EAU JANUARY 2016

PROJECT ID: 8996-00-97
WITH: N/A

COUNTY: CHIPPEWA

ORDER OF SHEETS

TOTAL SHEETS = 46

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

C CHIPPEWA FALLS, MAIN STREET

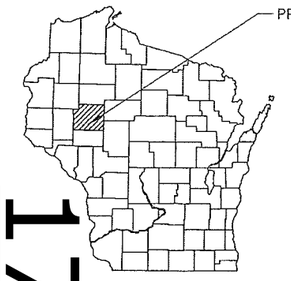
CHIPPEWA RIVER BRIDGE B-09-0099

LOCAL STREET

CHIPPEWA COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
8996-00-97	WISC 2016014	1

STATE PROJECT NUMBER
8996-00-97



DESIGN DESIGNATION

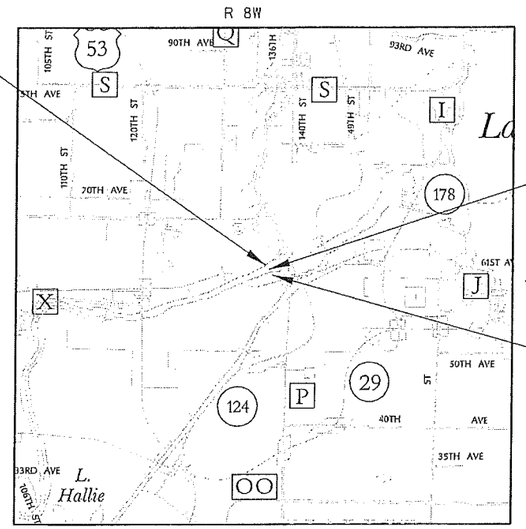
A.A.D.T.	2018	=	7700
A.A.D.T.	2028	=	9000
D.H.V.		=	13%
D.D.		=	58/42
T.		=	4.9%
DESIGN SPEED		=	25 MPH
ESALS		=	N/A

CONVENTIONAL SYMBOLS

COUNTY LINE		COMBUSTIBLE FLUIDS	CAUTION
CORPORATE LIMITS		UNDERGROUND UTILITIES	
PROPERTY LINE	P.L. + 58.1	GAS	G
LOT LINE		ELECTRIC	E
LIMITED EASEMENT		TELEPHONE OR TELEGRAPH	T
EARTHWORK BALANCE POINT		TV/CABLE	TV
EXISTING RIGHT OF WAY		SERVICE PEDESTAL	
PROPOSED OR NEW R/W LINE		POWER POLE	
SURVEY LINE		TELEPHONE POLE	
SLOPE INTERCEPT		RAILROAD	
ORIGINAL GROUND		SANITARY SEWER	SAN
MARSH OR ROCK PROFILE (To be noted as such)	ROCK	STORM SEWER	SS
		WATER	W
MARSH AREA		EXISTING CULVERT	
		PROPOSED CULVERT (Box or Pipe)	
WOODED OR SHRUB AREA		CULVERT (Profile View)	

N

END PROJECT 8996-00-97
STA 14+16.02



STRUCTURE B-09-0099
STA 10+00

BEGIN PROJECT 8996-00-97
STA 5+83.88

Y = 127287.7106
X = 171319.4534

LAYOUT
SCALE 0 0.5 MI

TOTAL NET LENGTH OF CENTERLINE =0.158 MI.

Coordinates on this plan are referenced to the Wisconsin County Coordinate System (WCCS), Chippewa County.

ACCEPTED FOR
CITY of CHIPPEWA FALLS
Sept. 30 2015 Richard J. Rubyan
DATE:

ORIGINAL PLANS PREPARED BY:
SEH
WISCONSIN TARA L KRISTA 37975 CHIPPEWA FALLS, WI 9-30-15 PROFESSIONAL ENGINEER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	SEH
Designer	SEH
Project Manager	TARA WEISS
Regional Examiner	DAN OJIBWAY
Regional Supervisor	TIM MASON
C.O. Examiner	

APPROVED FOR THE DEPARTMENT
DATE: 10/1/15 (Signature)

E

STANDARD ABBREVIATIONS

ABUT	ABUTMENT
AC	ACRE
AGG	AGGREGATE
AECPRC	APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE
ASPH	ASPHALTIC
AVG	AVERAGE
ADT	AVERAGE DAILY TRAFFIC
BF	BACK FACE
BM	BENCH MARK
BR	BRIDGE
CE	COMMERCIAL ENTRANCE
CL OR C/L OR ℄	CENTER LINE
△	CENTRAL ANGLE OR DELTA
CONC	CONCRETE
CPRC	CULVERT PIPE REINFORCED CONCRETE
CPRCHE	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL
CR	CREEK
CY	CUBIC YARD
C & G	CURB AND GUTTER
D	DEGREE OF CURVE
DHV	DESIGN HOUR VOLUME
DISCH	DISCHARGE
DG	DITCH GRADE
DWY	DRIVEWAY
X	EAST GRID COORDINATE
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
EOR	END POINT OF RADIUS
EL	ELEVATION
ENT	ENTRANCE
ESALS	EQUIVALENT SINGLE AXLE LOADS
EXC	EXCAVATION
EBS	EXCAVATION BELOW SUBGRADE
EXIST	EXISTING
FC	FACE OF CURB
FF	FACE TO FACE
FERT	FERTILIZE
FE	FIELD ENTRANCE
FL	FLOW LINE
FO	FIBER OPTIC
CWT	HUNDREDWEIGHT
HYD	HYDRANT
ID	INSIDE DIAMETER
INV	INVERT
IP	IRON PIPE ON PIN
LHF	LEFT-HAND FORWARD
L	LENGTH OF CURVE
LF	LINEAR FOOT
LC	LONG CHORD OF CURVE
LS	LUMP SUM
MH	MANHOLE
MOR	MID POINT OF RADIUS
NC	NORMAL CROWN
NO	NUMBER
OBLIT	OBLITERATE
PAVT	PAVEMENT
PE	PRIVATE ENTRANCE
PVRC	POINT OF VERTICAL REVERSE CURVE
QOR	QUARTER POINT OF RADIUS
R	RADIUS
REQ'D	REQUIRED
RES	RESIDENCE OR RESIDENTIAL
RHF	RIGHT-HAND FORWARD
R/W	RIGHT-OF-WAY
R	RIVER
RDWY	ROADWAY
R/L OR ℞	REFERENCE LINE
SALV	SALVAGED
SAN	SANITARY SEWER
SF	SQUARE FEET
SY	SQUARE YARD
SDD	STANDARD DETAIL DRAWINGS
STA	STATION
SS	STORM SEWER
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
SE	SUPERELEVATION RATE
TC	TOP OF CURB
T OR TN	TOWN
T	TRUCKS (PERCENT OF)
TYP	TYPICAL
VAR	VARIABLE
VC	VERTICAL CURVE
Y	NORTH GRID COORDINATE
YD	YARD

GENERAL NOTES

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE APPROXIMATE USGS DATUM.

WHEN THE QUANTITY OF BASE AGGREGATE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

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

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

CURVE DATA IS BASED ON THE ARC DEFINITION.

BEARINGS SHOWN ON THE PLANS ARE PROJECT BEARINGS TO THE NEAREST SECOND.

THE LOCATION OF ALL DRIVEWAYS WILL BE DETERMINED BY THE ENGINEER.
REMOVAL LIMITS WILL BE DETERMINED BY THE ENGINEER.

THE 4-INCH ASPHALTIC SURFACE SHALL BE CONSTRUCTED IN A 2-INCH LOWER LAYER AND A 2-INCH UPPER LAYER.

UTILITY CONTACTS

AT&T WISCONSIN
304 SOUTH DEWEY
EAU CLAIRE, WI 54701
TELEPHONE: 715.839.5565
ATTENTION: RICK PODOLAK
EMAIL: RP4514@ATT.COM

CHARTER COMMUNICATIONS
1201 MCCANN DRIVE
ALTOONA, WI 54720
TELEPHONE: 715.831.8940 EXT. 619
ATTENTION: SHANE YODER
EMAIL: SHANE.YODER@CHARTERCOM.COM

CHIPPEWA VALLEY INTERNETWORKING CONSORTIUM (CINC) - COMMUNICATION
105 GARFIELD AVENUE
EAU CLAIRE, WI 54701
TELEPHONE:715.836.5286
ATTENTION: DAREN BAUER
EMAIL: BAUERDP@UWEC.EDU

CITY OF CHIPPEWA FALLS
30 W. CENTRAL STREET
CHIPPEWA FALLS, WI, 54729
TELEPHONE: 715.726.2736
ATTENTION: RICK RUBENZER
EMAIL: RRUBENZER@CHIPPEWAFLLAS-WI.GOV

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

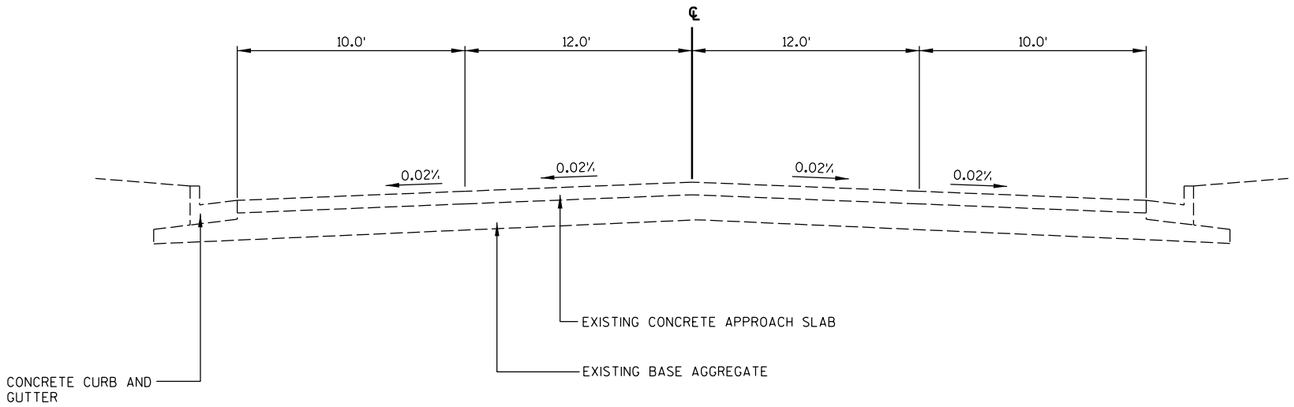
DESIGN CONTACT

SEH
10 NORTH BRIDGE STREET
CHIPPEWA FALLS, WI 54729
TELEPHONE: 715.720.6291
ATTENTION: TARA KRISTA
EMAIL: TKRISTA@SEHINC.COM

WDNR CONTACT

WI DEPT OF NATURAL RESOURCES
1300 WEST CLAIREMONT AVENUE
SPOONER, WI 54801
TELEPHONE: 715.839.1609
ATTENTION: CHRIS WILLGER
EMAIL: CHRISTOPHERJ.WILLGER@WISCONSIN.GOV

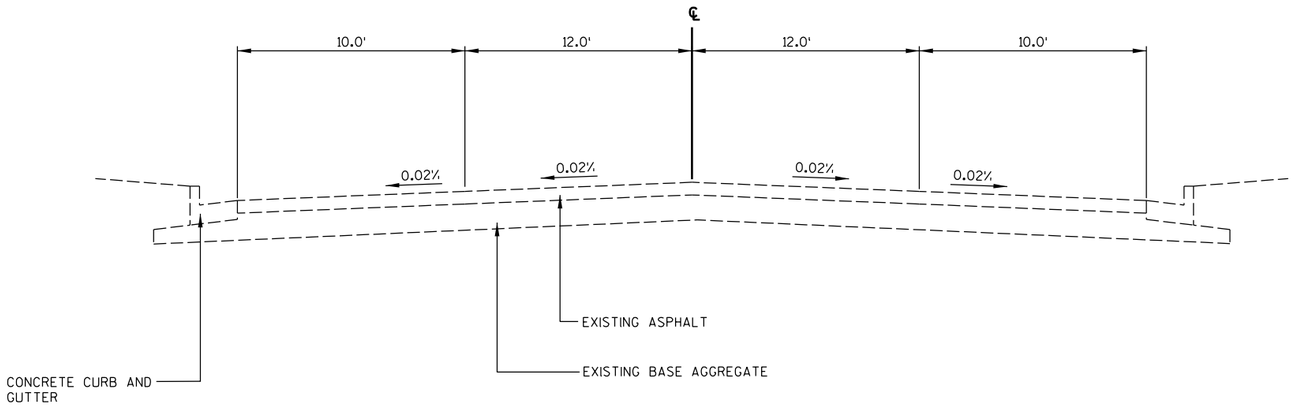
2



TYPICAL EXISTING SECTION

MAIN ST

STA 5+83.88 TO STA 6+05.55

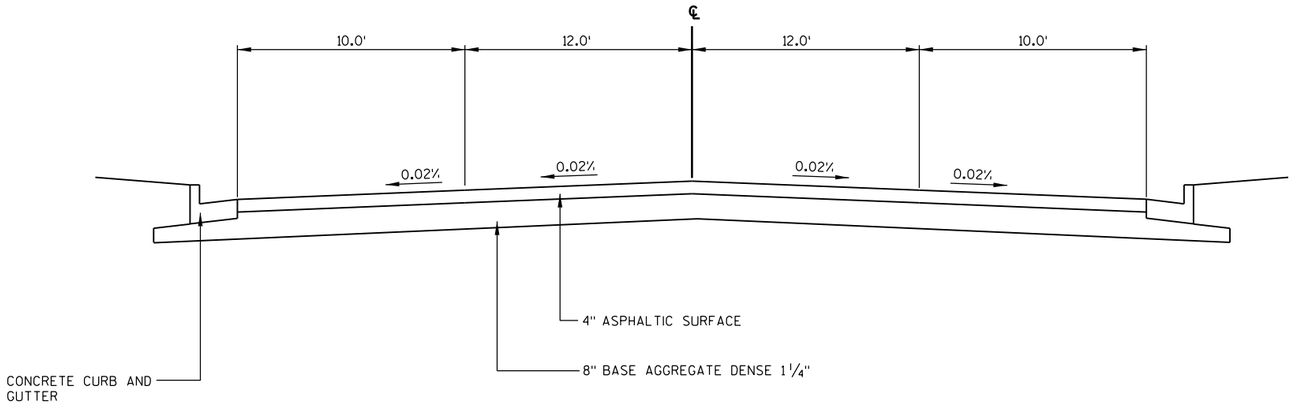


TYPICAL EXISTING SECTION

MAIN ST

STA 13+94.35 TO STA 14+16.02

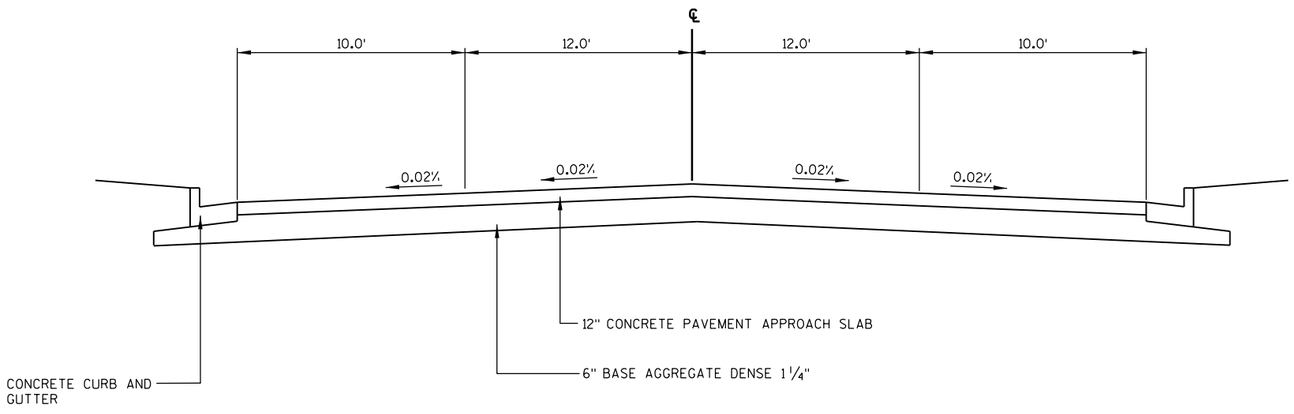
2



TYPICAL FINISHED SECTION

MAIN ST

STA 5+83.88 TO STA 5+89.55
STA 14+10.02 TO STA 14+16.02



TYPICAL FINISHED SECTION

MAIN ST

STA 5+89.55 TO STA 6+05.55
STA 13+94.35 TO STA 14+10.02

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POST(S)

XXX DENOTES SIGN NUMBER

N

CONCRETE CURB AND GUTTER
30-INCH TYPE A & D

REPLACE

1-2

W4-2R
36" X 36"

CONCRETE PAVEMENT 8-INCH

C

+33

BLDG

HWD MH

HWD MH

FO

W

5+00

6+00

7+00

8+00

9+00

10+00

11+00

12+00

13+00

14+00

N 19°30'51" W

A

B

FLAG

+98

PI 14+84.45

PI 14+85.24

ASPHALTIC
SURFACE

CONCRETE PAVEMENT
APPROACH SLAB

CONCRETE CURB AND GUTTER 30-INCH TYPE A & D

EXISTING MANHOLE TO REMAIN

CONCRETE SIDEWALK 6-INCH

EXISTING TO REMAIN

1-1

REPLACE

SPEED LIMIT 25

R2-1
24" X 30"

1-3

INLET PROTECTION TYPE C

CONCRETE CURB AND GUTTER
30-INCH TYPE A (TYP)

ASPHALTIC
SURFACE

EXISTING TO REMAIN

YELLOWSTONE TRAIL

REPLACE

RIGHT LANE MUST TURN RIGHT

R3-7R
30" X 30"

1-4

CONCRETE CURB AND
GUTTER 30-INCH
TYPE A

CONCRETE SIDEWALK
6-INCH

CONCRETE PAVEMENT
APPROACH SLAB

INLET PROTECTION TYPE C
& ADJUST INLET COVER

REPLACE

TO BUSINESS 53 29

1-5

1/2" EXP JT MAT'L
AROUND MH

EXIST MH

PROTECT EXISTING 2"
DIA TEL CONDUIT

LEGEND

(A) PAVEMENT MARKING EPOXY 4"
(DOUBLE YELLOW)

(B) PAVEMENT MARKING EPOXY 4"
(DASHED WHITE)

(C) PAVEMENT MARKING EPOXY 8"
(WHITE)

PROJECT NO: 8996-00-97	HWY: MAIN ST	COUNTY: CHIPPEWA	DETAIL SHEET	SHEET 5	E

LEGEND

VEHICLE DETOUR ROUTE (BY OTHERS)

PEDESTRIAN DETOUR ROUTE (BY OTHERS)

PROJECT LOCATION

DIRECTION OF TRAFFIC

CITY OF CHIPPEWA FALLS (BY OTHERS)

FOR VEHICLE DETOUR ROUTE SIGNING UTILIZE SDD:
"BARRICADES AND SIGNS FOR MAINLINE CLOSURES"

BY CONTRACTOR

FOR ROAD CLOSURE AND ADVANCED WARNING SIGNING, CONTRACTOR TO UTILIZE SDD: "BARRICADES AND SIGNS FOR MAINLINE CLOSURES

N

WOODWARD AVE
IRVINE ST
SUMMIT AVE.
A ST.
SUMMIT AVE.
IRVINE ST
CHIPPEWA MALL DR
CHIPPEWA MALL DR
CHIPPEWA MALL DR
SUMMIT AVE
CTH J / E. PARK AVE
CTH J / E. PARK AVE
CN RAILROAD
CN RAILROAD
S MAIN ST
RIVERSIDE DR
CHIPPEWA RIVER
W RIVER ST
STH 124 / S. BRIDGE ST SB
STH 124 / S. BRIDGE ST NB

PEDESTRIAN DETOUR

VEHICLE DETOUR

DETOUR
M4-9BL
30"X24"

DETOUR
M4-9BR
30"X24"

R9-9
30"X18"
SIDEWALK CLOSED
DETOUR
M4-9BR
30"X24"

R9-9
30"X18"
SIDEWALK CLOSED
DETOUR
M4-9BL
30"X24"

DETOUR
M4-9BR
30"X24"

DETOUR
M4-9BL
30"X24"

DETOUR
M4-9BL
30"X24"

DETOUR
M4-9BL
30"X24"

PROJECT NO: 8996-00-97	HWY: MAIN ST	COUNTY: CHIPPEWA	DETOUR ROUTE FOR INFORMATION ONLY (BY OTHERS)	SHEET 6	E

DATE 21OCT15 — E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	8996-00-97 QUANTITY
0010	203.0225.S	Debris Containment (structure) 01. B-9-99	LS	1.000	1.000
0020	204.0100	Removing Pavement	SY	108.000	108.000
0030	204.0150	Removing Curb & Gutter	LF	65.000	65.000
0040	204.0155	Removing Concrete Sidewalk	SY	31.000	31.000
0050	205.0100	Excavation Common	CY	70.000	70.000
0060	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 8996-00-97	LS	1.000	1.000
0070	211.0200	Prepare Foundation for Concrete Pavement (project) 01. 8996-00-97	LS	1.000	1.000
0080	213.0100	Finishing Roadway (project) 01. 8996-00-97	EACH	1.000	1.000
0090	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	81.000	81.000
0100	415.0080	Concrete Pavement 8-Inch	SY	3.000	3.000
0110	415.0410	Concrete Pavement Approach Slab	SY	154.000	154.000
0120	416.0610	Drilled Tie Bars	EACH	10.000	10.000
0130	465.0105	Asphaltic Surface	TON	14.000	14.000
0140	502.0717.S	Crack Sealing Epoxy	LF	3,000.000	3,000.000
0150	502.3100	Expansion Device (structure) 01. B-9-99	LS	1.000	1.000
0160	502.3200	Protective Surface Treatment	SY	4,210.000	4,210.000
0170	502.5005	Masonry Anchors Type L No. 5 Bars	EACH	108.000	108.000
0180	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	2,600.000	2,600.000
0190	506.0105	Structural Steel Carbon	LB	550.000	550.000
0200	509.0301	Preparation Decks Type 1	SY	70.000	70.000
0210	509.0302	Preparation Decks Type 2	SY	60.000	60.000
0220	509.0500	Cleaning Decks	SY	4,170.000	4,170.000
0230	509.1000	Joint Repair	SY	50.000	50.000
0240	509.1200	Curb Repair	LF	20.000	20.000
0250	509.1500	Concrete Surface Repair	SF	10.000	10.000
0260	509.2000	Full-Depth Deck Repair	SY	300.000	300.000
0270	509.2500	Concrete Masonry Overlay Decks	CY	184.000	184.000
0280	514.0900	Adjusting Floor Drains	EACH	8.000	8.000
0290	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	53.000	53.000
0300	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	12.000	12.000
0310	602.0415	Concrete Sidewalk 6-Inch	SF	273.000	273.000
0320	611.8115	Adjusting Inlet Covers	EACH	1.000	1.000
0330	619.1000	Mobilization	EACH	1.000	1.000
0340	628.1905	Mobilizations Erosion Control	EACH	1.000	1.000
0350	628.1910	Mobilizations Emergency Erosion Control	EACH	1.000	1.000
0360	628.7015	Inlet Protection Type C	EACH	3.000	3.000
0370	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	2.000	2.000
0380	637.2210	Signs Type II Reflective H	SF	30.250	30.250
0390	637.2230	Signs Type II Reflective F	SF	9.000	9.000
0400	638.2602	Removing Signs Type II	EACH	4.000	4.000
0410	638.3000	Removing Small Sign Supports	EACH	7.000	7.000
0420	642.5001	Field Office Type B	EACH	1.000	1.000
0430	643.0100	Traffic Control (project) 01. 8996-00-97	EACH	1.000	1.000
0440	643.0420	Traffic Control Barricades Type III	DAY	714.000	714.000
0450	643.0705	Traffic Control Warning Lights Type A	DAY	1,428.000	1,428.000
0460	643.0900	Traffic Control Signs	DAY	918.000	918.000
0470	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0480	646.0106	Pavement Marking Epoxy 4-Inch	LF	2,050.000	2,050.000
0490	646.0126	Pavement Marking Epoxy 8-Inch	LF	172.000	172.000
0500	650.7000	Construction Staking Concrete Pavement	LF	32.000	32.000

DATE 21OCT15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	8996-00-97 QUANTITY
0510	650.9910	Construction Staking Supplemental Control (project) 01. 8996-00-97	LS	1.000	1.000
0520	690.0150	Sawing Asphalt	LF	95.000	95.000
0530	690.0250	Sawing Concrete	LF	26.000	26.000
0540	SPV.0060	Special 01. Cleaning and Painting Bearings	EACH	18.000	18.000
0550	SPV.0060	Special 02. Installing Utility Support for CINC	EACH	4.000	4.000
0560	SPV.0060	Special 03. Installing Utility Support for City of Chippewa Falls	EACH	10.000	10.000

3

REMOVING PAVEMENT

STATION - STATION	LOCATION	204.0100 SY	REMARKS
MAIN ST			
5+84 - 6+06	LT & RT	108	CONCRETE APPROACH SLAB
	TOTAL	108	

REMOVING CURB & GUTTER

STATION - STATION	LOCATION	204.0150 LF
MAIN ST		
5+84 - 5+90	LT & RT	12
5+90 - 5+95	LT	5
5+90 - 6+06	RT	16
13+94 - 14+10	LT & RT	32
	TOTAL	65

REMOVING CONCRETE SIDEWALK

STATION - STATION	LOCATION	204.0155 SY
MAIN ST		
5+84 - 6+06	RT	16
13+94 - 14+10	RT	15
	TOTALS	31

EXCAVATION COMMON

STATION - STATION	LOCATION	205.0100 CY
MAIN ST		
13+94 - 14+16	LT & RT	70
	TOTAL	70

PREPARE FOUNDATION

STATION - STATION	LOCATION	211.0100 FOR ASPHALTIC PAVING LS	211.0200 FOR CONCRETE PAVEMENT LS	REMARKS
MAIN ST				
5+84 - 14+16	LT & RT	1		ASPHALTIC SURFACE
5+90 - 14+10	LT & RT		1	CONCRETE APPROACH SLAB
	TOTAL	1	1	

FINISHING ROADWAY (8996-00-97)

STATION - STATION	LOCATION	213.0100 EACH
MAIN ST.		
5+84 - 14+16	LT & RT	1
	TOTAL	1

BASE AGGREGATE DENSE 1 1/4-INCH

STATION - STATION	LOCATION	305.0120 TON	REMARKS
MAIN ST			
5+84 - 5+90	LT & RT	13	ASPHALTIC SURFACE
5+90 - 6+06	LT & RT	26	CONCRETE APPROACH SLAB
13+94 - 14+10	LT & RT	26	CONCRETE APPROACH SLAB
14+10 - 14+16	LT & RT	16	ASPHALTIC SURFACE
	TOTAL	81	

CONCRETE PAVEMENT 8-INCH

STATION - STATION	LOCATION	415.0080 SY
MAIN ST		
5+95 - 6+06	LT	3
	TOTALS	3

CONCRETE PAVEMENT APPROACH SLAB

STATION - STATION	LOCATION	415.0410 SY
MAIN ST		
5+90 - 6+06	LT & RT	77
13+94 - 14+10	LT & RT	77
	TOTAL	154

ASPHALTIC SURFACE

STATION - STATION	LOCATION	465.0105 TON
MAIN ST.		
5+84 - 5+90	LT & RT	6
14+10 - 14+16	LT & RT	8
	TOTAL	14

CONCRETE CURB & GUTTER

STATION - STATION	LOCATION	601.0409 30-INCH TYPE A LF	601.0411 30-INCH TYPE D LF	416.0610 DRILLED TIE BARS EACH
MAIN ST				
5+84 - 5+90	LT & RT		12	
5+90 - 5+95	LT	5		
5+90 - 6+06	RT	16		
13+94.35 - 14+10	RT	16		5
13+94.35 - 14+10	LT	16		5
	TOTAL	53	12	10

CONCRETE SIDEWALK 6-INCH

STATION - STATION	LOCATION	602.0415 SF
MAIN ST		
5+84 - 6+06	RT	143
13+94 - 14+10	RT	130
	TOTALS	273

MOBILIZATION

STATION - STATION	LOCATION	619.1000* EACH
MAIN ST		
5+84 - 14+16	LT & RT	0.05
	TOTAL	0.05

*QUANTITY SHOWN ELSEWHERE IN PLANS

ADJUSTING INLET COVERS

STATION - STATION	LOCATION	611.8115 EACH
MAIN ST		
14+11	RT	1
	TOTALS	1

EROSION CONTROL ITEMS

STATION - STATION	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.7015 INLET PROTECTION TYPE C EACH
MAIN ST				
5+84 - 14+16	LT & RT	1	1	
14+11	LT & RT			2
14+32	LT			1
	TOTALS	1	1	3

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010, UNLESS OTHERWISE NOTED.

