LAX NOVEMBER 2020

PROJECT ID: 7575-00-71 & 3700-10-83

WITH: N/A

COUNTY: LA CROSSE

07

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 = 206

N

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7575-00-71	WISC 2020536	1
3700-10-83	———	—

LA CROSSE - SPARTA

BRAUND ST TO CTH OS

STH 16

LA CROSSE COUNTY

STATE PROJECT NUMBER
7575-00-71

LA CROSSE - SPARTA

STH 16/IH 90 INTERCHANGE EB/WB RAMPS

STH 16

LA CROSSE COUNTY

STATE PROJECT NUMBER
3700-10-83

DESIGN DESIGNATION			STH 16	BRAUND ST	THEATER RD	S. KINNEY COULEE RD	CTH OS
A.A.D.T.	2020	=	26,000	4,000	8,500	7,400	17,400
A.A.D.T.	2040	=	29,650	4,300	10,200	8,600	20,900
D.H.V.		=	1720				
D.D.		=	59/41				
T.		=	22.7%				
DESIGN SPEED		=	45 MPH	30 MPH	30 MPH	30 MPH	30 MPH
ESALS		=	N/A				

CONVENTIONAL SYMBOLS

PLAN

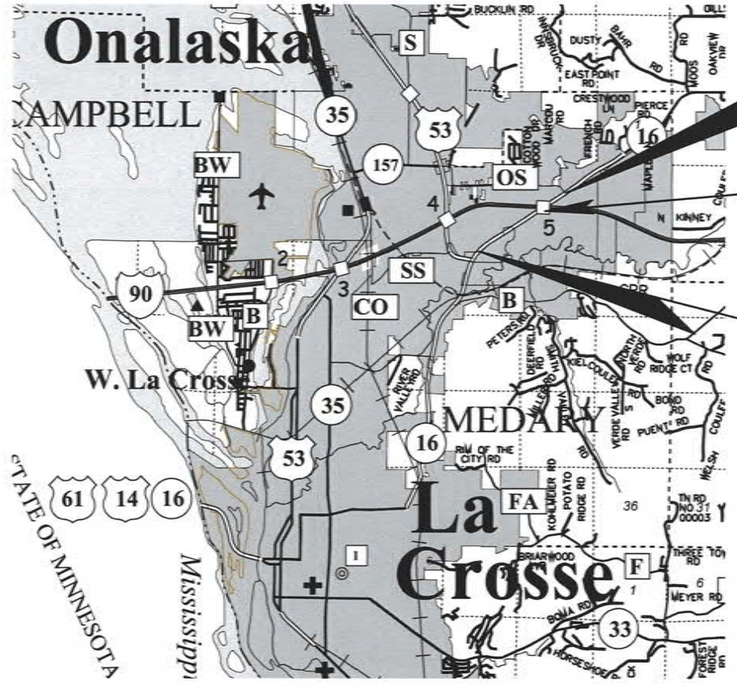
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'ES')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

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



END PROJECT 7575-00-71

STA. 270+90.00

Y = 156,247.28

X = 464,587.16

3700-10-83

SIGNAL REPLACEMENTS

BEGIN PROJECT 7575-00-71

STA. 199+98.00

Y = 152,234.00

X = 458,744.95

LAYOUT

SCALE 0 2 MI

7575-00-71	1.343 MI
3700-10-83	0.000 MI
TOTAL NET LENGTH OF CENTERLINE =	1.343 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, LA CROSSE COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 NAVD (2012).

ORIGINAL PLANS PREPARED BY

Mead & Hunt

WISCONSIN
JAY P. WHEATON
E-35729
LA CROSSE, WI
PROFESSIONAL ENGINEER

DATE: 7/17/2020 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	MEAD & HUNT
Designer	MEAD & HUNT
Project Manager	VALERIE GUIDER
Regional Examiner	SW REGION
Regional Supervisor	REINY YAHNKE

APPROVED FOR THE DEPARTMENT

DATE: 7/22/2020 Valerie Guider (Signature)

E

FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\010101_TI.DWG PLOT DATE : 7/2/2020 8:10 AM PLOT BY : JEFF BREU PLOT NAME :

GENERAL NOTES

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

THE EXACT LOCATION OF EROSION CONTROL DEVICES SHALL BE DETERMINED IN THE FIELD.

BEARINGS SHOWN ON THE PLANS ARE GRID BEARING TO NEAREST SECOND.

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

DISTURBED AREA WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, ARE TO BE 4-INCH SALVAGED TOPSOIL, FERTILIZED, SEEDED AND EROSION MAT.

ALL CURB AND GUTTER RADII, PAVEMENT DIMENSIONS AND STATIONS ARE SHOWN TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

A VERTICAL SAWCUT SHALL BE MADE THROUGH EXISTING DRIVEWAYS AND PAVEMENTS AT REMOVAL LIMITS.

TOP OF CASTING ELEVATIONS SHOWN FOR INLETS REFER TO THE CASTING ELEVATION AT THE FRONT EDGE OF CASTING.

ALL STORM SEWER INVERTS, ELEVATIONS, PIPE LENGTHS, AND GRADES ARE COMPUTED CENTER-TO-CENTER OF STRUCTURES.

ORDER OF SECTION 2 SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
INTERSECTION DETAILS
EROSION CONTROL
PERMANENT SIGNING
TRAFFIC SIGNAL PLAN
PAVEMENT MARKING
TRAFFIC CONTROL
ALIGNMENTS

STANDARD ABBREVIATIONS

ADT	AVERAGE DAILY TRAFFIC
AGG	AGGREGATE
ASPH	ASPHALTIC
BM	BENCH MARK
BOC	BACK OF CURB
C&G	CURB AND GUTTER
CE	COMMERCIAL ENTRANCE
CL	CENTERLINE
COR	CORNER
CWT	HUNDREDWEIGHT
CY	CUBIC YARD
DHV	DESIGN HOURLY VOLUME
DWY	DRIVEWAY
EL	ELEVATION
EX	EXISTING
EXC	EXCAVATION
FT	FOOT
FTG	FOOTING
HYD	HYDRANT
INV	INVERT
LB	POUND
LF	LINEAR FOOT
LHF	LEFT-HAND FORWARD
LS	LUMP SUM
LT	LEFT
Mgal	MEGAGALLON
M/L	MAINLINE
NO	NUMBER
PE	PRIVATE ENTRANCE
PI	POINT OF INTERSECTION
PL	PROPERTY LINE
PP	POWER POLE
QTY	QUANTITY
RHF	RIGHT-HAND FORWARD
RT	RIGHT
R/L	REFERENCE LINE
R/W	RIGHT-OF-WAY
SF	SQUARE FOOT
SHLDR	SHOULDER
SS	STORM SEWER
STA	STATION
SY	SQUARE YARD
T	TRUCKS (PERCENT OF)
TEL	TELEPHONE
TLE	TEMPORARY LIMITED EASEMENT
TYP	TYPICAL
UG	UNDERGROUND CABLE
VAR	VARIABLE
VC	VERTICAL CURVE
VPC	VERTICAL POINT OF CURVE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY

UTILITIES

CENTURYLINK
COMMUNICATION LINE
333 N. FRONT STREET
LA CROSSE, WI 54601
ATTN: BRIAN STELPLUGH
PHONE: (608) 615-4136
EMAIL: Brian.Stelplugh@centurylink.com

DAIRYLAND PWR COOP
ELECTRICITY
3200 EAST AVENUE SOUTH
PO BOX 817
LA CROSSE, WI 54602-0817
ATTN: ROB MALY
PHONE: (608) 518-2633
EMAIL: Rob.Maly@DairylandPower.com

CHARTER
COMMUNICATION LINE
1228 12th AVENUE S
ONALASKA, WI 54650
ATTN: PERRY McCLELLAN
PHONE: (608) 317-6213
EMAIL: Perry.Mcclellan@charter.com

WI DOT
COMMUNICATION LINE
433 WEST ST PAUL AVENUE
MILWAUKEE, WI 53203
ATTN: PAUL KUTZ
PHONE: (608) 205-7859
EMAIL: pkutz@hntb.com

CITY OF LA CROSSE
SEWER
400 LA CROSSE STREET
LA CROSSE, WI 54601
PHONE: (608) 789-7505
ATTN: RANDY TURTENWALD
EMAIL: turtenwaldr@cityoflacrosse.org

WI INDPNDNT NTWRK
COMMUNICATION LINE
4955 BULLIS FARMS ROAD
EAU CLAIRE, WI 54701
PHONE: (715) 838-4012
MOBIL: (715) 864-2918
ATTN: JOHN LOUIS
EMAIL: John.Louis@wintechnology.com

LA CROSSE WATER UTILITY
400 LA CROSSE STREET
LA CROSSE, WI 54601
PHONE: (608) 789-7505
ATTN: RANDY TURTENWALD
EMAIL: turtenwaldr@cityoflacrosse.org

XCEL ENERGY
ELECTRICITY
3215 COMMERCE STREET
LA CROSSE, WI 54603
PHONE: (608) 789-3689
MOBIL: (715) 577-1132
ATTN: JASON MCROBERTS
EMAIL: Jason.L.Mcroberts@xcelenergy.com

CITY OF ONALASKA W&S
ROAD FACILITY
415 MAIN STREET
ONALASKA, WI 54630
PHONE: (608) 781-9537
MOBIL: (608) 769-6061
ATTN: KEVIN SCHUBERT
EMAIL: kschubert@onalaskawi.gov

XCEL ENERGY
GAS/PETROLEUM
3215 COMMERCE STREET
LA CROSSE, WI 54603
PHONE: (608) 789-3681
ATTN: TOM LaLOND
EMAIL: Thomas.J.LaLond@xcelenergy.com

CITY OF ONALASKA W&S
SEWER
415 MAIN STREET
ONALASKA, WI 54650
PHONE: (608) 781-9537
MOBIL: (608) 769-6061
ATTN: KEVIN SCHUBERT
EMAIL: kschubert@onalaskawi.gov

CITY OF ONALASKA W&S
WATER
415 MAIN STREET
ONALASKA, WI 54650
PHONE: (608) 781-9537
MOBIL: (608) 769-6061
ATTN: KEVIN SCHUBERT
EMAIL: kschubert@onalaskawi.gov

ALL UTILITIES LISTED ABOVE ARE MEMBERS OF DIGGERS HOTLINE

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

RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP-TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE-TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = 1.15 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.55 ACRES

DESIGN CONSULTANT

Mead & Hunt

MEAD & HUNT, INC.
750 NORTH THIRD STREET
LA CROSSE, WI 54601
ATTN: JAY P. WHEATON, P.E.
PHONE: (608) 784-6040
MOBILE: (608) 386-0212
EMAIL: JAY.WHEATON@MEADHUNT.COM

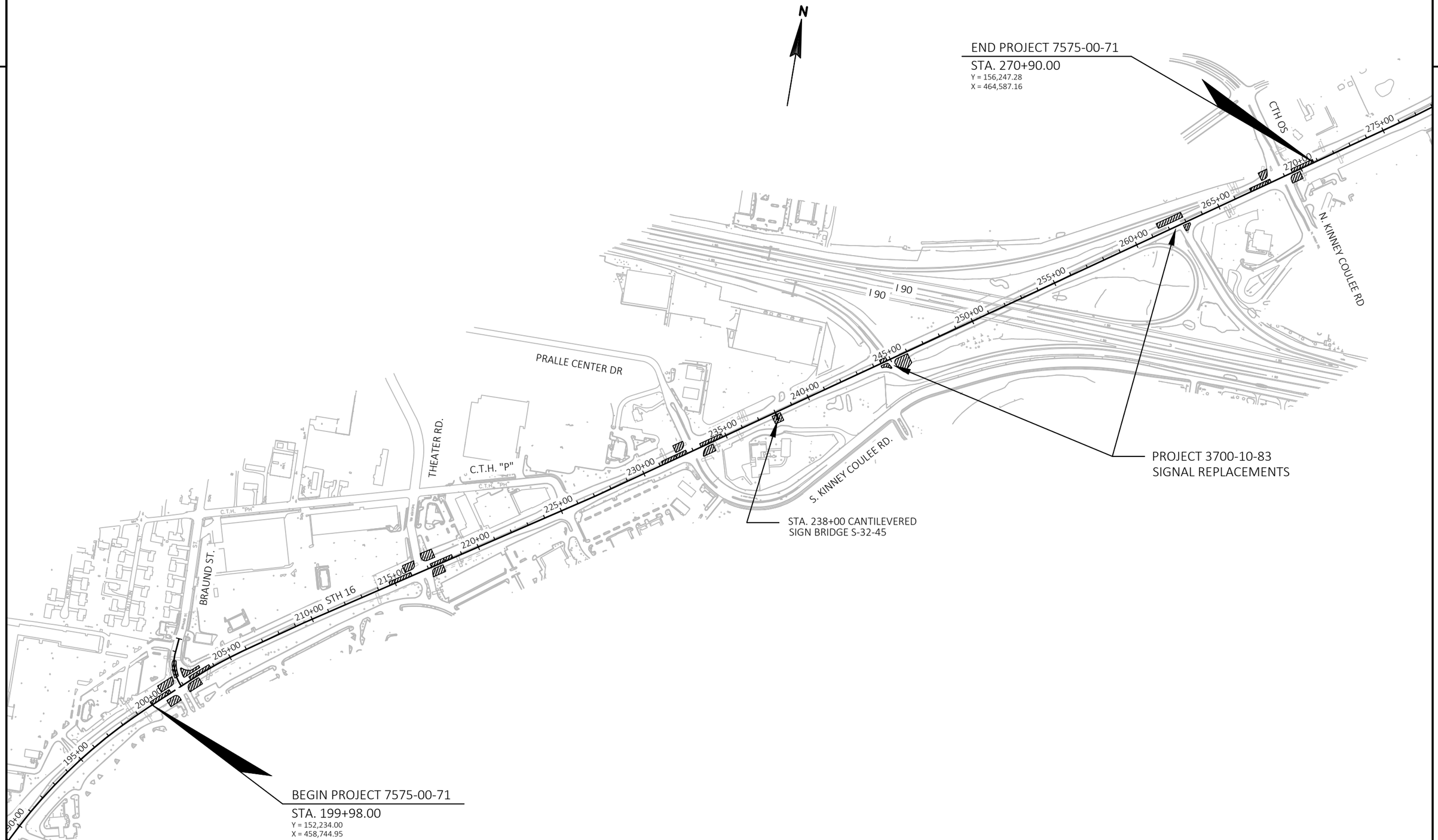
WISCONSIN DOT

WISCONSIN DEPARTMENT OF TRANSPORTATION
SOUTHWEST REGION
3550 MORMON COULEE ROAD
LA CROSSE, WI 54601
ATTN: VALERIE GUIDER
PHONE: (608) 789-6303
EMAIL: VALERIE.GUIDER@dot.wi.gov

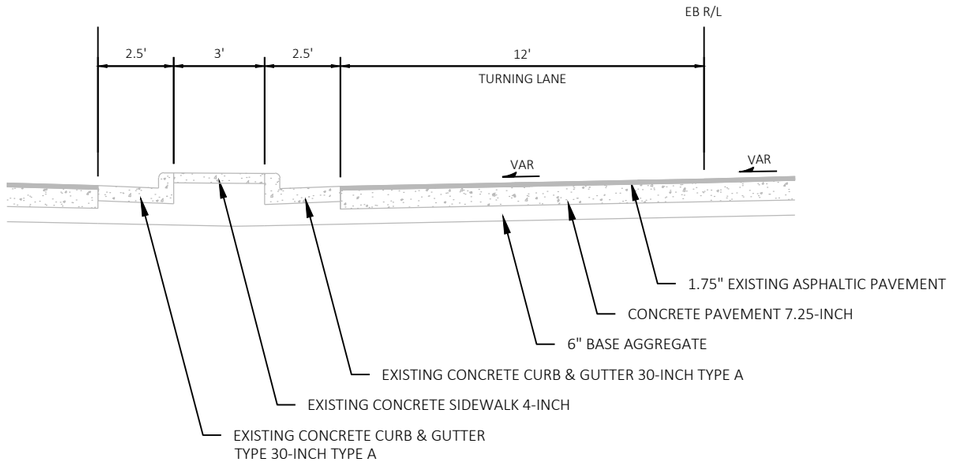
DNR

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
WEST CENTRAL REGION
3550 MORMON COULEE ROAD
LA CROSSE, WI 54601
ATTN: KAREN KAVELAGE
PHONE: (608) 785-9115
EMAIL: karen.kalvelage@wisconsin.gov

2



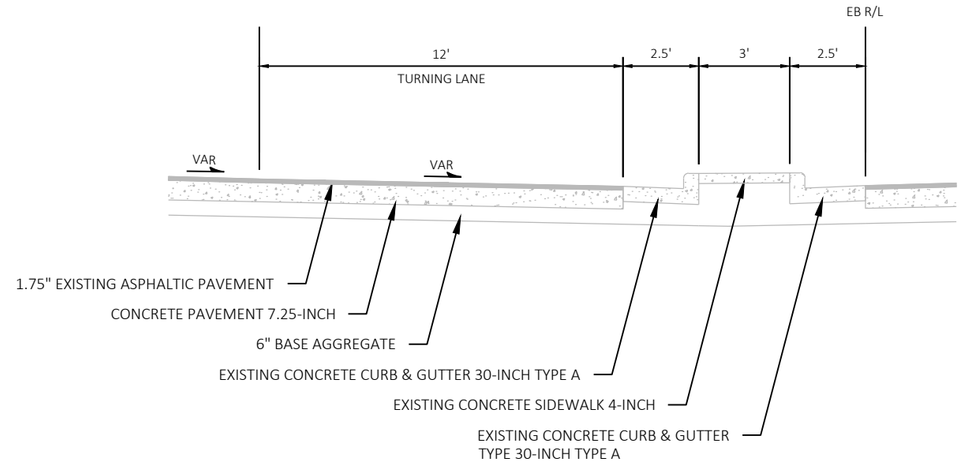
PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	PROJECT OVERVIEW	SHEET 3	E



EXISTING TYPICAL SECTION

STH 16

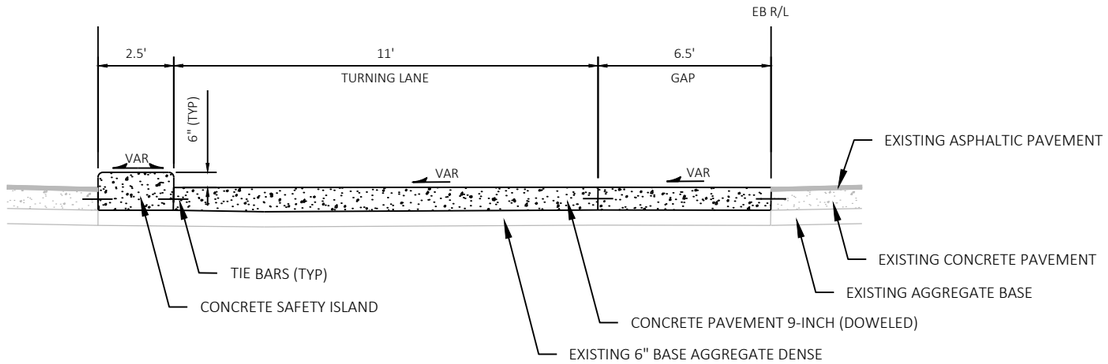
STA. 199+98 -201+21
STA. 214+70 - 216+02
STA. 231+15 - 232+65
STA. 266+95 - 268+20



EXISTING TYPICAL SECTION

STH 16

STA. 202+49 - 203+75
STA. 217+18 - 218+48
STA. 233+48 - 234+80
STA. 269+47 - 270+90

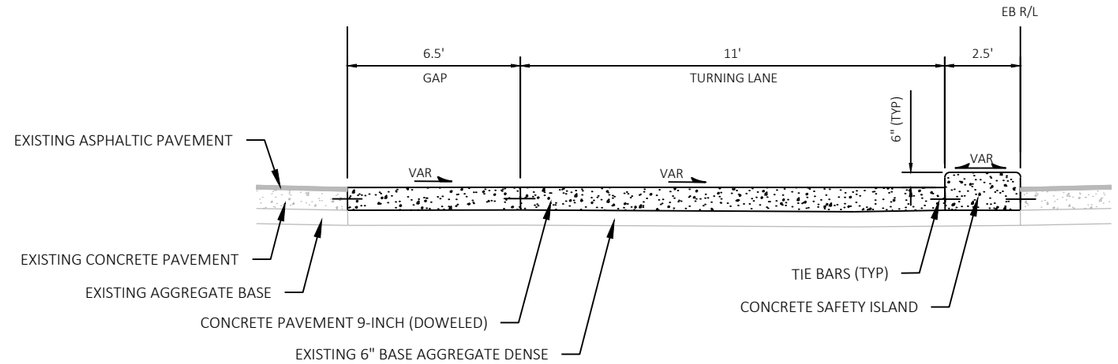


EXISTING 6" CRUSHED AGGREGATE BASE TO REMAIN IN PLACE UNLESS CONTAMINATED DURING REMOVALS. REMOVE AND REPLACE ONLY THE MATERIAL CONTAMINATED DURING THE REMOVALS .

PROPOSED TYPICAL SECTION

STH 16

STA. 199+98 -201+21
STA. 214+70 - 216+02
STA. 231+15 - 232+65
STA. 266+95 - 268+20



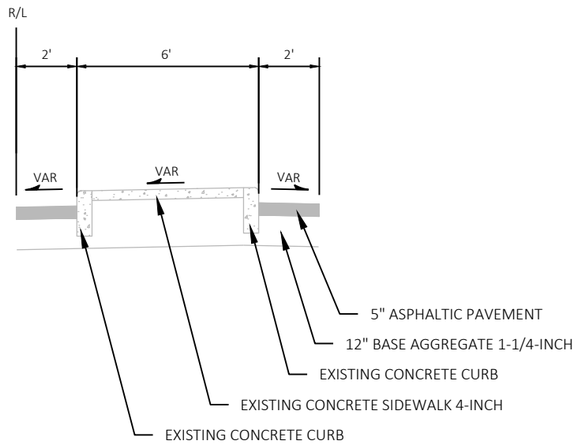
EXISTING 6" CRUSHED AGGREGATE BASE TO REMAIN IN PLACE UNLESS CONTAMINATED DURING REMOVALS. REMOVE AND REPLACE ONLY THE MATERIAL CONTAMINATED DURING THE REMOVALS .

PROPOSED TYPICAL SECTION

STH 16

STA. 202+49 - 203+75
STA. 217+18 - 218+48
STA. 233+48 - 234+80
STA. 269+47 - 270+90

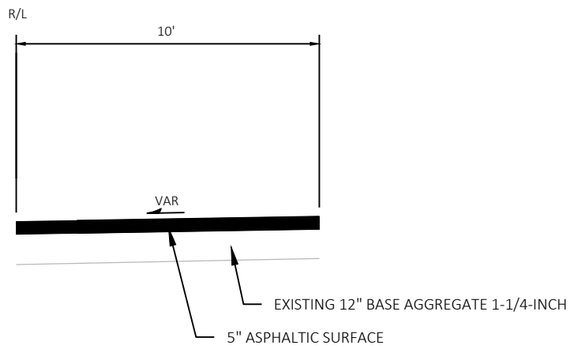
2



EXISTING TYPICAL SECTION

BRAUND STREET

STA. 10+55 - 11+49

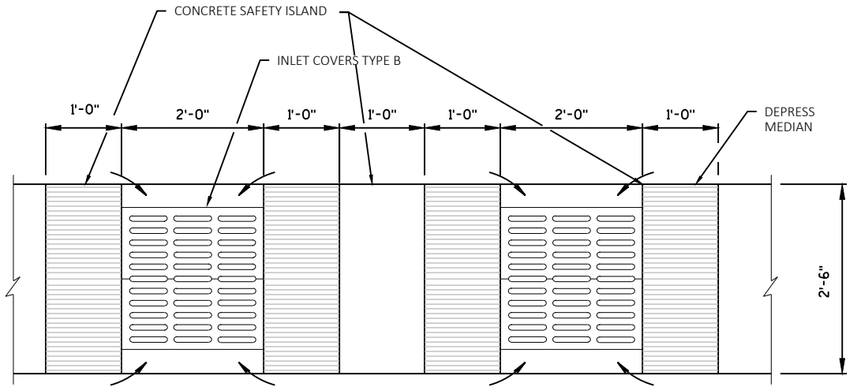


PROPOSED TYPICAL SECTION

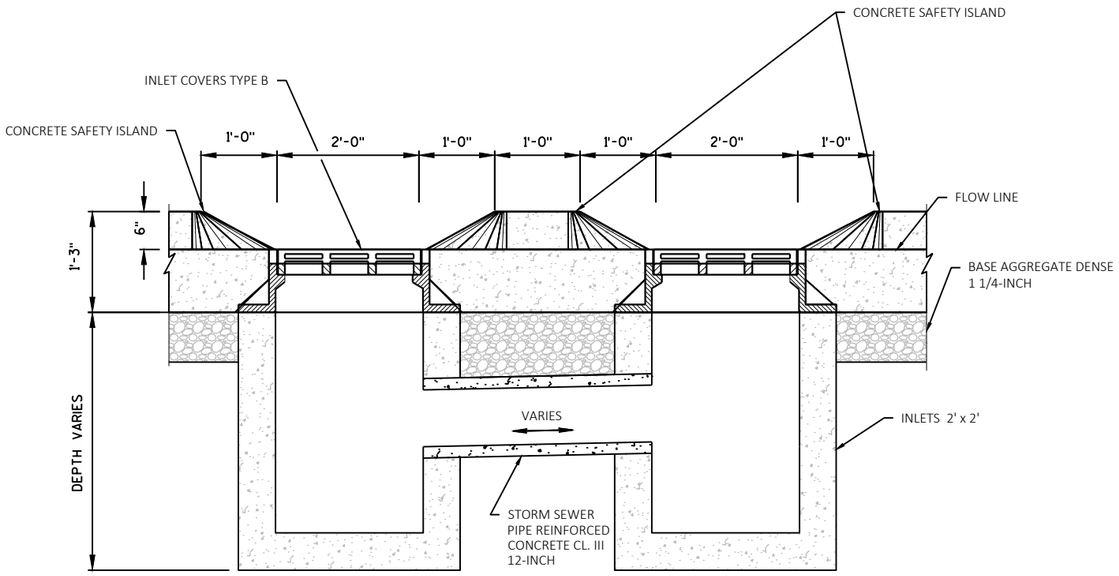
BRAUND STREET

STA. 10+55 - 11+49

EXISTING 12" CRUSHED AGGREGATE BASE TO REMAIN IN PLACE UNLESS CONTAMINATED DURING REMOVALS. REMOVE AND REPLACE ONLY THE MATERIAL CONTAMINATED DURING THE REMOVALS .

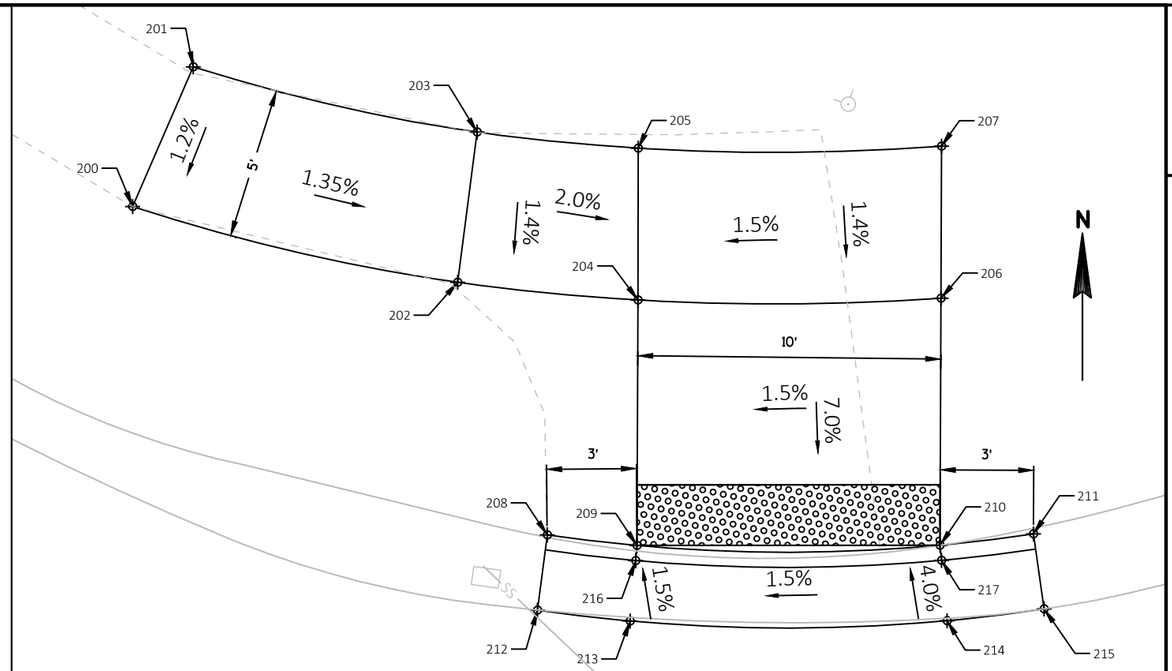


PLAN VIEW



PROFILE VIEW

MEDIAN CUT WITH TYPE "B" COVER

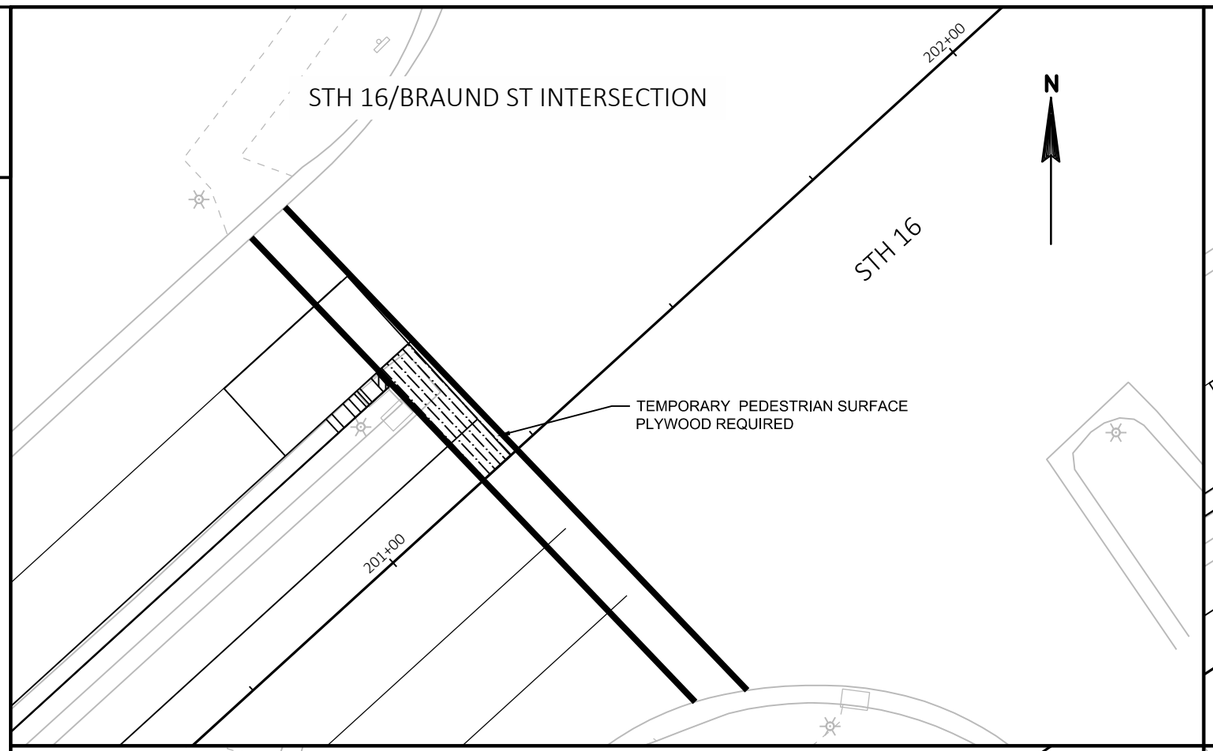


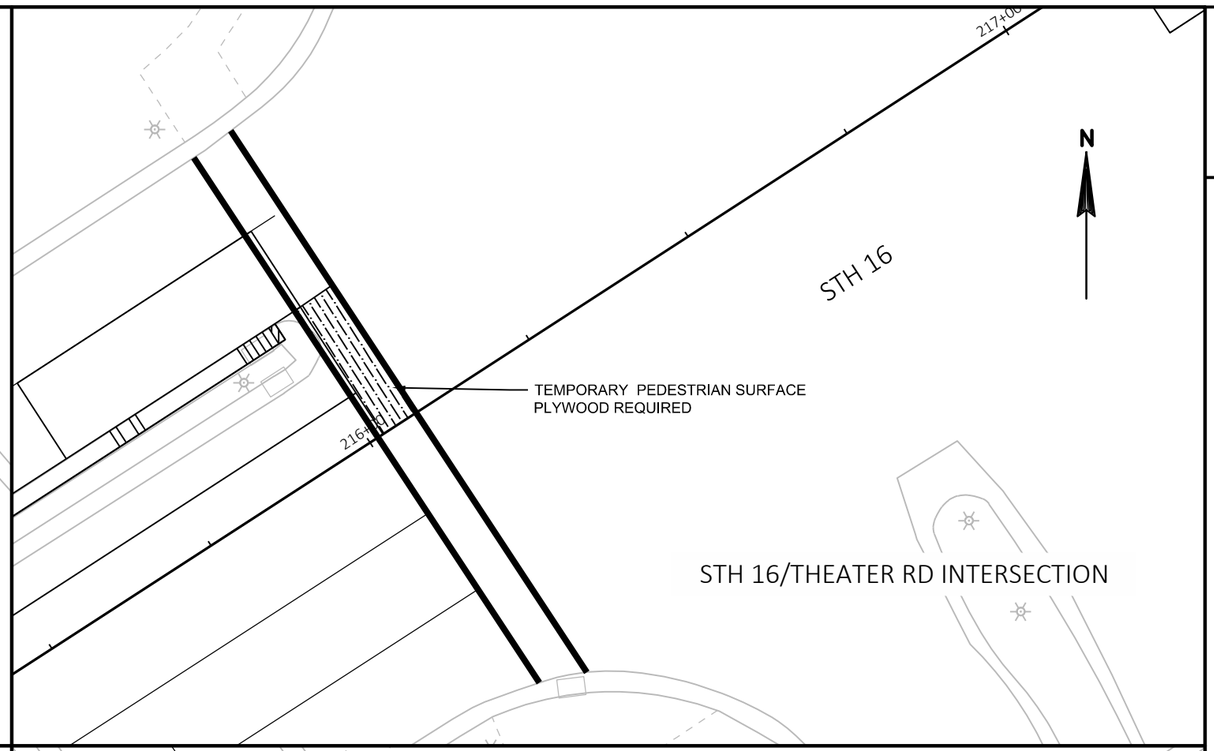
CURB RAMP DETAIL - NW CORNER OF CTH OS / STH 16

CURB RAMP / SIDEWALK GRADES

Point #	STA, OFFSET	ELEV.	REMARKS
200	269+39.92, 88.61 LT	721.26	MATCH EXISTING
201	269+44.18, 91.28 LT	721.32	MATCH EXISTING
202	269+47.36, 80.49 LT	721.12	
203	269+50.69, 84.22 LT	721.19	
204	269+51.94, 76.65 LT	721.01	
205	269+54.77, 80.79 LT	721.08	
206	269+60.23, 71.06 LT	721.16	
207	269+63.08, 75.19 LT	721.23	
208	269+45.10, 71.95 LT	720.63	MATCH EXISTING
209	269+47.35, 69.99 LT	721.46	
210	269+55.61, 64.35 LT	720.51	
211	269+58.36, 62.92 LT	721.06	MATCH EXISTING
212	269+43.44, 70.08 LT	720.37	MATCH EXISTING
213	269+45.76, 68.06 LT	720.45	
214	269+54.39, 62.17 LT	720.59	
215	269+57.26, 60.67 LT	720.72	MATCH EXISTING
216	269+47.03, 69.60 LT	721.05	
217	269+55.37, 63.91 LT	720.63	

2





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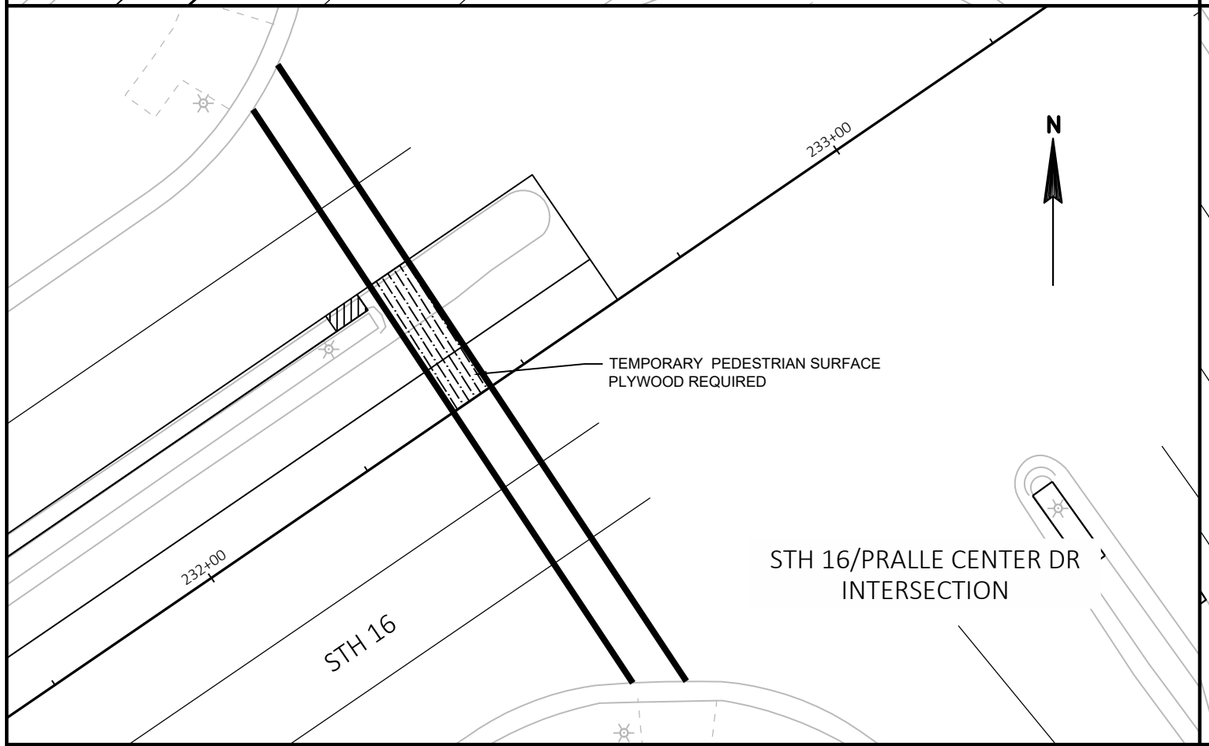
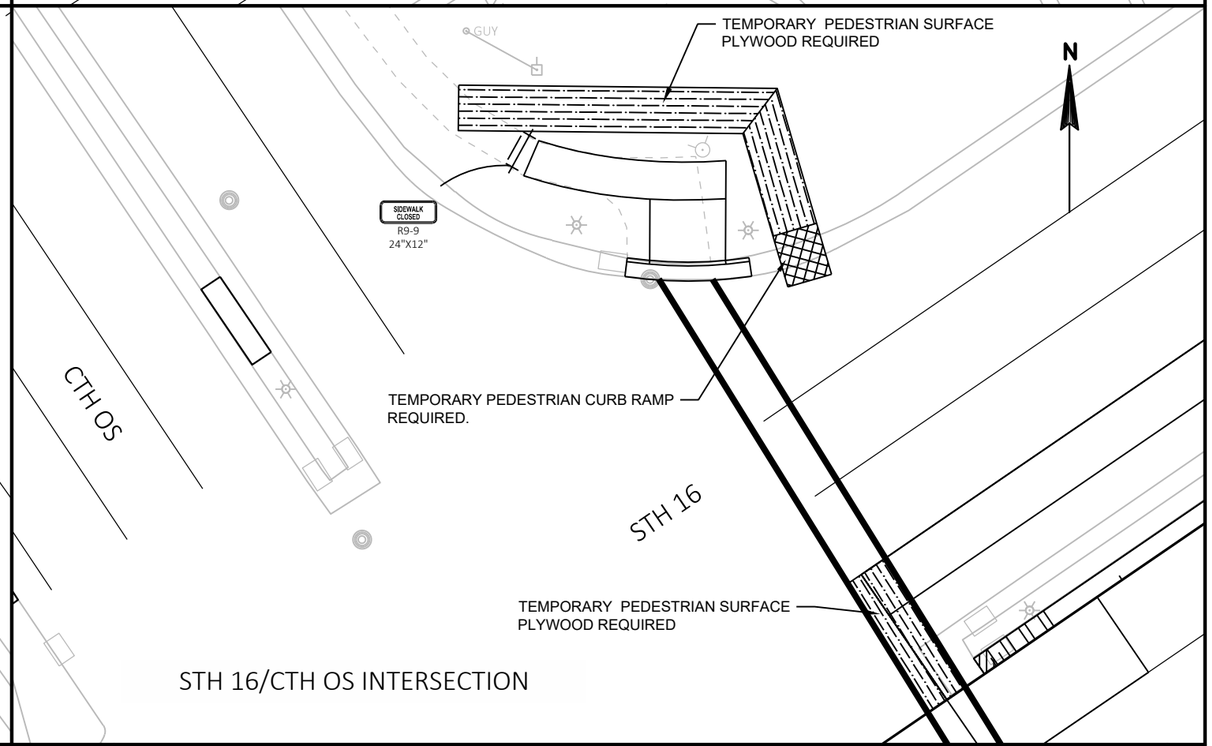




PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	CONSTRUCTION DETAILS - TEMPORARY PEDESTRIAN ACCOMMODATIONS	SHEET 7	E

2

2

STH 16

237+00

238+00

239+00

W

T

FO

SAN

E

SS

OH

9'

5'

12'

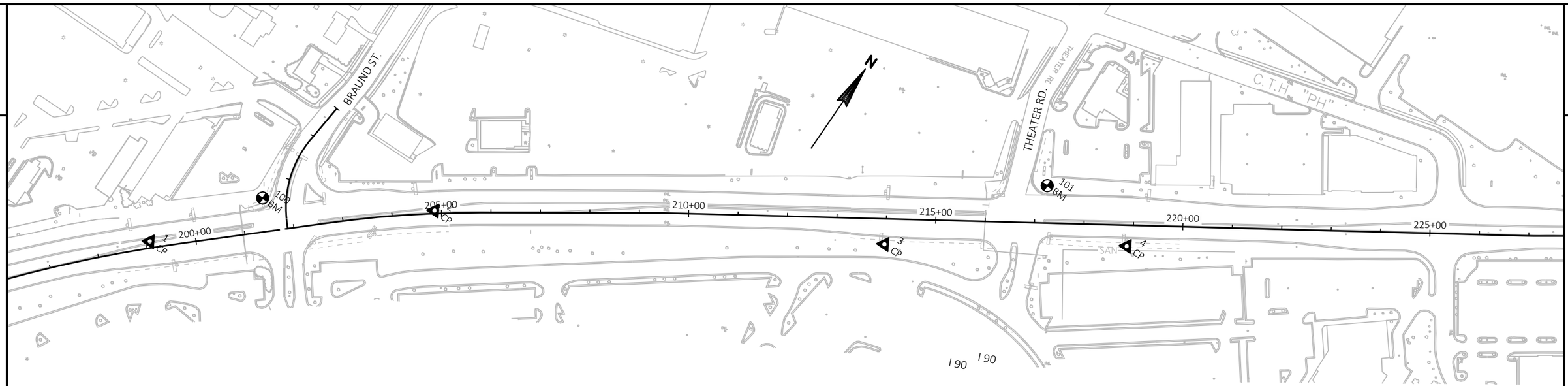
CITY OF ONALASKA

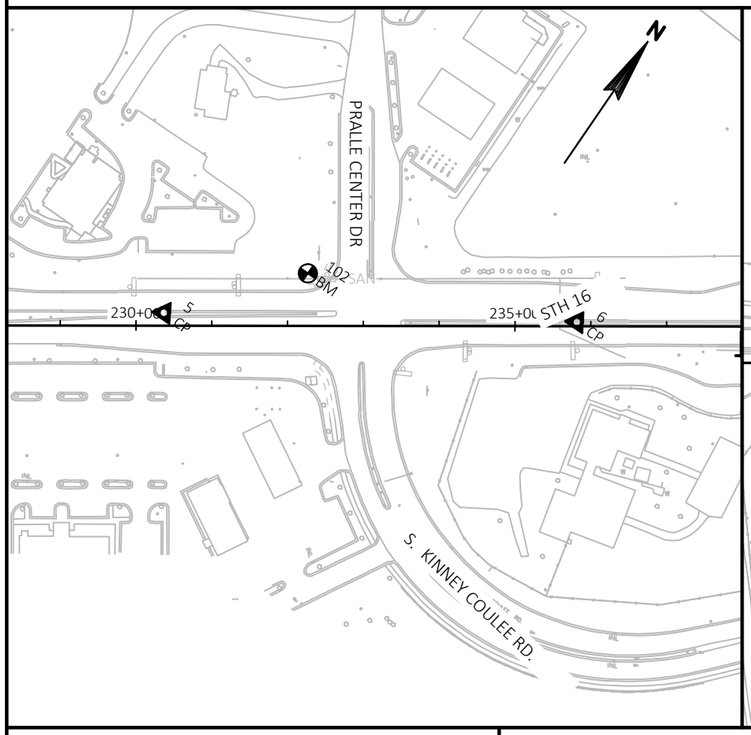
WATER MAIN OFFSET REQUIRED
SEE DETAIL

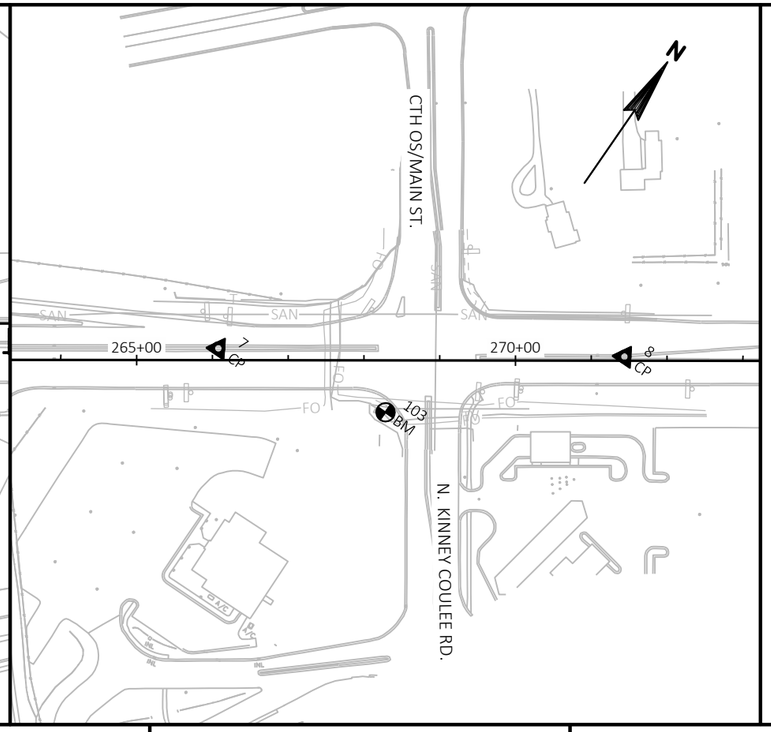
STA. 238+00 CANTILEVERED
SIGN BRIDGE S-32-45

XCEL ENERGY

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	CONSTRUCTION DETAIL - CANTILEVER SIGN BRIDGE (S-32-45)	SHEET 8	E







POINT NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP 1	152,182.04	458,669.57	711.51	MAG NAIL - MEDIAN
CP 2	152,559.10	459,109.10	712.08	MAG NAIL - MEDIAN
CP 3	153,018.12	459,897.86	709.79	MAG NAIL - BIKE PATH
CP 4	153,292.08	460,304.36	710.41	MAG NAIL - BIKE PATH
CP 5	153,973.21	461,231.83	717.97	MAG NAIL - MEDIAN
CP 6	154,271.37	461,687.99	715.80	MAG NAIL - MEDIAN
CP 7	155,987.67	464,180.36	719.48	MAG NAIL - MEDIAN
CP 8	156,281.97	464,628.46	722.34	MAG NAIL - MEDIAN
BM 100	152,383.55	458,808.19	710.89	NE CORNER OF SIGNAL CABINET
BM 101	153,301.92	460,102.72	710.88	SW CORNER OF SIGNAL CABINET
BM 102	154,123.58	461,358.99	718.52	SW CORNER OF SIGNAL CABINET
BM 103	156,043.05	464,409.83	719.31	EAST SIDE OF STEP ON SIGNAL CABINET

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	CONTROL POINTS & BENCHMARKS	SHEET 9	E

GENERAL NOTES

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

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING THIER OWN DETERMINATION AS TO THE TYPE AND LOCATION OF THE UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

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

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUNG THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

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

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

CONDUIT HEIGHT ABOVE CONCRETE BASE SHALL BE 4½" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

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

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

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTOR FITTINGS, UL LISTED FOR ELECTRICAL USE, SHALL BE USED.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

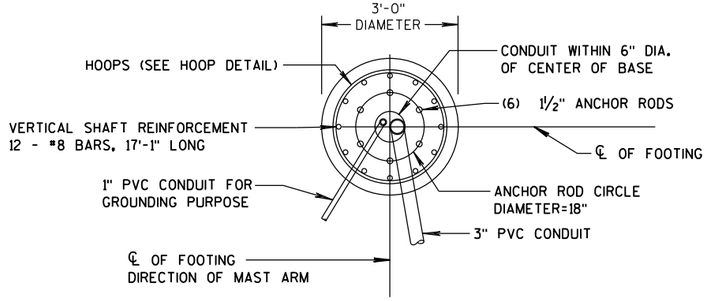
THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1-INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4-FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

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

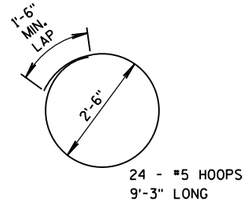
THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVEL WAY SHALL BE 24-INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18-INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36-INCHES, (GREATER THAN 36-INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH THE WRITTEN APPROVAL OF THE ENGINEER.

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

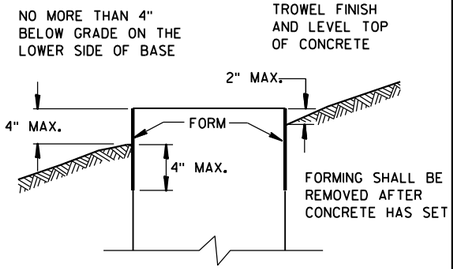
CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 641.2.2.3 OF THE STANDARD SPECIFICATIONS	fy=55,000 p.s.i.
TEMPLATES, ASTM A709 GRADE 36	fy=36,000 p.s.i.



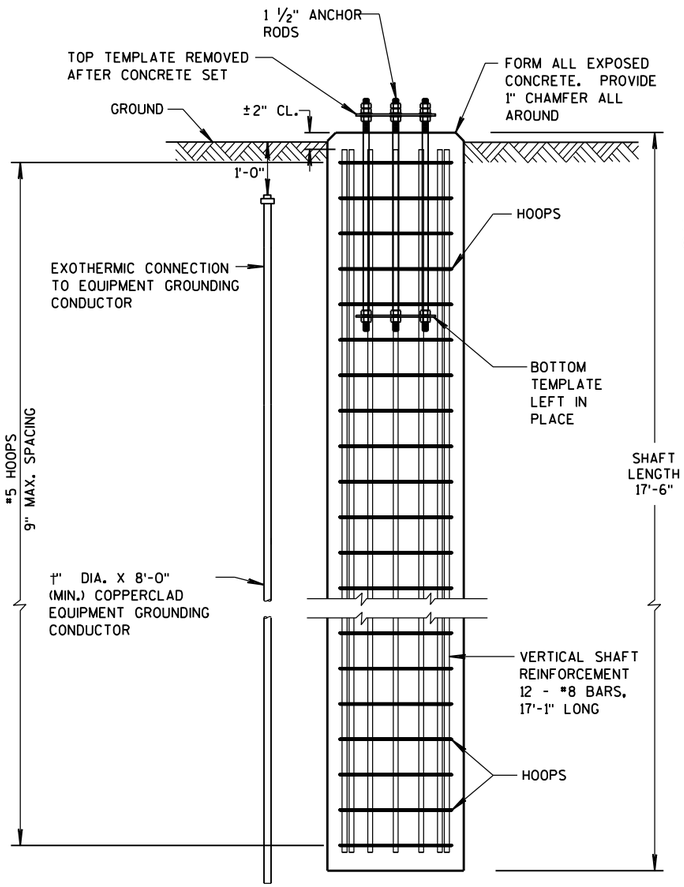
PLAN VIEW



HOOP DETAIL

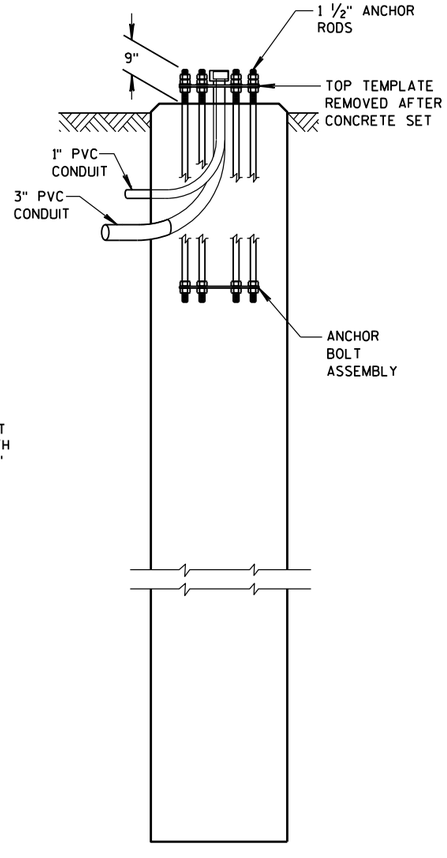


FORMING DETAIL



ELEVATION VIEW *

*CONDUITS ARE NOT SHOWN ON THIS VIEW FOR CLARITY



SIDE VIEW **

**HOOPS AND VERTICAL SHAFT REINFORCEMENT NOT SHOWN ON THIS VIEW FOR CLARITY

(FOR TYPE 9 & 10 SPECIAL POLES)

CONCRETE = 4.6 C.Y.
H.S. REINFORCEMENT = 779 LBS.

TO BE USED WHEN GROUND ELEVATION, AT BASE, EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.

PROJECT NO: 7575-00-71	HWY: STH 16	COUNTY: LA CROSSE	TYPE 9&10 SPECIAL TRAFFIC SIGNAL BASE DETAILS	SHEET 10	E

LEGEND

SIGNAL CABINET

PULL BOX

MONOTUBE TRAFFIC SIGNAL

TRAFFIC SIGNAL POLE

SAW CUT

35' TRANSITION FROM EXISTING CURB & GUTTER TO FULL CONCRETE SAFETY ISLAND SHALL INCLUDE GUTTERS. THE GUTTERS SHALL BE INCIDENTALS TO THE CONSTRUCTION OF THE CONCRETE SAFETY ISLANDS. **

35' **

87.25'

10'

25'

12'

MATCH EXISTING PAVEMENT SAW CUT REQUIRED

199+98.00, -20.00' LT

200+08.00, -18.00' LT

200+28.00, -20.00' LT

MATCH EXISTING PAVEMENT SW CUT REQUIRED

CONCRETE SAFETY ISLAND TYP.

7.5%

0.66%

0.60%

0.60%

710.30

710.15

710.00

1.6%

1.4%

2.50'

11'

1.2%

1.1%

6.50'

199+98.00, -12.42' LT

200+00

201+00

2.00'

199+98.00, 0.00'

200+00.66, 0.00'

200+08.00, -15.50' LT
EL. 710.58

200+28.00, -17.50' LT
EL. 710.43

STH 16

STRUCTURE 1-2
STA 201+13, 18.75' LT
INLET 2'X2'-B COVER
RIM 709.80 INV 705.90 (NW)
INV 706.10 (SE) INV 706.15 (SW)

STRUCTURE 1-1
STA 201+08, 18.75' LT
INLET 2'X2'-B COVER
RIM 709.85 INV 706.20 (NE)

PB8

SB7

SB8

18" CONC

SC1

PB1

SB1

PB9

CONCRETE PAVEMENT REPLACEMENT SHES

200+99.00, -32.00' LT

MEDIAN CUT REQ'D SEE DETAIL

201+21.00, -31.95' LT

12 LF OF SSPRC CLASS III 18-INCH

MATCH EXISTING PAVEMENT SAW CUT REQUIRED

201+21.00, -20.00' LT

709.98

2.50'

201+15.25, -20.00' LT
EL. 709.90

201+15.25, -17.50' LT
EL. 709.85

REMOVE INLET

201+21.00, 0.00'

6 LF OF SSPRC CLASS III 18-INCH

6 LF OF SSPRC CLASS III 12-INCH

CONCRETE PAVEMENT HES 9-INCH

PAVEMENT JOINT

MATCH EXISTING PAVEMENT SAW CUT REQUIRED

CENTURY LINK

18" CONC

WISCONSIN DEPARTMENT OF TRANSPORTATION

PB7

SB6

SB5

PB6

PI: 11+11.00

REMOVING CONCRETE SIDEWALK

BRAUND ST

CENTURY LINK

REMOVING CURB

11'

11'

PB1

5" ASPHALTIC SURFACE

SB1

PB2

SB2

CONCRETE S

SB3

WISCONSIN DEPARTMENT OF TRANSPORTATION

MATCH EXISTING PAVEMENT SAW CUT REQUIRED

10+55.00, 0.00'

10+00.00, 0.00'

202+00

STRUCTURE 2-1
STA 202+61.5, 1.25' LT
INLET 2'x2'-B COVER
RIM 710.40 INV 706.05 (NE)
INV 705.95 (SE)

202+49.00, -20.00' LT

202+55.50, -2.50' LT
EL. 710.50

202+49.00, 0.00'

2.50'

0.4%

710.58

202+55.50, 0.00'

MATCH EXISTING PAVEMENT

CONCRETE MEDIAN SLOPED NOSE TYPE I

202+54.44, 12.00' RT

6 LF OF SSPRC CLASS III 18-INCH

CONCRETE PAVEMENT REPLACEMENT SHES

SB4

18

PB3

WISCONSIN DEPART TRANSPORTATION

PB4

PB5

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	INTERSECTION DETAILS - BRAUND ST	SHEET 11	E

FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - 021101_id

PLOT DATE : 7/23/2020 1:42 PM PLOT BY : JEFF BREU PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

SIGNAL CABINET

PULL BOX

MONOTUBE TRAFFIC SIGNAL

TRAFFIC SIGNAL POLE

SAW CUT

11+50.00, 0.00' RT

MATCH EXISTING PAVEMENT SAW CUT REQUIRED

11'

11'

10'

PI: 11+11.00

REMOVING CONCRETE SIDEWALK

BRAUND ST

CENTURY LINK

REMOVING CURB

11'

11'

PB1

5" ASPHALTIC SURFACE

SB1

PB2

SB2

CONCRETE SIDEWALK 4-INCH

SB3

PB11

PB12

WISCONSIN DEPARTMENT OF TRANSPORTATION

MATCH EXISTING PAVEMENT SAW CUT REQUIRED

10+55.00, 0.00'

T

LASS III 18-INCH

PAVEMENT

ED

0' LT

0' LT

0' LT

8-INCH

CH

OF

STRUCTURE 2-1
STA 202+61.5, 1.25' LT
INLET 2'x2'-B COVER
RIM 710.40 INV 706.05 (NE)
INV 705.95 (SE)

REMOVE INLET

5 LF OF SSPRC CLASS III 12-INCH

STRUCTURE 2-2
STA 202+66.5, 1.25' LT
INLET 2'x2'-B COVER
RIM 710.45 INV 706.10 (SW)

MATCH EXISTING PAVEMENT SAW CUT REQUIRED

PAVEMENT JOINT

CONCRETE PAVEMENT HES 9-INCH

12'

12'

203+40.00, -2.50' LT
EL. 710.71

203+60.00, -4.50' LT
EL. 710.78

203+60.00, -2.00' LT

2'

203+75.00, -20.00' LT

PI: 204+22.56

STH 16

MATCH EXISTING PAVEMENT SAW CUT REQUIRED

203+75.00, -8.00' LT

202+49.00, -20.00' LT

202+55.50, -2.50' LT
EL. 710.50

202+49.00, 0.00'

10+00.00, 0.00'

202+00

0.4%

1.1%

6.50'

11'

1.4%

1.2%

1.2%

2.50'

0.33%

710.58

710.66

0.33%

203+00

PB13

1.88'

204+00

710.58

202+55.50, 0.00'

710.50

2.50'

12'

203+40.00, 0.00'

CONCRETE SIDEWALK 4-INCH

203+75.00, 0.00' RT

203+60.00, -2.00' LT

MATCH EXISTING PAVEMENT

CONCRETE MEDIAN SLOPED NOSE TYPE I

MATCH EXISTING PAVEMENT SAW CUT REQUIRED

CONCRETE SAFETY ISLAND TYP.

202+54.44, 12.00' RT

202+78.51, 12.00' RT

6 LF OF SSPRC CLASS III 18-INCH

CONCRETE PAVEMENT REPLACEMENT SHES

MEDIAN CUT REQ'D SEE DETAIL

84.5'

20'

15'

35' TRANSITION FROM EXISTING CURB & GUTTER TO FULL CONCRETE SAFETY ISLAND SHALL INCLUDE GUTTERS. THE GUTTERS SHALL BE INCIDENTALS TO THE CONSTRUCTION OF THE CONCRETE SAFETY ISLANDS. **

SB4

MONOTUBE TO HAVE 20' VERTICAL CLEARANCE

18" CONC.

35' **

PB3

WISCONSIN DEPARTMENT OF TRANSPORTATION

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	INTERSECTION DETAILS - BRAUND ST	SHEET 12	E

FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - 021102_id

PLOT DATE : 7/23/2020 1:42 PM PLOT BY : JEFF BREU PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

LEGEND

SIGNAL CABINET

PULL BOX

MONOTUBE TRAFFIC SIGNAL

TRAFFIC SIGNAL POLE

SAW CUT

** 35' TRANSITION FROM EXISTING CURB & GUTTER TO FULL CONCRETE SAFETY ISLAND SHALL INCLUDE GUTTERS. THE GUTTERS SHALL BE INCIDENTALS TO THE CONSTRUCTION OF THE CONCRETE SAFETY ISLANDS.

35' **
93'
15'
20'

PB34
PB35
PB27
PB28
PB29
SB24
SB25
SB27

214+70.00, -20.00' LT
214+85.00, -18.00' LT
215+05.00, -20.00' LT
215+65.25, -31.91' LT
216+02.00, -31.90' LT
215+98.00, -20.00' LT
FL. 708.74
217+07.60, -68.70' LT
FL. 708.40
216+94.90, -111.55' LT
FL. 708.80
216+93.90, -10
FL
217+18.00, -20.00' LT
217+22.00, -2.50' LT
FL. 708.93
214+85.00, -15.50' LT
FL. 708.79
215+05.00, -17.50' LT
FL. 708.73
215+98.00, -17.50' LT
FL. 708.70
214+70.00, 0.00'
214+70.00, 0.00'
216+02.00, 0.00'
217+18.00, 0.00'
217+18.01, 12.00' RT

CONCRETE SAFETY ISLAND TYP.
MATCH EXISTING PAVEMENT SAW CUT REQUIRED
CONCRETE PAVEMENT REPLACEMENT SHES
MEDIAN CUT REQ'D SEE DETAIL
STRUCTURE 3-1
STA 215+74, 18.75' LT
INLET 2'X2' - B COVER
RIM 708.50 INV 704.40 (NE)
6 LF OF SSPRC CLASS III 18-INCH
CONCRETE MEDIAN SLOPED NOSE TYPE 2
REMOVE INLET
5 LF OF SSPRC CLASS III 12
MATCH EXISTING PAVEMENT SAW CUT REQUIRED
CONCRETE PAVEMENT REPLACEMENT SHES
STA REM
REM REPL
14 LF OF SSPRC CLASS III 12-INCH
12" CONC
CENTURY LINK
WISCONSIN DEPARTMENT OF TRANSPORTATION
THEATER RD
CONCRETE SIDEWALK 4-INCH
MATCH EXISTING PAVEMENT SAW CUT REQUIRED
CONCRETE PAVEMENT HES 9-INCH
PAVEMENT JOINT
MATCH EXISTING PAVEMENT SAW CUT REQUIRED
20 LF OF SSPRC CLASS III 12-INCH @ 1%
STRUCTURE 3-2
STA 215+94, 18.75' LT
INLET 2'X2'- B COVER
RIM 708.60 INV 704.20 (SW)
INV 704.10 (NW) INV 704.10 (SE)
12 LF OF SSPRC CLASS III 18-INCH
CONCRETE MEDIAN SLOPED NOSE TYPE I
STRUCTURE 4-1
STA 217+28, 1.25' LT
INLET 2'X2'- B COVER
RIM 708.80 INV 704.68 (SE)
INV 704.78 (NE)
6 LF OF SSPRC CLASS III 12-IN
STRUCTURE 4-2
STA 217+33, 1.25' L
INLET 2'X2'- B COVE
RIM 708.85 INV 70
PB26
24" CONC
18" CONC
PB25
SB23
PB24
CENTURY LINK
XCEL

708.67
708.58
708.50
708.76
708.99

0.32%
0.36%
0.35%
0.50%
0.50%
1.4%
0.6%
1.5%
1.7%
1.7%

2.00'
8.05'
11'
12'
2.50'
6.50'

214+00
215+00
216+00
217+00

STH 16

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	INTERSECTION DETAILS - THEATER RD	SHEET 13	E

FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - 021103_id

PLOT DATE : 7/23/2020 1:43 PM PLOT BY : JEFF BREU PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

LEGEND

SIGNAL CABINET

PULL BOX

MONOTUBE TRAFFIC SIGNAL

TRAFFIC SIGNAL POLE

SAW CUT

N

STH 16

216+94.96, -111.55' LT
EL. 708.80

REMOVE EXISTING CONCRETE SIDEWALK AND REPLACE WITH CONCRETE SIDEWALK 4-INCH

216+93.90, -104.81' LT
EL. 708.90

SB26

217+38.75, -101.20' LT 45' RAD. TO FLAG

STRUCTURE 4-3
STA 217+08.3, 69.42' LT
INLET 2'X3' - H COVER
RIM 708.40 INV 706.25 (SW)

PB30

SC2

PB21

CONCRETE CURB & GUTTER, TYPE 'A', 30-INCH

SB21

PB31

THEATER RD

217+07.60, -68.70' LT
EL. 708.40

14 LF OF SSPRC CLASS III 12-INCH

12" CONC

MATCH EXISTING PAVEMENT SAW CUT REQUIRED

CONCRETE PAVEMENT REPLACEMENT SHES

STA 217+01, 67.47' LT
REMOVE INLET

217+38.69, -56.20' LT
EL. 708.95

WISCONSIN DEPARTMENT OF TRANSPORTATION

PB29

SB25

PB28

SB27

6 LF OF SSPRC CLASS III 18-INCH

216+02.00, -31.90' LT

215+98.00, -20.00' LT
EL. 708.74

CONCRETE MEDIAN SLOPED NOSE TYPE 2

708.76

2.50'

215+98.00, -17.50' LT
EL. 708.70

REMOVE INLET

216+02.00, 0.00'

12 LF OF SSPRC CLASS III 18-INCH

216+00

217+00

218+00

219+00

12'

12'

12'

12'

5 LF OF SSPRC CLASS III 12-INCH

217+18.00, -20.00' LT

REMOVE INLET

MEDIAN CUT REQ'D SEE DETAIL

CONCRETE PAVEMENT HES 9-INCH

PAVEMENT JOINT

CONCRETE SAFETY ISLAND TYP.

6.50'

2.50'

1.3%

1.9%

1.9%

1.9%

1.8%

1.9%

11'

2.50'

2.00'

708.93

0.50%

709.05

709.17

0.50%

7.81'

217+22.00, -2.50' LT
EL. 708.93

708.99

217+18.00, 0.00'

0.83%

MATCH EXISTING PAVEMENT SAW CUT REQUIRED

CONCRETE MEDIAN SLOPED NOSE TYPE I

STRUCTURE 4-1
STA 217+28, 1.25' LT
INLET 2'X2'- B COVER
RIM 708.80 INV 704.68 (SE)
INV 704.78 (NE)

217+44.00, 12.00' RT

CONCRETE PAVEMENT REPLACEMENT SHES

217+18.01, 12.00' RT

6 LF OF SSPRC CLASS III 12-INCH

STRUCTURE 4-2
STA 217+33, 1.25' LT
INLET 2'X2'- B COVER
RIM 708.85 INV 704.83 (SW)

12" CONC

PB22

SB22

91'

218+35.93, -20.00' LT

218+33.00, -4.50' LT
EL. 709.33

218+48.00, -20.00' LT

MATCH EXISTING PAVEMENT SAW CUT REQUIRED

218+48.00, -7.81' LT

CONCRETE SIDEWALK 4-INCH

PB32

218+13.00, -2.50' LT
EL. 709.23

218+13.00, 0.00'

218+48.00, 0.00'

218+33.00, -2.00' LT

35' TRANSITION FROM EXISTING CURB & GUTTER TO FULL CONCRETE SAFETY ISLAND SHALL INCLUDE GUTTERS. THE GUTTERS SHALL BE INCIDENTALS TO THE CONSTRUCTION OF THE CONCRETE SAFETY ISLANDS. **

20'

15'

35' **

18" CONC

PB23

PB24

PB25

SB23

CENTURY LINK

XCEL

XCEL

CITY OF LACROSSE

CITY OF LACROSSE SANITARY SEWER

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	INTERSECTION DETAILS - THEATER RD	SHEET 14	E

FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - 021104_id

PLOT DATE : 7/23/2020 1:43 PM PLOT BY : JEFF BREU PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

LEGEND

SIGNAL CABINET

PULL BOX

MONOTUBE TRAFFIC SIGNAL

TRAFFIC SIGNAL POLE

SAW CUT

CENTURY LINK

CHARTER COMMUNCIATIONS

CITY OF ONALASKA

SC3

PB41

SB43

SB42

PB46

PB48

PB49

PB42

PRALLE CENTER DR

12' 12' 12'

CONCRETE SIDEWALK 4-INCH

WISCONSIN DEPARTMENT OF TRANSPORTATION

40' **

82'

20' 20'

12'

12'

** 40' TRANSITION FROM EXISTING CURB & GUTTER TO FULL CONCRETE SAFETY ISLAND SHALL INCLUDE GUTTERS. THE GUTTERS SHALL BE INCIDENTALS TO THE CONSTRUCTION OF THE CONCRETE SAFETY ISLANDS.

231+55.00, -20.00' LT

231+35.00, -18.02' LT

231+15.00, -20.00' LT

231+15.00, -11.45' LT

8.51

0.30%

MATCH EXISTING PAVEMENT SAW CUT REQUIRED

CONCRETE SAFETY ISLAND TYP.

2.50'

CONCRETE MEDIAN SLOPED NOSE TYPE I

232+37.00, -20.00' LT

232+65.00, -20.00' LT

233+48.00, -20.00' LT

717.90

233+53.00, -2.50' LT
EL. 717.49

MATCH EXISTING PAVEMENT SAW CUT REQUIRED

717.68

717.75

717.83

0.30%

11'

2.3%

2.2%

2.1%

1.5%

1.1%

232+37.00, -17.49' LT
EL. 717.87

231+00

232+00

233+00

6.5'

717.62

231+15.00, 0.00'

2.00'

231+35.00, -15.50' LT
EL. 717.56

231+55.00, -17.50' LT
EL. 717.62

231+33.20, 0.00'

CONCRETE PAVEMENT HES 9-INCH

PAVEMENT JOINT

MATCH EXISTING PAVEMENT SAW CUT REQUIRED

232+65.00, 0.00'

2.50'

233+48.00, 0.00'

233+53.00, 0.00'

CONCRETE MEDIAN SLOPED NOSE TYPE I

STH 16

WISCONSIN DEPARTMENT OF TRANSPORTATION

CITY OF ONALASKA

PB45

GUY

XCEL

PB50

CONCRETE SIDEWALK 4-INCH

WISCONSIN DEPARTMENT OF TRANSPORTATION

S KINNEY COULEE RD

12' 12' 12'

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	INTERSECTION DETAILS - S KINNEY COULEE RD/PRALLE CENTER DR	SHEET 15	E

FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - 021105_id

PLOT DATE : 7/23/2020 1:44 PM PLOT BY : JEFF BREU PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

PRALLE CENTER DR

12' 12' 12'

PB41

PB42

PB43

PB47

CENTURY LINK

CITY OF ONALASKA

CONCRETE SIDEWALK 4-INCH

WISCONSIN DEPARTMENT OF TRANSPORTATION

WISCONSIN DEPARTMENT OF TRANSPORTATION

STH 16

CONCRETE MEDIAN SLOPED NOSE TYPE I

232+37.00, -20.00' LT

232+65.00, -20.00' LT

717.90

717.83

2.50'

1.1%

MATCH EXISTING PAVEMENT SAW CUT REQUIRED

232+37.00, -17.49' LT
EL. 717.87

232+65.00, 0.00'

233+00

233+48.00, -20.00' LT

233+53.00, -2.50' LT
EL. 717.49

MATCH EXISTING PAVEMENT SAW CUT REQUIRED

PAVEMENT JOINT

CONCRETE PAVEMENT HES 9-INCH

12'

12'

12'

6.5'

234+45.00, -2.50' LT
EL. 716.70

234+65.88, -20.00' LT

234+65.00, -4.50' LT
EL. 716.53

234+80.00, -20.00' LT

2.00'

CONCRETE SIDEWALK 4-INCH

1.0%

1.4%

1.8%

1.9%

1.5%

0.87%

0.87%

717.62

717.30

717.08

716.87

11'

234+00

235+00

2.50'

2.50'

12'

12'

234+80.00, 0.00'

234+45.00, 0.00'

35' TRANSITION FROM EXISTING CURB & GUTTER TO FULL CONCRETE SAFETY ISLAND SHALL INCLUDE GUTTERS. THE GUTTERS SHALL BE INCIDENTALS TO THE CONSTRUCTION OF THE CONCRETE SAFETY ISLANDS. **

234+65.00, -2.00' LT

20'

15'

92'

35' **

CONCRETE SAFETY ISLAND TYP.

MATCH EXISTING PAVEMENT SAW CUT REQUIRED

233+48.00, 0.00'

233+53.00, 0.00'

CONCRETE MEDIAN SLOPED NOSE TYPE I

CITY OF ONALASKA

SB41

PB44

WATER MAIN OFFSET REQUIRED SEE DETAIL

XCEL

WISCONSIN DEPARTMENT OF TRANSPORTATION

PB50

CONCRETE SIDEWALK 4-INCH

DAIRYLAND POWER COOPERATIVE

S KINNEY COULEE RD

12' 12' 12'

LEGEND

SIGNAL CABINET

PULL BOX

MONOTUBE TRAFFIC SIGNAL

TRAFFIC SIGNAL POLE

SAW CUT

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	INTERSECTION DETAILS - S KINNEY COULEE RD/PRALLE CENTER DR	SHEET 16	E

2

LEGEND

SIGNAL CABINET

PULL BOX

MONOTUBE TRAFFIC SIGNAL

TRAFFIC SIGNAL POLE

SAW CUT

CENTURY LINK

XCEL

WIN FIBER CABLE

PB63

PB62

SB61

PB75

CTH OS

PB64

CONCRETE SIDEWALK 4-INCH

WISCONSIN DEPARTMENT OF TRANSPORTATION

PB65

CONCRETE SIDEWALK 4-INCH

ADJUSTING MANHOLE COVERS

CONCRETE CURB & GUTTER, TYPE 'A', 30-INCH

CURB RAMP DETECTABLE WARNING FIELD RADIAL NATURAL PATINA

15" CONC

CITY OF ONALASKA

35' **

83'

15'

20'

** 35' TRANSITION FROM EXISTING CURB & GUTTER TO FULL CONCRETE SAFETY ISLAND SHALL INCLUDE GUTTERS. THE GUTTERS SHALL BE INCIDENTALS TO THE CONSTRUCTION OF THE CONCRETE SAFETY ISLANDS.

266+95.00, -20.00' LT

267+10.00, -18.00' LT

267+30.00, -20.00' LT

CONCRETE SAFETY ISLAND TYP.

MATCH EXISTING PAVEMENT SAW CUT REQUIRED

CONCRETE MEDIAN SLOPED NOSE TYPE I

268+13.00, -20.00' LT

268+20.00, -20.00' LT

720.28

CONCRETE SIDEWALK 4-INCH

PB72

8.02'

719.82

719.94

720.07

0.50%

0.68%

2.50'

11'

266+95.00, -11.98' LT

267+30.00, -17.50' LT
EL. 719.72

268+13.00, -17.50' LT
EL. 720.20

MATCH EXISTING PAVEMENT SAW CUT REQUIRED.

2.00'

1.2%

1.1%

1.0%

0.9%

0.7%

6.5'

267+00

268+00

269+00

266+95.00, 0.00'

267+10.00, -15.50' LT
EL. 719.62

268+20.00, 0.00'

267+12.24, 0.06' RT

12'

CONCRETE PAVEMENT HES 9-INCH

PAVEMENT JOINT

MATCH EXISTING PAVEMENT SAW CUT REQUIRED

STH 16

MATCH EXISTING PAVEMENT SAW CUT REQUIRED

ADJUSTING MANHOLE COVERS

269+47.00, -20.00' LT

REMOVE INLET

12 LF OF SSPRC CLASS III 15-INCH

269+53.00, -2.50' LT
EL. 720.92

0.5%

2.50'

720.91

269+47.00, 0.00'

CONCRETE MEDIAN SLOPED NOSE TYPE 2

269+47.00, 12.00' RT

269+53.00, 0.00'

6 LF OF SSPRC CLASS III 15-INCH

CITY OF ONALASKA

PB71

CITY OF ONALASKA

XCEL

WIN FIBER CABLE

WISCONSIN DEPARTMENT OF TRANSPORTATION

CENTURY LINK

PB61

SC4

PB70

CHARTER

12'

8'

CONCRETE SIDEWALK 4-INCH

PB69

PB68

N KINNEY COULEE RD

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	INTERSECTION DETAILS - N KINNEY COULEE RD/CTH OS	SHEET 17	E

FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - 021107_id

PLOT DATE : 7/23/2020 1:45 PM PLOT BY : JEFF BREU PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

CONCRETE SIDEWALK 4-INCH
PB64
PB65
CONCRETE SIDEWALK 4-INCH
CURB RAMP TYPE 3
XCEL
WISCONSIN DEPARTMENT OF TRANSPORTATION
CHARTER
CITY OF ONALASKA
ADJUSTING MANHOLE COVERS
PB66
CONCRETE CURB & GUTTER, TYPE 'A', 30-INCH
CURB RAMP DETECTABLE WARNING FIELD RADIAL NATURAL PATINA
15" CONC
STRUCTURE 5-1
STA 269+56, 1.25' LT
INLET 2'X2'- B COVER
RIM 720.88 INV 716.68 (SE)
INV 717.15 (NE) INV 717.15 (NW)
MATCH EXISTING PAVEMENT SAW CUT REQUIRED
ADJUSTING MANHOLE COVERS
5 LF OF SSPRC CLASS III 12-INCH
STRUCTURE 5-2
STA 269+61, 1.25' LT
INLET 2'X2'- B COVER
FL 720.90 INV 717.20 (SW)
269+47.00, -20.00' LT
REMOVE INLET
12 LF OF SSPRC CLASS III 15-INCH
269+53.00, -2.50' LT
EL. 720.92
MATCH EXISTING PAVEMENT SAW CUT REQUIRED
PAVEMENT JOINT
CONCRETE PAVEMENT HES 9-INCH
270+75.00, -4.50' LT
EL. 721.40
270+80.44, -20.00' LT
270+90.00, -20.00' LT
270+90.00, -7.78' LT
721.51
CONCRETE SIDEWALK 4-INCH
PB73
721.86
270+55.00, -2.50' LT
EL. 721.31
STH 16
269+00
270+00
271+00
721.00
721.10
721.20
0.38%
0.38%
720.91
CONCRETE SAFETY ISLAND TYP.
MATCH EXISTING PAVEMENT SAW CUT REQUIRED
269+47.00, 0.00'
269+71.00, 12.00' RT
270+55.00, 0.00'
270+75.00, -2.00' LT
270+90.00, 0.00'
35' TRANSITION FROM EXISTING CURB & GUTTER ** TO FULL CONCRETE SAFETY ISLAND SHALL INCLUDE GUTTERS. THE GUTTERS SHALL BE INCIDENTALS TO THE CONSTRUCTION OF THE CONCRETE SAFETY ISLANDS.
CONCRETE MEDIAN SLOPED NOSE TYPE 2
269+47.00, 12.00' RT
269+53.00, 0.00'
MEDIAN CUT REQ'D SEE DETAIL
CONCRETE PAVEMENT REPLACEMENT SHES
MATCH EXISTING PAVEMENT SAW CUT REQUIRED
6 LF OF SSPRC CLASS III 15-INCH
102'
20'
15'
35' **
PB67
WISCONSIN DEPARTMENT OF TRANSPORTATION
SB62
PB74
CENTURY LINK
CENTURY LINK
XCEL
PB68
N KINNEY COULEE RD

LEGEND
SIGNAL CABINET
PULL BOX
MONOTUBE TRAFFIC SIGNAL
TRAFFIC SIGNAL POLE
SAW CUT

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	INTERSECTION DETAILS - N KINNEY COULEE RD/CTH OS	SHEET 18	E

FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - 021108_id
PLOT DATE : 7/23/2020 1:45 PM
PLOT BY : JEFF BREU
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

LEGEND

EROSION MAT URBAN CLASS I TYPE A

INLET PROTECTION TYPES B OR C

SILT FENCE

BRAUND ST

11+00

STH 16

198+00

199+00

200+00

201+00

202+00

203+00

204+00

205+00

STH 16

THEATER RD

11+00

STH 16

213+00

214+00

215+00

216+00

217+00

218+00

219+00

220+00

STH 16

2

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	EROSION CONTROL	SHEET 19	E

FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 022001_ec

PLOT DATE : 7/23/2020 1:46 PM PLOT BY : JEFF BREU PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

EROSION MAT URBAN CLASS I TYPE A

INLET PROTECTION TYPES B OR C

SILT FENCE

PRALLE CENTER DR

STH 16

231+00 232+00 233+00 234+00 235+00 236+00 237+00 238+00

S. KINNEY COULEE RD

EB IH 90 OFF RAMP

241+00 242+00 243+00 244+00 245+00 246+00 247+00 248+00

STH 16

EB IH 90 ON RAMP

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	EROSION CONTROL	SHEET 20	E

2

2

LEGEND

EROSION MAT URBAN CLASS I TYPE A

INLET PROTECTION TYPES B OR C

SILT FENCE

WB IH 90 ON RAMP

STH 16

259+00 260+00 261+00 262+00 263+00 264+00 265+00 266+00

WB IH 90 ON RAMP

WB IH 90 OFF RAMP

E MAIN ST

STH 16

265+00 266+00 267+00 268+00 269+00 270+00 271+00 272+00

N KINNEY COULEE RD

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	EROSION CONTROL	SHEET 21	E

FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 022003_ec

PLOT DATE : 7/23/2020 1:47 PM PLOT BY : JEFF BREU PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

DAIRYLAND POWER COOPERATIVE

STH 16

N

234+00

WISCONSIN DEPARTMENT OF TRANSPORATION

NEW MONOTUBE SIGNAL & BASE

STA 233+56.0, 36' RT
12" 45° FITTING

STA 234+01.0, 36.0' RT
12" 45° FITTING

CITY OF ONALASKA

EXISTING 12" W/M

6" D.I. WATER MAIN

STA 233+98.0, 45.2' RT
6" VALVE

STA 233+68.5, 48.5' RT
12" 45° FITTING

PROPOSED 12" D.I. WATER MAIN

STA 234+02.0, 49.0' RT
HYDRANT

STA 233+94.7, 42.2' RT
12" 6" TEE

STA 233+88.5, 48.5' RT
12" 45° FITTING

XCEL

S KINNEY COULEE RD

COORDINATE HOLING OF EXISTING POWER POLE FOR WATER MAIN RELOCATION.

DAIRYLAND POWER COOPERATIVE

STH 16

N

238+00

CITY OF ONALASKA

9'

5'

12'

EXISTING 12" W/M

STA 237+70.6, 36.2' RT
12" 45° FITTING

STA 238+25.3, 34.6' RT
12" 45° FITTING

XCEL

XCEL

STA 237+88.4, 52.8' RT
12" 45° FITTING

STA 238+08.5, 52.1' RT
12" 45° FITTING

PROPOSED 12" D.I. WATER MAIN

STA. 238+00 CANTILEVERED
SIGN BRIDGE S-32-45

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	CONSTRUCTION DETAIL - WATER MAIN RELOCATION DETAIL	SHEET 22	E

FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\023001_UP.DWG
LAYOUT NAME - 023001_up
PLOT DATE : 7/23/2020 1:48 PM
PLOT BY : JEFF BREU
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

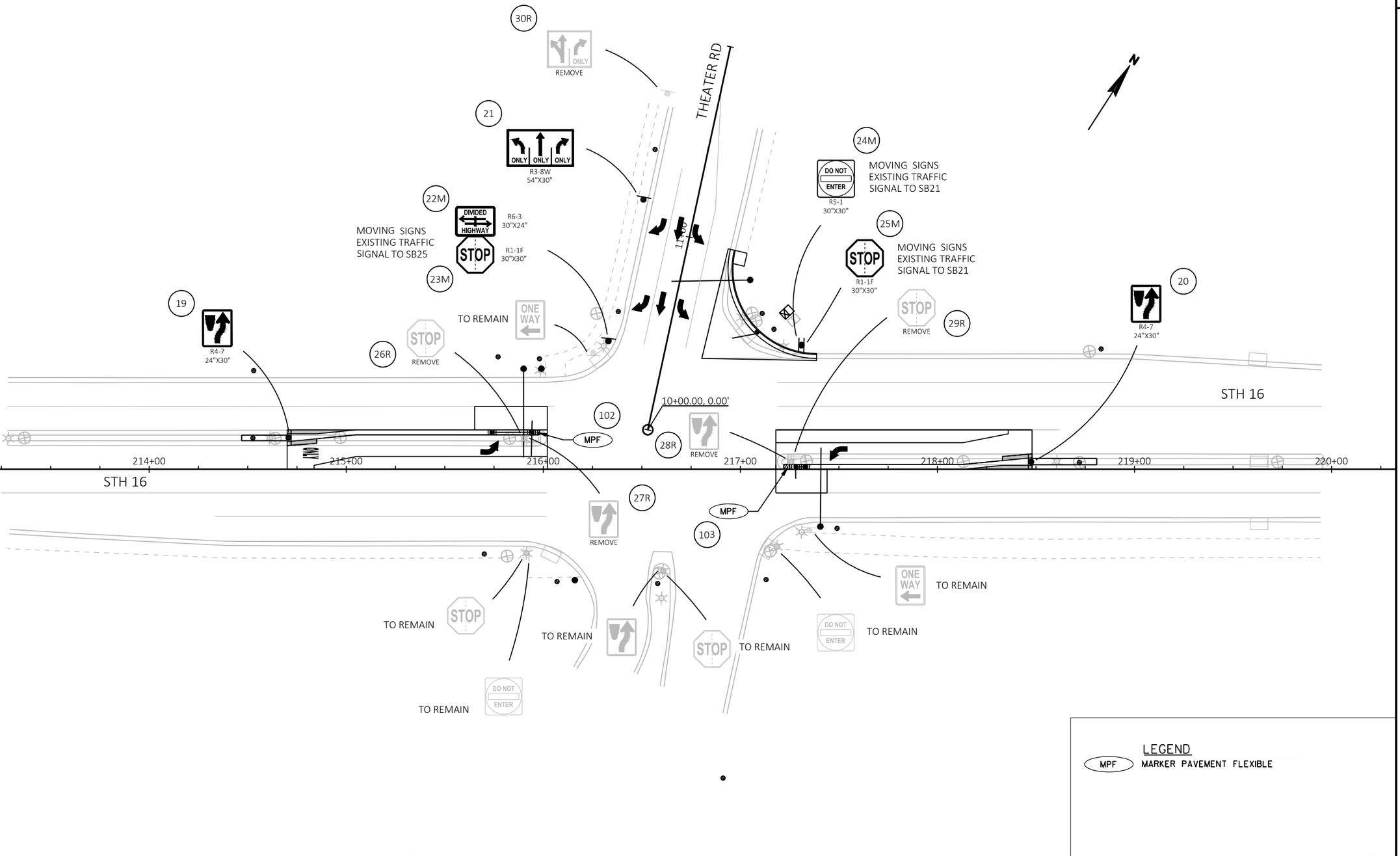
4
REMOVE
R3-8W
54"X30"
REMOVE EXISTING SIGN AND SUPPORT, REPLACE NEW SIGN
3
REMOVE
R3-8W
54"X30"
18R
REMOVE EXISTING SIGN AND SUPPORT, REPLACE NEW SIGN
REMOVE
17R
12+00
BRAUND ST
5M
MOVING SIGNS EXISTING TRAFFIC SIGNAL TO SB1
R6-3
30"X24"
R1-1F
30"X30"
16R
REMOVE
6M
8M
MOVING SIGNS EXISTING TRAFFIC SIGNAL TO SB3
R5-1
30"X30"
MOVING SIGNS EXISTING TRAFFIC SIGNAL TO SB1
R5-1
30"X30"
7M
TO REMAIN
9M
R1-1F
30"X30"
MOVING SIGNS EXISTING TRAFFIC SIGNAL TO SB3
1
12R
REMOVE
R4-7
24"X30"
TO REMAIN
MPF
100
ONE WAY
TO REMAIN
10+00.00, 0.00'
MPF
101
199+00
200+00
201+00
202+00
203+00
204+00
205+00
206+
STH 16
STH 16
13R
14R
REMOVE
REMOVE
10M
MOVING SIGNS EXISTING TRAFFIC SIGNAL TO SB6
R1-1F
30"X30"
11M
MOVING SIGNS EXISTING TRAFFIC SIGNAL TO SB6
R5-1
30"X30"
TO REMAIN
TO REMAIN
15R
REMOVE
ONE WAY
TO REMAIN
DO NOT ENTER
TO REMAIN
DIVIDED HIGHWAY
TO REMAIN
2
R4-7
24"X30"

LEGEND
MPF MARKER PAVEMENT FLEXIBLE

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	PERMANENT SIGNING	SHEET 23	E

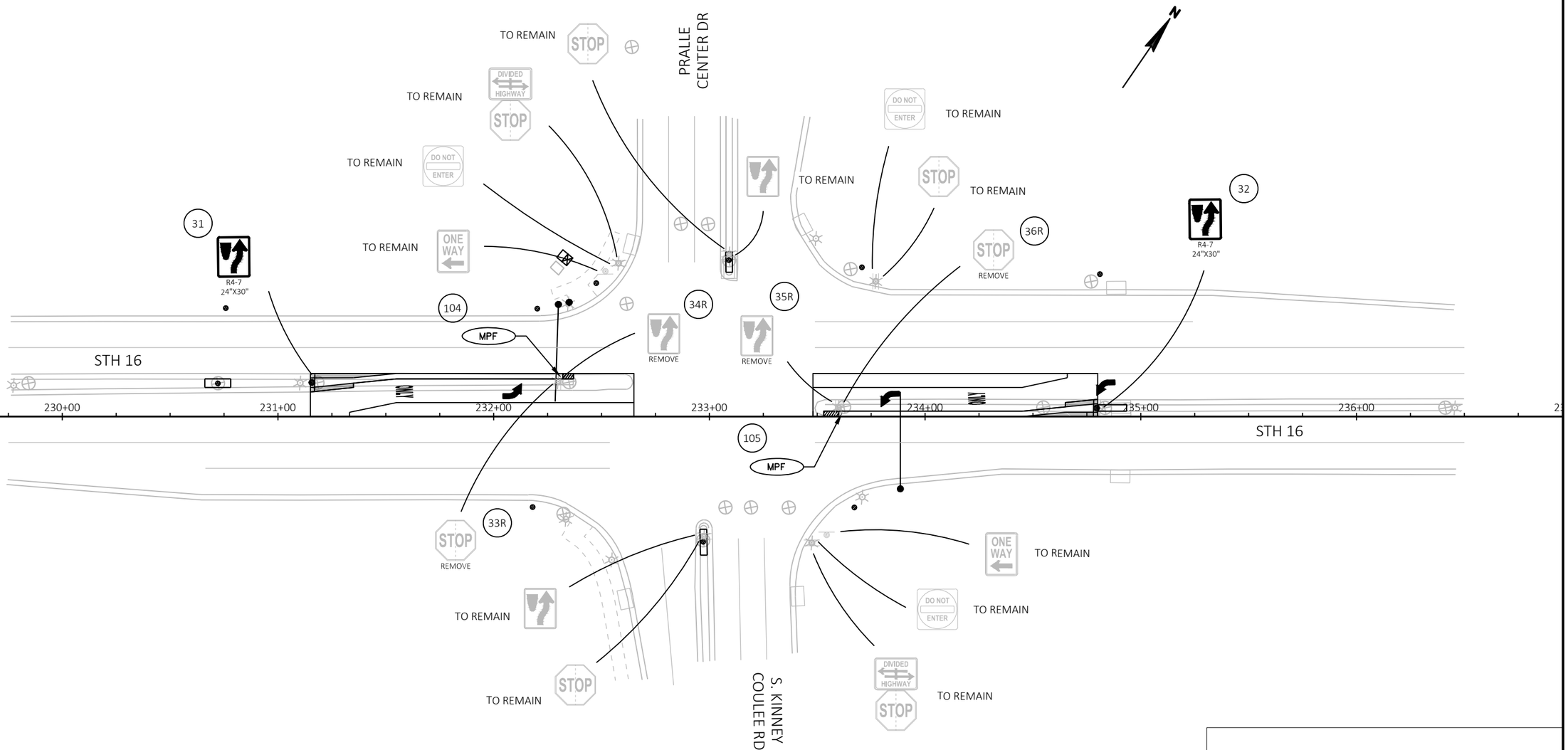
FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023201_ps
PLOT DATE : 7/29/2020 2:17 PM PLOT BY : JEFF BREU PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



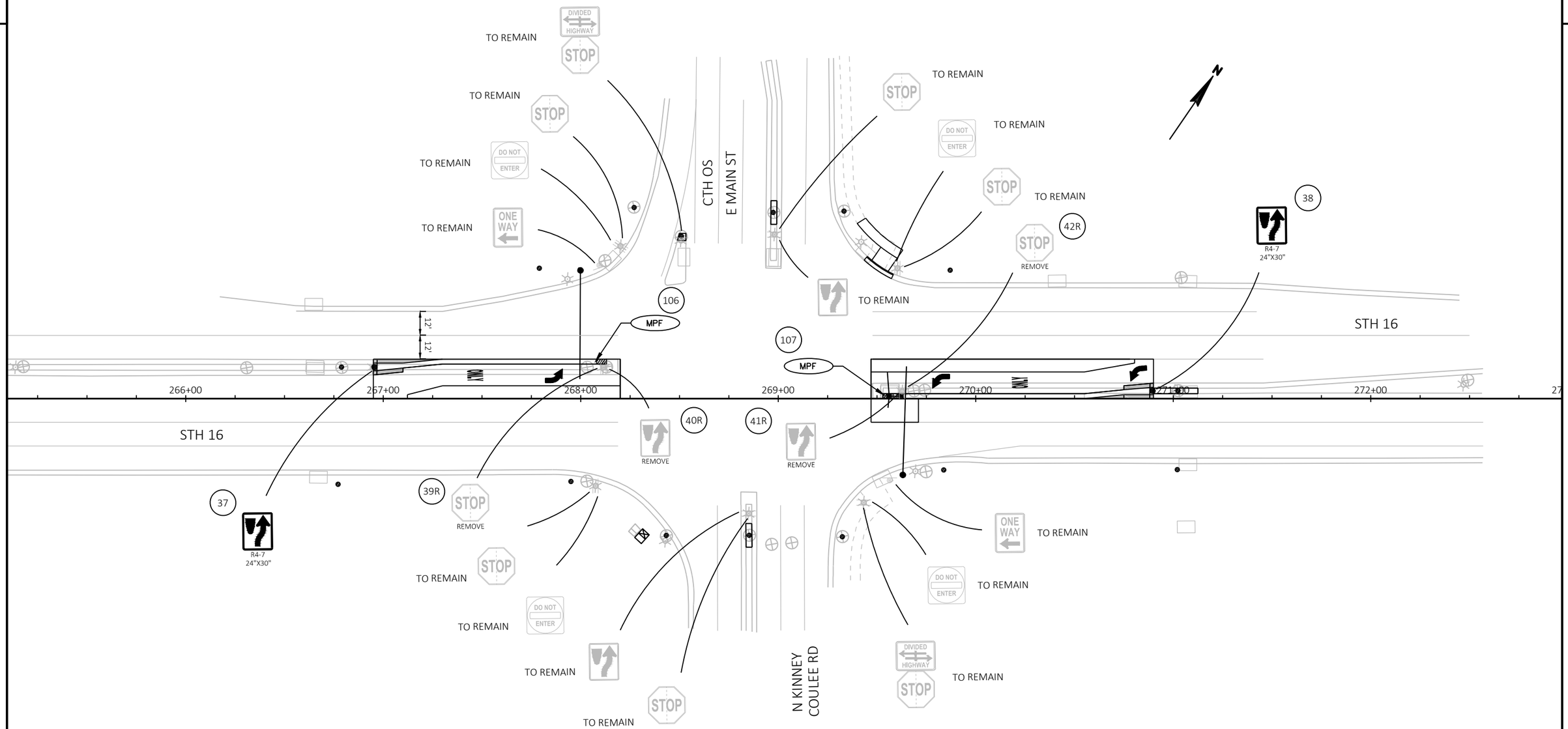
PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	PERMANENT SIGNING	SHEET 24	E

2



PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	PERMANENT SIGNING	SHEET 25	E

2



LEGEND

MPF — MARKER PAVEMENT FLEXIBLE

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	PERMANENT SIGNING	SHEET 26	E

FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023204_ps
PLOT DATE : 7/23/2020 1:50 PM
PLOT BY : JEFF BREU
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

IH 90 EB
OFF-RAMP

STH 16

244+00 245+00 246+00 247+00

50M

R3-18
30"X30"

MOVING SIGNS
EXISTING TRAFFIC
SIGNAL TO SB401

STOP
R1-1F
30"X30"

51M

IH 90 EB
ON-RAMP

IH 90 WB ON-RAMP

261+00 262+00 263+00 264+00

STH 16

52M

DIVIDED HIGHWAY
R6-3A
30"X24"

MOVING SIGNS
EXISTING TRAFFIC
SIGNAL TO SB411

STOP
R1-1F
30"X30"

53M

TO REMAIN

IH 90 WB
OFF-RAMP

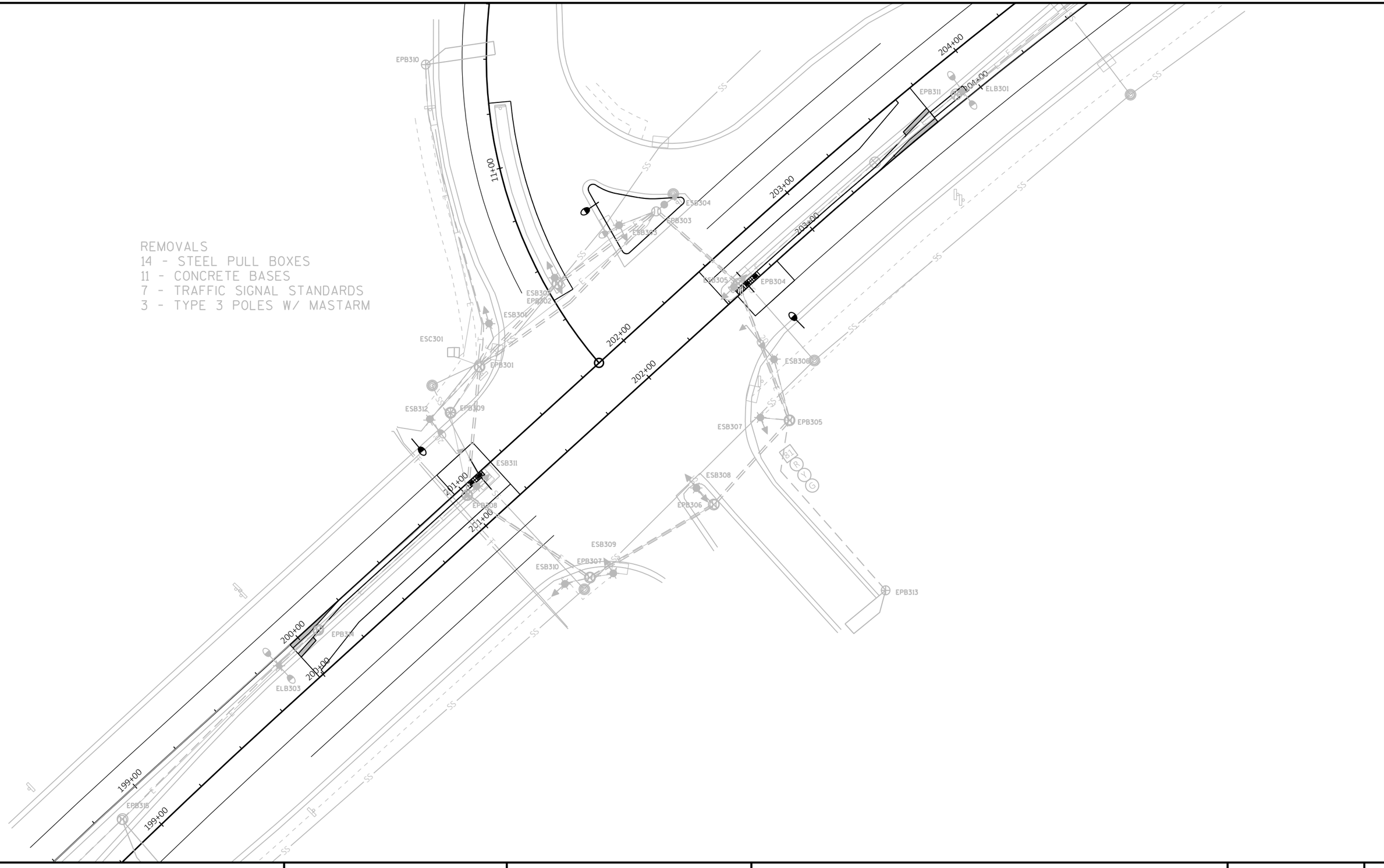
2

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	PERMANENT SIGNING	SHEET 27	E

2

2

REMOVALS
14 - STEEL PULL BOXES
11 - CONCRETE BASES
7 - TRAFFIC SIGNAL STANDARDS
3 - TYPE 3 POLES W/ MASTARM



PROJECT NO: 7575-00-71	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC SIGNAL REMOVAL PLAN - STH 16 & BRAUND ST	SHEET 28	E

FILE NAME : C:\USERS\DOTC5W\DESKTOP\7575-00-01\7575-00-01_SIGNALDESIGN.DWG
LAYOUT NAME - 024001-sr
PLOT DATE : 7/14/2020 7:01 PM
PLOT BY : WEBB, COLLIN J
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

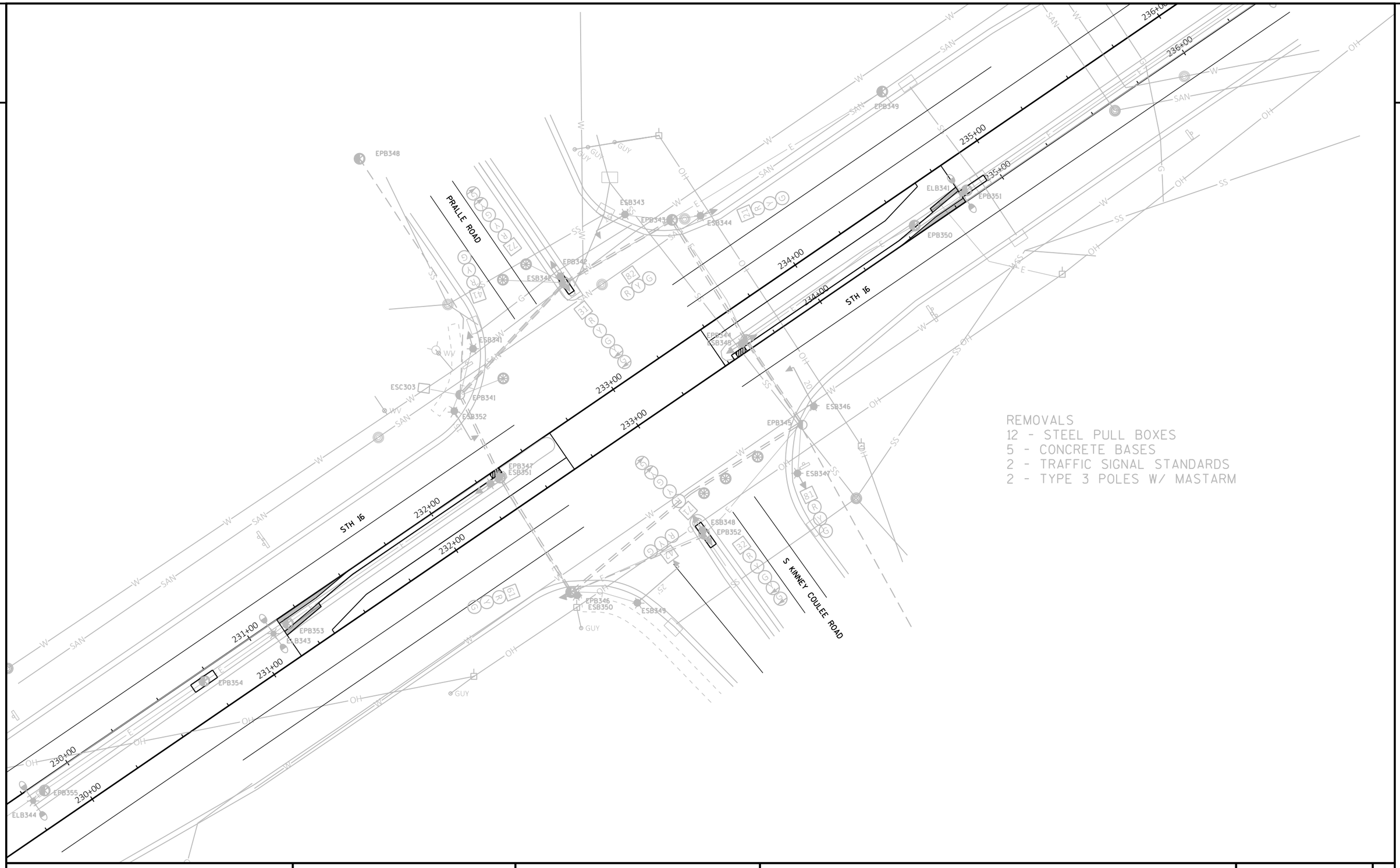
2

REMOVALS
14 - STEEL PULL BOXES
9 - CONCRETE BASES
5 - TRAFFIC SIGNAL STANDARDS
2 - TYPE 3 POLES W/ MASTARM
1 - TYPE 4 POLES

EP: 11+98.73
THEATER ROAD
11+00
BP: 10+00.00
116+00
214+00
215+00
216+00
217+00
218+00
219+00
220+00
STH 16
EPB336
EPB328
EPB331
EPB330
ELB321
EPB329
ESB32
EPB32
ESC302
ESB321
ESB331
ESB322
EPB322
ESB330
EPB327
ESB329
EPB326
ESB323
EPB323
ESB324
ESB325
EPB324
ESB327
ESB326
EPB325
EPB333
EPB334
ELB322
EPB332
WV

PROJECT NO: 7575-00-71	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC SIGNAL REMOVAL PLAN - STH 16 & THEATER RD	SHEET 29	E

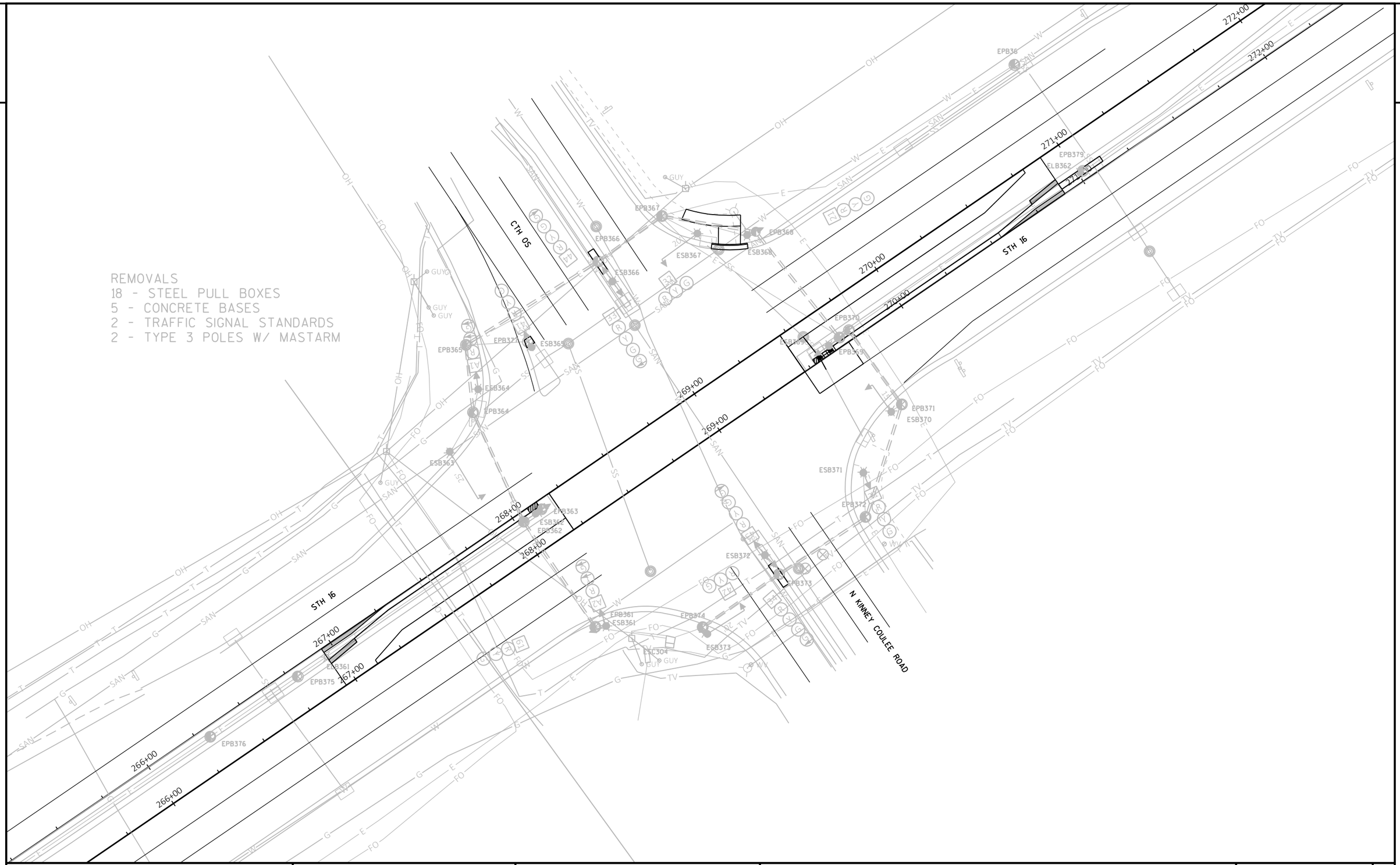
2



REMOVALS
12 - STEEL PULL BOXES
5 - CONCRETE BASES
2 - TRAFFIC SIGNAL STANDARDS
2 - TYPE 3 POLES W/ MASTARM

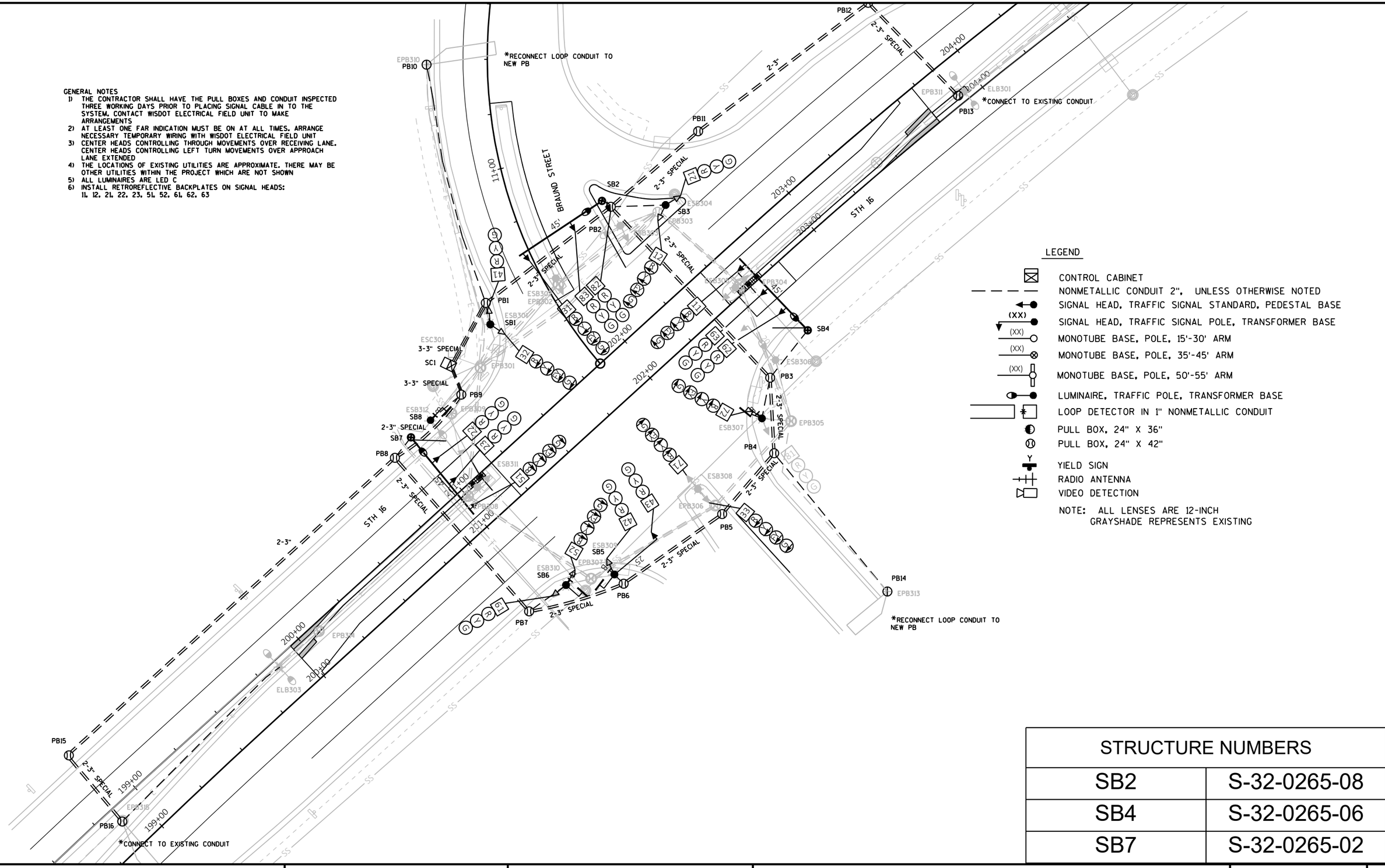
PROJECT NO: 7575-00-71	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC SIGNAL REMOVAL PLAN - STH 16 & PRALLE RD	SHEET 30	E

REMOVALS
18 - STEEL PULL BOXES
5 - CONCRETE BASES
2 - TRAFFIC SIGNAL STANDARDS
2 - TYPE 3 POLES W/ MASTARM



GENERAL NOTES

1) THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT INSPECTED THREE WORKING DAYS PRIOR TO PLACING SIGNAL CABLE IN TO THE SYSTEM. CONTACT WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS
2) AT LEAST ONE FAR INDICATION MUST BE ON AT ALL TIMES. ARRANGE NECESSARY TEMPORARY WIRING WITH WISDOT ELECTRICAL FIELD UNIT
3) CENTER HEADS CONTROLLING THROUGH MOVEMENTS OVER RECEIVING LANE. CENTER HEADS CONTROLLING LEFT TURN MOVEMENTS OVER APPROACH LANE EXTENDED
4) THE LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE. THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT WHICH ARE NOT SHOWN
5) ALL LUMINAIRES ARE LED C
6) INSTALL RETROREFLECTIVE BACKPLATES ON SIGNAL HEADS: 11, 12, 21, 22, 23, 51, 52, 61, 62, 63



LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-45' ARM
- (XX) MONOTUBE BASE, POLE, 50'-55' ARM
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- Y YIELD SIGN
- RADIO ANTENNA
- VIDEO DETECTION

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

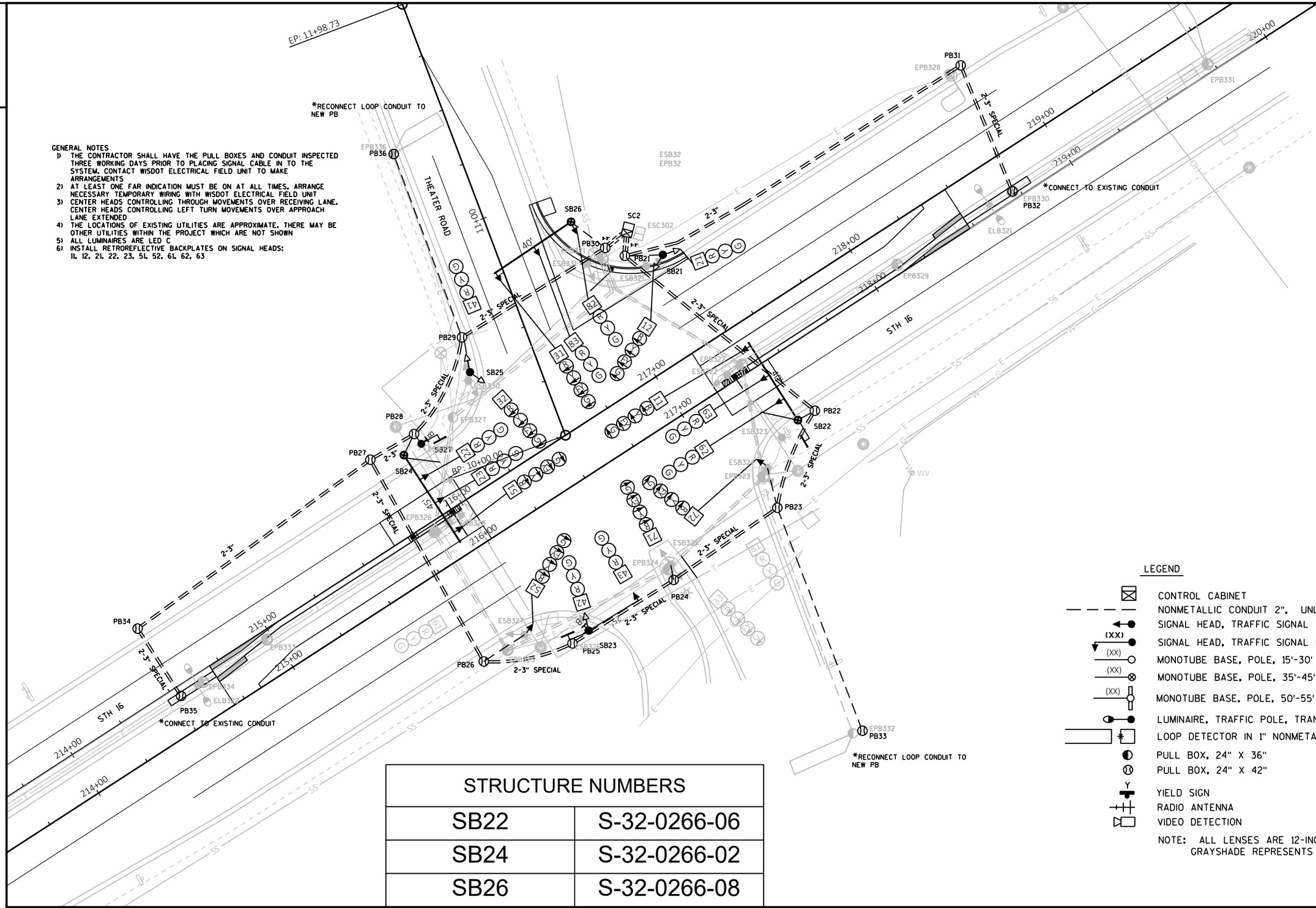
STRUCTURE NUMBERS	
SB2	S-32-0265-08
SB4	S-32-0265-06
SB7	S-32-0265-02

PROJECT NO: 7575-00-71	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC SIGNAL PLAN - STH 16 & BRAUND ST	SHEET 32	E

FILE NAME : C:\USERS\DOTC5W\DESKTOP\7575-00-01\7575-00-01_SIGNALDESIGN.DWG
LAYOUT NAME - 024201-sp
PLOT DATE : 7/14/2020 7:12 PM
PLOT BY : WEBB, COLLIN J
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

GENERAL NOTES
1) THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT INSPECTED THREE WORKING DAYS PRIOR TO PLACING SIGNAL CABLE IN TO THE SYSTEM. CONTACT WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS
2) AT LEAST ONE FAR INDICATION MUST BE ON AT ALL TIMES. ARRANGE NECESSARY TEMPORARY WIRING WITH WISDOT ELECTRICAL FIELD UNIT
3) CENTER HEADS CONTROLLING THROUGH MOVEMENTS OVER RECEIVING LANE. CENTER HEADS CONTROLLING LEFT TURN MOVEMENTS OVER APPROACH LANE EXTENDED
4) THE LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE. THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT WHICH ARE NOT SHOWN
5) ALL LUMINAIRES ARE LED C
6) INSTALL RETROREFLECTIVE BACKPLATES ON SIGNAL HEADS: 11, 12, 21, 22, 23, 51, 52, 61, 62, 63



STRUCTURE NUMBERS	
SB22	S-32-0266-06
SB24	S-32-0266-02
SB26	S-32-0266-08

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-45' ARM
- (XX) MONOTUBE BASE, POLE, 50'-55' ARM
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- Y YIELD SIGN
- RADIO ANTENNA
- VIDEO DETECTION

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

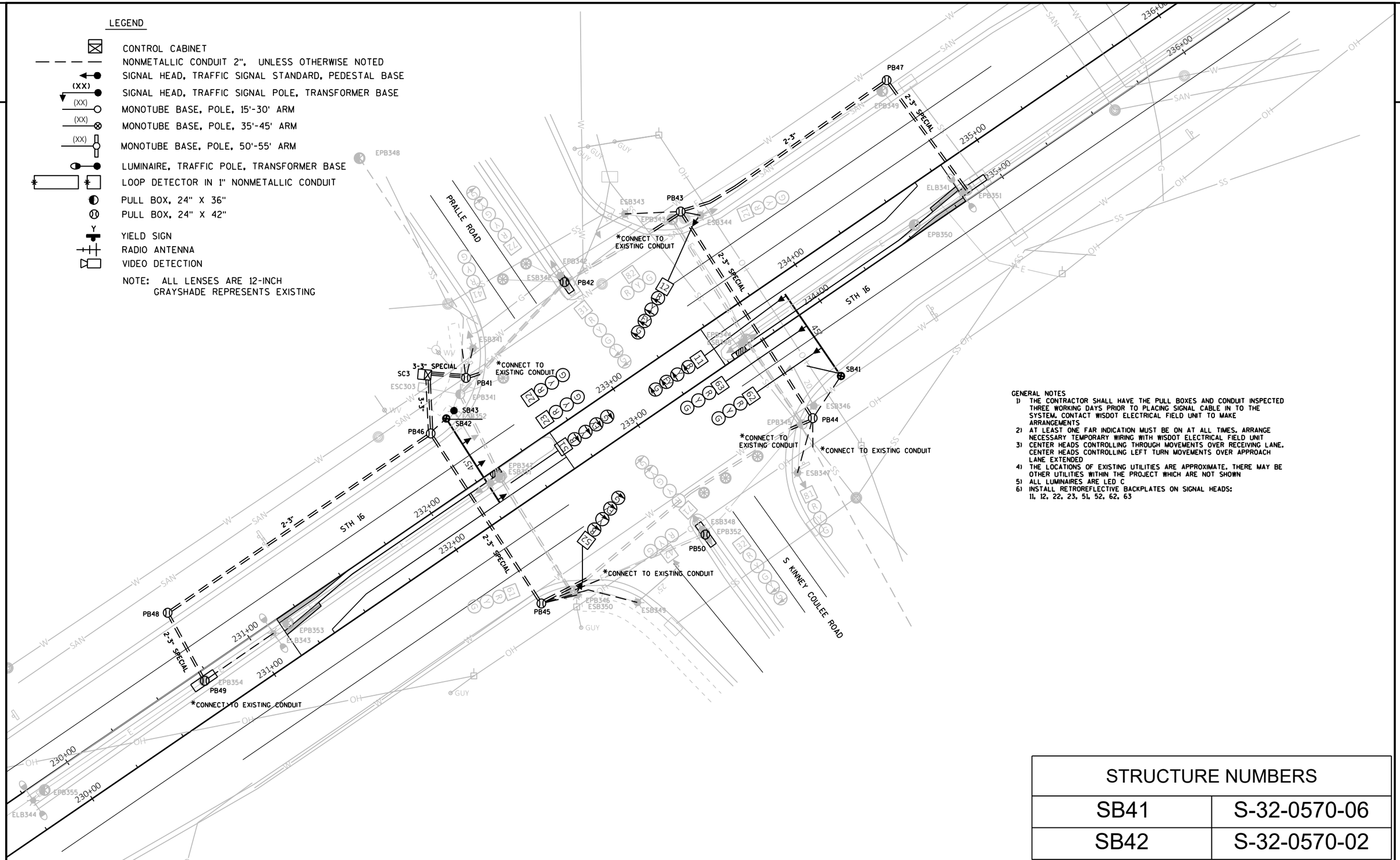
PROJECT NO: 7575-00-71	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC SIGNAL PLAN - STH 16 & THEATER RD	SHEET 33	E

FILE NAME : C:\USERS\DOTC5W\DESKTOP\7575-00-01\7575-00-01_SIGNALDESIGN.DWG
LAYOUT NAME - 024202-sp
PLOT DATE : 7/14/2020 7:12 PM
PLOT BY : WEBB, COLLIN J
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-45' ARM
- (XX) MONOTUBE BASE, POLE, 50'-55' ARM
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- Y YIELD SIGN
- RADIO ANTENNA
- VIDEO DETECTION

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



GENERAL NOTES

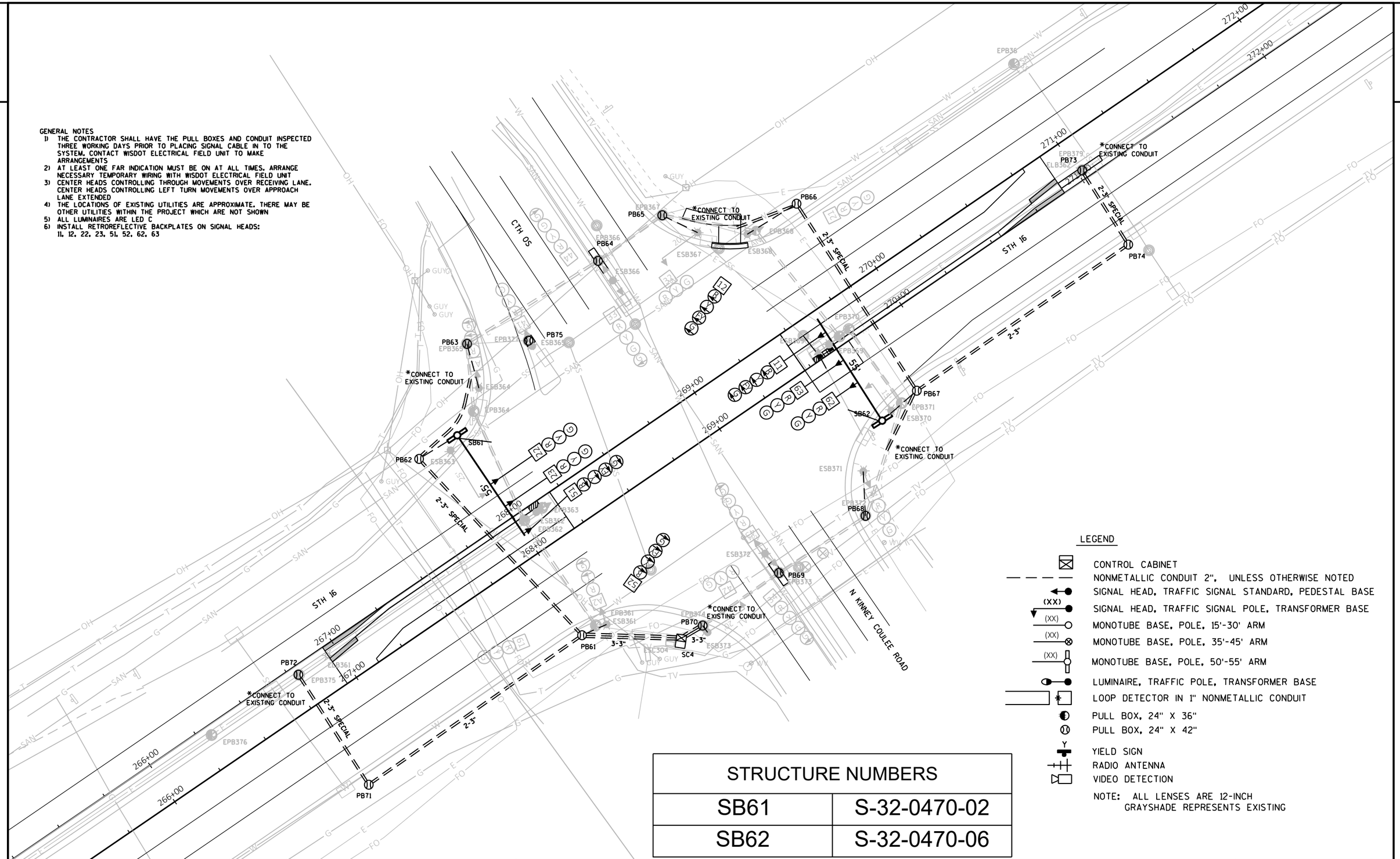
1) THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT INSPECTED THREE WORKING DAYS PRIOR TO PLACING SIGNAL CABLE IN TO THE SYSTEM. CONTACT WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS
2) AT LEAST ONE FAR INDICATION MUST BE ON AT ALL TIMES. ARRANGE NECESSARY TEMPORARY WIRING WITH WISDOT ELECTRICAL FIELD UNIT
3) CENTER HEADS CONTROLLING THROUGH MOVEMENTS OVER RECEIVING LANE. CENTER HEADS CONTROLLING LEFT TURN MOVEMENTS OVER APPROACH LANE EXTENDED
4) THE LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE. THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT WHICH ARE NOT SHOWN
5) ALL LUMINAIRES ARE LED C
6) INSTALL RETROREFLECTIVE BACKPLATES ON SIGNAL HEADS: 11, 12, 22, 23, 51, 52, 62, 63

STRUCTURE NUMBERS	
SB41	S-32-0570-06
SB42	S-32-0570-02

PROJECT NO: 7575-00-71	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC SIGNAL PLAN - STH 16 & PRALLE RD	SHEET 34	E

FILE NAME : C:\USERS\DOTC5W\DESKTOP\7575-00-01\7575-00-01_SIGNALDESIGN.DWG
LAYOUT NAME - 024203-sp
PLOT DATE : 7/14/2020 7:12 PM PLOT BY : WEBB, COLLIN J PLOT NAME : PLOT SCALE : 1 IN:40 FT

GENERAL NOTES
1) THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT INSPECTED THREE WORKING DAYS PRIOR TO PLACING SIGNAL CABLE IN TO THE SYSTEM. CONTACT WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS
2) AT LEAST ONE FAR INDICATION MUST BE ON AT ALL TIMES. ARRANGE NECESSARY TEMPORARY WIRING WITH WISDOT ELECTRICAL FIELD UNIT
3) CENTER HEADS CONTROLLING THROUGH MOVEMENTS OVER RECEIVING LANE. CENTER HEADS CONTROLLING LEFT TURN MOVEMENTS OVER APPROACH LANE EXTENDED
4) THE LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE. THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT WHICH ARE NOT SHOWN
5) ALL LUMINAIRES ARE LED C
6) INSTALL RETROREFLECTIVE BACKPLATES ON SIGNAL HEADS: 11, 12, 22, 23, 51, 52, 62, 63



STRUCTURE NUMBERS	
SB61	S-32-0470-02
SB62	S-32-0470-06

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-45' ARM
- (XX) MONOTUBE BASE, POLE, 50'-55' ARM
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- Y YIELD SIGN
- RADIO ANTENNA
- VIDEO DETECTION

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

PROJECT NO: 7575-00-71	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC SIGNAL PLAN - STH 16 & CTH OS	SHEET 35 E

FILE NAME : C:\USERS\DOTC5W\DESKTOP\7575-00-01\7575-00-01_SIGNALDESIGN.DWG
LAYOUT NAME - 024204-sp
PLOT DATE : 7/14/2020 7:12 PM
PLOT BY : WEBB, COLLIN J
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

STRUCTURE NUMBERS	
SB401	S-32-0619-02
SB402	S-32-0619-06
SB403	S-32-0619-04

GENERAL NOTES
1) THE CONTRACTOR SHALL HAVE CONDUIT INSPECTED THREE WORKING DAYS PRIOR TO PLACING SIGNAL CABLE IN TO THE SYSTEM. CONTACT WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS
2) AT LEAST ONE FAR INDICATION MUST BE ON AT ALL TIMES. ARRANGE NECESSARY TEMPORARY WIRING WITH WISDOT ELECTRICAL FIELD UNIT
3) CENTER HEADS CONTROLLING THROUGH MOVEMENTS OVER RECEIVING LANE. CENTER HEADS CONTROLLING LEFT TURN MOVEMENTS OVER APPROACH LANE EXTENDED
4) THE LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE. THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT WHICH ARE NOT SHOWN
5) INSTALL RETROREFLECTIVE BACKPLATES ON SIGNAL HEADS: 22, 23, 51, 62, 63

IH 90 EB OFF-RAMP

STH 16 EB

SB401 EPB401 ESB401

SB402 EPB402 ESB402

SB403 EPB403 ESB403

PB4 SB4 EPB34 ESB34

2-3" SPECIAL

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-45' ARM
- (XX) MONOTUBE BASE, POLE, 50'-55' ARM
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- Y YIELD SIGN
- RADIO ANTENNA
- VIDEO DETECTION

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

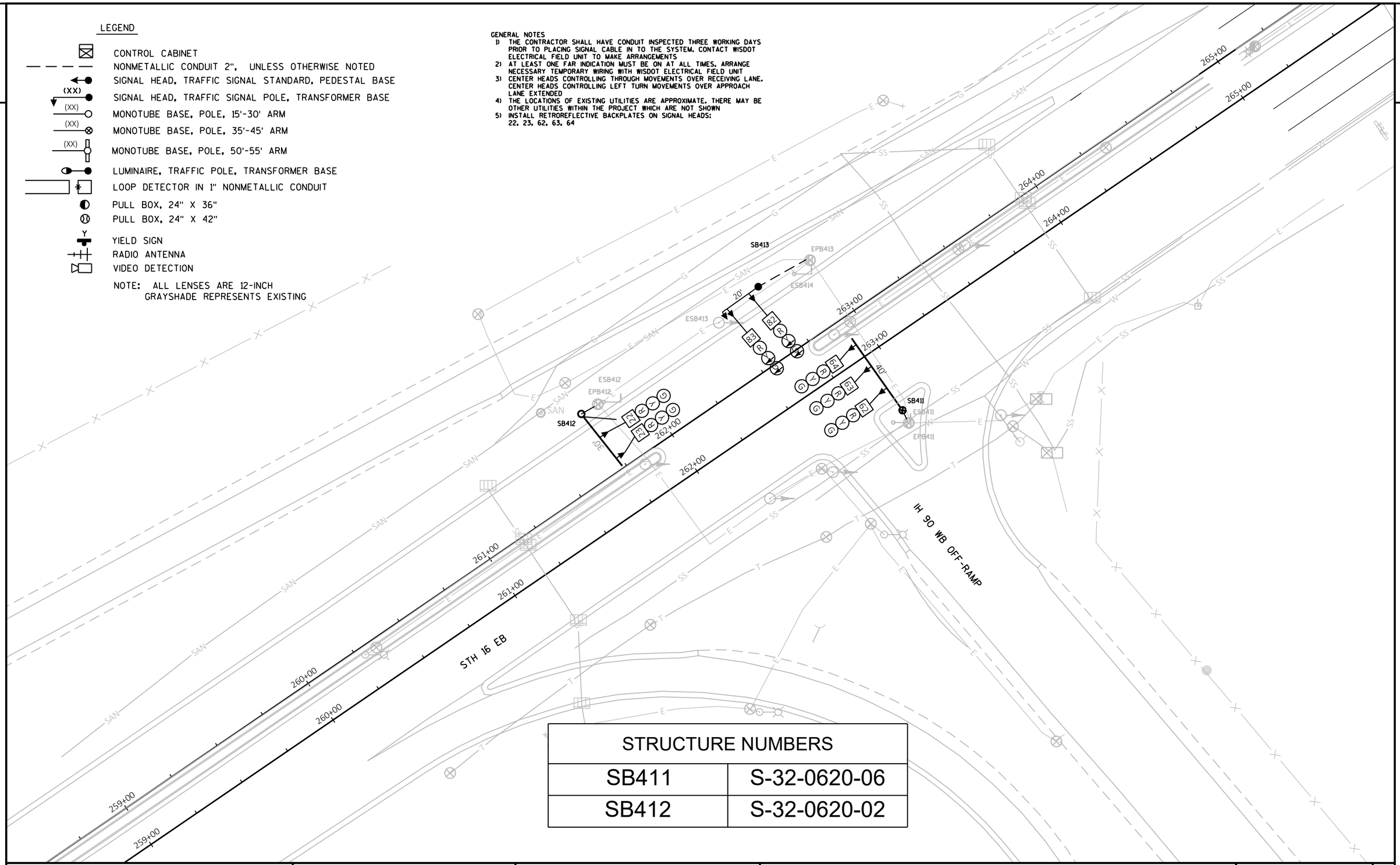
PROJECT NO: 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC SIGNAL PLAN - STH 16 & IH 90 EB RAMPS	SHEET 36	E

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-45' ARM
- (XX) MONOTUBE BASE, POLE, 50'-55' ARM
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- Y YIELD SIGN
- RADIO ANTENNA
- VIDEO DETECTION

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

GENERAL NOTES
1) THE CONTRACTOR SHALL HAVE CONDUIT INSPECTED THREE WORKING DAYS PRIOR TO PLACING SIGNAL CABLE IN TO THE SYSTEM. CONTACT WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS
2) AT LEAST ONE FAR INDICATION MUST BE ON AT ALL TIMES. ARRANGE NECESSARY TEMPORARY WIRING WITH WISDOT ELECTRICAL FIELD UNIT
3) CENTER HEADS CONTROLLING THROUGH MOVEMENTS OVER RECEIVING LANE. CENTER HEADS CONTROLLING LEFT TURN MOVEMENTS OVER APPROACH LANE EXTENDED
4) THE LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE. THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT WHICH ARE NOT SHOWN
5) INSTALL RETROREFLECTIVE BACKPLATES ON SIGNAL HEADS: 22, 23, 62, 63, 64



STRUCTURE NUMBERS	
SB411	S-32-0620-06
SB412	S-32-0620-02

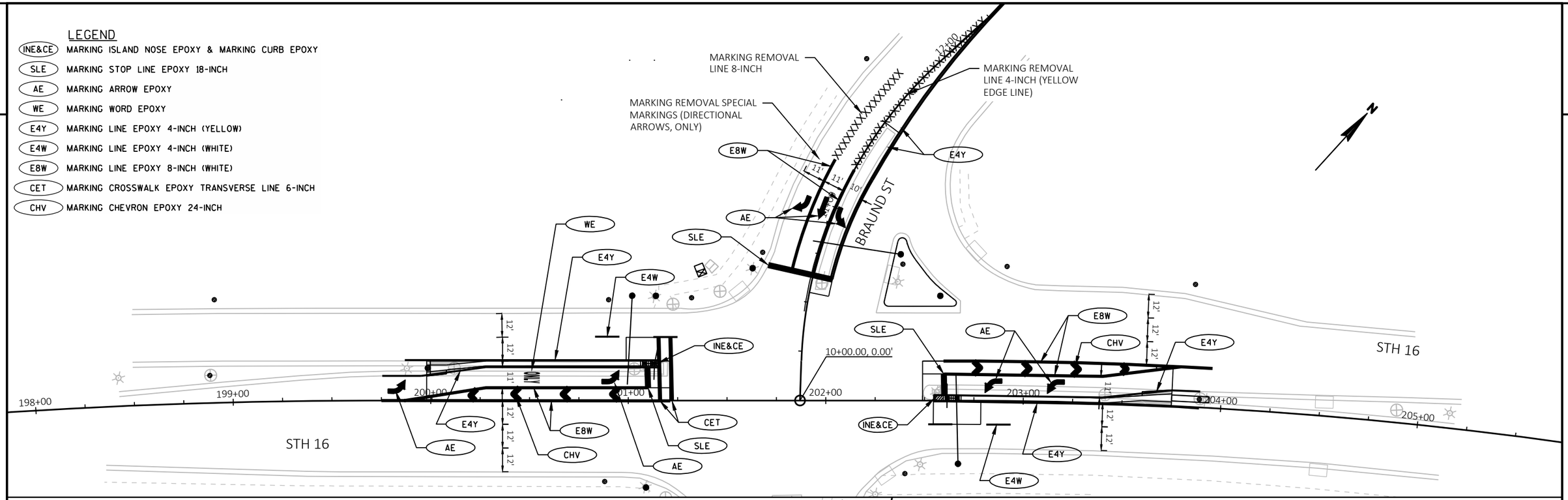
PROJECT NO: 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC SIGNAL PLAN - STH 16 & IH 90 WB RAMP	SHEET 37	E

FILE NAME : C:\USERS\DOTC5W\DESKTOP\7575-00-01\7575-00-01_SIGNALDESIGN.DWG
LAYOUT NAME - 024206-sp
PLOT DATE : 7/14/2020 7:13 PM PLOT BY : WEBB, COLLIN J PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

INE&CE	MARKING ISLAND NOSE EPOXY & MARKING CURB EPOXY
SLE	MARKING STOP LINE EPOXY 18-INCH
AE	MARKING ARROW EPOXY
WE	MARKING WORD EPOXY
E4Y	MARKING LINE EPOXY 4-INCH (YELLOW)
E4W	MARKING LINE EPOXY 4-INCH (WHITE)
E8W	MARKING LINE EPOXY 8-INCH (WHITE)
CET	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
CHV	MARKING CHEVRON EPOXY 24-INCH



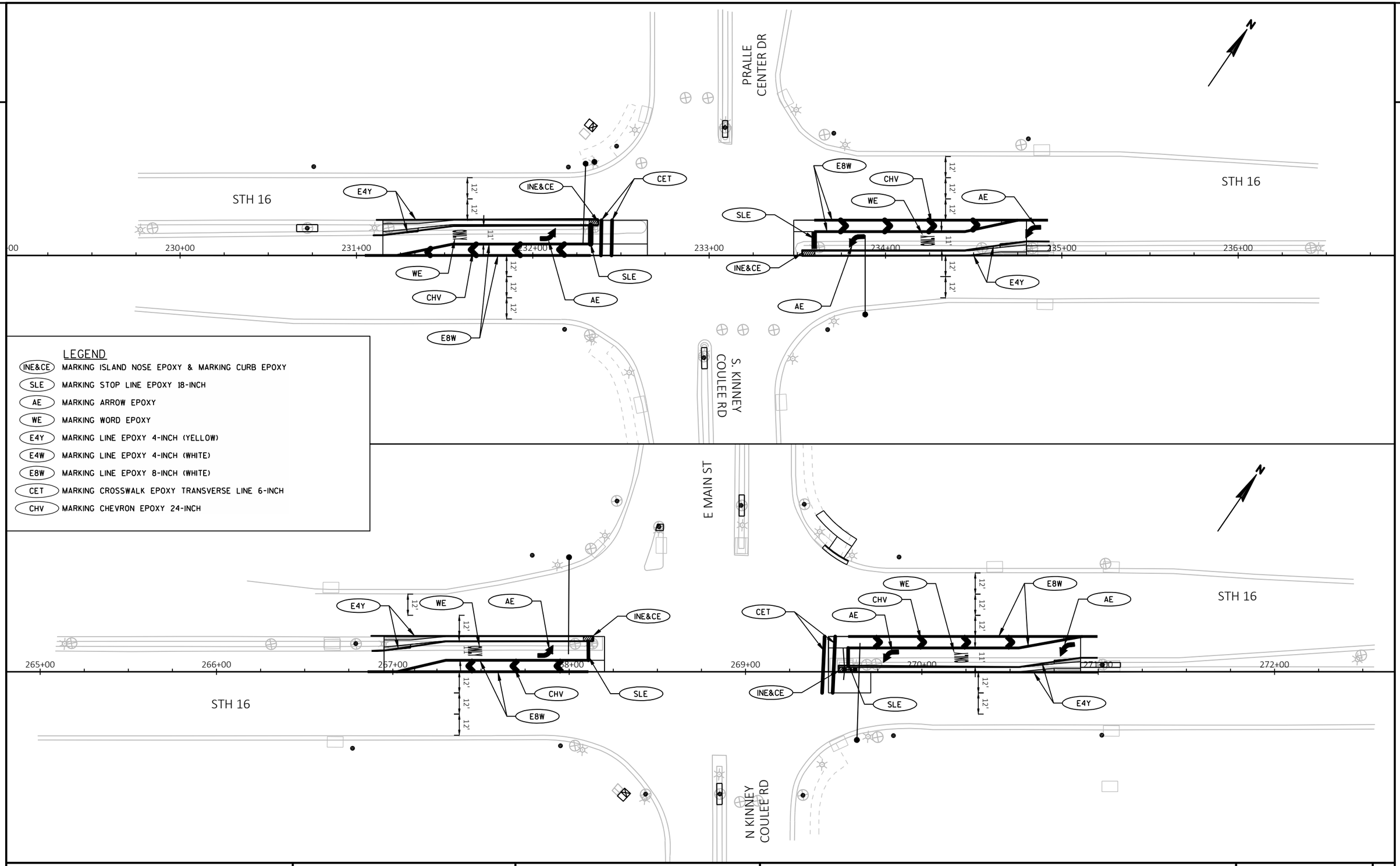
PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	PAVEMENT MARKING	SHEET 38 E

FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024501_pm

PLOT DATE : 7/23/2020 1:51 PM PLOT BY : JEFF BREU PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

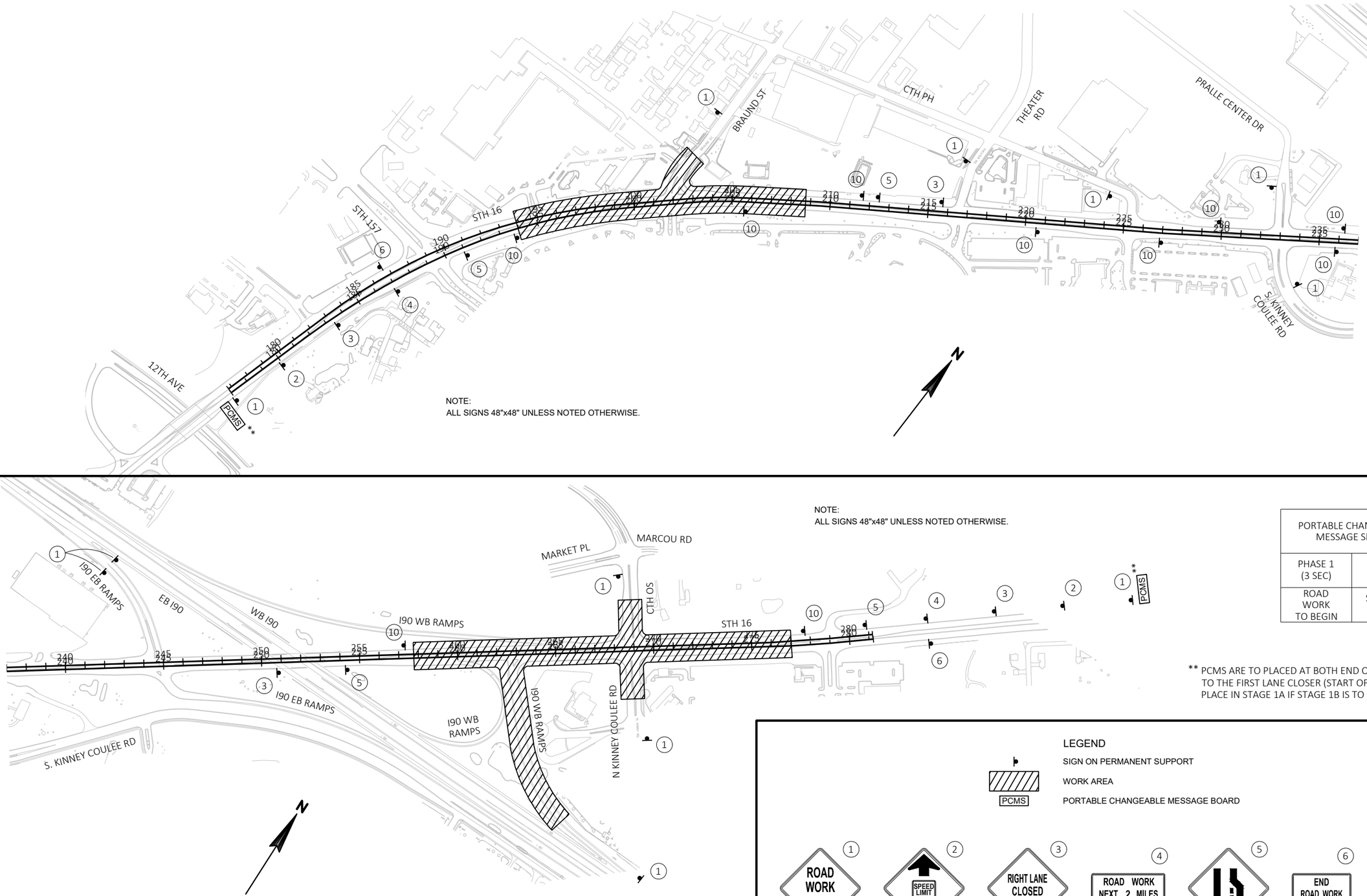
2



LEGEND

INE&CE	MARKING ISLAND NOSE EPOXY & MARKING CURB EPOXY
SLE	MARKING STOP LINE EPOXY 18-INCH
AE	MARKING ARROW EPOXY
WE	MARKING WORD EPOXY
E4Y	MARKING LINE EPOXY 4-INCH (YELLOW)
E4W	MARKING LINE EPOXY 4-INCH (WHITE)
E8W	MARKING LINE EPOXY 8-INCH (WHITE)
CET	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
CHV	MARKING CHEVRON EPOXY 24-INCH

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	PAVEMENT MARKING	SHEET 39	E



PORTABLE CHANGEABLE MESSAGE SIGNS	
PHASE 1 (3 SEC)	PHASE 2 (3 SEC)
ROAD WORK TO BEGIN	STARTING XX/XX/XX

** PCMS ARE TO PLACED AT BOTH END OF THE PROJECT 7 DAYS PRIOR TO THE FIRST LANE CLOSER (START OF THE PROJECT ONLY). DO NOT PLACE IN STAGE 1A IF STAGE 1B IS TO BE CONSTRUCTED FIRST.

LEGEND

SIGN ON PERMANENT SUPPORT

WORK AREA

PCMS — PORTABLE CHANGEABLE MESSAGE BOARD

1 — ROAD WORK AHEAD — W20-1A

2 — SPEED LIMIT 35 — W03-5

3 — RIGHT LANE CLOSED AHEAD — W20-5A

4 — ROAD WORK NEXT 2 MILES — G20-1 60"X24"

5 — W04-2R

6 — END ROAD WORK — G20-2A 48"X24"

7 — LEFT LANE CLOSED AHEAD — W20-5SA

COVER 10 — SPEED LIMIT 45 / SPEED LIMIT 35 — R2-1 30"X36"

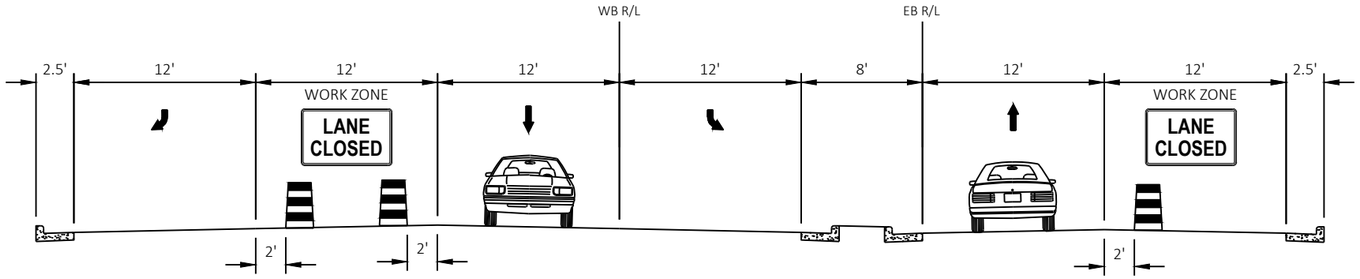
PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC CONTROL STAGE 1A - (APPROACH OVERVIEW)	SHEET 40	E

FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\025001_TC_OVERVIEW_1A.DWG
LAYOUT NAME - 025001_tc

PLOT DATE : 7/29/2020 3:32 PM PLOT BY : JEFF BREU PLOT NAME : PLOT SCALE : ######

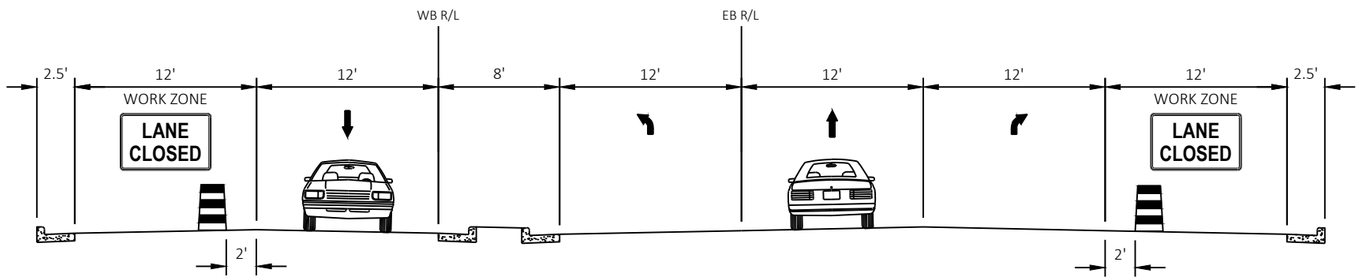
WISDOT/CADDS SHEET 42

2



STAGE 1A NIGHT
TRAFFIC CONTROL TYPICAL SECTION
STH 16 AND BRAUND ST INTERSECTION

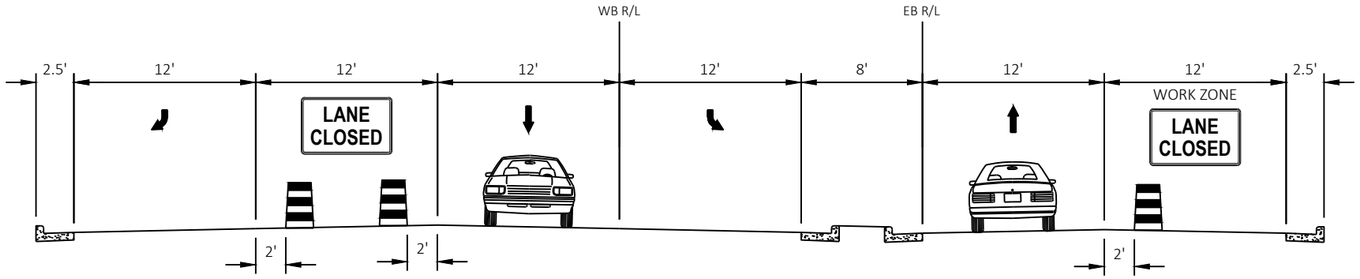
STA 202+50 TO STA 203+75



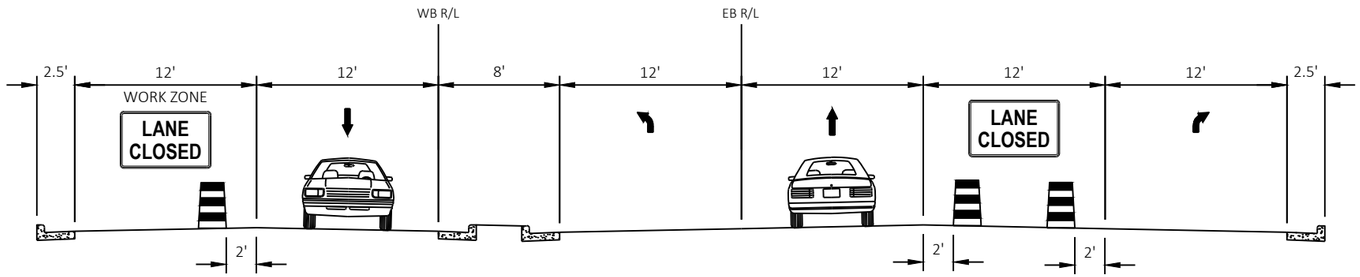
STAGE 1A NIGHT
TRAFFIC CONTROL TYPICAL SECTION
STH 16 AND BRAUND ST INTERSECTION

STA 199+75 TO STA 201+25

2

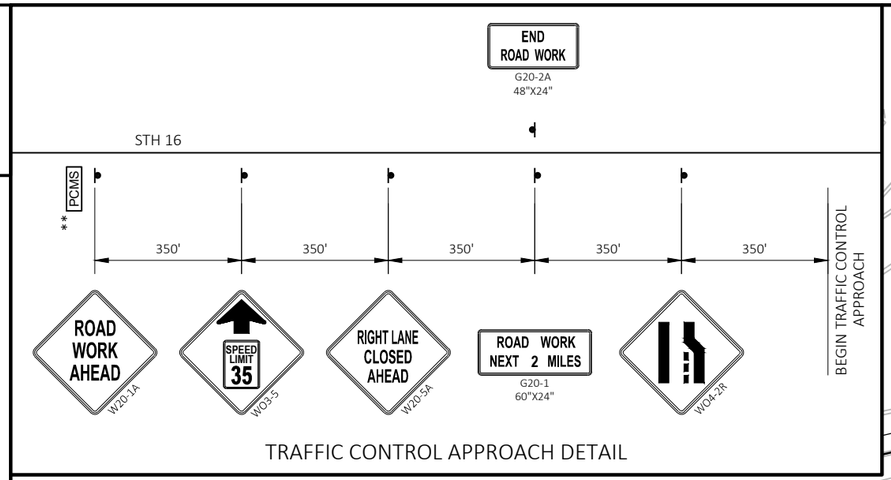


STAGE 1A NIGHT
TRAFFIC CONTROL TYPICAL SECTION
STH 16 AND CTH OS/N KINNEY COULEE RD INTERSECTION
STA 269+50 TO STA 270+75



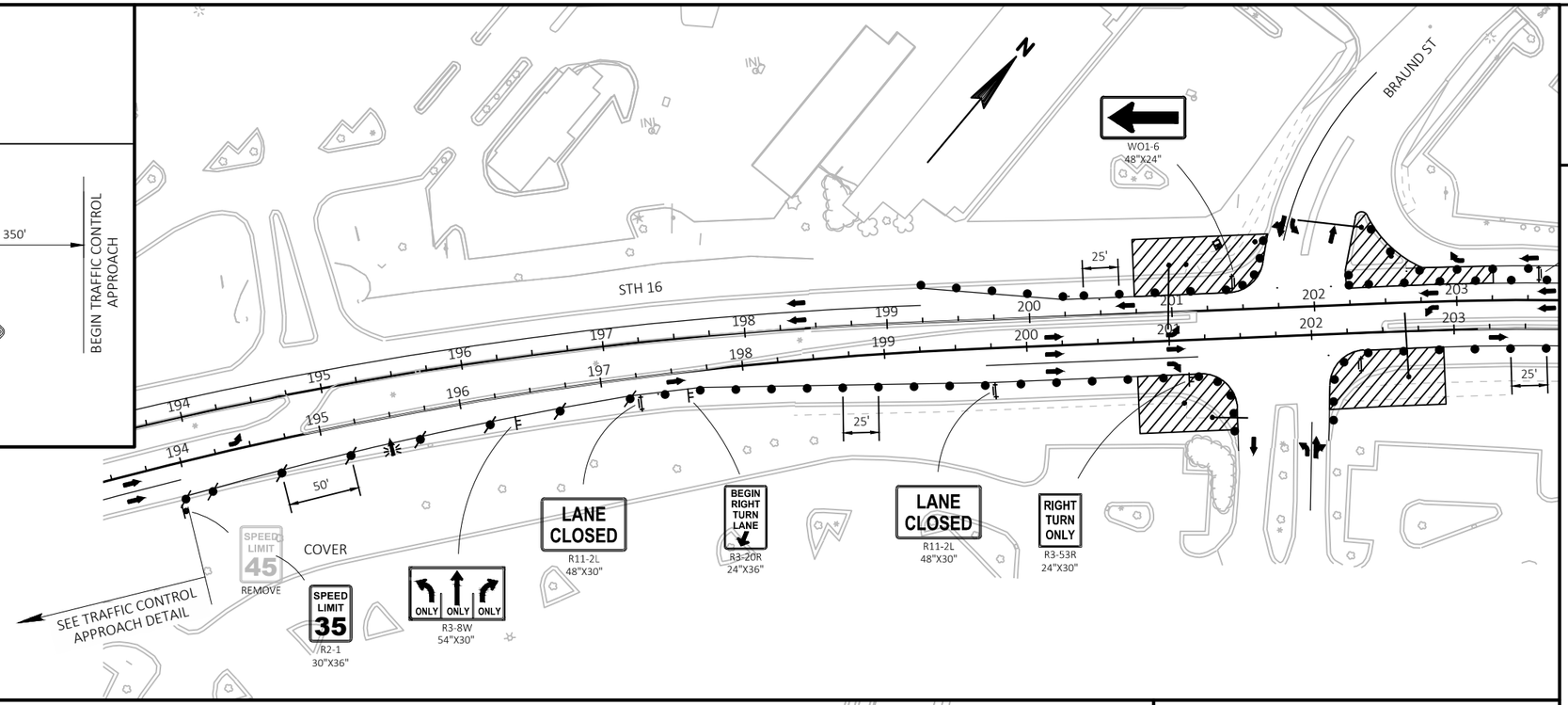
STAGE 1A NIGHT
TRAFFIC CONTROL TYPICAL SECTION
STH 16 AND CTH OS/N KINNEY COULEE RD INTERSECTION
STA 267+00 TO STA 268+25

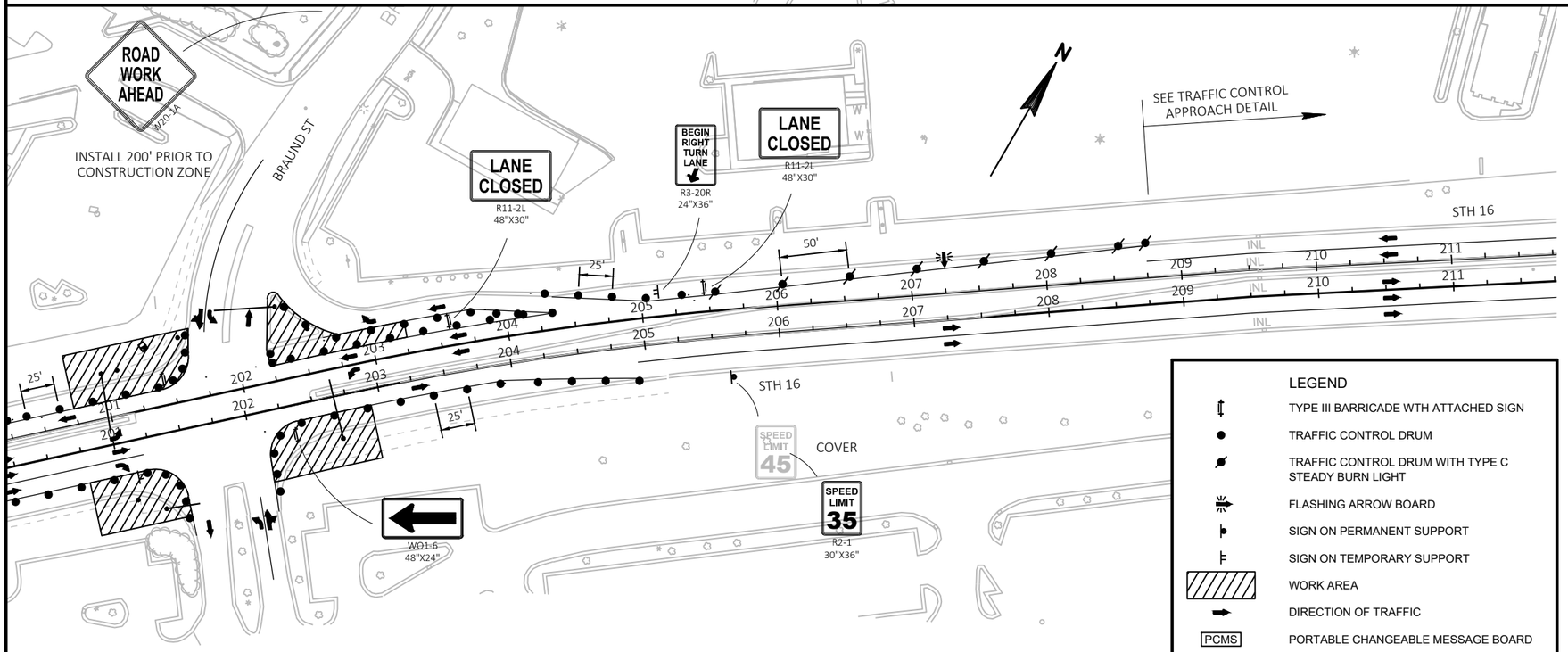
PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC CONTROL STAGE 1A TYPICAL SECTIONS (NIGHT TIME CONFIGURATION)	SHEET 42	E

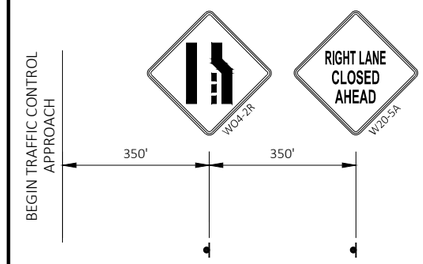


TRAFFIC CONTROL APPROACH DETAIL

** PCMS ARE TO PLACED AT BOTH END OF THE PROJECT 7 DAYS PRIOR TO THE FIRST LANE CLOSER (START OF THE PROJECT ONLY). DO NOT PLACE IN STAGE 1A IF STAGE 1B IS TO BE CONSTRUCTED FIRST.







TRAFFIC CONTROL APPROACH DETAIL

LEGEND

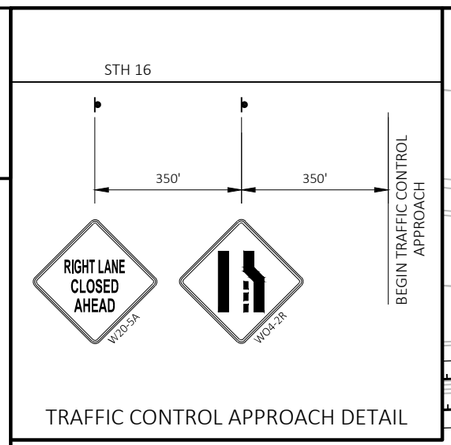
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PCMS — PORTABLE CHANGEABLE MESSAGE BOARD

NOTE: ALL SIGNS 48"x48" UNLESS NOTED OTHERWISE.

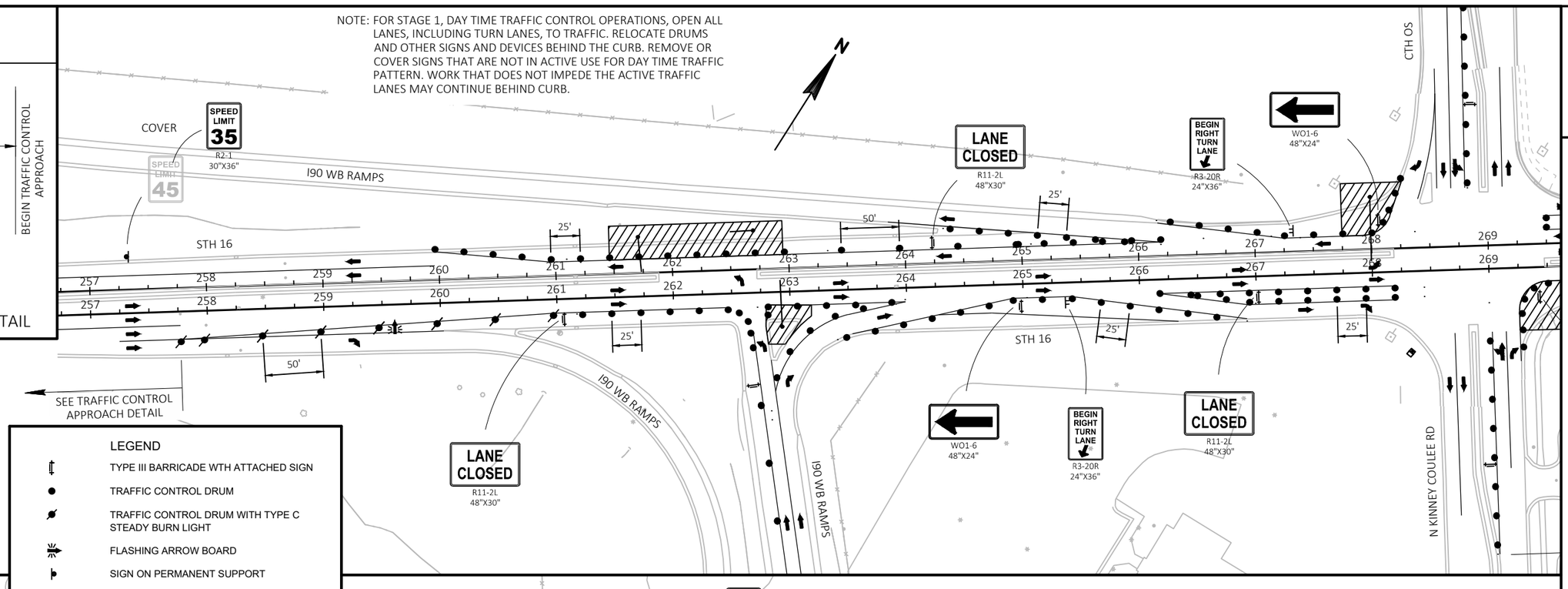
NOTE: FOR STAGE 1, DAY TIME TRAFFIC CONTROL OPERATIONS, OPEN ALL LANES, INCLUDING TURN LANES, TO TRAFFIC. RELOCATE DRUMS AND OTHER SIGNS AND DEVICES BEHIND THE CURB. REMOVE OR COVER SIGNS THAT ARE NOT IN ACTIVE USE FOR DAY TIME TRAFFIC PATTERN. WORK THAT DOES NOT IMPEDE THE ACTIVE TRAFFIC LANES MAY CONTINUE BEHIND CURB.

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC CONTROL STAGE 1A - (NIGHT TIME CONFIGURATION)	SHEET 43	E

NOTE: FOR STAGE 1, DAY TIME TRAFFIC CONTROL OPERATIONS, OPEN ALL LANES, INCLUDING TURN LANES, TO TRAFFIC. RELOCATE DRUMS AND OTHER SIGNS AND DEVICES BEHIND THE CURB. REMOVE OR COVER SIGNS THAT ARE NOT IN ACTIVE USE FOR DAY TIME TRAFFIC PATTERN. WORK THAT DOES NOT IMPEDE THE ACTIVE TRAFFIC LANES MAY CONTINUE BEHIND CURB.

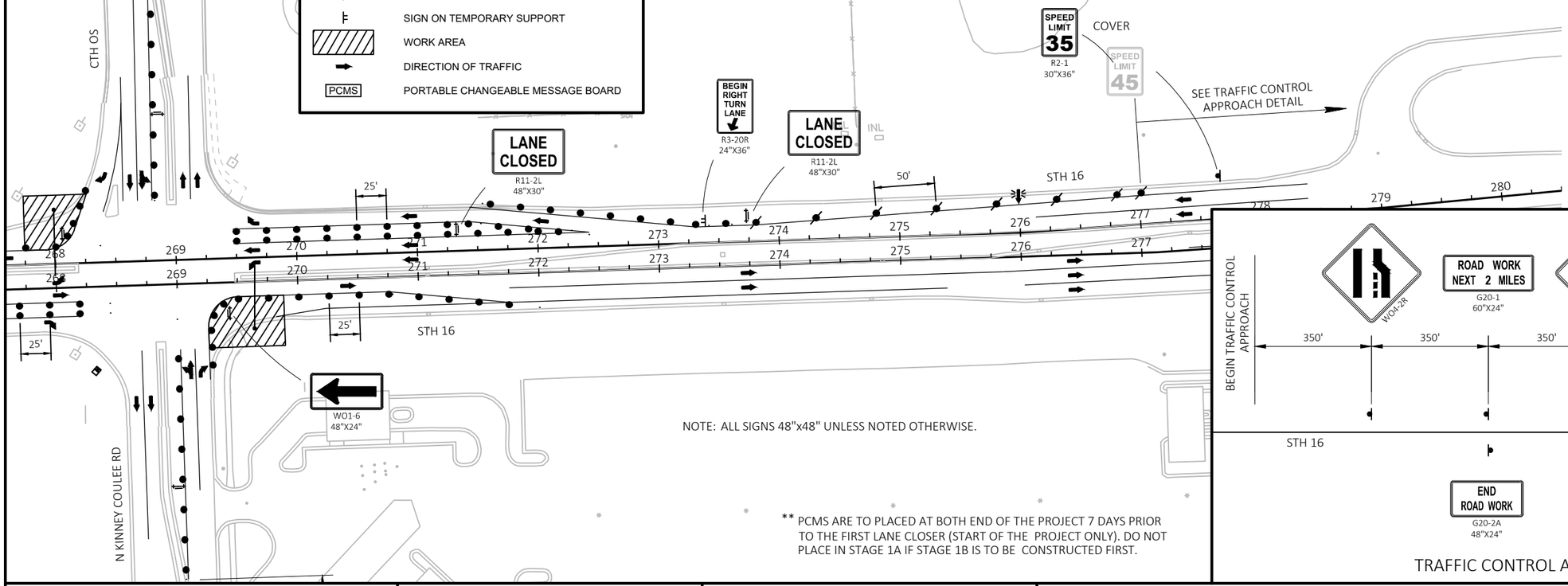


TRAFFIC CONTROL APPROACH DETAIL



LEGEND

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



NOTE: ALL SIGNS 48"x48" UNLESS NOTED OTHERWISE.

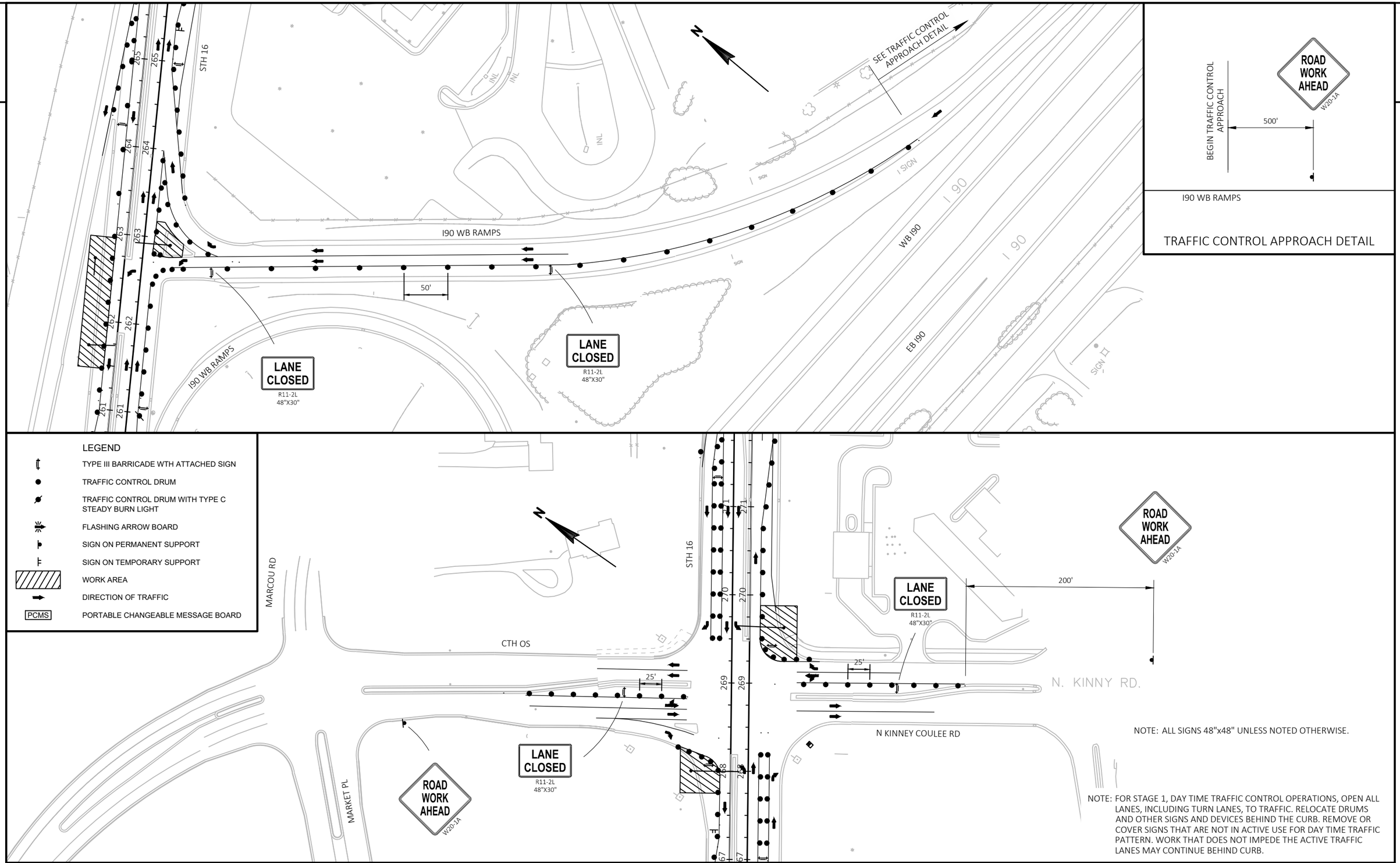
** PCMS ARE TO PLACED AT BOTH END OF THE PROJECT 7 DAYS PRIOR TO THE FIRST LANE CLOSER (START OF THE PROJECT ONLY). DO NOT PLACE IN STAGE 1A IF STAGE 1B IS TO BE CONSTRUCTED FIRST.

TRAFFIC CONTROL APPROACH DETAIL

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC CONTROL STAGE 1A - (NIGHT TIME CONFIGURATION)	SHEET 44	E

FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\025002_TC_1A NIGHT.DWG
LAYOUT NAME - 025003_tc
PLOT DATE : 7/23/2020 1:58 PM PLOT BY : JEFF BREU PLOT NAME : PLOT SCALE : ######
WISDOT/CADDS SHEET 42

2



BEGIN TRAFFIC CONTROL APPROACH

ROAD WORK AHEAD W20-1A

500'

I90 WB RAMPS

TRAFFIC CONTROL APPROACH DETAIL

LEGEND

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

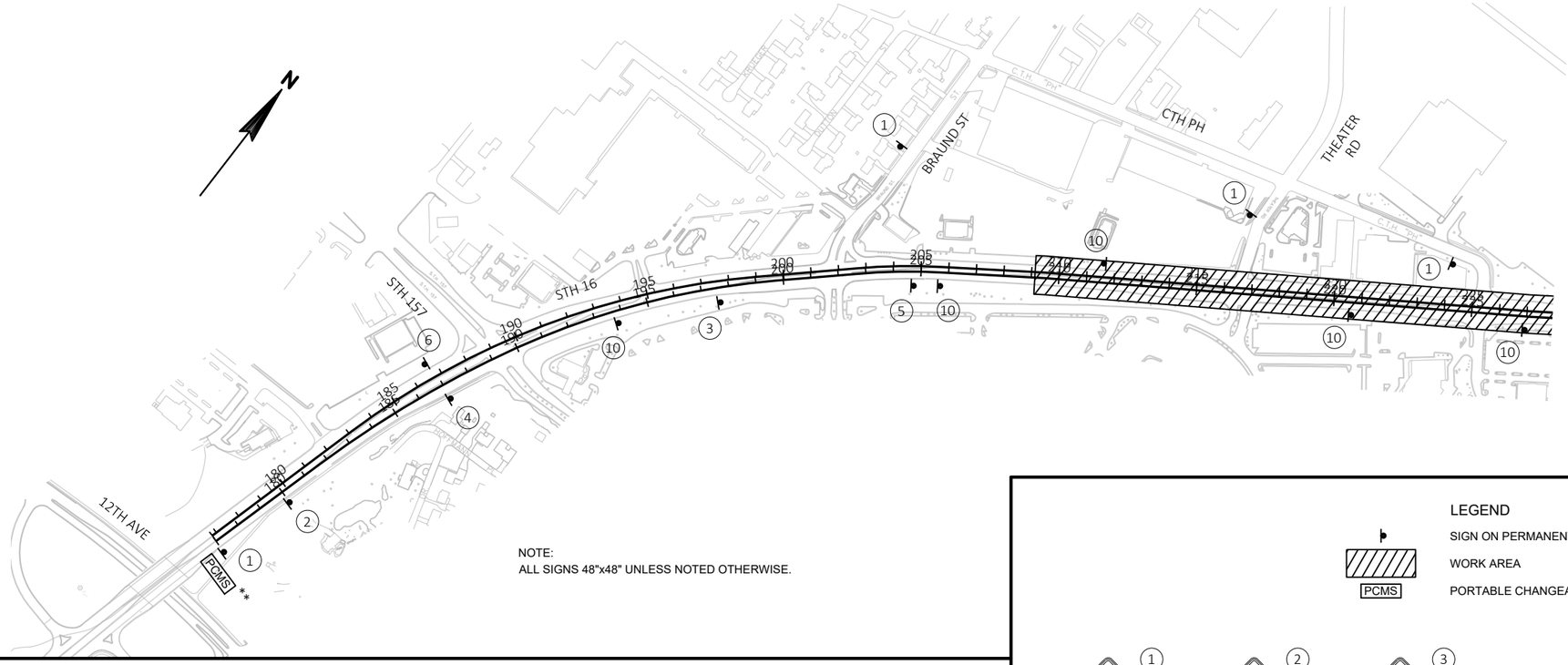
NOTE: ALL SIGNS 48"x48" UNLESS NOTED OTHERWISE.

NOTE: FOR STAGE 1, DAY TIME TRAFFIC CONTROL OPERATIONS, OPEN ALL LANES, INCLUDING TURN LANES, TO TRAFFIC. RELOCATE DRUMS AND OTHER SIGNS AND DEVICES BEHIND THE CURB. REMOVE OR COVER SIGNS THAT ARE NOT IN ACTIVE USE FOR DAY TIME TRAFFIC PATTERN. WORK THAT DOES NOT IMPEDE THE ACTIVE TRAFFIC LANES MAY CONTINUE BEHIND CURB.

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC CONTROL 1A - (NIGHT TIME CONFIGURATION)	SHEET 45	E

FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\025004_TC_1A NIGHT.DWG
LAYOUT NAME - 025004_tc
PLOT DATE : 7/23/2020 1:59 PM
PLOT BY : JEFF BREU
PLOT NAME :
PLOT SCALE : ######

2



NOTE:
ALL SIGNS 48"x48" UNLESS NOTED OTHERWISE.

PORTABLE CHANGEABLE MESSAGE SIGNS	
PHASE 1 (3 SEC)	PHASE 2 (3 SEC)
ROAD WORK TO BEGIN	STARTING XX/XX/XX

** PCMS ARE TO PLACED AT BOTH END OF THE PROJECT 7 DAYS PRIOR TO THE FIRST LANE CLOSER (START OF THE PROJECT ONLY). DO NOT PLACE IN STAGE 1B IF STAGE 1A IS TO BE CONSTRUCTED FIRST.

LEGEND

SIGN ON PERMANENT SUPPORT

WORK AREA

PCMS — PORTABLE CHANGEABLE MESSAGE BOARD

SPEED LIMIT 45 — COVER 10

SPEED LIMIT 35 — R2-1, 30"X36"

1 — ROAD WORK AHEAD — W20-1A

2 — SPEED LIMIT 35 — W03-5

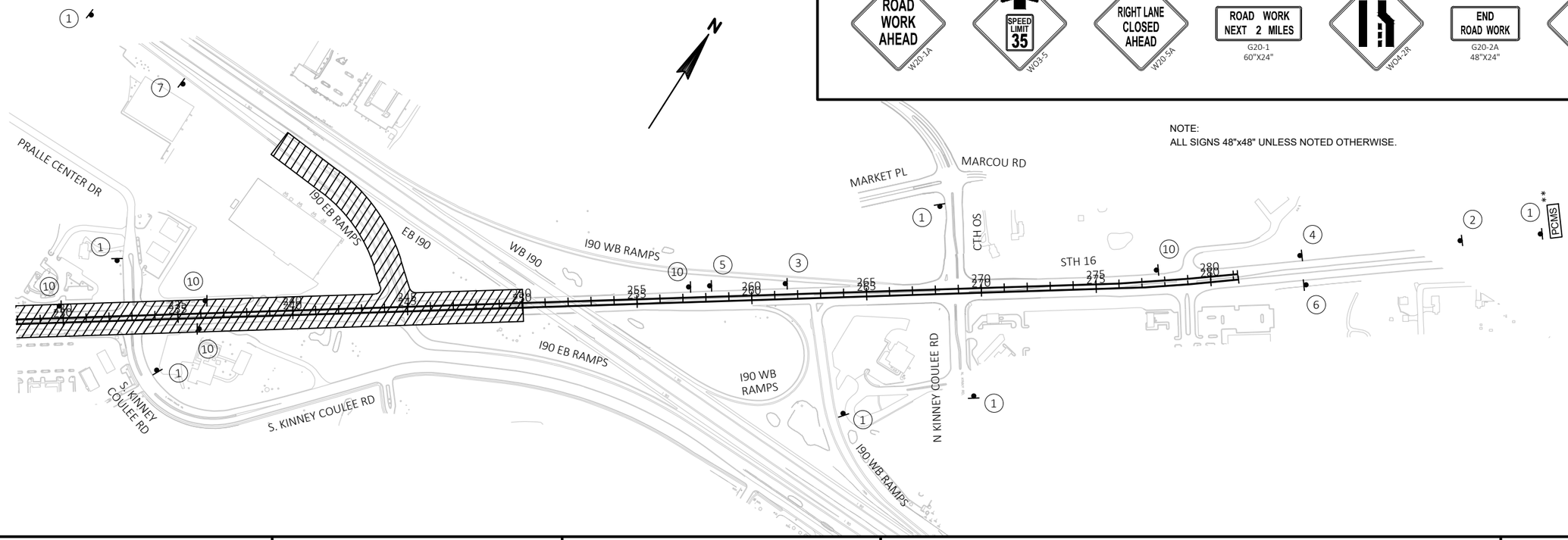
3 — RIGHT LANE CLOSED AHEAD — W20-5A

4 — ROAD WORK NEXT 2 MILES — G20-1, 60"X24"

5 — W04-2R

6 — END ROAD WORK — G20-2A, 48"X24"

7 — ROAD WORK 500 FT — W20-1D

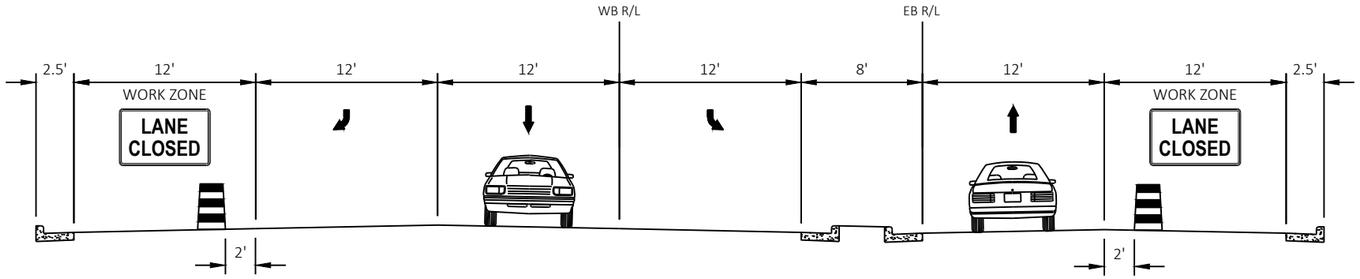


NOTE:
ALL SIGNS 48"x48" UNLESS NOTED OTHERWISE.

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC CONTROL STAGE 1B - (APPROACH OVERVIEW)	SHEET 46	E

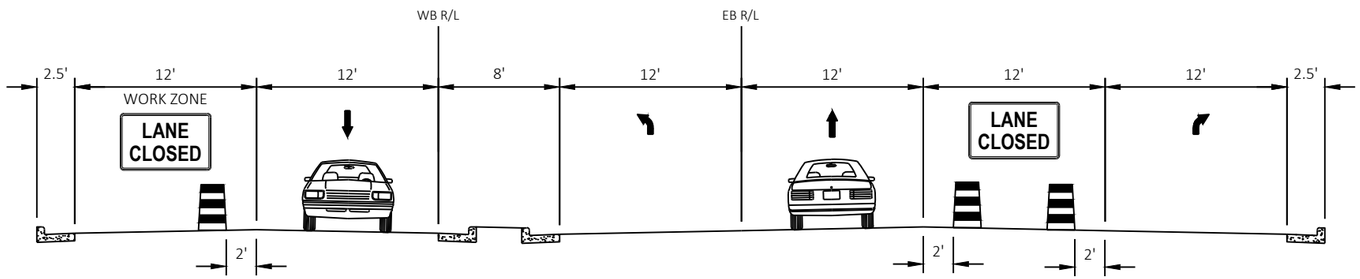
FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\025005_TC_OVERVIEW_1B.DWG
LAYOUT NAME - 025005_tc
PLOT DATE : 7/29/2020 3:31 PM
PLOT BY : JEFF BREU
PLOT NAME :
PLOT SCALE : ######
WISDOT/CADDS SHEET 42

2



STAGE 1B NIGHT
TRAFFIC CONTROL TYPICAL SECTION
STH 16 AND THEATER RD INTERSECTION

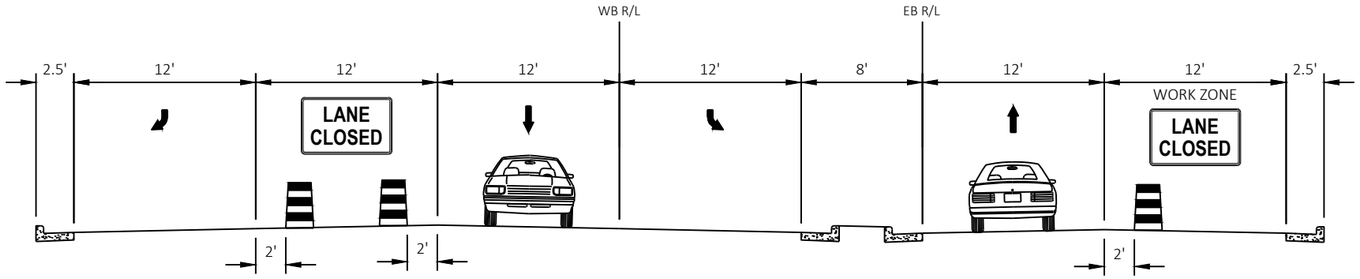
STA 217+25 TO STA 218+15



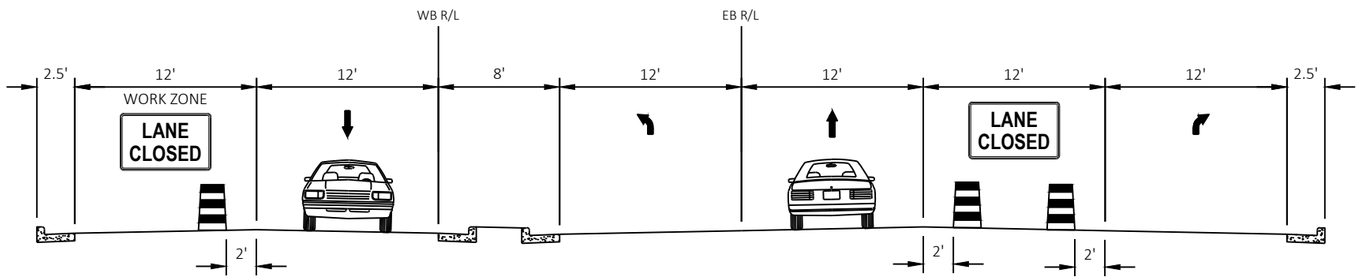
STAGE 1B NIGHT
TRAFFIC CONTROL TYPICAL SECTION
STH 16 AND THEATER RD INTERSECTION

STA 214+75 TO STA 216+00

2



STAGE 1B NIGHT
TRAFFIC CONTROL TYPICAL SECTION
STH 16 AND PRALLE CENTER DR/S KINNEY COULEE RD INTERSECTION
STA 233+50 TO STA 234+75



STAGE 1B NIGHT
TRAFFIC CONTROL TYPICAL SECTION
STH 16 AND PRALLE CENTER DR/S KINNEY COULEE RD INTERSECTION
STA 231+25 TO STA 232+75

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC CONTROL STAGE 1B TYPICAL SECTIONS (NIGHT TIME CONFIGURATION)	SHEET 48	E

2

END ROAD WORK
G20-2A
48"X24"

STH 16

PCMS **

350' 700' 350' 350'

USE SAME LOCATION AS STAGE 1A.

ROAD WORK AHEAD W20-1A

SPEED LIMIT 35 W03-5

ROAD WORK NEXT 2 MILES
G20-1
60"X24"

RIGHT LANE CLOSED AHEAD W20-5A

W04-2R

BEGIN TRAFFIC CONTROL APPROACH

TRAFFIC CONTROL APPROACH DETAIL

** PCMS ARE TO PLACED AT BOTH END OF THE PROJECT 7 DAYS PRIOR TO THE FIRST LANE CLOSER (START OF THE PROJECT ONLY). DO NOT PLACE IN STAGE 1B IF STAGE 1A IS TO BE CONSTRUCTED FIRST.

LEGEND

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

NOTE: ALL SIGNS 48"x48" UNLESS NOTED OTHERWISE.

ROAD WORK AHEAD W20-1A

INSTALL 200' PRIOR TO CONSTRUCTION ZONE

WO1-6
48"X24"

THEATER RD

COVER

SPEED LIMIT 35
R2-1
30"X36"

SPEED LIMIT 45

STH 16

208 209 INL 210 211 212 213 214 215 216 217

25' 50' 25' 25'

SEE TRAFFIC CONTROL APPROACH DETAIL

LANE CLOSED
R11-2L
48"X30"

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

LANE CLOSED
R11-2L
48"X30"

NOTE: FOR STAGE 1, DAY TIME TRAFFIC CONTROL OPERATIONS, OPEN ALL LANES, INCLUDING TURN LANES, TO TRAFFIC. RELOCATE DRUMS AND OTHER SIGNS AND DEVICES BEHIND THE CURB. REMOVE OR COVER SIGNS THAT ARE NOT IN ACTIVE USE FOR DAY TIME TRAFFIC PATTERN. WORK THAT DOES NOT IMPEDE THE ACTIVE TRAFFIC LANES MAY CONTINUE BEHIND CURB.

THEATER RD

CTH PH

ROAD WORK AHEAD W20-1A

WO1-6
48"X24"

LANE CLOSED
R11-2L
48"X30"

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

COVER

SPEED LIMIT 35
R2-1
30"X36"

SPEED LIMIT 45

STH 16

216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231

25' 50' 25' 25' 25' 50' 25' 25'

WO1-6
48"X24"

SPEED LIMIT 35
R2-1
30"X36"

COVER

SPEED LIMIT 45

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

LANE CLOSED
R11-2L
48"X30"

INL

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC CONTROL STAGE 1B - (NIGHT TIME CONFIGURATION)	SHEET 49	E

FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\025006_TC_1B NIGHT.DWG
LAYOUT NAME - 025006_tc
PLOT DATE : 7/23/2020 2:01 PM PLOT BY : JEFF BREU PLOT NAME : PLOT SCALE : ######
WISDOT/CADDS SHEET 42

NOTE: ALL SIGNS 48"x48" UNLESS NOTED OTHERWISE.

ROAD WORK AHEAD W20-1A

PRALLE CENTER DR

SPEED LIMIT 35 R2-1 30"X36"

COVER

SPEED LIMIT 45

WO1-6 48"X24"

LANE CLOSED R11-2L 48"X30"

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

STH 16

25'

50'

S. KINNEY COULEE RD

INSTALL 200' PRIOR TO CONSTRUCTION ZONE

I90 EB RAMPS

NOTE: FOR STAGE 1, DAY TIME TRAFFIC CONTROL OPERATIONS, OPEN ALL LANES, INCLUDING TURN LANES, TO TRAFFIC. RELOCATE DRUMS AND OTHER SIGNS AND DEVICES BEHIND THE CURB. REMOVE OR COVER SIGNS THAT ARE NOT IN ACTIVE USE FOR DAY TIME TRAFFIC PATTERN. WORK THAT DOES NOT IMPEDE THE ACTIVE TRAFFIC LANES MAY CONTINUE BEHIND CURB.

SEE TRAFFIC CONTROL APPROACH DETAIL

LEGEND

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

** PCMS ARE TO PLACED AT BOTH END OF THE PROJECT 7 DAYS PRIOR TO THE FIRST LANE CLOSER (START OF THE PROJECT ONLY). DO NOT PLACE IN STAGE 1B IF STAGE 1A IS TO BE CONSTRUCTED FIRST.

BEGIN TRAFFIC CONTROL APPROACH

W04-2R

RIGHT LANE CLOSED AHEAD W20-5A

ROAD WORK NEXT 2 MILES G20-1 60"X24"

SPEED LIMIT 35 W03-5

ROAD WORK AHEAD W20-1A

USE SAME LOCATION AS STAGE 1A.

350' 350' 700' 350'

** PCMS

STH 16

END ROAD WORK G20-2A 48"X24"

TRAFFIC CONTROL APPROACH DETAIL

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC CONTROL STAGE 1B - (NIGHT TIME CONFIGURATION)	SHEET 50	E

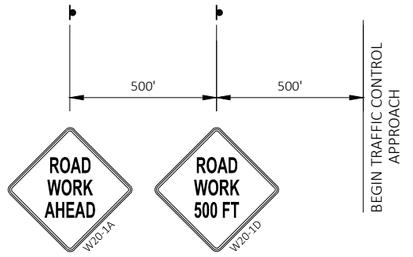
FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\025006_TC_1B NIGHT.DWG
LAYOUT NAME - 025007_tc

PLOT DATE : 7/23/2020 2:02 PM PLOT BY : JEFF BREU PLOT NAME : PLOT SCALE : ######

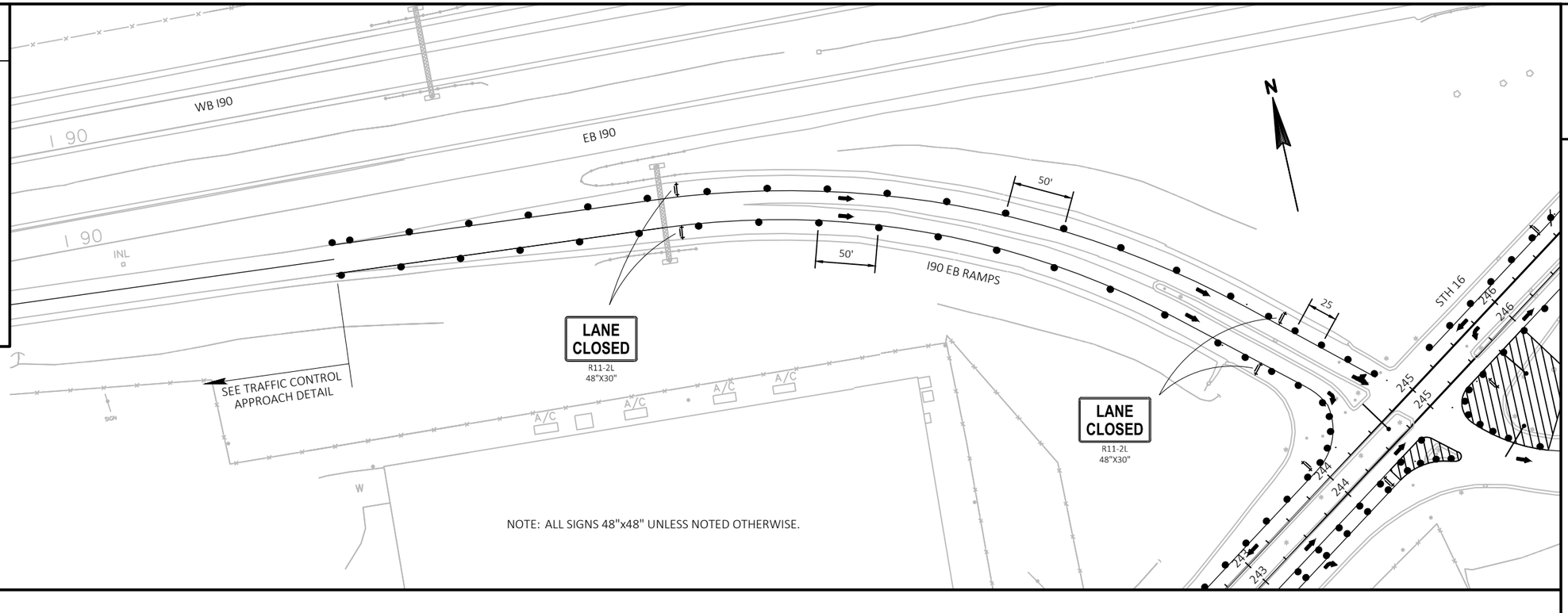
WISDOT/CADDS SHEET 42

2

I90 EB RAMPS



TRAFFIC CONTROL APPROACH DETAIL



NOTE: ALL SIGNS 48"x48" UNLESS NOTED OTHERWISE.

2

NOTE: FOR STAGE 1, DAY TIME TRAFFIC CONTROL OPERATIONS, OPEN ALL LANES, INCLUDING TURN LANES, TO TRAFFIC. RELOCATE DRUMS AND OTHER SIGNS AND DEVICES BEHIND THE CURB. REMOVE OR COVER SIGNS THAT ARE NOT IN ACTIVE USE FOR DAY TIME TRAFFIC PATTERN. WORK THAT DOES NOT IMPEDE THE ACTIVE TRAFFIC LANES MAY CONTINUE BEHIND CURB.

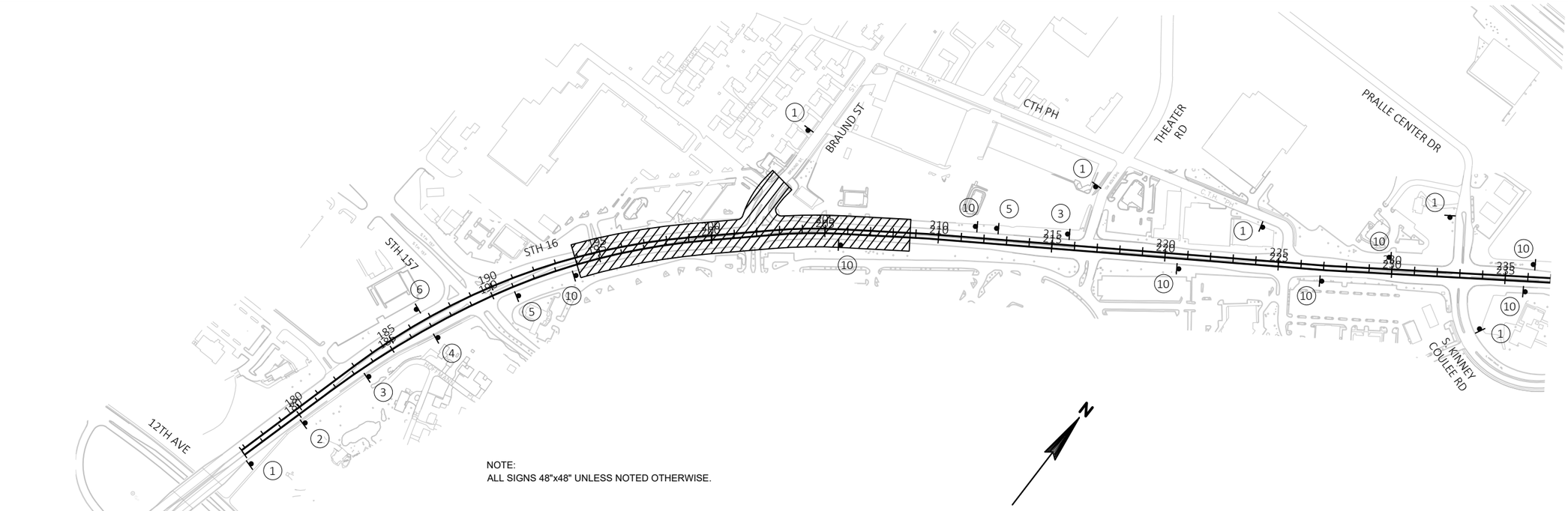
LEGEND

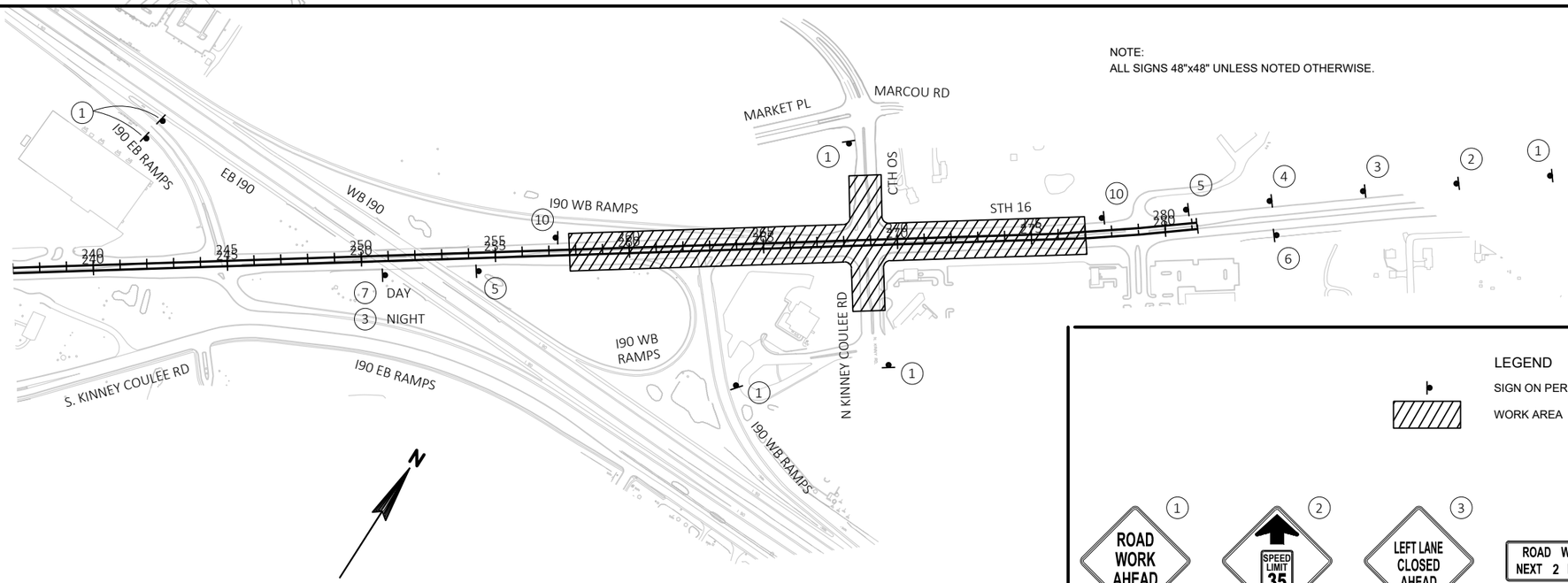
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PCMS — PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC CONTROL STAGE 1B - (NIGHT CONFIGURATION)	SHEET 51	E

FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\025008_TC_1B NIGHT.DWG
LAYOUT NAME - 025008_tc
PLOT DATE : 7/23/2020 2:03 PM PLOT BY : JEFF BREU PLOT NAME : PLOT SCALE : ######
WISDOT/CADDS SHEET 42

2





LEGEND

SIGN ON PERMANENT SUPPORT

WORK AREA

10 COVER

SPEED LIMIT 45 / SPEED LIMIT 35
R2-1
30"X36"

1 ROAD WORK AHEAD
W20-1A

2 SPEED LIMIT 35
W03-5

3 LEFT LANE CLOSED AHEAD
W20-5A

4 ROAD WORK NEXT 2 MILES
G20-1
60"X24"

5
W04-2L

6 END ROAD WORK
G20-2A
48"X24"

7
W01-4C
48"X48"

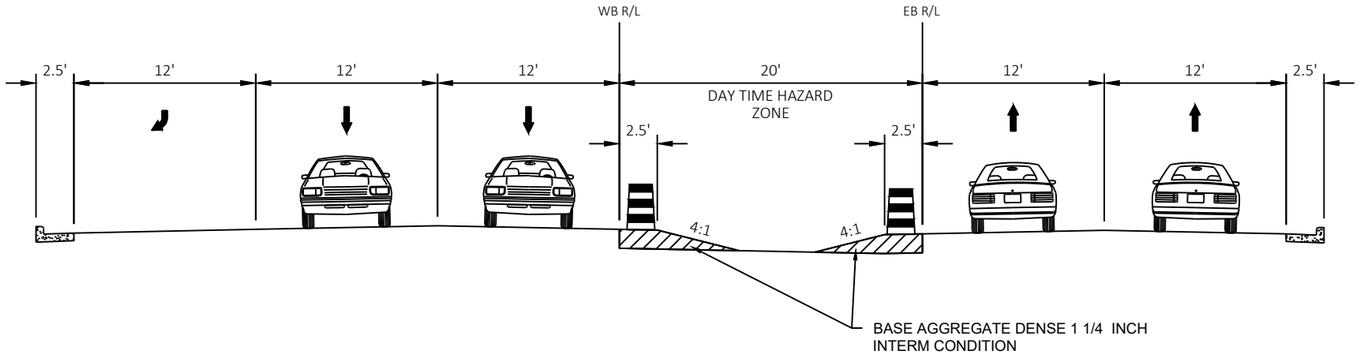
NOTE: SEE TRAFFIC CONTROL PLAN SHEETS FOR SIGNS TO BE COVERED DURING THE DAY TIME CONFIGURATION.

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC CONTROL STAGE 2A - (APPROACH OVERVIEW)	SHEET 52	E

FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\025010_TC_OVERVIEW_2A.DWG
LAYOUT NAME - 025010_tc

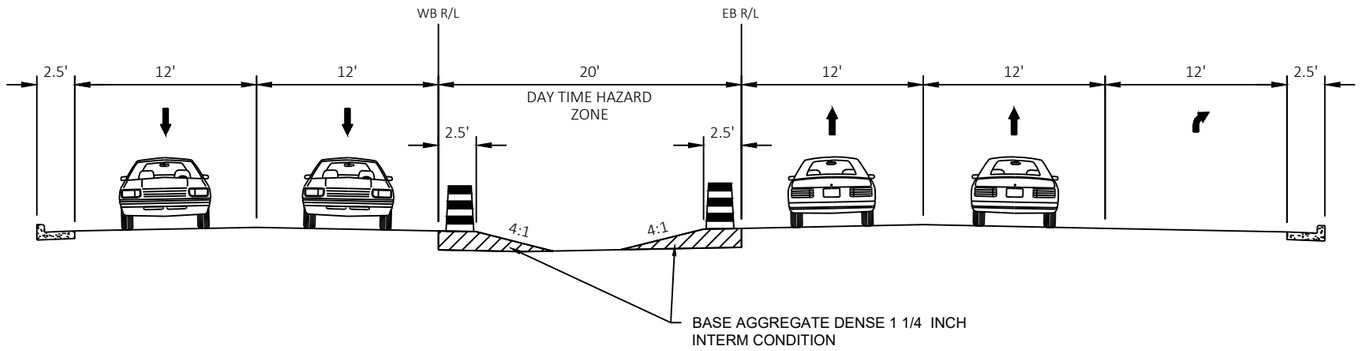
PLOT DATE : 7/23/2020 2:04 PM PLOT BY : JEFF BREU PLOT NAME : PLOT SCALE : ######

2



STAGE 2A DAY
TRAFFIC CONTROL TYPICAL SECTION
STH 16 AND BRAUND ST INTERSECTION

STA 202+50 TO STA 203+75

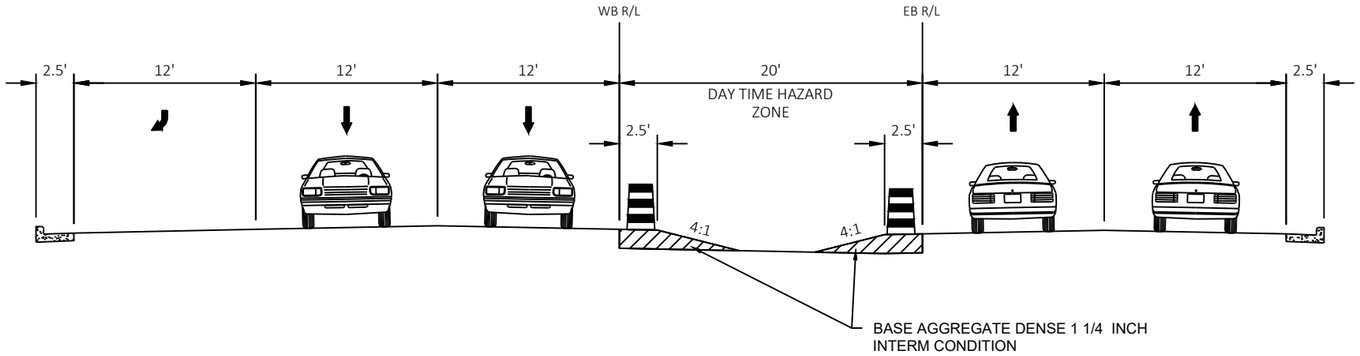


STAGE 2A DAY
TRAFFIC CONTROL TYPICAL SECTION
STH 16 AND BRAUND ST INTERSECTION

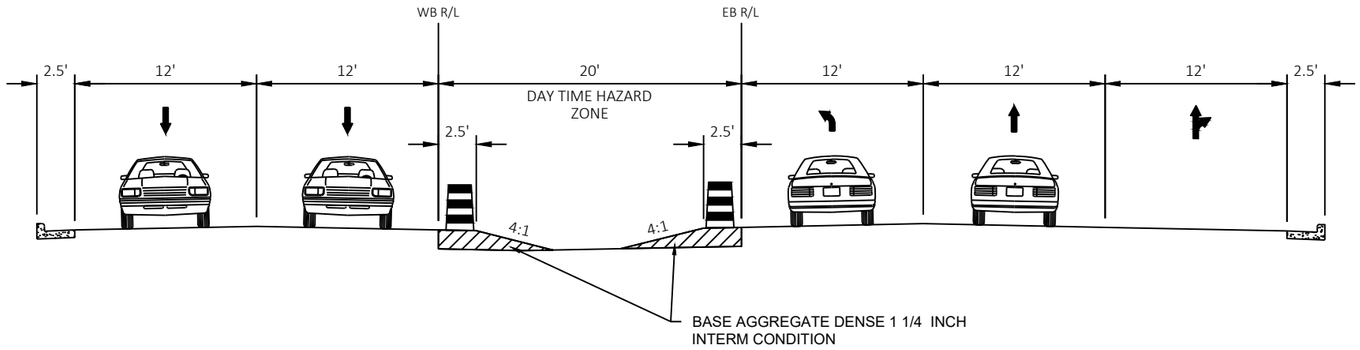
STA 199+75 TO STA 201+25

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC CONTROL STAGE 2A TYPICAL SECTIONS (DAY TIME CONFIGURATION)	SHEET 53	E

2

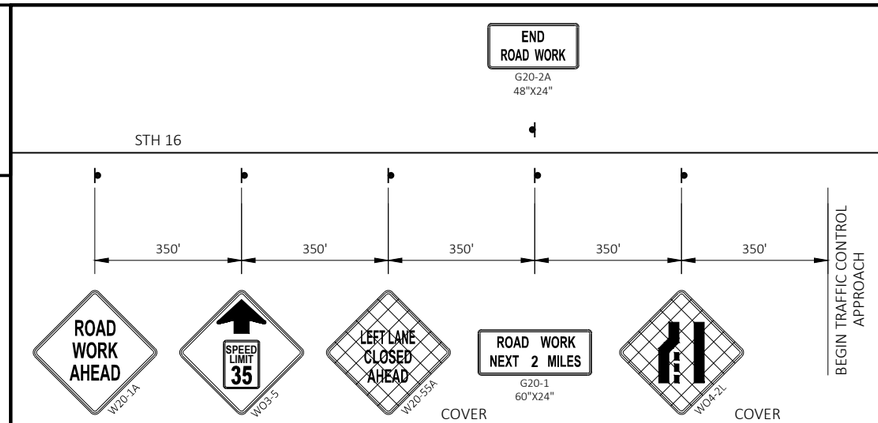


STAGE 2A DAY
TRAFFIC CONTROL TYPICAL SECTION
STH 16 AND CTH OS/N KINNEY COULEE RD INTERSECTION
STA 269+50 TO STA 270+75

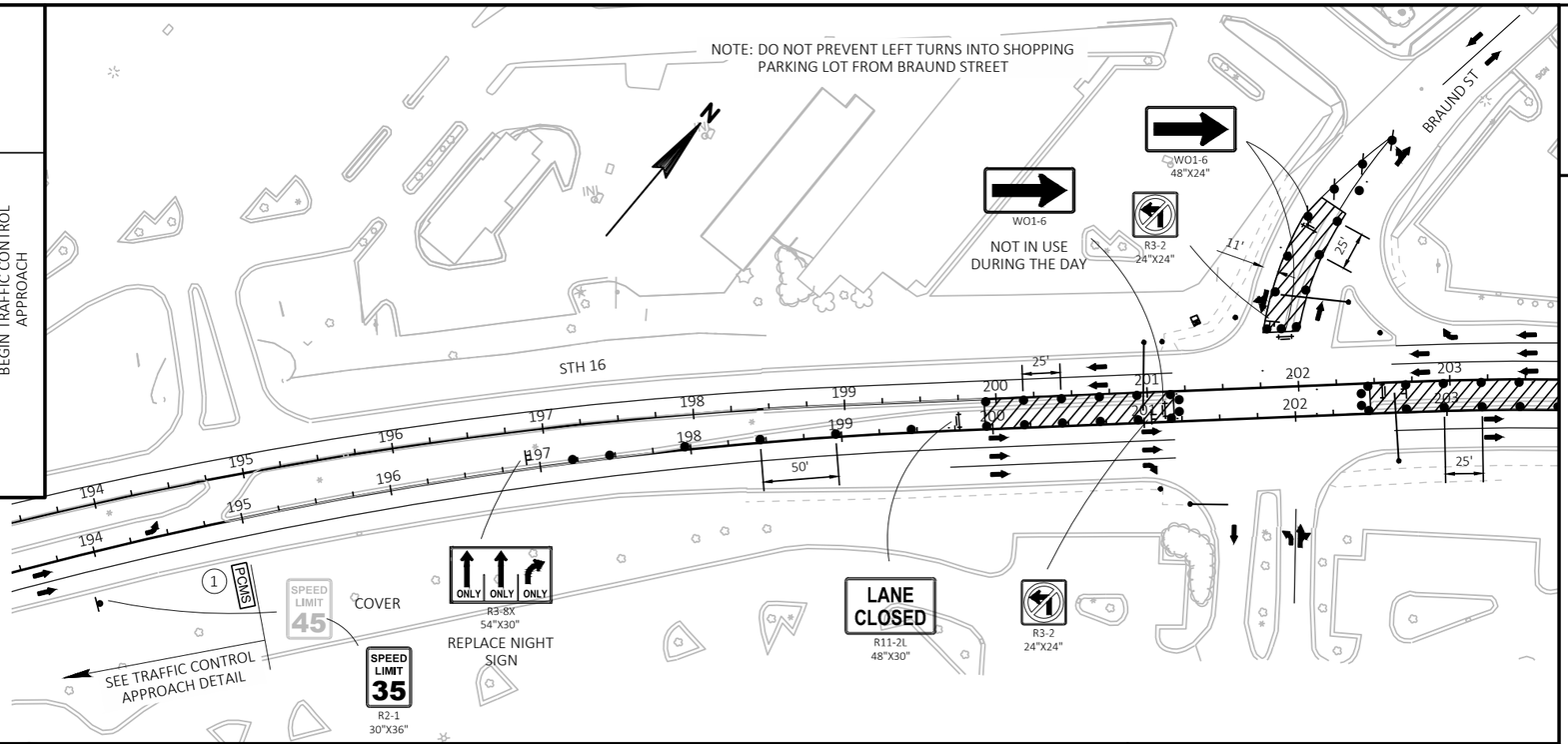


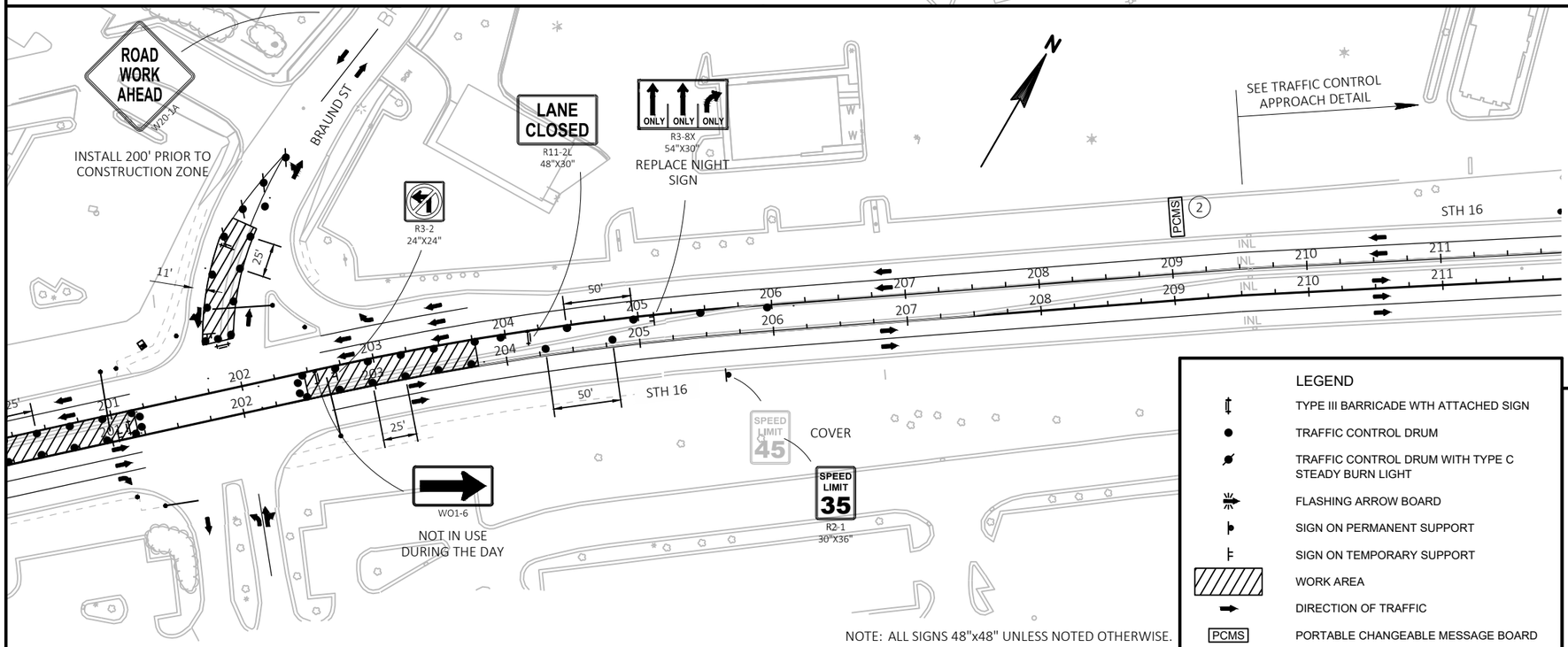
STAGE 2A DAY
TRAFFIC CONTROL TYPICAL SECTION
STH 16 AND CTH OS/N KINNEY COULEE RD INTERSECTION
STA 267+00 TO STA 268+25

2

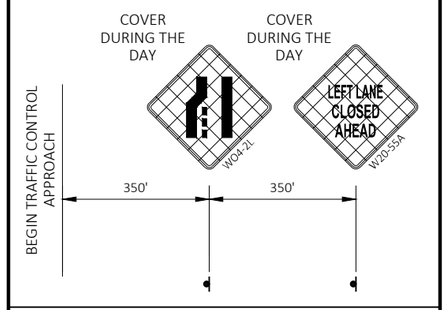


TRAFFIC CONTROL APPROACH DETAIL





NOTE: ALL SIGNS 48"x48" UNLESS NOTED OTHERWISE.



