WKE

Mar 08, 2022

PROJECT ID: 2160-17-70/2160-18-70

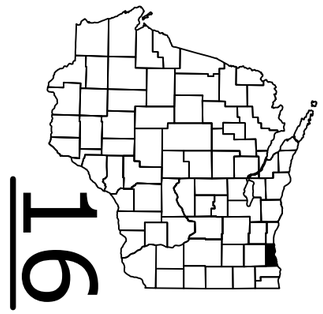
WITH: N/A

COUNTY: MILWAUKEE

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 = 184



N

DESIGN DESIGNATION

A.A.D.T.	(2022)	=	18,760
A.A.D.T.	(2042)	=	23,740
D.H.V.		=	2,375
D.D.		=	53%/47%
T.		=	2.6%
DESIGN SPEED		=	40 MPH
ESALS		=	2,109,000

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (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

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
2160-17-70	WISC 2022239	1
2160-18-70	WISC 2022240	1

S 76TH STREET (NB)

BRIDGE OVER STH 36 B-40-0573

CTH U

MILWAUKEE COUNTY

STATE PROJECT NUMBER: 2160-17-70

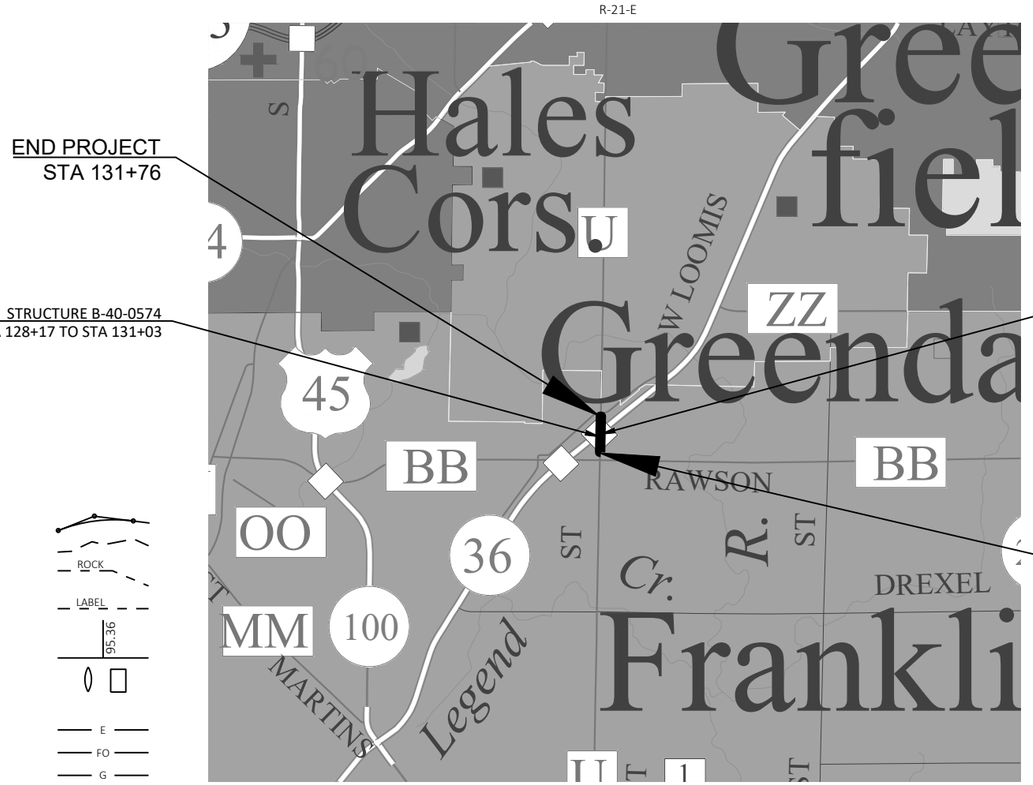
S 76TH STREET (SB)

BRIDGE OVER STH 36 B-40-0574

CTH U

MILWAUKEE COUNTY

STATE PROJECT NUMBER: 2160-18-70



END PROJECT
STA 131+76

STRUCTURE B-40-0574
STA 128+17 TO STA 131+03

STRUCTURE B-40-0573
STA 128+63 TO STA 131+49

BEGIN PROJECT
STA 127+95
X = 2533280.0755
Y = 341047.2952

LAYOUT

SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 0.072 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE BASED ON WISCONSIN STATE PLANE SYSTEM, SOUTH ZONE, NORTH AMERICAN HORIZONTAL DATUM OF 1927 (NAD27) IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD1929).

ACCEPTED FOR
MILWAUKEE COUNTY
DEPARTMENT OF TRANSPORTATION

Date 10/20/2021 — DIRECTOR OF TRANSPORTATION ENGINEERING

10-20-21 — DIRECTOR OF MILWAUKEE COUNTY DEPARTMENT OF TRANSPORTATION

ORIGINAL PLANS PREPARED BY

Michael Baker INTERNATIONAL

WISCONSIN PROFESSIONAL ENGINEER
LINDSAY M. KAUFMANN
E-434390
MILWAUKEE, WI

DATE: 11/01/2021 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	BAXTER & WOODMAN, CONSULTING ENGINEERS
Designer	MICHAEL BAKER INTERNATIONAL
Project Manager	MICHAEL BAIRD, P.E.
Regional Examiner	
Regional Supervisor	JEFF BOHEN, P.E.

APPROVED FOR THE DEPARTMENT

DATE: 10/27/2021 (Signature)

E

GENERAL NOTES

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

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. IT IS THE CONTRACTORS RESPONSIBILITY TO HAVE ALL UTILITIES LOCATED BEFORE EXCAVATIONS.

CONSTRUCTION JOINTS IN CURB AND GUTTER SHALL BE SPACED AT 15 FEET MINIMUM.

THE QUANTITY OF THE ITEMS LOWER OR UPPER LAYER ARE MEASURED FOR PAYMENT BY THE TON. THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND UPON THE DISTRIBUTION OF MATERIAL AS DIRECTED BY THE ENGINEER.

THE EXACT LOCATION OF EROSION CONTROL DEVICES SHALL BE DETERMINED IN THE FIELD, AND AS DIRECTED BY THE ENGINEER.

ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN PLACE UNTIL SUCH TIME AS THE ENGINEER DETERMINES THAT THEY ARE NO LONGER NEEDED.

INLET PROTECTION, TYPE B SHALL BE USED ON ALL INLETS/CATCH BASINS.

A VERTICAL SAWCUT SHALL BE MADE THROUGH EXISTING PAVEMENTS AT MATCHES.

ALL CONCRETE SHALL BE REMOVED IN SUCH A MANNER AS TO AVOID DISTURBANCE OF EXISTING BASE COURSE.

ALL PROPOSED ELEVATIONS AT TIE-IN POINTS REQUIRE FIELD VERIFICATION BY THE CONTRACTOR.

TRAFFIC CONTROL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FT (500 FT DESIRABLE) DISTANCE TO EXISTING SIGNS.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED IN THE PLANS.

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

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

ALL EXISTING CONFLICTING PAVEMENT MARKING SHOULD BE REMOVED.

ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
REMOVAL PLAN
TEMPORARY PAVEMENT DETAIL
APPROACH PAVEMENT DETAIL
PAVING NOTCH DETAIL
EROSION CONTROL
TRAFFIC SIGNAL PLAN
PERMANENT SIGNING AND PAVEMENT MARKING
TRAFFIC CONTROL PLAN

UTILITY CONTACTS

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EMAIL: MD95A5@ATT.COM

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MILWAUKEE COUNTY STORM SEWER

EDUARDO SANTIAGO
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ENVIRONMENTAL ANALYSIS AND REVIEW SPECIALIST
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
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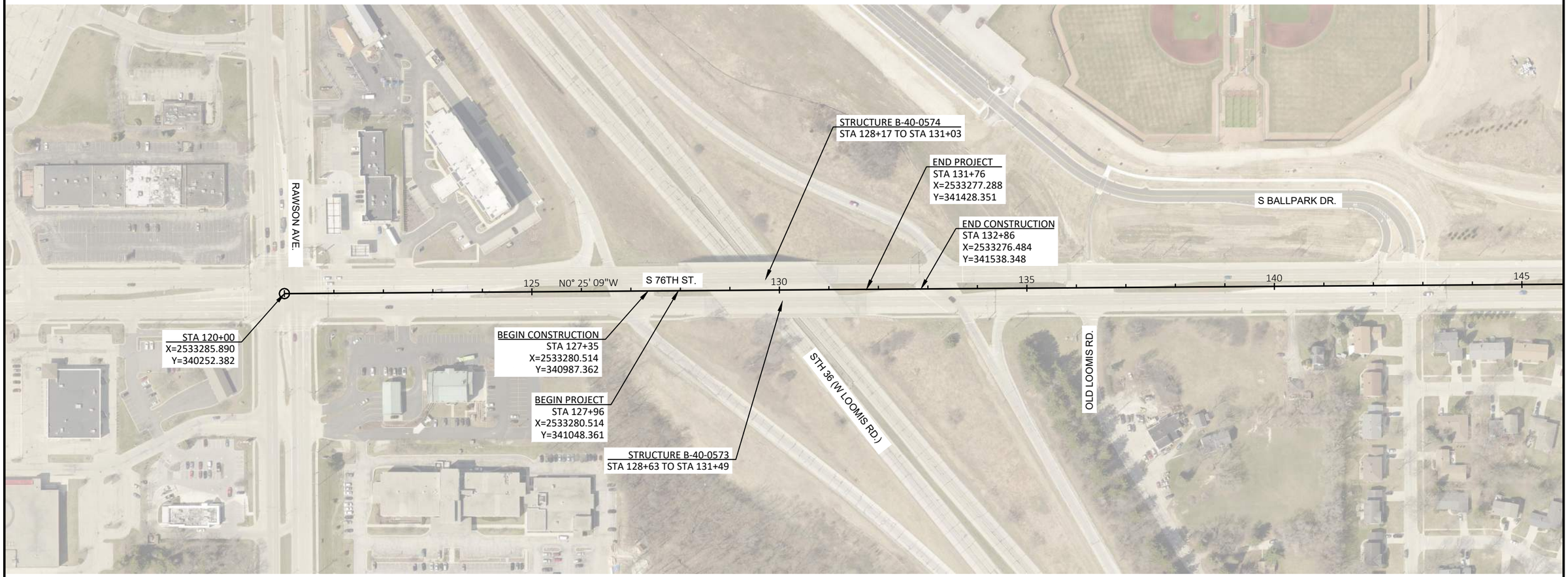
WISDOT SE REGION - SIGNALS

JARRETT GATES, PE
SIGNAL OPERATIONS ENGINEER
141 N.W. BARSTOW STREET
WAUKESHA, WI 53187
PHONE: (414) 750-2472
EMAIL: JARRETT.GATES@DOT.WI.GOV

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

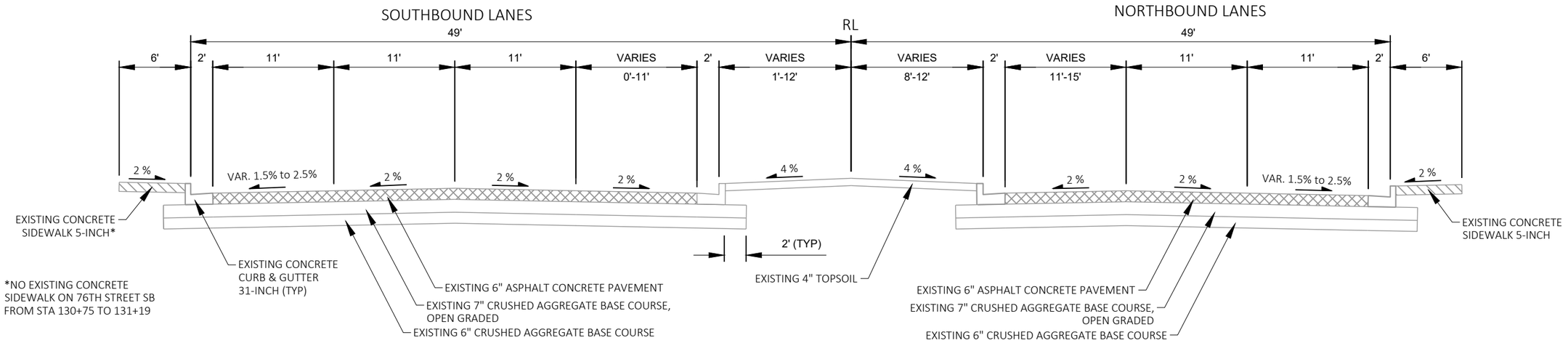
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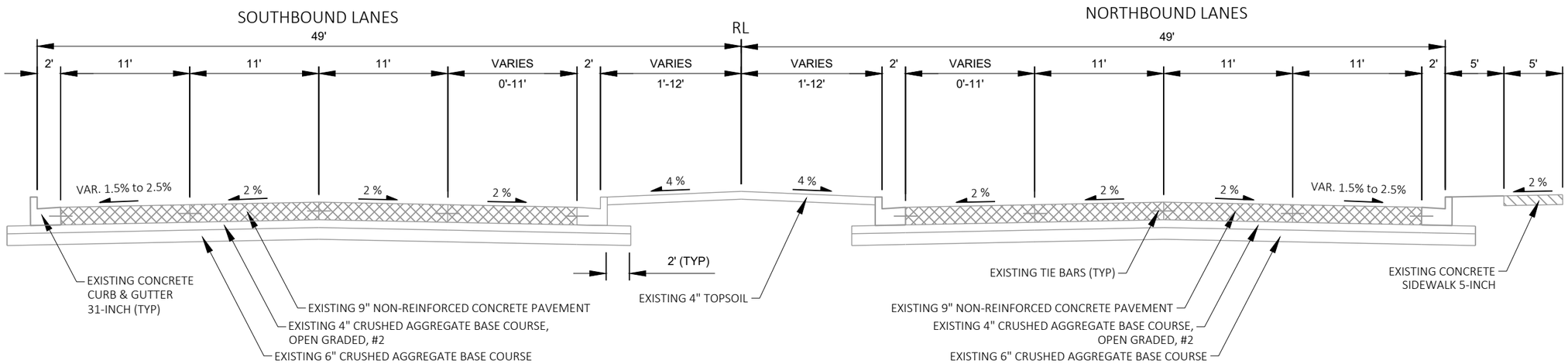
PROJECT NO: 2160-17-70/2160-18-70	HWY: S 76TH STREET	COUNTY: MILWAUKEE	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : K:\178837_38_76TH STREET BRIDGE REHABS\3.0 DELIVERABLES\3.02 ROADWAY\AUTOCAD\SHEETSOTHER\SHEETSPLAN\020201 - PO.DWG
LAYOUT NAME - 020201 - po
PLOT DATE : 10/15/2021 1:06 AM PLOT BY : WAGNER, NOLAN PLOT NAME : PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42



EXISTING TYPICAL SECTION

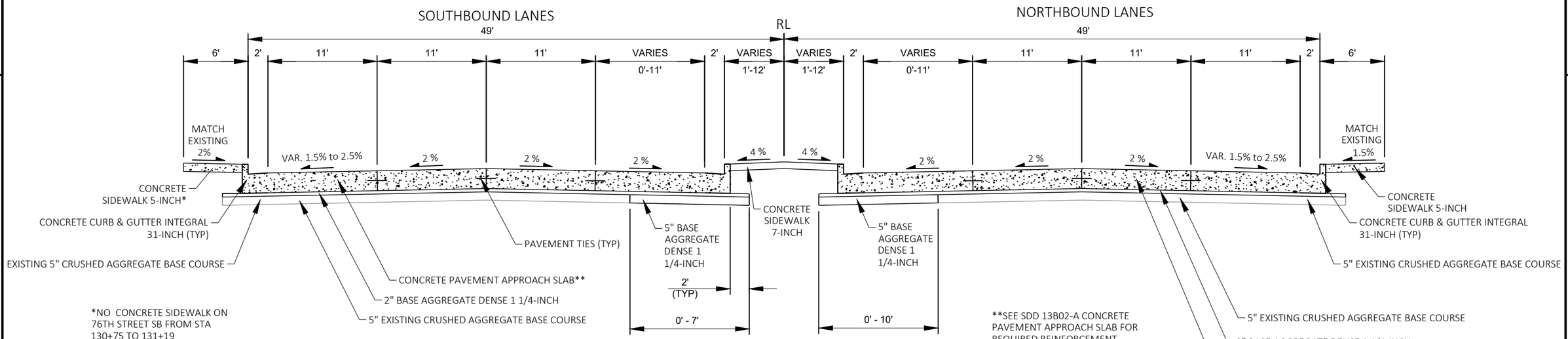
STA 127+95 - 128+95
STA 130+70 - 131+76



EXISTING TYPICAL SECTION

STA 127+35 - 127+95
STA 131+76 - 132+86

PROJECT NO: 2160-17-70/2160-18-70	HWY: S 76TH STREET	COUNTY: MILWAUKEE	EXISTING TYPICAL SECTIONS	SHEET 4	E

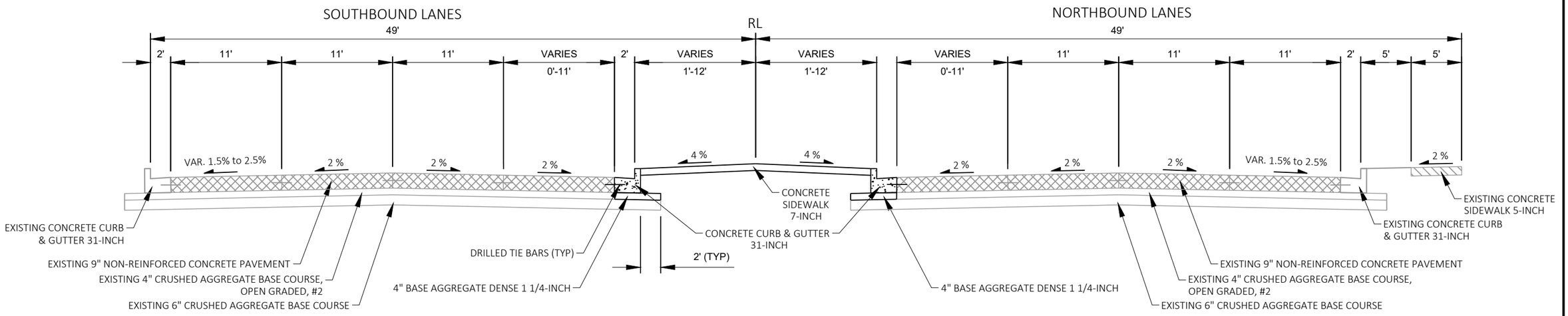


*NO CONCRETE SIDEWALK ON 76TH STREET SB FROM STA 130+75 TO 131+19

**SEE SDD 13B02-A CONCRETE PAVEMENT APPROACH SLAB FOR REQUIRED REINFORCEMENT WITHIN SLAB (12" DEPTH) SEE CONSTRUCTION DETAILS FOR PAVING NOTCH DETAIL

PROPOSED TYPICAL SECTION

NORTHBOUND: STA 128+14 - 128+98
SOUTHBOUND: STA 127+84 - 128+56
NORTHBOUND: STA 131+15 - 132+24
SOUTHBOUND: STA 130+69 - 131+53



PROPOSED TYPICAL SECTION

NORTHBOUND: STA 127+39 - 128+14
SOUTHBOUND: STA 127+39 - 127+84
NORTHBOUND: STA 132+24 - 132+82
SOUTHBOUND: STA 131+53 - 132+82

PROJECT NO: 2160-17-70/2160-18-70	HWY: S 76TH STREET	COUNTY: MILWAUKEE	PROPOSED TYPICAL SECTIONS	SHEET 5	E

FILE NAME : K:\178837_38_76TH STREET BRIDGE REHABS\3.0 DELIVERABLES\3.02 ROADWAY\AUTOCAD\SHEETSOTHER\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 020302-ts
PLOT DATE : 10/22/2021 3:49 PM PLOT BY : WAGNER, NOLAN PLOT NAME : PLOT SCALE : 1 IN:10 FT

2

N

127+96.00, 55.00' LT
127+96.00, 49.50' LT
127+84.00, 49.50' LT
127+84.00, 3.00' LT
127+53.74, 3.00' LT
127+37.01, 1.44' RT
127+37.00, 8.35' RT
REMOVING SIGNS TYPE II
127+53.37, 14.00' RT
REMOVING SIGNS TYPE II
128+10.99, 55.03' LT
128+15.60, 49.50' LT
128+54.16, 3.05' LT
128+56.64, 0.30' LT
128+66.66, 11.84' RT
128+68.78, 14.28' RT
128+36.02, 14.00' RT
128+98.02, 49.50' RT
128+36.00, 49.51' RT
128+48.00, 49.50' RT
128+48.00, 55.00' RT
129+02.76, 55.00' RT
S 76TH STREET
128
130
130+64.09, 55.00' LT
130+68.68, 49.50' LT
130+98.29, 14.00' LT
131+00.32, 11.59' LT
131+19.49, 11.42' RT
131+21.64, 14.00' RT
131+51.25, 49.50' RT
130+75.13, 55.00' LT
130+75.12, 49.51' LT
131+18.56, 49.46' LT
131+31.00, 49.50' LT
131+31.00, 14.00' LT
131+55.83, 55.00' RT
131+76.00, 49.50' RT
131+76.00, 55.00' RT
131+88.00, 49.42' RT
131+88.00, 14.00' RT
132
132+24.00, 14.00' RT
132+24.00, 3.00' RT
132+67.26, 3.00' RT
132+67.32, 14.00' LT
132+84.00, 8.44' LT
132+84.00, 1.46' LT
REMOVING SIGNS TYPE II
134
4" FLEX
12" RCP
SS
MP
EL
OHL

LEGEND

- COMMON EXCAVATION
- REMOVING PAVEMENT
- REMOVING CONCRETE SIDEWALK
- XXXXX SAWING CONCRETE
- REMOVING CURB & GUTTER

PROJECT NO: 2160-17-70/2160-18-70	HWY: S 76TH STREET	COUNTY: MILWAUKEE	REMOVAL PLAN	SHEET 6	E

FILE NAME : K:\178837_38_76TH STREET BRIDGE REHABS\3.0 DELIVERABLES\3.03 STRUCTURE\MICROS\REFERENCE\021101-RM.DWG
LAYOUT NAME - 050201-pn

PLOT DATE : 10/22/2021 1:31 AM PLOT BY : WAGNER, NOLAN PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

N

127+37.47, 2.42' RT

TEMPORARY
DRAINAGE COVER
FOR EXISTING INLET

128+54.16, 3.05' LT

S 76TH STREET

130+97.93, 14.18' LT

TEMPORARY
DRAINAGE COVER
FOR EXISTING INLET

132+84.15, 7.71' LT

132+84.11, 2.59' LT

4" FLEX

128

130

132

12" RCP

SS

E

EL

TEMPORARY
DRAINAGE COVER
FOR EXISTING INLET

128+68.93, 14.46' RT

131+48.07, 14.04' RT

TEMPORARY
DRAINAGE COVER
FOR EXISTING INLET

131+21.44, 13.94' RT

132+28.54, 2.96' RT

127+37.67, 8.88' RT

MP

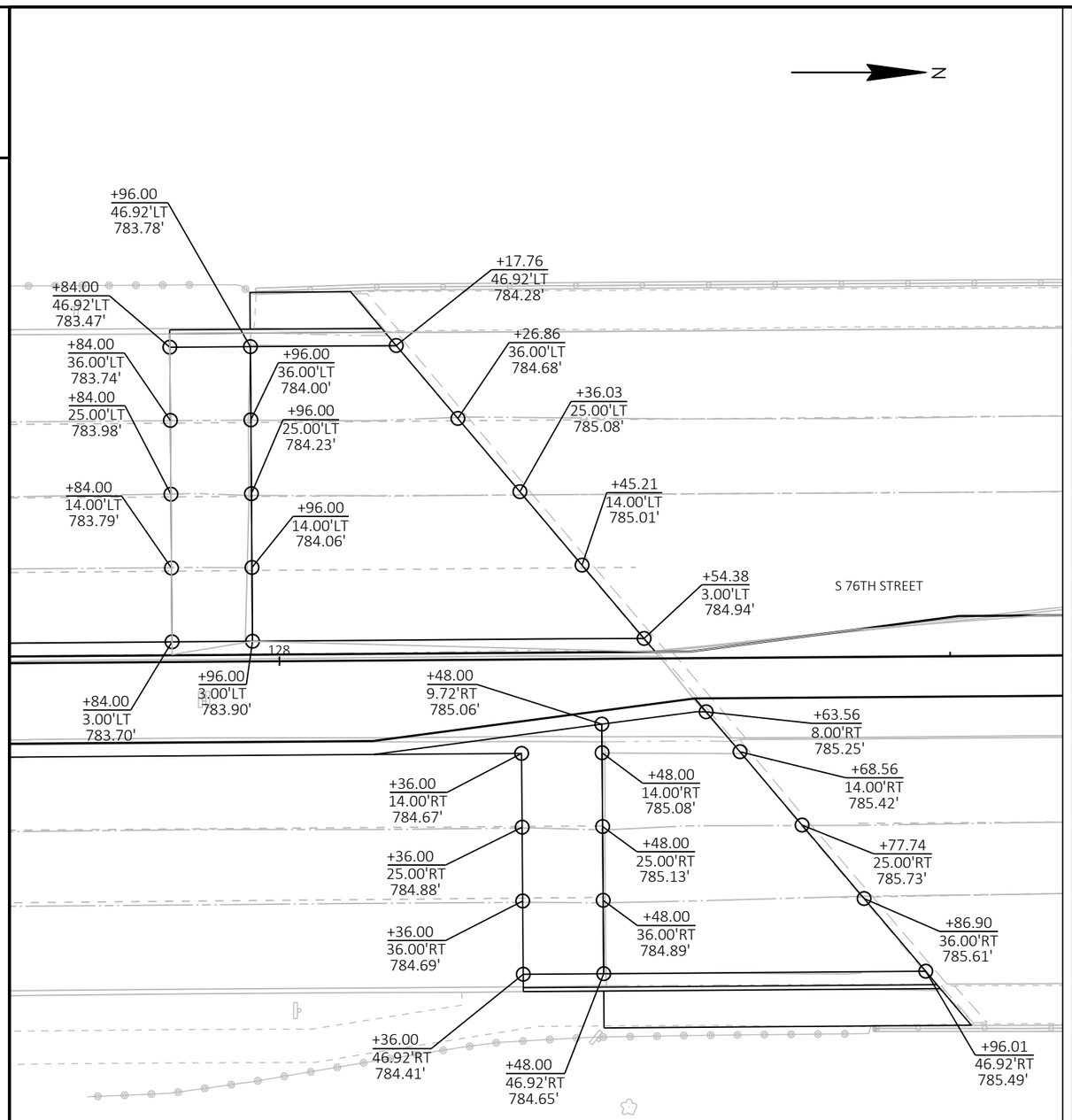
LEGEND

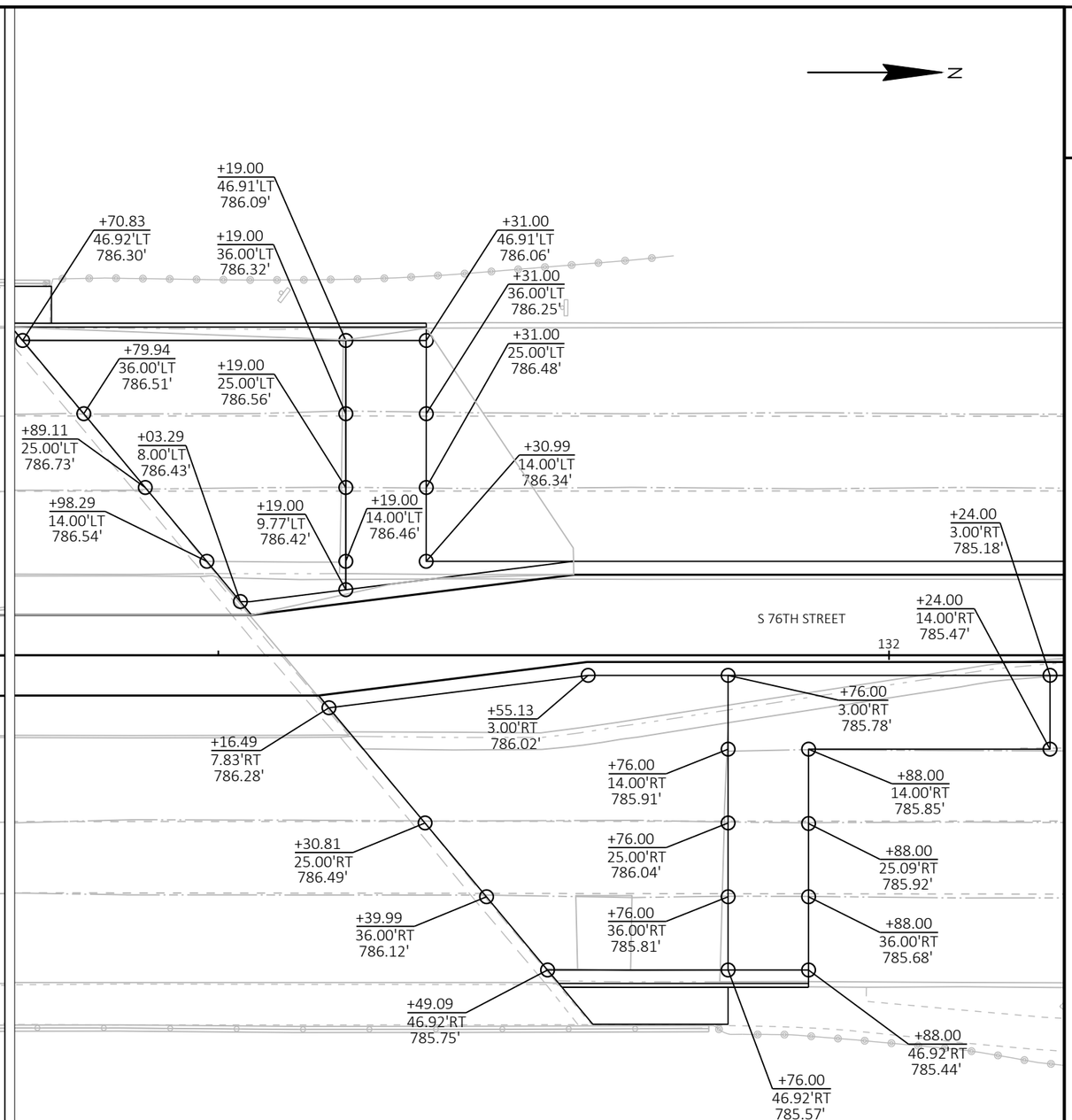
ASPHALTIC SURFACE TEMPORARY

PROJECT NO: 2160-17-70/2160-18-70	HWY: S 76TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION DETAIL - TEMPORARY PAVEMENT	SHEET 7	E

FILE NAME : K:\178837_38_76TH STREET BRIDGE REHABS\3.0 DELIVERABLES\3.02 ROADWAY\AUTOCAD\SHEETSOTHER\SHEETSPLAN\021001 - TEMP PAVEMENT.DWG
LAYOUT NAME - 021001-pd

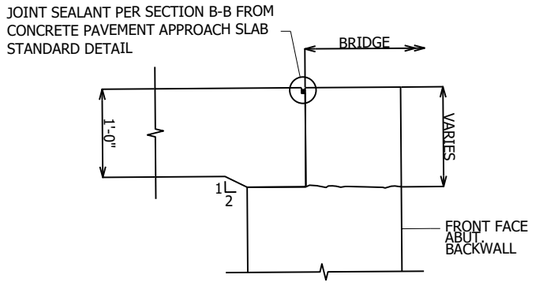
PLOT DATE : 10/15/2021 1:09 AM PLOT BY : WAGNER, NOLAN PLOT NAME : PLOT SCALE : 1 IN:40 FT



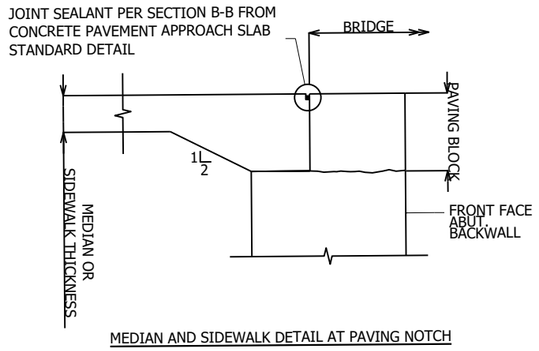


PROJECT NO: 2160-17-70/2160-18-70	HWY: S 76TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION DETAIL - APPROACH PAVEMENT	SHEET 8	E

FILE NAME : K:\178837_38_76TH STREET BRIDGE REHABS\3.0 DELIVERABLES\3.02 ROADWAY\AUTOCAD\SHEETSOTHER\SHEETSPLAN\021002-CD-APPROACH.DWG
LAYOUT NAME - 021002-cd
PLOT DATE : 10/15/2021 1:10 AM
PLOT BY : WAGNER, NOLAN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42



APPROACH SLAB DETAIL AT PAVING NOTCH



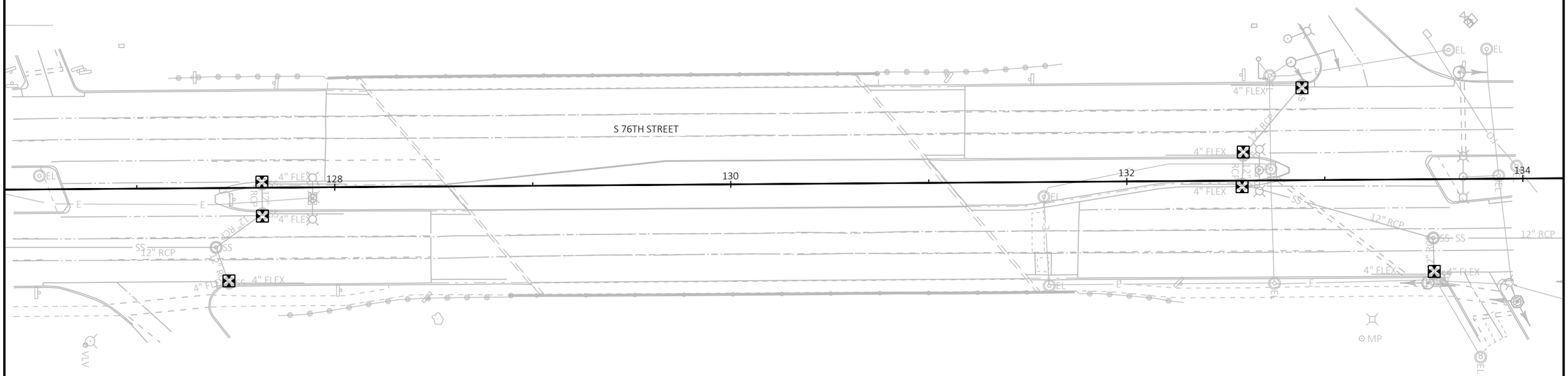
MEDIAN AND SIDEWALK DETAIL AT PAVING NOTCH

PROJECT NO: 2160-17-70/2160-18-70	HWY: S 76TH STREET	COUNTY: MILWAUKEE	CONSTRUCTION DETAIL - PAVING NOTCH	SHEET 9	E

FILE NAME : K:\178837_38_76TH STREET BRIDGE REHABS\3.0 DELIVERABLES\3.02 ROADWAY\AUTOCAD\SHEETSOTHER\SHEETSPLAN\021003-CD-PAVING NOTCH.DWG
LAYOUT NAME - 021003-cd
PLOT DATE : 10/15/2021 1:11 AM PLOT BY : WAGNER, NOLAN PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

N



LEGEND

INLET PROTECTION TYPE B

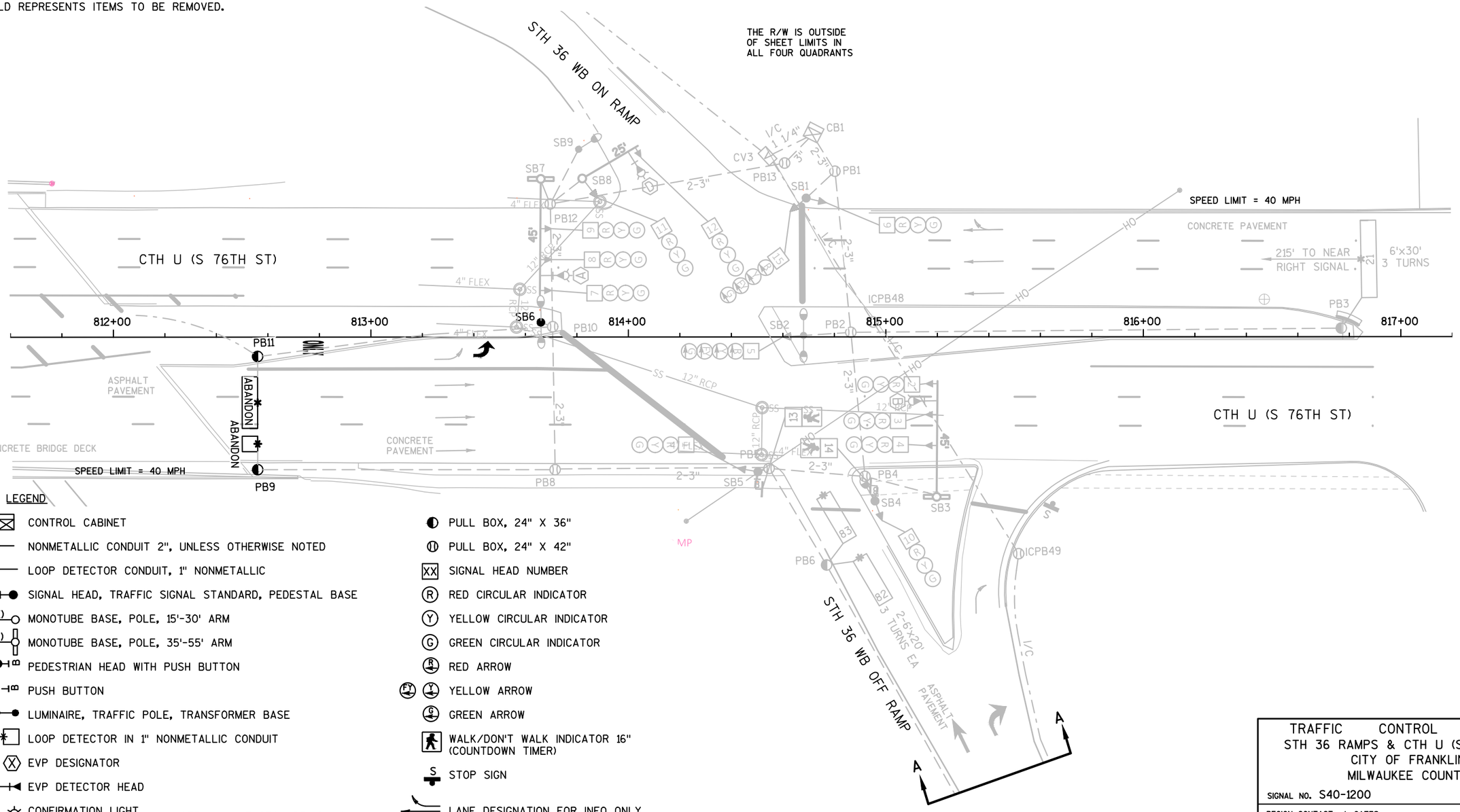
PROJECT NO: 2160-17-70/2160-18-70	HWY: S 76TH STREET	COUNTY: MILWAUKEE	EROSION CONTROL - TEMPORARY	SHEET 10	E

FILE NAME : K:\178837_38_76TH STREET BRIDGE REHABS\3.0 DELIVERABLES\3.02 ROADWAY\AUTOCAD\SHEETSOTHER\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022001-EC

PLOT DATE : 10/15/2021 1:12 AM PLOT BY : WAGNER, NOLAN PLOT NAME : PLOT SCALE : 1 IN:50 FT

CONSTRUCTION NOTES:

1. EXISTING CONDUIT RUNS TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS REMAINING IN THE CONDUIT.
2. ABANDONED LOOP DETECTOR CONDUIT TO REMAIN IN PLACE. LOOP DETECTOR WIRE AND LEAD-IN CABLE TO BE REMOVED BY THE CONTRACTOR.
3. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
4. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.



LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT, 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- EVP DESIGNATOR
- EVP DETECTOR HEAD
- CONFIRMATION LIGHT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- FY YELLOW ARROW
- G GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- S STOP SIGN
- LANE DESIGNATION FOR INFO ONLY

NOTE: ALL LENSES ARE 12-INCH GRAYSHADE REPRESENTS EXISTING

TRAFFIC CONTROL SIGNAL
STH 36 RAMPS & CTH U (S 76TH ST)
CITY OF FRANKLIN
MILWAUKEE COUNTY

SIGNAL NO. S40-1200

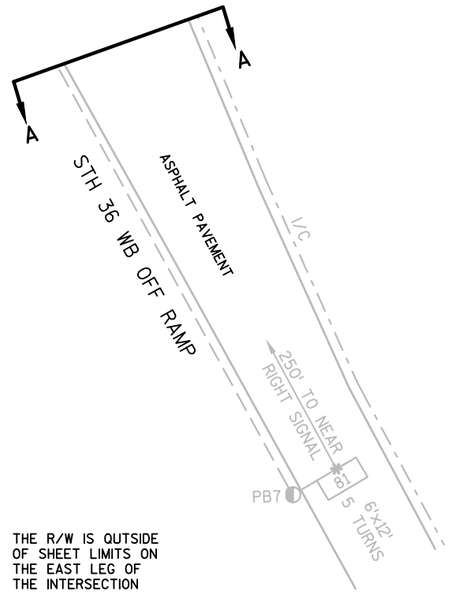
REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: S. WAGNER

PAGE 1 OF 2

PROJECT NO: 2160-18-70	HWY: STH 36	COUNTY: MILWAUKEE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 11	E

2

N



THE R/W IS QUTSIDE OF SHEET LIMITS ON THE EAST LEG OF THE INTERSECTION

TRAFFIC CONTROL SIGNAL
STH 36 RAMPS & CTH U (S 76TH ST)
CITY OF FRANKLIN
MILWAUKEE COUNTY

SIGNAL NO. S40-1200

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: S. WAGNER

PAGE 2 OF 2

PROJECT NO: 2160-18-70	HWY: STH 36	COUNTY: MILWAUKEE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 12	E

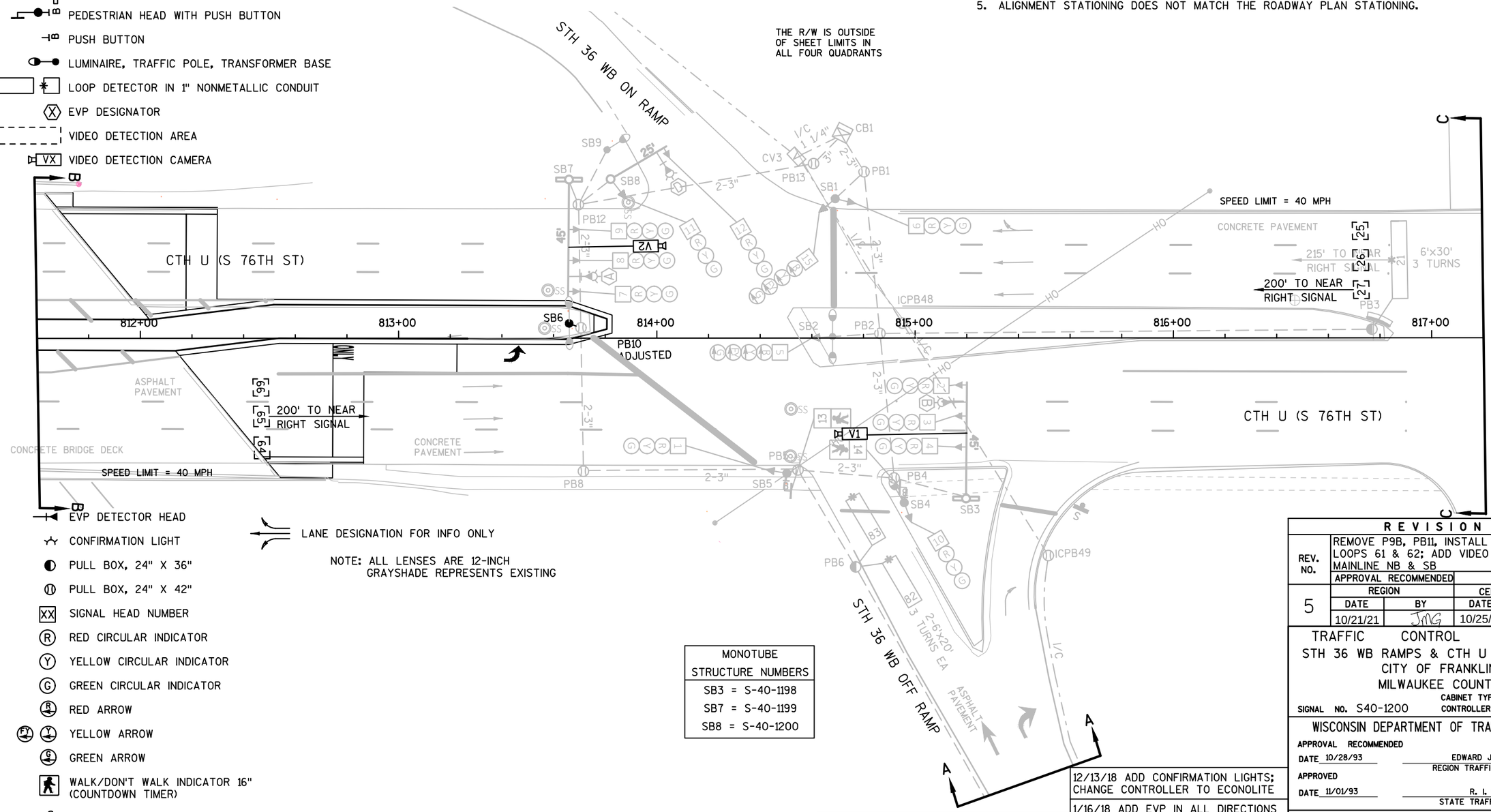
LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT, 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- EVP DESIGNATOR
- VIDEO DETECTION AREA
- VX VIDEO DETECTION CAMERA

CONSTRUCTION NOTES:

1. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. ALL LUMINAIRES ARE 250 WATT HPS UNLESS OTHERWISE NOTED.
4. NEW SB6 BASE AND CONTRACTOR TO REMOVE POLE AND REINSTALL POLE AFTER NEW BASE IS INSTALLED.
5. ALIGNMENT STATIONING DOES NOT MATCH THE ROADWAY PLAN STATIONING.

N



EVP DETECTOR HEAD

CONFIRMATION LIGHT

PULL BOX, 24" X 36"

PULL BOX, 24" X 42"

XX SIGNAL HEAD NUMBER

R RED CIRCULAR INDICATOR

Y YELLOW CIRCULAR INDICATOR

G GREEN CIRCULAR INDICATOR

RA RED ARROW

FYA YELLOW ARROW

GA GREEN ARROW

WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)

S STOP SIGN

LANE DESIGNATION FOR INFO ONLY

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

MONOTUBE STRUCTURE NUMBERS
SB3 = S-40-1198
SB7 = S-40-1199
SB8 = S-40-1200

7/10/20 INSTALL FYA NB; CHANGE CABINET TO TS2; INSTALL 15-FT POLE ON SB1.

12/13/18 ADD CONFIRMATION LIGHTS; CHANGE CONTROLLER TO ECONOLITE

1/16/18 ADD EVP IN ALL DIRECTIONS

11/25/09 INTERSECTION RECONSTRUCT

REVISION

REV. NO.		APPROVAL RECOMMENDED		APPROVED	
		REGION		CENTRAL OFFICE	
		DATE	BY	DATE	BY
5	REMOVE P9B, PB11, INSTALL NEW SB6; LOOPS 61 & 62; ADD VIDEO DETECTION MAINLINE NB & SB	10/21/21	JMG	10/25/21	JR

10/21/21

TRAFFIC CONTROL SIGNAL
STH 36 WB RAMPS & CTH U (S 76TH ST)
CITY OF FRANKLIN
MILWAUKEE COUNTY
CABINET TYPE: TS2-S
SIGNAL NO. S40-1200 CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE 10/28/93 EDWARD J. FRIEDE, REGION TRAFFIC ENGINEER

APPROVED
DATE 11/01/93 R. I. MOE, STATE TRAFFIC ENGINEER

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: S. WAGNER

PAGE 1 OF 3

PROJECT NO: 2160-18-70	HWY: STH 36	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN	SHEET 13	E

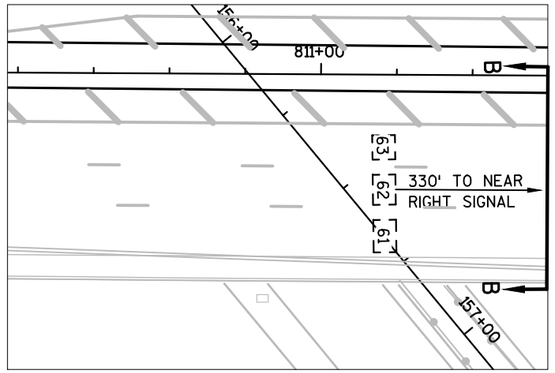
FILE NAME : N:\PDS\C3D\CAD\21601700\SIG\S40-1200_R5_18.DWG
LAYOUT NAME - S40-1200_R5_PG1

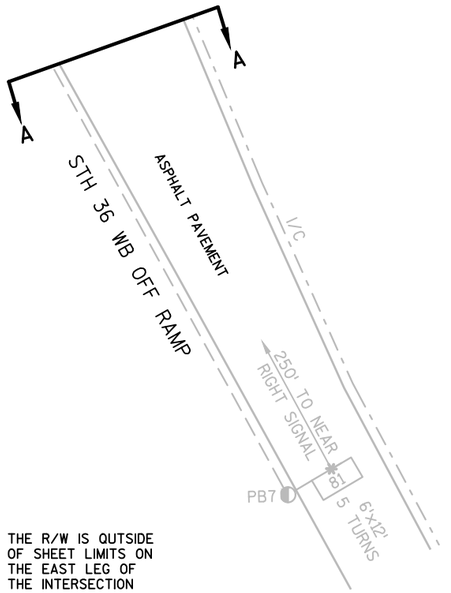
PLOT DATE : 10/26/2021 12:36 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

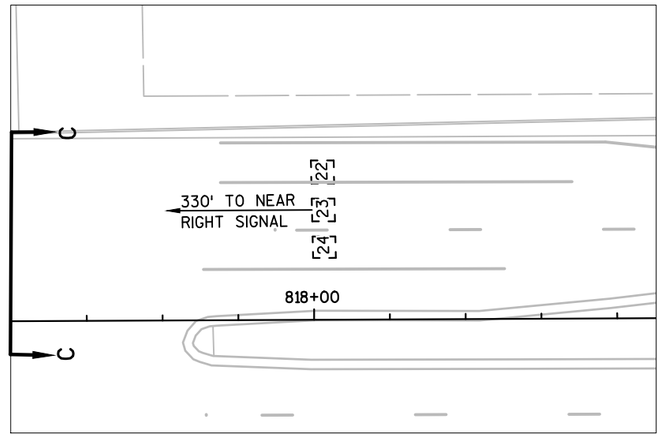
2

N





THE R/W IS QUTSIDE OF SHEET LIMITS ON THE EAST LEG OF THE INTERSECTION



TRAFFIC CONTROL SIGNAL
STH 36 RAMPS & CTH U (S 76TH ST)
CITY OF FRANKLIN
MILWAUKEE COUNTY

SIGNAL NO. S40-1200

REGION CONTACT: J. GATES
DESIGNED BY:
REVISED BY: S. WAGNER

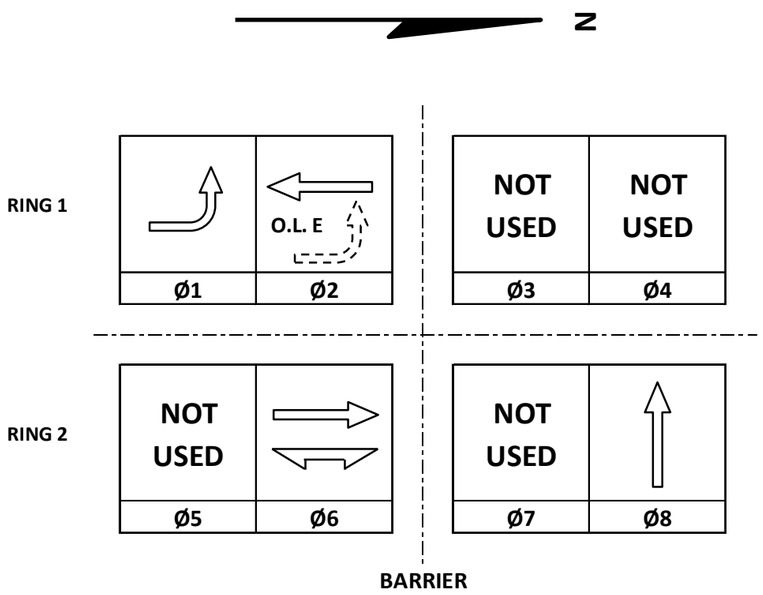
PAGE 2 OF 3

PROJECT NO: 2160-18-70	HWY: STH 36	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN	SHEET 14	E

FILE NAME : N:\PDS\C3D\CAD\21601700\SIG\S40-1200_R5_18.DWG
LAYOUT NAME - S40-1200_R5_PG2

PLOT DATE : 10/26/2021 12:36 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

	HEAD NUMBERS	FLASH
Ø1	5,15	R ←
Ø2	6,7,8,9	R
Ø3		
Ø4		
Ø5		
Ø6	1,2,3,4	R
Ø7		
Ø8	10,11,12	R
Ø2P		
Ø4P		
Ø6P	13,14	
Ø8P		
OLE	5,15	-
OLF		
OLG		
OLH		



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN	X
3				
4				
5				
6	X	2	MIN	X
7				
8				X

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT	←	→		↑
PHASE	2+6	6+1		8

AFTER PREEMPTION SEQUENCE 2+6 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 8, CONTROLLER SHALL RETURN TO PHASE 8.

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	X
RADIO	
CELL MODEM	

TYPE OF COORDINATION	
NONE	X
TBC	
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO: S-	
SIGNAL SYSTEM NO: SS-	

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

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	X
TOMAR	
HARDWIRE	
OTHER	
CONFIRMATION LIGHTS	X
LIFT BRIDGE	
QUEUE DETECTION	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13	17	19	21	23	25	27	29	31	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	21	82							22	24	26	61	63	65			PLAN LOOP DETECTOR*(S)
CALLED PHASE		8							2	2	2	6	6	6			CALLED PHASE
CALL OPTION		X							X	X	X	X	X	X			CALL OPTION
DELAY TIME																	DELAY TIME
EXTENTION OPTION		X							X	X	X	X	X	X			EXTENTION OPTION
EXTEND TIME																	EXTEND TIME
USE ADDED INITIAL									X	X	X	X	X	X			USE ADDED INITIAL
CROSS SWITCH PHASE																	CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14	18	20	22	24	26	28	30	32	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	81	83							23	25	27	62	64	66			PLAN LOOP DETECTOR*(S)
CALLED PHASE	8	8							2	2	2	6	6	6			CALLED PHASE
CALL OPTION		X							X	X	X	X	X	X			CALL OPTION
DELAY TIME																	DELAY TIME
EXTENTION OPTION	X	X							X	X	X	X	X	X			EXTENTION OPTION
EXTEND TIME	X																EXTEND TIME
USE ADDED INITIAL									X	X	X	X	X	X			USE ADDED INITIAL
CROSS SWITCH PHASE																	CROSS SWITCH PHASE

GENERAL NOTES:

1. PHASE 1 IS ONLY ACTIVATED BY PREEMPTION SEQUENCE B

STH 36 WB RAMPS & CTH U (S 76TH ST)
CITY OF FRANKLIN
MILWAUKEE COUNTY
SIGNAL NO: S40-1200 CABINET TYPE: TS2-S
CONTROLLER TYPE: ECONOLITE
DATE: 10/2021 PAGE NUMBER: 3 OF 3

FILE NAME: \\wkertovfilpi01\N3PUBLIC\SPO\Operations\Signals\Databases\Signal Intersection Files\S40-1200\PLANS\TS2-S_E_FYA_EFGH_Econolite_SEQ.xlsx PLOT DATE: ######## PLOT NAME: TS2-S_E_FYA_EFGH_Econolite_SEQ.xlsx PLOT BY: _____ PLOT SCALE: 1:1

PROJECT ID:	2160-18-70
INTERSECTION:	STH 36 WB Ramps & CTH U

Signal Wire Color Coding	BLK - black	RED - red	GRN - green
	WHT - white	BLU - blue	ORG - orange

VIDEO DETECTION CABLE	
From	To
CB1	SB3 (V1)
CB1	SB7 (V2)

2

2

N

W RAWSOM AVE

S 76TH STREET

121+00.00, 24.46' RT
MARKING LINE EPOXY
4-INCH, WHITE, DASHED

121+00.00, 35.15' RT
MARKING LINE EPOXY
4-INCH, WHITE, DASHED

124+84.98, 35.30' RT

126+52.55, 35.49' RT

MARKING ISLAND NOSE EPOXY, YELLOW

MARKING LINE EPOXY
8-INCH, WHITE

SIGNS TYPE II
REFLECTIVE H

R4-7
24"X30"

R3-18
24"X24"

1 - POST TUBULAR STEEL
2X2-INCH X 11-FT REQ'D

MARKING CURB
EPOXY, YELLOW

SIGNS TYPE II
REFLECTIVE H

SOUTH
36

J2-1
24"X57"

SIGNS TYPE II
REFLECTIVE H

NORTH
36

J3-1
24"X57"

128+13.97, 14.00' RT

127+84.00, 36.00' LT
END MARKING LINE EPOXY 4-INCH, WHITE, DASHED
BEGIN MARKING LINE GROOVED WET REF CONTRAST
EPOXY 4-INCH, WHITE, DASHED

127+84.00, 25.00' LT
END MARKING LINE EPOXY 4-INCH, WHITE, DASHED
BEGIN MARKING LINE GROOVED WET REF CONTRAST
EPOXY 4-INCH, WHITE, DASHED

MARKING LINE GROOVED WET REF EPOXY
8-INCH, WHITE

127+39.00, 36.00' LT
MARKING LINE EPOXY
4-INCH, WHITE, DASHED

127+39.00, 25.00' LT
MARKING LINE EPOXY
4-INCH, WHITE, DASHED

127+39.00, 14.00' LT

11'

11'

128+54.38, 3.00' LT

128+61.26, 14.27' LT

129+01.31, 7.55' LT

MARKING LINE EPOXY
4-INCH, YELLOW

129+52.71, 14.00' LT
END TAPER

11'

11'

MARKING DIAGONAL EPOXY
12-INCH, YELLOW

MARKING LINE EPOXY
4-INCH, YELLOW

128+36.00, 25.00' RT
END MARKING LINE EPOXY 4-INCH, WHITE, DASHED
BEGIN MARKING LINE GROOVED WET REF CONTRAST
EPOXY 4-INCH, WHITE, DASHED

128+36.00, 36.00' RT
END MARKING LINE EPOXY 4-INCH, WHITE, DASHED
BEGIN MARKING LINE GROOVED WET REF CONTRAST
EPOXY 4-INCH, WHITE, DASHED

131+31.00, 36.00' LT
END MARKING LINE GROOVED WET REF CONTRAST
EPOXY 4-INCH, WHITE, DASHED
BEGIN MARKING LINE EPOXY 4-INCH, WHITE, DASHED

131+31.00, 25.00' LT
END MARKING LINE GROOVED WET REF CONTRAST
EPOXY 4-INCH, WHITE, DASHED
BEGIN MARKING LINE EPOXY 4-INCH, WHITE, DASHED

131+52.88, 14.00' LT

R4-7
24"X30"

SIGN TYPE II
REFLECTIVE H

SOUTH
36

J2-1
24"X57"

STOP

R1-1F
36"X36"

SIGNS TYPE II
REFLECTIVE H

STH 36 (W LOOMIS RD.)

131+88.00, 25.00' RT
END MARKING LINE GROOVED WET REF CONTRAST
EPOXY 4-INCH, WHITE, DASHED
BEGIN MARKING LINE EPOXY 4-INCH, WHITE, DASHED

131+88.00, 36.00' RT
END MARKING LINE GROOVED WET REF CONTRAST
EPOXY 4-INCH, WHITE, DASHED
BEGIN MARKING LINE EPOXY 4-INCH, WHITE, DASHED

MARKING LINE GROOVED WET REF EPOXY
8-INCH, WHITE

131+54.84, 14.00' RT

131+16.48, 7.83' RT
END TAPER

130+66.84, 14.00' RT
BEGIN TAPER

MARKING ISLAND
NOSE EPOXY, YELLOW

132+77.00, 36.00' LT
MARKING LINE EPOXY
4-INCH, WHITE, DASHED

132+77.00, 25.00' LT
MARKING LINE EPOXY
4-INCH, WHITE, DASHED

MARKING CURB
EPOXY, YELLOW

MARKING ISLAND
NOSE EPOXY, YELLOW

132+84.00, 1.46' LT

133+74.70, 49.02' LT

133+74.88, 35.87' LT

MARKING STOP LINE
EPOXY 18-INCH, WHITE

133+74.86, 24.88' LT

133+74.94, 12.05' LT

MARKING LINE EPOXY
4-INCH, WHITE, DASHED

MARKING STOP LINE
EPOXY 18-INCH, WHITE

133+43.61, 47.95' RT

133+29.19, 36.00' RT
MARKING LINE EPOXY
4-INCH, WHITE, DASHED

133+15.92, 25.00' RT
MARKING LINE EPOXY
4-INCH, WHITE, DASHED

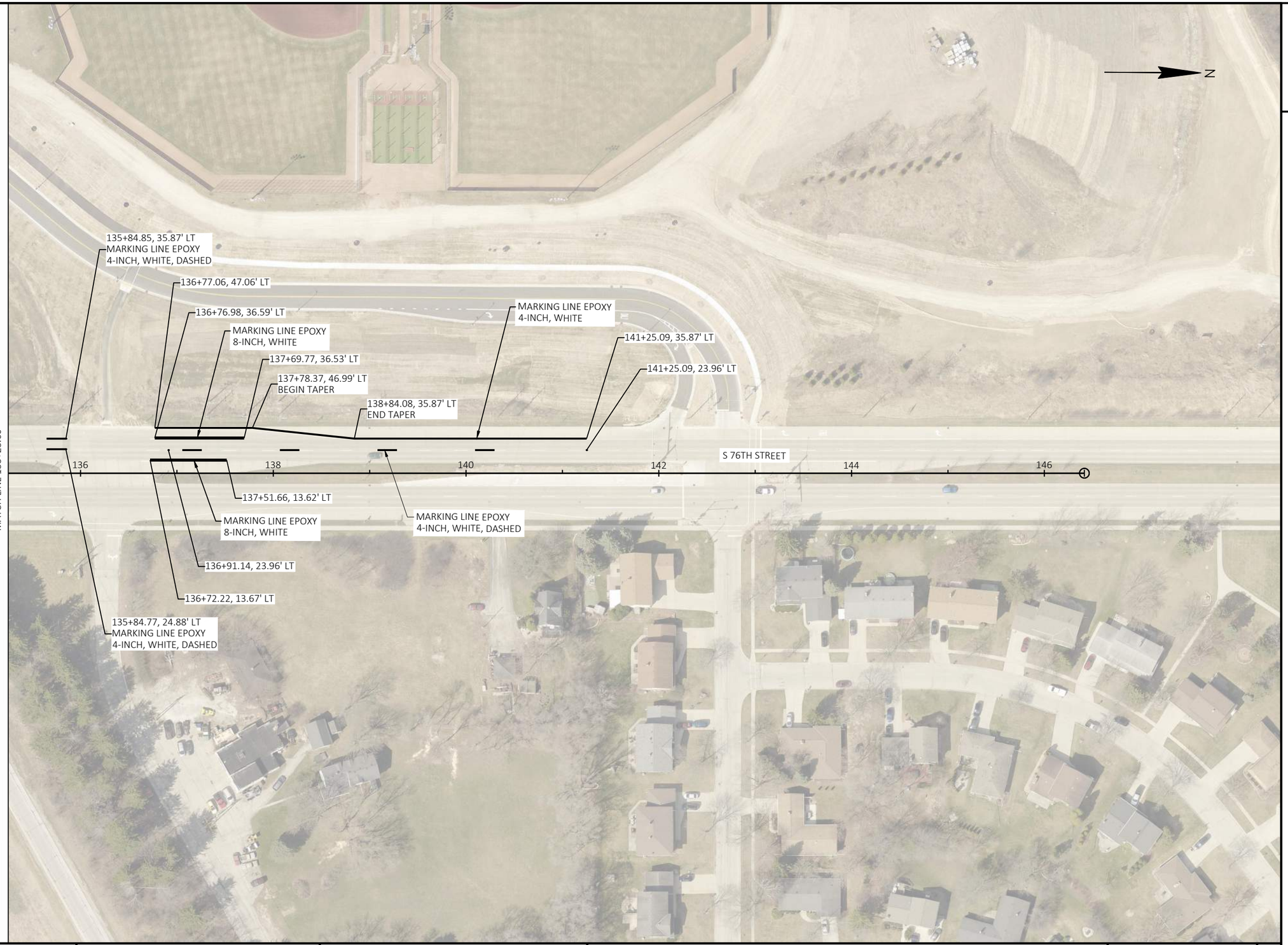
133+02.65, 14.00' RT

MATCH LINE 135+25.00

LEGEND
MARKING ARROW
EPOXY, WHITE
ONLY
MARKING WORD
EPOXY, WHITE

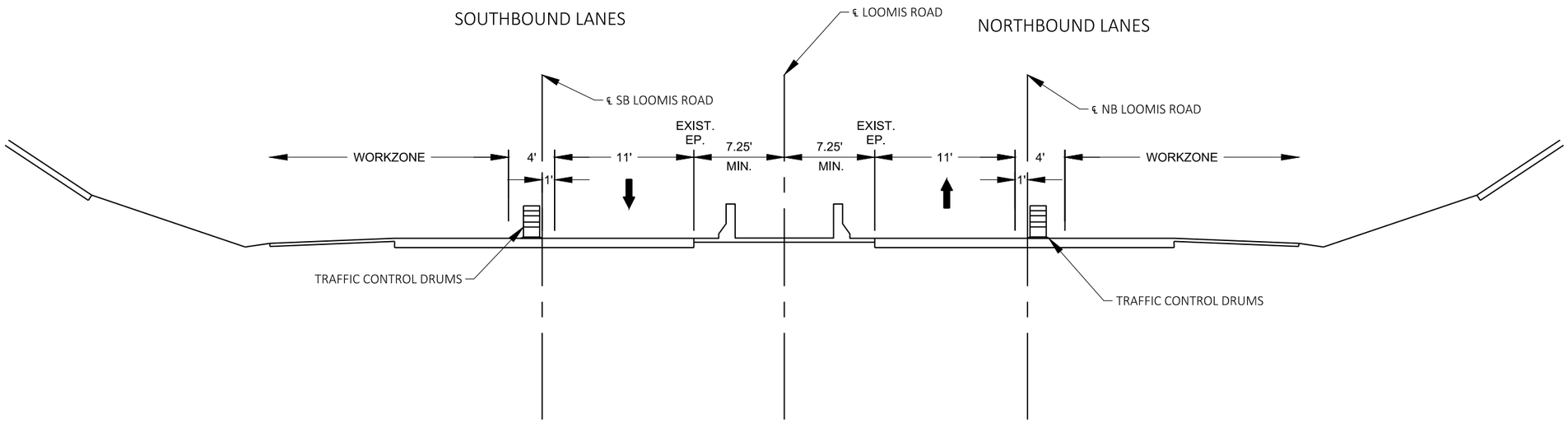
PROJECT NO: 2160-17-70/2160-18-70	HWY: S 76TH STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING AND SIGNING	SHEET 17	E

2

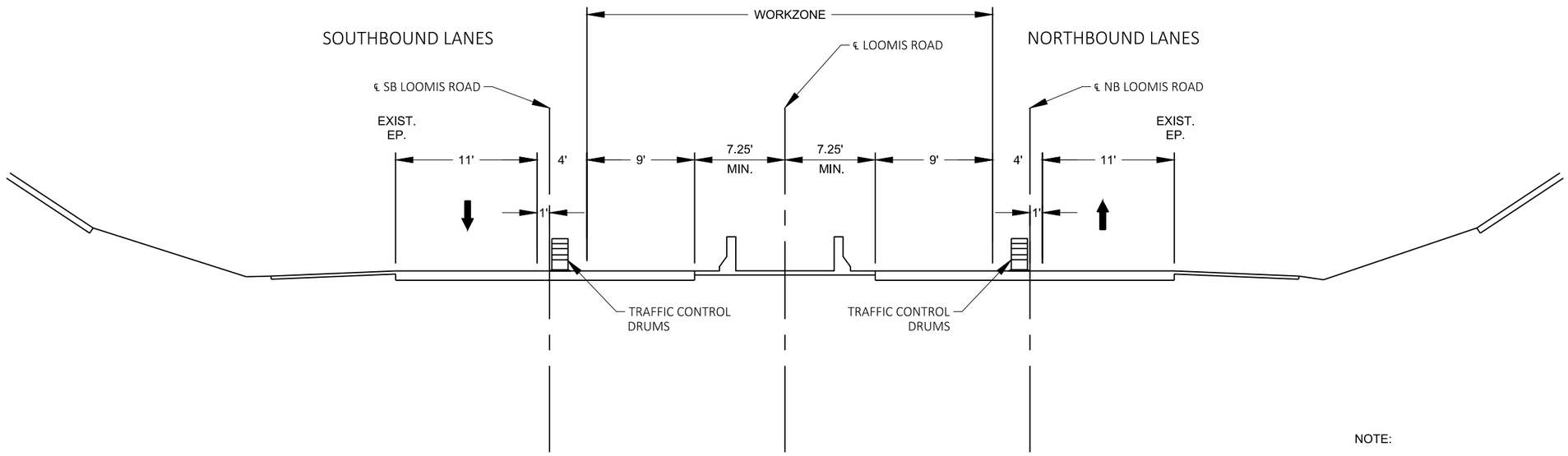


PROJECT NO: 2160-17-70/2160-18-70	HWY: S 76TH STREET	COUNTY: MILWAUKEE	PAVEMENT MARKING AND SIGNING	SHEET 18	E

2



STAGE 1 - TYPICAL SECTION
LOOKING NORTHEAST



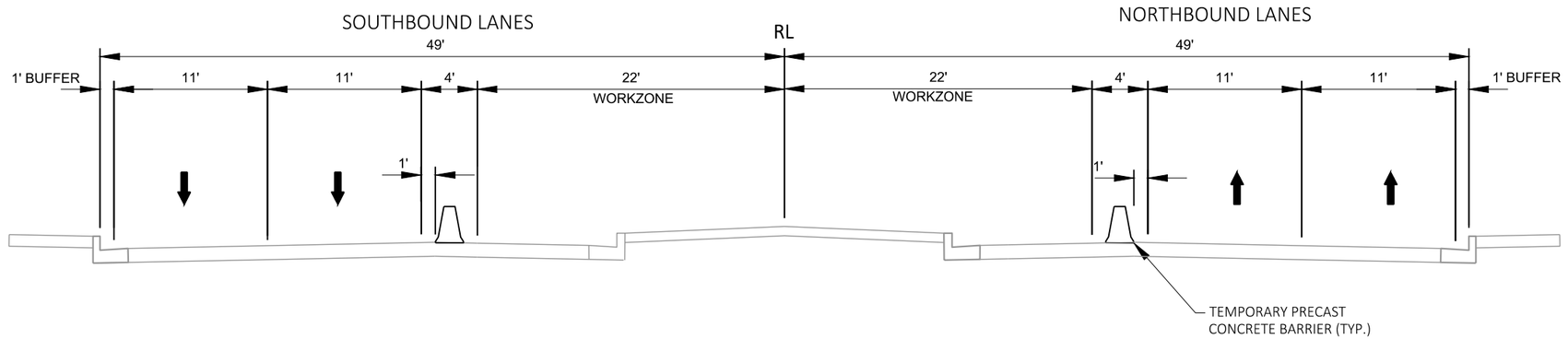
STAGE 2 - TYPICAL SECTION
LOOKING NORTHEAST

NOTE:

1. FULL OVERNIGHT CLOSURES OF W. LOOMIS ROAD ARE AVAILABLE TO ACCOMMODATE BRIDGE PAINTING ABOVE THE C/L OF NORTHBOUND AND SOUTHBOUND LANES.

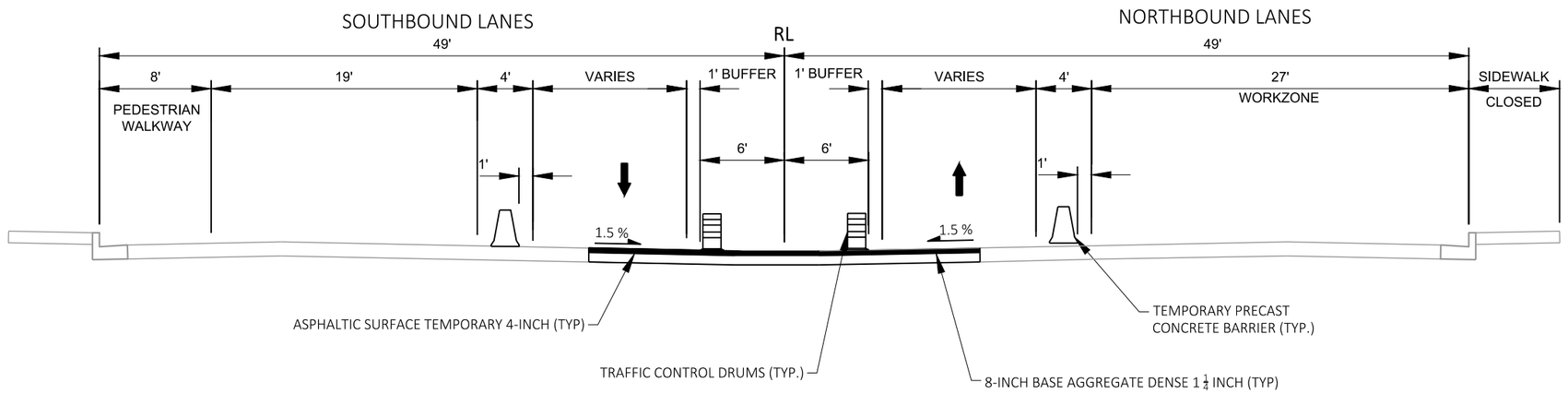
PROJECT NO: 2160-17-70/2160-18-70	HWY: STH 36	COUNTY: MILWAUKEE	TRAFFIC CONTROL - TYPICAL SECTION WEST LOOMIS ROAD	SHEET 19	E

FILE NAME : Y:\PUBLIC\PROJECTS\2020\20033.25 S. 76TH STREET BRIDGE OVER STH 36 - NORTHBOUND 2160-17-00 (MBI)\CADD\SHEETSPLAN\TC_STH36_CT.DWG
LAYOUT NAME - STH 36 - CTYP
PLOT DATE : 10/25/2021 9:25 AM PLOT BY : SHARDUL ADHIKARI PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 44



STAGE 1 - TYPICAL SECTION

LOOKING NORTH
STA. 127+35 to STA. 132+86



STAGE 2A - TYPICAL SECTION

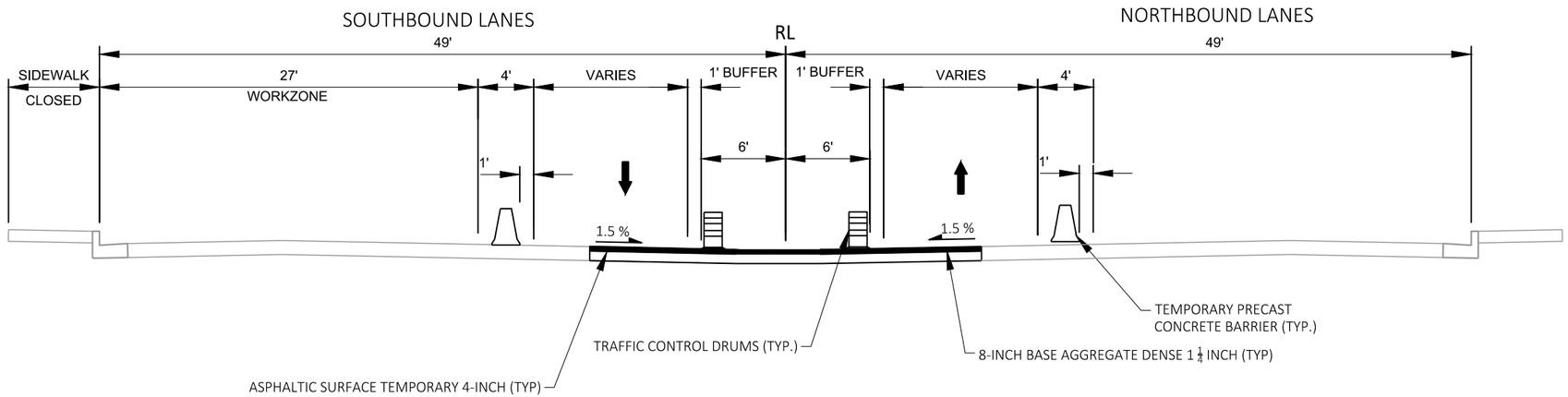
LOOKING NORTH
STA. 127+35 to STA. 132+86

NOTE:

1. INSIDE TRAFFIC CONTROL DRUMS ARE NOT REQUIRED ON THE BRIDGE MEDIAN. THEY ARE ONLY PRESENT ON THE APPROACHES.

PROJECT NO: 2160-17-70/2160-18-70	HWY: S 76TH STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL - TYPICAL SECTION SOUTH 76 STREET	SHEET 20	E

FILE NAME : Y:\PUBLIC\PROJECTS\2020\20033.25 S. 76TH STREET BRIDGE OVER STH 36 - NORTHBOUND 2160-17-00 (MBI)\CADD\SHEETSPLAN\TC_76ST_CT.DWG
LAYOUT NAME - 76th - CTYP
PLOT DATE : 10/25/2021 9:25 AM PLOT BY : SHARDUL ADHIKARI PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 44

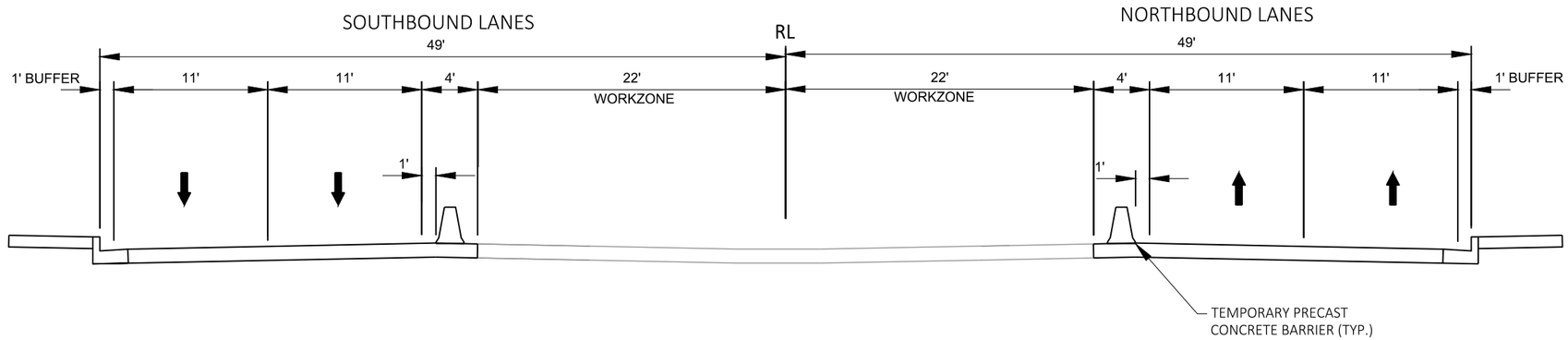


STAGE 2B - TYPICAL SECTION

LOOKING NORTH
STA. 127+35 to STA. 132+86

NOTE:

1. INSIDE TRAFFIC CONTROL DRUMS ARE NOT REQUIRED ON THE BRIDGE MEDIAN. THEY ARE ONLY PRESENT ON THE APPROACHES.



STAGE 3 - TYPICAL SECTION

LOOKING NORTH
STA. 127+35 to STA. 132+86

PROJECT NO: 2160-17-70/2160-18-70	HWY: S 76TH STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL - TYPICAL SECTION SOUTH 76 STREET	SHEET 21	E

FILE NAME : Y:\PUBLIC\PROJECTS\2020\20033.25 S. 76TH STREET BRIDGE OVER STH 36 - NORTHBOUND 2160-17-00 (MBI)\CADD\SHEETSPLAN\TC_76ST_CT.DWG
LAYOUT NAME - 76th - CTYP2
PLOT DATE : 10/25/2021 9:25 AM PLOT BY : SHARDUL ADHIKARI PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 44

2

W RAWSON AVENUE

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHT AND ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- FLASHING ARROW BOARD
- WORK AREA
- DIRECTION OF TRAFFIC
- SIGN ON PERMANANT SUPPORT
- SIGN ON TEMPORARY SUPPORT

ROAD WORK 1 MILE W20-1F

RIGHT LANE CLOSED 1/2 MILE W20-5G

W04-2R

G20-2A 48"X24" END ROAD WORK

STH 36 (W LOOMIS ROAD)

50' TYP.

25'

500'

50' TYP.

330'

100' TYP.

G20-2A 48"X24" END ROAD WORK

2600'

1600'

1000'

660'

800' BUFFER SPACE

MATCHLINE A

MATCHLINE A

S 76TH STREET

220' BUFFER SPACE

540'

500'

R11-2L 48"X30" LANE CLOSED

100'

130'

R11-2L 48"X30" LANE CLOSED

50' TYP.

100' TYP.

100' TYP.

400' TYP.

800' BUFFER SPACE.

STH 36 (W LOOMIS ROAD)

END ROAD WORK G20-2A 48"X24"

MATCHLINE B

NOTE:

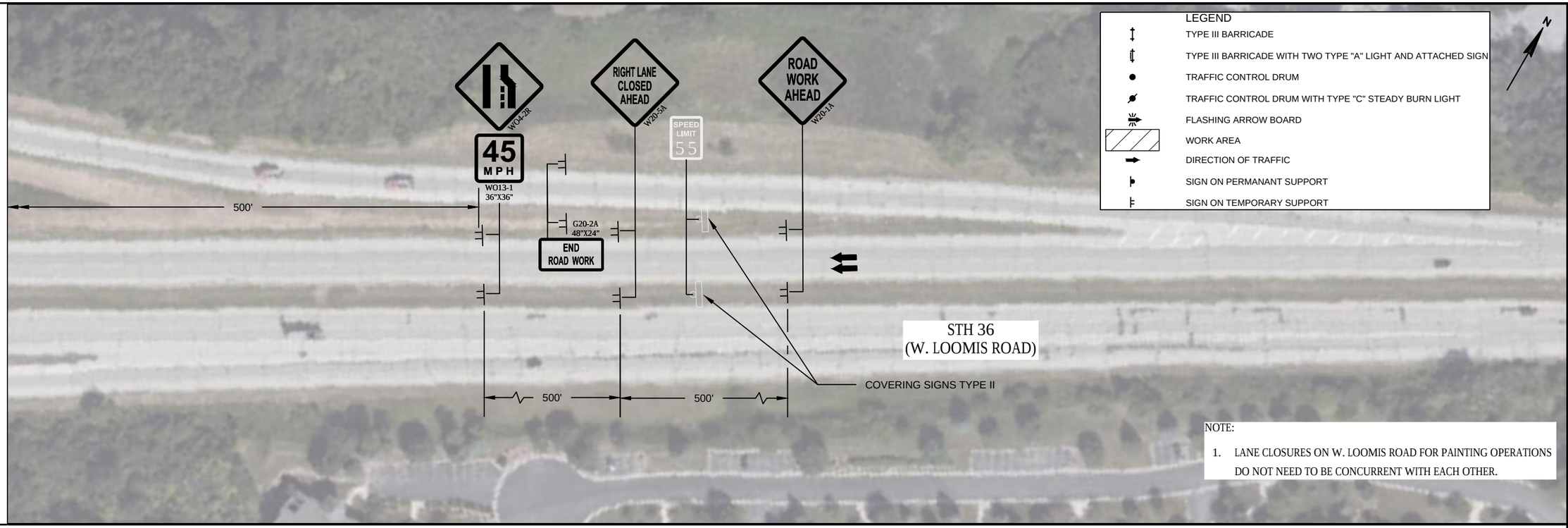
1. LANE CLOSURES ON W. LOOMIS ROAD FOR PAINTING OPERATIONS DO NOT NEED TO BE CONCURRENT WITH EACH OTHER.

PROJECT NO: 2160-17-70/2160-18-70	HWY: STH 36	COUNTY: MILWAUKEE	TRAFFIC CONTROL - WEST LOOMIS ROAD STAGE 1	SHEET 22	E

FILE NAME : Y:\PUBLIC\PROJECTS\2020\20033.25 S. 76TH STREET BRIDGE OVER STH 36 - NORTHBOUND 2160-17-00 (MBI)\CADD\SHEETSPLAN\TC_STH36.DWG
LAYOUT NAME - STH 36- Stage1-1
PLOT DATE : 10/25/2021 9:26 AM PLOT BY : SHARDUL ADHIKARI PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

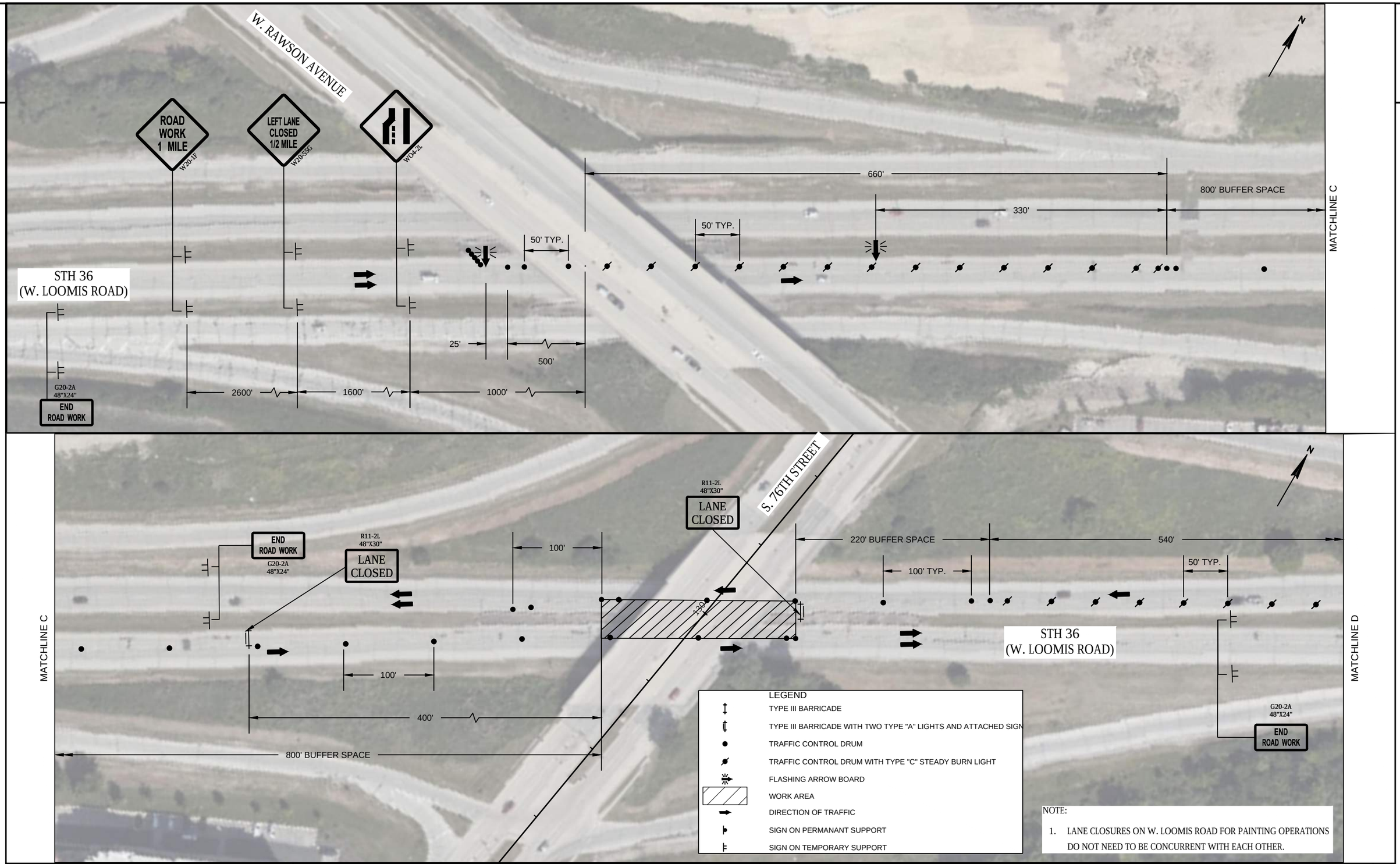
MATCHLINE B



NOTE:

1. LANE CLOSURES ON W. LOOMIS ROAD FOR PAINTING OPERATIONS DO NOT NEED TO BE CONCURRENT WITH EACH OTHER.

PROJECT NO: 2160-17-70/2160-18-70	HWY: STH 36	COUNTY: MILWAUKEE	TRAFFIC CONTROL - WEST LOOMIS ROAD STAGE 1	SHEET 23	E



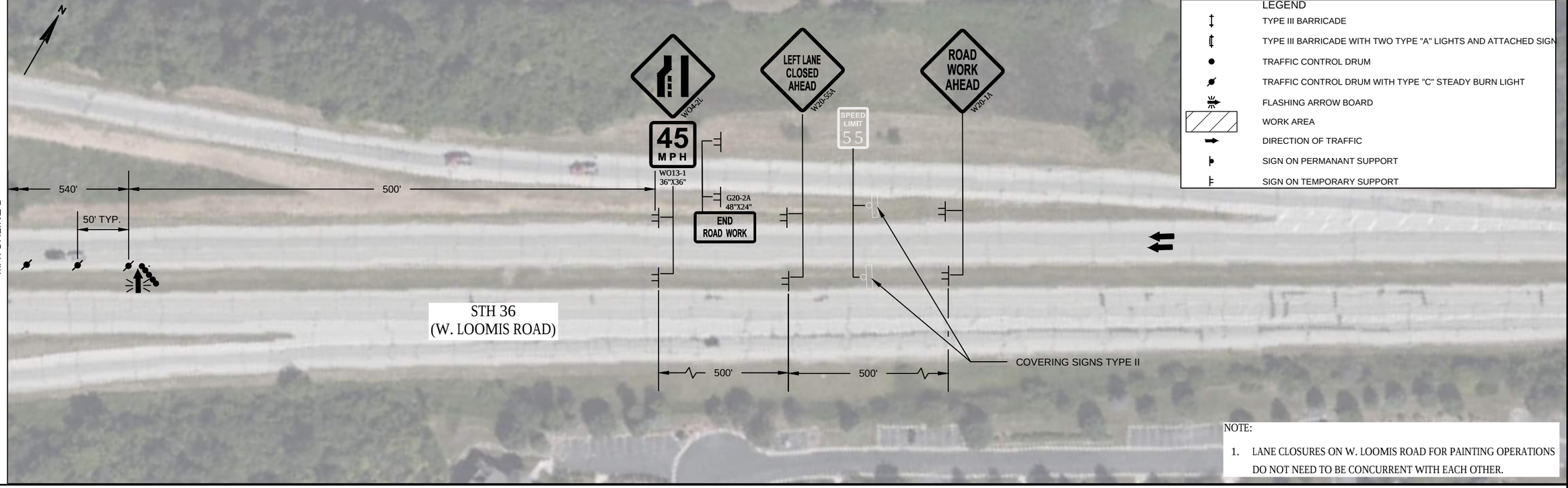
NOTE:

1. LANE CLOSURES ON W. LOOMIS ROAD FOR PAINTING OPERATIONS DO NOT NEED TO BE CONCURRENT WITH EACH OTHER.

PROJECT NO: 2160-17-70/2160-18-70	HWY: STH 36	COUNTY: MILWAUKEE	TRAFFIC CONTROL - WEST LOOMIS ROAD STAGE 2	SHEET 24	E

2

MATCHLINE D



NOTE:

1. LANE CLOSURES ON W. LOOMIS ROAD FOR PAINTING OPERATIONS DO NOT NEED TO BE CONCURRENT WITH EACH OTHER.

PROJECT NO: 2160-17-70/2160-18-70	HWY: STH 36	COUNTY: MILWAUKEE	TRAFFIC CONTROL - WEST LOOMIS ROAD STAGE 2	SHEET 25	E

FILE NAME : Y:\PUBLIC\PROJECTS\2020\20033.25 S. 76TH STREET BRIDGE OVER STH 36 - NORTHBOUND 2160-17-00 (MBI)\CADD\SHEETSPLAN\TC_STH36_STG2.DWG
LAYOUT NAME - STH 36- Stage2-2
PLOT DATE : 10/25/2021 9:26 AM PLOT BY : SHARDUL ADHIKARI PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

3 DAYS PRIOR TO CLOSE:

FRAME 1	FRAME 2
ROAD CLOSED	BEGINS XXXX DAY

DURING CLOSURE:

FRAME 1	FRAME 2
ROAD CLOSED	DETOUR AHEAD

STH 36
(W LOOMIS ROAD)

PCMS

PCMS

ROAD CLOSED AHEAD
W20-3A

DETOUR AHEAD
W20-2A

LEFT LANE CLOSED 1/2 MILE
W20-5G

WO4-2L

G20-2A
48"X24"
END ROAD WORK

500'

2600'

1600'

500'

500'

660'

50' TYP.

ROAD CLOSED
R11-2
48"X30"

ROAD CLOSED
R11-2
48"X30"

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHT AND ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- FLASHING ARROW BOARD
- WORK AREA
- DIRECTION OF TRAFFIC
- SIGN ON PERMANANT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- PCMS PORTABLE CHANGEABLE MESSAGE BOARD

N

MATCHLINE E

2

MATCHLINE E

LANE CLOSED
R11-2L
48"X30"

50' TYP.

STH 36
(W LOOMIS ROAD)

330'

660'

1320'

15' TYP.

LANE CLOSED
R11-2L
48"X30"

WO1-6
48"X24"

50' TYP.

500'

ROAD CLOSED
R11-2
48"X30"

WO1-2R

N

MATCHLINE F

NOTE:

1. CLOSURES ON W. LOOMIS ROAD FOR PAINTING OPERATION DO NOT NEED TO BE CONCURRENT WITH EACH OTHER.
2. LEFT TURN LANE CLOSED IN THE SOUTHBOUND DIRECTION.

PROJECT NO: 2160-17-70/2160-18-70	HWY: STH 36	COUNTY: MILWAUKEE	TRAFFIC CONTROL - WEST LOOMIS ROAD STAGE 3	SHEET 26	E

FILE NAME : Y:\PUBLIC\PROJECTS\2020\20033.25 S. 76TH STREET BRIDGE OVER STH 36 - NORTHBOUND 2160-17-00 (MBI)\CADD\SHEETSPLAN\TC_STH36 -STG3.DWG
LAYOUT NAME - STH 36- Stage3-1
PLOT DATE : 10/25/2021 9:26 AM
PLOT BY : SHARDUL ADHIKARI
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

MATCHLINE F

1320'

500'

660'

STH 36
(W LOOMIS ROAD)

50' TYP.

50' TYP.

25' TYP.

LANE CLOSED
R11-2L
48"X30"

ROAD WORK AHEAD
W20-1A

ROAD CLOSED
R11-2
48"X30"

WO1-6
48"X24"

MATCHLINE G

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHT AND ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- FLASHING ARROW BOARD
- WORK AREA
- DIRECTION OF TRAFFIC
- SIGN ON PERMANANT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- PCMS — PORTABLE CHANGEABLE MESSAGE BOARD

2

MATCHLINE G

STH 36
(W LOOMIS ROAD)

25' TYP.

RAMP CLOSED
R11-2R
48"X30"

RAMP WILL BE CLOSED 10PMTO5AM BEGINNING XXX XX
R11-51
48"X48"

200'

100'

ROAD CLOSED
R11-2
48"X30"

END ROAD WORK
G20-2A
48"X24"

RAMP CLOSED AHEAD
W20-53A

RAMP CLOSED 1000 FT
W20-53C

1500'

1000'

NOTE:

1. CLOSURES ON W. LOOMIS ROAD FOR PAINTING OPERATION DO NOT NEED TO BE CONCURRENT WITH EACH OTHER.
2. LEFT TURN LANE CLOSED IN THE SOUTHBOUND DIRECTION.

PROJECT NO: 2160-17-70/2160-18-70	HWY: STH 36	COUNTY: MILWAUKEE	TRAFFIC CONTROL - WEST LOOMIS ROAD STAGE 3	SHEET 27	E

FILE NAME : Y:\PUBLIC\PROJECTS\2020\20033.25 S. 76TH STREET BRIDGE OVER STH 36 - NORTHBOUND 2160-17-00 (MBI)\CADD\SHEETSPLAN\TC_STH36 -STG3.DWG
LAYOUT NAME - STH 36- Stage3-2

PLOT DATE : 10/25/2021 9:27 AM PLOT BY : SHARDUL ADHIKARI PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHT AND ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- FLASHING ARROW BOARD
- WORK AREA
- DIRECTION OF TRAFFIC
- SIGN ON PERMANANT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- PCMS — PORTABLE CHANGEABLE MESSAGE BOARD

RAMP WILL BE CLOSED 10PMTO5AM BEGINNING XXX XX
R11-51
48"X48"

END ROAD WORK
G20-2A
48"X24"

25' TYP.

ROAD CLOSED
R11-2
48"X30"

WO1-6
48"X24"

50' TYP.

540'

1080'

500'

100' TYP.

STH 36
(W. LOOMIS ROAD)

MATCHLINE H

NOTE:

1. CLOSURES ON W. LOOMIS ROAD FOR PAINTING OPERATIONS DO NOT NEED TO BE CONCURRENT WITH EACH OTHER.

WO1-2R

HORIZON DRIVE

ROOT RIVER PARKWAY

MATCHLINE H

MATCHLINE I

100' - 150' MIN.

WO1-6
48"X24"

S 68 STREET

WO12-1D
24"X24"

50' MIN.

BEGIN LEFT TURN LANE
R3-20L
24"X36"

15' TYP.

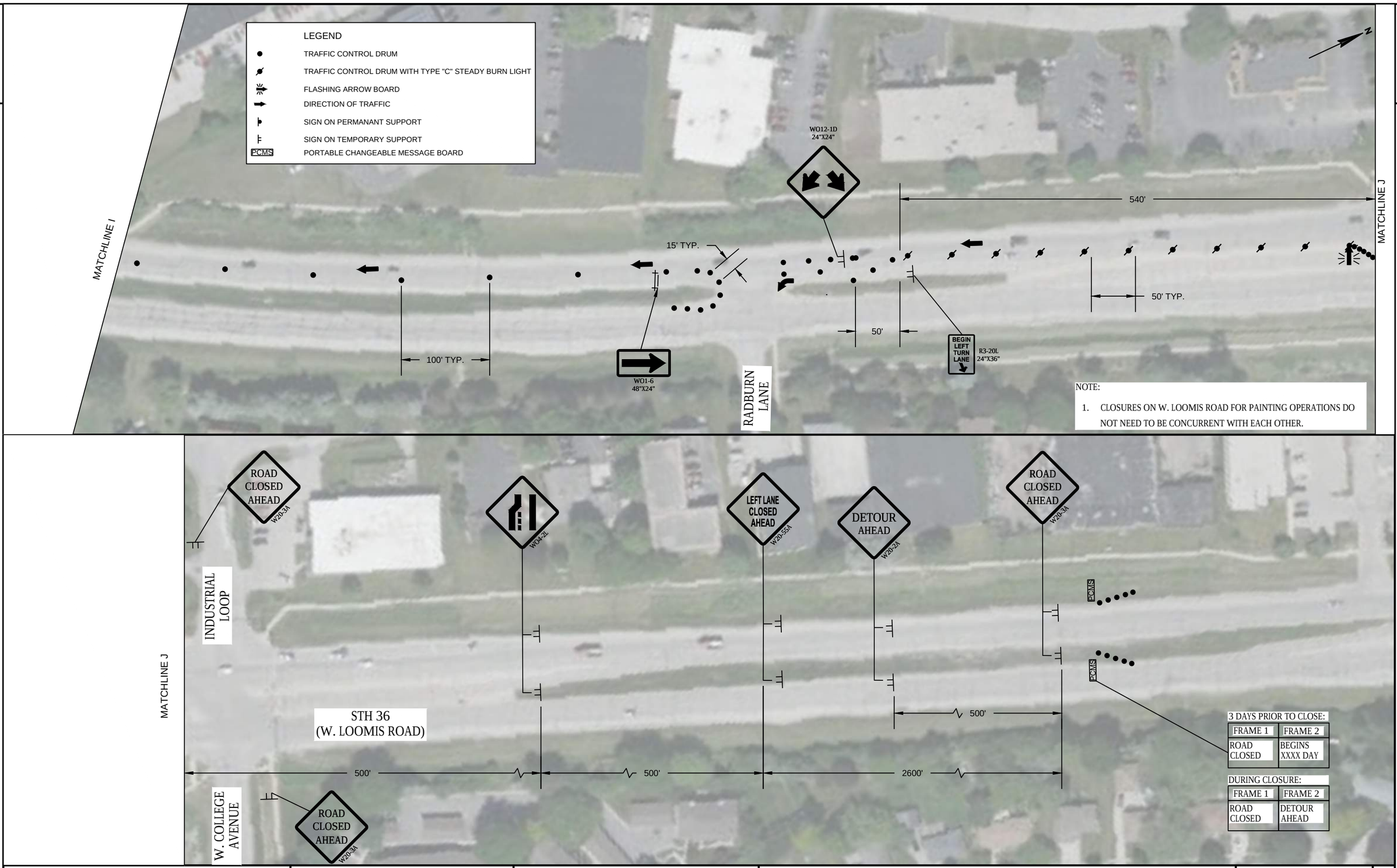
WO1-6
48"X24"

LANE CLOSED
R11-2L
48"X30"

100' TYP.