3

SIGNING ITEMS

SIGN GROUP NUMBER	SIGN CODE	SIGN MESSAGE	SIGN SIZE W X H (INCHES)	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	634.0616 4X6-INCH X 16-FT EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPORTS EACH	REMARKS
MAIN ST									
1-1	M1-85	WI HERITAGE							EXISTING TO REMAIN
		J. LEINENKUGAL BREWING CO. #255							EXISTING TO REMAIN
1-2	W4-2R	RIGHT LANE ENDS	36 X 36		9.00	1	1	1	REPLACE
1-3	R2-1	SPEED LIMIT 25	24 X 30	5.00			1		BAND TO LIGHT POST
1-4	R3-7R	RIGHT LANE MUST TURN RIGHT	30 X 30	6.25			1		REPLACE
		YELLOWSTONE TRAIL							EXISTING TO REMAIN
1-5	J2-2	TO	48 X 57	19.00		1	1	1	REPLACE
		USH 53						1	
		LEFT ARROW						1	
		BUSINESS						1	
		STH 29						1	
		DOUBLE ARROW						1	
		TOTALS		30.25	9.00	2	4	7	

CONSTRUCTION STAKING

STATION - STATION	LOCATION	650.7000 CONCRETE PAVEMENT LF	650.9910 SUPPLEMENTAL CONTROL (8996-00-97) LS
MAIN ST			
5+84 - 14+16	LT & RT		1
5+90 - 6+06	LT & RT	16	
13+94 - 14+10	LT & RT	16	
	TOTALS	32	1

3

FIELD OFFICE TYPE B

STATION - STATION	LOCATION	642.5001 EACH
MAIN ST		
5+84 - 14+16	LT & RT	1
	TOTAL	1

TRAFFIC CONTROL

STATION - STATION	LOCATION	643.0100 (8896-00-97) EACH	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0900 TRAFFIC CONTROL SIGNS DAY	643.1050 SIGNS PCMS DAYS
MAIN ST						
5+84 - 14+16	LT & RT	1	714	1428	918	14
	TOTAL	1	714	1428	918	14

SAWING

STATION - STATION	LOCATION	690.0150 ASPHALT LF	690.0250 CONCRETE LF	REMARKS
MAIN ST				
5+84	LT & RT	44		
5+90	LT & RT		11.5	SIDEWALK & CURB & GUTTER
14+10	LT & RT		14.5	SIDEWALK & CURB & GUTTER
14+16	LT & RT	51		
	TOTAL	95	26	

PAVEMENT MARKING

STATION - STATION	LOCATION	646.0106 EPOXY 4-INCH LF	646.0126 EPOXY 8-INCH LF	REMARKS
MAIN ST				
5+84 - 14+16	LT & RT	1662		DOUBLE YELLOW
5+84 - 6+33	LT		48	WHITE
5+84 - 12+92	RT	188		WHITE SKIP
6+33 - 14+16	LT	200		WHITE SKIP
12+92 - 14+16	RT		124	WHITE
	TOTALS	2050	172	

INSTALLING UTILITY SUPPORT

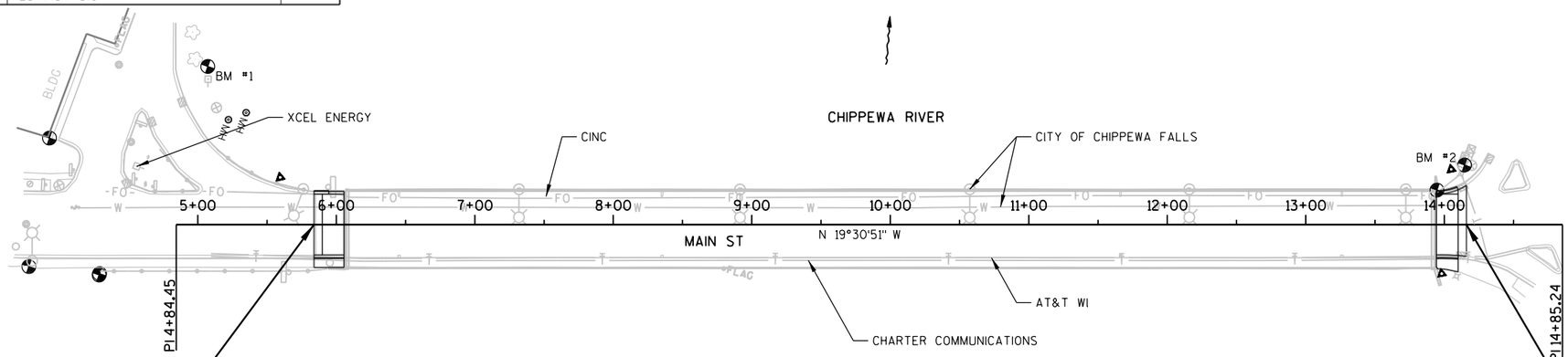
STATION - STATION	LOCATION	SPV.0060.02** FOR CINC EACH	SPV.0060.03* FOR CITY OF CHIPPEWA FALLS EACH
MAIN ST.			
5+84 - 14+16	LT & RT	4	10
	TOTAL	4	10

*CATEGORY 0030
**CATEGORY 0040

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010, UNLESS OTHERWISE NOTED.

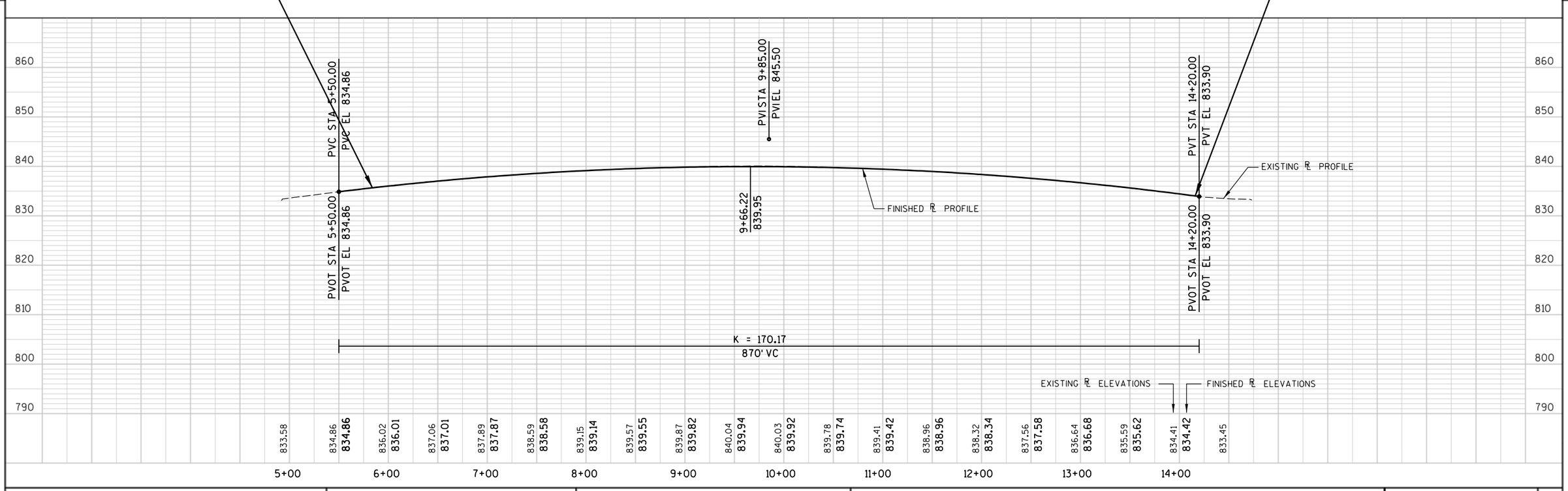
BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
1	5+07.37, 105.1' LT	WEATHER SIREN	832.55
2	14+14.65, 43.0' LT	ALUMINUM DISK	835.068



BEGIN PROJECT
STA 5+83.88
MATCH EXISTING
SAWCUT REQ'D
Y= 127287.7106
X= 171319.4534

END PROJECT
STA 14+16.02
MATCH EXISTING
SAWCUT REQ'D



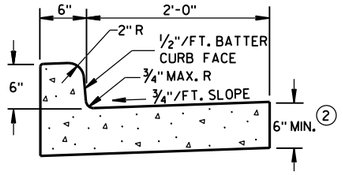
PROJECT NO: 8996-00-97	HWY: MAIN ST	COUNTY: CHIPPEWA	PLAN AND PROFILE	SHEET 11	E

Standard Detail Drawing List

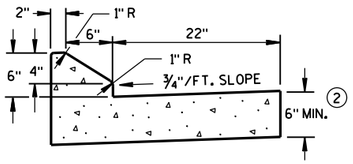
08D01-18	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08E10-02	INLET PROTECTION TYPE A, B, C AND D
13B02-08A	CONCRETE BRIDGE APPROACH
13B02-08B	STRUCTURAL APPROACH SLAB AND CONCRETE BRIDGE APPROACH
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C08-16A	PAVEMENT MARKING (MAINLINE)

6

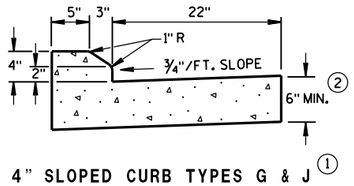
6



TYPES A & D ①

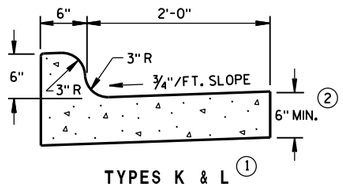


6" SLOPED CURB TYPES G & J ①

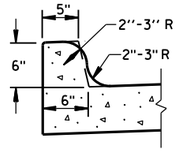


4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

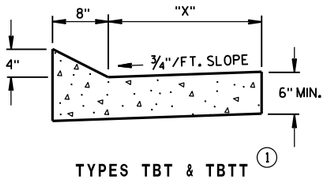


TYPES K & L ①



OPTIONAL CURB SHAPE FOR TYPES K & L ①

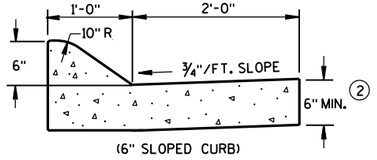
CONCRETE CURB & GUTTER 30"



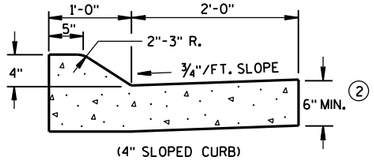
TYPES TBT & TBTT ①

CONCRETE CURB & GUTTER

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

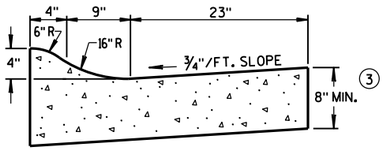


(6" SLOPED CURB)



(4" SLOPED CURB)

TYPES A & D ①



4" SLOPED CURB TYPES R & T ① ④

CONCRETE CURB & GUTTER 36"

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. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

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.

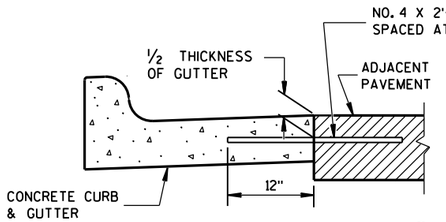
① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

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.

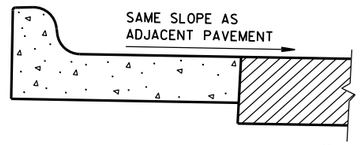
③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

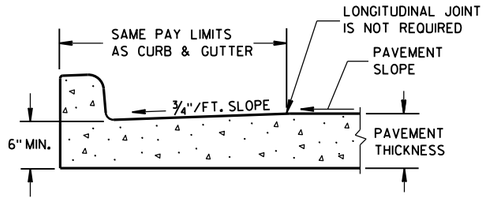
⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



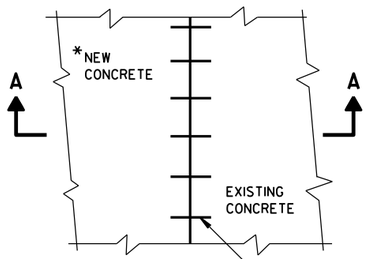
TYPICAL TIE BAR LOCATION ①



REVERSE SLOPE GUTTER ⑤
(TYPICAL FOR ALL CURB & GUTTER TYPES)

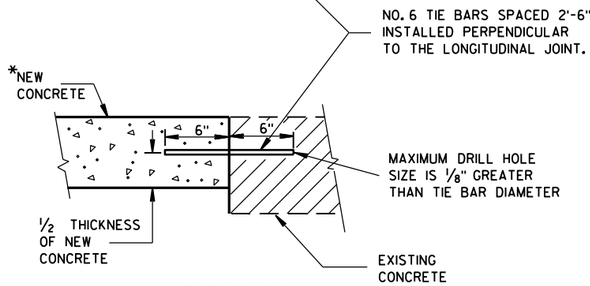


PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



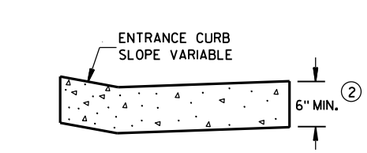
PLAN VIEW

*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

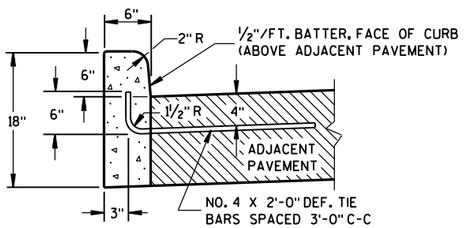


SECTION A-A

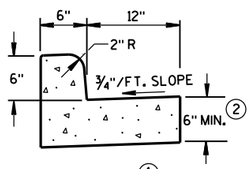
TIE BARS DRILLED
INTO EXISTING PAVEMENT



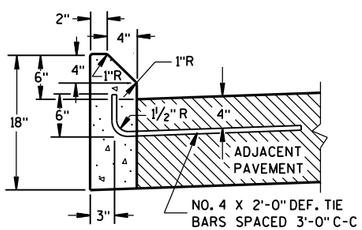
DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)



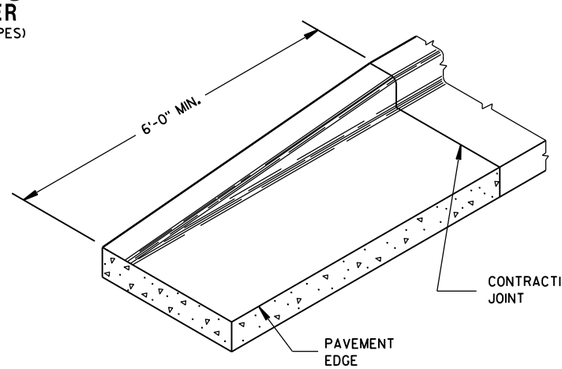
① TYPES A & D



① TYPES A & D
CONCRETE CURB & GUTTER 18"



① TYPES G & J



END SECTION CURB & GUTTER

CONCRETE CURB

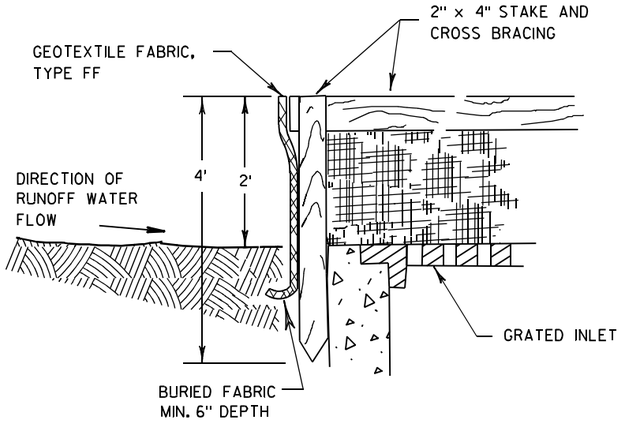
CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

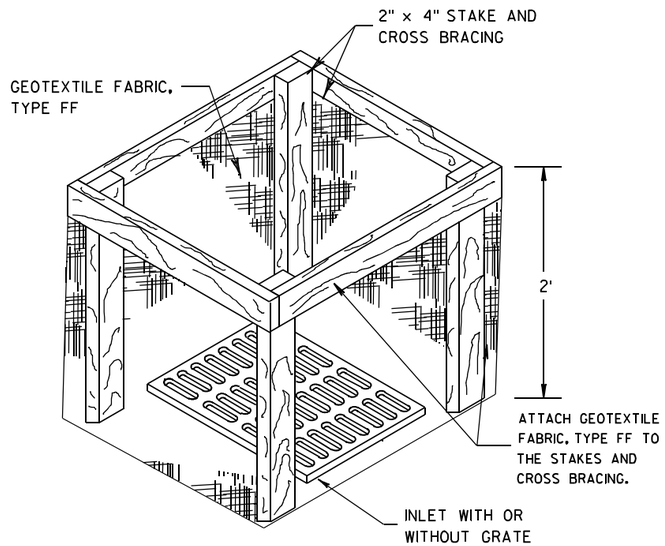
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

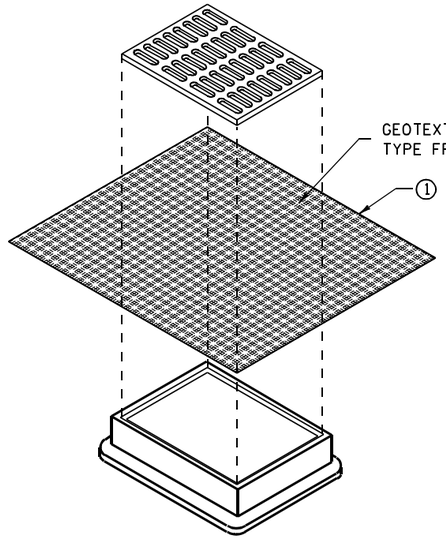
6

S.D.D. 8 D 1-18



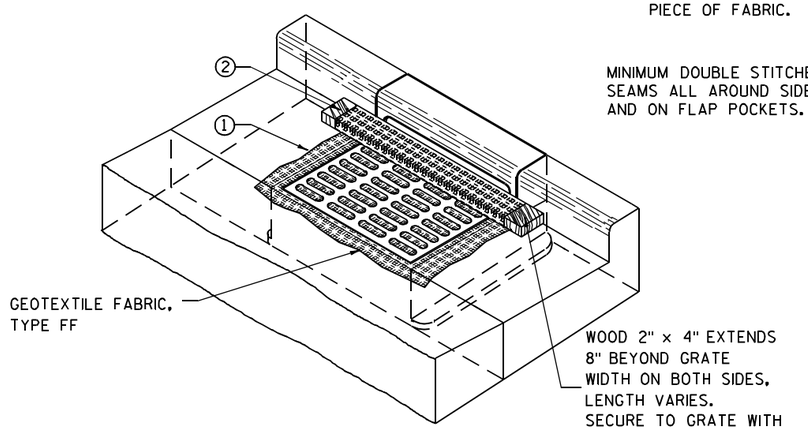


INLET PROTECTION, TYPE A

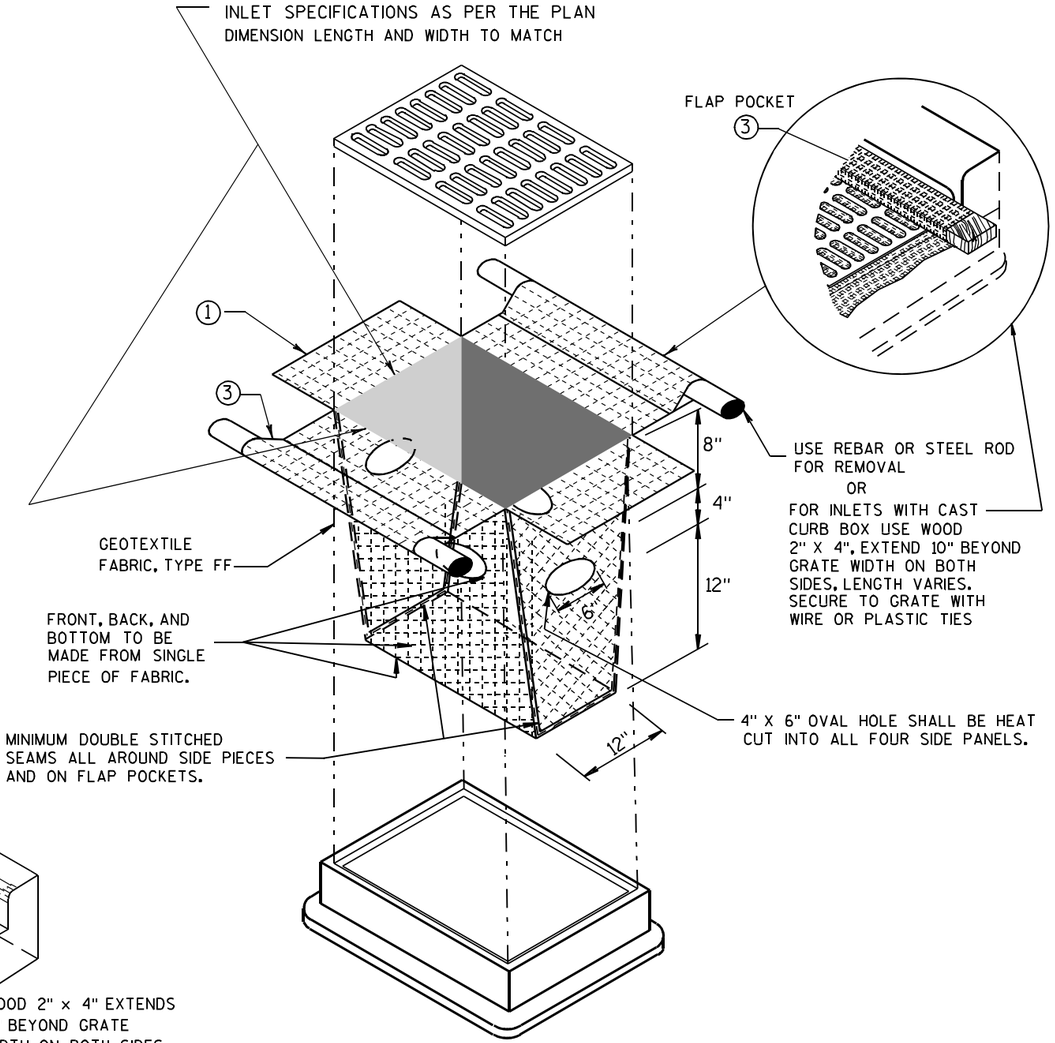


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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.

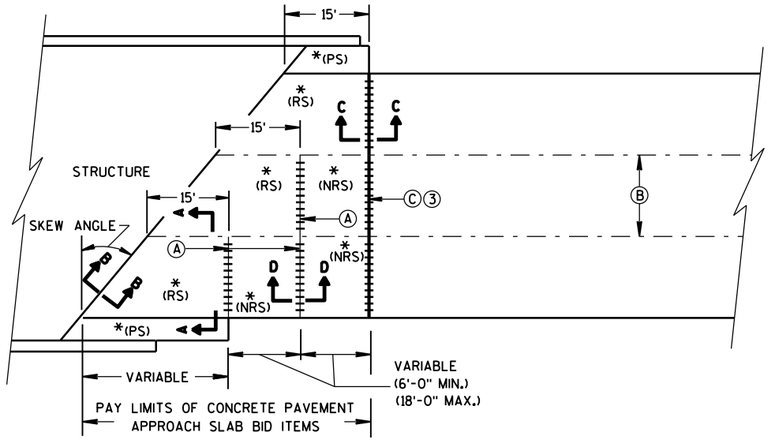
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

INLET PROTECTION
TYPE A, B, C, AND D

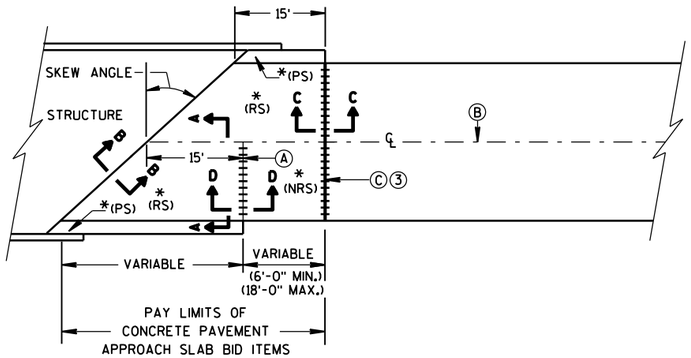
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

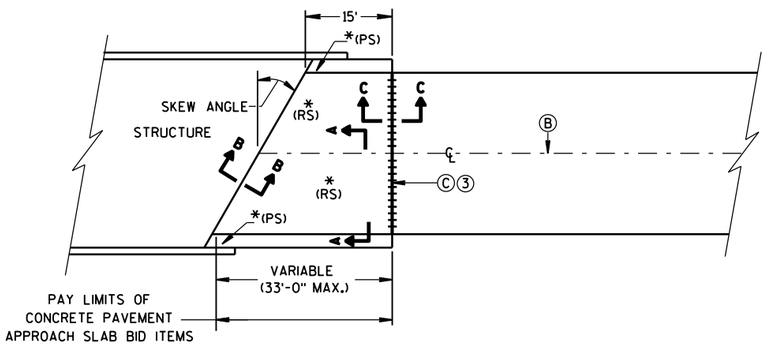
6
S.D.D. 8 E 10-2



SKEWED APPROACH
(PAVEMENT MORE THAN 2 LANES)



SKEWS >20°
(PAVEMENT WIDTH ≤30')



SKEWS ≤20°
(PAVEMENT WIDTH ≤30')

APPROACH SLAB AND ADJACENT PAVEMENT

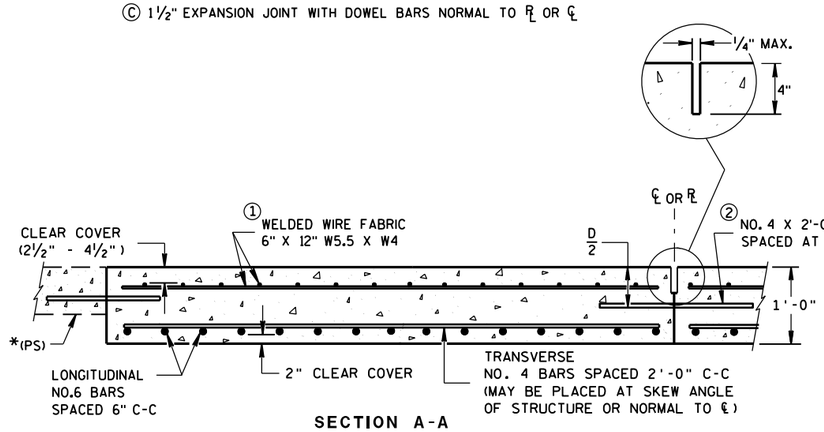
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB
(SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

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

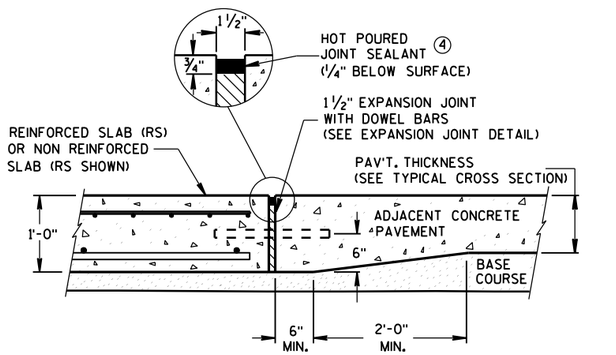
Ⓐ STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄

Ⓑ STANDARD LONGITUDINAL JOINT WITH TIE BARS.

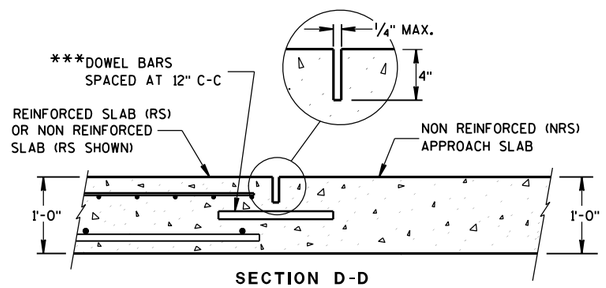
Ⓒ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄



SECTION A-A
REINFORCEMENT POSITIONING DETAIL



SECTION C-C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT



SECTION D-D
CONTRACTION JOINT

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.

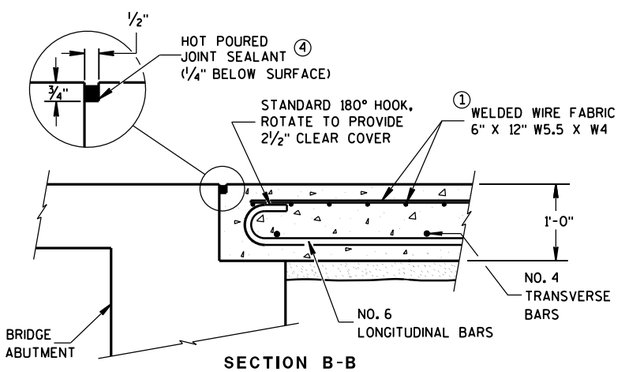
① THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

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

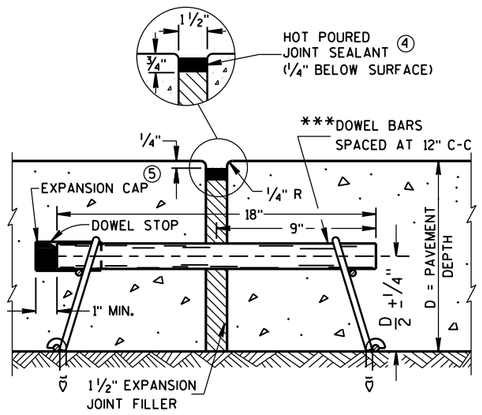
③ DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

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.



SECTION B-B
BEND DETAIL
BOTTOM REINFORCEMENT



EXPANSION JOINT DETAIL

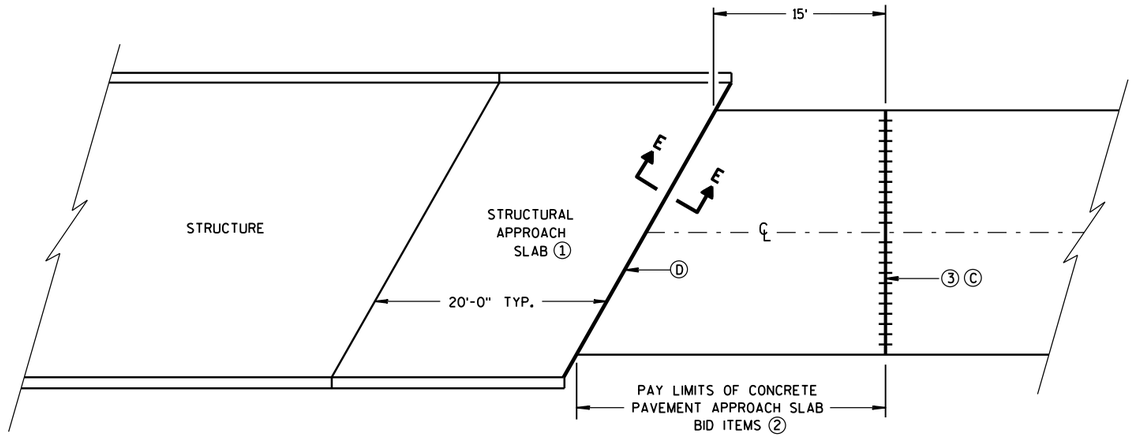
CONCRETE PAVEMENT
APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE
/S/ Peter Kemp, P.E.
PAVEMENT SUPER
FHWA

6

S.D.D. 13 B 2-8a



GENERAL NOTES

ALL PROJECTS THAT INVOLVE A STRUCTURAL APPROACH SLAB WILL ALSO HAVE A CONCRETE PAVEMENT APPROACH SLAB.

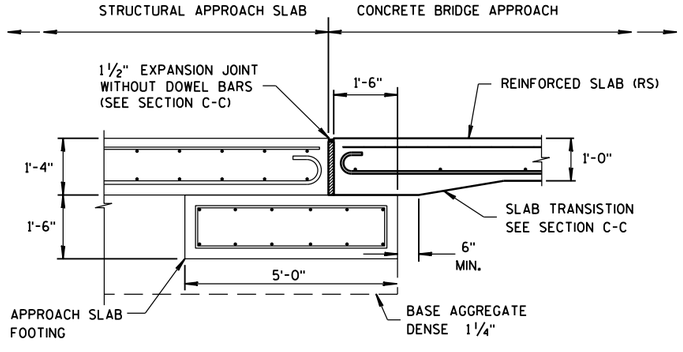
① SEE BRIDGE PLAN.

② CONFORM TO SHEET 13 B 2(A) FOR CONCRETE PAVEMENT APPROACH SLAB DETAILS.

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

Ⓒ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄

Ⓓ 1½" EXPANSION JOINT (NO DOWELS)



SECTION E-E

FOOTING DETAIL

STRUCTURAL APPROACH SLAB TO CONCRETE BRIDGE APPROACH

STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

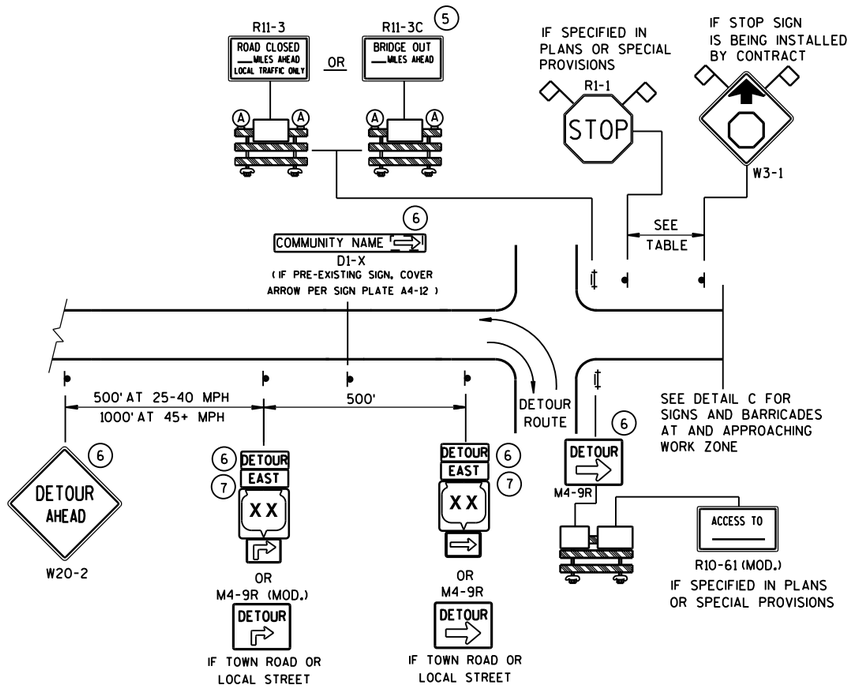
June, 2015
DATE

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

FHWA

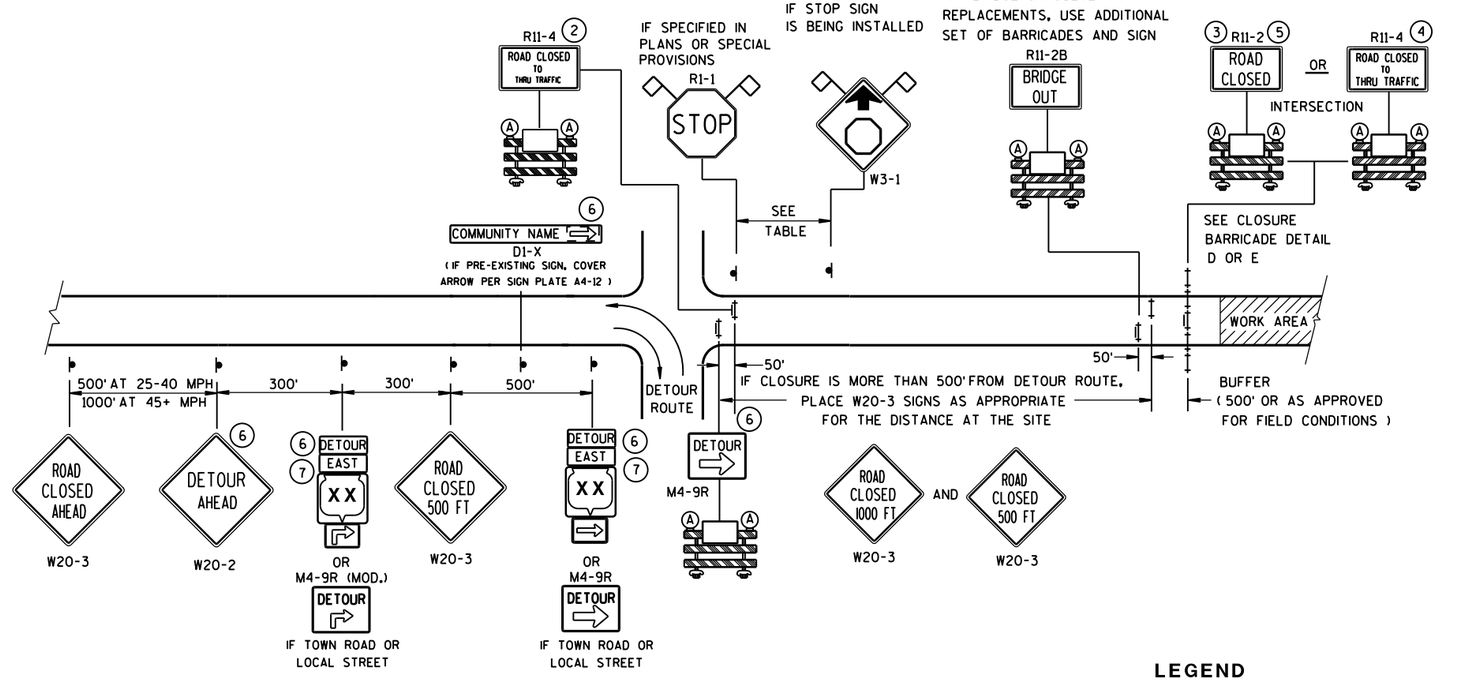
6

S.D.D. 13 B 2-8b



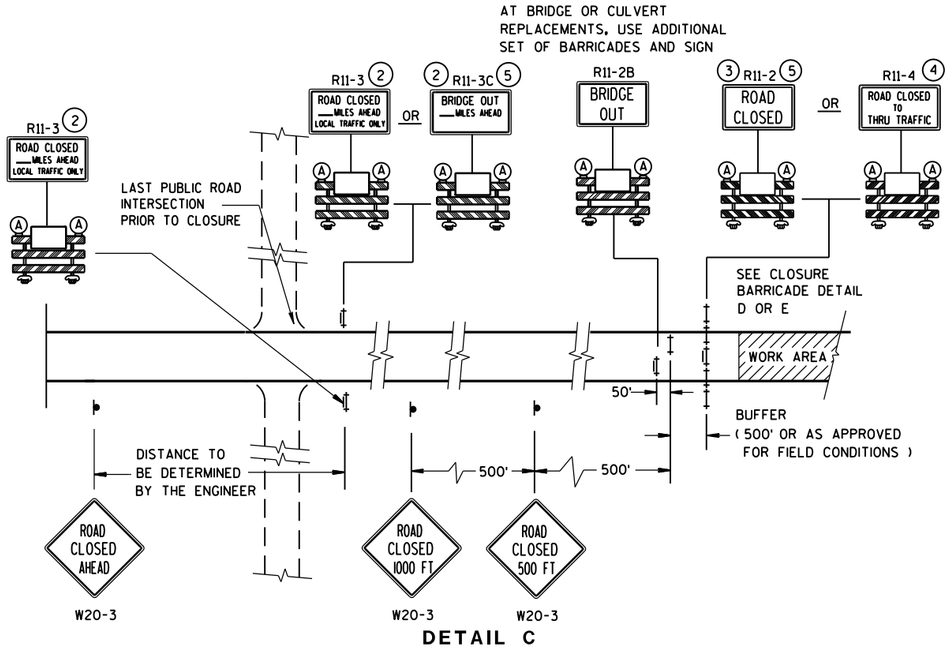
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

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

LEGEND

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

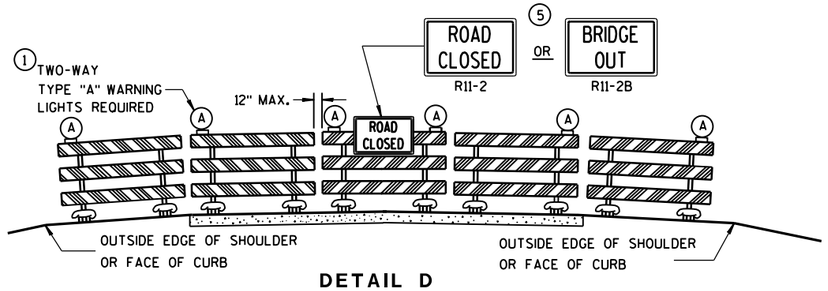
8/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

FHWA

6

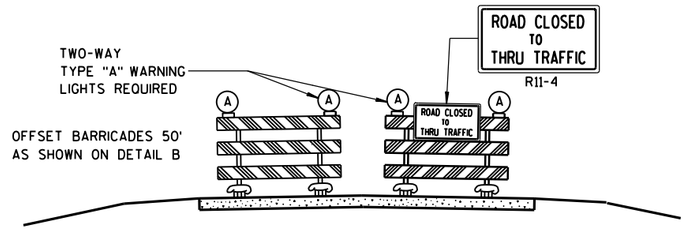
S.D.D. 15 C 2-5a



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 BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE 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, 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". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- 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 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 LANE 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 MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

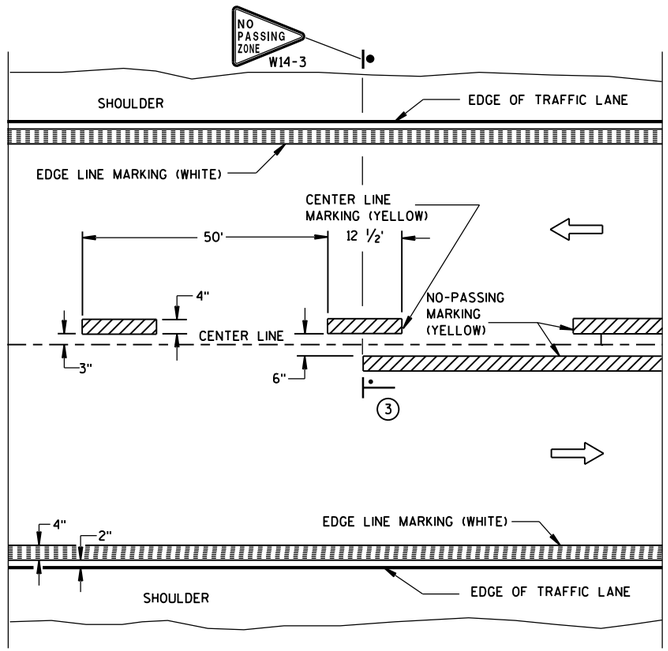
8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

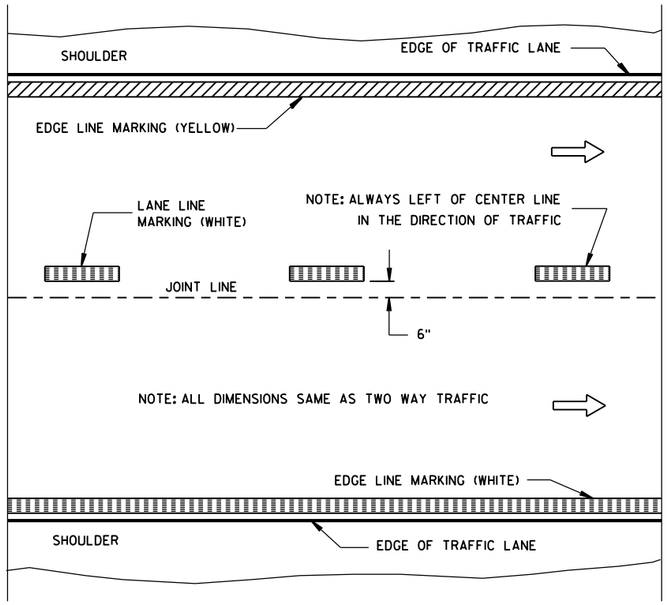
FHWA

6

S.D.D. 15 C 2-5b

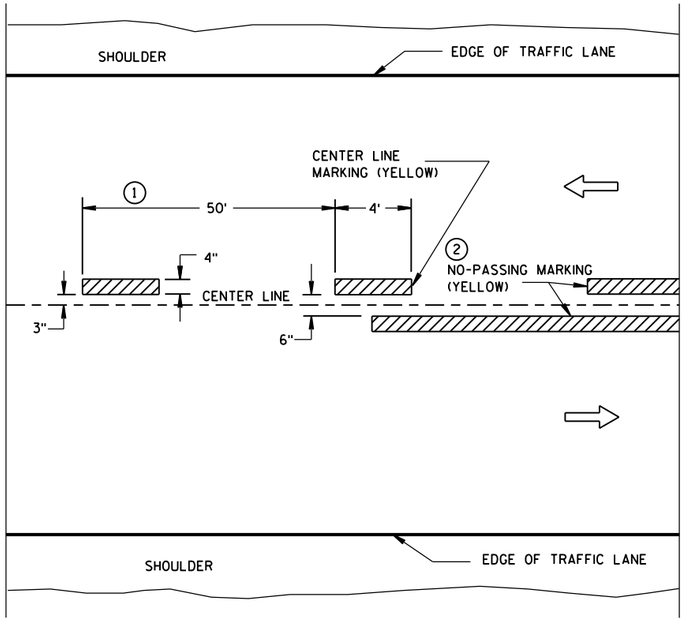


TWO WAY TRAFFIC

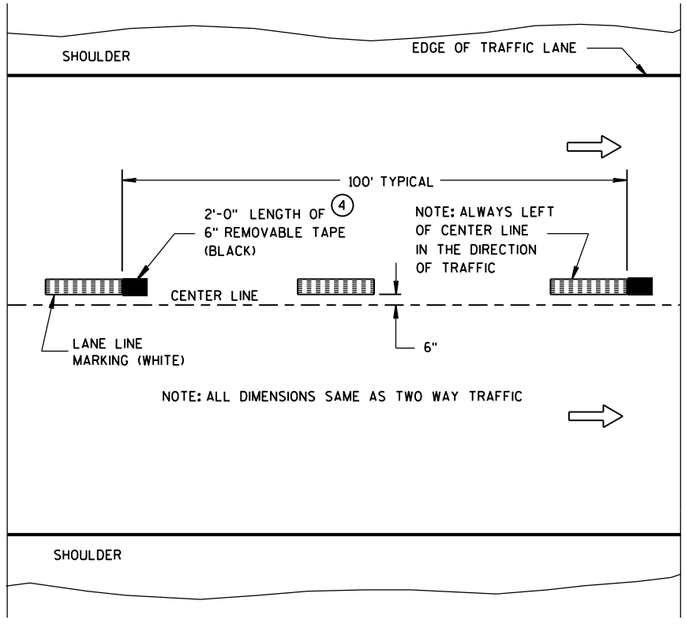


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

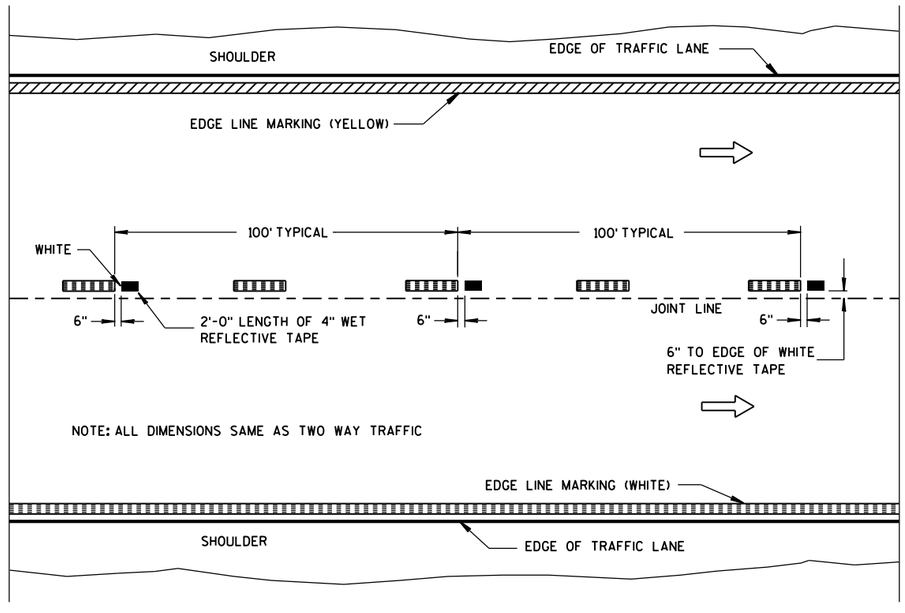
GENERAL NOTES

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

1. HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
2. NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
3. NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
4. CONCRETE ONLY.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-13-2013 DATE

/S/ Travis Feltes STATE TRAFFIC E

FHWA

6

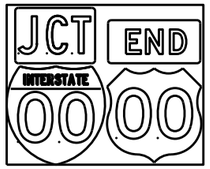
S.D.D. 15 C 8-16a

6

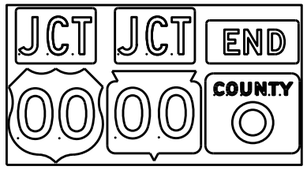
S.D.D. 15 C 8-16a

TYPICAL ASSEMBLIES

J1-1

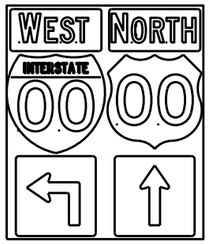


J1-2

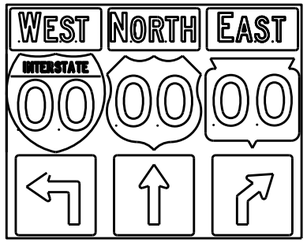


J1-3

J2-1



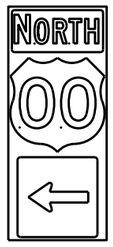
J2-2



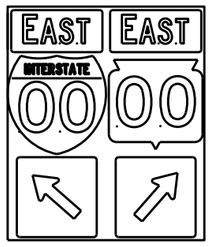
J2-3

JV

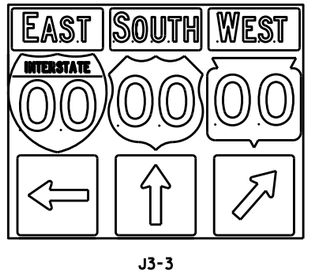
(Typical Vertical J-Assembly
See Note 10 and 11)



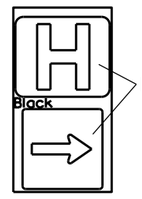
J3-1



J3-2

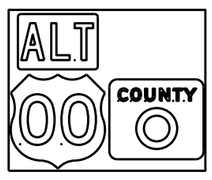


J3-3

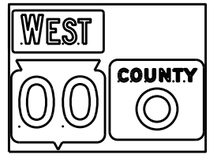


JH-1

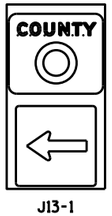
J4-1



J4-2



J4-2



J13-1

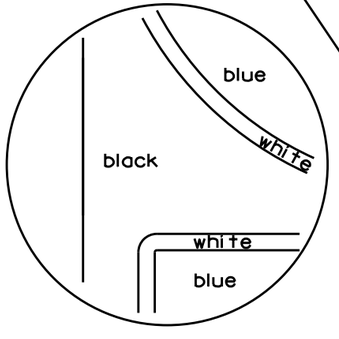
J12-1

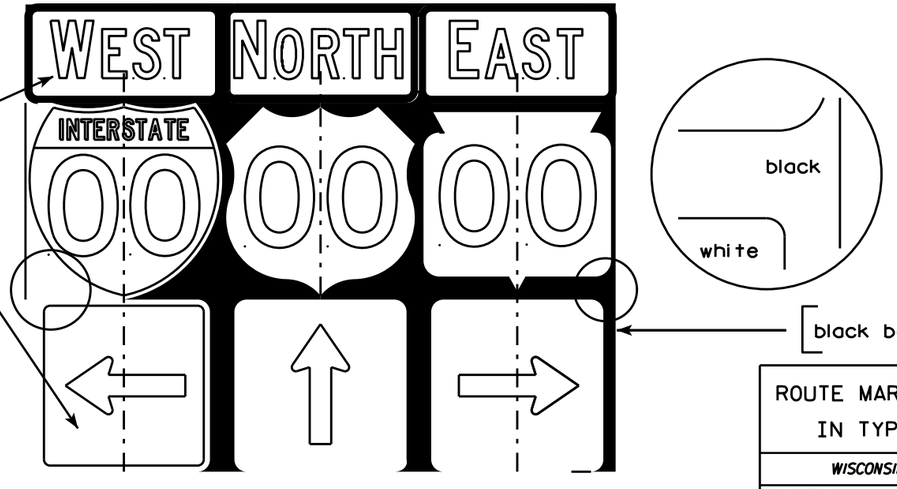
J32-1

J33-1

J23-1

J22-1





NOTES

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

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/06/14 PL... A2-1S.8

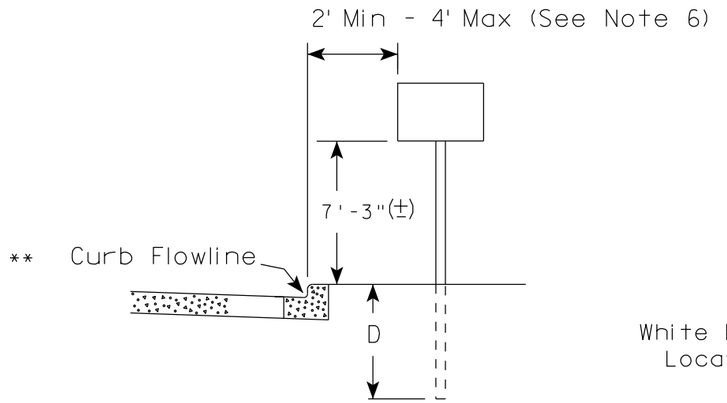
PROJECT NO:

SHEET NO: E

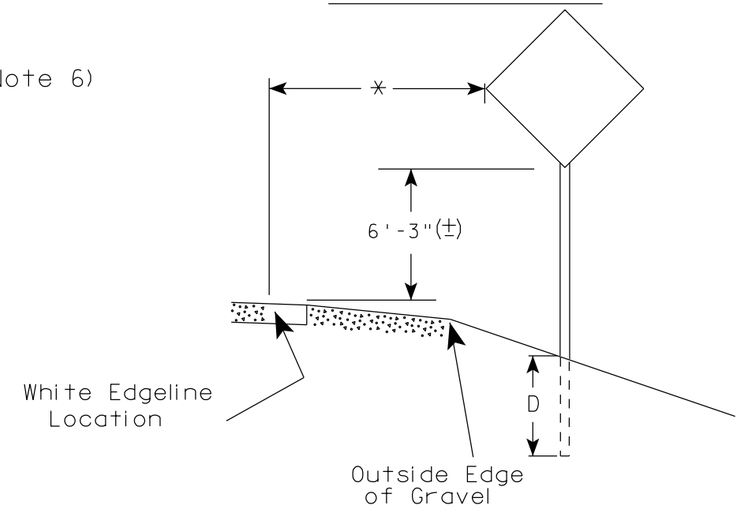
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :

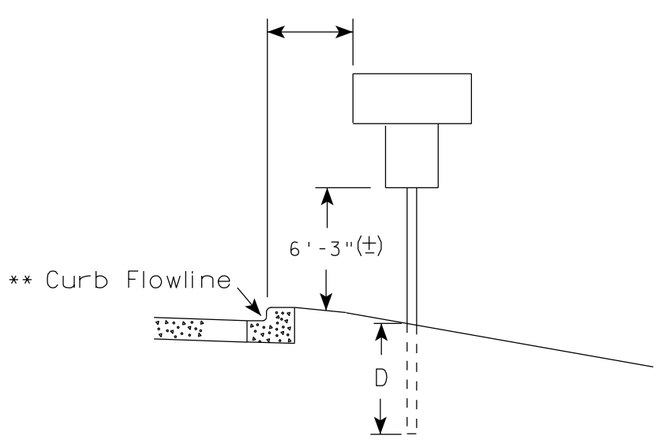
WISDOT/CADDS SHEET 42

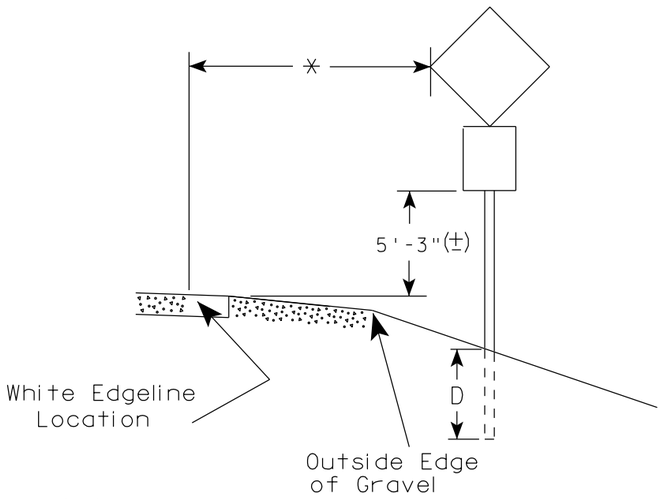
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on 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. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
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" (±).

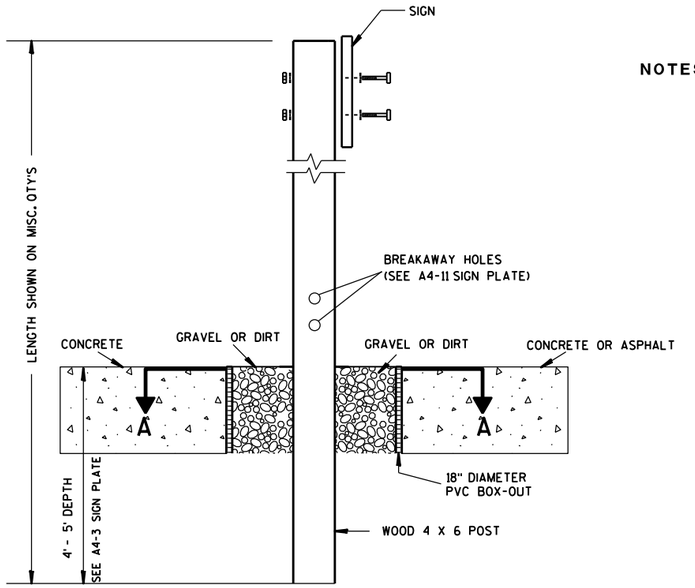
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-3.20

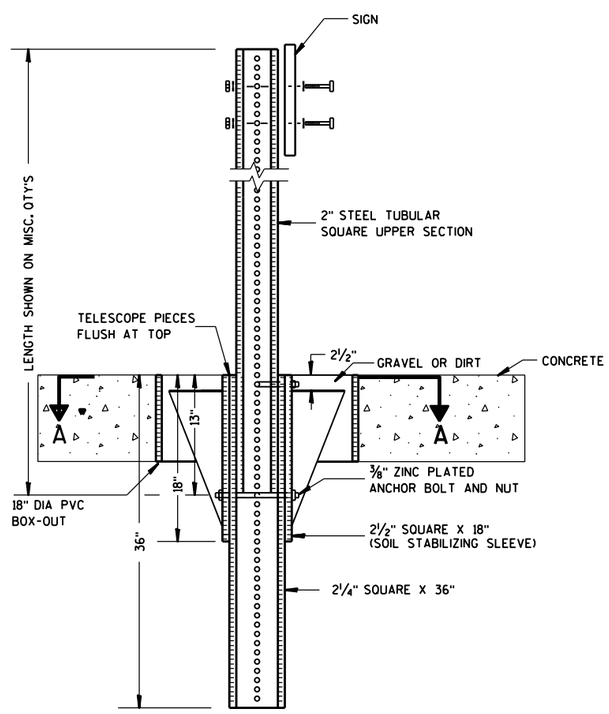
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

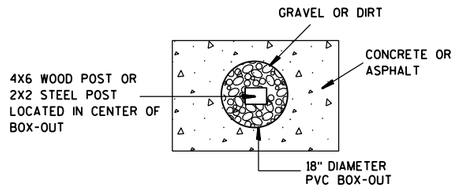
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

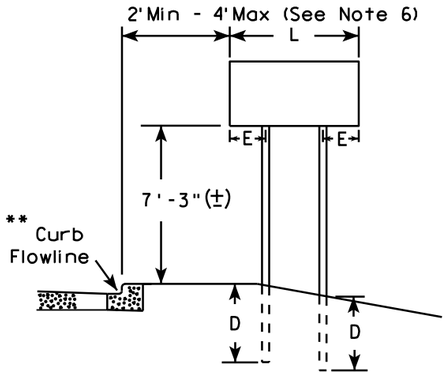
APPROVED Matthew R Rauch
for State Traffic Engineer

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

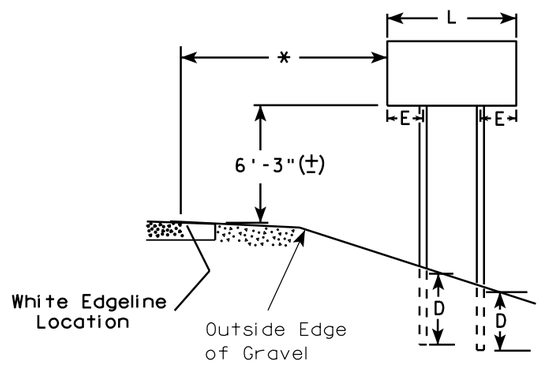
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

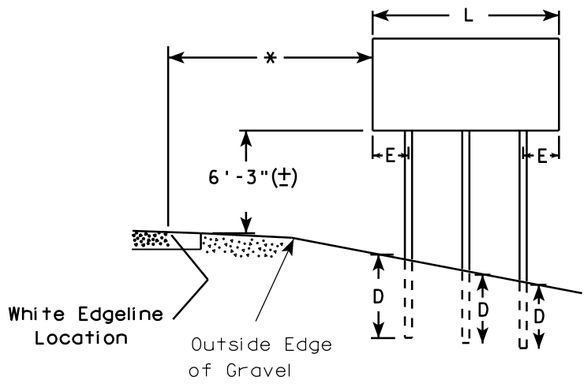
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

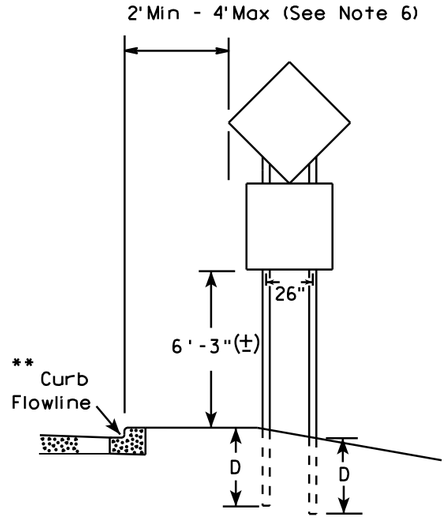
URBAN AREA



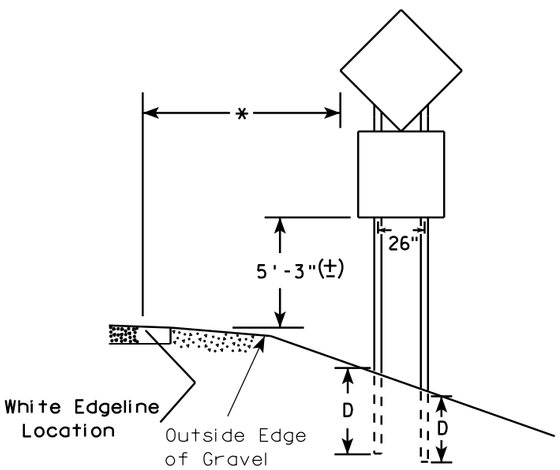
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
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.

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

***

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

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

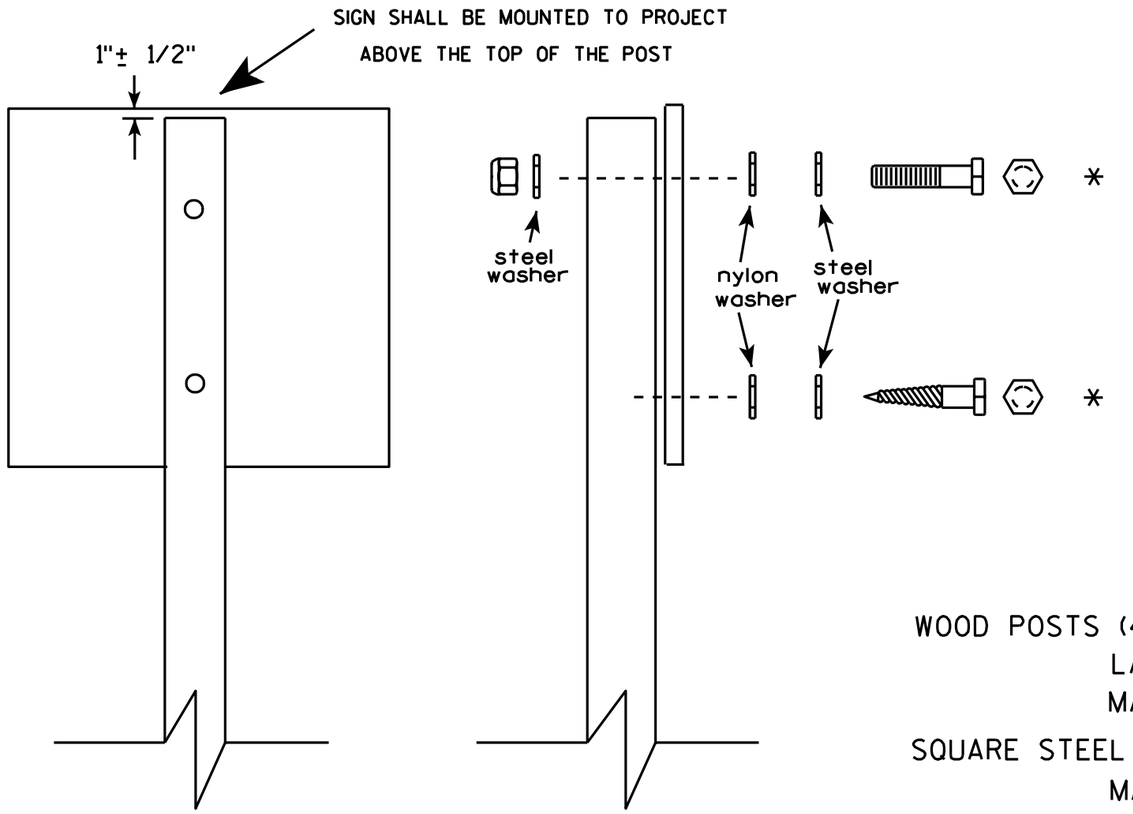
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-4 14
23

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A44.DGN PLOT DATE : 23-JUL-2015 15:23 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 107.021305:1.000000

WISDOT/CADDS SHEET 42



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

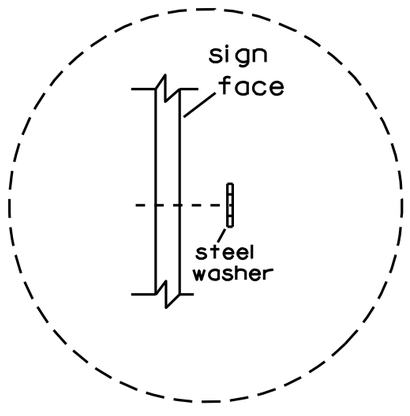
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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.



Washer Placement when Sign Has Other Than Type H or Type F Face

* 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 3/23/10 PLATE NO. A4-8.7

7

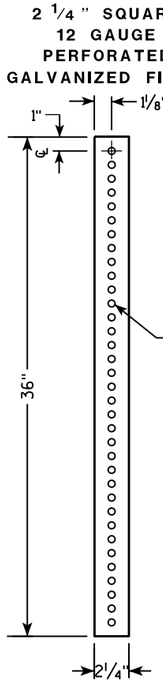
7

PROJECT NO:

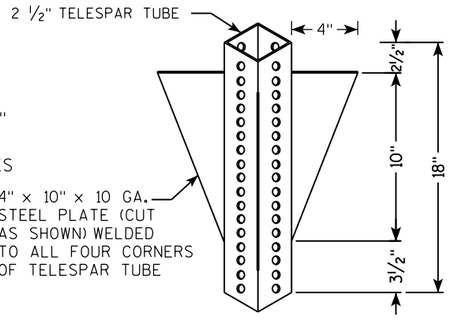
SHEET NO: 24 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

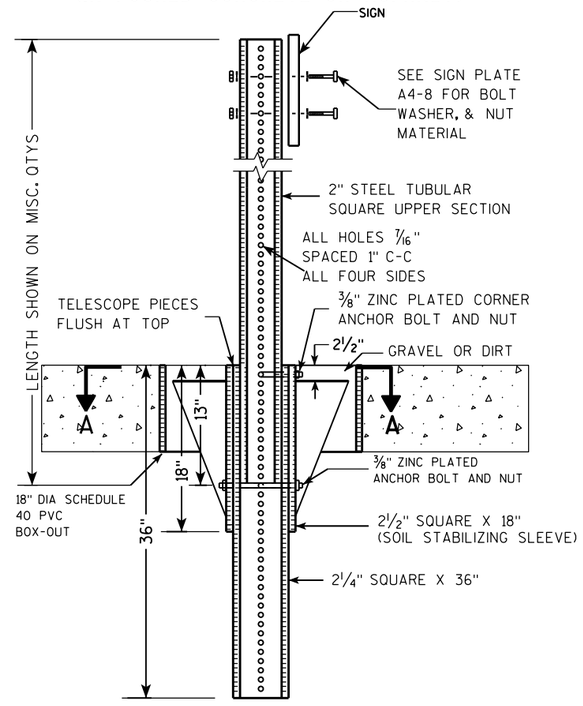
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



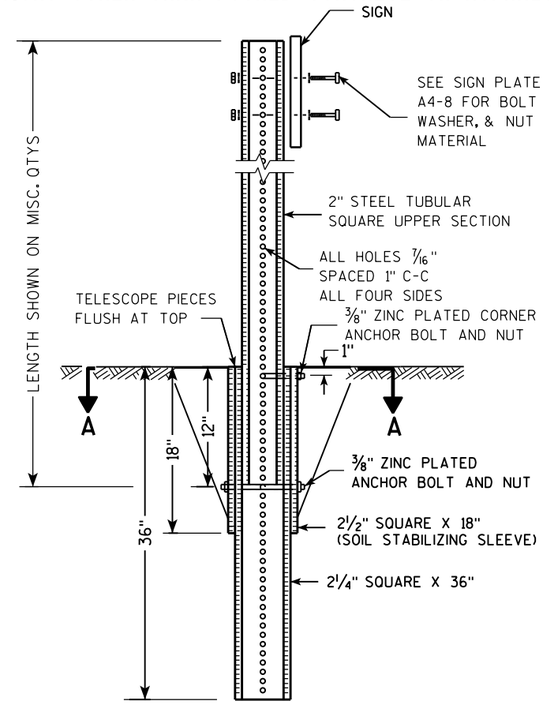
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

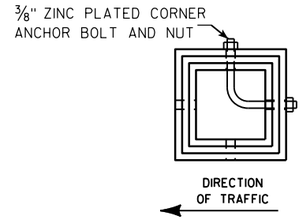


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

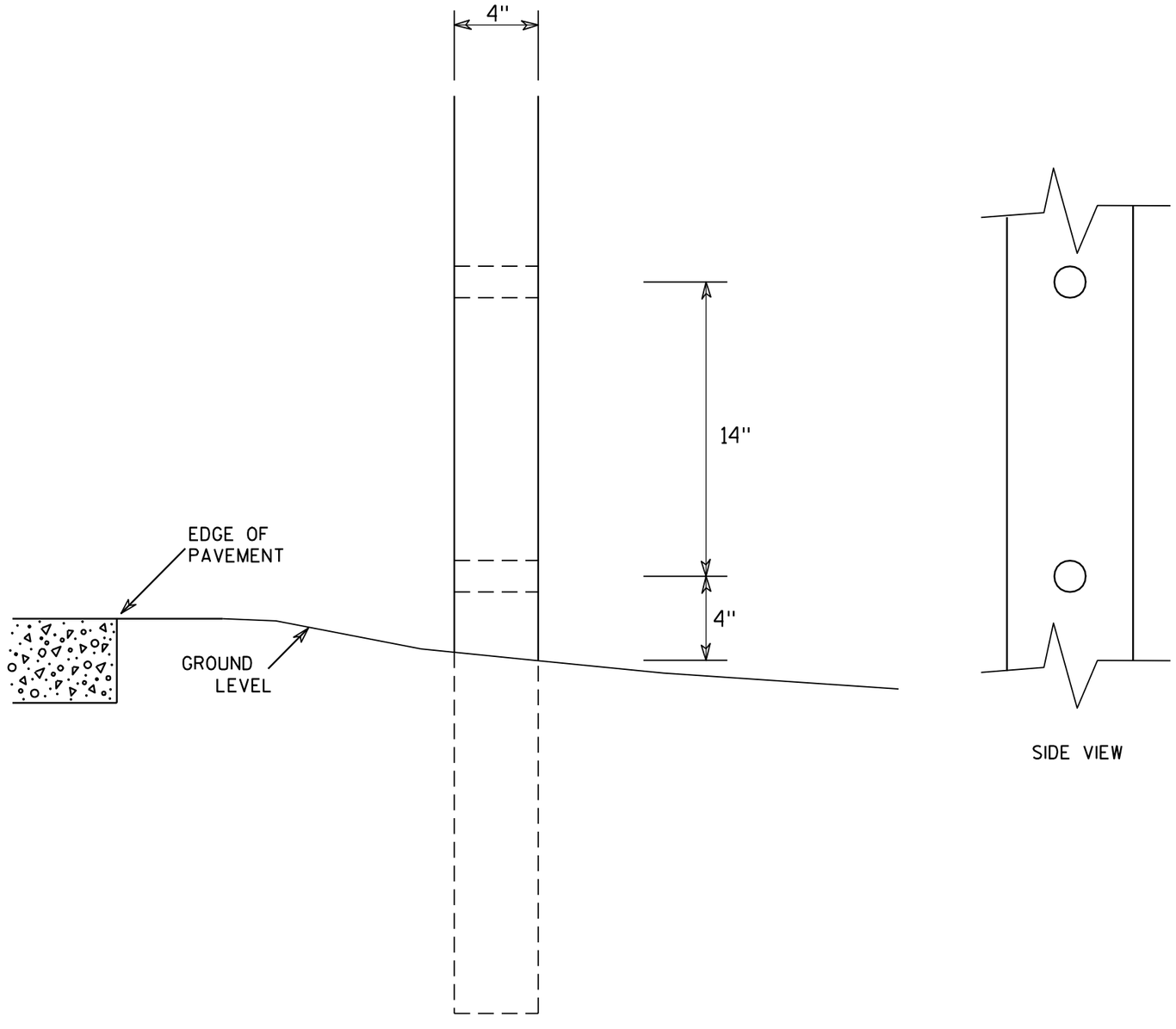
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 25 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

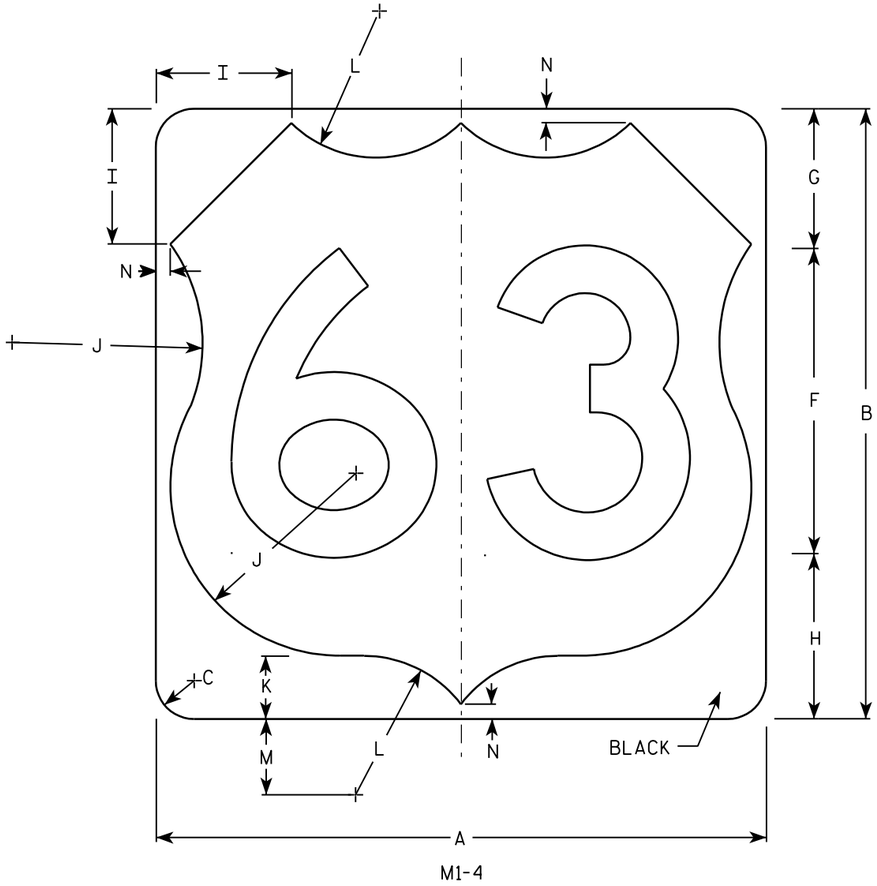
APPROVED Chester J Spang for State Traffic Engineer

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

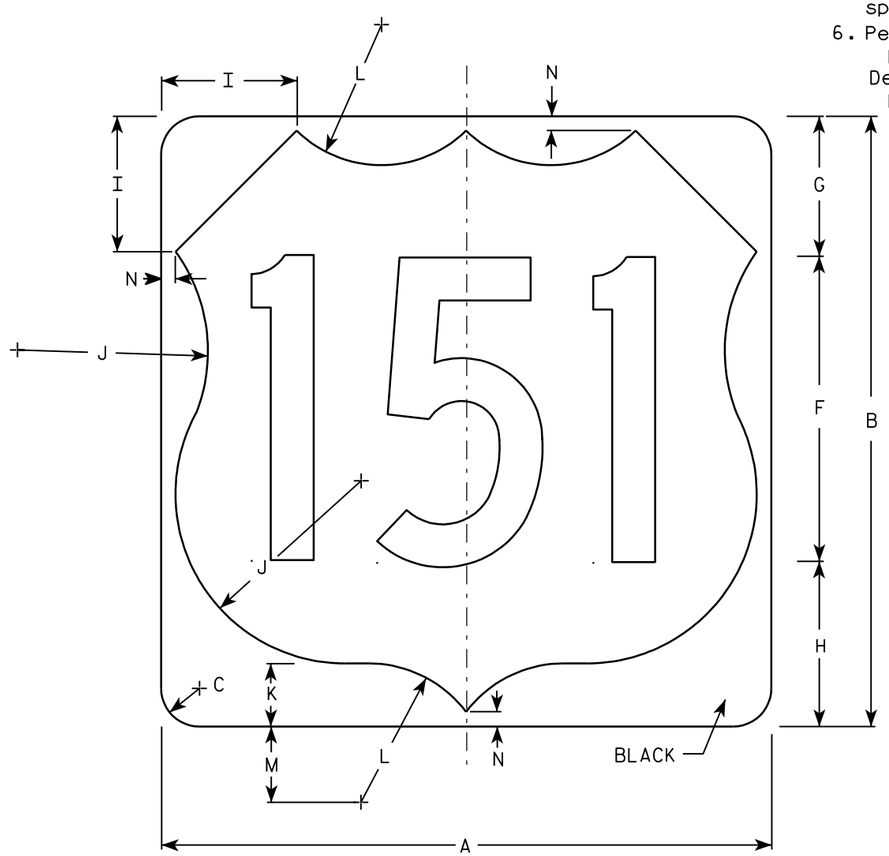
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 26	E

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   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. Substitute appropriate numerals and adjust spacing as per Plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or other temporary signs
   Background - Reflective



M1-4



M1-4

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 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																												
2	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0	.36
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81

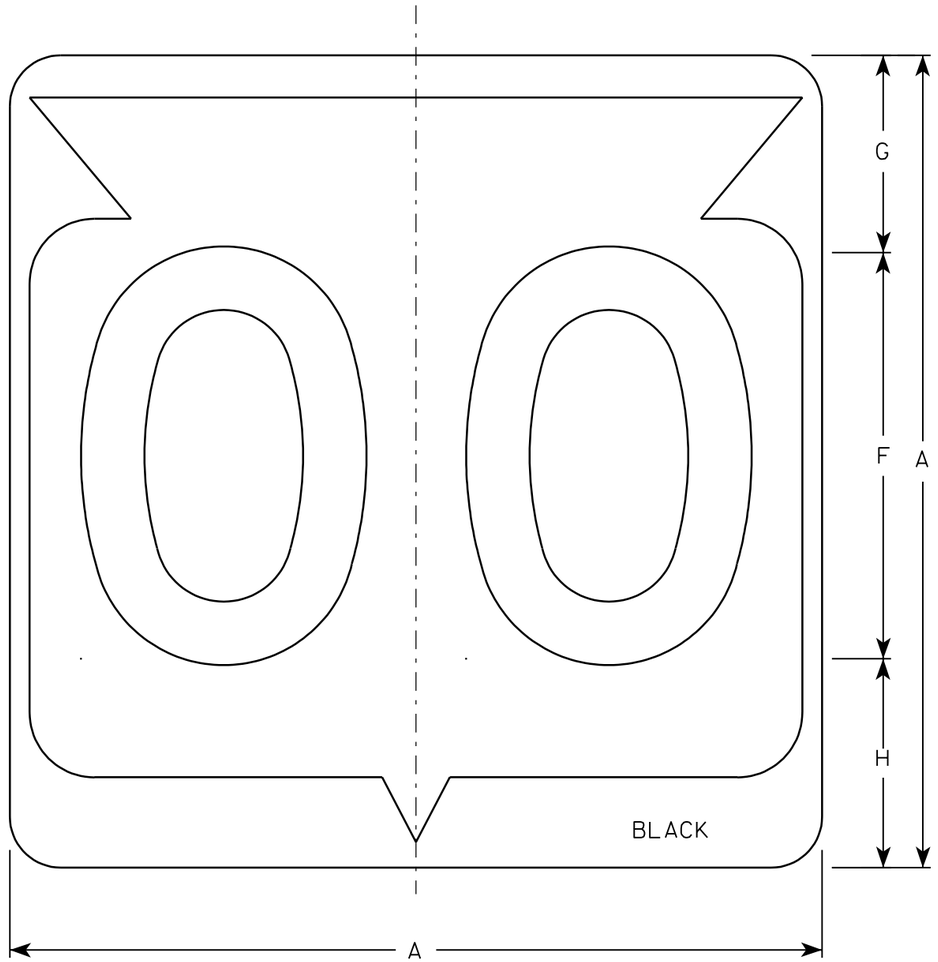
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 08/25/05 PLATE NO. M1-4.9

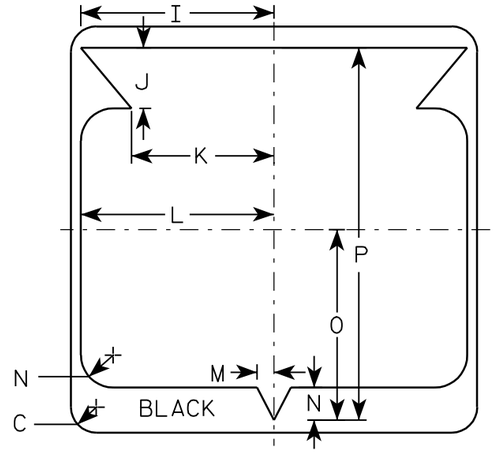
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 27 | E



M1-6

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   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. Substitute appropriate Series numerals and adjust spacing as per plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective



Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 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																												
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	.36
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	.81
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	.81
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	.81

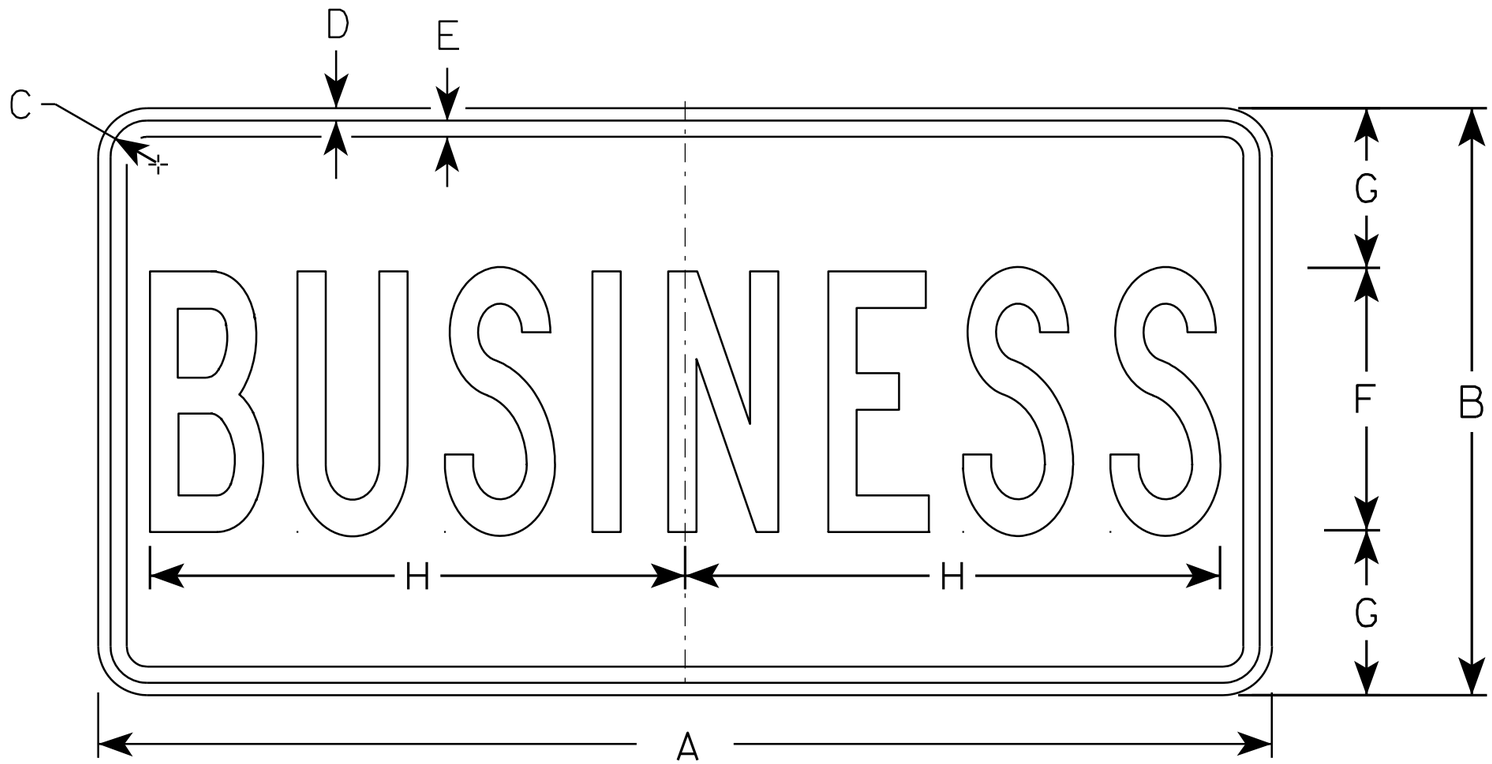
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/20/02 PLATE NO. M1-6.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 28	E



M4-3

NOTES

1. Sign is Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White - See Note 5
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Permanent Signs
   Background - Type H Reflective
   Detour or other temporary Signs
   Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	5	3 1/2	9 5/8																			2.0
3	36	18	1 1/8	3/8	1/2	8	5	16 3/8																			4.5
4																											
5																											

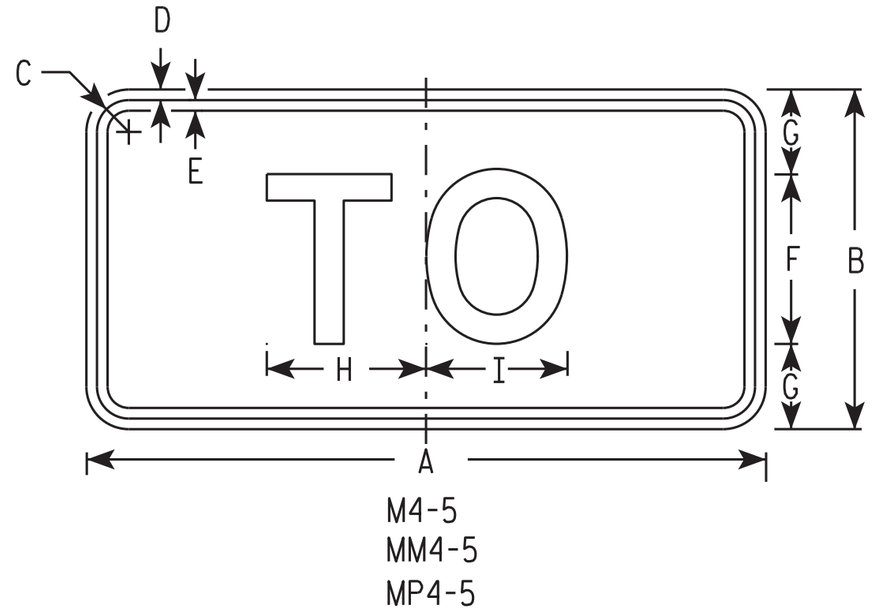
STANDARD SIGN
M4-3

WISCONSIN DEPT OF TRANSPORTATION

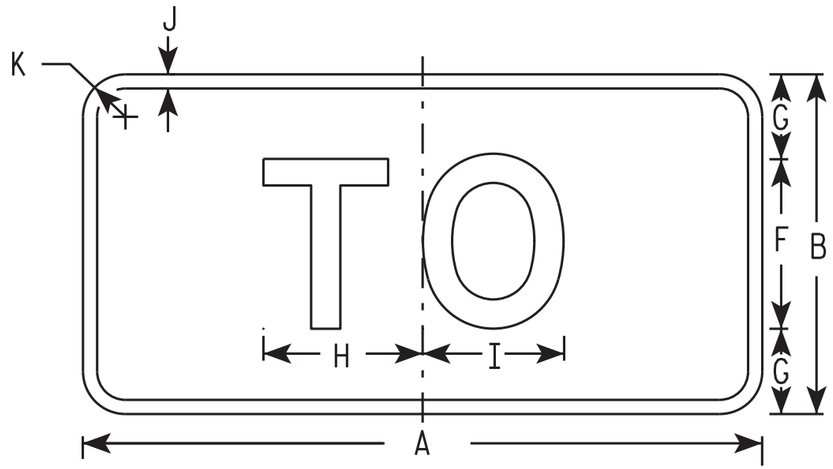
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-3.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 29 | E



M4-5
MM4-5
MP4-5



MB4-5
MK4-5
MN4-5

NOTES

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

   MB4-5 Background - Blue
   Message - White

   MK4-5 Background - Green
   Message - White

   MM4-5 Background - White
   Message - Green

   MN4-5 Background - Brown
   Message - White

   MP4-5 Background - White
   Message - Blue

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

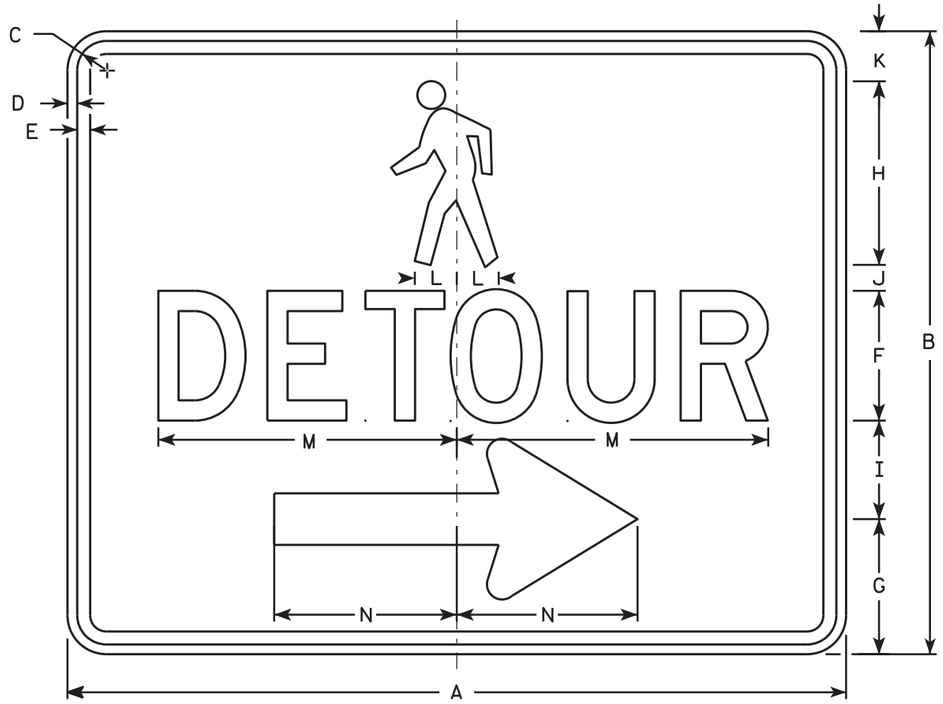
STANDARD SIGN
M4-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M4-5.8

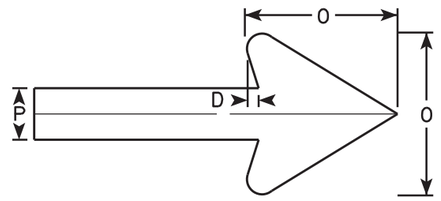
PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E



M4-9BR

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-9BL is the same as M4-9BR except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	24	1 1/8	3/8	1/2	5	5 1/4	7 1/8	3 3/4	1	1 1/8	1 5/8	11 3/4	7	6	2											5.00
3																											
4																											
5																											

STANDARD SIGN
M4-9B L&R

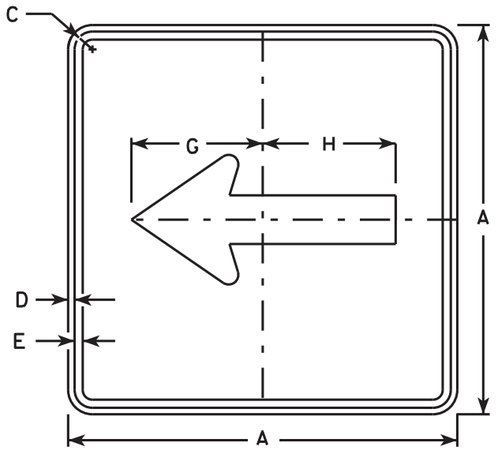
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

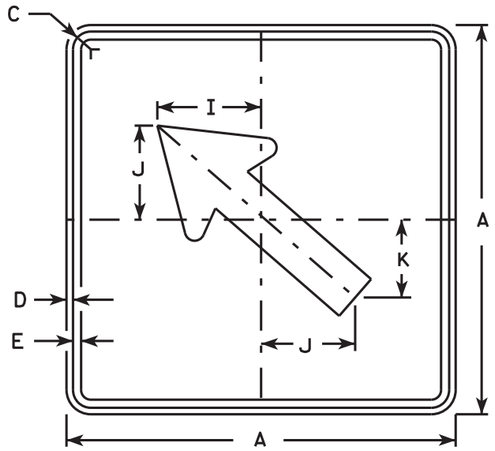
DATE 9/30/13 PLATE NO. M4-9B.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M49B.DGN PLOT DATE : 01-OCT-2013 13:44 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42



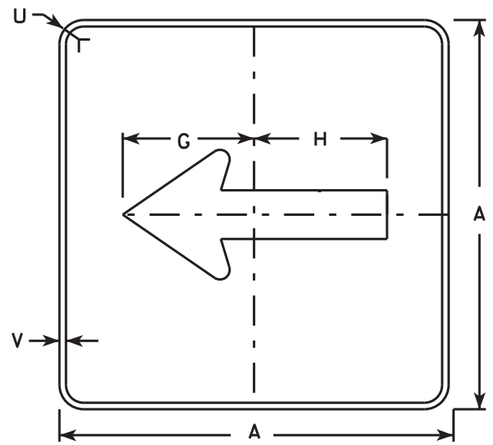
M6-1
MM6-1
MO6-1
MP6-1



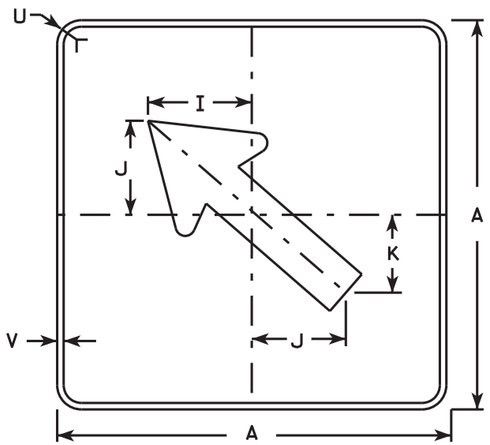
M6-2
MM6-2
MO6-2
MP6-2

NOTES

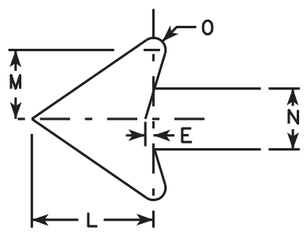
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

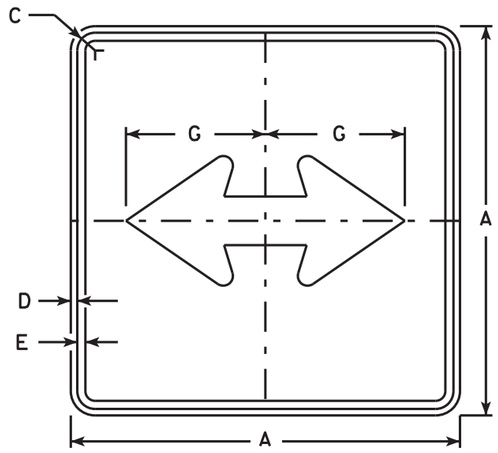
STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

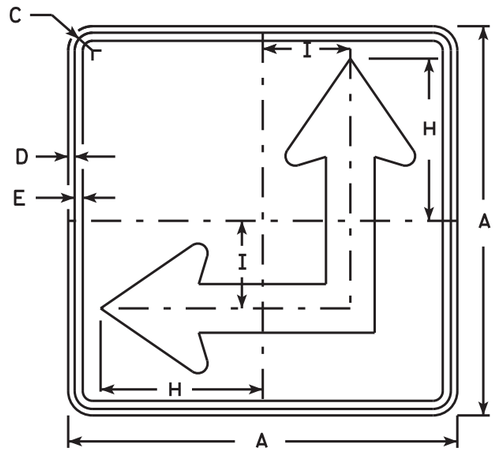
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M6-1.15

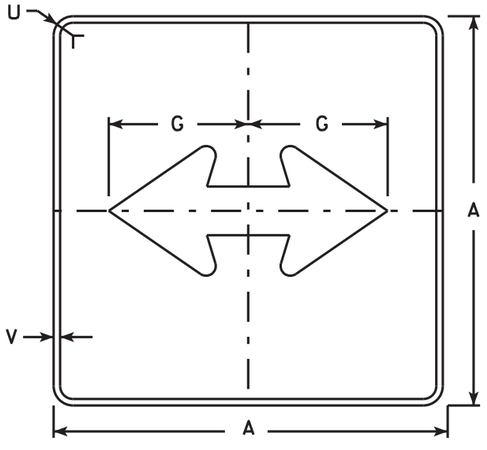
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



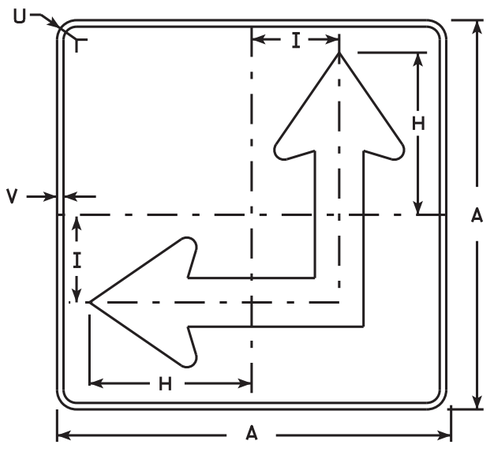
M6-4
MM6-4
MO6-4
MP6-4



M6-6
MM6-6
MO6-6
MP6-6



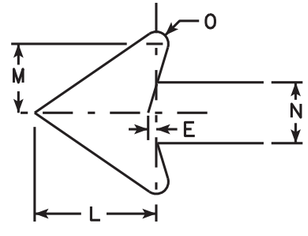
MB6-4
MK6-4
MN6-4
MR6-4



MB6-6
MK6-6
MN6-6
MR6-6

NOTES

1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

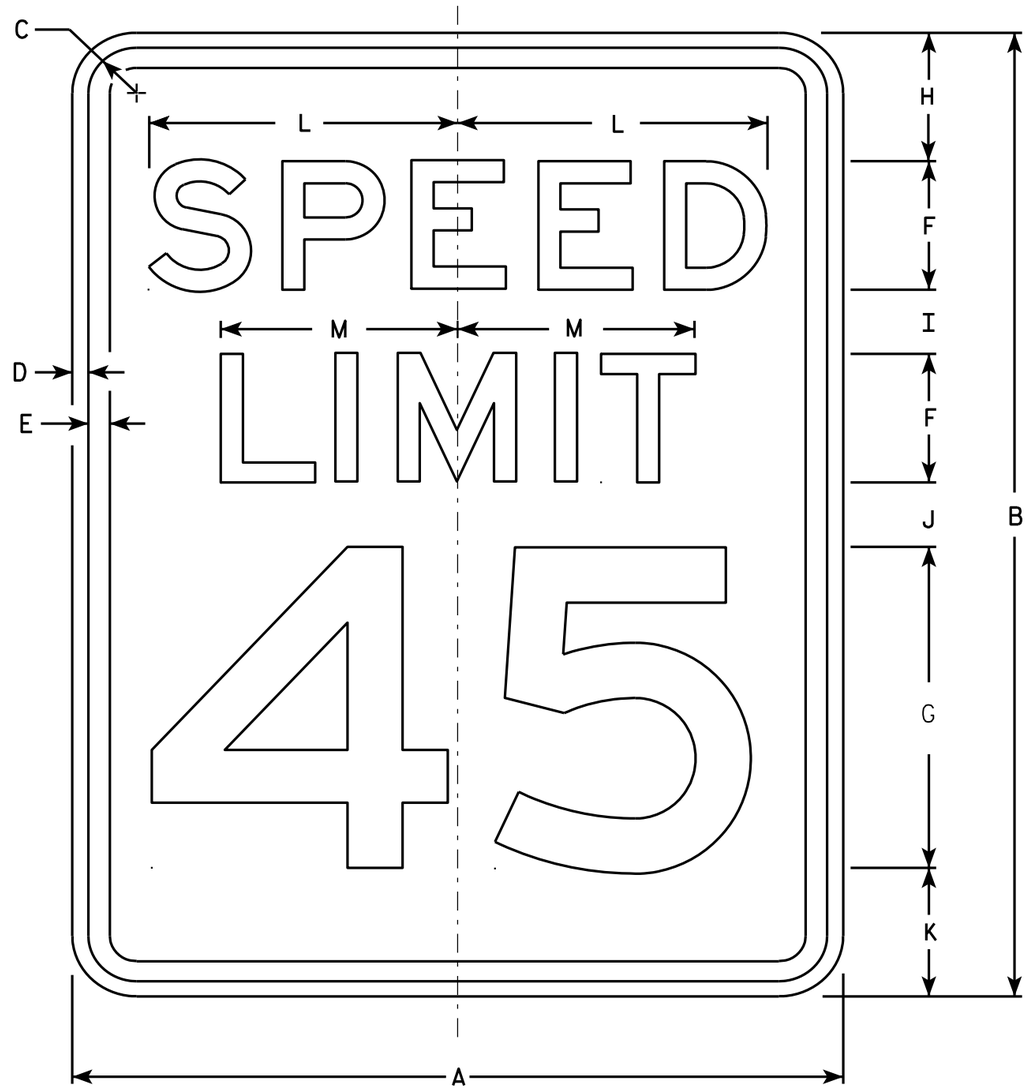
STANDARD SIGN
M6-4 & M6-6
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO. M6-4.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



R2-1

NOTES

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

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

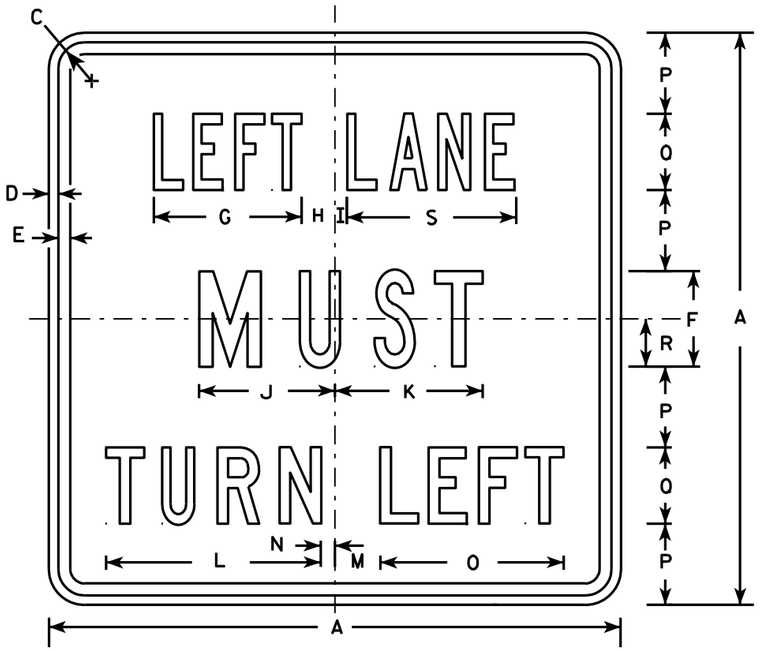
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

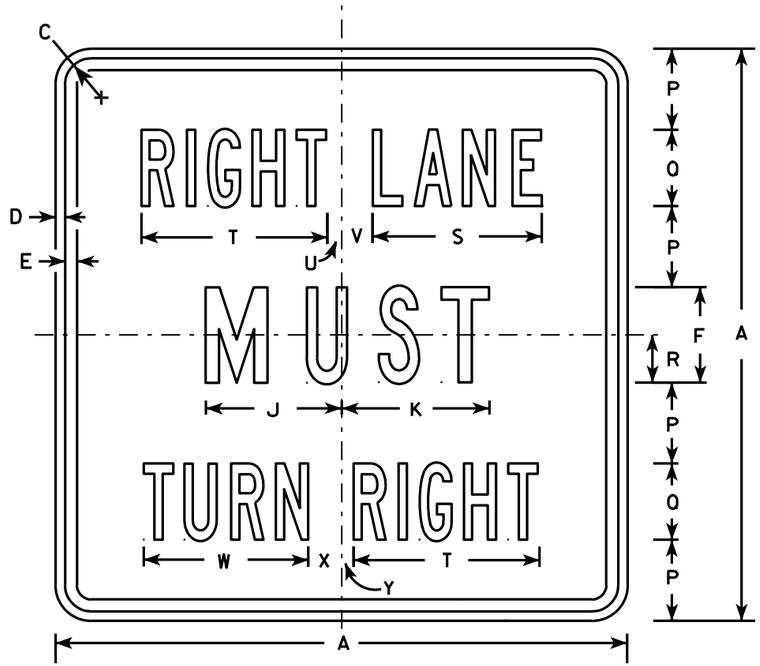
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 34 | E



R3-7L



R3-7R

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 - Line 1 is Series B.
   Line 2 is Series C.
   Line 3 on plate R3-7R is Series B and Series C on plate R3-7L.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2S	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2M	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
3	36		1 5/8	5/8	3/4	6	9 5/8	2	1 1/8	8 3/4	9	13 1/2	3 7/8	1 1/2	12 1/2	5	5	3	10 5/8	12	7/8	2 1/4	10 5/8	2 1/8	1		9.00
4	48		2 1/4	3/4	1	8	13 1/2	2 3/8	1 1/2	11 1/2	11 7/8	17 3/4	3 5/8	2 1/2	16 3/8	6 1/2	7	4	14 3/8	16 7/8	5/8	3 1/4	15 1/8	2 3/4	1 1/8		16.00
5																											

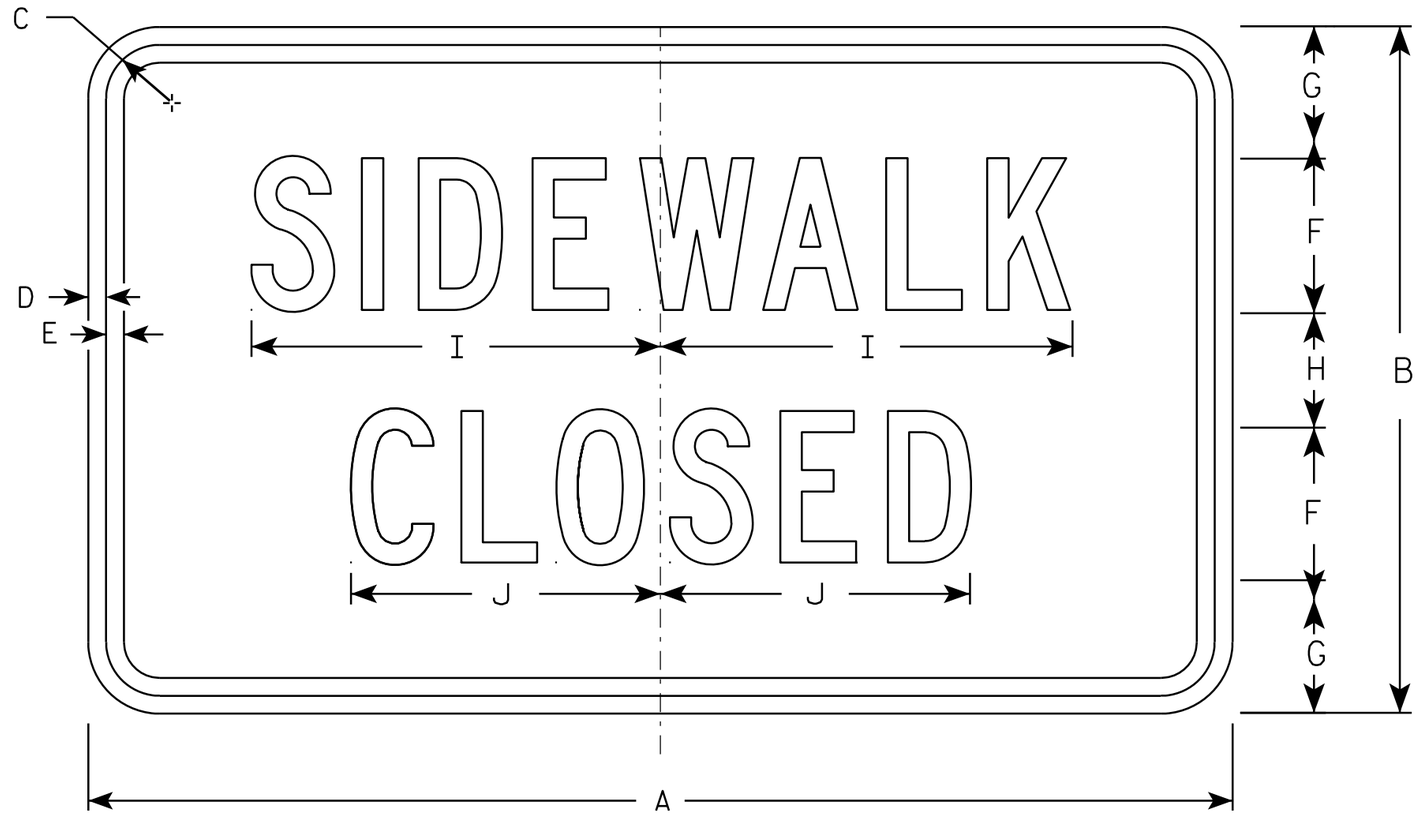
STANDARD SIGN
R3-7L & R3-7R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-7.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 35 | E



R9-9

NOTES

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

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

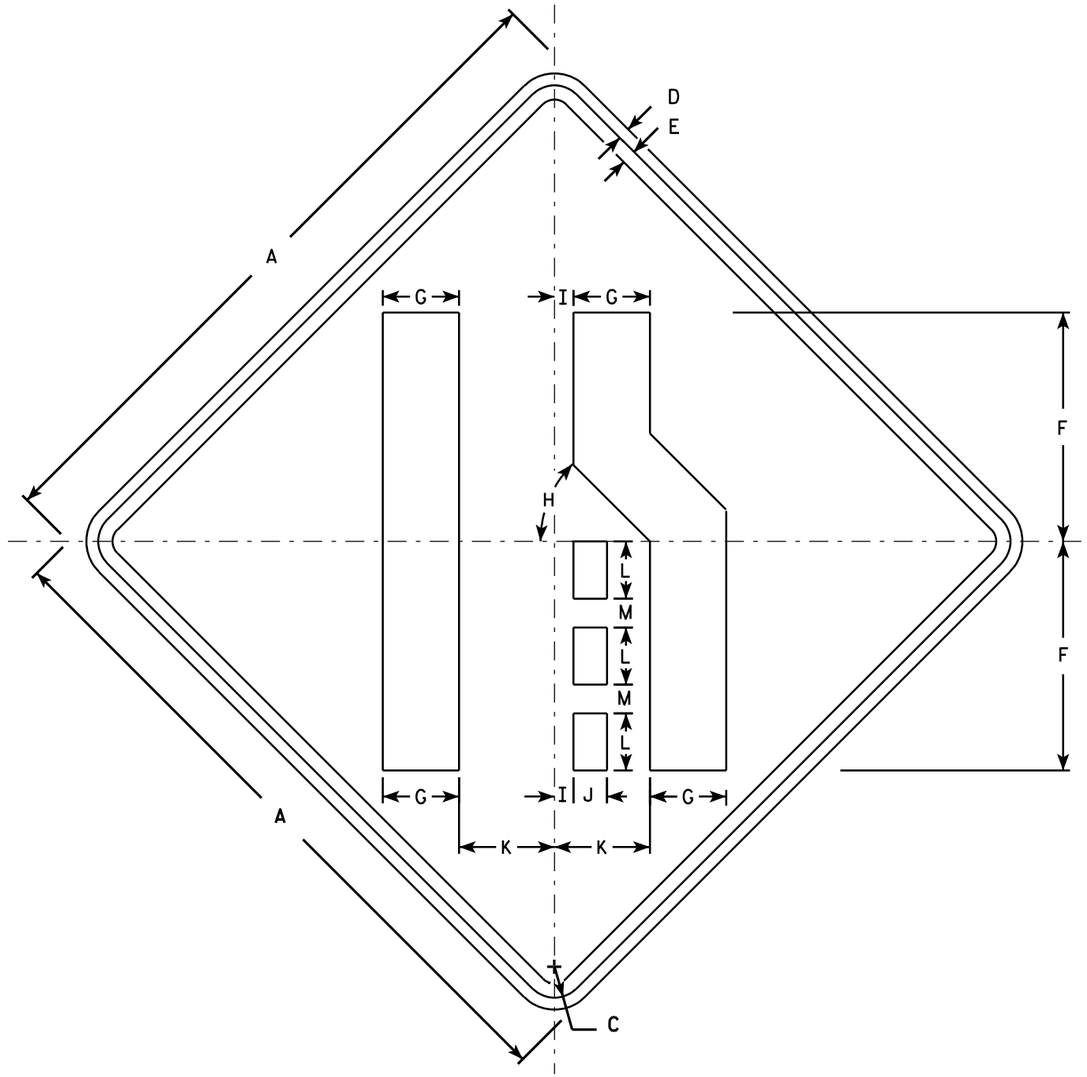
STANDARD SIGN
R9-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/2011 PLATE NO. R9-9.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 36	E



W4-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   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. W4-2L is the same as W4-2R 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	30		1 3/8	1/2	5/8	10	3 3/8	45°	7/8	1 1/2	4 1/4	2 1/2	1 1/4														6.25
2S	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2M	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
3	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
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
W4-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

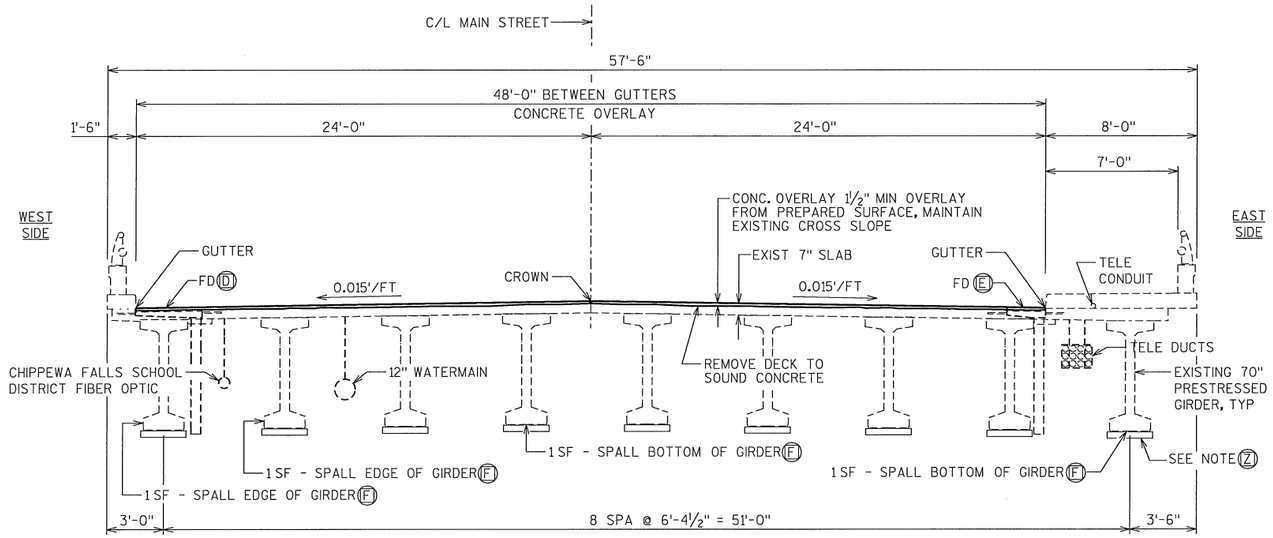
DATE 3/12/13 PLATE NO. W4-2.14

PROJECT NO:

SHEET NO: 37 E

PLOT TIME: 10:40:32 AM
PLOT DATE: 6/5/2015
FILE NAME : S:\UZ\WI\tnw\125171\5-final-dsgn\5f-drawings\20-Struct\bridge\b089099gl.dgn

STATE PROJECT NUMBER
8996-00-97



CROSS SECTION A-A THRU RDWY - LOOKING NORTH
B-9-99

LEGEND

(A) NOT USED

(B) LONGITUDINAL CONSTRUCTION JOINT IN OVERLAY.

(C) SEE SPECIFICATIONS FOR THE USE OF TRANSVERSE CONSTRUCTION JOINTS AND POURING SEQUENCE FOR CONCRETE OVERLAYS

(D) FD = REPLACE FLOOR DRAIN GRATE TYPE D, WEST SIDE. (4 REQUIRED) AS APPROVED BY THE ENGINEER. SEE SHEET 8 FOR DETAILS.

(E) FD = REPLACE FLOOR DRAIN GRATE TYPE E, EAST SIDE. (4 REQUIRED) AS APPROVED BY THE ENGINEER. SEE SHEET 9 FOR DETAILS.

(F) CONCRETE GIRDER REPAIR AT ENDS OF GIRDERS AT SOUTH ABUTMENT AT GENERAL LOCATIONS SHOWN. INCLUDED IN ITEM "CONCRETE SURFACE REPAIR".

(Z) CLEANING AND PAINTING OF ALL THE EXPANSION BEARINGS AT THE ABUTMENTS (16 TOTAL) IS A PART OF THIS CONTRACT. SEE NOTES ON SHEET 2.

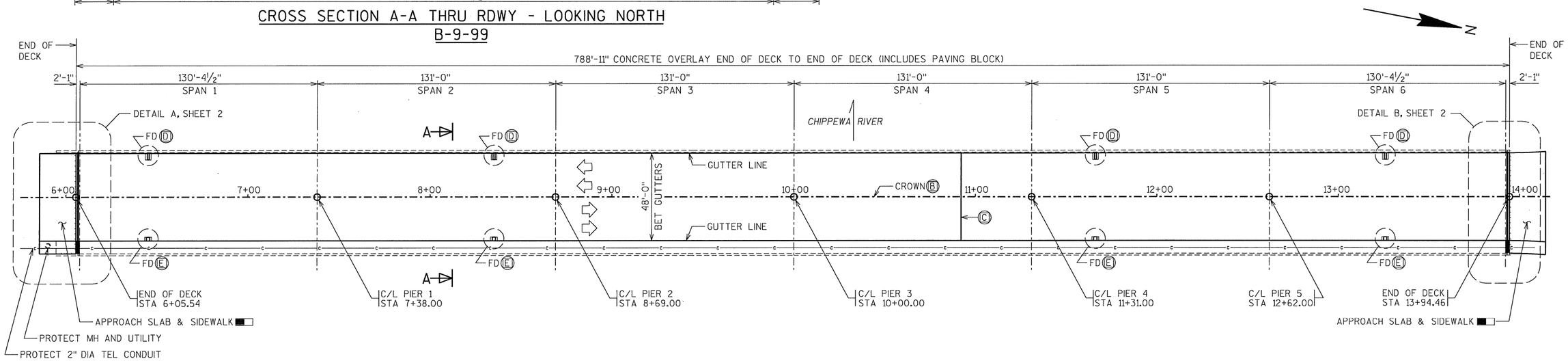
DESIGN DATA

LIVE LOAD:
DESIGN RATING = HS20
INVENTORY RATING = HS19
OPERATING RATING = HS42
WISCONSIN STANDARD PERMIT VEHICLE LOAD = 190 KIPS

ULTIMATE DESIGN STRESSES:
CONCRETE MASONRY f'c = 4,000 psi
HIGH STRENGTH BAR STEEL REINFORCEMENT GRADE 60 fy = 60,000 psi

NOTES:

SEE SHEET 2 FOR "GENERAL NOTES" AND "QUANTITIES".



PLAN
B-9-99

(6-SPAN - 70" PRESTRESSED CONCRETE GIRDER BRIDGE)

NOTE: STATIONING MAY VARY BASED ON EXACT LOCATION OF BRIDGE PROPOSED ALIGNMENT

■ APPROACH SLAB DETAILED IN ROADWAY PLANS.

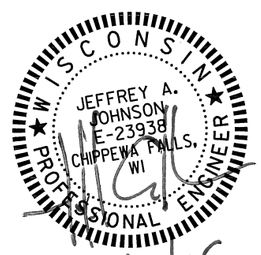
BENCHMARK			
NO	LOCATION	DESCRIPTION	ELEV
1	5+07.37, 105.1' LT		832.55
2	14+14.65, 43.0' LT	ALUMINUM DISK	835.068

NOTE:
SEE ROADWAY DRAWINGS FOR STATIONING AND PROFILE GRADE ELEVATIONS

TRAFFIC DATA

ADT (2018) = 7700
ADT (2038) = 9000
DHV = 13
D = 58/42 %
T = 4.9 %
DESIGN SPEED = 25 MPH

LIST OF DRAWINGS



SEH CONTACT: GREG WEYANDT, PE, 715.720.6266
WISDOT BRIDGE OFFICE CONTACT: BILL DREHER, PE, 608.266.8489

NO.	DATE	REVISION	BY

SEH
SHORT ELLIOTT HENDRICKSON INC.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 09/30/15
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-9-99

MAIN STREET OVER CHIPPEWA RIVER

COUNTY	TOWN/CITY/VILLAGE
CHIPPEWA	CHIPPEWA FALLS

DESIGN SPEC. REHABILITATION N/A

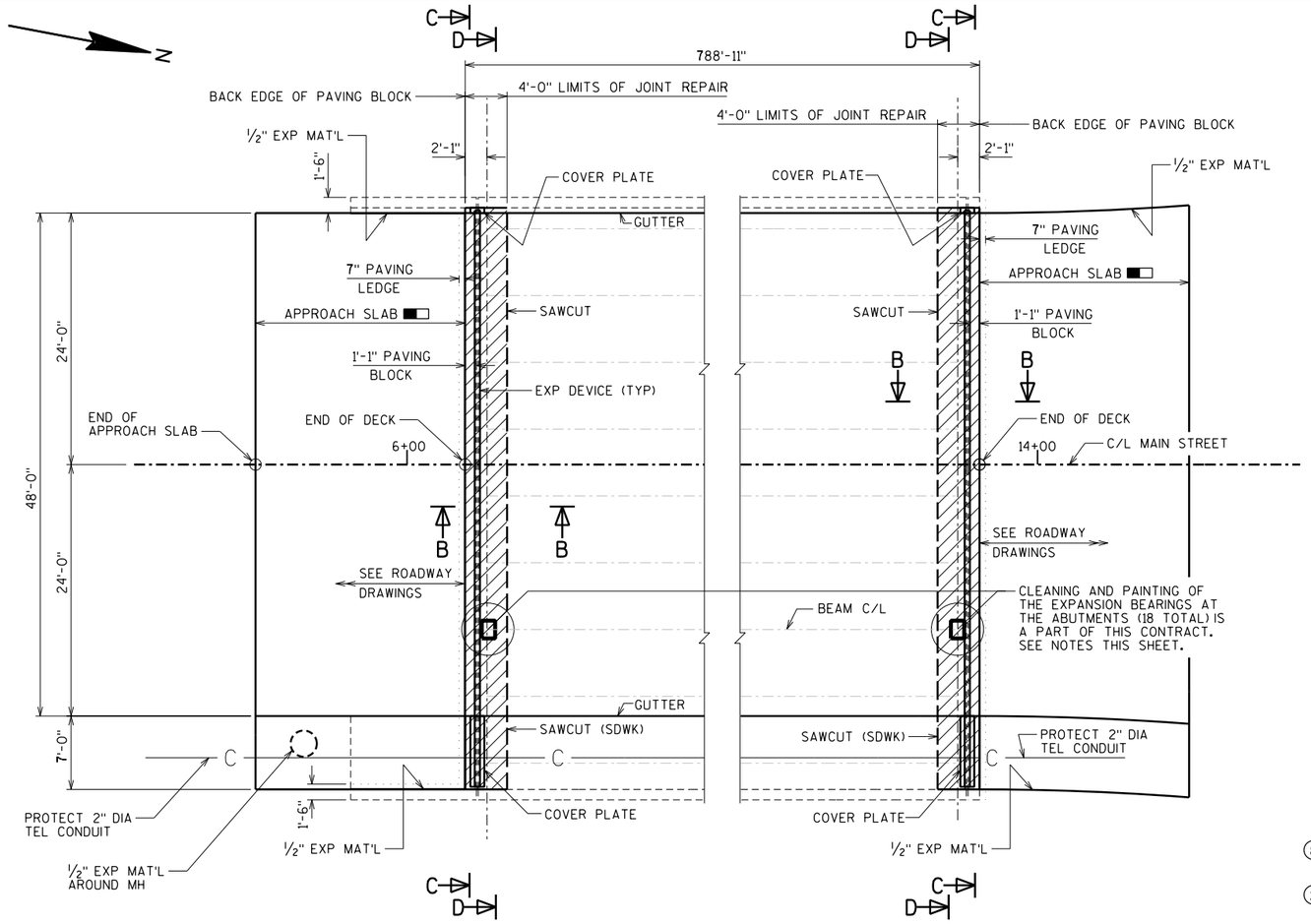
DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
JAJ	JAJ	DLF	JAJ

CONCRETE OVERLAY

SHEET 1 OF 8
38

8

8

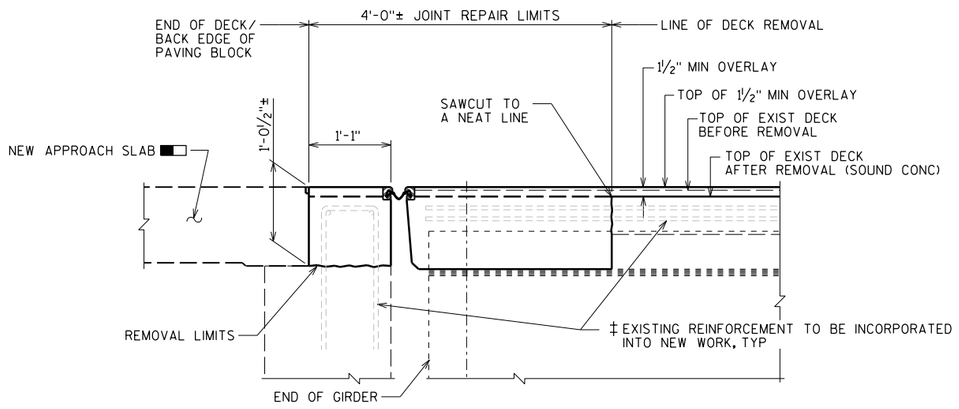


DETAIL A
SOUTH END

DETAIL B
NORTH END

NOTE: SEE SHEET 4 FOR SECTION C-C & D-D.

APPROACH SLAB DETAILED IN ROADWAY PLANS.



SECTION B-B

GENERAL NOTES

DRAWING SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL AND THE 1993 REHABILITATION STRUCTURE PLANS.

SEE ROADWAY DRAWINGS FOR EXISTING AND PROPOSED UTILITY LOCATIONS BEYOND BRIDGE.

ALL CONCRETE REMOVAL NOT COVERED WITH A CONCRETE OVERLAY SHALL BE DEFINED BY A 1-INCH DEEP SAWCUT.

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

AT "CURB REPAIR" EXPOSE EXISTING REINFORCEMENT A MINIMUM OF 1½" CLEAR.

EXISTING FLOOR DRAINS TO REMAIN IN PLACE. REMOVE TOP OF DECK IN DRAIN AREA AS DIRECTED BY THE FIELD ENGINEER TO ALLOW PLACING THE FULL DEPTH 1½" CONCRETE OVERLAY.

EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS AND HARDWARE SHALL BE PAID FOR IN THE LUMP SUM PRICE BID AS "EXPANSION DEVICE B-9-99".

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

‡ EXISTING BARS ARE LIKELY TO BE CORRODED AND/OR DAMAGED DURING CONCRETE REMOVAL. PRESERVE AND INCORPORATE AS MUCH REBAR AS PRACTICAL.

UNDER THE BID ITEM "MASONRY ANCHORS TYPE L NO.5 BARS", ANCHORED REINFORCING STEEL SHALL BE PAID FOR SEPARATELY AS PROVIDED IN SECTION 505 OF THE STANDARD SPECIFICATIONS FOR BAR STEEL REINFORCEMENT.

CLEAN AND FILL EXISTING LONGITUDINAL AND TRANSVERSE CRACKS WITH PENETRATING EPOXY AS DIRECTED BY THE ENGINEERS.

PROFILE GRADE LINE SHALL BE DETERMINED IN THE FIELD BASED ON A MINIMUM OVERLAY THICHNESS OF 1½" PLACED ABOVE THE DECK SURFACE AFTER CLEANING. EXPECTED AVERAGE OVERLAY THICKNESS IS 2" (OR AS GIVEN BY THE ENGINEER). IF EXPECTED AVERAGE OVERLAY THICKNESS IS EXCEEDED BY MORE THAN ½", CONTACT THE STRUCTURES DESIGN SECTION.

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

A MINIMUM OF 1" OF CONCRETE SHALL BE ROMOVE FROM THE ENTIRE BRIDGE DECK UNDER THE BID ITEM " CLEANING DECKS".

ANY EXCAVATION TO COMPLETE THE OVERLAY OR THE PAVING BLOCK AT THE ABUTMENTS IS INCIDENTAL TO BID ITEM, "CONCRETE MASONRY OVERLAY DECKS". SEE ROADWAY DRAWINGS FOR ADDITIONAL NOTES, QUANTITIES AND DETAILS.

CLEAN ALL LOOSE MATERIAL ON THE DECK PRIOR TO OVERLAY PLACEMENT USING HIGH PRESSURE WATER OR AIR, ENSURING ALL FREE-STANDING WATER IS REMOVED PRIOR TO OVERLAY PLACEMENT, NEAT CEMENT IS REQUIRED PER 509.3.9.2 OF THE STANDARD SPECIFICATIONS.

OPTIONAL TRANSVERSE CONST JOINTS SUBJECT TO THE APPROVAL OF THE STRUCTURES DESIGN SECTION. MULTIPLE POURS AND SEQUENCE OF POURS FOR A GIVEN STAGE MUST BE APPROVED BY THE STRUCTURES DESIGN SECTION.

PREPARATION DECKS AND FULL-DEPTH DECK REPAIR SHALL BE AS DIRECTED BY THE ENGINEER IN THE FIELD.

THE ENGINEER SHALL INSPECT THE UNDERSIDE OF THE DECK AFTER DECK PREP PRIOR TO PLACEMENT OF OVERLAY, FOR AREAS OF FULL-DEPTH DECK REPAIR IF REQUIRED.

TOTAL ESTIMATED QUANTITIES - B-9-99

	BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
	203.0225.S	DEBRIS CONTAINMENT B-9-99	LS	1
(8)	502.0717.S	CRACK SEALING EPOXY	LF	3000
	502.3100	EXPANSION DEVICE B-9-99	LS	1
(2)	502.3200	PROTECTIVE SURFACE TREATMENT	SY	4210
	502.5005	MASONRY ANCHORS TYPE L NO.5 BARS	EACH	108
	505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	2,600
(3)	506.0105	STRUCTURAL STEEL CARBON	LB	550
	509.0301	PREPARATION DECKS TYPE 1	SY	70
	509.0302	PREPARATION DECKS TYPE 2	SY	60
	509.0500	CLEANING DECKS	SY	4170
	509.1000	JOINT REPAIR	SY	50
	509.1200	CURB REPAIR	LF	20
(6)	509.1500	CONCRETE SURFACE REPAIR	SF	10
	509.2000	FULL-DEPTH DECK REPAIR	SY	300
(1)	509.2500	CONCRETE MASONRY OVERLAY DECKS	CY	184
(4)	514.0900	ADJUSTING FLOOR DRAINS	EACH	8
(5)	SPV.0060.01	CLEANING AND PAINTING BEARINGS	EACH	18

QUANTITY NOTES:

(1) ITEM IS FOR DECK OVERLAY CONCRETE AND INCLUDES THE OVERHANG ON THE PAVING BLOCK AND JOINT REPAIR, AND ALL CONCRETE IN THE AREAS REMOVED AND REPLACED AT THE TYPE 1 & 2 DECK REPAIR AS REQUIRED. SAWCUTS FOR THESE AREAS DEFINED BY A 1-INCH DEEP SAWCUT TO A NEAT LINE.

(2) INCLUDES THE ENTIRE TOP OF DECK AND PAVING BLOCK ON THE BRIDGE.

(3) ITEM IS FOR FLOOR DRAIN GRATES.

(4) ITEM IS FOR THE REPAIR OF EXISTING FLOOR DRAIN FRAME INCLUDING REMOVING GRATE, CLEANING RAISING FRAME TOP AND GRATE SUPPORT BARS AND, INSTALLING NEW GRATE.

(5) ITEM IS FOR CLEANING AND PAINTING EXPANSION BEARINGS AT ABUTMENTS.

(6) REPAIR OF GIRDER ENDS AT LOCATIONS IDENTIFIED AND DIRECTED BY ENGINEER IN THE FIELD.

(7) QUANTITY IS FOR ESTIMATING PURPOSES ONLY. COORDINATE FINAL LENGTH WITH ENGINEER IN THE FIELD. TOTAL LENGTH NOT TO EXCEED PLAN QUANTITY WITHOUT APPROVAL OF THE ENGINEER. SEE GENERAL NOTES.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-9-99

DRAWN BY DLF | PLANS CK'D. JAJ

CONCRETE OVERLAY CONTINUED

SHEET 2 OF 8

39

8

8

PLOT DATE: 9/29/2015 PLOT TIME: 10:15:43 AM

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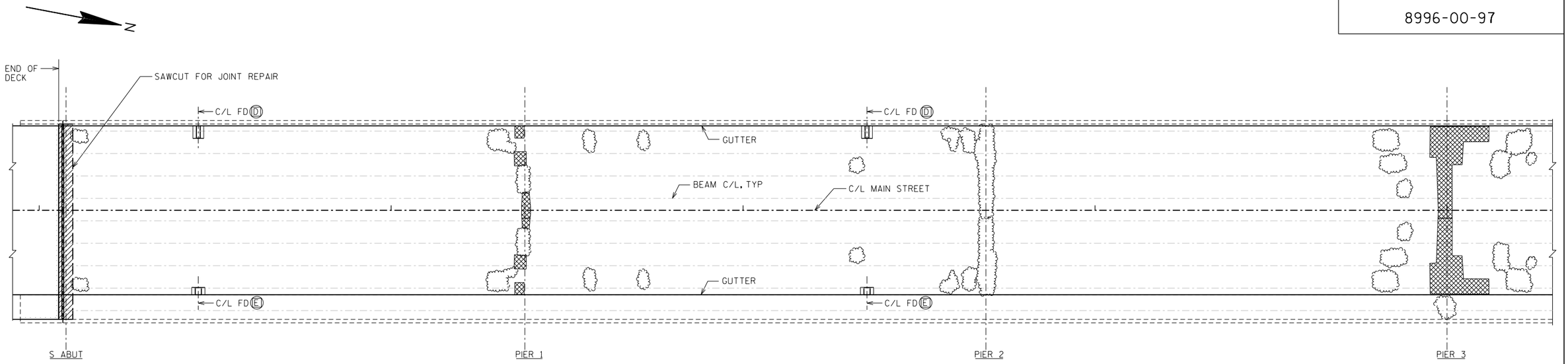
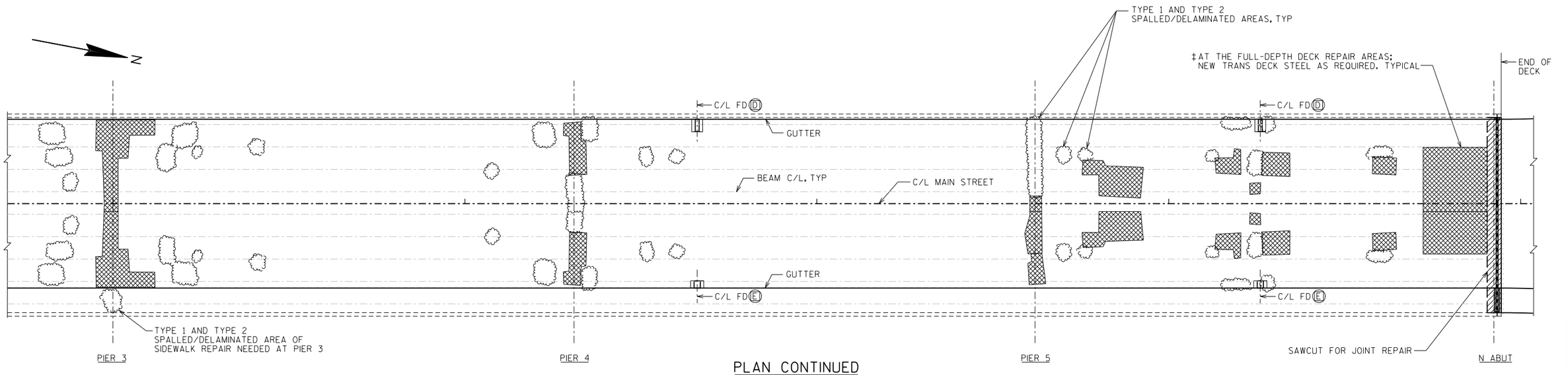
STATE PROJECT NUMBER
8996-00-97



PLAN



PLAN CONTINUED

NOTES

PROTECT EXISTING REINFORCEMENT DURING DECK SAWING & REMOVAL.

FD (D) = FLOOR DRAIN D, SEE SHEET 1

FD (E) = FLOOR DRAIN E, SEE SHEET 1

‡ EXISTING BARS ARE LIKELY TO BE CORRODED AND/OR DAMAGED DURING CONCRETE REMOVAL. PRESERVE AND INCORPORATE AS MUCH REBAR AS PRACTICAL.

LEGEND

JOINT REPAIR

FULL-DEPTH DECK REPAIR

TYPE 2
TYPE 1 — PER STD SPEC SECTION 509, TYPE 2 LIMITS ARE CONTAINED WITHIN TYPE 1 LIMITS. THE TYPE 2 LIMITS WOULD BE A % OF THE TYPE 1 LIMITS.

INDICATES SPALLED/DELAMINATED AREAS

THIS SHEET IS FOR REFERENCE ONLY.

DECK REPAIR AREAS SHOWN ARE FOR REFERENCE ONLY. ENGINEER TO VERIFY REPAIR AREAS. REPAIRS SHALL BE MADE ONLY AS DIRECTED BY THE ENGINEER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-9-99

DRAWN BY DLF | PLANS CK'D. JAJ

DECK REPAIR

SHEET 3 OF 8

40

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PLOT DATE: 7/9/2015
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8

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PLOT DATE: 6/5/2015
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STATE PROJECT NUMBER

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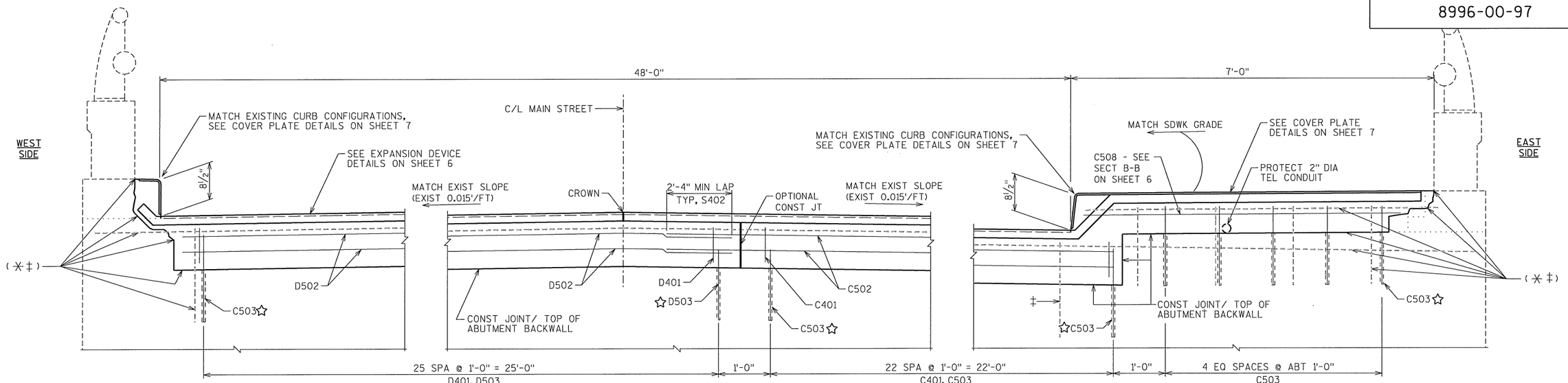
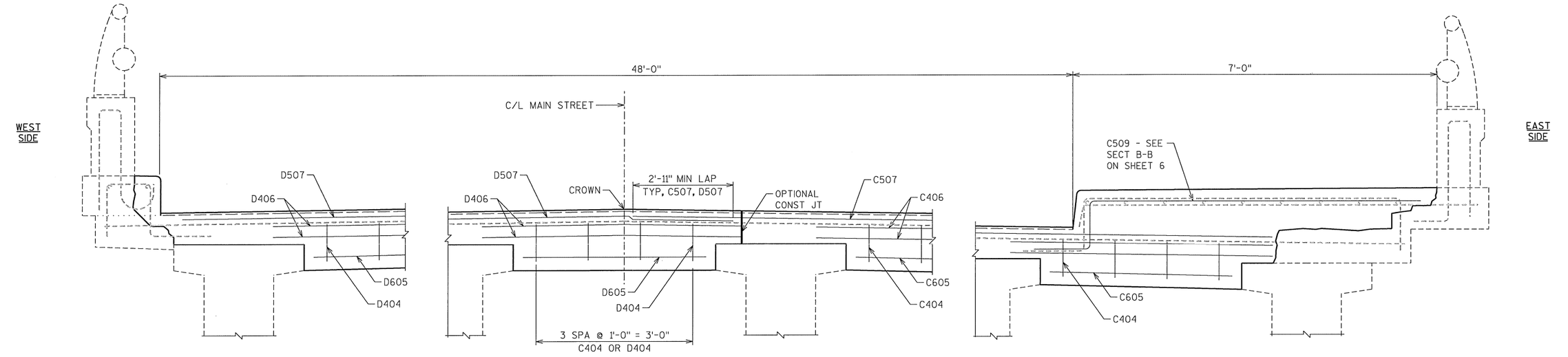


SECTION C-C
SHOWN AT PAVING BLOCK



SECTION D-D

NOTE: SEE SECTION C-C FOR SIMILAR DETAILS UNLESS SHOWN OR OTHERWISE NOTED.

✳ REMOVE CONC TO SOUND CONCRETE.

‡ EXISTING BARS ARE LIKELY TO BE CORRODED AND/OR DAMAGED DURING CONCRETE REMOVAL. PRESERVE AND INCORPORATE AS MUCH REBAR AS PRACTICAL.

☆ MASONRY ANCHOR TYPE L NO.5 BARS. EMBED A MINIMUM OF 1'-6" INTO CONCRETE, SPACE AT 1'-0", TURN 10" LEG AS NECESSARY TO FIT. WEIGHT OF BAR INCLUDED IN TABLE.

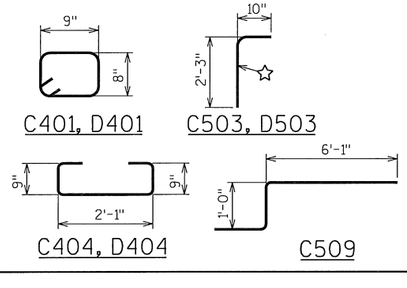
NOTE: THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE ENGLISH BAR DIAMETER SIZE.
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

BILL OF BARS

BAR MARK	COAT	NO. REQ'D.	LENGTH (FT-IN)	BAR SERIES	BENT	DECK JOINT
C401	X	46	3 - 4		X	PAVING BLOCK VERT
C502	X	24	7 - 6			PAVING BLOCK HORIZ
☆C503	X	56	2 - 8		X	PAVING BLOCK DWL
C404	X	32	3 - 0		X	END DIAPH TIE
C605	X	20	4 - 0			END DIAPH HORIZ
C406	X	16	5 - 10			END DIAPH HORIZ
C507	X	36	15 - 6			NEW DECK TRANS
C508	X	4	6 - 2			AT SDWK PAVING BLK
C509	X	6	8 - 7		X	AT SDWK

BILL OF BARS

BAR MARK	COAT	NO. REQ'D.	LENGTH (FT-IN)	BAR SERIES	BENT	DECK JOINT
D401	X	52	3 - 4		X	PAVING BLOCK VERT
D502	X	24	7 - 6			PAVING BLOCK HORIZ
☆D503	X	52	3 - 0		X	PAVING BLOCK DWL
D404	X	32	4 - 0		X	END DIAPH TIE
D605	X	20	3 - 6			END DIAPH HORIZ
D406	X	16	5 - 10			END DIAPH HORIZ
D507	X	36	14 - 0			NEW DECK TRANS



NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-9-99

DRAWN BY DLF | PLANS CK'D. JAJ

END BLOCK SECTIONS

SHEET 4 OF 8

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8

8

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PLOT DATE: 6/5/2015
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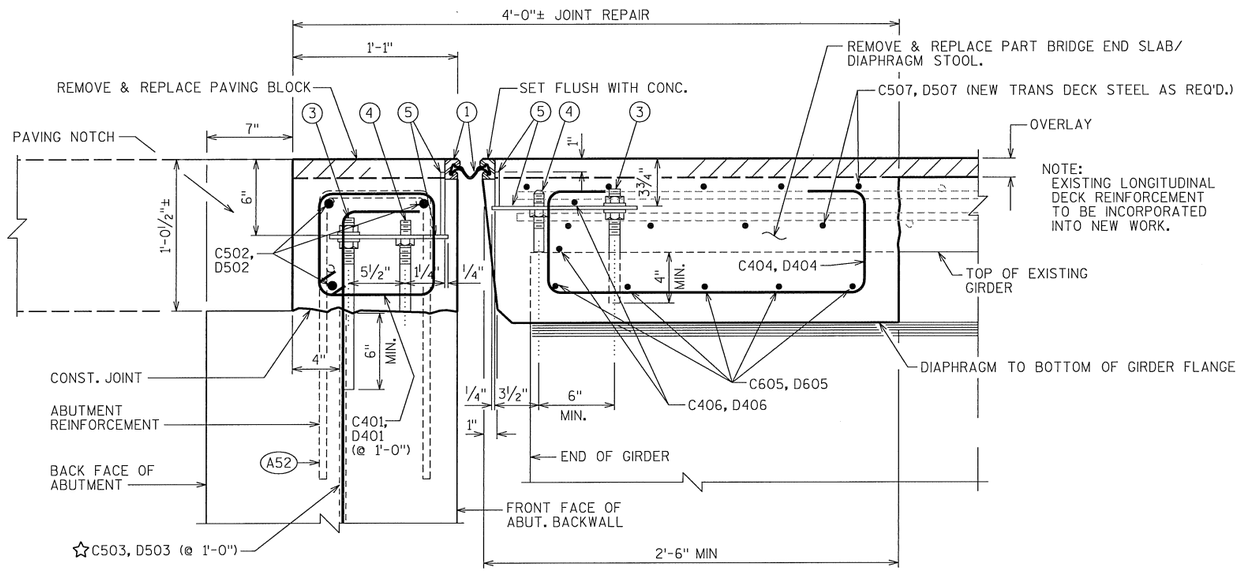


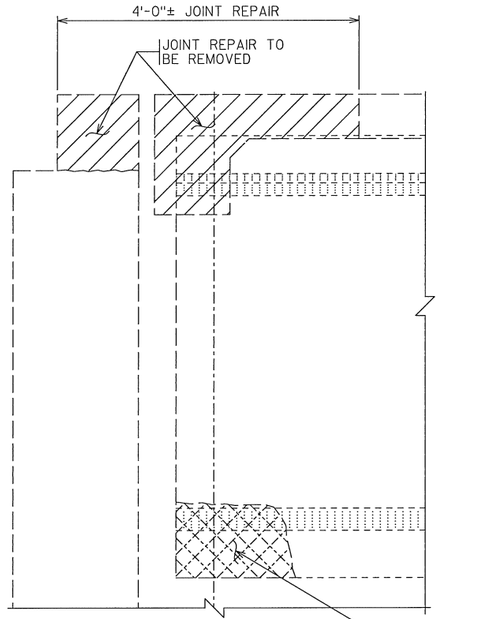
(A52) PRESERVE EXISTING REINF. EXTEND FULL LENGTH & INCORPORATE INTO NEW WORK.

SECTION THRU JOINT AT ABUTMENT

NORMAL TO ℄ SUBSTRUCTURE
SIDEWALK & CURB NOT SHOWN

NOTE:
THIS SHEET IS TO BE USED IN CONJUCTION WITH "COVER PLATE DETAILS" SHEET.

☆MASONRY ANCHOR TYPE L NO.5 BARS. EMBED A MINIMUM OF 1'-6" INTO CONCRETE, SPACE AT 1'-0", TURN 10" LEG AS NECESSARY TO FIT.

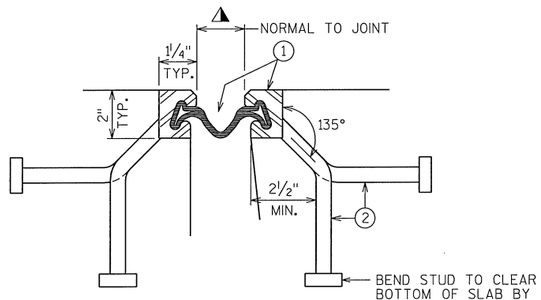


JOINT REPAIR REMOVAL

CROSS-HATCH AREA INDICATES REPAIR ON GIRDERS IF REQUIRED AT THE FULL-DEPTH DECK REPAIR AREAS, AND AT THE JOINT REPAIR AREAS, TYPICAL. INCLUDED IN THE BID ITEM "CONCRETE SURFACE REPAIR".

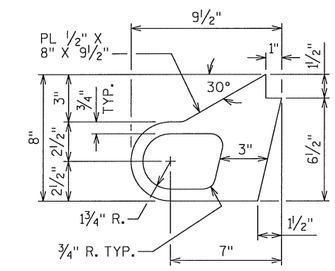
LEGEND

1. NEOPRENE STRIP SEAL (5" - INCH) AND STEEL EXTRUSIONS.
2. STUDS 5/8"ϕ X 6 3/8" LONG AT 6" ALTERNATE CENTERS. WELD TO EXTRUSIONS AND BEND AS SHOWN AFTER WELDING.
2A. 1/2" THICK ANCHOR PLATE WITH 5/8"ϕ ROD (OR ALTERNATE STRIP SEAL ANCHOR). WELD ROD TO ANCHOR PLATE, WELD ANCHOR PLATE TO NO. 1 AT 1'-6" CENTERS BETWEEN GIRDERS.
3. 3/4" ϕ THREADED ROD WITH 2 NUTS AND PLATE WASHERS. GROUT THREADED ROD INTO FIELD DRILLED HOLES ON ℄ OF GIRDER. ON ABUTMENT SIDE GROUT THREADED ROD INTO FIELD DRILLED HOLES IN ABUTMENT BACKWALL AS SHOWN.
4. 3/4"ϕ THREADED ROD WITH NUT. TACK WELD NUT TO NO. 5.
5. FABRICATE SUPPORT FROM 3" X 1/2" BAR AS SHOWN OR EQUIVALENT, ONE PER GIRDER PER SIDE. SHOP OR FIELD WELD TO NO. 1. IF FIELD WELDED, COVER WELDED AREAS WITH EPOXY-COATING MATERIAL. PROVIDE 1 1/2" ϕ HOLE FOR NO. 3 & 1" ϕ HOLE FOR NO. 4.
6. (VACANT)
7. 3/4"ϕ X 1 1/2" STAINLESS STEEL SOCKET FLAT HEAD SCREWS WITH ANTI-SEIZE LUBRICANT. PLACE IN COUNTERSUNK HOLE. RECESS 1/16" BELOW PLATE SURFACE.
8. 3/4"ϕ X 4" GALVANIZED HEX HEAD BOLT. BEND 45°.
9. 3/4"ϕ X 2 1/4" GALVANIZED THREADED COUPLING.
10. 1" X 5" SLOTTED COUNTERSUNK HOLE FOR NO. 7. PLACE SLOT PARALLEL TO DIRECTION OF MOVEMENT.
11. SIDEWALK & CURB COVER PLATE 3/8" X 2'-0" X LIMITS SHOWN. BEND DOWN FACE OF SIDEWALK OR CURB WITH HOLES FOR NO. 7. GALVANIZE PLATE AFTER SLIP-RESISTANT SURFACE IS APPLIED.

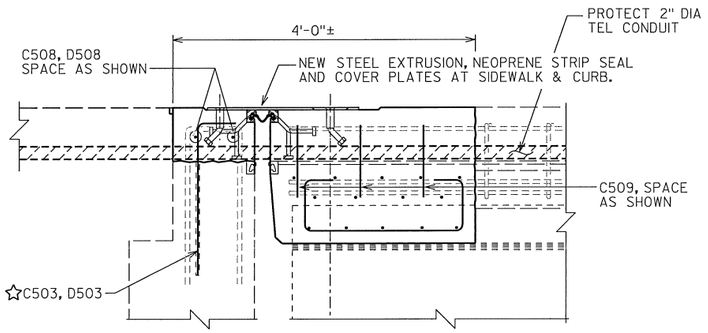


SECTION THRU JOINT

(EXTERIOR GIRDER TO EDGE OF DECK AND AT PARAPETS AND SIDEWALKS)



ALTERNATE STRIP SEAL ANCHOR



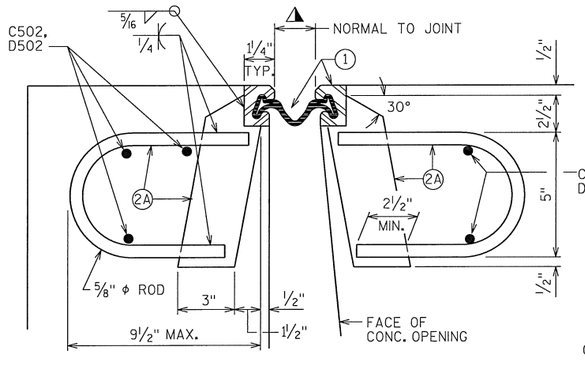
SECT B-B

AT SIDEWALK

TEMPERATURE TABLE

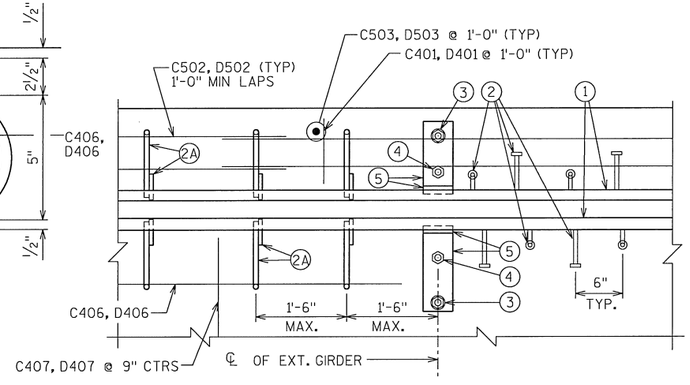
SHADED UNDERSIDE DECK TEMP. (°F)	JOINT OPENING (NORMAL TO JT.)
85°	1 1/2"
75°	1 3/4"
65°	2 1/8"
55°	2 3/8"
45°	2 5/8"
35°	2 7/8"
25°	3 1/4"
15°	3 1/2"
5°	3 3/4"

A SMALL JOINT OPENING DUE TO A HIGH TEMPERATURE AT TIME OF CONSTRUCTION MAY REQUIRE NEOPRENE STRIP SEAL INSTALLATION INTO STEEL EXTRUSIONS PRIOR TO SETTING THE EXPANSION JOINT.



SECTION THRU JOINT

ROADWAY TRAFFIC AREA BETWEEN EXTERIOR GIRDERS.



PART PLAN

NOTES

ONE FIELD SPLICE PERMITTED IN STEEL EXTRUSIONS, UNLESS MORE ARE REQUIRED FOR STAGED CONSTRUCTION, HANDLING OR GALVANIZING REQUIREMENTS. IF USED, DETAILS SHALL BE SUBMITTED FOR APPROVAL. NO SPLICING PERMITTED IN NEOPRENE STRIP SEAL.

AFTER FABRICATION, BUT BEFORE SHIPMENT, STRAIGHTEN STEEL EXTRUSIONS SUCH THAT THEY SHALL BE FREE FROM WARP, TWIST AND SWEEP.

FABRICATOR SHALL PROVIDE MEANS OF KEEPING GALVANIZED EXTRUSIONS CLEAN AND SMOOTH DURING SHIPMENT AND PRIOR TO APPLYING LUBRICANT ADHESIVE FOR NEOPRENE GLAND INSTALLATION.

SANDBLAST PLATES, SUPPORTS AND EXTRUSIONS AFTER FABRICATION IN ACCORDANCE WITH SSPC SP. #6 "COMMERCIAL BLAST CLEANING". AFTER BLAST CLEANING, THE PLATES, SUPPORTS AND EXTRUSIONS SHALL BE HOT DIPPED GALVANIZED. SLIP-RESISTANT SURFACE IS APPLIED TO SIDEWALK COVER PLATES BY THE MANUFACTURER AND THEN HOT DIPPED GALVANIZED TO THEIR RECOMMENDATIONS TO MAINTAIN THE INTEGRITY OF THIS SURFACE.

ANCHOR SYSTEM NO. 8 AND NO. 9 SHALL CONFORM TO ASTM A307 AND SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C AND D.

STRIP SEAL EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS AND HARDWARE WILL BE PAID FOR AT THE LUMP SUM PRICE BID FOR "EXPANSION DEVICE B-9-99".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

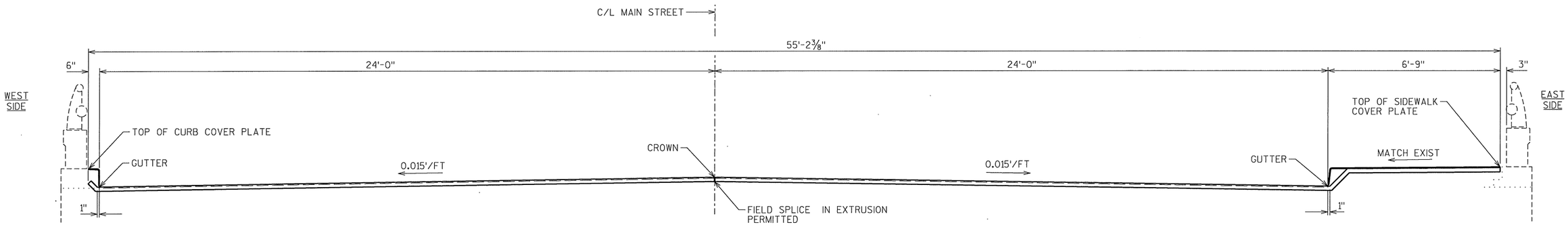
STRUCTURE B-9-99

DRAWN BY DLF | PLANS CK'D. JAJ

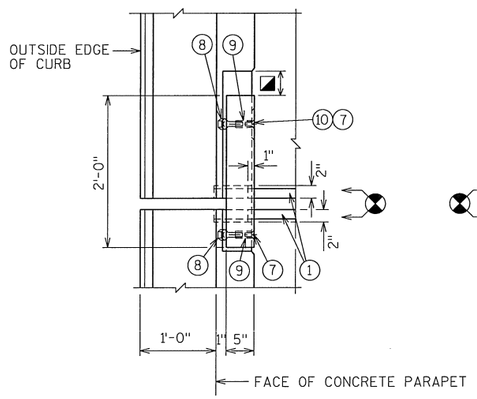
EXPANSION DEVICE

SHEET 5 OF 8

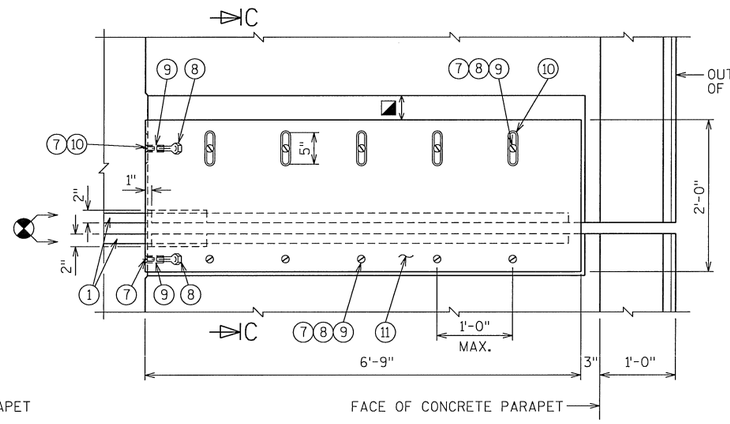
STATE PROJECT NUMBER
8996-00-97



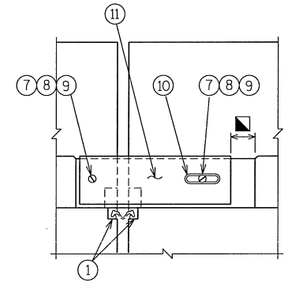
EXPANSION DEVICE ELEV LOOKING NORTH



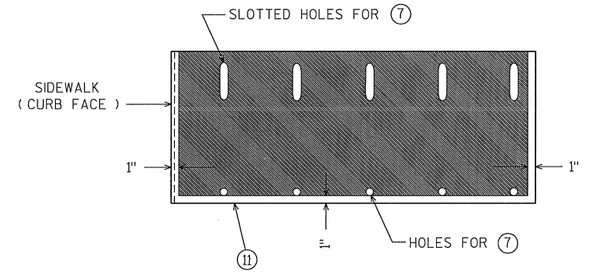
PLAN AT CURB



PLAN AT SIDEWALK



VIEW OF COVER PLATES FROM ROADWAT

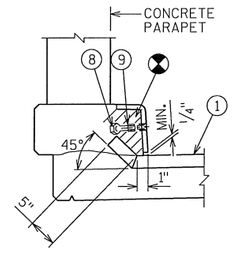


PLAN OF SIDEWALK COVER PLATE WITH SLIP-RESISTANT SURFACE

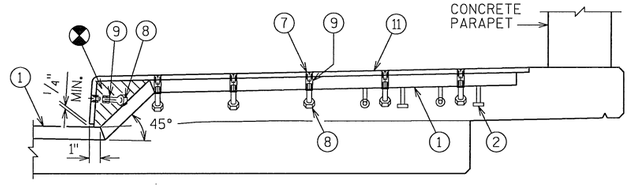
PLACE SLIP-RESISTANT SURFACE ON TOP WALKING SURFACE IN SHADED AREA ONLY (NOT ON CURB FACE).

SLIP-RESISTANT SURFACE NOT REQUIRED ON CURB SIDE OF BRIDGE.

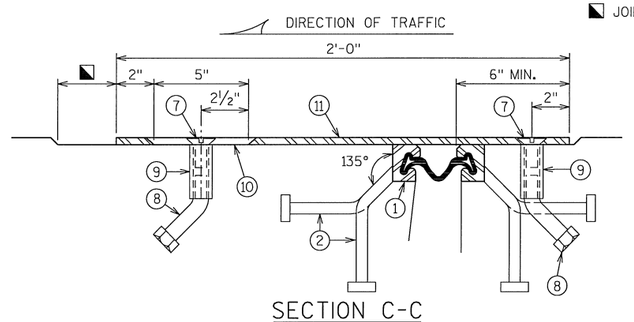
APPROVED SLIP-RESISTANT APPLIED SURFACES FOR STEEL PLATES		
PRODUCT	MANUFACTURER	CONTACT AT
SLIPNOT GRADE 2, STEEL	W. S. MOLNAR COMPANY	1-800-SLIPNOT
ALGRIP, STEEL	ROSS TECHNOLOGY CORP.	1-800-345-8170



SECTION AT CURB



SECTION AT SIDEWALK



SECTION C-C

- BLOCK OUT CONCRETE 2" EACH SIDE OF JOINT OPENING.
- JOINT OPENING DIMENSION ALONG SKEW PLUS ½".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-9-99

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COVER PLATE DETAILS

SHEET 6 OF 8

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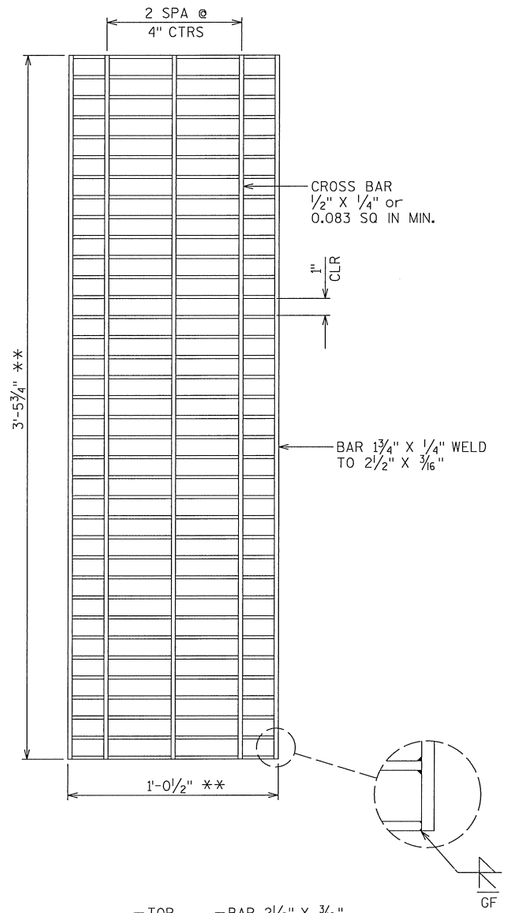
8

PLOT TIME: 10:40:35 AM

PLOT DATE: 6/5/2015

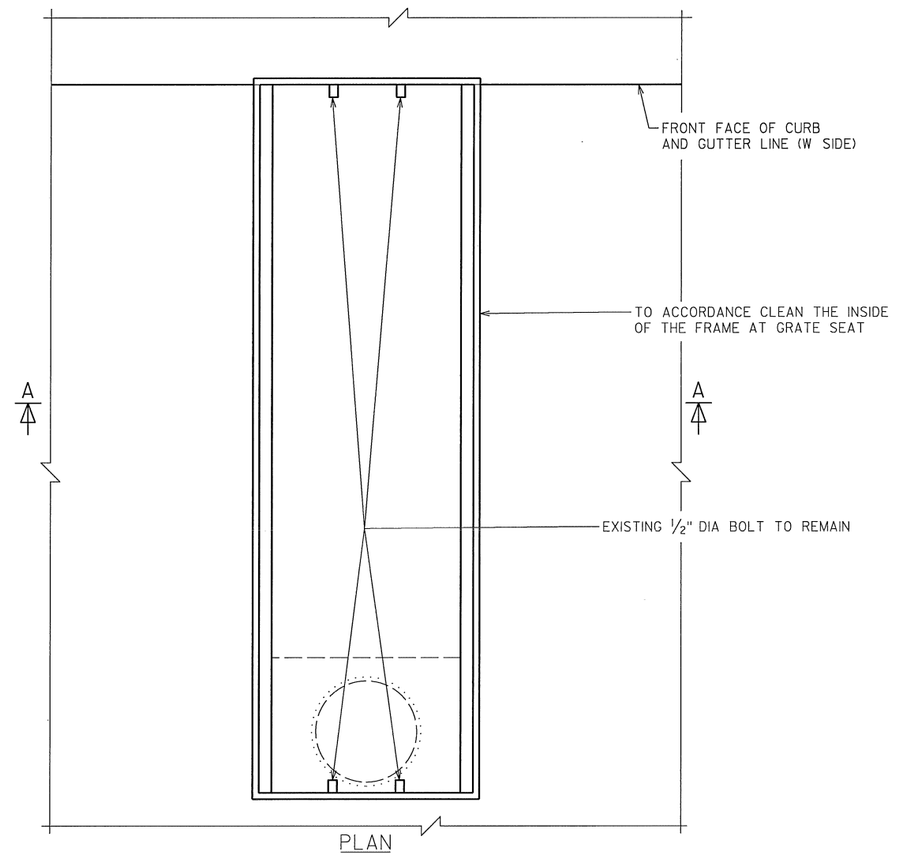
FILE NAME : S:\UZ\WI\Hnw\255171\5-final-dsgn\5i-drawings\20-Struct\bridge\b09099jtss_RailsSdwk.dgn

STATE PROJECT NUMBER
8996-00-97

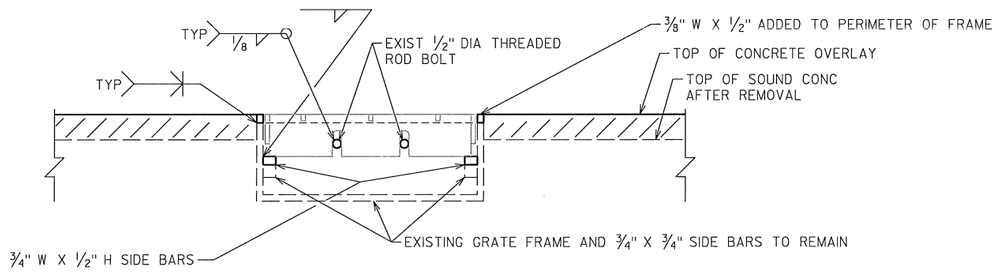


GRATE DETAIL
(TYPE D)
(4) NEW

** GRATE DIMENSIONS ARE BASED ON THE ORIGINAL AND 1993 REHABILITAION STRUCTURE PLANS. THESE NEW GRATES ARE INTENDED TO REPLACE EXISTING GRATES IN LIKE KIND. VERIFY GRATE & FRAME DIMENSIONS.



PLAN



SECTION A-A

EXISTING FLOOR DRAIN TYPE D

NOTES

ALL GRATE MATERIAL SHALL BE ASTM A36 STEEL.

GRATE SHALL BE HOT DIP GALVANIZED.

WELDS SHALL CONFORM TO SECTION 506.3.19.2/3 OF THE STD. SPECS.

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

THE CONTRACTOR AND FABRICATOR SHALL TAKE STEPS TO PREVENT DAMAGE, WARPING AND TWISTING OF THE GRATE IN SHIPPING.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-9-99

DRAWN BY DLF | PLANS CK'D. JAJ

FLOOR DRAIN
GRATE DETAILS
(TYPE D)

SHEET 7 OF 8

44

8

8

PLOT DATE: 6/5/2015 PLOT TIME: 10:40:35 AM

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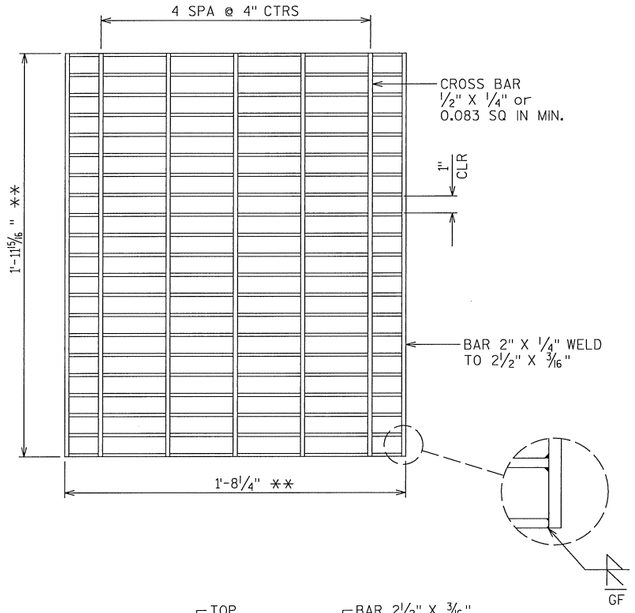
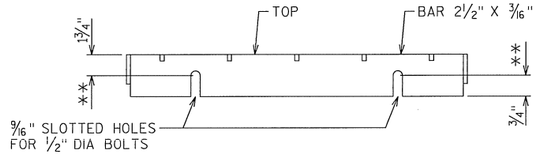
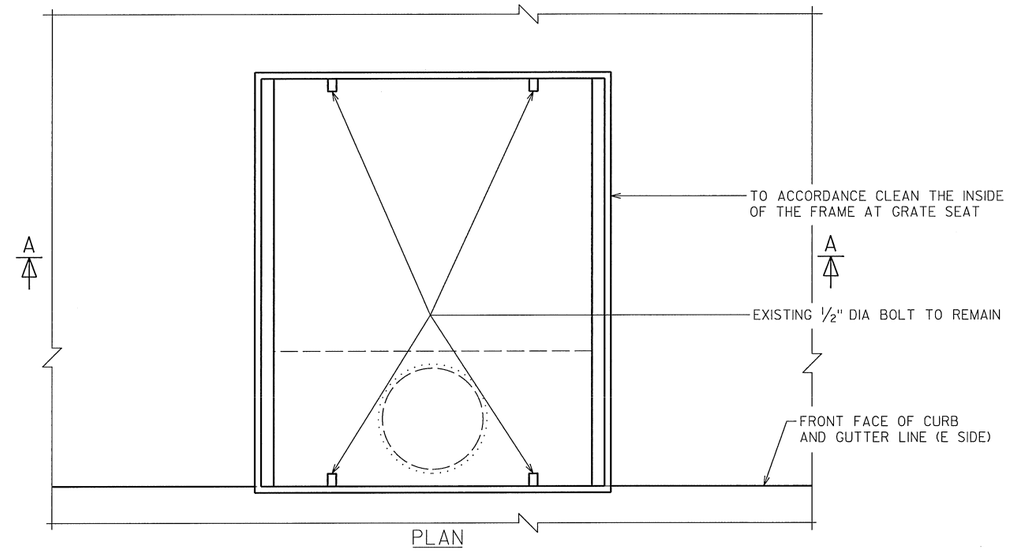


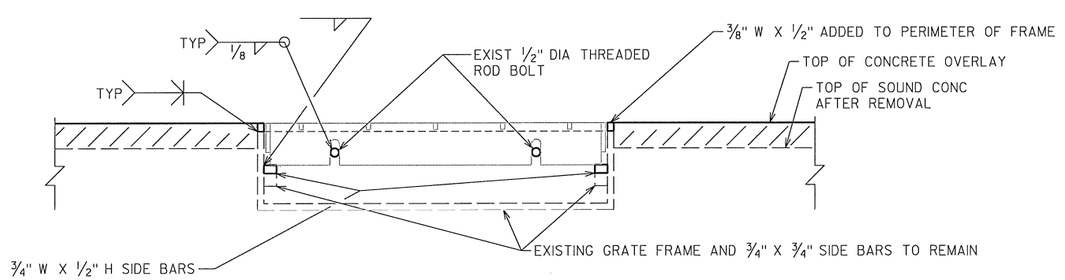


GRATE DETAIL
(TYPE E)
(4) NEW

** GRATE DIMENSIONS ARE BASED ON THE ORIGINAL AND 1993 REHABILITAION STRUCTURE PLANS. THESE NEW GRATES ARE INTENDED TO REPLACE EXISTING GRATES IN LIKE KIND. VERIFY GRATE & FRAME DIMENSIONS.



PLAN



SECTION A-A

EXISTING FLOOR DRAIN TYPE E

NOTES

ALL GRATE MATERIAL SHALL BE ASTM A36 STEEL.

GRATE SHALL BE HOT DIP GALVANIZED.

WELDS SHALL CONFORM TO SECTION 506.3.19.2/3 OF THE STD. SPECS.

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

THE CONTRACTOR AND FABRICATOR SHALL TAKE STEPS TO PREVENT DAMAGE, WARPING AND TWISTING OF THE GRATE IN SHIPPING.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-9-99

DRAWN BY DLF | PLANS CK'D. JAJ

FLOOR DRAIN
GRATE DETAILS
(TYPE E)

SHEET 8 OF 8

45

8

8

PLOT DATE: 6/5/2015 PLOT TIME: 10:40:35 AM

FILE NAME : S:\DZ\WI\Tnw\255117\5-final-dsgn\51-drawings\20-Struct\bridge\b09099fd.dgn

Wisconsin Department of Transportation

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