TRAFFIC CONTROL APPROACH DETAIL

LEGEND

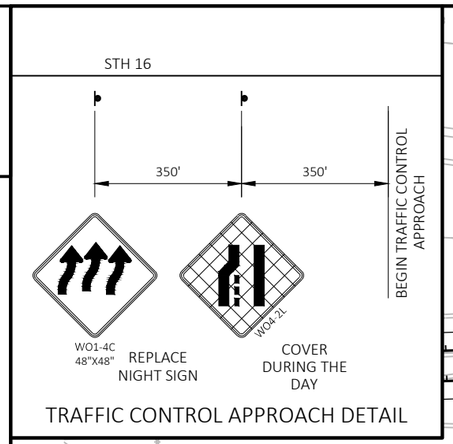
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PCMS — PORTABLE CHANGEABLE MESSAGE BOARD

1	2
PORTABLE CHANGEABLE MESSAGE SIGN	PORTABLE CHANGEABLE MESSAGE SIGN
PHASE 1	PHASE 1
NO LEFT TURN BRAUND	NO LEFT TURN MALL

PCMS ARE TO BE PLACED ONLY ON DAYS THE LEFT TURNS ARE TO BE CLOSED.

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC CONTROL STAGE 2A - (DAY TIME CONFIGURATION)	SHEET 55	E

FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\025011_TC_2A DAY.DWG
LAYOUT NAME - 025011_tc
PLOT DATE : 7/29/2020 3:35 PM PLOT BY : JEFF BREU PLOT NAME : PLOT SCALE : ######



TRAFFIC CONTROL APPROACH DETAIL

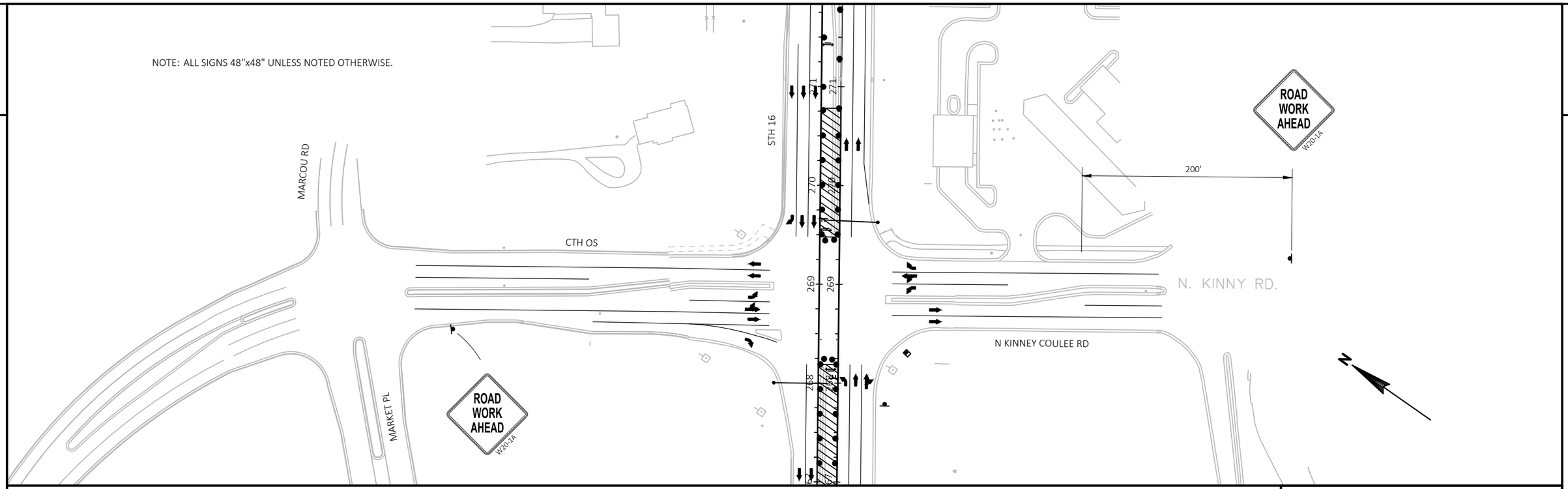
TRAFFIC CONTROL APPROACH DETAIL

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC CONTROL STAGE 2A - (DAY TIME CONFIGURATION)	SHEET 56	E

FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\025011_TC_2A DAY.DWG
LAYOUT NAME - 025012_tc
PLOT DATE : 7/29/2020 3:36 PM
PLOT BY : JEFF BREU
PLOT NAME :
PLOT SCALE : ######
WISDOT/CADDS SHEET 42

2

NOTE: ALL SIGNS 48"x48" UNLESS NOTED OTHERWISE.

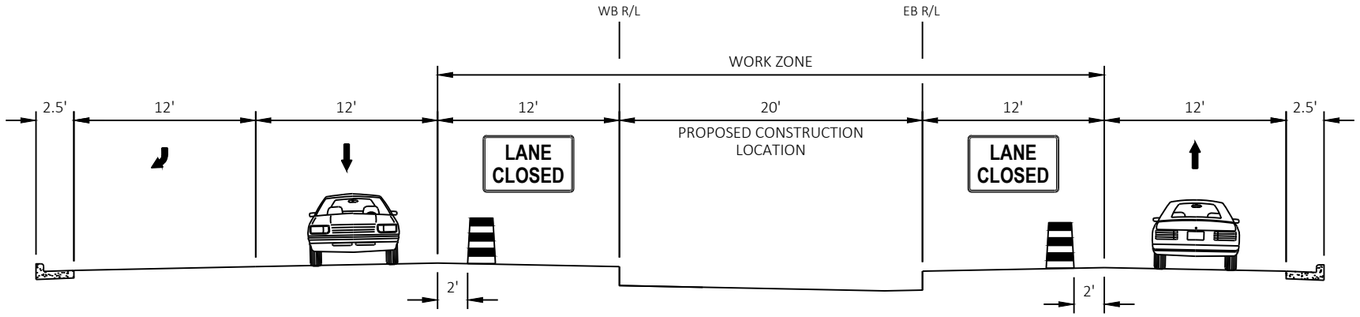


LEGEND

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

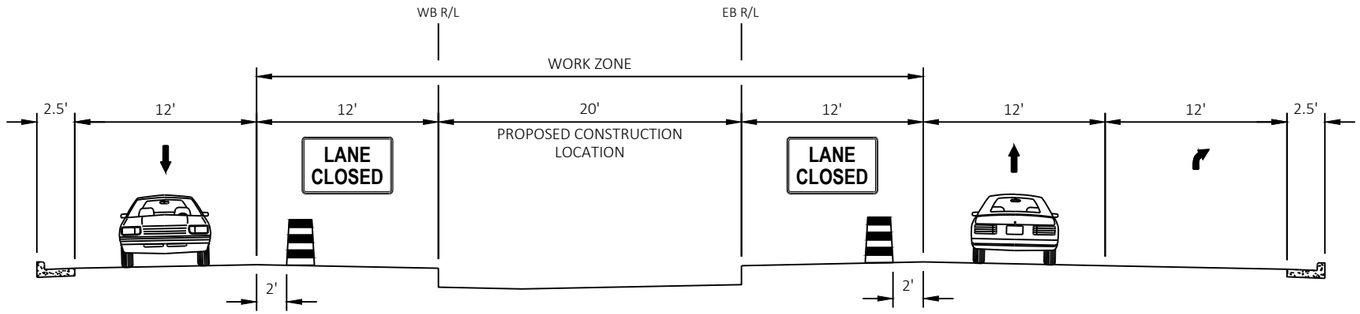
PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC CONTROL STAGE 2A - (DAY TIME CONFIGURATION)	SHEET 57	E

2



STAGE 2A NIGHT
TRAFFIC CONTROL TYPICAL SECTION
STH 16 AND BRAUND ST INTERSECTION

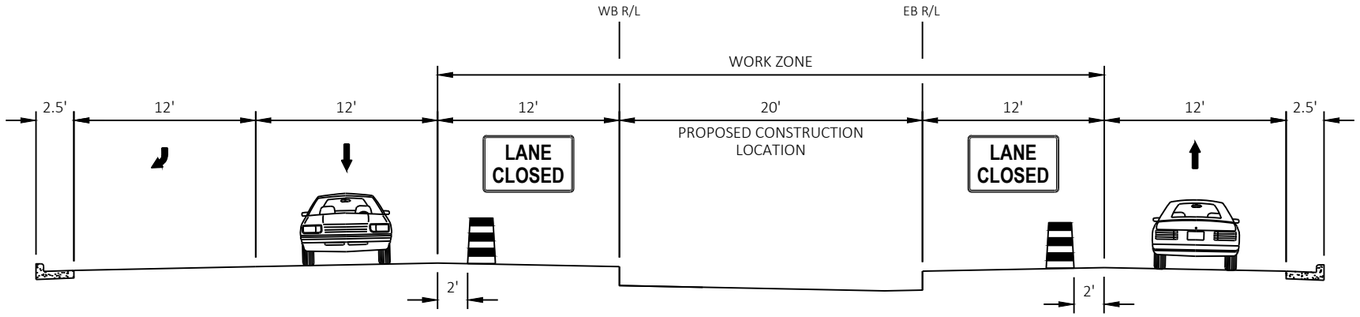
STA 202+50 TO STA 203+75



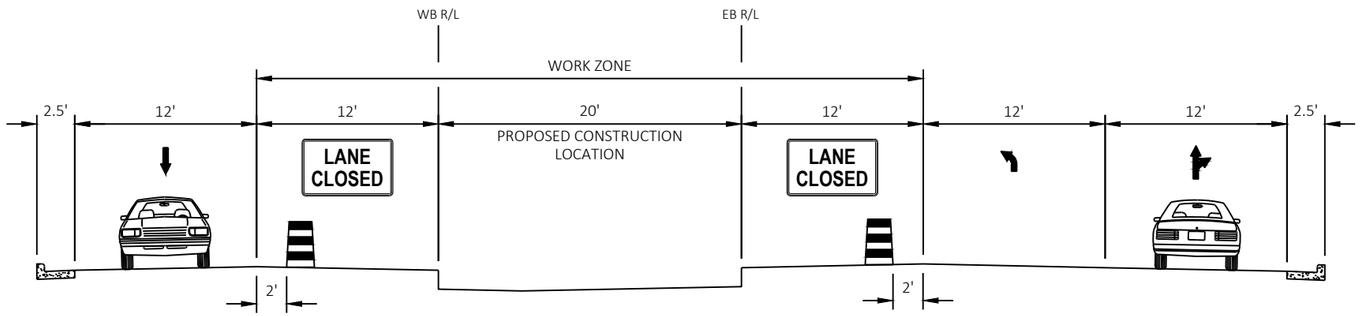
STAGE 2A NIGHT
TRAFFIC CONTROL TYPICAL SECTION
STH 16 AND BRAUND ST INTERSECTION

STA 199+75 TO STA 201+25

2

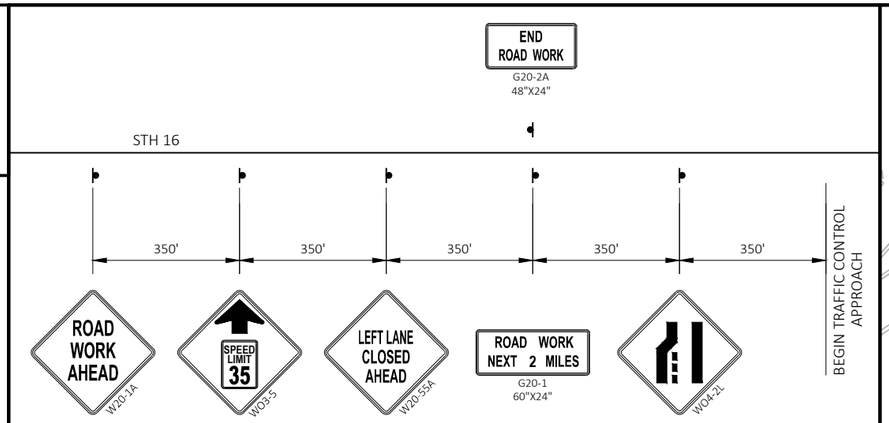


STAGE 2A NIGHT
TRAFFIC CONTROL TYPICAL SECTION
STH 16 AND CTH OS/N KINNEY COULEE RD INTERSECTION
STA 269+50 TO STA 270+75

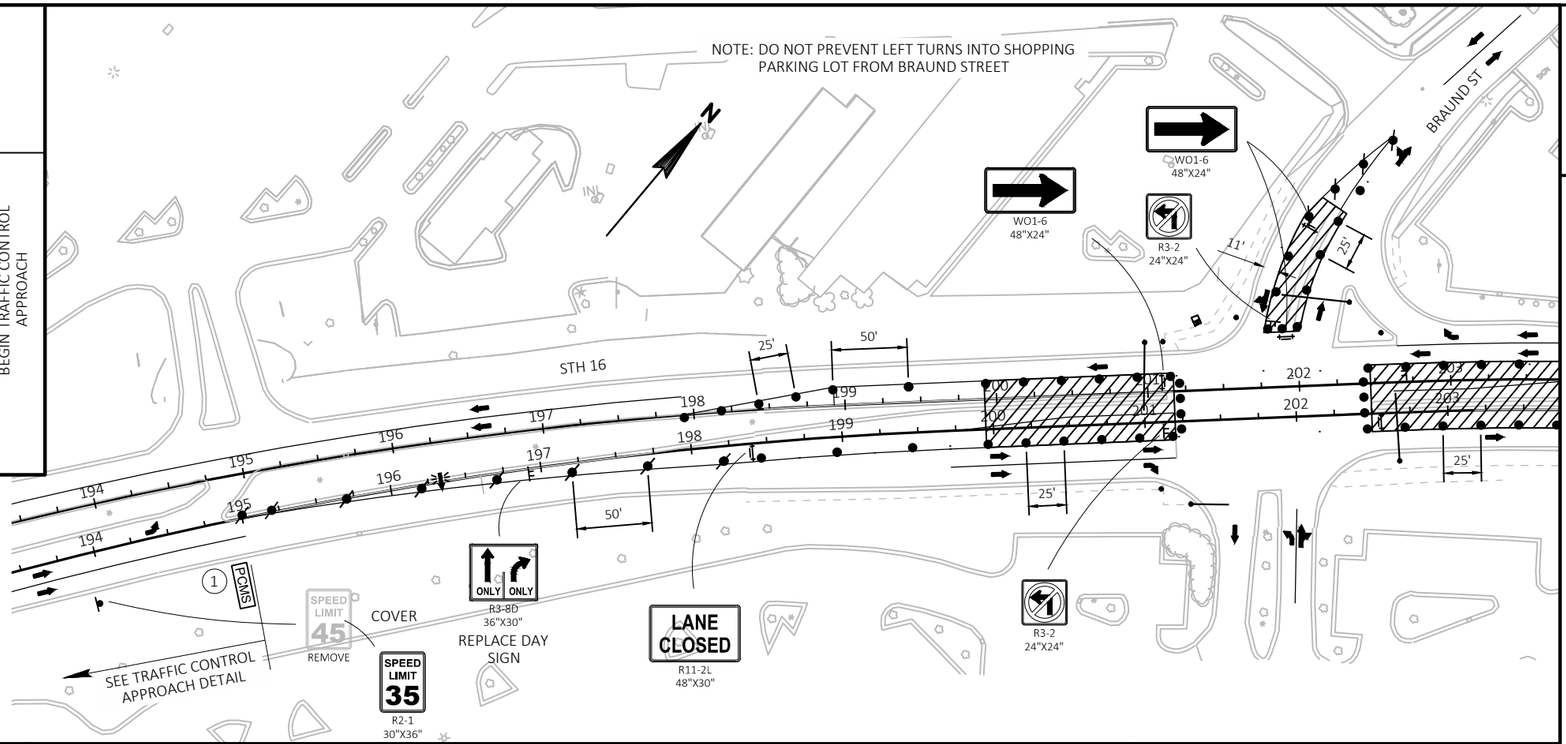


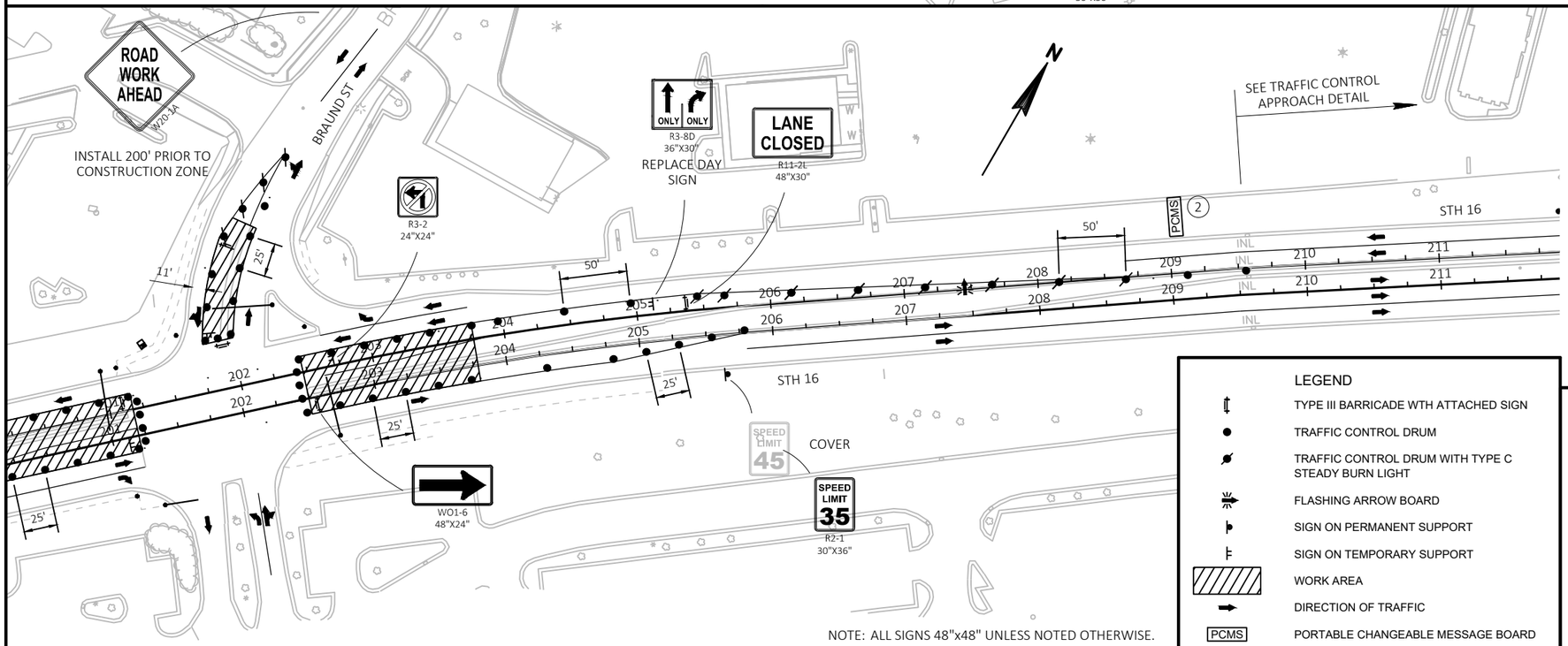
STAGE 2A NIGHT
TRAFFIC CONTROL TYPICAL SECTION
STH 16 AND CTH OS/N KINNEY COULEE RD INTERSECTION
STA 267+00 TO STA 268+25

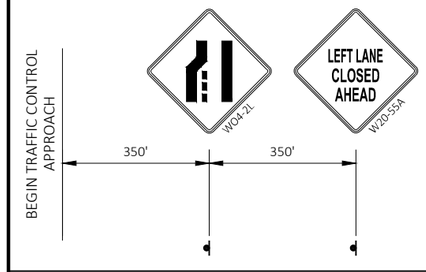
2



TRAFFIC CONTROL APPROACH DETAIL







TRAFFIC CONTROL APPROACH DETAIL

LEGEND

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

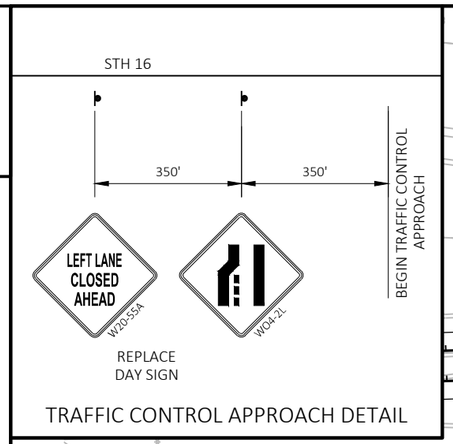
1	2
PORTABLE CHANGEABLE MESSAGE SIGN	PORTABLE CHANGEABLE MESSAGE SIGN
PHASE 1	PHASE 1
NO LEFT TURN BRAUND	NO LEFT TURN MALL

PCMS ARE TO BE PLACED ONLY ON DAYS THE LEFT TURNS ARE TO BE CLOSED.

NOTE: ALL SIGNS 48"x48" UNLESS NOTED OTHERWISE.

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC CONTROL STAGE 2A - (NIGHT TIME CONFIGURATION)	SHEET 60	E

FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\025014_TC_2A NIGHT.DWG
LAYOUT NAME - 025014_tc
PLOT DATE : 7/29/2020 3:40 PM PLOT BY : JEFF BREU PLOT NAME : PLOT SCALE : ######



TRAFFIC CONTROL APPROACH DETAIL

2

COVER

SPEED LIMIT 35
R2-1
30"X36"

SPEED LIMIT 45

I90 WB RAMPS

STH 16

LANE CLOSED
R11-2L
48"X30"

WO1-6
48"X24"

CTH OS

25'

SEE TRAFFIC CONTROL APPROACH DETAIL

50'

LANE CLOSED
R11-2L
48"X30"

I90 WB RAMPS

ONLY
R3-8A
36"X30"
REPLACE DAY SIGN

LANE CLOSED
R11-2L
48"X30"

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

LEFT TURN ONLY
R3-5L
24"X30"

WO1-4L
REPLACE DAY SIGN

N KINNEY COULEE RD

WB I90

EB I90

WO1-4R
REPLACE DAY SIGN

I90 WB RAMPS

N

CTH OS

R3-2
24"X24"

LANE CLOSED
R11-2L
48"X30"

ONLY ONLY
R3-8D
36"X30"
REPLACE DAY SIGN

INL INL

SEE TRAFFIC CONTROL APPROACH DETAIL

COVER

SPEED LIMIT 35
R2-1
30"X36"

SPEED LIMIT 45

PCMS 3

STH 16

50'

25'

50'

25'

WO1-6
48"X24"

N KINNEY COULEE RD

N

NOTE: ALL SIGNS 48"x48" UNLESS NOTED OTHERWISE.

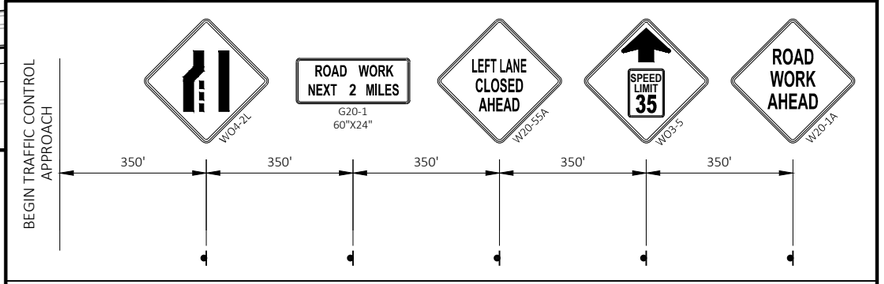
3

PORTABLE CHANGEABLE MESSAGE SIGN
PHASE 1
NO TURN N KINNEY COULEE

PCMS ARE TO BE PLACED ONLY ON DAYS THE LEFT TURNS ARE TO BE CLOSED.

LEGEND

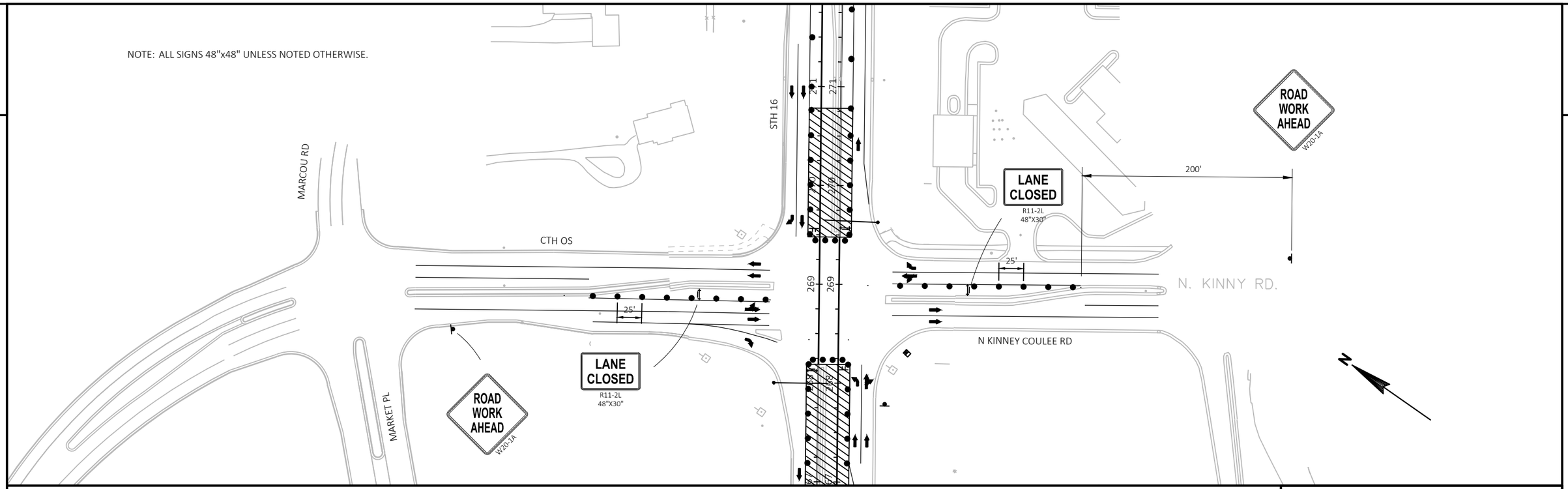
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PCMS — PORTABLE CHANGEABLE MESSAGE BOARD



TRAFFIC CONTROL APPROACH DETAIL

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC CONTROL STAGE 2A - (NIGHT TIME CONFIGURATION)	SHEET 61	E

NOTE: ALL SIGNS 48"x48" UNLESS NOTED OTHERWISE.



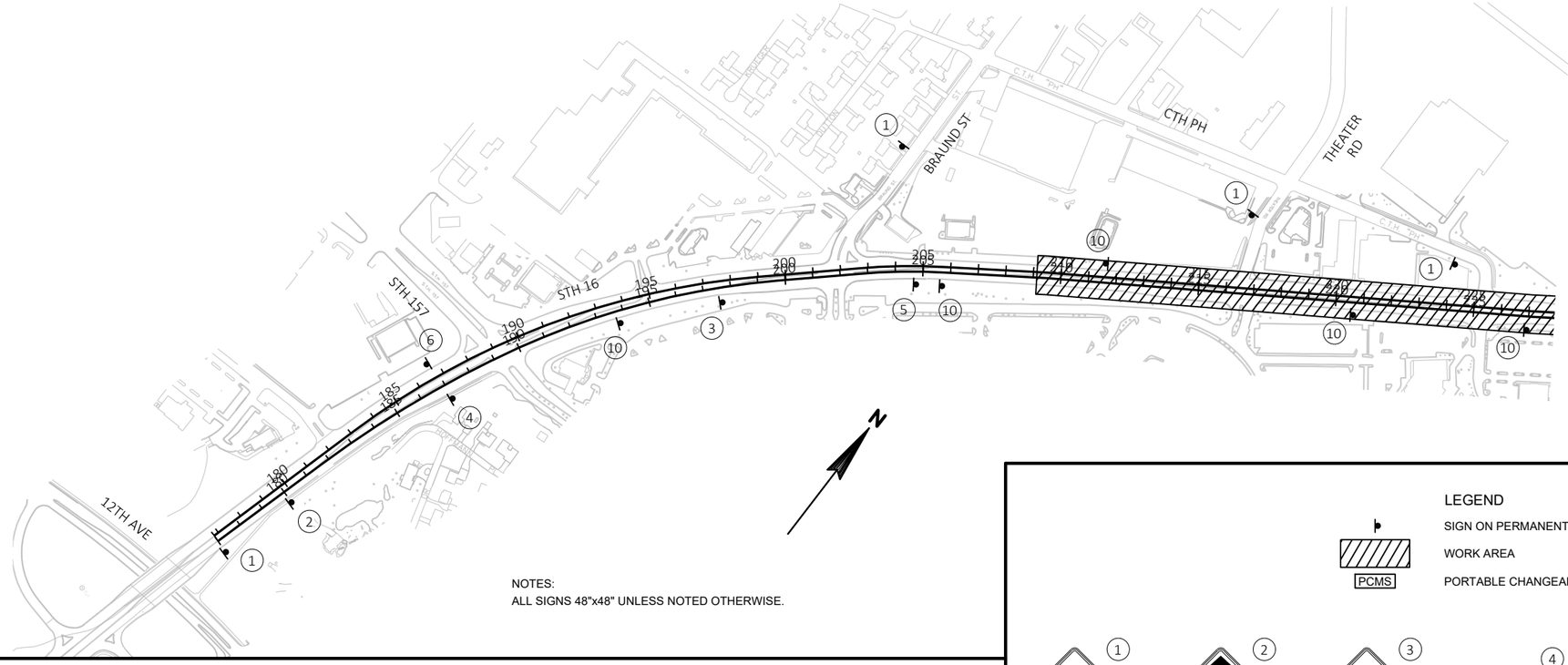
LEGEND

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

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC CONTROL STAGE 2A - (NIGHT TIME CONFIGURATION)	SHEET 62	E

FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\025016_TC_2A NIGHT.DWG
LAYOUT NAME - 025016_tc
PLOT DATE : 7/23/2020 2:17 PM PLOT BY : JEFF BREU PLOT NAME : PLOT SCALE : #######

2



NOTES:
ALL SIGNS 48"x48" UNLESS NOTED OTHERWISE.

LEGEND

SIGN ON PERMANENT SUPPORT

WORK AREA

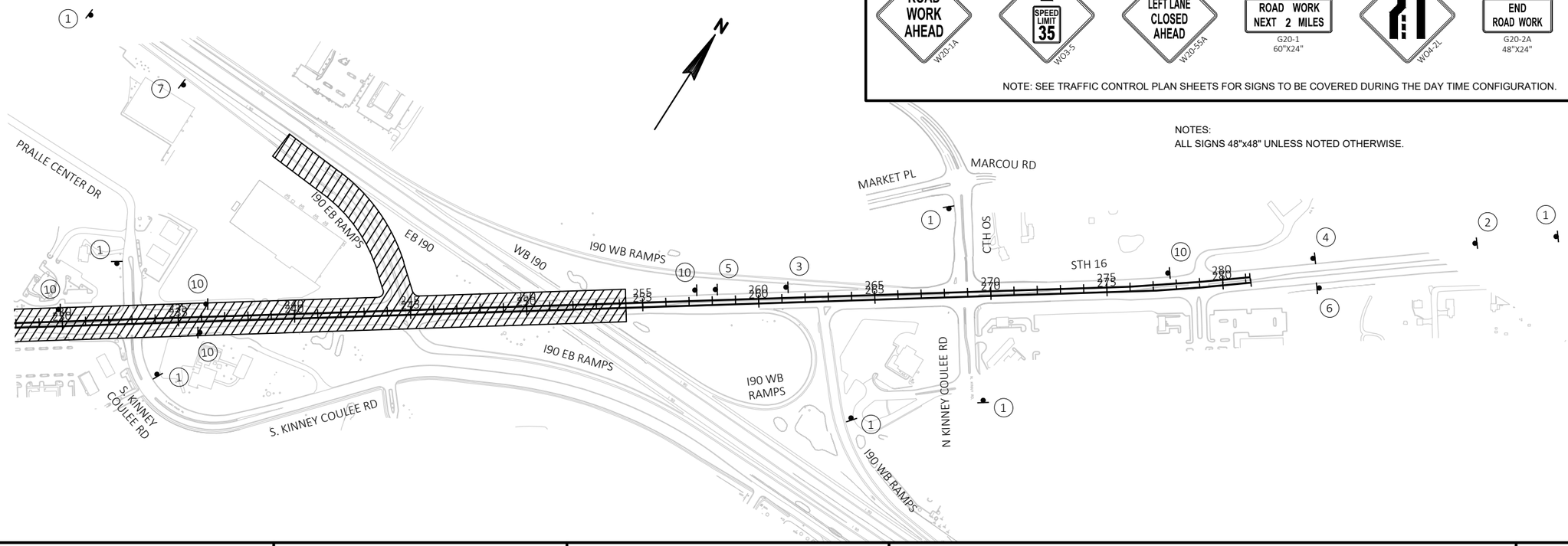
PCMS PORTABLE CHANGEABLE MESSAGE BOARD

COVER (10)

SPEED LIMIT 45 / SPEED LIMIT 35 — R2-1 30"X36"

1. ROAD WORK AHEAD — W20-1A
2. SPEED LIMIT 35 — W03-5
3. LEFT LANE CLOSED AHEAD — W20-5SA
4. ROAD WORK NEXT 2 MILES — G20-1 60"X24"
5. W04-2L
6. END ROAD WORK — G20-2A 48"X24"
7. ROAD WORK 500 FT — W20-1D

NOTE: SEE TRAFFIC CONTROL PLAN SHEETS FOR SIGNS TO BE COVERED DURING THE DAY TIME CONFIGURATION.

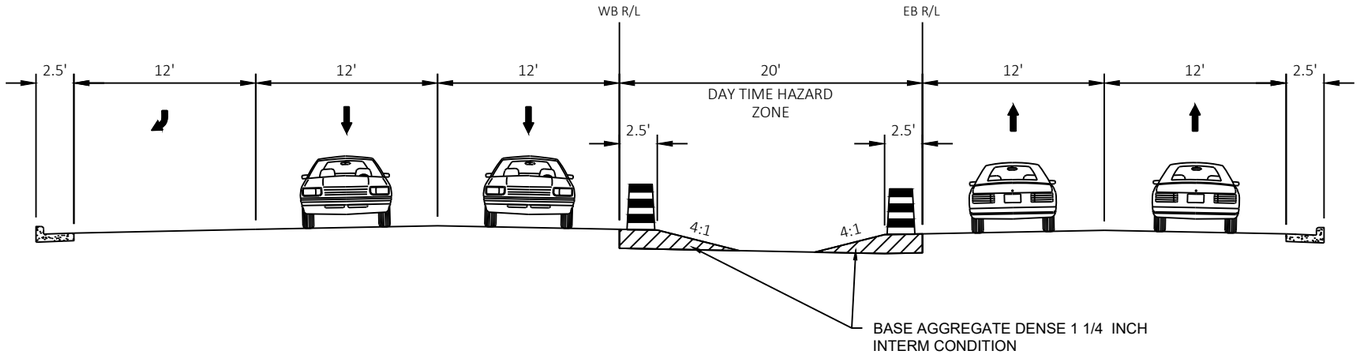


NOTES:
ALL SIGNS 48"x48" UNLESS NOTED OTHERWISE.

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC CONTROL STAGE 2B - (APPROACH OVERVIEW)	SHEET 63	E

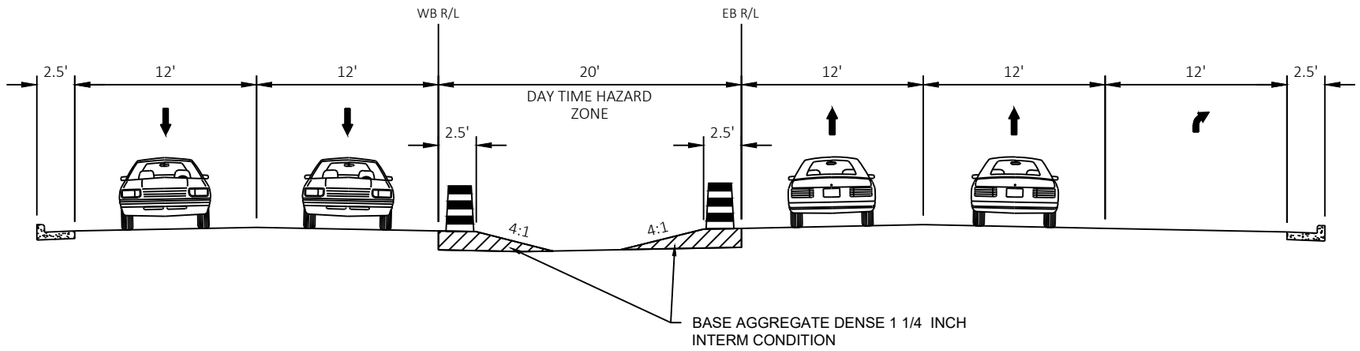
FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\025020_TC_OVERVIEW_2B.DWG
LAYOUT NAME - 025020_tc
PLOT DATE : 7/23/2020 2:18 PM
PLOT BY : JEFF BREU
PLOT NAME :
PLOT SCALE : ######
WISDOT/CADDS SHEET 42

2



STAGE 2B DAY
TRAFFIC CONTROL TYPICAL SECTION
STH 16 AND THEATER RD INTERSECTION

STA 217+25 TO STA 218+15

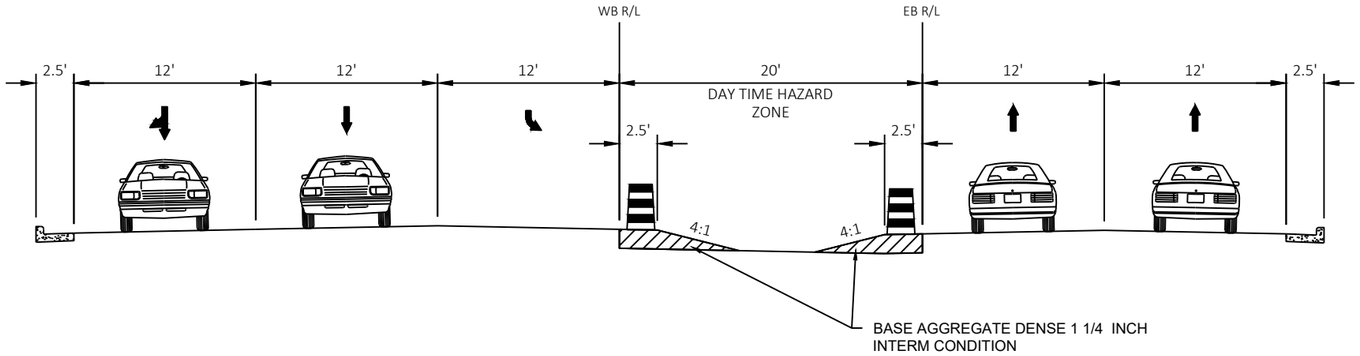


STAGE 2B DAY
TRAFFIC CONTROL TYPICAL SECTION
STH 16 AND THEATER RD INTERSECTION

STA 214+75 TO STA 216+00

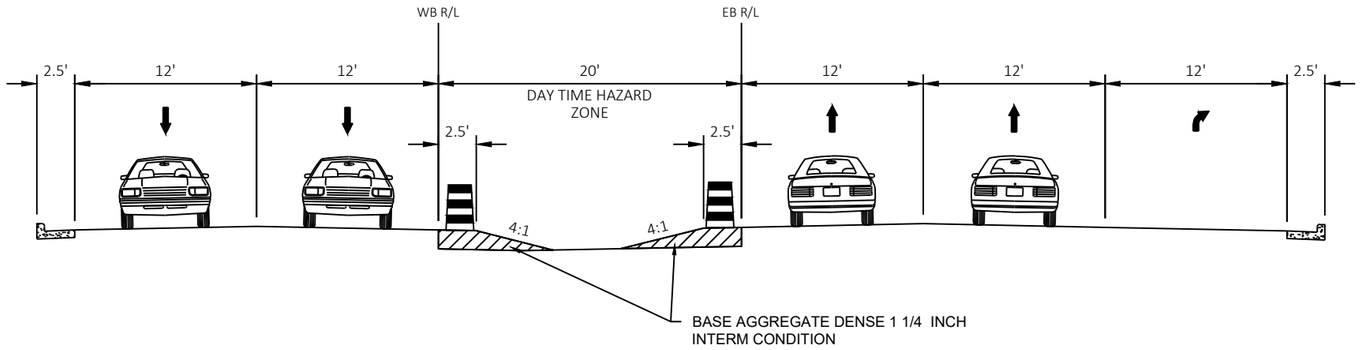
PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC CONTROL STAGE 2B TYPICAL SECTIONS (DAY TIME CONFIGURATION)	SHEET 64	E

2



STAGE 2B DAY
TRAFFIC CONTROL TYPICAL SECTION
STH 16 AND PRALLE CENTER DR/S KINNEY COULEE RD INTERSECTION

STA 233+50 TO STA 234+75



STAGE 2B DAY
TRAFFIC CONTROL TYPICAL SECTION
STH 16 AND PRALLE CENTER DR/S KINNEY COULEE RD INTERSECTION

STA 231+25 TO STA 232+75

2

END ROAD WORK
G20-2A
48"X24"

STH 16

350' 700' 350' 350'

USE SAME LOCATION AS STAGE 2A.

ROAD WORK AHEAD W20-1A

SPEED LIMIT 35 W03-5

ROAD WORK NEXT 2 MILES
G20-1
60"X24"

LEFT LANE CLOSED AHEAD W20-5A

W04-2L

COVER DURING THE DAY

COVER DURING THE DAY

BEGIN TRAFFIC CONTROL APPROACH

TRAFFIC CONTROL APPROACH DETAIL

NOTE: ALL SIGNS 48"x48" UNLESS NOTED OTHERWISE.

LEGEND

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

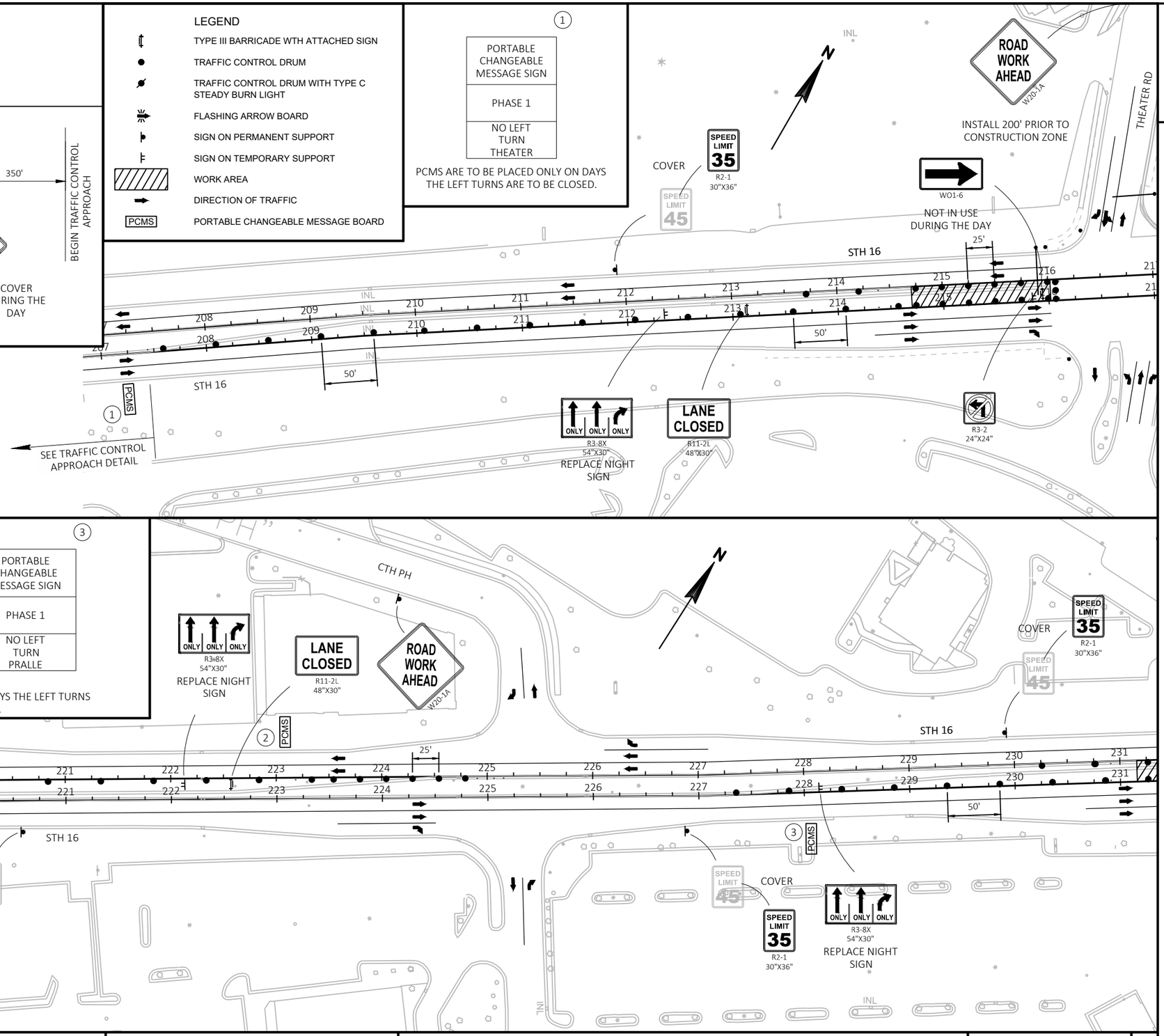
① PORTABLE CHANGEABLE MESSAGE SIGN | PHASE 1 | NO LEFT TURN THEATER

PCMS ARE TO BE PLACED ONLY ON DAYS THE LEFT TURNS ARE TO BE CLOSED.

② PORTABLE CHANGEABLE MESSAGE SIGN | PHASE 1 | NO LEFT TURN MALL

③ PORTABLE CHANGEABLE MESSAGE SIGN | PHASE 1 | NO LEFT TURN PRALLE

PCMS ARE TO BE PLACED ONLY ON DAYS THE LEFT TURNS ARE TO BE CLOSED.



PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC CONTROL STAGE 2B - (DAY TIME CONFIGURATION)	SHEET 66	E

FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\025021_TC_2B DAY.DWG
LAYOUT NAME - 025021_tc
PLOT DATE : 7/29/2020 3:43 PM PLOT BY : JEFF BREU PLOT NAME : PLOT SCALE : ######
WISDOT/CADDS SHEET 42

2

ROAD WORK AHEAD
W20-1A

PRALLE CENTER DR

SPEED LIMIT 35
R2-1
30"X36"

COVER

SPEED LIMIT 45

WO1-6

NOT IN USE DURING THE DAY

LEFT TURN ONLY
R3-53L
24"X30"

LANE CLOSED
R11-2L
48"X30"

WO1-6
48"X24"

ONLY ONLY
R3-8M
54"X30"

REPLACE NIGHT SIGN

WO1-4C
48"X48"

REPLACE NIGHT SIGN

I90 EB RAMPS

STH 16

25'

230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245

REMOVE PAVEMENT MARKING

TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE 4-INCH EDGE LINE (WHITE)

TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE 4-INCH EDGE LINE (YELLOW)

R3-2
24"X24"

S. KINNEY COULEE RD

INSTALL 200' PRIOR TO CONSTRUCTION ZONE

N

I90 EB RAMPS

STH 16

244 245 246 247 248 249 250 251 252 253 254 255

WB I90

EB I90

I90 EB RAMPS

NOTE: ALL SIGNS 48"x48" UNLESS NOTED OTHERWISE.

SEE TRAFFIC CONTROL APPROACH DETAIL

TRAFFIC CONTROL APPROACH DETAIL

BEGIN TRAFFIC CONTROL APPROACH

COVER DURING THE DAY

W04-2L

LEFT LANE CLOSED AHEAD
W20-5SA

COVER DURING THE DAY

ROAD WORK NEXT 2 MILES
G20-1
60"X24"

SPEED LIMIT 35
W03-5

ROAD WORK AHEAD
W20-1A

350' 700'

USE SAME LOCATION AS STAGE 2A.

700' 350'

STH 16

END ROAD WORK
G20-2A
48"X24"

LEGEND

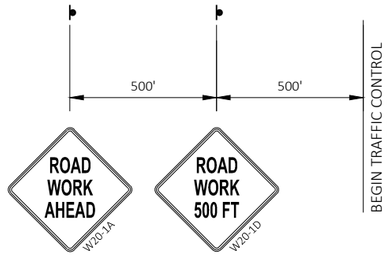
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PCMS — PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC CONTROL STAGE 2B - (DAY TIME CONFIGURATION)	SHEET 67	E

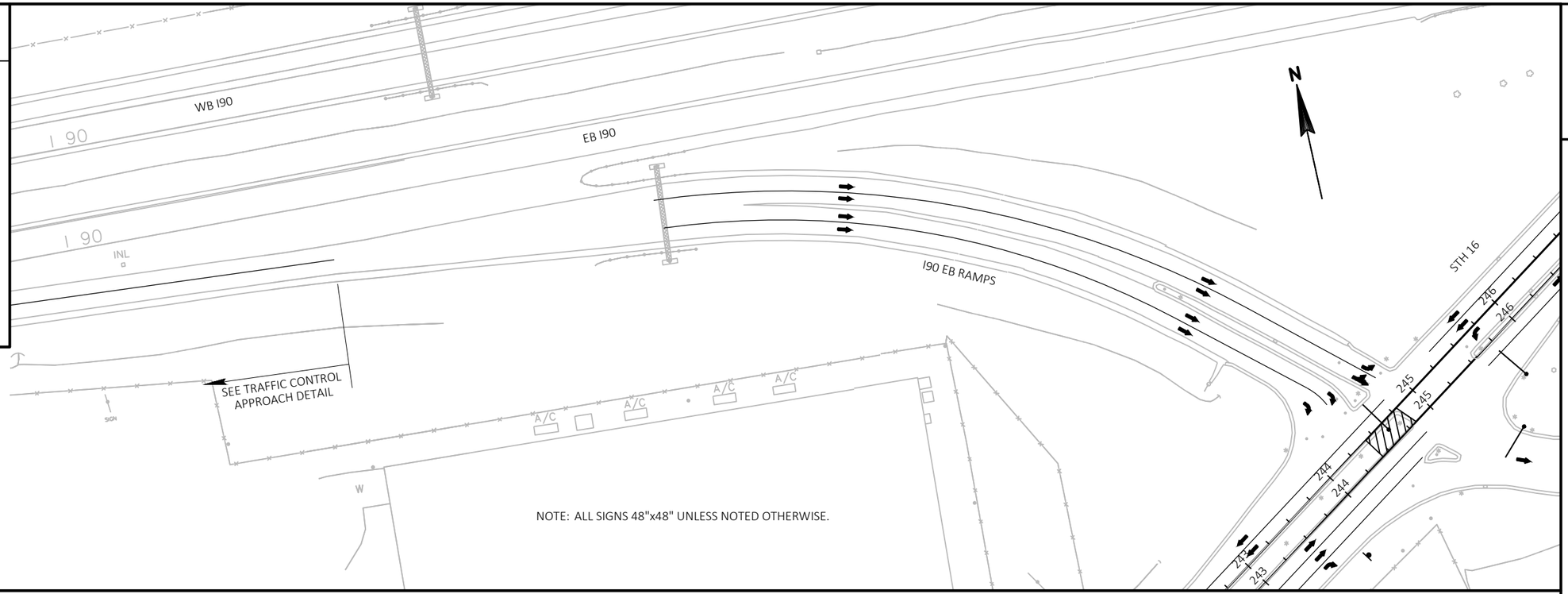
FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\025021_TC_2B DAY.DWG
LAYOUT NAME - 025022_tc
PLOT DATE : 7/23/2020 2:28 PM PLOT BY : JEFF BREU PLOT NAME : PLOT SCALE : ######
WISDOT/CADDS SHEET 42

2

I90 EB RAMPS



TRAFFIC CONTROL APPROACH DETAIL



NOTE: ALL SIGNS 48"x48" UNLESS NOTED OTHERWISE.

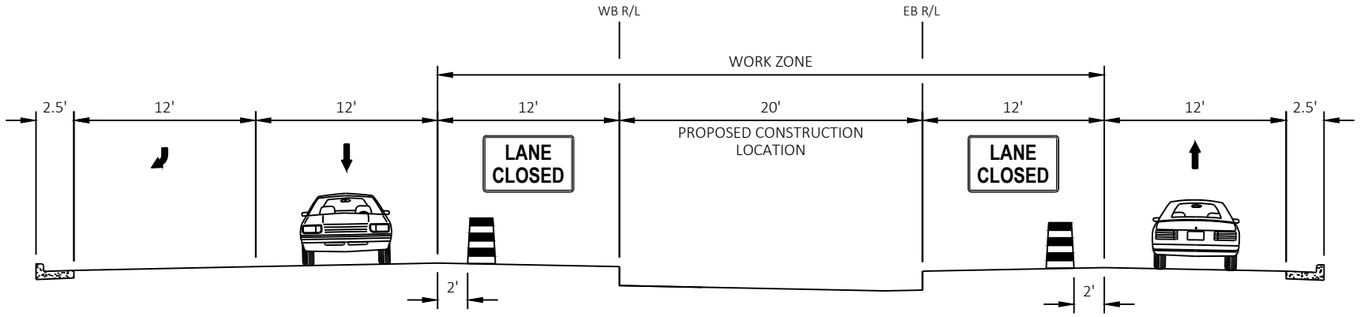
2

LEGEND

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

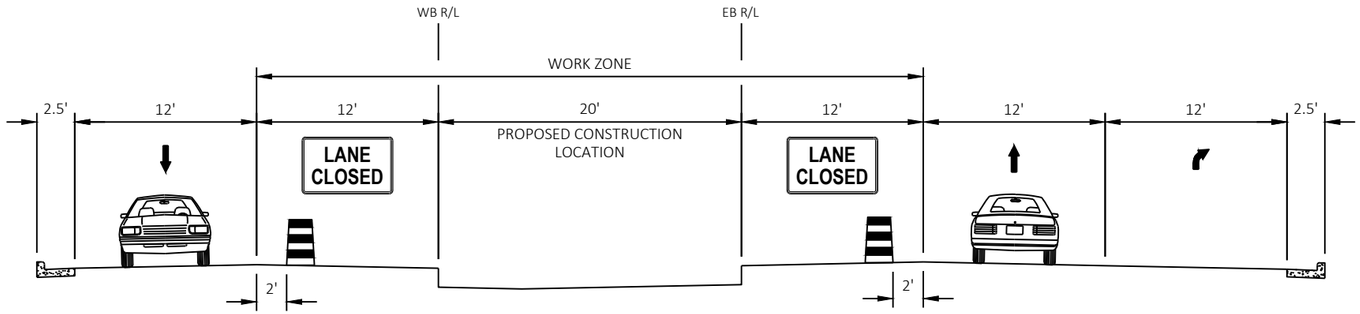
PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC CONTROL STAGE 2B - (DAY TIME CONFIGURATION)	SHEET 68	E

2



STAGE 2B NIGHT
TRAFFIC CONTROL TYPICAL SECTION
STH 16 AND THEATER RD INTERSECTION

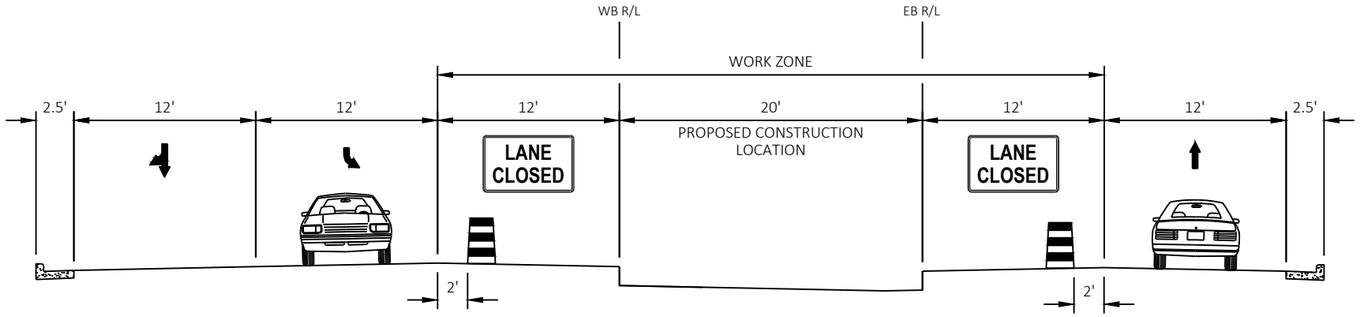
STA 217+25 TO STA 218+15



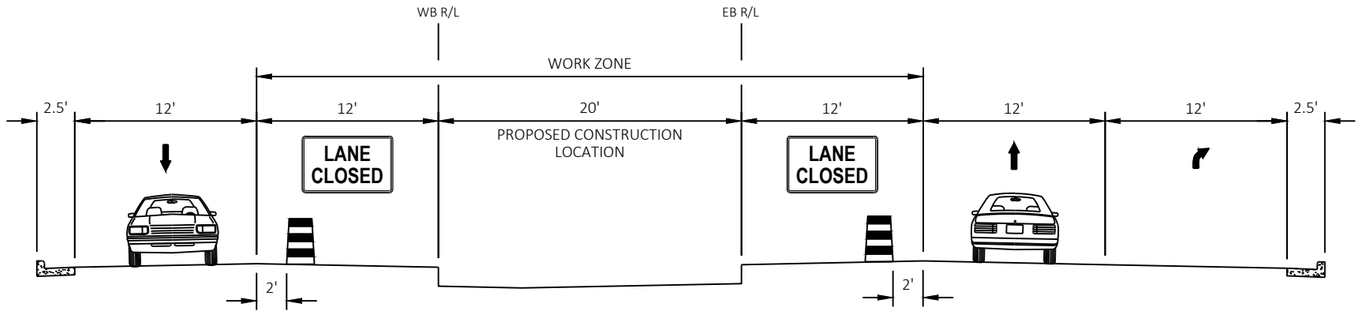
STAGE 2B NIGHT
TRAFFIC CONTROL TYPICAL SECTION
STH 16 AND THEATER RD INTERSECTION

STA 214+75 TO STA 216+00

2



STAGE 2B NIGHT
TRAFFIC CONTROL TYPICAL SECTION
STH 16 AND PRALLE CENTER DR/S KINNEY COULEE RD INTERSECTION
STA 233+50 TO STA 234+75



STAGE 2B NIGHT
TRAFFIC CONTROL TYPICAL SECTION
STH 16 AND PRALLE CENTER DR/S KINNEY COULEE RD INTERSECTION
STA 231+25 TO STA 232+75

2

END ROAD WORK
G20-2A
48"X24"

STH 16

350' 700' 350' 350'

USE SAME LOCATION AS STAGE 2A.

ROAD WORK AHEAD W20-1A | SPEED LIMIT 35 W03-5 | ROAD WORK NEXT 2 MILES G20-1 60"X24" | LEFT LANE CLOSED AHEAD W20-5A | W04-2L

BEGIN TRAFFIC CONTROL APPROACH

TRAFFIC CONTROL APPROACH DETAIL

NOTE: ALL SIGNS 48"x48" UNLESS NOTED OTHERWISE.

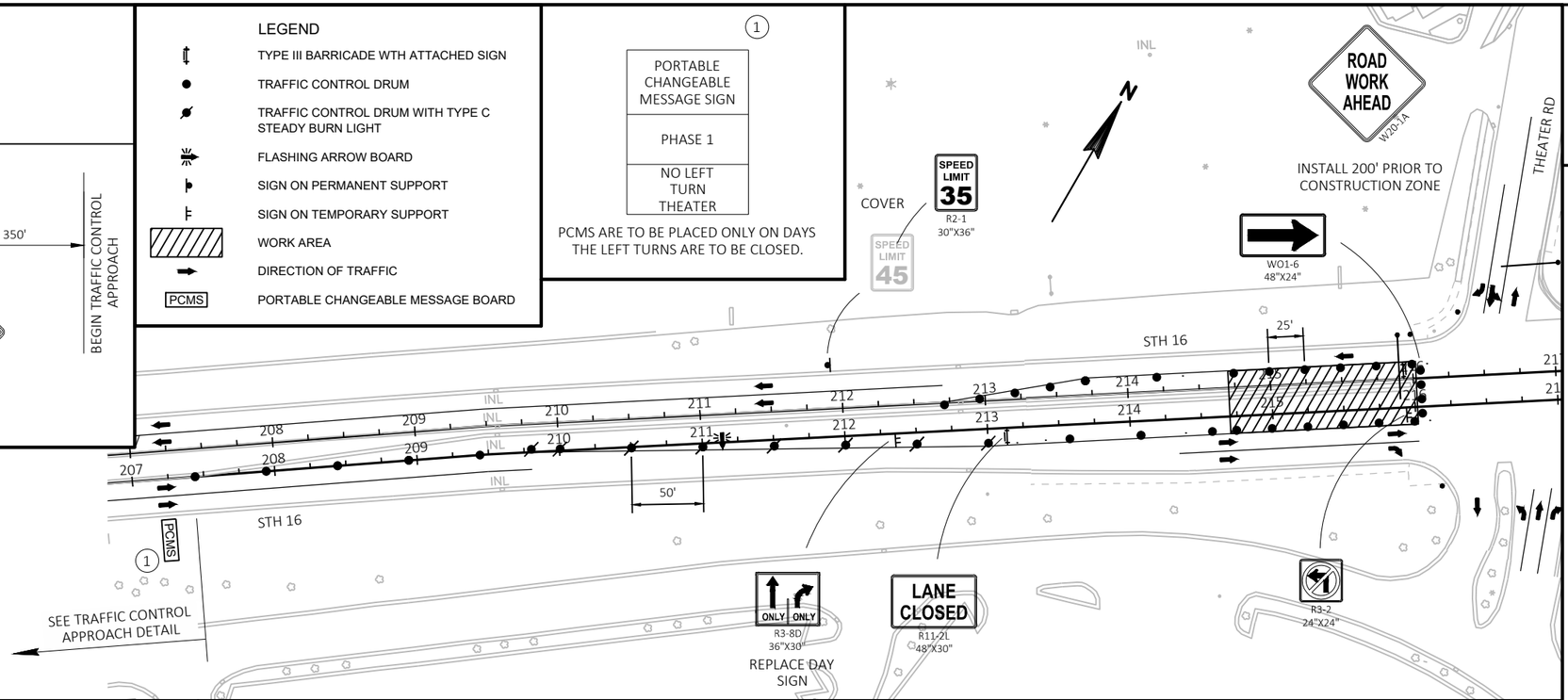
LEGEND

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

(1)

PORTABLE CHANGEABLE MESSAGE SIGN
PHASE 1
NO LEFT TURN THEATER

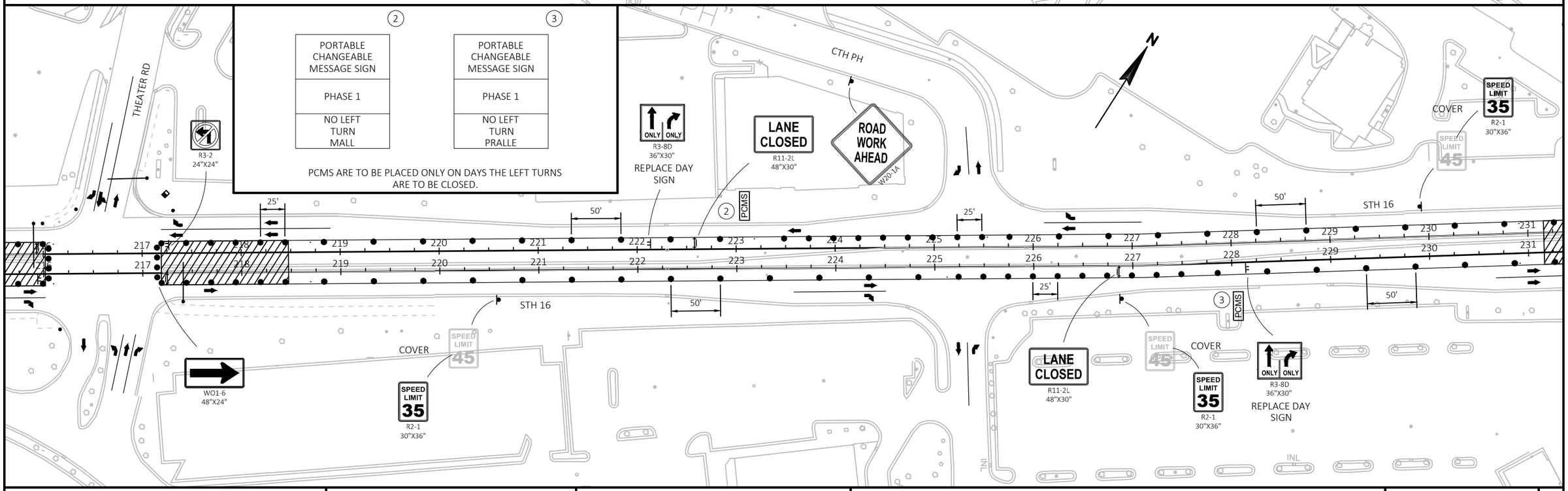
PCMS ARE TO BE PLACED ONLY ON DAYS THE LEFT TURNS ARE TO BE CLOSED.



(2) (3)

PORTABLE CHANGEABLE MESSAGE SIGN	PORTABLE CHANGEABLE MESSAGE SIGN
PHASE 1	PHASE 1
NO LEFT TURN MALL	NO LEFT TURN PRALLE

PCMS ARE TO BE PLACED ONLY ON DAYS THE LEFT TURNS ARE TO BE CLOSED.



PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC CONTROL STAGE 2B - (NIGHT TIME CONFIGURATION)	SHEET 71	E

FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\025024_TC_2B NIGHT.DWG
LAYOUT NAME - 025024_tc
PLOT DATE : 7/29/2020 3:45 PM PLOT BY : JEFF BREU PLOT NAME : PLOT SCALE : ######
WISDOT/CADDS SHEET 42

2

2

ROAD WORK AHEAD
W20-1A

PRALLE CENTER DR

SPEED LIMIT 35
R2-1
30"X36"

COVER

SPEED LIMIT 45

WO1-6
48"X24"

LEFT TURN ONLY
R3-53L
24"X30"

LANE CLOSED
R11-2L
48"X30"

BEGIN LEFT TURN LANE
R3-20L

WO1-4R

REPLACE DAY SIGN

ONLY
R3-8A
36"X30"

I90 EB RAMPS

STH 16

25'

50'

230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245

R3-2
24"X24"

S. KINNEY COULEE RD

INSTALL 200' PRIOR TO CONSTRUCTION ZONE

N

EB I90

WB I90

I90 EB RAMPS

SEE TRAFFIC CONTROL APPROACH DETAIL

NOTE: ALL SIGNS 48"x48" UNLESS NOTED OTHERWISE.

TRAFFIC CONTROL APPROACH DETAIL

BEGIN TRAFFIC CONTROL APPROACH

W04-2L

LEFT LANE CLOSED AHEAD
W20-5SA

ROAD WORK NEXT 2 MILES
G20-1
60"X24"

SPEED LIMIT 35
W03-5

ROAD WORK AHEAD
W20-1A

350' 350'

USE SAME LOCATION AS STAGE 2A.
700' 350'

STH 16

END ROAD WORK
G20-2A
48"X24"

LEGEND

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

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC CONTROL STAGE 2B - (NIGHT TIME CONFIGURATION)	SHEET 72	E

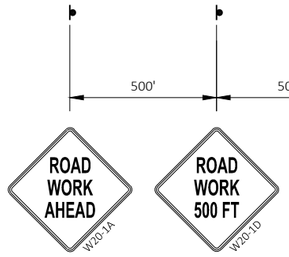
FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\025024_TC_2B NIGHT.DWG
LAYOUT NAME - 025025_tc

PLOT DATE : 7/23/2020 2:31 PM PLOT BY : JEFF BREU PLOT NAME : PLOT SCALE : ######

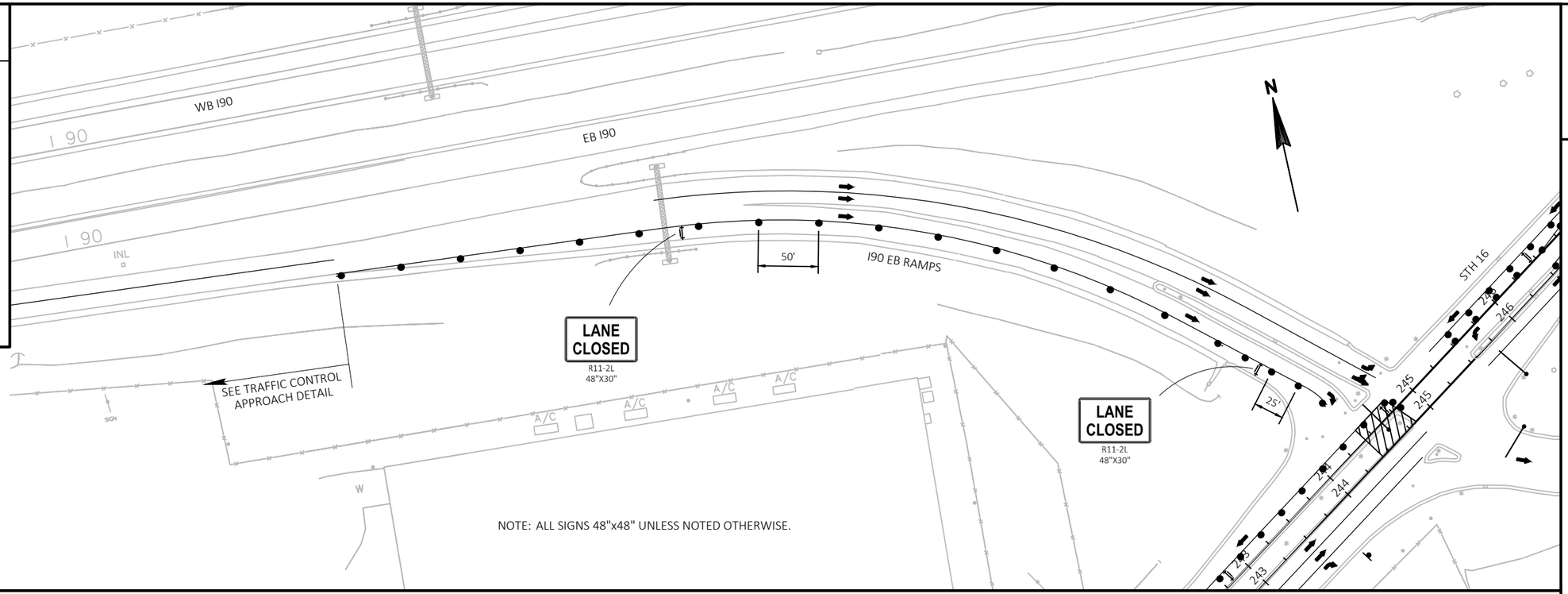
WISDOT/CADDS SHEET 42

2

I90 EB RAMPS



TRAFFIC CONTROL APPROACH DETAIL



NOTE: ALL SIGNS 48"x48" UNLESS NOTED OTHERWISE.

2

LEGEND

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

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	TRAFFIC CONTROL STAGE 2B - (NIGHT TIME CONFIGURATION)	SHEET 73	E

2

PI STA = 185+32.21
Y = 151033.788
X = 457920.492
DELTA = 10°21'38"
D = 1°26'16"
T = 361.28'
L = 720.59'
R = 3985.00'
PC STA = 181+70.93
Y = 150686.421
X = 457821.203
PT STA = 188+91.51
Y = 151357.637
X = 458080.632

PI STA = 194+41.45
Y = 151850.595
X = 458324.396
DELTA = 21°20'00"
D = 1°59'30"
T = 541.84'
L = 1071.13'
R = 2876.79'
PC STA = 188+99.61
Y = 151364.893
X = 458084.220
PT STA = 199+70.74
Y = 152215.642
X = 458724.810

PI STA = 11+11.00
Y = 152445.869
X = 458812.688
DELTA = 45°56'13"
D = 26°42'41"
T = 90.91'
L = 171.98'
R = 214.50'
PC STA = 10+20.09
Y = 152376.604
X = 458871.570
PT STA = 11+92.06
Y = 152536.350
X = 458821.510

PI STA = 204+22.56
Y = 152520.043
X = 459058.701
DELTA = 7°59'20"
D = 2°32'07"
T = 157.80'
L = 315.10'
R = 2259.83'
PC STA = 202+64.76
Y = 152413.728
X = 458942.086
PT STA = 205+79.86
Y = 152609.119
X = 459188.961

BEGIN PROJECT 7575-00-71
STA. 199+98.00
Y = 152,234.00
X = 458,744.95

BP: 177+01.32
Y = 150234.901
X = 457692.145
N15° 57' 06"E
PC: 181+70.93
PI: 185+23.21
PT: 188+91.51
PC: 188+99.61
N26° 18' 43"E
PI: 194+41.45
EB STH 16 R/L
PT: 199+70.74
PC: 10+20.09
BP: 10+00.00
Y = 152361.300
X = 458884.580
PI: 11+11.00
N5° 34' 08"E
EP: 12+73.77
Y = 152617.675
X = 458829.439
PT: 11+92.06
BRAUND ST R/L
N40° 22' 04"W
PC: 202+64.76
PI: 204+22.56
PT: 205+79.86
N55° 38' 03"E
MATCH LINE STA 207+00.00
180
185
190
195
200
205

N

MATCH LINE STA 207+00.00
PI: 209+49.05
Y = 152817.518
X = 459493.711
N55° 38' 03"E
210
215
EP: 11+98.73
Y = 153402.870
X = 460003.280
THEATER RD R/L
BP: 10+00.00
Y = 153217.020
X = 460073.669
N20° 44' 37"W
220
N57° 03' 59"E
225
EB STH 16 R/L
PI: 227+09.60
Y = 153774.668
X = 460971.345
230
235
MATCH LINE STA 236+00.00

N

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	ALIGNMENTS	SHEET 74	E

FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - 027201_ad
PLOT DATE : 7/31/2020 8:58 AM
PLOT BY : JEFF BREU
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2

2

MATCH LINE STA 236+00.00

240

245

N55° 38' 04"E

250

255

260

EB STH 16 R/L

MATCH LINE STA 263+00.00

MATCH LINE STA 263+00.00

265

N55° 38' 04"E

270

275

PI: 277+12.88
Y = 156598.877
X = 465101.315

PI: 279+03.87
Y = 156712.273
X = 465255.000

EP: 281+21.55
Y = 156846.080
X = 465426.699

280

N53° 34' 43"E

N52° 04' 12"E

EB STH 16 R/L

END PROJECT 7575-00-71
STA. 270+90.00
Y = 156,247.28
X = 464,587.16

PROJECT NO: 7575-00-71 & 3700-10-83	HWY: STH 16	COUNTY: LA CROSSE	ALIGNMENTS	SHEET 75	E

FILE NAME : X:\3231000\180979.01\TECH\CAD\75750001\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - 027202_ad

PLOT DATE : 7/31/2020 8:58 AM PLOT BY : JEFF BREU PLOT NAME : PLOT SCALE : ##########

					3700-10-83	7575-00-71
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0002	204.0100	Removing Concrete Pavement	SY	2,052.000		2,052.000
0004	204.0110	Removing Asphaltic Surface	SY	50.000		50.000
0006	204.0130	Removing Curb	LF	190.000		190.000
0008	204.0150	Removing Curb & Gutter	LF	903.000		903.000
0010	204.0155	Removing Concrete Sidewalk	SY	564.000	42.000	522.000
0012	204.0195	Removing Concrete Bases	EACH	38.000	8.000	30.000
0014	204.0220	Removing Inlets	EACH	10.000		10.000
0016	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	8.000		8.000
0018	204.0245	Removing Storm Sewer (size) 02. 15-Inch	LF	32.000		32.000
0020	204.0245	Removing Storm Sewer (size) 03. 18-Inch	LF	64.000		64.000
0022	205.0100	Excavation Common	CY	230.000		230.000
0024	213.0100	Finishing Roadway (project) 01. 7575-00-71	EACH	1.000		1.000
0026	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	475.000		475.000
0028	415.1090	Concrete Pavement HES 9-Inch	SY	2,001.000		2,001.000
0030	415.5110.S	Concrete Pavement Joint Layout 01. STH 16 & Braund St	LS	1.000		1.000
0032	415.5110.S	Concrete Pavement Joint Layout 02. STH 16 & Theater Rd	LS	1.000		1.000
0034	415.5110.S	Concrete Pavement Joint Layout 03. STH 16 & Pralle Center	LS	1.000		1.000
0036	415.5110.S	Concrete Pavement Joint Layout 04. STH 16 & CTH OS	LS	1.000		1.000
0038	416.0610	Drilled Tie Bars	EACH	880.000		880.000
0040	416.0620	Drilled Dowel Bars	EACH	256.000		256.000
0042	416.1725	Concrete Pavement Replacement SHES	SY	273.000		273.000
0044	455.0605	Tack Coat	GAL	10.000		10.000
0046	465.0105	Asphaltic Surface	TON	30.000		30.000
0048	511.1100	Temporary Shoring	SF	360.000		360.000
0050	520.8000	Concrete Collars for Pipe	EACH	9.000		9.000
0052	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	96.000		96.000
0054	602.0405	Concrete Sidewalk 4-Inch	SF	1,812.000	378.000	1,434.000
0056	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	20.000		20.000
0058	602.2400	Concrete Safety Islands	SF	3,230.000		3,230.000
0060	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	60.000		60.000
0062	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	18.000		18.000
0064	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	30.000		30.000
0066	611.0606	Inlet Covers Type B	EACH	10.000		10.000
0068	611.0624	Inlet Covers Type H	EACH	1.000		1.000
0070	611.3220	Inlets 2x2-FT	EACH	10.000		10.000

					3700-10-83	7575-00-71
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0072	611.3230	Inlets 2x3-FT	EACH	1.000		1.000
0074	611.8110	Adjusting Manhole Covers	EACH	2.000		2.000
0076	618.0100	Maintenance And Repair of Haul Roads (project) 01. 7575-00-71	EACH	1.000		1.000
0078	619.1000	Mobilization	EACH	1.000		1.000
0080	620.0300	Concrete Median Sloped Nose	SF	74.000		74.000
0082	624.0100	Water	MGAL	9.500		9.500
0084	625.0500	Salvaged Topsoil	SY	525.000		525.000
0086	628.1504	Silt Fence	LF	185.000		185.000
0088	628.1520	Silt Fence Maintenance	LF	370.000		370.000
0090	628.1905	Mobilizations Erosion Control	EACH	3.000		3.000
0092	628.1910	Mobilizations Emergency Erosion Control	EACH	1.000		1.000
0094	628.2006	Erosion Mat Urban Class I Type A	SY	525.000		525.000
0096	628.7010	Inlet Protection Type B	EACH	10.000		10.000
0098	628.7015	Inlet Protection Type C	EACH	36.000		36.000
0100	628.7570	Rock Bags	EACH	15.000		15.000
0102	629.0210	Fertilizer Type B	CWT	0.500		0.500
0104	630.0130	Seeding Mixture No. 30	LB	10.000		10.000
0106	630.0200	Seeding Temporary	LB	4.000		4.000
0108	630.0500	Seed Water	MGAL	15.000		15.000
0110	633.5350	Markers Permanent Flexible	EACH	8.000		8.000
0112	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	14.000		14.000
0114	636.0100	Sign Supports Concrete Masonry	CY	13.000		13.000
0116	636.1000	Sign Supports Steel Reinforcement HS	LB	1,755.000		1,755.000
0118	637.1220	Signs Type I Reflective SH	SF	136.000		136.000
0120	637.2210	Signs Type II Reflective H	SF	73.750		73.750
0122	638.2102	Moving Signs Type II	EACH	15.000	4.000	11.000
0124	638.2602	Removing Signs Type II	EACH	22.000		22.000
0126	638.3000	Removing Small Sign Supports	EACH	3.000		3.000
0128	641.1200	Sign Bridge Cantilevered (structure) 01. S-32-45	LS	1.000		1.000
0130	642.5001	Field Office Type B	EACH	1.000		1.000
0132	643.0300	Traffic Control Drums	DAY	16,300.000		16,300.000
0134	643.0420	Traffic Control Barricades Type III	DAY	1,100.000		1,100.000
0136	643.0705	Traffic Control Warning Lights Type A	DAY	2,000.000		2,000.000
0138	643.0715	Traffic Control Warning Lights Type C	DAY	1,700.000		1,700.000
0140	643.0800	Traffic Control Arrow Boards	DAY	125.000		125.000
0142	643.0900	Traffic Control Signs	DAY	3,800.000		3,800.000
0144	643.1050	Traffic Control Signs PCMS	DAY	158.000		158.000
0146	643.5000	Traffic Control	EACH	1.000		1.000
0148	644.1420	Temporary Pedestrian Surface Plywood	SF	700.000		700.000

					3700-10-83	7575-00-71
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0150	644.1601	Temporary Pedestrian Curb Ramp	DAY	5.000		5.000
0152	644.1810	Temporary Pedestrian Barricade	LF	50.000		50.000
0154	646.1020	Marking Line Epoxy 4-Inch	LF	2,850.000		2,850.000
0156	646.3020	Marking Line Epoxy 8-Inch	LF	2,680.000		2,680.000
0158	646.5020	Marking Arrow Epoxy	EACH	21.000		21.000
0160	646.5120	Marking Word Epoxy	EACH	6.000		6.000
0162	646.6120	Marking Stop Line Epoxy 18-Inch	LF	156.000		156.000
0164	646.7220	Marking Chevron Epoxy 24-Inch	LF	310.000		310.000
0166	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	232.000		232.000
0168	646.8120	Marking Curb Epoxy	LF	80.000		80.000
0170	646.8220	Marking Island Nose Epoxy	EACH	8.000		8.000
0172	646.9010	Marking Removal Line Water Blasting 4-Inch	LF	494.000		494.000
0174	646.9110	Marking Removal Line Water Blasting 8-Inch	LF	725.000		725.000
0176	646.9310	Marking Removal Special Marking Water Blasting	EACH	9.000		9.000
0178	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	1,100.000		1,100.000
0180	650.4000	Construction Staking Storm Sewer	EACH	11.000		11.000
0182	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	79.000		79.000
0184	650.7000	Construction Staking Concrete Pavement	LF	1,061.000		1,061.000
0186	650.8500	Construction Staking Electrical Installations (project) 01. 3700-10-83	LS	1.000	1.000	
0188	650.8500	Construction Staking Electrical Installations (project) 02. 7575-00-71	LS	1.000		1.000
0190	650.9000	Construction Staking Curb Ramps	EACH	1.000		1.000
0192	650.9910	Construction Staking Supplemental Control (project) 01. 3700-10-83	LS	1.000	1.000	
0194	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	896.000		896.000
0196	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	3,166.000	64.000	3,102.000
0198	652.0615	Conduit Special 3-Inch	LF	4,443.000		4,443.000
0200	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	57.000		57.000
0202	653.0900	Adjusting Pull Boxes	EACH	13.000	6.000	7.000
0204	653.0905	Removing Pull Boxes	EACH	58.000		58.000
0206	654.0101	Concrete Bases Type 1	EACH	8.000		8.000
0208	654.0102	Concrete Bases Type 2	EACH	3.000	1.000	2.000
0210	654.0110	Concrete Bases Type 10	EACH	4.000	4.000	
0212	654.0113	Concrete Bases Type 13	EACH	2.000		2.000
0214	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	4.000		4.000
0216	655.0210	Cable Traffic Signal 3-14 AWG	LF	90.000		90.000
0218	655.0230	Cable Traffic Signal 5-14 AWG	LF	2,993.000	710.000	2,283.000
0220	655.0240	Cable Traffic Signal 7-14 AWG	LF	1,834.000	678.000	1,156.000
0222	655.0260	Cable Traffic Signal 12-14 AWG	LF	7,457.000	117.000	7,340.000

					3700-10-83	7575-00-71
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0224	655.0305	Cable Type UF 2-12 AWG Grounded	LF	2,193.000		2,193.000
0226	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	5,106.000	360.000	4,746.000
0228	655.0700	Loop Detector Lead In Cable	LF	2,438.000		2,438.000
0230	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. STH 16 & Braund St	LS	1.000		1.000
0232	656.0200	Electrical Service Meter Breaker Pedestal (location) 02. STH 16 & Theater Rd	LS	1.000		1.000
0234	656.0200	Electrical Service Meter Breaker Pedestal (location) 03. STH 16 & Pralle Center	LS	1.000		1.000
0236	656.0200	Electrical Service Meter Breaker Pedestal (location) 04. STH 16 & CTH OS	LS	1.000		1.000
0238	657.0100	Pedestal Bases	EACH	8.000		8.000
0240	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	3.000	1.000	2.000
0242	657.0305	Poles Type 2	EACH	3.000	1.000	2.000
0244	657.0405	Traffic Signal Standards Aluminum 3.5-FT	EACH	1.000		1.000
0246	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	5.000		5.000
0248	657.0430	Traffic Signal Standards Aluminum 10-FT	EACH	2.000		2.000
0250	657.0595	Trombone Arms 25-FT	EACH	3.000	1.000	2.000
0252	658.0173	Traffic Signal Face 3S 12-Inch	EACH	40.000	13.000	27.000
0254	658.0174	Traffic Signal Face 4S 12-Inch	EACH	27.000	1.000	26.000
0256	658.0416	Pedestrian Signal Face 16-Inch	EACH	6.000		6.000
0258	658.0500	Pedestrian Push Buttons	EACH	6.000		6.000
0260	658.5069	Signal Mounting Hardware (location) 01. STH 16 & IH 90 EB Off Ramp	LS	1.000	1.000	
0262	658.5069	Signal Mounting Hardware (location) 02. STH 16 & IH 90 WB Off Ramp	LS	1.000	1.000	
0264	658.5069	Signal Mounting Hardware (location) 03. STH 16 & Braund St	LS	1.000		1.000
0266	658.5069	Signal Mounting Hardware (location) 04. STH 16 & Theater Rd	LS	1.000		1.000
0268	658.5069	Signal Mounting Hardware (location) 05. STH 16 & Pralle Center	LS	1.000		1.000
0270	658.5069	Signal Mounting Hardware (location) 06. STH 16 & CTH OS	LS	1.000		1.000
0272	659.1125	Luminaires Utility LED C	EACH	10.000		10.000
0274	690.0150	Sawing Asphalt	LF	215.000		215.000
0276	690.0250	Sawing Concrete	LF	2,665.000		2,665.000
0278	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,200.000		1,200.000
0280	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	600.000		600.000
0282	SPV.0060	Special 01. Removing Traffic Signal Unit	EACH	34.000	8.000	26.000
0284	SPV.0060	Special 02. Concrete Bases Type 9 & 10 Special	EACH	9.000	1.000	8.000
0286	SPV.0060	Special 03. Install Poles Type 9 Special	EACH	1.000	1.000	

					3700-10-83	7575-00-71
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0288	SPV.0060	Special 04. Install Poles Type 9	EACH	2.000	2.000	
0290	SPV.0060	Special 05. Install Poles Type 10	EACH	2.000	2.000	
0292	SPV.0060	Special 06. Install Poles Type 10 Special	EACH	8.000		8.000
0294	SPV.0060	Special 07. Install Poles Type 13	EACH	2.000		2.000
0296	SPV.0060	Special 08. Install Monotube Arms 30-FT	EACH	4.000	4.000	
0298	SPV.0060	Special 09. Install Monotube Arms Type 10 Speical 40-FT	EACH	2.000		2.000
0300	SPV.0060	Special 10. Install Monotube Arms Type 10 Special 45-FT	EACH	6.000		6.000
0302	SPV.0060	Special 11. Install Monotube Arms Type 9 Special 40-FT	EACH	1.000	1.000	
0304	SPV.0060	Special 12. Install Monotube Arms 55-FT	EACH	2.000		2.000
0306	SPV.0060	Special 13. Install Luminaire Arms Steel 15-FT	EACH	20.000	2.000	18.000
0308	SPV.0060	Special 14. Retroreflective Backplate 3S	EACH	28.000	9.000	19.000
0310	SPV.0060	Special 15. Retroreflective Backplate 4S	EACH	17.000	1.000	16.000
0312	SPV.0060	Special 17. Fire Hydrant	EACH	1.000		1.000
0314	SPV.0060	Special 18. Water Valve & Box, 6-Inch	EACH	1.000		1.000
0316	SPV.0085	Special 01. Water Main Fittings	LB	798.000		798.000
0318	SPV.0090	Special 01. Water Main Ductile Iron 6-Inch	LF	8.000		8.000
0320	SPV.0090	Special 02. Water Main Ductile Iron 12-Inch	LF	124.000		124.000
0322	SPV.0090	Special 03. Remove or Abandon Water Main	LF	90.000		90.000
0324	SPV.0090	Special 04. Construction Staking Watermain	LF	90.000		90.000

REMOVING PAVEMENT

PROJECT ID	STATION	-	STATION	LOCATION	204.0100 REMOVING PAVEMENT (SY)
7575-00-71	199+98	-	201+21	STH 16/BRAUND ST EB LT LN	240
	202+49	-	203+75	STH 16/BRAUND ST WB LT LN	248
	214+70	-	216+02	STH 16/THEATER RD EB LT LN	272
	217+18	-	218+48	STH 16/THEATER RD WB LT LN	255
	216+80	-	217+39	STH 16/THEATER RD NE QUADRANT	87
	231+15	-	232+65	STH 16/PRALLE CEN DR EB LT LN	257
	233+48	-	234+80	STH 16/PRALLE CEN DR WB LT LN	215
	266+95	-	268+20	STH 16/CTH OS EB LT LN	204
	269+47	-	270+90	STH 16/CTH OS EB RT LN	274
				TOTAL	2052

REMOVING ASPHALTIC SURFACE

PROJECT ID	STATION	-	STATION	LOCATION	204.0110 REMOVING ASPHALTIC SURFACE (SY)
7575-00-71	10+55	-	11+50	BRAUND ST.	50
				TOTAL	50

REMOVING CURB & GUTTER

PROJECT ID	STATION	-	STATION	LOCATION	204.0130 REMOVING CURB (LF)	204.0150 REMOVING CURB & GUTTER (LF)
7575-00-71	199+98	-	200+98	STH 16/BRAUND ST MEDIAN		101
	10+55		11+50	BRAUND ST MEDIAN	190	-
	202+78		203+75	STH 16/BRAUND ST MEDIAN		97
	214+70		215+65	STH 16/THEATER RD EB LT LN		95
	217+44		218+48	STH 16/THEATER RD MEDIAN		104
	231+15		232+37	STH 16/PRALLE CEN DR MEDIAN		122
	233+53		234+80	STH 16/PRALLE CEN DR MEDIAN		127
	266+95		268+16	STH 16/CTH OS MEDIAN		121
	269+71		270+90	STH 16/CTH OS MEDIAN		119
	269+45		269+56	NW RADIUS STH 16/CTH OS		17
				TOTAL	190	903

REMOVING STORM SEWER

PROJECT ID	STATION	LOCATION	DESCRIPTION	204.0245.01 REMOVING STORM SEWER SIZE (12-INCH) (LF)	204.0245.02 REMOVING STORM SEWER SIZE (15-INCH) (LF)	204.0245.03 REMOVING STORM SEWER SIZE (18-INCH) (LF)
7575-00-71	201+13	16' LT	STH 16/BRAUND ST MEDIAN			16
	202+62	6' LT	STH 16/BRAUND ST MEDIAN			10
	215+94	14' LT	STH 16/THEATER RD MEDIAN			14
	215+94	18' LT	STH 16/THEATER RD MEDIAN			16
	217+28	6' LT	STH 16/THEATER RD MEDIAN	8		
	217+01	67' LT	THEATER RD NW RADIUS			8
	269+56	4' LT	STH 16/N KINNEY COULEE RD		32	
			TOTAL	8	32	64

NOTE: ALL ITEMS CATEGORY 0010, UNLESS NOTED OTHERWISE

REMOVING CONCRETE SIDEWALK

PROJECT ID	STATION	-	STATION	LOCATION	204.0155 REMOVING CONCRETE SIDEWALK (SY)
7575-00-71	199+98	-	201+15	STH 16/BRAUND ST MEDIAN	35
	10+55	-	11+50	BRAUND ST MEDIAN	39
	10+56	-	11+00	BRAUND ST ISLAND, RT	71
	202+54	-	203+94	STH 16/BRAUND ST MEDIAN	47
	214+46	-	215+97	STH 16/THEATER RD MEDIAN	48
	217+21	-	218+81	STH 16/THEATER RD MEDIAN	54
	216+96	-	217+02	NW RADIUS THEATER RD	5
	230+66	-	230+78	STH 16 MEDIAN	6
	231+15	-	232+37	STH 16/PRALLE CEN DR MEDIAN	39
	233+07	-	233+10	PRALLE CEN DR MEDIAN	3
	232+95	-	232+98	S KINNEY COULEE RD MEDIAN	4
	233+53	-	234+94	STH 16/PRALLE CEN DR MEDIAN	48
	266+95	-	268+16	STH 16/CTH OS MEDIAN	39
	269+53	-	271+13	STH 16/CTH OS MEDIAN	50
	268+96	-	268+99	CTH OS MEDIAN	4
	268+49	-	268+54	CTH OS ISLAND, LT	2
	268+83	-	268+86	N KINNEY COULEE RD MEDIAN	4
	269+45	-	269+64	NW RADIUS STH 16/CTH OS	24
				TOTAL	522
3700-10-83	262+81	-	263+05	STH 16/IH 90 WB OFF RAMP ISLAND	42
				TOTAL	42

REMOVING INLETS

PROJECT ID	STATION	LOCATION	DESCRIPTION	204.0220 REMOVING INLETS (EACH)
7575-00-71	201+13	14' LT	STH 16/BRAUND ST MEDIAN	1
	201+13	18' LT	STH 16/BRAUND ST MEDIAN	1
	202+62	6' LT	STH 16/BRAUND ST MEDIAN	1
	215+94	14' LT	STH 16/THEATER RD MEDIAN	1
	215+94	18' LT	STH 16/THEATER RD MEDIAN	1
	217+28	2' LT	STH 16/THEATER RD MEDIAN	1
	217+28	6' LT	STH 16/THEATER RD MEDIAN	1
	217+01	67' LT	THEATER RD NW RADIUS	1
	269+56	2' LT	STH 16/N KINNEY COULEE RD	1
	269+56	6' LT	STH 16/N KINNEY COULEE RD	1
			TOTAL	10

EXCAVATION COMMON

PROJECT ID	STATION	-	STATION	LOCATION	205.0100 EXCAVATION COMMON (CY)
7575-00-71	199+98	-	201+21	STH 16/BRAUND ST MEDIAN	25
	202+49	-	203+75	STH 16/BRAUND ST MEDIAN	23
	10+55	-	11+50	BRAUND ST MEDIAN	9
	214+70	-	216+02	STH 16/THEATER RD EB LT LN	29
	216+80	-	217+39	THEATER RD NW RADIUS	27
	217+18	-	218+48	STH 16/THEATER RD MEDIAN	9
	231+15	-	232+65	STH 16/PRALLE CEN DR MEDIAN	28
	233+48	-	234+80	STH 16/PRALLE CEN DR MEDIAN	26
	266+95	-	268+20	STH 16/CTH OS MEDIAN	23
	269+47	-	270+90	STH 16/CTH OS MEDIAN	29
	269+45	-	269+56	NW RADIUS STH 16/CTH OS	2
				TOTAL	230

3

BASE AGGREGATE DENSE 1 1/4-INCH

PROJECT ID	STATION	-	STATION	LOCATION	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH (TON)	624.0100 WATER (MGAL)
7575-00-71	199+98	-	201+21	STH 16/BRAUND ST MEDIAN	50	1.0
	202+49	-	203+75	STH 16/BRAUND ST MEDIAN	50	1.0
	10+55	-	11+50	BRAUND ST MEDIAN	20	0.4
	214+70	-	216+02	STH 16/THEATER RD EB LT LN	60	1.2
	216+80	-	217+39	THEATER RD NW RADIUS	55	1.1
	217+18	-	218+48	STH 16/THEATER RD MEDIAN	20	0.4
	231+15	-	232+65	STH 16/PRALLE CEN DR MEDIAN	55	1.1
	233+48	-	234+80	STH 16/PRALLE CEN DR MEDIAN	50	1.0
	266+95	-	268+20	STH 16/CTH OS MEDIAN	50	1.0
	269+47	-	270+90	STH 16/CTH OS MEDIAN	60	1.2
	269+45	-	269+56	NW RADIUS STH 16/CTH OS	5	0.1
				TOTAL	475	9.5

CONCRETE PAVEMENT HES 9-INCH

PROJECT ID	STATION	-	STATION	LOCATION	415.1090 CONCRETE PAVEMENT HES 9-INCH (SY)
7575-00-71	199+98	-	201+21	STH 16/BRAUND ST EB LT LN	234
	202+49	-	203+75	STH 16/BRAUND ST WB LT LN	237
	214+70	-	216+02	STH 16/THEATER RD EB LT LN	247
	217+18	-	218+48	STH 16/THEATER RD WB LT LN	244
	231+15	-	232+65	STH 16/PRALLE CEN DR EB LT LN	286
	233+48	-	234+80	STH 16/PRALLE CEN DR WB LT LN	248
	266+95	-	268+20	STH 16/CTH OS EB LT LN	235
	269+47	-	270+90	STH 16/CTH OS EB RT LN	270
				TOTAL	2001

CONCRETE PAVEMENT JOINT LAYOUT

PROJECT ID	CATEGORY	415.5110.S.01 CONCRETE PAVEMENT JOINTS STH 16 & BRAUND ST. (LS)	415.5110.S.02 CONCRETE PAVEMENT JOINTS STH 16 & THEATER RD. (LS)	415.5110.S.03 CONCRETE PAVEMENT JOINTS STH 16 & PRALLE CENTER (LS)	415.5110.S.04 CONCRETE PAVEMENT JOINTS STH 16 & CTH OS (LS)
7575-00-71	0010	1	-	-	-
		-	1	-	-
		-	-	1	-
		-	-	-	1
	TOTAL	1	1	1	1

ASPHALTIC SURFACE

PROJECT ID	STATION	-	STATION	LOCATION	455.0605 TACK COAT (GAL)	465.0105 ASPHALTIC SURFACE (TON)
7575-00-71	10+55	-	11+50	BRAUND ST. MEDIAN	10	30
				TOTAL	10	30

DRILLED TIE BARS

PROJECT ID	STATION	-	STATION	LOCATION	416.0610 DRILLED TIE BARS (EACH)
7575-00-71	199+98	-	201+21	STH 16/BRAUND ST EB LT LN	96
	202+49	-	203+75	STH 16/BRAUND ST WB LT LN	98
	214+70	-	216+02	STH 16/THEATER RD EB LT LN	105
	217+18	-	218+48	STH 16/THEATER RD WB LT LN	102
	216+80	-	217+39	THEATER RD NW RADIUS	45
	231+15	-	232+65	STH 16/PRALLE CEN DR EB LT LN	118
	233+48	-	234+80	STH 16/PRALLE CEN DR WB LT LN	104
	266+95	-	268+20	STH 16/CTH OS EB LT LN	100
	269+47	-	270+90	STH 16/CTH OS EB RT LN	112
				TOTAL	880

DRILLED DOWEL BARS

PROJECT ID	STATION	-	STATION	LOCATION	416.0620 DRILLED DOWEL BARS (EACH)
7575-00-71	199+98	-	201+21	STH 16/BRAUND ST EB LT LN	22
	200+99	-	201+21	STH 16/BRAUND ST WB LT LN	16
	202+54	-	202+78	STH 16/BRAUND ST EB LT LN	16
	202+49	-	203+75	STH 16/BRAUND ST WB LT LN	22
	214+70	-	216+02	STH 16/THEATER RD EB LT LN	22
	215+65	-	216+02	STH 16/THEATER RD WB LT LN	16
	217+18	-	217+44	STH 16/THEATER RD EB LT LN	16
	217+18	-	218+48	STH 16/THEATER RD WB LT LN	22
	231+15	-	232+65	STH 16/PRALLE CEN DR EB LT LN	22
	233+48	-	234+80	STH 16/PRALLE CEN DR WB LT LN	22
	266+95	-	268+20	STH 16/CTH OS EB LT LN	22
	269+47	-	269+71	STH 16/CTH OS EB LT LN	16
	269+47	-	270+90	STH 16/CTH OS EB RT LN	22
				TOTAL	256

CONCRETE PAVEMENT REPLACEMENT SHES

PROJECT ID	STATION	-	STATION	LOCATION	416.1725 CONCRETE PAVEMENT REPLACEMENT SHES (SY)
7575-00-71	200+99	-	201+21	STH 16/BRAUND ST WB LT LN	30
	202+54	-	202+78	STH 16/BRAUND ST EB LT LN	32
	215+65	-	216+02	STH 16/THEATER RD WB LT LN	50
	217+18	-	217+44	STH 16/THEATER RD WB LT LN	35
	216+80		217+39	THEATER RD NW RADIUS	94
	269+47	-	269+71	STH 16/CTH OS EB RT LN	32
				TOTAL	273

NOTE: ALL ITEMS CATEGORY 0010, UNLESS NOTED OTHERWISE

CONCRETE COLLARS FOR PIPE

PROJECT ID	STATION	LOCATION	DESCRIPTION	520.8000 CONCRETE COLLARS FOR PIPE (EACH)
7575-00-71	201+13	11' LT	STH 16/BRAUND ST MEDIAN	1
	201+13	21' LT	STH 16/BRAUND ST MEDIAN	1
	202+61	5' RT	STH 16/BRAUND ST MEDIAN	1
	215+94	10' LT	STH 16/THEATER RD MEDIAN	1
	215+94	24' LT	STH 16/THEATER RD MEDIAN	1
	217+28	3' RT	STH 16/THEATER RD MEDIAN	1
	216+96	66' LT	THEATER RD NW RADIUS	1
	269+56	8' LT	STH 16/N KINNEY COULEE RD	1
	269+56	4' RT	STH 16/N KINNEY COULEE RD	1
			TOTAL	9

CONCRETE SIDEWALK 4-INCH

PROJECT ID	STATION	-	STATION	LOCATION	602.0405 CONCRETE SIDEWALK 4-INCH (SF)
7575-00-71	203+75	-	203+94	STH 16/BRAUND ST MEDIAN	57
	10+56		11+00	BRAUND ST ISLAND, RT	638
	214+47	-	214+70	STH 16/THEATER RD MEDIAN	69
	218+48	-	218+81	STH 16/THEATER RD MEDIAN	99
	216+96	-	217+02	NW RADIUS THEATER RD	45
	230+66	-	230+78	STH 16 MEDIAN	48
	234+80	-	234+94	PRALLE CEN DR MEDIAN	28
	232+95	-	232+98	S KINNEY COULEE RD MEDIAN	38
	234+80	-	234+94	STH 16/PRALLE CEN DR MEDIAN	42
	270+90	-	271+13	STH 16/CTH OS MEDIAN	69
	268+96	-	268+99	CTH OS MEDIAN	36
	268+49	-	268+54	CTH OS ISLAN, LT	14
	268+83	-	268+86	N KINNEY COULEE RD MEDIAN	36
	269+44	-	269+57	STH 16/CTH OS NW RADIUS	215
				TOTAL	1434
3700-10-83	262+81	-	263+05	STH 16/IH 90 WB OFF RAMP ISLAND	378
				TOTAL	378

CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

PROJECT ID	STATION	-	STATION	LOCATION	602.0515 CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA (SF)
7575-00-71	269+45	-	269+64	STH 16/CTH OS NW RADIUS	20
				TOTAL	20

ADJUSTING MANHOLE COVERS

PROJECT ID	STATION	LOCATION	DESCRIPTION	611.8110 ADJUSTING MANHOLE COVERS (EACH)
7575-00-71	269+46	68' LT	STH 16/CTH OS NW RAD.	1
	269+55	14' LT	STH 16/CTH OS WB TURN LANE	1
			TOTAL	2

CONCRETE CURB & GUTTER 30-INCH TYPE A

PROJECT ID	STATION	-	STATION	LOCATION	601.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A (LF)
7575-00-71	216+91	-	217+39	THEATER RD NW RADIUS	79
	269+44	-	269+57	STH 16/CTH OS NW RADIUS	17
				TOTAL	96

CONCRETE SAFETY ISLANDS

PROJECT ID	STATION	-	STATION	LOCATION	602.2400 CONCRETE SAFETY ISLANDS (SF)
7575-00-71	199+98	-	201+15	STH 16/BRAUND ST MEDIAN	360
	202+55	-	203+75	STH 16/BRAUND ST MEDIAN	395
	214+17	-	215+98	STH 16/THEATER RD MEDIAN	415
	217+22	-	218+48	STH 16/THEATER RD MEDIAN	405
	231+15	-	232+37	STH 16/PRALLE CEN DR MEDIAN	425
	233+53	-	234+80	STH 16/PRALLE CEN DR MEDIAN	410
	266+95	-	268+13	STH 16/CTH OS MEDIAN	390
	269+53	-	270+90	STH 16/CTH OS MEDIAN	430
				TOTAL	3230

CONCRETE MEDIAN SLOPED NOSE

PROJECT ID	STATION	-	STATION	LOCATION	620.0300 CONCRETE MEDIAN SLOPED NOSE (SF)
7575-00-71	201+14	-	201+15	STH 16/BRAUND ST MEDIAN	3
	202+55	-	202+59	STH 16/BRAUND ST MEDIAN	10
	215+97	-	215+98	STH 16/THEATER RD EB LT LN	3
	217+22	-	217+25	STH 16/THEATER RD MEDIAN	8
	232+32	-	232+37	STH 16/PRALLE CEN DR MEDIAN	13
	233+53	-	233+60	STH 16/PRALLE CEN DR MEDIAN	18
	268+08	-	268+13	STH 16/CTH OS MEDIAN	13
	269+53	-	269+55	STH 16/CTH OS MEDIAN	6
				TOTAL	74

NOTE: ALL ITEMS CATEGORY 0010, UNLESS NOTED OTHERWISE

STORM SEWER PIPE REINFORCED CONCRETE

PROJECT ID	STRUCTURE FROM	-	STRUCTURE TO	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH (LF)	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH (LF)	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH (LF)	INVERT ELEVATION	DISCHARGE ELEVATION	SLOPE FT/FT
7575-00-71	1-2	-	1-1	5			706.20	706.15	0.0100
	NW	-	1-2			10	MATCH EX.	705.90	
	1-2	-	SE			8	706.10	MATCH EX.	
	2-2	-	2-1	5			706.10	706.05	0.0100
	2-1	-	SE			6	705.95	MATCH EX.	
	3-1	-	3-2	20			704.40	704.20	0.0100
	NW	-	3-2			6	MATCH EX.	704.10	
	4-2	-	4-1	5			704.83	704.78	0.0100
	4-1	-	SE	6			704.68	MATCH EX.	
	4-3	-	SW	14			706.25	MATCH EX.	
	5-2	-	5-1	5			717.20	717.15	0.0100
	NW	-	5-1		12		MATCH EX.	717.15	
	5-1	-	SE		6		716.78	MATCH EX.	
				60	18	30			

PROJECT ID	STRUCTURE	STATION	LOCATION	DESCRIPTION	611.0606 INLET COVERS TYPE B (EACH)	611.0624 INLET COVERS TYPE H (EACH)	611.3220 INLETS 2X2-FT (EACH)	611.3230 INLETS 2X3-FT (EACH)	650.4000 CONSTRUCTION STAKING STORM SEWER (EACH)	RIM ELEVATION	INVERT ELEVATION	DEPTH FT
7575-00-71	1-1	201+07	18.75' LT	STH 16/BRAUND ST MEDIAN	1		1		1	709.85	706.20	2.32
	1-2	201+13	18.75' LT	STH 16/BRAUND ST MEDIAN	1		1		1	709.80	705.90	2.57
	2-1	202+61.5	1.25' LT	STH 16/BRAUND ST MEDIAN	1		1		1	710.40	705.95	3.12
	2-2	202+66.5	1.25' LT	STH 16/BRAUND ST MEDIAN	1		1		1	710.45	706.10	3.02
	3-1	215+74	18.75' LT	STH 16/THEATER RD MEDIAN	1		1		1	708.50	704.40	2.77
	3-2	215+94	18.75' LT	STH 16/THEATER RD MEDIAN	1		1		1	708.60	704.10	3.17
	4-1	217+28	1.25' LT	STH 16/THEATER RD MEDIAN	1		1		1	708.80	704.68	2.79
	4-2	217+33	1.25' LT	STH 16/THEATER RD MEDIAN	1		1		1	708.85	704.83	2.69
	4-3	217+08	69.42' LT	THEATER RD NW RADIUS		1		1	1	708.40	706.25	1.15
	5-1	269+56	1.25' LT	STH 16/CTH OS MEDIAN	1		1		1	720.88	716.68	2.87
	5-2	269+61	1.25' LT	STH 16/CTH OS MEDIAN	1		1		1	720.90	716.75	2.82
				TOTAL	10	1	10	1	11			

LANDSCAPING

PROJECT ID	STATION	-	STATION	LOCATION	625.0500 SALVAGED TOPSOIL (SY)	628.2006 EROSION MAT URBAN CLASS I TYPE A (SY)	629.0210 FERTILIZER TYPE B (CWT)	630.0130 SEEDING MIXTURE NO. 30 (LB)	630.0200 SEEDING TEMPORARY (LB)	630.0500 SEED WATER (MGAL)
7575-00-71	216+95	-	217+40	STH 16 / THEATER RD - NW RAD.	125	125	0.08	2.25	-	3
	237+65	-	238+35	STH 16/BRAUND ST MEDIAN	225	225	0.14	4.05	-	6
	269+35	-	269+80	STH 16/BRAUND ST MEDIAN	75	75	0.05	1.35	-	2
				UNDISTRIBUTED	100	100	0.23	2.80	4.00	4
				TOTAL	525	525	0.50	10	4	15

NOTE: ALL ITEMS CATEGORY 0010, UNLESS NOTED OTHERWISE

EROSION CONTROL

PROJECT ID	STATION	O/S	LOCATION	628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)	628.7010 INLET PROTECTION TYPE B (EACH)	628.7015 INLET PROTECTION TYPE C (EACH)	628.7570 ROCK BAGS (EACH)
7575-00-71	201+08	RT	STH 16			1		
	201+13	RT				1	2	
	201+33	RT					1	
	201+57	LT					1	
	202+29	RT					1	
	202+32	LT					1	
	202+62	LT					1	
	202+61	LT				1		
	202+66	LT				1		
	202+75	LT					1	
	215+74	RT				1		
	215+94	RT				1	2	
	216+05	RT					1	
	216+30	LT					1	
	217+02	LT					1	
	217+08	LT					1	
	217+13	RT					1	
	217+28	LT				1	2	
	217+32	LT				1		
	232+63	RT					1	
	232+66	LT					1	
	233+07	LT					1	
	233+12	LT					1	
	233+39	RT					1	
	233+42	LT					1	
	234+91	LT					2	
	234+88	LT					1	
	238+00	RT		85	170			
	238+47	RT					1	
	246+26	RT					1	
	261+17	LT					1	
	266+65	RT					2	
	268+17	LT					1	
	269+42	LT					1	
	269+52	RT					1	
	269+56	LT				1	2	
	269+62	LT				1		
			UNDISTRIBUTED	100	200			15
			TOTAL	185	370	10	36	15

MOBILIZATIONS EROSION CONTROL

PROJECT ID	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL (EACH)	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL (EACH)
7575-00-71	STH 16	3	1
	TOTAL	3	1

CONSTRUCTION STAKING CONCRETE PAVEMENT

PROJECT ID	STATION	-	STATION	LOCATION	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT (LF)
7575-00-71	199+98	-	201+21	STH 16/BRAUND ST EB LT LN	123
	202+49	-	203+75	STH 16/BRAUND ST WB LT LN	126
	214+70	-	216+02	STH 16/THEATER RD EB LT LN	132
	217+18	-	218+48	STH 16/THEATER RD WB LT LN	130
	231+15	-	232+65	STH 16/PRALLE CEN DR EB LT LN	150
	233+48	-	234+80	STH 16/PRALLE CEN DR WB LT LN	132
	266+95	-	268+20	STH 16/CTH OS EB LT LN	125
	269+47	-	270+90	STH 16/CTH OS EB RT LN	143
				TOTAL	1061

CONSTRUCTION STAKING CURB RAMPS

PROJECT ID	STATION	-	STATION	LOCATION	650.9000 CONSTRUCTION STAKING CURB RAMPS (EACH)
7575-00-71	269+47	-	269+63	STH 16/THEATER RD. - NW RAD.	1
				TOTAL	1

CONSTRUCTION STAKING CURB AND GUTTER

PROJECT ID	STATION	-	STATION	LOCATION	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER (LF)
7575-00-71	216+95	-	217+39	STH 16/THEATER RD - NW RAD.	79
				TOTAL	79

FIELD OFFICE

PROJECT ID	LOCATION	642.5001 FIELD OFFICE TYPE B (EACH)
7575-00-71	STH 16	1
	TOTAL	1

NOTE: ALL ITEMS CATEGORY 0010, UNLESS NOTED OTHERWISE

MARKERS PERMANENT FLEXIBLE

PROJECT ID	CATEGORY	STATION	LOCATION	633.5350 MARKERS PERMANENT FLEXIBLE (EACH)
7575-00-71	0010	201+05	LT	1
		202+59	LT	1
		215+96	LT	1
		217+26	LT	1
		232+31	LT	1
		233+61	LT	1
		268.06	LT	1
		269+54	LT	1
			TOTAL	8

SIGNS TYPE I & 2

PROJECT ID	CATEGORY	SIGN NO	STATION	LOCATION	SIGN CODE	SIGN SIZE	DESCRIPTION	MASSAGE	638.2602 REMOVING SIGNS TYPE II (EACH)	638.3000 REMOVING SMALL SIGN SUPPORTS (EACH)	634.0614 POSTS WOOD 4X6-INCH X 14-FT (EACH)	637.2210 SIGNS TYPE II REFLECTIVE H (SF)	637.1220 SIGNS TYPE I REFLECTIVE SH (SF)	638.2102 MOVING SIGNS TYPE II (EACH)	REMARKS
7575-00-71	0010	1	200+00	LT	R4-7	24"X30"	KEEP RIGHT SYMBOL	-	-	-	1	5.00	-	-	
		2	208+73	LT	R4-7	24"X30"	KEEP RIGHT SYMBOL	-	-	-	1	5.00	-	-	
		3	11+50	LT	R3-8W	54"X30"	VARIOUS ONLY	L,A,R	1	1	2	11.25	-	-	
		4	12+74	LT	R3-8W	54"X30"	VARIOUS ONLY	L,A,R	1	1	2	11.25	-	-	
		5M	201+63	LT	-	-	DIVIDED HIGHWAY CROSSING	-	-	-	-	-	-	1	MOVE TO SB1 W/ 6M
		6M	201+63	LT	-	-	STOP (FOLDING SIGN)	-	-	-	-	-	-	1	MOVE TO SB1 W/ 5M
		7M	201+63	LT	-	-	DO NOT ENTER	-	-	-	-	-	-	1	MOVE TO SB1
		8M	202+58	LT	-	-	DO NOT ENTER	-	-	-	-	-	-	1	MOVE TO SB3
		9M	202+58	LT	-	-	STOP (FOLDING SIGN)	-	-	-	-	-	-	1	MOVE TO SB3
		10M	201+09	RT	-	-	STOP (FOLDING SIGN)	-	-	-	-	-	-	1	MOVE TO SB6
		11M	201+09	RT	-	-	DO NOT ENTER	-	-	-	-	-	-	1	MOVE TO SB6
		12R	201+09	LT	-	-	STOP (FOLDING SIGN)	-	1	-	-	-	-	-	
		13R	201+09	LT	-	-	KEEP RIGHT SYMBOL	-	1	-	-	-	-	-	
		14R	205+59	LT	-	-	KEEP RIGHT SYMBOL	-	1	-	-	-	-	-	
		15R	202+59	LT	-	-	STOP (FOLDING SIGN)	-	1	-	-	-	-	-	
		16R	201+99	LT	-	-	KEEP RIGHT SYMBOL	-	1	-	-	-	-	-	
		17R	201+99	LT	-	-	STOP (FOLDING SIGN)	-	1	-	-	-	-	-	
		18R	11+47	RT	-	-	KEEP RIGHT SYMBOL	-	1	1	-	-	-	-	
		19	204+71	LT	R4-7	24"X30"	KEEP RIGHT SYMBOL	-	-	-	1	5.00	-	-	
		20	2018+46	LT	R4-7	24"X30"	KEEP RIGHT SYMBOL	-	-	-	1	5.00	-	-	
		21	11+16	LT	R3-38W	54"X30"	VARIOUS ONLY	L,A,R	-	-	2	11.25	-	-	
		22M	216+31	LT	-	-	DIVIDED HIGHWAY CROSSING	-	-	-	-	-	-	1	MOVE TO SB25 W/23M
		23M	216+31	LT	-	-	STOP (FOLDING SIGN)	-	-	-	-	-	-	1	MOVE TO SB25 W/ 22M
		24M	XX	LT	-	-	DO NOT ENTER	-	-	-	-	-	-	1	MOVE TO SB21
		25M	XX	LT	-	-	STOP (FOLDING SIGN)	-	-	-	-	-	-	1	MOVE TO SB21
		26R	215+90	LT	-	-	STOP (FOLDING SIGN)	-	1	-	-	-	-	-	
		27R	215+90	LT	-	-	KEEP RIGHT SYMBOL	-	1	-	-	-	-	-	
		28R	217+26	LT	-	-	KEEP RIGHT SYMBOL	-	1	-	-	-	-	-	
		29R	217+26	LT	-	-	STOP (FOLDING SIGN)	-	1	-	-	-	-	-	
		30R	11+69	LT	-	-	VARIOUS ONLY	E,R	1	-	-	-	-	-	
		31	231+16	LT	R4-7	24"X30"	KEEP RIGHT SYMBOL	-	-	-	1	5.00	-	-	
		32	234+79	LT	R4-7	24"X30"	KEEP RIGHT SYMBOL	-	-	-	1	5.00	-	-	
		33R	232+30	LT	-	-	STOP (FOLDING SIGN)	-	1	-	-	-	-	-	
		34R	232+30	LT	-	-	KEEP RIGHT SYMBOL	-	1	-	-	-	-	-	
		35R	233+60	LT	-	-	KEEP RIGHT SYMBOL	-	1	-	-	-	-	-	
		36R	233+60	LT	-	-	STOP (FOLDING SIGN)	-	1	-	-	-	-	-	
		37	266+96	LT	R4-7	24"X30"	KEEP RIGHT SYMBOL	-	-	-	1	5.00	-	-	
		38	270+89	LT	R4-7	24"X30"	KEEP RIGHT SYMBOL	-	-	-	1	5.00	-	-	
		39R	268+11	LT	-	-	STOP (FOLDING SIGN)	-	1	-	-	-	-	-	
		40R	268+11	LT	-	-	KEEP RIGHT SYMBOL	-	1	-	-	-	-	-	
		41R	269+63	LT	-	-	KEEP RIGHT SYMBOL	-	1	-	-	-	-	-	
		42R	269+63	LT	-	-	STOP (FOLDING SIGN)	-	1	-	-	-	-	-	
7575-00-71	0030	XX	238+00	RT	E7-2	204"X96"	X	-	-	-	-	-	136	-	
							TOTAL		22	3	14	73.75	136.00	11.00	
3700-10-83	0010	50M	244+62	LT	-	-	NO U OR LEFT TURN SYMBOL	-	-	-	-	-	-	1	MOVE TO SB401 W/ 51M
		51M	244+62	LT	-	-	STOP (FOLDING SIGN)	-	-	-	-	-	-	1	MOVE TO SB401 W/ 50M
		52M	270+89	LT	-	-	DIVIDED HIGHWAY CROSSING	-	-	-	-	-	-	1	MOVE TO SB411 W/ 53M
		53M	268+11	LT	-	-	STOP (FOLDING SIGN)	-	-	-	-	-	-	1	MOVE TO SB411 W/ 52M
							TOTAL		-	-	-	-	-	4.00	

3

TRAFFIC CONTROL

PROJECT ID	STAGE	DESCRIPTION	643.5000 TRAFFIC CONTROL (EACH)	643.0300 TRAFFIC CONTROL DRUMS (DAY)	643.0420 TRAFFIC CONTROL BARRICADES TYPE III (DAY)	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A (DAY)	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C (DAY)	643.0800 TRAFFIC CONTROL ARROW BOARDS (DAY)	643.0900 TRAFFIC CONTROL SIGNS (DAY)	643.1050 TRAFFIC CONTROL SIGNS PCMS (DAY)	DAYS
7575-00-71		PRECONSTRUCTION	-	-	-	-	-	-	-	14	7
	1A NIGHT	NIGHT WORK	-	2800	180	360	320	40	600	-	10
	1B NIGHT	NIGHT WORK	-	4200	230	460	160	20	640	-	10
	2A DAY	DAY WORK	-	1500	140	280	180	-	670	42	14
	2A NIGHT	NIGHT WORK	-	1900	130	260	410	40	620	30	10
	2B DAY	DAY WORK	-	1600	110	220	130	-	560	42	14
	2B NIGHT	NIGHT WORK	-	2500	150	300	250	20	580	30	10
		UNDISTRIBUTED	1	1800	160	120	250	5	130	-	-
		TOTAL	1	16300	1100	2000	1700	125	3800	158	

3

PAVEMENT MARKING

PROJECT ID	STATION		STATION	DESCRIPTION	646.1020 MARKING LINE EPOXY 4-INCH (LF)	646.3020 MARKING LINE EPOXY 8-INCH (LF)	646.5020 MARKING ARROWS EPOXY (EACH)	646.5120 MARKING WORDS EPOXY (EACH)	646.6120 MARKING STOP LINE EPOXY 18-INCH (LF)	646.7220 CHEVRON EPOXY 24-INCH (LF)	646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (LF)	646.8120 MARKING CURB EPOXY (LF)	646.8220 MARKING ISLAND NOSE EPOXY (EACH)	646.9010 MARKING REMOVAL LINE WATER BLASTING 4-INCH (LF)	646.9110 MARKING REMOVAL LINE WATER BLASTING 8-INCH (LF)	646.9310 MARKING REMOVAL SPECIAL MARKING WATER BLASTING
7575-00-71	199+98	-	201+21	STH 16/BRAUND ST EB LT LN	290	270	2	1	11	40	64	10	1	-	110	-
	202+49	-	203+75	STH 16/BRAUND ST WB LT LN	275	255	2	-	11	40	-	10	1	-	-	-
	10+55	-	12+00	BRAUND ST.	290	125	3	-	34	-	-	-	-	190	60	5
	214+70	-	216+02	STH 16/THEATER RD EB LT LN	300	275	1	1	11	40	64	10	1	-	-	-
	217+18	-	218+48	STH 16/THEATER RD WB LT LN	290	255	1	-	11	40	-	10	1	-	-	-
	10+25	-	11+50	THEATER RD.	215	140	6	-	34	-	-	-	-	204	20	4
	231+15	-	232+65	STH 16/PRALLE CEN DR EB LT LN	250	235	1	1	11	40	40	10	1	-	50	-
	233+48	-	234+80	STH 16/PRALLE CEN DR WB LT LN	280	250	2	1	11	40	-	10	1	-	120	-
	235+30	-	237+30	STA 16 WB STAGE 2B TC	50	200	-	-	-	-	-	-	-	50	200	-
	264+70	-	266+35	STH 16 EB STAGE 2A TC	50	165	-	-	-	-	-	-	-	50	165	-
	266+95	-	268+20	STH 16/CTH OS EB LT LN	260	235	1	1	11	30	-	10	1	-	-	-
	269+47	-	270+90	STH 16/CTH OS EB RT LN	300	275	2	1	11	40	64	10	1	-	-	-
				TOTAL	2850	2680	21	6	156	310	232	80	8	494	725	9

TEMPORARY PEDESTRIAN ACCESS

PROJECT ID	STATION	LOCATION	644.1420 TEMPORARY PEDESTRIAN SURFACE PLYWOOD (SF)	644.1601 TEMPORARY PEDESTRIAN CURB RAMP (DAY)	644.1810 TEMPORARY PEDESTRIAN BARRICADE LF
7575-00-71	201+20	STH 16/BRAUND ST MEDIAN	120	-	-
	216+00	STH 16/BRAUND ST MEDIAN	120	-	-
	232+46	STH 16/THEATER RD MEDIAN	120	-	-
	269+47	STH 16/THEATER RD MEDIAN	340	5	-
		UNDISTRIBUTED	-	-	50
		TOTAL	700	5	50

TEMPORARY MARKING LINE REMOVABLE TAPE

PROJECT ID	STATION		STATION	LOCATION	649.0150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (LF)
7575-00-71	235+30	-	237+30	STH 16 WB	600
	264+70	-	266+35	STH 16 EB	500
				TOTAL	1100

NOTE: ALL ITEMS CATEGORY 0010, UNLESS NOTED OTHERWISE

SAWING ASPHALT

PROJECT ID	STATION		STATION	LOCATION	690.0150 SAWING ASPHALT (LF)
7575-00-71	10+55	-	11+50	BRUAND ST. MEDIAN	215
				TOTAL	215

SAWING CONCRETE

PROJECT ID	STATION		STATION	LOCATION	690.0250 SAWING CONCRETE (LF)
7575-00-71	199+98	-	201+21	STH 16/BRAUND ST MEDIAN	310
	202+49	-	203+75	STH 16/BRAUND ST MEDIAN	315
	214+70	-	216+02	STH 16/THEATER RD MEDIAN	325
	216+80	-	217+39	THEATER RD NW RADIUS	130
	217+18	-	218+48	STH 16/THEATER RD MEDIAN	325
	231+15	-	232+65	STH 16/PRALLE CEN DR MEDIAN	340
	233+48	-	234+80	STH 16/PRALLE CEN DR MEDIAN	305
	266+95	-	268+20	STH 16/CTH OS MEDIAN	290
	269+47	-	270+90	STH 16/CTH OS MEDIAN	250
	269+43		LT	CTH OS NW RADIUS SIDEWALK & C&G	30
	VARIOUS LOCATIONS			MEDIAN SIDEWALKS	45
				TOTAL	2665

FIRE HYDRANT

PROJECT ID	CATEGORY	STATION	LOCATION	SPV.0060.17 FIRE HYDRANT (EACH)
7575-00-71	0020	234+02, 49' RT	STH 16	1
			TOTAL	1

WATER VALVE & BOX, 6-INCH

PROJECT ID	CATEGORY	STATION	LOCATION	SPV.0060.18 WATER VALVE & BOX, 6-INCH (EACH)
7575-00-71	0020	233+98, 45.2' RT	STH 16	1
			TOTAL	1

WATER MAIN FITTINGS

PROJECT ID	CATEGORY	STATION	LOCATION	SPV.0085.01 WATER MAIN FITTINGS (LB)
7575-00-71	0020	233+56, 36' RT	STH 16	86
		233+68.5, 48.5' RT	STH 16	86
		233+88.5, 48.5' RT	STH 16	86
		233+94.7, 42.2' RT	STH 16	110
		234+01, 36' RT	STH 16	86
		237+70.6, 36.2' RT	STH 16	86
		237+88.4, 52.8' RT	STH 16	86
		238+08.5, 52.1' RT	STH 16	86
		238+25.3, 34.6' RT	STH 16	86
			TOTAL	798

WATER MAIN CL 52 DUCTILE IRON

PROJECT ID	CATEGORY	STATION	-	STATION	LOCATION	SPV.0090.01 WATER MAIN 6-INCH, CL 52 D.I. (LF)	SPV.0090.02 WATER MAIN 12-INCH, CL 52 D.I. (LF)
7575-00-71	0020	233+56, 36' RT	-	233+68.5, 48.5' RT	STH 16		17
		233+68.5, 48.5' RT	-	233+88.5, 48.5' RT	STH 16		20
		233+88.5, 48.5' RT	-	233+94.7, 42.2' RT	STH 16		9
		233+94.7, 42.2' RT	-	233+98, 45.2' RT	STH 16	4	
		233+98, 45.2' RT	-	234+02, 49' RT	STH 16	4	
		233+94.7, 42.2' RT	-	234+01, 36' RT	STH 16		9
		237+70.6, 36.2' RT	-	237+88.4, 52.8' RT	STH 16		25
		237+88.4, 52.8' RT	-	238+08.5, 52.1' RT	STH 16		20
		238+08.5, 52.1' RT	-	238+25.3, 34.6' RT	STH 16		24
					TOTAL	8	124

REMOVE OR ABANDON WATER MAIN

PROJECT ID	CATEGORY	STATION	-	STATION	LOCATION	SPV.0090.03 REMOVE OR ABANDON WATER MAIN (LF)
7575-00-71	0020	233+56, 36' RT	-	234+01, 36' RT	STH 16	45
		237+70.6, 36.2' RT	-	238+25.3, 34.6' RT	STH 16	45
					TOTAL	90

CONSTRUCTION STAKING WATER MAIN

PROJECT ID	CATEGORY	STATION	-	STATION	LOCATION	SPV.0090.04 CONSTRUCTION STAKING WATER MAIN (LF)
7575-00-71	0020	233+56, 36' RT	-	234+01, 36' RT	STH 16	45
		237+70.6, 36.2' RT	-	238+25.3, 34.6' RT	STH 16	45
					TOTAL	90

Signal Wire

Category	Station		Station	655.0210 Cable Traffic Signal 3-14 AWG LF	655.0230 Cable Traffic Signal 5-14 AWG LF	655.0240 Cable Traffic Signal 7-14 AWG LF	655.0260 Cable Traffic Signal 12-14 AWG LF	655.0305 Cable Type UF 2-12 AWG Grounded LF	655.0515 Elecrtrical Wire Traffic Signals 10 AWG LF	655.0700 Loop Dectector Lead in Cable LF	Description		
0010	201 + 63				40						SB1 - Up Pole		
0010	202 + 38				154						SB2 - Up Pole		
0010	202 + 58				40						SB3 - Up Pole		
0010	202 + 67				183						SB4 - Up Pole		
0010	201 + 28			15	72						SB5 - Up Pole		
0010	201 + 09			15	40						SB6 - Up Pole		
0010	201 + 02				183						SB7 - Up Pole		
0010	201 + 14			15							SB8 - Up Pole		
0010	202 + 25				20						Existing SB307 - Up Pole		
0010	201 + 82				40						Existing SB308 - Up Pole		
0010	201 + 37	to	201 16I + 63				64				SC1	to SB1	
0010	201 + 37	to	202 16I + 38				141				SC1	to SB2	
0010	201 + 37	to	202 16I + 58				161				SC1	to SB3	
0010	201 + 37	to	202 16I + 67				280				SC1	to SB4	
0010	201 + 37	to	202 16I + 25				271				SC1	to Existing SB307	
0010	201 + 37	to	201 16I + 82				328				SC1	to Existing SB308	
0010	201 + 37	to	201 16I + 28				252				SC1	to SB5	
0010	201 + 37	to	201 16I + 9				213				SC1	to SB6	
0010	201 + 37	to	201 16I + 2				101				SC1	to SB7	
0010	201 + 37	to	201 16I + 14			113					SC1	to SB8	
0010	201 + 37	to	202 16I + 18						537		SC1	to PB4	Grounding Conductor
0010	202 + 18	to	201 16I + 32						503		PB4	to PB9	Grounding Conductor
0010	201 + 32	to	201 16I + 37						83		PB9	to SC1	Grounding Conductor
0010	201 + 37	to	204 16I + 89							479	SC1	to Existing PB312	
0010	201 + 37	to	198 16I + 88							352	SC1	to PB16	
0010	201 + 37	to	202 16I + 38					141			SC1	to SB2	
0010	202 + 38	to	202 16I + 67					167			SB2	to SB4	
0010	201 + 37	to	201 16I + 2					101			SC1	to SB7	
0010	217 + 31			15	40						SB21 - Up Pole		
0010	217 + 41			15	124						SB22 - Up Pole		
0010	216 + 16				72						SB23 - Up Pole		
0010	215 + 90				134						SB24 - Up Pole		
0010	216 + 33				40						SB25 - Up Pole		
0010	217 + 05				144						SB26 - Up Pole		
0010	215 + 99			15							SB27 - Up Pole		
0010	217 + 19				20						Existing SB324 - Up Pole		
0010	216 + 61				40						Existing SB325 - Up Pole		
0010	215 + 91				20						Existing SB327 - Up Pole		
0010	217 + 23	to	217 16I + 31				48				SC2	to SB21	
0010	217 + 23	to	217 16I + 41				156				SC2	to SB22	
0010	217 + 23	to	217 16I + 19				220				SC2	to Existing SB324	
0010	217 + 23	to	216 16I + 61				275				SC2	to Existing SB325	
0010	217 + 23	to	216 16I + 16				377				SC2	to SB23	
0010	217 + 23	to	215 16I + 91				339				SC2	to Existing SB327	
0010	217 + 23	to	215 16I + 90				222				SC2	to SB24	
0010	217 + 23	to	215 16I + 99			181					SC2	to SB27	
0010	217 + 23	to	216 16I + 33				134				SC2	to SB25	
0010	217 + 23	to	217 16I + 5				53				SC2	to SB26	
0010	217 + 23	to	216 16I + 58						422		SC2	to PB24	Grounding Conductor
0010	216 + 58	to	215 16I + 98						426		PB24	to PB28	Grounding Conductor
0010	215 + 98	to	217 16I + 23						269		PB28	to SC2	Grounding Conductor
0010	217 + 23	to	219 16I + 73							385	SC2	to Existing PB331	
0010	217 + 23	to	213 16I + 37							509	SC2	to Existing PB335	
0010	217 + 23	to	217 16I + 41					156			SC2	to SB22	
0010	217 + 23	to	217 16I + 5					53			SC2	to SB26	
0010	217 + 05	to	215 16I + 90					225			SB26	to SB24	
0010	233 + 89				183						SB41 - Up Pole		
0010	232 + 30				183						SB42 - Up Pole		
0010	232 + 35				5						SB43 - Up Pole		
0010	233 + 77				20						Existing SB343 - Up Pole		
0010	232 + 34				20						Existing SB350 - Up Pole		
0010	232 + 34	to	232 16I + 58				53				SC3	to Existing SB341	
0010	232 + 34	to	233 16I + 9				115				SC3	to Existing SB342	
0010	232 + 34	to	233 16I + 49			210					SC3	to Existing SB343	
0010	232 + 34	to	233 16I + 77				193				SC3	to Existing SB344	
0010	232 + 34	to	233 16I + 89				330				SC3	to SB41	
0010	232 + 34	to	233 16I + 47				332				SC3	to Existing SB347	
0010	232 + 34	to	232 16I + 97				245				SC3	to Existing SB348	
0010	232 + 34	to	232 16I + 54			195					SC3	to Existing SB349	
0010	232 + 34	to	232 16I + 34				169				SC3	to Existing SB350	
0010	232 + 34	to	232 16I + 30				59				SC3	to SB42	
0010	232 + 34	to	232 16I + 35			64					SC3	to SB43	
0010	232 + 34	to	233 16I + 67						501		SC3	to PB44	Grounding Conductor
0010	233 + 67	to	232 16I + 20						524		PB44	to PB46	Grounding Conductor
0010	232 + 20	to	232 16I + 34						126		PB46	to SC3	Grounding Conductor
0010	232 + 34	to	233 16I + 49					210			SC3	to Existing SB343	
0010	233 + 49	to	233 16I + 89					190			Existing SB343	to SB41	
0010	232 + 34	to	232 16I + 30					59			SC3	to SB42	
0010	232 + 30	to	232 16I + 54					176			SB42	to Existing SB349	
0010	267 + 99				213						SB61 - Up Pole		
0010	269 + 63				213						SB62 - Up Pole		
0010	268 + 07				20						Existing SB361 - Up Pole		
0010	269 + 60				20						Existing SB368 - Up Pole		
0010	268 + 32	to	268 16I + 7			80					SC4	to Existing SB361	
0010	268 + 32	to	268 16I + 7				80				SC4	to Existing SB361	
0010	268 + 32	to	267 16I + 99				208				SC4	to SB61	
0010	268 + 32	to	268 16I + 20			276					SC4	to Existing SB364	
0010	268 + 32	to	268 16I + 51				297				SC4	to Existing SB365	
0010	268 + 32	to	268 16I + 98				348				SC4	to Existing SB366	
0010	268 + 32	to	269 16I + 42				419				SC4	to Existing SB367	
0010	268 + 32	to	269 16I + 60				356				SC4	to Existing SB368	
0010	268 + 32	to	269 16I + 63				239				SC4	to SB62	
0010	268 + 32	to	269 16I + 43				165				SC4	to Existing SB371	
0010	268 + 32	to	268 16I + 85				97				SC4	to Existing SB372	
0010	268 + 32	to	268 16I + 43			37					SC4	to Existing SB373	
0010	268 + 32	to	268 16I + 51						449		SC4	to Existing SB365	Grounding Conductor
0010	268 + 51	to	269 16I + 63						553		Existing SB365	to SB62	Grounding Conductor
0010	269 + 63	to	268 16I + 32						353		SB62	to SC4	Grounding Conductor
0010	268 + 32	to	267 16I + 99					208			SC4	to SB61	
0010	268 + 32	to	268 16I + 43					37			SC4	to Existing SB373	
0010	268 + 43	to	269 16I + 63					228			Existing SB373	to SB62	
0010	269 + 63	to	269 16I + 42					242			SB62	to Existing SB367	
0010	268 + 32	to	266 16I + 31							321	SC4	to Existing PB376	
0010	268 + 32	to	271 16I + 2							392	SC4	to PB73	
			7575-00-71 Total	**90**	**2283**	**1156**	**7340**	**2193**	**4746**	**2438**			

Poles, Arms & Equipment

Category	Station	Dir	Location	SPV.0060.06 Install Poles Type 10 Special EACH	SPV.0060.07 Install Poles Type 13 EACH	SPV.0060.09 Install Monotube Arms Type 10 Special 40-FT EACH	SPV.0060.10 Install Monotube Arms Type 10 Special 45-FT EACH	SPV.0060.12 Install Monotube Arms 55-FT EACH	SPV.0060.13 Install Luminaire Arms Steel 15-FT EACH	657.0100 Pedestal Bases EACH	657.2550 Transformer Bases Breakaway 11 1/2 Inch Bolt Circle EACH	657.0405 Traffic Signal Standard Aluminum 3.5' EACH	657.0425 Traffic Signal Standard Aluminum 15' EACH	657.0430 Traffic Signal Standard Aluminum 10' EACH	657.0305 Poles Type 2 EACH	657.0595 Trombone Arms 25-FT EACH	658.0173 Traffic Signal Face 3S 12-Inch EACH	658.0174 Traffic Signal Face 4S 12-Inch EACH	SPV.0060.14 Retroreflective Backplate 3S EACH	SPV.0060.15 Retroreflective Backplate 4S EACH	658.0500 Pedestrian Push Button EACH	658.0416 Pedestrian Signal Face Ped 16-inch EACH	659.1125 Luminaires Utility LED C EACH	Desc
0010	201 + 63	LEFT	66.7							1			1				1	1						SB1
0010	202 + 38	LEFT	73.9	1			1		1								2	1					1	SB2
0010	202 + 58	LEFT	53.2							1			1				1	1	1	1				SB3
0010	202 + 67	RIGHT	32.1	1			1		2								2	1	2	1			1	SB4
0010	201 + 28	RIGHT	54.9								1				1	1	2				1	1		SB5
0010	201 + 9	RIGHT	43.6							1			1				1	1	1	1	1	1		SB6
0010	201 + 2	LEFT	53.1	1			1		2								2	1	2	1			1	SB7
0010	201 + 14	LEFT	52.9							1				1							1	1		SB8
0010	202 + 25	RIGHT	47.5															1						Existing SB30
0010	201 + 82	RIGHT	51.7															2						Existing SB30
0010	217 + 31	LEFT	63							1			1				1	1	1	1	1	1		SB21
0010	217 + 41	RIGHT	29	1		1			2								1	1	2	1		1	1	SB22
0010	216 + 16	RIGHT	56								1				1	1	2							SB23
0010	215 + 90	LEFT	51	1			1		2								1	1	2	1			1	SB24
0010	216 + 33	LEFT	65							1			1				1	1						SB25
0010	217 + 5	LEFT	96	1		1			1								2	1					1	SB26
0010	215 + 99	LEFT	51							1				1							1	1		SB27
0010	217 + 19	RIGHT	39															1						Existing SB32
0010	216 + 61	RIGHT	52															2						Existing SB32
0010	215 + 91	RIGHT	43															1			1			Existing SB32
0010	233 + 89	RIGHT	34	1			1		2								2	1	2	1			1	SB41
0010	232 + 30	LEFT	52	1			1		2								2	1	2	1			1	SB42
0010	232 + 35	LEFT	53							1		1									1			SB43
0010	233 + 77	LEFT	63															1			1			Existing SB34
0010	232 + 34	RIGHT	48															1			1			Existing SB35
0010	267 + 99	LEFT	65		1			1	2								2	1	2	1			1	SB61
0010	269 + 63	RIGHT	39		1			1	2								2	1	2	1			1	SB62
0010	268 + 7	RIGHT	44															1		1				Existing SB36
0010	269 + 60	LEFT	66															1		1				Existing SB36
		7575-00-71 Total		8	2	2	6	2	18	8	2	1	5	2	2	2	27	26	19	16	6	6	10	

Electrical Items

Category	Station	Dir	Location	656.0200.01 Electrical Service Meter Breaker Pedestal Braund Street LS	656.0200.02 Electrical Service Meter Breaker Pedestal Theater Rd LS	656.0200.03 Electrical Service Meter Breaker Pedestal Pralle Dr LS	656.0200.04 Electrical Service Meter Breaker Pedestal CTH OS LS	650.8500 Construction Staking Electrical Installations 7575-00-71 LS	658.5069.01 Signal Mounting Hardware Braund St LS	658.5069.02 Signal Mounting Hardware Theater Rd LS	658.5069.03 Signal Mounting Hardware Pralle Dr LS	658.5069.04 Signal Mounting Hardware CTH OS LS	654.0217 Concrete Control Cabinet Bases Type 9 Special EACH	Description
0010	201 + 37	LEFT	65	1					1				1	SC1
0010	217 + 23	LEFT	79		1					1			1	SC2
0010	232 + 34	LEFT	73			1					1		1	SC3
0010	268 + 32	RIGHT	69				1					1	1	SC4
0010	201 + 37	LEFT	65					1						Project
		7575-00-71 Total		1	1	1	1	1	1	1	1	1	4	

Pull Boxes

Category	Station	Dir	Location	653.0164 Pull Boxes Non-Conductive 24x42-Inch EACH	Description
0010	201 + 68	LEFT	75	1	PB1
0010	202 + 39	LEFT	69	1	PB2
0010	202 + 40	RIGHT	37	1	PB3
0010	202 + 18	RIGHT	63	1	PB4
0010	201 + 83	RIGHT	68	1	PB5
0010	201 + 28	RIGHT	61	1	PB6
0010	200 + 88	RIGHT	41	1	PB7
0010	200 + 90	LEFT	51	1	PB8
0010	201 + 32	LEFT	52	1	PB9
0010	202 + 21	LEFT	173	1	PB10
0010	202 + 91	LEFT	68	1	PB11
0010	203 + 84	LEFT	62	1	PB12
0010	203 + 89	LEFT	4	1	PB13
0010	202 + 14	RIGHT	144	1	PB14
0010	198 + 92	LEFT	52	1	PB15
0010	198 + 88	LEFT	14	1	PB16
0010	217 + 17	LEFT	71	1	PB21
0010	217 + 49	RIGHT	30	1	PB22
0010	217 + 13	RIGHT	56	1	PB23
0010	216 + 58	RIGHT	58	1	PB24
0010	216 + 7	RIGHT	57	1	PB25
0010	215 + 70	RIGHT	43	1	PB26
0010	215 + 77	LEFT	57	1	PB27
0010	215 + 98	LEFT	56	1	PB28
0010	216 + 38	LEFT	80	1	PB29
0010	217 + 11	LEFT	79	1	PB30
0010	218 + 83	LEFT	61	1	PB31
0010	218 + 72	LEFT	3	1	PB32
0010	216 + 91	RIGHT	157	1	PB33
0010	214 + 53	LEFT	50	1	PB34
0010	214 + 53	LEFT	16	1	PB35
0010	216 + 57	LEFT	162	1	PB36
0010	232 + 48	LEFT	62	1	PB41
0010	233 + 9	LEFT	72	1	PB42
0010	233 + 71	LEFT	69	1	PB43
0010	233 + 67	RIGHT	42	1	PB44
0010	232 + 18	RIGHT	42	1	PB45
0010	232 + 20	LEFT	50	1	PB46
0010	234 + 81	LEFT	66	1	PB47
0010	230 + 76	LEFT	50	1	PB48
0010	230 + 72	LEFT	15	1	PB49
0010	232 + 97	RIGHT	58	1	PB50
0010	267 + 95	RIGHT	42	1	PB61
0010	267 + 79	LEFT	66	1	PB62
0010	268 + 27	LEFT	97	1	PB63
0010	268 + 97	LEFT	94	1	PB64
0010	269 + 33	LEFT	95	1	PB65
0010	269 + 87	LEFT	65	1	PB66
0010	269 + 84	RIGHT	36	1	PB67
0010	269 + 32	RIGHT	70	1	PB68
0010	268 + 85	RIGHT	69	1	PB69
0010	268 + 43	RIGHT	69	1	PB70
0010	266 + 77	RIGHT	43	1	PB71
0010	266 + 79	LEFT	16	1	PB72
0010	271 + 2	LEFT	4	1	PB73
0010	271 + 2	RIGHT	36	1	PB74
0010	268 + 51	LEFT	82	1	PB75
			7575-00-71 Total	**57**	

Signal Bases

Category	Station	Dir	Location	654.0101 Concrete Bases Type 1 EACH	654.0102 Concrete Bases Type 2 EACH	SPV.0060.02 Concrete Bases Type 9 & 10 Special EACH	654.0113 Concrete Bases Type 13 EACH	Description
0010	201 + 63	LEFT	67	1				SB1
0010	202 + 38	LEFT	74			1		SB2
0010	202 + 58	LEFT	53	1				SB3
0010	202 + 67	RIGHT	32			1		SB4
0010	201 + 28	RIGHT	55		1			SB5
0010	201 + 9	RIGHT	44	1				SB6
0010	201 + 2	LEFT	53			1		SB7
0010	201 + 14	LEFT	53	1				SB8
0010	217 + 31	LEFT	63	1				SB21
0010	217 + 41	RIGHT	29			1		SB22
0010	216 + 16	RIGHT	56		1			SB23
0010	215 + 90	LEFT	51			1		SB24
0010	216 + 33	LEFT	65	1				SB25
0010	217 + 5	LEFT	96			1		SB26
0010	215 + 99	LEFT	51	1				SB27
0010	233 + 89	RIGHT	34			1		SB41
0010	232 + 30	LEFT	52			1		SB42
0010	232 + 35	LEFT	53	1				SB43
0010	267 + 99	LEFT	65				1	SB61
0010	269 + 63	RIGHT	39				1	SB62
			7575-00-71 Total	**8**	**2**	**8**	**2**	

Electrical Conduit

Category	Station	to	Station	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch LF	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch LF	652.0615 Conduit Special 3-Inch LF	Description
0010	201 + 37	to	201 16E + 68		99		SC1 to PB1
0010	201 + 68	to	202 16E + 39			143	PB1 to PB2
0010	202 + 39	to	202 16E + 40			212	PB2 to PB3
0010	202 + 40	to	202 16E + 18			69	PB3 to PB4
0010	202 + 18	to	201 16E + 83			71	PB4 to PB5
0010	201 + 83	to	201 16E + 28			111	PB5 to PB6
0010	201 + 28	to	200 16E + 88			89	PB6 to PB7
0010	200 + 88	to	200 16E + 90			185	PB7 to PB8
0010	200 + 90	to	201 16E + 32		85		PB8 to PB9
0010	201 + 32	to	201 16E + 37		41		PB9 to SC1
0010	201 + 68	to	202 16E + 21	112			PB1 to PB10
0010	202 + 39	to	202 16E + 91			105	PB2 to PB11
0010	202 + 91	to	203 16E + 84		187		PB11 to PB12
0010	203 + 84	to	203 16E + 89			118	PB12 to PB13
0010	202 + 18	to	202 16E + 14	81			PB4 to PB14
0010	200 + 90	to	198 16E + 92		397		PB8 to PB15
0010	198 + 92	to	198 16E + 88			78	PB15 to PB16
0010	201 + 68	to	201 16E + 63	10			PB1 to SB1
0010	202 + 39	to	202 16E + 38	5			PB2 to SB2
0010	202 + 39	to	202 16E + 58	25			PB2 to SB3
0010	202 + 40	to	202 16E + 67	28			PB3 to SB4
0010	202 + 40	to	202 16E + 25	19			PB3 to Existing SB30
0010	201 + 83	to	201 16E + 82	16			PB5 to Existing SB30
0010	201 + 28	to	201 16E + 28	6			PB6 to SB5
0010	200 + 88	to	201 16E + 09	22			PB7 to SB6
0010	200 + 90	to	201 16E + 02	13			PB8 to SB7
0010	201 + 32	to	201 16E + 14	19			PB9 to SB8
0010	198 + 88	to	199 16E + 88	101			PB16 to Existing LB30
0010	217 + 23	to	217 16E + 17		30		SC2 to PB21
0010	217 + 17	to	217 16E + 49			212	PB21 to PB22
0010	217 + 49	to	217 16E + 13			90	PB22 to PB23
0010	217 + 13	to	216 16E + 58			111	PB23 to PB24
0010	216 + 58	to	216 16E + 07			103	PB24 to PB25
0010	216 + 07	to	215 16E + 70			80	PB25 to PB26
0010	215 + 70	to	215 16E + 77			200	PB26 to PB27
0010	215 + 77	to	215 16E + 98		43		PB27 to PB28
0010	215 + 98	to	216 16E + 38			94	PB28 to PB29
0010	216 + 38	to	217 16E + 11			147	PB29 to PB30
0010	217 + 11	to	217 16E + 23		37		PB30 to SC2
0010	217 + 17	to	218 16E + 83		333		PB21 to PB31
0010	218 + 83	to	218 16E + 72			118	PB31 to PB32
0010	217 + 13	to	216 16E + 91		207		PB23 to PB33
0010	215 + 77	to	214 16E + 53		249		PB27 to PB34
0010	214 + 53	to	214 16E + 53			70	PB34 to PB35
0010	217 + 17	to	217 16E + 31	17			PB21 to SB21
0010	217 + 49	to	217 16E + 41	9			PB22 to SB22
0010	217 + 13	to	217 16E + 19	18			PB23 to Existing SB32
0010	216 + 58	to	216 16E + 61	7			PB24 to Existing SB32
0010	216 + 07	to	216 16E + 16	10			PB25 to SB23
0010	215 + 70	to	215 16E + 91	22			PB26 to Existing SB32
0010	215 + 77	to	215 16E + 90	15			PB27 to SB24
0010	215 + 98	to	215 16E + 99	6			PB28 to SB27
0010	216 + 38	to	216 16E + 33	16			PB29 to SB25
0010	217 + 11	to	217 16E + 05	19			PB30 to SB26
0010	232 + 34	to	232 16E + 48			54	SC3 to PB41
0010	232 + 48	to	233 16E + 09			124	PB41 to PB42
0010	233 + 09	to	233 16E + 71			125	PB42 to PB43
0010	233 + 71	to	233 16E + 67			223	PB43 to PB44
0010	233 + 67	to	232 16E + 97			144	PB44 to PB50
0010	232 + 97	to	232 16E + 18			162	PB50 to PB45
0010	232 + 18	to	232 16E + 20			185	PB45 to PB46
0010	232 + 20	to	232 16E + 34			80	PB46 to SC3
0010	233 + 71	to	234 16E + 81		221		PB43 to PB47
0010	234 + 81	to	234 16E + 83			124	PB47 to Existing PB35
0010	232 + 20	to	230 16E + 76		289		PB46 to PB48
0010	230 + 76	to	230 16E + 72			71	PB48 to PB49
0010	232 + 48	to	232 16E + 58	14			PB41 to Existing SB34
0010	233 + 09	to	233 16E + 09	4			PB42 to Existing SB34
0010	233 + 71	to	233 16E + 49	26			PB43 to Existing SB34
0010	233 + 71	to	233 16E + 77	9			PB43 to Existing SB34
0010	233 + 67	to	233 16E + 89	24			PB44 to SB41
0010	233 + 67	to	233 16E + 47	26			PB44 to Existing SB34
0010	232 + 97	to	232 16E + 97	3			PB50 to Existing SB34
0010	232 + 18	to	232 16E + 54	44			PB45 to Existing SB34
0010	232 + 18	to	232 16E + 34	18			PB45 to Existing SB35
0010	232 + 20	to	232 16E + 30	11			PB46 to SB42
0010	232 + 20	to	232 16E + 35	16			PB46 to SB43
0010	268 + 32	to	267 16E + 95		137		SC4 to PB61
0010	267 + 95	to	267 16E + 79			219	PB61 to PB62
0010	267 + 79	to	268 16E + 27		115		PB62 to PB63
0010	269 + 33	to	269 16E + 87		124		PB65 to PB66
0010	269 + 87	to	269 16E + 84			202	PB66 to PB67
0010	269 + 84	to	269 16E + 32			125	PB67 to PB68
0010	268 + 43	to	268 16E + 32		34		PB70 to SC4
0010	267 + 95	to	266 16E + 77		237		PB61 to PB71
0010	266 + 77	to	266 16E + 79			119	PB71 to PB72
0010	269 + 84	to	271 16E + 02		237		PB67 to PB74
0010	271 + 02	to	271 16E + 02			80	PB74 to PB73
0010	267 + 95	to	268 16E + 07	13			PB61 to Existing SB36
0010	267 + 79	to	267 16E + 99	21			PB62 to SB61
0010	269 + 84	to	269 16E + 63	22			PB67 to SB62
0010	268 + 27	to	268 16E + 20	21			PB63 to Existing SB36
0010	269 + 87	to	269 16E + 60	28			PB66 to Existing SB36
			7575-00-71 Total	**896**	**3102**	**4443**	

Removals

Category	Station	Dir	Location	653.0900 Adjusting Pull Box EACH	653.0905 Removing Pull Box EACH	SPV.0060.01 Removing Traffic Signal Units EACH	204.0195 Removing Concrete Bases EACH	Description
0010	201 + 46	LEFT	55		1			Existing PB301
0010	201 + 98	LEFT	59		1			Existing PB302
0010	202 + 53	LEFT	53		1			Existing PB303
0010	202 + 58	LEFT	4		1			Existing PB304
0010	202 + 34	RIGHT	57		1			Existing PB305
0010	201 + 83	RIGHT	63		1			Existing PB306
0010	201 + 19	RIGHT	49		1			Existing PB307
0010	201 + 3	LEFT	16		1			Existing PB308
0010	201 + 23	LEFT	49		1			Existing PB309
0010	202 + 21	LEFT	173		1			Existing PB310
0010	203 + 89	LEFT	4		1			Existing PB311
0010	204 + 89	LEFT	6	1				Existing PB312
0010	202 + 14	RIGHT	144		1			Existing PB313
0010	200 + 12	LEFT	16		1			Existing PB314
0010	198 + 89	LEFT	14		1			Existing PB315
0010	201 + 63	LEFT	67			1	1	Existing SB301
0010	201 + 99	LEFT	62			1	1	Existing SB302
0010	202 + 36	LEFT	60			1	1	Existing SB303
0010	202 + 58	LEFT	53			1	1	Existing SB304
0010	202 + 56	LEFT	4			1	1	Existing SB305
0010	202 + 47	RIGHT	32			1	1	Existing SB306
0010	201 + 28	RIGHT	55			1	1	Existing SB309
0010	201 + 9	RIGHT	44			1	1	Existing SB310
0010	201 + 9	LEFT	16			1	1	Existing SB311
0010	201 + 14	LEFT	53			1	1	Existing SB312
0010	217 + 8	LEFT	75		1			Existing PB321
0010	217 + 34	LEFT	4		1			Existing PB322
0010	217 + 15	RIGHT	42		1			Existing PB323
0010	216 + 59	RIGHT	53		1			Existing PB324
0010	215 + 82	RIGHT	44		1			Existing PB325
0010	215 + 83	LEFT	16		1			Existing PB326
0010	216 + 16	LEFT	53		1			Existing PB327
0010	218 + 77	LEFT	61		1			Existing PB328
0010	218 + 16	LEFT	4		1			Existing PB329
0010	218 + 72	LEFT	3		1			Existing PB330
0010	219 + 73	LEFT	4	1				Existing PB331
0010	216 + 87	RIGHT	155		1			Existing PB332
0010	214 + 97	LEFT	16		1			Existing PB333
0010	214 + 64	LEFT	16		1			Existing PB334
0010	213 + 37	LEFT	16	1				Existing PB335
0010	216 + 57	LEFT	162		1			Existing PB336
0010	217 + 22	LEFT	62			1	1	Existing SB321
0010	217 + 26	LEFT	4			1	1	Existing SB322
0010	217 + 31	RIGHT	32			1	1	Existing SB323
0010	216 + 16	RIGHT	56			1	1	Existing SB326
0010	215 + 90	LEFT	16			1	1	Existing SB328
0010	215 + 99	LEFT	51			1	1	Existing SB329
0010	216 + 31	LEFT	63			1	1	Existing SB330
0010	217 + 1	LEFT	77			1	1	Existing SB331
0010	232 + 41	LEFT	57		1			Existing PB341
0010	233 + 9	LEFT	72		1			Existing PB342
0010	233 + 65	LEFT	68		1			Existing PB343
0010	233 + 63	LEFT	4		1			Existing PB344
0010	233 + 62	RIGHT	42		1			Existing PB345
0010	232 + 32	RIGHT	45		1			Existing PB346
0010	232 + 35	LEFT	16		1			Existing PB347
0010	232 + 64	LEFT	171	1				Existing PB348
0010	234 + 77	LEFT	63		1			Existing PB349
0010	234 + 55	LEFT	4		1			Existing PB350
0010	234 + 83	LEFT	4	1				Existing PB351
0010	232 + 97	RIGHT	58		1			Existing PB352
0010	231 + 18	LEFT	16		1			Existing PB353
0010	230 + 72	LEFT	15		1			Existing PB354
0010	229 + 84	LEFT	15	1				Existing PB355
0010	233 + 60	LEFT	4			1	1	Existing SB345
0010	233 + 71	RIGHT	38			1	1	Existing SB346
0010	232 + 30	LEFT	16			1	1	Existing SB351
0010	232 + 35	LEFT	53			1	1	Existing SB352
0010	268 + 3	RIGHT	42		1			Existing PB361
0010	268 + 3	LEFT	16		1			Existing PB362
0010	268 + 13	LEFT	16		1			Existing PB363
0010	268 + 12	LEFT	70		1			Existing PB364
0010	268 + 27	LEFT	97		1			Existing PB365
0010	268 + 97	LEFT	94		1			Existing PB366
0010	269 + 33	LEFT	95		1			Existing PB367
0010	269 + 64	LEFT	65		1			Existing PB368
0010	269 + 69	LEFT	4		1			Existing PB369
0010	269 + 74	LEFT	4		1			Existing PB370
0010	269 + 75	RIGHT	37		1			Existing PB371
0010	269 + 32	RIGHT	70		1			Existing PB372
0010	268 + 85	RIGHT	69		1			Existing PB373
0010	268 + 43	RIGHT	69		1			Existing PB374
0010	266 + 79	LEFT	16		1			Existing PB375
0010	266 + 31	LEFT	16	1				Existing PB376
0010	268 + 51	LEFT	82		1			Existing PB377
0010	271 + 4	LEFT	62		1			Existing PB378
0010	271 + 2	LEFT	4		1			Existing PB379
0010	268 + 10	LEFT	16			1	1	Existing SB362
0010	267 + 94	LEFT	61			1	1	Existing SB363
0010	269 + 63	LEFT	4			1	1	Existing SB369
0010	269 + 69	RIGHT	37			1	1	Existing SB370
0010	201 + 42	LEFT	68				1	Existing SC301
0010	217 + 27	LEFT	76				1	Existing SC302
0010	232 + 29	LEFT	69				1	Existing SC303
0010	268 + 28	RIGHT	66				1	Existing SC304
			7575-00-71 Total	**7**	**58**	**26**	**30**	

STATE PROJECT NO: 7575-00-71 | HWY: STH 16 | COUNTY: LA CROSSE | MISCELLANEOUS QUANTITIES | SHEET NO: 93 E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ ORG DATE : _____ ORIGINATOR : DIST _ PLOT SCALE : 1:1

Electrical Items

Category	Station	Dir	Location	650.8500 Construction Staking Electrical Installations 3700-10-83 LS	658.5069.01 Signal Mounting Hardware IH 90 EB LS	658.5069.02 Signal Mounting Hardware IH 90 WB EACH	Description
0010	244 + 95	RIGHT	74		1		Existing SC401
0010	263 + 47	RIGHT	61			1	Existing SC402
0010	244 + 95	RIGHT	74	1			Project
		3700-10-83 Total		**1**	**1**	**1**	

Signal Bases

Category	Station	Dir	Location	654.0102 Concrete Bases Type 2 EACH	654.0110 Concrete Bases Type 10 EACH	SPV.0060.02 Concrete Bases Type 9 & 10 Special EACH	Description
0010	244 + 62	LEFT	12		1		SB401
0010	245 + 74	RIGHT	40		1		SB402
0010	245 + 41	RIGHT	68		1		SB403
0010	262 + 93	RIGHT	30			1	SB411
0010	261 + 72	LEFT	51		1		SB412
0010	262 + 70	LEFT	53	1			SB413
		3700-10-83 Total		**1**	**4**	**1**	

Poles, Arms & Equipment

Category	Station	Dir	Location	SPV.0060.04 Install Poles Type 9 EACH	SPV.0060.03 Install Poles Type 9 Special EACH	SPV.0060.05 Install Poles Type 10 EACH	SPV.0060.08 Install Monotube Arms 30-FT EACH	SPV.0060.11 Install Monotube Arms ype 9 Specia 40-FT EACH	SPV.0060.13 Install Luminaire Arms Steel 15-FT EACH	657.2550 Transformer Bases Breakaway 11 1/2 Inch Bolt Circle EACH	657.0305 Poles Type 2 EACH	657.0595 Trombone Arms 25-FT EACH	658.0173 Traffic Signal Face 3S 12-Inch EACH	658.0174 Traffic Signal Face 4S 12-Inch EACH	SPV.0060.14 Retroreflective Backplate 3S EACH	SPV.0060.15 Retroreflective Backplate 4S EACH	Desc
0010	244 + 62	LEFT	12.3	1			1						2	1	2	1	SB401
0010	245 + 74	RIGHT	39.8			1	1		1				2		2		SB402
0010	245 + 41	RIGHT	68.1	1			1						2				SB403
0010	262 + 93	RIGHT	29.9		1			1					3		3		SB411
0010	261 + 72	LEFT	50.9			1	1		1				2		2		SB412
0010	262 + 70	LEFT	53.3							1	1	1	2				SB413
		3700-10-83 Total		**2**	**1**	**2**	**4**	**1**	**2**	**1**	**1**	**1**	**13**	**1**	**9**	**1**	

3

Electrical Conduit

Category	Station	to	Station	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch LF	Description
0010	244 + 68	to	244 16E + 62	7	Existing PB401 to SB401
0010	245 + 68	to	245 16E + 74	7	Existing PB402 to SB402
0010	245 + 45	to	245 16E + 41	6	Existing PB403 to SB403
0010	262 + 92	to	262 16E + 93	7	Existing PB411 to SB411
0010	261 + 80	to	261 16E + 72	9	Existing PB412 to SB412
0010	262 + 97	to	262 16E + 70	28	Existing PB413 to SB413
			3700-10-83 Total	**64**	

Removals

Category	Station	Dir	Location	653.0900 Adjusting Pull Box EACH	SPV.0060.01 Removing Traffic Signal Units EACH	204.0195 Removing Concrete Bases EACH	Description
0010	244 + 68	LEFT	10	1			Existing PB40
0010	245 + 68	RIGHT	40	1			Existing PB40
0010	245 + 45	RIGHT	71	1			Existing PB40
0010	262 + 92	RIGHT	36	1			Existing PB41
0010	261 + 80	LEFT	51	1			Existing PB41
0010	262 + 97	LEFT	50	1			Existing PB41
0010	244 + 62	LEFT	12		1	1	Existing SB40
0010	245 + 74	RIGHT	40		1	1	Existing SB40
0010	245 + 41	RIGHT	68		1	1	Existing SB40
0010	262 + 93	RIGHT	30		1	1	Existing SB41
0010	261 + 72	LEFT	51		1	1	Existing SB41
0010	262 + 70	LEFT	53		1	1	Existing SB41
0010	262 + 50	LEFT	5		1	1	Existing SB41
0010	262 + 50	LEFT	5		1	1	Existing SB41
			3700-10-83 Total	**6**	**8**	**8**	

3

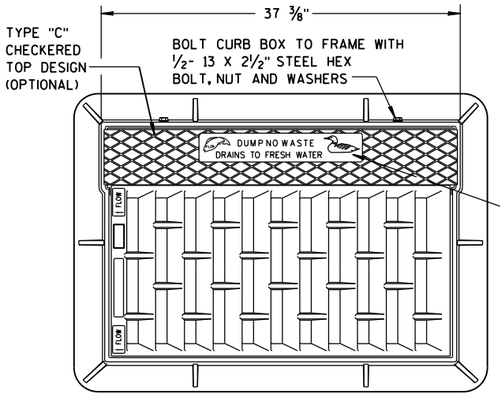
Signal Wire

Category	Station	to	Station	655.0230 Cable Traffic Signal 5-14 AWG LF	655.0240 Cable Traffic Signal 7-14 AWG LF	655.0260 Cable Traffic Signal 12-14 AWG LF	655.0515 Elecrtrical Wire Traffic Signals 10 AWG LF	Description
0010	244 + 62			138				SB401 - Up Pole
0010	245 + 74			104				SB402 - Up Pole
0010	245 + 41			104				SB403 - Up Pole
0010	262 + 93			168				SB411 - Up Pole
0010	261 + 72			104				SB412 - Up Pole
0010	262 + 70			92				SB413 - Up Pole
0010	244 + 95	to	244 16I + 62			117		Existing SC401 to SB401
0010	244 + 95	to	245 16I + 74		109			Existing SC401 to SB402
0010	244 + 95	to	245 16I + 41		78			Existing SC401 to SB403
0010	263 + 47	to	262 16I + 93		89			Existing SC402 to SB411
0010	263 + 47	to	261 16I + 72		231			Existing SC402 to SB412
0010	263 + 47	to	262 16I + 70		171			Existing SC402 to SB413
0010	244 + 68	to	244 16I + 62				49	Existing PB401 to SB401 Grounding Conductor
0010	245 + 68	to	245 16I + 74				49	Existing PB402 to SB402 Grounding Conductor
0010	245 + 45	to	245 16I + 41				46	Existing PB403 to SB403 Grounding Conductor
0010	262 + 92	to	262 16I + 93				49	Existing PB411 to SB411 Grounding Conductor
0010	261 + 80	to	261 16I + 72				55	Existing PB412 to SB412 Grounding Conductor
0010	262 + 97	to	262 16I + 70				112	Existing PB413 to SB413 Grounding Conductor
			3700-10-83 Total	**710**	**678**	**117**	**360**	

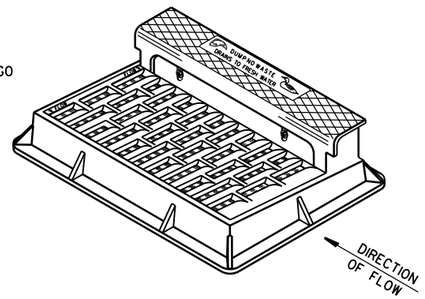
Standard Detail Drawing List

08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-21A	CONCRETE CURB & GUTTER
08D01-21B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-20A	CURB RAMPS TYPES 1 AND 1-A
08D05-20B	CURB RAMPS TYPES 2 AND 3
08D05-20C	CURB RAMPS TYPES 4A AND 4A1
08D05-20D	CURB RAMPS TYPE 4B AND 4B1
08D05-20E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
09B02-10	CONDUIT
09B04-11	PULL BOX
09B16-01	PULL BOX NON-CONDUCTIVE
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C06-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09C11-10	CONCRETE BASE TYPE 10
09C12-09A	CONCRETE BASE TYPE 13
09C12-09B	CONCRETE BASE TYPE 13
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-03	SIGNAL CONTROL CABINET
09E01-15A	POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2
09E01-15B	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)
09E01-15C	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4
09E01-15D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-15E	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 6 (35 FEET)
09E01-15F	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 17 (40 FEET)
09E01-15G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E08-08A	TYPE 9 POLE 15'-30' MONOTUBE ARM
09E08-08B	TYPE 10 POLE 15'-30' MONOTUBE ARM
09E08-08D	TYPE 13 POLE 35'-55' MONOTBE ARM
09E08-08E	GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS
11B02-02	CONCRETE MEDIAN NOSE
12A04-03	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORTS & TRAFFIC SIGNALS
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C09-15A	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-15B	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-15C	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C13-09	URBAN DOWELED CONCRETE PAVEMENT
13C18-07A	CONCRETE PAVEMENT JOINTING
13C18-07B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-07C	CONCRETE PAVEMENT JOINT TYPES
13C18-07D	CONCRETE PAVEMENT JOINT TYPES AT UTILITY FIXTURES
15C07-15A	PAVEMENT MARKING SYMBOLS
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)
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D20-05A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
15D20-05B	TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY
15D20-05C	TRAFFIC CONTROL, SINGLE LEFT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY
15D21-06A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D21-06B	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
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS

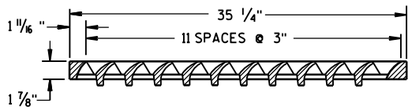
6

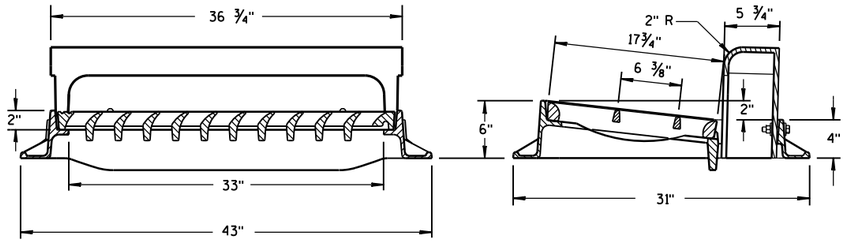


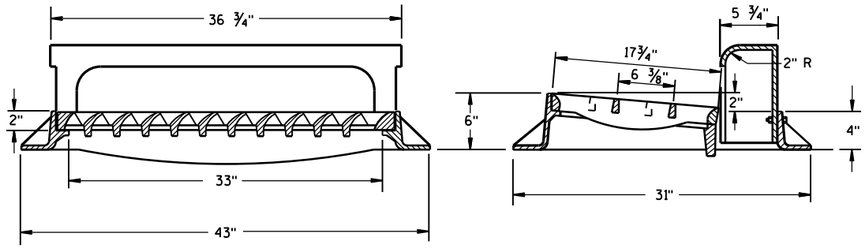
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

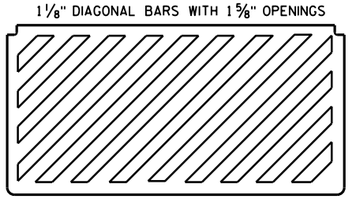






TYPE "H"

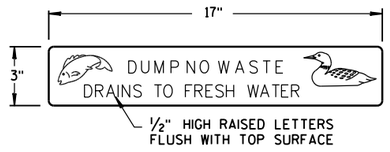
NOTE: EITHER CASTING IS ACCEPTABLE



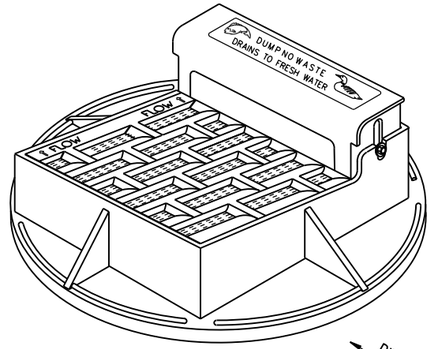
SPECIAL GRATE FOR TYPE "H" COVER

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

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

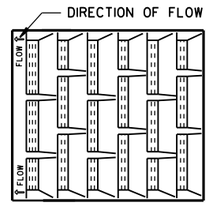
NOTE:
GRATE IS REVERSIBLE.

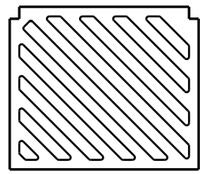
GENERAL NOTES

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

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

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

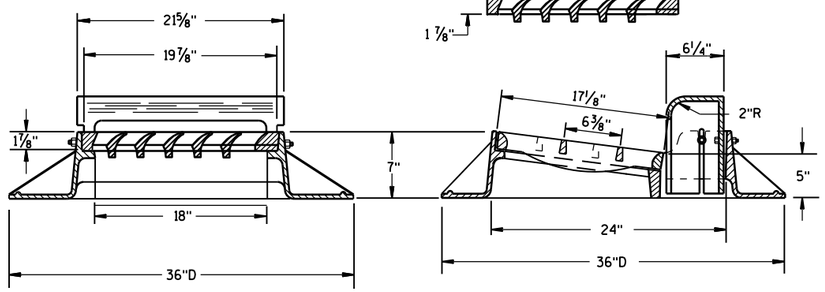




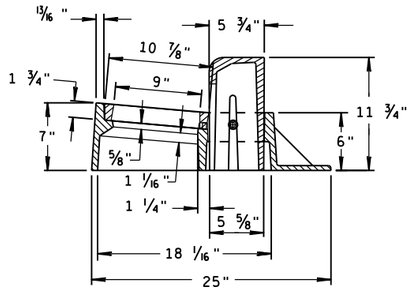
SPECIAL GRATE FOR TYPE "A" COVER

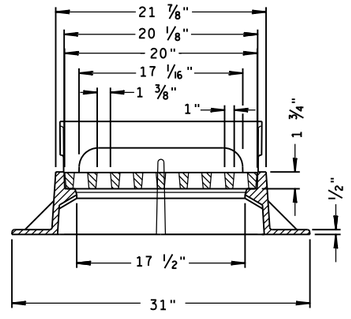
(MEASURES 19 3/4" X 17" X 1 7/8")

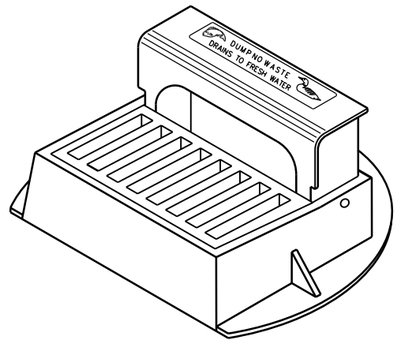
(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "A"







TYPE "Z"

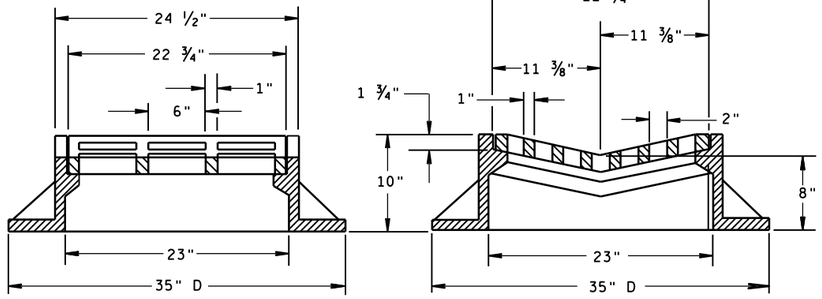
INLET COVERS
TYPE A, H, A-S, H-S & Z

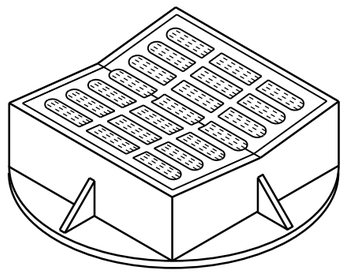
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

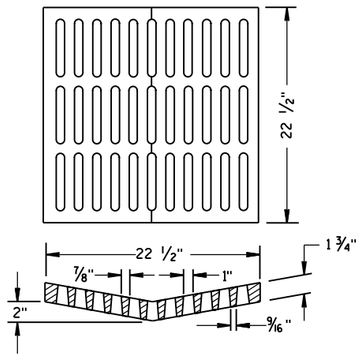
6

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



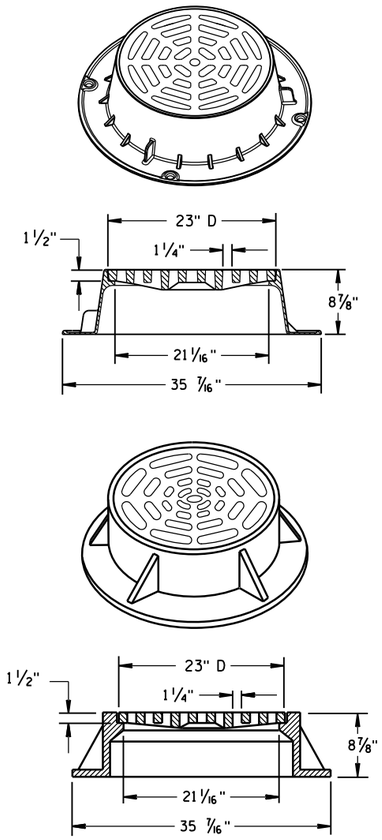


TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

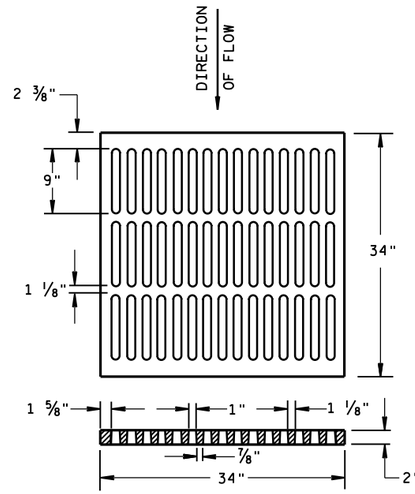
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

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

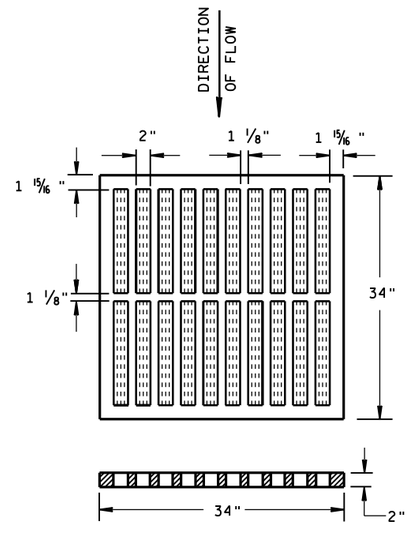
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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



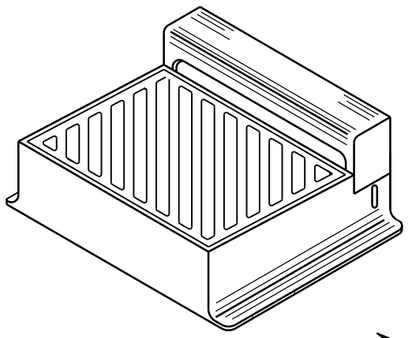
ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

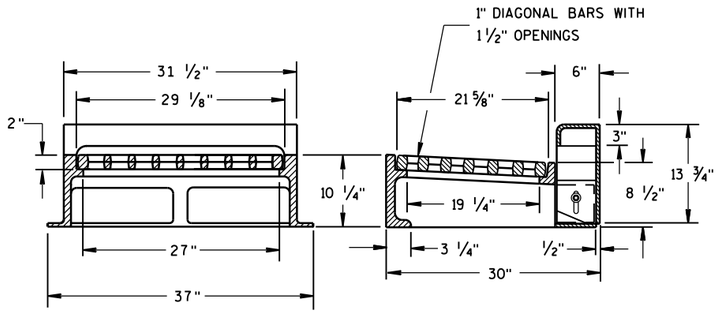


TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE



DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

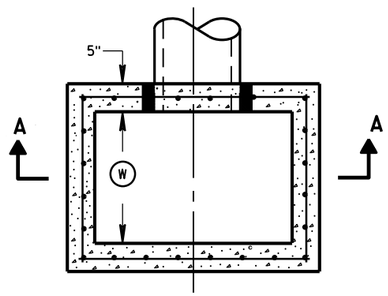
INLET COVERS
TYPE B, B-A, C, MS, MS-A, & WM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

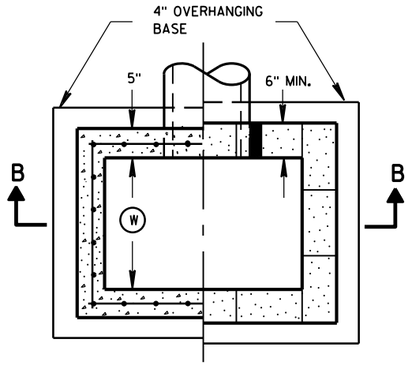
APPROVED
11/27/2013 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6

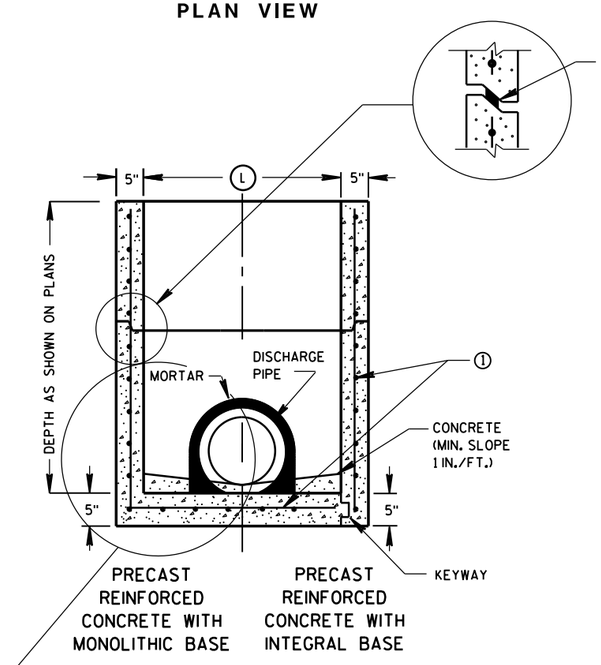
S.D.D. 8 A 5-19b



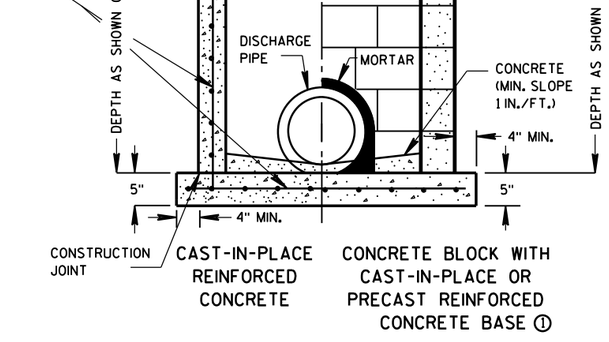
PLAN VIEW



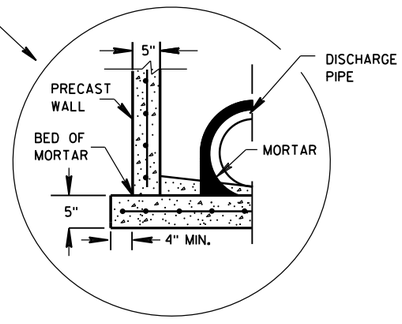
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

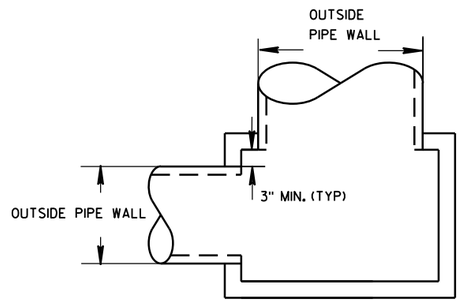
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

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

PIPE MATRIX

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



DETAIL "A"

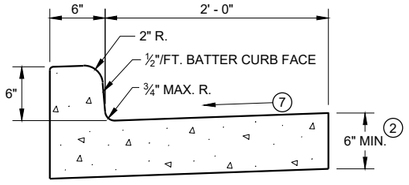
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

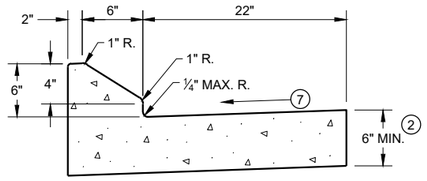
APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D IT UNIT SUPERVIS
FHWA

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

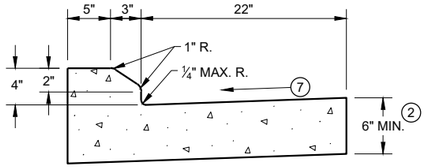
6
S.D.D. 8 C 7-2



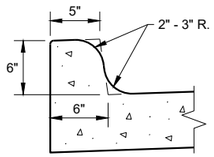
TYPES A[1] & D



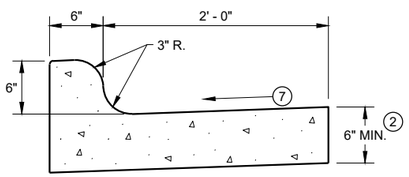
6" SLOPED CURB TYPES G[1] & J



4" SLOPED CURB TYPES G[1] & J

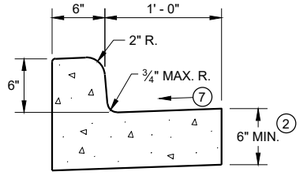


TYPES K[1] & L
(OPTIONAL CURB SHAPE)



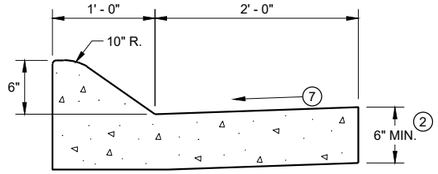
TYPES K[1] & L

CONCRETE CURB AND GUTTER 30"

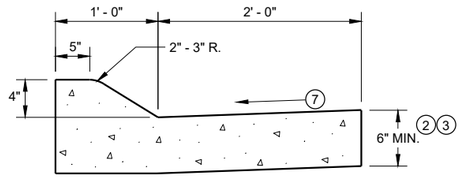


TYPES A[1] & D

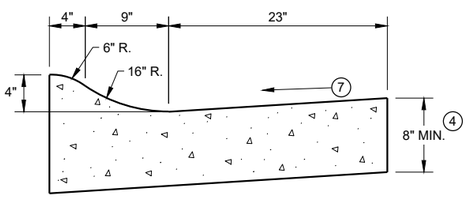
CONCRETE CURB AND GUTTER 18"



6" SLOPED CURB TYPES A[1] & D



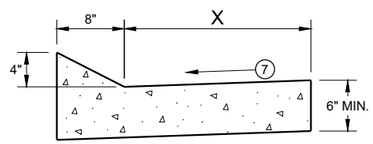
4" SLOPED CURB TYPES A[1] & D



4" SLOPED CURB TYPES R[1] & T[5]

CONCRETE CURB AND GUTTER 36"

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

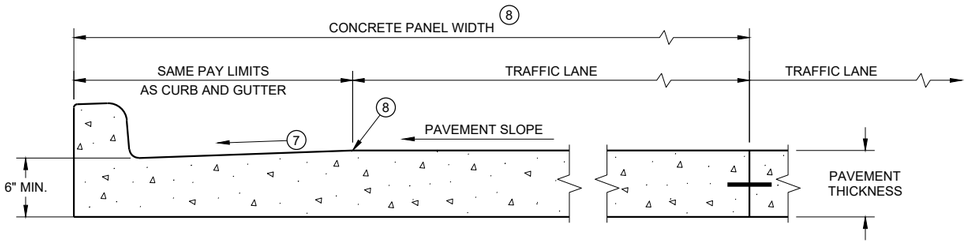


TYPES TBT & TBTT[1]

CONCRETE CURB AND GUTTER

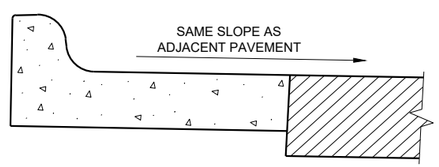
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



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

GENERAL NOTES

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

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

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

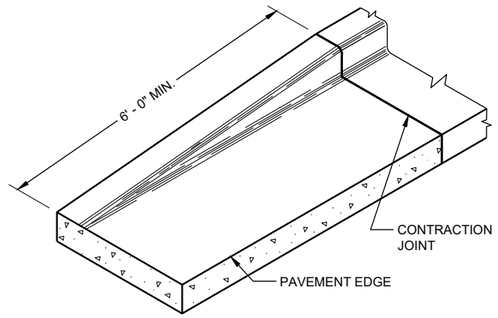
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

1. TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
2. THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
3. USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.
4. THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
5. THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
6. WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.
7. USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.
8. INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

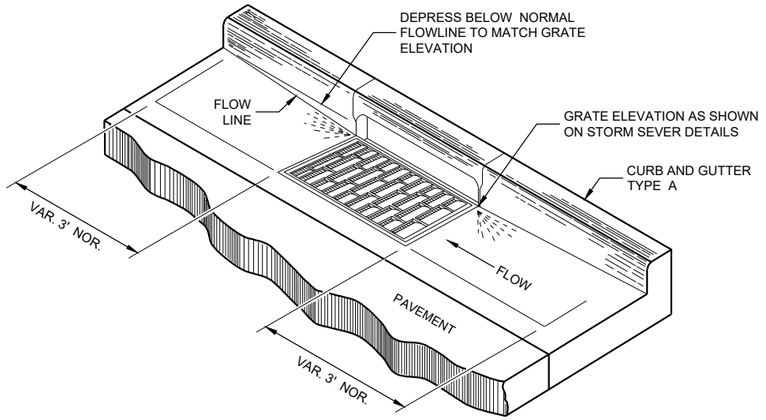
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 08D01 - 21a



END SECTIONCURB AND GUTTER



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

GENERAL NOTES

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

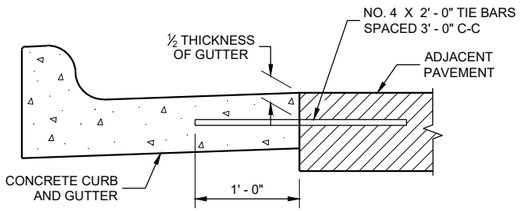
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

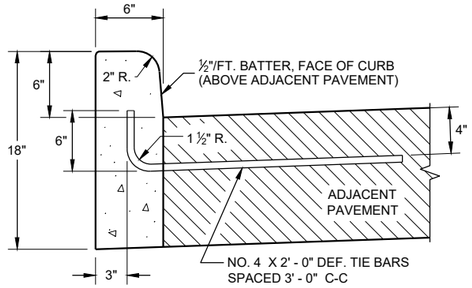
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

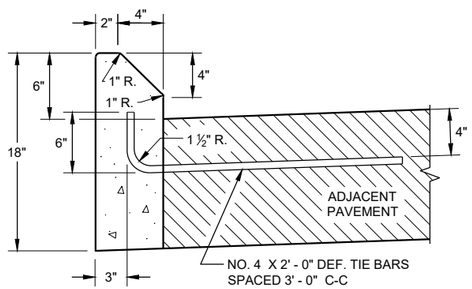
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION (1)

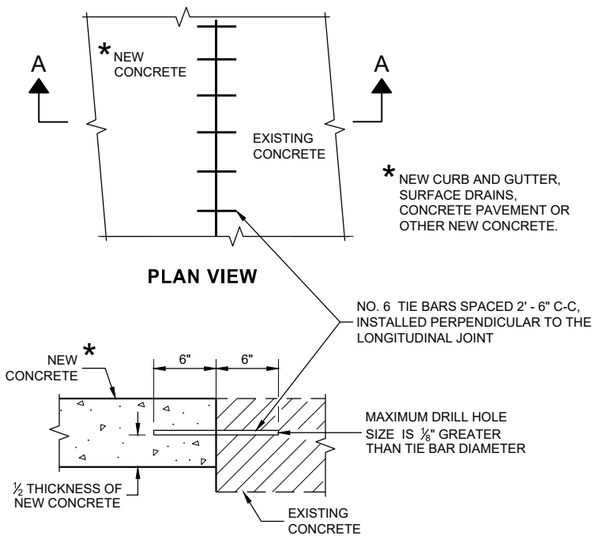


TYPES A (1) & D



TYPES G (1) & J

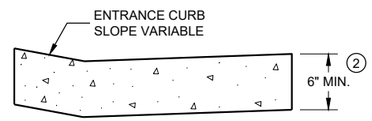
CONCRETE CURB



PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



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

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

SDD08D01 - 21b

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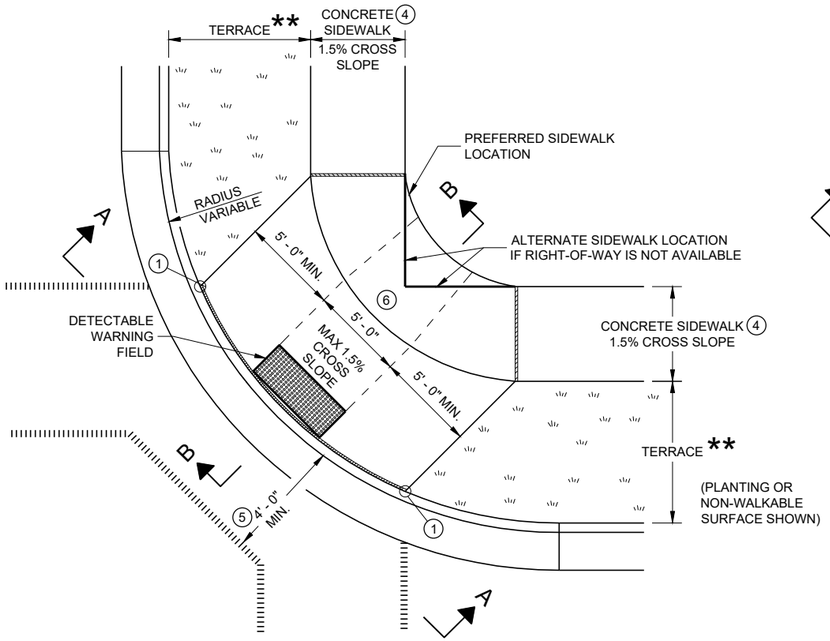
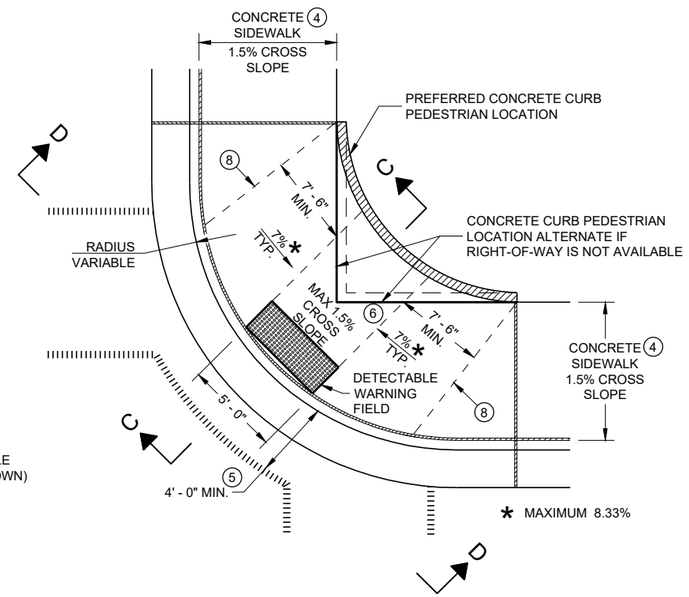
SDD08D01 - 21b



PLAN VIEW

CURB RAMP TYPE 1

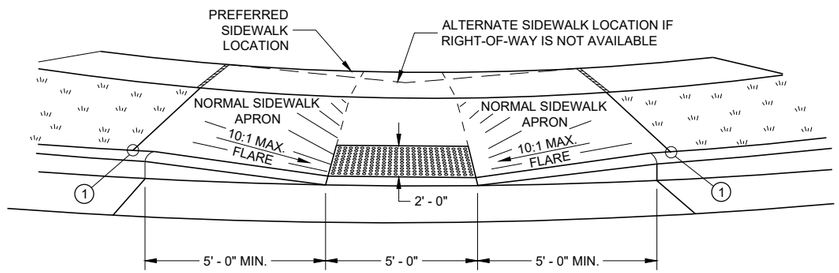
(CENTER OF CORNER RADIUS)



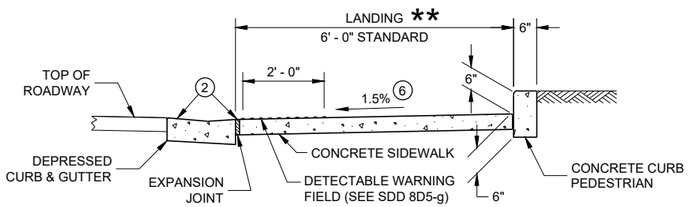
PLAN VIEW

CURB RAMP TYPE 1 - A

(NO TERRACE)

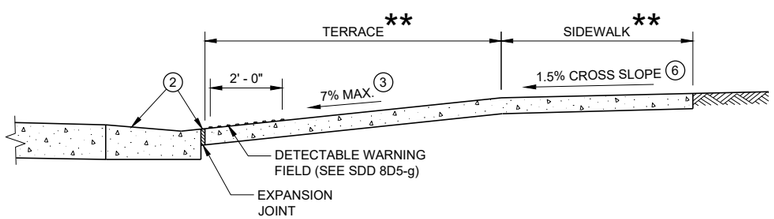


VIEW A - A FOR TYPE 1

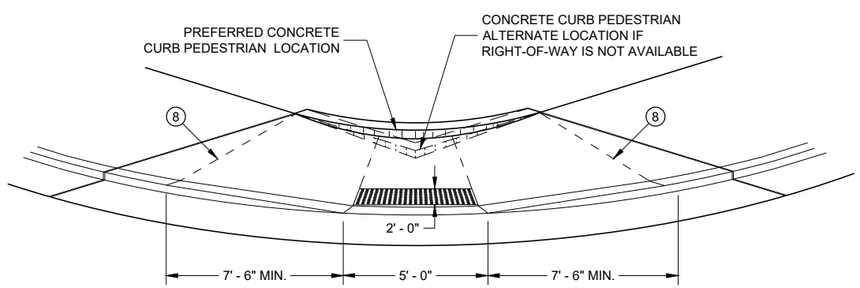


SECTION C - C FOR TYPE 1 - A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B - B FOR TYPE 1



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

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

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

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

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

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

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

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

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

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

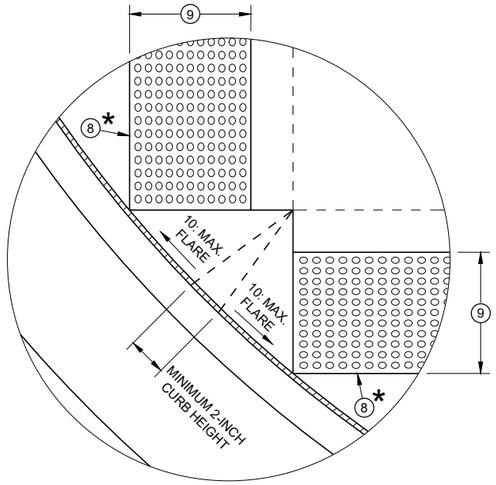
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 1 AND 1-A

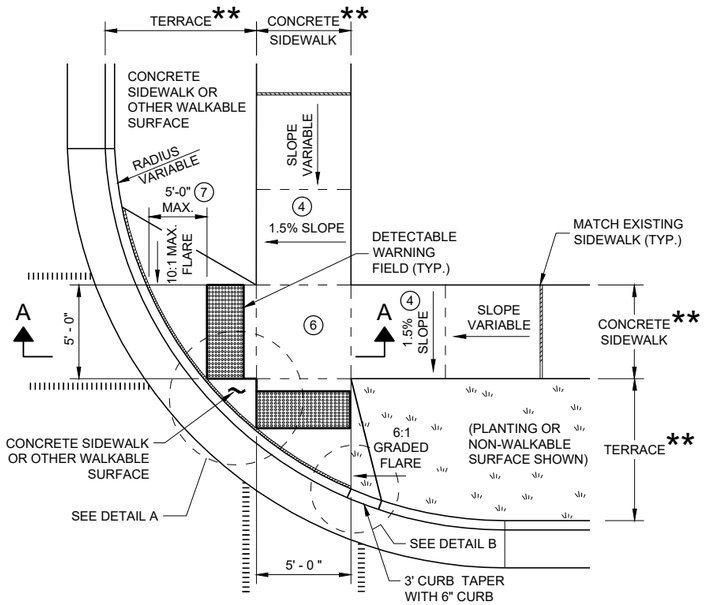
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20a



DETAIL A



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

GENERAL NOTES

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

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.

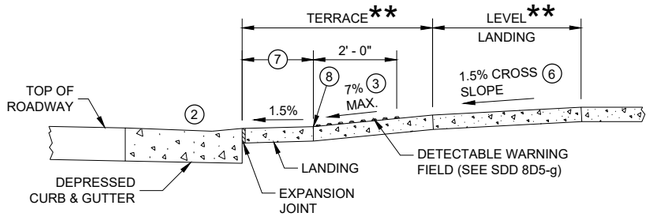
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.

(7) WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

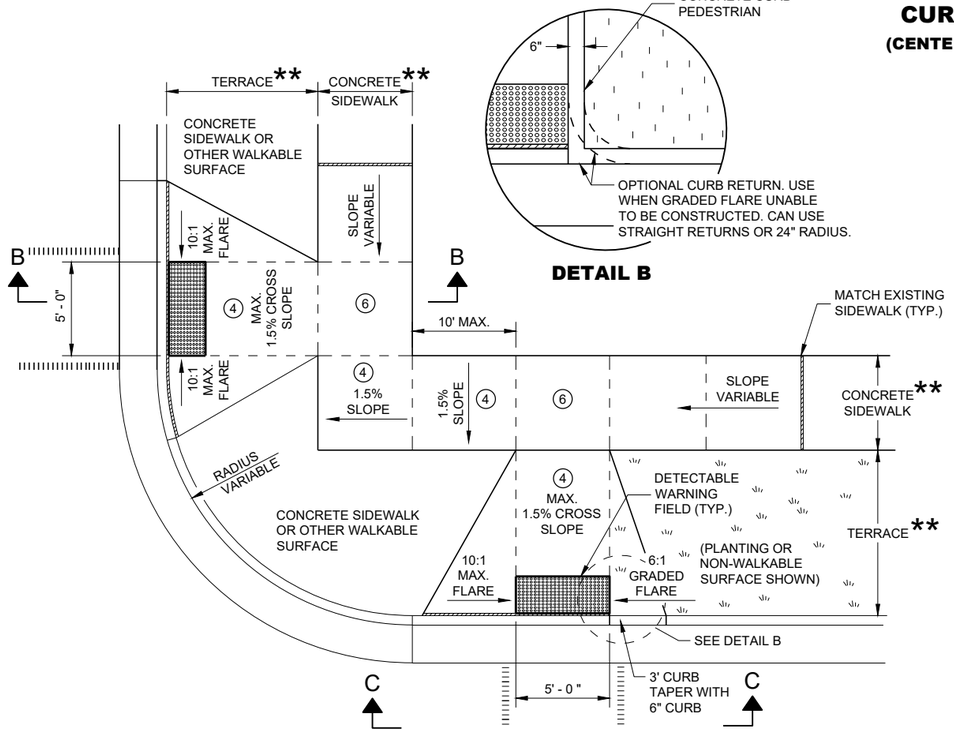
(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.



SECTION A - A FOR TYPE 2

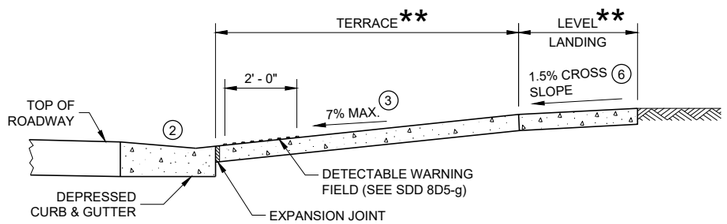
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

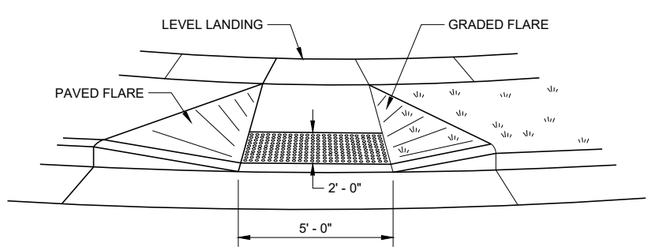


DETAIL B

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



SECTION B - B FOR TYPE 3



VIEW C - C FOR TYPE 3

LEGEND

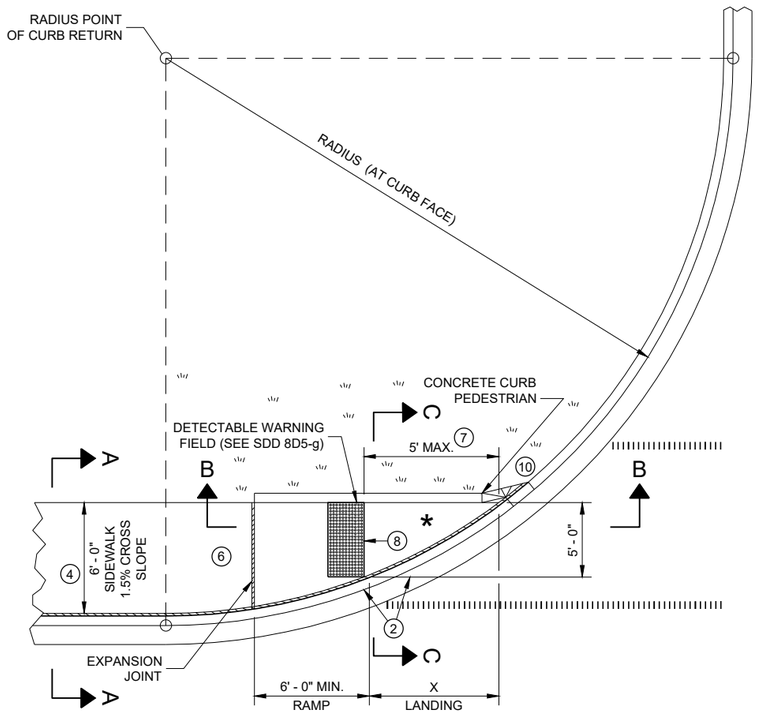
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20b

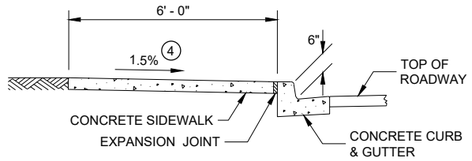


PLAN VIEW

CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"
15 FEET	6' - 5½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A

GENERAL NOTES

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

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

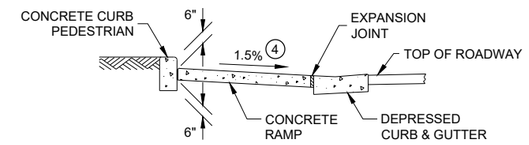
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

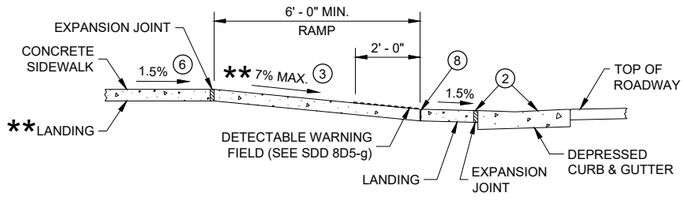
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)

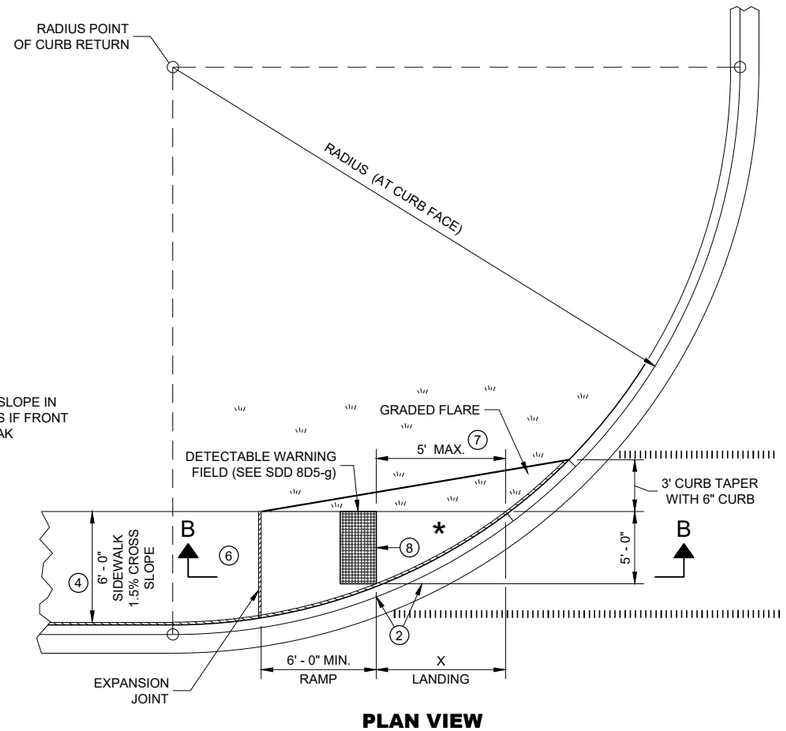


SECTION C - C FOR TYPE 4A



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

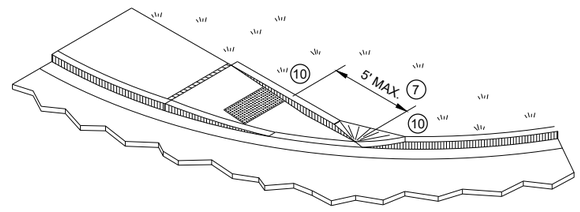
SECTION B - B FOR TYPE 4A AND TYPE 4A1



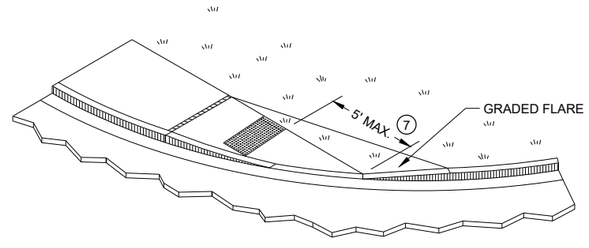
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

PLAN VIEW

CURB RAMP TYPE 4A1



ISOMETRIC VIEW FOR TYPE 4A



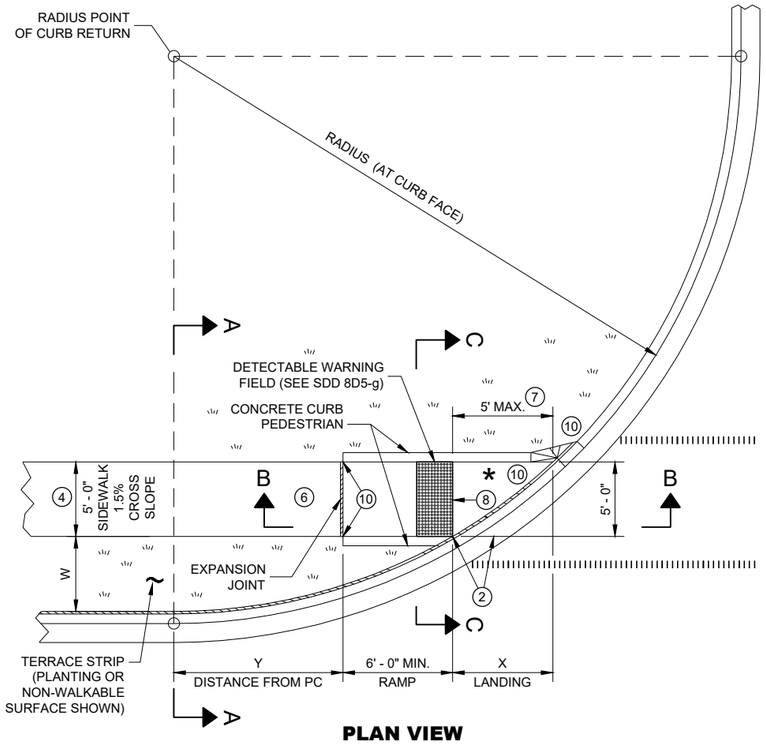
ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS
TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20c

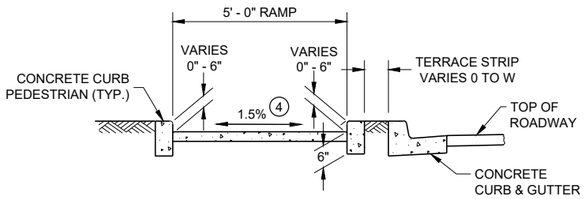


PLAN VIEW

CURB RAMP TYPE 4B

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 ¼"	0' - 5"	2' - 1"	1' - 4 ½"	1' - 5"	2' - 1"	0' - 10"	2' - 7 ½"	0' - 3 ¼"	3' - 0 ¼"						
15 FEET	4' - 6 ¾"	2' - 1 ¾"	3' - 9"	3' - 5 ¾"	3' - 1 ¼"	4' - 6"	2' - 6 ¾"	5' - 4 ½"	2' - 1"	6' - 1"	1' - 8"	6' - 8 ½"	1' - 3 ¼"	7' - 2 ½"	0' - 10 ¾"	7' - 7 ¼"
20 FEET	5' - 9 ¾"	3' - 6 ½"	4' - 11 ½"	5' - 1 ¾"	4' - 3 ¼"	6' - 5 ½"	3' - 8 ¾"	7' - 7"	3' - 3"	8' - 6 ½"	2' - 10"	9' - 4 ½"	2' - 5 ½"	10' - 1 ¼"	2' - 1 ¼"	10' - 9"
30 FEET			6' - 9 ¼"	7' - 11 ¼"	6' - 0 ¼"	9' - 8"	5' - 5"	11' - 1 ¾"	4' - 10 ¾"	12' - 5 ¾"	4' - 5 ½"	13' - 7 ¾"	4' - 0 ¾"	14' - 8 ½"	3' - 8 ½"	15' - 8 ¼"
40 FEET									6' - 1 ¾"	15' - 8 ½"	5' - 8"	17' - 2"	5' - 3"	18' - 5 ¾"	4' - 10 ¾"	19' - 8 ¼"
50 FEET															5' - 10 ¼"	23' - 2"

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



SECTION C - C FOR TYPE 4B

LEGEND

½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

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

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

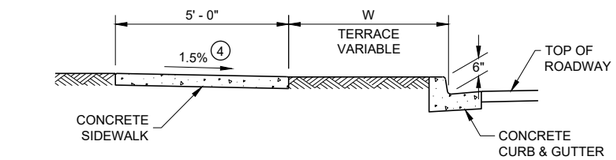
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

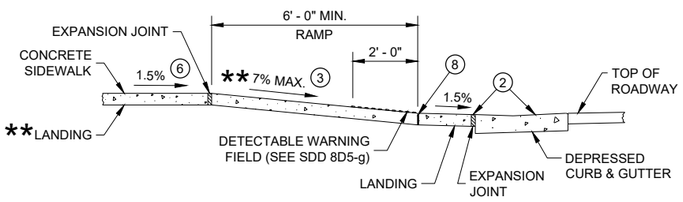
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

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



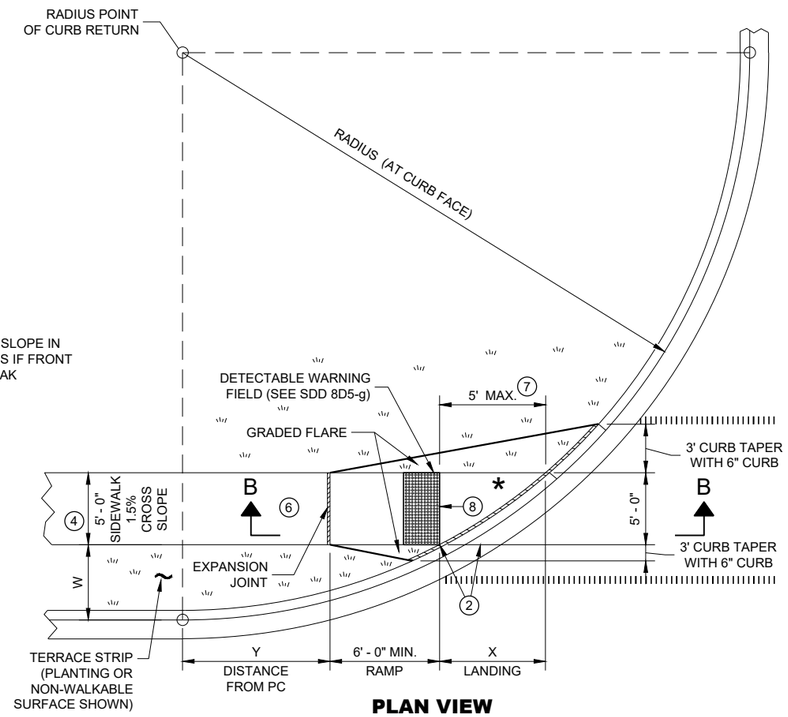
SECTION A - A FOR TYPE 4B



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

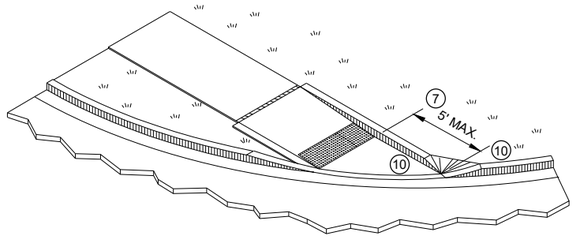
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

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

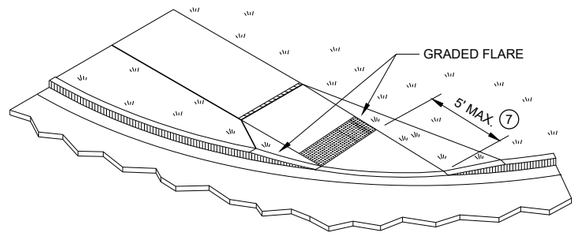


PLAN VIEW

CURB RAMP TYPE 4B1



ISOMETRIC VIEW FOR TYPE 4B



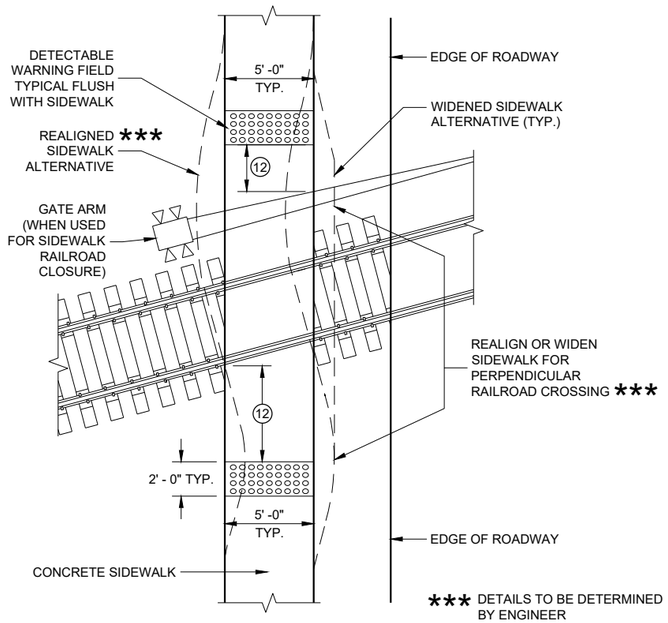
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

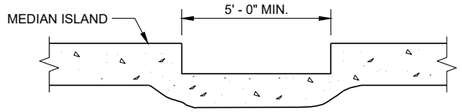
6

SDD 08D05 - 20d

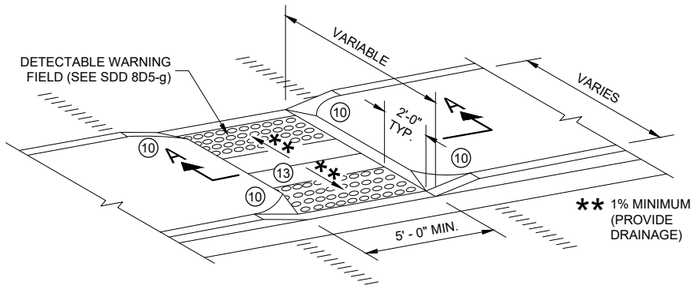


CURB RAMP TYPE 8

DETECTABLE WARNINGS AT RAILROAD CROSSING



SECTION A - A FOR TYPE 5



CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

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

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

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

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

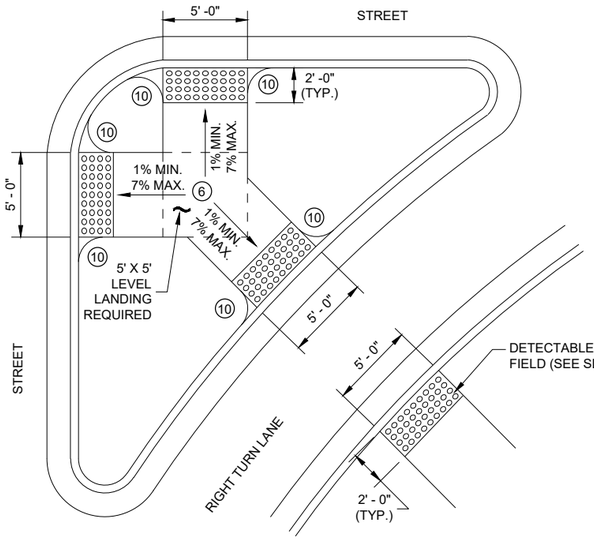
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

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

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

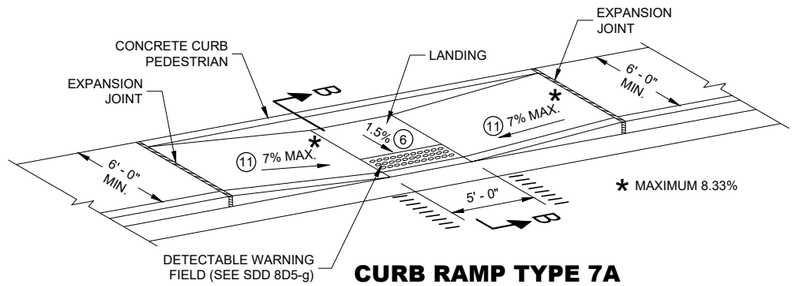
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



