

## GENERAL NOTES

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

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

THE DEPARTMENT OF TRANSPORTATION WILL FURNISH THE CONTRACTOR WITH A MONUMENT TO BE INSTALLED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCLUSIVE OF THE ROADBED, SHALL BE FERTILIZED, SEEDED, AND MULCHED AS DIRECTED BY THE ENGINEER.

SEEDING TEMPORARY SHALL BE USED IN THE PROJECT AND SHALL BE PLACED AS SHOWN IN THE PLANS AND/OR AS DIRECTED BY THE ENGINEER.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM (NAVD) 88.

## UTILITIES

CITY OF CHIPPEWA FALLS  
30 W. CENTRAL STREET  
CHIPPEWA FALLS, WI 54729  
ATTN: RICHARD RUBENZER  
715-726-2701  
rrubenz@chippewafalls-wi.gov

XCEL ENERGY  
1414 WEST HAMILTON AVE.  
EAU CLAIRE, WI 54702-0008  
ATTN: DAWN SCHULTZ  
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down.schultz@xcelenergy.com

AT&T  
304 SOUTH DEWEY STREET  
EAU CLAIRE, WI 54701  
ATTN: RICK PODOLAK  
715-839-5565  
rp4514@att.com

## ABBREVIATIONS

AC	ACRES
CHIS	CHISELED
CL	CENTERLINE
COR	CORNER
CWT	COUNT
CY	CUBIC YARD
EL	ELEVATION
GAL	GALLON
H	HOUSE
IP	IRON PIPE
LB	POUND
LF	LINEAR FEET
LS	LUMP SUM
LT	LEFT
MAX	MAXIMUM
MIN	MINIMUM
MON	MONUMENT
NORM	NORMAL
OAL	OVERALL LENGTH
PC	POINT OF CURVATURE
PD	PEDESTAL
PI	POINT OF INTERSECTION
PK	PARKER-KALON
PL	PROPERTY LINE
PLE	PERMANENT LIMITED EASEMENT
PP	POWER POLE
PT	POINT OF TANGENCY
R	RADIUS
REQ'D	REQUIRED
RT	RIGHT
R/W	RIGHT-OF-WAY
SF	SQUARE FEET
SHLDR	SHOULDER
STA	STATION
SY	SQUARE YARD
TLE	TEMPORARY LIMITED EASEMENT
VAR	VARIES
WL	WELL

\* \* DENOTES UTILITIES THAT ARE NOT DIGGERS HOTLINE MEMBERS

**DIGGERS HOTLINE**

Dial 811 or (800)242-8511

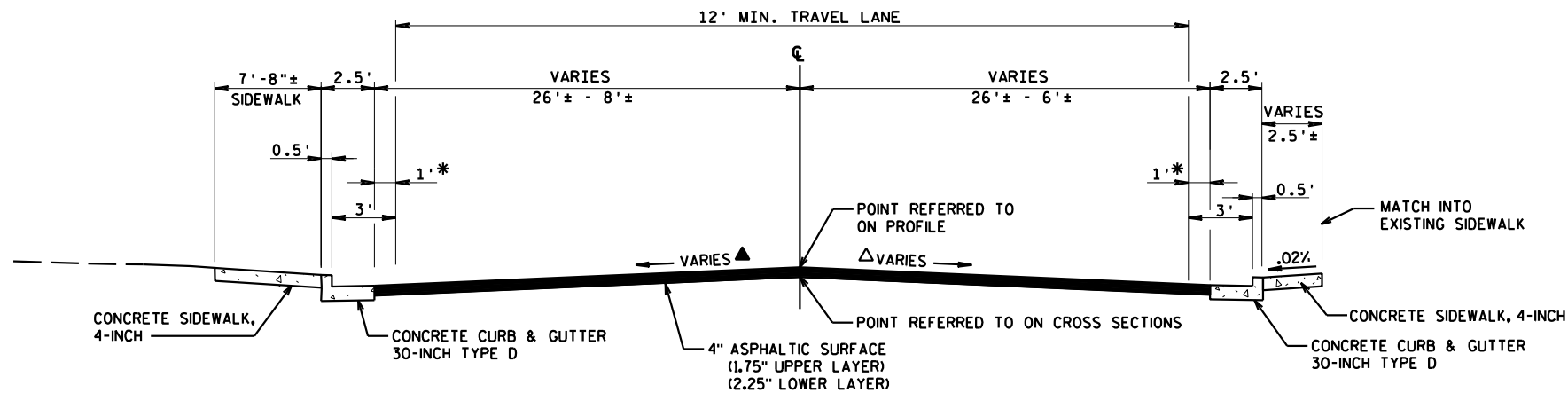
www.DiggersHotline.com

## DESIGNER

AYRES ASSOCIATES  
3433 OAKWOOD HILLS PARKWAY  
EAU CLAIRE, WI 54701  
ATTN: CHRIS McMAHON  
715-834-3161  
mcmahon@AyresAssociates.com

WISCONSIN DEPARTMENT OF  
NATURAL RESOURCES CONTACT:

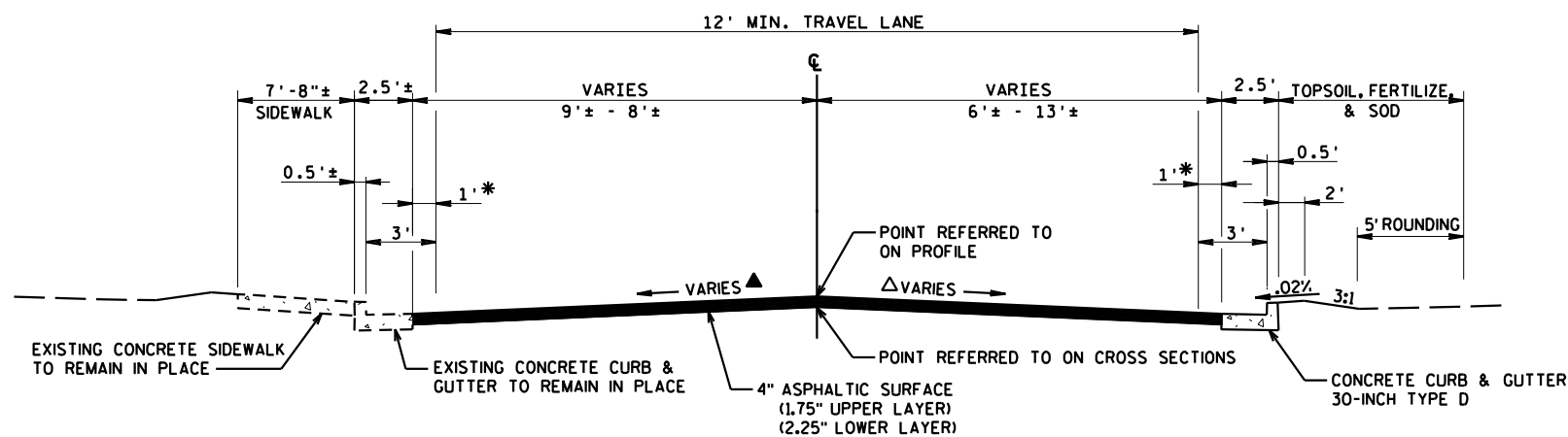
CHRIS WILLGER  
1300 W. CLAIREMONT AVE.  
EAU CLAIRE, WI. 54702  
715-839-1609  
christopherj.willger@wisconsin.gov



## FINISHED TYPICAL SECTION

(WEST APPROACH)

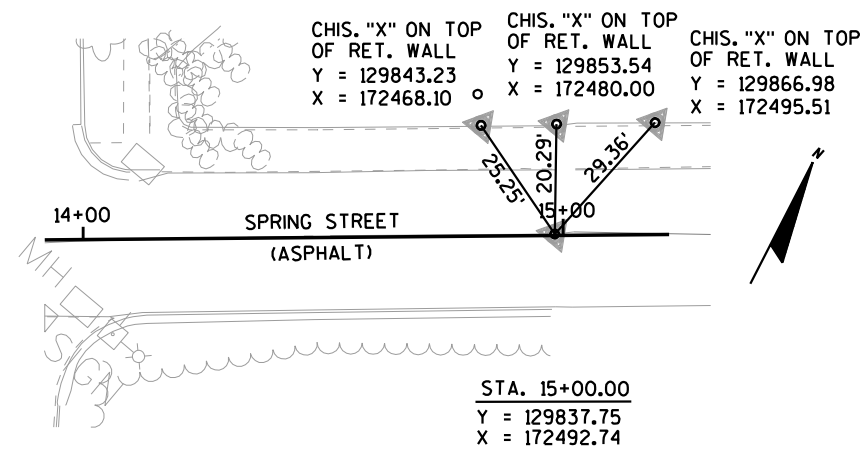
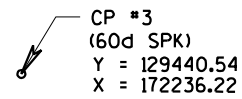
- \* URBAN PAVED SHOULDER
- ▲ 0.4% - 2.4% (R = 1.8%)
- △ 2.2% - 3.7% (R = 3.2%)



## FINISHED TYPICAL SECTION

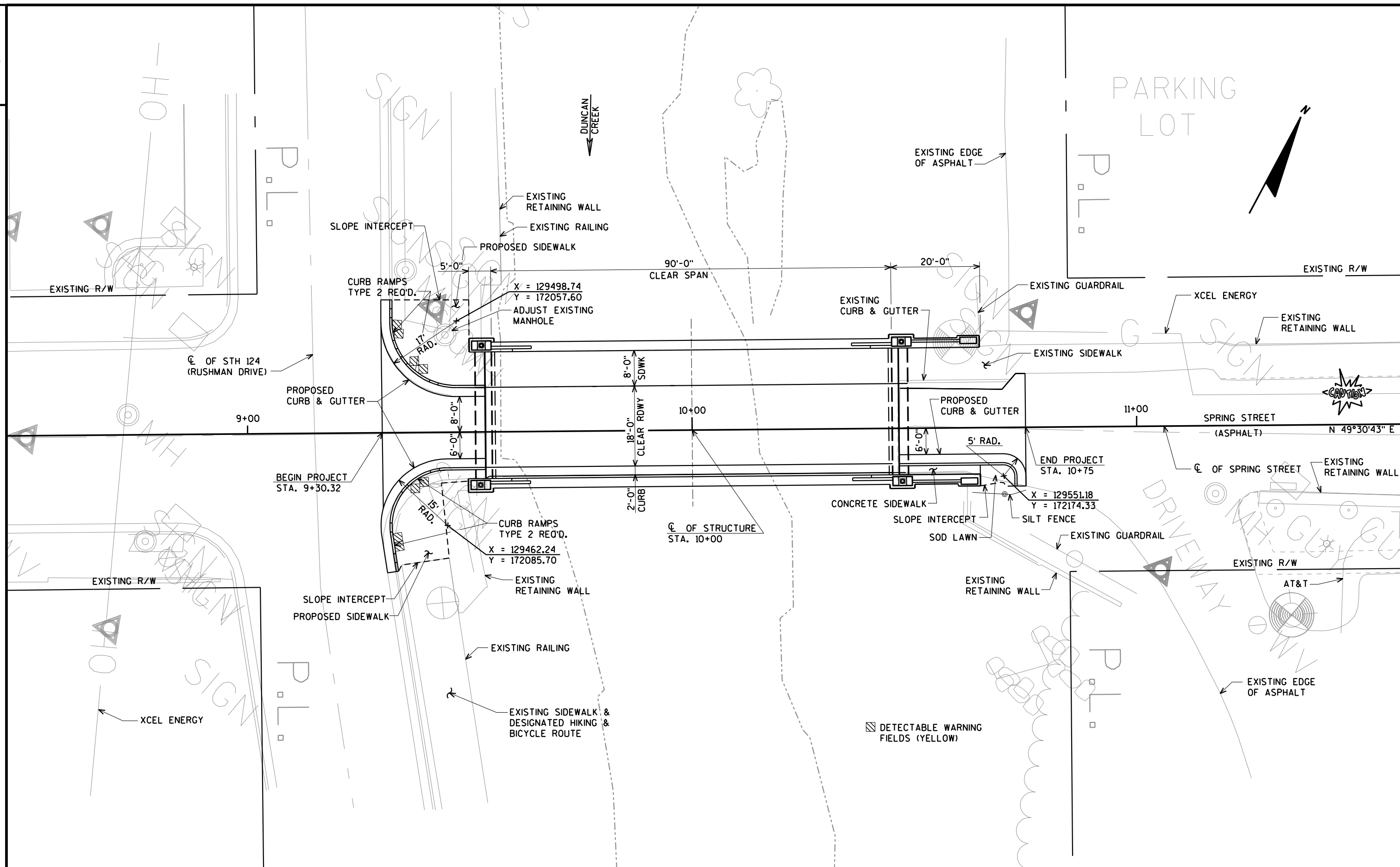
(EAST APPROACH)

- \* URBAN PAVED SHOULDER
- ▲ 0.2% - 2.0% (R = 1.2%)
- △ 0.6% - 1.4% (R = 1.0%)



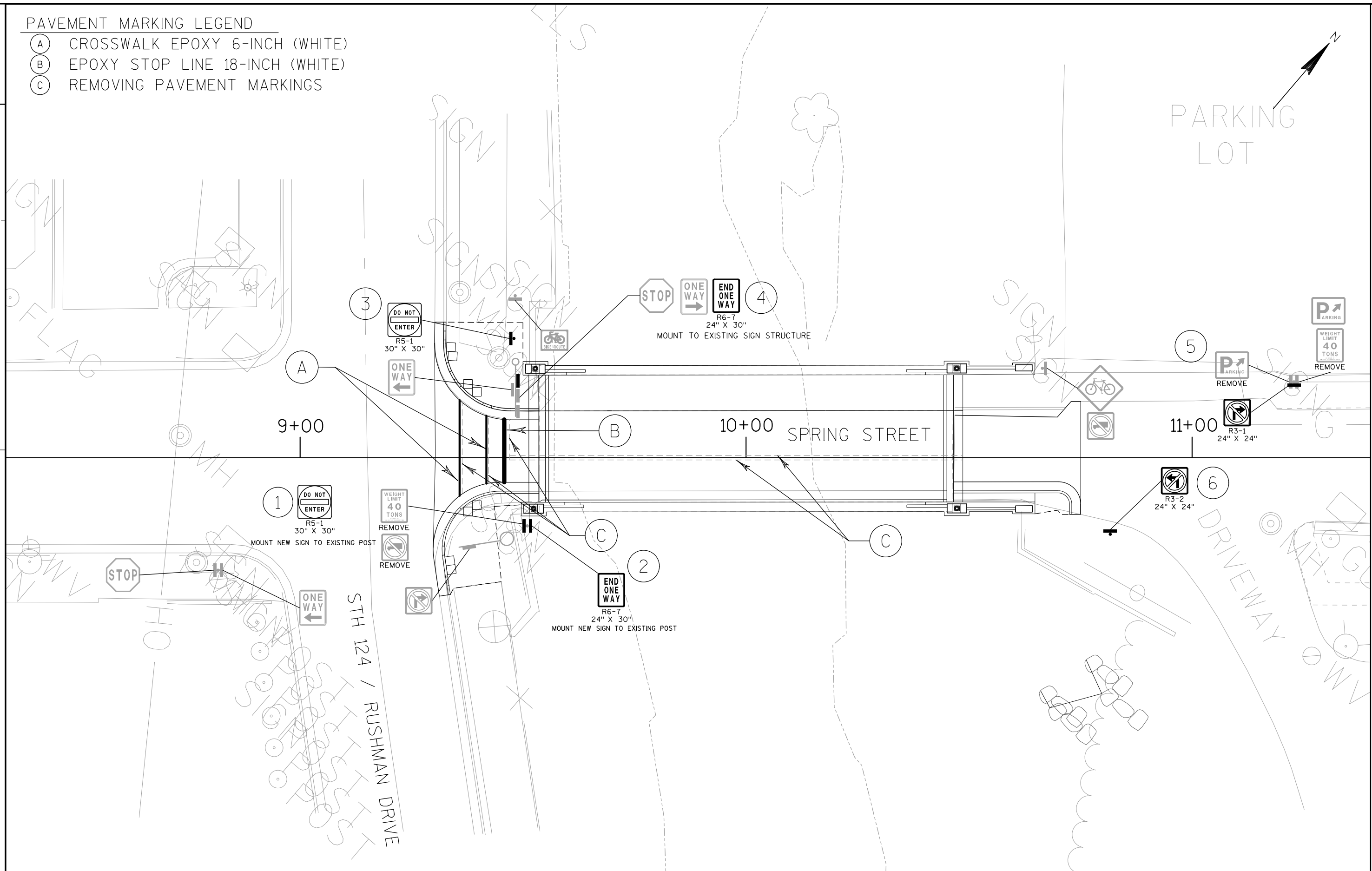
## WISDOT/CADDS SHEET 42





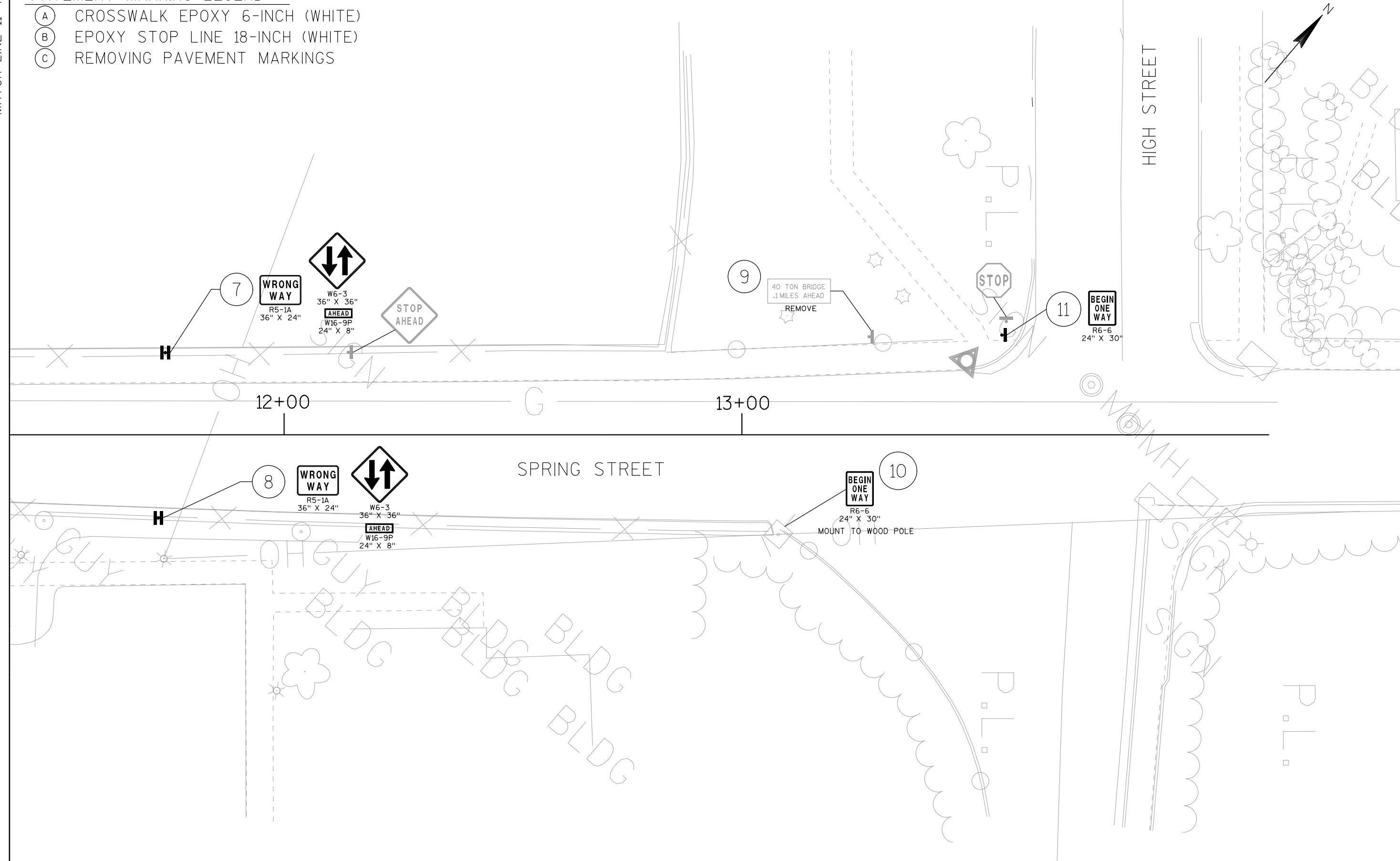
PAVEMENT MARKING LEGEND

- (A) CROSSWALK EPOXY 6-INCH (WHITE)
- (B) EPOXY STOP LINE 18-INCH (WHITE)
- (C) REMOVING PAVEMENT MARKINGS



## PAVEMENT MARKING LEGEND

- (A) CROSSWALK EPOXY 6-INCH (WHITE)  
(B) EPOXY STOP LINE 18-INCH (WHITE)  
(C) REMOVING PAVEMENT MARKINGS



DATE 04MAR15		E S T I M A T E O F Q U A N T I T I E S			
LINE					8996-00-98
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	204.0110	Removing Asphaltic Surface	SY	125.000	125.000
0020	204.0150	Removing Curb & Gutter	LF	78.000	78.000
0030	204.0155	Removing Concrete Sidewalk	SY	55.000	55.000
0040	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 8996-00-98	LS	1.000	1.000
0050	213.0100	Finishing Roadway (project) 01. 8996-00-98	EACH	1.000	1.000
0060	455.0605	Tack Coat	GAL	8.000	8.000
0070	465.0105	Asphaltic Surface	TON	25.000	25.000
0080	502.0100	Concrete Masonry Bridges	CY	5.000	5.000
0090	502.3200	Protective Surface Treatment	SY	275.000	275.000
0100	502.5002	Masonry Anchors Type L No. 4 Bars	EACH	224.000	224.000
0110	505.0605	Bar Steel Reinforcement HS Coated Bridges	LB	450.000	450.000
0120	509.0301	Preparation Decks Type 1	SY	3.000	3.000
0130	509.0302	Preparation Decks Type 2	SY	3.000	3.000
0140	509.2000	Full-Depth Deck Repair	SY	1.000	1.000
0150	509.2500	Concrete Masonry Overlay Decks	CY	15.000	15.000
0160	509.9005. S	Removing Concrete Masonry Deck Overlay (structure) 01. P-09-0711	SY	210.000	210.000
0170	517.1010. S	Concrete Staining (structure) 01. P-09-0711	SF	4,800.000	4,800.000
0180	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	115.000	115.000
0190	602.0405	Concrete Sidewalk 4-Inch	SF	590.000	590.000
0200	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	32.000	32.000
0210	611.8110	Adjusting Manhole Covers	EACH	1.000	1.000
0220	619.1000	Mobilization	EACH	1.000	1.000
0230	625.0105	Topsoil	CY	1.000	1.000
0240	628.1504	Silt Fence	LF	20.000	20.000
0250	628.1520	Silt Fence Maintenance	LF	20.000	20.000
0260	628.1905	Mobilizations Erosion Control	EACH	1.000	1.000
0270	628.1910	Mobilizations Emergency Erosion Control	EACH	1.000	1.000
0280	631.1000	Sod Lawn	SY	5.000	5.000
0290	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	2.000	2.000
0300	634.0812	Posts Tubular Steel 2x2-Inch X 12-FT	EACH	1.000	1.000
0310	634.0818	Posts Tubular Steel 2x2-Inch X 18-FT	EACH	2.000	2.000
0320	637.2220	Signs Type II Reflective SH	SF	73.170	73.170
0330	638.2602	Removing Signs Type II	EACH	5.000	5.000
0340	642.5001	Field Office Type B	EACH	1.000	1.000
0350	643.0100	Traffic Control (project) 01. 8996-00-98	EACH	1.000	1.000
0360	646.0600	Removing Pavement Markings	LF	247.000	247.000
0370	647.0566	Pavement Marking Stop Line Epoxy 18-Inch	LF	15.000	15.000
0380	647.0766	Pavement Marking Crosswalk Epoxy 6-Inch	LF	45.000	45.000
0390	650.5000	Construction Staking Base	LF	52.000	52.000
0400	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	115.000	115.000
0410	650.9910	Construction Staking Supplemental Control (project) 01. 8996-00-98	LS	1.000	1.000
0420	650.9920	Construction Staking Slope Stakes	LF	9.000	9.000
0430	690.0150	Sawing Asphalt	LF	77.000	77.000
0440	690.0250	Sawing Concrete	LF	45.000	45.000
0450	715.0502	Incentive Strength Concrete Structures	DOL	500.000	500.000
0460	SPV.0105	Special 01. Painting Existing Steel Gas Line	LS	1.000	1.000



DATE 04MAR15		E S T I M A T E O F Q U A N T I T I E S				
LINE		8996-00-98				
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY	
0470	SPV. 0165	Speci al 01. Fi ber Wrap Rei nforci ng	SF	4, 500. 000	4, 500. 000	
0480	SPV. 0165	Speci al 02. Concrete Surface Repai r	SF	1, 100. 000	1, 100. 000	
		Speci al				

204.0110 REMOVING ASPHALTIC SURFACE (CATEGORY 0010)

STATION TO STATION	LOCATION	SY
Sta. 9+30.32 to Sta. 9+53.50	Mainline	60
Sta. 10+46.50 to Sta. 10+75	Mainline	65
TOTAL		125

204.0150 REMOVING CURB & GUTTER (CATEGORY 0010)

STATION TO STATION	LOCATION	LF
Sta. 9+30.32 to Sta. 9+53.50	RT	40
Sta. 9+30.32 to Sta. 9+53.50	LT	38
TOTAL		78

204.0155 REMOVING CONCRETE SIDEWALK (CATEGORY 0010)

STATION TO STATION	LOCATION	SY
Sta. 9+30.32 to Sta. 9+45	RT	20
Sta. 9+30.32 to Sta. 9+53.50	LT	35
TOTAL		55

211.0100 PREPARE FOUNDATION FOR ASPHALTIC PAVING (CATEGORY 0010)

LOCATION	LS
PROJECT 8996-00-98	1

213.0100 FINISH ROADWAY (CATEGORY 0010)

LOCATION	EACH
PROJECT 8996-00-98	1

455.0605 TACK COAT (CATEGORY 0010)

STATION TO STATION	LOCATION	GAL
Sta. 9+30.32 to Sta. 9+53.50	Mainline	4
Sta. 10+46.50 to Sta. 10+75	Mainline	4
TOTAL		8

465.0105 ASPHALTIC SURFACE (CATEGORY 0010)

STATION TO STATION	LOCATION	TON
Sta. 9+30.32 to Sta. 9+53.50	Mainline	12.5
Sta. 10+46.50 to Sta. 10+75	Mainline	12.5
TOTAL		25

601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D (CATEGORY 0010)

STATION TO STATION	LOCATION	LF
Sta. 9+30.32 to Sta. 9+53.50	RT	43
Sta. 9+30.32 to Sta. 9+53.50	LT	38
Sta. 10+46.50 to Sta. 10+75	RT	34
TOTAL		115

602.0405 CONCRETE SIDEWALK 4-INCH (CATEGORY 0010)

STATION TO STATION	LOCATION	SF
Sta. 9+30.32 to Sta. 9+53.50	RT	235
Sta. 9+30.32 to Sta. 9+53.50	LT	315
Sta. 10+46.50 to Sta. 10+65	RT	40
TOTAL		590

602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW (CATEGORY 0010)

STATION TO STATION	LOCATION	SF
Sta. 9+33	25' RT	8
Sta. 9+33	23' LT	8
Sta. 9+39	10' RT	8
Sta. 9+39	13' LT	8
TOTAL		32

611.8110 ADJUSTING MANHOLE COVER (CATEGORY 0010)

STATION	LOCATION	EACH
Sta. 9+45	22' LT	1

619.1000 MOBILIZATION

LOCATION	EACH
PROJECT 8996-00-98 (CATEGORY 0010)	0.1
PROJECT 8996-00-98 (CATEGORY 0020)	0.9
TOTAL	1

625.0105 TOPSOIL (CATEGORY 0010)

STATION TO STATION	LOCATION	CY
Sta. 10+65 to Sta. 10+72.50	RT	0.8
Undistributed		0.2
TOTALS		1

SILT FENCE (CATEGORY 0010)

STATION TO STATION	LOCATION	628.1504	628.1520
		SILT FENCE LF	SILT FENCE MAINTENANCE LF
Sta. 10+63 to Sta. 10+75	RT	15	15
Undistributed		5	5
TOTALS		20	20

MOBILIZATIONS EROSION CONTROL & EMERGENCY EROSION CONTROL (CATEGORY 0010)

LOCATION	628.1905	628.1910
	MOBILIZATIONS EROSION CONTROL EACH	MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
PROJECT 8996-00-98	1	1

631.1000 SOD LAWN (CATEGORY 0010)

STATION TO STATION	LOCATION	SY
Sta. 10+65 to Sta. 10+72.50	RT	4
Undistributed		1
TOTALS		5

642.5001 FIELD OFFICE TYPE B (CATEGORY 0010)

LOCATION	EACH
PROJECT 8996-00-98	1

643.0100 TRAFFIC CONTROL (CATEGORY 0010)

LOCATION	EACH
PROJECT 8996-00-98	1

CONSTRUCTION STAKING

CATEGORY	LOCATION	650.5000	650.5500	650.9910	650.9920
		BASE LF	CURB GUTTER AND CURB & GUTTER LF	SUPPLEMENTARY CONTROL LS	SLOPE STAKES LF
0010	Sta. 9+30.32 to Sta. 10+75	52	115	1	9
0020	P-09-0711	---	---	---	---
TOTALS		52	115	1	9

690.0150 SAWING ASPHALT (CATEGORY 0010)

STATION	LOCATION	LF
Sta. 9+30.32	Mainline	52
Sta. 10+75	Mainline	25
TOTAL		77

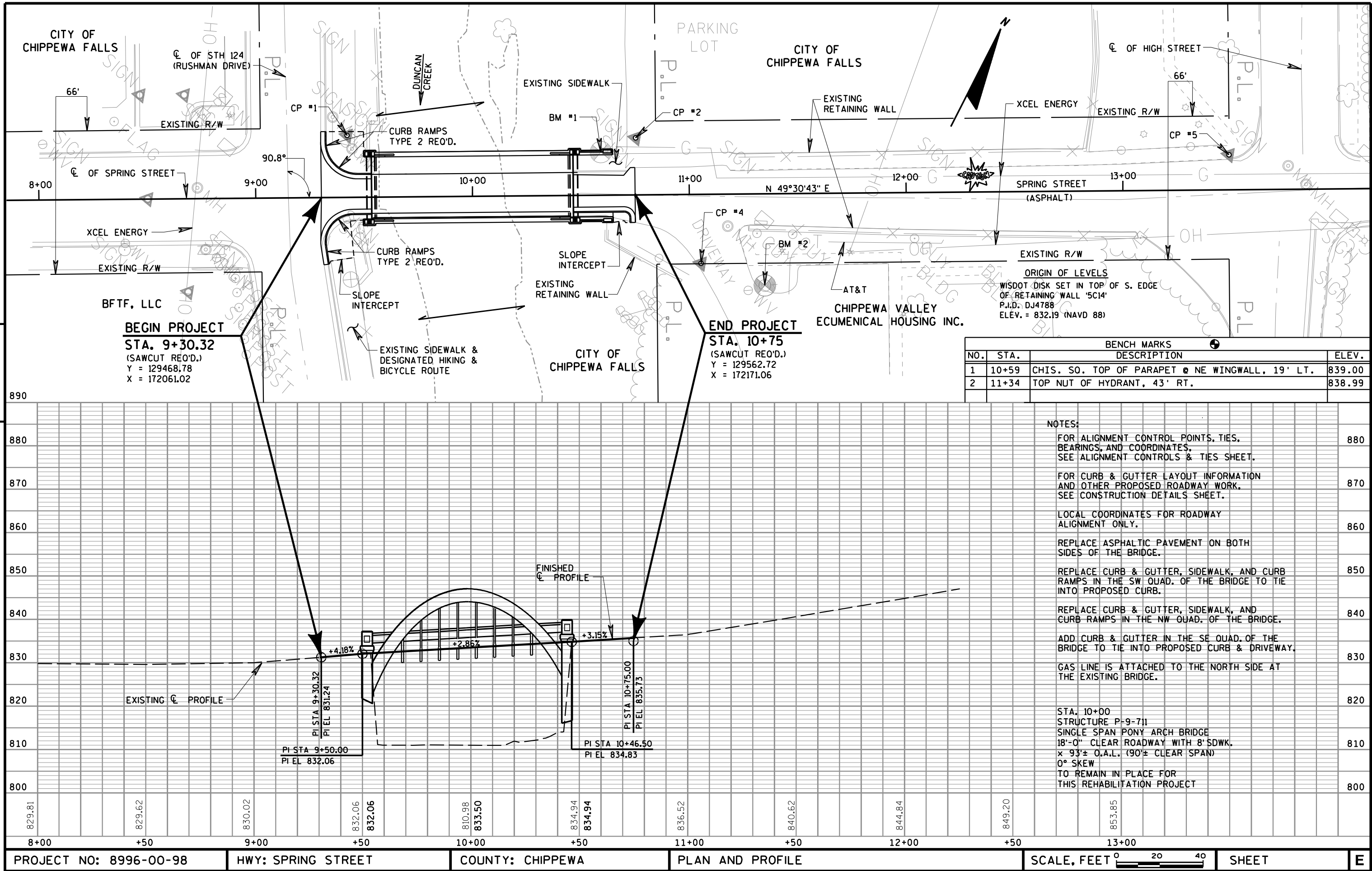
690.0250 SAWING CONCRETE (CATEGORY 0010)

STATION TO STATION	LOCATION	LF
Sta. 9+30.32 to Sta. 9+45	RT	19
Sta. 9+30.32 to Sta. 9+50	LT	26
TOTAL		45

PAVEMENT MARKING			
	646.0600	647.0566	647.0766
	REMOVING	STOP LINE EPOXY	CROSSWALK
	PAVEMENT	18-INCH	EPOXY 6-INCH
	MARKINGS	(WHITE)	(WHITE)
LOCATION	LF	LF	LF
STA. 9+00 TO STA. 14+00	247	15	45

PERMANENT SIGNING									
SIGN NO.	SIGN CODE*	WIDTH (IN)	HEIGHT (IN)	637.2220	634.0614	634.0812	634.0818	638.2602	NOTES
				SIGNS TYPE II	POSTS WOOD	POSTS TUBULAR	POSTS TUBULAR	REMOVING	
				REFLECTIVE SH	4X6-INCH	STEEL 2X2-INCH	STEEL 2X2-INCH	SIGNS	
				SF	X 14-FT	X 12-FT	X 18-FT	TYPE II	
					EACH	EACH	EACH	EACH	
1	R5-1	30	30	6.25	--	--	--	2	MOUNT TO EXISTING SIGN POLE
2	R6-7	24	30	5.00	--	--	--	--	MOUNT TO EXISTING SIGN POLE W/ SIGN NO. 1
3	R5-1	30	30	6.25	1	--	--	--	
4	R6-7	24	30	5.00	--	--	--	--	MOUNT TO SIGN STRUCTURE
5	R3-1	24	24	4.00	--	--	--	2	
6	R3-2	24	24	4.00	--	1	--	--	
7	R5-1A	36	24	6.00	--	--	1		
	W6-3	36	36	9.00	--	--	--	--	MOUNT W/ SIGN NO. 7
	W16-9P	24	8	1.33	--	--	--	--	MOUNT W/ SIGN NO. 7
8	R5-1A	36	24	6.00	--	--	1	--	
	W6-3	36	36	9.00	--	--	--	--	MOUNT W/ SIGN NO. 8
	W16-9P	24	8	1.33	--	--	--	--	MOUNT W/ SIGN NO. 8
9	--	--	--	--	--	--	--	1	
10	R6-6	24	30	5.00	--	--	--	--	MOUNT TO WOOD POLE
11	R6-6	24	30	5.00	1	--	--	--	
				73.17	2	1	2	5	

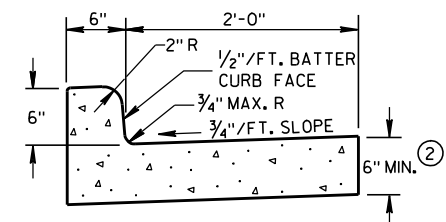
\*ALL SIGNS ARE SIGN SIZE 2S



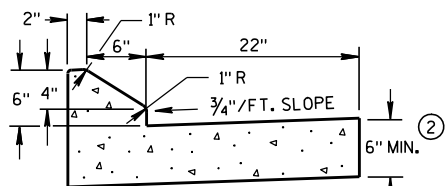
Standard Detail Drawing List

08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D05-15A	CURB RAMPS TYPES 1 AND 1-A
08D05-15B	CURB RAMPS TYPES 2 AND 3
08D05-15C	CURB RAMPS TYPES 4A AND 4A1
08D05-15D	CURB RAMPS TYPE 4B AND 4B1
08D05-15E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E09-06	SILT FENCE
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING

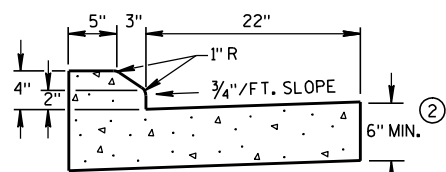




TYPES A &amp; D ①



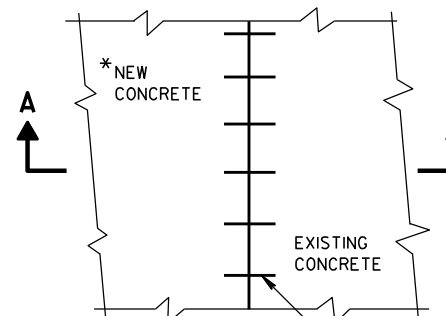
6" SLOPED CURB TYPES G &amp; J ①



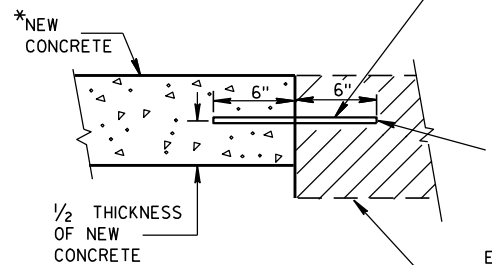
4" SLOPED CURB TYPES G &amp; J ①

CONCRETE CURB &amp; GUTTER 30"

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



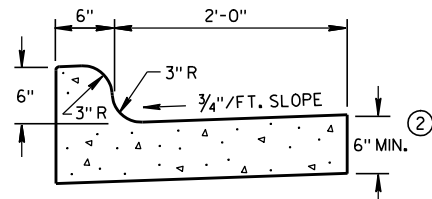
PLAN VIEW

SECTION A-A  
TIE BARS DRILLED  
INTO EXISTING PAVEMENT

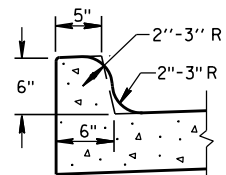
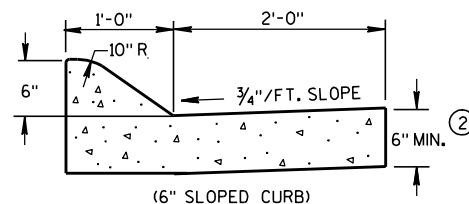
NO. 6 TIE BARS SPACED 2'-6" C-C,  
INSTALLED PERPENDICULAR  
TO THE LONGITUDINAL JOINT.

MAXIMUM DRILL HOLE  
SIZE IS 1/8" GREATER  
THAN TIE BAR DIAMETER

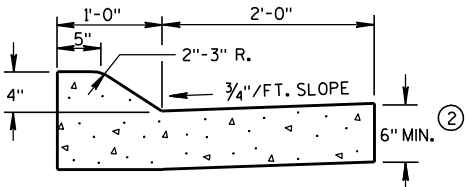
EXISTING  
CONCRETE



TYPES K &amp; L ①

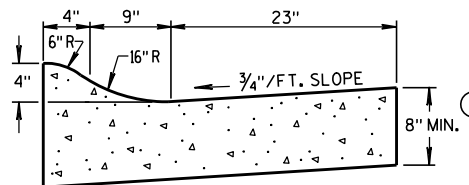
OPTIONAL CURB SHAPE  
FOR TYPES K & L ①

(6" SLOPED CURB)

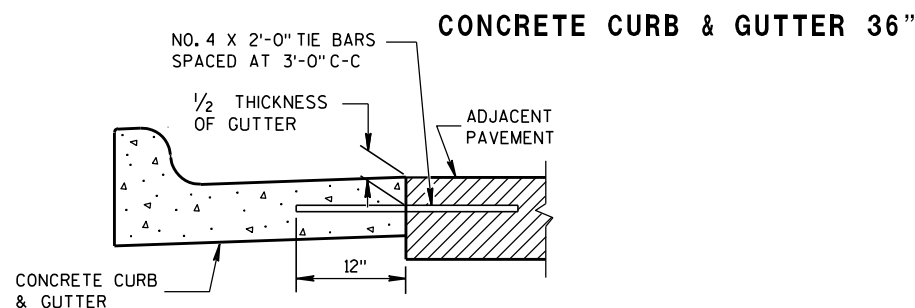


(4" SLOPED CURB)

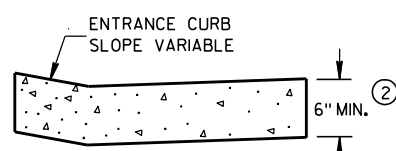
TYPES A &amp; D ①



4" SLOPED CURB TYPES R &amp; T ① ④

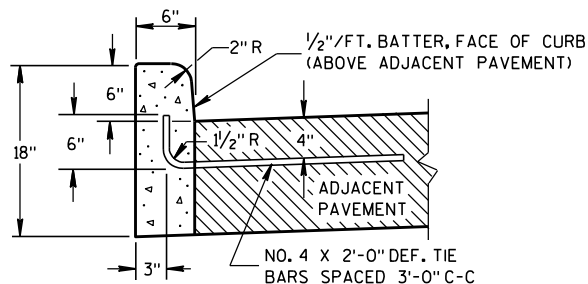


TYPICAL TIE BAR LOCATION ①



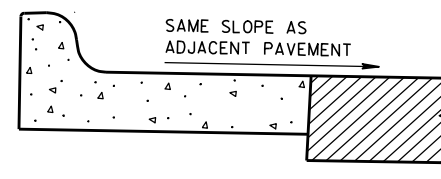
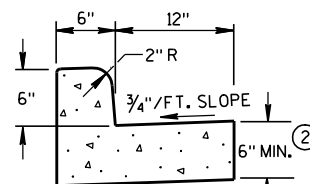
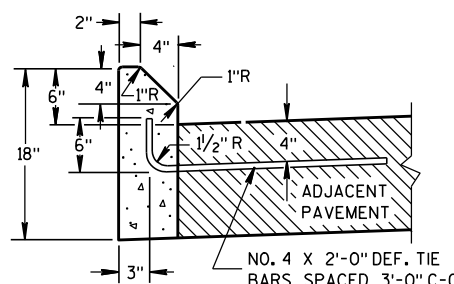
DRIVEWAY ENTRANCE CURB

(WHEN DIRECTED BY THE ENGINEER)



TYPES A &amp; D ①

CONCRETE CURB

REVERSE SLOPE GUTTER ⑤  
(TYPICAL FOR ALL CURB & GUTTER TYPES)TYPES A & D  
CONCRETE CURB & GUTTER 18"

TYPES G &amp; J ①

## GENERAL NOTES

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

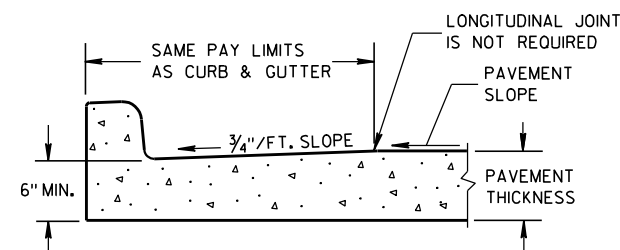
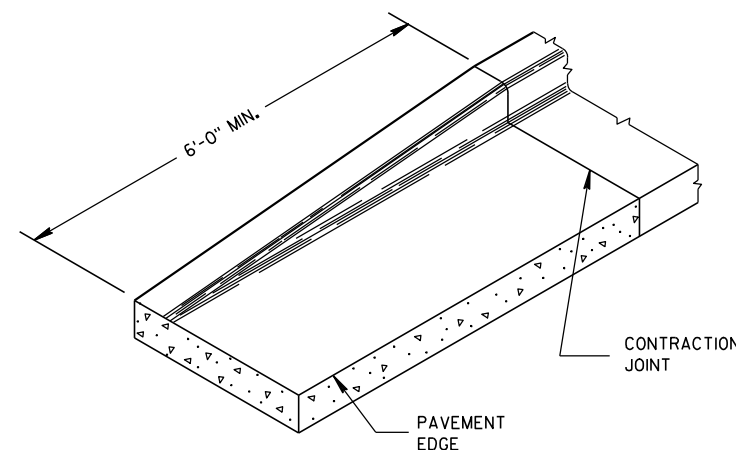
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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 AND R.
- 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.

PARTIAL SECTION OF PAVEMENT  
WITH INTEGRAL CURB & GUTTER

END SECTION CURB &amp; GUTTER

CONCRETE CURB, CONCRETE  
CURB & GUTTER AND TIES

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

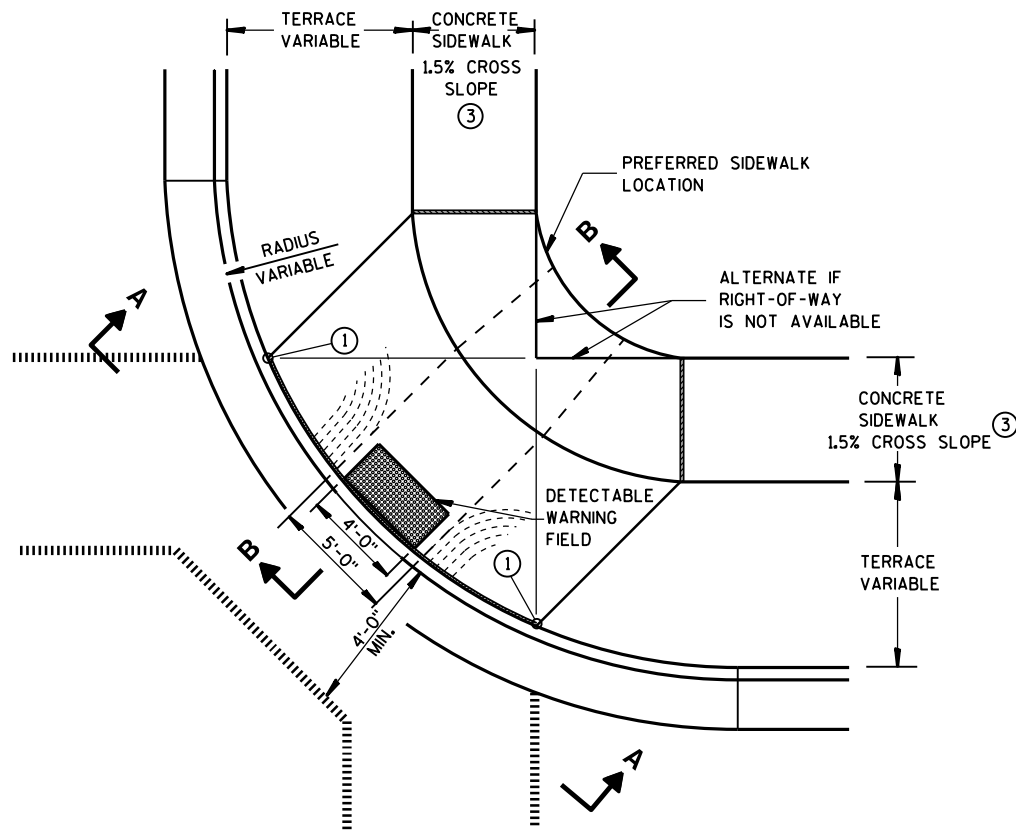
APPROVED

9/4/08

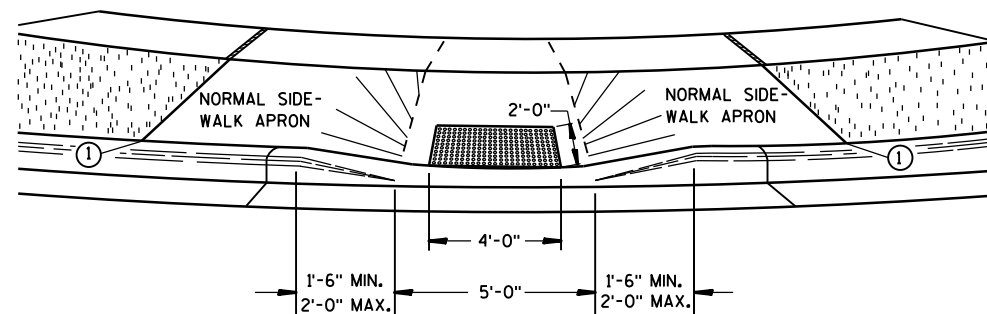
DATE

FHWA

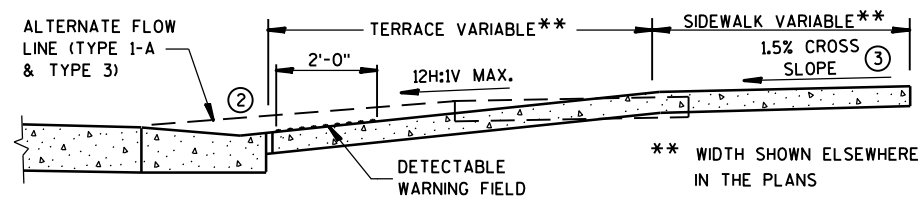
/S/ Jerry H. Zogg  
ROADWAY STANDARDS DEVELOPMENT  
ENGINEER



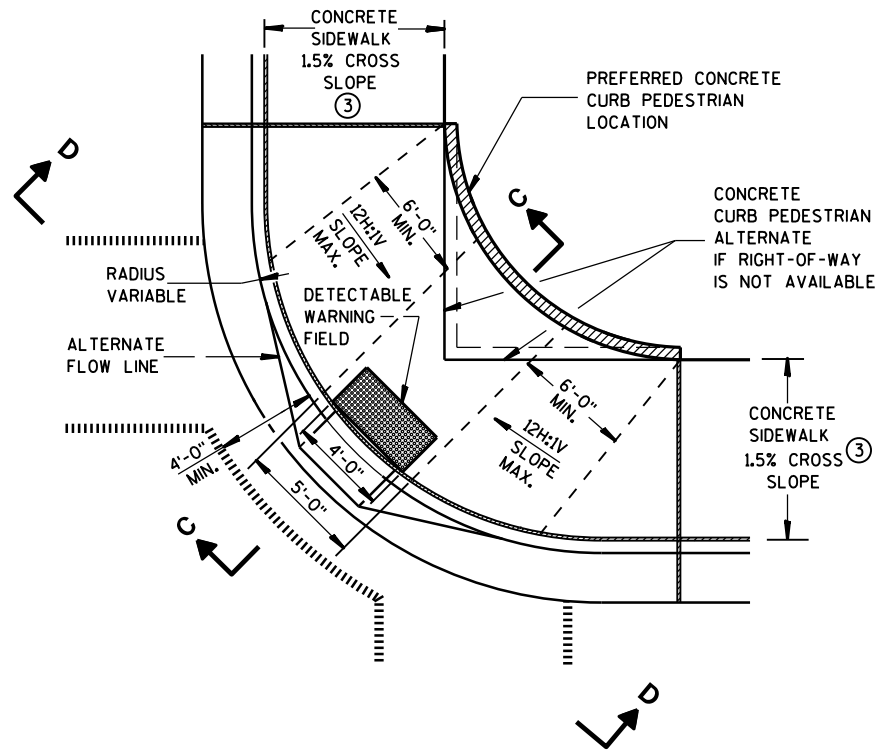
**PLAN VIEW  
TYPE 1 RAMP**  
(CENTER OF CORNER RADIUS)



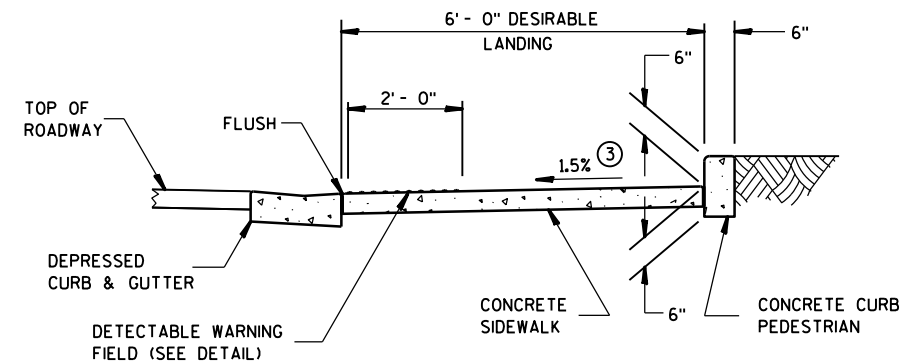
**VIEW A-A**



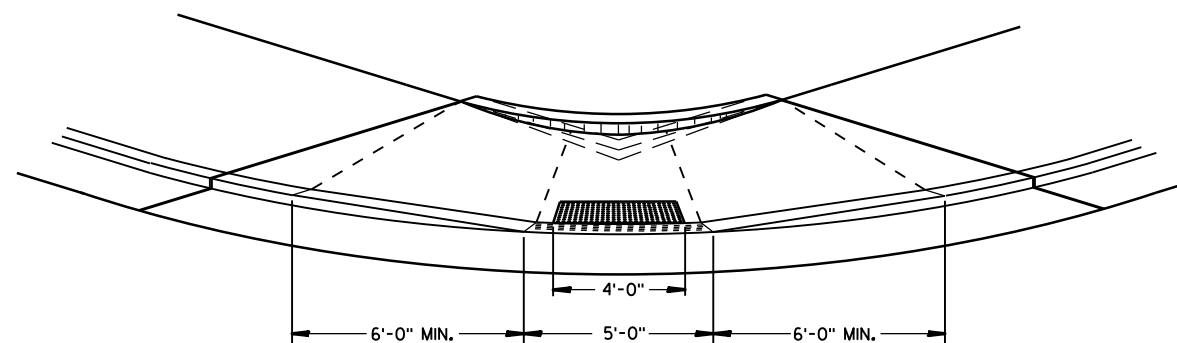
**SECTION B-B**



**PLAN VIEW  
TYPE 1-A RAMP**  
(NO TERRACE)



**SECTION C-C**



**VIEW D-D**

## GENERAL NOTES

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

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

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

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

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

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

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

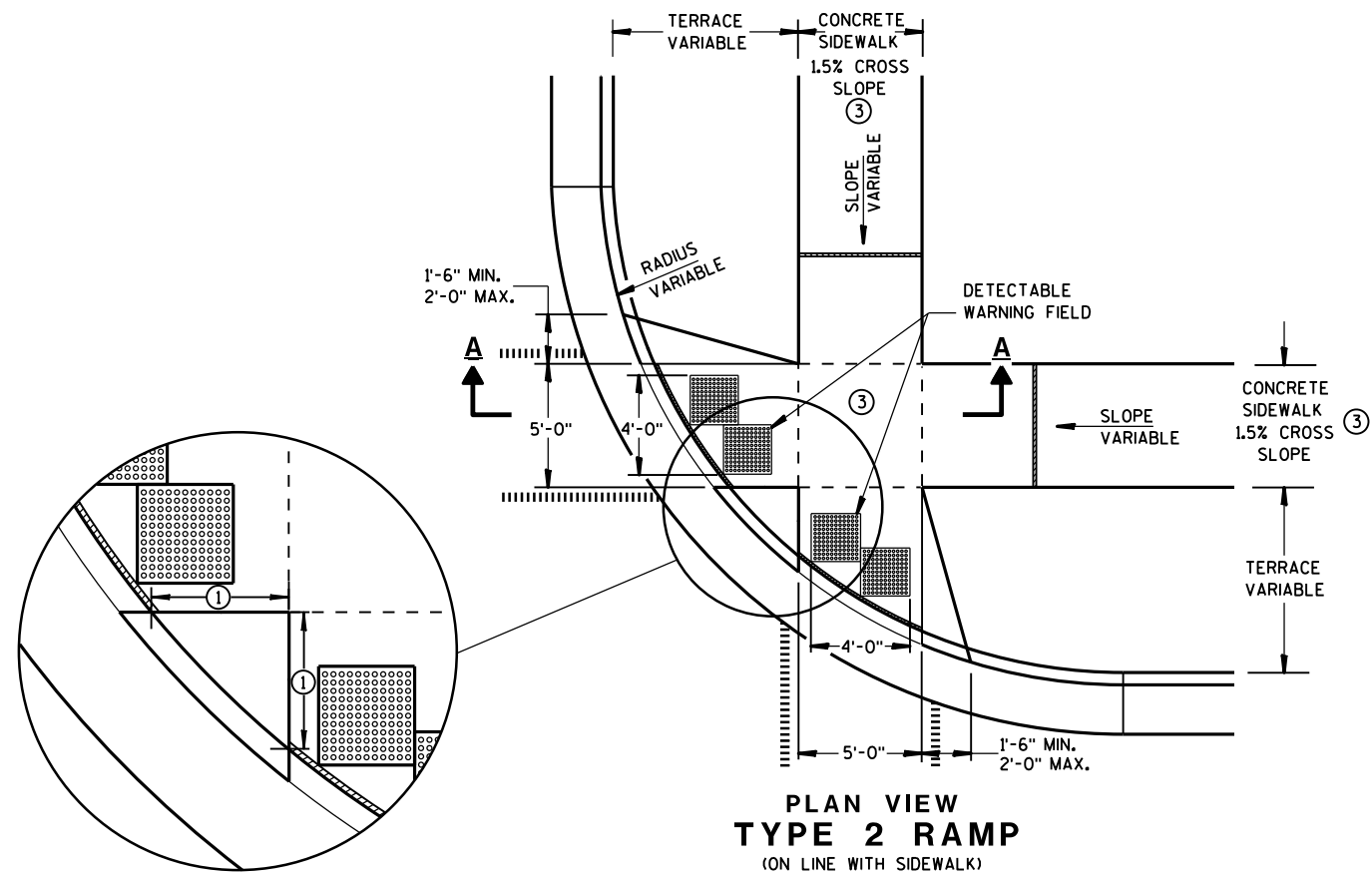
- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.
- ③  $\pm 0.5\%$  CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

## LEGEND

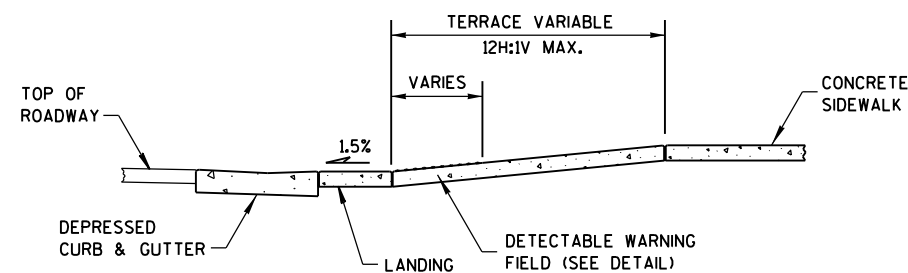
- 1/2" EXPANSION JOINT-SIDEWALK
- - - - - CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

**CURB RAMPS  
TYPES 1 AND 1-A**

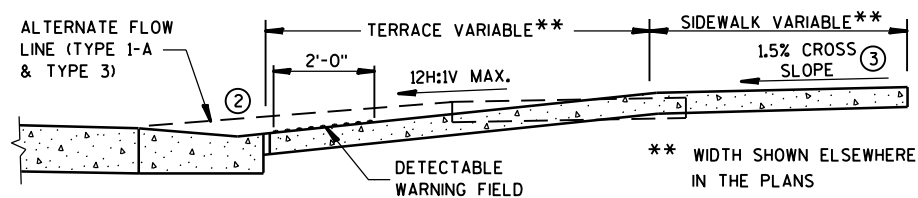
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



**PLAN VIEW  
TYPE 2 RAMP**  
(ON LINE WITH SIDEWALK)



**SECTION A-A**



**SECTION B-B**

## GENERAL NOTES

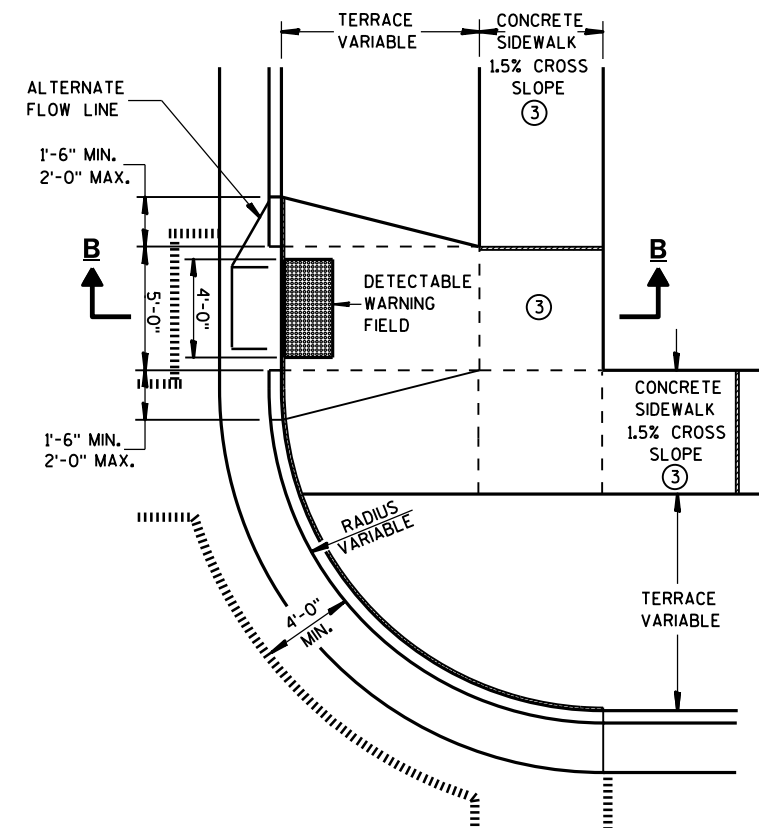
USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

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

- ① WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.
- ③  $\pm 0.5\%$  CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

## LEGEND

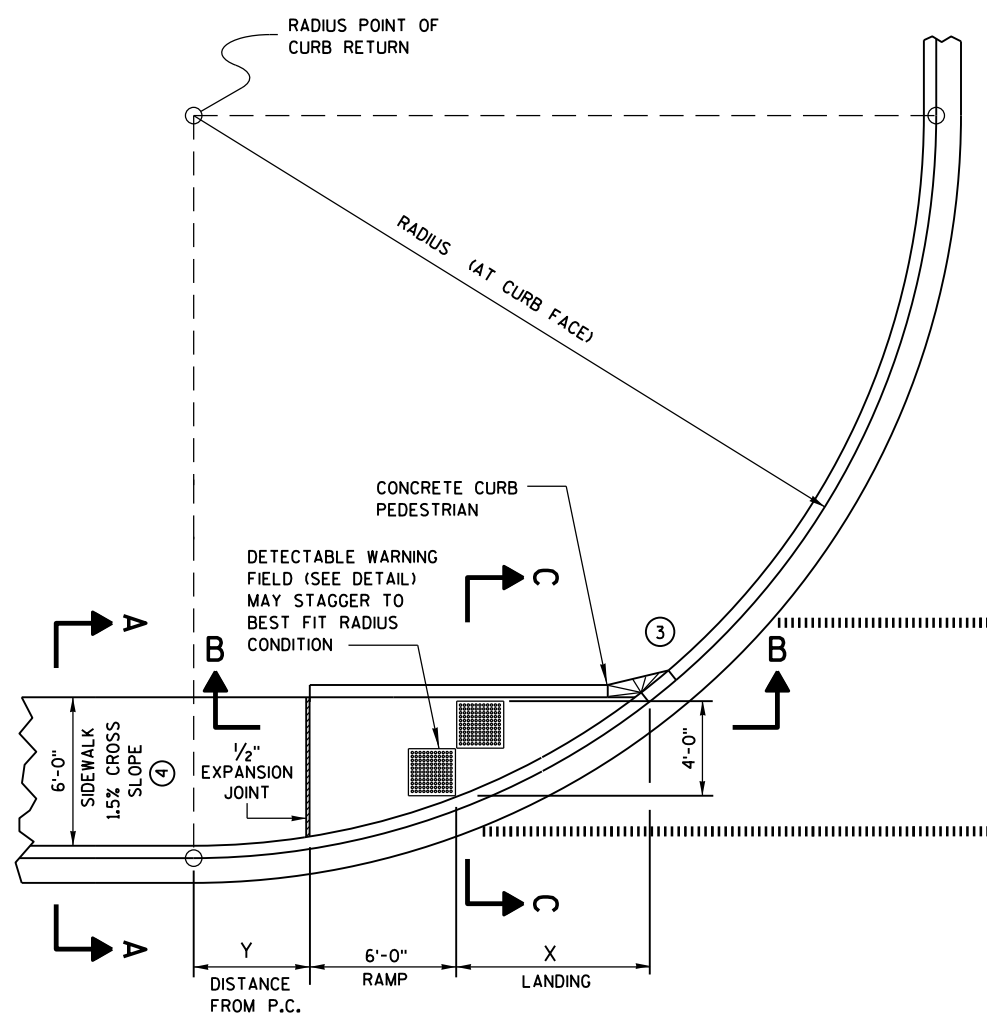
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



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

**CURB RAMPS  
TYPES 2 AND 3**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



## INTERMEDIATE RADII CAN BE INTERPOLATED

## GENERAL NOTES

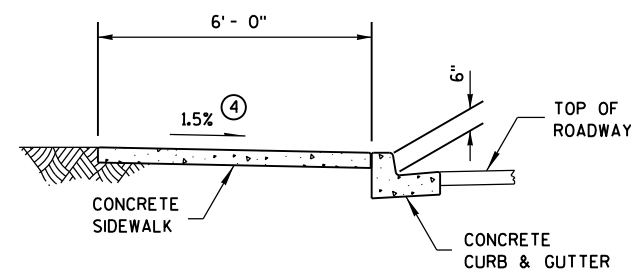
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

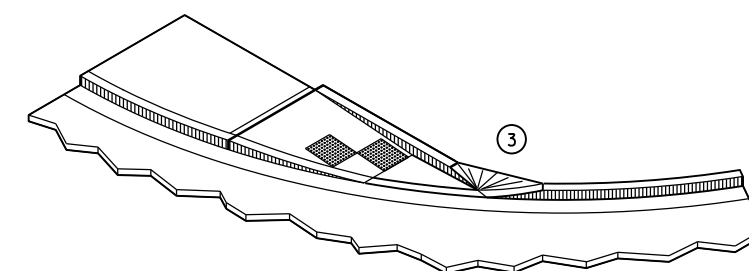
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.)  
DO NOT MARK TRANSITION NOSE.

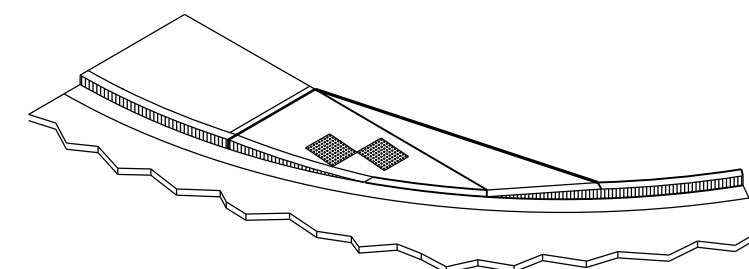
④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



**SECTION A-A FOR TYPE 4A**

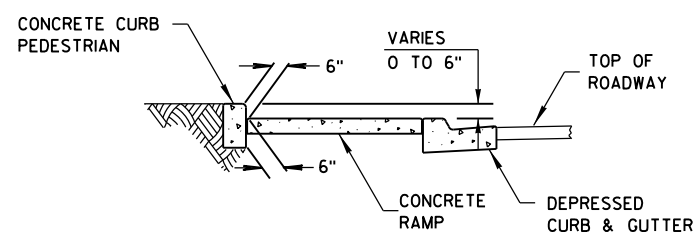


ISOMETRIC VIEW FOR TYPE 4A

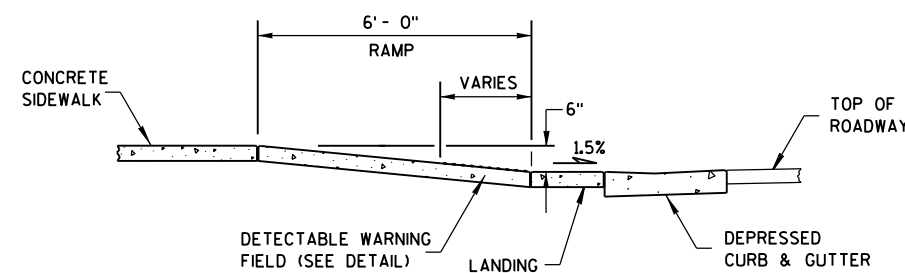


**ISOMETRIC VIEW FOR TYPE 4A1**

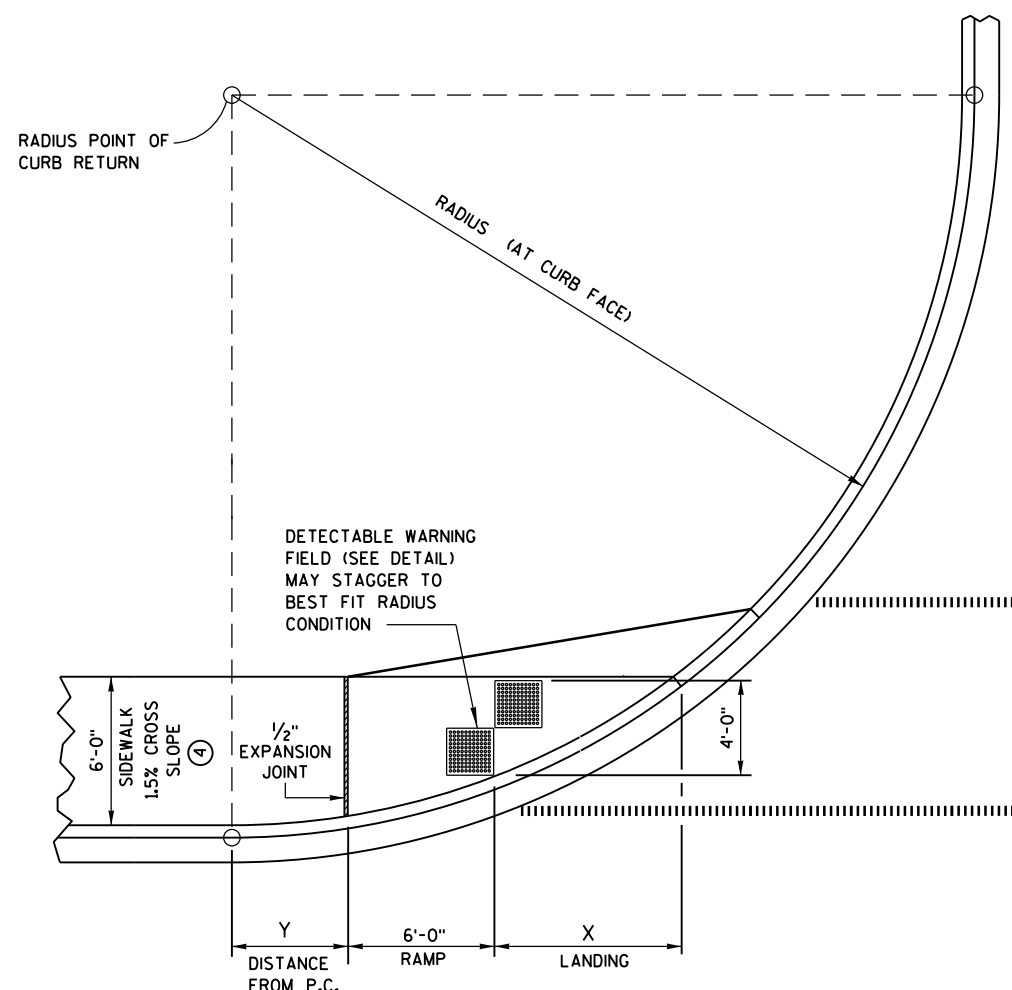
**CURB RAMP TYPE 4A**  
**PLAN VIEW**



**SECTION C-C FOR TYPE 4A**



**SECTION B-B FOR TYPE 4A**



**CURB RAMP TYPE 4A1**  
**PLAN VIEW**

### LEGEND

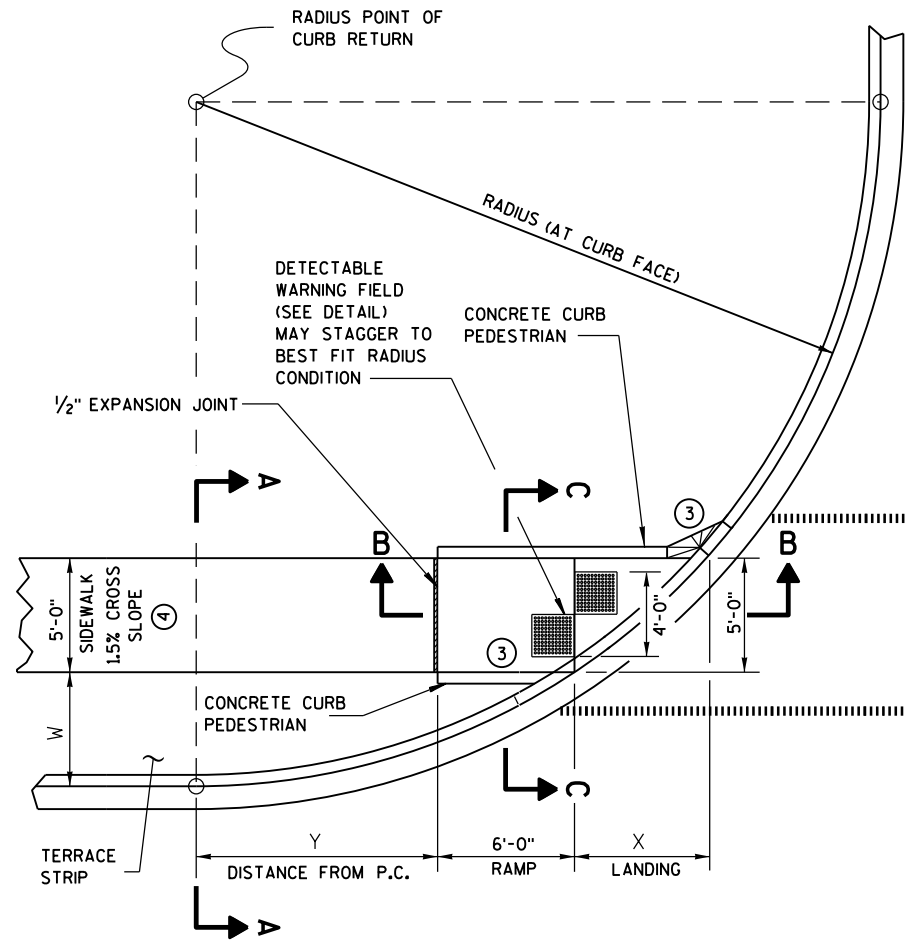
 1/2" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

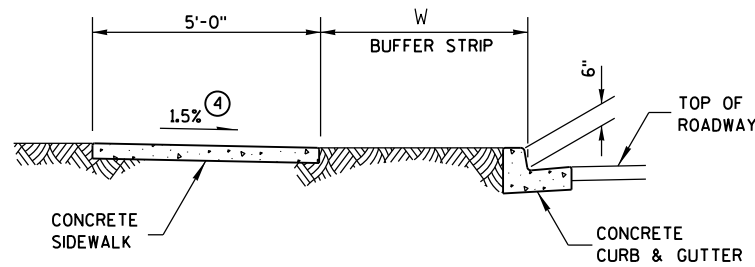
PAVEMENT MARKING CROSSWALK (WHITE)

## CURB RAMPS TYPES 4A AND 4A1

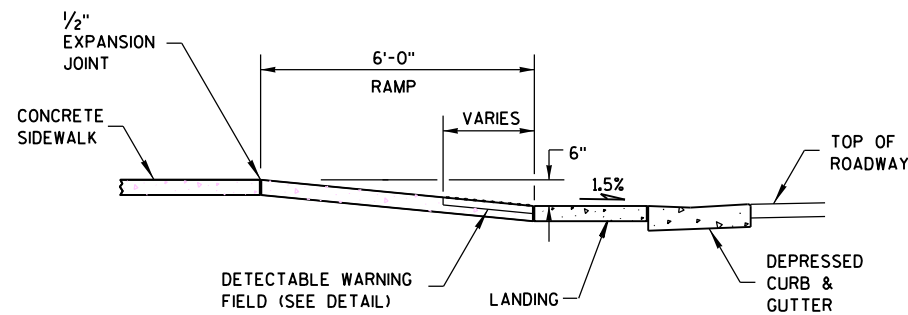
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



**CURB RAMP TYPE 4B  
PLAN VIEW**



**SECTION A-A FOR TYPE 4B**

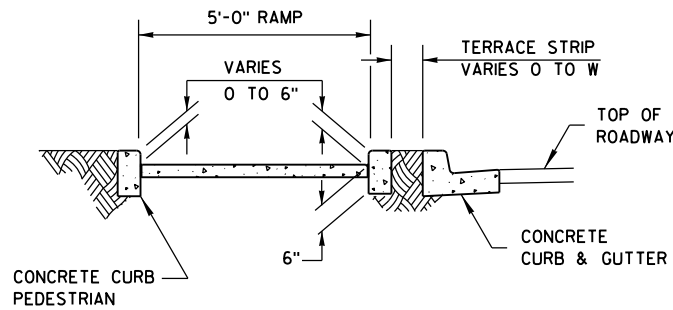


**SECTION B-B FOR TYPE 4B**

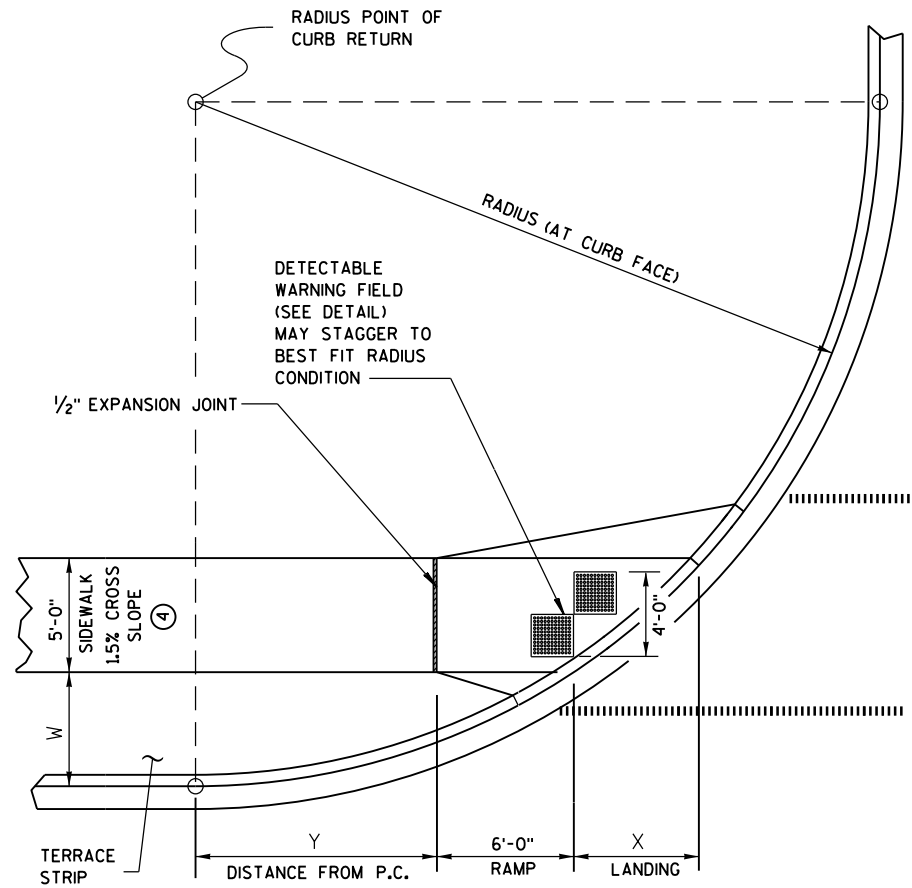
- LEGEND**
- 1/2" EXPANSION JOINT-SIDEWALK
  - - - CONTRACTION JOINT FIELD LOCATED
  - ===== PAVEMENT MARKING CROSSWALK (WHITE)

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-5 1/2"	4'-6 1/2"	4'-8 1/2"	6'-0"	4'-1"	7'-2 3/4"	3'-7"	8'-3 1/2"	3'-1 1/2"	9'-2 1/2"
30 FEET	7'-3 3/4"	7'-1"	6'-5 1/2"	8'-11 1/2"	5'-9 1/4"	10'-7"	5'-2 1/2"	12'-0"	4'-8 3/4"	13'-3 1/4"
40 FEET	8'-9 1/2"	9'-2 1/2"	7'-10"	11'-5 1/4"	7'-1"	13'-4 1/2"	6'-5 3/4"	15'-3/4"	5'-11 1/2"	16'-7 1/4"
50 FEET	10'-3/4"	11'-3/4"	9'-1/4"	13'-7 1/4"	8'-2 1/2"	15'-9 1/2"	7'-6 1/2"	17'-9"	6'-11 3/4"	19'-6 1/4"
60 FEET	11'-2 1/2"	12'-8 3/4"	10'-3/4"	15'-6 1/2"	9'-2 1/4"	17'-11 3/4"	8'-5 3/4"	20'-1 3/4"	7'-10 1/2"	22'-1 1/2"

INTERMEDIATE RADII CAN BE INTERPOLATED



**SECTION C-C FOR TYPE 4B**



**CURB RAMP TYPE 4B1  
PLAN VIEW**

**GENERAL NOTES**

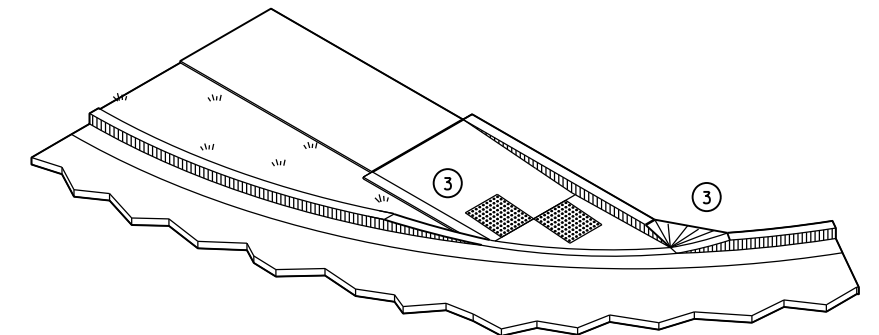
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

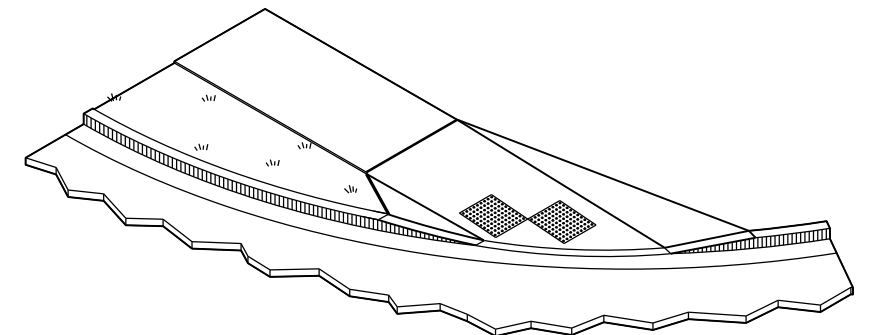
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

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



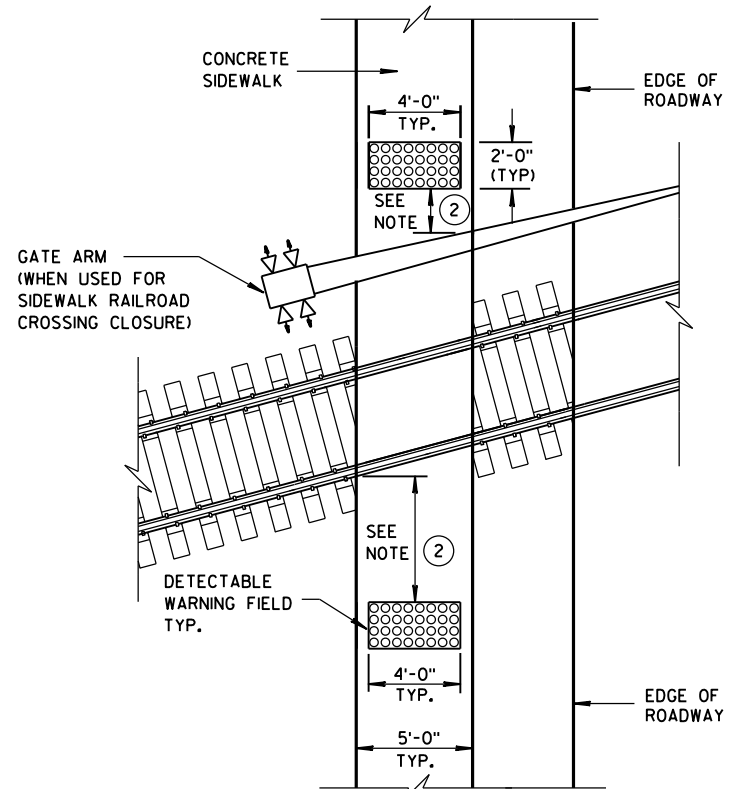
**ISOMETRIC VIEW FOR TYPE 4B**



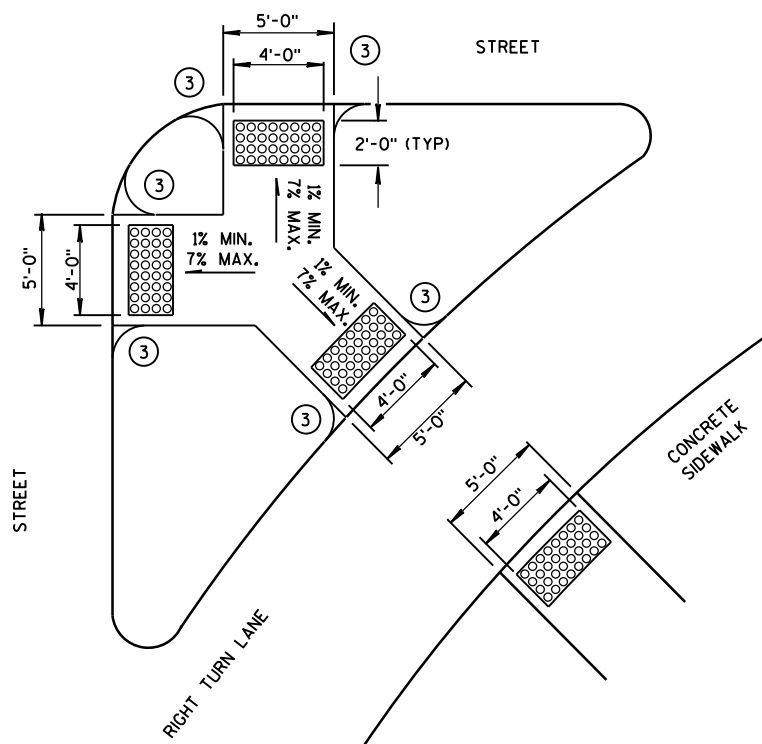
**ISOMETRIC VIEW FOR TYPE 4B1**

**CURB RAMPS  
TYPE 4B AND 4B1**

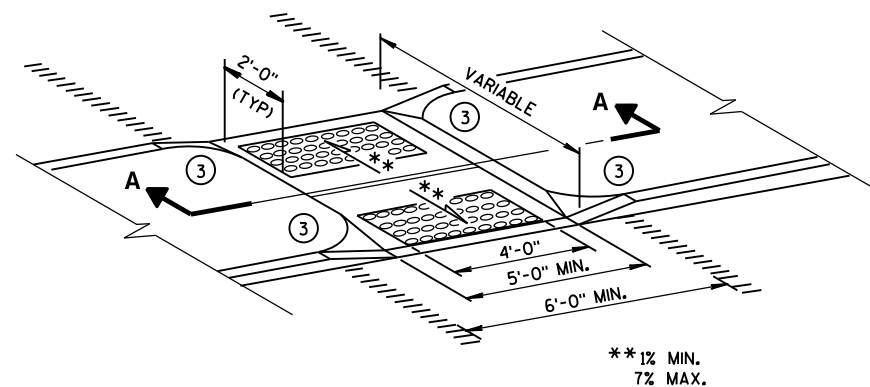
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



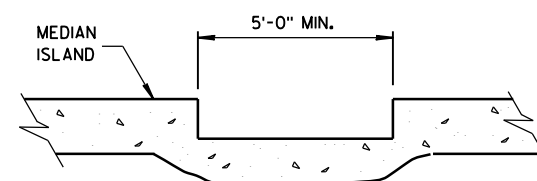
**TYPE 8**  
**DETECTABLE WARNINGS**  
**AT RAILROAD CROSSING**



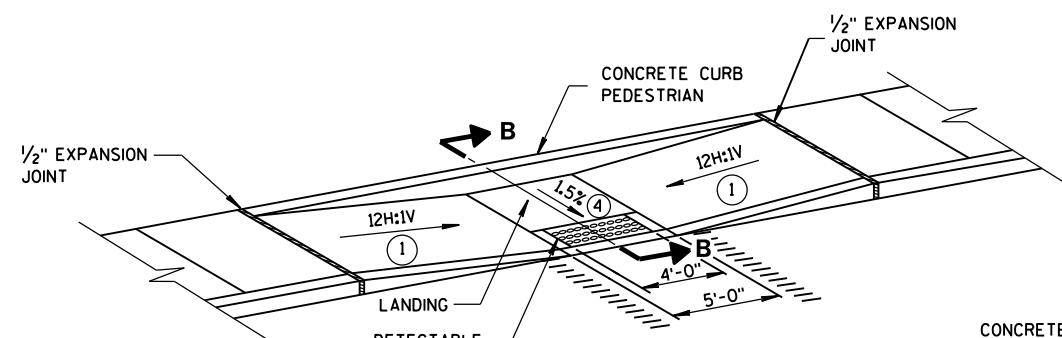
**TYPE 6**  
**DETECTABLE WARNING AT ISLANDS**



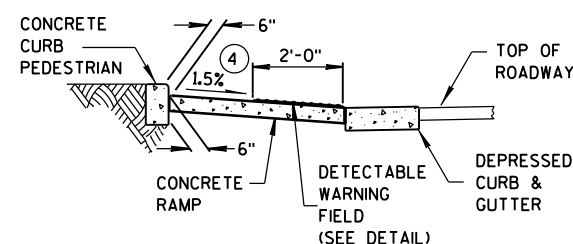
**MEDIAN ISLAND**  
**NON-ELEVATED CROSSING**  
**TYPE 5**



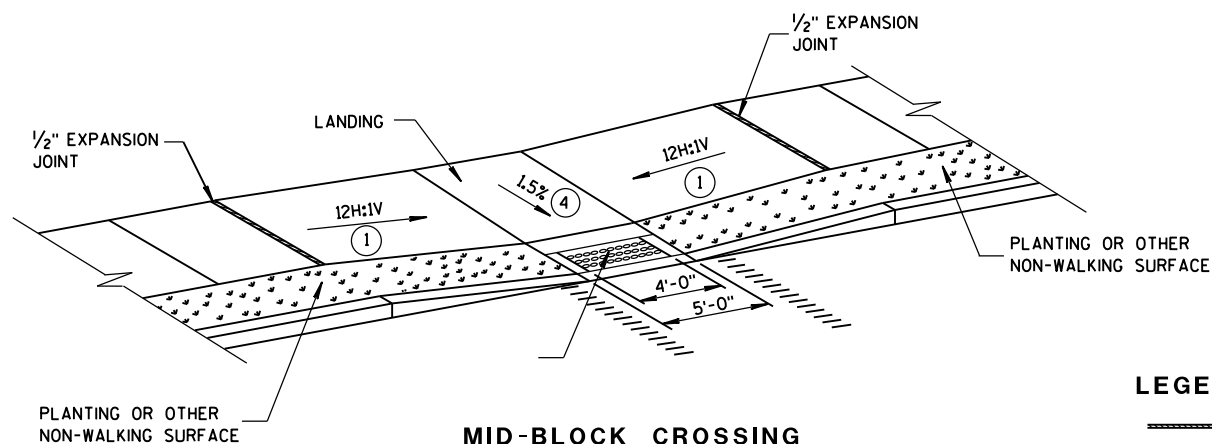
**SECTION A-A**



**MID-BLOCK CROSSING**  
**TYPE 7A**



**SECTION B-B**



**MID-BLOCK CROSSING**  
**TYPE 7B**

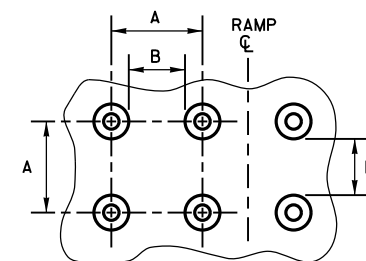
NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

## GENERAL NOTES

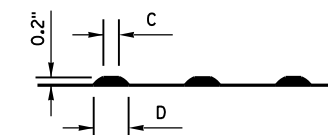
SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

- ① SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- ② THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET  $\pm$  0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- ③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.
- ④  $\pm$ 0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



**PLAN VIEW**



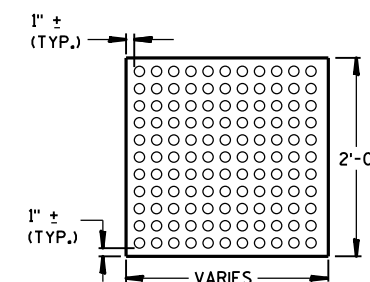
**ELEVATION VIEW**

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

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

## TRUNCATED DOMES

### DETECTABLE WARNING PATTERN DETAIL



**PLAN VIEW**

## DETECTABLE WARNING FIELD (TYPICAL)

## LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- - - CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)

## CURB RAMPS

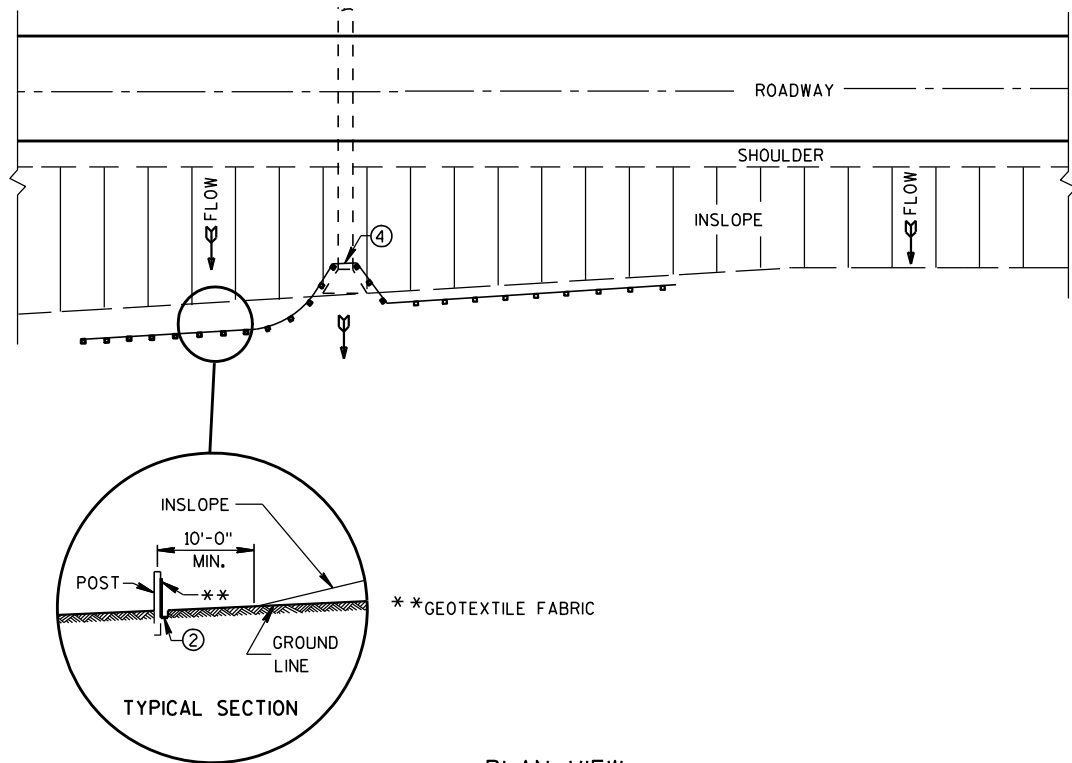
### TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

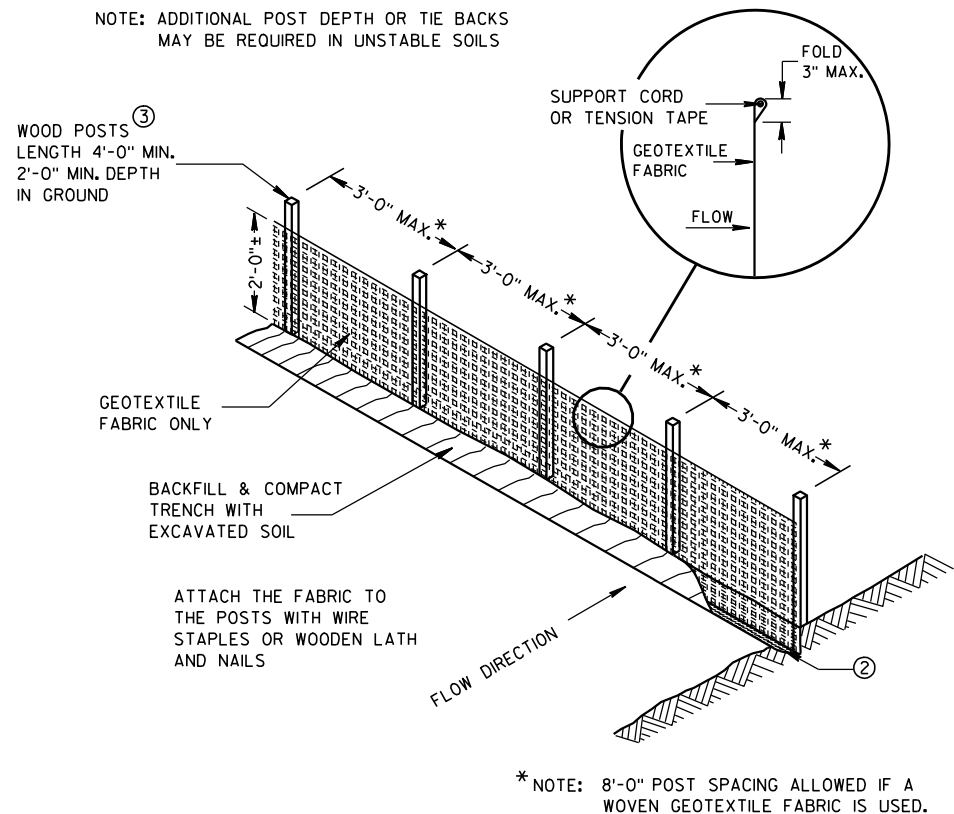
APPROVED  
2-6-2013  
DATE  
FHWA

/S/ Jerry H. Zogg  
ROADWAY STANDARDS DEVELOPMENT  
ENGINEER

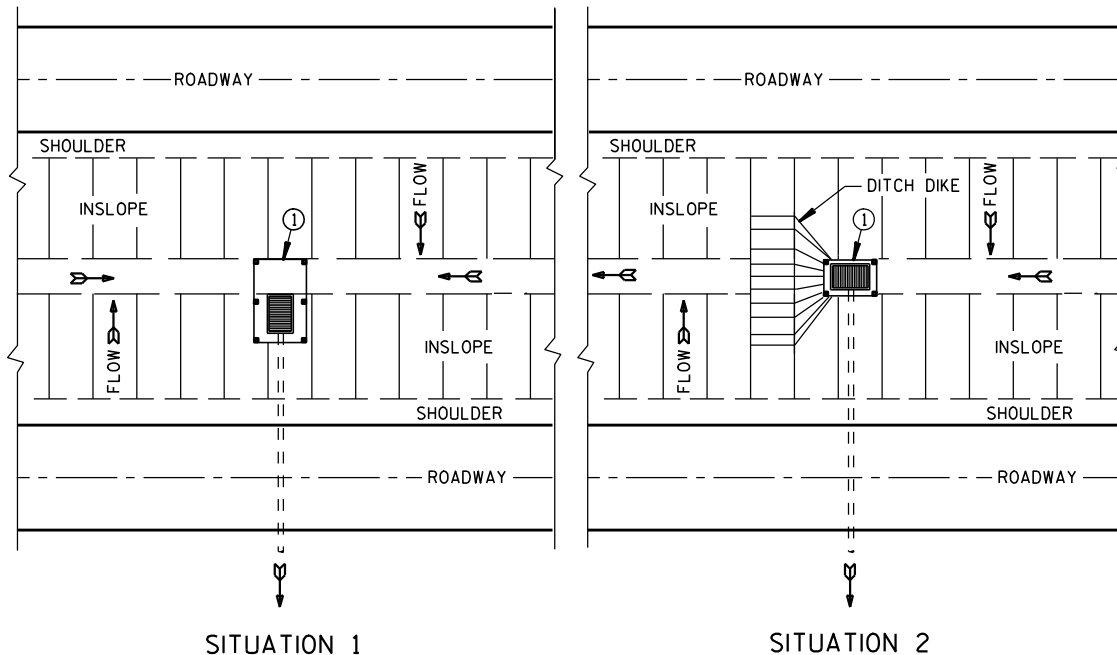




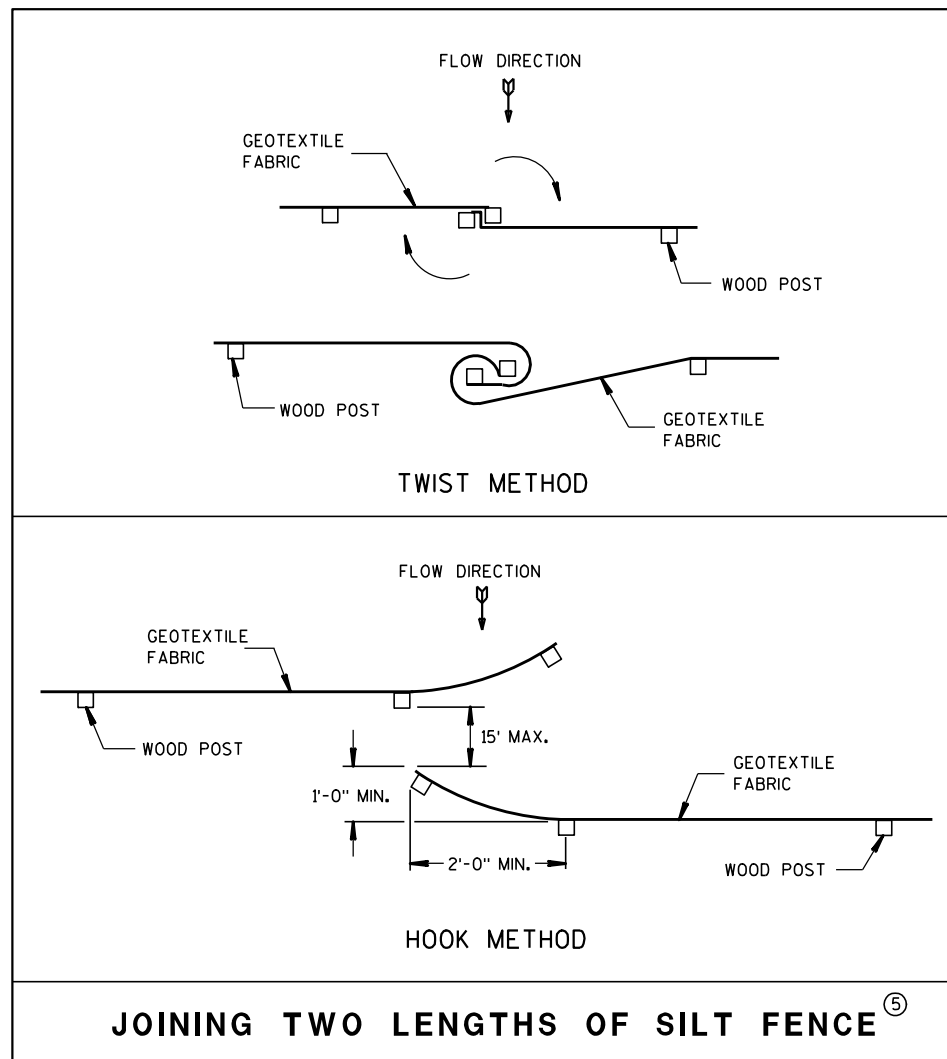
PLAN VIEW  
TYPICAL APPLICATION OF SILT FENCE



SILT FENCE



PLAN VIEW  
SILT FENCE AT MEDIAN SURFACE DRAINS

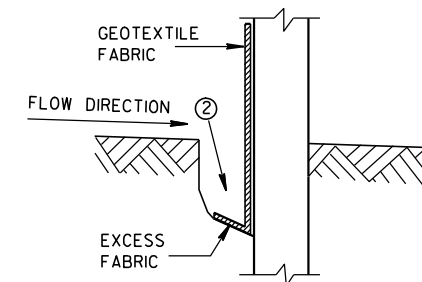


JOINING TWO LENGTHS OF SILT FENCE (5)

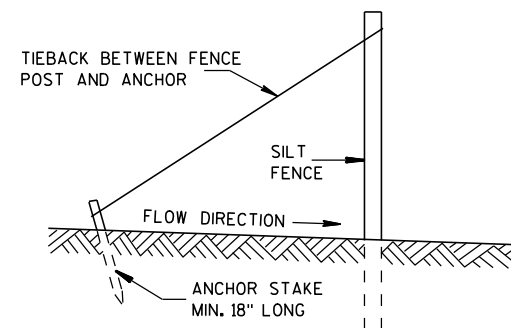
GENERAL NOTES

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

- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



TRENCH DETAIL

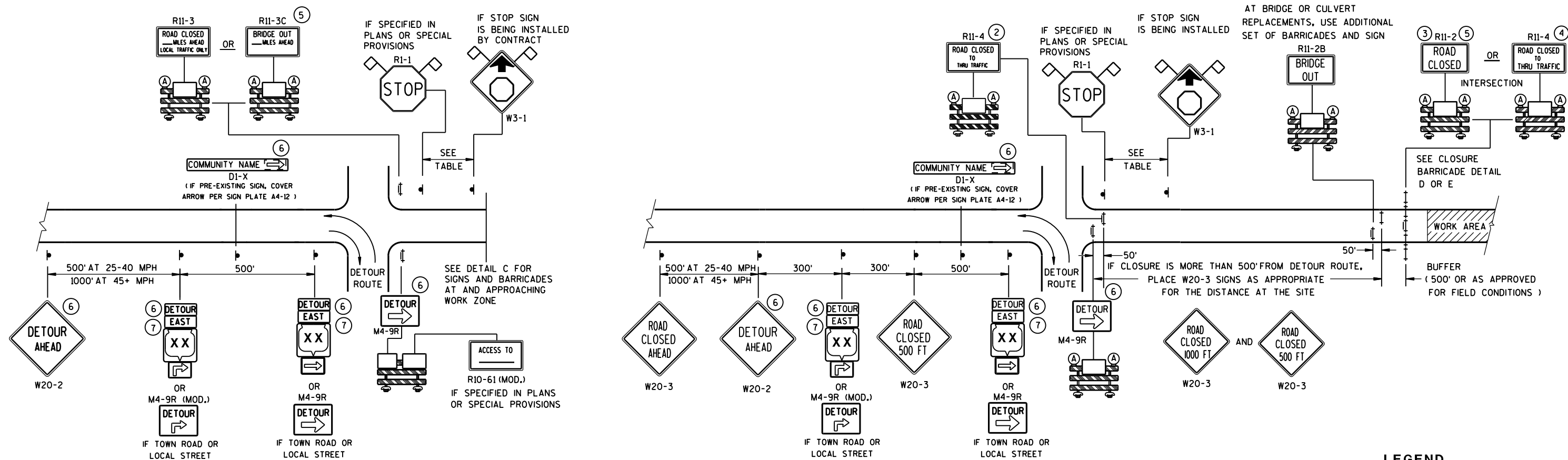


SILT FENCE TIE BACK  
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

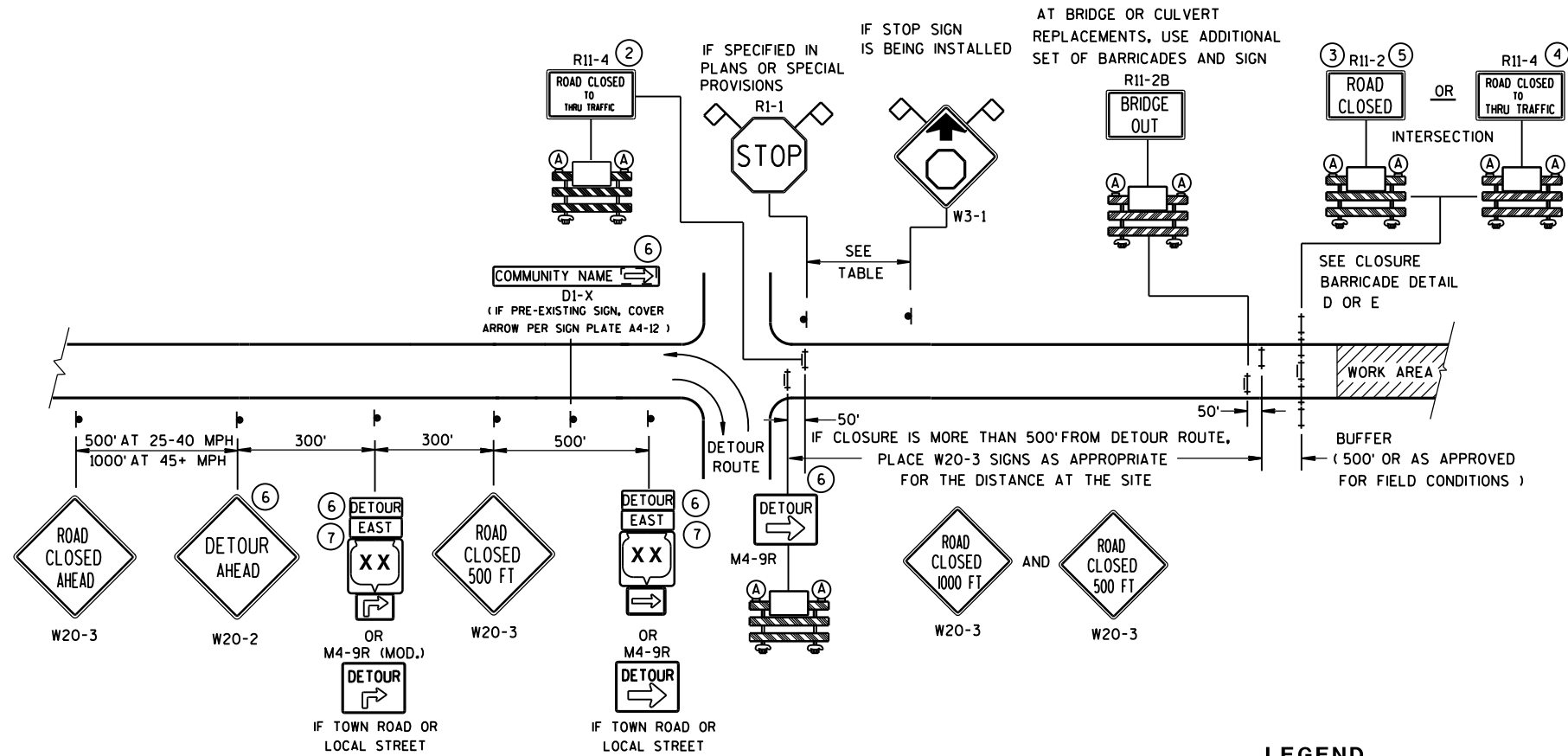
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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



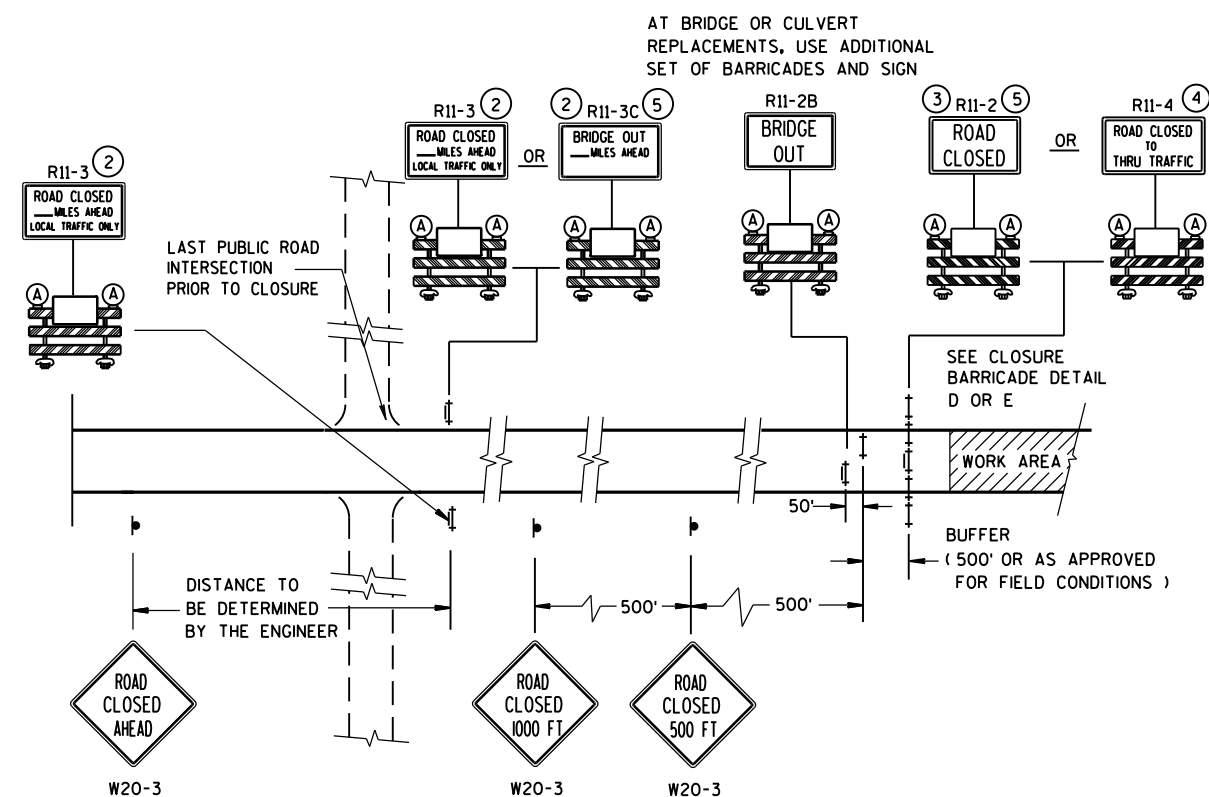
DETAIL A  
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN 1/2 MILE FROM DETOUR ROUTE ( 1000 FEET IF URBAN )
















**DETAIL B**  
**MAINLINE CLOSURE WITH POSTED DETOUR**

WORK ZONE LESS THAN 1/2 MILE FROM DETOUR ROUTE ( 1000 FEET IF URBAN )



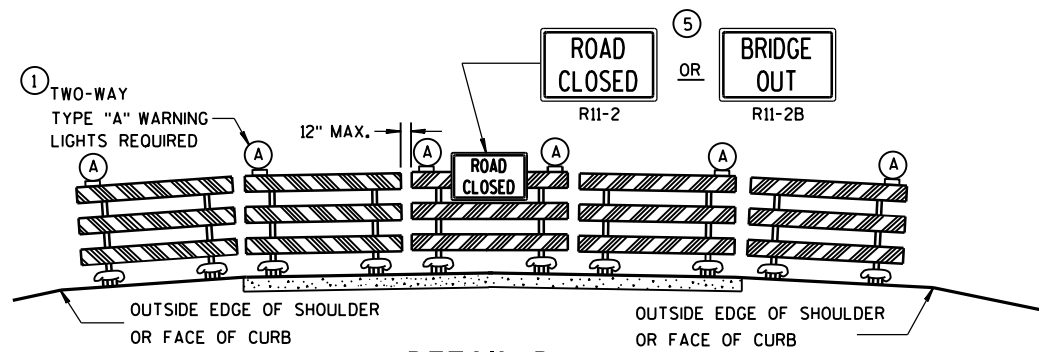
**DETAIL C**  
**MAINLINE CLOSURE, NO POSTED DETOUR**

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

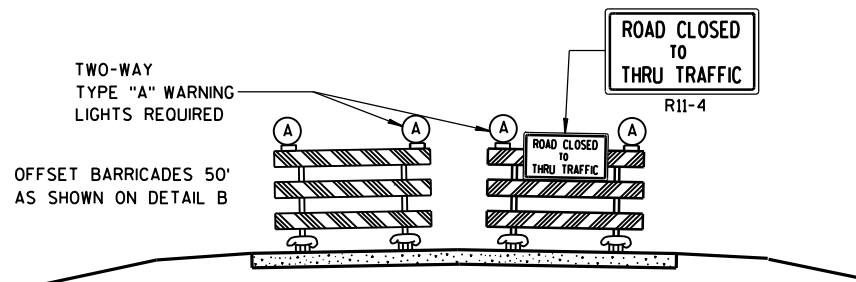
- # LEGEND
-  SIGN ON PERMANENT SUPPORT
-  TYPE III BARRICADE
-  TYPE III BARRICADE WITH ATTACHED SIGN
-  TYPE "A" WARNING LIGHT (FLASHING)
-  WORK AREA
-  M4-8  
 M3-X
-  M1-4 OR  M1-5A OR  M1-6
-  M05-1 OR  M06-1
-  FLAGS, 16" X 16" MIN., (ORANGE)

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

<b>BARRICADES AND SIGNS FOR MAINLINE CLOSURES</b>	
<b>STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION</b>	
<u>8/2013</u> DATE	<u>/S/ Travis Feites</u> STATE TRAFFIC ENGINEER OF DESIGN



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.

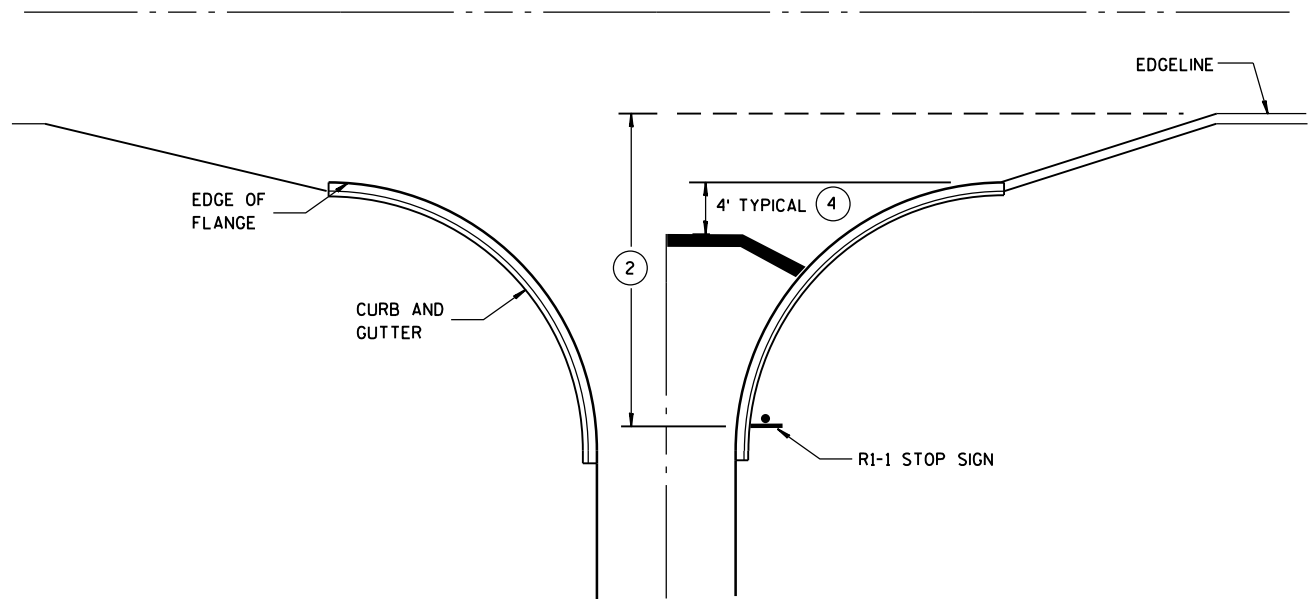
R1-1 SHALL BE 36" X 36".

- 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.

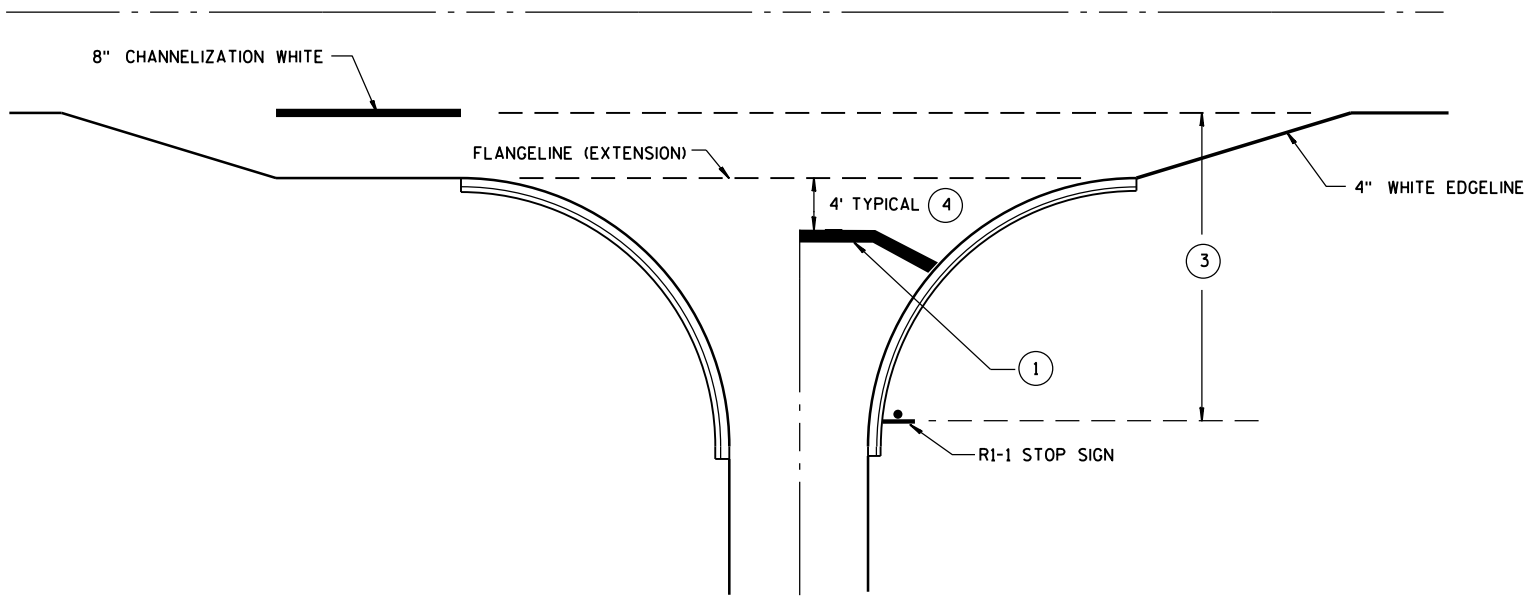
BARRICADES AND SIGNS  
FOR  
MAINLINE CLOSURES

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

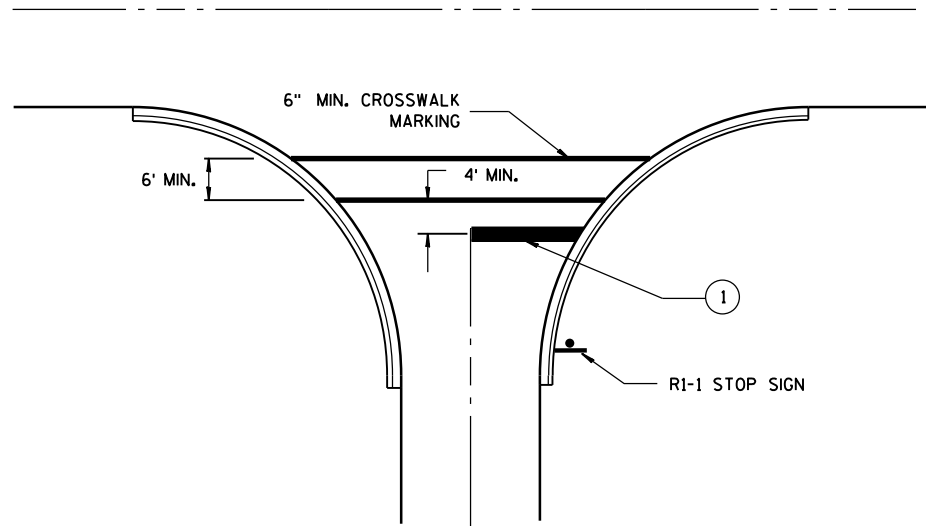
8/2013 /S/ Travis Feltes  
DATE STATE TRAFFIC ENGINEER OF DESIGN  
FHWA



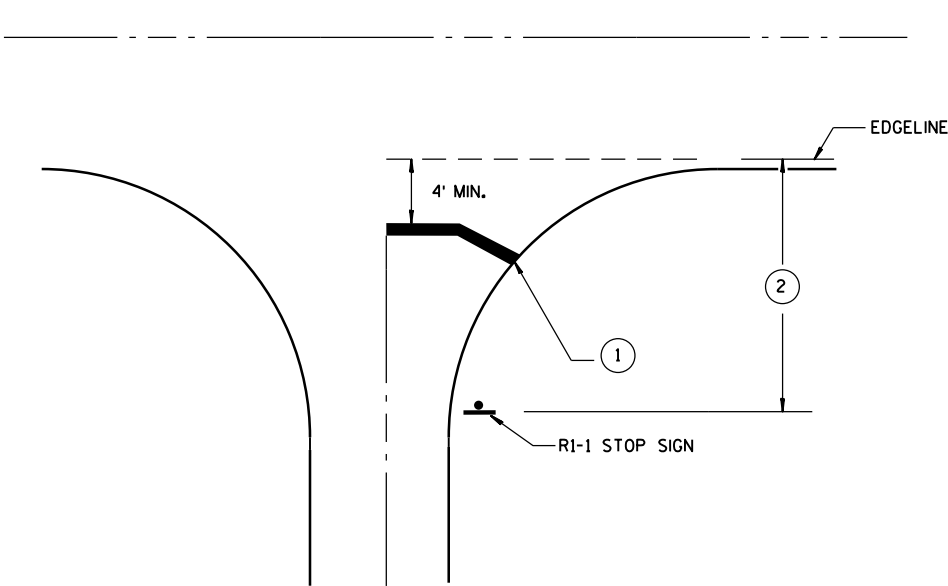
TYPICAL STOP LINE PAVEMENT MARKING  
WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING  
FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING  
FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING  
WITHOUT CURB AND GUTTER

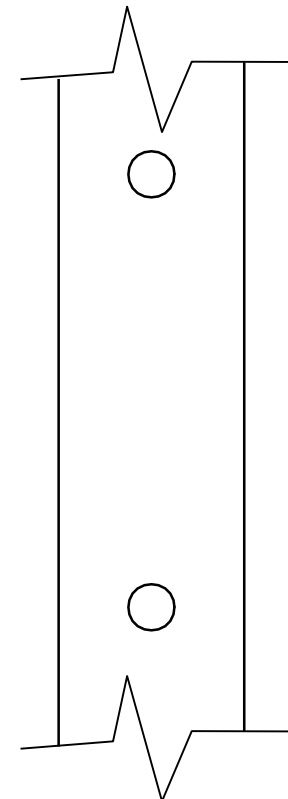
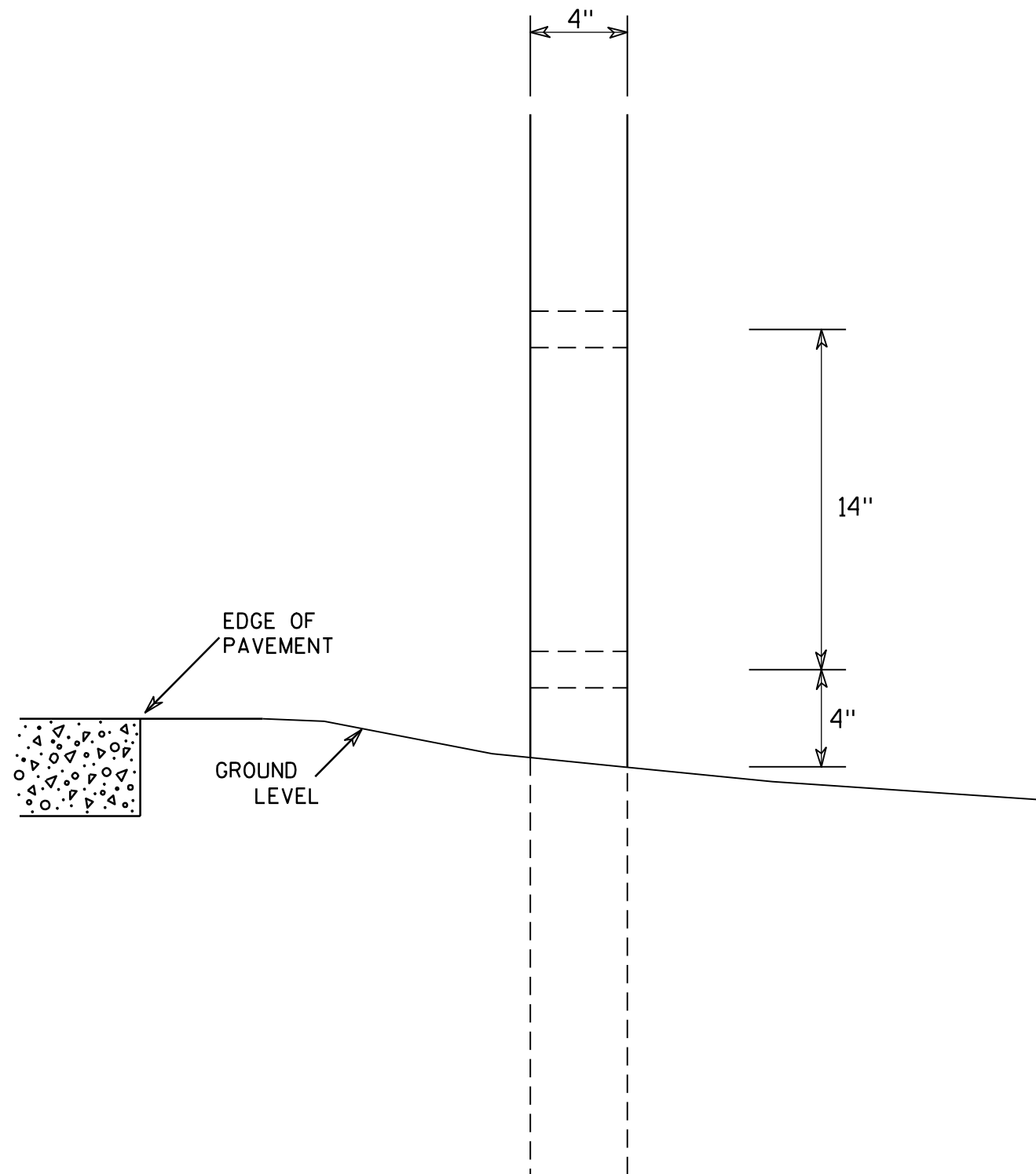
GENERAL NOTES

- ① 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- ② IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGE LINE THAN NO STOP LINE IS REQUIRED.
- ③ IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
- ④ MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES.

STOP LINE AND CROSSWALK  
PAVEMENT MARKING

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
4/30/2013 DATE /S/ Travis Feltz  
STATE TRAFFIC ENGINEER  
FHWA



SIDE VIEW

# GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1 1/2" diameter holes drilled perpendicular to the roadway centerline.

## 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: 8996-00-98

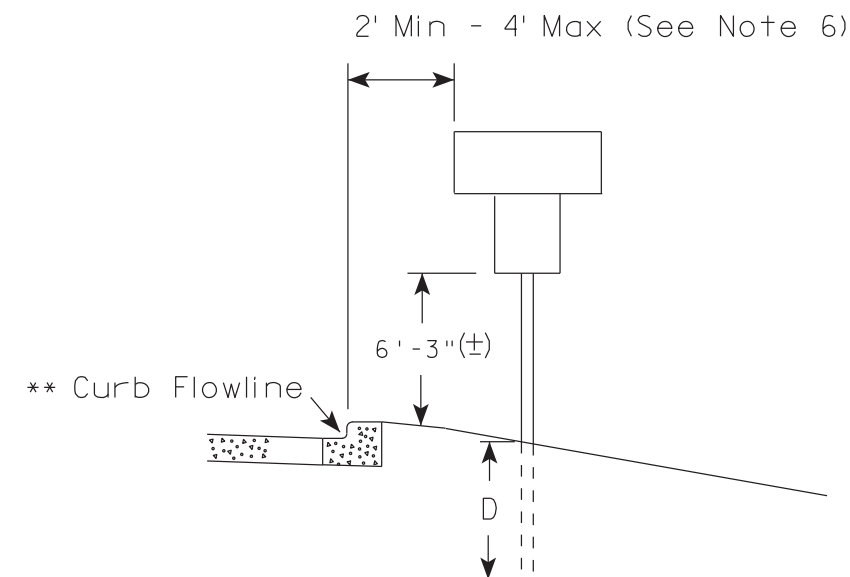
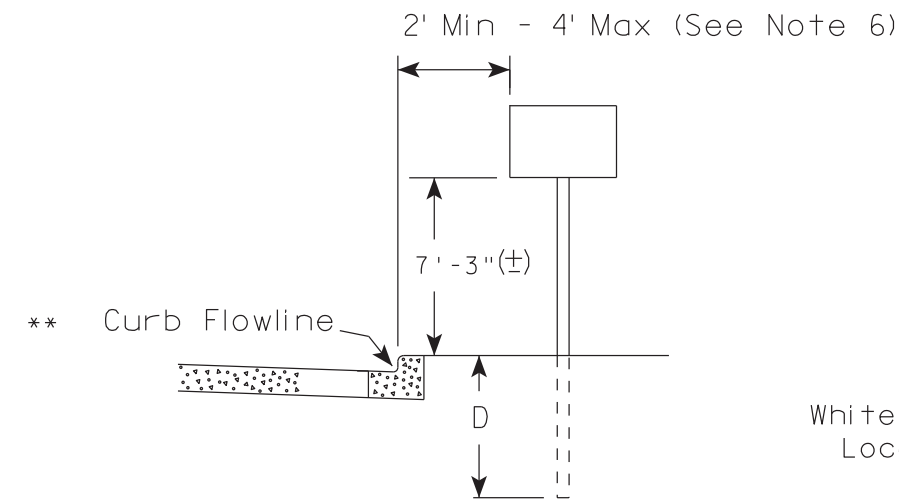
HWY: SPRING STREET

COUNTY: CHIPPEWA

SHEET NO:

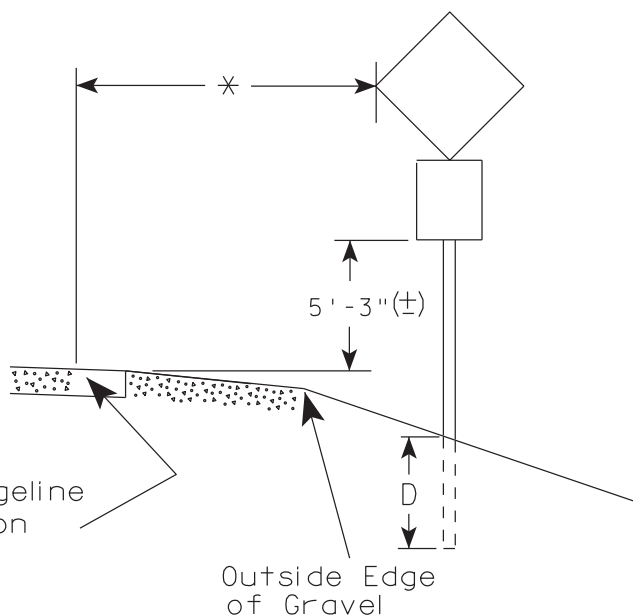
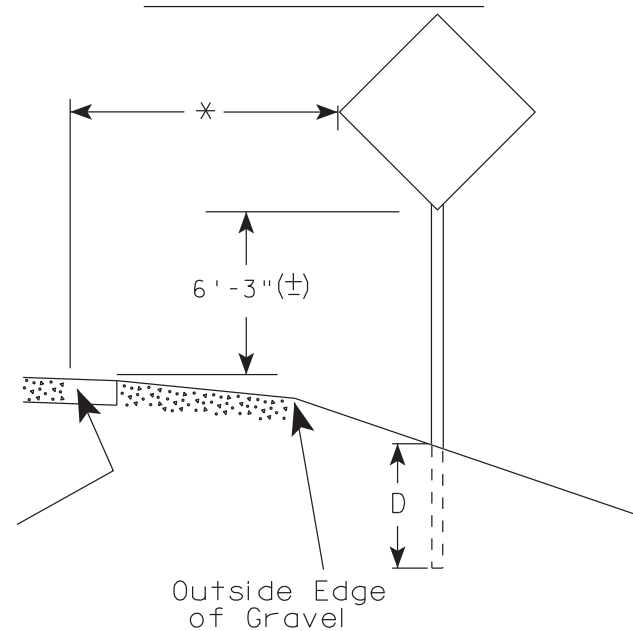
E

## URBAN AREA



White Edgeline Location

## RURAL AREA (See Note 2)



White Edgeline Location

Outside Edge of Gravel

### 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, 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 (A4-5) 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 stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed 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) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (+).

\* \* 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.

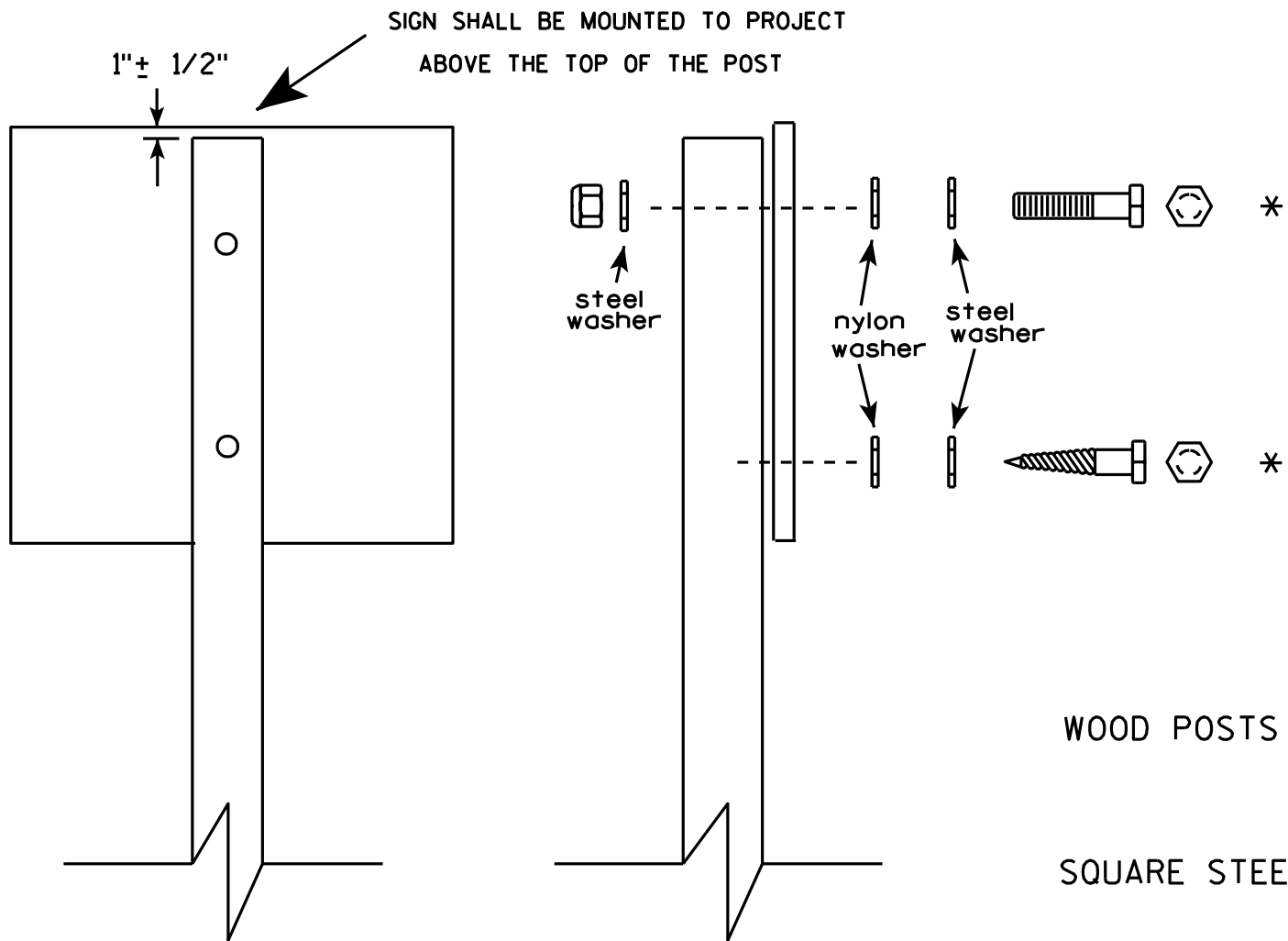
TYPICAL INSTALLATION  
OF PERMANENT TYPE II  
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 9/30/13 PLATE NO. A4-3.18



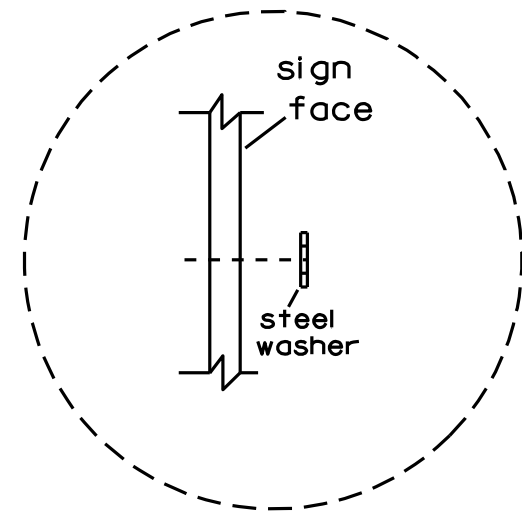


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- 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.

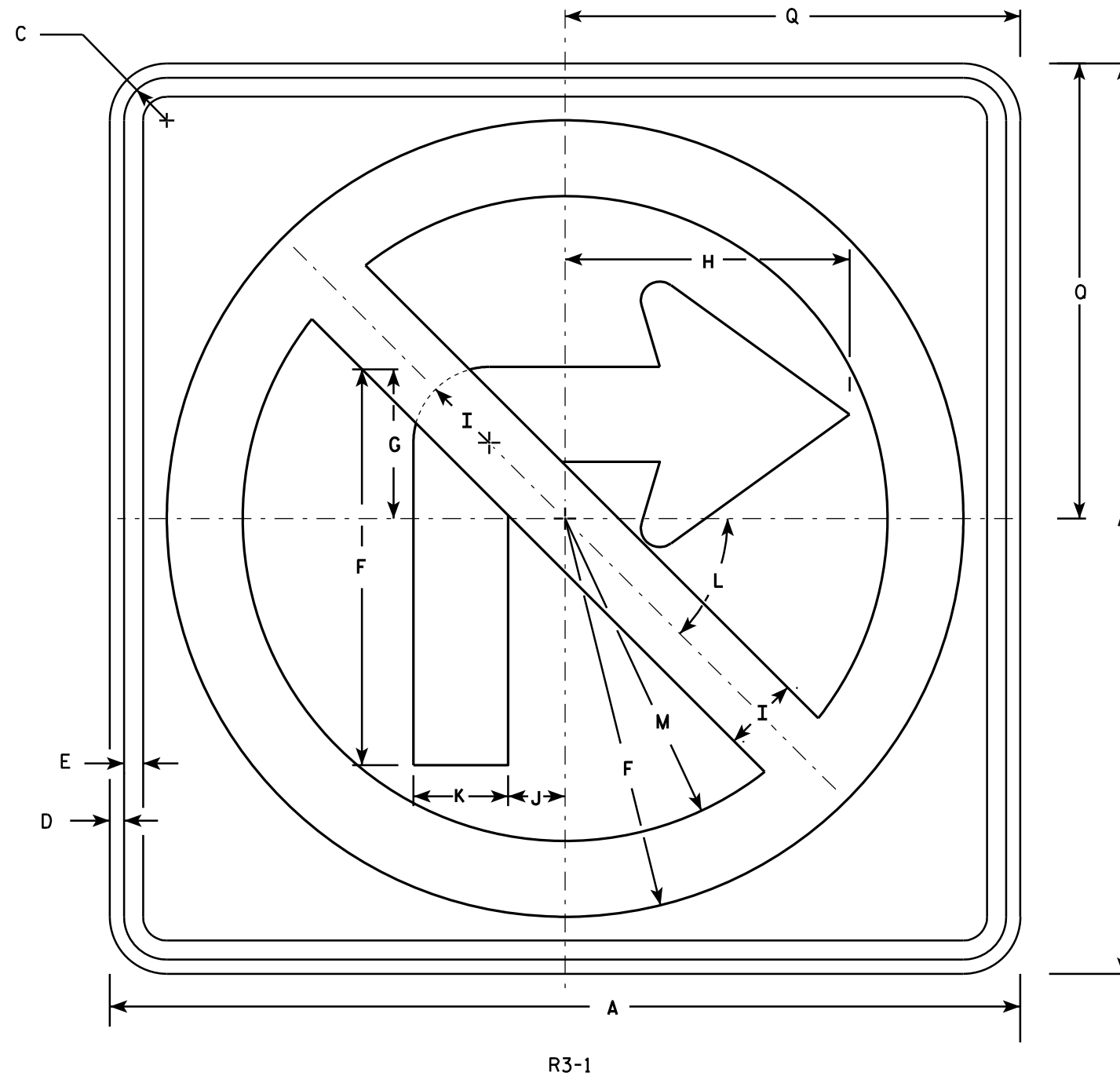
- WOOD POSTS (4" x 4" or 4" x 6")
- LAG SCREWS -  $\frac{3}{8}$ " X 3"
- MACHINE BOLTS -  $\frac{5}{16}$ " X 6-1/2" or 7" Length w/ nuts
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS -  $\frac{3}{8}$ " X 3-1/4" Length w/ nuts
- RIVETS -  $\frac{9}{32}$ " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
- O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
- 1-1/4" O.D. X  $\frac{3}{8}$ " I.D. X  $\frac{1}{16}$ " STEEL
- 1-1/4" O.D. X  $\frac{3}{8}$ " I.D. X .080 NYLON for all Type H signs.



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

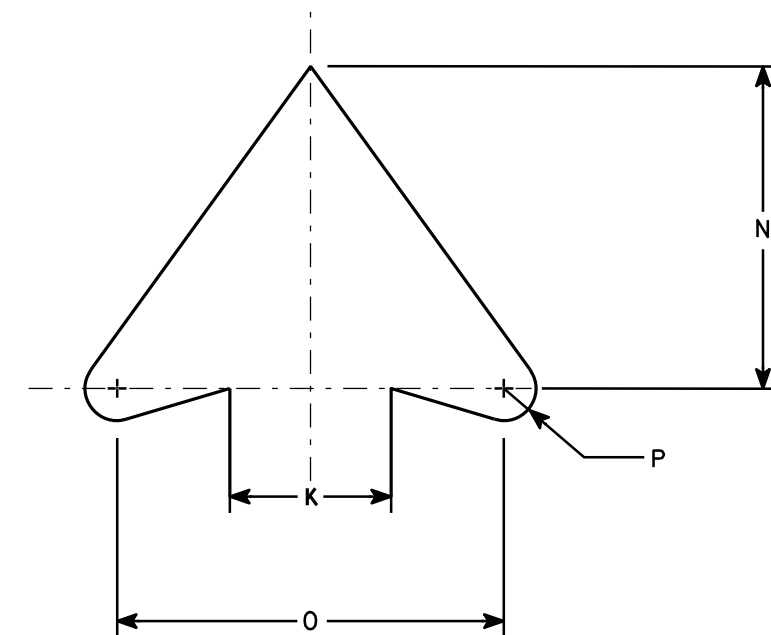
\* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 3/23/10	PLATE NO. A4-8.7



# NOTES

- Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:  
Background - White  
Message - See note 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.
- Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45	8 1/2	5	6	1/2	12										4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2	12										4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

PROJECT NO: 8996-00-98

HWY: SPRING STREET

COUNTY: CHIPPEWA

SHEET NO:

E

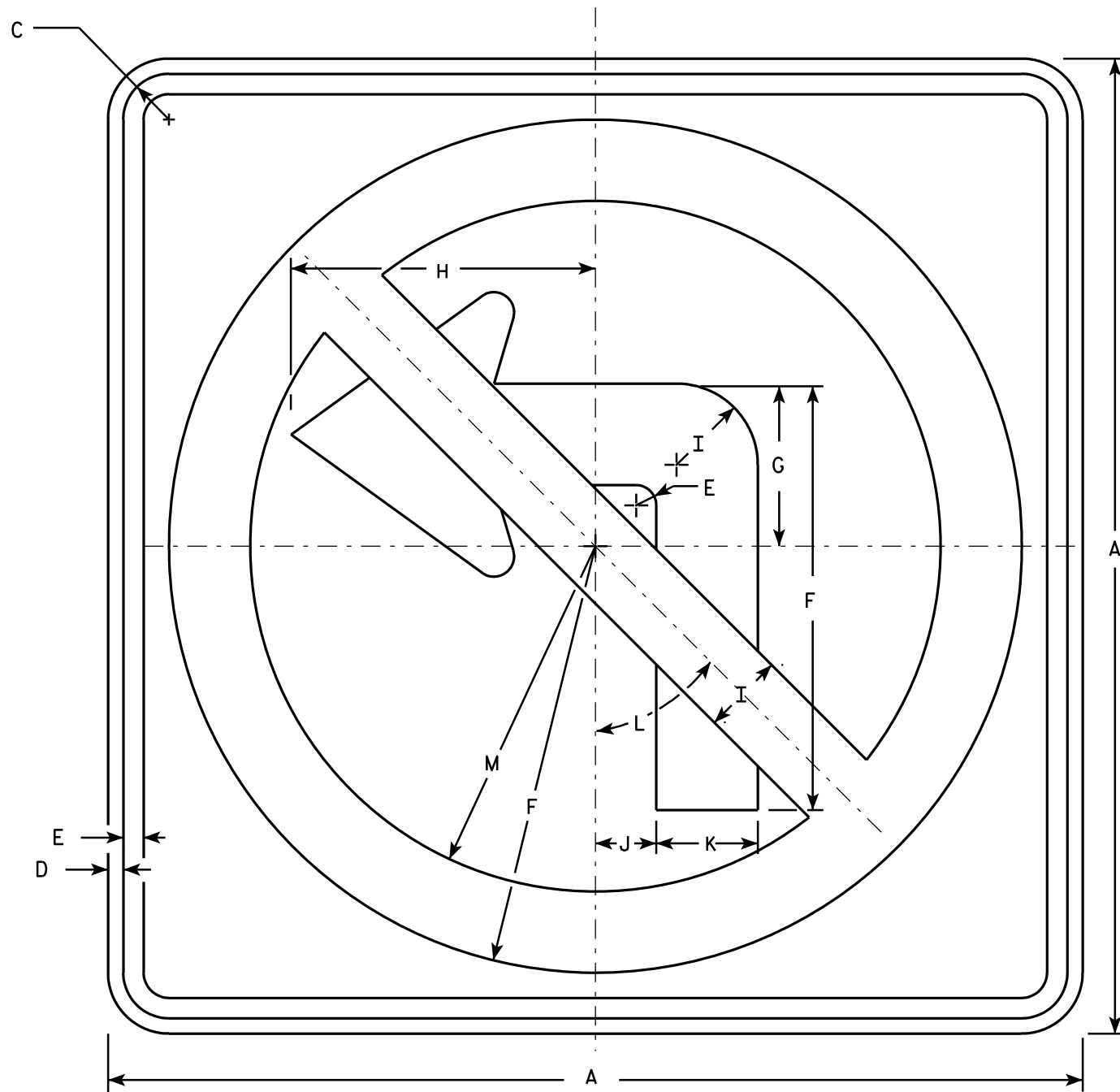
STANDARD SIGN

R3-1

WISCONSIN DEPT OF TRANSPORTATION

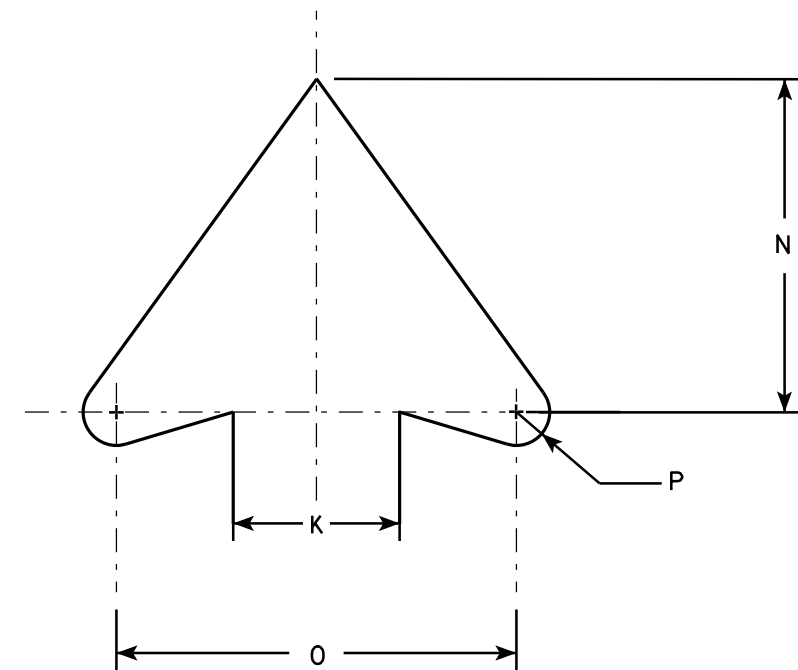
APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5



R3-2

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



ARROW DETAIL

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

PROJECT NO: 8996-00-98

HWY: SPRING STREET

COUNTY: CHIPPEWA

SHEET NO:

E

STANDARD SIGN  
R3-2

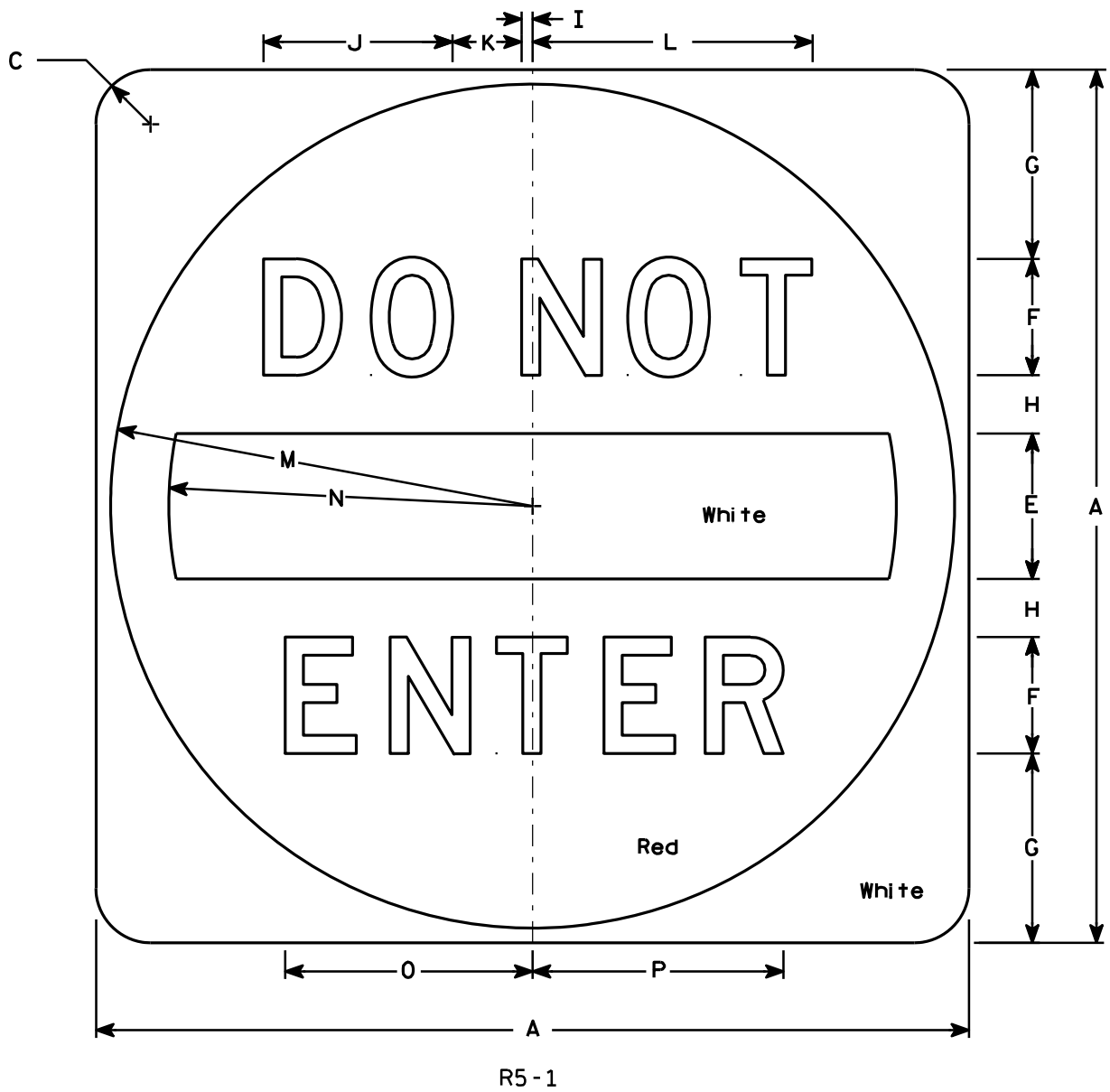
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

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

NOTES

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



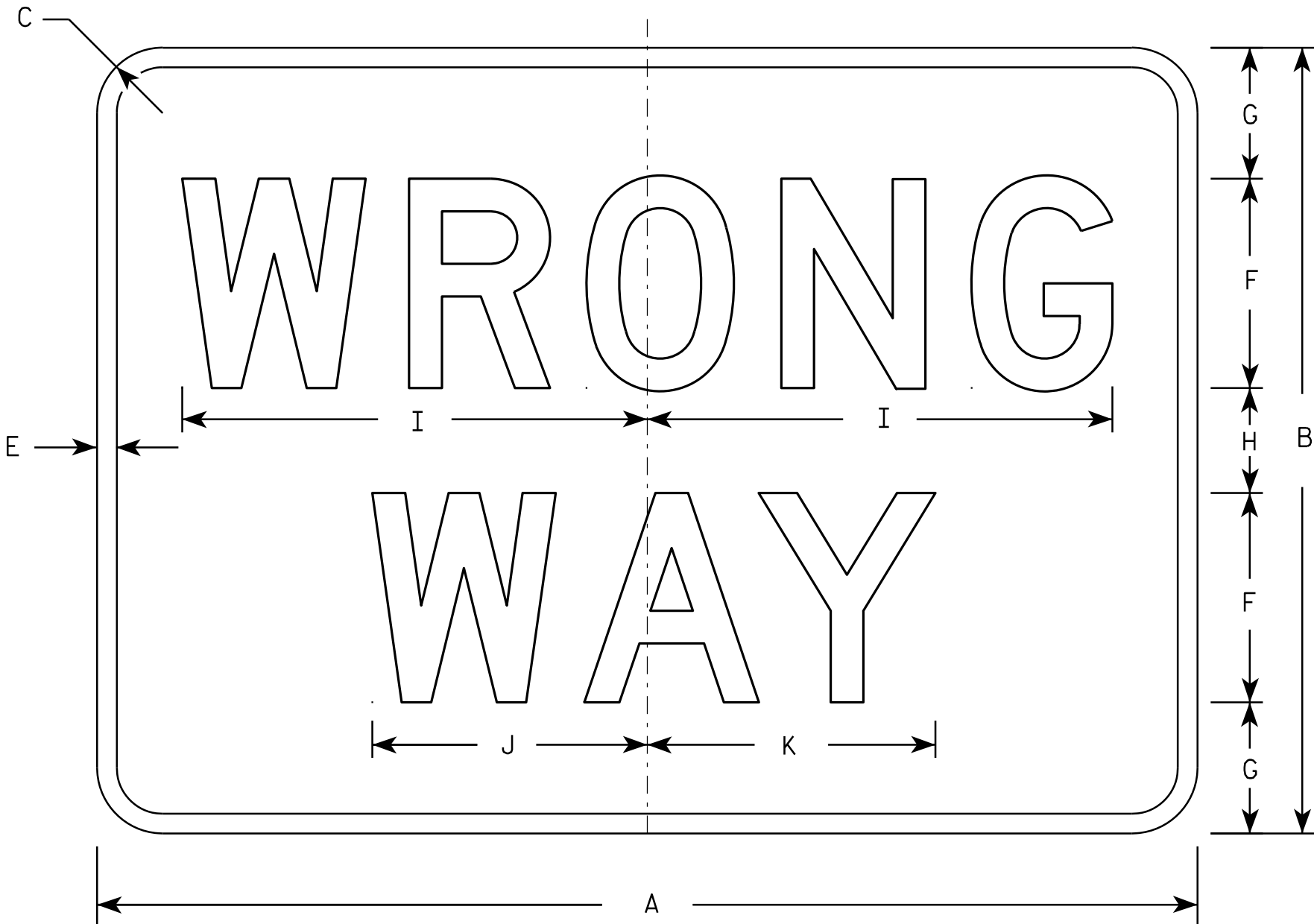
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7⁄8		5	4	6 1⁄2	2	3⁄8	6 1⁄2	2 3⁄8	9 5⁄8	14 1⁄2	12 1⁄2	8 1⁄2	8 5⁄8											6.26
2M	36		2 1⁄4		6	5	7 1⁄2	2 1⁄2	1⁄2	8 1⁄8	3	12 1⁄8	17 1⁄2	15	10 5⁄8	10 3⁄4											9.0
3	36		2 1⁄4		6	5	7 1⁄2	2 1⁄2	1⁄2	8 1⁄8	3	12 1⁄8	17 1⁄2	15	10 5⁄8	10 3⁄4											9.0
4	36		2 1⁄4		6	5	7 1⁄2	2 1⁄2	1⁄2	8 1⁄8	3	12 1⁄8	17 1⁄2	15	10 5⁄8	10 3⁄4											9.0
5	48		3		8	6	11	3	5⁄8	9 3⁄4	3 5⁄8	14 1⁄2	23 1⁄2	20	12 3⁄4	12 7⁄8											16.0

STANDARD SIGN  
R5 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1.15



R5-1A

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75

STANDARD SIGN  
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2



R6 - 6

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:  
Background - White  
Message - Black
3. Message Series - D except Line 1 is 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
1																										
2S	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	9 1/8	8 1/8	8 1/2															
2M	30	36	1 3/8	1/2	5/8	8	3 1/4	2 3/4	12 1/4	10 1/2	11 1/2															
3	36	48	1 3/8	1/2	5/8	10	5 1/4	3 1/4	15 1/4	12 3/4	13 3/8															
4	36	48	1 3/8	1/2	5/8	10	5 1/4	3 1/4	15 1/4	12 3/4	13 3/8															
5																										

STANDARD SIGN

R6 - 6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R. Rauch  
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-6.1

PROJECT NO: 8996-00-98

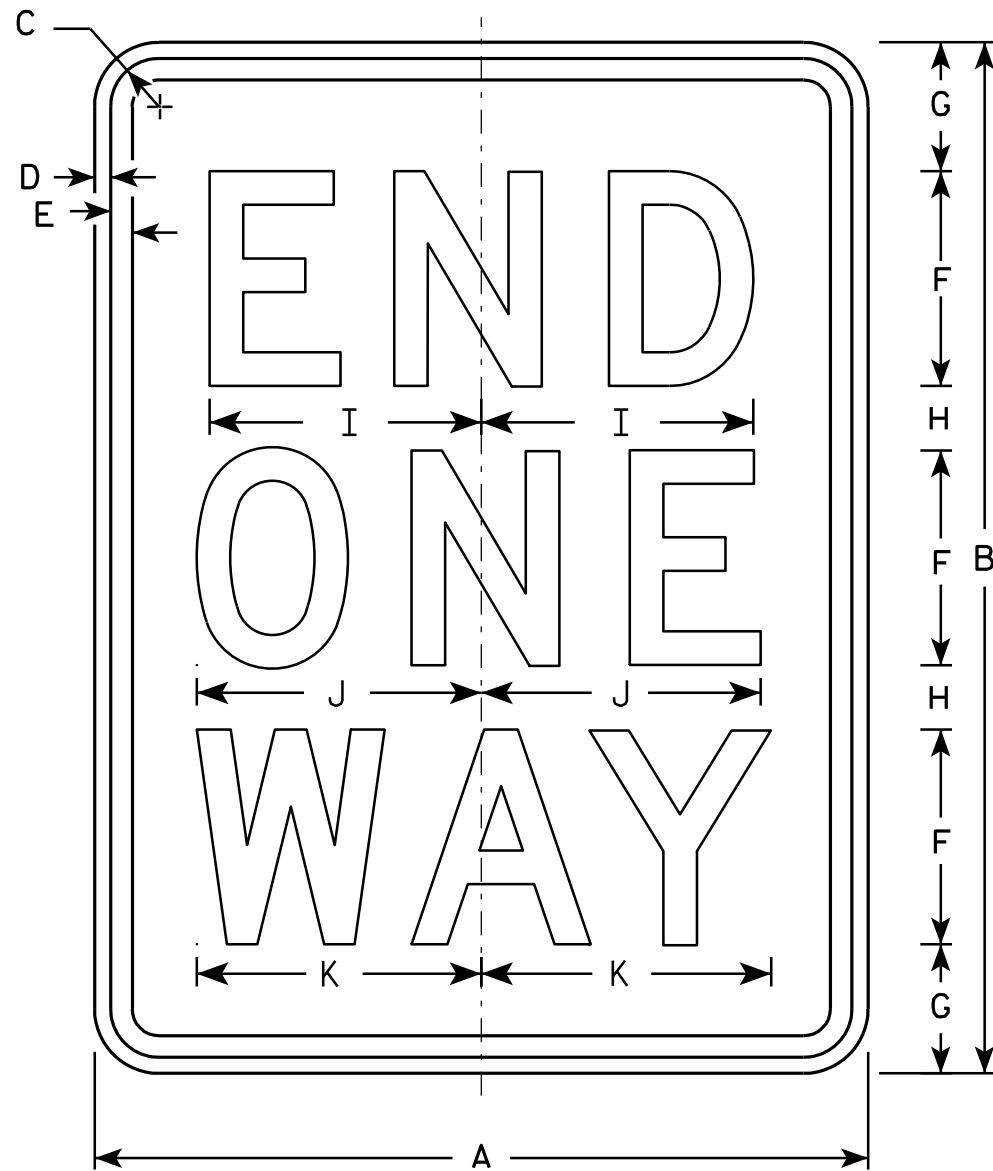
HWY: SPRING STREET

COUNTY: CHIPPEWA

SHEET NO:

E





R6 - 7

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z
1																										
2S	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	8	8 1/8	8 1/2															
2M	30	36	1 3/8	1/2	5/8	8	3 1/4	2 3/4	10 1/8	10 1/2	11 1/2															
3	36	48	1 3/8	1/2	5/8	10	5 1/4	3 1/4	12 5/8	12 3/4	13 3/8															
4	36	48	1 3/8	1/2	5/8	10	5 1/4	3 1/4	12 5/8	12 3/4	13 3/8															
5																										

STANDARD SIGN

R6 - 7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-7.1

PROJECT NO: 8996-00-98

HWY: SPRING STREET

COUNTY: CHIPPEWA

SHEET NO:

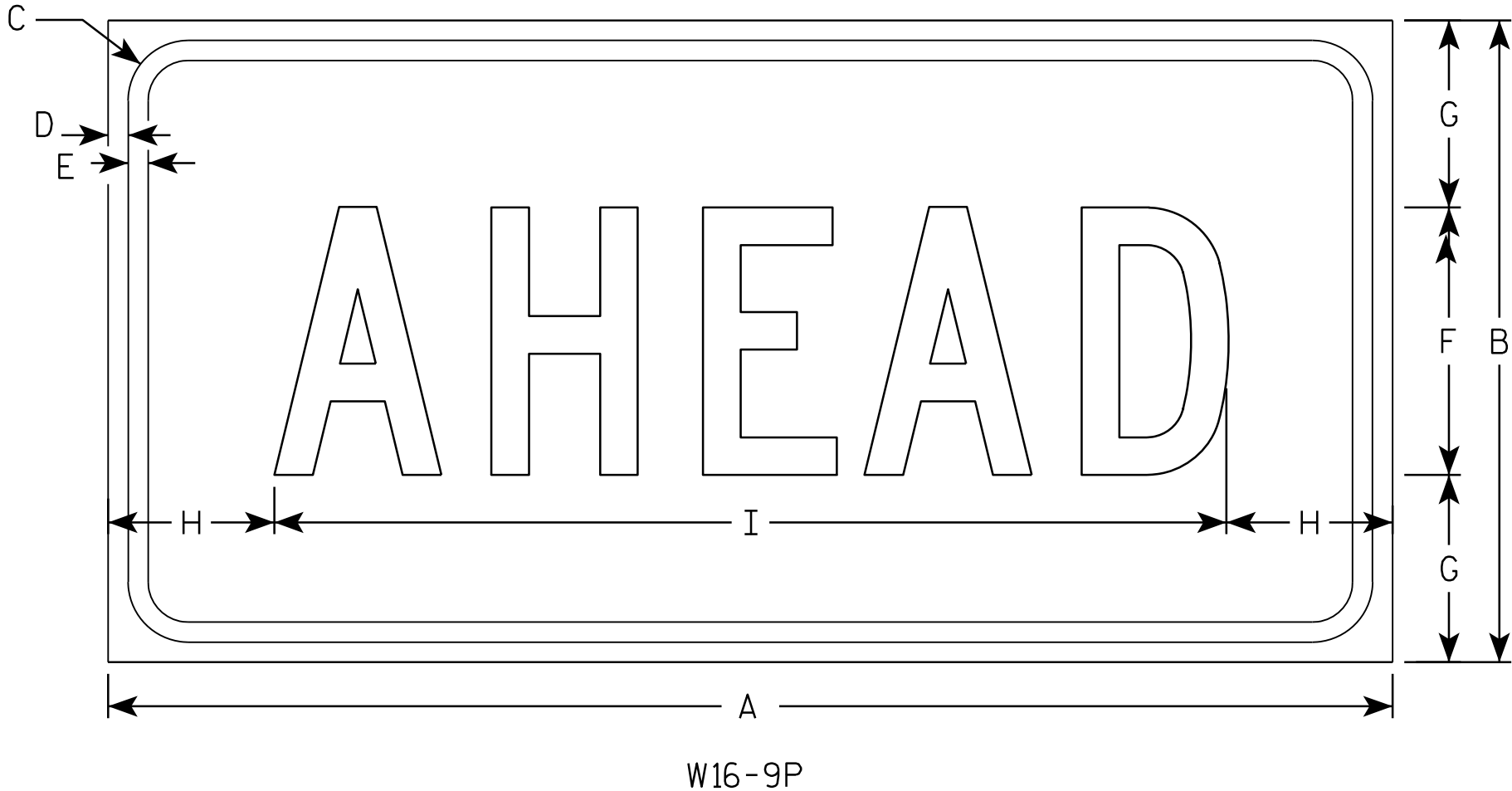
E

7

7

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. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

STANDARD SIGN

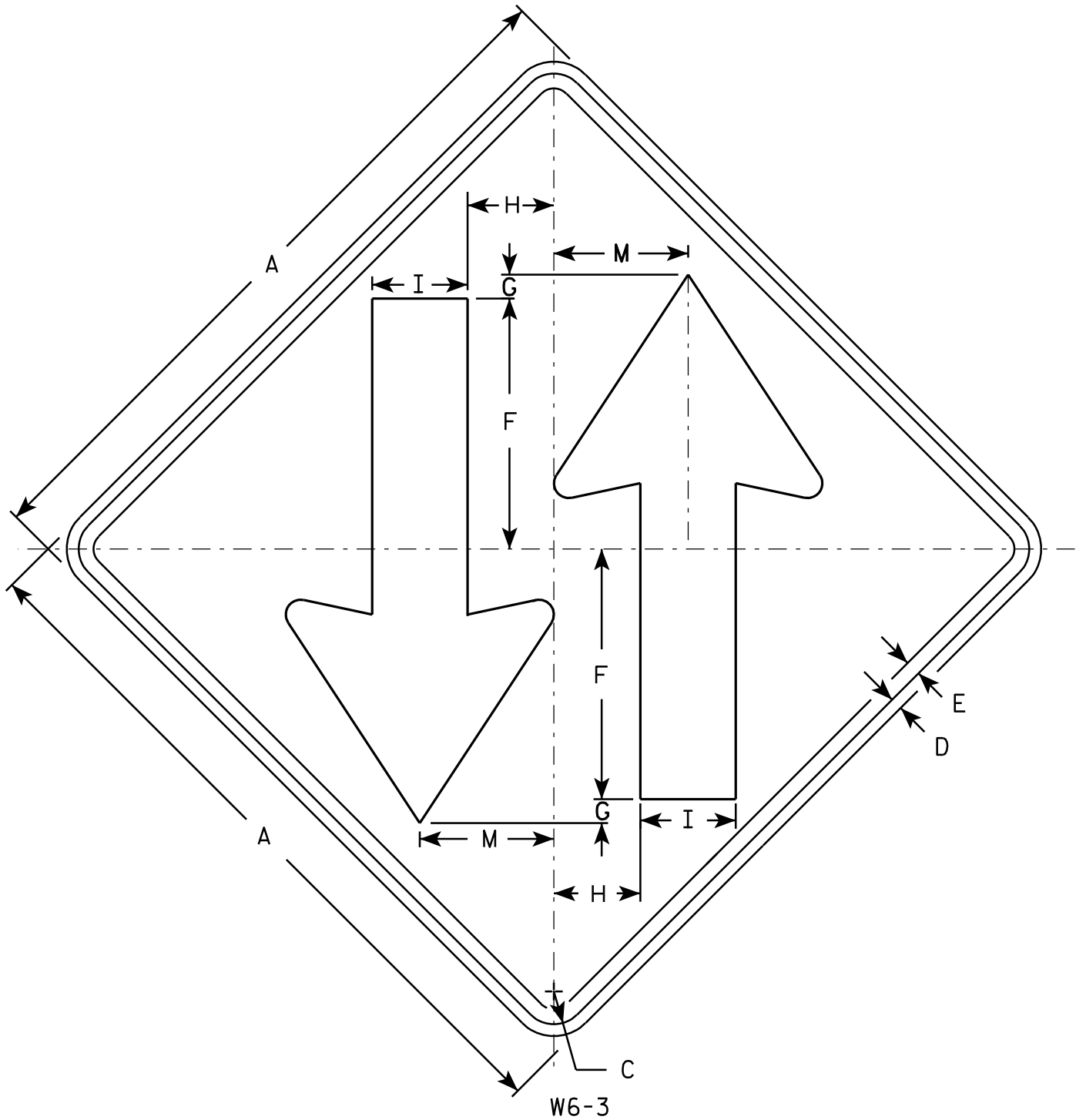
W16-9P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 12/28/10 PLATE NO. W16-9P.6

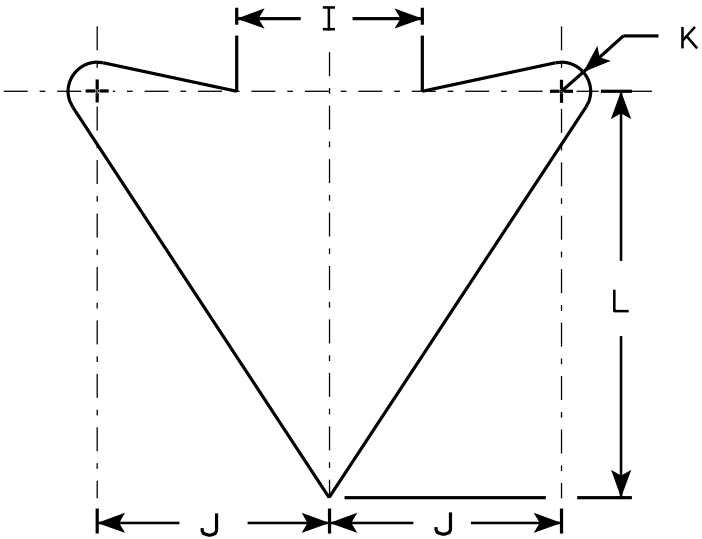
7



W6-3

NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:  
Background - 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.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	v	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	10 1/2	1	3 5/8	4	5	5/8	8 3/4	5 5/8														6.25
2S	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
2M	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
3																											
4	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
5	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0

STANDARD SIGN

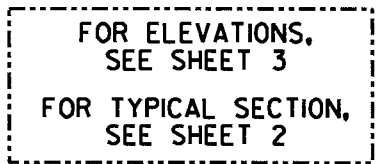
W6 - 3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W6-3.10

7



A.D.T. = 510 (2015)  
A.D.T. = 620 (2035)  
R.D.S. = 25 M.P.H.

THE EXISTING STEEL GAS LINE ON THE BRIDGE WILL BE PAINTED WHITE WHERE IT IS ADJACENT TO THE CONCRETE ARCHES AND BLUE-GREY EVERYWHERE ELSE. FEDERAL STANDARD COLOR NUMBER 37886 (WHITE) AND 36152 (BLUE-GREY). COST OF PAINTING THE EXISTING STEEL GAS LINE IS INCLUDED TO BID ITEM "PAINTING EXISTING STEEL GAS LINE".

1. GENERAL PLAN
2. TYPICAL SECTION & DETAILS
3. CONCRETE SURFACE REPAIR DETAILS
4. STRUCTURE STAINING & FIBER WRAP DETAILS

<u>BID NUMBER</u>	<u>BID ITEMS</u>	<u>AMOUNT</u>
502.0100	CONCRETE MASONRY BRIDGES _____	5 CY
502.5002	MASONRY ANCHORS TYPE L NO. 4 BARS _____	224 EACH
502.3200	PROTECTIVE SURFACE TREATMENT _____	275 SY
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES _____	450 LB
509.0301	PREPARATION DECKS TYPE 1 _____	3 SY
509.0302	PREPARATION DECKS TYPE 2 _____	3 SY
509.2000	FULL-DEPTH DECK REPAIR _____	1 SY
509.2500	CONCRETE MASONRY OVERLAY DECKS _____	15 CY
509.9005.S	REMOVING CONCRETE MASONRY DECK OVERLAY P-09-0711 _____	210 SY
517.1010.S	CONCRETE STAINING P-09-0711 _____	4,800 SF
SPV.0105.01	PAINTING EXISTING STEEL GAS LINE _____	1 LS
SPV.0165.01	FIBER WRAP REINFORCING _____	4,500 SF
SPV.0165.02	CONCRETE SURFACE REPAIR SPECIAL _____	1,100 SF

2/24/15

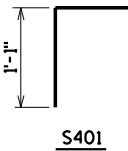
CONSULTANT CONTACT:  
CHRIS MCMAHON  
(715)-834-3161

NO.	DATE	REVISION	BY
ORIGINAL PLANS PREPARED BY			
<b>AYRES ASSOCIATES</b>		3433 Oakwood Hills Parkway Eau Claire, WI 54701 www.AyresAssociates.com	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED	<i>William C. Dechen</i> CIVIL		7/24/15
CHIEF STRUCTURES DESIGN ENGINEER		DATE	
STRUCTURE P-9-711			
SPRING STREET OVER DUNCAN CREEK			
COUNTY	CHIPPewa	TOWN/VILLAGE CHIPPewa FALLS	
DESIGN SPEC.		REHABILITATION N/A	
DESIGNED BY	KLW	DESIGN CK'D.	CBM
DRAWN BY	CLS	PLANS CK'D.	CBM
GENERAL PLAN		SHEET 1 OF 4	

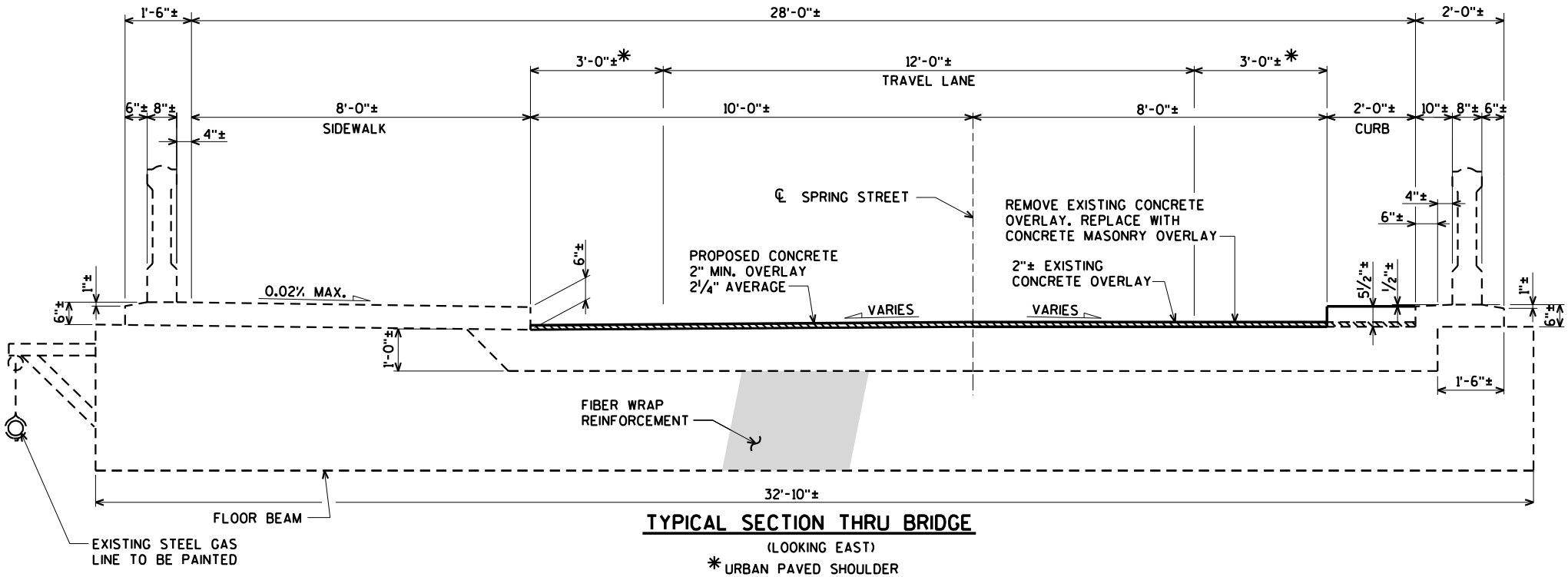
BILL OF BARS

BAR NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR SERIES	450# COATED
						LOCATION
S401	X	112	1-11	X		PROPOSED CURB TRANS.
S402	X	112	2-5			PROPOSED CURB TRANS.
S403	X	6	31-9			PROPOSED CURB LONG.

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



S401

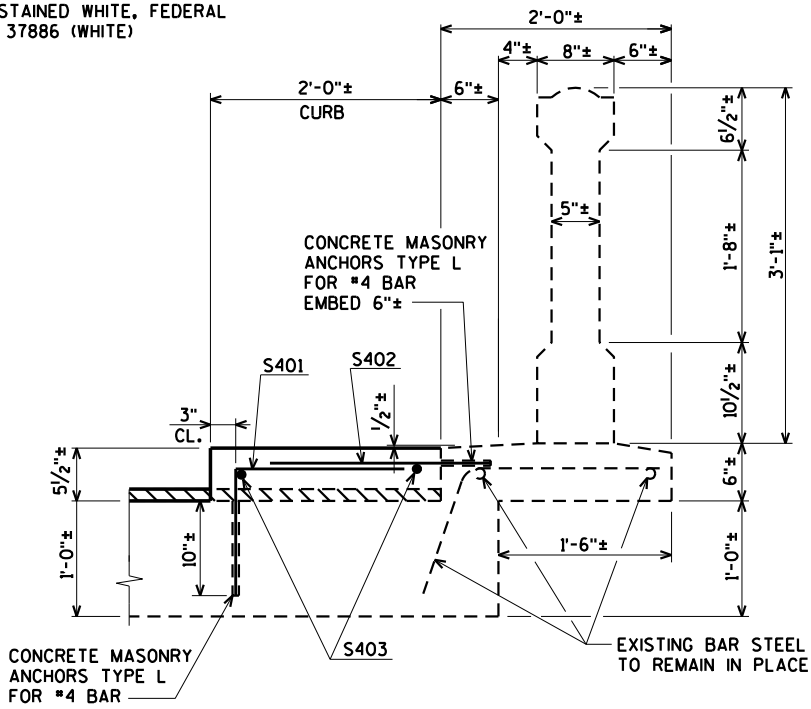


TYPICAL SECTION THRU BRIDGE

(LOOKING EAST)

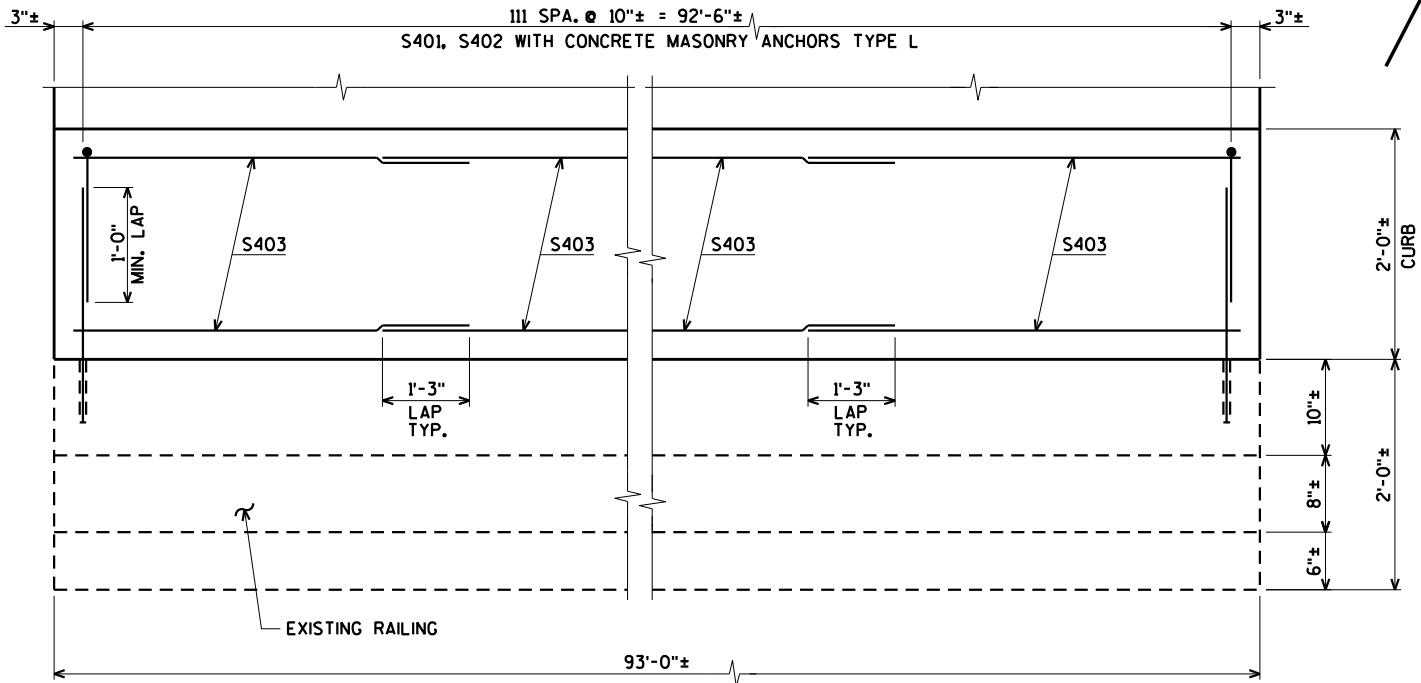
\* URBAN PAVED SHOULDER

NOTE:  
EXISTING RAILINGS, CURB, EDGES OF DECK AND SIDEWALK,  
AND ABUTMENTS WILL BE STAINED WHITE, FEDERAL  
STANDARD COLOR NUMBER 37886 (WHITE)



PROPOSED CURB DETAIL

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



PLAN AT PROPOSED CURB

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE P-9-711			
DRAWN BY	CLS	PLANS CK'D.	KLW
TYPICAL SECTION & DETAILS			SHEET 2 OF 4

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

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42-0740grEHAB.dgn

8

CONCRETE SURFACE REPAIR

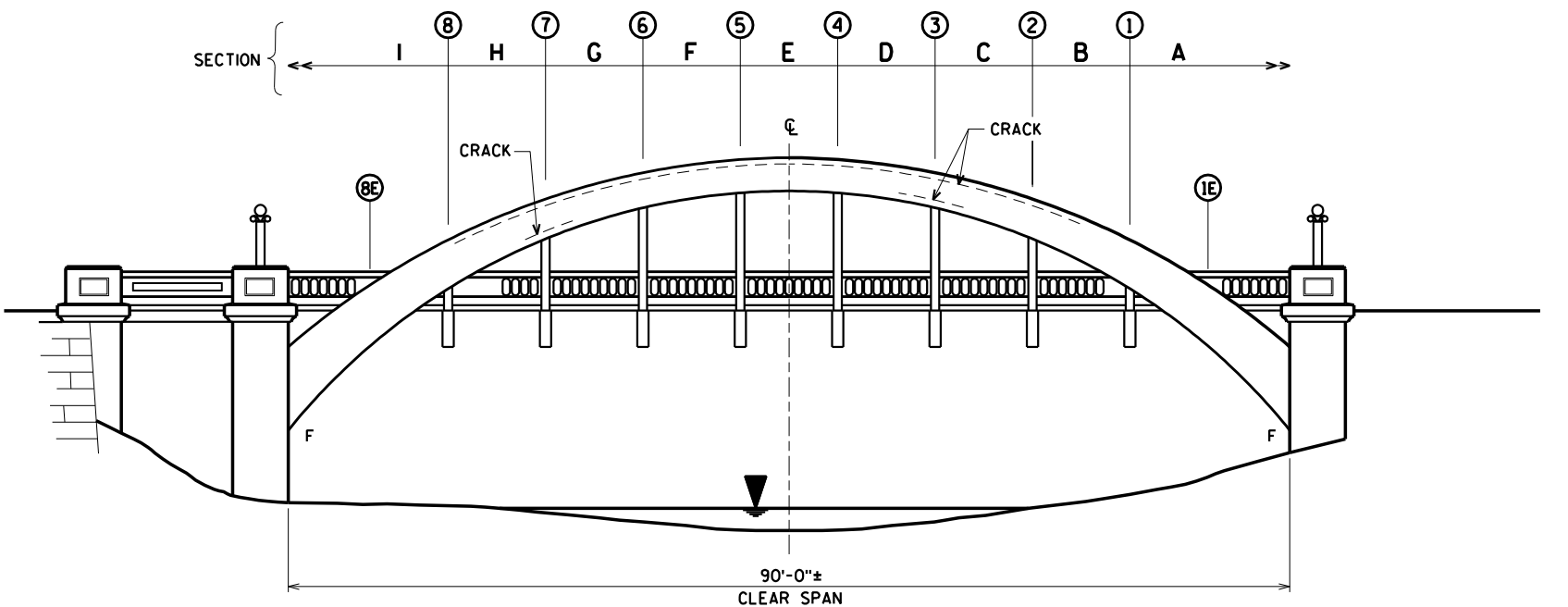
NORTH SIDE CONCRETE SURFACE REPAIR			
SECTION	CONCRETE ELEMENT	DESCRIPTION	SF
A	VERTICALS IN RAILING	4 VERTICALS NEEDING REPAIR	4
1	HANGER	NO CRACKS	0
1-B	FLOOR BEAM	ENDS ARE DISTRESSED WITH SPALLS AND CRACKS	60
8E	FLOOR BEAM	NO CRACKS	0
B	VERTICALS IN RAILING	3 VERTICALS NEEDING REPAIR	3
2	HANGER	CRACKED INSIDE AND OUTSIDE FACES	10
B-H	ARCH	CRACKED ALONG INSIDE FACE TOP	70
C	VERTICALS IN RAILING	NO CRACKS	0
3	HANGER	CRACKED ON INSIDE FACE TOP	5
C-D	ARCH	CRACKED ON INSIDE FACE BOTTOM	5
C-D	SIDEWALK	SPALLED ON INSIDE FACE	5
D	VERTICALS IN RAILING	NO CRACKS	0
4	HANGER	CRACKED INSIDE FACE	10
D-E	SIDEWALK	SPALLED ON INSIDE FACE	1
E	VERTICALS IN RAILING	2 VERTICALS NEEDING REPAIR	1
5	HANGER	CRACKED ON OUTSIDE FACE TOP	5
F	VERTICALS IN RAILING	3 VERTICALS NEEDING REPAIR	3
6	HANGER	NO CRACKS	0
G	VERTICALS IN RAILING	3 VERTICALS NEEDING REPAIR	3
7	HANGER	CRACKED INSIDE AND OUTSIDE FACES	10
G-H	ARCH	CRACKED ON INSIDE FACE BOTTOM	5
H	ARCH	CRACKED ON TOP	10
H	VERTICALS IN RAILING	3 VERTICALS NEEDING REPAIR, SPALLED TOP INSIDE FACE	5
8	HANGER	NO CRACKS	0
I	VERTICALS IN RAILING	NO CRACKS	0
I	SIDEWALK	CRACKED ON EAST END WITH SPALL ON INSIDE FACE	10
8E	FLOOR BEAM	SPALLED ON BOTH SIDES WITH EXPOSED REBAR	5
I	ARCH	CRACKED ON INSIDE FACE BOTTOM UNDER DECK	5
SUBTOTAL			235

SOUTH SIDE CONCRETE SURFACE REPAIR			
SECTION	CONCRETE ELEMENT	DESCRIPTION	SF
A	VERTICALS IN RAILING	2 VERTICALS NEEDING REPAIR	1
A	RAILING END BLOCK	CRACKED AND SPALLED ALL AROUND	20
A	ARCH	TOP DETERIORATED EXPOSED LATTICE STEEL	5
A	ARCH	CRACKED ON INSIDE FACE BOTTOM UNDER DECK	5
1E	FLOOR BEAM	SPALLED ON SIDE WITH EXPOSED REBAR	5
1	HANGER	NO CRACKS	0
1-B	FLOOR BEAM	ENDS ARE DISTRESSED WITH SPALLS AND CRACKS	80
B	VERTICALS IN RAILING	2 VERTICALS NEEDING REPAIR	1
2	HANGER	20% CRACKED	10
C	VERTICALS IN RAILING	1 VERTICALS NEEDING REPAIR	1
3	HANGER	CRACKED ON OUTSIDE FACE BOTH SIDES	20
D	VERTICALS IN RAILING	2 VERTICALS NEEDING REPAIR	1
D	ARCH	CRACKED ON TOP	10
4	HANGER	CRACKED ON BOTTOM	5
D-E	ARCH	CRACKED ON INSIDE FACE TOP	10
E	VERTICALS IN RAILING	2 VERTICALS NEEDING REPAIR	1
5	HANGER	CRACKED ON BOTTOM AND CRACKED MID HEIGHT ON INSIDE FACE	15
E-F	ARCH	CRACKED ON INSIDE FACE BOTTOM	15
F	VERTICALS IN RAILING	NO CRACKS	0
6	HANGER	CRACKED INSIDE FACE ONE CORNER	10
G	VERTICALS IN RAILING	4 VERTICALS NEEDING REPAIR	4
G	ARCH	SPALLS ON BOTTOM AND CRACKED ON INSIDE FACE TOP	10
7	HANGER	CRACKED AND SPALLED ON INSIDE AND OUTSIDE FACES	10
H	VERTICALS IN RAILING	2 VERTICALS NEEDING REPAIR	2
H	RAILING	SPALL INSIDE FACE AT ARCH, CRACK/SPALL INSIDE FACE BOTTOM AT ARCH	5
8	HANGER	NO CRACKS	0
H-I	CURB	SPALLED TOP OF CURB	1
I	VERTICALS IN RAILING	2 VERTICALS NEEDING REPAIR	2
8E	FLOOR BEAM	NO CRACKS	0
I	CURB	DETERIORATED CONCRETE AT WINGWALL	1
I	RAILING END BLOCK	BOTTOM OF RAILING SPALLED OFF AT END	5
I	ARCH	TOP OF ARCH SPALLED	10
I	ARCH	CRACK ON INSIDE FACE BOTTOM UNDER DECK EXPOSED REBAR	5
SUBTOTAL			270

UNDERSIDE CONCRETE SURFACE REPAIR			
SECTION	CONCRETE ELEMENT	DESCRIPTION	SF
B-H	DECK	DISTRESSED CONCRETE BETWEEN FLOOR BEAMS ON SOUTH SIDE EDGE	75
H	DECK	HOLE THROUGH BOTTOM OF DECK WITH EXPOSED REBAR & SPALLS	5
I	ABUTMENT	SPALLING AND DELAMINATED CONCRETE	10
3	FLOOR BEAM	SPALL ON BOTTOM OF FLOOR BEAM	5
SUBTOTAL			95
UNDISTRIBUTED			500
TOTAL			1100

STATE PROJECT NUMBER

8996-00-98

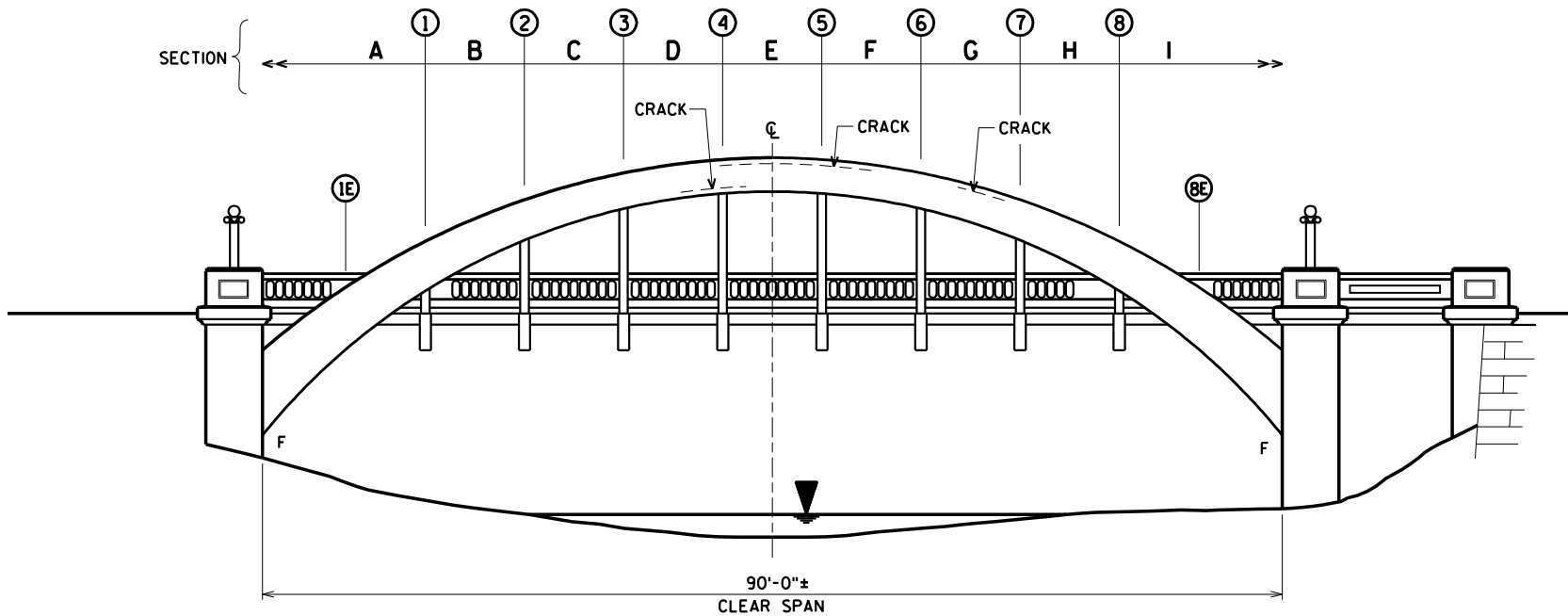


ELEVATION

NORTH SIDE LOOKING SOUTH AT OUTSIDE FACE

LEGEND

— CRACK ON OUTSIDE  
FACE OF ARCH  
- - - CRACK ON INSIDE  
FACE OF ARCH



ELEVATION

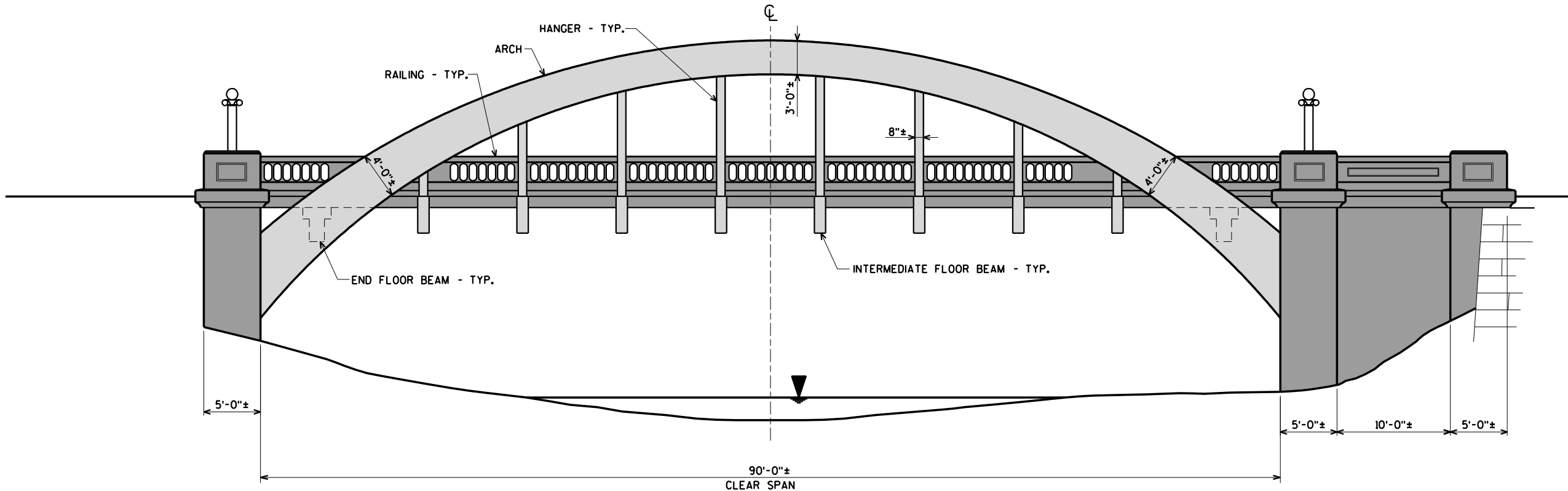
SOUTH SIDE LOOKING NORTH AT OUTSIDE FACE

NOTE:

EXPOSED STEEL WILL BE CLEANED AND PAINTED PRIOR TO PLACING THE CONCRETE FOR CONCRETE SURFACE REPAIR. EXPOSED STEEL AREAS ARE TO BE PHOTOGRAPHED AND LOCATION LABELED. SEE SPECIAL PROVISION "CONCRETE SURFACE REPAIR SPECIAL, SPV.0165.02".

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

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION STRUCTURE P-9-711			
DRAWN BY		CLS	PLANS CK'D. KLW
CONCRETE SURFACE REPAIR DETAILS			SHEET 3 OF 4

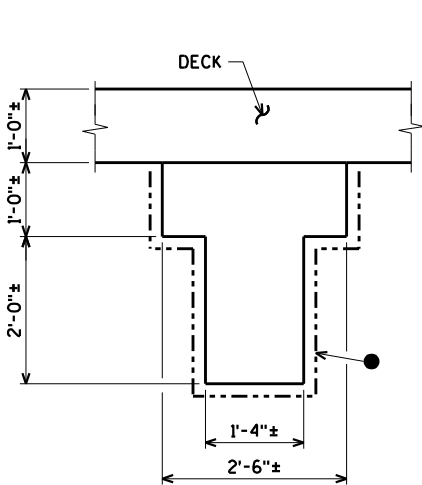


**LEGEND**

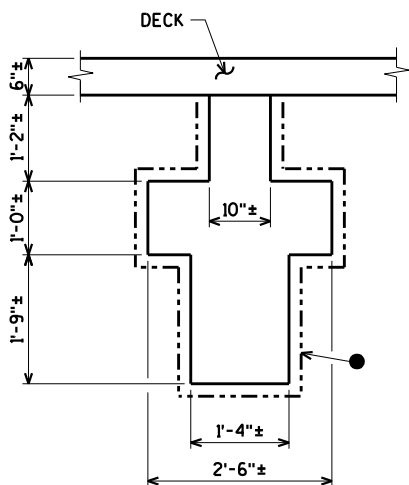
- APPLY FIBER WRAP REINFORCING TO STRUCTURAL ELEMENTS.  
PAINT FIBER WRAPPED AREAS WHITE USING ACRYLIC PAINT.  
(ARCHES, HANGERS, FLOOR BEAMS) FEDERAL STANDARD COLOR 37886 (WHITE)
- STAIN CONCRETE WHITE. (RAILING, CURB, ABUTMENTS, END OF DECK)  
FEDERAL STANDARD COLOR 37886 (WHITE)

**ELEVATION**

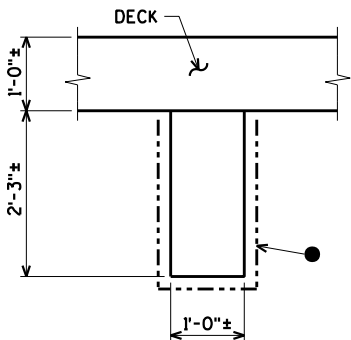
SOUTH SIDE LOOKING NORTH AT OUTSIDE FACE



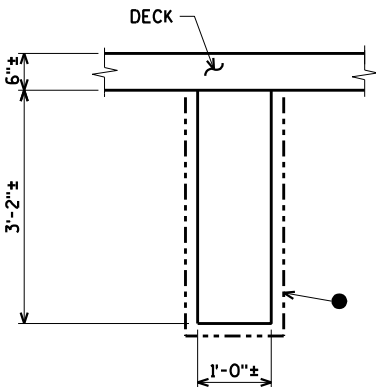
DETAIL OF END FLOOR BEAMS



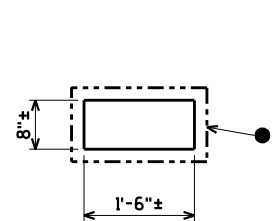
DETAIL OF END FLOOR BEAMS  
AT SIDEWALK



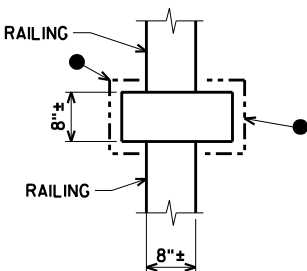
DETAIL OF INTERMEDIATE FLOOR BEAMS



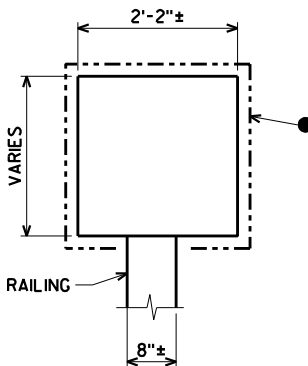
DETAIL OF INTERMEDIATE FLOOR BEAMS  
AT SIDEWALK



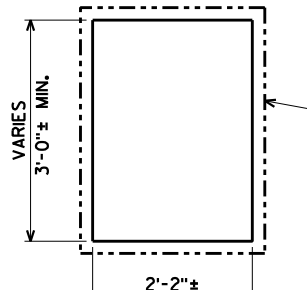
CROSS SECTION THRU HANGER



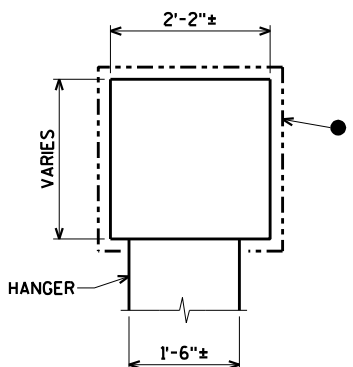
SECTION THRU HANGER AT RAILING



SECTION THRU ARCH AT RAILING



SECTION THRU ARCH



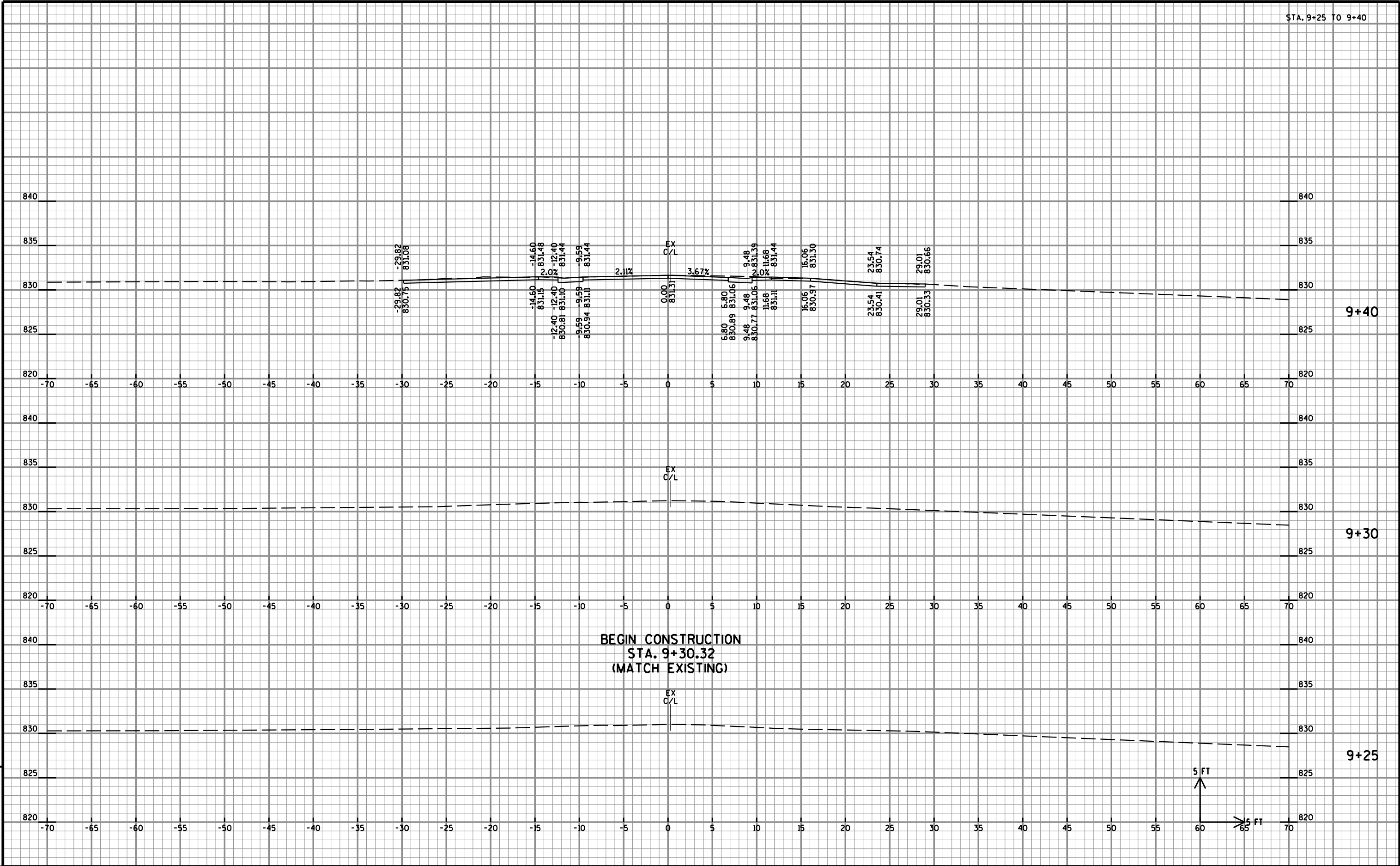
SECTION THRU ARCH AT HANGER

**FIBER WRAP REINFORCEMENT DETAILS**

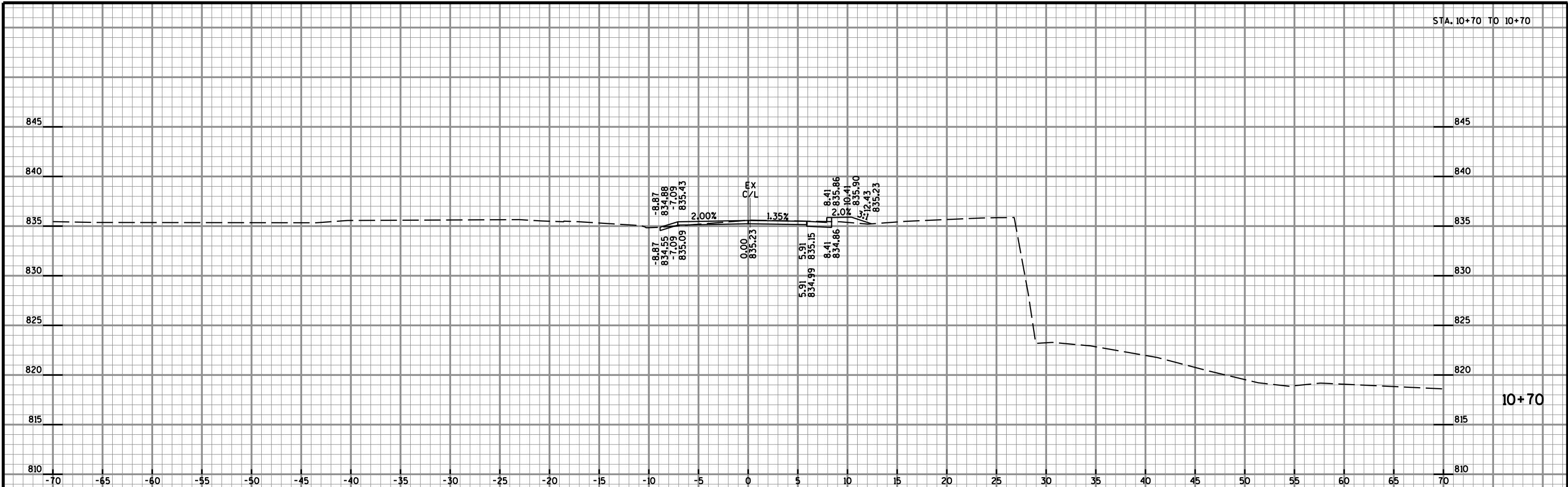
● FIBER WRAP REINFORCEMENT

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

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE P-9-711			
DRAWN BY		CLS	PLANS CK'D. KLW
STRUCTURE STAINING & FIBER WRAP DETAILS			SHEET 4 OF 4



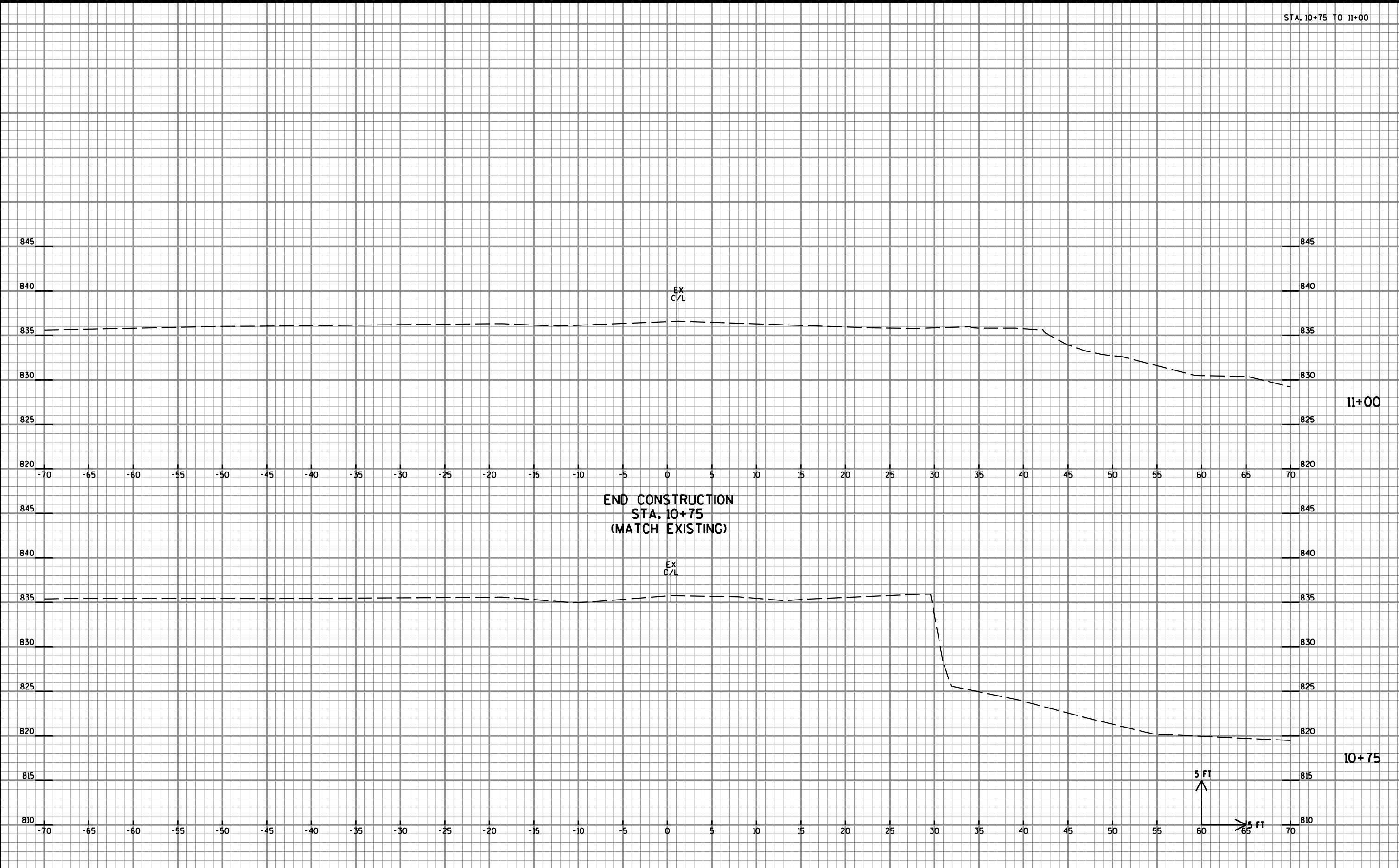




9

5 FT  
5 FT

9



PROJECT NO: 8996-00-98

HWY: SPRING STREET

COUNTY: CHIPPEWA

CROSS SECTIONS

SHEET

E

## Notes



## ***Wisconsin Department of Transportation***

Dedicated people creating transportation solutions  
through innovation and exceptional service.

<http://www.dot.wisconsin.gov>