GRE

Jan 14, 2020

PROJECT ID: 4997-05-71

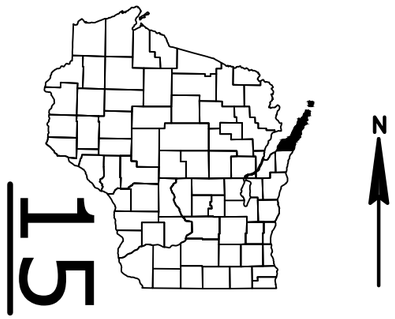
WITH:

COUNTY: DOOR

ORDER OF SHEETS

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

TOTAL SHEETS = 30



DESIGN DESIGNATION

A.A.D.T.	2017	=	7,200
A.A.D.T.	2045	=	N/A
D.H.V.		=	550
D.D.		=	51/49
T.		=	4.0%
DESIGN SPEED		=	30 MPH
ESALS		=	N/A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

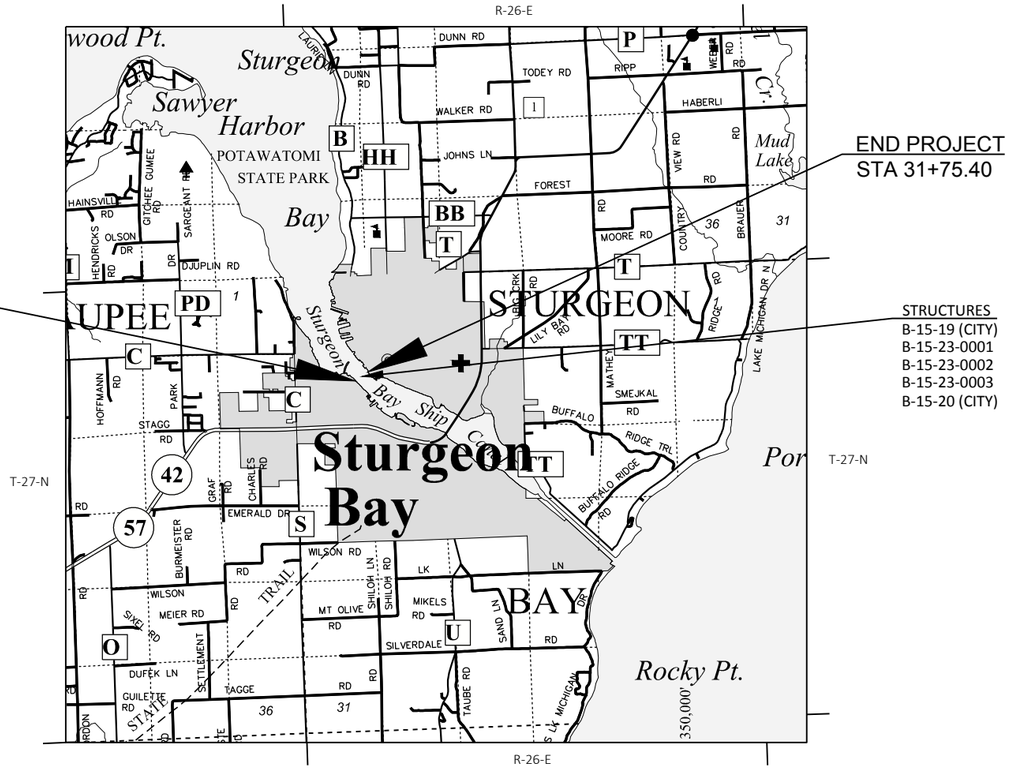
MAPLE-OREGON BRIDGE, STURGEON BAY

NEENAH AVENUE - FIRST AVENUE

LOCAL STREET
DOOR COUNTY

STATE PROJECT NUMBER
4997-05-71

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4997-05-00		



END PROJECT
STA 31+75.40

BEGIN PROJECT
STA 17+18.67
Y = 156513.29
X = 492625.89

STRUCTURES
B-15-19 (CITY)
B-15-23-0001
B-15-23-0002
B-15-23-0003
B-15-20 (CITY)

LAYOUT
SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 0.276 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), DOOR COUNTY, NAD83 (1991), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88. GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

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

ORIGINAL PLANS PREPARED BY

AECOM
1555 N Rivercenter Drive
Suite 214
Milwaukee, WI 53212

WISCONSIN PROFESSIONAL ENGINEER
WILLIAM R SCHILLING
E-35841-006
WAUKESHA, WI

(Professional Engineer Signature) 8/1/2019 (Date)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	N/A
Designer	AECOM
Project Manager	JEREMY ASHAUER
Regional Examiner	
Regional Supervisor	JAMES THOMPSON

APPROVED FOR THE DEPARTMENT

DATE: 8/1/2019 (Signature)

E

GENERAL NOTES

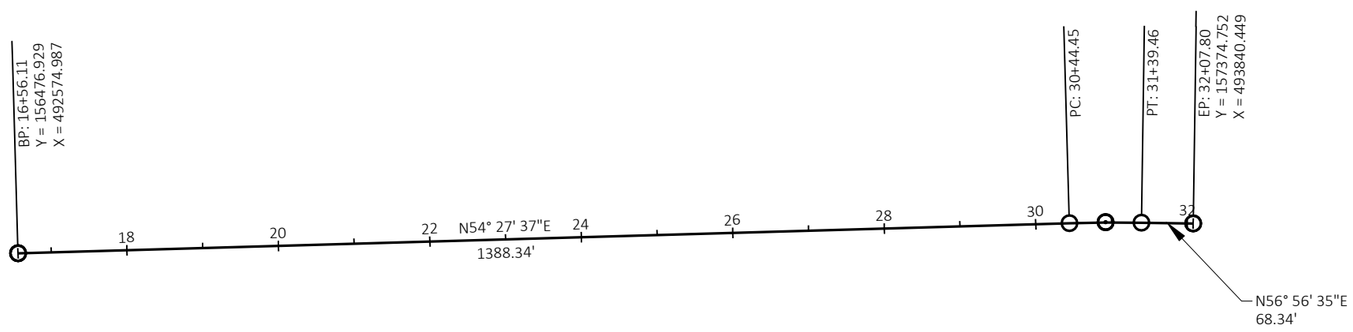
1. THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.
2. RADII, ELEVATIONS, AND DIMENSIONS ARE GIVEN AT THE PAVEMENT EDGES UNLESS OTHERWISE NOTED IN THE PLANS.
3. TRAFFIC CONTROL SHALL FOLLOW STANDARD DETAIL DRAWING "BARRICADES AND SIGNS FOR MAINLINE CLOSURES, DETAIL C FOR MAINLINE CLOSURE, NO POSTED DETOUR". PLACE FULL CLOSURE ROW OF BARRICADES JUST NORTH OF NEENAH AVENUE AND JUST SOUTH OF FIRST AVENUE. THE LAST PUBLIC ROAD INTERSECTION PRIOR TO CLOSURE SHALL BE MADISON AVENUE SOUTH OF THE PROJECT AND 3RD AVENUE NORTH OF THE PROJECT. ADJUST TRAFFIC CONTROL DEVICE LOCATIONS TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
4. A FULLY SIGNED DETOUR ROUTE IS NOT INCLUDED. PLACE TRAFFIC CONTROL FIXED MESSAGE SIGN PRIOR TO THE BUSINESS 42/57 SIGN SOUTH OF THE STH 42/57 AND CTH C/S INTERSECTION FOR NORTHBOUND TRAFFIC AND NORTH OF THE STH 42/57 AND EGG HARBOR ROAD ROUNDABOUT FOR SOUTHBOUND TRAFFIC .
5. EROSION CONTROL ITEMS ARE AT SUGGESTED LOCATIONS. THE ENGINEER MAY MODIFY LOCATIONS TO FIT FIELD CONDITIONS.
6. WATERWAYS AND OTHER ENVIRONMENTALLY SENSITIVE AREAS SHALL BE PROTECTED AT ALL TIMES. DO NOT STORE EQUIPMENT OR MATERIALS NEAR THESE SITES UNLESS APPROVED BY THE ENGINEER.

PROJECT CONTACTS

WISCONSIN DNR
MATTHEW SCHAEVE
2984 SHAWANO AVENUE
GREEN BAY, WI 54313
MATTHEW.SHAEVE@WISCONSIN.GOV

US COAST GUARD
LEE D SOULE
1240 EAST 9TH STREET
CLEVELAND, OH 44199
LEE.D.SOULE@USCG.MIL

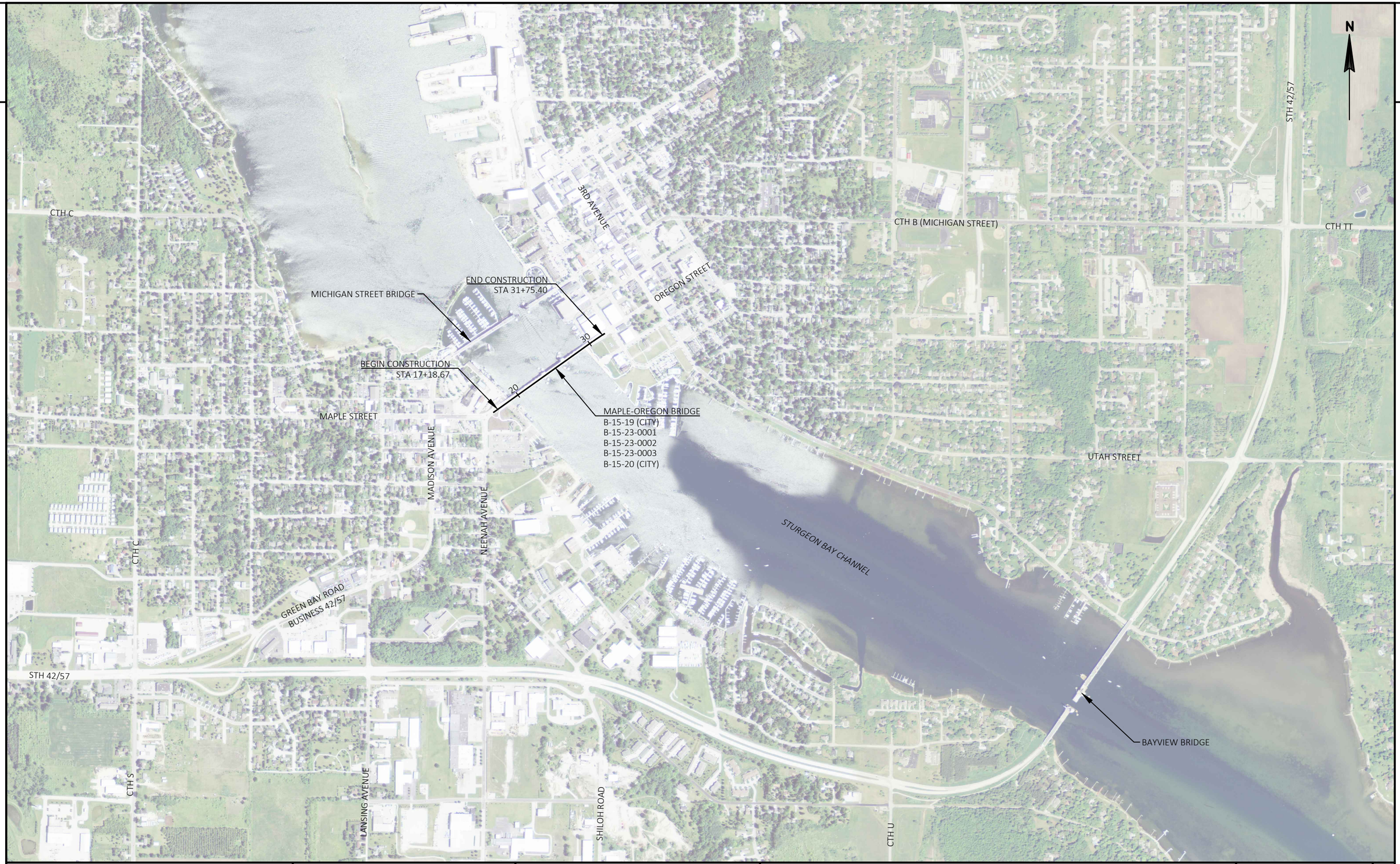
ORDER OF SECTION 2



PI STA = 30+91.96
Y = 157311.543
X = 493743.359
DELTA = 2°28'28"
D = 2°36'16"
T = 47.51'
L = 95.01'
R = 2200.00'
PC STA = 30+44.45
PT STA = 31+39.46

ALIGNMENT DIAGRAM

2



PROJECT NO: 4997-05-71	HWY: LOCAL STREET	COUNTY: DOOR	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : Z:\MAPLE-OREGON STURGEON BAY W.O. 4\900_CAD_GIS\910_CAD\49970500\SHEETSPLAN\020200_PO.DWG
LAYOUT NAME - Plan 1 IN 100 FT

PLOT DATE : 7/30/2019 12:05 PM PLOT BY : ERICSON, SARAH PLOT NAME : PLOT SCALE : 1 IN:1000 FT

2

N

3RD AVENUE

1ST AVENUE

OREGON STREET

B-15-20

PC: 30+44.45

PT: 31+39.46

30

25

B-15-23

B-15-23

20

MADISON AVENUE

MAPLE STREET

NEENAH AVENUE

B-15-19

STURGEON BAY CHANNEL

LEGEND

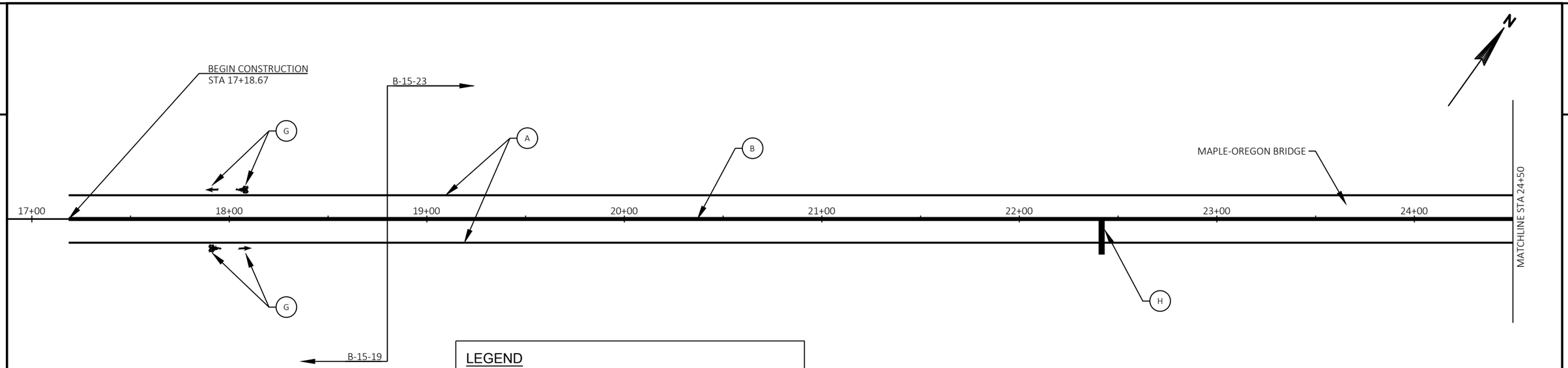
B — INLET PROTECTION TYPE B/C, AS NOTED

PROJECT NO: 4997-05-71	HWY: LOCAL STREET	COUNTY: DOOR	EROSION CONTROL	SHEET 4	E

FILE NAME : Z:\MAPLE-OREGON STURGEON BAY W.O. 4\900_CAD_GIS\910_CAD\49970500\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - Plan 1 IN 100 FT

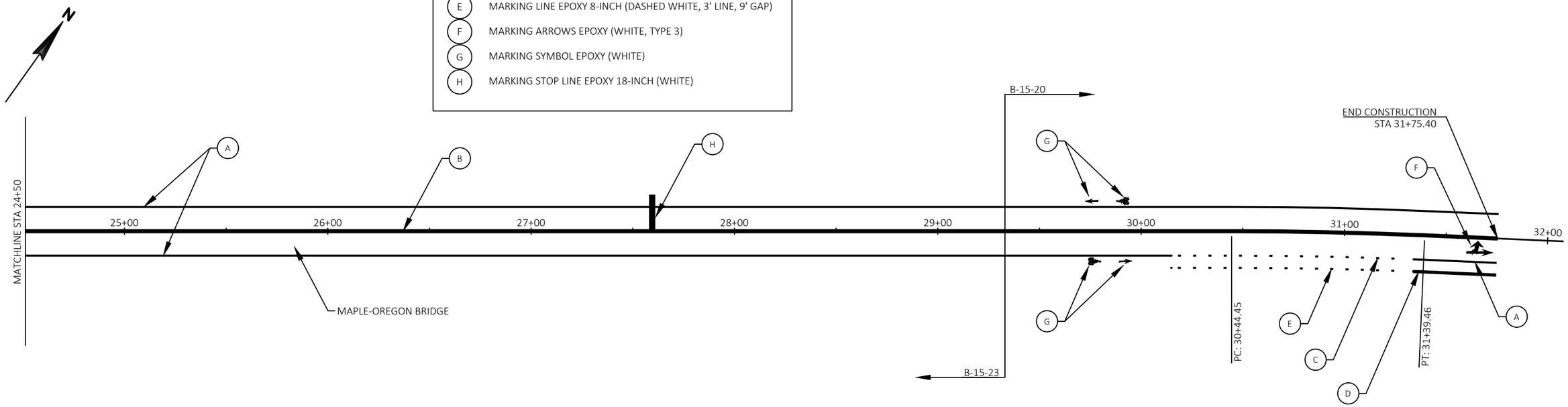
PLOT DATE : 7/30/2019 12:33 PM PLOT BY : ERICSON, SARAH PLOT NAME : PLOT SCALE : 1 IN:200 FT

2



LEGEND

- (A) MARKING LINE EPOXY 4-INCH (WHITE)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (DASHED WHITE, 3' LINE, 9' GAP)
- (D) MARKING LINE EPOXY 8-INCH (WHITE)
- (E) MARKING LINE EPOXY 8-INCH (DASHED WHITE, 3' LINE, 9' GAP)
- (F) MARKING ARROWS EPOXY (WHITE, TYPE 3)
- (G) MARKING SYMBOL EPOXY (WHITE)
- (H) MARKING STOP LINE EPOXY 18-INCH (WHITE)



PROJECT NO: 4997-05-71	HWY: LOCAL STREET	COUNTY: DOOR	PAVEMENT MARKING	SHEET 5	E

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LAYOUT NAME - Plan 1 IN 100 FT

PLOT DATE : 7/30/2019 12:36 PM PLOT BY : ERICSON, SARAH PLOT NAME : PLOT SCALE : 1 IN:50 FT

4997-05-71

Line	Item	Item Description	Unit	Total	Qty
0002	509.0301	Preparation Decks Type 1	SY	181.000	181.000
0004	509.0302	Preparation Decks Type 2	SY	72.000	72.000
0006	509.0310.S	Sawing Pavement Deck Preparation Areas	LF	1,809.000	1,809.000
0008	509.2100.S	Concrete Masonry Deck Repair	CY	20.000	20.000
0010	509.5100.S	Polymer Overlay	SY	6,031.000	6,031.000
0012	619.1000	Mobilization	EACH	1.000	1.000
0014	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0016	628.1910	Mobilizations Emergency Erosion Control	EACH	1.000	1.000
0018	628.7010	Inlet Protection Type B	EACH	10.000	10.000
0020	628.7015	Inlet Protection Type C	EACH	4.000	4.000
0022	643.0300	Traffic Control Drums	DAY	75.000	75.000
0024	643.0420	Traffic Control Barricades Type III	DAY	240.000	240.000
0026	643.0705	Traffic Control Warning Lights Type A	DAY	480.000	480.000
0028	643.0900	Traffic Control Signs	DAY	120.000	120.000
0030	643.1000	Traffic Control Signs Fixed Message	SF	200.000	200.000
0032	643.1050	Traffic Control Signs PCMS	DAY	28.000	28.000
0034	643.5000	Traffic Control	EACH	1.000	1.000
0036	646.1020	Marking Line Epoxy 4-Inch	LF	5,709.000	5,709.000
0038	646.3020	Marking Line Epoxy 8-Inch	LF	45.000	45.000
0040	646.5020	Marking Arrow Epoxy	EACH	1.000	1.000
0042	646.5220	Marking Symbol Epoxy	EACH	8.000	8.000
0044	646.6120	Marking Stop Line Epoxy 18-Inch	LF	36.000	36.000
0046	SPV.0035	Special 01. Concrete Masonry Lightweight Deck Repair	CY	2.000	2.000
0048	SPV.0105	Special 01. Counterweight Calculations and Span Balancing	LS	1.000	1.000
0050	SPV.0180	Special 01. Diamond Grinding Bascule Span	SY	1,106.000	1,106.000

3

EROSION CONTROL

LOCATION	628.1905 MOBILIZATION EROSION CONTROL EACH	628.1910 MOBILIZATION EMERGENCY EROSION CONTROL EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH
PROJECT 4997-05-71	2	1	10	4
TOTALS	**2**	**1**	**10**	**4**

TRAFFIC CONTROL FIXED MESSAGE SIGNS

LOCATION	NUMBER SIGNS	SIGN SIZE IN x IN	643.1000 TRAFFIC CONTROL FIXED MESSAGE SIGNS SF	NOTES
STH 42/57 NORTHBOUND	2	60 x 120	100	BETWEEN DULUTH AVENUE AND GREEN BAY ROAD EXIT
STH 42/57 SOUTHBOUND	2	60 x 120	100	BETWEEN GORDON ROAD AND EGG HARBOR ROAD
TOTALS			**200**	

3

TRAFFIC CONTROL

STAGE	DAYS	643.0300 TRAFFIC CONTROL DRUMS EACH	643.0300 DAYS	643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH	643.0420 DAYS	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH	643.0705 DAYS	643.0900 TRAFFIC CONTROL SIGNS EACH	643.0900 DAYS	643.1050 TRAFFIC CONTROL SIGNS PCMS EACH	643.1050 DAYS*	643.5000 TRAFFIC CONTROL EACH
PROJECT 4997-05-71	-	-	-	-	-	-	-	-	-	-	-	1
STAGE 1	5	5	25	16	80	32	160	8	40	2	14	-
STAGE 2A	5	5	25	16	80	32	160	8	40	2	14	-
STAGE 2B	5	5	25	16	80	32	160	8	40	2	0	-
TOTALS			**75**		**240**		**480**		**120**		**28**	1

PAVEMENT MARKING

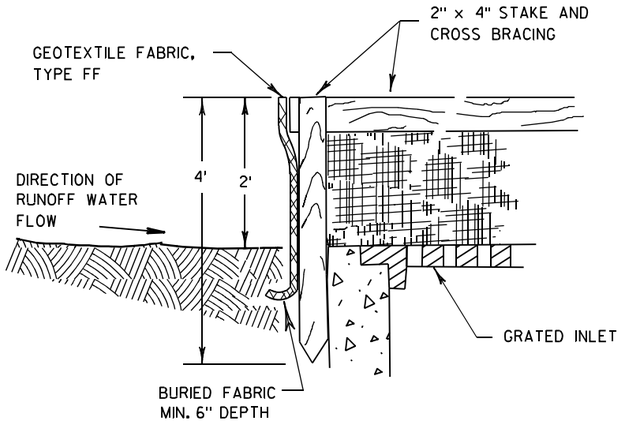
STA	-	STA	LOCATION	646.1020 MARKING LINE EPOXY 4-INCH WHITE LF	646.1020 DOUBLE YELLOW LF	646.1020 DASHED WHITE LF	646.3020 MARKING LINE EPOXY 8-INCH WHITE LF	646.3020 DASHED WHITE LF	646.5020 MARKING ARROW EPOXY EACH	646.5220 MARKING SYMBOL EPOXY EACH	646.6120 MARKING STOP LINE EPOXY 18-INCH LF
17+19	-	31+75	CL	-	2,912	-	-	-	-	-	-
17+19	-	31+75	LT	1,456	-	-	-	-	-	-	-
17+19	-	30+15	RT	1,296	-	-	-	-	-	-	-
18+00			LT/RT	-	-	-	-	-	-	4	-
22+42			RT	-	-	-	-	-	-	-	18
27+60			LT	-	-	-	-	-	-	-	18
29+85			LT/RT	-	-	-	-	-	-	4	-
30+15	-	31+35	RT	-	-	5	-	5	-	-	-
31+35	-	31+75	RT	40	-	-	40	-	-	-	-
31+65			RT	-	-	-	-	-	1	-	-
SUBTOTALS				2,792	2,912	5	40	5	1	8	36
TOTALS					**5,709**		**45**		**1**	**8**	**36**

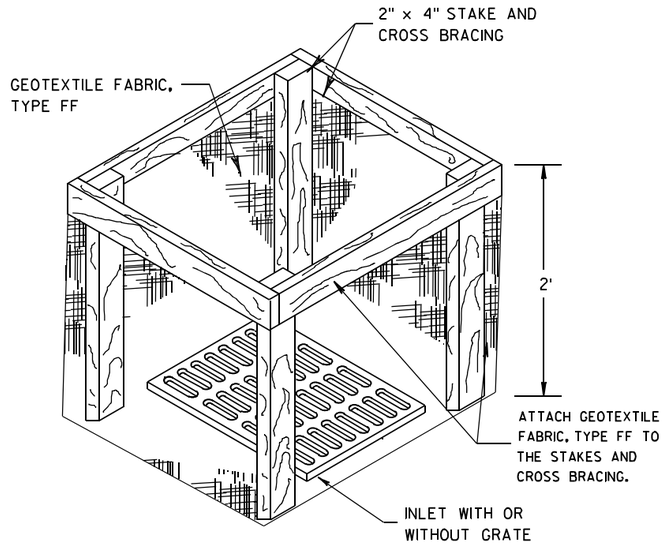
UNLESS OTHERWISE NOTED
ALL ITEMS IN CATEGORY 0010

Standard Detail Drawing List

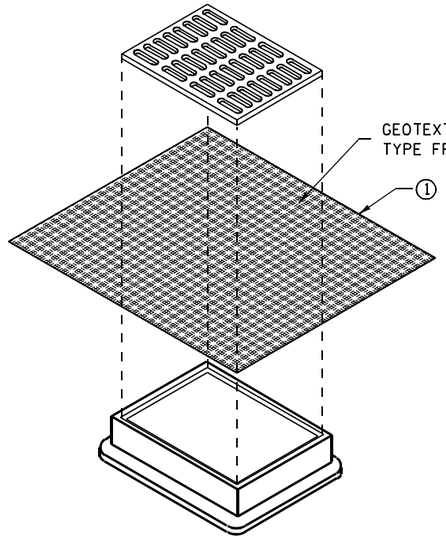
08E10-02	INLET PROTECTION TYPE A, B, C AND D
15C02-07A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-07B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C07-14C	PAVEMENT MARKING ARROWS
15C07-14E	PAVEMENT MARKING FOR BIKE LANES
15C08-19A	LONGITUDINAL MARKING (MAINLINE)
15C08-19C	PAVEMENT MARKING (TURN LANES)
15C29-06A	BICYCLE LANE MARKING
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS

6



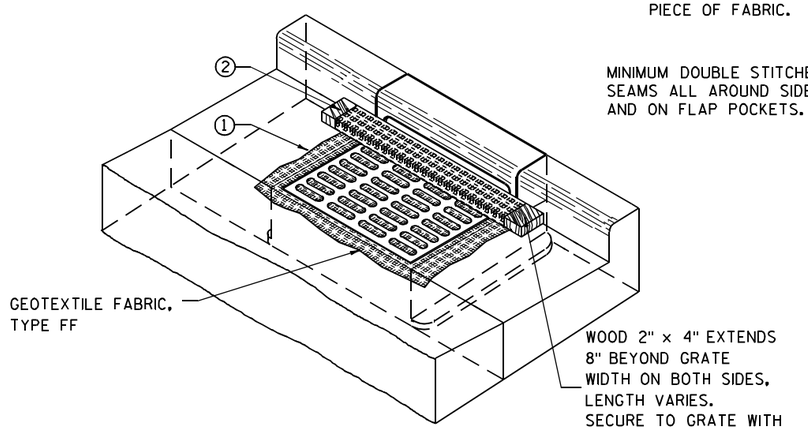


INLET PROTECTION, TYPE A

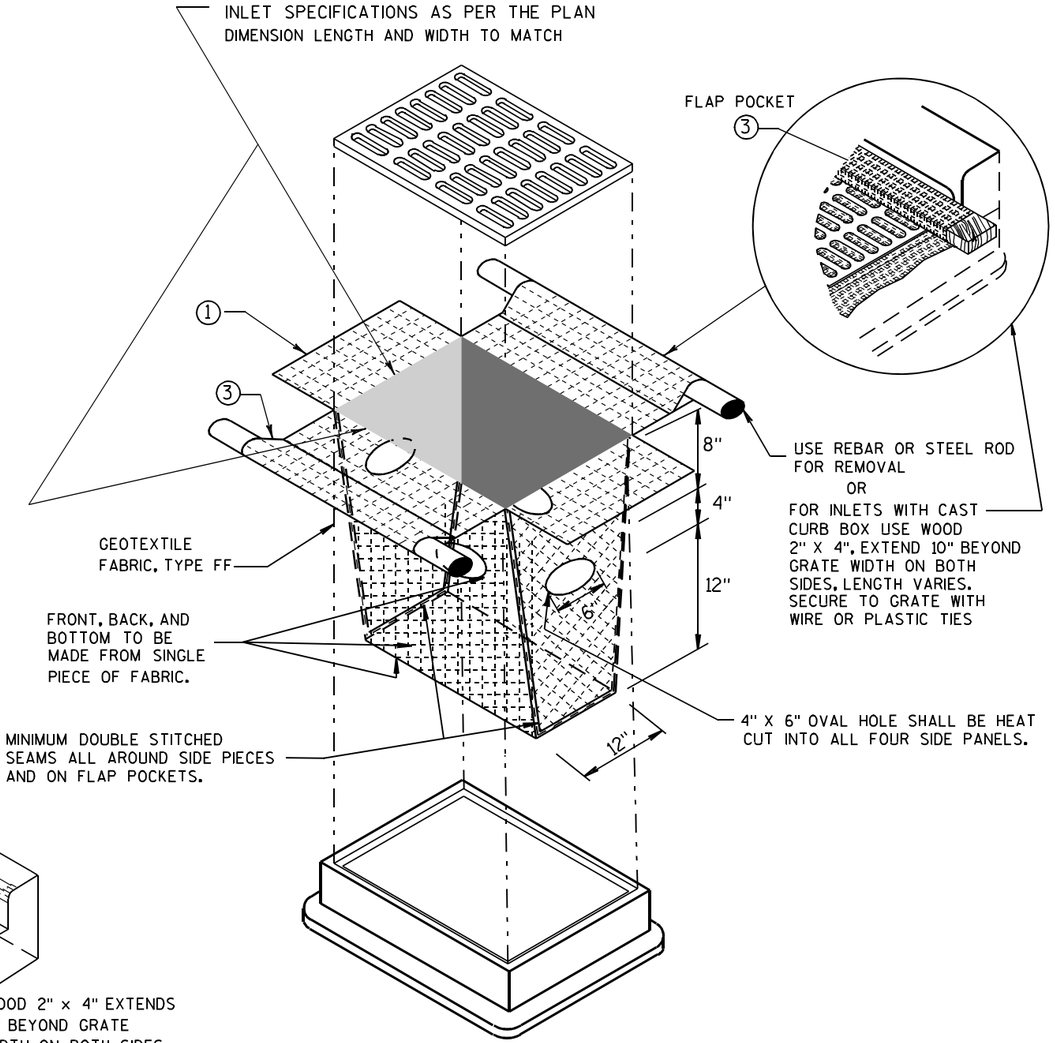


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

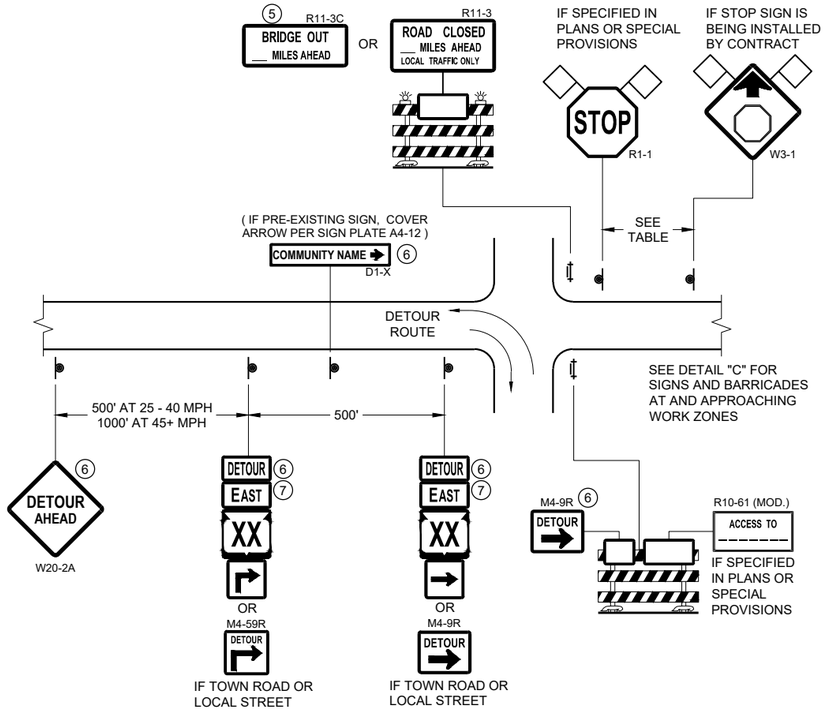
10/16/02
DATE

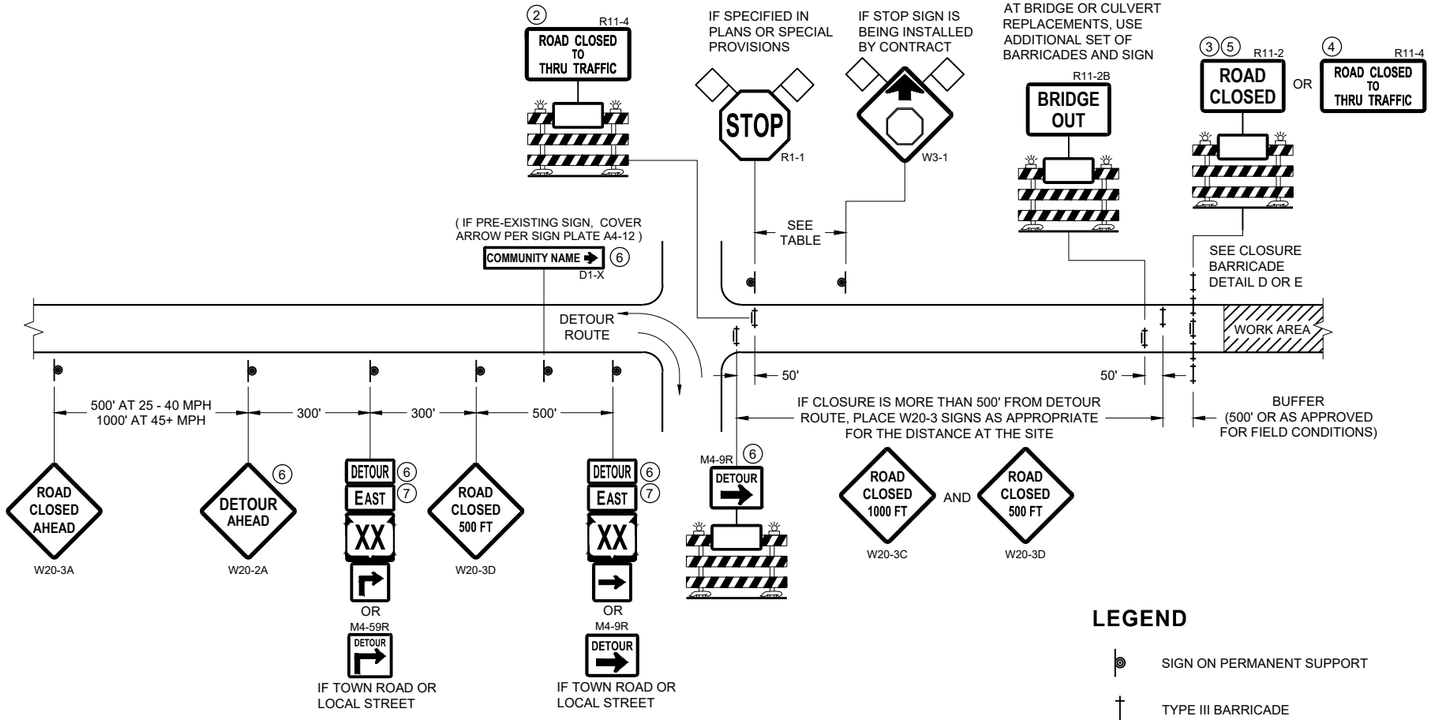
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

6

S.D.D. 8 E 10-2



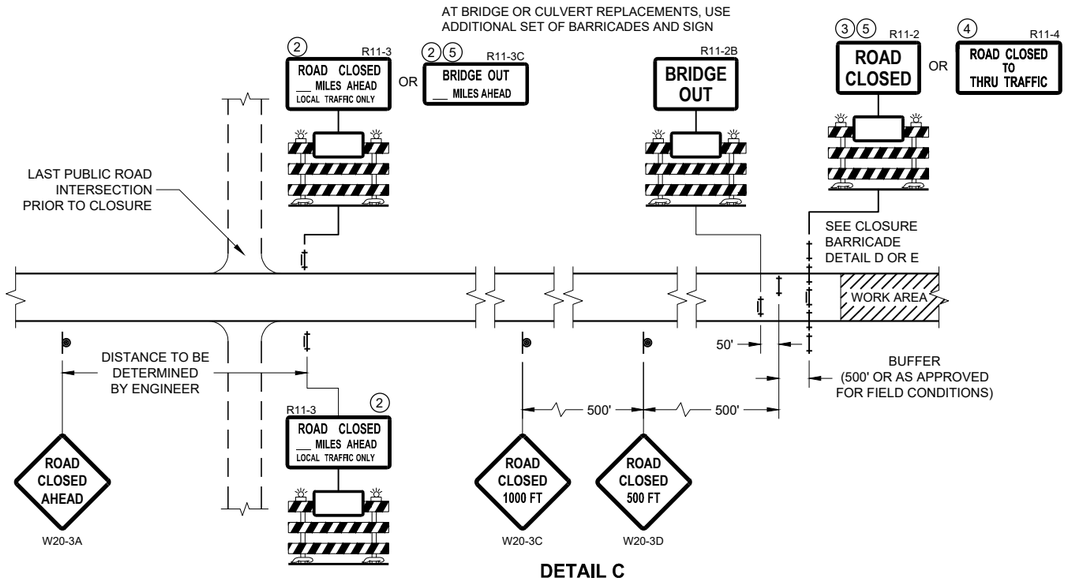


DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

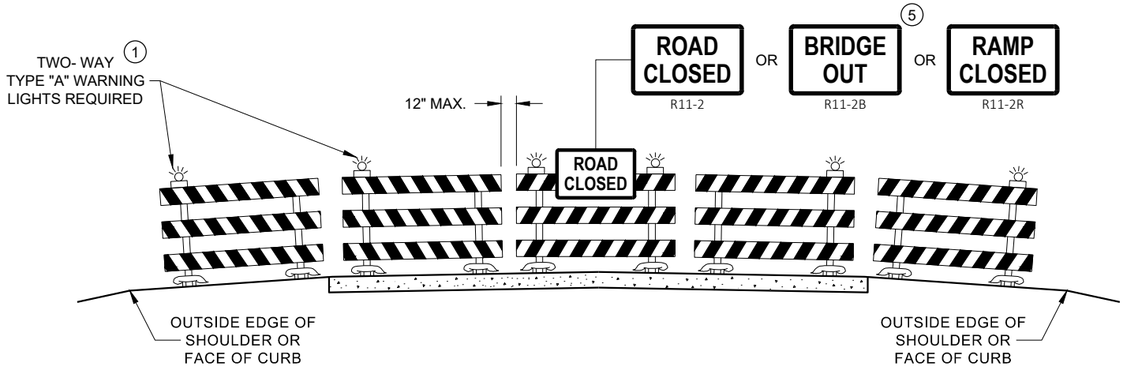
APPROVED
November 2018
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

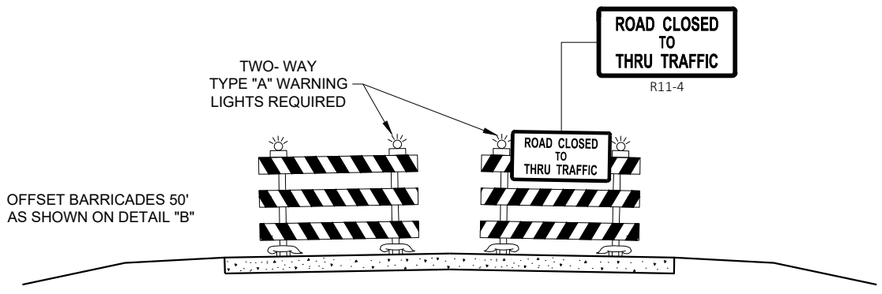
6

SDD 15C02 - 07a

SDD 15C02 - 07a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

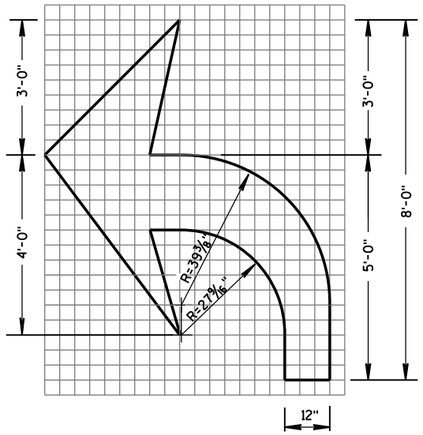
SDD 15C02 - 07b

6

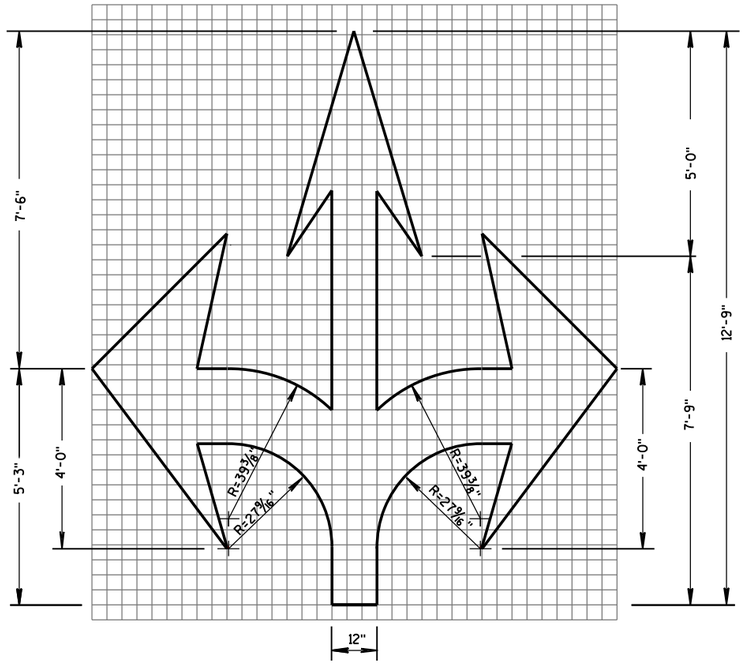
SDD 15C02 - 07b

GENERAL NOTES

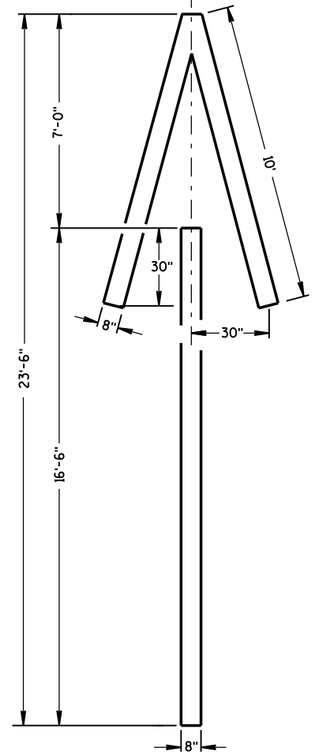
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



TYPE 2



TYPE 6



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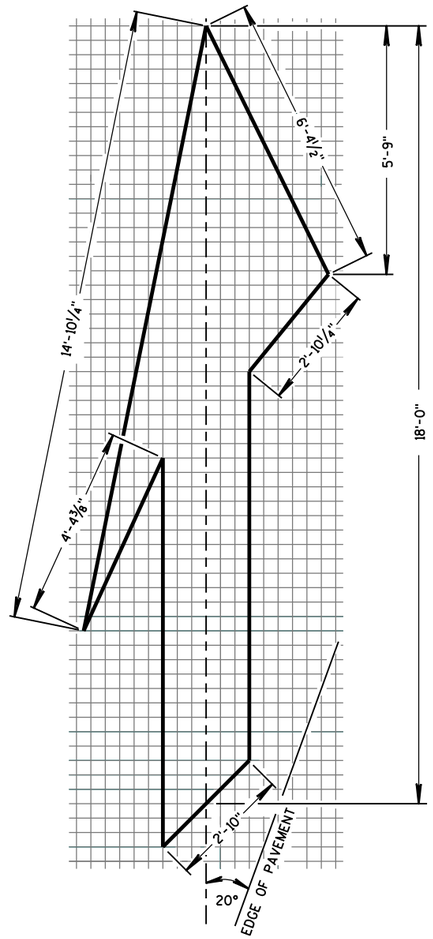
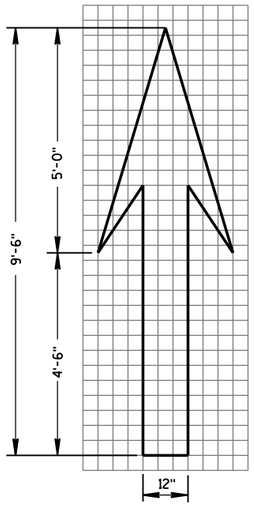
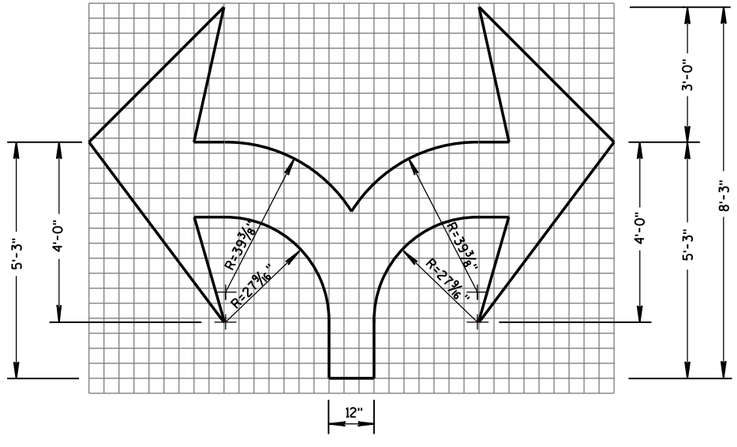


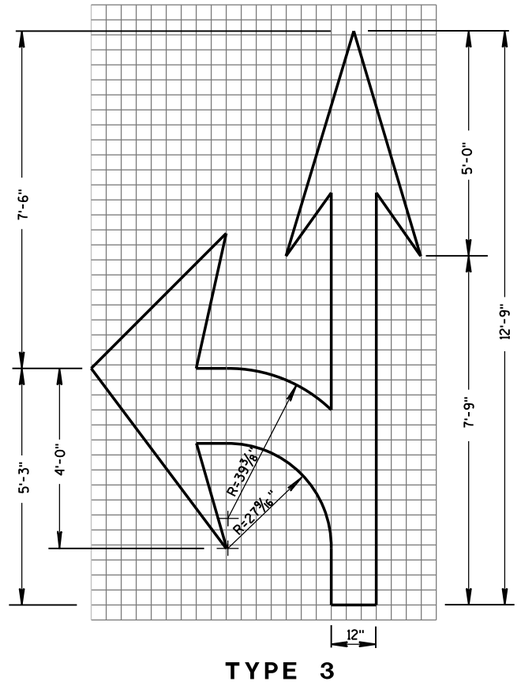
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER
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S.D.D. 15 C 7-14c

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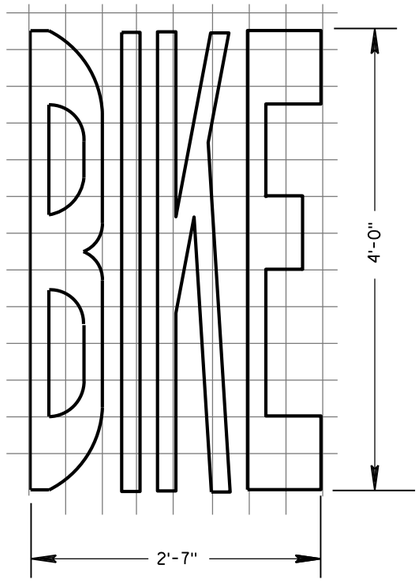
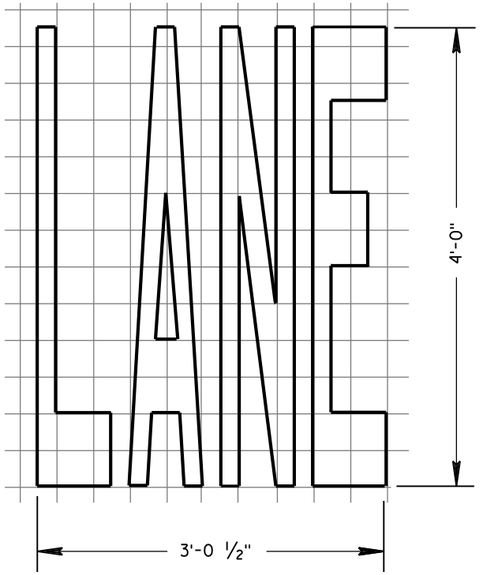
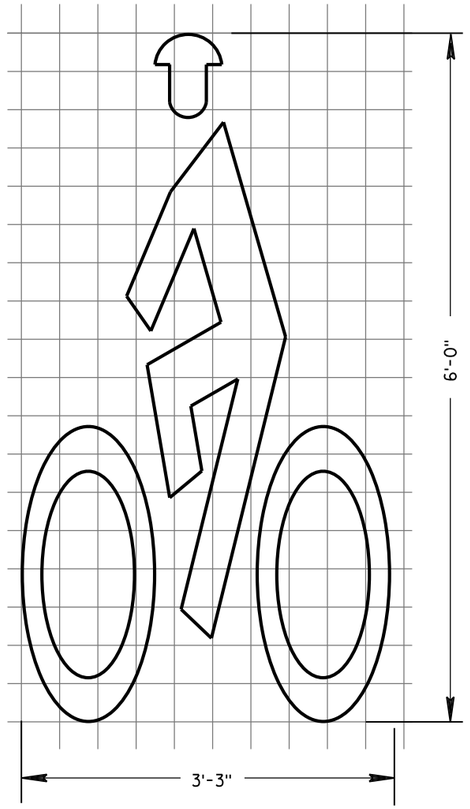
S.D.D. 15 C 7-14c

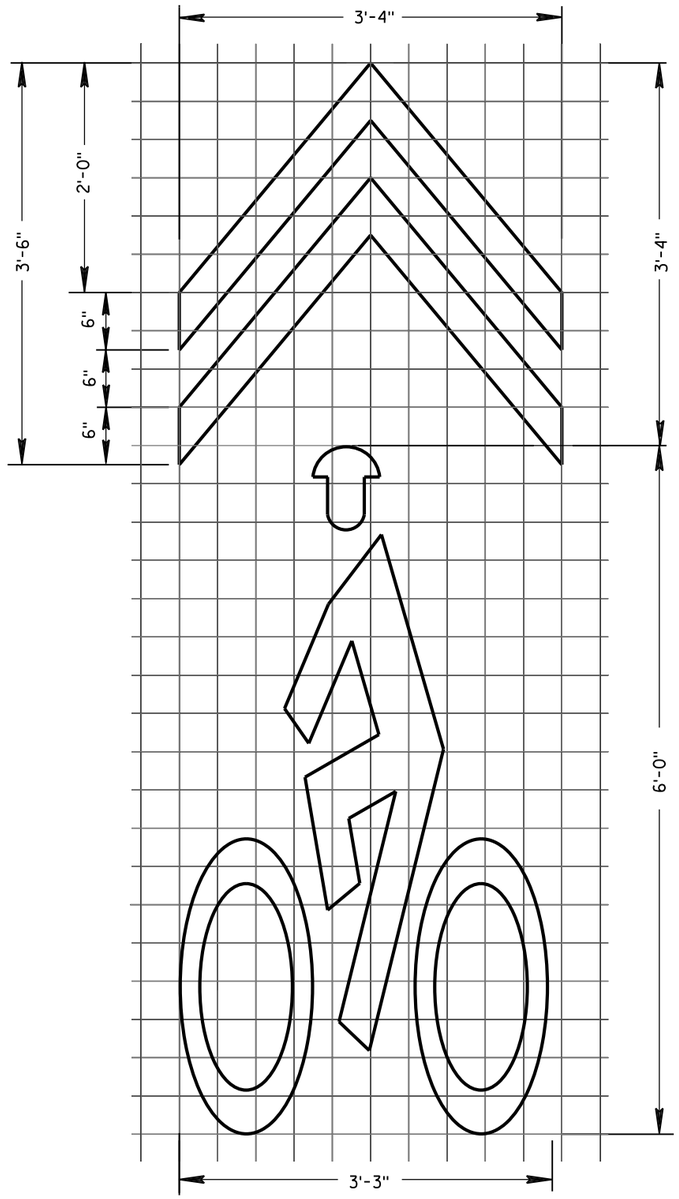




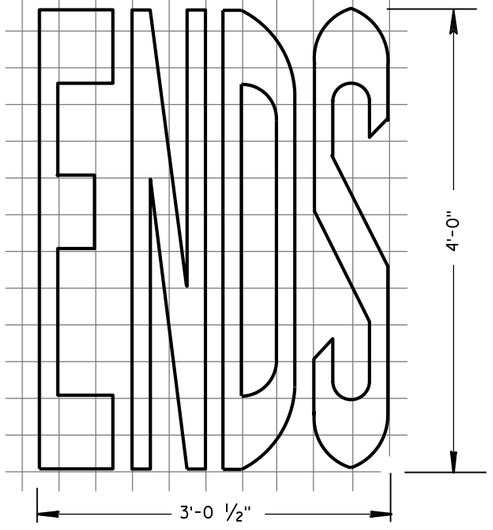
BIKE LANE WORDS



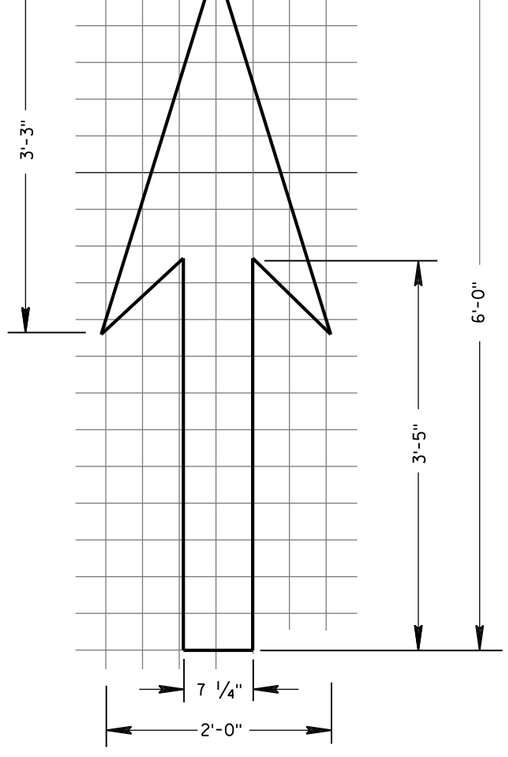
BIKE LANE SYMBOL



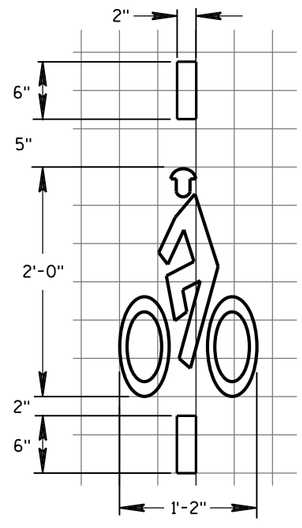
BIKE SYMBOL FOR SHARED LANE



BIKE LANE WORDS



BIKE LANE ARROW



BICYCLE DETECTOR PAVEMENT MARKING

GENERAL NOTES

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

PAVEMENT MARKING FOR BIKE LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER
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S.D.D. 15 C 7-14e

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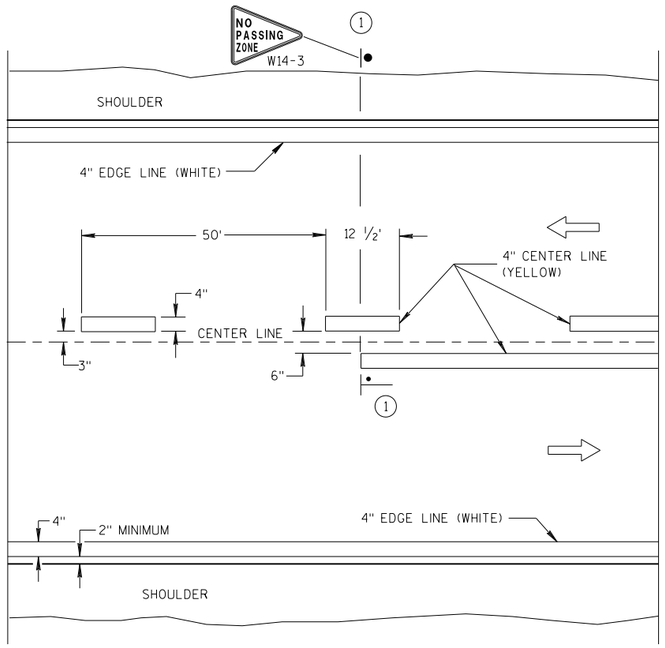
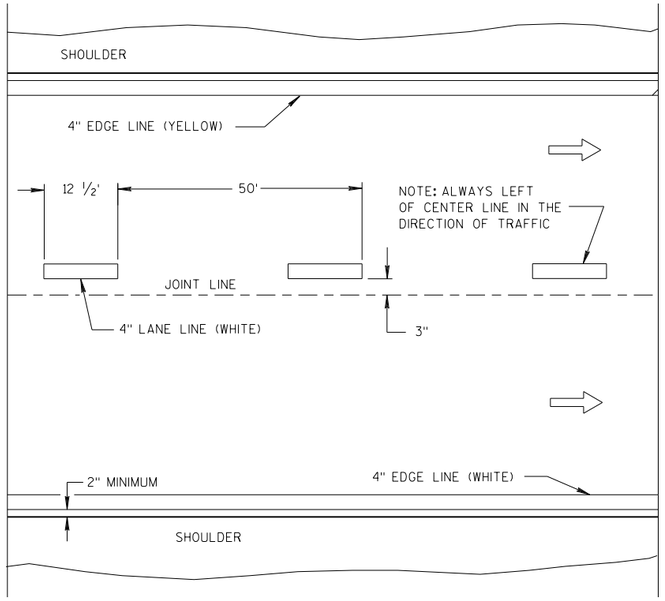
S.D.D. 15 C 7-14e



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.

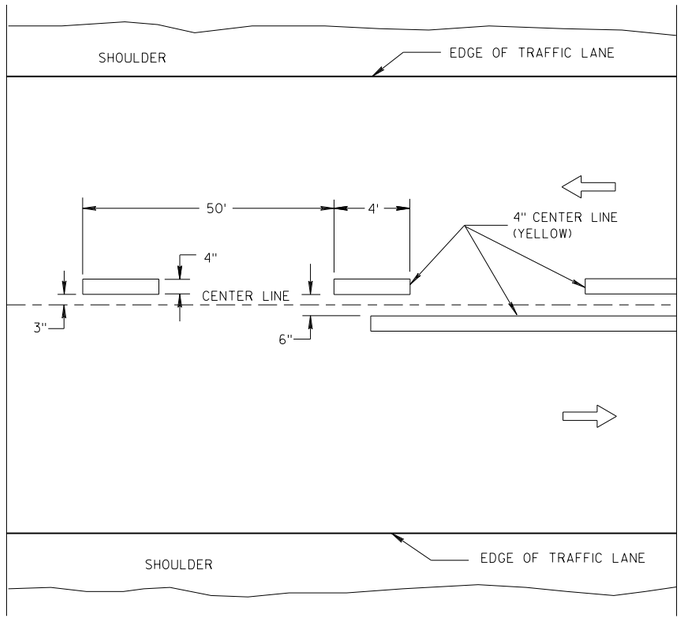
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

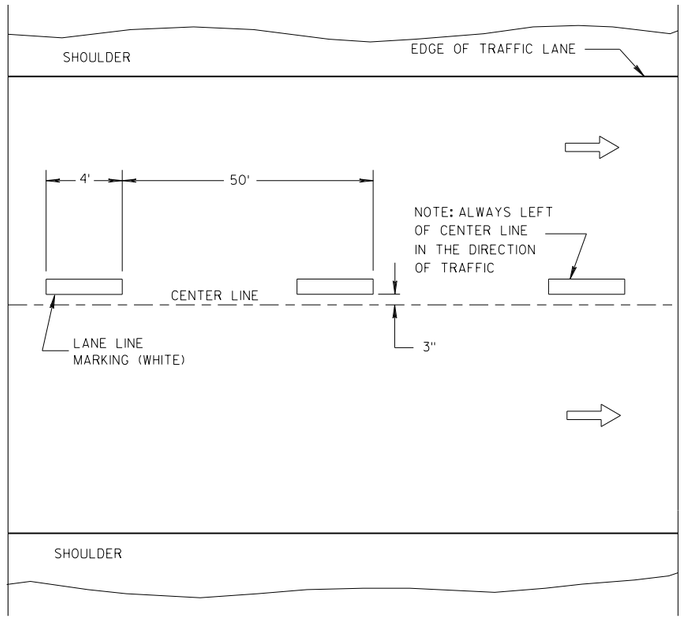
LEGEND

"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

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

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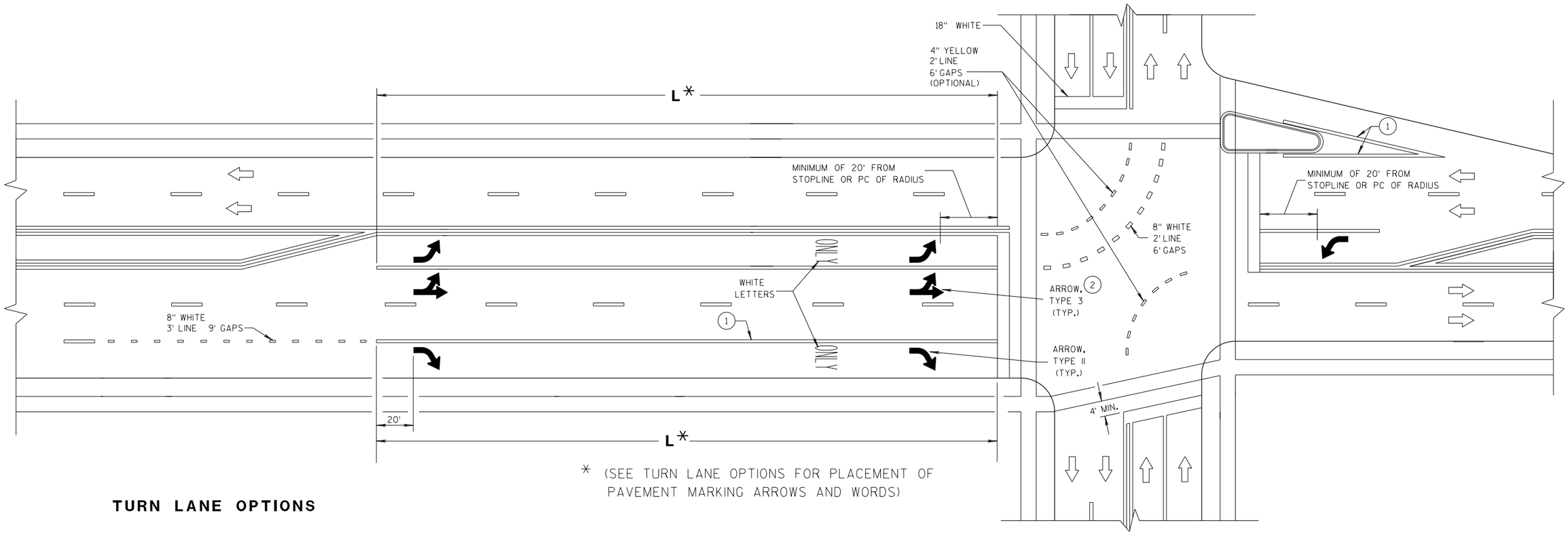
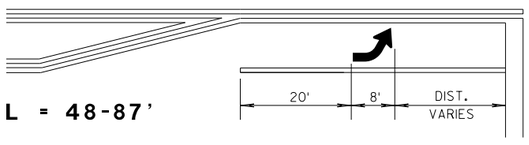
S.D.D. 15 C 8-19a



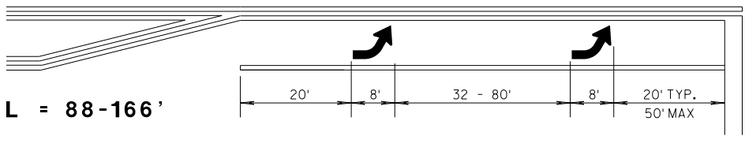
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

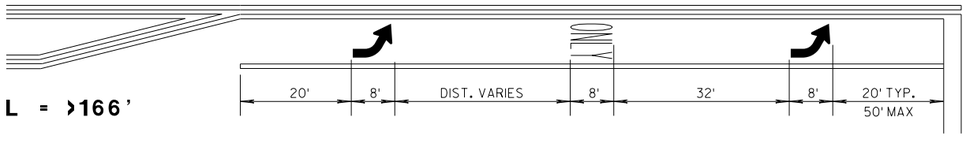
LENGTH OF TURN BAY (**L**) OF 0-47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48-87'



L = 88-166'



L = >166'

GENERAL NOTES

1. 8" WHITE
2. QUANTITY AND LOCATION OF TYPE 3 ARROW ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION, THE ARROWS AND ONLY MARKING ARE ELIMINATED.

⇨ DIRECTION OF TRAFFIC

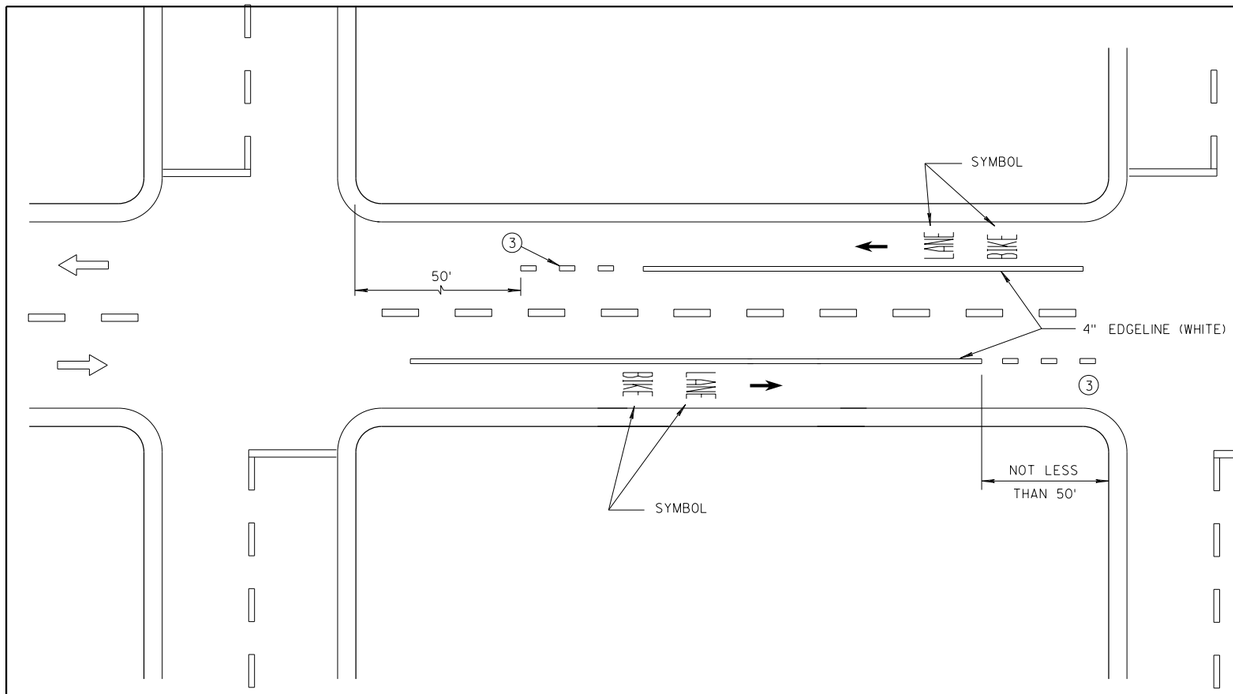
L = LENGTH OF TURN BAY

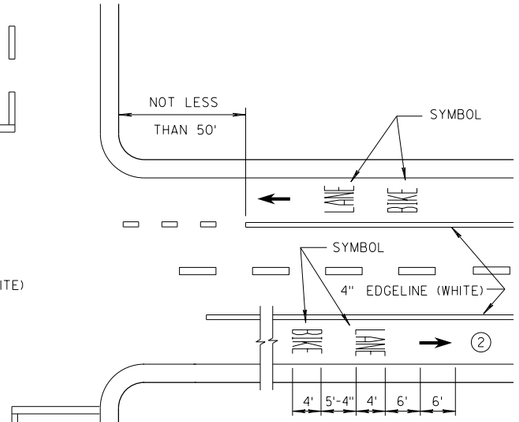
PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORT

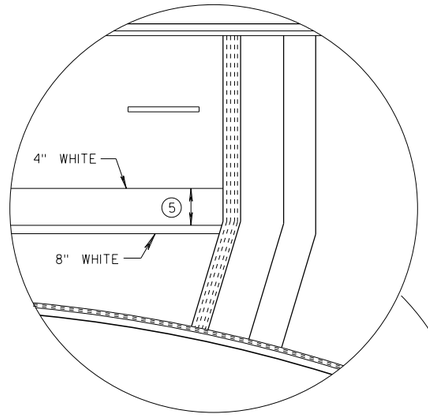
6

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

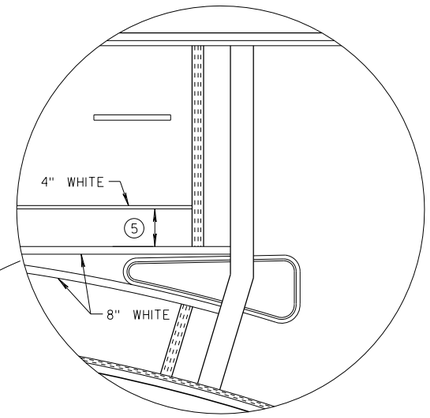




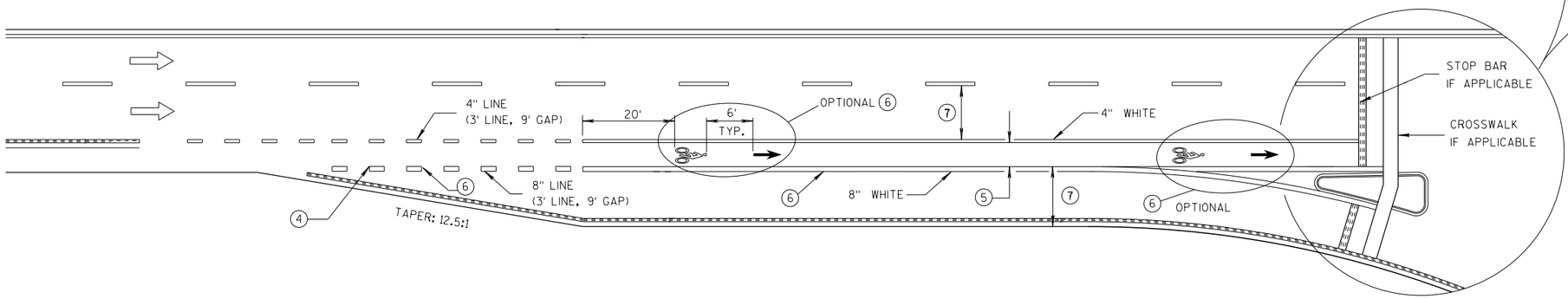
DESIGNATED BICYCLE LANE
NO PARKING



4 LANE DIVIDED WITHOUT ISLAND



4 LANE DIVIDED WITH ISLAND



BIKE LANE - FOR 2-LANE ROADWAYS AND 4-LANE DIVIDED ROADWAYS
(4-LANE DIVIDED WITH RIGHT TURN LANE SHOWN)

GENERAL NOTES

1. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. MINIMUM OF ONE PER BLOCK. MAXIMUM OF 250 FEET.
3. DOTTED LINES (3' LINE, 9' GAP) SHOULD BE USED 50 FEET TO 200 FEET IN ADVANCE OF AN INTERSECTION WHERE THERE IS NO RIGHT TURN ONLY LANE AND THERE IS HEAVY RIGHT TURN TRAFFIC OR THERE IS A NEAR-SIDE BUS STOP. AT OTHER INTERSECTIONS WHERE RIGHT TURN TRAFFIC IS LIGHT TO MODERATE, A SOLID LINE CAN BE USED UP TO THE INTERSECTION.
4. IF SIGNED AND/OR MARKED AS A BICYCLE FACILITY INCLUDE SECOND LINE OF LINE-SPACE MARKING, OTHERWISE DO NOT.
5. BIKE ACCOMODATION IS TYPICALLY 5 FEET WIDE AND A MINIMUM OF 4 FEET FROM A LONGITUDINAL JOINT. USE 5 FEET AT 45 MPH.
6. OMIT THESE MARKINGS FOR WIDER TURN LANE APPLICATIONS (MINIMUM OF 15 FEET WIDE TURN LANE).
7. REFER TO CONTRACT PLANS FOR LANE WIDTH.