STH 36
(W LOOMIS ROAD)

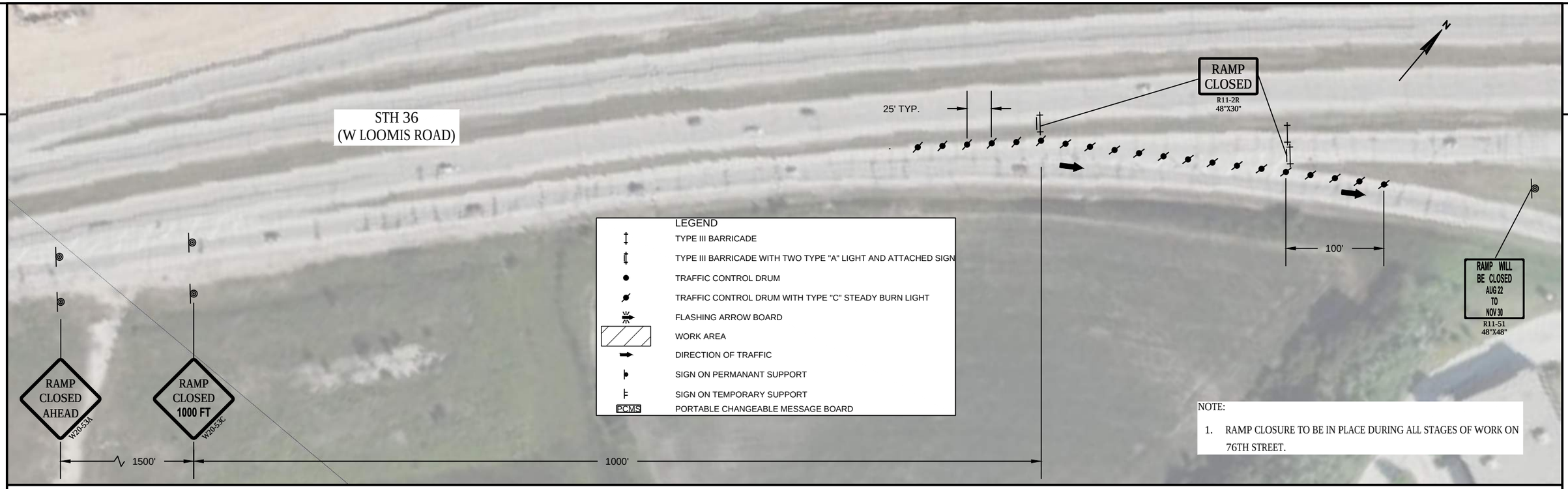
1080'



PROJECT NO: 2160-17-70/2160-18-70	HWY: STH 36	COUNTY: MILWAUKEE	TRAFFIC CONTROL - WEST LOOMIS ROAD STAGE 3	SHEET 29	E

FILE NAME : Y:\PUBLIC\PROJECTS\2020\20033.25 S. 76TH STREET BRIDGE OVER STH 36 - NORTHBOUND 2160-17-00 (MBI)\CADD\SHEETSPLAN\TC_STH36 -STG3.DWG
LAYOUT NAME - STH 36- Stage3-4
PLOT DATE : 10/25/2021 9:27 AM
PLOT BY : SHARDUL ADHIKARI
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2



PROJECT NO: 2160-17-70/2160-18-70	HWY: STH 36	COUNTY: MILWAUKEE	TRAFFIC CONTROL - WEST LOOMIS RD NB EXIT TO 76TH ST RAMP CLOSURE	SHEET 30	E

NOTE:

1. SEE TRAFFIC CONTROL - WEST LOOMIS RD NB EXIT TO 76TH ST RAMP CLOSURE FOR RAMP CLOSURE.

ROAD WORK AHEAD W20-1A
W RAWSON AVENUE
BP: 120+00.00
350'
S 76TH STREET
END ROAD WORK G20-2A 48"X24"
124+00.00 14.00'RT BEGIN SHIFTING TAPER
125+22.50 25.00'RT END SHIFTING TAPER
STH 36 (W LOOMIS ROAD)
R3-2 24"X24"
TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
127+31.00 24.00'LT
ROAD CLOSED R11-2 48"X30"
25' TYP.
125
130
CC
MATCHLINE STA 131+00
LANE CLOSED R11-2L 48"X30"
ROAD CLOSED R11-2 48"X30"
LANE CLOSED R11-2L 48"X30"
124+00.00 36.00'RT
WO1-6 48"X24"
50' TYP.
125+22.50 47.00'RT
127+31.01 24.00'RT
WO1-6 48"X24"
TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
END ROAD WORK G20-2A 48"X24"
ROAD WORK AHEAD W20-1A
ROAD WORK AHEAD W20-1A
LEFT LANE CLOSED AHEAD W20-5A
SPEED LIMIT 35 W03-5
SPEED LIMIT 35 R2-1 24"X30"
WO1-4BR
350'
350'
350'
350'
N
TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
END ROAD WORK G20-2A 48"X24"
WO5-52L 12"X36"
132+65.00 24.00'LT
132+90.00 14.00'LT
WO1-6 48"X24"
136+79.02 14.00'LT
136+79.10 25.00'LT
140+02.54 25.00'LT BEGIN SHIFTING TAPER
138+50.00 25.00'LT
ROAD WORK AHEAD W20-1A
TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
350'TYP.
141+25.09 14.00'LT END SHIFTING TAPER
EP: 146+41.48
MATCHLINE STA 131+00
135
135+90.00 25.00'LT
S 76TH STREET
140
145
BEGIN LEFT TURN LANE R3-20L 24"X36"
WO1-6 48"X24"
138+50.00 14.00'LT
END ROAD WORK G20-2A 48"X24"
R3-2 24"X24"
132+90.00 24.00'RT
133+74.00 25.00'LT
500'
WO12-1D 24"X24"
OLD LOOMIS ROAD
TEMPORARY MARKING LINE TEMPORARY MARKING 4-INCH (YELLOW)
TEMPORARY MARKING LINE TEMPORARY MARKING 4-INCH (WHITE)
ROAD WORK AHEAD W20-1A
SPEED LIMIT 35 R2-1 24"X30"
SPEED LIMIT 35 W03-5
LEFT LANE CLOSED AHEAD W20-5A
ROAD WORK AHEAD W20-1A
WO1-4BR
350'
350'
350'
350'

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS AND ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- FLASHING ARROW BOARD
- WORK AREA
- DIRECTION OF TRAFFIC
- SIGN ON PERMANANT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY (CC)

PROJECT NO: 2160-17-70/2160-18-70	HWY: S 76TH STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL - S 76TH STREET STAGE 1 AND STAGE 3	SHEET 31	E

FILE NAME : Y:\PUBLIC\PROJECTS\2020\20033.25 S. 76TH STREET BRIDGE OVER STH 36 - NORTHBOUND 2160-17-00 (MBI)\CADD\SHEETSPLAN\TC_76ST_STG1.DWG
LAYOUT NAME - 76th - STG 1
PLOT DATE : 10/25/2021 9:27 AM PLOT BY : SHARDUL ADHIKARI PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS AND ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- FLASHING ARROW BOARD
- WORK AREA
- DIRECTION OF TRAFFIC
- SIGN ON PERMANANT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- CC — CRASH CUSHIONS TEMPORARY

NOTE:

1. SEE TRAFFIC CONTROL - WEST LOOMIS RD NB EXIT TO 76TH ST RAMP CLOSURE FOR RAMP CLOSURE.

S 76TH STREET

ROAD WORK AHEAD W20-1A — 350' — ROAD WORK AHEAD W20-1A — RIGHT LANE CLOSED AHEAD W20-5A — 350' — SPEED LIMIT 35 W03-5 — 350' — SPEED LIMIT 35 R2-1 24"X30" — W04-2R — 350'

W RAWSON AVENUE

BP: 120+00.00

350'

END ROAD WORK G20-2A 48"X24"

ASPHALTIC SURFACE TEMPORARY 4-INCH

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

122+00.00 36.00'RT BEGIN TAPER

25' TYP.

LANE CLOSED R11-2L 48"X30"

350'

ROAD WORK AHEAD W20-1A

ROAD CLOSED R11-2 48"X30"

123+75.39 38.70'LT

5'

124+45.00 25.00'RT END TAPER

LANE CLOSED R11-2L 48"X30"

BEGIN RIGHT TURN LANE R3-20R 24"X36"

125+59.00 25.00'RT

125

50' TYP.

126+58.39 38.73'LT

126+58.00 14.00'RT

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

ROAD CLOSED R11-2 48"X30"

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)

R3-2 24"X24"

127+80.18 20.00'LT

130

126+61.00 47.30'RT

100'

500'

128+01.00 20.00'RT

END ROAD WORK G20-2A 48"X24"

LANE CLOSED R11-2L 48"X30"

STH 36 (W LOOMIS ROAD)

MATCHLINE STA 132+50

Z

ROAD CLOSED R11-2 48"X30"

WO5-52R 12"X36"

END ROAD WORK G20-2A 48"X24"

WO1-6 48"X24"

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)

132+66.22 24.91'LT

R1-5L 30"X30"

132+01.93 21.70'LT

CC

10'

135+00.00 50.00'LT

25' TYP.

BEGIN RIGHT TURN LANE R3-20R 24"X36"

135

134+75.00 25.00'LT

136+00.00 25.00'LT

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

TEMPORARY MARKING ARROW REMOVABLE TAPE

MARKING REMOVAL SPECIAL

R3-2 24"X24"

132+00.00 18.00'RT

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

500'

ROAD WORK AHEAD W20-1A

OLD LOOMIS ROAD

S 76TH STREET

WO1-6 48"X24"

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

139+00.00 25.00'LT END TAPER

25' TYP.

140

G20-2A 48"X24"

END ROAD WORK

141+45.00 36.00'LT BEGIN TAPER

350'

ROAD WORK AHEAD W20-1A

145

EP: 146+41.48

MATCHLINE STA 132+50

SPEED LIMIT 35 R2-1 24"X30"

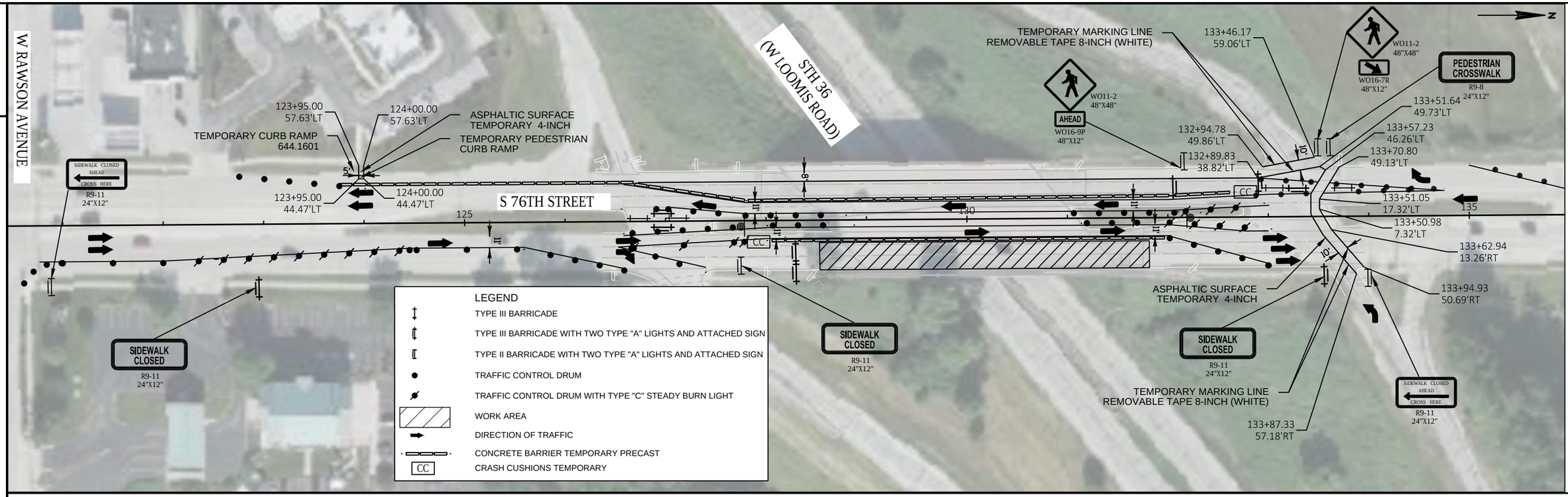
W04-2R — SPEED LIMIT 35 W03-5 — RIGHT LANE CLOSED AHEAD W20-5A — ROAD WORK AHEAD W20-1A

350' — 350' — 350' — 350'

NOTE:

1. SEE TRAFFIC CONTROL - S 76TH STREET STAGE 2A - PEDESTRIAN ACCOMMODATION SHEET FOR ALL PEDESTRIAN TRAFFIC CONTROL.

PROJECT NO: 2160-17-70/2160-18-70	HWY: S 76TH STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL - S 76TH STREET STAGE 2A	SHEET 32	E



2

PROJECT NO: 2160-17-70/2160-18-70	HWY: S 76TH STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL - S 76TH STREET STAGE 2A - PEDESTRIAN ACCOMMODATION	SHEET 33	E

FILE NAME : Y:\PUBLIC\PROJECTS\2020\20033.25 S. 76TH STREET BRIDGE OVER STH 36 - NORTHBOUND 2160-17-00 (MBI)\CADD\SHEETSPLAN\TC_76ST_STG2A-PED.DWG
LAYOUT NAME - PEDESTRIAN ACCOMMODATION
PLOT DATE : 10/25/2021 9:28 AM
PLOT BY : SHARDUL ADHIKARI
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS AND ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- FLASHING ARROW BOARD
- WORK AREA
- DIRECTION OF TRAFFIC
- SIGN ON PERMANANT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- CC CRASH CUSHIONS TEMPORARY

NOTE:

1. SEE TRAFFIC CONTROL - WEST LOOMIS RD NB EXIT TO 76TH ST RAMP CLOSURE FOR RAMP CLOSURE.

S 76TH STREET

W RAWSON AVENUE

ROAD WORK AHEAD W20-1A

RIGHT LANE CLOSED AHEAD W20-5A

SPEED LIMIT 35 W03-5

SPEED LIMIT 35 R2-1 24"X30"

W04-2R

350' 350' 350' 350'

BP: 120+00.00

350'

END ROAD WORK G20-2A 48"X24"

122+00.00 36.00'RT BEGIN TAPER

124+45.00 25.00'RT END TAPER

25' TYP.

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

LANE CLOSED R11-2L 48"X30"

ROAD CLOSED R11-2 48"X30"

ROAD WORK AHEAD W20-1A

125+59.00 25.00'RT

125

50' TYP.

BEGIN RIGHT TURN LANE R3-20R 24"X36"

100'

500'

126+58.00 14.00'RT

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)

ROAD CLOSED R11-2 48"X30"

R3-2 24"X24"

127+80.18 20.00'LT

SIDEWALK CLOSED R9-9 24"X12"

SIDEWALK CLOSED R9-9 24"X12"

130

CC

126+61.00 47.30'RT

128+01.00 20.00'RT

LANE CLOSED R11-2L 48"X30"

END ROAD WORK G20-2A 48"X24"

STH 36 (W LOOMIS ROAD)

MATCHLINE STA 132+50

ROAD CLOSED R11-2 48"X30"

WO5-52R 12"X36"

END ROAD WORK G20-2A 48"X24"

WO1-6 48"X24"

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)

132+66.29 25.21'LT

132+02.00 22.00'LT

CC

135+00.00 50.00'LT

25' TYP.

BEGIN RIGHT TURN LANE R3-20R 24"X36"

135

134+75.00 25.00'LT

136+00.00 25.00'LT

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

139+00.00 25.00'LT END TAPER

25' TYP.

WO1-6 48"X24"

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

141+45.00 36.00'LT BEGIN TAPER

140

350'

ROAD WORK AHEAD W20-1A

EP: 146+41.48

145

SPEED LIMIT 35 R2-1 24"X30"

W04-2R

W03-5

RIGHT LANE CLOSED AHEAD W20-5A

ROAD WORK AHEAD W20-1A

350' 350' 350' 350'

MATCHLINE STA 132+50

R3-2 24"X24"

132+00.00 18.00'RT

TEMPORARY MARKING ARROW REMOVABLE TAPE

MARKING REMOVAL SPECIAL

500'

ROAD WORK AHEAD W20-1A

OLD LOOMIS ROAD

G20-2A 48"X24"

END ROAD WORK

S 76TH STREET

PROJECT NO: 2160-17-70/2160-18-70	HWY: S 76TH STREET	COUNTY: MILWAUKEE	TRAFFIC CONTROL - S 76TH STREET STAGE 2B	SHEET 34	E

FILE NAME : Y:\PUBLIC\PROJECTS\2020\20033.25 S. 76TH STREET BRIDGE OVER STH 36 - NORTHBOUND 2160-17-00 (MBI)\CADD\SHEETSPLAN\TC_76ST_STG2B.DWG
LAYOUT NAME - 76th - STG 2B

PLOT DATE : 10/25/2021 9:28 AM PLOT BY : SHARDUL ADHIKARI PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

1

NORTH
M3-1
24"X12"

36
M1-6
24"X24"

RAMP CLOSED AHEAD
W20-53A

2

TO
MO4-5
24"X12"

NORTH
M3-1
24"X12"

36
M1-6
24"X24"

MO5-1R
21"X21"

3

TO
MO4-5
24"X12"

NORTH
M3-1
24"X12"

36
M1-6
24"X24"

MO6-1
21"X21"

4

TO
MO4-5
24"X12"

NORTH
M3-1
24"X12"

36
EXISTING

EXISTING

5

TO
MO4-5
24"X12"

NORTH
M3-1
24"X12"

36
M1-6
24"X24"

MO6-1
21"X21"

6

TO
MO4-5
24"X12"

TO
COVERING EXISTING

NORTH
EXISTING

36
EXISTING

EXISTING

7

TO
MO4-5
24"X12"

NORTH
EXISTING

36
EXISTING

EXISTING

8

NORTH
COVERING EXISTING

36
COVERING EXISTING

COVERING EXISTING

9

TO
MO4-5
24"X12"

NORTH
EXISTING

36
EXISTING

10

TO
MO4-5
24"X12"

NORTH
M3-1
24"X12"

36
M1-6
24"X24"

MO5-1L
21"X21"

LEGEND

- WORK AREA
- DIRECTION OF TRAFFIC
- SIGN ON PERMANENT SUPPORT
- SIGN ON EXISTING SUPPORT
- DETOUR ROUTE

NOTES:

1. ALL EXISTING SIGN MESSAGES IN CONFLICT WITH TRAFFIC CONTROL DETOUR SIGNS SHALL BE COVERED OR REMOVED.
2. THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICE SHALL BE ADJUSTED TO FIT FIELD CONDITIONS. SIGNS MAY BE MOUNTED ON EXISTING POSTS, LIGHTS, PERMANENT SIGN SUPPORTS AS APPROVED BY THE ENGINEER.



PROJECT NO: 2160-17-70/2160-18-70	HWY: S 76TH STREET	COUNTY: MILWAUKEE	DETOUR PLAN: SB S 76TH ST TO NB STH 36 - ALL STAGES	SHEET 35	E

FILE NAME : Y:\PUBLIC\PROJECTS\2020\20033.25 S. 76TH STREET BRIDGE OVER STH 36 - NORTHBOUND 2160-17-00 (MBI)\CADD\SHEETSPLAN\TC_76ST_DT.DWG
LAYOUT NAME - SB 76th - NB STH 36 ON RAMP
PLOT DATE : 10/25/2021 9:28 AM PLOT BY : SHARDUL ADHIKARI PLOT NAME : PLOT SCALE : 1" = 500'
WISDOT/CADDS SHEET 44

2

1

WEST
M3-4
24"X12"

COUNTY BB
M1-5A
24"X24"

RAMP CLOSED AHEAD
W20-5AA

2

TO
MO4-5
24"X12"

TO
COVERING EXISTING

WEST
EXISTING

COUNTY BB
EXISTING

MO5-1L
21"X21"

3

TO
MO4-5
24"X12"

TO
COVERING EXISTING

WEST
EXISTING

COUNTY BB
EXISTING

MO6-1
21"X21"

4

TO
MO4-5
24"X12"

WEST
M3-4
24"X12"

COUNTY BB
M1-5A
24"X24"

MO5-1R
21"X21"

5

TO
MO4-5
24"X12"

WEST
M3-4
24"X12"

COUNTY BB
M1-5A
24"X24"

MO6-1
21"X21"

LEGEND

- WORK AREA
- DIRECTION OF TRAFFIC
- SIGN ON PERMANENT SUPPORT
- SIGN ON EXISTING SUPPORT
- DETOUR ROUTE

NOTES:

1. ALL EXISTING SIGN MESSAGES IN CONFLICT WITH TRAFFIC CONTROL DETOUR SIGNS SHALL BE COVERED OR REMOVED.
2. THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICE SHALL BE ADJUSTED TO FIT FIELD CONDITIONS. SIGNS MAY BE MOUNTED ON EXISTING POSTS, LIGHTS, PERMANENT SIGN SUPPORTS AS APPROVED BY THE ENGINEER.



PROJECT NO: 2160-17-70/2160-18-70	HWY: S 76TH STREET	COUNTY: MILWAUKEE	DETOUR PLAN - SB STH 36 TO WB RAWSON AVENUE - STAGE 2	SHEET 36	E

FILE NAME : Y:\PUBLIC\PROJECTS\2020\20033.25 S. 76TH STREET BRIDGE OVER STH 36 - NORTHBOUND 2160-17-00 (MBI)\CADD\SHEETSPLAN\TC_76ST_DT.DWG
LAYOUT NAME - SB STH 36 - WB RAWSON AVENUE
PLOT DATE : 10/25/2021 9:28 AM PLOT BY : SHARDUL ADHIKARI PLOT NAME : PLOT SCALE : 1" = 500'
WISDOT/CADDS SHEET 44

2

1



M1-5A
24"X24"

W20-5A

2



MO4-5
24"X12"

M1-5A
24"X24"

MO5-2R
21"X21"

3



MO4-5
24"X12"

EXISTING

MO6-2
21"X21"

4



MO4-5
24"X12"

M1-5A
24"X24"

MO6-1
21"X21"

5



MO4-5
24"X12"

M3-1
24"X12"

M1-5A
24"X24"

MO5-1L
21"X21"

6



MO4-5
24"X12"

M3-3
24"X12"

M1-5A
24"X24"

MO5-1R
21"X21"

7



MO4-5
24"X12"

M3-1
24"X12"

M1-5A
24"X24"

MO6-1
21"X21"

8



MO4-5
24"X12"

M3-3
24"X12"

M1-5A
24"X24"

MO6-1
21"X21"

9



MO4-5
24"X12"

COVERING EXISTING

EXISTING

EXISTING



LEGEND

- WORK AREA
- DIRECTION OF TRAFFIC
- SIGN ON TEMPORARY SUPPORT
- SIGN ON EXISTING SUPPORT
- DETOUR ROUTE

NOTES:

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PROJECT NO: 2160-17-70/2160-18-70	HWY: S 76TH STREET	COUNTY: MILWAUKEE	DETOUR PLAN - NB STH 36 TO S 76TH STREET - ALL STAGES	SHEET 37	E

FILE NAME : Y:\PUBLIC\PROJECTS\2020\20033.25 S. 76TH STREET BRIDGE OVER STH 36 - NORTHBOUND 2160-17-00 (MBI)\CADD\SHEETSPLAN\TC_76ST_DT.DWG
LAYOUT NAME - STH 36 - NB 76TH STREET OFF RAMP
PLOT DATE : 10/25/2021 9:28 AM PLOT BY : SHARDUL ADHIKARI PLOT NAME : PLOT SCALE : 1" = 500'
WISDOT/CADDS SHEET 44

2

1

M1-6
24"X24"

RAMP
CLOSED
AHEAD
W20-53A

2

TO
MO4-5
24"X12"

EXISTING

EXISTING

3

TO
MO4-5
24"X12"

M1-6
24"X24"

MO6-1
21"X21"



LEGEND

- WORK AREA
- DIRECTION OF TRAFFIC
- SIGN ON TEMPORARY SUPPORT
- SIGN ON EXISTING SUPPORT
- DETOUR ROUTE

NOTES:

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PROJECT NO: 2160-17-70/2160-18-70	HWY: STH 36	COUNTY: MILWAUKEE	DETOUR PLAN - SB STH 36 NIGHTTIME CLOSURE	SHEET 38	E

FILE NAME : Y:\PUBLIC\PROJECTS\2020\20033.25 S. 76TH STREET BRIDGE OVER STH 36 - NORTHBOUND 2160-17-00 (MBI)\CADD\SHEETSPLAN\TC_76ST_DT.DWG
LAYOUT NAME - DETOUR PLAN - SB STH 76 NIGHTTIME CLOSURE
PLOT DATE : 10/25/2021 9:28 AM PLOT BY : SHARDUL ADHIKARI PLOT NAME : PLOT SCALE : 1" = 500'

2

1
M1-6
24"X24"
36
RAMP CLOSED AHEAD
W20-53A

2
TO
MO4-5
24"X12"
NORTH
M3-1
24"X12"
36
M1-6
24"X24"
MO6-1
21"X21"

3
TO
MO4-5
24"X12"
36
M1-6
24"X24"
MO6-2
21"X21"

4
TO
MO4-5
24"X12"
36
M1-6
24"X24"
MO5-1R
21"X21"

5
TO
MO4-5
24"X12"
36
M1-6
24"X24"
MO6-1
21"X21"

6
TO
MO4-5
24"X12"
TO
COVERING EXISTING
NORTH
EXISTING
36
EXISTING
EXISTING

7
TO
MO4-5
24"X12"
NORTH
EXISTING
36
EXISTING
EXISTING

8
TO
MO4-5
24"X12"
NORTH
EXISTING
36
EXISTING
EXISTING



LEGEND

- WORK AREA
- DIRECTION OF TRAFFIC
- SIGN ON TEMPORARY SUPPORT
- SIGN ON EXISTING SUPPORT
- DETOUR ROUTE

NOTES:

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PROJECT NO: 2160-17-70/2160-18-70	HWY: STH 36	COUNTY: MILWAUKEE	DETOUR PLAN - NB STH 36 NIGHTTIME CLOSURE	SHEET 39	E

					2160-17-70	2160-18-70
Line	Item	Item Description	Unit	Total	Qty	Qty
0002	203.0220	Removing Structure (structure) 01. B-40-573	EACH	1.000	1.000	
0004	203.0220	Removing Structure (structure) 02. B-40-574	EACH	1.000		1.000
0006	203.0330	Debris Containment (structure) 01. B-40-573	EACH	1.000	1.000	
0008	203.0330	Debris Containment (structure) 02. B-40-574	EACH	1.000		1.000
0010	204.0100	Removing Concrete Pavement	SY	267.000	147.000	120.000
0012	204.0150	Removing Curb & Gutter	LF	713.000	352.000	361.000
0014	204.0155	Removing Concrete Sidewalk	SY	64.000	47.000	17.000
0016	204.9060.S	Removing (item description) 01. Loop Detector Wire & Lead-in Cable STH 36 Ramps & CTH U	EACH	1.000		1.000
0018	205.0100	Excavation Common	CY	605.000	304.000	301.000
0020	213.0100	Finishing Roadway (project) 01. 2160-17-70	EACH	1.000	1.000	
0022	213.0100	Finishing Roadway (project) 02. 2160-18-70	EACH	1.000		1.000
0024	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	482.000	258.000	224.000
0026	415.0090	Concrete Pavement 9-Inch	SY	270.000	157.000	113.000
0028	415.0410	Concrete Pavement Approach Slab	SY	684.000	348.000	336.000
0030	416.0610	Drilled Tie Bars	EACH	151.000	75.000	76.000
0032	416.0620	Drilled Dowel Bars	EACH	127.000	64.000	63.000
0034	455.0605	Tack Coat	GAL	1.230	0.620	0.610
0036	465.0125	Asphaltic Surface Temporary	TON	147.000	77.000	70.000
0038	502.0100	Concrete Masonry Bridges	CY	58.000	29.000	29.000
0040	502.2000	Compression Joint Sealer Preformed Elastomeric (width) 01. 2 1/4"	LF	252.000	252.000	
0042	502.3101	Expansion Device	LF	288.000	144.000	144.000
0044	502.3200	Protective Surface Treatment	SY	2,853.000	1,425.000	1,428.000
0046	502.3205	Pigmented Surface Sealer Reseal	SY	199.000	101.000	98.000
0048	502.4204	Adhesive Anchors No. 4 Bar	EACH	2,047.000	1,027.000	1,020.000
0050	502.4205	Adhesive Anchors No. 5 Bar	EACH	326.000	164.000	162.000
0052	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	22,780.000	11,640.000	11,140.000
0054	505.0905	Bar Couplers No. 5	EACH	36.000	18.000	18.000
0056	509.0301	Preparation Decks Type 1	SY	118.000	58.000	60.000
0058	509.0302	Preparation Decks Type 2	SY	48.000	24.000	24.000
0060	509.0500	Cleaning Decks	SY	2,332.000	1,160.000	1,172.000
0062	509.1000	Joint Repair	SY	124.000	62.000	62.000
0064	509.1500	Concrete Surface Repair	SF	20.000	10.000	10.000
0066	509.2500	Concrete Masonry Overlay Decks	CY	254.000	126.000	128.000
0068	509.9020.S	Epoxy Crack Sealing	LF	656.000	328.000	328.000
0070	517.3001.S	Structure Overcoating Cleaning and Priming (structure) 01. B-40-573	EACH	1.000	1.000	
0072	517.3001.S	Structure Overcoating Cleaning and Priming (structure) 02. B-40-574	EACH	1.000		1.000
0074	517.4001.S	Containment and Collection of Waste Materials (structure) 01. B-40-573	EACH	1.000	1.000	
0076	517.4001.S	Containment and Collection of Waste Materials (structure) 02. B-40-574	EACH	1.000		1.000
0078	601.0331	Concrete Curb & Gutter 31-Inch	LF	291.000	125.000	166.000
0080	602.0410	Concrete Sidewalk 5-Inch	SF	558.000	413.000	145.000
0082	602.0420	Concrete Sidewalk 7-Inch	SF	3,493.000	1,340.000	2,153.000
0084	603.8000	Concrete Barrier Temporary Precast Delivered	LF	3,536.000	2,412.000	1,124.000
0086	603.8125	Concrete Barrier Temporary Precast Installed	LF	3,536.000	2,412.000	1,124.000
0088	604.9010.S	Slope Paving Repair Crushed Aggregate	CY	6.000	6.000	
0090	604.9015.S	Reseal Crushed Aggregate Slope Paving	SY	996.000	498.000	498.000
0092	611.8110	Adjusting Manhole Covers	EACH	3.000	2.000	1.000
0094	611.8115	Adjusting Inlet Covers	EACH	4.000	2.000	2.000
0096	611.9710	Salvaged Inlet Covers	EACH	4.000	2.000	2.000

Line	Item	Item Description	Unit	Total	2160-17-70 Qty	2160-18-70 Qty
0098	614.0905	Crash Cushions Temporary	EACH	8.000	6.000	2.000
0100	618.0100	Maintenance And Repair of Haul Roads (project) 01. 2160-17-70	EACH	1.000	1.000	
0102	618.0100	Maintenance And Repair of Haul Roads (project) 02. 2160-18-70	EACH	1.000		1.000
0104	619.1000	Mobilization	EACH	1.000	0.500	0.500
0106	620.0300	Concrete Median Sloped Nose	SF	128.000	64.000	64.000
0108	624.0100	Water	MGAL	9.470	5.080	4.390
0110	628.1905	Mobilizations Erosion Control	EACH	2.000	1.000	1.000
0112	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	1.000	1.000
0114	628.7010	Inlet Protection Type B	EACH	7.000	4.000	3.000
0116	634.0811	Posts Tubular Steel 2x2-Inch X 11-FT	EACH	1.000	1.000	
0118	637.2210	Signs Type II Reflective H	SF	90.500	60.000	30.500
0120	637.2215	Signs Type II Reflective H Folding	SF	7.460		7.460
0122	638.2601	Removing Signs Type I	EACH	3.000	2.000	1.000
0124	643.0300	Traffic Control Drums	DAY	10,132.000	5,679.000	4,453.000
0126	643.0410	Traffic Control Barricades Type II	DAY	60.000	60.000	
0128	643.0420	Traffic Control Barricades Type III	DAY	1,813.000	1,042.000	771.000
0130	643.0705	Traffic Control Warning Lights Type A	DAY	2,836.000	1,658.000	1,178.000
0132	643.0715	Traffic Control Warning Lights Type C	DAY	4,217.000	2,946.000	1,271.000
0134	643.0800	Traffic Control Arrow Boards	DAY	122.000	66.000	56.000
0136	643.0900	Traffic Control Signs	DAY	11,115.000	7,213.000	3,902.000
0138	643.0920	Traffic Control Covering Signs Type II	EACH	24.000	18.000	6.000
0140	643.1050	Traffic Control Signs PCMS	DAY	12.000	6.000	6.000
0142	643.5000	Traffic Control	EACH	1.000	0.500	0.500
0144	644.1601	Temporary Pedestrian Curb Ramp	DAY	20.000	20.000	
0146	646.1020	Marking Line Epoxy 4-Inch	LF	1,713.000	699.000	1,014.000
0148	646.1545	Marking Line Grooved Wet Ref Contrast Epoxy 4-Inch	LF	352.000	178.000	174.000
0150	646.3020	Marking Line Epoxy 8-Inch	LF	341.000	168.000	173.000
0152	646.3040	Marking Line Grooved Wet Ref Epoxy 8-Inch	LF	275.000	148.000	127.000
0154	646.5020	Marking Arrow Epoxy	EACH	4.000	3.000	1.000
0156	646.5120	Marking Word Epoxy	EACH	3.000	2.000	1.000
0158	646.6120	Marking Stop Line Epoxy 18-Inch	LF	115.000	78.000	37.000
0160	646.7120	Marking Diagonal Epoxy 12-Inch	LF	216.000	120.000	96.000
0162	646.8120	Marking Curb Epoxy	LF	64.000	32.000	32.000
0164	646.8220	Marking Island Nose Epoxy	EACH	2.000	1.000	1.000
0166	646.9000	Marking Removal Line 4-Inch	LF	2,070.000	1,645.000	425.000
0168	646.9300	Marking Removal Special Marking	EACH	1.000	1.000	
0170	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	18,596.000	9,251.000	9,345.000
0172	649.0250	Temporary Marking Line Removable Tape 8-Inch	LF	371.000	371.000	
0174	649.0550	Temporary Marking Arrow Removable Tape	EACH	2.000	1.000	1.000
0176	650.4500	Construction Staking Subgrade	LF	790.000	385.000	405.000
0178	650.5000	Construction Staking Base	LF	299.000	121.000	178.000
0180	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	291.000	125.000	166.000
0182	650.7000	Construction Staking Concrete Pavement	LF	491.000	264.000	227.000
0184	652.0125	Conduit Rigid Metallic 2-Inch	LF	12.000	12.000	
0186	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	257.000	252.000	5.000
0188	653.0900	Adjusting Pull Boxes	EACH	1.000		1.000
0190	653.0905	Removing Pull Boxes	EACH	2.000		2.000
0192	654.0105	Concrete Bases Type 5	EACH	1.000		1.000
0194	690.0250	Sawing Concrete	LF	809.000	414.000	395.000

					2160-17-70	2160-18-70
Line	Item	Item Description	Unit	Total	Qty	Qty
0196	715.0502	Incentive Strength Concrete Structures	DOL	1,872.000	930.000	942.000
0198	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	1,000.000	500.000	500.000
0200	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	900.000	900.000	
0202	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,500.000	1,500.000	
0204	SPV.0060	Special 01. Temporary Drainage Cover For Existing Inlet	EACH	4.000	2.000	2.000
0206	SPV.0060	Special 02. Field Facilities Office Space	EACH	1.000	0.500	0.500
0208	SPV.0060	Special 03. Removing Traffic Signals - Partial STH 36 WB Ramp &CTH U S 76th Street	EACH	1.000		1.000
0210	SPV.0060	Special 04. Trnspt & Install State Furn Video Detect Sys STH 36 WB Ramps & CTH U	EACH	1.000		1.000
0212	SPV.0060	Special 05. Fence Repairs B-40-573	EACH	1.000	1.000	
0214	SPV.0060	Special 06. Fence Repairs B-40-574	EACH	1.000		1.000
0216	SPV.0090	Special 01. Concrete Curb & Gutter Integral 31-Inch	LF	476.000	259.000	217.000

Category	PROJECT ID	STAGE	STATION	TO	STATION	LOCATION	204.0100 Removing Concrete Pavement SY	204.0150 Removing Curb & Gutter LF	204.0155 Removing Concrete Sidewalk SY
10	2160-17-70	STAGE 1	127+37	-	127+46	S 76th St NB	5		
		STAGE 1	127+47	-	128+67	S 76th St NB		121	
		STAGE 1	131+20	-	132+76	S 76th St NB		157	
		STAGE 2A	128+36	-	128+48	S 76th St NB	38		
		STAGE 2A	128+48	-	128+98	S 76th St NB		50	
		STAGE 2A	128+48	-	129+03	S 76th St NB			33
		STAGE 2A	131+51	-	131+75	S 76th St NB		24	
		STAGE 2A	131+51	-	131+76	S 76th St NB			14
		STAGE 2A	131+75	-	131+88	S 76th St NB	40		
		STAGE 3	128+36	-	128+48	S 76th St NB	12		
		STAGE 3	131+76	-	132+24	S 76th St NB	52		
	2160-17-70 Total						**147**	**352**	**47**
	2160-18-70	STAGE 1	127+42	-	128+57	S 76th St SB		115	
		STAGE 1	131+00	-	132+75	S 76th St SB		176	
		STAGE 1	132+75	-	132+84	S 76th St SB	9		
		STAGE 2B	127+84	-	127+96	S 76th St SB	36		
		STAGE 2B	127+96	-	128+16	S 76th St SB		20	11
		STAGE 2B	130+64	-	130+75	S 76th St SB			6
		STAGE 2B	130+69	-	131+19	S 76th St SB		50	
		STAGE 2B	131+18	-	131+31	S 76th St SB	39		
		STAGE 3	127+84	-	127+95	S 76th St SB	24		
		STAGE 3	131+18	-	131+31	S 76th St SB	12		
	2160-18-70 Total						**120**	**361**	**17**
Contract Total							**267**	**713**	**64**

Category	PROJECT ID	STAGE	STATION	TO	STATION	LOCATION	205.0100 Excavation Common CY
10	2160-17-70	STAGE 1	127+38	-	128+66	S 76th St NB	52
		STAGE 1	131+10	-	132+64	S 76th St NB	32
		STAGE 2A	128+48	-	128+96	S 76th St NB	41
		STAGE 2A	131+28	-	131+76	S 76th St NB	40
		STAGE 3	127+37	-	128+69	S 76th St NB	65
		STAGE 3	128+48	-	128+75	S 76th St NB	8
		STAGE 3	131+10	-	132+77	S 76th St NB	46
		STAGE 3	131+22	-	131+76	S 76th St NB	20
	2160-17-70 Total						**304**
	2160-18-70	STAGE 1	131+00	-	132+76	S 76th St SB	71
		STAGE 2B	127+96	-	128+39	S 76th St SB	35
		STAGE 2B	130+71	-	131+19	S 76th St SB	41
		STAGE 3	127+44	-	128+57	S 76th St SB	12
		STAGE 3	127+95	-	128+54	S 76th St SB	42
		STAGE 3	130+92	-	131+18	S 76th St SB	8
		STAGE 3	130+98	-	132+84	S 76th St SB	92
	2160-18-70 Total						**301**
Contract Total							**605**

Category	PROJECT ID	STAGE	STATION	TO	STATION	LOCATION	305.0120 Base Aggregate Dense 1 1/4-Inch TON	624.0100 Water MGAL
10	2160-17-70	STAGE 1	127+37	-	128+69	S 76th St NB	86	1.72
		STAGE 1	131+10	-	132+77	S 76th St NB	62	1.22
		STAGE 2A	123+95	-	124+00	S 76th St SB	3	0.05
		STAGE 2A	128+36	-	128+98	S 76th St NB	17	0.34
		STAGE 2A	131+28	-	131+88	S 76th St NB	17	0.32
		STAGE 3	127+37	-	127+44	S 76th St NB	2	0.03
		STAGE 3	127+43	-	128+14	S 76th St NB	8	0.16
		STAGE 3	128+14	-	128+75	S 76th St NB	8	0.16
		STAGE 3	128+18	-	128+65	S 76th St NB	4	0.08
		STAGE 3	131+13	-	132+24	S 76th St NB	25	0.50
		STAGE 3	131+13	-	132+19	S 76th St NB	20	0.38
		STAGE 3	132+24	-	132+78	S 76th St NB	6	0.12
	2160-17-70 Total						**258**	**5.08**
	2160-18-70	STAGE 1	127+44	-	128+57	S 76th St SB	16	0
		STAGE 1	130+98	-	132+84	S 76th St SB	123	2
		STAGE 2B	127+84	-	128+39	S 76th St SB	15	0
		STAGE 2B	130+69	-	131+31	S 76th St SB	17	0
		STAGE 3	127+43	-	127+84	S 76th St SB	5	0
		STAGE 3	127+84	-	128+58	S 76th St SB	19	0
		STAGE 3	130+92	-	131+53	S 76th St SB	9	0
		STAGE 3	131+02	-	131+48	S 76th St SB	4	0
		STAGE 3	131+53	-	132+78	S 76th St SB	14	0
		STAGE 3	132+77	-	132+84	S 76th St SB	2	0
	2160-18-70 Total						**224**	**4.39**
Contract Total							**482**	**9.47**

Category	PROJECT ID	STAGE	STATION	TO	STATION	LOCATION	415.0090 Concrete Pavement 9-Inch SY	415.0410 Concrete Pavement Approach Slab SY
10	2160-17-70	STAGE 2A	128+36	-	128+48	S 76th St NB	34	
		STAGE 2A	128+48	-	128+96	S 76th St NB		105
		STAGE 2A	131+28	-	131+76	S 76th St NB		104
		STAGE 2A	131+76	-	131+88	S 76th St NB	34	
		STAGE 3	128+14	-	128+48	S 76th St NB	19	
		STAGE 3	128+48	-	128+75	S 76th St NB		32
		STAGE 3	131+16	-	131+76	S 76th St NB		107
		STAGE 3	131+76	-	132+24	S 76th St NB	70	
	2160-17-70 Total						**157**	**348**
	2160-18-70	STAGE 2B	127+84	-	127+96	S 76th St SB	34	
		STAGE 2B	127+96	-	128+39	S 76th St SB		90
		STAGE 2B	130+71	-	131+19	S 76th St SB		106
		STAGE 2B	131+19	-	131+31	S 76th St SB	34	
		STAGE 3	127+84	-	127+96	S 76th St SB	26	
		STAGE 3	127+96	-	128+54	S 76th St SB		107
		STAGE 3	130+92	-	131+19	S 76th St SB		33
		STAGE 3	131+19	-	131+53	S 76th St SB	19	
	2160-18-70 Total						**113**	**336**
Contract Total							**270**	**684**

Category	PROJECT ID	STAGE	STATION	TO	STATION	LOCATION	416.0610 Drilled Tie Bars EACH	416.0620 Drilled Dowel Bars EACH
10	2160-17-70	STAGE 2A	128+36	-	128+36	S 76th St NB		21
		STAGE 2A	131+88	-	131+88	S 76th St NB		20
		STAGE 3	127+44	-	128+14	S 76th St NB	29	
		STAGE 3	128+14	-	128+36	S 76th St NB	9	
		STAGE 3	128+36	-	128+36	S 76th St NB		7
		STAGE 3	131+88	-	131+88	S 76th St NB		7
		STAGE 3	131+88	-	132+24	S 76th St NB	15	
		STAGE 3	132+24	-	132+24	S 76th St NB		9
		STAGE 3	132+24	-	132+77	S 76th St NB	22	
	2160-17-70 Total						**75**	**64**
	2160-18-70	STAGE 2B	127+84	-	127+84	S 76th St SB		20
		STAGE 2B	131+31	-	131+31	S 76th St SB		20
		STAGE 3	127+44	-	127+84	S 76th St SB	17	
		STAGE 3	127+84	-	127+84	S 76th St SB		16
		STAGE 3	131+31	-	131+53	S 76th St SB	9	
		STAGE 3	131+31	-	131+31	S 76th St SB		7
		STAGE 3	131+53	-	132+77	S 76th St SB	50	
	2160-18-70 Total						**76**	**63**
Contract Total							**151**	**127**

Category	PROJECT ID	STAGE	STATION	TO	STATION	LOCATION	455.0605 Tack Coat GAL	465.0125 Asphaltic Surface Temporary TON
10	2160-17-70	STAGE 1	127+37	-	128+69	S 76th St NB	0.30	44
		STAGE 1	131+10	-	132+77	S 76th St NB	0.32	31
		STAGE 2A	123+95	-	124+00	S 76th St SB		2
	2160-17-70 Total						**0.62**	**77**
	2160-18-70	STAGE 1	127+44	-	128+57	S 76th St SB	0.21	8
		STAGE 1	130+98	-	132+84	S 76th St SB	0.40	62
	2160-18-70 Total						**0.61**	**70**
Contract Total							**1.23**	**147**

Category	PROJECT ID	STAGE	STATION	TO	STATION	LOCATION	601.0331 Concrete Curb & Gutter 31-Inch LF	SPV.0090.01 Concrete Curb & Gutter Integral 31-Inch LF
10	2160-17-70	STAGE 2A	128+36	-	128+98	S 76th St NB		63
		STAGE 2A	131+51	-	131+88	S 76th St NB		37
		STAGE 3	127+44	-	128+14	S 76th St NB	71	
		STAGE 3	128+14	-	128+62	S 76th St NB		49
		STAGE 3	131+15	-	132+24	S 76th St NB		110
		STAGE 3	132+24	-	132+77	S 76th St NB	54	
	2160-17-70 Total						**125**	**259**
	2160-18-70	STAGE 2B	127+84	-	128+16	S 76th St SB		32
		STAGE 2B	130+69	-	131+31	S 76th St SB		63
		STAGE 3	127+44	-	127+84	S 76th St SB	41	
		STAGE 3	127+84	-	128+56	S 76th St SB		73
		STAGE 3	131+05	-	131+53	S 76th St SB		49
		STAGE 3	131+53	-	132+77	S 76th St SB	125	
	2160-18-70 Total						**166**	**217**
Contract Total							**291**	**476**

FILE NAME : K:\178837_38_76th Street Bridge Rehabs\3.0 Deliverables\3.02 Roadway\Design\Quantity Calculations\Final PS&E PLOT DATE : 1/5/2022 4:56 PM PLOT BY : MICHAEL BAKER INTL PLOT NAME : PLOT SCALE : 1:1

Category	PROJECT ID	STAGE	STATION	TO	STATION	LOCATION	602.0410 Concrete Sidewalk 5-Inch SF	602.0420 Concrete Sidewalk 7-Inch SF	620.0300 Concrete Median Sloped Nose SF
10	2160-17-70	STAGE 2A	128+48	-	129+03	S 76th St NB	289		
		STAGE 2A	131+51	-	131+76	S 76th St NB	24		
		STAGE 3	127+37	-	127+44	S 76th St NB			64
		STAGE 3	127+44	-	128+62	S 76th St NB		1,340	
	2160-17-70 Total						**413**	**1,340**	**64**
	2160-18-70	STAGE 2B	127+96	-	128+16	S 76th St SB	96		
		STAGE 2B	130+64	-	130+75	S 76th St SB	49		
		STAGE 3	131+05	-	132+77	S 76th St SB		2,153	
		STAGE 3	132+77	-	132+84	S 76th St SB			64
	2160-18-70 Total						**145**	**2,153**	**64**
Contract Total							**558**	**3,493**	**128**

Category	PROJECT ID	STAGE	STATION	TO	STATION	LOCATION	611.8110 Adjusting Manhole Covers EACH	611.8115 Adjusting Inlet Covers EACH
10	2160-17-70	STAGE 2A	131+60	-	131+60	S 76th St NB	1	
		STAGE 3	127+61	-	127+65	S 76th St NB		1
		STAGE 3	131+58	-	131+58	S 76th St NB	1	
		STAGE 3	132+56	-	132+60	S 76th St NB		1
	2160-17-70 Total						**2**	**2**
	2160-18-70	STAGE 3	127+61	-	127+65	S 76th St SB		1
		STAGE 3	132+57	-	132+61	S 76th St SB		1
		STAGE 3	132+73	-	132+73	S 76th St SB	1	
	2160-18-70 Total						**1**	**2**
Contract Total							**3**	**4**

Category	PROJECT ID	STAGE	STATION	TO	STATION	LOCATION	628.7010 Inlet Protection Type B EACH	SPV.0060.01 Temporary Drainage Cover For Existing Inlet EACH	611.9710 Salvaged Inlet Covers EACH
10	2160-17-70	STAGE 1	127+60	-	127+66	S 76th St NB	1		
		STAGE 1	127+61	-	127+65	S 76th St NB		1	1
		STAGE 1	132+55	-	132+61	S 76th St NB	1		
		STAGE 1	132+56	-	132+60	S 76th St NB		1	1
		STAGE 2A	127+43	-	127+49	S 76th St NB	1		
		STAGE 2A	133+52	-	133+58	S 76th St NB	1		
	2160-17-70 Total						**4**	**2**	**2**
	2160-18-70	STAGE 1	127+60	-	127+66	S 76th St SB	1		
		STAGE 1	127+61	-	127+65	S 76th St SB		1	1
		STAGE 1	132+56	-	132+62	S 76th St SB	1		
		STAGE 1	132+57	-	132+61	S 76th St SB		1	1
		STAGE 2B	132+85	-	132+91	S 76th St SB	1		
	2160-18-70 Total						**3**	**2**	**2**
Contract Total							**7**	**4**	**4**

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Category	PROJECT ID	STAGE	STATION	LOCATION	Sign Code	Sign Size	Description	634.0811 Posts Tubular Steel 2x2-Inch x 11-FT EACH	637.2210 Signs Type II Reflective H SF	637.2215 Signs Type II Reflective H Folding SF	638.2602 Removing Signs Type II EACH
10	2160-17-70	STAGE 1	127+49	S 76th St NB							1
		STAGE 1	127+89	S 76th St NB							1
		STAGE 3	127+49	S 76th St NB	R4-7	24"X30"	KEEP RIGHT		5		
		STAGE 3	127+49	S 76th St NB	R3-18	24"X24"	NO U/LEFT TURN		4		
		STAGE 3	127+49	S 76th St NB				1			
		STAGE 3	127+89	S 76th St NB	J2-1	24"X57"	--		9.5		
					M3-3	24"X12"	SOUTH				
					M1-6	24"X24"	STH 36				
					M5-1L	21"X21"	LEFT TURN AHEAD				
		STAGE 3	127+89	S 76th St NB	J3-1	24"X57"	--		9.5		
					M3-1	24"X12"	NORTH				
					M1-6	24"X24"	STH 36				
					M6-1	21"X21"	LEFT TURN				
2160-17-70 Total								**1**	**28**		**2**
	2160-18-70	STAGE 1	132+66	S 76th St SB							1
		STAGE 3	132+66	S 76th St SB	J2-1	24"X57"	--		9.5		
					M3-1	24"X12"	SOUTH				
					M1-6	24"X24"	STH 36				
					M6-1	21"X21"	LEFT TURN				
		STAGE 3	132+66	S 76th St SB	R1-1F	36"X36"	STOP (FOLDING)			7.46	
		STAGE 3	132+66	S 76th St SB	R4-7	24"X30"	KEEP RIGHT		5		
	2160-18-70 Total								**14.5**	**7.46**	**1**
Contract Total								**1**	**42.5**	**7.46**	**3**

Category	PROJECT ID	STAGE	COLOR	STATION	TO	STATION	LOCATION	646.1020 Marking Line Epoxy 4-Inch LF	646.1545 Marking Line Grooved Wet Ref Contrast Epoxy 4-Inch LF	646.3020 Marking Line Epoxy 8-Inch LF	646.3040 Marking Line Grooved Wet Ref Epoxy 8-Inch LF	646.5020 Marking Arrow Epoxy EACH	646.5120 Marking Word Epoxy EACH	646.6120 Marking Stop Line Epoxy 18-Inch LF
10	2160-17-70	STAGE 3	White	121+00	-	128+36	S 76th St NB	185						
		STAGE 3	White	121+00	-	124+85	S 76th St NB	97						
		STAGE 3	White	124+85	-	126+53	S 76th St NB			168				
		STAGE 3	White	125+06	-	125+14	S 76th St NB					1		
		STAGE 3	White	125+85	-	125+93	S 76th St NB						1	
		STAGE 3	White	126+25	-	126+33	S 76th St NB					1		
		STAGE 3	White	126+53	-	128+36	S 76th St NB	46						
		STAGE 3	White	128+36	-	131+88	S 76th St NB		178					
		STAGE 3	White	131+55	-	133+03	S 76th St NB				148			
		STAGE 3	White	131+76	-	131+84	S 76th St NB						1	
		STAGE 3	White	131+88	-	133+16	S 76th St NB	32						
		STAGE 3	White	131+88	-	133+29	S 76th St NB	36						
		STAGE 3	White	132+43	-	132+51	S 76th St NB					1		
		STAGE 3	White	132+84	-	133+44	S 76th St NB							78
		STAGE 3	Yellow	128+14	-	131+16	S 76th St NB	303						
	2160-17-70 Total							**699**	**178**	**168**	**148**	**3**	**2**	**78**
	2160-18-70	STAGE 3	White	127+39	-	127+84	S 76th St SB	24						
		STAGE 3	White	127+39	-	128+65	S 76th St SB				127			
		STAGE 3	White	127+84	-	131+31	S 76th St SB		174					
		STAGE 3	White	127+88	-	127+96	S 76th St SB					1		
		STAGE 3	White	128+37	-	128+45	S 76th St SB						1	
		STAGE 3	White	131+31	-	132+77	S 76th St SB	74						
		STAGE 3	White	133+75	-	133+75	S 76th St SB							37
		STAGE 3	White	133+75	-	135+85	S 76th St SB	106						
		STAGE 3	White	136+72	-	137+52	S 76th St SB			80				
		STAGE 3	White	136+77	-	137+70	S 76th St SB			93				
		STAGE 3	White	136+91	-	141+25	S 76th St SB	109						
		STAGE 3	Yellow	129+01	-	131+53	S 76th St SB	252						
		STAGE 3	Yellow	136+77	-	141+25	S 76th St SB	449						
	2160-18-70 Total							**1,014**	**174**	**173**	**127**	**1**	**1**	**37**
Contract Total								**1,713**	**352**	**341**	**275**	**4**	**3**	**115**

Category	PROJECT ID	STAGE	COLOR	STATION	TO	STATION	LOCATION	646.7120 Marking Diagonal Epoxy 12-Inch LF	646.8120 Marking Curb Epoxy LF	646.8220 Marking Island Nose Epoxy EACH
10	2160-17-70	STAGE 3	Yellow	127+39	-	127+44	S 76th St NB			1
		STAGE 3	Yellow	127+44	-	127+59	S 76th St NB		16	
		STAGE 3	Yellow	127+44	-	127+50	S 76th St NB		7	
		STAGE 3	Yellow	128+22	-	128+23	S 76th St NB	2		
		STAGE 3	Yellow	128+44	-	128+48	S 76th St NB	6		
		STAGE 3	Yellow	128+65	-	128+73	S 76th St NB	12		
		STAGE 3	Yellow	128+90	-	128+98	S 76th St NB	12		
		STAGE 3	Yellow	129+15	-	129+23	S 76th St NB	12		
		STAGE 3	Yellow	129+40	-	129+48	S 76th St NB	12		
		STAGE 3	Yellow	129+65	-	129+73	S 76th St NB	12		
		STAGE 3	Yellow	129+94	-	130+02	S 76th St NB	12		
		STAGE 3	Yellow	130+19	-	130+27	S 76th St NB	12		
		STAGE 3	Yellow	130+44	-	130+52	S 76th St NB	12		
		STAGE 3	Yellow	130+69	-	130+76	S 76th St NB	10		
		STAGE 3	Yellow	130+94	-	130+98	S 76th St NB	6		
		STAGE 3	Yellow	132+62	-	132+71	S 76th St NB		9	
	2160-17-70 Total							**120**	**32**	**1**
	2160-18-70	STAGE 3	Yellow	127+50	-	127+59	S 76th St SB		9	
		STAGE 3	Yellow	129+06	-	129+08	S 76th St SB	3		
		STAGE 3	Yellow	129+28	-	129+33	S 76th St SB	7		
		STAGE 3	Yellow	129+50	-	129+58	S 76th St SB	11		
		STAGE 3	Yellow	129+75	-	129+83	S 76th St SB	12		
		STAGE 3	Yellow	130+00	-	130+08	S 76th St SB	12		
		STAGE 3	Yellow	130+25	-	130+33	S 76th St SB	12		
		STAGE 3	Yellow	130+50	-	130+58	S 76th St SB	12		
		STAGE 3	Yellow	130+75	-	130+83	S 76th St SB	12		
		STAGE 3	Yellow	131+00	-	131+05	S 76th St SB	9		
		STAGE 3	Yellow	131+25	-	131+28	S 76th St SB	5		
		STAGE 3	Yellow	131+50	-	131+50	S 76th St SB	1		
		STAGE 3	Yellow	132+62	-	132+77	S 76th St SB		16	
		STAGE 3	Yellow	132+71	-	132+77	S 76th St SB		7	
		STAGE 3	Yellow	132+77	-	132+82	S 76th St SB			1
	2160-18-70 Total							**96**	**32**	**1**
Contract Total								**216**	**64**	**2**

Category	PROJECT ID	STAGE	STATION	TO	STATION	LOCATION	650.4500 Construction Staking Subgrade LF	650.5000 Construction Staking Base LF	650.5500 Construction Staking Curb Gutter and Curb & Gutter LF	650.7000 Construction Staking Concrete Pavement LF
10	2160-17-70	STAGE 1	127+39	-	128+60	S 76th St NB	121	121		
		STAGE 2A	128+36	-	128+96	S 76th St NB	61			61
		STAGE 2A	131+28	-	131+88	S 76th St NB	60			60
		STAGE 3	127+44	-	128+14	S 76th St NB			71	
		STAGE 3	128+36	-	128+75	S 76th St NB	40			40
		STAGE 3	131+21	-	132+24	S 76th St NB	103			103
		STAGE 3	132+24	-	132+77	S 76th St NB			54	
	2160-17-70 Total						**385**	**121**	**125**	**264**
	2160-18-70	STAGE 1	131+04	-	132+82	S 76th St SB	178	178		
		STAGE 2B	127+84	-	128+39	S 76th St SB	55			55
		STAGE 2B	130+71	-	131+31	S 76th St SB	61			61
		STAGE 3	127+44	-	127+84	S 76th St SB			41	
		STAGE 3	127+84	-	128+54	S 76th St SB	71			71
		STAGE 3	130+92	-	131+31	S 76th St SB	40			40
		STAGE 3	131+53	-	132+77	S 76th St SB			125	
	2160-18-70 Total						**405**	**178**	**166**	**227**
Contract Total							**790**	**299**	**291**	**491**

Category	PROJECT ID	STAGE	STATION	TO	STATION	LOCATION	690.0250 Sawing Concrete LF
10	2160-17-70	STAGE 1	127+37	-	128+69	S 76th St NB	144
		STAGE 1	131+22	-	132+77	S 76th St NB	157
		STAGE 2A	128+36	-	128+36	S 76th St NB	25
		STAGE 2A	131+88	-	131+88	S 76th St NB	25
		STAGE 3	128+36	-	128+36	S 76th St NB	8
		STAGE 3	131+88	-	132+24	S 76th St NB	55
	2160-17-70 Total						**414**
	2160-18-70	STAGE 1	127+41	-	128+54	S 76th St SB	115
		STAGE 1	130+98	-	132+84	S 76th St SB	202
		STAGE 2B	127+84	-	127+84	S 76th St SB	25
		STAGE 2B	131+31	-	131+31	S 76th St SB	25
		STAGE 3	127+84	-	127+84	S 76th St SB	19
		STAGE 3	131+31	-	131+31	S 76th St SB	9
	2160-18-70 Total						**395**
Contract Total							**809**

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PROJECT ID	ITEM #	DESCRIPTION	UNIT	Sum of Quantity
2160-17-70	213.0100.01	Finishing Roadway 2160-17-70	EACH	1
2160-17-70	618.0100.01	Maintenance and Repair of Haul Roads 2160-17-70	EACH	1
2160-17-70	619.1000	Mobilization	EACH	0.3
2160-17-70	628.1905	Mobilizations Erosion Control	EACH	1
2160-17-70	628.1910	Mobilizations Emergency Erosion Control	EACH	1
2160-17-70	SPV.0060.02	Field Facilities Office Space	EACH	0.5
2160-18-70	213.0100.02	Finishing Roadway 2160-18-70	EACH	1
2160-18-70	618.0100.02	Maintenance and Repair of Haul Roads 2160-18-70	EACH	1
2160-18-70	619.1000	Mobilization	EACH	0.3
2160-18-70	628.1905	Mobilizations Erosion Control	EACH	1
2160-18-70	628.1910	Mobilizations Emergency Erosion Control	EACH	1
2160-18-70	SPV.0060.02	Field Facilities Office Space	EACH	0.5

3

TRAFFIC CONTROL ITEMS

PROJECT ID	CATEGORY	STAGE	ROADWAY	STATION	STA	STAGE DURATION DAYS	637.2210 SIGNS TYPE II REFLECTIVE H SIGNS SF	643.0300 TRAFFIC CONTROL DRUMS EACH	643.0300 DAYS	643.0410 TRAFFIC CONTROL BARRICADES TYPE II EACH	643.0410 DAYS	643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH	643.0420 DAYS	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH	643.0705 DAYS	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH	643.0715 DAYS	643.0800 TRAFFIC CONTROL ARROW BOARDS EACH	643.0800 DAYS	643.0900 TRAFFIC CONTROL SIGNS EACH	643.0900 DAYS	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	643.1050 TRAFFIC CONTROL SIGNS PCMS EACH	643.1050 DAYS
2160-17-70	10	1	STH 36			5	--	32	160	--	--	1	5	2	10	13	65	2	10	11	55	--	--	--
		2	STH 36			5	--	32	160	--	--	1	5	2	10	13	65	2	10	11	55	--	--	--
		3	STH 36			3	16	148	444	--	--	17	51	28	84	82	246	2	6	53	159	1	2	6
		SUBTOTAL					16		764		--		61		104		376		26		269	1		6
2160-17-70	10	1	S 76TH ST			33	16	47	1,552	--	--	11	363	14	462	30	990	--	--	84	2,772	5	--	--
		2A	S 76TH ST			20	--	126	2,517	6	60	21	420	42	840	52	1,040	2	40	133	2,660	7	--	--
		3	S 76TH ST			18	--	47	847	--	--	11	198	14	252	30	540	--	--	84	1,512	5	--	--
		SUBTOTAL					16		4,916		60		981		1,554		2,570		40		6,944	17		--
		SUBTOTAL					32		5,679		60		1,042		1,658		2,946		66		7,213	18		6
2160-18-70	10	1	STH 36		5	--	22	110	--	--	1	5	2	10	11	54	1	5	11	55	2	--	--	
		2	STH 36		5	--	22	110	--	--	1	5	2	10	11	54	1	5	11	55	2	--	--	
		3	STH 36		3	16	119	356	--	--	8	24	16	48	41	123	2	6	33	99	--	2	6	
		SUBTOTAL				16		576		--		34		68		231		16		209	4		6	
2160-18-70	10	1	S 76TH ST		33	--	27	879	--	--	7	231	10	330	--	--	--	--	23	759	--	--	--	
		2B	S 76TH ST		20	--	126	2,518	--	--	19	380	30	600	52	1,040	2	40	126	2,520	2	--	--	
		3	S 76TH ST		18	--	27	480	--	--	7	126	10	180	--	--	--	--	23	414	--	--	--	
		SUBTOTAL				--		3,877		--		737		1,110		1,040		40		3,693	2		--	
		SUBTOTAL				16		4,453		--		771		1,178		1,271		56		3,902	6		6	
		TOTALS				48		10,133		60		1,813		2,836		4,217		122		11,115	24		12	

PROJECT ID	CATEGORY	STAGE	ROADWAY	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED LF	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED LF	614.0905 CRASH CUSHIONS TEMPORARY EACH	644.1601 TEMPORARY PEDESTRIAN CURB RAMP DAY
2160-17-70	10	1	S 76TH ST	560	560	2	--
		2A	S 76TH ST	1,292	1,292	2	20
		3	S 76TH ST	560	560	2	--
		SUBTOTAL		2,412	2,412	6	20
2160-18-70	10	1	S 76TH ST	562	562	1	--
		2B	S 76TH ST	--	--	--	--
		3	S 76TH ST	562	562	1	--
		SUBTOTAL		1,124	1,124	2	--
		TOTALS		3,536	3,536	8	20

PROJECT ID	CATEGORY	STAGE	ROADWAY	646.9000 MARKING REMOVAL LINE 4-INCH LF	646.9300 MARKING REMOVAL SPECIAL MARKING EACH	649.0150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH WHITE LF	649.0150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH YELLOW LF	649.0250 TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH WHITE LF	649.0550 TEMPORARY MARKING ARROW REMOVABLE TAPE EACH
2160-17-70	10	1	S 76TH ST	244	--	1,326	1,215	--	--
		2A	S 76TH ST	1,401	1	2,926	1,243	371	1
		3	S 76TH ST	--	--	1,326	1,215	--	--
		SUBTOTAL		1,645	1	5,578	3,673	371	1
2160-18-70	10	1	S 76TH ST	425	--	1,999	1,028	--	--
		2B	S 76TH ST	--	--	2,048	1,243	--	1
		3	S 76TH ST	--		1,999	1,028	--	--
		SUBTOTAL		425	--	6,046	3,299	--	1
		TOTALS		2,070	1	11,624	6,972	371	2

3

ESTIMATE OF QUANTITIES

2160-17-70/2160-18-70

			2160-17-70	2160-18-70	TOTAL
ITEM NUMBER	ITEM	UNIT	QUANTITY	QUANTITY	QUANTITY
603.8000	Concrete Barrier Temporary Precast Delivered	LF	2412	1124	3536
603.8125	Concrete Barrier Temporary Precast Installed	LF	2412	1124	3536
614.0905	Crash Cushions Temporary	EACH	6	2	8
637.2210	Signs Type II Reflective H	SF	32	16	48
643.0300	Traffic Control Drums	DAYS	5679	4453	10133
643.0410	Traffic Control Barricades Type II	DAYS	60	0	60
643.0420	Traffic Control Barricades Type III	DAYS	1042	771	1813
643.0705	Traffic Control Warning Lights Type A	DAYS	1658	1178	2836
643.0715	Traffic Control Warning Lights Type C	DAYS	2946	1271	4217
643.0800	Traffic Control Arrow Boards	DAYS	66	56	122
643.0900	Traffic Control Signs	DAYS	7213	3902	11115
643.0920	Traffic Control Covering Signs Type II	EACH	18	6	24
643.1050	Traffic Control Signs PCMS	DAYS	6	6	12
644.1601	Temporary Pedestrian Curb Ramp	DAYS	20	0	20
646.9000	Marking Removal Line 4-Inch	LF	1645	425	2070
646.9300	Marking Removal Special Marking	EACH	1	0	1
649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	9251	9345	18596
649.0250	Temporary Marking Line Removable Tape 8-Inch	LF	371	0	371
649.0550	Temporary Marking Arrow Removable Tape	EACH	1	1	2

STH 36 WB RAMPS & CTH U (S 76TH ST)
MILWAUKEE COUNTY
CATEGORY 0010
S40-1200

STATE FURNISHED MATERIALS SUMMARY

EACH	DESCRIPTION
2	VIDEO CAMERA

STATE FURNISHED FOR INFORMATION ONLY

SIGNAL BASE NO.	VIDEO CAMERA EACH
SB3	1
SB7	1
TOTAL	2

REMOVING TRAFFIC SIGNALS

LOCATION	SPV.0060.03 REMOVING TRAFFIC SIGNAL-PARTIAL EACH
STH 36 WB RAMPS & CTH U	1
TOTAL	1

REMOVING LOOP DETECTOR WIRE AND LEAD-IN CABLE

LOCATION	204.9060.S.01 REMOVING LOOP DETECTOR WIRE & LEAD-IN CABLE EACH
STH 36 RAMPS & CTH U	1
TOTAL	1

CONDUIT

FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.
PB10	SB6	5
TOTAL		5

PULL BOXES

PULL BOX NO.	LOCATION^	653.0900 ADJUSTING PULL BOXES EACH
PB10	813+70.6, 4.0' LT	1
TOTAL		1

^ FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

REMOVING PULL BOXES

PULL BOX NO.	653.0905 REMOVING PULL BOXES EACH
PB9	1
PB11	1
TOTAL	2

CONCRETE BASES

SIGNAL BASE NO.	LOCATION^	654.0105 CONCRETE BASES TYPE 5 EACH
SB6	STA 813+66.1, 5.7' LT	1
	TOTAL	1

^ FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

TRANSPORT AND INSTALL STATE FURNISHED VIDEO DETECTION SYSTEM

LOCATION	SPV.0060.04 TRNSPT & INSTALL STATE FURN VIDEO DETECT SYS EACH
STH 36 WB RAMPS & CTH U	1
TOTAL	1

CONTROL POINT TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
CP #1	133+70.71	6.89 RT	341623.102	2533282.755	784.64	REBAR IN GRASS MEDIAN NORTH OF BRIDGE
CP #2	131+16.20	3.16 RT	341368.571	2533280.888	786.77	REBAR IN MIDDLE OF GRASS MEDIAN
CP #3	126+52.08	-1.83 LT	340904.427	2533279.288	781.96	REBAR SOUTH OF BRIDGE IN GRASS MEDIAN
CP #4	129+79.78	0.89 RT	341232.141	2533279.609	787.04	X IN CONC MEDIAN

N

127+96.00, 55.00' LT
BEGIN CONCRETE
SIDEWALK 5-INCH

127+96.00, 47.00' LT

127+84.00, 49.00' LT
BEGIN CONCRETE CURB & GUTTER
INTEGRAL 31-INCH

128+11.01, 55.00' LT
END CONCRETE
SIDEWALK 5-INCH

cp#8

127+96.04, 3.00' LT

PROTECT IN PLACE

128+16.02, 49.00' LT
END CONCRETE CURB & GUTTER
INTEGRAL 31-INCH

128+55.99, 1.07' LT
END CONCRETE CURB & GUTTER
INTEGRAL 31-INCH

127+84.00, 1.00' LT
END CONCRETE CURB & GUTTER
31-INCH
BEGIN CONCRETE CURB & GUTTER
INTEGRAL 31-INCH

128+61.26, 1.00' LT
BEGIN TAPER

CITY OF FRANKLIN STREET LIGHT

129+01.30, 6.00' LT
END TAPER

127+54.00, 1.00' LT

S 76TH STREET

127+44.00, 1.67' RT
BEGIN CONCRETE CURB & GUTTER
31-INCH

127+39.00, 5.00' RT
CONCRETE MEDIAN SLOPED NOSE

127+44.00, 8.67' RT
BEGIN CONCRETE CURB & GUTTER
31-INCH

127+54.00, 12.00' RT

MILWAUKEE COUNTY STORM SEWER

128+61.89, 6.00' RT
END TAPER
END CONCRETE CURB & GUTTER
INTEGRAL 31-INCH

128+13.84, 12.00' RT
BEGIN TAPER
END CONCRETE CURB & GUTTER
31-INCH
BEGIN CONCRETE CURB & GUTTER
INTEGRAL 31-INCH

BM #6

cp#5

PROTECT IN PLACE

128+36.00, 14.00' RT

128+36.00, 49.00' RT
BEGIN CONCRETE CURB & GUTTER
INTEGRAL 31-INCH

128+48.00, 9.72' RT

128+48.00, 47.00' RT

128+48.00, 55.00' RT
END CONCRETE
SIDEWALK 5-INCH

128+97.75, 49.00' RT
END CONCRETE CURB & GUTTER
INTEGRAL 31-INCH

129+02.76, 55.00' RT
END CONCRETE
SIDEWALK 5-INCH

BM #7

STH 36 (W. LOOMIS RD.)

130+64.09, 55.00' LT
BEGIN CONCRETE
SIDEWALK 5-INCH

130+75.13, 55.00' LT
END CONCRETE
SIDEWALK 5-INCH

PROTECT IN PLACE

130+69.10, 49.00' LT
BEGIN CONCRETE CURB & GUTTER
INTEGRAL 31-INCH

131+04.96, 6.00' LT
BEGIN TAPER
BEGIN CONCRETE CURB & GUTTER
INTEGRAL 31-INCH

131+14.97, 6.00' RT
BEGIN TAPER
BEGIN CONCRETE CURB & GUTTER
INTEGRAL 31-INCH

131+55.01, 1.00' RT
END TAPER

131+50.83, 49.00' RT
BEGIN CONCRETE CURB & GUTTER
INTEGRAL 31-INCH

131+55.83, 55.00' RT
BEGIN CONCRETE
SIDEWALK 5-INCH

ADJUSTING MANHOLES

131+19.00, 47.00' LT

131+31.00, 49.00' LT
END CONCRETE CURB & GUTTER
INTEGRAL 31-INCH

131+19.00, 9.77' LT

131+30.99, 14.00' LT

131+53.01, 12.00' LT
END TAPER
END CONCRETE CURB & GUTTER
INTERGRAL 31-INCH
BEGIN CONCRETE CURB & GUTTER
31-INCH

LOCATED FIBER OPTIC

cp#10

WISDOT TRAFFIC SIGNAL

BM #11

BM #9

MILWAUKEE COUNTY
STORM SEWER

132+67.00, 12.00' LT

132+77.00, 8.67' LT
END CONCRETE CURB & GUTTER
31-INCH

132+82.00, 5.00' LT
CONCRETE MEDIAN BLUNT NOSE

ADJUSTING MANHOLES

132+77.00, 1.67' LT
END CONCRETE CURB & GUTTER
31-INCH

132+67.00, 1.00' RT

132+24.00, 14.00' RT

131+88.00, 14.00' RT

131+76.00, 3.00' RT

PROTECT IN PLACE

131+88.00, 49.00' RT
END CONCRETE CURB & GUTTER
INTEGRAL 31-INCH

131+76.00, 47.00' RT

131+76.00, 55.00' RT
END CONCRETE
SIDEWALK 5-INCH

ADJUSTING MANHOLES

132+24.00, 3.00' RT
END CONCRETE CURB & GUTTER
INTEGRAL 31-INCH
BEGIN CONCRETE CURB & GUTTER
31-INCH

WISDOT TRAFFIC SIGNAL

cp#12

BENCHMARK POINT TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
BM #6	126+75.77	77.19 RT	340928.699	2533358.138	782.00	SE TAG BOLT FH
BM #7	127+82.35	175.62 RT	341035.991	2533455.780	774.82	SPIKE IN NW FACE OF POWER POLE
BM #9	132+67.10	-60.10 LT	341519.008	2533216.522	786.00	X ON EAST FLANGE BOLT FOR TRAFFIC SIGNAL MAST ARM
BM #11	133+73.92	-76.50 LT	341625.704	2533199.347	785.36	X AT SE CORNER OF PAD FOR TRAFFIC CONTROL BOX

SCALE, FEET 0 25 50

LEGEND

CONCRETE PAVEMENT
APPROACH SLAB
SEE CONSTRUCTION DETAILS
FOR PAVING NOTCH DETAIL

CONCRETE PAVEMENT

CONCRETE SIDEWALK

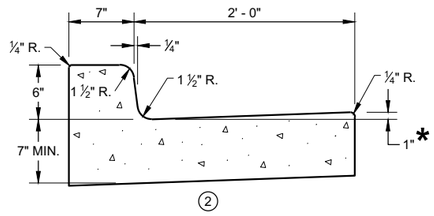
ADJUSTING INLET COVERS

PROJECT NO: 2160-17-70/2160-18-70	HWY: S 76TH STREET	COUNTY: MILWAUKEE	PLAN	SHEET 57	E

Standard Detail Drawing List

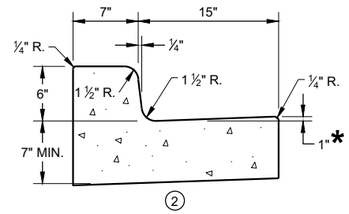
08D16-11	CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES
08E10-02	INLET PROTECTION TYPE A, B, C AND D
09B02-10	CONDUIT
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
11B02-02	CONCRETE MEDIAN NOSE
13B02-09A	CONCRETE PAVEMENT APPROACH SLAB
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C09-15C	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C13-09	URBAN DOWELED CONCRETE PAVEMENT
14B07-15A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15I	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B08-02A	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02B	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02C	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02D	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02E	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
15C02-08C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C02-08D	ON RAMP LANE CLOSURE
15C02-08E	OFF RAMP LANE CLOSURE
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
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C08-20B	PAVEMENT MARKING (TURN LANES)
15C08-20C	PAVEMENT MARKING (TURN LANES)
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C18-05	MEDIAN ISLAND MARKING
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D12-09A	TRAFFIC CONTROL, LANE CLOSURE
15D12-09B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D20-05A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D21-07A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D21-07B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D30-06A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-06B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-06C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D42-01	TRAFFIC CONTROL, TWO LANE FULL FREEWAY CLOSURE

6

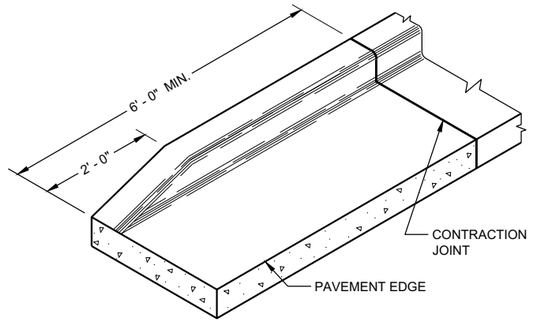


CONCRETE CURB AND GUTTER 31" ①

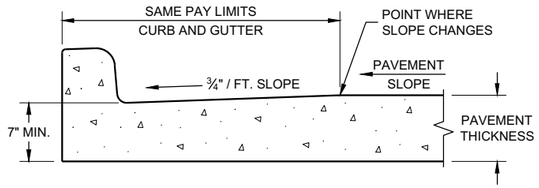
*TO BE MEASURED TO A MAXIMUM OF 3" WHERE DRAINAGE PROBLEMS EXIST.



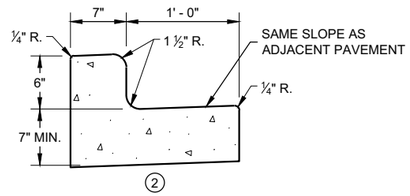
CONCRETE CURB AND GUTTER 22" ①



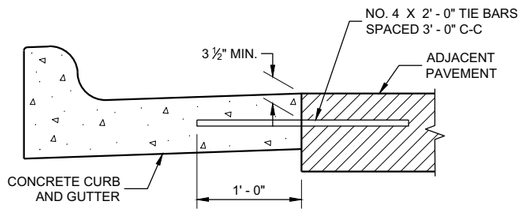
END SECTIONCURB AND GUTTER



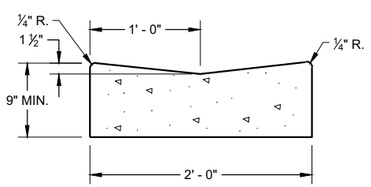
PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB AND GUTTER



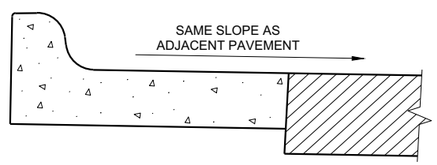
CONCRETE CURB AND GUTTER 19" ①



TYPICAL TIE BAR LOCATION ①



CONCRETE GUTTER 24" ①



HIGH SIDE SECTION ③

(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

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

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

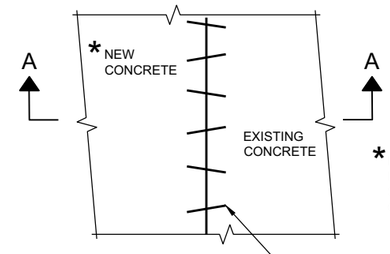
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

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

① WHEN PLACED ADJACENT TO NEW CONCRETE, TIE BARS ARE REQUITED FOR CURB AND GUTTER 31", 22", 19" AND CONCRETE GUTTER 24".

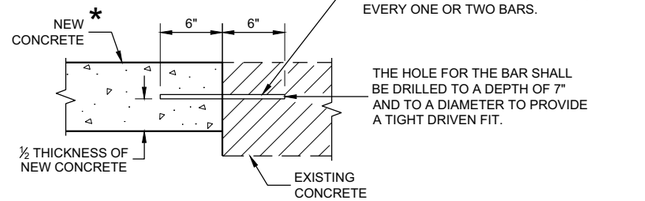
② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 7" MINIMUM GUTTER THICKNESS IS MAINTAINED.

③ WHEN HIGH SIDE CURB SECTION IS REQUIRED, THE LOCATION(S) WILL BE NOTED ON THE PLANS



PLAN VIEW

*EXISTING AND NEW CONCRETE MAY BE CURB AND GUTTER, SURFACE DRAINS, PAVEMENT OR OTHER CONCRETE STRUCTURE.



SECTION A - A

PAVEMENT TIES

CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES

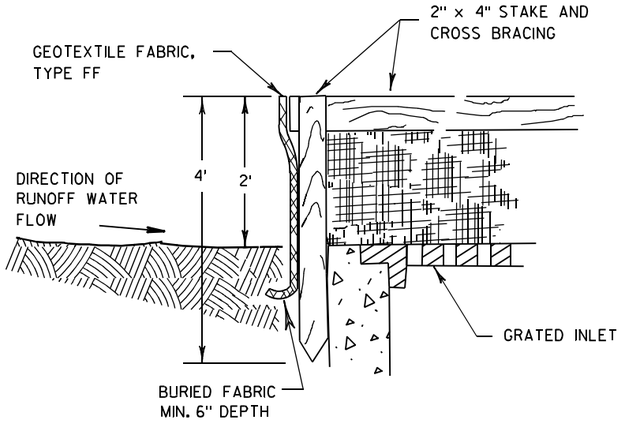
(For Optional use in Milwaukee Co. Only)

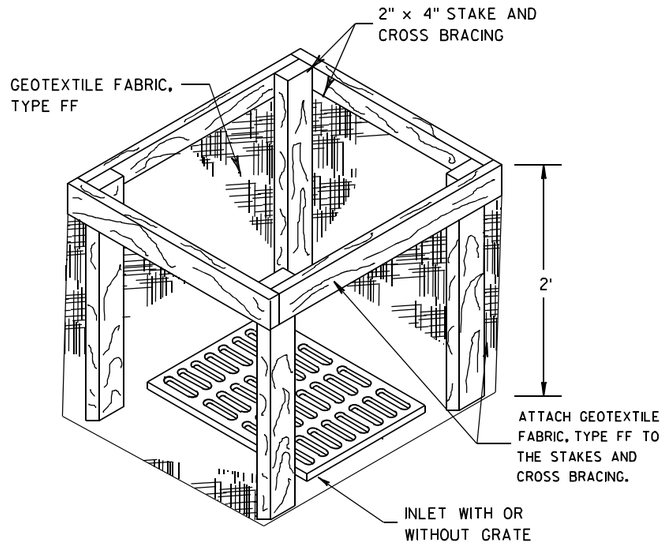
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

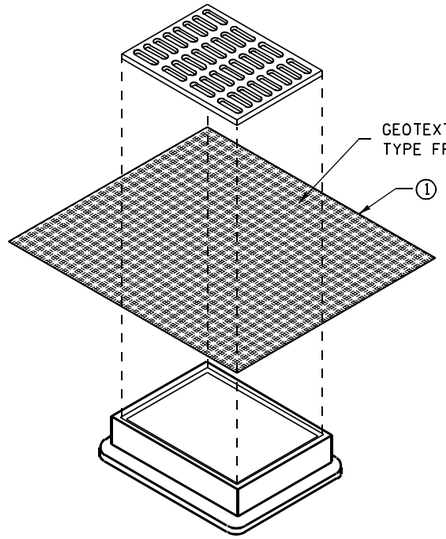
6

SDD 08D16 - 11
SDD 08D16 - 11



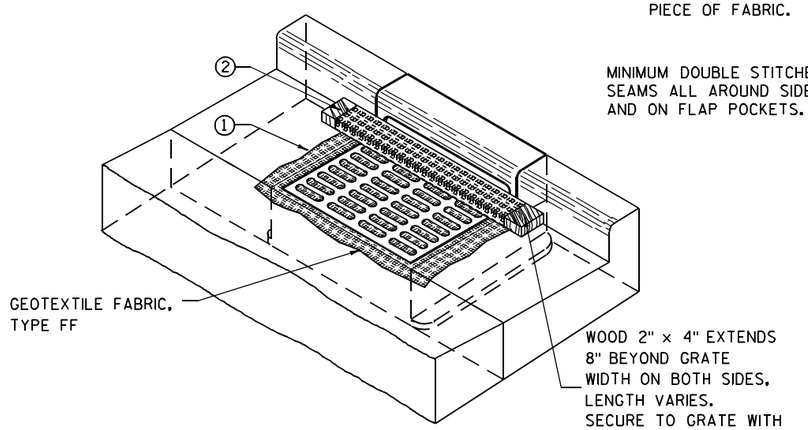


INLET PROTECTION, TYPE A

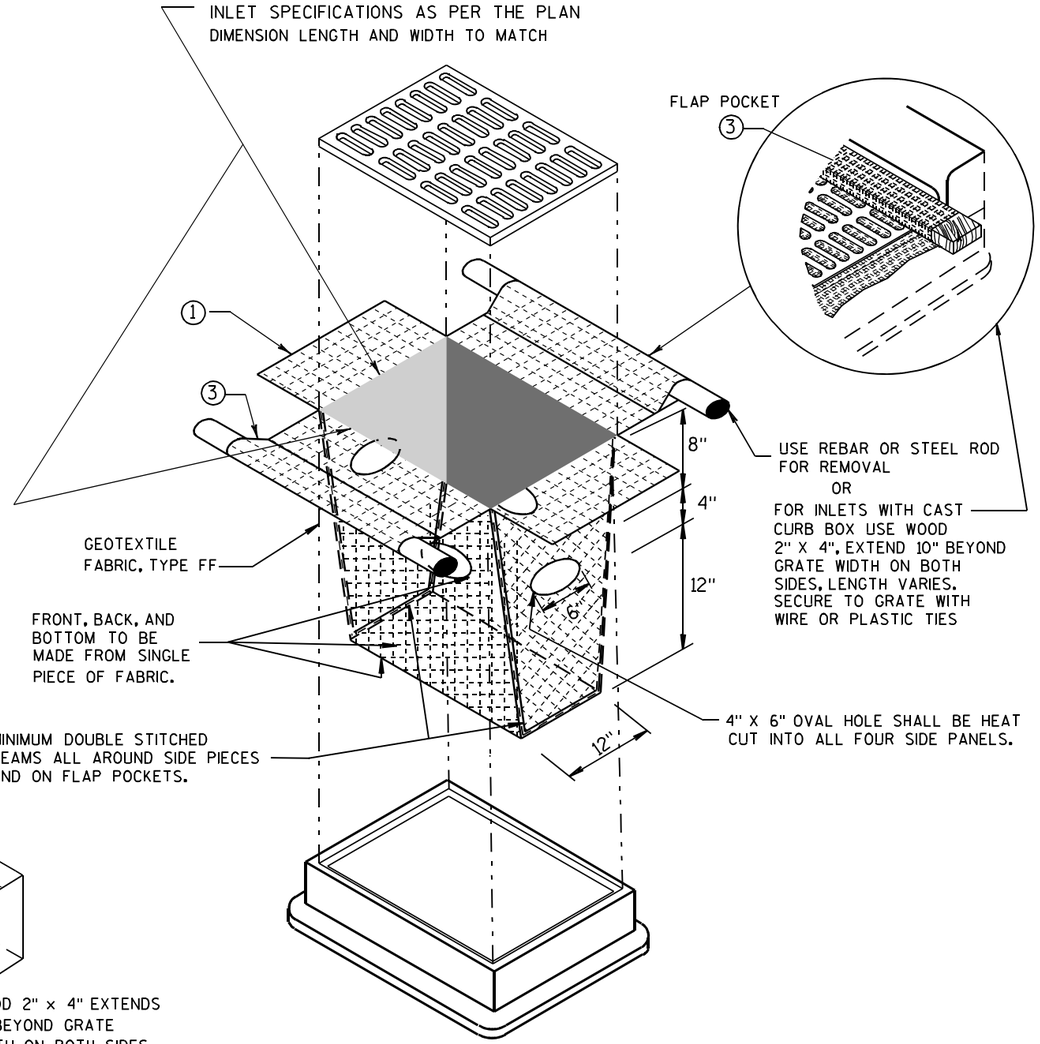


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

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

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

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

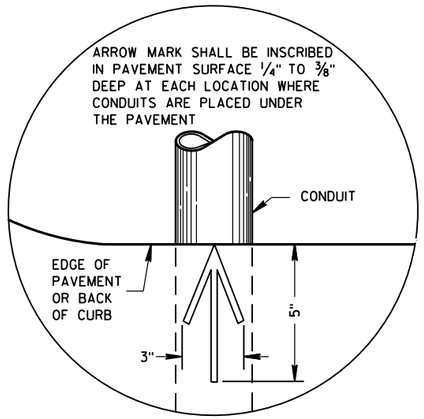
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

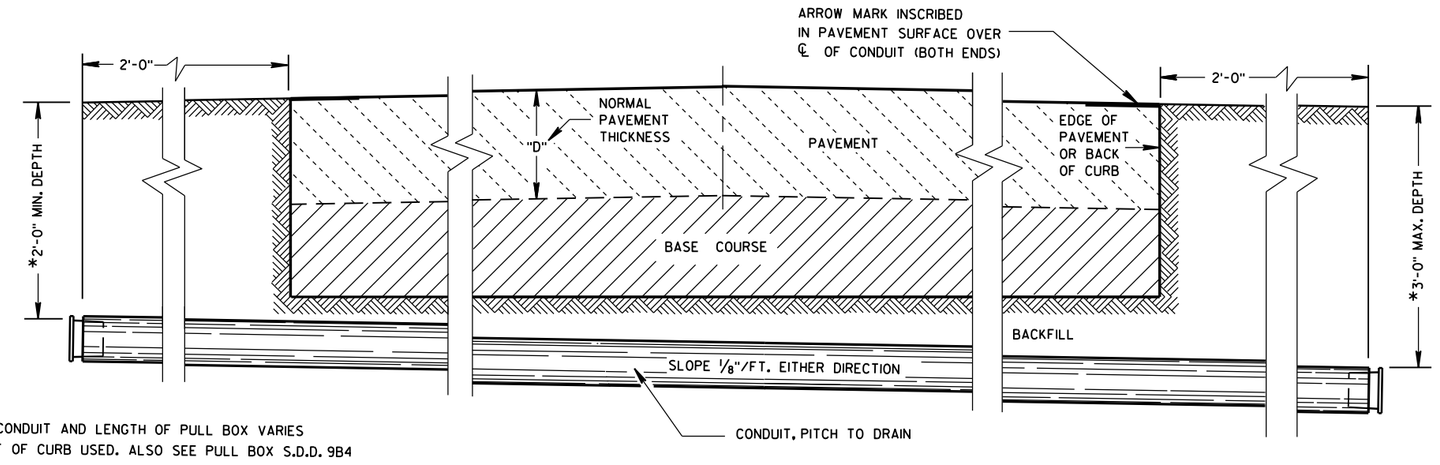
APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 E 10-2



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

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

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

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

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

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

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

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

CONDUIT

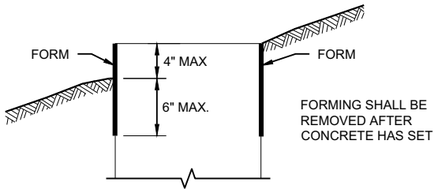
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

S.D.D. 9 B 2-10

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.

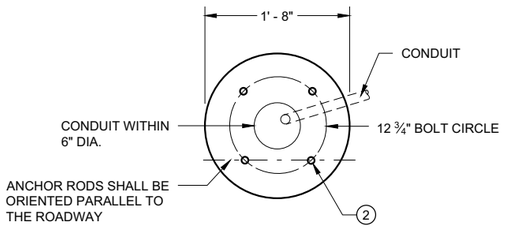
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

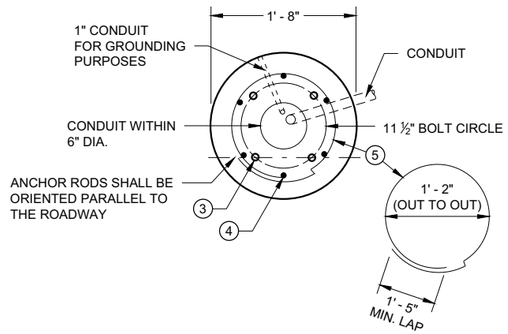
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

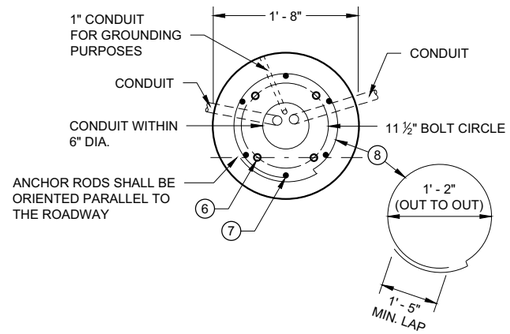
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

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

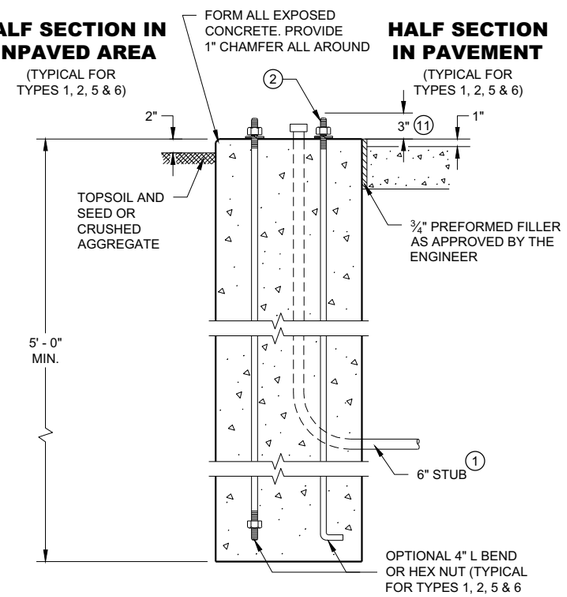
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

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.

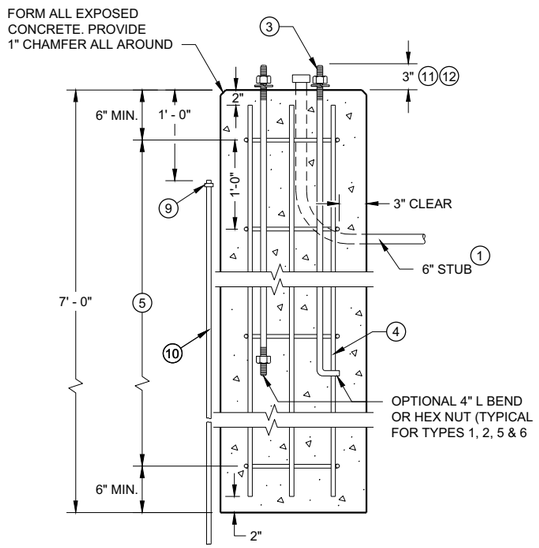
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5 & 6)

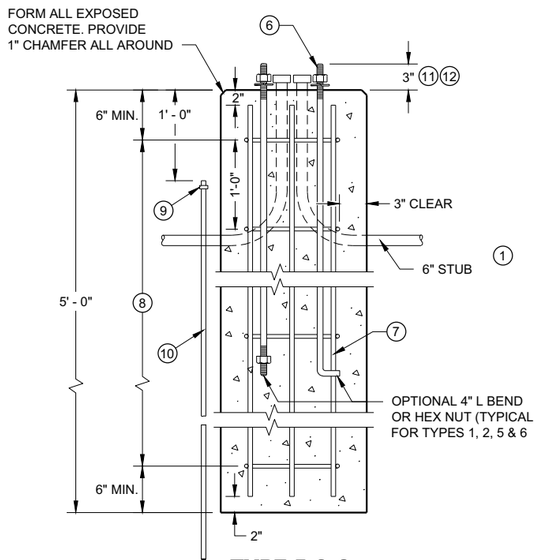
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5 & 6)



TYPE 1



TYPE 2



TYPE 5 & 6

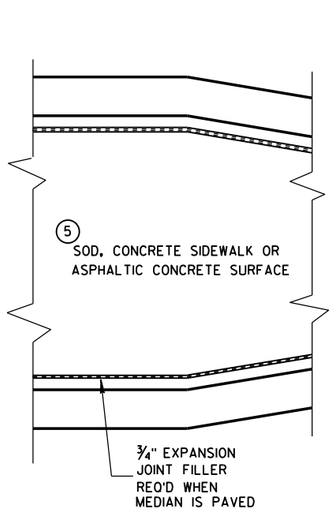
CONCRETE BASES

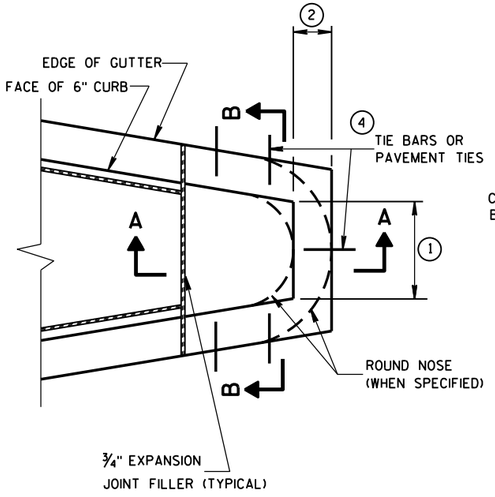
CONCRETE BASES
TYPES 1, 2, 5, & 6

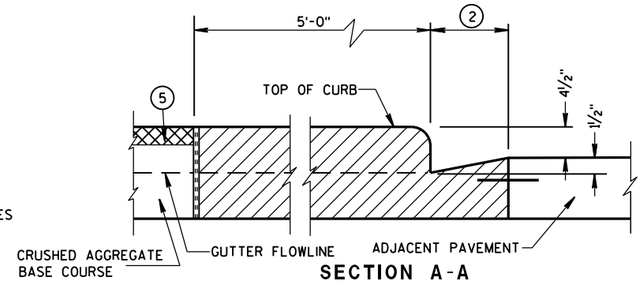
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

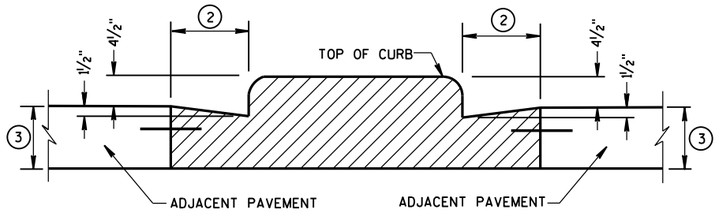
FHWA







SECTION A-A



SECTION B-B

CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

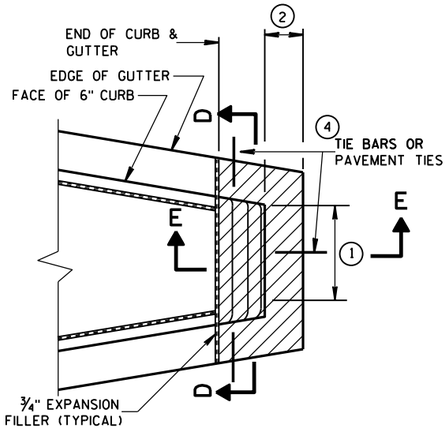
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

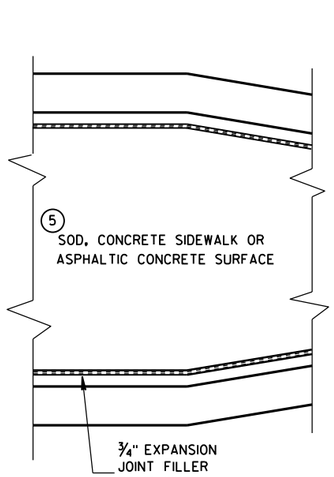
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

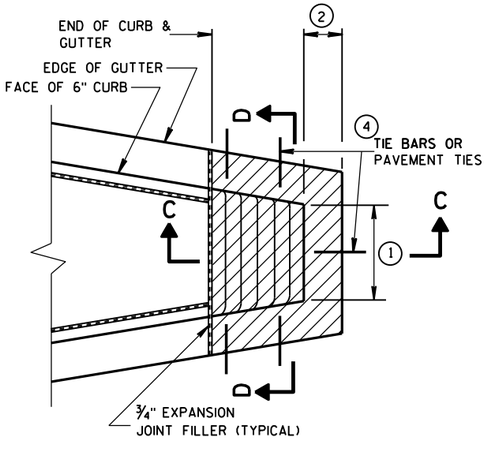
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

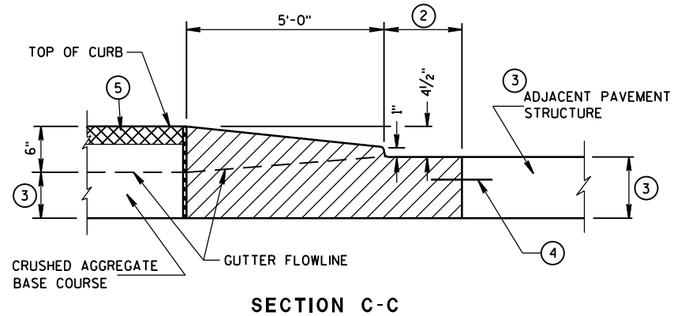
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



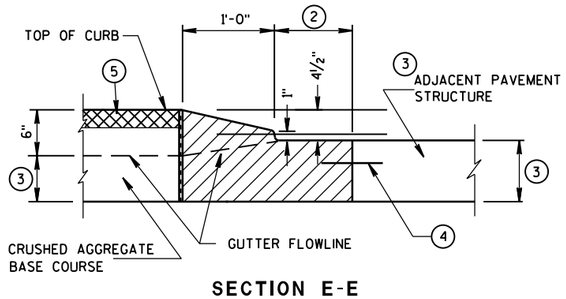




CONCRETE MEDIAN SLOPED NOSE TYPE 1

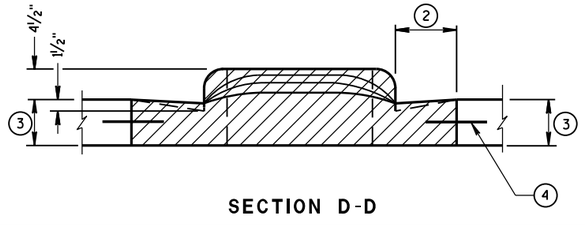


SECTION C-C



SECTION E-E

CONCRETE MEDIAN SLOPED NOSE TYPE 2



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

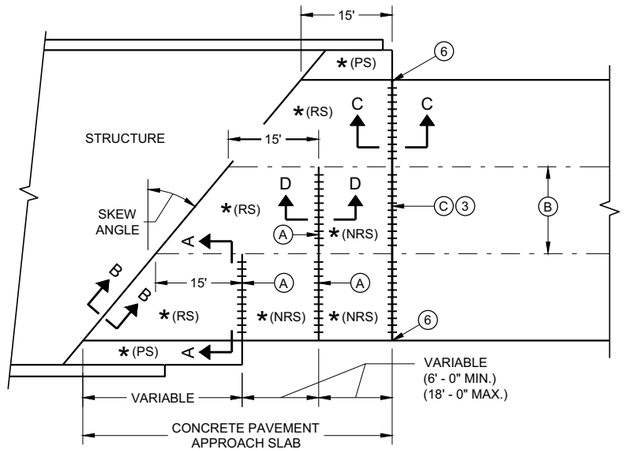
APPROVED
6/8/2006 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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S.D.D. 11 B 2-2

6

S.D.D. 11 B 2-2



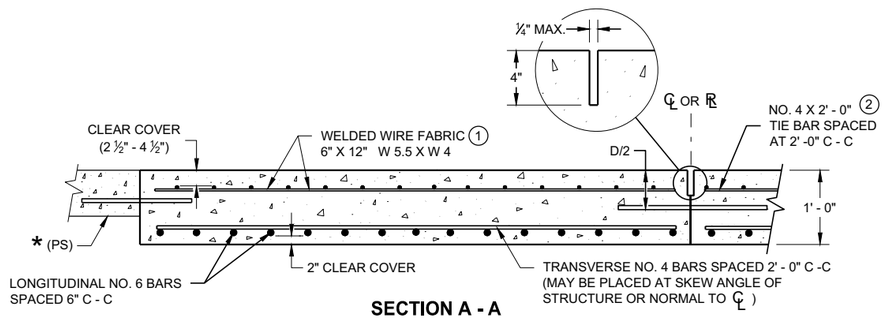
SKEWED APPROACH
(PAVEMENT MORE THAN TWO LANES)

* (RS) = REINFORCED CONCRETE SLAB

* (PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB

* (NRS) - NON - REINFORCED CONCRETE SLAB

*** STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11 AND SDD 13C13)



SECTION A - A
REINFORCEMENT POSITIONING DETAIL

GENERAL NOTES

THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

(1) THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2' - 0 " C - C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

(2) THE CONTRACTOR MAY OMIT THE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

(3) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

(4) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

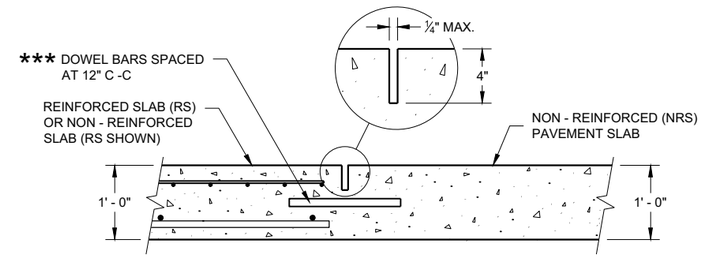
(5) PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.

(6) EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.

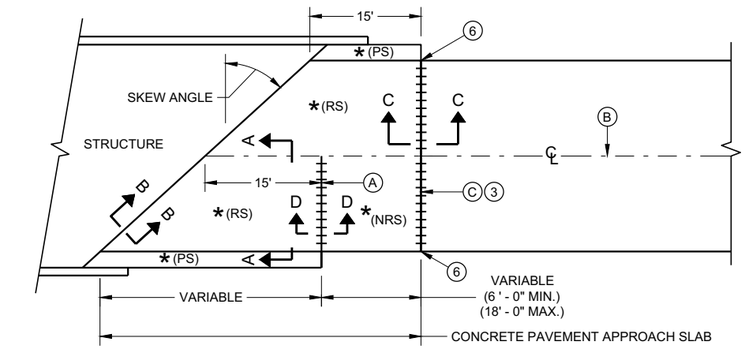
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℞.

(B) STANDARD LONGITUDINAL JOINT WITH TIE BARS.

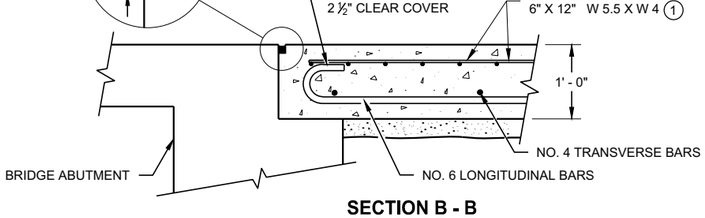
(C) 1 ½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℞ .



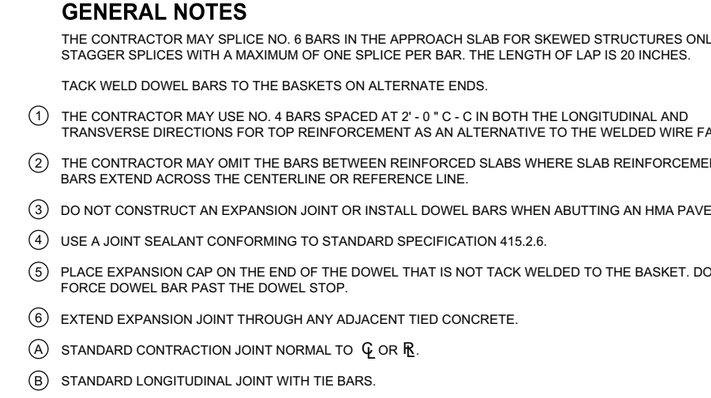
SECTION D - D
CONTRACTION JOINT



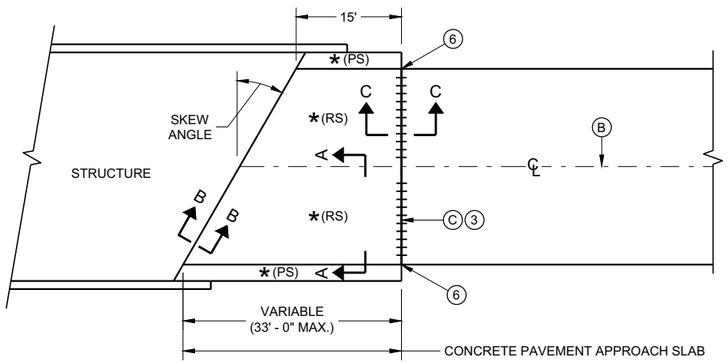
SKEWS > 20°
(PAVEMENT WIDTH ≤ 30')



SECTION B - B
BEND DETAIL
BOTTOM REINFORCEMENT

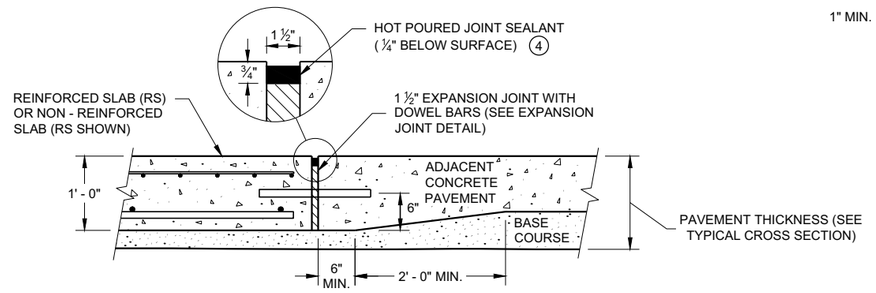


EXPANSION JOINT DETAIL



SKEWS ≤ 20°
(PAVEMENT WIDTH ≤ 30')

APPROACH SLAB AND ADJACENT PAVEMENT



SECTION C - C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT

CONCRETE PAVEMENT APPROACH SLAB

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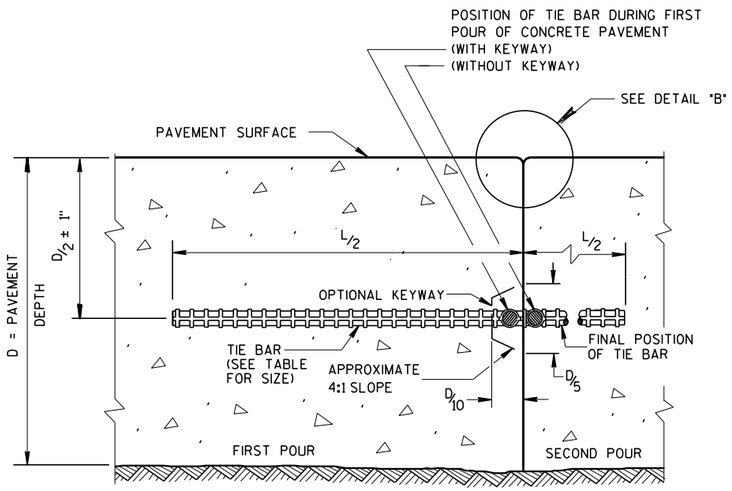
APPROVED
November 2018
DATE

/S/ Peter Kemp, P.E.
PAVEMENT SUPERVISO

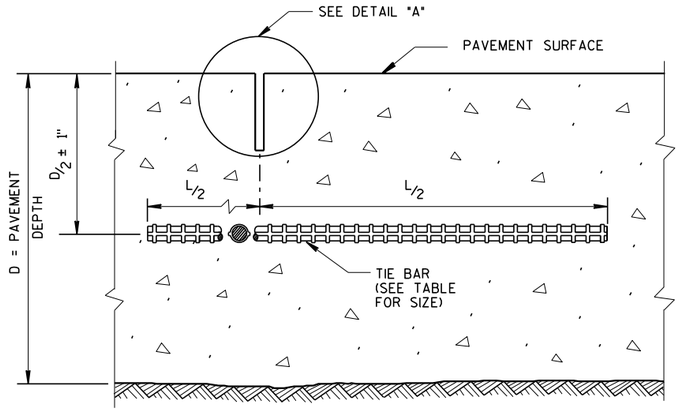
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SDD 13B02 - 09a



CONSTRUCTION JOINT



SAWED JOINT

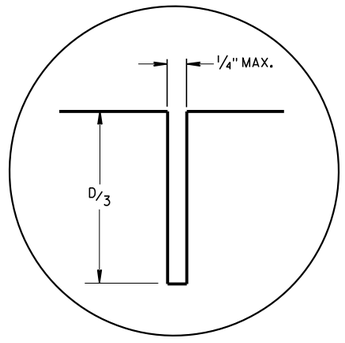
GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

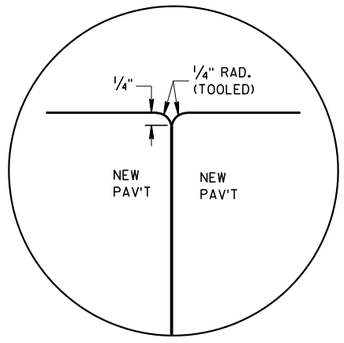
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

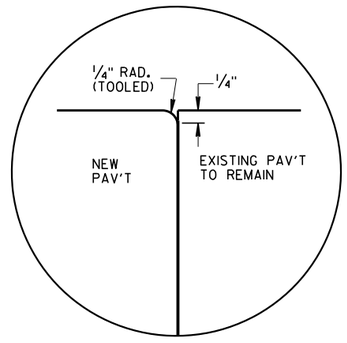
(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.



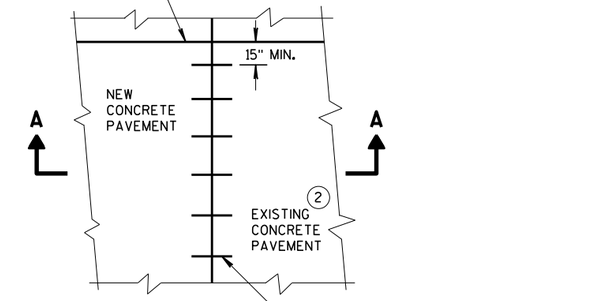
DETAIL "A"



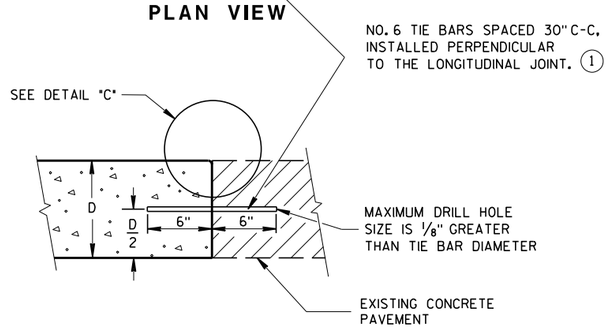
DETAIL "B"



DETAIL "C"



PLAN VIEW



SECTION A-A

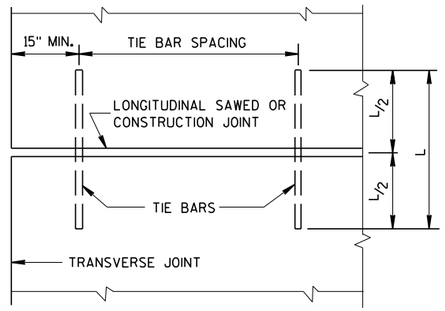
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

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.

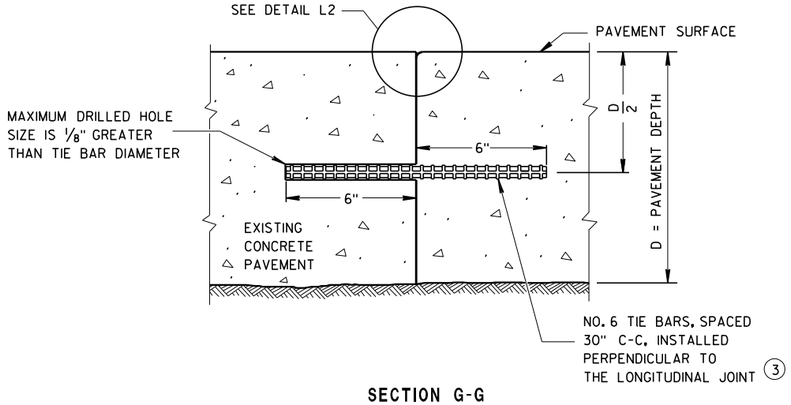


PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

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March 2018 — DATE
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SECTION G-G

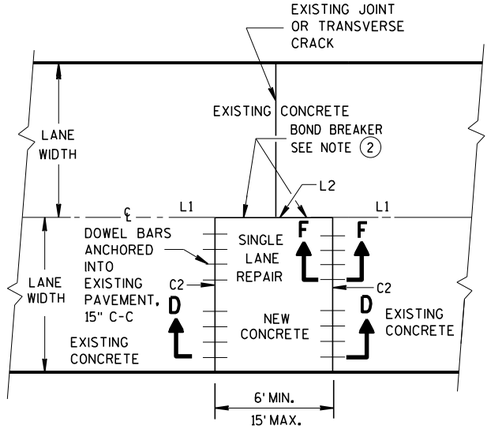
TIE BARS ANCHORED INTO EXISTING PAVEMENT

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.

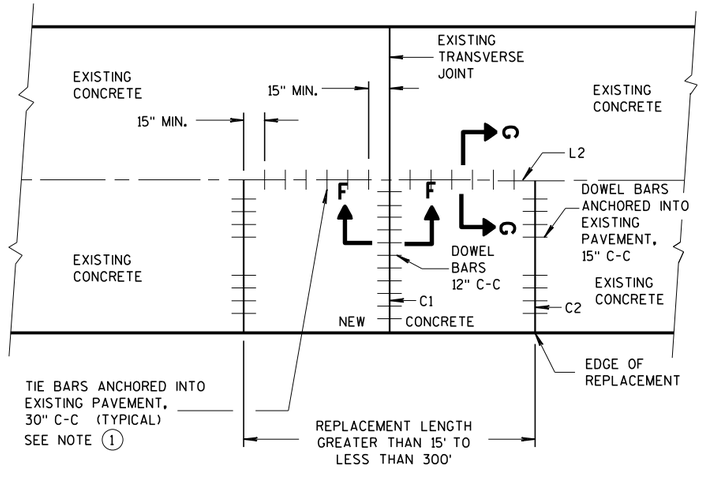
(2) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.

(3) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPLACEMENT

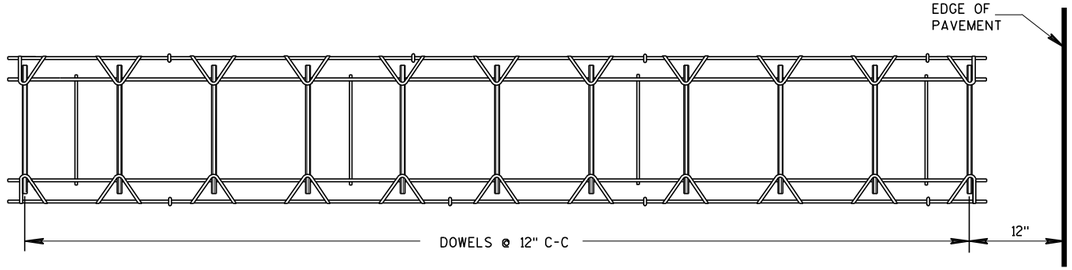
CONCRETE PAVEMENT REPAIR AND REPLACEMENT

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PLAN VIEW



SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE LONGITUDINAL JOINT AND THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

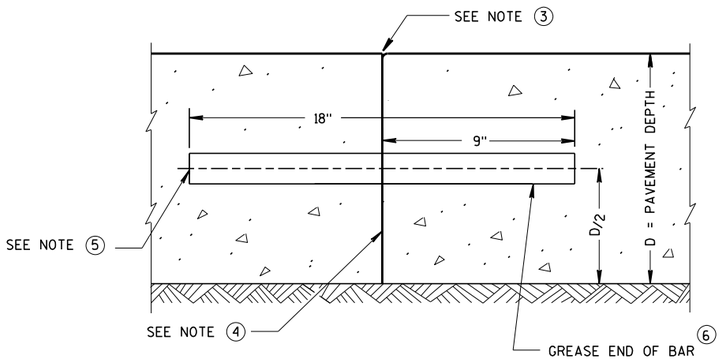
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

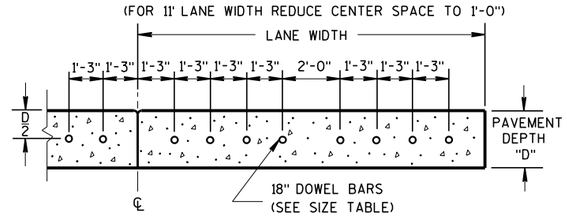
⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

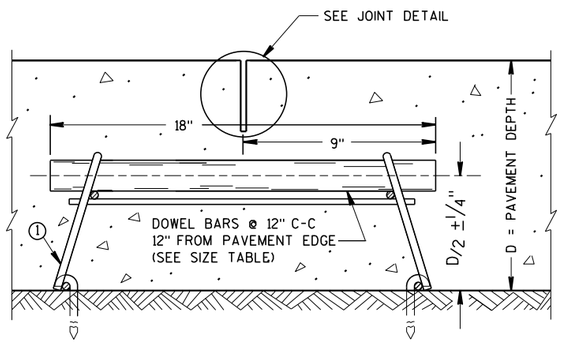
⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



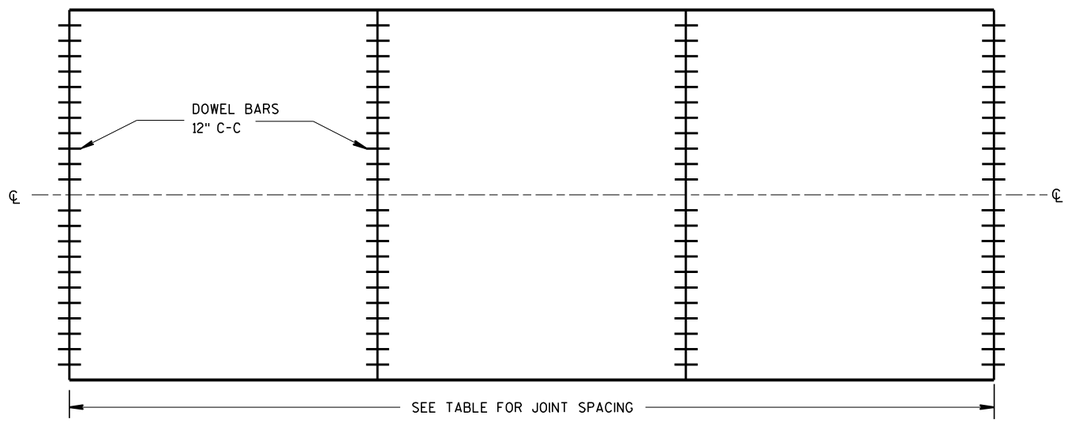
TRANSVERSE CONSTRUCTION JOINT



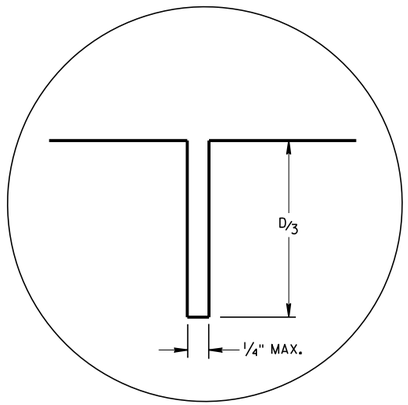
DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



DOWELED CONTRACTION JOINT



CONTRACTION JOINT LOCATIONS



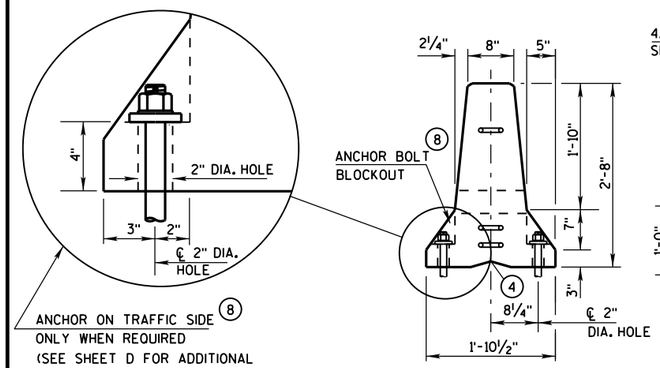
JOINT DETAIL

URBAN DOWELED CONCRETE PAVEMENT

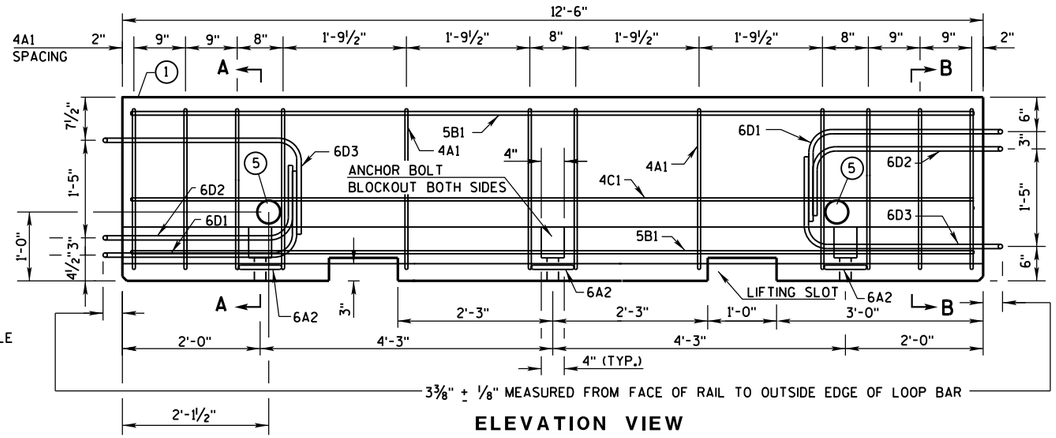
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FHWA

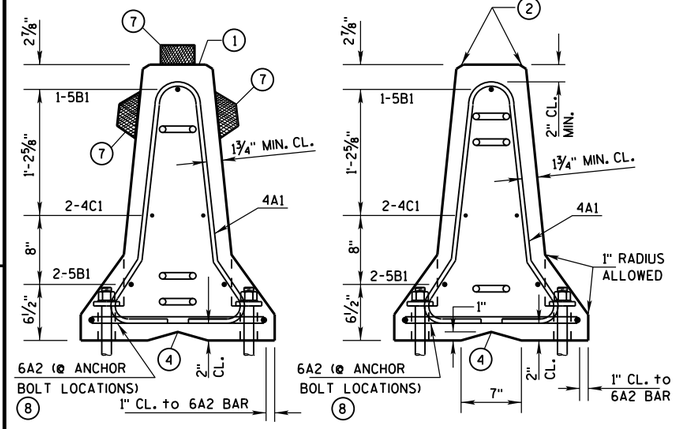
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S.D.D. 13 C 13-9



END VIEW

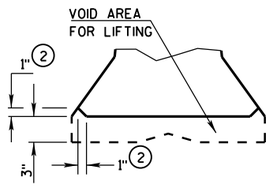


ELEVATION VIEW

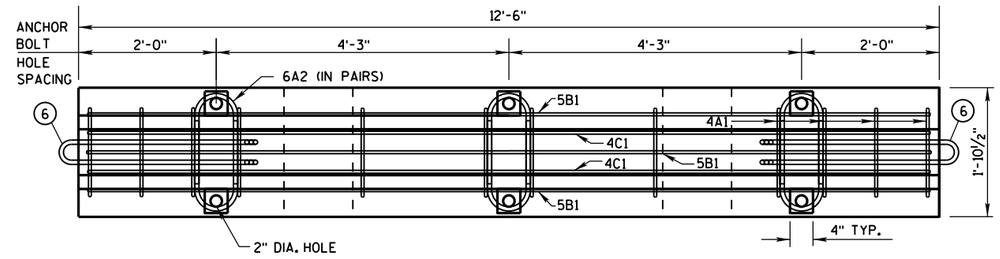


SECTION A-A
(STIRRUP PLACEMENT)

SECTION B-B
(STIRRUP PLACEMENT)

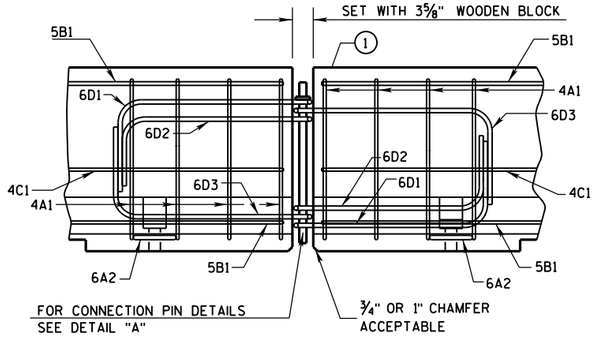


DETAIL "B"
LIFTING SLOT DETAIL

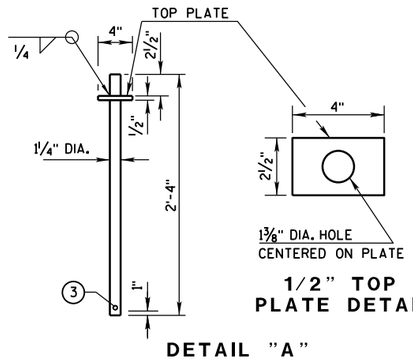


PLAN VIEW

DETAILS OF BARRIER SECTION

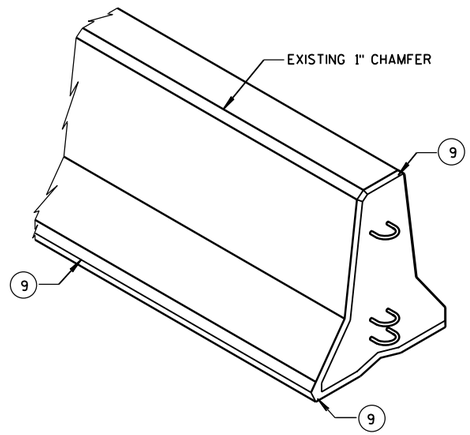


DETAILS OF BARRIER CONNECTION



1/2" TOP
PLATE DETAIL

DETAIL "A"
CONNECTION PIN
(A36 STEEL (10.9 LB EACH))



GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-15(a) THRU 14B7-15(i).

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRCAST, 12'-6" (CBTP12.5) WITH OTHER TEMPORARY CONCRETE BARRIERS.

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR BARS 4A1, 6A2, 5B1 AND 4C1 IN THE BARRIER SECTION AND FOR 4V1, 4V2, 4V3, 4V4, 4V5, 4V6, 4F1, 4F2 AND 5F3 IN THE BARRIER TAPER SECTION.

LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE ¾" SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3-½" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN ⅛" OF THE PLAN DIMENSION.

CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

INSTALL MECHANICAL OR ADHESIVE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE MANUFACTURER'S INFORMATION TO PROJECT ENGINEER.

(1) MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
- a. TYPE: WI CBTP
- b. MANUFACTURER
- c. DATE MANUFACTURED (MONTH AND YEAR)

(2) 1" CHAMFER TO PREVENT SPALLING.

(3) A ⅜" HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..

(4) "V" NOTCH IS OPTIONAL.

(5) THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).

(6) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

(7) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

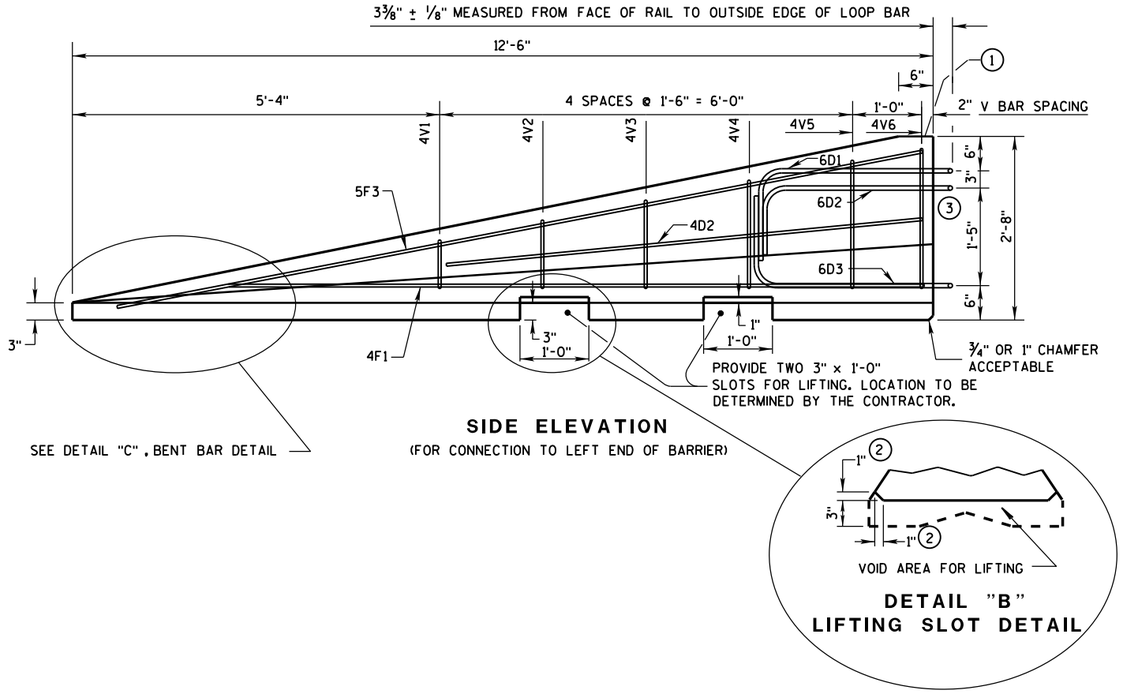
(8) SEE SHEET D FOR HOW TO ANCHOR BARRIER. SEE SHEET E FOR WHEN TO ANCHOR BARRIER.

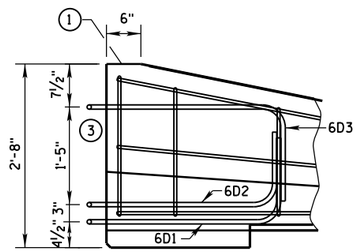
(9) 1" CHAMFER OPTIONAL.

f'c = 4,000 psi

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

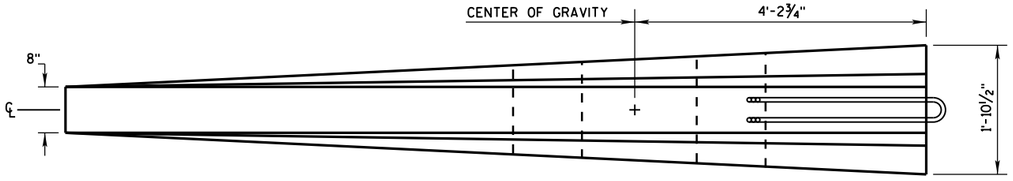
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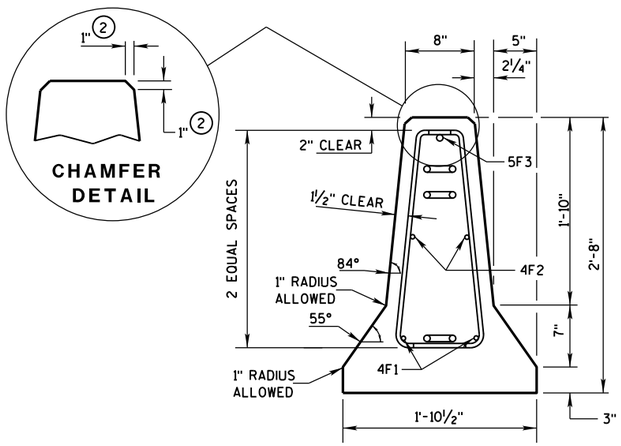


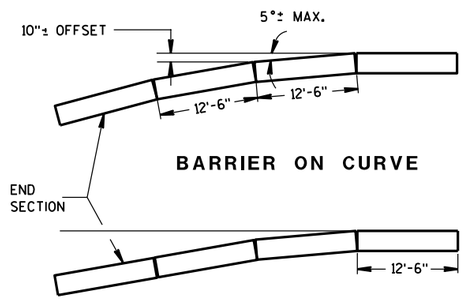


GENERAL NOTES

1. MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
   a. TYPE WICBTP
   b. MANUFACTURER
   c. DATE MANUFACTURED (MONTH AND YEAR)
2. 1" CHAMFER TO PREVENT SPALLING.
3. NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.







POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

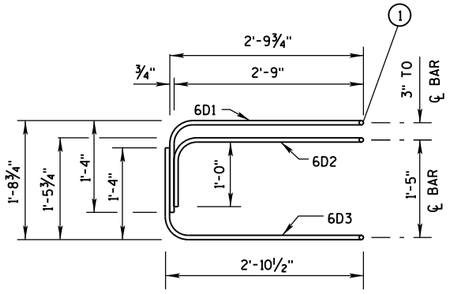
6

S.D.D. 14 B 7-15b

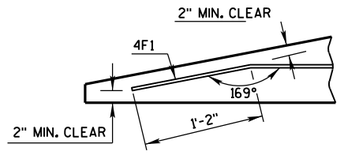
BARRIER TAPER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

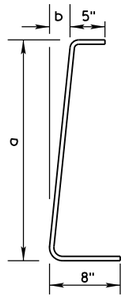
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



ELEVATION
LOOP BAR ASSEMBLY



DETAIL "C"
BENT BAR DETAIL



BAR	a	b
V1	10"	1"
V2	1'-1"	1¼"
V3	1'-5"	1⅝"
V4	1'-8"	1⅞"
V5	2'-0½"	2⅜"
V6	2'-3"	2¾"

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

TAPER BARRIER SECTION

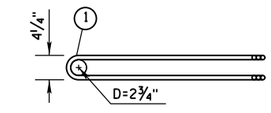
GENERAL NOTES

(1) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

BARRIER SECTION BILL OF MATERIALS

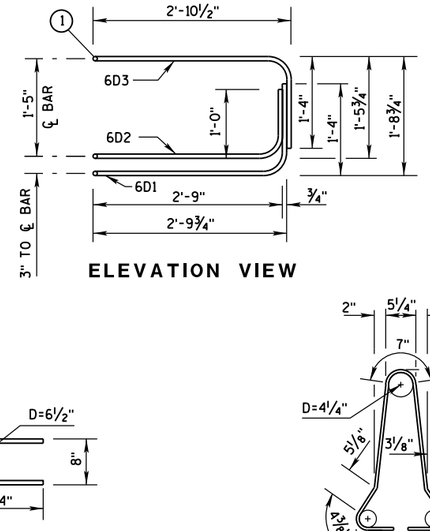
(PER 12'-6" BARRIER SECTION)

BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"

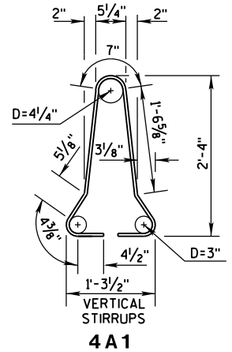


PLAN VIEW
LOOP BAR ASSEMBLY
(MARKED END SHOWN, INVERT FOR OTHER END)

6A2



ELEVATION VIEW



4A1

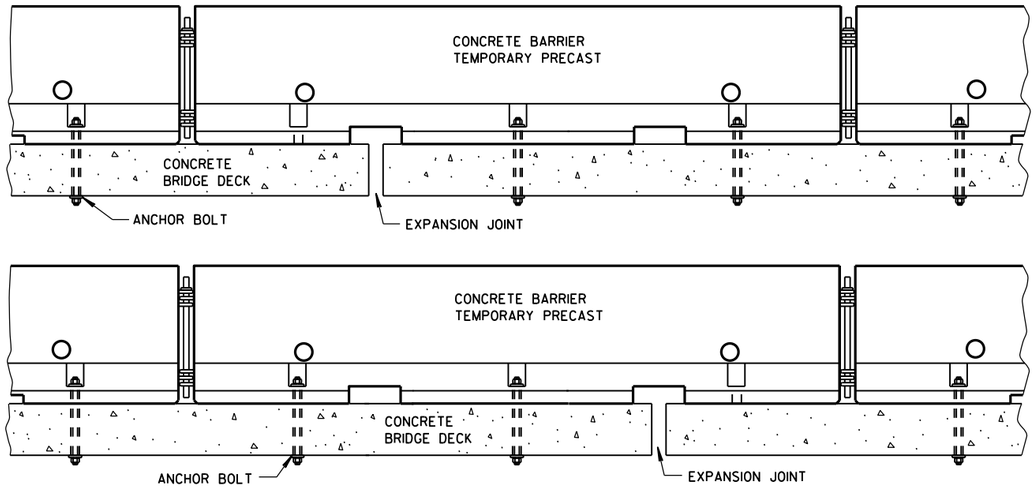
BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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S.D.D. 14 B 7-15c



TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.)

GENERAL NOTES

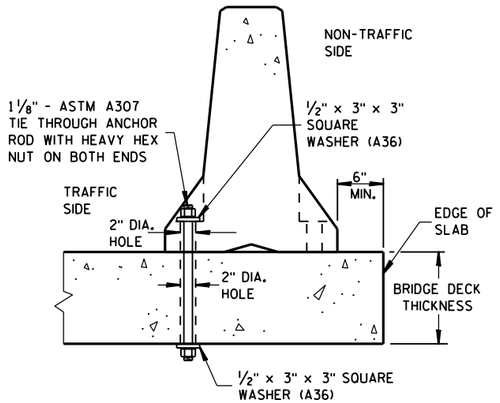
SEE SHEET E FOR WHEN TO ANCHOR. OTHER PARTS OF THE PLAN MAY SHOW ADDITIONAL LOCATIONS REQUIRING ANCHORING.

REMOVE ALL ANCHORS WHEN NO LONGER NEEDED. FILL CONCRETE PAVEMENTS, DECKS AND APPROACH SLABS WITH NON-SHRINK COMMERICAL GROUT FROM THE APPROVED PRODUCT LIST. FILL ASPHALT PAVEMENTS WITH ASTM D6690 TYPE II RUBBERIZED CRACK FILLER.

(1) 1⅛" DIAMENTER A307 THREADED ROD. ½" X 3" X 3" SQUARE PLATE WASHER WITH ASTM A36 STEEL. ASTM A563A HEAVY HEX NUT.

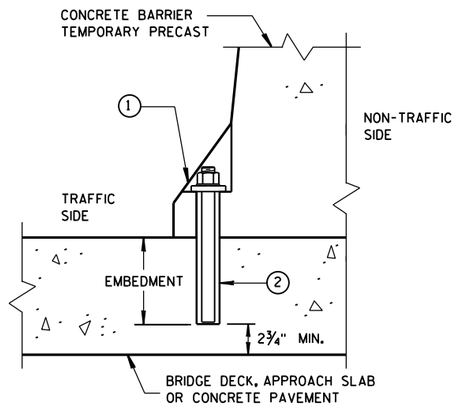
(2) ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5¼" EMBEDMENT. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.

(3) ASPHALT SURFACE SHOWN. CONTRACTOR MAY DRILL THROUGH CONCRETE PAVEMENT AND THAN DRIVE ASPHALT ANCHOR PIN.



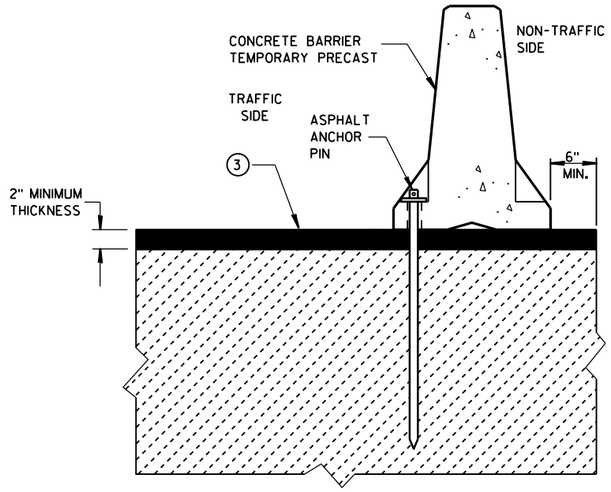
THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)

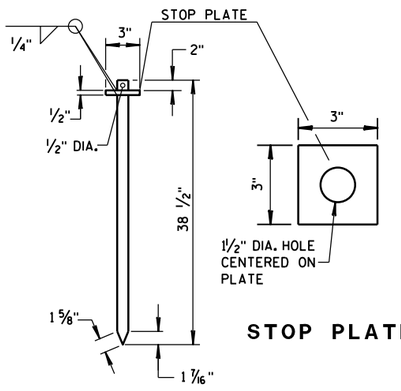


REMOVABLE ADHESIVE ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)



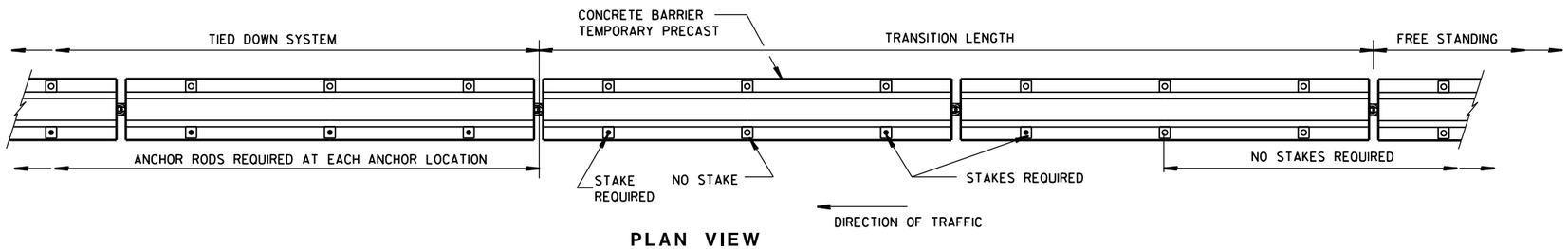
STAKE DOWN INSTALLATION FOR ASPHALTIC SURFACE



STOP PLATE

ASPHALT ANCHOR PIN

(ASTM A36 STEEL)



PLAN VIEW

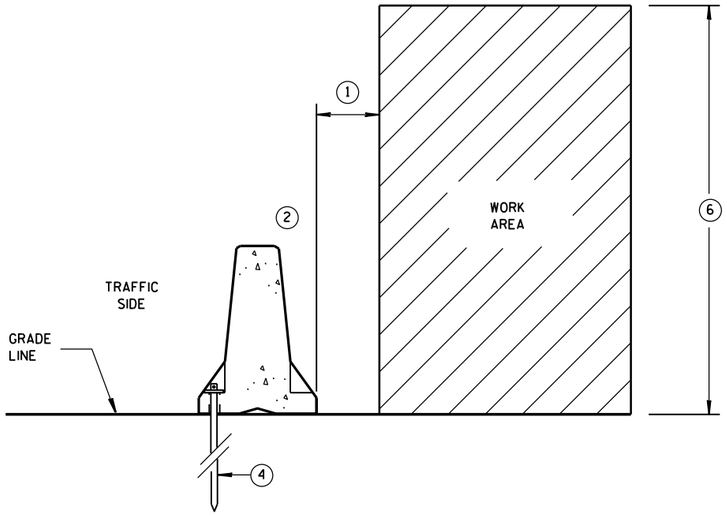
FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

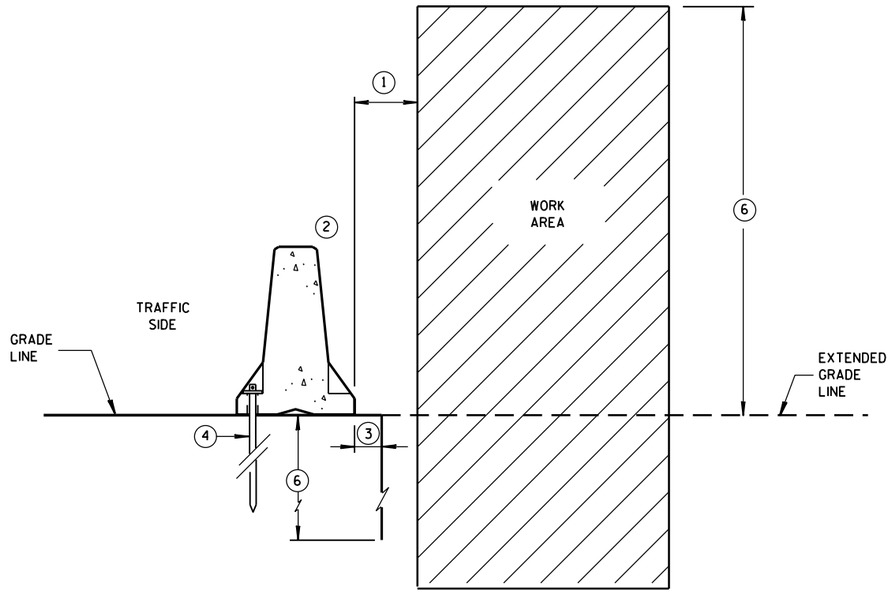
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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ANCHORED BARRIER SPACE REQUIREMENTS FOR HAZARDS EXTENDED ABOVE THE GRADE LINE

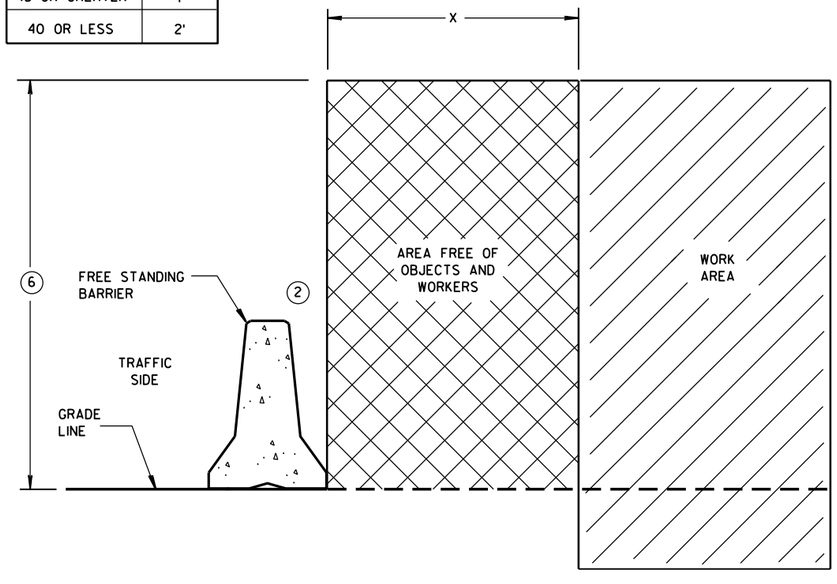


ANCHORED BARRIER SPACE REQUIREMENTS ON VERTICAL DROP OFFS

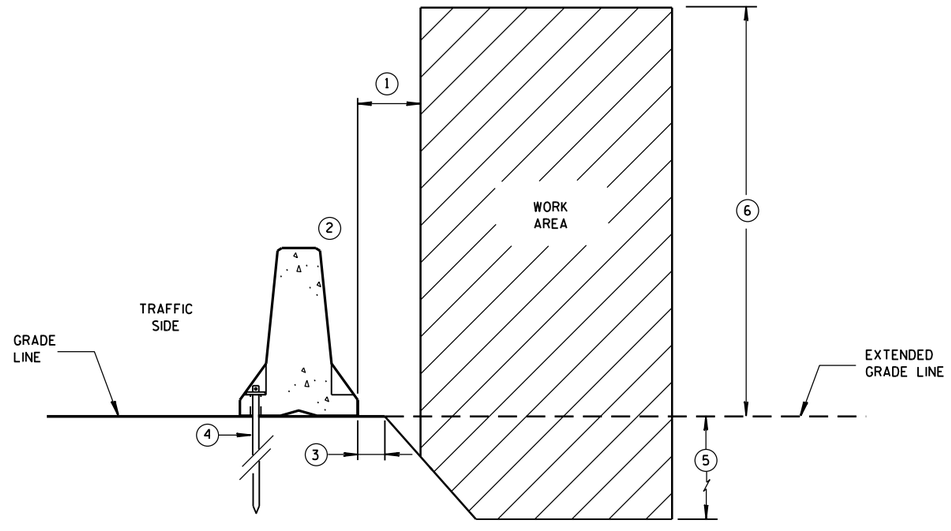
GENERAL NOTES

1. WHEN OBJECTS EXTEND ABOVE THE GRADE, A MINIMUM OF 1 FOOT IS REQUIRED FROM BACK OF BARRIER TO OBJECT. SEE OTHER DETAILS FOR FOR THE MINIMUM OFFSET FROM BACK OF BARRIER TO SLOPES OR VERTICAL DROPS.
2. OBJECTS ARE NOT TO BE PLACED ON, MOUNTED TO, OR LEANED AGAINST THE BARRIER WITHOUT PERMISSION OF THE PROJECT ENGINEER.
3. SEE OTHER DETAIL ON SHEET "D" FOR SPACE REQUIREMENTS.
4. SEE BOLT THROUGH DECK, REMOVABLE ADHESIVE ANCHOR, OR A STAKE DOWN FOR ASPHALTIC SURFACE TREATMENT DETAILS. ASPHALTIC ANCHOR SHOWN.
5. DEPTH OF 3 FEET OR MORE.
6. Y = 6'-6".

POSTED SPEED MPH	X
45 OR GREATER	4'
40 OR LESS	2'



FREE STANDING BARRIER SPACE REQUIREMENTS



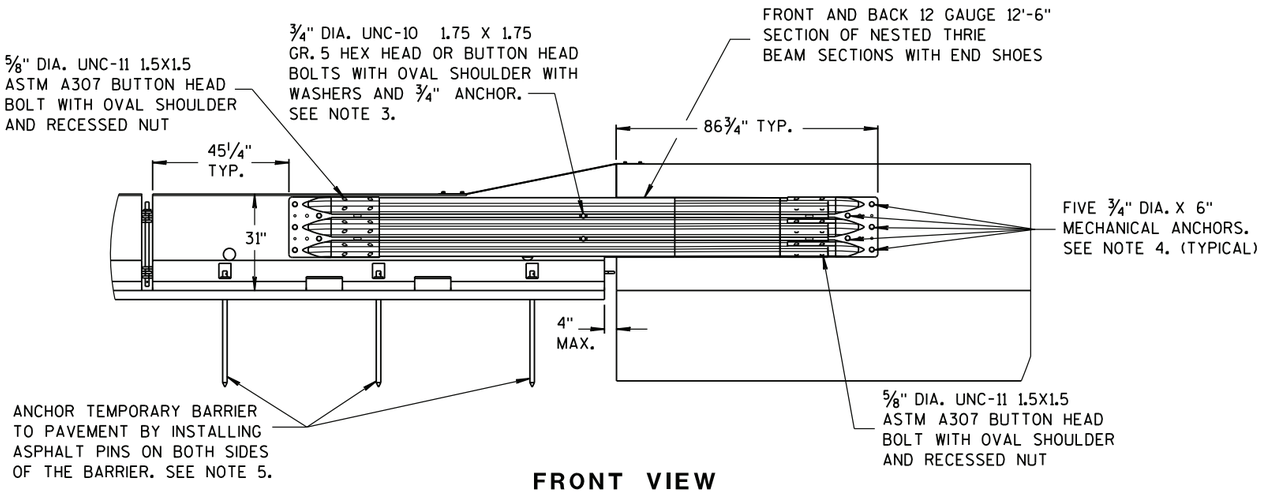
ANCHORED BARRIER SPACE REQUIREMENTS ON SLOPES

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

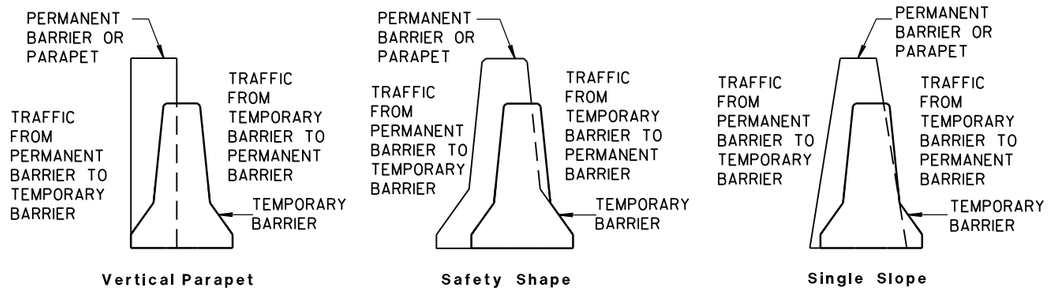
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 14 B 7-15e



FRONT VIEW

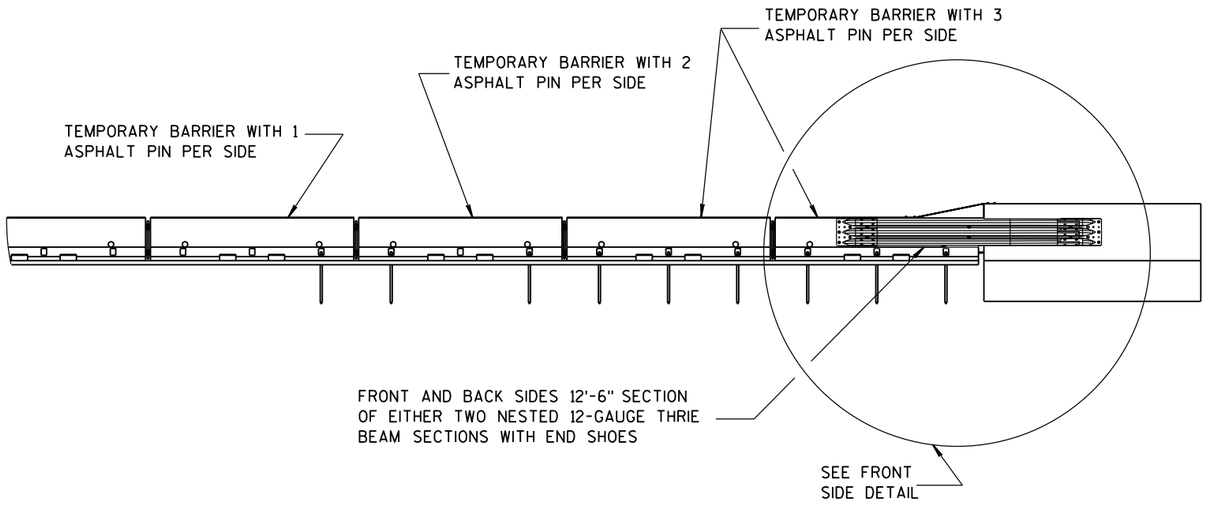


TEMPORARY BARRIER PLACEMENT FOR TRANSITION TO TIED DOWN SYSTEM

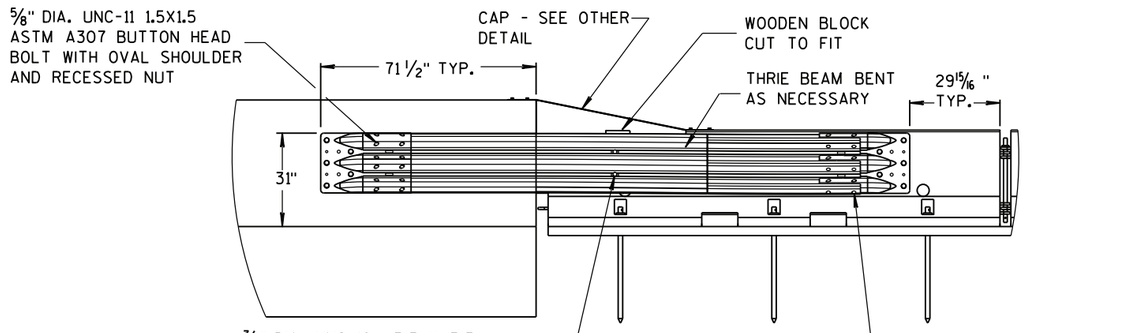
NOTES

NESTED THRIE BEAM IS REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS REGARDLESS OF TRAFFIC.

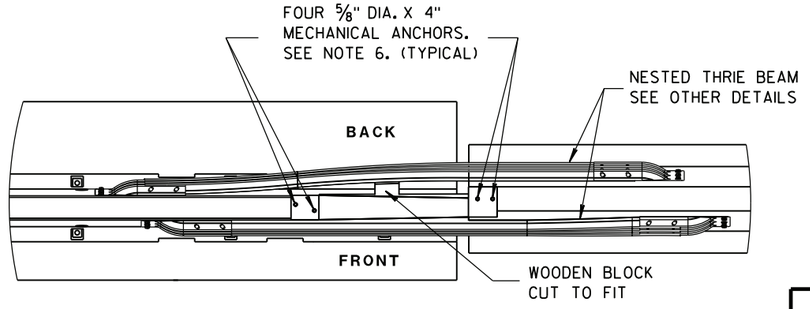
1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS.
5. MAY BE USED ON CONCRETE OR ASPHALT PAVEMENTS. ASPHALT OPTION SHOWN. FOR CONCRETE OPTION SEE OTHER DETAILS.
6. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.



FRONT VIEW



BACK VIEW



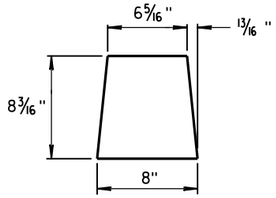
PLAN VIEW

TRANSITION TO TIED DOWN SYSTEM

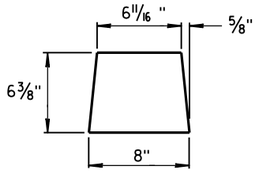
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

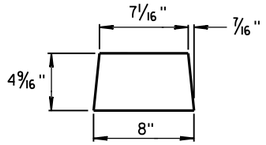
6
S.D.D. 14 B 7-15f



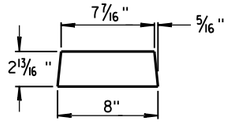
GUSSET 1



GUSSET 2

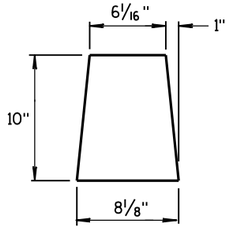


GUSSET 3

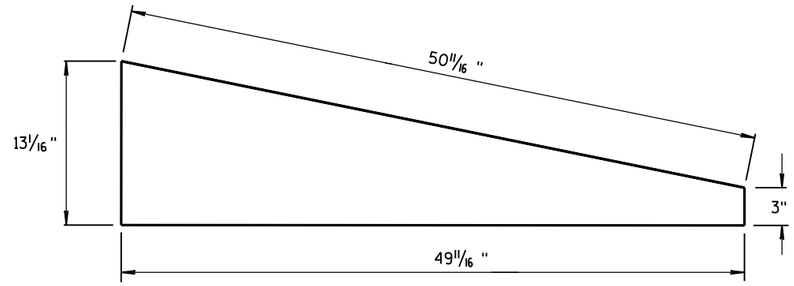


GUSSET 4

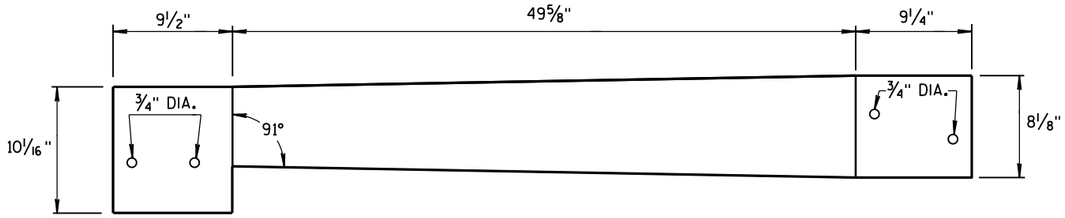
GUSSETS

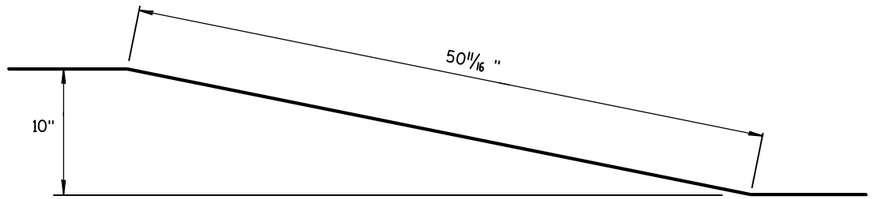


END PLATE



SIDE PLATE

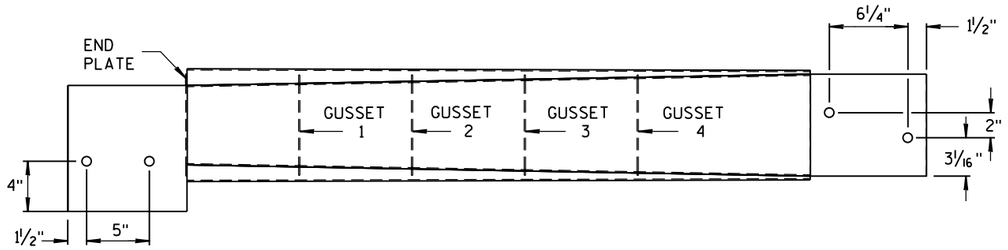


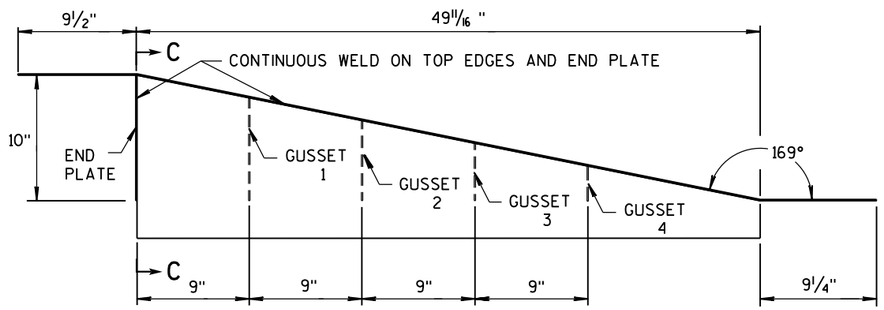


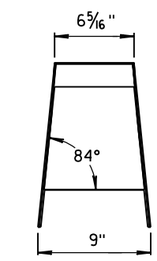
TOP PLATE

SIDE, TOP AND END PLATES FOR CAP FROM TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.







SECTION C-C

NOTES

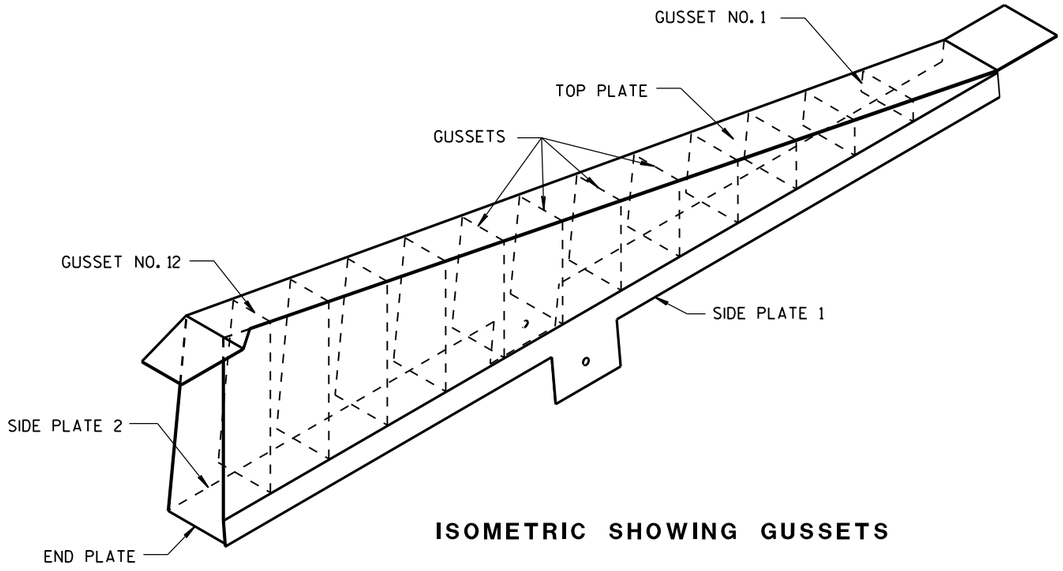
1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

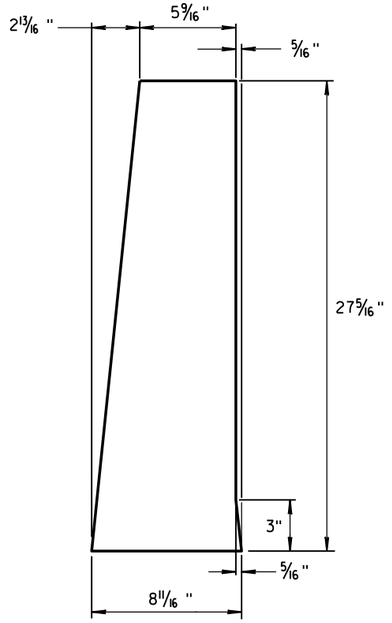
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 14 B 7-15g

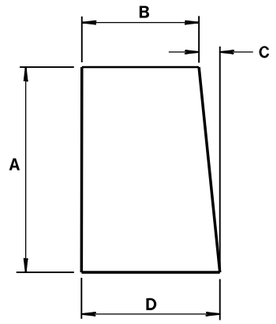


ISOMETRIC SHOWING GUSSETS



END PLATE

1/8" STEEL PLATE



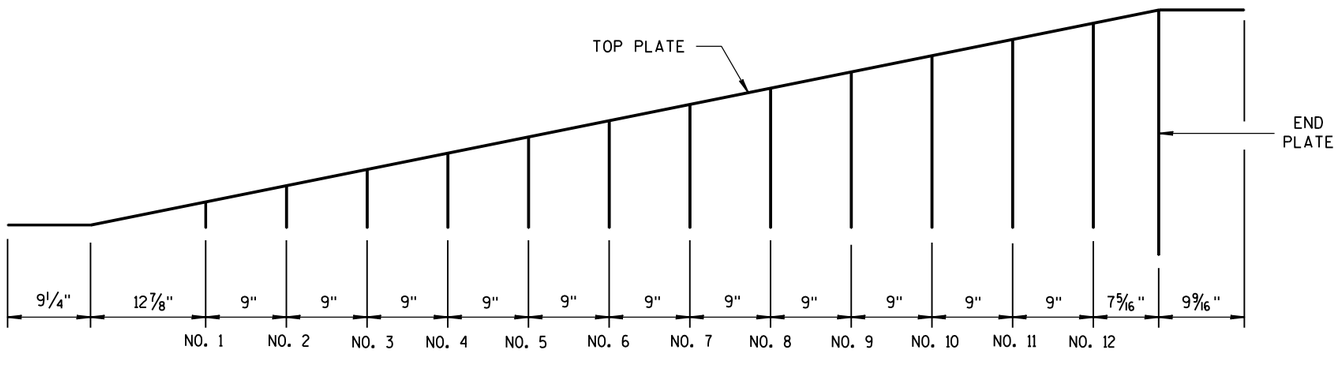
GUSSETS 1 - 12

ALL GUSSETS 1/8" STEEL PLATE

GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
1	2 7/8"	7 3/4"	1/4"	8
2	4 11/16 "	7 9/16 "	1/2"	8
3	6 1/2"	7 3/8"	11/16 "	8 1/16 "
4	8 5/16 "	7 3/16 "	7/8"	8 1/16 "
5	10 1/8"	7"	1 1/16 "	8 1/16 "
6	11 15/16 "	6 13/16 "	1 1/4"	8 1/16 "
7	13 3/4"	6 5/8"	1 7/16 "	8 1/16 "
8	15 9/16 "	6 7/16 "	1 9/16 "	8 1/16 "
9	17 3/8"	6 1/4"	1 13/16 "	8 1/16 "
10	19 3/16 "	6 1/16 "	1 15/16 "	8 1/16 "
11	21"	5 7/8"	2 3/16 "	8 1/16 "
12	22 13/16 "	5 11/16 "	2 5/16 "	8 1/16 "

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 STEEL AND GALVANIZED.

GUSSETS AND END PLATE ARE STITCH WELDED ON 3 SIDES. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE AND GUSSETS.



GUSSET LOCATION

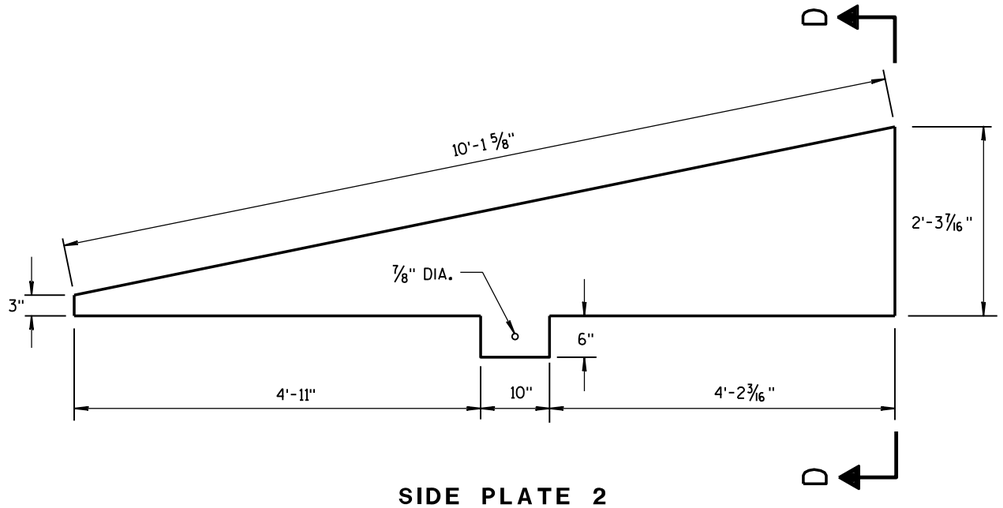
CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

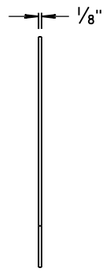
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

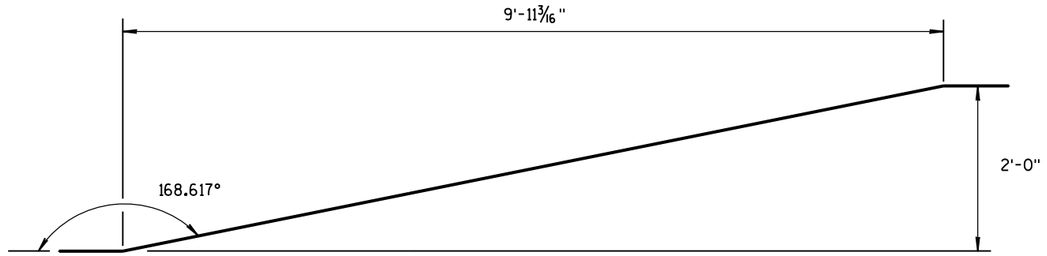
S.D.D. 14 B 7-15h



SIDE PLATE 2

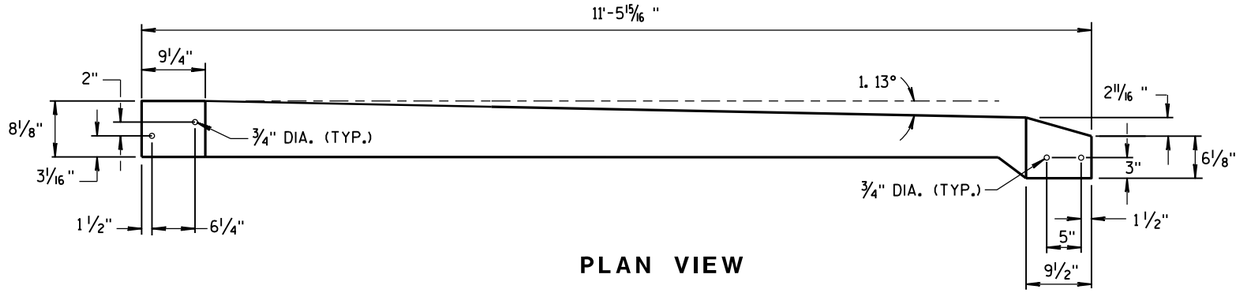


END VIEW



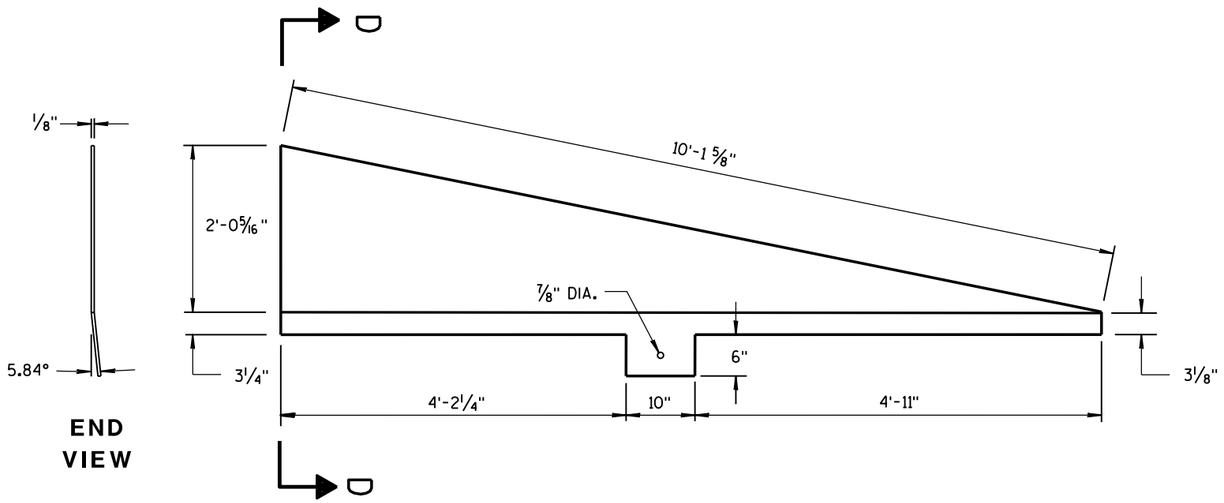
SIDE VIEW

TOP PLATE



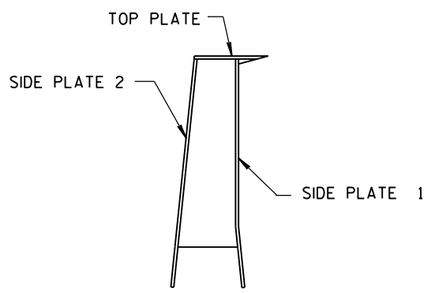
PLAN VIEW

TOP PLATE



END VIEW

SIDE PLATE 1



SECTION D-D

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

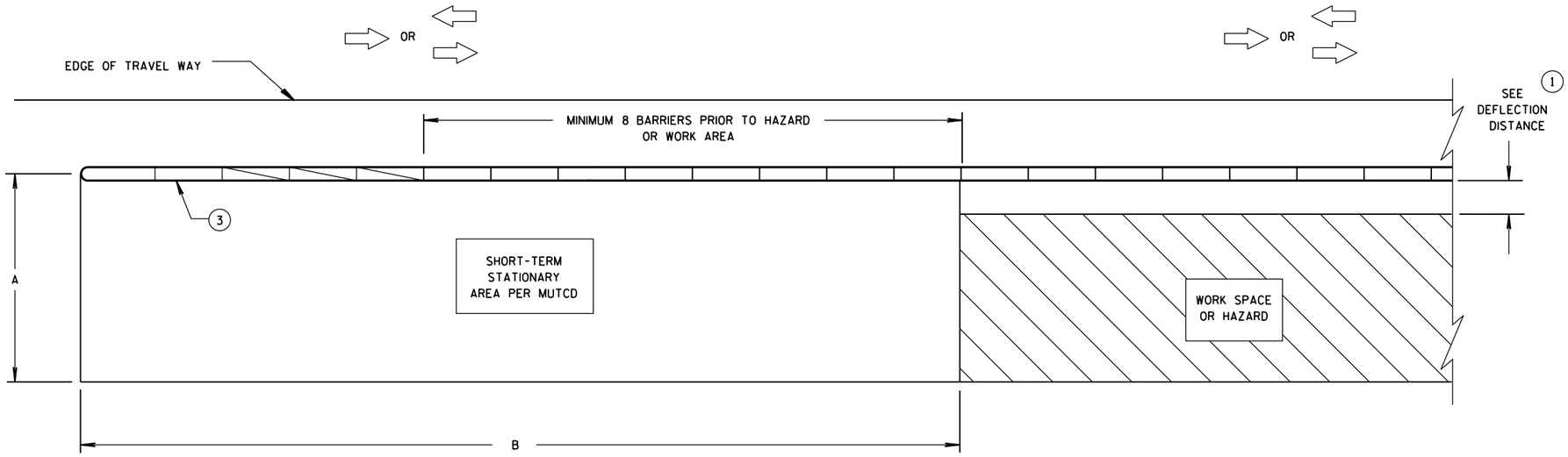
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS UNIT SUPERV
FHWA

6

S.D.D. 14 B 7-15i



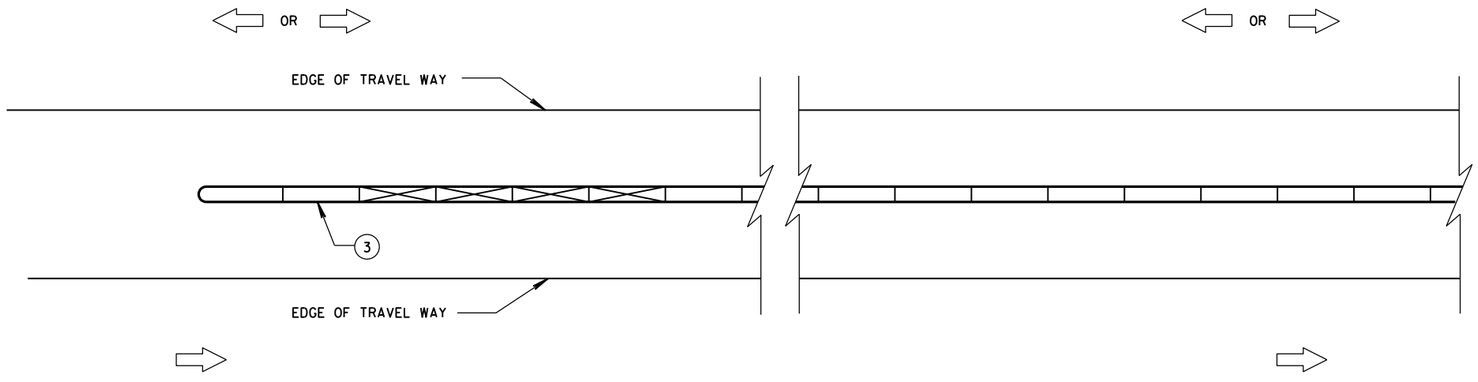
CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER

DIMENSION A TABLE (2)

FACILITY	POSTED SPEED MPH	DIMENSION A	
		MIN. FT	MAX. FT
FREEWAY/EXPRESSWAY	ALL	15	20
NON-FREEWAY/EXPRESSWAY	GREATER THAN OR EQUAL TO 45	10	15
NON-FREEWAY/EXPRESSWAY	LESS THAN 45	8	10
AADT LESS THAN 1,500	ALL	8	10

DIMENSION B TABLE (2)

POSTED SPEEDS MPH	DIMENSION B FT
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON BOTH SIDES OF BARRIER

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

GENERAL NOTES

SEE STANDARD DETAIL DRAWING 14B7 FOR MORE INFORMATION.

DETAILS PROVIDE A GENERAL LAYOUT OF TEMPORARY CONCRETE BARRIER, CRASH CUSHIONS, SAND BARREL ARRAYS AND TIE DOWN TRANSITIONS. DETAILS PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

ADDITIONAL TEMPORARY BARRIER MAY BE REQUIRED TO PROTECT TRAVELING PUBLIC FROM HAZARDS, CONTRACTOR'S OPERATIONS OR TO CONTROL TRAFFIC.

TEMPORARY BARRIER MAY BE REQUIRED TO BE ANCHORED TO PAVEMENT OR BRIDGE DECK.

FOR DETAILS ON CRASH CUSHION OR SAND BARREL ARRAYS SEE OTHER SECTIONS OF THE PLAN AND MANUFACTURE'S DETAILS.

SLOPES LEADING TO TEMPORARY BARRIER, CRASH CUSHION OR SAND BARREL ARRAY ARE 10:1 OR LESS.

(1) FOR DEFLECTION INFORMATION SEE STANDARD DETAIL DRAWING 14B7.

(2) VALUES PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

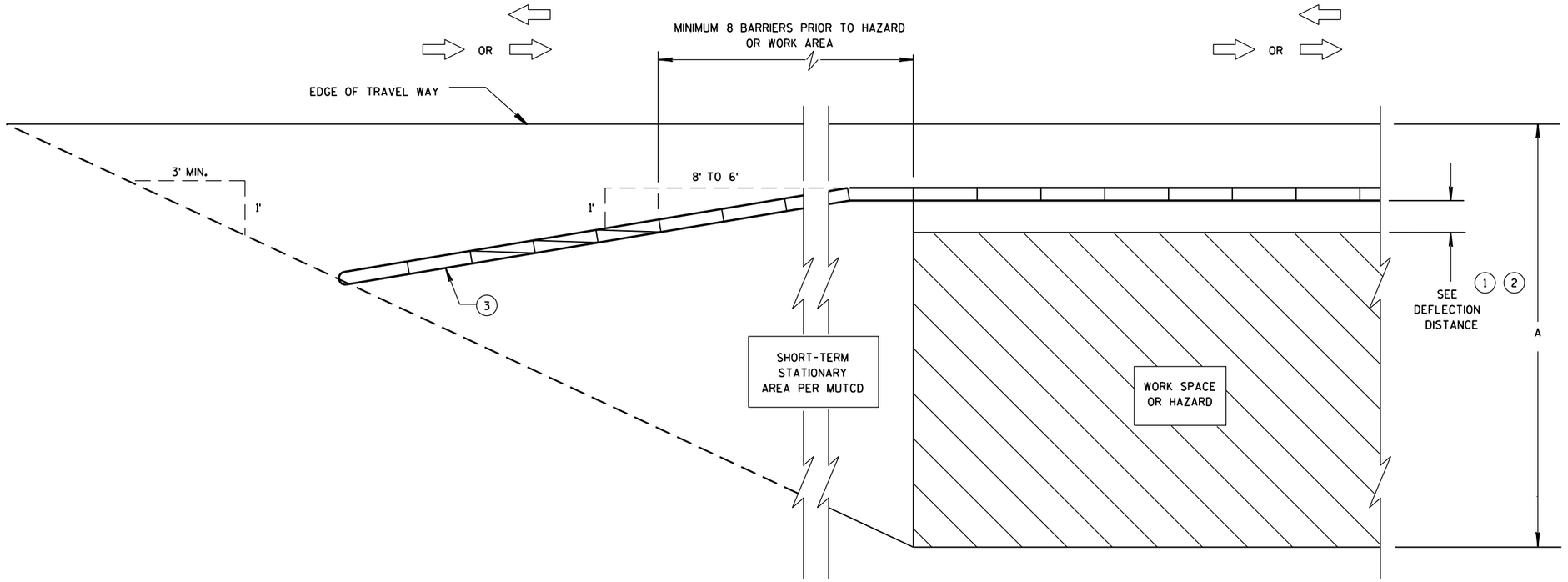
(3) ANCHOR TEMPORARY BARRIER ACCORDING TO CRASH CUSHION OR SAND BARREL MANUFACTURER'S RECOMMENDATIONS. IF MANUFACTURER'S RECOMMENDATIONS ARE NOT PROVIDED, ANCHOR 3 PINS ON TRAFFIC SIDE.

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

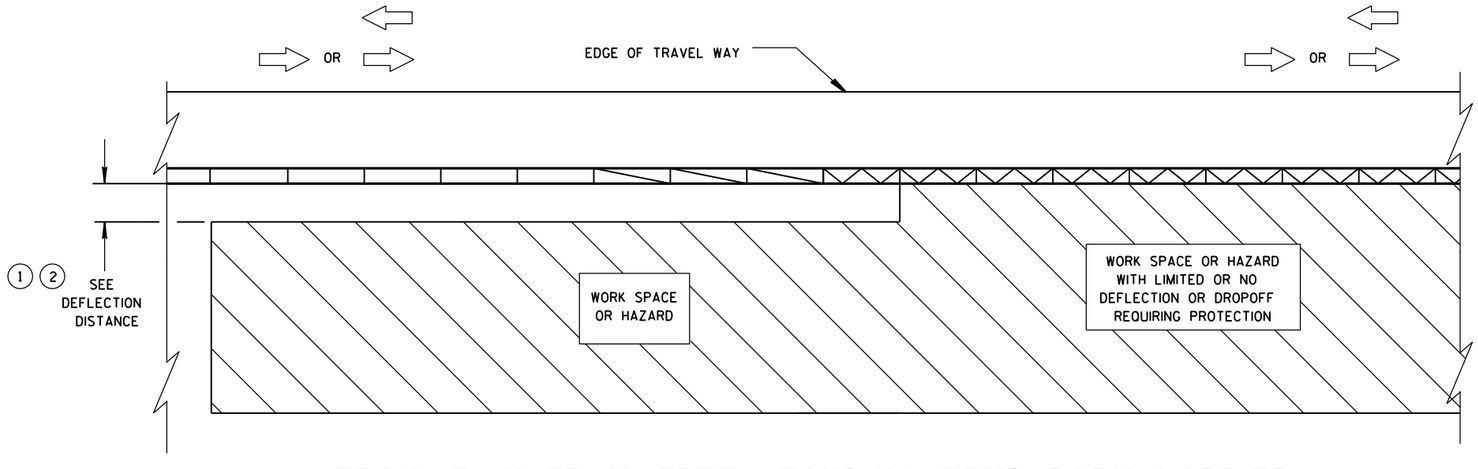
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 14 B 8-2a



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE - FLARED INSTALLATION



TRANSITION FROM FREE STANDING TEMPORARY BARRIER TO ANCHORED BARRIER

LEGEND

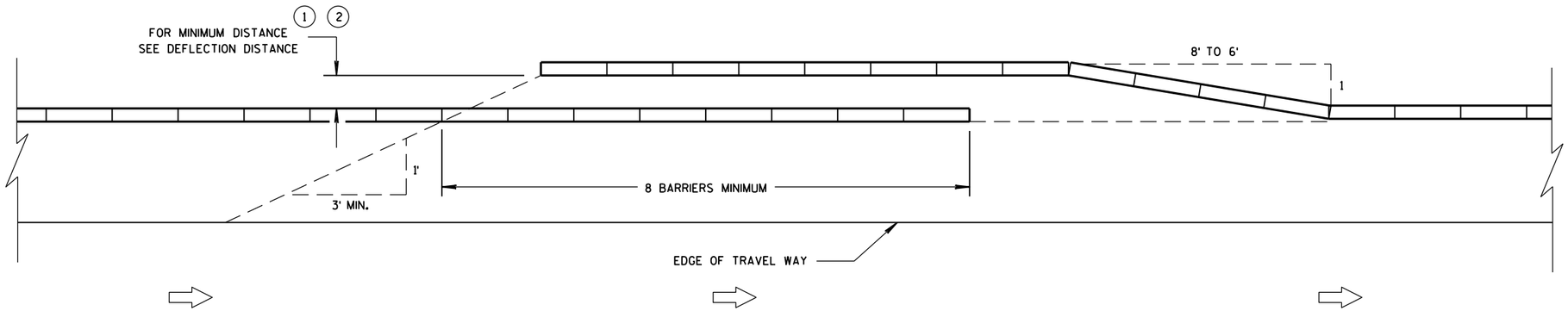
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

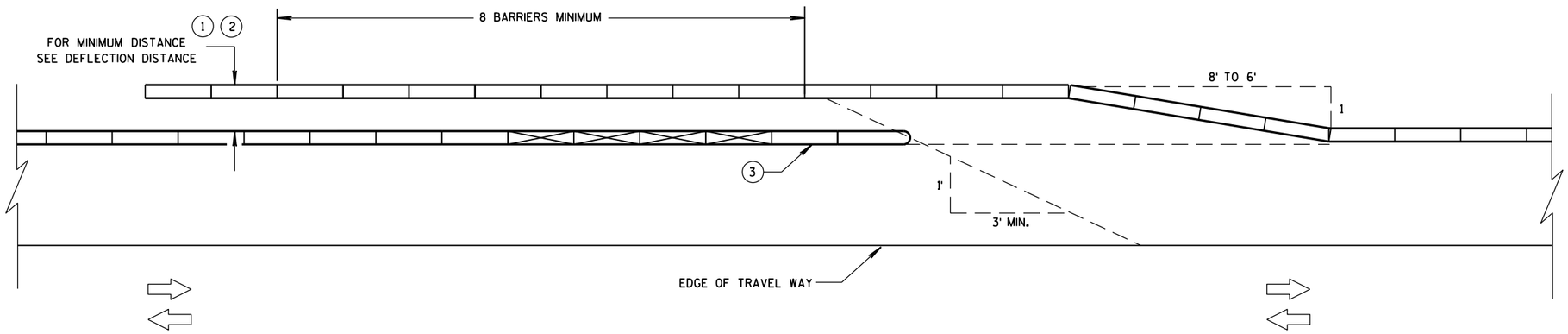
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

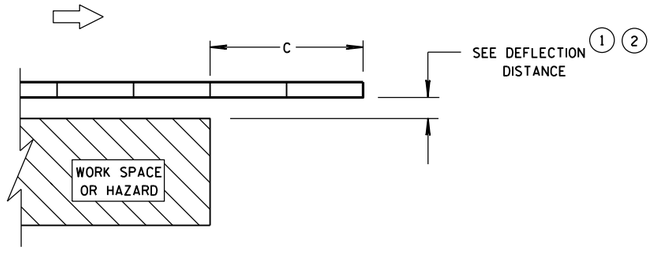
S.D.D. 14 B 8-2b



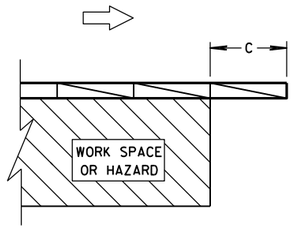
TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC



TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC



ENDING TEMPORARY BARRIER DOWNSTREAM - UNANCHORED



ENDING TEMPORARY BARRIER DOWNSTREAM - ANCHORED

LEGEND

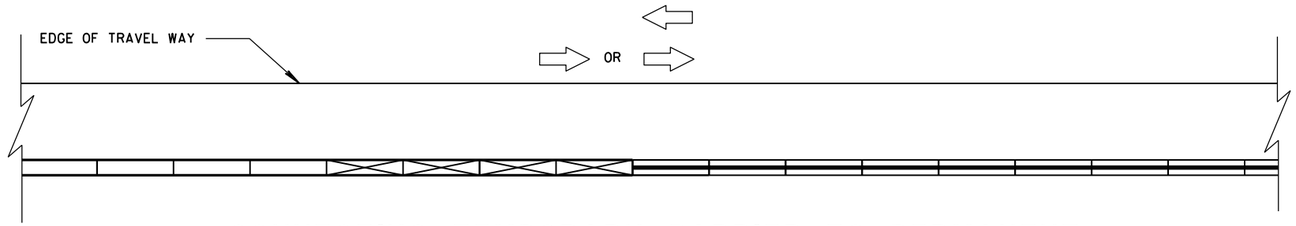
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

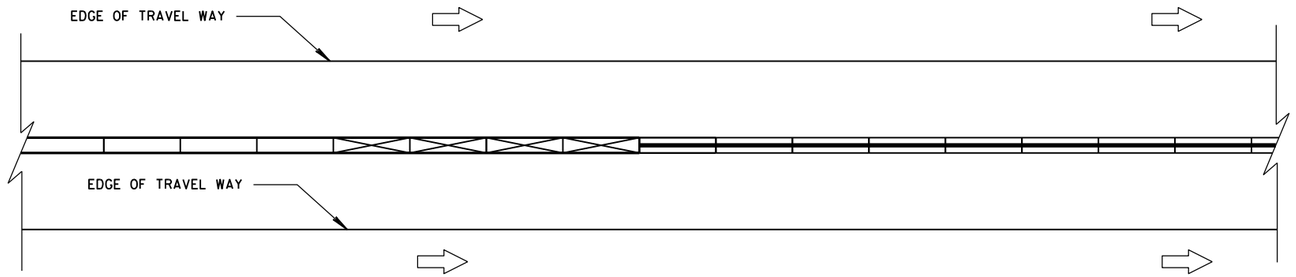
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 8-2c



CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON ONE SIDE



CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON BOTH SIDES

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR
SAND BARREL ARRAY

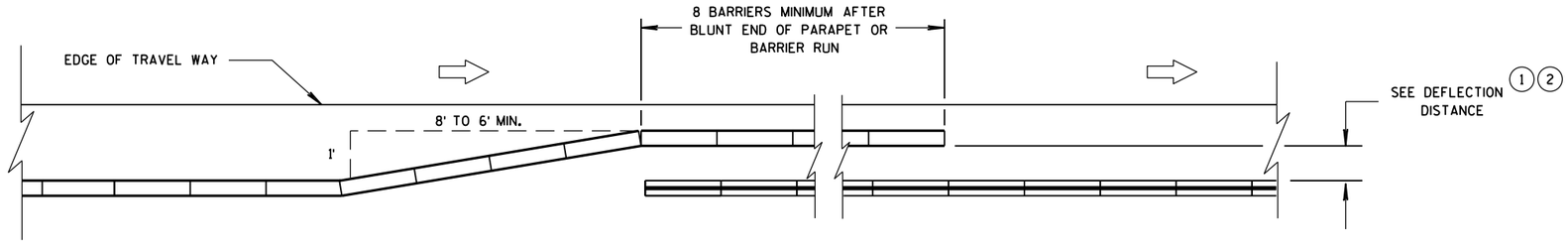
SEE FREE STANDING TRANSITION
TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION
TO TIED-DOWN SYSTEM DETAILS

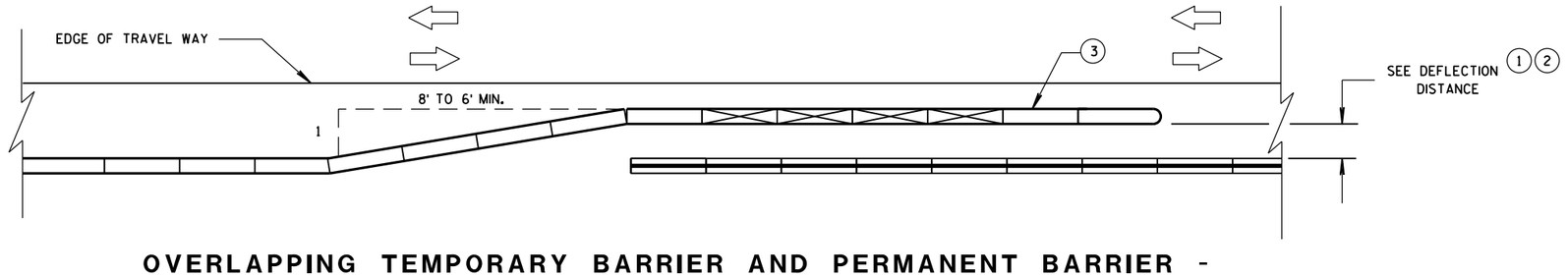
3 PINS PLACED ON
TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER
OR CONCRETE PARAPET

FREE STANDING TEMPORARY
BARRIER



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
ONE WAY TRAFFIC



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
TWO WAY TRAFFIC

CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 8-2d

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

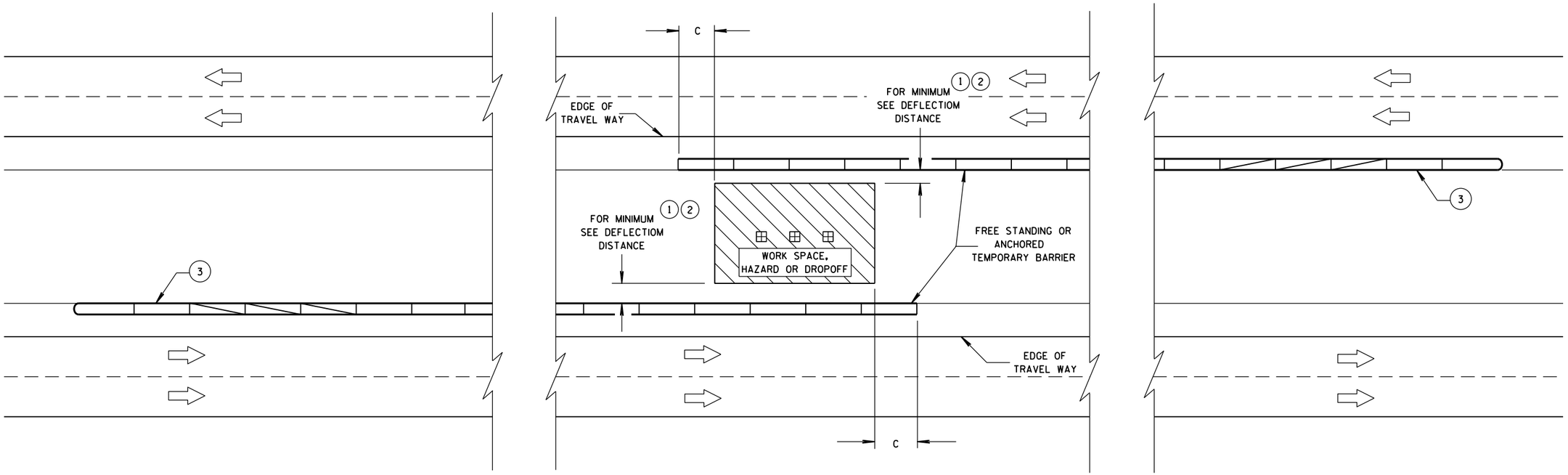
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

DIMENSION C TABLE (2)

AVAILABLE DEFLECTION DISTANCE	MINIMUM LENGTH OF BARRIER BEYOND HAZARD FT
GREATER THAN 8'	12.5
LESS THAN OR EQUAL TO 8' BUT GREATER THAN 4'	50
LESS THAN OR EQUAL TO 4'	100



CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINNER
FHWA

6

S.D.D. 14 B 8-2e

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S.D.D. 14 B 8-2e

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

LEGEND

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

GENERAL NOTES

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

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

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

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

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

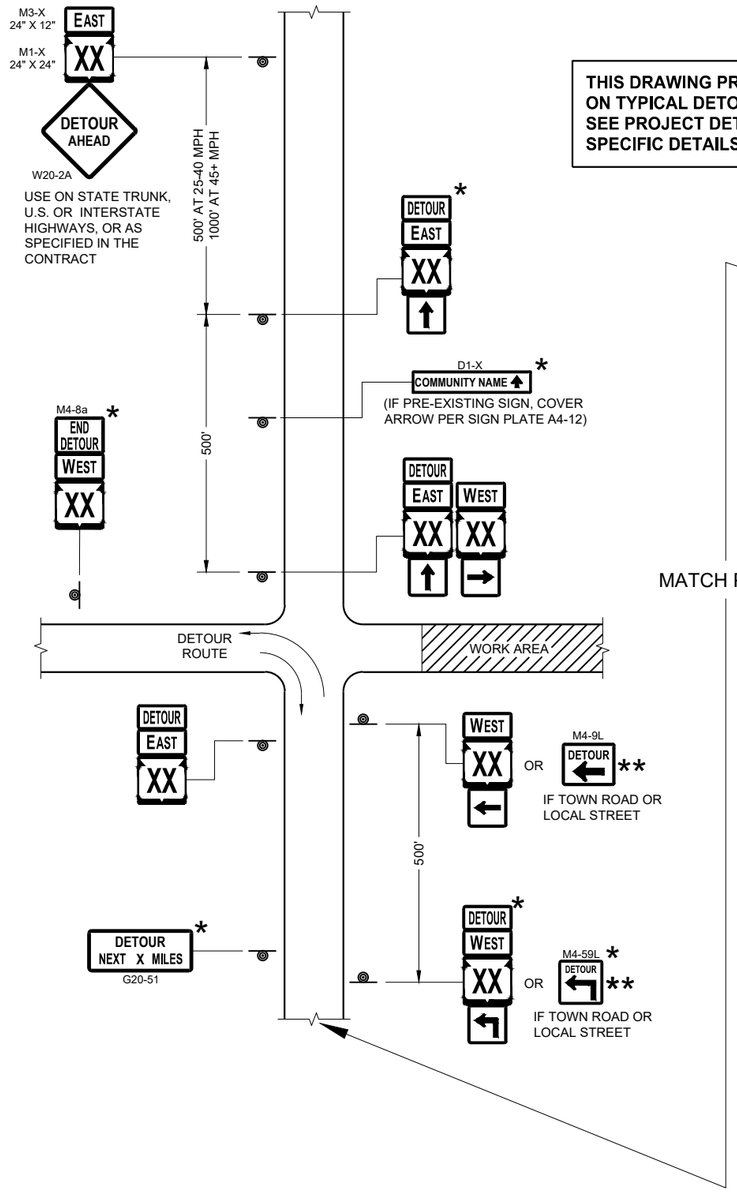
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

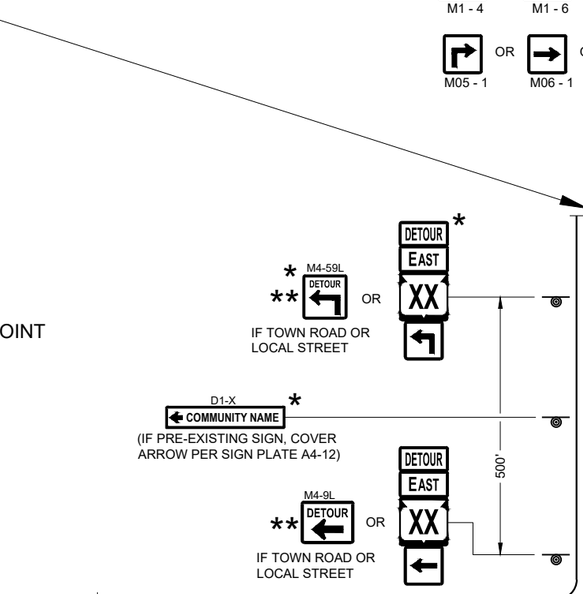
M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)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

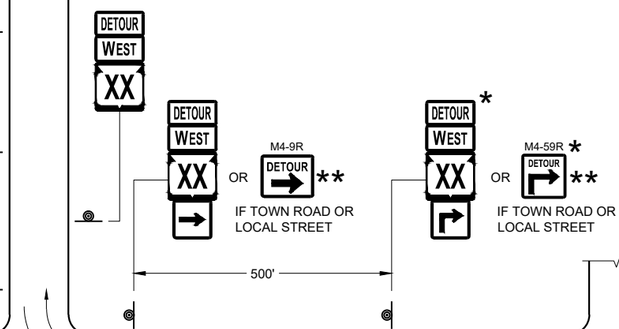
* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

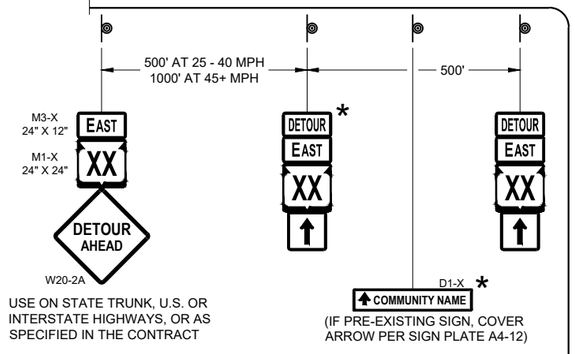
** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.

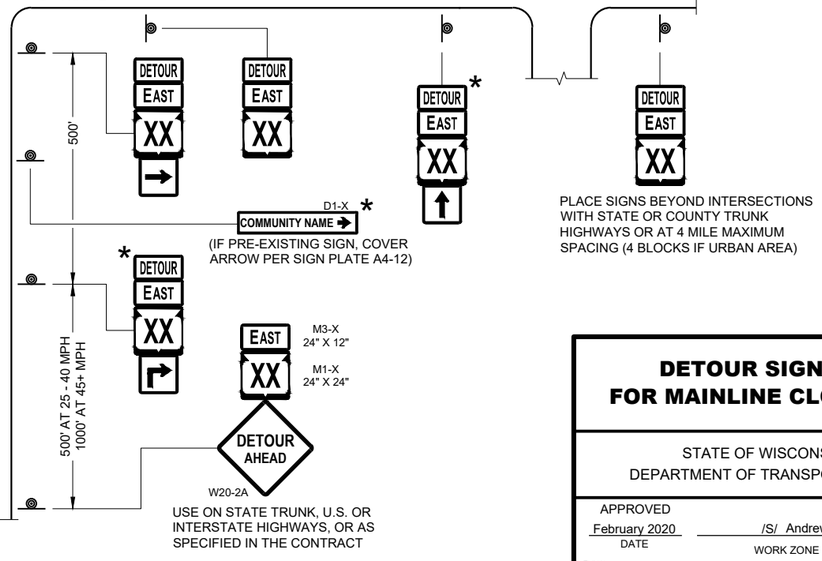


MATCH POINT









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

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

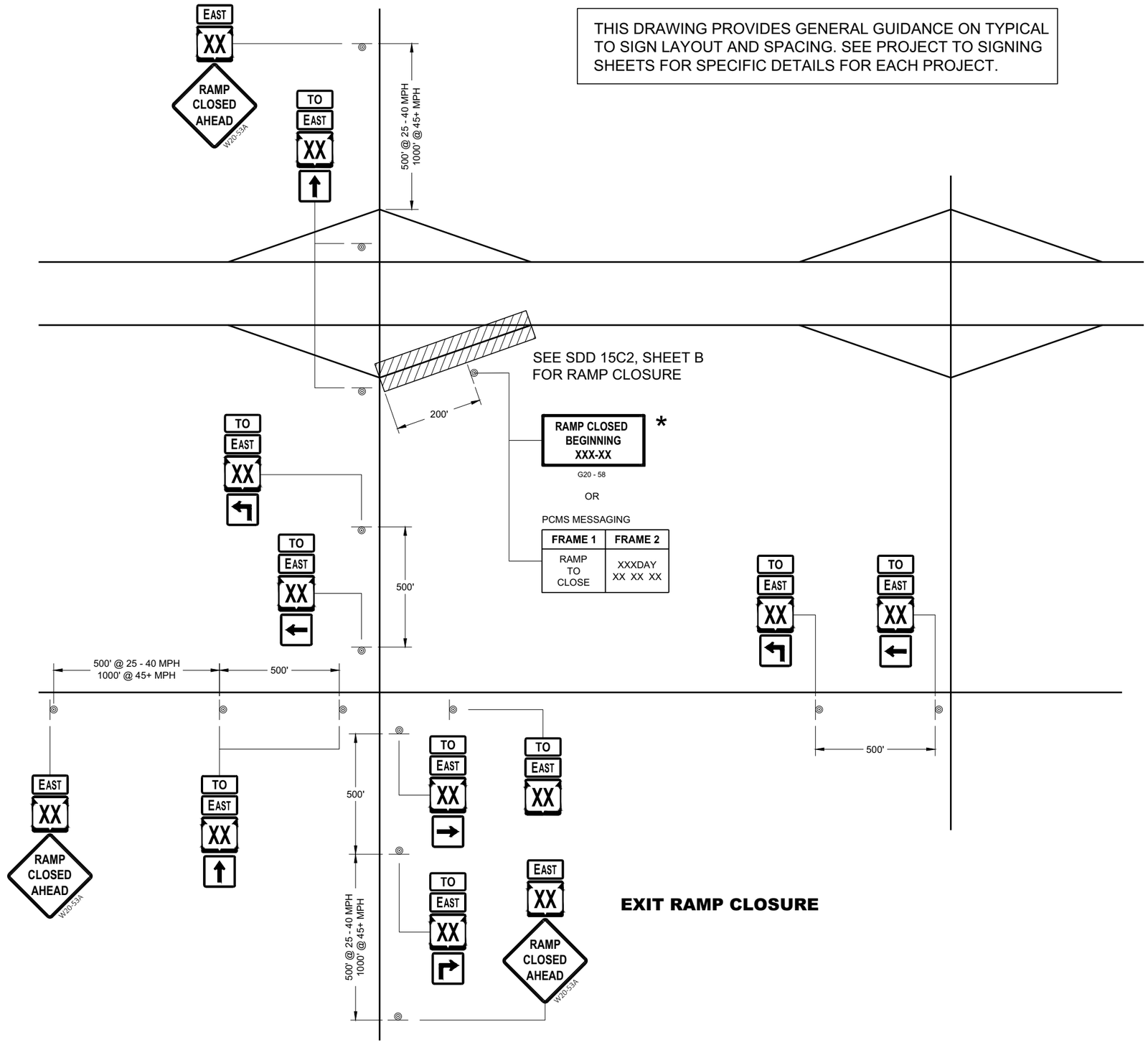
APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15C02 - 08c

SDD 15C02 - 08c

6



EXIT RAMP CLOSURE

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

LEGEND

SIGN ON PERMANENT SUPPORT

TO EAST — MO4 - 5, M3 - X

XX M1 - 6 OR XX M1 - 4 OR INTERSTATE XX M1 - 1

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

THE SPACING BETWEEN TRAFFIC CONTROL AND TO 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 SHALL 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 FOLLOW:
- M3 - X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- MO4 - 5 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- M1 - 1, M1 - 4, AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS).
- MO5 - 1, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).
- W20 - 53A SHALL BE 48" X 48"

* PLACE "RAMP CLOSED BEGINNING" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR LAYOUT.

ON RAMP LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

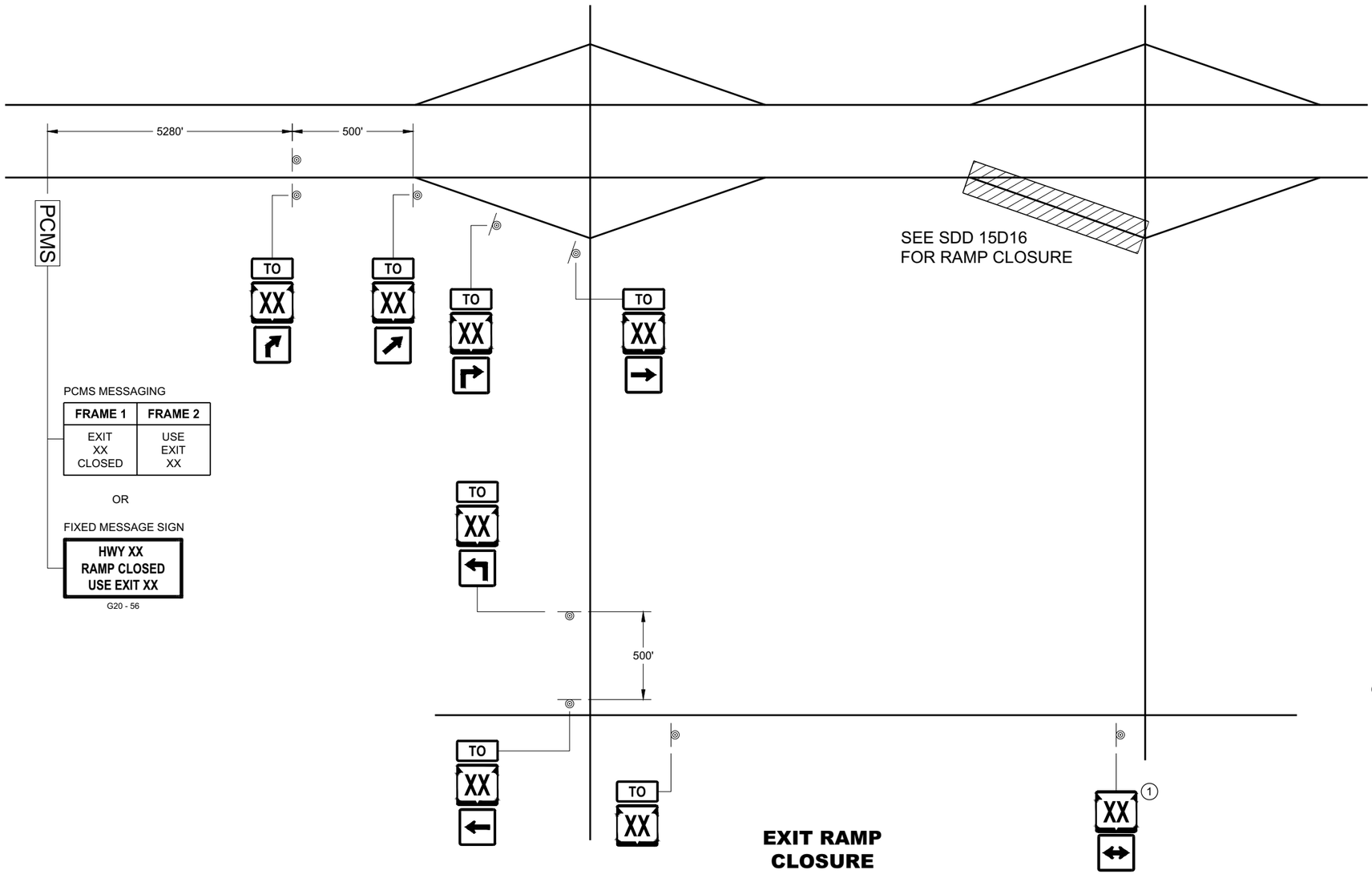
APPROVED
February 2020 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

SDD 15C02 - 08d

6

SDD 15C02 - 08d

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL "TO" MO-4 SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.



PCMS MESSAGING

FRAME 1	FRAME 2
EXIT XX CLOSED	USE EXIT XX

OR

FIXED MESSAGE SIGN

HWY XX
RAMP CLOSED
USE EXIT XX

G20 - 56

EXIT RAMP CLOSURE

LEGEND

SIGN ON PERMANENT SUPPORT

PCMS PORTABLE CHANGEABLE MESSAGE SIGN

TO MO4 - 5

XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A

M05 - 1 OR M05 - 2 OR M06 - 1 OR M06 - 2 OR M06 - 4

GENERAL NOTES

SEE SDD 15D16 "TRAFFIC CONTROL, EXIT RAMP CLOSURE" DETAIL FOR TRAFFIC CONTROL AT EXIT RAMP CLOSURE.

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

IF THERE ARE ANY ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE "TO" MO-4 ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT TO SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND "TO" MO-4 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 SHALL 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 FOLLOW:
- MO4 - 5 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, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).

(1) ONLY ADD IF THERE ARE NO EXISTING ROUTE MARKERS FOR THE INTERSECTING ROADWAY.

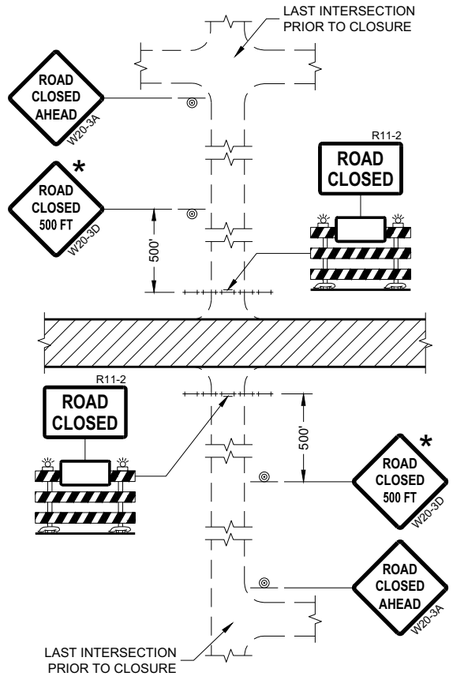
OFF RAMP LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

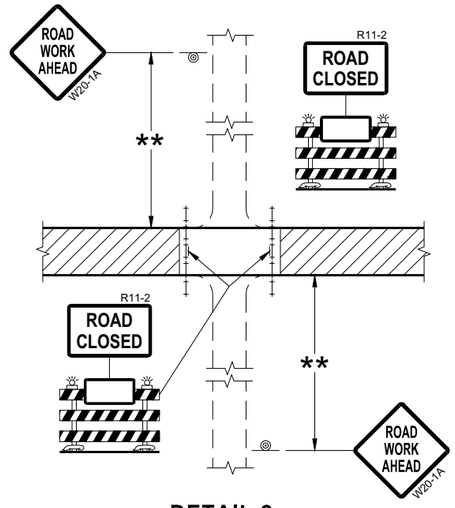
APPROVED
February 2020 DATE
/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA

SDD 15C02 - 08e

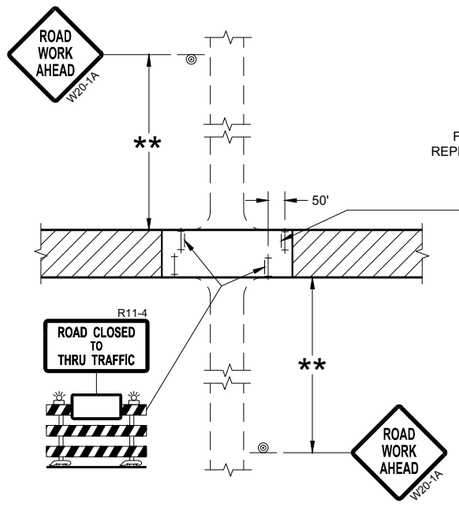
SDD 15C02 - 08e



DETAIL 1
(NO ACCESS TO PROJECT)



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



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT 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.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C03 - 05

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

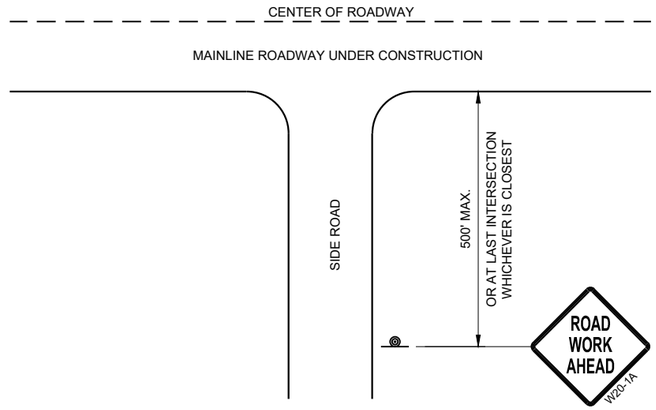
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

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

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS

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



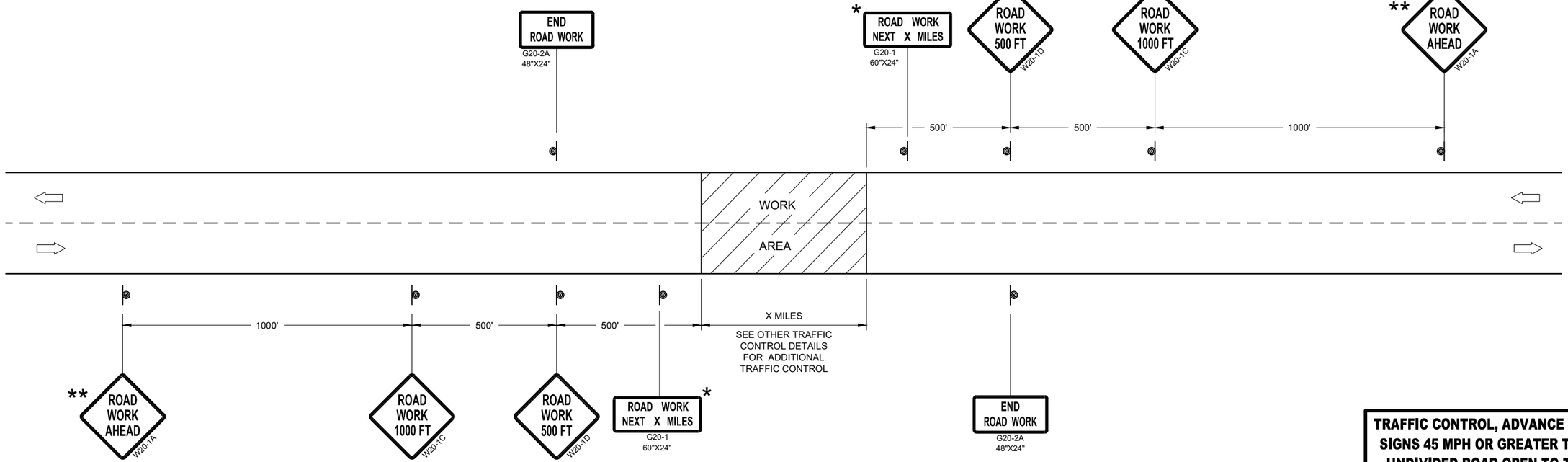
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C04 - 05

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

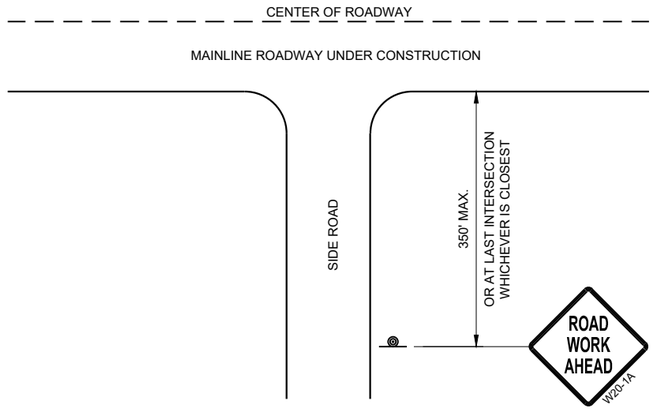
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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.



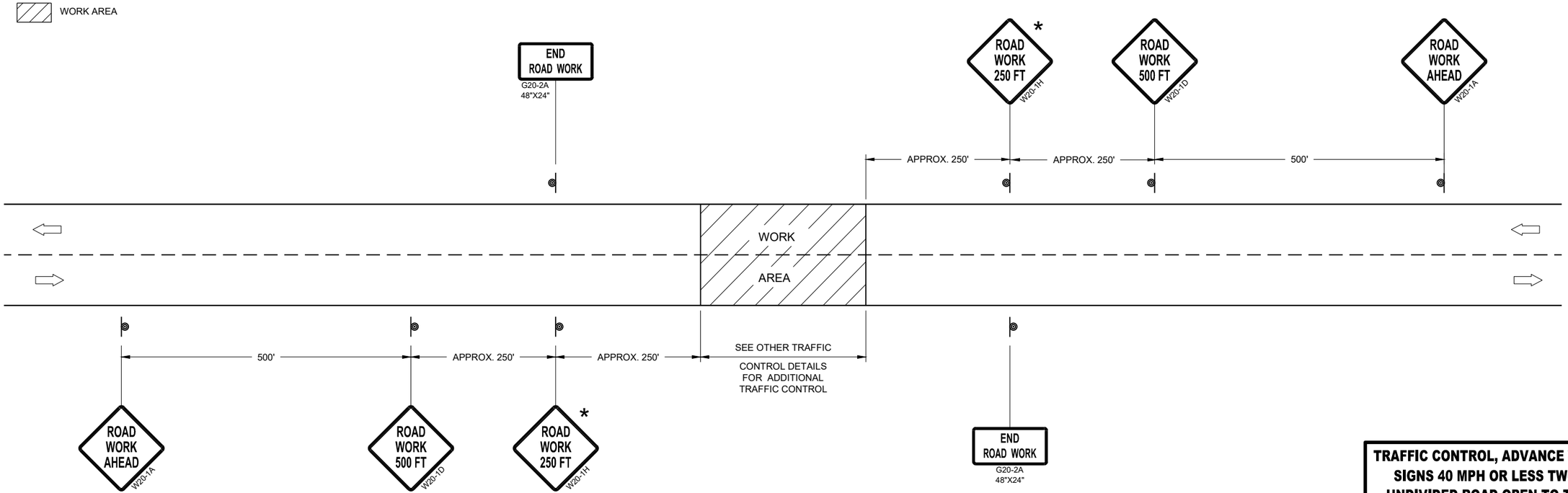
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

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

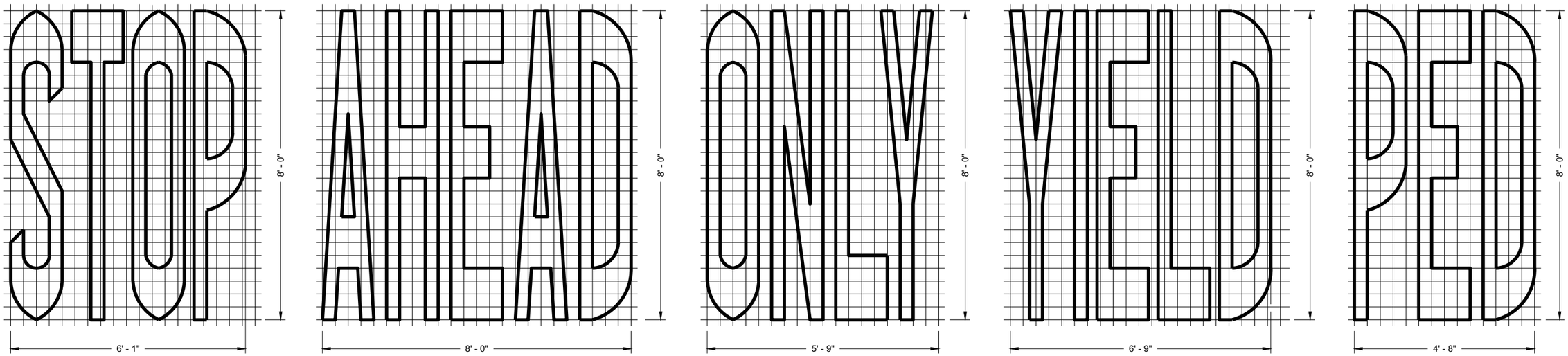
APPROVED
July 2018
DATE

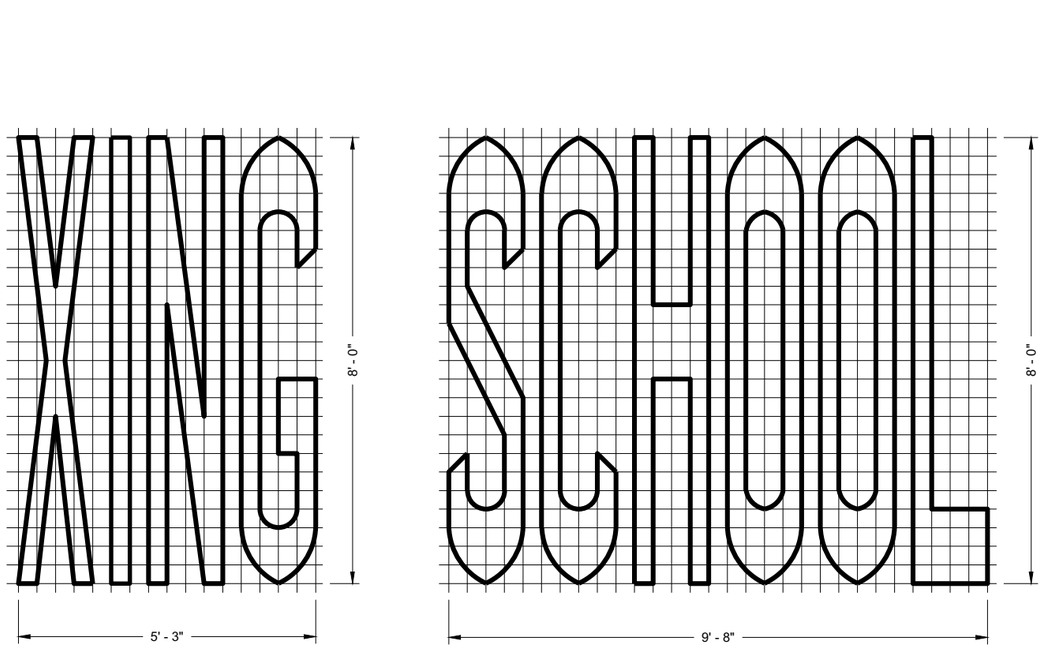
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

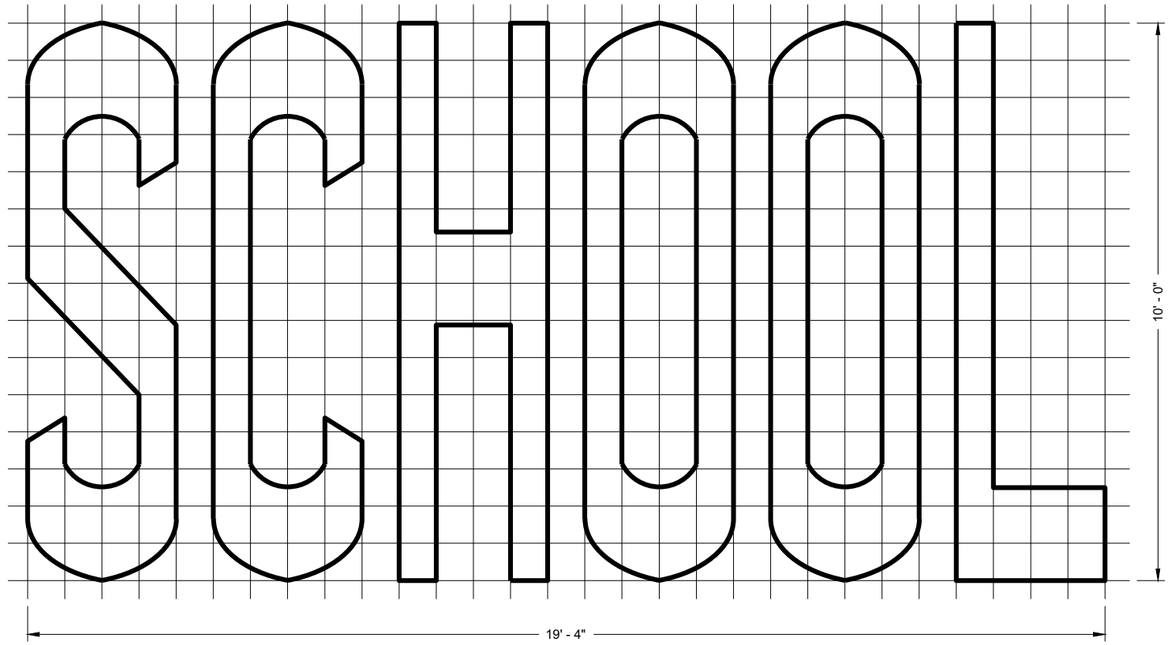
6

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

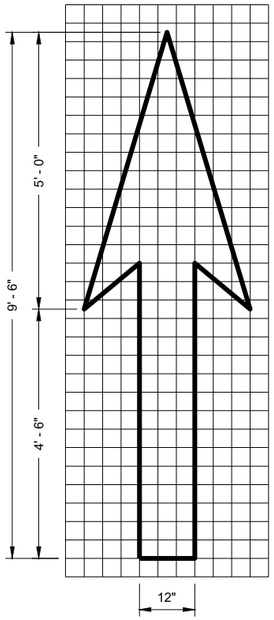
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SDD 15C07 - 15b

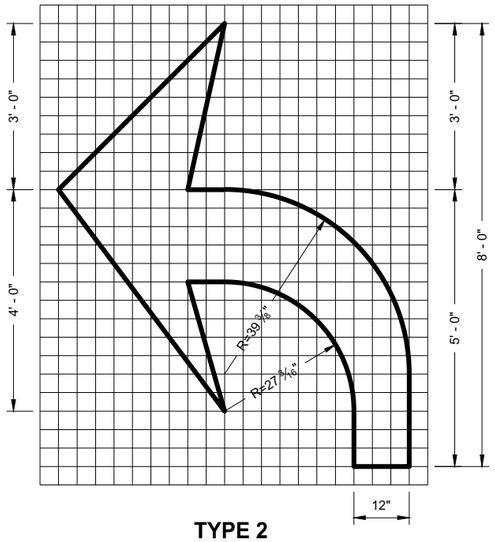
SDD 15C07 - 15b

GENERAL NOTES

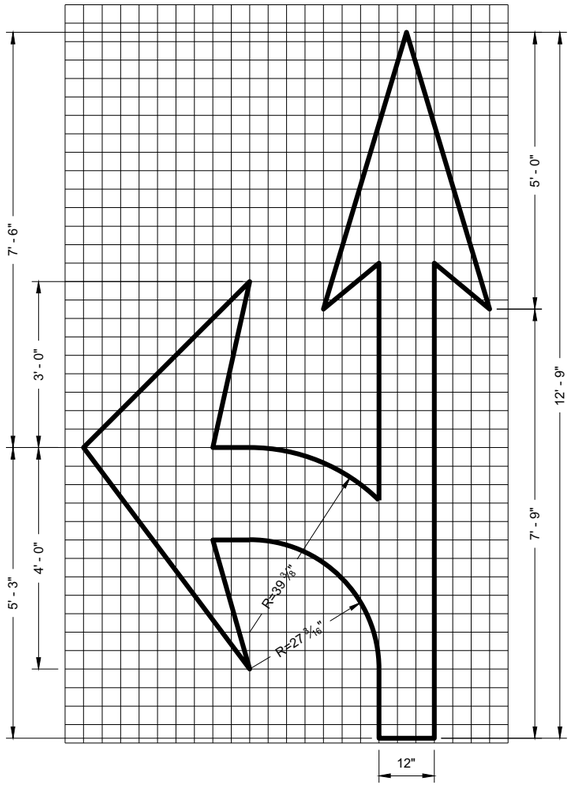
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



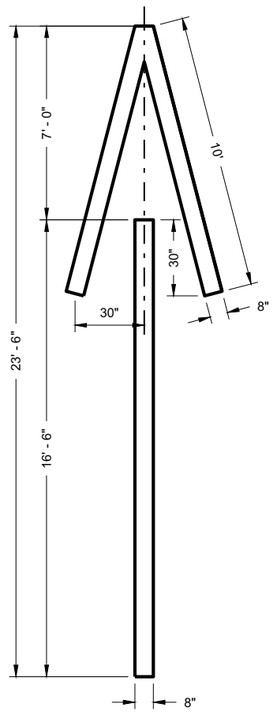
TYPE 1



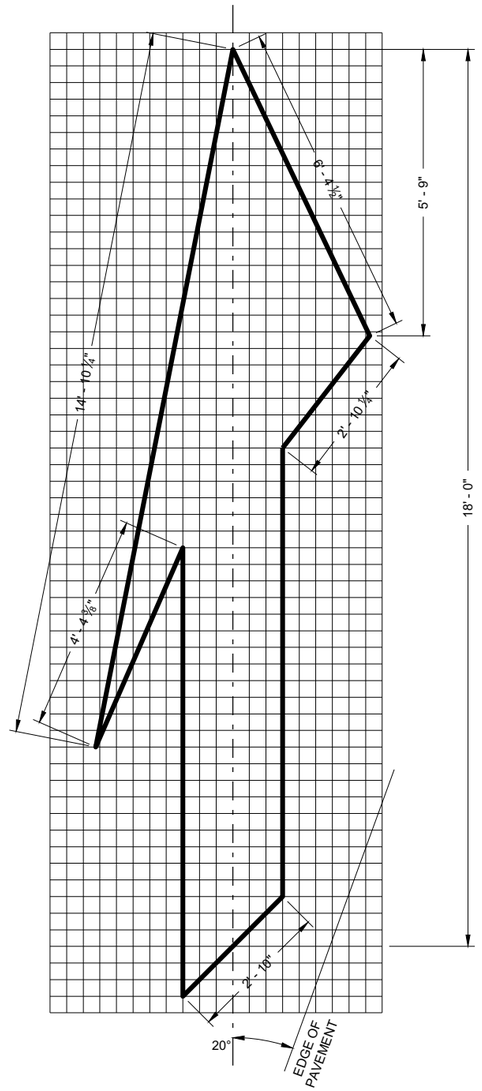
TYPE 2



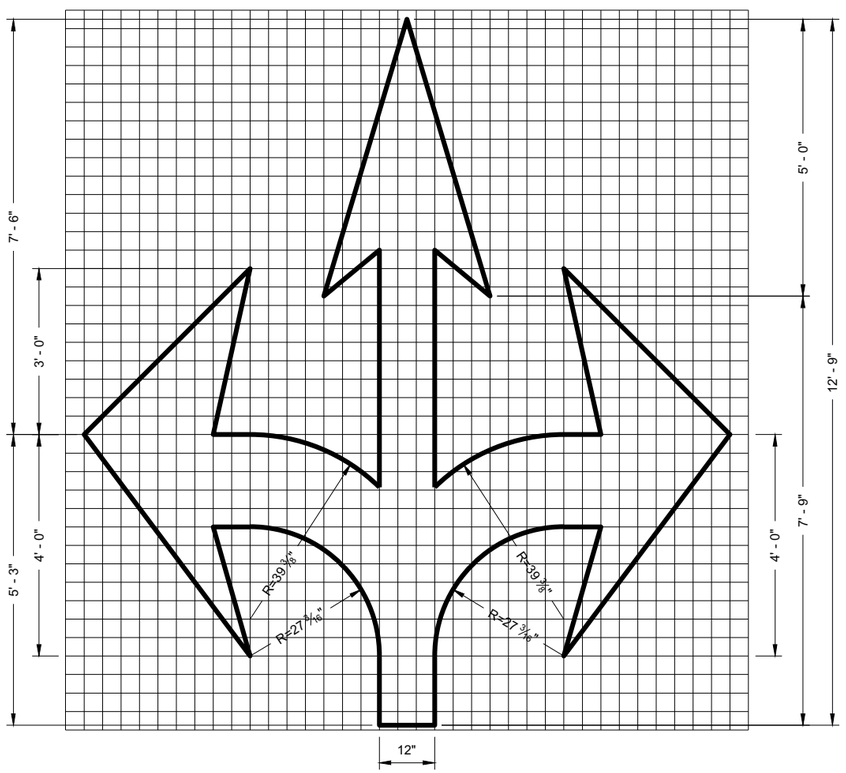
TYPE 3



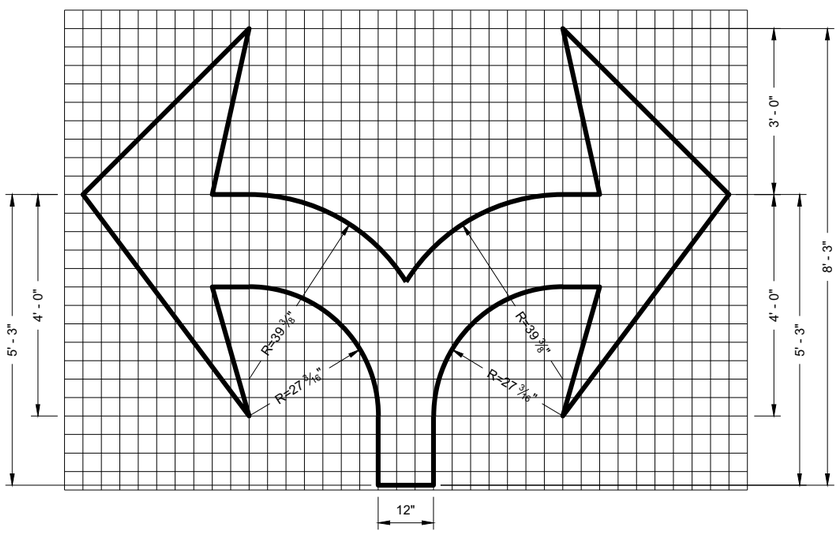
TYPE 4



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 MARKING ENGINEER

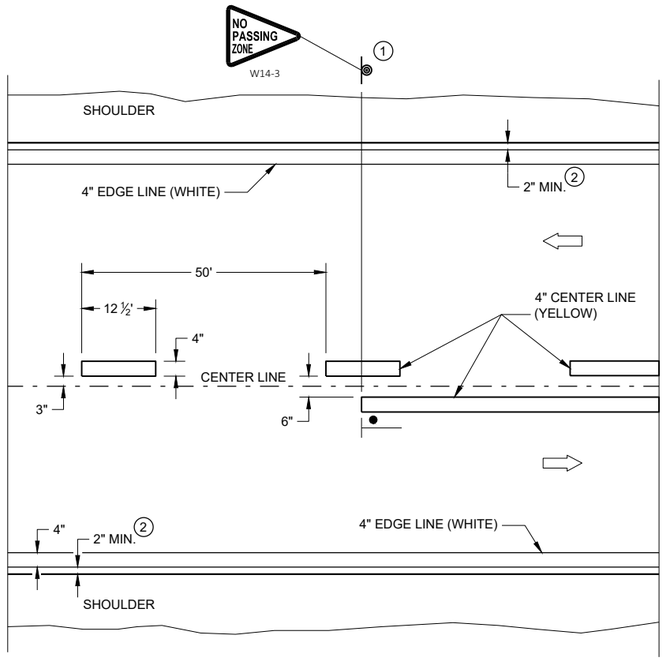
FHWA

6

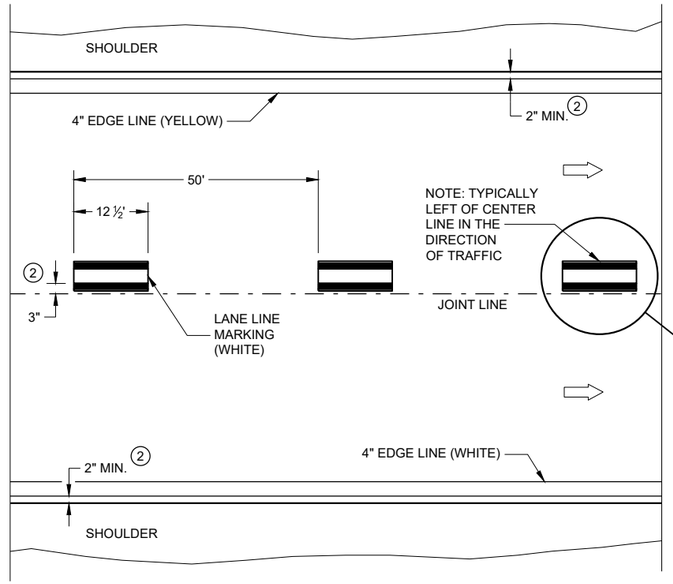
SDD 15C07 - 15c

6

SDD 15C07 - 15c

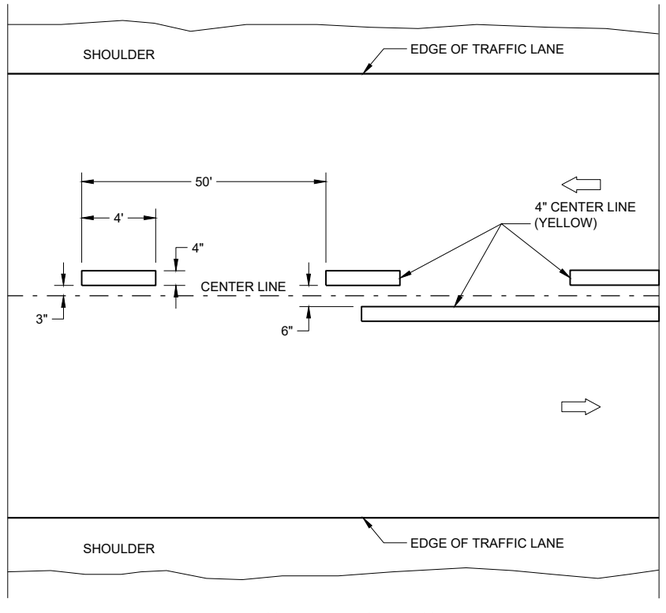


TWO WAY TRAFFIC

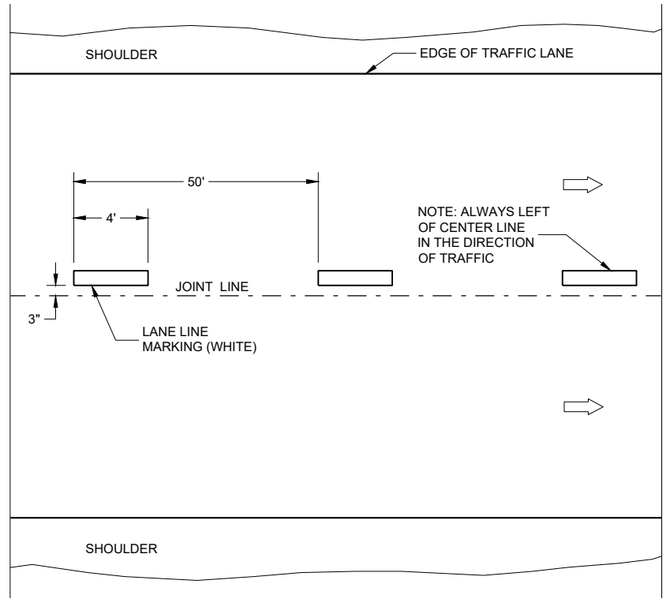


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

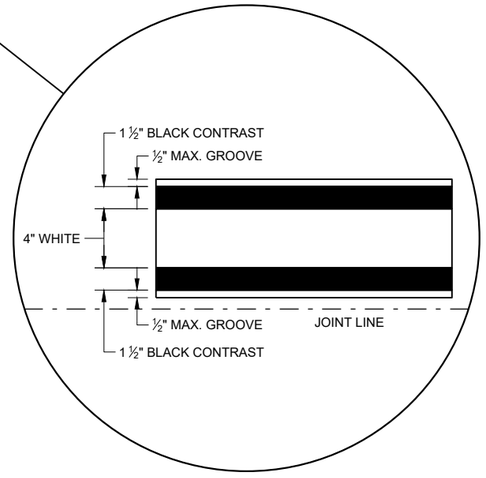
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 — DATE
/S/ Matthew Rauch — STATEWIDE SIGNING AND M ENGINEER

FHWA

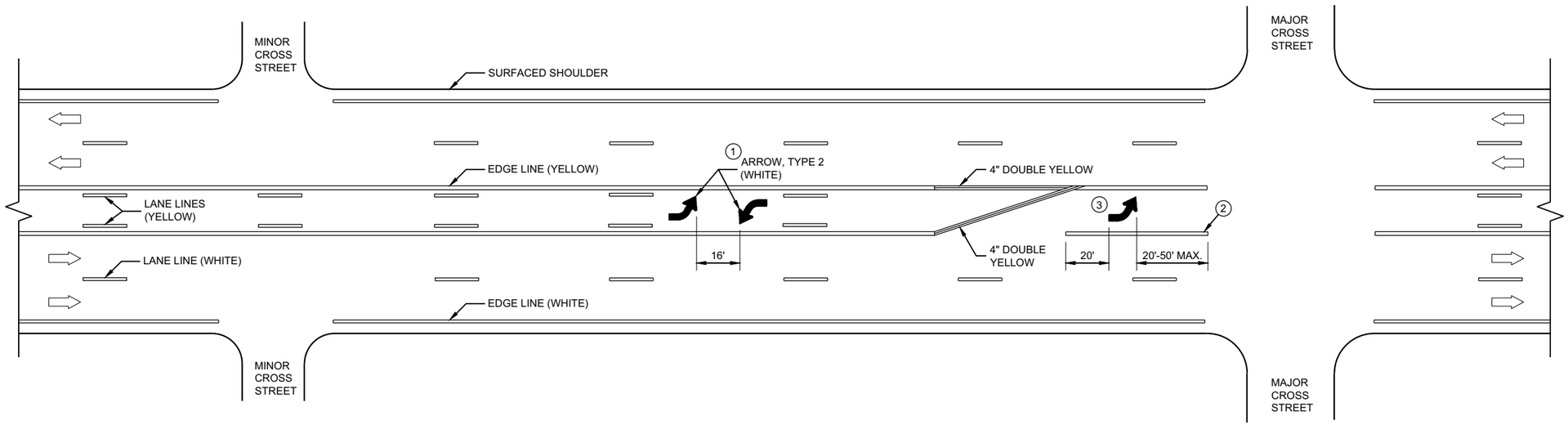
SDD 15C08 - 20a

SDD 15C08 - 20a

GENERAL NOTES

1. 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

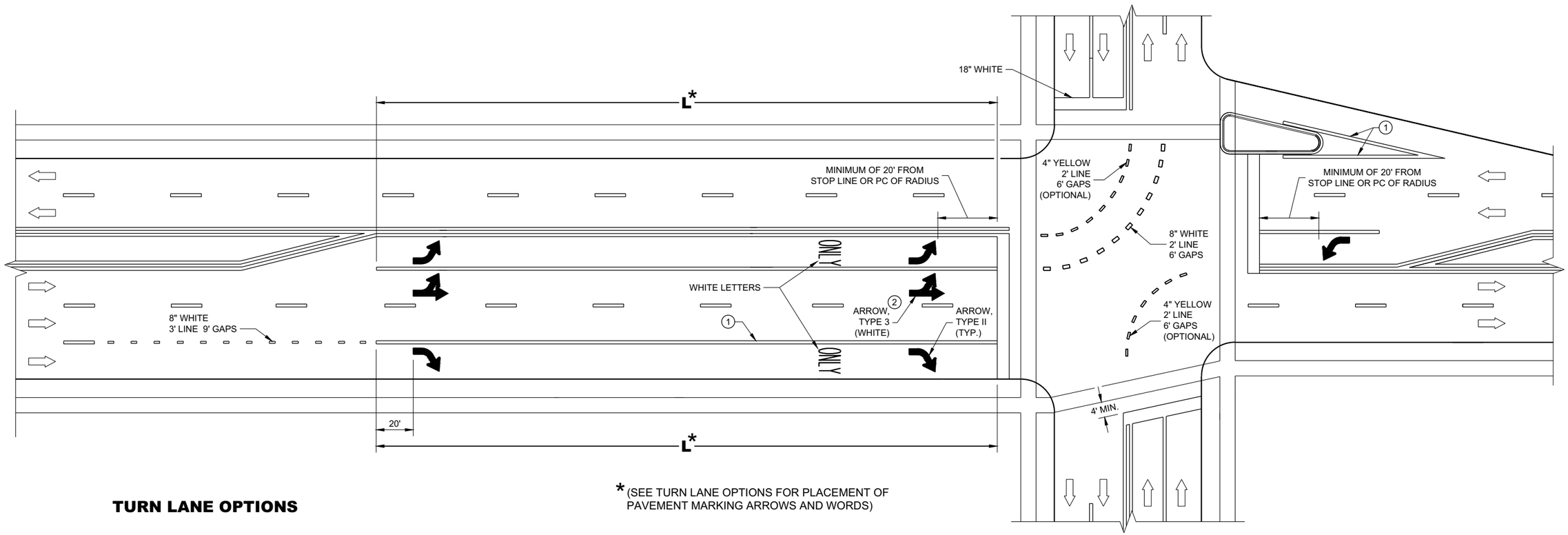
6

SDD 15C08 - 20b

SDD 15C08 - 20b

PAVEMENT MARKING (TURN LANES)

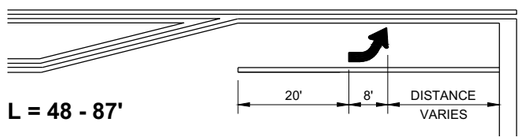
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



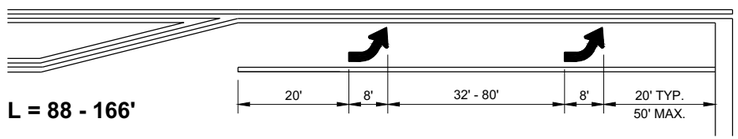
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

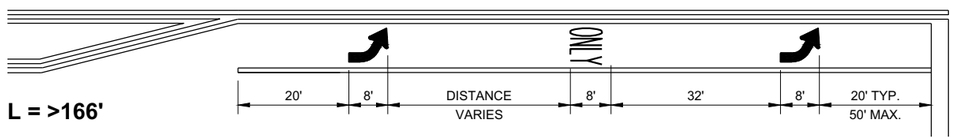
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



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)

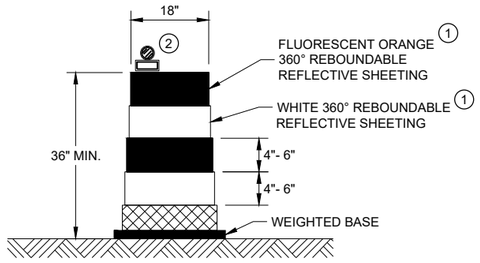
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

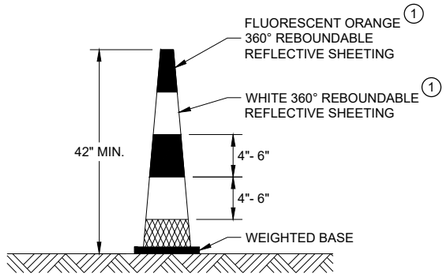
SDD 15C08 - 20c

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.

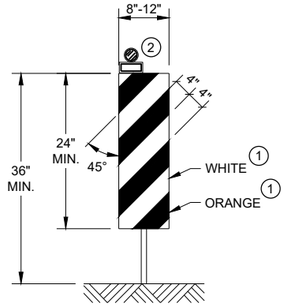


DRUM



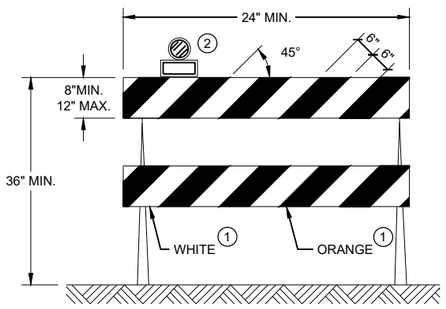
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



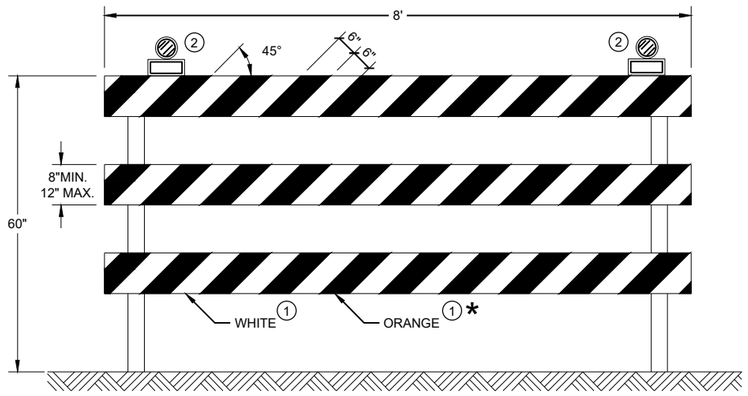
VERTICAL PANEL

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

SDD15C11 - 09b

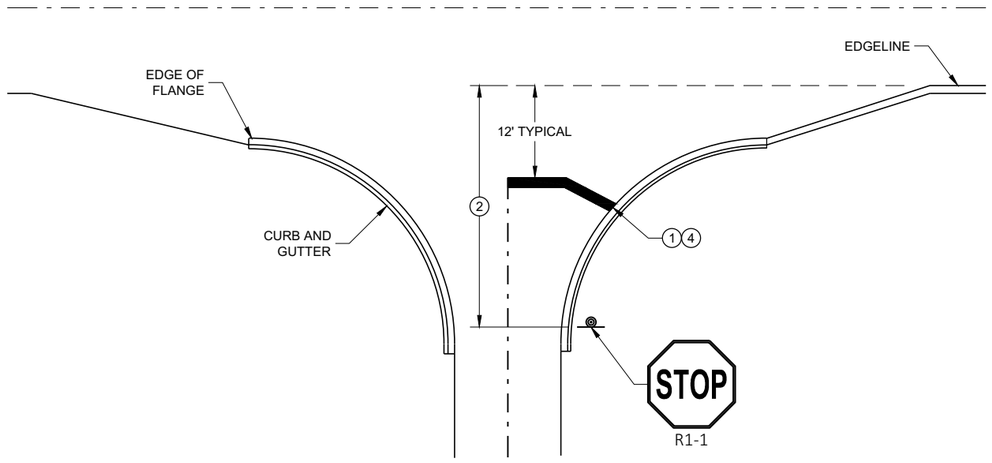
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SDD15C11 - 09b

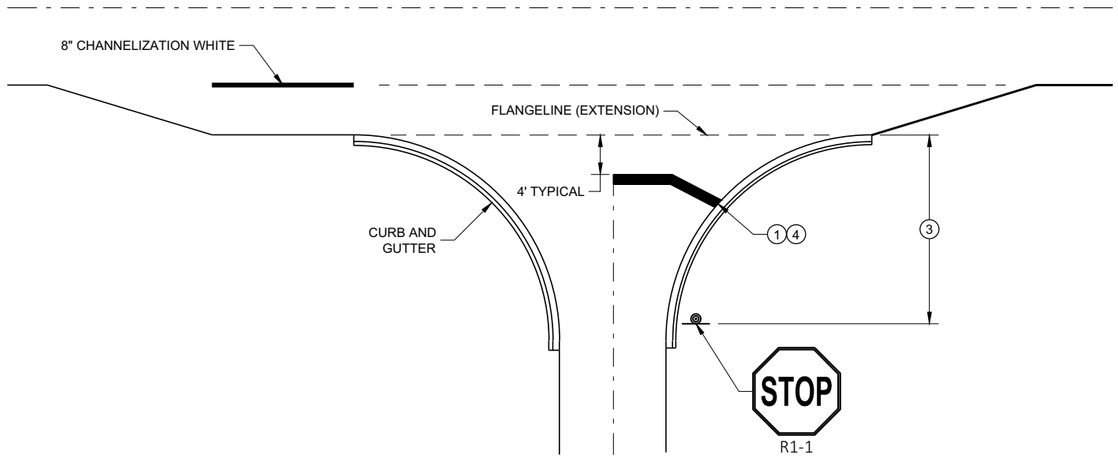
GENERAL NOTES

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

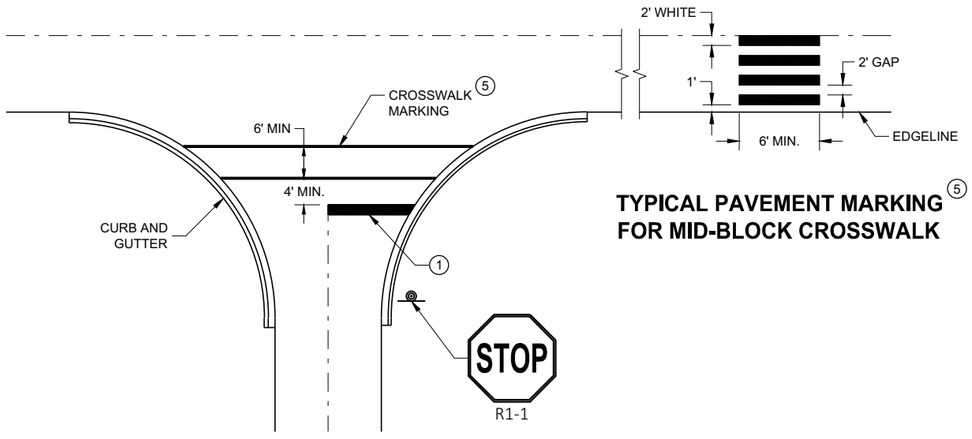
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE 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

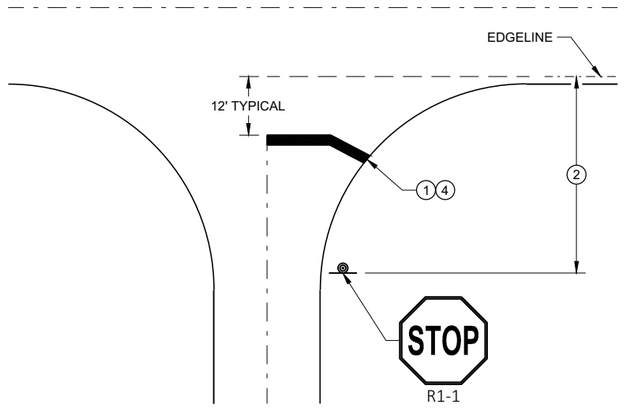


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



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

6

SDD 15C33 - 04
SDD 15C33 - 04

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

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

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

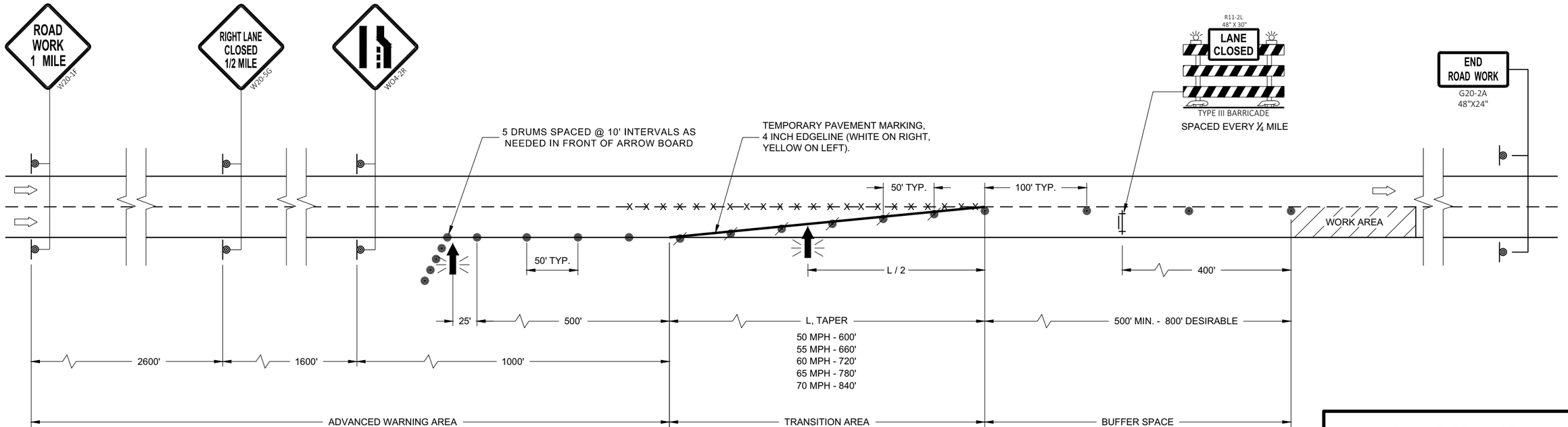
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD



TRAFFIC CONTROL LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D12 - 09a

6

SDD 15D12 - 09a

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

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

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

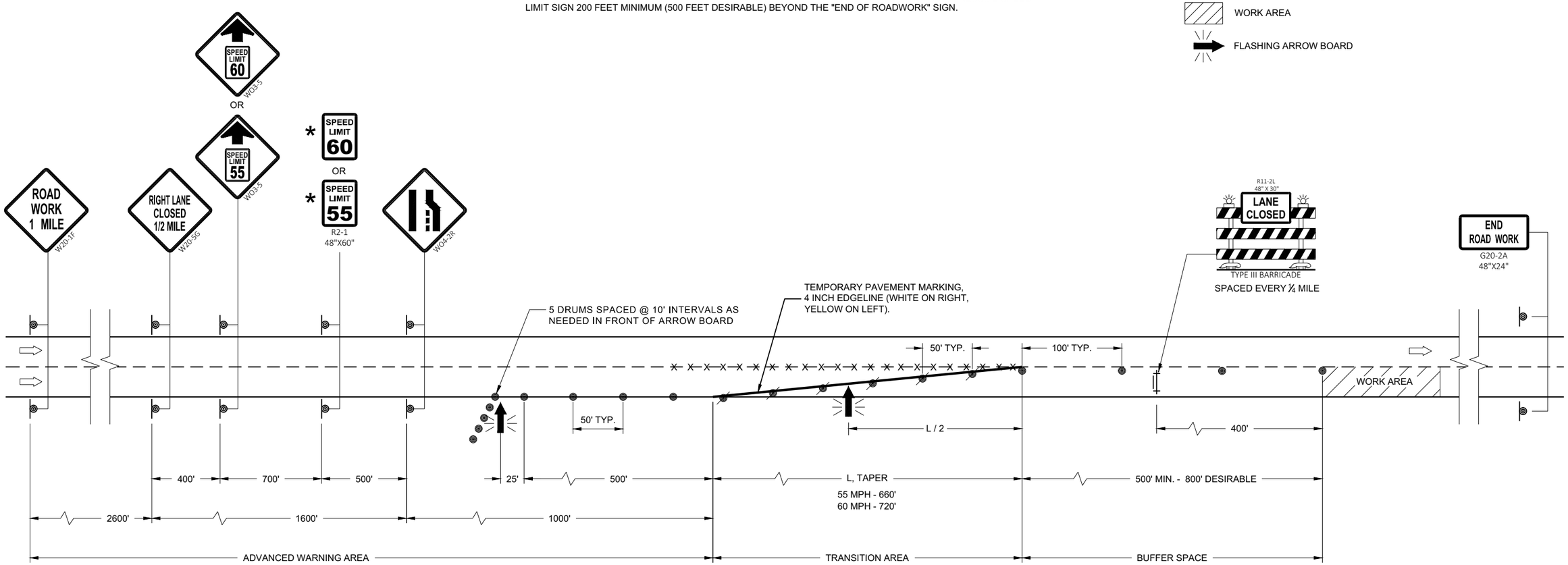
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES. INCLUDE A RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIRABLE) BEYOND THE "END OF ROADWORK" SIGN.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD



TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15D12 - 09b

6
SDD 15D12 - 09b

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

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

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

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

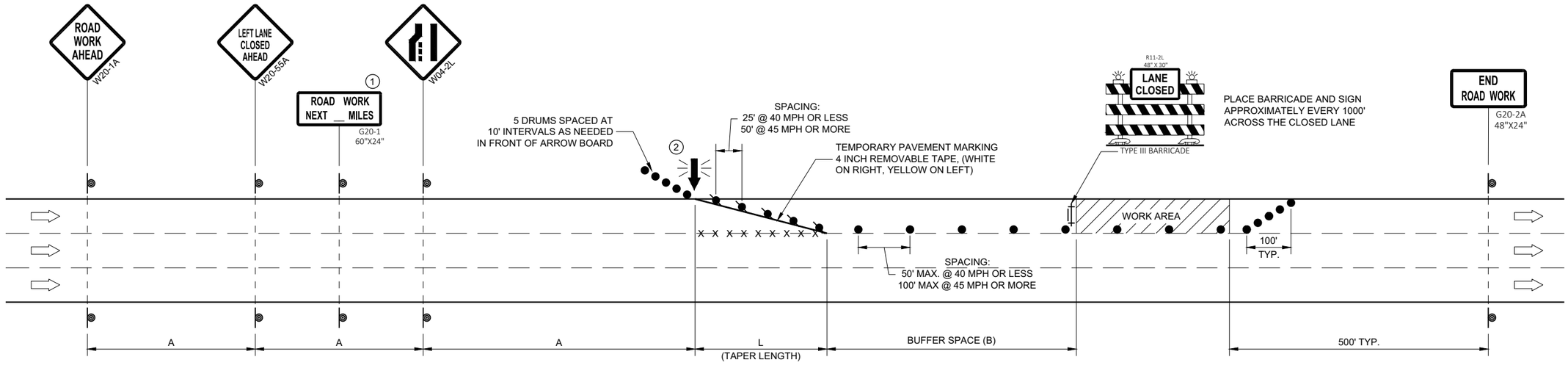
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

(2) WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'

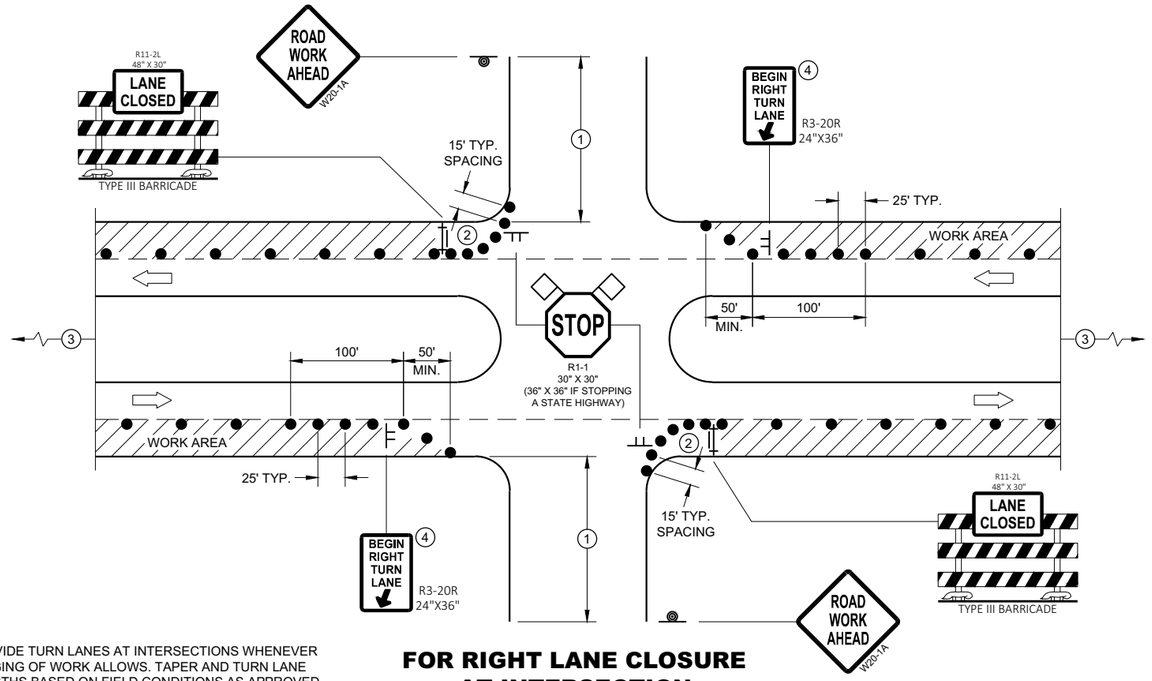
TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

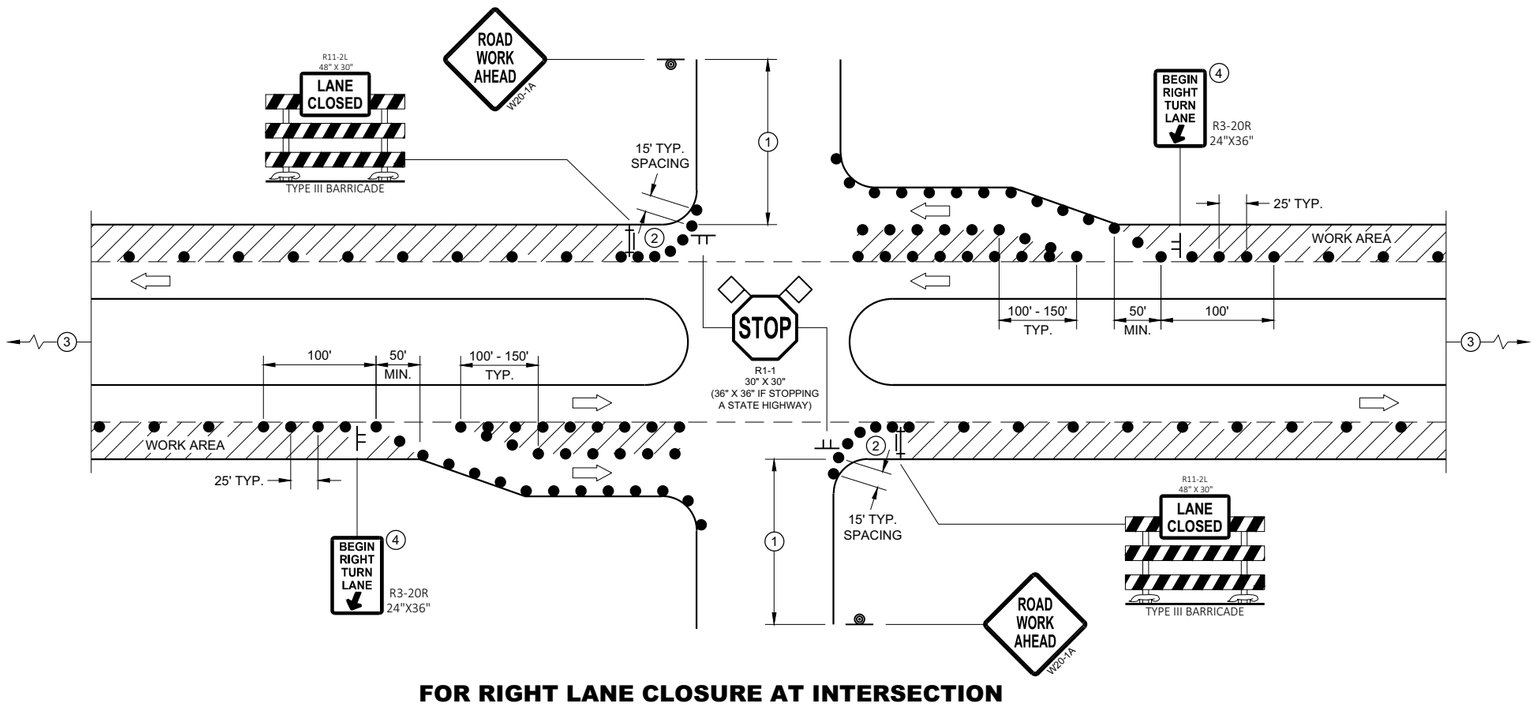
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SDD15D20 - 05a



FOR RIGHT LANE CLOSURE AT INTERSECTION

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.



FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

BARRICADES IN A CLOSED LANE 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.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE

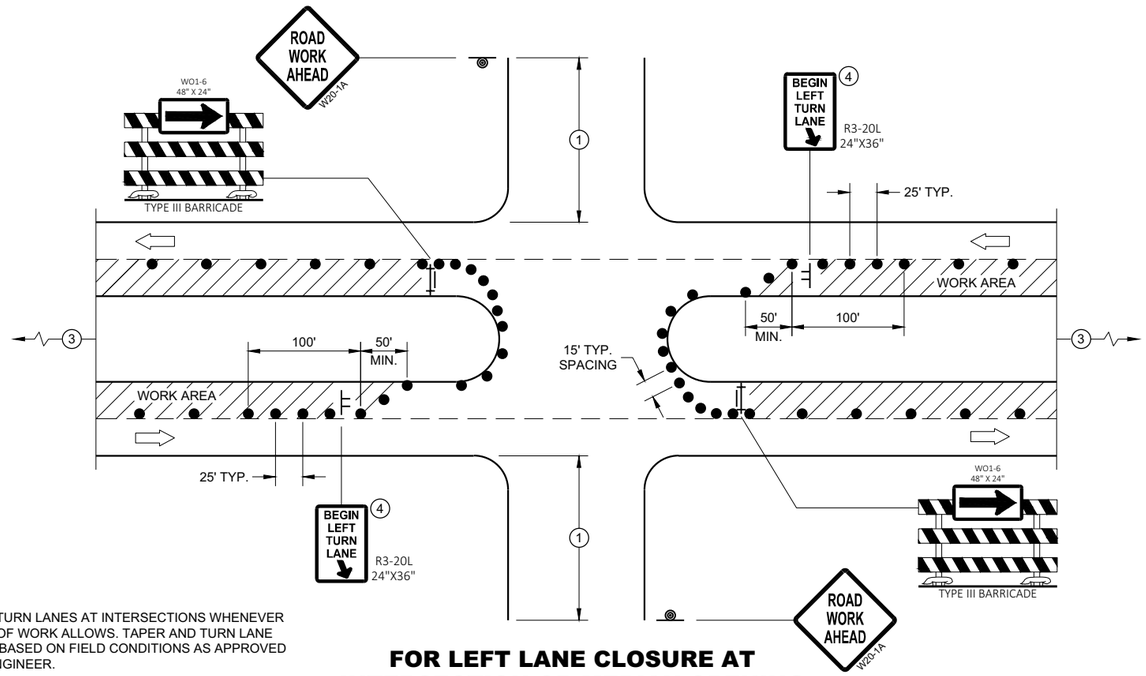
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D21 - 07a

6

SDD 15D21 - 07a



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

BARRICADES IN A CLOSED LANE 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.

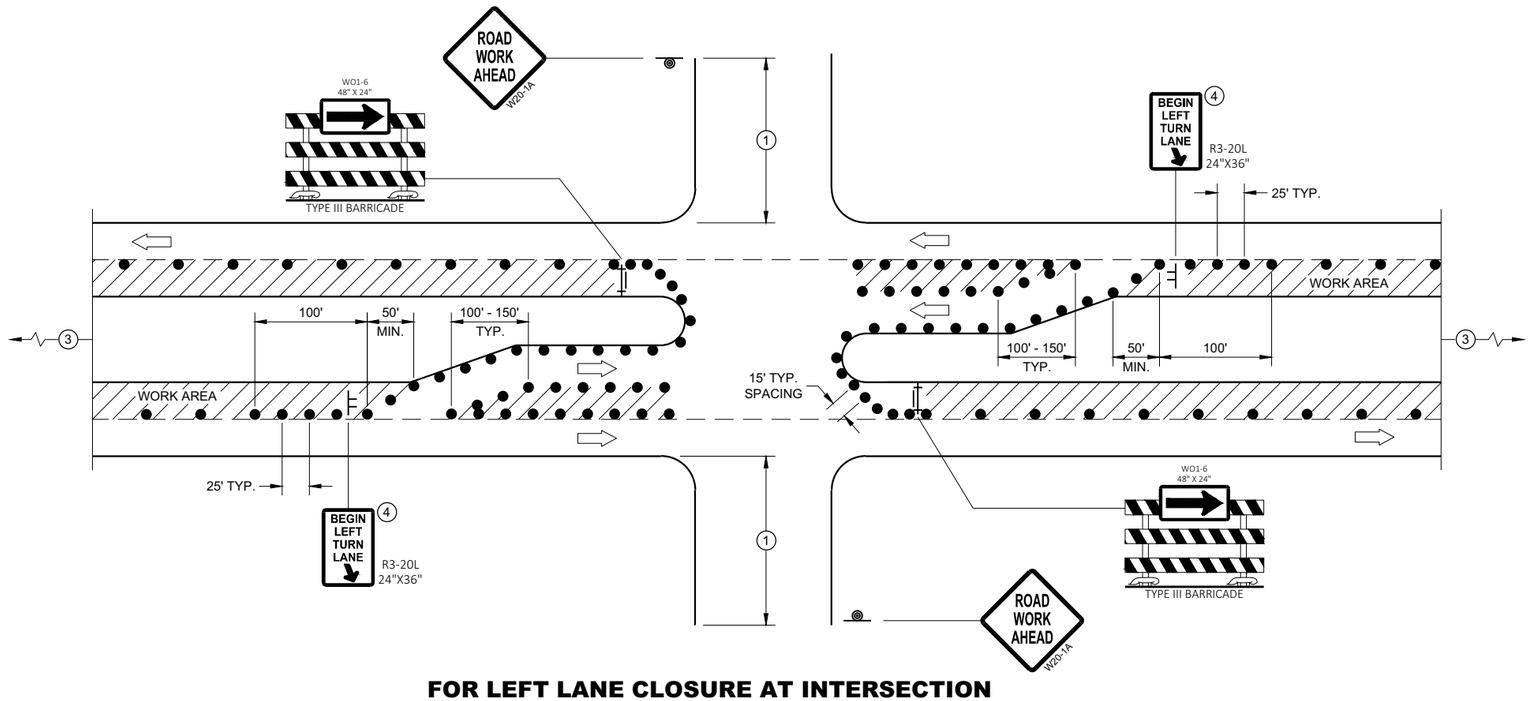
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

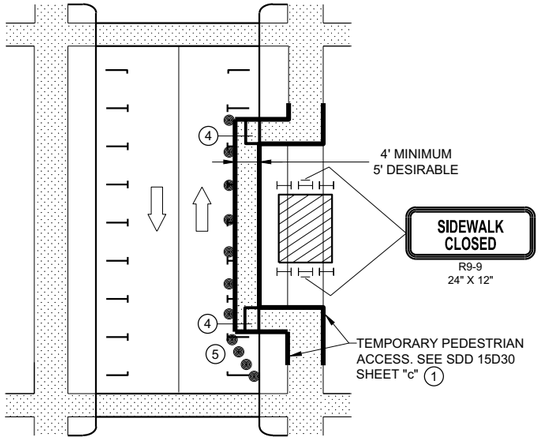
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SDD 15D21 - 07b

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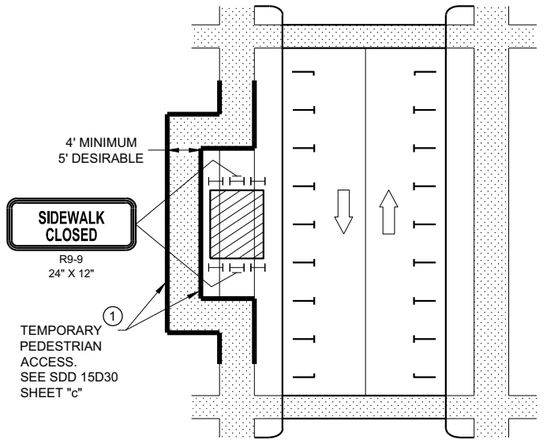
SDD 15D21 - 07b

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

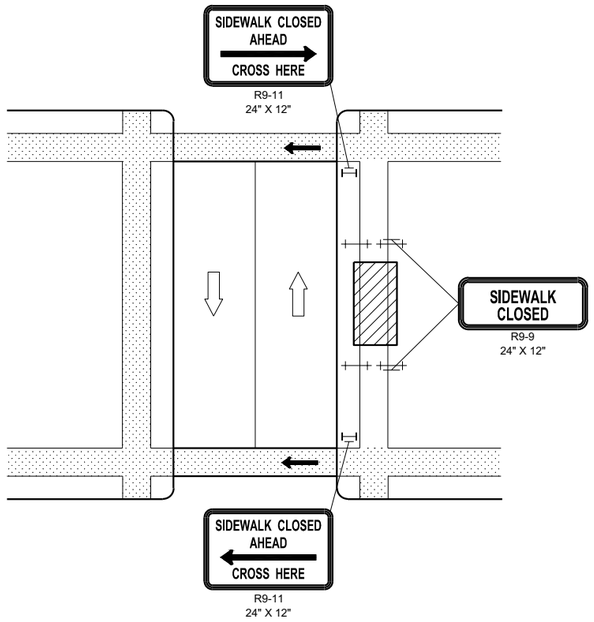


MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

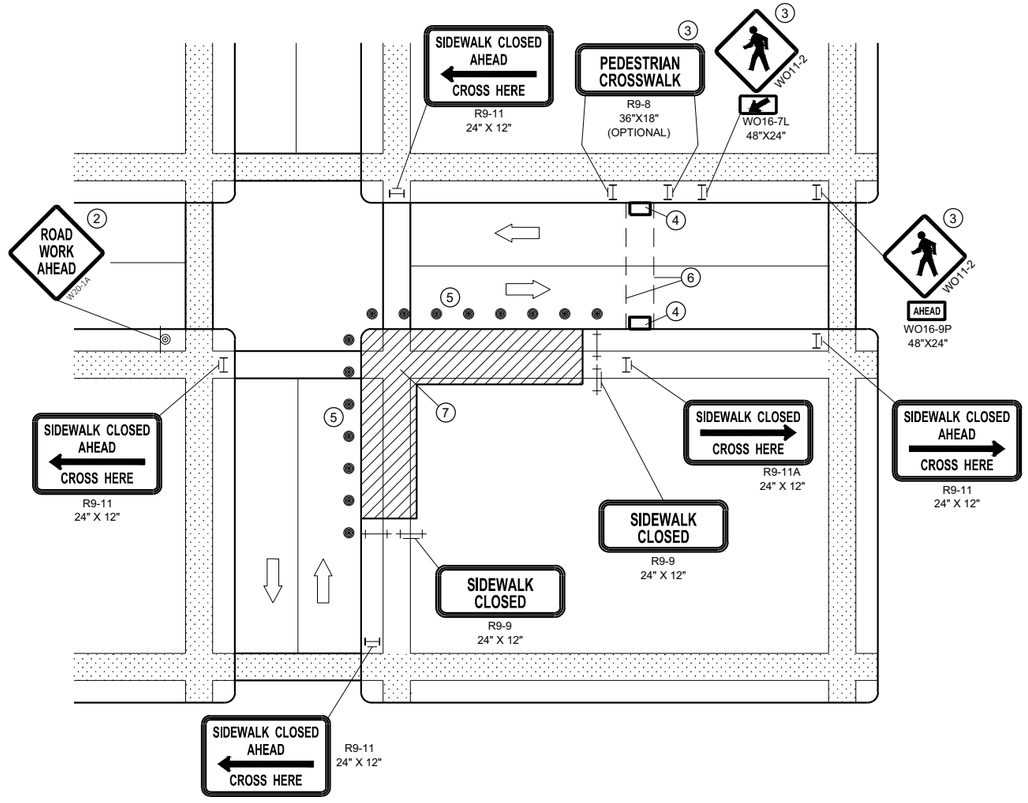
NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION



MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

GENERAL NOTES

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

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

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

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

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

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

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

(1) IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE

(2) "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

(3) IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND WO11-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.

(4) TEMPORARY CURB RAMPS. SEE SDD 15D30 SHEET "b'.

(5) DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.

(6) TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.

(7) LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

LEGEND

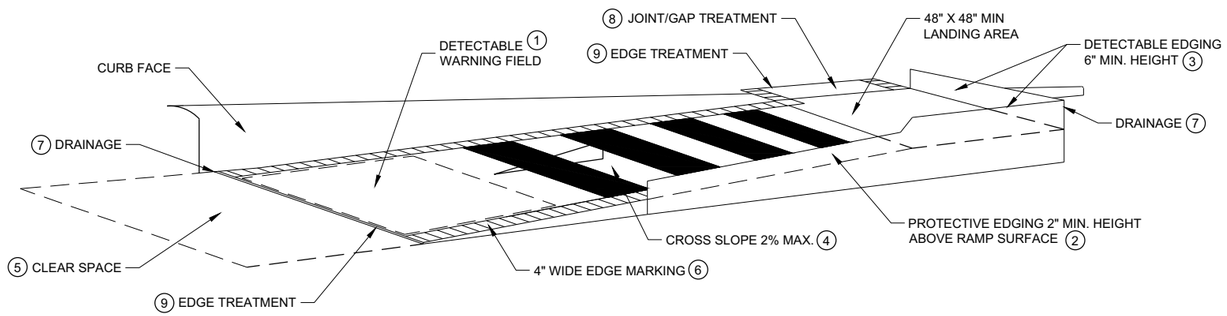
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW INTENSITY FLASHING)
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- PEDESTRIAN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

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

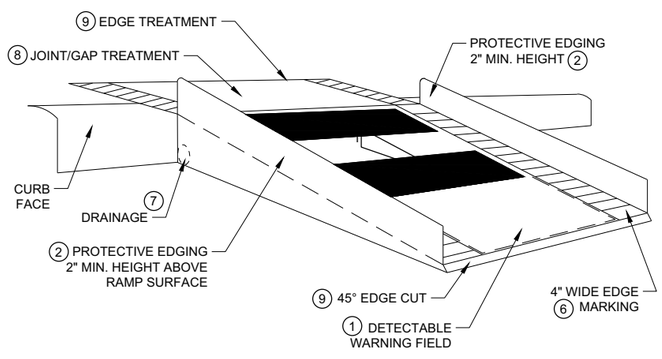
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

6

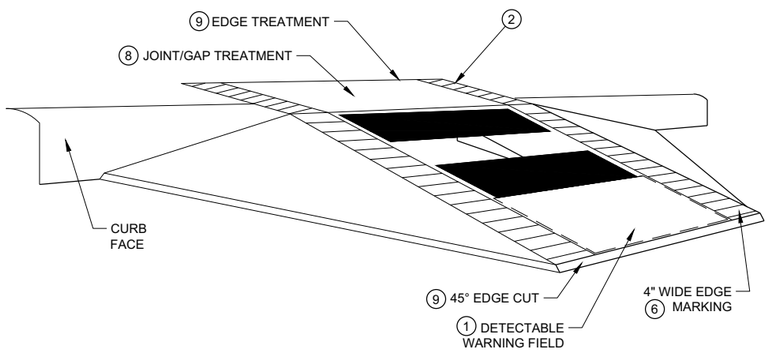
SDD15D30 - 06a



TEMPORARY CURB RAMP PARALLEL TO CURB



WITH PROTECTIVE EDGE



WITH SIDE APRON

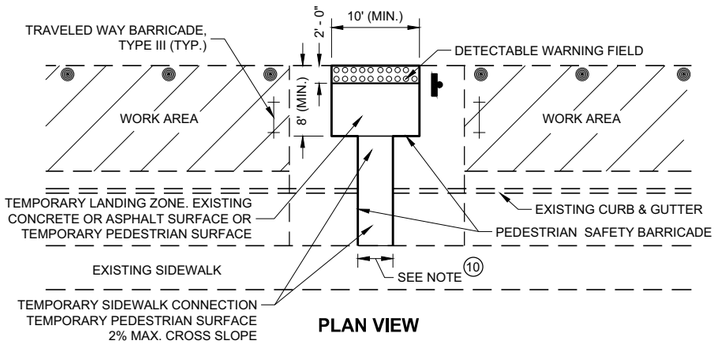
TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

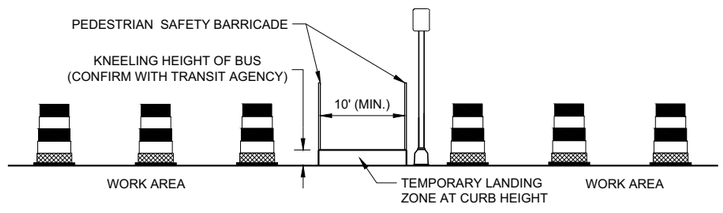
NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

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

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



PLAN VIEW



PROFILE VIEW

TEMPORARY BUS STOP PAD

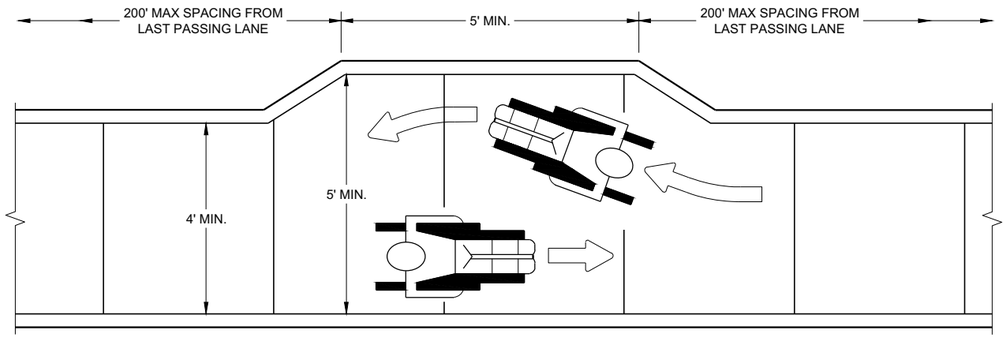
LEGEND

- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- WORK AREA

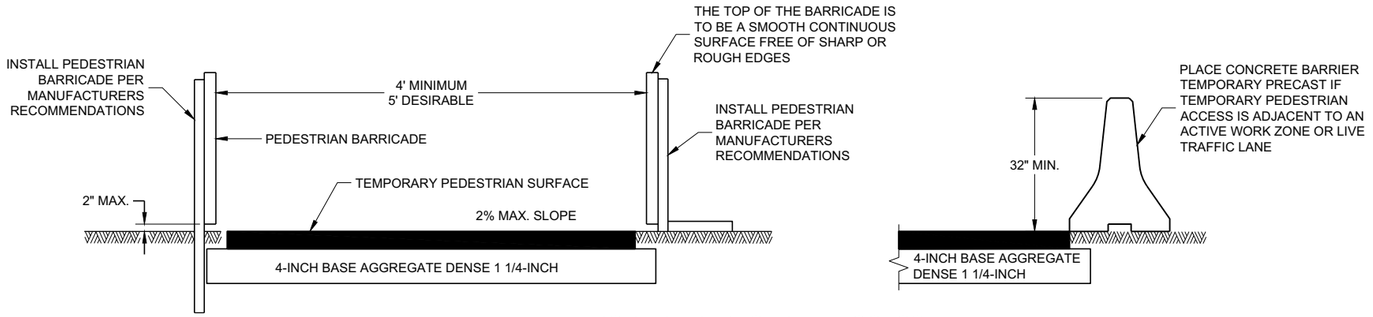
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

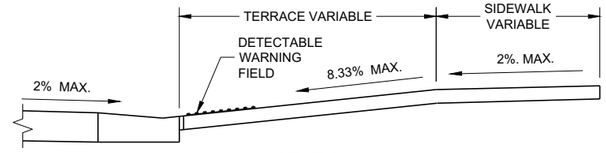
SDD 15D30 - 06b



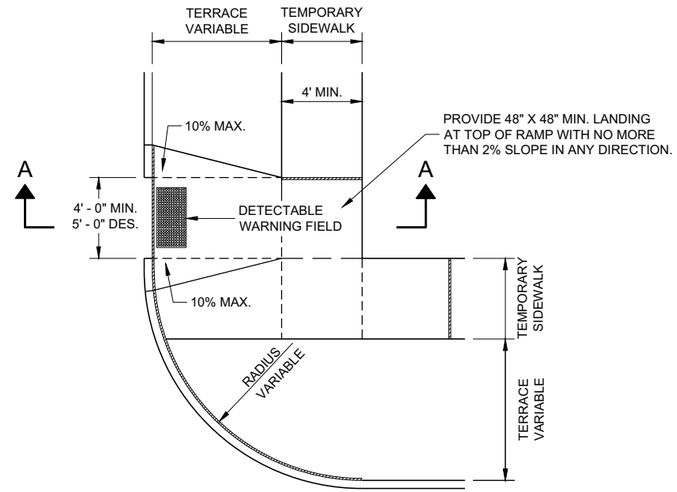
NARROW SIDEWALK PASSING DETAIL



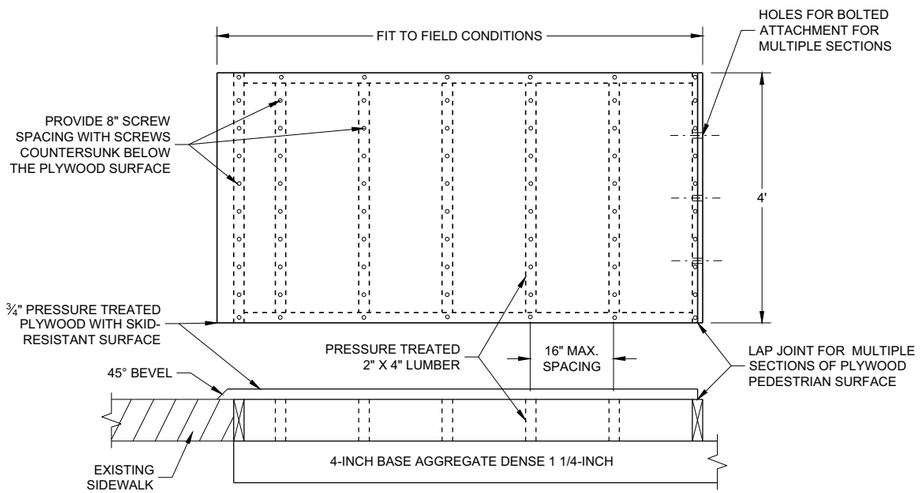
TEMPORARY PEDESTRIAN ACCESS



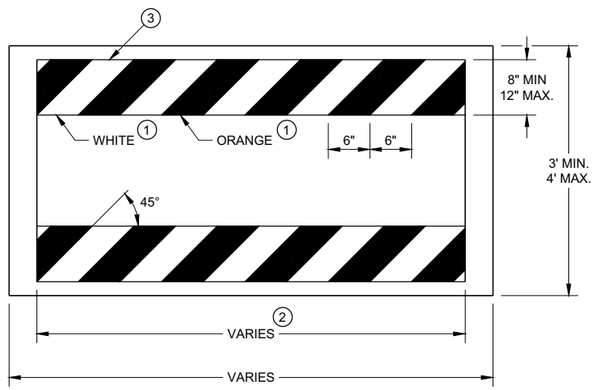
SECTION A - A



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



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



TEMPORARY PEDESTRIAN BARRICADE *

GENERAL NOTES

BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D30 - 06c

SDD 15D30 - 06c

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN

GENERAL NOTES

RIGHT CLOSURE SHOWN (LEFT LANE CLOSURE SIMILAR)

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

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS PART OF A DAYTIME ONLY OPERATION.

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

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

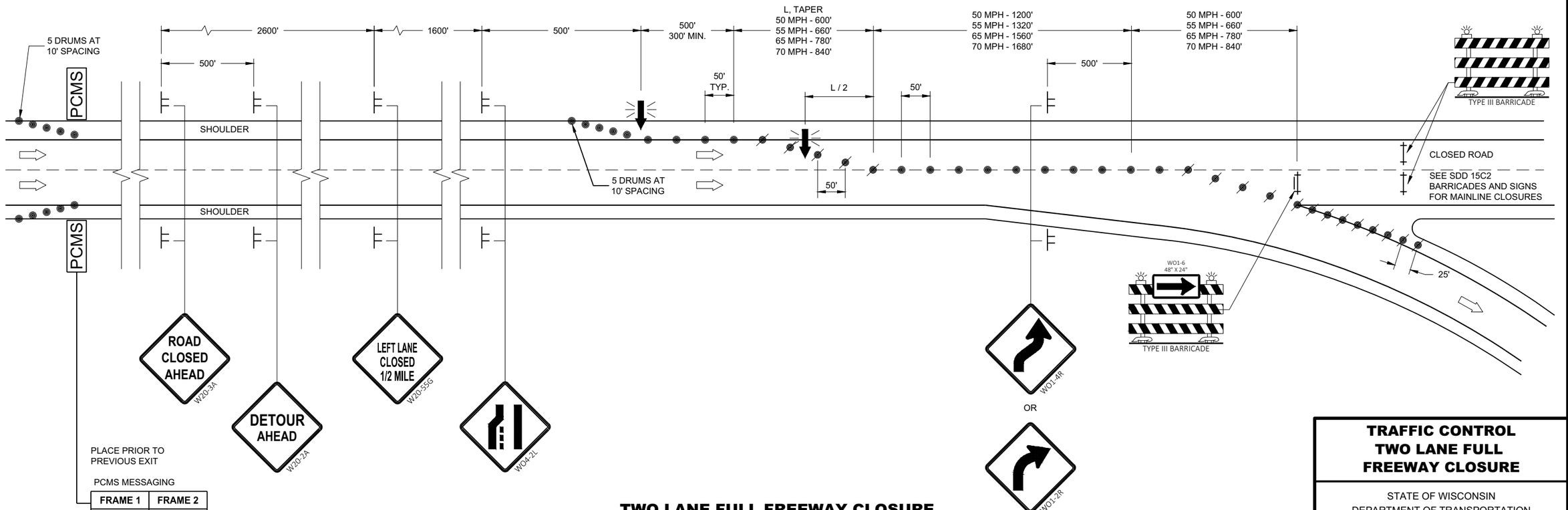
WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROL SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND / OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

PLACE A TYPE III BARRICADE APPROXIMATELY EVERY 1000' ACROSS EACH CLOSED LANE TO HELP REINFORCE THE DRUM LINE.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

REFER TO DETOUR ROUTES FOR TRAFFIC GUIDANCE SIGNING.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED OR AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.



PLACE PRIOR TO PREVIOUS EXIT

PCMS MESSAGING

FRAME 1	FRAME 2
FREEWAY CLOSED	EXIT AHEAD

TWO LANE FULL FREEWAY CLOSURE

TRAFFIC CONTROL TWO LANE FULL FREEWAY CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

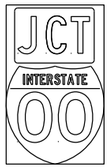
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6

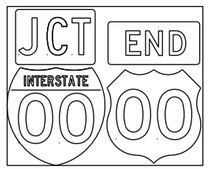
SDD 15D42 - 01

SDD 15D42 - 01

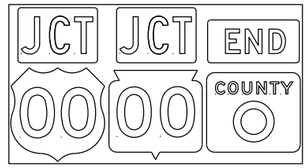
TYPICAL ASSEMBLIES



J1-1



J1-2



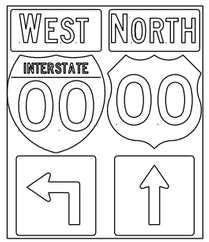
J1-3



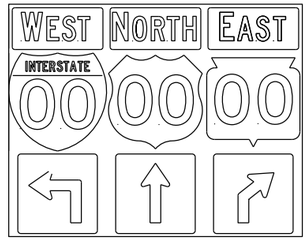
JR1-1



J2-1



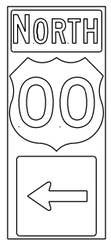
J2-2



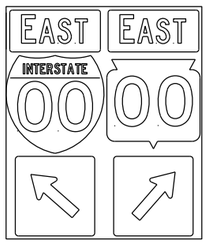
J2-3



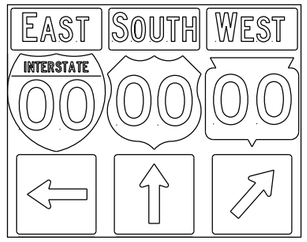
JV
(Typical Vertical J-Assembly
See Note 10 and 11)



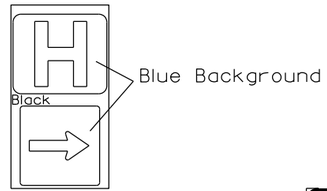
J3-1



J3-2



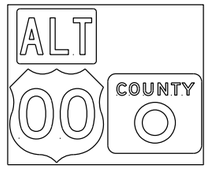
J3-3



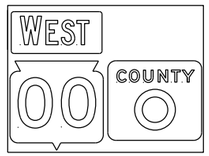
JH-1



J4-1



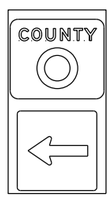
J4-2



J4-2



J12-1



J13-1



J32-1



J33-1



J22-1



J23-1



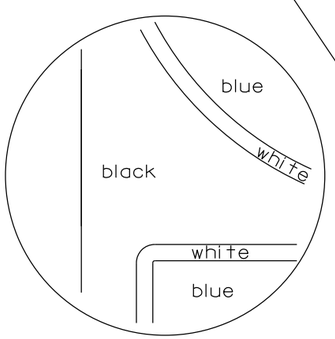
JR13-1



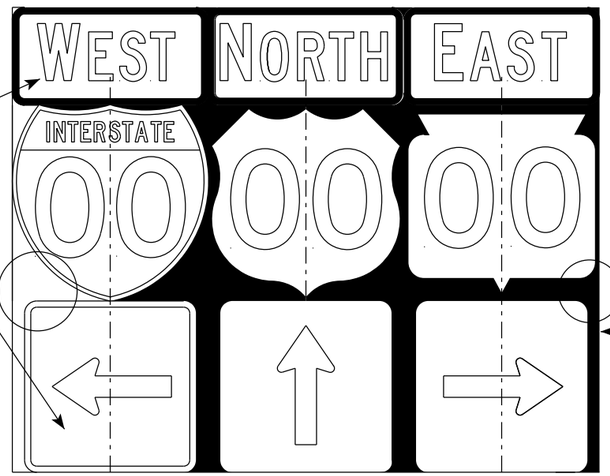
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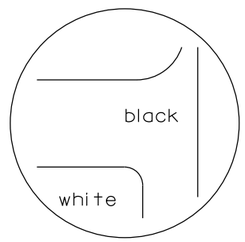


JR99-1



blue background
with interstate





black background

NOTES

1. Signs are Type II - Type H Reflective
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/21 PLATE NO. A2-1S.9

PROJECT NO:

SHEET NO: 104 **E**

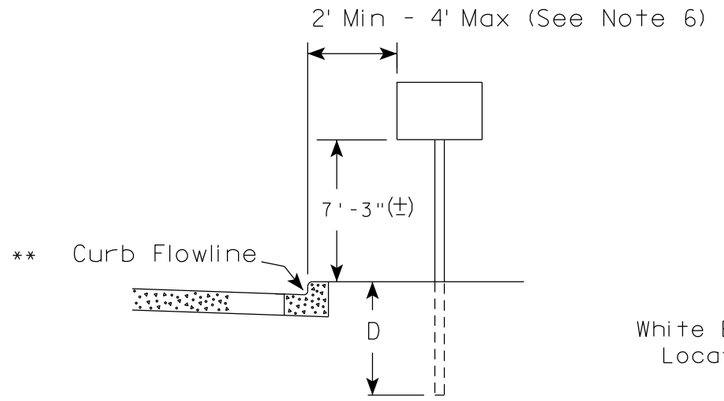
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WISDOT/CADDS SHEET 42

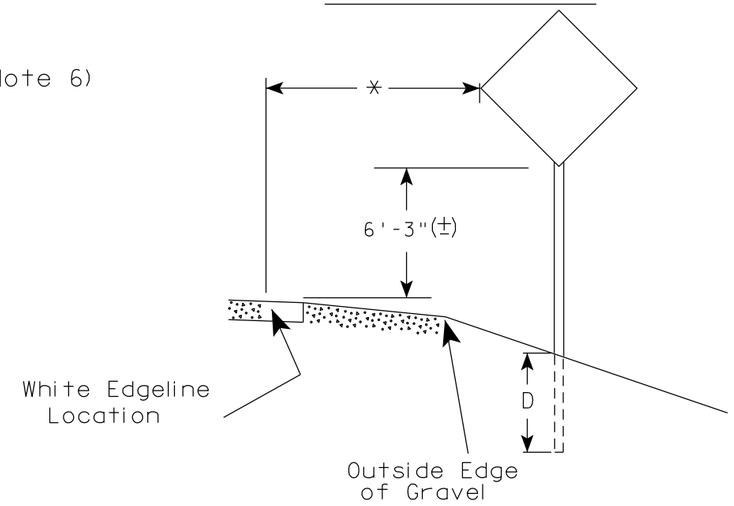
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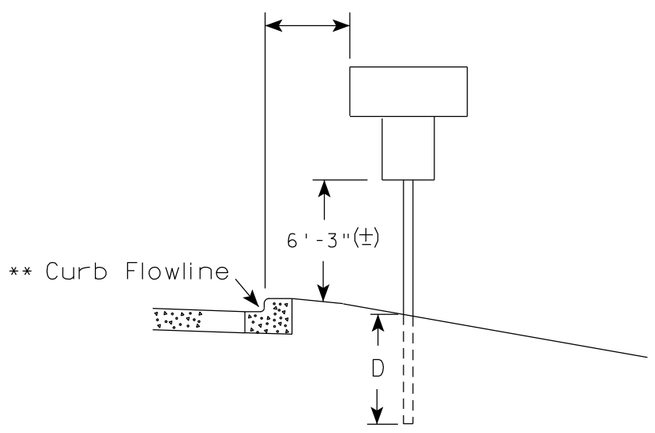
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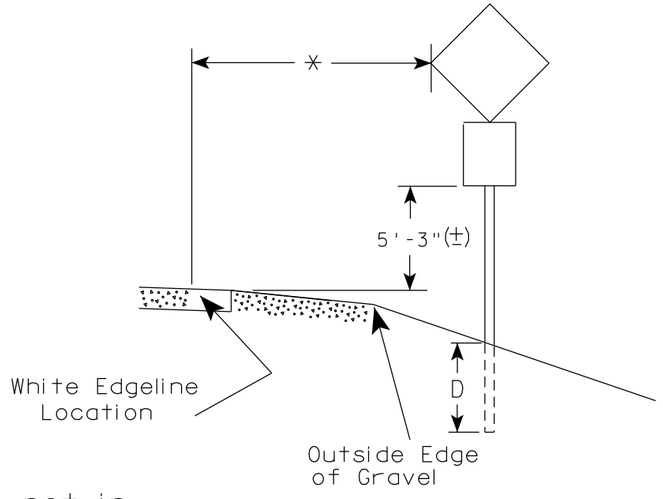
URBAN AREA



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.

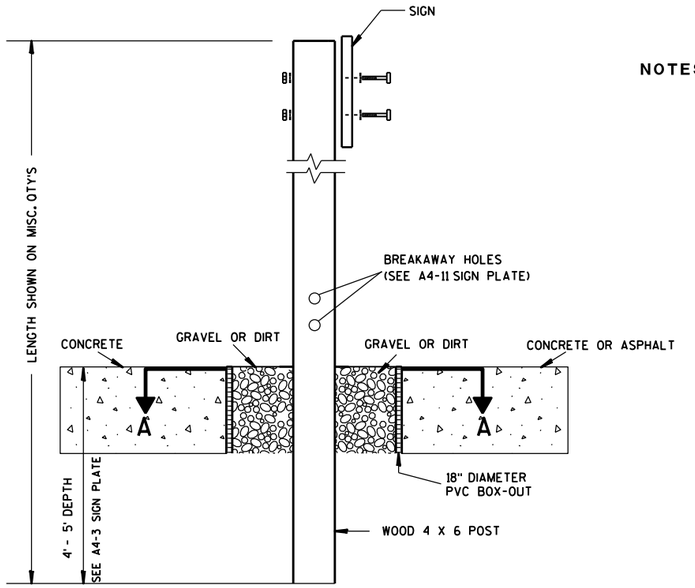
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

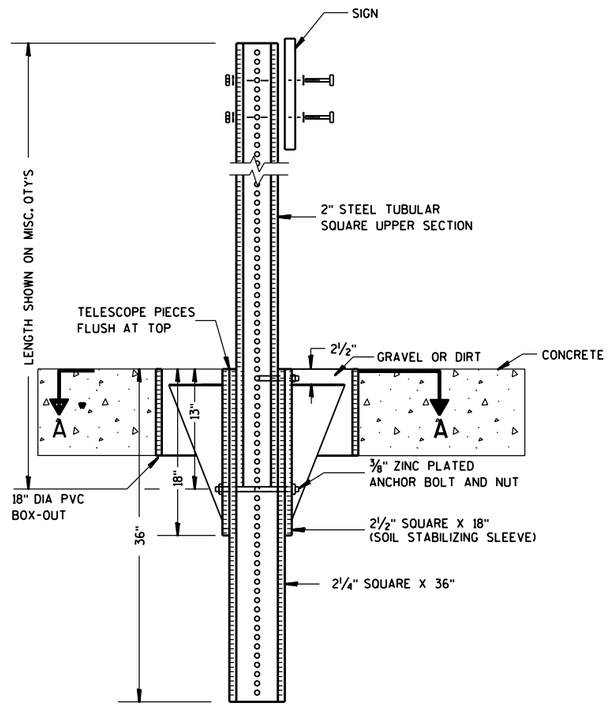
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ELEVATION VIEW

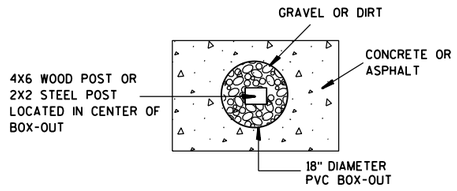
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

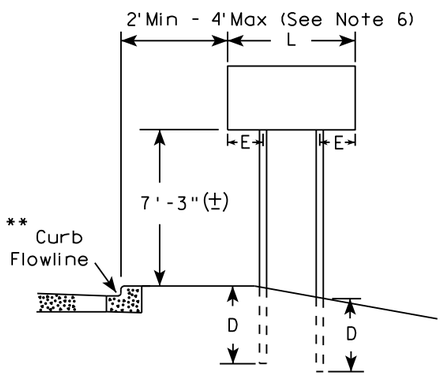
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

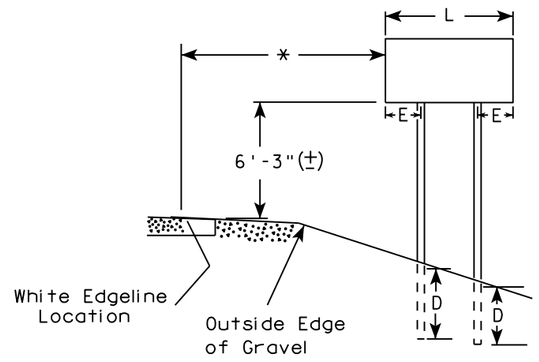
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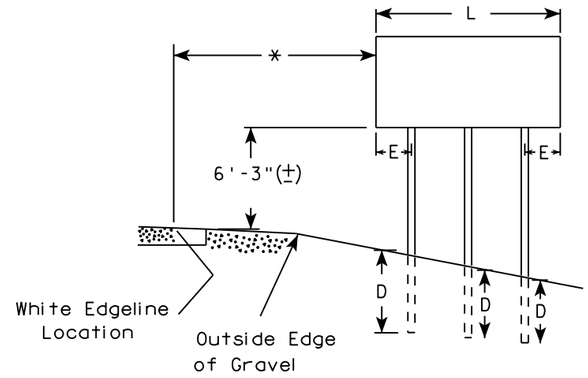
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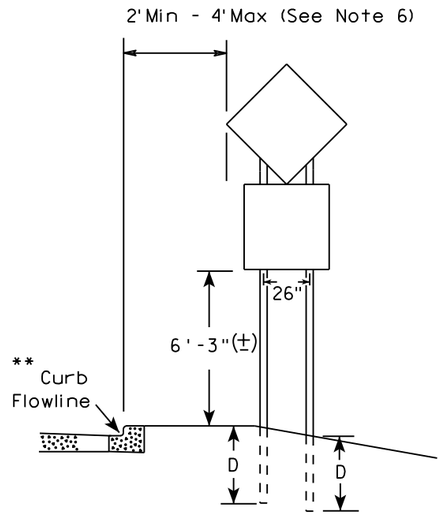
URBAN AREA



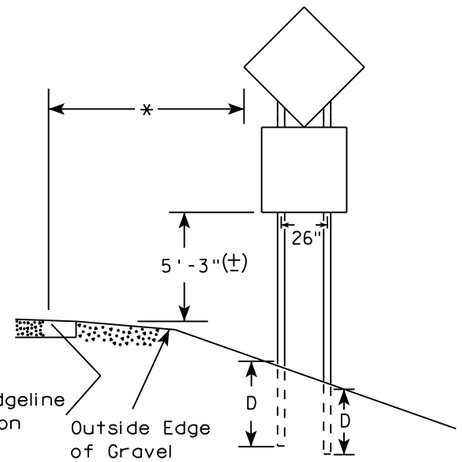
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)		
	L	E
***	Greater than 48" Less than 60"	12"
	60" to 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'

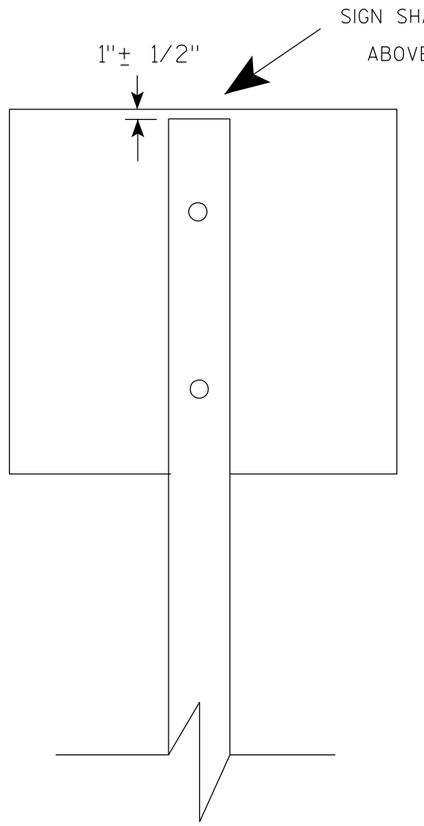
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

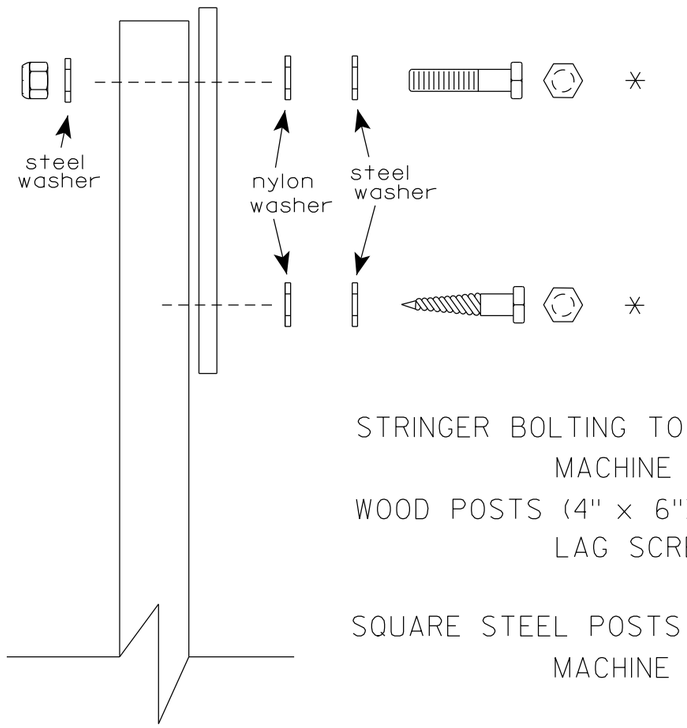
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 107	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

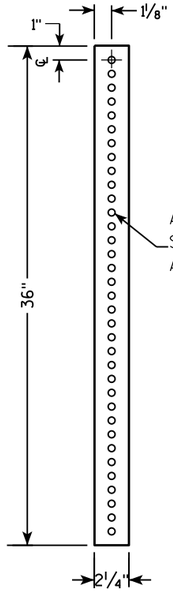
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

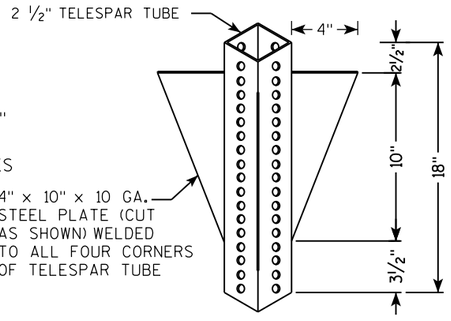
SHEET NO: 108 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

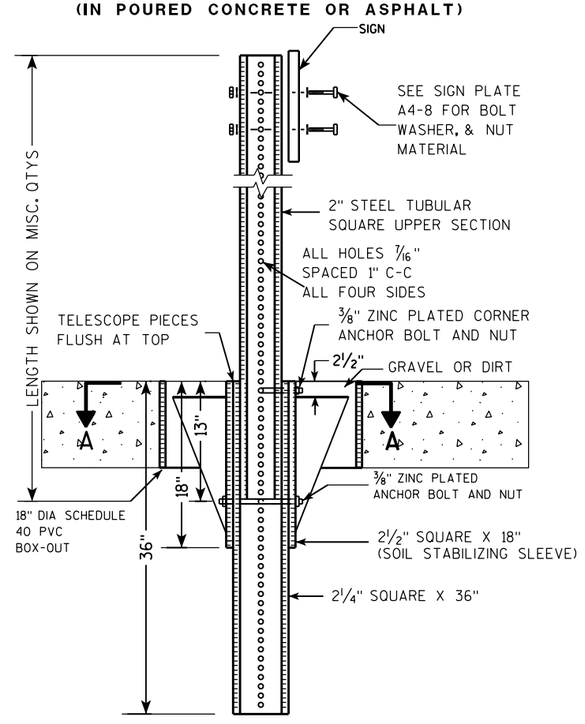
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



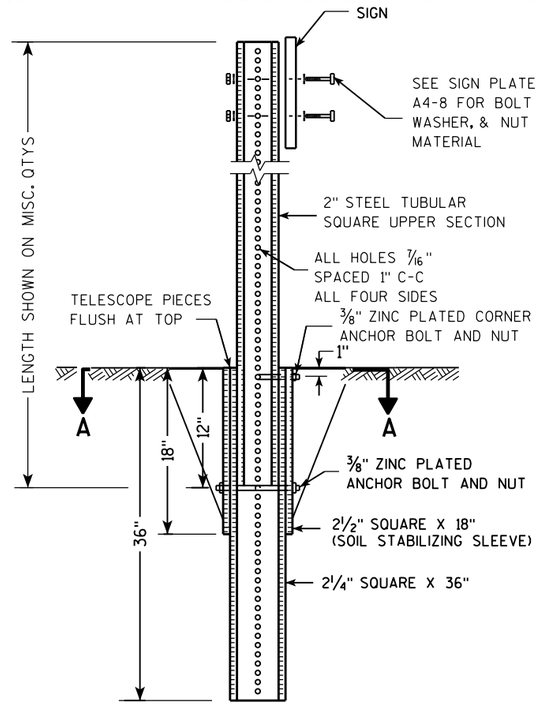
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

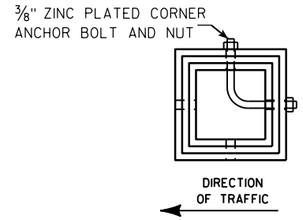


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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

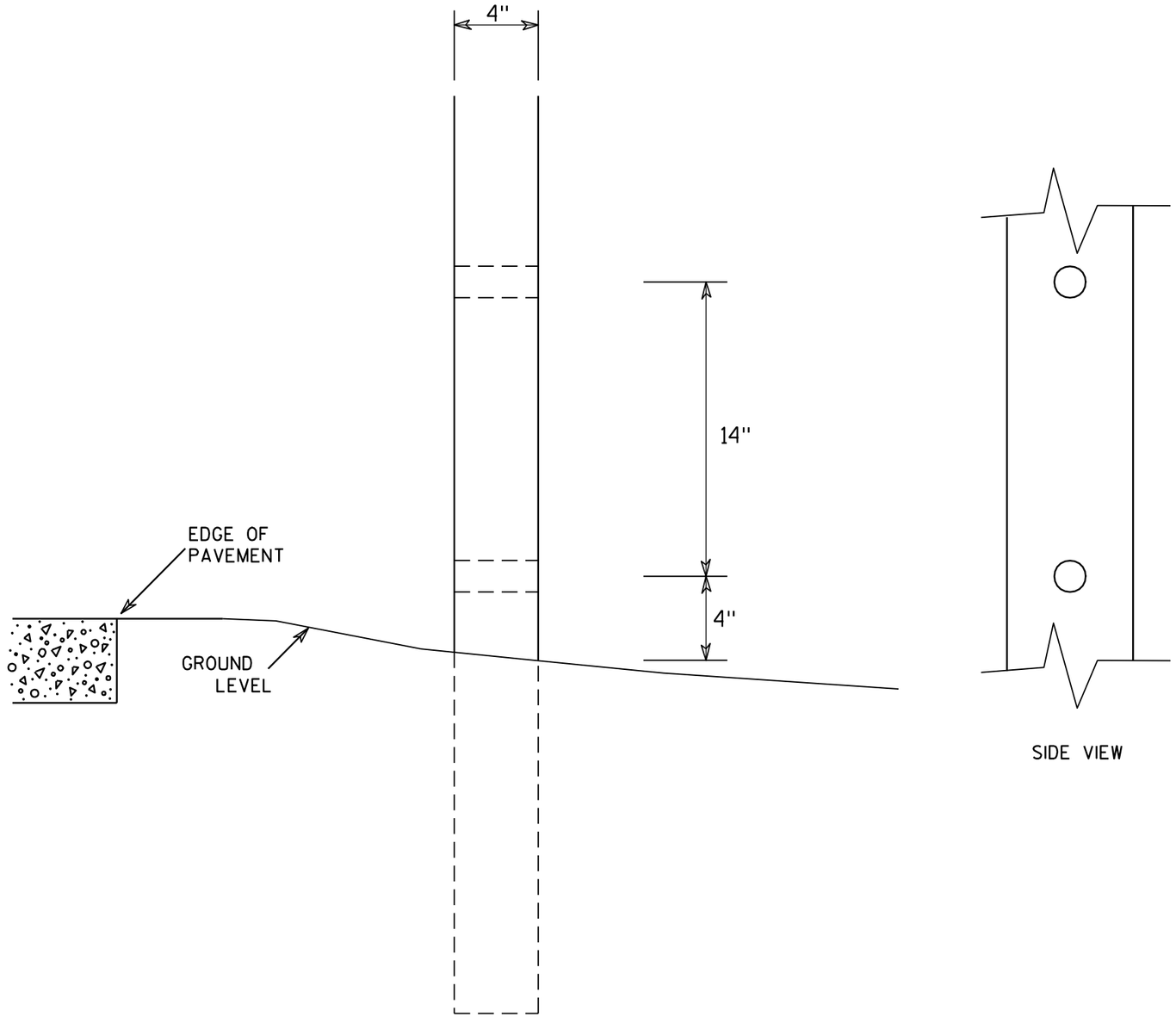
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 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

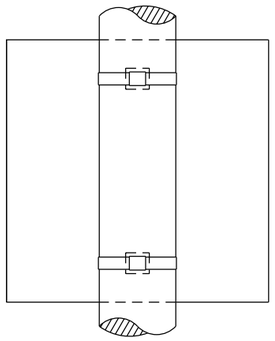
APPROVED Chester J Spang for State Traffic Engineer

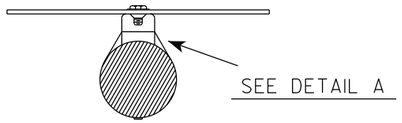
DATE 3/27/97 PLATE NO. A4-11.2

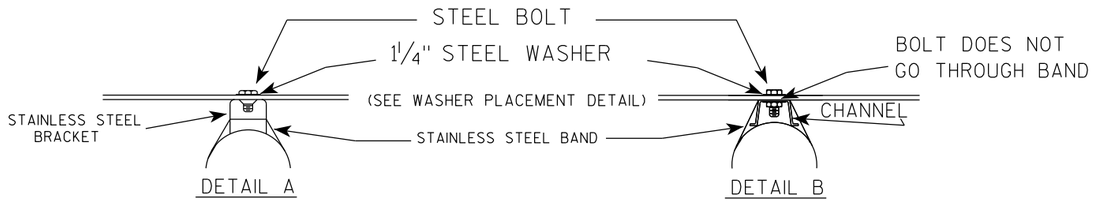
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 110	E

BANDING

SINGLE SIGN



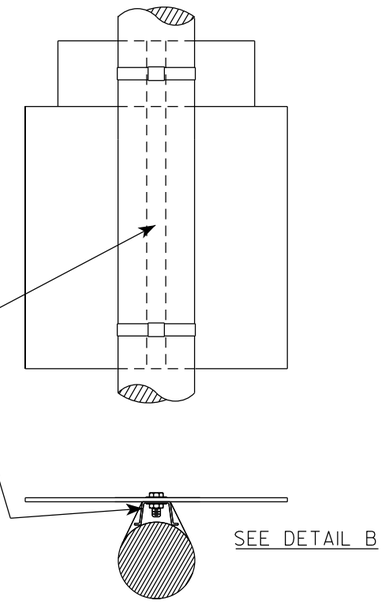




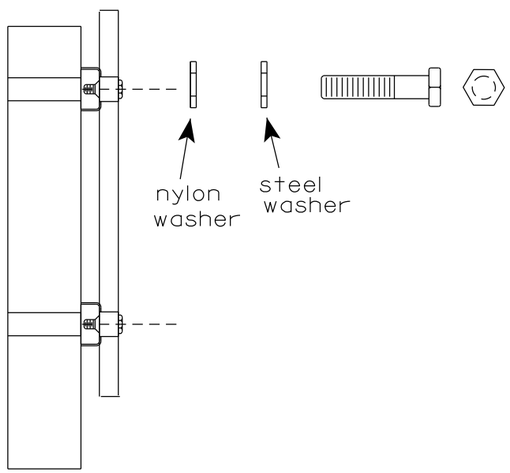
GENERAL NOTES

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

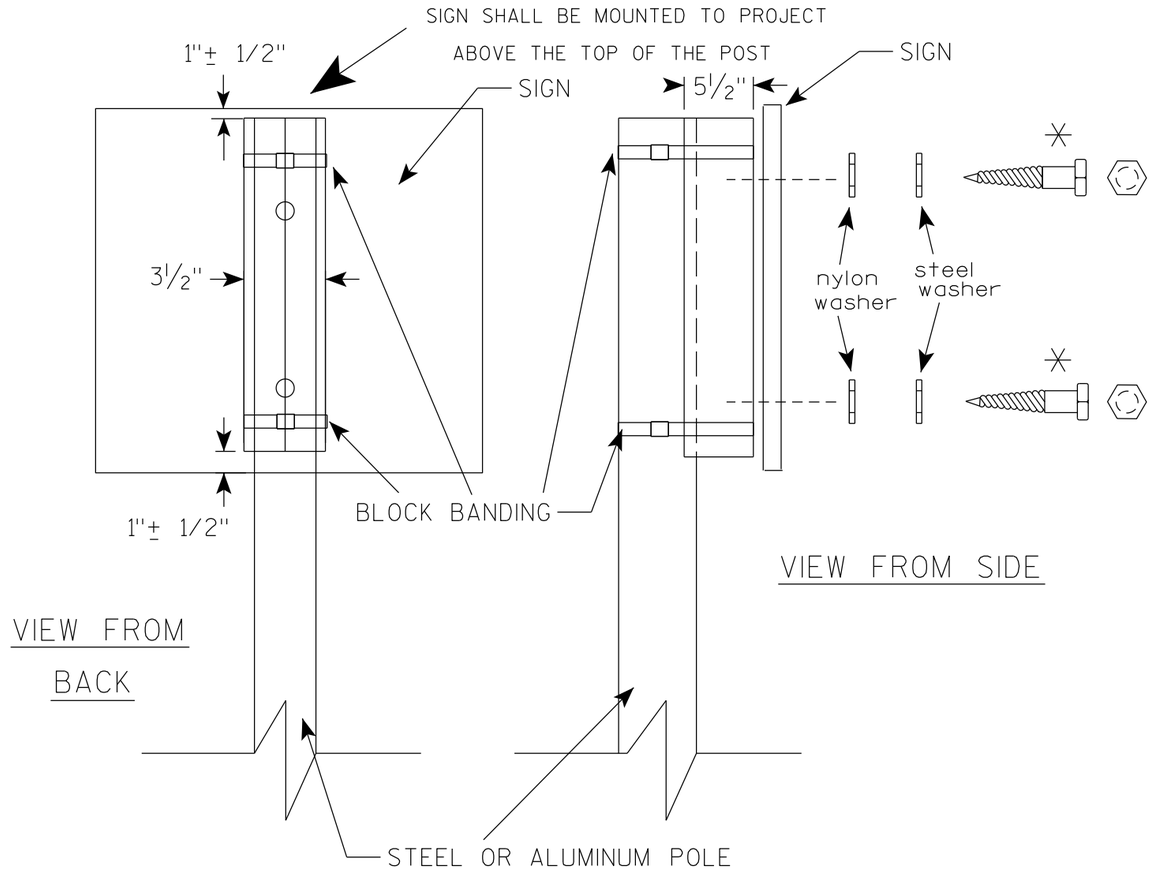
DATE 6/10/19 PLATE NO. A5-9.4

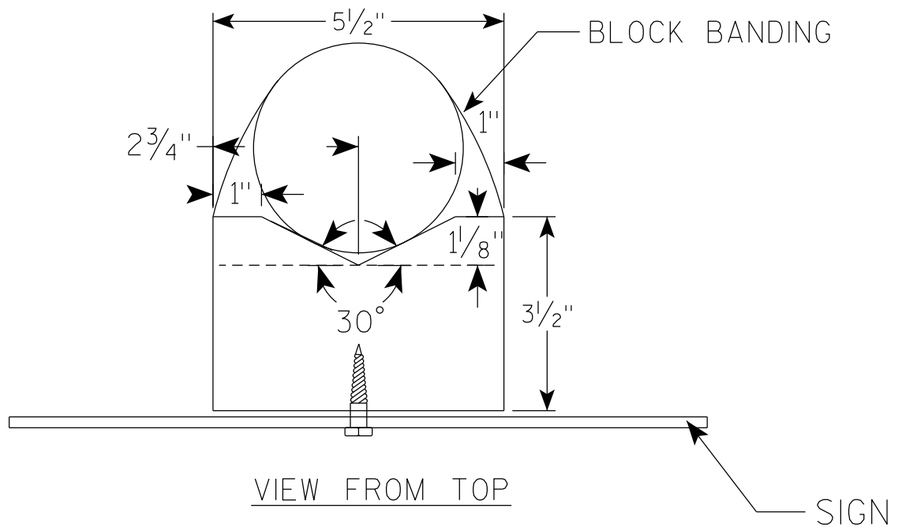
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 111	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

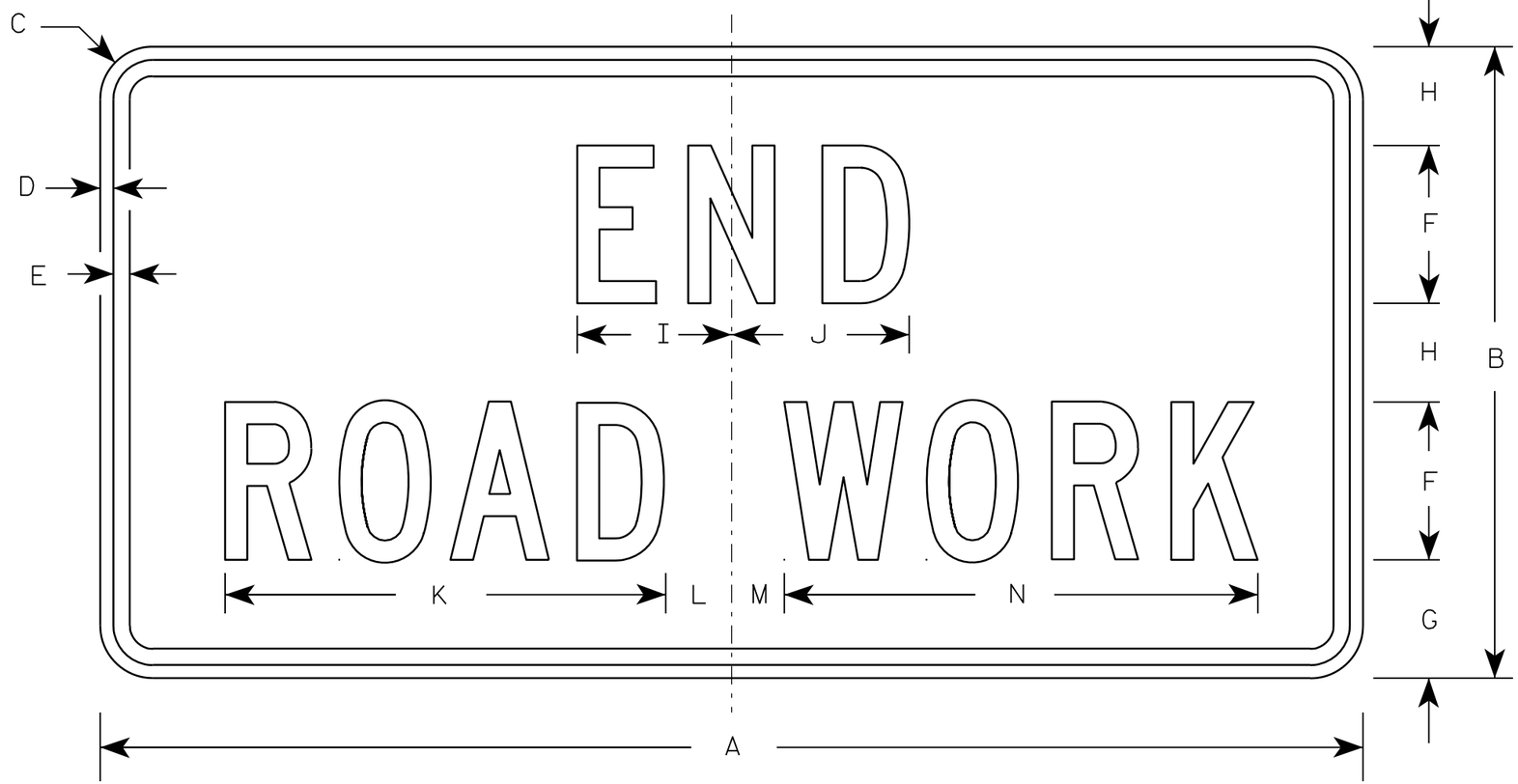
BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-10.2

PROJECT NO:				SHEET NO: 112	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

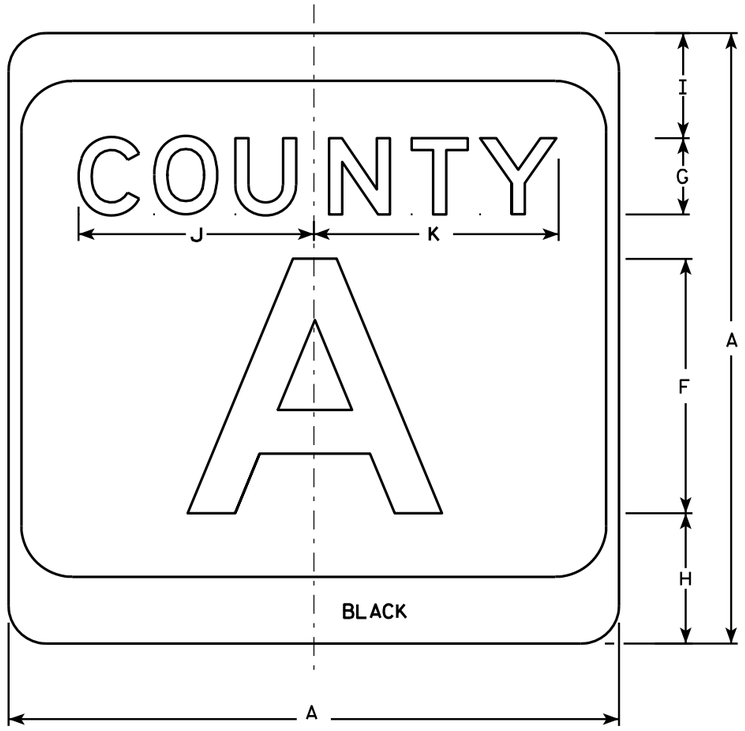
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

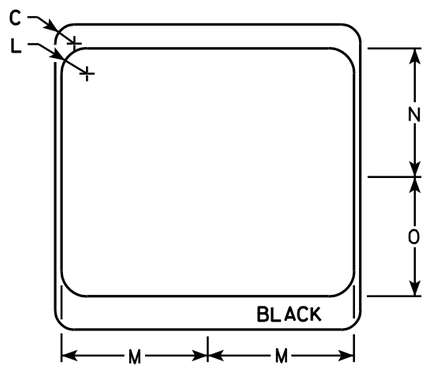
APPROVED Matthew R Rauch
for State Traffic Engineer

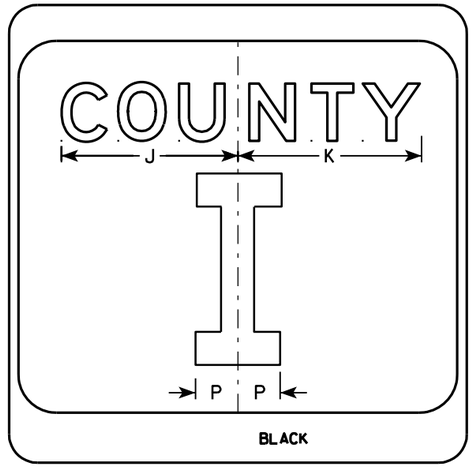
DATE 9/30/09 PLATE NO. G20-2A.8

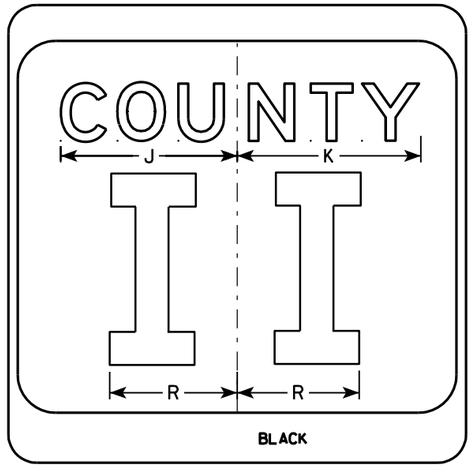
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 113	E



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

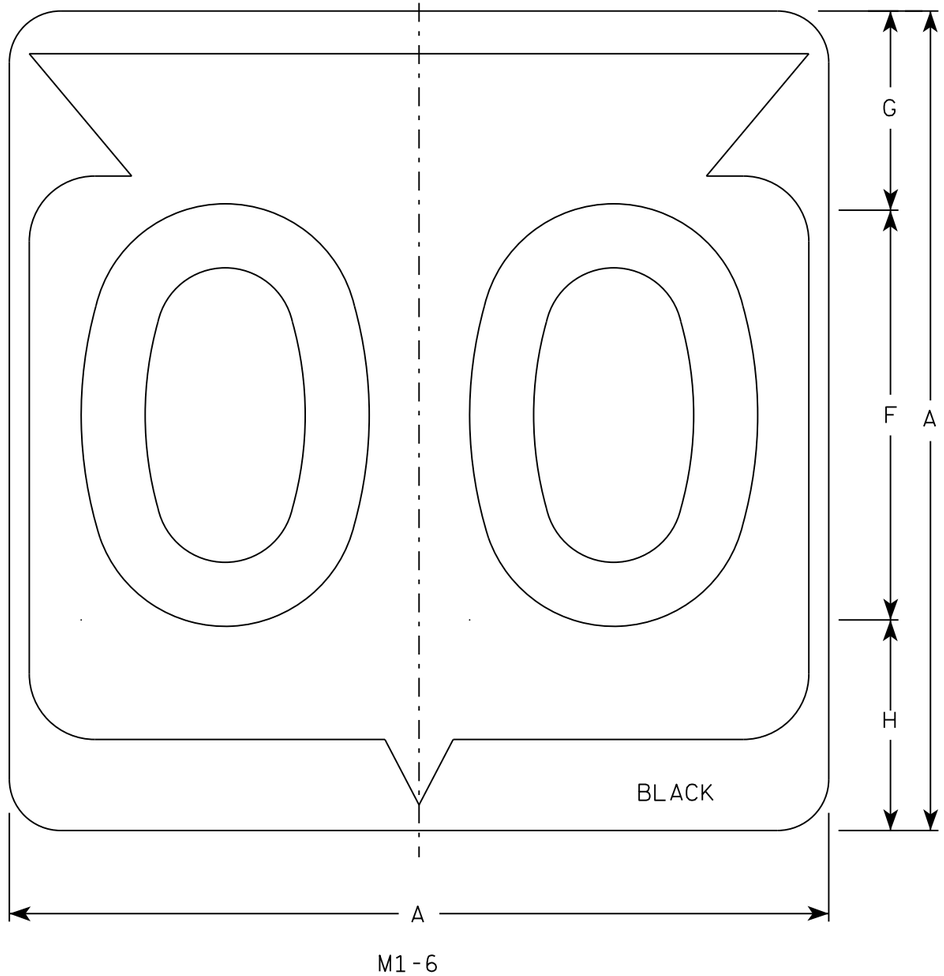
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

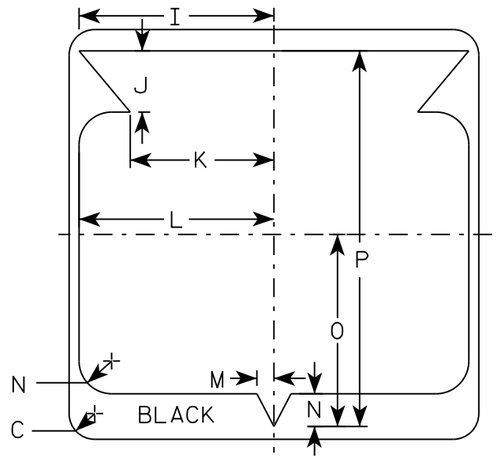
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 114	E



M1-6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

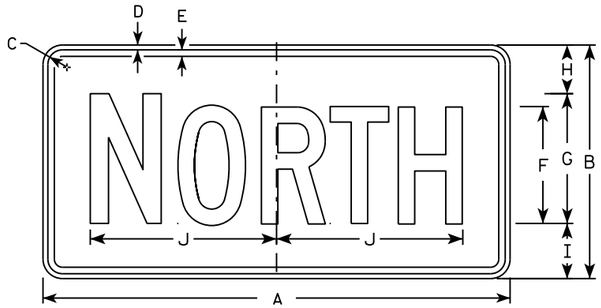
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

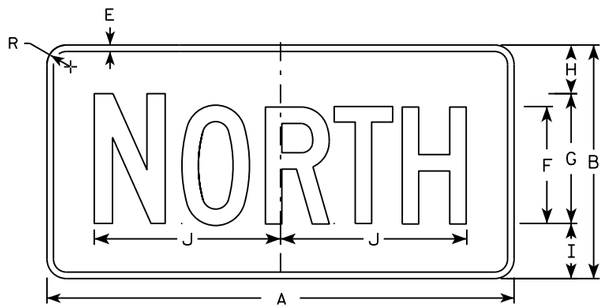
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 115 | E



M3-1
MM3-1
MP3-1



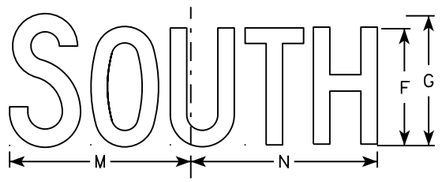
MB3-1
MK3-1
MN3-1



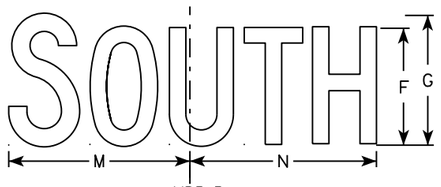
M3-2
MM3-2
MP3-2



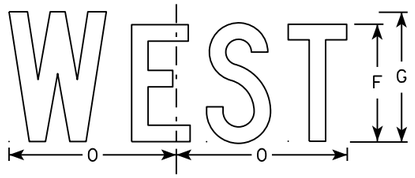
MB3-2
MK3-2
MN3-2



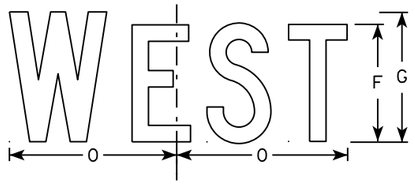
M3-3
MM3-3
MP3-3



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

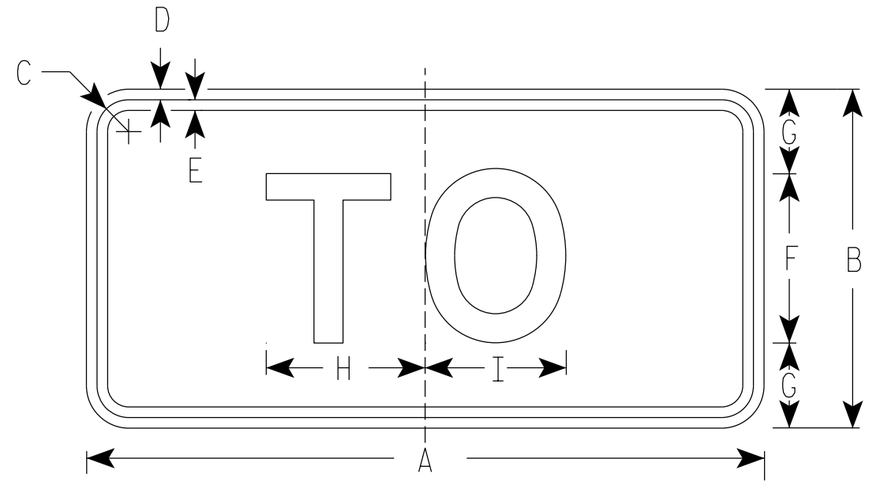
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

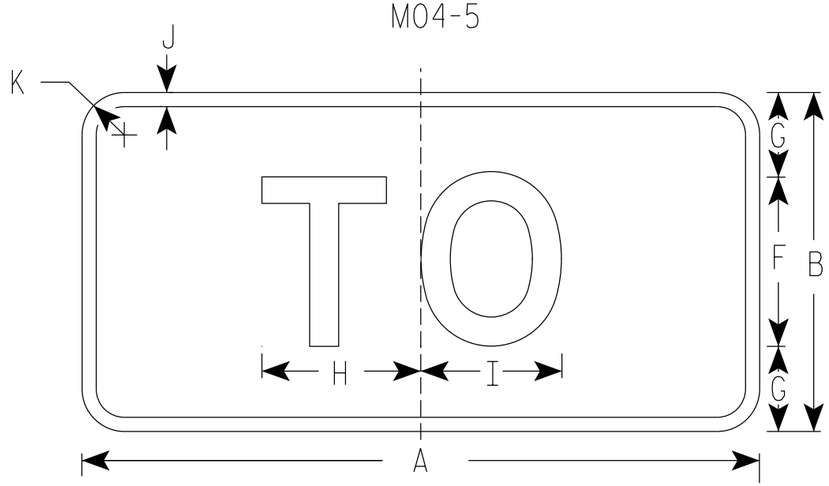
DATE 10/15/15 PLATE NO M3-1.14

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



M4-5
MM4-5
MP4-5
M04-5



MB4-5
MK4-5
MN4-5

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-5 Background - White
   Message - Black

   MB4-5 Background - Blue
   Message - White

   MK4-5 Background - Green
   Message - White

   MM4-5 Background - White
   Message - Green

   MN4-5 Background - Brown
   Message - White

   MP4-5 Background - White
   Message - Blue

   M04-5 Background - Orange Type F Reflective
   Message - Black

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	5 3/8	5 1/4	1/2	1 1/2																2.00
3	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
4	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
5	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5

STANDARD SIGN
M4-5

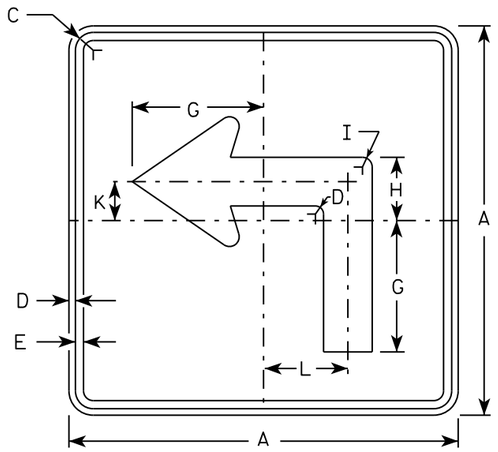
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

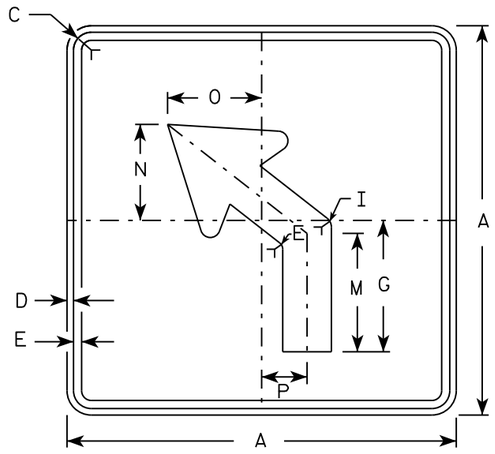
DATE 03/7/19 PLATE NO. M4-5.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 117 | E

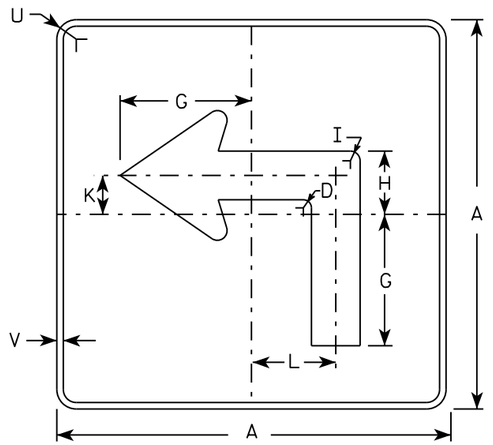
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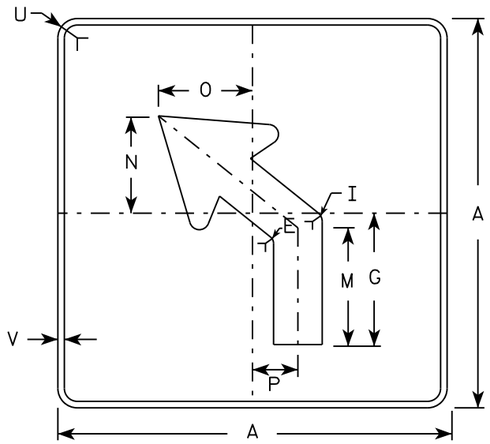
M5-1L
MM5-1L
MO5-1L
MP5-1L



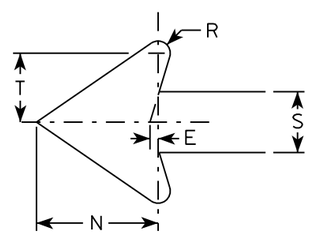
M5-2L
MM5-2L
MO5-2L
MP5-2L



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

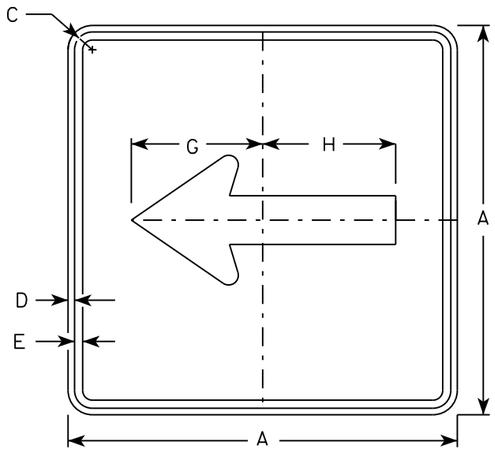
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

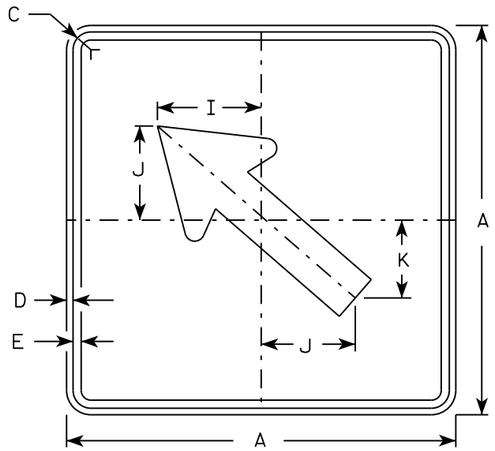
DATE 10/15/15 PLATE NO. M5-1.13

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



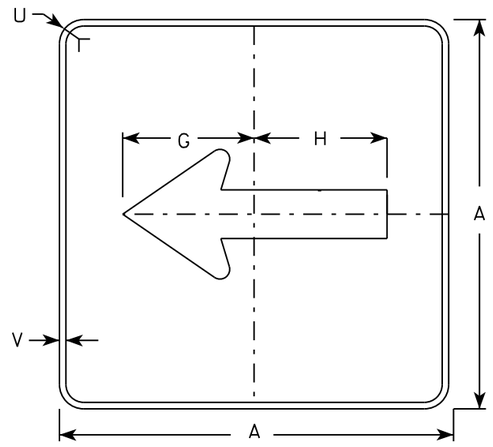
M6-1
MM6-1
MO6-1
MP6-1



M6-2
MM6-2
MO6-2
MP6-2

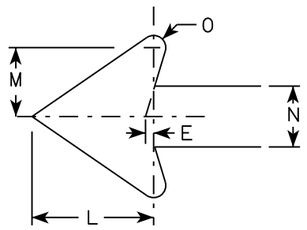
NOTES

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

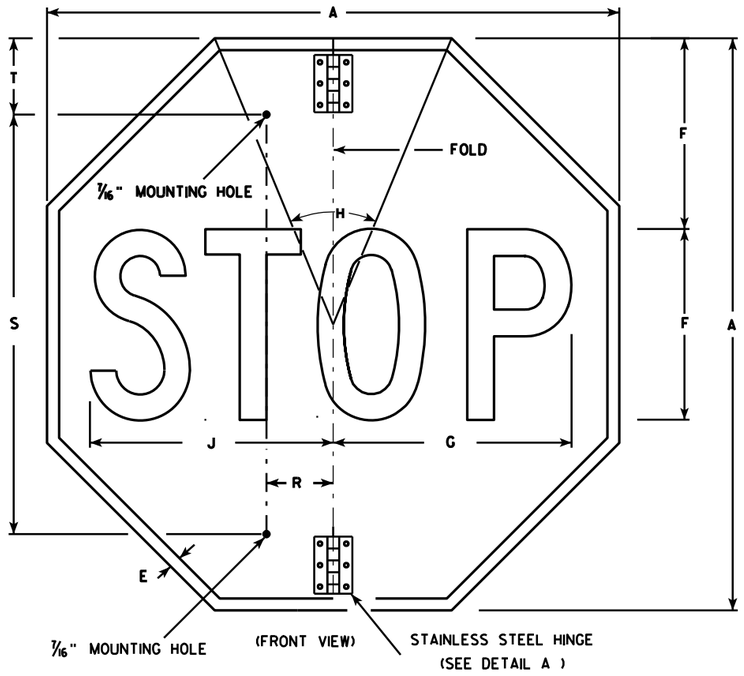
WISCONSIN DEPT OF TRANSPORTATION

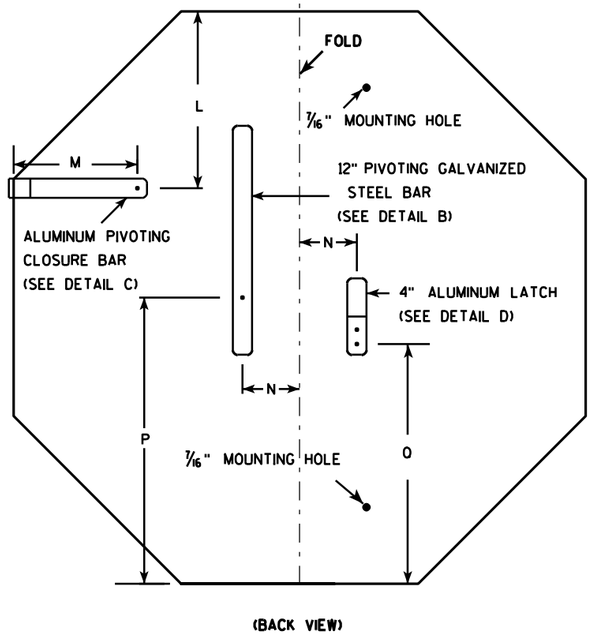
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 119 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

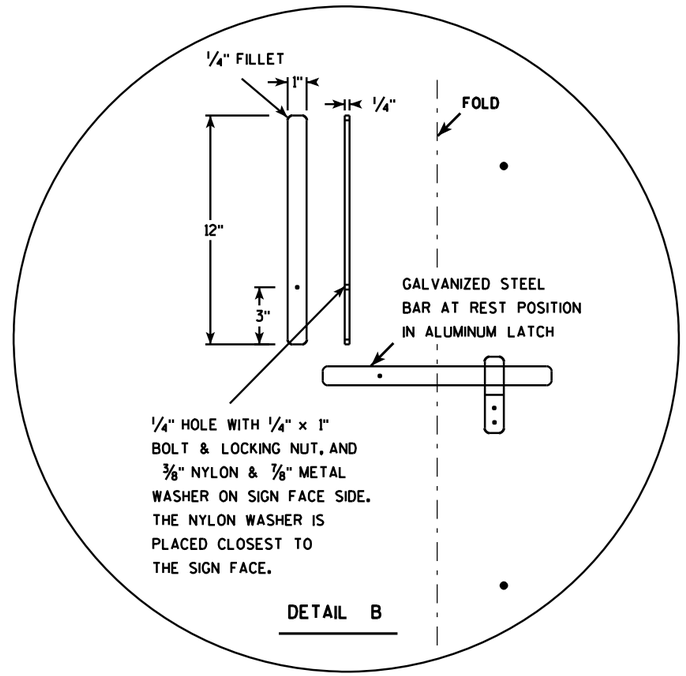
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000

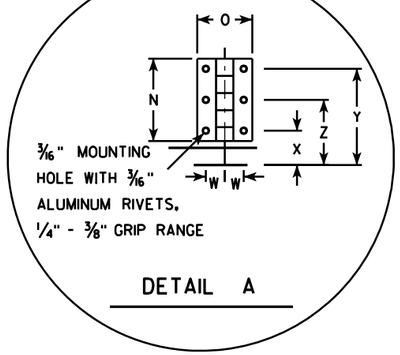


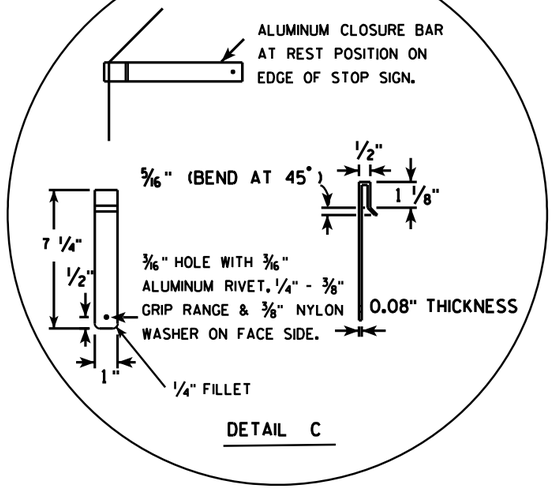


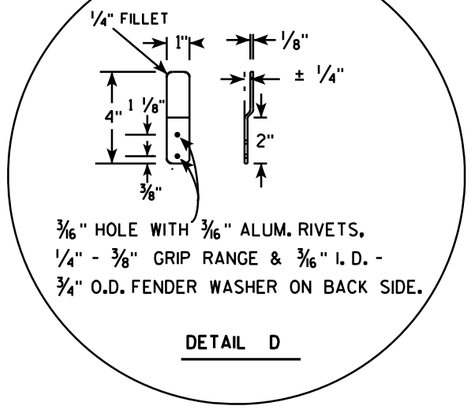
NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.









SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

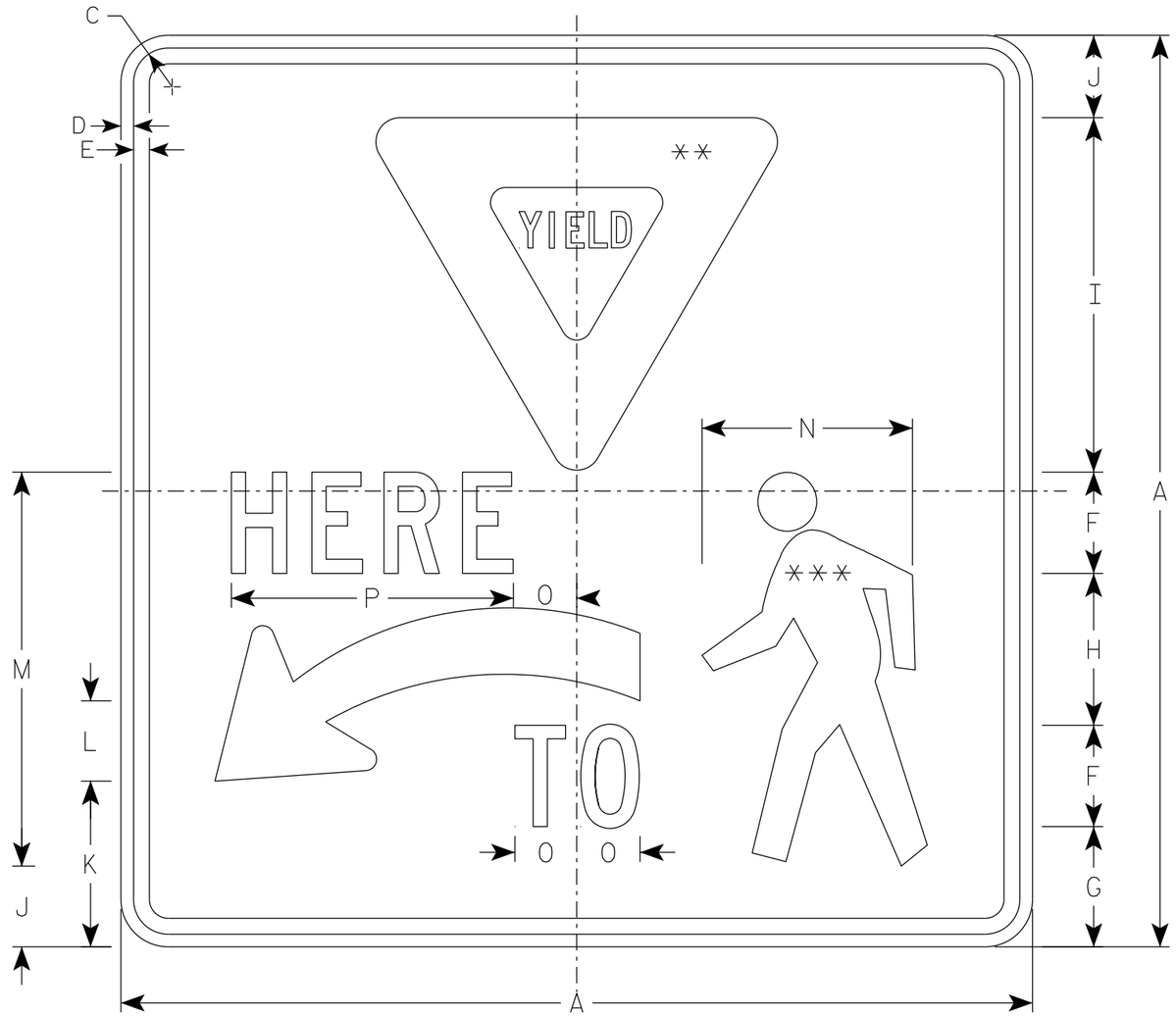
STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 120	E



R1-5L

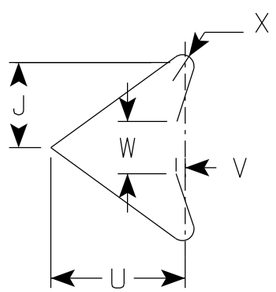
NOTES

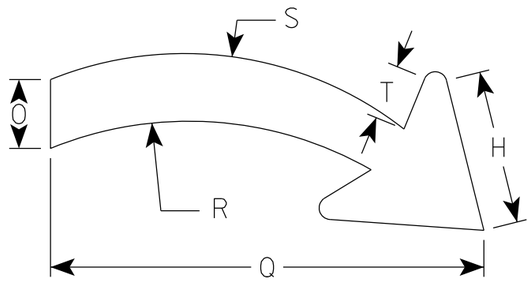
1. Sign is Type II - Type H Reflective
2. Color:
   - Background - WHITE
   - Message - BLACK
   - YIELD SYMBOL - RED ON WHITE
   - PED SYMBOL - BLACK ON WHITE
3. Message Series - D

** INSERT R1-2 AND SIZE TO FIT

*** INSERT W11-2 AND SIZE TO FIT

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	36		1 3/8	1/2	5/8	4	4 3/4	6	14	3 1/4	6 1/2	3 1/8	15	8 1/4	2 1/2	11 1/8	16 3/4	28 1/2	27 3/4	2 1/8	5 1/4	3/8	2	1			9.0
2S	36		1 3/8	1/2	5/8	4	4 3/4	6	14	3 1/4	6 1/2	3 1/8	15	8 1/4	2 1/2	11 1/8	16 3/4	28 1/2	27 3/4	2 1/8	5 1/4	3/8	2	1			9.0
2M	36		1 3/8	1/2	5/8	4	4 3/4	6	14	3 1/4	6 1/2	3 1/8	15	8 1/4	2 1/2	11 1/8	16 3/4	28 1/2	27 3/4	2 1/8	5 1/4	3/8	2	1			9.0
3	36		1 3/8	1/2	5/8	4	4 3/4	6	14	3 1/4	6 1/2	3 1/8	15	8 1/4	2 1/2	11 1/8	16 3/4	28 1/2	27 3/4	2 1/8	5 1/4	3/8	2	1			9.0
4																											
5																											

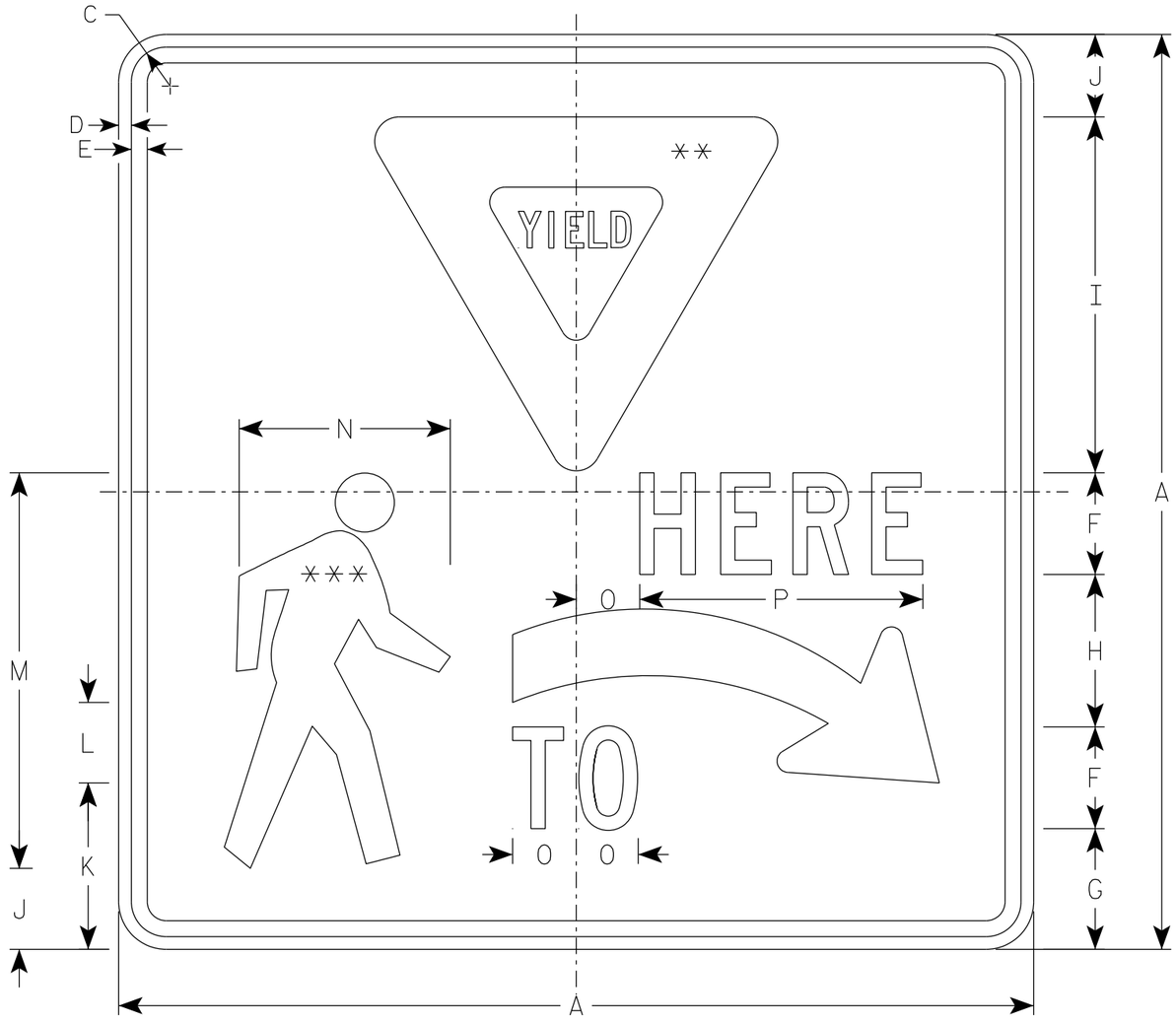
STANDARD SIGN
R1-5L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/15/21 PLATE NO. R1-5L.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 121 | E



R1-5R

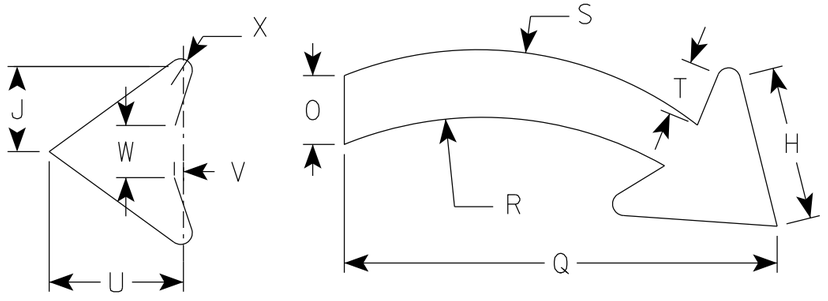
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - WHITE
   Message - BLACK
   YIELD SYMBOL - RED ON WHITE
   PED SYMBOL - BLACK ON WHITE
3. Message Series - D

** INSERT R1-2 AND SIZE TO FIT

*** INSERT W11-2 AND SIZE TO FIT

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	36		1 3/8	1/2	5/8	4	4 3/4	6	14	3 1/4	6 1/2	3 1/8	15	8 1/4	2 1/2	11 1/8	16 3/4	28 1/2	27 3/4	2 1/8	5 1/4	3/8	2	1			9.0
2S	36		1 3/8	1/2	5/8	4	4 3/4	6	14	3 1/4	6 1/2	3 1/8	15	8 1/4	2 1/2	11 1/8	16 3/4	28 1/2	27 3/4	2 1/8	5 1/4	3/8	2	1			9.0
2M	36		1 3/8	1/2	5/8	4	4 3/4	6	14	3 1/4	6 1/2	3 1/8	15	8 1/4	2 1/2	11 1/8	16 3/4	28 1/2	27 3/4	2 1/8	5 1/4	3/8	2	1			9.0
3	36		1 3/8	1/2	5/8	4	4 3/4	6	14	3 1/4	6 1/2	3 1/8	15	8 1/4	2 1/2	11 1/8	16 3/4	28 1/2	27 3/4	2 1/8	5 1/4	3/8	2	1			9.0
4																											
5																											

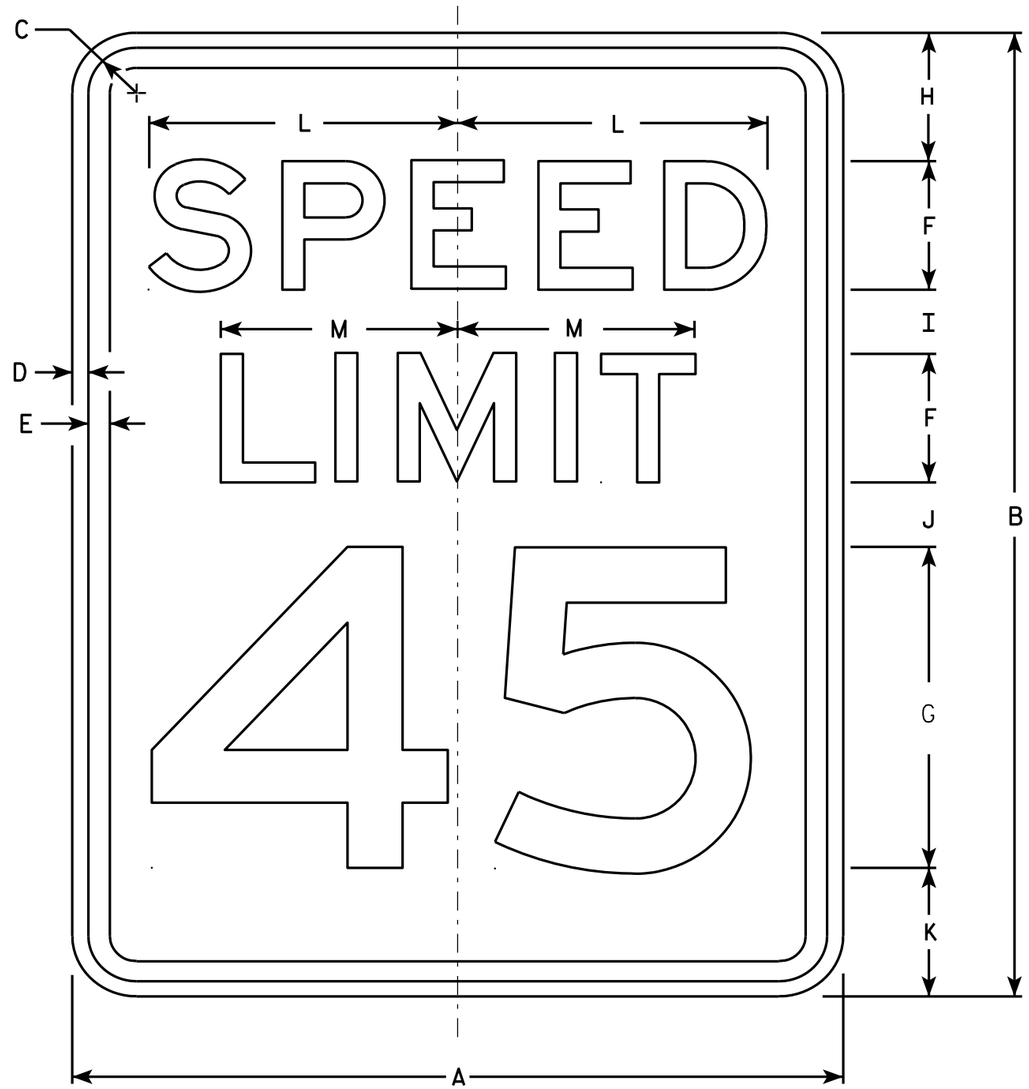
STANDARD SIGN
R1-5R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/15/21 PLATE NO. R1-5R.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 122 | E



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

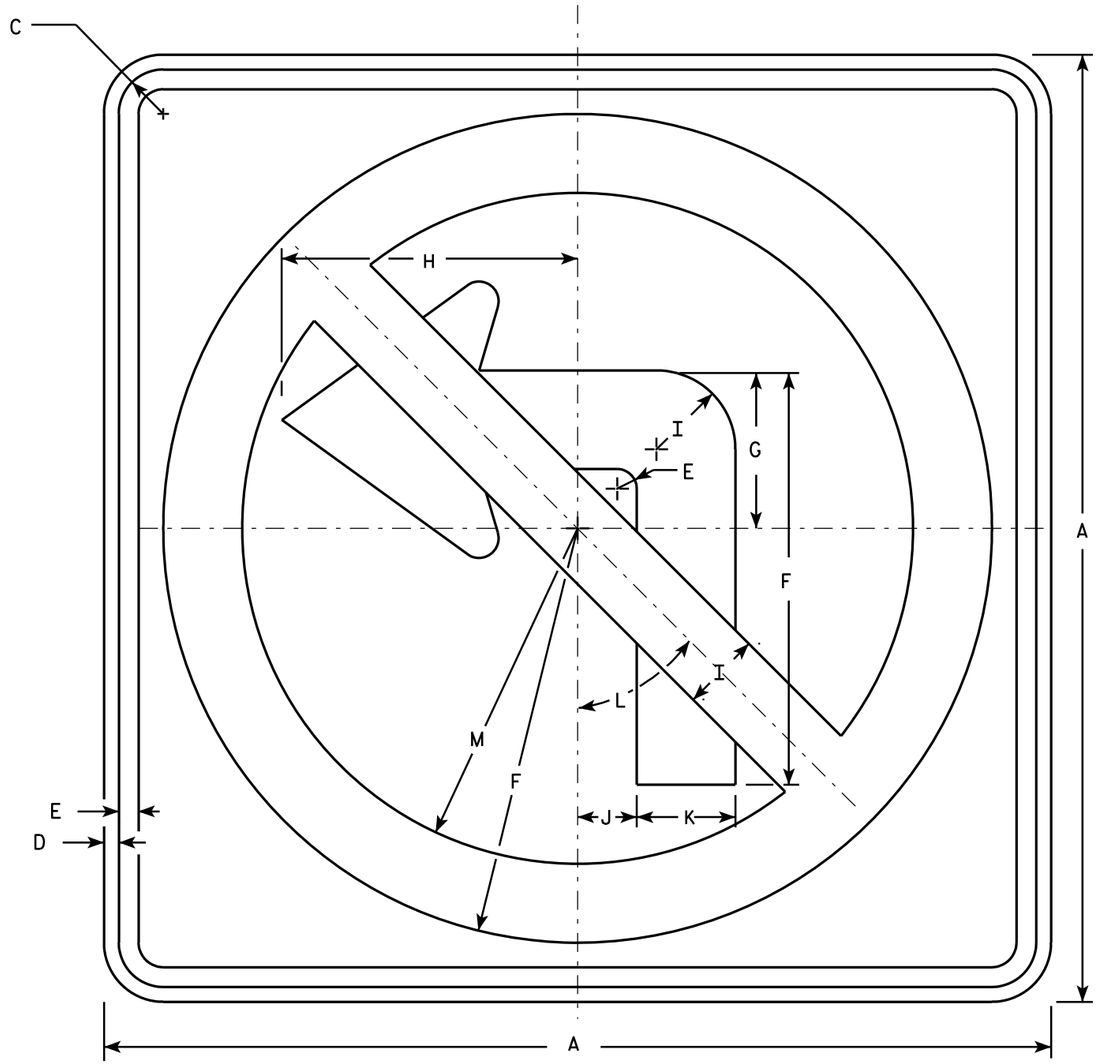
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

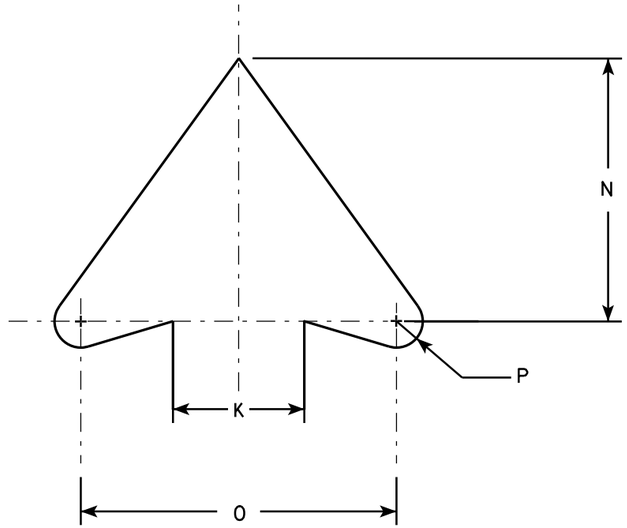
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 123 | E



R3-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

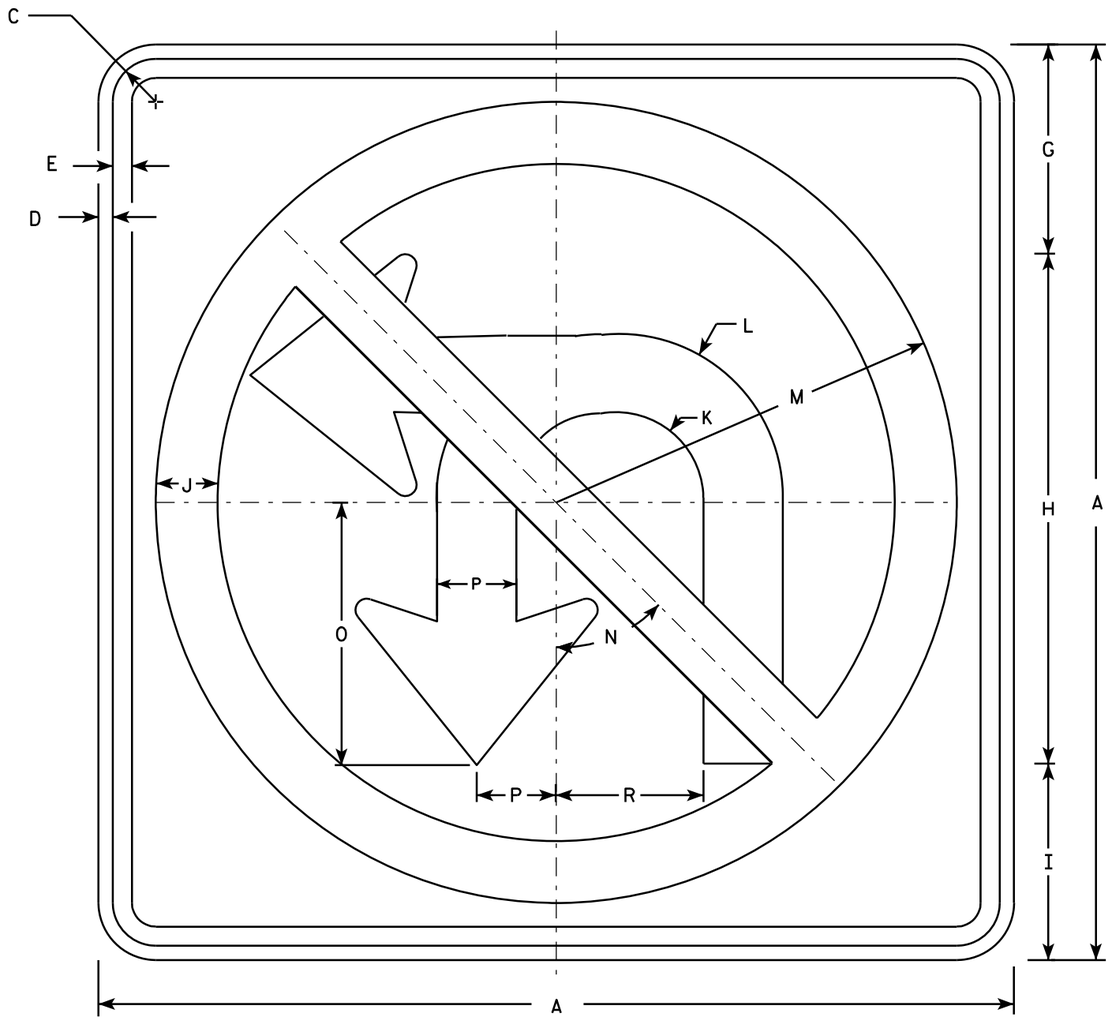
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 124	E



R3-18

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2		5 1/2	13 3/8	5 1/8	1 5/8	2 1/4	4 1/4	10 1/2	45°	6 7/8	2 1/8		3 7/8									4.0
2M	36		1 5/8	5/8	3/4		8 1/4	20	7 3/4	2 1/2	3 3/8	6 1/2	15 3/4	45°	10 3/8	3 1/8		5 3/4									9.0
3	36		1 5/8	5/8	3/4		8 1/4	20	7 3/4	2 1/2	3 3/8	6 1/2	15 3/4	45	10 3/8	3 1/8		5 3/4									9.0
4	36		1 5/8	5/8	3/4		8 1/4	20	7 3/4	2 1/2	3 3/8	6 1/2	15 3/4	45	10 3/8	3 1/8		5 3/4									9.0
5	48		2 1/4	3/4	1		11	26 3/4	10 1/4	3 1/4	4 5/8	8 5/8	21	45°	13 3/4	4 1/8		7 3/4									16.0

STANDARD SIGN
R3-18

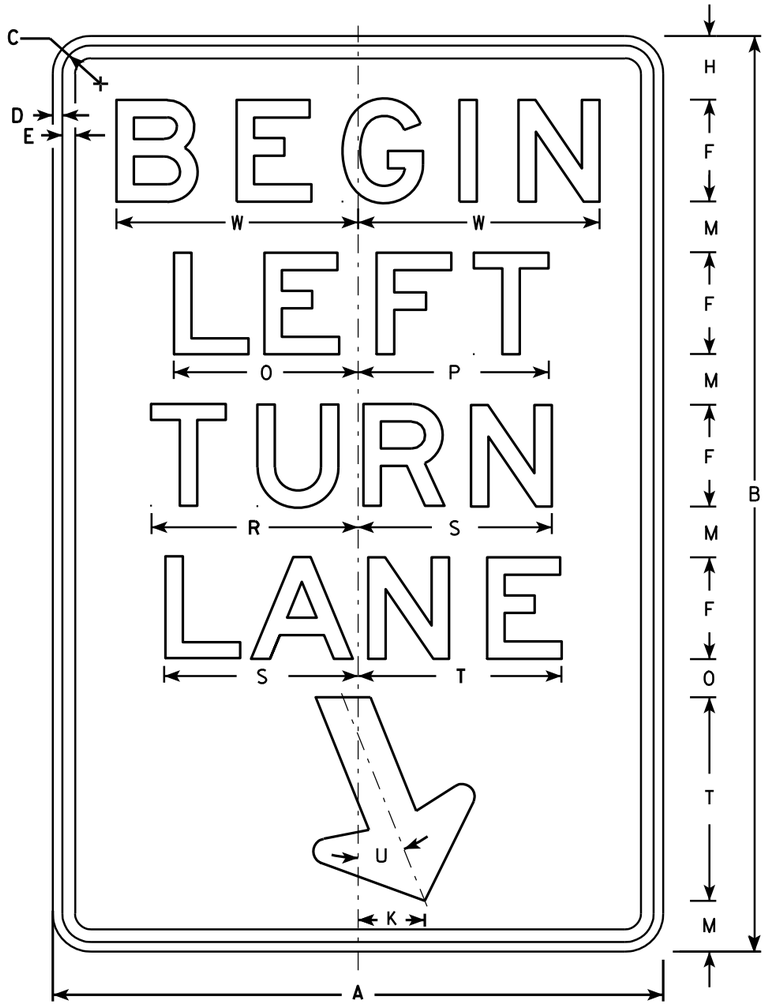
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/21/10 PLATE NO. R3-18.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 125 | E

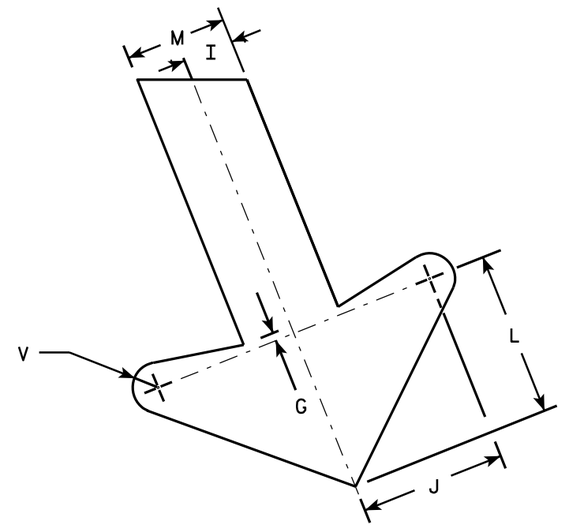
FILE NAME : C:\Users\PROJECTS\tr_stdplate\R318.DGN PLOT DATE : 21-DEC-2010 10:58 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 5.959043:1.000000
WISDOT/CADDS SHEET 42



R3-20L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

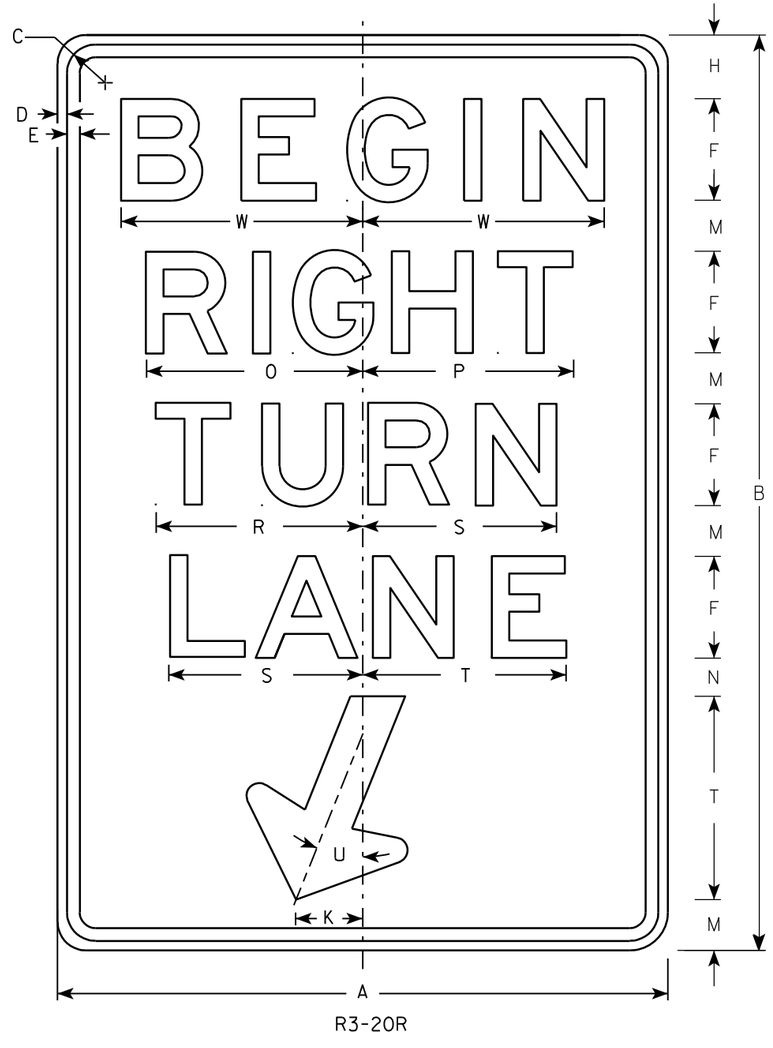
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

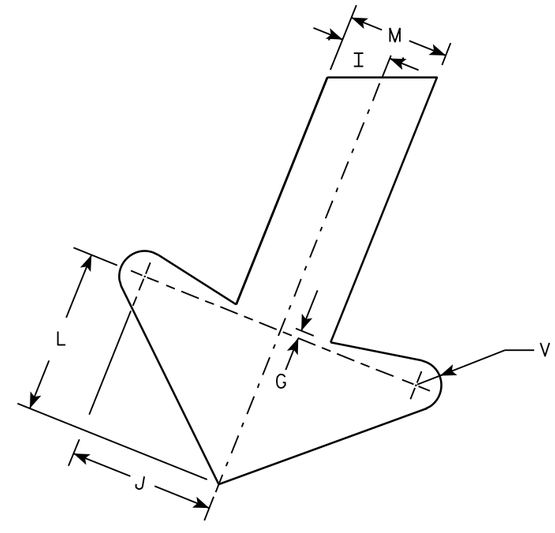
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 126 | E



R3-20R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

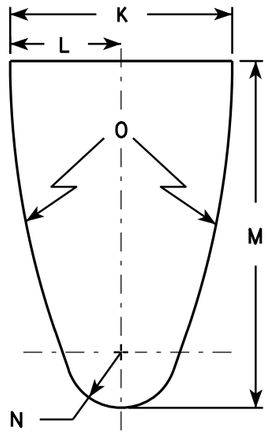
STANDARD SIGN
R3-20R

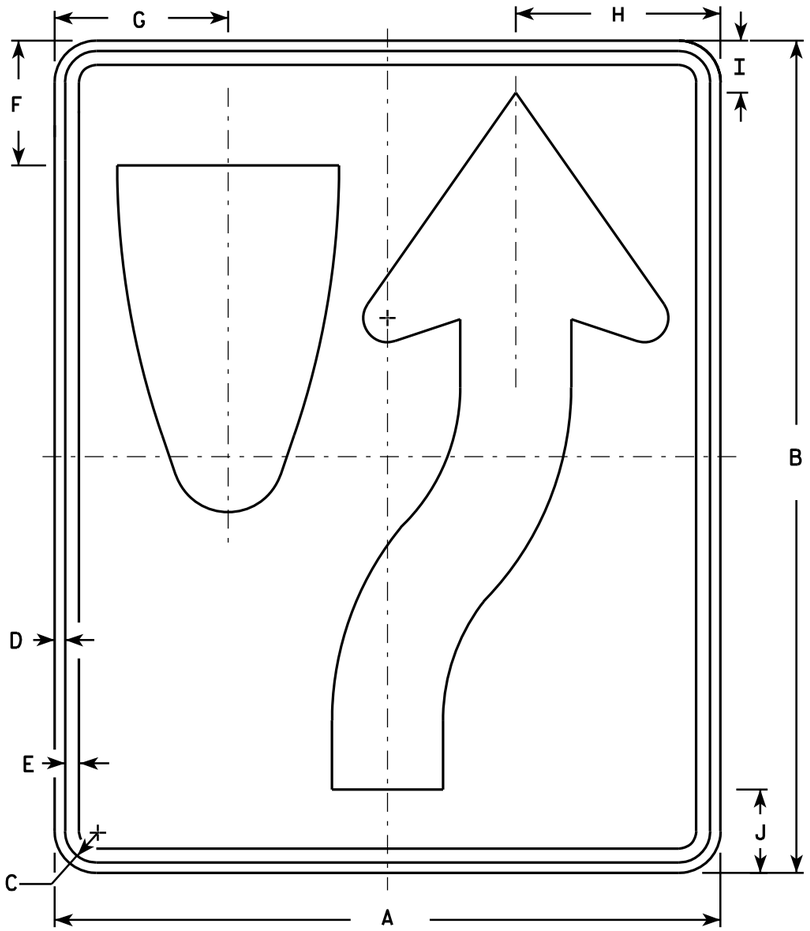
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 127 | E

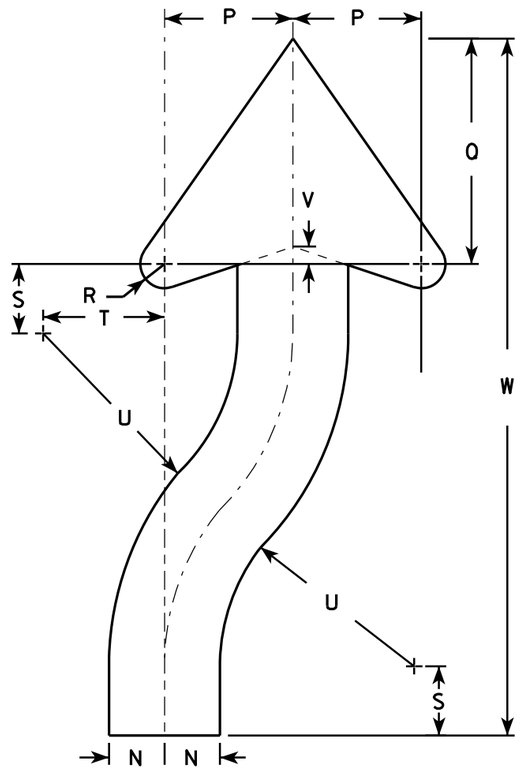




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

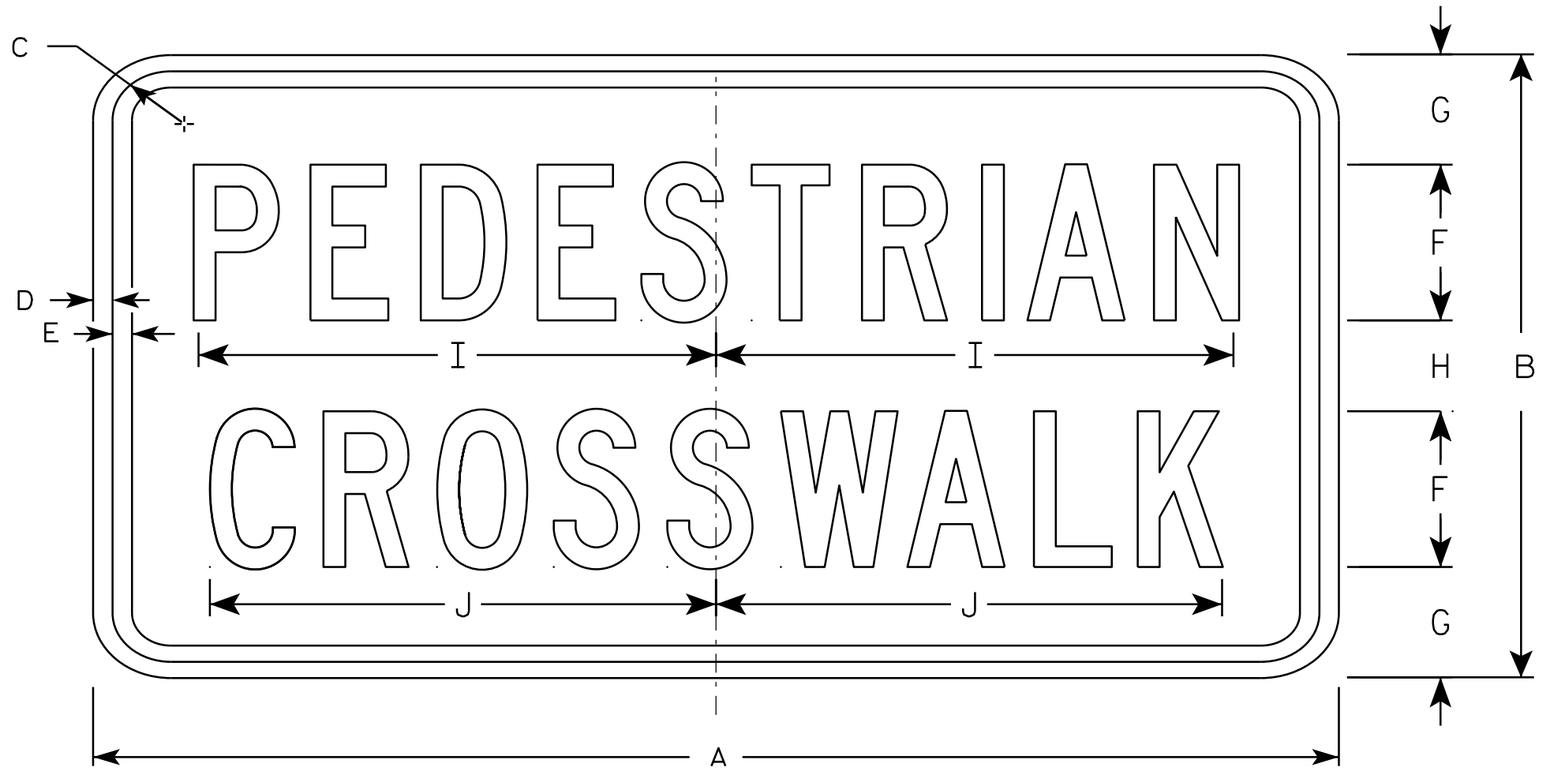
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 128	E



R9-8

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	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	9 3/4																	2.0
2M	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	9 3/4																	2.0
3	30	18	1 3/4	1/2	1/2	4	3 1/2	3	13	13																	3.75
4																											
5																											

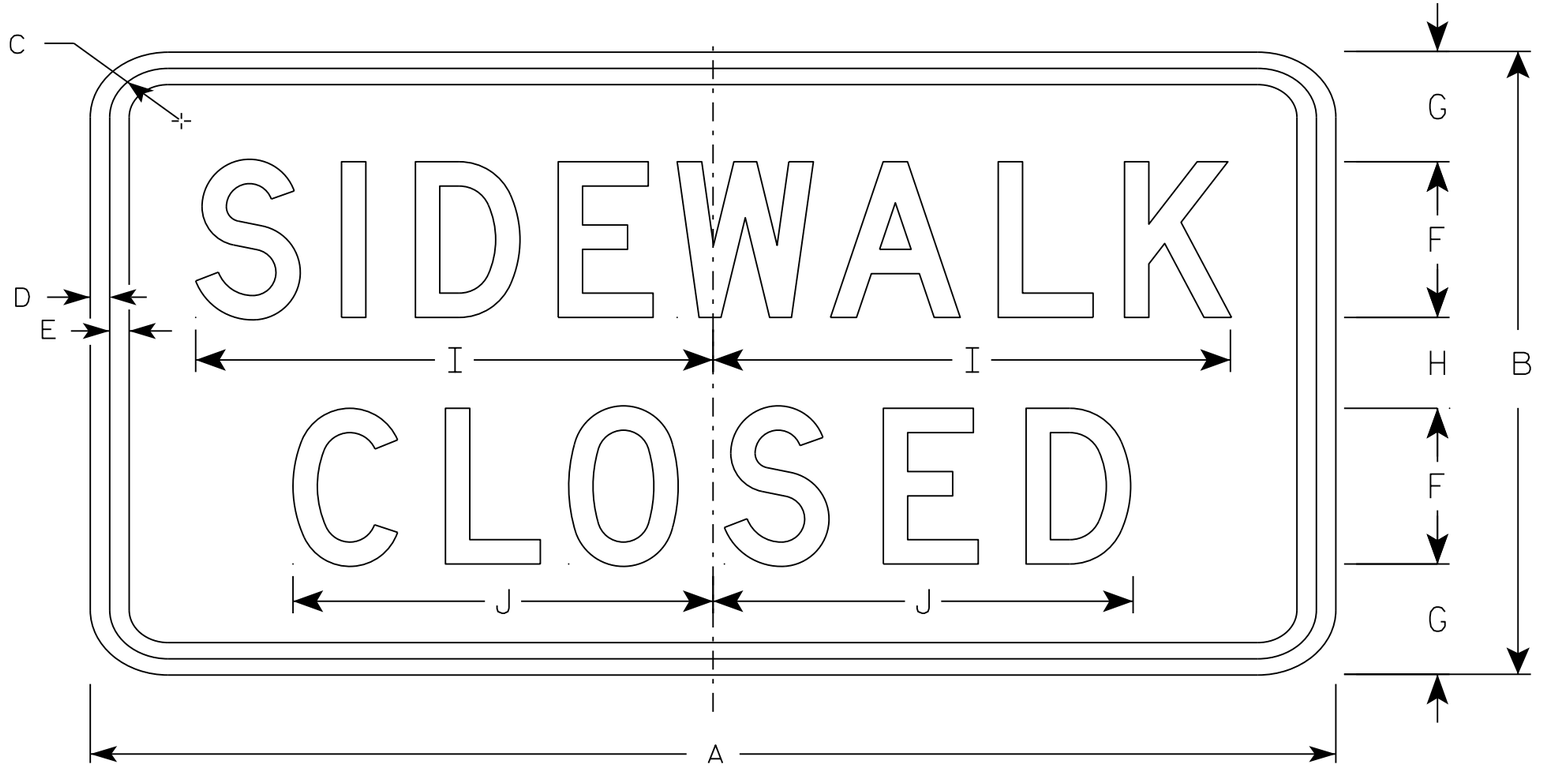
STANDARD SIGN
R9-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/17/16 PLATE 129 R9-8.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



R9-9

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

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

STANDARD SIGN
R9-9

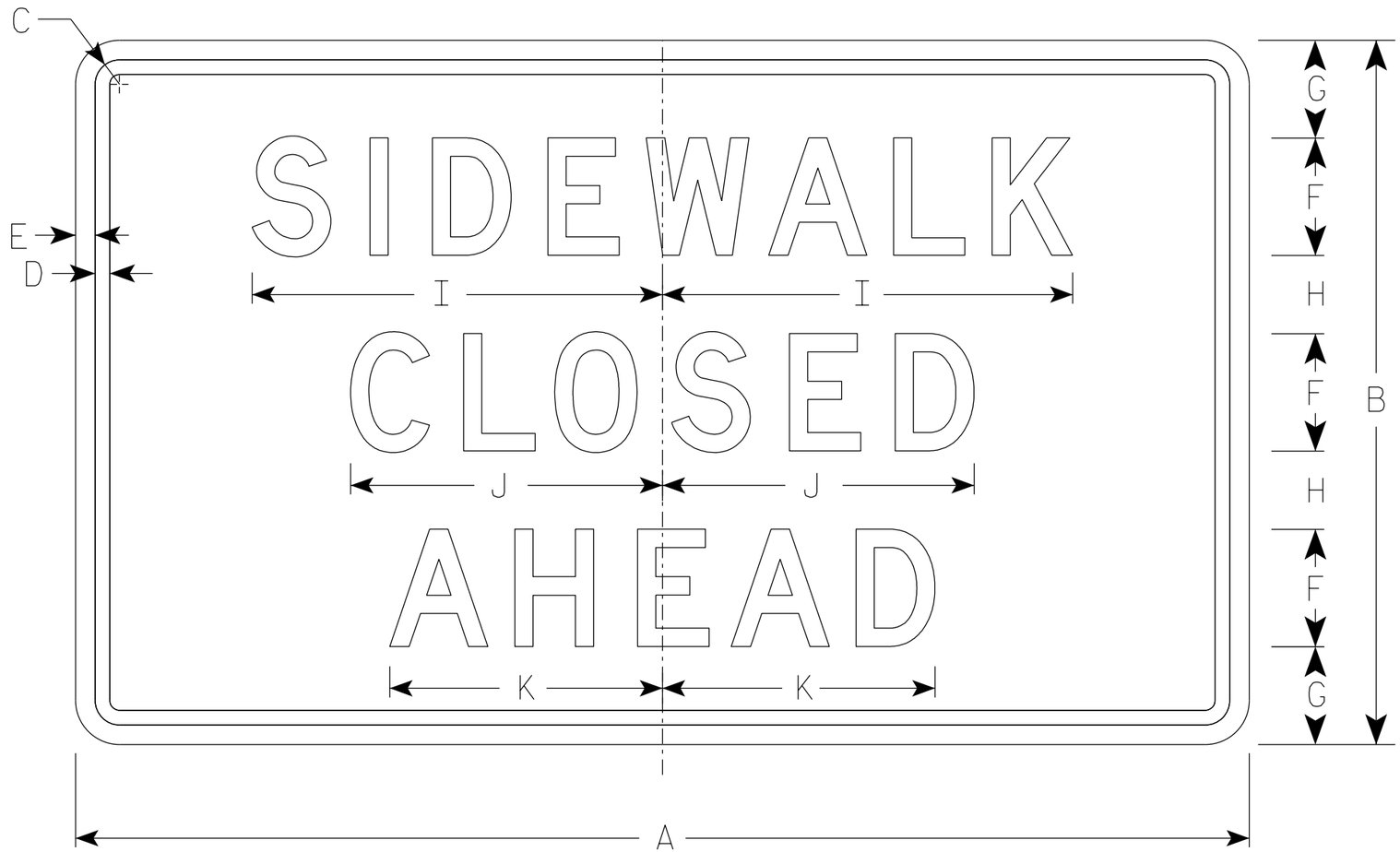
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/11/16 PLATE 130 R9-9.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000



R9-9A

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.

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	18	1 1/8	3/8	1/2	3	2 1/2	2	10 1/2	8	7																3.75
2M	30	18	1 1/8	3/8	1/2	3	2 1/2	2	10 1/2	8	7																3.75
3																											
4																											
5																											

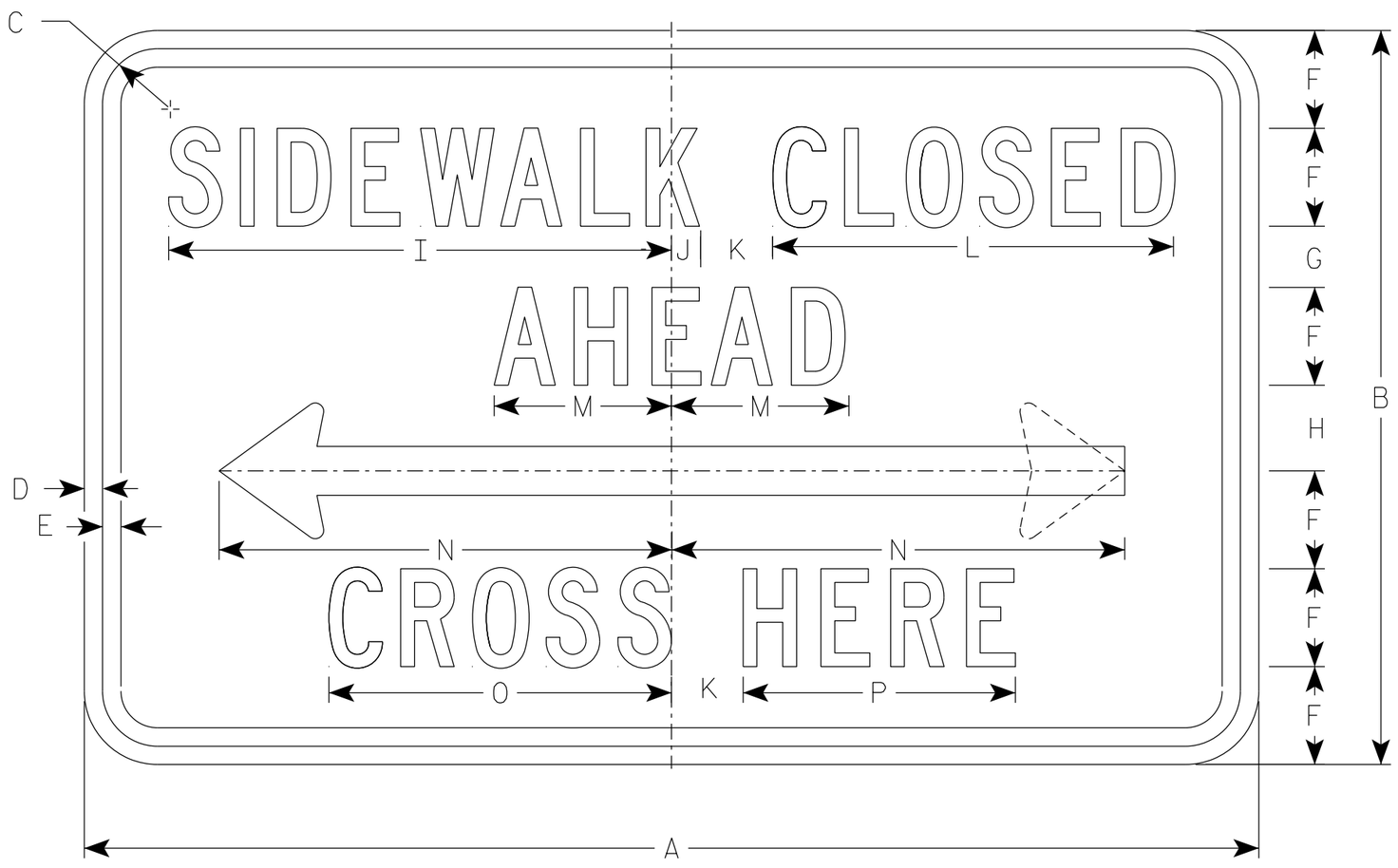
STANDARD SIGN
R9-9A

WISCONSIN DEPT OF TRANSPORTATION

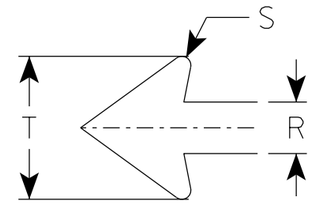
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/31/2020 PLATE NO. R9-9A.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 131 | E



R9-11



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C except Size 1 is Series D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.
6. R9-11 D (double arrow)
   R9-11 L (left arrow)
   R9-11 R (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																											
2S	24	12	1 1/8	3/8	3/8	1 1/2	1 1/2	1 1/2	9 3/4	5/8	1 1/2	7 5/8	3 1/2	9 1/4	6 5/8	5 1/8		1	1/8	2 3/4							2.0
2M	24	12	1 1/8	3/8	3/8	1 1/2	1 1/2	1 1/2	9 3/4	5/8	1 1/2	7 5/8	3 1/2	9 1/4	6 5/8	5 1/8		1	1/8	2 3/4							2.0
3	30	15	1 1/8	3/8	1/2	2	1 1/2	1 1/2	13	3/4	2	10 1/4	4 5/8	12 3/8	8 7/8	6 7/8		1 1/4	1/4	3 5/8							3.125
4																											
5																											

STANDARD SIGN
R9-11

WISCONSIN DEPT OF TRANSPORTATION

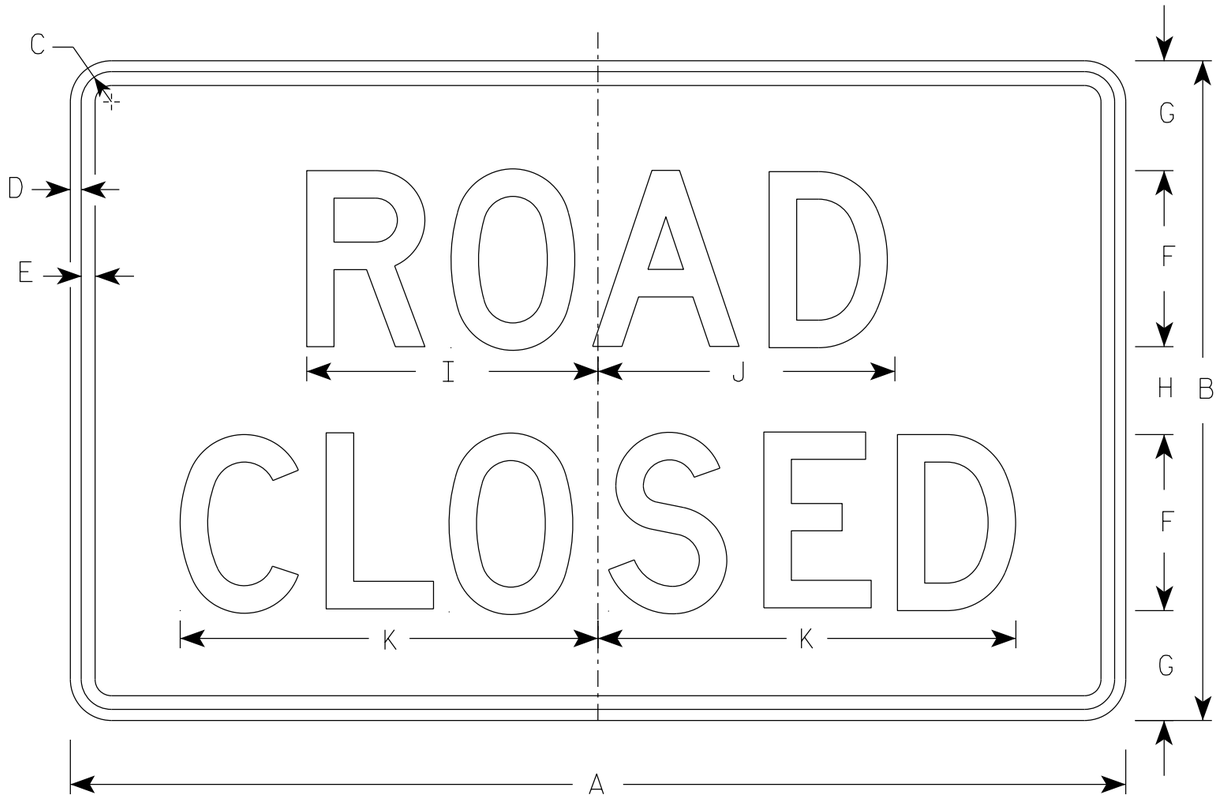
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 3/30/2021 PLATE NO. R9-11.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 132 | E

7

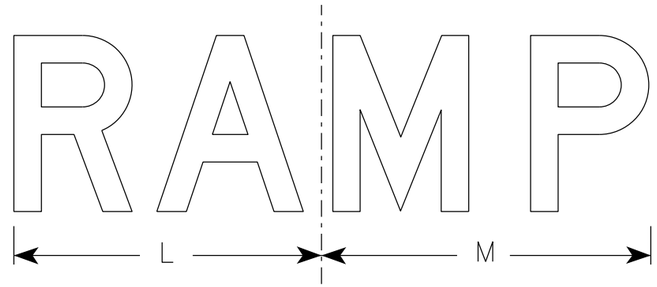
7



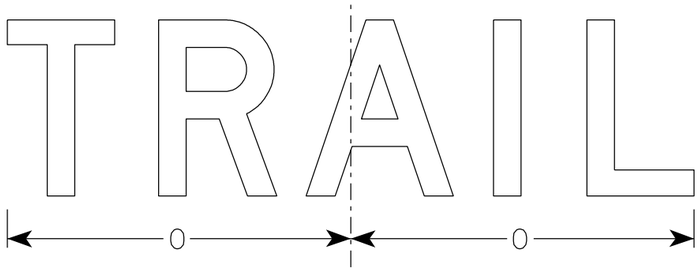
R11-2

NOTES

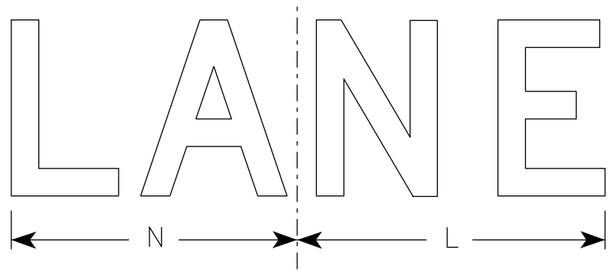
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the 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

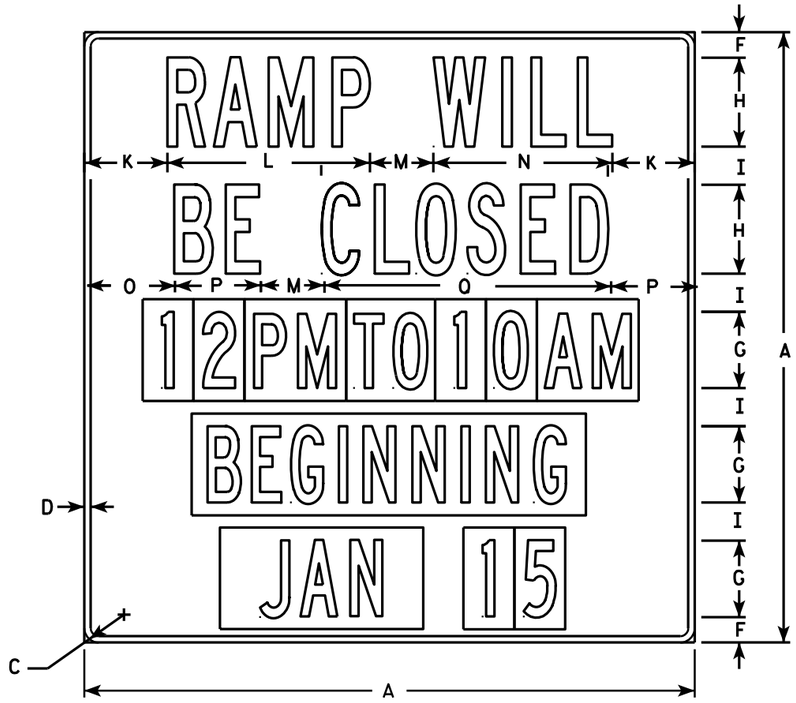
STANDARD SIGN
R11-2

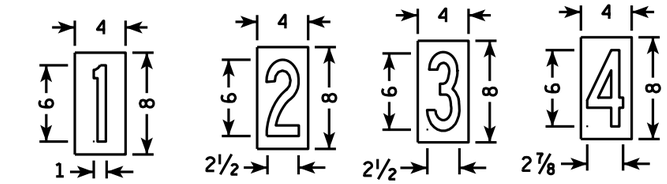
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11

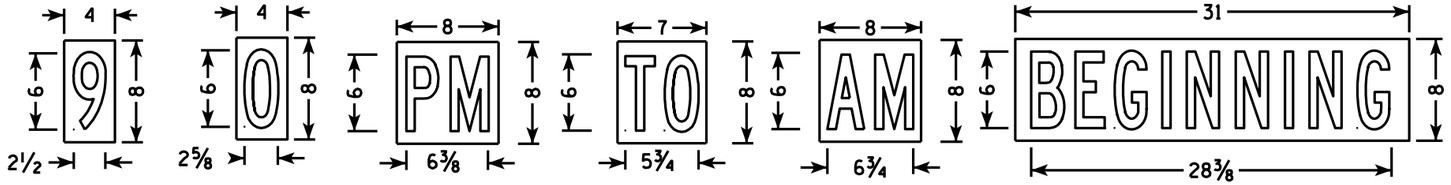
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 133	E

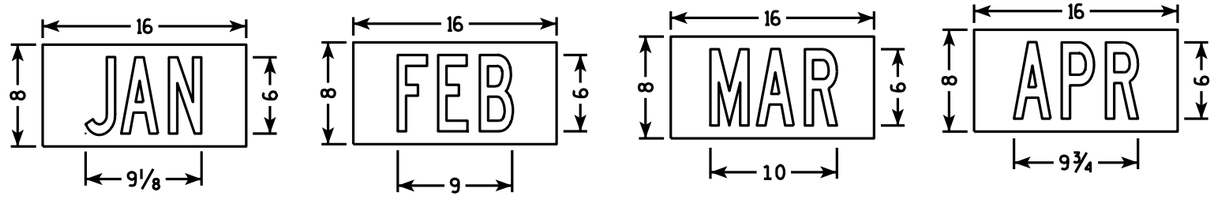


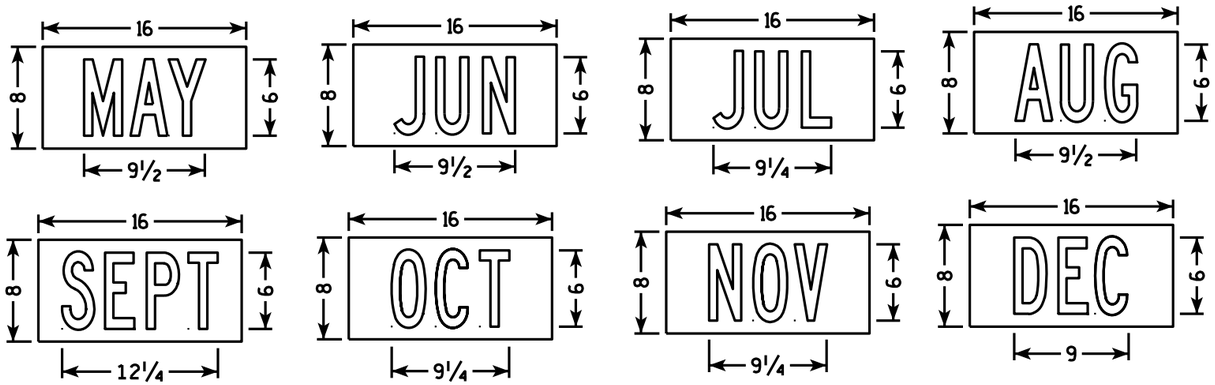


NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - B
4. Message plaques consist of Type H Reflective sheeting with the appropriate non-reflective black message applied to .040 aluminum and screwed to the base sign.









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		2 1/4	1/2		2	6	7	3		6 1/2	15 7/8	5	14 1/8	6 7/8	6 3/4	22 1/2										16.0
2M	48		2 1/4	1/2		2	6	7	3		6 1/2	15 7/8	5	14 1/8	6 7/8	6 3/4	22 1/2										16.0
3																											
4																											
5																											

STANDARD SIGN
R11-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-51.4

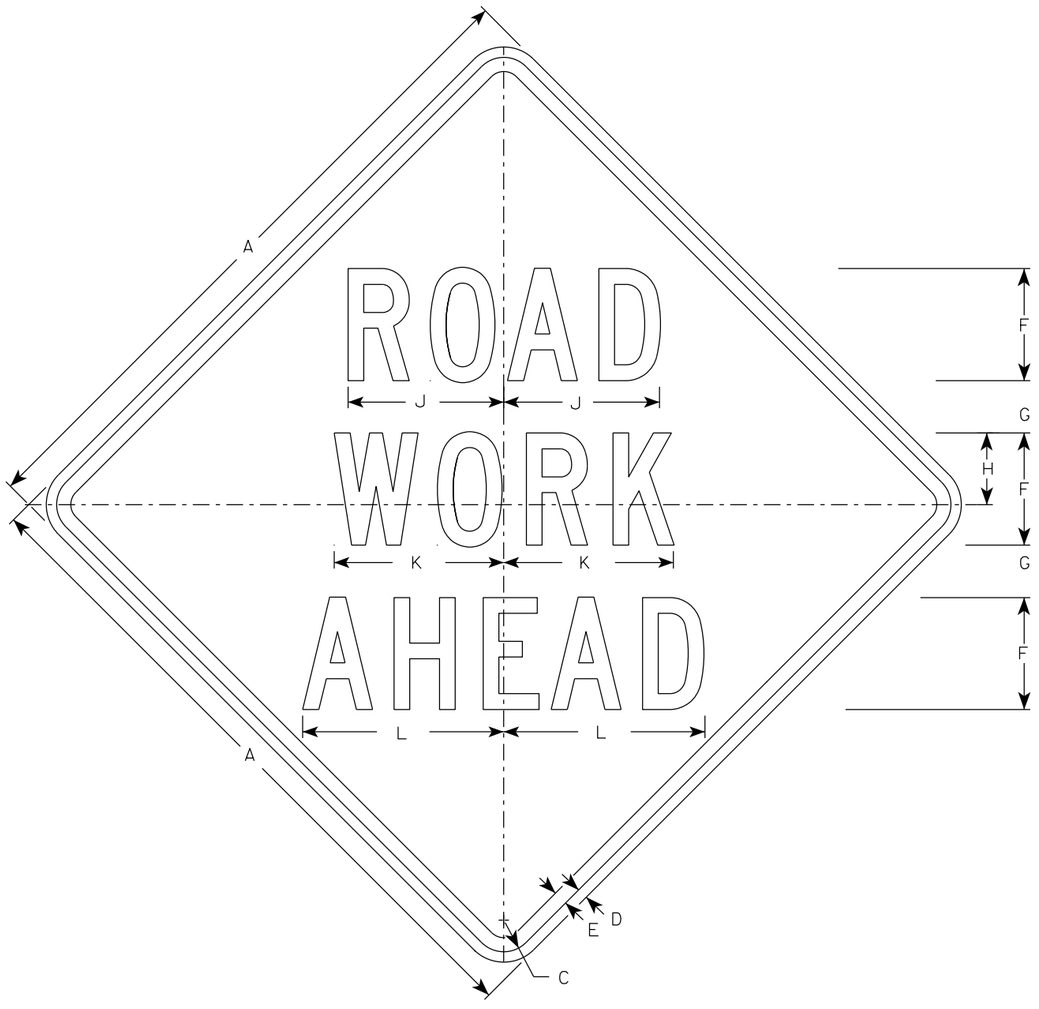
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 134	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R1151.DGN PLOT DATE : 01-APR-2011 14:07 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000

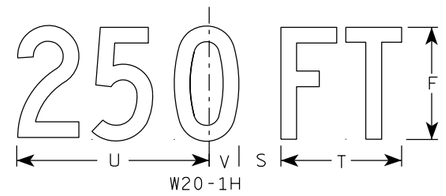
WISDOT/CADDS SHEET 42

7

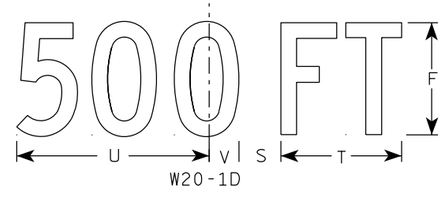
7



W20-1A



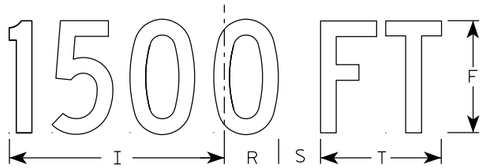
W20-1H



W20-1D



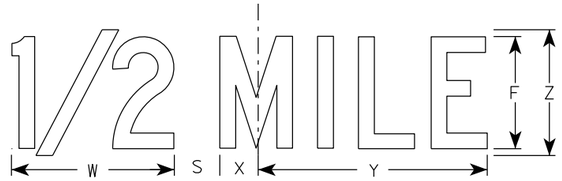
W20-1C



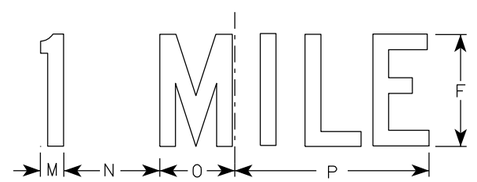
W20-1B

NOTES

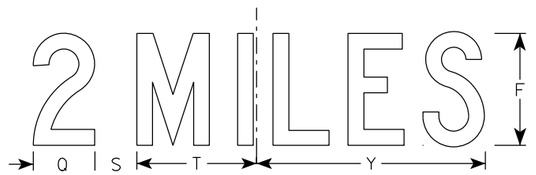
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1G



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:

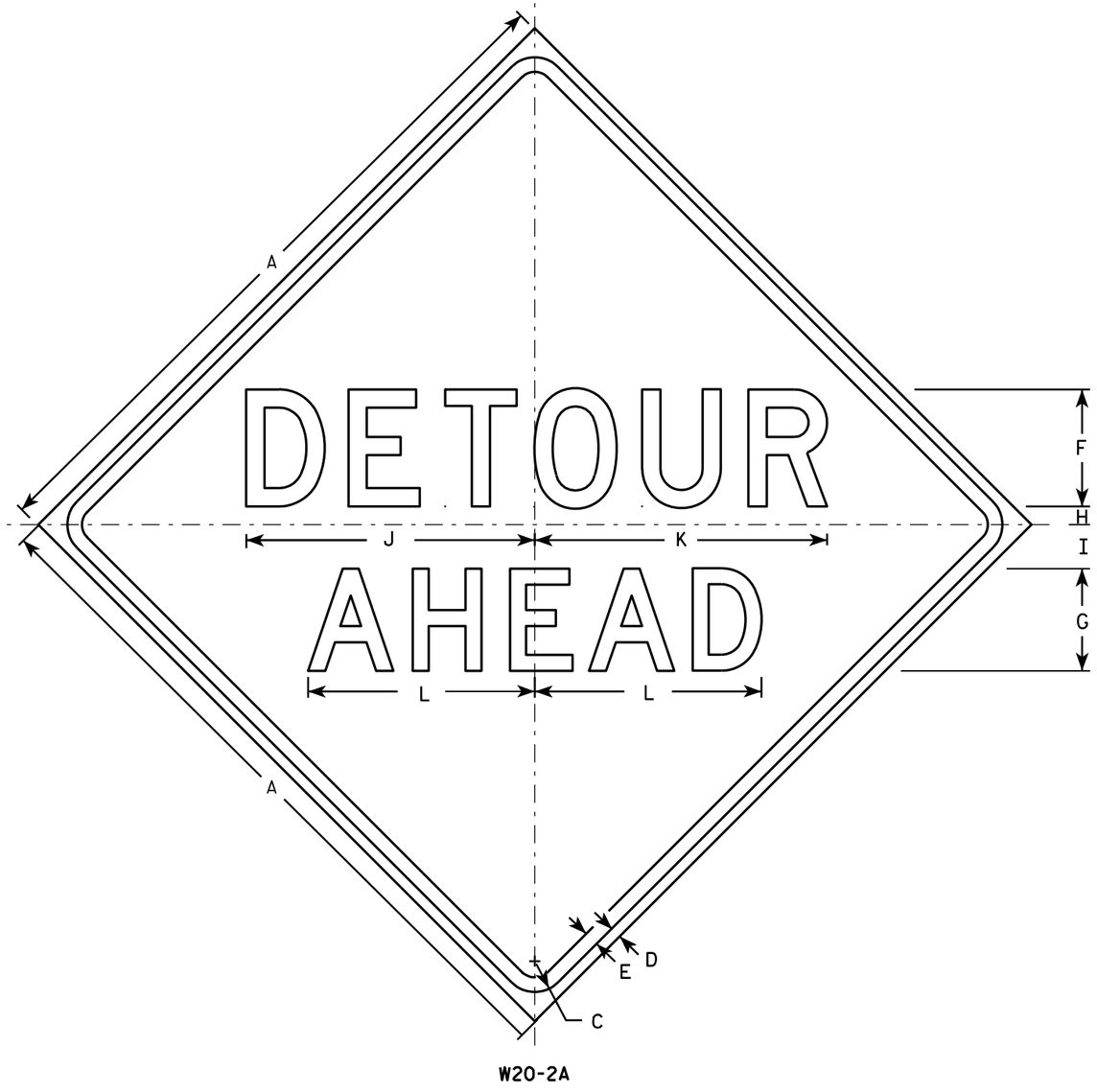
SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 25-MARCH-2020 PLOT BY : dotc4c

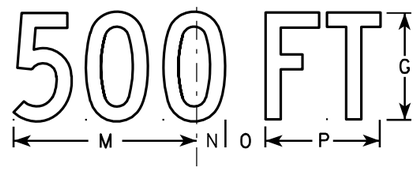
WISDOT/CADDS SHEET 42

7

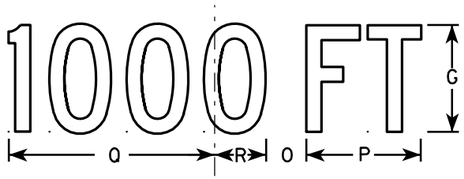
7



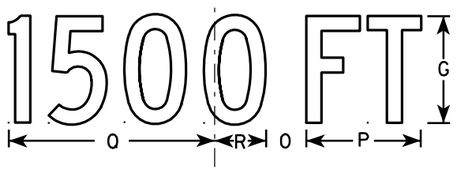
W20-2A



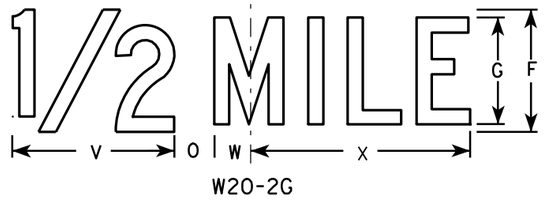
W20-2D



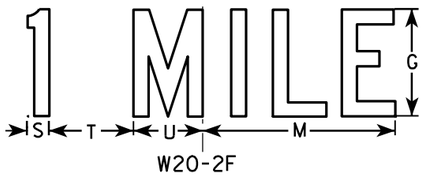
W20-2C



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

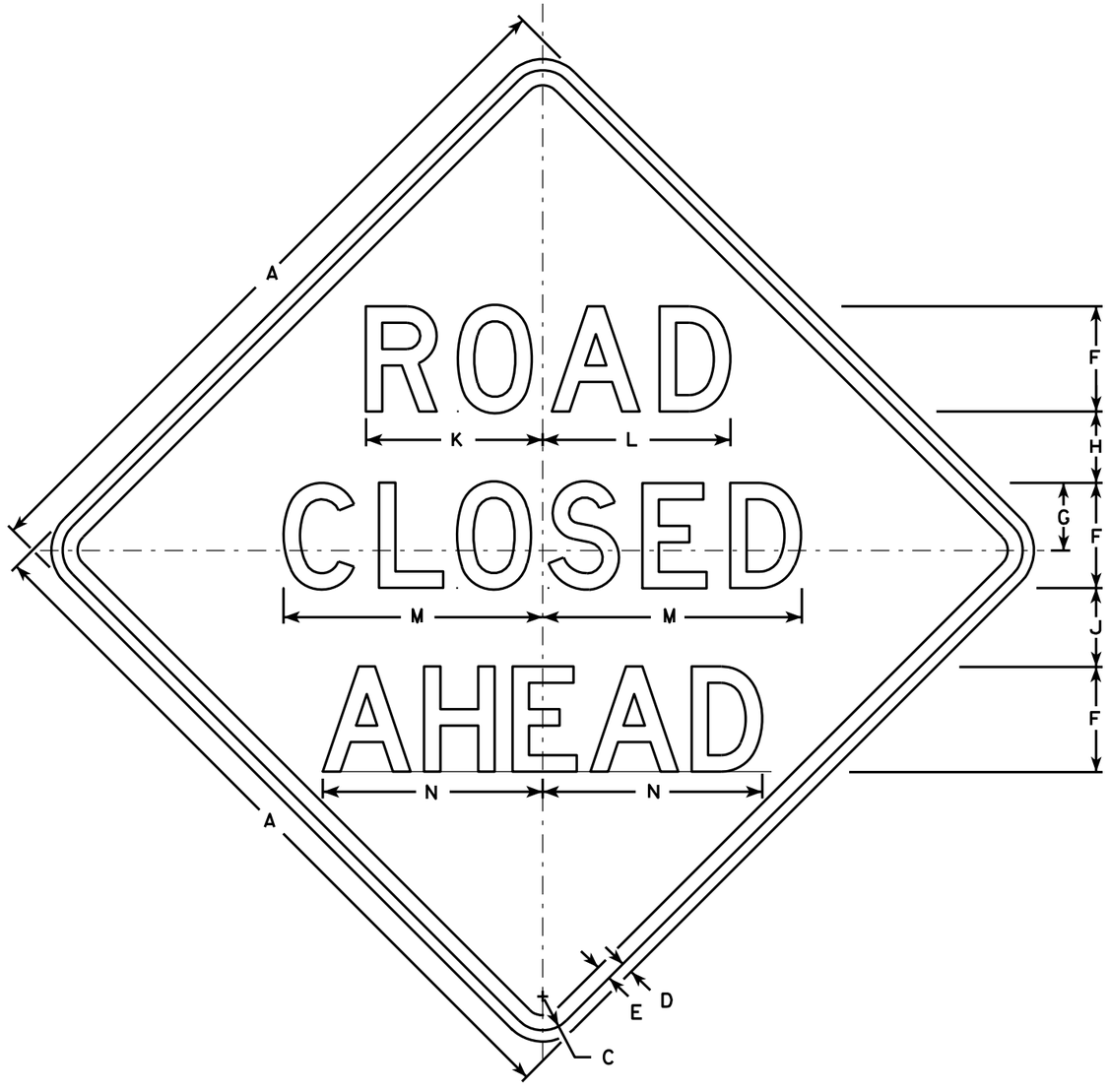
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

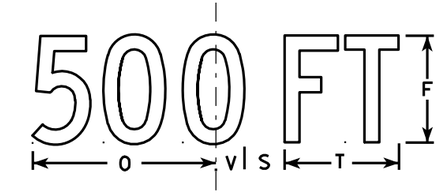
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 136 | E

7

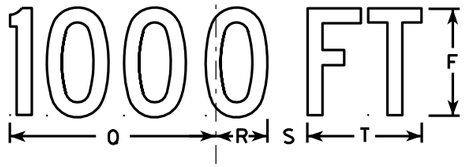
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W202.DGN PLOT DATE : 18-MAR-2011 10:00 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000
WISDOT/CADDS SHEET 42



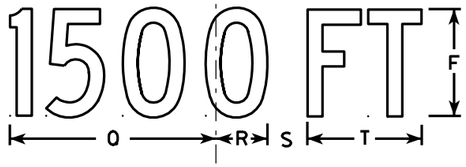
W20-3A



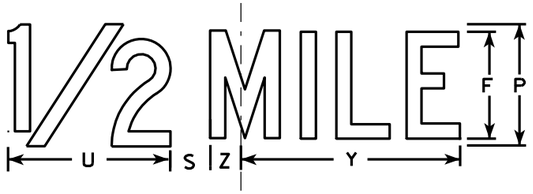
W20-3D



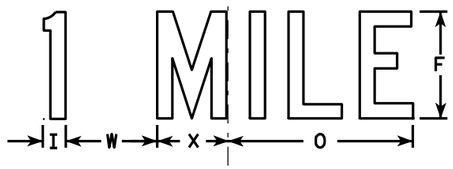
W20-3C



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.
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. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	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

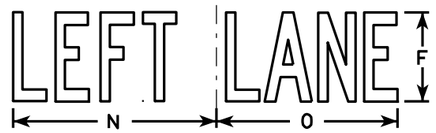
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 137 | E

7

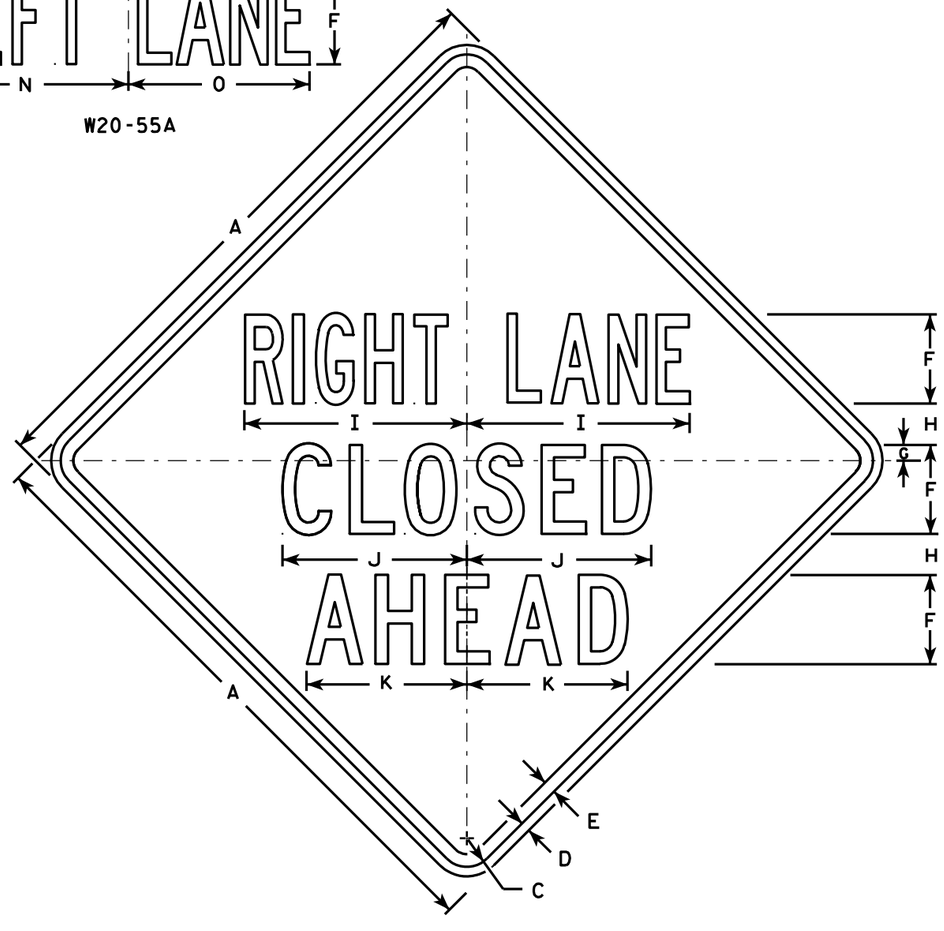
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W203.DGN PLOT DATE : 18-MAR-2011 12:08 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000
WISDOT/CADDS SHEET 42



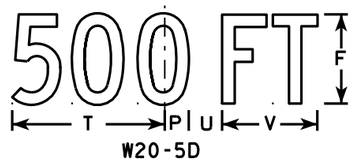
W20-56A



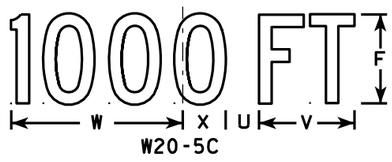
W20-55A



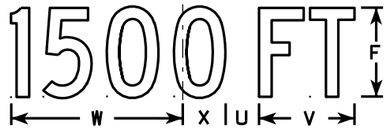
W20-5A



W20-5D



W20-5C



W20-5B



W20-5G



W20-5F

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. " _____ LANE" is Series B.
   All other copy is 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	36	6	1 5/8	5/8	3/4	5	1/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 1/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

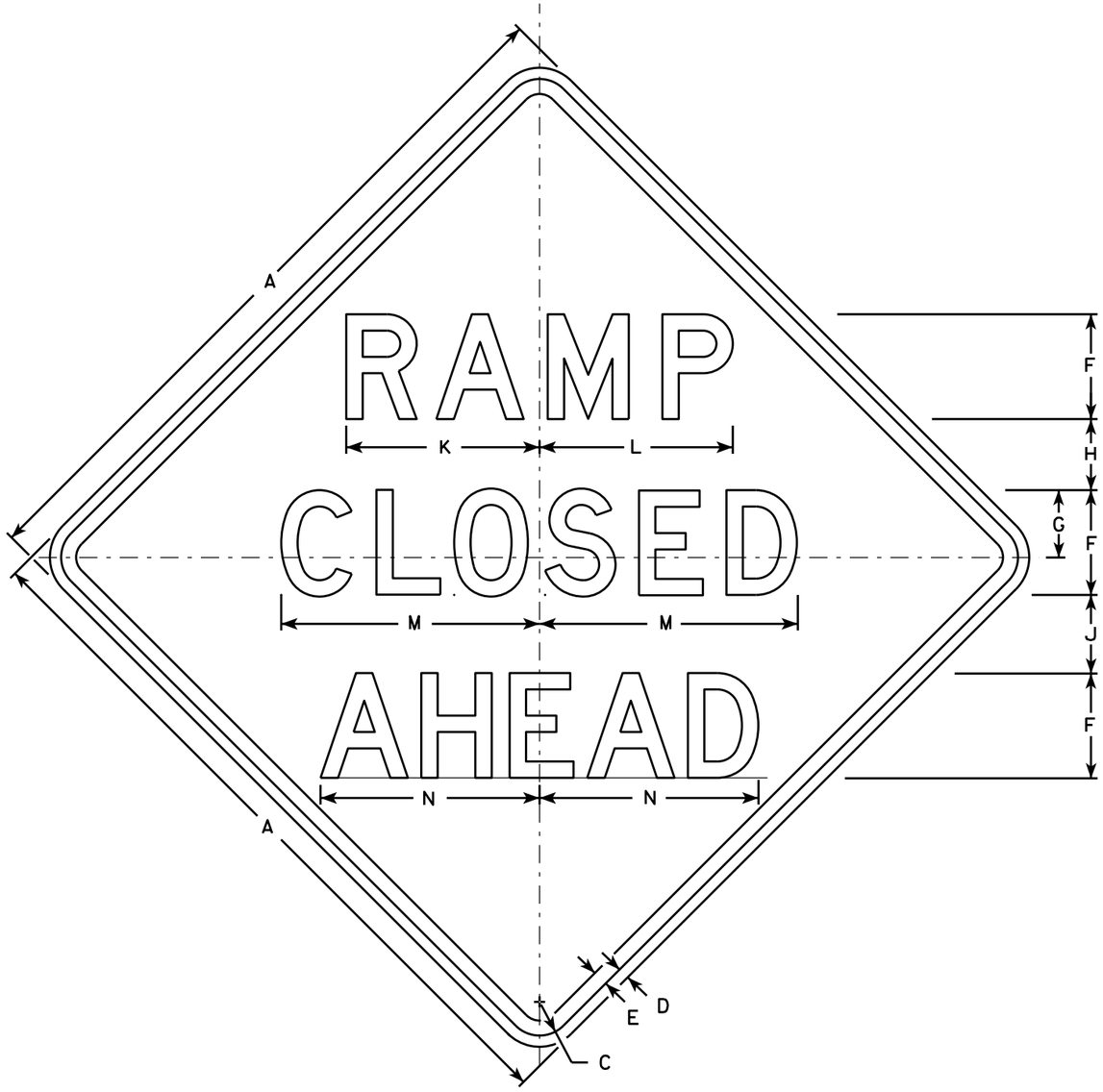
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

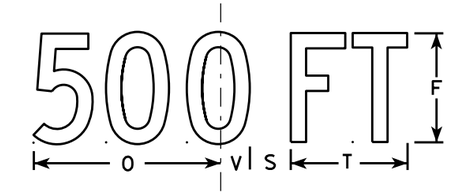
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 138	E

7

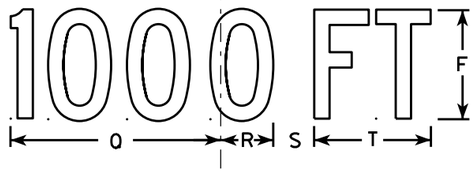
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W205.DGN PLOT DATE : 18-MAR-2011 12:15 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000
WISDOT/CADDS SHEET 42



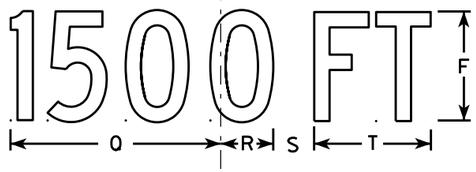
W20-53A



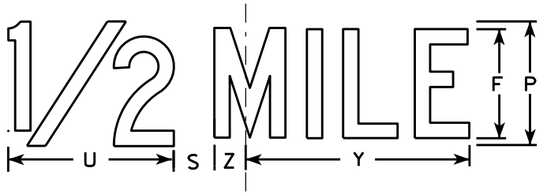
W20-53D



W20-53C



W20-53B



W20-53G



W20-53F

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. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	9 1/4	9 1/4	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	12 7/8	12 7/8	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	12 7/8	12 7/8	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	12 7/8	12 7/8	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	12 7/8	12 7/8	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	12 7/8	12 7/8	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
W20-53A,B,C,D,F,G

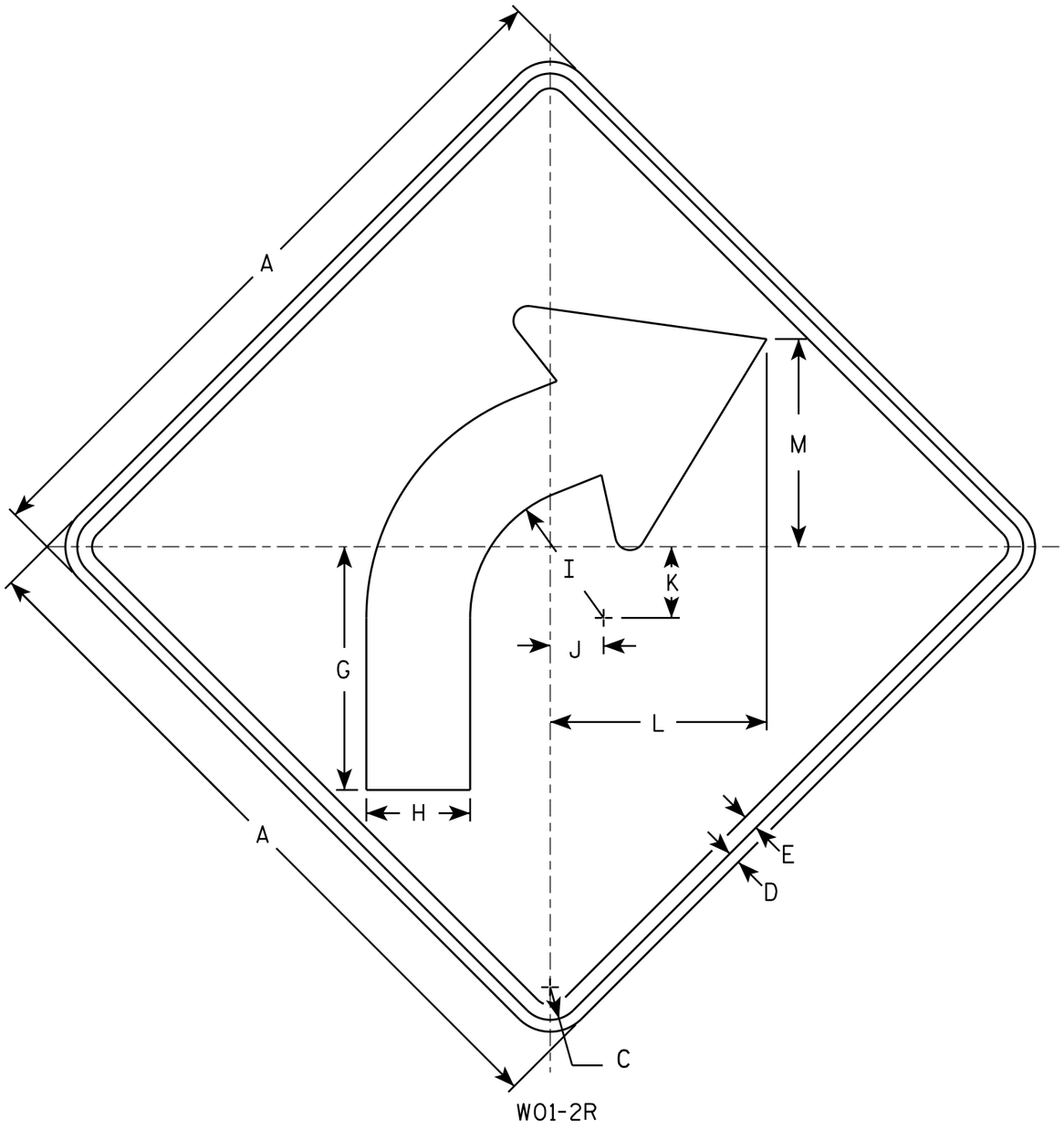
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/27/15 PLATE NO. W20-53.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

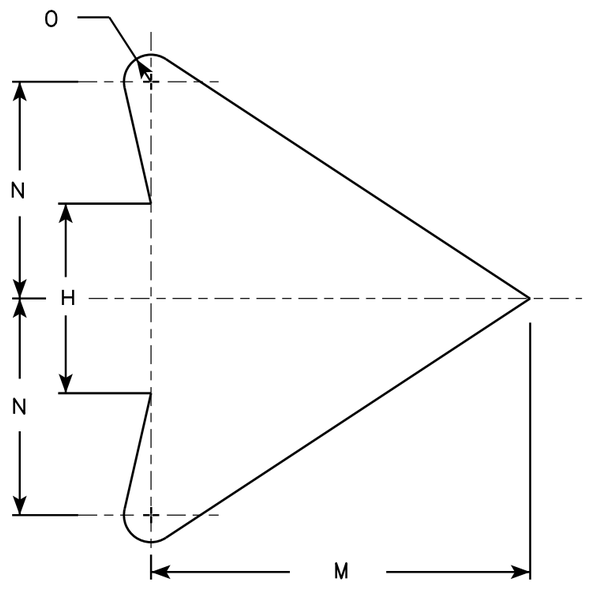
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W2053.DGN PLOT DATE : 27-MAY-2015 19:40 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.729210:1.000000
WISDOT/CADDS SHEET 42



W01-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-2L is the same as W01-2R except the arrow is reversed along the vertical centerline.



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	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												4.0
2S	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0
2M	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0
3	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0
4	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

STANDARD SIGN
W01-2

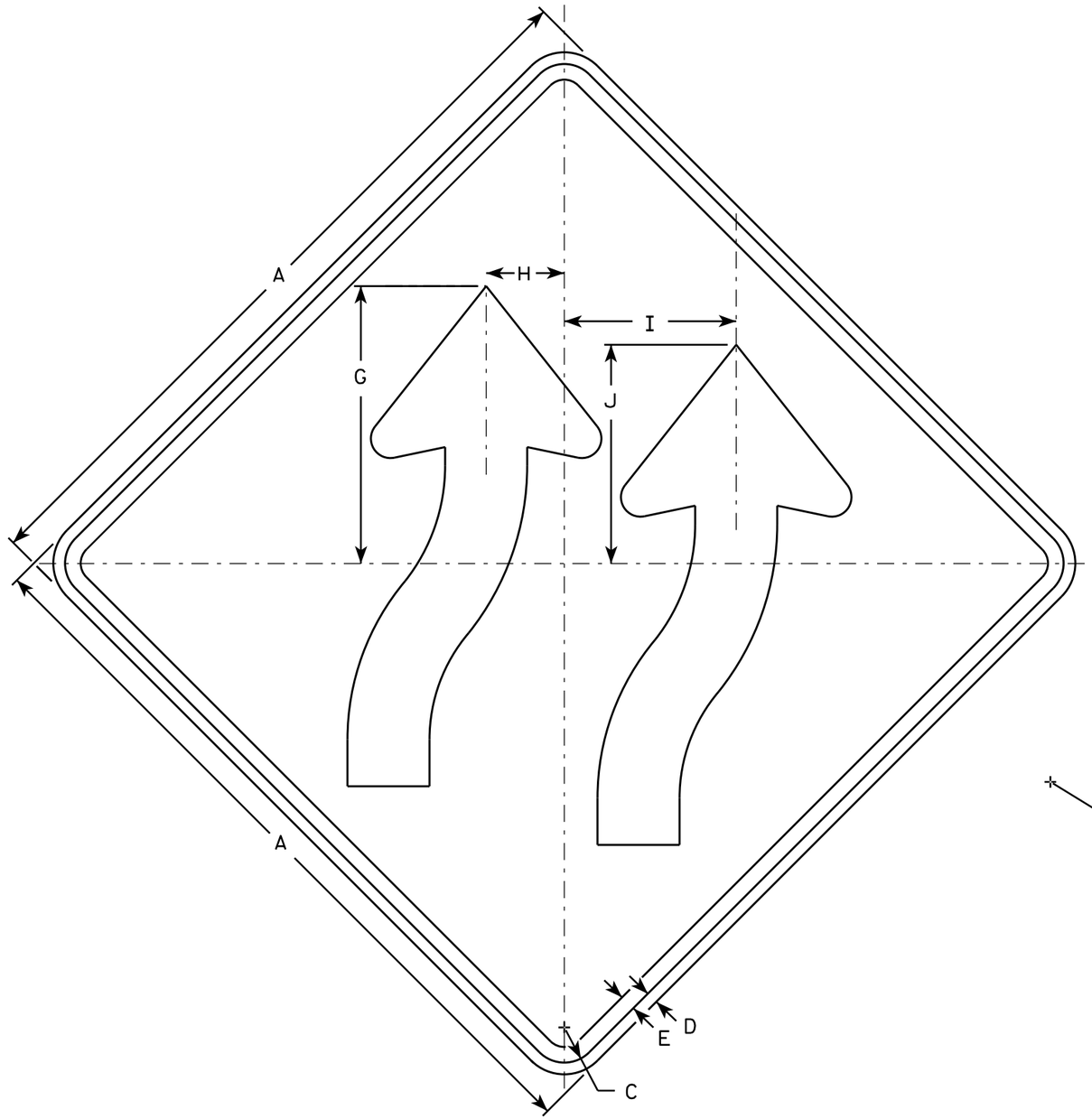
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

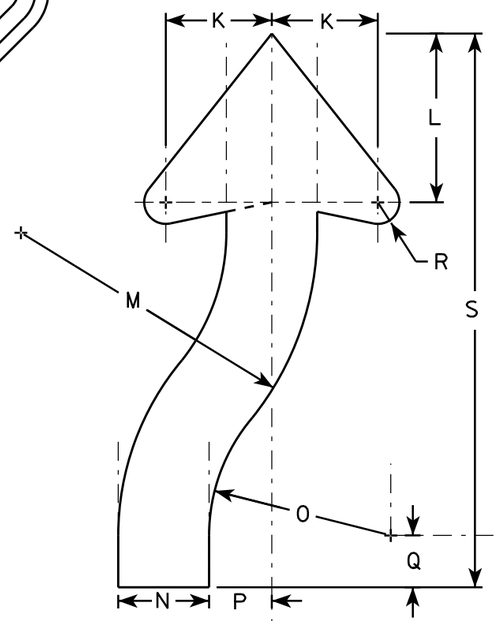
DATE 11/18/13 PLATE NO W01-1.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W012.DGN PLOT DATE : 28-FEB-2014 11:34 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.992871:1.000000 WISDOT/CADDS SHEET 42



W01-4bR



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. 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. W01-4bL is the same as W014-bR exept arrows are reversed along the vertical centerline

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4		13 3/8	3 3/4	8 1/4	10 1/2	4 5/8	7 3/8	12 7/8	3 7/8	7 7/8	2 3/4	2 1/4	7/8	24								9.0
2S	48		2 1/4	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
2M	48		2 1/4	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
3	48		2 1/4	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
4	48		2 1/4	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
5	48		2 1/4	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0

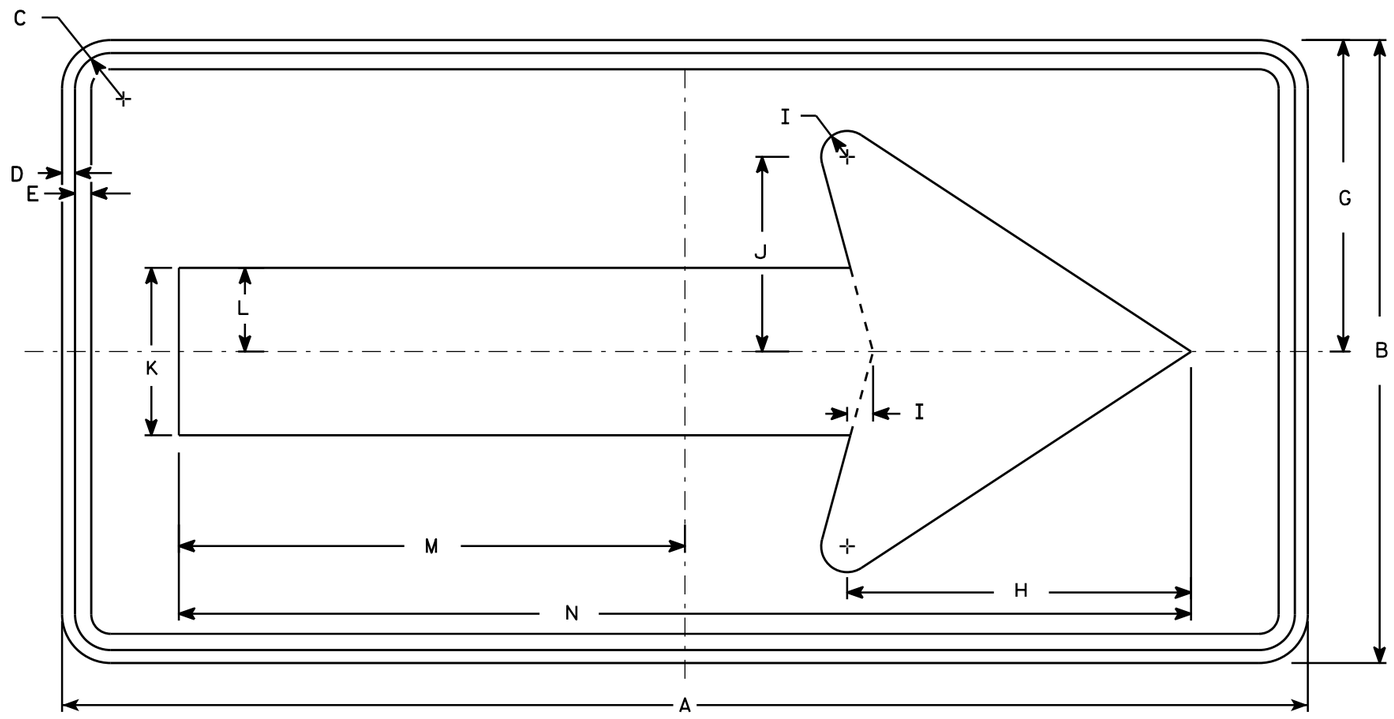
STANDARD SIGN
W01-4b

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-4b.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W01-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

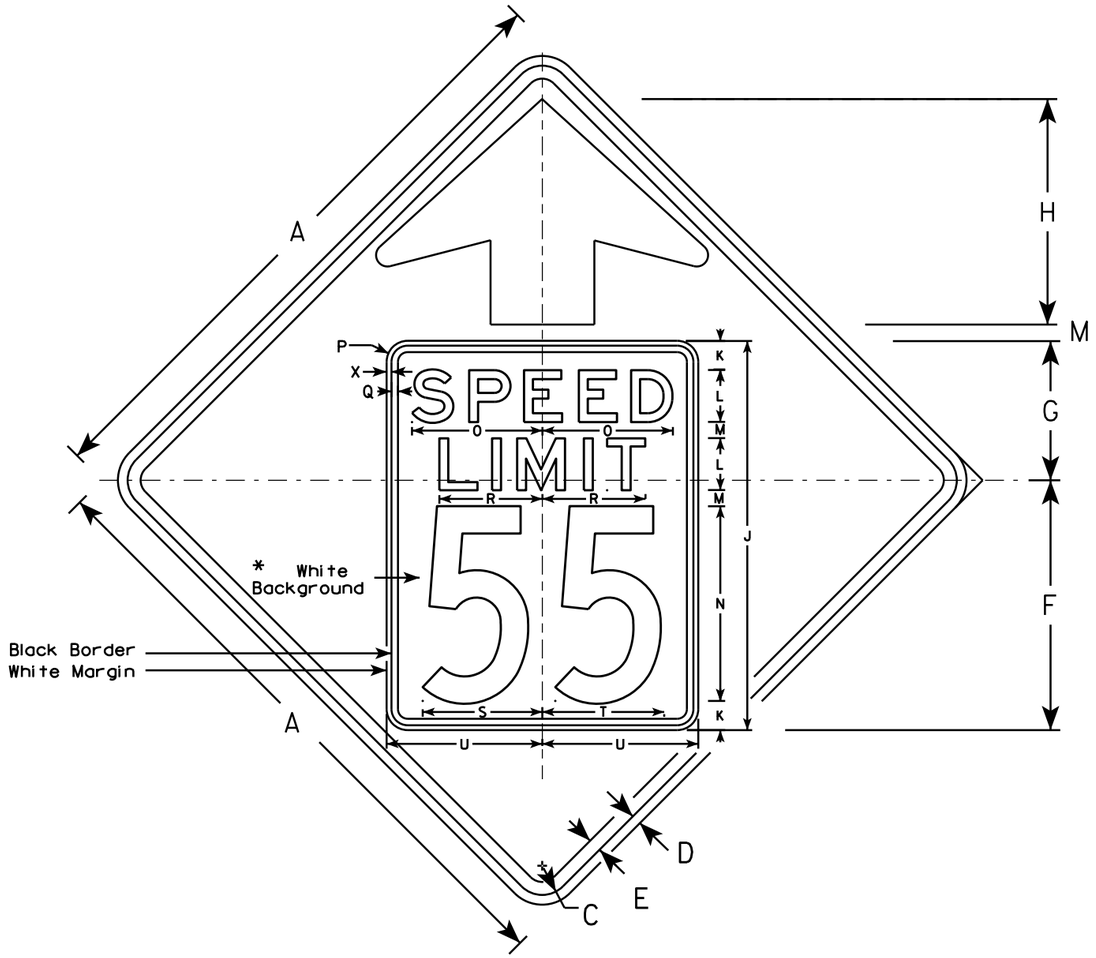
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42

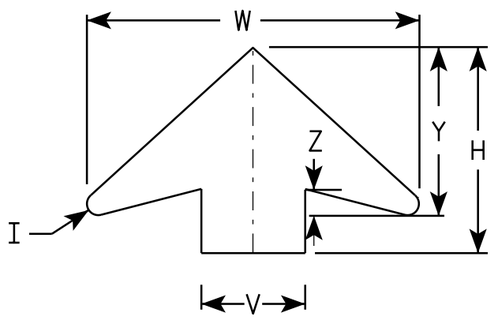


W03-5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color: *
   Background - ORANGE*
   Message - BLACK
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2S	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
2M	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
3	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
4	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN
W03-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

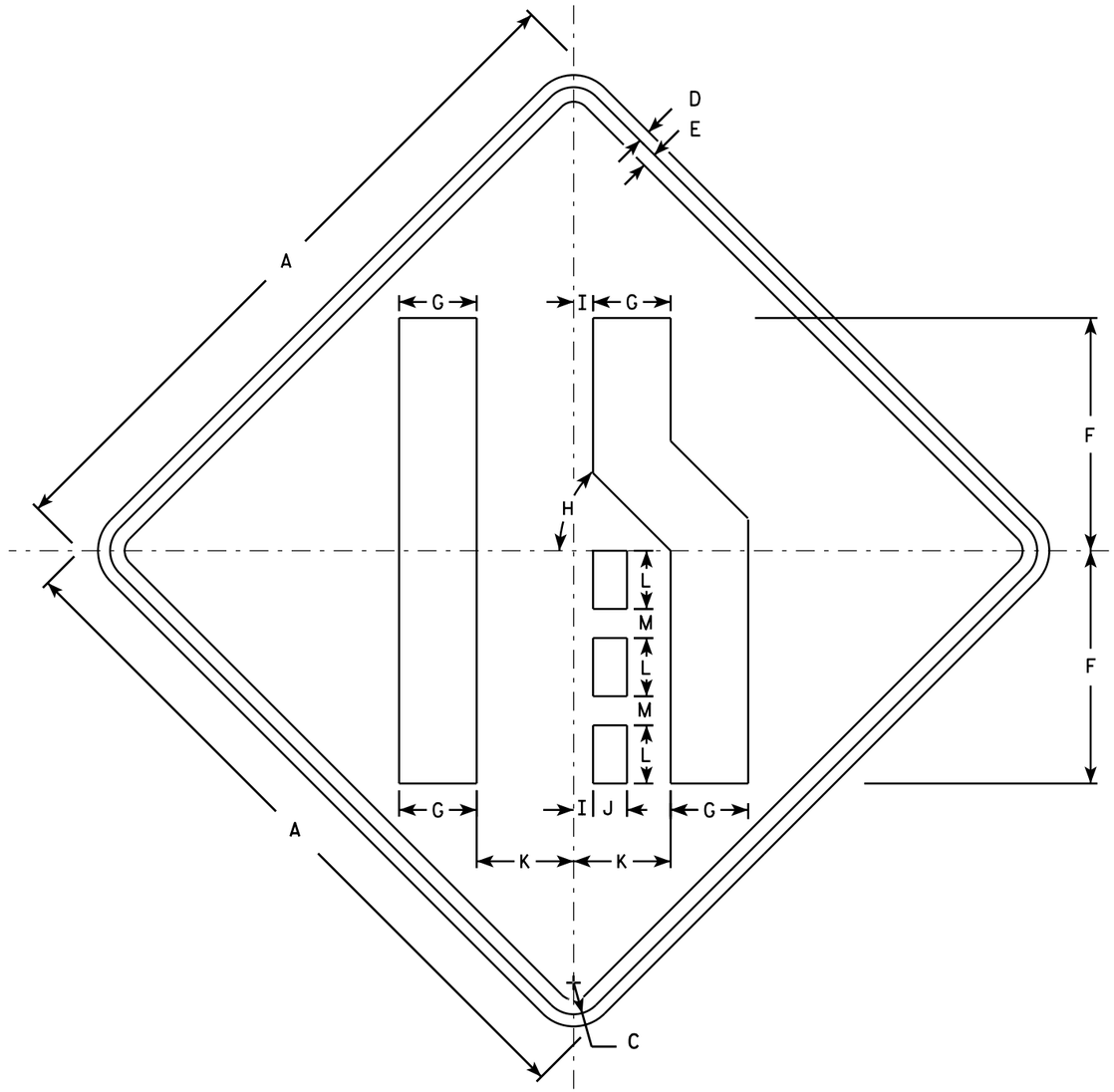
DATE 11/20/13 PLATE W03-5.1

PROJECT NO: SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W035.DGN PLOT DATE : 20-NOV-2013 11:32 PLOT BY : mscsja

WISDOT/CADDS SHEET 42

7 7



W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W04-2

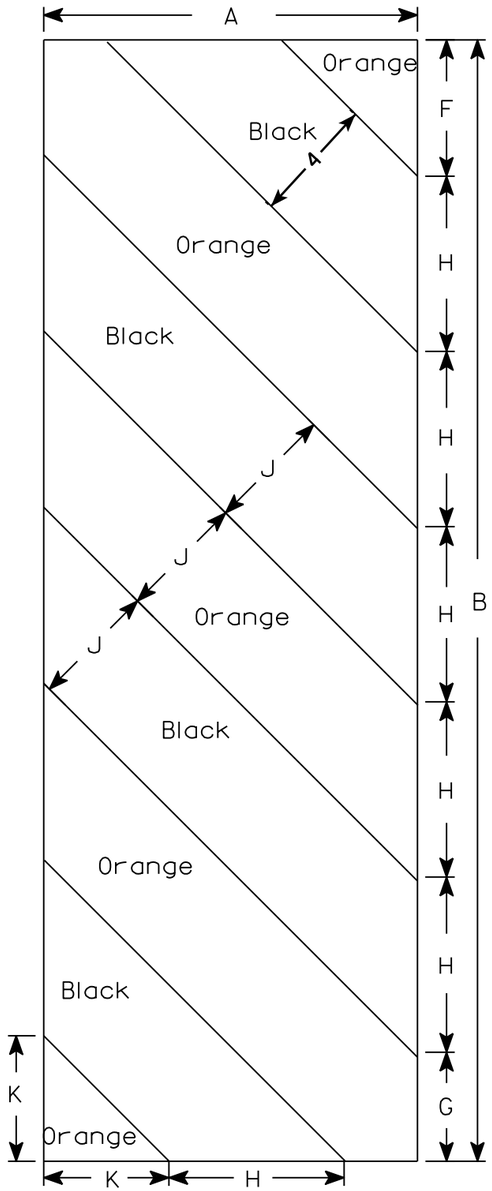
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

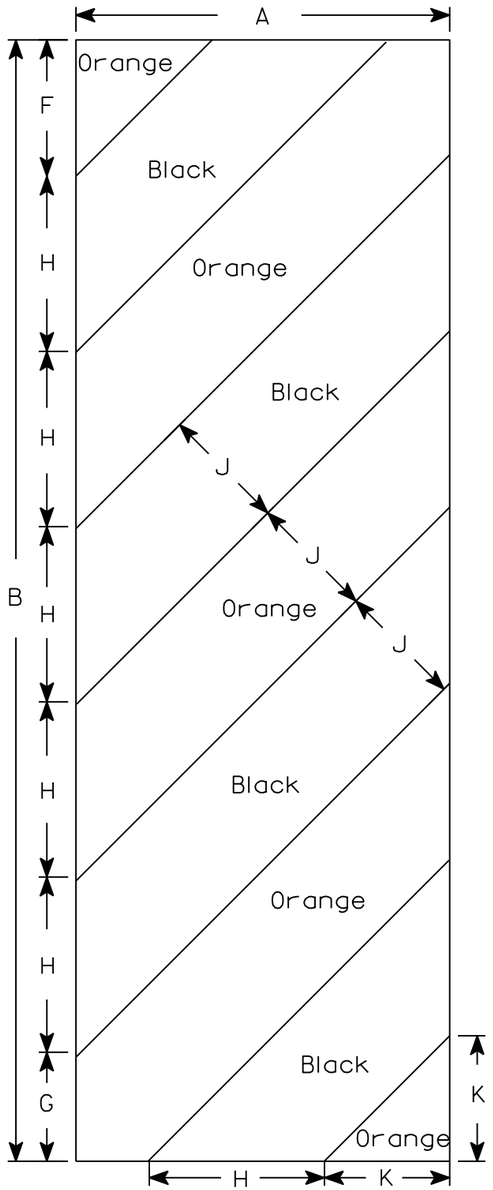
DATE 11/20/13 PLATE 144 W04-2.1

PROJECT NO:

SHEET NO: E



W05-52L



W05-52R

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. 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. Alternate colors of stripes as shown.

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	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54				6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN

W05-52L & W05-52R

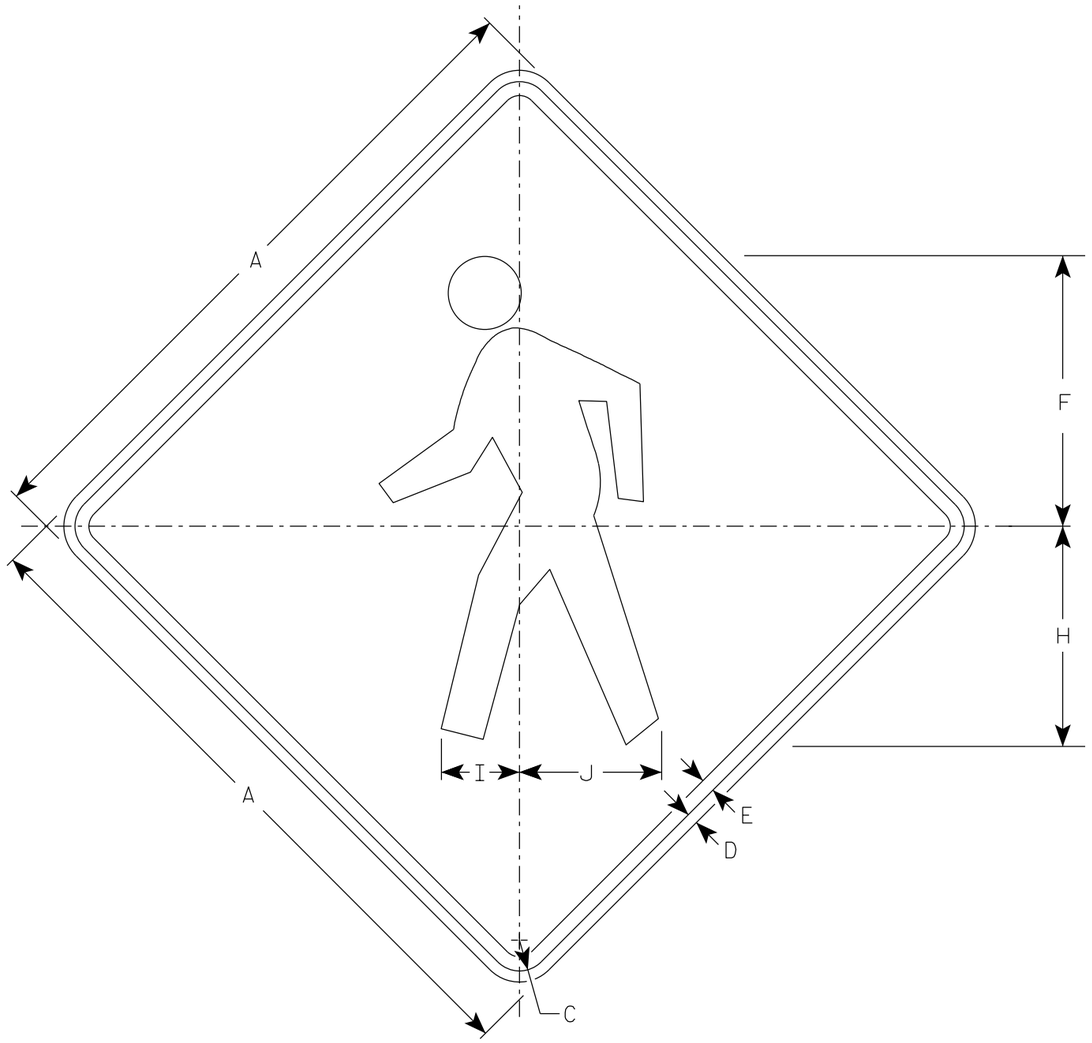
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE W05-52.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W0552.DGN PLOT DATE : 28-FEB-2014 11:39 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 4.864607:1.000000
WISDOT/CADDS SHEET 42



WO11-2

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
2S	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
2M	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
3	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
4	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

STANDARD SIGN

WO11-2

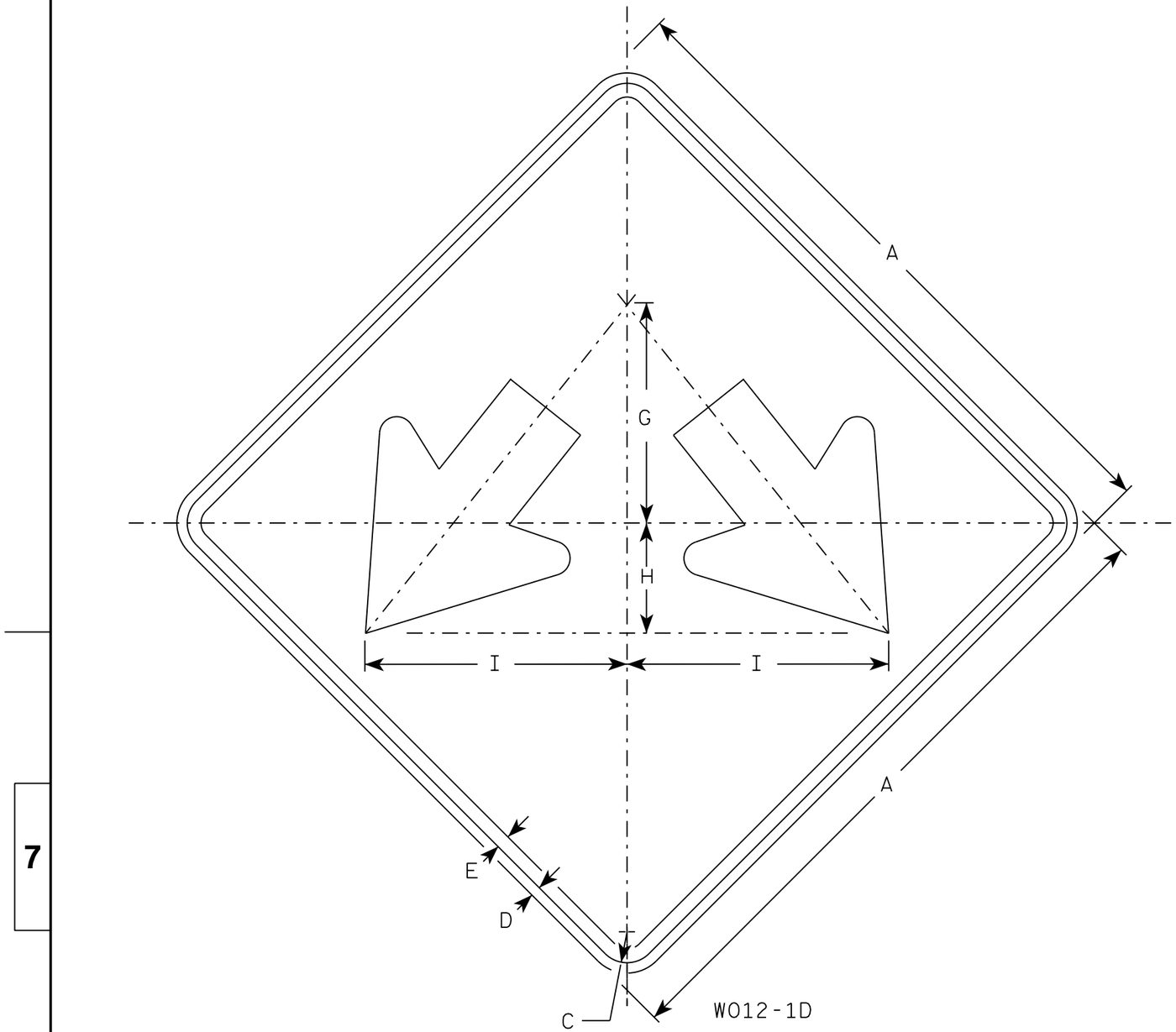
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

DATE 4/8/2020 PLATE NO. WO11-2.1

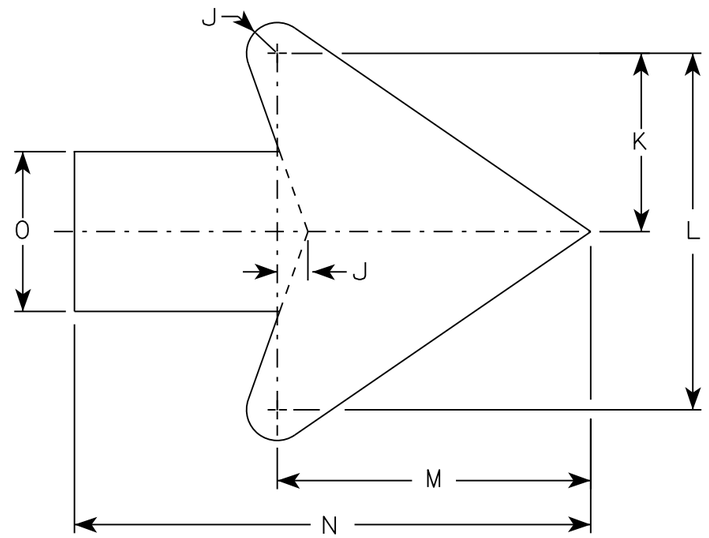
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 146	E



W012-1D

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2S	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0

STANDARD SIGN
W012-1D

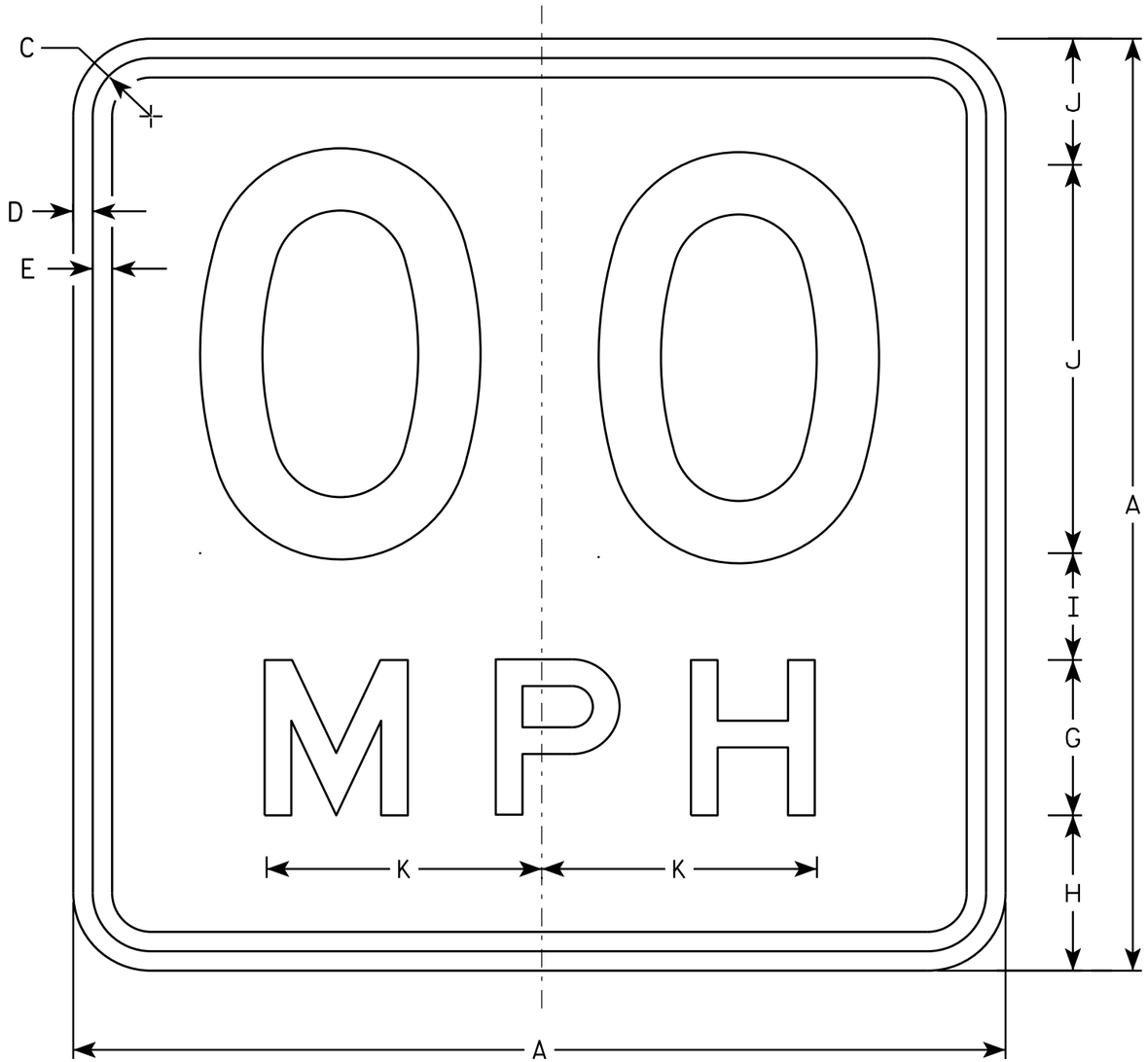
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/28/16 PLATE NO W012-1D.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CADfiles\Projects\tr_stdplate\W0121D.DGN PLOT DATE : 11-AUG-2016 11:28 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.621375:1.000000



W013-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	7 1/8																4.00
2S	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
2M	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
3	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

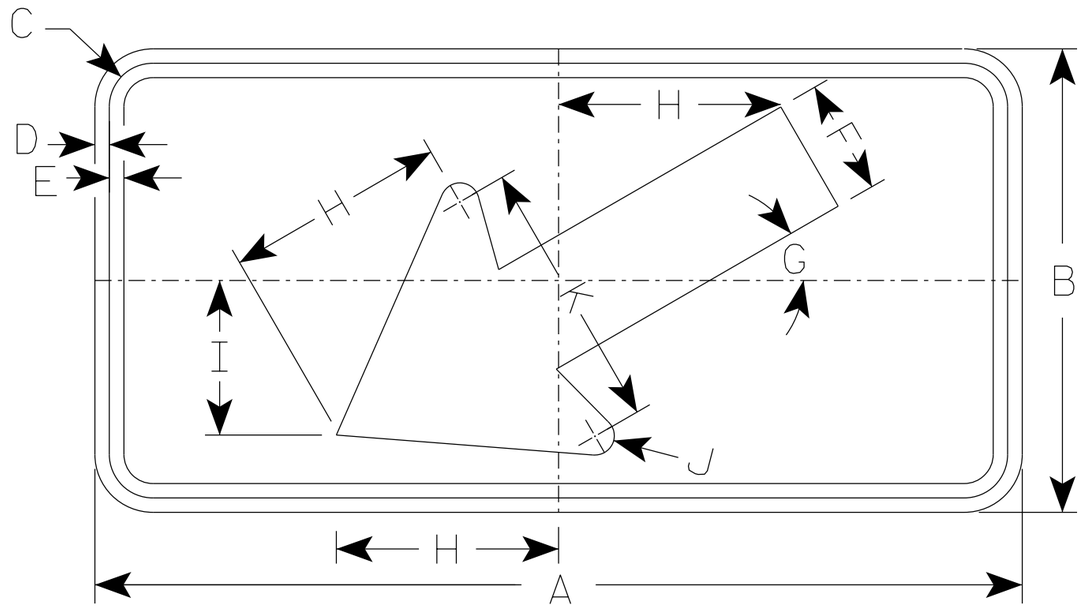
STANDARD SIGN
W013-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/21/13 PLATE 148 W013-1.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W016-7L

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded but corners shall be rounded when base material is metal.
4. W016-7R is the same as W016-L except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/8	3/8	1/2	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2S	48	24	1 3/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
2M	48	24	1 3/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
3	48	24	1 3/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
4	48	24	1 3/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
5	48	24	1 3/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0

STANDARD SIGN
W016-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

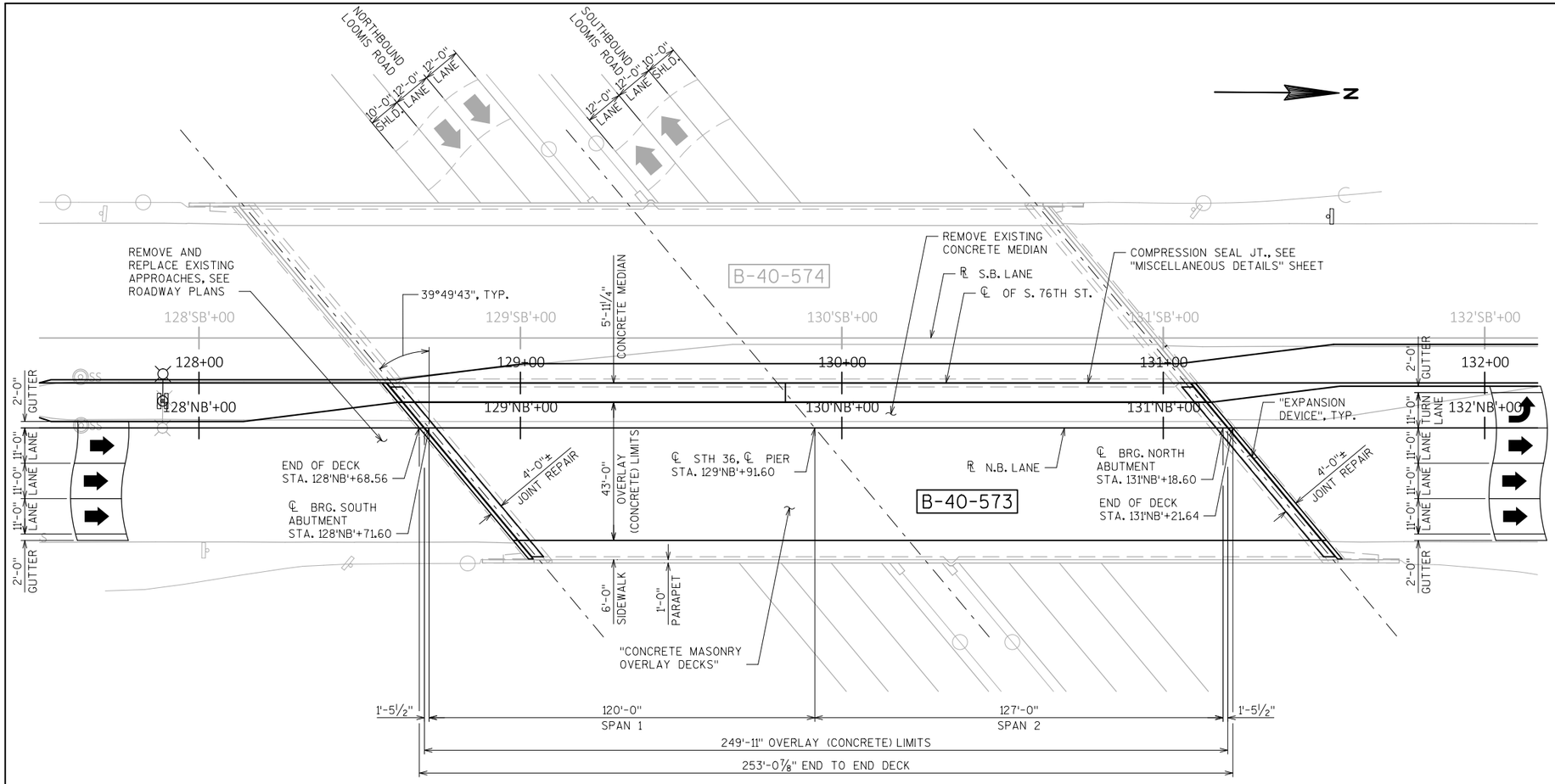
DATE 3/16/2021 PLATE NO. W016-7.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 149 E

7

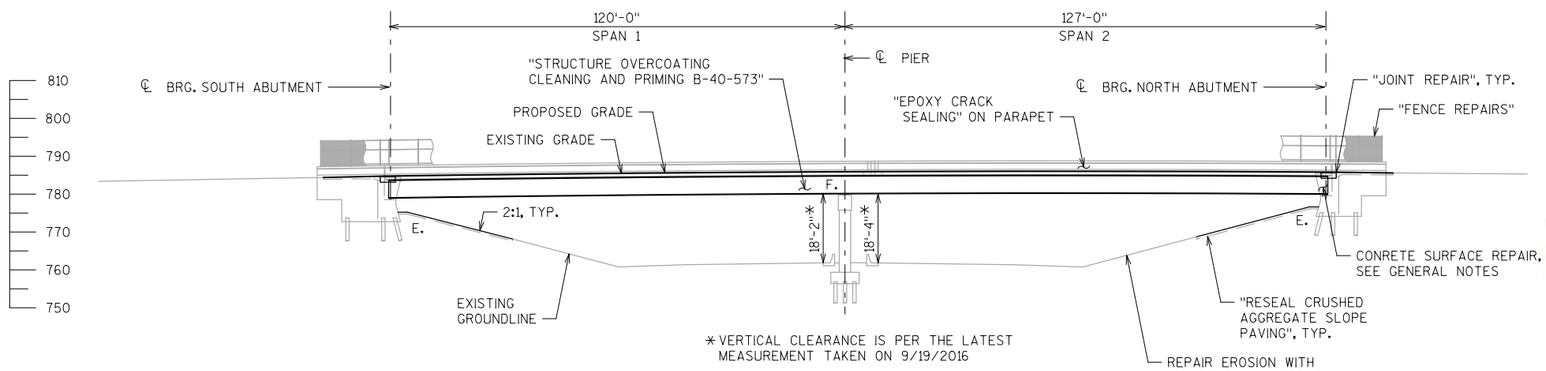
7

STATE PROJECT NUMBER
2160-17-70



PLAN

2 SPAN CONTINUOUS STEEL GIRDER - CONCRETE OVERLAY



ELEVATION

NORMAL TO SUBSTRUCTURE UNITS

DESIGN DATA

LIVE LOAD:
DESIGN LOADING: HS-20
INVENTORY RATING: HS-21
OPERATING RATING: HS-36
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 230 KIPS

MATERIAL PROPERTIES:
CONCRETE MASONRY BRIDGES
SUPERSTRUCTURE.....f'c = 4,000 P.S.I.
ALL OTHERS.....f'c = 3,500 P.S.I.

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

TRAFFIC DATA

76TH STREET
A.A.D.T. = 18,760 BI-DIRECTIONAL (2022)
A.A.D.T. = 23,740 BI-DIRECTIONAL (2042)
RDS = 40 MPH

LIST OF DRAWINGS

1. GENERAL PLAN
2. GENERAL NOTES & QUANTITIES
3. CROSS SECTION & REHAB DETAILS
4. STAGED CONSTRUCTION SECTIONS
5. EXPANSION JOINT REMOVAL (1 OF 2)
6. EXPANSION JOINT REMOVAL (2 OF 2)
7. EXPANSION JOINT (1 OF 2)
8. EXPANSION JOINT (2 OF 2)
9. MEDIAN DETAILS
10. SIDEWALK DETAILS
11. BILL OF BARS
12. OVERLAY DETAILS
13. STRIP SEAL EXPANSION JOINT
14. STRIP SEAL COVER PLATE
15. MISCELLANEOUS DETAILS

WISCONSIN
JASON R. SADOWSKI
E-38660
BROOKFIELD, WI
PROFESSIONAL ENGINEER

1/6/2022

STRUCTURE DESIGN CONTACTS
BUREAU OF STRUCTURES:
AARON BONK (608) 261-0261
CONSULTANT:
JASON SADOWSKI (414) 751-9986

NO.	DATE	REVISION	BY

Michael Baker INTERNATIONAL
MICHAEL BAKER INTERNATIONAL
250 E. WISCONSIN STREET
SUITE 1725
MILWAUKEE, WI 53202

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 01/06/22
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-40-573

S. 76TH STREET (NB) OVER STH 36

COUNTY	~~TOWN~~/CITY/~~VILLAGE~~
MILWAUKEE	FRANKLIN

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
TJN	JRS	TJN	JRS

GENERAL PLAN

SHEET 1 OF 15
150

K:\178837_38_76th Street Bridge Rehabs\3.0 Deliverables\3.03 Structure\Micros\B-40-573\080101_gp.dgn 28-JUN-2021 10:40

STATE PROJECT NUMBER

2160-17-70

GENERAL NOTES

THE EXISTING STRUCTURE B-40-573, IS A 2 SPAN CONTINUOUS STEEL GIRDER STRUCTURE WITH A DECK LENGTH OF 249'-11".

THE PROPOSED WORK INCLUDES REPLACING THE EXISTING MEDIAN, PLACING OVERLAY ON DECK, JOINT REPLACEMENT, REPAINTING STEEL, SLOPE PAVING REPAIRS, AND PARAPET AND FENCE REPAIRS.

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

THE FIRST DIGIT OF A THREE DIGIT BAR MARK AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFY THE BAR SIZE.

BEVEL ALL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE ENTIRE TOP SURFACE OF THE NEW CONCRETE OVERLAY, PAVING BLOCK, PAVING NOTCH PRIOR TO POURING APPROACH SLAB, THE TOP SURFACES OF THE MEDIAN AND SIDEWALK, AND THE VERTICAL SURFACES OF THE MEDIAN AND SIDEWALK AT THE GUTTERLINES. THE PROTECTIVE SURFACE TREATMENT SHALL ONLY BE APPLIED TO NEW WORK.

SEAL OVERLAY CONSTRUCTION JOINTS ACCORDING TO SECTION 502.3.13.1 OF THE STANDARD SPECIFICATIONS. COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY OVERLAY DECKS".

A MINIMUM OF 1-INCH OF CONCRETE SHALL BE REMOVED FROM THE BRIDGE DECK AND BETWEEN THE PROPOSED MEDIAN AND EXISTING SIDEWALK UNDER THE BID ITEM "CLEANING DECKS". FOR AREAS OF MILLING, SEE "OVERLAY DETAILS" SHEET.

COST OF MILLING BEYOND THE TYPICAL 1" IS INCIDENTAL TO BID ITEM "CLEANING DECKS". ALTERNATIVE MEANS AND METHODS OF REMOVAL TO STANDARD SPECIFICATION 509.3.3 CLEANING MAY BE USED BY THE CONTRACTOR AND MUST BE APPROVED BY THE ENGINEER. COST OF REMOVAL IS INCLUDED IN BID ITEM "CLEANING DECKS".

ANY REINFORCEMENT THAT IS DAMAGED OR REMOVED BY THE MILLING PROCESS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTORS EXPENSE.

CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO EXISTING CONCRETE BRIDGE DECK.

AN AVERAGE OVERLAY THICKNESS OF 2⅞" WAS USED FOR THE LOAD RATING AND CALCULATION OF QUANTITIES. THE AVERAGE OVERLAY THICKNESS IS BASED ON THE AREA OF THE VARIABLE DEPTH OVERLAY DIVIDED BY THE WIDTH OF THE CROSS SECTION +½-INCH TO ACCOUNT FOR VARIATIONS IN THE DECK SURFACE.
(AVERAGE OVERLAY THICKNESS = AREA OF CROSS SECTION / WIDTH +½-INCH).

PROFILE GRADE LINE SHALL BE DETERMINED IN THE FIELD BASED ON A MINIMUM OVERLAY THICKNESS OF 2½" AT THE ROADWAY/OVERLAY CROWN. THE PROFILE GRADE LINE SHALL BE DETERMINED AFTER SURFACE PREPARATION. EXPECTED AVERAGE OVERLAY THICKNESS IS 2⅞". IF EXPECTED AVERAGE OVERLAY THICKNESS IS EXCEEDED BY MORE THAN ½", CONTACT THE STRUCTURES DESIGN SECTION. NOTIFY THE ENGINEER IF THE OVERLAY DEPTH AT ANY LOCATION EXCEEDS 4".

PREPARATION DECKS TYPE 1, AND PREPARATION DECKS TYPE 2 REPAIR AREAS SHALL BE DETERMINED BY THE ENGINEER. DECK PREPARATION REPAIRS SHALL BE FILLED WITH "CONCRETE MASONRY OVERLAY DECKS".

ANY EXCAVATION REQUIRED TO COMPLETE THE OVERLAY OR JOINT REPAIR AT THE ABUTMENTS IS TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY OVERLAY DECKS".

ALL CONCRETE REMOVAL NOT COVERED WITH CONCRETE OVERLAY SHALL BE DEFINED BY A 1" DEEP SAW CUT.

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

CLEAN, STRAIGHTEN, AND EXTEND EXISTING BAR STEEL REINFORCEMENT 24 BAR DIAMETERS INTO NEW CONSTRUCTION UNLESS SPECIFIED OTHERWISE.

DECK DIMENSIONS AND EXISTING CROSS-SLOPES ARE TAKEN FROM EXISTING PLANS.

STRIP SEAL EXPANSION JOINT ASSEMBLIES, INCLUDING ANCHOR STUDS, COVER PLATES, AND HARDWARE SHALL BE PAID FOR AT THE LINEAL FOOT PRICE BID FOR "EXPANSION DEVICE".

STRUCTURAL STEEL SURFACES IDENTIFIED IN THE "REHABILITATION LIMITS" DETAIL ON THE "CROSS SECTION & REHAB DETAILS" SHEET AND LOCATIONS IDENTIFIED BY THE FIELD ENGINEER ARE TO BE CLEANED AND PAINTED UNDER THE BID ITEM "STRUCTURE OVERCOATING CLEANING AND PRIMING B-40-573." PAINT COLOR TO BE FEDERAL STANDARD COLOR NO. 26293 (GRAY). SEE SPECIAL PROVISIONS FOR ADDITIONAL PAINTING REQUIREMENTS TO ENSURE COMPATIBILITY WITH THE EXISTING VINYL PAINT SYSTEM.

CLEAN AND PAINT BEARINGS AT BOTH ABUTMENTS AND PIER. COSTS OF CLEANING AND PAINTING BEARINGS IS INCLUDED IN BID ITEM "STRUCTURE OVERCOATING CLEANING AND PRIMING B-40-573".

REMOVE THE EXISTING MEDIAN UNDER THE BID ITEM, "REMOVING STRUCTURE B-40-573". USE CAUTION DURING REMOVAL TO AVOID DAMAGE TO THE EXISTING DECK.

REMOVING THE EXISTING MEDIAN SHALL BE PERFORMED BY HAND POWER TOOLS OR AIR HAMMERS WEIGHING LESS THAN 80 POUNDS. HEAVIER EQUIPMENT INCLUDING BACKHOE MOUNTED HAMMERS ARE NOT PERMITTED. PERFORM MEDIAN REMOVAL IN SUCH A MANNER SO AS TO NOT DAMAGE THE DECK.

CRACKS IN THE PARAPET ON BRIDGE AND APPROACHES SHALL BE REPAIRED AS DIRECTED BY THE FIELD ENGINEER. COST OF PARAPET REPAIRS INCLUDED IN THE BID ITEM "EPOXY CRACK SEALING".

PERFORM "CONCRETE SURFACE REPAIR" AS DIRECTED BY THE FIELD ENGINEER. QUANTITIES SHOWN ON THE PLANS ARE APPROXIMATE.

GENERAL NOTES (CONTINUED)

CLEAN AND SEAL THE TOP AND ROADWAY FACES OF THE EXISTING PARAPET ON BRIDGE AND APPROACHES. COST OF CLEANING IS INCLUDED IN THE BID ITEM "PIGMENTED SURFACE SEALER RESEAL".

APPLY BRIDGE SEAT PROTECTION, PER SECTION 502.3.12 OF THE STANDARD SPECIFICATIONS, TO THE TOP SURFACES OF BOTH ABUTMENTS BELOW EXPANSION DEVICES. POWERWASH AND ADEQUATELY DRY SURFACES BEFORE APPLICATION. WORK INCIDENTAL TO BID ITEM "JOINT REPAIR".

FOR STAGING OF LOOMIS ROAD PAINT WORK, SEE ROADWAY PLANS.

ANY DAMAGED WIRING OR CONDUIT, INCLUDING WITHIN THE JOINT REPAIR LIMITS, SHALL BE REPLACED AT NO COST TO THE DEPARTMENT.

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	SOUTH ABUTMENT	NORTH ABUTMENT	SUPER.	TOTAL
203.0220.01	REMOVING STRUCTURE B-40-573	EACH	---	---	---	1
203.0330.01	DEBRIS CONTAINMENT B-40-573	EACH	---	---	---	1
502.0100	CONCRETE MASONRY BRIDGES	CY	1	1	27	29
502.2000	COMPRESSION JOINT SEALER PREFORMED ELASTOMERIC 2 1/4-INCH	LF	---	---	252	252
502.3101	EXPANSION DEVICE	LF	72	72	---	144
502.3200	PROTECTIVE SURFACE TREATMENT	SY	26	26	1,373	1,425
502.3215	PIGMENTED SURFACE SEALER RESEAL	SY	---	---	101	101
502.4204	ADHESIVE ANCHORS NO. 4 BAR	EACH	---	---	1,027	1,027
502.4205	ADHESIVE ANCHORS NO. 5 BAR	EACH	82	82	---	164
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	2,260	2,260	7,120	11,640
505.0905	BAR COUPLERS NO. 5	EACH	9	9	---	18
509.0301	PREPARATION DECKS TYPE 1	SY	---	---	58	58
509.0302	PREPARATION DECKS TYPE 2	SY	---	---	24	24
509.0500	CLEANING DECKS	SY	---	---	1,160	1,160
509.1000	JOINT REPAIR	SY	31	31	---	62
509.1500	CONCRETE SURFACE REPAIR	SF	5	5	---	10
509.2500	CONCRETE MASONRY OVERLAY DECKS	CY	---	---	126	126
509.9020.S	EPOXY CRACK SEALING	LF	---	---	328	328
517.3001.S.01	STRUCTURE OVERCOATING CLEANING AND PRIMING B-40-573	EACH	---	---	1	1
517.4001.S.01	CONTAINMENT AND COLLECTION OF WASTE MATERIALS B-40-573	EACH	---	---	1	1
604.9010.S	SLOPE PAVING REPAIR CRUSHED AGGREGATE	CY	3*	3*	---	6*
604.9015.S	RESEAL CRUSHED AGGREGATE SLOPE PAVING	SY	280 *	218 *	---	498 *
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	---	---	12	12
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	---	---	252	252
SPV.0060.05	FENCE REPAIRS B-40-573	EACH	---	---	1	1
	NON-BID ITEMS					
	FILLER	SIZE	---	---	---	1 1/2 "
	BRIDGE SEAT PROTECTION					---

* QUANTITIES ARE APPROXIMATE AND WILL NEED TO BE VERIFIED IN THE FIELD BY THE ENGINEER.

BENCH MARKS

NO.	NORTHING (Y)	EASTING (X)	DESCRIPTION	ELEV.
1	340928.699	2533358.138	TAG BOLT AT FIRE HYDRANT AT ON SE CORNER RAMP TO STH 36	782.005
2	341519.008	2533216.522	X ON EST FLANGE BOLT OF TRAFFIC SIGNAL MASTARM AT NW CORNER RAMP TO STH 36	785.996

NOTE: FOR BENCHMARK LOCATIONS IN PLAN VIEW, SEE ROADWAY PLANS

8

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-573

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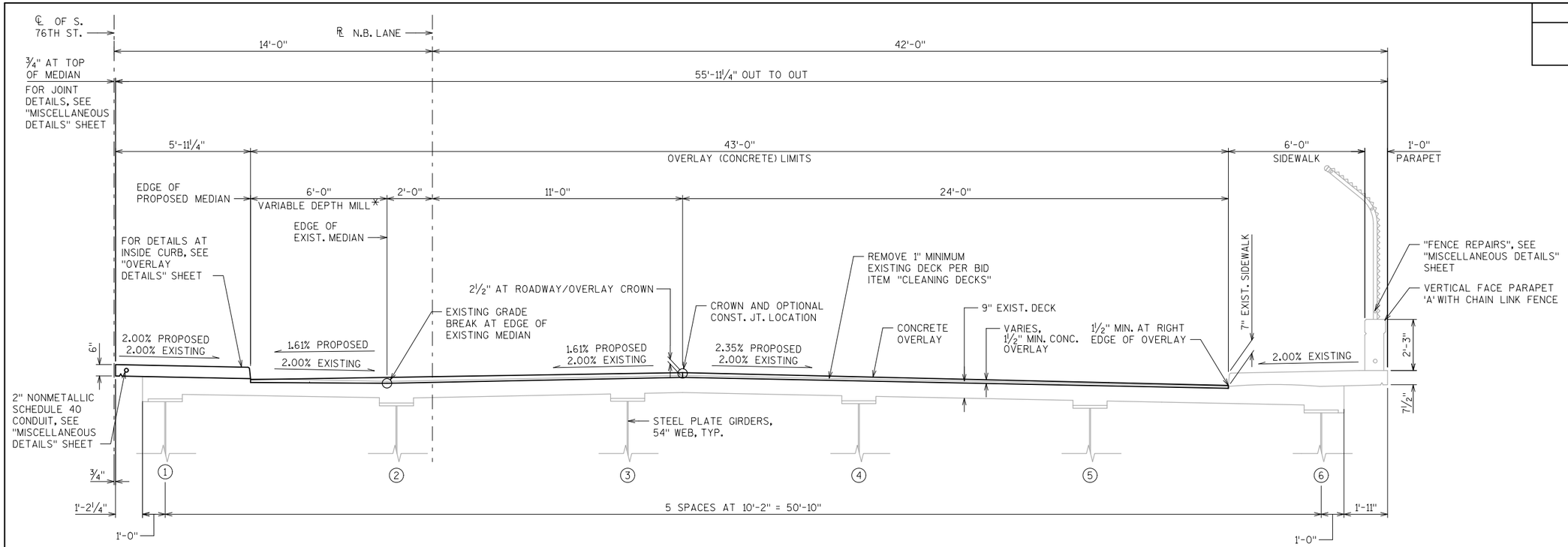
GENERAL NOTES & QUANTITIES

SHEET 2 OF 15
151

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STATE PROJECT NUMBER

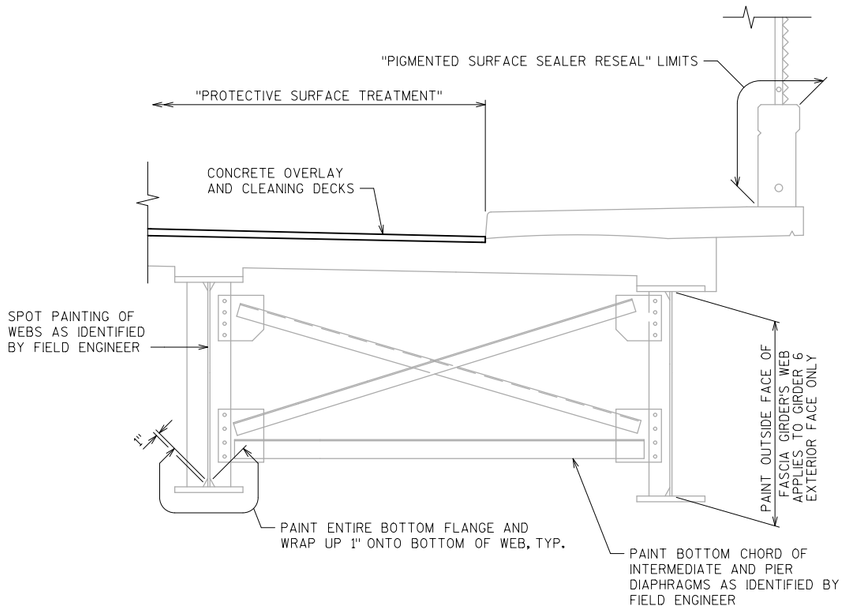
2160-17-70



AVERAGE OVERLAY THICKNESS FOR VARIABLE DEPTH OVERLAY: 2⅞"

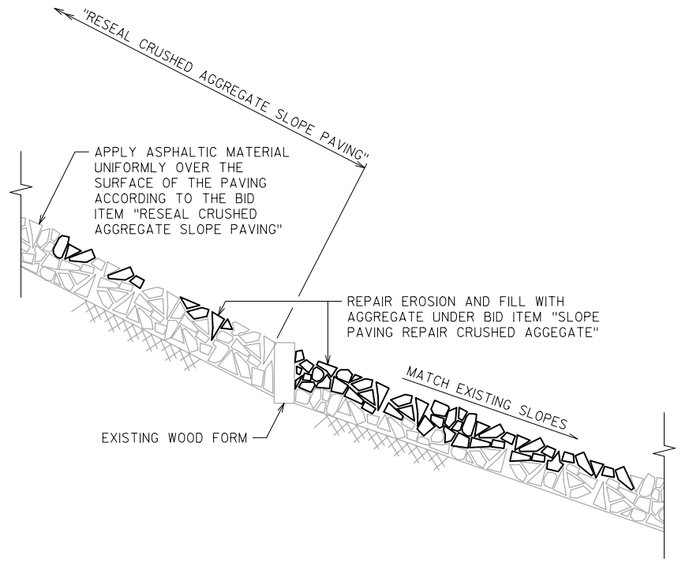
TYPICAL SECTION

LOOKING NORTH



REHABILITATION LIMITS

EXPECTED LIMITS OF CLEANING AND PAINTING SHOWN, FIELD ENGINEER TO IDENTIFY ACTUAL LIMITS



SECTION AT SLOPE REPAIR

BELOW LONGITUDINAL JOINT BETWEEN STRUCTURES, TYP. AT BOTH ENDS
ROUND STONE WILL NOT BE ACCEPTED

LEGEND

(#) GIRDER NUMBER

* VARIABLE DEPTH MILL IN THE AREA BELOW EXISTING MEDIAN, SEE "OVERLAY DETAILS" SHEET FOR LIMITS AND DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-573

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CROSS SECTION & REHAB DETAILS

SHEET 3 OF 15

152

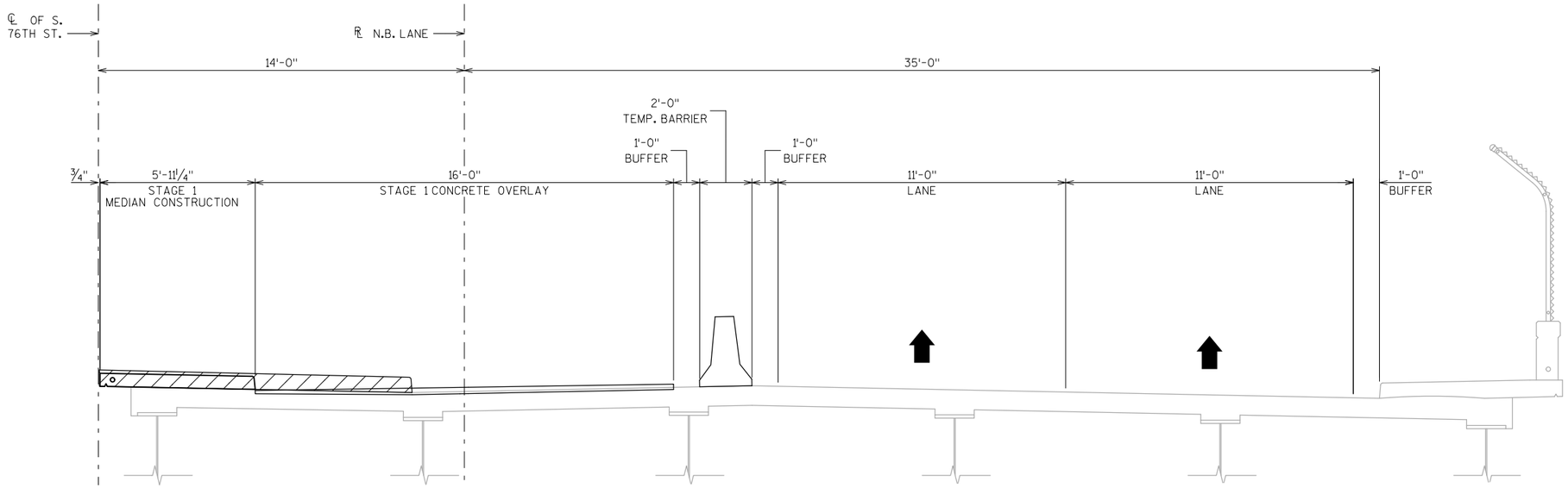
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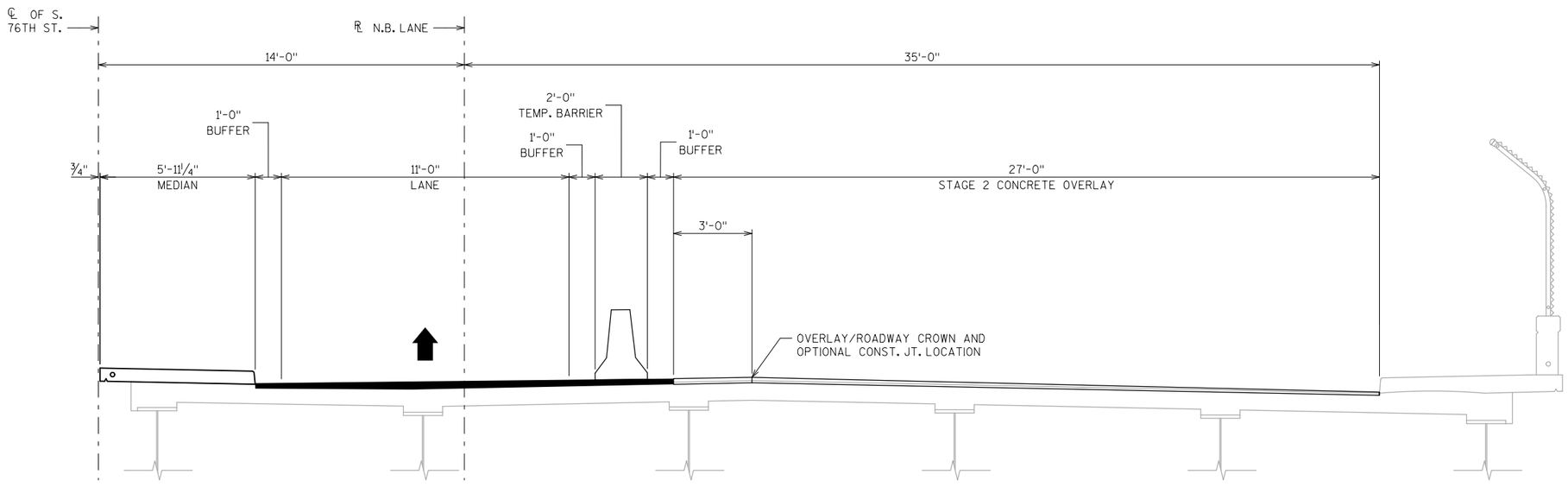
STATE PROJECT NUMBER

2160-17-70



STAGE 1 - CONSTRUCTION SECTION

LOOKING NORTH



STAGE 2 - CONSTRUCTION SECTION

LOOKING NORTH

STAGING NOTES

FOR TRAFFIC CONTROL AND STAGE CONSTRUCTION DETAILS, SEE ROADWAY PLANS.

FOR EXPANSION JOINT STAGE LENGTHS, SEE "STRIP SEAL EXPANSION JOINT" SHEET.

STAGE 2 CONSTRUCTION IS SEPARATED INTO TWO SUBSTAGES, STAGE 2A AND STAGE 2B. CONSTRUCTION ON NB AND SB S. 76TH IS PERFORMED SEPARATELY DURING THESE STAGES. SEE ROADWAY PLANS FOR DETAILS.

LEGEND

- CONCRETE OVERLAY PLACED IN SHOWN STAGE
- CONCRETE OVERLAY PLACED IN PREVIOUS STAGE
- REMOVE EXISTING MEDIAN

8

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-573

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STAGED CONSTRUCTION SECTIONS

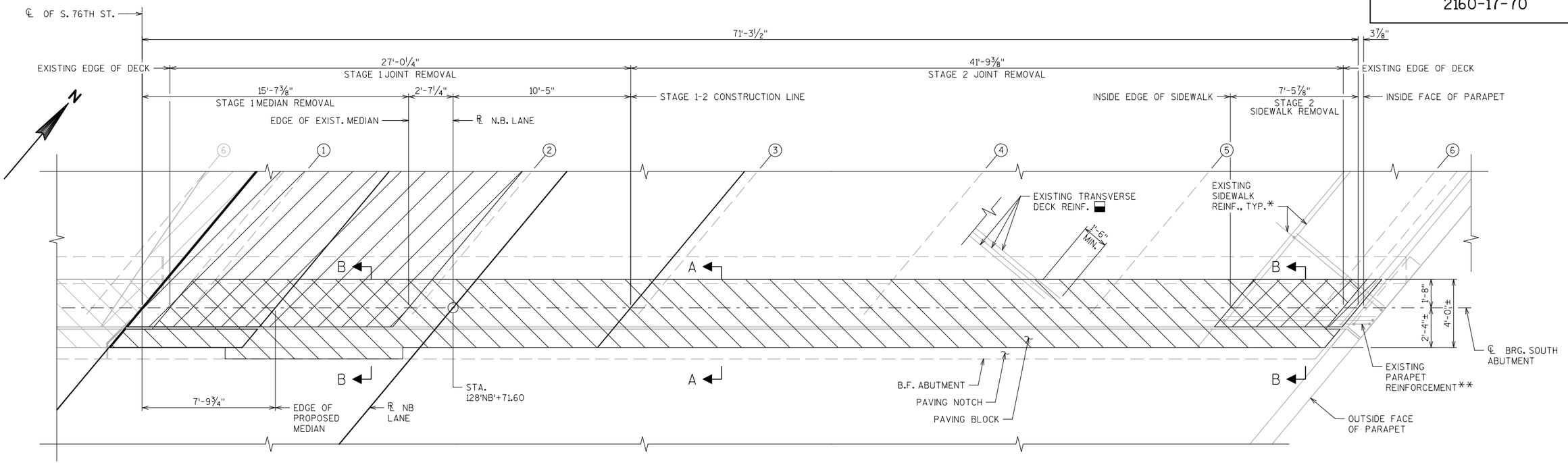
SHEET 4 OF 15

153

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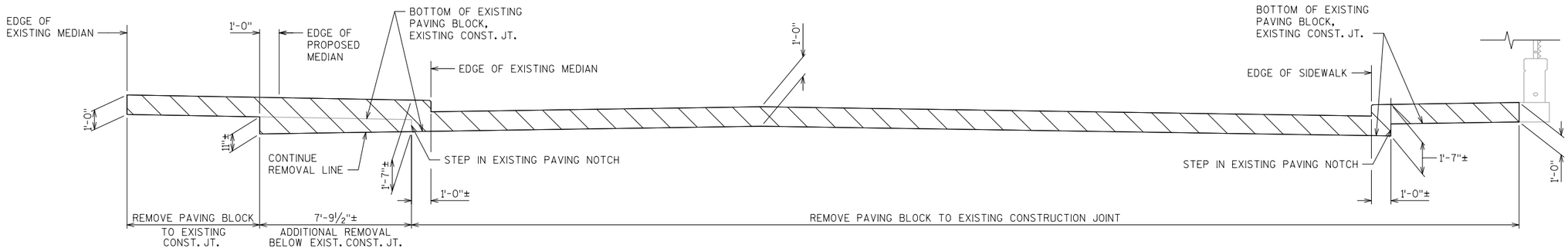
STATE PROJECT NUMBER

2160-17-70



REMOVAL PLAN

SOUTH ABUTMENT SHOWN, NORTH ABUTMENT SIMILAR



PAVING BLOCK REMOVAL

SOUTH ABUTMENT SHOWN, NORTH ABUTMENT SIMILAR

8

8

LEGEND

MEDIAN OR SIDEWALK REMOVAL

EXISTING CONCRETE TO BE REMOVED

EXISTING TRANSVERSE REINFORCEMENT IS PLACED NORMAL TO THE GIRDERS. SAVE AND INCORPORATE 1'-6" MIN. OF TRANSVERSE REINFORCING BARS.

(#) GIRDER NUMBER

* ALL EXISTING SIDEWALK TRANSVERSE AND LONGITUDINAL REINFORCEMENT NOT SHOWN FOR CLARITY. SALVAGE AND INCORPORATE 1'-6" MINIMUM.

** ALL EXISTING PARAPET REINFORCEMENT NOT SHOWN FOR CLARITY. SALVAGE AND INCORPORATE FULL LENGTH INTO NEW WORK.

NOTES

ALL DIMENSIONS SHOWN ON THIS SHEET ARE TAKEN ALONG AND NORMAL TO ℄ BEARING SOUTH ABUTMENT.

FOR SECTIONS A-A AND B-B, SEE "EXPANSION JOINT REMOVAL (2 OF 2)" SHEET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-573

DRAWN BY TJN | PLANS CK'D. JRS

EXPANSION JOINT REMOVAL (1 OF 2)

SHEET 5 OF 15

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STATE PROJECT NUMBER

2160-17-70

NOTES

FOR THE LOCATIONS OF SECTION A-A AND SECTION B-B, SEE "EXPANSION JOINT REMOVAL (1 OF 2)" SHEET.

LEGEND

MEDIAN OR SIDEWALK REMOVAL

EXISTING CONCRETE TO BE REMOVED

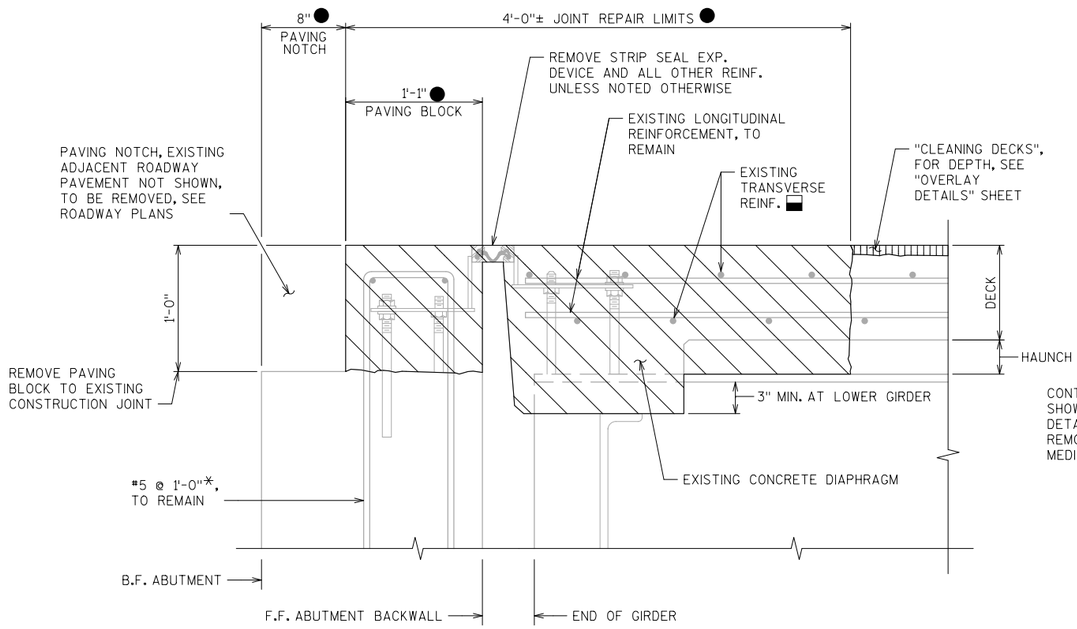
"CLEANING DECKS

* EXISTING BARS ARE LIKELY TO BE CORRODED AND/OR DAMAGED DURING CONCRETE REMOVAL. SALVAGE AND INCORPORATE AS MUCH REBAR AS PRACTICAL. SUPPLEMENT WITH "ADHESIVE ANCHORS NO. 5 BAR". EMBED 1'-0" IN CONCRETE AND SPACE AT 1'-0". FOR ADHESIVE ANCHOR LOCATIONS, SEE SECTION C-C AND D-D ON "EXPANSION JOINT (2 OF 2)" SHEET.

EXISTING TRANSVERSE REINFORCEMENT IS PLACED NORMAL TO THE GIRDERS. SAVE AND INCORPORATE 1'-6" MIN. OF TRANSVERSE REINFORCING BARS.

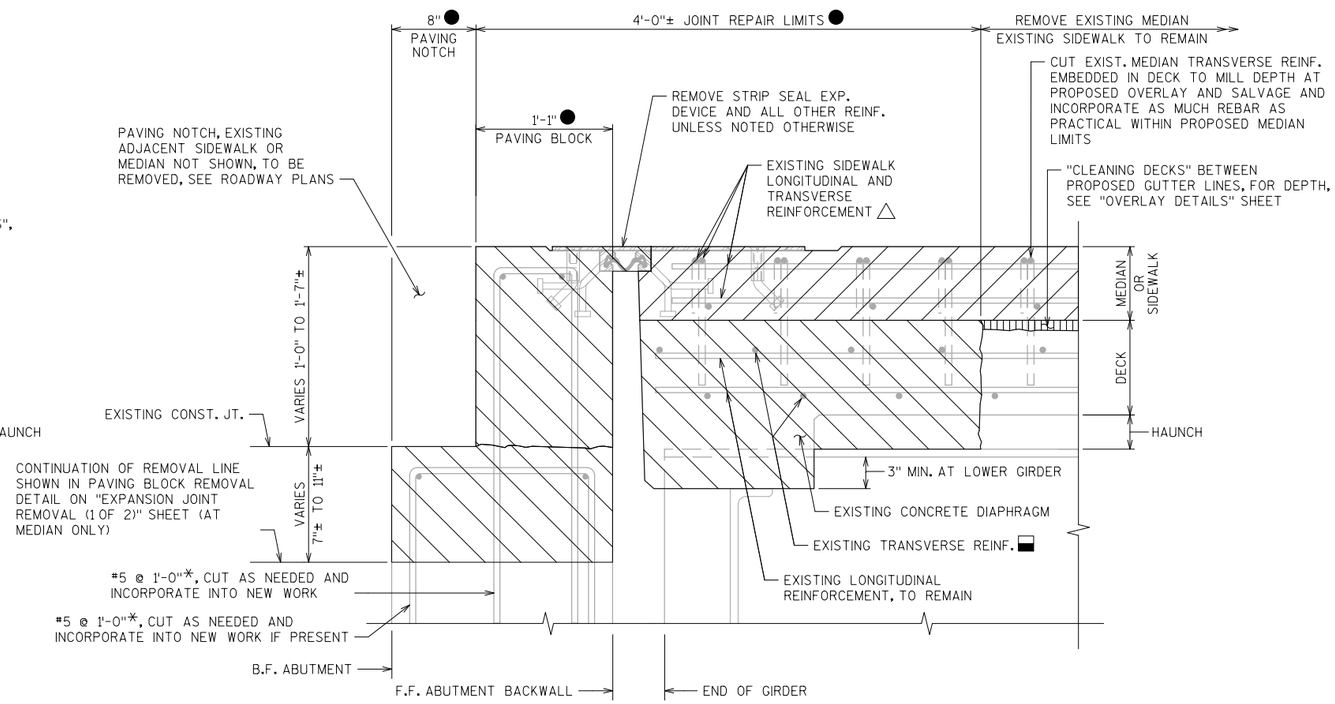
△ SALVAGE AND INCORPORATE 1'-6" MINIMUM OF LONGITUDINAL REINFORCEMENT.

● DIMENSION IS TAKEN NORMAL TO ℄ ABUTMENT.



SECTION A-A

NORMAL TO ℄ ABUTMENT



SECTION B-B

NORMAL TO ℄ ABUTMENT

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-573

DRAWN BY TJN | PLANS CK'D. JRS

EXPANSION JOINT REMOVAL (2 OF 2)

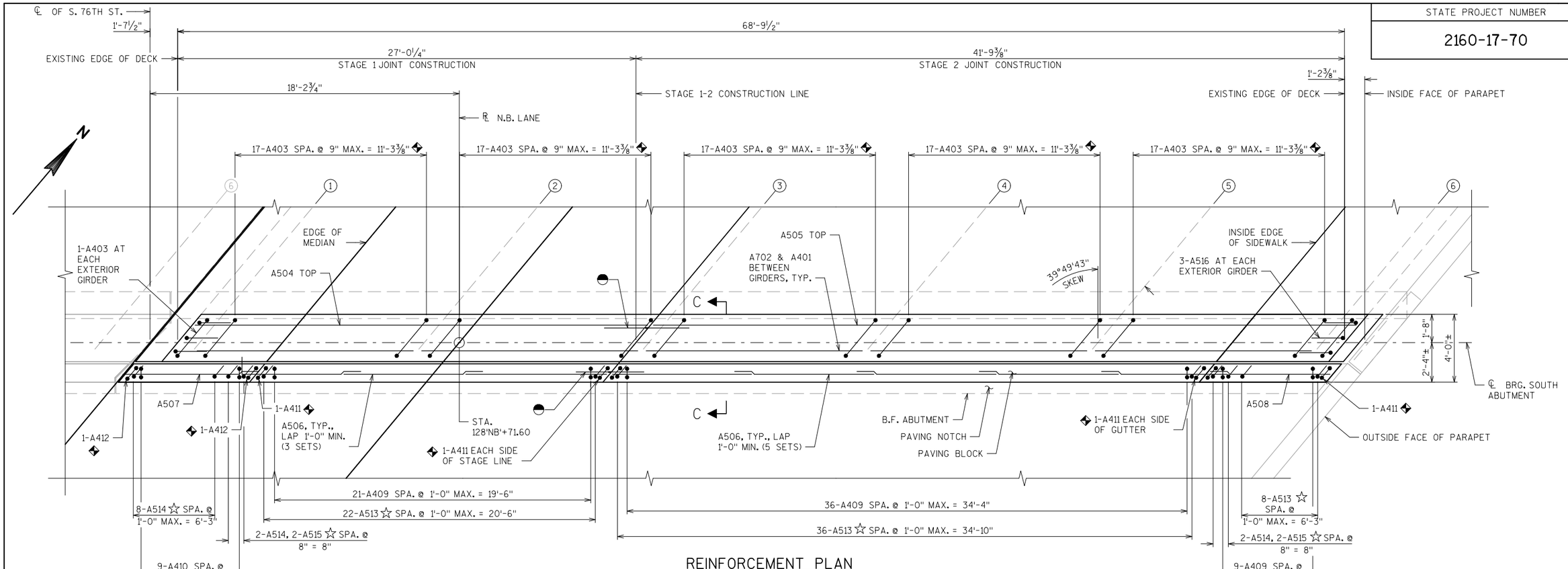
SHEET 6 OF 15

155

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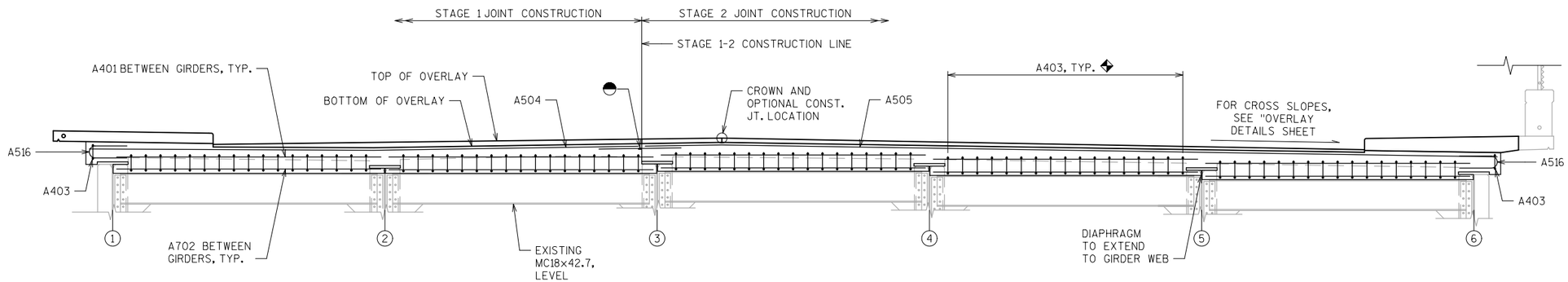
STATE PROJECT NUMBER

2160-17-70



REINFORCEMENT PLAN

SOUTH ABUTMENT SHOWN, NORTH ABUTMENT SIMILAR



TRANSVERSE SECTION AT DIAPHRAGM

SOUTH ABUTMENT SHOWN, NORTH ABUTMENT SIMILAR
SECTION TAKEN ALONG ℄ ABUTMENT
DECK SIDE OF JOINT SHOWN

NOTES

ALL DIMENSIONS SHOWN ON THIS SHEET ARE TAKEN ALONG AND NORMAL TO ℄ BEARING SOUTH ABUTMENT.

SHEET ONLY SHOWS JOINT CONSTRUCTION. FOR MEDIAN AND SIDEWALK DETAILS, SEE "MEDIAN DETAILS" AND "SIDEWALK DETAILS" SHEETS.

FOR SECTION C-C, SEE "EXPANSION JOINT (2 OF 2)".

FOR BILL OF BARS, SEE "BILL OF BARS" SHEET.

BAR MARKS ARE ONLY SHOWN FOR SOUTH ABUTMENT. USE "B" PREFIX IN FRONT OF BAR MARK NUMBER FOR NORTH ABUTMENT.

LEGEND

- ◆ BARS PLACED PARALLEL TO GIRDERS. SPACING PERPENDICULAR TO ℄ GIRDERS.
- ◓ BAR COUPLERS, SEE "MISCELLANEOUS DETAILS" SHEET. PROVIDE BAR COUPLERS FOR BARS ONLY AT STAGE CONSTRUCTION LINE.
- (#) GIRDER NUMBER
- ☆ ADHESIVE ANCHORS NO. 5 BAR. EMBED 1'-0" IN CONCRETE. SPACE AT 1'-0". TURN 10" LEG AS NECESSARY TO FIT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-573

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EXPANSION JOINT (1 OF 2)

SHEET 7 OF 15

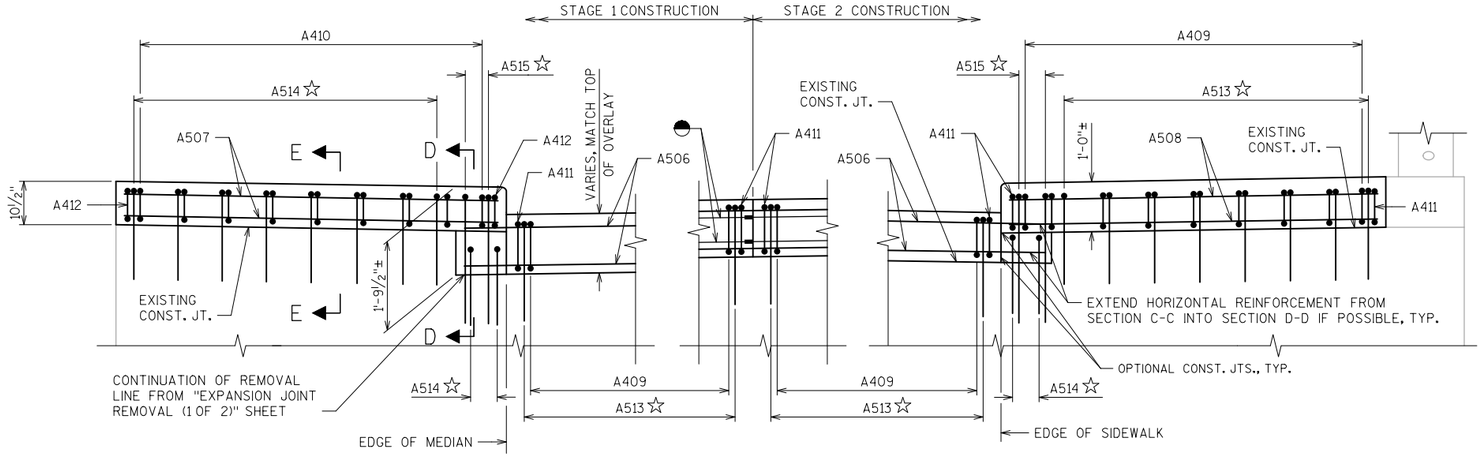
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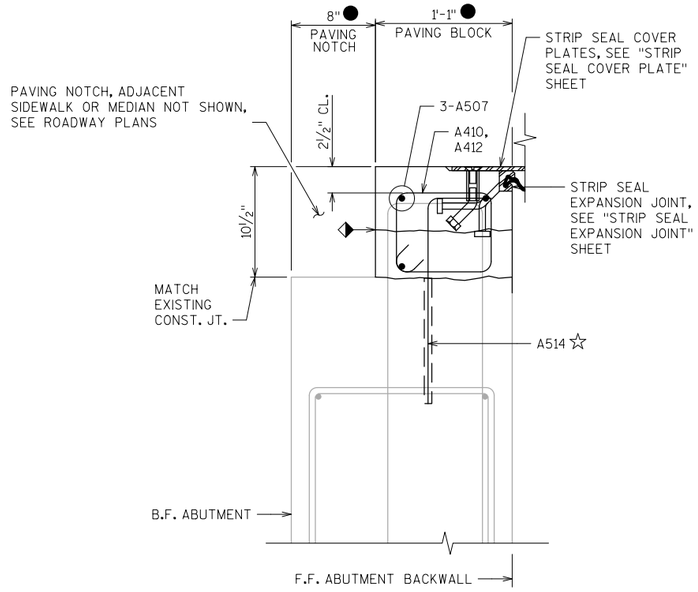
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TRANSVERSE SECTION AT PAVING BLOCK

SOUTH ABUTMENT SHOWN, NORTH ABUTMENT SIMILAR
SECTION TAKEN ALONG ℄ ABUTMENT



SECTION E-E

NORMAL TO ℄ ABUTMENT

NOTES

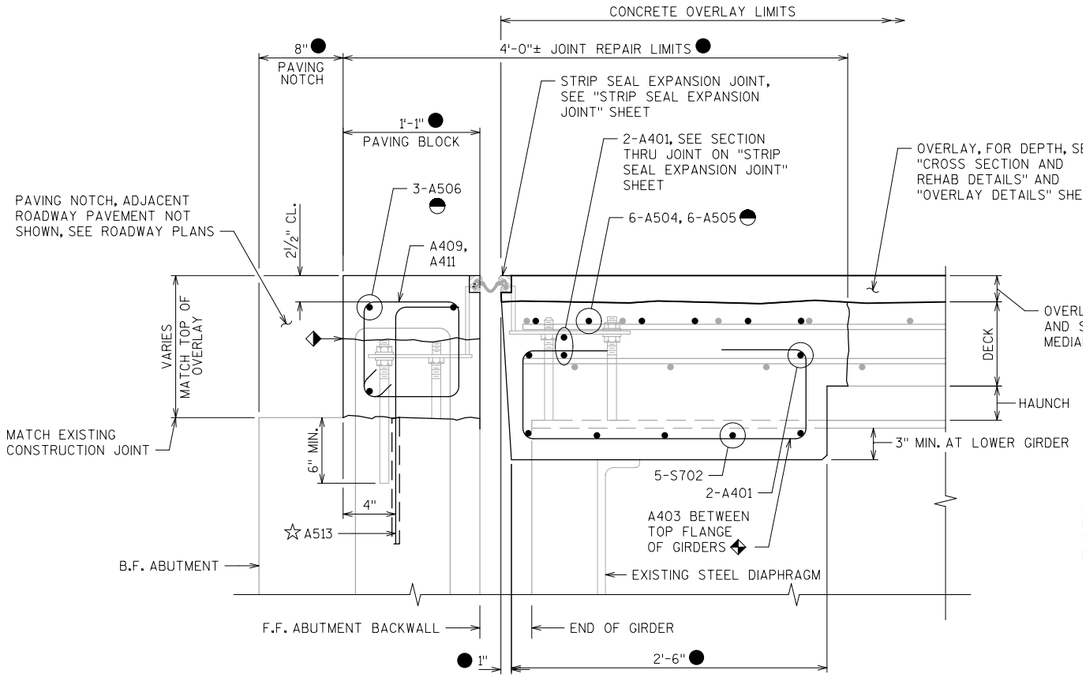
FOR THE LOCATION OF SECTION C-C, SEE "EXPANSION JOINT (1 OF 2)" SHEET.

BAR MARKS ARE ONLY SHOWN FOR SOUTH ABUTMENT. USE "B" PREFIX IN FRONT OF BAR MARK NUMBER FOR NORTH ABUTMENT.

THE DECK SIDE OF JOINT SHOWN IN SECTION C-C IS ALSO APPLICABLE TO SECTIONS D-D AND E-E FOR THE JOINT CONSTRUCTION LIMITS SHOWN ON "EXPANSION JOINT (1 OF 2)".

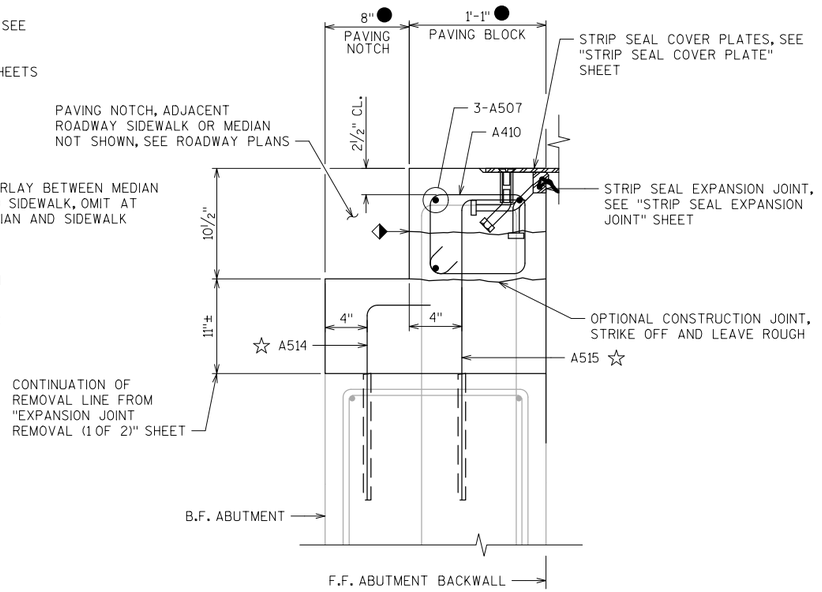
LEGEND

- ◆ BARS PLACED PARALLEL TO GIRDERS. SPACING PERPENDICULAR TO ℄ GIRDERS.
- ● DIMENSION IS TAKEN NORMAL TO ℄ ABUTMENT.
- ◆ OPTIONAL CONSTRUCTION JOINT 1" MIN. BELOW EXISTING REINFORCEMENT. STRIKE OFF AND LEAVE ROUGH.
- ☆ ADHESIVE ANCHORS NO. 5 BAR. EMBED 1'-0" IN CONCRETE. SPACE AT 1'-0". TURN 10" LEG AS NECESSARY TO FIT.
- ◒ BAR COUPLERS, SEE "MISCELLANEOUS DETAILS" SHEET. PROVIDE BAR COUPLERS FOR BARS ONLY AT STAGE CONSTRUCTION LINE.



SECTION C-C

NORMAL TO ℄ ABUTMENT



SECTION D-D

NORMAL TO ℄ ABUTMENT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-573

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EXPANSION JOINT (2 OF 2)

SHEET 8 OF 15

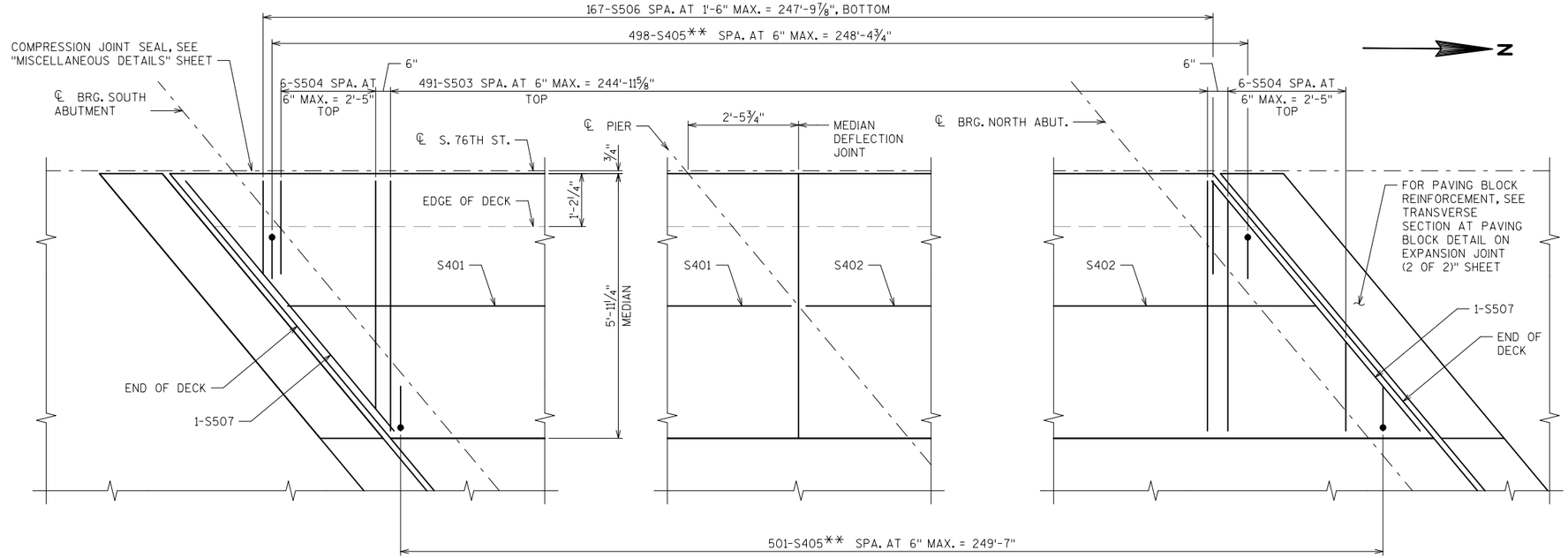
157

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STATE PROJECT NUMBER

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MEDIAN PLAN AT SW CORNER

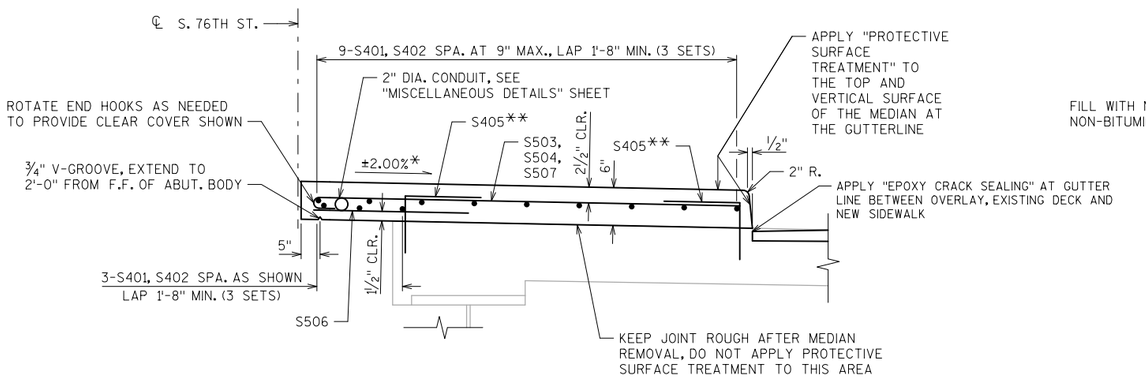
MEDIAN PLAN AT PIER

TRANSVERSE REINFORCEMENT AT PIER NOT SHOWN, ADJUST SPACING AS NEEDED TO PROVIDE 2" CLEAR FROM JOINT DO NOT RUN LONGITUDINAL REINFORCEMENT THRU JOINT

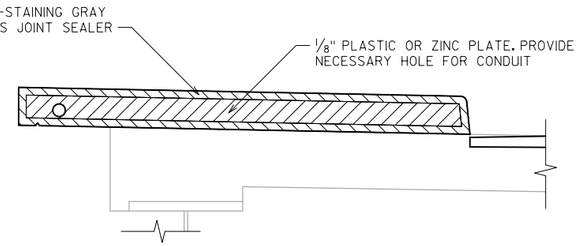
MEDIAN PLAN AT NW CORNER

NOTE

CLEAN ALL LOOSE MATERIAL ON DECK AT THE MEDIAN LOCATION PRIOR TO MEDIAN PLACEMENT USING HIGH PRESSURE WATER OR AIR, ENSURING ALL FREE-STANDING WATER IS REMOVED PRIOR TO MEDIAN PLACEMENT. NEAT CEMENT IS REQUIRED AS PER 509.3.9.2 OF THE STANDARD SPECIFICATIONS.



SECTION THRU MEDIAN



MEDIAN DEFLECTION JOINT DETAIL

WHEN MEDIAN IS POURED CONTINUOUSLY FROM END TO END, THE MEDIAN SHALL BE SEPARATED AT THE DEFLECTION JOINT BY A PIECE OF ⅛" ZINC OR PLASTIC PLATE CUT AS SHOWN IN THE "MEDIAN DEFLECTION JOINT DETAIL". IF A CONSTRUCTION JOINT IN THE MEDIAN IS USED AT THE DEFLECTION JOINT, ONE SIDE OF THE JOINT SHALL BE COATED WITH AN APPROVED LIQUID BOND BREAKER AND PLATE SEPARATORS MAY BE OMITTED.

LEGEND

* MATCH EXISTING DECK CROSS-SLOPE AT MEDIAN, ±2.00%.

** ADHESIVE ANCHORS NO. 4 BAR. EMBED 5" IN CONCRETE. SPACE AT 1'-0". TURN 1'-0" LEG AS NECESSARY TO FIT.

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-573

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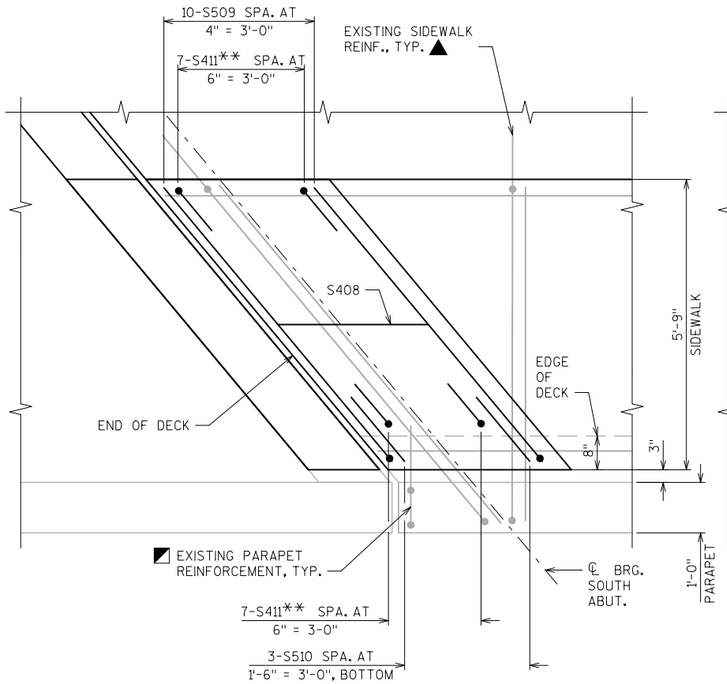
MEDIAN DETAILS

SHEET 9 OF 15

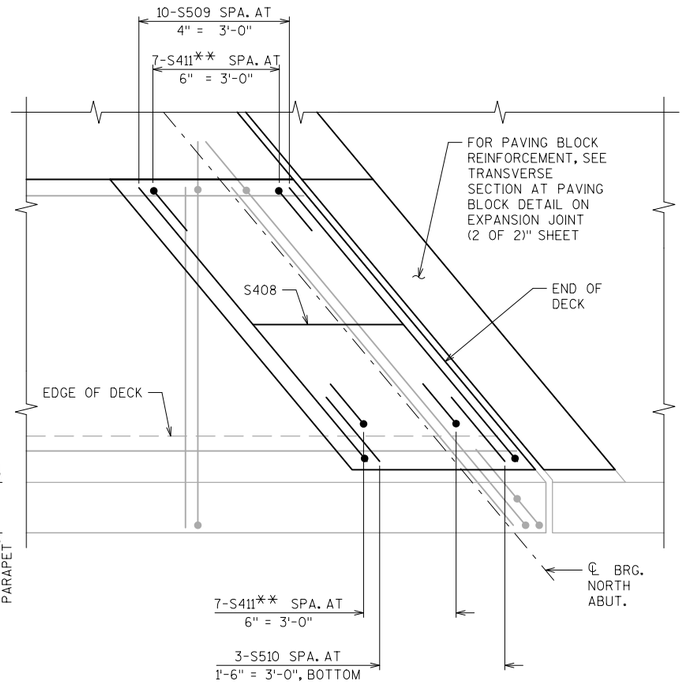
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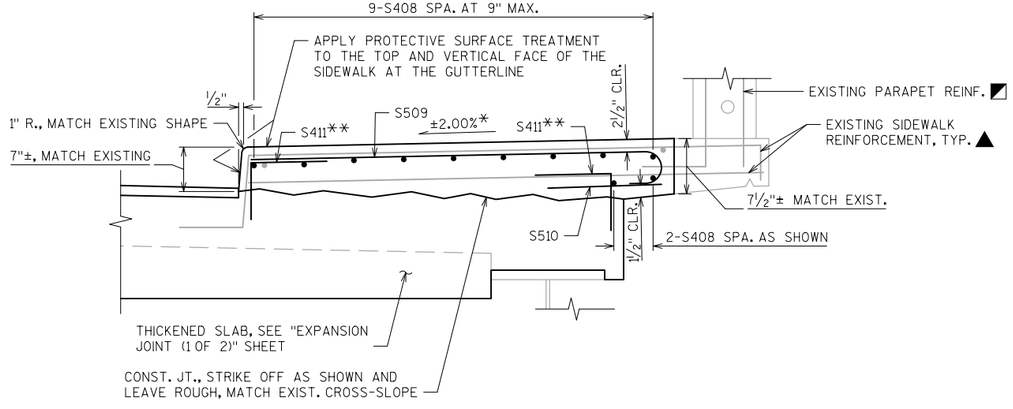
STATE PROJECT NUMBER
2160-17-70



SIDEWALK PLAN AT SE CORNER



SIDEWALK PLAN AT NE CORNER



SECTION THRU SIDEWALK

NOTES

PLACE TRANSVERSE BARS IN SIDEWALK PARALLEL TO ℄ BEARING ABUTMENT. SPACINGS ARE GIVEN PARALLEL TO ℄ OF S. 76TH ST.

LEGEND

* MATCH EXISTING SIDEWALK CROSS-SLOPE AT SIDEWALK, ±2.00%.

** ADHESIVE ANCHORS NO. 5 BAR. EMBED 5" IN CONCRETE. SPACE AT 1'-0". TURN 1'-0" LEG AS NECESSARY TO FIT.

▲ ALL EXISTING SIDEWALK TRANSVERSE AND LONGITUDINAL REINFORCEMENT NOT SHOWN FOR CLARITY. SALVAGE AND INCORPORATE 1'-6" MINIMUM.

◩ ALL EXISTING PARAPET REINFORCEMENT NOT SHOWN FOR CLARITY. SALVAGE AND INCORPORATE FULL LENGTH INTO NEW WORK.

8

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-573

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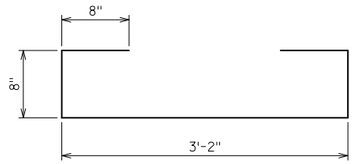
SIDEWALK DETAILS

SHEET 10 OF 15

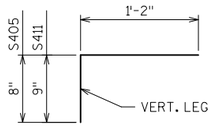
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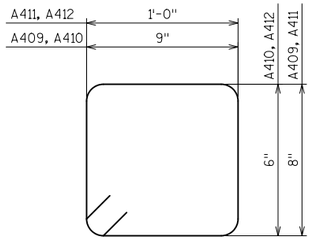
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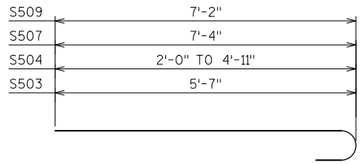
A403, B403



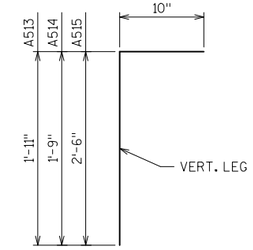
S405, S411



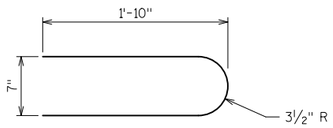
A409, A410, A411, A412
B409, B410, B411, B412



S503, S504, S507, S509



A513, A514, A515
B513, B514, B515



A516, B516

BAR SERIES TABLE

MARK	NO. REQ'D.	LENGTH
S504	2 SERIES OF 6	2'-7" TO 5'-6"

BUNDLE AND TAG EACH SERIES SEPARATELY.

LEGEND

☆ ADHESIVE ANCHORS NO. 5 BAR, SEE "EXPANSION JOINT (2 OF 2)" SHEET.

** ADHESIVE ANCHORS NO. 4 BAR, SEE "MEDIAN DETAILS" AND "SIDEWALK DETAILS" SHEETS.

◓ BAR COUPLERS REQUIRED WITH BARS. FOR BAR COUPLER DETAILS, SEE "MISCELLANEOUS DETAILS" SHEET.

BILL OF BARS
(SOUTH ABUT. JOINT REPAIR) TOTAL COATED = 2,260 LBS

	BAR MARK	NO. REQ'D. STAGE 1	NO. REQ'D. STAGE 2	LENGTH	COAT	BENT	LOCATION
	A401	8	12	12'-10"	X		DIAPHRAGM - HORIZONTAL
	A702	10	15	12'-10"	X		DIAPHRAGM - HORIZONTAL
	A403	35	52	5'-6"	X	X	DIAPHRAGM - VERTICAL
◓	A504	6	-	26'-9"	X		DECK - HORIZONTAL
◓	A505	-	6	41'-6"	X		DECK - HORIZONTAL
◓	A506	9	15	8'-0"	X		PAVING BLOCK - HORIZONTAL
	A507	3	-	7'-5"	X		PAVING BLOCK - HORIZONTAL AT MEDIAN
	A508	-	3	7'-2"	X		PAVING BLOCK - HORIZONTAL AT SIDEWALK
	A409	21	45	3'-4"	X	X	PAVING BLOCK - VERTICAL
	A410	9	-	3'-0"	X	X	PAVING BLOCK - VERTICAL
	A411	2	4	3'-10"	X	X	PAVING BLOCK - VERTICAL
	A412	2	-	3'-6"	X	X	PAVING BLOCK - VERTICAL
☆	A513	22	44	2'-8"	X	X	PAVING BLOCK - VERTICAL
☆	A514	10	2	2'-6"	X	X	PAVING BLOCK - VERTICAL
☆	A515	2	2	3'-3"	X	X	PAVING BLOCK - VERTICAL
	A516	3	3	4'-0"	X	X	DIAPRHAGM - VERTICAL AT EXTERIOR GIRDERS

BILL OF BARS
(NORTH ABUT. JOINT REPAIR) TOTAL COATED = 2,260 LBS

	BAR MARK	NO. REQ'D. STAGE 1	NO. REQ'D. STAGE 2	LENGTH	COAT	BENT	LOCATION
	B401	8	12	12'-10"	X		DIAPHRAGM - HORIZONTAL
	B702	10	15	12'-10"	X		DIAPHRAGM - HORIZONTAL
	B403	35	52	5'-6"	X	X	DIAPHRAGM - VERTICAL
◓	B504	6	-	26'-9"	X		DECK - HORIZONTAL
◓	B505	-	6	41'-6"	X		DECK - HORIZONTAL
◓	B506	9	15	8'-0"	X		PAVING BLOCK - HORIZONTAL
	B507	3	-	7'-5"	X		PAVING BLOCK - HORIZONTAL AT MEDIAN
	B508	-	3	7'-2"	X		PAVING BLOCK - HORIZONTAL AT SIDEWALK
	B409	21	45	3'-4"	X	X	PAVING BLOCK - VERTICAL
	B410	9	-	3'-0"	X	X	PAVING BLOCK - VERTICAL
	B411	2	4	3'-10"	X	X	PAVING BLOCK - VERTICAL
	B412	2	-	3'-6"	X	X	PAVING BLOCK - VERTICAL
☆	B513	22	44	2'-8"	X	X	PAVING BLOCK - VERTICAL
☆	B514	10	2	2'-6"	X	X	PAVING BLOCK - VERTICAL
☆	B515	2	2	3'-3"	X	X	PAVING BLOCK - VERTICAL
	B516	3	3	4'-0"	X	X	DIAPRHAGM - VERTICAL AT EXTERIOR GIRDERS

BILL OF BARS
(MEDIAN AND SIDEWALK) TOTAL COATED = 7,120 LBS

	BAR MARK	NO. REQ'D.	LENGTH	COAT	BENT	BAR SERIES	LOCATION
	S401	36	42'-11"	X			MEDIAN - LONGITUDINAL SPAN 1
	S402	36	44'-9"	X			MEDIAN - LONGITUDINAL SPAN 2
	S503	491	6'-2"	X	X		MEDIAN - TRANSVERSE
	S504	12	4'-1"	X	X	X	MEDIAN - TRANSVERSE
**	S405	999	1'-9"	X	X		MEDIAN - VERTICAL
	S506	167	2'-1"	X			MEDIAN - TRANSVERSE
	S507	2	7'-11"	X	X		MEDIAN - TRANSVERSE
	S408	22	3'-2"	X			SIDEWALK - LONGITUDINAL
	S509	20	7'-9"	X	X		SIDEWALK - TRANSVERSE
	S510	6	1'-9"	X			SIDEWALK - TRANSVERSE
**	S411	28	1'-10"	X	X		SIDEWALK - VERTICAL

NOTE: LENGTH SHOWN FOR ANY BAR IN A BAR SERIES IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

NO.	DATE	REVISION	BY

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STRUCTURE B-40-573

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BILL OF BARS

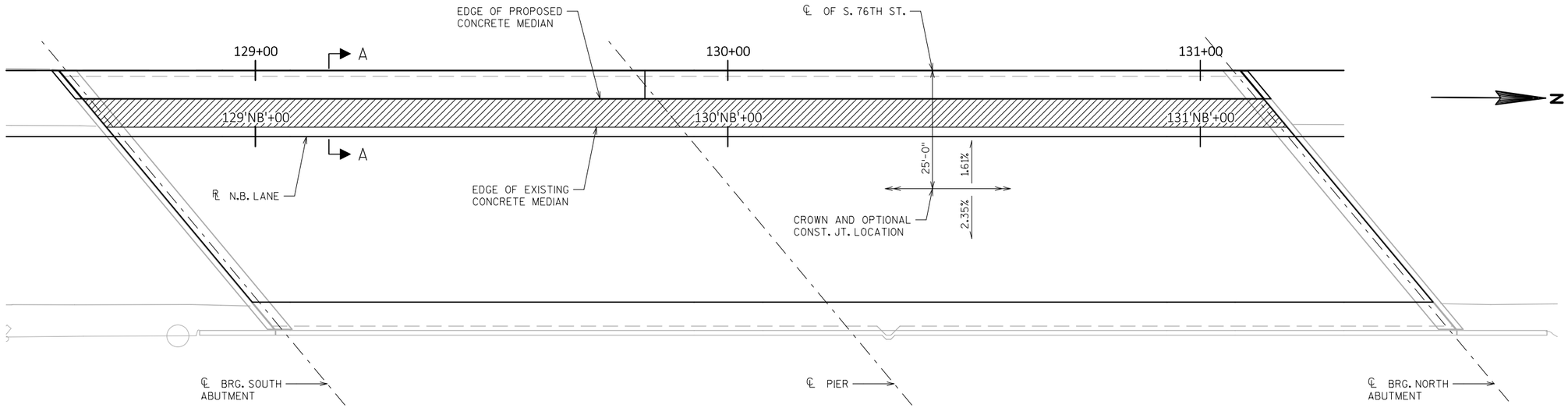
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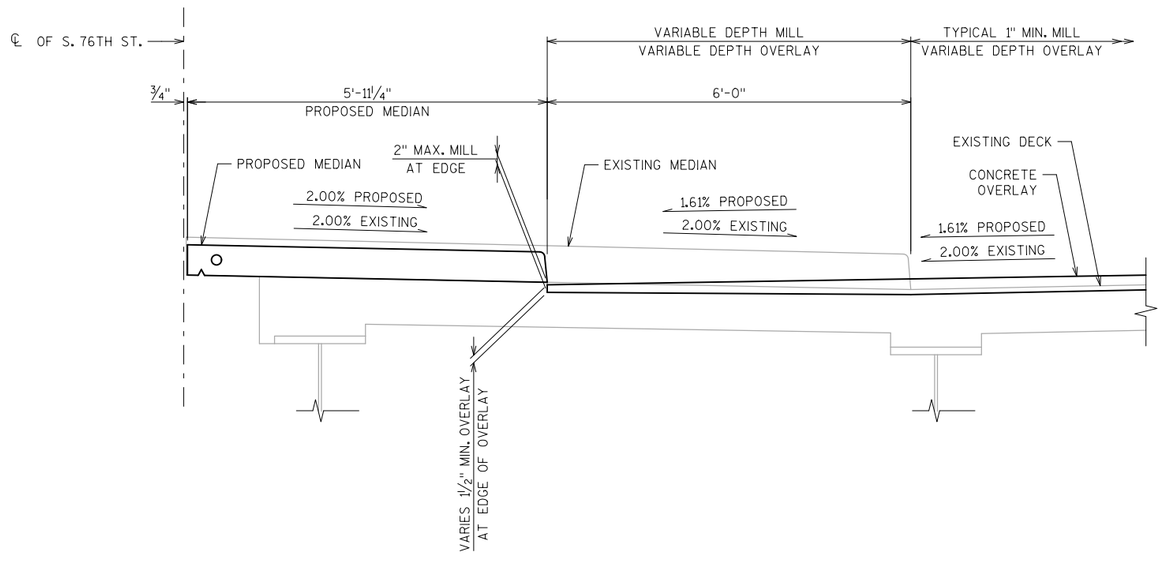
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PLAN



SECTION A-A

NOTES

REMOVAL HATCHING OF EXISTING MEDIAN IN SECTION A-A NOT SHOWN FOR CLARITY.

CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO EXISTING BRIDGE DECK.

CROSS SLOPES ARE ESTIMATED BASED ON EXISTING PLANS. REMOVE EXISTING DECK TO DEPTHS SHOWN ON THIS SHEET UNDER BID ITEM "CLEANING DECKS". PLACE NEW OVERLAY TO THE DEPTHS SHOWN AT THE CROWN AND GUTTER LINES ON THIS SHEET AND ON THE "CROSS SECTION & REHAB DETAILS" SHEET.

LEGEND

▨ LIMITS OF VARIABLE DEPTH MILL

8

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NO.	DATE	REVISION	BY

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-573

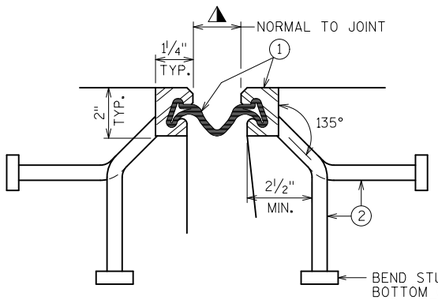
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OVERLAY DETAILS

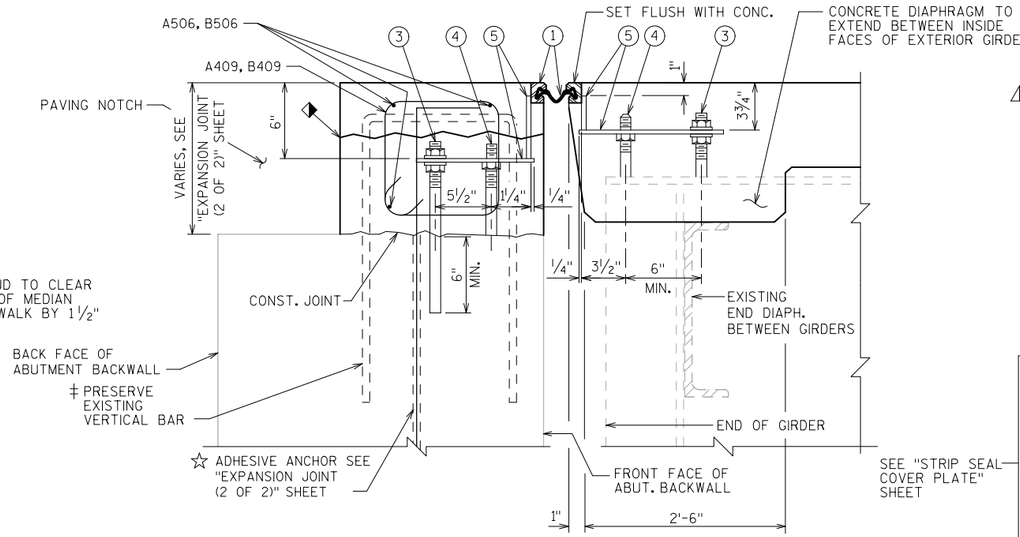
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SECTION THRU JOINT
AT MEDIAN AND SIDEWALK



SECTION THRU JOINT AT ABUTMENT
NORMAL TO ℄ SUBSTRUCTURE
SECTION BETWEEN MEDIAN AND SIDEWALK SHOWN

LEGEND

▲ (1) NEOPRENE STRIP SEAL (4-INCH) AND STEEL EXTRUSIONS. JOINT OPENINGS GIVEN NORMAL TO JOINT. SET JOINT OPENING TO 1¼".

(2) STUDS ⅝"Φ X 6⅜" LONG AT 6" ALTERNATE CENTERS. WELD TO EXTRUSIONS AND BEND AS SHOWN AFTER WELDING.

(2A) ½" THICK ANCHOR PLATE WITH ⅝" DIA. ROD (OR ALTERNATE STRIP SEAL ANCHOR). WELD ROD TO ANCHOR PLATE, WELD ANCHOR PLATE TO NO. 1 AT 1'-6" CENTERS BETWEEN GIRDERS.

(3) ¾" Φ THREADED ROD WITH 2 NUTS AND PLATE WASHERS. WELD THREADED ROD TO TOP FLANGE OR ATTACH BY BOLTING THRU FLANGE. ON ABUTMENT SIDE, GROUT THREADED ROD INTO FIELD DRILLED HOLES IN ABUTMENT BACKWALL AS SHOWN.

(4) ¾"Φ THREADED ROD WITH NUT. TACK WELD NUT TO NO. 5.

(5) FABRICATE SUPPORT FROM 3" X ½" BAR AS SHOWN OR EQUIVALENT, ONE PER GIRDER PER SIDE. SHOP OR FIELD WELD TO NO. 1. IF FIELD WELDED, COVER WELDED AREAS WITH EPOXY-COATING MATERIAL. PROVIDE 1½"Φ HOLE FOR NO. 3 AND 1"Φ HOLE FOR NO. 4.

(6) NOT USED

(7) ¾"Φ X 1½" STAINLESS STEEL SOCKET FLAT HEAD SCREWS WITH ANTI-SEIZE LUBRICANT. PLACE IN COUNTERSUNK HOLE. RECESS 1/16" BELOW PLATE SURFACE.

(8) ¾"Φ X 4" GALVANIZED HEX HEAD BOLT. BEND 45°.

(9) ¾"Φ X 2¼" GALVANIZED THREADED COUPLING.

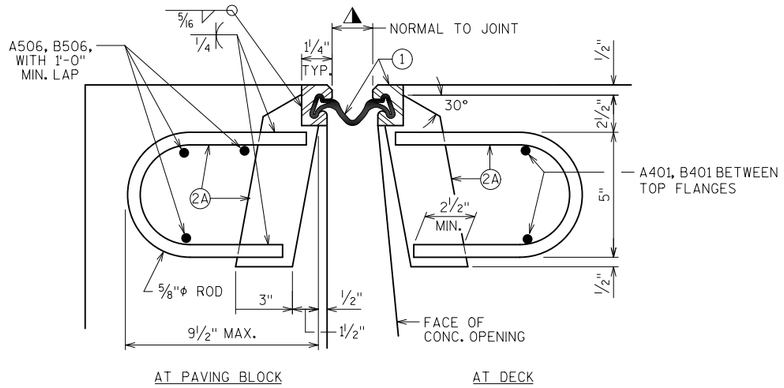
(10) SIDEWALK OR MEDIAN COVER PLATE ⅜" x LIMITS SHOWN. BEND DOWN FACE OF SIDEWALK OR MEDIAN WITH HOLES FOR NO. 7. GALVANIZE PLATE AFTER SLIP-RESISTANT SURFACE IS APPLIED.

(11) 1" x 5" SLOTTED COUNTERSUNK HOLE FOR NO. 7. PLACE SLOT PARALLEL TO DIRECTION OF MOVEMENT.

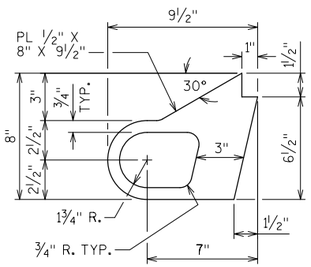
☆ EMBED 1'-0" INTO CONCRETE. SPACE AT 1'-0". TURN 10" LEG AS NECESSARY TO FIT.

‡ EXISTING BARS ARE LIKELY TO BE CORRODED AND/OR DAMAGED DURING CONCRETE REMOVAL. PRESERVE AND INCORPORATE AS MUCH REBAR AS PRACTICAL.

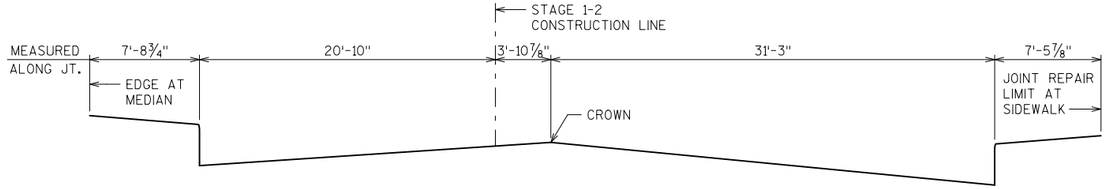
◆ OPTIONAL CONSTRUCTION JOINT 1" MIN. BELOW EXISTING REINFORCEMENT.



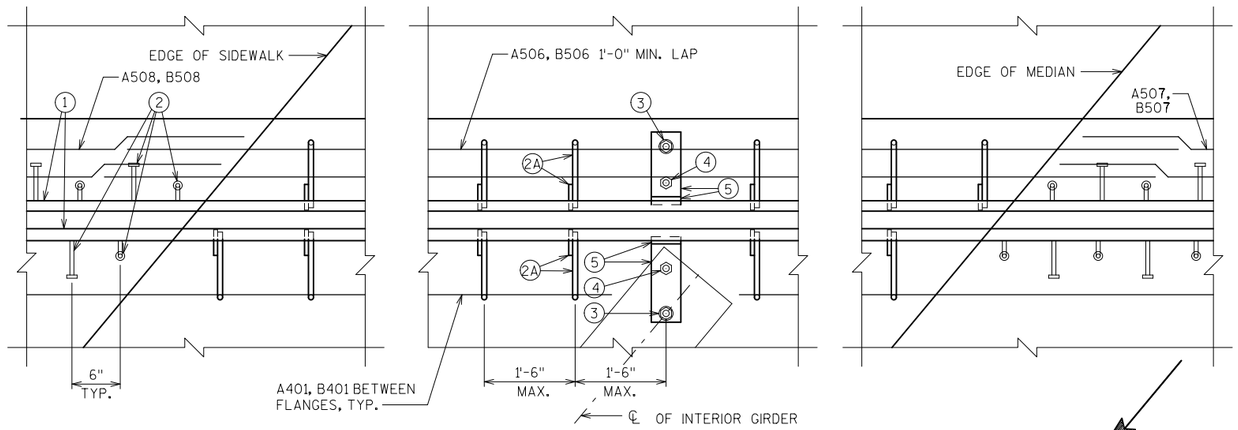
SECTION THRU JOINT
ROADWAY TRAFFIC AREA BETWEEN MEDIAN AND SIDEWALK.



ALTERNATE STRIP SEAL ANCHOR



EXPANSION JOINT ELEVATION
LOOKING NORTH
VERTICAL EXAGGERATION SHOWN



PART PLAN
SOUTH ABUTMENT SHOWN, NORTH ABUTMENT SIMILAR

NOTES

FIELD SPLICES IN THE STEEL EXTRUSIONS ARE PERMITTED AT STAGE LINE AND CROSS SLOPE BREAK POINTS TO FACILITATE INSTALLATION. IF USED, ANCHOR PLATES SHALL BE PROVIDED 3" FROM EACH SIDE OF THE FIELD SPLICE. DETAILS SHALL BE SUBMITTED FOR APPROVAL. SPLICING IS PERMITTED IN NEOPRENE STRIP SEAL AT MEDIAN BETWEEN NB AND SB STRUCTURES. THE NEOPRENE STRIP SEAL SPLICE MUST BE VULCANIZED AND WATERTIGHT. NEOPRENE STRIP SEAL MAY NOT BE SPLICED IN ANY OTHER LOCATION.

AFTER FABRICATION, BUT BEFORE SHIPMENT, STRAIGHTEN STEEL EXTRUSIONS SUCH THAT THEY SHALL BE FREE FROM WARP, TWIST AND SWEEP.

FABRICATOR SHALL PROVIDE MEANS OF KEEPING GALVANIZED EXTRUSIONS CLEAN AND SMOOTH DURING SHIPMENT AND PRIOR TO APPLYING LUBRICANT ADHESIVE FOR NEOPRENE GLAND INSTALLATION.

SANDBLAST PLATES, SUPPORTS AND EXTRUSIONS AFTER FABRICATION IN ACCORDANCE WITH SSPC SP. #6 "COMMERCIAL BLAST CLEANING". AFTER BLAST CLEANING, THE PLATES, SUPPORTS AND EXTRUSIONS SHALL BE HOT DIPPED GALVANIZED. SLIP-RESISTANT SURFACE IS APPLIED TO SIDEWALK AND MEDIAN COVER PLATES BY THE MANUFACTURER AND THEN HOT DIPPED GALVANIZED TO THEIR RECOMMENDATION TO MAINTAIN THE INTEGRITY OF THIS SURFACE.

ANCHOR SYSTEM NO. 8 AND NO. 9 SHALL CONFORM TO ASTM A307 & SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C AND D.

STRIP SEAL EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS AND HARDWARE WILL BE PAID FOR UNDER THE BID ITEM "EXPANSION DEVICE".

FOR JOINT DETAILS BETWEEN NB AND SB STRUCTURES, SEE "STRIP SEAL COVER PLATE" AND "MISCELLANEOUS DETAILS" SHEETS.

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-573

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RBH	JRS

STRIP SEAL EXPANSION JOINT

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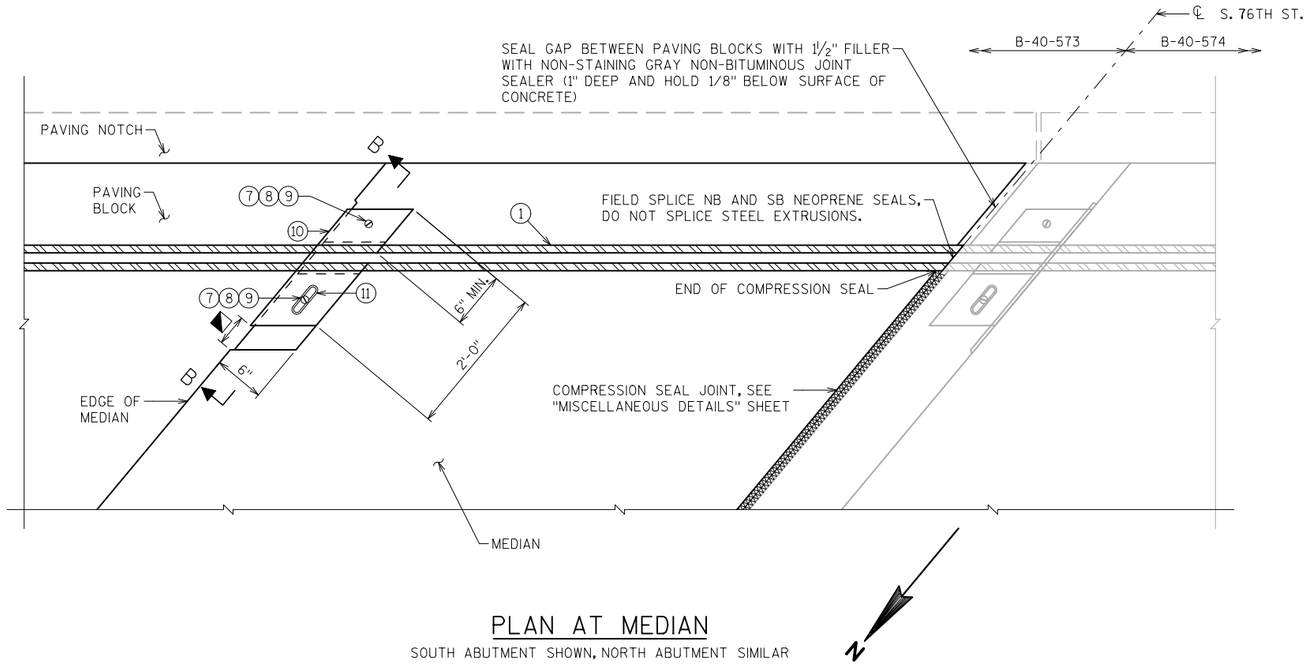
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STATE PROJECT NUMBER
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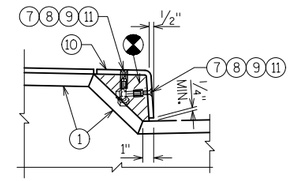
PLAN AT MEDIAN

SOUTH ABUTMENT SHOWN, NORTH ABUTMENT SIMILAR

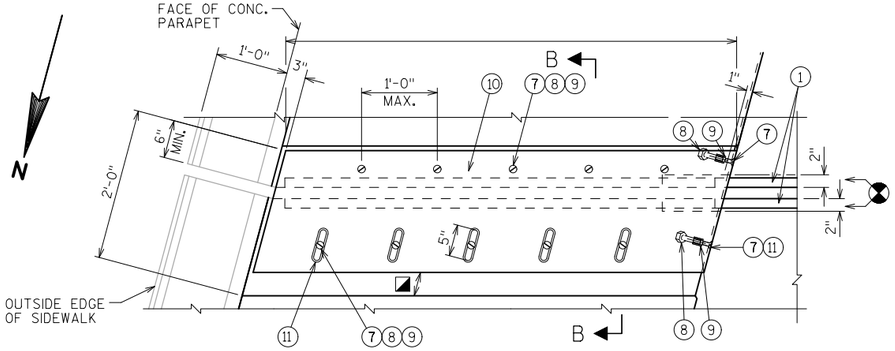
NOTE:

FOR NUMBERED ITEMS, SEE "STRIP SEAL EXPANSION JOINT" SHEET.

FABRICATE COVER PLATES TO MATCH CROSS-SLOPES AT MEDIAN AND SIDEWALK.

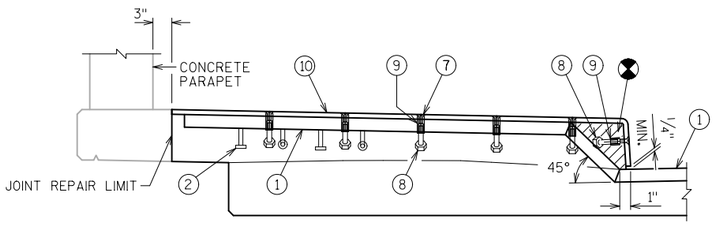


SECTION AT MEDIAN

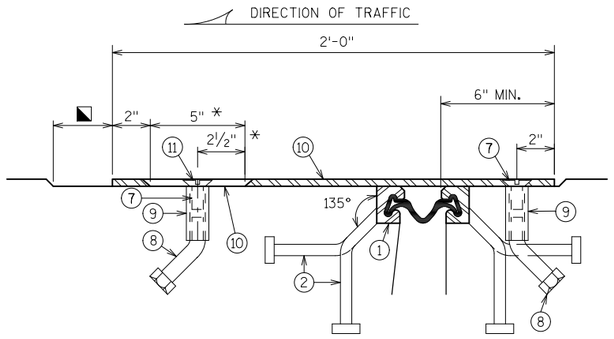


PLAN AT SIDEWALK

SOUTH ABUTMENT SHOWN, NORTH ABUTMENT SIMILAR

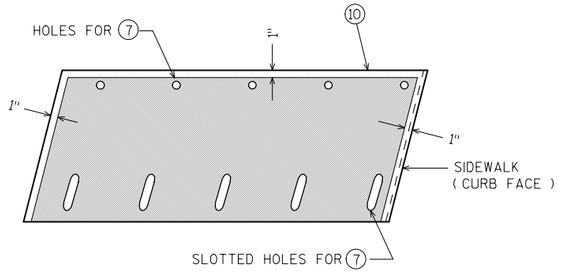


SECTION AT SIDEWALK



SECTION B-B

* DIMENSION ALONG DIRECTION OF MOVEMENT



PLAN OF SIDEWALK COVER PLATE WITH SLIP-RESISTANT SURFACE

PLACE SLIP-RESISTANT SURFACE ON TOP WALKING SURFACE IN SHADED AREA ONLY (NOT ON CURB FACE).

APPROVED SLIP-RESISTANT APPLIED SURFACES FOR STEEL PLATES		
PRODUCT	MANUFACTURER	CONTACT AT
SLIPNOT GRADE 2, STEEL	W. S. MOLNAR COMPANY	1-800-SLIPNOT
ALGRIP, STEEL	ROSS TECHNOLOGY CORP.	1-800-345-8170

⊗ BLOCK OUT CONCRETE 2" EACH SIDE OF JOINT OPENING.

◪ JOINT OPENING DIMENSION ALONG SKEW PLUS ½".

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STRUCTURE B-40-573

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STRIP SEAL COVER PLATE

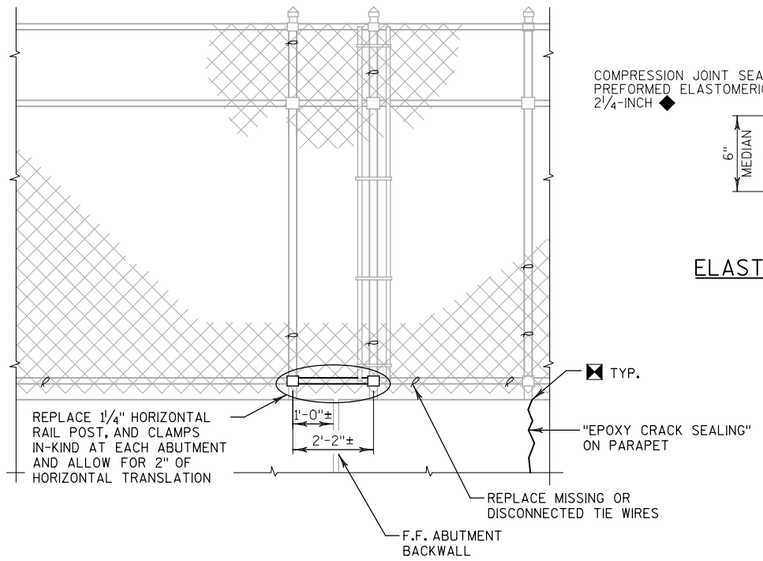
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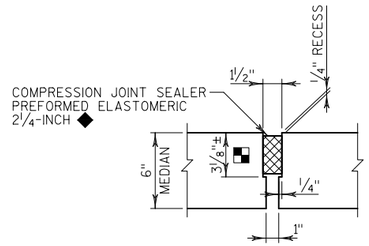
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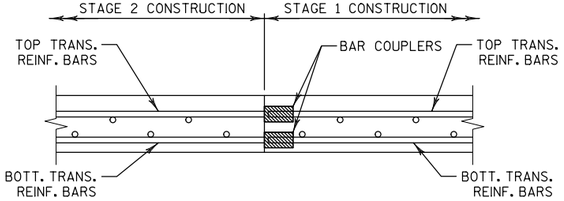


FENCE PART ELEVATION

ALL WORK SHOWN IS INCLUDED IN BID ITEM "FENCE REPAIR" EXCEPT FOR "EPOXY CRACK SEALING"

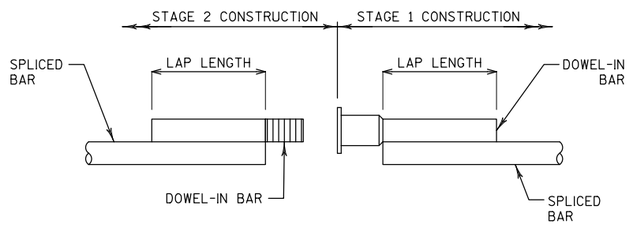


ELASTOMERIC COMPRESSION SEAL DETAIL



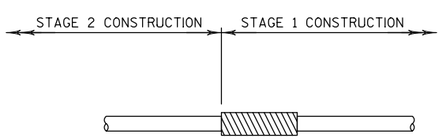
SECTION THRU DECK

ONE-PIECE THREADED BAR COUPLER SHOWN



DOWEL BAR COUPLER

STAGE 2 DOWEL SCREWS INTO COUPLER PLACED IN STAGE 1



ONE PIECE THREADED SPLICER

BAR COUPLER ALTERNATIVES

NOTES

FOR DOWEL BAR COUPLERS, ALL REINFORCEMENT SHALL BE LAPPED AND TIED TO THE REINFORCEMENT BARS.

BAR LENGTH COMPUTED TO THE ℄ OF THE CONSTRUCTION JOINT AND SHALL BE MODIFIED BY THE BAR COUPLER MANUFACTURERS RECOMMENDATIONS.

CONDUIT SHALL BE EMBEDDED 2" CLEAR.

EXPANSION FITTINGS, CONDUIT FITTINGS, CONDUIT BENDS, AND ADAPTER FITTINGS INCIDENTAL TO CONDUIT WORK.

CONDUIT BENDS SHALL CONFORM TO THE NATIONAL ELECTRIC CODE.

REPLACE FENCE RAILS, REPLACE TIES, SEAL PERIMETER OF POSTS AND REPAIR CRACKS IN THE PARAPET AS DIRECTED BY THE FIELD ENGINEER.

ALL FENCE COMPONENTS SHALL BE GALVANIZED STEEL EXCEPT FOR THE FENCE TIES WHICH MAY BE ALUMINUM-COATED STEEL OR GALVANIZED STEEL.

BOLTS, NUTS, AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM 307. IF 307 IS USED, BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED.

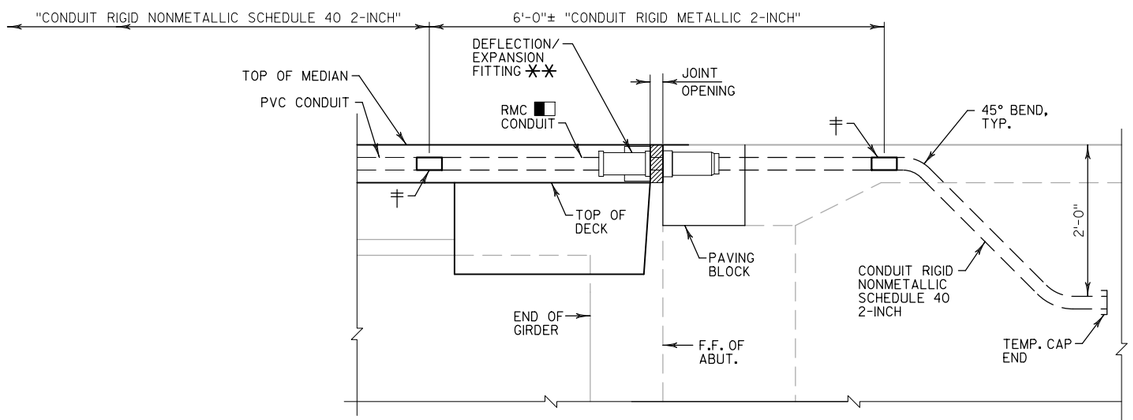
FIELD VERIFY DIMENSIONS AND SIZE OF RAIL POST SHOWN IN FENCE PART ELEVATION DETAIL.

LEGEND

- ■ USE 2" DIA. RIGID METALLIC (RMC) CONDUIT AT FITTINGS. PROVIDE RMC FOR 3'-0" MIN. ON EACH SIDE OF JOINT OPENINGS UNLESS NOTED OTHERWISE.
- ┼ NONMETALLIC CONDUIT TO METALLIC CONDUIT ADAPTER FITTING (UL OR NRTL LISTED FOR ELECTRICAL USE SHALL BE USED).
- ◥ SPONGE RUBBER WRAP TO BE AASHTO M153, TYPE 1 OR EQUIVALENT - ¼" MINIMUM THICKNESS. PROVIDE WRAP FOR THE ENTIRE LENGTH OF THE FITTING OR AS SHOWN. SPONGE RUBBER WRAP INCIDENTAL TO "CONDUIT RIGID METALLIC 2-INCH".
- ⬟ POSITION MOVABLE END OF CONDUIT INSIDE EXPANSION FITTING, SUCH THAT IT WILL HAVE THE SAME ALLOWANCE FOR MOVEMENT (EXPANSION/CONTRACTION) AS THE EXPANSION DEVICE SET IN PLACE IN THE DECK BELOW IT. TAKE CARE TO INSTALL EXPANSION FITTING AND CONDUIT EXACTLY PARALLEL TO BRIDGE MOVEMENT.
- ✳ EXPANSION FITTING REQUIREMENTS:
  - 4" TOTAL MOVEMENT WITH BONDING JUMPER
- ✳✳ DEFLECTION/EXPANSION FITTING REQUIREMENTS:
  - UP TO ¾" CONDUIT CONTRACTION OR EXPANSION AND UP TO 30° OF ANGULAR MISALIGNMENT IN ANY DIRECTION WITH BONDING JUMPER
- ⧓ CAULK AROUND PERIMETER OF ALL FENCE POSTS WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. INCLUDED WITH BID ITEM "FENCE REPAIR"
- ◪ VARIES BASED ON JOINT MANUFACTURER.
- ◆ MANUFACTURER SHALL LABEL TOP OF SEAL.

DEFLECTION/EXPANSION AND 4" EXPANSION FITTING

BOND JUMPER NOT SHOWN FOR CLARITY



ELEVATION OF MEDIAN

STATE PROJECT NUMBER

2160-17-70

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-573

DRAWN BY RBH | PLANS CK'D. JRS

MISCELLANEOUS DETAILS

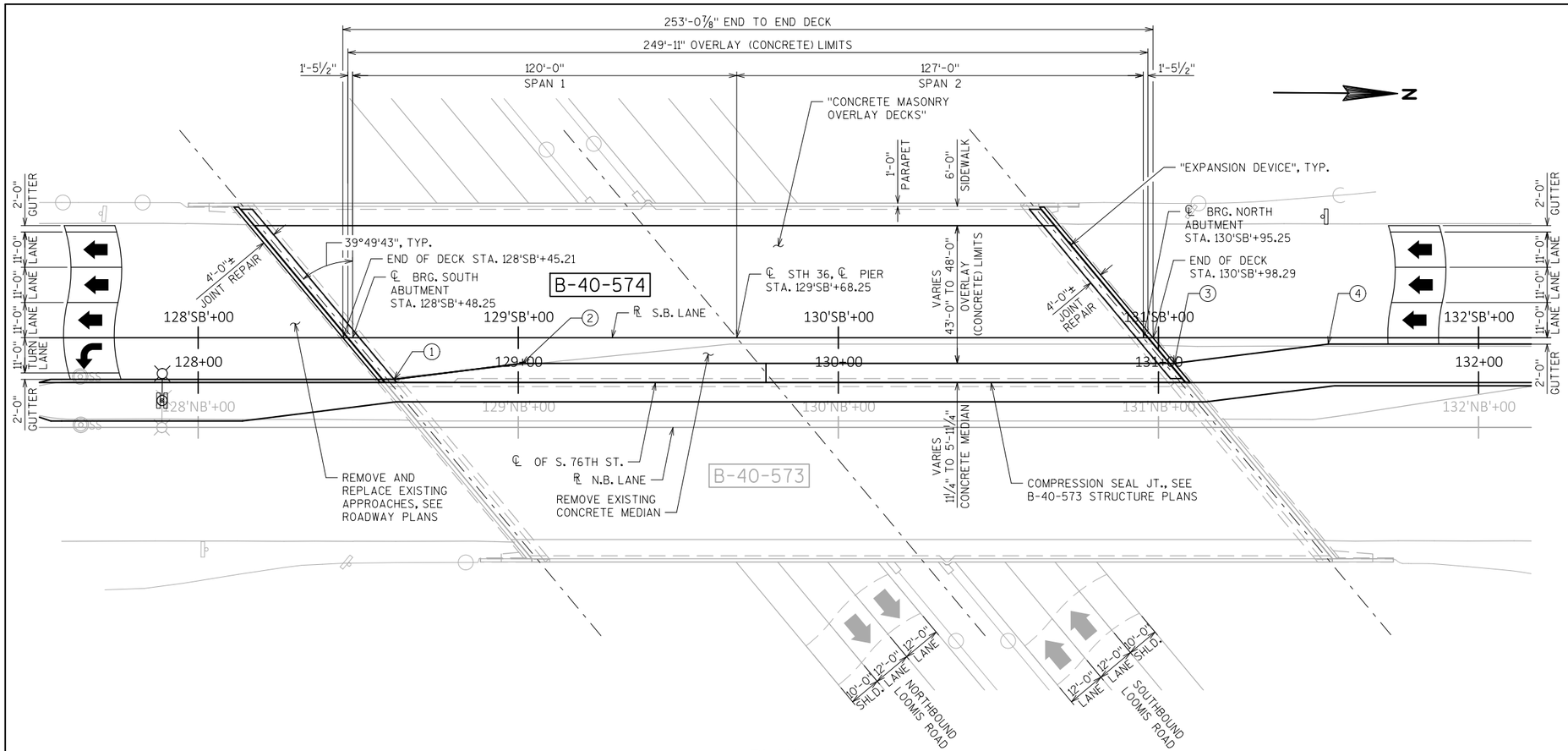
SHEET 15 OF 15

164

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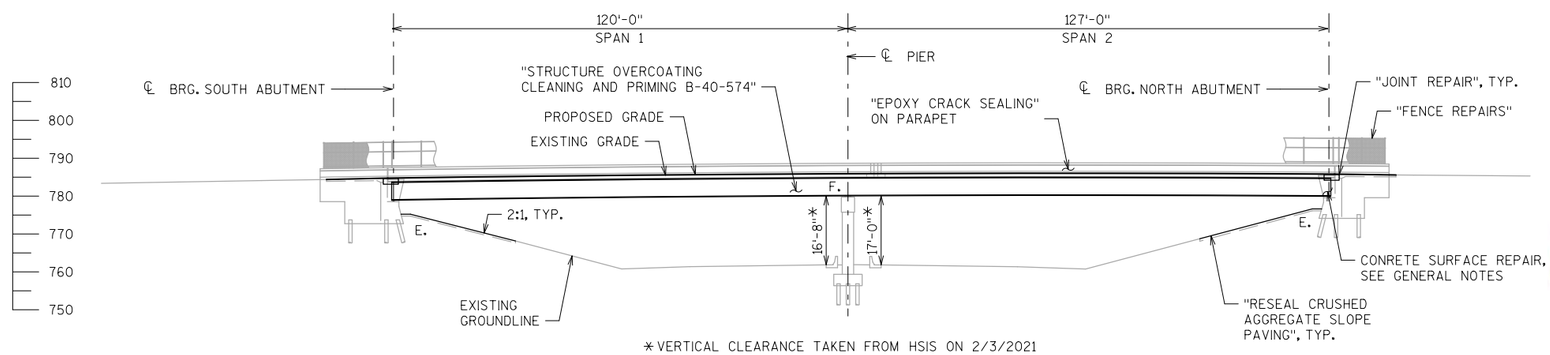
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STATE PROJECT NUMBER
2160-18-70



PLAN

2 SPAN CONTINUOUS STEEL GIRDER - CONCRETE OVERLAY



* VERTICAL CLEARANCE TAKEN FROM HSIS ON 2/3/2021

ELEVATION

NORMAL TO SUBSTRUCTURE UNITS

DESIGN DATA

LIVE LOAD:
DESIGN LOADING: HS-20
INVENTORY RATING: HS-21
OPERATING RATING: HS-36
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 230 KIPS

MATERIAL PROPERTIES:
CONRETE MASONRY BRIDGES
SUPERSTRUCTURE.....f'c = 4,000 P.S.I.
ALL OTHERS.....f'c = 3,500 P.S.I.

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

TRAFFIC DATA

76TH STREET
A.A.D.T. = 18,760 BI-DIRECTIONAL (2022)
A.A.D.T. = 23,740 BI-DIRECTIONAL (2042)
RDS = 40 MPH

LIST OF DRAWINGS

1. GENERAL PLAN
2. GENERAL NOTES & QUANTITIES
3. CROSS SECTION & REHAB DETAILS
4. STAGED CONSTRUCTION SECTIONS
5. SOUTH ABUTMENT EXPANSION JOINT REMOVAL
6. NORTH ABUTMENT EXPANSION JOINT REMOVAL
7. EXPANSION JOINT REMOVAL DETAILS
8. SOUTH EXPANSION JOINT
9. NORTH EXPANSION JOINT
10. EXPANSION JOINT DETAILS (1 OF 2)
11. EXPANSION JOINT DETAILS (2 OF 2)
12. MEDIAN DETAILS
13. SIDEWALK DETAILS
14. BILL OF BARS
15. OVERLAY DETAILS
16. STRIP SEAL EXPANSION JOINT
17. STRIP SEAL COVER PLATE
18. MISCELLANEOUS DETAILS

GEOMETRY FOR MEDIAN GUTTERLINE		
POINT	STATION	OFFSET*
1	128+61.26	1.00'
2	129+01.30	6.00'
3	131+04.96	6.00'
4	SEE ROADWAY PLANS	

* OFFSETS GIVEN LT OF ℄ OF S. 76TH ST. IN THE DIRECTION OF INCREASING STATIONING

WISCONSIN
JASON R. SADOWSKI
E-38660
BROOKFIELD, WI
PROFESSIONAL ENGINEER

1/6/2022

STRUCTURE DESIGN CONTACTS
BUREAU OF STRUCTURES:
AARON BONK (608) 261-0261
CONSULTANT:
JASON SADOWSKI (414) 751-9986

NO.	DATE	REVISION	BY

Michael Baker INTERNATIONAL
MICHAEL BAKER INTERNATIONAL
250 E. WISCONSIN STREET
SUITE 1725
MILWAUKEE, WI 53202

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED _____ SDR 01/06/22
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-40-574

S. 76TH STREET (SB) OVER STH 36

COUNTY	TOWN/CITY/VILLAGE
MILWAUKEE	FRANKLIN

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
TJN	JRS	TJN	JRS

GENERAL PLAN

SHEET 1 OF 18
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STATE PROJECT NUMBER

2160-18-70

GENERAL NOTES

THE EXISTING STRUCTURE B-40-574, IS A 2 SPAN CONTINUOUS STEEL GIRDER STRUCTURE WITH A DECK LENGTH OF 249'-11".

THE PROPOSED WORK INCLUDES REPLACING THE EXISTING MEDIAN, PLACING OVERLAY ON DECK, JOINT REPLACEMENT, REPAINTING STEEL, SLOPE PAVING REPAIRS, AND PARAPET AND FENCE REPAIRS.

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

THE FIRST DIGIT OF A THREE DIGIT BAR MARK AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFY THE BAR SIZE.

BEVEL ALL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE ENTIRE TOP SURFACE OF THE NEW CONCRETE OVERLAY, PAVING BLOCK, PAVING NOTCH PRIOR TO POURING APPROACH SLAB, THE TOP SURFACES OF THE MEDIAN AND SIDEWALK, AND THE VERTICAL SURFACES OF THE MEDIAN AND SIDEWALK AT THE GUTTERLINES. THE PROTECTIVE SURFACE TREATMENT SHALL ONLY BE APPLIED TO NEW WORK.

SEAL OVERLAY CONSTRUCTION JOINTS ACCORDING TO SECTION 502.3.13.1 OF THE STANDARD SPECIFICATIONS. COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY OVERLAY DECKS".

A MINIMUM OF 1-INCH OF CONCRETE SHALL BE REMOVED FROM THE BRIDGE DECK AND BETWEEN THE PROPOSED MEDIAN AND EXISTING SIDEWALK UNDER THE BID ITEM "CLEANING DECKS". FOR AREAS OF MILLING, SEE "OVERLAY DETAILS" SHEET.

COST OF MILLING BEYOND THE TYPICAL 1" IS INCIDENTAL TO BID ITEM "CLEANING DECKS". ALTERNATIVE MEANS AND METHODS OF REMOVAL TO STANDARD SPECIFICATION 509.3.3 CLEANING MAY BE USED BY THE CONTRACTOR AND MUST BE APPROVED BY THE ENGINEER. COST OF REMOVAL IS INCLUDED IN BID ITEM "CLEANING DECKS".

ANY REINFORCEMENT THAT IS DAMAGED OR REMOVED BY THE MILLING PROCESS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTORS EXPENSE.

CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO EXISTING CONCRETE BRIDGE DECK.

AN AVERAGE OVERLAY THICKNESS OF 2⅞" WAS USED FOR THE LOAD RATING AND CALCULATION OF QUANTITIES. THE AVERAGE OVERLAY THICKNESS IS BASED ON THE AREA OF THE VARIABLE DEPTH OVERLAY DIVIDED BY THE WIDTH OF THE CROSS SECTION + ½-INCH TO ACCOUNT FOR VARIATIONS IN THE DECK SURFACE.
(AVERAGE OVERLAY THICKNESS = AREA OF CROSS SECTION / WIDTH + ½-INCH).

PROFILE GRADE LINE SHALL BE DETERMINED IN THE FIELD BASED ON A MINIMUM OVERLAY THICKNESS OF 2½" AT THE ROADWAY/OVERLAY CROWN. THE PROFILE GRADE LINE SHALL BE DETERMINED AFTER SURFACE PREPARATION. EXPECTED AVERAGE OVERLAY THICKNESS IS 2⅞". IF EXPECTED AVERAGE OVERLAY THICKNESS IS EXCEEDED BY MORE THAN ½", CONTACT THE STRUCTURES DESIGN SECTION. NOTIFY THE ENGINEER IF THE OVERLAY DEPTH AT ANY LOCATION EXCEEDS 4".

PREPARATION DECKS TYPE 1, AND PREPARATION DECKS TYPE 2 REPAIR AREAS SHALL BE DETERMINED BY THE ENGINEER. DECK PREPARATION REPAIRS SHALL BE FILLED WITH "CONCRETE MASONRY OVERLAY DECKS".

ANY EXCAVATION REQUIRED TO COMPLETE THE OVERLAY OR JOINT REPAIR AT THE ABUTMENTS IS TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY OVERLAY DECKS".

ALL CONCRETE REMOVAL NOT COVERED WITH CONCRETE OVERLAY SHALL BE DEFINED BY A 1" DEEP SAW CUT.

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

CLEAN, STRAIGHTEN, AND EXTEND EXISTING BAR STEEL REINFORCEMENT 24 BAR DIAMETERS INTO NEW CONSTRUCTION UNLESS SPECIFIED OTHERWISE.

DECK DIMENSIONS AND EXISTING CROSS-SLOPES ARE TAKEN FROM EXISTING PLANS.

STRIP SEAL EXPANSION JOINT ASSEMBLIES, INCLUDING ANCHOR STUDS, COVER PLATES, AND HARDWARE SHALL BE PAID FOR AT THE LINEAL FOOT PRICE BID FOR "EXPANSION DEVICE".

STRUCTURAL STEEL SURFACES IDENTIFIED IN THE "REHABILITATION LIMITS" DETAIL ON THE "CROSS SECTION & REHAB DETAILS" SHEET AND LOCATIONS IDENTIFIED BY THE FIELD ENGINEER ARE TO BE CLEANED AND PAINTED UNDER THE BID ITEM "STRUCTURE OVERCOATING CLEANING AND PRIMING B-40-574." PAINT COLOR TO BE FEDERAL STANDARD COLOR NO. 26293 (GRAY). SEE SPECIAL PROVISIONS FOR ADDITIONAL PAINTING REQUIREMENTS TO ENSURE COMPATIBILITY WITH THE EXISTING VINYL PAINT SYSTEM.

CLEAN AND PAINT BEARINGS AT BOTH ABUTMENTS AND PIER. COSTS OF CLEANING AND PAINTING BEARINGS IS INCLUDED IN BID ITEM "STRUCTURE OVERCOATING CLEANING AND PRIMING B-40-574".

REMOVE THE EXISTING MEDIAN UNDER THE BID ITEM, "REMOVING STRUCTURE B-40-574". USE CAUTION DURING REMOVAL TO AVOID DAMAGE TO THE EXISTING DECK.

REMOVING THE EXISTING MEDIAN SHALL BE PERFORMED BY HAND POWER TOOLS OR AIR HAMMERS WEIGHING LESS THAN 80 POUNDS. HEAVIER EQUIPMENT INCLUDING BACKHOE MOUNTED HAMMERS ARE NOT PERMITTED. PERFORM MEDIAN REMOVAL IN SUCH A MANNER SO AS TO NOT DAMAGE THE DECK.

CRACKS IN THE PARAPET ON BRIDGE AND APPROACHES SHALL BE REPAIRED AS DIRECTED BY THE FIELD ENGINEER. COST OF PARAPET REPAIRS INCLUDED IN THE BID ITEM "EPOXY CRACK SEALING".

PERFORM "CONCRETE SURFACE REPAIR" AS DIRECTED BY THE FIELD ENGINEER. QUANTITIES SHOWN ON THE PLANS ARE APPROXIMATE.

GENERAL NOTES (CONTINUED)

CLEAN AND SEAL THE TOP AND ROADWAY FACES OF THE EXISTING PARAPET ON BRIDGE AND APPROACHES. COST OF CLEANING IS INCLUDED IN THE BID ITEM "PIGMENTED SURFACE SEALER RESEAL".

APPLY BRIDGE SEAT PROTECTION, PER SECTION 502.3.12 OF THE STANDARD SPECIFICATIONS, TO THE TOP SURFACES OF BOTH ABUTMENTS BELOW EXPANSION DEVICES. POWERWASH AND ADEQUATELY DRY SURFACES BEFORE APPLICATION. WORK INCIDENTAL TO BID ITEM "JOINT REPAIR".

FOR STAGING OF LOOMIS ROAD PAINT WORK, SEE ROADWAY PLANS.

ANY DAMAGED WIRING OR CONDUIT, INCLUDING WITHIN THE JOINT REPAIR LIMITS, SHALL BE REPLACED AT NO COST TO THE DEPARTMENT.

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	SOUTH ABUTMENT	NORTH ABUTMENT	SUPER.	TOTAL
203.0220.02	REMOVING STRUCTURE B-40-574	EACH	---	---	---	1
203.0330.02	DEBRIS CONTAINMENT B-40-574	EACH	---	---	---	1
502.0100	CONCRETE MASONRY BRIDGES	CY	1	1	27	29
502.3101	EXPANSION DEVICE	LF	72	72	---	144
502.3200	PROTECTIVE SURFACE TREATMENT	SY	28	26	1,374	1,428
502.3215	PIGMENTED SUFACE SEALER RESEAL	SY	---	---	98	98
502.4204	ADHESIVE ANCHORS NO. 4 BAR	EACH	---	---	1,020	1,020
502.4205	ADHESIVE ANCHORS NO. 5 BAR	EACH	80	82	---	162
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	2,240	2,260	6,640	11,140
505.0905	BAR COUPLERS NO. 5	EACH	9	9	---	18
509.0301	PREPARATION DECKS TYPE 1	SY	---	---	60	60
509.0302	PREPARATION DECKS TYPE 2	SY	---	---	24	24
509.0500	CLEANING DECKS	SY	---	---	1,172	1,172
509.1000	JOINT REPAIR	SY	31	31	---	62
509.1500	CONCRETE SURFACE REPAIR	SF	5	5	---	10
509.2500	CONCRETE MASONRY OVERLAY DECKS	CY	---	---	128	128
509.9020.S	EPOXY CRACK SEALING	LF	---	---	328	328
517.3001.S.02	STRUCTURE OVERCOATING CLEANING AND PRIMING B-40-574	EACH	---	---	1	1
517.4001.S.02	CONTAINMENT AND COLLECTION OF WASTE MATERIALS B-40-574	EACH	---	---	1	1
604.9015.S	RESEAL CRUSHED AGGREGATE SLOPE PAVING	SY	280*	218*	---	498*
SPV.0060.06	FENCE REPAIRS B-40-574	EACH	---	---	1	1
	NON-BID ITEMS					
	FILLER	SIZE	---	---	---	1 1/2 "
	BRIDGE SEAT PROTECTION					---

* QUANTITIES ARE APPROXIMATE AND WILL NEED TO BE VERIFIED IN THE FIELD BY THE ENGINEER.

BENCH MARKS

NO.	NORTHING (Y)	EASTING (X)	DESCRIPTION	ELEV.
1	340928.699	2533358.138	TAG BOLT AT FIRE HYDRANT AT ON SE CORNER RAMP TO STH 36	782.005
2	341519.008	2533216.522	X ON EST FLANGE BOLT OF TRAFFIC SIGNAL MASTARM AT NW CORNER RAMP TO STH 36	785.996

NOTE: FOR BENCHMARK LOCATIONS IN PLAN VIEW, SEE ROADWAY PLANS

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-574

DRAWN BY TJN | PLANS CK'D. JRS

GENERAL NOTES & QUANTITIES

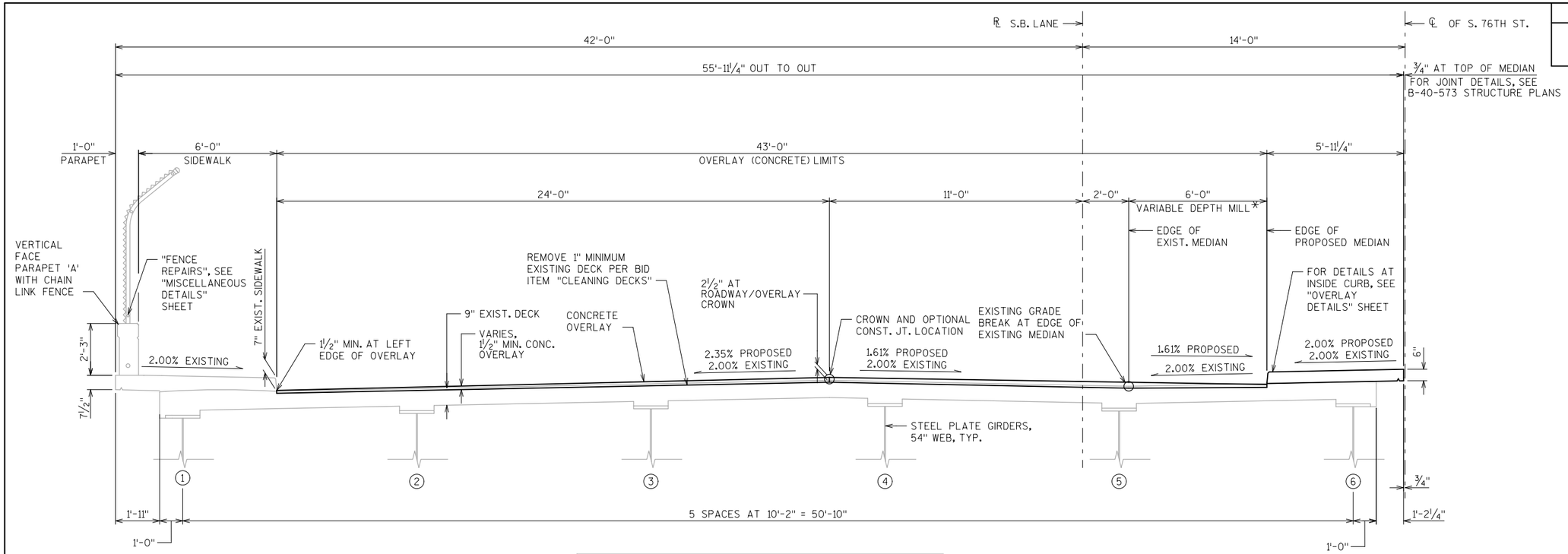
SHEET 2 OF 18

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STATE PROJECT NUMBER

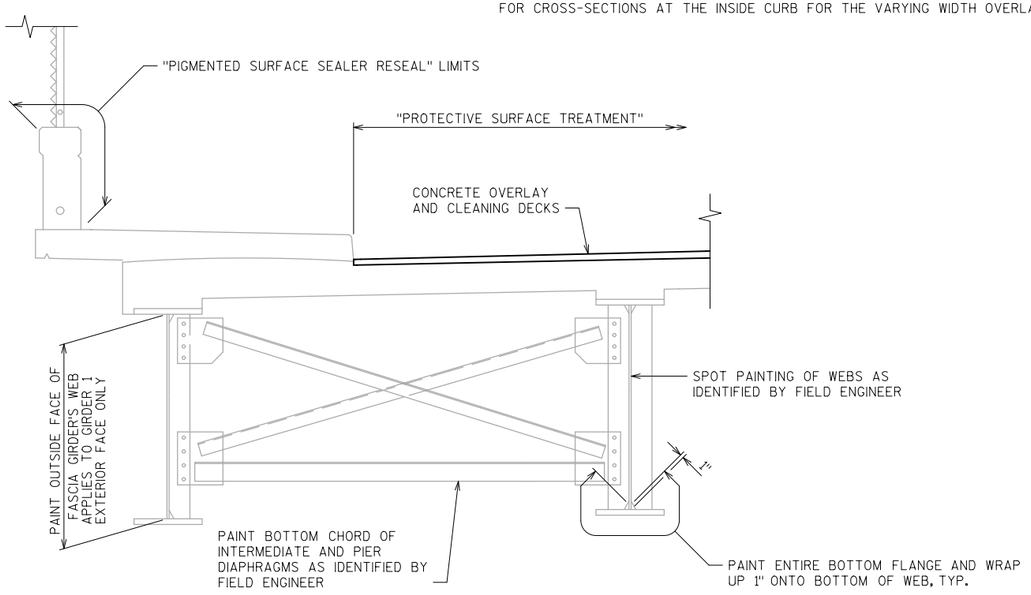
2160-18-70



AVERAGE OVERLAY THICKNESS FOR VARIABLE DEPTH OVERLAY: 2⅞"

TYPICAL SECTION

LOOKING NORTH
SECTION RT OF THE CROWN IS APPLICABLE TO SPAN 2 CONSTANT WIDTH OVERLAY ONLY
FOR CROSS-SECTIONS AT THE INSIDE CURB FOR THE VARYING WIDTH OVERLAY, SEE "OVERLAY DETAILS" SHEET



REHABILITATION LIMITS

EXPECTED LIMITS OF CLEANING AND PAINTING SHOWN, FIELD ENGINEER TO IDENTIFY ACTUAL LIMITS

LEGEND

(#) GIRDER NUMBER

* VARIABLE DEPTH MILL IN THE AREA BELOW EXISTING MEDIAN, SEE "OVERLAY DETAILS" SHEET FOR LIMITS AND DETAILS.

NO.	DATE	REVISION	BY

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-574

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CROSS SECTION & REHAB DETAILS

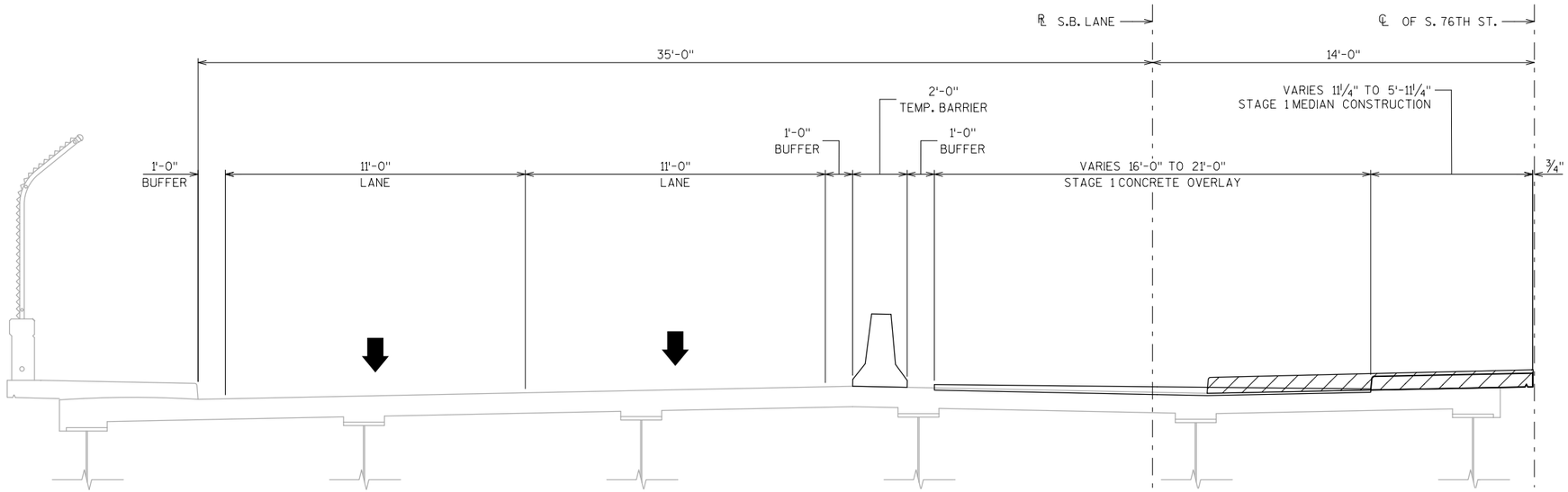
SHEET 3 OF 18
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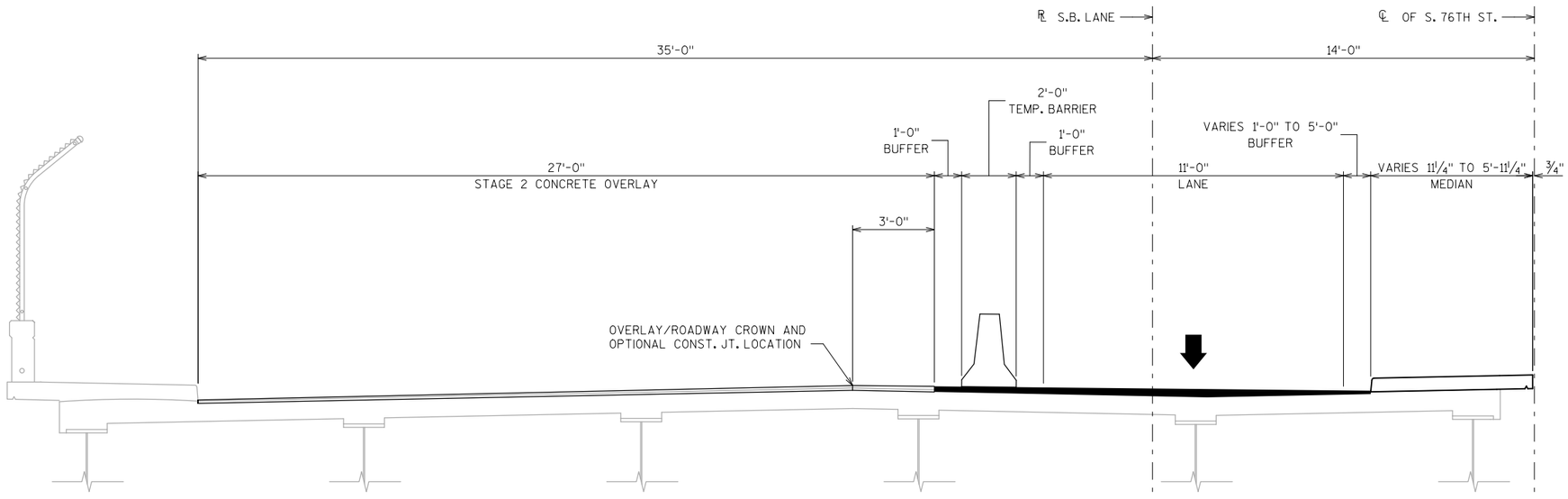
STATE PROJECT NUMBER

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STAGE 1 - CONSTRUCTION SECTION

LOOKING NORTH



STAGE 2 - CONSTRUCTION SECTION

LOOKING NORTH

STAGING NOTES

FOR TRAFFIC CONTROL AND STAGE CONSTRUCTION DETAILS, SEE ROADWAY PLANS.

FOR EXPANSION JOINT STAGE LENGTHS, SEE "STRIP SEAL EXPANSION JOINT" SHEET.

STAGE 2 CONSTRUCTION IS SEPARATED INTO TWO SUBSTAGES. STAGE 2A AND STAGE 2B. CONSTRUCTION ON NB AND SB S. 76TH STREET IS PERFORMED SEPARATELY DURING THESE STAGES. SEE ROADWAY PLANS FOR DETAILS.

LEGEND

- CONCRETE OVERLAY PLACED IN SHOWN STAGE
- CONCRETE OVERLAY PLACED IN PREVIOUS STAGE
- REMOVE EXISTING MEDIAN

8

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURE B-40-574

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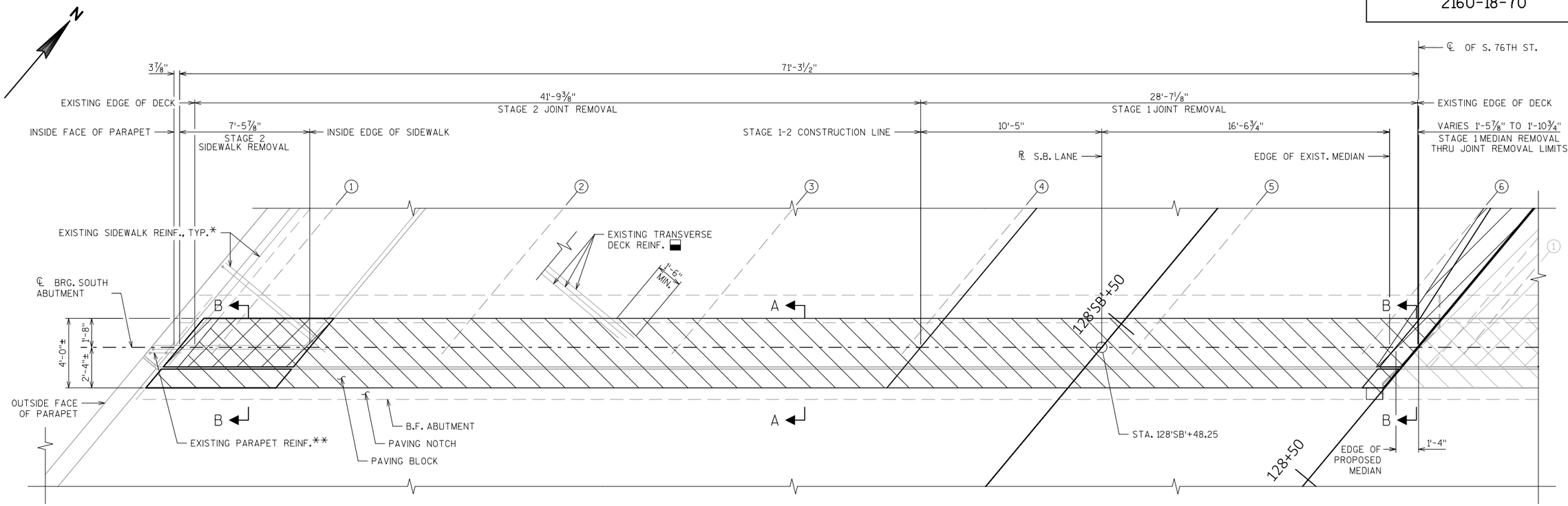
STAGED CONSTRUCTION SECTIONS

SHEET 4 OF 18

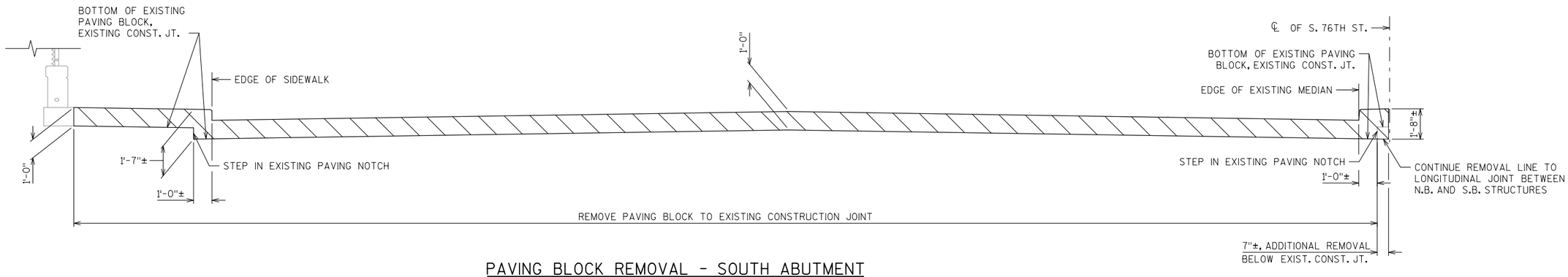
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REMOVAL PLAN - SOUTH ABUTMENT



PAVING BLOCK REMOVAL - SOUTH ABUTMENT

LOOKING NORTH

LEGEND

- MEDIAN OR SIDEWALK REMOVAL
- EXISTING CONCRETE TO BE REMOVED
- EXISTING TRANSVERSE REINFORCEMENT IS PLACED NORMAL TO THE GIRDERS. SAVE AND INCORPORATE 1'-6" MIN. OF TRANSVERSE REINFORCING BARS.
- (#) GIRDER NUMBER
- * ALL EXISTING SIDEWALK TRANSVERSE AND LONGITUDINAL REINFORCEMENT NOT SHOWN FOR CLARITY. SALVAGE AND INCORPORATE 1'-6" MINIMUM.
- ** ALL EXISTING PARAPET REINFORCEMENT NOT SHOWN FOR CLARITY. SALVAGE AND INCORPORATE FULL LENGTH INTO NEW WORK.

NOTES

ALL DIMENSIONS SHOWN ON THIS SHEET ARE TAKEN ALONG AND NORMAL TO ℄ BEARING SOUTH ABUTMENT.

FOR SECTIONS A-A AND B-B, SEE "EXPANSION JOINT REMOVAL DETAILS" SHEET.

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-574

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SOUTH ABUTMENT EXPANSION JOINT REMOVAL

SHEET 5 OF 18

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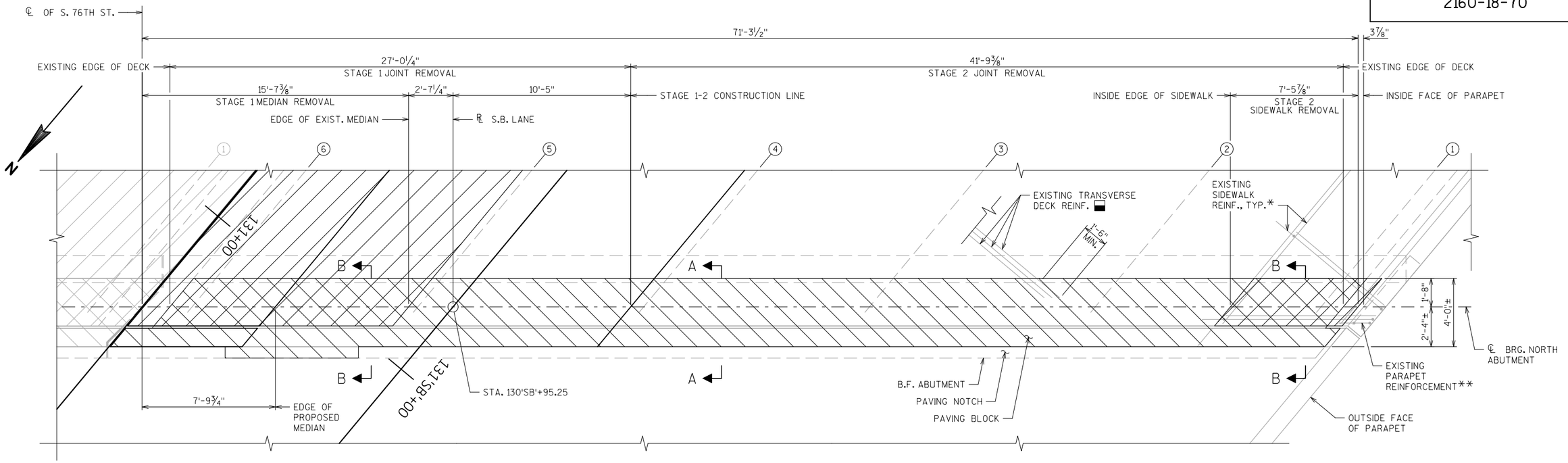
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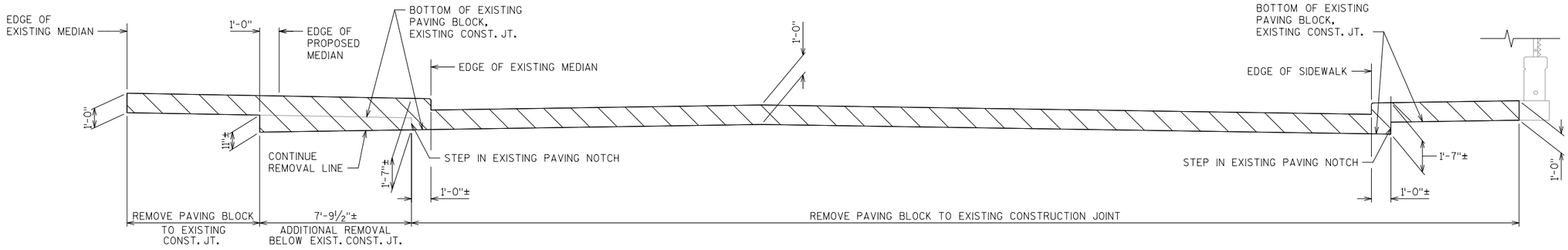
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STATE PROJECT NUMBER

2160-18-70



REMOVAL PLAN - NORTH ABUTMENT



PAVING BLOCK REMOVAL - NORTH ABUTMENT

LOOKING SOUTH

8

8

LEGEND

- MEDIAN OR SIDEWALK REMOVAL
- EXISTING CONCRETE TO BE REMOVED
- EXISTING TRANSVERSE REINFORCEMENT IS PLACED NORMAL TO THE GIRDERS. SAVE AND INCORPORATE 1'-6" MIN. OF TRANSVERSE REINFORCING BARS.
- (#) GIRDER NUMBER
- * ALL EXISTING SIDEWALK TRANSVERSE AND LONGITUDINAL REINFORCEMENT NOT SHOWN FOR CLARITY. SALVAGE AND INCORPORATE 1'-6" MINIMUM.
- ** ALL EXISTING PARAPET REINFORCEMENT NOT SHOWN FOR CLARITY. SALVAGE AND INCORPORATE FULL LENGTH INTO NEW WORK.

NOTES

ALL DIMENSIONS SHOWN ON THIS SHEET ARE TAKEN ALONG AND NORMAL TO ℄ BEARING NORTH ABUTMENT.

FOR SECTIONS A-A AND B-B, SEE "EXPANSION JOINT REMOVAL DETAILS" SHEET.

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STRUCTURE B-40-574

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NORTH ABUTMENT EXPANSION JOINT REMOVAL

SHEET 6 OF 18

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NOTES

FOR THE LOCATIONS OF SECTION A-A AND SECTION B-B, SEE "SOUTH ABUTMENT EXPANSION JOINT REMOVAL" AND "NORTH ABUTMENT EXPANSION JOINT REMOVAL" SHEETS.

LEGEND

MEDIAN OR SIDEWALK REMOVAL

EXISTING CONCRETE TO BE REMOVED

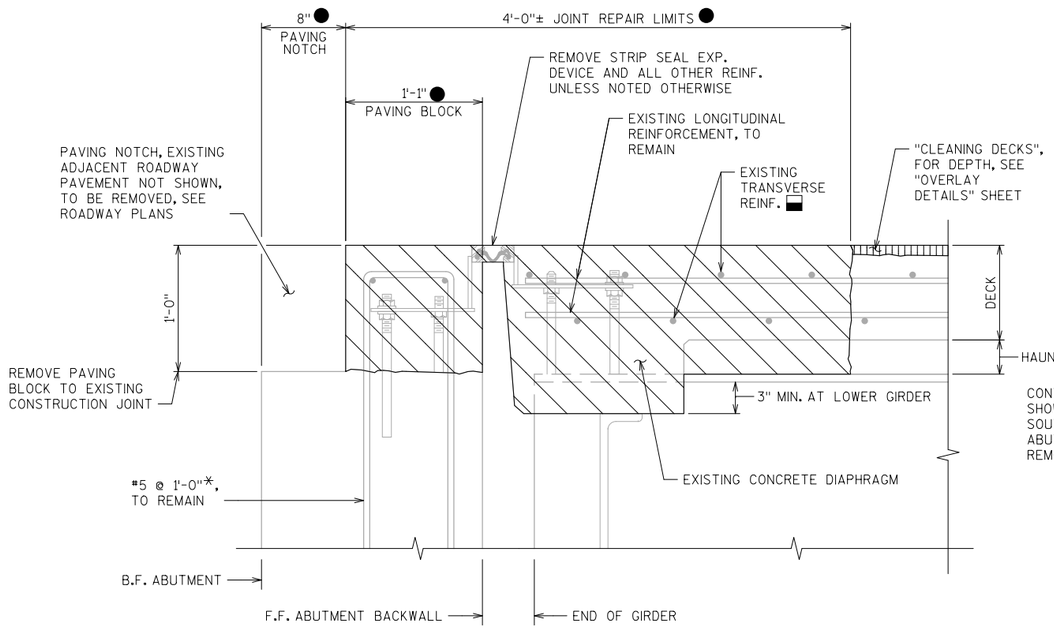
"CLEANING DECKS

* EXISTING BARS ARE LIKELY TO BE CORRODED AND/OR DAMAGED DURING CONCRETE REMOVAL. SALVAGE AND INCORPORATE AS MUCH REBAR AS PRACTICAL. SUPPLEMENT WITH "ADHESIVE ANCHORS NO. 5 BAR". EMBED 1'-0" IN CONCRETE AND SPACE AT 1'-0". FOR ADHESIVE ANCHOR LOCATIONS, SEE SECTION C-C AND D-D ON "EXPANSION JOINT DETAILS (2 OF 2)" SHEET.

EXISTING TRANSVERSE REINFORCEMENT IS PLACED NORMAL TO THE GIRDERS. SAVE AND INCORPORATE 1'-6" MIN. OF TRANSVERSE REINFORCING BARS.

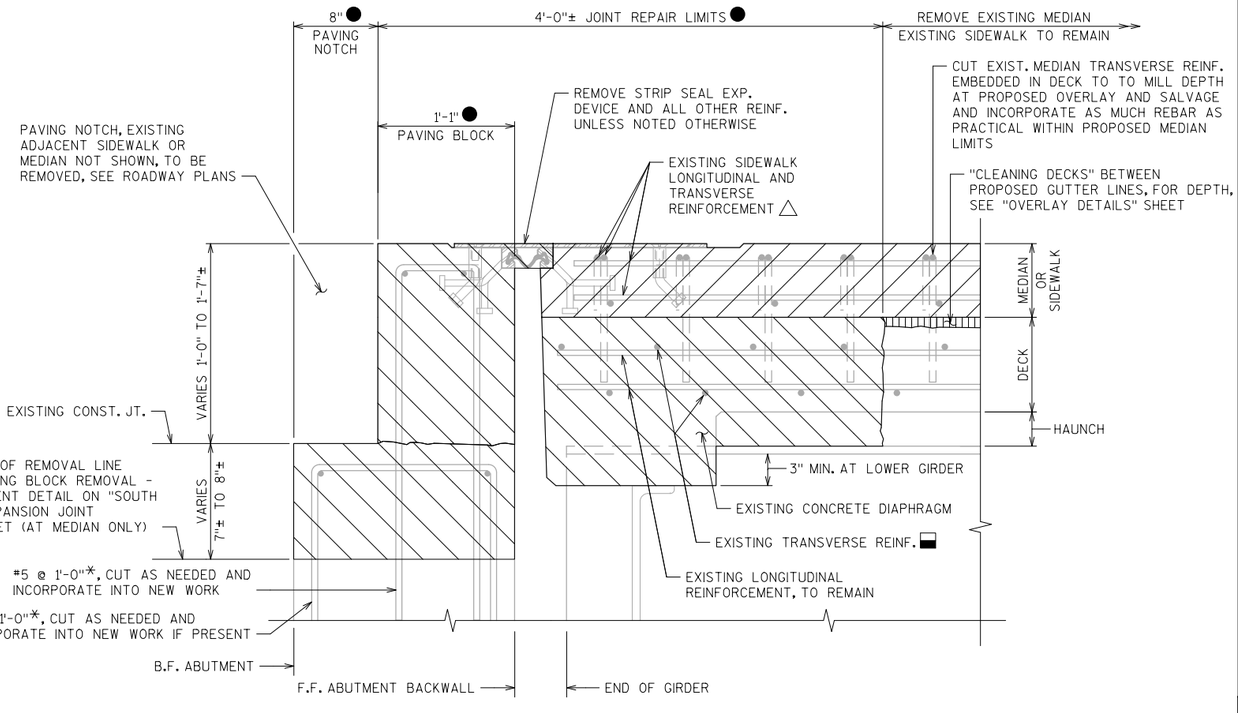
△ SALVAGE AND INCORPORATE 1'-6" MINIMUM OF LONGITUDINAL REINFORCEMENT.

● DIMENSION IS TAKEN NORMAL TO ℄ ABUTMENT.



SECTION A-A

NORMAL TO ℄ ABUTMENT



SECTION B-B

NORMAL TO ℄ ABUTMENT

8

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-574

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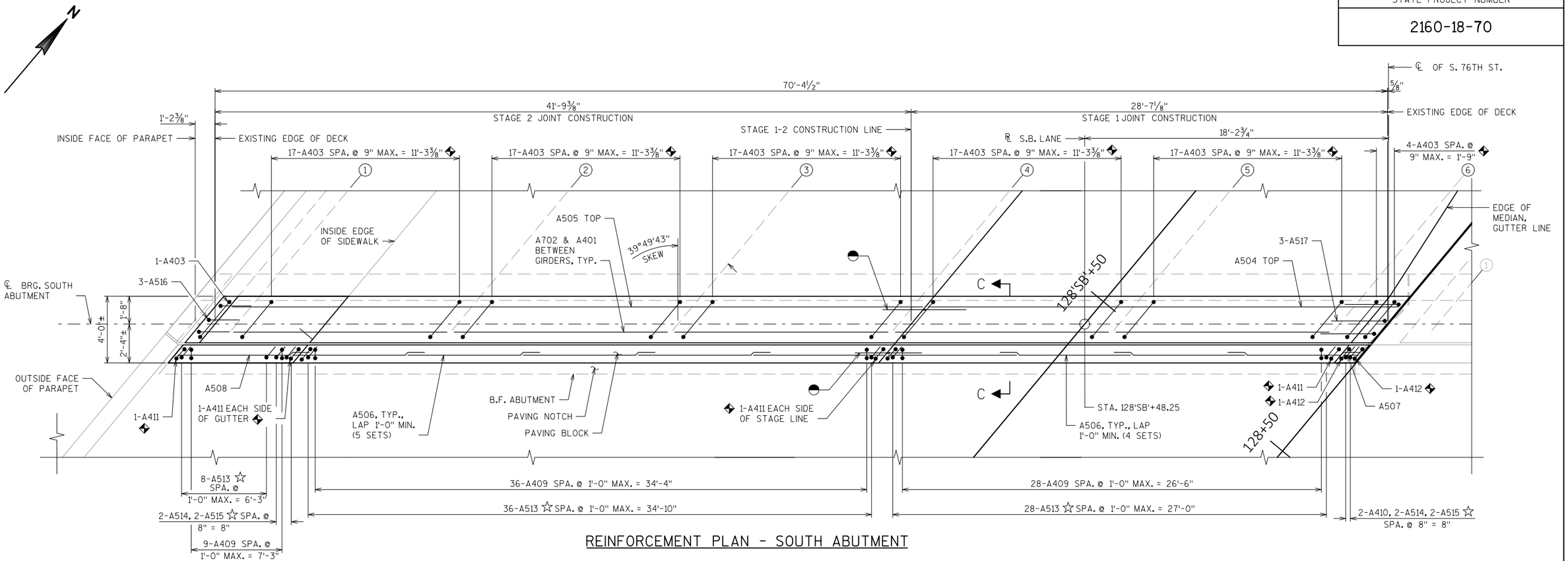
EXPANSION JOINT REMOVAL DETAILS

SHEET 7 OF 18

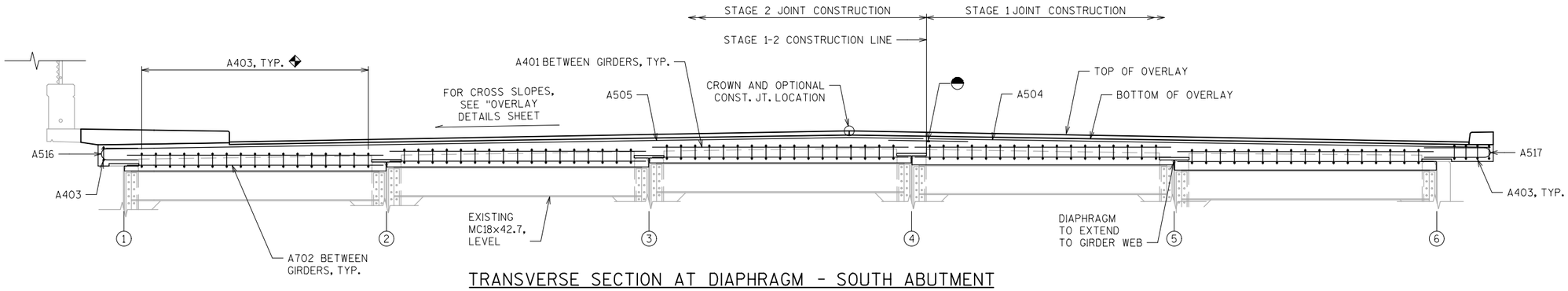
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STATE PROJECT NUMBER
2160-18-70



REINFORCEMENT PLAN - SOUTH ABUTMENT



TRANSVERSE SECTION AT DIAPHRAGM - SOUTH ABUTMENT

SECTION TAKEN ALONG ℄ ABUTMENT
DECK SIDE OF JOINT SHOWN

NOTES

ALL DIMENSIONS SHOWN ON THIS SHEET ARE TAKEN ALONG AND NORMAL TO ℄ BEARING SOUTH ABUTMENT.

SHEET ONLY SHOWS JOINT CONSTRUCTION. FOR MEDIAN AND SIDEWALK DETAILS, SEE "MEDIAN DETAILS" AND "SIDEWALK DETAILS" SHEETS.

FOR SECTION C-C , SEE "EXPANSION JOINT DETAILS (2 OF 2)" SHEET.

FOR BILL OF BARS, SEE "BILL OF BARS" SHEET.

LEGEND

- ◆ BARS PLACED PARALLEL TO GIRDERS. SPACING PERPENDICULAR TO ℄ GIRDERS.
- ◓ BAR COUPLERS, SEE "MISCELLANEOUS DETAILS" SHEET. PROVIDE BAR COUPLERS FOR BARS ONLY AT STAGE CONSTRUCTION LINE.
- (#) GIRDER NUMBER
- ☆ ADHESIVE ANCHORS NO. 5 BAR. EMBED 1'-0" IN CONCRETE. SPACE AT 1'-0". TURN 10" LEG AS NECESSARY TO FIT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-574

DRAWN BY TJN | PLANS CK'D. JRS

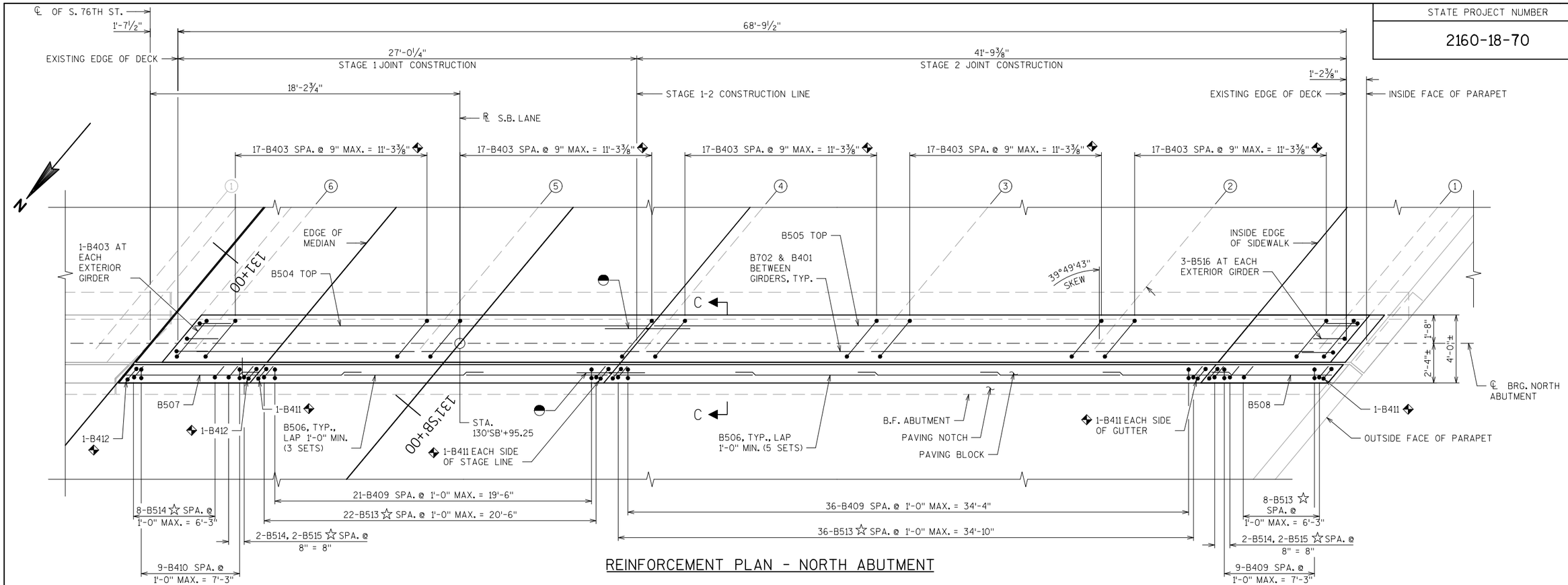
SOUTH EXPANSION JOINT

SHEET 8 OF 18
172

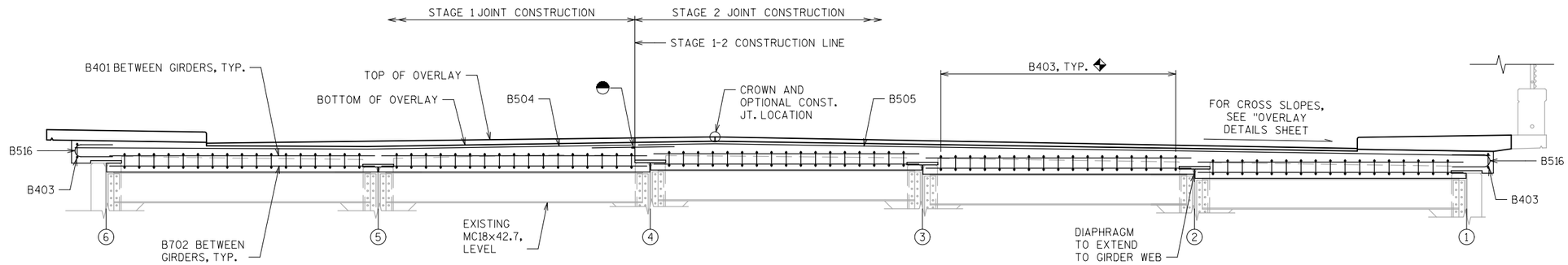
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REINFORCEMENT PLAN - NORTH ABUTMENT



TRANSVERSE SECTION AT DIAPHRAGM - NORTH ABUTMENT

SECTION TAKEN ALONG ℄ ABUTMENT
DECK SIDE OF JOINT SHOWN

NOTES

ALL DIMENSIONS SHOWN ON THIS SHEET ARE TAKEN ALONG AND NORMAL TO ℄ BEARING NORTH ABUTMENT.

SHEET ONLY SHOWS JOINT CONSTRUCTION. FOR MEDIAN AND SIDEWALK DETAILS, SEE "MEDIAN DETAILS" AND "SIDEWALK DETAILS" SHEETS.

FOR SECTION C-C, SEE "EXPANSION JOINT DETAILS (2 OF 2)" SHEET.

FOR BILL OF BARS, SEE "BILL OF BARS" SHEET.

LEGEND

- ◆ BARS PLACED PARALLEL TO GIRDERS. SPACING PERPENDICULAR TO ℄ GIRDERS.
- ◓ BAR COUPLERS, SEE "MISCELLANEOUS DETAILS" SHEET. PROVIDE BAR COUPLERS FOR BARS ONLY AT STAGE CONSTRUCTION LINE.
- (#) GIRDER NUMBER
- ☆ ADHESIVE ANCHORS NO. 5 BAR. EMBED 1'-0" IN CONCRETE. SPACE AT 1'-0". TURN 10" LEG AS NECESSARY TO FIT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STATE PROJECT NUMBER
2160-18-70

STRUCTURE B-40-574

DRAWN BY TJN | PLANS CK'D. JRS

NORTH EXPANSION JOINT

SHEET 9 OF 18
173

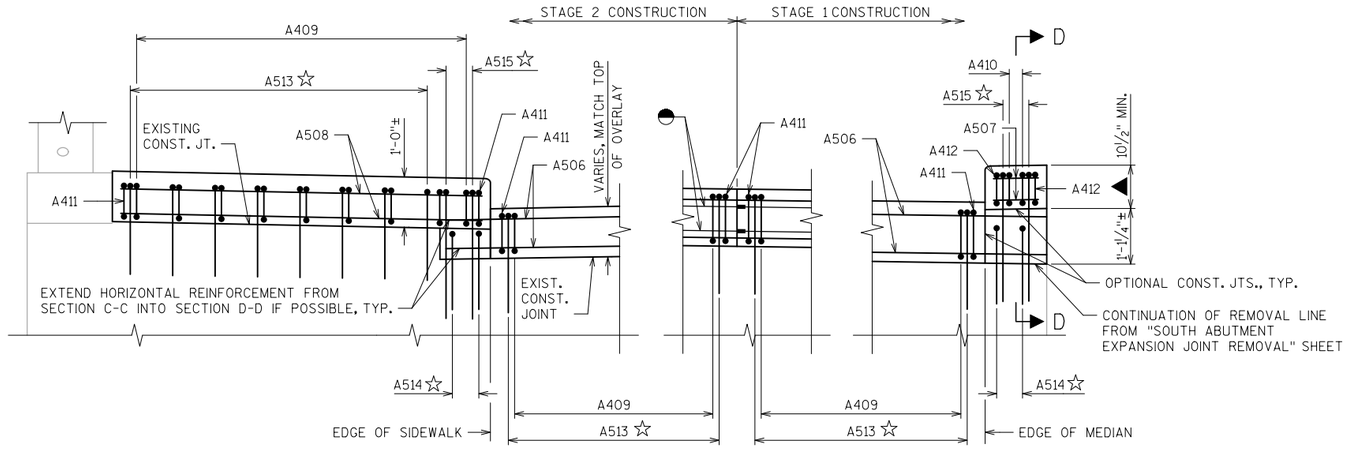
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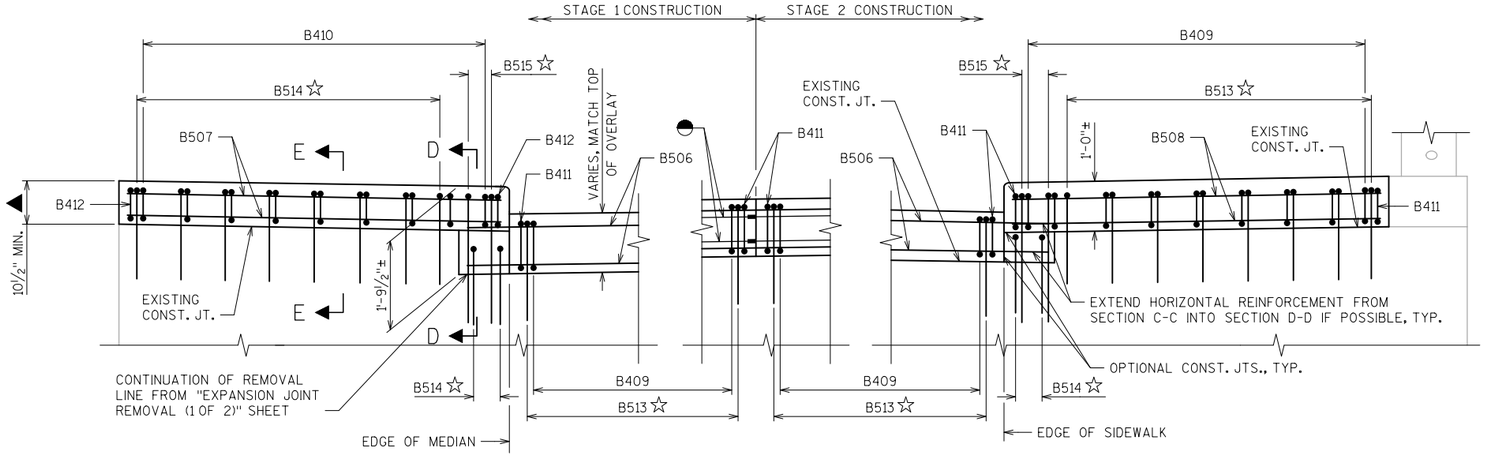
STATE PROJECT NUMBER

2160-18-70



TRANSVERSE SECTION AT PAVING BLOCK - SOUTH ABUTMENT

SECTION TAKEN ALONG ℄ ABUTMENT
LOOKING NORTH



TRANSVERSE SECTION AT PAVING BLOCK - NORTH ABUTMENT

SECTION TAKEN ALONG ℄ ABUTMENT
LOOKING SOUTH

LEGEND

☆ ADHESIVE ANCHORS NO. 5 BAR. EMBED 1'-0" IN CONCRETE. SPACE AT 1'-0". TURN 10" LEG AS NECESSARY TO FIT.

◓ BAR COUPLERS, SEE "MISCELLANEOUS DETAILS" SHEET. PROVIDE BAR COUPLERS FOR BARS ONLY AT STAGE CONSTRUCTION LINE.

▲ ADJUST PAVING BLOCK THICKNESS AT OUTSIDE EDGE TO MATCH N.B. MEDIAN.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-574

DRAWN BY TJN | PLANS CK'D. JRS

EXPANSION JOINT DETAILS (1 OF 2)

SHEET 10 OF 18

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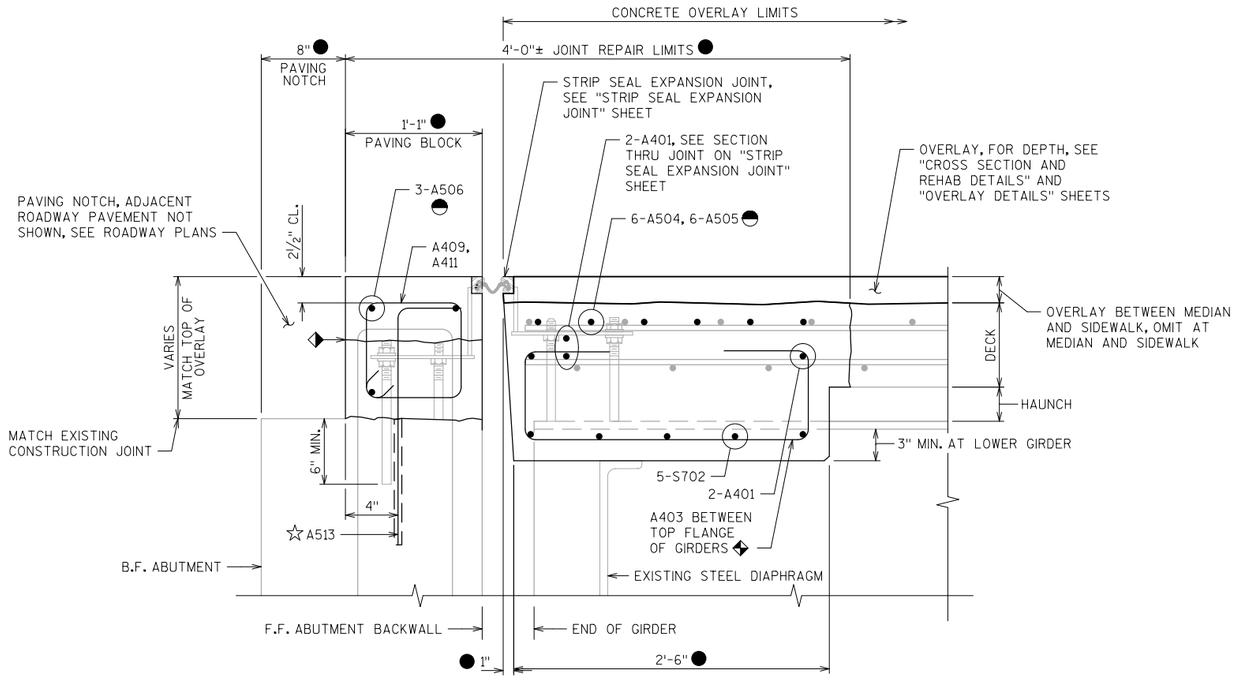
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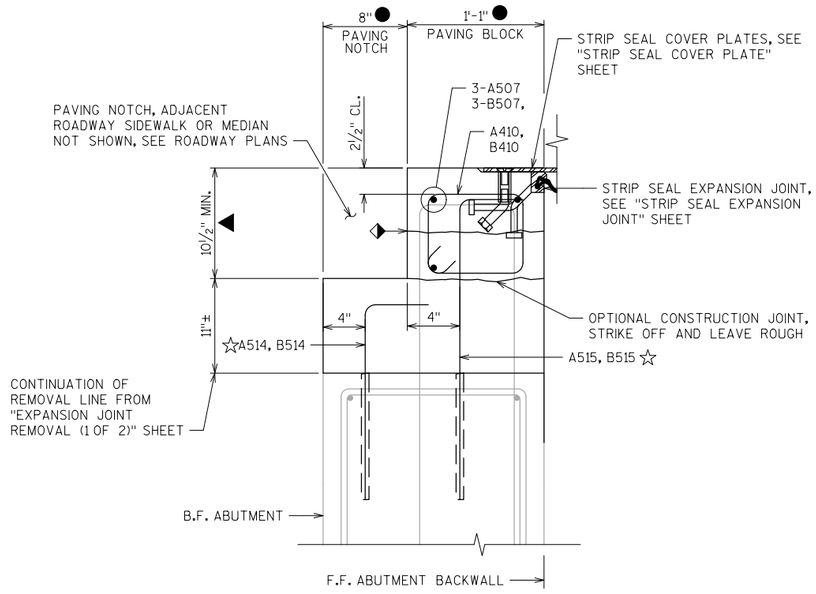
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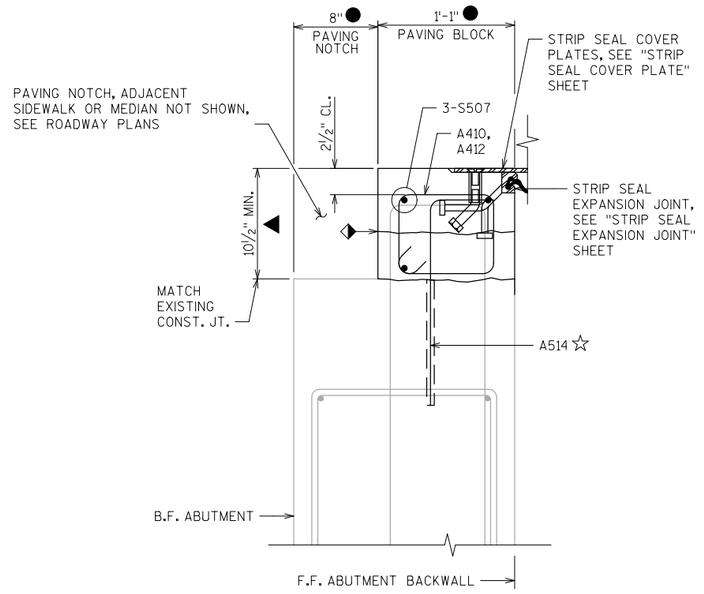
SECTION C-C

NORMAL TO ℄ ABUTMENT



SECTION D-D

NORMAL TO ℄ ABUTMENT



SECTION E-E

NORMAL TO ℄ ABUTMENT

NOTES

FOR THE LOCATION OF SECTION C-C, SEE "NORTH EXPANSION JOINT" AND "SOUTH EXPANSION JOINT" SHEETS.

BAR MARKS ARE ONLY SHOWN FOR SOUTH ABUTMENT. USE "B" PREFIX IN FRONT OF BAR MARK NUMBER FOR NORTH ABUTMENT.

THE DECK SIDE OF JOINT SHOWN IN SECTION C-C IS ALSO APPLICABLE TO SECTIONS D-D AND E-E FOR THE JOINT CONSTRUCTION LIMITS SHOWN ON "NORTH EXPANSION JOINT" AND "SOUTH EXPANSION JOINT" SHEETS.

LEGEND

- ◆ BARS PLACED PARALLEL TO GIRDERS. SPACING PERPENDICULAR TO ℄ GIRDERS.
- ● DIMENSION IS TAKEN NORMAL TO ℄ ABUTMENT.
- ◆ OPTIONAL CONSTRUCTION JOINT 1" MIN. BELOW EXISTING REINFORCEMENT. STRIKE OFF AND LEAVE ROUGH.
- ☆ ADHESIVE ANCHORS NO. 5 BAR. EMBED 1'-0" IN CONCRETE. SPACE AT 1'-0". TURN 10" LEG AS NECESSARY TO FIT.
- ◓ BAR COUPLERS, SEE "MISCELLANEOUS DETAILS" SHEET. PROVIDE BAR COUPLERS FOR BARS ONLY AT STAGE CONSTRUCTION LINE.
- ▲ ADJUST PAVING BLOCK THICKNESS AT OUTSIDE EDGE TO MATCH N.B. MEDIAN.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-574

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EXPANSION JOINT DETAILS (2 OF 2)

SHEET 11 OF 18

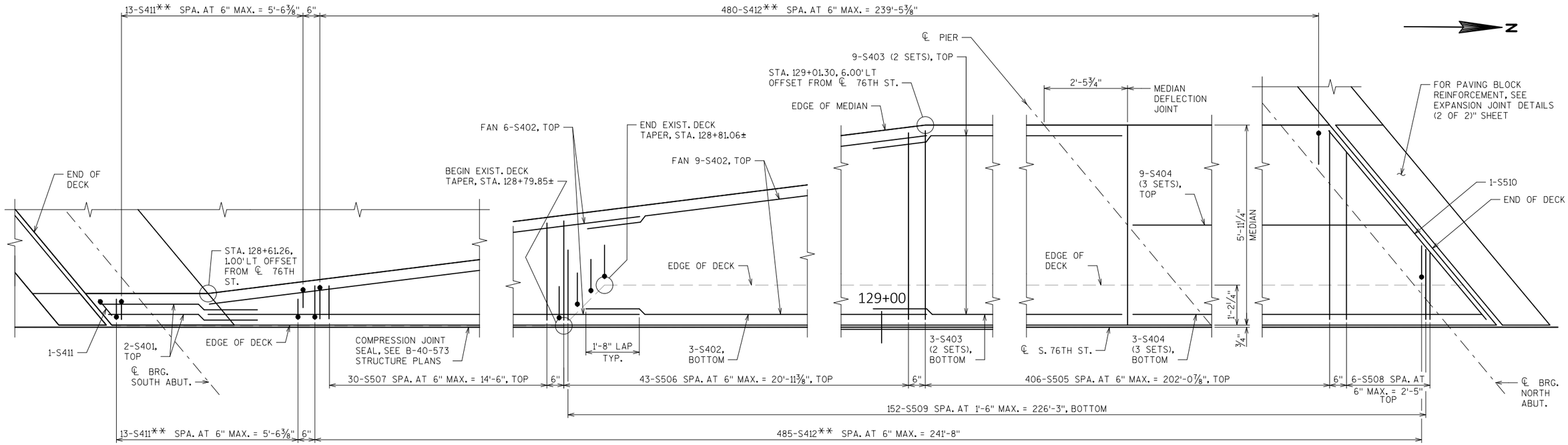
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STATE PROJECT NUMBER
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MEDIAN PLAN

TRANSVERSE REINFORCEMENT AT PIER NOT SHOWN.
ADJUST SPACING AS NEEDED TO PROVIDE 2" CLEAR FROM JOINT AT PIER
DO NOT RUN LONGITUDINAL REINFORCEMENT THRU JOINT AT PIER

NOTE

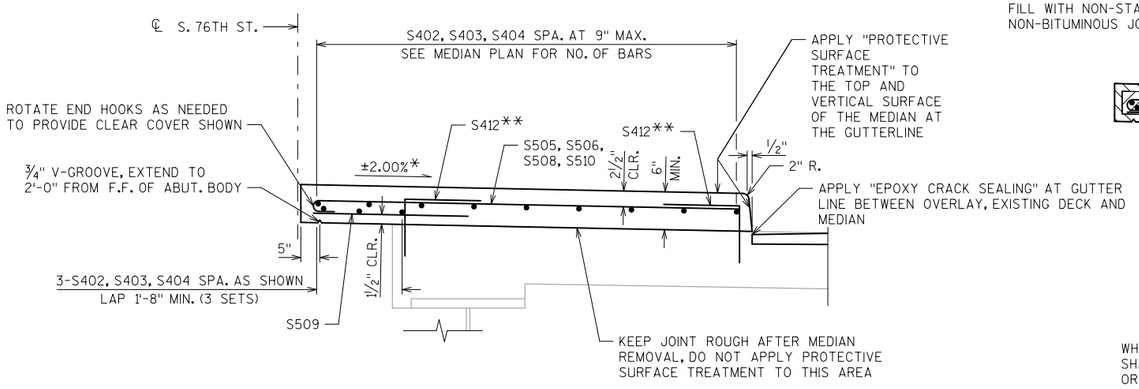
CLEAN ALL LOOSE MATERIAL ON DECK AT THE MEDIAN LOCATION PRIOR TO MEDIAN PLACEMENT USING HIGH PRESSURE WATER OR AIR, ENSURING ALL FREE-STANDING WATER IS REMOVED PRIOR TO MEDIAN PLACEMENT. NEAT CEMENT IS REQUIRED AS PER 509.3.9.2 OF THE STANDARD SPECIFICATIONS.

LEGEND

* MATCH EXISTING DECK CROSS-SLOPE AT MEDIAN, ±2.00%. ADJUST CROSS-SLOPE AND MEDIAN THICKNESS AT OUTSIDE EDGE TO MATCH N.B. MEDIAN.

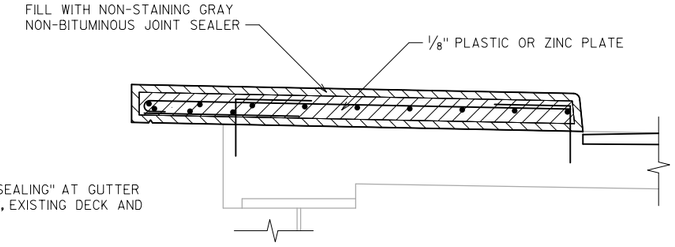
** ADHESIVE ANCHORS NO. 4 BAR. EMBED 5" IN CONCRETE. SPACE AT 1'-0". TURN LEG AS NECESSARY TO FIT.

*** ADJUST CROSS-SLOPE AND MEDIAN THICKNESS AT OUTSIDE EDGE TO MATCH N.B. MEDIAN.



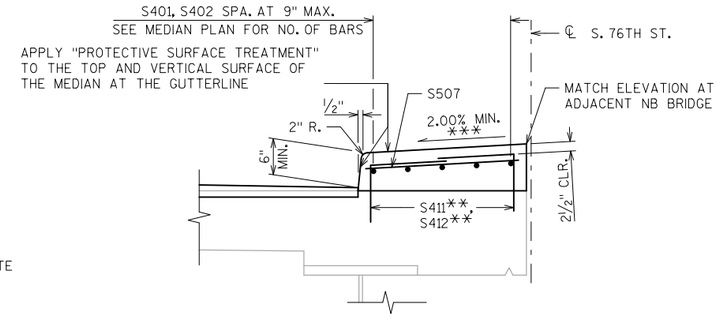
SECTION THRU MEDIAN OVERHANGING DECK

LOOKING SOUTH



MEDIAN DEFLECTION JOINT DETAIL

WHEN MEDIAN IS POURED CONTINUOUSLY FROM END TO END, THE MEDIAN SHALL BE SEPARATED AT THE DEFLECTION JOINT BY A PIECE OF ⅛" ZINC OR PLASTIC PLATE CUT AS SHOWN IN THE "MEDIAN DEFLECTION JOINT DETAIL". IF A CONSTRUCTION JOINT IN THE MEDIAN IS USED AT THE DEFLECTION JOINT, ONE SIDE OF THE JOINT SHALL BE COATED WITH AN APPROVED LIQUID BOND BREAKER AND PLATE SEPARATORS MAY BE OMITTED.



SECTION THRU MEDIAN NOT OVERHANGING DECK

LOOKING NORTH

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-574

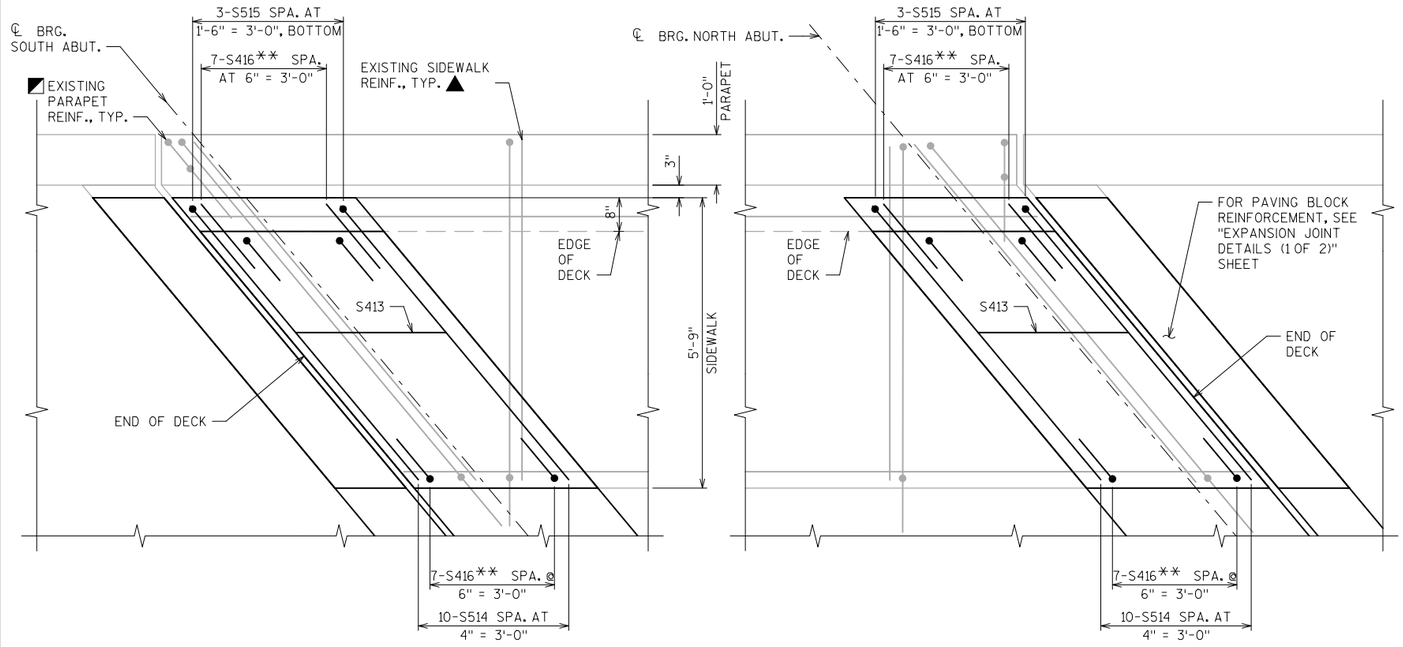
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MEDIAN DETAILS

SHEET 12 OF 18
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STATE PROJECT NUMBER

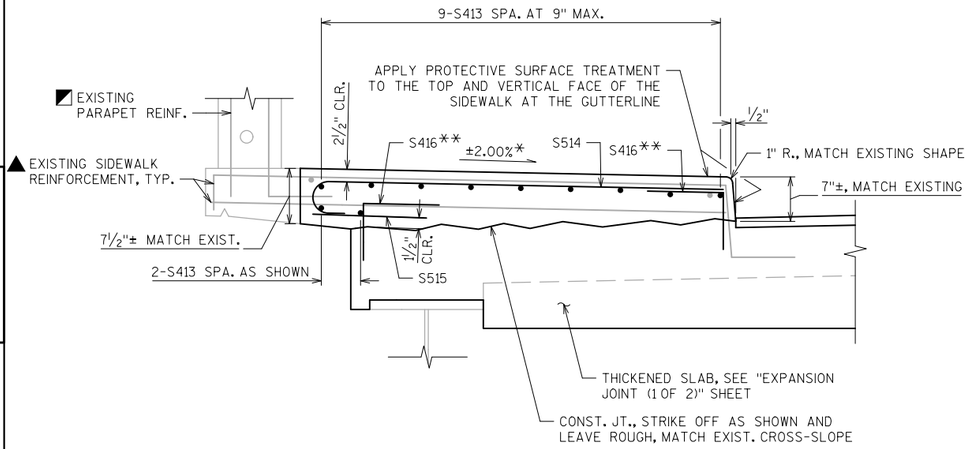
2160-18-70



SIDEWALK PLAN AT SW CORNER

SIDEWALK PLAN AT NW CORNER

N



SECTION THRU SIDEWALK

NOTES

PLACE TRANSVERSE BARS IN SIDEWALK PARALLEL TO ℄ BEARING ABUTMENT. SPACINGS ARE GIVEN PARALLEL TO ℄ OF S. 76TH ST.

LEGEND

* MATCH EXISTING SIDEWALK CROSS-SLOPE AT SIDEWALK, ±2.00%.

** ADHESIVE ANCHORS NO. 4 BAR. EMBED 5" IN CONCRETE. SPACE AT 1'-0". TURN 1'-0" LEG AS NECESSARY TO FIT.

▲ ALL EXISTING SIDEWALK TRANSVERSE AND LONGITUDINAL REINFORCEMENT NOT SHOWN FOR CLARITY. SALVAGE AND INCORPORATE 1'-6" MINIMUM.

◩ ALL EXISTING PARAPET REINFORCEMENT NOT SHOWN FOR CLARITY. SALVAGE AND INCORPORATE FULL LENGTH INTO NEW WORK.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-574

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SIDEWALK DETAILS

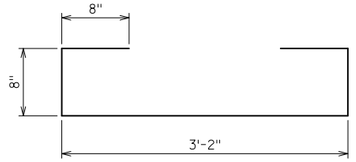
SHEET 13 OF 18

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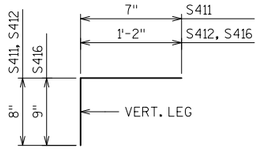
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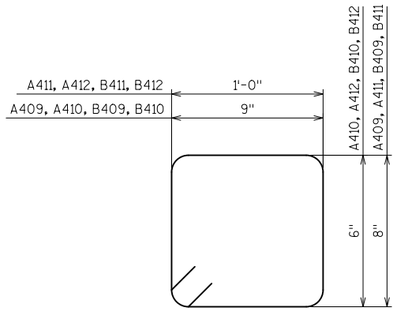
2160-18-70



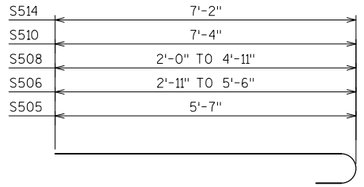
A403, B403



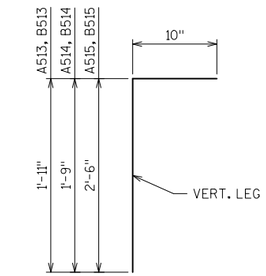
S411, S412, S416



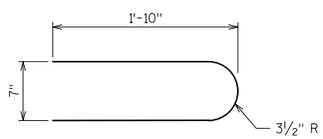
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B409, B410, B411, B412



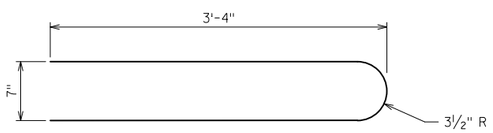
S505, S506 S508, S510, S514



A513, A514, A515
B513, B514, B515



A516, B516



A517
SOUTH ABUTMENT ONLY

BAR SERIES TABLE

MARK	NO. REQ'D.	LENGTH
S506	1 SERIES OF 43	3'-6" to 6'-1"
S507	1 SERIES OF 30	1'-0" TO 2'-10"
S508	1 SERIES OF 6	2'-7" TO 5'-6"

BUNDLE AND TAG EACH SERIES SEPARATELY.

LEGEND

☆ ADHESIVE ANCHORS NO. 5 BAR, SEE "EXPANSION JOINT DETAILS (2 OF 2)" SHEET.

** ADHESIVE ANCHORS NO. 4 BAR, SEE "MEDIAN DETAILS" AND "SIDEWALK DETAILS" SHEETS.

◓ BAR COUPLERS REQUIRED WITH BARS. FOR BAR COUPLER DETAILS, SEE "MISCELLANEOUS DETAILS" SHEET.

BILL OF BARS (SOUTH ABUT. JOINT REPAIR)

TOTAL COATED = 2,240 LBS

	BAR MARK	NO. REQ'D. STAGE 1	NO. REQ'D. STAGE 2	LENGTH	COAT	BENT	LOCATION
	A401	8	12	12'-0"	X		DIAPHRAGM - HORIZONTAL
	A702	10	15	12'-0"	X		DIAPHRAGM - HORIZONTAL
	A403	38	52	5'-6"	X	X	DIAPHRAGM - VERTICAL
◓	A504	6	-	28'-5"	X		DECK - HORIZONTAL
◓	A505	-	6	41'-6"	X		DECK - HORIZONTAL
◓	A506	12	15	8'-0"	X		PAVING BLOCK - HORIZONTAL
	A507	3	-	10"	X		PAVING BLOCK - HORIZONTAL AT MEDIAN
	A508	-	3	7'-2"	X		PAVING BLOCK - HORIZONTAL AT SIDEWALK
	A409	28	45	3'-4"	X	X	PAVING BLOCK - VERTICAL
	A410	2	-	3'-0"	X	X	PAVING BLOCK - VERTICAL
	A411	2	4	3'-10"	X	X	PAVING BLOCK - VERTICAL
	A412	2	-	3'-6"	X	X	PAVING BLOCK - VERTICAL
☆	A513	28	44	2'-8"	X	X	PAVING BLOCK - VERTICAL
☆	A514	2	2	2'-6"	X	X	PAVING BLOCK - VERTICAL
☆	A515	2	2	3'-3"	X	X	PAVING BLOCK - VERTICAL
	A516	-	3	4'-0"	X	X	DIAPRHAGM - VERTICAL AT EXTERIOR GIRDER 1
	A517	3	-	7'-0"	X	X	DIAPRHAGM - VERTICAL AT EXTERIOR GIRDER 6

BILL OF BARS (NORTH ABUT. JOINT REPAIR)

TOTAL COATED = 2,260 LBS

	BAR MARK	NO. REQ'D. STAGE 1	NO. REQ'D. STAGE 2	LENGTH	COAT	BENT	LOCATION
	B401	8	12	12'-10"	X		DIAPHRAGM - HORIZONTAL
	B702	10	15	12'-10"	X		DIAPHRAGM - HORIZONTAL
	B403	35	52	5'-6"	X	X	DIAPHRAGM - VERTICAL
◓	B504	6	-	26'-9"	X		DECK - HORIZONTAL
◓	B505	-	6	41'-6"	X		DECK - HORIZONTAL
◓	B506	9	15	8'-0"	X		PAVING BLOCK - HORIZONTAL
	B507	3	-	7'-5"	X		PAVING BLOCK - HORIZONTAL AT MEDIAN
	B508	-	3	7'-2"	X		PAVING BLOCK - HORIZONTAL AT SIDEWALK
	B409	21	45	3'-4"	X	X	PAVING BLOCK - VERTICAL
	B410	9	-	3'-0"	X	X	PAVING BLOCK - VERTICAL
	B411	2	4	3'-10"	X	X	PAVING BLOCK - VERTICAL
	B412	2	-	3'-6"	X	X	PAVING BLOCK - VERTICAL
☆	B513	22	44	2'-8"	X	X	PAVING BLOCK - VERTICAL
☆	B514	10	2	2'-6"	X	X	PAVING BLOCK - VERTICAL
☆	B515	2	2	3'-3"	X	X	PAVING BLOCK - VERTICAL
	B516	3	3	4'-0"	X	X	DIAPRHAGM - VERTICAL AT EXTERIOR GIRDERS

BILL OF BARS (MEDIAN AND SIDEWALK)

TOTAL COATED = 6,640 LBS

	BAR MARK	NO. REQ'D.	LENGTH	COAT	BENT	BAR SERIES	LOCATION
	S401	2	5'-1"	X			MEDIAN - LONGITUDINAL SPAN 1
	S402	18	22'-0"	X			MEDIAN - LONGITUDINAL SPAN 1
	S403	24	39'-7"	X			MEDIAN - LONGITUDINAL SPAN 1
	S404	36	44'-8"	X			MEDIAN - LONGITUDINAL SPAN 2
	S505	406	6'-2"	X	X		MEDIAN - TRANSVERSE
	S506	43	4'-10"	X	X	X	MEDIAN - TRANSVERSE
	S507	30	1'-11"	X		X	MEDIAN - TRANSVERSE
	S508	6	4'-1"	X	X	X	MEDIAN - TRANSVERSE
	S509	152	2'-1"	X			MEDIAN - TRANSVERSE
	S510	1	7'-11"	X	X		MEDIAN - TRANSVERSE
**	S411	27	1'-2"	X	X		MEDIAN - VERTICAL
**	S412	965	1'-9"	X	X		MEDIAN - VERTICAL
	S413	22	3'-2"	X			SIDEWALK - LONGITUDINAL
	S514	20	7'-9"	X	X		SIDEWALK - TRANSVERSE
	S515	6	1'-9"	X			SIDEWALK - TRANSVERSE
**	S416	28	1'-10"	X	X		SIDEWALK - VERTICAL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-574

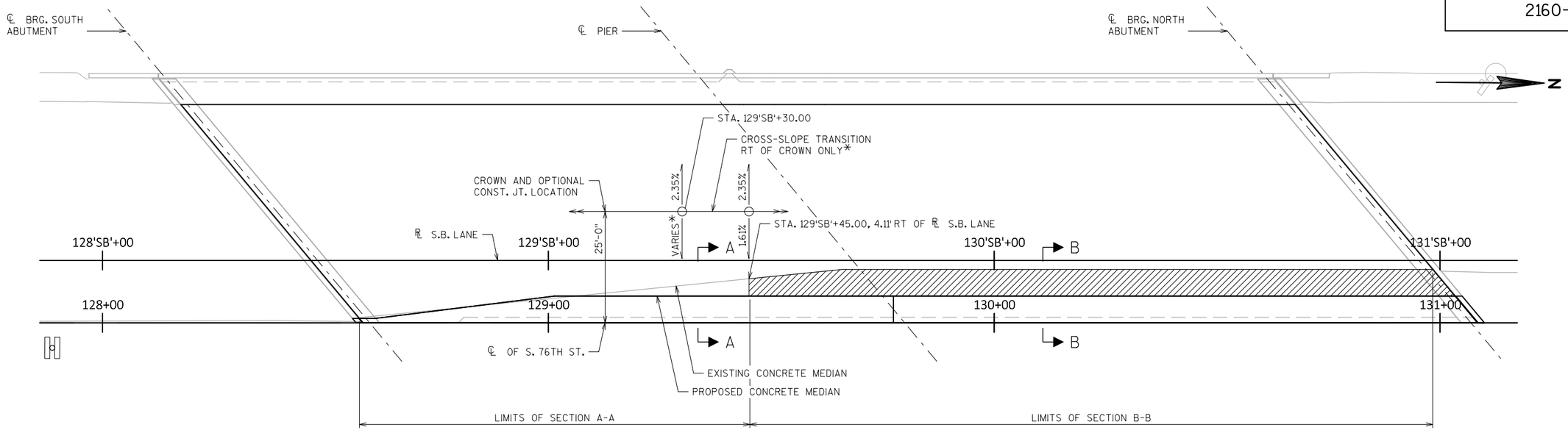
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BILL OF BARS

SHEET 14 OF 18
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STATE PROJECT NUMBER

2160-18-70



PLAN

NOTES

REMOVAL HATCHING OF EXISTING MEDIAN IN SECTION A-A AND SECTION B-B NOT SHOWN FOR CLARITY.

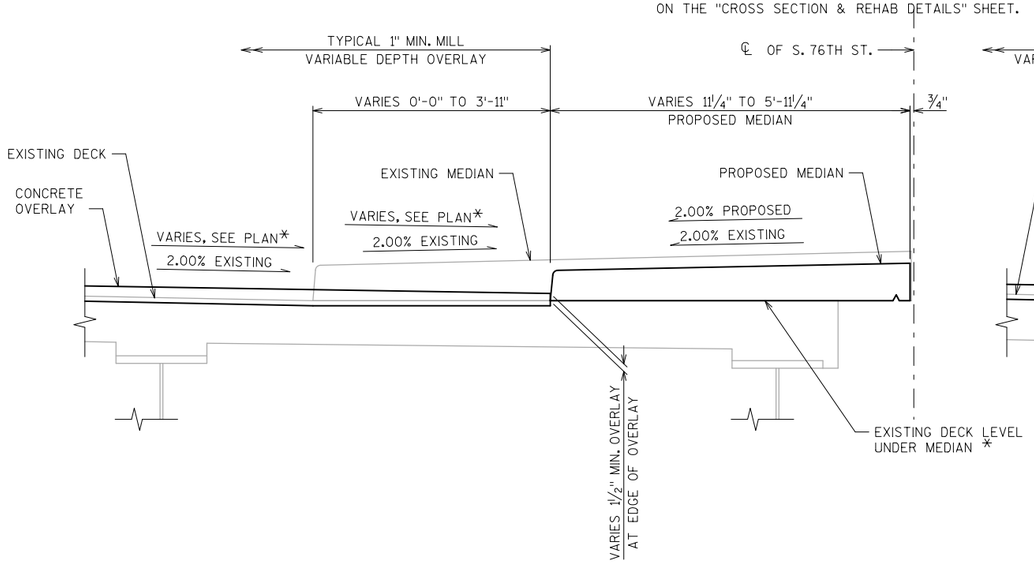
CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO EXISTING BRIDGE DECK.

CROSS SLOPES ARE ESTIMATED BASED ON EXISTING PLANS. REMOVE EXISTING DECK TO DEPTHS SHOWN ON THIS SHEET UNDER BID ITEM "CLEANING DECKS". PLACE NEW OVERLAY TO THE DEPTHS SHOWN AT THE CROWN AND GUTTER LINES ON THIS SHEET AND ON THE "CROSS SECTION & REHAB DETAILS" SHEET.

LEGEND

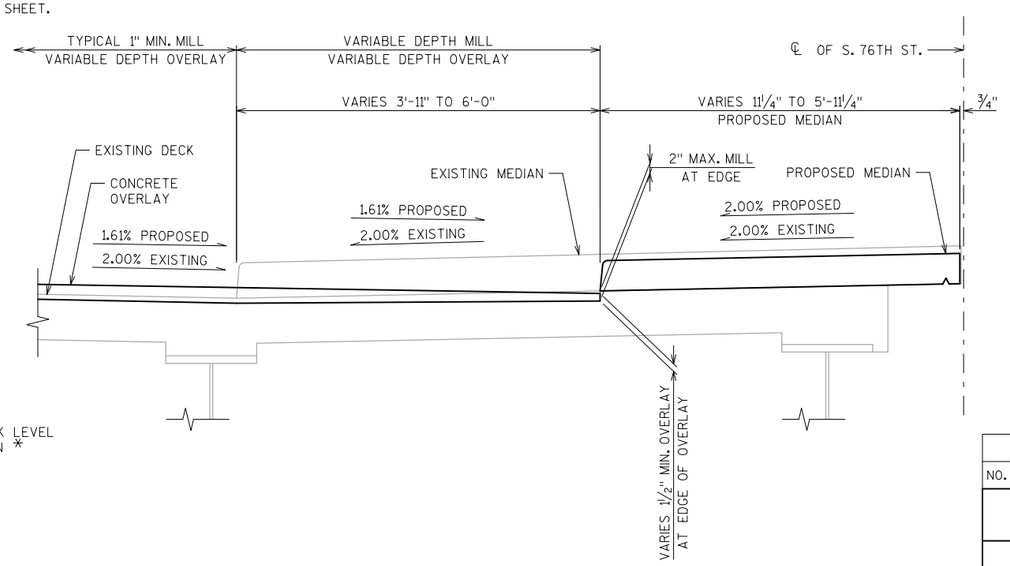
APPROXIMATE LIMITS OF VARIABLE DEPTH MILL

* THE EXISTING STRUCTURE PLAN'S CROSS-SECTIONS SHOW THE DECK BENEATH THE EXISTING MEDIAN AS BEING LEVEL AND TRANSITIONING TO AN UPWARD 2% CROSS-SLOPE IN SPAN 2. EXACT LIMITS OF THE TRANSITION ARE NOT GIVEN ON THE EXISTING STRUCTURE PLANS. THE PROPOSED OVERLAY'S CROSS-SLOPES SHALL BE DETERMINED BY PROVIDING A 1½" MIN. OVERLAY AT THE GUTTER LINES. THE SHOWN CROSS-SLOPES AND OVERLAY CONCEPT IS BASED ON THE EXISTING STRUCTURE PLANS AND SURVEY. THE SHOWN CROSS-SLOPES MAY BE ADJUSTED WITH APPROVAL FROM THE ENGINEER. CROSS-SLOPES SHALL BE 1.5% MIN. TO PROVIDE ADEQUATE DRAINAGE.



SECTION A-A

APPLICABLE TO LIMITS OF TYPICAL 1" MIN. MILL



SECTION B-B

APPLICABLE TO LIMITS OF 2" OVERMILL

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OVERLAY DETAILS

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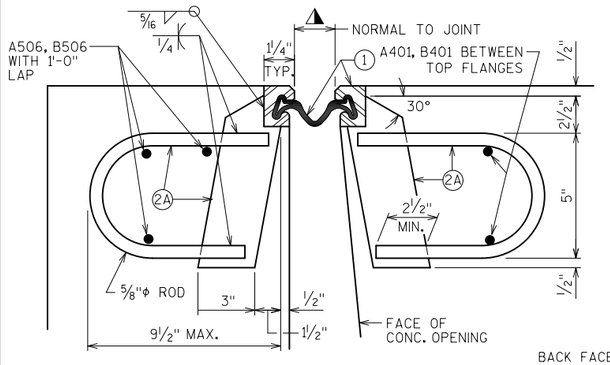
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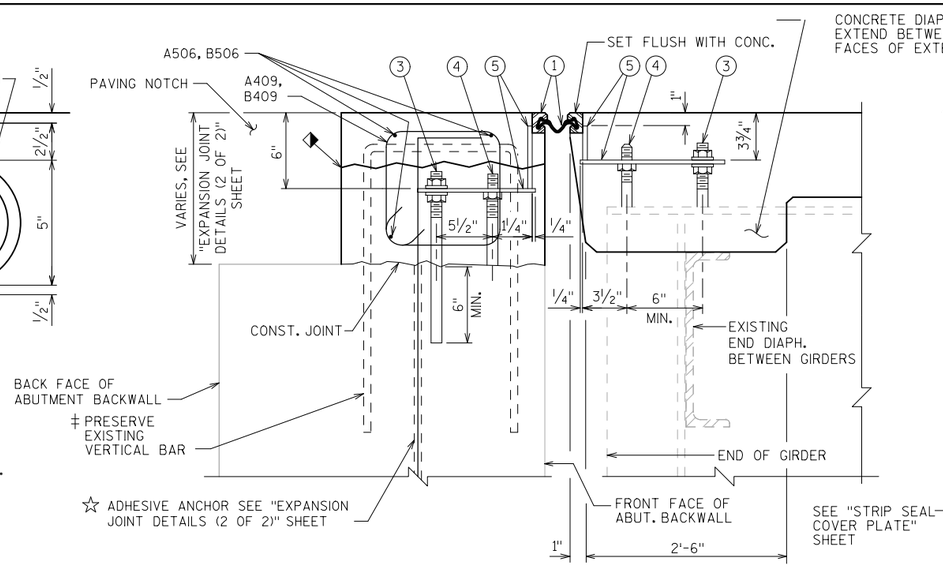
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STATE PROJECT NUMBER
2160-18-70



SECTION THRU JOINT

ROADWAY TRAFFIC AREA BETWEEN MEDIAN AND SIDEWALK.

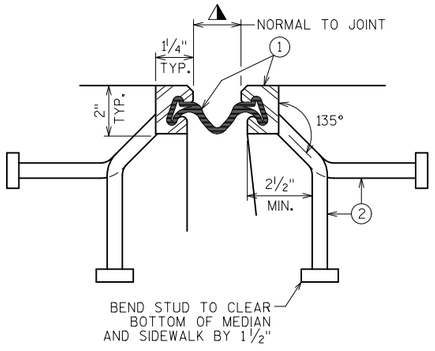


SECTION THRU JOINT AT ABUTMENT

NORMAL TO ℄ SUBSTRUCTURE
SECTION BETWEEN MEDIAN AND SIDEWALK SHOWN

LEGEND

- ◭ (1) NEOPRENE STRIP SEAL (4-INCH) AND STEEL EXTRUSIONS. JOINT OPENINGS GIVEN NORMAL TO JOINT. SET JOINT OPENING TO 1¾".
- (2) STUDS 5/8"ϕ X 6⅜" LONG AT 6" ALTERNATE CENTERS. WELD TO EXTRUSIONS AND BEND AS SHOWN AFTER WELDING.
- (2A) ½" THICK ANCHOR PLATE WITH 5/8" DIA. ROD (OR ALTERNATE STRIP SEAL ANCHOR). WELD ROD TO ANCHOR PLATE, WELD ANCHOR PLATE TO NO. 1 AT 1'-6" CENTERS BETWEEN GIRDERS.
- (3) ¾" ϕ THREADED ROD WITH 2 NUTS AND PLATE WASHERS. WELD THREADED ROD TO TOP FLANGE OR ATTACH BY BOLTING THRU FLANGE. ON ABUTMENT SIDE, GROUT THREADED ROD INTO FIELD DRILLED HOLES IN ABUTMENT BACKWALL AS SHOWN.
- (4) ¾"ϕ THREADED ROD WITH NUT. TACK WELD NUT TO NO. 5.
- (5) FABRICATE SUPPORT FROM 3" X ½" BAR AS SHOWN OR EQUIVALENT, ONE PER GIRDER PER SIDE. SHOP OR FIELD WELD TO NO. 1. IF FIELD WELDED, COVER WELDED AREAS WITH EPOXY-COATING MATERIAL. PROVIDE 1½"ϕ HOLE FOR NO. 3 AND 1"ϕ HOLE FOR NO. 4.
- (6) NOT USED
- (7) ¾"ϕ X 1½" STAINLESS STEEL SOCKET FLAT HEAD SCREWS WITH ANTI-SEIZE LUBRICANT. PLACE IN COUNTERSUNK HOLE. RECESS 1/16" BELOW PLATE SURFACE.
- (8) ¾"ϕ X 4" GALVANIZED HEX HEAD BOLT. BEND 45°.
- (9) ¾"ϕ X 2¼" GALVANIZED THREADED COUPLING.
- (10) SIDEWALK OR MEDIAN COVER PLATE ⅜" x LIMITS SHOWN. BEND DOWN FACE OF SIDEWALK OR MEDIAN WITH HOLES FOR NO. 7. GALVANIZE PLATE AFTER SLIP-RESISTANT SURFACE IS APPLIED.
- (11) 1" × 5" SLOTTED COUNTERSUNK HOLE FOR NO. 7. PLACE SLOT PARALLEL TO DIRECTION OF MOVEMENT.
- ☆ EMBED 1'-0" INTO CONCRETE. SPACE AT 1'-0". TURN 10" LEG AS NECESSARY TO FIT.
- ‡ EXISTING BARS ARE LIKELY TO BE CORRODED AND/OR DAMAGED DURING CONCRETE REMOVAL. PRESERVE AND INCORPORATE AS MUCH REBAR AS PRACTICAL.
- ◆ OPTIONAL CONSTRUCTION JOINT 1" MIN. BELOW EXISTING REINFORCEMENT.



SECTION THRU JOINT

AT MEDIAN AND SIDEWALK

NOTES

FIELD SPLICES IN THE STEEL EXTRUSIONS ARE PERMITTED AT STAGE LINE AND CROSS SLOPE BREAK POINTS TO FACILITATE INSTALLATION. IF USED, ANCHOR PLATES SHALL BE PROVIDED 3" FROM EACH SIDE OF THE FIELD SPLICE. DETAILS SHALL BE SUBMITTED FOR APPROVAL. SPLICING IS PERMITTED IN NEOPRENE STRIP SEAL AT MEDIAN BETWEEN NB AND SB STRUCTURES. THE NEOPRENE STRIP SEAL SPLICE MUST BE VULCANIZED AND WATERTIGHT.

AFTER FABRICATION, BUT BEFORE SHIPMENT, STRAIGHTEN STEEL EXTRUSIONS SUCH THAT THEY SHALL BE FREE FROM WARP, TWIST AND SWEEP.

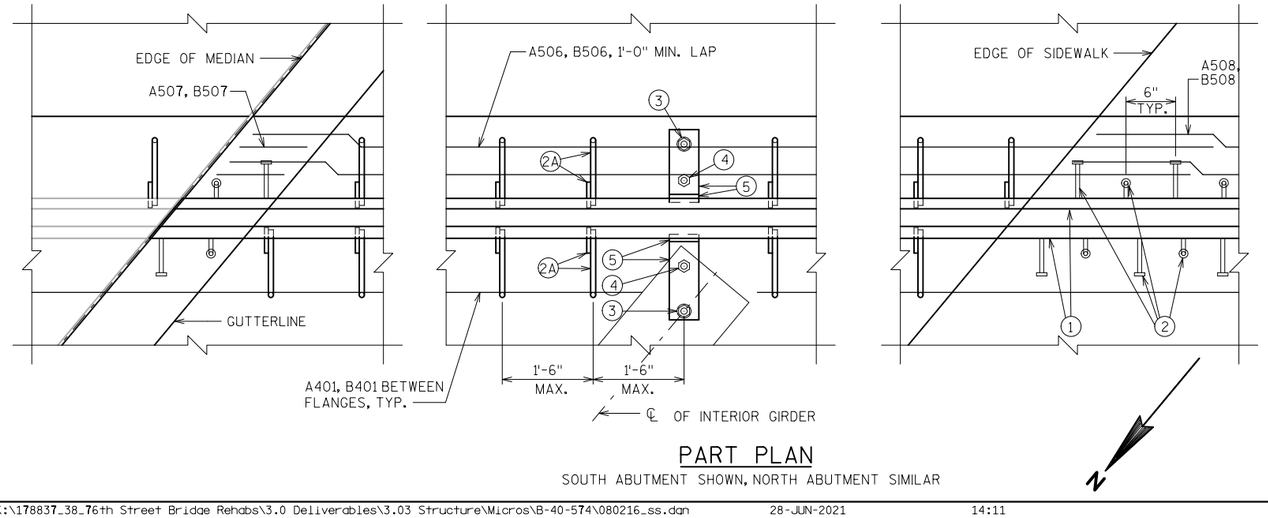
FABRICATOR SHALL PROVIDE MEANS OF KEEPING GALVANIZED EXTRUSIONS CLEAN AND SMOOTH DURING SHIPMENT AND PRIOR TO APPLYING LUBRICANT ADHESIVE FOR NEOPRENE GLAND INSTALLATION.

SANDBLAST PLATES, SUPPORTS AND EXTRUSIONS AFTER FABRICATION IN ACCORDANCE WITH SSPC SP. #6 "COMMERCIAL BLAST CLEANING". AFTER BLAST CLEANING, THE PLATES, SUPPORTS AND EXTRUSIONS SHALL BE HOT DIPPED GALVANIZED. SLIP-RESISTANT SURFACE IS APPLIED TO SIDEWALK AND MEDIAN COVER PLATES BY THE MANUFACTURER AND THEN HOT DIPPED GALVANIZED TO THEIR RECOMMENDATION TO MAINTAIN THE INTEGRITY OF THIS SURFACE.

ANCHOR SYSTEM NO. 8 AND NO. 9 SHALL CONFORM TO ASTM A307 & SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C AND D.

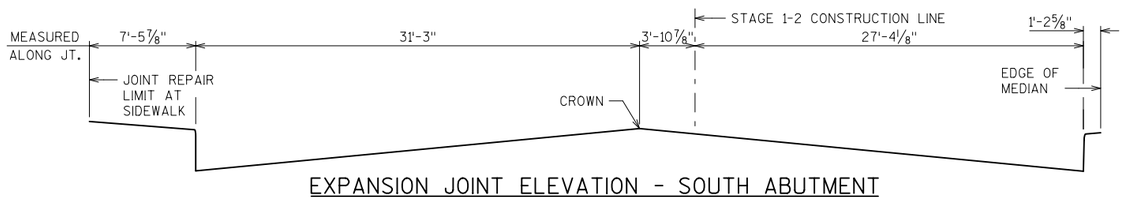
STRIP SEAL EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS AND HARDWARE WILL BE PAID FOR UNDER THE BID ITEM "EXPANSION DEVICE".

FOR JOINT DETAILS BETWEEN NB AND SB STRUCTURES, SEE B-40-573 STRUCTURE PLANS.



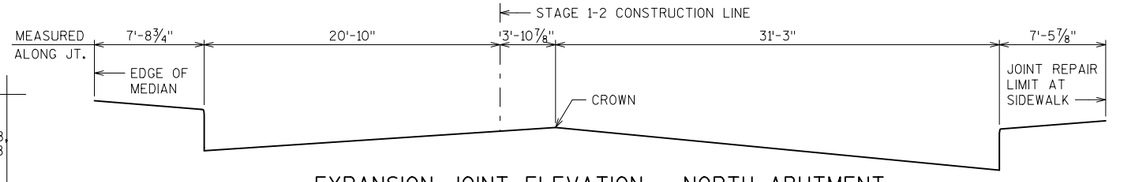
PART PLAN

SOUTH ABUTMENT SHOWN, NORTH ABUTMENT SIMILAR



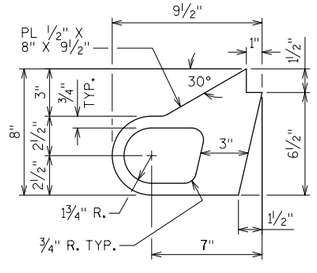
EXPANSION JOINT ELEVATION - SOUTH ABUTMENT

LOOKING NORTH
VERTICAL EXAGGERATION SHOWN



EXPANSION JOINT ELEVATION - NORTH ABUTMENT

LOOKING SOUTH
VERTICAL EXAGGERATION SHOWN



ALTERNATE STRIP SEAL ANCHOR

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STRIP SEAL EXPANSION JOINT

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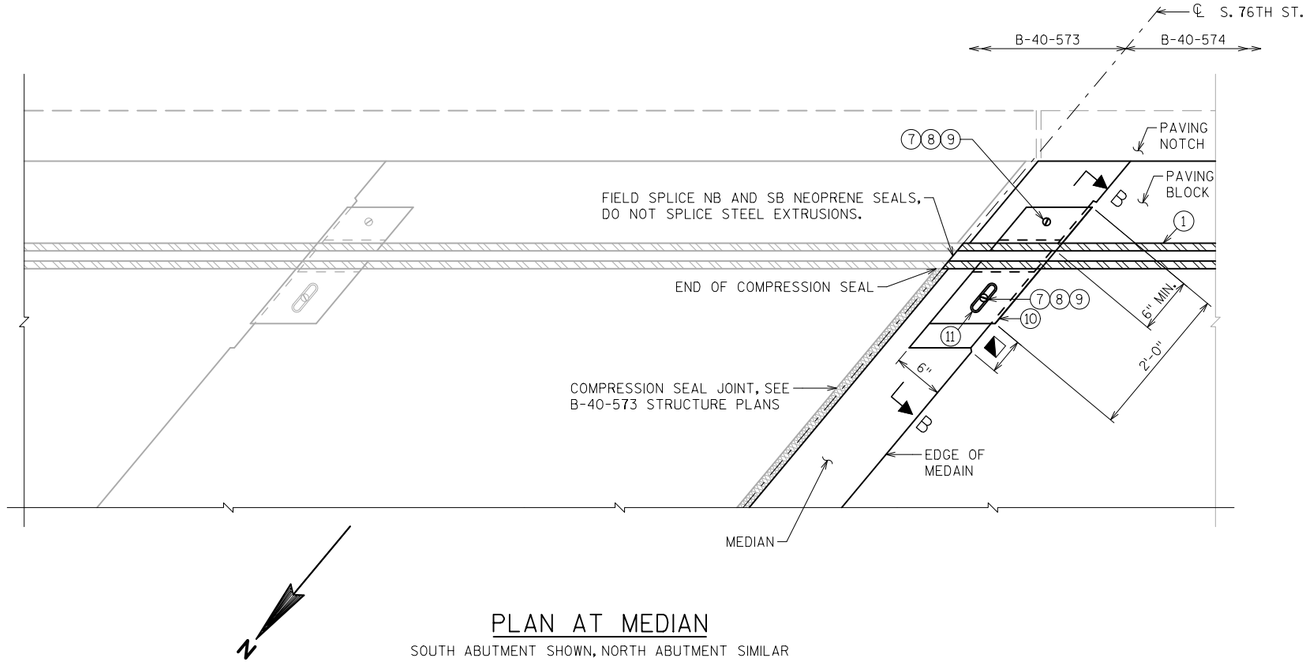
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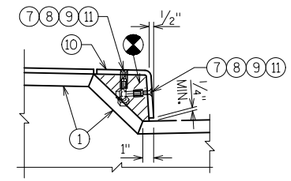
PLAN AT MEDIAN

SOUTH ABUTMENT SHOWN, NORTH ABUTMENT SIMILAR

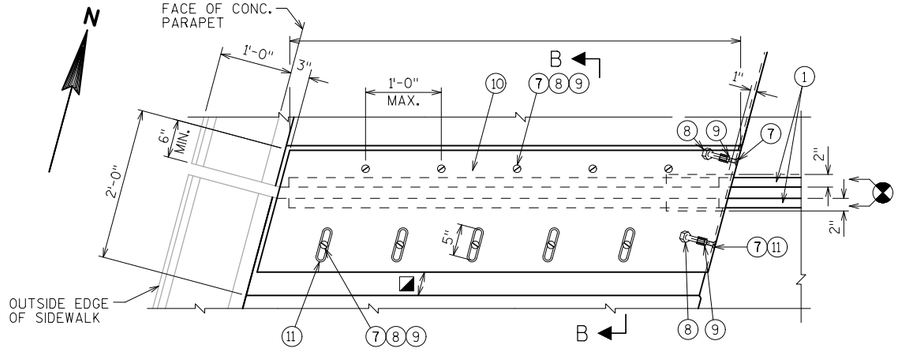
NOTE:

FOR NUMBERED ITEMS, SEE "STRIP SEAL EXPANSION JOINT" SHEET.

FABRICATE COVER PLATES TO MATCH CROSS-SLOPES AT MEDIAN AND SIDEWALK.

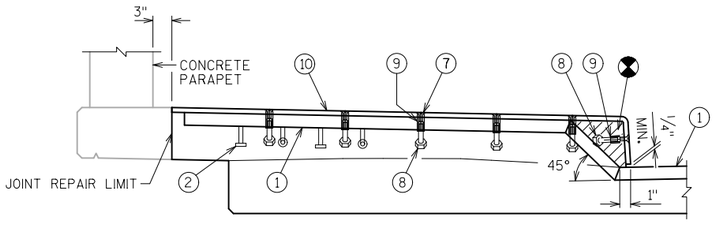


SECTION AT MEDIAN

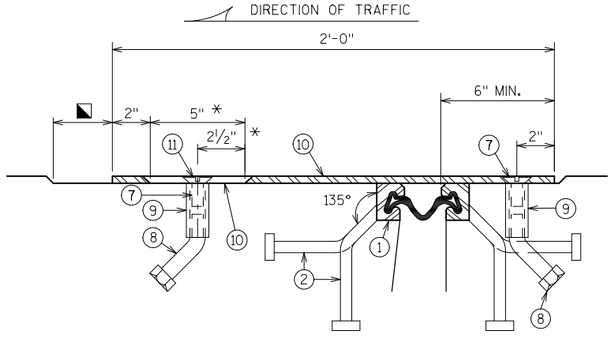


PLAN AT SIDEWALK

NORTH ABUTMENT SHOWN, SOUTH ABUTMENT SIMILAR

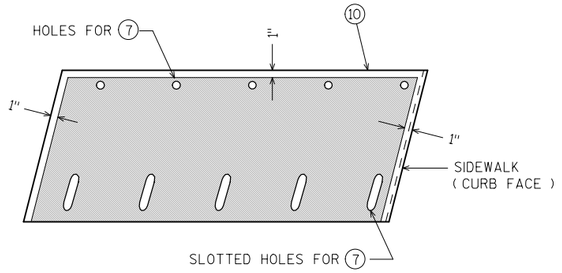


SECTION AT SIDEWALK



SECTION B-B

* DIMENSION ALONG DIRECTION OF MOVEMENT



PLAN OF SIDEWALK COVER PLATE WITH SLIP-RESISTANT SURFACE

PLACE SLIP-RESISTANT SURFACE ON TOP WALKING SURFACE IN SHADED AREA ONLY (NOT ON CURB FACE).

APPROVED SLIP-RESISTANT APPLIED SURFACES FOR STEEL PLATES		
PRODUCT	MANUFACTURER	CONTACT AT
SLIPNOT GRADE 2, STEEL	W. S. MOLNAR COMPANY	1-800-SLIPNOT
ALGRIP, STEEL	ROSS TECHNOLOGY CORP.	1-800-345-8170

⊗ BLOCK OUT CONCRETE 2" EACH SIDE OF JOINT OPENING.

◪ JOINT OPENING DIMENSION ALONG SKEW PLUS 1/2".

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STRIP SEAL COVER PLATE

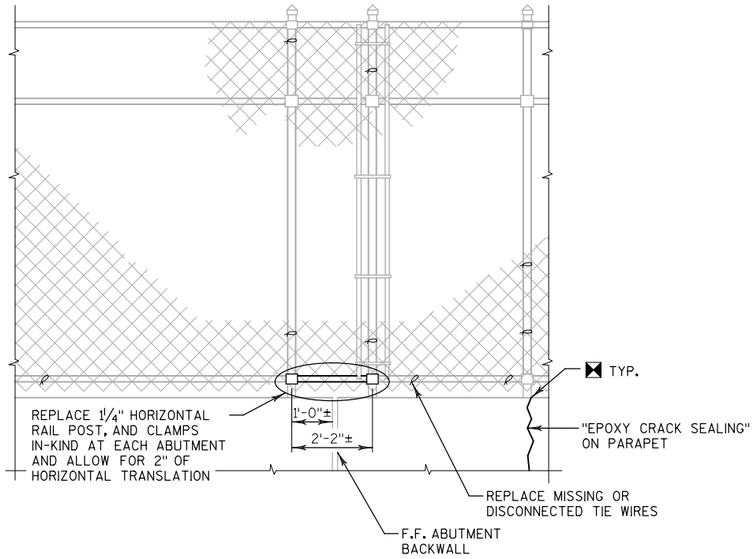
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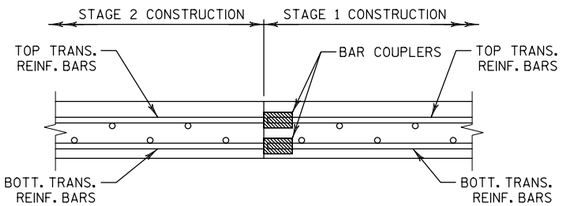
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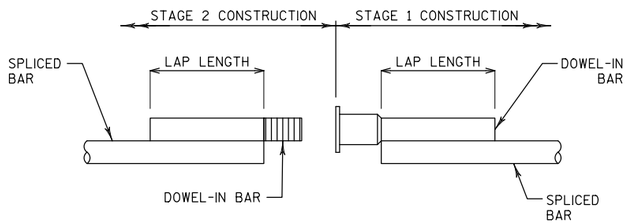
FENCE PART ELEVATION

ALL WORK SHOWN IS INCLUDED IN BID ITEM "FENCE REPAIR" EXCEPT FOR "EPOXY CRACK SEALING"



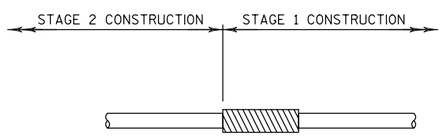
SECTION THRU DECK

ONE-PIECE THREADED BAR COUPLER SHOWN



DOWEL BAR COUPLER

STAGE 2 DOWEL SCREWS INTO COUPLER PLACED IN STAGE 1



ONE PIECE THREADED SPLICER

BAR COUPLER ALTERNATIVES

NOTES

FOR DOWEL BAR COUPLERS, ALL REINFORCEMENT SHALL BE LAPPED AND TIED TO THE REINFORCEMENT BARS.

BAR LENGTH COMPUTED TO THE ℄ OF THE CONSTRUCTION JOINT AND SHALL BE MODIFIED BY THE BAR COUPLER MANUFACTURERS RECOMMENDATIONS.

REPLACE FENCE RAILS, REPLACE TIES, SEAL PERIMETER OF POSTS AND REPAIR CRACKS IN THE PARAPET AS DIRECTED BY THE FIELD ENGINEER.

ALL FENCE COMPONENTS SHALL BE GALVANIZED STEEL EXCEPT FOR THE FENCE TIES WHICH MAY BE ALUMINUM-COATED STEEL OR GALVANIZED STEEL.

BOLTS, NUTS, AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM 307. IF 307 IS USED, BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED.

FIELD VERIFY DIMENSIONS AND SIZE OF RAIL POST SHOWN IN FENCE PART ELEVATION DETAIL.

LEGEND

CAULK AROUND PERIMETER OF ALL FENCE POSTS WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. INCLUDED WITH BID ITEM "FENCE REPAIR"

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MISCELLANEOUS DETAILS

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Notes

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