CURB RAMP TYPE 6

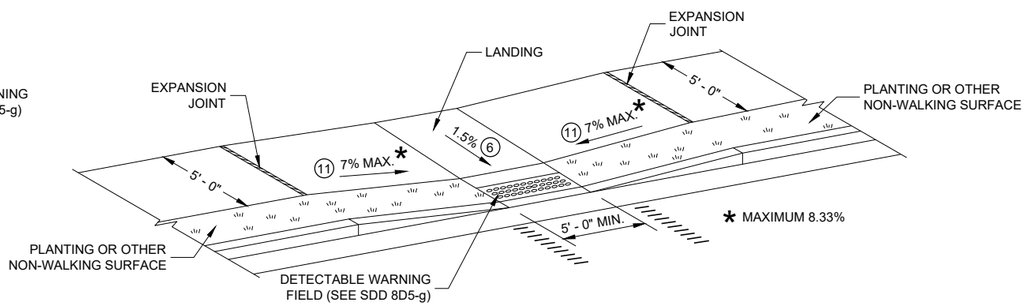
DETECTABLE WARNING AT ISLANDS

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



CURB RAMP TYPE 7A

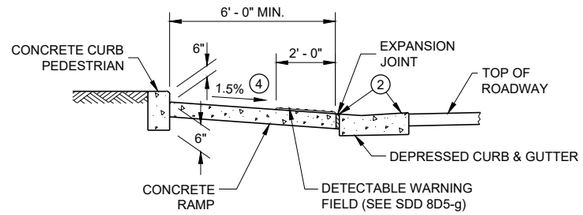
MID BLOCK CROSSING



CURB RAMP TYPE 7B

MID BLOCK CROSSING

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



SECTION B - B FOR TYPE 7A

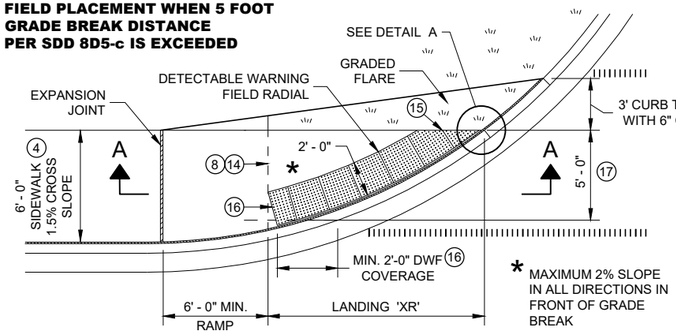
CURB RAMPS TYPE 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20e

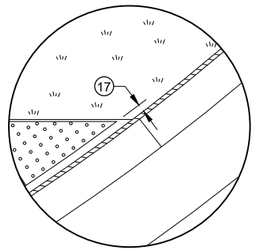
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED



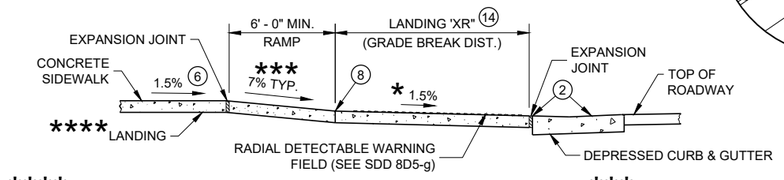
PLAN VIEW

CURB RAMP TYPE 4A1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL A

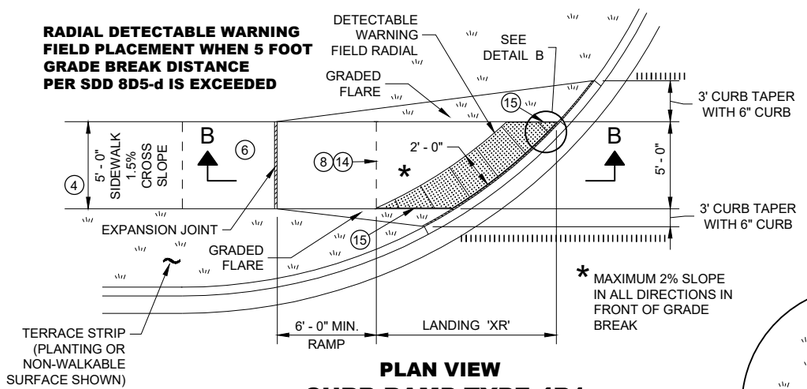


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION A - A FOR TYPE 4A1

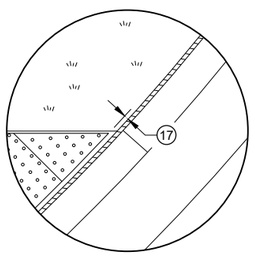
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED



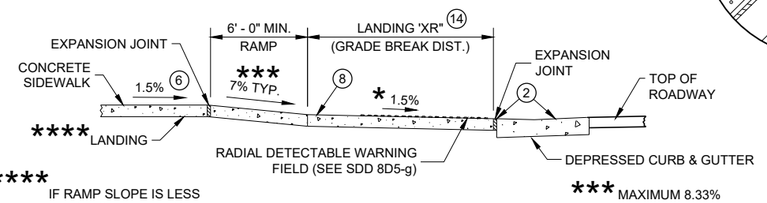
PLAN VIEW

CURB RAMP TYPE 4B1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B



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

*** MAXIMUM 8.33%

SECTION B - B FOR TYPE 4B1

LEGEND

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

GENERAL NOTES

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

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

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

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

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

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

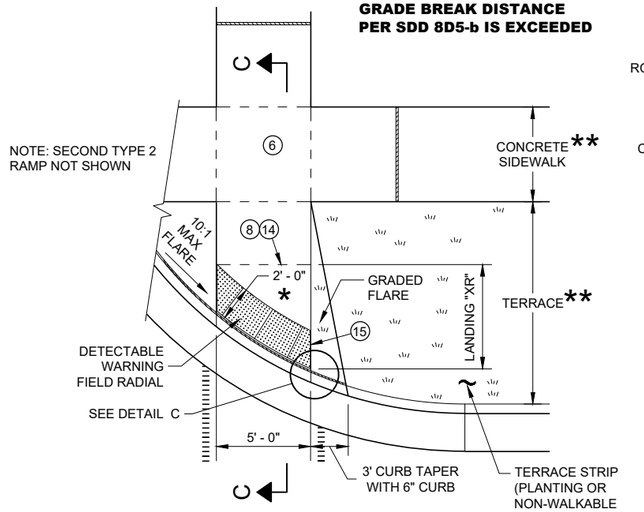
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

(17) A MAXIMUM 3 INCH CONCRETE BORDER WITH IS ALLOWABLE IN FROM OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

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

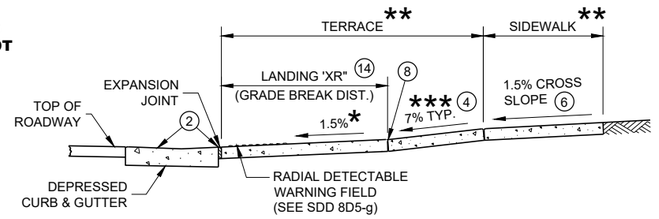


PLAN VIEW

CURB RAMP TYPE 2

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

(ON LINE WITH SIDEWALK)

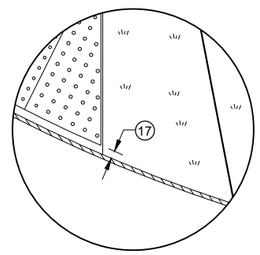


SECTION C - C FOR TYPE 2

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

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%



DETAIL C

CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS

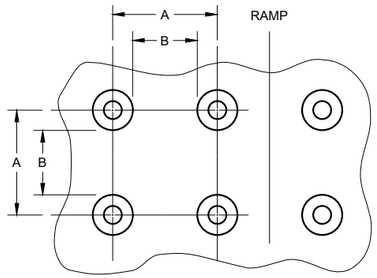
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D05 - 20f

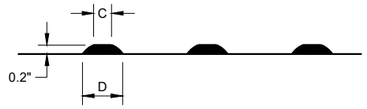
SDD 08D05 - 20f

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

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

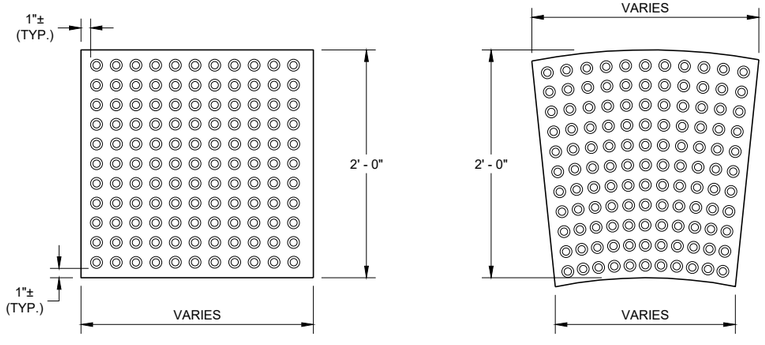


PLAN VIEW



ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)

GENERAL NOTES

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

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

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

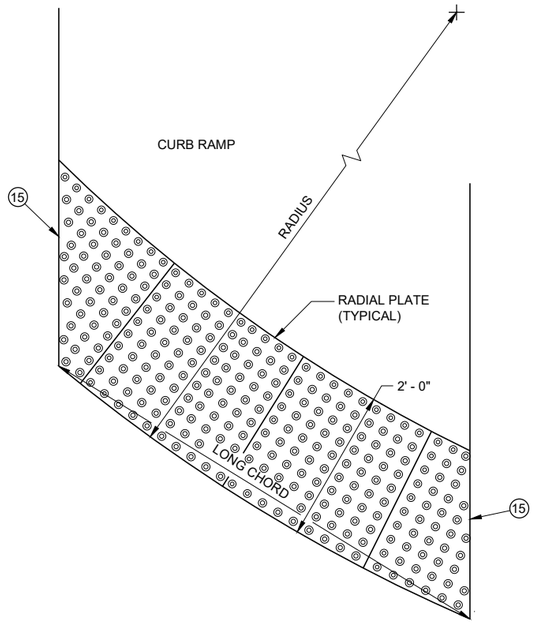
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

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

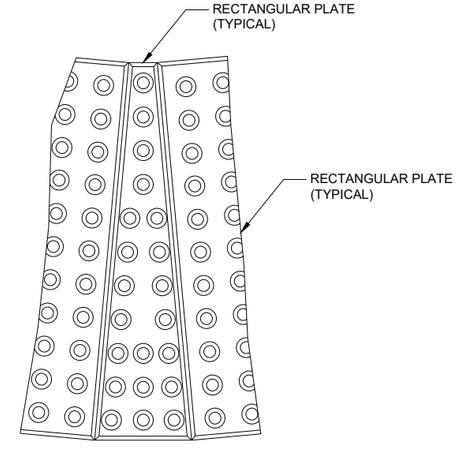
REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

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

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

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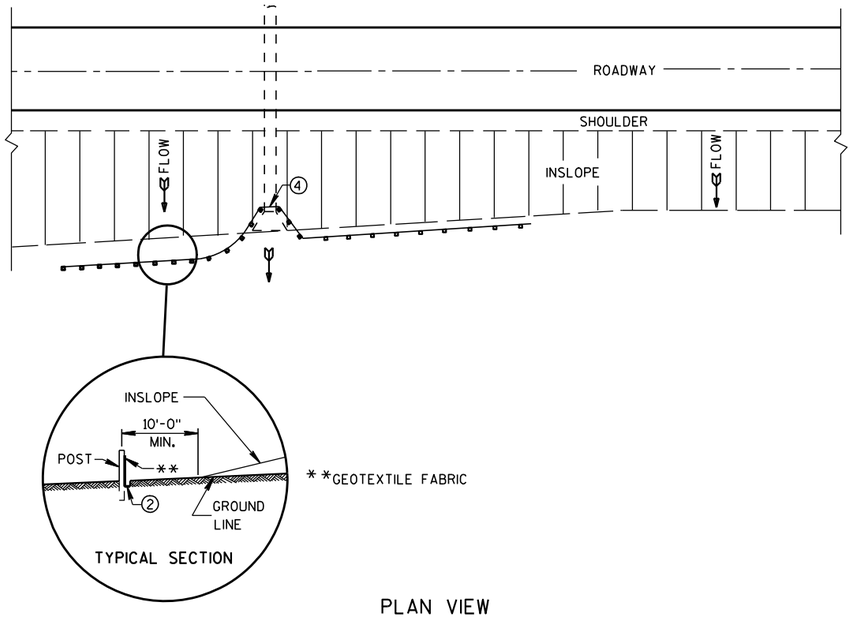
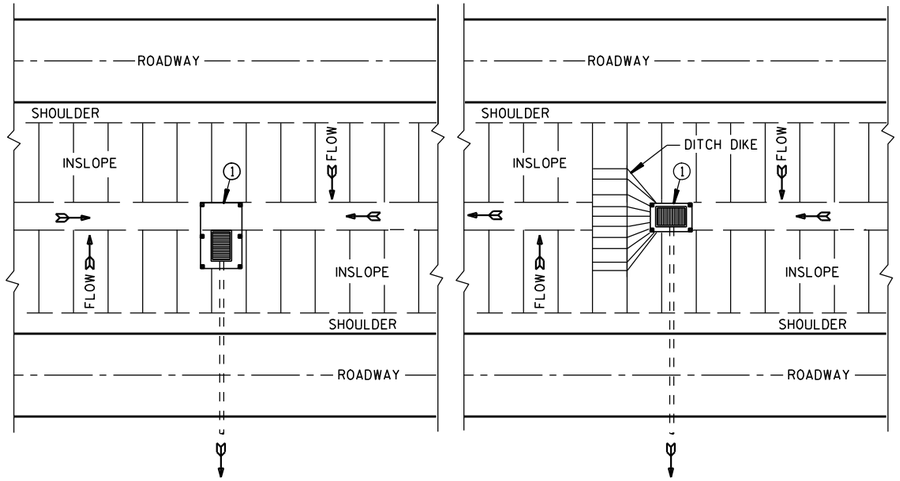
SDD 08D05 - 20g



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

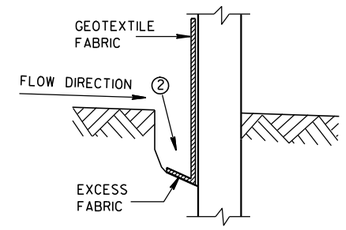
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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

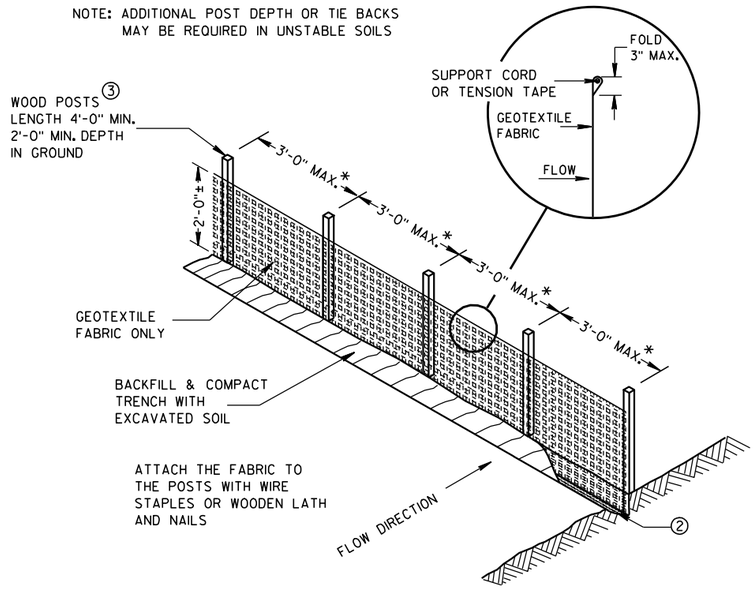
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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

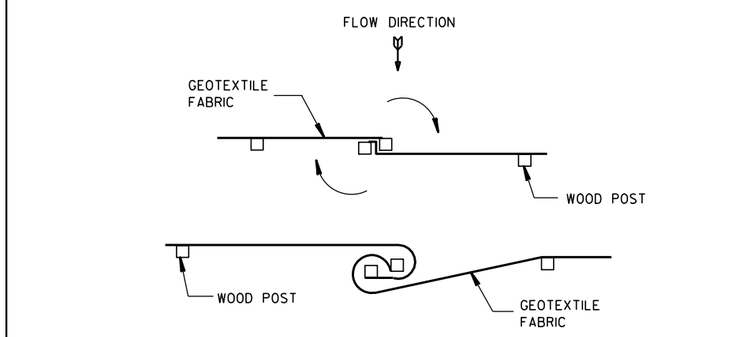
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



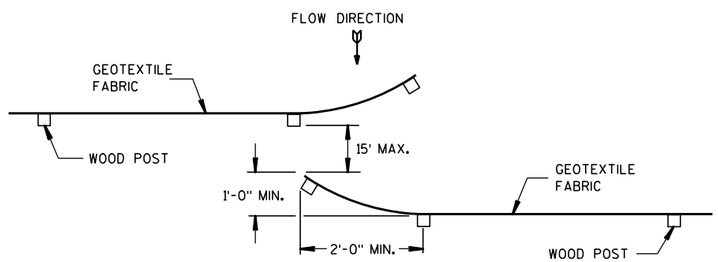
TRENCH DETAIL



SILT FENCE

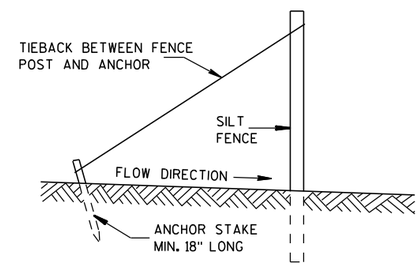


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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S.D.D. 8 E 9-6

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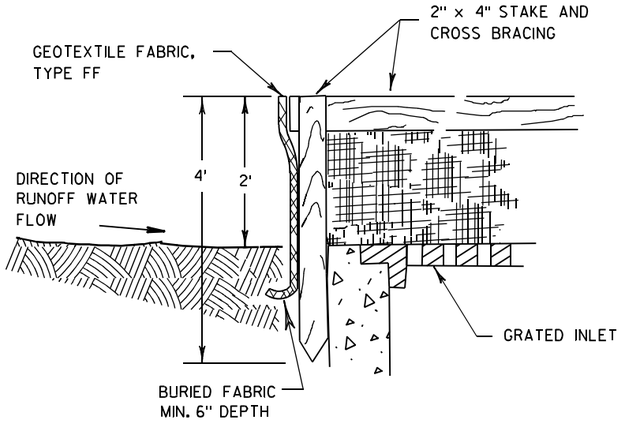
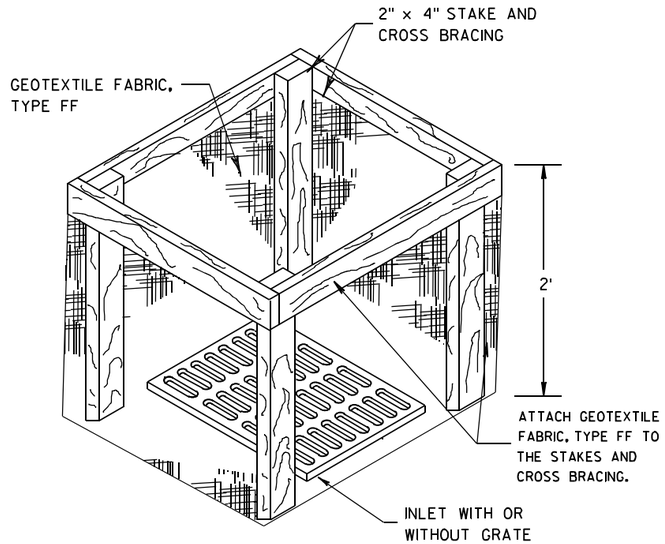
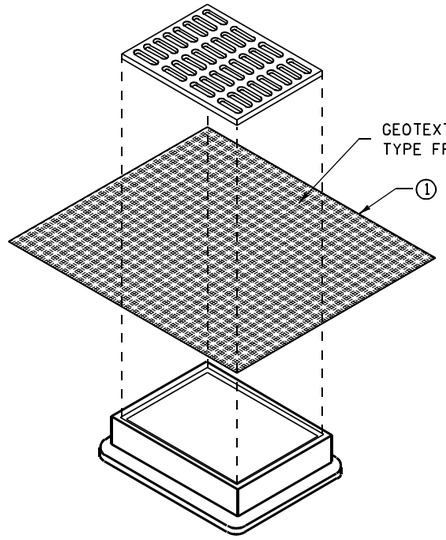
S.D.D. 8 E 9-6



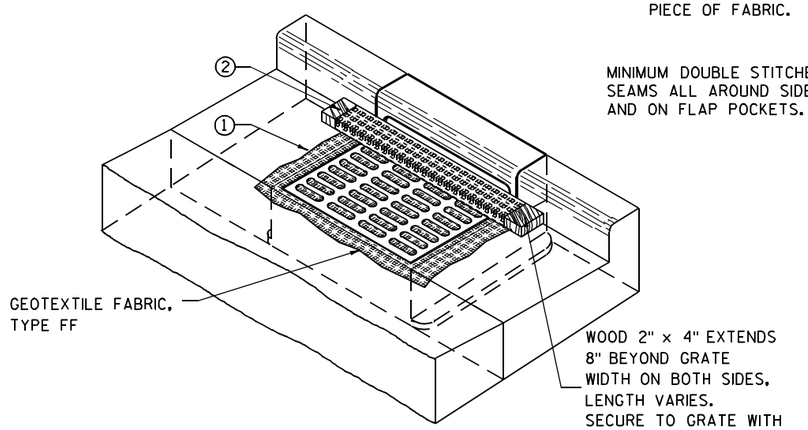


INLET PROTECTION, TYPE A

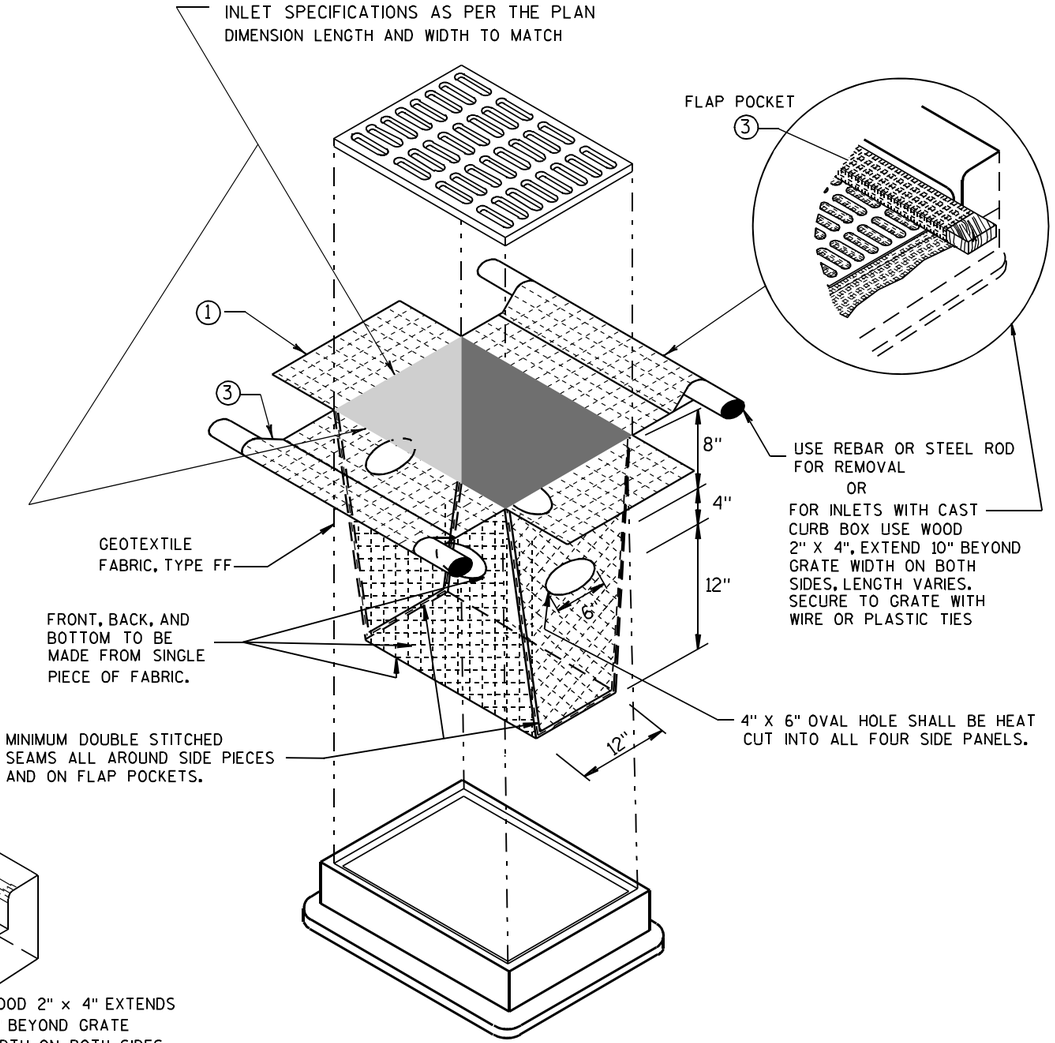


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

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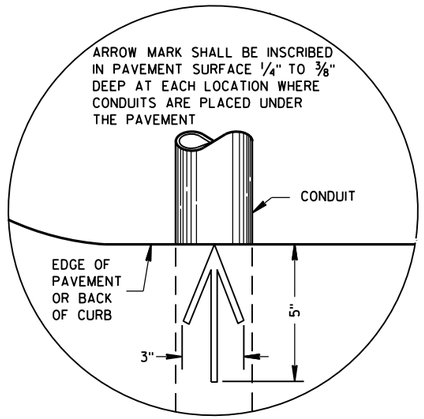
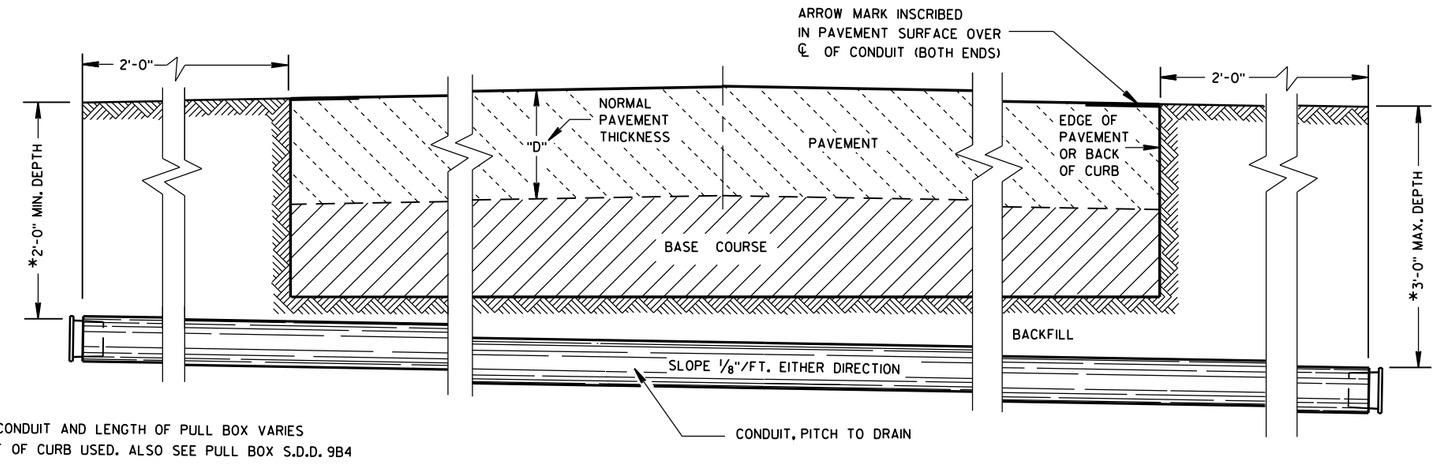
S.D.D. 8 E 10-2



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

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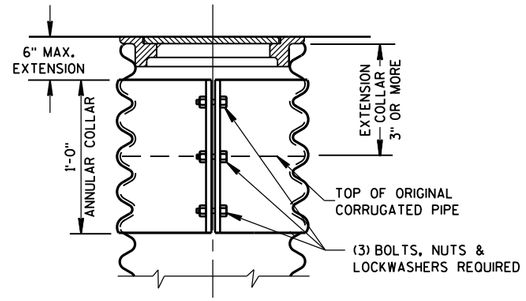
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

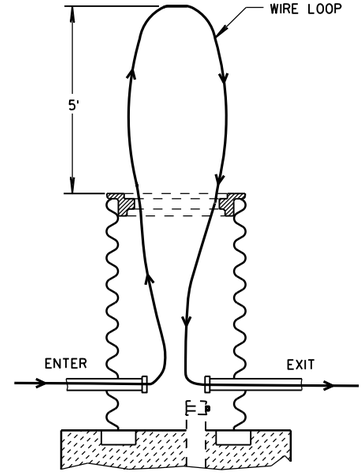
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2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

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

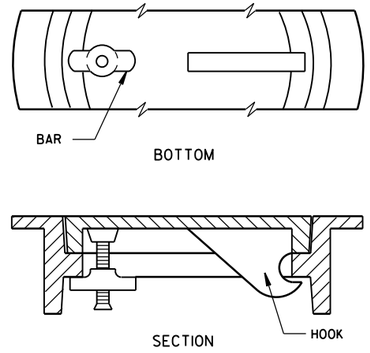
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

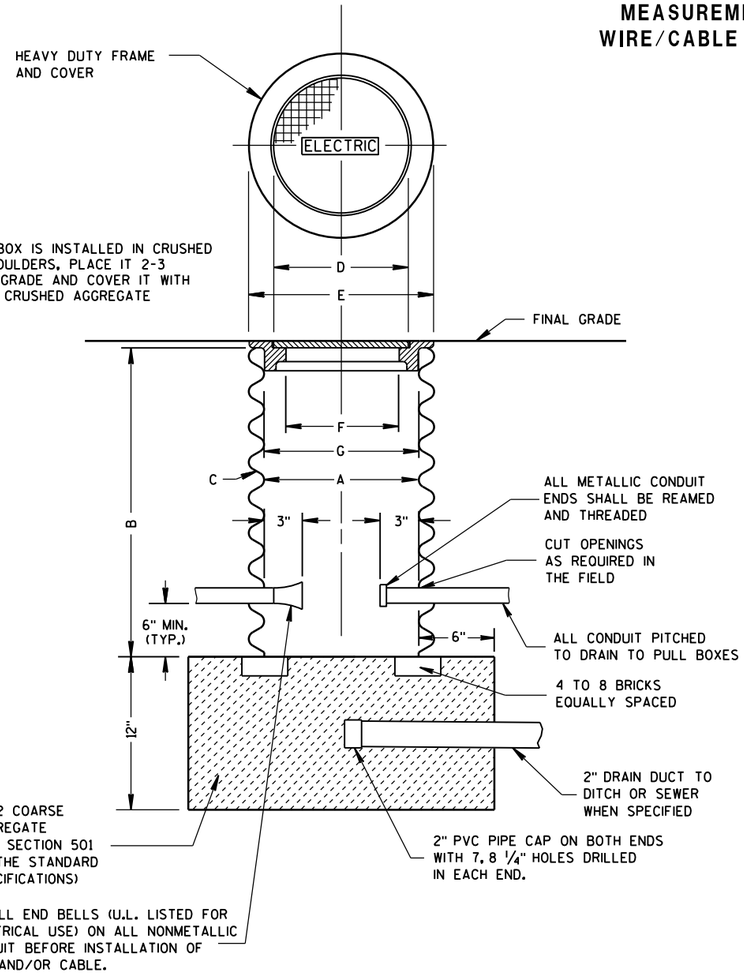


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



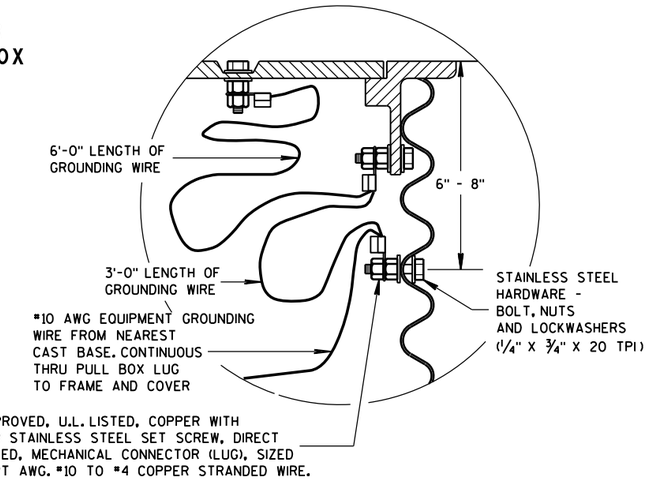
ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE

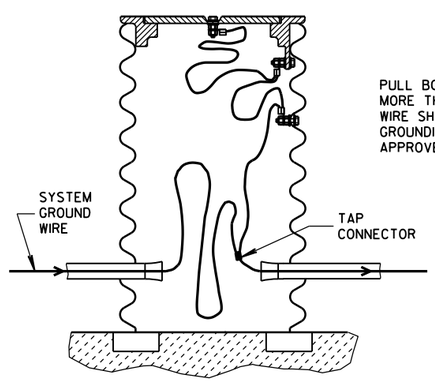


WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

PULL BOX



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

GENERAL NOTES

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

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

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

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

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

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

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

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

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 B 4-11

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		NON-CONDUCTIVE PULL BOX	
BOX DIAMETER ** (INSIDE)	A	24	24
BOX OVERALL OUTSIDE DIAMETER	B	27	27
BOX LENGTH	C	36	42
FRAME OPENING	D	22 1/2	22 1/2
WEIGHT IN POUNDS *			
COVER		50	50
BOX ONLY		75	85

* THE ACTUAL WEIGHT OF THE COVER OR BOX ONLY MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.

** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE

GENERAL NOTES

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

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN 1/2" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN 1/4".

COVER SHALL BE MAGNETICALLY LOCATABLE.

BOXES AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

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

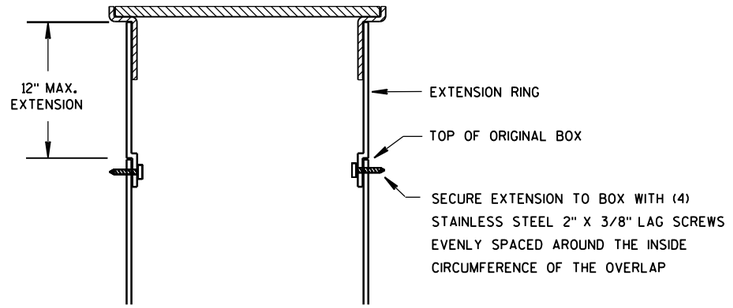
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

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

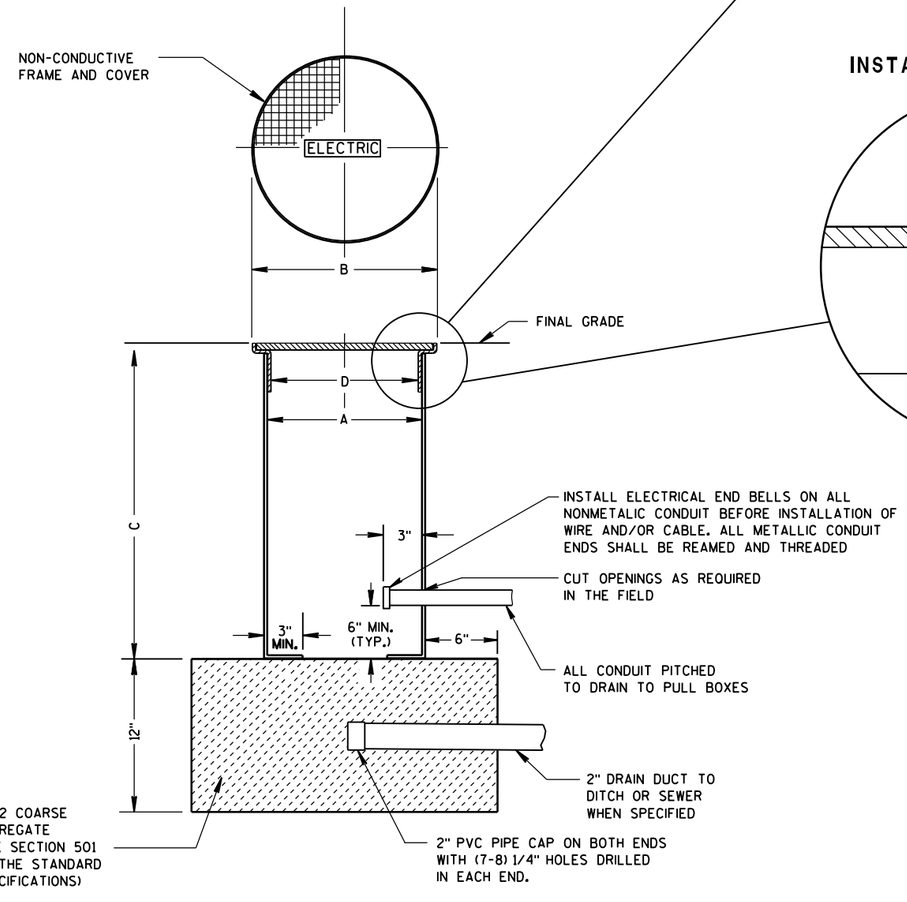
ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL AND LIGHTING SYSTEMS, "WISDOT ITS" FOR COMMUNICATIONS AND ITS EQUIPMENT SYSTEMS.

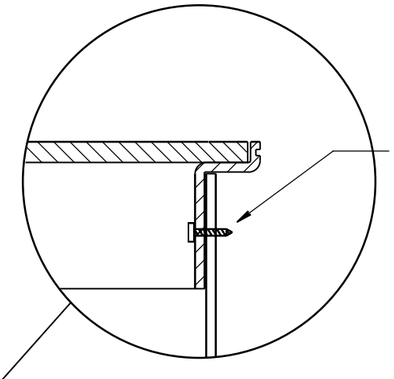


BOX EXTENSION

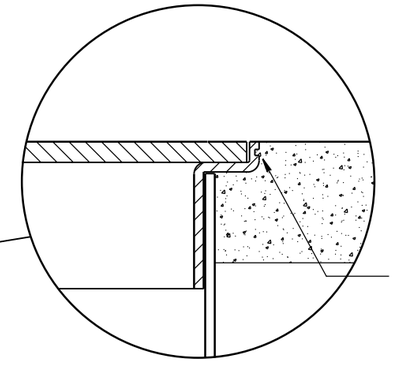


NON-CONDUCTIVE PULL BOX

INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK



PULL BOX NON-CONDUCTIVE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 B 16-1

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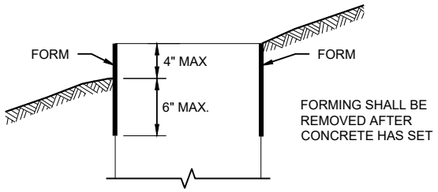
FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



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.

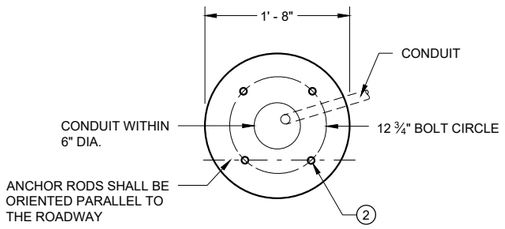
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

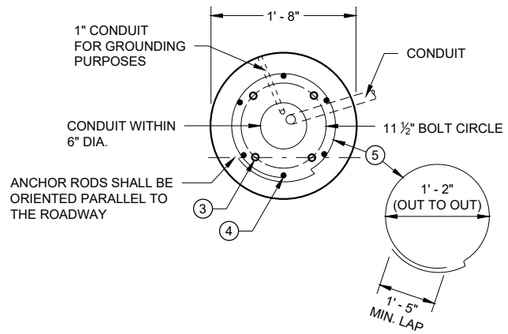
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

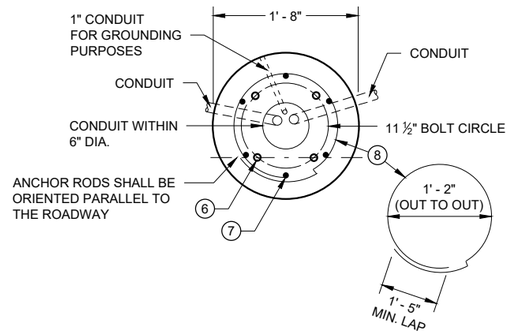
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

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

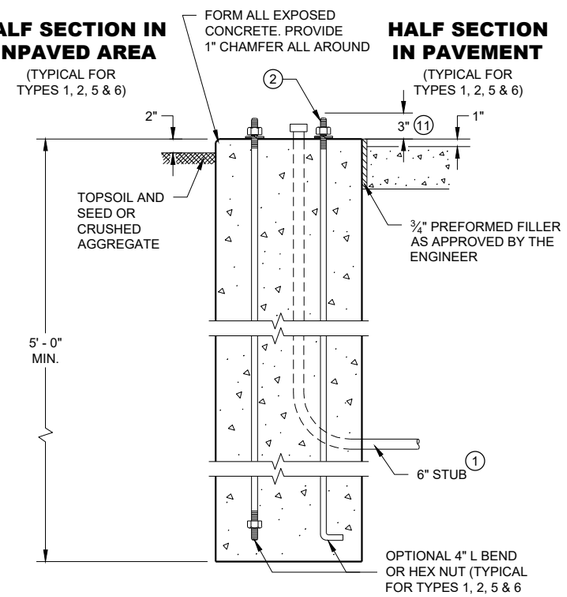
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

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.

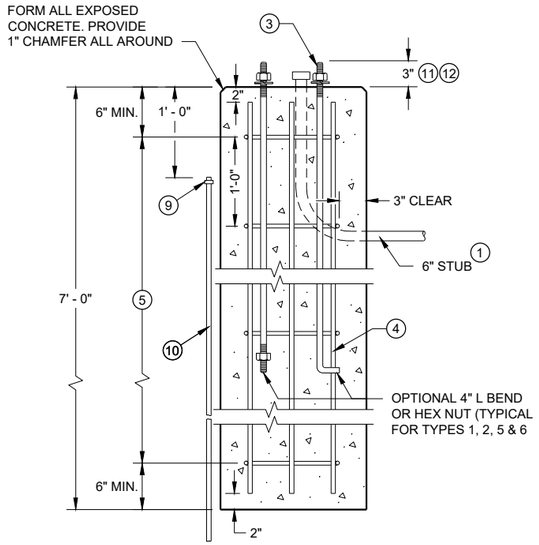
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

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



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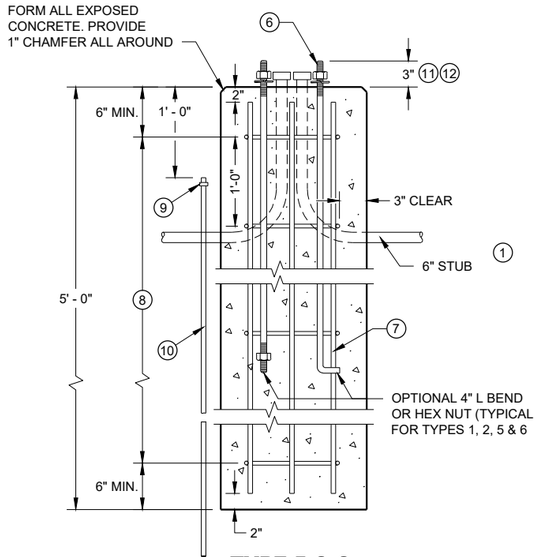


TYPE 5 & 6

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 114
FHWA

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

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

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

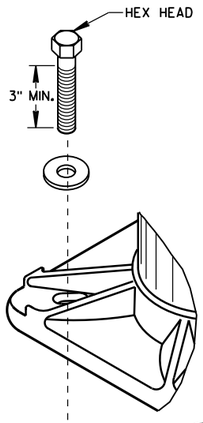
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

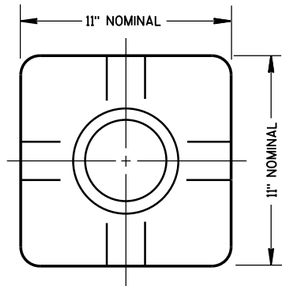
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

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

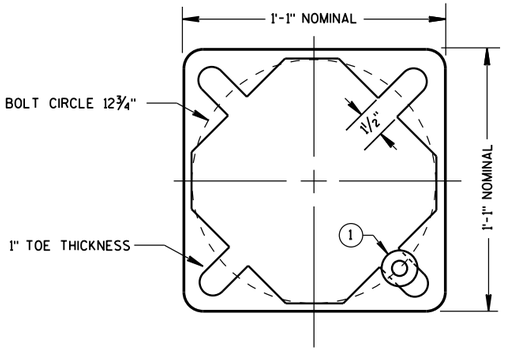
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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

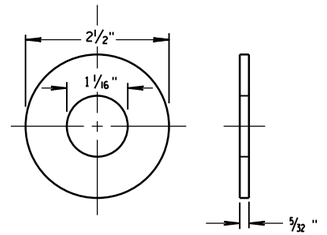




TOP VIEW
(PEDESTAL BASE)

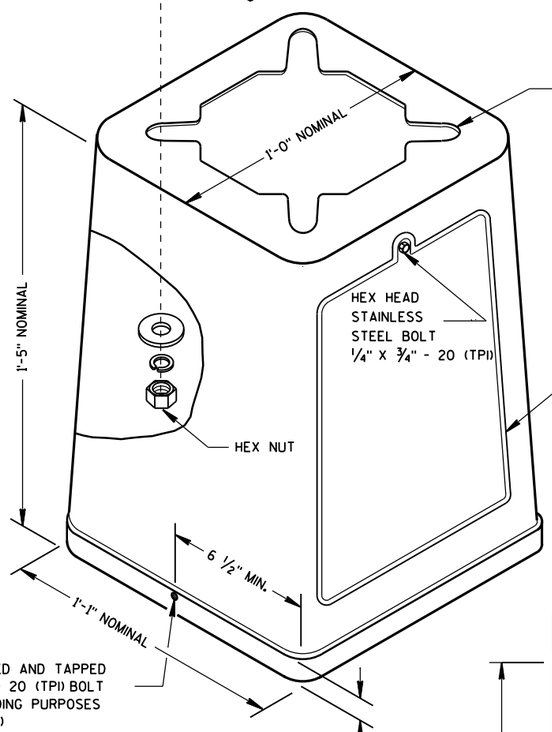


BOTTOM VIEW
(PEDESTAL BASE)

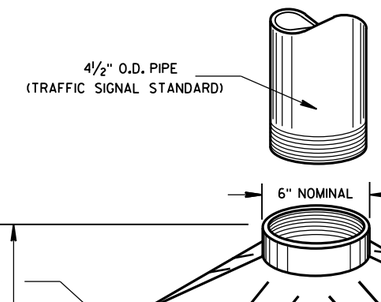


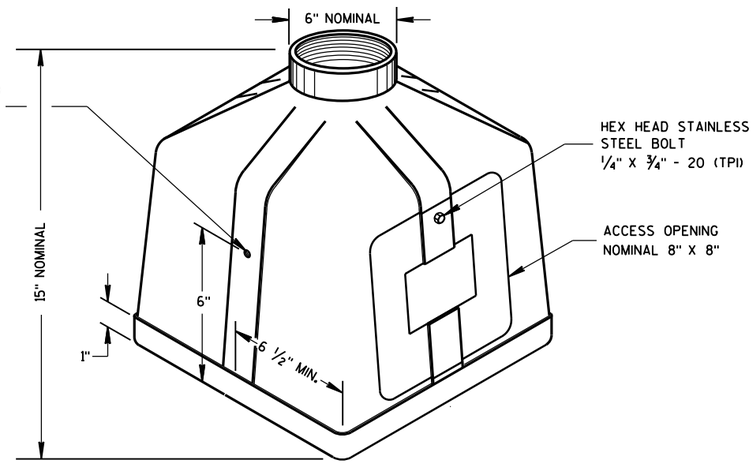
ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)



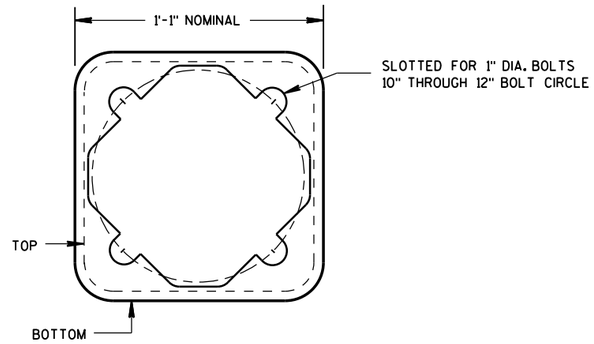
ISOMETRIC VIEW



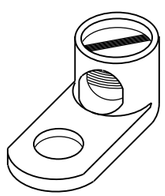


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

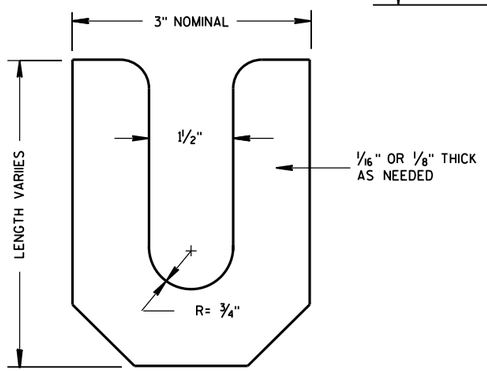


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

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



LEVELING SHIM

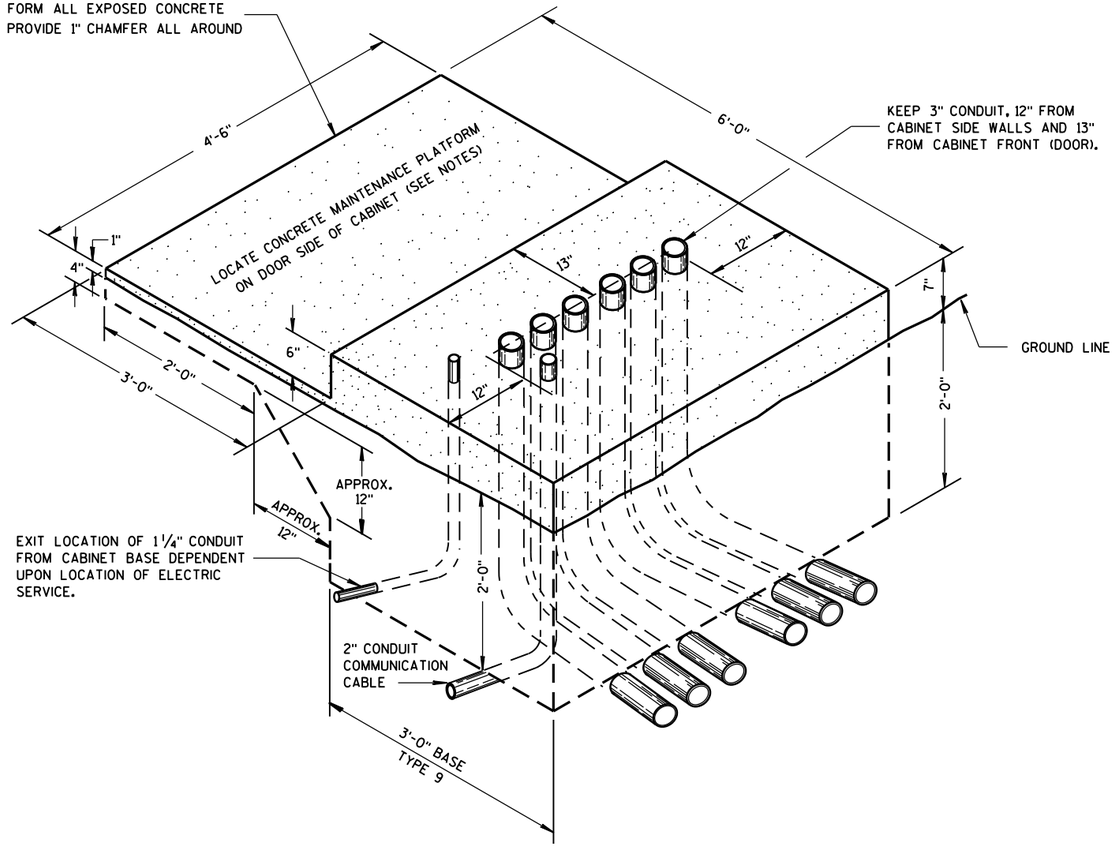
TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

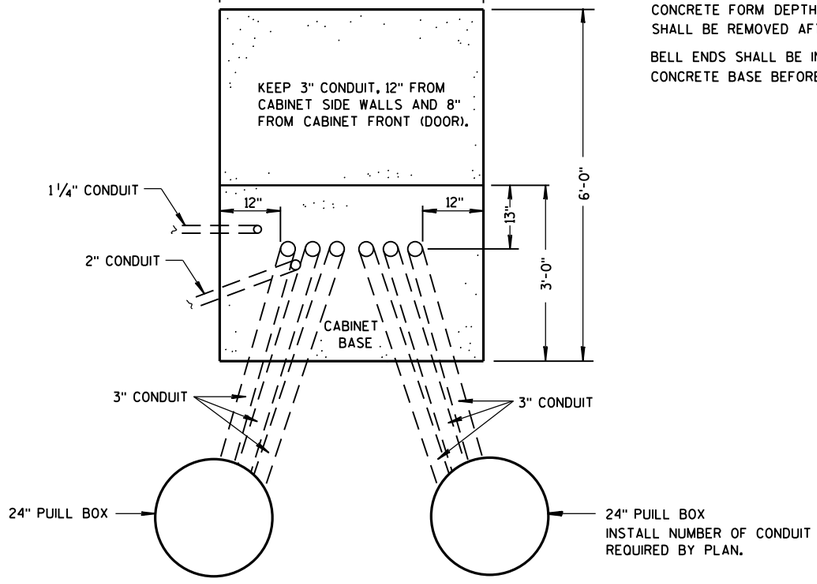
S.D.D. 9 C 3-4



ISOMETRIC VIEW

TYPE 9, SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

GENERAL NOTES

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

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

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

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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

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

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

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

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

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

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

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

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

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

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

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

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

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

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

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

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

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

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4 INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL END INSTALLED. ALL CONDUIT SHALL BE SLOPED TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUIT 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 OF CABLE OR WIRE.

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

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

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

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL ENTER THE BASE 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.

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

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

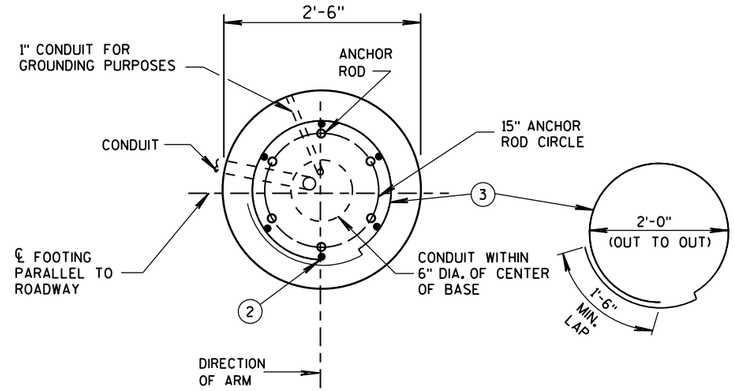
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

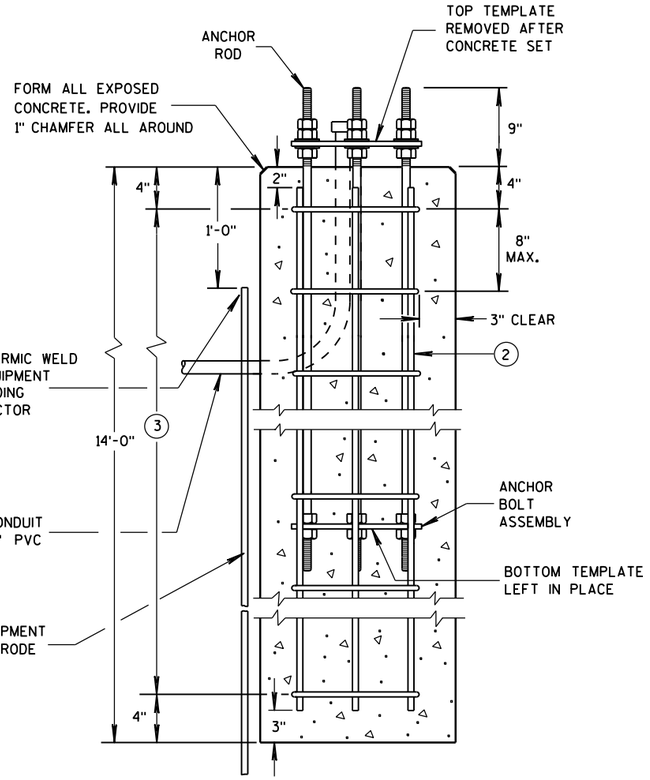
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES, (GREATER THAN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

(2) (6) NO. 6 X 13'-7" BAR STEEL REINFORCEMENT.

(3) (21) NO. 5 X 7'-10" BAR STEEL REINFORCEMENT @ 8" MAX. C-C.

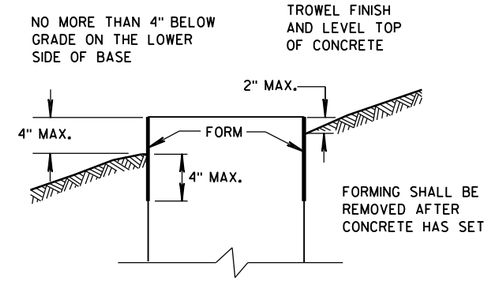
CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 641.2.2.3 OF THE STANDARD SPECIFICATION)	fy=55,000 p.s.i.
TEMPLATES, ASTM, A709 GRADE 36	fy=36,000 p.s.i.



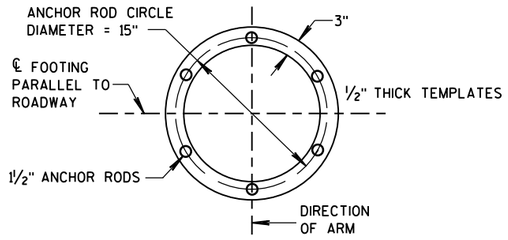


CONCRETE BASE TYPE 10
(FOR TYPE 9 & 10 & OVER HEIGHT (OH) POLES)

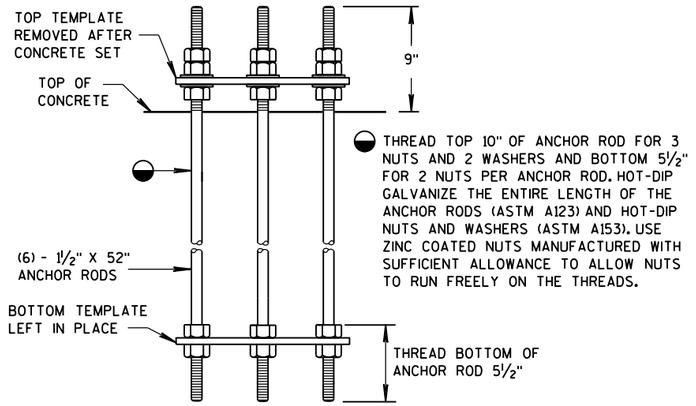
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 10 ANCHOR ASSEMBLY

QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	172
LBS. OF VERTICAL BAR STEEL	122

CONCRETE BASE TYPE 10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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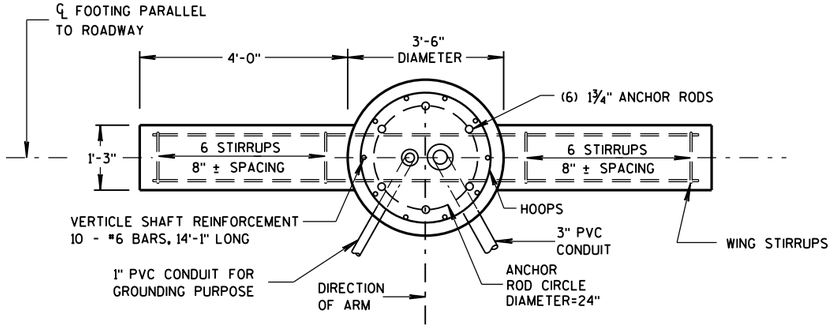
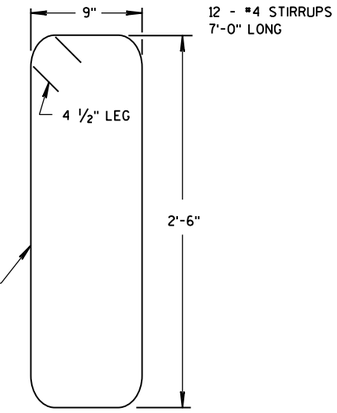
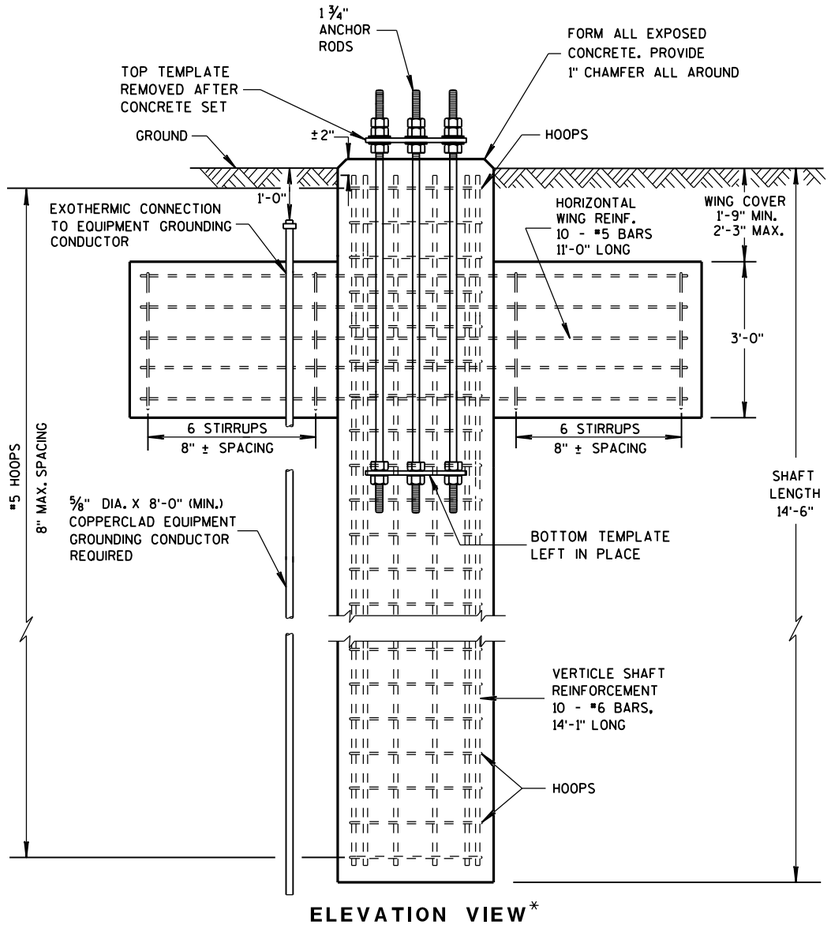
S.D.D. 9 C 11-10



PLAN VIEW

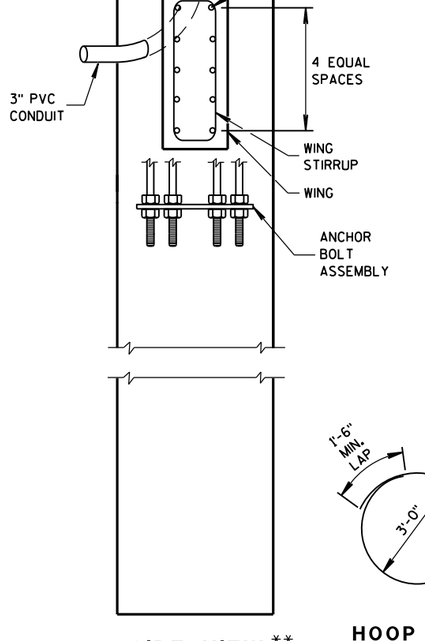


WING STIRRUP



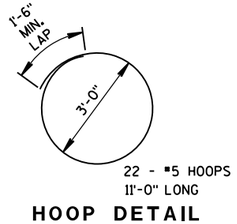
ELEVATION VIEW*

* CONDUITS ARE NOT SHOWN ON THIS VIEW FOR CLARITY



SIDE VIEW**

** HOOPS AND VERTICAL SHAFT REINFORCEMENT NOT SHOWN ON THIS VIEW FOR CLARITY



HOOP DETAIL

GENERAL NOTES

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

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF THE UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

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

BASES (SHAFT), BELOW THE WING, SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUNG THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

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

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

CONDUIT HEIGHT ABOVE CONCRETE BASE SHALL BE 4½" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

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

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

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTOR FITTINGS, UL LISTED FOR ELECTRICAL USE, SHALL BE USED.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE 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.

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

THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVEL 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, (GREATER THAN 36-INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH THE WRITTEN APPROVAL OF THE ENGINEER.

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

CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 641.2.2.3 OF THE STANDARD SPECIFICATIONS	fy=55,000 p.s.i.
TEMPLATES, ASTM A709 GRADE 36	fy=36,000 p.s.i.

(FOR TYPE 12 & 13 & OVER HEIGHT (OH) POLES)

CONCRETE = 6.3 C.Y.
H.S. REINFORCEMENT = 635 LBS.

TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.
SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.

CONCRETE BASE TYPE 13

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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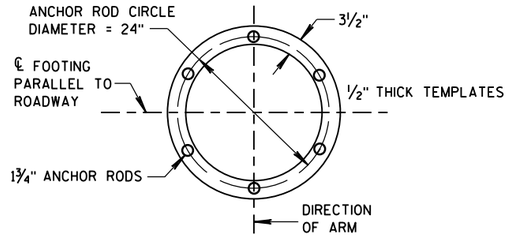
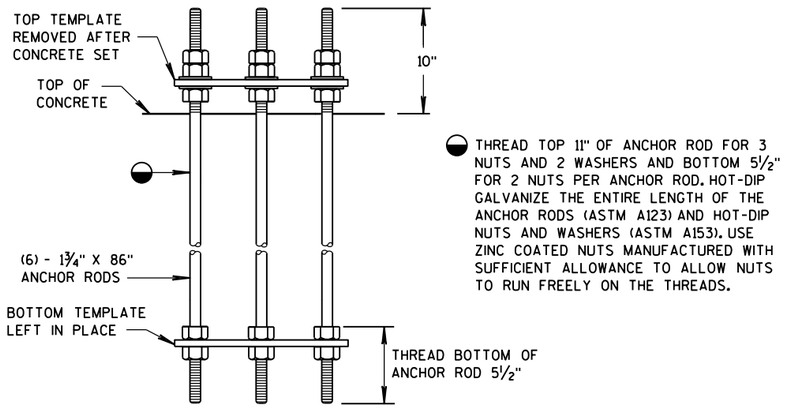
S.D.D. 9 C 12-9a

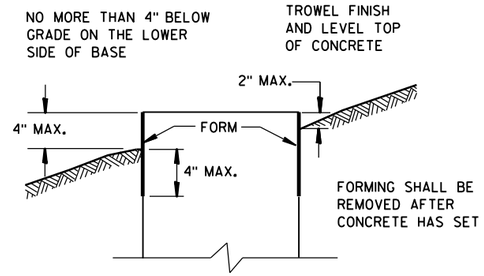


TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 13 ANCHOR ASSEMBLY



FORMING DETAIL

CONCRETE BASE TYPE 13	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2017 DATE FHWA	/S/ Ahmet Demirbilek STATE ELECTRICAL

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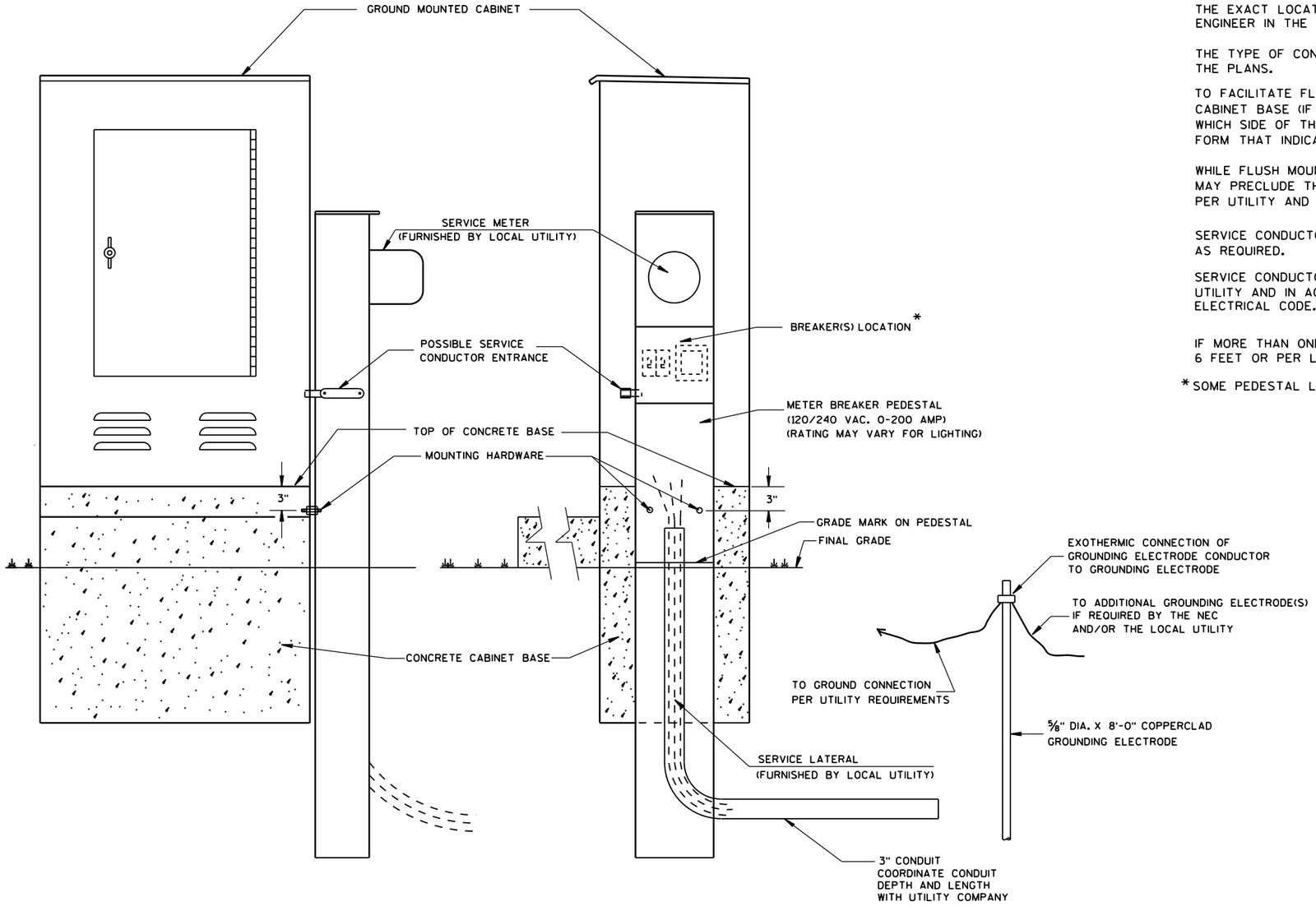
S.D.D. 9 C 12-9b



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

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

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

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

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

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

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

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

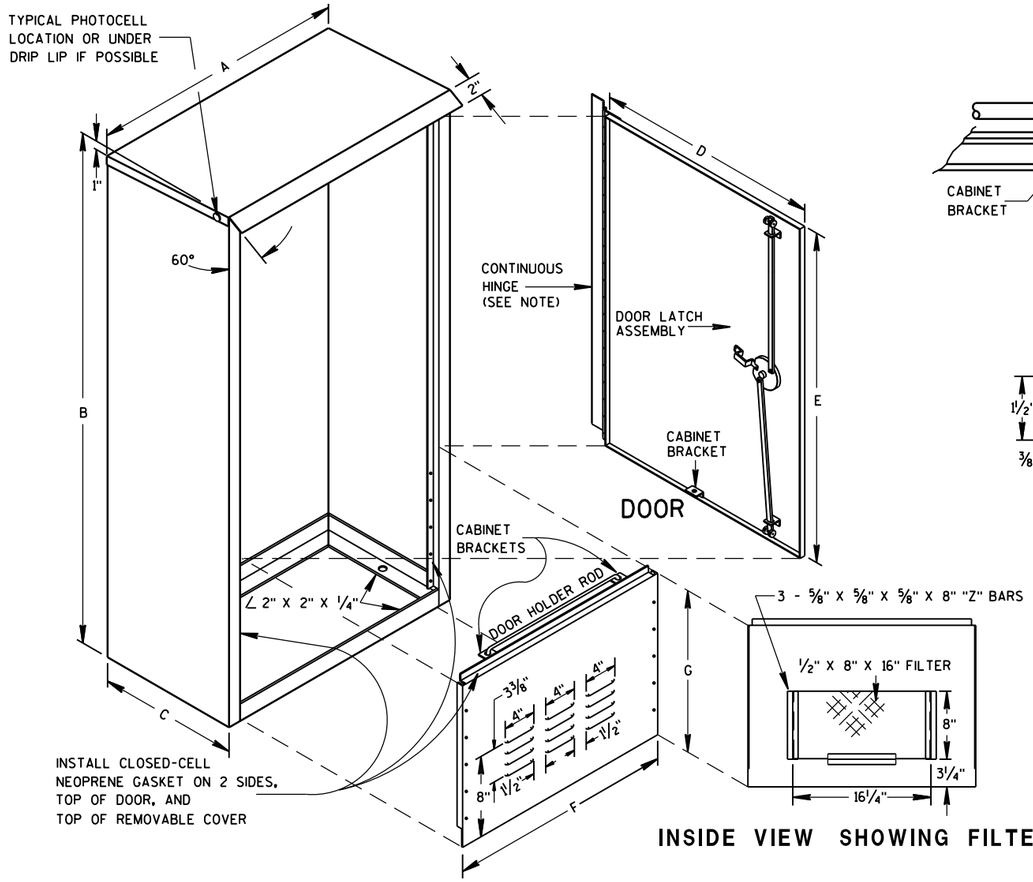
*SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

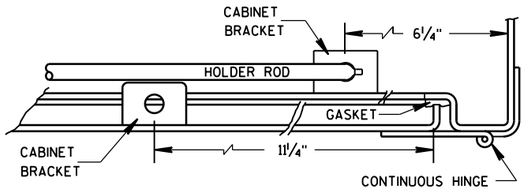
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6
S.D.D. 9 D 1-5

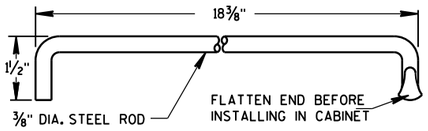


REMOVABLE COVER

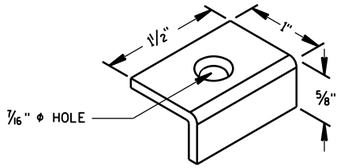
INSIDE VIEW SHOWING FILTER



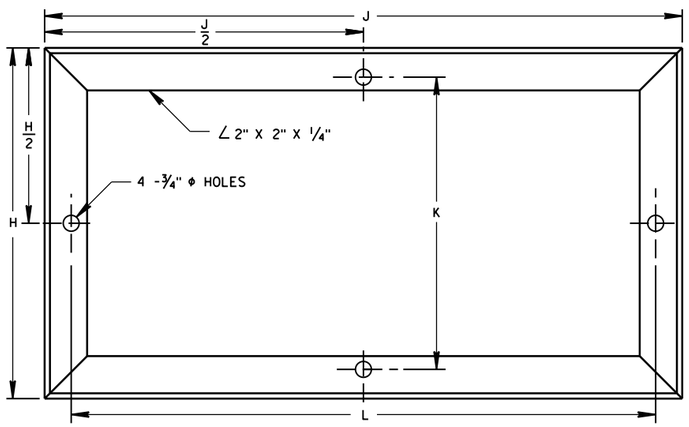
HINGE & DOOR HOLDER



HOLDER ROD



CABINET BRACKET



MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 1/2	16 1/2	24
D	26 1/2	34 3/4	33 3/4
E	38 3/4	38 3/4	38 3/4
F	26 1/2	34 3/4	33 3/4
G	19	19	25
H	16 1/2	16 1/2	24
H/2	8 1/4	8 1/4	12
J	30	38	38
J/2	15	19	19
K	13 3/4	13 3/4	21 1/4
L	27 1/2	35 1/2	35 1/2

GENERAL NOTES

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

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

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

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

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

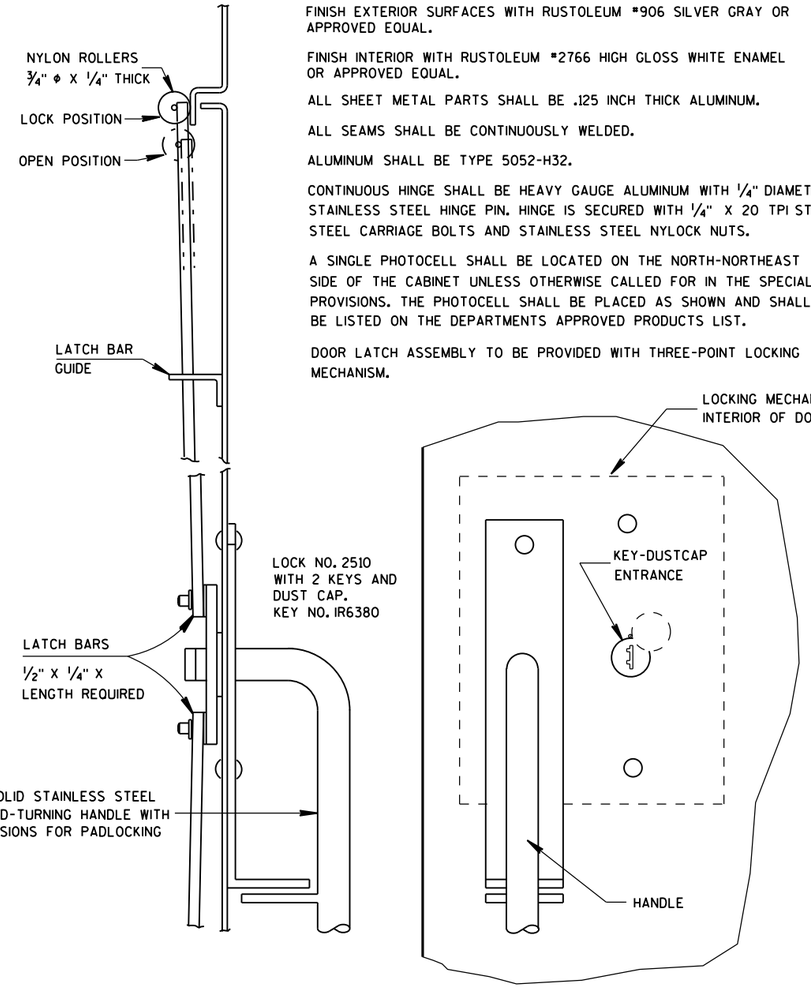
ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

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

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

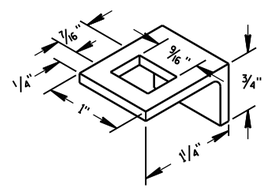
DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.



SIDE VIEW

FRONT VIEW

LATCH ASSEMBLY



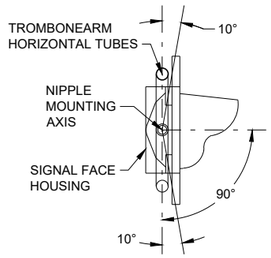
LATCH BAR GUIDE

SIGNAL CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL
FHWA

6
S.D.D. 9 D 2-3

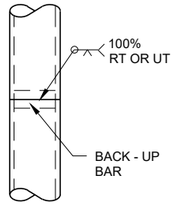


SECTION A-A

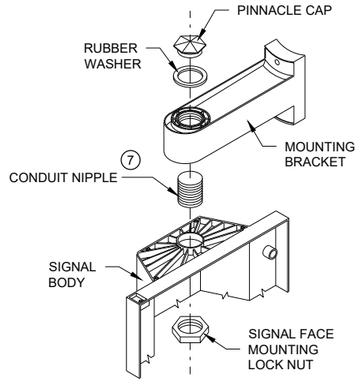
(10 DEGREES TILT REQUIREMENT OF FACE(S) IN THE TROMBONE MOUNTING)

FOR MANUFACTURERS USE ONLY

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



POLE SPLICE DETAIL



SIGNAL FACE MOUNTING DETAIL

(BANDED)

GENERAL NOTES

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

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

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

A PULL WIRE / ROPE SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

TYPE 2 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

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

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.

(3) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING,PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) ASREQUIRED, TO PLUMB THE SIGNAL FACES.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

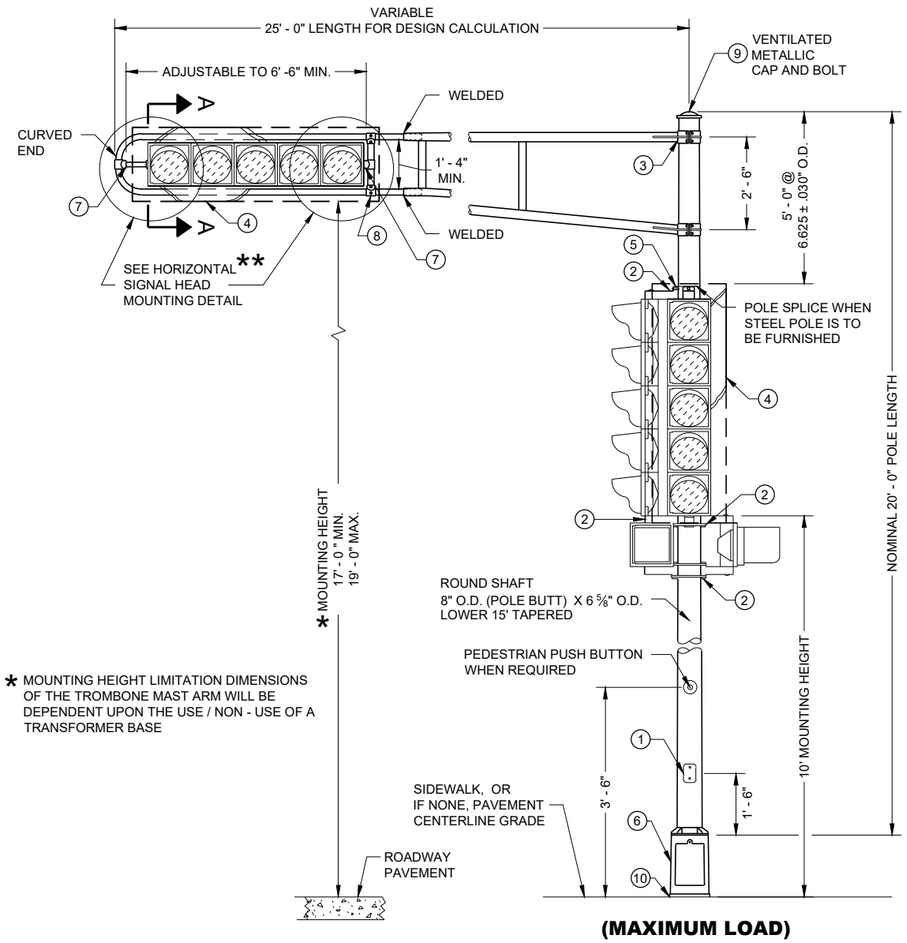
(7) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOTINTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACES AND BRACKET ENDS.

(8) VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUTIS THE SLIDING TYPE.

(9) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

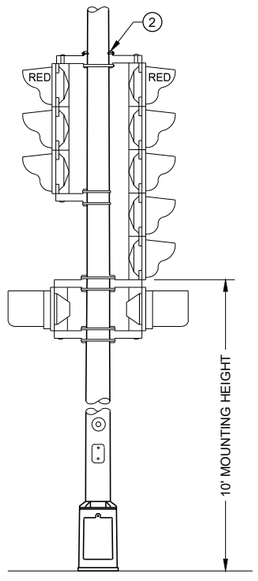
(10) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

(11) USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.

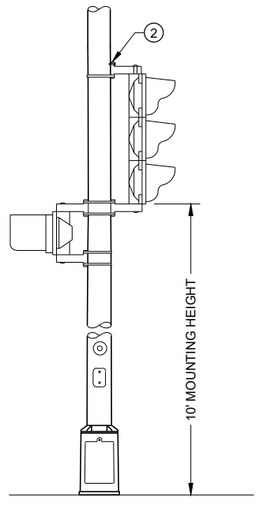


* MOUNTING HEIGHT LIMITATION DIMENSIONS OF THE TROMBONE MAST ARM WILL BE DEPENDENT UPON THE USE / NON - USE OF A TRANSFORMER BASE

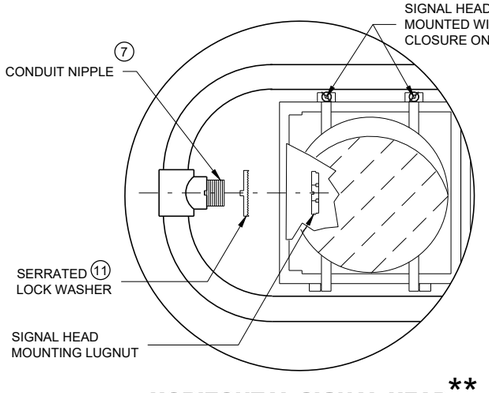
(MAXIMUM LOAD)



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



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE



HORIZONTAL SIGNAL HEAD MOUNTING DETAIL **

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

TYPE 2 POLE MOUNTING CONFIGURATION

POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2

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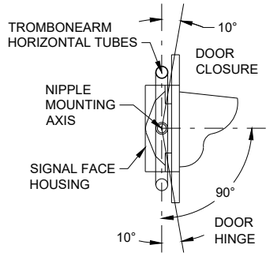
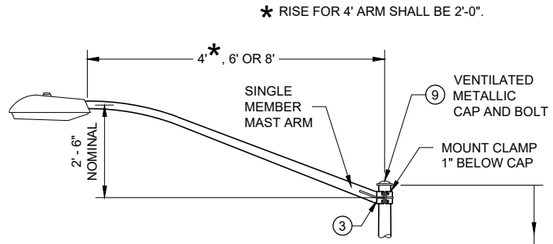
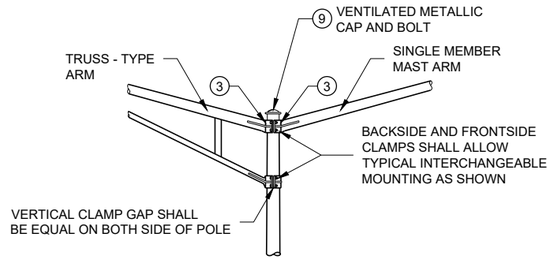
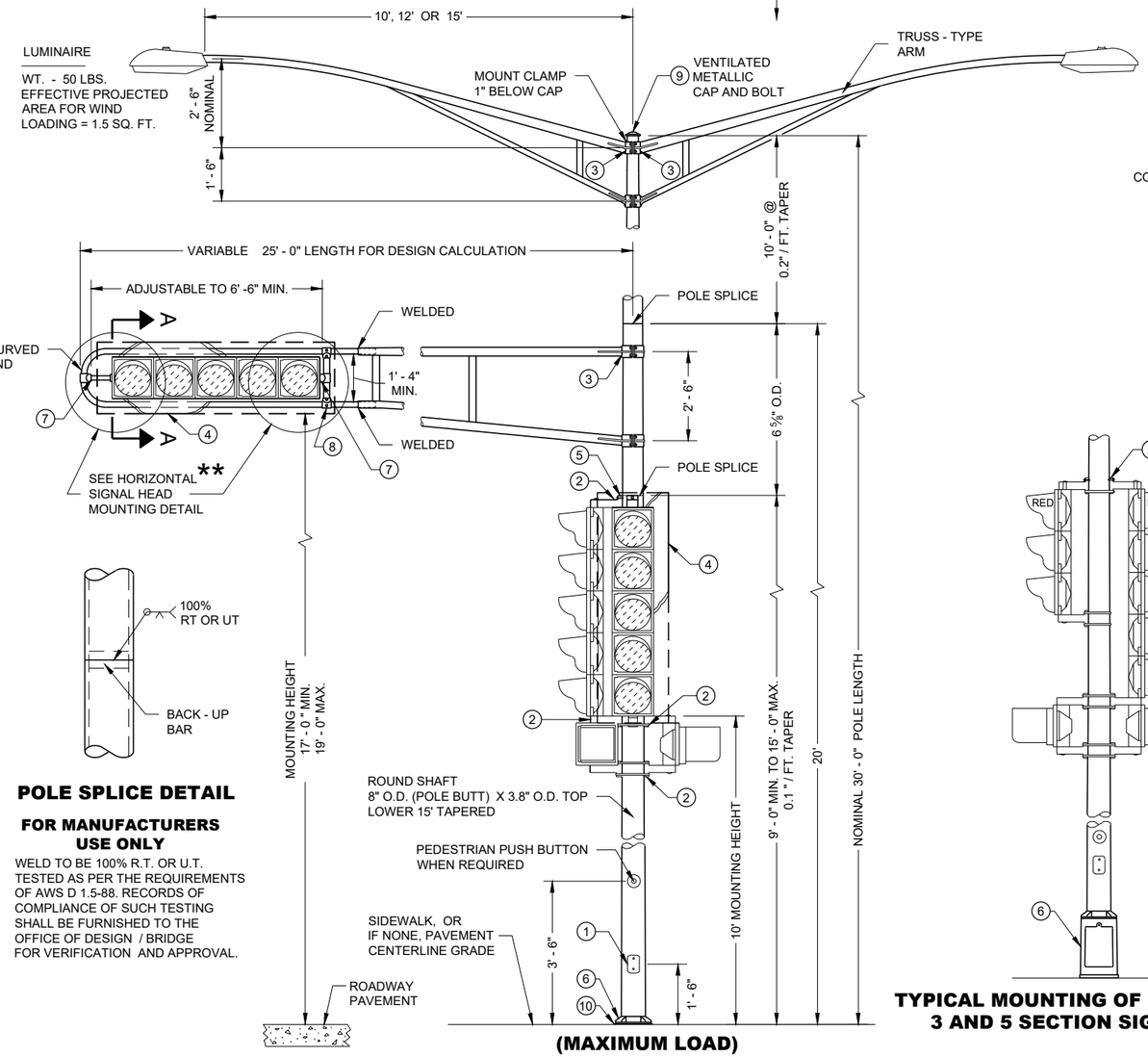


SECTION A-A

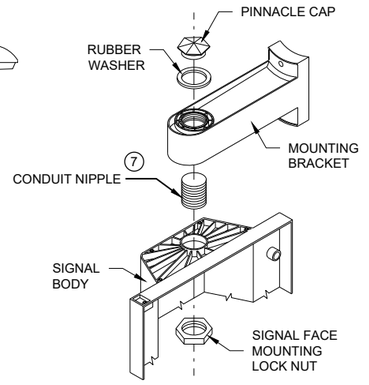




INTERCHANGEABLE MOUNTING DETAIL



(MAXIMUM LOAD)



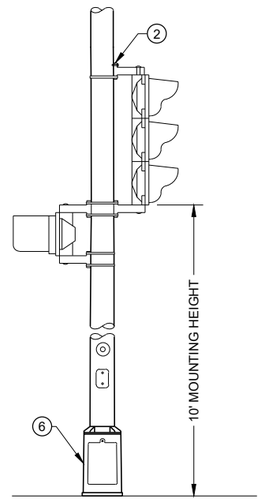
SIGNAL FACE MOUNTING DETAIL
(BANDED)

POLE SPLICE DETAIL

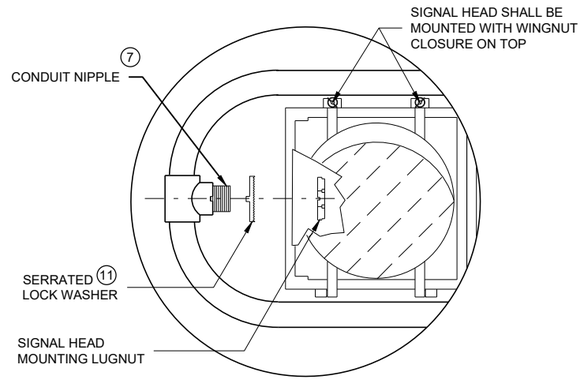
FOR MANUFACTURERS USE ONLY

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

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



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE



HORIZONTAL SIGNAL HEAD ** MOUNTING DETAIL

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

GENERAL NOTES

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

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

POLES SHALL BE GALVANIZED STEEL.

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

A PULL WIRE / ROPE SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 3/8 INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

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

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.

(3) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 3/8" HOLE IN POLE SHAFT FOR WIRING.

(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED. UNDER MAX LOADING, TYPE 3 POLE SHALL BE MOUNTED DIRECTLY TO ITS CONCRETE BASE.

(7) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACES AND BRACKET ENDS.

(8) VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.

(9) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(10) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(11) USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.

TYPE 3 POLE MOUNTING CONFIGURATION

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

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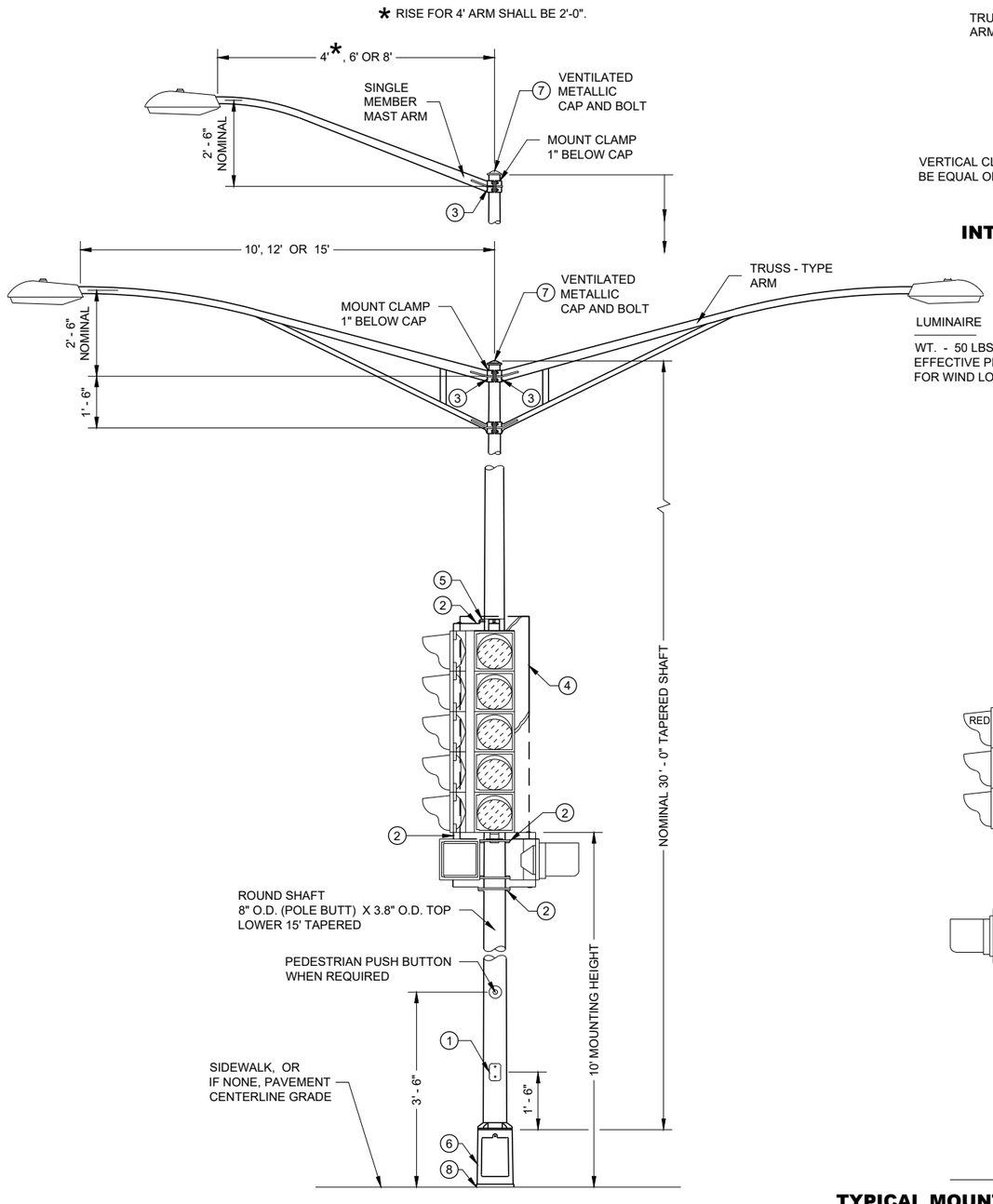
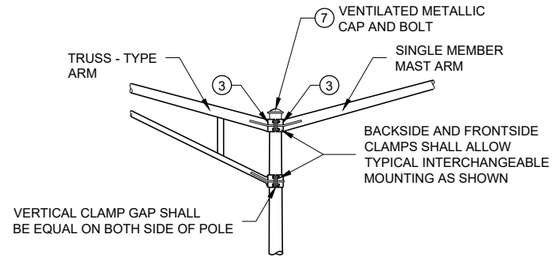


(MAXIMUM LOAD)



INTERCHANGEABLE MOUNTING DETAIL

GENERAL NOTES

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

ALL TYPE 4 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL WITH A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

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

A PULL WIRE / ROPE SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

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

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.

(3) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

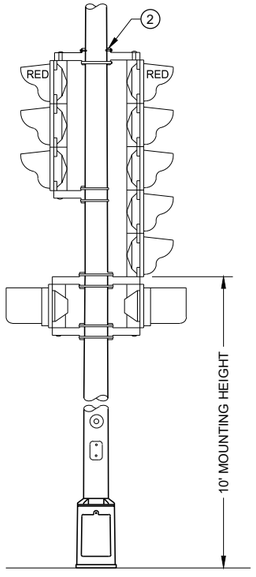
(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

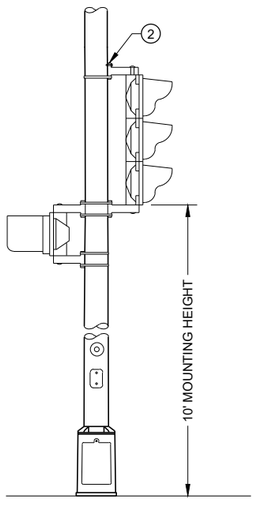
(7) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(8) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

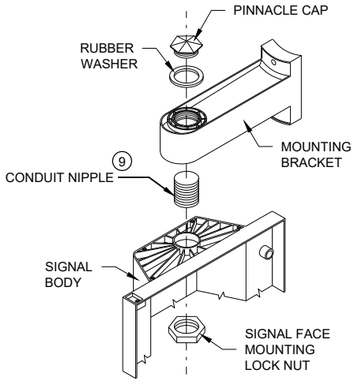
(9) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACES AND BRACKET ENDS.



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



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE



SIGNAL FACE MOUNTING DETAIL
(BANDED)

TYPE 4 POLE MOUNTING CONFIGURATION

POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4

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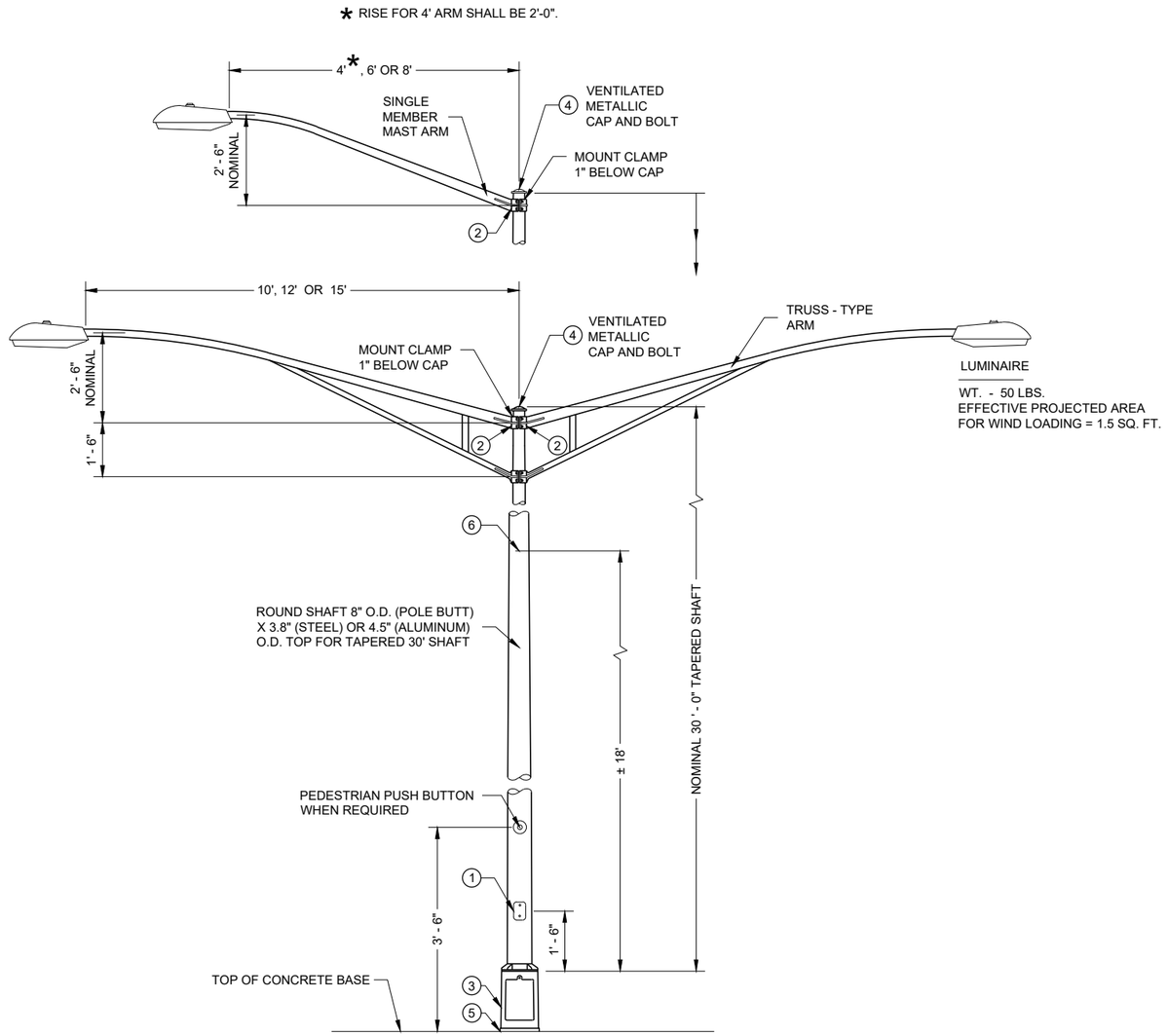


TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY

GENERAL NOTES

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

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

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

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

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

TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.1888".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

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

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

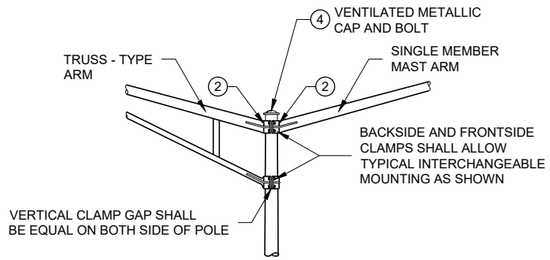
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(6) INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.



INTERCHANGEABLE MOUNTING DETAIL

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

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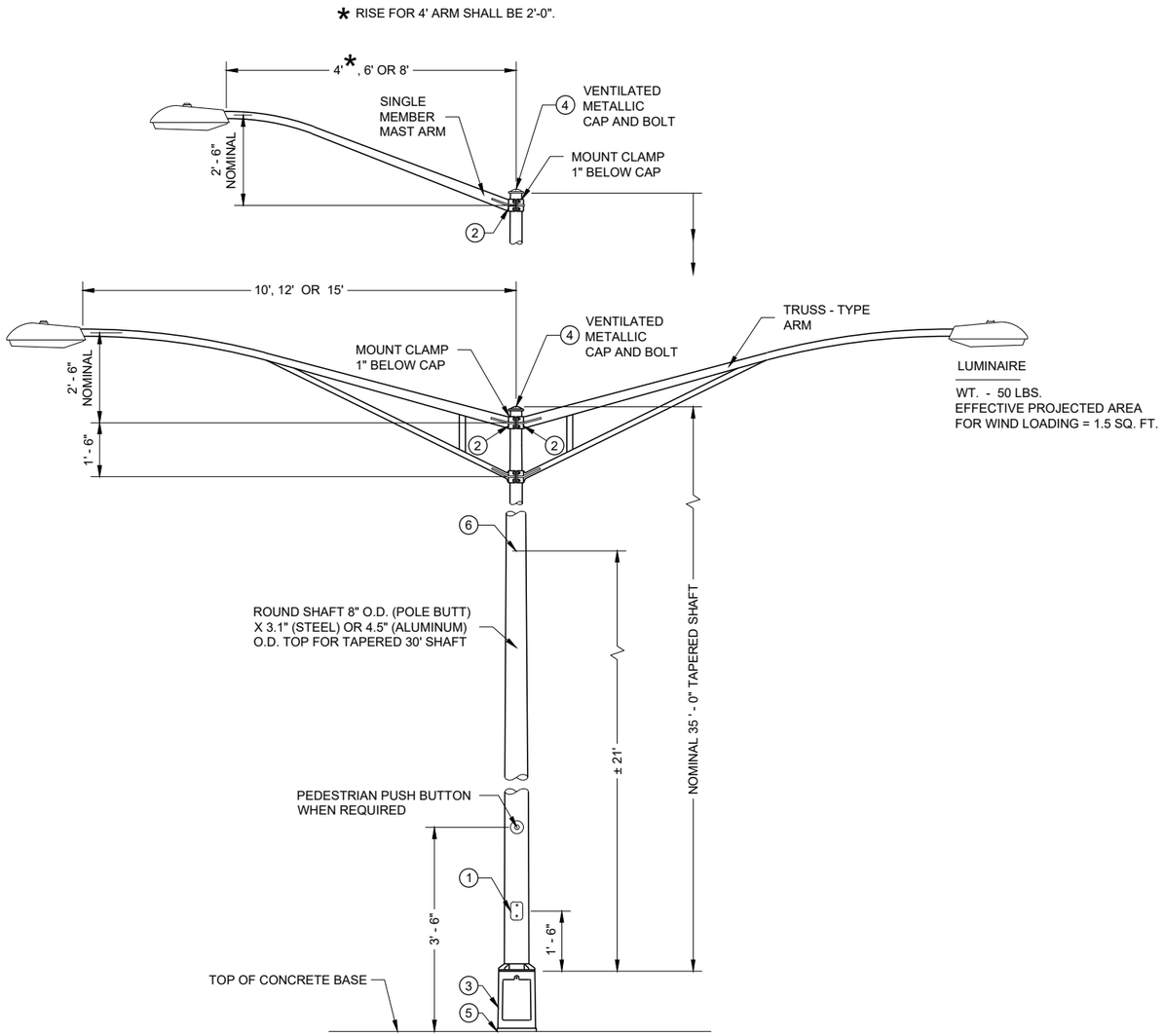


TYPE 6 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY

GENERAL NOTES

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

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

ALL TYPE 6 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

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

TYPE 6 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

TYPE 6 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.219".

TYPE 6 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

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

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

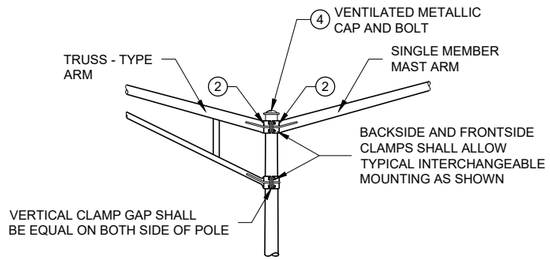
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(6) INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.



INTERCHANGEABLE MOUNTING DETAIL

POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 6 (35 FEET)

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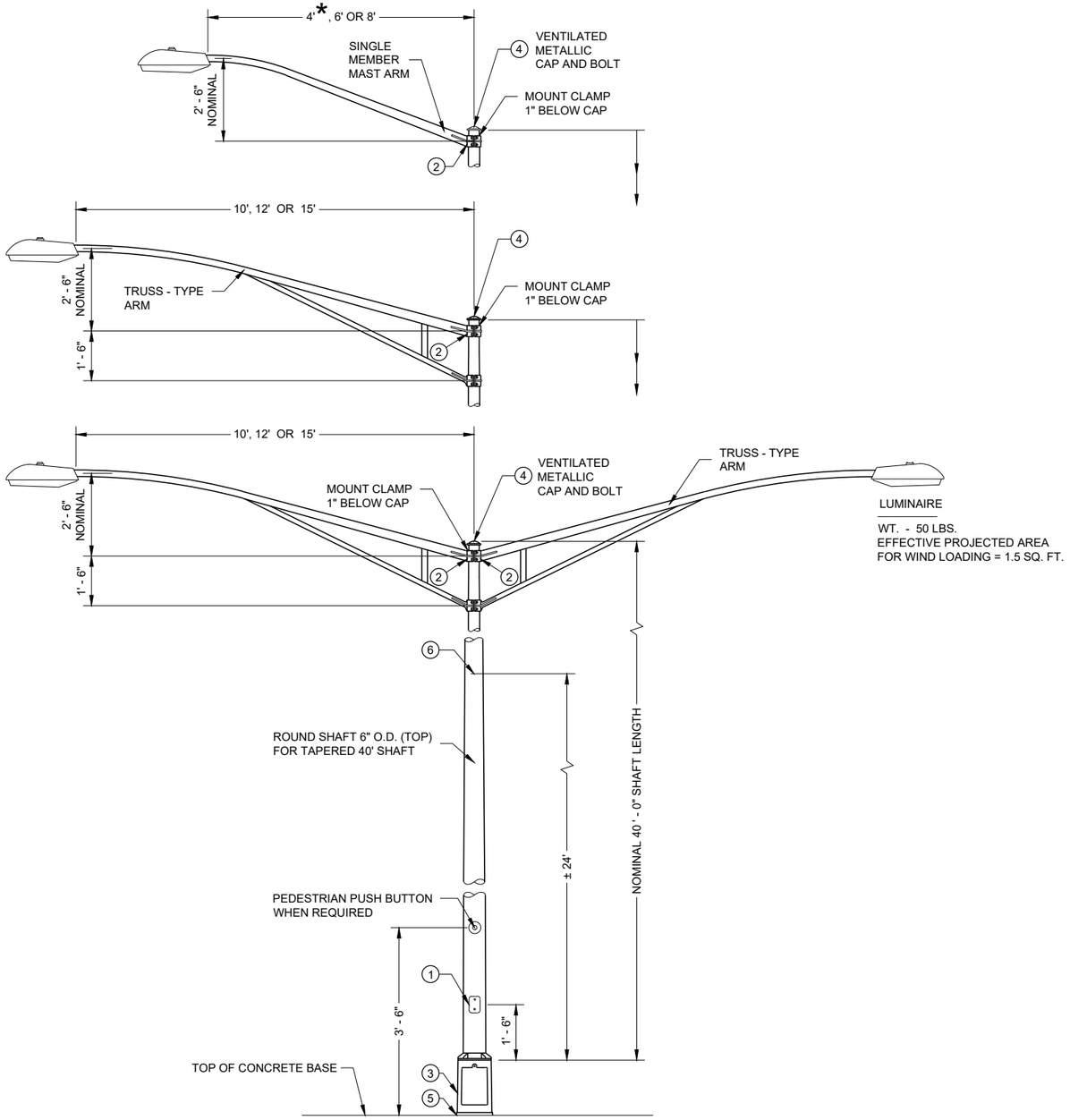
* RISE FOR 4' ARM SHALL BE 2'-0".