DIRECTION OF TRAVEL

BICYCLE LANE MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAR ... ENGINEER

FHWA

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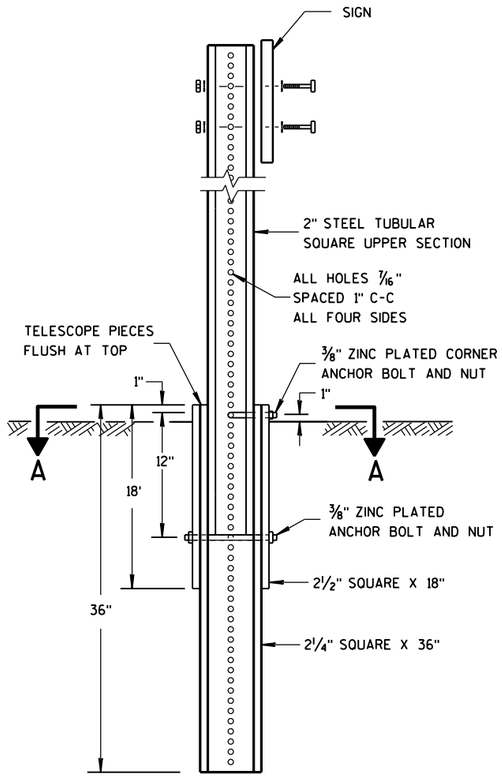
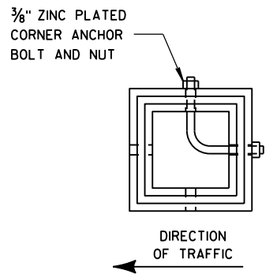
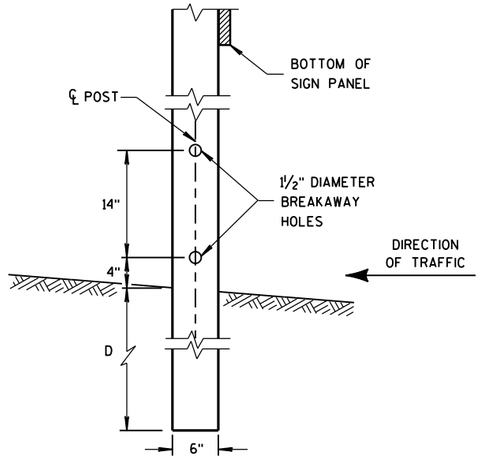
S.D.D. 15 C 29-6a
S.D.D. 15 C 29-6a



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



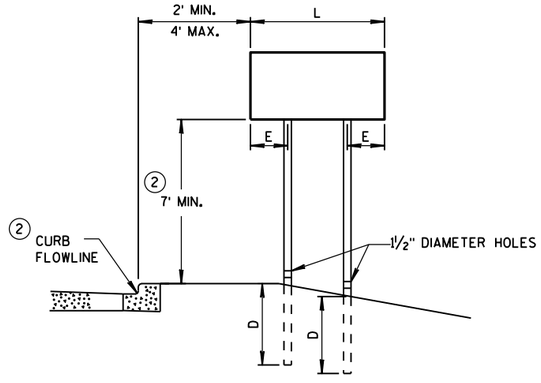
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

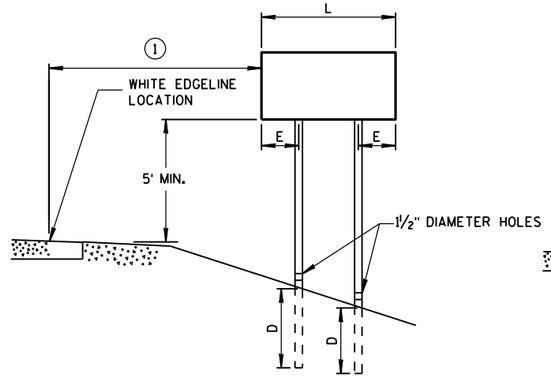
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

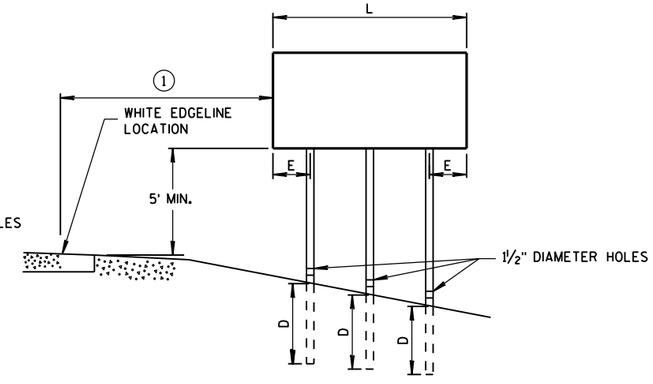
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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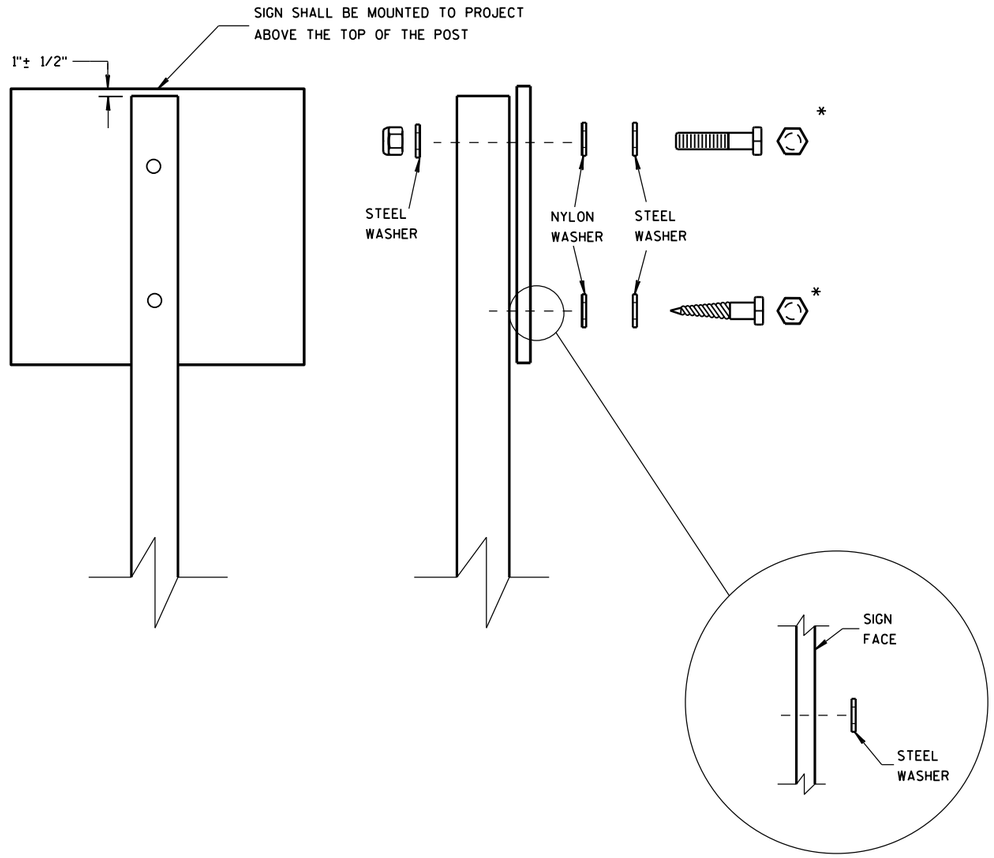
S.D.D. 15 D 38-2a
S.D.D. 15 D 38-2a



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

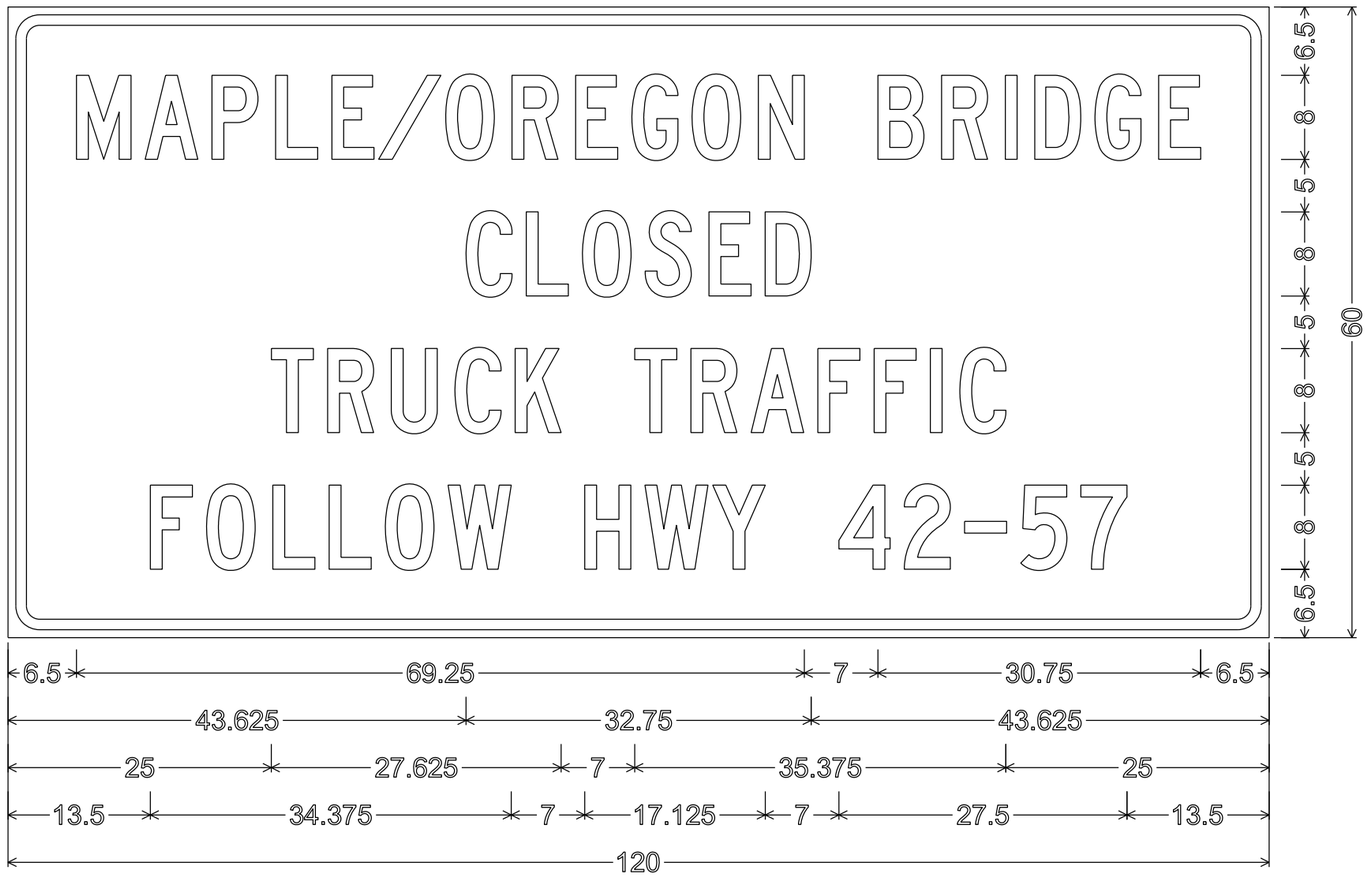
June 2017
DATE

/S/ Andrew Heldtke
WORK ZONE ENG

FHWA

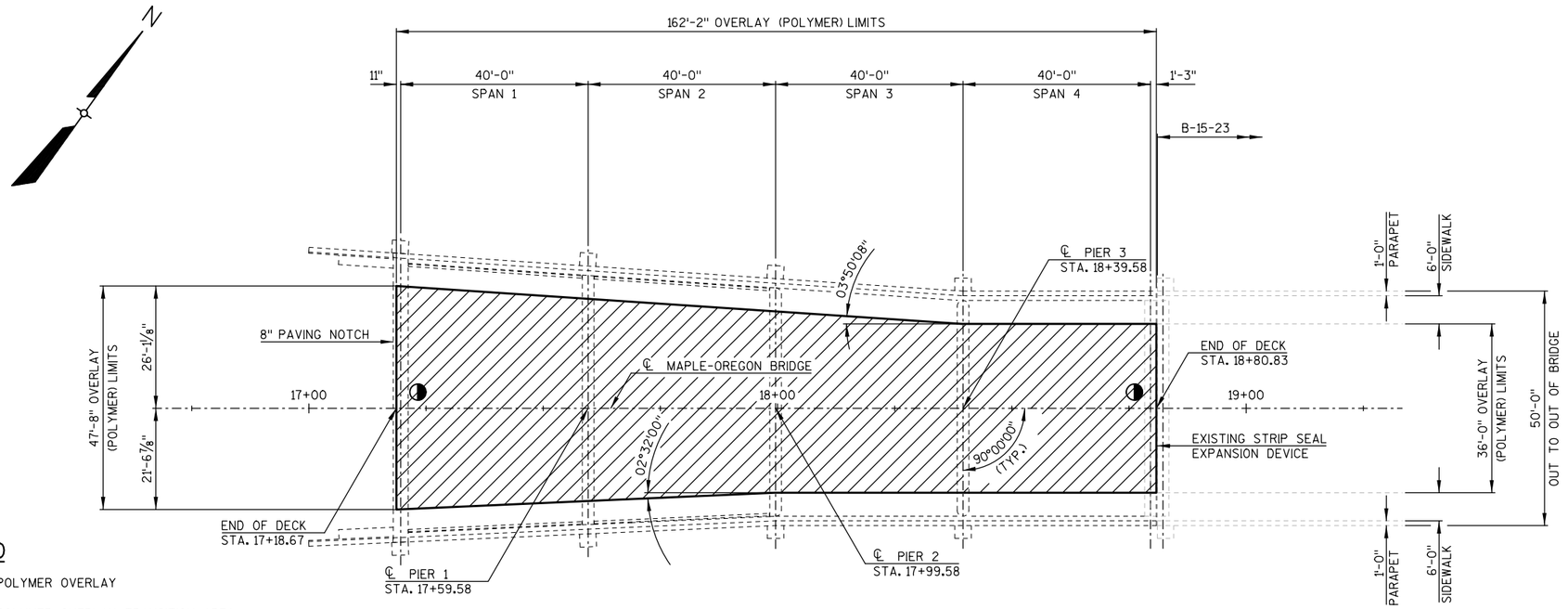
NOTES

1. Fixed Message Type II Signs - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C



3.000" Radius, 1.000" Border, 0.750" Indent, Black on Fluorescent orange;

STATE PROJECT NUMBER
4997-05-71



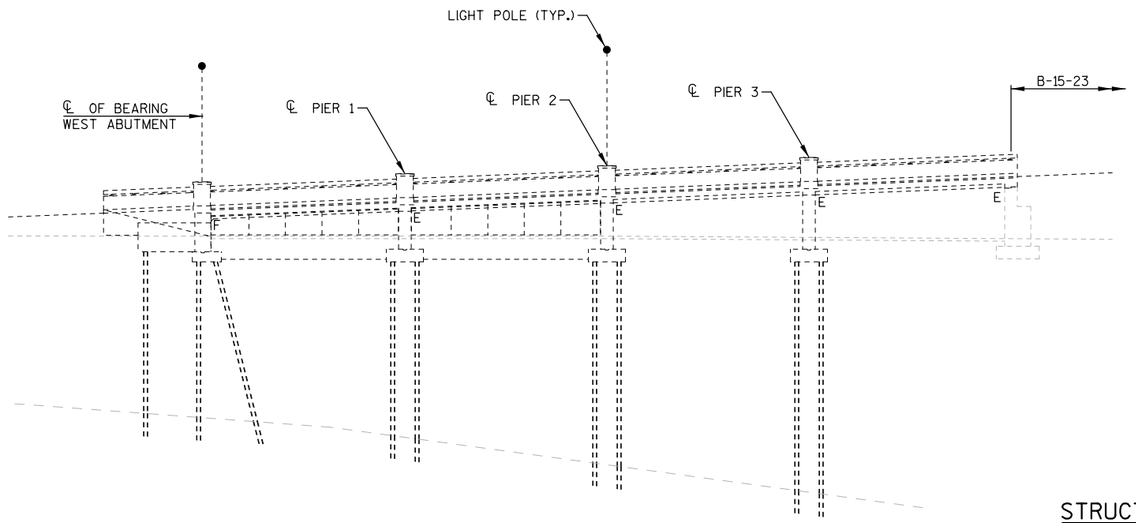
LEGEND

POLYMER OVERLAY

POLYMER OVERLAY TRANSITION AREA. TYPICAL AT JOINTS AND BREAKS.

PLAN

22" REINFORCED CONCRETE SLAB
4-SPAN CONTINUOUS



ELEVATION

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HS-20
INVENTORY RATING: HS-25
OPERATING RATING: HS-43
WISCONSIN STANDARD PERMIT VEHICLE (Wis-SPV) = 250 KIPS

MATERIAL PROPERTIES:
CONCRETE MASONRY
DECK PATCHING ——— f'c = 4,000 PSI

TRAFFIC DATA

A.D.T. (2017) = 7,200
A.D.T. (2045) = N/A
R.D.S. = 30 MPH

LIST OF DRAWINGS

1. GENERAL PLAN AND ELEVATION
2. TYPICAL SECTIONS, GENERAL NOTES AND QUANTITIES

STRUCTURES DESIGN CONTACTS

BUREAU OF STRUCTURES CONTACT - WILLIAM DREHER (608) 266-8489
CONSULTANT CONTACT - MICHAEL DELEMONT (414) 944-6200

WISCONSIN
MICHAEL A. DELEMONT
E-42185
FRANKLIN, WI
PROFESSIONAL ENGINEER
5/31/2019

NO.	DATE	REVISION	BY

AECOM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 08/26/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-15-19

MAPLE-OREGON BRIDGE OVER STURGEON BAY

COUNTY	~~TOWN~~/CITY/~~VILLAGE~~
DOOR	STURGEON BAY

DESIGN SPEC. REHABILITATION N/A

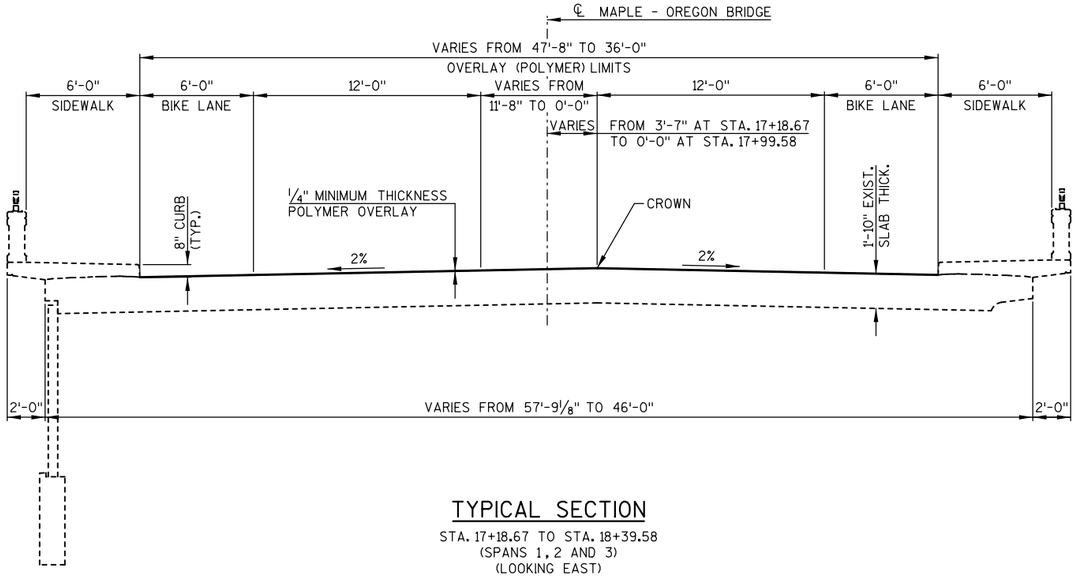
DESIGNED BY	AJC	DESIGN CK'D.	MJA	DRAWN BY	DNJ	PLANS CK'D.	MAD

GENERAL PLAN AND ELEVATION

SHEET 1 OF 2
20

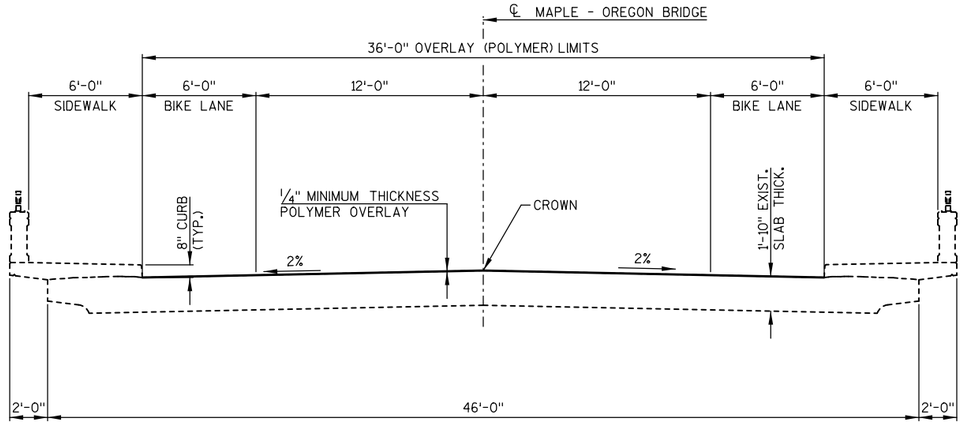
8

8



TYPICAL SECTION

STA. 17+18.67 TO STA. 18+39.58
(SPANS 1, 2 AND 3)
(LOOKING EAST)



TYPICAL SECTION

STA. 18+39.58 TO STA. 18+80.83
(SPAN 4 ONLY)
(LOOKING EAST)

GENERAL NOTES

THE PROPOSED WORK INCLUDES A POLYMER OVERLAY OF THE BRIDGE DECK.

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

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

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAW CUT. SAWCUTS TO BE PAID FOR AS "SAWING PAVEMENT DECK PREPARATION AREAS."

AREAS OF PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE DETERMINED BY THE ENGINEER. AREAS REQUIRING FULL-DEPTH REPAIR ARE NOT ANTICIPATED.

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEM	UNIT	TOTALS
509.0301	PREPARATION DECKS TYPE 1	SY	22
509.0302	PREPARATION DECKS TYPE 2	SY	9
509.0310.S	SAWING PAVEMENT DECK PREPARATION AREAS	LF	215
509.2100.S	CONCRETE MASONRY DECK REPAIR	CY	3
509.5100.S	POLYMER OVERLAY	SY	718

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-15-19

DRAWN BY DNJ | PLANS CK'D. MAD

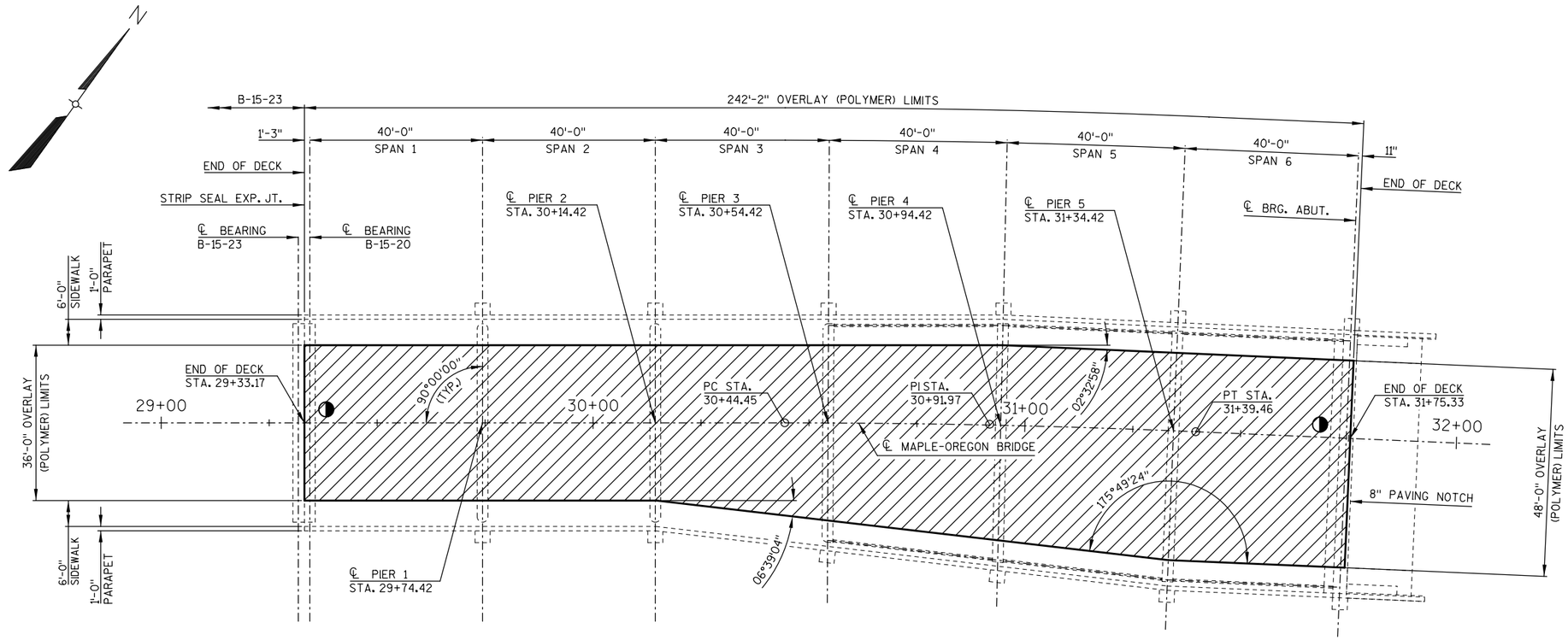
TYPICAL SECTIONS, GENERAL NOTES AND QUANTITIES

SHEET 2 OF 2
21

8

8

STATE PROJECT NUMBER
4997-05-71



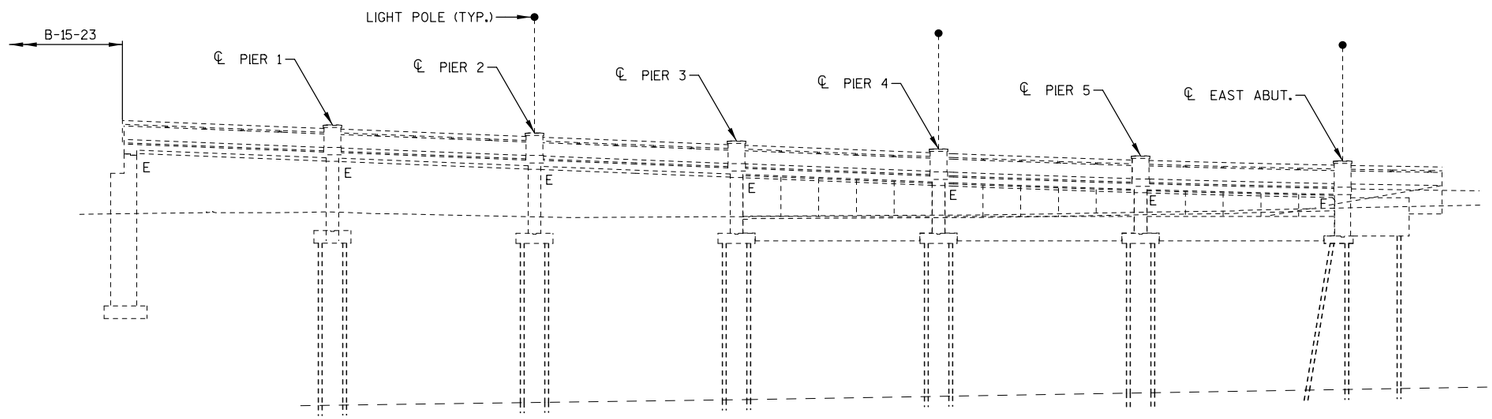
PLAN

22" REINFORCED CONCRETE SLAB
6-SPAN CONTINUOUS

LEGEND

POLYMER OVERLAY

POLYMER OVERLAY TRANSITION AREA.
TYPICAL AT JOINTS AND BREAKS.



ELEVATION

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HS-20
INVENTORY RATING: HS-25
OPERATING RATING: HS-43
WISCONSIN STANDARD PERMIT VEHICLE (Wis-SPV) = 250 KIPS

MATERIAL PROPERTIES:
CONCRETE MASONRY
DECK PATCHING ——— f'c = 4,000 PSI

TRAFFIC DATA

A.D.T. (2017) = 7,200
A.D.T. (2045) = N/A
R.D.S. = 30 MPH

CURVE DATA

(FOR REFERENCE ONLY)
PC STA 30+44.45
PI STA 30+91.97
PT STA 31+39.46
DELTA 2°28'28"
DC 2°36'16"
R 2200.00'
L 95.01'
T 47.51'

LIST OF DRAWINGS

1. GENERAL PLAN AND ELEVATION
2. TYPICAL SECTIONS, GENERAL NOTES AND QUANTITIES

STRUCTURES DESIGN CONTACTS

BUREAU OF STRUCTURES CONTACT - WILLIAM DREHER (608) 266-8489
CONSULTANT CONTACT - MICHAEL DELEMONT (414) 944-6200

NO.	DATE	REVISION	BY

AECOM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 08/26/19
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-15-20

MAPLE-OREGON BRIDGE OVER STURGEON BAY

COUNTY	~~TOWN~~/CITY/~~VILLAGE~~
DOOR	STURGEON BAY

DESIGN SPEC.
REHABILITATION N/A

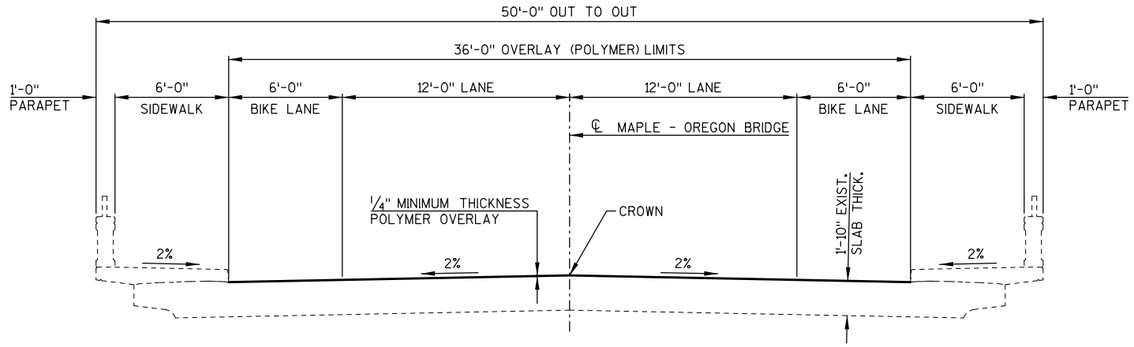
DESIGNED BY	AJC	DESIGN CK'D.	MJA	DRAWN BY	DNJ	PLANS CK'D.	MAD

GENERAL PLAN AND ELEVATION

SHEET 1 OF 2
22

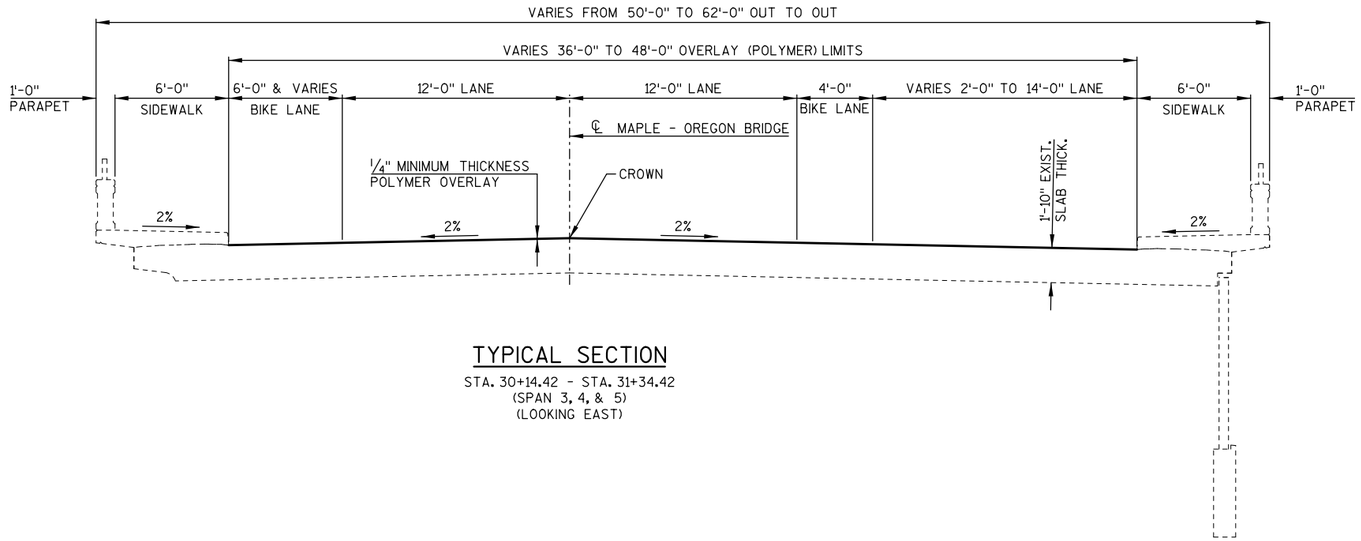
8

8



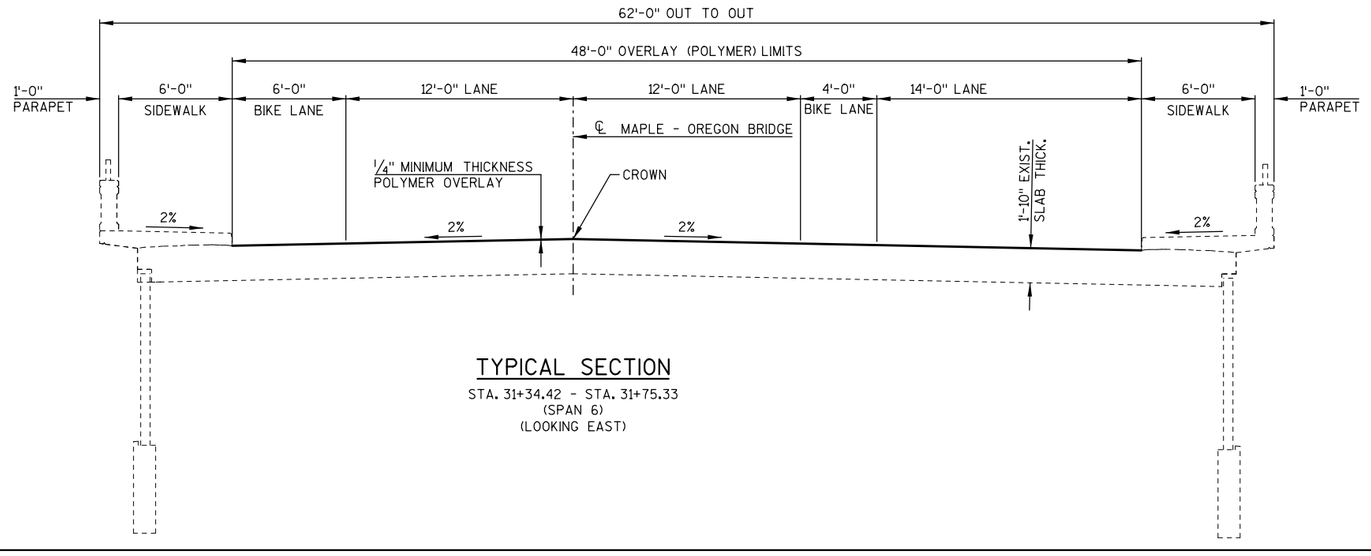
TYPICAL SECTION

STA. 29+33.17 - STA. 30+14.42
(SPAN 1 & 2)
(LOOKING EAST)



TYPICAL SECTION

STA. 30+14.42 - STA. 31+34.42
(SPAN 3, 4, & 5)
(LOOKING EAST)



TYPICAL SECTION

STA. 31+34.42 - STA. 31+75.33
(SPAN 6)
(LOOKING EAST)

STATE PROJECT NUMBER

4997-05-71

GENERAL NOTES

THE PROPOSED WORK INCLUDES A POLYMER OVERLAY OF THE BRIDGE DECK.

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

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

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAW CUT. SAWCUTS TO BE PAID FOR AS "SAWING PAVEMENT DECK PREPARATION AREAS."

AREAS OF PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE DETERMINED BY THE ENGINEER. AREAS REQUIRING FULL-DEPTH REPAIR ARE NOT ANTICIPATED.

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEM	UNIT	TOTALS
509.0301	PREPARATION DECKS TYPE 1	SY	33
509.0302	PREPARATION DECKS TYPE 2	SY	13
509.0310.S	SAWING PAVEMENT DECK PREPARATION AREAS	LF	333
509.2100.S	CONCRETE MASONRY DECK REPAIR	CY	5
509.5100.S	POLYMER OVERLAY	SY	1,110

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-15-20

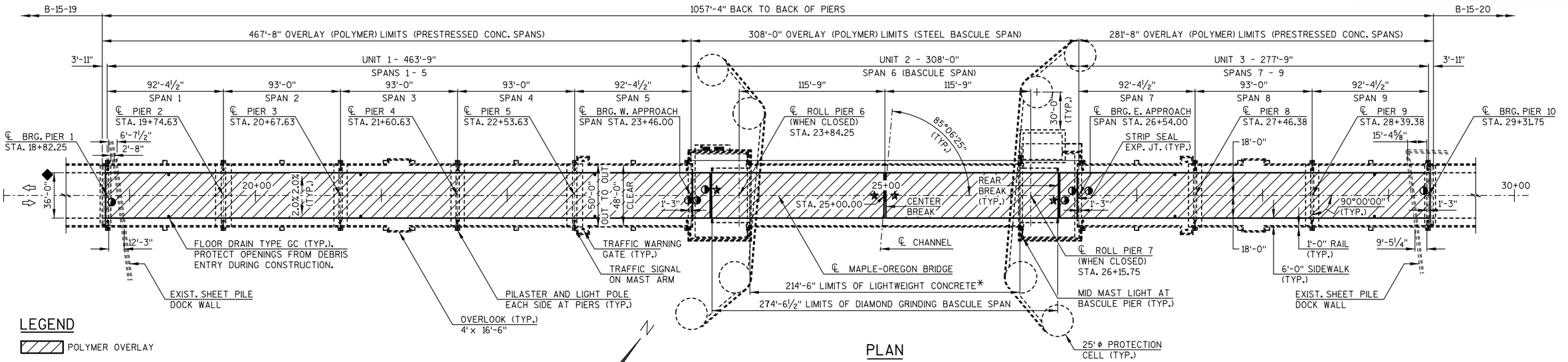
DRAWN BY DNJ | PLANS CK'D. MAD

TYPICAL SECTIONS, GENERAL NOTES AND QUANTITIES

SHEET 2 OF 2
23

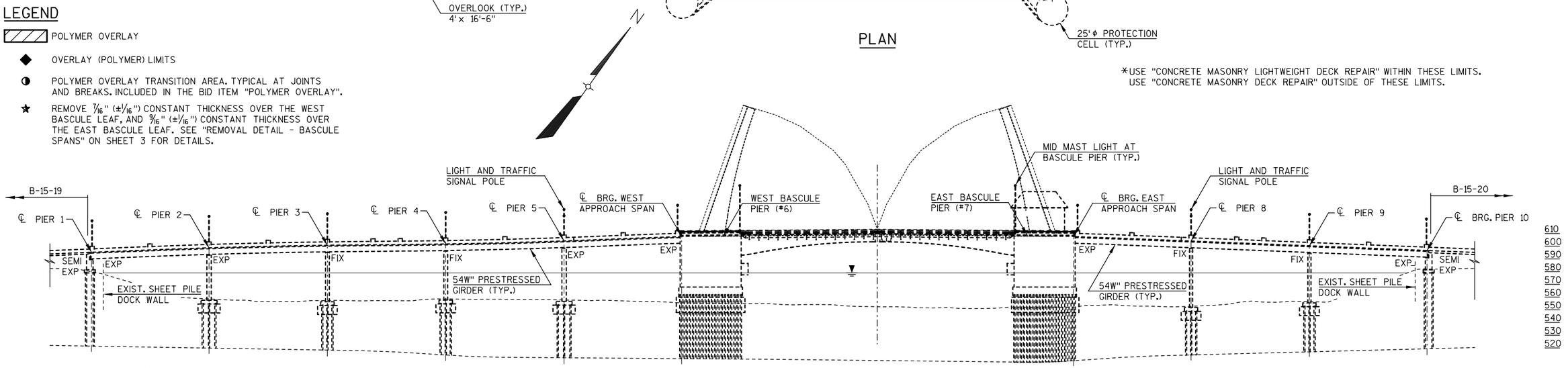
8

STATE PROJECT NUMBER
4997-05-71



PLAN

*USE "CONCRETE MASONRY LIGHTWEIGHT DECK REPAIR" WITHIN THESE LIMITS. USE "CONCRETE MASONRY DECK REPAIR" OUTSIDE OF THESE LIMITS.



ELEVATION

LEGEND

- POLYMER OVERLAY
- ◆ OVERLAY (POLYMER) LIMITS
- ◑ POLYMER OVERLAY TRANSITION AREA. TYPICAL AT JOINTS AND BREAKS. INCLUDED IN THE BID ITEM "POLYMER OVERLAY".
- ★ REMOVE 1/16" (±1/16") CONSTANT THICKNESS OVER THE WEST BASCULE LEAF, AND 9/16" (±1/16") CONSTANT THICKNESS OVER THE EAST BASCULE LEAF. SEE "REMOVAL DETAIL - BASCULE SPANS" ON SHEET 3 FOR DETAILS.

LIST OF DRAWINGS

STRUCTURE TYPE

SPANS 1-5 & 7-9 - 54"W PRESTRESSED CONCRETE GIRDER
SPAN 6 - WELDED STEEL PLATE GIRDER (BASCULE)

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTAL
509.0301	PREPARATION DECKS TYPE 1	SY	126
509.0302	PREPARATION DECKS TYPE 2	SY	50
509.0310.S	SAWING PAVEMENT DECK PREPARATION AREAS	LF	1,261
509.2100.S	CONCRETE MASONRY DECK REPAIR	CY	12
509.5100.S	POLYMER OVERLAY	SY	4,203
SPV.0035.01	CONCRETE MASONRY LIGHTWEIGHT DECK REPAIR	CY	2
SPV.0105.01	COUNTERWEIGHT CALCULATIONS AND SPAN BALANCING	LS	1
SPV.0180.01	DIAMOND GRINDING BASCULE SPAN	SY	1,106

DESIGN DATA

LIVE LOAD:
DESIGN LOAD: HS-20
INVENTORY RATING: HS-21
OPERATING RATING: HS-36
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS

MATERIAL PROPERTIES:
CONCRETE MASONRY
DECK PATCHING —— f'c = 4,000 PSI
LIGHTWEIGHT DECK PATCHING —— f'c = 4,000 PSI

GENERAL NOTES

THE PROPOSED WORK INCLUDES A POLYMER OVERLAY OF THE BRIDGE DECK AND MODIFICATIONS TO CORRECT BASCULE SPAN BALANCE.

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

THE COST FOR CONCRETE REMOVAL ON THE BASCULE SPAN IS INCLUDED IN THE BID ITEM "DIAMOND GRINDING BASCULE SPAN".

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

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAW CUT. SAWCUTS TO BE PAID FOR AS "SAWING PAVEMENT DECK PREPARATION AREAS."

AREAS OF PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE DETERMINED BY THE ENGINEER. AREAS REQUIRING FULL-DEPTH REPAIR ARE NOT ANTICIPATED.

TRAFFIC DATA

A.D.T. (2017) = 7,200
A.D.T. (2045) = N/A
R.D.S. = 30 MPH

WISCONSIN
MICHAEL A. DELEMONT
E-42185
FRANKLIN, WI
PROFESSIONAL ENGINEER
5/31/2019

STRUCTURES DESIGN CONTACTS

BUREAU OF STRUCTURES CONTACT - WILLIAM DREHER (608) 266-8489
CONSULTANT CONTACT - MICHAEL DELEMONT (414) 944-6200

NO.	DATE	REVISION	BY

AECOM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 08/26/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-15-23

MAPLE-OREGON BRIDGE OVER STURGEON BAY

COUNTY DOOR | ~~TOWN~~/CITY/~~VILLAGE~~ STURGEON BAY

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY	CEB	DESIGN CK'D.	MJA	DRAWN BY	DNJ	PLANS CK'D.	MAD

GENERAL PLAN AND ELEVATION

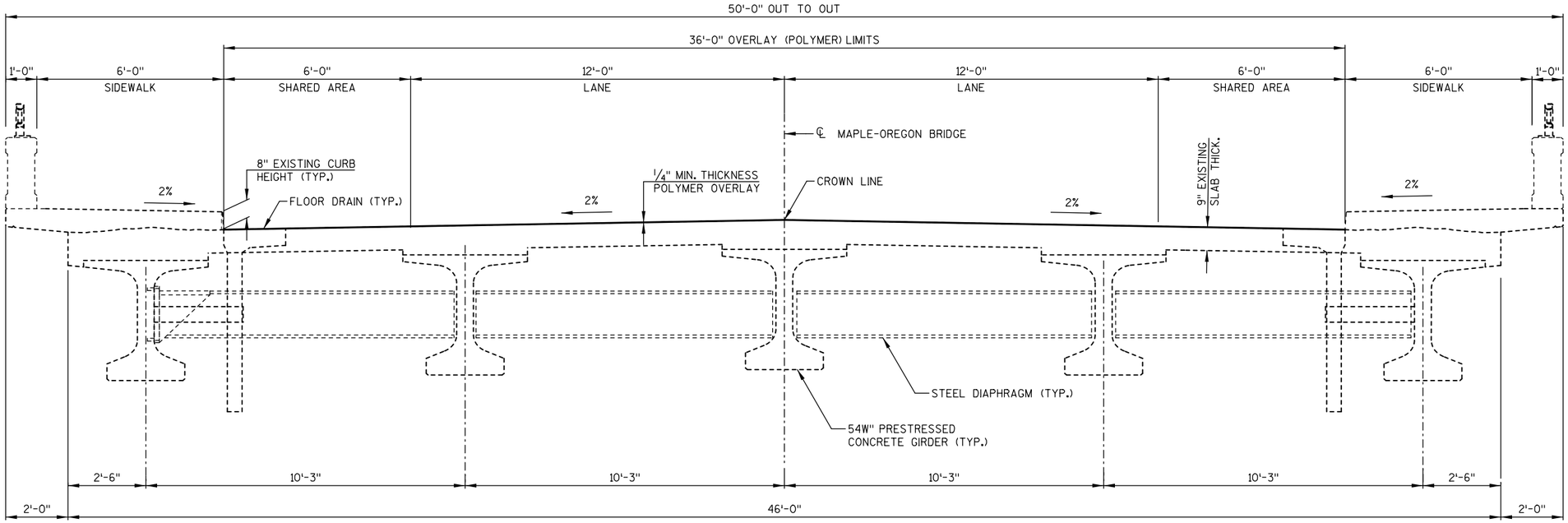
SHEET 1 OF 5
24

8

8

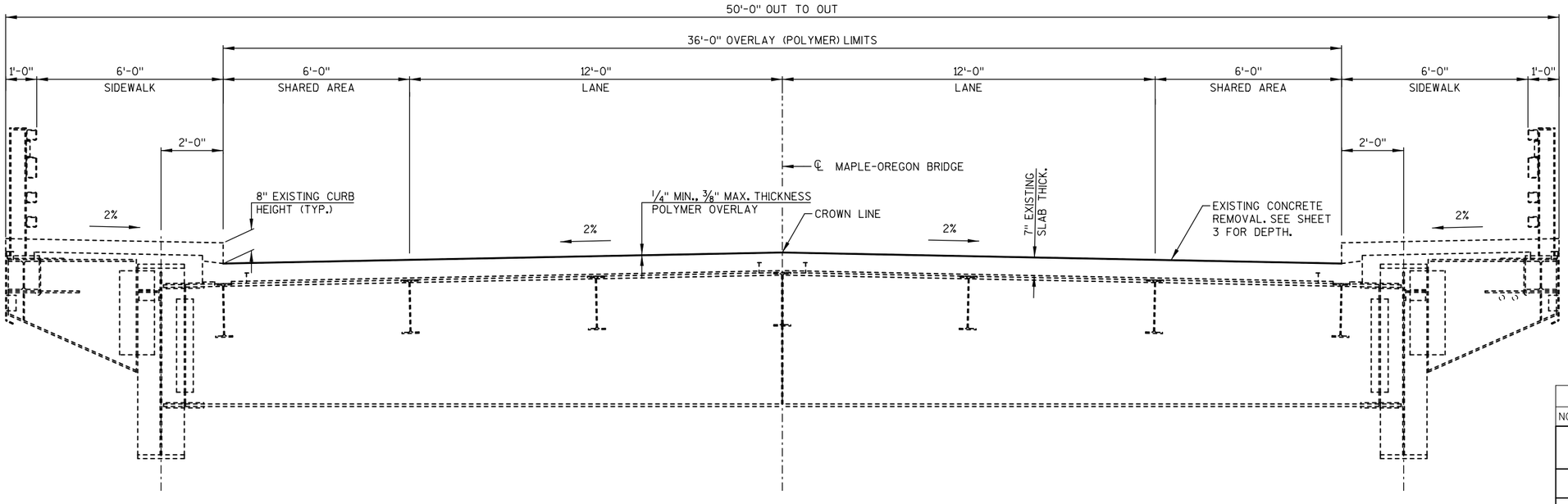
STATE PROJECT NUMBER

4997-05-71



TYPICAL SECTION OF APPROACH SPANS

UNIT 1 - SPANS 1-5
UNIT 3 - SPANS 7-9
(LOOKING EAST)



TYPICAL SECTION OF BASCULE SPAN

UNIT 2 - SPAN 6
(LOOKING EAST)

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-15-23

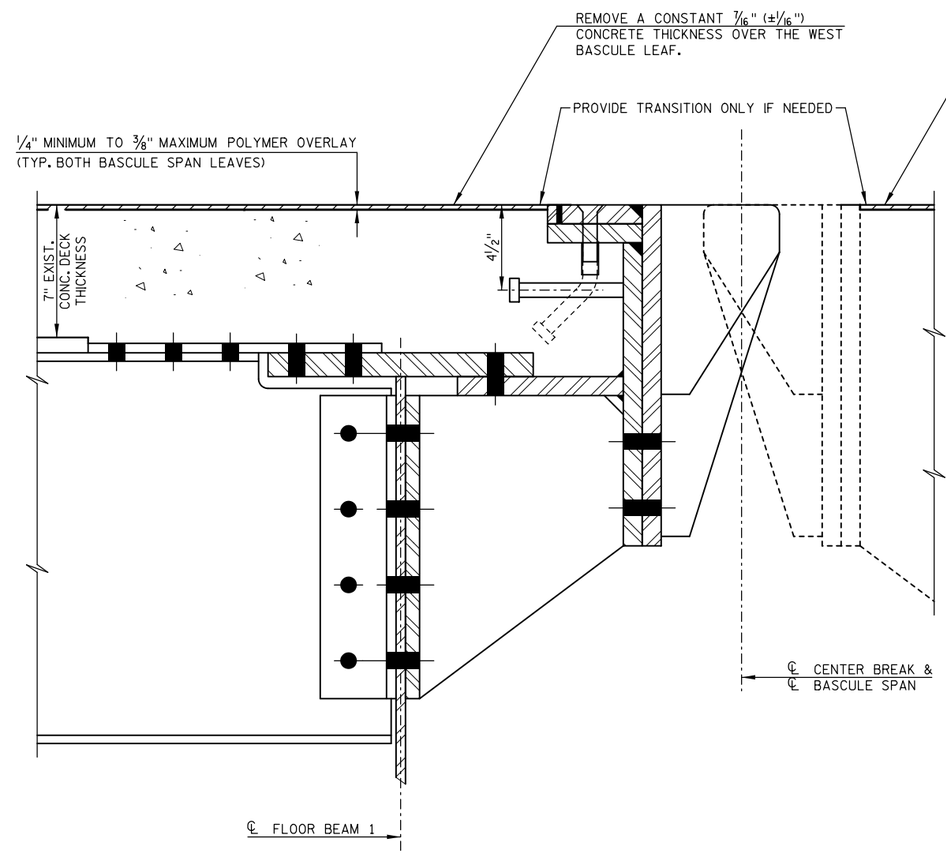
DRAWN BY DNJ | PLANS CK'D. MAD

TYPICAL SECTIONS

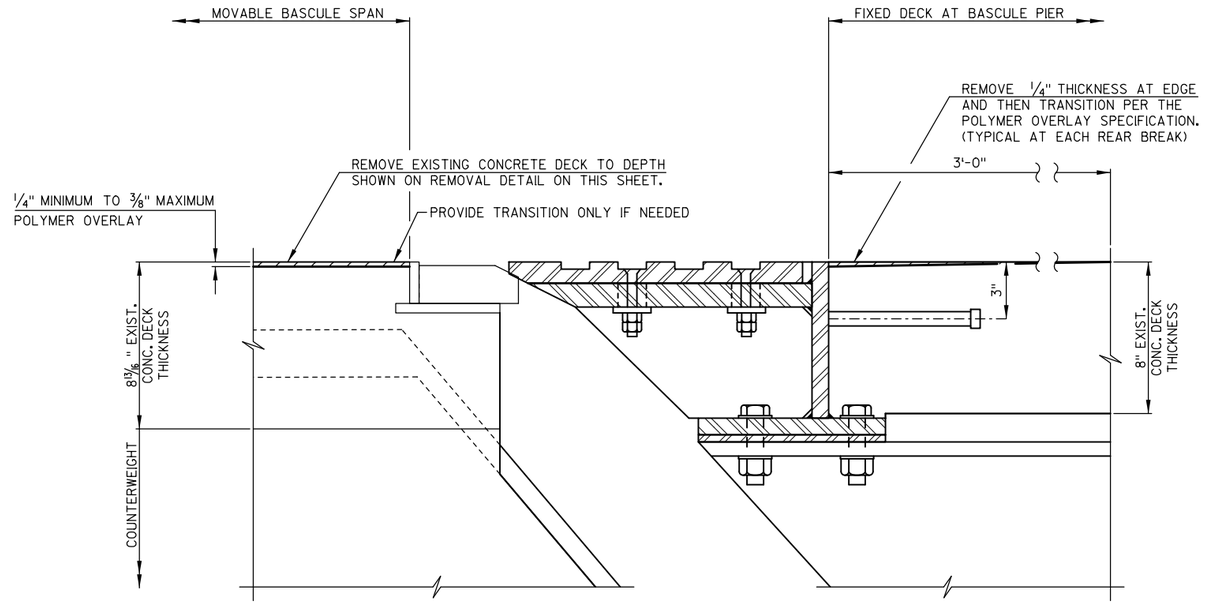
SHEET 2 OF 5
25

STATE PROJECT NUMBER

4997-05-71



REMOVAL DETAIL - BASCULE SPANS



TRANSITION DETAIL AT REAR BREAK

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-15-23

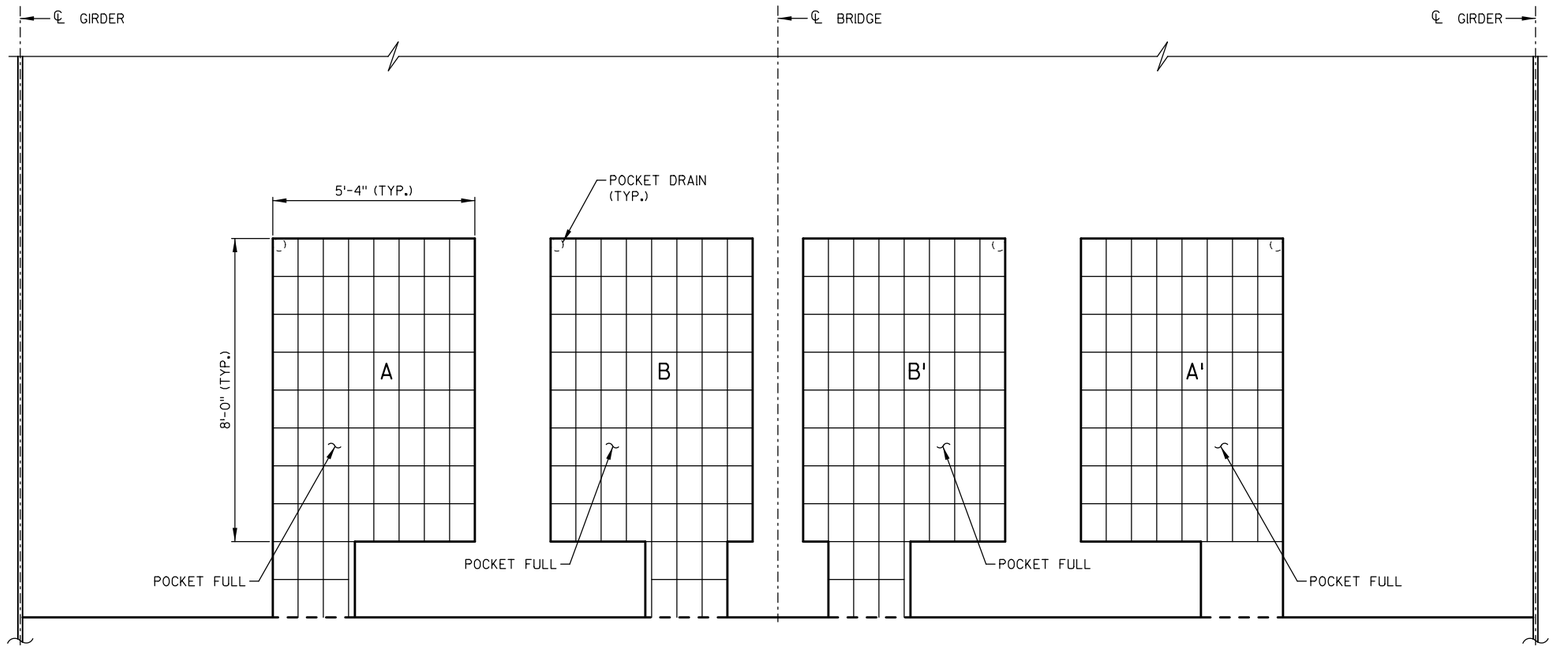
DRAWN BY DNJ | PLANS CK'D. MAD

POLYMER OVERLAY DETAILS

SHEET 3 OF 5
26

STATE PROJECT NUMBER

4997-05-71

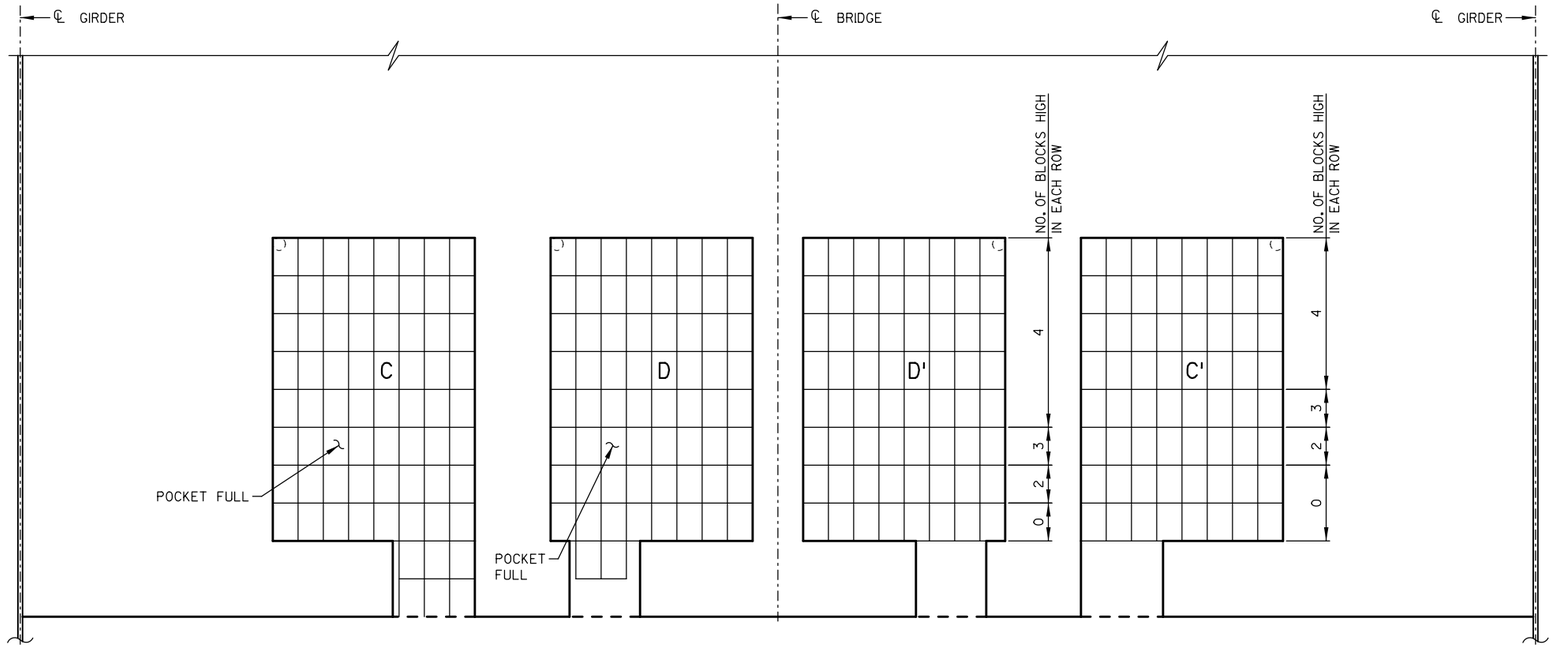


PLAN OF COUNTERWEIGHT - TOP ROW

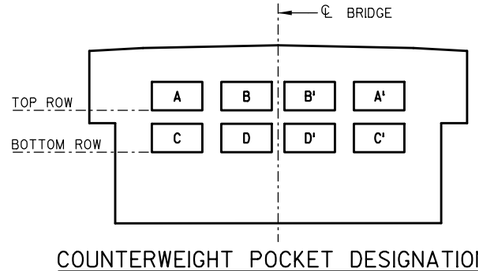
NOTES:
1. THE EXISTING BLOCK ARRANGEMENT SHOWN IS APPROXIMATE AND FOR INFORMATION ONLY.

2. THE CONTRACTOR SHALL DETERMINE THE ACTUAL BLOCK ARRANGEMENTS AND UTILIZE THEM IN AN INDEPENDENT MATHEMATICAL BALANCE CALCULATION TO BE SUBMITTED TO THE ENGINEER FOR REVIEW. SEE SPECIAL PROVISIONS.

3. THE CONTRACTOR SHALL MAKE ADJUSTMENTS TO COUNTERWEIGHT BLOCK CONFIGURATION AS DETERMINED BY BALANCE CALCULATIONS AND BALANCE TESTS IN THE FIELD IN COORDINATION WITH THE ENGINEER. SEE SPECIAL PROVISIONS.



PLAN OF COUNTERWEIGHT - BOTTOM ROW



COUNTERWEIGHT POCKET DESIGNATIONS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-15-23

DRAWN BY CEB | PLANS CK'D. MAD

EAST LEAF COUNTERWEIGHT SECTIONS

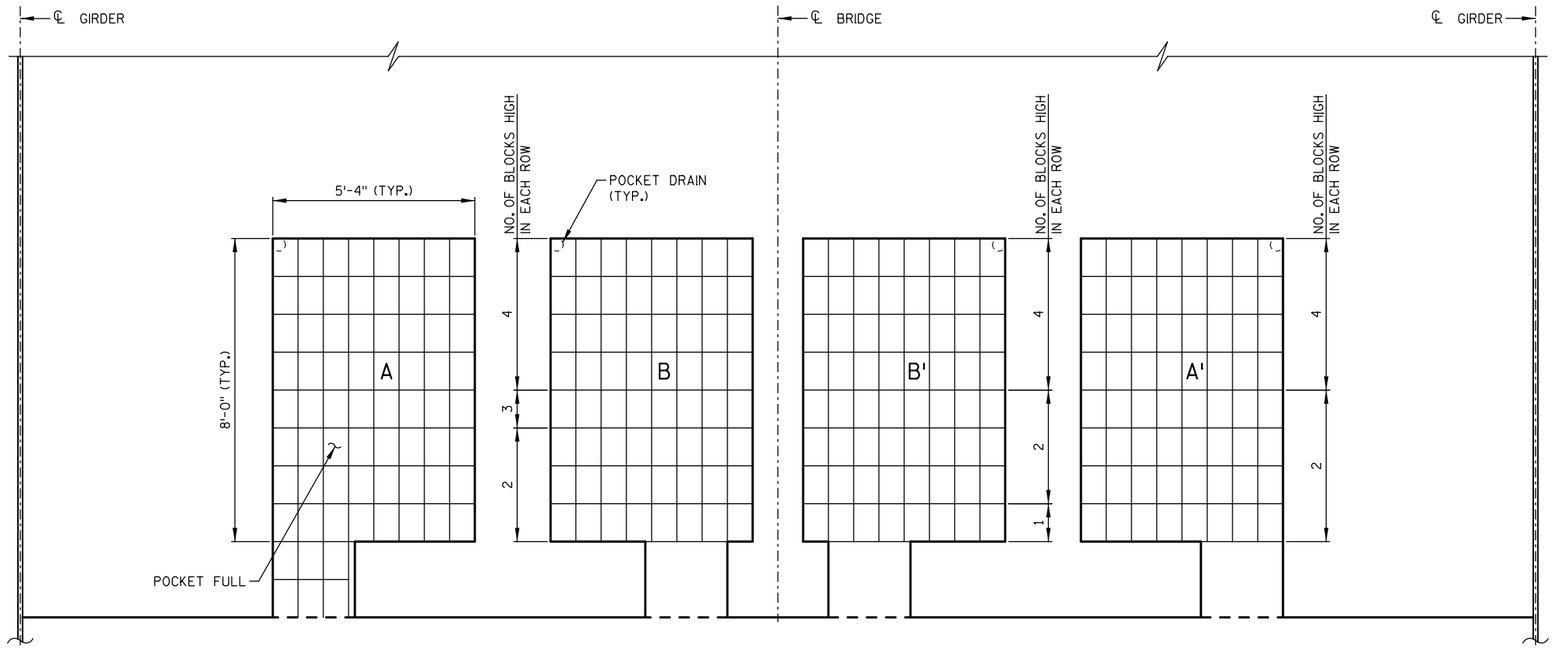
SHEET 4 OF 5
27

8

8

STATE PROJECT NUMBER

4997-05-71

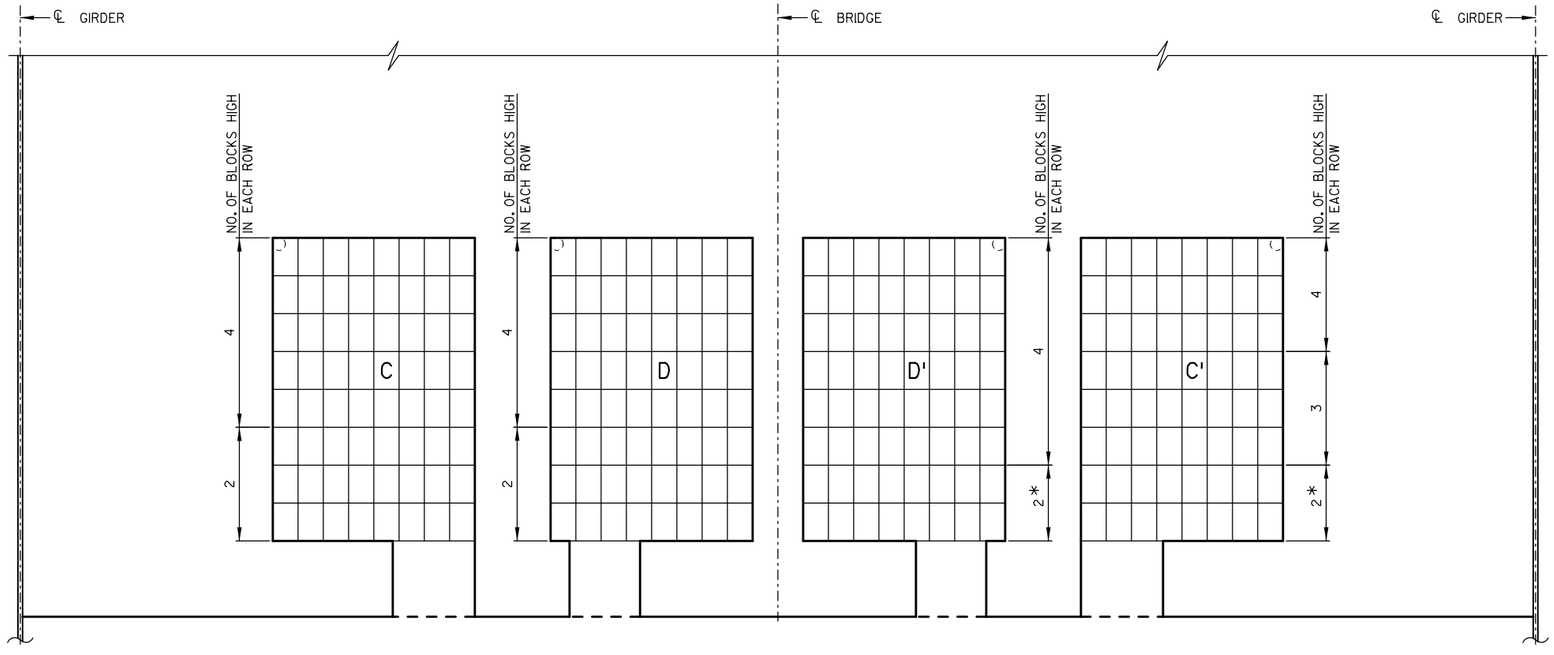


PLAN OF COUNTERWEIGHT - TOP ROW

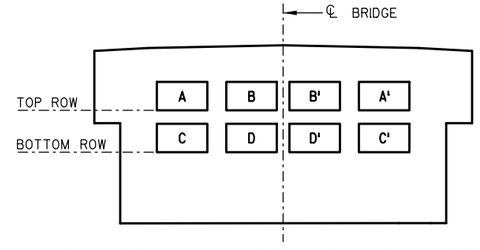
NOTES:
1. THE EXISTING BLOCK ARRANGEMENT SHOWN IS APPROXIMATE AND FOR INFORMATION ONLY.

2. THE CONTRACTOR SHALL DETERMINE THE ACTUAL BLOCK ARRANGEMENTS AND UTILIZE THEM IN AN INDEPENDENT MATHEMATICAL BALANCE CALCULATION TO BE SUBMITTED TO THE ENGINEER FOR REVIEW. SEE SPECIAL PROVISIONS.

3. THE CONTRACTOR SHALL MAKE ADJUSTMENTS TO COUNTERWEIGHT BLOCK CONFIGURATION AS DETERMINED BY BALANCE CALCULATIONS AND BALANCE TESTS IN THE FIELD IN COORDINATION WITH THE ENGINEER. SEE SPECIAL PROVISIONS.



PLAN OF COUNTERWEIGHT - BOTTOM ROW



COUNTERWEIGHT POCKET DESIGNATIONS

* SOME STEEL PLATES.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-15-23

DRAWN BY CEB | PLANS CK'D. MAD

WEST LEAF COUNTERWEIGHT SECTIONS

SHEET 5 OF 5
28

8

8

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov