WIS

MAY 2019

PROJECT ID: 6280-00-70

COUNTY: PORTAGE

ORDER OF SHEETS

TOTAL SHEETS = 116

36

N

DESIGN DESIGNATION

A.A.D.T.	2020	=	19200
A.A.D.T.	2040	=	22800
D.H.V.		=	11.3 %
D.D.		=	59/41
T.		=	5.4%
DESIGN SPEED		=	40 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'EB')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

C STEVENS POINT, MAIN STREET

PLOVER RIVER, B-49-41

STH 66

PORTAGE COUNTY

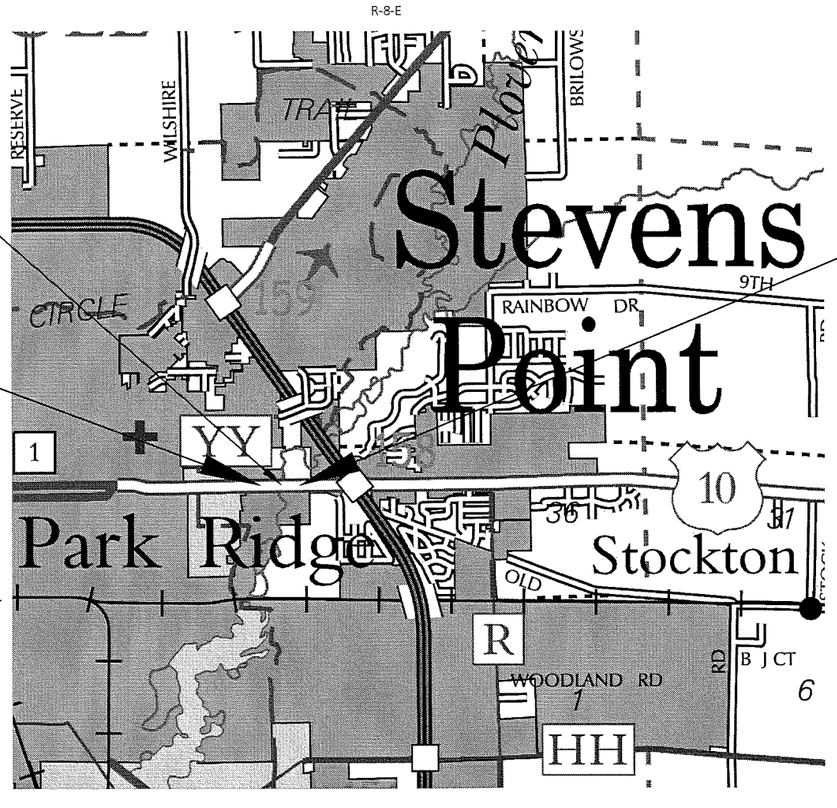
STATE PROJECT NUMBER
6280-00-70

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6280-00-70	WISC 2019307	1

STRUCTURE B-49-41
STA 66+76.77 - STA 67+39.71

BEGIN PROJECT
STA 66+31
X = 175352.986
Y = 202971.879

END PROJECT
STA 67+85
X = 175506.976
Y = 202973.684



LAYOUT

SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 0.029 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, PORTAGE 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 NAVD 88 (2012).

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	NC REGION
Designer	ERIN CHRISTIANSON
Project Manager	TIMOTHY HANLEY
Regional Examiner	CHERYL SIMON
Regional Supervisor	NICHOLE LYSNE

APPROVED FOR THE DEPARTMENT

DATE: 1-28-19 (Signature)

E

FILE NAME : N:\PDS\C3D\62800000\SHEETSPLAN\010101-TI.DWG

PLOT DATE : 1/22/2019 6:57 AM PLOT BY : CHRISTIANSON, ERIN M PLOT NAME :

GENERAL NOTES

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

TOPSOIL SHALL BE PLACED 1" BELOW THE TOP OF ADJACENT CONCRETE CURBS OR SIDEWALKS.

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

PURSUANT TO CHAPTER 59 OF THE WISCONSIN STATUTES, THE CONTRACTOR SHALL CAREFULLY MAKE A SEARCH FOR EVIDENCE OF A LANDMARK IN ALL AREAS WHERE SUCH A LANDMARK MAY EXIST.

THE CONTRACTOR IS TO WORK WITH UTMOST CARE AND PROTECT ALL SURVEY MARKERS. REMOVAL OF ANY SURVEY MARKER IS TO BE WITH THE APPROVAL OF THE ENGINEER.

DNR

CASEY JONES
473 GRIFFITH AVENUE
WISCONSIN RAPIDS, WI 54494
PHONE: (715) 421-7867 WORK
E-MAIL: casey.jones@wisconsin.gov

UTILITIES

AT&T WISCONSIN - COMMUNICATION LINE

CHUCK BARTELT
70 E DIVISION STREET
FOND DU LAC, WI 54935
PHONE: (920) 929-1013 WORK
(920) 410-5104 MOBILE
E-MAIL: CB1461@ATT.COM

NSIGHT - COMMUNICATION LINE

RICK VINCENT
450 SECURITY BOULEVARD
GREEN BAY, WI 54313
PHONE: (920) 617-7316 WORK
E-MAIL: rick.vincent@nsight.com

WINDSTREAM KDL, LLC - COMMUNICATION LINE

DENNIS RUESS
1858 WRIGHT STREET
MADISON, WI 53704
PHONE: (608) 512-5587 WORK
E-MAIL: dennis.ruess@windstream.com

CHARTER COMMUNICATIONS - COMMUNICATION LINE

RUDI RUDIGER
5024 HEFFRON STREET
STEVENS POINT, WI 54481
PHONE: (715) 204-5339 MOBILE
E-MAIL: rudi.rudiger@charter.net

WISCONSIN PUBLIC SERVICE CORPORATION - ELECTRICITY

DAVE PETERSON
3300 N MAIN STREET
OSHKOSH, WI 54901
PHONE: (920) 236-5910 WORK
PHONE: (920) 680-2036 MOBILE
E-MAIL: david.peterson@wisconsinpublicservice.com

WISCONSIN PUBLIC SERVICE CORPORATION - GAS

FRANCIS MARTIN
1700 SHERMAN STREET
WAUSAU, WI 54402
PHONE: (715) 848-7387 WORK
PHONE: (715) 573-2025 MOBILE
E-MAIL: francis.martin@wisconsinpublicservice.com

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

2

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	GENERAL NOTES	SHEET: 2	E

2

N

PLOVER RIVER

BEGIN CONSTRUCTION
STA 63+35

END CONSTRUCTION
STA 70+29

STH 66/MAIN STREET (WB)

B-49-41

64+00 65+00 66+00 67+00 68+00 69+00 70+00 71+00

STH 66/MAIN STREET (EB)

SIDEWALK

BEGIN PROJECT
STA 66+31

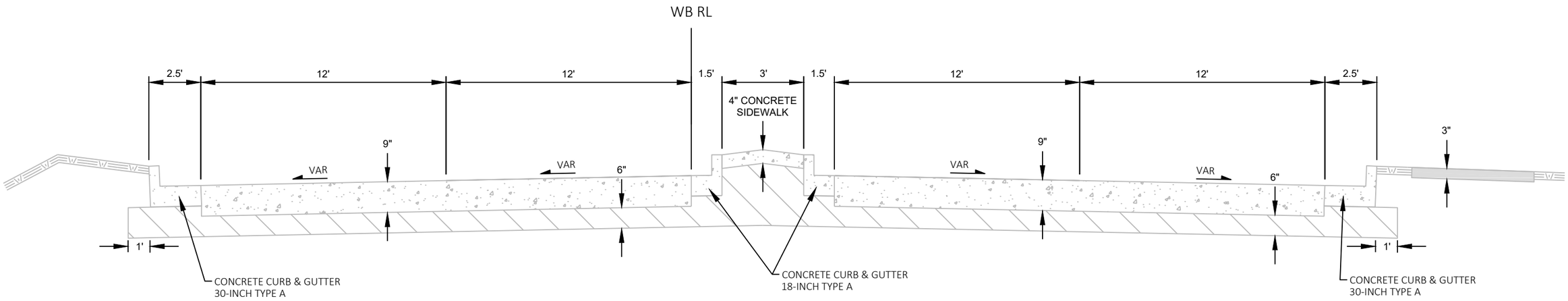
END PROJECT
STA 67+85

PLOVER RIVER

FOOTBRIDGE

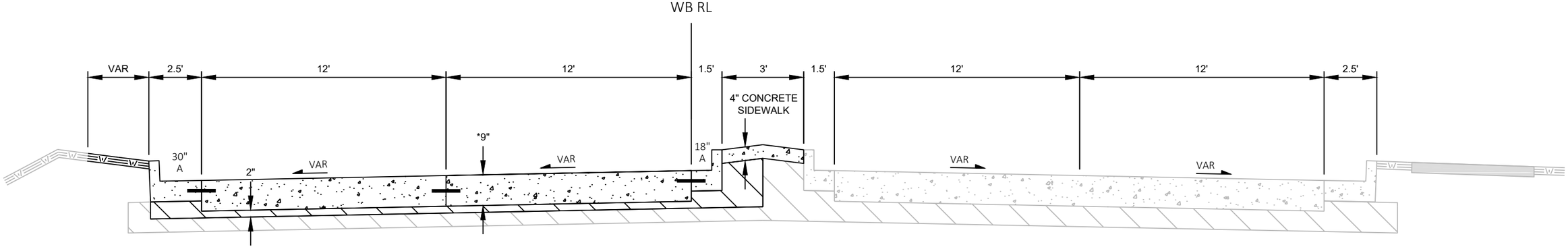
PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : N:\PDS\C3D\62800000\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - Overview
PLOT DATE : 1/22/2019 6:58 AM
PLOT BY : CHRISTIANSON, ERIN M
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42



EXISTING STH 66 TYPICAL SECTION

STA 66+31 TO STA 66+77
STA 67+40 TO STA 67+85



PROPOSED STH 66 TYPICAL SECTION

STA 66+31 TO STA 66+77
STA 67+40 TO STA 67+85

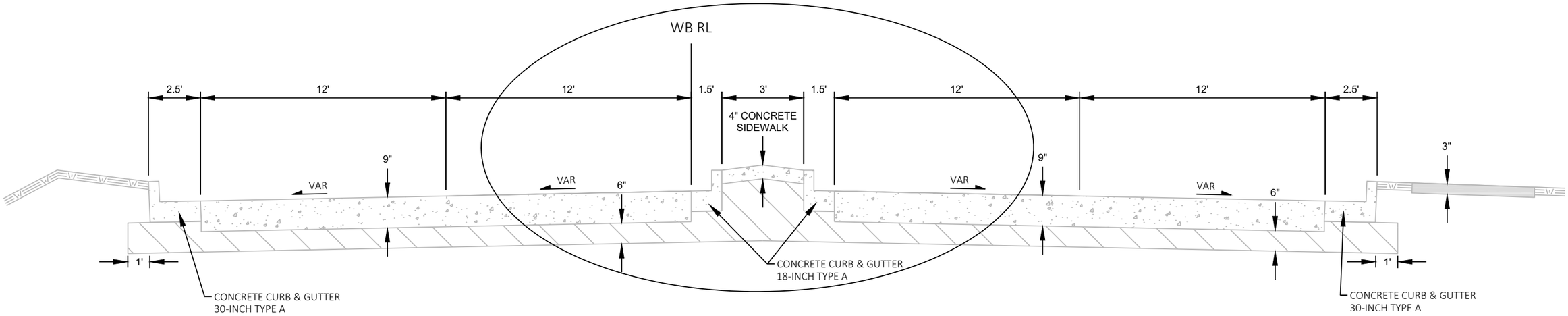
LEGEND

- CONCRETE PAVEMENT 9-INCH
- BASE AGGREGATE DENSE, 1 1/4-INCH
- PAVEMENT TIE REQUIRED
- TOPSOIL, SEED AND FERTILIZER
- EXISTING CONCRETE PAVEMENT (DOWELED)
- EXISTING ASPHALT SURFACE SIDEWALK
- EXISTING CRUSHED AGGREGATE BASE COURSE
- EXISTING GROUND

* CONCRETE APPROACH SLAB (12-INCH DEPTH) FROM STA 66+62 TO 66+77 AND STA 67+40 TO STA 67+55

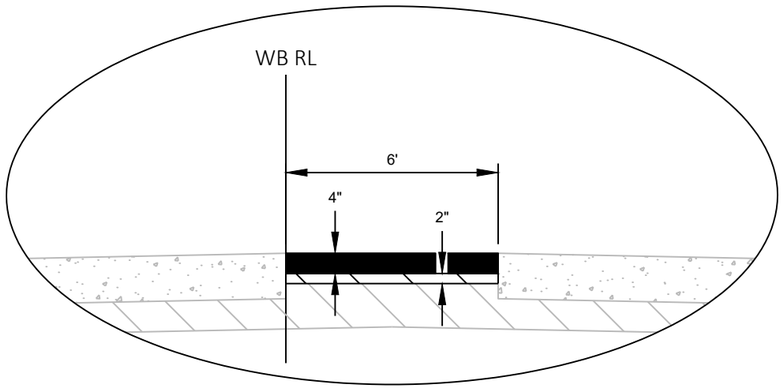
PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	TYPICAL SECTIONS	SHEET 4	E

2



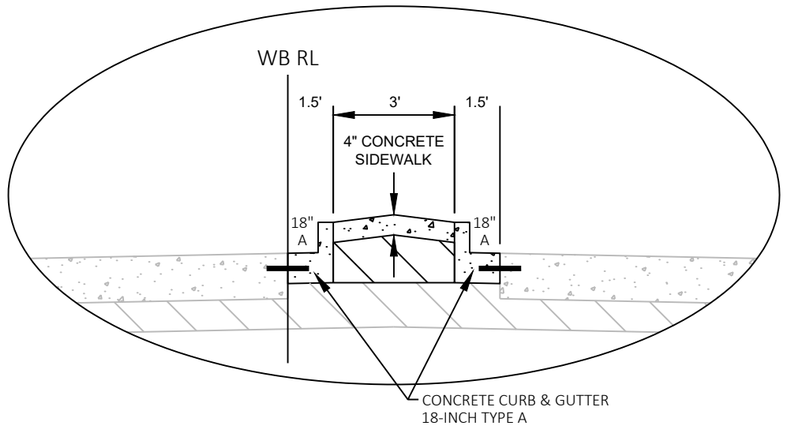
EXISTING TYPICAL SECTION

STA 63+35 TO STA 65+19
STA 68+46 TO STA 70+29



TEMPORARY CROSSOVER TYPICAL SECTION

STA 63+35 TO STA 65+19
STA 68+46 TO STA 70+29



PROPOSED TYPICAL SECTION

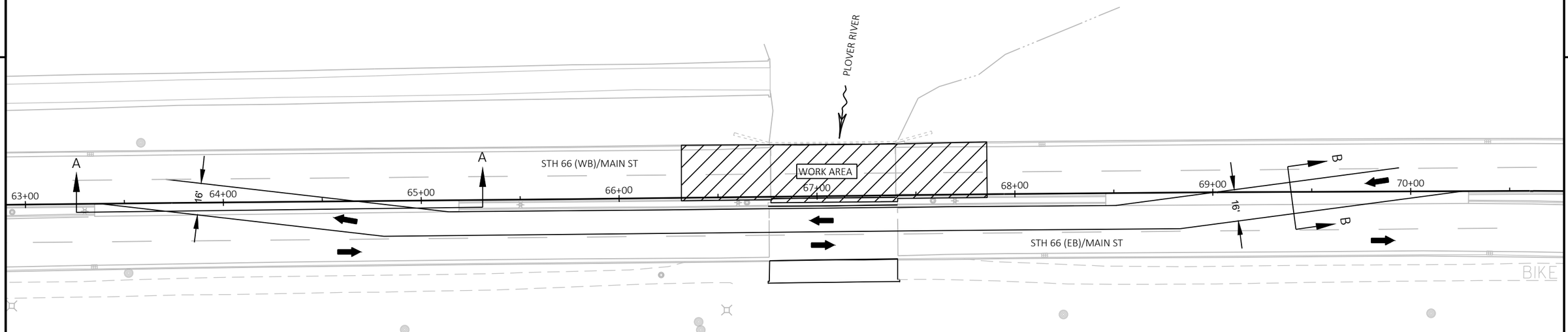
STA 63+35 TO STA 65+19
STA 68+46 TO STA 70+29

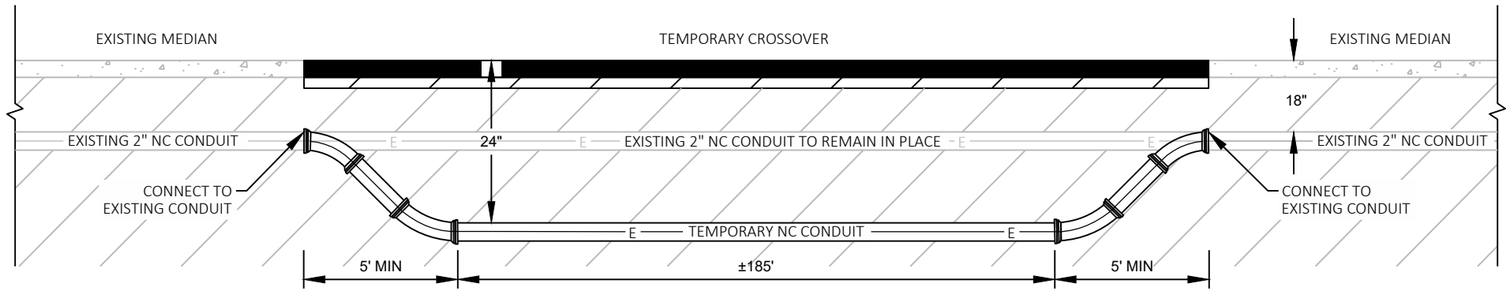
NOTE:
1. CONSTRUCT TEMPORARY MEDIAN CROSSOVER PRIOR TO SWITCHING TRAFFIC
2. ASPHALTIC SURFACE TEMPORARY SHALL BE PLACED IN 2 LIFTS
3. AFTER CONSTRUCTION OF B-49-41, REMOVE TEMPORARY MEDIAN CROSSOVER REPLACE CONCRETE CURB & GUTTER AND CONCRETE SIDEWALK (NEW PAVEMENT TIES ARE REQ'D)

LEGEND

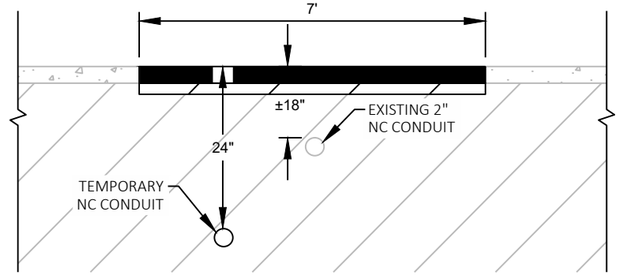
- CONCRETE SIDEWALK 4-INCH
- BASE AGGREGATE DENSE, 1 1/4-INCH
- PAVEMENT TIE REQUIRED
- EXISTING CONCRETE PAVEMENT (DOWELED)
- EXISTING ASPHALT SURFACE SIDEWALK
- EXISTING CRUSHED AGGREGATE BASE COURSE
- EXISTING GROUND

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	TYPICAL SECTIONS	SHEET 5	E





SECTION A - A



SECTION B - B

LEGEND

- TEMPORARY ASPHALT
- BASE AGGREGATE DENSE, 1 1/4-INCH
- EXISTING CONCRETE SIDEWALK
- EXISTING BASE AGGREGATE DENSE

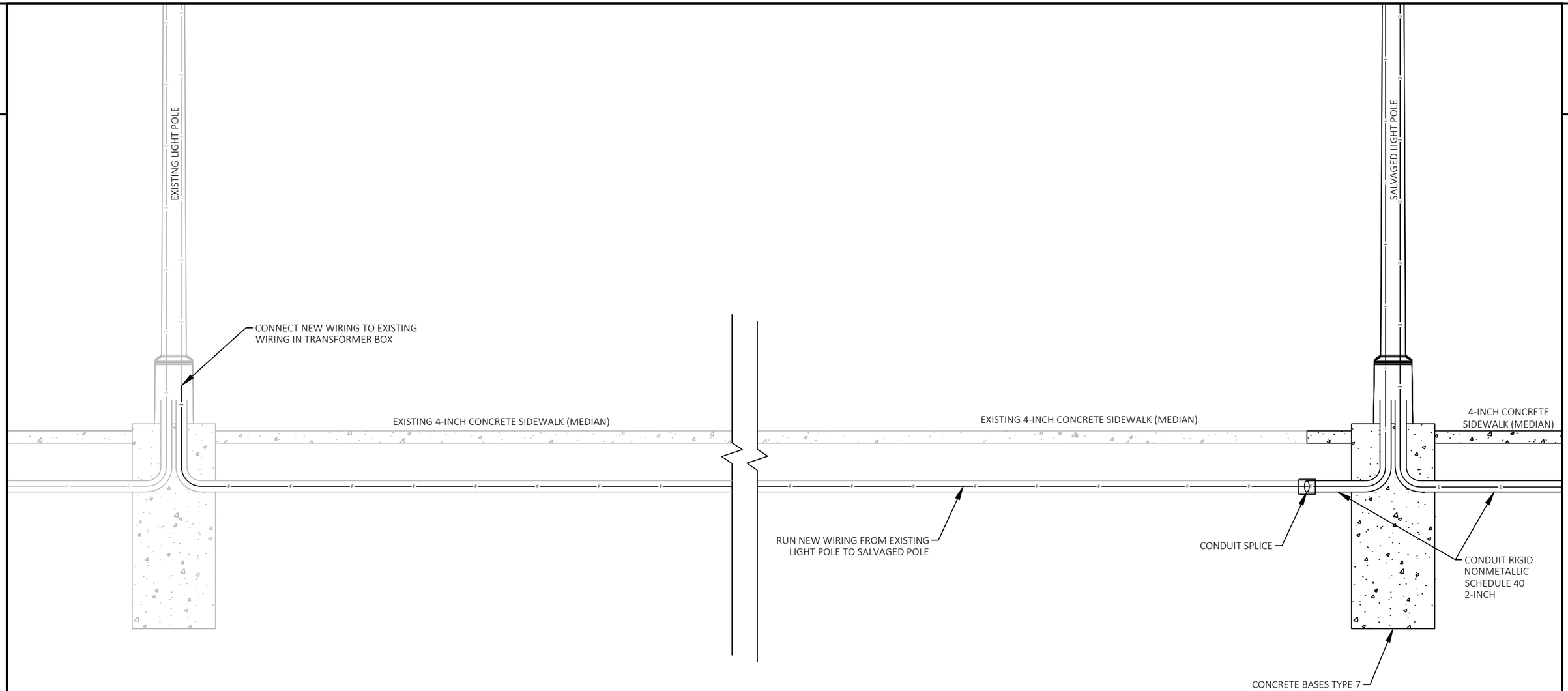
TEMPORARY CONDUIT ADJUSTMENT

STA 63+35 TO STA 65+19
STA 68+46 TO STA 70+29

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	CONSTRUCTION DETAILS	SHEET 6	E

FILE NAME : N:\PDS\C3D\62800000\SHEETSPLAN\021001-CD.DWG
LAYOUT NAME - 01-cd
PLOT DATE : 1/22/2019 7:00 AM
PLOT BY : CHRISTIANSON, ERIN M
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

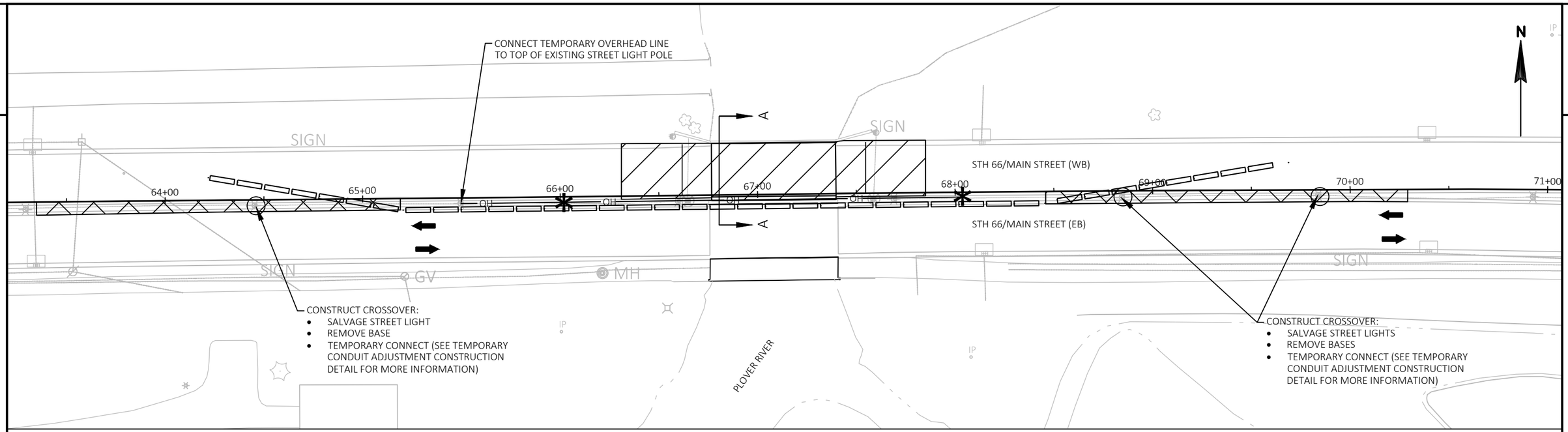
2



WIRING DETAIL FOR SALVAGE LIGHT POLE CONNECTION

SALVAGED LIGHT POLE TO EXISTING LIGHT POLE LOCATIONS:

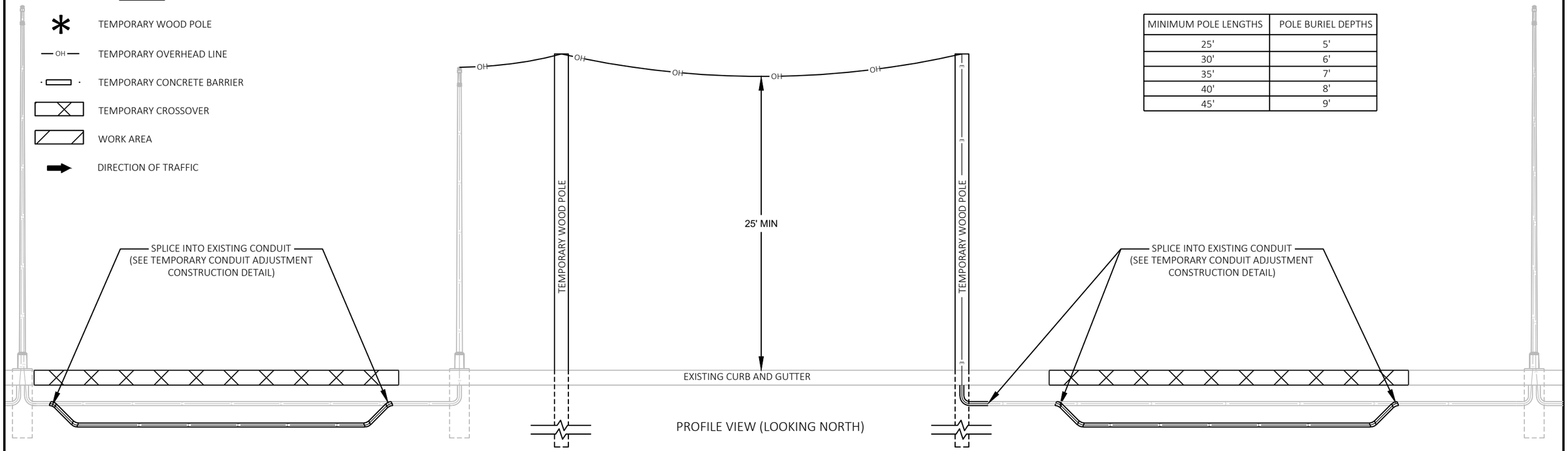
STA 63+30 TO STA 64+40
STA 64+40 TO STA 65+50
STA 65+50 TO STA 66+60
STA 67+60 TO STA 68+78
STA 69+85 TO STA 70+93



LEGEND

- TEMPORARY WOOD POLE
- OH — TEMPORARY OVERHEAD LINE
- TEMPORARY CONCRETE BARRIER
- TEMPORARY CROSSOVER
- WORK AREA
- DIRECTION OF TRAFFIC

MINIMUM POLE LENGTHS	POLE BURIEL DEPTHS
25'	5'
30'	6'
35'	7'
40'	8'
45'	9'

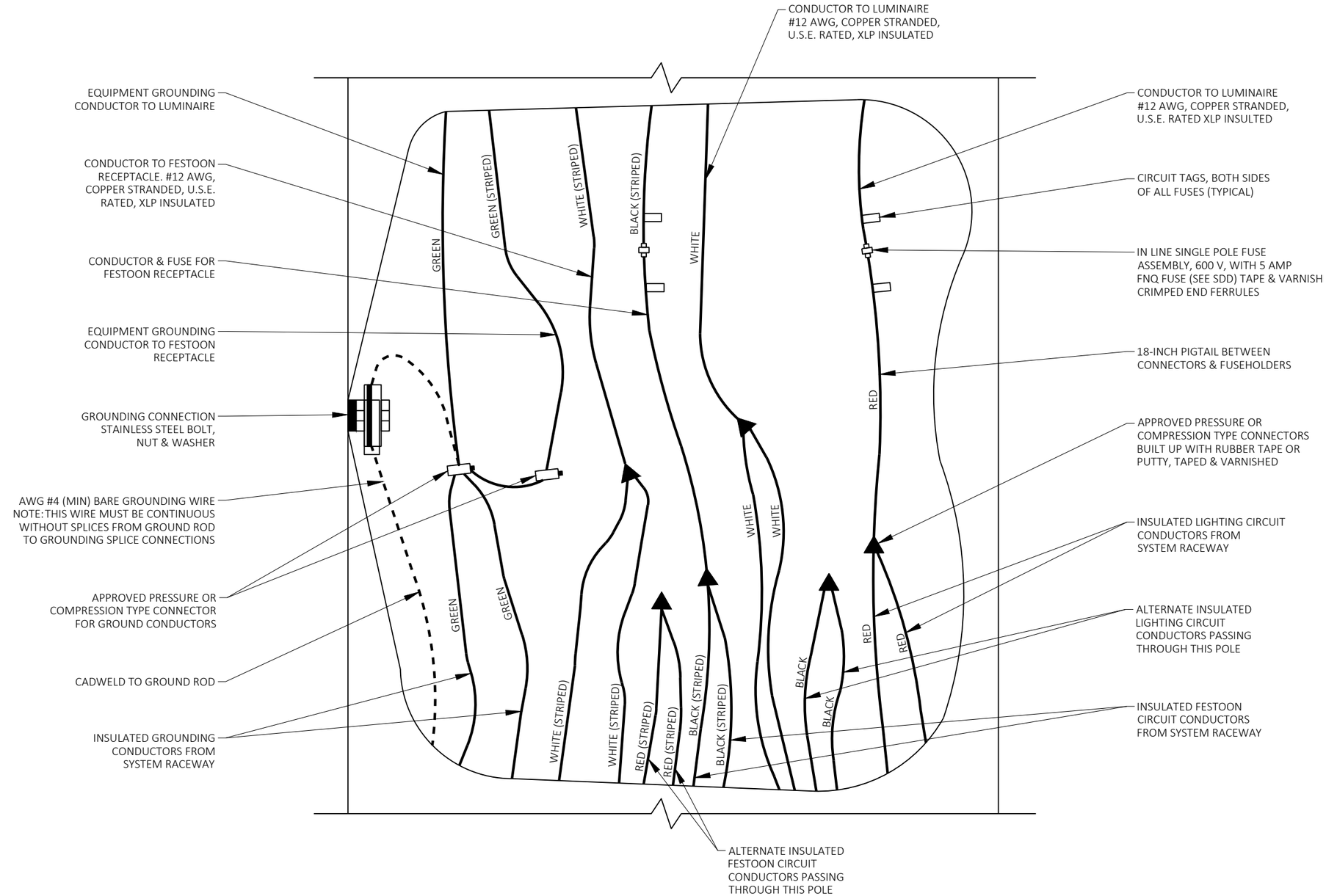


TEMPORARY WOOD POLE AND WIRING DETAIL

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	CONSTRUCTION DETAILS	SHEET 8	E

FILE NAME : N:\PDS\C3D\62800000\SHEETSPLAN\021003-CD.DWG
LAYOUT NAME - 03-cd
PLOT DATE : 1/22/2019 7:01 AM PLOT BY : CHRISTIANSON, ERIN M PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

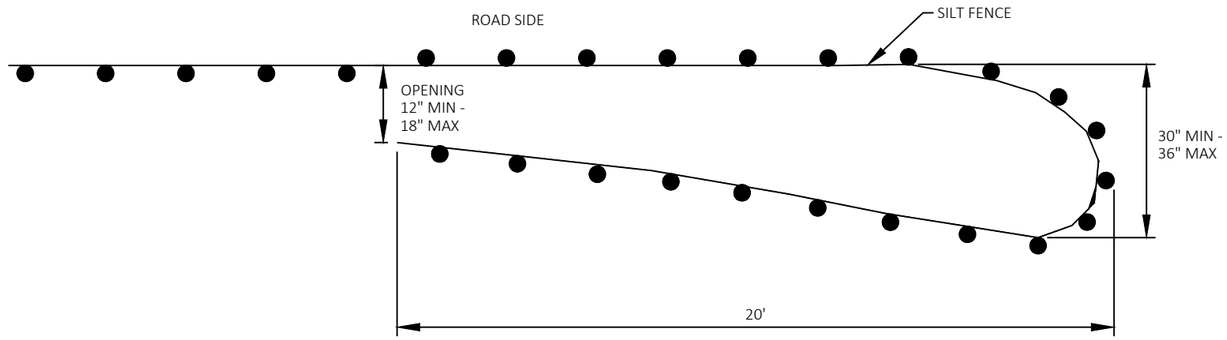
2



LIGHTING UNIT POLE WIRING

120 / 240 VOLT, 3 WIRE - LIGHTING
120 / 240 VOLT, 3 WIRE - RECEPTACLES

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	CONSTRUCTION DETAILS	SHEET 9	E



PLAN VIEW

GENERAL NOTES:

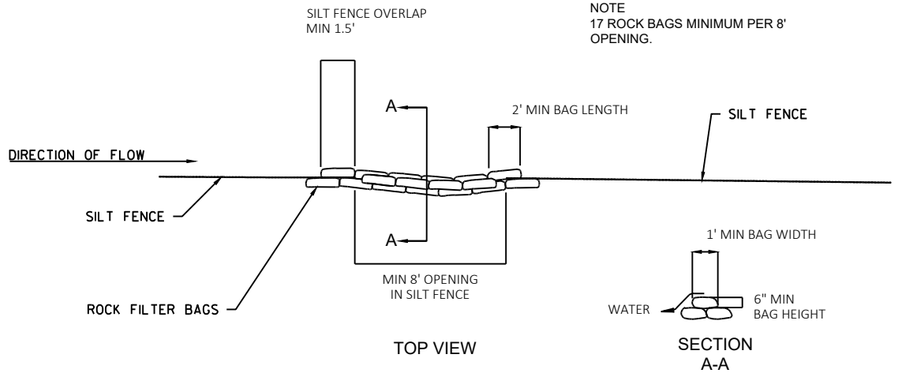
SILT FENCE POSTS FOR THE TURN-AROUND SHOULD BE ON THE OUTSIDE OF THE TURN-AROUND. AND TRENCHED IN ACCORDING TO SILT FENCE REQUIREMENTS.

TEMPORARY SMALL ANIMAL TURN-AROUND

RUNOFF COEFFICIENT TABLE

A	HYDROLOGIC SOIL GROUP											
	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 = 0.41 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = < 0.01 ACRES (TCGP IS NOT REQUIRED)



ROCK BAGS USED FOR SILT FENCE RELIEF

2

LEGEND

- EROSION MAT URBAN CLASS I TYPE A
- SILT FENCE
- RIP RAP OR STONE DITCH CHECK
- SLOPE INTERCEPT
- INLET PROTECTION
- SURFACE WATER FLOW
- SILT FENCE TURTLE TURN-AROUND

N

PLOVER RIVER

SEE BRIDGE PLAN FOR RIPRAP INFORMATION

STH 66 (WB)/MAIN ST

STH 66 (EB)/MAIN ST

64+00 65+00 66+00 67+00 68+00 69+00 70+00 71+00

SIDEWALK

SIDEWALK

PLOVER RIVER

FOOTBRIDGE

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	EROSION CONTROL	SHEET 11	E

FILE NAME : N:\PDS\C3D\62800000\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 01_ec

PLOT DATE : 1/22/2019 7:06 AM PLOT BY : CHRISTIANSON, ERIN M PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

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PLOVER RIVER

3-INCH CONDUIT
UNDER ROADWAY

RUN NEW WIRE TO
TOP OF EXISTING
STREET LIGHT POLE

LPB-I8

LPB-I9

6|3|6|3|4|1

10' FROM
WINGWALL END

10' FROM
WINGWALL END

STH 66/MAIN STREET (WB)

STH 66/MAIN STREET (EB)

64+00

65+00

66+00

67+00

68+00

69+00

70+00

71+00

SIGN

GV

MH

IP

LPB-I7

LPB-I10

I-A-13
STA 63+30
II-70-32-6
(EXISTING POLE)

I-C-1
STA 64+40
II-70-32-6

I-D-2
STA 65+50
II-70-32-6
(EXISTING POLE)

I-C-3
STA 66+60
II-70-32-6

I-D-4
STA 67+60
II-70-32-6

I-C-5
STA 68+78
II-70-32-6

I-D-6
STA 69+85
II-70-32-6

I-C-7
STA 70+94
II-70-32-6
(EXISTING POLE)

LEGEND

- SALVAGED STREET LIGHT POLE
- PULL BOX NON-CONDUCTIVE 24X42-INCH
- E — ELECTRICAL WIRE LIGHTING 4 AND 6 AWG
- CONDUIT SPLICE

I-C-1
STA 64+40
II-70-32-6

- SERVICE CABINET DESIGNATOR
- CIRCUIT
- POLE NUMBER
- LOCATION
- LUMINAIRE ARM LENGTH IN FEET
- NOMINAL MOUNTING HEIGHT
- LAMP WATTAGE
- IES DISTRIBUTION TYPE

6|3|6|3|4|1

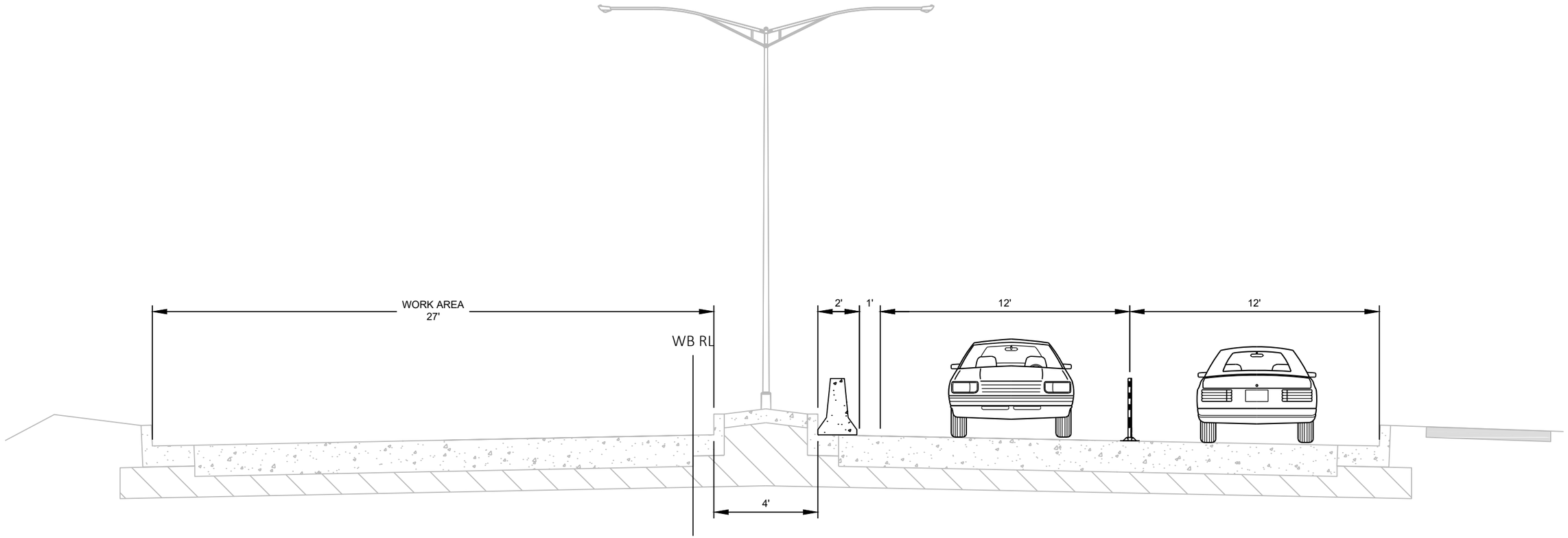
- CONDUCTOR SIZE
- QUANTITY OF CONDUCTORS
- GROUNDING CONDUCTOR
- FESTOON CONDUCTORS
- LIGHTING CONDUCTORS

FOOTBRIDGE

* CONNECT TO CONDUIT INSTALLED WITHIN PARAPET (SEE STRUCTURE PLAN)

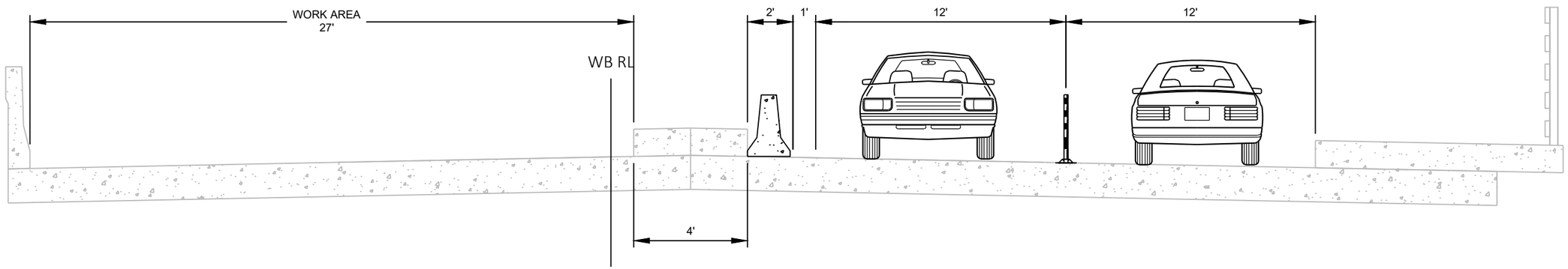
PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	LIGHTING	SHEET 12	E

2



STH 66 TYPICAL SECTION

STA 66+31 TO STA 66+77
STA 67+40 TO STA 67+85



STH 66 TYPICAL SECTION

STA 66+77 TO STA 67+40

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	TRAFFIC CONTROL - TRAFFIC SHIFT TYPICALS	SHEET 13	E

2

PCMS INSTALLED 7 DAYS PRIOR TO CLOSURE

PHASE 1 | PHASE 2

ROADWORK BEGINS XX/XX	USE ALT ROUTE

PORTABLE CHANGEABLE MESSAGE SIGN LOCATION DETAILS

STATION 54+50

MAX. 11' WIDTH
W12-52

0.3 MILES AHEAD
W57-52
36"X24"

EAST 66
M3-2 24"X12"
M1-6 24"X24"

MAX. 11' WIDTH
W12-52

INSTALL AT THE INTERSECTION OF STH 66 (EB) & CTH YY
(SEE SDD TRAFFIC CONTROL, ADVANCED WIDTH RESTRICTION SIGNING FOR MORE INFORMATION)

ROAD WORK AHEAD
W20-1A

500' MAX OR AT
LAST INTERSECTION
WHICH EVER IS CLOSER

N

RIDGE RD

SPEED LIMIT 35

IP

STH 66 (WB)/MAIN ST

STH 66 (EB)/MAIN ST

50+00 51+00 52+00 53+00 54+00 55+00 56+00 57+00

SIDEWALK

SIGN

MB

PARK ENTRANCE

MAX. 11' WIDTH
W12-52

500'

ROAD WORK AHEAD
W20-1A

200'

SPEED LIMIT 30
W03-5

200'

LEFT LANE CLOSED AHEAD
W20-5A

400'

SUNRISE AVE

ROAD WORK AHEAD
W20-1A

500' MAX OR AT
LAST INTERSECTION
WHICH EVER IS CLOSER

LEGEND

- TYPE III BARRICADE
- 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
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- REMOVE PAVEMENT MARKING
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST

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

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	STAGE CONSTRUCTION - STAGE 1	SHEET 14	E

2

LEGEND

- TYPE III BARRICADE
- 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
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- REMOVE PAVEMENT MARKING
- WORK AREA
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST

N

2

MEDIAN CROSSOVER STA 63+35 TO STA 65+19
REMOVE EXISTING CURB & GUTTER AND MEDIAN
REPLACE WITH TEMPORARY ASPHALT

END ROAD WORK
G20-2A
48"X24"

SPEED LIMIT 40 COVER
SPEED LIMIT 30
R2-1
24"X30"

TEMPORARY PAVEMENT MARKING
REMOVABLE TAPE 4-INCH, YELLOW

STH 66 (WB)/MAIN ST

STH 66 (EB)/MAIN ST

58+00 59+00 60+00 61+00 62+00 63+00 64+00 65+00

25' 25' 25' 50' 50'

6:1 TAPER

SIDEWALK

200'

180' TAPER
STA 60+75 TO STA 62+55

400'

W04-2L

W6-3
36"X36"

SAWCUT REQ'D
STA 63+35 TO STA 65+19
MEDIAN & CURB AND GUTTER

SALVAGE EXISTING
LIGHT POLE

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

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	STAGE CONSTRUCTION - STAGE 1	SHEET	E

FILE NAME : N:\PDS\C3D\62800000\SHEETSPLAN\026001-S1.DWG
LAYOUT NAME - s1-02
PLOT DATE : 1/22/2019 7:13 AM
PLOT BY : CHRISTIANSON, ERIN M
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

2

LEGEND

- TYPE III BARRICADE
- 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
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- REMOVE PAVEMENT MARKING
- WORK AREA
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST

N

TO BE REMOVED BY OTHERS

PLOVER RIVER

SALVAGE EXISTING LIGHT POLES

MEDIAN CROSSOVER STA 68+46 TO STA 70+29
REMOVE EXISTING CURB & GUTTER AND MEDIAN
REPLACE WITH TEMPORARY ASPHALT

SAWCUT REQ'D
STA 68+46 TO STA 70+29
MEDIAN & CURB AND GUTTER

INSTALL LAST TWO SECTIONS IN STAGE 2

6:1 TAPER

SPEED LIMIT 40
COVER

SPEED LIMIT 30
R2-1
24"X30"

50'

65+00

66+00

67+00

STH 66 (WB)/MAIN ST

68+00

69+00

70+00

71+00

72+00

25'

50'

STH 66 (EB)/MAIN ST

SIDEWALK

SALVAGE EXISTING LIGHT POLES

IVERSON PARK

SAWCUT REQ'D
STA 63+35 TO STA 65+19
MEDIAN & CURB
AND GUTTER

TEMPORARY PAVEMENT
MARKING REMOVABLE
TAPE 4-INCH, DOUBLE YELLOW

SAWCUT REQ'D
STA 68+46 TO STA 70+29
MEDIAN & CURB AND GUTTER

W6-3

SPEED LIMIT 30
R2-1
24"X30"

SPEED LIMIT 40
COVER

END ROAD WORK
G20-2A
48"X24"

FOOTBRIDGE

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

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	STAGE CONSTRUCTION - STAGE 1	SHEET 16	E

FILE NAME : N:\PDS\C3D\62800000\SHEETSPLAN\026001-S1.DWG
LAYOUT NAME - s1-03

PLOT DATE : 1/22/2019 7:13 AM PLOT BY : CHRISTIANSON, ERIN M PLOT NAME : PLOT SCALE : 1 IN:50 FT

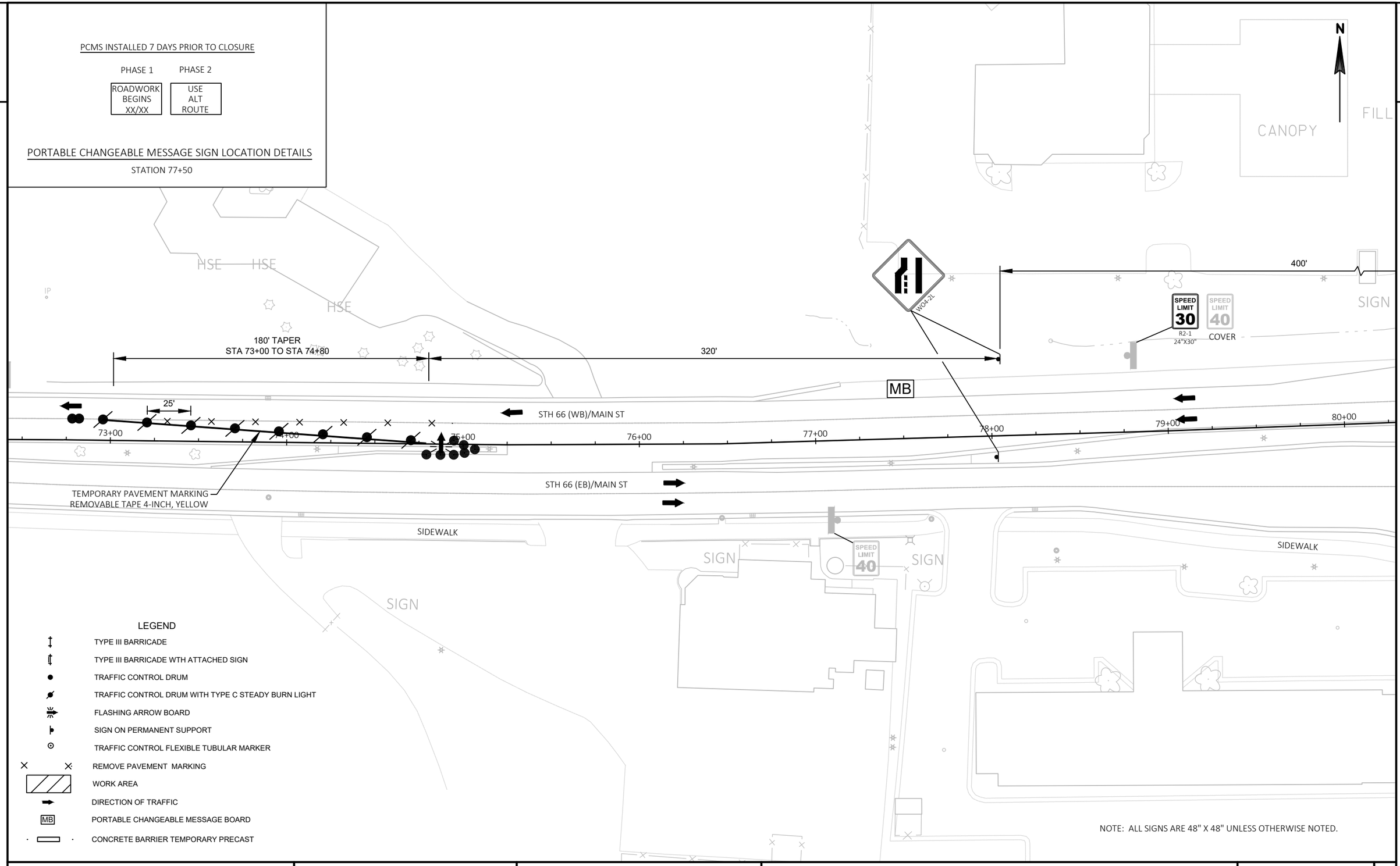
2

PCMS INSTALLED 7 DAYS PRIOR TO CLOSURE

PHASE 1	PHASE 2
ROADWORK BEGINS XX/XX	USE ALT ROUTE

PORTABLE CHANGEABLE MESSAGE SIGN LOCATION DETAILS

STATION 77+50



LEGEND

- TYPE III BARRICADE
- 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
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- REMOVE PAVEMENT MARKING
- WORK AREA
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST

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

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	STAGE CONSTRUCTION - STAGE 1	SHEET 17	E

2

LEGEND

- TYPE III BARRICADE
- 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
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- REMOVE PAVEMENT MARKING
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST

N

MAX. 11' WIDTH W12-52

0.4 MILES AHEAD W57-52 36"X24"

WEST 66 M3-4 24"X12" M1-6 24"X24"

MAX. 11' WIDTH W12-52

AT THE INTERSECTION OF STH 66 (WB) & I-39 (NB) OFF RAMP (SEE SDD TRAFFIC CONTROL, ADVANCED WIDTH RESTRICTION SIGNING FOR MORE INFORMATION)

WEST 66 M3-4 24"X12" M1-6 24"X24"

MAX. 11' WIDTH W12-52

PLACE ON I-39 (SB) AND I-39 (NB) AT THE BEGINNING OF THE OFF RAMP ONTO STH 66 (WB) (SEE SDD TRAFFIC CONTROL, ADVANCED WIDTH RESTRICTION SIGNING FOR MORE INFORMATION)

ANT

FILLER CAP

A/C

400' 200' 200'

LEFT LANE CLOSED AHEAD W20-5SA

SPEED LIMIT 30 W03-5

ROAD WORK AHEAD W20-1A

750'

MAX. 11' WIDTH W12-52

STH 66 (WB)/MAIN ST

80+00 81+00 82+00 83+00 84+00 85+00 86+00 87+00

STH 66 (EB)/MAIN ST

SIDEWALK

COUNTRY CLUB DR

ROAD WORK AHEAD W20-1A

500' MAX OR AT LAST INTERSECTION WHICH EVER IS CLOSER

WEST 66 M3-4 36"X18" M1-6 36"X36"

MAX. 11' WIDTH W12-52

I-39 (SB) ON RAMP

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

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	STAGE CONSTRUCTION - STAGE 1	SHEET 18	E

2

MAX. 11' WIDTH
W12-52

0.3 MILES AHEAD
W57-52
36"X24"

EAST 66
M3-2
24"X12"
M1-6
24"X24"

MAX. 11' WIDTH
W12-52

INSTALLED IN STAGE 1
AT THE INTERSECTION OF STH 66 (EB) & CTH YY
(SEE SDD TRAFFIC CONTROL, ADVANCED WIDTH
RESTRICTION SIGNING FOR MORE INFORMATION)

ROAD WORK AHEAD
W20-1A

INSTALLED
UNDER
STAGE 1

N

RIDGE RD

SPEED LIMIT 35

IP

IP

STH 66 (WB)/MAIN ST

STH 66 (EB)/MAIN ST

50+00 51+00 52+00 53+00 54+00 55+00 56+00 57+00

SIDEWALK

SIGN

SIGN

PARK ENTRANCE

IP

SIGN

MAX. 11' WIDTH
W12-52

500'

INSTALLED
UNDER
STAGE 1

SUNRISE AVE

ROAD WORK AHEAD
W20-1A

INSTALLED
UNDER
STAGE 1

200'

SPEED LIMIT 30
W03-5

INSTALLED
UNDER
STAGE 1

200'

LEFT LANE CLOSED AHEAD
W20-5A

INSTALLED
UNDER
STAGE 1

400'

ROAD WORK AHEAD
W20-1A

INSTALLED
UNDER
STAGE 1

LEGEND

- TYPE III BARRICADE
- 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
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- REMOVE PAVEMENT MARKING
- WORK AREA
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST

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

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	STAGE CONSTRUCTION - STAGE 2	SHEET 19	E

FILE NAME : N:\PDS\C3D\62800000\SHEETSPLAN\026101-S2.DWG
LAYOUT NAME - s2-01

PLOT DATE : 1/22/2019 7:15 AM PLOT BY : CHRISTIANSON, ERIN M PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- TYPE III BARRICADE
- 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
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- REMOVE PAVEMENT MARKING
- WORK AREA
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST

N

END ROAD WORK
G20-2A
48"X24"
INSTALLED UNDER STAGE 1

TYPE III BARRICADE

SPEED LIMIT 40
COVERED STAGE 1

SPEED LIMIT 30
R2-1
24"X30"
INSTALLED UNDER STAGE 1

STA 63+71

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE

STH 66 (WB)/MAIN ST

58+00 59+00 60+00 61+00 62+00 63+00 64+00 65+00

25' 25' 25' 50'

STH 66 (EB)/MAIN ST

STA 64+80

SIDEWALK

180' TAPER
STA 60+75 TO STA 62+55

200'

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW EDGELINE)

WO1-6
48" X 24"

SPEED LIMIT 30
R2-1
24"X30"
INSTALLED UNDER STAGE 1

SPEED LIMIT 40
COVERED STAGE 1

PARK

SPEED LIMIT 40
COVERED STAGE 1

SPEED LIMIT 30
R2-1
24"X30"
INSTALLED UNDER STAGE 1

WO4-2L
INSTALLED UNDER STAGE 1

W6-3
INSTALLED UNDER STAGE 1

TYPE III BARRICADE

STATUE

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

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	STAGE CONSTRUCTION - STAGE 2	SHEET 20	E

LEGEND

- TYPE III BARRICADE
- 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
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- REMOVE PAVEMENT MARKING
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST

N

R11-2B
48"X30"
BRIDGE OUT
TYPE III BARRICADE
TYPE III BARRICADE

WO1-6
48" X 24"
TYPE III BARRICADE
TYPE III BARRICADE

WO24-1L

COVERED STAGE 1
SPEED LIMIT 40

INSTALLED UNDER STAGE 1
SPEED LIMIT 30
R2-1
24"X30"

ARY PAVEMENT
S REMOVABLE
NCH, WHITE

WORK AREA

STH 66 (WB)/MAIN ST

STA 69+94

25'

50'

65+00 66+00 67+00 68+00 69+00 70+00 71+00 72+00

50'

25'

STH 66 (EB)/MAIN ST

STA 68+83

SIDEWALK

TEMPORARY PAVEMENT MARKING
REMOVABLE TAP 4-INCH, YELLOW

TEMPORARY PAVEMENT MARKING
REMOVABLE TAPE 4-INCH, DOUBLE YELLOW

TEMPORARY PAVEMENT MARKING
REMOVABLE TAPE 4-INCH, WHITE

IVERSON PARK

W6-3
INSTALLED UNDER STAGE 1

SPEED LIMIT 30
R2-1
24"X30"
INSTALLED UNDER STAGE 1

SPEED LIMIT 40
COVERED STAGE 1

END ROAD WORK
G20-2A
48"X24"
INSTALLED UNDER STAGE 1

FOOTBRIDGE

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

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	STAGE CONSTRUCTION - STAGE 2	SHEET	E

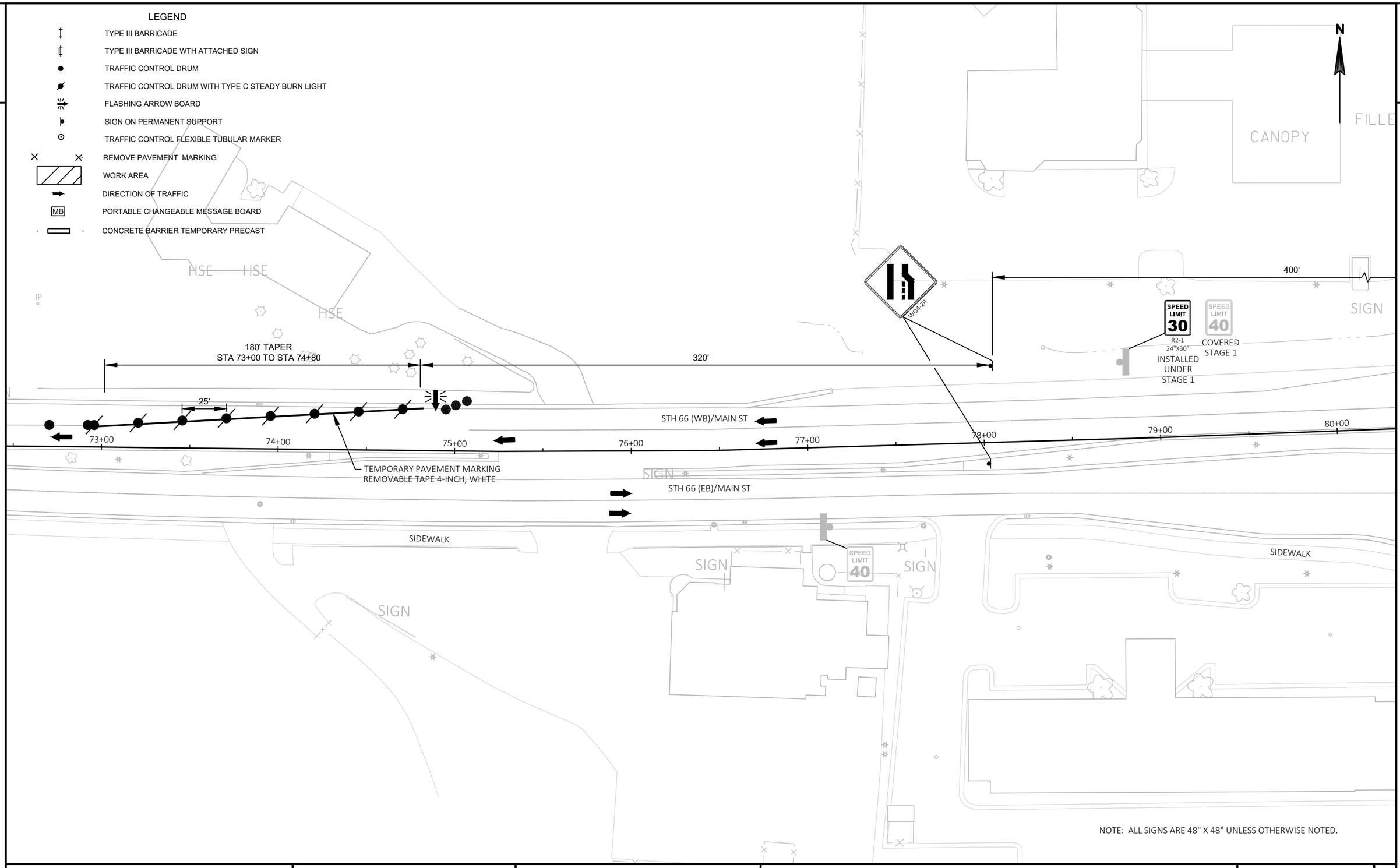
FILE NAME : N:\PDS\C3D\62800000\SHEETSPLAN\026101-S2.DWG
LAYOUT NAME - s2-03

PLOT DATE : 1/22/2019 7:15 AM PLOT BY : CHRISTIANSON, ERIN M PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

LEGEND

- TYPE III BARRICADE
- 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
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- REMOVE PAVEMENT MARKING
- WORK AREA
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST



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

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	STAGE CONSTRUCTION - STAGE 2	SHEET	E

FILE NAME : N:\PDS\C3D\62800000\SHEETSPLAN\026101-S2.DWG
LAYOUT NAME - s2-04

PLOT DATE : 1/22/2019 7:15 AM PLOT BY : CHRISTIANSON, ERIN M PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

LEGEND

- TYPE III BARRICADE
- 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
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- REMOVE PAVEMENT MARKING
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST

N

MAX. 11' WIDTH
W12-52

0.4 MILES AHEAD
W57-52
36"X24"

WEST 66
M3-4 24"X12"
M1-6 24"X24"

MAX. 11' WIDTH
W12-52

INSTALLED IN STAGE 1
AT THE INTERSECTION OF STH 66 (WB) & I-39 (NB) OFF RAMP
(SEE SDD TRAFFIC CONTROL, ADVANCED WIDTH RESTRICTION SIGNING FOR MORE INFORMATION)

WEST 66
M3-4 24"X12"
M1-6 24"X24"

MAX. 11' WIDTH
W12-52

INSTALLED IN STAGE 1
PLACE ON I-39 (SB) AND I-39 (NB) AT THE BEGINNING OF THE OFF RAMP ONTO STH 66 (WB)
(SEE SDD TRAFFIC CONTROL, ADVANCED WIDTH RESTRICTION SIGNING FOR MORE INFORMATION)

ANT

A/C

400'

200'

200'

RIGHT LANE CLOSED AHEAD
W20-5A

SPEED LIMIT 30
W03-5
INSTALLED UNDER STAGE 1

ROAD WORK AHEAD
W20-1A
INSTALLED UNDER STAGE 1

750'

MAX. 11' WIDTH
W12-52
INSTALLED UNDER STAGE 1

STH 66 (WB)/MAIN ST

80+00 81+00 82+00 83+00 84+00 85+00 86+00 87+00

STH 66 (EB)/MAIN ST

SIDEWALK

COUNTRY CLUB DR

ROAD WORK AHEAD
W20-1A
INSTALLED UNDER STAGE 1

WEST 66
M3-4 36"X18"
M1-6 36"X36"

MAX. 11' WIDTH
W12-52
INSTALLED UNDER STAGE 1

I-39 (SB) ON RAMP

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

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	STAGE CONSTRUCTION - STAGE 2	SHEET 23	E

FILE NAME : N:\PDS\C3D\62800000\SHEETSPLAN\026101-S2.DWG
LAYOUT NAME - s2-05

PLOT DATE : 1/22/2019 7:15 AM PLOT BY : CHRISTIANSON, ERIN M PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

MAX. 11' WIDTH
W12-52
0.3 MILES AHEAD
W57-52
36"X24"

EAST 66
M3-2 24"X12"
M1-6 24"X24"
MAX. 11' WIDTH
W12-52

INSTALLED IN STAGE 1
AT THE INTERSECTION OF STH 66 (EB) & CTH YY
(SEE SDD TRAFFIC CONTROL, ADVANCED WIDTH
RESTRICTION SIGNING FOR MORE INFORMATION)

ROAD WORK AHEAD
W20-1A
INSTALLED UNDER STAGE 1

N

2

RIDGE RD

SPEED LIMIT 35

IP

IP

50+00 51+00 52+00 53+00 54+00 55+00 56+00 57+00

STH 66 (WB)/MAIN ST

STH 66 (EB)/MAIN ST

SIDEWALK

SIGN

SIGN

PARK ENTRANCE

IP

SIGN

MAX. 11' WIDTH
W12-52
INSTALLED UNDER STAGE 1

500'

ROAD WORK AHEAD
W20-1A
INSTALLED UNDER STAGE 1

200'

SPEED LIMIT 30
W03-5
INSTALLED UNDER STAGE 1

200'

LEFT LANE CLOSED AHEAD
W20-5SA
INSTALLED UNDER STAGE 1

400'

ROAD WORK AHEAD
W20-1A
INSTALLED UNDER STAGE 1

SUNRISE AVE

LEGEND

- TYPE III BARRICADE
- 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
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- REMOVE PAVEMENT MARKING
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD

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

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	STAGE CONSTRUCTION - STAGE 3	SHEET 24	E

2

LEGEND

- TYPE III BARRICADE
- 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
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- REMOVE PAVEMENT MARKING
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD

N

2

MEDIAN CROSSOVER STA 63+35 TO STA 65+19
REMOVE TEMPORARY ASPHALT
REPLACE CURB & GUTTER, MEDIAN AND REINSTALL LIGHT POLES

END ROAD WORK
G20-2A
48"X24"
INSTALLED UNDER STAGE 1

SPEED LIMIT 40
COVERED STAGE 1

SPEED LIMIT 30
R2-1
24"X30"
INSTALLED UNDER STAGE 1

58+00 59+00 60+00 61+00 62+00 63+00 64+00 65+00

STH 66 (WB)/MAIN ST

STH 66 (EB)/MAIN ST

25' 25' 50' 50'

SIDEWALK

SIDEWALK

200'

180' TAPER
STA 60+75 TO STA 62+55

400'

W04-2L

INSTALLED UNDER STAGE 1

MARKING LINE
EPOXY 4-INCH
(YELLOW EDGELINE)

REINSTALL SALVAGED LIGHT POLE

IVERSON PARK

STATUE

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

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	STAGE CONSTRUCTION - STAGE 3	SHEET 25	E

FILE NAME : N:\PDS\C3D\62800000\SHEETSPLAN\026201-S3.DWG
LAYOUT NAME - s3-02
PLOT DATE : 1/22/2019 7:17 AM
PLOT BY : CHRISTIANSON, ERIN M
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- TYPE III BARRICADE
- 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
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- REMOVE PAVEMENT MARKING
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD

N

2

POLES

MEDIAN CROSSOVER STA 68+46 TO STA 70+29
REMOVE TEMPORARY ASPHALT
REPLACE CURB & GUTTER, MEDIAN AND REINSTALL LIGHT POLES

STH 66 (WB)/MAIN ST

STH 66 (EB)/MAIN ST

65+00 66+00 67+00 68+00 69+00 70+00 71+00 72+00

50' 50' 25'

IVERSON PARK

IP

SIDEWALK

REINSTALL SALVAGED LIGHT POLES

MARKING LINE EPOXY 4-INCH (YELLOW EDGELINE)

MARKING LINE EPOXY 4-INCH (YELLOW EDGELINE)

COVERED STAGE 1
SPEED LIMIT 40

INSTALLED UNDER STAGE 1
SPEED LIMIT 30
R2-1
24"X30"

SPEED LIMIT 30
R2-1
24"X30"
INSTALLED UNDER STAGE 1

SPEED LIMIT 40
COVERED STAGE 1

END ROAD WORK
G20-2A
48"X24"
INSTALLED UNDER STAGE 1

FOOTBRIDGE

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

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	STAGE CONSTRUCTION - STAGE 3	SHEET 26	E

FILE NAME : N:\PDS\C3D\62800000\SHEETSPLAN\026201-S3.DWG
LAYOUT NAME - s3-03

PLOT DATE : 1/22/2019 7:17 AM PLOT BY : CHRISTIANSON, ERIN M PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

LEGEND

- TYPE III BARRICADE
- 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
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- REMOVE PAVEMENT MARKING
- WORK AREA
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD

N

CANOPY

FILL

HSE HSE HSE

IP

W04-2L

400'

SIGN

SPEED LIMIT 30 R2-1 24"X30"

SPEED LIMIT 40

COVERED STAGE 1

INSTALLED UNDER STAGE 1

180' TAPER
STA 73+00 TO STA 74+80

320'

STH 66 (WB)/MAIN ST

73+00 25 74+00 75+00 76+00 77+00 78+00 79+00 80+00

STH 66 (EB)/MAIN ST

TEMPORARY PAVEMENT MARKING
REMOVABLE TAPE 4-INCH, YELLOW

SIDEWALK

SIGN

SIGN

SPEED LIMIT 40

SIGN

SIDEWALK

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

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	STAGE CONSTRUCTION - STAGE 3	SHEET 27	E

2

LEGEND

- TYPE III BARRICADE
- 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
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- REMOVE PAVEMENT MARKING
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD

N

MAX. 11' WIDTH
W12-52

0.4 MILES AHEAD
W57-52
36"X24"

WEST 66
M3-4 24"X12"
M1-6 24"X24"

MAX. 11' WIDTH
W12-52

INSTALLED IN STAGE 1
AT THE INTERSECTION OF STH 66 (WB) & I-39 (NB) OFF RAMP
(SEE SDD TRAFFIC CONTROL, ADVANCED WIDTH RESTRICTION SIGNING FOR MORE INFORMATION)

WEST 66
M3-4 24"X12"
M1-6 24"X24"

MAX. 11' WIDTH
W12-52

INSTALLED IN STAGE 1
PLACE ON I-39 (SB) AND I-39 (NB) AT THE BEGINNING OF THE OFF RAMP ONTO STH 66 (WB)
(SEE SDD TRAFFIC CONTROL, ADVANCED WIDTH RESTRICTION SIGNING FOR MORE INFORMATION)

2

400' 200' 200'

LEFT LANE CLOSED AHEAD
W20-5SA

SPEED LIMIT 30
W3-5

INSTALLED UNDER STAGE 1

ROAD WORK AHEAD
W20-1A

750'

MAX. 11' WIDTH
W12-52

INSTALLED UNDER STAGE 1

INSTALLED UNDER STAGE 1

STH 66 (WB)/MAIN ST

80+00 81+00 82+00 83+00 84+00 85+00 86+00 87+00

STH 66 (EB)/MAIN ST

SIDEWALK

COUNTRY CLUB DR

ROAD WORK AHEAD
W20-1A

INSTALLED UNDER STAGE 1

WEST 66
M3-4 36"X18"
M1-6 36"X36"

MAX. 11' WIDTH
W12-52

INSTALLED UNDER STAGE 1

I-39 (SB) ON RAMP

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

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	STAGE CONSTRUCTION - STAGE 3	SHEET 28	E

2

2

MAX. 11' WIDTH
W12-52

0.3 MILES AHEAD
W57-52
36"X24"

EAST 66
M3-2 24"X12"
M1-6 24"X24"

MAX. 11' WIDTH
W12-52

INSTALLED IN STAGE 1
AT THE INTERSECTION OF STH 66 (EB) & CTH YY
(SEE SDD TRAFFIC CONTROL, ADVANCED WIDTH
RESTRICTION SIGNING FOR MORE INFORMATION)

ROAD WORK AHEAD
W20-1A

INSTALLED
UNDER
STAGE 1

N

RIDGE RD

SPEED LIMIT 35

IP

IP

50+00 51+00 52+00 53+00 54+00 55+00 56+00 57+00

STH 66 (WB)/MAIN ST

STH 66 (EB)/MAIN ST

SIDEWALK

SIGN

SIGN

PARK ENTRANCE

IP

SIGN

MAX. 11' WIDTH
W12-52

500'

INSTALLED
UNDER
STAGE 1

SUNRISE AVE

ROAD WORK AHEAD
W20-1A

200'

INSTALLED
UNDER
STAGE 1

SPEED LIMIT 30
W03-5

200'

INSTALLED
UNDER
STAGE 1

RIGHT LANE CLOSED AHEAD
W20-5A

400'

ROAD WORK AHEAD
W20-1A

INSTALLED
UNDER
STAGE 1

LEGEND

- TYPE III BARRICADE
- 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
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- REMOVE PAVEMENT MARKING
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD

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

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	STAGE CONSTRUCTION - STAGE 4	SHEET 29	E

FILE NAME : N:\PDS\C3D\62800000\SHEETSPLAN\026201-S4.DWG
LAYOUT NAME - s4-01
PLOT DATE : 1/22/2019 7:19 AM
PLOT BY : CHRISTIANSON, ERIN M
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- TYPE III BARRICADE
- 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
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- REMOVE PAVEMENT MARKING
- WORK AREA
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD

N

END ROAD WORK
G20-2A
48"X24"
INSTALLED UNDER STAGE 1

SPEED LIMIT 40
COVERED STAGE 1

SPEED LIMIT 30
R2-1
24"X30"
INSTALLED UNDER STAGE 1

58+00 59+00 60+00 61+00 62+00 63+00 64+00 65+00

STH 66 (WB)/MAIN ST

STH 66 (EB)/MAIN ST

25' 25' 50' 50'

SIDEWALK

200'

180' TAPER
STA 60+75 TO STA 62+55

400'

W4-2R

IVERSON PARK

STATUE

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

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	STAGE CONSTRUCTION - STAGE 4	SHEET 30	E

2

LEGEND

- TYPE III BARRICADE
- 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
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- REMOVE PAVEMENT MARKING
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD

N

APPLY POLYMER OVERLAY TO INSIDE LANE

STH 66 (WB)/MAIN ST

STH 66 (EB)/MAIN ST

65+00 66+00 67+00 68+00 69+00 70+00 71+00 72+00

50'

50'

25'

IVERSON PARK

IP

CONCRETE SURFACE REPAIR ON ABUTMENT

SIDEWALK

COVERED STAGE 1

SPEED LIMIT 40

INSTALLED UNDER STAGE 1

SPEED LIMIT 30

R2-1 24"X30"

SPEED LIMIT 40

COVERED STAGE 1

SPEED LIMIT 30

R2-1 24"X30"

INSTALLED UNDER STAGE 1

END ROAD WORK

G20-2A 48"X24"

INSTALLED UNDER STAGE 1

FOOTBRIDGE

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

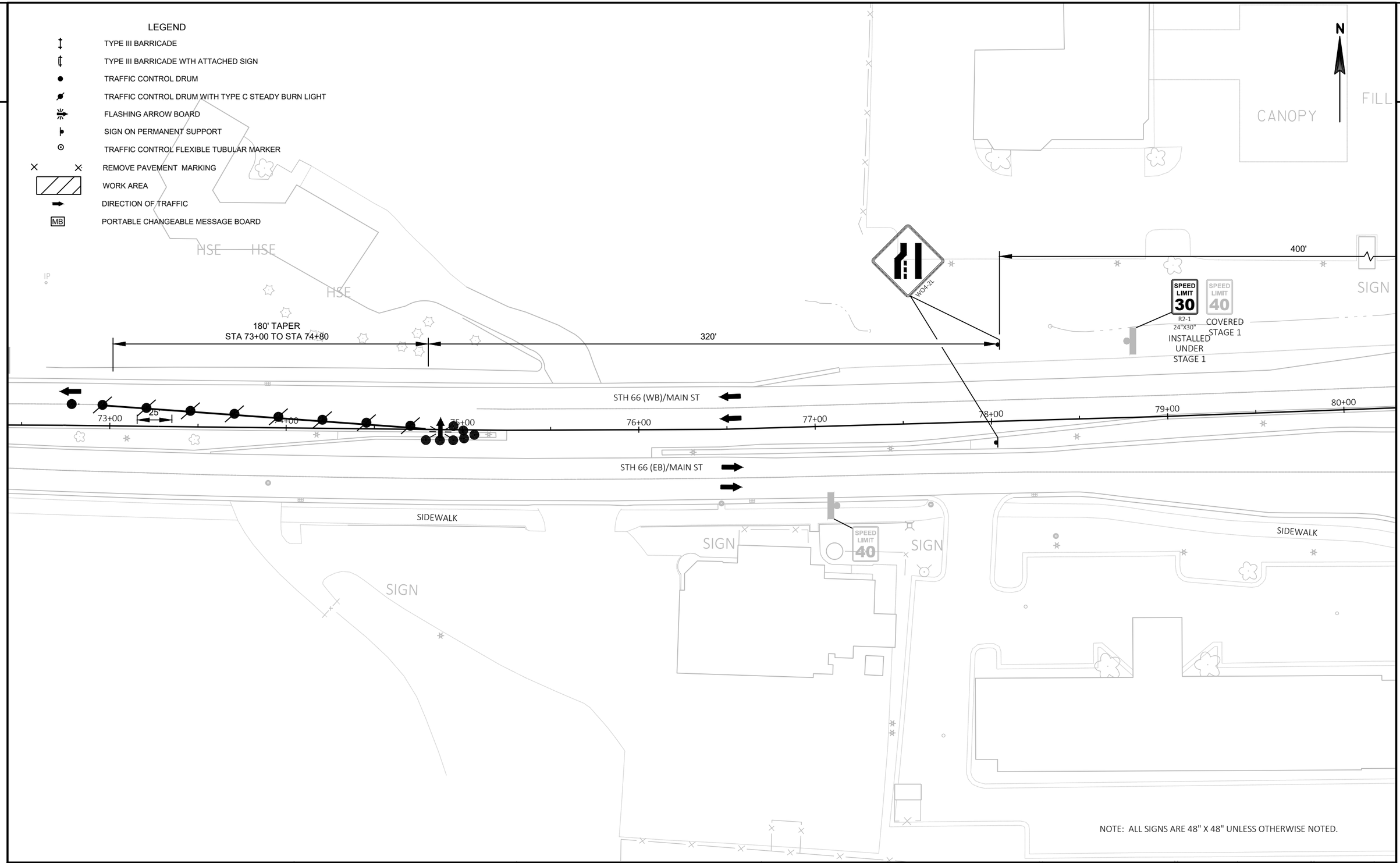
PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	STAGE CONSTRUCTION - STAGE 4	SHEET 31	E

FILE NAME : N:\PDS\C3D\62800000\SHEETSPLAN\026201-S4.DWG
LAYOUT NAME - s4-03

PLOT DATE : 1/22/2019 7:19 AM PLOT BY : CHRISTIANSON, ERIN M PLOT NAME : PLOT SCALE : 1 IN:50 FT

LEGEND

- TYPE III BARRICADE
- 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
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- REMOVE PAVEMENT MARKING
- WORK AREA
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD



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

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	STAGE CONSTRUCTION - STAGE 4	SHEET 32	E

2

LEGEND

- TYPE III BARRICADE
- 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
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- REMOVE PAVEMENT MARKING
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD

N

MAX. 11' WIDTH
W12-52

0.4 MILES AHEAD
W57-52
36"X24"

WEST 66
M3-4 24"X12"
M1-6 24"X24"

MAX. 11' WIDTH
W12-52

INSTALLED IN STAGE 1
AT THE INTERSECTION OF STH 66 (WB) & I-39 (NB) OFF RAMP
(SEE SDD TRAFFIC CONTROL, ADVANCED WIDTH RESTRICTION SIGNING FOR MORE INFORMATION)

WEST 66
M3-4 24"X12"
M1-6 24"X24"

MAX. 11' WIDTH
W12-52

INSTALLED IN STAGE 1
PLACE ON I-39 (SB) AND I-39 (NB) AT THE BEGINNING OF THE OFF RAMP ONTO STH 66 (WB)
(SEE SDD TRAFFIC CONTROL, ADVANCED WIDTH RESTRICTION SIGNING FOR MORE INFORMATION)

400' 200' 200'

LEFT LANE CLOSED AHEAD
W20-5SA

SPEED LIMIT 30
W03-5
INSTALLED UNDER STAGE 1

ROAD WORK AHEAD
W20-1A
INSTALLED UNDER STAGE 1

750'

MAX. 11' WIDTH
W12-52
INSTALLED UNDER STAGE 1

STH 66 (WB)/MAIN ST

80+00 81+00 82+00 83+00 84+00 85+00 86+00 87+00

STH 66 (EB)/MAIN ST

SIDEWALK

COUNTRY CLUB DR

ROAD WORK AHEAD
W20-1A
INSTALLED UNDER STAGE 1

WEST 66
M3-4 36"X18"
M1-6 36"X36"

MAX. 11' WIDTH
W12-52
INSTALLED UNDER STAGE 1

I-39 (SB) ON RAMP

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

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	STAGE CONSTRUCTION - STAGE 4	SHEET 33	E

2

LEGEND

- TYPE III BARRICADE
- 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
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- REMOVE PAVEMENT MARKING
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD

N

END ROAD WORK
G20-2A
48"X24"
INSTALLED UNDER STAGE 1

MARKING LINE EPOXY 4-INCH (WHITE C/L)
MUST BE INSTALLED PRIOR TO
OPENING BOTH LANES

INSTALLED UNDER STAGE 1

SPEED LIMIT 40
COVERED STAGE 1

SPEED LIMIT 30
R2-1
24"X30"

25'

50'

STH 66 (WB)/MAIN ST

58+00 59+00 60+00 61+00 62+00 63+00 64+00 65+00

STH 66 (EB)/MAIN ST

SIDEWALK

SIDEWALK

SPEED LIMIT 40

SPEED LIMIT 40

N PARK

IVERSON PA

STATUE

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

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	STAGE CONSTRUCTION - STAGE 5	SHEET 34	E

FILE NAME : N:\PDS\C3D\62800000\SHEETSPLAN\026301-S5.DWG
LAYOUT NAME - s5-01

PLOT DATE : 1/22/2019 7:21 AM PLOT BY : CHRISTIANSON, ERIN M PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

LEGEND

- TYPE III BARRICADE
- 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
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- REMOVE PAVEMENT MARKING
- WORK AREA
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD

N

MARKING LINE EPOXY 4-INCH (YELLOW EDGELINE)

APPLY POLYMER OVERLAY TO OUTSIDE LANE

INSTALLED UNDER STAGE 1

SPEED LIMIT 40 — COVERED STAGE 1

SPEED LIMIT 30 — R2-1 24"X30"

50'

STH 66 (WB)/MAIN ST

65+00 66+00 67+00 68+00 69+00 70+00 71+00 72+00

STH 66 (EB)/MAIN ST

SIDEWALK

IVERSON PARK

IP

MARKING LINE EPOXY 4-INCH (WHITE C/L) MUST BE INSTALLED PRIOR TO OPENING BOTH LANES

SPEED LIMIT 40

FOOTBRIDGE

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

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	STAGE CONSTRUCTION - STAGE 5	SHEET 35	E

FILE NAME : N:\PDS\C3D\62800000\SHEETSPLAN\026301-S5.DWG
LAYOUT NAME - s5-02

PLOT DATE : 1/22/2019 7:21 AM PLOT BY : CHRISTIANSON, ERIN M PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

LEGEND

- TYPE III BARRICADE
- 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
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- REMOVE PAVEMENT MARKING
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD

N

FILLER CAP

CANOPY

HSE HSE HSE

W04-2R

400'

SIGN

SPEED LIMIT 30
R2-1
24"X30"
INSTALLED UNDER STAGE 1

SPEED LIMIT 40
COVERED STAGE 1

180' TAPER
STA 73+00 TO STA 74+80

320'

25'

STH 66 (WB)/MAIN ST

73+00 74+00 75+00 76+00 77+00 78+00 79+00 80+00

STH 66 (EB)/MAIN ST

SIDEWALK

MARKING LINE EPOXY 4-INCH (WHITE C/L)
MUST BE INSTALLED PRIOR TO
OPENING BOTH LANES

SIGN SIGN SIGN SIGN

SPEED LIMIT 40

SIDEWALK

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

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	STAGE CONSTRUCTION - STAGE 5	SHEET 36	E

2

LEGEND

- TYPE III BARRICADE
- 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
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- REMOVE PAVEMENT MARKING
- WORK AREA
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD

FILLER CAP

ANT

A/C

N

MAX. 11' WIDTH — W12-52

0.4 MILES AHEAD — W57-52, 36"X24"

WEST 66 — M3-4 24"X12", M1-6 24"X24"

MAX. 11' WIDTH — W12-52

INSTALLED IN STAGE 1
AT THE INTERSECTION OF STH 66 (WB) & I-39 (NB) OFF RAMP
(SEE SDD TRAFFIC CONTROL, ADVANCED WIDTH RESTRICTION SIGNING FOR MORE INFORMATION)

WEST 66 — M3-4 24"X12", M1-6 24"X24"

MAX. 11' WIDTH — W12-52

INSTALLED IN STAGE 1
PLACE ON I-39 (SB) AND I-39 (NB) AT THE BEGINNING OF THE OFF RAMP ONTO STH 66 (WB)
(SEE SDD TRAFFIC CONTROL, ADVANCED WIDTH RESTRICTION SIGNING FOR MORE INFORMATION)

400' 200' 200' 750'

RIGHT LANE CLOSED AHEAD — W20-5A

SPEED LIMIT 30 — W3-5 — INSTALLED UNDER STAGE 1

ROAD WORK AHEAD — W20-1A — INSTALLED UNDER STAGE 1

MAX. 11' WIDTH — W12-52 — INSTALLED UNDER STAGE 1

STH 66 (WB)/MAIN ST

80+00 81+00 82+00 83+00 84+00 85+00 86+00 87+00

STH 66 (EB)/MAIN ST

SIDEWALK

COUNTRY CLUB DR

ROAD WORK AHEAD — W20-1A — INSTALLED UNDER STAGE 1

WEST 66 — M3-4 36"X18", M1-6 36"X36"

MAX. 11' WIDTH — W12-52 — INSTALLED UNDER STAGE 1

I-39 (SB) ON RAMP

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

PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	STAGE CONSTRUCTION - STAGE 5	SHEET 37	E

6280-00-70

Line	Item	Item Description	Unit	Total	Qty
0002	203.0600.S	Removing Old Structure Over Waterway With Minimal Debris (station) 01. 67+08.28	LS	1.000	1.000
0004	204.0100	Removing Pavement	SY	283.000	283.000
0006	204.0110	Removing Asphaltic Surface	SY	245.000	245.000
0008	204.0150	Removing Curb & Gutter	LF	367.000	367.000
0010	204.0155	Removing Concrete Sidewalk	SY	152.000	152.000
0012	204.0195	Removing Concrete Bases	EACH	5.000	5.000
0014	206.1000	Excavation for Structures Bridges (structure) 01. B-49-41	LS	1.000	1.000
0016	210.1500	Backfill Structure Type A	TON	60.000	60.000
0018	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 6280-00-70	LS	1.000	1.000
0020	213.0100	Finishing Roadway (project) 01. 6280-00-70	EACH	1.000	1.000
0022	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	74.000	74.000
0024	415.0090	Concrete Pavement 9-Inch	SY	163.000	163.000
0026	415.0410	Concrete Pavement Approach Slab	SY	80.000	80.000
0028	416.0610	Drilled Tie Bars	EACH	240.000	240.000
0030	416.0620	Drilled Dowel Bars	EACH	22.000	22.000
0032	465.0125	Asphaltic Surface Temporary	TON	54.000	54.000
0034	502.0100	Concrete Masonry Bridges	CY	77.000	77.000
0036	502.2000	Compression Joint Sealer Preformed Elastomeric (width) 01. 2-Inch	LF	63.000	63.000
0038	502.3200	Protective Surface Treatment	SY	18.000	18.000
0040	502.3210	Pigmented Surface Sealer	SY	51.000	51.000
0042	502.4204	Adhesive Anchors No. 4 Bar	EACH	86.000	86.000
0044	502.4205	Adhesive Anchors No. 5 Bar	EACH	208.000	208.000
0046	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	13,680.000	13,680.000
0048	506.4000	Steel Diaphragms (structure) 01. B-49-41	EACH	4.000	4.000
0050	509.1200	Curb Repair	LF	10.000	10.000
0052	509.1500	Concrete Surface Repair	SF	10.000	10.000
0054	509.5100.S	Polymer Overlay	SY	189.000	189.000
0056	514.0445	Floor Drains Type GC	EACH	2.000	2.000
0058	514.2625	Downspout 6-Inch	LF	8.000	8.000
0060	516.0500	Rubberized Membrane Waterproofing	SY	18.000	18.000
0062	601.0405	Concrete Curb & Gutter 18-Inch Type A	LF	825.000	825.000
0064	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	91.000	91.000
0066	602.0405	Concrete Sidewalk 4-Inch	SF	1,374.000	1,374.000
0068	603.8000	Concrete Barrier Temporary Precast Delivered	LF	550.000	550.000
0070	603.8125	Concrete Barrier Temporary Precast Installed	LF	550.000	550.000
0072	606.0200	Riprap Medium	CY	6.000	6.000
0074	618.0100	Maintenance And Repair of Haul Roads (project) 01.	EACH	1.000	1.000

6280-00-70

Line	Item	Item Description	Unit	Total	Qty
		6280-00-70			
0076	619.1000	Mobilization	EACH	1.000	1.000
0078	624.0100	Water	MGAL	10.000	10.000
0080	625.0100	Topsoil	SY	70.000	70.000
0082	628.1504	Silt Fence	LF	140.000	140.000
0084	628.1520	Silt Fence Maintenance	LF	140.000	140.000
0086	628.2006	Erosion Mat Urban Class I Type A	SY	70.000	70.000
0088	628.7015	Inlet Protection Type C	EACH	1.000	1.000
0090	628.7570	Rock Bags	EACH	37.000	37.000
0092	629.0210	Fertilizer Type B	CWT	0.040	0.040
0094	630.0140	Seeding Mixture No. 40	LB	1.100	1.100
0096	642.5201	Field Office Type C	EACH	1.000	1.000
0098	643.0300	Traffic Control Drums	DAY	3,935.000	3,935.000
0100	643.0420	Traffic Control Barricades Type III	DAY	320.000	320.000
0102	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	11.000	11.000
0104	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	11.000	11.000
0106	643.0705	Traffic Control Warning Lights Type A	DAY	640.000	640.000
0108	643.0715	Traffic Control Warning Lights Type C	DAY	1,488.000	1,488.000
0110	643.0800	Traffic Control Arrow Boards	DAY	121.000	121.000
0112	643.0900	Traffic Control Signs	DAY	3,441.000	3,441.000
0114	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0116	643.5000	Traffic Control	EACH	1.000	1.000
0118	645.0120	Geotextile Type HR	SY	18.000	18.000
0120	646.1020	Marking Line Epoxy 4-Inch	LF	1,329.500	1,329.500
0122	646.9000	Marking Removal Line 4-Inch	LF	984.000	984.000
0124	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	2,333.000	2,333.000
0126	650.6500	Construction Staking Structure Layout (structure) 01. B-49-41	LS	1.000	1.000
0128	650.7000	Construction Staking Concrete Pavement	LF	91.000	91.000
0130	650.8000	Construction Staking Resurfacing Reference	LF	154.000	154.000
0132	650.8500	Construction Staking Electrical Installations (project) 01. 6280-00-70	LS	1.000	1.000
0134	650.9910	Construction Staking Supplemental Control (project) 01. 6280-00-70	LS	1.000	1.000
0136	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	251.000	251.000
0138	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	92.000	92.000
0140	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	4.000	4.000
0142	653.0905	Removing Pull Boxes	EACH	4.000	4.000
0144	654.0107	Concrete Bases Type 7	EACH	5.000	5.000
0146	655.0510	Electrical Wire Traffic Signals 12 AWG	LF	960.000	960.000

6280-00-70

Line	Item	Item Description	Unit	Total	Qty
0148	655.0625	Electrical Wire Lighting 6 AWG	LF	5,040.000	5,040.000
0150	655.0630	Electrical Wire Lighting 4 AWG	LF	1,160.000	1,160.000
0152	690.0250	Sawing Concrete	LF	820.000	820.000
0154	715.0415	Incentive Strength Concrete Pavement	DOL	500.000	500.000
0156	715.0502	Incentive Strength Concrete Structures	DOL	500.000	500.000
0158	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	150.000	150.000
0160	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	300.000	300.000
0162	SPV.0060	Special 01. Temporary Wood Pole 35-Foot	EACH	2.000	2.000
0164	SPV.0105	Special 01. Remove and Salvage Local Light Poles (Sta 64+45, 66+60, 67+70, 68+85, 69+85)	LS	1.000	1.000
0166	SPV.0105	Special 02. Transport and Install City Furnished Light Poles and Lighting Material	LS	1.000	1.000

3

REMOVING PAVEMENT

STATION - STATION	LOCATION	204.0100 SY	REMARKS
66+31 - 66+77	STH 66 (WB)	143	WB LANES
67+40 - 67+85	STH 66 (WB)	140	WB LANES
TOTAL		**283**	

REMOVING ASPHALTIC SURFACE

STATION - STATION	LOCATION	204.0110 SY	REMARKS
63+35 - 65+19	STH 66 MEDIAN	123	TEMPORARY CROSSOVER
68+46 - 70+29	STH 66 MEDIAN	122	TEMPORARY CROSSOVER
TOTAL		**245**	

REMOVING CURB & GUTTER

STATION - STATION	LOCATION	204.0150 LF	REMARKS
63+35 - 65+19	STH 66 MEDIAN	184	TEMPORARY CROSSOVER
68+46 - 70+29	STH 66 MEDIAN	183	TEMPORARY CROSSOVER
TOTAL		**367**	

3

REMOVING CONCRETE SIDEWALK

STATION - STATION	LOCATION	204.0155 SY	REMARKS
63+35 - 65+19	STH 66 MEDIAN	61	TEMPORARY CROSSOVER
66+31 - 66+77	STH 66 MEDIAN	15	WB LANES
67+40 - 67+85	STH 66 MEDIAN	15	WB LANES
68+46 - 70+29	STH 66 MEDIAN	61	TEMPORARY CROSSOVER
TOTAL		**152**	

REMOVING CONCRETE BASES

STATION	LOCATION	204.0195 EACH	REMARKS
64+45	STH 66 MEDIAN	1	TEMPORARY CROSSOVER
66+60	STH 66 MEDIAN	1	
67+70	STH 66 MEDIAN	1	
68+85	STH 66 MEDIAN	1	TEMPORARY CROSSOVER
69+85	STH 66 MEDIAN	1	TEMPORARY CROSSOVER
TOTAL		**5**	

PREPARE FOUNDATION FOR ASPHALTIC PAVING

STATION - STATION	LOCATION	211.0100 LS	REMARKS
63+35 - 65+19 68+46 - 70+29	STH 66 MEDIAN	1	TEMPORARY CROSSOVER
TOTAL		**1**	

BASE AGGREGATE DENSE

STATION - STATION	LOCATION	305.0120 1 1/4-INCH TON	REMARKS
63+35 - 65+19	STH 66 MEDIAN	20	TEMPORARY CROSSOVER
66+31 - 66+77	STH 66 (WB)	17	WB LANES
67+40 - 67+85	STH 66 (WB)	17	WB LANES
68+46 - 70+29	STH 66 MEDIAN	20	TEMPORARY CROSSOVER
TOTAL		**74**	

CONCRETE PAVEMENT 9-INCH

STATION - STATION	LOCATION	415.0090 SY	REMARKS
66+31 - 66+62	STH 66 (WB)	83	
67+55 - 67+85	STH 66 (WB)	80	
TOTAL		**163**	

CONCRETE PAVEMENT APPROACH SLAB

STATION - STATION	LOCATION	415.0410 SY	REMARKS
66+62 - 66+77	STH 66 (WB)	40	
67+40 - 67+55	STH 66 (WB)	40	
TOTAL		**80**	

3

ASPHALTIC SURFACE TEMPORARY

STATION - STATION	LOCATION	465.0125 TON	REMARKS
63+35 - 65+19	STH 66 MEDIAN	27	TEMPORARY CROSSOVER
68+46 - 70+29	STH 66 MEDIAN	27	TEMPORARY CROSSOVER
TOTAL		**54**	

CONCRETE SIDEWALK

STATION - STATION	LOCATION	602.0405 4-INCH SF	REMARKS
63+35 - 65+19	STH 66 MEDIAN	552	TEMPORARY CROSSOVER
66+31 - 66+77	STH 66 MEDIAN	138	
67+40 - 67+85	STH 66 MEDIAN	135	
68+46 - 70+29	STH 66 MEDIAN	549	TEMPORARY CROSSOVER
TOTAL		**1374**	

3

CONCRETE CURB & GUTTER

STATION - STATION	LOCATION	601.0405 18-INCH TYPE A LF	601.0409 30-INCH TYPE A LF	REMARKS
63+35 - 65+19	STH 66 (WB) MEDIAN	184	---	TEMPORARY CROSSOVER
63+35 - 65+19	STH 66 (EB) MEDIAN	184	---	TEMPORARY CROSSOVER
66+31 - 66+77	STH 66 (WB) MEDIAN	46	---	WB LANES
66+31 - 66+77	STH 66 (WB) LT	---	46	WB LANES
67+40 - 67+85	STH 66 (WB) MEDIAN	45	---	WB LANES
67+40 - 67+85	STH 66 (WB) LT	---	45	WB LANES
68+46 - 70+29	STH 66 (WB) MEDIAN	183	---	TEMPORARY CROSSOVER
68+46 - 70+29	STH 66 (EB) MEDIAN	183	---	TEMPORARY CROSSOVER
TOTALS		**825**	**91**	

CONCRETE BARRIER TEMPORARY PRECAST

STATION - STATION	LOCATION	603.8000 DELIVERED LF	603.8125 INSTALLED LF	REMARKS
64+20 - 69+70	STH 66 MEDIAN	550	550	
TOTALS		**550**	**550**	

WATER

STATION - STATION	LOCATION	624.0100 MGAL	REMARKS
PROJECT LIMITS	STH 66 (WB)	10	
TOTAL		**10**	

DRILLED BARS

STATION - STATION	LOCATION	416.0610 TIE EACH	416.0620 DOWEL EACH
63+35 - 65+19	STH 66 MEDIAN	120	---
66+31	STH 66 (WB)	---	11
67+85	STH 66 (WB)	---	11
68+46 - 70+29	STH 66 MEDIAN	120	---
TOTAL		**240**	**22**

EROSION CONTROL

STATION - STATION	LOCATION	625.0100 TOPSOIL SY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2006 EROSION MAT URBAN CLASS I TYPE A SY	628.7015 INLET PROTECTION TYPE C EACH	628.7570 ROCK BAGS EACH	629.0210 FERTILIZER TYPE B CWT	630.0140 SEEDING MIXTURE NO. 40 LB	REMARKS
65+90 - 66+77	STH 66 (LT)	27	60	60	27	---	17	0.02	0.5	
67+40 - 68+25	STH 66 (LT)	28	60	60	28	1	17	0.02	0.5	
UNDISTRIBUTED	PROJECT LIMITS	15	20	20	15	0	3	0.01	0.1	
TOTALS		**70**	**140**	**140**	**70**	**1**	**37**	**0.04**	**1.1**	

3

TRAFFIC CONTROL DRUMS & WARNING LIGHTS

STATION - STATION	LOCATION	643.0300 DRUMS NO	DRUMS DAYS	DRUMS DAY	643.0715 LIGHTS TYPE C NO	LIGHTS TYPE C DAYS	LIGHTS TYPE C DAY	REMARKS
STAGE 1								
60+50 - 71+50	STH 66 (EB)	23	8	184	8	8	64	SEE STAGE CONSTRUCTION - STAGE 1
62+00 - 75+25	STH 66 (WB)	40	8	320	8	8	64	SEE STAGE CONSTRUCTION - STAGE 1
	STAGE 1 SUB-TOTALS			504			128	
STAGE 2								
60+50 - 71+50	STH 66 (EB)	24	40	960	8	40	320	SEE STAGE CONSTRUCTION - STAGE 2
63+00 - 75+25	STH 66 (WB)	39	40	1560	21	40	840	SEE STAGE CONSTRUCTION - STAGE 2
	STAGE 2 SUB-TOTALS			2520			1160	
STAGE 3								
60+50 - 71+50	STH 66 (EB)	34	7	238	8	7	56	SEE STAGE CONSTRUCTION - STAGE 3
62+00 - 75+25	STH 66 (WB)	39	7	273	8	7	56	SEE STAGE CONSTRUCTION - STAGE 3
	STAGE 4 SUB-TOTALS			511			112	
STAGE 4								
60+50 - 71+50	STH 66 (EB)	34	5	170	8	5	40	SEE STAGE CONSTRUCTION - STAGE 4
62+00 - 75+25	STH 66 (WB)	39	5	195	8	5	40	SEE STAGE CONSTRUCTION - STAGE 4
	STAGE 4 SUB-TOTALS			365			80	
STAGE 5								
62+00 - 75+25	STH 66 (WB)	35	1	35	8	1	8	SEE STAGE CONSTRUCTION - STAGE 5
	STAGE 5 SUB-TOTALS			35			8	
	GRAND TOTALS			**3935**			**1488**	

TRAFFIC CONTROL BARRICADE & WARNING LIGHTS TYPE A

STATION	LOCATION	643.0420 BARRICADE TYPE III NO	BARRICADE TYPE III DAYS	BARRICADE TYPE III DAY	643.0705 LIGHTS TYPE A NO	LIGHTS TYPE A DAYS	LIGHTS TYPE A DAY	REMARKS
62+75	STH 66 (EB)	1	40	40	2	40	80	SEE STAGE CONSTRUCTION - STAGE 2
63+90	STH 66 (EB)	1	40	40	2	40	80	SEE STAGE CONSTRUCTION - STAGE 2
66+25	STH 66 (WB)	2	40	80	4	40	160	SEE STAGE CONSTRUCTION - STAGE 2
68+00	STH 66 (WB)	2	40	80	4	40	160	SEE STAGE CONSTRUCTION - STAGE 2
69+00	STH 66 (WB)	2	40	80	4	40	160	SEE STAGE CONSTRUCTION - STAGE 2
	TOTALS			**320**			**640**	

TRAFFIC CONTROL FLEX TUBULAR MARKER

STATION - STATION	LOCATION	643.0500 POSTS EACH	643.0600 BASES EACH	REMARKS
65+00 - 70+00	STH 66 (EB)	11	11	SEE STAGE CONSTRUCTION - STAGE 1
	TOTALS	**11**	**11**	

TRAFFIC CONTROL ARROW BOARDS

STATION	LOCATION	NO	DAY	643.0800 DAY	REMARKS
STAGE 1					
60+65	STH 66 (EB)	1	8	8	SEE STAGE CONSTRUCTION - STAGE 1
74+90	STH 66 (WB)	1	8	8	SEE STAGE CONSTRUCTION - STAGE 1
	STAGE 1 SUB-TOTAL			16	
STAGE 2					
60+65	STH 66 (EB)	1	40	40	SEE STAGE CONSTRUCTION - STAGE 2
74+90	STH 66 (WB)	1	40	40	SEE STAGE CONSTRUCTION - STAGE 2
	STAGE 2 SUB-TOTAL			80	
STAGE 3					
60+65	STH 66 (EB)	1	7	7	SEE STAGE CONSTRUCTION - STAGE 3
74+90	STH 66 (WB)	1	7	7	SEE STAGE CONSTRUCTION - STAGE 3
	STAGE 3 SUB-TOTAL			14	
STAGE 4					
60+65	STH 66 (EB)	1	5	5	SEE STAGE CONSTRUCTION - STAGE 4
74+90	STH 66 (WB)	1	5	5	SEE STAGE CONSTRUCTION - STAGE 4
	STAGE 4 SUB-TOTAL			10	
STAGE 5					
74+90	STH 66 (WB)	1	1	1	SEE STAGE CONSTRUCTION - STAGE 5
	STAGE 5 SUB-TOTAL			1	
	GRAND TOTAL			**121**	

3

TRAFFIC CONTROL SIGNS

LOCATION	MESSAGE	SIGN CODE	NO	DAYS	643.0900 DAY	REMARKS
STAGE 1						
STH 66 (EB)	MAX 11' WIDTH	W12-52	1	8	8	SEE STAGE CONSTRUCTION - STAGE 1
	ROAD WORK AHEAD	W20-1A	2	8	16	SEE STAGE CONSTRUCTION - STAGE 1
	SPEED REDUCTION AHEAD 30 MPH	WO3-5	2	8	16	SEE STAGE CONSTRUCTION - STAGE 1
	LEFT LANE CLOSED AHEAD	W20-55A	2	8	16	SEE STAGE CONSTRUCTION - STAGE 1
	TWO-WAY TRAFFIC SYMBOL	W06-3	1	8	8	SEE STAGE CONSTRUCTION - STAGE 1
	SPEED LIMIT 30 MPH	R2-1	3	8	24	SEE STAGE CONSTRUCTION - STAGE 1
	LEFT LANE ENDS SYMBOL	WO4-2L	2	8	16	SEE STAGE CONSTRUCTION - STAGE 1
	END ROAD WORK	G20-2A	2	8	16	SEE STAGE CONSTRUCTION - STAGE 1
STH 66 (WB)	MAX 11' WIDTH	W12-52	1	8	8	SEE STAGE CONSTRUCTION - STAGE 1
	ROAD WORK AHEAD	W20-1A	2	8	16	SEE STAGE CONSTRUCTION - STAGE 1
	SPEED REDUCTION AHEAD 30 MPH	WO3-5	2	8	16	SEE STAGE CONSTRUCTION - STAGE 1
	LEFT LANE CLOSED AHEAD	W20-55A	2	8	16	SEE STAGE CONSTRUCTION - STAGE 1
	SPEED LIMIT 30 MPH	R2-1	3	8	24	SEE STAGE CONSTRUCTION - STAGE 1
	LEFT LANE ENDS SYMBOL	WO4-2L	2	8	16	SEE STAGE CONSTRUCTION - STAGE 1
	TWO-WAY TRAFFIC SYMBOL	W06-3	1	8	8	SEE STAGE CONSTRUCTION - STAGE 1
	END ROAD WORK	G20-2A	2	8	16	SEE STAGE CONSTRUCTION - STAGE 1
STH 66 (EB) & CTH YY	MAX 11' WIDTH	W12-52	3	8	24	SEE STAGE CONSTRUCTION - STAGE 1
	EAST	M3-2	2	8	16	SEE STAGE CONSTRUCTION - STAGE 1
	STH 66	M1-6	2	8	16	SEE STAGE CONSTRUCTION - STAGE 1
	0.3 MILES AHEAD	W57-52	1	8	8	SEE STAGE CONSTRUCTION - STAGE 1
IH-39 (SB) & IH-39 (NB)	MAX 11' WIDTH	W12-52	5	8	40	SEE STAGE CONSTRUCTION - STAGE 1
RAMPS ONTO STH 66 (WB)	0.4 MILES AHEAD	W57-52	1	8	8	SEE STAGE CONSTRUCTION - STAGE 1
	STH 66	M1-6	4	8	32	SEE STAGE CONSTRUCTION - STAGE 1
	WEST	W3-4	4	8	32	SEE STAGE CONSTRUCTION - STAGE 1
SIDEROADS	ROAD WORK AHEAD	W20-1A	3	8	24	SEE STAGE CONSTRUCTION - STAGE 1
		STAGE 1 SUB-TOTAL			440	

CONT. ON NEXT SHEET

CONT. FROM PREVIOUS SHEET

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3

TRAFFIC CONTROL SIGNS

LOCATION	MESSAGE	SIGN CODE	NO	DAYS	643.0900 DAY	REMARKS
STAGE 2						
STH 66 (EB)	MAX 11' WIDTH	W12-52	1	40	40	SEE STAGE CONSTRUCTION - STAGE 2
	ROAD WORK AHEAD	W20-1A	2	40	80	SEE STAGE CONSTRUCTION - STAGE 2
	SPEED REDUCTION AHEAD 30 MPH	WO3-5	2	40	80	SEE STAGE CONSTRUCTION - STAGE 2
	LEFT LANE CLOSED AHEAD	W20-55A	2	40	80	SEE STAGE CONSTRUCTION - STAGE 2
	TWO-WAY TRAFFIC SYMBOL	W06-3	1	40	40	SEE STAGE CONSTRUCTION - STAGE 2
	SPEED LIMIT 30 MPH	R2-1	3	40	120	SEE STAGE CONSTRUCTION - STAGE 2
	LEFT LANE ENDS SYMBOL	WO4-2L	2	40	80	SEE STAGE CONSTRUCTION - STAGE 2
	NIGHT ARROW	WO1-6	1	40	40	SEE STAGE CONSTRUCTION - STAGE 2
	END ROAD WORK	G20-2A	2	40	80	SEE STAGE CONSTRUCTION - STAGE 2
STH 66 (WB)	MAX 11' WIDTH	W12-52	1	40	40	SEE STAGE CONSTRUCTION - STAGE 2
	ROAD WORK AHEAD	W20-1A	2	40	80	SEE STAGE CONSTRUCTION - STAGE 2
	SPEED REDUCTION AHEAD 30 MPH	WO3-5	2	40	80	SEE STAGE CONSTRUCTION - STAGE 2
	RIGHT LANE CLOSED AHEAD	W20-5A	2	40	80	SEE STAGE CONSTRUCTION - STAGE 2
	SPEED LIMIT 30 MPH	R2-1	3	40	120	SEE STAGE CONSTRUCTION - STAGE 2
	RIGHT LANE ENDS SYMBOL	WO4-2R	2	40	80	SEE STAGE CONSTRUCTION - STAGE 2
	DOUBLE REVERSE CURVE (1 LANE)	WO24-1L	2	40	80	SEE STAGE CONSTRUCTION - STAGE 2
	NIGHT ARROW	WO1-6	1	40	40	SEE STAGE CONSTRUCTION - STAGE 2
	TWO-WAY TRAFFIC SYMBOL	W06-3	1	40	40	SEE STAGE CONSTRUCTION - STAGE 2
	BRIDGE OUT	R11-2B	2	40	80	SEE STAGE CONSTRUCTION - STAGE 2
	END ROAD WORK	G20-2A	2	40	80	SEE STAGE CONSTRUCTION - STAGE 2
STH 66 (EB) & CTH YY	MAX 11' WIDTH	W12-52	1	40	40	SEE STAGE CONSTRUCTION - STAGE 2
	EAST	M3-2	2	40	80	SEE STAGE CONSTRUCTION - STAGE 2
	STH 66	M1-6	2	40	80	SEE STAGE CONSTRUCTION - STAGE 2
	0.3 MILES AHEAD	W57-52	1	40	40	SEE STAGE CONSTRUCTION - STAGE 2
IH-39 (SB) & IH-39 (NB)	MAX 11' WIDTH	W12-52	5	40	200	SEE STAGE CONSTRUCTION - STAGE 2
RAMPS ONTO STH 66 (WB)	0.4 MILES AHEAD	W57-52	1	40	40	SEE STAGE CONSTRUCTION - STAGE 2
	STH 66	M1-6	4	40	160	SEE STAGE CONSTRUCTION - STAGE 2
	WEST	W3-4	4	40	160	SEE STAGE CONSTRUCTION - STAGE 2
SIDEROADS	ROAD WORK AHEAD	W20-1A	3	40	120	SEE STAGE CONSTRUCTION - STAGE 2
				STAGE 2 SUB-TOTAL	2360	

CONT. ON NEXT SHEET

CONT. FROM PREVIOUS SHEET

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TRAFFIC CONTROL SIGNS

LOCATION	MESSAGE	SIGN CODE	NO	DAYS	643.0900 DAY	REMARKS
STAGE 3						
STH 66 (EB)	MAX 11' WIDTH	W12-52	1	7	7	SEE STAGE CONSTRUCTION - STAGE 3
	ROAD WORK AHEAD	W20-1A	2	7	14	SEE STAGE CONSTRUCTION - STAGE 3
	SPEED REDUCTION AHEAD 30 MPH	WO3-5	2	7	14	SEE STAGE CONSTRUCTION - STAGE 3
	LEFT LANE CLOSED AHEAD	W20-55A	2	7	14	SEE STAGE CONSTRUCTION - STAGE 3
	SPEED LIMIT 30 MPH	R2-1	3	7	21	SEE STAGE CONSTRUCTION - STAGE 3
	LEFT LANE ENDS SYMBOL	WO4-2L	2	7	14	SEE STAGE CONSTRUCTION - STAGE 3
	END ROAD WORK	G20-2A	2	7	14	SEE STAGE CONSTRUCTION - STAGE 3
STH 66 (WB)	MAX 11' WIDTH	W12-52	1	7	7	SEE STAGE CONSTRUCTION - STAGE 3
	ROAD WORK AHEAD	W20-1A	2	7	14	SEE STAGE CONSTRUCTION - STAGE 3
	SPEED REDUCTION AHEAD 30 MPH	WO3-5	2	7	14	SEE STAGE CONSTRUCTION - STAGE 3
	LEFT LANE CLOSED AHEAD	W20-55A	2	7	14	SEE STAGE CONSTRUCTION - STAGE 3
	SPEED LIMIT 30 MPH	R2-1	3	7	21	SEE STAGE CONSTRUCTION - STAGE 3
	LEFT LANE ENDS SYMBOL	WO4-2L	2	7	14	SEE STAGE CONSTRUCTION - STAGE 3
	END ROAD WORK	G20-2A	2	7	14	SEE STAGE CONSTRUCTION - STAGE 3
STH 66 (EB) & CTH YY	MAX 11' WIDTH	W12-52	1	7	7	SEE STAGE CONSTRUCTION - STAGE 3
	EAST	M3-2	2	7	14	SEE STAGE CONSTRUCTION - STAGE 3
	STH 66	M1-6	2	7	14	SEE STAGE CONSTRUCTION - STAGE 3
	0.3 MILES AHEAD	W57-52	1	7	7	SEE STAGE CONSTRUCTION - STAGE 3
IH-39 (SB) & IH-39 (NB)	MAX 11' WIDTH	W12-52	5	7	35	SEE STAGE CONSTRUCTION - STAGE 3
RAMPS ONTO STH 66 (WB)	0.4 MILES AHEAD	W57-52	1	7	7	SEE STAGE CONSTRUCTION - STAGE 3
	STH 66	M1-6	4	7	28	SEE STAGE CONSTRUCTION - STAGE 3
	WEST	W3-4	4	7	28	SEE STAGE CONSTRUCTION - STAGE 3
SIDEROADS	ROAD WORK AHEAD	W20-1A	3	7	21	SEE STAGE CONSTRUCTION - STAGE 3

STAGE 3 SUB-TOTAL 357

CONT. ON NEXT SHEET

CONT. FROM PREVIOUS SHEET

3

TRAFFIC CONTROL SIGNS

LOCATION	MESSAGE	SIGN CODE	NO	DAYS	643.0900 DAY	REMARKS
STAGE 4						
STH 66 (EB)	MAX 11' WIDTH	W12-52	1	5	5	SEE STAGE CONSTRUCTION - STAGE 4
	ROAD WORK AHEAD	W20-1A	2	5	10	SEE STAGE CONSTRUCTION - STAGE 4
	SPEED REDUCTION AHEAD 30 MPH	WO3-5	2	5	10	SEE STAGE CONSTRUCTION - STAGE 4
	RIGHT LANE CLOSED AHEAD	W20-5A	2	5	10	SEE STAGE CONSTRUCTION - STAGE 4
	SPEED LIMIT 30 MPH	R2-1	3	5	15	SEE STAGE CONSTRUCTION - STAGE 4
	RIGHT LANE ENDS SYMBOL	WO4-2R	2	5	10	SEE STAGE CONSTRUCTION - STAGE 4
	END ROAD WORK	G20-2A	2	5	10	SEE STAGE CONSTRUCTION - STAGE 4
STH 66 (WB)	MAX 11' WIDTH	W12-52	1	5	5	SEE STAGE CONSTRUCTION - STAGE 4
	ROAD WORK AHEAD	W20-1A	2	5	10	SEE STAGE CONSTRUCTION - STAGE 4
	SPEED REDUCTION AHEAD 30 MPH	WO3-5	2	5	10	SEE STAGE CONSTRUCTION - STAGE 4
	LEFT LANE CLOSED AHEAD	W20-55A	2	5	10	SEE STAGE CONSTRUCTION - STAGE 4
	SPEED LIMIT 30 MPH	R2-1	3	5	15	SEE STAGE CONSTRUCTION - STAGE 4
	LEFT LANE ENDS SYMBOL	WO4-2L	2	5	10	SEE STAGE CONSTRUCTION - STAGE 4
	END ROAD WORK	G20-2A	2	5	10	SEE STAGE CONSTRUCTION - STAGE 4
STH 66 (EB) & CTH YY	MAX 11' WIDTH	W12-52	1	5	5	SEE STAGE CONSTRUCTION - STAGE 4
	EAST	M3-2	2	5	10	SEE STAGE CONSTRUCTION - STAGE 4
	STH 66	M1-6	2	5	10	SEE STAGE CONSTRUCTION - STAGE 4
	0.3 MILES AHEAD	W57-52	1	5	5	SEE STAGE CONSTRUCTION - STAGE 4
IH-39 (SB) & IH-39 (NB)	MAX 11' WIDTH	W12-52	5	5	25	SEE STAGE CONSTRUCTION - STAGE 4
RAMPS ONTO STH 66 (WB)	0.4 MILES AHEAD	W57-52	1	5	5	SEE STAGE CONSTRUCTION - STAGE 4
	STH 66	M1-6	4	5	20	SEE STAGE CONSTRUCTION - STAGE 4
	WEST	W3-4	4	5	20	SEE STAGE CONSTRUCTION - STAGE 4
SIDEROADS	ROAD WORK AHEAD	W20-1A	3	5	15	SEE STAGE CONSTRUCTION - STAGE 4

STAGE 4 SUB-TOTAL 255

CONT. ON NEXT SHEET

CONT. FROM PREVIOUS SHEET

TRAFFIC CONTROL SIGNS

LOCATION	MESSAGE	SIGN CODE	NO	DAYS	643.0900 DAY	REMARKS
STAGE 5						
STH 66 (WB)	MAX 11' WIDTH	W12-52	1	1	1	SEE STAGE CONSTRUCTION - STAGE 5
	ROAD WORK AHEAD	W20-1A	2	1	2	SEE STAGE CONSTRUCTION - STAGE 5
	SPEED REDUCTION AHEAD 30 MPH	WO3-5	2	1	2	SEE STAGE CONSTRUCTION - STAGE 5
	RIGHT LANE CLOSED AHEAD	W20-5A	2	1	2	SEE STAGE CONSTRUCTION - STAGE 5
	SPEED LIMIT 30 MPH	R2-1	3	1	3	SEE STAGE CONSTRUCTION - STAGE 5
	RIGHT LANE ENDS SYMBOL	WO4-2R	2	1	2	SEE STAGE CONSTRUCTION - STAGE 5
	END ROAD WORK	G20-2A	2	1	2	SEE STAGE CONSTRUCTION - STAGE 5
IH-39 (SB) & IH-39 (NB)	MAX 11' WIDTH	W12-52	5	1	5	SEE STAGE CONSTRUCTION - STAGE 5
RAMPS ONTO STH 66 (WB)	0.4 MILES AHEAD	W57-52	1	1	1	SEE STAGE CONSTRUCTION - STAGE 5
	STH 66	M1-6	4	1	4	SEE STAGE CONSTRUCTION - STAGE 5
	WEST	W3-4	4	1	4	SEE STAGE CONSTRUCTION - STAGE 5
SIDEROADS	ROAD WORK AHEAD	W20-1A	1	1	1	SEE STAGE CONSTRUCTION - STAGE 5
				STAGE 5 SUB-TOTAL	29	
				GRAND TOTAL	**3441**	

TRAFFIC CONTROL SIGNS PCMS

STATION	LOCATION	DESCRIPTION PHASE 1	DESCRIPTION PHASE 2	643.1050 DAY
STAGE 1				
54+50	STH 66 (EB)	ROADWORK BEGINS XX/XX	USE ALT ROUTE	7
77+50	STH 66 (WB)	ROADWORK BEGINS XX/XX	USE ALT ROUTE	7
			TOTAL	**14**

SAWING CONCRETE

STATION	LOCATION	690.0250 LF	REMARKS
66+31	STH 66 (WB)	31	BEGIN PROJECT
67+85	STH 66 (WB)	31	END PROJECT
63+35 - 65+19	STH 66 MEDIAN	380	TEMPORARY CROSSOVER
68+46 - 70+29	STH 66 MEDIAN	378	TEMPORARY CROSSOVER
	TOTAL	**820**	

PAVEMENT MARKING 4-INCH

STATION - STATION	LOCATION	646.1020 PAVEMENT MARKING 4-INCH EDGELINE YELLOW LF	EDGELINE WHITE LF	CENTERLINE WHITE LF	646.9000 MARKING REMOVAL LINE LF	649.0150 TEMPORARY MARKING REMOVABLE TAPE LF	REMARKS
60+75 - 62+55	STH 66 (EB)	---	---	50.0	50	180	B-49-41
63+30 - 64+80	STH 66 (EB)	---	---	---	---	150	
63+35 - 65+19	STH 66 (EB)	184	---	---	184	---	TEMPORARY CROSSOVER
63+35 - 65+19	STH 66 (WB)	184	---	---	184	---	TEMPORARY CROSSOVER
63+71 - 69+94	STH 66 (EB)	---	---	---	---	623	
64+50 - 70+50	STH 66 (EB)	---	---	150	150	1200	CENTERLINE
66+31 - 67+85	STH 66 (WB)	154	154	37.5	---	---	B-49-41
68+46 - 70+29	STH 66 (EB)	183	---	---	183	---	TEMPORARY CROSSOVER
68+46 - 70+29	STH 66 (WB)	183	---	---	183	---	TEMPORARY CROSSOVER
73+00 - 74+80	STH 66 (WB)	---	---	50.0	50	180	B-49-41
	SUB-TOTALS	888	154	287.5	984	2333	
	TOTALS		**1329.5**		**984**	**2333**	

3

CONSTRUCTION STAKING

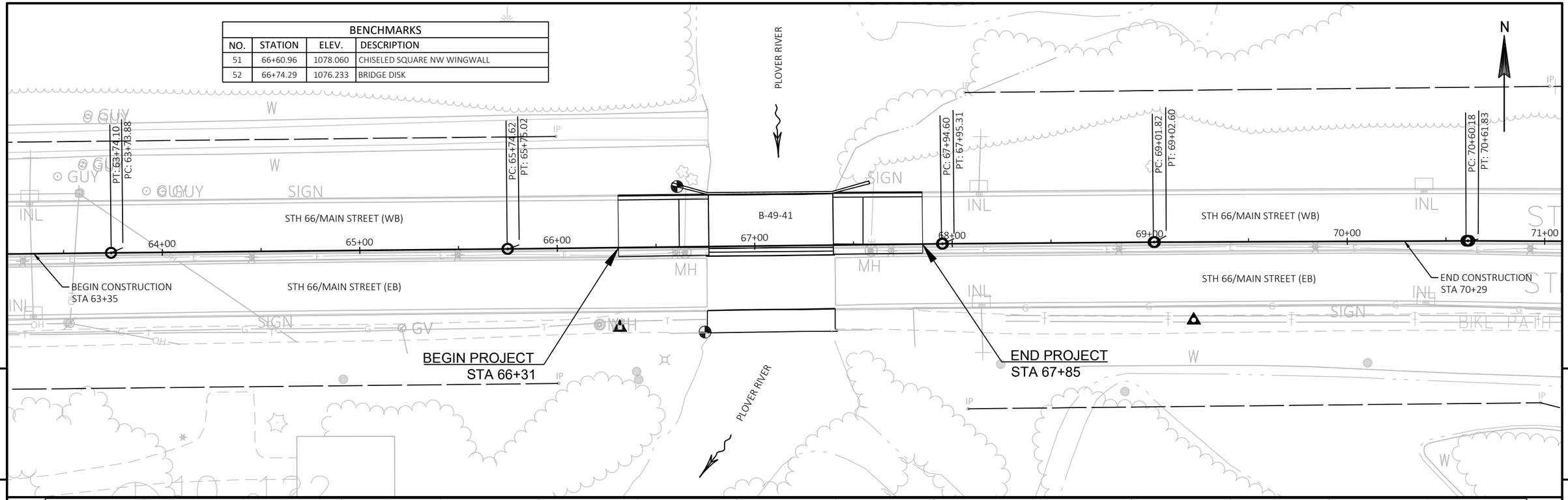
STATION - STATION	LOCATION	650.6500 STRUCTURE LAYOUT (B-49-41) LS	650.7000 CONCRETE PAVEMENT LF	650.8000 RESURFACING REFERENCE LF	650.8500 ELECTRICAL INSTALLATIONS (6280-00-70) LS	650.9910 SUPPLEMENTAL CONTROL (6280-00-70) LS	REMARKS
66+31 - 66+77	STH 66 (WB)	---	46	---	1	1	
67+40 - 67+85	STH 66 (WB)	---	45	---			
66+31 - 67+85	STH 66 (WB)	---	---	154			
66+77 - 67+40	B-49-41	1	---	---	---	---	CATEGORY 0020
	TOTALS	**1**	**91**	**154**	**1**	**1**	

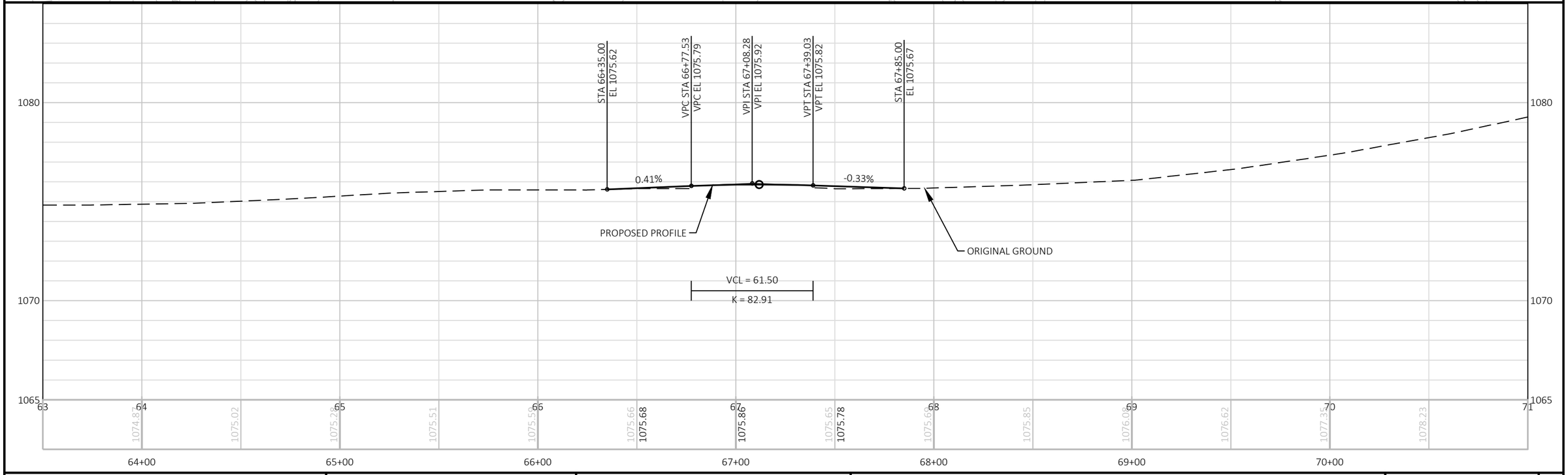
3

ELECTRICAL WIRING

STATION - STATION	LOCATION	LIGHT POLES FROM	LIGHT POLES TO	CONDUIT RIGID NONMETALLIC SCHEDULE 40 652.0225 2-INCH LF	CONDUIT RIGID NONMETALLIC SCHEDULE 40 652.0235 3-INCH LF	653.0164 PULL BOXES NON-CONDUCTIVE 24x42-INCH EACH	653.0905 REMOVING PULL BOXES EACH	654.0107 CONCRETE BASES TYPE 7 EACH	ELECTRICAL WIRE LIGHTING 655.0510 12 AWG LF	ELECTRICAL WIRE LIGHTING 655.0625 6 AWG LF	ELECTRICAL WIRE LIGHTING 655.0630 4 AWG LF	SPV.0060.01 TEMPORARY WOOD POLE 35-FOOT EACH	SPV.0105.01 REMOVE AND SALVAGE LOCAL LIGHT POLES LS	SPV.0105.02 TRANSPORT AND INSTALL CITY FURNISHED LIGHT POLES AND LIGHTING MATERIAL LS	REMARKS
TEMPORARY CONNECTIONS															
66+05	STH 66 MEDIAN	---	---	---	---	---	---	---	---	---	---	1	---	---	
68+05	STH 66 MEDIAN	---	---	---	---	---	---	---	---	---	---	1	---	---	
PROJECT LIMITS	STH 66 MEDIAN	---	---	---	---	---	---	---	---	---	---	---	1	1	STA 64+45, 66+60, 67+70, 68+85, 69+85
PERMANENT CONNECTIONS															
66+48	STH 66 (WB)	LPB-I7	LPB-I8	---	46	2	2	---	---	---	---	---	---	---	CROSSES STH 66 (WB) LANES
66+48 - 66+60	STH 66 MEDIAN	LPB-I7	I-C-3	25	---	---	---	---	---	---	---	---	---	---	
67+60 - 67+68	STH 66 MEDIAN	I-D-4	LPB-I10	20	---	---	---	---	---	---	---	---	---	---	
67+68	STH 66 (WB)	LPB-I9	LPB-I10	---	46	2	2	---	---	---	---	---	---	---	CROSSES STH 66 (WB) LANES
63+30 - 64+40	STH 66 MEDIAN	I-A-13	I-C-1	---	---	---	---	---	---	720	120	---	---	---	
64+40 - 65+50	STH 66 MEDIAN	I-C-1	I-D-2	---	---	---	---	---	---	720	120	---	---	---	
65+50 - 66+60	STH 66 MEDIAN	I-D-2	I-C-3	---	---	---	---	---	---	720	120	---	---	---	
66+60 - 67+60	STH 66 (WB)	I-C-3	I-D-4	---	---	---	---	---	---	660	110	---	---	---	
67+60 - 68+78	STH 66 MEDIAN	I-D-4	I-C-5	---	---	---	---	---	---	780	130	---	---	---	
68+78 - 69+85	STH 66 MEDIAN	I-C-5	I-D-6	---	---	---	---	---	---	720	120	---	---	---	
69+85 - 70+94	STH 66 MEDIAN	I-D-6	I-C-7	---	---	---	---	---	---	720	120	---	---	---	
63+30	STH 66 MEDIAN	I-A-13	---	---	---	---	---	---	120	---	40	---	---	---	
64+40	STH 66 MEDIAN	I-C-1	---	---	---	---	---	1	120	---	40	---	---	---	
65+50	STH 66 MEDIAN	I-D-2	---	---	---	---	---	---	120	---	40	---	---	---	
66+60	STH 66 MEDIAN	I-C-3	---	---	---	---	---	1	120	---	40	---	---	---	
67+60	STH 66 MEDIAN	I-D-4	---	---	---	---	---	1	120	---	40	---	---	---	
68+78	STH 66 MEDIAN	I-C-5	---	---	---	---	---	1	120	---	40	---	---	---	
69+85	STH 66 MEDIAN	I-D-6	---	---	---	---	---	1	120	---	40	---	---	---	
70+94	STH 66 MEDIAN	I-C-7	---	---	---	---	---	---	120	---	40	---	---	---	
		TOTALS		**45**	**92**	**4**	**4**	**5**	**960**	**5040**	**1160**	**2**	**1**	**1**	

BENCHMARKS			
NO.	STATION	ELEV.	DESCRIPTION
51	66+60.96	1078.060	CHISELED SQUARE NW WINGWALL
52	66+74.29	1076.233	BRIDGE DISK





PROJECT NO: 6280-00-70	HWY: STH 66	COUNTY: PORTAGE	PLAN AND PROFILE: PLOVER RIVER, B-49-41	SHEET 50	E

FILE NAME : N:\PDS\C3D\62800000\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - 050101-pp

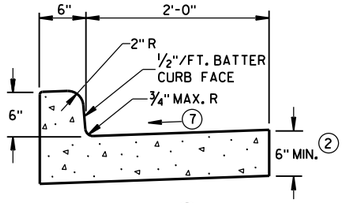
PLOT DATE : 1/22/2019 7:28 AM PLOT BY : CHRISTIANSON, ERIN M PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

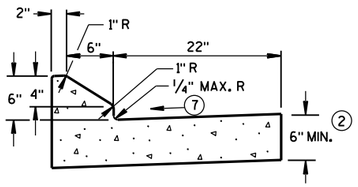
Standard Detail Drawing List

08D01-20A	CONCRETE CURB & GUTTER
08D01-20B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
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
09C03-04	TRANSFORMER/PEDESTAL BASES
09C08-05	CONCRETE BASE, TYPE 7
09E01-15G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-06	NON-FREEWAY LIGHTING UNIT POLE WIRING
13B02-09A	CONCRETE PAVEMENT APPROACH SLAB
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-09	URBAN DOWELED CONCRETE PAVEMENT
14B07-15A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15I	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
15C02-07F	ADVANCED WIDTH RESTRICTION SIGNING
15C08-19A	LONGITUDINAL MARKING (MAINLINE)
15C11-07A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15D03-05	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER
15D06-03	TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION
15D12-07B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D20-04	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS

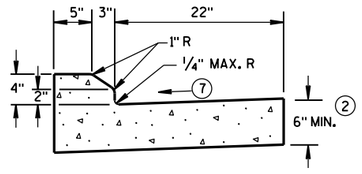
6



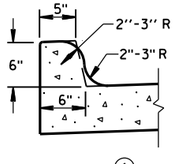
TYPES A (1) & D



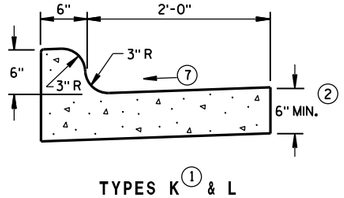
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

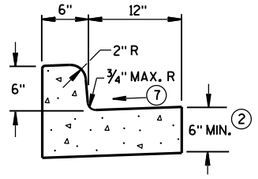


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



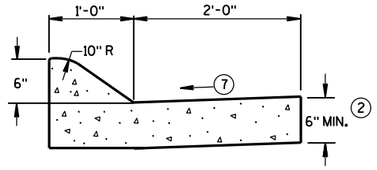
TYPES K (1) & L

CONCRETE CURB & GUTTER 30"

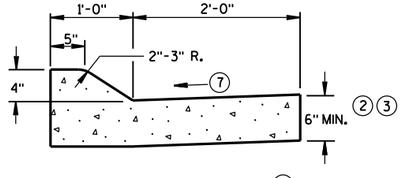


TYPES A (1) & D

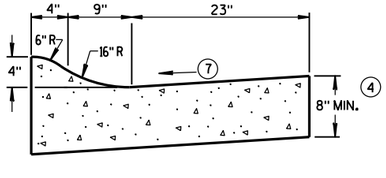
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

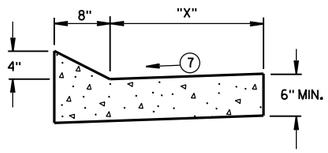


4" SLOPED CURB TYPES A (1) & D



4" SLOPED CURB TYPES R (1) & T (5)

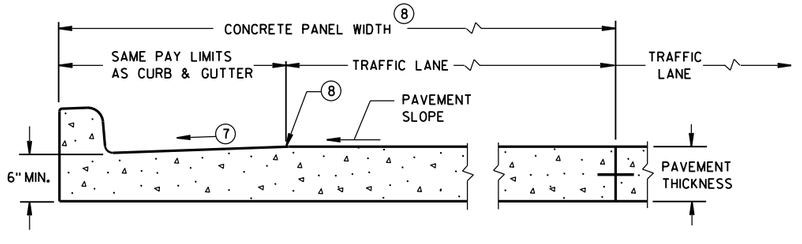
CONCRETE CURB & GUTTER 36"



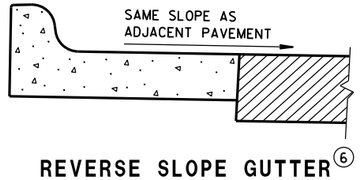
TYPES TBT & TBTT (1)

CONCRETE CURB & GUTTER

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



PARTIAL SECTION OF PAVEMENT *
WITH INTEGRAL CURB & GUTTER



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

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS 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 & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

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 GUTTER 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.

PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

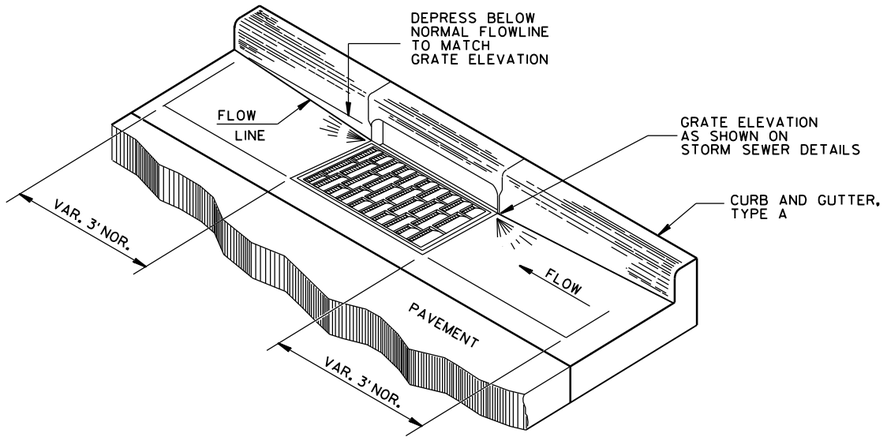
PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'

* BIKE LANE IS NOT SHOWN.

CONCRETE CURB & GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 8 D 1-20a



DETAIL OF CURB AND GUTTER AT INLETS

(TYPE H INLET COVER SHOWN)

GENERAL NOTES

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

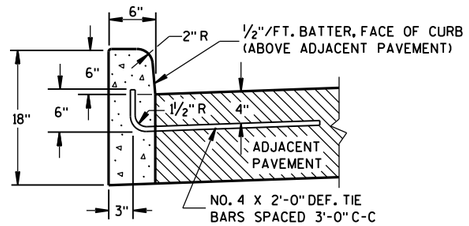
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

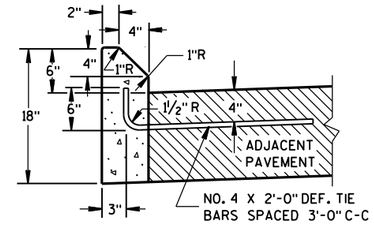
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

(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 8D18 AND SDD 8D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

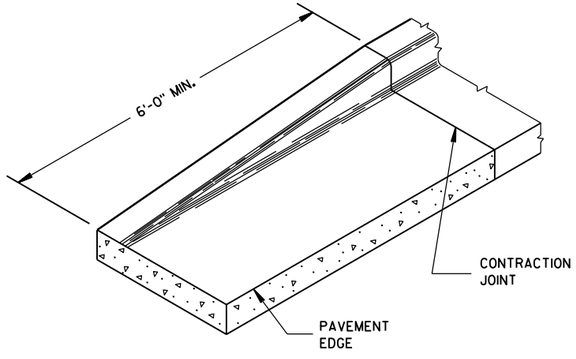


TYPES A(1) & D

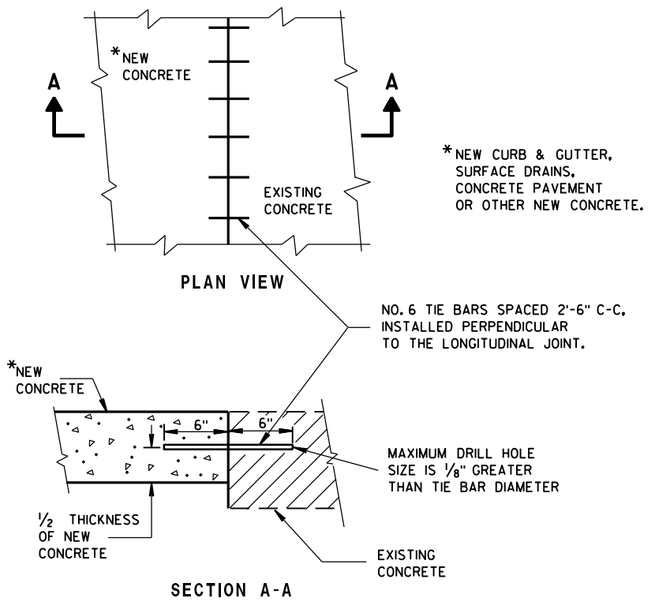


TYPES G(1) & J

CONCRETE CURB



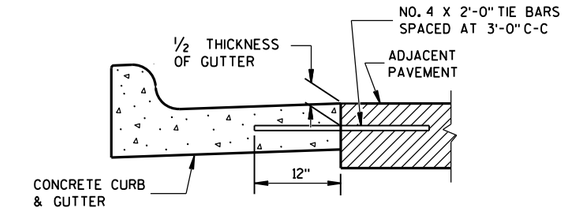
END SECTION CURB & GUTTER



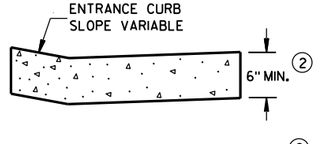
PLAN VIEW

SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

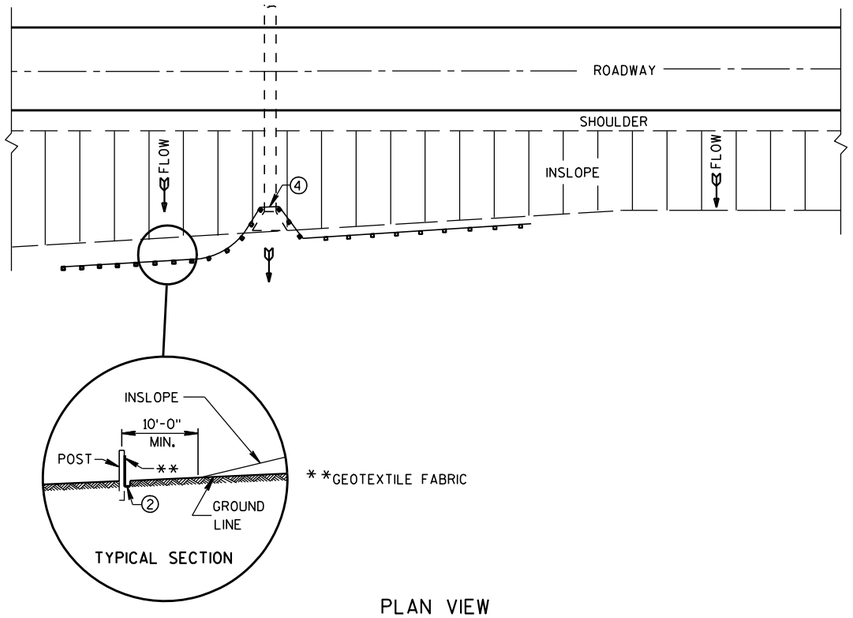
APPROVED
June, 2017 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS 53 ENT
UNIT SUPERVISOR
FHWA

6

S.D.D. 8 D 1-20b

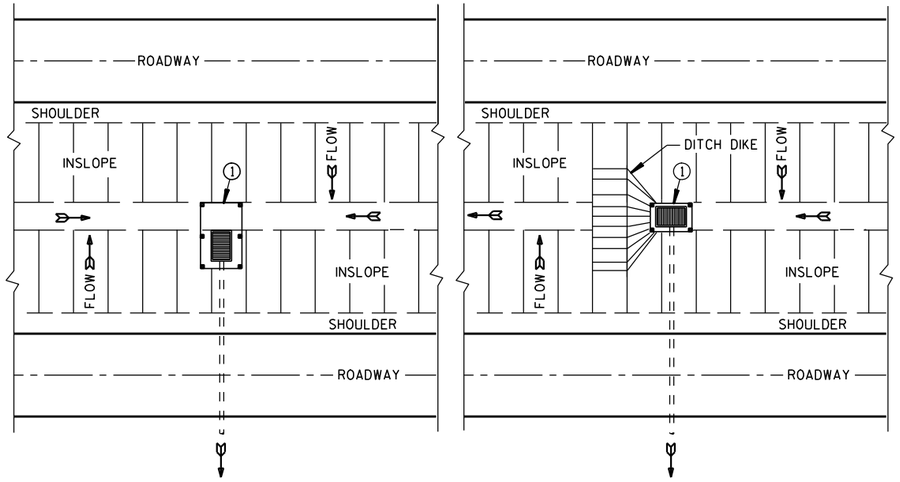
6

S.D.D. 8 D 1-20b



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



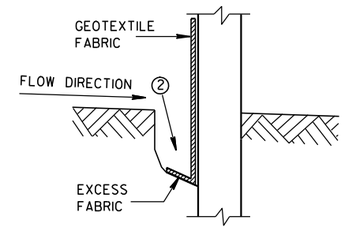
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

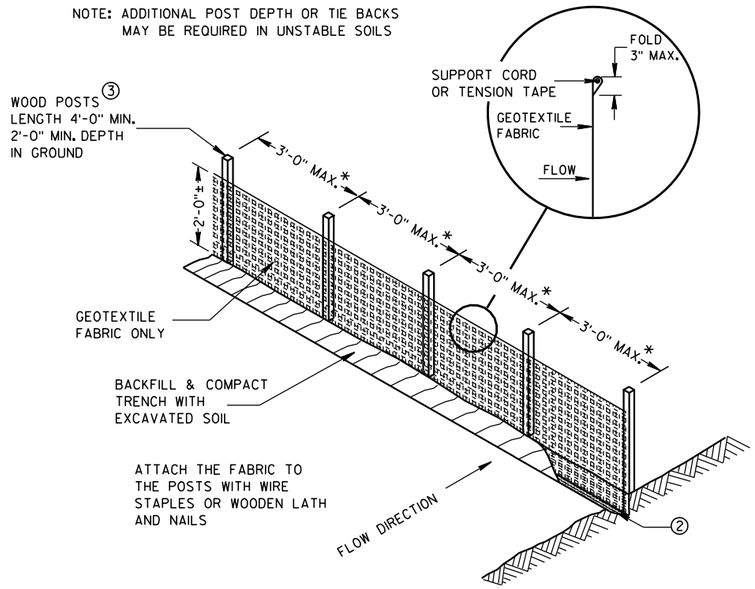
GENERAL NOTES

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.

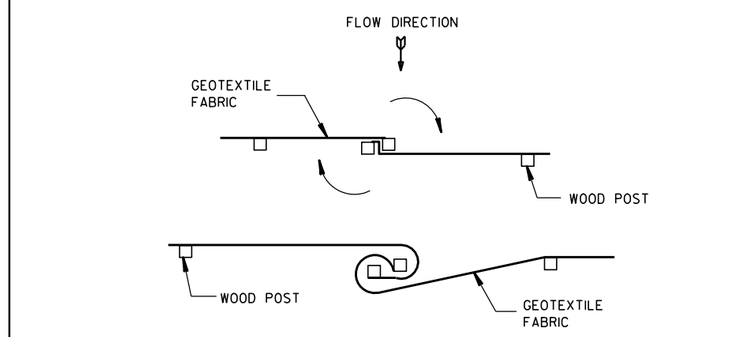


TRENCH DETAIL

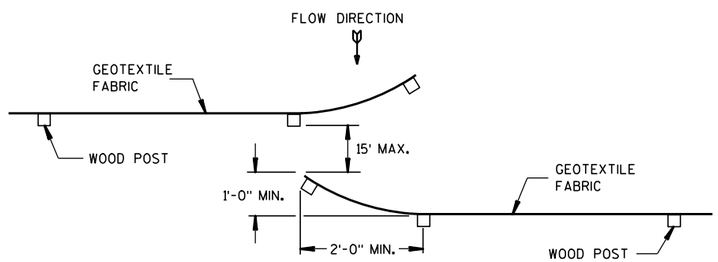


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

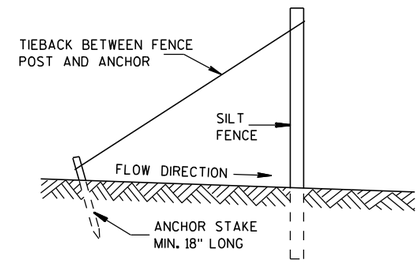


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

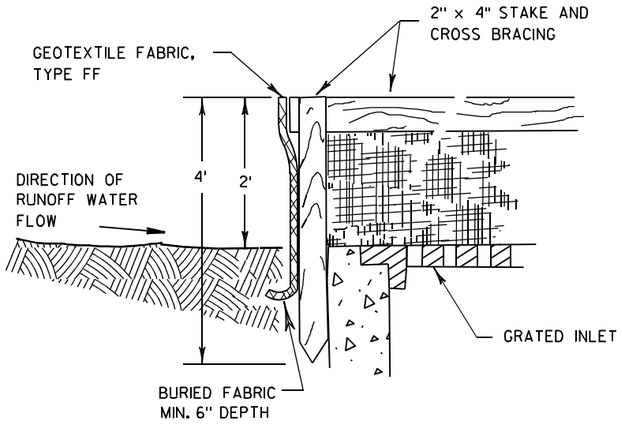
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

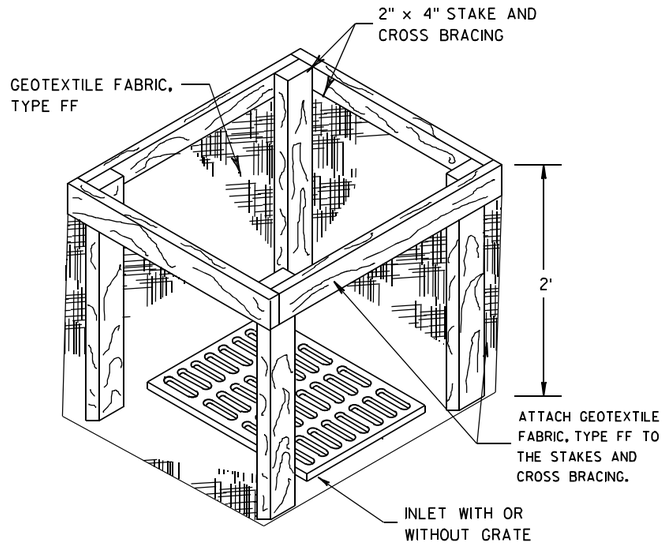
6

S.D.D. 8 E 9-6

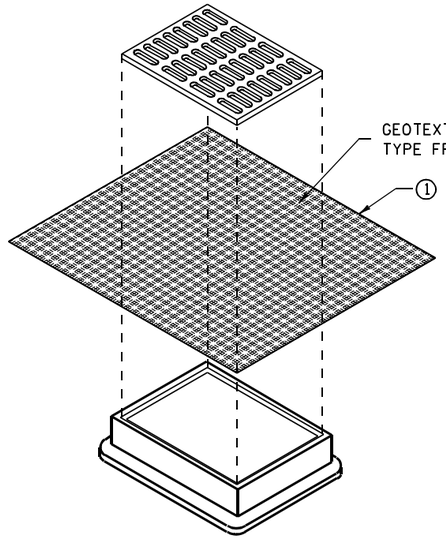
6

S.D.D. 8 E 9-6



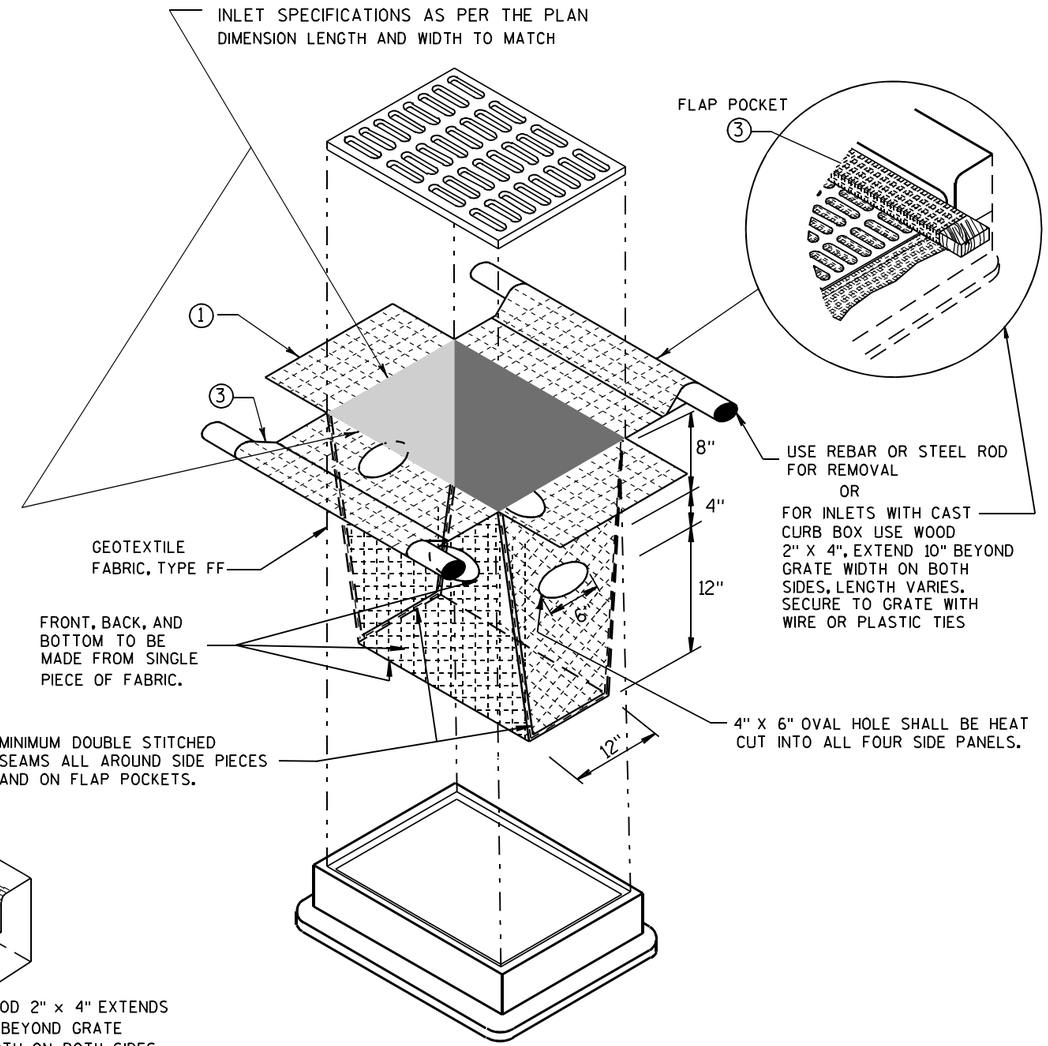


INLET PROTECTION, TYPE A



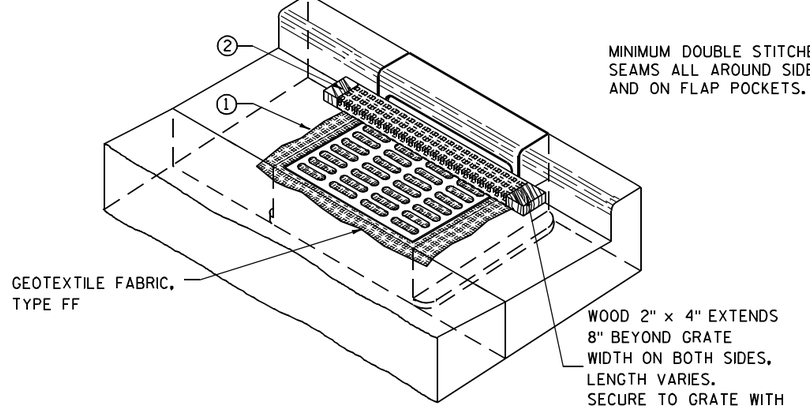
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE D

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

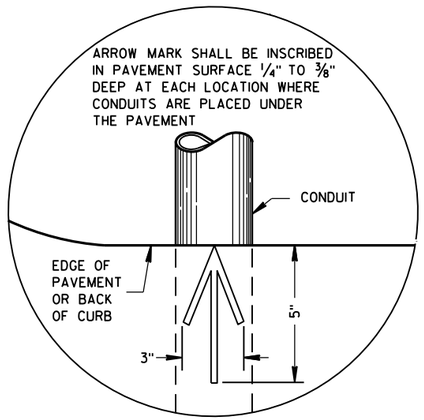
APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

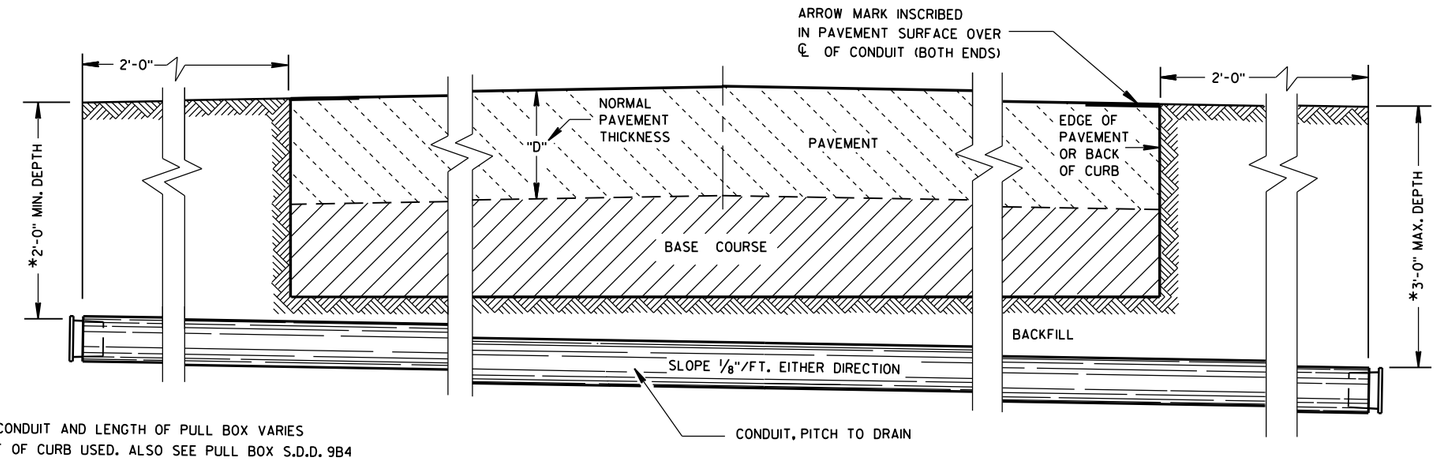
FHWA

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



PLAN VIEW

ARROW MARK



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

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

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

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

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

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

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

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

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

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

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

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

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

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

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

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

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

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

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

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

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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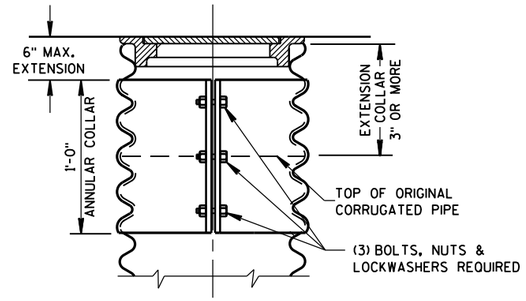
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

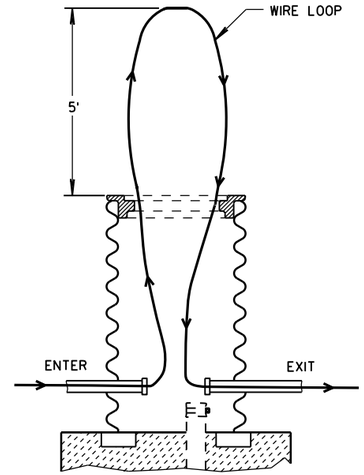
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	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.

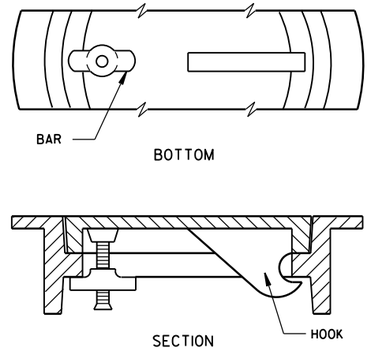
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

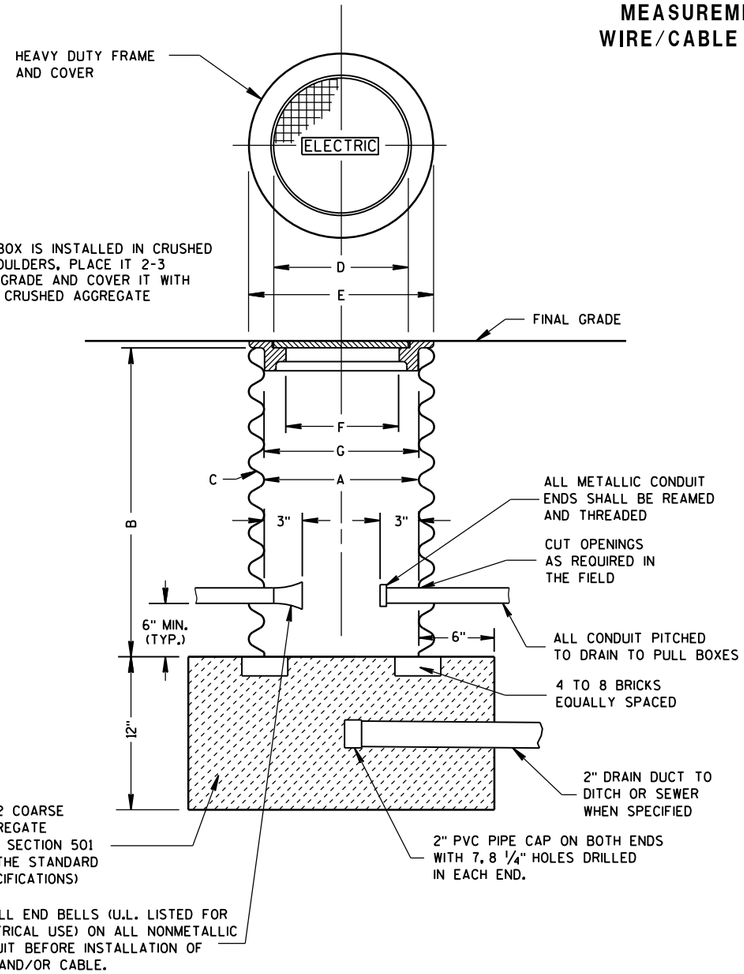


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



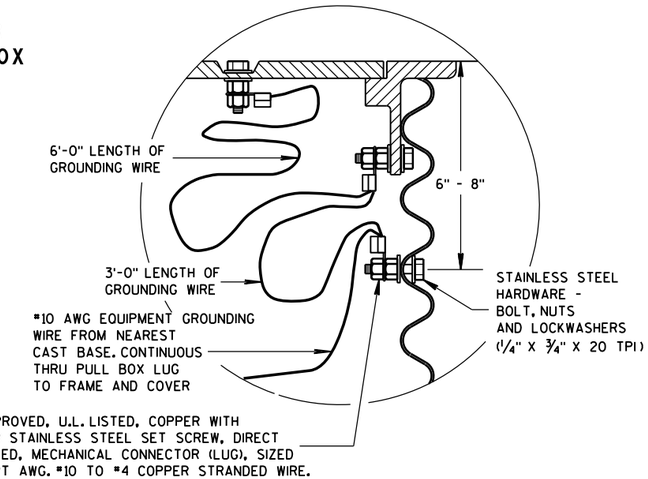
ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE

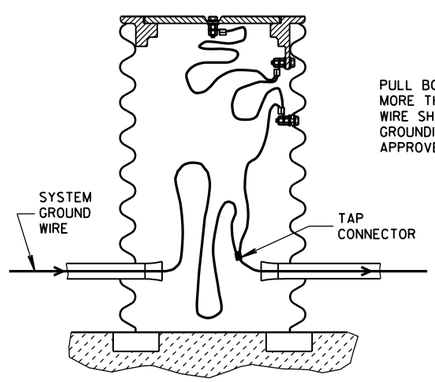


WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

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

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".

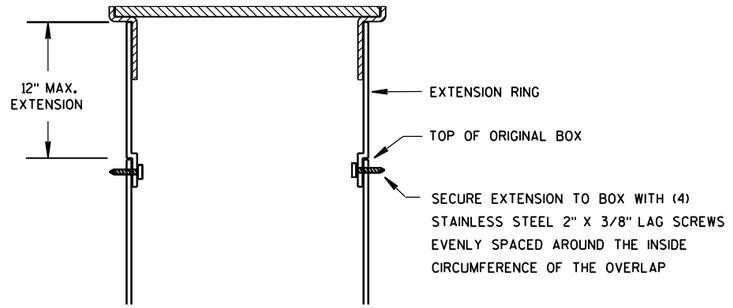
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

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

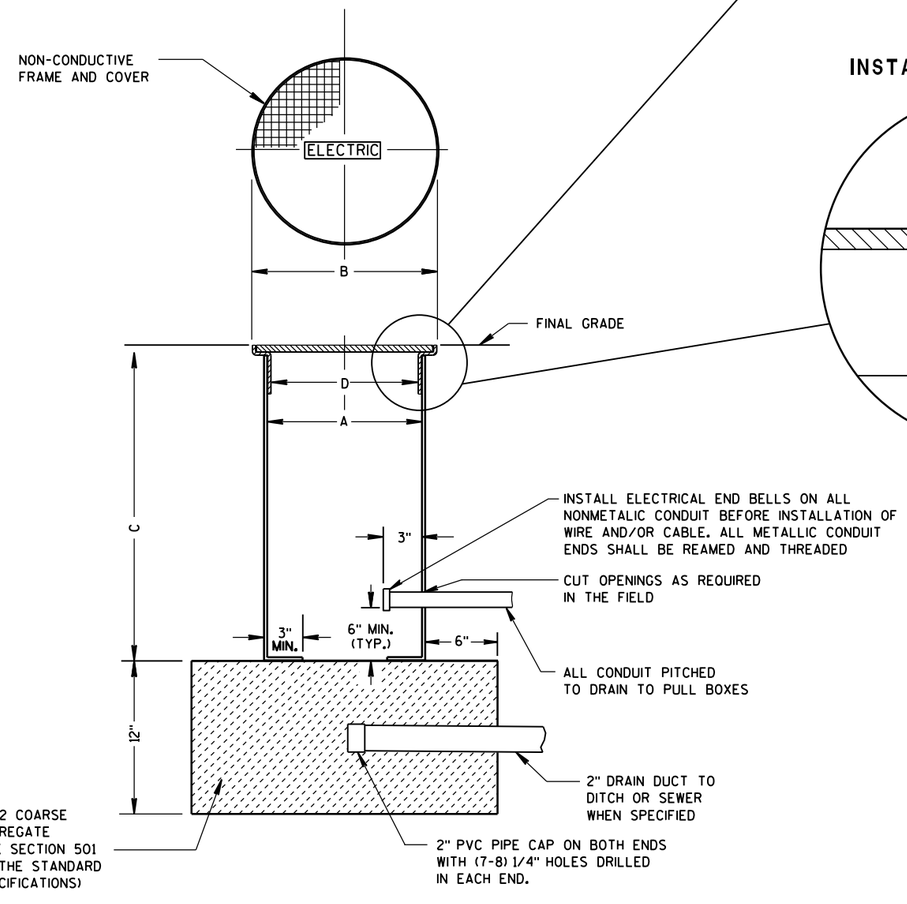
ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

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.

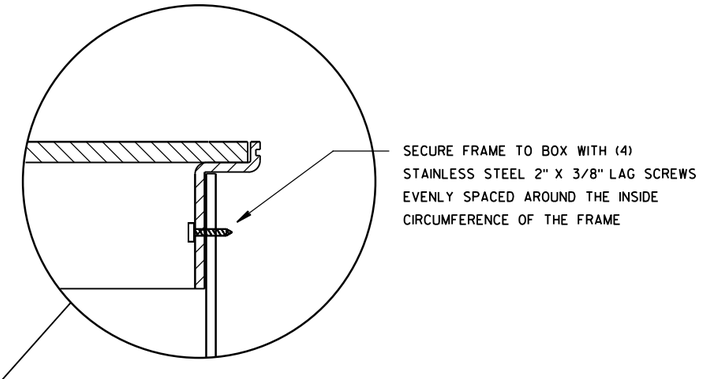


BOX EXTENSION

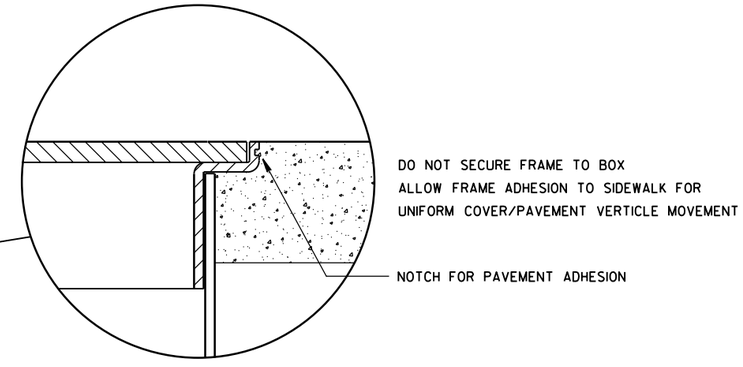


NON-CONDUCTIVE PULL BOX

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

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.

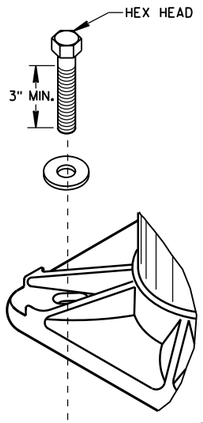
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

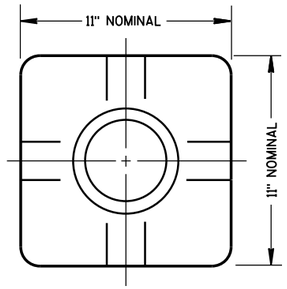
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

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

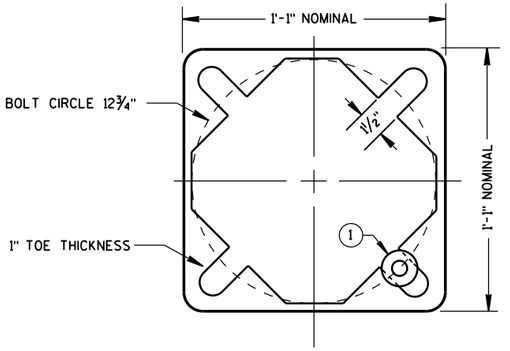
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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

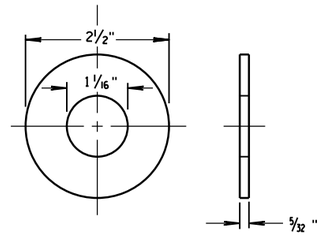




TOP VIEW
(PEDESTAL BASE)

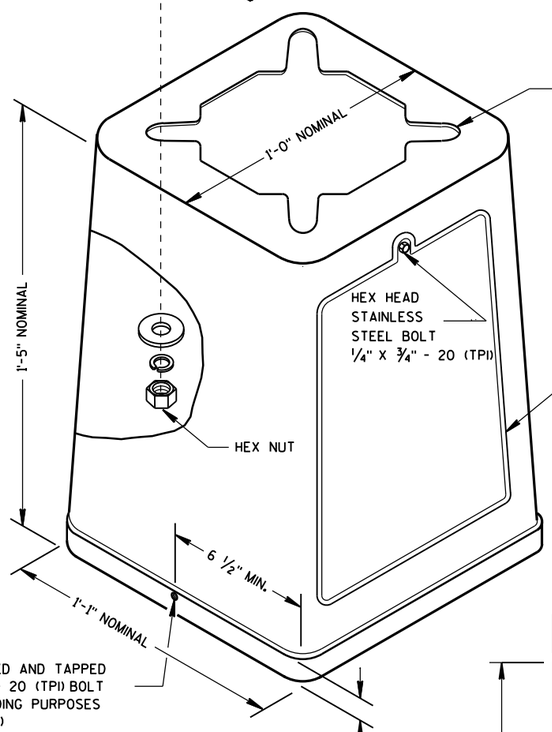


BOTTOM VIEW
(PEDESTAL BASE)

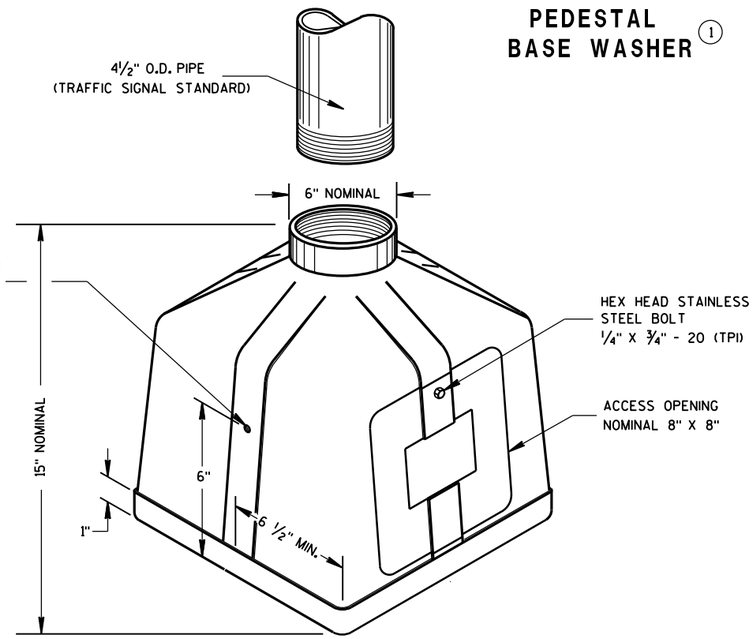


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

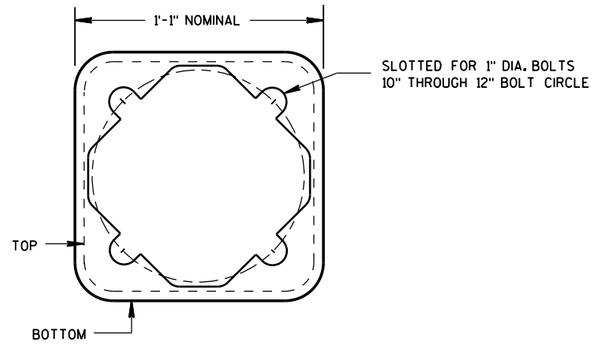


ISOMETRIC VIEW

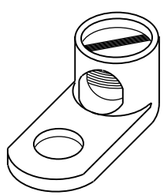


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

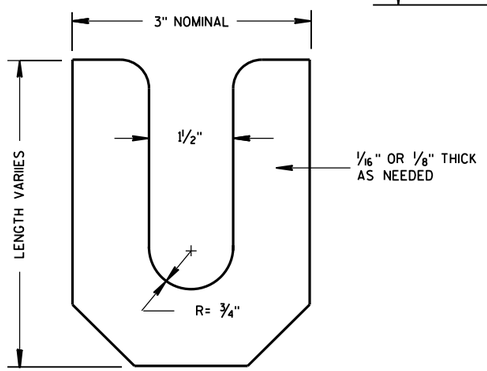


TYPICAL MECHANICAL CONNECTOR LUG

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

6

S.D.D. 9 C 3-4

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 SMOOTH 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 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 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.

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.

ANCHOR RODS SHALL BE 1" X 60".

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.

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

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

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

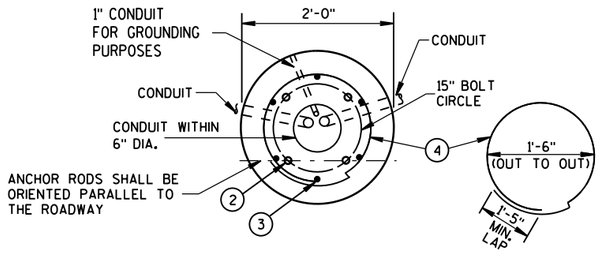
BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

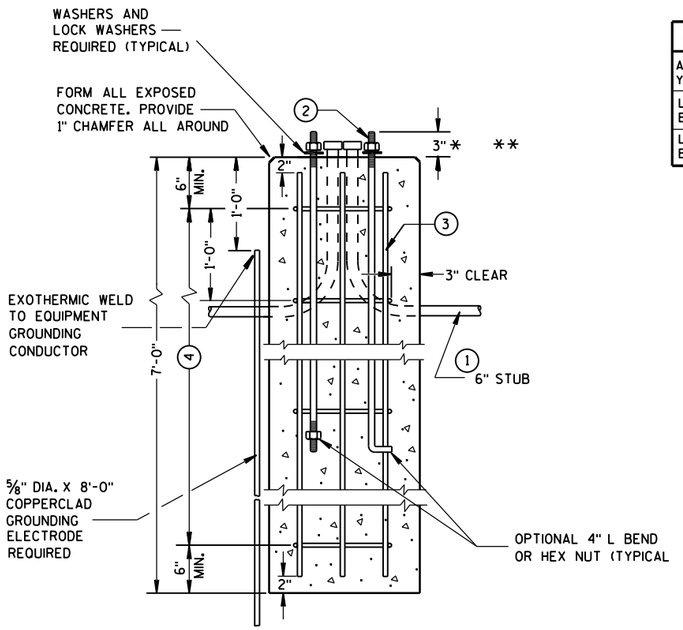
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN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

(2) (4) 1" DIA. X 5'-0" ANCHOR RODS.

(3) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

(4) (7) NO. 4 X 6'-2" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

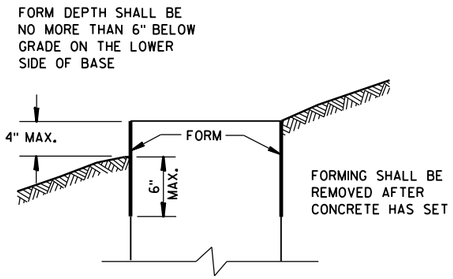




CONCRETE BASE, TYPE 7 (FOR 40' LIGHT POLES)

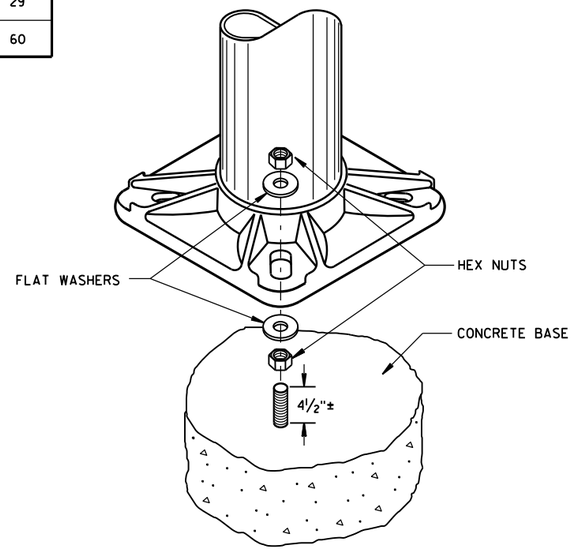
* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.



FORMING DETAIL

QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	0.8
LBS. OF HOOP BAR STEEL	29
LBS. OF VERTICAL BAR STEEL	60



NON-BREAKAWAY INSTALLATION (LEVELING NUT)

CONCRETE BASE, TYPE 7

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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Sept. 2014 — DATE
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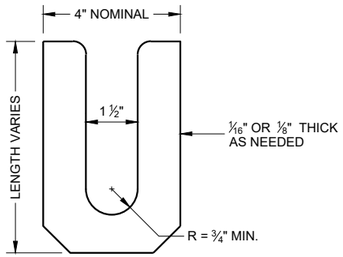
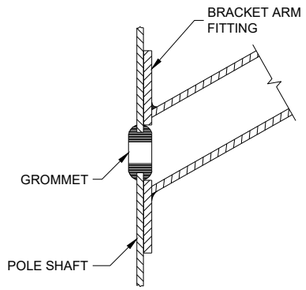
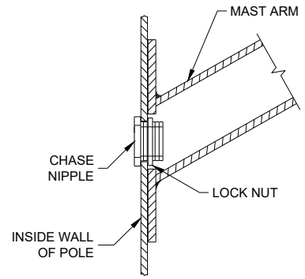


LEVELING SHIM (1)
SHALL BE ALUMINUM



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.

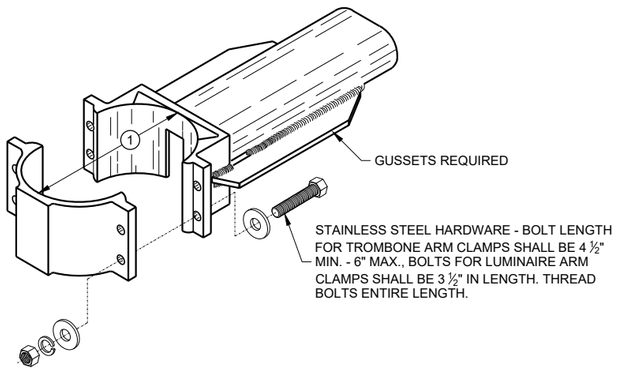
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(2) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

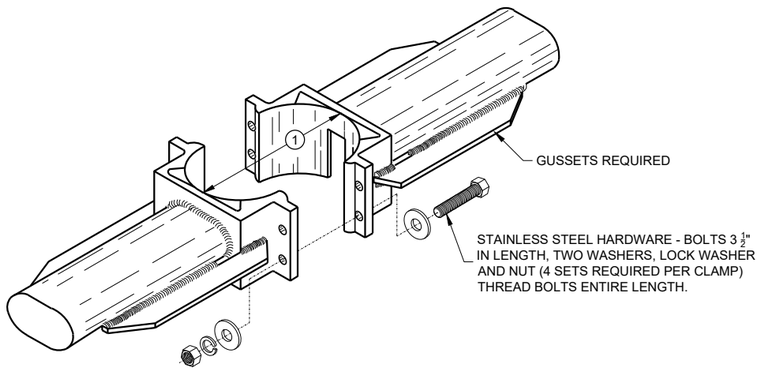
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(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.

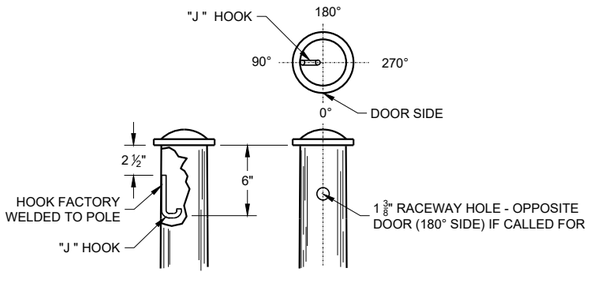
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



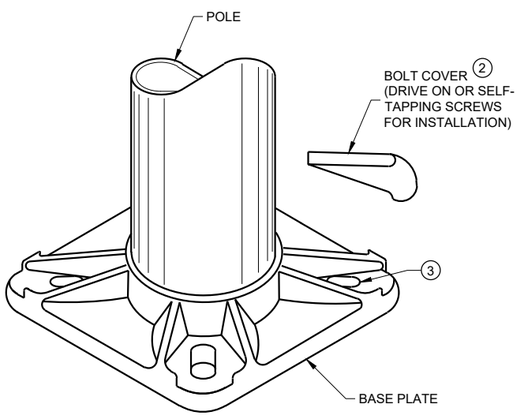
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



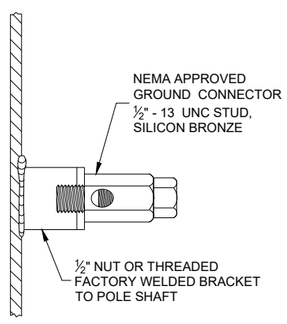
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

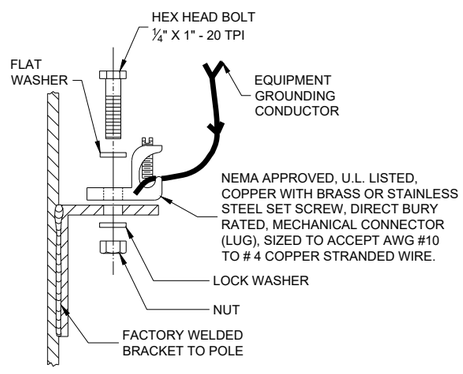


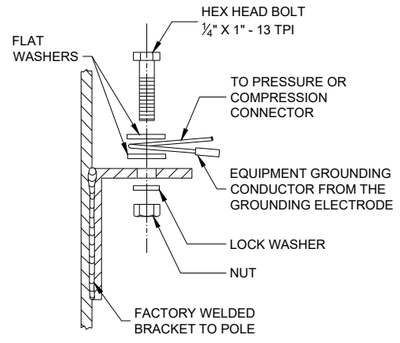
TYPICAL "J" HOOK LOCATION



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

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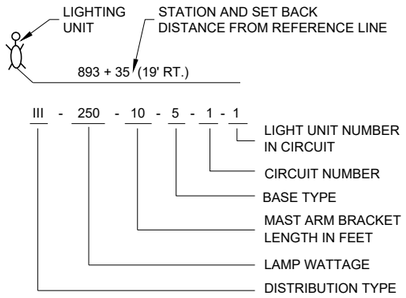
SDD 09A01 - 15g

GENERAL NOTES

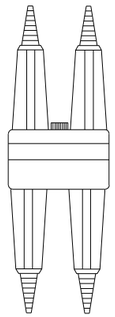
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUND CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

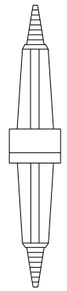
WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.



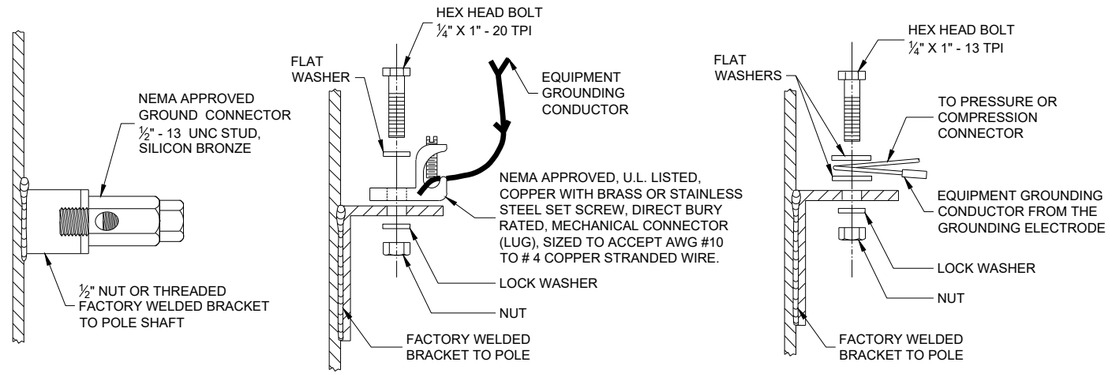
LIGHTING UNIT CODE
(TYPICAL)



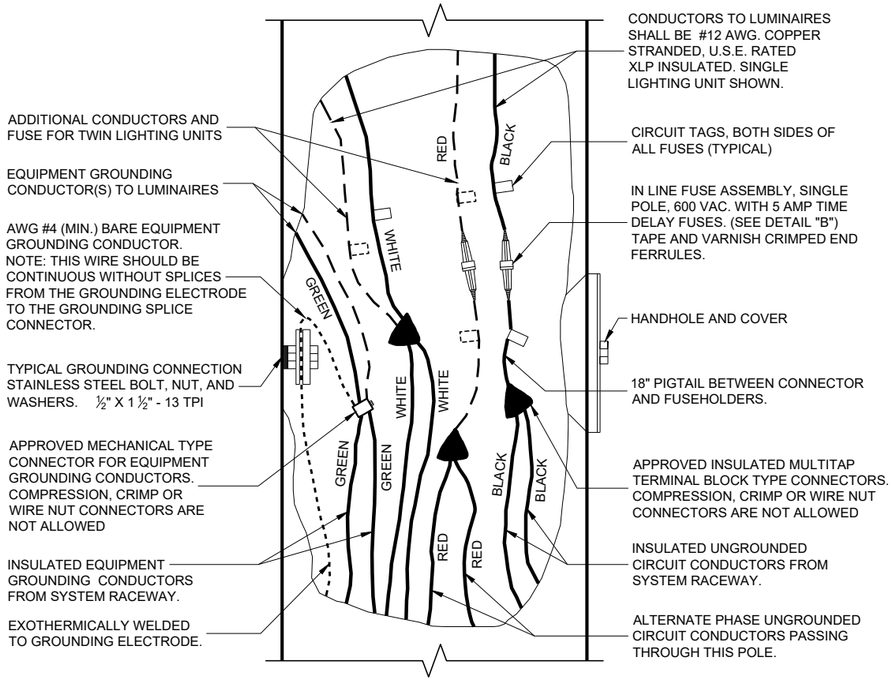
DETAIL "A"
BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT



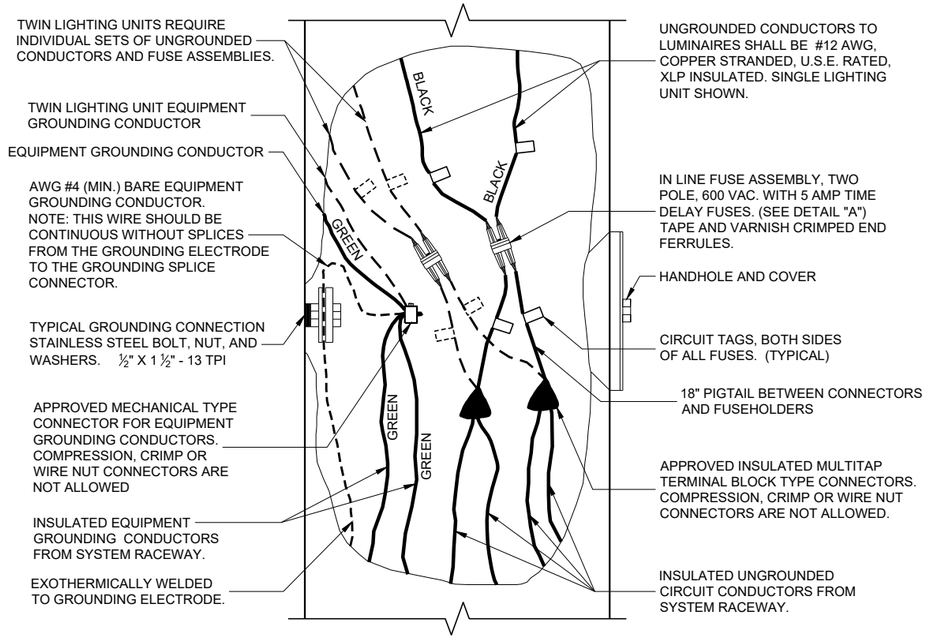
DETAIL "B"
BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT



TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH GROUNDING CONDUCTOR AND EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

NON - FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Ahmet Demirbilek
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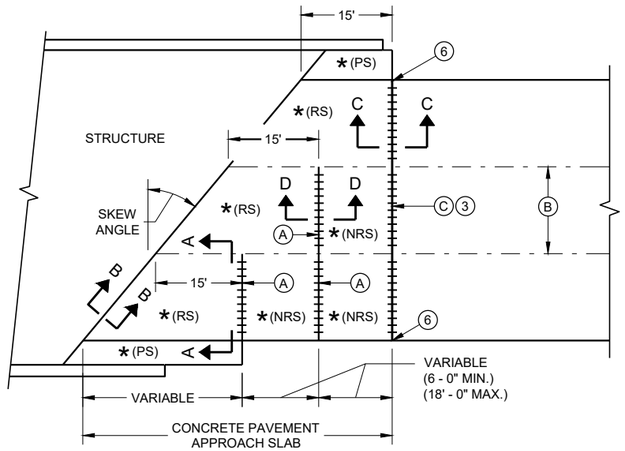
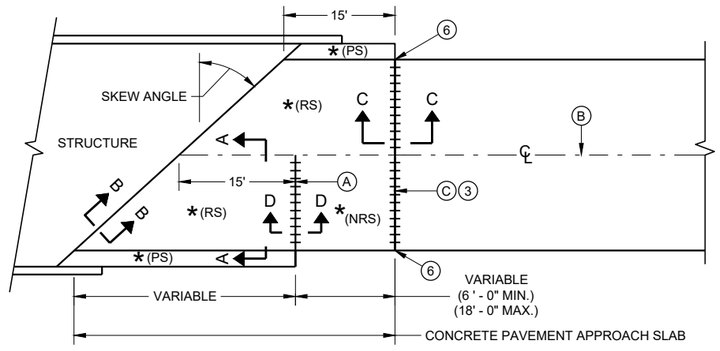
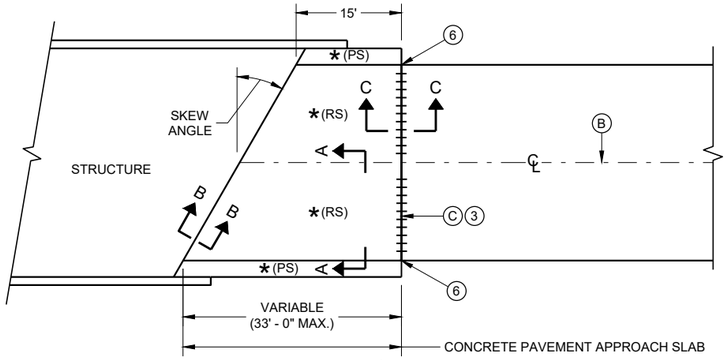


SKEWED APPROACH
(PAVEMENT MORE THAN TWO LANES)



SKEWS > 20°
(PAVEMENT WIDTH ≤ 30')



SKEWS ≤ 20°
(PAVEMENT WIDTH ≤ 30')

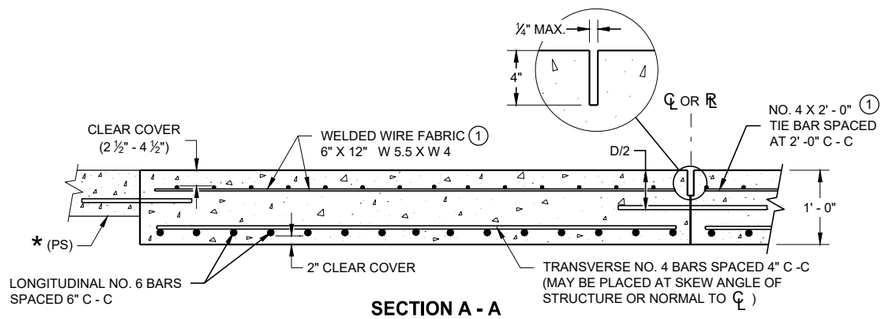
APPROACH SLAB AND ADJACENT PAVEMENT

* (RS) = REINFORCED CONCRETE SLAB

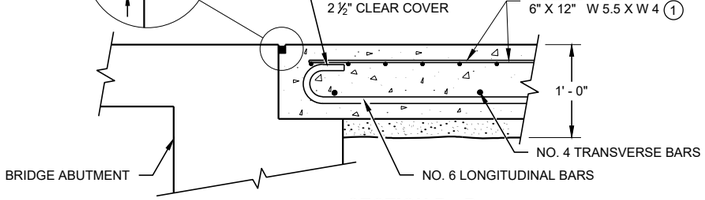
* (PS) = PAVECD CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB

* (NRS) - NON - REINFORCED CONCRETE SLAB

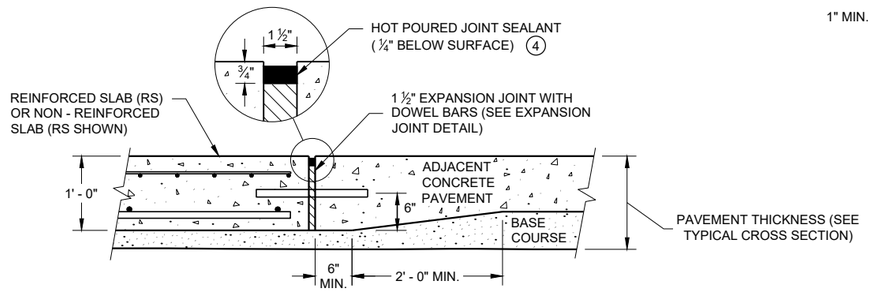
*** STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11 AND SDD 13C13)



SECTION A - A
REINFORCEMENT POSITIONING DETAIL



SECTION B - B
BEND DETAIL
BOTTOM REINFORCEMENT



SECTION C - C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT

GENERAL NOTES

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

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

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

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

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

(4) USE A JOINT SEALANT MEETING THE REQUIREMENTS OF ASTM D6690.

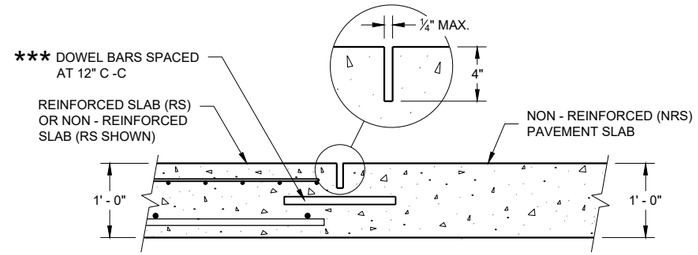
(5) PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.

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

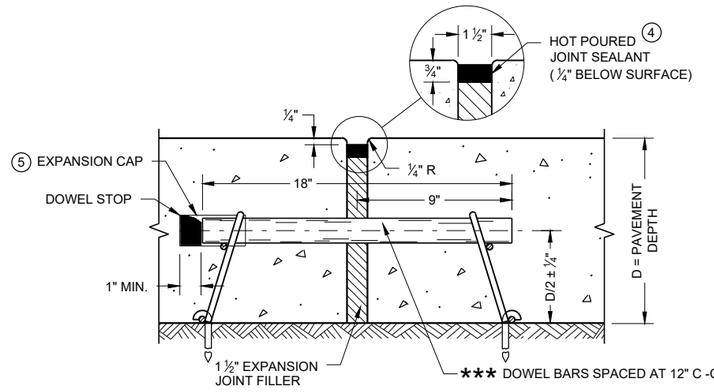
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℞.

(B) STANDARD LONGITUDINAL JOINT WITH TIE BARS.

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



SECTION D - D
CONTRACTION JOINT



EXPANSION JOINT DETAIL

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVISO

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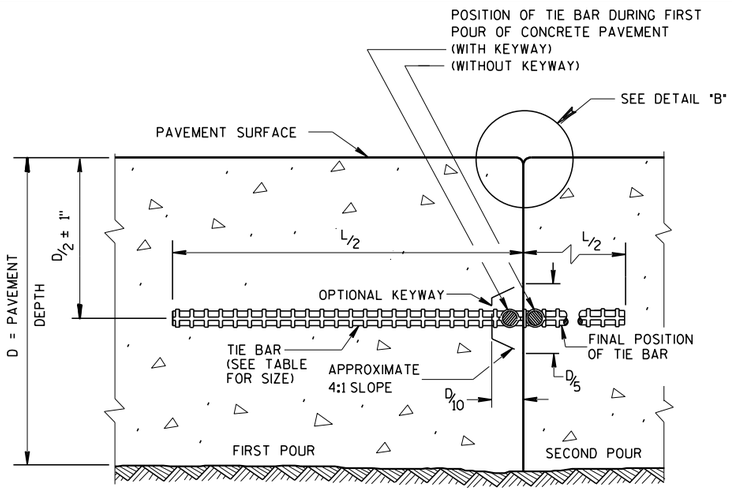
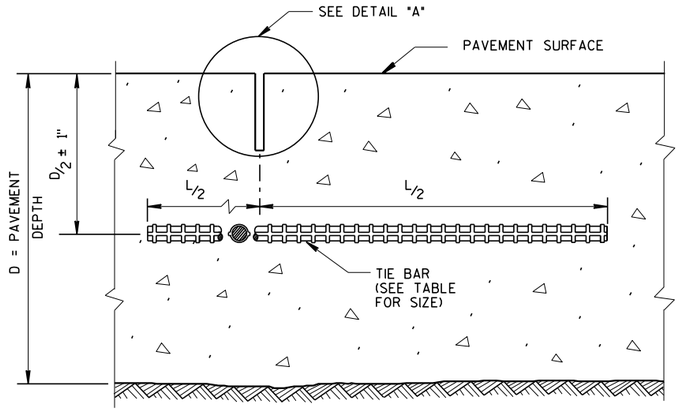
SDD 13B02 - 09a



CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

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

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

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

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

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 Kerr, P.E.
PAVEMENT SUPE
FHWA

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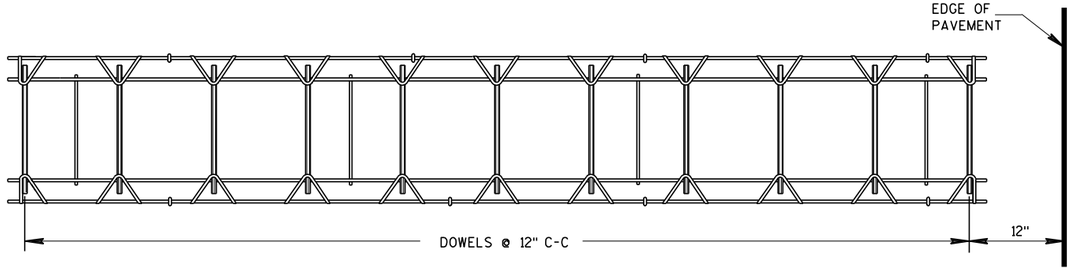
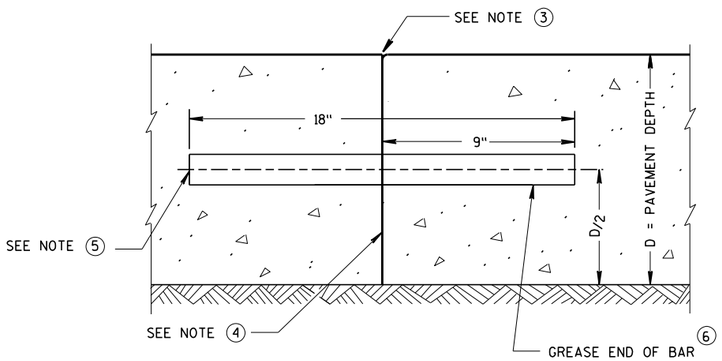


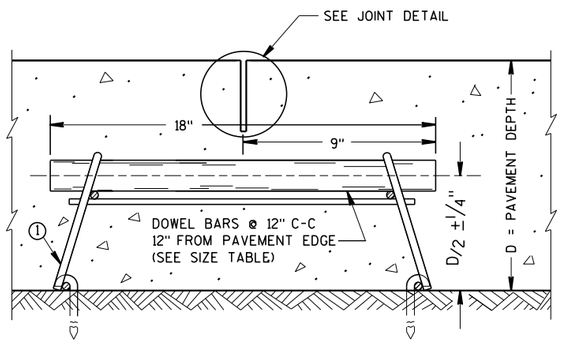
PLAN VIEW

SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①



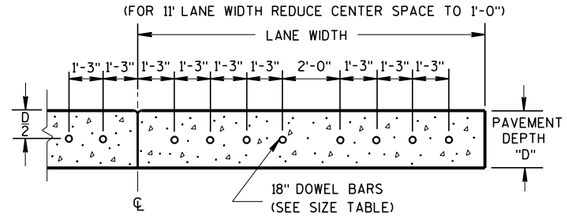
TRANSVERSE CONSTRUCTION JOINT



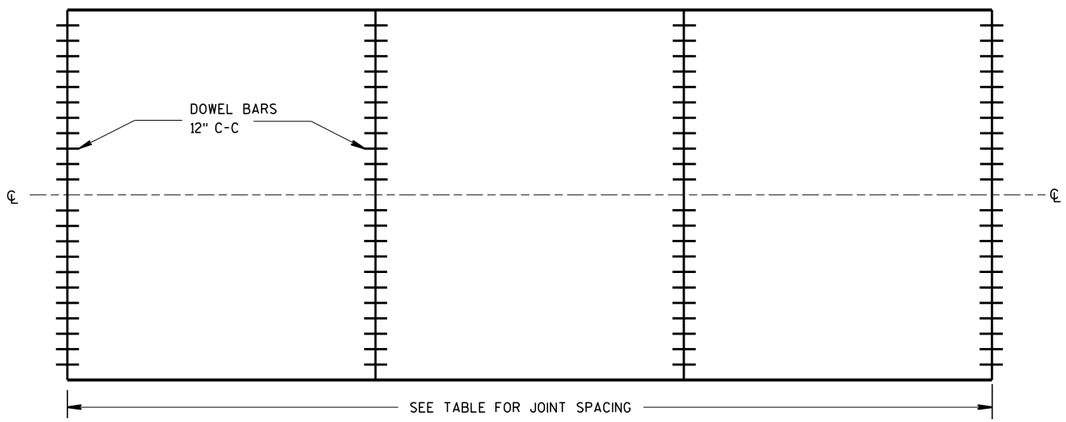
DOWELED CONTRACTION JOINT

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.

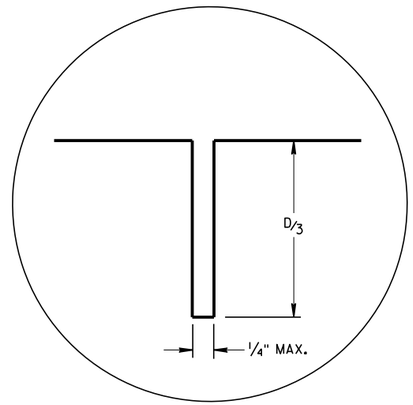
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

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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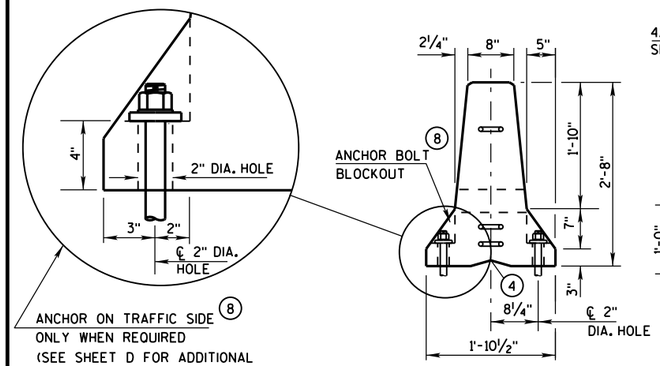
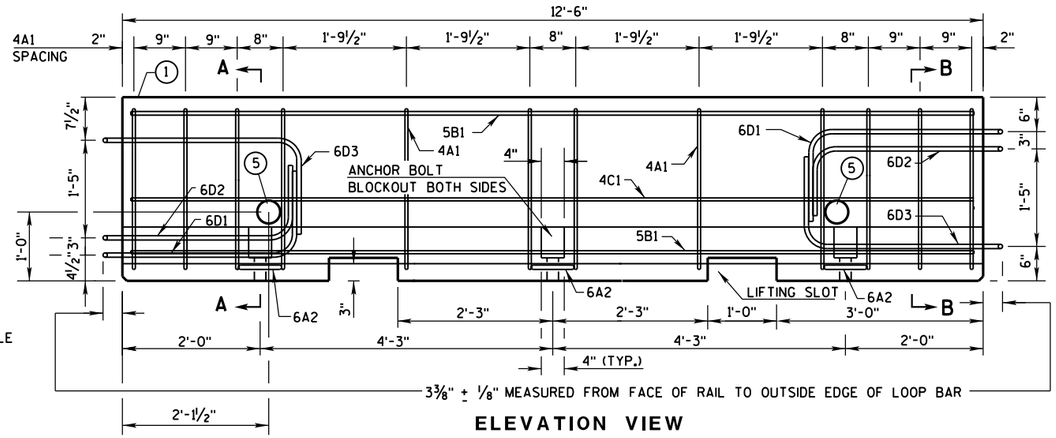
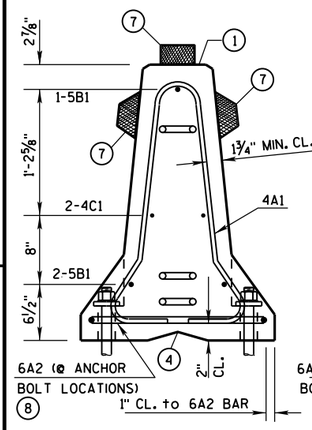


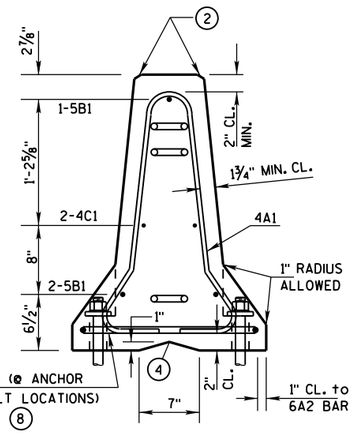
END VIEW



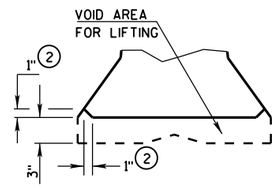
ELEVATION VIEW



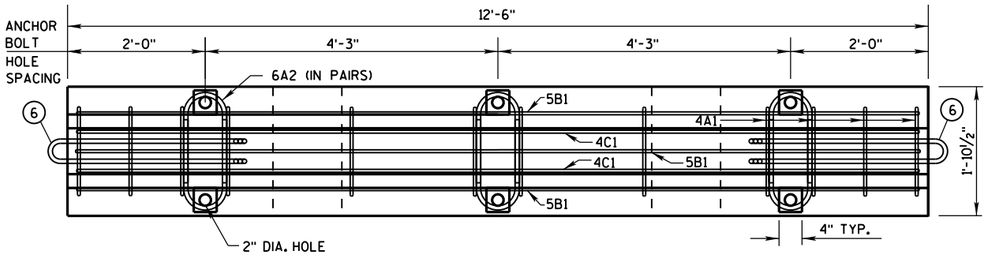
SECTION A-A
(STIRRUP PLACEMENT)



SECTION B-B
(STIRRUP PLACEMENT)

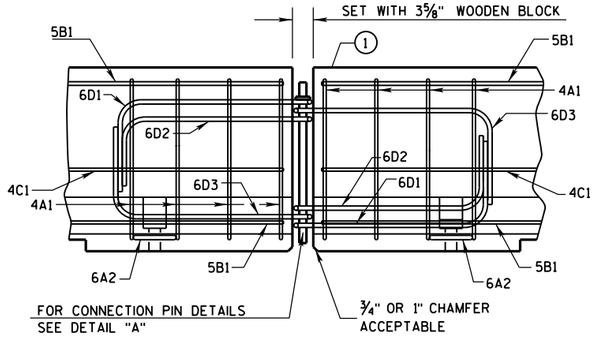


DETAIL "B"
LIFTING SLOT DETAIL

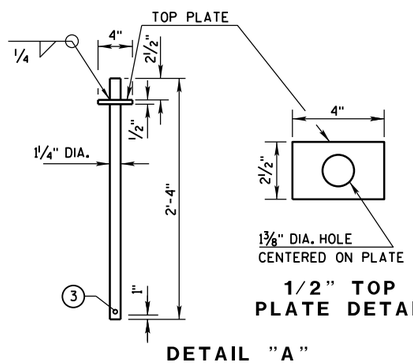


PLAN VIEW

DETAILS OF BARRIER SECTION

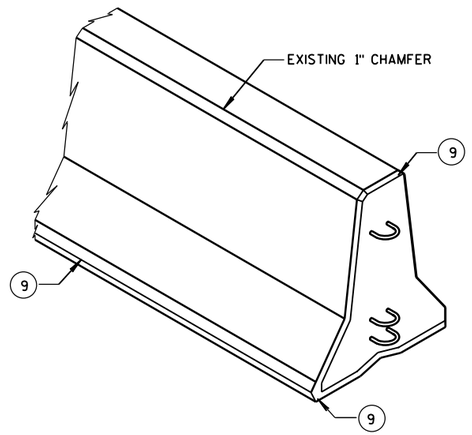


DETAILS OF BARRIER CONNECTION



1/2" TOP
PLATE DETAIL

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



GENERAL NOTES

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

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

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

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

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

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

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

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

(2) 1" CHAMFER TO PREVENT SPALLING.

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

(4) "V" NOTCH IS OPTIONAL.

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

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

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

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

(9) 1" CHAMFER OPTIONAL.

f'c = 4,000 psi

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 66

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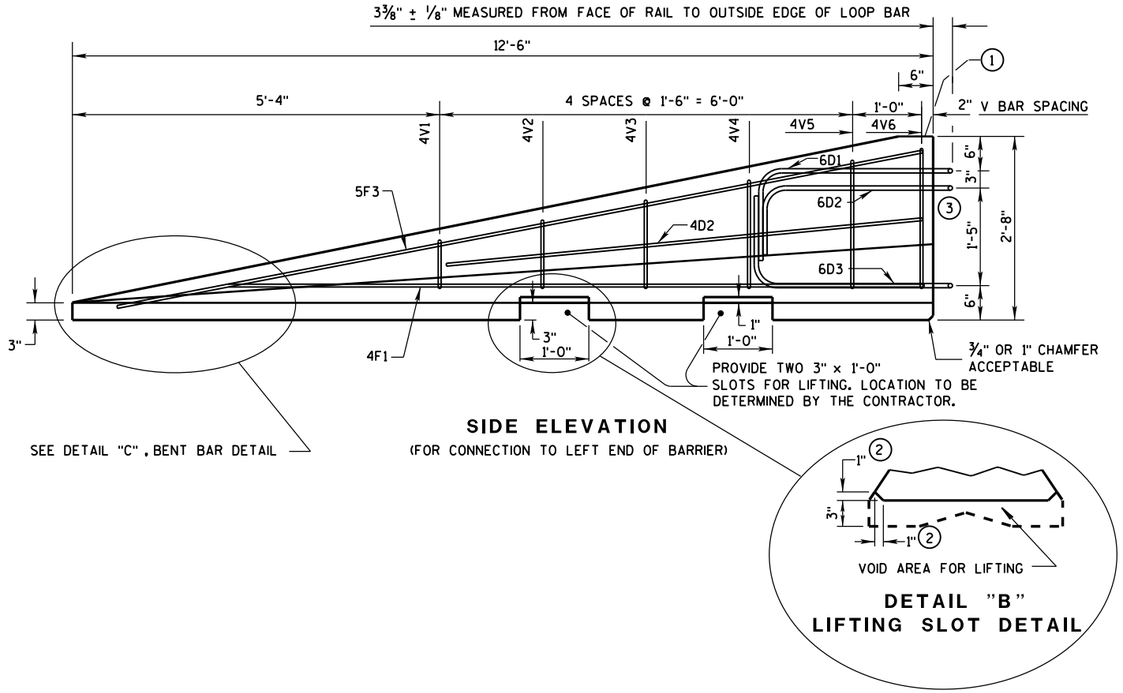
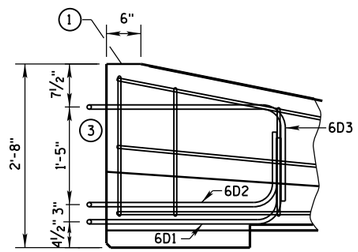
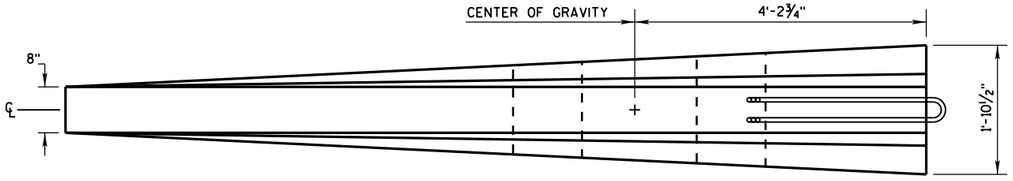
S.D.D. 14 B 7-15a

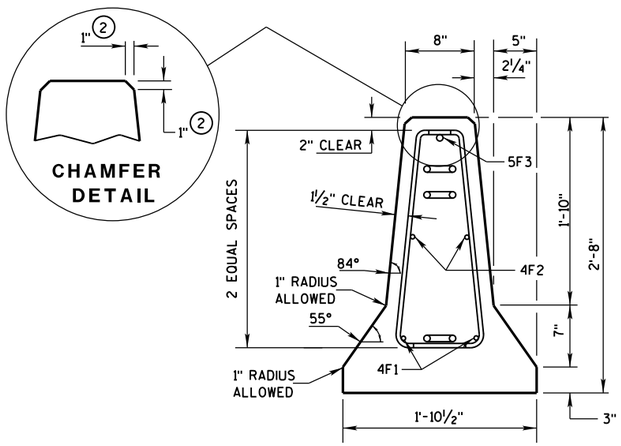


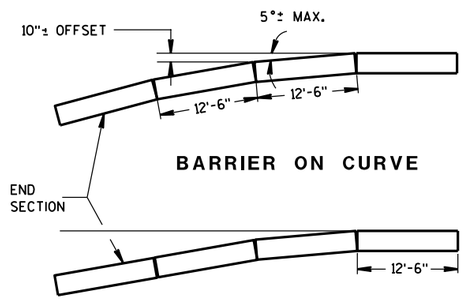


GENERAL NOTES

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







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

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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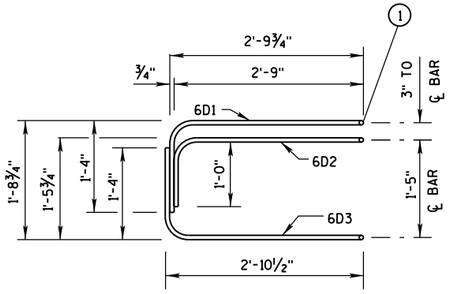
S.D.D. 14 B 7-15b

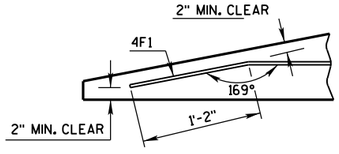
BARRIER TAPER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

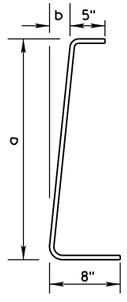
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



ELEVATION
LOOP BAR ASSEMBLY



DETAIL "C"
BENT BAR DETAIL



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

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

TAPER BARRIER SECTION

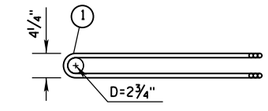
GENERAL NOTES

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

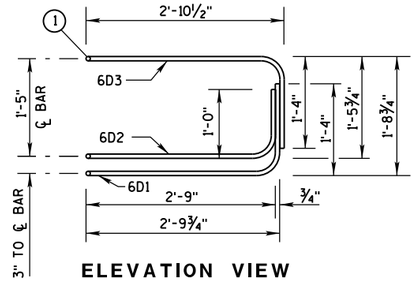
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

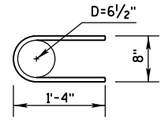
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



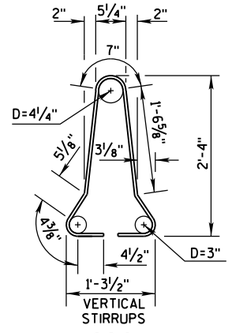
PLAN VIEW
LOOP BAR ASSEMBLY
(MARKED END SHOWN, INVERT FOR OTHER END)



ELEVATION VIEW



6A2



4A1

BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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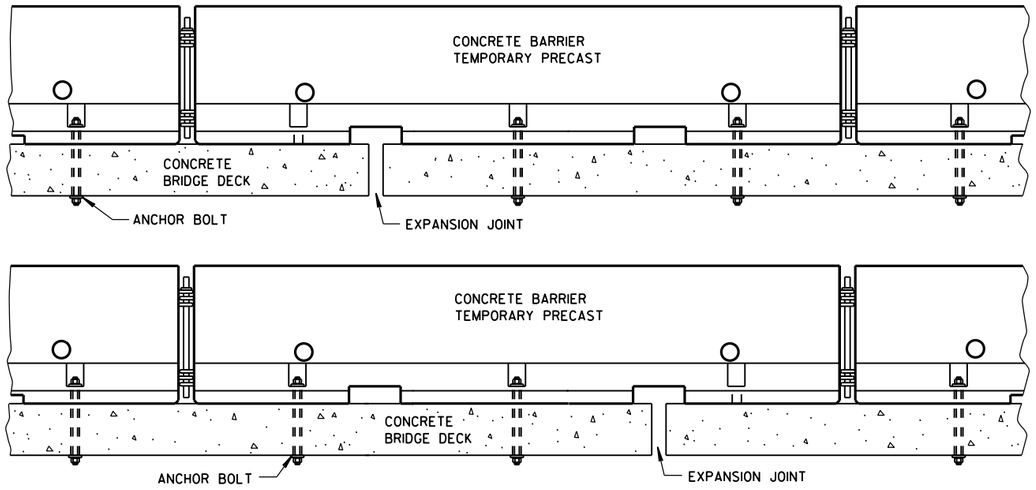
S.D.D. 14 B 7-15c



TREATMENT AT BRIDGE DECK EXPANSION JOINTS

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

GENERAL NOTES

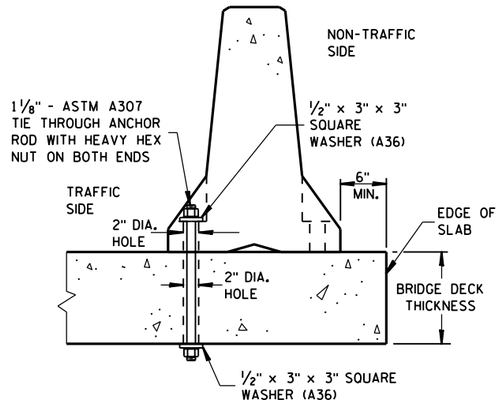
SEE SHEET E FOR WHEN TO ANCHOR. OTHER PARTS OF THE PLAN MAY SHOW ADDITIONAL LOCATIONS REQUIRING ANCHORING.

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

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

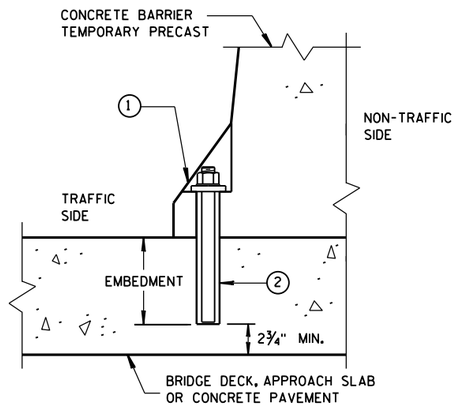
(2) ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5¼" EMBEDMENT. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.

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



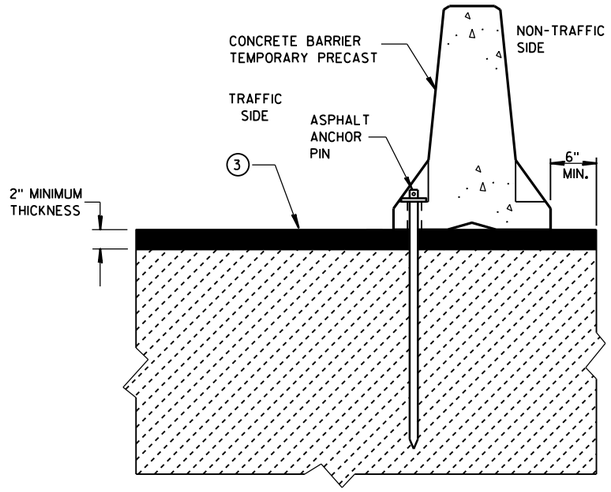
THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)

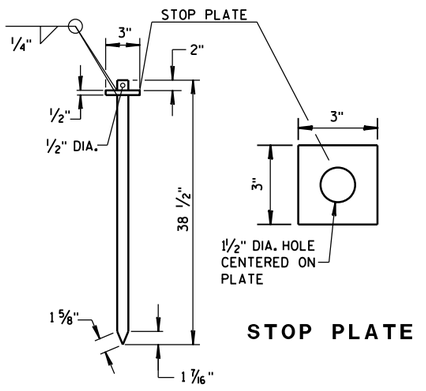


REMOVABLE ADHESIVE ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)



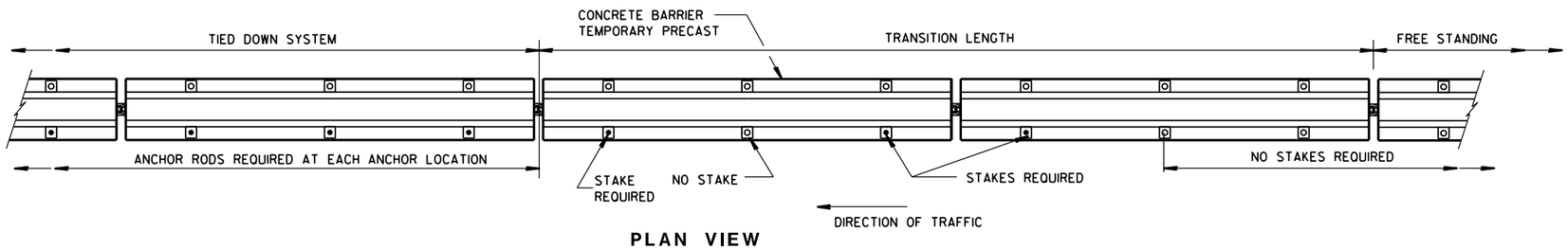
STAKE DOWN INSTALLATION FOR ASPHALTIC SURFACE



STOP PLATE

ASPHALT ANCHOR PIN

(ASTM A36 STEEL)



PLAN VIEW

FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

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

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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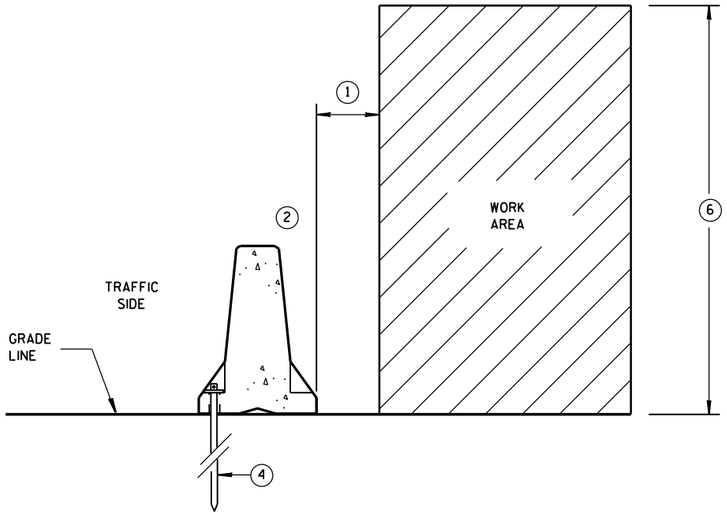
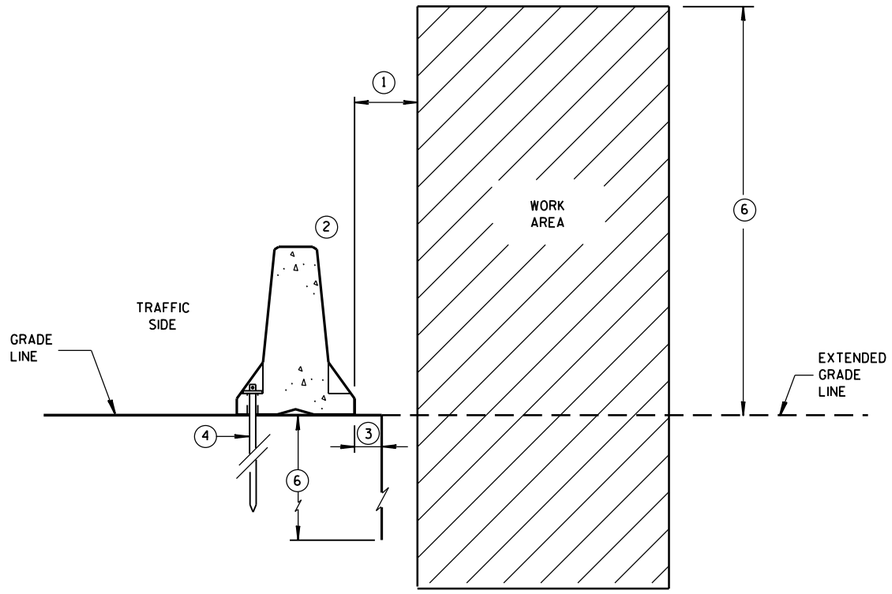
S.D.D. 14 B 7-15d



ANCHORED BARRIER SPACE REQUIREMENTS FOR HAZARDS EXTENDED ABOVE THE GRADE LINE

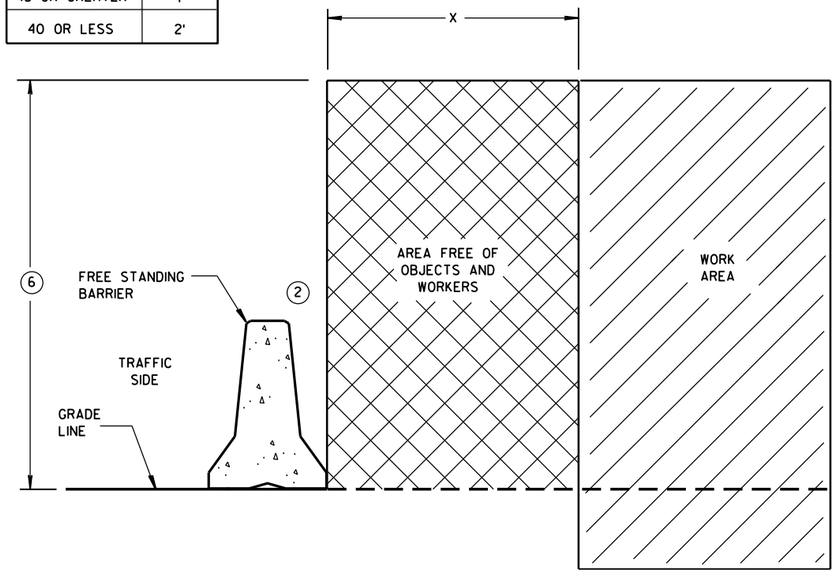


ANCHORED BARRIER SPACE REQUIREMENTS ON VERTICAL DROP OFFS

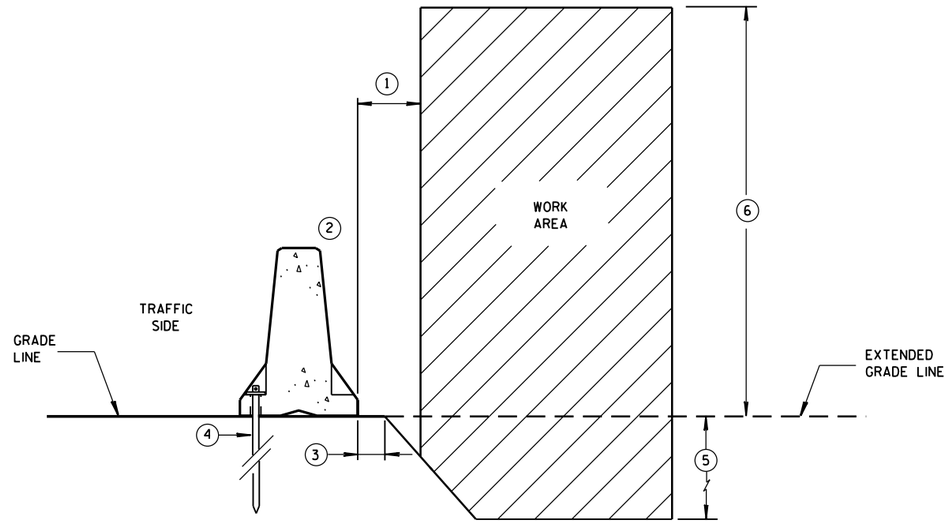
GENERAL NOTES

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

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



FREE STANDING BARRIER SPACE REQUIREMENTS



ANCHORED BARRIER SPACE REQUIREMENTS ON SLOPES

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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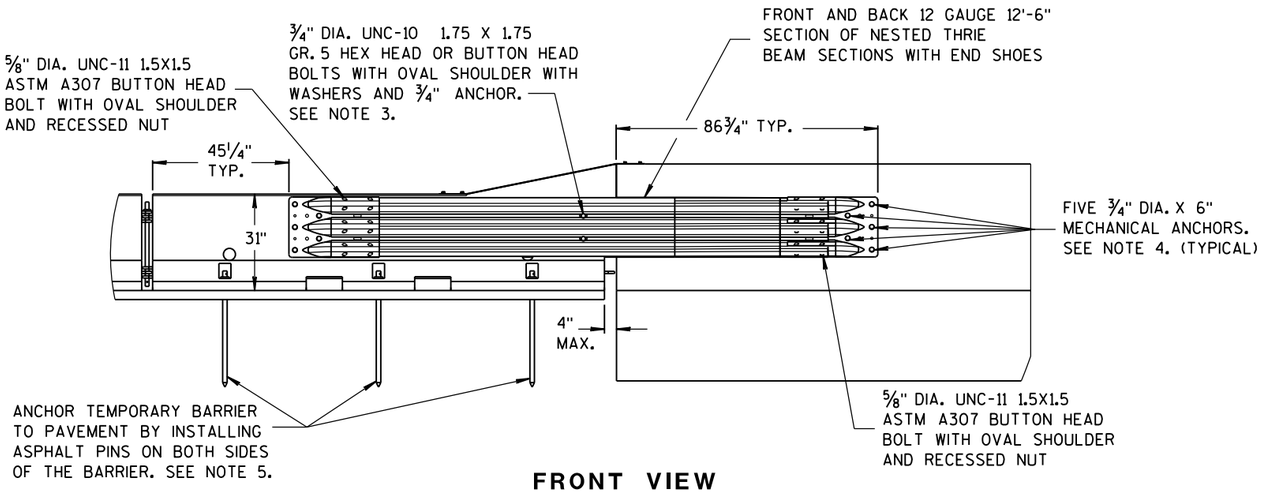
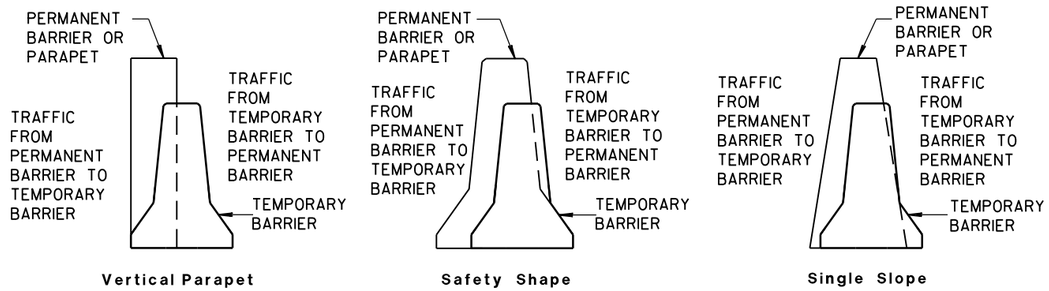
S.D.D. 14 B 7-15e



FRONT VIEW

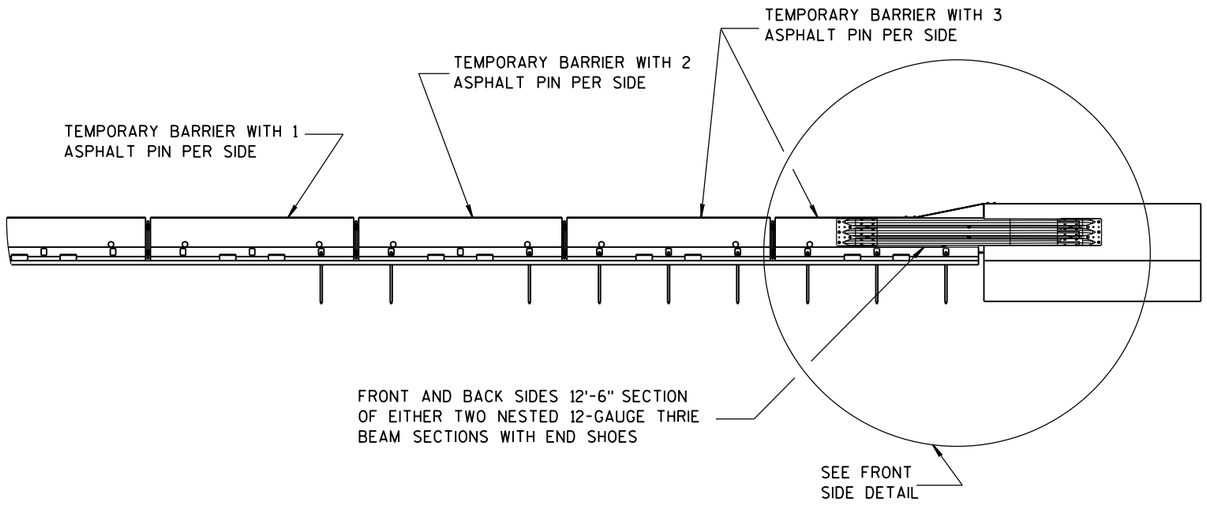


TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

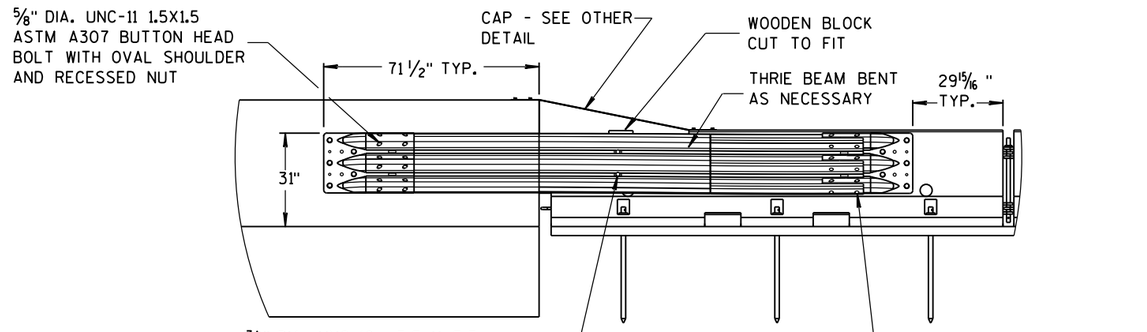
NOTES

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

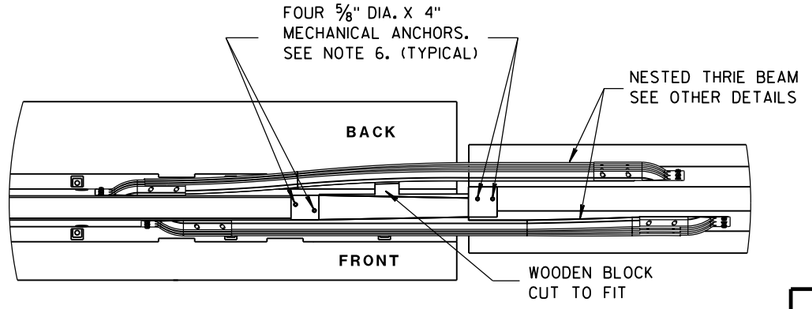
1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD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



FRONT VIEW



BACK VIEW



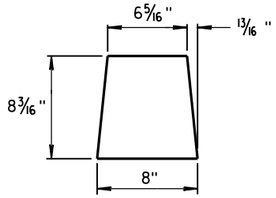
PLAN VIEW

BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

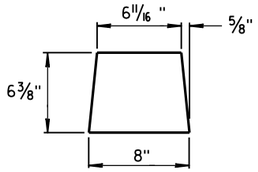
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

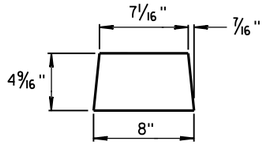
6
S.D.D. 14 B 7-15f



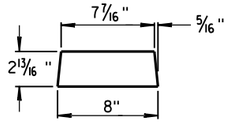
GUSSET 1



GUSSET 2

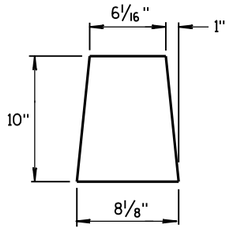


GUSSET 3

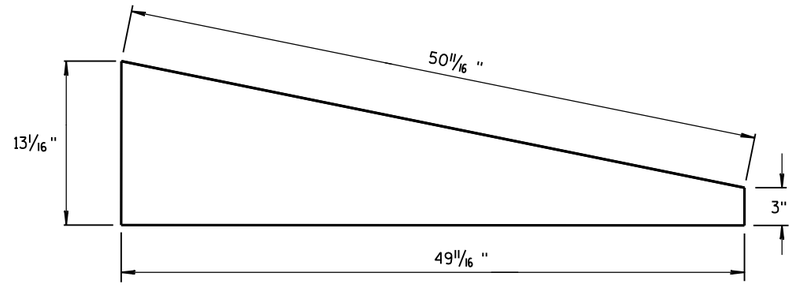


GUSSET 4

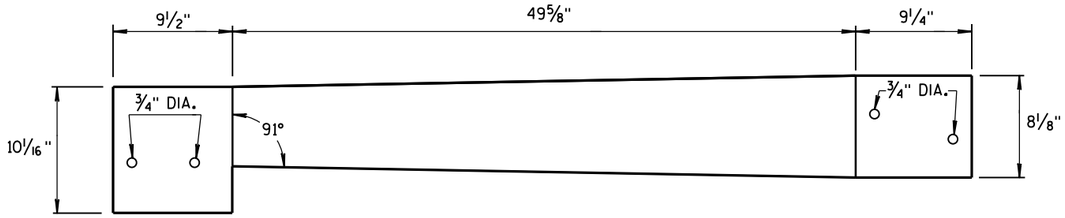
GUSSETS

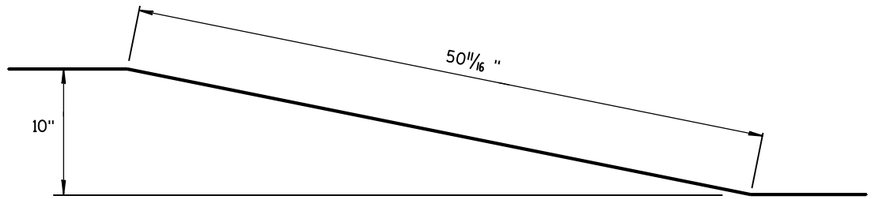


END PLATE



SIDE PLATE

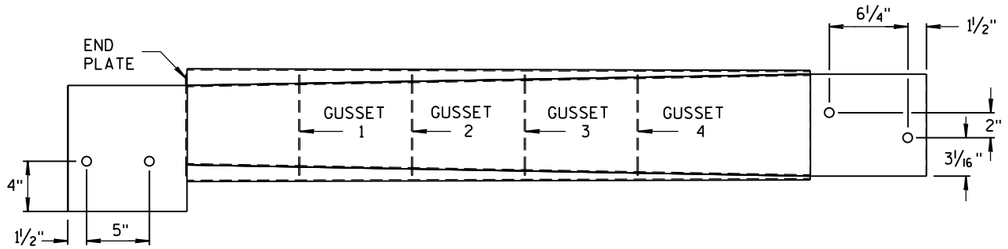


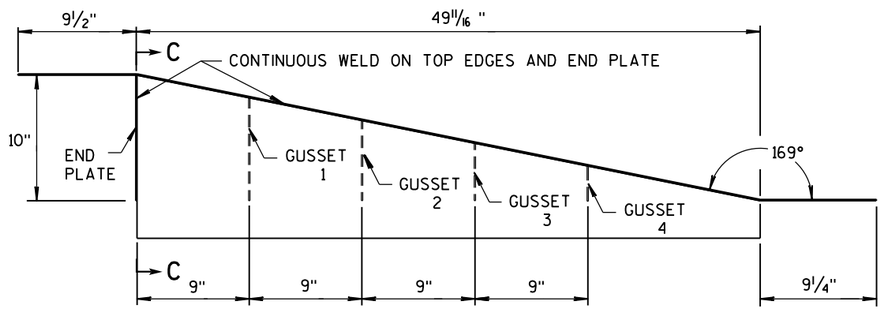


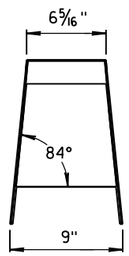
TOP PLATE

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

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







SECTION C-C

NOTES

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

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

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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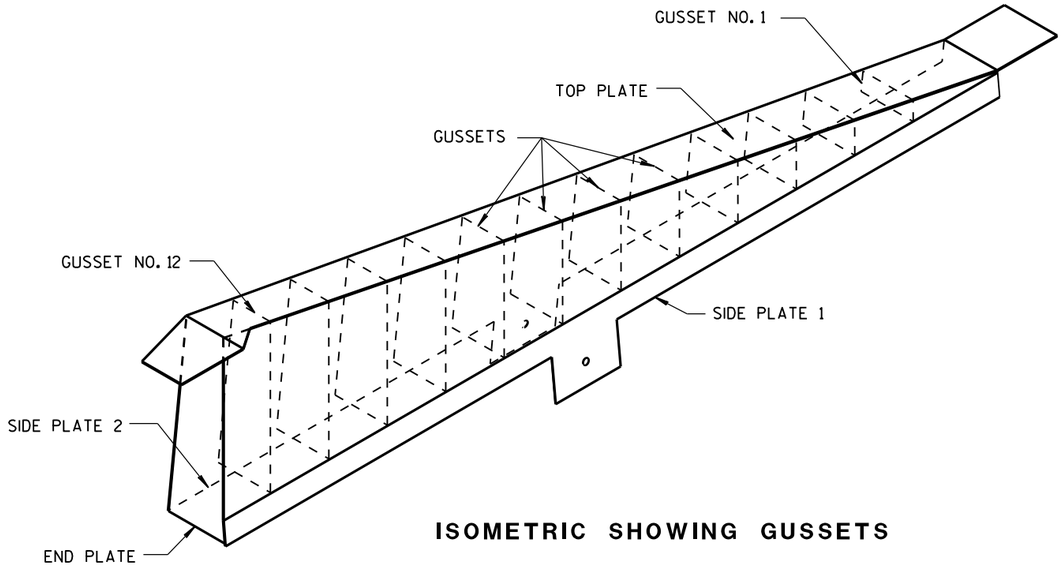
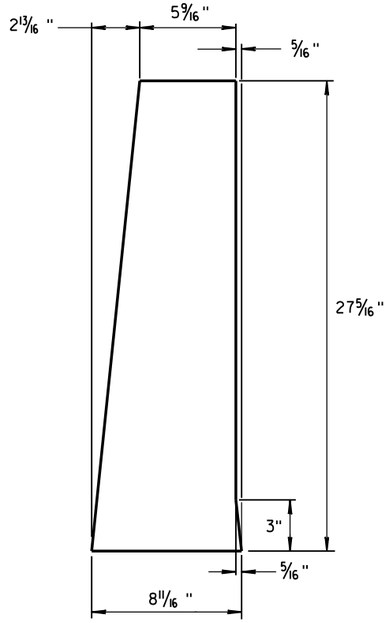
S.D.D. 14 B 7-15g

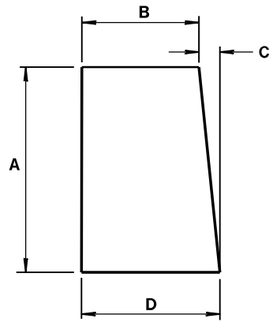


ISOMETRIC SHOWING GUSSETS



END PLATE

1/8" STEEL PLATE



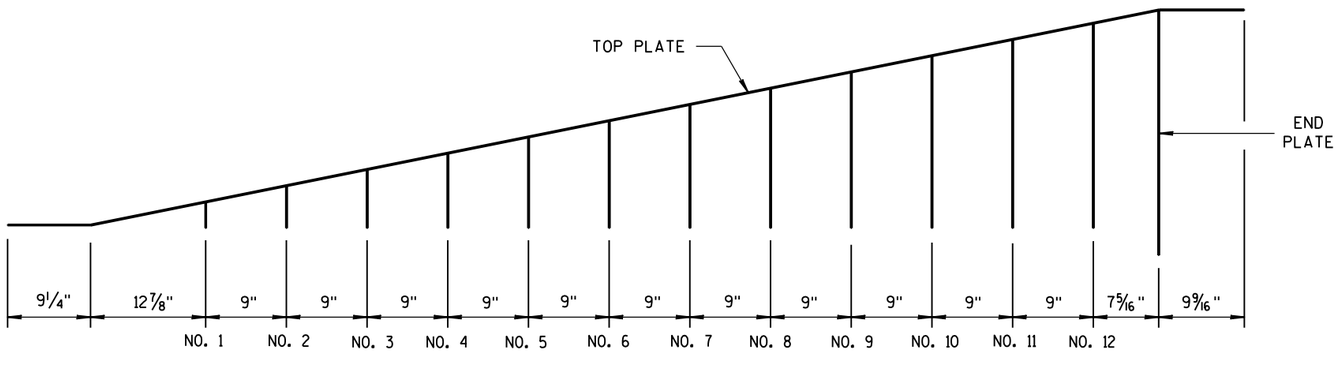
GUSSETS 1 - 12

ALL GUSSETS 1/8" STEEL PLATE

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

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

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



GUSSET LOCATION

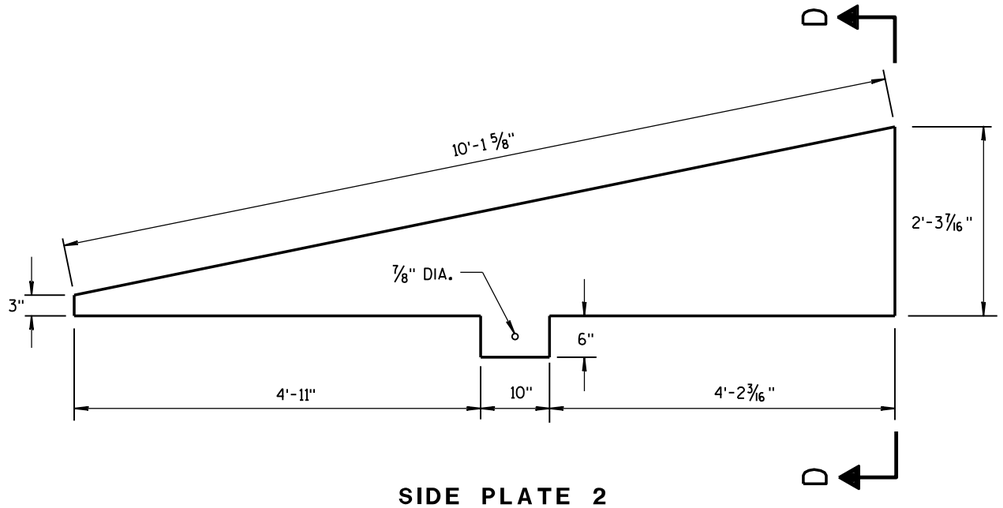
CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

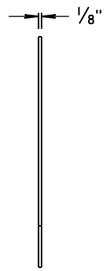
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

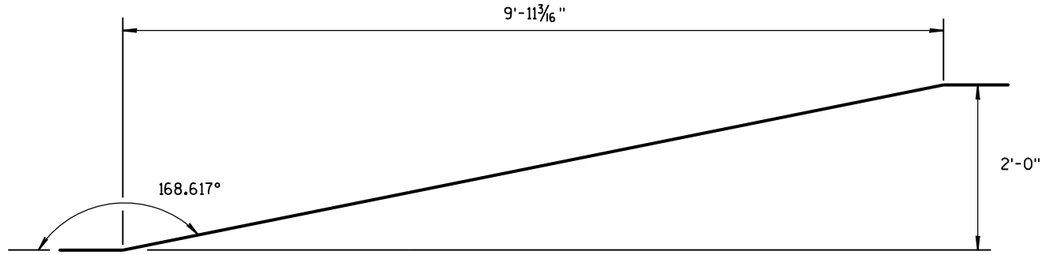
S.D.D. 14 B 7-15h



SIDE PLATE 2

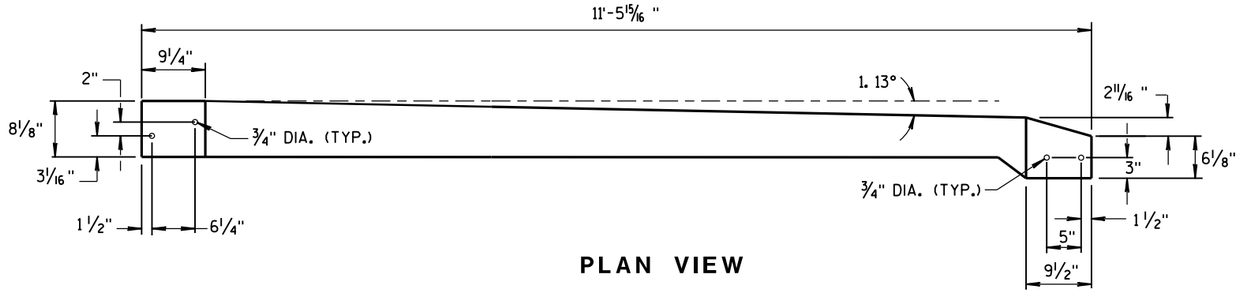


END VIEW



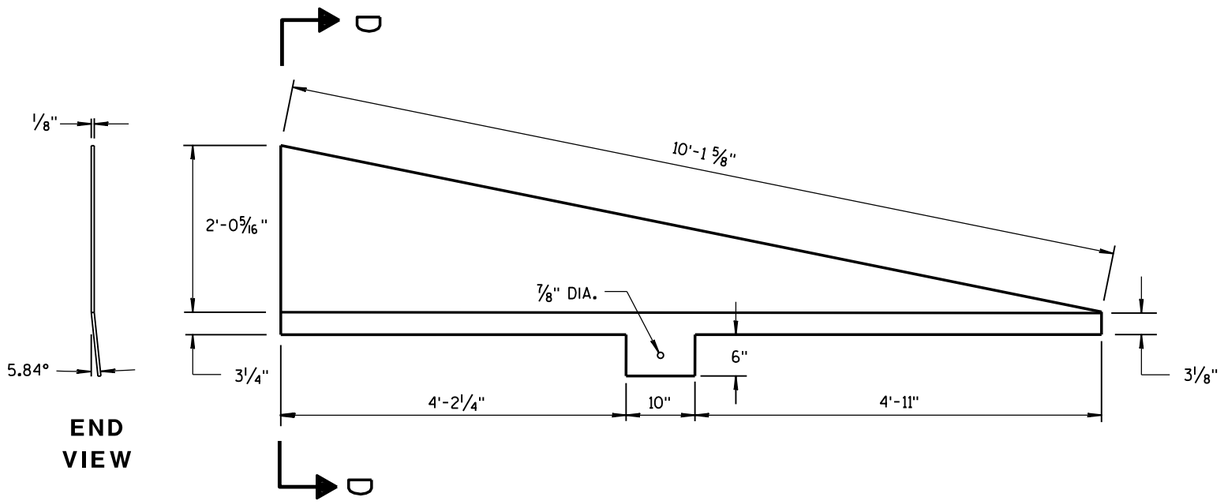
SIDE VIEW

TOP PLATE



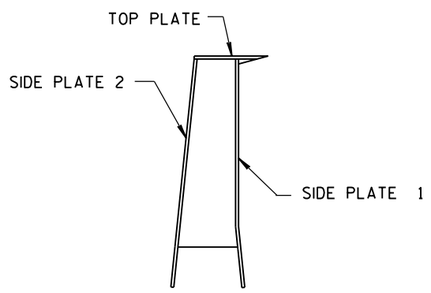
PLAN VIEW

TOP PLATE



END VIEW

SIDE PLATE 1



SECTION D-D

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

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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

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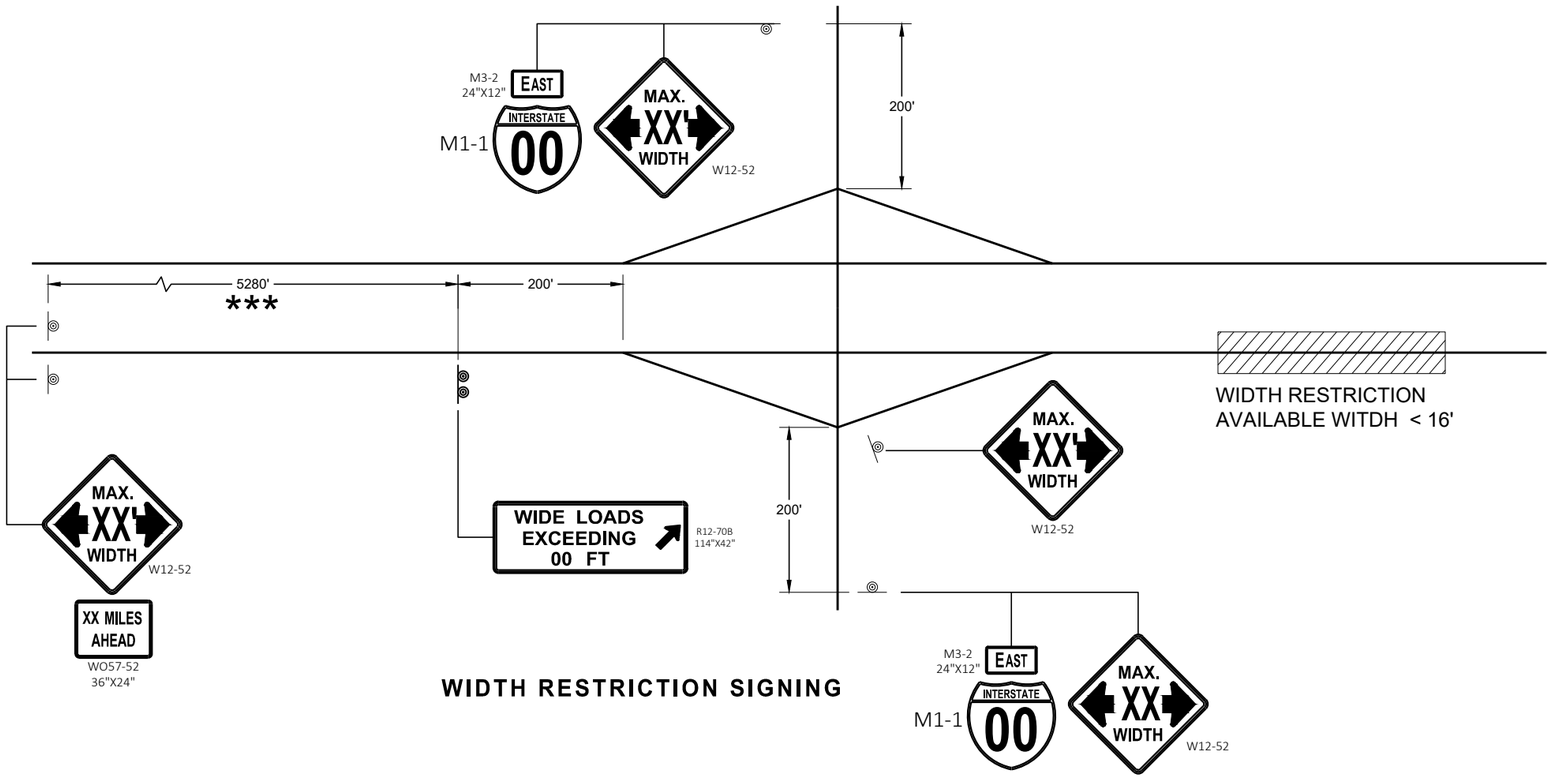
S.D.D. 14 B 7-15i



WIDTH RESTRICTION SIGNING

LEGEND

SIGN ON PERMANENT SUPPORT

GENERAL NOTES

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

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

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

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

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

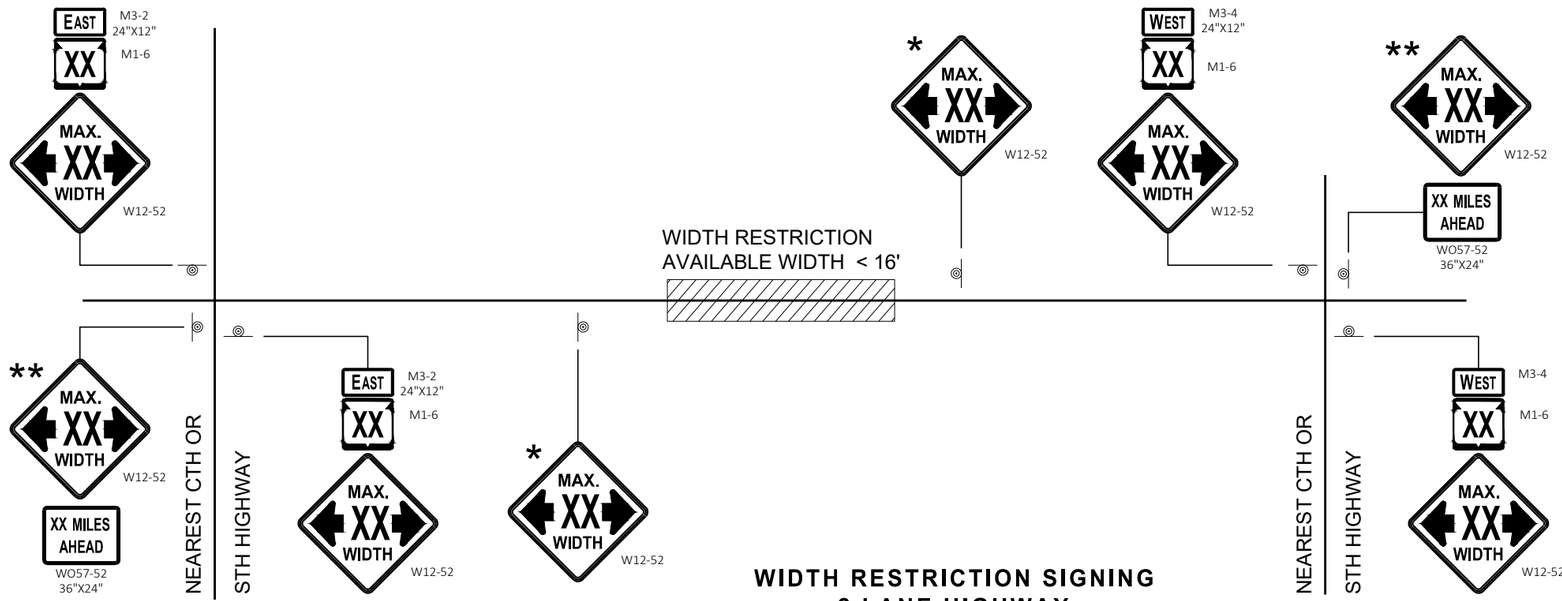
WIDTH ON SIGN TO BE APPROXIMATELY ONE FOOT LESS THAN AVAILABLE WIDTH.

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

** SIGN SHALL BE VISIBLE FROM ROADWAY.

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

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



WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY

ADVANCED WIDTH RESTRICTION SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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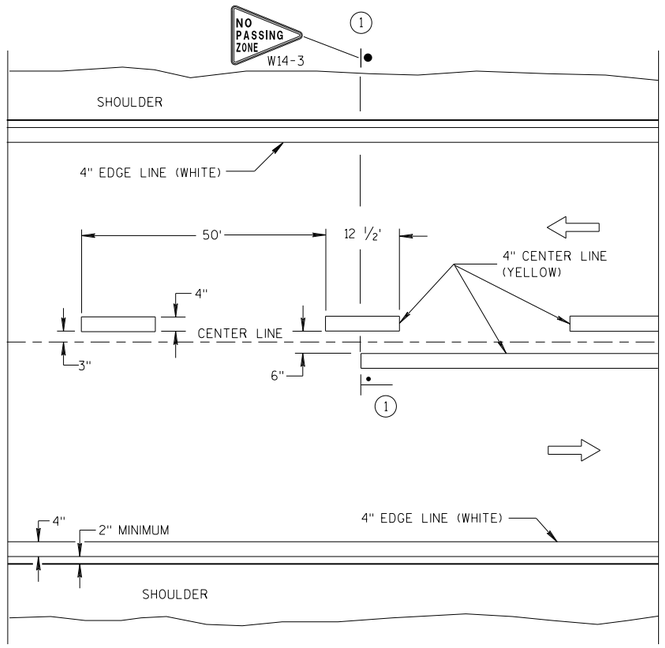
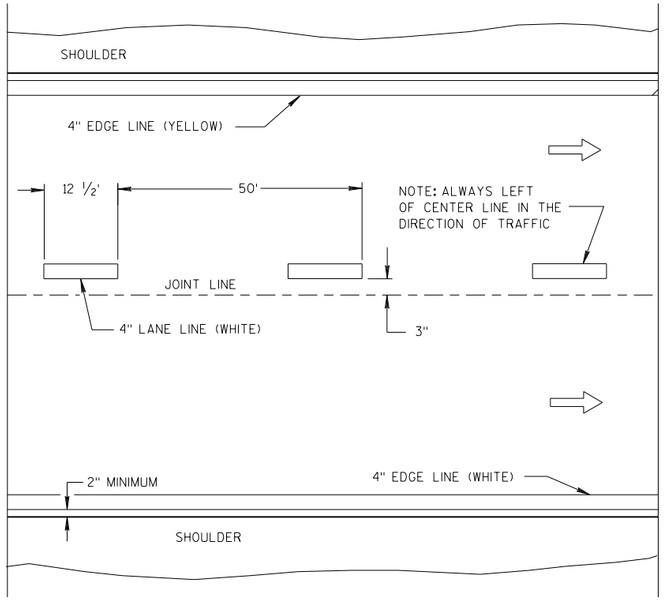
SDD 15C02 - 07f



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

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

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING.

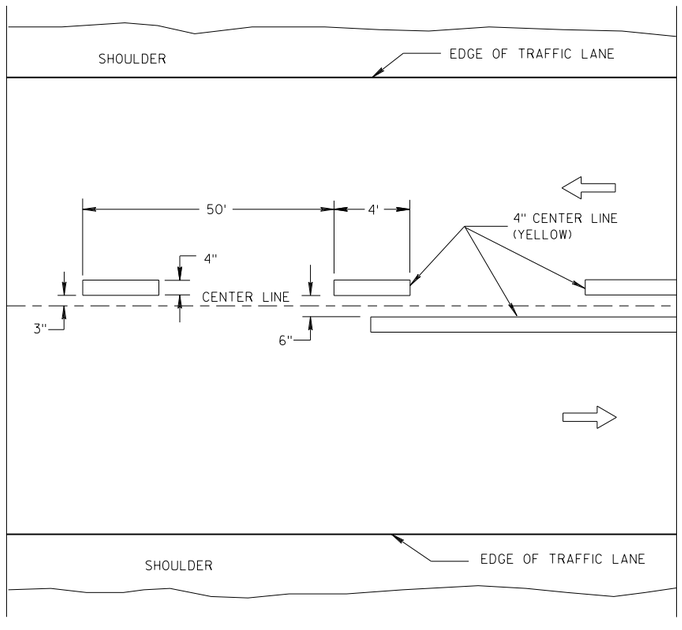
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

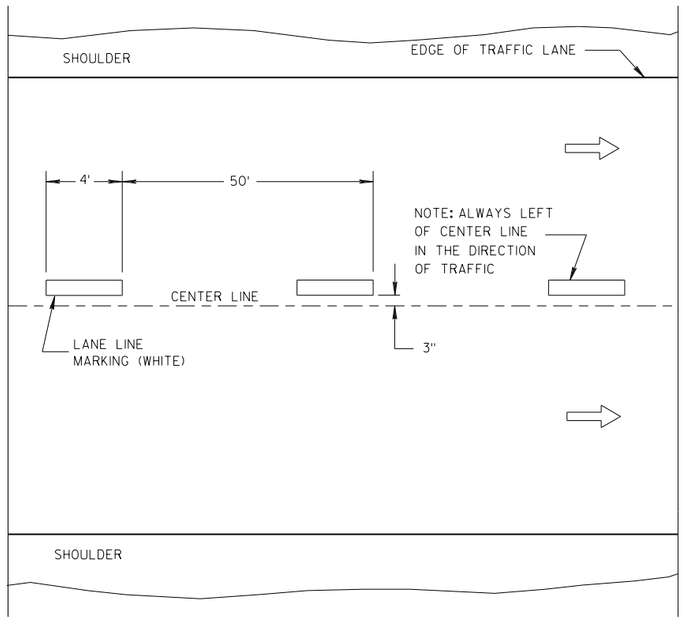
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

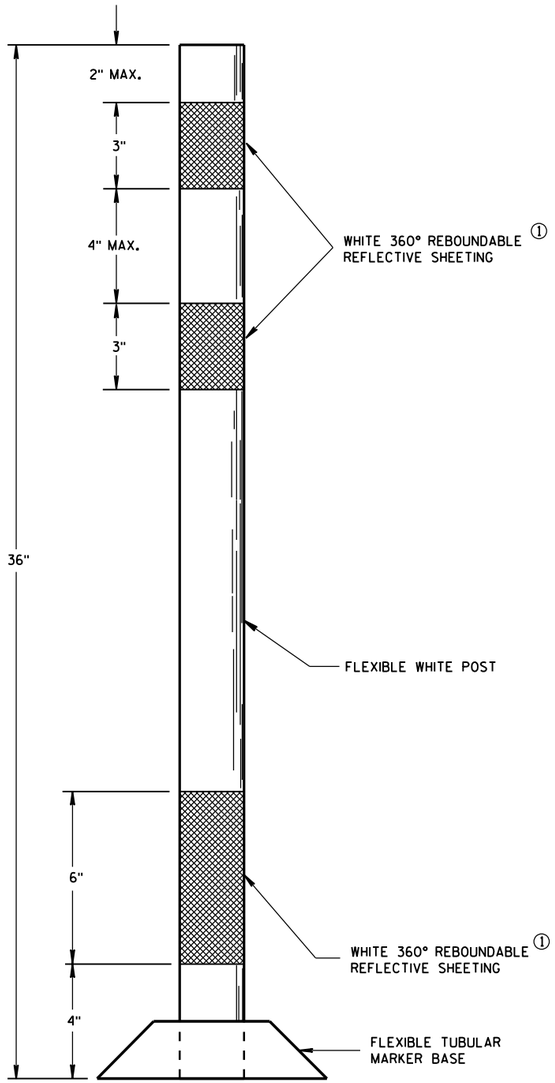
7/2018 — DATE

/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER

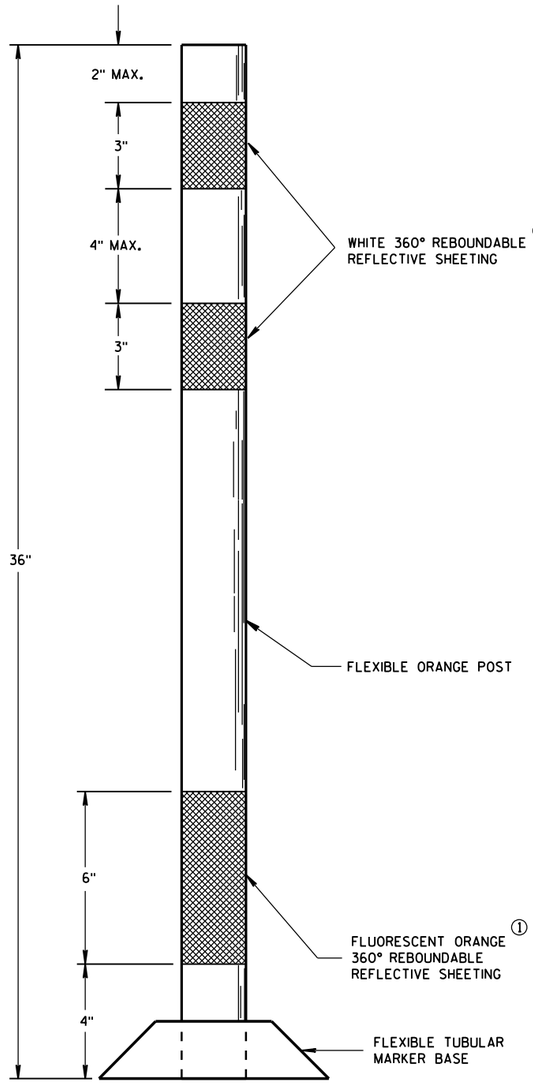
FHWA

6

S.D.D. 15 C 8-19a



FLEXIBLE
TUBULAR MARKER POST
PERMANENT CROSSOVER



FLEXIBLE
TUBULAR MARKER POST
WORK ZONE

GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

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

CHANNELIZING DEVICES
FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Andrew Heldtke — WORK ZONE ENGR
FHWA

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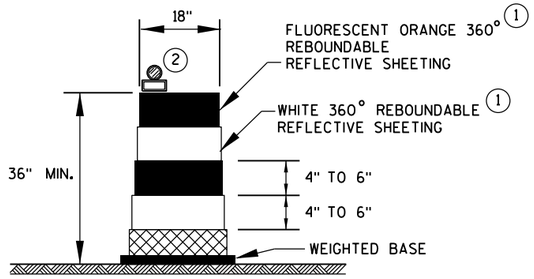
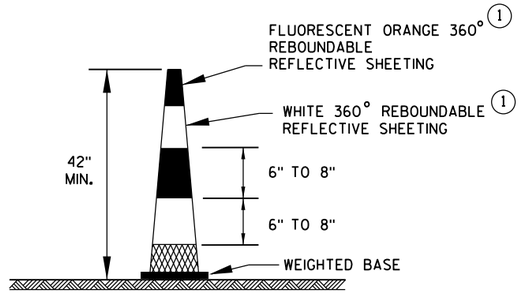
S.D.D. 15 C 11-7a



DRUM

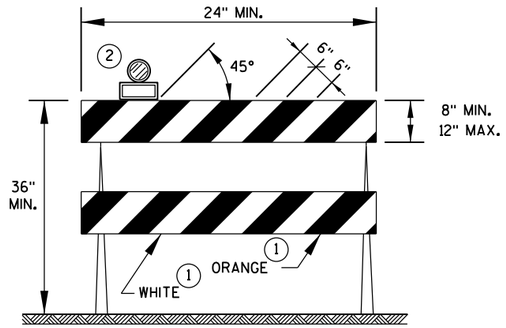


42" CONE

DO NOT USE IN TAPERS
1/2 SPACING OF DRUMS

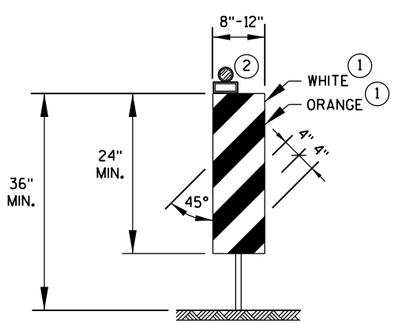
GENERAL NOTES

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.



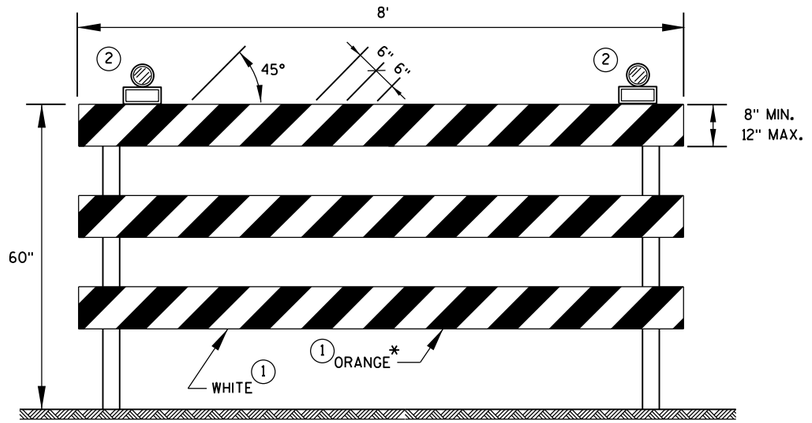
TYPE 2 BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE 3 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 ENG
FHWA

6

S.D.D. 15 C 11-7b

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

(2) IF NEEDED. USE ONLY IF DESIGN SPEED IS 10 MPH LESS THAN POSTED SPEED.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- REMOVING PAVEMENT MARKING
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA

OR

R2-1
48"X60"

OR

R2-1
48"X60"

IF THE REGULATORY SPEED HAS BEEN REDUCED, A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES.

LOCATED 400 FEET BEYOND THE W20- 5G SIGN.

SEE SDD 15D12b FOR SIGN PLACEMENT.

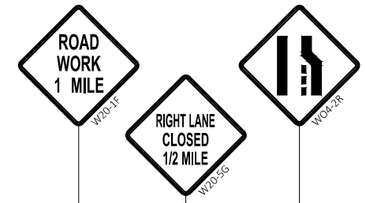
(BLACK AND WHITE)

LOCATED 700 FEET BEYOND W03-5 SIGN

WO13-1
36"X36"

* INCLUDE RESUME SPEED LIMIT SIGN A MINIMUM OF 200 FEET (500 FEET DESIRABLE) AFTER END ROAD WORK SIGNS.

G20-2A
48"X24"



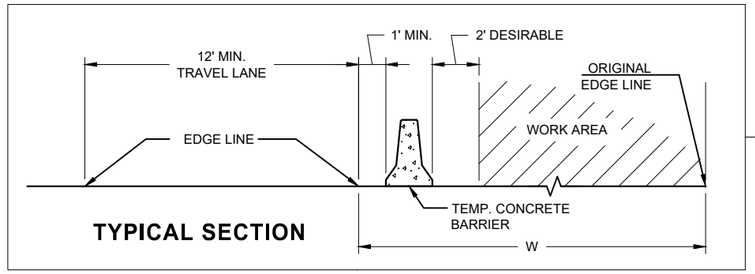
WO13-1
36"X36"

5 DRUMS SPACED @ 10' INTERVALS AS NEEDED IN FRONT OF ARROW BOARD

TEMPORARY PAVEMENT MARKING, 4 INCH EDGELINE (WHITE ON RIGHT, YELLOW ON LEFT).

12'
12'
50' TYP.
50' TYP.
25'
500' (1)
1000'
L / 2
L = W S
200'
100' TYP.
L / 2
12' MIN.
W
8:1
WORK AREA
50' TYP.
300' MIN.
600' DESIRABLE
TAPER TO OUTSIDE EDGE OF WORK ZONE CLEAR ZONE. OTHERWISE PROVIDE CRASH CUSHION.
WO5-52R
18"X54"
1000'
2600'
1600'
1000'
ADVANCED WARNING AREA
TRANSITION AREA
BUFFER SPACE
WORK AREA
100' TYP.
500'

L, TAPER LENGTH (MPH)												
SPEED (MPH)	W, LATERAL OFFSET (FT)											
	1	2	3	4	5	6	7	8	9	10	11	12
45	45	90	135	180	225	270	315	360	405	450	495	540
50	50	100	150	200	250	300	350	400	450	500	550	600
55	55	110	165	220	275	330	385	440	495	550	605	660
60	60	120	180	240	300	360	420	480	540	600	660	720
65	65	130	195	260	325	390	455	520	585	650	715	780
70	70	140	210	280	350	420	490	560	630	700	770	840



TYPICAL SECTION

TRAFFIC CONTROL LANE CLOSURE, SPEEDS GREATER THAN 40 MPH WITH BARRIER

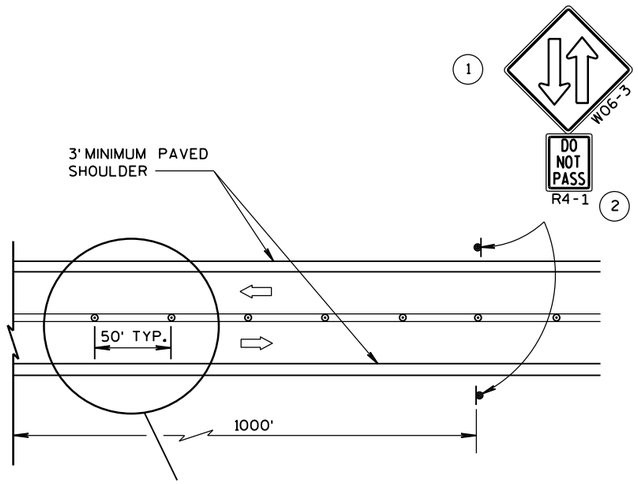
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINE

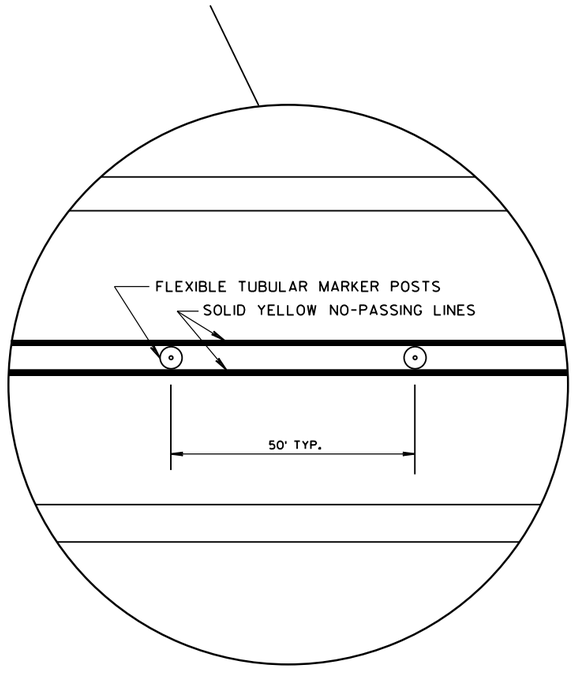
FHWA

SDD 15D03-05

SDD 15D03-05



TWO LANE, TWO WAY OPERATION



LEGEND

- SIGN ON PERMANENT SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC

GENERAL NOTES

ALL SIGNS ARE 48"x48" UNLESS OTHERS NOTED.

"WO" IS THE SAME AS "W" 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 SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

A SINGLE ROW OF FLEXIBLE TUBULAR MARKERS ON CENTERLINE EXTEND FOR THE ENTIRE LENGTH OF TWO-WAY TRAFFIC AT 50-FOOT SPACING.

COVER EXISTING CENTERLINE STRIPE WITH TEMPORARY PAVEMENT MARKING, 4-INCH DOUBLE YELLOW.

(1)

W057-51
48"x24"

R4-1 (2)

THE W06-3 WITH THE W057-51 SHALL BE LOCATED 200 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP AND/OR 500 FEET BEYOND ANY SIDEROAD. THE W06-3 WITH THE R4-1 SHALL BE LOCATED 1000 FEET BEYOND THE W06-3 AND THE W057-51 AND THE SIGNS SHALL BE ALTERNATED WITH ONE MILE INTERVALS BETWEEN W06-3 SIGNS.

(2) CONVENTIONAL: 24"x30"
FREEWAY AND EXPRESSWAY: 36"x48"

TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

SIGN

FHWA

6

S.D.D. 15 D 6-3

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

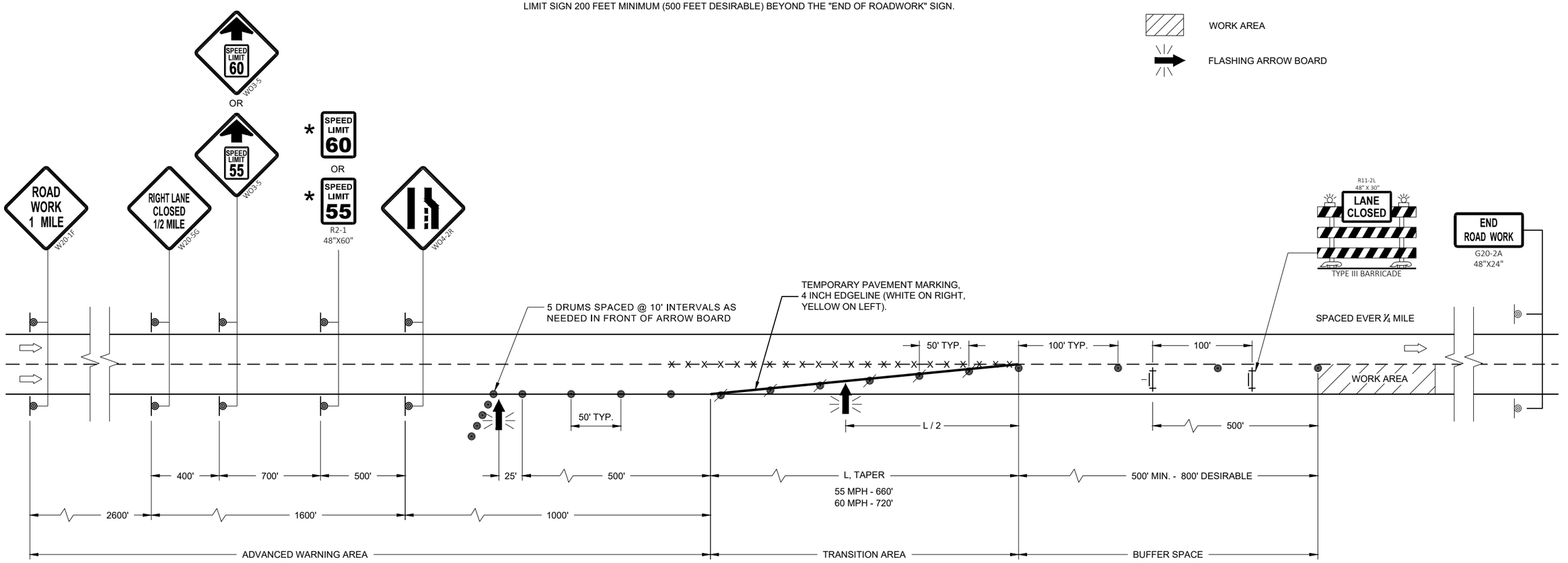
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

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

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

LEGEND

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



TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15D12 - 07b

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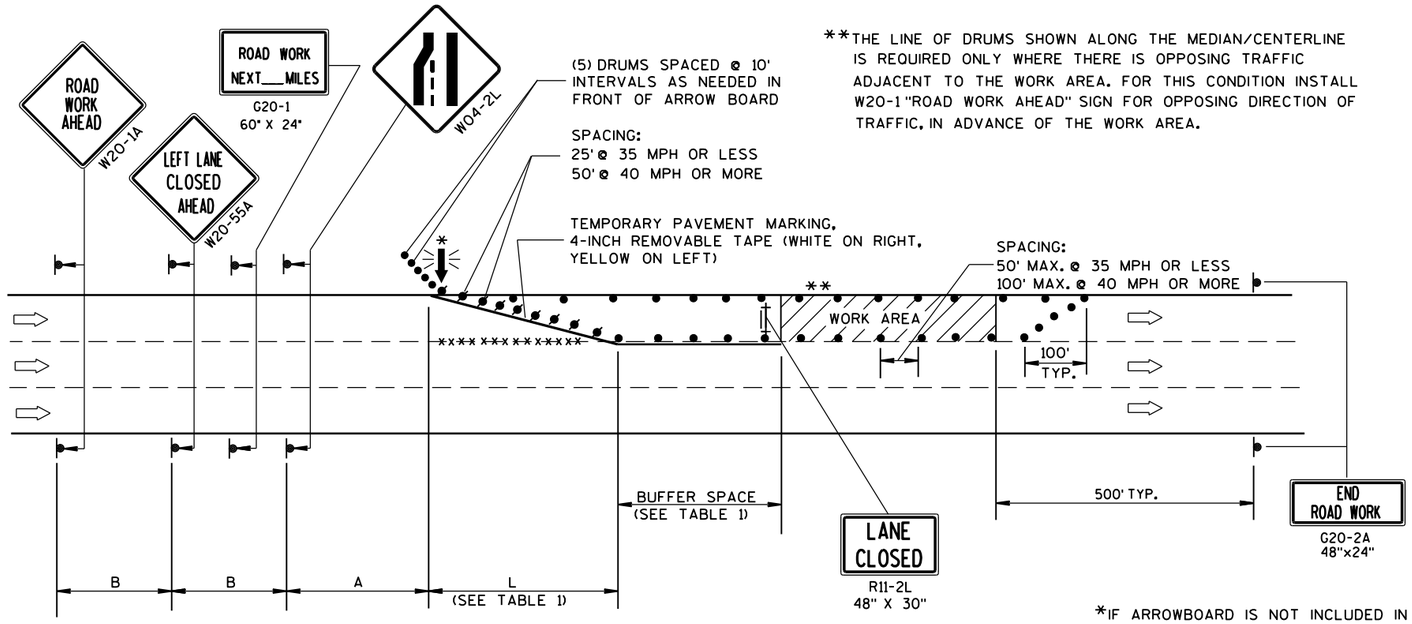
SDD 15D12 - 07b



**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF TRAFFIC, IN ADVANCE OF THE WORK AREA.

B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

(PLACE BARRICADE AND SIGN APPROX. EVERY 1000' ACROSS THE CLOSED LANE)

*IF ARROWBOARD IS NOT INCLUDED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER.

W01-6
48"x24"

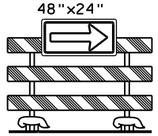


TABLE 1
TAPER AND BUFFER SPACE FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

LEGEND

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

GENERAL NOTES

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.

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 SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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 DISTRICT TRAFFIC UNIT.

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

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 PORTABLE SUPPORTS.

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

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.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

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.

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

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

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

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

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 — DATE
/S/ Peter Amakobe Atepe — STATEWIDE WORK ZONE SAFETY ENGINEER
IC
FHWA

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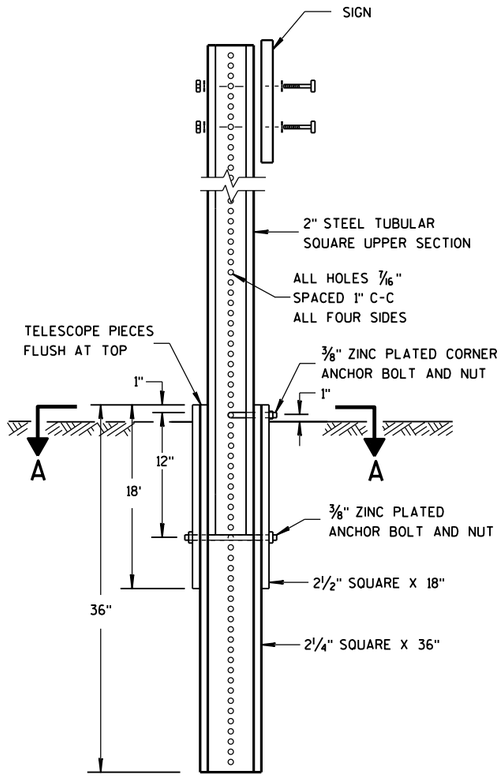
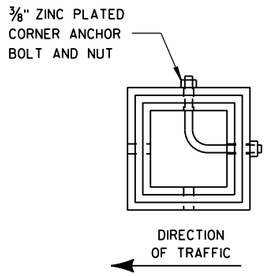
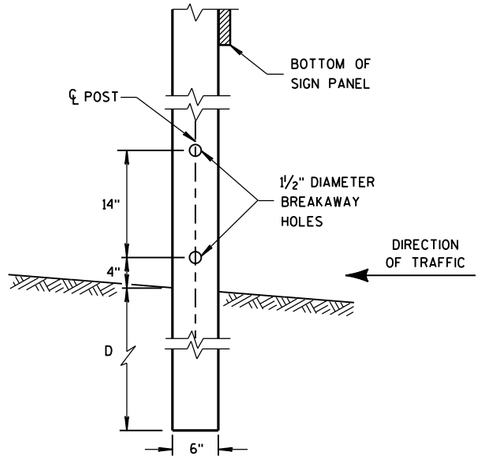
S.D.D. 15 D 20-4



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



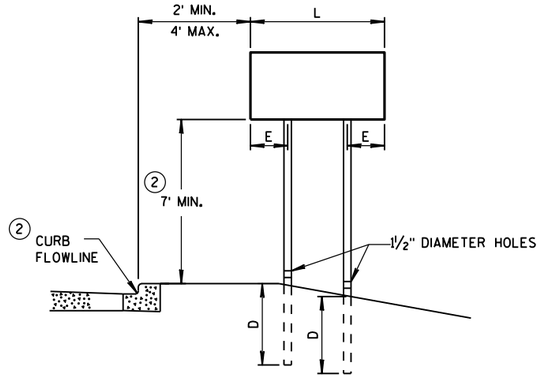
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

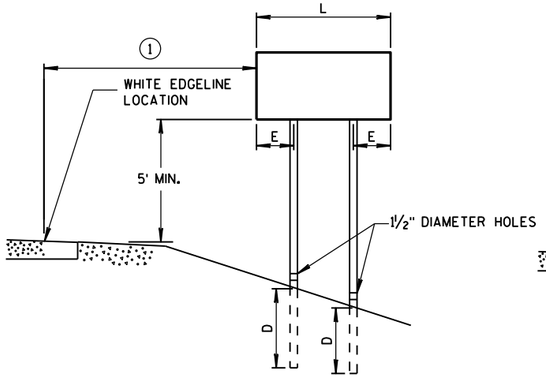
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

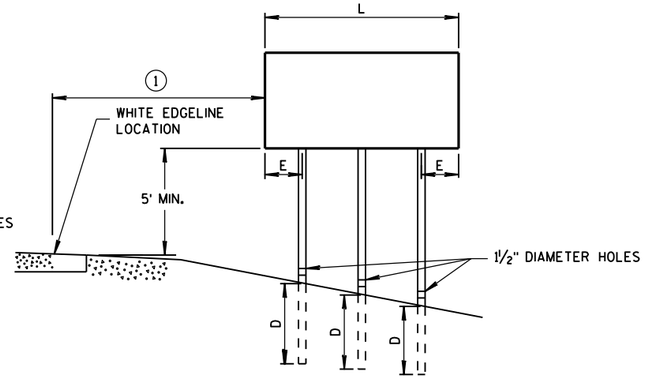
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK 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

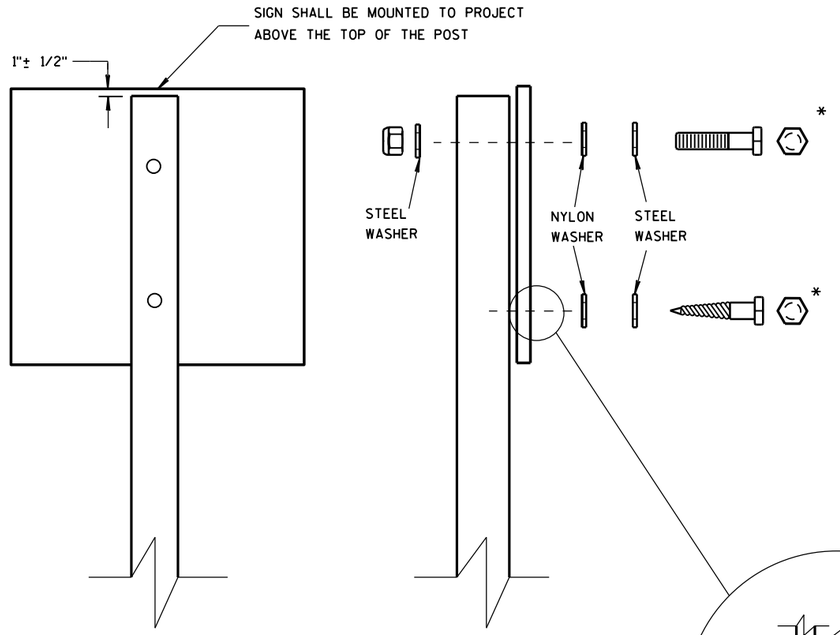
SEE NOTE (3)

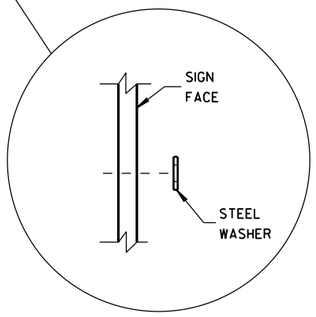
TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 15 D 38-2a





WASHER PLACEMENT WHEN SIGN HAS OTHER THAN TYPE H OR TYPE F FACE

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 POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3"

MACHINE BOLTS - 5/16" X 6-1/2" OR 7" LENGTH W/ NUTS

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" LENGTH W/ NUTS

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 FOR ALL TYPE H SIGNS

* 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.

6

6

S.D.D. 15 D 38-2b

S.D.D. 15 D 38-2b

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

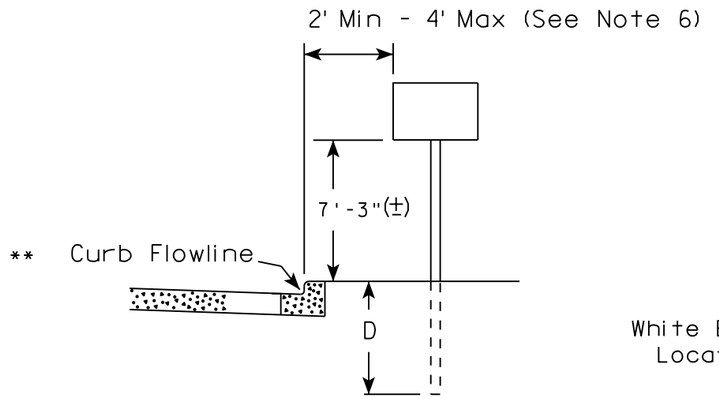
APPROVED

June 2017
DATE

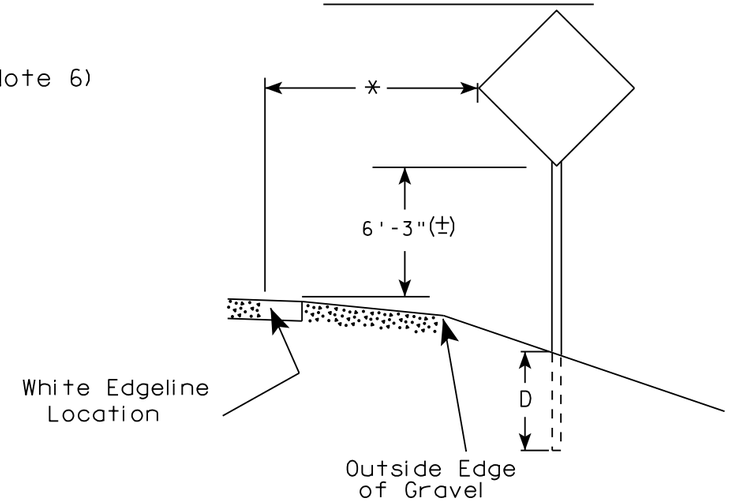
/S/ Andrew Heldtke
WORK ZONE ENG

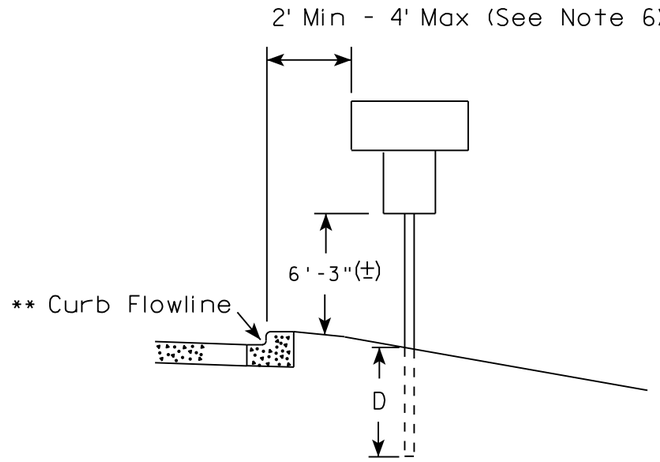
FHWA

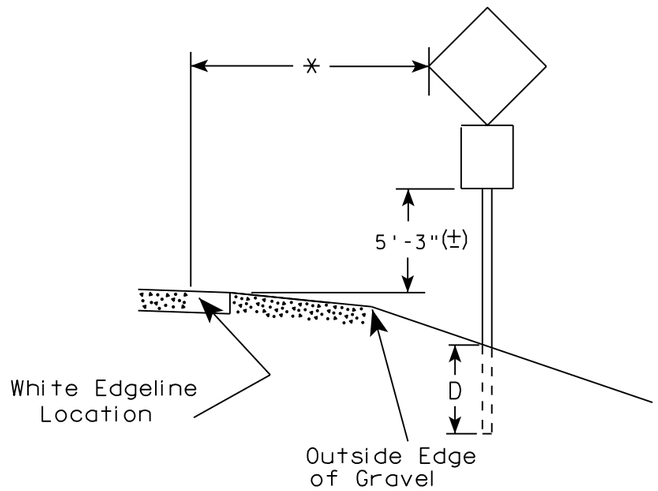
URBAN AREA



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.

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 barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. J-Assemblies are considered to be one sign for mounting height.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. 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), 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" (±).

POST EMBEDMENT DEPTH

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

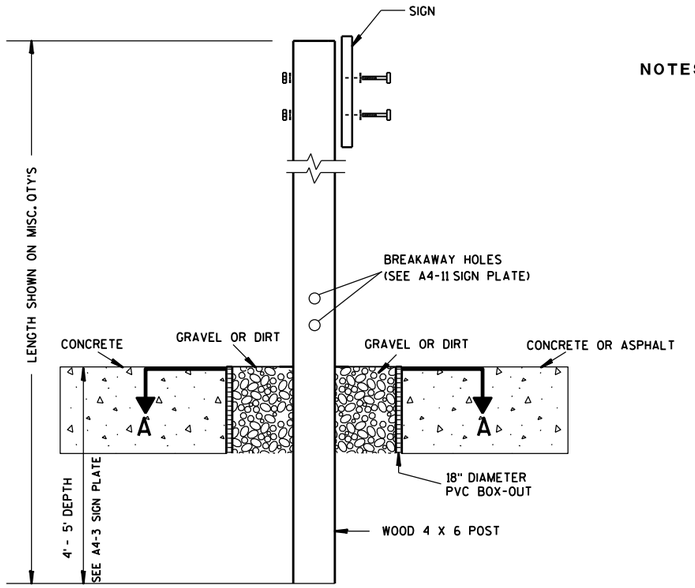
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-3.21

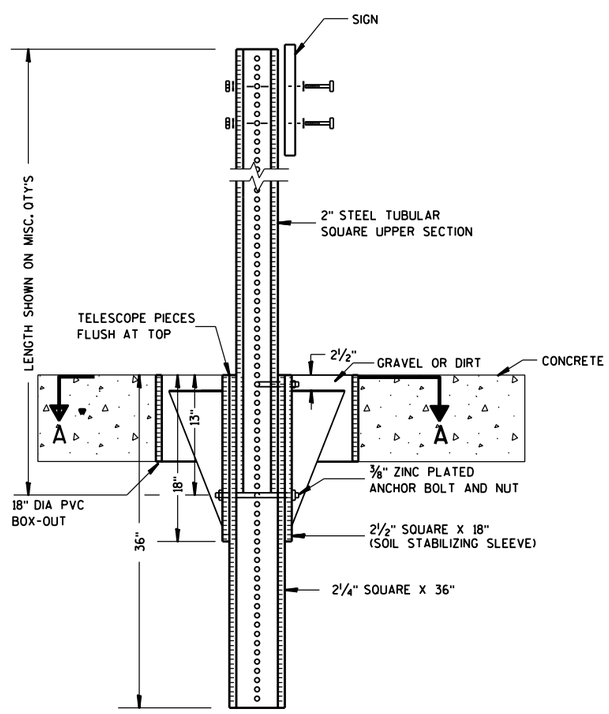
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 85	E



ELEVATION VIEW

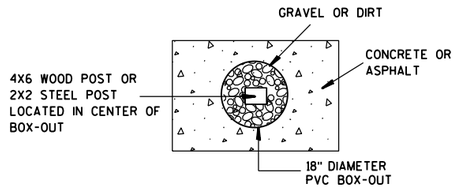
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

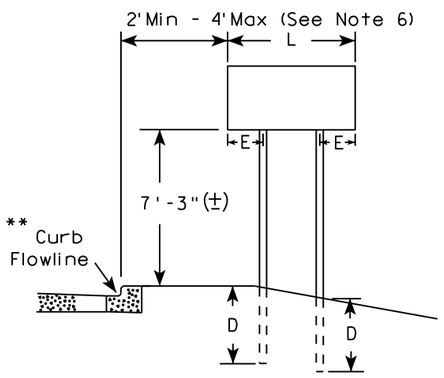
APPROVED Matthew R Rauch
for State Traffic Engineer

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

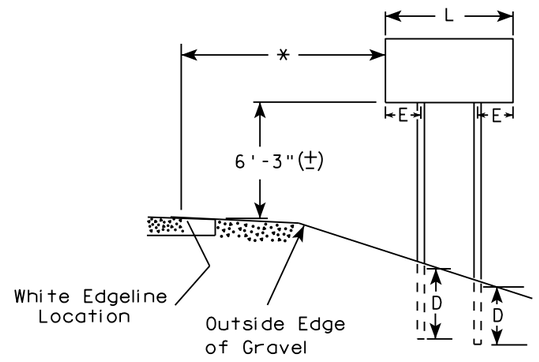
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

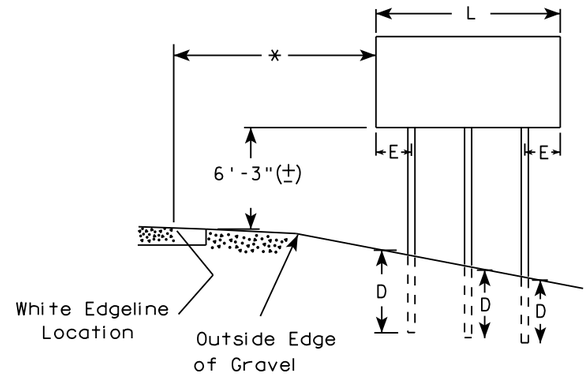
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

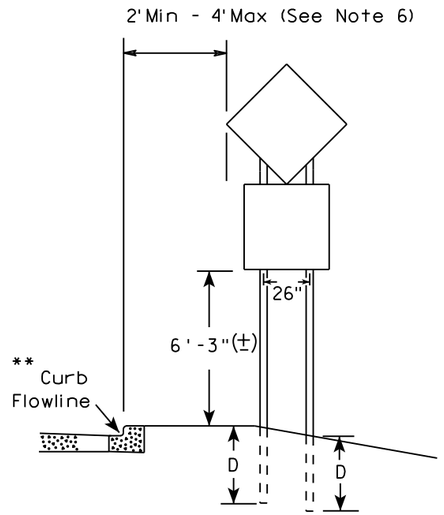
URBAN AREA



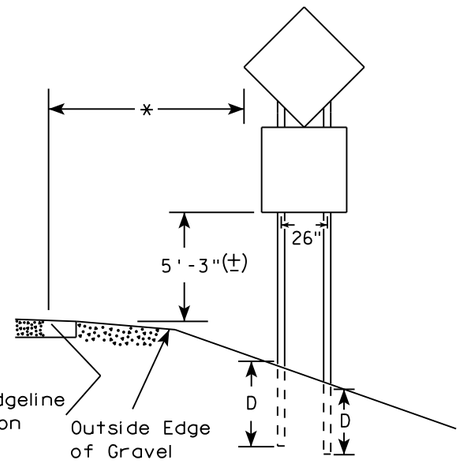
RURAL AREA (See Note 3)







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'

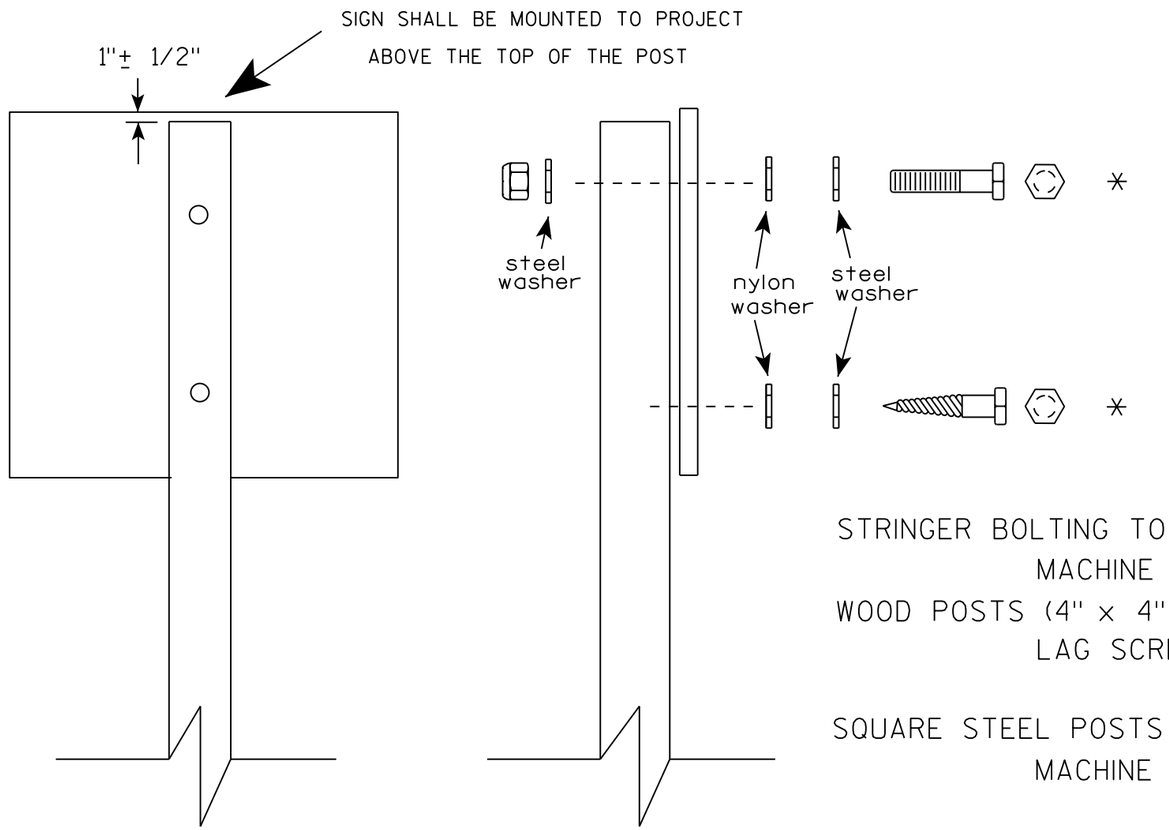
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

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: 87	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 4" or 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 8/11/16 PLATE NO. A4-8.8

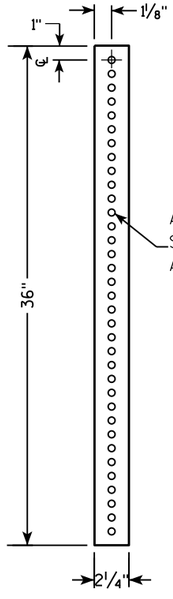
PROJECT NO:

SHEET NO: E

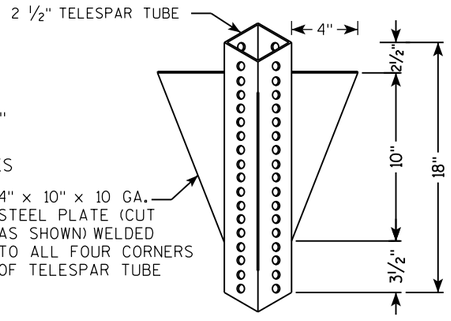
FILE NAME : C:\CADfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ plotuser $$

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

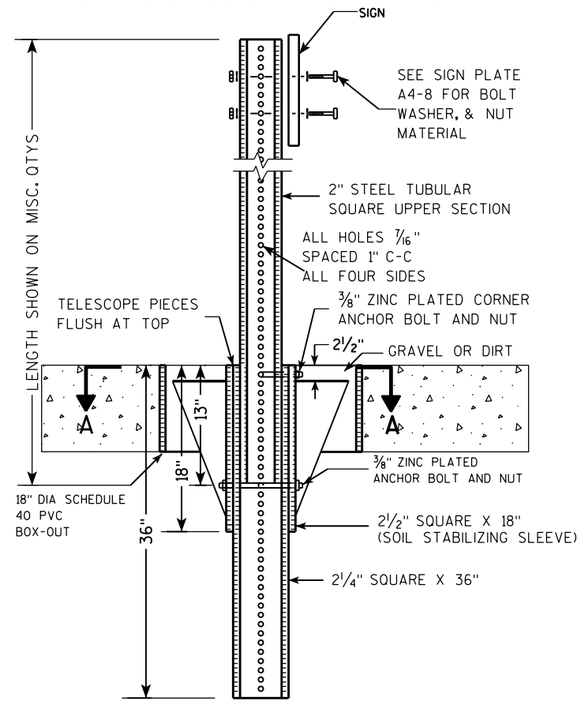
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



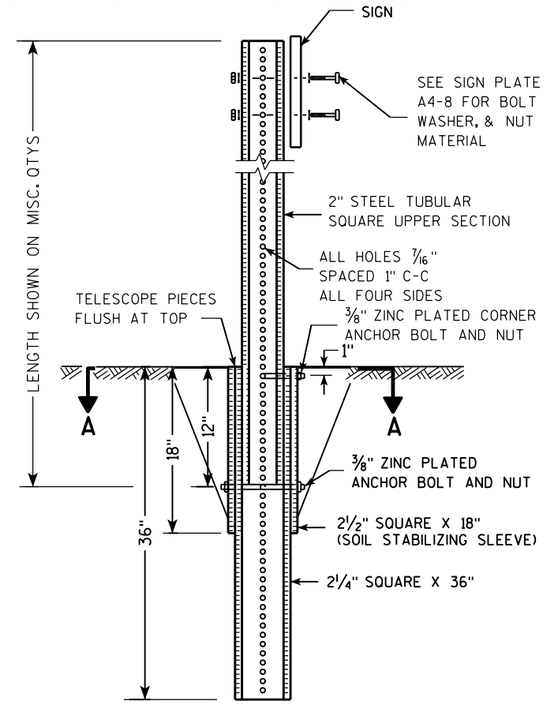
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

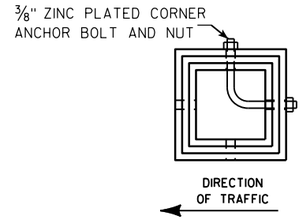


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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).

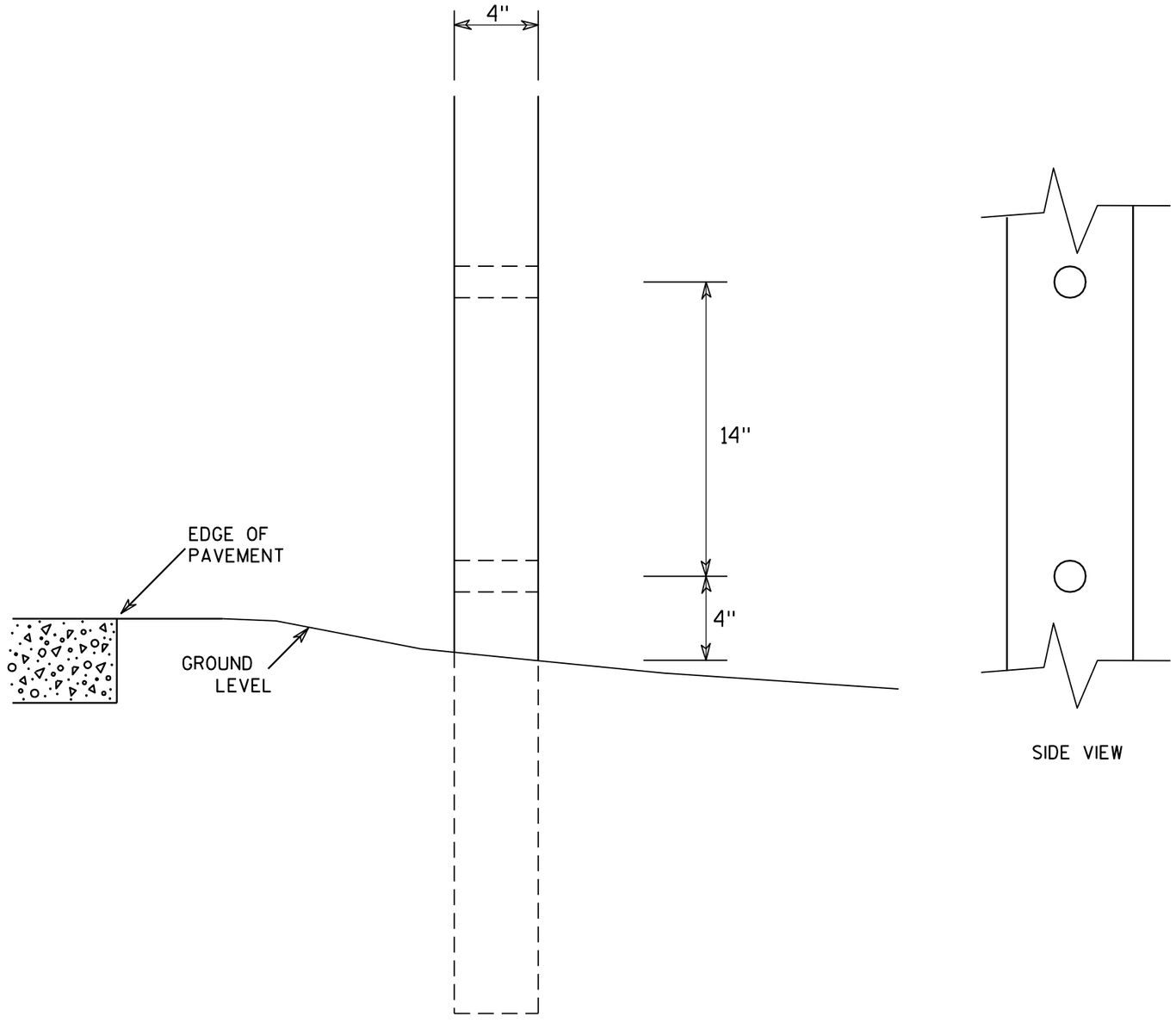
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 89 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

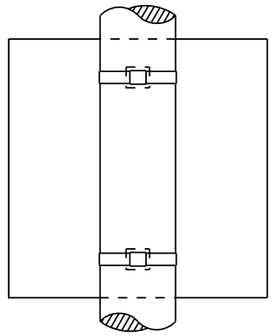
APPROVED Chester J Spang for State Traffic Engineer

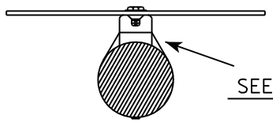
DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 90	E

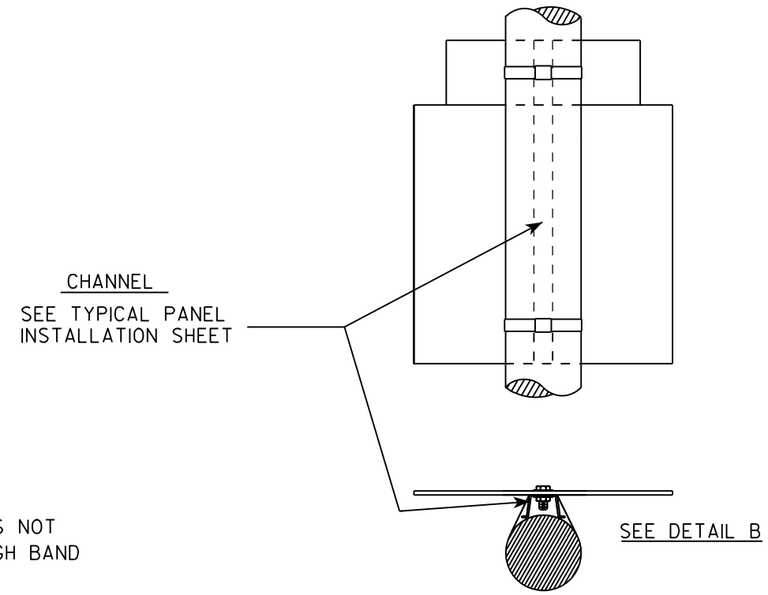
BANDING

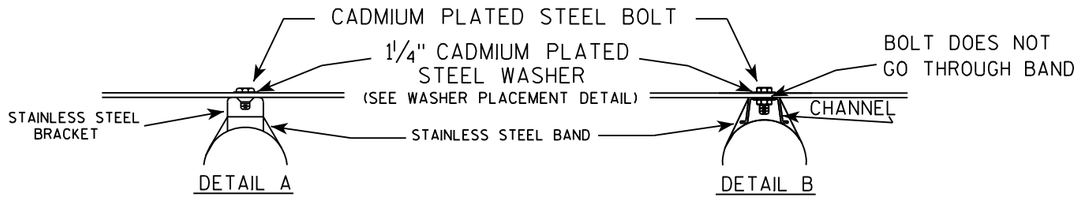
SINGLE SIGN



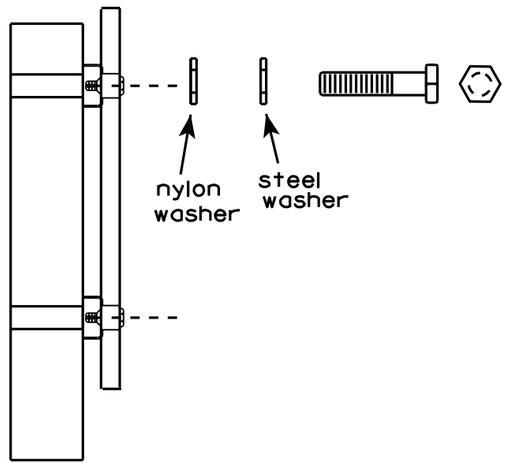


"J" ASSEMBLY





WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.

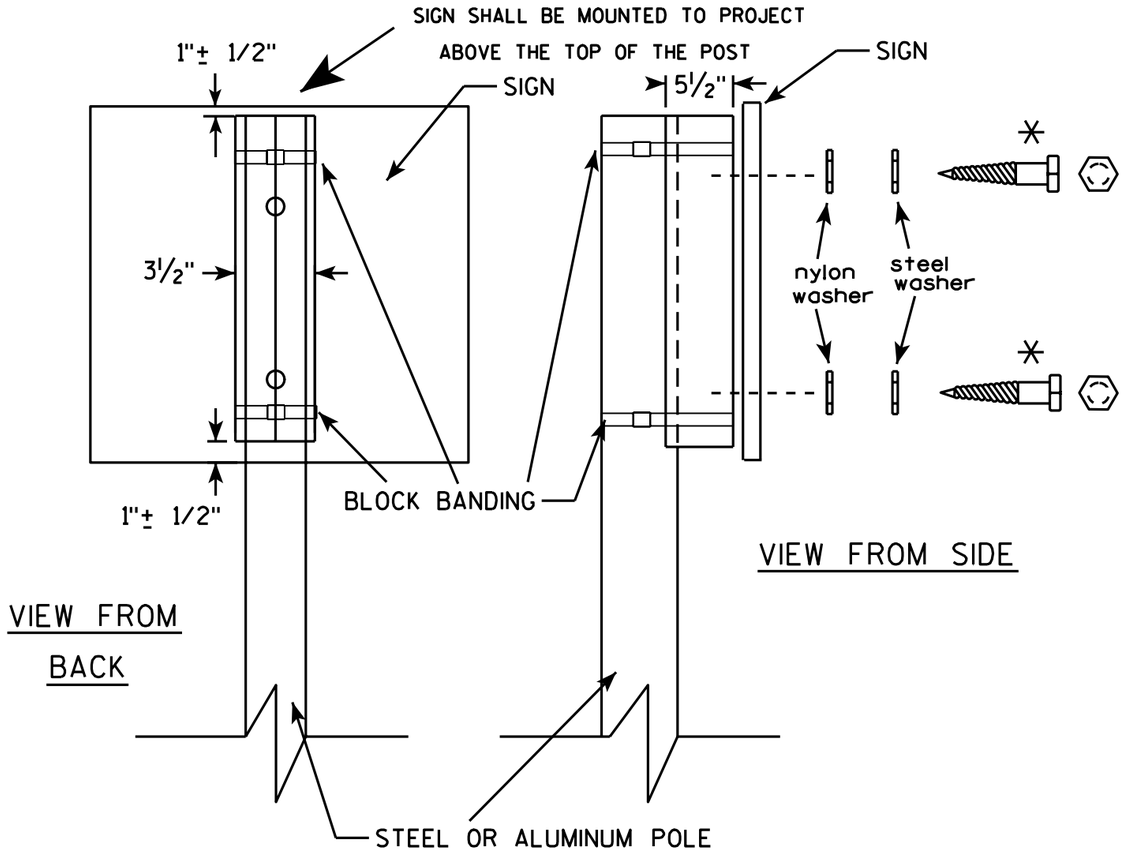
STANDARD SIGN
SIGN BANDING DETAILS

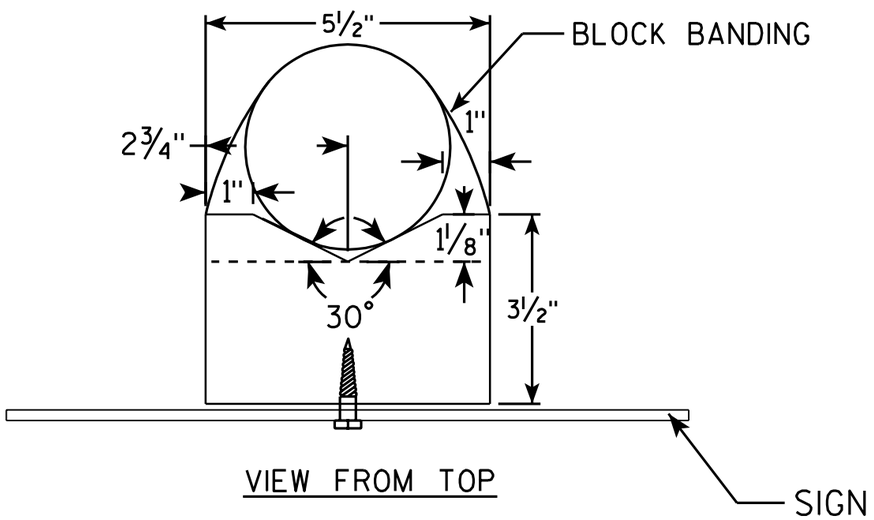
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 91	E





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, or
   b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
   c. 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)

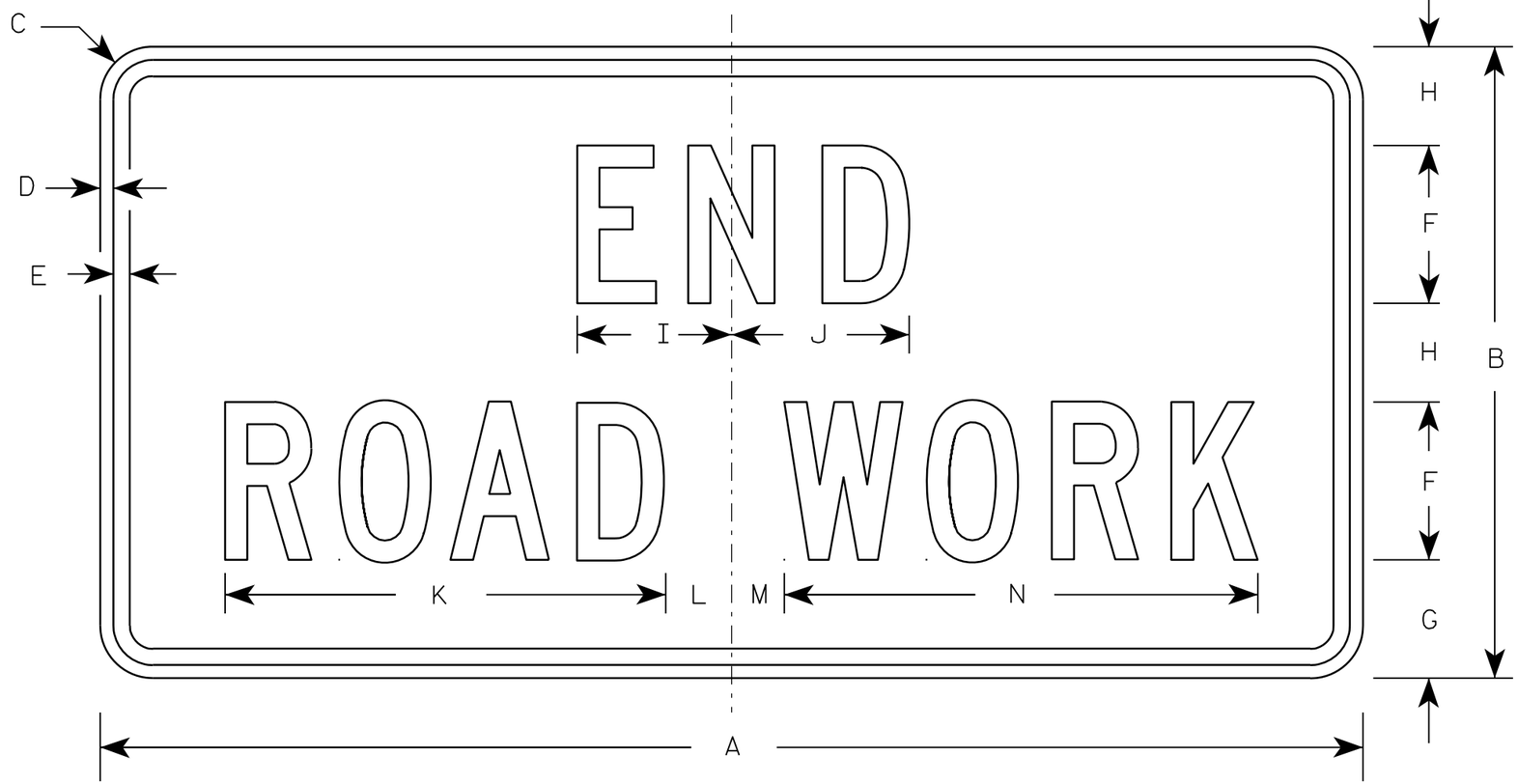
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

SHEET NO: 92 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

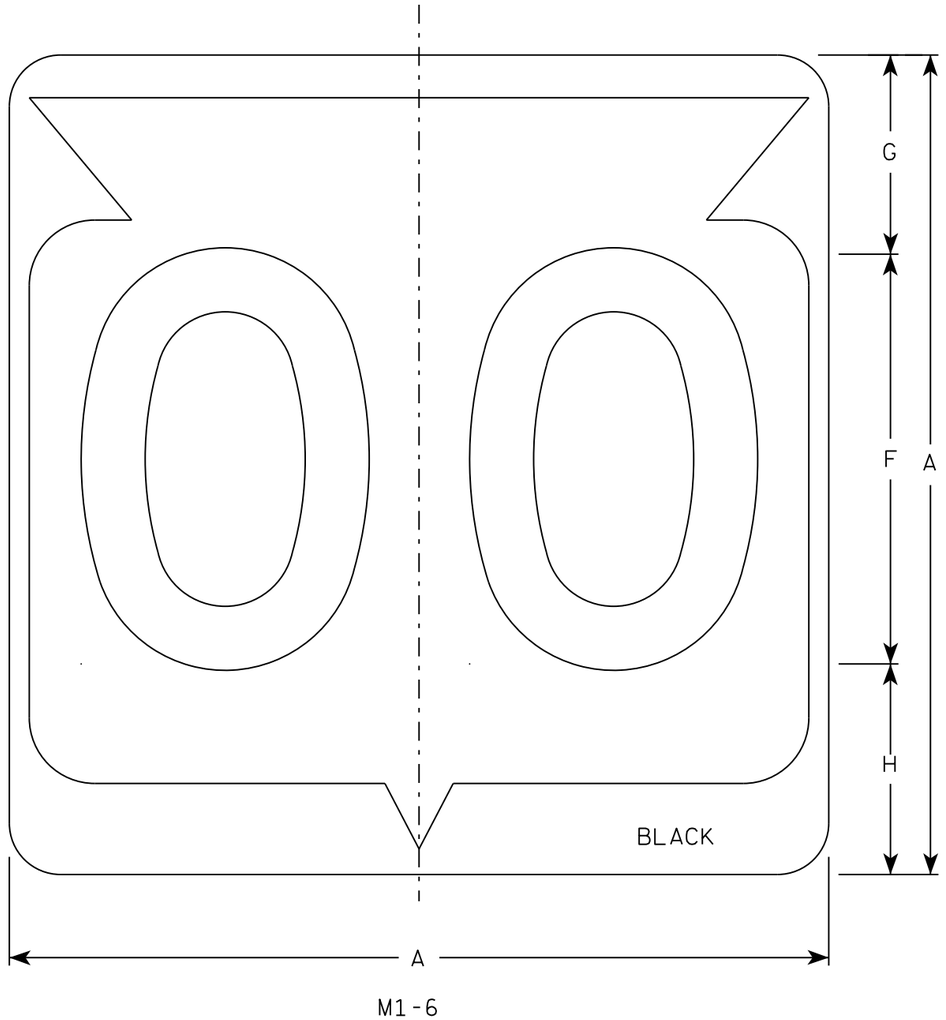
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

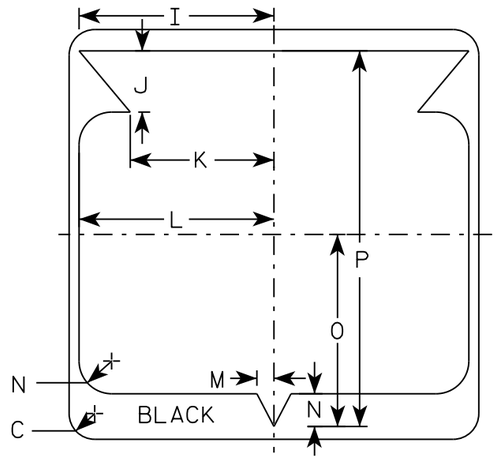
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 93	E



M1-6

NOTES

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



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

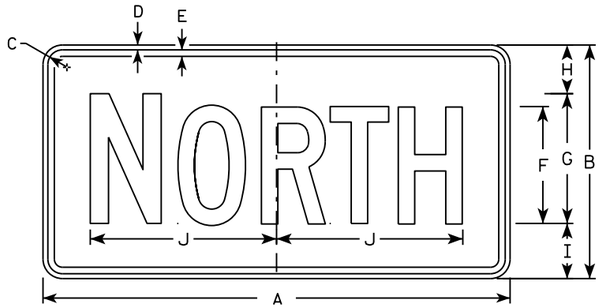
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

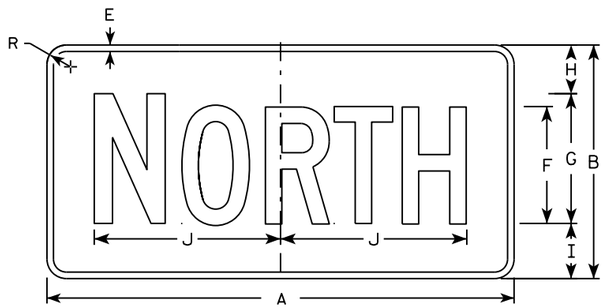
APPROVED Matthew R Rauch for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 94	E



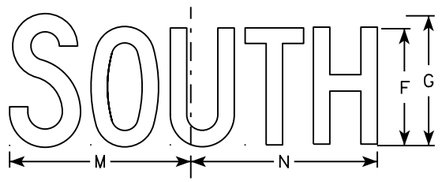
M3-1
MM3-1
MP3-1



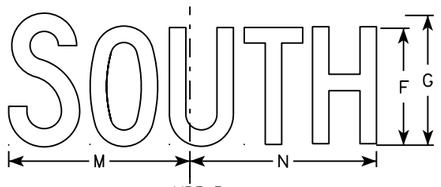
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

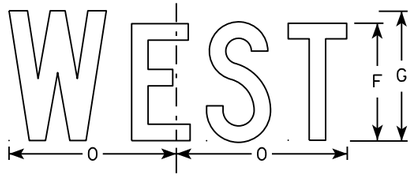
MB3-2
MK3-2
MN3-2



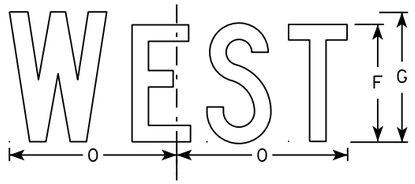
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thur M3-4
SERIES

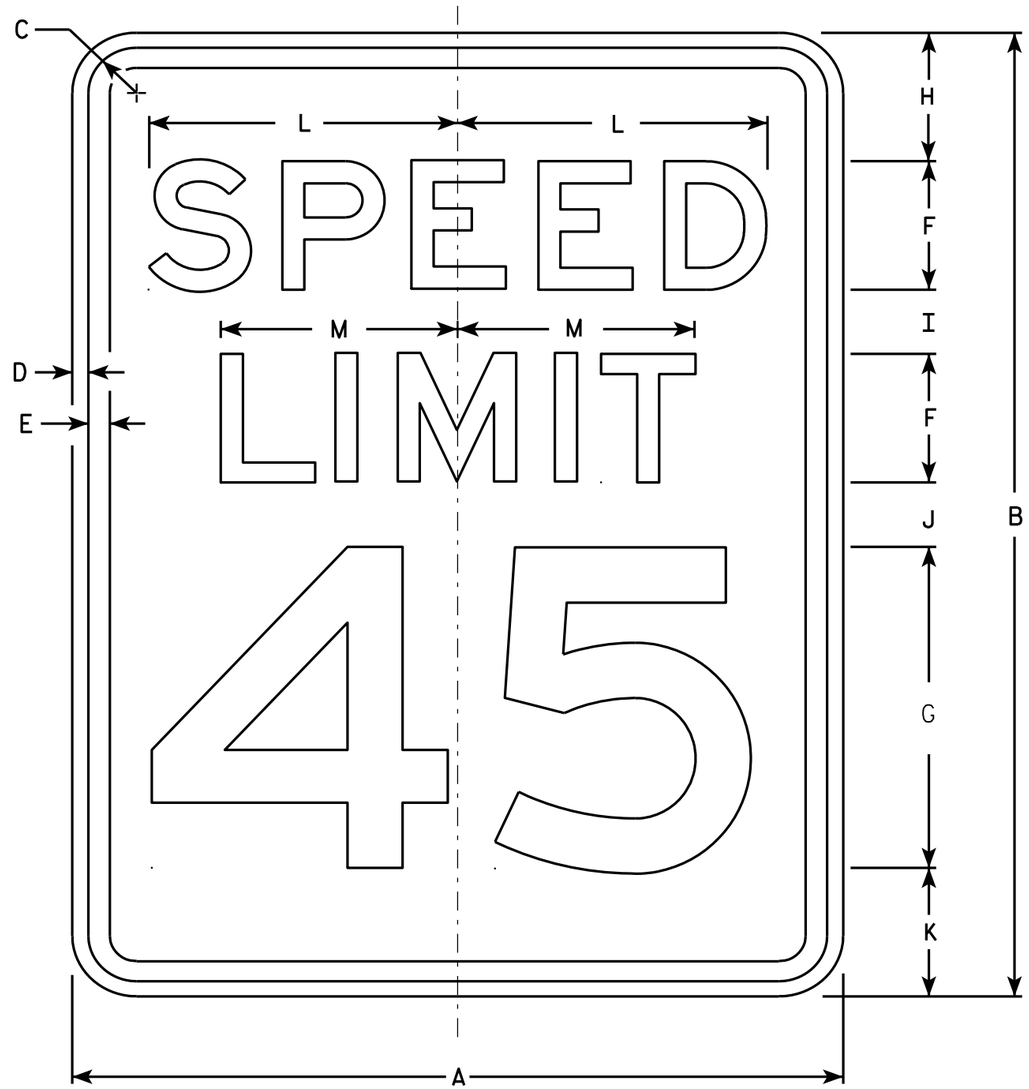
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



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

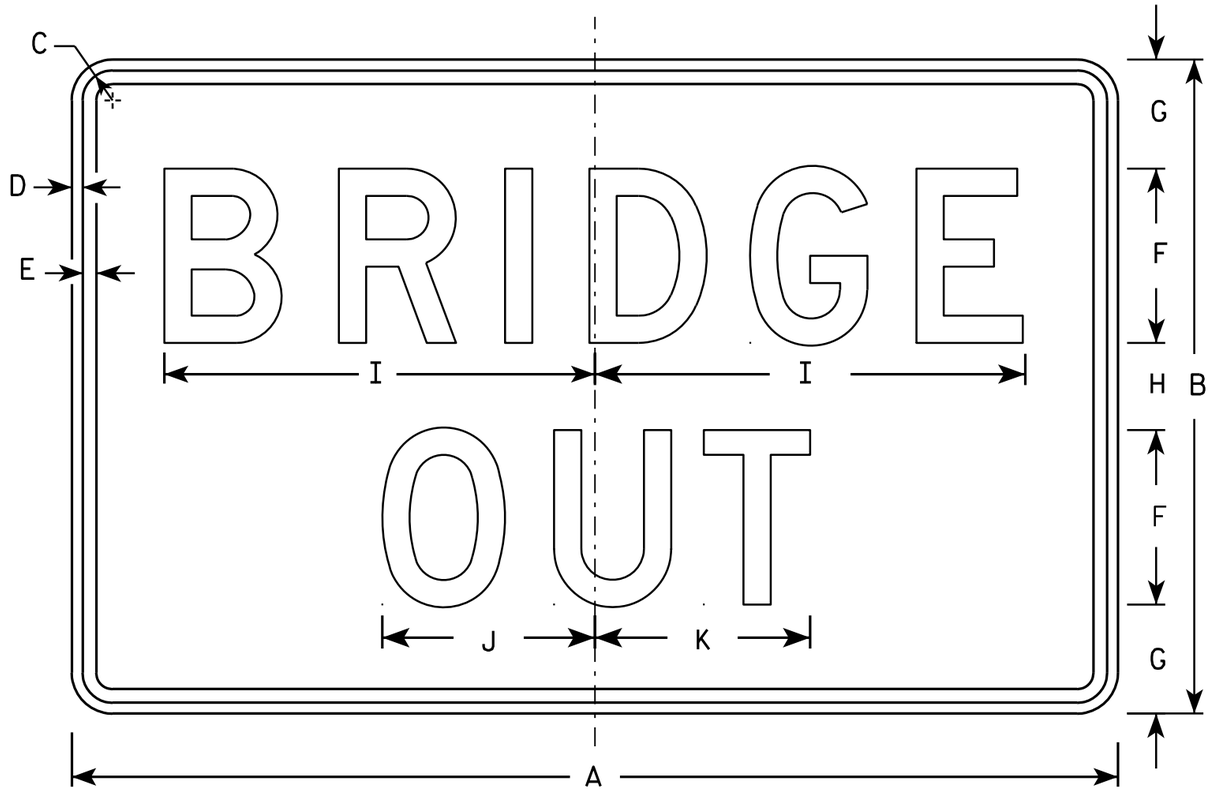
STANDARD SIGN
R2-1

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: 96 | E



R11-2B

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0

STANDARD SIGN
R11-2B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2B.2

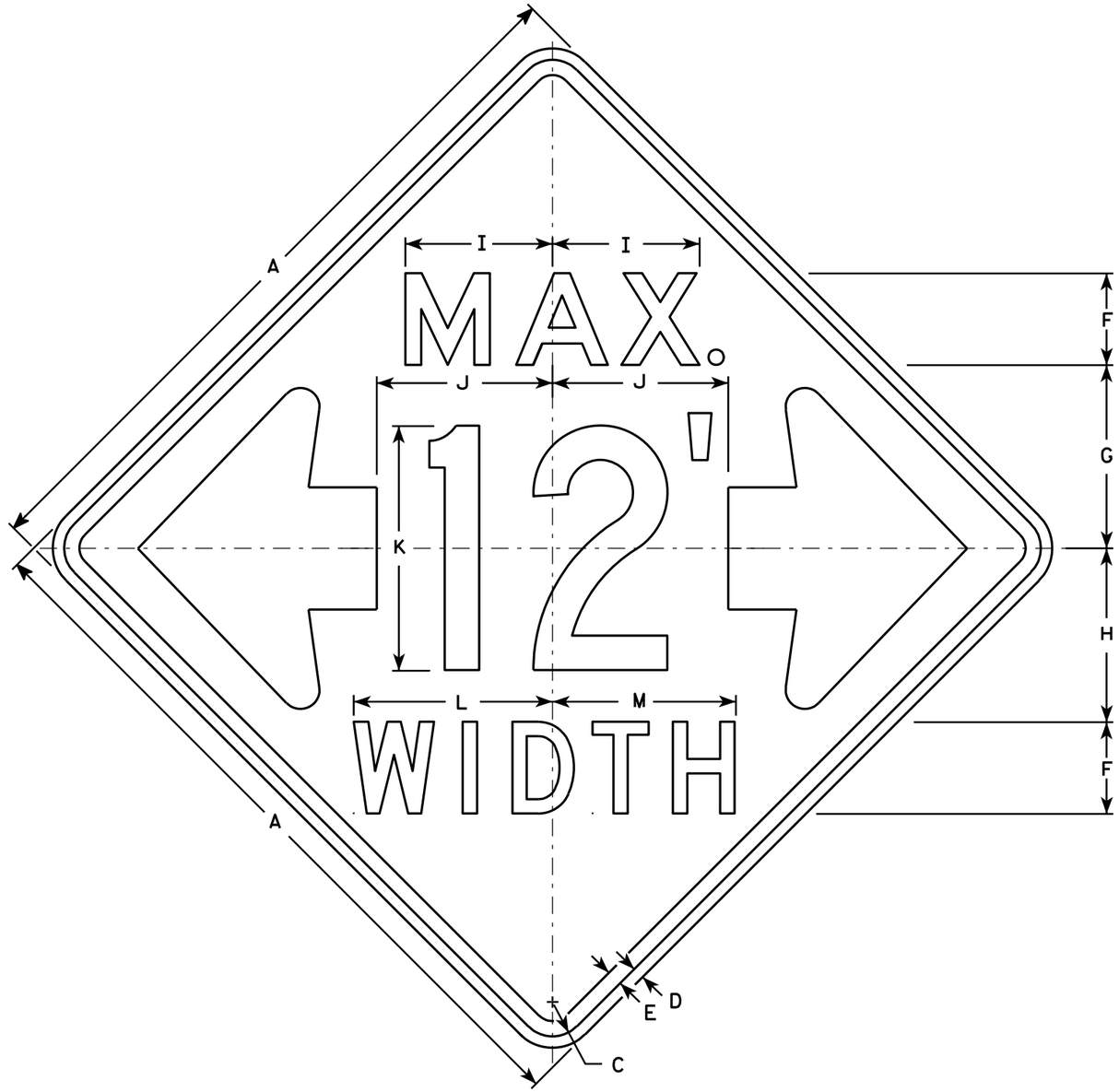
PROJECT NO:

SHEET NO: 97 E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R112B.DGN PLOT DATE : 01-APR-2011 14:23 PLOT BY : mscj9h

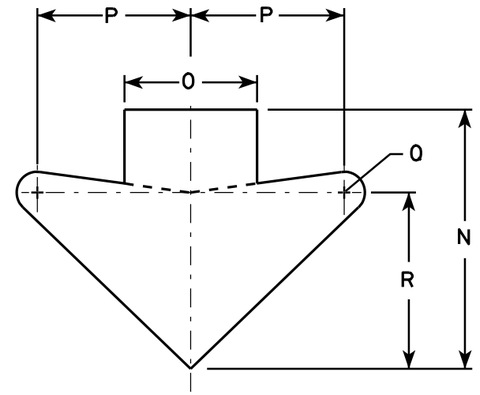
WISDOT/CADDS SHEET 42



W12-52

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. The top line is series E, the numerals are series C, and the bottom line is series D.
6. Substitute appropriate numerals and adjust spacing as required.



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	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
2M	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
3																											
4																											
5																											

STANDARD SIGN
W12-52

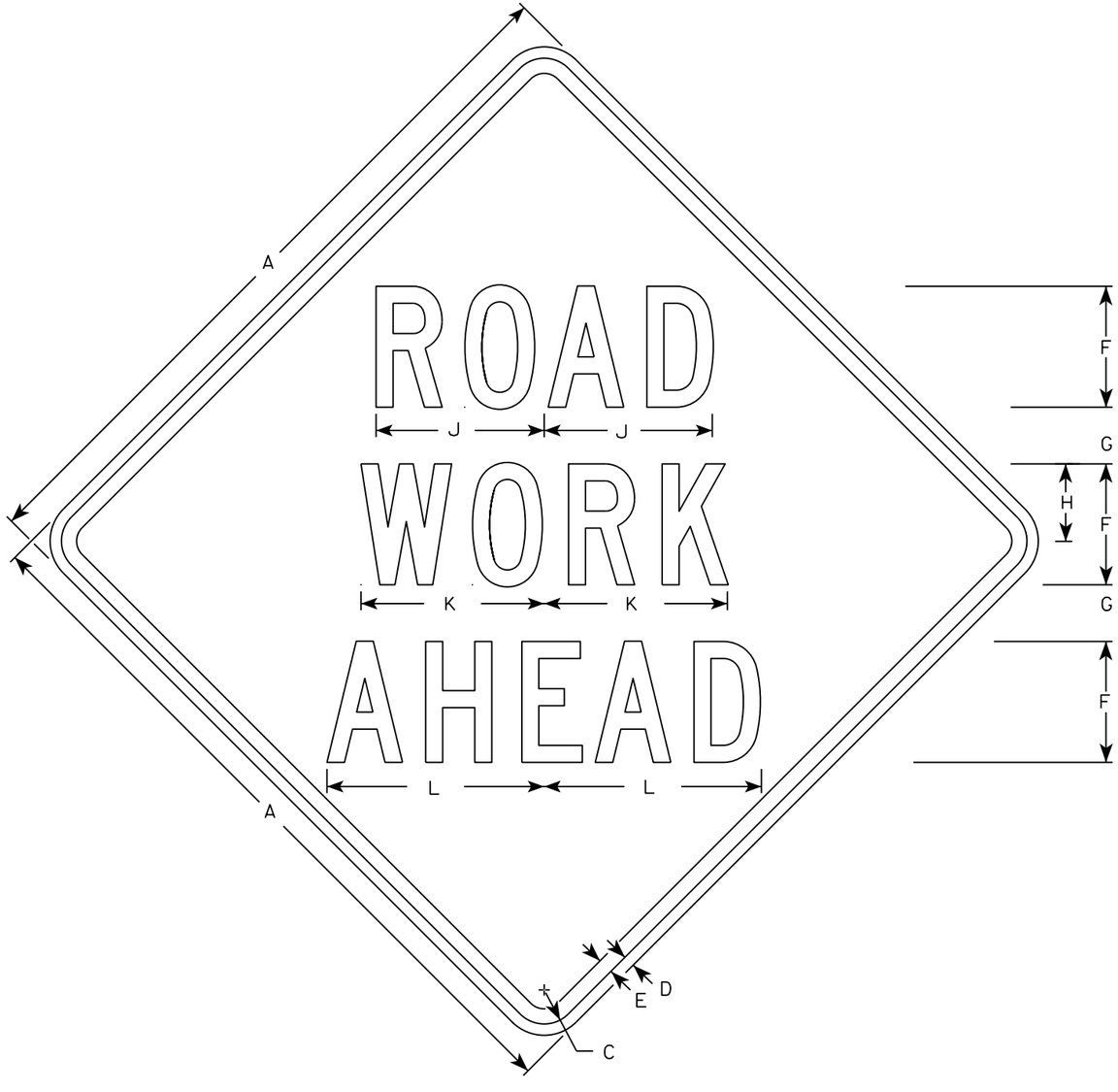
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

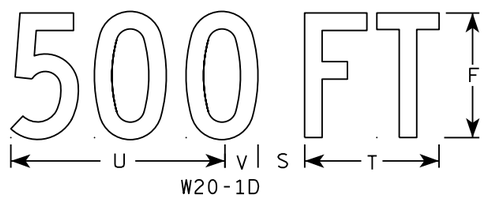
DATE 3/16/11 PLATE NO. W12-52.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 98 | E

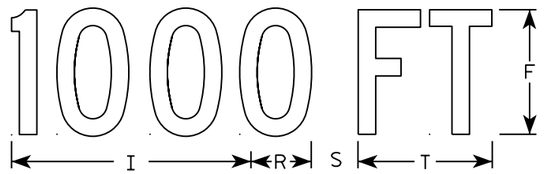
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W1252.DGN PLOT DATE : 16-MAR-2011 14:45 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.137199:1.000000
WISDOT/CADDS SHEET 42



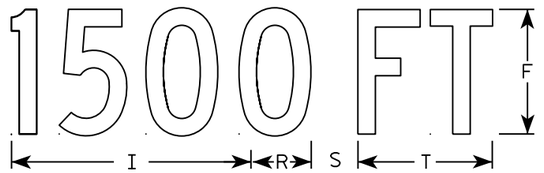
W20-1A



W20-1D

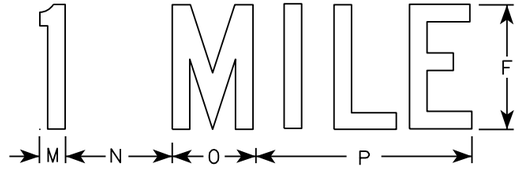


W20-1C

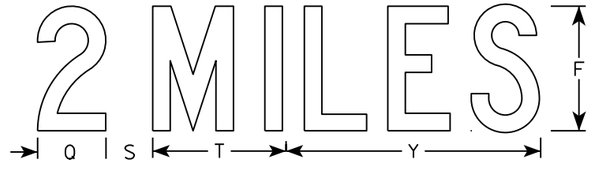


W20-1B

W20-1G



W20-1F



W20-1E

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.

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

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

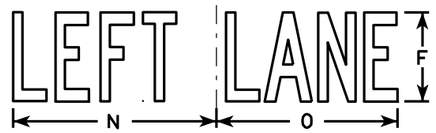
DATE 5/07/15 PLATE NO. W20-1.10

PROJECT NO:

SHEET NO: E

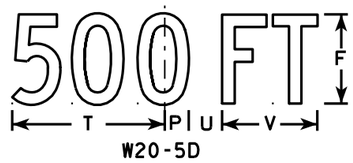
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 01-DEC-2015 18:24 PLOT BY : $$ plotuser $$

W20-56A

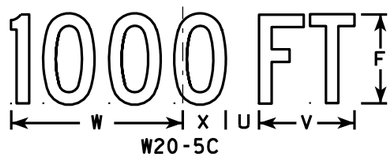


W20-55A

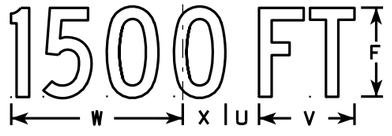
W20-5A



W20-5D



W20-5C



W20-5B

W20-5G

W20-5F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. " _____ LANE" is Series B.
   All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	1 5/8	5/8	3/4	5	1/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 1/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

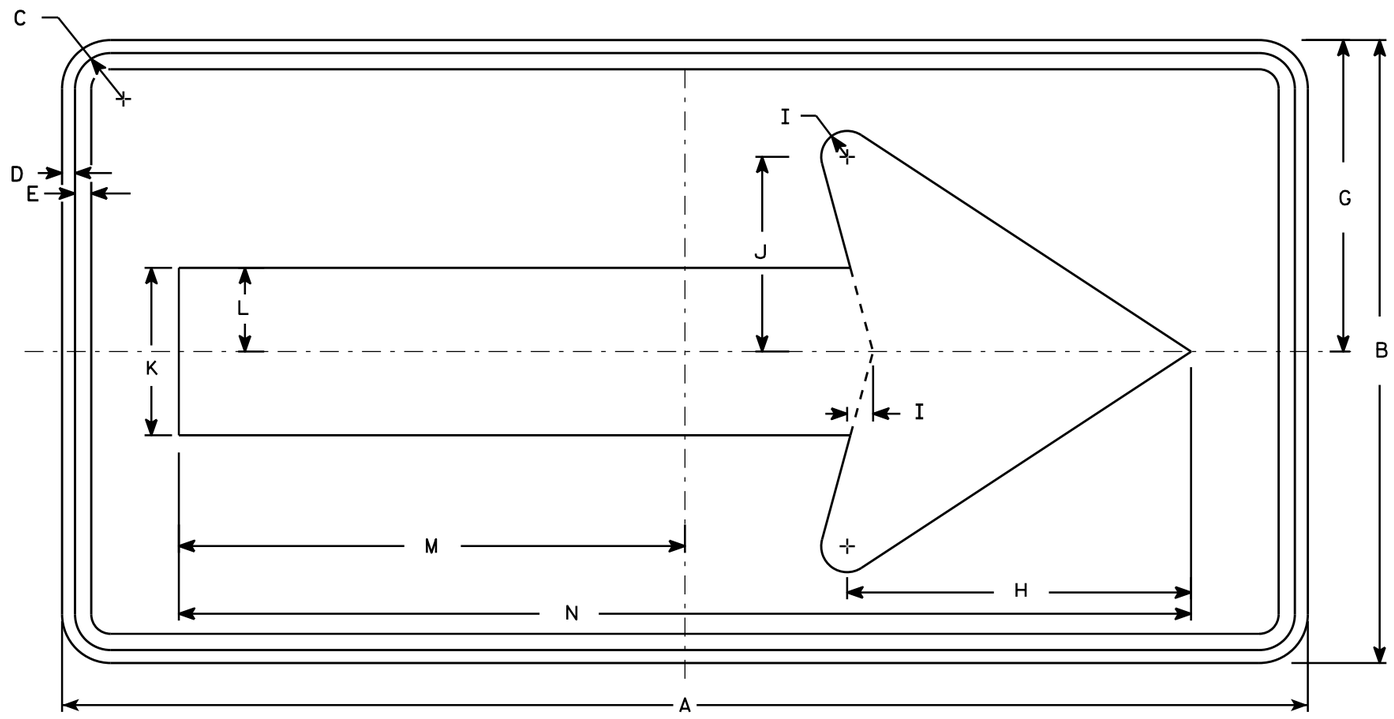
STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 100	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

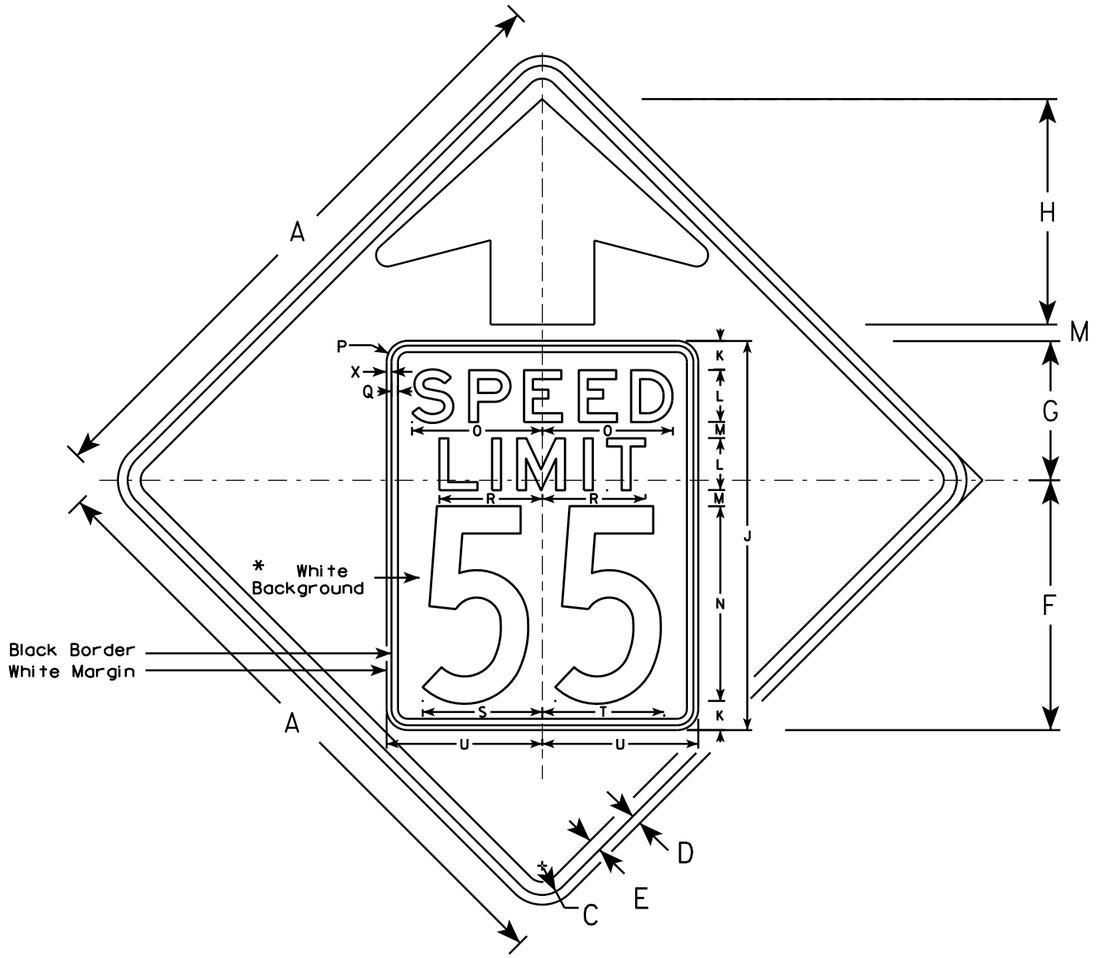
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE 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

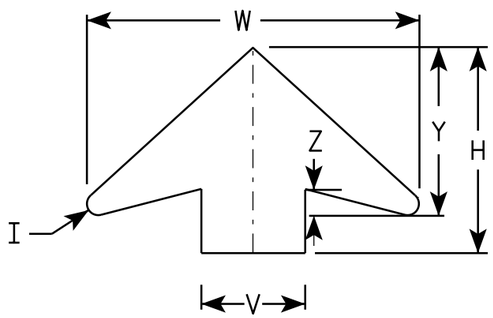


W03-5

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

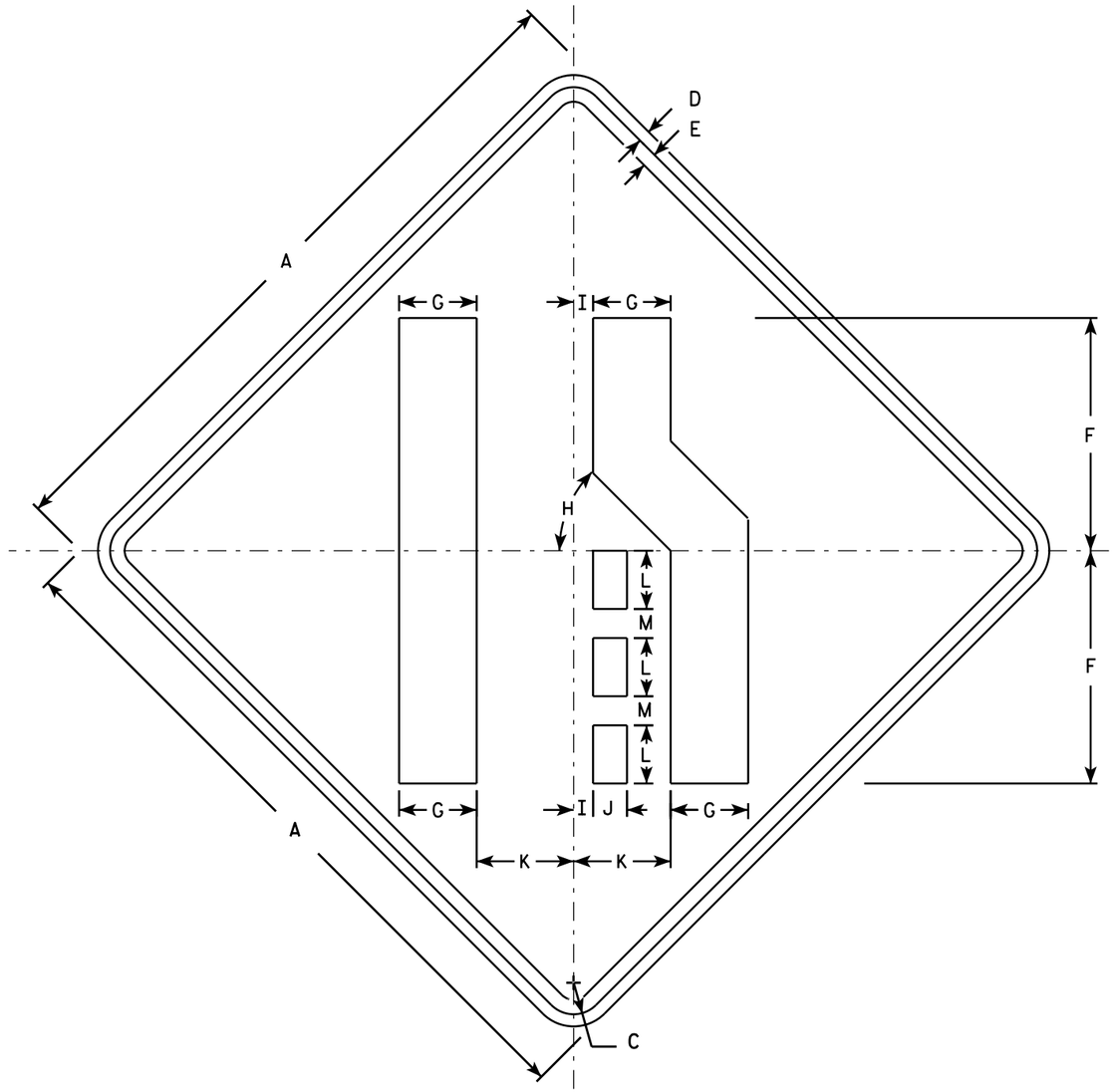
APPROVED Matthew R Rauch
for State Traffic Engineer

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

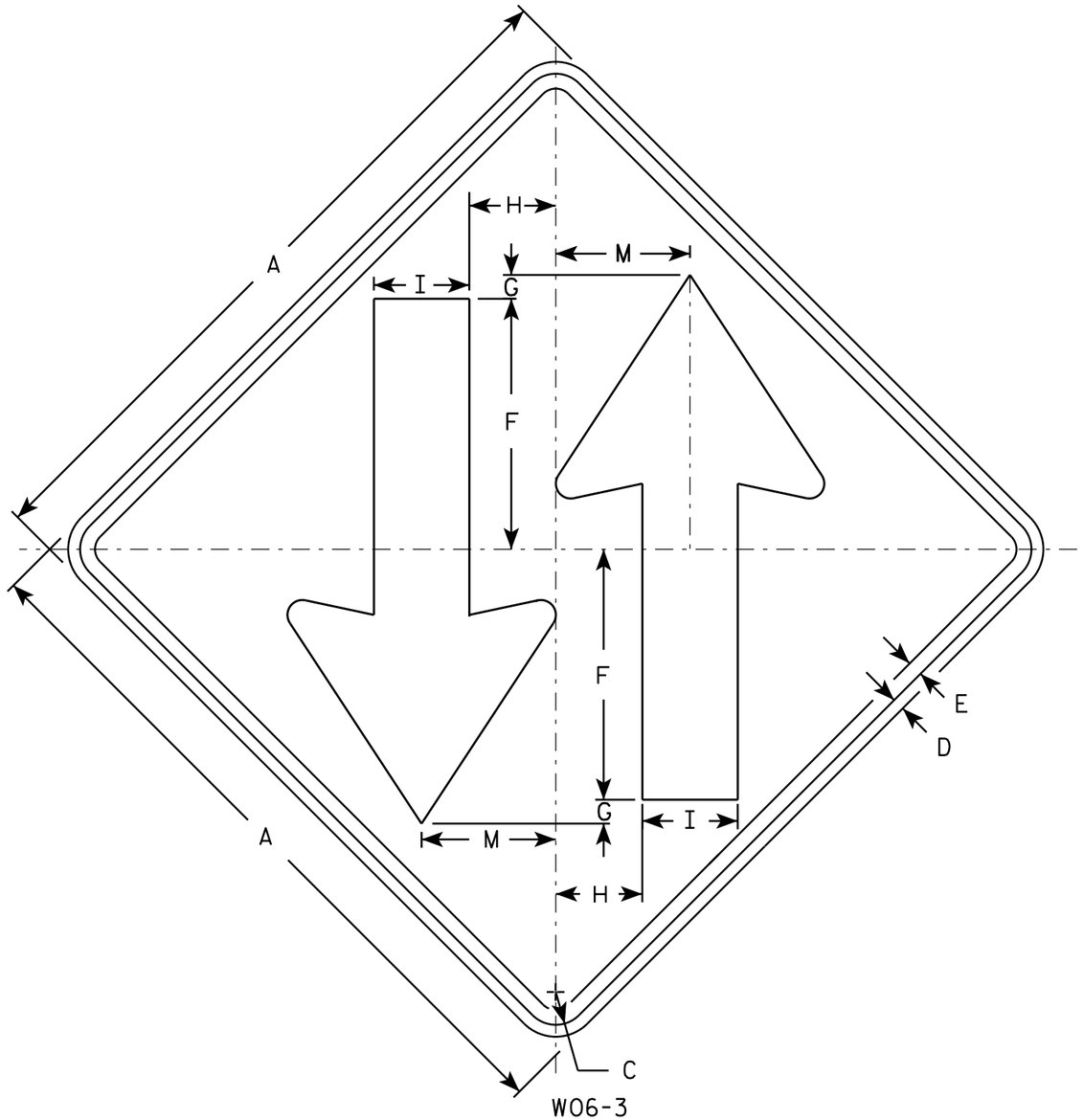
STANDARD SIGN
W04-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 103 W04-2.1

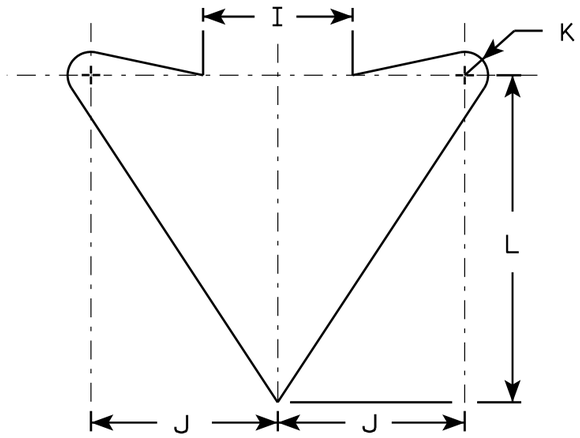
PROJECT NO: | SHEET NO: E



W06-3

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.



ARROW DETAIL

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

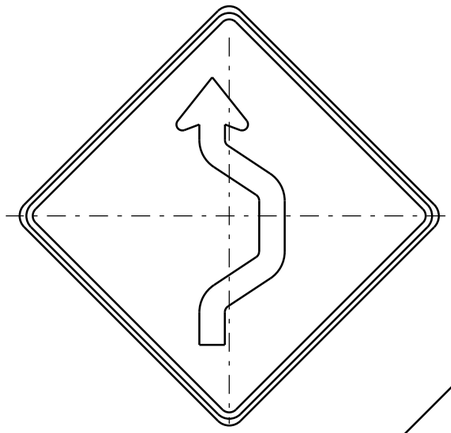
STANDARD SIGN
W06-3

WISCONSIN DEPT OF TRANSPORTATION

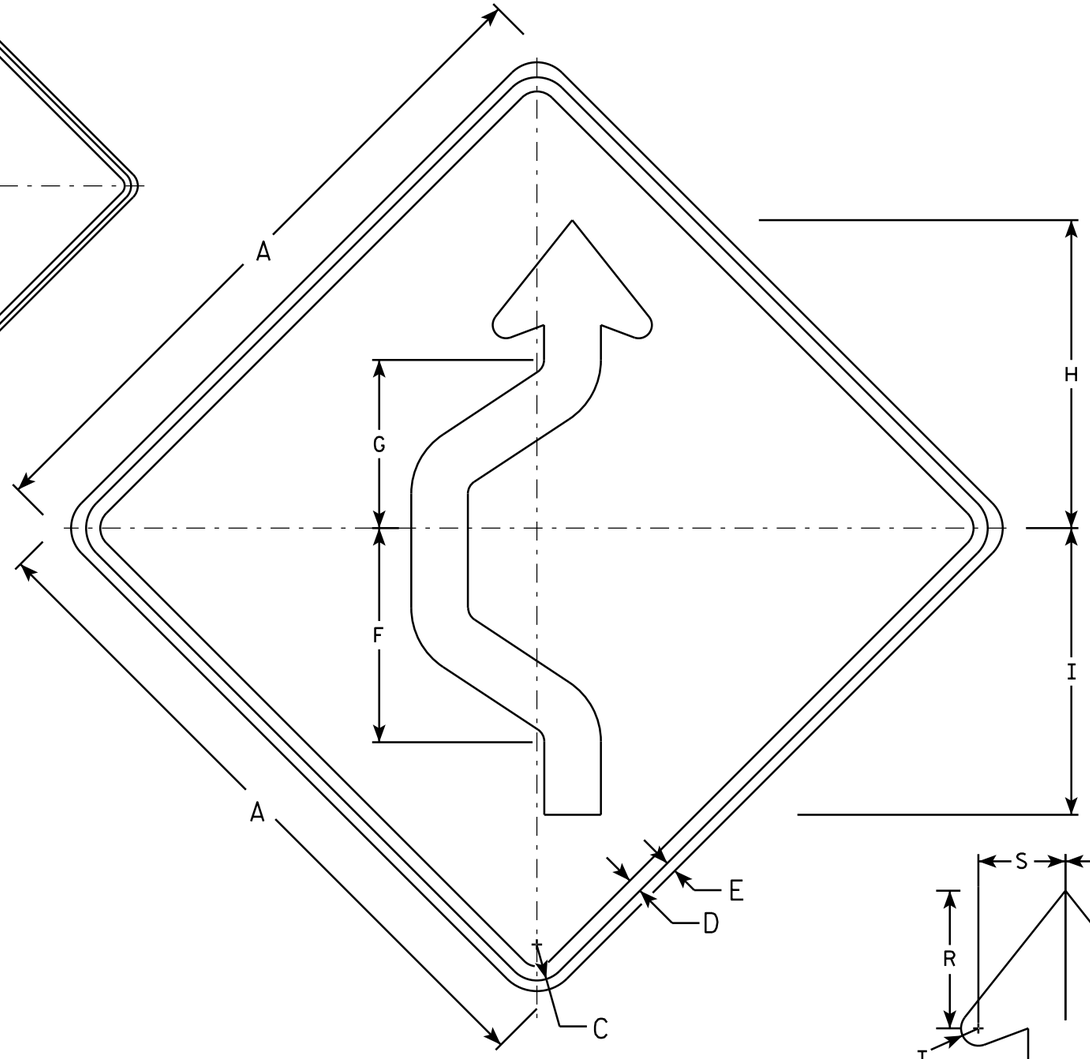
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 104 W06-3.1

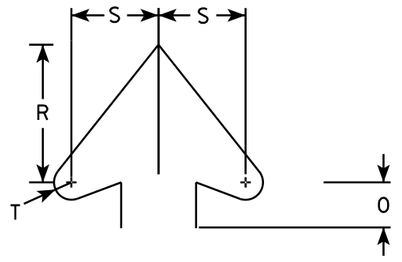
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



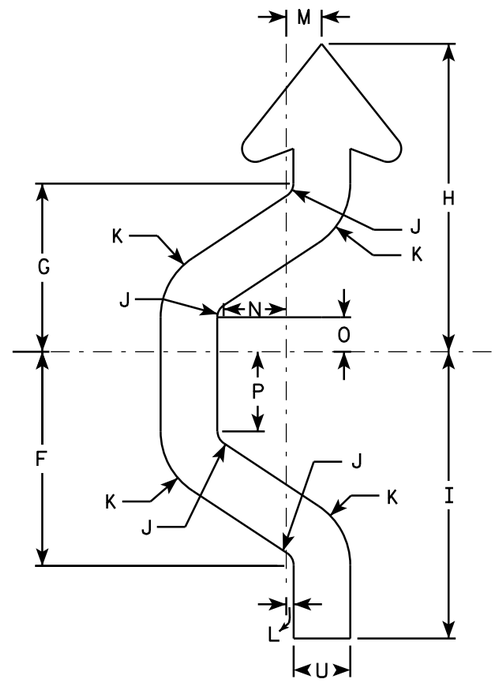
W024-1R



W024-1L



Arrowhead Detail



Arrow Detail

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. W024-1R is the same as W024-1L except 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 3/8	5/8	1/2	11 3/8	8 7/8	16 3/8	15 1/4	3/4	3 3/4	3/8	2	3 3/8	1 7/8	4 1/4		5 1/2	3 1/2	5/8	3						9
2S	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16
2M	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16
3	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16
4	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16
5	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16

STANDARD SIGN
W024-1 L & R

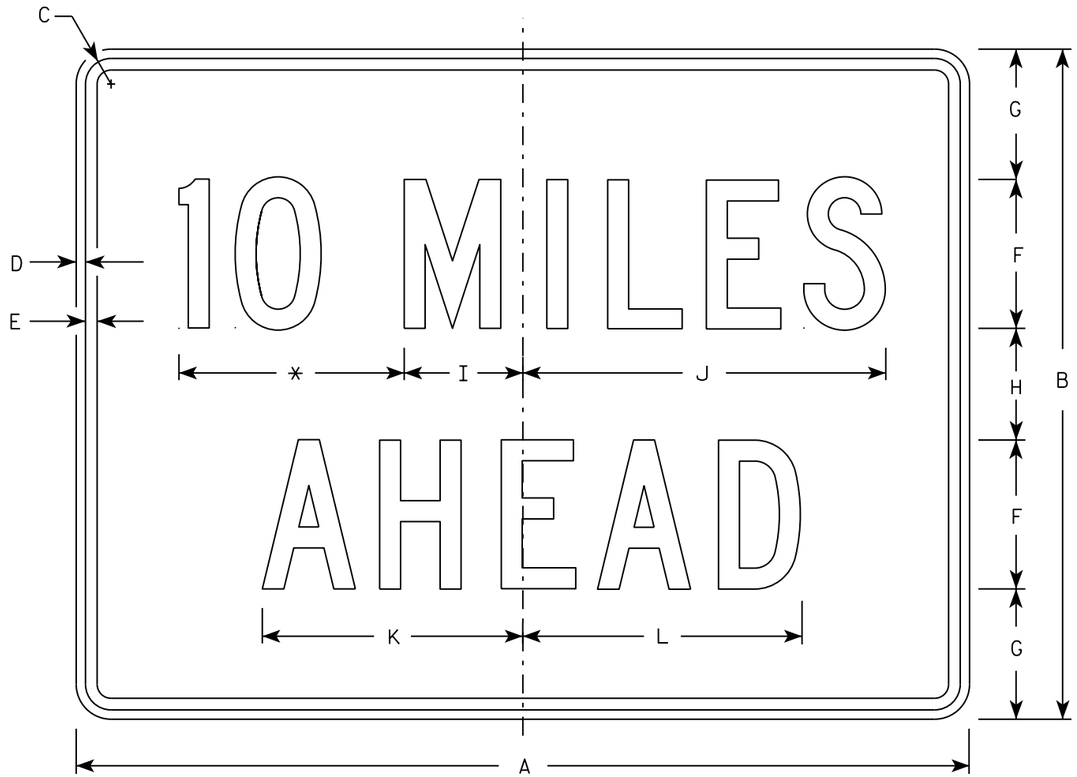
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

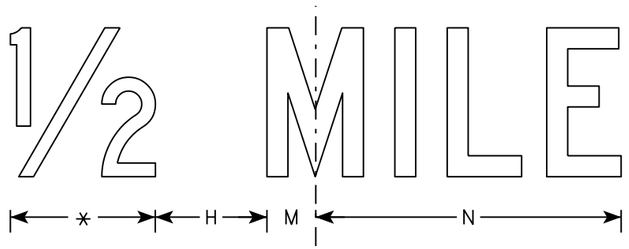
DATE 9/25/2013 PLATE NO. W024-1.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W0241.DGN PLOT DATE : 25-SEP-2013 13:08 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 10.702132:1.000000 WISDOT/CADDS SHEET 42



W057-52



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. Substitute appropriate numerals to the nearest quarter mile and optically adjust spacing to achieve proper balance.

* See note 5

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	24	1 1/8	3/8	1/2	6	4 1/2	3	4 3/4	14 5/8	10 5/8	11 3/8	2	12													6.0
2S	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
2M	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
3	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
4	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
5	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0

STANDARD SIGN
W057-52

WISCONSIN DEPT OF TRANSPORTATION

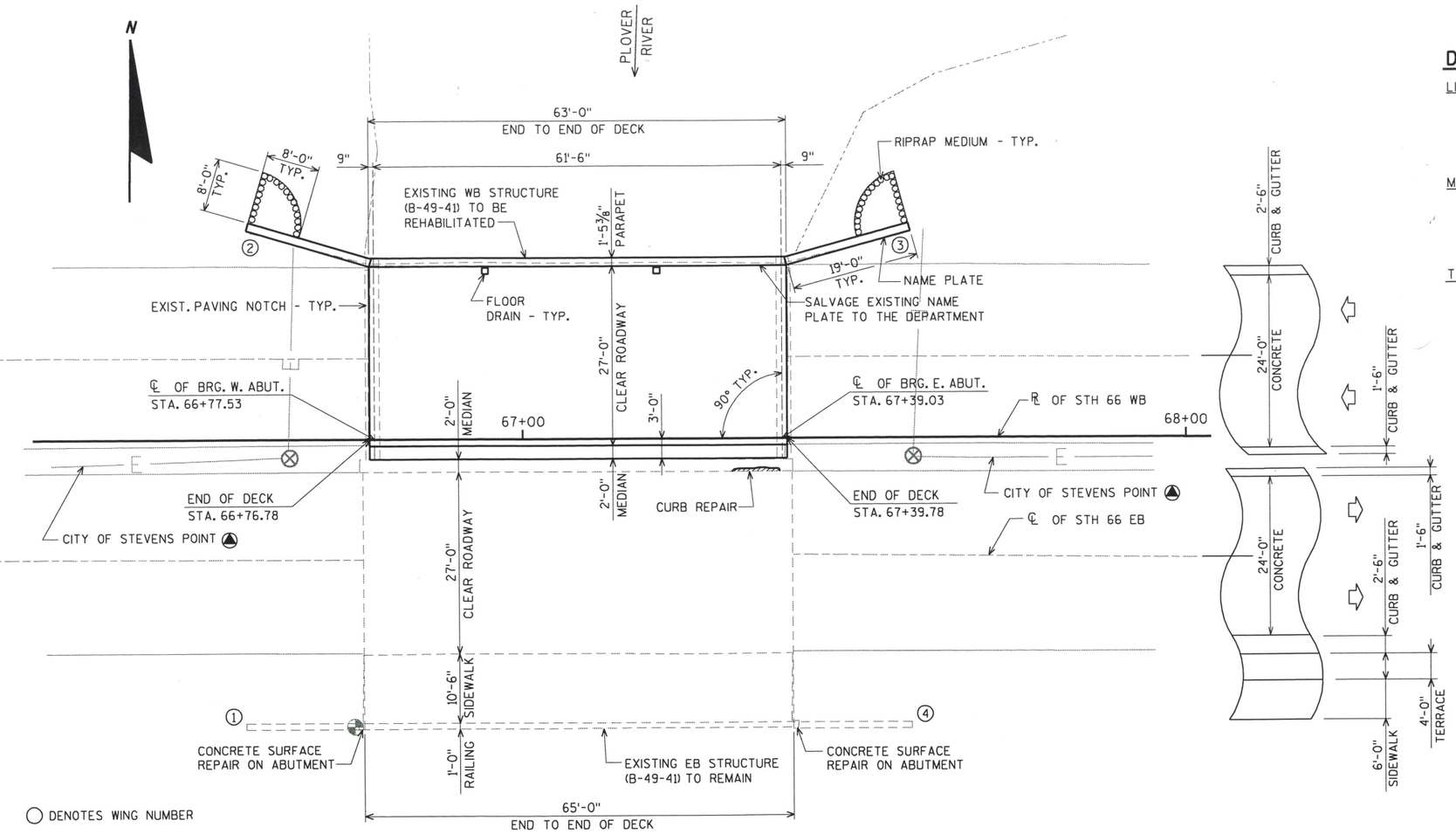
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W057-52.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 106	E

STATE PROJECT NUMBER

6280-00-70

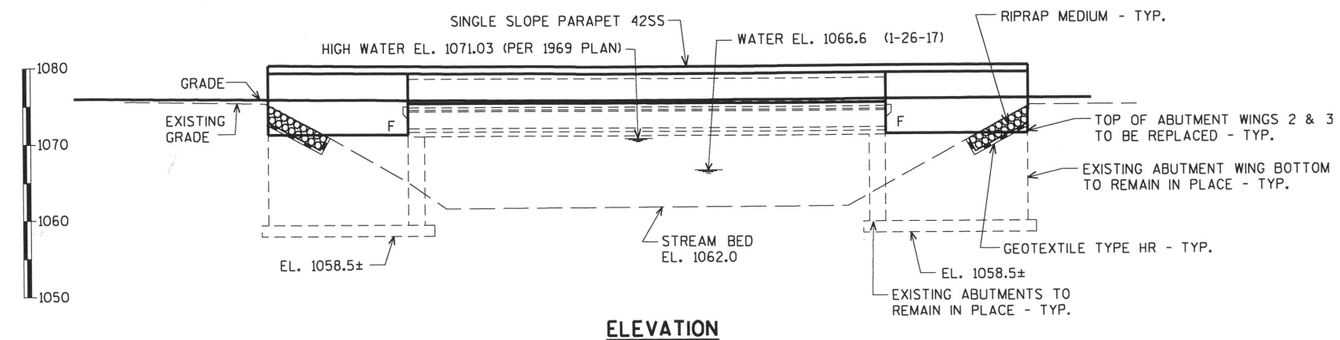


◯ DENOTES WING NUMBER

▲ SEE ROADWAY PLAN FOR TEMPORARY POLES AND WIRING.

PLAN

SINGLE-SPAN 36" PRESTRESSED CONCRETE GIRDER BRIDGE
(REDECK AND POLYMER OVERLAY)



ELEVATION

(LOOKING NORTH)

DESIGN DATA

LIVE LOAD (WESTBOUND PORTION OF BRIDGE):

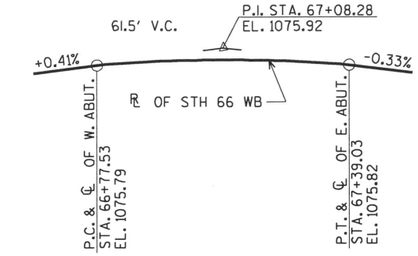
DESIGN LOADING: HS-20
INVENTORY RATING: HS-19
OPERATING RATING: HS-32
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS

MATERIAL PROPERTIES:

CONCRETE MASONRY — SUPERSTRUCTURE	f'_c =	4,000 p.s.i.
CONCRETE MASONRY — ALL OTHER	f'_c =	3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT (GRADE 60)	f_y =	60,000 p.s.i.

TRAFFIC DATA:

A.A.D.T. = 19,200 (2020)
A.A.D.T. = 22,800 (2040)
R.D.S. = 40 M.P.H.



PROFILE GRADE LINE

(STH 66 WB)

NOTE: PROFILE GRADE LINE SET TO APPROX. MATCH PROFILE OF EB STRUCTURE.

BENCH MARK:
CHISLED SQUARE IN TOP OF PARAPET
STA. 66+61, 30' LT
EL. 1078.06

LIST OF DRAWINGS

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608)-266-8489

CONSULTANT CONTACT:
DAN SYDOW
(715)-834-3161

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 02/05/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-49-41

STH 66 WB OVER PLOVER RIVER

COUNTY PORTAGE | ~~TOWN~~/CITY/~~VILLAGE~~ STEVENS POINT

DESIGN SPEC. REHABILITATION (N/A)

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
ZSS	AEB	ZSS	DW3

GENERAL PLAN

SHEET 1 OF 9
107

I.D.

DATE:

DATE: 12/6/2018
CHECKED BY:
BACK CHECKED BY: DATE:
CORRECTED BY: DATE:

$PRFNAME$
U:±42-1076.00 - Portage Co, STH 66 Re-deck±Structure±421076 gp.dgn

PENTABLE:BRegu_shd_util.tbl

8

8

STATE PROJECT NUMBER

6280-00-70

TOTAL ESTIMATED QUANTITIES

	BID ITEM NUMBER	BID ITEMS	UNIT	W. ABUT.	E. ABUT.	SUPER.	TOTAL
*	203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STATION 67+08.28	LS	-----	-----	-----	1
	206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-49-41	LS	-----	-----	-----	1
	210.1500	BACKFILL STRUCTURE TYPE A	TON	30	30	-----	60
	502.0100	CONCRETE MASONRY BRIDGES	CY	7	7	63	77
	502.2000	COMPRESSION JOINT SEALER PREFORMED ELASTOMERIC 2¼-INCH	LF	-----	-----	63	63
	502.3200	PROTECTIVE SURFACE TREATMENT	SY	-----	-----	18	18
	502.3210	PIGMENTED SURFACE SEALER	SY	10	10	31	51
	502.4204	ADHESIVE ANCHORS NO. 4 BARS	EACH	-----	-----	86	86
	502.4205	ADHESIVE ANCHORS NO. 5 BARS	EACH	52	52	104	208
	505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1,120	1,120	11,440	13,680
	506.4000	STEEL DIAPHRAGMS B-49-41	EACH	-----	-----	4	4
**	509.1200	CURB REPAIR	LF	-----	-----	-----	10
**	509.1500	CONCRETE SURFACE REPAIR	SF	-----	-----	-----	10
	509.5100.S	POLYMER OVERLAY	SY	-----	-----	189	189
	514.0445	FLOOR DRAINS TYPE GC	EACH	-----	-----	2	2
	514.2625	DOWNSPOUT 6-INCH	LF	-----	-----	8	8
	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	9	9	-----	18
	606.0200	RIPRAP MEDIUM	CY	3	3	-----	6
	645.0120	GEOTEXTILE TYPE HR	SY	9	9	-----	18
	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	40	40	126	206
		NON-BID ITEMS					
		FILLER					

* SALVAGE EXISTING FLOOR DRAINS TO THE DEPARTMENT.

** UNDISTRIBUTED AS DIRECTED BY THE ENGINEER.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS ARE BASED ON ORIGINAL STRUCTURE PLANS.

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

THE FIRST DIGIT OF A THREE DIGIT BAR NO. AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR NO. SIGNIFIES THE BAR SIZE.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1" DEEP SAW CUT UNLESS SHOWN OR NOTED OTHERWISE.

AT ABUTMENTS ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH BACKFILL STRUCTURE TYPE A.

VARIATIONS TO THE NEW GRADE LINE OVER ¼" MUST BE SUBMITTED BY THE FIELD ENGINEER TO THE STRUCTURES DESIGN SECTION FOR REVIEW.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

THE EXISTING GROUNDLINE SHALL BE THE UPPER LIMIT FOR EXCAVATION FOR STRUCTURES.

THE SLOPE OF FILL IN FRONT OF THE ABUTMENT WINGS SHALL BE COVERED WITH RIPRAP MEDIUM AND GEOTEXTILE TYPE HR TO THE EXTENT SHOWN ON SHEET 1.

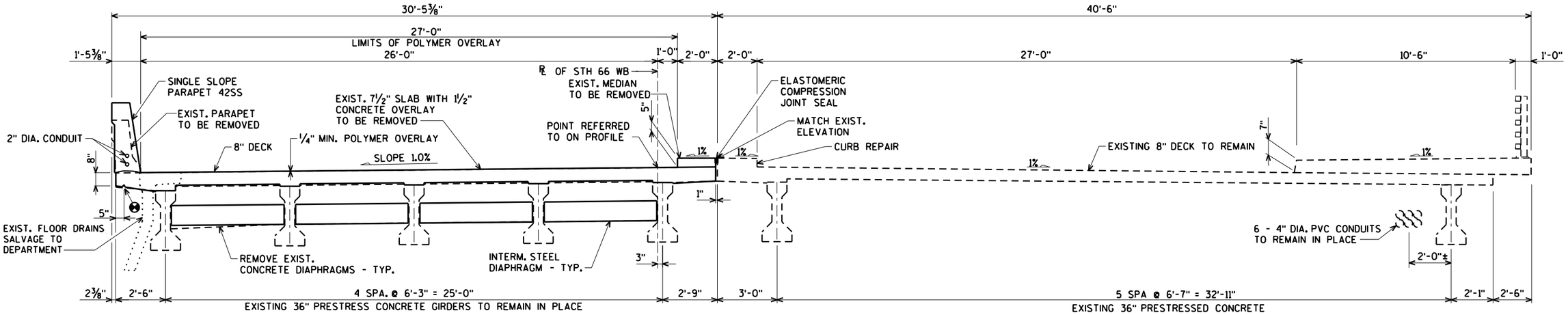
JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M 153, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M 213.

THE MINIMUM CONCRETE HAUNCH SHALL BE 2" FOR DESIGN CALCULATIONS AND THE HAUNCH CONCRETE QUANTITY IS BASED ON AN AVERAGE DEPTH OF 3", WHICH IS THE MAXIMUM HAUNCH QUANTITY FOR WHICH THE CONTRACTOR WILL BE PAID.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

POLYMER OVERLAY PROTECTIVE SURFACE TREATMENT, AND PIGMENTED SURFACE SEALER TO BE APPLIED AS SHOWN IN THE DETAILS ON THIS SHEET.

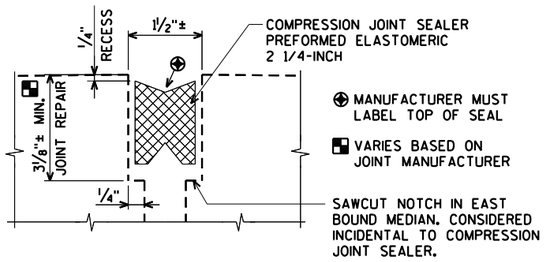
DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".



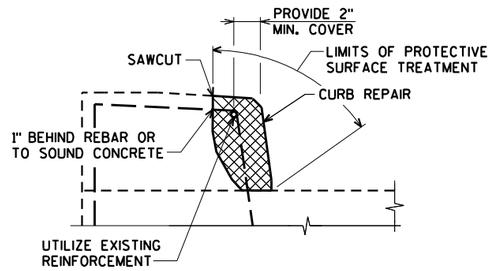
⊗ ¾" V-GROOVE REQ'D. EXTEND TO 6" FROM FRONT FACE OF ABUT. DIAPH.

TYPICAL SECTION THRU BRIDGE

(LOOKING EAST)

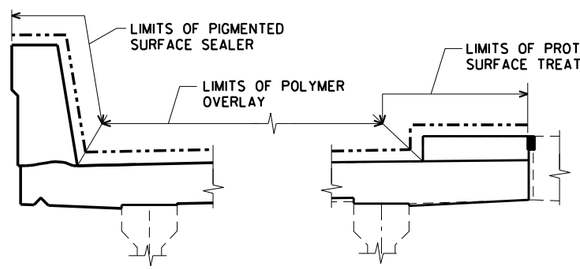


ELASTOMERIC COMPRESSION SEAL DETAIL



CURB REPAIR DETAIL

NOTE:
LIMITS OF REPAIR FOR CURB SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER. VERTICAL AND HORIZONTAL LIMITS OF CURB REPAIR SHALL BE DEFINED BY A ½" DEEP SAW CUT.



SURFACE TREATMENT DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-41

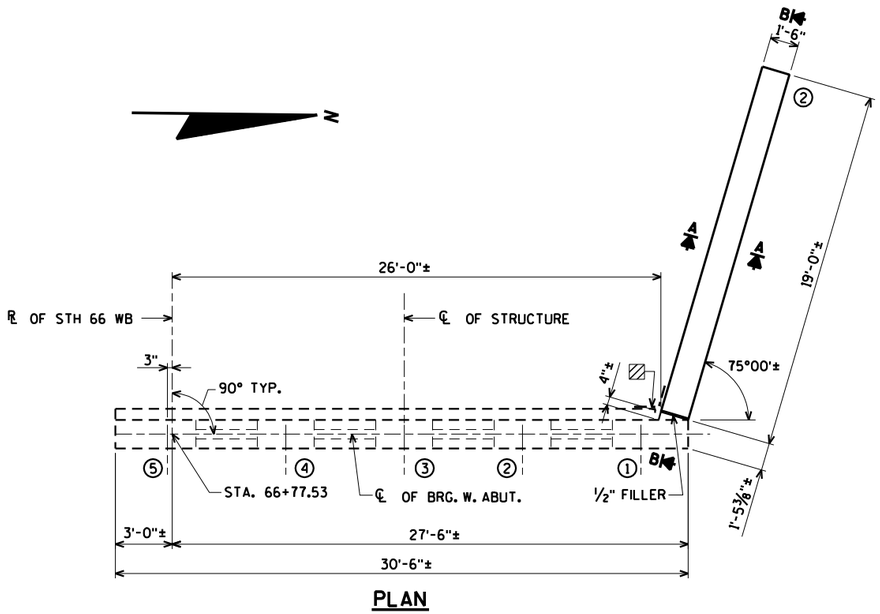
DRAWN BY ZSS | PLANS CK'D. JLB

TYPICAL SECTION, QUANTITIES, AND NOTES

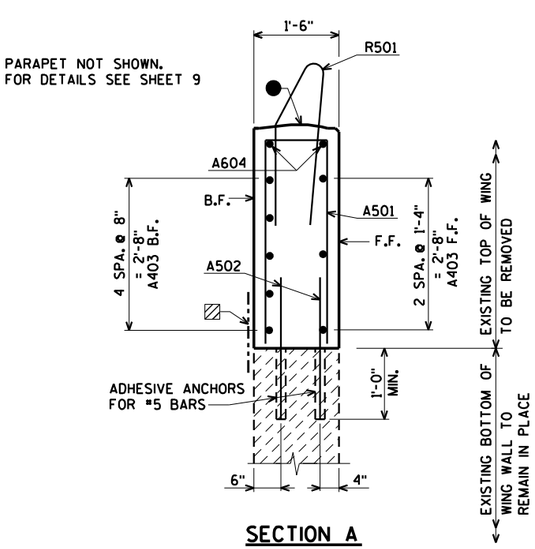
SHEET 2 OF 9
108

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

$PRFNAME$
U:\42-1076.00 - Portage Co. STH 66 Re-deck\Structure\#421076 gp.dgn



PLAN



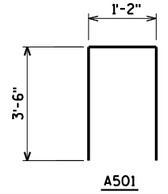
SECTION A

BILL OF BARS

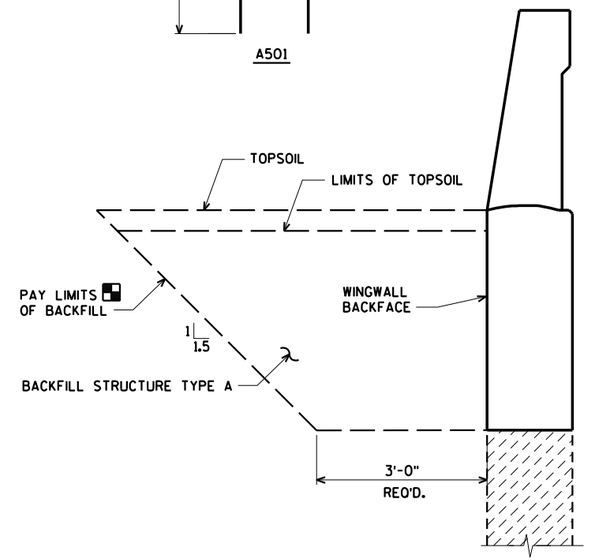
WEIGHTS INCLUDE PARAPET STEEL SHOWN ON SHEET 9

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR SERIES	1,120# COATED LOCATION
A501	X	26	7-11	X		WING 2 VERT.
A502	X	52	2-8			WING 2 VERT. DOWELS E.F.
A403	X	8	18-8			WING 2 HORIZ. E.F.
A604	X	2	18-8			WING 2 HORIZ. TOP E.F.

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



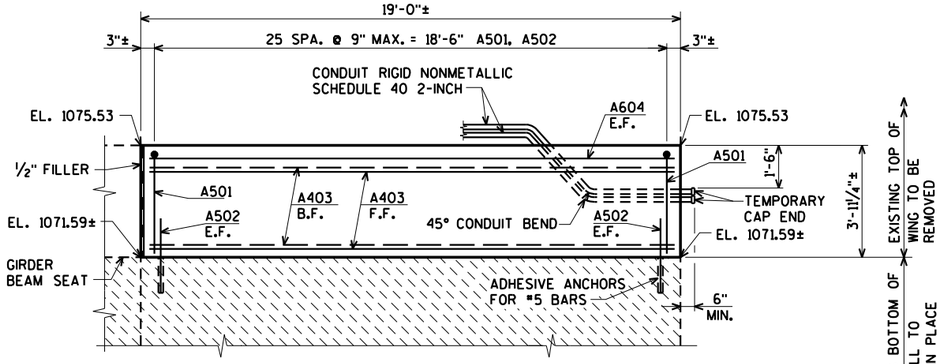
A501



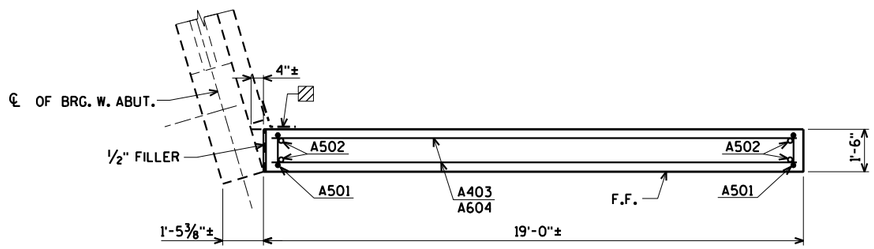
BACKFILL STRUCTURE LIMITS

AT WINGS 2 & 3

BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.



SECTION B



PLAN - WING 2

● STRIKE OFF AND LEAVE ROUGH.

▨ 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE OF ABUTMENT.

B.F. DENOTES BACK FACE

F.F. DENOTES FRONT FACE

E.F. DENOTES EACH FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-41

DRAWN BY CLS | PLANS CK'D. JLB

WEST ABUTMENT

SHEET 3 OF 9
109

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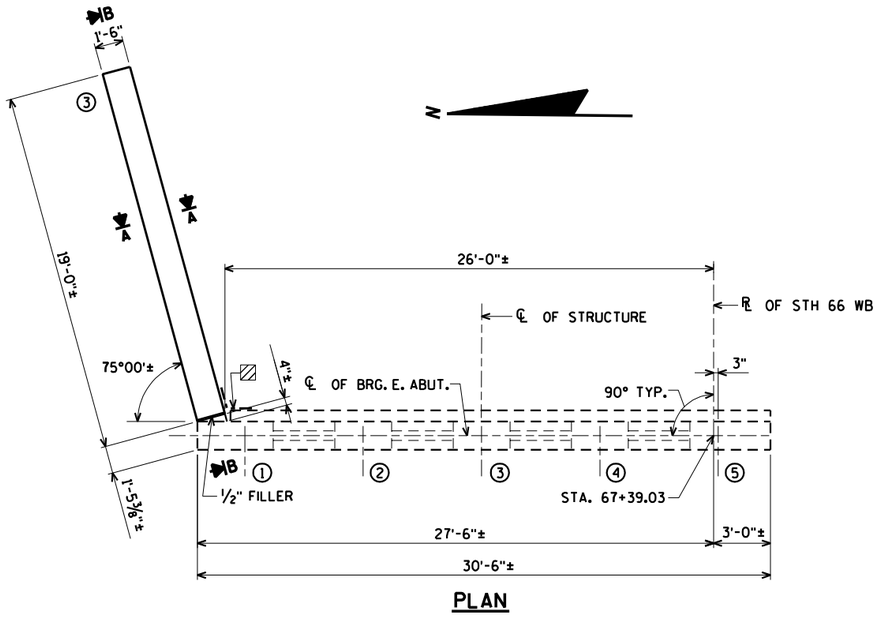
STATE PROJECT NUMBER
6280-00-70

BILL OF BARS

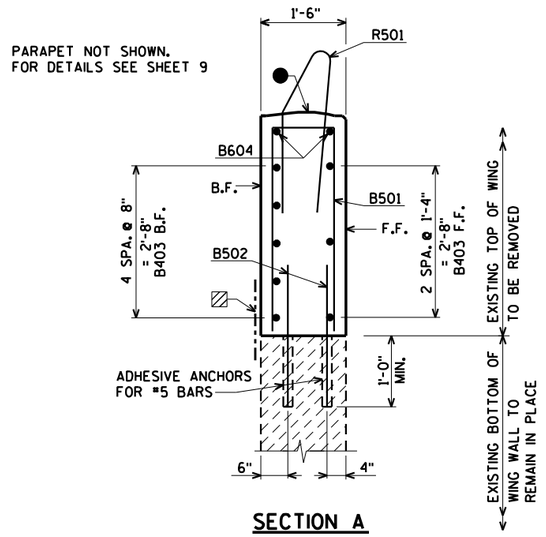
WEIGHTS INCLUDE PARAPET STEEL SHOWN ON SHEET 9

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR SERIES	1.120" COATED LOCATION
B501	X	26	7-11	X		WING 3 VERT.
B502	X	52	2-8			WING 3 VERT. DOWELS E.F.
B403	X	8	18-8			WING 3 HORIZ. E.F.
B604	X	2	18-8			WING 3 HORIZ. TOP E.F.

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



PLAN



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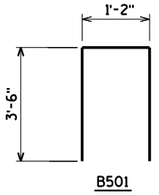
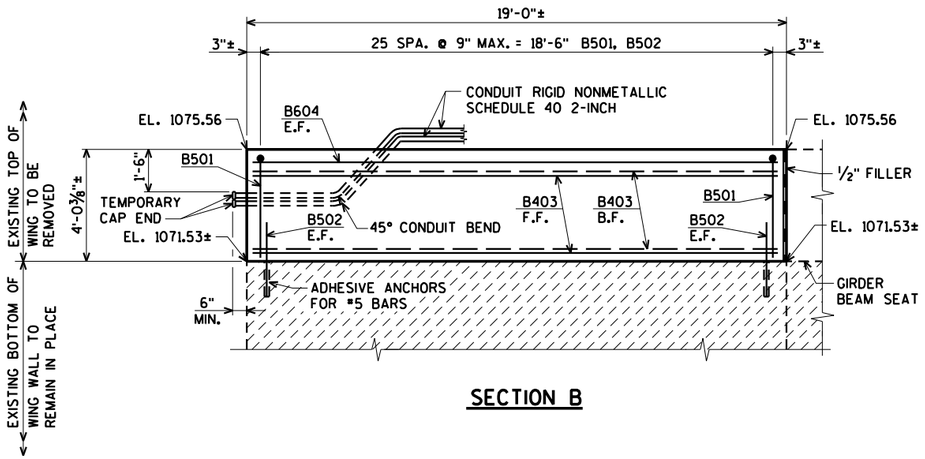


B501



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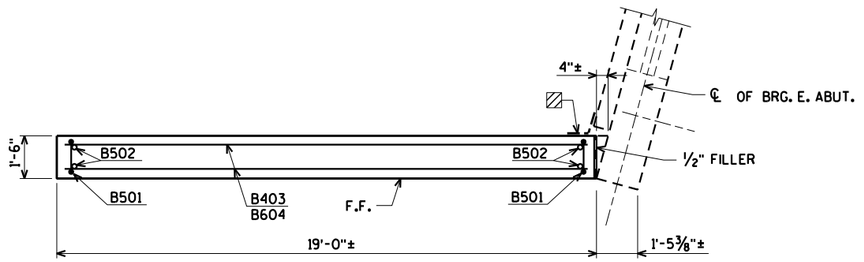

PLAN - WING 3

● STRIKE OFF AND LEAVE ROUGH.

▨ 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE OF ABUTMENT.

B.F. DENOTES BACK FACE

F.F. DENOTES FRONT FACE

E.F. DENOTES EACH FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURE B-49-41

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EAST ABUTMENT

SHEET 4 OF 9
110

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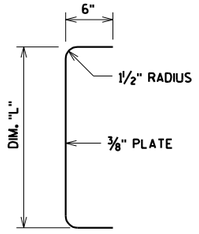
8

8

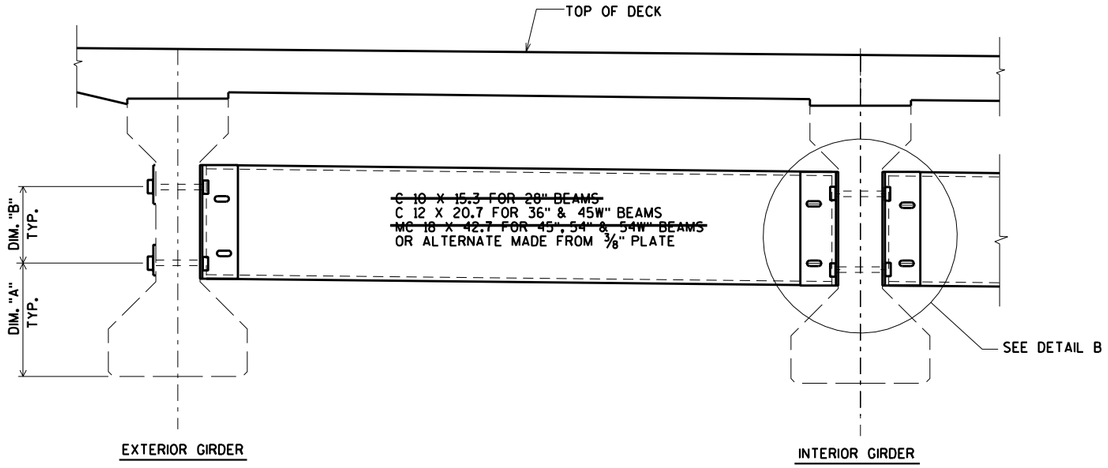
TABLE

GIRDER HEIGHT	DIM. "A"	DIM. "B"	DIM. "L"	* DIM. "X"
~~28"~~	~~1'-0 7/8"~~	~~5 7/8"~~	~~9 1/2"~~	~~2 1/4"~~
36"	1'-2 7/8"	9 7/8"	1'-1 1/2"	3 1/4"
~~45"~~	~~1'-5 7/8"~~	~~1'-1 7/8"~~	~~1'-5 1/2"~~	~~2 1/4"~~
~~45W"~~	~~1'-9 1/8"~~	~~8 7/8"~~	~~1'-0 1/2"~~	~~2 3/4"~~
~~54"~~	~~1'-7 7/8"~~	~~1'-5 7/8"~~	~~1'-9 1/2"~~	~~4 1/4"~~
~~54W"~~	~~1'-9 1/8"~~	~~1'-5 7/8"~~	~~1'-9 1/2"~~	~~4 1/4"~~



SECTION THRU ALTERNATE DIAPHRAGM

*DIM "X" = 2 1/2" FOR ALTERNATE PLATE DIAPHRAGM



PART TRANSVERSE SECTION AT DIAPHRAGM

NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-49-41", EACH.

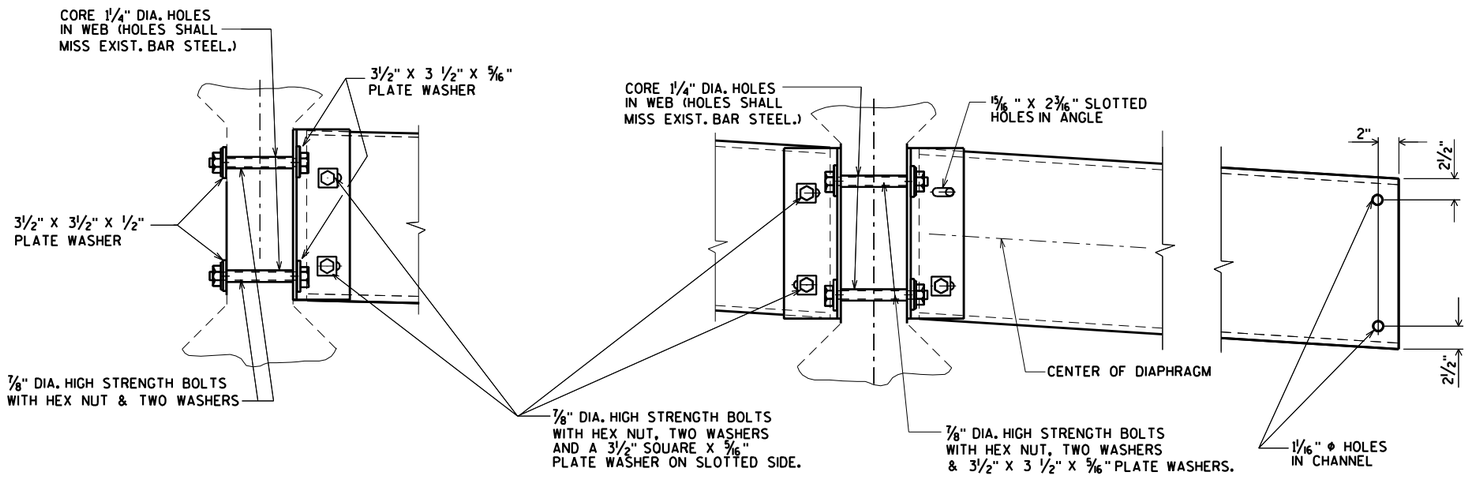
EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36.

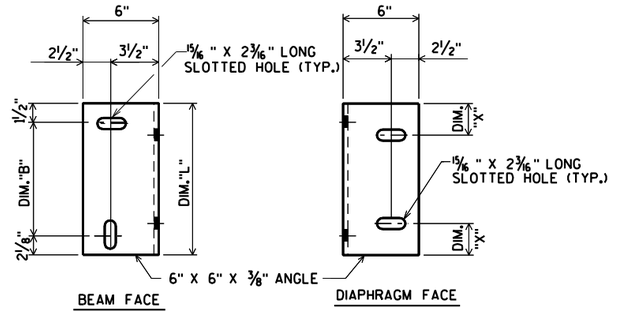
ALL DIAPHRAGM MATERIAL INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AFTER FABRICATION.

STEEL DIAPHRAGM TO CONCRETE WEB CONNECTION SHALL BE SNUG-TIGHT PLUS 1/4 TURN, UNLESS NOTED OTHERWISE. HIGH STRENGTH BOLTS FOR WEB CONNECTION SHALL MEET THE REQUIREMENTS FOR ASTM A325 OR ASTM A449.

CORING HOLES IN EXISTING GIRDERS SHALL BE CONSIDERED INCIDENTAL TO "STEEL DIAPHRAGMS B-49-41".



DETAIL B



DIAPHRAGM SUPPORT

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STRUCTURE B-49-41

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STEEL DIAPHRAGM

SHEET 5 OF 9
111

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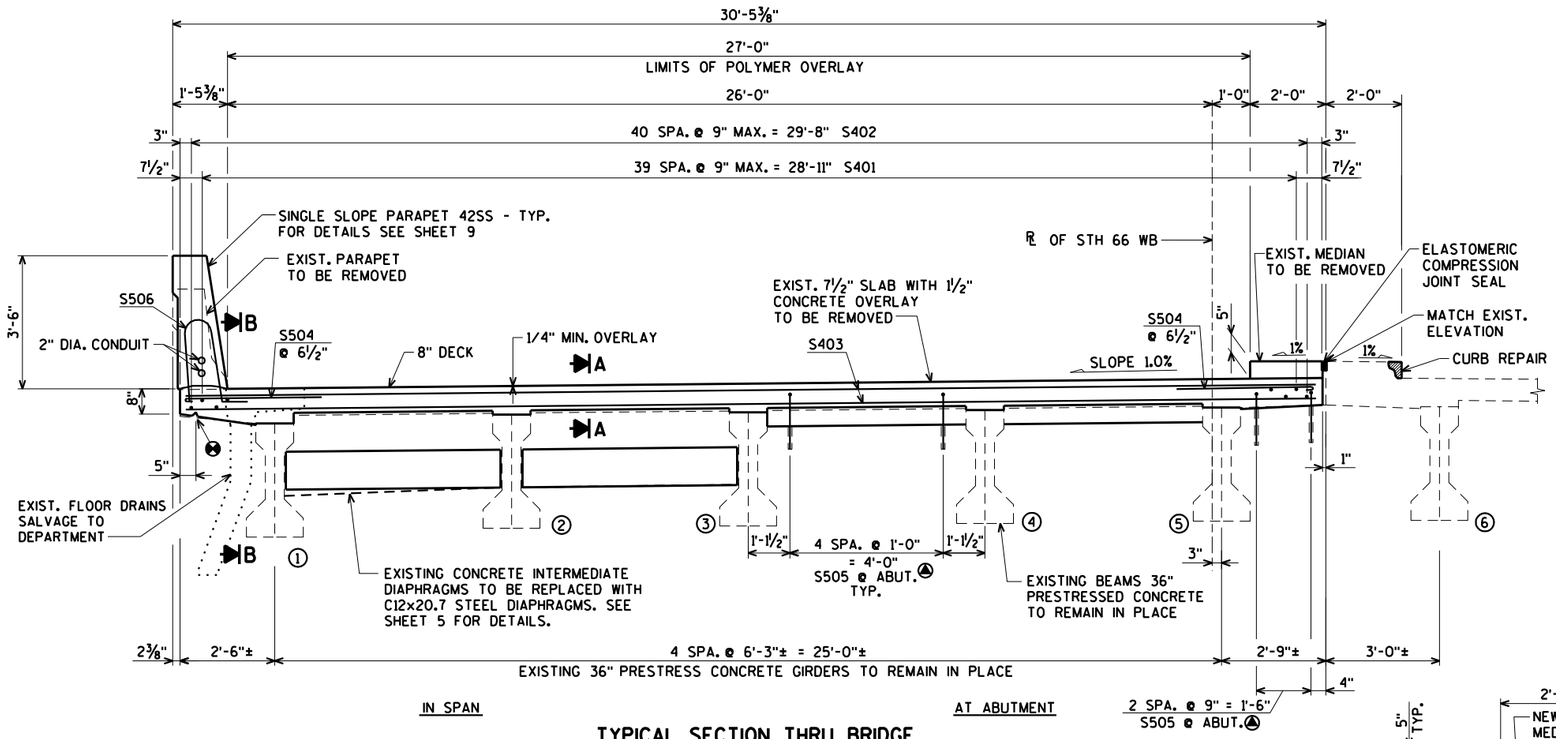
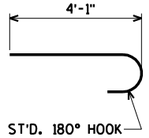


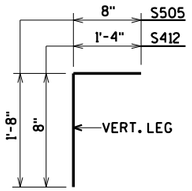
TYPICAL SECTION THRU BRIDGE

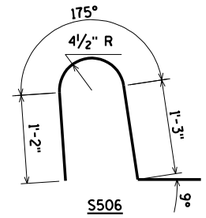
BILL OF BARS

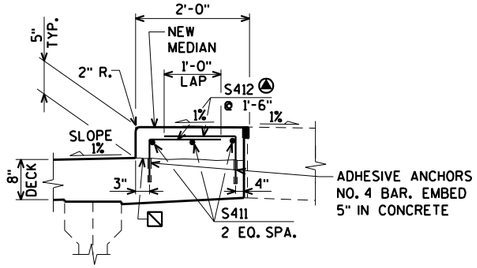
	BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR SERIES	11,440# COATED LOCATION
	S401	X	80	32-6			SLAB LONG. TOP
	S402	X	82	32-2			SLAB LONG. BOT.
	S403	X	233	29-10			SLAB TRANS. TOP & BOT.
	S504	X	232	4-8	X		SLAB TRANS. TOP AT SLAB EDGE
▲	S505	X	104	2-3	X		DOWEL BAR AT ABUT.
	S506	X	95	4-5	X		PARAPET VERT.
	S507	X	95	6-8	X		PARAPET VERT.
	S508	X	16	32-2			PARAPET HORIZ.
	S411	X	6	32-2			MEDIAN LONG. TOP
▲	S412	X	86	1-11	X		MEDIAN VERT.
	S513	X	8	5-0			SLAB @ FLOOR DRAINS

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

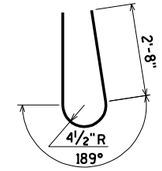


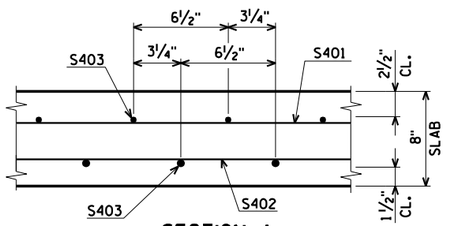




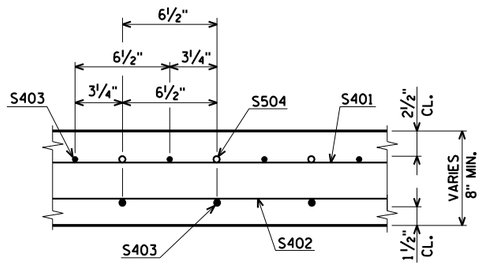


MEDIAN DETAIL





SECTION A



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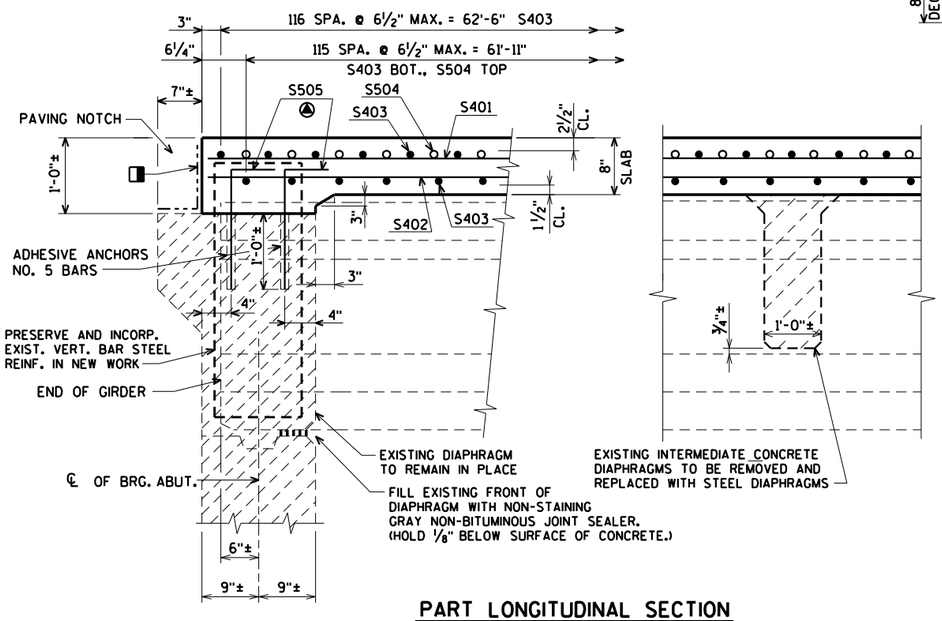

PART LONGITUDINAL SECTION

⊗ ¾" V - GROOVE. EXTEND V-GROOVE TO 6" FROM FRONT FACE OF ABUTMENT DIAPHRAGMS - TYP.

▲ ADHESIVE ANCHORS NO. 4 & NO. 5 BARS

▨ CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH. FOR DECK POUR, MATCH BRIDGE X-SLOPE.

◨ RUBBERIZED MEMBRANE WATERPROOFING

NOTE:
DAMAGE TO THE EXISTING GIRDERS CAUSED DURING DECK REMOVAL OPERATIONS WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

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STRUCTURE B-49-41

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SUPERSTRUCTURE

SHEET 6 OF 9
112

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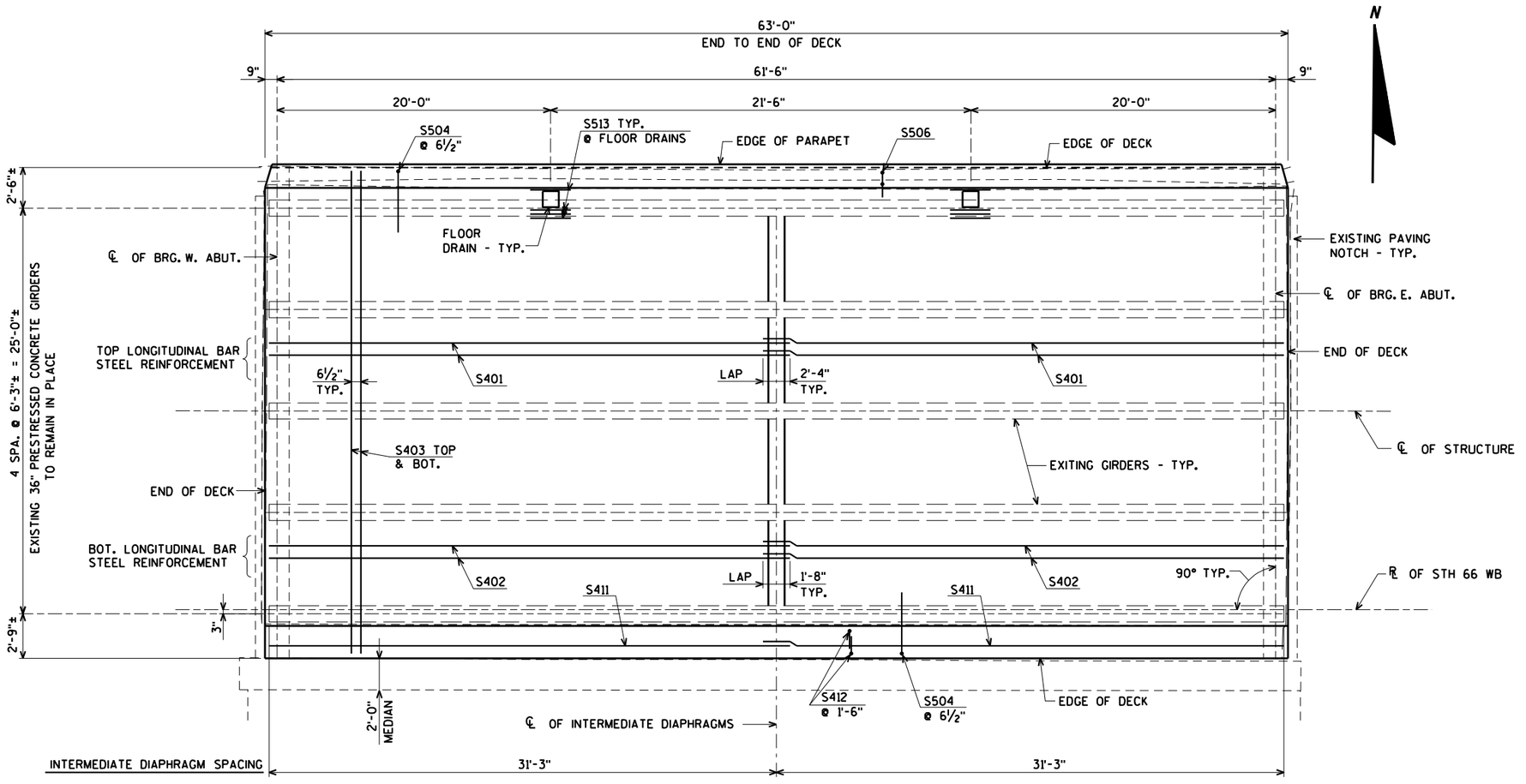


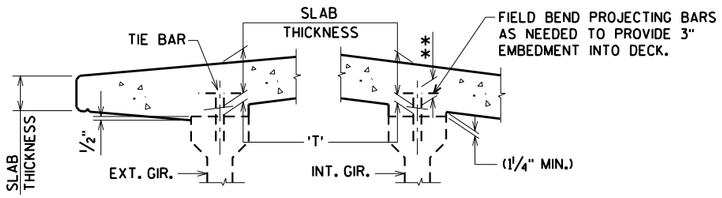
PLAN

TOP OF DECK ELEVATIONS

	℄ OF BRG. W. ABUT.	0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.	℄ OF BRG. E. ABUT.
N. EDGE OF DECK	1075.54	1075.56	1075.58	1075.59	1075.60	1075.61	1075.61	1075.60	1075.59	1075.58	1075.56
GIRDER 1	1075.55	1075.57	1075.59	1075.61	1075.61	1075.62	1075.62	1075.62	1075.61	1075.59	1075.57
GIRDER 2	1075.61	1075.63	1075.65	1075.67	1075.67	1075.68	1075.68	1075.68	1075.67	1075.65	1075.63
GIRDER 3	1075.67	1075.69	1075.71	1075.73	1075.73	1075.74	1075.74	1075.74	1075.73	1075.71	1075.69
GIRDER 4	1075.73	1075.75	1075.77	1075.79	1075.79	1075.80	1075.80	1075.80	1075.79	1075.77	1075.75
PROFILE GRADELINE	1075.79	1075.81	1075.83	1075.85	1075.85	1075.86	1075.86	1075.86	1075.85	1075.83	1075.81
GIRDER 5	1075.79	1075.82	1075.83	1075.85	1075.86	1075.86	1075.86	1075.86	1075.85	1075.84	1075.82
S. EDGE OF DECK	1075.82	1075.84	1075.86	1075.88	1075.88	1075.89	1075.89	1075.89	1075.88	1075.86	1075.84

DEAD LOAD DEFLECTIONS

UNITS ARE INCHES	0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.
SPAN 1	0.3	0.5	0.7	0.8	0.9	0.8	0.7	0.5	0.3



SLAB HAUNCH DETAIL

IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN SLAB THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ¼" OR,

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- SLAB THICKNESS
= HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 3" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-41

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SUPERSTRUCTURE PLAN

SHEET 7 OF 9
113

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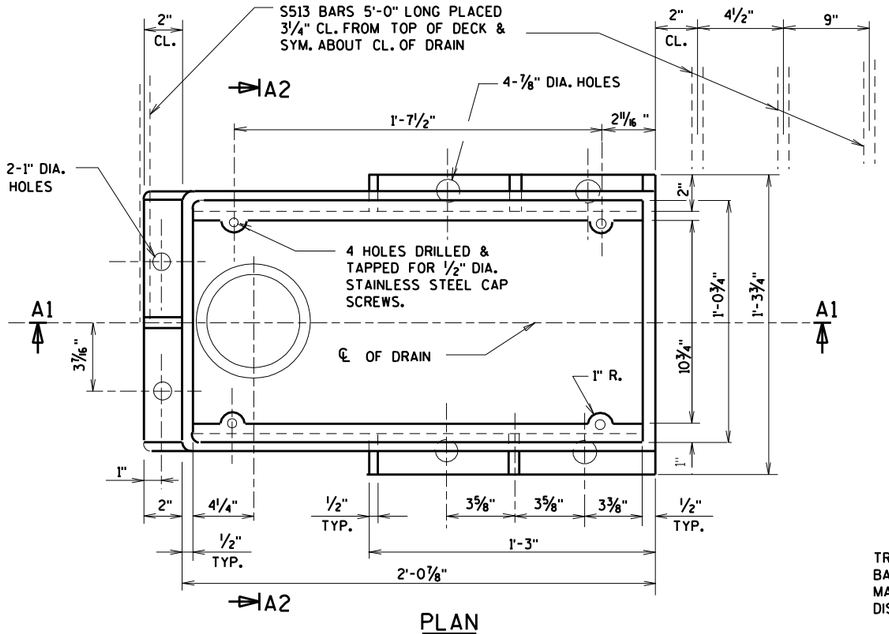
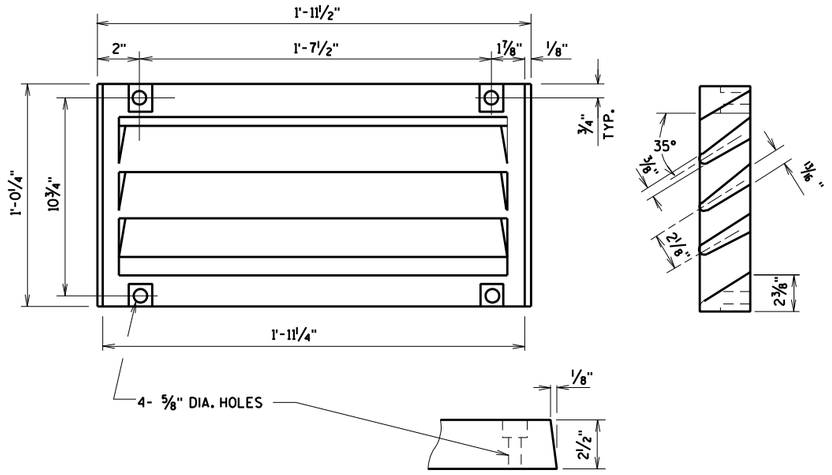


PLAN



GRATE CASTING DETAIL

ATTACH GRATE TO FRAME FOR SHIPMENT

TRANS. AND LONGIT. SLAB BAR REINF. TO BE CUT A MAX. 1" CL. FROM DRAIN FRAME DISPLACE BARS WHERE POSSIBLE

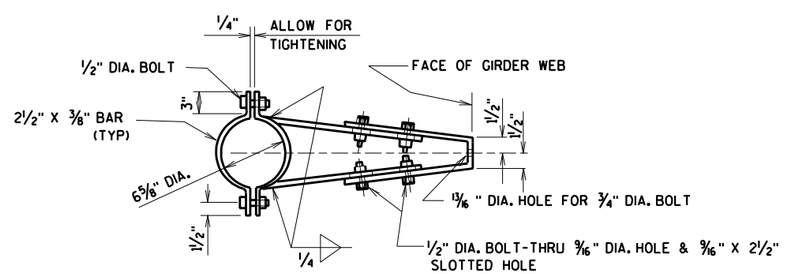
NOTES

ALL MATERIAL FOR TYPE "GC" CASTING, EXCLUDING GRATE HOLD DOWN SCREWS, SHALL BE GRAY IRON CONFORMING TO ASTM A48, CLASS 30. (APPROXIMATE WEIGHT = 225#)

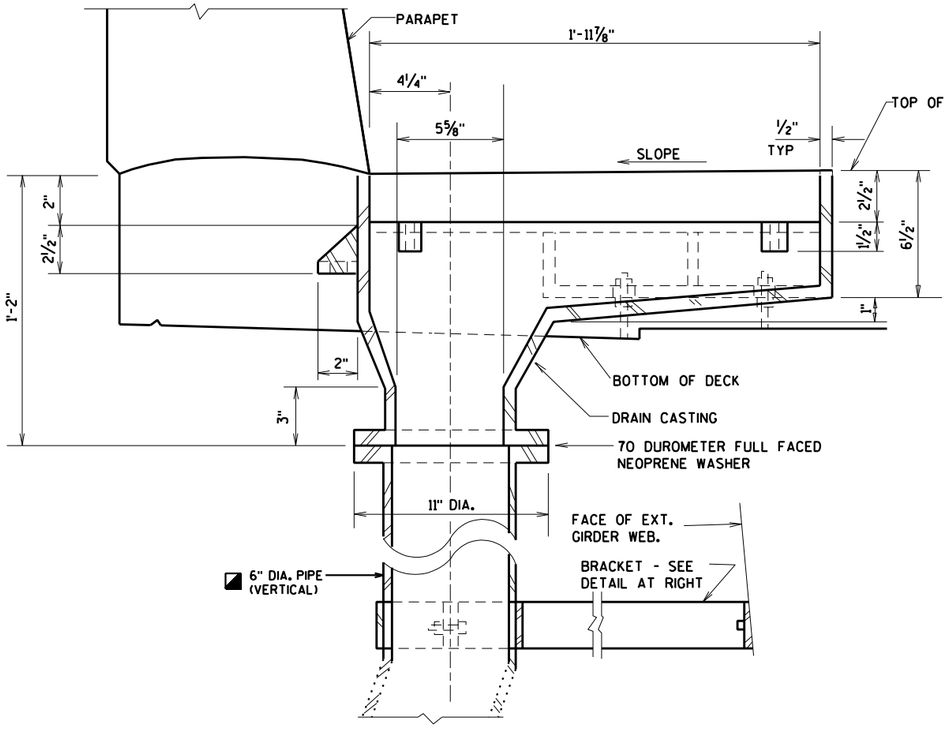
MATERIAL FOR BRACKETS SHALL CONFORM TO ASTM A36.

THE CONTRACTOR MAY PROPOSE AN ALTERNATE TYPE OF BRACKET. THE PROPOSED ALTERNATE DETAILS SHALL BE SUBMITTED AND SUBJECT TO THE APPROVAL OF THE ENGINEER.

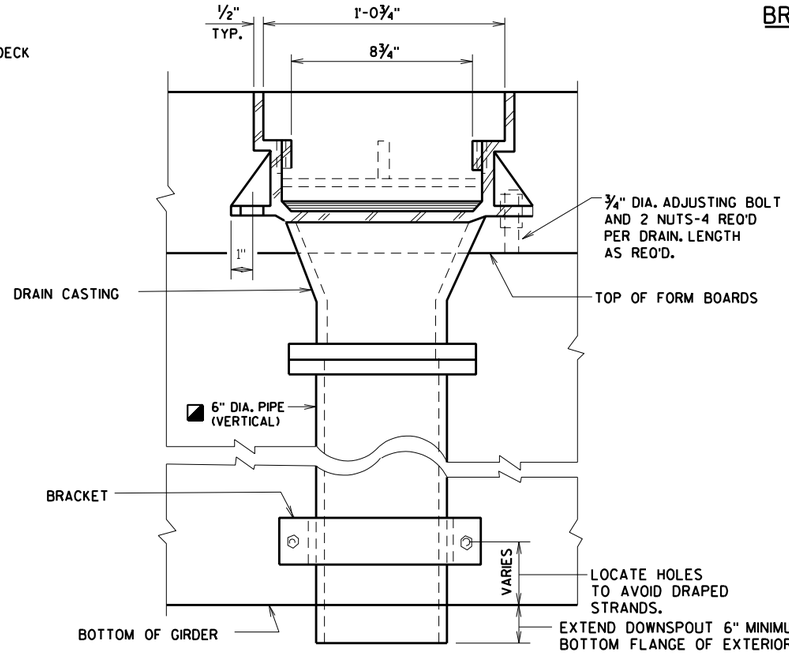
◪ FLANGED 6" DIA. DOWNSPOUTS SHALL BE REINFORCED THERMOSETTING RESIN PIPE (RTRP) OR GALVANIZED STANDARD PIPE CONFORMING TO ASTM A53.



BRACKET DETAIL



SECTION A1



SECTION A2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-41

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FLOOR DRAIN TYPE 'GC'

SHEET 8 OF 9
114

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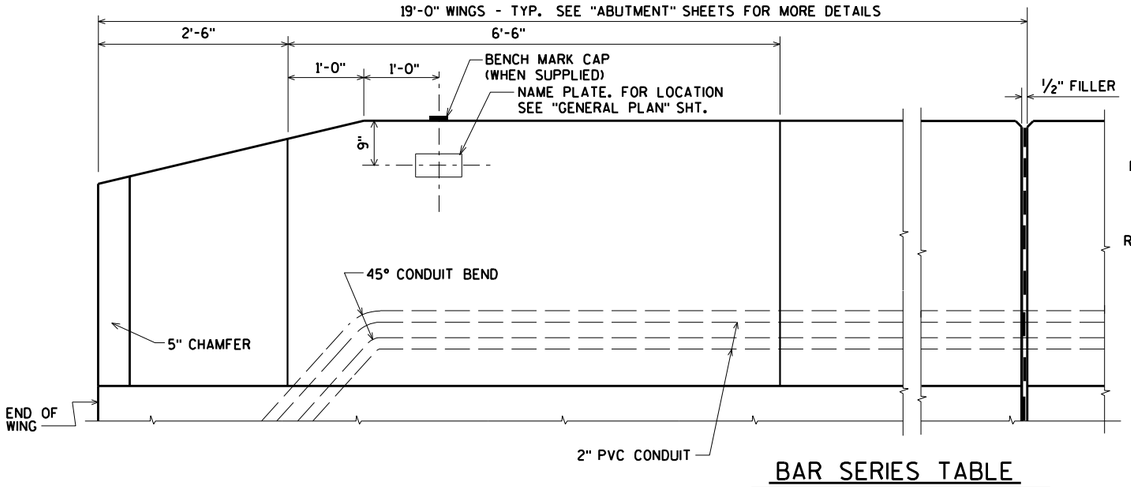
STATE PROJECT NUMBER

6280-00-70

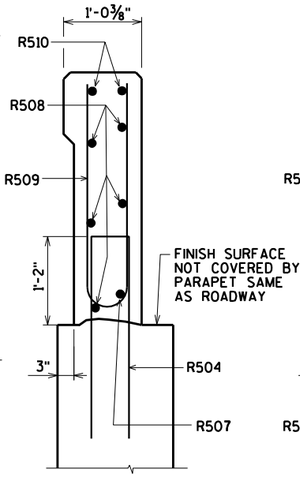


INSIDE ELEVATION

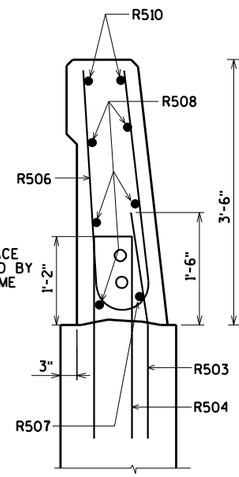
BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
R509	2 SERIES OF 6	4'-9" TO 6'-1"

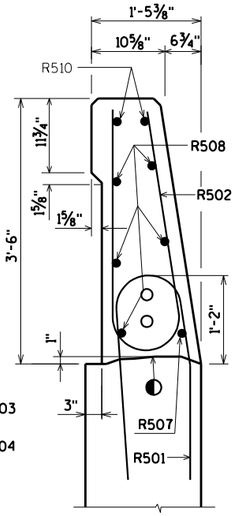
BUNDLE AND TAG EACH SERIES SEPARATELY.



SECTION A



SECTION B



SECTION C

BILL OF BARS

FOR ABUTMENT PARAPETS WEIGHTS SHOWN ON SHEETS 3 & 4.

BAR MARK	COAT	WEST ABUT.	EAST ABUT.	LENGTH	BENT	BAR SERIES	LOCATION
R501	X	16	16	5-10	X		PARAPET VERT.
R502	X	16	16	6-8	X		PARAPET VERT.
R503	X	11	11	3-0	X		PARAPET VERT.
R504	X	17	17	5-7	X		PARAPET VERT.
R505	X	5	5	6-5	X		PARAPET VERT.
R506	X	6	6	6-6	X		PARAPET VERT.
R507	X	1	1	18-7	X		PARAPET HORIZ.
R508	X	5	5	18-7			PARAPET HORIZ.
R509	X	6	6	5-5	X	⚠	PARAPET VERT.
R510	X	2	2	18-8	X		PARAPET HORIZ.

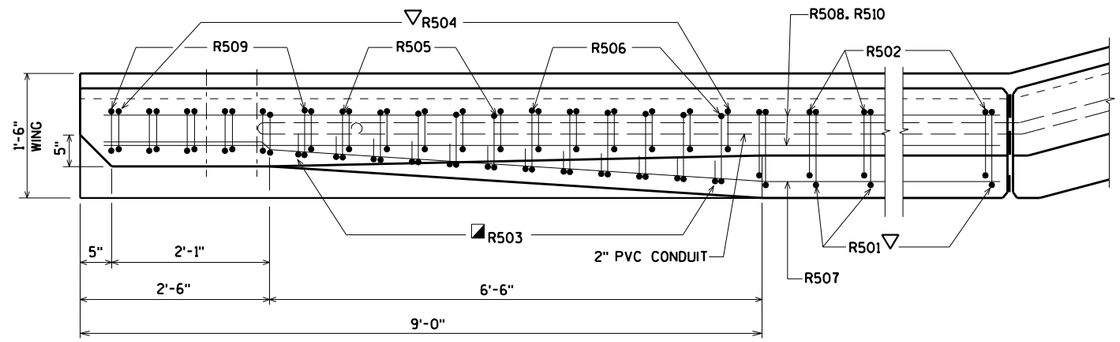
⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

CONDUIT SHALL BE EMBEDDED 2" CLEAR.

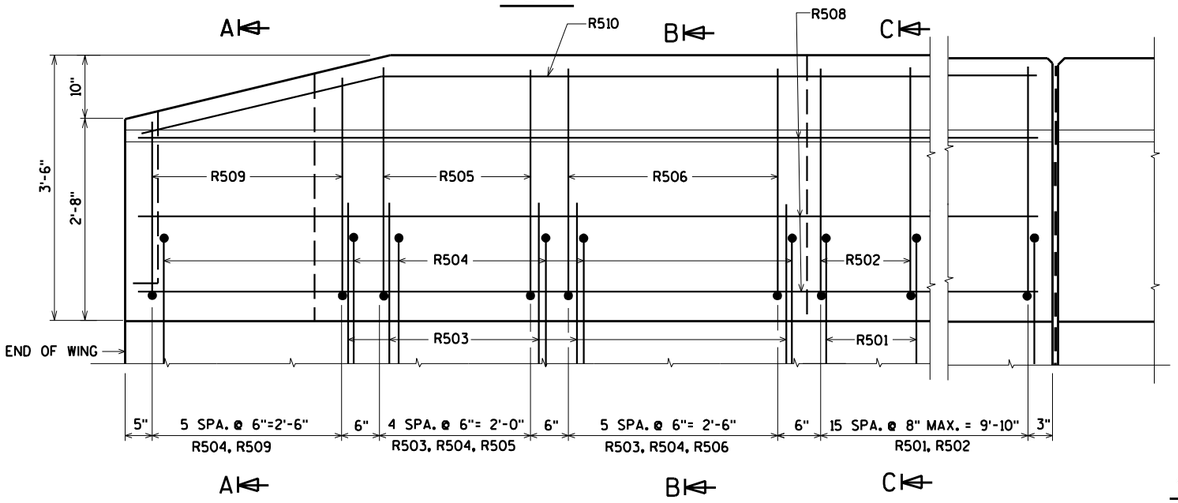
USE 2" DIA. RIGID NONMETALLIC CONDUIT (PVC) UNLESS NOTED OTHERWISE.

CONDUIT FITTINGS, CONDUIT BENDS, AND ADAPTER FITTINGS INCIDENTAL TO CONDUIT WORK.

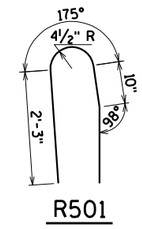
CONDUIT BENDS SHALL CONFORM TO THE NATIONAL ELECTRIC CODE.



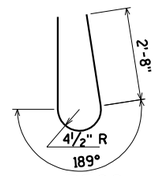
PLAN



OUTSIDE ELEVATION



R501



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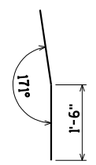

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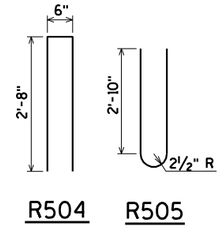
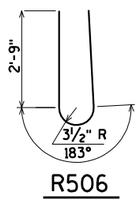


R504 R505



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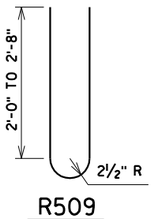
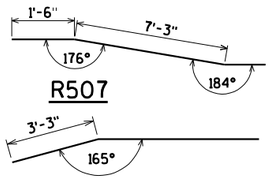
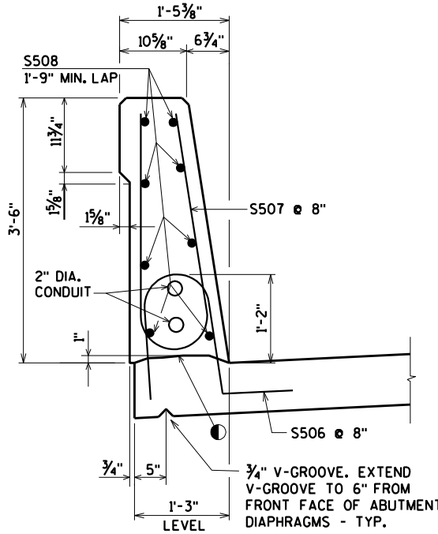


R509



R507 R510



SECTION THRU PARAPET ON BRIDGE

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

◪ R503 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE R503 BARS CORRECTLY ALONG TRANSITION OF PARAPET.

▽ R501 AND R504 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-41

DRAWN BY CLS | PLANS CK'D. JLB

SINGLE SLOPE PARAPET 42SS

SHEET 9 OF 9
115

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

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