TYPE 17 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY

GENERAL NOTES

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

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

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

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

TYPE 17 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

TYPE 17 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SHOE BASE SHALL BE SLOTTED TO ACCEPT A 15" BOLT CIRCLE (14" X 16" SLOT) USING 1" ANCHOR RODS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

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

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

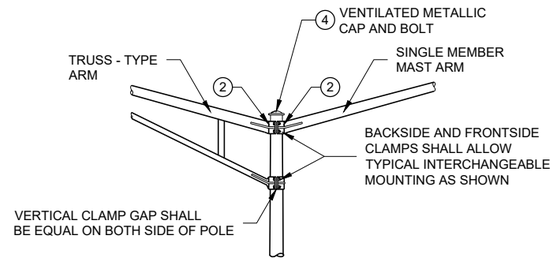
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM FHWA APPROVED TRANSFORMER BASE WHEN REQUIRED, SHALL HAVE AN ULTIMATE STATIC LOAD STRENGTH OF AT LEAST 40,000 FT. - LBS.

(4) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(6) INTERNAL DUMBELL - TYPE VIBRATION DAMPER.



INTERCHANGEABLE MOUNTING DETAIL

POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 17 (40 FEET)

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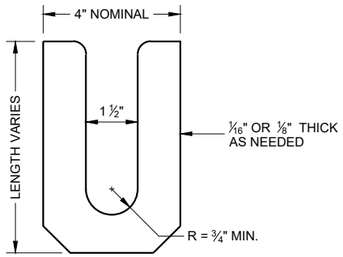
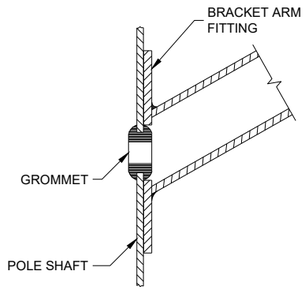
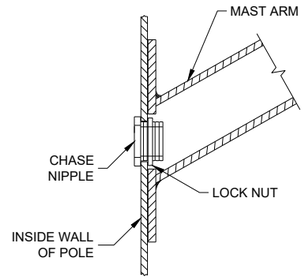


LEVELING SHIM (1)
SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

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

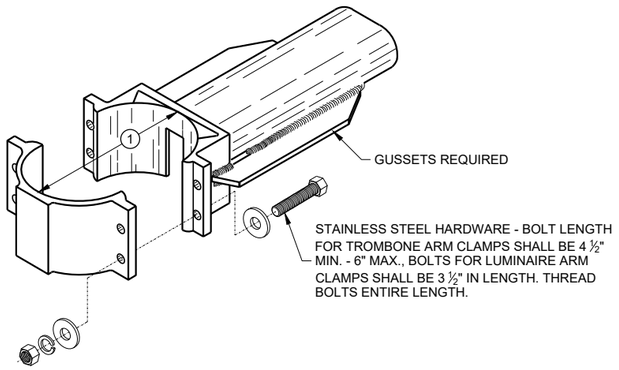
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

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

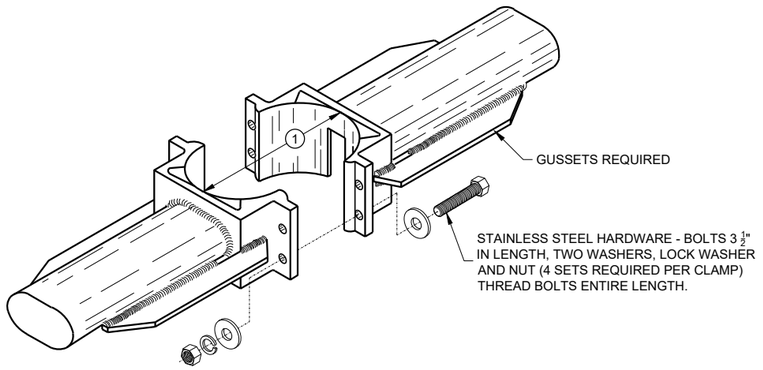
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

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

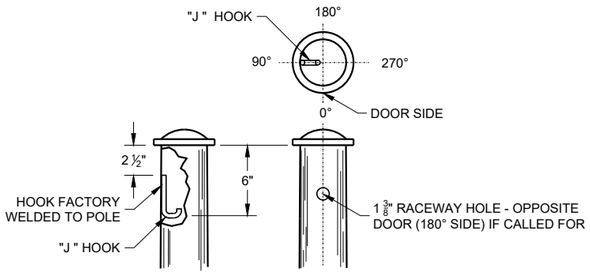
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



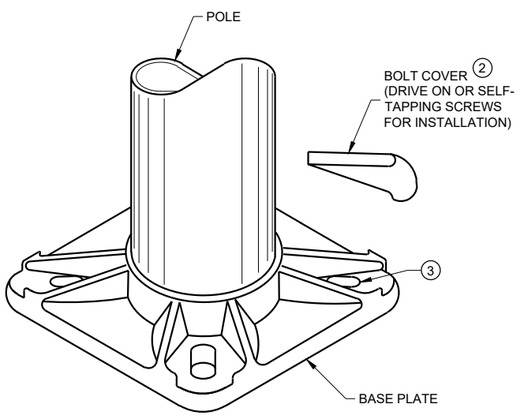
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



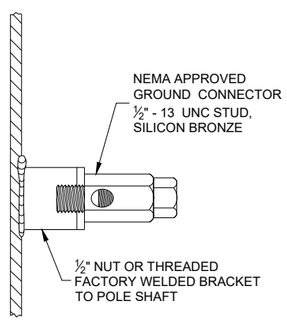
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

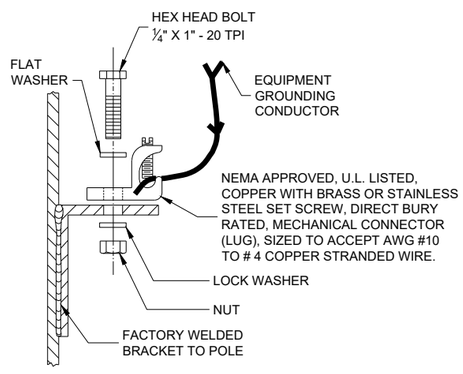


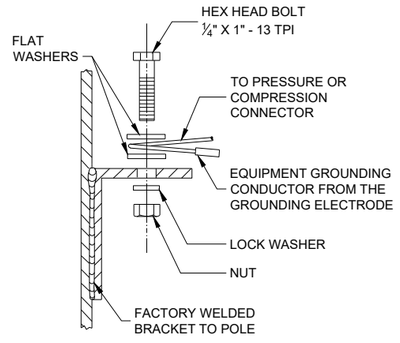
TYPICAL "J" HOOK LOCATION



BASE PLATE







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

HARDWARE DETAILS FOR POLE MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 128

FHWA

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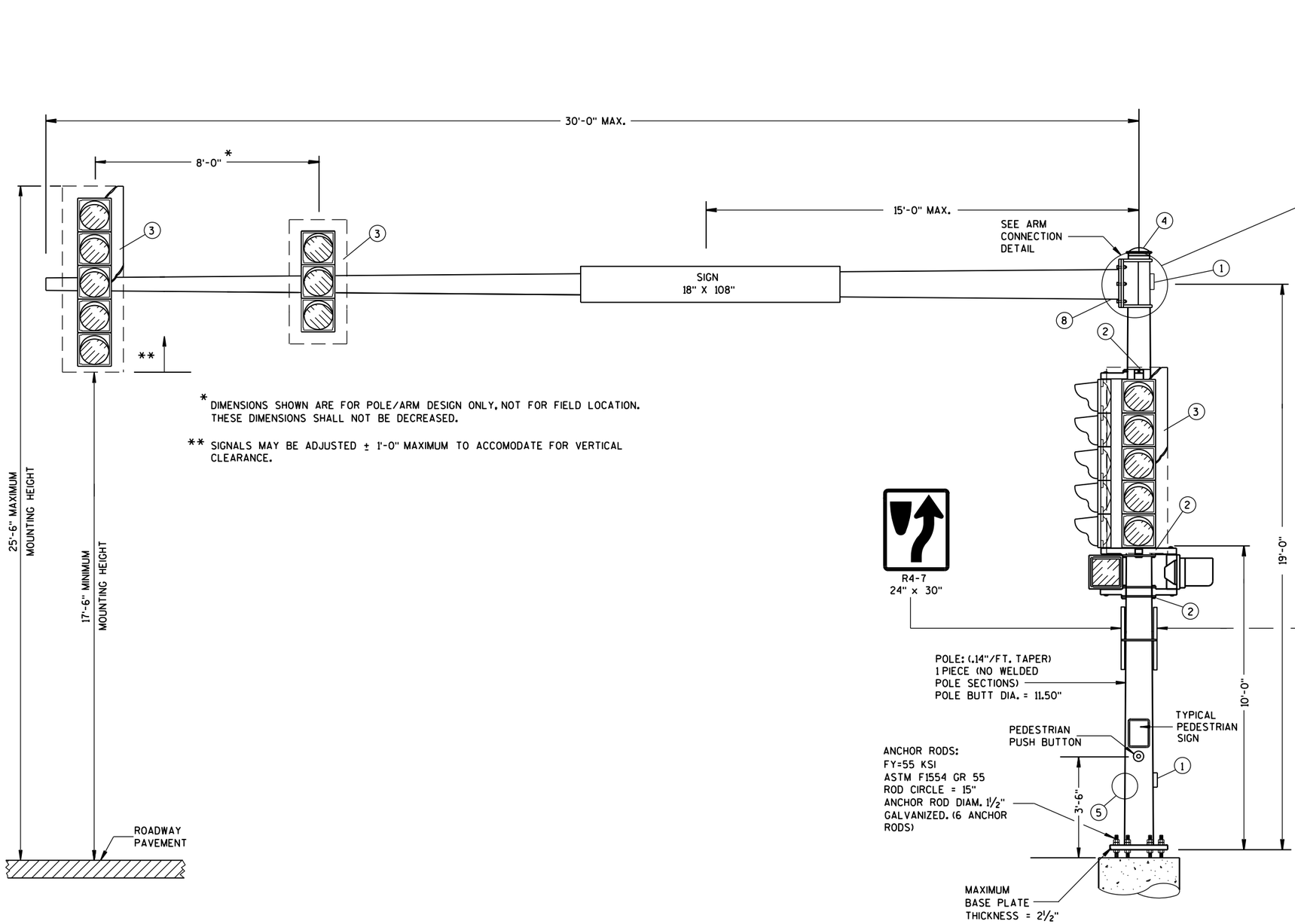
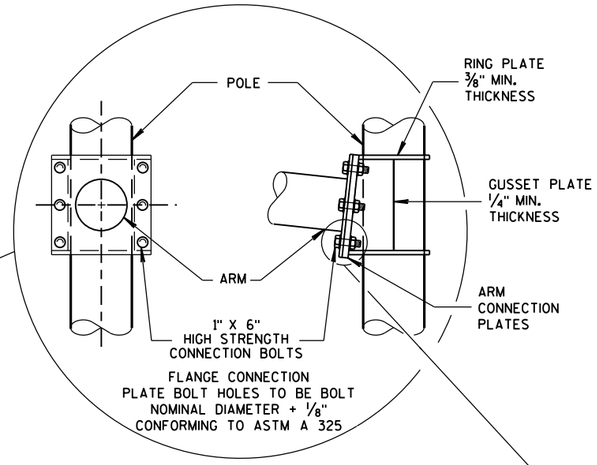
SDD 09A01 - 15g

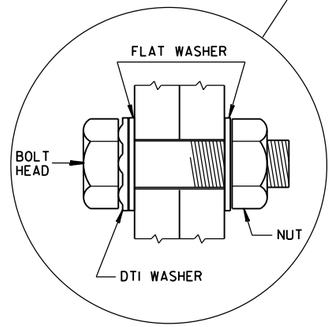


* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

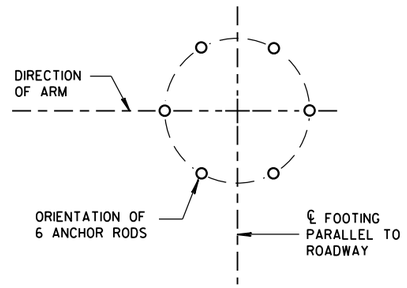
** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.



6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL



ANCHOR ROD LOCATION

(MAXIMUM LOAD)

TYPE 9 POLE 15'- 30' MONOTUBE ARM

TYPE 9 POLE
15' - 30' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May, 2016 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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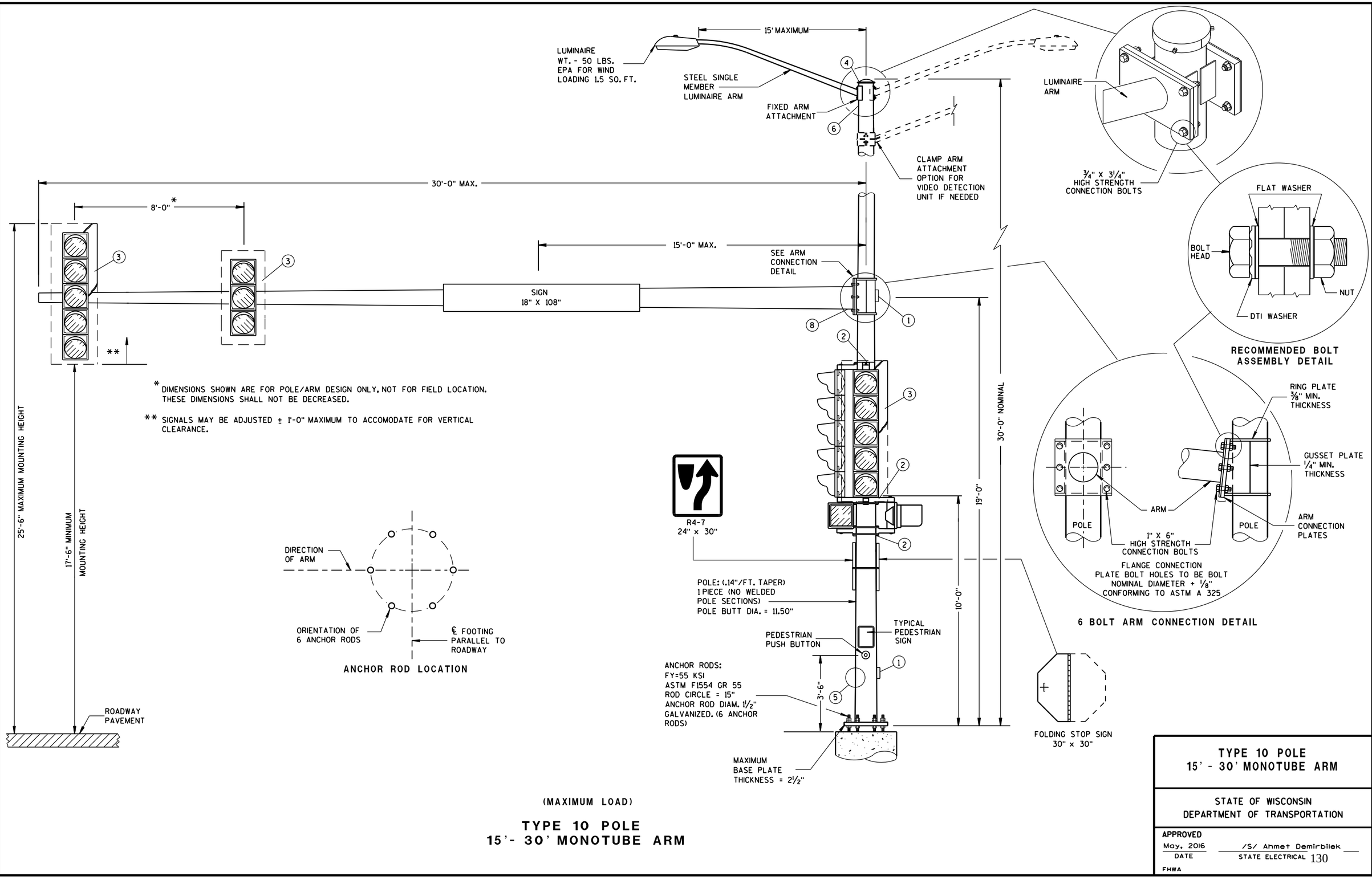

* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.

(MAXIMUM LOAD)

TYPE 10 POLE
15'- 30' MONOTUBE ARM

TYPE 10 POLE
15' - 30' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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May, 2016 — DATE
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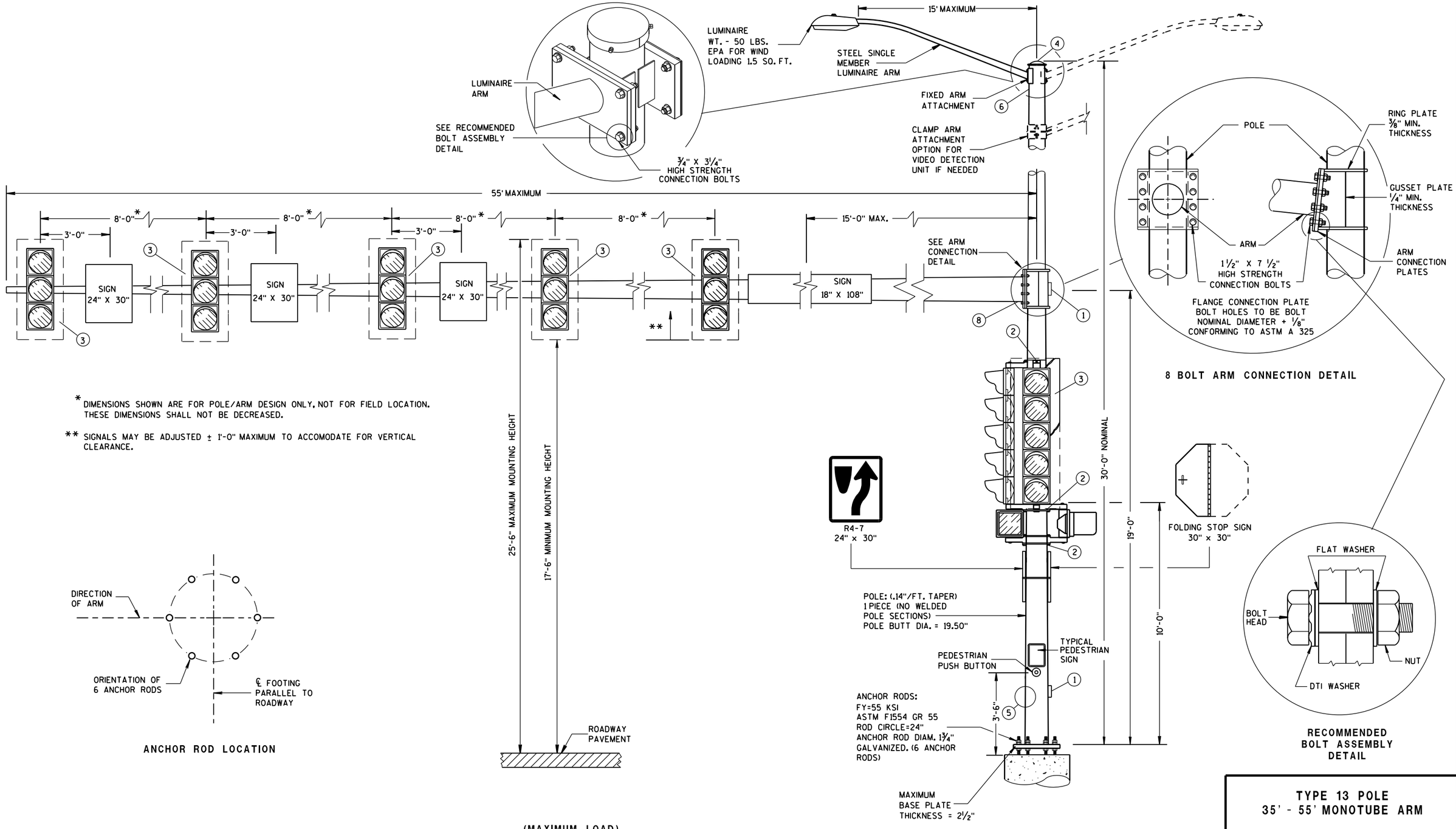

* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.

8 BOLT ARM CONNECTION DETAIL

RECOMMENDED BOLT ASSEMBLY DETAIL

ANCHOR ROD LOCATION

(MAXIMUM LOAD)

TYPE 13 POLE 35'- 55' MONOTUBE ARM

TYPE 13 POLE
35' - 55' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2016 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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GENERAL NOTES

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

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15-FOOT TO 30-FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35-FOOT TO 55-FOOT.

MONOTUBE POLE AND ARM SHALL BE GALVANIZED STEEL.

RING-STIFFENED BUILT-UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE (1) PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3 % ± RISE).

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

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO 2013 6TH EDITION AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR TRAFFIC AND LIGHTING STRUCTURES AND AS FOLLOWS:

- CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.
- CATEGORY II FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 12 AND TYPE 13 STRUCTURES.
- 90 MPH (3-SECOND GUST) WIND SPEED AND A 50 YEAR DESIGN LIFE.

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" S.S. BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR AS DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEADS AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HANDHOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING, (SEE SPECIFICATIONS SEC. 658).

(3) SECURELY MOUNT BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE END OF THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY-WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HANDHOLE, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

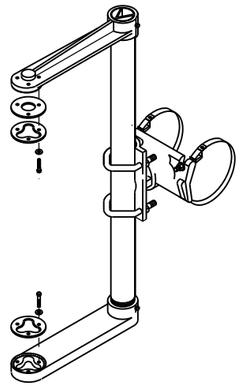
(6) FACTORY-WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

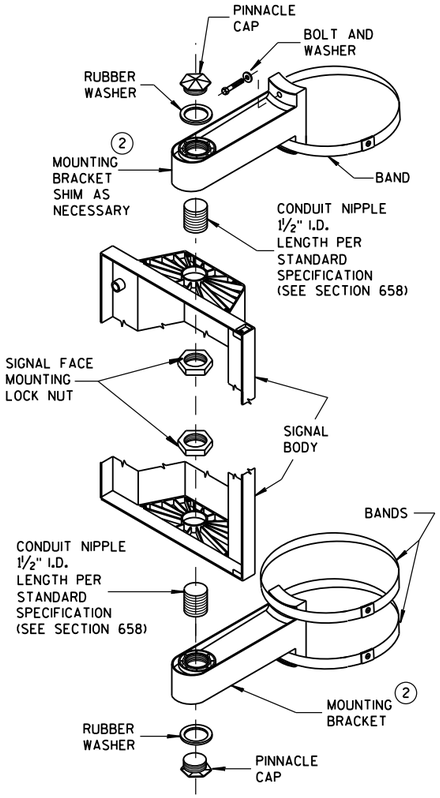
MOUNTING HEIGHT SHALL BE 6'-0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

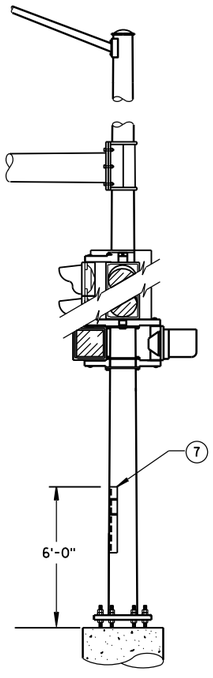


SIGNAL FACE MOUNTING BRACKET
DETAIL FOR MONOTUBE ARM

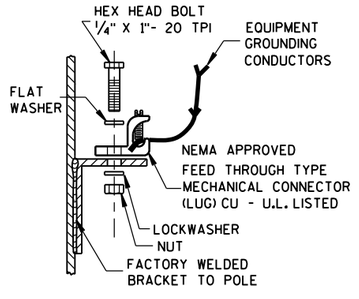
(MOUNT PER MANUFACTURER'S RECOMMENDATION)



SIGNAL FACE
VERTICAL MOUNTING DETAIL

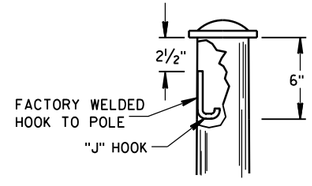


STRUCTURAL IDENTIFICATION
PLAQUE PLACEMENT



TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL
BE STAINLESS STEEL



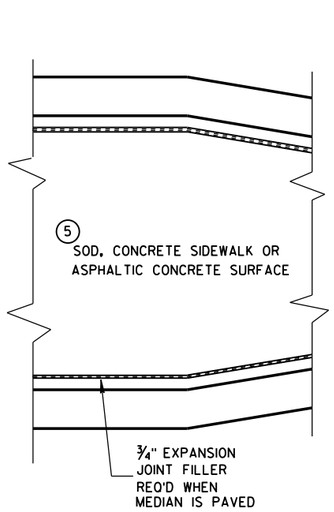
"J" HOOK WIRE SUPPORT (6)

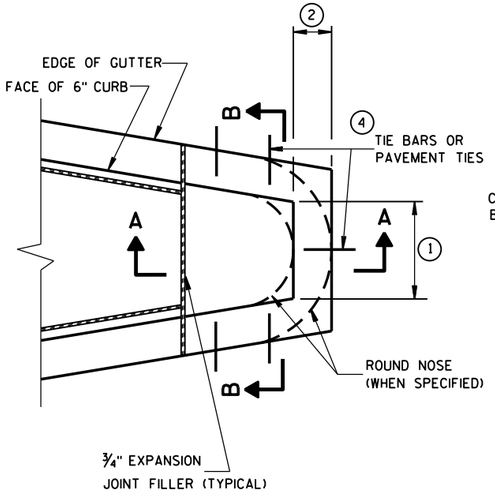
GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS

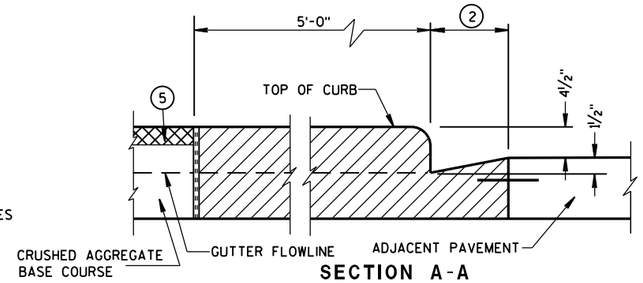
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2016 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

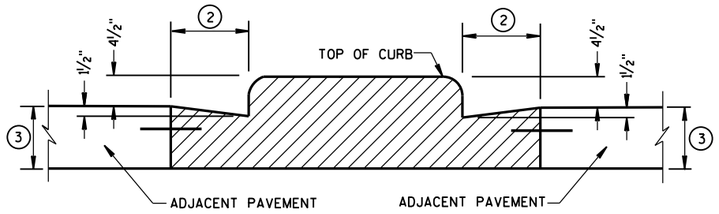
S.D.D. 9 E 8-8e







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.

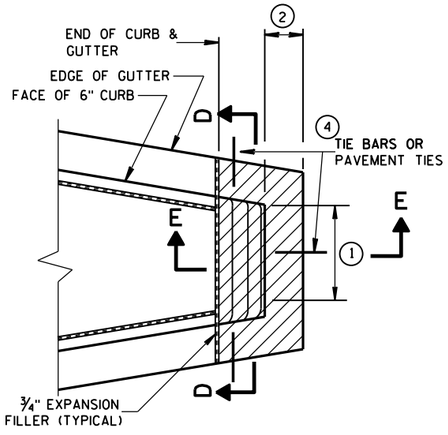
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

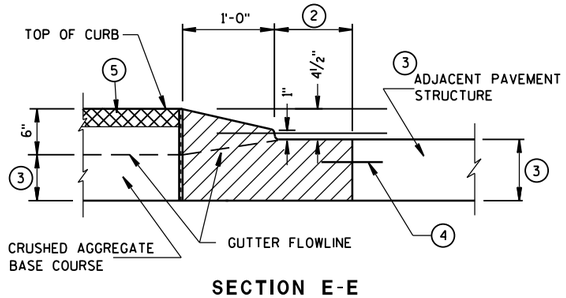
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(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.

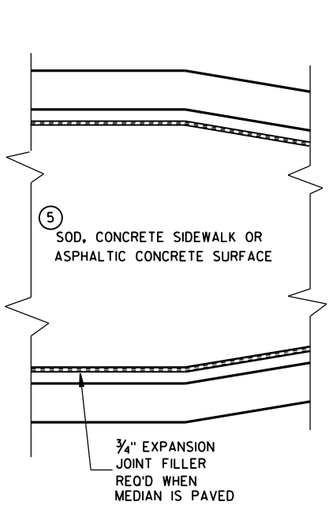
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

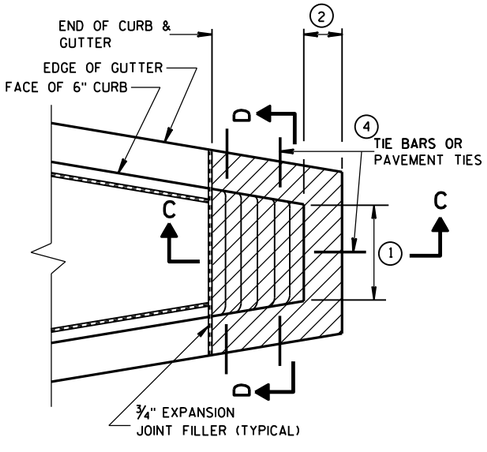


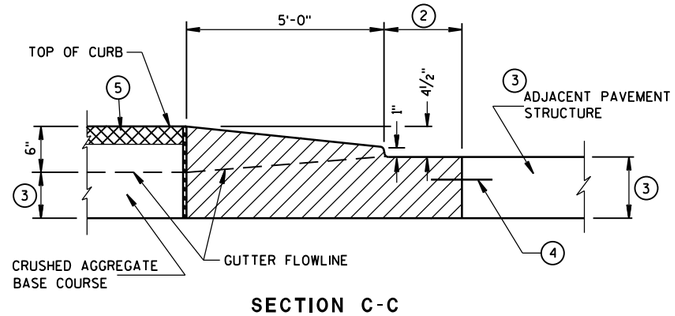


SECTION E-E

CONCRETE MEDIAN SLOPED NOSE TYPE 2

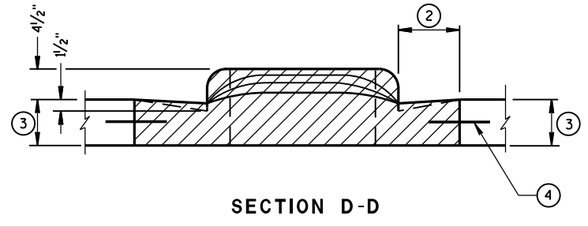






SECTION C-C

CONCRETE MEDIAN SLOPED NOSE TYPE 1



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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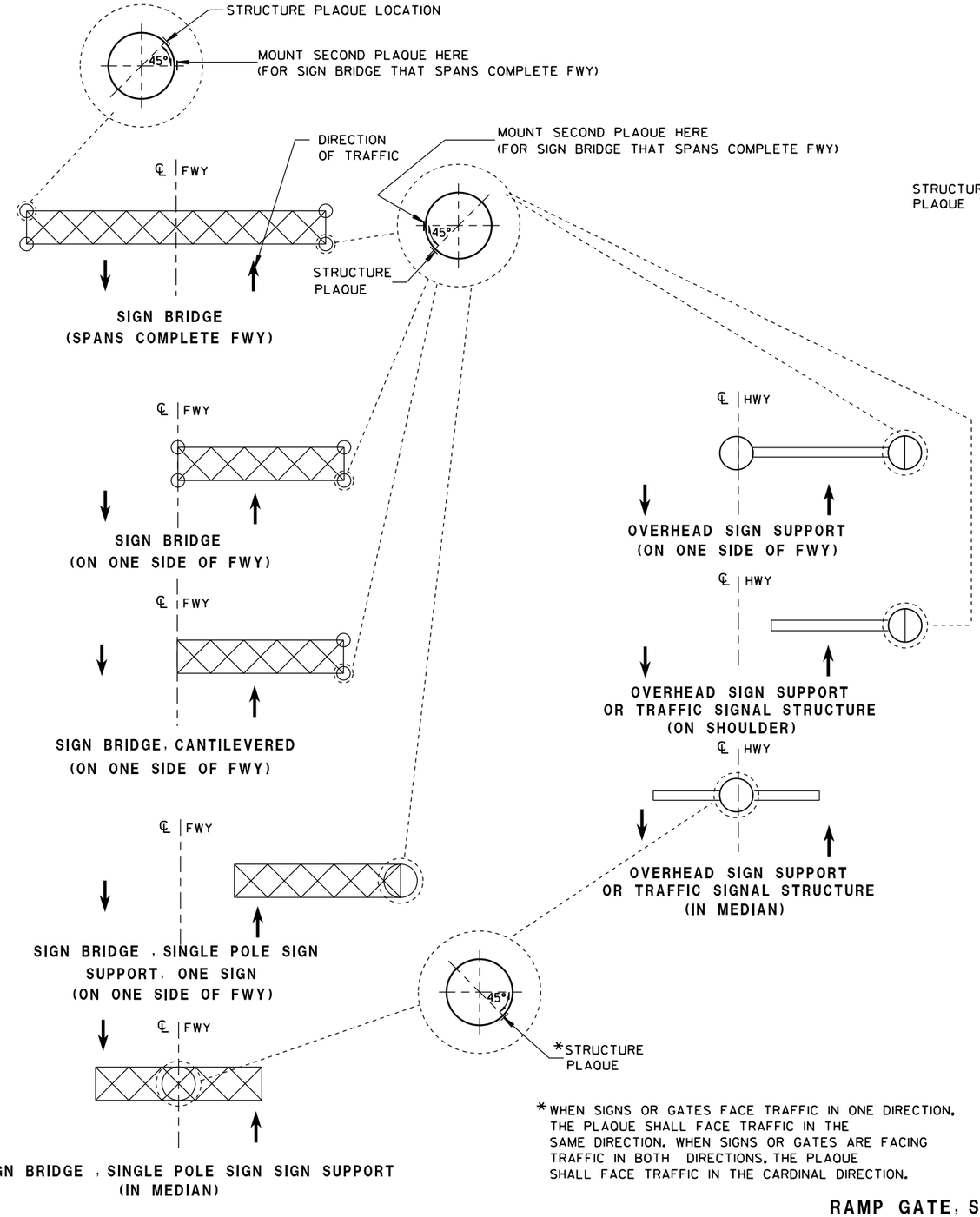
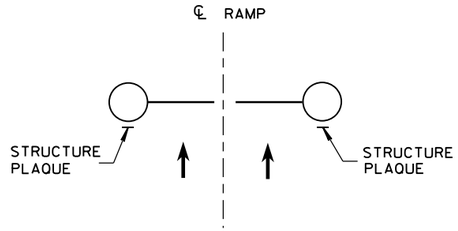
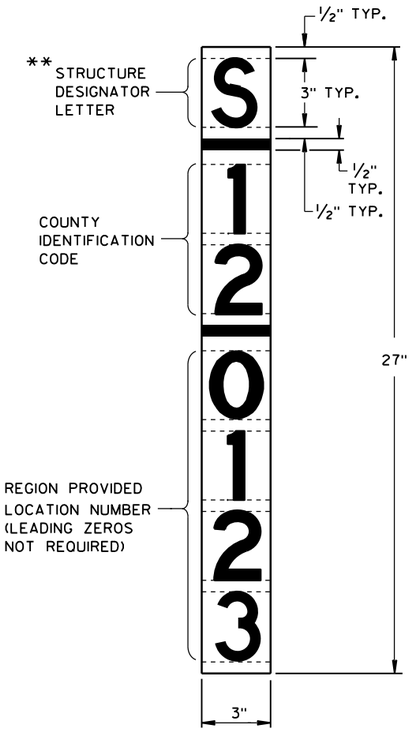


*WHEN SIGNS OR GATES FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS OR GATES ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.

LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES



**RAMP GATE
(ACROSS FWY ON-RAMP)**



** LETTER "G" UTILIZED FOR RAMP GATES. LETTER "S" UTILIZED FOR SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, AND TRAFFIC SIGNALS.

RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT AND TRAFFIC SIGNAL STRUCTURE PLAQUE FOR SIGN BRIDGES AND OVERHEAD SIGN SUPPORT WHICH ARE NOT STRUCTURE MOUNTED

GENERAL NOTES

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

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

IF THE PROPOSED SIGN BRIDGE OR OVERHEAD SIGN SUPPORT IS REPLACING AN EXISTING SIGN BRIDGE OR OVERHEAD SIGN SUPPORT, A NEW IDENTIFICATION PLAQUE WILL BE REQUIRED.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - 3 STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - 3 ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 5.0' ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 0.060" THICK.

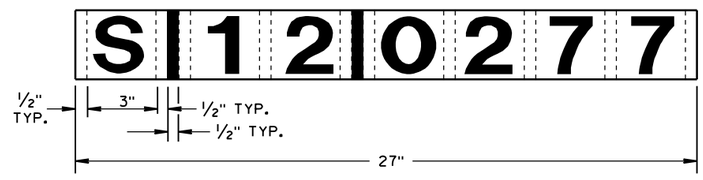
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

LINES - BLACK, ½" WIDE, SELF-ADHESIVE

CHARACTERS:- BLACK, SELF ADHESIVE, SERIES "D", SIZE AS SHOWN.

FOR SIGN BRIDGES, STRUCTURE MOUNTED, THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY AS SHOWN ON THE DRAWING. THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY TO THE BACK OF THE SIGN, BETWEEN THE ALUMINUM EXTRUSIONS, NEAR THE TOP LEFT HAND CORNER OF THE SIGN. THE BASE MATERIAL SHALL BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE ALUMINUM SURFACE. PRIOR TO ADHERING THE MATERIAL, THE ALUMINUM SURFACE SHALL BE SMOOTH, CLEAN AND DRY.

WHERE SIGN BRIDGE ILLUMINATION IS PROVIDED, THE STRUCTURE MUST ALSO HAVE A SIGN BRIDGE CIRCUIT PLAQUE AS SHOWN IN THE ELECTRICAL DETAILS.



IDENTIFICATION PLAQUE FOR SIGN BRIDGE, STRUCTURE MOUNTED

STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, & TRAFFIC SIGNALS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/4/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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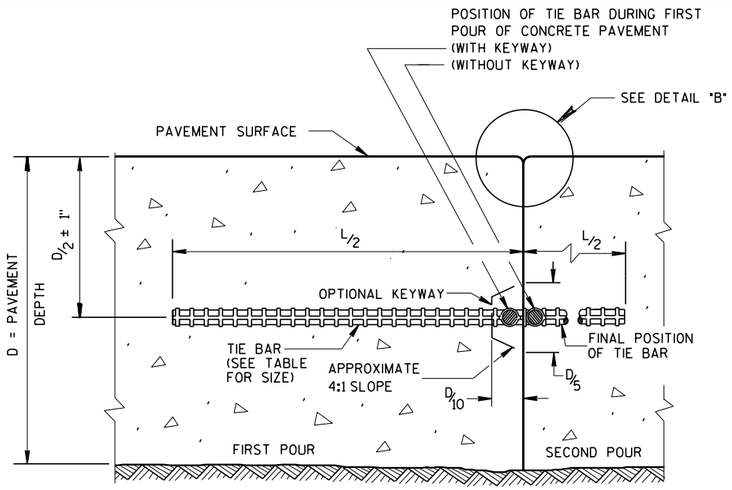
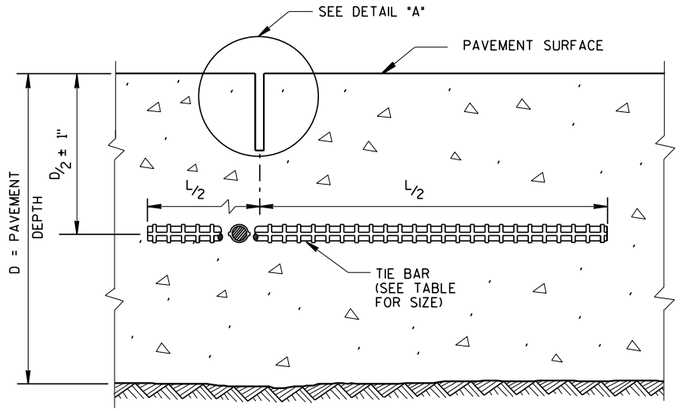
S.D.D. 12 A 4-3



CONSTRUCTION JOINT



SAWED JOINT

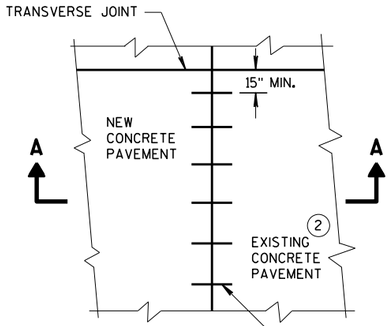
GENERAL NOTES

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

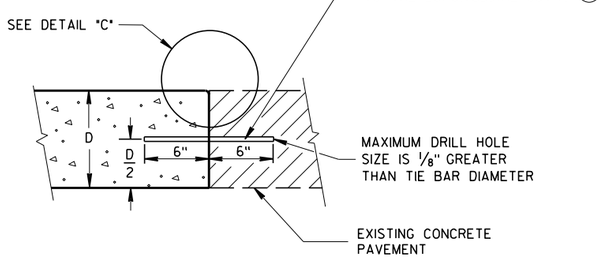
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

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

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

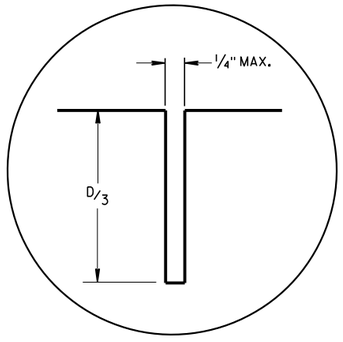


PLAN VIEW

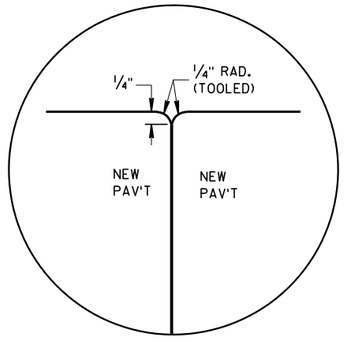


SECTION A-A

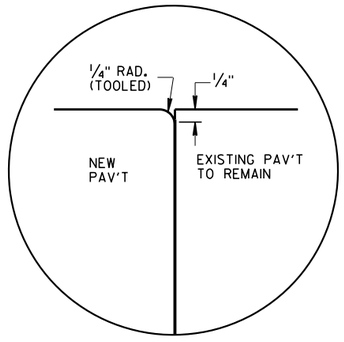
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



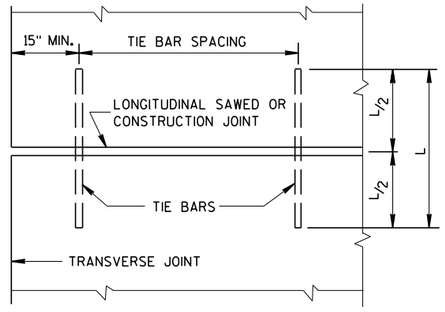
DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPE
FHWA

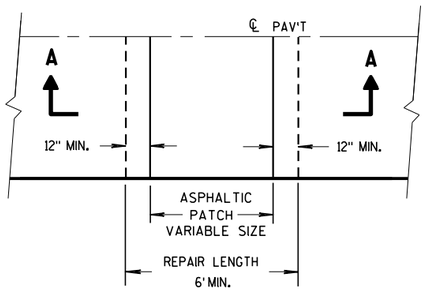
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

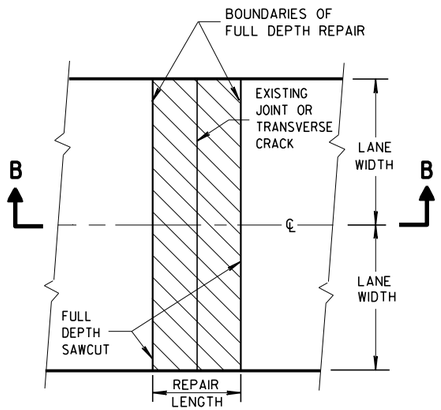
PROVIDE A 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK IN THE SAME LANE.

THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NONDOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

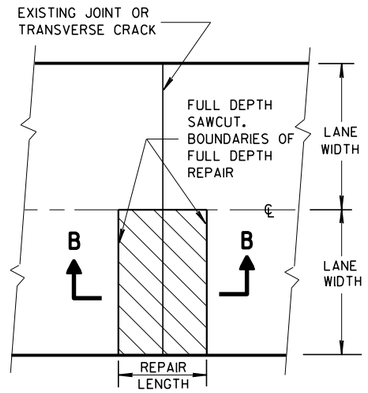
(1) DOWEL BARS MIGHT NOT EXIST.



PLAN VIEW

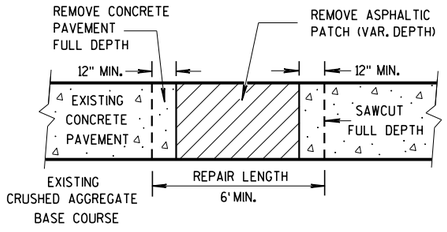


PLAN VIEW
(DOUBLE LANE REPAIR)



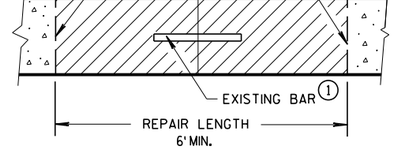
PLAN VIEW
(SINGLE LANE REPAIR)

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION A-A

HMA PATCH REMOVAL



SECTION B-B

CONCRETE REMOVAL

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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S.D.D. 13 C 9-15a

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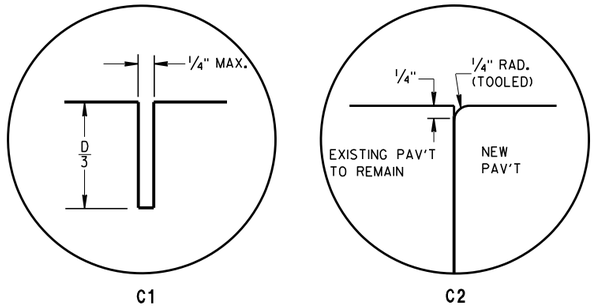
S.D.D. 13 C 9-15a



C1 C2

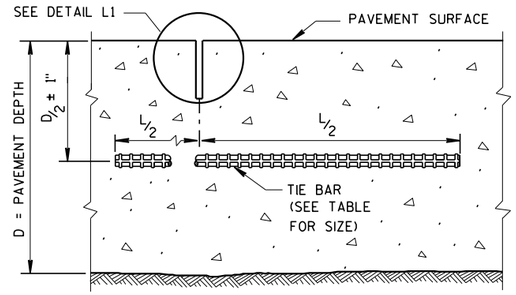
TRANSVERSE JOINTS

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.



SECTION C-C

SAWED LONGITUDINAL JOINT

GENERAL NOTES

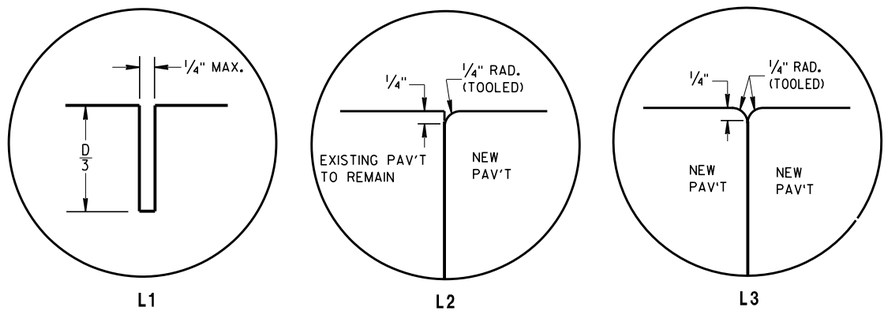
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

CONCRETE PAVEMENT REPAIRS OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

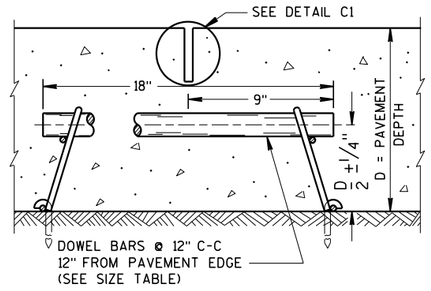
FOR MULTI-LANE CONCRETE PAVEMENT REPLACEMENTS, PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM ALL TRANSVERSE JOINTS OR EDGES OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

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



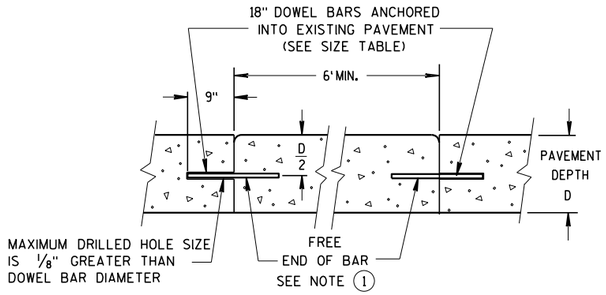
L1 L2 L3

LONGITUDINAL JOINTS

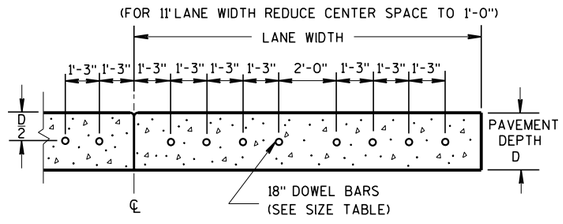


SECTION F-F

CONTRACTION JOINT



SECTION D-D

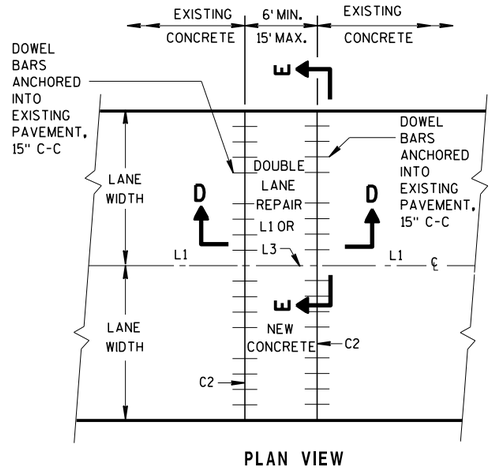


SECTION E-E

DRILLED DOWEL BAR CONSTRUCTION JOINT

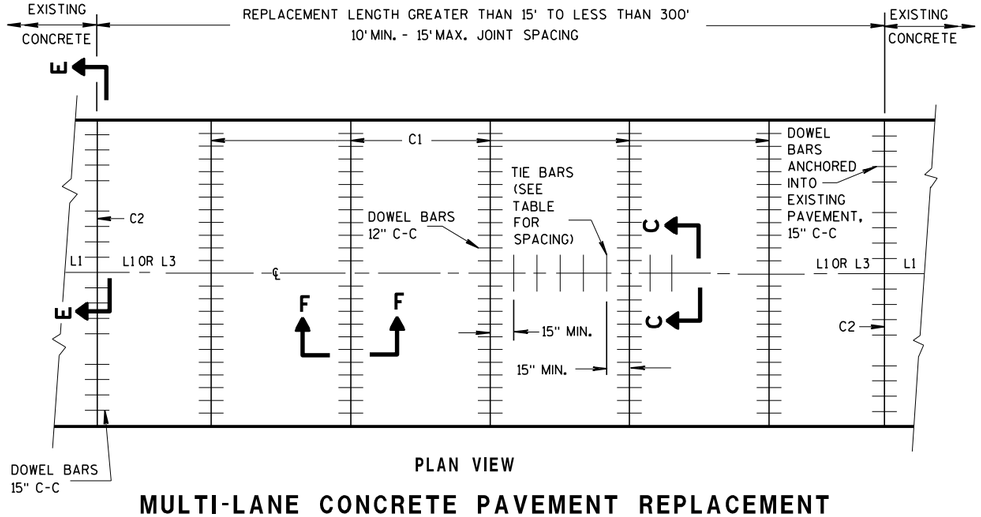
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	DRILLED DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 1/2", 6", 6 1/2"	NONE	NONE	12'
7", 7 1/2"	1"	1"	14'
8", 8 1/2"	1 1/4"	1 1/4"	15'
9", 9 1/2"	1 1/4"	1 1/4"	15'
10" & ABOVE	1 1/2"	1 1/4"	15'



PLAN VIEW

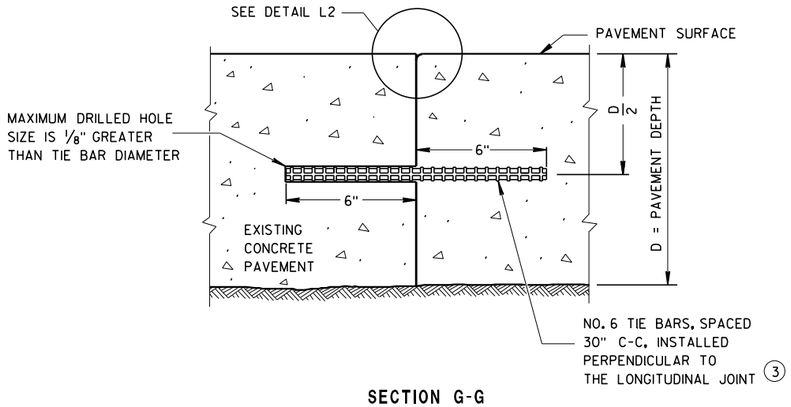
MULTI-LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT



SECTION G-G

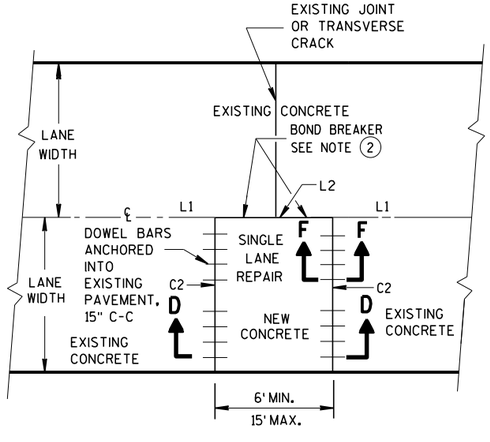
TIE BARS ANCHORED INTO EXISTING PAVEMENT

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.

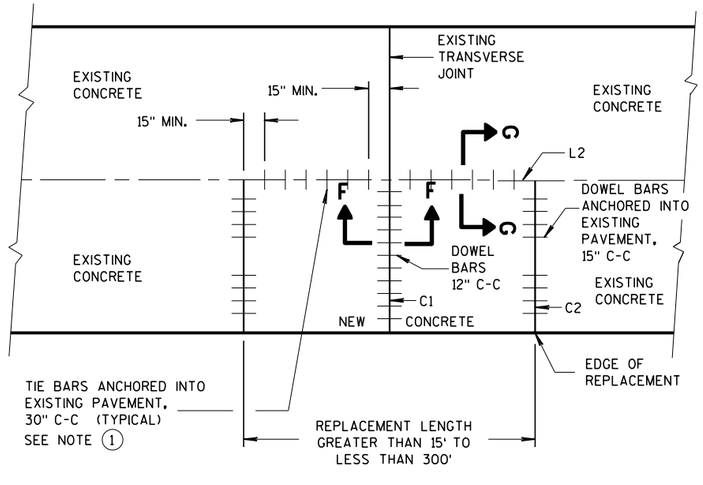
(2) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.

(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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Ken... — PAVEMENT SUPE...
FHWA

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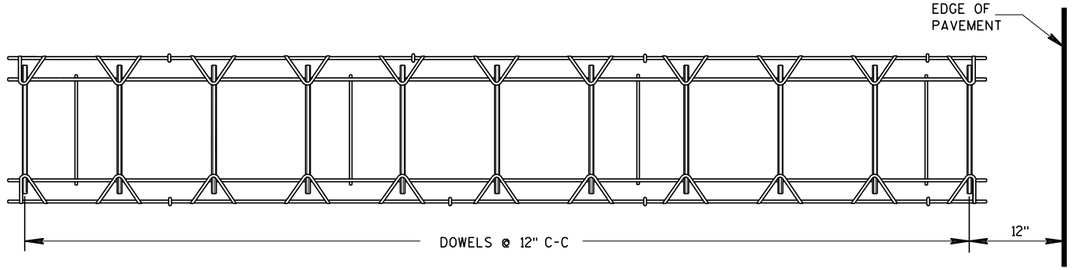
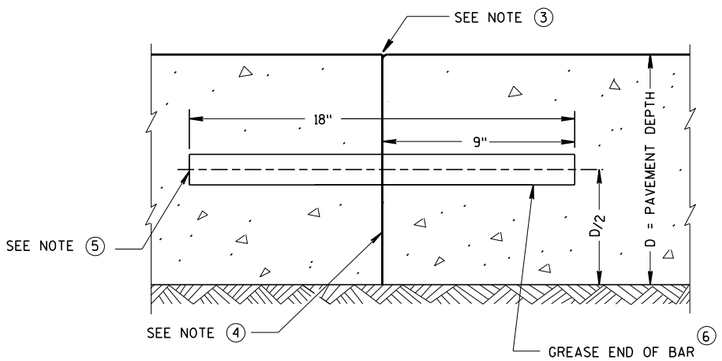
S.D.D. 13 C 9-15c



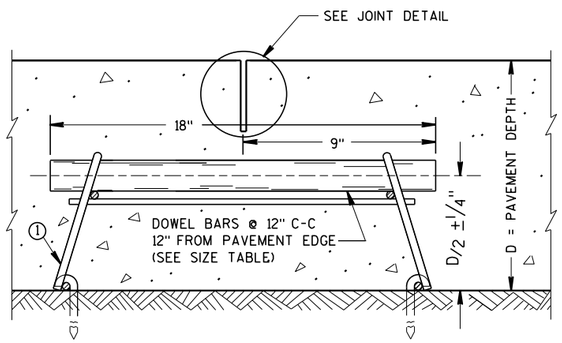
PLAN VIEW

SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①



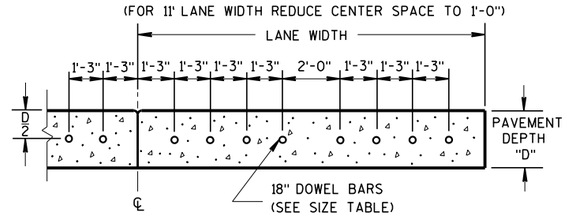
TRANSVERSE CONSTRUCTION JOINT



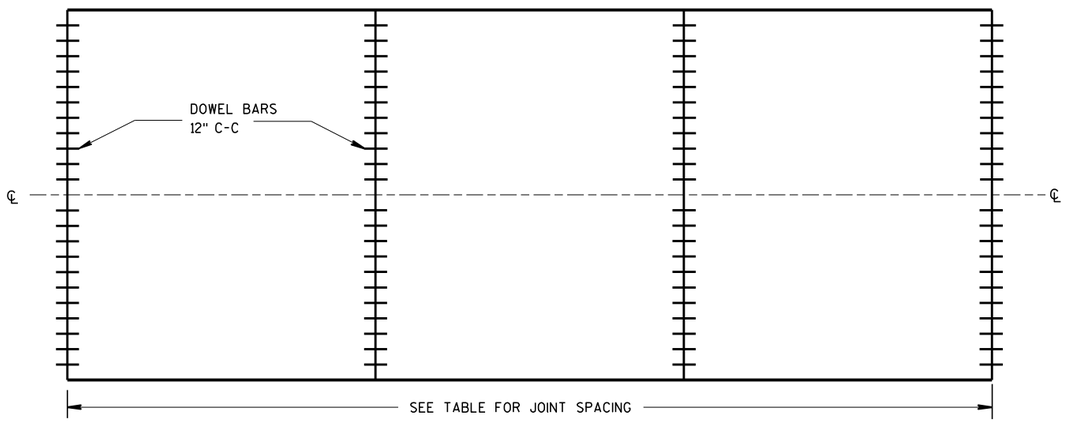
DOWELED CONTRACTION JOINT

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'



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



CONTRACTION JOINT LOCATIONS

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.

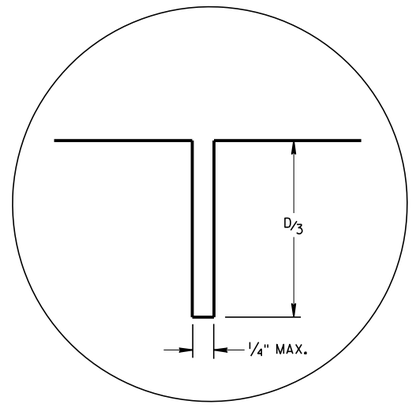
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

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.



JOINT DETAIL

URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE
/S/ Peter Kemp P.E.
PAVEMENT SUP
FHWA

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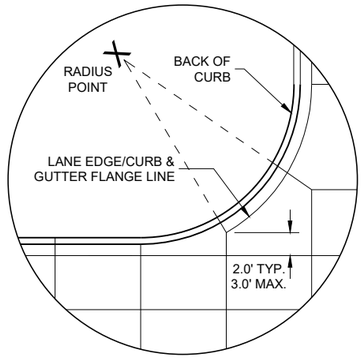
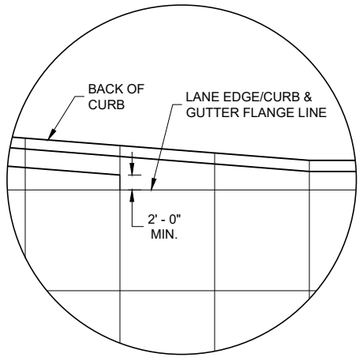
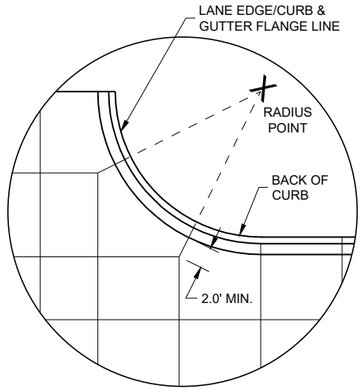
S.D.D. 13 C 13-9



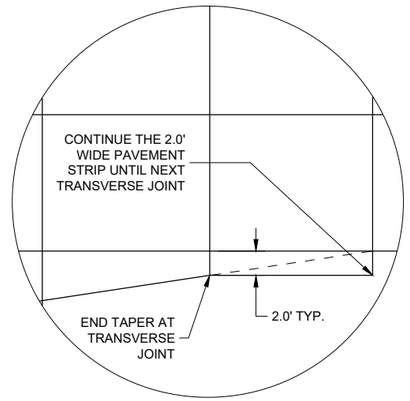
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

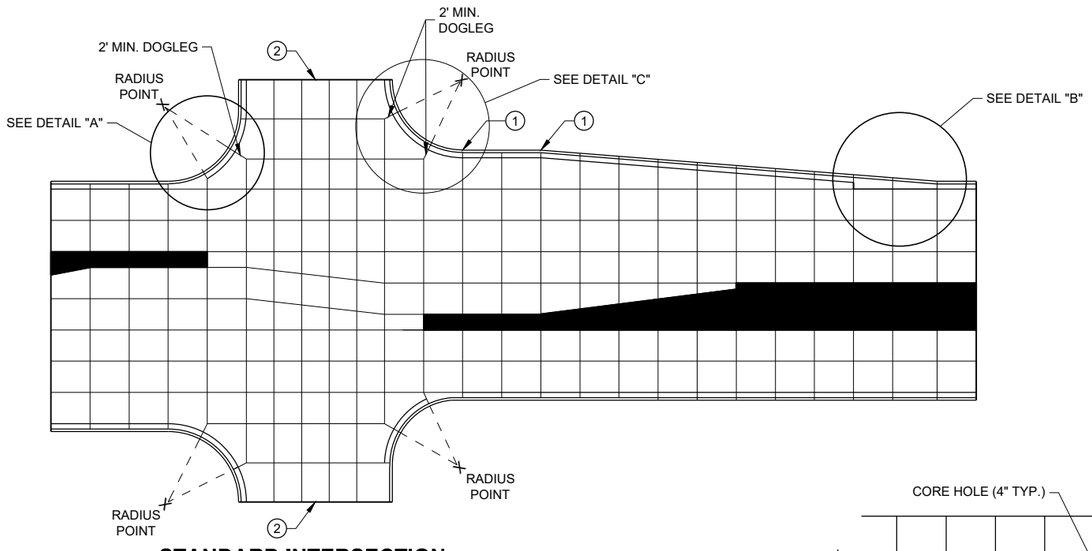
AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.

(2) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITHEDGE OF RADIUS.

(3) THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.

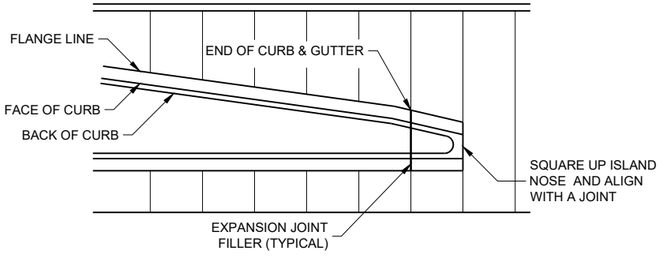


STANDARD INTERSECTION

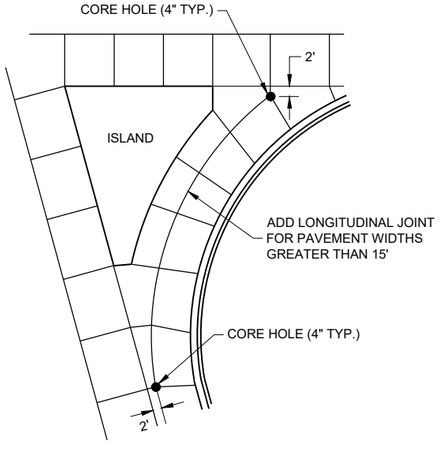
PAVEMENT DEPTH AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'

SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTAT

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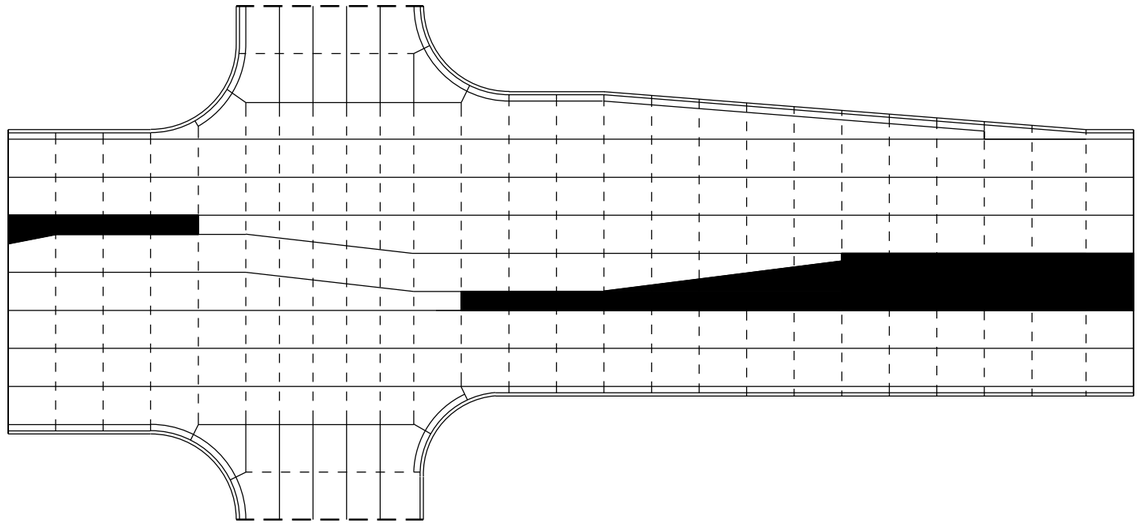
LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

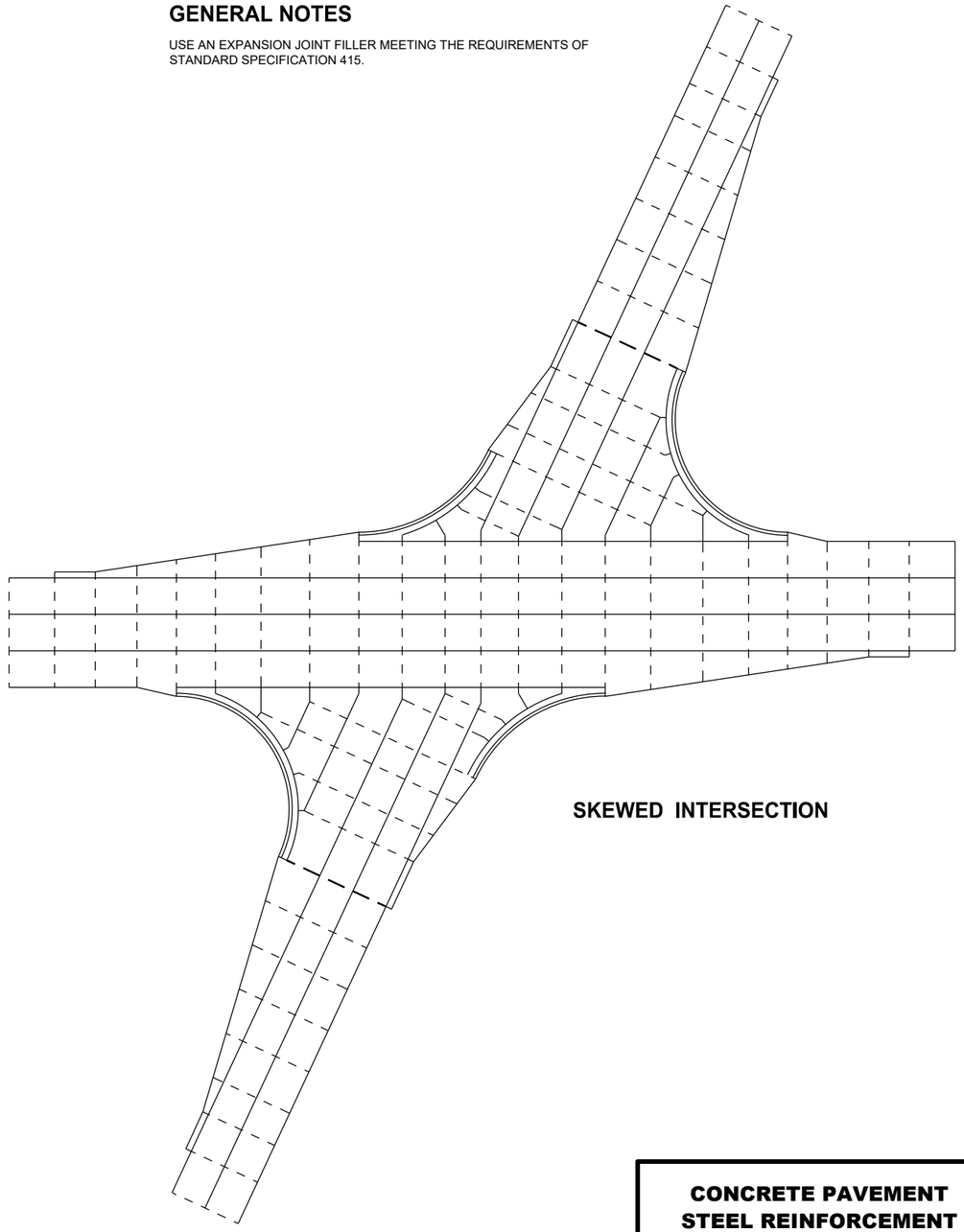
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

6

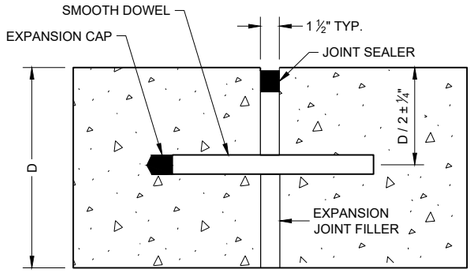
SDD 13C18 - 07b

CONCRETE PAVEMENT
STEEL REINFORCEMENT

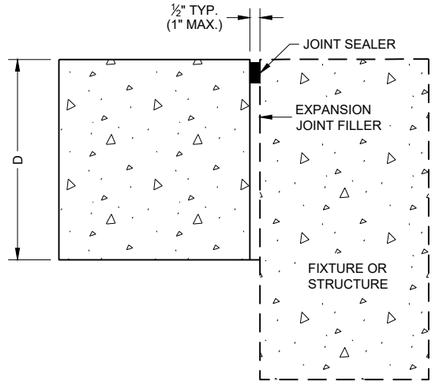
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

6

SDD 13C18 - 07b



DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

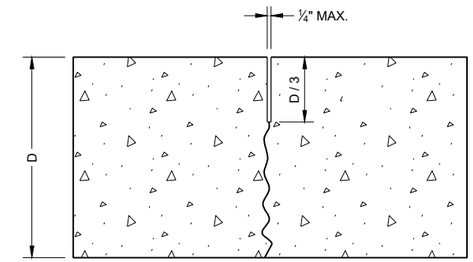
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4*	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

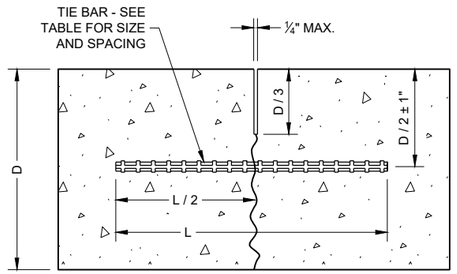
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

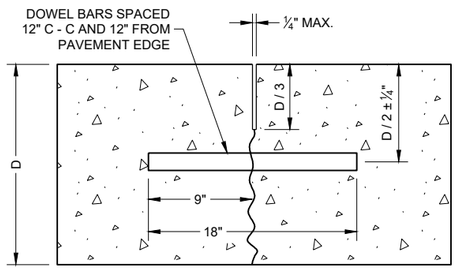
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A ¼" RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



UNDOWELED TRANSVERSE

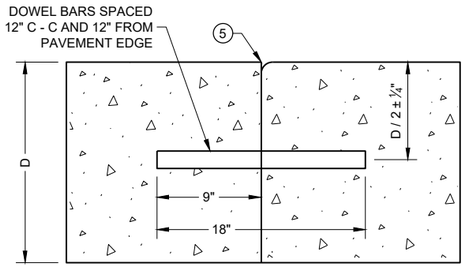


TIED LONGITUDINAL

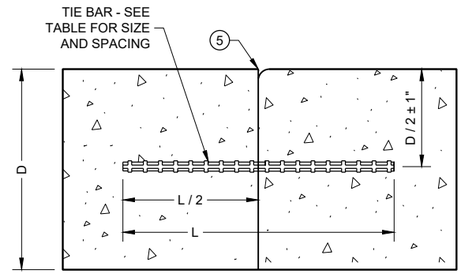


DOWELED TRANSVERSE

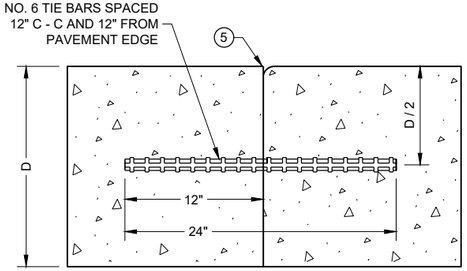
CONTRACTION JOINTS (2)



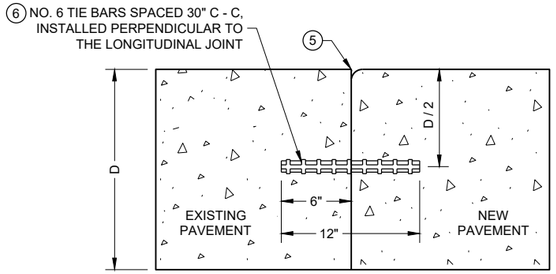
DOWELED TRANSVERSE (3)



TIED LONGITUDINAL



TIED TRANSVERSE (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

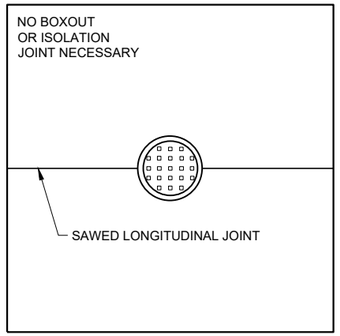
CONSTRUCTION JOINTS (4)

CONCRETE PAVEMENT JOINT TYPES

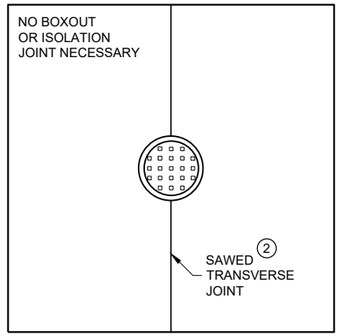
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

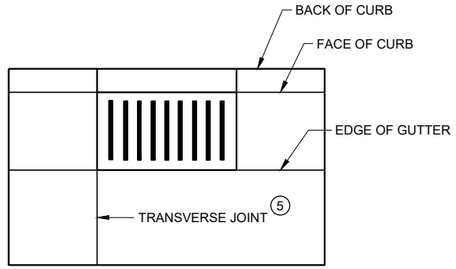
SDD 13C18 - 07c
SDD 13C18 - 07c



MANHOLE WITH LONGITUDINAL JOINT



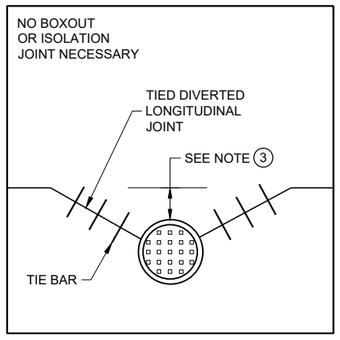
MANHOLE WITH TRANSVERSE JOINT



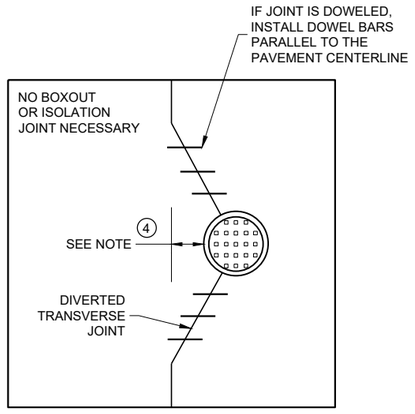
INLET WITH TRANSVERSE JOINT

GENERAL NOTES

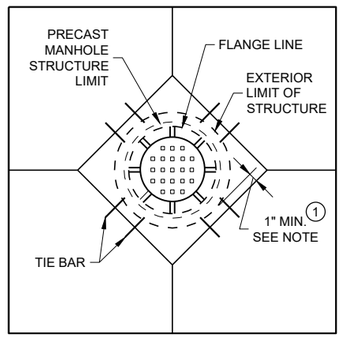
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
4. IF THE DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS LESS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
5. ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT



DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

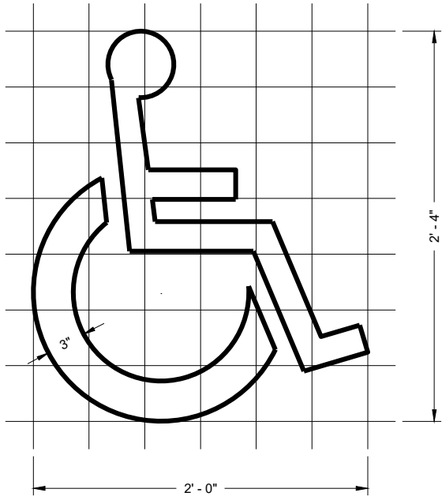
FHWA

6

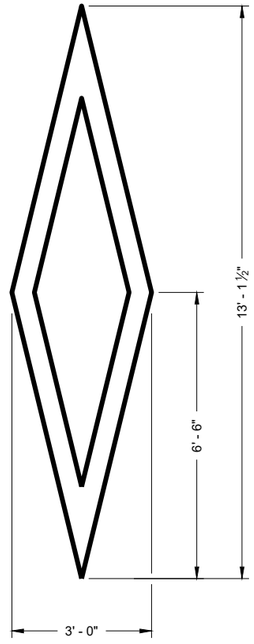
SDD 13C18 - 07d
SDD 13C18 - 07d

GENERAL NOTES

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



HANDICAP SYMBOL



PREFERENTIAL LANE SYMBOL

6

6

SDD 15C07 - 15a

SDD 15C07 - 15a

PAVEMENT MARKING SYMBOLS

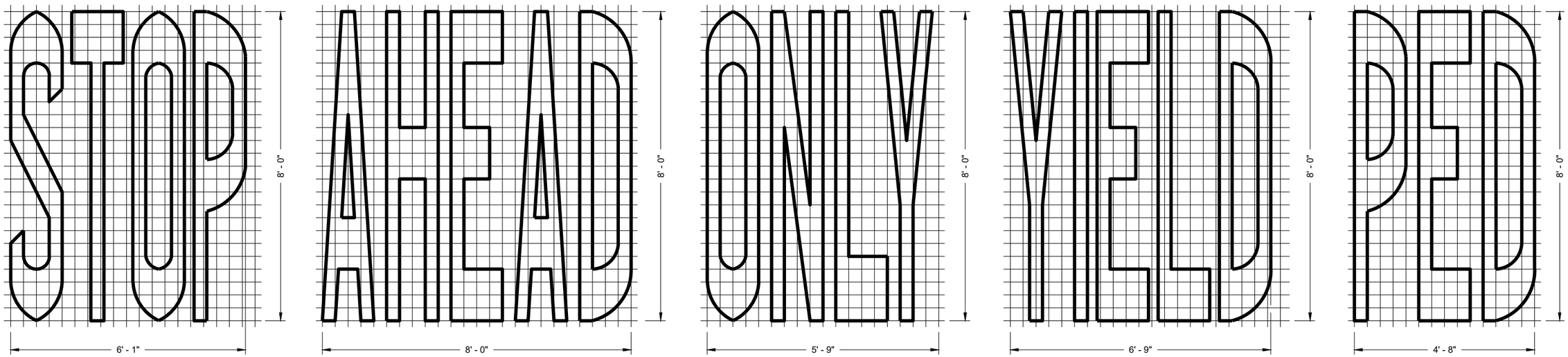
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

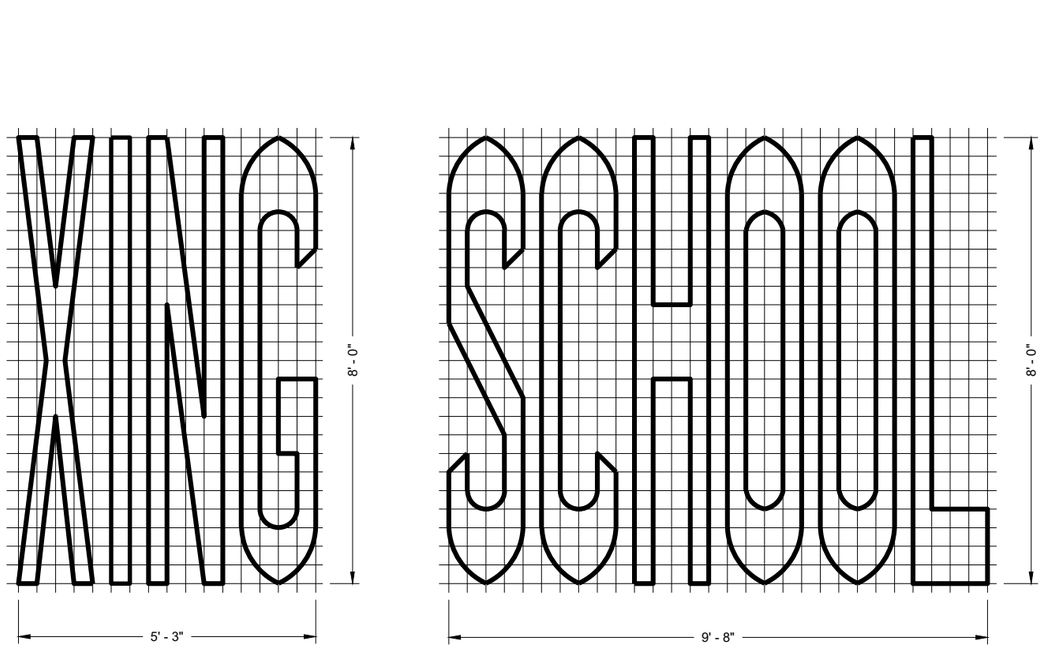
APPROVED

November 2019
DATE

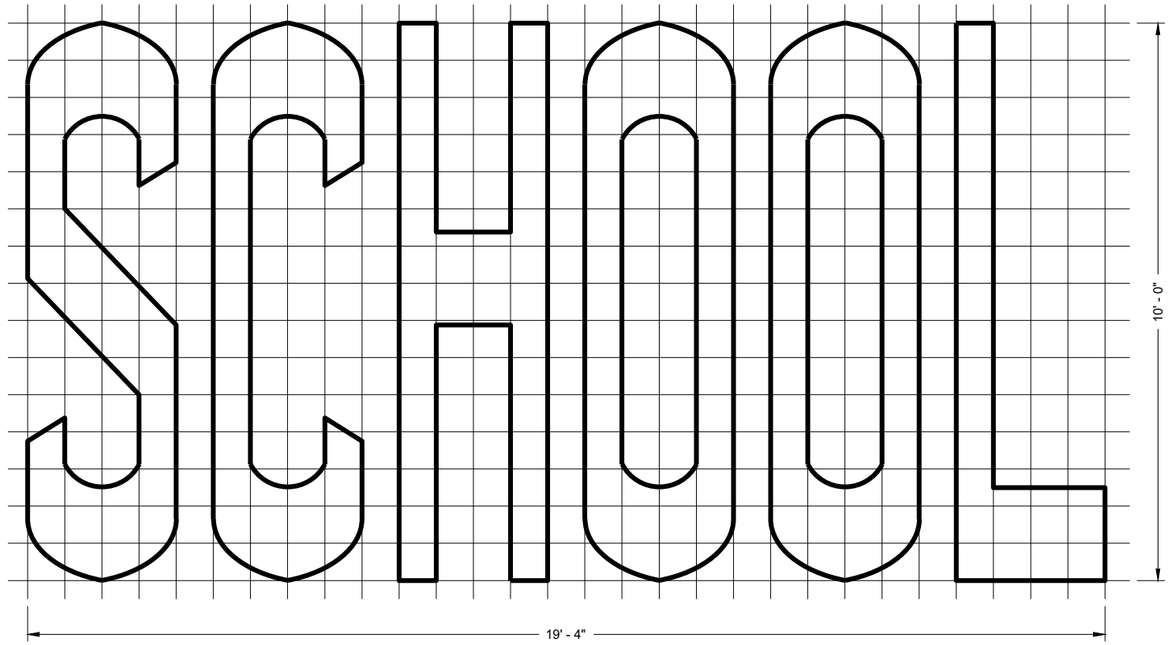
/S/ Matthew Rauch
STATE SIGNING AND MAR ENGINEER

FHWA





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

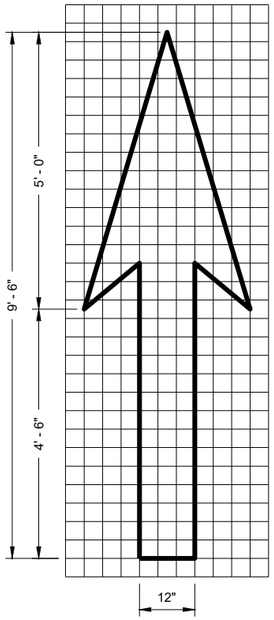
6

SDD 15C07 - 15b

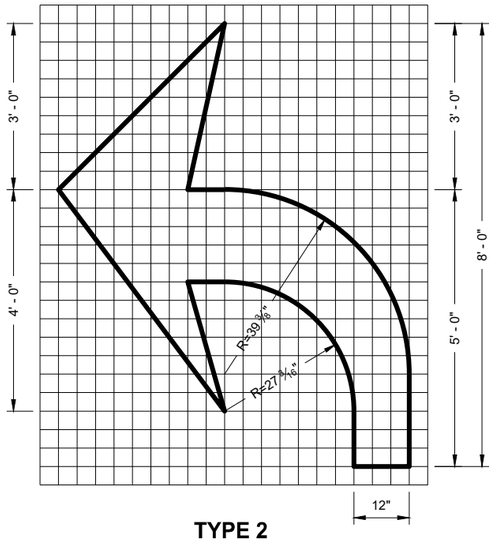
SDD 15C07 - 15b

GENERAL NOTES

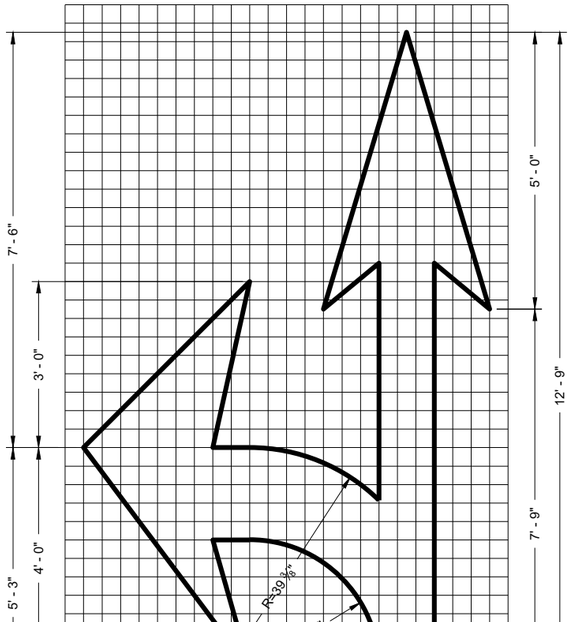
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



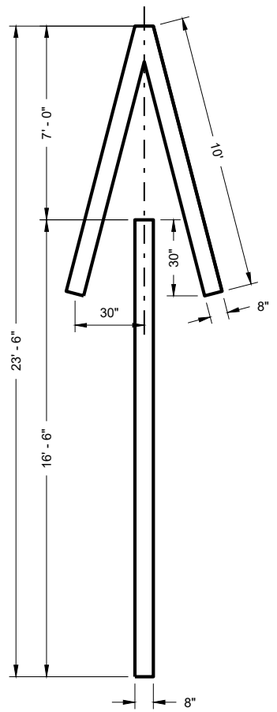
TYPE 1



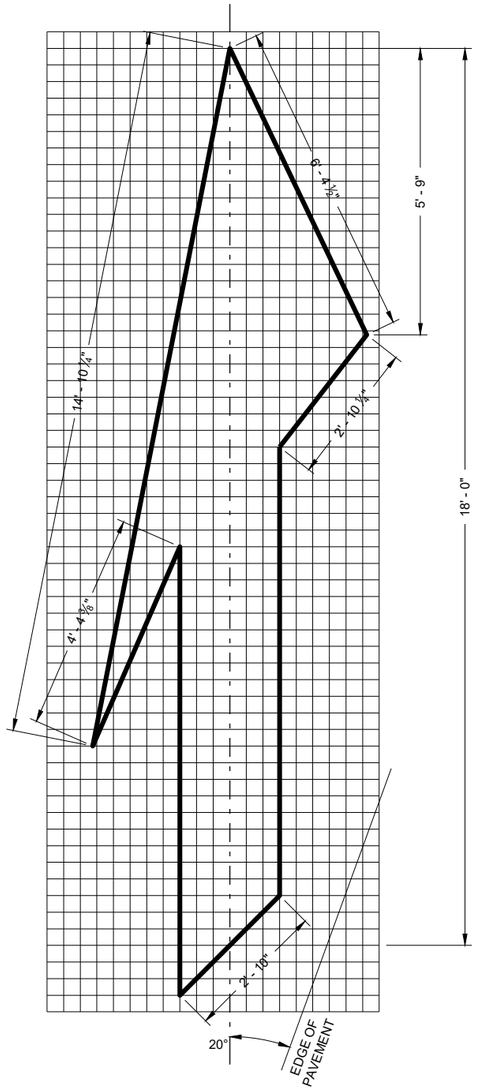
TYPE 2



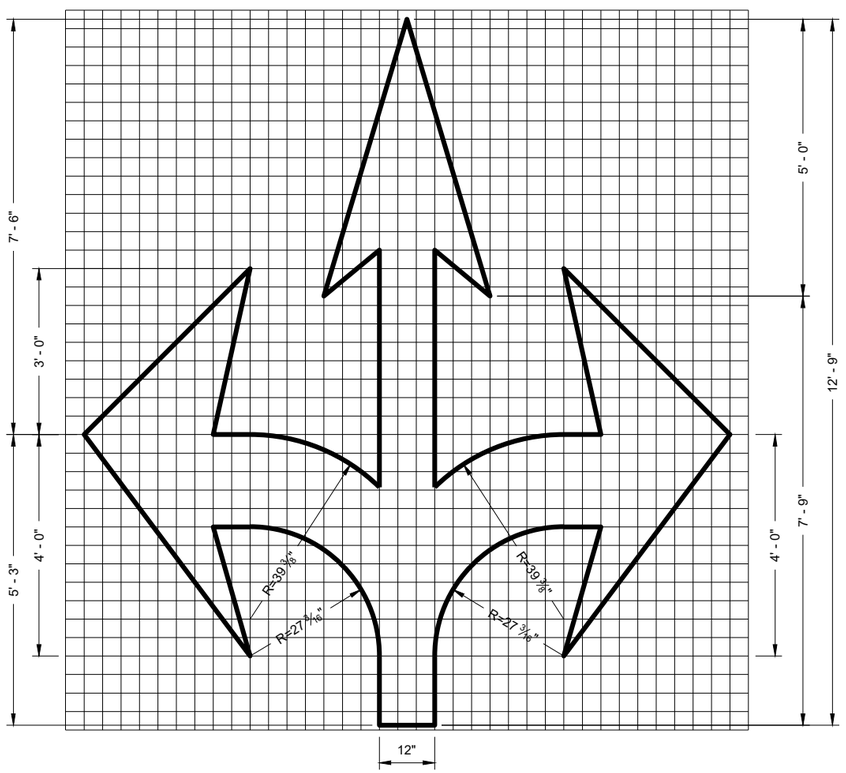
TYPE 3



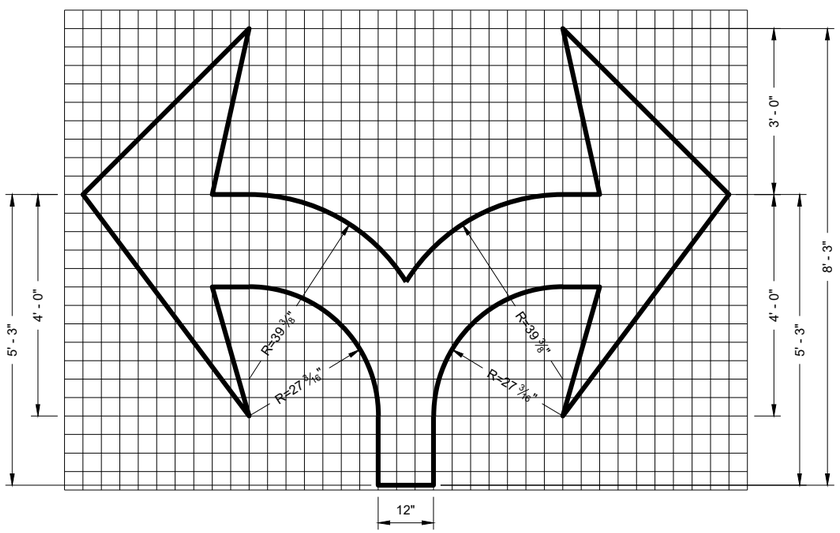
TYPE 4



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 MAF ENGINEER

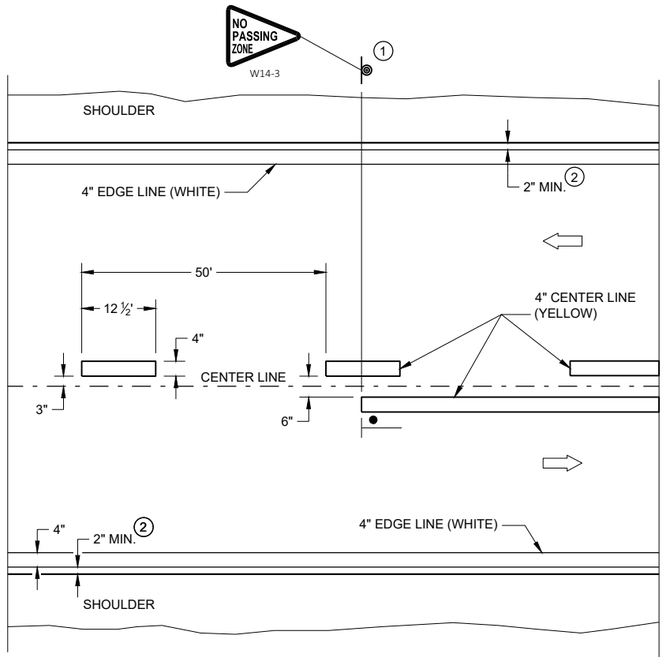
FHWA

6

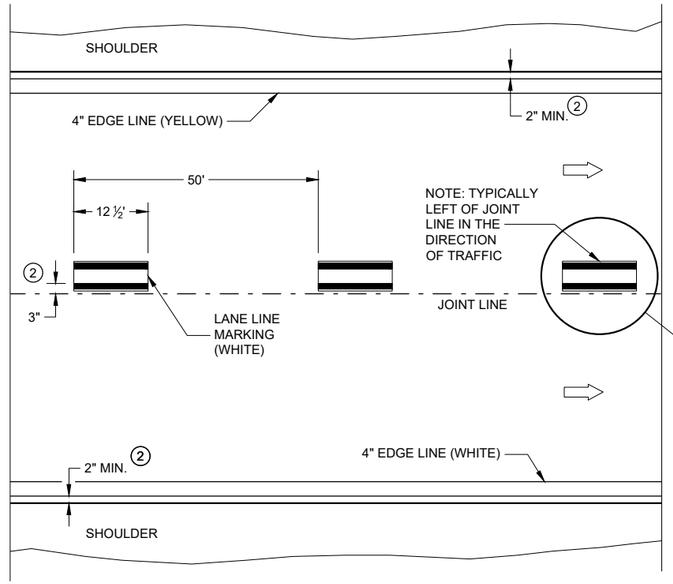
SDD 15C07 - 15c

6

SDD 15C07 - 15c

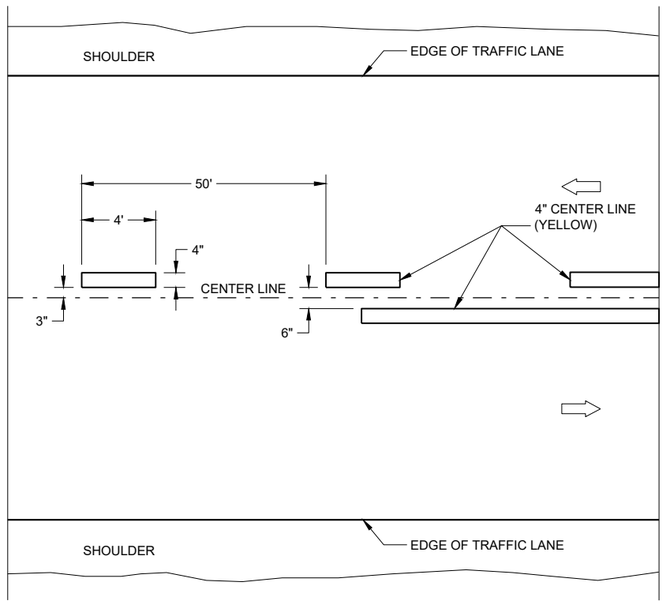


TWO WAY TRAFFIC

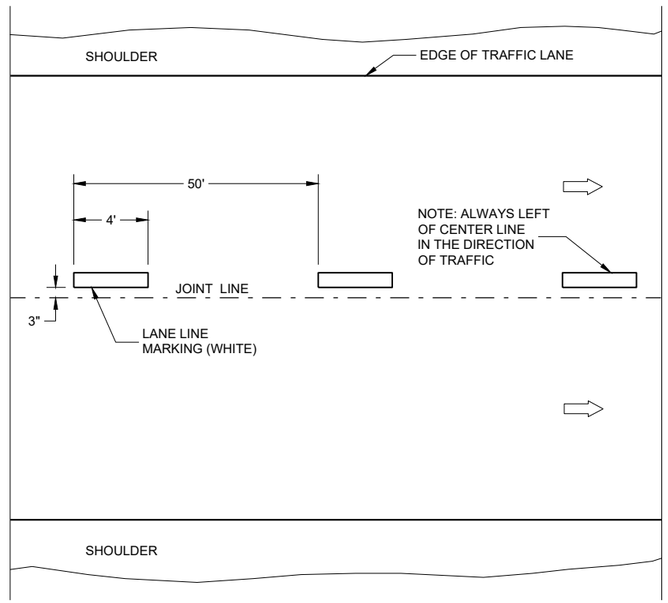


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

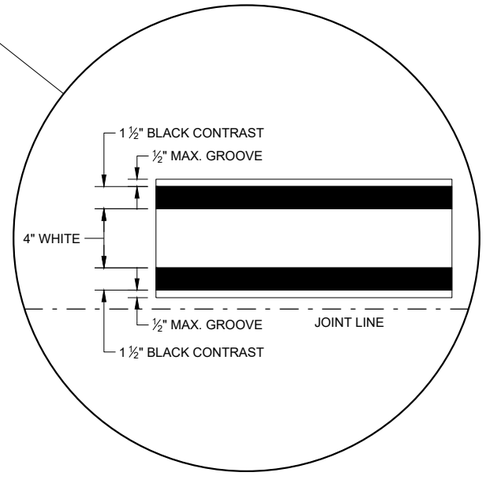
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITH 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

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

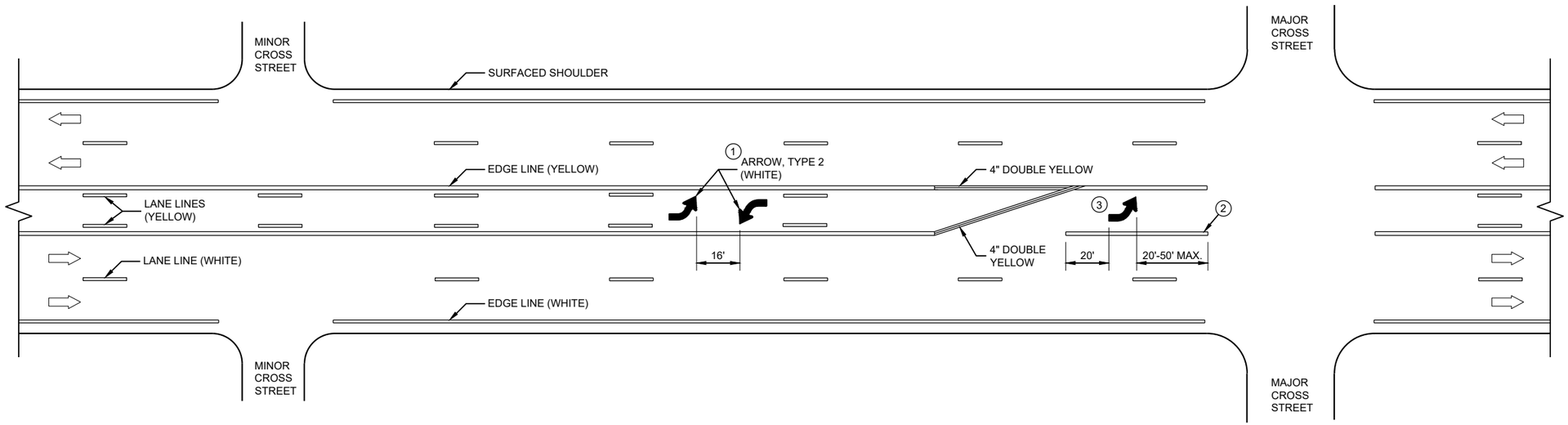
SDD 15C08 - 20a

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

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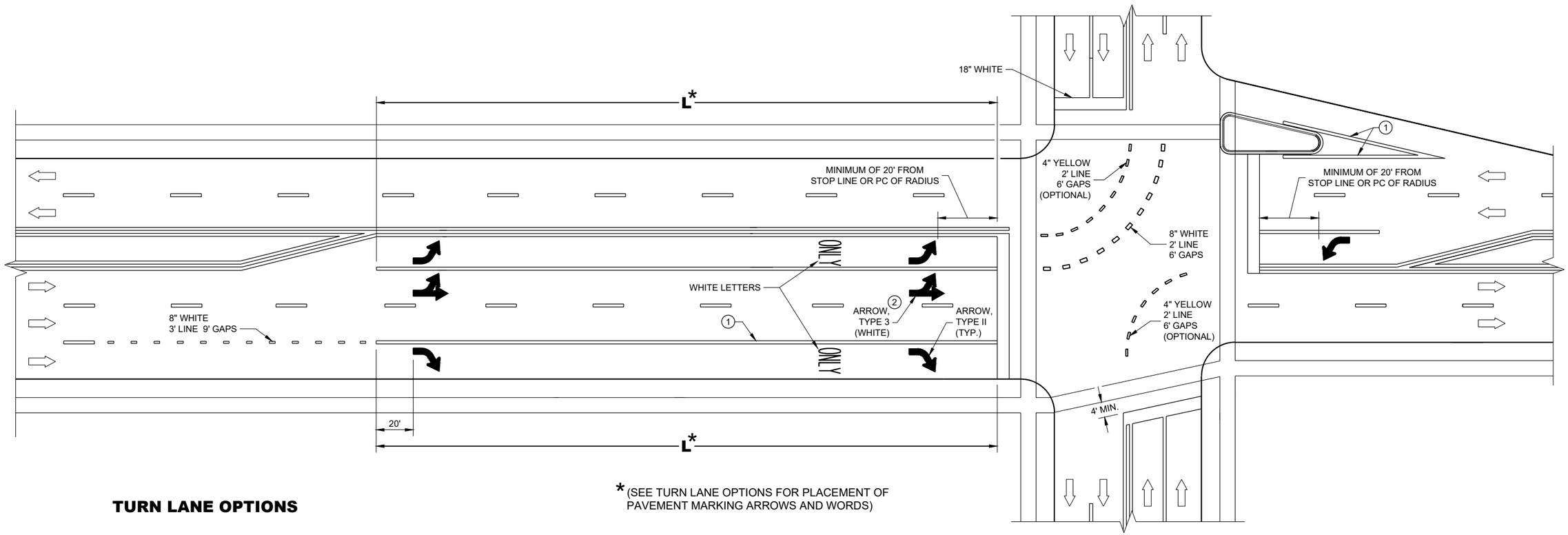
SDD 15C08 - 20b

SDD 15C08 - 20b

PAVEMENT MARKING (TURN LANES)

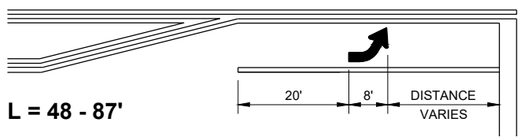
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA



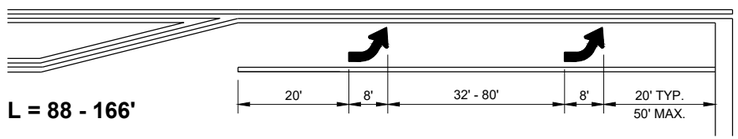
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

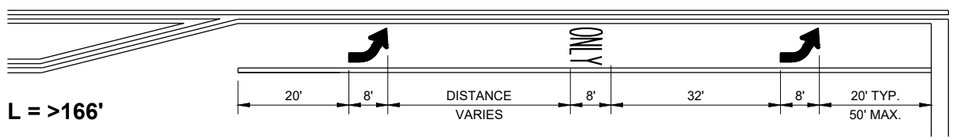
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



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)

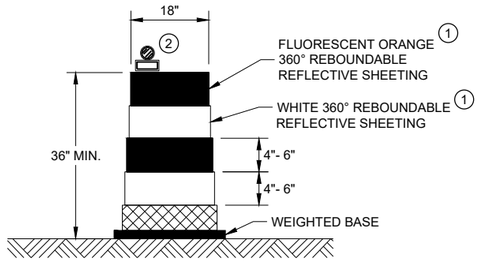
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

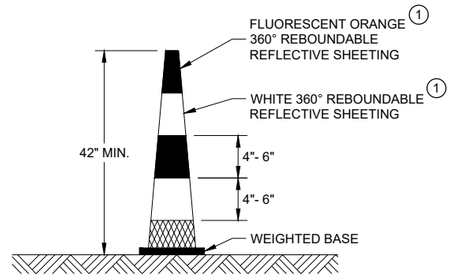
SDD 15C08 - 20c

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.

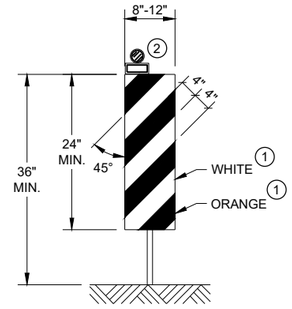


DRUM



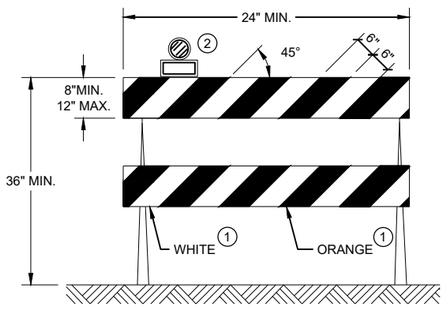
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



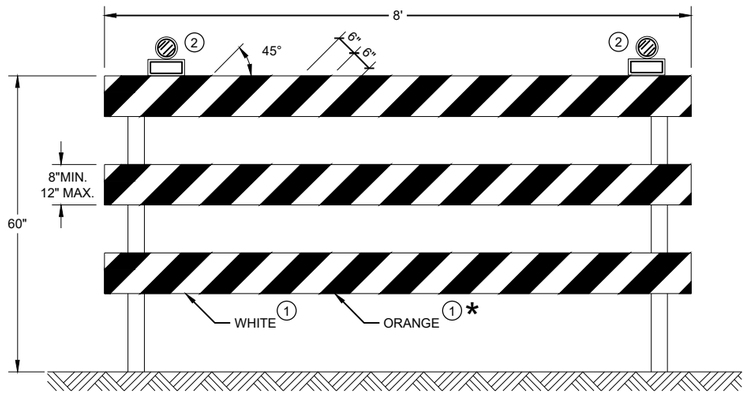
VERTICAL PANEL

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
June 2017
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C11 - 07b

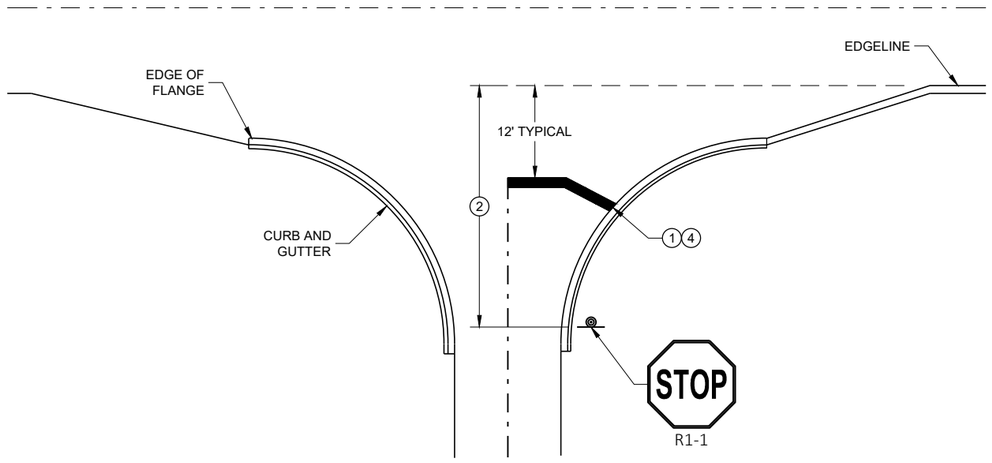
6

SDD 15C11 - 07b

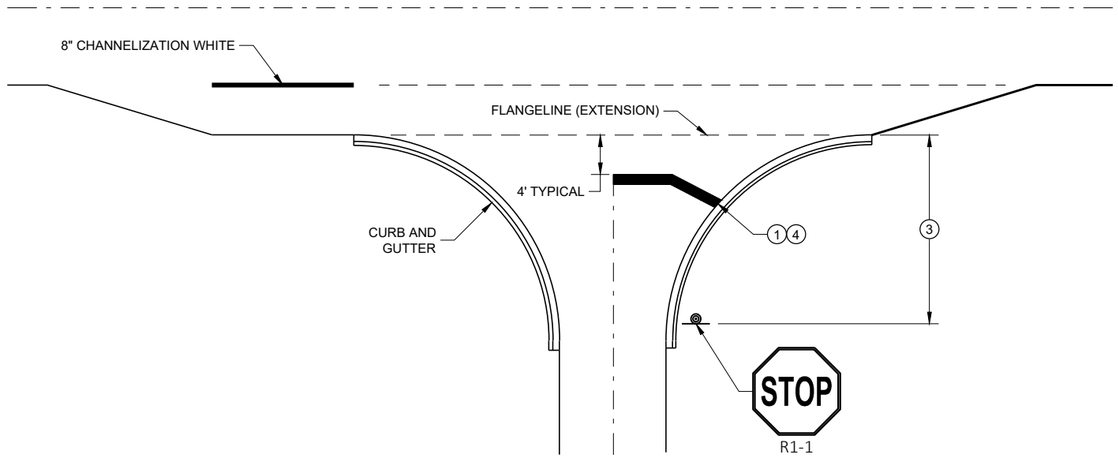
GENERAL NOTES

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

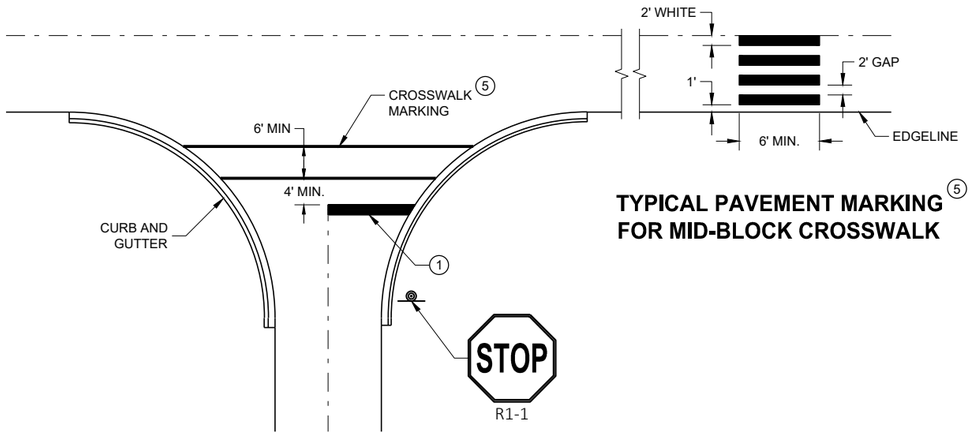
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

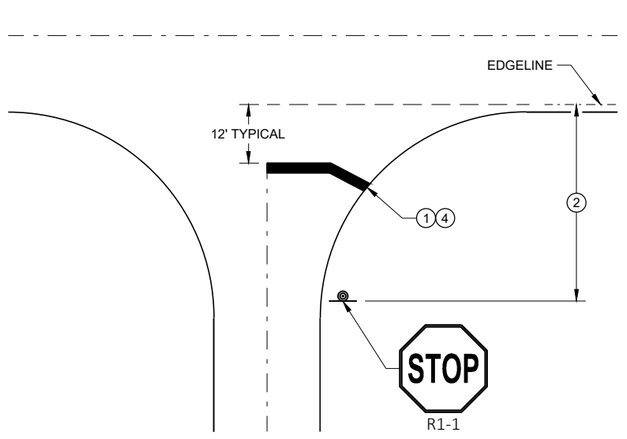


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING

TYPICAL PAVEMENT MARKING 5 FOR MID-BLOCK CROSSWALK



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

6

SDD 15C33 - 04

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.

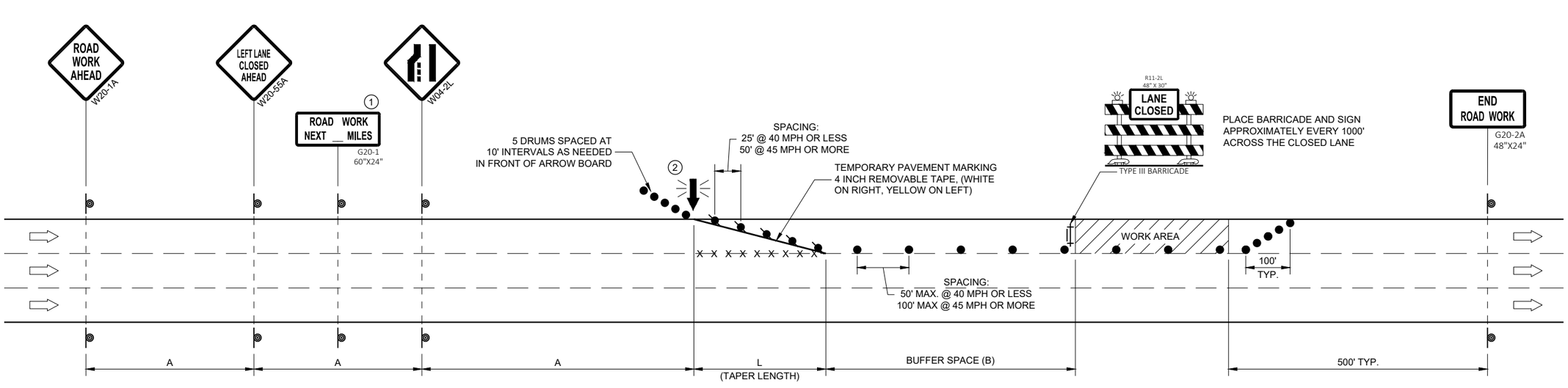
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

6

SDD 15D20 - 05a
SDD15D20 - 05a

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

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.

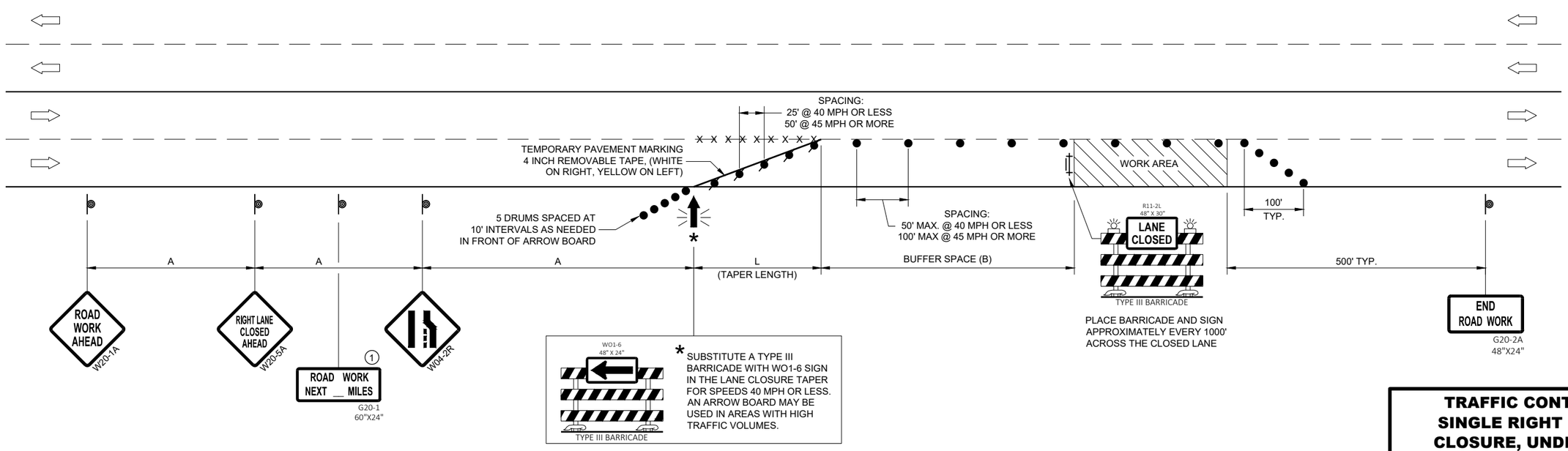
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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.

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'
50	500'	600'	280'
55	500'	660'	335'



TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

SDD 15D20 - 05b

SDD 15D20 - 05b

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

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

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DUE TO LACK OF SHOULDER/MEDIAN, ARROW BOARD IS PLACED AT THE THE END OF THE TAPER.

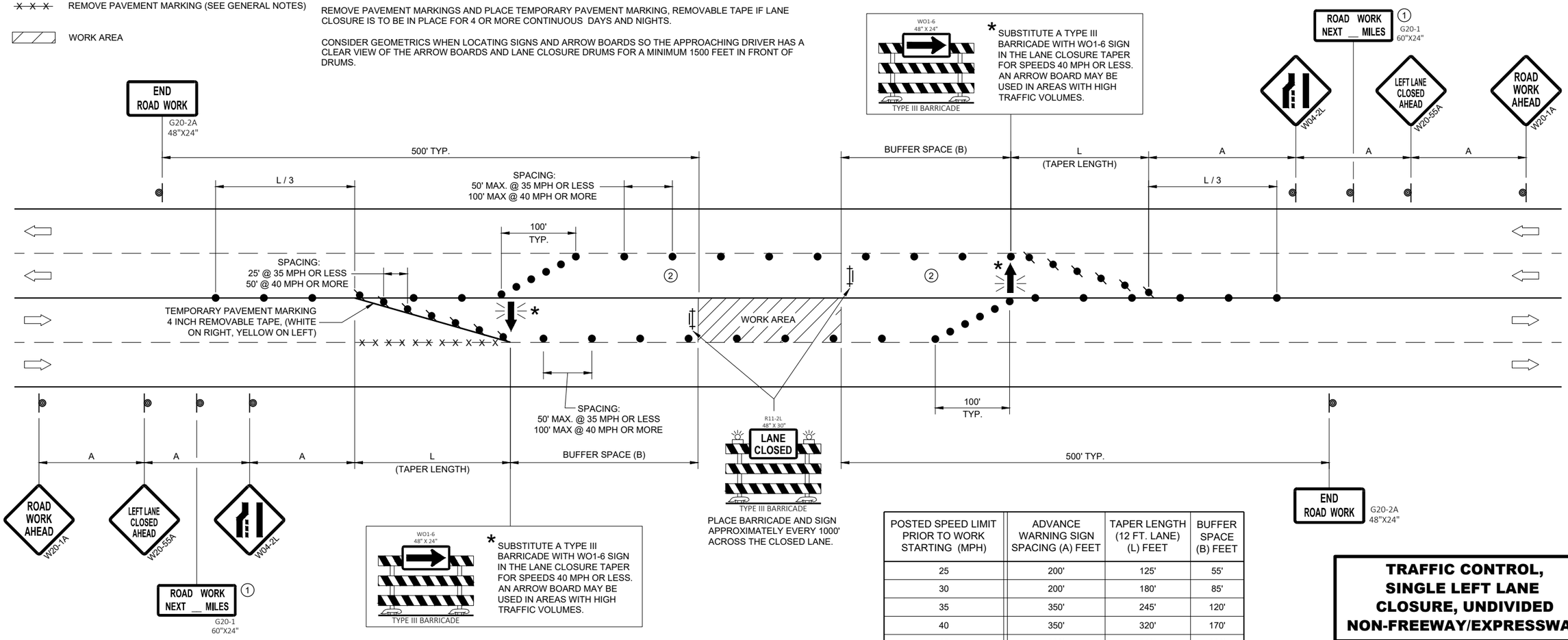
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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) LANE MAY BE OPENED WHEN WORKERS ARE NOT PRESENT IN THE WORK AREA.



WO1-6 48" X 24"

TYPE III BARRICADE

* SUBSTITUTE A TYPE III BARRICADE WITH WO1-6 SIGN IN THE LANE CLOSURE TAPER FOR SPEEDS 40 MPH OR LESS. AN ARROW BOARD MAY BE USED IN AREAS WITH HIGH TRAFFIC VOLUMES.

* SUBSTITUTE A TYPE III BARRICADE WITH WO1-6 SIGN IN THE LANE CLOSURE TAPER FOR SPEEDS 40 MPH OR LESS. AN ARROW BOARD MAY BE USED IN AREAS WITH HIGH TRAFFIC VOLUMES.

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
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TRAFFIC CONTROL, SINGLE LEFT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

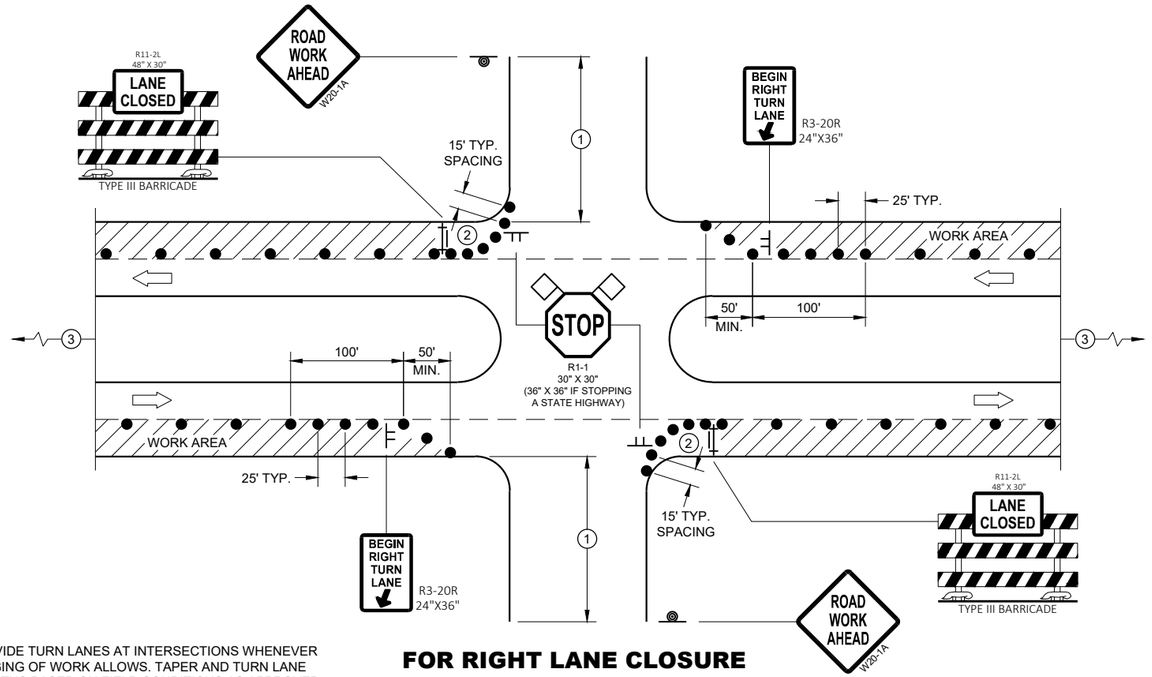
APPROVED
May 2020 — DATE
/S/ Andrew Heidtke — STATEWIDE WORK ZONE T SAFETY ENGINEER
FHWA

6

SDD 15D20 - 05c

6

SDD 15D20 - 05c



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

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.

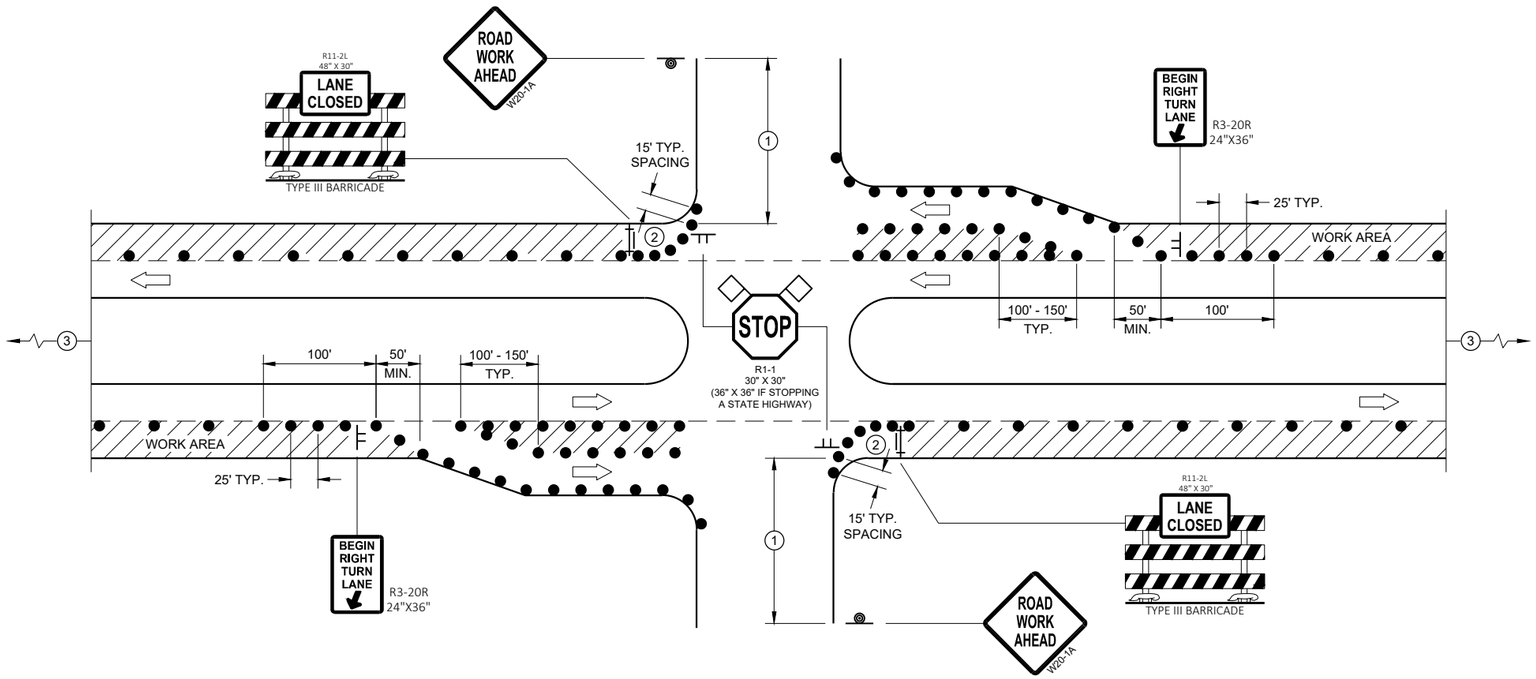
(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

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

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

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



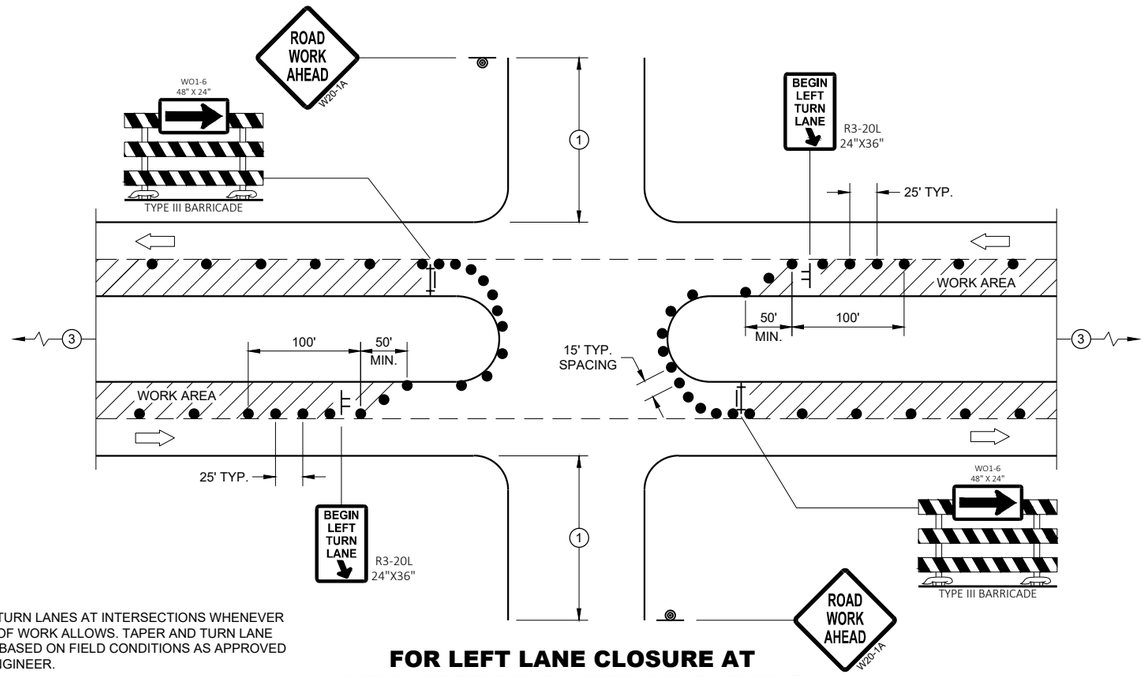
FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 15D21 - 06a

SDD 15D21 - 06a



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.

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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.

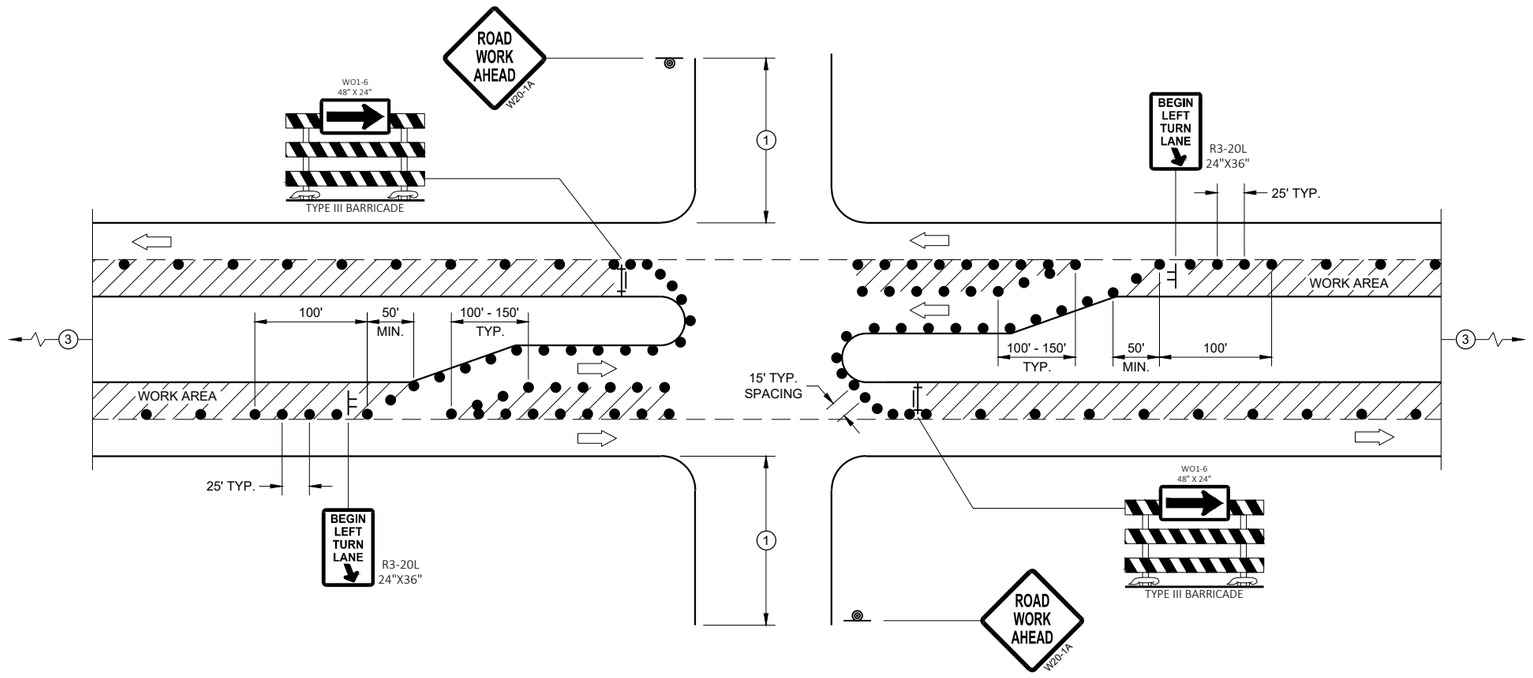
(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

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

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

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



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

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

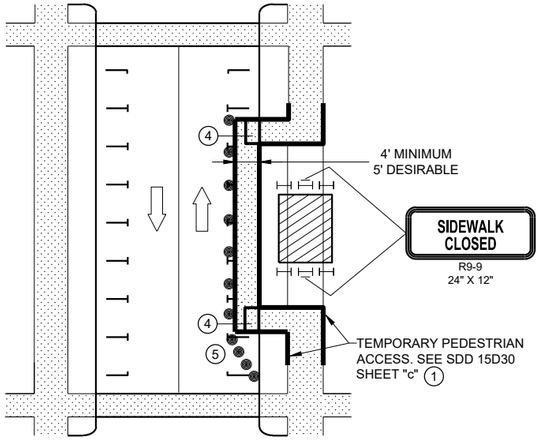
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15D21 - 06b

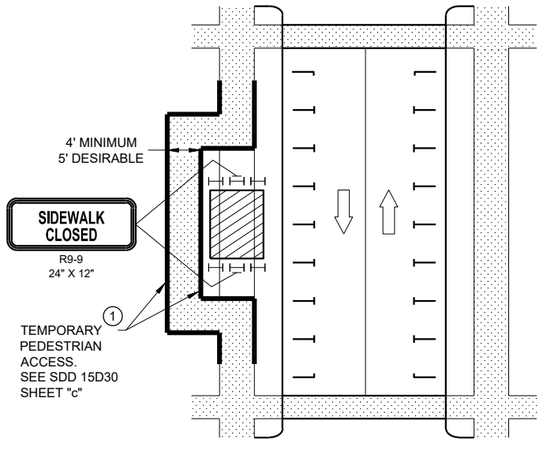
SDD 15D21 - 06b

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

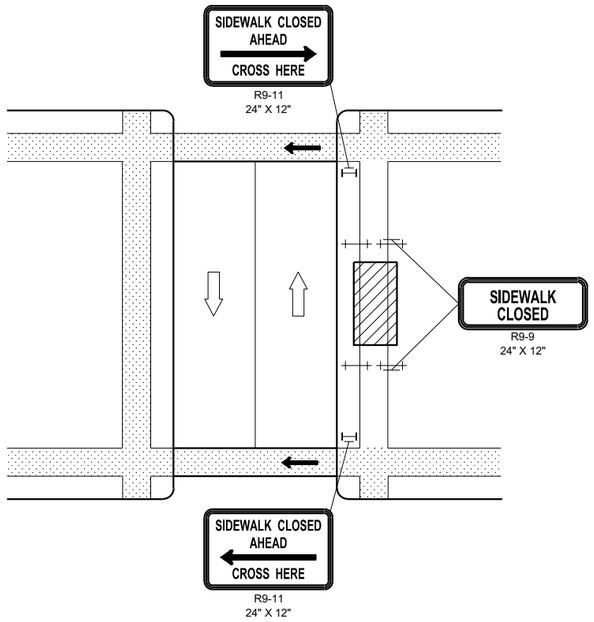


MID-BLOCK SIDEWALK SIDEWALK CLOSURE IN PARKING LANE

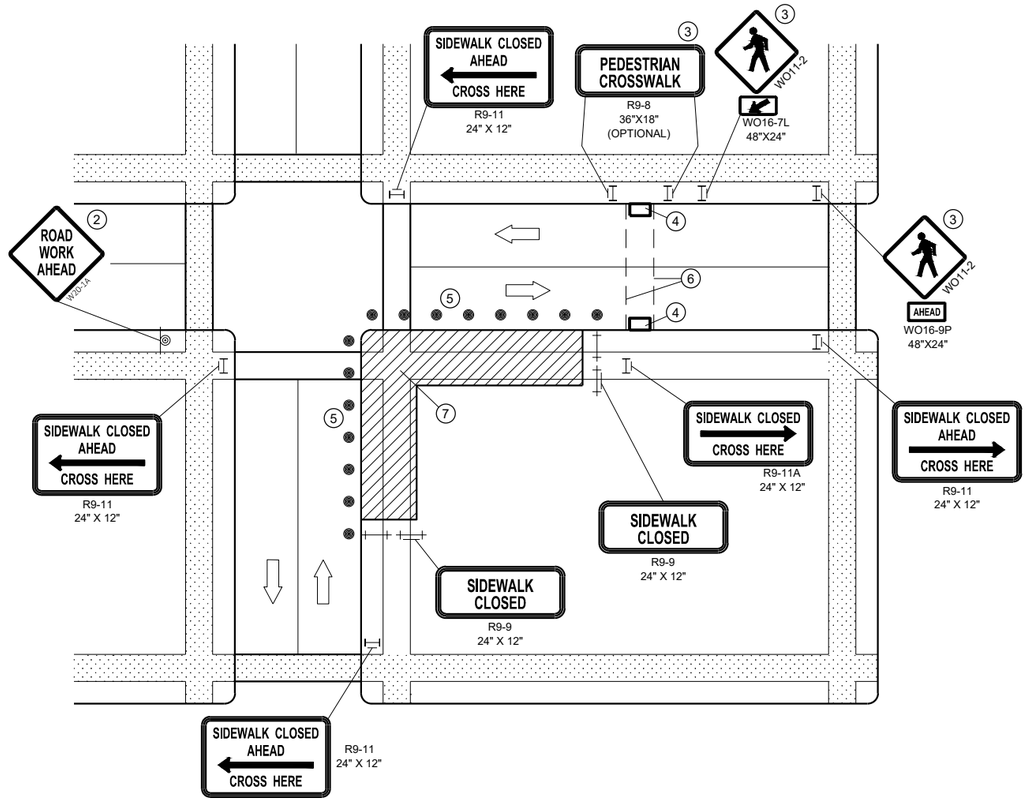
NOTE: LAYOUT SAME AS ABOVE.



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

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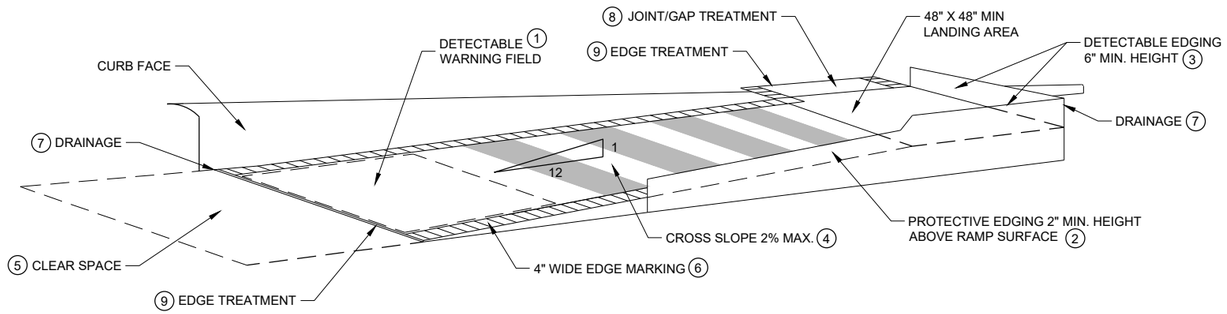
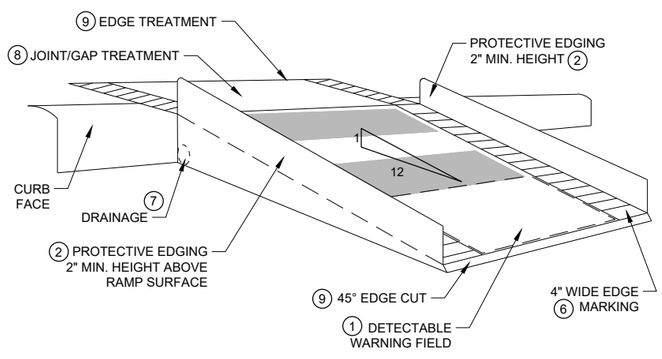
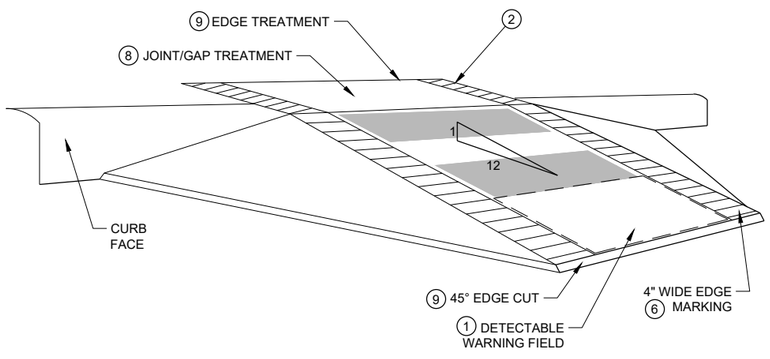
SDD15D30 - 06a



TEMPORARY CURB RAMP PARALLEL TO CURB



WITH PROTECTIVE EDGE



WITH SIDE APRON

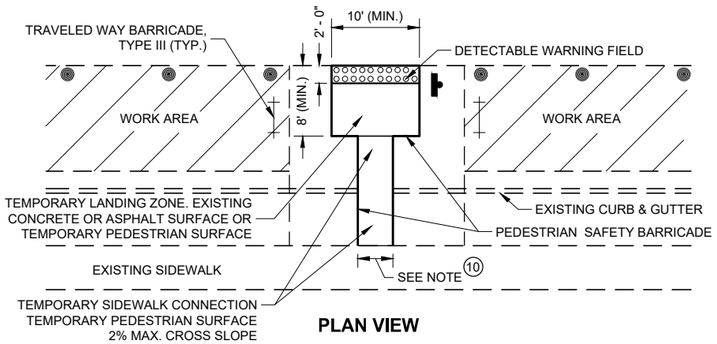
TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

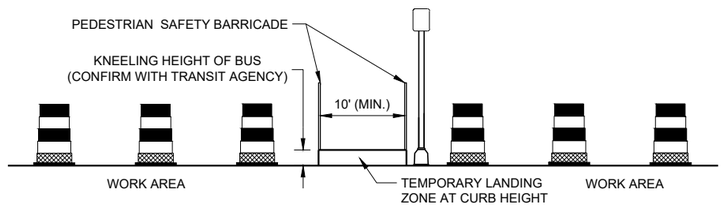
NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

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

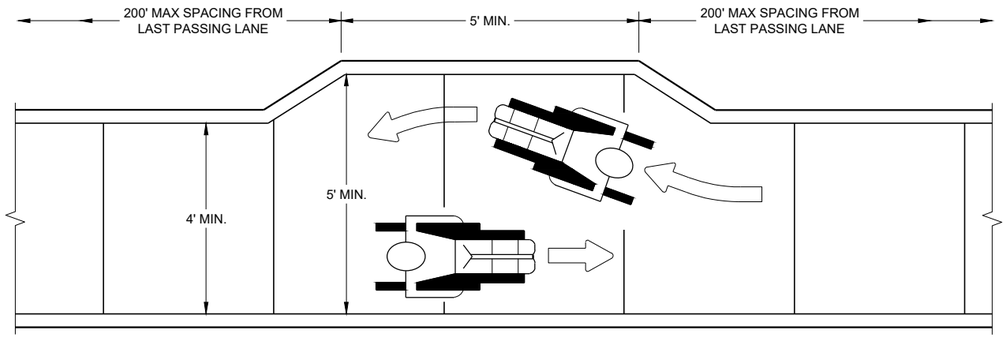
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- WORK AREA

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

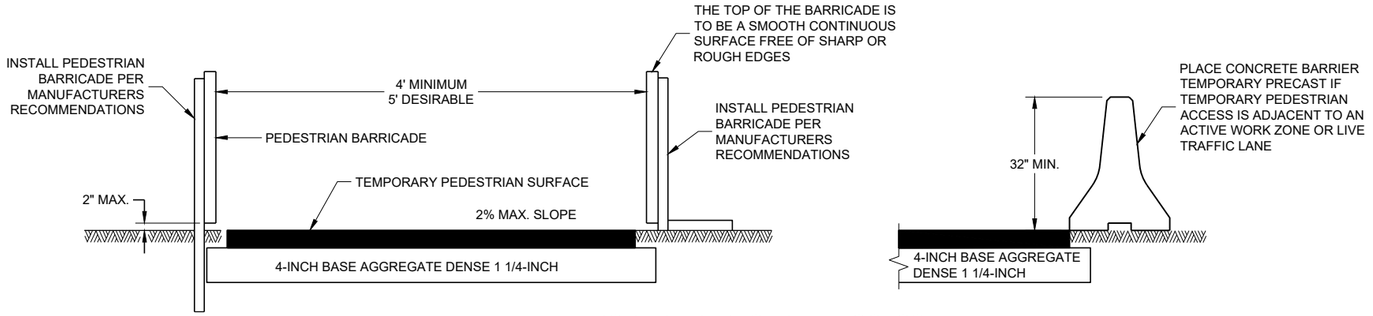
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

6

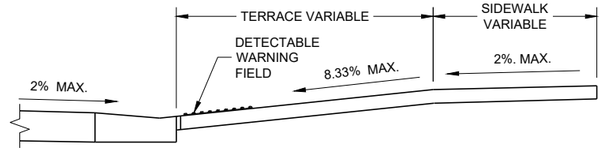
SDD 15D30 - 06b



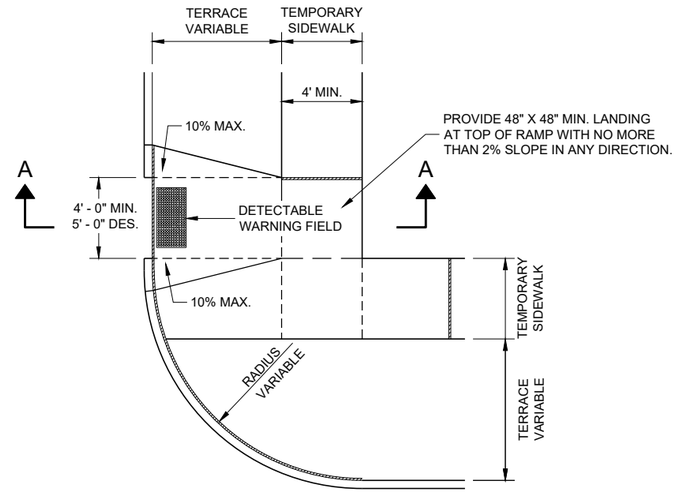
NARROW SIDEWALK PASSING DETAIL



TEMPORARY PEDESTRIAN ACCESS



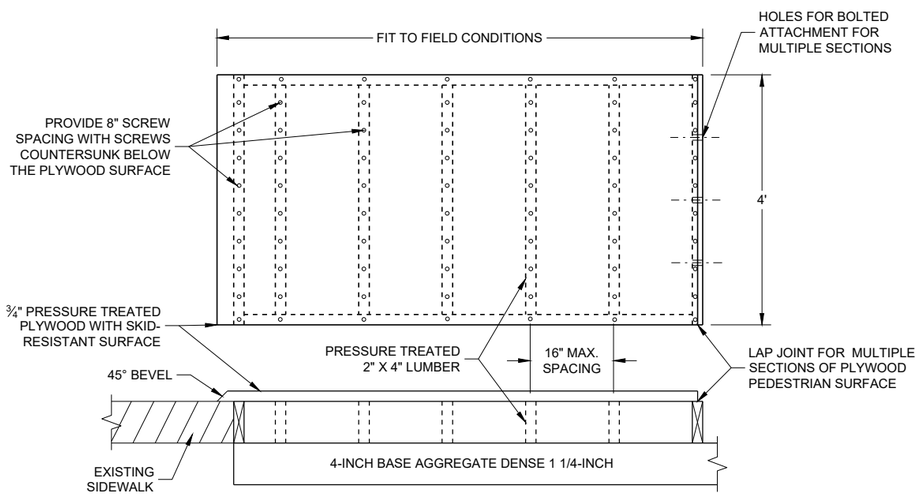
SECTION A - A



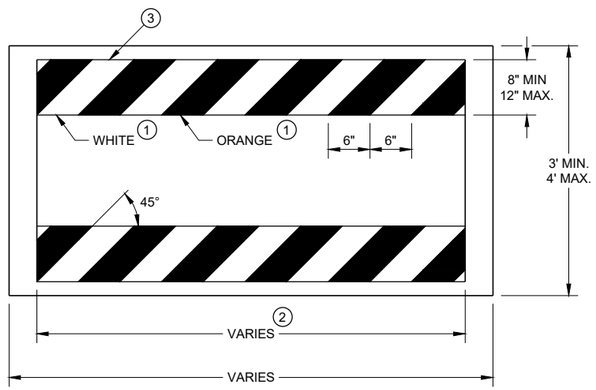
PLAN VIEW

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

SDD 15D30 - 06c

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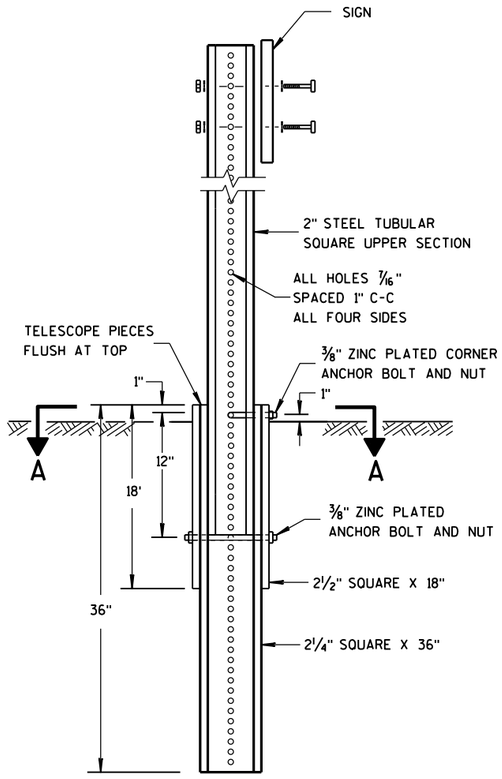
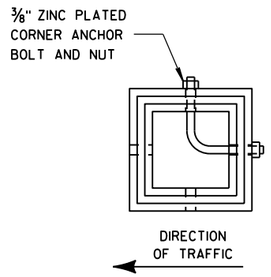
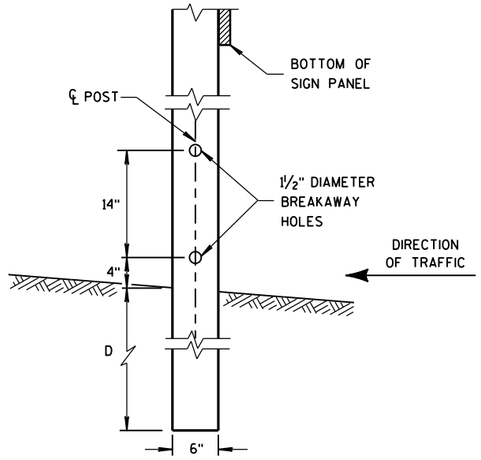
SDD 15D30 - 06c



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



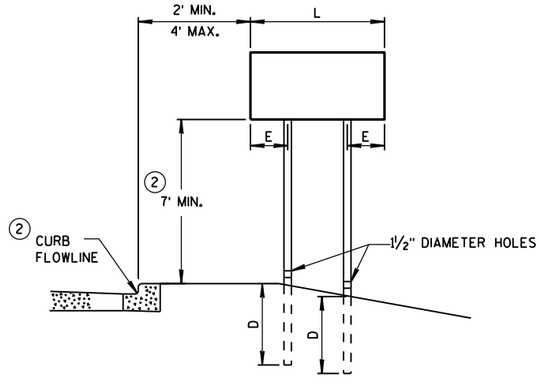
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

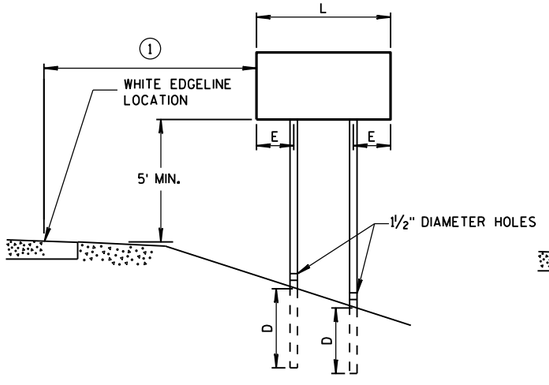
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

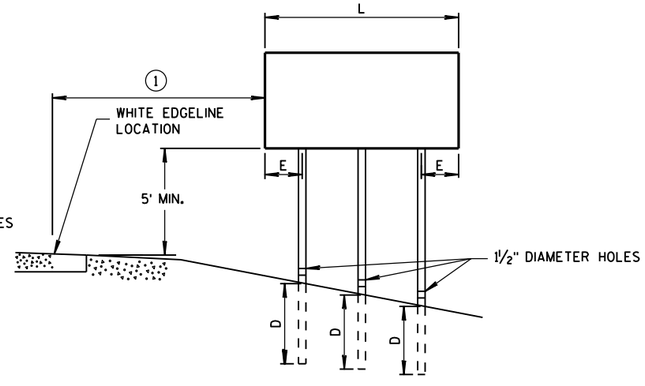
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL 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).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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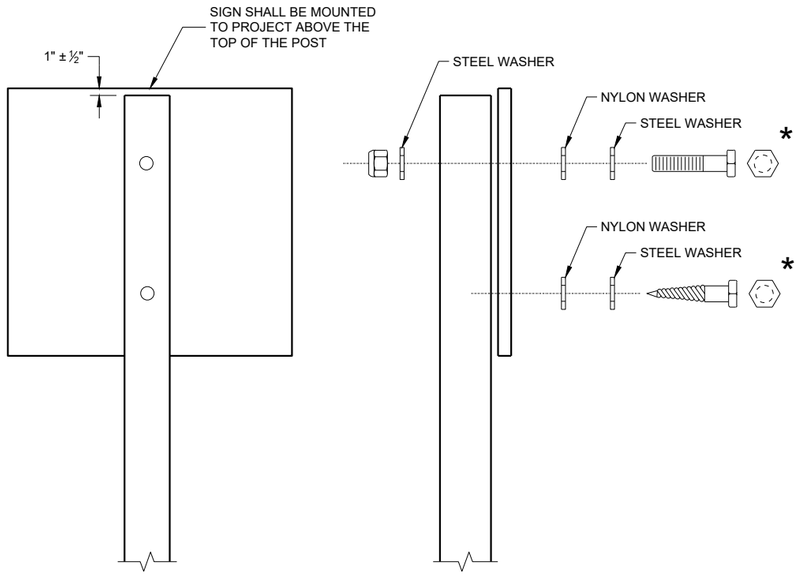
S.D.D. 15 D 38-2a
S.D.D. 15 D 38-2a



NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3
B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

WOOD POST (4" x 6")
LAG SCREWS - ⅜" x 3"
MACHINE BOLTS - 5/16" x 6 ½" OR 7" LENGTH W/NUTS

SQUARE STEEL POST (2" x 2")
MACHINE BOLTS - ⅜" x 3 ¼" LENGTH W/NUTS
RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE 0.720 - 0.765 INCH, GRIP RANGE 0.042 - 0.375 INCH

WASHERS (ALL POSTS) -
1 ¼" O.D. x ⅜" I.D. x 1/16" STEEL
1 ¼" O.D. x ⅜" I.D. x 0.080 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. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

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SDD 15D38 - 02b

SDD 15D38 - 02b

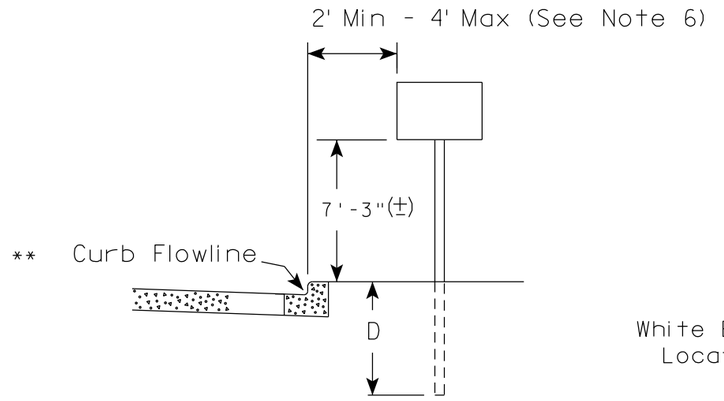
ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

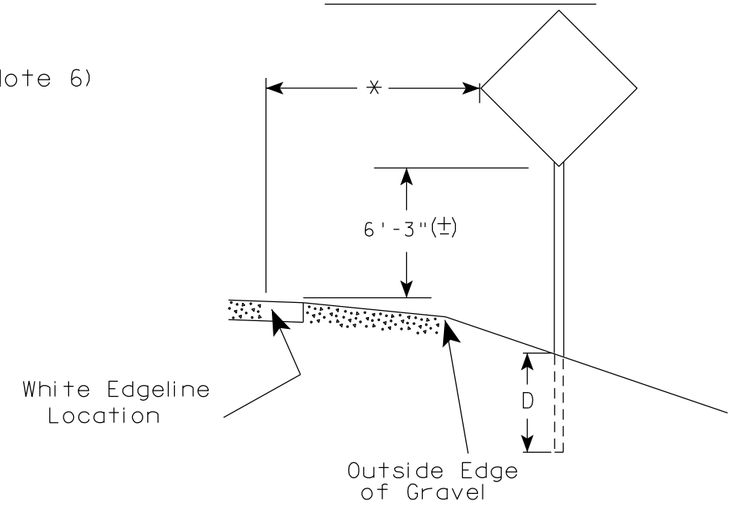
APPROVED
June 2017
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

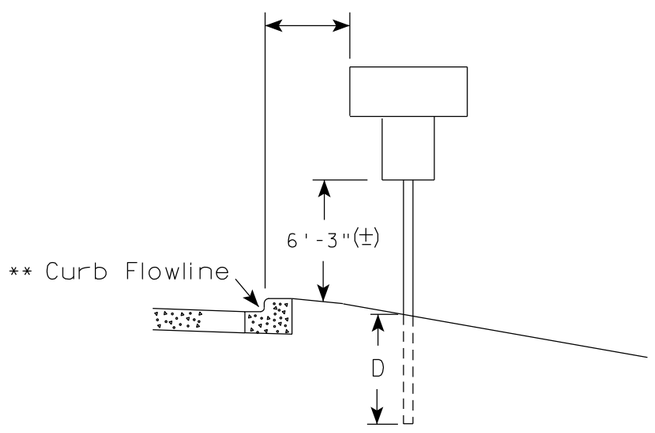
FHWA

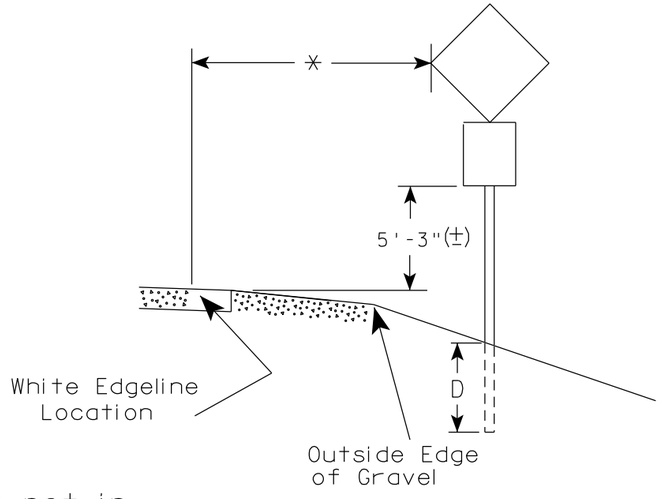
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

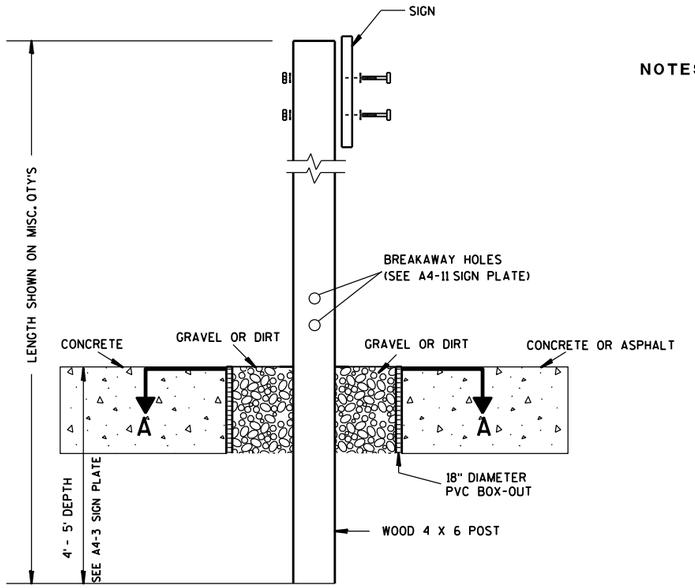
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

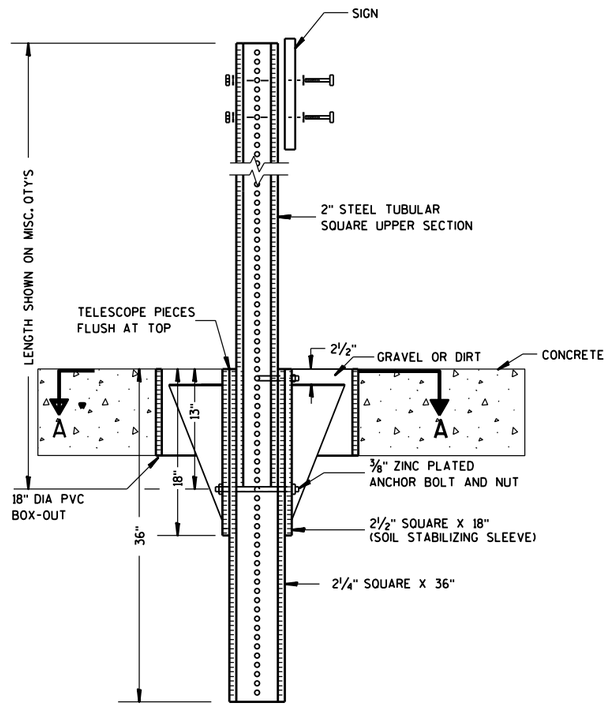
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 162	E



ELEVATION VIEW

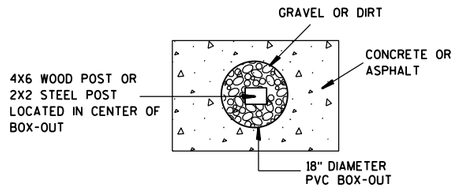
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

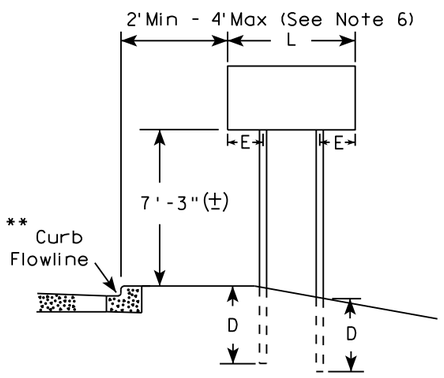
APPROVED Matthew R Rauch
for State Traffic Engineer

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

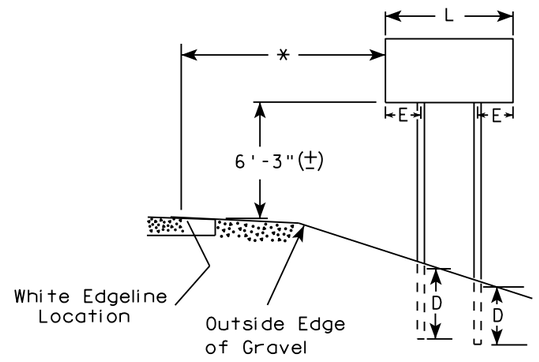
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

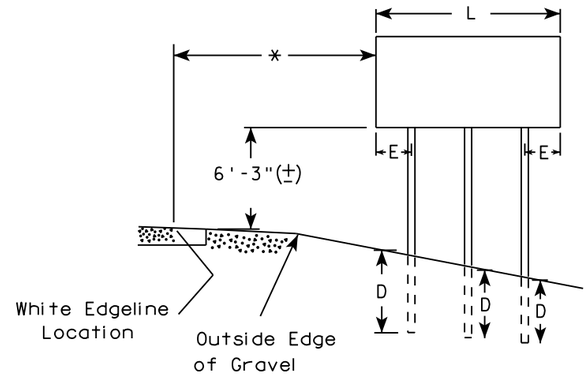
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

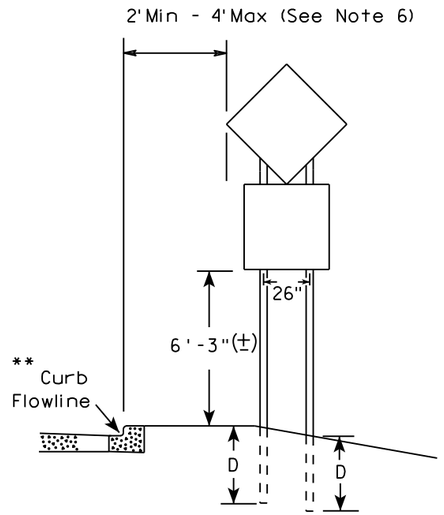
URBAN AREA



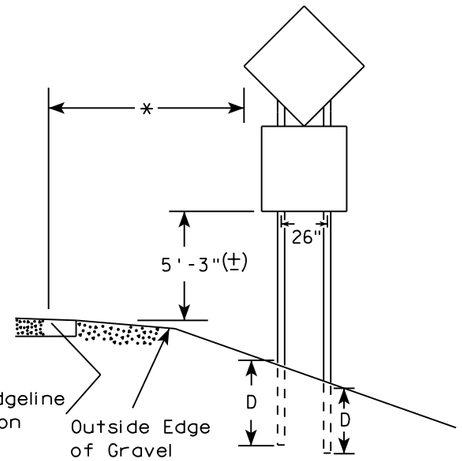
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

***	SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
	L	E
	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

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

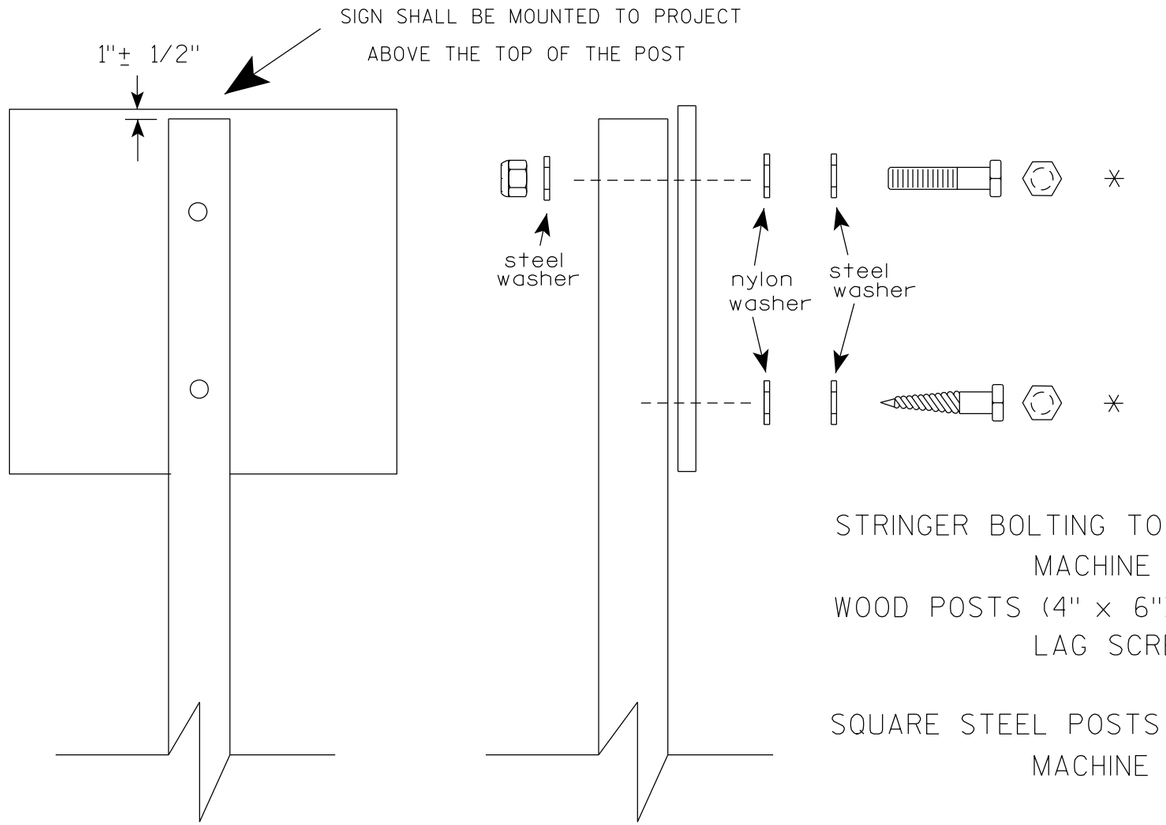
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 164	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

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

ATTACHMENT OF SIGNS TO POSTS

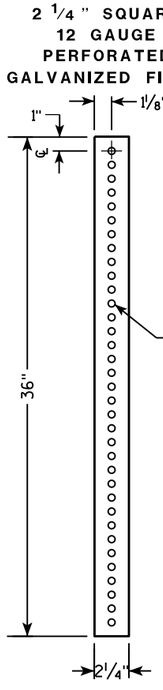
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

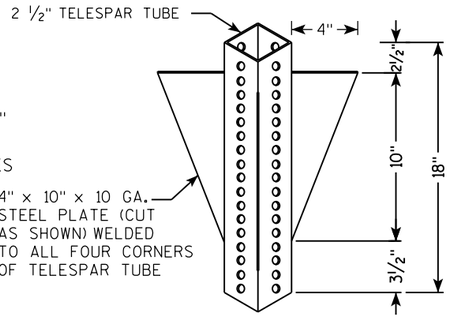
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

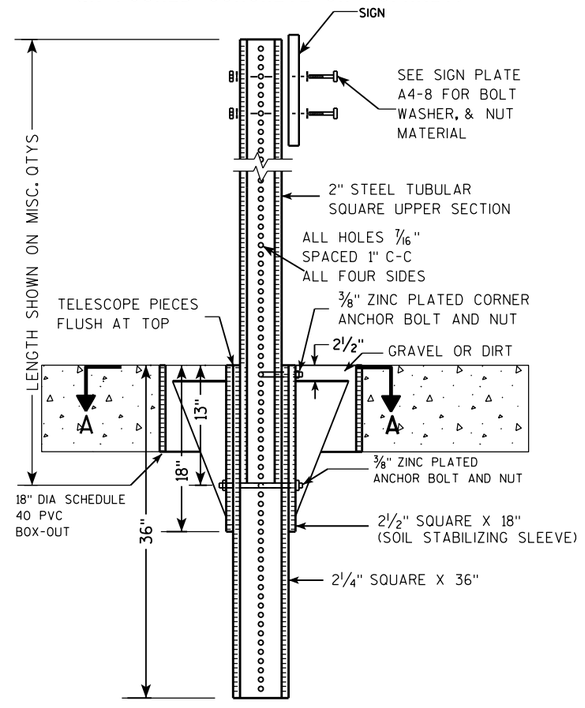
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



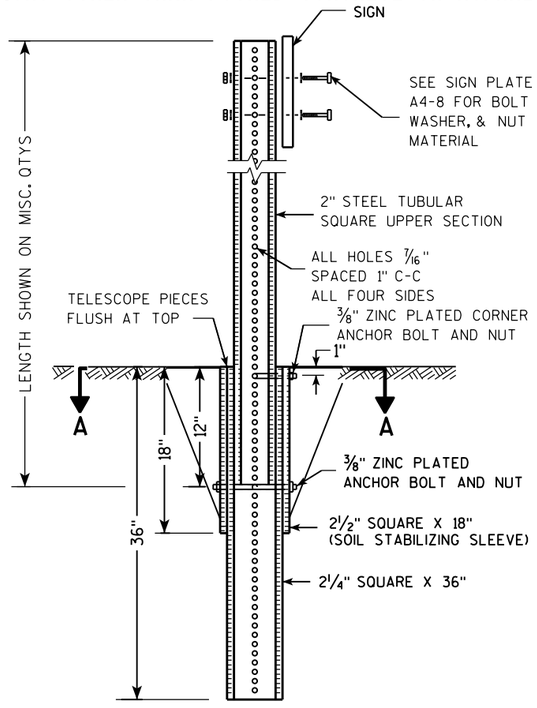
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

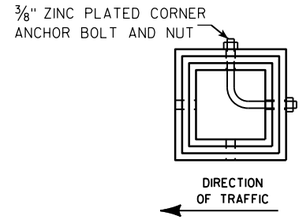


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

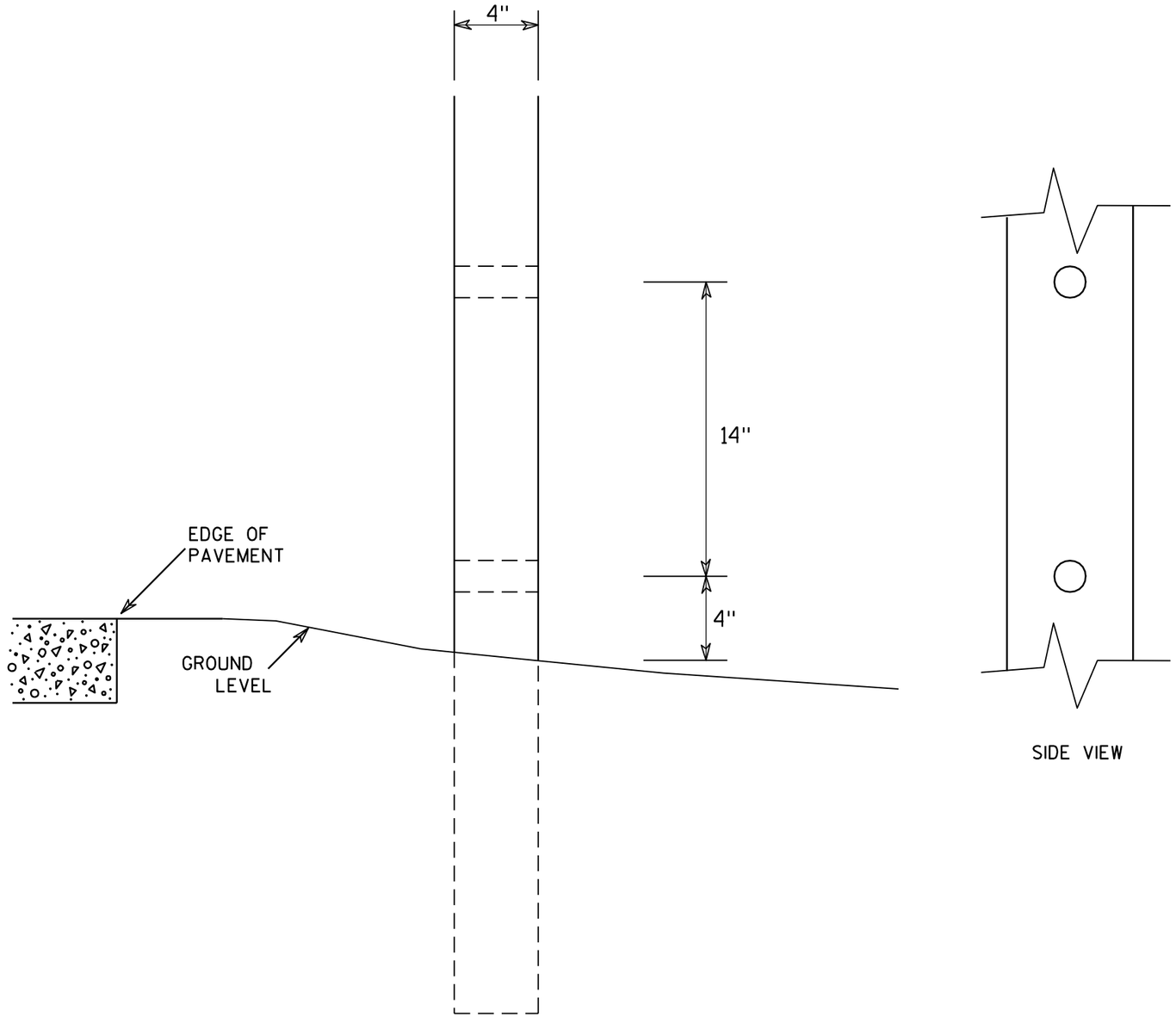
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

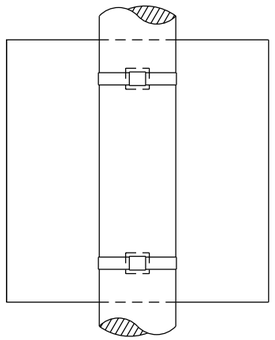
APPROVED Chester J Spang for State Traffic Engineer

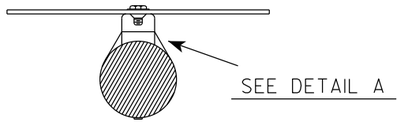
DATE 3/27/97 PLATE NO. A4-11.2

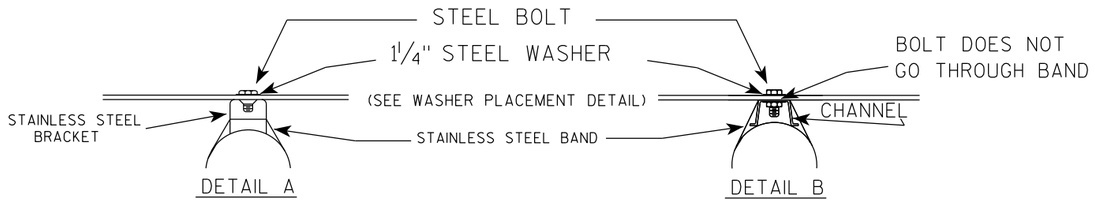
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 167	E

BANDING

SINGLE SIGN



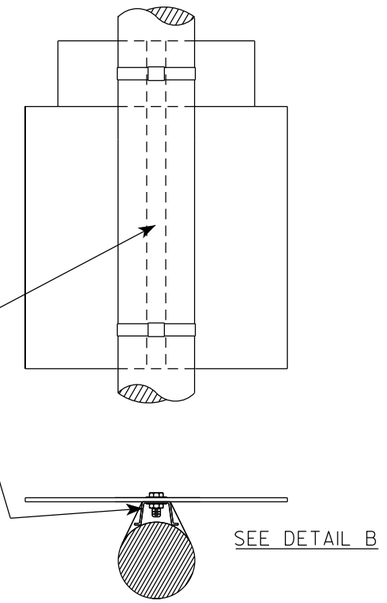




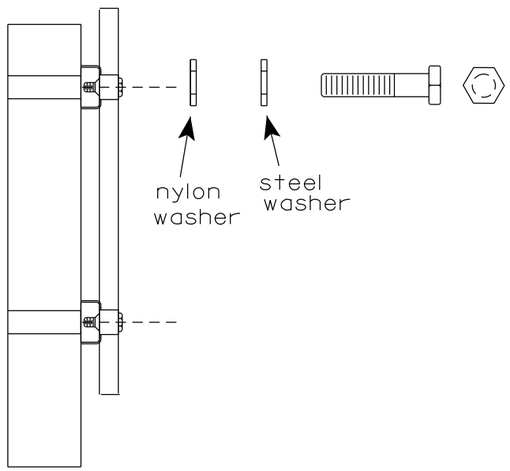
GENERAL NOTES

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

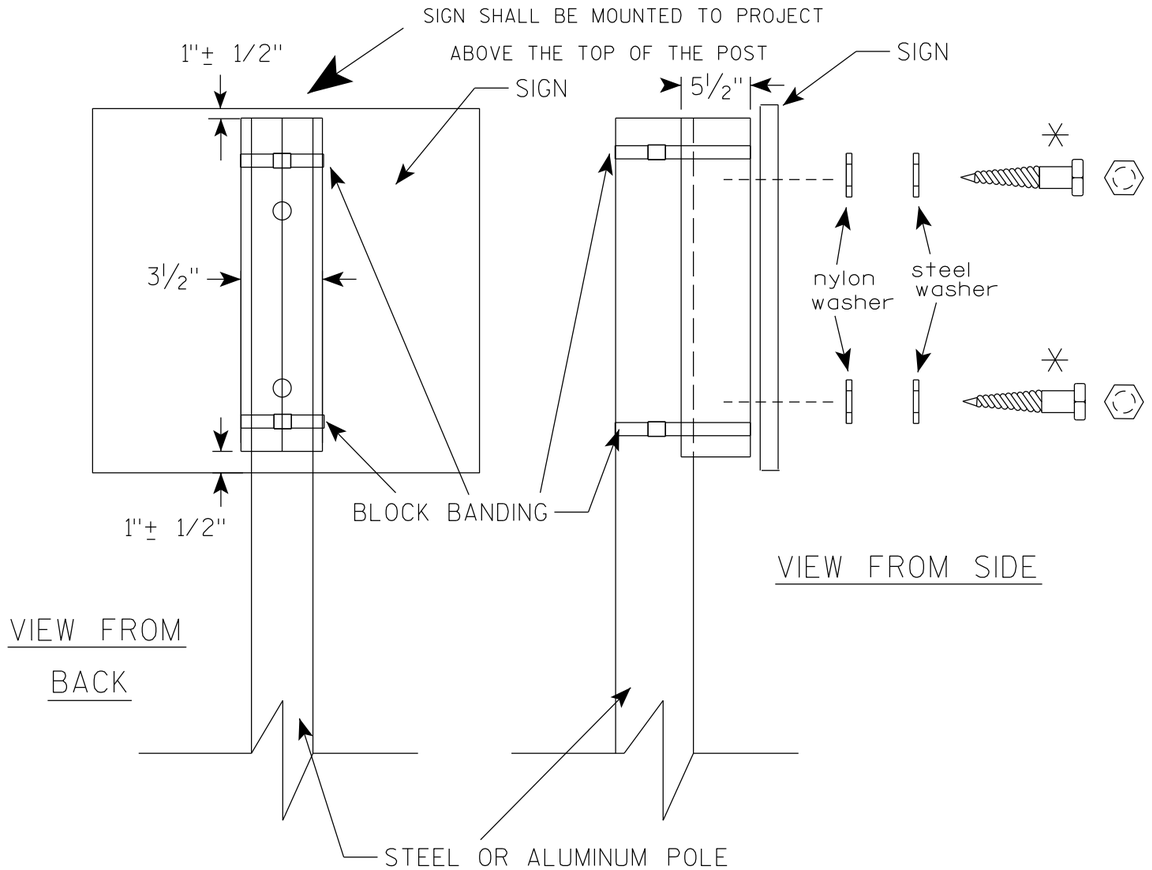
DATE 6/10/19 PLATE NO. A5-9.4

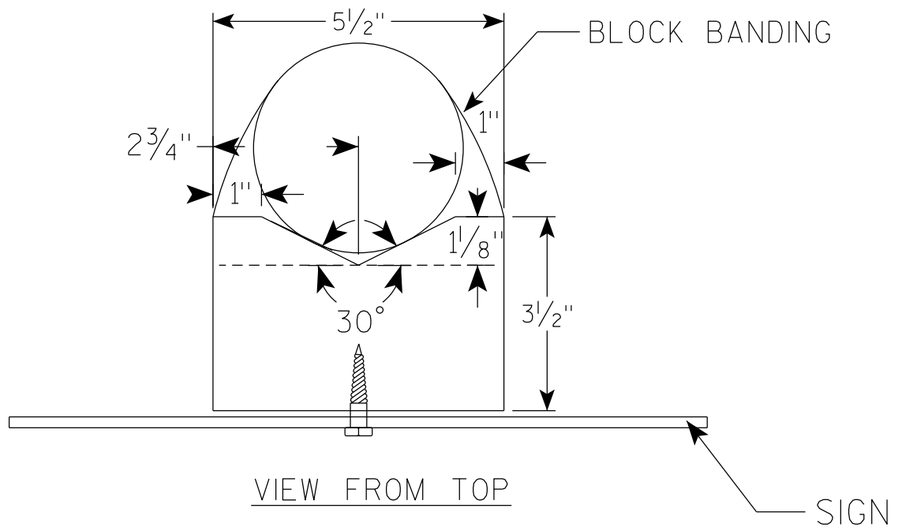
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 168	E

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"

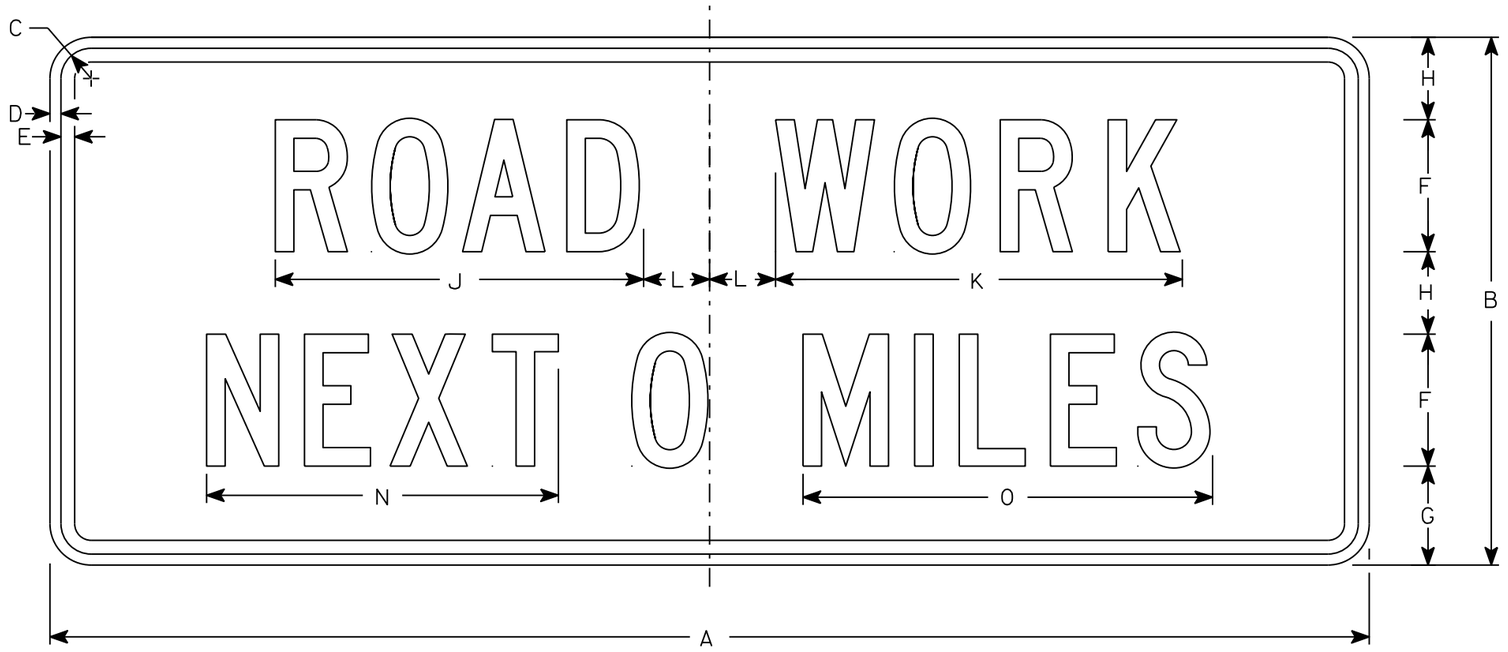
BLOCK BANDING DETAIL (V-BLOCK OPTION)

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: 169 | E



G20-1

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.
5. Round distance to nearest whole Mile and 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																											
2	60	24	1 3/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10
3																											
4	60	24	1 3/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10
5																											

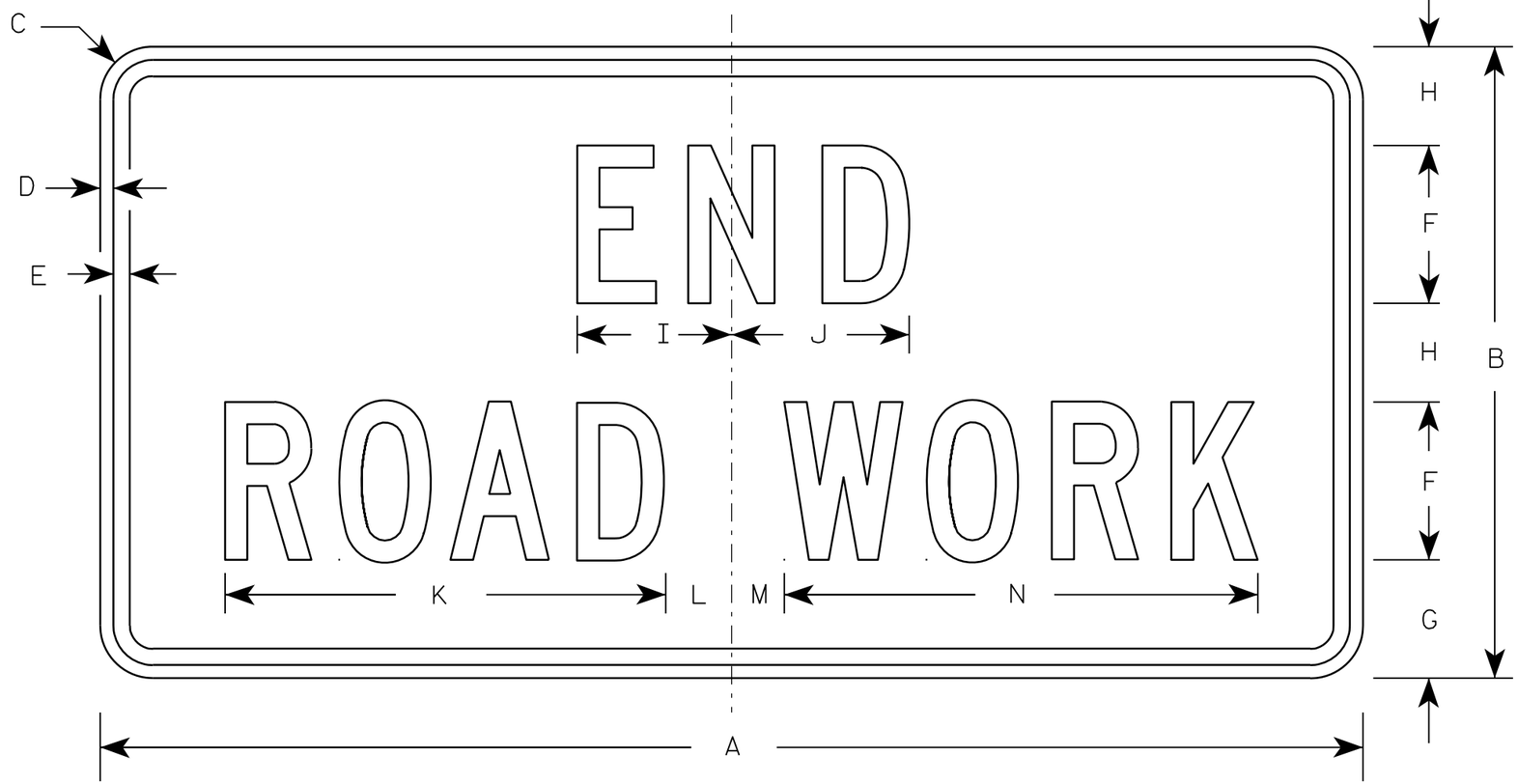
STANDARD SIGN
G20-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/14/17 PLATE NO. G20-1.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 170 | 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

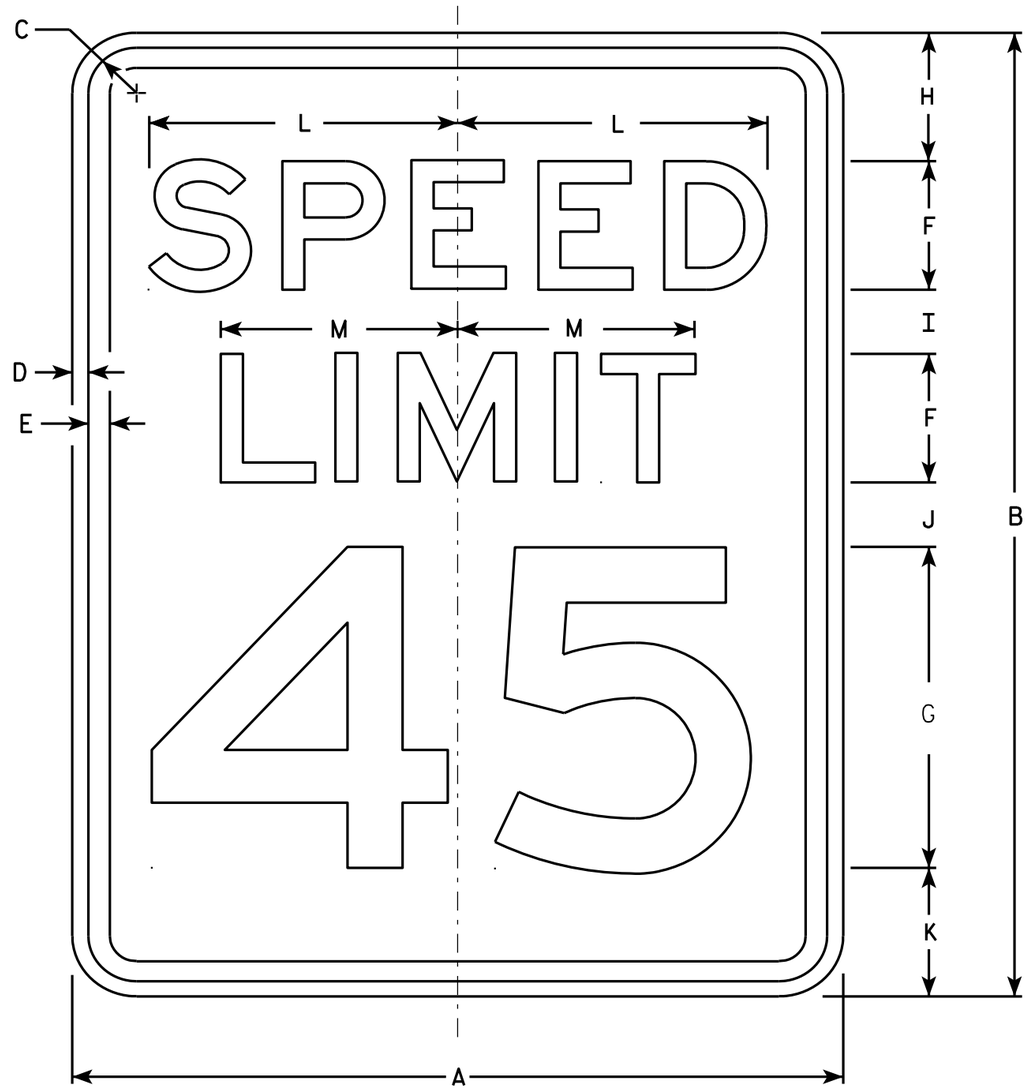
STANDARD SIGN
G20-2A

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: 171	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

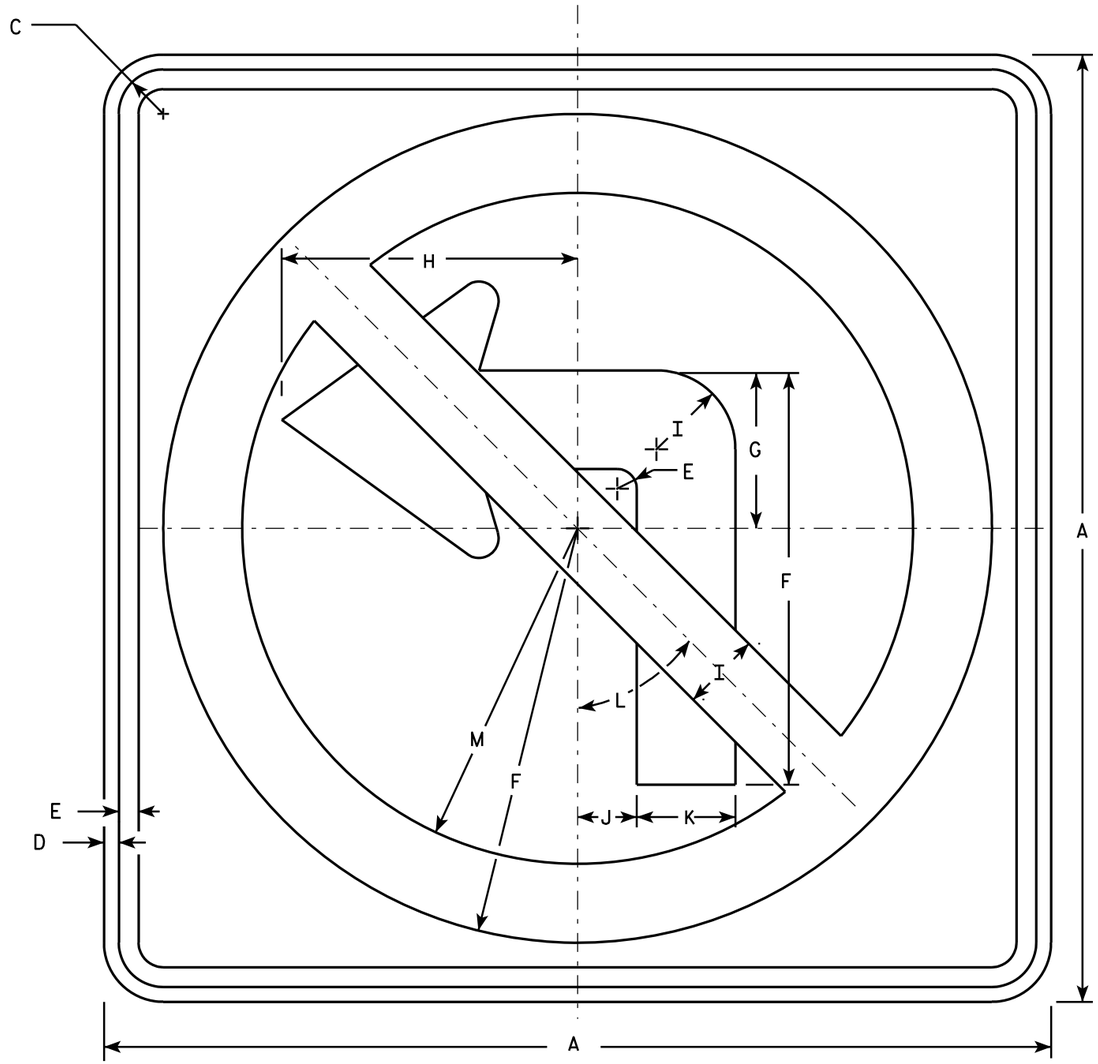
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

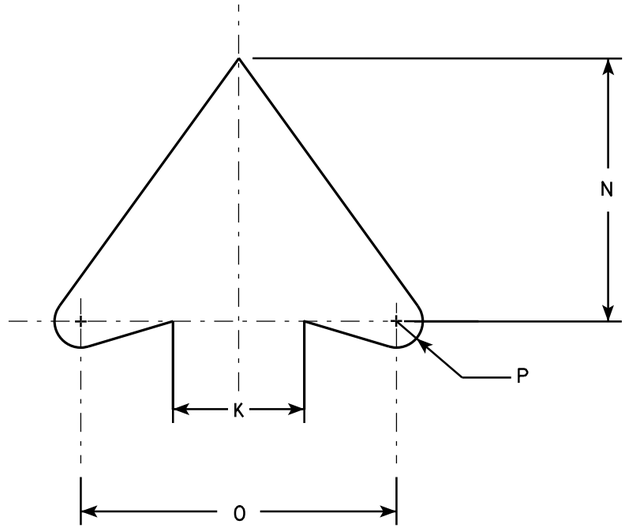
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 172 | E



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

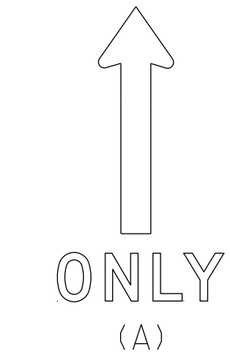
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

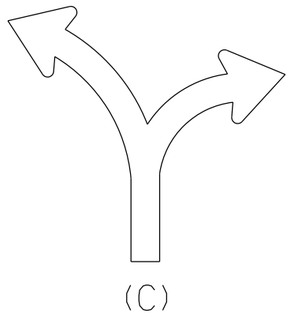
DATE 12/08/10 PLATE NO. R3-2.10

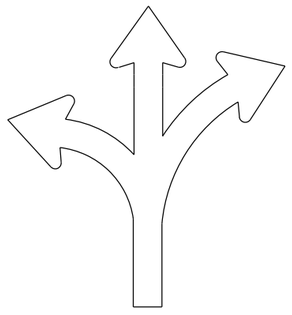
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 173	E

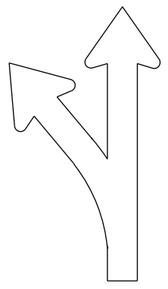


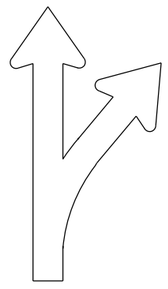
(A)

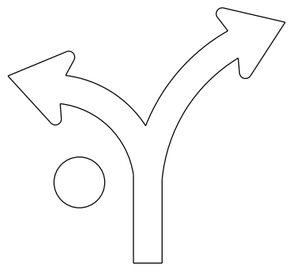
(B)

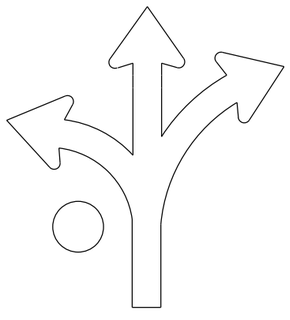

(C)

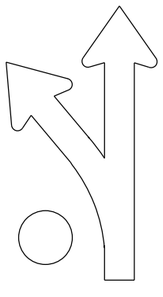

(D)

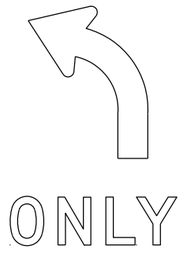

(E)


(F)

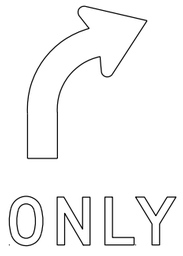

(G)


(H)

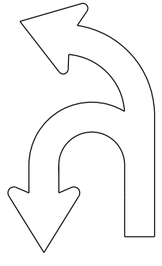

(I)



(L)



(R)


(U)

NOTES

1. Sigs are Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Use appropriate Letter for Sign Code
   Each letter added makes sign wider. Example R3-8EAR
5. Square footage of sign varies by letters

1	Letter =	3.75 sq ft for Size 2
		6.0 sq ft for Size 3
		10.0 sq ft for Size 4 or 5
2	Letters =	7.5 sq ft for Size 2
		12.0 sq ft for Size 3
		20.0 sq ft for Size 4 or 5
3	Letters =	11.25 sq ft for Size 2
		18.0 sq ft for Size 3
		30.0 sq ft for Size 4 or 5
4	Letters =	15.0 sq ft for Size 2
		24.0 sq ft for Size 3
		40.0 sq ft for Size 4 or 5
5	Letters =	18.75 sq ft for Size 2
		30.0 sq ft for Size 3
		50.0 sq ft for Size 4 or 5
6	Letters =	22.5 sq ft for Size 2
		36.0 sq ft for Size 3
		60.0 sq ft for Size 4 or 5

6. When letters C,D,G,H are used on the Left or Right end of the sign the Sq. Ft. changes.
   Add the amounts when these letters are used:
   1.25 sq ft for Size 2
   1.5 sq ft for Size 3
   2.0 sq ft for Size 4 or 5

STANDARD SIGN
R3-8 Series

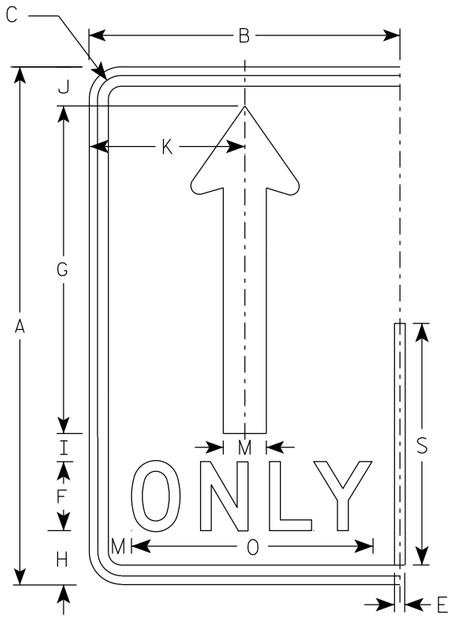
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

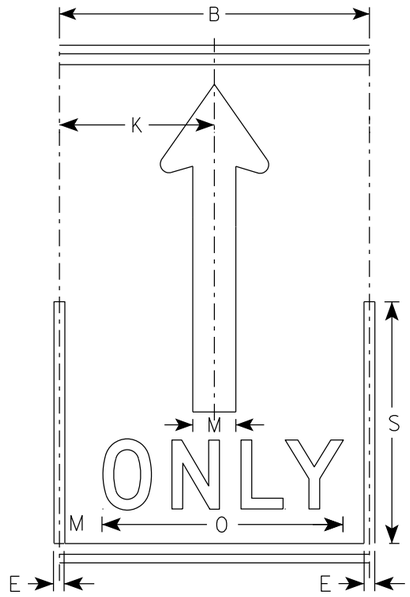
DATE 5/21/19 PLATE NO. R3-8.1

NOTES

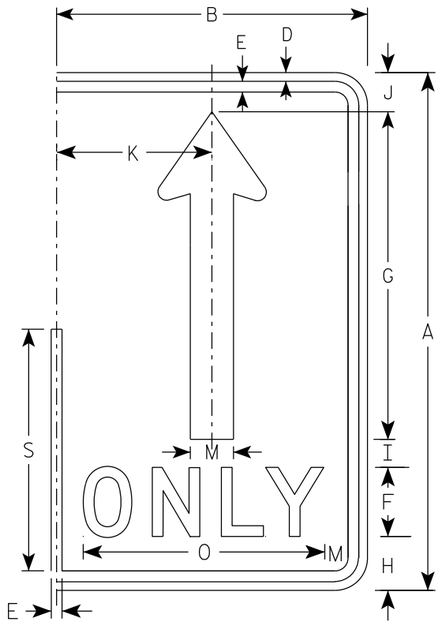
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



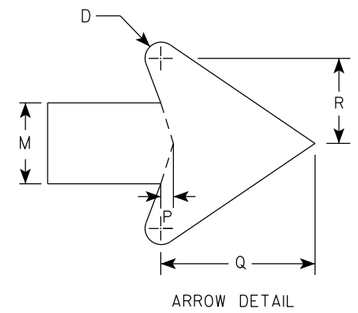
(A)



(A)



(A)



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	30	18	1 3/8	1/2	5/8	4	19	3 1/8	1 5/8	2 1/4	9		2 1/2		14	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 3/8	1/2	5/8	4	19	3 1/8	1 5/8	2 1/4	9		2 1/2		14	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 3/8	1/2	5/8	5	22 3/4	3 3/4	1 3/4	2 3/4	12		3		17 5/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1	6	30 3/8	5 1/8	2 7/8	3 5/8	15		4		21 3/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1	6	30 3/8	5 1/8	2 7/8	3 5/8	15		4		21 3/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (A) Arrow

WISCONSIN DEPT OF TRANSPORTATION

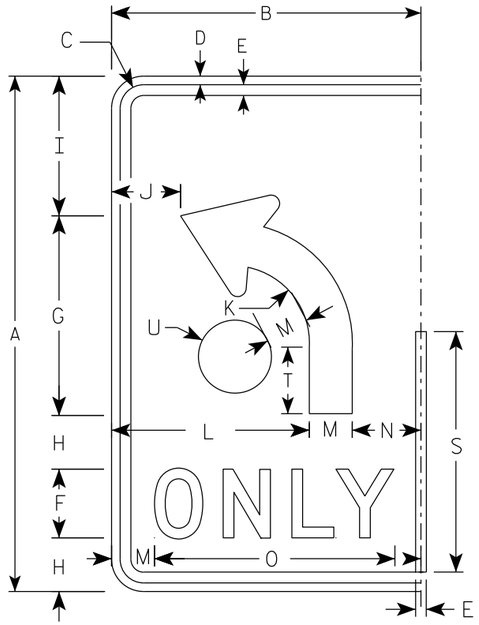
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

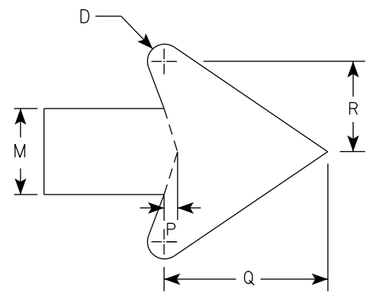
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 175 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
   Message Series - D



(B)



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	30	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8	2 1/8						3.75
2M	30	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8	2 1/8						3.75
3	36	24	1 3/8	1/2	5/8	5	14	3 1/2	9 3/4	6	5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8	2 1/2						6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4	3 3/8						10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4	3 3/8						10.0

STANDARD SIGN

R3-8 (B) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

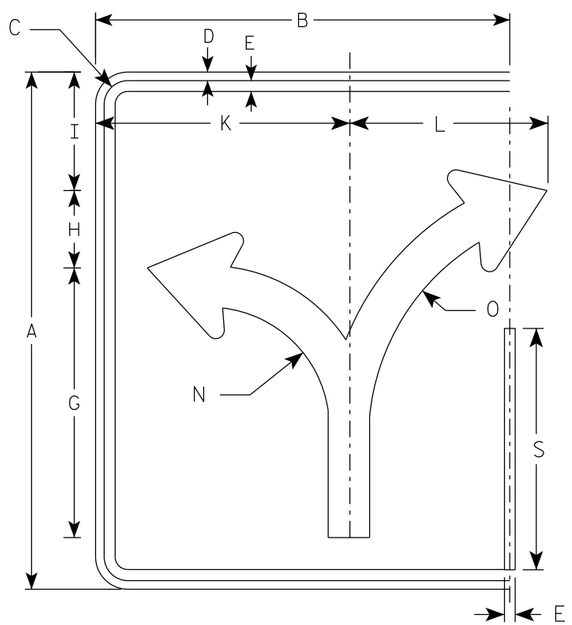
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO:

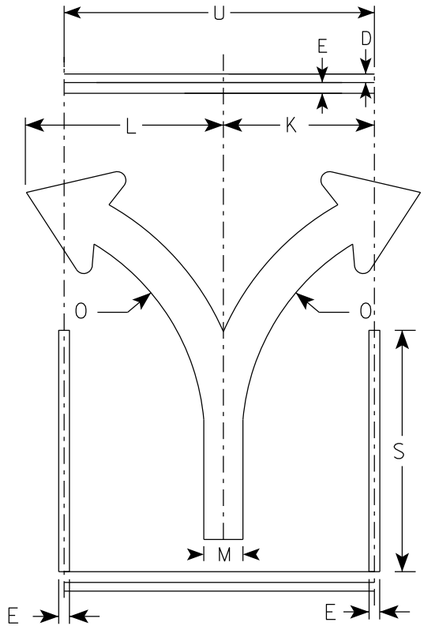
SHEET NO: 176 E

NOTES

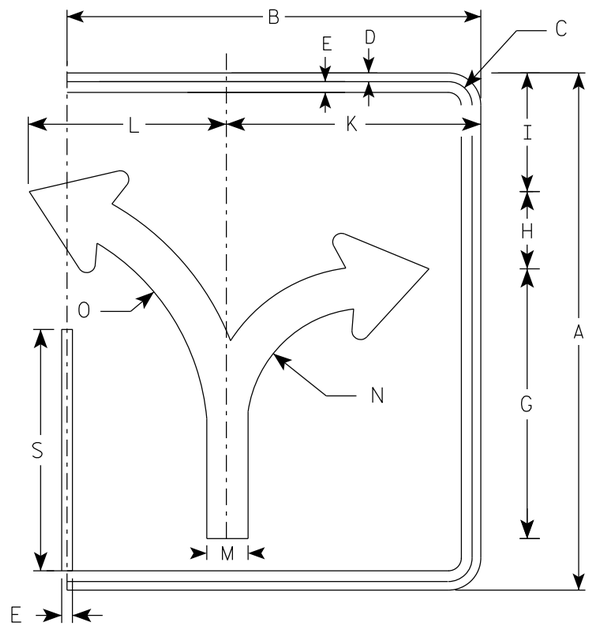
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



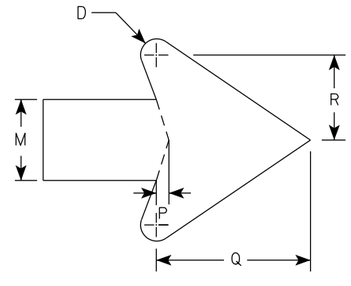
(C)



(C)



(C)



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	ENDS Area sq. ft.	MIDDLE Area sq. ft.
1																												
2S	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
2M	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
3	36	30	1 3/8	1/2	5/8		18 3/4	5 1/2	8 1/4		17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		24						7.5	6.0
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0

STANDARD SIGN
R3-8 (C) Arrow

WISCONSIN DEPT OF TRANSPORTATION

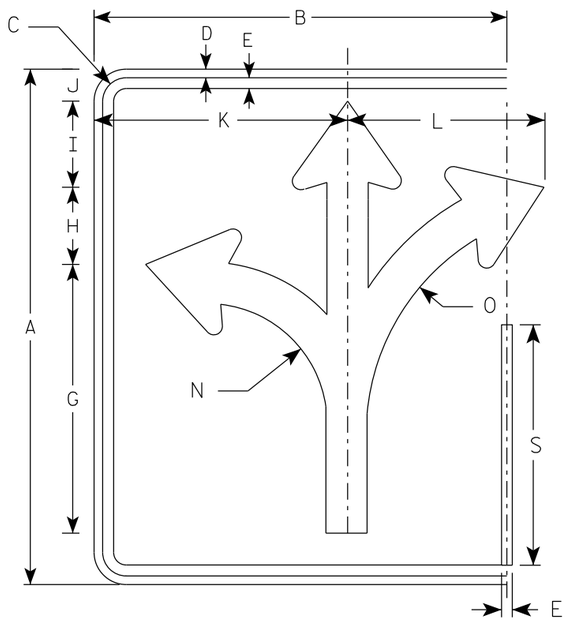
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

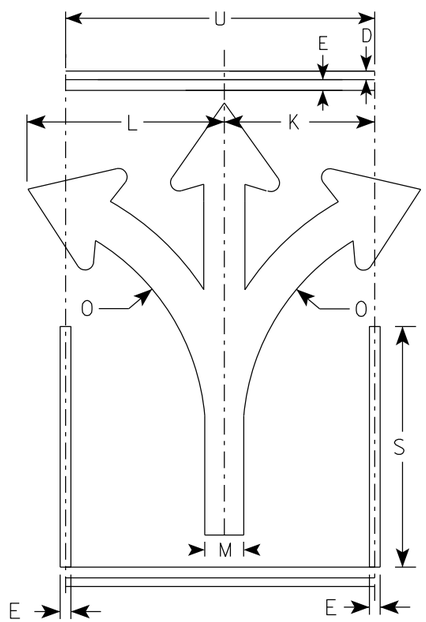
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 177 | E

NOTES

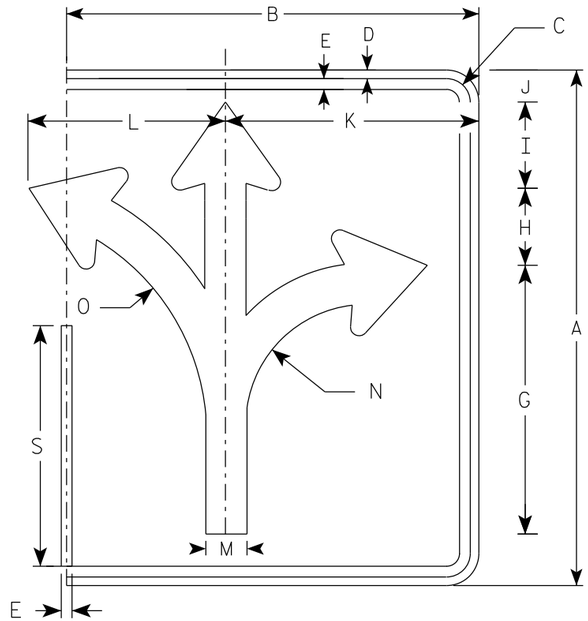
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



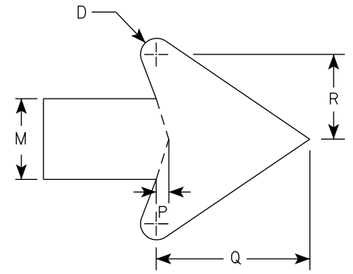
(D)



(D)



(D)



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	ENDS Area sq. ft.	MIDDLE Area sq. ft.
1																												
2S	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
2M	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
3	36	30	1 3/8	1/2	5/8		18 3/4	5 1/2	6	2 1/4	17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		24						7.5	6.0
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0

STANDARD SIGN
R3-8 (D) Arrow

WISCONSIN DEPT OF TRANSPORTATION

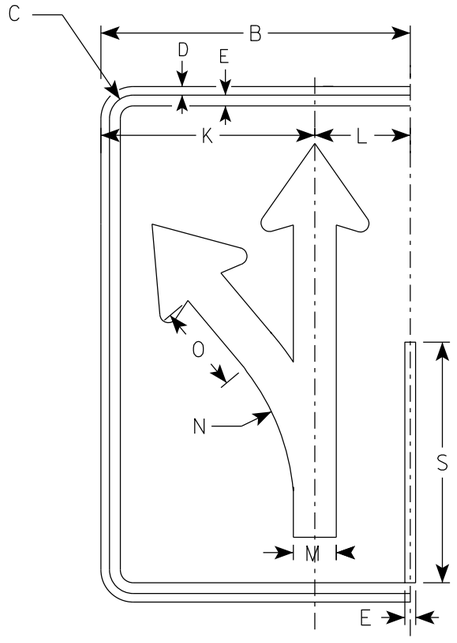
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

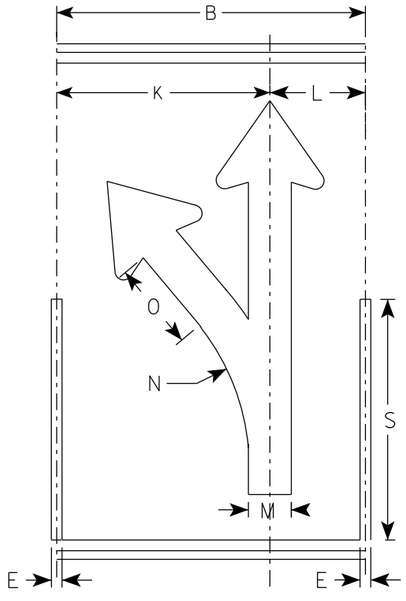
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 178 | E

NOTES

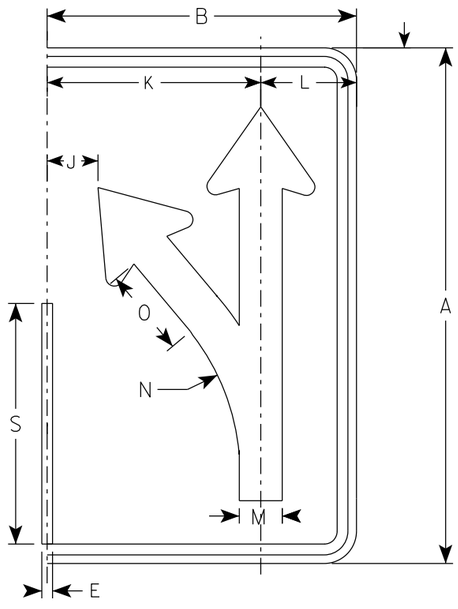
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



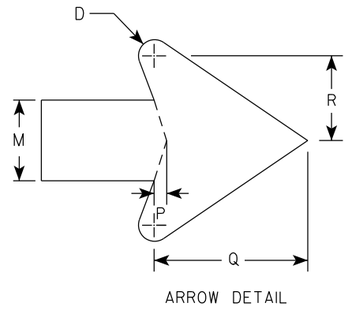
(E)



(E)



(E)



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	30	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 3/8	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (E) Arrow

WISCONSIN DEPT OF TRANSPORTATION

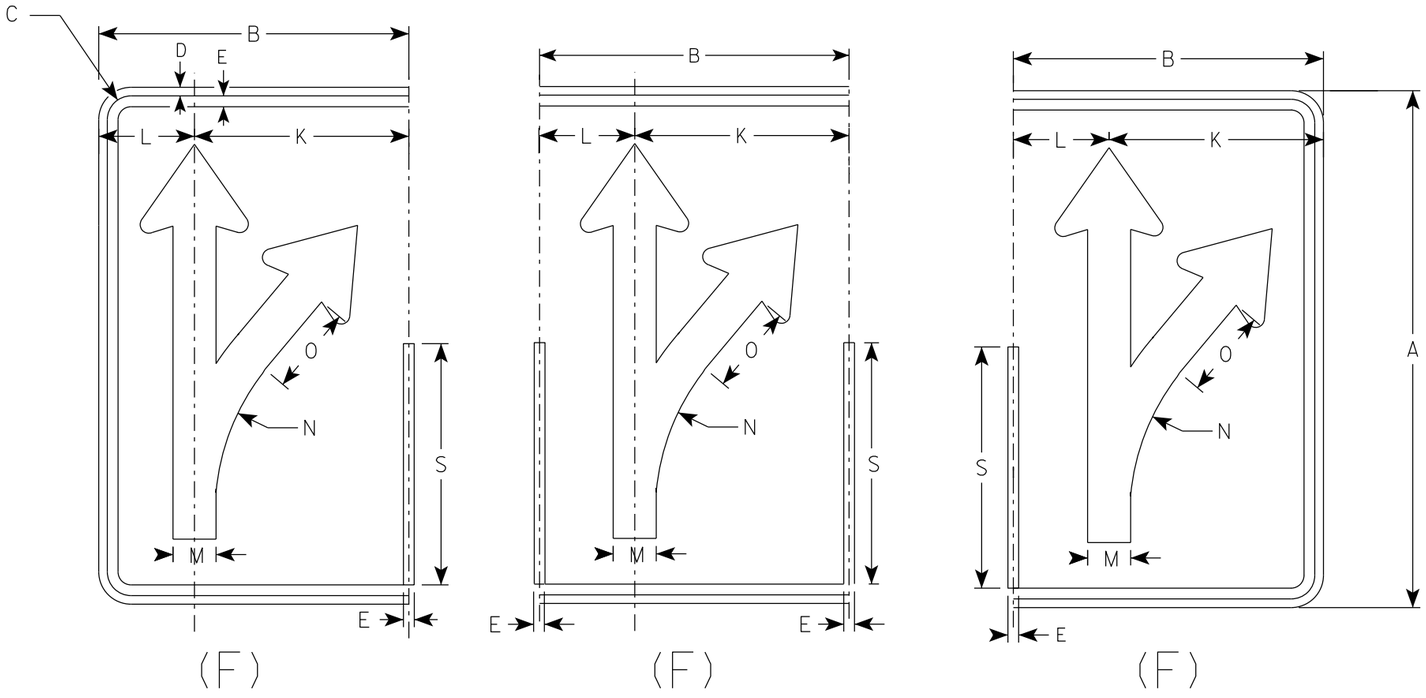
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

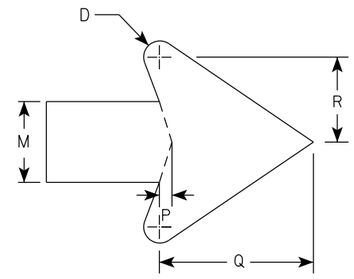
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 179 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(F) (F) (F)



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	30	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 3/8	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (F) Arrow

WISCONSIN DEPT OF TRANSPORTATION

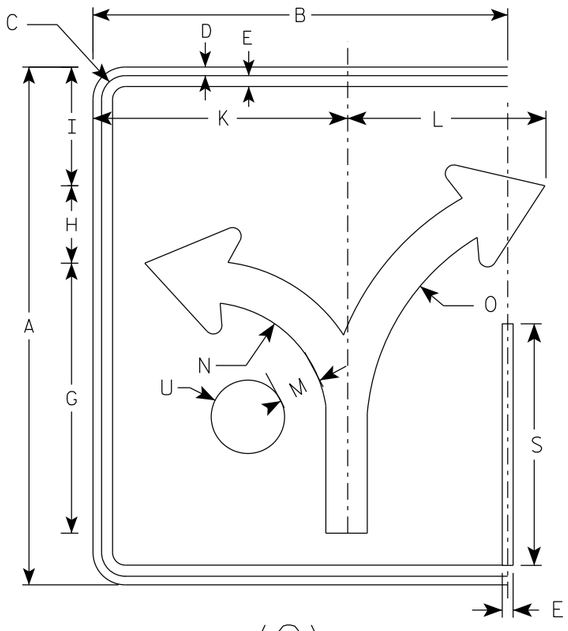
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

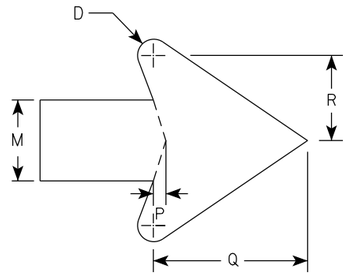
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 180 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(G)



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	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
2M	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
3	36	30	1 3/8	1/2	5/8		18 3/4	5 1/2	8 1/4		17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		2 1/2						7.5
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0

STANDARD SIGN
R3-8 (G) Arrow

WISCONSIN DEPT OF TRANSPORTATION

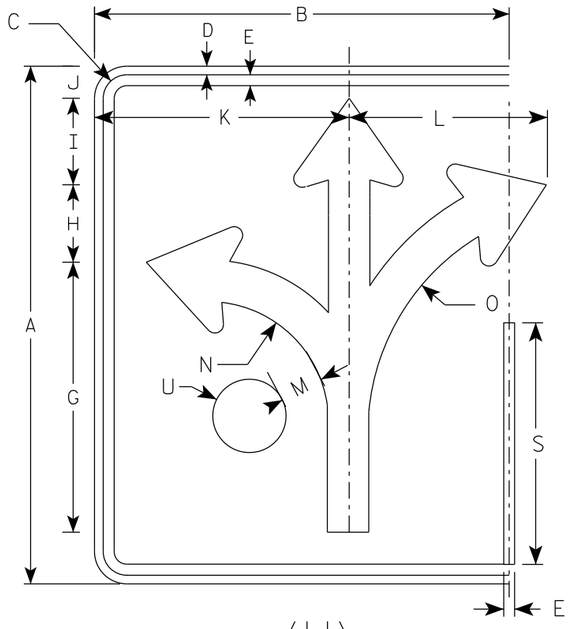
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

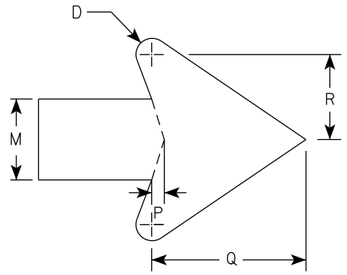
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 181 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(H)



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	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
2M	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
3	36	30	1 3/8	1/2	5/8		18 3/4	5 1/2	6	3 1/8	17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		2 1/2						7.5
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0

STANDARD SIGN
R3-8 (H) Arrow

WISCONSIN DEPT OF TRANSPORTATION

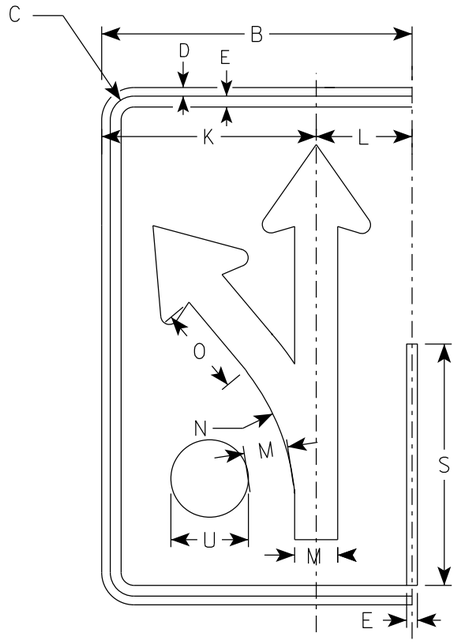
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

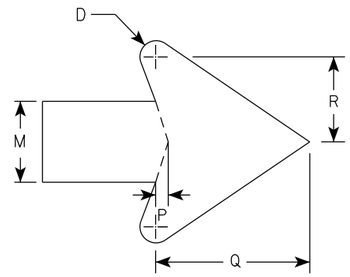
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 182	E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(I)



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	30	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14		2 1/8						3.75
2M	30	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14		2 1/8						3.75
3	36	24	1 3/8	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4		2 1/2						6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8		3 3/8						10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8		3 3/8						10.0

STANDARD SIGN
R3-8 (I) Arrow

WISCONSIN DEPT OF TRANSPORTATION

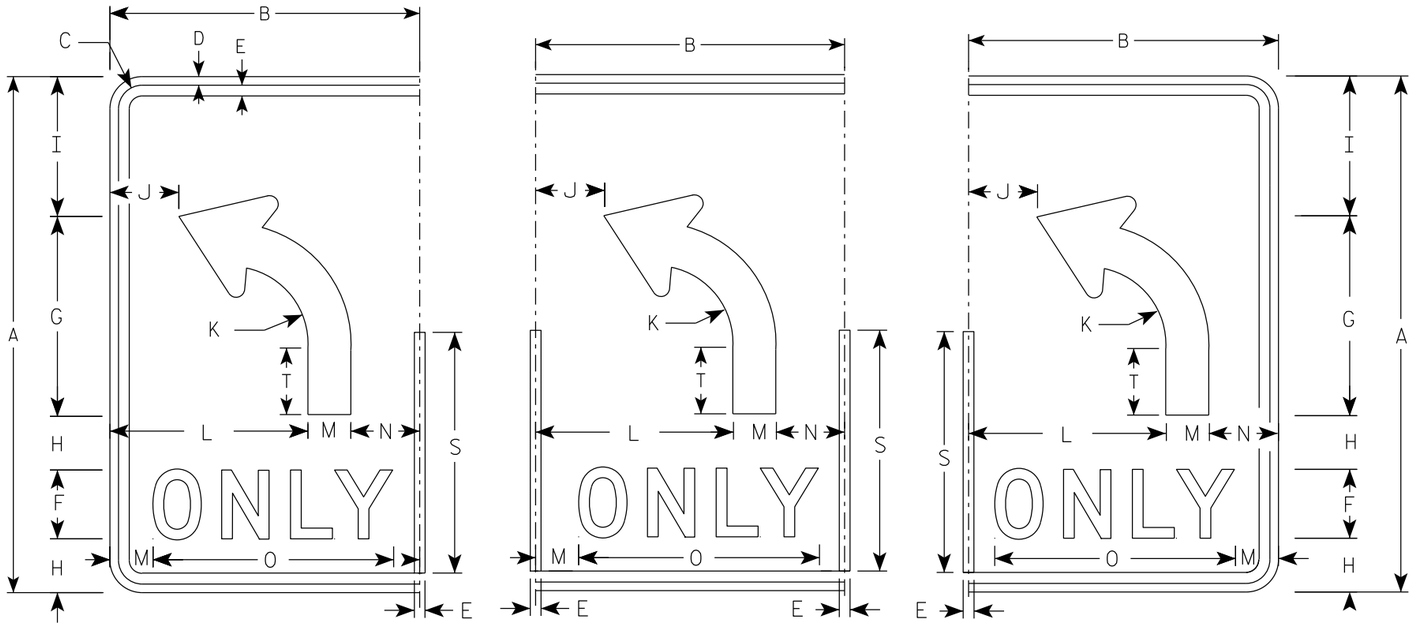
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

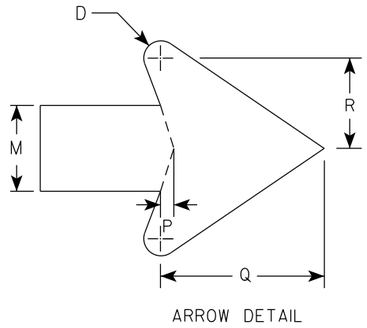
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 183 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



(L) (L) (L)



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	30	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
2M	30	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
3	36	24	1 3/8	1/2	5/8	5	14	3 1/2	9 3/4		5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8							6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0

STANDARD SIGN

R3-8 (L) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

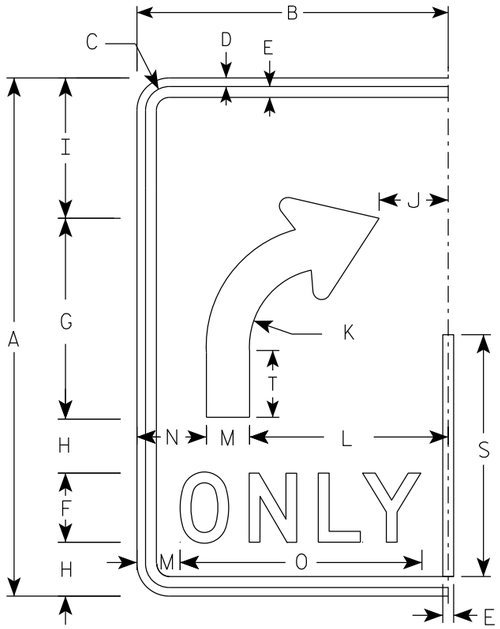
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO:

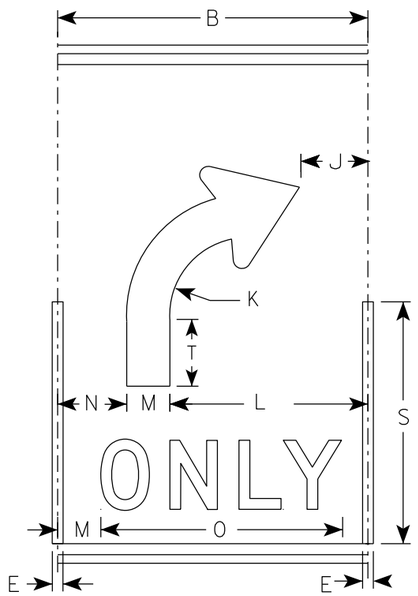
SHEET NO: 184 E

NOTES

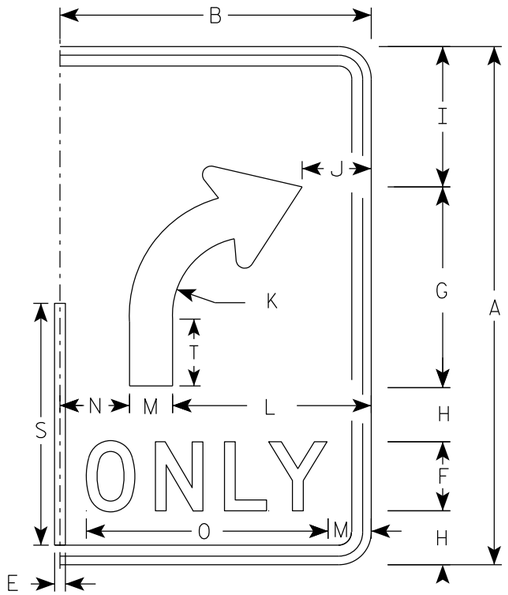
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



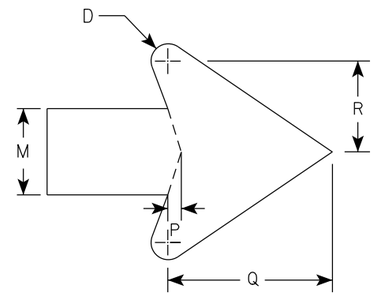
(R)



(R)



(R)



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	30	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
2M	30	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
3	36	24	1 3/8	1/2	5/8	5	14	3 1/2	9 3/4	6	5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8							6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0

STANDARD SIGN

R3-8 (R) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

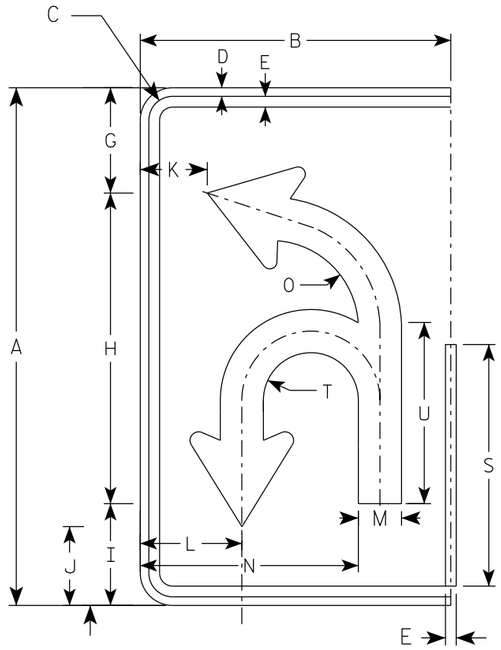
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO:

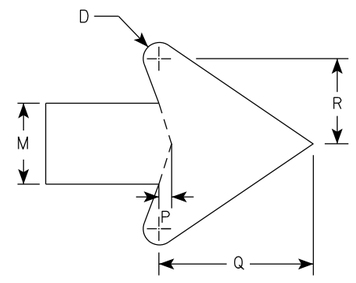
SHEET NO: 185 **E**

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(U)



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	30	18	1 3/8	1/2	5/8		6 1/8	18	5 7/8	4 5/8	3 7/8	5 7/8	2 1/2	12 5/8	5 1/8	3/8	4 3/4	2 5/8	14	2 3/4	10 1/2						3.75
2M	30	18	1 3/8	1/2	5/8		6 1/8	18	5 7/8	4 5/8	3 7/8	5 7/8	2 1/2	12 5/8	5 1/8	3/8	4 3/4	2 5/8	14	2 3/4	10 1/2						3.75
3	36	24	1 3/8	1/2	5/8		21 7/8	21 5/8	7 1/8	5 1/2	5 7/8	8 1/4	3	16 3/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4	3 1/4	12 5/8						6.0
4	48	30	2 1/4	3/4	1		29 1/8	28 3/4	9 3/8	7 1/4	6 7/8	10	4	20 7/8	8 1/8	5/8	7 5/8	4 1/4	22 3/8	4 3/8	16 3/4						10.0
5	48	30	2 1/4	3/4	1		29 1/8	28 3/4	9 3/8	7 1/4	6 7/8	10	4	20 7/8	8 1/8	5/8	7 5/8	4 1/4	22 3/8	4 3/8	16 3/4						10.0

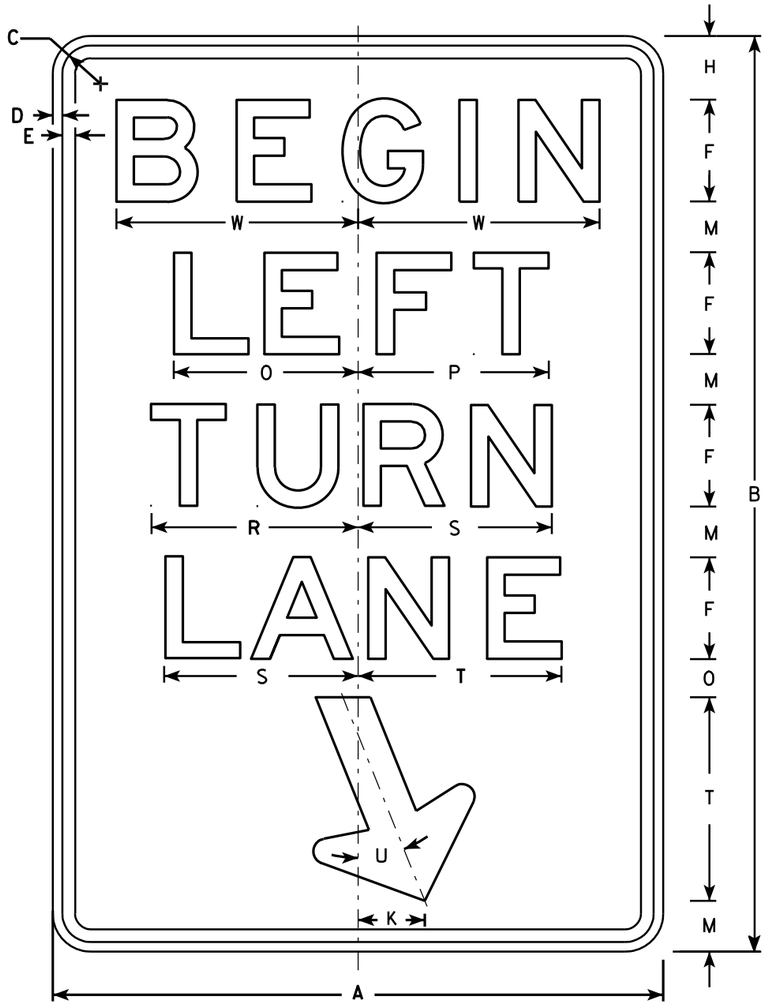
STANDARD SIGN
R3-8 (U) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

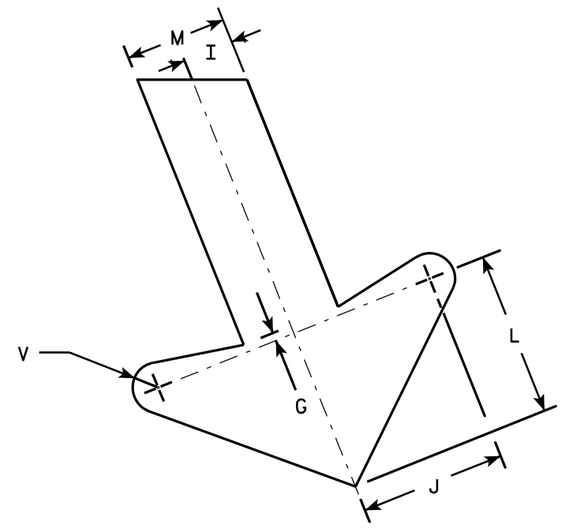
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 186 | E



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																											

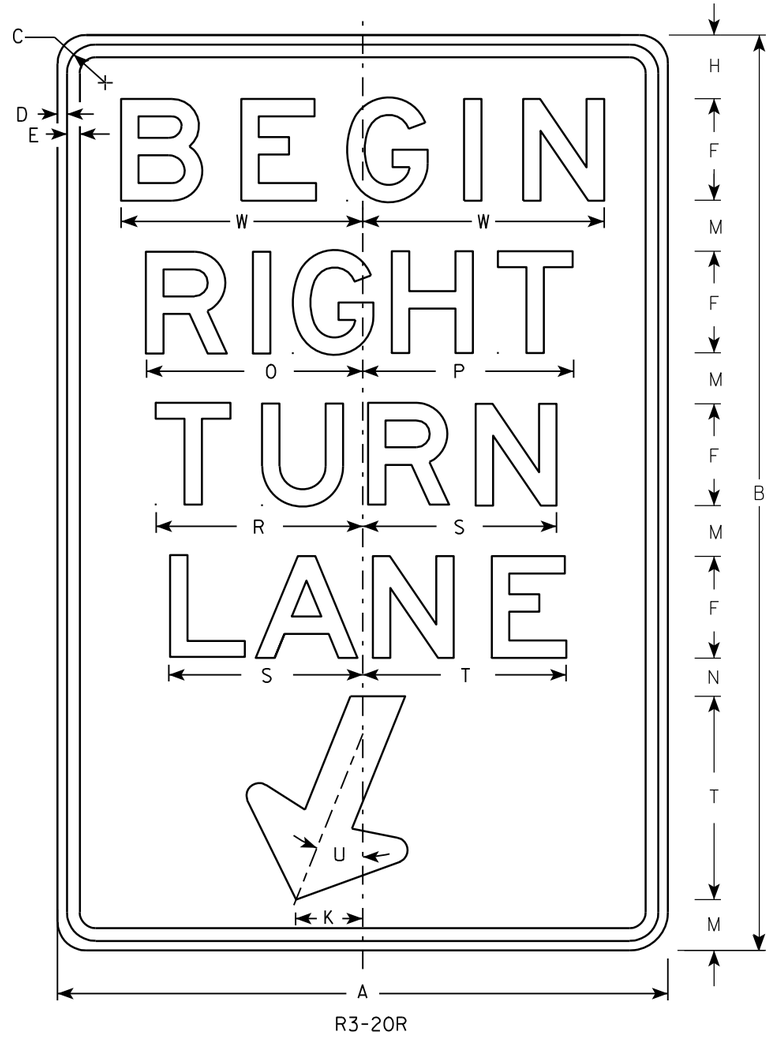
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

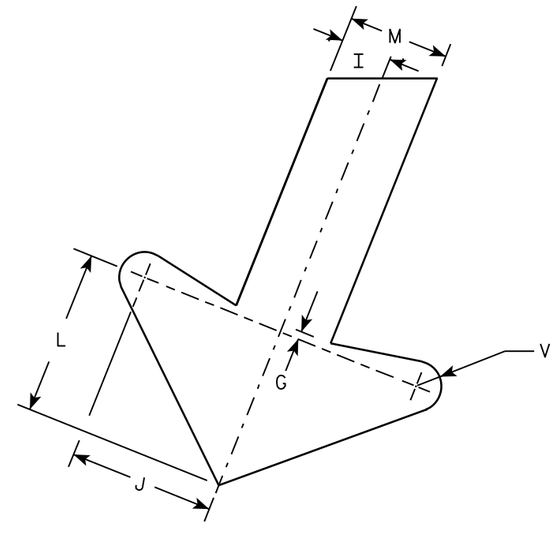
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 187 | E



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																											

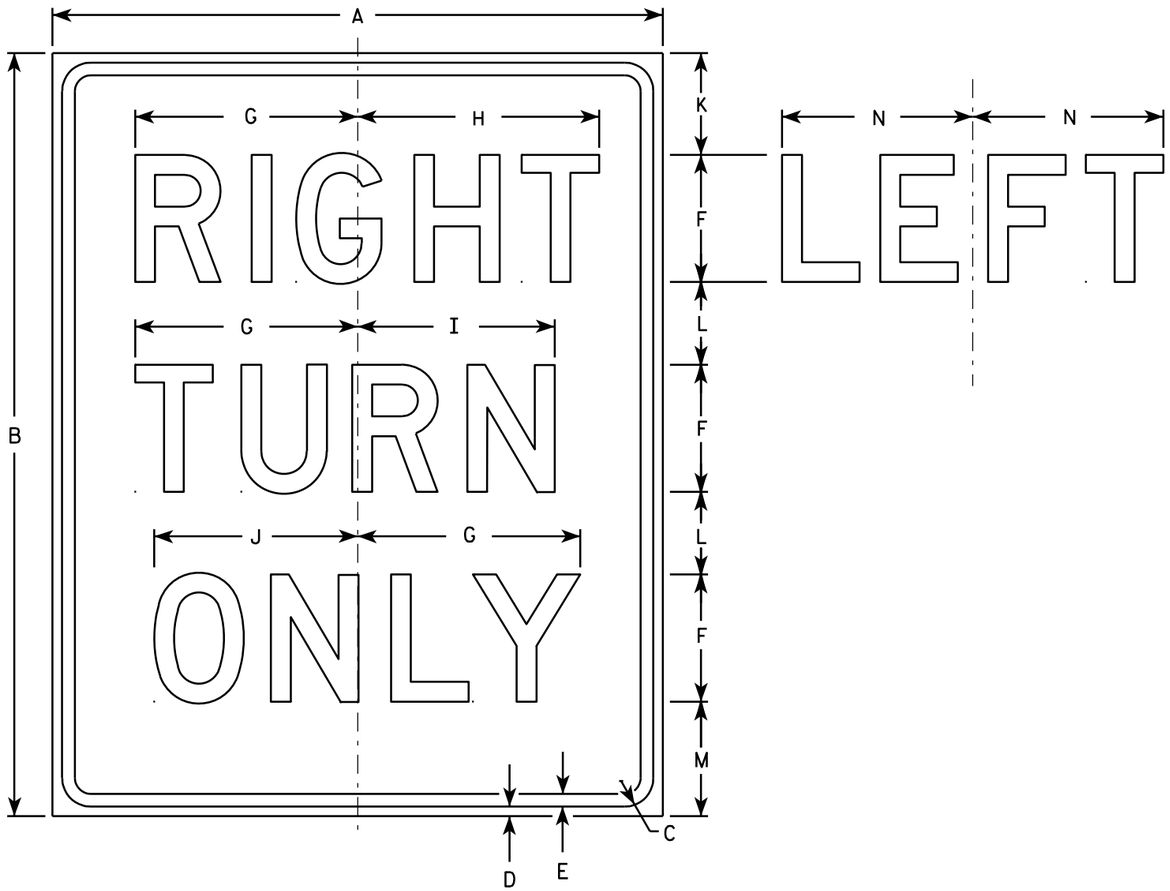
STANDARD SIGN
R3-20R

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: 188 | E



R3-53R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R3-53L same as R3-53R except LEFT is substituted for RIGHT.

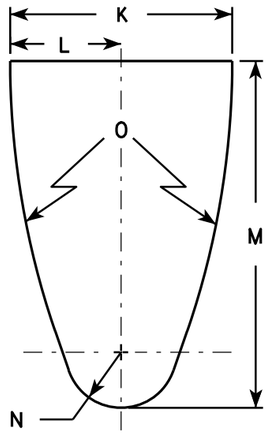
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	30	1 1/8	3/8	1/2	5	8 3/4	9 1/2	7 3/4	8	4	3 1/4	4 1/2	7 1/2													5.0
2M	24	30	1 1/8	3/8	1/2	5	8 3/4	9 1/2	7 3/4	8	4	3 1/4	4 1/2	7 1/2													5.0
3	24	30	1 1/8	3/8	1/2	5	8 3/4	9 1/2	7 3/4	8	4	3 1/4	4 1/2	7 1/2													5.0
4																											
5																											

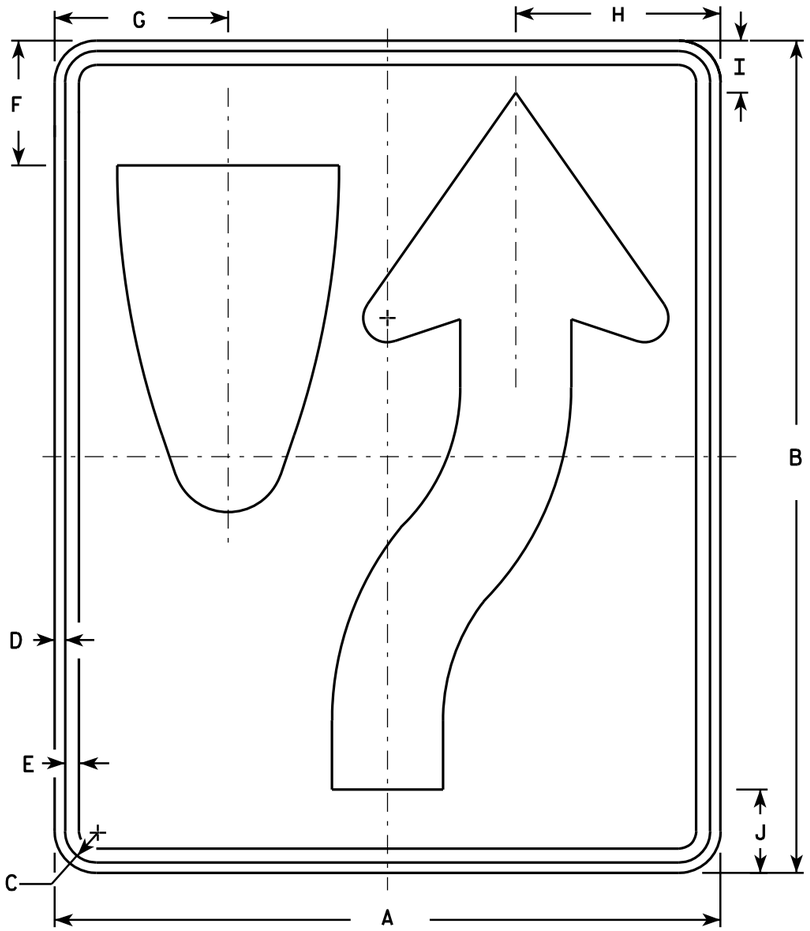
STANDARD SIGN
R3-53

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/24/2011 PLATE NO. R3-53.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 189 | E

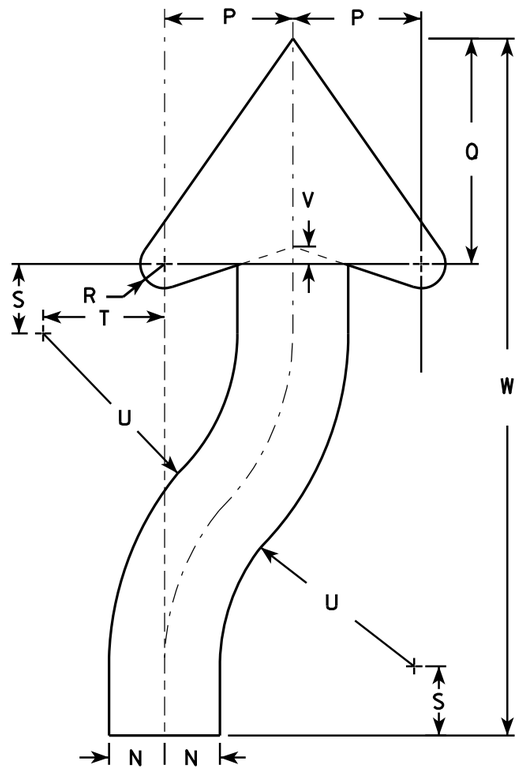




R4-7

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

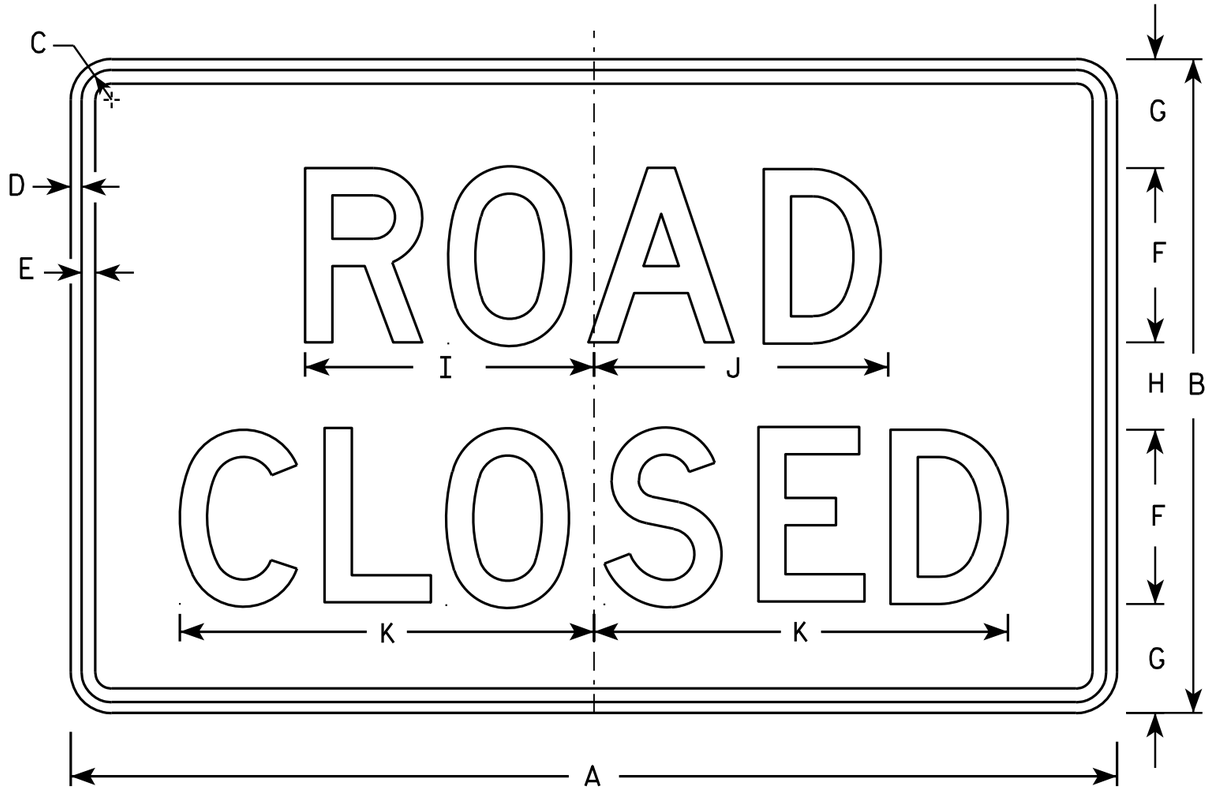
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

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

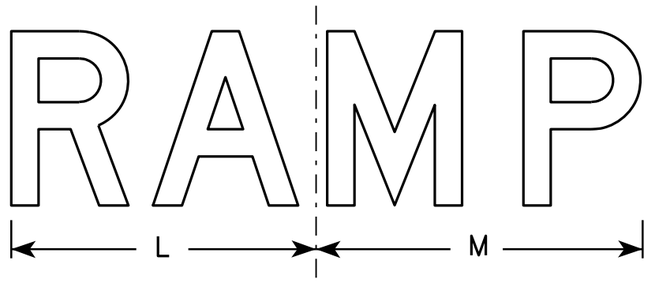
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 190	E



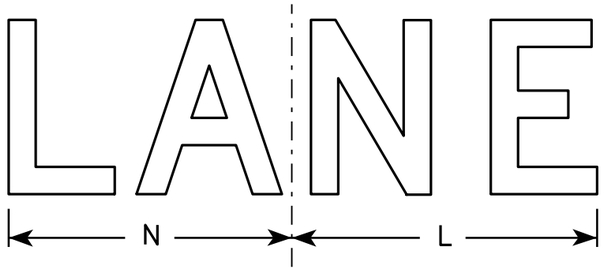
R11-2

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 - 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



R11-2L

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													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													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													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													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													10.0

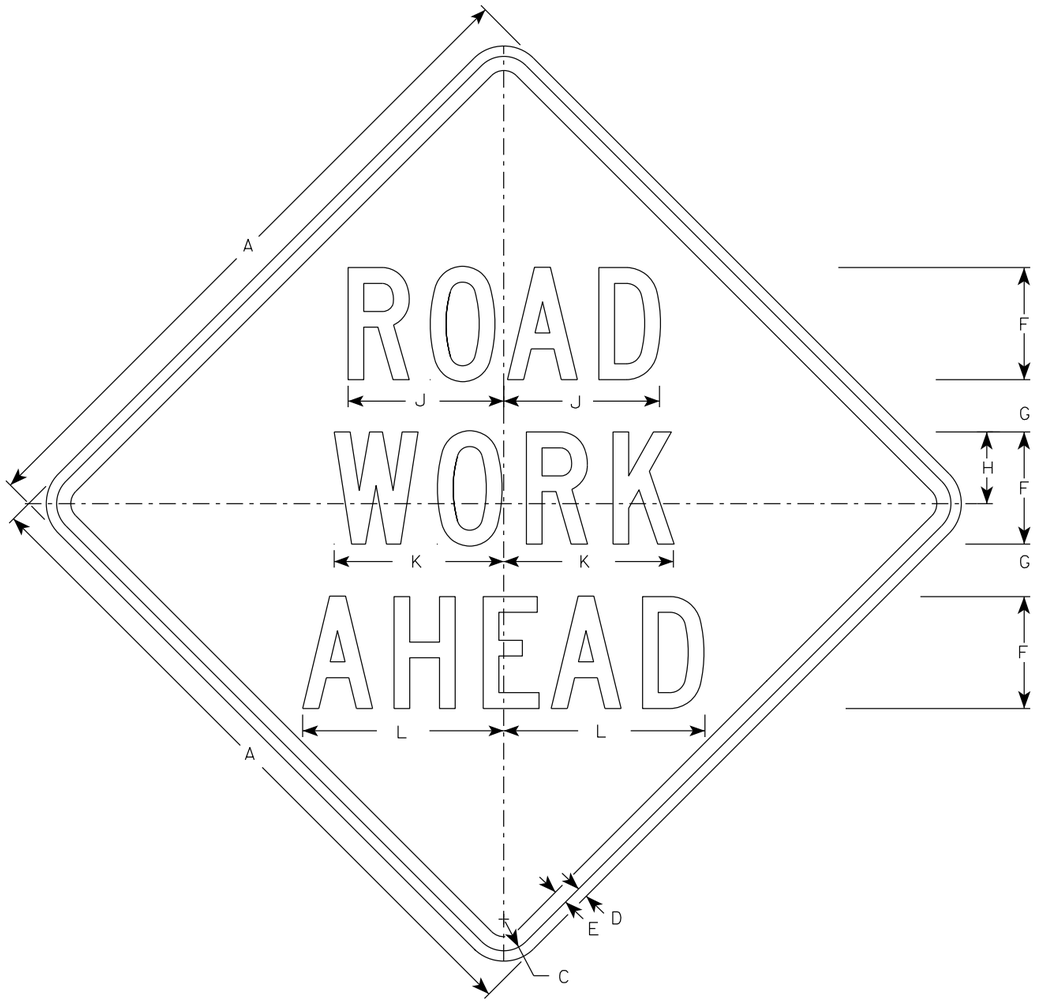
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

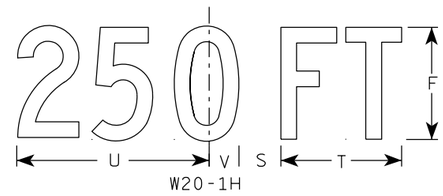
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

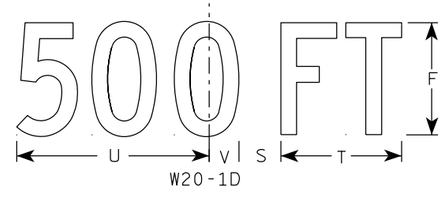
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 191 | E



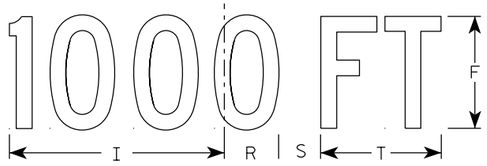
W20-1A



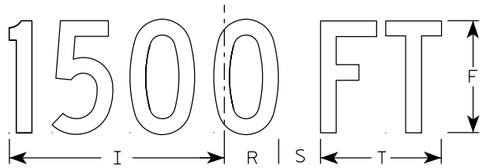
W20-1H



W20-1D



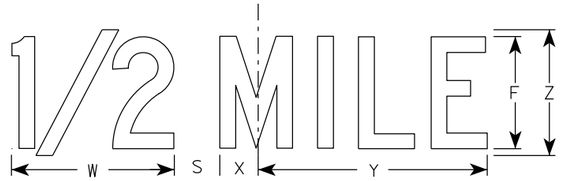
W20-1C



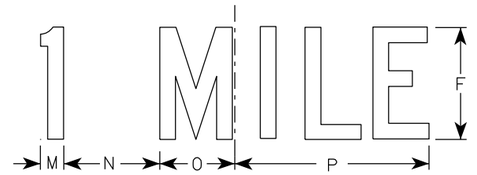
W20-1B

NOTES

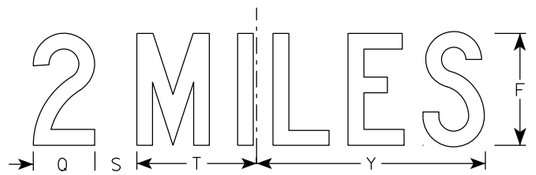
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



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:

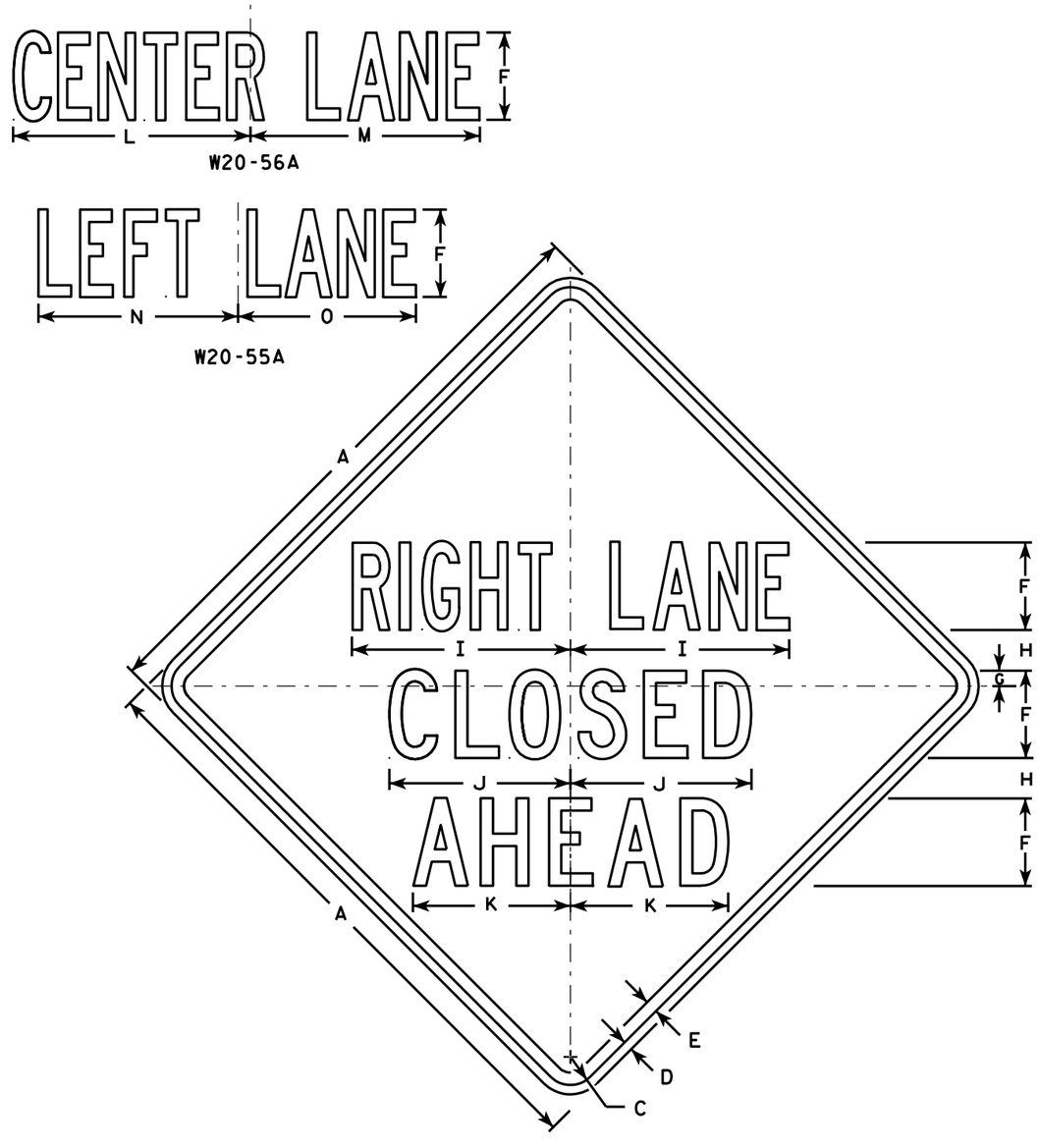
SHEET NO: E

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

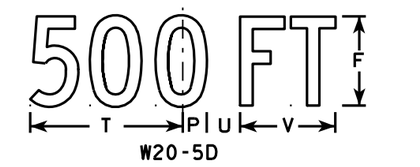
WISDOT/CADDS SHEET 42

7

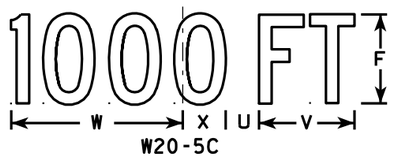
7



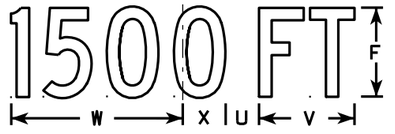
W20-5A



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

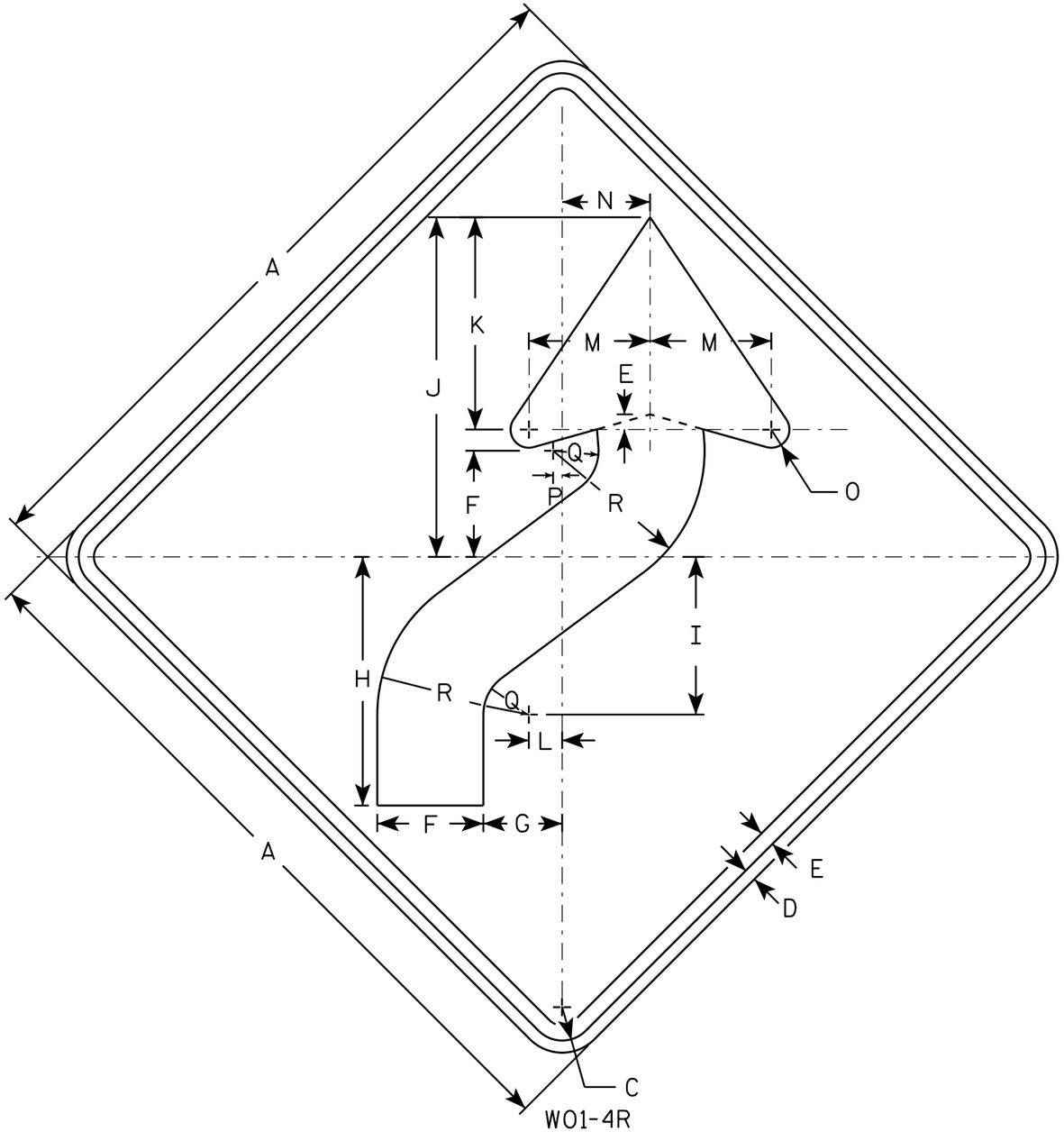
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 193	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



W01-4R

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. W01-4L is the same as W01-4R 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	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN
W01-4

WISCONSIN DEPT OF TRANSPORTATION

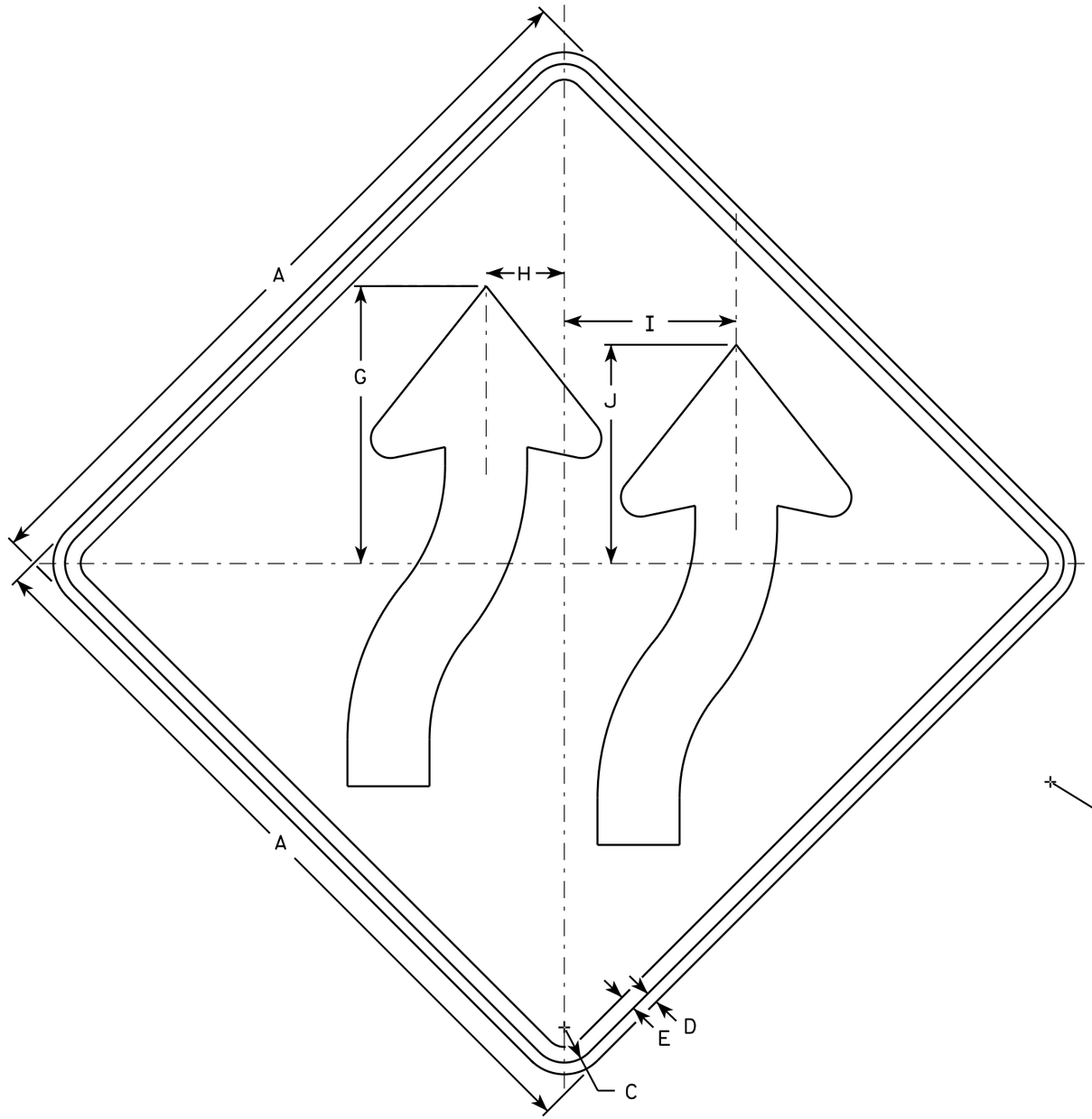
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-4.1

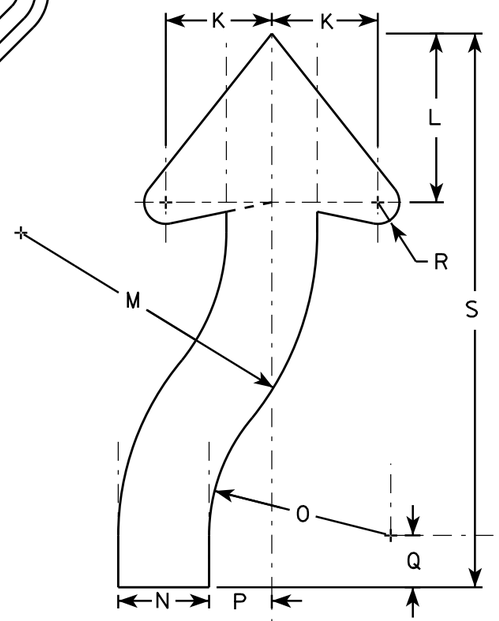
PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014.DGN PLOT DATE : 28-FEB-2014 11:35 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.755110:1.000000
WISDOT/CADDS SHEET 42

7



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

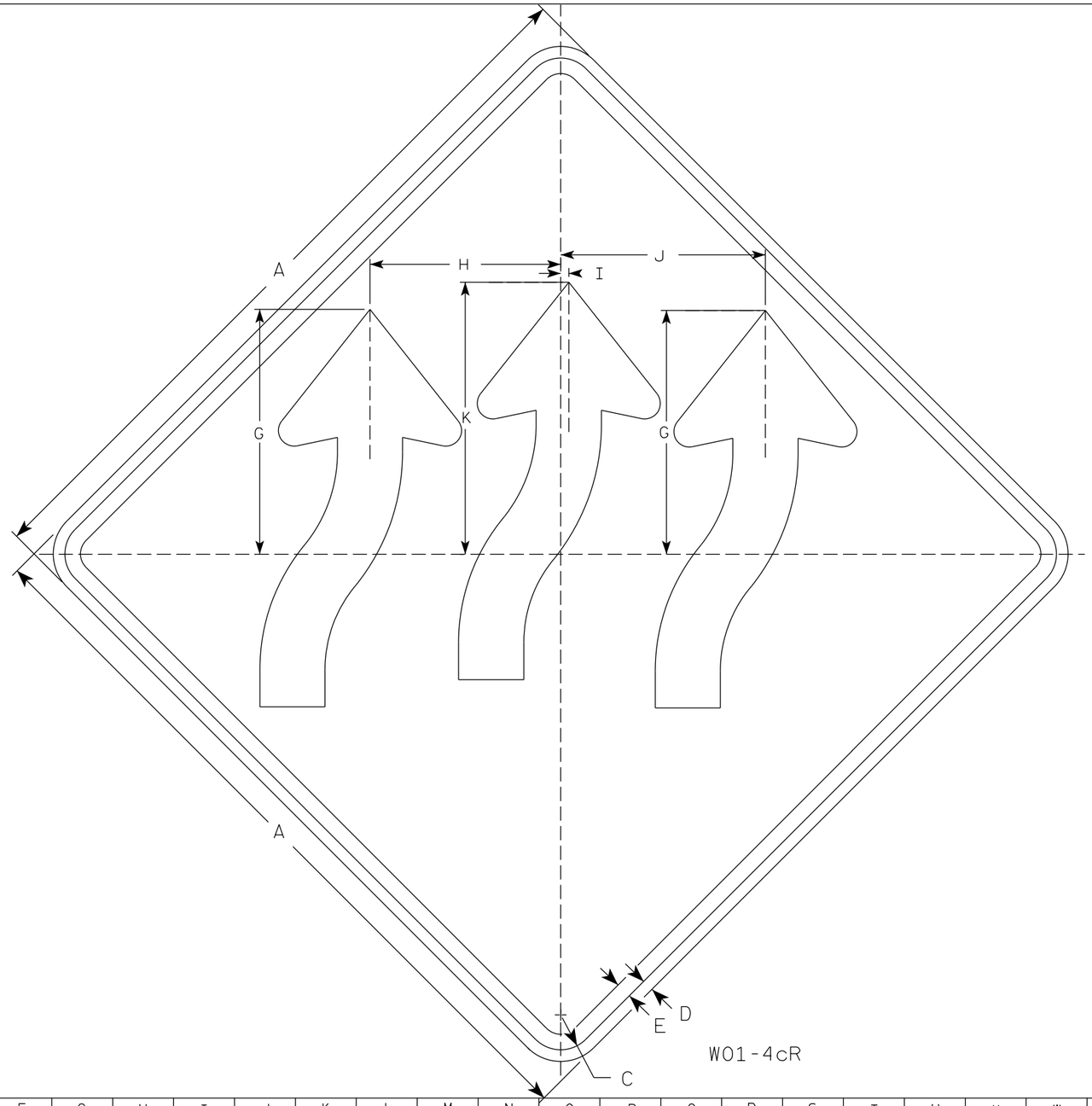
STANDARD SIGN
W01-4b

WISCONSIN DEPT OF TRANSPORTATION

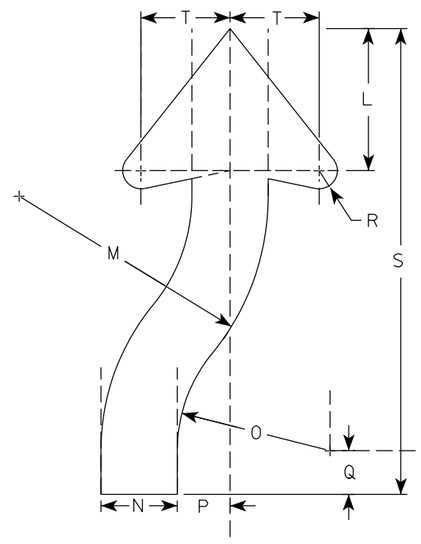
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W01-4cR



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.
4. W01-4cL is the same as W01-4cR except 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		11 3/4	9 1/4	3/8	9 7/8	13 1/8	5 7/8	10 1/4	3 1/8	6 1/4	2 1/4	1 7/8	3/4	19 1/4	3 3/4							9.0
2S	48		2 1/4	3/4	1		15 3/4	12 1/4	1/2	13 1/4	17 1/2	7 3/4	13 3/4	4 1/4	8 1/2	2 7/8	2 3/8	1	25 5/8	4 7/8							16.0
2M	48		2 1/4	3/4	1		15 3/4	12 1/4	1/2	13 1/4	17 1/2	7 3/4	13 3/4	4 1/4	8 1/2	2 7/8	2 3/8	1	25 5/8	4 7/8							16.0
3	48		2 1/4	3/4	1		15 3/4	12 1/4	1/2	13 1/4	17 1/2	7 3/4	13 3/4	4 1/4	8 1/2	2 7/8	2 3/8	1	25 5/8	4 7/8							16.0
4	48		2 1/4	3/4	1		15 3/4	12 1/4	1/2	13 1/4	17 1/2	7 3/4	13 3/4	4 1/4	8 1/2	2 7/8	2 3/8	1	25 5/8	4 7/8							16.0
5	48		2 1/4	3/4	1		15 3/4	12 1/4	1/2	13 1/4	17 1/2	7 3/4	13 3/4	4 1/4	8 1/2	2 7/8	2 3/8	1	25 5/8	4 7/8							16.0

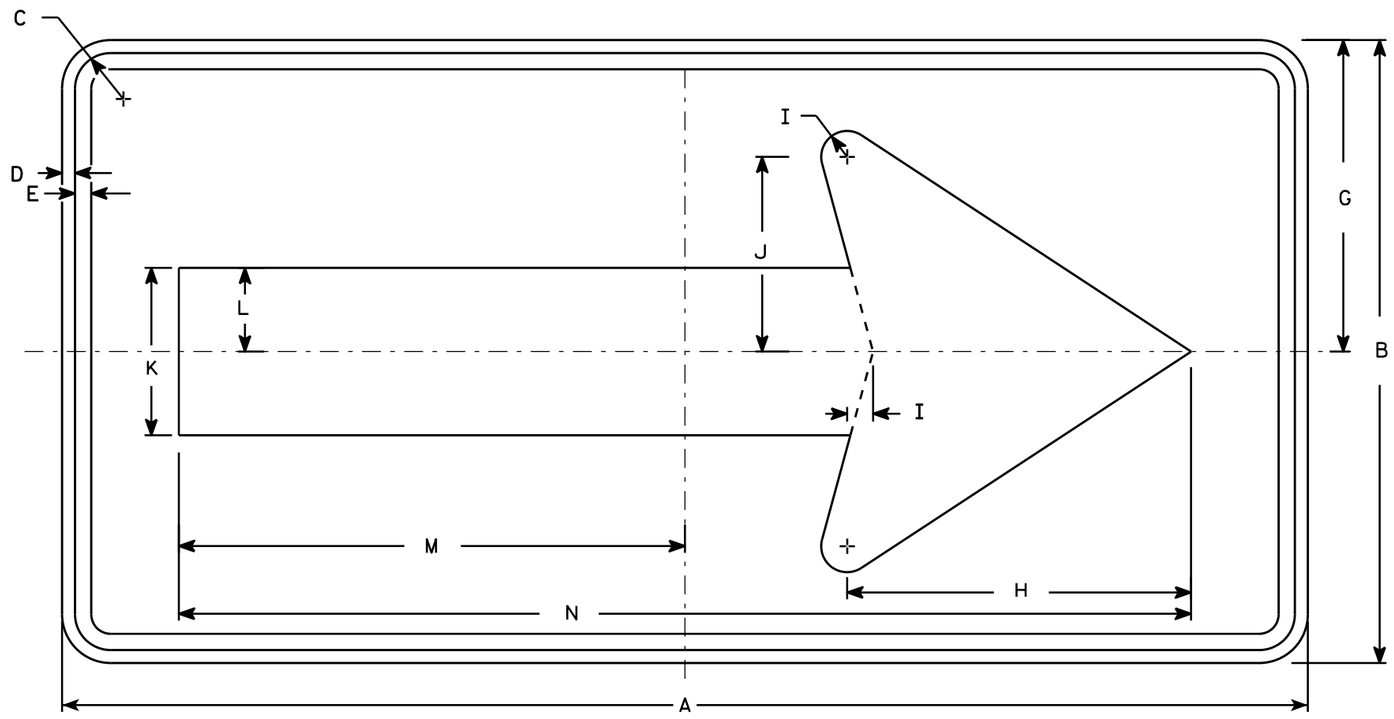
STANDARD SIGN
W01-4c

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/12/19 PLATE NO. W01-4c.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 196	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

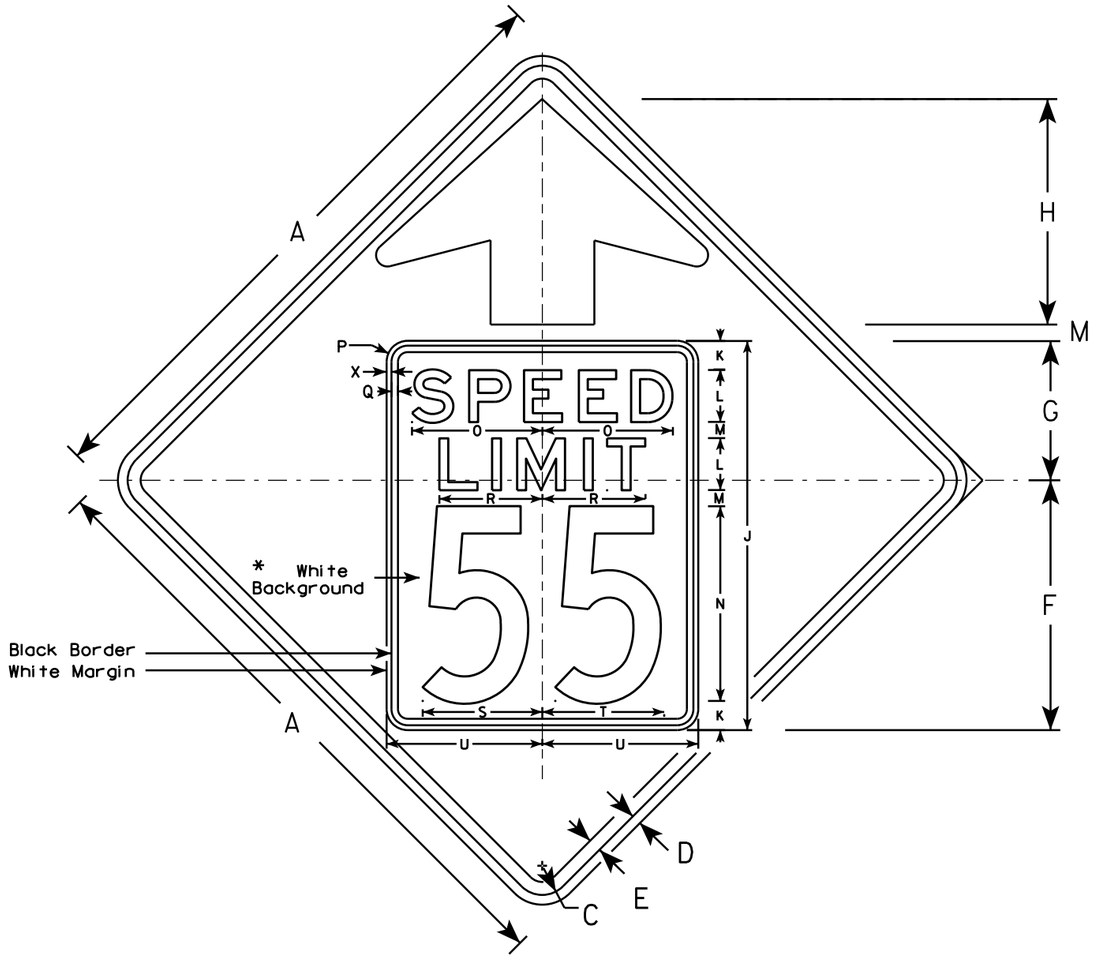
WISCONSIN DEPT OF TRANSPORTATION

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

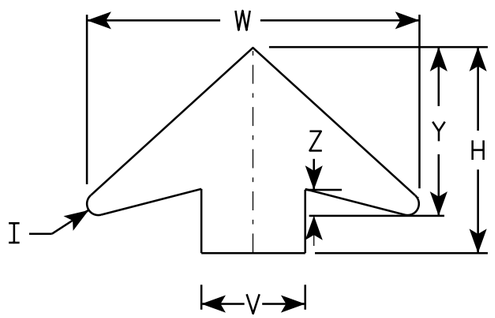


W03-5

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

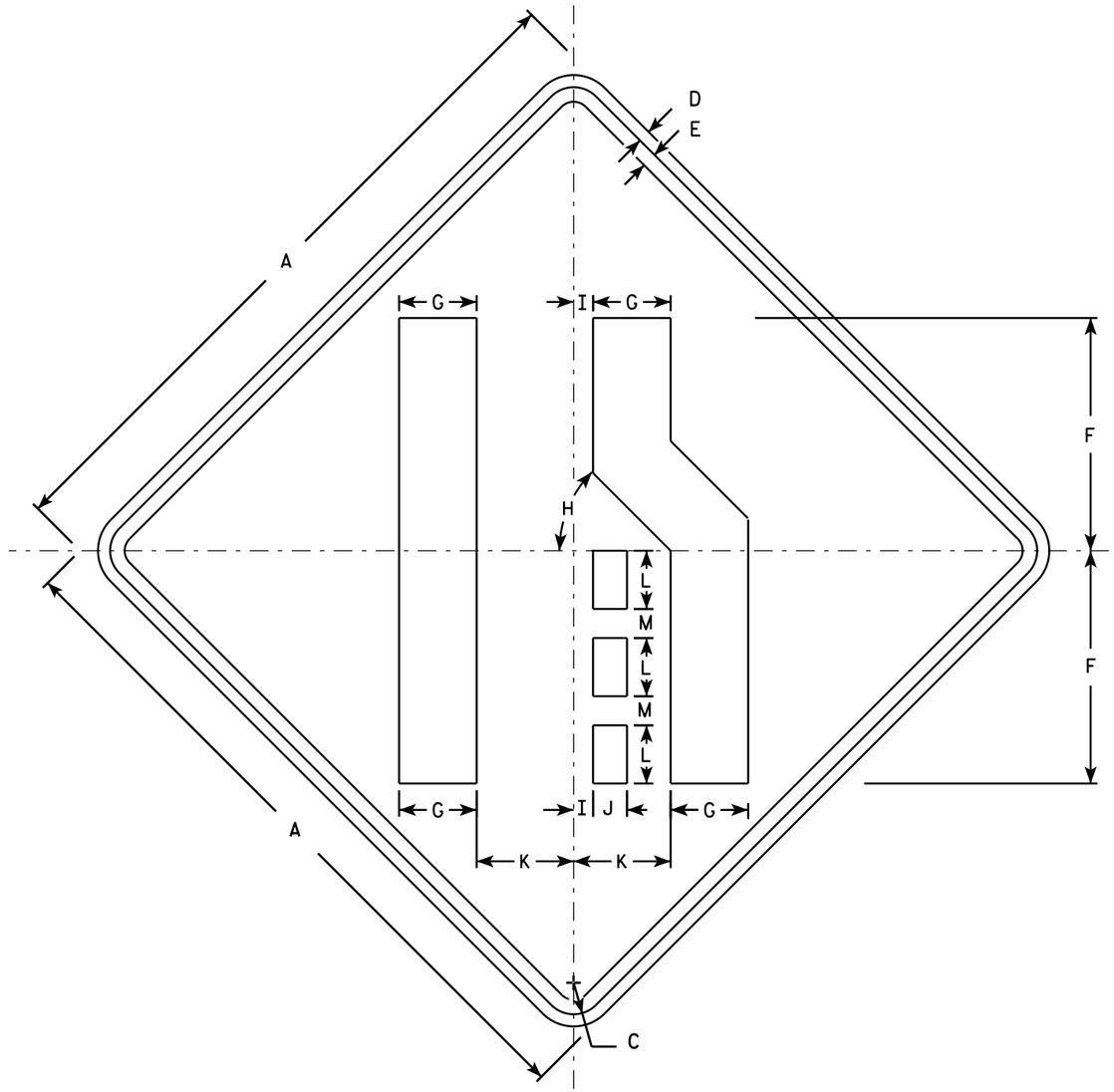
APPROVED Matthew R Rauch
for State Traffic Engineer

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



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

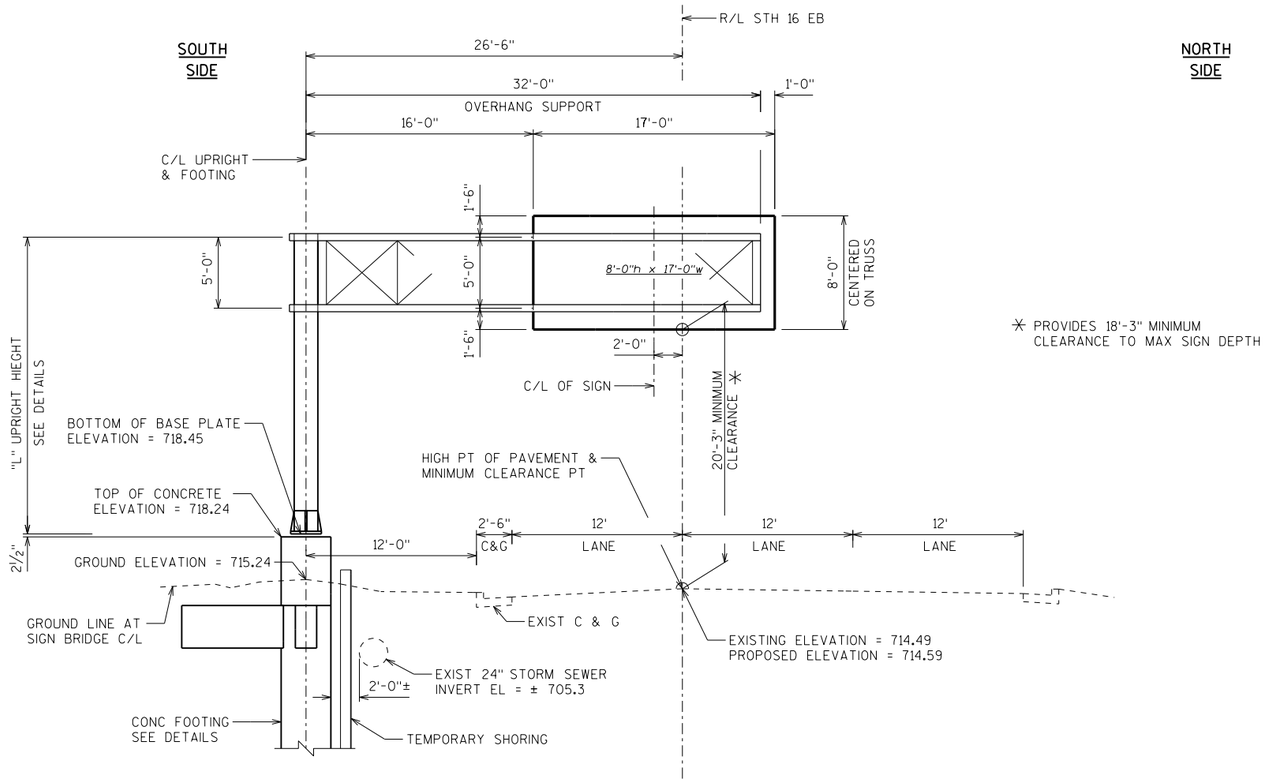
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 199 W04-2.1

PROJECT NO: | SHEET NO: E

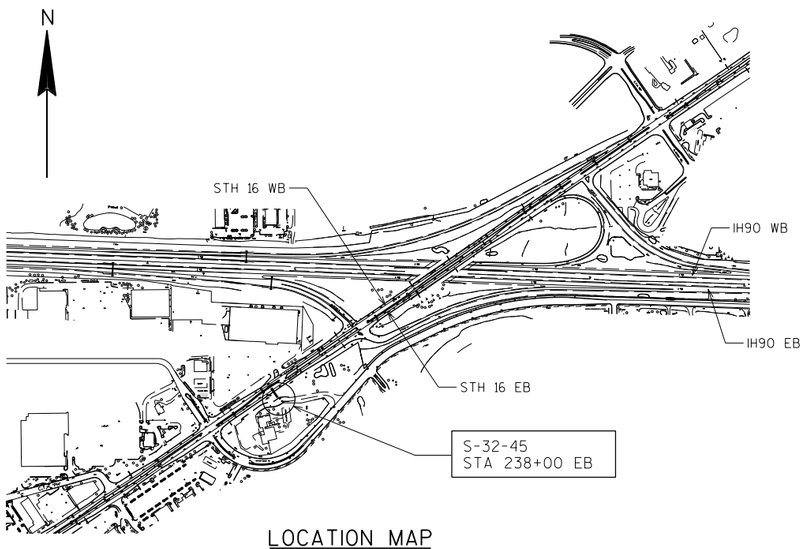
PLOT DATE: 9/25/2020 PLOT TIME: 7:45:31 AM
FILE NAME : S:\UZ\W\Witsw\253\5-final-dsgn\5i-drawings\20-Struct\s-32-45\bridge\s32045gpl.dgn



CANTILEVER SIGN BRIDGE
S-32-45
STA 238+00 EB

(LOOKING DOWNSTATION)

LOOKING AT BACK OF SIGN



LOCATION MAP

STATE PROJECT NUMBER

7575-00-71

DESIGN DATA

SIGN BRIDGE	DESIGN SIGN AREA (SQ FT)	MAX SIGN DEPTH
S-32-45	264	12'-0"

SIGN IS A TYPE 1 WITH A SIZE OF 8'-0" HIGH X 17'-0" WIDE.

DESIGN IS IN ACCORDANCE WITH AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS", 2013.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALTERNATE DESIGNS ARE NOT ALLOWED.

SEE SHEET 2 FOR STRUCTURE NOTES AND DESIGN.

PROVIDE SIGN BRIDGE IDENTIFICATION PLAQUE FOR SIGN BRIDGE. TO BE CONSIDERED INCIDENTAL TO BID ITEM "TRUSS CANTILEVERED 4-CHORD TYPE NS S-32-45".

CONCRETE AND REINFORCEMENT SHALL BE IN ACCORDANCE WITH WISDOT "STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION" SECTION 636.

CONTRACTOR WILL BE RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES. ALL UTILITIES TO REMAIN IN SERVICE. COORDINATE WITH UTILITY COMPANIES.

TEMPORARY SHORING LOCATION SHALL BE DETERMINED BY ENGINEER IN THE FIELD.

LIST OF DRAWINGS

1 LAYOUT S-32-45
2 GALVANIZED STEEL CANTILEVER SIGN TRUSS
3 GALVANIZED STEEL CANTILEVER SIGN TRUSS DETAILS
4 CANTILEVER TRUSS FOOTING
5 SUBSURFACE EXPLORATION

FOR SIGN BRIDGE IDENTIFICATION PLAQUE SEE S.D.D. 12 A 4-3.

TOTAL ESTIMATED QUANTITIES (S-32-45)

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
511.1200	TEMPORARY SHORING S-32-45	SF	360
531.1100	CONCRETE MASONRY ANCILLARY STRUCTURES TYPE NS	CY	13
531.1140	STEEL REINFORCEMENT HS ANCILLARY STRUCTURES TYPE NS	LB	1755
532.6000	TRUSS CANTILEVERED 4-CHORD TYPE NS S-32-45	LS	1

WISCONSIN
CHRISTOPHER J. BLUM
E-33157
MADISON
WI
PROFESSIONAL ENGINEER

9/25/2020

SEH CONTACT: CHRIS BLUM, PE, 608.620.6192
WISDOT BRIDGE OFFICE CONTACT: AARON BONK, PE, 608.261.0261

NO.	DATE	REVISION	BY

SEH
SHORT ELLIOTT HENDRICKSON INC.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 09/25/20
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE S-32-45

STH 16 EB / IH 90 INTERCHANGE SIGN BRIDGE

COUNTY	~~TOWN~~/CITY ~~/VILLAGE~~
LA CROSSE	ONALASKA

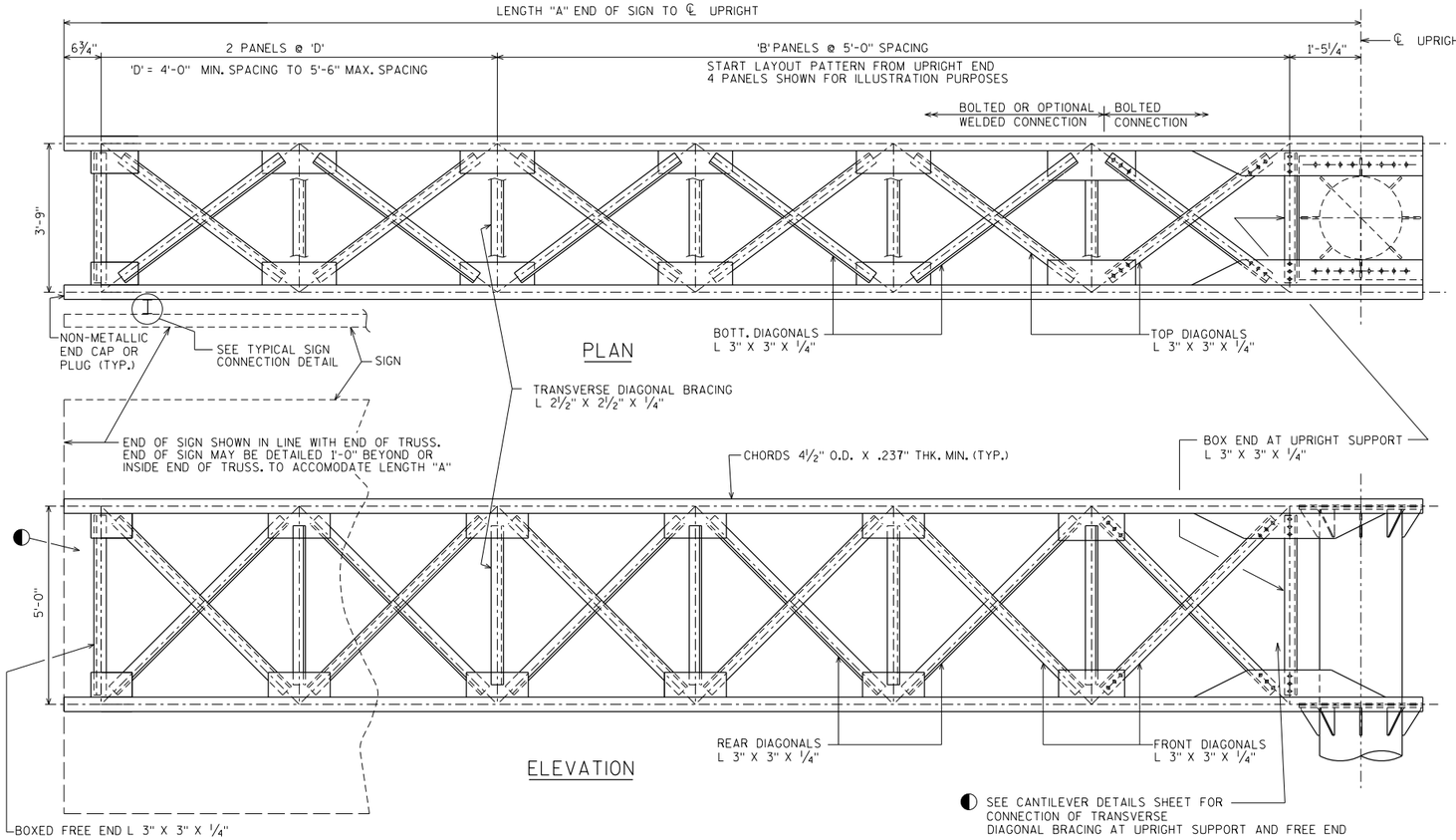
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

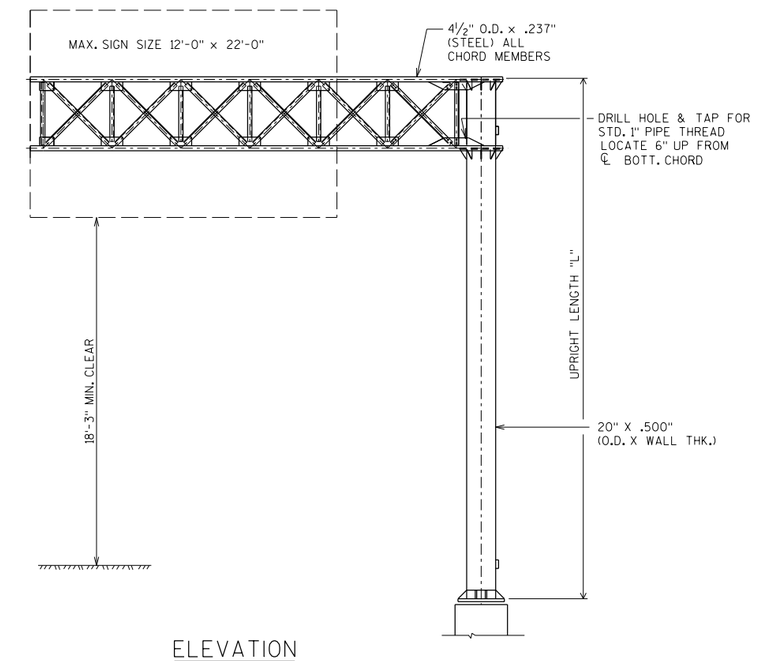
DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
CJB	COMP	DLF	CJB

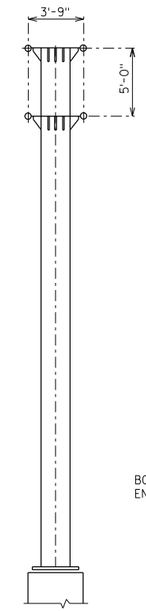
LAYOUT
S-32-45

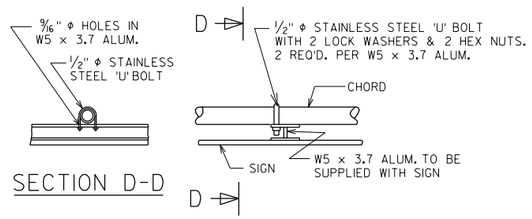
SHEET 1 OF 5
200

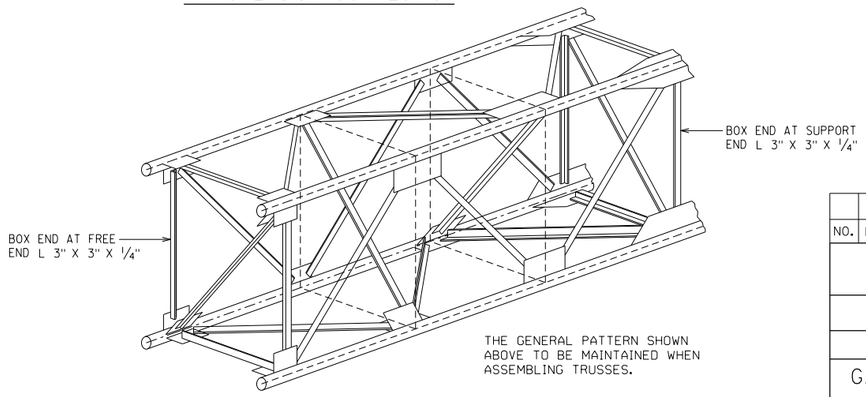
8











STATE PROJECT NUMBER

7575-00-71

GENERAL NOTES

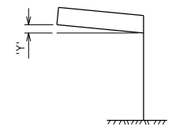
WIND VELOCITY = 90 M.P.H. (3-SECOND GUST SPEED)

PREFABRICATE CAMBER INTO THE HORIZONTAL SUPPORT PROVIDING AN AMOUNT "Y" AT END OF TRUSS SHOWN IN "CAMBER DIAGRAM". DO NOT RAKE VERTICAL UPRIGHT BY ADJUSTMENT OF LEVELING NUTS.

ALLOWABLE DESIGN STRESSES

CHORDS & COLUMN (INCLD. HANDHOLE) — API-5L-X42 — fy=42,000 P.S.I.
STRUCTURAL ANGLES — A.S.T.M. A709 GRADE 36 — fy=36,000 P.S.I.
PLATES & BARS — A.S.T.M. A709 GRADE 36 — fy=36,000 P.S.I.
ANCHOR BOLTS — A.A.S.H.T.O. M314 — fy=55,000 P.S.I.
HIGH STRENGTH BOLTS- A325 — fy=92,000 P.S.I.
STRUCTURAL MEMBERS GALVANIZED A123
HARDWARE GALVANIZED — A153 CLASS C

STRUCTURE	"A"	"L"	"B"	"D"	"Y"
S-32-45	32'-0"	23'-0"	4	5'-0"	2⅜"



CAMBER DIAGRAM

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-32-45

DRAWN BY DLF | PLANS CK'D. CJB

GALVANIZED STEEL CANTILEVER SIGN TRUSS

SHEET 2 OF 5

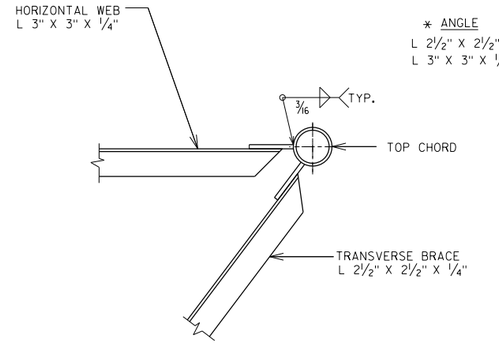
201

8

8

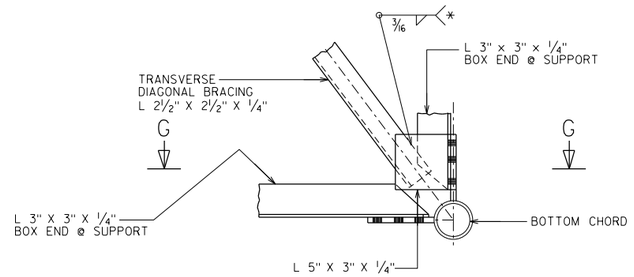
PLOT DATE: 9/25/2020 PLOT TIME: 7:45:32 AM

FILE NAME : S:\UZ\WI\sw\12513\5-final-dsgn\5i-drawings\20-Struct\s-32-45\bridge\s32045sw3910.dgn

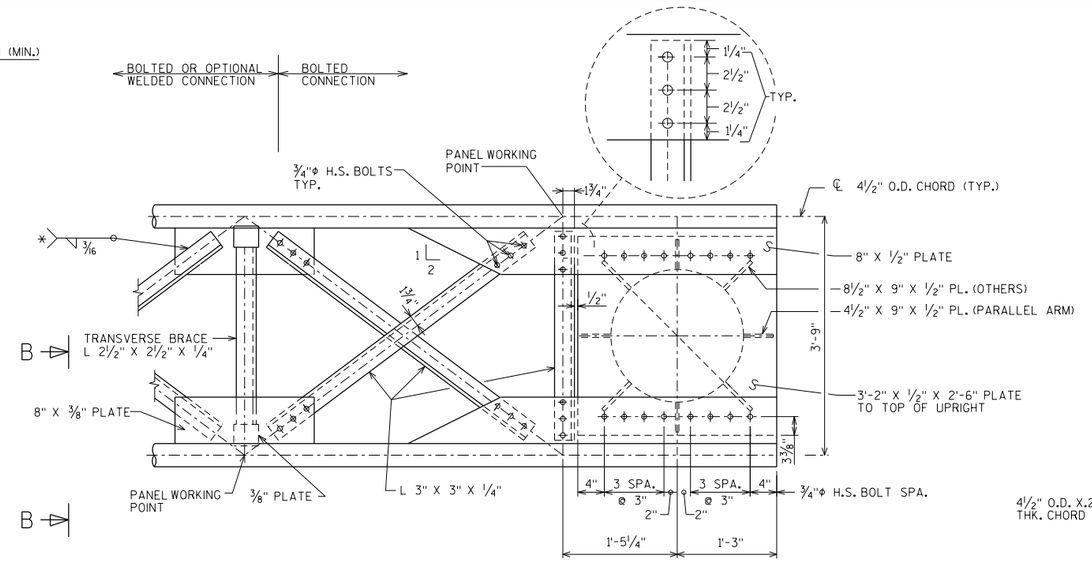


* ANGLE	WELD LENGTH (MIN.)
L 2 1/2" X 2 1/2" X 1/4"	7"
L 3" X 3" X 1/4"	8"

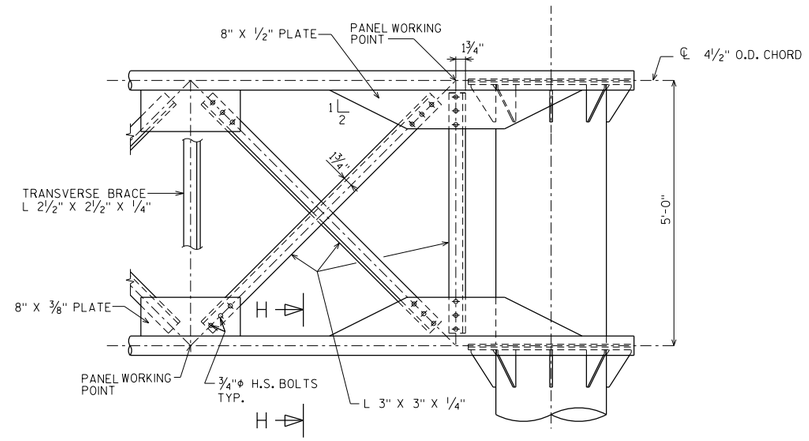
SECTION B-B



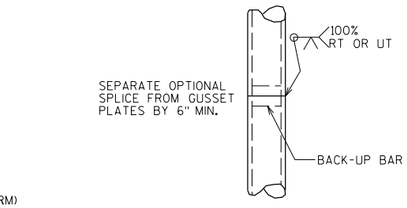
SECTION H-H



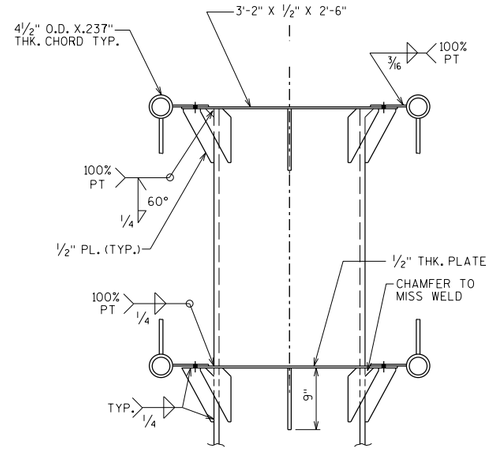
PLAN TRUSS TO UPRIGHT



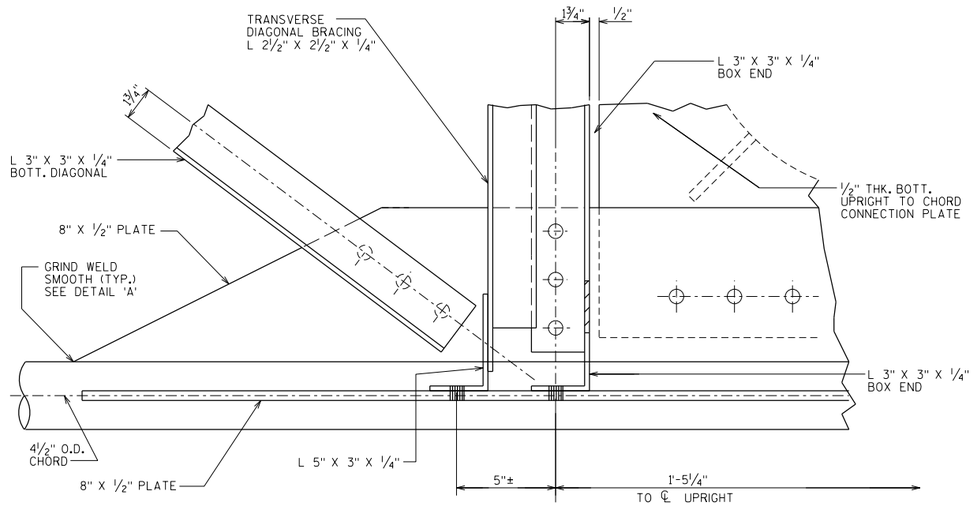
ELEVATION TRUSS TO UPRIGHT



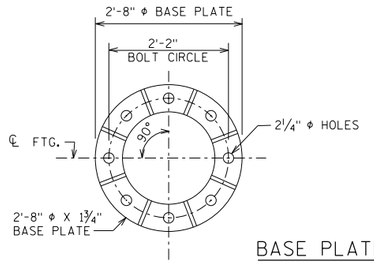
OPTIONAL COLUMN
OR CHORD SPLICE
DETAIL

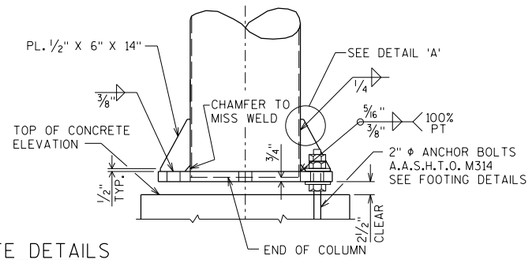


END VIEW
TRUSS TO UPRIGHT

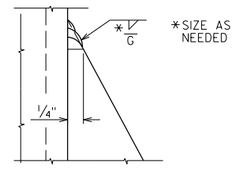


SECTION G-G
(LOOKING DOWN @ BOTT. HORIZ. PLANE @ FRONT CHORD)





BASE PLATE DETAILS



DETAIL 'A'

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-32-45

DRAWN BY DLF | PLANS CK'D. CJB

GALVANIZED STEEL
CANTILEVER
SIGN TRUSS DETAILS

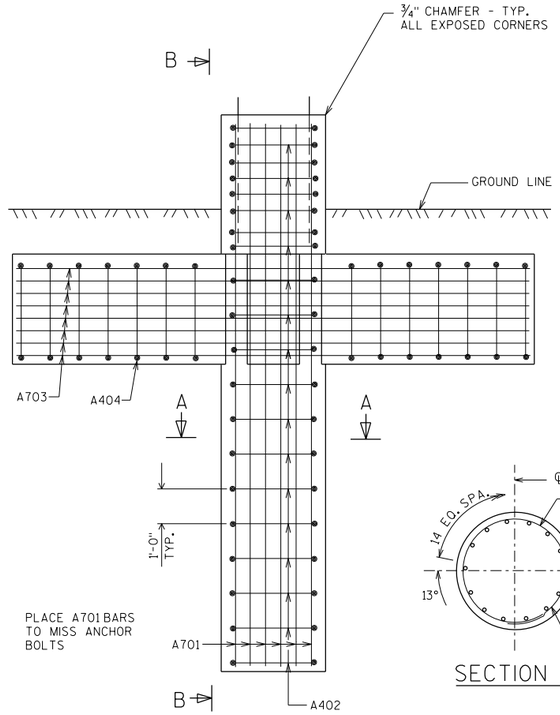
SHEET 3 OF 5
202

8

8

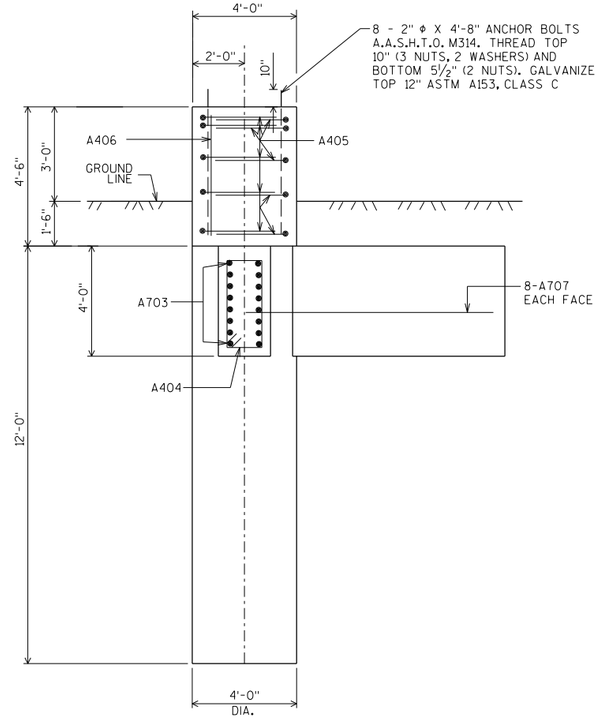
PLOT DATE: 9/25/2020
PLOT TIME: 7:45:32 AM
FILE NAME : S:\UZ\W\Wtsw\2513\5-final-dsgn\5i-drawings\20-Struct\s-32-45\bridge\s32045w39ll.dgn

STATE PROJECT NUMBER
7575-00-71

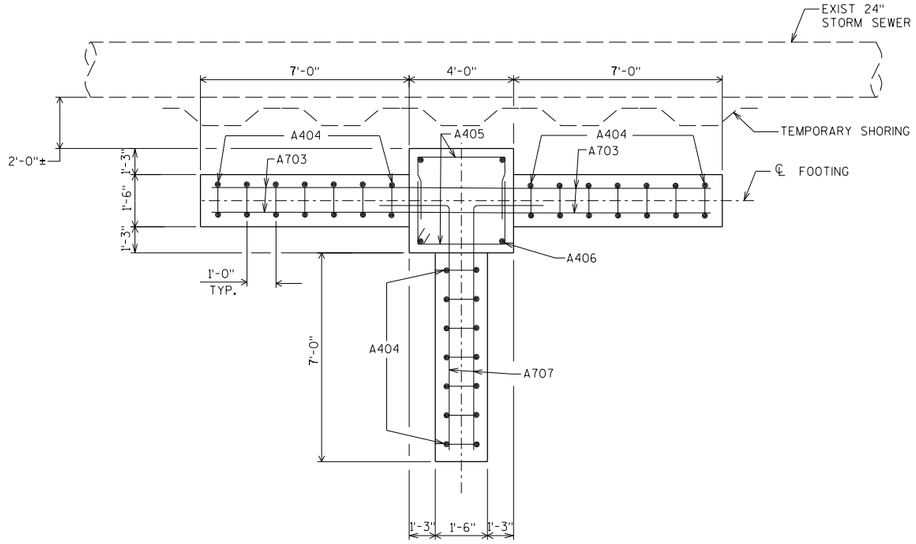


ELEVATION
(13 C.Y.)

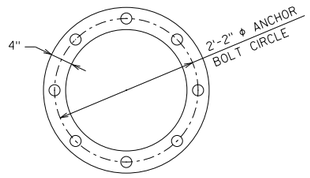
SECTION A



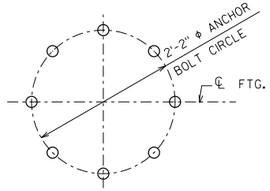
SECTION B

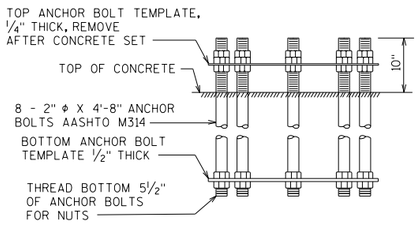


PLAN



TOP VIEW OF TOP &
BOTTOM TEMPLATES





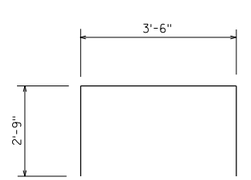
ANCHOR BOLT DETAILS

NOTE:
THE FIRST DIGIT OF A BAR MARK
SIGNIFIES THE BAR SIZE.

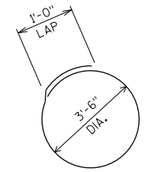
BILL OF BARS

1755 LB.

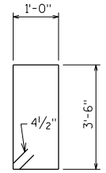
BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	CUT. DIAG.	BUN-DLE	LOCATION
A701		14	16'-0"				FOOTING - COLUMN/TOP
A402		16	12'-0"	X			FOOTING - COLUMN/TOP
A703		16	17'-6"				FOOTING - WINGS
A404		21	9'-6"	X			FOOTING - WINGS
A405		10	8'-10"	X			FOOTING - TOP
A406		4	4'-0"				FOOTING - TOP - COLUMNS
A707		16	12'-0"	X			FOOTING - WINGS



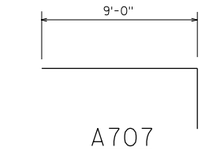
A405



A402



A404
(STIRRUP)



A707

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
BAR STEEL REINFORCEMENT SHALL
BE EMBEDDED 3" CLEAR UNLESS
DETAILED OTHERWISE.

ALLOWABLE DESIGN STRESSES

CONCRETE MASONRY ——— f'c=3,500 P.S.I.
HIGH STRENGTH BAR STEEL REINFORCEMENT,
GRADE 60 ——— fy=60,000 P.S.I.
ANCHOR BOLTS A.A.S.H.T.O. M314 ——— fy=55,000 P.S.I.

FOUNDATION DATA

ALLOWABLE SOIL BEARING PRESSURE = 2T/SQ.FT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-32-45

DRAWN BY DLF | PLANS CK'D. CJB

CANTILEVER
TRUSS FOOTING

SHEET 4 OF 5
203

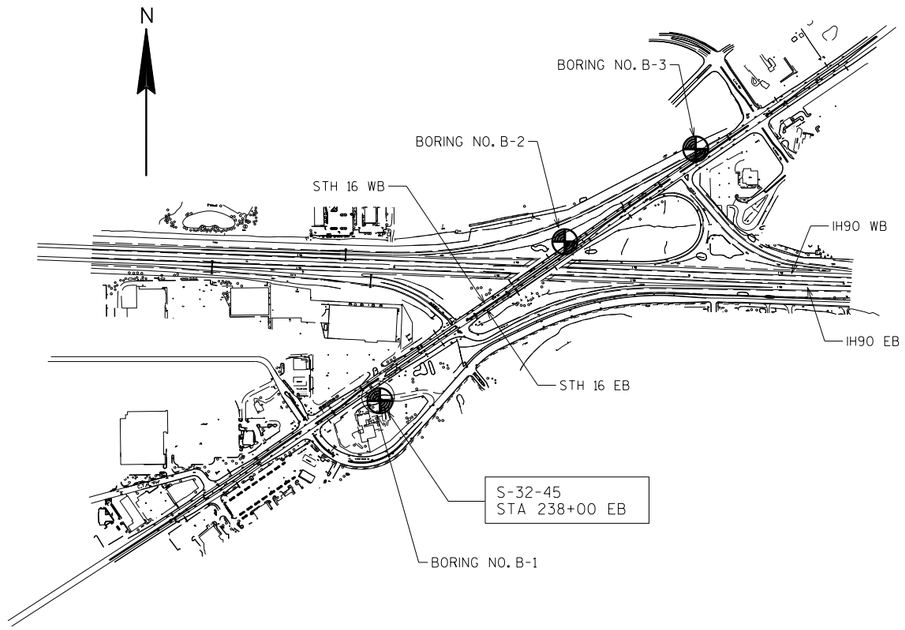
8

8

PLOT DATE: 9/25/2020 PLOT TIME: 7:45:32 AM

FILE NAME : S:\UZ\W\Mt+sw\2513\5-final-dsgn\5i-drawings\20-Struct\s-32-45\bridge\s32045sw3912.dgn

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
B-1	08/12/2013	-	-
B-2	08/12/2013	-	-
B-3	08/12/2013	-	-



SOIL BORINGS PERFORMED BY:

MIDWEST ENGINEERING SERVICES, INC.
12839 30TH AVENUE, SUITE A
CHIPPEWA FALLS, WISCONSIN 54729
PH: (715) 738-2770
FAX: (715) 738-2771

REPORT BY:
JEFFREY A MANNINEN
BRANCH MANAGER, CHIPPEWA FALLS

STATE PROJECT NUMBER

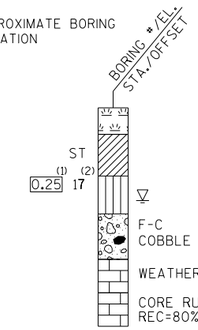
7575-00-71

MATERIAL SYMBOLS

ASPHALT, TOPSOIL, PEAT, CONCRETE, FILL, GRAVEL, SAND, CLAY, SILT, BOULDERS OR COBBLES, LIMESTONE, BEDROCK (UNKNOWN), SHALE, SANDSTONE, IGNEOUS/META

LEGEND OF BORING

= APPROXIMATE BORING LOCATION



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

▽ AT TIME OF DRILLING
▼ END OF DRILLING
▼ AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

BORING B-1 - EL 715.2
STA 238+00± EB,
27'± RT

26	0 TO 4": BROWN SILTY, SANDY TOPSOIL
36	LIGHT BROWN SAND, WITH LIMESTONE AND ASPHALT FRAGMENTS, LITTLE SILT, DAMP TO MOIST (FILL)
13	
10	BROWN SANDY SILT, MOIST
14	LIGHT BROWN FINE SAND, WITH SILT SEAMS, DAMP
16	
11	LIGHT BROWN FINE SAND, TRACE SILT, DAMP
17	LIGHT GRAYISH BROWN FINE SAND, TRACE SILT AND GRAVEL, DAMP

END OF BORING @ 21.5 FEET

NOTE
WATER LEVEL DURING DRILLING:
NO GROUNDWATER WAS ENCOUNTERED WHILE DRILLING OR UPON COMPLETION.

BORING B-2 - EL 714.2
STA 254+00± EB,
80'± LT

12	0 TO 3": BROWN SILTY, SANDY TOPSOIL
13	LIGHT BROWN FINE SAND, WITH SILT LAYERS, TRACE ROOT HAIRS, DAMP (POSSIBLE FILL)
6	
17	BROWN SILTY CLAY, LITTLE SAND, MOIST
9	BROWN FINE SAND, TRACE TO LITTLE SILT, MOIST
10	
12	LIGHT BROWN FINE SAND, TRACE SILT, MOIST TO VERY MOIST
15	TAN FINE SAND, TRACE SILT, DAMP

END OF BORING @ 21.5 FEET

NOTE
WATER LEVEL DURING DRILLING:
NO GROUNDWATER WAS ENCOUNTERED WHILE DRILLING OR UPON COMPLETION.

BORING B-3 - EL 715.9
STA 264+50± EB,
100'± LT

5	0 TO 12": DARK BROWN CLAYEY TOPSOIL
6	BROWN SILTY CLAY, TRACE SAND AND GRAVEL, MOIST
14	GRAY AND BROWN MOTTLED SILTY CLAY, TRACE SAND, VERY MOIST
5	
6	BROWN FINE SAND, TRACE SILT AND CLAY, VERY MOIST
10	
10	BROWN AND TAN SILT, LITTLE SAND, TRACE CLAY, VERY MOIST
8	TAN AND LIGHT ORANGE FINE SAND, TRACE SILT, DAMP

END OF BORING @ 21.5 FEET

NOTE
WATER LEVEL DURING DRILLING:
NO GROUNDWATER WAS ENCOUNTERED WHILE DRILLING OR UPON COMPLETION.

720 710 700 690 680 670 660 650 640 630

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-32-45

DRAWN BY DLF | PLANS CK'D. CJB

SUBSURFACE EXPLORATION

SHEET 5 OF 5

204

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PLOT DATE: 9/25/2020 PLOT TIME: 7:45:33 AM

FILE NAME : S:\UZ\W\Wi+sw\125131\5-final-dsgn\5i-drawings\20-Struct\s-32-45\bridge\s32045bi.dgn

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov