WIS DEC 2014

PROJECT ID: 6250-01-70
WITH: 6250-01-76 AND 6250-01-77

COUNTY: WAUPACA

ORDER OF SHEETS

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

TOTAL SHEETS = 98

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6250-01-70	WISC 2014442	1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

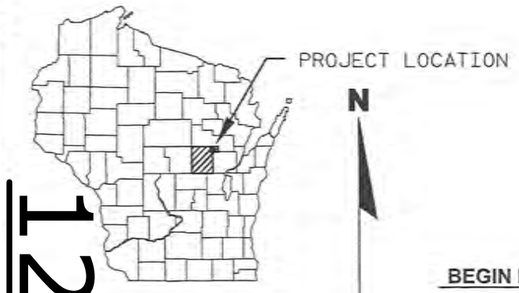
C CLINTONVILLE, MAIN STREET

PIGEON RIVER BRIDGE B-68-131

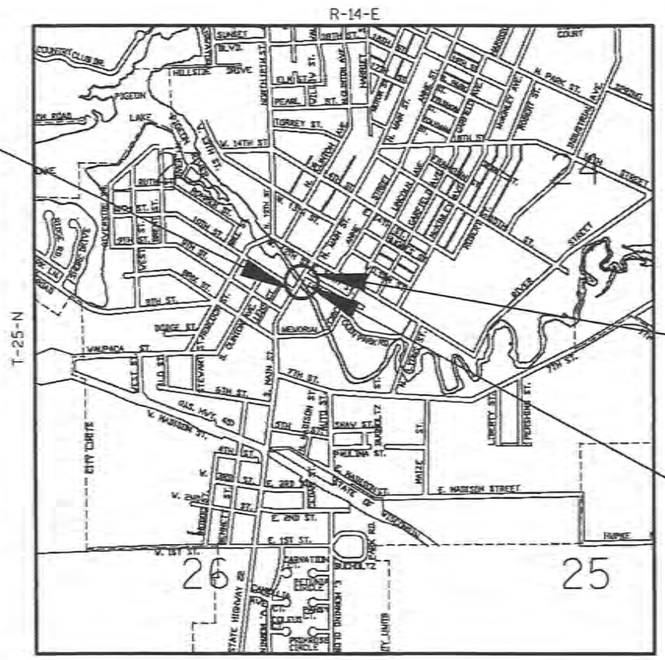
STH 22

WAUPACA COUNTY

STATE PROJECT NUMBER
6250-01-70



BEGIN PROJECT 6250-01-70
STA 119+31.22
Y = 438087.025
X = 621501.643



END PROJECT 6250-01-70
STA 122+67.37
Y = 438374.001
X = 621676.689

STRUCTURE
B-68-131
STA 120+71.33

DESIGN DESIGNATION

A.A.D.T. (2015)	=	18,400
A.A.D.T. (2025)	=	20,200
A.A.D.T. (2035)	=	21,900
D.H.V. (2035)	=	2,430
D.D.	=	58/42
T.	=	5.3%
DESIGN SPEED	=	30 MPH
ESALS	=	3,657,300

CONVENTIONAL SYMBOLS

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

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

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

LAYOUT
SCALE 0 1000 FT

TOTAL NET LENGTH OF CENTERLINE = 0.064 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), WAUPACA COUNTY.

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

ORIGINAL PLANS PREPARED BY

CWE, Inc.
5707 SCHOFIELD AVE.
WESTON, WISCONSIN
54476
PHONE: (715) 359-9400
FAX: (715) 355-4199
generaldocwengineers.com
[illegible]engineers.com

WISCONSIN
JAY R. KNOKE
E-25023
WAUSAU, WI
PROFESSIONAL ENGINEER

DATE: 7/21/14 [illegible], PE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	CWE, Inc
Designer	CWE, Inc
Project Manager	M. STEIDL
Regional Examiner	C. SIMON
Regional Supervisor	S. RILEY

APPROVED FOR THE DEPARTMENT
DATE: 7/21/14 [signature]
(Signature)

E

GENERAL NOTES

NO TREES (AND/OR SHRUBS) SHALL BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

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

HMA PAVEMENT, WHEN INDICATED ON THE PLANS, SHALL CONSIST OF COURSES AS FOLLOWS UNLESS OTHERWISE NOTED ON THE PLANS.

3" TOTAL DEPTH	TYPE	NOMINAL MAX SIZE GRADATION	PERFORMANCE GRADE
1 1/2" LOWER	E-1	12.5 MM	PG64-28
1 1/2" UPPER	E-1	12.5 MM	PG64-28

ALL STREET LIGHTING SHALL BE CONSTRUCTED UNDER PROJECT 6250-01-76.

ALL HOLES OR OPENINGS BELOW SUBGRADE RESULTING FROM THE ABANDONMENT OR REMOVAL OF EXISTING PIPES, MANHOLES, INLETS, OR CATCH BASINS SHALL BE BACKFILLED WITH ON-SITE MATERIAL APPROVED BY THE ENGINEER. THIS WORK SHALL BE INCIDENTAL TO THE COST OF THE REMOVAL ITEM.

WHEN THE QUANTITIES OF THE ITEM OF BASE AGGREGATE OR HMA PAVEMENT ARE MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

ALL RADII DIMENSIONS AND STAKEOUT DATA ARE MEASURED TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

ALL GRADES PROVIDED ALONG CURVE RADII LOCATED ALONG THE FLANGE OF CURB.

EXPANSION JOINTS TO BE CONSTRUCTED AT ALL RADII POINTS IN THE CURB AND GUTTER OR AT LOCATIONS SHOWN ON THE PLAN.

CONTRACTOR IS RESPONSIBLE FOR RESHAPING AND FINISHING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY THEIR OPERATION OUTSIDE THE NORMAL CONSTRUCTION LIMITS.

REMOVAL ITEMS REQUIRING RESTORATION OF CONCRETE OR ASPHALT SHALL BE REMOVED TO AN EXISTING JOINT OR SAWED AS DIRECTED BY THE ENGINEER.

A LINEAR SCHEDULE IS INCLUDED UNDER PROJECT 6250-01-76 THAT INCLUDES THE WORK TO BE COMPLETED UNDER PROJECT 6250-01-70.

A LINEAR SCHEDULE IS INCLUDED UNDER PROJECT 6250-01-76 THAT INCLUDES THE WORK TO BE COMPLETED UNDER PROJECT 6250-01-70.

SECTION 2 SHEET ORDER

GENERAL NOTES AND UTILITIES
TYPICAL SECTIONS
CONSTRUCTION DETAILS
INTERSECTION DETAIL
PAVEMENT JOINTS AND GRADES
EROSION CONTROL PLAN
STORM SEWER PLAN
PAVEMENT MARKING AND SIGNING PLAN

UTILITIES

CLINTONVILLE WATER & ELECTRIC UTILITY
50 TENTH STREET
CLINTONVILLE, WI 54929
TOBY KERSTEN, DPW
PHONE: (715) 823-7685
MOBILE: (715) 250-0220

DARRELL TEALL (SANITARY SEWER)
MOBILE: (715) 250-0067

BOB STANISLAWSKI (WATER)
MOBILE: (715) 250-0200

BRIAN ELLICKSON (ELECTRIC)
MOBILE: (715) 250-2870

SEND ALL WE ENERGIES CORRESPONDENCE TO:
WE ENERGIES (GAS)
333 W EVERETT ST, A299
MILWAUKEE, WI 53203
LATROY BRUMFIELD
PHONE: (414) 221-5617
latroy.brumfield@we-energies.com

CONSTRUCTION FIELD CONTACT
WE ENERGIES (GAS)
800 S. LYNNDALE DR.
APPLETON, WI 54914
CODY BECKMAN
PHONE: (920) 380-3422
MOBILE: (920) 428-1038
cody.beckman@we-energies.com

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

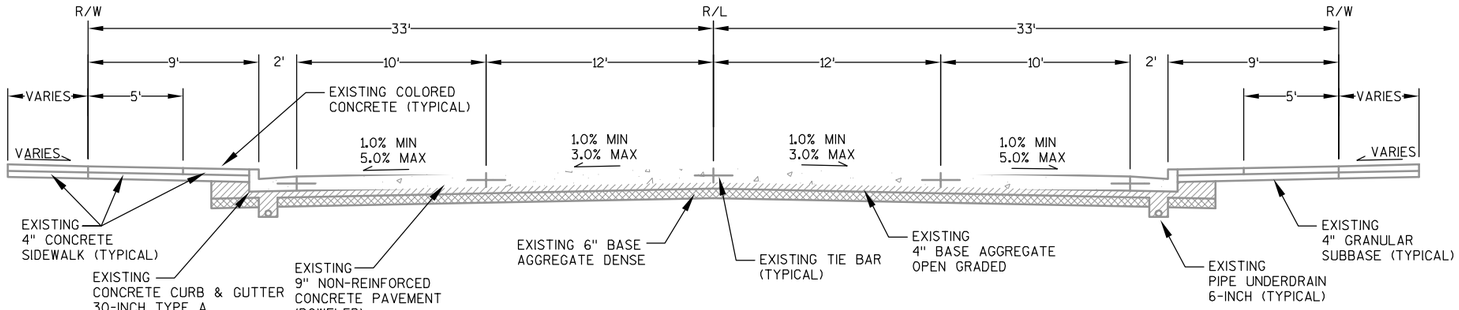
DNR LIAISON

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
427 E TOWER DRIVE, SUITE 100
WAUTOMA, WI 54982
BOBBI JO FISCHER
PHONE: (920) 787-3015
bobbi.fischer@wisconsin.gov

CONTROL POINTS

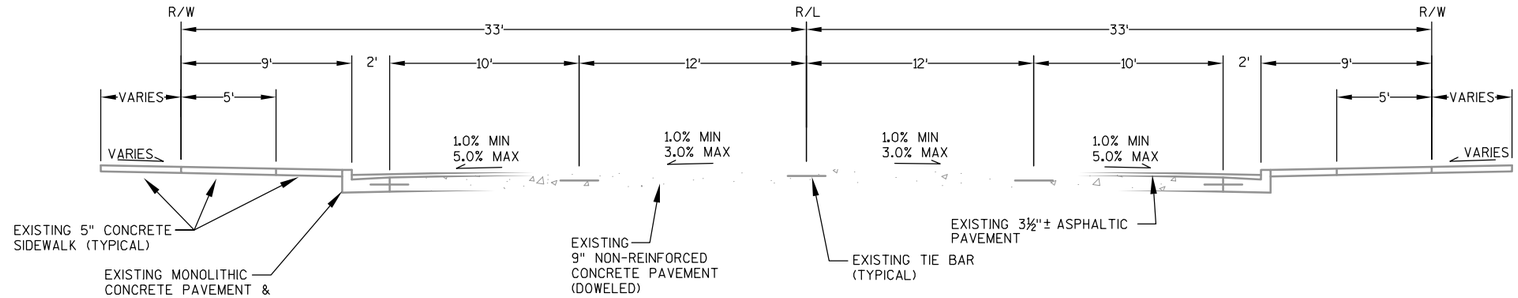
POINT	LOCATION	Y	X	ELEVATION	DESCRIPTION
CP 1	119+63.43, 25.11' LT	438127.598	621497.026	805.97	PK NAIL BEHIND CURB
CP 2	122+33.01, 25.91' LT	438358.153	621636.688	804.99	PK NAIL BEHIND CURB

2



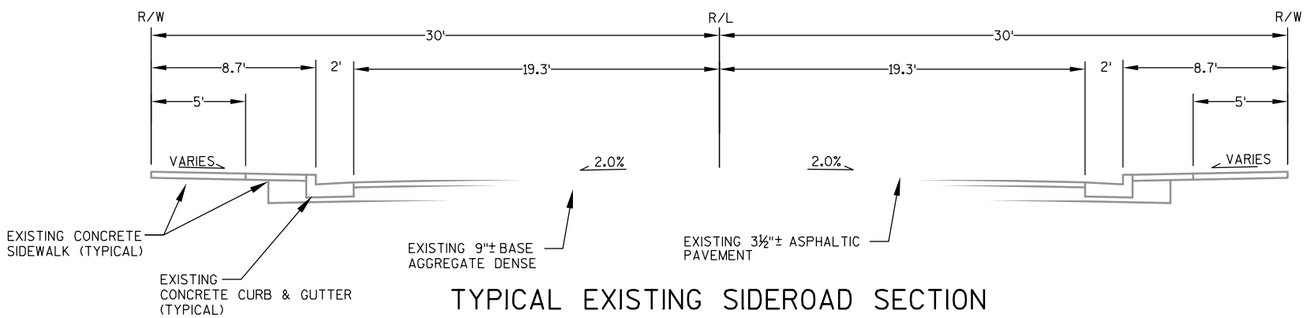
TYPICAL EXISTING SECTION - STH 22

STA 119+31.22 - 120+40.10



TYPICAL EXISTING SECTION - STH 22

STA 121+02.56 - 122+67.37

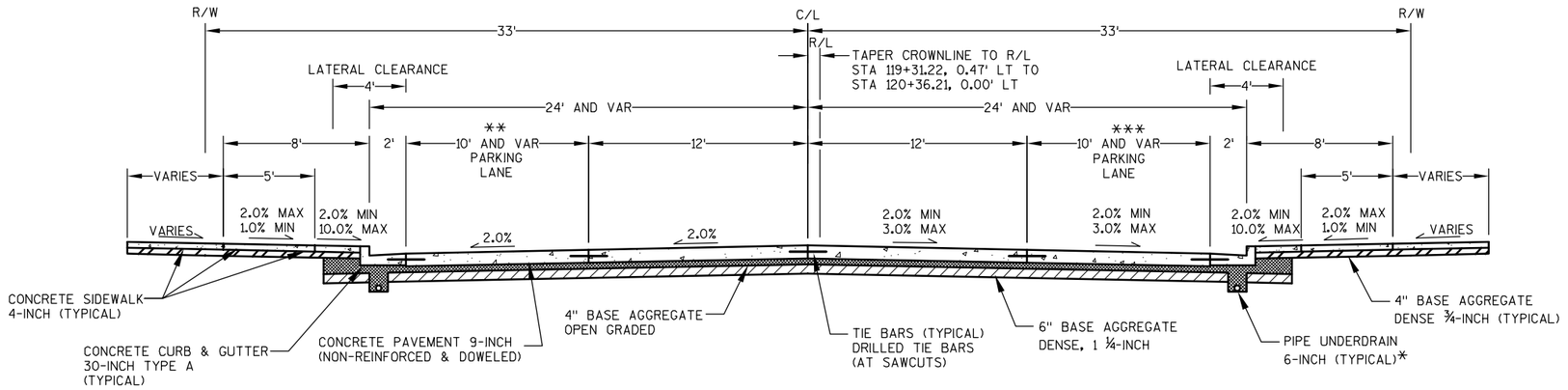


TYPICAL EXISTING SIDEROAD SECTION

11th STREET

PROJECT NO: 6250-01-70	HWY: STH 22	COUNTY: WAUPACA	TYPICAL SECTIONS	SHEET 3	E

2



TYPICAL FINISHED SECTION - STH 22

STA 119+31.22 - STA 120+13.33

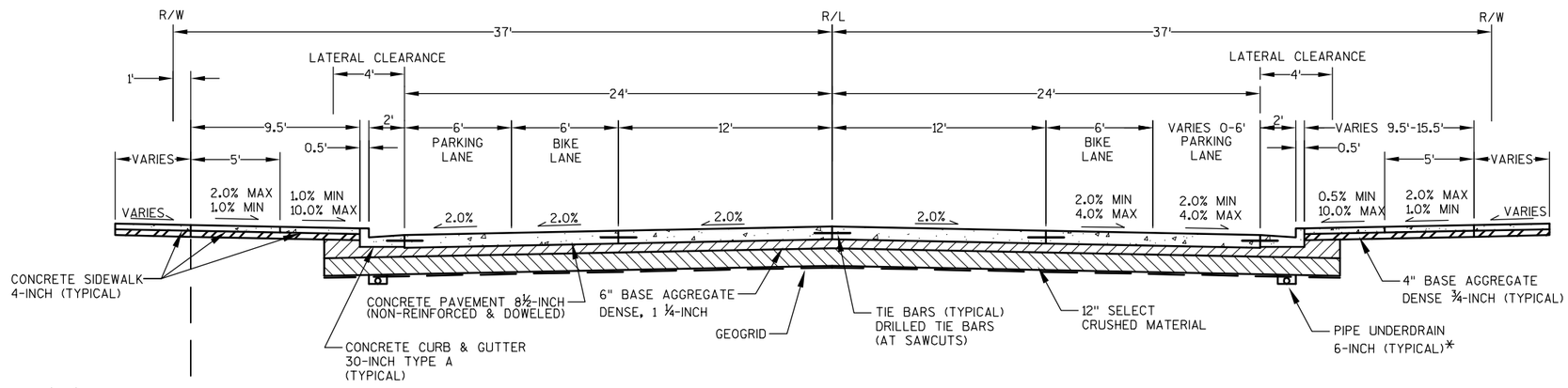
** 10' TO 12'
STA 120+35 TO STA 120+45

* SEE SDD EDGEDRAIN AND BASE AGGREGATE OPEN GRADED FOR DETAILS

*** 10' TO 12'
STA 120+18 TO STA 120+28

NOTE:

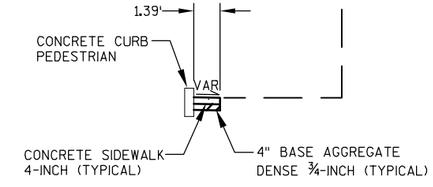
THE SIDEWALK CROSSSLOPE SHALL BE 1.0% MIN AND 2.0% MAX.



TYPICAL FINISHED SECTION - STH 22

STA 121+30.15 - STA 122+67.37

* SEE SDD EDGEDRAIN AND BASE AGGREGATE OPEN GRADED FOR DETAILS

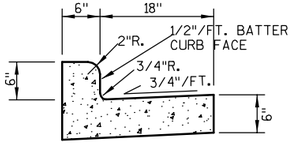


CONCRETE CURB PEDESTRIAN

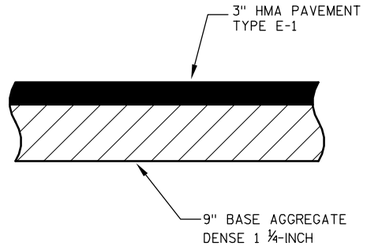
STA 122+05.5 - STA 122+45

PROJECT NO: 6250-01-70	HWY: STH 22	COUNTY: WAUPACA	TYPICAL SECTIONS	SHEET 4	E

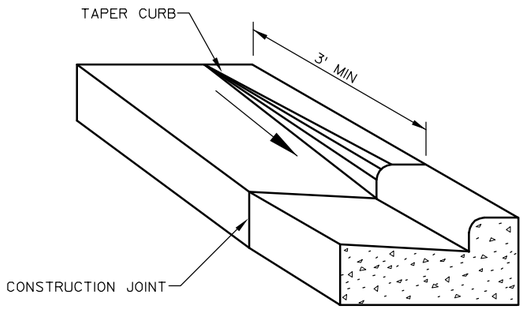
2



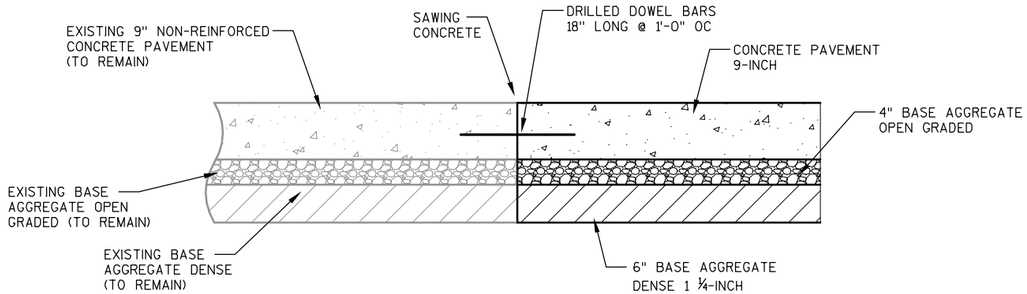
CONCRETE CURB & GUTTER
24-INCH, TYPE D



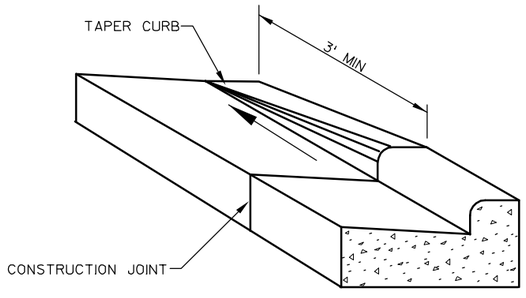
TYPICAL FINISHED SECTION
DRIVEWAYS



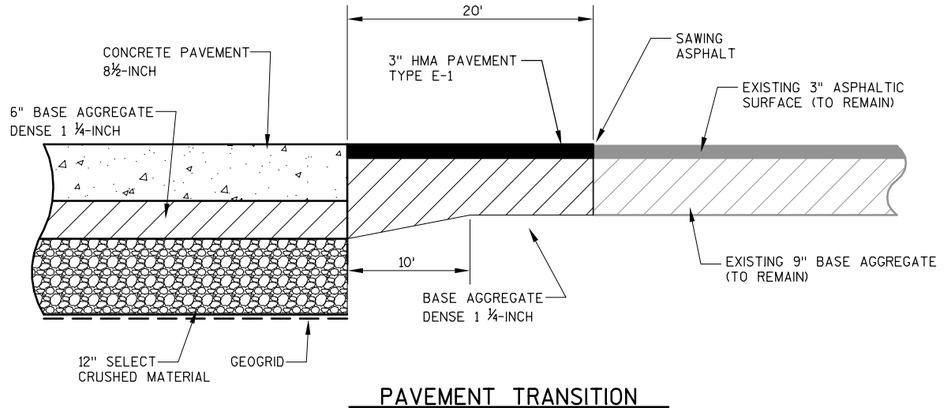
REVERSE CURB TAPER
STA 121+70.5, 38' LT



CONCRETE PAVEMENT JOINT
AT EXISTING CONCRETE PAVEMENT
STA 119+31
STA 119+53



CURB TAPER
STA 122+07, 39' LT



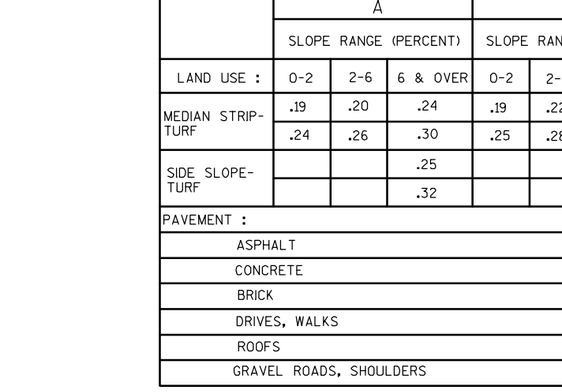
PAVEMENT TRANSITION
AT SIDE ROAD WITH ASPHALTIC PAVEMENT
FOR 11 TH STREET

PROJECT NO: 6250-01-70	HWY: STH 22	COUNTY: WAUPACA	CONSTRUCTION DETAILS	SHEET 5	E

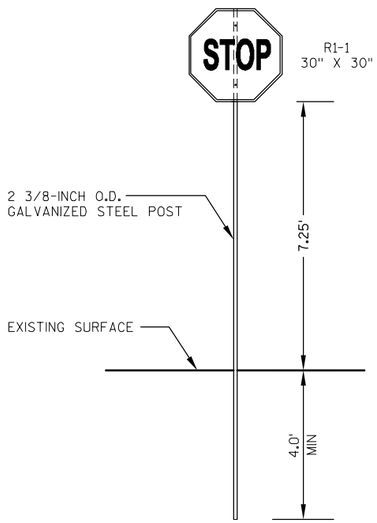
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE :	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
MEDIAN STRIP-TURF	.19	.20	.24	.19	.22	.26	.20	.23	.30	.20	.25	.30
	.24	.26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

TOTAL PROJECT AREA = 0.6 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.6 ACRES

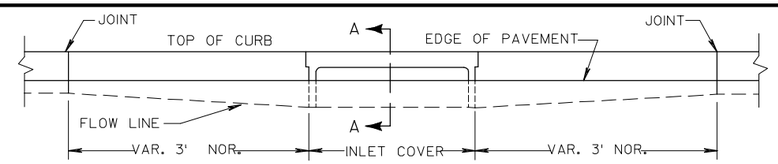
RUNOFF COEFFICENT TABLE



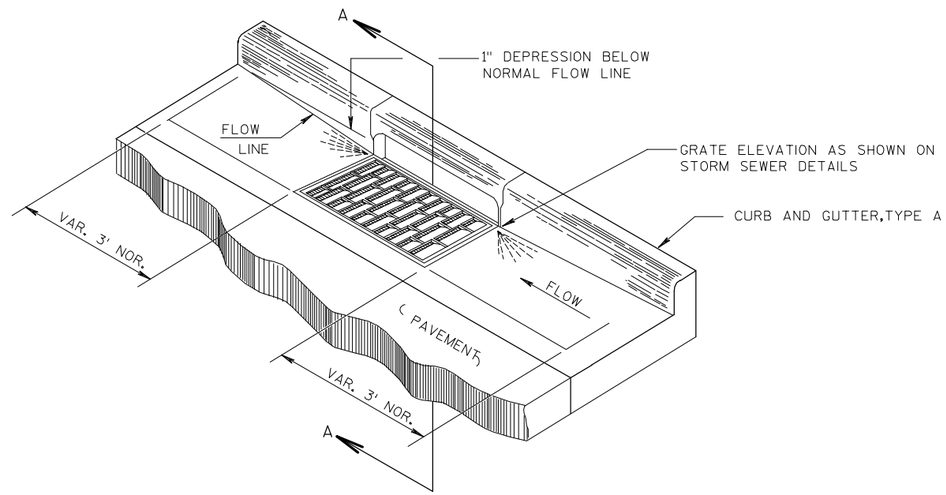
SIDEWALK AT BUILDING FACE

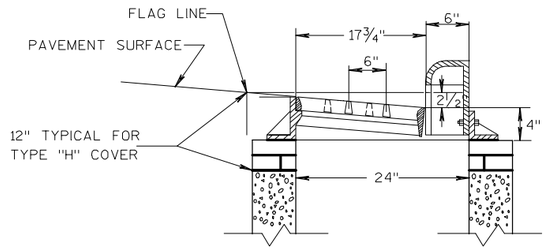


POSTS STEEL 2 3/8-INCH DIAMETER (LENGTH)



ELEVATION

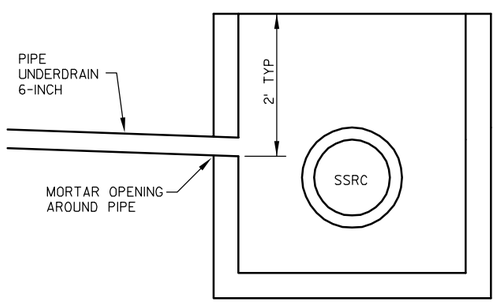




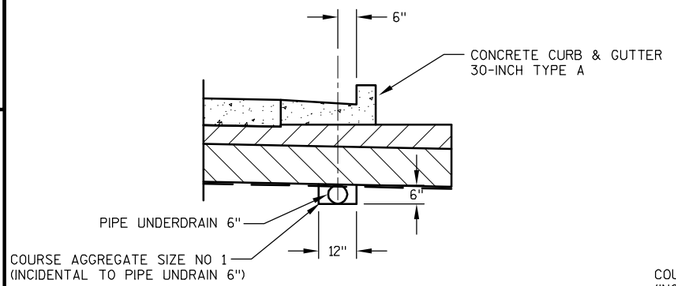
SECTION A-A

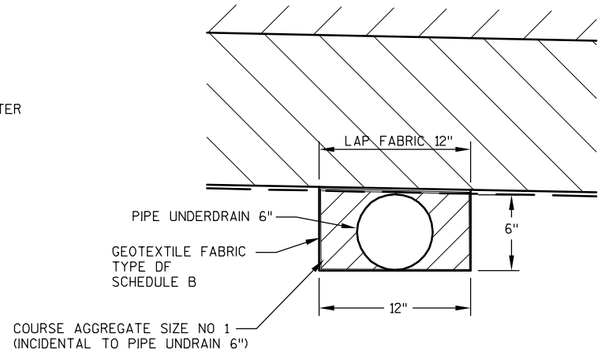
DETAIL OF CURB AND GUTTER AT INLETS

(TYPE 3-H INLET SHOWN)



PIPE UNDERDRAIN CONNECTION TO INLETS

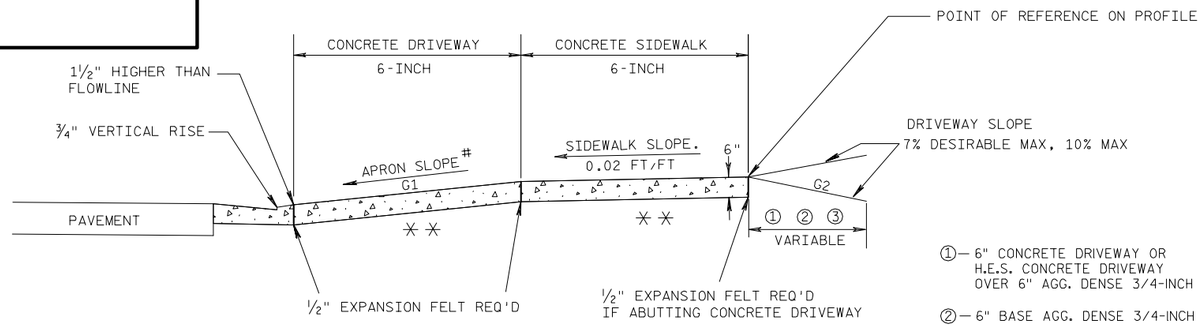




PIPE UNDERDRAIN

NOTE:

THE SIDEWALK CROSSSLOPE SHALL BE 1.0% MIN AND 2.0% MAX.



TYPICAL SIDEWALK SECTION

① — 6" CONCRETE DRIVEWAY OR H.E.S. CONCRETE DRIVEWAY OVER 6" AGG. DENSE 3/4-INCH

② — 6" BASE AGG. DENSE 3/4-INCH

③ — 3" ASPHALTIC SURFACE OVER 6" BASE AGG. DENSE 3/4-INCH

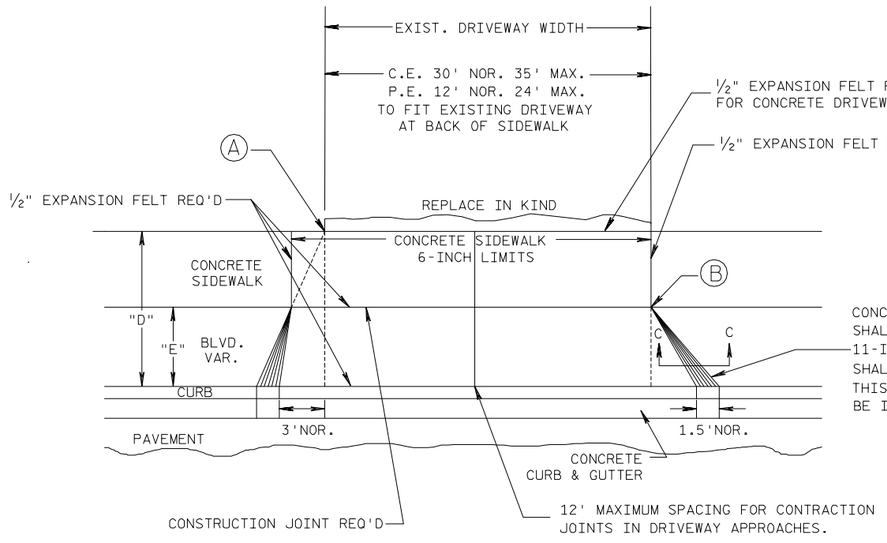
⁑ ⁑ = 6" BASE AGG. DENSE 3/4-INCH REQ'D UNDER CONCRETE DRIVEWAY AND CONCRETE SIDEWALK

\#

TERRACE WIDTH	APRON SLOPE (G1)		
	MIN %	DESIRABLE %	MAX %
3 FT	7.0	8.5	9.0
4 FT	5.0	7.0	9.0
5 FT	4.0	7.0	9.0
6 FT	4.0	7.0	9.0
7 FT	3.5	7.0	9.0
8 FT	3.0	7.0	9.0

NOTE: ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G1 & G2 TO NOT EXCEED 15%

DEPRESS SIDEWALK PROFILE IF DRIVEWAY APRON EXCEEDS MAX SLOPE

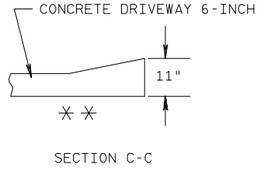


PLAN VIEW

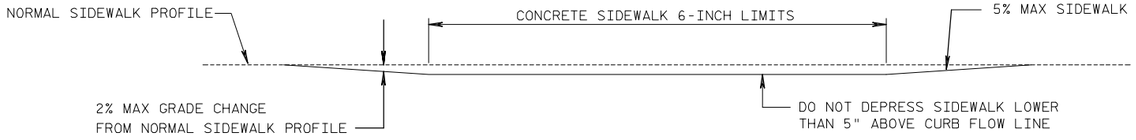
Ⓐ WHEN "D" IS 13' OR LESS, ALIGN TAPER WITH BACK OF SIDEWALK

Ⓑ WHEN "D" IS GREATER THAN 13', ALIGN TAPER WITH FRONT OF SIDEWALK

⁑ WHEN "E" = 0 MAKE CURB TAPER 5'



SECTION C-C



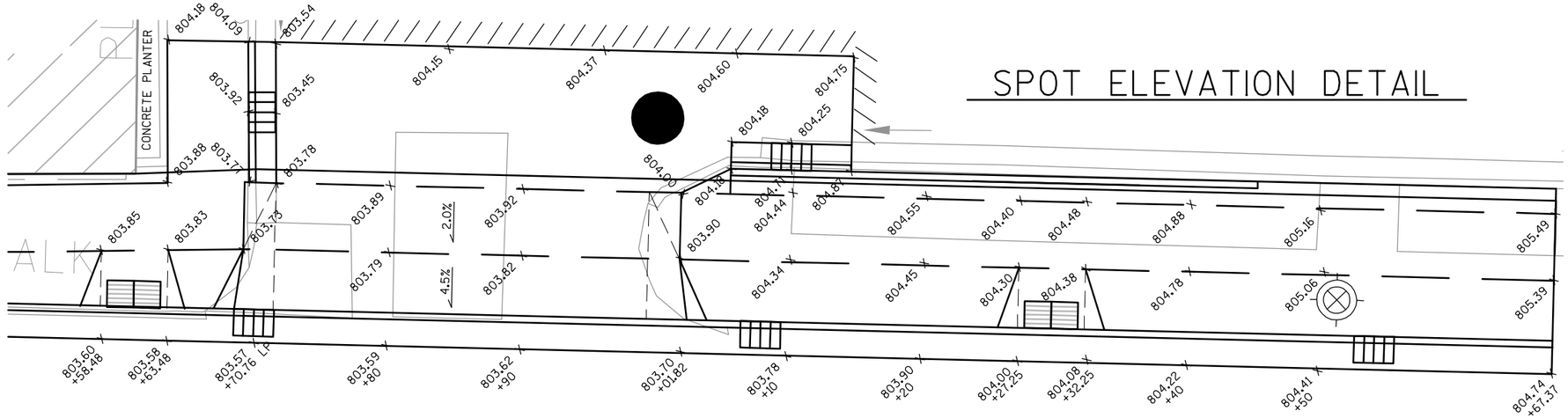
DEPRESSED SIDEWALK PROFILE DETAIL

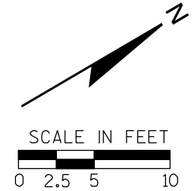
DRIVEWAY ENTRANCE DETAIL WITH SIDEWALK, CURB & GUTTER

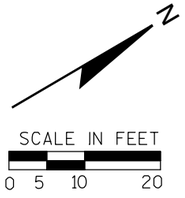
PROJECT NO: 6250-01-70	HWY: STH 22	COUNTY: WAUPACA	CONSTRUCTION DETAILS	SHEET 7	E

2

SPOT ELEVATION DETAIL

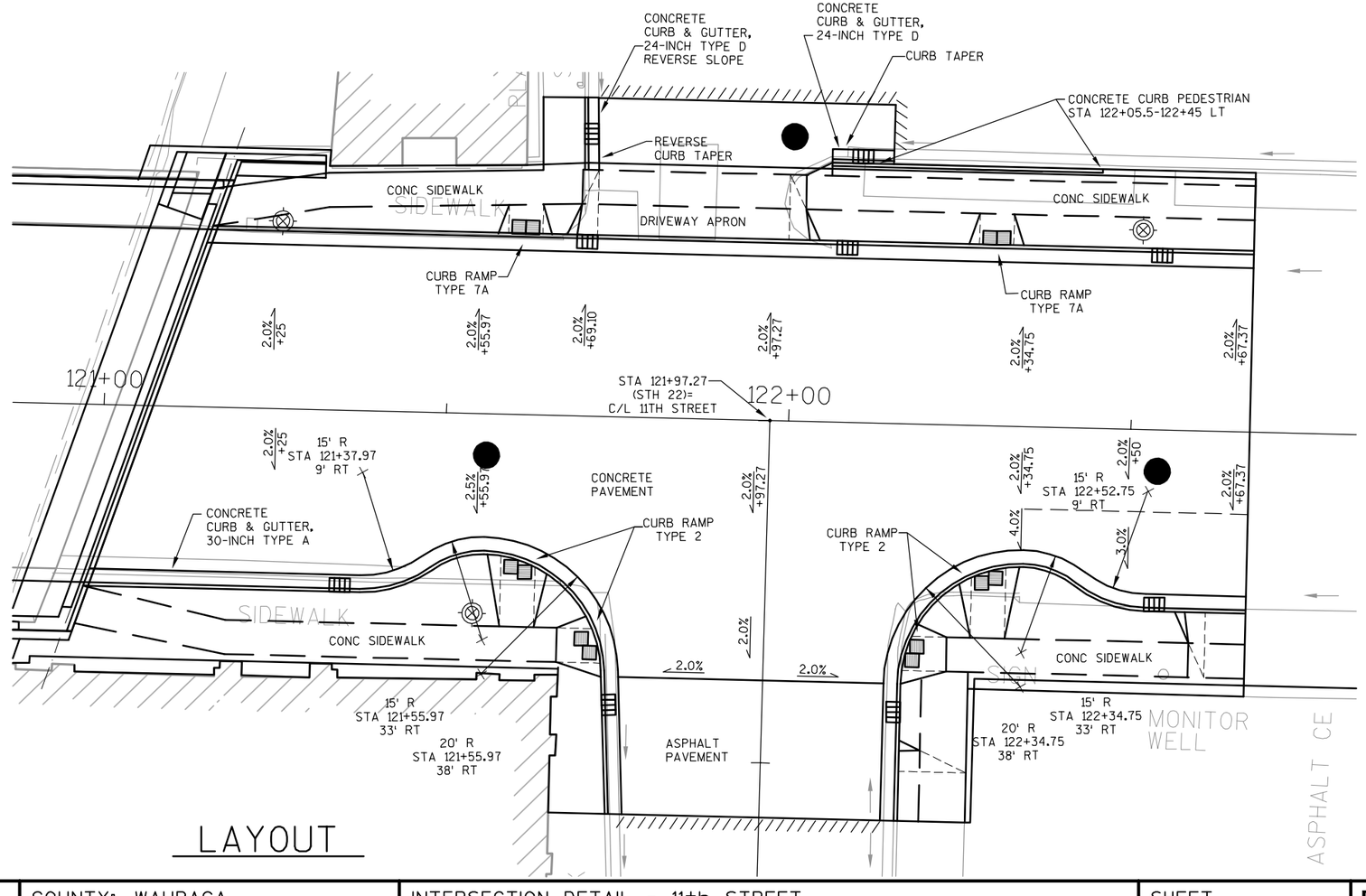






LEGEND

- SAWING ASPHALT
- DETECTABLE WARNING FIELD
- TYPE H INLET COVER
- MANHOLE
- 803.74 x SPOT ELEVATION



LAYOUT

PROJECT NO: 6250-01-70	HWY: STH 22	COUNTY: WAUPACA	INTERSECTION DETAIL - 11th STREET	SHEET 8	E

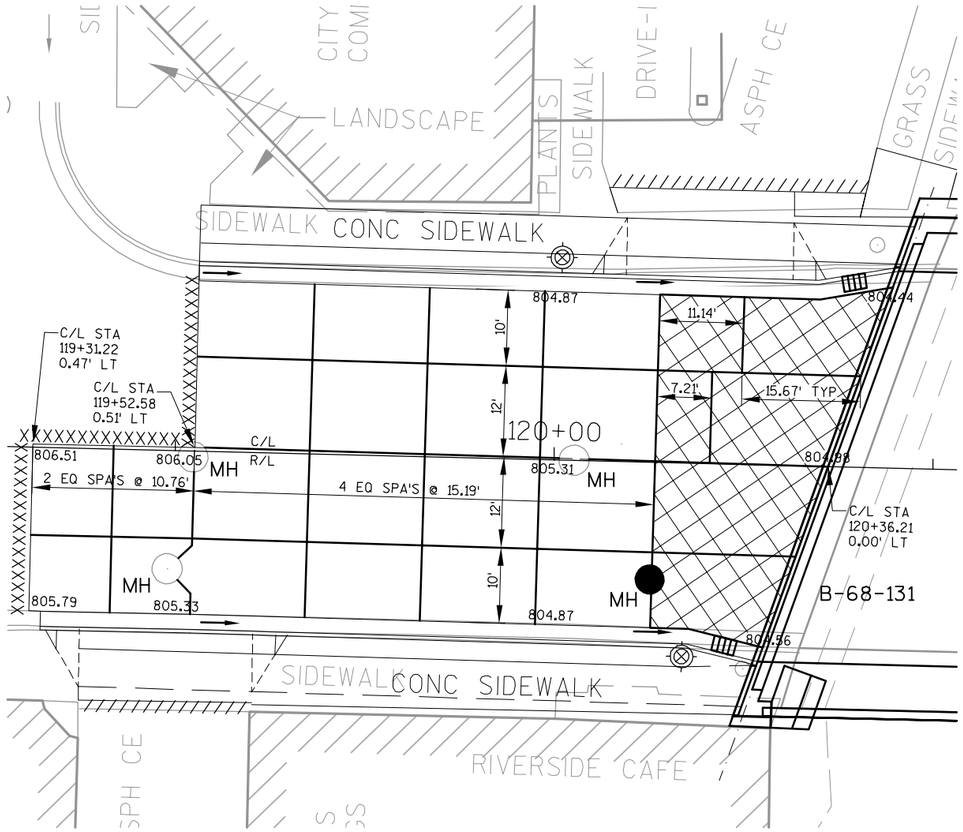
LEGEND

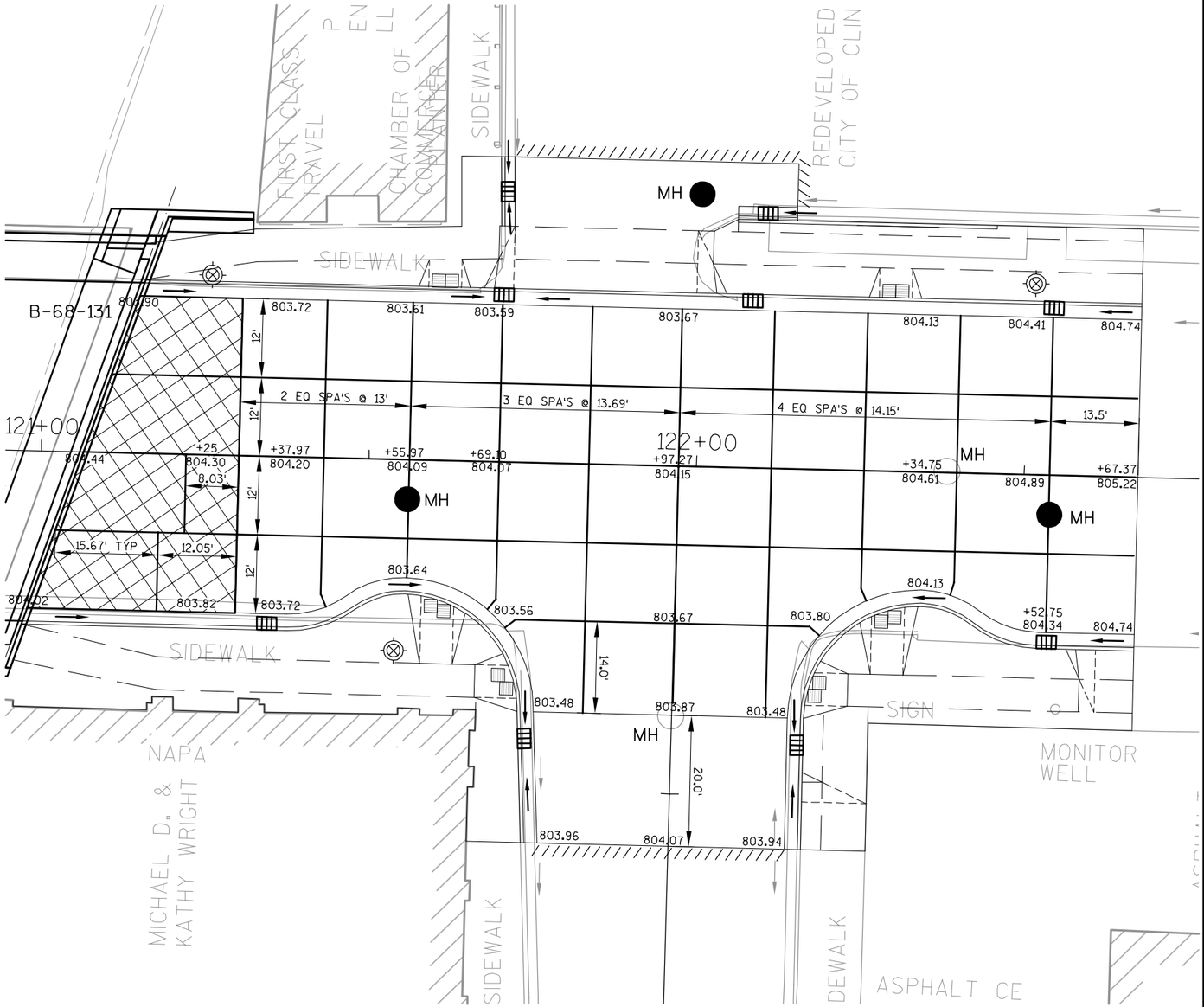
PAVEMENT JOINTS

CONCRETE PAVEMENT APPROACH SLABS
BEGIN STA 120+13.33, END STA 121+30.15

N

SCALE IN FEET
0 5 10 20





PROJECT NO: 6250-01-70	HWY: STH 22	COUNTY: WAUPACA	PAVEMENT JOINTS AND GRADES	SHEET 9	E

2

2

LEGEND

INLET PROTECTION, TYPE A & C

TURBIDITY BARRIER

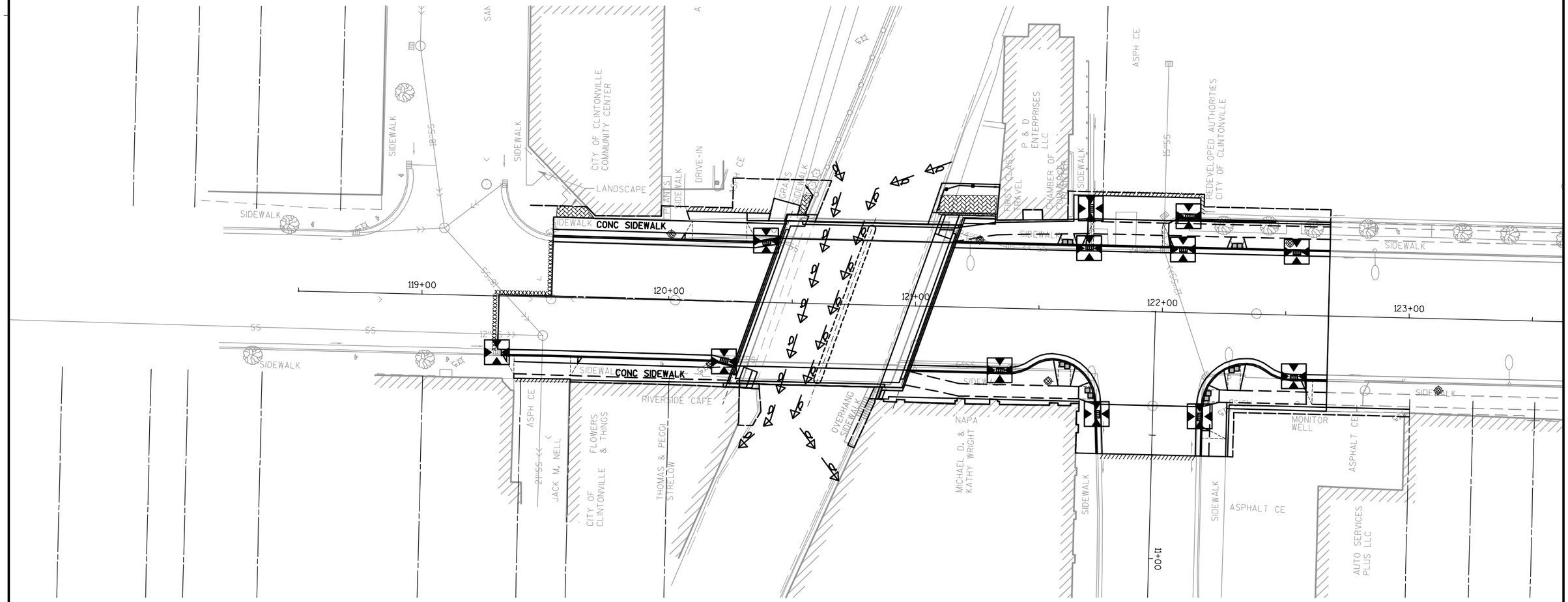
TOPSOIL, SEEDING MIXTURE NO. 40, FERTILIZER TYPE B, EROSION MAT URBAN CLASS I TYPE B

SILT FENCE

N

SCALE IN FEET

0 10 20 40



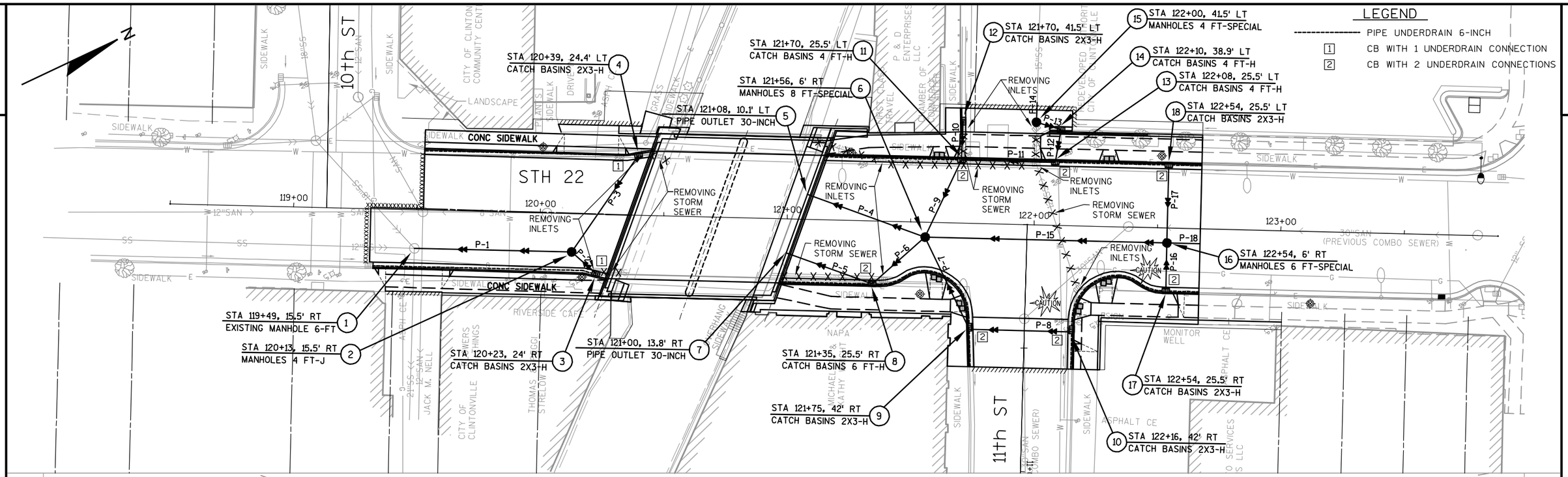
PROJECT NO: 6250-01-70	HWY: STH 22	COUNTY: WAUPACA	EROSION CONTROL PLAN	SHEET 10	E

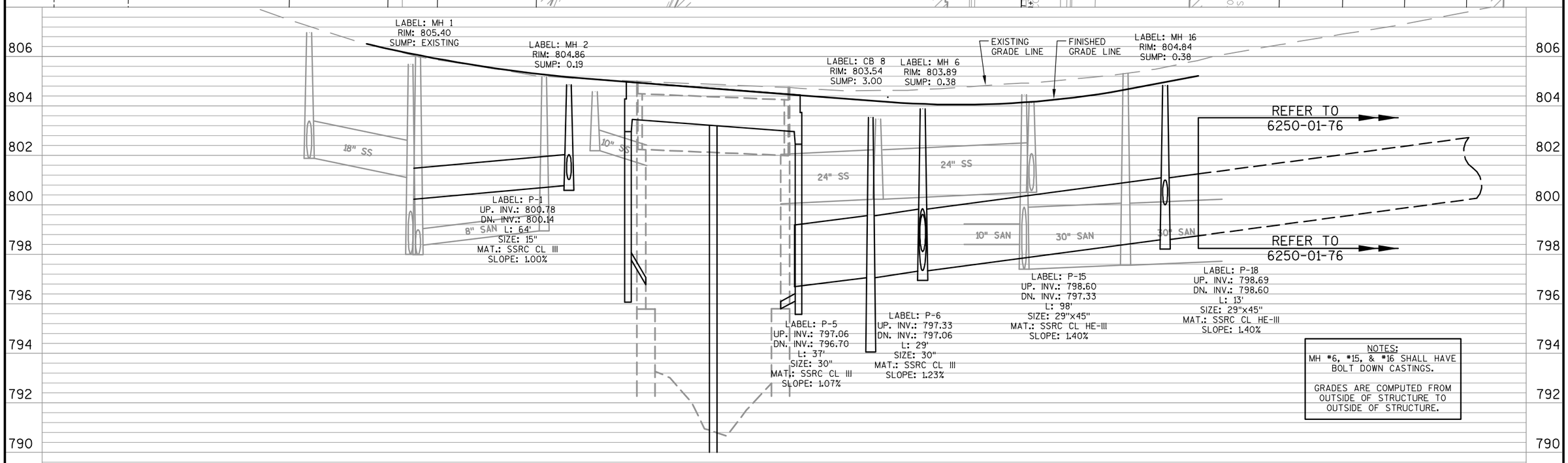
FILE NAME : J:\DRAFT\40020900 STH 22, Pigeon River Bridge\CAD\022001_ec.dwg EROSION CONTROL

PLOT DATE : Jul 22, 2014 - 7:32am

PLOT BY : 256

WISDOT/CADDS SHEET 42

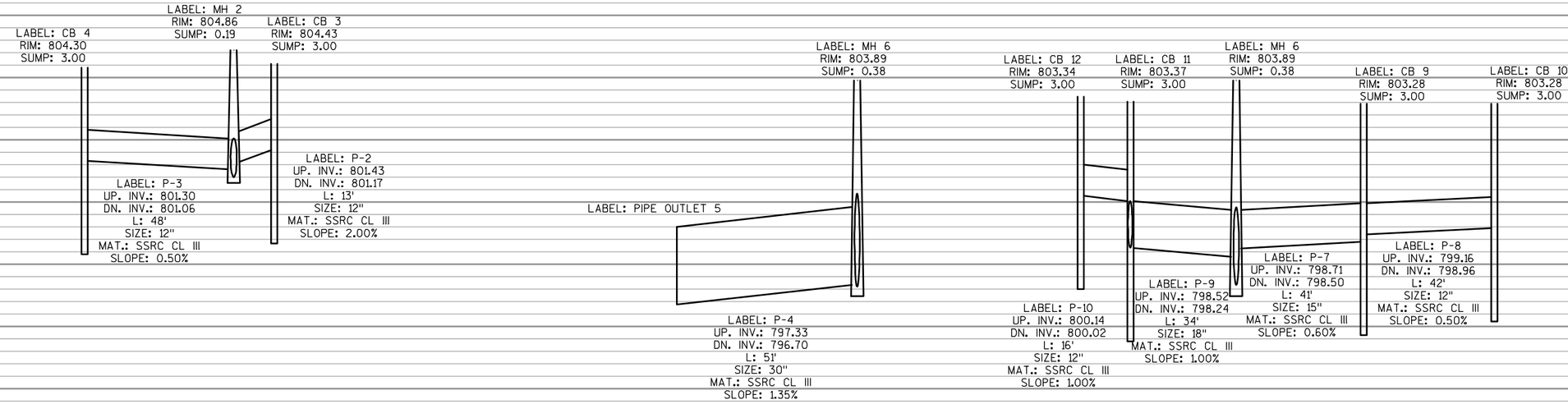




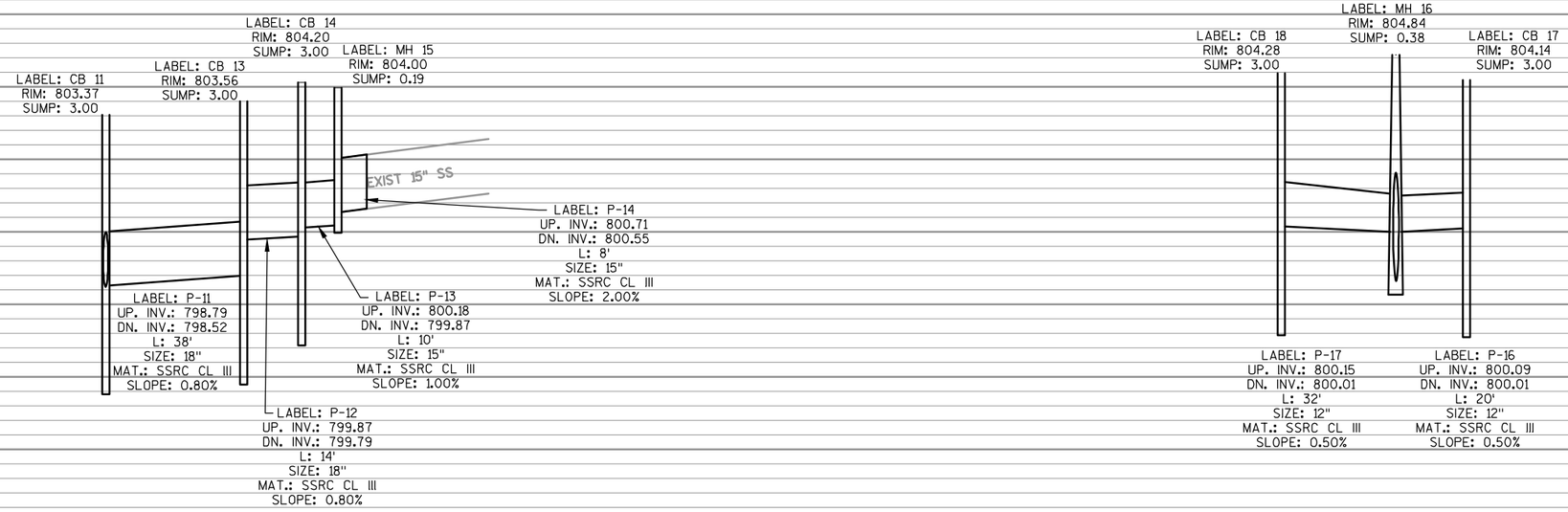
NOTES:
MH #6, #15, & #16 SHALL HAVE BOLT DOWN CASTINGS.

GRADES ARE COMPUTED FROM OUTSIDE OF STRUCTURE TO OUTSIDE OF STRUCTURE.

PROJECT NO: 6250-01-70	HWY: STH 22	COUNTY: WAUPACA	STORM SEWER PLAN	SHEET 11	E

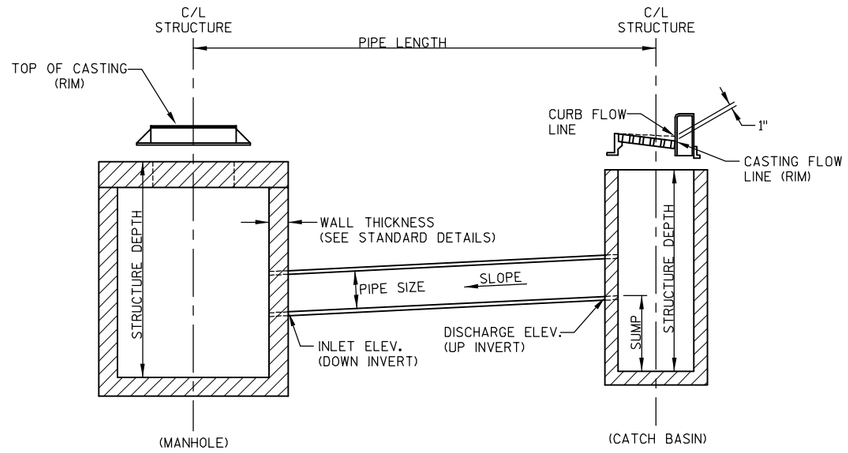


NOTE:
MH #6, #15, & #16 SHALL HAVE BOLT DOWN CASTINGS.



PROJECT NO: 6250-01-70	HWY: STH 22	COUNTY: WAUPACA	STORM SEWER PLAN	SHEET 12	E

2



STORM SEWER MEASUREMENT DETAIL

STORM SCHEDULE

				STORM SEWER PIPE REINFORCED CONCRETE					MANHOLE COVERS		INLET COVERS	CATCH BASINS			MANHOLES			ADJUSTING	STRUCTURE SUMMARY * [1]DEPTH = (CASTING ELEV - DISCHARGE ELEV) - (CASTING HEIGHT + 6" ADJUSTMENT) + SUMP DEPTH				
				608.0312 CLASS III 12-INCH	608.0315 CLASS III 15-INCH	608.0318 CLASS III 18-INCH	608.0330 CLASS III 30-INCH	610.0129 CLASS HE-III 29X45-INCH	611.0530 TYPE J	SPV.0060.01 SPECIAL BOLTED LID	611.0624 TYPE H	611.1004 4-FT DIAMETER	611.1006 6-FT DIAMETER	611.1230 2X3-FT	611.2004 4-FT DIAMETER	611.2006 6-FT DIAMETER	611.2008 8-FT DIAMETER	611.8110 MANHOLE COVERS	DEPTH[1]	FROM STRUCTURE	TO STRUCTURE	INLET ELEV	DISCHARGE ELEVATION
STRUCTURE	STATION	LOCATION	RIM ELEV	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	FT				
1	119+49	RT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	2	EXIST	800.14	-
2	120+13	RT	804.86	-	64	-	-	-	1	-	-	-	-	-	1	-	-	-	2.84	3,4	1	801.06	800.78
3	120+23	RT	804.43	13	-	-	-	-	-	-	1	-	-	1	-	-	-	-	5.17	-	2	-	801.43
4	120+39	LT	804.30	48	-	-	-	-	-	-	1	-	-	1	-	-	-	-	5.17	-	2	-	801.30
5	121+08	LT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	796.70	-
6**	121+56	RT	803.89	-	-	-	80	-	-	1	-	-	-	-	-	-	1	-	8.32	9,11,16	5,8	797.33	797.33
7	121+00	RT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	796.70	-
8	121+35	RT	803.54	-	-	-	37	-	-	-	1	-	1	-	-	-	-	-	8.65	6	7	797.06	797.06
9	121+75	RT	803.28	-	41	-	-	-	-	-	1	-	-	1	-	-	-	-	6.74	10	6	798.96	798.71
10	122+16	RT	803.28	42	-	-	-	-	-	-	1	-	-	1	-	-	-	-	6.29	-	9	-	799.16
11	121+70	LT	803.37	-	-	34	-	-	-	-	1	1	-	-	-	-	-	-	7.02	12,13	6	798.52	798.52
12	121+70	LT	803.34	16	-	-	-	-	-	-	1	-	-	1	-	-	-	-	5.37	-	11	-	800.14
13	122+08	LT	803.56	-	-	38	-	-	-	-	1	1	-	-	-	-	-	-	6.94	14	11	799.79	798.79
14	122+10	LT	804.20	-	-	14	-	-	-	-	1	1	-	-	-	-	-	-	6.50	15	13	800.12	799.87
15	122+00	LT	804.00	-	18	-	-	-	-	1	-	-	-	-	1	-	-	-	2.57	EXIST	14	800.55	800.18
16	122+54	RT	804.84	-	-	-	-	111	-	1	-	-	-	-	-	1	-	-	8.00	17,18	6	798.60	798.60
17	122+54	RT	804.14	20	-	-	-	-	-	-	1	-	-	1	-	-	-	-	6.22	-	16	-	800.09
18	122+54	LT	804.28	32	-	-	-	-	-	-	1	-	-	1	-	-	-	-	6.30	-	16	-	800.15
			TOTAL	**171**	**123**	**86**	**117**	**111**	**1**	**3**	**11**	**3**	**1**	**7**	**2**	**1**	**1**	**1**					

* ALL STRUCTURES (EXCEPT 2, 6,15, AND 16) HAVE A 3-FOOT SUMP DEPTH

** STRUCTURE 6 TO BE A BLOCK MANHOLE

2

NOTE

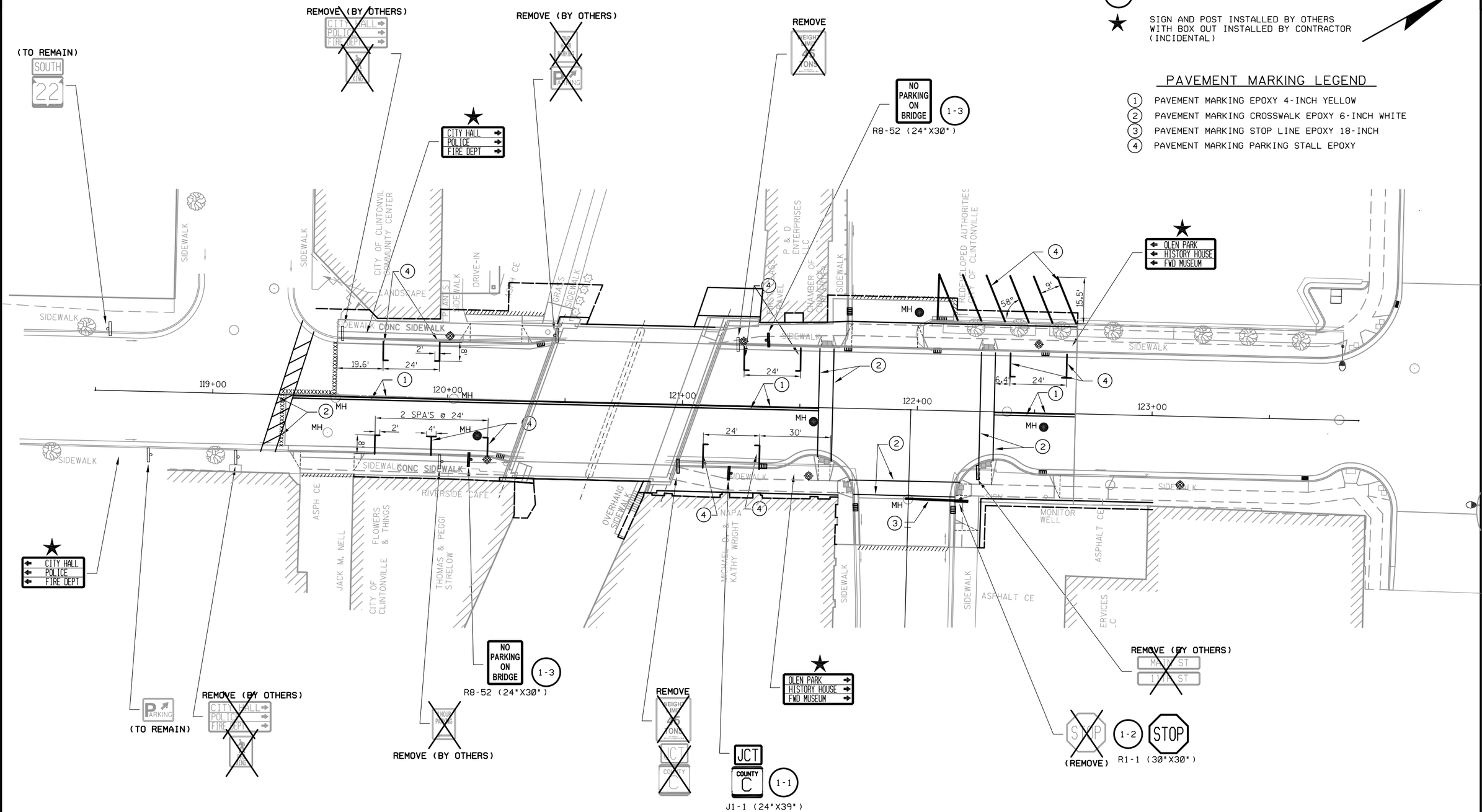
TYPICAL DIMENSIONS SHOWN FOR ANGLE PARKING STALLS-ENGINEER MAY ADJUST IN THE FIELD.

SIGN LEGEND

- EXISTING SIGN ON TUBULAR STEEL POST(S)
- EXISTING SIGN MOUNTED ONTO SIGNAL OR LIGHT POLE
- PROPOSED SIGN ON STEEL POST(S) WITH BOX OUT
- (1-1) DESIGNATES SIGN ITEM NUMBER
- ★ SIGN AND POST INSTALLED BY OTHERS WITH BOX OUT INSTALLED BY CONTRACTOR (INCIDENTAL)

PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH YELLOW
2. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH WHITE
3. PAVEMENT MARKING STOP LINE EPOXY 18-INCH
4. PAVEMENT MARKING PARKING STALL EPOXY



PROJECT NO: 6250-01-70	HWY: STH 22	COUNTY: WAUPACA	PAVEMENT MARKING AND SIGNING PLAN	SHEET 14	E

DATE 21OCT14 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	6250-01-70 QUANTITY
0020	201.0120	CLEARING	ID	12.000	12.000
0040	201.0220	GRUBBING	ID	12.000	12.000
0050	203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS (STATION) 01. 120+71	LS	1.000	1.000
0060	204.0100	REMOVING PAVEMENT	SY	1,412.000	1,412.000
0070	204.0110	REMOVING ASPHALTIC SURFACE	SY	147.000	147.000
0090	204.0150	REMOVING CURB & GUTTER	LF	555.000	555.000
0100	204.0155	REMOVING CONCRETE SIDEWALK	SY	557.000	557.000
0140	204.0220	REMOVING INLETS	EACH	8.000	8.000
0150	204.0245	REMOVING STORM SEWER (SIZE) 01. 6-INCH	LF	45.000	45.000
0170	204.0245	REMOVING STORM SEWER (SIZE) 03. 10-INCH	LF	22.000	22.000
0180	204.0245	REMOVING STORM SEWER (SIZE) 04. 12-INCH	LF	53.000	53.000
0190	204.0245	REMOVING STORM SEWER (SIZE) 05. 15-INCH	LF	17.000	17.000
0210	204.0245	REMOVING STORM SEWER (SIZE) 07. 24-INCH	LF	91.000	91.000
0230	204.9060.S	REMOVING (ITEM DESCRIPTION) 01. WELL CASING	EACH	1.000	1.000
0250	204.9105.S	REMOVING (ITEM DESCRIPTION) 01. STAIRWAY	LS	1.000	1.000
0260	205.0100	EXCAVATION COMMON	CY	1,475.000	1,475.000
0270	206.1000	EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 01. B-68-131	LS	1.000	1.000
0290	210.0100	BACKFILL STRUCTURE	CY	484.000	484.000
0300	213.0100	FINISHING ROADWAY (PROJECT) 01. 6250-01-70	EACH	1.000	1.000
0320	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	166.000	166.000
0330	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	571.000	571.000
0340	310.0110	BASE AGGREGATE OPEN GRADED	TON	130.000	130.000
0350	312.0110	SELECT CRUSHED MATERIAL	TON	715.000	715.000
0360	415.0085	CONCRETE PAVEMENT 8 1/2-INCH	SY	773.000	773.000
0370	415.0090	CONCRETE PAVEMENT 9-INCH	SY	349.000	349.000
0380	415.0410	CONCRETE PAVEMENT APPROACH SLAB	SY	242.000	242.000
0390	416.0160	CONCRETE DRIVEWAY 6-INCH	SY	44.000	44.000
0400	416.0610	DRILLED TIE BARS	EACH	21.000	21.000
0410	416.0620	DRILLED DOWEL BARS	EACH	42.000	42.000
0440	455.0120	ASPHALTIC MATERIAL PG64-28	TON	2.000	2.000
0450	455.0605	TACK COAT	GAL	4.000	4.000
0460	460.1101	HMA PAVEMENT TYPE E-1	TON	29.000	29.000
0480	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	20.000	20.000
0510	502.0100	CONCRETE MASONRY BRIDGES	CY	545.000	545.000
0520	502.3200	PROTECTIVE SURFACE TREATMENT	SY	640.000	640.000
0530	502.5005	MASONRY ANCHORS TYPE L NO. 5 BARS	EACH	48.000	48.000
0540	502.6102	MASONRY ANCHORS TYPE S 1/2-INCH	EACH	182.000	182.000
0550	505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	13,710.000	13,710.000
0560	505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	67,200.000	67,200.000
0570	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	45.000	45.000
0580	517.1015.S	CONCRETE STAINING MULTI-COLOR (STRUCTURE) 01. B-68-131	SF	518.000	518.000
0590	517.1050.S	ARCHITECTURAL SURFACE TREATMENT (STRUCTURE) 01. B-68-131	SF	518.000	518.000
0620	550.0010	PRE-BORING UNCONSOLIDATED MATERIALS	LF	330.000	330.000
0630	550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	2,640.000	2,640.000
0640	601.0409	CONCRETE CURB & GUTTER 30-INCH TYPE A	LF	535.000	535.000
0660	601.0600	CONCRETE CURB PEDESTRIAN	LF	40.000	40.000
0670	602.0405	CONCRETE SIDEWALK 4-INCH	SF	4,000.000	4,000.000
0680	602.0415	CONCRETE SIDEWALK 6-INCH	SF	580.000	580.000

3

DATE 21OCT14 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	6250-01-70 QUANTITY
0690	602.0505	CURB RAMP DETECTABLE WARNING FIELD YELLOW	SF	48.000	48.000
0730	604.0400	SLOPE PAVING CONCRETE	SY	90.000	90.000
0750	606.0300	RIPRAP HEAVY	CY	8.000	8.000
0760	608.0312	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH	LF	171.000	171.000
0770	608.0315	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH	LF	123.000	123.000
0780	608.0318	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH	LF	86.000	86.000
0790	608.0330	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH	LF	117.000	117.000
0810	610.0129	STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 29X45-INCH	LF	111.000	111.000
0820	611.0530	MANHOLE COVERS TYPE J	EACH	1.000	1.000
0840	611.0624	INLET COVERS TYPE H	EACH	11.000	11.000
0860	611.1004	CATCH BASINS 4-FT DIAMETER	EACH	3.000	3.000
0870	611.1006	CATCH BASINS 6-FT DIAMETER	EACH	1.000	1.000
0880	611.1230	CATCH BASINS 2X3-FT	EACH	7.000	7.000
0890	611.2004	MANHOLES 4-FT DIAMETER	EACH	2.000	2.000
0910	611.2006	MANHOLES 6-FT DIAMETER	EACH	1.000	1.000
0930	611.2008	MANHOLES 8-FT DIAMETER	EACH	1.000	1.000
0960	611.8110	ADJUSTING MANHOLE COVERS	EACH	1.000	1.000
0970	612.0106	PIPE UNDERDRAIN 6-INCH	LF	535.000	535.000
0980	612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	190.000	190.000
1000	616.0700.S	FENCE SAFETY	LF	360.000	360.000
1010	619.1000	MOBILIZATION	EACH	0.550	0.550
1020	624.0100	WATER	MGAL	16.000	16.000
1030	625.0100	TOPSOIL	SY	31.000	31.000
1040	628.1504	SILT FENCE	LF	45.000	45.000
1050	628.1520	SILT FENCE MAINTENANCE	LF	45.000	45.000
1060	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	4.000	4.000
1070	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	2.000	2.000
1080	628.2008	EROSION MAT URBAN CLASS I TYPE B	SY	31.000	31.000
1090	628.6005	TURBIDITY BARRIERS	SY	280.000	280.000
1100	628.7005	INLET PROTECTION TYPE A	EACH	12.000	12.000
1110	628.7015	INLET PROTECTION TYPE C	EACH	12.000	12.000
1140	630.0140	SEEDING MIXTURE NO. 40	LB	1.000	1.000
1190	637.2210	SIGNS TYPE II REFLECTIVE H	SF	21.680	21.680
1220	638.2602	REMOVING SIGNS TYPE II	EACH	5.000	5.000
1240	642.5201	FIELD OFFICE TYPE C	EACH	0.450	0.450
1250	643.0100	TRAFFIC CONTROL (PROJECT) 01. 6250-01-70	EACH	1.000	1.000
1280	643.0410	TRAFFIC CONTROL BARRICADES TYPE II	DAY	1,112.000	1,112.000
1290	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	3,892.000	3,892.000
1320	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	5,699.000	5,699.000
1330	643.0900	TRAFFIC CONTROL SIGNS	DAY	2,085.000	2,085.000
1380	645.0120	GEOTEXTILE FABRIC TYPE HR	SY	20.000	20.000
1410	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	516.000	516.000
1460	647.0566	PAVEMENT MARKING STOP LINE EPOXY 18-INCH	LF	18.000	18.000
1470	647.0656	PAVEMENT MARKING PARKING STALL EPOXY	LF	254.000	254.000
1500	647.0766	PAVEMENT MARKING CROSSWALK EPOXY 6-INCH	LF	454.000	454.000
1530	650.4000	CONSTRUCTION STAKING STORM SEWER	EACH	15.000	15.000
1540	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	265.000	265.000

3

DATE 21OCT14 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	6250-01-70 QUANTITY
1560	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	595.000	595.000
1610	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 6250-01-70	LS	1.000	1.000
1650	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	287.000	287.000
2050	690.0150	SAWING ASPHALT	LF	145.000	145.000
2060	690.0250	SAWING CONCRETE	LF	66.000	66.000
2070	715.0415	INCENTIVE STRENGTH CONCRETE PAVEMENT	DOL	500.000	500.000
2080	715.0502	INCENTIVE STRENGTH CONCRETE STRUCTURES	DOL	3,270.000	3,270.000
2110	SPV.0030	SPECIAL 20. FERTILIZER FOR LAWN TYPE TURF	CWT	0.100	0.100
2120	SPV.0060	SPECIAL 01. BOLTED LID MANHOLE COVERS SPECIAL	EACH	3.000	3.000
2130	SPV.0060	SPECIAL 02. REMOVING ABANDONED SIGN POST	EACH	1.000	1.000
2140	SPV.0060	SPECIAL 20. POSTS STEEL 2 3/8-INCH DIAMETER X 14-FT	EACH	4.000	4.000
2570	SPV.0090	SPECIAL 01. CONCRETE CURB & GUTTER 24-INCH TYPE D	LF	20.000	20.000
2780	SPV.0105	SPECIAL 01. SCOUR PROTECTION	LS	1.000	1.000
2790	SPV.0105	SPECIAL 02. RAILING STEEL TYPE C5 GALVANIZED B-68-131	LS	1.000	1.000
2820	SPV.0105	SPECIAL 22. RESEARCH AND LOCATE EXISTING PROPERTY MONUMENTS PROJECT 6250-01-70	LS	1.000	1.000
2840	SPV.0105	SPECIAL 24. VERIFY AND REPLACE EXISTING PROPERTY MONUMENTS PROJECT 6250-01-70	LS	1.000	1.000
2860	SPV.0120	SPECIAL 20. WATER FOR SEEDED AREAS	MGAL	0.100	0.100
2870	SPV.0165	SPECIAL 20. CONCRETE SIDEWALK HES 4-INCH	SF	400.000	400.000
2880	SPV.0180	SPECIAL 01. GEOGRID REINFORCEMENT	SY	1,074.000	1,074.000
2890	SPV.0180	SPECIAL 20. PREPARING TOPSOIL FOR LAWN TYPE TURF	SY	31.000	31.000
2910	SPV.0195	SPECIAL 01. HAULING AND DISPOSAL OF DREDGED MATERIAL	TON	365.000	365.000

3

3

CLEARING AND GRUBBING

STATION	LOCATION	201.0120 CLEARING ID	201.0220 GRUBBING ID
122+25	35' LT	4	4
122+44	35' LT	4	4
122+61	35' LT	4	4
	TOTAL	12	12

REMOVING PAVEMENT

STATION	TO	STATION	204.0100 SY
119+31	-	120+40	489
121+03	-	122+67	923
		TOTAL	1,412

REMOVING ASPHALTIC SURFACE

STATION	LOCATION	204.0110 SY	REMARKS
119+50	RT	4	CE
120+20	LT	12	CE
121+85	LT	46	CE
121+97		85	11TH ST
	TOTAL	147	

REMOVING CURB & GUTTER

STATION	TO	STATION	LOCATION	204.0150 LF
119+33	-	120+28	RT	95
119+53	-	120+45	LT	92
120+98	-	121+77	RT	110
121+14	-	122+67	LT	153
121+70			LT	11
122+05	-	122+14	LT	9
122+15	-	122+67	RT	85
			TOTAL	555

REMOVING CONCRETE SIDEWALK

STATION	TO	STATION	LOCATION	204.0155 SY
119+33	-	120+33	RT	101
119+53	-	120+52	LT	87
120+87	-	121+75	RT	144
121+11	-	121+70	LT	75
121+99	-	122+67	LT	57
122+17	-	122+67	RT	93
			TOTAL	557

REMOVING INLETS

STATION	LOCATION	204.0220 EA
120+24	RT	1
120+42	LT	1
121+38	LT	1
121+40	RT	1
121+70	LT	1
122+00	LT	2
122+18	RT	1
	TOTAL	8

3

REMOVING STORM SEWER

STATION	TO	STATION	LOCATION	204.0245.01 6-INCH LF	204.0245.03 10-INCH LF	204.0245.04 12-INCH LF	204.0245.05 15-INCH LF	204.0245.07 24-INCH LF
120+24	-	120+37	RT	-	13	-	-	-
120+43	-	120+52	LT	-	9	-	-	-
120+93	-	121+38	RT	45	-	-	-	-
121+09	-	122+00	LT	-	-	-	-	91
122+00			LT	-	-	-	17	-
122+00	-	122+18	LT & RT	-	-	53	-	-
			TOTAL	45	22	53	17	91

REMOVING WELL CASING

STATION	LOCATION	204.9060.S.01 EA
122+63	33' LT	1
	TOTAL	1

REMOVING STAIRWAY

STATION	LOCATION	204.9105.S.01 LS
120+84	33' RT	1
	TOTAL	1

EXCAVATION

STATION	TO	STATION	205.0100 EXCAVATION COMMON CY +	FILL CY +	WASTE CY +	BORROW CY +
119+31	-	120+36	375	0	375	-
121+06	-	122+67	1,100	0	1,100	-
		TOTAL	1,475	0	1,475	0

+ SEE EARTHWORK SHEET

BASE AGGREGATE

STATION	TO	STATION	LOCATION	305.0110 DENSE 3/4-INCH TON	305.0120 DENSE 1 1/4-INCH TON	310.0110 OPEN GRADED TON	REMARKS
119+31	-	120+17	-	-	125	84	-
119+33	-	120+28	RT	-	16	21	-
119+50			RT	9	-	-	CE
119+53	-	120+06	LT	11	-	-	-
119+53	-	120+45	LT	-	15	20	-
119+61	-	120+27	RT	16	-	-	-
120+17	-	120+36	-	-	29	5	-
120+20			LT	12	-	-	CE
120+34	-	120+52	LT	4	-	-	-
120+87	-	121+75	RT	30	-	-	-
120+98	-	121+77	RT	-	18	-	-
121+06	-	121+26	-	-	13	-	-
121+14	-	122+67	LT	-	26	-	-
121+15	-	121+69	LT	14	-	-	-
121+26	-	122+67	-	-	268	-	-
121+85			LT	27	-	-	CE
121+97			RT	-	47	-	11TH ST
122+02	-	122+67	LT	18	-	-	-
122+15	-	122+67	RT	-	14	-	-
122+17	-	122+59	RT	17	-	-	-
122+22			RT	4	-	-	CE
122+67			RT	4	-	-	CE
			TOTAL	166	571	130	

SELECT CRUSHED MATERIAL

STATION	TO	STATION	LOCATION	312.0110 TON
120+98	-	121+77	RT	37
121+06	-	121+26	-	63
121+14	-	122+67	LT	51
121+26	-	122+67	-	536
122+15	-	122+67	RT	28
		TOTAL		715

CONCRETE PAVEMENT

STATION	TO	STATION	415.0085 8 1/2-INCH SY	415.0090 9-INCH SY	415.0410 APPROACH SLAB SY
119+31	-	120+13	-	349	-
120+13	-	120+36	-	-	115
121+06	-	121+30	-	-	127
121+30	-	122+67	773	-	-
		TOTAL	773	349	242

CONCRETE DRIVEWAY

STATION	LOCATION	416.0160 6-INCH SY	REMARKS
119+50	RT	9	CE
120+20	LT	9	CE
121+85	LT	17	CE
122+22	RT	4	CE
122+67	RT	5	CE
	TOTAL	44	

DRILLED BARS

STATION	TO	STATION	LOCATION	416.0610 TIE BARS EA	416.0620 DOWEL BARS EA
119+31	-	119+53	-	21	-
119+31			RT	-	21
119+53			LT	-	21
			TOTAL	21	42

ASPHALTIC PAVEMENT

STATION	LOCATION	455.0120 ASPHALTIC MATERIAL PG64-28 TON	455.0605 TACK COAT GAL	460.1101 HMA PAVEMENT TYPE E-1 TON	REMARKS
119+50	RT	0.1	0.1	1	CE
120+20	LT	0.2	0.3	2	CE
121+85	LT	0.5	1.2	9	CE
121+97	-	1.0	2.1	17	11TH ST
	TOTAL	2	4	29	

NOTE: HMA PAVEMENT ESTIMATED AT 112 LB/SY/INCH, ASPHALT MATERIAL IS 5.5% OF HMA, TACK COAT APPLICATION RATE IS 0.025 GAL/SY AND PLACED BETWEEN THE UPPER AND LOWER LAYERS OF HMA PAVEMENT.

CONCRETE CURB & GUTTER

STATION	TO	STATION	LOCATION	601.0409 30-INCH TYPE A LF	SPV.0090.01 24-INCH TYPE D LF
119+33	-	120+28	RT	95	-
119+53	-	120+45	LT	92	-
120+98	-	121+77	RT	110	-
121+14	-	122+67	LT	153	-
121+70			LT	-	11
122+05	-	122+14	LT	-	9
122+15	-	122+67	RT	85	-
			TOTAL	535	20

CONCRETE CURB

STATION	TO	STATION	LOCATION	601.0600 PEDESTRIAN LF
122+05	-	122+45	LT	40
			TOTAL	40

CONCRETE SIDEWALK

STATION	TO	STATION	LOCATION	602.0405 4-INCH SF	602.0415 6-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	SPV.0165.20 HES 4-INCH SF
119+35	-	119+64	RT	-	144	-	-
119+53	-	120+06	LT	428	-	-	-
119+61	-	120+27	RT	439	-	-	-
119+80	-	119+90	RT	-	-	-	100
120+06	-	120+34	LT	-	139	-	-
120+08	-	120+18	RT	-	-	-	100
120+34	-	120+52	LT	163	-	-	-
120+87	-	121+75	RT	1,114	-	-	-
121+15	-	121+69	LT	461	-	-	-
121+20	-	121+30	RT	-	-	-	100
121+43	-	121+53	LT	-	-	-	100
121+61			LT	-	-	8	-
121+61			RT	-	-	8	-
121+69	-	122+02	LT	-	164	-	-
121+71			RT	-	-	8	-
122+02	-	122+67	LT	718	-	-	-
122+17	-	122+59	RT	677	-	-	-
122+19			RT	-	-	8	-
122+20	-	122+27	RT	-	70	-	-
122+30			LT	-	-	8	-
122+30			RT	-	-	8	-
122+59	-	122+67	RT	-	63	-	-
			TOTAL	4,000	580	48	400

STORM SCHEDULE

	STORM SEWER PIPE REINFORCED CONCRETE 608.0312 CLASS III 12-INCH LF	608.0315 CLASS III 15-INCH LF	608.0318 CLASS III 18-INCH LF	608.0330 CLASS III 30-INCH LF	610.0129 CLASS HE-III 29X45-INCH LF	MANHOLE COVERS 611.0530 TYPE J EA	SPV.0060.01 SPECIAL BOLTED LID EA	INLET COVERS 611.0624 TYPE H EA	CATCH BASINS 611.1004 4-FT DIAMETER EA	611.1006 6-FT DIAMETER EA	611.1230 2X3-FT EA	MANHOLES 611.2004 4-FT DIAMETER EA	611.2006 6-FT DIAMETER EA	611.2008 8-FT DIAMETER EA	ADJUSTING 611.8110 MANHOLE COVERS EA
TOTAL	171	123	86	117	111	1	3	11	3	1	7	2	1	1	1

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

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PIPE UNDERDRAIN

STATION	TO	STATION	LOCATION	612.0106 6-INCH LF
119+33	-	120+28	RT	95
119+53	-	120+45	LT	92
120+98	-	121+77	RT	110
121+14	-	122+67	LT	153
122+15	-	122+67	RT	85
			TOTAL	535

TRAFFIC CONTROL

STATION	TO	STATION	LOCATION	ESTIMATED CONTRACT TIME FOR COMPLETION DAYS	616.0700.S FENCE SAFETY LF	643.0410 BARRICADES TYPE II DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.0900 SIGNS DAYS
118+90			25' RT	139	-	139	-	139	139
118+90	-	120+05	RT	-	120	-	-	-	-
119+31			C/L	139	-	-	1,251	1,390	139
119+40			60' LT	139	-	139	-	139	139
119+50			30' LT	139	-	139	-	139	139
119+50			35' RT	139	-	-	417	556	139
120+05			30' RT	139	-	139	-	139	139
120+05			40' LT	139	-	139	-	139	139
120+25			40' LT	139	-	-	695	834	139
120+40	-	120+60	LT	-	20	-	-	-	-
121+20	-	121+70	RT	-	90	-	-	-	-
121+40	-	121+70	LT	-	60	-	-	-	-
121+65			50' LT	139	-	139	-	139	139
121+70			60' RT	139	-	139	-	278	139
121+90			50' LT	139	-	-	834	695	139
121+97			60' RT	139	-	-	695	834	417
122+15	-	122+67	RT	-	70	-	-	-	-
122+20			60' RT	139	-	139	-	278	139
			TOTAL	360	1,112	3,892	5,699	2,085	

WATER

STATION	TO	STATION	LOCATION	624.0100 MGAL	REMARKS
119+31	-	120+17	-	2.1	-
119+33	-	120+28	RT	0.4	-
119+50			RT	0.1	CE
119+53	-	120+06	LT	0.1	-
119+53	-	120+45	LT	0.4	-
119+61	-	120+27	RT	0.2	-
120+17	-	120+36	-	0.3	-
120+20			LT	0.1	CE
120+34	-	120+52	LT	0.1	-
120+87	-	121+75	RT	0.3	-
120+98	-	121+77	RT	0.6	-
121+06	-	121+26	-	0.8	-
121+14	-	122+67	LT	0.8	-
121+15	-	121+69	LT	0.1	-
121+26	-	122+67	-	8.0	-
121+85			LT	0.3	CE
121+97			RT	0.5	11TH ST
122+02	-	122+67	LT	0.2	-
122+15	-	122+67	RT	0.4	-
122+17	-	122+59	RT	0.2	-
122+22			RT	0.1	CE
122+67			RT	0.1	CE
			TOTAL	16	

FINISHING ITEMS

STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	630.0140 SEEDING MIXTURE NO. 40 LB	SPV.0030.20 FERTILIZER FOR LAWN TYPE TURF CWT	SPV.0120.20 WATER FOR SEEDED AREAS MGAL	SPV.0180.20 PREPARING TOPSOIL FOR LAWN TYPE TURF SY
119+54	-	119+69	LT	7	0.1	0.004	0.02	7
120+51	-	120+58	LT	3	0.1	0.002	0.01	3
121+08	-	121+32	LT	21	0.4	0.013	0.07	21
			TOTAL	31	1	0.1	0.1	31

PERMANENT SIGNS

SIGN NUMBER	STATION	LOCATION	SIGN CODE	DESCRIPTION	SIZE IN X IN	637.2210 SIGNS TYPE II REFLECTIVE H SF	SPV.0060.20 POSTS STEEL 2 3/8-INCH DIA X 14-FT EA
1-1	121+00	RT	J1-1	JUNCTION CTH C	24X39	6.50	1
1-2	122+20	RT	R1-1	STOP	30X30	5.18	1
1-3	120+10	RT	R8-52	PARKING	24X30	5.00	1
1-3	121+35	LT	R8-52	PARKING	24X30	5.00	1
					TOTAL	21.68	4

EROSION CONTROL

STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.6005 TURBIDITY BARRIERS SY
119+54	-	119+69	LT	-	-	-	-	7	-
120+51	-	120+58	LT	15	15	-	-	3	-
121+08	-	121+32	LT	30	30	-	-	21	-
B-68-131				-	-	-	-	-	280
PROJECT				-	-	4	2	-	-
			TOTAL	45	45	4	2	31	280

INLET PROTECTION

STATION	LOCATION	628.7005 TYPE A EA	628.7015 TYPE C EA
119+31	RT	1	1
120+23	RT	1	1
120+39	LT	1	1
121+35	RT	1	1
121+70	LT	2	2
121+75	RT	1	1
122+08	LT	1	1
122+10	LT	1	1
122+16	RT	1	1
122+54	LT	1	1
122+54	RT	1	1
	TOTAL	12	12

REMOVING SIGNS

STATION	LOCATION	638.2602 TYPE II EA
121+00	RT	3
121+22	LT	1
122+20	RT	1
	TOTAL	5

PAVEMENT MARKING

STATION	TO	STATION	LOCATION	646.0106 EPOXY 4-INCH (YELLOW) LF	647.0566 STOP LINE EPOXY 18-INCH (WHITE) LF	647.0656 PARKING STALL EPOXY (WHITE) LF	647.0766 CROSSWALK EPOXY 6-INCH (WHITE) LF	COMMENTS
119+21	-	119+42	-	-	-	-	176	
119+34	-	121+58	-	448	-	-	-	DOUBLE CENTERLINE
119+70			RT	-	-	10	-	
119+72			LT	-	-	10	-	
119+94			RT	-	-	12	-	
119+96			LT	-	-	10	-	
119+96	-	120+04	LT	-	-	-	-	
120+18			RT	-	-	10	-	
120+18	-	121+09	RT	-	-	-	-	
120+35	-	121+26	LT	-	-	-	-	
121+09			RT	-	-	10	-	
121+26			LT	-	-	10	-	
121+33			RT	-	-	10	-	
121+33	-	121+74	RT	-	-	-	-	
121+50			LT	-	-	10	-	
121+50	-	121+67	LT	-	-	-	-	
121+58	-	121+64	-	-	-	-	94	
121+72	-	122+19	RT	-	-	-	90	
121+97	-	122+15	RT	-	18	-	-	
122+04	-	122+39	LT	-	-	-	-	
122+17	-	122+57	RT	-	-	-	-	
122+27	-	122+33	-	-	-	-	94	
122+33	-	122+67	-	68	-	-	-	DOUBLE CENTERLINE
122+39			LT	-	-	10	-	DOUBLE CENTERLINE
122+63			LT	-	-	12	-	
122+00	-	122+65	LT	-	-	140	-	
			TOTAL	516	18	254	454	

CONSTRUCTION STAKING

STATION	TO	STATION	LOCATION	650.4000 STORM SEWER EA	650.4500 SUBGRADE LF	650.5500 CURB GUTTER AND CURB & GUTTER LF
119+31	-	120+36	-	-	105	-
119+33	-	120+28	RT	-	-	95
119+53	-	120+45	LT	-	-	92
120+13			RT	1	-	-
120+23			RT	1	-	-
120+39			LT	1	-	-
120+98	-	121+77	RT	-	-	110
121+07	-	122+67	-	-	160	-
121+14	-	122+67	LT	-	-	153
121+35			RT	1	-	-
121+56			RT	1	-	-
121+70			LT	2	-	-
121+70			LT	-	-	11
121+75			RT	1	-	-
122+00			LT	1	-	-
122+05	-	122+14	LT	-	-	9
122+05	-	122+45	LT	-	-	40
122+08			LT	1	-	-
122+10			LT	1	-	-
122+15	-	122+67	RT	-	-	85
122+16			RT	1	-	-
122+54			LT	1	-	-
122+54			RT	2	-	-
			TOTAL	15	265	595

SAWING

STATION	TO	STATION	LOCATION	690.0150 ASPHALT LF	690.0250 CONCRETE LF	REMARKS
119+31			RT	-	22	-
119+31	-	119+53	-	-	22	-
119+50			RT	23	-	CE
119+53			LT	-	22	-
120+20			LT	34	-	CE
121+85			LT	50	-	CE
121+97			RT	38	-	11TH ST
			TOTAL	145	66	

GEOGRID REINFORCEMENT

STATION	TO	STATION	LOCATION	SPV.0180.01 SY
120+98	-	121+77	RT	55
121+06	-	121+26	-	94
121+14	-	122+67	LT	77
121+26	-	122+67	-	805
122+15	-	122+67	RT	43
			TOTAL	1,074

REMOVING ABANDONED SIGN POST

STATION	LOCATION	SPV.0060.01 REMOVING ABANDONED SIGN POST EA
120+87.5	33.5' RT	1
	TOTAL	1

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

813037

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6250-01-20 - 4.01
SHEET 2 OF 2
AMENDMENT NO:

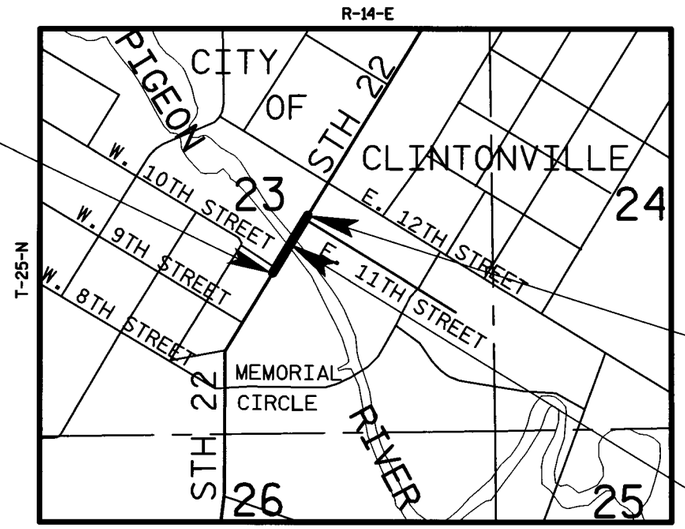
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

TRANSPORTATION PROJECT PLAT TITLE SHEET

PROJECT NO. 6250-01-20

C CLINTONVILLE-PIGEON RIVER BRIDGE (B-68-131) MAIN STREET
STH 22
WAUPACA COUNTY





BEGIN RELOCATION ORDER 6250-01-20
STA 118+50
WAUPACA COUNTY COORDS.
Y = 438017.686
X = 621459.348

END RELOCATION ORDER 6250-01-20
STA 123+88
WAUPACA COUNTY COORDS.
Y = 438476.983
X = 621739.505

B-68-131
STA 120+71.33

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WAUPACA COUNTY, NAD83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE A TYPE 3 CHISLED CROSS AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD".

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 22 ESTABLISHED AND EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENTS ALONG WITH THE PLAT OF THE VILLAGE OF CLINTONVILLE, CERTIFIED SURVEY MAP NO. 4093 AND THE PLAT OF SURVEY BY LEON P. PELISHEK DATED MAY 23, 1947.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLEs EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTURMENT IS GIVEN.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

CONVENTIONAL ABBREVIATIONS

ACCESS POINT, DRIVEWAY CONNECTION	AP	RELEASE OF RIGHTS	ROR	FOUND IRON PIPE/PIN	
ACCESS RIGHTS	AR	REMAINING	REM.		
ACRES	AC.	RIGHT-OF-WAY	R/W	R/W MONUMENT (CHISELED CROSS)	
AND OTHERS	ET.AL.	SECTION	SEC.	R/W STANDARD	
CENTERLINE	C/L	STATION	STA.	SIGN	
CERTIFIED SURVEY MAP	CSM	TEMPORARY LIMITED EASEMENT	TLE	SECTION CORNER MONUMENT	
CORNER	COR.	VOLUME	V.	SECTION CORNER SYMBOL	
DOCUMENT	DOC.			FEE (HATCH VARIES)	
EASEMENT	EASE.			TEMPORARY LIMITED EASEMENT	
HIGHWAY EASEMENT	H.E.			PERMANENT LIMITED EASEMENT	
LAND CONTRACT	LC			R/W BOUNDARY POINT	
MONUMENT	MON.			PARCEL NUMBER	
PAGE	P.			SIGN NUMBER (OFF PREMISE)	
PERMANENT LIMITED EASEMENT	PLE			BUILDING	
PROPERTY LINE	PL				
RECORDED AS	(100')				
REFERENCE LINE	R/L				

CURVE DATA

LONG CHORD	LCH		
LONG CHORD BEARING	LCB		
RADIUS	R		
DEGREE OF CURVE	D		
CENTRAL ANGLE OR DELTA	DELTA		
LENGTH OF CURVE	L		
TANGENT	TAN		

CONVENTIONAL SYMBOLS

1/2" (1" UNLESS NOTED)	PROPOSED R/W LINE
● (SET)	EXISTING H.E. LINE
▲ (SET)	PROPERTY LINE
	LOT & TIE LINES
ISIGN	SLOPE INTERCEPTS
	CORPORATE LIMITS
	RESTRICTED ACCESS (BY PREVIOUS ACQUISITION/CONTROL)
	RESTRICTED ACCESS (BY ACQUISITION)
	NO ACCESS (BY STATUTORY AUTHORITY)
	SECTION LINE
RWB20	QUARTER LINE
102	SIXTEENTH LINE
21	EXISTING CENTERLINE
	PROPOSED REFERENCE LINE
	PARALLEL OFFSET

CONVENTIONAL UTILITY SYMBOLS

WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES	OH	
ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
	NON COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

ORIGINAL PLANS PREPARED BY

CWE, Inc.
5707 SCHOFIELD AVE.
WESTON, WISCONSIN
54476
PHONE: (715) 359-9400
FAX: (715) 355-4199
general@cwengineers.com
www.cwengineers.com

TRANSPORTATION PROJECT PLAT NO: 6250-01-20 - 4.01
AMENDENDMENT NO: 1
AMENDS PARCEL NO: 5 OF TRANSPORTATION PROJECT PLAT 6250-01-20
RECORDED AS DOCUMENT NO: 813037

(CLINTONVILLE, MAIN STREET PIGEON RIVER BRIDGE B-68-0036)

THAT PART OF THE SE 1/4 OF THE SE 1/4 OF SECTION 23, T25N - R14E, CITY OF CLINTONVILLE, WAUPACA COUNTY, WISCONSIN.

RELOCATION ORDER STH 22, WAUPACA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF CLINTONVILLE DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09 AND 62.22, WISCONSIN STATUTES, THE CITY HEREBY ORDERS THAT: 1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT. 2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF CLINTONVILLE, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

816896

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN Waupaca COUNTY, WISCONSIN AT 1:00 PM ON Sept 12, 2013 AS DOCUMENT # 816896 AND FILED IN Cabc / 80A

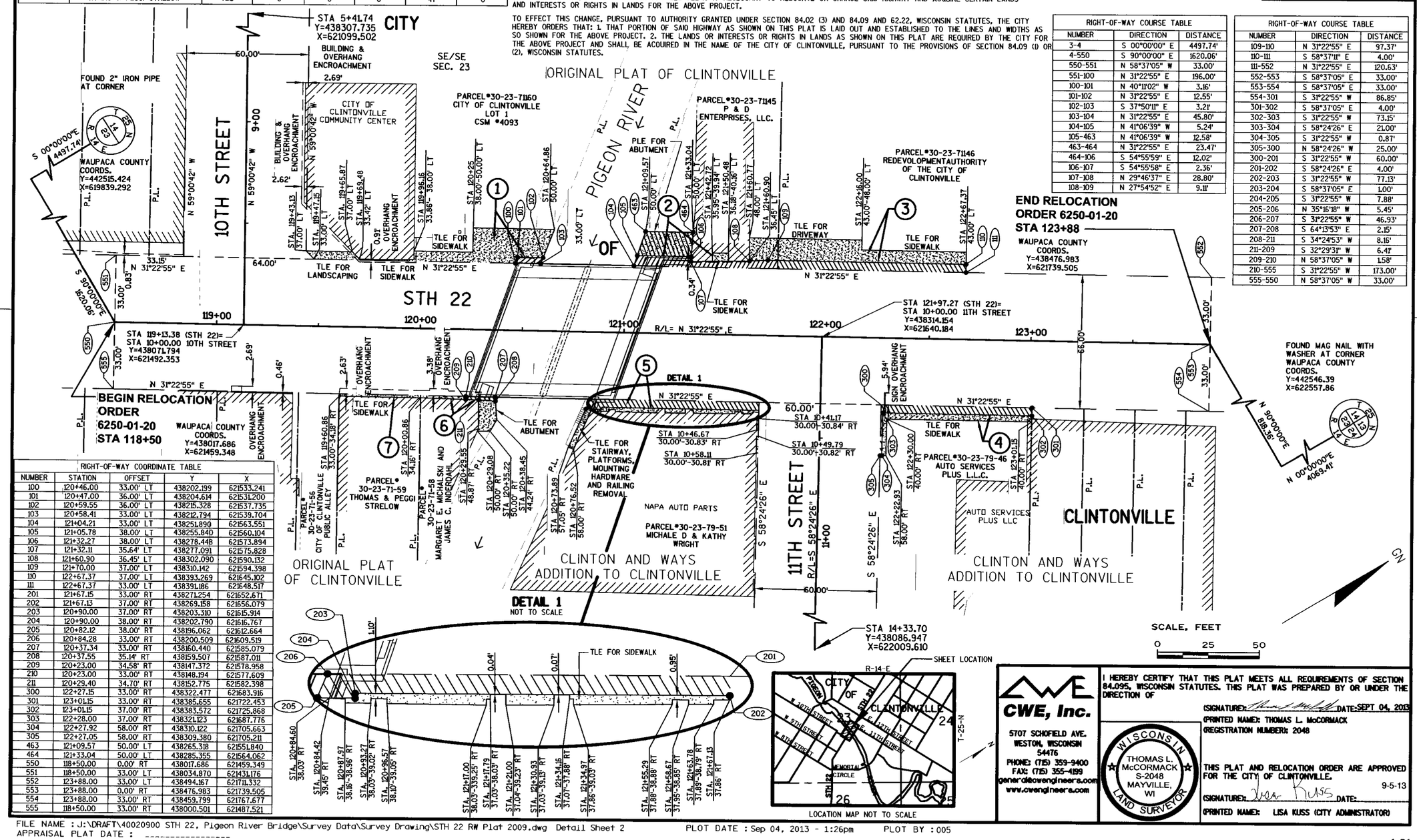
Michael Mazemke
SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6250-01-20 - 4.01
SHEET 1 OF 2
AMENDMENT NO:

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PARCEL NO.	OWNERS	INTEREST REQUIRED	R/W SQUARE FEET REQUIRED: NEW SQUARE FEET	EXISTING SQUARE FEET	TOTAL SQUARE FEET	TLE SQUARE FEET	PLE SQUARE FEET
1	CITY OF CLINTONVILLE	FEE & TLE	37	0	37	838	0
2	P & D ENTERPRISES, LLC	FEE, PLE & TLE	277	0	277	189	300
3	REDEVELOPMENT AUTHORITY OF THE CITY OF CLINTONVILLE	FEE & TLE	370	0	370	760	0
4	AUTO PLUS SERVICES, LLC	FEE & TLE	314	0	314	256	0
5	MICHALE D. & KATHY WRIGHT	FEE & TLE	336	0	336	205	0
6	MARGARET E. MICHALSKI AND JAMES C. INDERDAHL	FEE & TLE	26	0	26	152	0
7	THOMAS & PEGGI STRELOW	TLE	0	0	0	47	0



RIGHT-OF-WAY COURSE TABLE

NUMBER	DIRECTION	DISTANCE
3-4	S 00°00'00" E	4497.74'
4-550	S 90°00'00" E	1620.06'
550-551	N 58°37'05" W	33.00'
551-100	N 31°22'55" E	196.00'
100-101	N 40°11'02" W	3.16'
101-102	N 31°22'55" E	12.55'
102-103	S 37°50'11" E	3.21'
103-104	N 31°22'55" E	45.80'
104-105	N 41°06'39" W	5.24'
105-463	N 41°06'39" W	12.58'
463-464	N 31°22'55" E	23.47'
464-106	S 54°55'59" E	12.02'
106-107	S 54°55'58" E	2.36'
107-108	N 29°46'37" E	28.80'
108-109	N 27°54'52" E	9.11'

RIGHT-OF-WAY COURSE TABLE

NUMBER	DIRECTION	DISTANCE
109-110	N 31°22'55" E	97.37'
110-111	S 58°37'11" E	4.00'
111-552	N 31°22'55" E	120.63'
552-553	S 58°37'05" E	33.00'
553-554	S 58°37'05" E	33.00'
554-301	S 31°22'55" W	86.85'
301-302	S 58°37'05" E	4.00'
302-303	S 31°22'55" W	73.15'
303-304	S 58°24'26" E	21.00'
304-305	S 31°22'55" W	0.87'
305-300	N 58°24'26" W	25.00'
300-201	S 31°22'55" W	60.00'
201-202	S 58°24'26" E	4.00'
202-203	S 31°22'55" W	77.13'
203-204	S 58°37'05" E	1.00'
204-205	S 31°22'55" W	7.88'
205-206	N 35°16'18" W	5.45'
206-207	S 31°22'55" W	46.93'
207-208	S 64°13'53" E	2.15'
208-211	S 34°24'53" W	8.16'
211-209	S 32°29'31" W	6.41'
209-210	N 58°37'05" W	1.58'
210-555	S 31°22'55" W	173.00'
555-550	N 58°37'05" W	33.00'

RIGHT-OF-WAY COORDINATE TABLE

NUMBER	STATION	OFFSET	Y	X
100	120+46.00	33.00' LT	438202.199	621533.241
101	120+47.00	36.00' LT	438204.614	621531.200
102	120+59.55	36.00' LT	438215.328	621537.735
103	120+58.41	33.00' LT	438212.794	621539.704
104	121+04.21	33.00' LT	438251.890	621563.551
105	121+05.78	38.00' LT	438255.840	621560.104
106	121+32.27	38.00' LT	438278.448	621573.894
107	121+32.11	35.64' LT	438277.091	621575.828
108	121+60.90	36.45' LT	438302.090	621590.132
109	121+70.00	37.00' LT	438310.142	621594.398
110	122+67.37	37.00' LT	438393.269	621645.102
111	122+67.37	33.00' LT	43839L186	621648.517
201	121+67.15	33.00' RT	438271.254	621652.671
202	121+67.13	37.00' RT	438269.158	621656.079
203	120+90.00	37.00' RT	438203.310	621615.914
204	120+90.00	38.00' RT	438202.790	621616.767
205	120+82.12	38.00' RT	438196.062	621612.664
206	120+84.28	33.00' RT	438200.509	621609.519
207	120+37.34	33.00' RT	438160.440	621585.079
208	120+37.55	35.14' RT	438159.507	621587.011
209	120+23.00	34.58' RT	438147.372	621578.958
210	120+23.00	33.00' RT	438148.194	621577.609
211	120+29.40	34.70' RT	438152.775	621582.398
300	122+27.15	33.00' RT	438322.477	621683.916
301	123+01.15	33.00' RT	438385.655	621722.453
302	123+01.15	37.00' RT	438383.572	621725.868
303	122+28.00	37.00' RT	438321.123	621687.776
304	122+27.92	58.00' RT	438310.122	621705.663
305	122+27.05	58.00' RT	438309.380	621705.211
463	121+09.57	50.00' LT	438265.318	621551.840
464	121+33.04	50.00' LT	438285.355	621564.062
550	118+50.00	0.00' RT	438017.686	621459.349
551	118+50.00	33.00' LT	438034.870	621431.176
552	123+88.00	33.00' LT	438494.167	621711.332
553	123+88.00	0.00' RT	438476.983	621739.505
554	123+88.00	33.00' RT	438459.799	621767.677
555	118+50.00	33.00' RT	438000.501	621487.521

CWE, Inc.
5707 SCHOFIELD AVE.
WESTON, WISCONSIN 54476
PHONE: (715) 359-9400
FAX: (715) 355-4199
generaldeweng@neers.com
www.cwengineers.com

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

(SIGNATURE): DATE: SEPT 04, 2013
(PRINTED NAME): THOMAS L. McCORMACK
(REGISTRATION NUMBER): 2048

WISCONSIN THOMAS L. McCORMACK S-2048 MAYVILLE, WI LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF CLINTONVILLE.

(SIGNATURE): DATE: 9-5-13
(PRINTED NAME): LISA KUSS (CITY ADMINISTRATOR)

FILE NAME : J:\DRAFT\40020900 STH 22, Pigeon River Bridge\Survey Data\Survey Drawing\STH 22 RW Plat 2009.dwg Detail Sheet 2
APPRAISAL PLAT DATE : ----------
PLOT DATE : Sep 04, 2013 - 1:26pm PLOT BY : 005

---------- ---------- 4.01

BENCH MARK TABLE			
NO.	STATION	DESCRIPTION	ELEV.
1	118+92, 49' LT	TAG BOLT ON HYDRANT	809.65
2	120+34, 25' RT	BRASS CAP ON BRIDGE	805.48
3	122+19, 39' RT	TAG BOLT ON HYDRANT	806.35

LEGEND

- SAWING ASPHALT
- SAWING CONCRETE
- DETECTABLE WARNING FIELD
- TYPE H INLET COVER
- CONCRETE PAVEMENT APPROACH SLABS

BEGIN PROJECT
6250-01-70
STA 119+31.22
Y = 438087.025
X = 621501.643

END PROJECT
6250-01-70
STA 122+67.37
Y = 438374.001
X = 621676.689
BEGIN PROJECT
6250-01-76

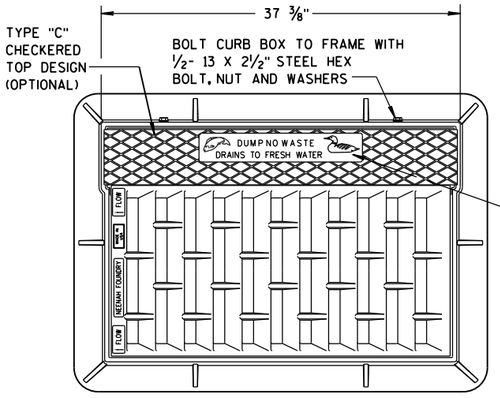
STA 120+71.33
REMOVE EXISTING STRUCTURE B-68-036
PRESTRESSED CONCRETE BOX GIRDER
50'-6¾" CLEAR ROADWAY WIDTH

STA 120+71.33
STRUCTURE B-68-131 REQ'D
TWO SPAN CONCRETE FLAT SLAB
71'-7¾" OVERALL LENGTH X 52' CLEAR WIDTH
SKEW 18°-30' LHF

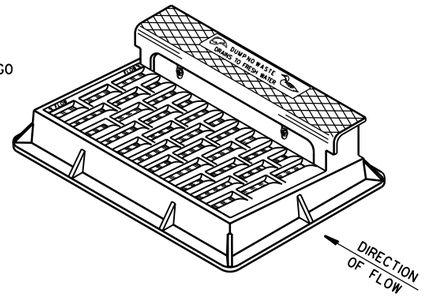
PROJECT NO: 6250-01-70	HWY: STH 22	COUNTY: WAUPACA	PLAN & PROFILE	SHEET 22 E

Standard Detail Drawing List

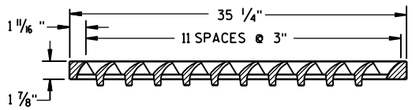
08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08A08-01	CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER
08A09-01	CATCH BASINS 2X3-FT AND 2.5X3-FT
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08D05-15A	CURB RAMPS 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
08D15-04A	EDGEDRAIN OUTLET AND OUTFALL MARKERS
08D15-04B	EDGEDRAIN AND BASE AGGREGATE OPEN GRADED
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E11-02	TURBIDITY BARRIER
12A03-10	NAME PLATE (STRUCTURES)
13B02-07A	CONCRETE BRIDGE APPROACH
13C01-16	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-08	URBAN DOWELED CONCRETE PAVEMENT
13C18-02A	CONCRETE PAVEMENT JOINTING
13C18-02B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-02C	CONCRETE PAVEMENT JOINT TIES
13C18-02D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-02	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C05-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16E	PAVEMENT MARKING (LEFT TURN LANE)
15C08-16F	PAVEMENT MARKING (ISLANDS)
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D30-01	TRAFFIC CONTROL, SIDEWALK CLOSURE

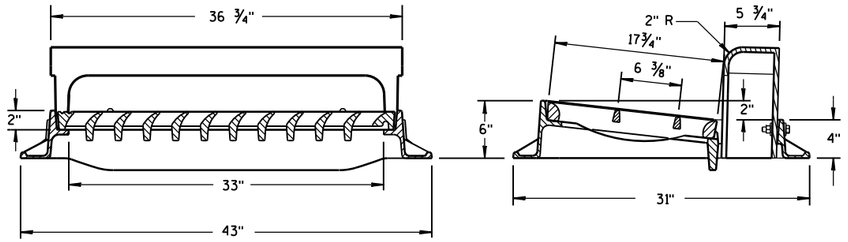


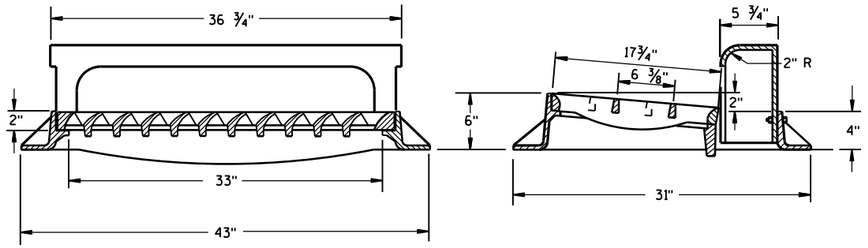
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

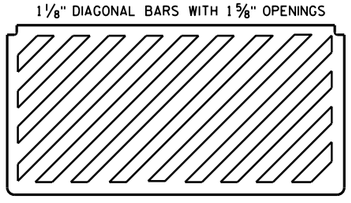






TYPE "H"

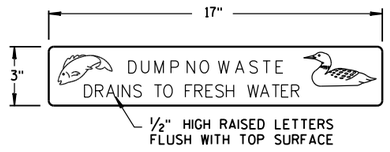
NOTE: EITHER CASTING IS ACCEPTABLE



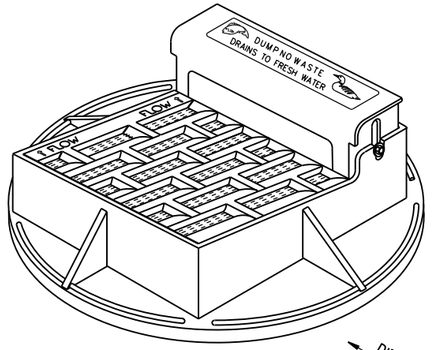
SPECIAL GRATE FOR TYPE "H" COVER

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

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

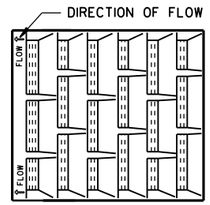
NOTE:
GRATE IS REVERSIBLE.

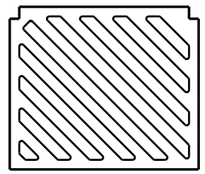
GENERAL NOTES

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

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

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

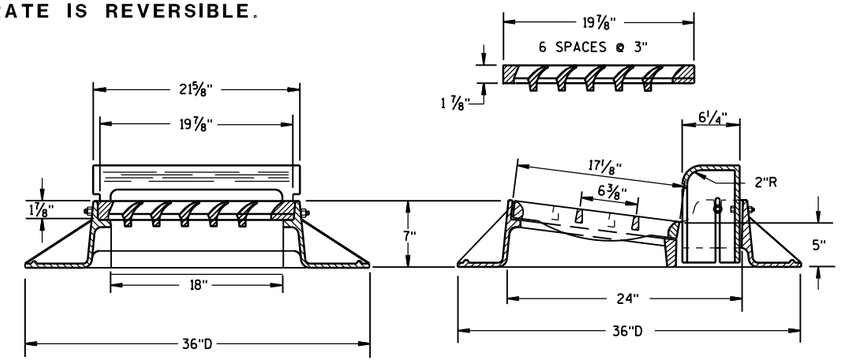




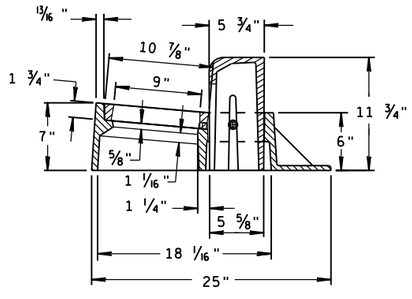
SPECIAL GRATE FOR TYPE "A" COVER

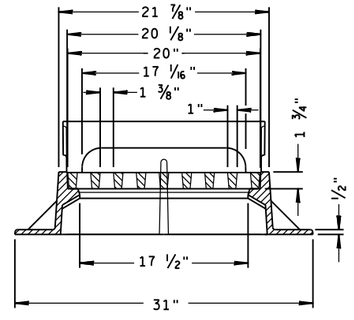
(MEASURES 19 3/4" X 17" X 1 7/8")

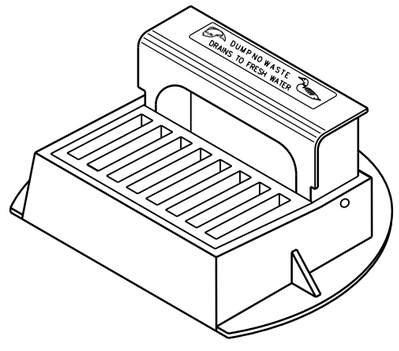
(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "A"







TYPE "Z"

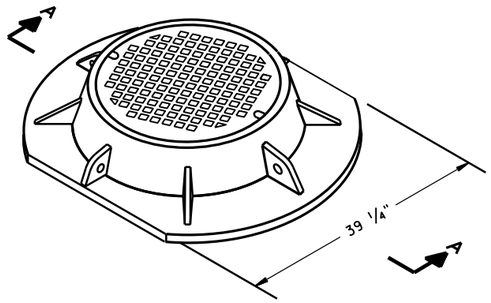
INLET COVERS
TYPE A, H, A-S, H-S & Z

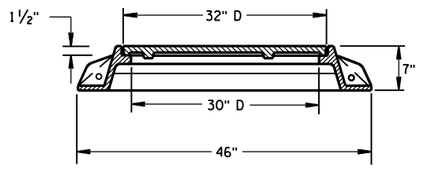
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

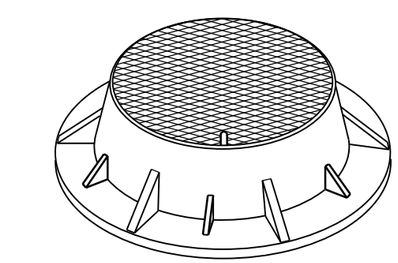
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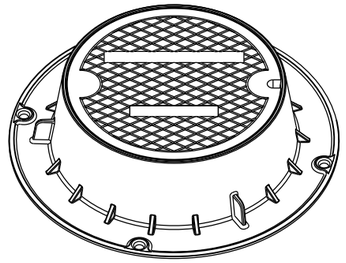
S.D.D. 8 A 5-19a

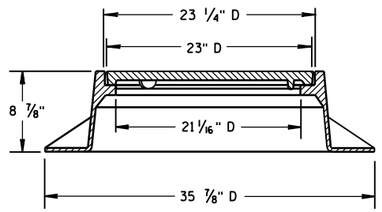


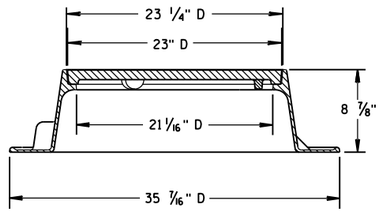


SECTION A-A
TYPE "K"









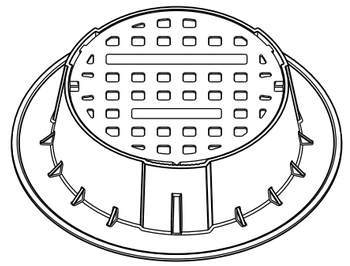
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

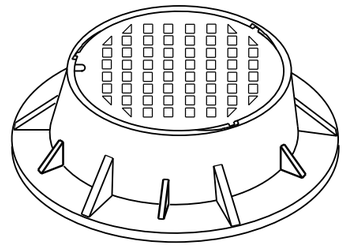
GENERAL NOTES

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

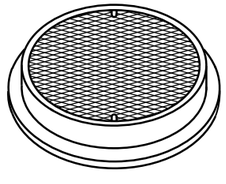
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

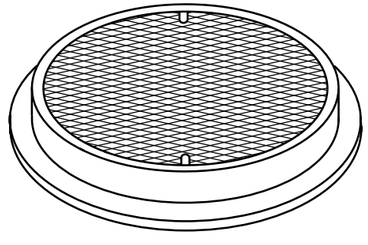
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

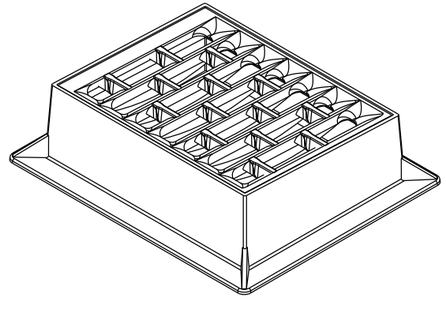


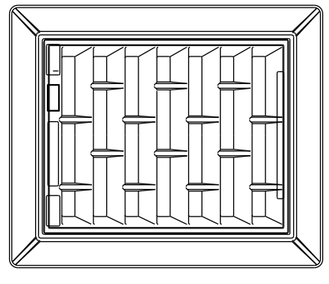


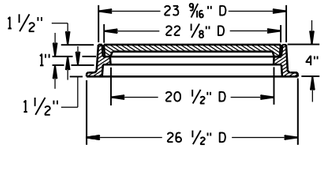
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



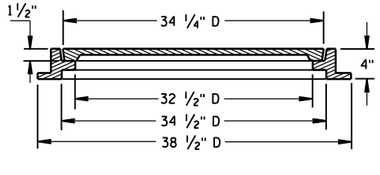




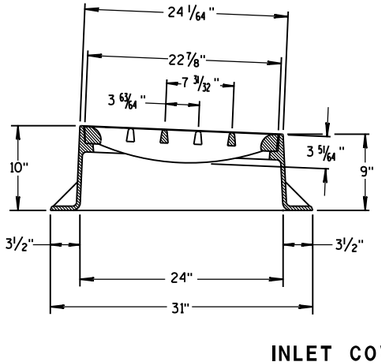


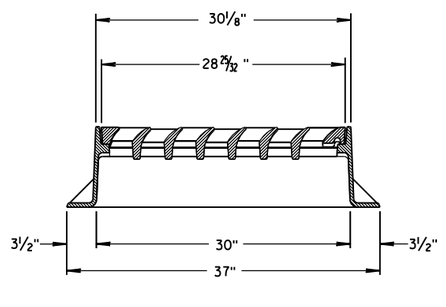


TYPE "L"



TYPE "M"





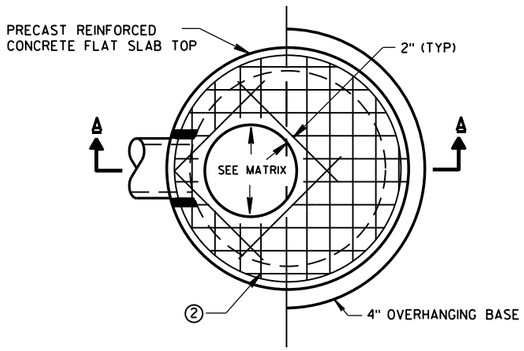
INLET COVER TYPE "BW"

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

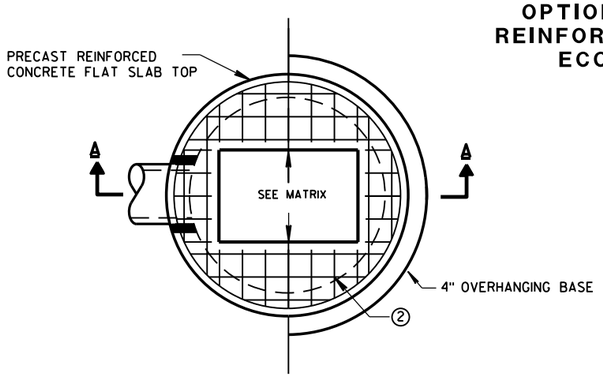
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

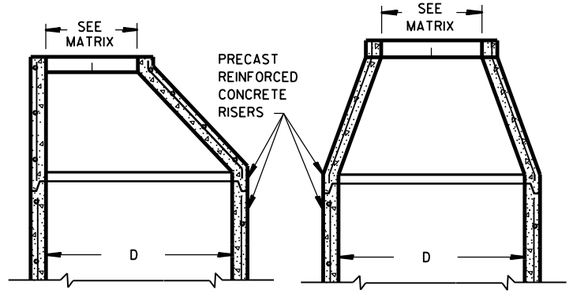
6
S.D.D. 8 A 5-19d



PLAN VIEW CIRCULAR OPENING

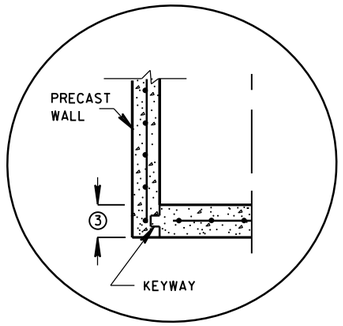


PLAN VIEW RECTANGULAR OPENING

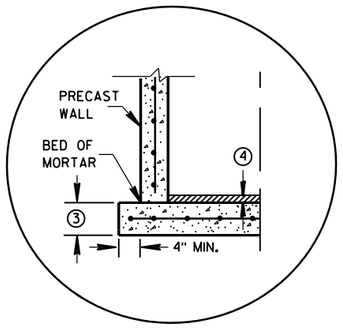


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

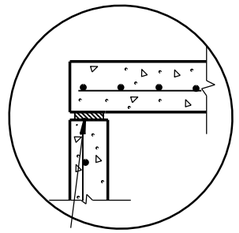


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



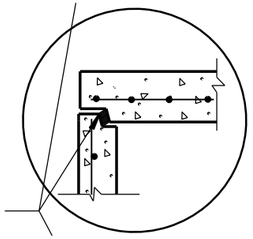
SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"

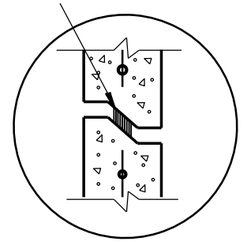


TOP WITH PLAIN END JOINT

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)

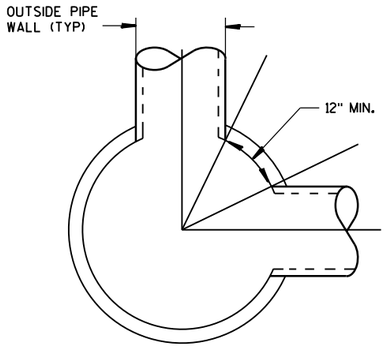


TOP WITH TONGUE AND GROOVE JOINT

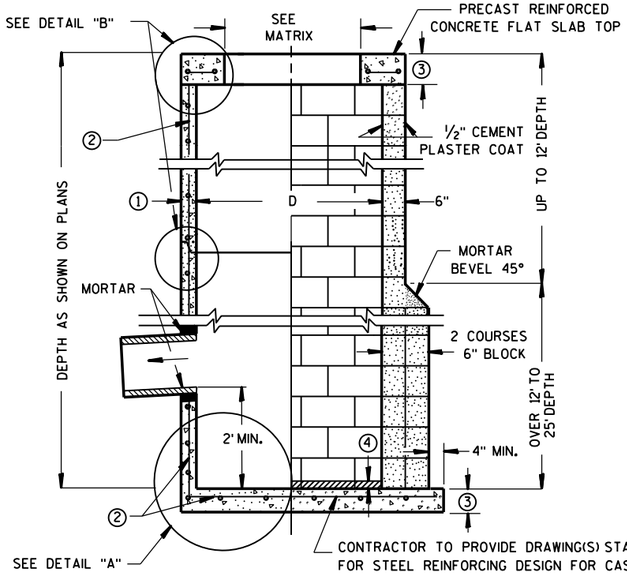


RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"



DETAIL "C"



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

SECTION A-A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

GENERAL NOTES

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

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

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

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

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

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF 1/2 INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

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

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT AND 7 INCHES FOR 6-FT DIAMETER PRECAST CATCH BASINS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

④ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER OPENING MATRIX

CATCH BASIN SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
	OPENING SIZE (FT)											
3-FT	2X2	X	X					X		X		
	2 DIA.				X							X
4-FT-6-FT	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2 DIA.				X							X
	2X3						X					
	2.5X3					X						

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	30

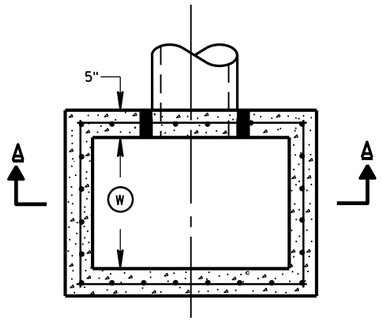
CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

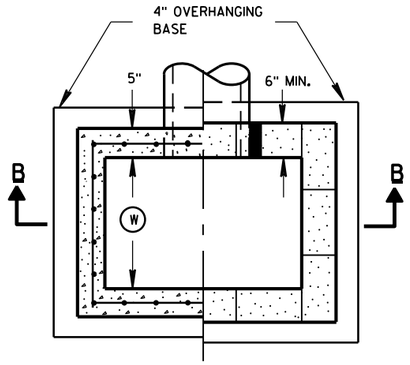
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

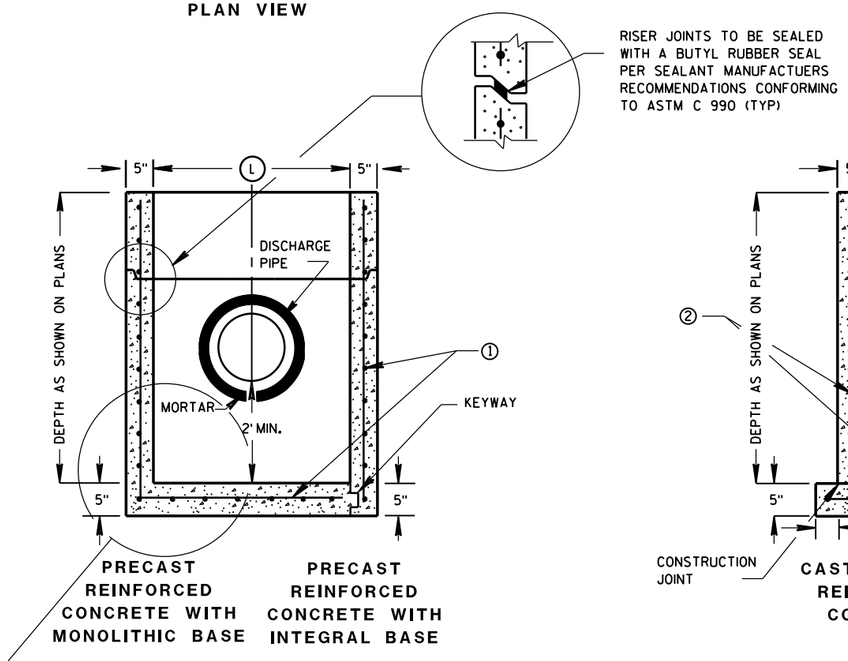
S.D.D. 8 A 8-1



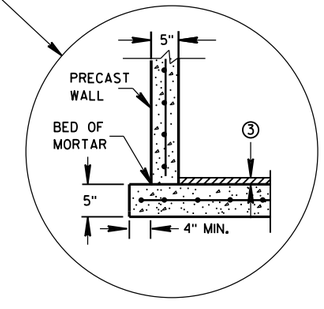
PLAN VIEW



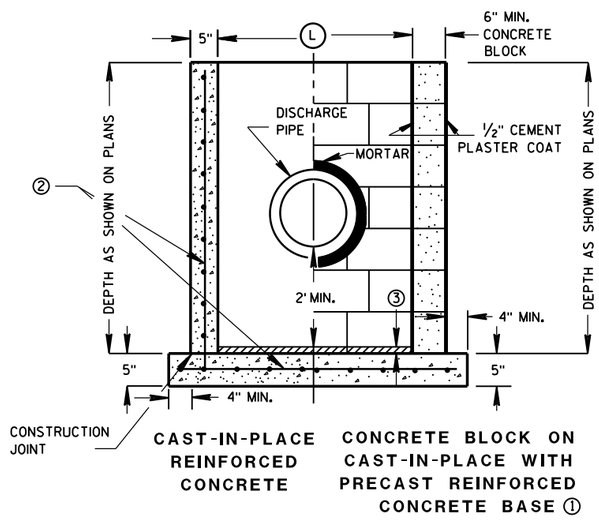
PLAN VIEW



SECTION A-A



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION



SECTION B-B

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

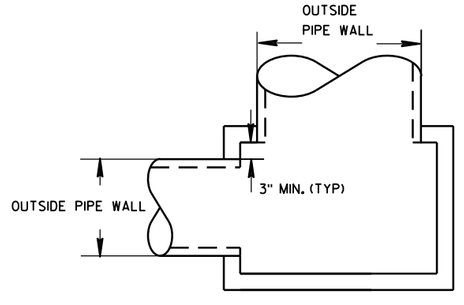
③ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER MATRIX

CATCH BASIN SIZE		INLET COVER TYPE	F	ALL H'S
	WIDTH (W) (FT)	LENGTH (L) (FT)		
2X3-FT	2	3		X
2.5X3-FT	2.5	3	X	

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2X3-FT	12	24
2.5X3-FT	18	24



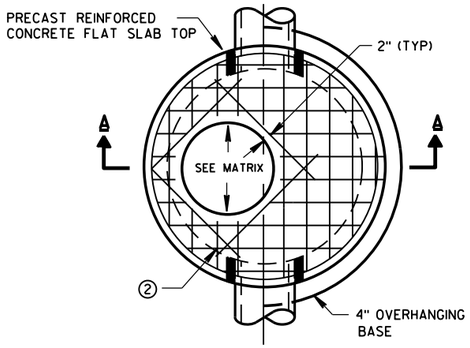
DETAIL "A"

CATCH BASINS 2X3-FT AND 2.5X3-FT

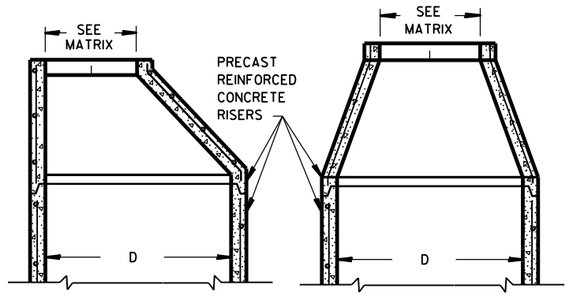
CATCH BASINS 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
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APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

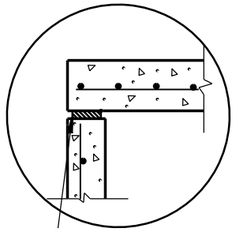


PLAN VIEW CIRCULAR OPENING

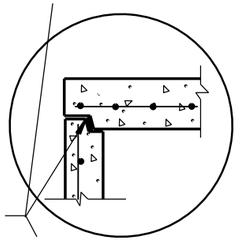


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

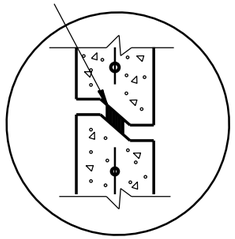


TOP WITH PLAIN END JOINT



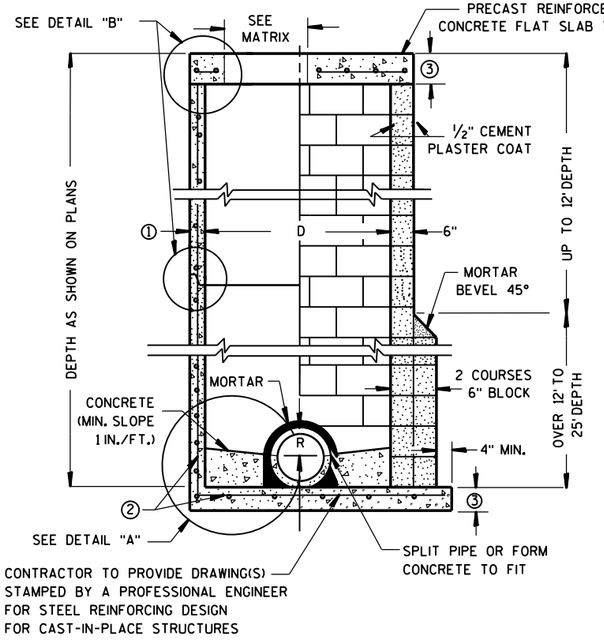
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



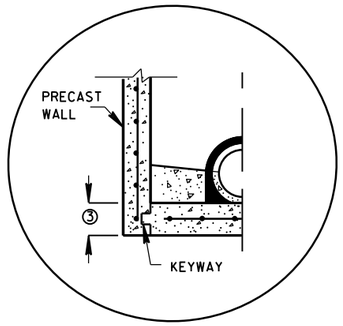
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

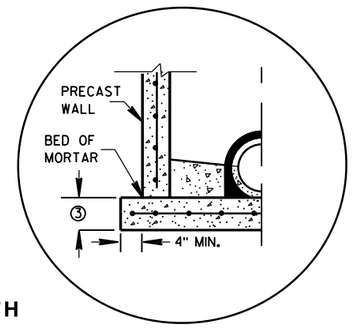


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

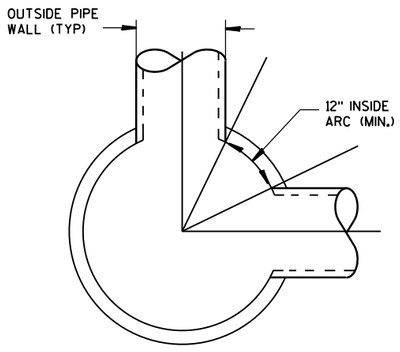


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

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

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

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

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

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE CONE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

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

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

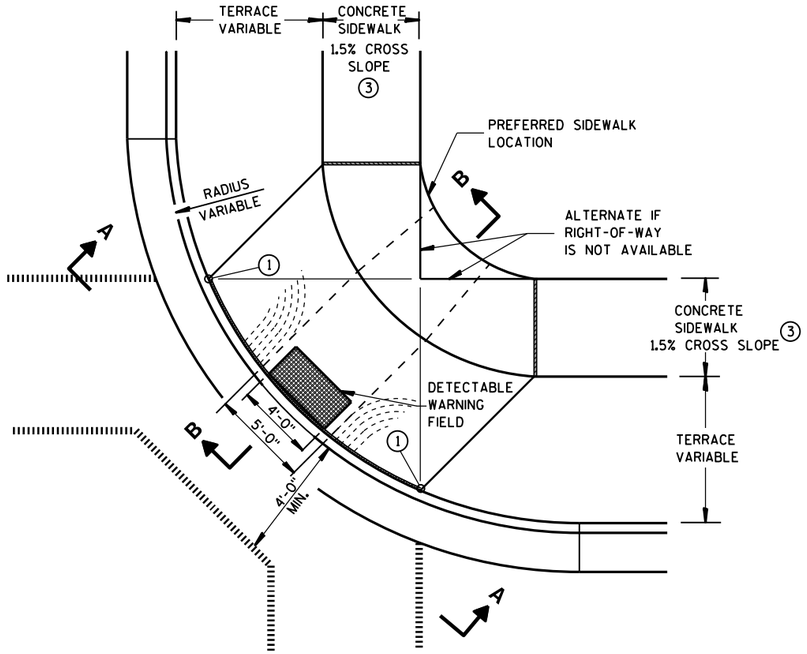
MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN
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APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

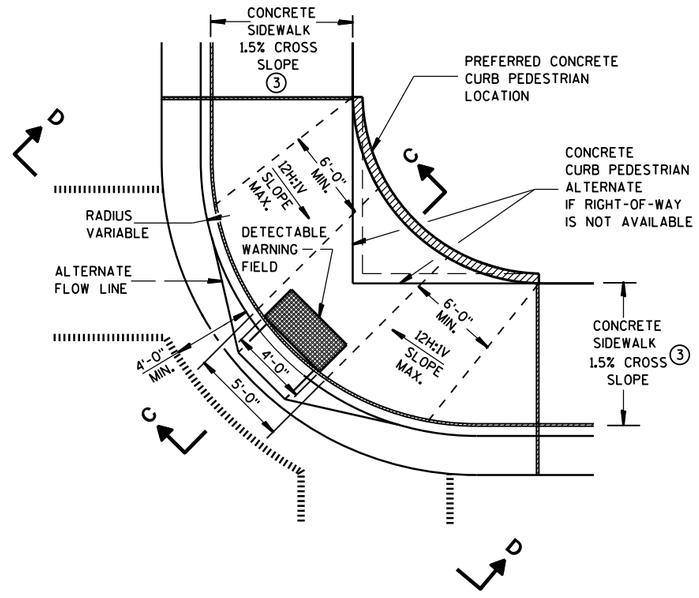
6
S.D.D. 8 B 9-1



PLAN VIEW

TYPE 1 RAMP

(CENTER OF CORNER RADIUS)



PLAN VIEW

TYPE 1-A RAMP

(NO TERRACE)

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.

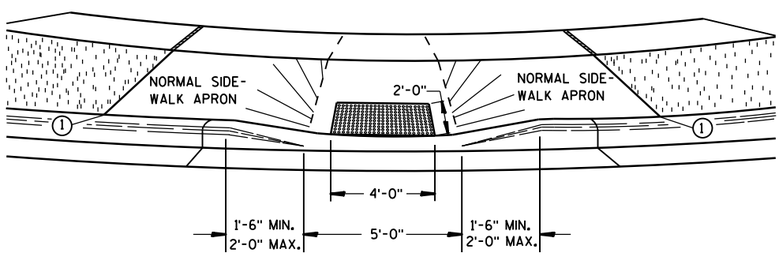
① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.

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.

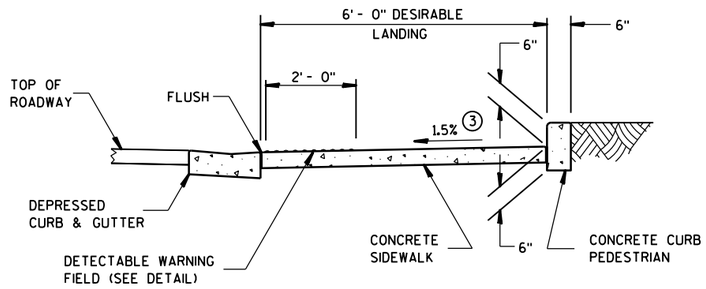
③ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

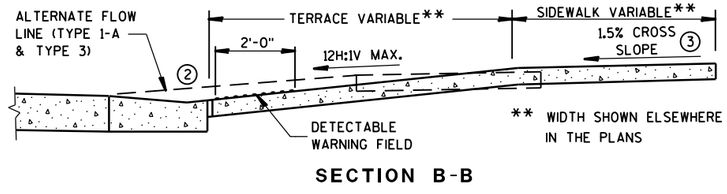
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



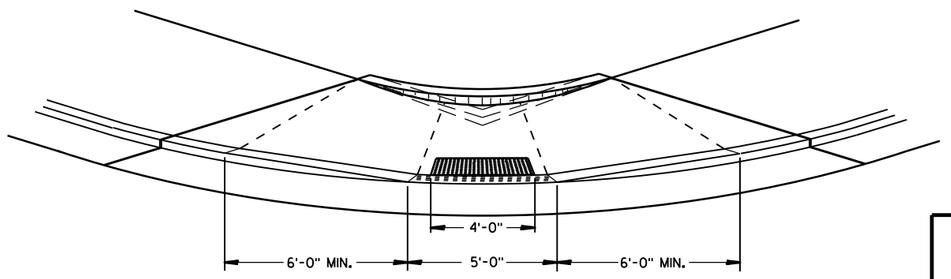
VIEW A-A



SECTION C-C



SECTION B-B



VIEW D-D

CURB RAMPS TYPES 1 AND 1-A

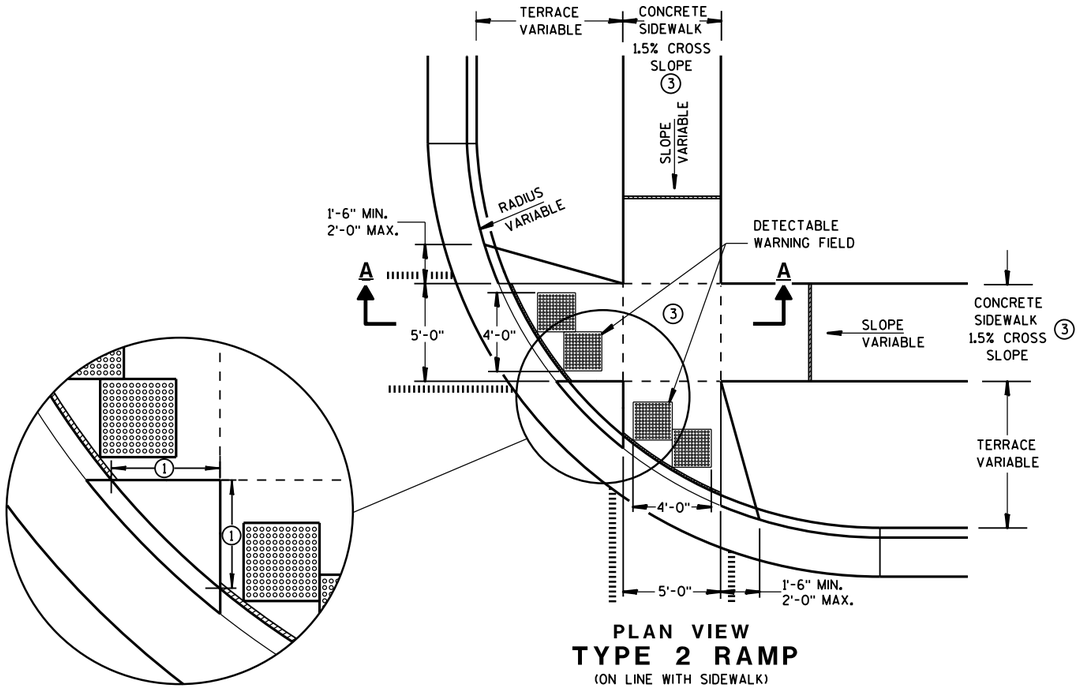
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DEPARTMENT OF TRANSPOR

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S.D.D. 8 D 5-15a

6

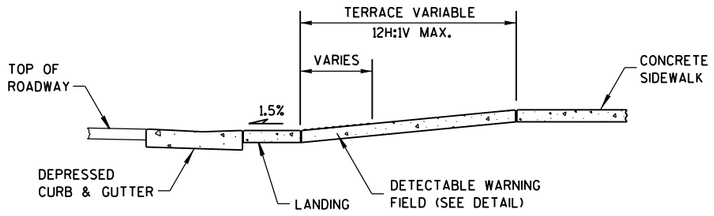
S.D.D. 8 D 5-15a



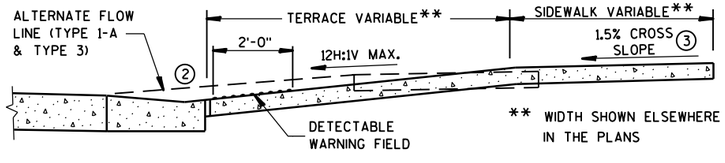
PLAN VIEW

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.

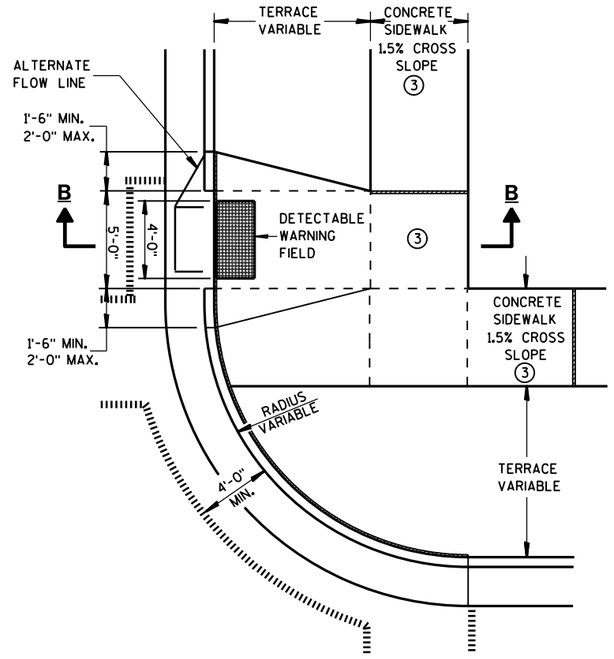
① WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.

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

LEGEND

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



PLAN VIEW

TYPE 3 RAMP

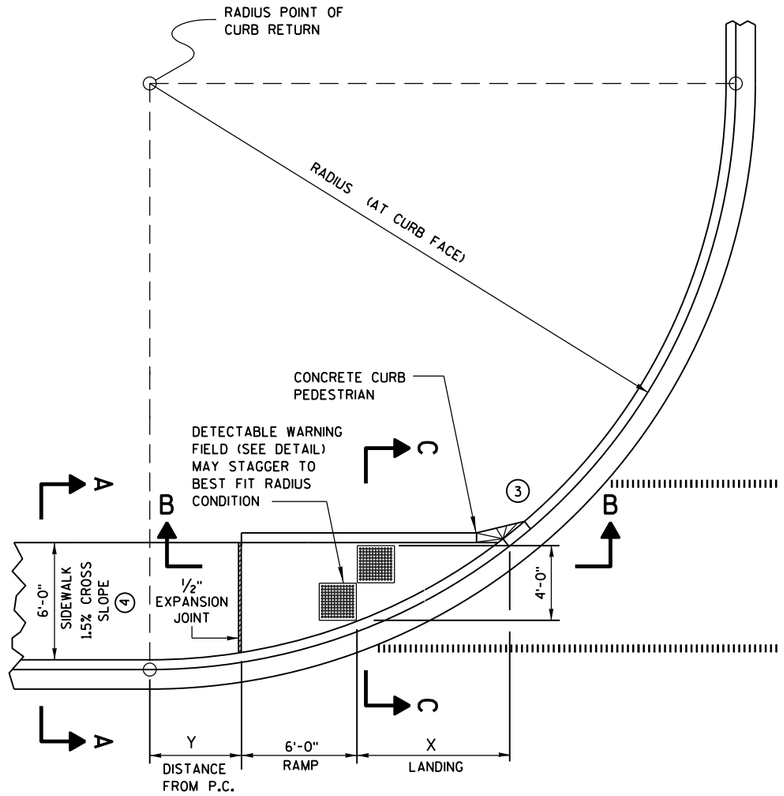
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

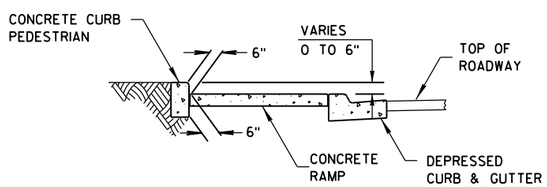
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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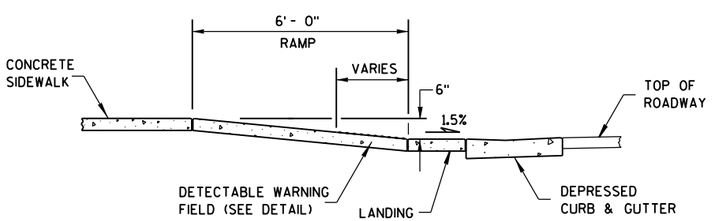
S.D.D. 8 D 5-15b



CURB RAMP TYPE 4A
PLAN VIEW



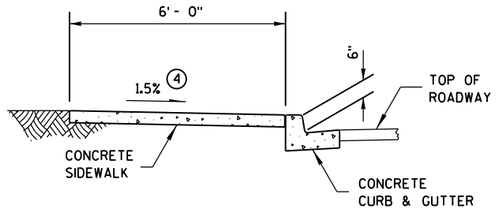
SECTION C-C FOR TYPE 4A



SECTION B-B FOR TYPE 4A

RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-1¾"	2'-7¼"
30 FEET	7'-11¾"	4'-8¼"
40 FEET	9'-5¼"	6'-5"
50 FEET	10'-8¾"	7'-11¼"
60 FEET	11'-10¼"	9'-3½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A

GENERAL NOTES

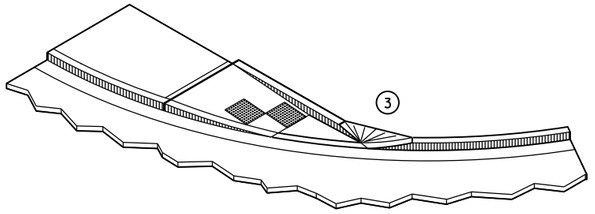
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

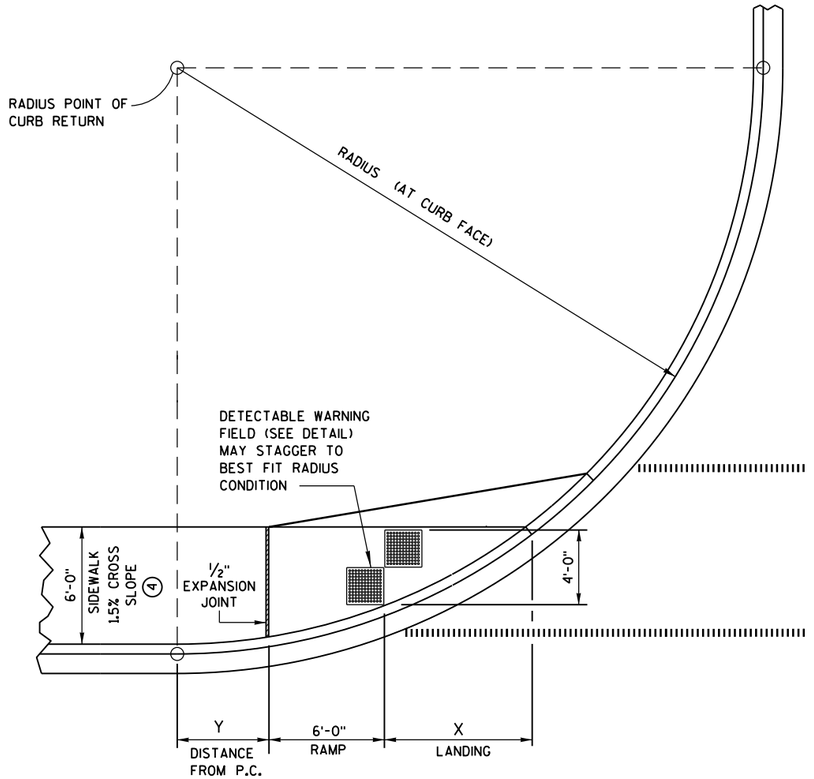
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

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

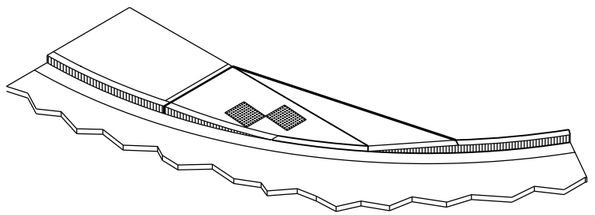
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



ISOMETRIC VIEW FOR TYPE 4A



CURB RAMP TYPE 4A1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

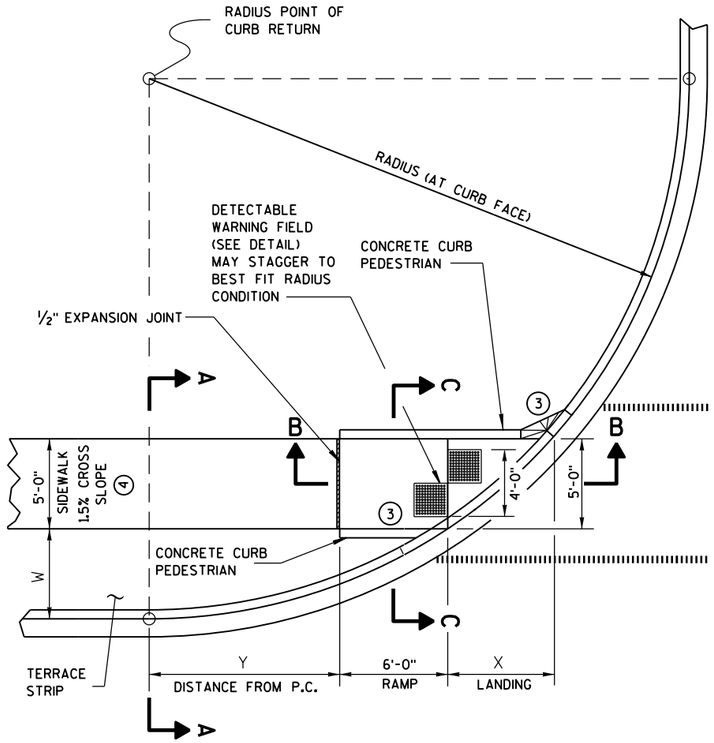
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPES 4A AND 4A1

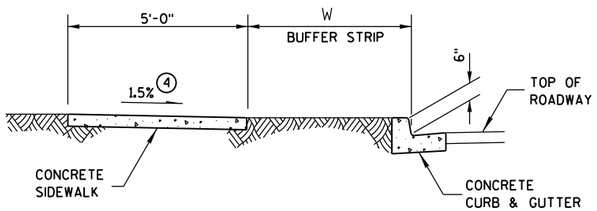
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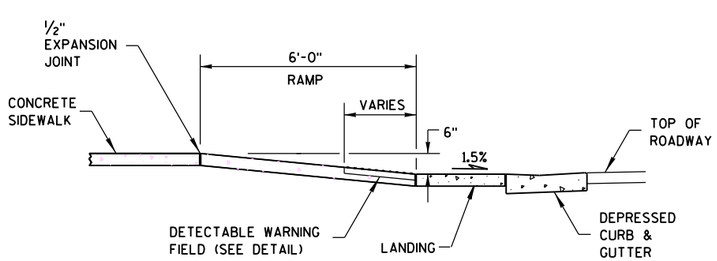
S.D.D. 8 D 5-15c



CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A FOR TYPE 4B



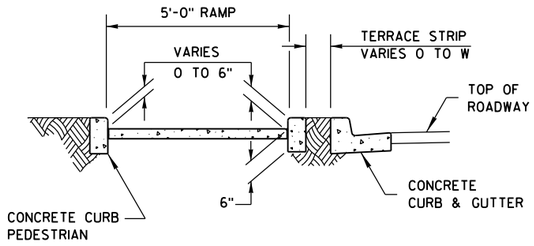
SECTION B-B FOR TYPE 4B

LEGEND

- ½" 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'-5½"	4'-6½"	4'-8½"	6'-0"	4'-1"	7'-2¾"	3'-7"	8'-3½"	3'-1½"	9'-2½"
30 FEET	7'-3¾"	7'-1"	6'-5½"	8'-11½"	5'-9¼"	10'-7"	5'-2½"	12'-0"	4'-8¾"	13'-3¼"
40 FEET	8'-9½"	9'-2½"	7'-10"	11'-5¼"	7'-1"	13'-4½"	6'-5¾"	15'-¾"	5'-11½"	16'-7¼"
50 FEET	10'-¾"	11'-¾"	9'-¼"	13'-7¼"	8'-2½"	15'-9½"	7'-6½"	17'-9"	6'-11¾"	19'-6¼"
60 FEET	11'-2½"	12'-8¾"	10'-¾"	15'-6½"	9'-2¼"	17'-11¾"	8'-5¾"	20'-1¾"	7'-10½"	22'-1½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION C-C FOR TYPE 4B

GENERAL NOTES

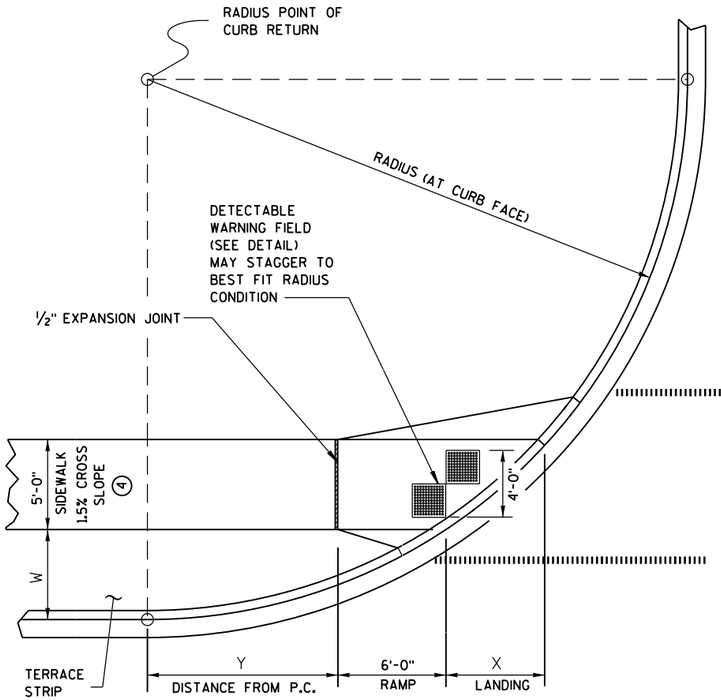
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

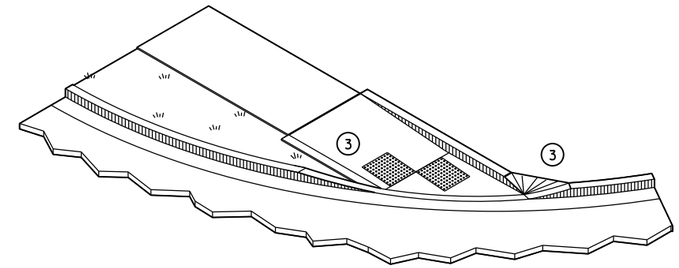
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

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

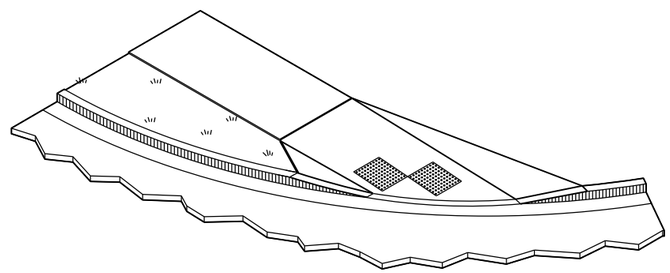
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



CURB RAMP TYPE 4B1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4B



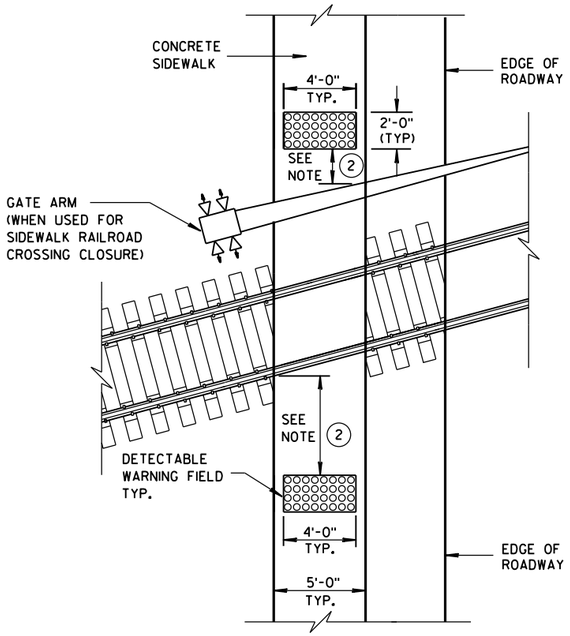
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS
TYPE 4B AND 4B1

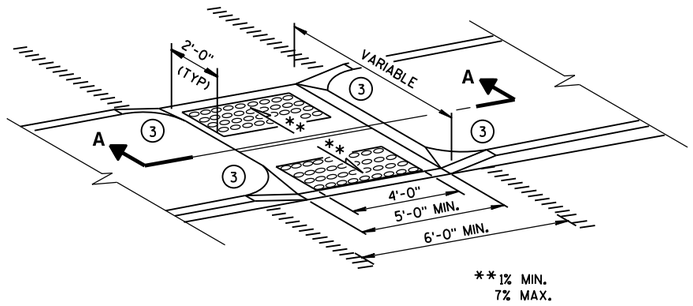
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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S.D.D. 8 D 5-15d



TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5

GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

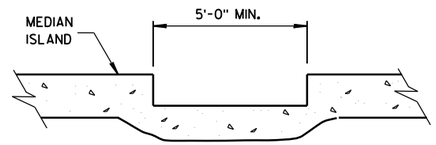
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

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

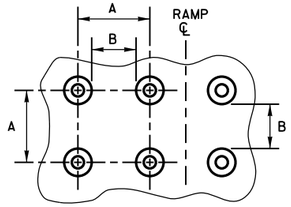
(2) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET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

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

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



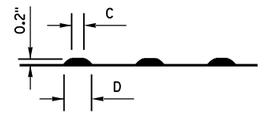
SECTION A-A



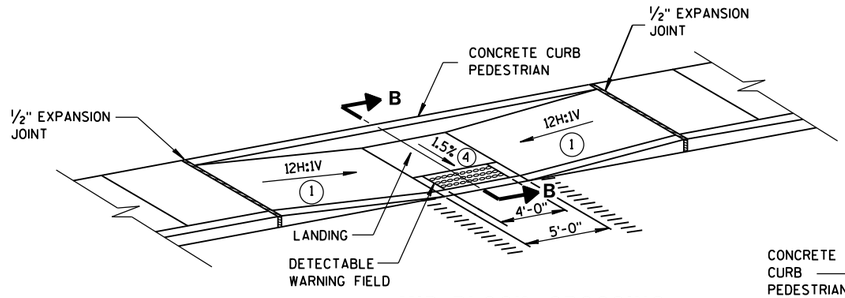
PLAN VIEW

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

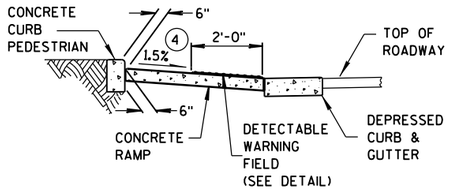
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



ELEVATION VIEW

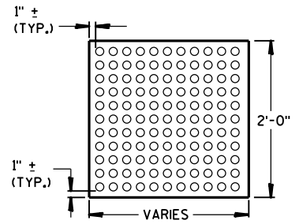


MID-BLOCK CROSSING
TYPE 7A



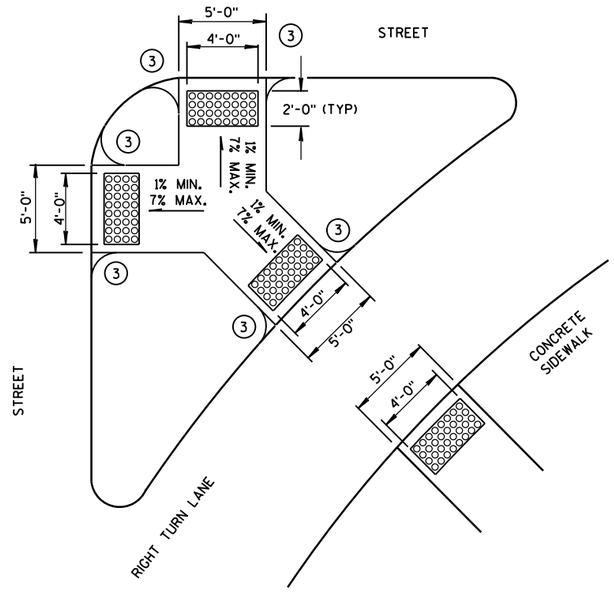
SECTION B-B

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

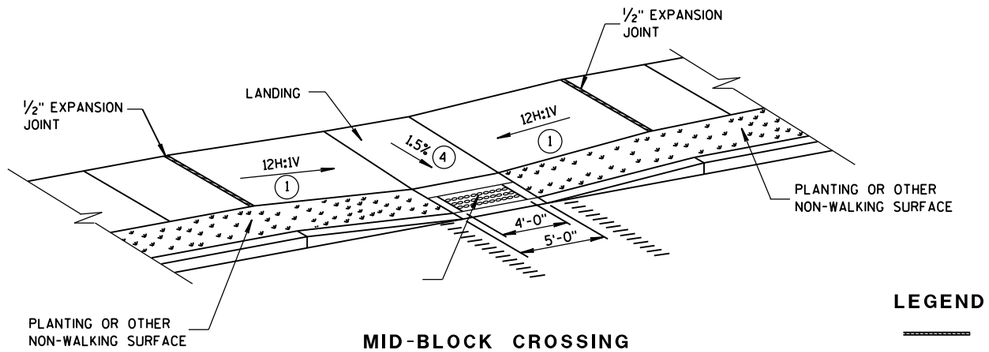


PLAN VIEW

DETECTABLE WARNING FIELD (TYPICAL)



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

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

LEGEND

- ½" 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
/S/ Jerry H. Zogg
ROADWAY STANDARDS [illegible] ENGINEER
FHWA

6

S.D.D. 8 D 5-15e

GENERAL NOTES

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

(1) UNPERFORATED PIPE UNDERDRAIN AND FITTINGS FURNISHED FOR OUTFALL PIPE SHALL MEET THE REQUIREMENTS OF ONE OF THE FOLLOWING SPECIFICATIONS:

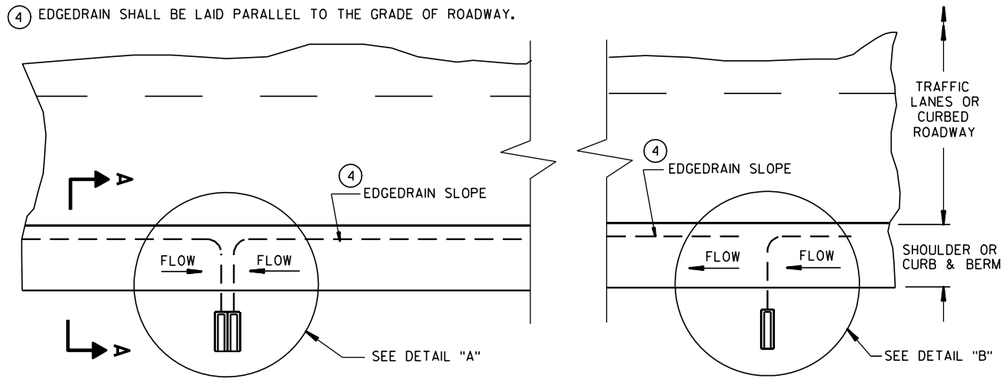
POLYVINYL CHLORIDE (PVC) PLASTIC DRAIN, WASTE, AND VENT PIPE AND FITTINGS, ASTM D 2665, SCHEDULE 40 PVC.

TYPE PSM POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS, ASTM D 3034, SDR 23.5 PVC SEWER PIPE.

(2) MAXIMUM SPACING OF EDGEDRAIN OUTLETS SHALL BE 250 FEET UNLESS OTHERWISE SPECIFIED IN THE CONTRACT OR DIRECTED BY THE ENGINEER.

(3) EDGEDRAIN SHALL BE CONNECTED TO INLETS REGARDLESS OF FLOW DIRECTION FOR DRAINAGE AND MAINTENANCE ACCESS.

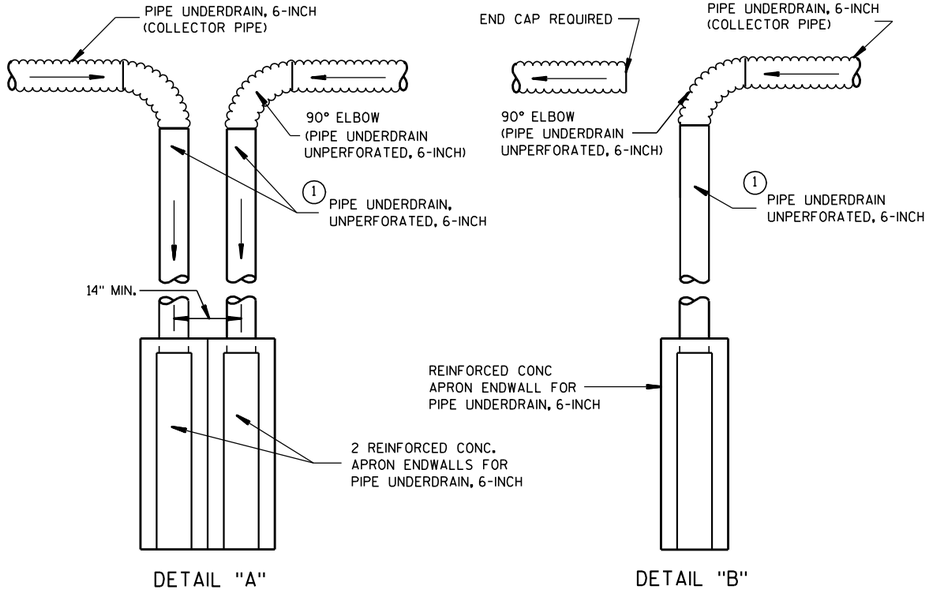
(4) EDGEDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF ROADWAY.



PLAN VIEW

ROADWAY WITH SHOULDERS OR CURBS

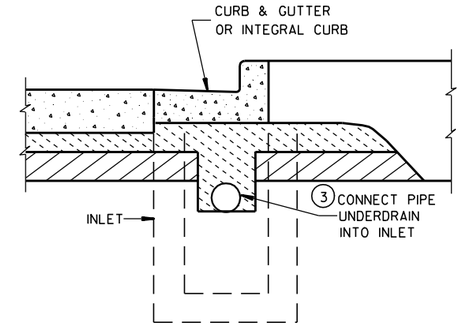
(EDGEDRAIN OUTLETS TO ROADSIDE) (2)



DETAIL "A"
TO BE USED AT LOW POINT LOCATIONS

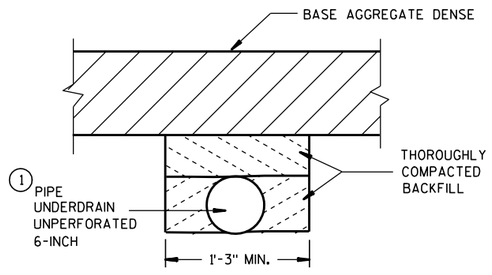
DETAIL "B"
TO BE USED AT INTERMEDIATE LOCATIONS

TYPICAL DRAIN OUT DETAILS



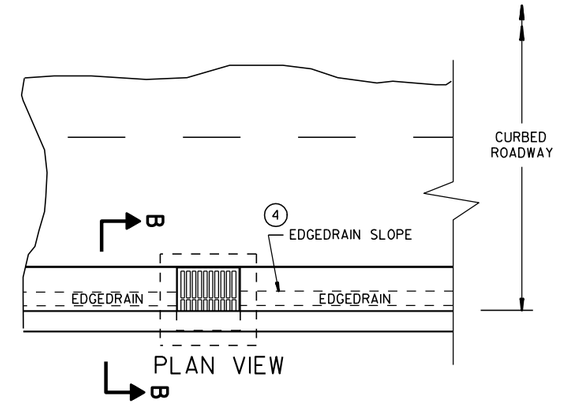
SECTION B-B

URBAN CROSS SECTION



SECTION C-C

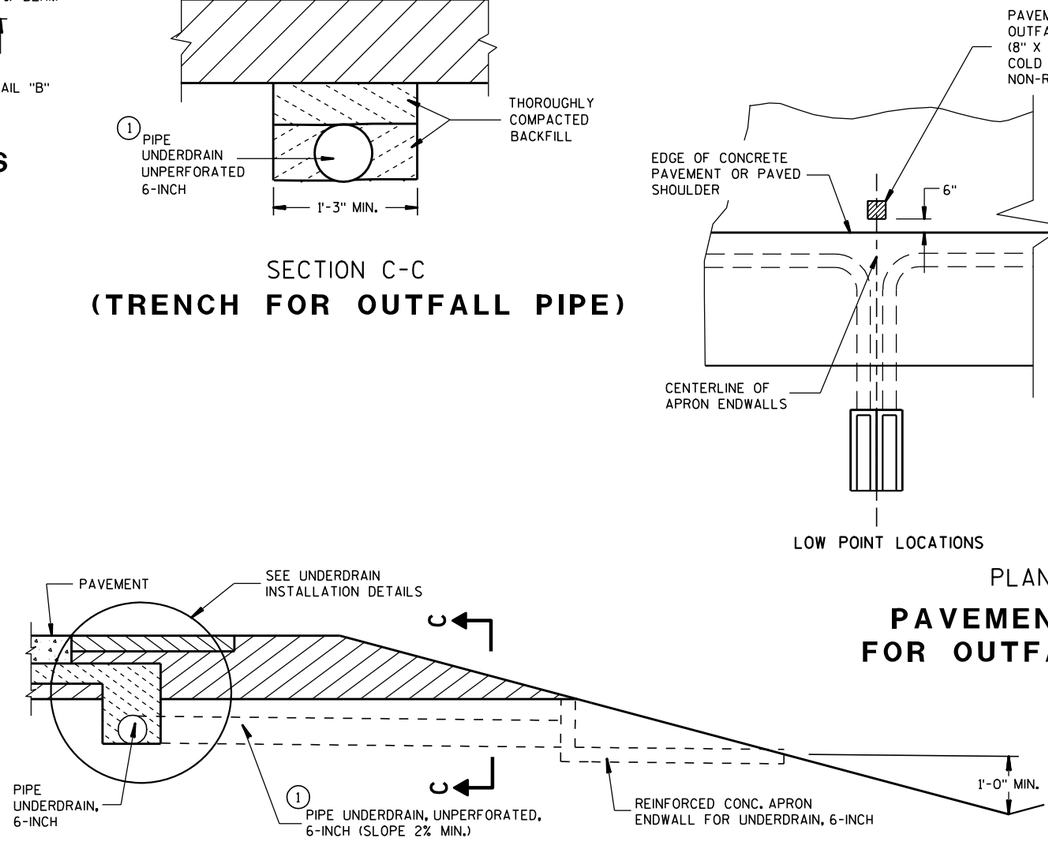
(TRENCH FOR OUTFALL PIPE)



PLAN VIEW

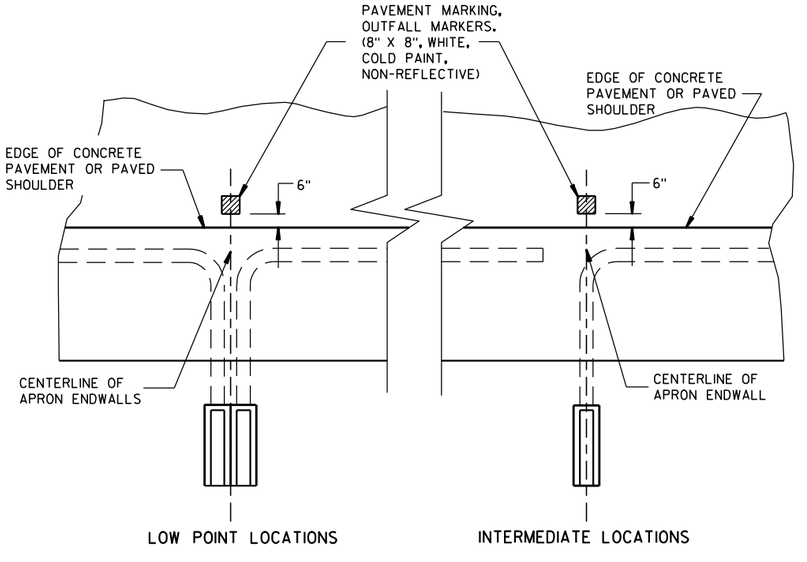
ROADWAY WITH CURBS

(EDGEDRAIN CONNECTS INTO INLET STRUCTURE)



SECTION A-A

RURAL CROSS SECTION



PLAN VIEW

PAVEMENT MARKING FOR OUTFALL MARKERS

EDGEDRAIN OUTLET AND OUTFALL MARKERS

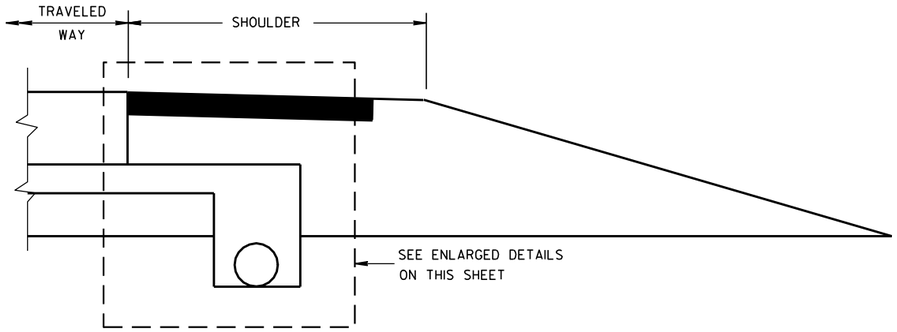
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 8 D 15-4a

6

S.D.D. 8 D 15-4a



RURAL CROSS SECTION

GENERAL NOTES

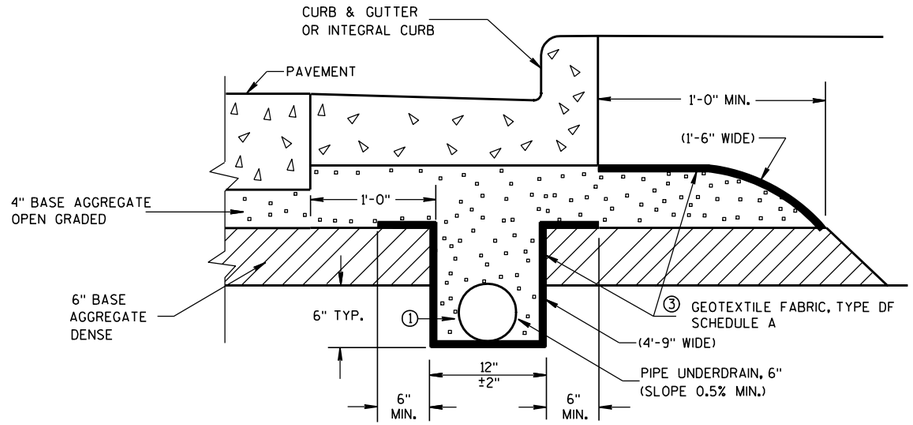
THE DIMENSIONS SHOWN ON THE TYPICAL CROSS SECTIONS WILL GOVERN IN THE EVENT THERE IS A CONFLICT WITH THE DETAILS SHOWN ON THIS DRAWING.

PIPE UNDERDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF THE ROADWAY.

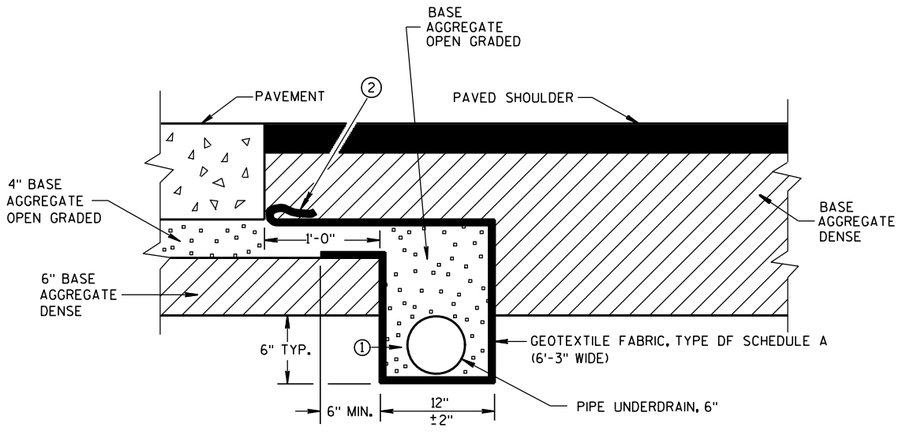
① TRENCH BACKFILL WILL BE PAID FOR AS BASE AGGREGATE OPEN GRADED.

② FOLD OVER EXCESS GEOTEXTILE FABRIC AT THIS LOCATION.

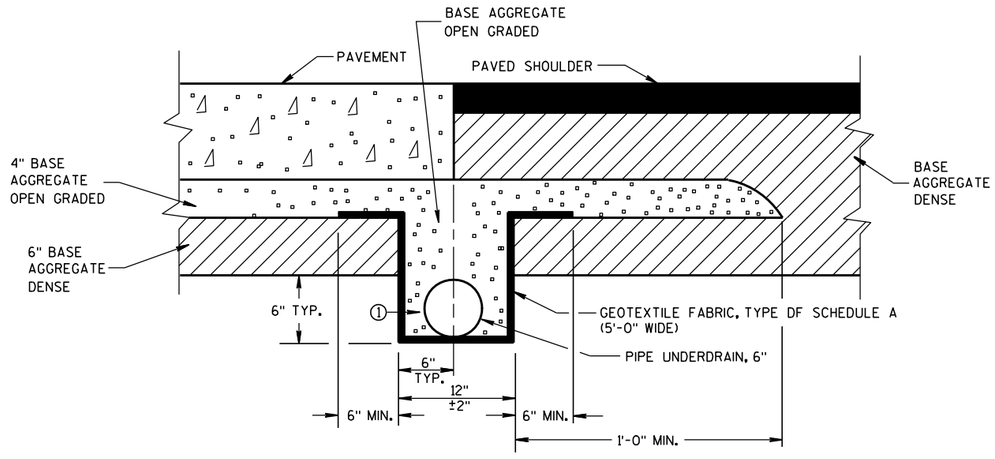
③ TOTAL FABRIC WIDTH IS 6'-3" FOR PAYMENT.



EDGEDRAIN IN URBAN ROADWAY



POST PAVING INSTALLATION
(QUANTITIES ARE BASED ON THIS DETAIL)



PRE-PAVING INSTALLATION ALTERNATE

EDGEDRAIN IN RURAL ROADWAY

EDGEDRAIN AND BASE AGGREGATE OPEN GRADED

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

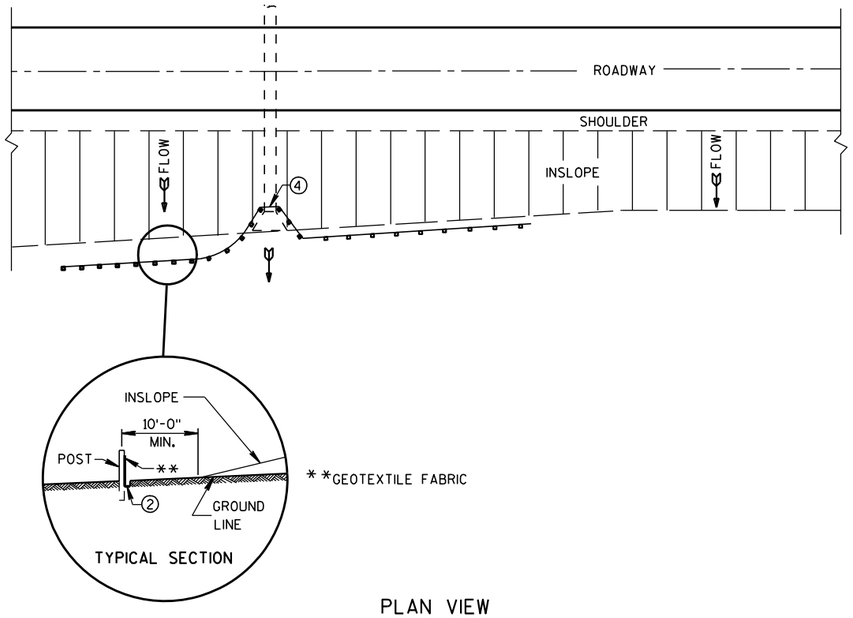
APPROVED

3/21/07 DATE — /S/ Steven W. [illegible] CHIEF MATERIALS MANAGER

FHWA

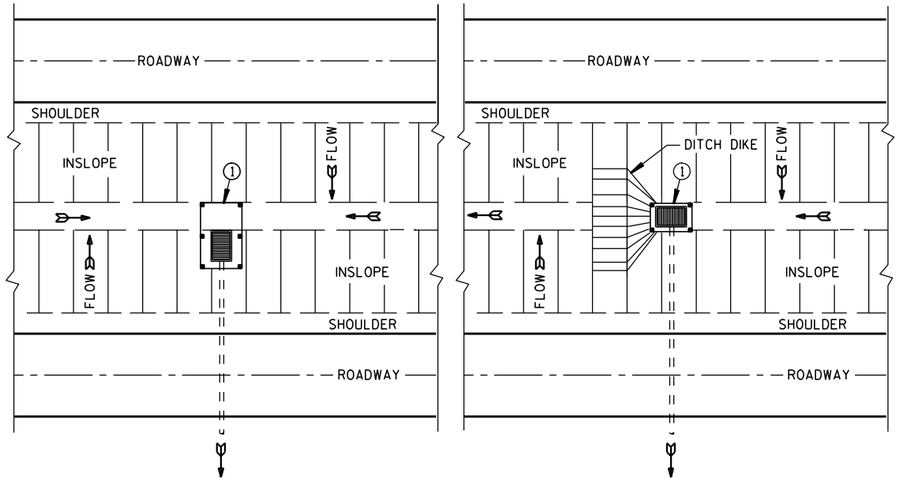
6

S.D.D. 8 D 15-4b



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

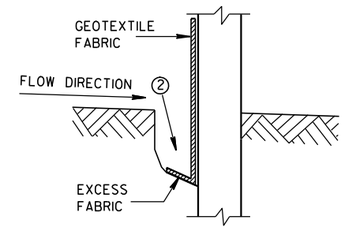
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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

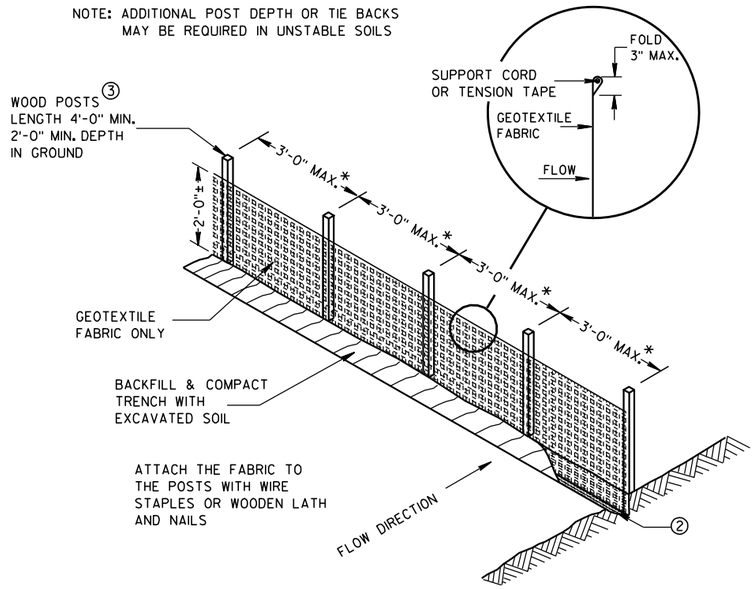
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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

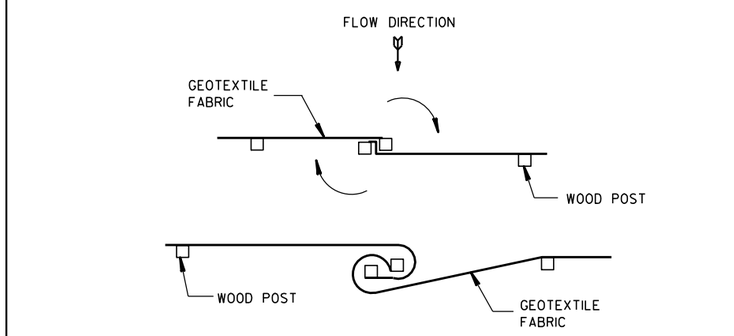
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



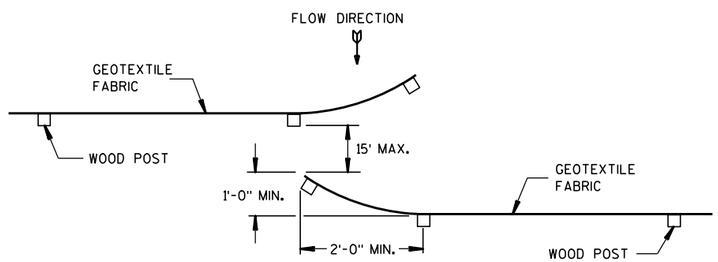
TRENCH DETAIL



SILT FENCE

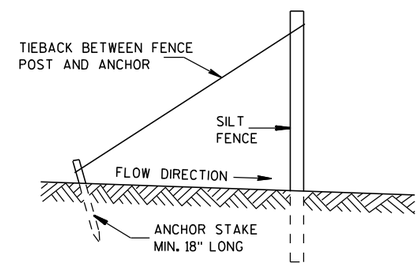


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

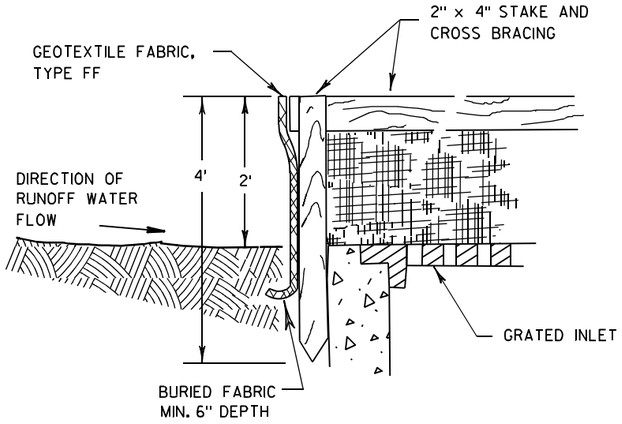
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

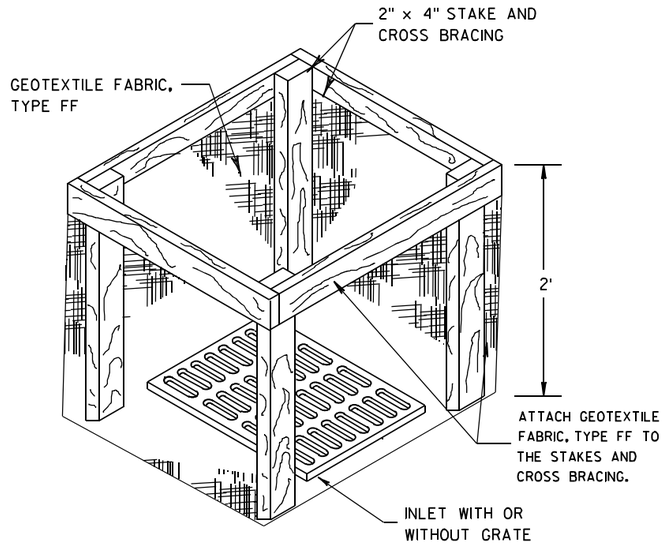
6

S.D.D. 8 E 9-6

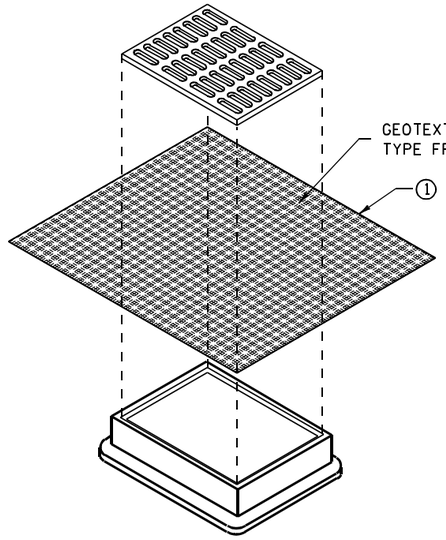
6

S.D.D. 8 E 9-6



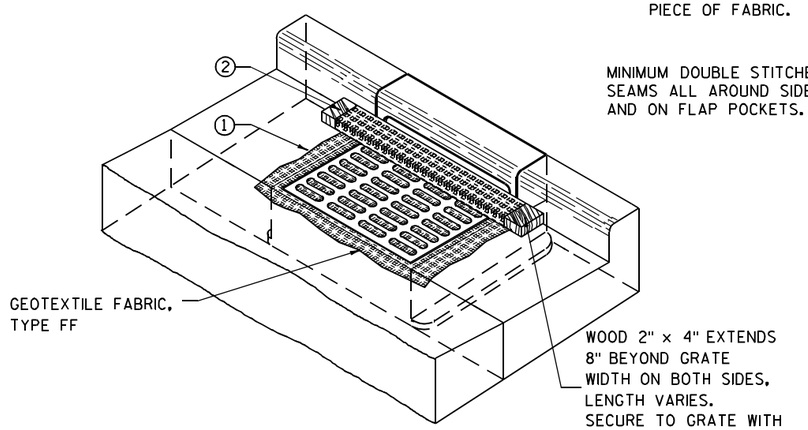


INLET PROTECTION, TYPE A

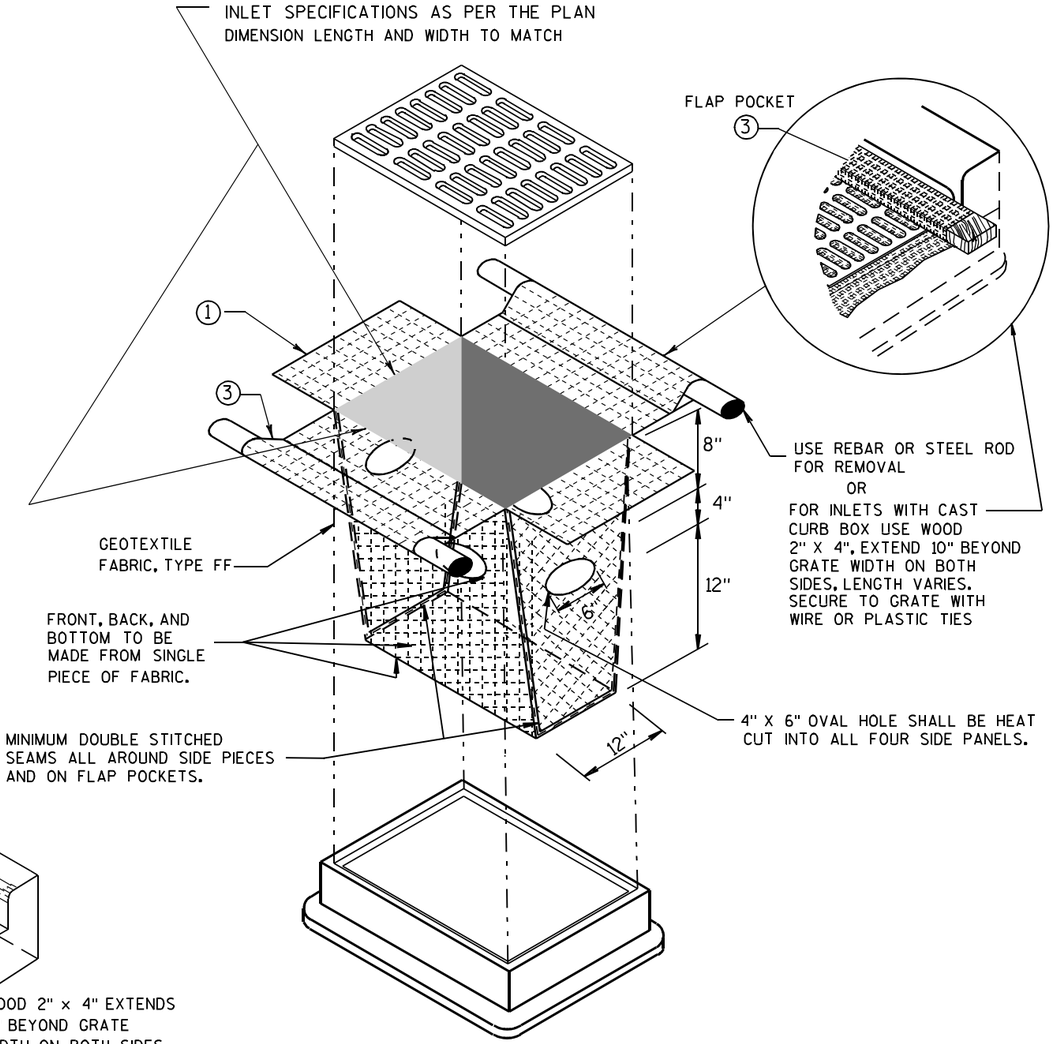


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE 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.

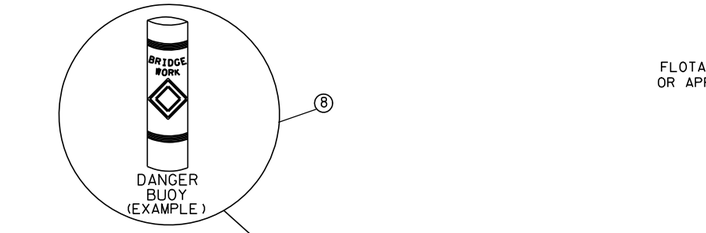
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

INLET PROTECTION
TYPE A, B, C, AND D

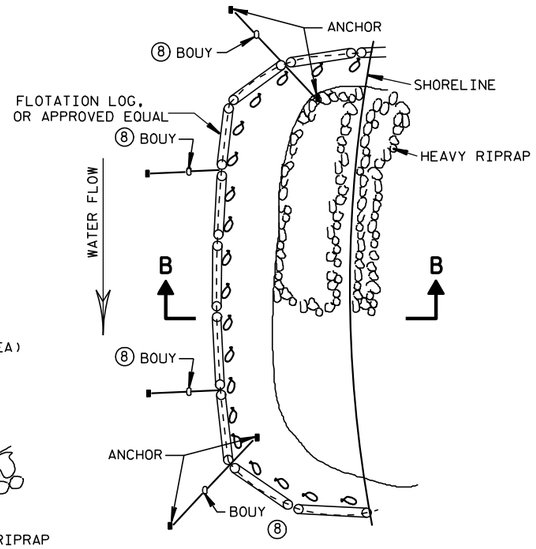
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

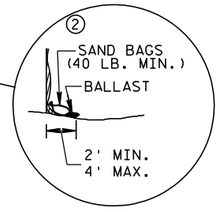
APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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

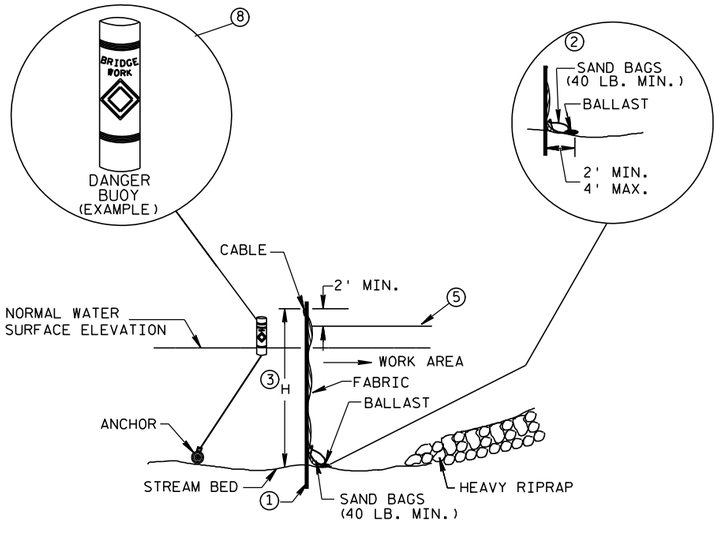


SECTION B-B

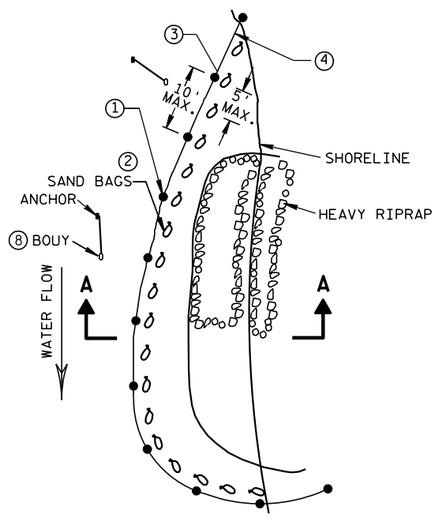




TURBIDITY BARRIER FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



SECTION A-A



PLAN VIEW

TURBIDITY BARRIER STANDARD POST INSTALLATION

TURBIDITY BARRIER PLACEMENT DETAILS

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.

TURBIDITY BARRIER MAY BE REMOVED AT THE ENGINEERS DISCRETION, WHEN PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

① DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.

② SANDBAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.

③ WHEN BARRIER HEIGHT, H, EXCEEDS 8 FT., POST SPACING MAY NEED TO BE DECREASED.

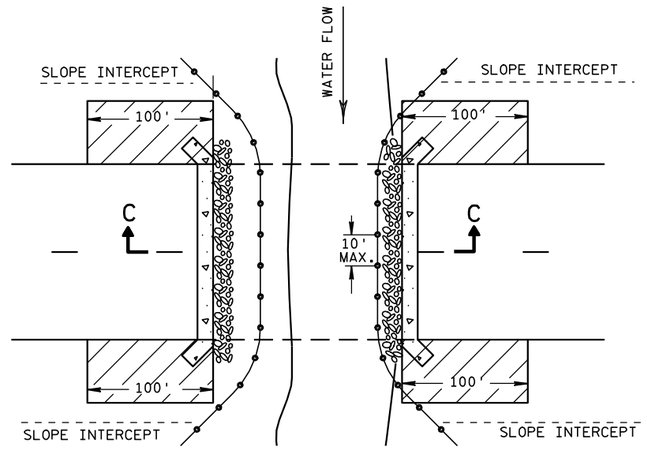
④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

⑤ ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MIMIMUM BARRIER HEIGHT SHALL BE 2'GREATER THAN EITHER THE O2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WICHEVER IS GREATER.

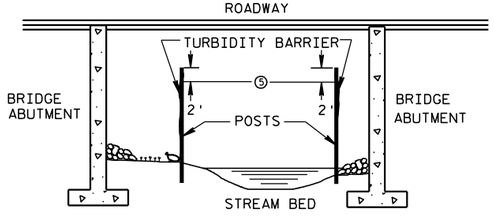
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

⑦ ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.

⑧ USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



PLAN VIEW



SECTION C-C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

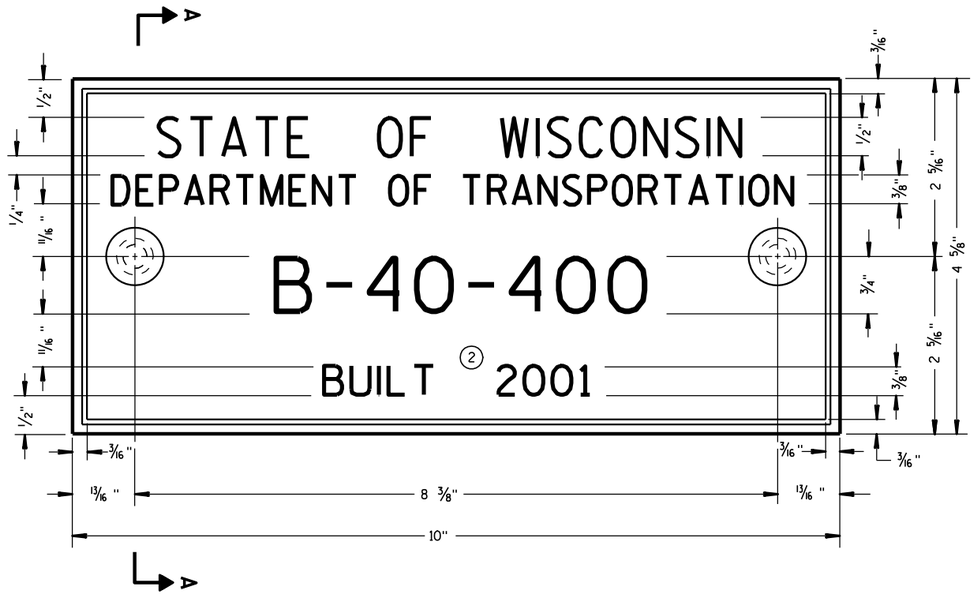
APPROVED
6/04/02 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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S.D.D. 8 E 11-2

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S.D.D. 8 E 11-2



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)

FOR MULTI-UNIT STRUCTURES
LINE 3 ABOVE SHALL READ

B = BRIDGE
C = CULVERT
R = RETAINING WALL

COUNTY NO.

BRIDGE NO.

UNIT NO. FOR MULTIPLE UNIT BRIDGE

B-40-400-1A

NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

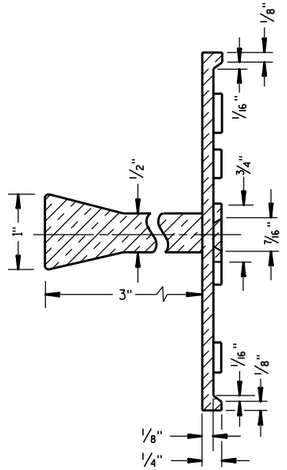
GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

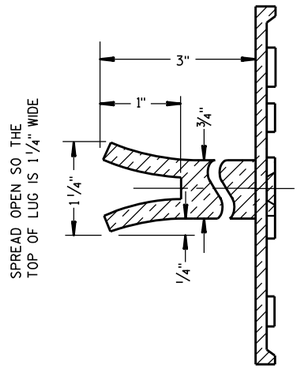
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

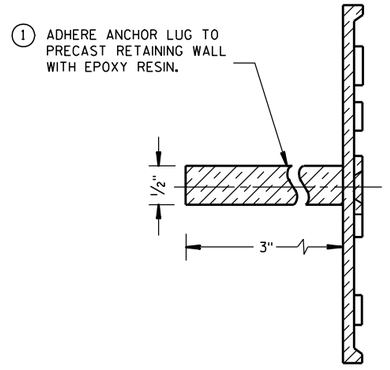
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

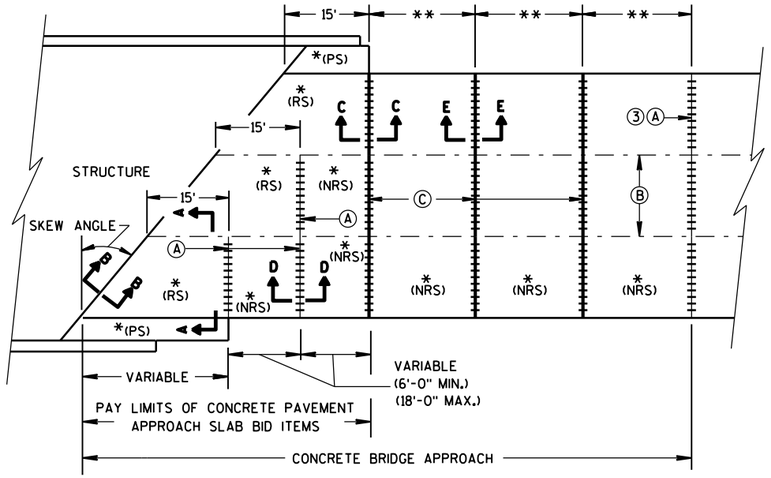
3/26/10 DATE

/S/ Scot Beck -- CHIEF STRUCTURAL DEVELOP ENGINEER

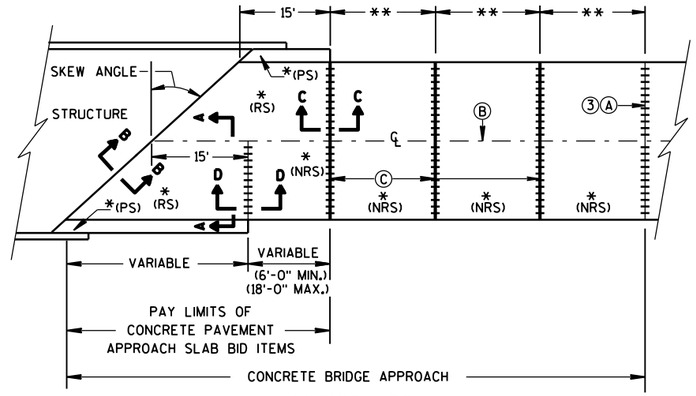
FHWA

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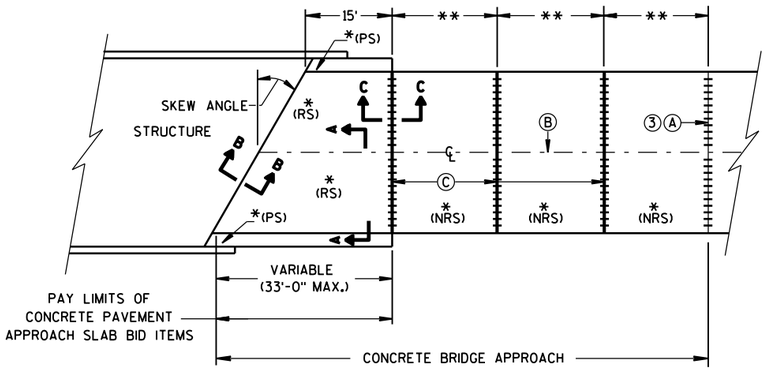
S.D.D. 12 A 3-10



SKEWED APPROACH
(PAVEMENT MORE THAN 2 LANES)



SKEWS >30°
(PAVEMENT WIDTH ≤30')



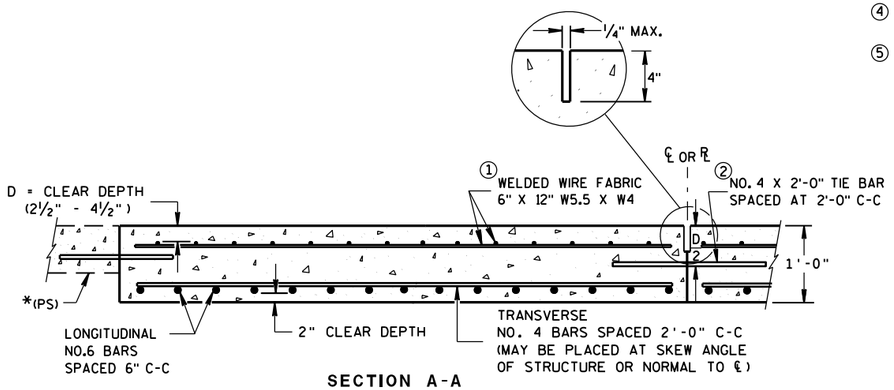
SKEWS ≤30°
(PAVEMENT WIDTH ≤30')

APPROACH SLAB AND ADJACENT PAVEMENT

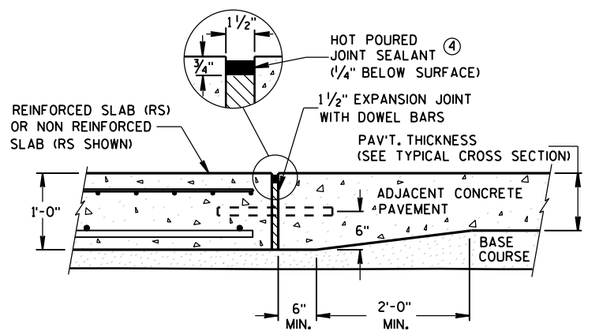
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER: CONCRETE PAVEMENT, OR CONCRETE SURFACE DRAIN (SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

**STANDARD TRANSVERSE JOINT SPACING (SEE SDD 13C4, SDD 13C11, & SDD 13C13)
***STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11, & SDD 13C13)

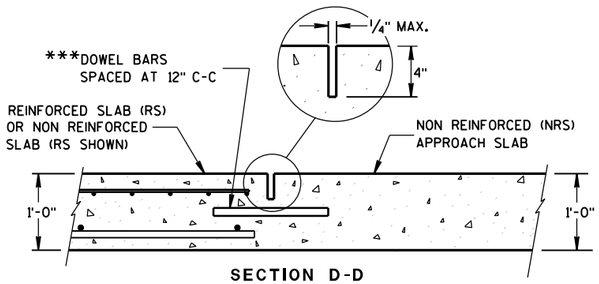
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄
(B) STANDARD LONGITUDINAL JOINT AND TIE BARS.
(C) 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄



SECTION A-A
REINFORCEMENT POSITIONING DETAIL



SECTION C-C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT



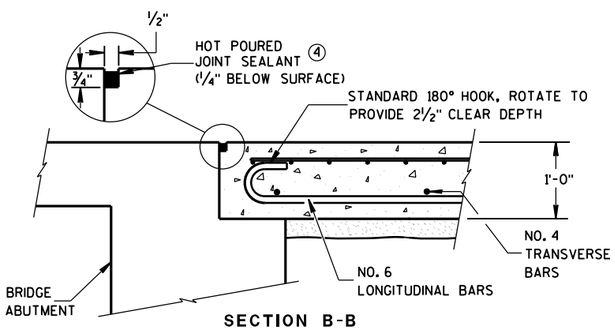
SECTION D-D
CONTRACTION JOINT

GENERAL NOTES

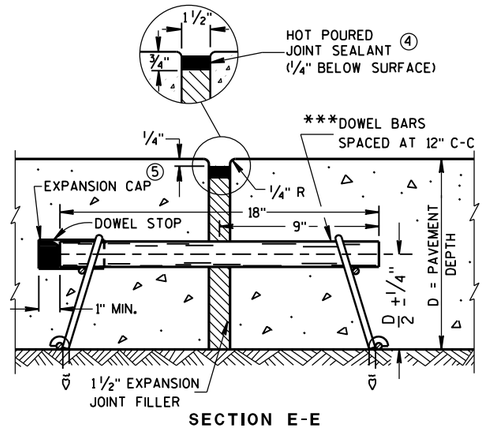
THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

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 DOWEL A CONTRACTION JOINT THAT ABUTS 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



SECTION E-E
EXPANSION JOINT

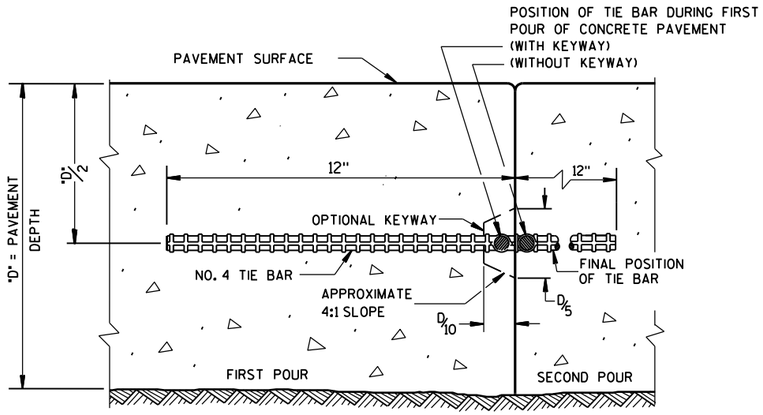
CONCRETE BRIDGE APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

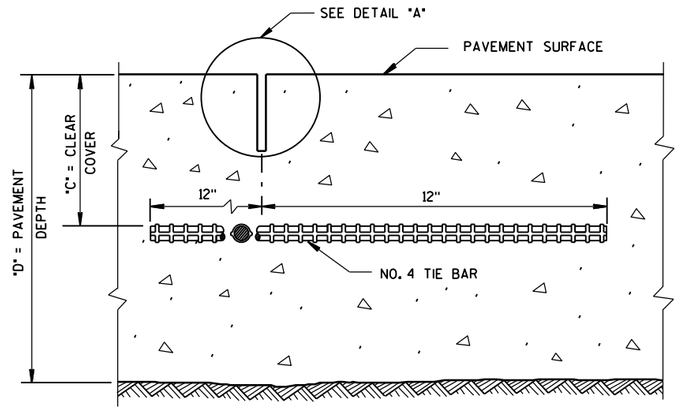
APPROVED
June, 2014 — DATE
/S/ Deb Bischoff — PAVEMENT POLICY & DE
EER
FHWA

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S.D.D. 13 B 2-7a



CONSTRUCTION JOINT



SAWED JOINT

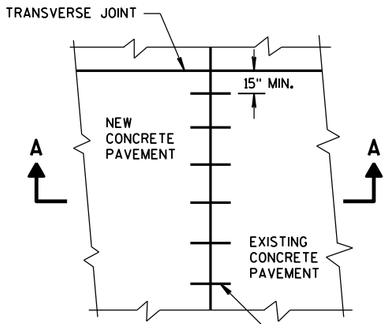
GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

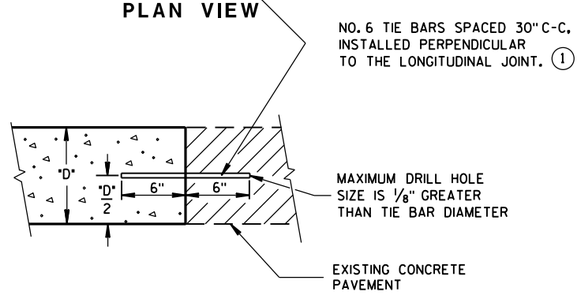
CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

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

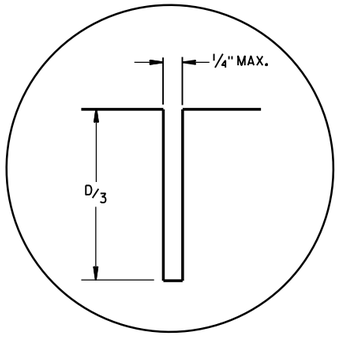


PLAN VIEW



SECTION A-A

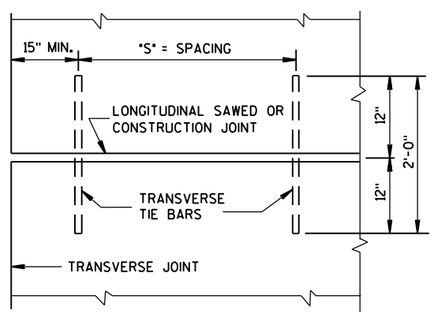
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"

TIE BAR TABLE

PAVEMENT DEPTH "D"	CLEAR COVER "C"	MAXIMUM TIE BAR SPACING "S"	
		PAVEMENT WIDTH	
		24' OR 26'	≥ 30'
6, 6 1/2"	3" ± 1/2"	48"	42"
7, 7 1/2"	3 1/4" ± 1"	45"	36"
8, 8 1/2"	3 3/4" ± 1"	39"	30"
9, 9 1/2"	4 1/4" ± 1"	33"	27"
10, 10 1/2"	4 3/4" ± 1"	30"	24"
11, 11 1/2"	5 1/4" ± 1"	27"	21"
12"	5 3/4" ± 1"	24"	21"



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

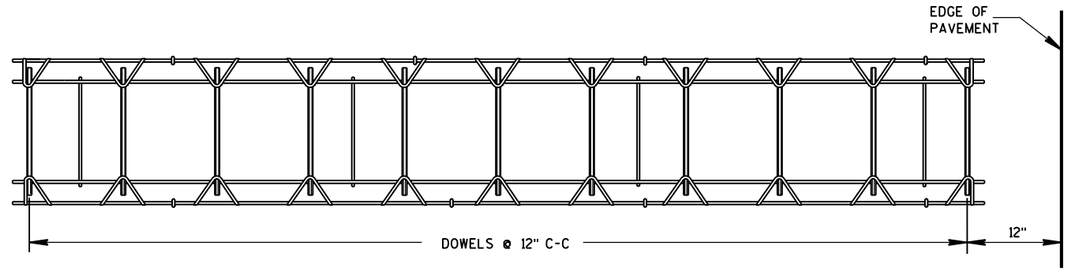
5-3-2013
DATE

/S/ Deb Bischoff
PAVEMENT POLICY & DE ...NEER

FHWA

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S.D.D. 13 C 1-16

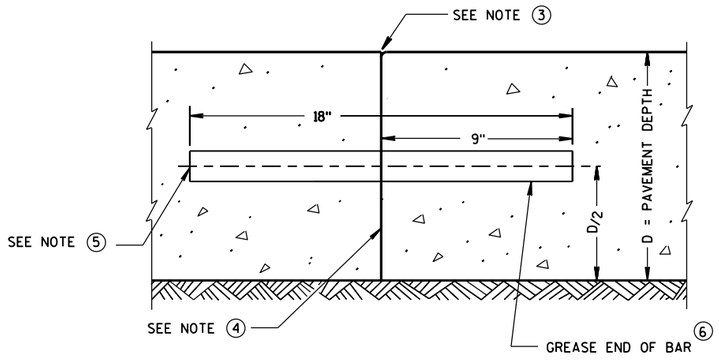


PLAN VIEW

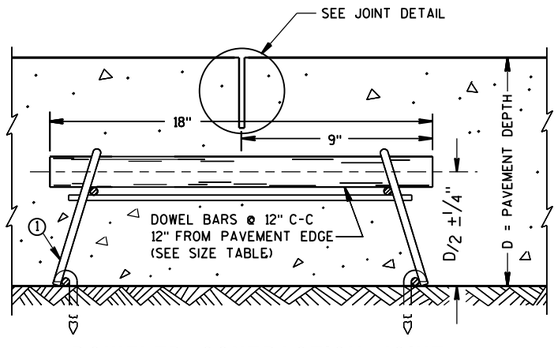


SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①



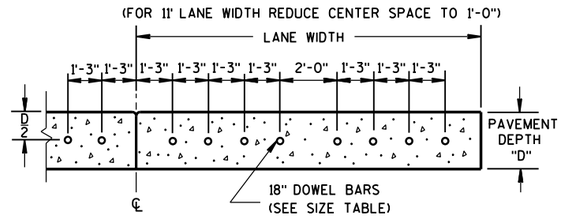
TRANSVERSE CONSTRUCTION JOINT



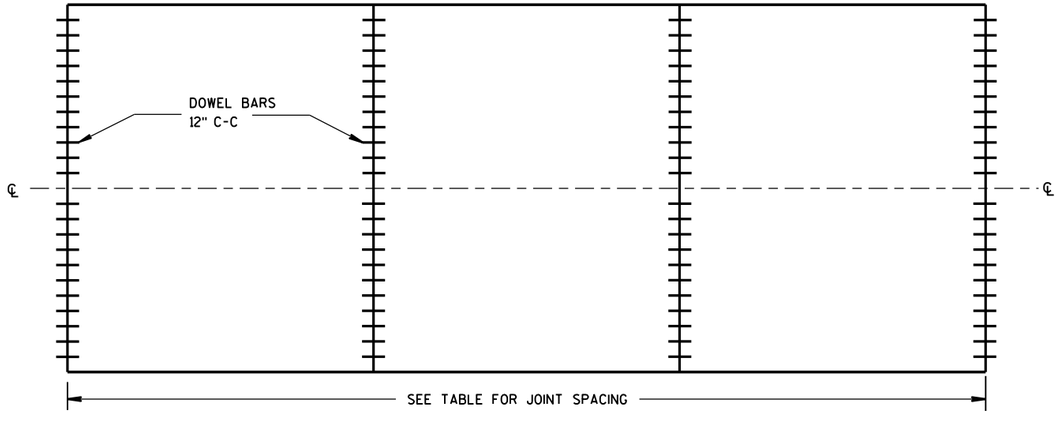
DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



CONTRACTION JOINT LOCATIONS

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE LONGITUDINAL JOINT AND THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① **OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.**

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

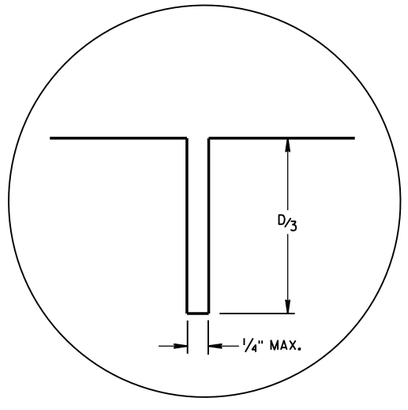
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



JOINT DETAIL

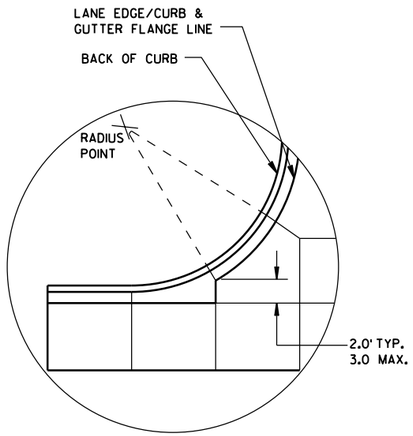
URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

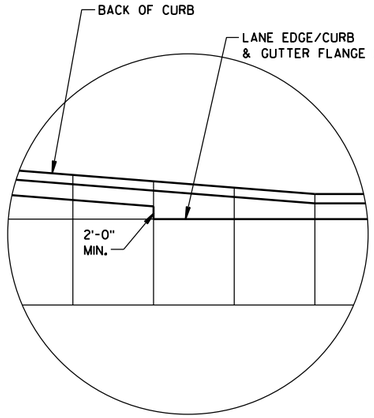
APPROVED
5/3/2013 DATE
/S/ Deb Bischoff
PAVEMENT POLICY & DE ENGINEER
FHWA

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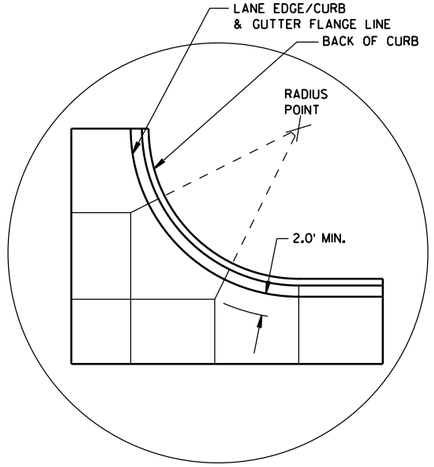
S.D.D. 13 C 13-8



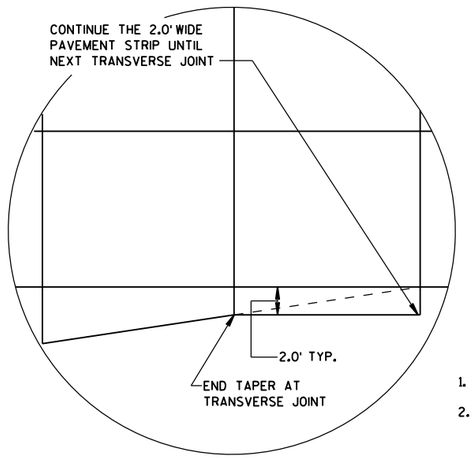
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G. MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

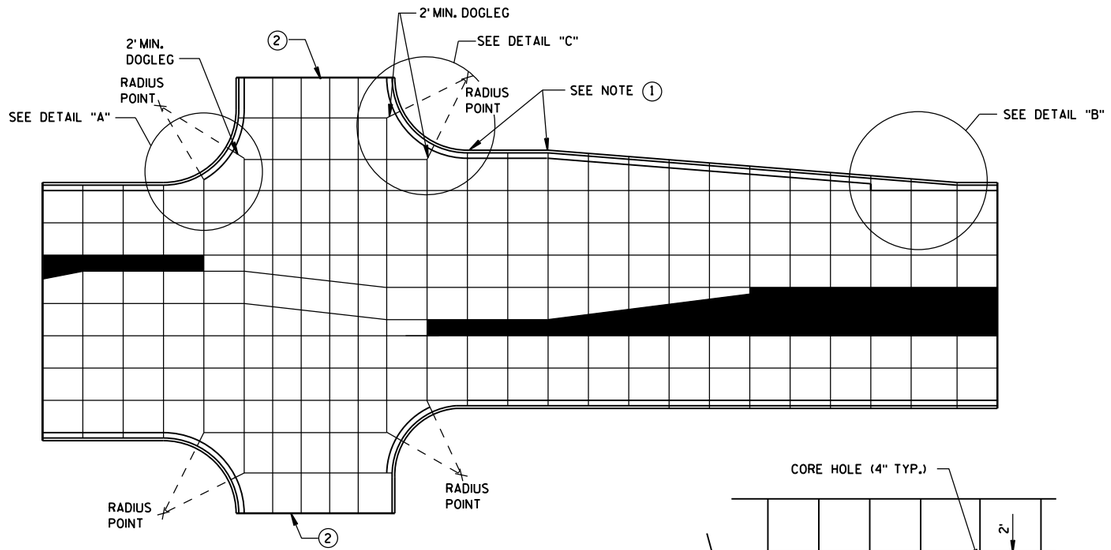
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

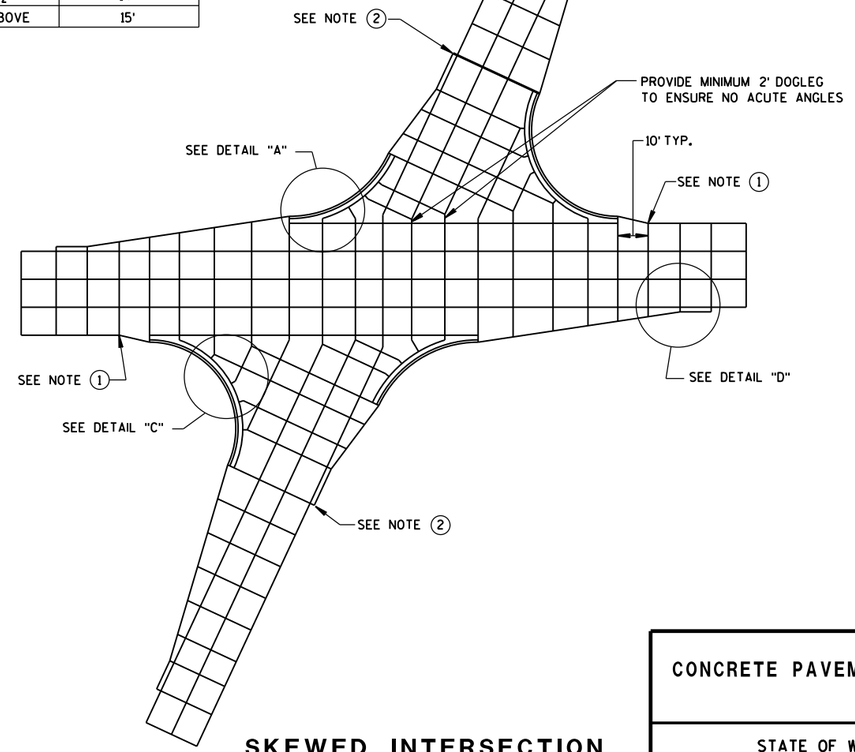
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



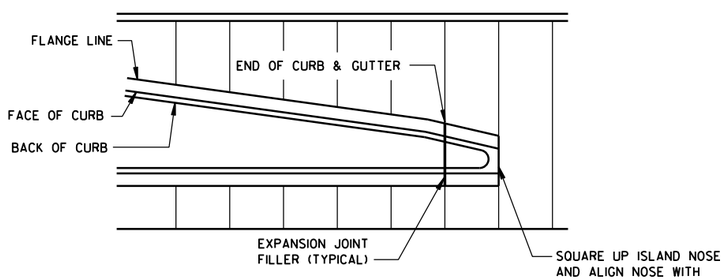
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

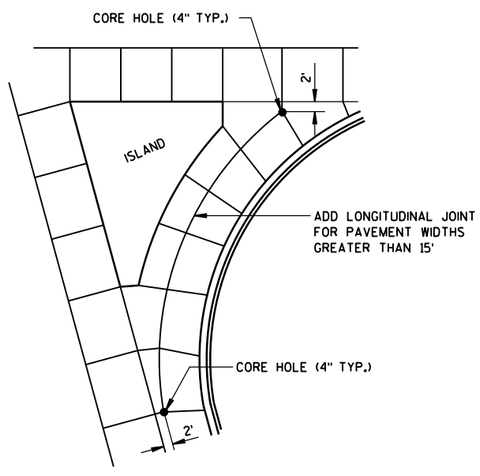
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

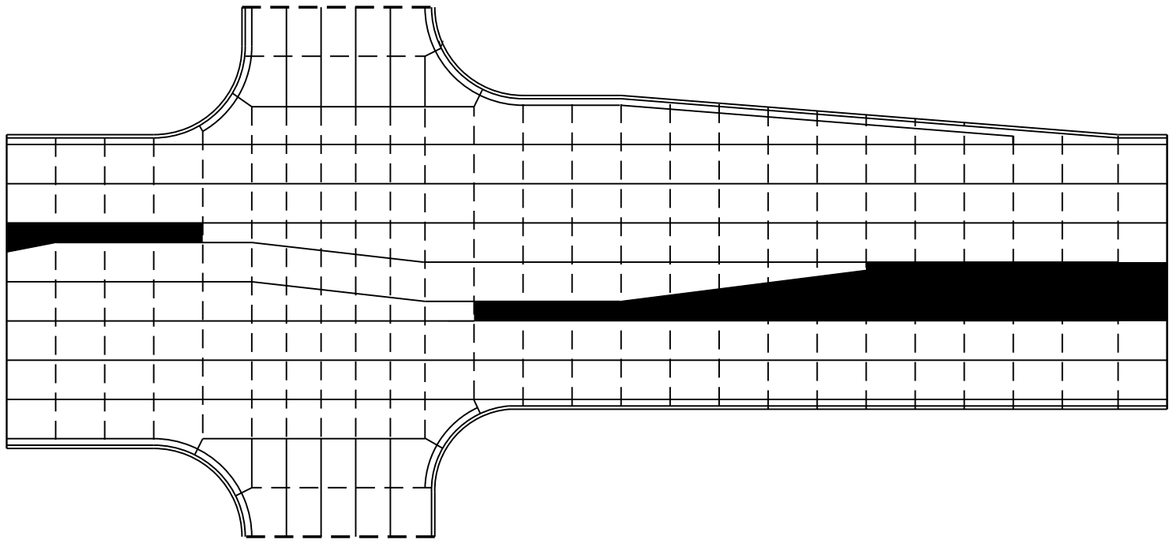
S.D.D. 13 C 18-2a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

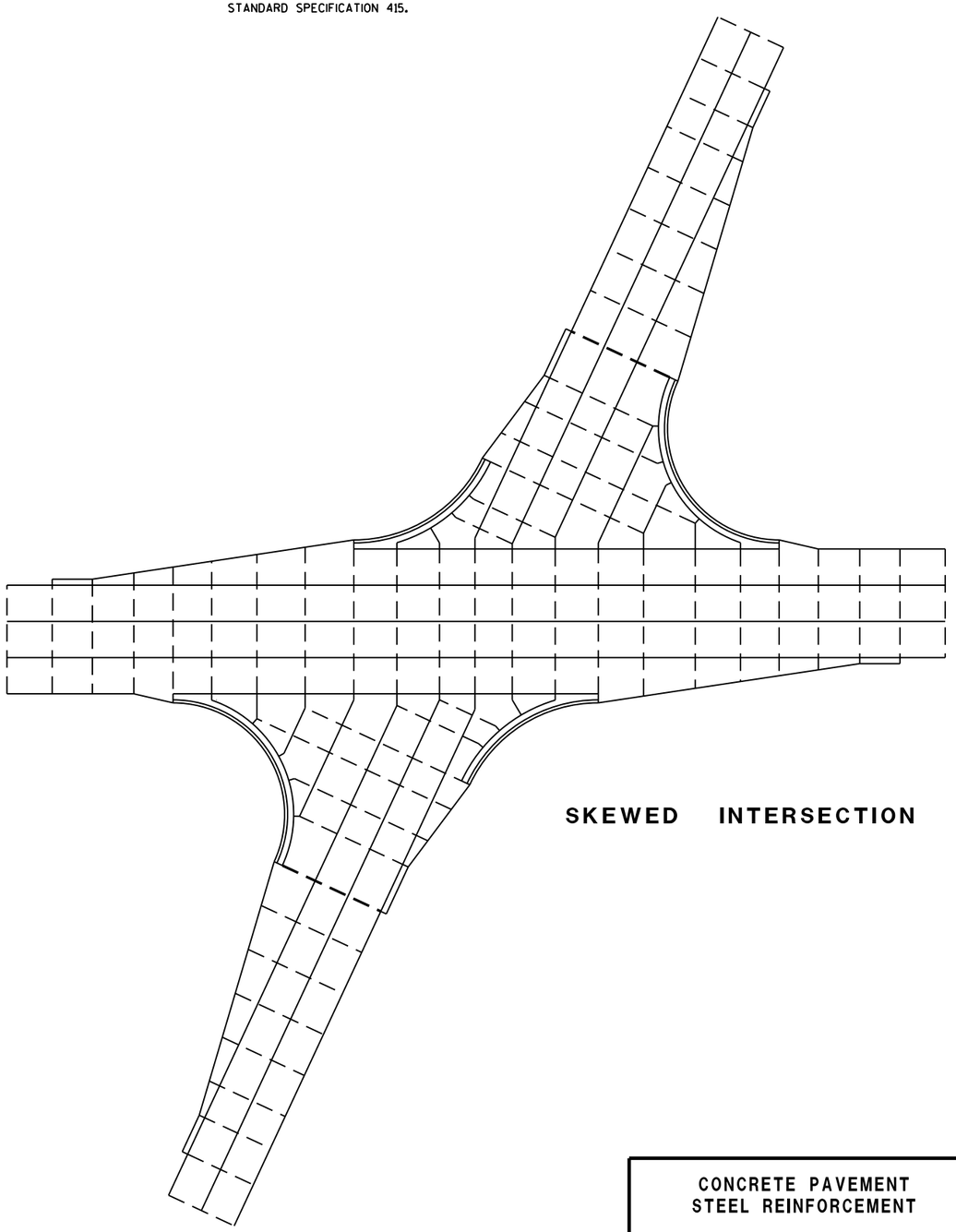
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

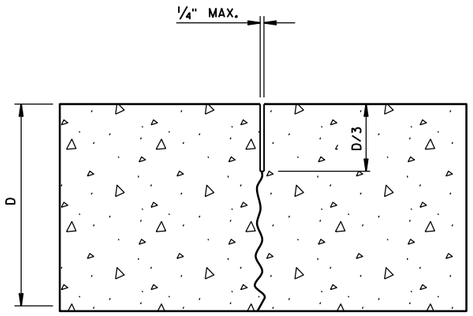
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

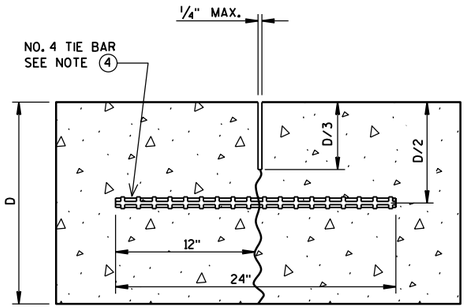
S.D.D. 13 C 18-2b

6

S.D.D. 13 C 18-2b



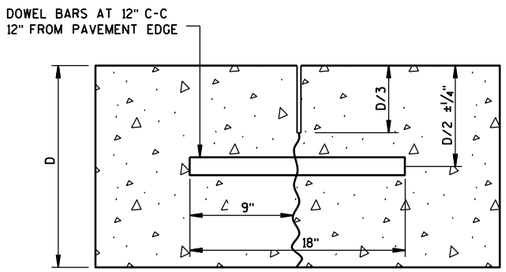
UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

GENERAL NOTES

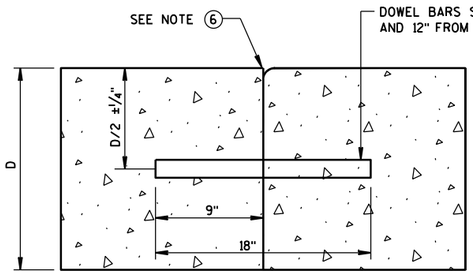
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. SPACE TIE BARS AT LONGITUDINAL CONSTRUCTION OR CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C1.
5. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
6. IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.



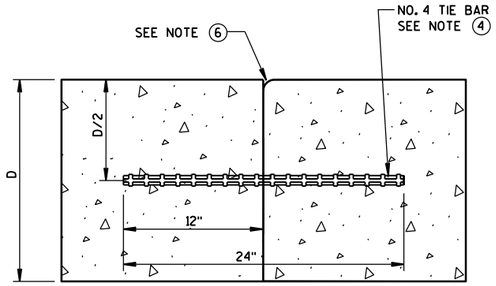
DOWELED-TRANSVERSE

CONTRACTION JOINTS

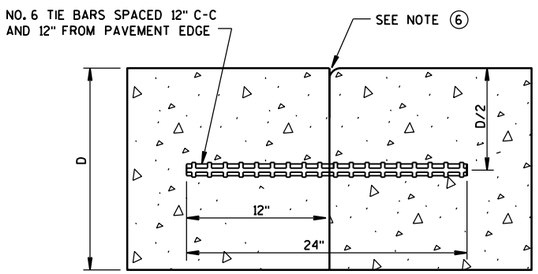
SEE NOTE (2)



DOWELED TRANSVERSE

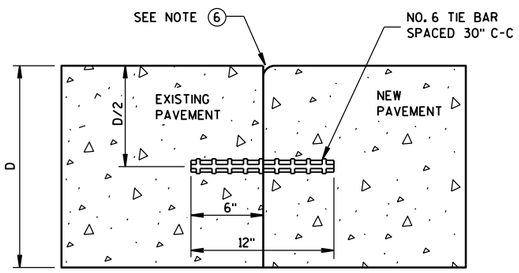


TIED LONGITUDINAL



TIED TRANSVERSE

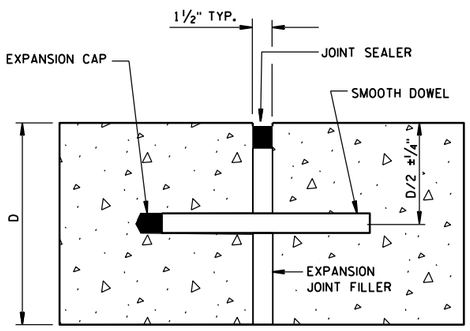
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

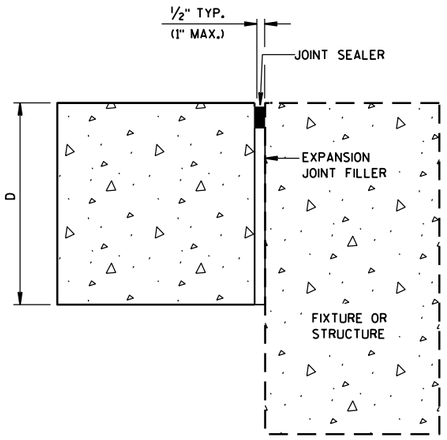
CONSTRUCTION JOINTS

SEE NOTE (5)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

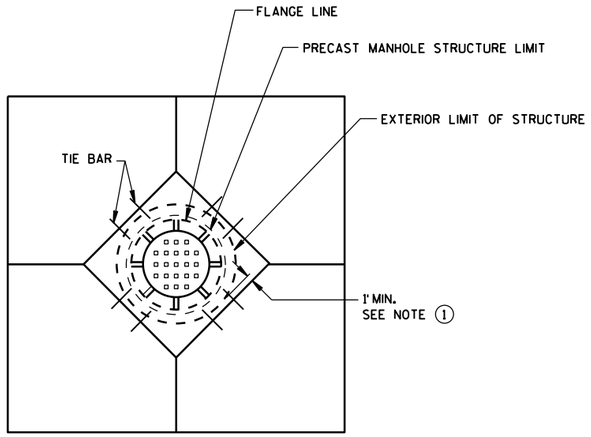
EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

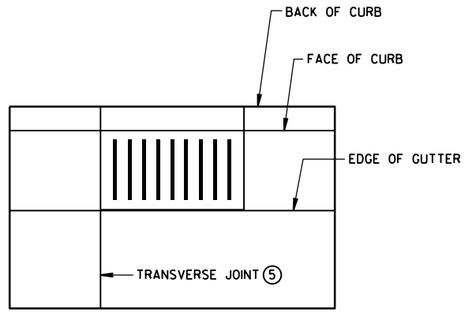
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

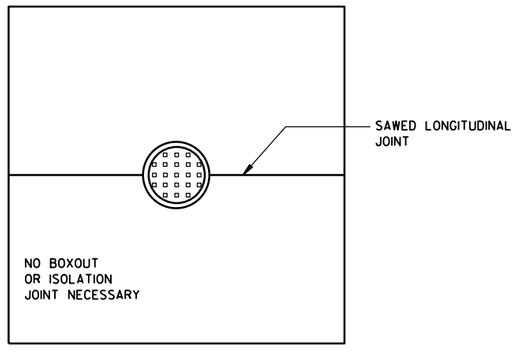
S.D.D. 13 C 18-2c



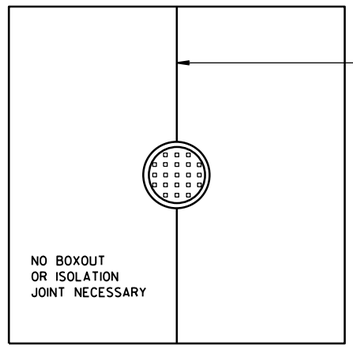
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



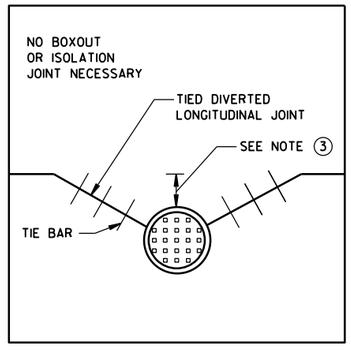
INLET WITH TRANSVERSE JOINT



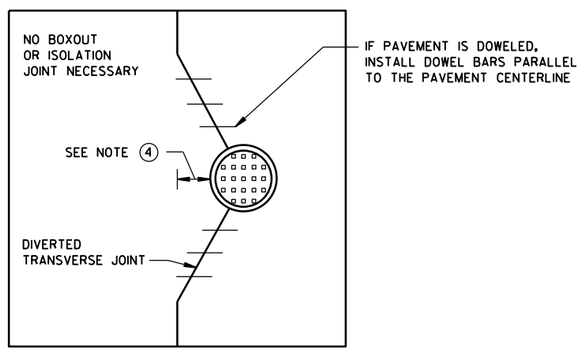
MANHOLE WITH LONGITUDINAL JOINT



MANHOLE WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT

GENERAL NOTES

(1) USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1-FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.

(2) ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.

(3) IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDIAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(4) IF DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(5) ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-3-2013 — DATE

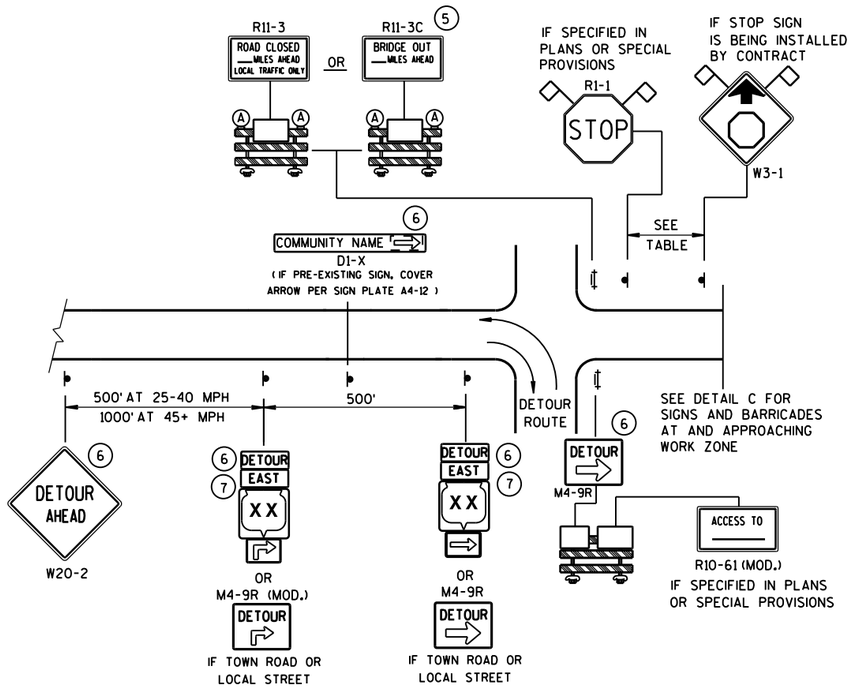
/S/ Deb Bischoff — PAVEMENT POLICY & DE

NEER

FHWA

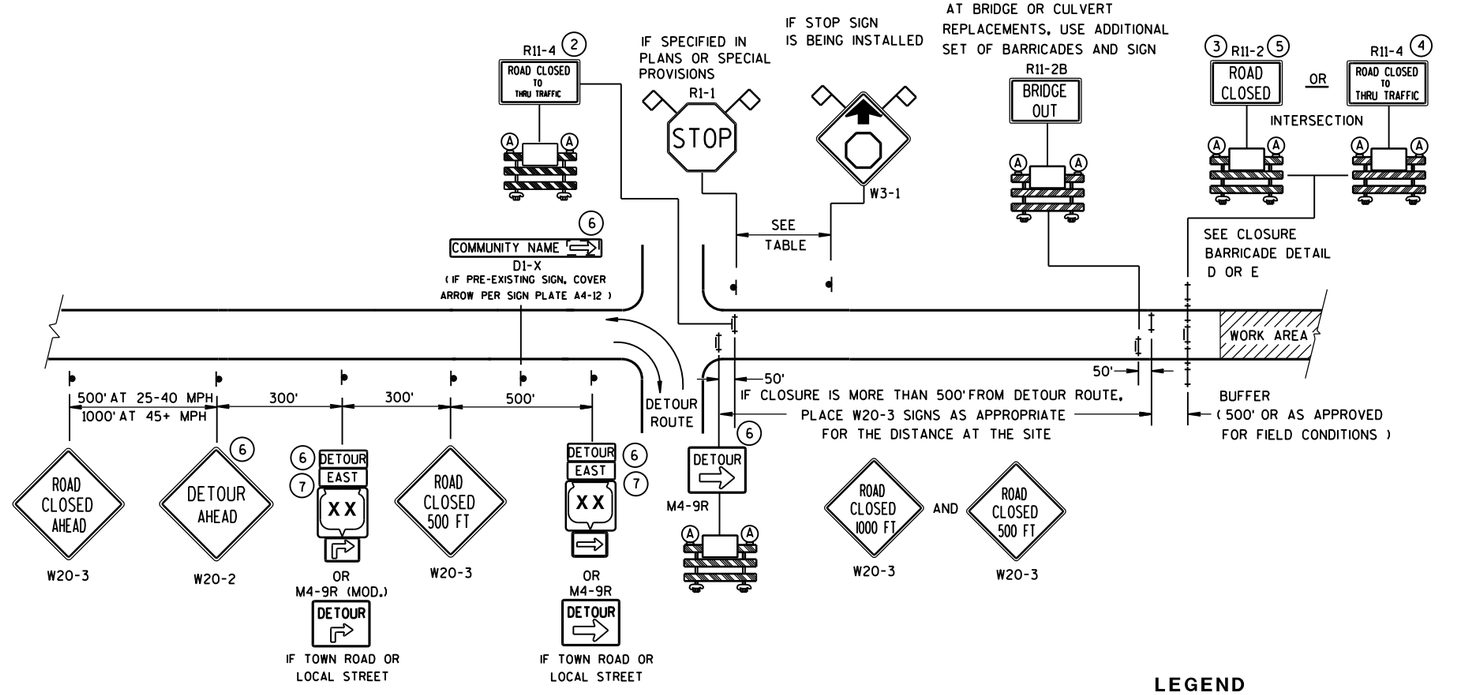
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S.D.D. 13 C 18-2d



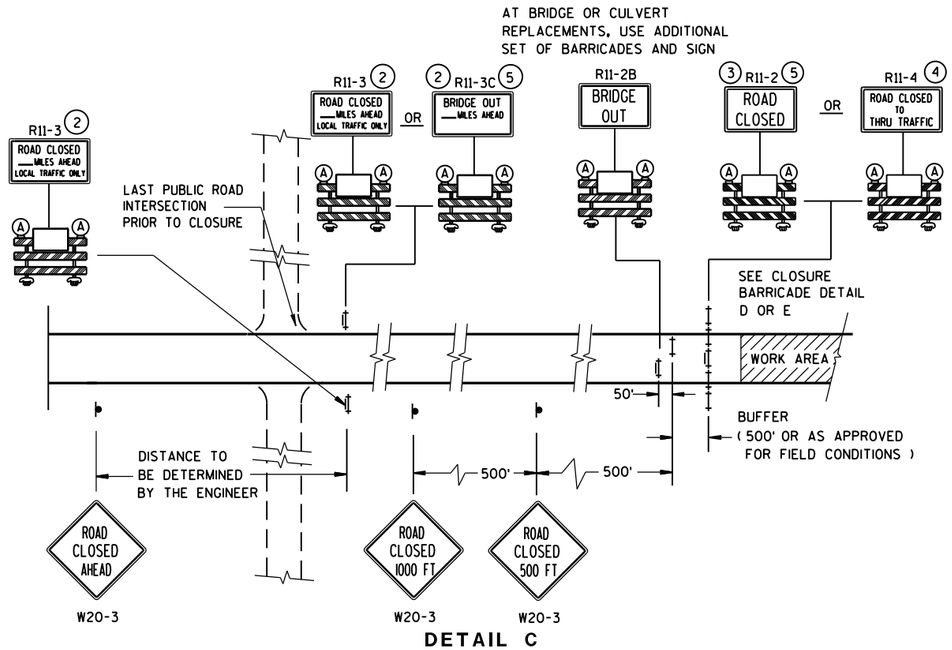
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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

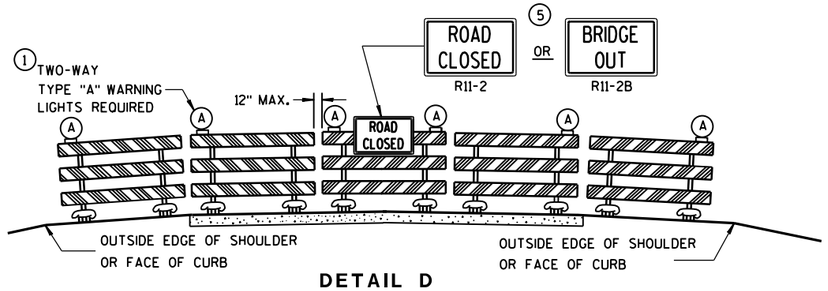
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

8/2013 DATE — /S/ Travis Feltes STATE TRAFFIC ENGINEER — DESIGN

FHWA

6

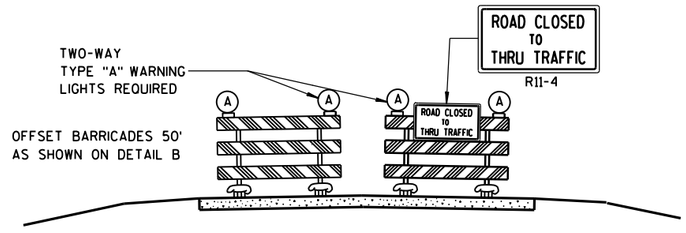
S.D.D. 15 C 2-5a



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
DESIGN

FHWA

6

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

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

GENERAL NOTES

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

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. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

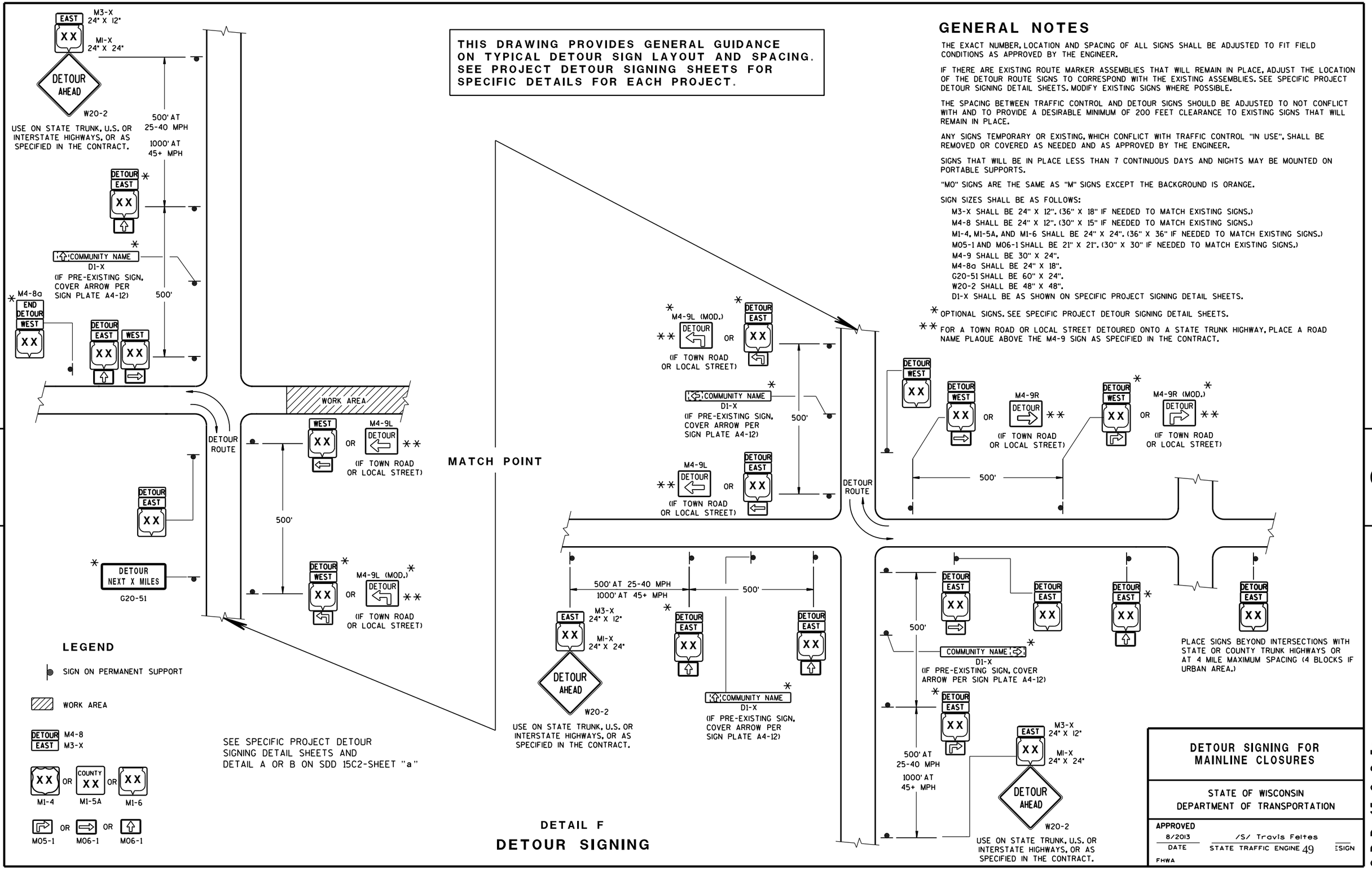
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- 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.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



DETAIL F

DETOUR SIGNING

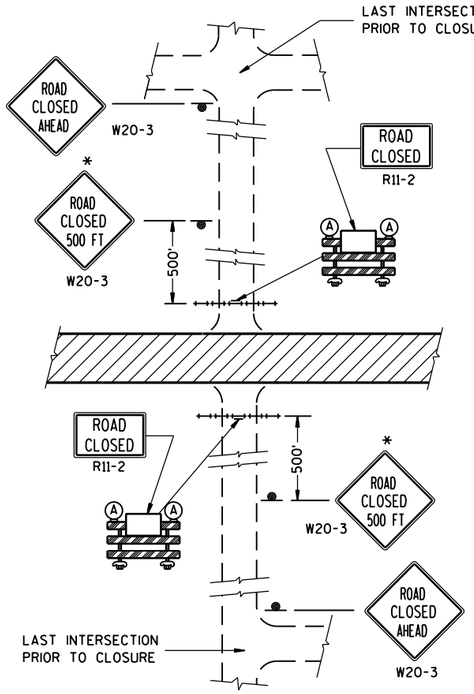
DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER

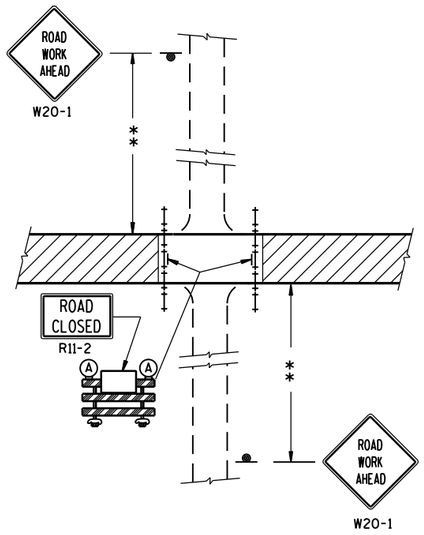
FHWA

6 S.D.D. 15 C 2-5c



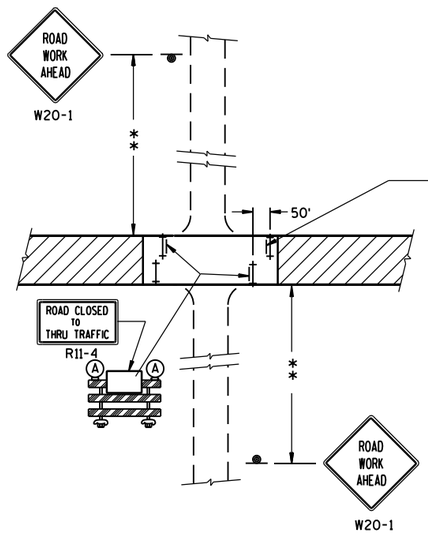
DETAIL 1

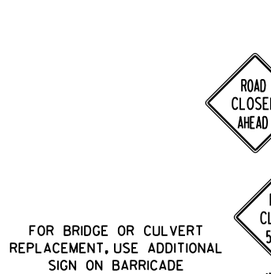
(NO ACCESS TO PROJECT)



DETAIL 2

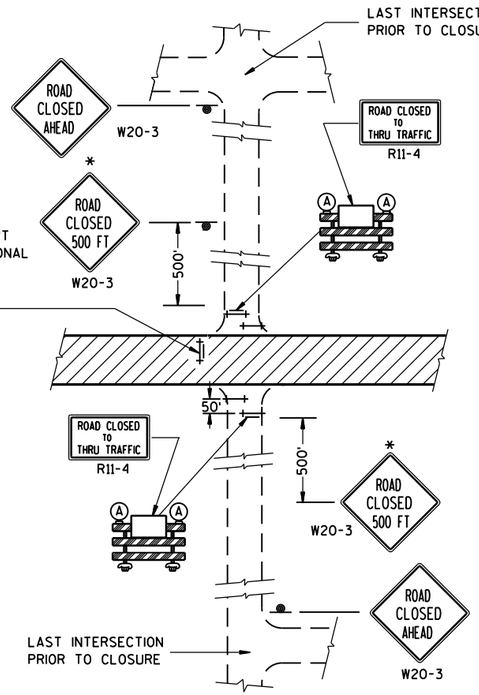
(PUBLIC CROSS-TRAFFIC MAINTAINED. NO ACCESS TO PROJECT).





DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

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.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

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 AND R11-4 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.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

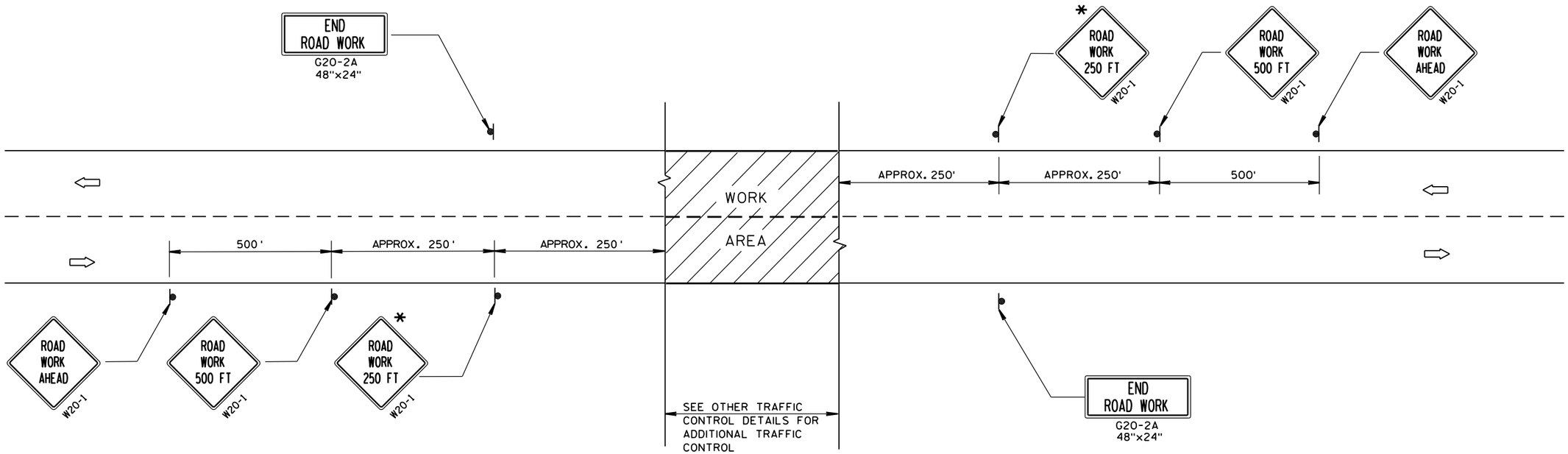
APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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S.D.D. 15 C 3-2

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S.D.D. 15 C 3-2



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

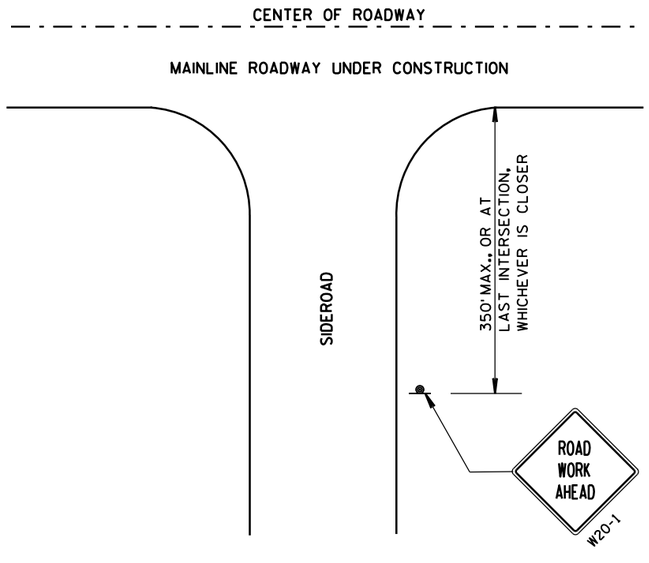
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS.

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

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 — DATE

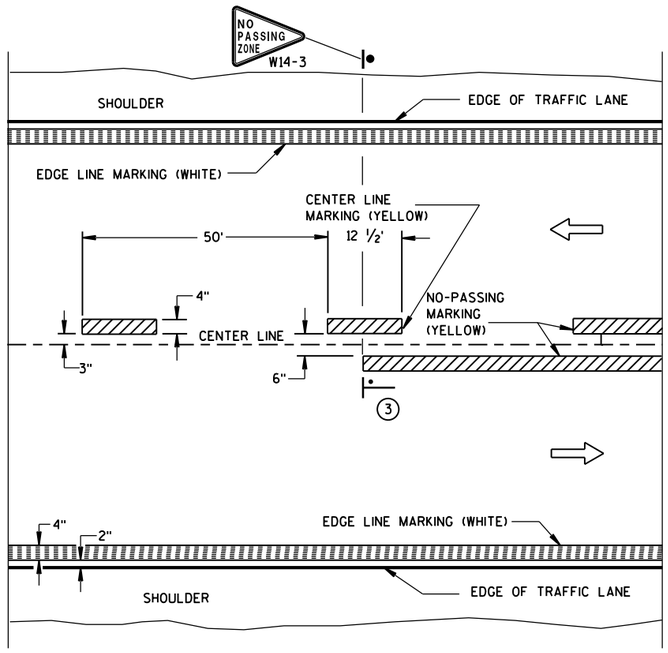
/S/ Travis Feltes — STATE TRAFFIC ENGINEER

FHWA

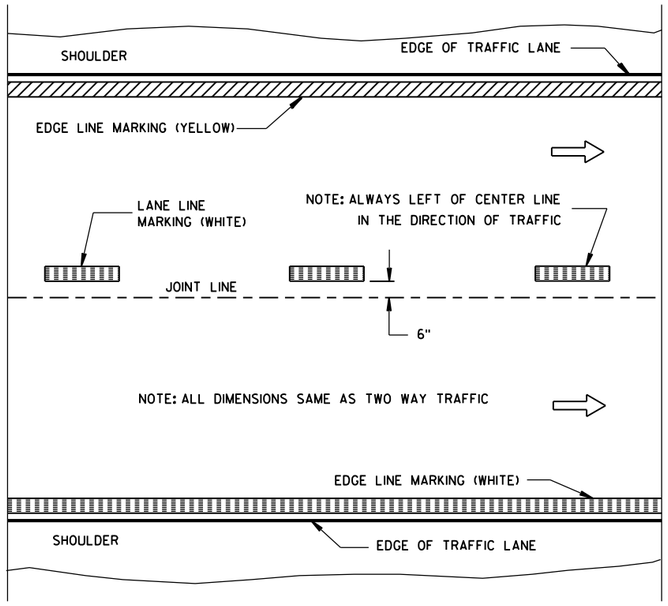
SIGN

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S.D.D. 15 C 5-2



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

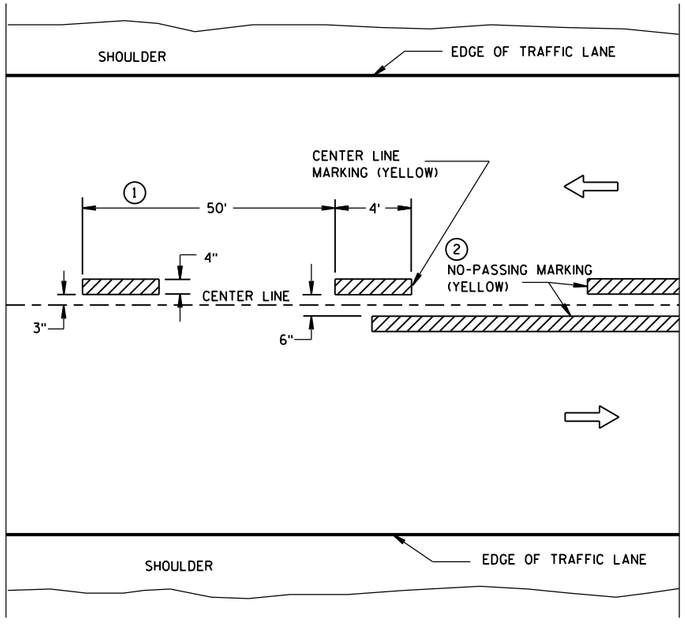
GENERAL NOTES

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

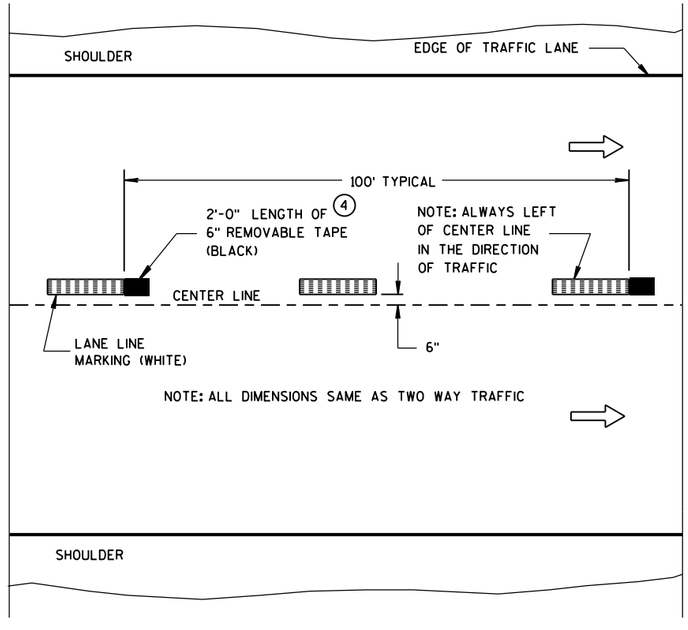
1. HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
2. NO PASSING ZONE TEMPORARY PAVEMENT MARKING 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



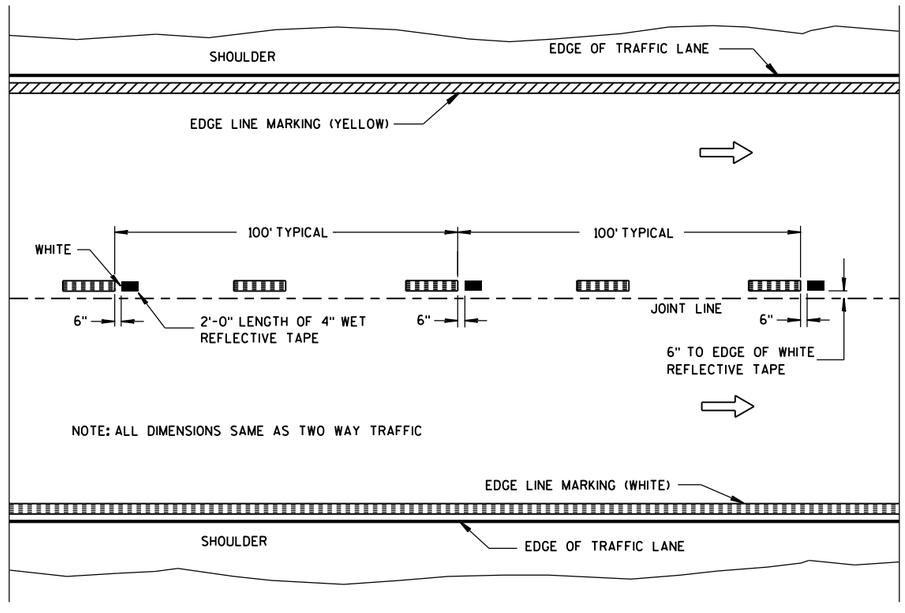
TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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



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

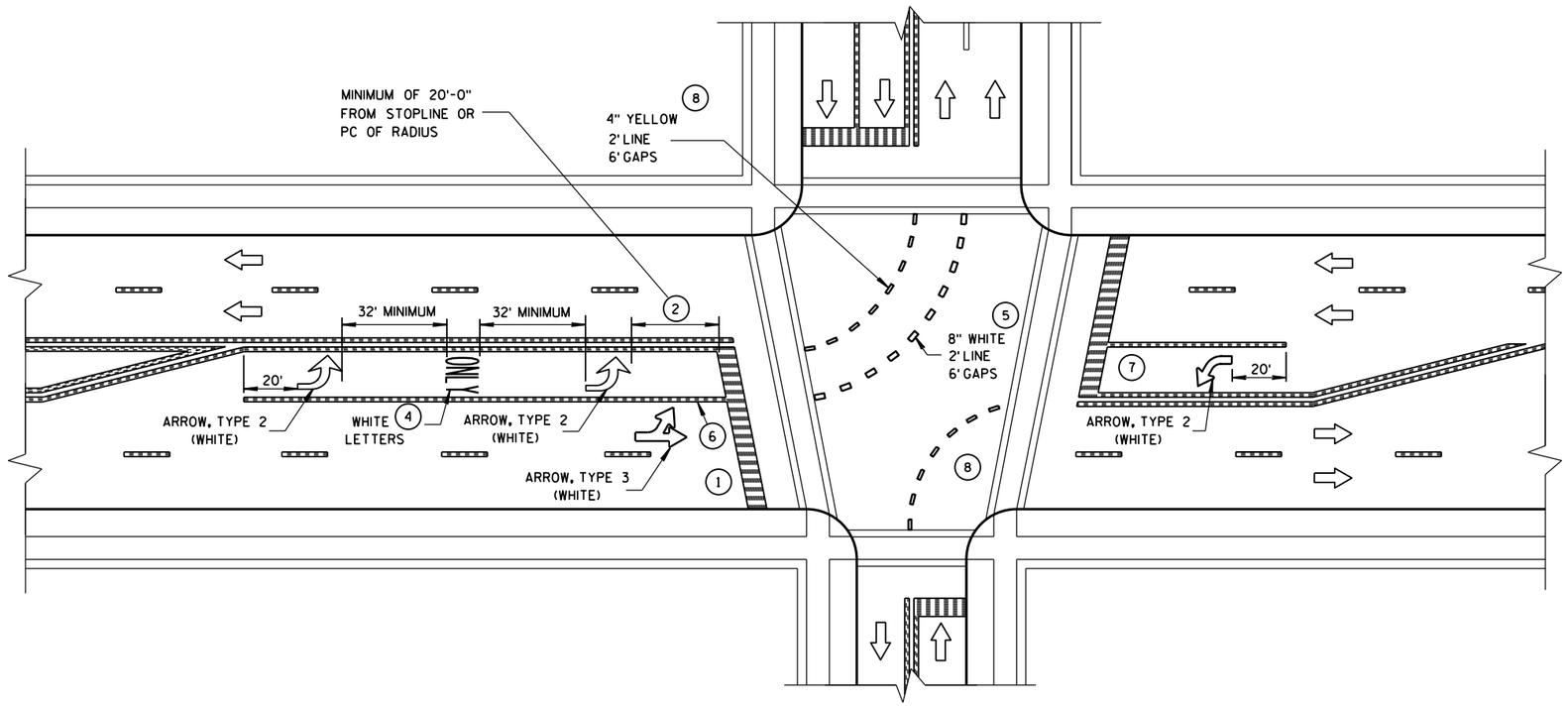
APPROVED
5-13-2013 DATE
/S/ Travis Feltes STATE TRAFFIC E
FHWA

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

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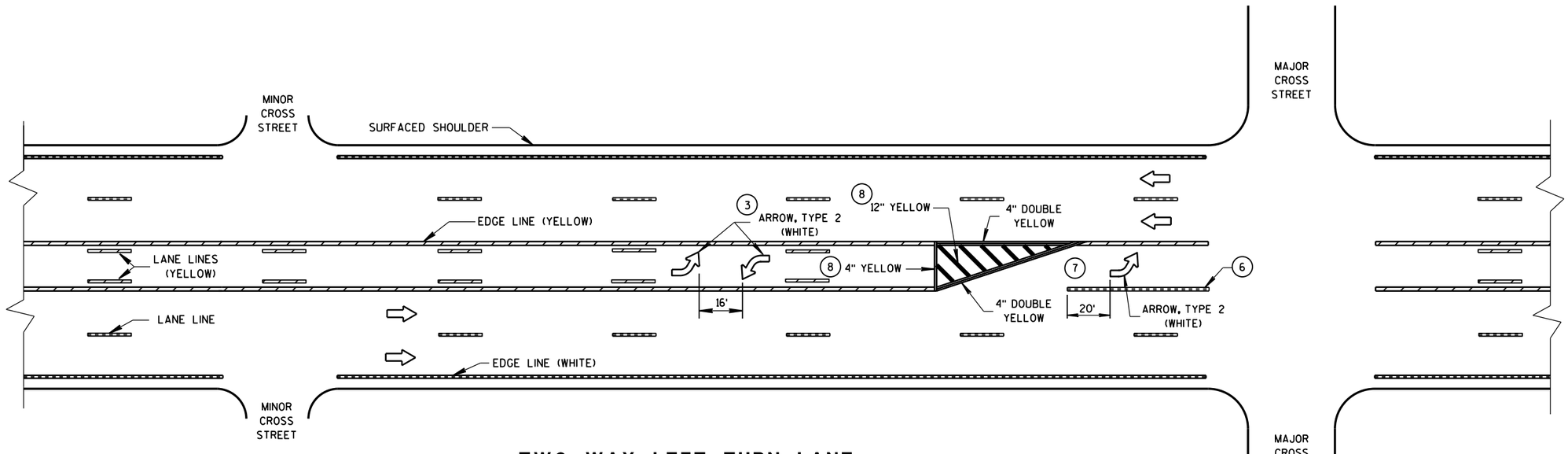
S.D.D. 15 C 8-16a



GENERAL NOTES

1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA SETS OF ONE ARROW AND ONE ONLY PER 160 FEET OR WHEN ON A CURVE.
5. 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
6. 8" WHITE
7. ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108 FEET.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



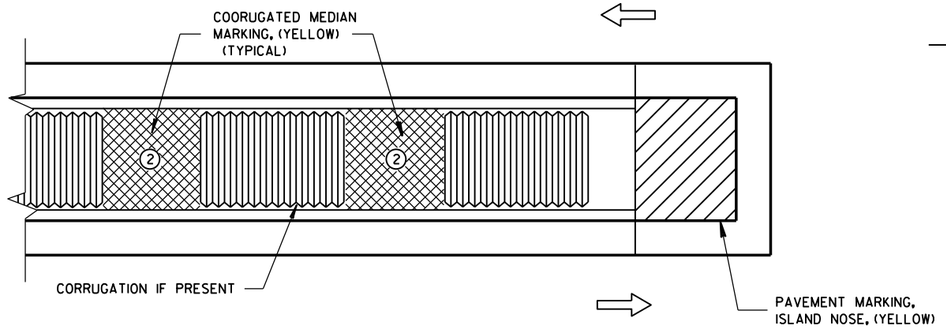
TWO WAY LEFT TURN LANE

PAVEMENT MARKING (LEFT TURN LANE)

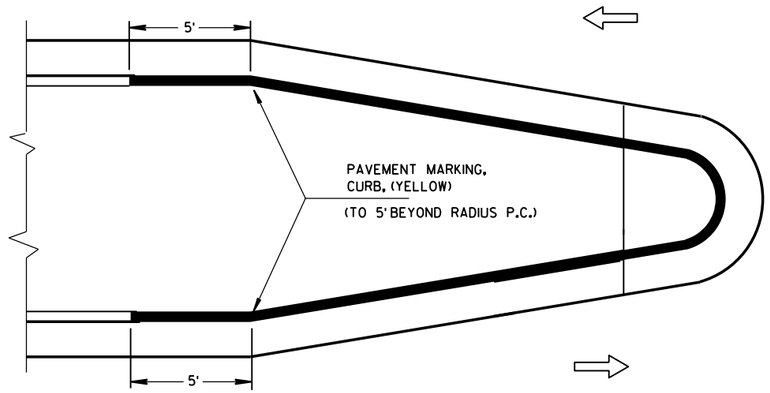
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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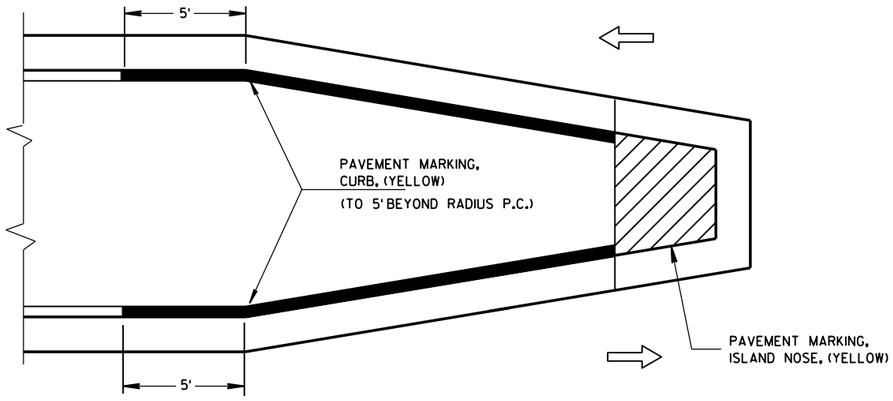
S.D.D. 15 C 8-16e



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

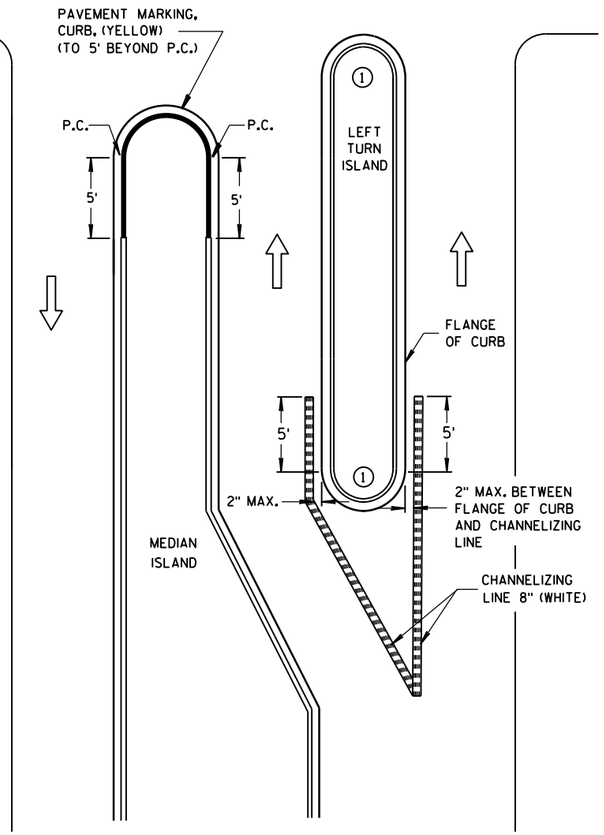


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

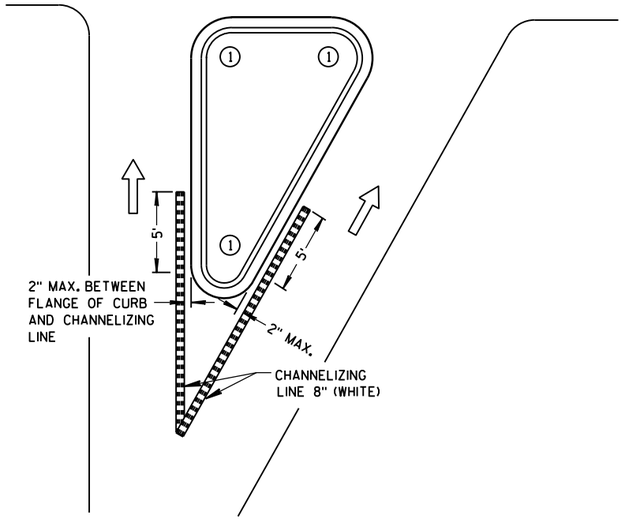


LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

1. DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.

2. WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND

LEGEND

- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

PAVEMENT MARKING
(ISLANDS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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

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

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

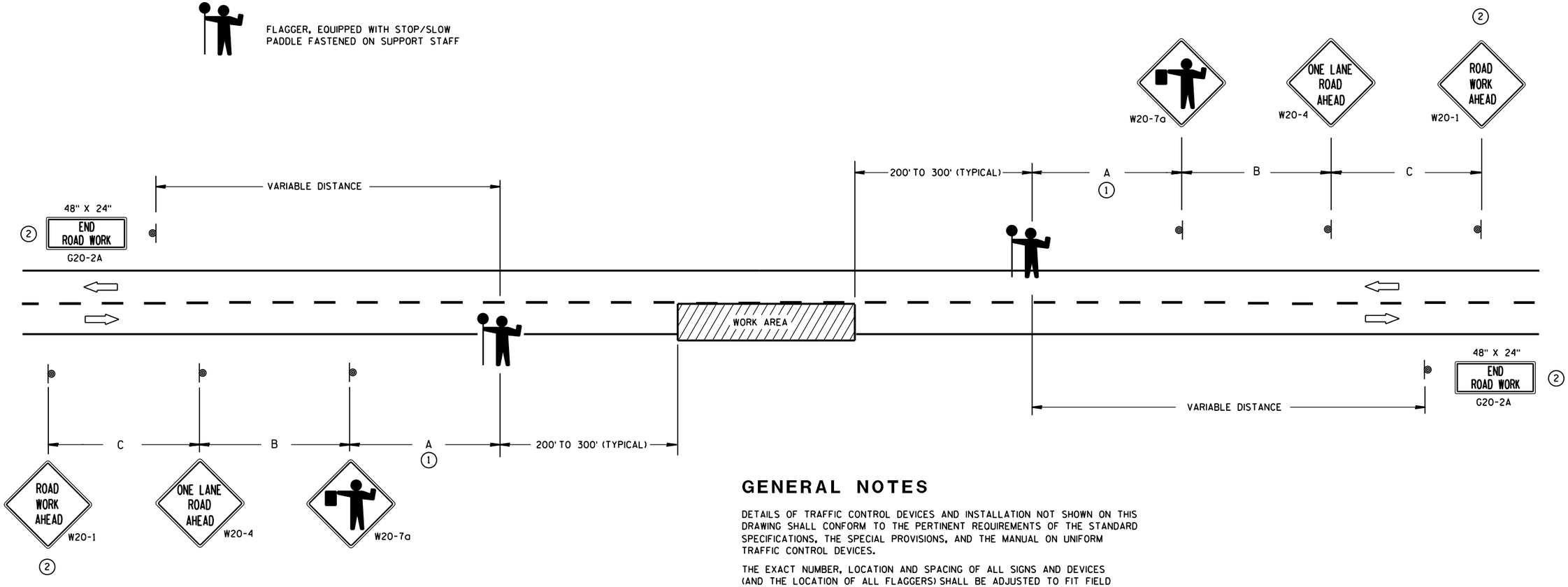
SIGN SPACING TABLE

SPEED LIMIT	SIGN SPACING A,B,C
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



W3-4

USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



(1) FOR A MOVING WORK OPERATION,
SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.

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

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

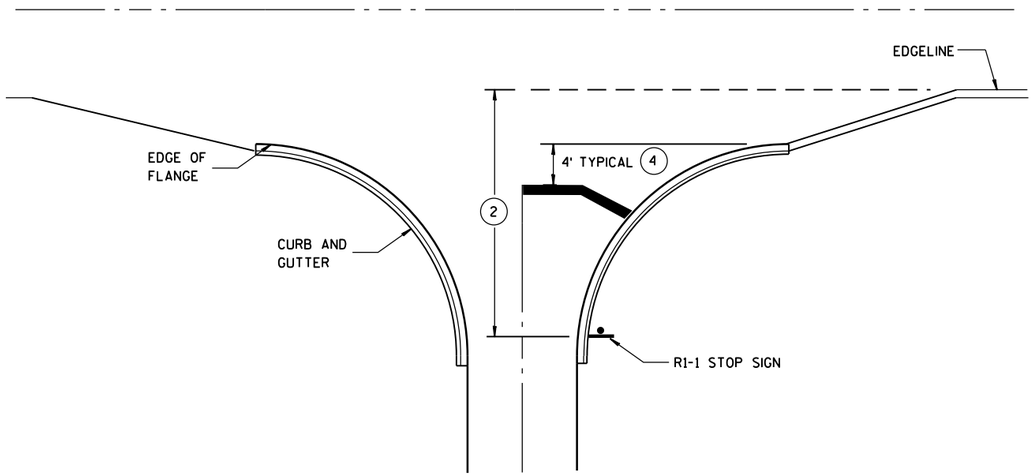
APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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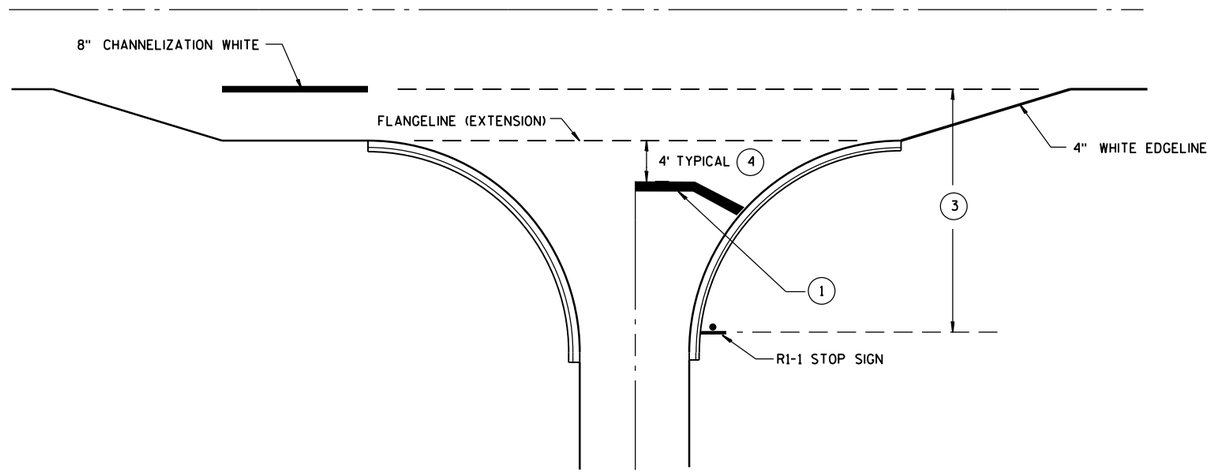
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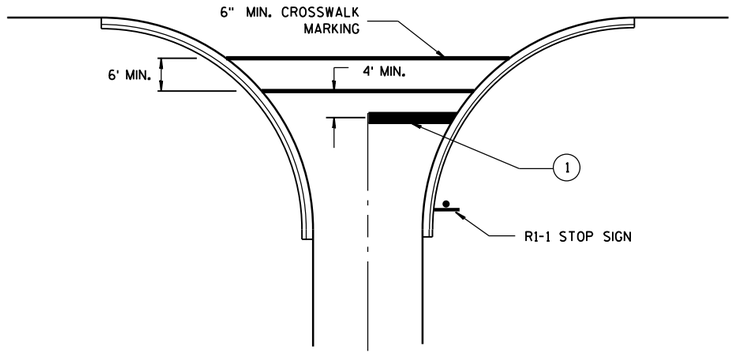
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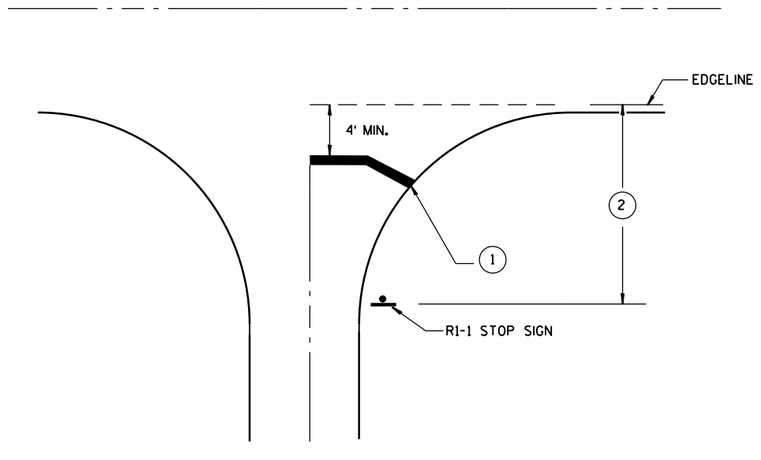
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



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 EDGELINE 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

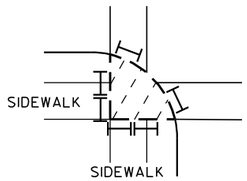
/S/ Travis Feltes
STATE TRAFFIC E

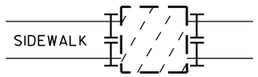
FHWA

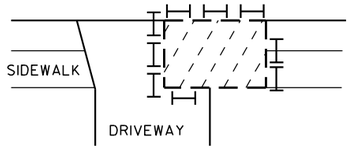
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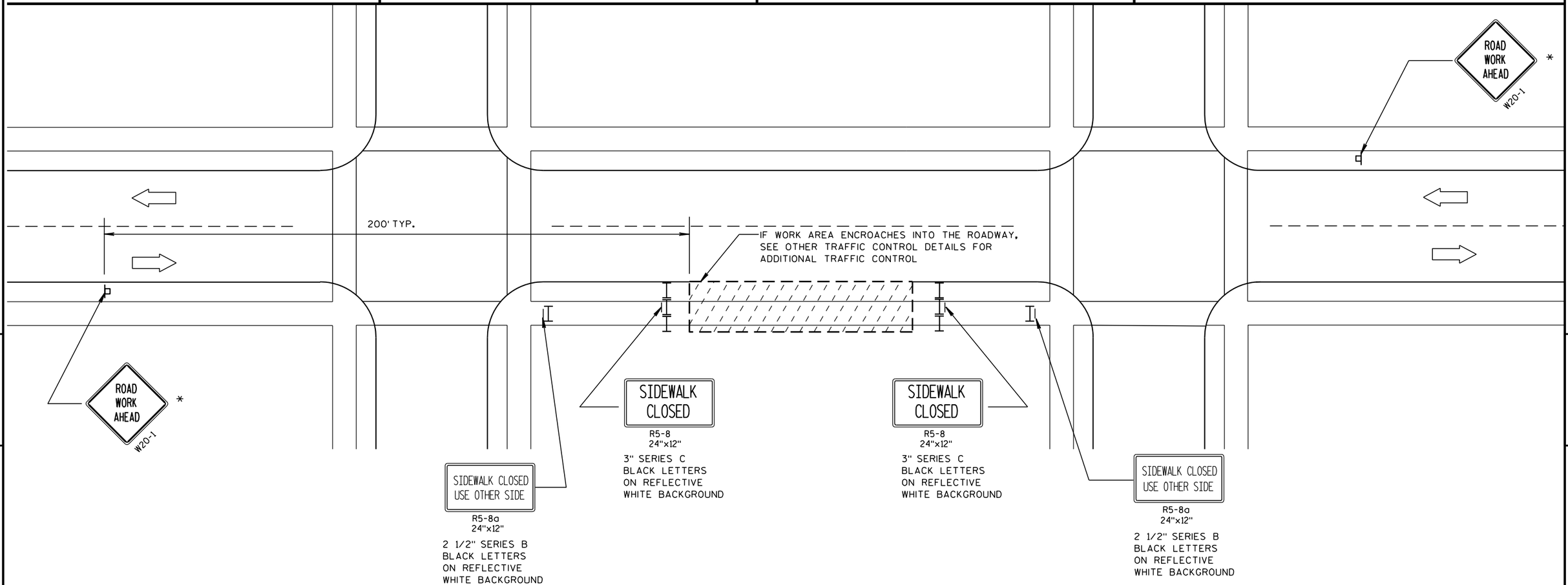
S.D.D. 15 C 33-1
S.D.D. 15 C 33-1

WARNING OF LOCALIZED SIDEWALK WORK AREAS









LEGEND

- POST MOUNTED SIGN
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- WORK AREA
- DIRECTION OF TRAFFIC FLOW

GENERAL NOTES :

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS, IF APPROVED BY DISTRICT TRAFFIC UNIT.

THE EXACT LOCATION AND PLACEMENT OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

* "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

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

TRAFFIC CONTROL, SIDEWALK CLOSURE

TRAFFIC CONTROL, SIDEWALK CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/2000 DATE
/S/ Chester J. [illegible]
CHIEF SIGNS AND MARK[illegible]NEER
FHWA

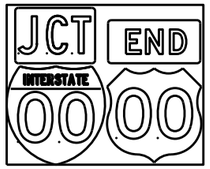
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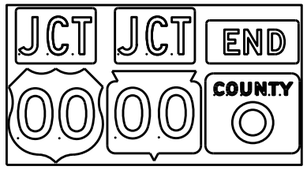
TYPICAL ASSEMBLIES



J1-1



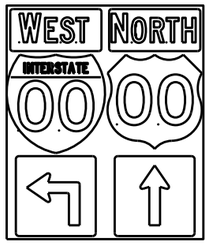
J1-2



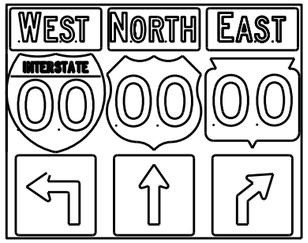
J1-3



J2-1



J2-2

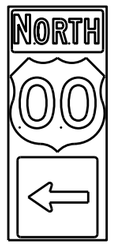


J2-3

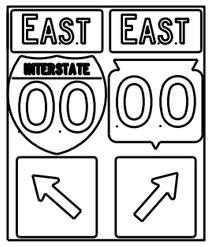


JV

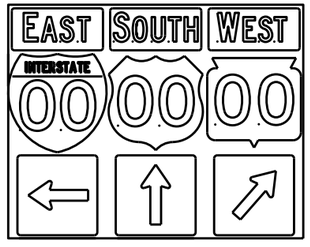
(Typical Vertical J-Assembly
See Note 10 and 11)



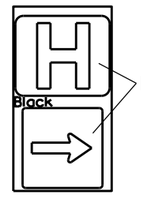
J3-1



J3-2



J3-3

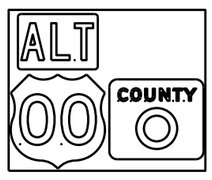


Blue Background

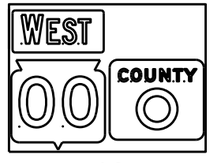
JH-1



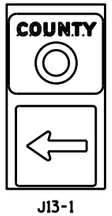
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

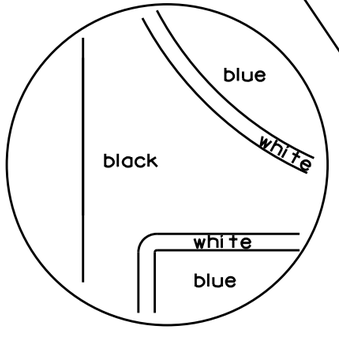


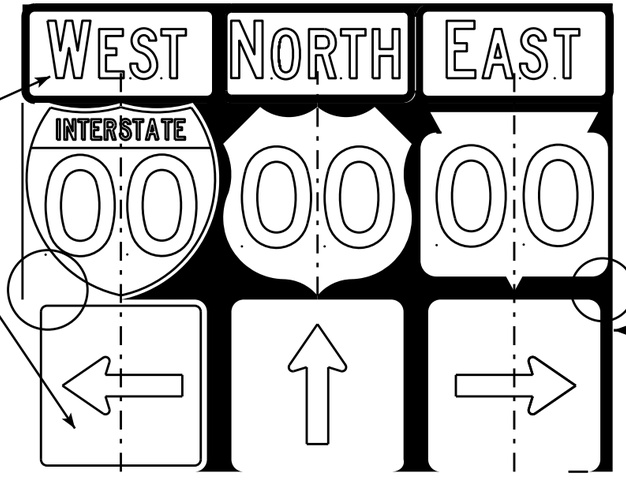
J23-1

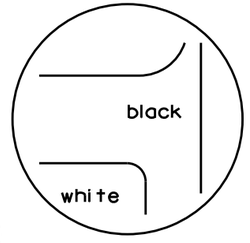


J22-1

[blue background with interstate]







[black background]

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

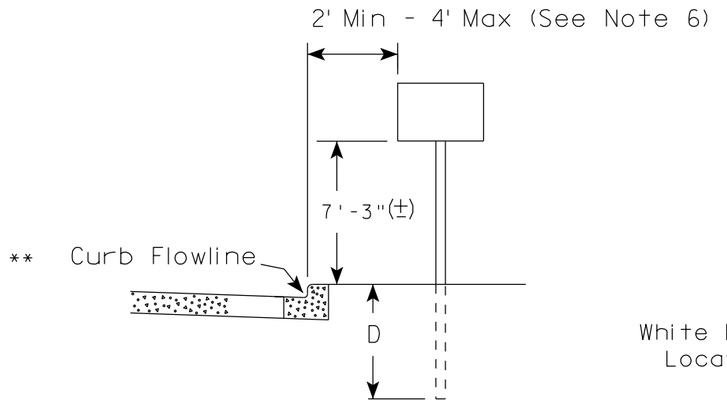
DATE 2/06/14 PL... A2-1S.8

PROJECT NO: | SHEET NO: E

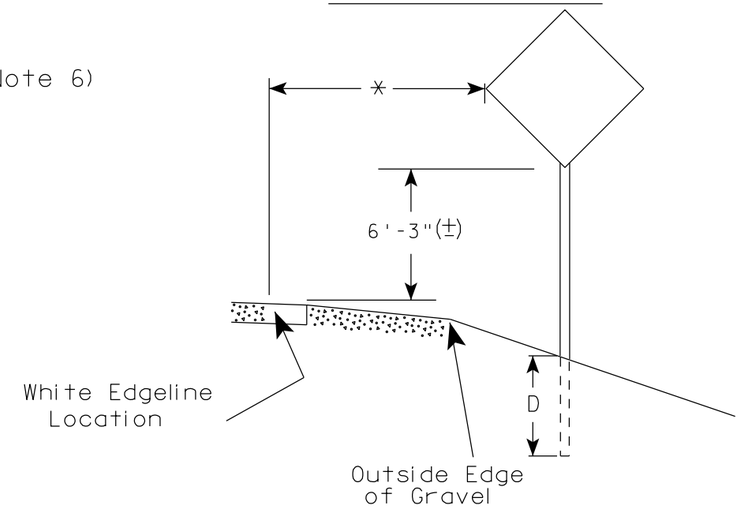
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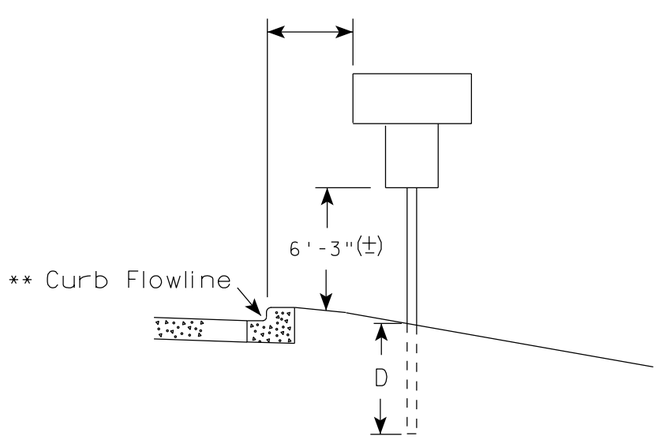
WISDOT/CADDS SHEET 42

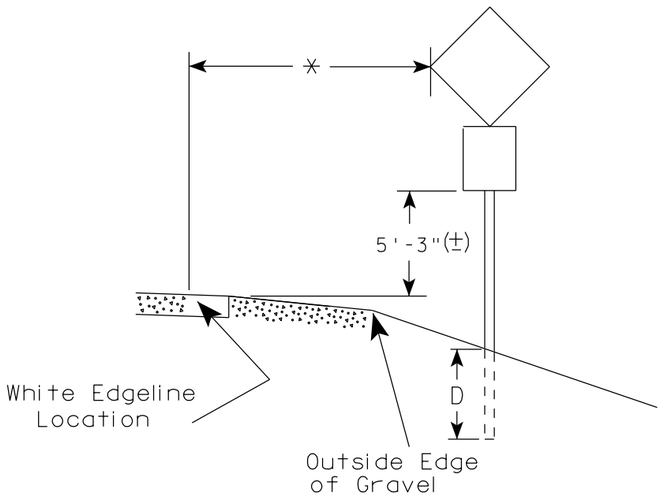
URBAN AREA



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.

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 Rod Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (+).

POST EMBEDMENT DEPTH

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

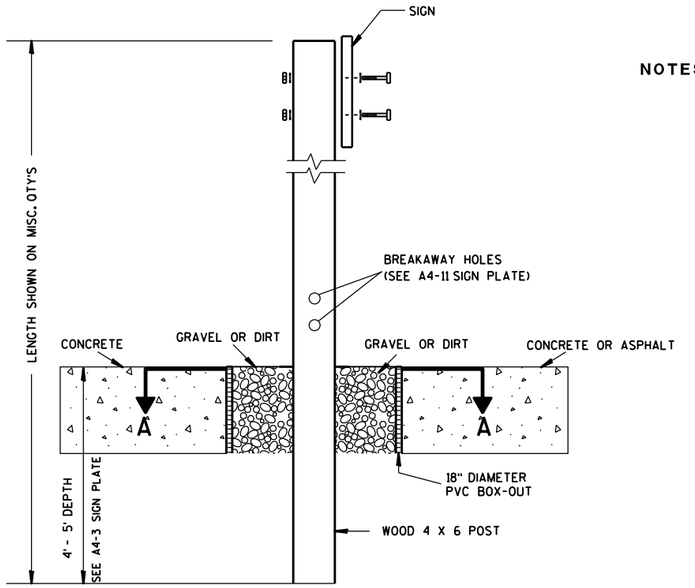
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

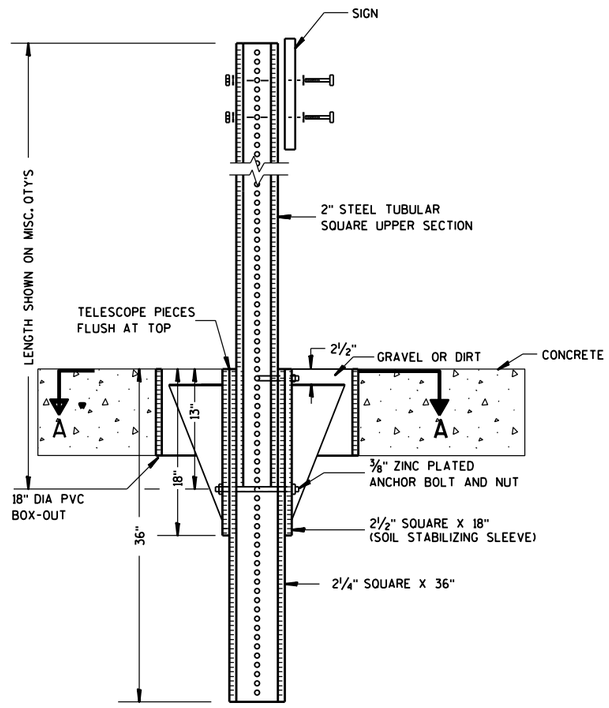
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

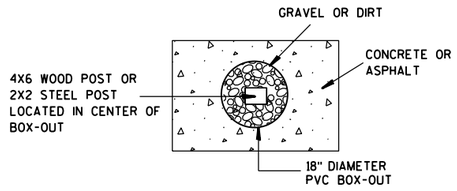
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

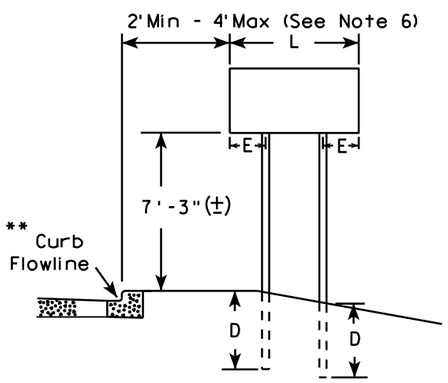
APPROVED Matthew R Rauch
for State Traffic Engineer

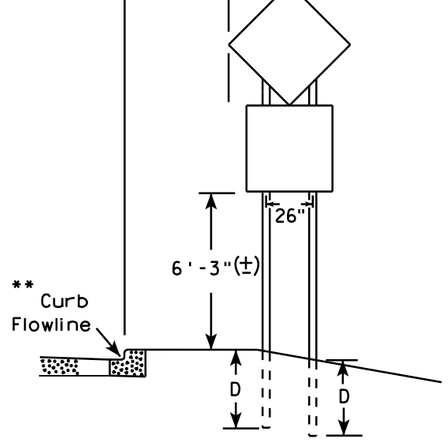
DATE 1/27/14 PLATE NO. A4-3B.1

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

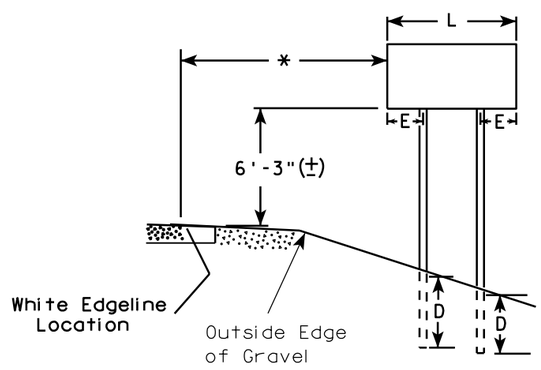
URBAN AREA

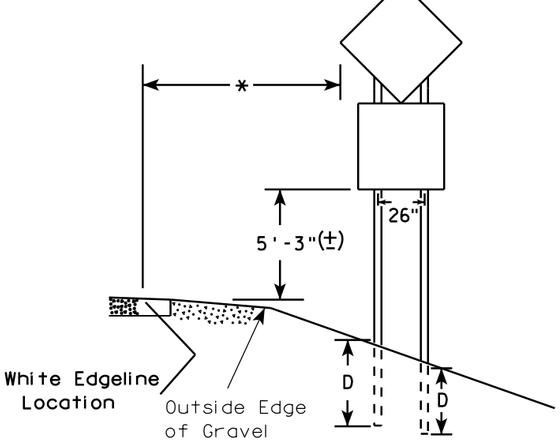




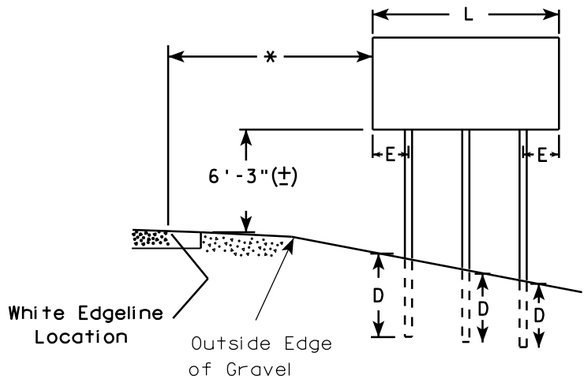
48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)





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 (A4-5) 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 stop signs (R1-1F) 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) & End of Road Markers (W5-56 & W5-56A) 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 or 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

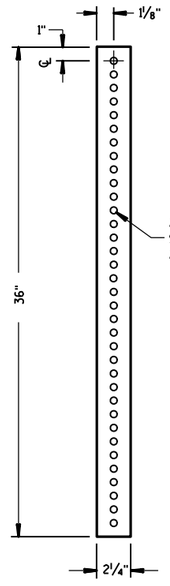
DATE 4/29/14 PLATE NO. A4-4 13

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

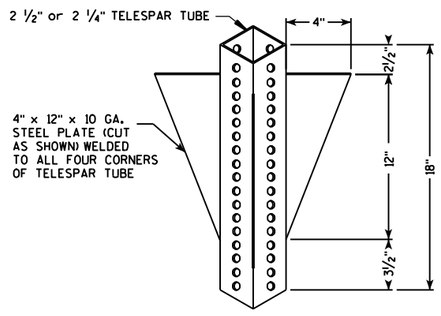
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TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

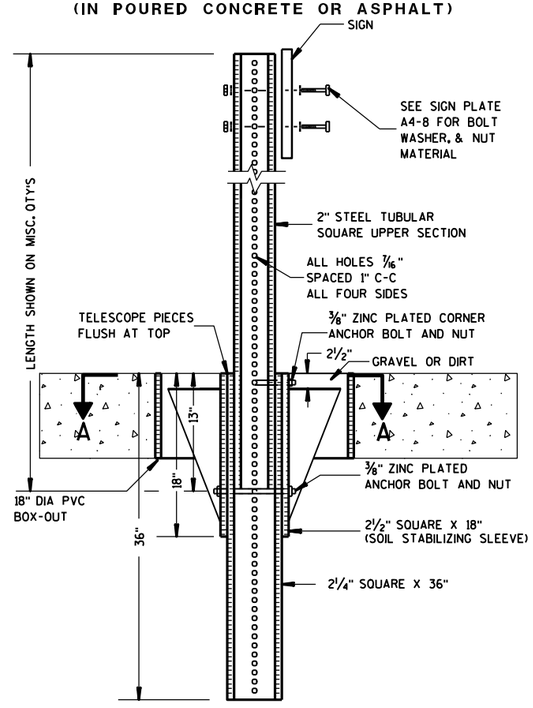
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



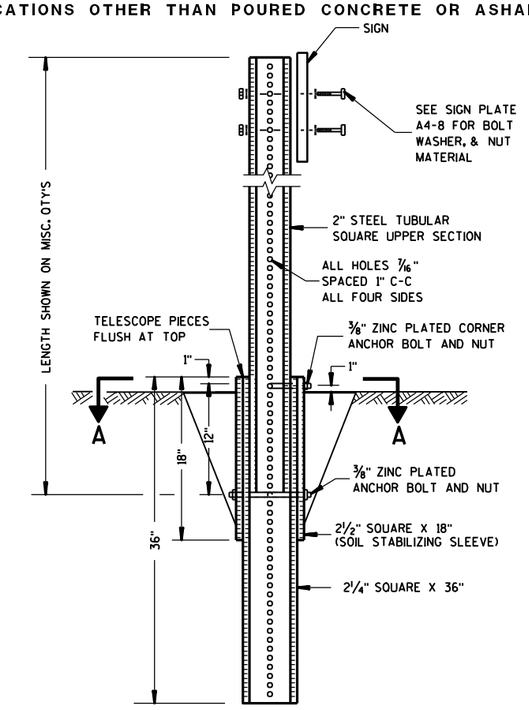
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

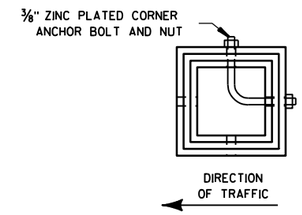


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





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).

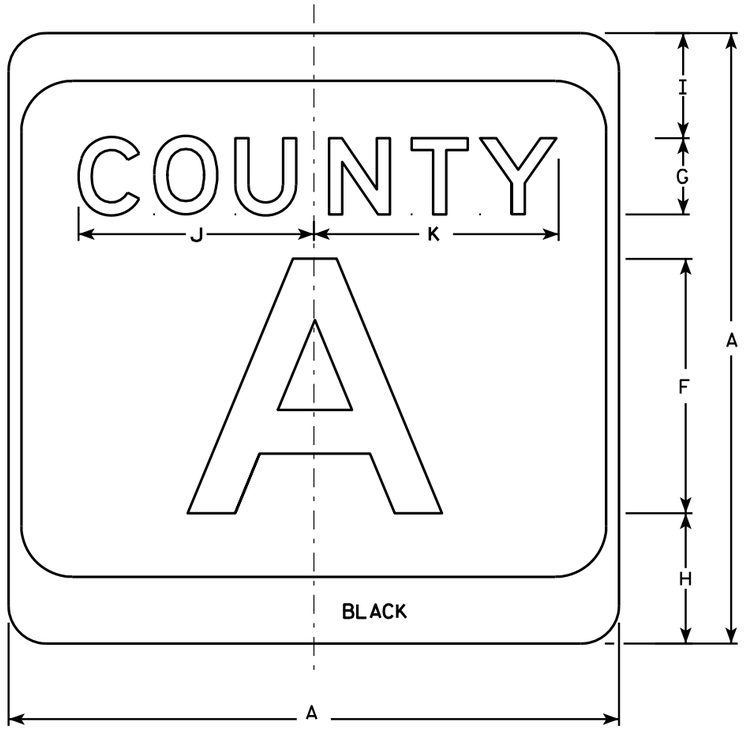
TUBULAR STEEL SIGN POST A4-9

WISCONSIN DEPT OF TRANSPORTATION

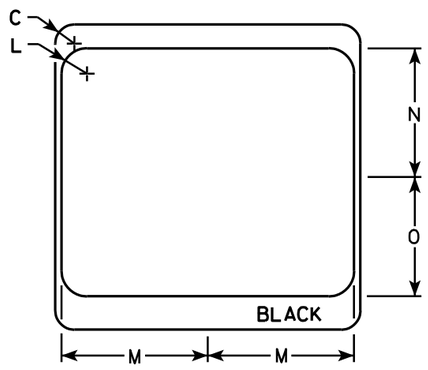
APPROVED Matthew R Rauch
for State Traffic Engineer

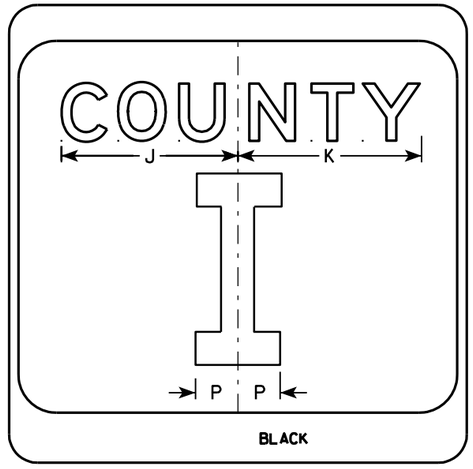
DATE 5/30/12 PLATE NO. A4-9.7

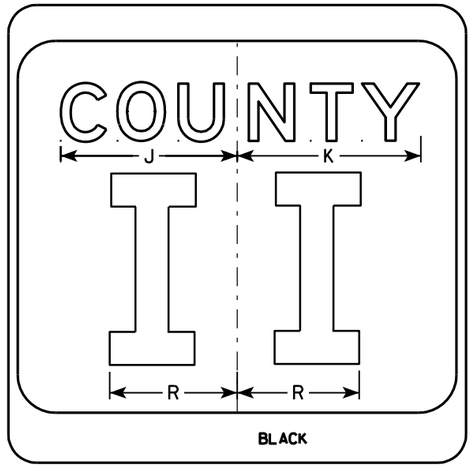
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 62	E



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   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. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or 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		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

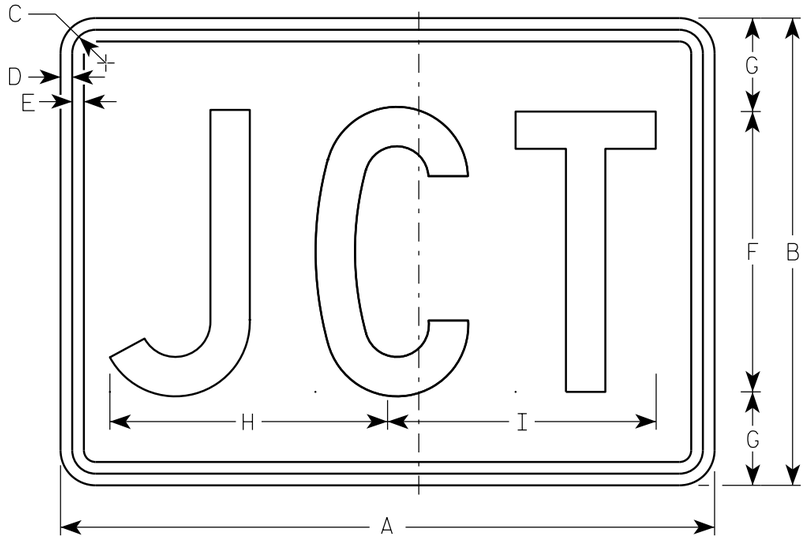
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

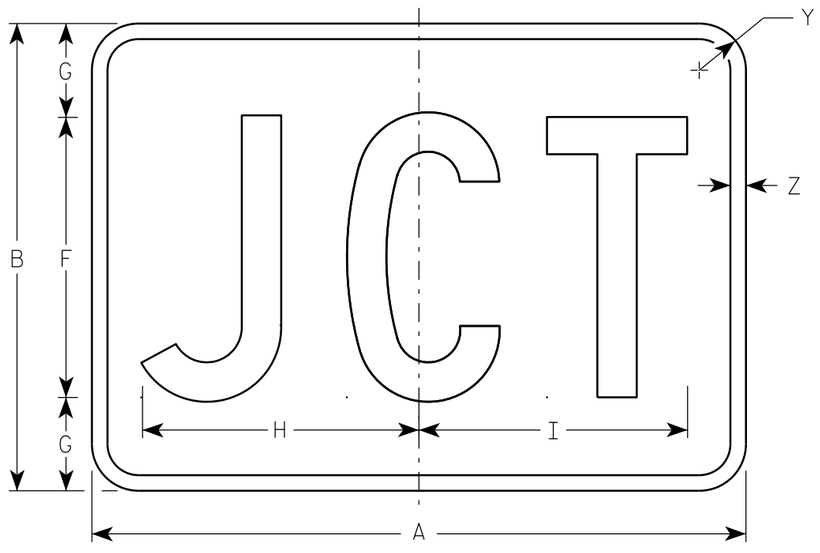
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 63 | E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\M15A.DGN PLOT DATE : 29-SEP-2011 11:25 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.959043:1.000000
WISDOT/CADDS SHEET 42



M2-1
MK2-1
MM2-1
MN2-1
MR2-1



MB2-1

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MR2-1 Background - Brown
   Message - Yellow

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	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

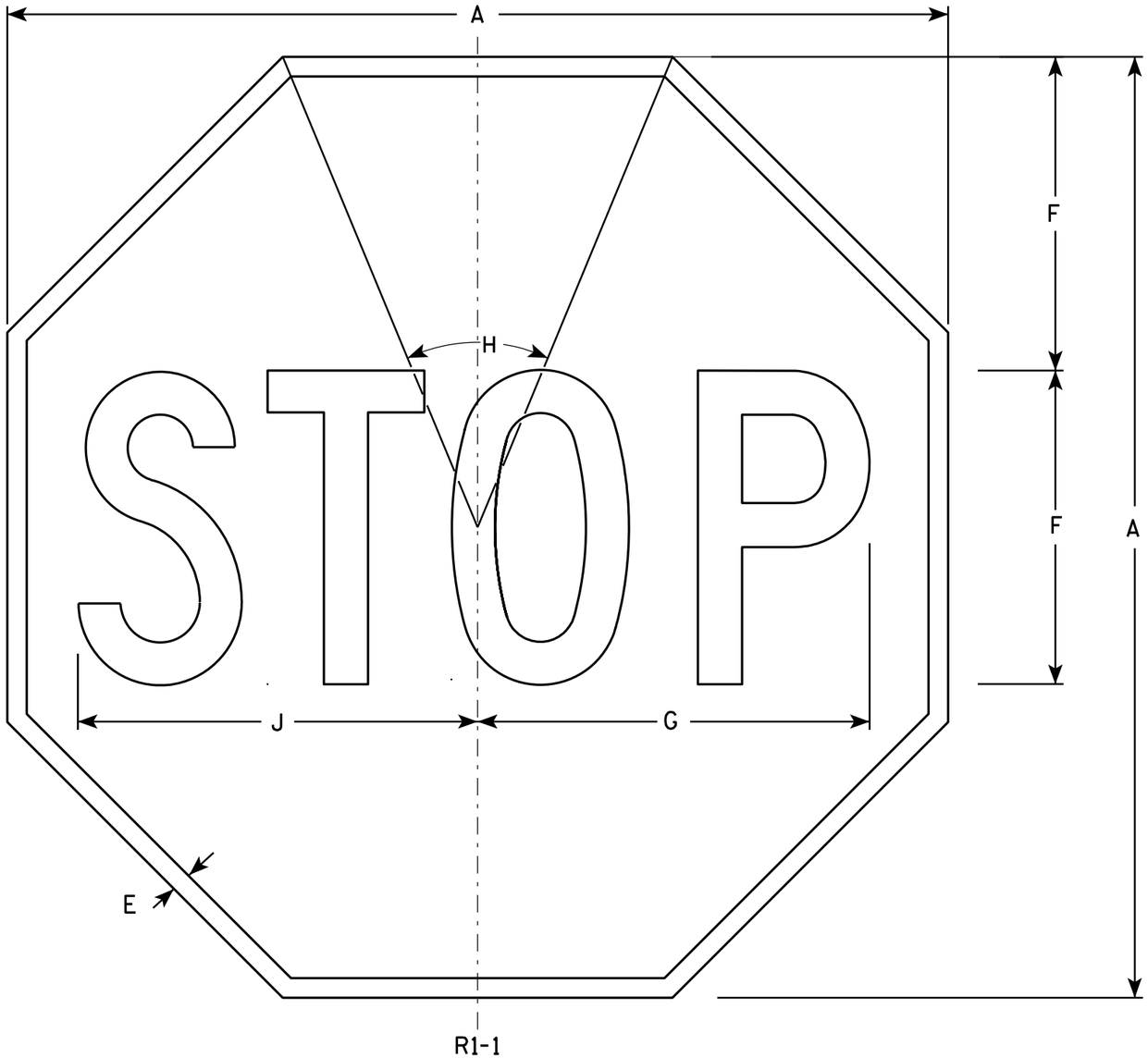
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 6/30/14 PLATE 64 12-1.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



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 - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24				3/8	8	10	45°		10 1/4																	3.31
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 65	E



R8-52

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 - 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. Lines 1, 3, and 4 are Series D. Line 2 shall be Series B

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	4	2 1/2	2 1/2	2	3 3/8	7	2 1/8	6 1/8														3.0
2S	24	30	1 1/8	3/8	1/2	5	3 5/8	3	2 1/4	4 1/8	8 3/4	2 5/8	7 5/8														5.0
2M	24	30	1 1/8	3/8	1/2	5	3 5/8	3	2 1/4	4 1/8	8 3/4	2 5/8	7 5/8														5.0
3																											
4	36	48	1 3/4	1/2	5/8	8	6 1/4	4	3 7/8	6 5/8	14	3 3/8	9 7/8														12.0
5																											

STANDARD SIGN
R8-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

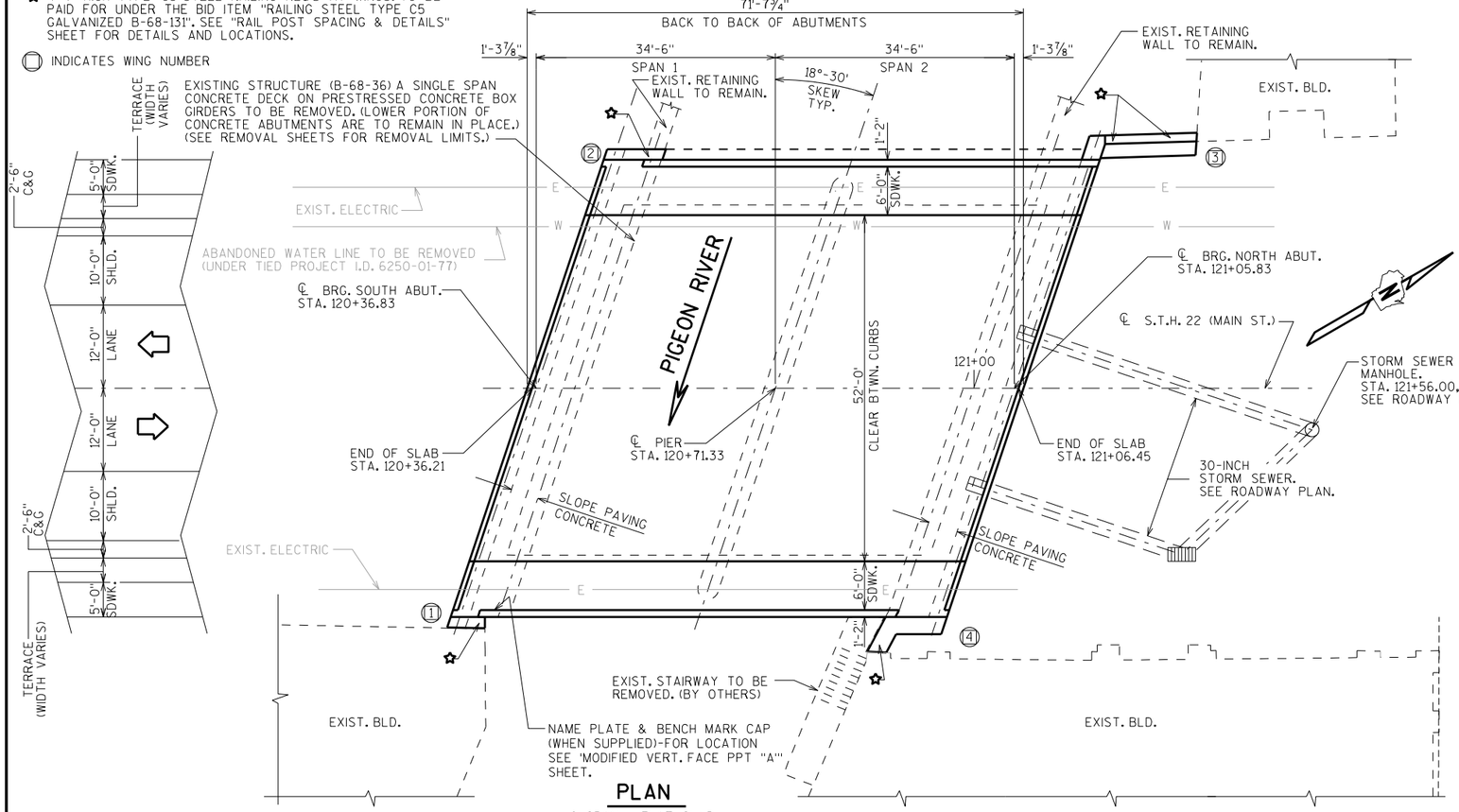
DATE 4/1/2011 PLATE NO. R8-52.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 66 | E

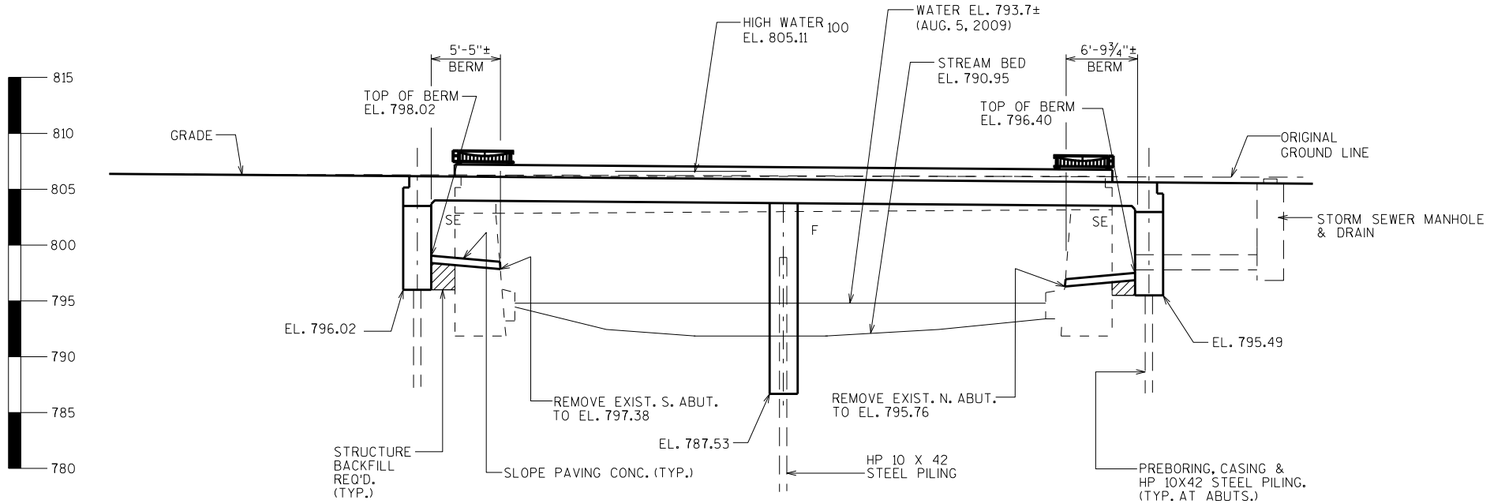
☆ 4'-7" HIGH TYPE 'C5' STEEL RAILING REQ'D AT WINGS. TO BE PAID FOR UNDER THE BID ITEM "RAILING STEEL TYPE C5 GALVANIZED B-68-131". SEE "RAIL POST SPACING & DETAILS" SHEET FOR DETAILS AND LOCATIONS.

(1) INDICATES WING NUMBER

EXISTING STRUCTURE (B-68-36) A SINGLE SPAN CONCRETE DECK ON PRESTRESSED CONCRETE BOX GIRDERS TO BE REMOVED. (LOWER PORTION OF CONCRETE ABUTMENTS ARE TO REMAIN IN PLACE.) (SEE REMOVAL SHEETS FOR REMOVAL LIMITS.)



PLAN
2 SPAN - FLAT SLAB



ELEVATION
NORMAL TO PIGEON RIVER

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF=1.08
OPERATING RATING FACTOR: RF=1.41
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY SLAB — f'c = 4,000 P.S.I. ALL OTHER — f'c = 3,500 P.S.I.
BAR STEEL REINFORCEMENT, GRADE 60 — fy = 60,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10 X 42 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 110 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA, ESTIMATED 80'-0" LONG.

AT ABUTMENTS, PREBORE EACH PILE TO A DEPTH OF 15'-0" BELOW THE BOTTOM OF ABUTMENT, PRIOR TO DRIVING PILES.

PIER TO BE SUPPORTED ON HP 10 X 42 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA, ESTIMATED 80'-0" LONG.

** THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISITANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

HYDRAULIC DATA

100 YEAR FREQUENCY

Q_{100} = 4000 C.F.S.
VEL. = 8.3 F.P.S.
HW.= EL. 805.11
WATERWAY AREA= 485 SQ. FT.
DRAINAGE AREA= 108.6 SQ. MI.
ROAD OVERTOPPING = NA
SCOUR CRITICAL CODE = 5

2 YEAR FREQUENCY

Q_2 =1352 C.F.S.
$HW._2$= EL. 799.8

TRAFFIC VOLUME

S.T.H. 22 (MAIN ST.)
A.D.T.=21000 (2033)
R.D.S.=30 M.P.H.

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. EXISTING SOUTH ABUTMENT REMOVAL
5. SOUTH ABUTMENT
6. WING 1 DETAILS
7. WING 2 DETAILS
8. SOUTH ABUTMENT DETAILS
9. EXISTING NORTH ABUTMENT REMOVAL
10. NORTH ABUTMENT
11. WING 3 DETAILS
12. WING 4 DETAILS
13. NORTH ABUTMENT DETAILS
14. PIER
15. SUPERSTRUCTURE CROSS SECTIONS
16. SUPERSTRUCTURE
17. SUPERSTRUCTURE DETAILS
18. MODIFIED VERT. FACE PPT. "A"
19. COMBINATION RAIL TYPE "C5"
20. COMBINATION RAIL TYPE "C5" DETAILS
21. RAIL POST SPACING & DETAILS
22. AESTHETIC DETAILS
23. ALTERNATE CONSTRUCTION JOINT
24. SLOPE PAVING (CONCRETE)
25. SCOUR PROTECTION

STRUCTURE DESIGN CONTACTS:

BRANDAN BURGER (608) 267-4019
LAURA SHADEWALD (608) 267-9592

STATE PROJECT NUMBER
6250-01-70

NO.	DATE	REVISION	BY

Plans Prepared By WISDOT
BUREAU OF STRUCTURES

ACCEPTED William C. Dreher LLS 8/4/14
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-68-131

S.T.H. 22 OVER PIGEON RIVER

COUNTY WAUPACA | CITY CLINTONVILLE

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	BLB	DESIGN CK'D.	JDL	DRAWN BY	WWR	PLANS CK'D.	ARC

GENERAL PLAN

SHEET 1 OF 25

67

I.D. 6250-01-00

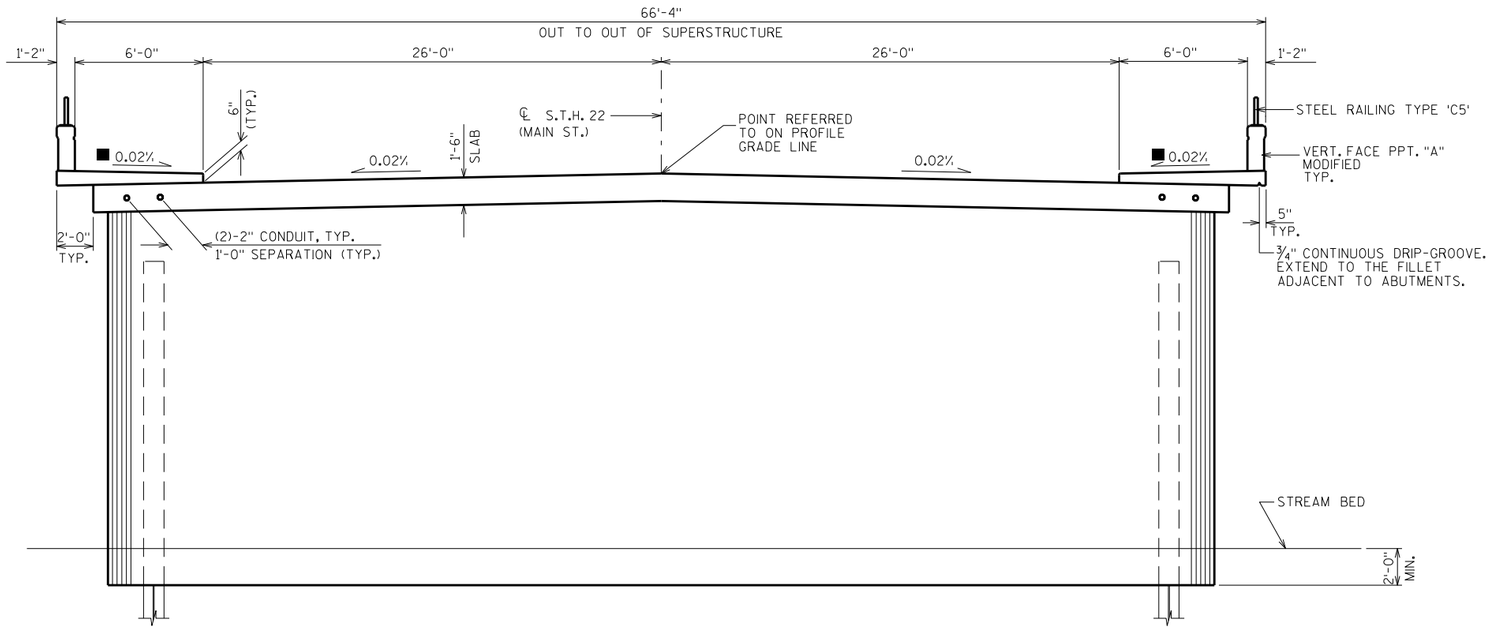
DATE: JUNE 2014

SCALE =

8

8

STATE PROJECT NUMBER
6250-01-70



CROSS SECTION THRU BRIDGE

(LOOKING NORTH)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

AT THE BACKFACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

SLAB FALSEWORK SHALL BE SUPPORTED ON THE SUBSTRUCTURE UNLESS AN ALTERNATE METHOD IS APPROVED BY THE ENGINEER. DO NOT USE DRIVEN PILES TO SUPPORT FALSEWORK.

THE GRADATION OF THE STRUCTURE BACKFILL SHALL MEET THE REQUIREMENTS OF SECTION 209.2.2 OF THE STANDARD SPECIFICATIONS FOR GRADE 1 MATERIAL.

THE EXISTING STREAM BED SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIER.

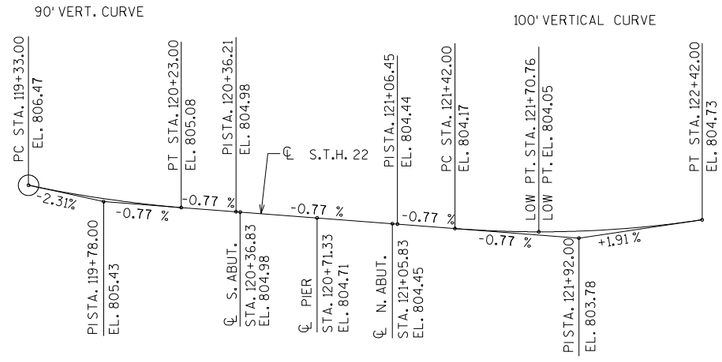
PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE TOP OF DECK AND SIDEWALK SURFACES. AT SIDEWALK OVERHANG, APPLY PROTECTIVE SURFACE TREATMENT TO THE EDGE AND TO THE UNDERSIDE 1'-0" FROM EDGE.

AT ABUTMENTS AND PIER, CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 OF THE STANDARD SPECIFICATIONS.

■ 0.02% IS THE SIDEWALK SLOPE WITH NEGATIVE 0.01% AND POSITIVE 0.00% FOR CONSTRUCTION TOLERANCE.

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	SOUTH ABUT.	NORTH ABUT.	PIER	TOTALS
203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA. 120+71	LS	———	———	———	———	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-68-131	LS	———	———	———	———	1
210.0100	BACKFILL STRUCTURE	CY	———	233	251	———	484
502.0100	CONCRETE MASONRY BRIDGES	CY	301	66	88	90	545
502.3200	PROTECTIVE SURFACE TREATMENT	SY	640	———	———	———	640
502.5005	MASONRY ANCHORS TYPE L NO. 5 BARS	EACH	———	24	24	———	48
502.6102	MASONRY ANCHORS TYPE S 1/2-INCH	EACH	———	94	88		182
505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	———	4,890	5,050	3,770	13,710
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	62,440	1,530	3,100	130	67,200
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	———	22	23	———	45
517.1015.S	CONCRETE STAINING MULTI-COLOR B-68-131	SF	443	———	75	———	518
517.1050.S	ARCHITECTURAL SURFACE TREATMENT B-68-131	SF	443	———	75	———	518
550.0010	PRE-BORING UNCONSOLIDATED MATERIALS	LF	———	150	180	———	330
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	———	800	960	880	2640
604.0400	SLOPE PAVING CONCRETE	SY	———	40	50	———	90
606.0300	RIPRAP HEAVY	CY	———	4	4	———	8
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	———	95	95	———	190
645.0120	GEOTEXTILE FABRIC, TYPE HR	SY	———	10	10	———	20
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	287	———	———	———	287
SPV.0035	HAULING AND DISPOSAL OF SALVAGED STREAM BED MATERIAL	CY	———	———	———	———	112
SPV.0105	SCOUR PROTECTION	LS	———	———	———	———	1
SPV.0105	RAILING STEEL TYPE C5 GALVANIZED B-68-131	LS	———	———	———	———	1
	NON-BID ITEMS						
	FILLER	SIZE	———	———	———	———	½" & ¾"
	EXPANDED POLYSTYRENE	SIZE	———	———	———	———	1"



PROFILE GRADE LINE S.T.H. 22

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-68-131

DRAWN BY BLB | PLANS CK'D. ARC

CROSS SECTION & QUANTITIES

SHEET 2

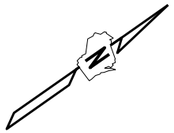
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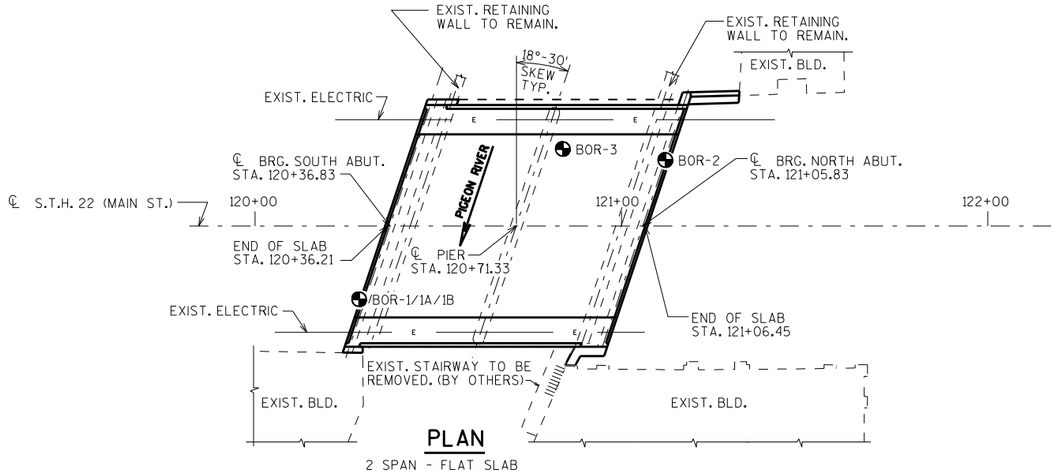
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8

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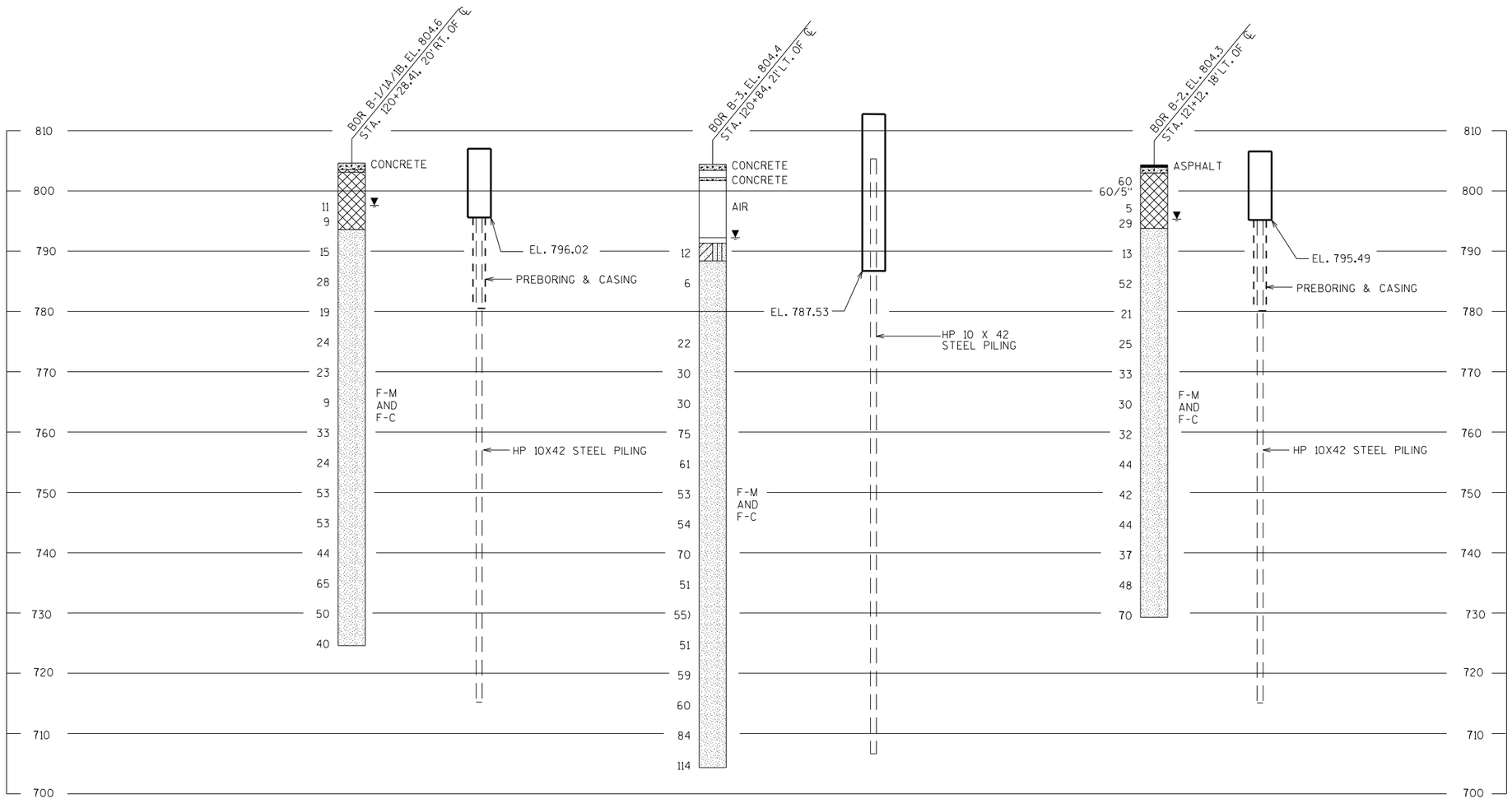
C CLINTONVILLE, MAIN STREET
PIGEON RIVER BRIDGE





PLAN

2 SPAN - FLAT SLAB



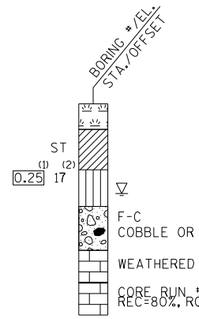
STATE PROJECT NUMBER

6250-01-70

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-68-131

DRAWN BY BLB | PLANS CK'D. ARC

SUBSURFACE EXPLORATION

SHEET 3

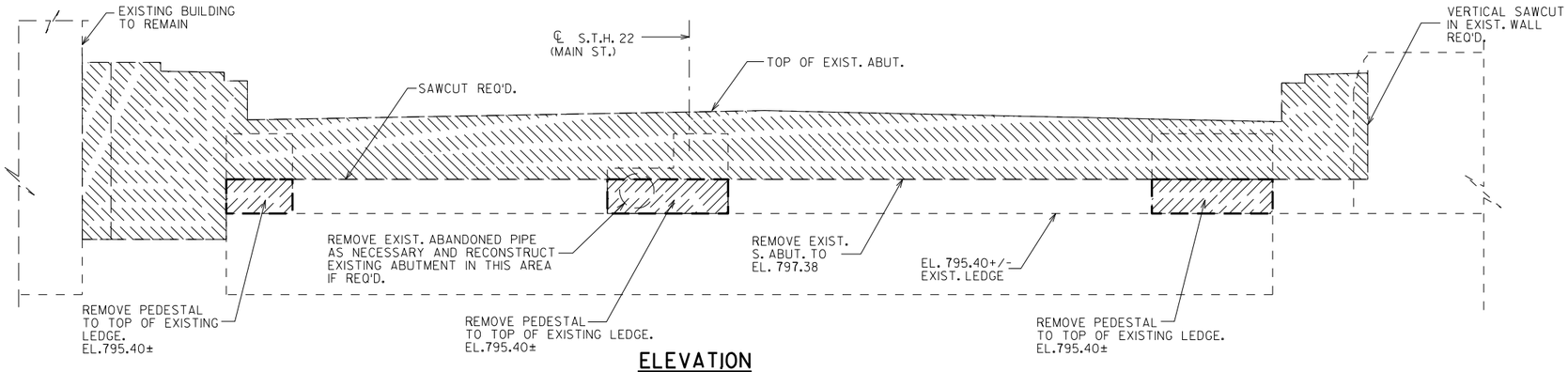
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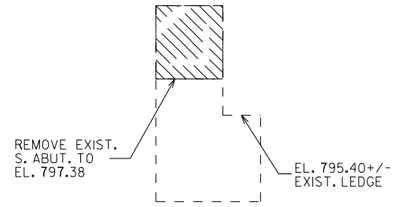
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STATE PROJECT NUMBER
6250-01-70

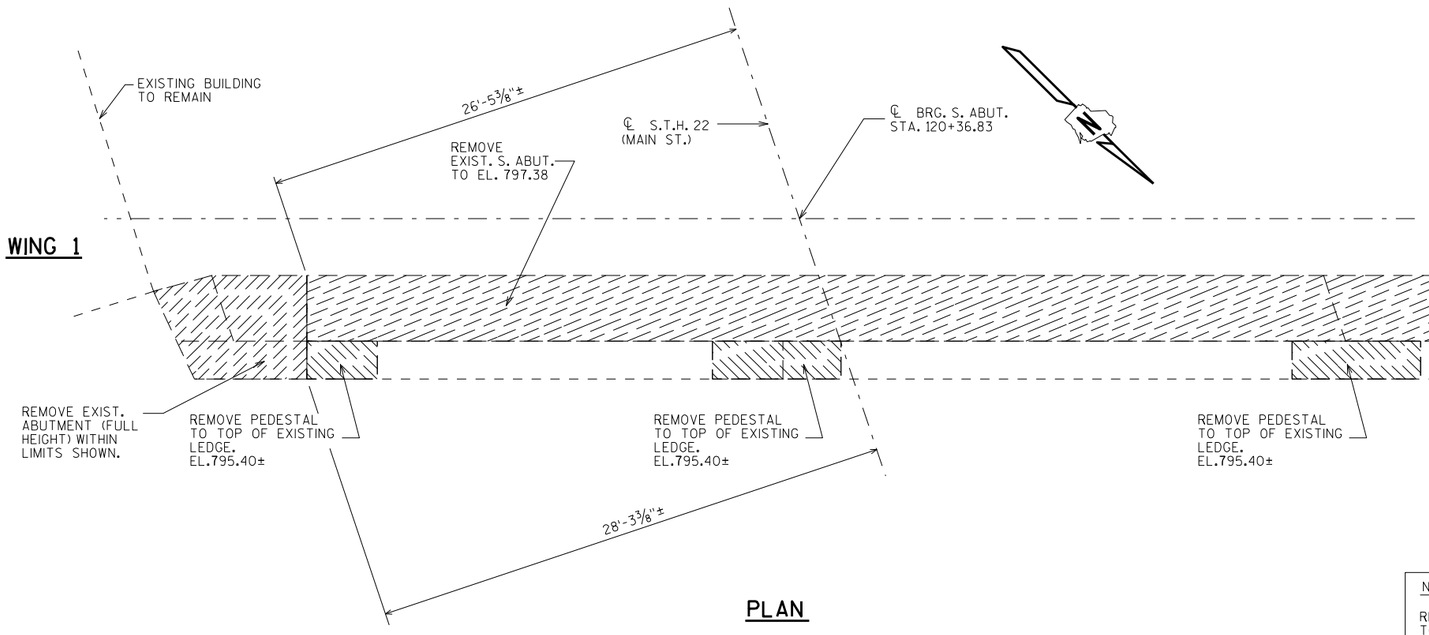


ELEVATION

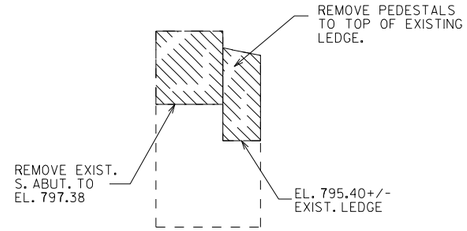
LOOKING SOUTH AT S. ABUT.



SECTION THRU EXISTING S. ABUTMENT



PLAN



SECTION THRU EXISTING S. ABUTMENT

(SHOWING PEDESTAL'S REMOVAL)

NOTE:

REMOVE PORTIONS OF THE EXISTING RETAINING WALL TO ALLOW FOR 1" EXPANDED POLYSTYRENE BETWEEN B-68-131 AND THE EXISTING RETAINING WALL. SEAL ALL EXPOSED HORIZ. AND VERT. SURFACES OF 1" EXPANDED POLYSTYRENE WITH NON-STAINING, GRAY, NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). THIS WORK SHALL BE INCIDENTAL TO 'REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA 120+71'.

REMOVE, SALVAGE AND MAKE AVAILABLE TO THE CITY OF CLINTONVILLE, THE EXISTING RETAINING WALL RAILING. THE CITY WILL MODIFY RAILING AND REATTACH.

DEFINE REMOVALS WITH A 1" DEEP SAWCUT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-68-131

DRAWN BY CRJ | PLANS CK'D. ARC

EXISTING SOUTH ABUTMENT REMOVAL

SHEET 4

70

SCALE = 4

8

8

STATE PROJECT NUMBER
6250-01-70

EL. 805.13
EL. 805.13
EL. 805.17
* EL. 802.18 (LEVEL)
END OF ABUT.
3¼"
32 SPA. @ 9" = 24'-0" A501
9"
24 SPA. @ 1'-0" = 24'-0" A501
9"
32 SPA. @ 9" = 24'-0" A501
EL.805.00
* EL. 802.02 (LEVEL)
3¼"
END OF ABUT.
EL. 804.93
EL. 804.9±
EL. 804.93
A508 @ 1'-0"
A411
A410 @ 1'-6"
℄ S.T.H. 22 (MAIN ST.)
* EL. 802.73
1'-11" MIN. LAP
A409
A439
A412
A410 @ 1'-6"
END OF EXISTING RETAINING WALL AFTER REMOVAL
EL. 795.40±
A602 F.F. TOP & BTM.
A804 B.F.
2'-11" MIN. LAP NO. 6 BARS
A04
A603 F.F. TOP & BTM.
A805 B.F.
▲ 1" EXPANDED POLYSTYRENE REQ'D.
BTM. ABUT. EL. 796.02
1'-0"
A15
1'-0"
A23
SEE SPACING & DETAILS ON 'WING 1 DETAILS' SHT.
BOT. ABUT. EL. 796.02
5'-1" MIN. LAP NO. 8 BARS
EL. 795.40+/- TOP OF EXIST. LEDGE
TOP OF EXIST. ABUT AFTER REMOVAL EL. 797.41
2'-0"
BTM. OF EXIST. ABUT.
FAN A501 BARS @ ENDS OF ABUT. (TYP.)
EL. 788.98±
GEOTEXTILE FABRIC, TYPE HR
HEAVY RIPRAP

ELEVATION
LOOKING SOUTH

*ELEVATIONS ARE GIVEN ALONG ℄ OF BRG.

A04 VERT. CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 x 8. 3/4" "V" GROOVE @ THE FRONT FACE AND 18" R.M.W. @ BACKFACE. FOR OPTIONAL DETAILS, SEE "ALTERNATE CONSTRUCTION JOINT" SHEET.

A06 SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 80'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 110 TONS PER PILE. PREBORE EACH PILE TO A DEPTH OF 15'-0" BELOW THE BOTTOM OF THE ABUTMENT PRIOR TO DRIVING PILES.

A15 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED. SEE 'SOUTH ABUTMENT DETAILS' SHEET FOR DETAILS.

A19 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS.

A23 A524 MASONRY ANCHORS TYPE L NO. 5 BARS. EMBED 1'-6" IN CONCRETE.

M02 MASONRY ANCHORS TYPE S 1/2-INCH. EMBED 5" IN CONCRETE.

* LEVEL IN THIS DIRECTION

▲ SEAL ALL EXPOSED HORIZ. AND VERT. SURFACES OF POLYSTYRENE WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

STEEL TROWEL TOP SURFACE OF ABUTMENT PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".

WING 1

END OF ABUT.
36'-5"
1'-4⅝"
35'-0½"
31'-3⅜"
18°-30' SKEW (TYP.)
END OF ABUT.
37'-7½"
2'-7⅛"
35'-0½"
31'-3⅜"
EXISTING BUILDING TO REMAIN
72°-36'-37"
A19
EL. 802.18
℄ S.T.H. 22 (MAIN ST.)
A04
A19
EL. 802.02
1'-3¾"
4'-5⅛"
1"
2'-9½"
2'-1⅞"
▲ 1" EXPANDED POLYSTYRENE
1'-6"
71°-30'
3'-8¾"
5'-9½"
2'-0¾"
5'-5¼"
33'-7"
SLOPE PAVING LIMITS
26'-10¾"
33'-8¼"
35'-2¼"
HEAVY RIPRAP
4" X ¾" FILLER X ABUTMENT LENGTH
F.F. ABUT.
108°-30'
1'-6"
M02 A438 FOR SPACING, SEE 'SLOPE PAVING (CONCRETE)' SHEET.
▲ 1" EXPANDED POLYSTYRENE
35'-1¼"
33'-3⅜"
2'-1⅜"
2'-2½"

WING 2

℄ BRG. S. ABUT.
1'-3⅛"
2'-6"
5'-8¼"
1'-3"
A19
1'-6⅛"
EL. 804.94
EL. 804.93
FOR SPACING, SEE 'SLOPE PAVING (CONCRETE)' SHEET.
EL. 797.41
8"
8"
A406
A602,A603
TOP OF EXIST. LEDGE EL. 795.40±
A438 M02
A06
1'-3"
1'-3"
2'-6"

PLAN

EXISTING BUILDING TO REMAIN
18°-30' SKEW (TYP.)
36'-9¾"
37'-2½"
℄ S.T.H. 22 (MAIN ST.)
4 SPA. @ 7'-10" = 31'-4"
3'-1"
4'-9"
4 SPA. @ 7'-10" = 31'-4"
PILE SPA.
A15
1'-3"
3'-11⅜"
2'-10½"
2'-11½"
8'-9"
1 2 3 4 5 6 7 8 9 10
108°-30'
A04
A06
℄ PILES & BRG.
6'-8¼"
5'-4½"
6'-10⅝"
▲ 1" EXPANDED POLYSTYRENE
31'-11"
26'-10¾"
PIPE UNDERDRAIN TO DROP VERTICALLY & TRAVEL UNDER S. ABUT. & THRU EXTENDED END OF EXISTING ABUT. @ WING 1.
32'-5⅜"
33'-8¼"
33'-3⅜"
39'-5⅛"
EXISTING RETAINING WALL TO REMAIN

PILE PLAN

SECTION THRU BODY

EXISTING RETAINING WALL TO REMAIN
℄ BRG. & PILES
4" X ¾" FILLER X ABUTMENT LENGTH
¾" BEVEL
A411
A412
A19
A410 @ 1'-6"
A409, A439
A508 @ 1'-0"
5'-5¼"
SLOPE PAVING EL. 798.02
6" THK.
0.02⅛
A602,A603
A407
A501
A804,A805 8 EQ. SPA.
A15
2'-0"
3" CL.
EL. 796.02
A06
1'-3"
1'-3"
2'-6"

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SOUTH ABUTMENT

SHEET 5

71

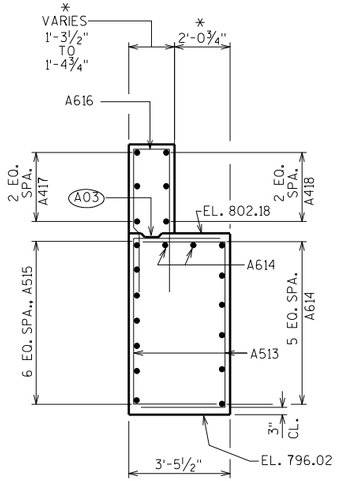
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8

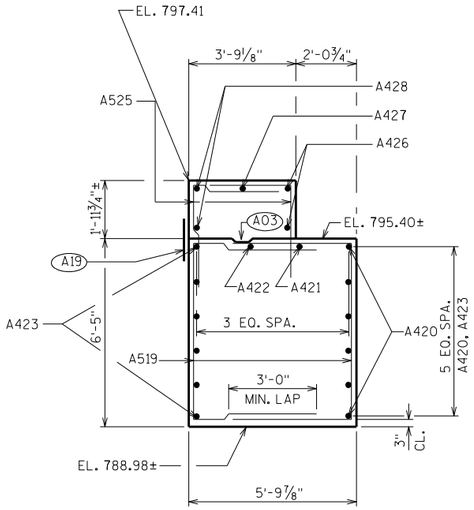
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6250-01-70

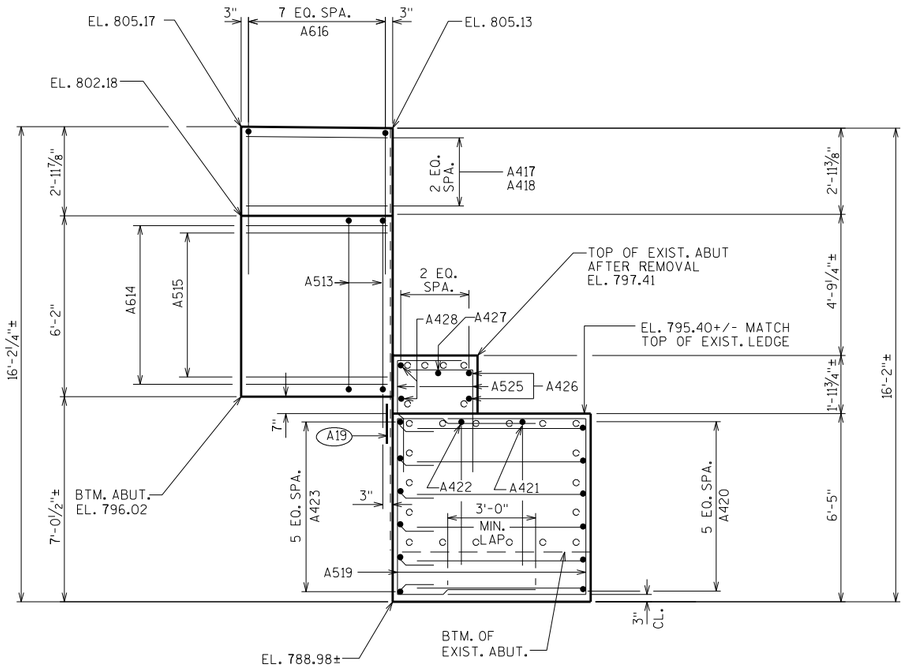


SECTION A-A

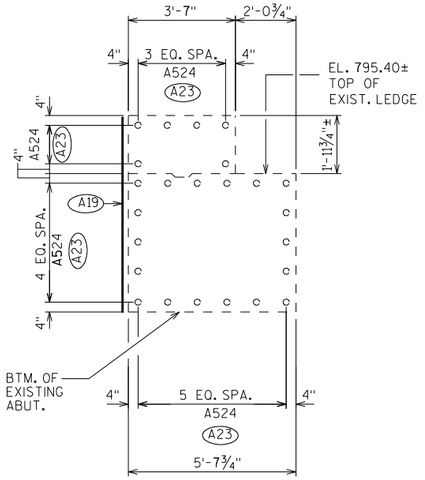
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SECTION B-B

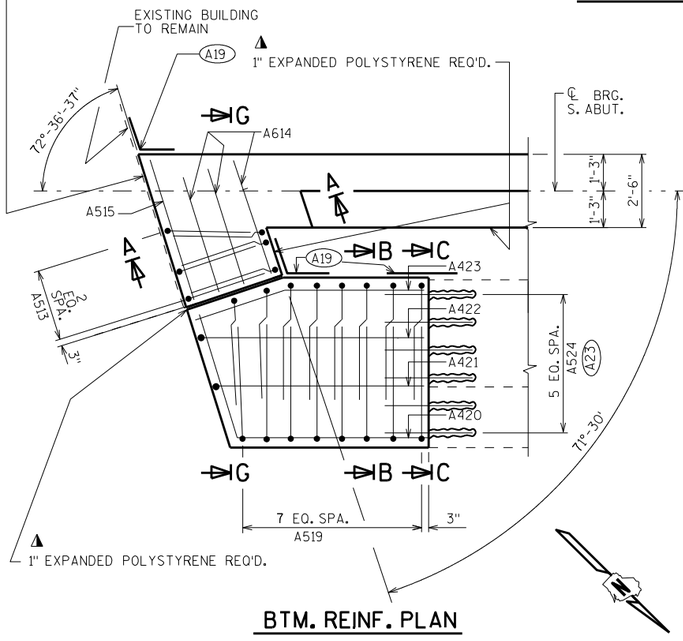


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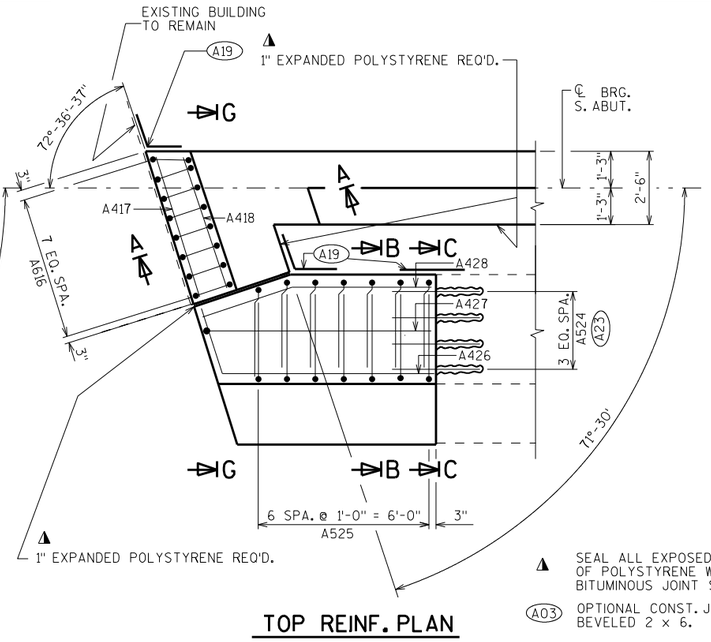


SECTION C-C

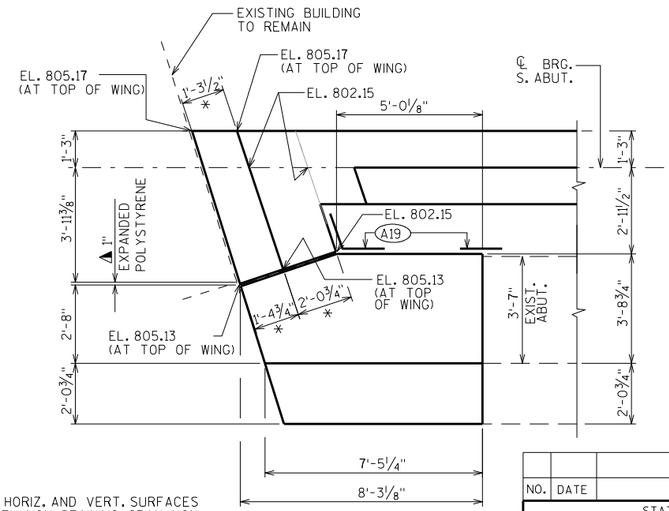
▲ 1" EXPANDED POLYSTYRENE REQ'D. BTWN. EXIST. BLDG. & S. ABUT.



BTM. REINF. PLAN



TOP REINF. PLAN



PLAN DETAIL

SHOWING DIMS. & ELEVS.

▲ SEAL ALL EXPOSED HORIZ. AND VERT. SURFACES OF POLYSTYRENE WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS, AS SHOWN.

(A23) A524 MASONRY ANCHORS TYPE L NO. 5 BARS. EMBED 1'-6" IN CONCRETE.

NO.	DATE	REVISION	BY

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WING 1 DETAILS

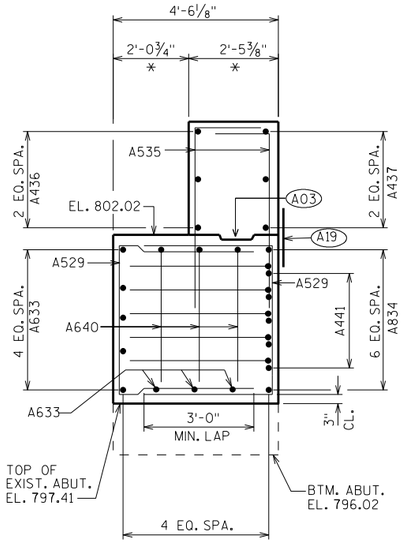
SHEET 6

72

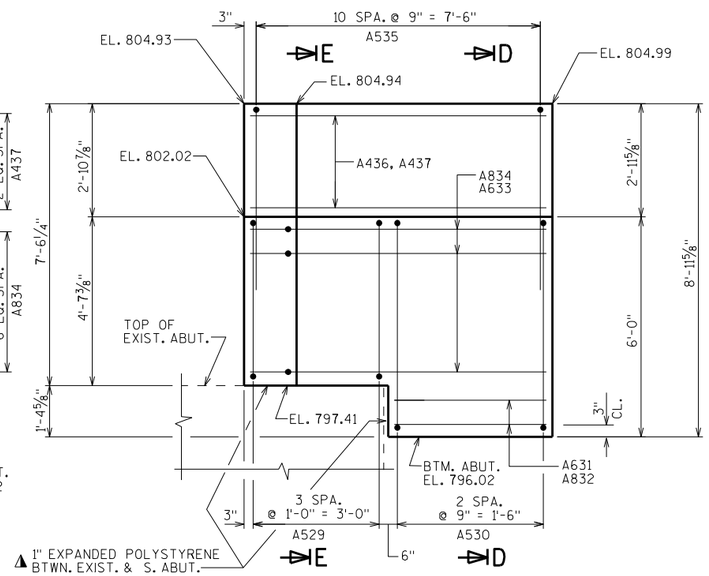
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STATE PROJECT NUMBER

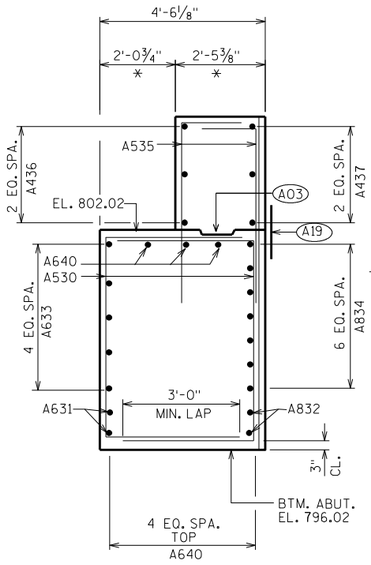
6250-01-70



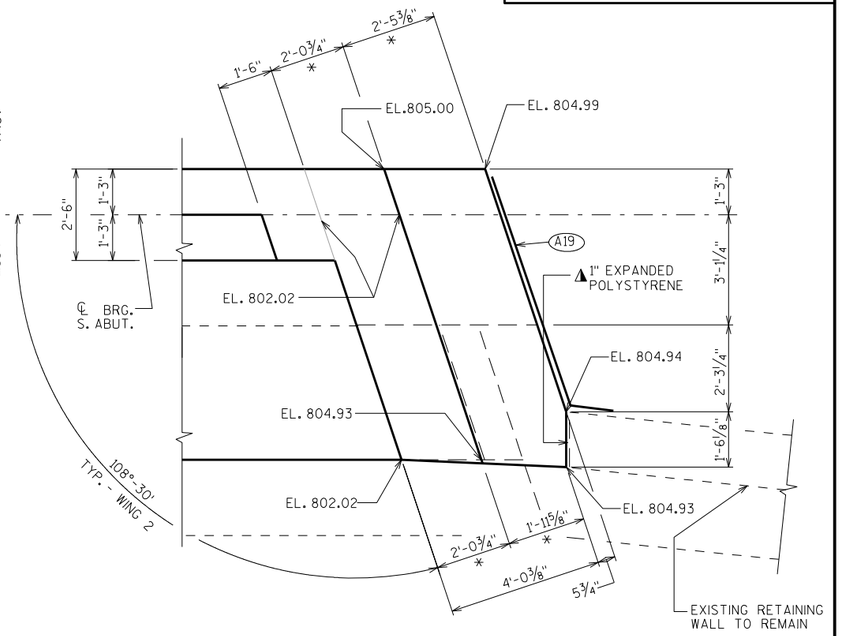
SECTION E-E



SECTION F-F



SECTION D-D



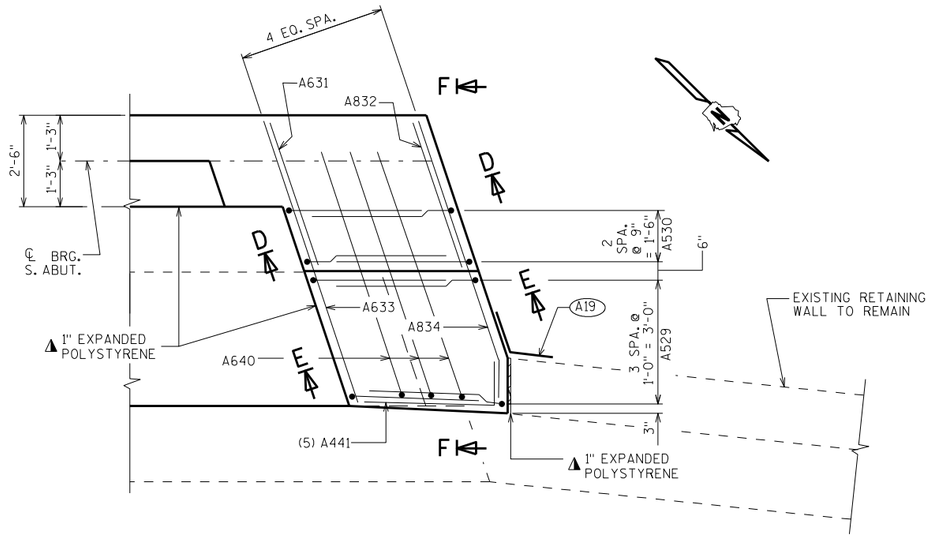
PLAN DETAILS

* LEVEL IN THIS DIRECTION

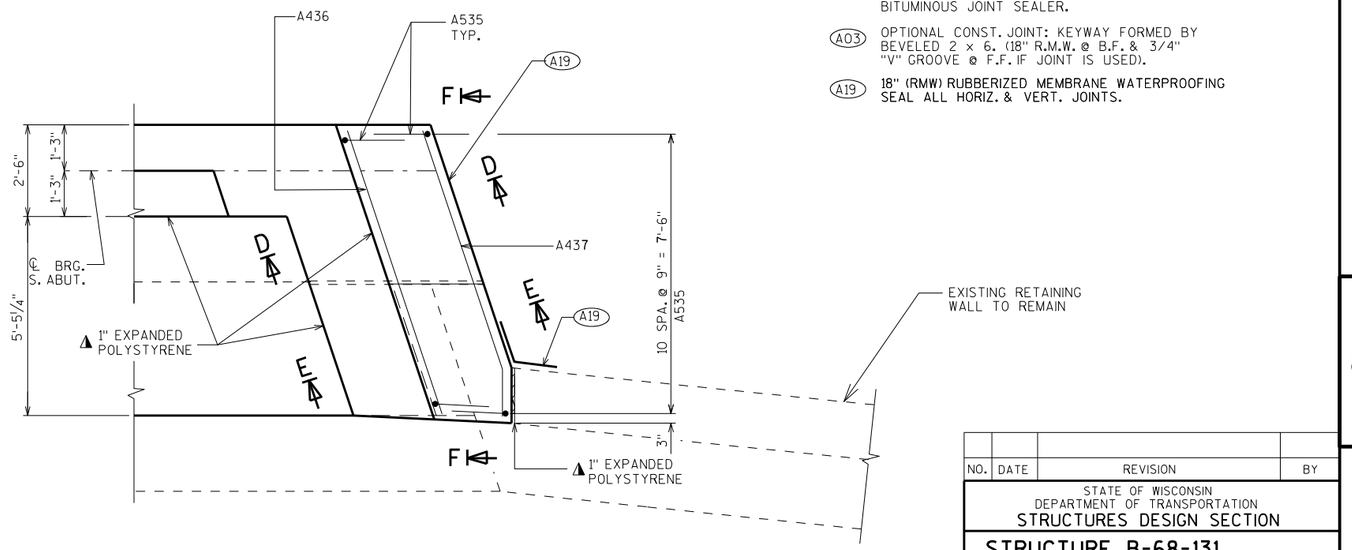
▲ SEAL ALL EXPOSED HORIZ. AND VERT. SURFACES OF POLYSTYRENE WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 × 6. (18" R.M.W. @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS.



BTM. REINF. PLAN



TOP REINF. PLAN

NO.	DATE	REVISION	BY

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STRUCTURES DESIGN SECTION

STRUCTURE B-68-131

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WING 2 DETAILS

SHEET 7

73

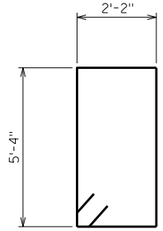
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STATE PROJECT NUMBER

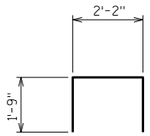
6250-01-70



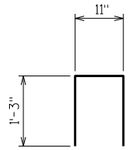
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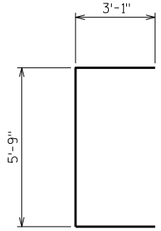
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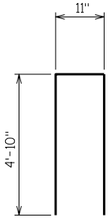
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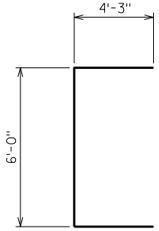
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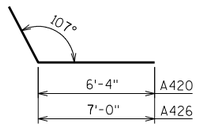
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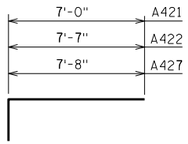
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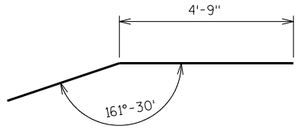
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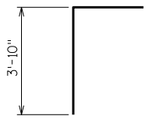
A420, A426



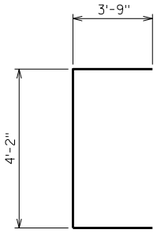
A421, A422, A427



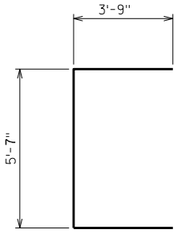
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A525



A529

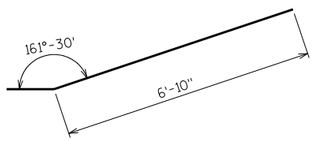


A530

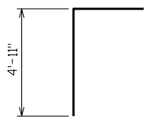
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

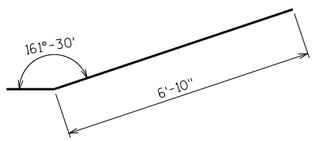
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A501		91	15'-8"	X		BODY-VERT.-STIRRUPS
A602		10	35'-9"			BODY-HORIZ.-F.F.,TOP & BTM.
A603		10	40'-5"			BODY-HORIZ.-F.F., TOP & BTM.
A804		7	36'-4"			BODY-HORIZ.-B.F.
A805		7	42'-5"			BODY-HORIZ.-B.F.
A406		10	28'-0"	X		BODY - 1 PER BODY PILE
A407		20	2'-3"			BODY - 2 PER BODY PILE
A508		41	5'-5"	X		BODY-TOP-VERT.
A409		3	22'-6"			BODY-TOP-HORIZ.
A410		43	3'-3"	X		BODY-TOP-VERT.
A411		2	31'-6"			BODY-TOP-HORIZ.
A412		2	33'-9"			BODY-TOP-HORIZ.
A513	X	6	11'-8"	X		WING 1-VERT.-SECTION A-A
A614	X	8	3'-8"			WING 1-HORIZ.-SECTION A-A
A515	X	7	4'-5"			WING 1-HORIZ.-SECTION A-A
A616	X	8	10'-3"	X		WING 1-VERT.-TOP-SECTION A-A
A417	X	3	5'-0"			WING 1-HORIZ.-TOP-SECTION A-A
A418	X	3	4'-9"			WING 1-HORIZ.-TOP-SECTION A-A
A519	X	16	14'-3"	X		WING 1-VERT.-SECTION-B-B
A420	X	6	10'-11"	X		WING 1-HORIZ.-SECTION-B-B
A421	X	1	12'-11"	X		WING 1-HORIZ.-SECTION-B-B
A422	X	1	13'-6"	X		WING 1-HORIZ.-SECTION-B-B
A423	X	6	7'-11"	X		WING 1-HORIZ.-SECTION-B-B
A524		24	3'-0"			WING 1-SECTION-C-C-CONC. MASONRY ANCHORS
A525	X	14	6'-3"	X		WING 1-VERT.-SECTION-B-B-TOP
A426	X	2	9'-3"	X		WING 1-HORIZ.-SECTION-B-B-TOP
A427	X	1	9'-1"	X		WING 1-HORIZ.-SECTION-B-B-TOP
A428	X	2	7'-11"	X		WING 1-HORIZ.-SECTION-B-B-TOP
A529	X	8	11'-5"	X		WING 2-VERT.-SECTION E-E/F-F
A530	X	6	12'-10"	X		WING 2-VERT.-SECTION D-D/F-F
A631	X	2	4'-0"			WING 2-HORIZ.-SECTION-D-D/ F-F
A832	X	2	4'-2"			WING 2-HORIZ.-SECTION-D-D/F-F
A633	X	8	7'-9"			WING 2-HORIZ.-SECTION-D-D/E-E/F-F
A834	X	7	8'-1"	X		WING 2-HORIZ.-SECTION-D-D/E-E/F-F
A535	X	22	6'-7"	X		WING 2-VERT.-SECTION D-D/E-E/F-F
A436	X	3	8'-0"			WING 2-HORIZ.-SECTION-D-D/E-E/F-F
A437	X	3	8'-1"	X		WING 2-HORIZ.-SECTION-D-D/E-E/F/F
A438	X	94	1'-3"	X		SLOPE PAVING-VERT.-CONC. MASONRY ANCHORS
A439		3	19'-8"			BODY-TOP-HORIZ.
A640	X	3	11'-7"	X		WING 2-HORIZ.-SECTION D-D/E-E
A441	X	5	4'-11"	X		WING 2-HORIZ.-SECTION E-E



A834



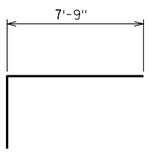
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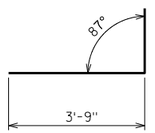
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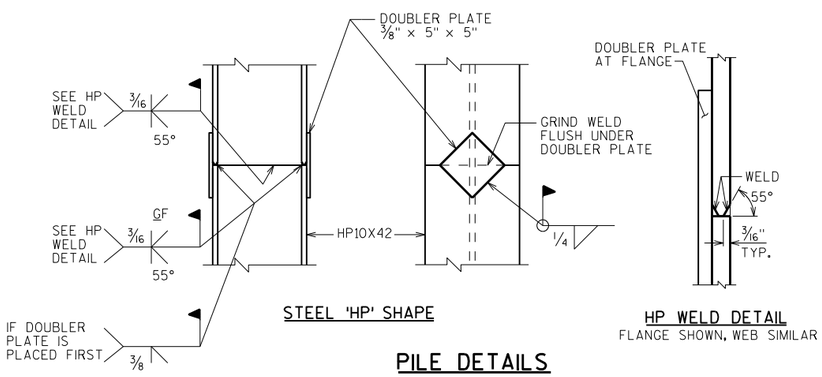
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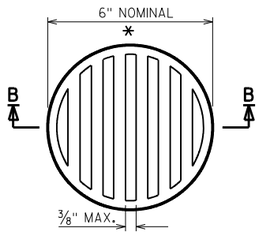
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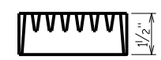


STEEL 'HP' SHAPE

HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

PILE DETAILS





SECTION B-B

RODENT SHIELD DETAIL

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-68-131

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SOUTH ABUTMENT DETAILS

SHEET 8

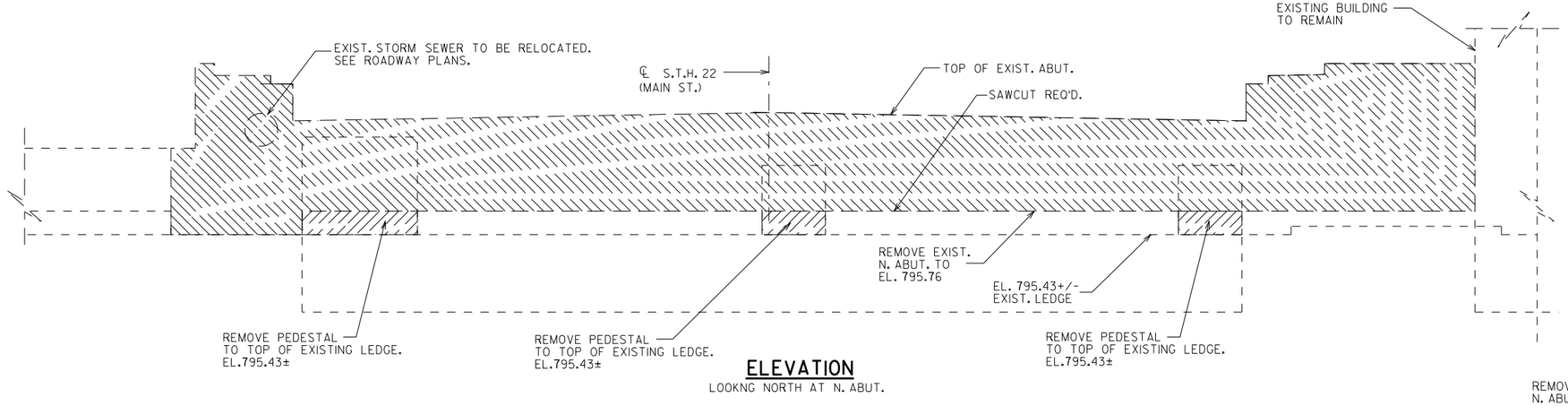
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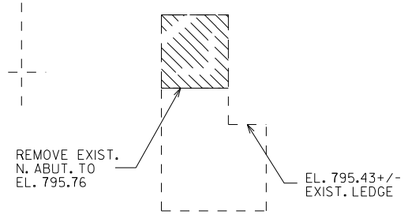
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STATE PROJECT NUMBER
6250-01-70

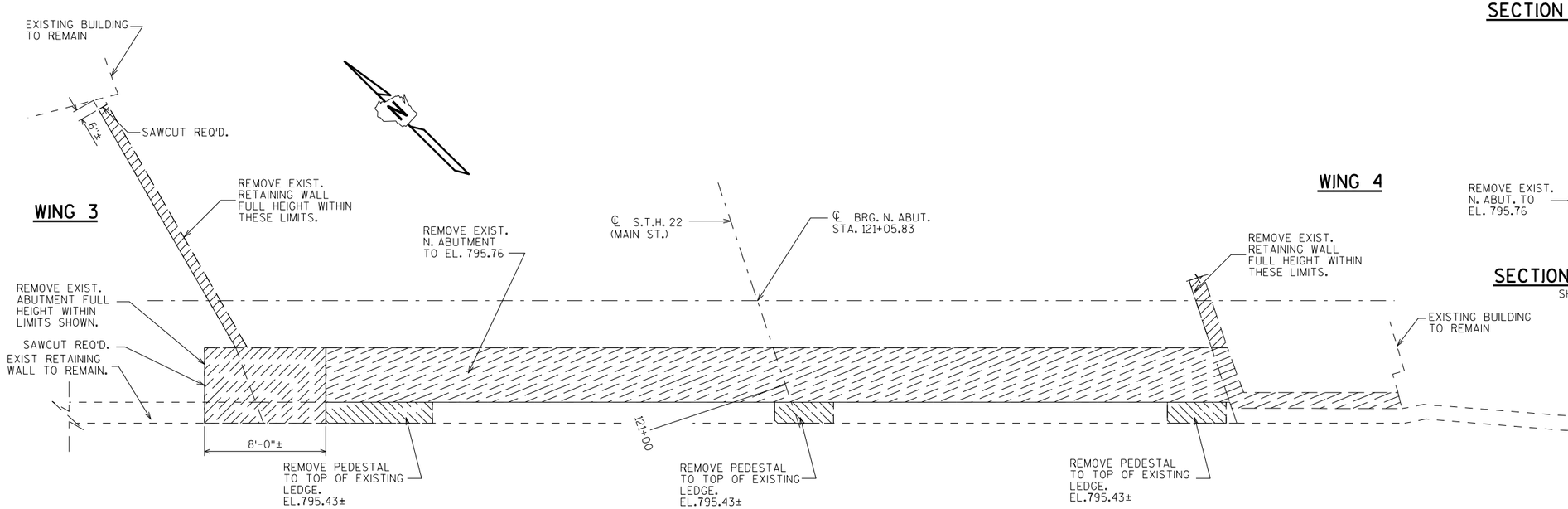


ELEVATION

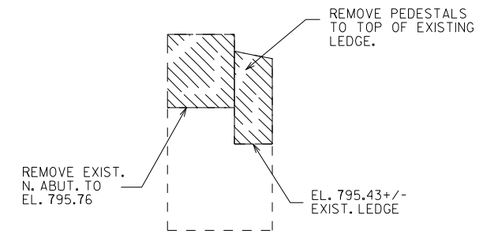
LOOKNG NORTH AT N. ABUT.



SECTION THRU EXISTING N. ABUTMENT



PLAN



SECTION THRU EXISTING N. ABUTMENT

SHOWING PEDESTAL'S REMOVAL

NOTE:

REMOVE PORTIONS OF THE EXISTING RETAINING WALL TO ALLOW FOR 1" EXPANDED POLYSTYRENE BETWEEN B-68-131 AND THE EXISTING RETAINING WALL. SEAL ALL EXPOSED HORIZ. AND VERT. SURFACES OF 1" EXPANDED POLYSTYRENE WITH NON-STAINING, GRAY, NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). THIS WORK SHALL BE INCIDENTAL TO 'REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA 120+71'.

DEFINE REMOVALS WITH A 1" DEEP SAWCUT.

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EXISTING NORTH ABUTMENT REMOVAL

SHEET 9

75

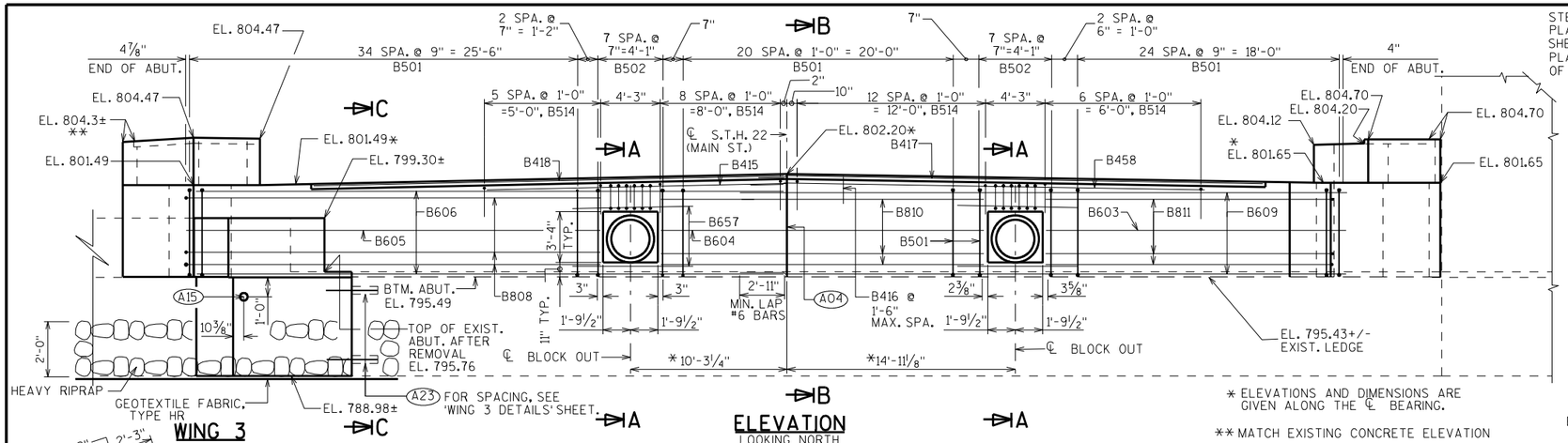
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8

8

STEEL TROWEL TOP SURFACE OF ABUTMENT PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".

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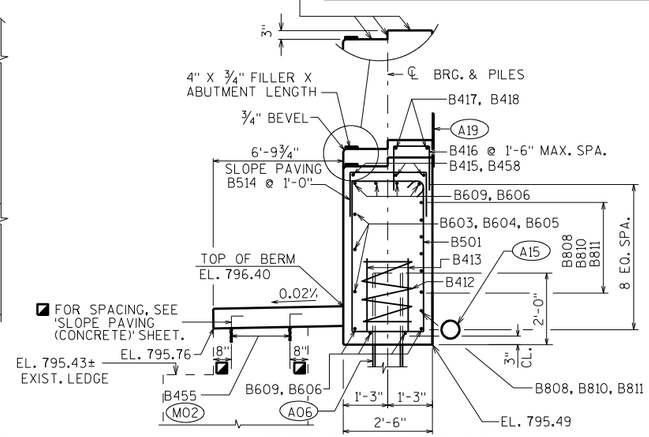
* ELEVATIONS AND DIMENSIONS ARE GIVEN ALONG THE ℄ BEARING.

** MATCH EXISTING CONCRETE ELEVATION

ELEVATION

LOOKING NORTH

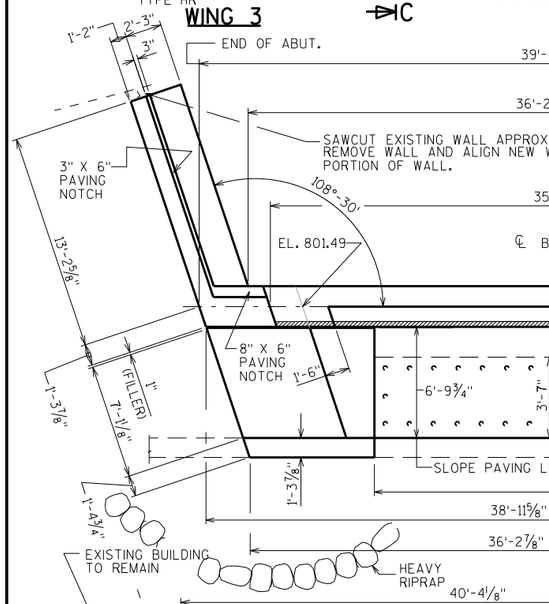
(CONCRETE SLOPE PAVING NOT SHOWN FOR CLARITY)



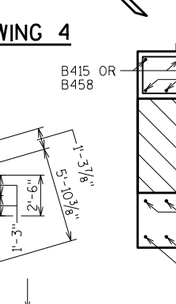
SECTION THRU BODY

(SEE SECTIONS A, B, & C FOR FURTHER/COMPLETED BAR DETAILS)

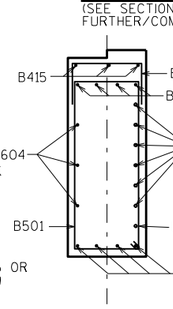
WING 3



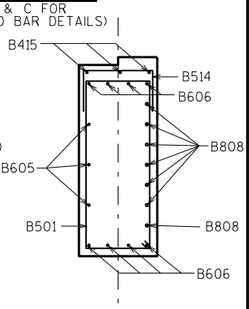
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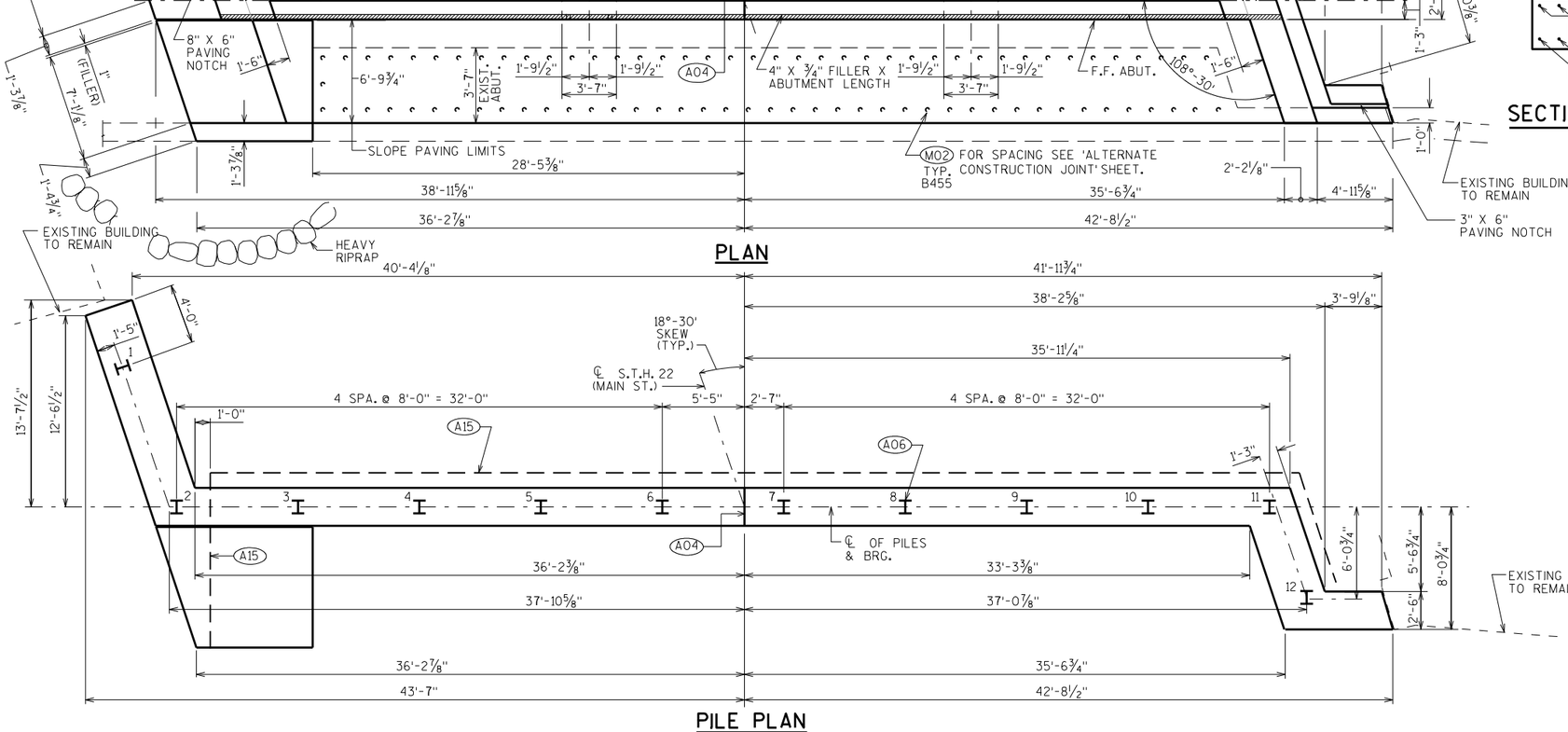
SECTION A-A



SECTION B-B



SECTION C-C



PLAN

PILE PLAN

A04 VERT. CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 X 8. 3/4" "V" GROOVE @ THE FRONT FACE AND 18" R.M.W. @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT" SHEET.

A06 SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING, ESTIMATED 80'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 110 TONS PER PILE. PREBORE EACH PILE TO A DEPTH OF 15'-0" BELOW THE BOTTOM OF THE ABUT. PRIOR TO DRIVING PILES.

A15 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED. SEE 'NORTH ABUTMENT DETAILS' SHEET FOR DETAILS.

A19 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS.

A23 B542 MASONRY ANCHORS TYPE L NO. 5 BARS. EMBED 1'-6" IN CONCRETE.

M02 B455 MASONRY ANCHORS TYPE S 1/2-INCH. EMBED 5" IN CONCRETE.

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NORTH ABUTMENT

SHEET 10

76

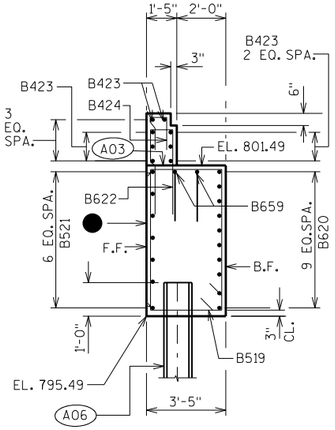
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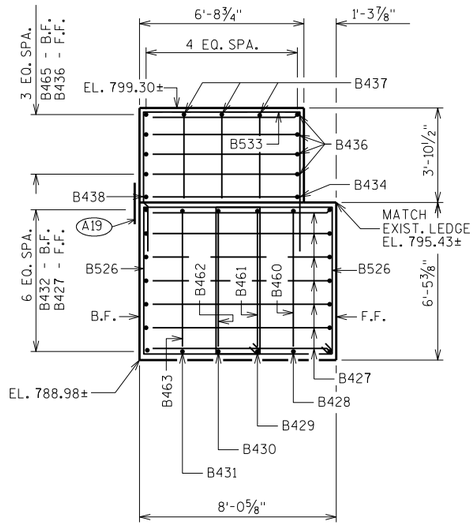
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STATE PROJECT NUMBER

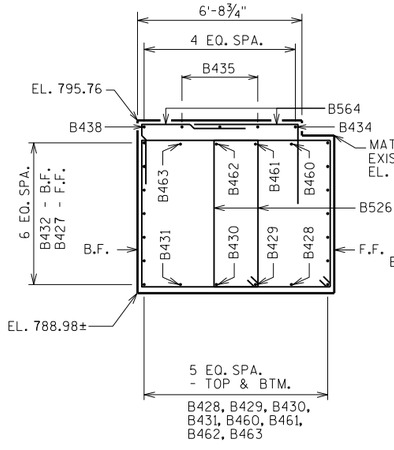
6250-01-70



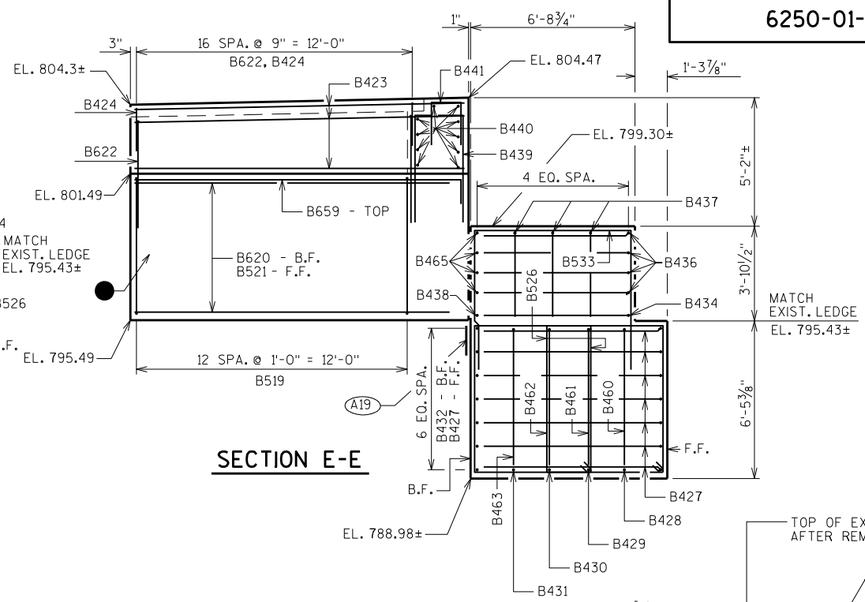
SECTION A-A



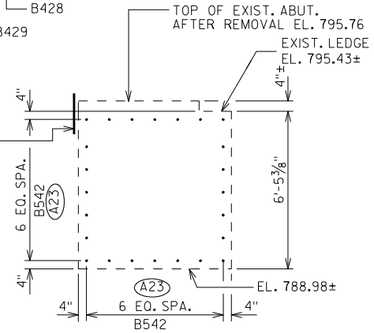
SECTION B-B



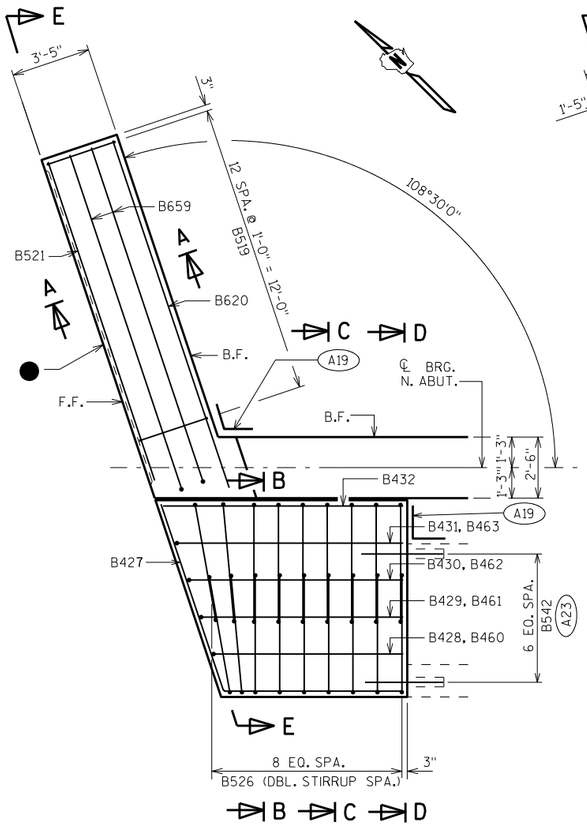
SECTION C-C



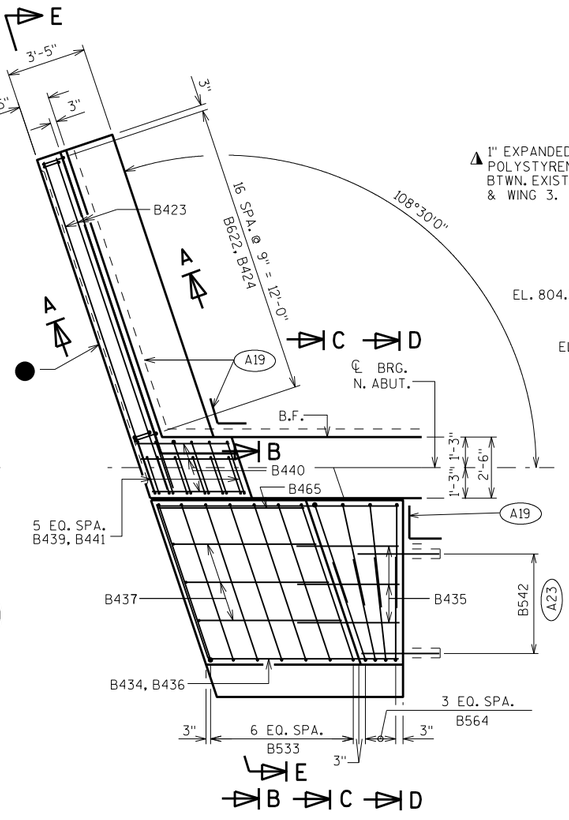
SECTION E-E



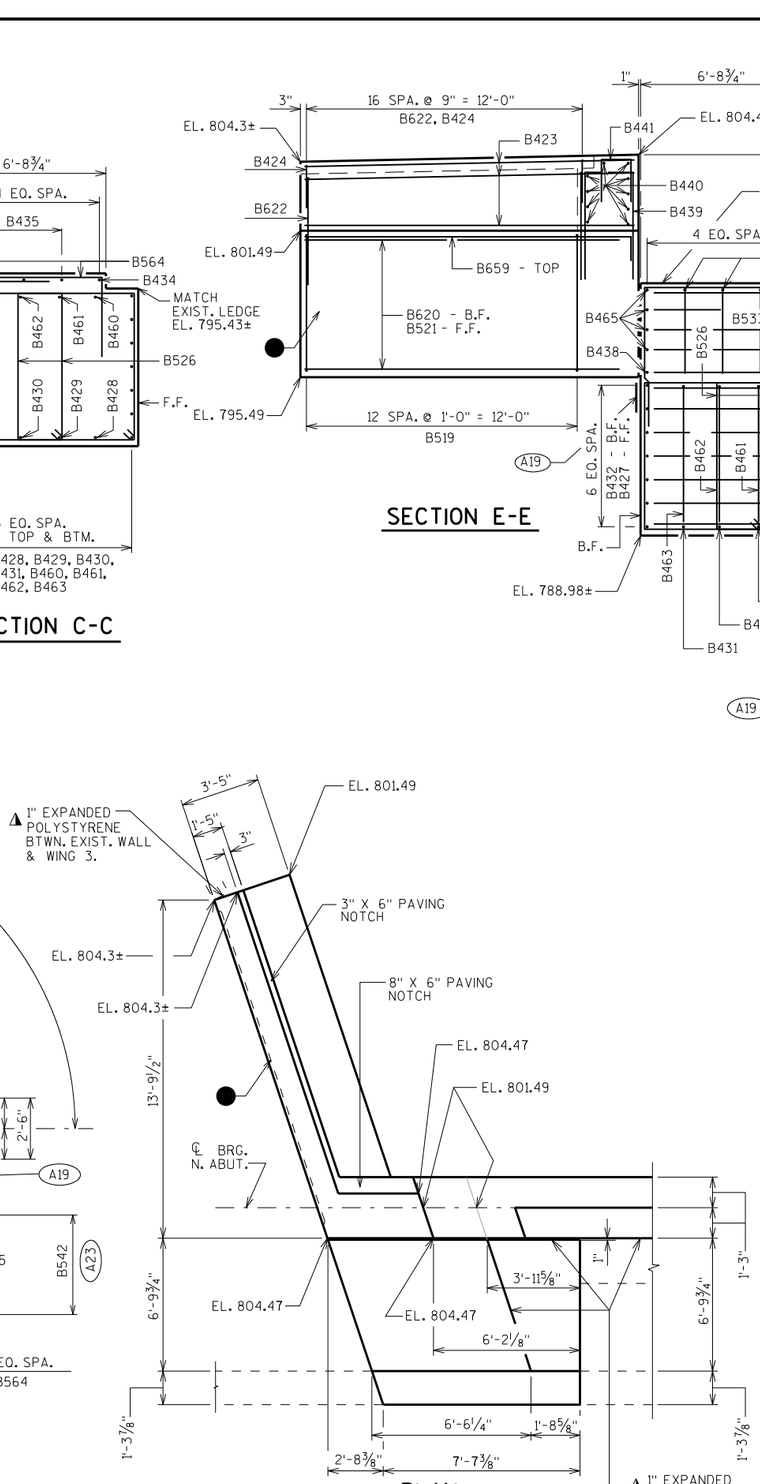
SECTION D-D



PLAN - BTM. REINF.



PLAN - TOP REINF.



PLAN

SHOWING DIMS. & ELEVS.

▲ SEAL ALL EXPOSED HORIZ. AND VERT. SURFACES OF POLYSTYRENE WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6.

(A06) SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING, ESTIMATED 80'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 110 TONS PER PILE. PREBORE EACH PILE TO A DEPTH OF 15'-0" BELOW THE BOTTOM OF THE ABUTMENT PRIOR TO DRIVING PILES.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS.

(A23) B542 MASONRY ANCHORS TYPE L NO. 5 BARS. EMBED 1'-6" IN CONCRETE. (MIN. SPA. ALLOWED BTWN. ANCHORS = 8")

● FORMLINER AND STAINING REQ'D. SEE 'AESTHETIC DETAILS' SHEET.

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WING 3 DETAILS

SHEET 11

77

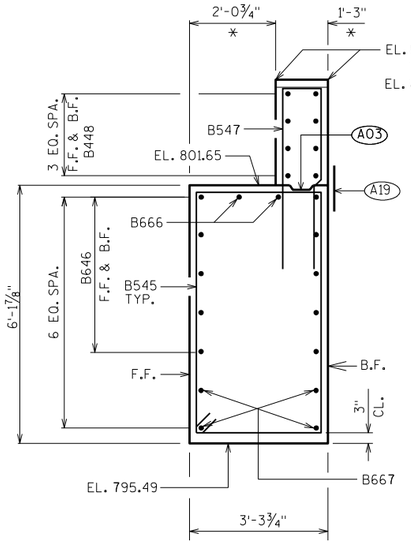
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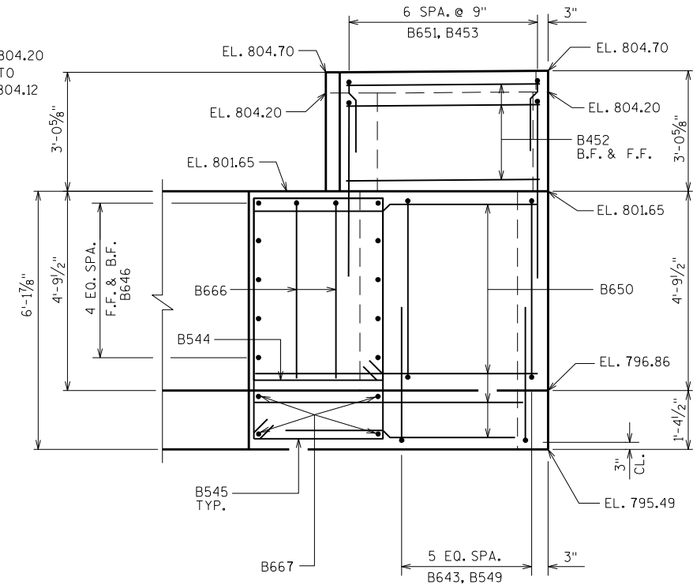
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STATE PROJECT NUMBER

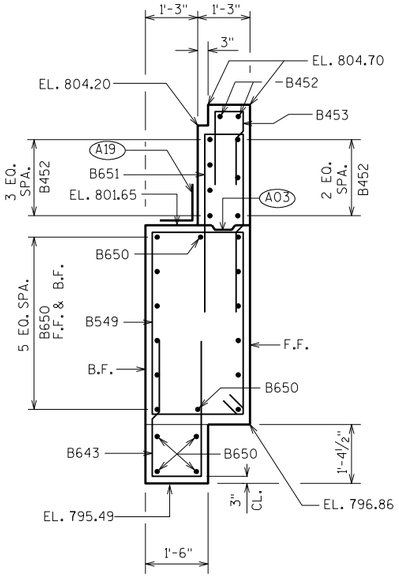
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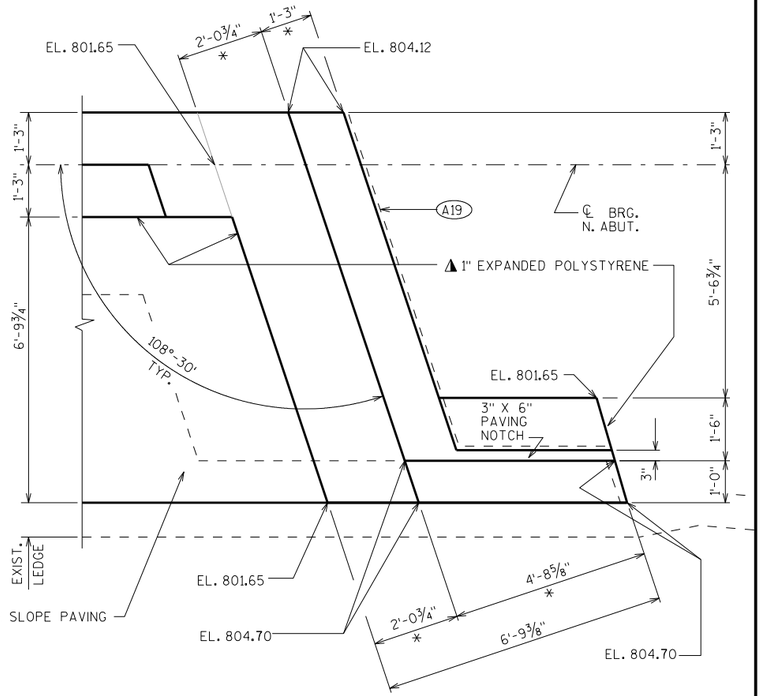
SECTION J-J



SECTION K-K



SECTION H-H



PLAN

SHOWING DIMS. & ELEVS.

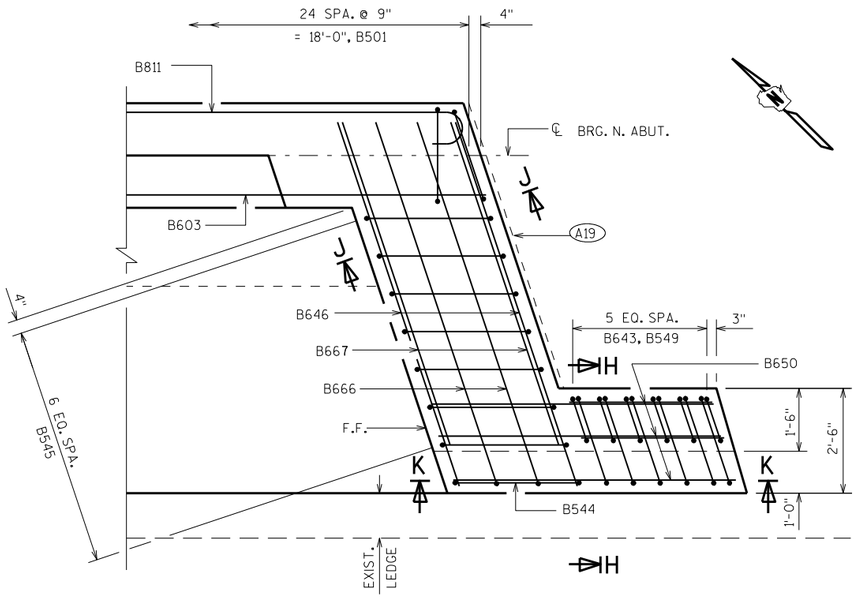
* LEVEL IN THIS DIRECTION

◭ SEAL ALL EXPOSED HORIZ. AND VERT. SURFACES OF POLYSTYRENE WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

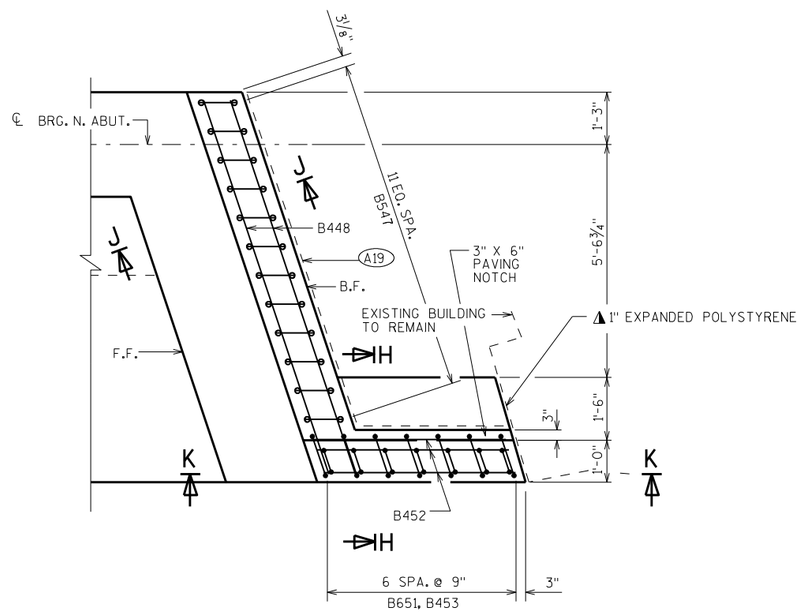
(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" R.M.W. @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

(A06) SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING, ESTIMATED 80'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 110 TONS PER PILE. PREBORE EACH PILE TO A DEPTH OF 15'-0" BELOW THE BOTTOM OF THE ABUTMENT PRIOR TO DRIVING PILES.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS.



PLAN - BTM. REINF.



PLAN - TOP REINF.

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STRUCTURE B-68-131

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WING 4
DETAILS

SHEET 12

78

SCALE = 1.75

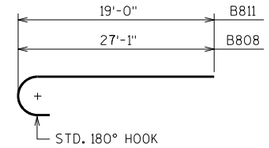
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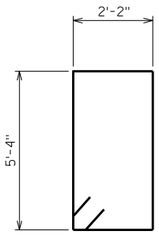
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

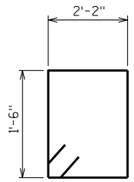
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B501		87	15'-8"	X		BODY-VERT.-STIRRUPS
B502		16	8'-0"	X		BODY-VERT. STIRRUPS @ STORM SEWER-TOP
B603		3	19'-5"			BODY-HORIZ.-F.F.-EAST
B604		3	21'-3"			BODY-HORIZ.-F.F.-MIDDLE
B605		3	26'-6"			BODY-HORIZ.-F.F.-WEST
B606		8	39'-0"			BODY-HORIZ.-TOP & BTM.-WEST
~~B807~~		NOT	USED			
B808		7	28'-0"	X		BODY-HORIZ.-B.F.-WEST
B609		8	38'-11			BODY-HORIZ.-TOP & BTM.-EAST
B810		7	21'-3"			BODY-HORIZ.-B.F.-MIDDLE
B811		7	19'-11	X		BODY-HORIZ.-B.F.-EAST
B412		12	28'-0"	X		BODY - 1 PER BODY PILE
B413		24	2'-3"			BODY - 2 PER BODY PILE
B514		35	5'-5"	X		BODY-TOP-VERT.
B415		3	17'-6"			BODY-TOP-HORIZ.
B416		43	3'-3"	X		BODY-TOP-VERT.
B417		2	33'-9"			BODY-TOP-HORIZ.
B418		2	31'-6"			BODY-TOP-HORIZ.
B519	X	13	17'-8"	X		WING 3-VERT.-STIRRUPS-SECTION A-A/E-E
B620	X	10	15'-0"			WING 3-HORIZ.-B.F.-SECTION A-A/E-E
B521	X	7	13'-9"			WING 3-HORIZ.-F.F.-SECTION A-A/E-E
B622	X	17	9'-3"	X		WING 3-VERT.-TOP-SECTION A-A/E-E
B423	X	8	14'-4"			WING 3-HORIZ.-TOP-F.F-B.F.-SECTION A-A/E-E
B424	X	17	4'-1"	X		WING 3-VERT.-TOP-SECTION A-A/E-E
~~B625~~	~~X~~	NOT	USED			
B526	X	18	22'-2"	X		WING 3-VERT.-STIRRUPS-SECTION B-B/E-E
B427	X	7	15'-4"	X		WING 3-HORIZ.-BTM-SECTION-B-B/E-E
B428	X	1	7'-10"			WING 3-HORIZ.-BTM-SECTION-B-B/E-E
B429	X	1	8'-4"			WING 3-HORIZ.-BTM-SECTION-B-B/E-E
B430	X	1	8'-10"			WING 3-HORIZ.-BTM-SECTION-B-B/E-E
B431	X	1	9'-4"			WING 3-HORIZ.-BTM-SECTION-B-B/E-E
B432	X	7	9'-10"			WING 3-HORIZ.-BTM-SECTION-B-B/E-E
B533	X	7	17'-11"	X		WING 3-VERT.-SECTION-B-B/E-E-TOP
B434	X	1	14'-3"	X		WING 3-VERT.-SECTION-C-C-TOP
B435	X	3	4'-3"			WING 3-VERT.-SECTION-C-C-TOP
B436	X	4	12'-6"	X		WING 3-VERT.-SECTION-B-B/E-E-TOP
B437	X	3	9'-4"	X		WING 3-VERT.-SECTION-B-B/E-E-TOP
B438	X	1	9'-10"			WING 3-VERT.-SECTION-B-B/E-E-TOP
B439	X	6	10'-3"	X		WING 3-VERT.SECTION E-E
B440	X	10	3'-10"			WING 3-HORIZ.SECTION E-E
B441	X	6	4'-11"	X		WING 3-VERT.SECTION E-E
B542	X	24	3'-0"			WING 3-SECTION-D-D/E-E-CONC. MASONRY ANCHORS
B643	X	6	7'-4"	X		WING 4 -VERT.-BTM-SECTION-H-H/K-K
B544	X	1	15'-6"	X		WING 4 -VERT.-STIRRUPS-SECTION-H-H/K-K
B545	X	7	18'-2"	X		WING 4-VERT.-STIRRUPS-SECTION-J-J/K-K
B646	X	10	9'-2"			WING 4-HORIZ.-BTM-SECTION-J-J/K-K
B547	X	12	9'-6"	X		WING 4 -VERT.-TOP-SECTION-J-J/K-K
B448	X	8	9'-5"			WING 4 -HORIZ.-TOP-SECTION-J-J/K-K
B549	X	6	13'-10"	X		WING 4-VERT.-STIRRUPS-SECTION-H-H/K-K
B650	X	18	6'-9"			WING 4-HORIZ.-BTM-SECTION-H-H/K-K
B651	X	7	9'-5"	X		WING 4-VERT.-TOP SECTION-H-H/K-K
B452	X	9	4'-6"			WING 4-VERT.-TOP SECTION-H-H/K-K
B453	X	7	4'-0"	X		WING 4-VERT.-TOP SECTION-H-H/K-K
~~B654~~	~~X~~	NOT	USED			
B455	X	88	1'-3"	X		SLOPE PAVING-VERT.-CONC. MASONRY ANCHORS
~~B556~~		NOT	USED	~~X~~		
B657		16	9'-9"			BODY-HORIZ. @ STORM SEWER-TOP & BTM.
B458		3	25'-2"			BODY-TOP-HORIZ.
B659	X	2	15'-4"	X		WING 3-HORIZ.-TOP-SECTION A-A/E-E
B460	X	1	13'-9"	X		WING 3-HORIZ.-BTM.-SECTION B-B/E-E
B461	X	1	14'-3"	X		WING 3-HORIZ.-BTM.-SECTION B-B/E-E
B462	X	1	14'-9"	X		WING 3-HORIZ.-BTM.-SECTION B-B/E-E
B463	X	1	15'-3"	X		WING 3-HORIZ.-BTM.-SECTION B-B/E-E
B564	X	8	6'-4"	X		WING 3-VERT.-SECTION C-C-TOP
B465	X	4	5'-11"			WING 3-HORIZ.-SECTION B-B/E-E-TOP
B666	X	2	13'-3"	X		WING 4-HORIZ.-BTM-SECTION-J-J/K-K
B667	X	4	8'-1"			WING 4 -HORIZ.-SECTION-J-J/K-K



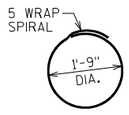
B808, B811



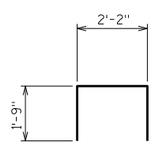
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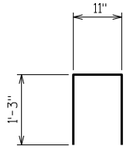
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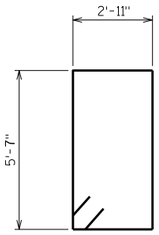
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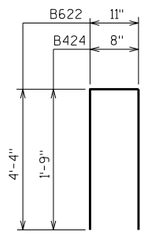
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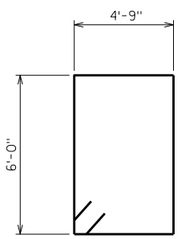
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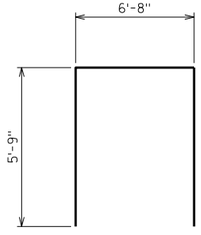
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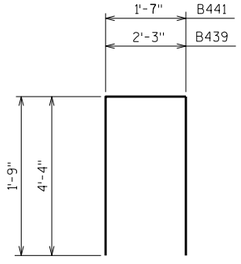
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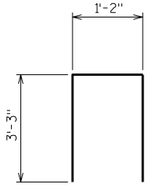
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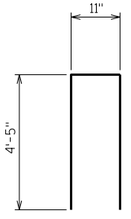
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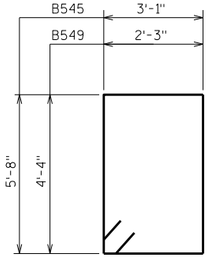
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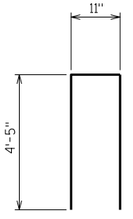
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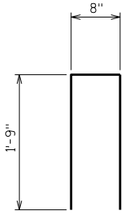
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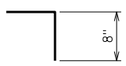
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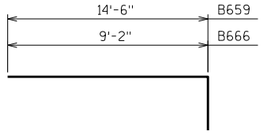
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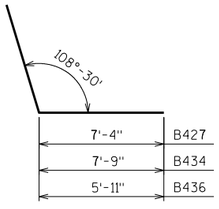
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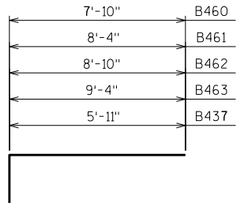
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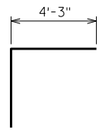
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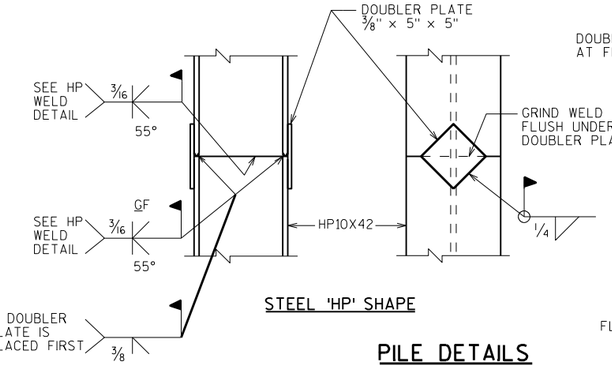
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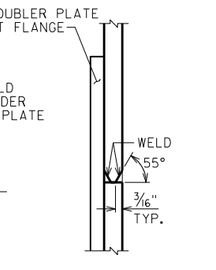
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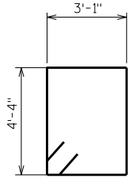


STEEL 'HP' SHAPE



HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

PILE DETAILS



B544

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-68-131

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NORTH ABUTMENT DETAILS

SHEET 13

79

STATE PROJECT NUMBER

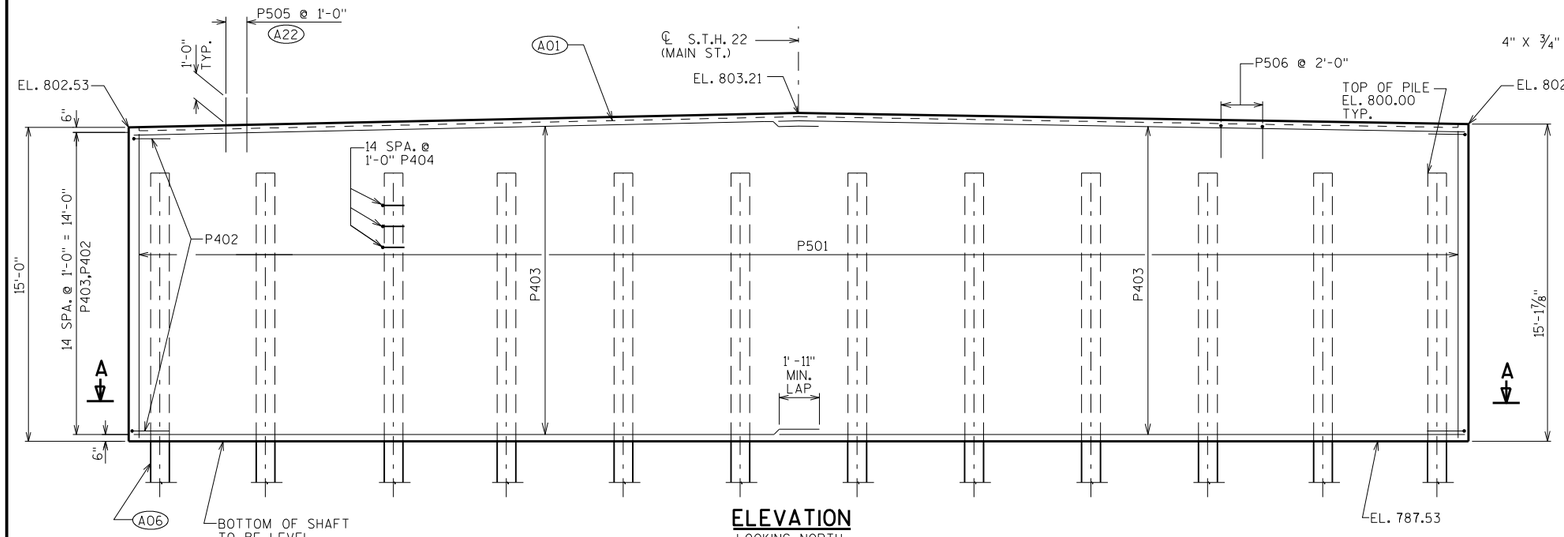
6250-01-70

8

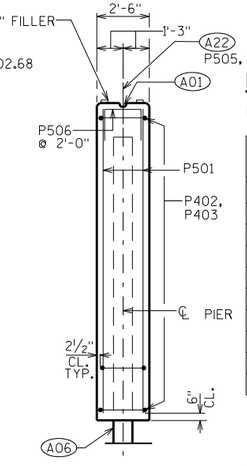
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SCALE = 2

STATE PROJECT NUMBER
6250-01-70



ELEVATION
LOOKING NORTH

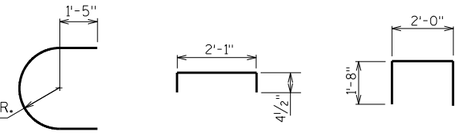


END VIEW

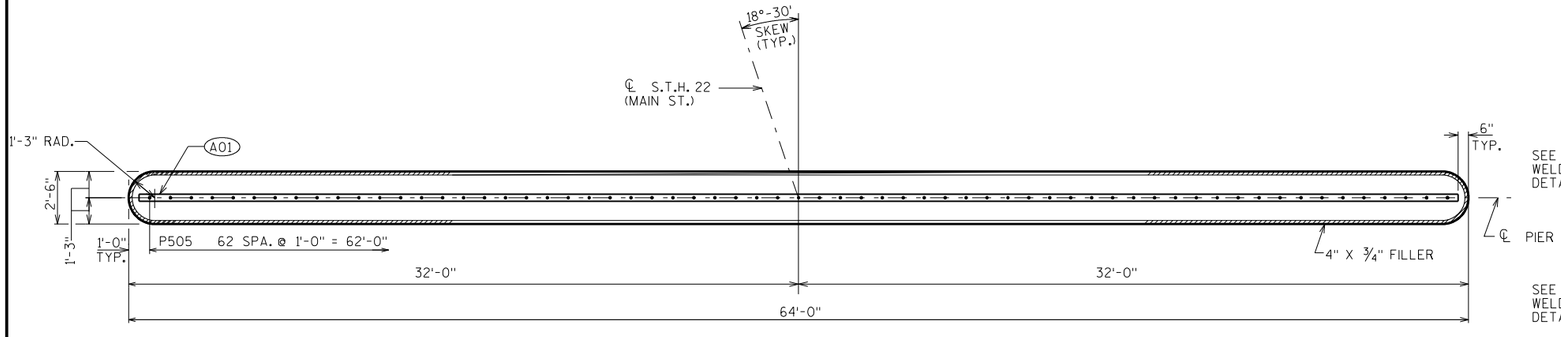
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

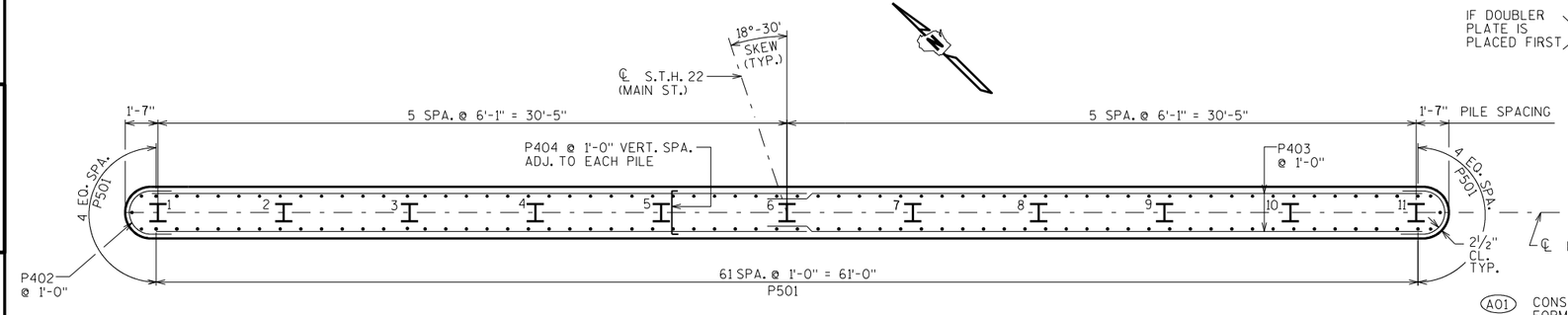
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	LOCATION
P501		130	14'-2"		SHAFT VERT.
P402		30	6'-2"	X	HORIZ. @ ENDS
P403		60	31'-6"		SHAFT HORIZ.
P404		165	2'-8"	X	SHAFT HORIZ. TIES
P505	X	63	2'-0"		TOP DOWELS
P506		32	5'-1"	X	TOP STIRRUPS



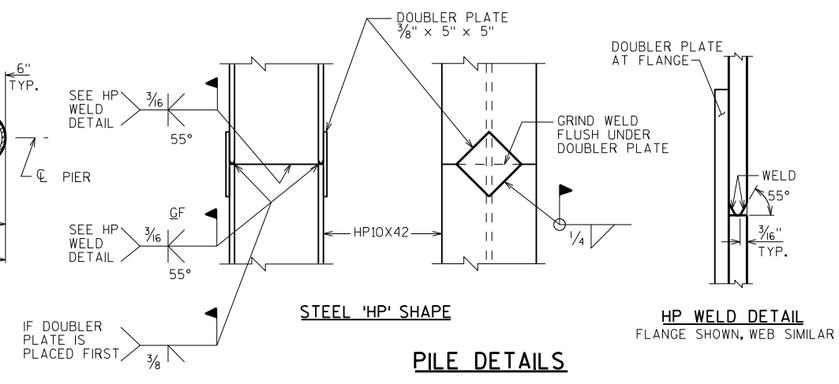
P402 P404 P506



PLAN



SECTION A-A



STEEL 'HP' SHAPE

HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

(A01) CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2" x 6".

(A06) SUPPORT PIER ON HP 10 x 42 STEEL PILING, ESTIMATED 80'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

(A22) P505 BARS SPACED @ 1'-0" CTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-68-131

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PIER

SHEET 14

80

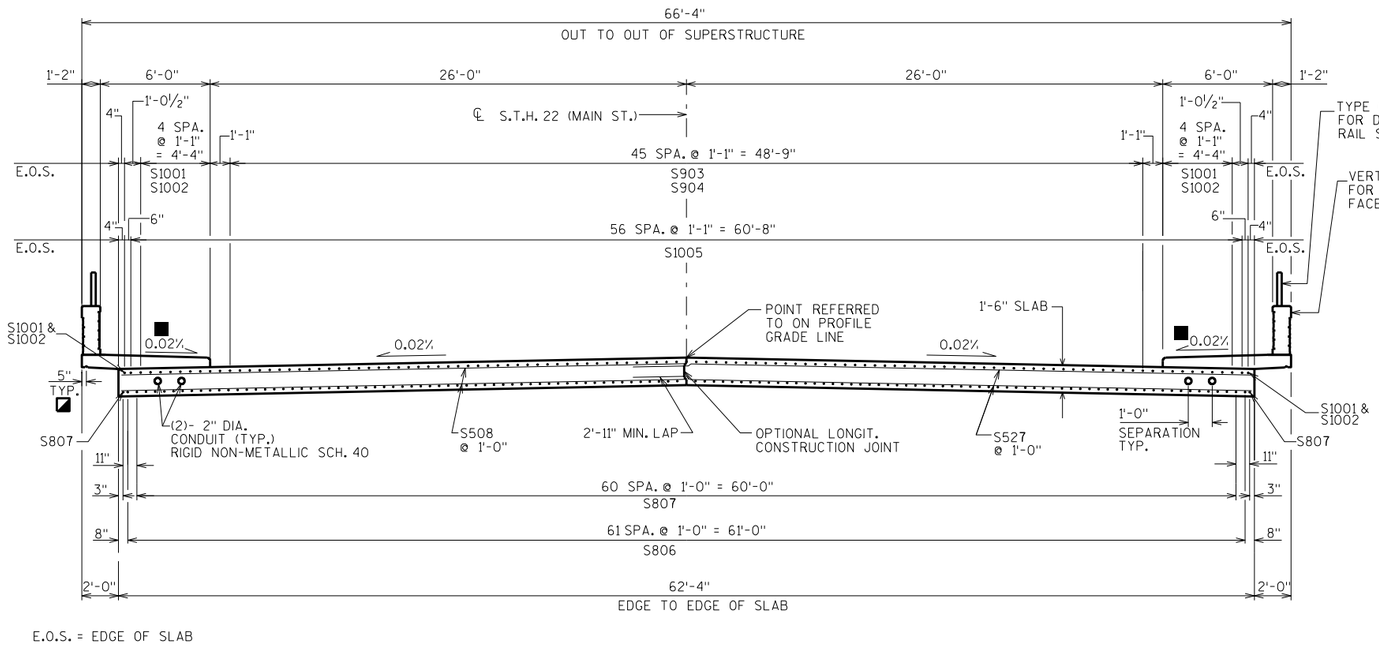
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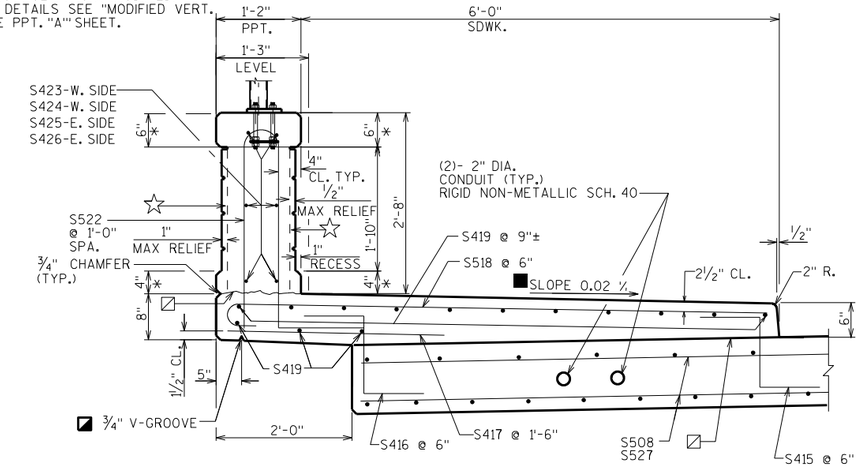
STATE PROJECT NUMBER

6250-01-70



E.O.S. = EDGE OF SLAB

CROSS SECTION THRU ROADWAY LOOKING NORTH



SECTION THRU SIDEWALK AND PARAPET

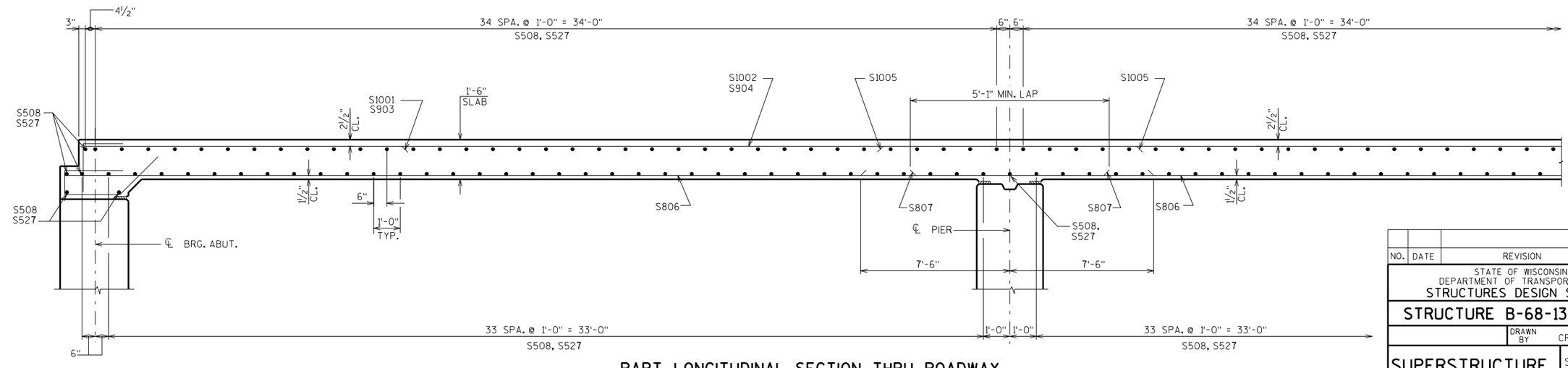
☐ CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH. FOR DECK POUR, MATCH BRIDGE X-SLOPE.

☆ FORMLINER & STAIN REQUIRED.

◪ ¾" V-GROOVE REQUIRED. EXTEND TO 3" FROM FRONT FACE OF ABUTMENT DIAPHRAGM.

* PLAIN CONCRETE. NO STAIN TO BE APPLIED HERE.

■ 0.02% IS THE SIDEWALK SLOPE WITH NEGATIVE 0.01% AND POSITIVE 0.00% FOR CONSTRUCTION TOLERANCE.



PART LONGITUDINAL SECTION THRU ROADWAY

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-68-131

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SUPERSTRUCTURE CROSS SECTIONS

SHEET 15

81

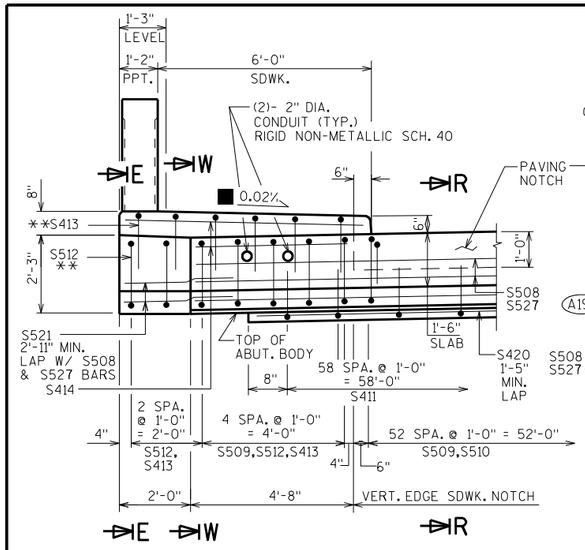
SCALE = 4

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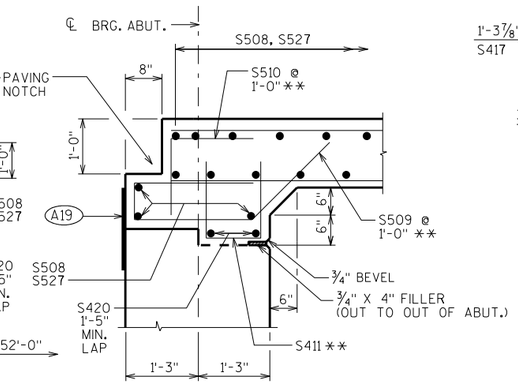
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STATE PROJECT NUMBER

6250-01-70

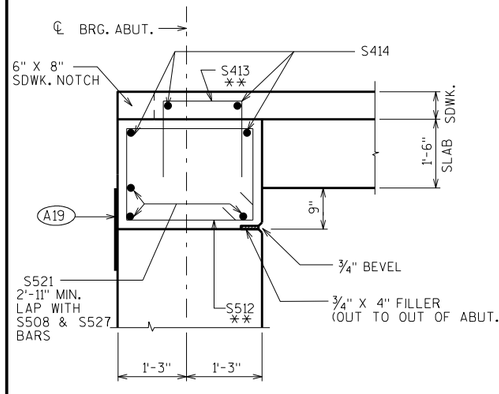


ABUT. DIAPH. DETAIL @ SIDEWALK



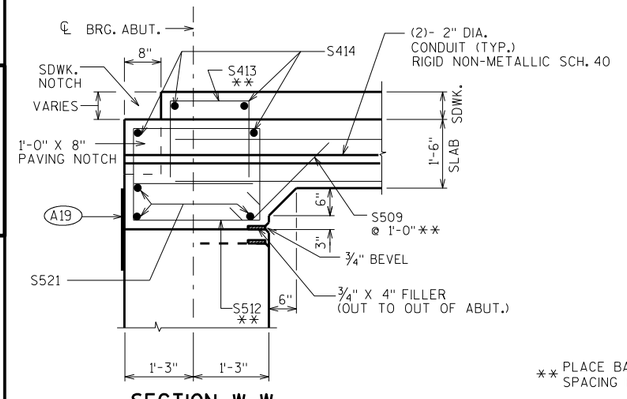
SECTION R-R

■ 0.02% IS THE SIDEWALK SLOPE WITH A NEGATIVE 0.01% & A POSITIVE 0.00% FOR CONSTRUCTION TOLERANCE.



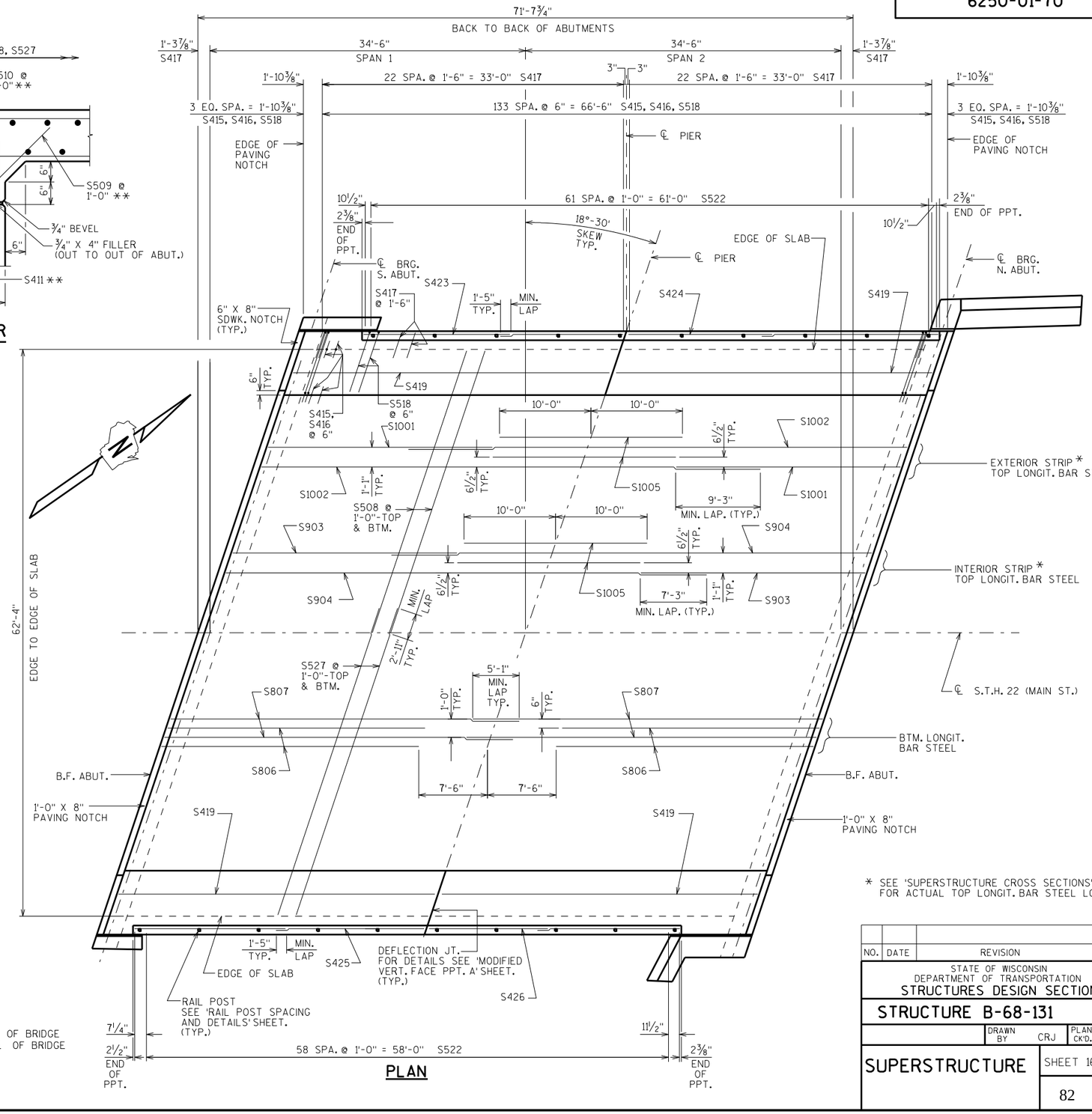
SECTION E-E

(SOME BARS NOT SHOWN FOR CLARITY)



SECTION W-W

A19 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE



PLAN

** PLACE BARS PARALLEL TO ℄ OF BRIDGE SPACING PERPENDICULAR TO ℄ OF BRIDGE

* SEE 'SUPERSTRUCTURE CROSS SECTIONS' SHEET FOR ACTUAL TOP LONGIT. BAR STEEL LOCATIONS.

NO.	DATE	REVISION	BY

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STRUCTURES DESIGN SECTION

STRUCTURE B-68-131

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SUPERSTRUCTURE

SHEET 16

82

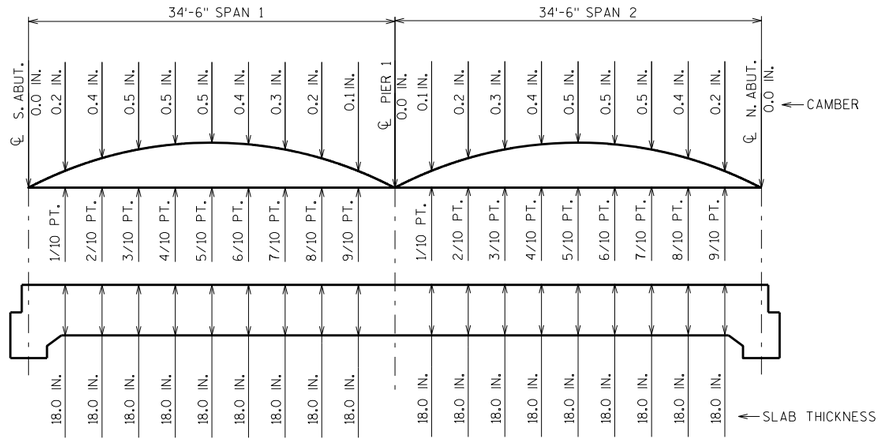
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8

SCALE = 6

STATE PROJECT NUMBER

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CAMBER AND SLAB THICKNESS DIAGRAM

CAMBER IS BASED ON 3 TIMES DEAD LOAD DEFLECTIONS. CAMBER SPANS AS SHOWN TO PROVIDE FOR DEADLOAD DEFLECTION & FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.
PARAPETS SHOWN ABOVE THE HORIZ. CONST. JT. SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED.

TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB, CROWN OR CENTERLINE FOLLOW THIS PROCEDURE:

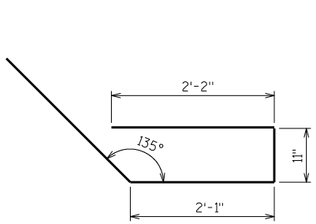
	TOP OF DECK ELEVATION AT FINAL GRADE
LESS	SLAB THICKNESS
PLUS	CAMBER
PLUS	FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (TO BE COMPUTED BY THE CONTRACTOR)
EQUALS	TOP OF SLAB FALSEWORK ELEVATION.

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF DECK ELEVATIONS AT THE ℄ OF ABUTMENTS, THE ℄ OF PIERS AND AT 5/10 PTS. TO VERIFY CAMBER.

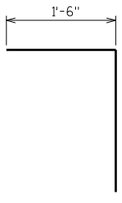
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

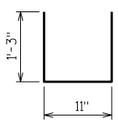
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S1001	X	12	25'-0"			SLAB TOP-LONGIT.-EXTERIOR
S1002	X	12	54'-3"			SLAB TOP-LONGIT.-EXTERIOR
S903	X	46	25'-0"			SLAB TOP-LONGIT.-INTERIOR
S904	X	46	52'-3"			SLAB TOP-LONGIT.-INTERIOR
S1005	X	57	20'-0"			SLAB-LONGIT.-OVER PIER
S806	X	124	28'-2"			SLAB-LONGIT.-BTM.
S807	X	126	38'-3"			SLAB-LONGIT.-BTM.
S508	X	149	32'-8"			SLAB-TRANS.-TOP & BTM.-WEST
S509	X	126	6'-10"	X		S. & N.-ABUT.-VERT.-HAUNCH
S510	X	106	3'-2"	X		S. & N.-ABUT.-VERT.-HAUNCH
S411	X	118	3'-3"	X		S. & N.-ABUT.-VERT.-HAUNCH
S512	X	28	8'-10"	X		S. & N.-ABUT.-VERT. @ SDWK.
S413	X	28	4'-9"	X		S. & N.-ABUT.-VERT. @ SDWK.
S414	X	16	6'-8"			S. & N.-ABUT.-HORIZ. @ SDWK.
S415	X	280	3'-4"	X		SLAB/SDWK.-VERT.
S416	X	280	3'-6"	X		SLAB/SDWK.-VERT.
S417	X	96	3'-0"			SDWK. BTM.-TRANS.
S518	X	280	7'-7"	X		SDWK. TOP-TRANS.
S419	X	56	34'-9"			SDWK.-LONGIT.-WEST & EAST SIDE
S420	X	8	31'-10"			S. & N.-ABUT.-HORIZ.-HAUNCH
S521	X	12	5'-0"			S. & N.-ABUT.-HORIZ.-HAUNCH - ENDS
S522	X	125	6'-10"	X		PPT./SDWK.-VERT.
S423	X	12	15'-0"			PPT.-LONGIT.-W. SIDE - SPAN 1
S424	X	12	17'-10"			PPT.-LONGIT.-W. SIDE - SPAN 2
S425	X	12	16'-8"			PPT.-LONGIT.-E. SIDE - SPAN 1
S426	X	12	14'-7"			PPT.-LONGIT.-E. SIDE - SPAN 2
S527	X	149	35'-8"			SLAB-TRANS.-TOP & BTM.-EAST



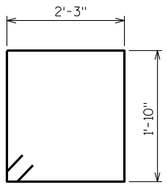
S509



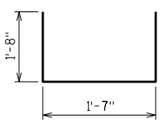
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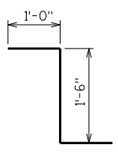
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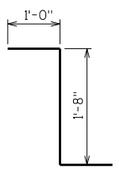
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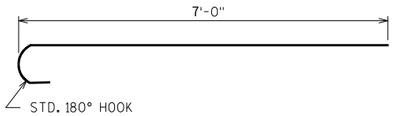
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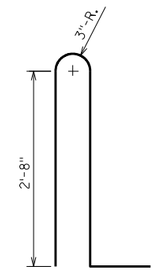
S415



S416



S518



S522

LOCATION	CL BRG. S. ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	CL PIER	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	CL BRG. N. ABUT.
WEST EDGE OF SLAB	804.27	804.25	804.22	804.19	804.17	804.14	804.11	804.09	804.06	804.03	804.01	803.98	803.95	803.93	803.90	803.87	803.85	803.82	803.79	803.77	803.74
WEST GUTTER	804.39	804.36	804.34	804.31	804.28	804.26	804.23	804.20	804.18	804.15	804.12	804.10	804.07	804.04	804.02	803.99	803.96	803.94	803.91	803.88	803.86
CL S.T.H. 22	804.98	804.95	804.92	804.90	804.87	804.84	804.82	804.79	804.76	804.74	804.71	804.68	804.66	804.63	804.60	804.58	804.55	804.52	804.50	804.47	804.44
EAST GUTTER	804.52	804.50	804.47	804.44	804.42	804.39	804.36	804.34	804.31	804.28	804.26	804.23	804.20	804.18	804.15	804.12	804.10	804.07	804.04	804.02	803.99
EAST EDGE OF SLAB	804.43	804.41	804.38	804.35	804.33	804.30	804.27	804.25	804.22	804.19	804.17	804.14	804.11	804.09	804.06	804.03	804.01	803.98	803.95	803.93	803.90

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STRUCTURES DESIGN SECTION

STRUCTURE B-68-131

DRAWN BY CRJ | PLANS CK'D. ARC

SUPERSTRUCTURE DETAILS

SHEET 17

83

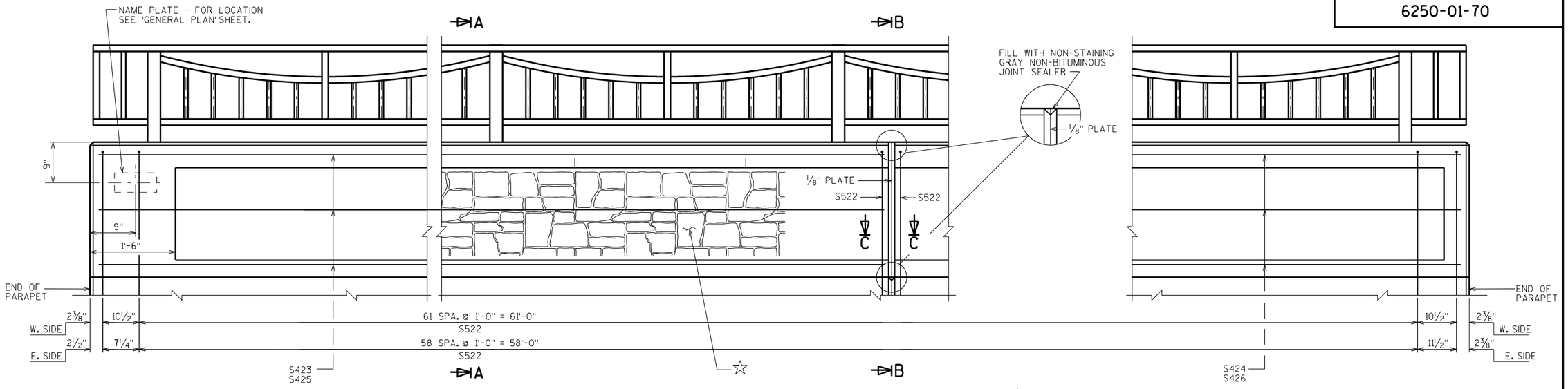
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STATE PROJECT NUMBER

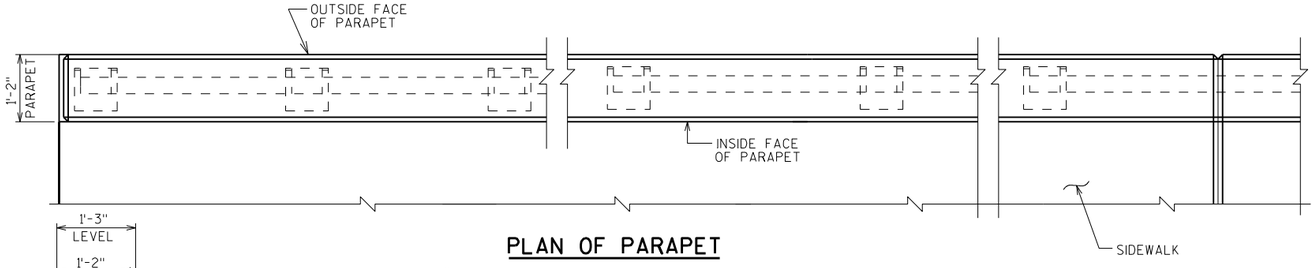
6250-01-70



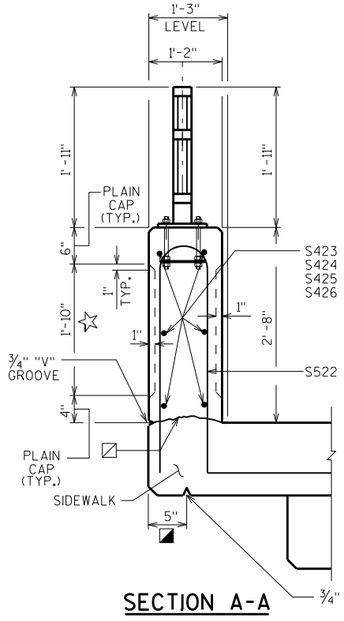
ELEVATION OF PARAPET

AT DEFLECTION JOINT

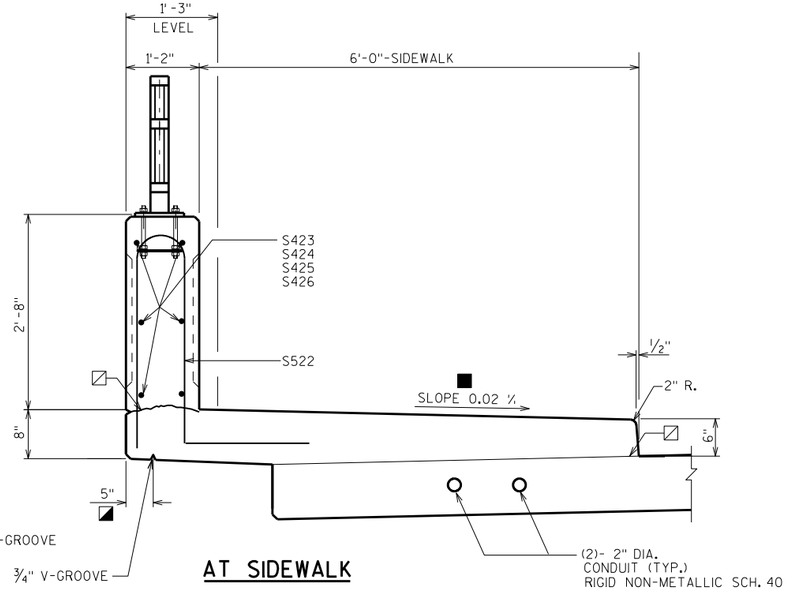
☆ RUSTIC ASHLAR FORMLINER AND STAIN REQUIRED.



PLAN OF PARAPET



SECTION A-A

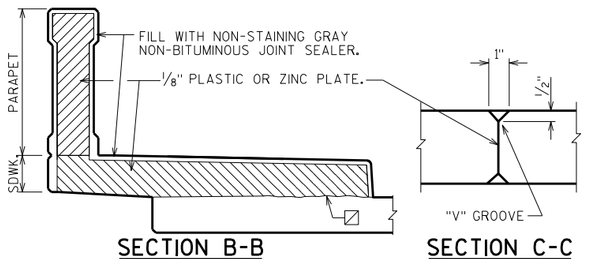


AT SIDEWALK

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

◪ ¾" V-GROOVE REQUIRED. EXTEND TO 3" FROM FRONT FACE OF ABUTMENT DIAPHRAGM.

■ 0.02± IS THE SIDEWALK SLOPE WITH NEGATIVE 0.01± AND POSITIVE 0.00± FOR CONSTRUCTION TOLERANCE.



SECTION B-B

SECTION C-C

(SHOWING DEFLECTION JOINT IN PARAPET AND SIDEWALK.)

WHEN PARAPETS ARE POURED CONTINUOUSLY FROM END TO END, THEY SHALL BE SEPARATED AT THE DEFLECTION JOINTS BY A PIECE OF 1/8" ZINC OR PLASTIC PLATE CUT AS SHOWN IN SECTION B-B BY SHADED AREA. IF CONSTRUCTION JOINTS IN PARAPETS ARE USED AT THE DEFLECTION JOINTS, ONE SIDE OF JOINT SHALL BE COATED WITH AN APPROVED LIQUID BOND BREAKER AND PLATE SEPARATORS MAY BE OMITTED.

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MODIFIED VERTICAL FACE PARAPET "A"

SHEET 18

84

8

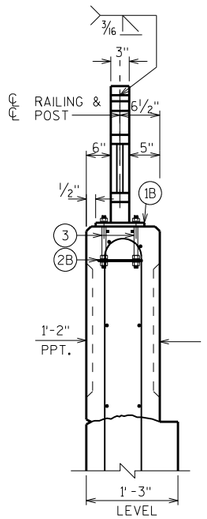
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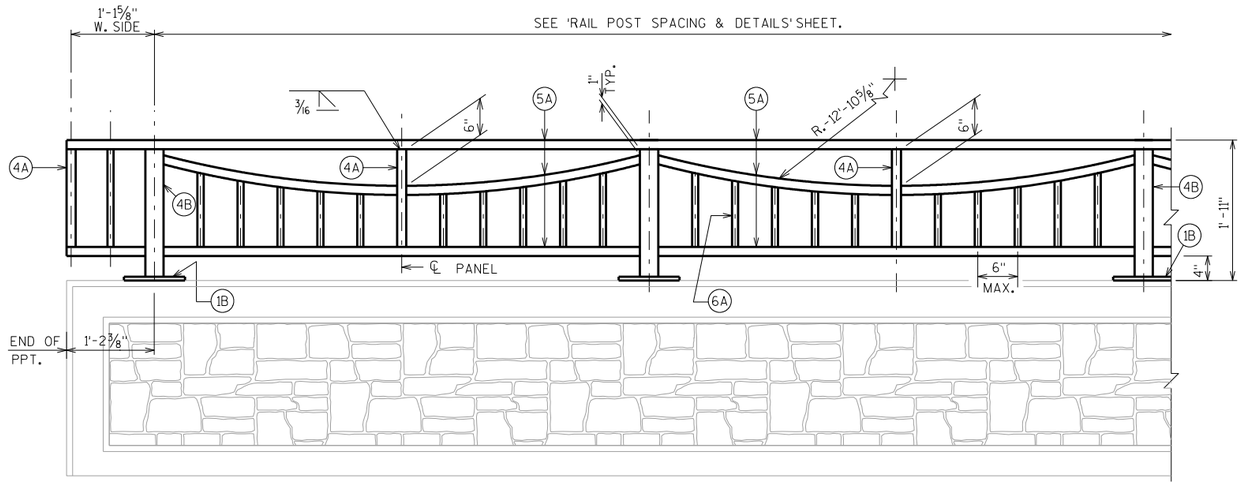
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STATE PROJECT NUMBER

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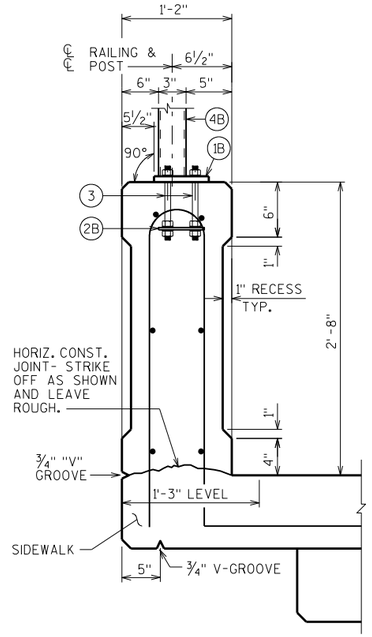


END VIEW

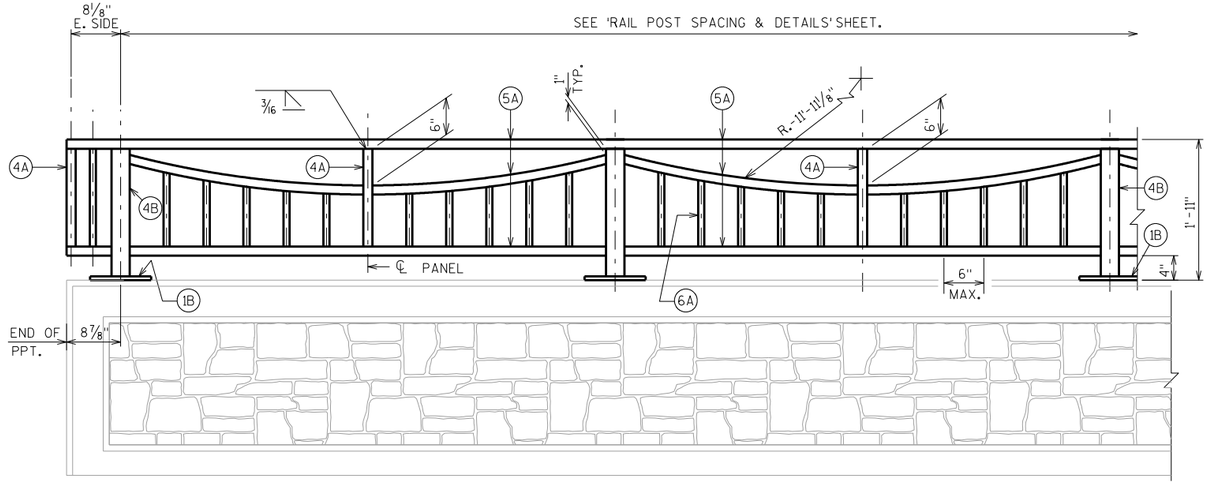


ELEVATION OF RAIL

(INSIDE ELEVATION OF WEST PPT.)



SECTION THRU PARAPET ON BRIDGE



ELEVATION OF RAIL

(OUTSIDE ELEVATION OF EAST PPT.)

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STRUCTURES DESIGN SECTION

STRUCTURE B-68-131

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COMBINATION RAIL TYPE "C5"

SHEET 19

85

SCALE = 1.000

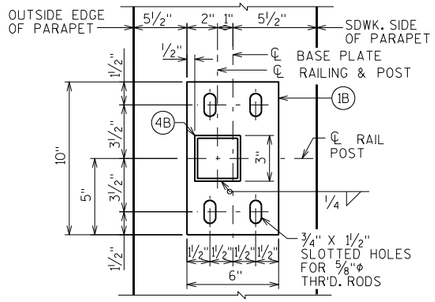
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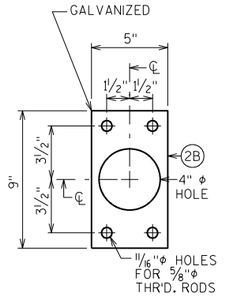
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STATE PROJECT NUMBER

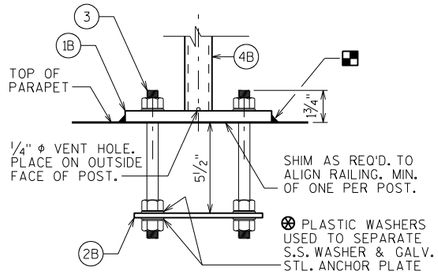
6250-01-70



TYPICAL RAIL POST BASE PLATE



ANCHOR PLATE



ANCHORAGE FOR RAIL POSTS

NOTE: ANCHOR PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED.

LEGEND

(1B) PLATE ⅝" X 6" X 10" WITH ¾" X 1½" SLOTTED HOLES

(2B) ¼" X 5" X 9" ANCHOR PLATE WITH 11/16" φ HOLES FOR THREADED RODS NO. 3.

(3) ⅝" DIA. X 9" LONG, TYPE 316 STAINLESS STEEL THREADED RODS (MIN. TENSILE STRENGTH = 70 KSI) WITH NUT AND WASHERS OF SAME ALLOY GROUP. (ALTERNATE RAIL POST ANCHORAGE - 4 EQUIV. STAINLESS STEEL CONCRETE MASONRY ANCHORS, TYPE S (EPOXY), ⅝" φ, MINIMUM PULLOUT CAPACITY OF 13 KIPS. EMBED A MIN. OF 7" FOR RAIL POSTS AND 5" FOR END RAILS.)

(4A) STRUCTURAL TUBING 3" X 1½" X 3/16". PLACE VERTICAL. WELD TO NO. 5.

(4B) STRUCTURAL TUBING 3" X 3" X 3/16". PLACE VERTICAL. WELD TO NO. 1 & 5.

(5A) STRUCTURAL TUBING 3" X 1½" X 3/16" RAILS. WELD TO NO. 4. INSIDE OF TUBE TO BE PAINTED AT ALL FIELD ERECTION & EXPANSION JOINTS.

(6A) BAR 1" X 1" PICKETS. WELD TO NO. 5. PLACE @ 6" MAX. VERT. SPA. ℄ TO ℄.

(9A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. PROVIDE "SLIDING FIT".

(10A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. (1'-4" @ FIELD ERECTION JTS.)

RAILING NOTES

BID ITEM SHALL BE "RAILING STEEL TYPE C5 GALVANIZED B-68-131", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

NO. 1, 2, 6, 9, & 10 SHALL CONFORM TO ASTM A709 GRADE 36. STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B (NO. 4 AND NO. 5).

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT, AND SHALL BE GALVANIZED.

■ CAULK AROUND PERIMETER OF BASE PLATES, NO. 1, AND FILL BOLT SLOT OPENINGS IN SHIMS AND BASE PLATES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

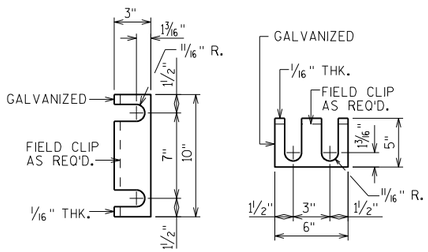
ALL JOINTS AND RECESSES IN CONCRETE PARAPET ARE TO BE VERTICAL.

ALL MATERIAL (EXCEPT NO. 3) SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, THE STEEL RAILING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH AN APPROVED TIE COAT AND TOP COAT AS SPECIFIED IN THE "BRIDGE SPECIAL PROVISIONS". THE RAILING SHALL BE PAINTED BLACK FEDERAL COLOR NO. 27038.

VENT HOLES SHALL BE DRILLED IN POST AND RAIL MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

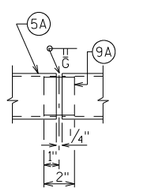
RAILING ON BRIDGE SHALL BE FABRICATED IN LENGTHS THAT INCLUDE A MAXIMUM OF 4 POSTS. RAILING ON WINGS SHALL BE FABRICATED AS SHOWN IN THE PLAN DETAILS.

TOUCH-UP PAINTING TO BE DONE AT COMPLETION OF STEEL RAILING INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO EXTRA COST.



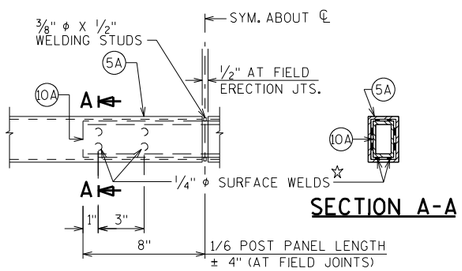
RAIL POST SHIM DETAIL

(2 SETS PER POST)



SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



SECTION A-A

FIELD ERECTION JOINT DETAIL

☆ MIN. ⅝" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.

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STRUCTURE B-68-131

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COMBINATION RAIL TYPE "C5" DETAILS

SHEET 20

86

8

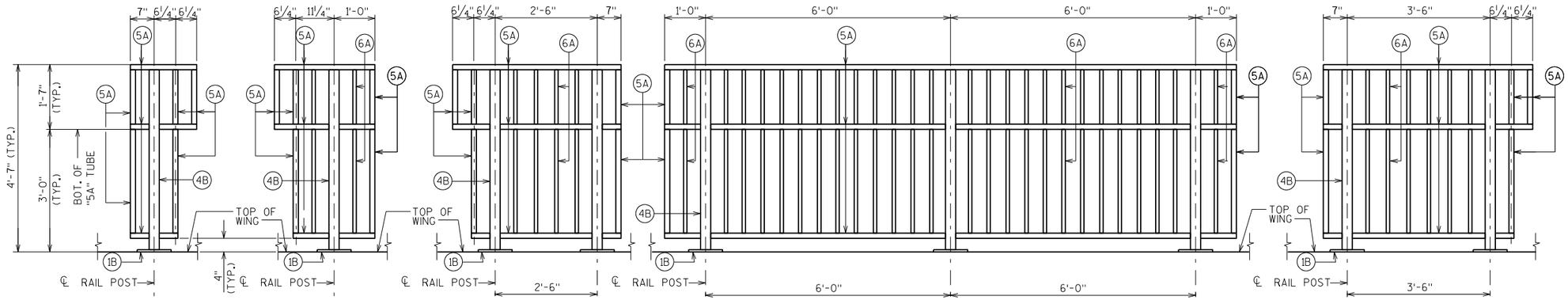
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SCALE = 1.000

STATE PROJECT NUMBER

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WING 1 (LOOKING SOUTH)

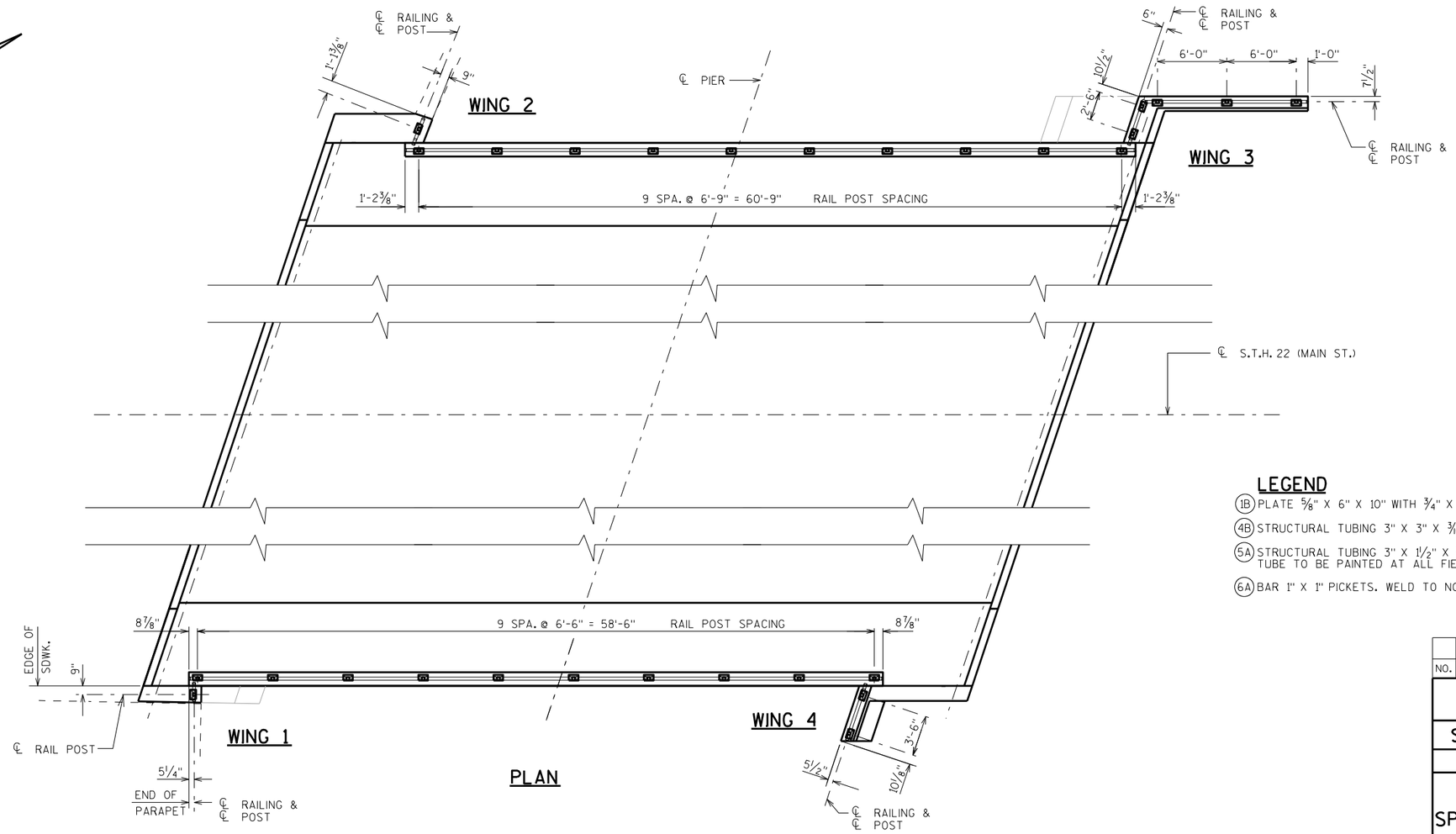
WING 2 (LOOKING SOUTH)

WING 3 (LOOKING SOUTH)

WING 3 (LOOKING WEST)

WING 4 (LOOKING SOUTH)





LEGEND

(1B) PLATE ⅝" X 6" X 10" WITH ¾" X 1½" SLOTTED HOLES

(4B) STRUCTURAL TUBING 3" X 3" X 3/16". PLACE VERTICAL. WELD TO NO. 1 & 5.

(5A) STRUCTURAL TUBING 3" X 1½" X 3/16" RAILS. WELD TO NO. 4. INSIDE OF TUBE TO BE PAINTED AT ALL FIELD ERECTION & EXPANSION JOINTS.

(6A) BAR 1" X 1" PICKETS. WELD TO NO. 5. PLACE @ 6" MAX. VERT. SPA. ℄ TO ℄.

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RAIL POST SPACING & DETAILS

SHEET 21

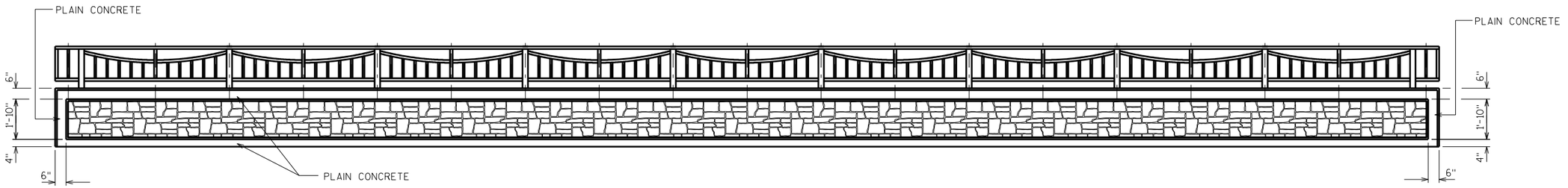
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SCALE =

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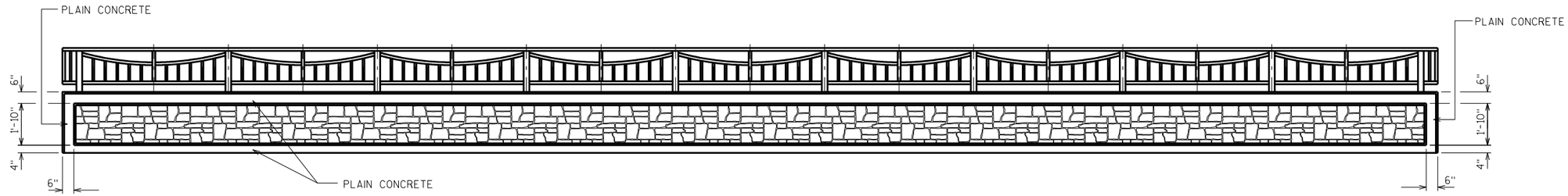
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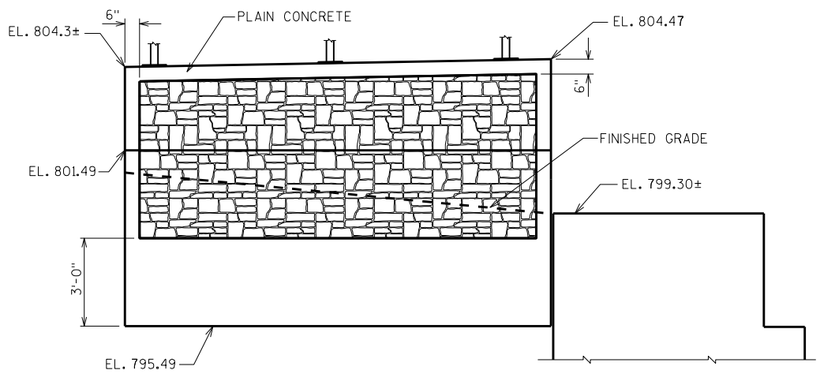
WEST PARAPET

(LOOKING AT OUTSIDE FACE)
FORMLINER TO BE USED ON BOTH SIDES OF PARAPET



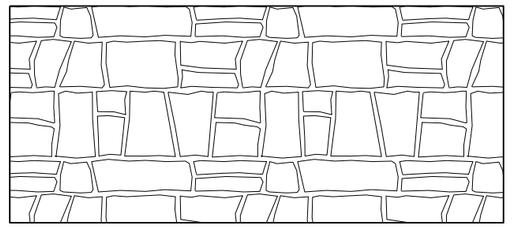
EAST PARAPET

(LOOKING AT OUTSIDE FACE)
FORMLINER TO BE USED ON BOTH SIDES OF PARAPET



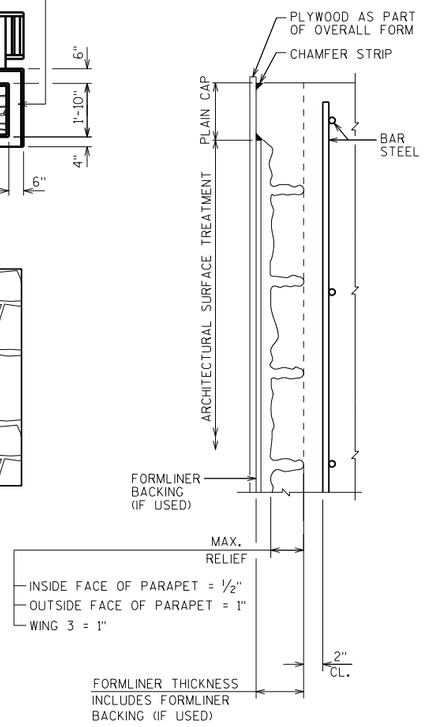
ELEVATION - WING 3

(LOOKING EAST AT OUTSIDE FACE)



RUSTIC ASHLAR FORMLINER

FORMLINER THICKNESS = 3"
SIZE = 8" TO 32"
MAX. RELIEF = SEE 'SECTION THRU FORMLINER' DETAIL.



SECTION THRU FORMLINER

NOTES

FORMLINER COURSING ON PARAPETS SHALL BE PARALLEL TO TOP OF PARAPET. THE FORMLINER PATTERN SHALL BE CONTINUOUS ACROSS CONST. JTS.

FORMLINER SHALL BE "RUSTIC ASHLAR".

STAIN COLOR SHALL BE "WEATHERED LIMESTONE". APPLY STAIN TO INSIDE AND OUTSIDE FACES OF ALL PARAPETS AND TO ONLY THE AREAS THAT HAVE FORMLINER.

PLAIN CONCRETE SHALL NOT BE STAINED.

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AESTHETIC DETAILS

SHEET 22

88

SCALE = 2.5

8

8

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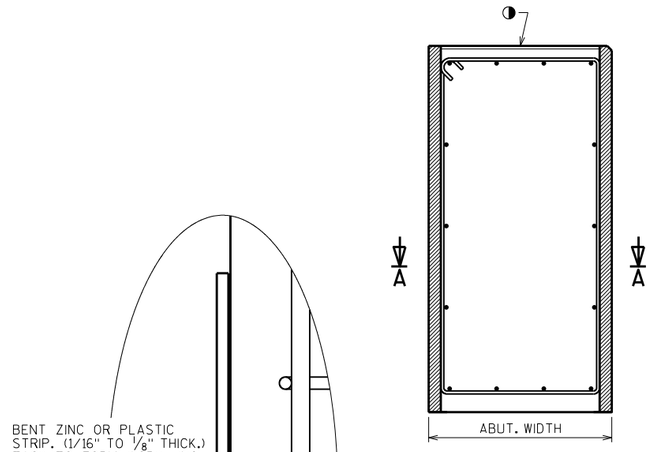
NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATE CONSTRUCTION JOINT, WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

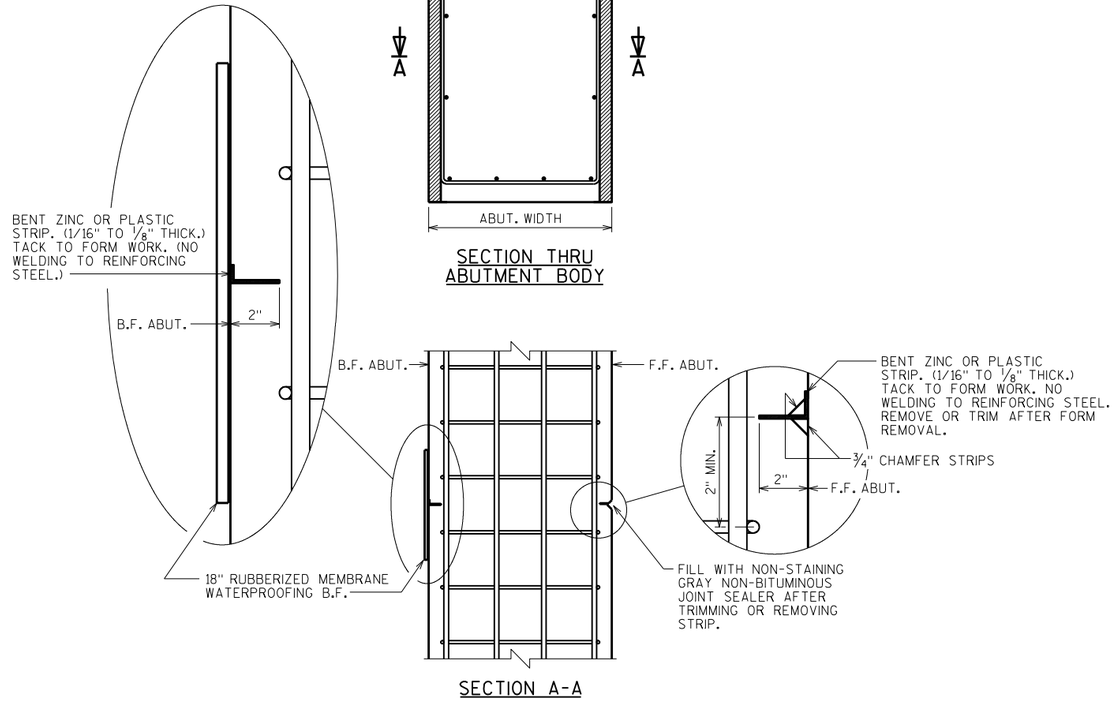
VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

◑ USE A JOINT TOOL TO CONSTRUCT A CONTRACTION JOINT APPROXIMATELY ½" DEEP.



SECTION THRU ABUTMENT BODY



SECTION A-A

ALTERNATE CONSTRUCTION JOINT AT ABUTMENT

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ALTERNATE CONSTRUCTION JOINT

SHEET 23

89

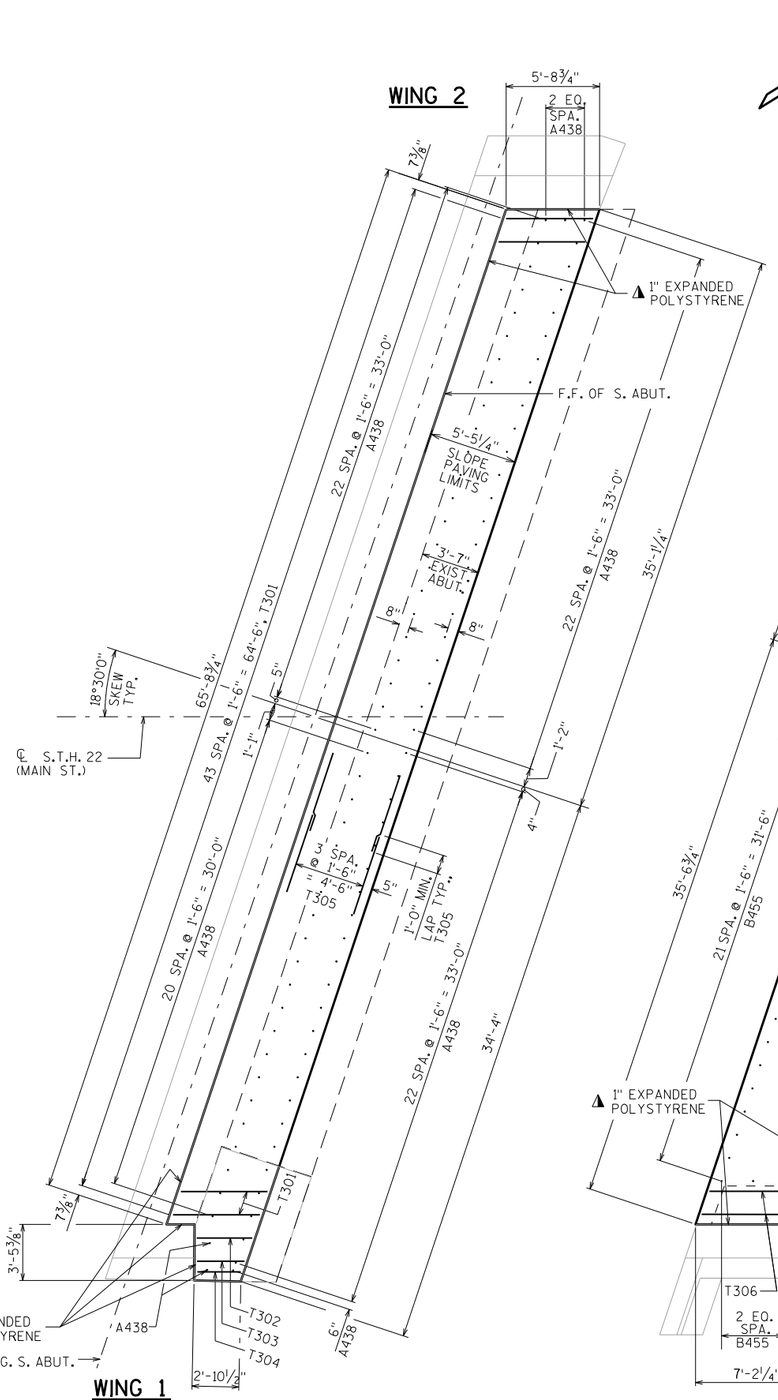
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STATE PROJECT NUMBER
6250-01-70

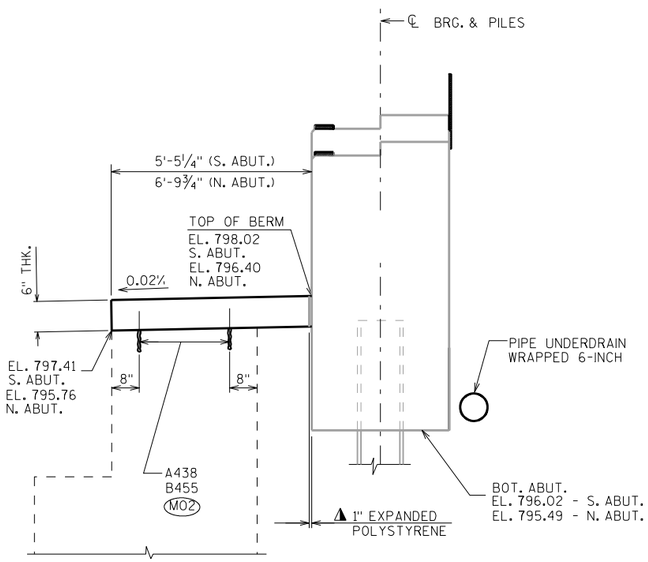


BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

(FOR INFORMATION ONLY. REINFORCEMENT PAID FOR UNDER THE BID ITEM 'SLOPE PAVING CONCRETE'.)

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
T301	X	44	5'-4"			HORIZ.-TRANS.-S. ABUT.
T302	X	1	3'-3"			HORIZ.-TRANS.-S. ABUT. - WING 1
T303	X	1	2'-9"			HORIZ.-TRANS.-S. ABUT. - WING 1
T304	X	1	2'-8"			HORIZ.-TRANS.-S. ABUT. - WING 1
T305	X	8	35'-0"			HORIZ.-LONGIT.-S. ABUT.
T306	X	44	6'-9"			HORIZ.-TRANS.-N. ABUT.
T307	X	10	33'-3"			HORIZ.-LONGIT.-N. ABUT.



TYP. SECTION CONC. PAVING

NOTE: 1" EXPANDED POLYSTYRENE INCLUDED IN DIMENSIONS SHOWN.

▲ SEAL ALL EXPOSED HORIZ. AND VERT. SURFACES OF POLYSTYRENE WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

(M02) A438 AND B455 MASONRY ANCHORS TYPE S 1/2-INCH. EMBED 5" IN CONCRETE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-68-131

DRAWN BY CRJ | PLANS CK'D. ARC

SLOPE PAVING (CONCRETE)

SHEET 24

90

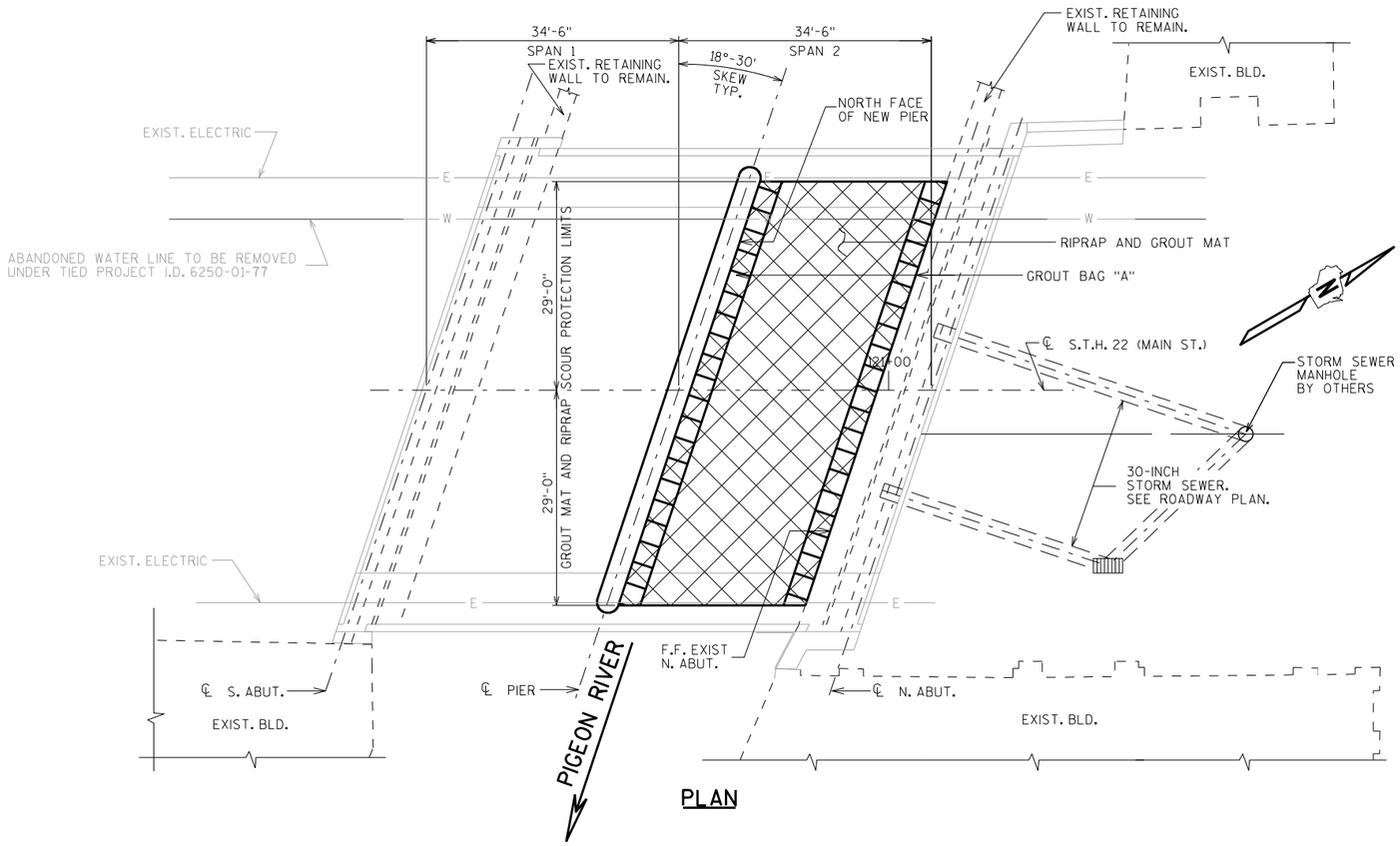
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8

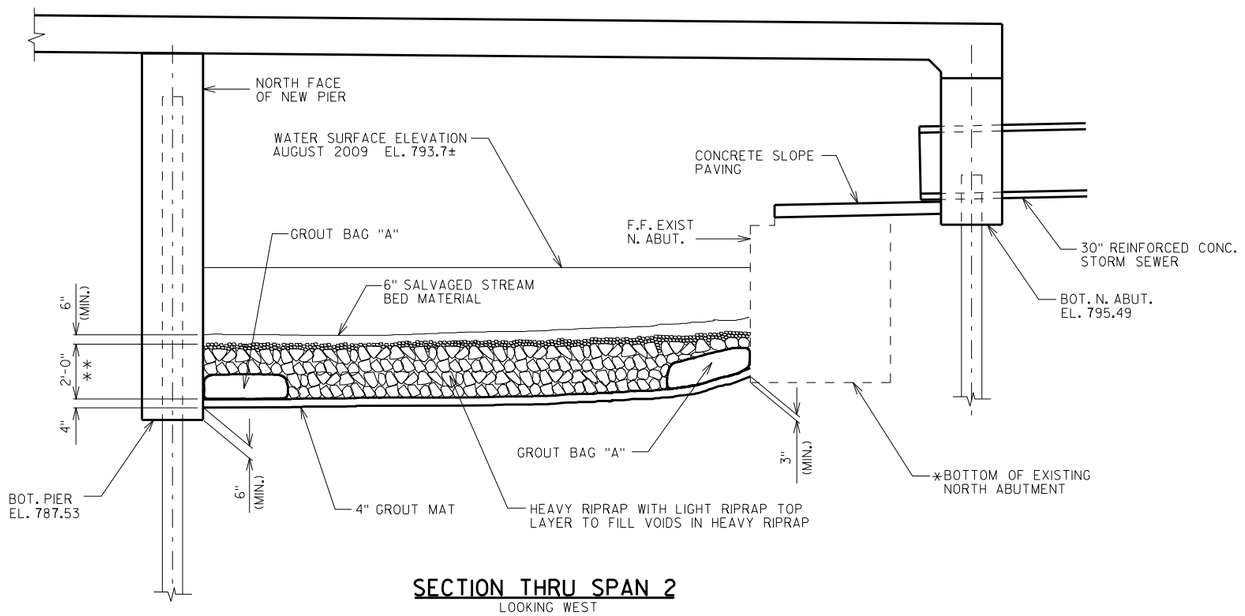
8

STATE PROJECT NUMBER

6250-01-70



PLAN



SECTION THRU SPAN 2

LOOKING WEST

NOTES

GROUT BAG "A" SHALL BE A MINIMUM OF 3'-0" WIDE X 8'-0" LONG X 1'-0" THICK, AND A MAXIMUM OF 3'-0" WIDE X 12'-0" LONG X 1'-0" THICK.

BAGS AND MAT ARE TO BE PLACED SO THAT THERE IS NO GAP BETWEEN THE BAGS AND THE PIER SHAFT.

ADJACENT MATS SHALL BE JOINED BY FIELD SEWING OR ZIPPERING BEFORE FILLING THE MATS WITH GROUT.

REMOVE MATERIAL THAT CONFLICTS WITH OR COULD DAMAGE GROUT MAT.

DIMENSIONS SHOWING LIMITS OF GROUT MAT ARE MEASURED ALONG FINISHED SURFACE OF MAT AFTER GROUTING.

* CONTRACTOR TO DETERMINE THE ELEVATION OF THE BOTTOM OF THE EXISTING NORTH ABUTMENT AND VERIFY THE CONSTRUCTION DETAIL WITH THE ENGINEER PRIOR TO INSTALLING THE 4" GROUT MAT.

** WASH SALVAGED STREAM BED MATERIAL INTO THE RIPRAP WITH WATER TO FILL RIPRAP VOIDS.

ESTIMATED SCOUR PROTECTION QUANTITIES

(FOR INFORMATION ONLY - ALL ITEMS INCLUDED IN THE BID ITEM 'SCOUR PROTECTION')

ITEM	UNIT	TOTAL
GROUT BAGS	CY	14
GROUT MATS	CY	19
HEAVY RIPRAP	CY	110
LIGHT RIPRAP	CY	20
SALVAGED STREAM BED MATERIAL	CY	35

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-68-131

DRAWN BY BLB | PLANS CK'D. ARC

SCOUR PROTECTION

SHEET 25

91

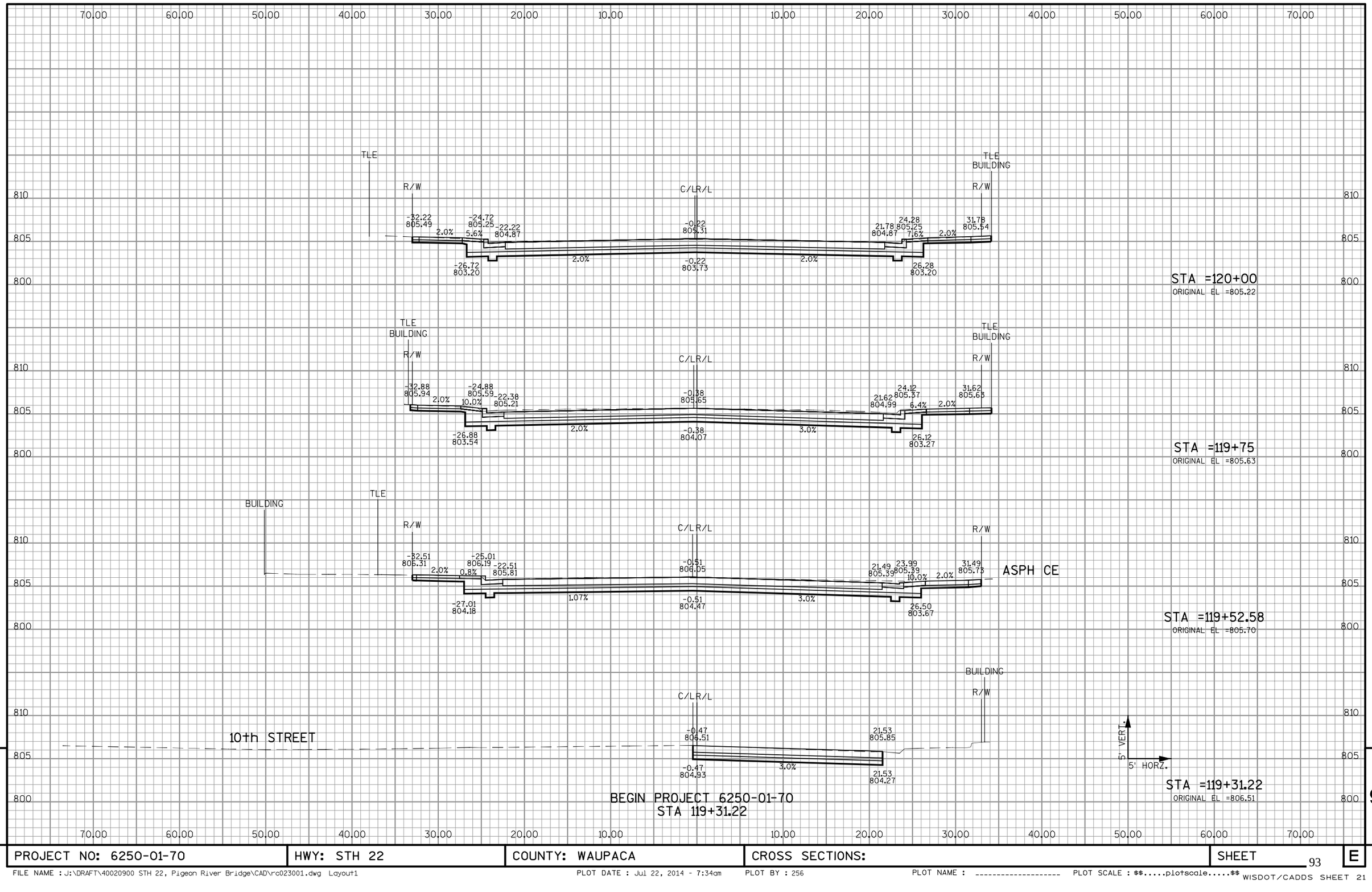
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Station 119+31 to Station 120+36			AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)							
STATION	Real Station	Distance	Cut	Salvaged / Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged / Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Expanded Fill	Expanded Marsh Backfill	Expanded Rock	Expanded EBS Backfill	Reduced Marsh in Fill	Reduced EBS In Fill	Mass Ordinate
									Note 1	Note 2	Note 3				1.00 Note 1	1.30	1.50 Note 4	1.10	1.30 Note 5	0.60 Note 6	0.80 Note 7	Note 8
119+31	119+31		34	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
119+53	119+53	22	103	34	0	0	0	0	56	0	0	0	0	0	56	0	0	0	0	0	0	56
119+75	119+75	22	100	34	0	0	0	0	83	0	0	0	0	0	139	0	0	0	0	0	0	139
120+00	120+00	25	94	34	0	0	0	0	90	0	0	0	0	0	228	0	0	0	0	0	0	228
120+25	120+25	25	118	34	0	0	0	0	98	0	0	0	0	0	326	0	0	0	0	0	0	326
120+36	120+36	11	118	34	0	0	0	0	48	0	0	0	0	0	375	0	0	0	0	0	0	375
					Total 119+31 - 120+36				375	0	0	0	0	0								

Station 121+06 to Station 122+67			AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)							
STATION	Real Station	Distance	Cut	Salvaged / Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged / Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Expanded Fill	Expanded Marsh Backfill	Expanded Rock	Expanded EBS Backfill	Reduced Marsh in Fill	Reduced EBS In Fill	Mass Ordinate
									Note 1	Note 2	Note 3				1.00 Note 1	1.30	1.50 Note 4	1.10	1.30 Note 5	0.60 Note 6	0.80 Note 7	Note 8
121+06	121+06		165	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
121+25	121+25	19	165	36	0	0	0	0	116	0	0	0	0	0	116	0	0	0	0	0	0	116
121+56	121+56	31	152	36	0	0	0	0	182	0	0	0	0	0	298	0	0	0	0	0	0	298
121+97	121+97	41	244	36	0	0	0	0	301	0	0	0	0	0	599	0	0	0	0	0	0	599
122+35	122+35	38	170	36	0	0	0	0	291	0	0	0	0	0	890	0	0	0	0	0	0	890
122+50	122+50	15	182	36	0	0	0	0	98	0	0	0	0	0	988	0	0	0	0	0	0	988
122+67	122+67	17	172	36	0	0	0	0	111	0	0	0	0	0	1099	0	0	0	0	0	0	1099
					Total 121+06 - 122+67				1099	0	0	0	0	0								

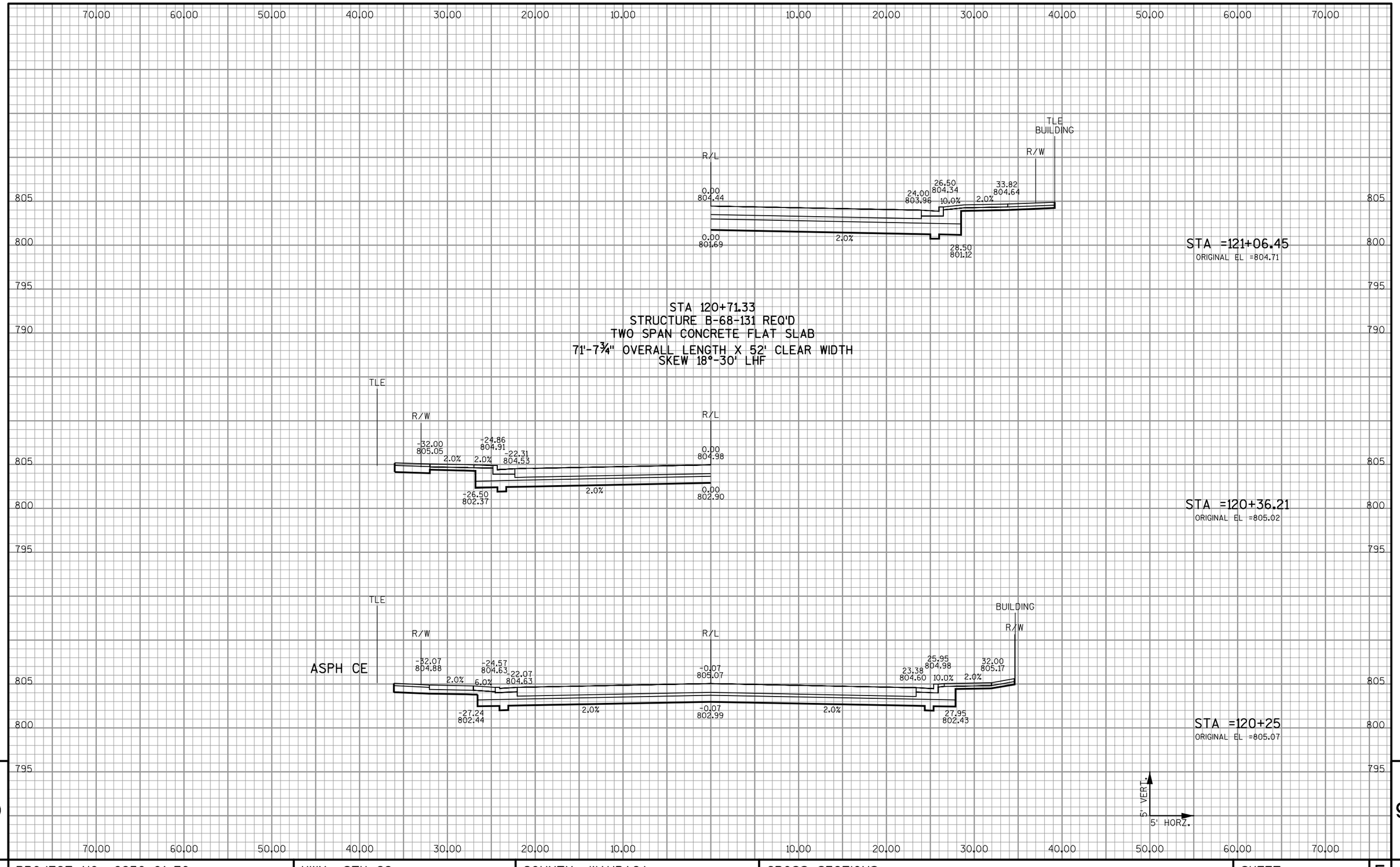
Division	From / To Station	Location	Common Excavation (1) (item #205.0100)		Salvaged / Unusable Pavement Material (4)	Available Material (5)	Mass Ordinate + / - (6)	Waste
			Cut (2)	EBS Excavation (3)				
1	119+31 to 120+36	Mainline	375	0	125	250	250	250
2	121+06 to 122+67	Mainline	1099	0	211	888	888	888
			1475	0	-	-	-	-
			Total	1475	336	1138	1138	1138

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Salvaged/Unsuable Pavement Material is included in Cut.
3) EBS Excavation to be backfilled with Select Borrow material. Note: this is designers choice, can be backfilled with Borrow, or Cut as well.
4) Salvaged/Unusable Pavement Material
5) Available Material = Cut - Salvaged/Unusable Pavement Material
6) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

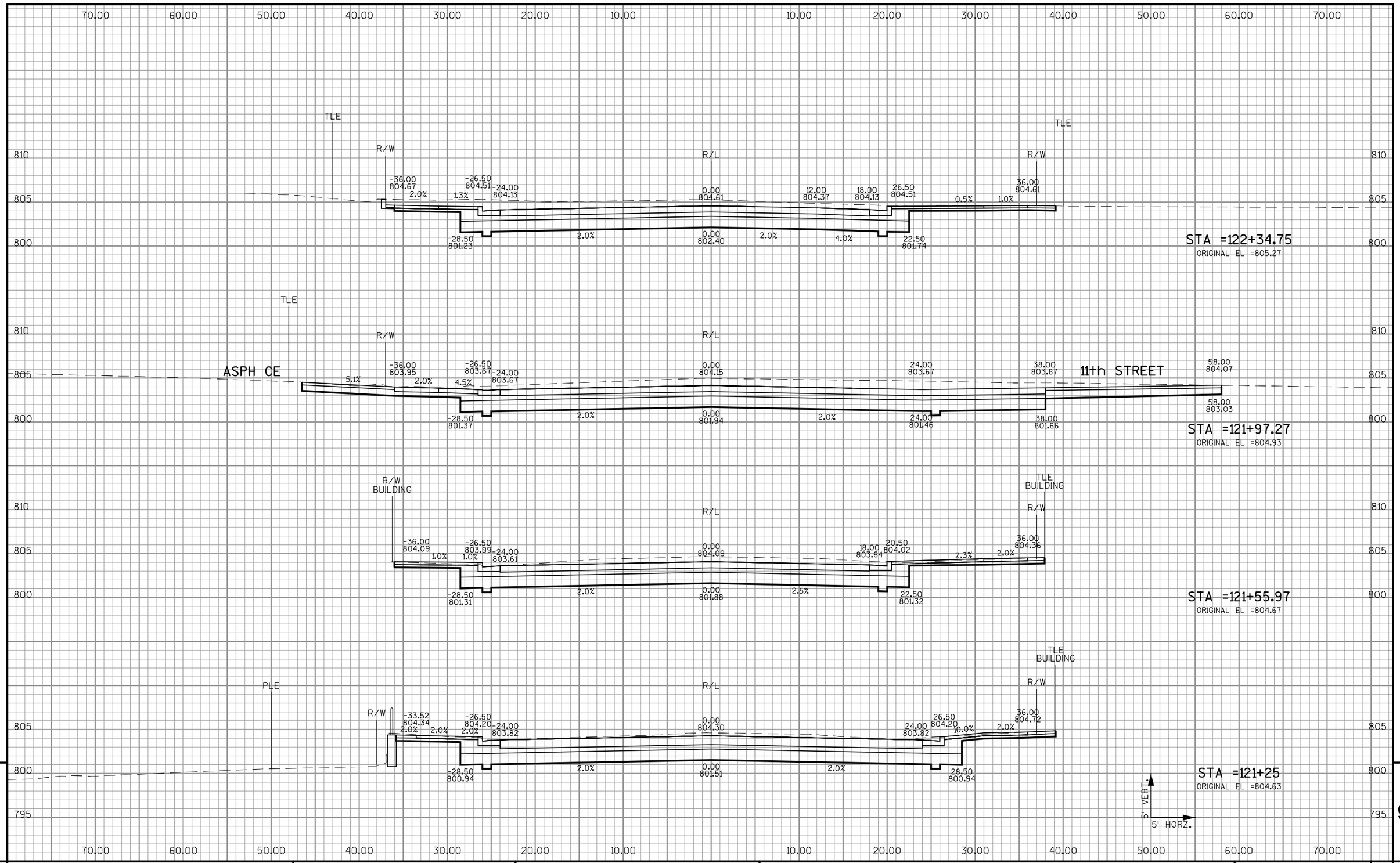


PROJECT NO: 6250-01-70	HWY: STH 22	COUNTY: WAUPACA	CROSS SECTIONS:	SHEET	E

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PROJECT NO: 6250-01-70	HWY: STH 22	COUNTY: WAUPACA	CROSS SECTIONS:	SHEET 94 E

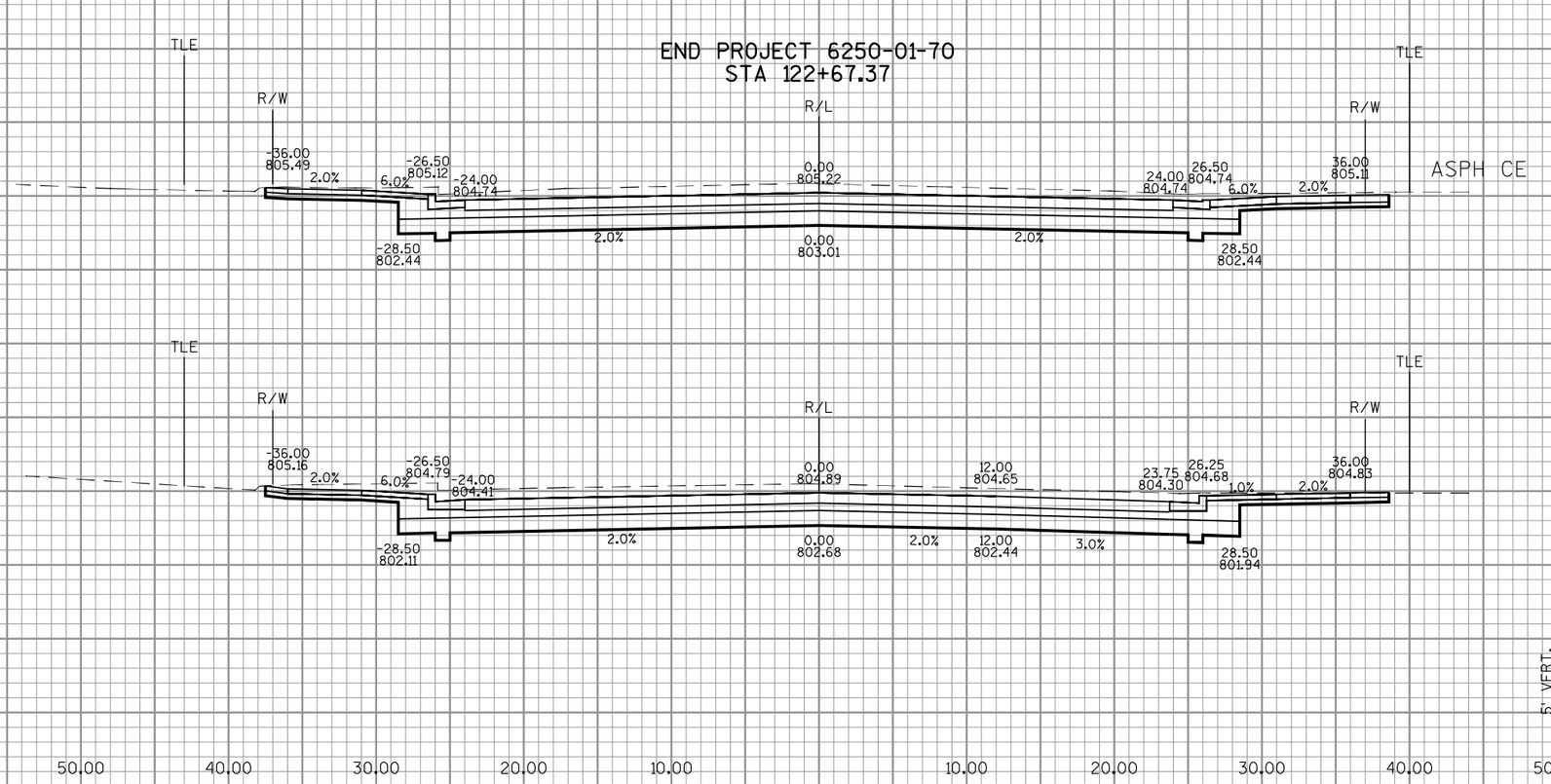


PROJECT NO: 6250-01-70	HWY: STH 22	COUNTY: WAUPACA	CROSS SECTIONS:	SHEET	E

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70.00 60.00 50.00 40.00 30.00 20.00 10.00 10.00 20.00 30.00 40.00 50.00 60.00 70.00

END PROJECT 6250-01-70
STA 122+67.37



STA =122+67.37
ORIGINAL EL =805.84

STA =122+50
ORIGINAL EL =805.49

5' VERT.
5' HORZ.

9 9

70.00 60.00 50.00 40.00 30.00 20.00 10.00 10.00 20.00 30.00 40.00 50.00 60.00 70.00

PROJECT NO: 6250-01-70	HWY: STH 22	COUNTY: WAUPACA	CROSS SECTIONS:	SHEET E

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Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

WIS

DEC 2014

PROJECT ID: 6250-01-76

COUNTY: WAUPACA

ORDER OF SHEETS

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

TOTAL SHEETS = 194



12

N

DESIGN DESIGNATION

A.A.D.T. (2015)	=	15,300
A.A.D.T. (2035)	=	18,400
D.H.V. (2035)	=	2,043
D.D.	=	58/42
T.	=	5.3%
DESIGN SPEED	=	30 MPH
ESALS	=	3,117,100

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

C CLINTONVILLE, MAIN STREET

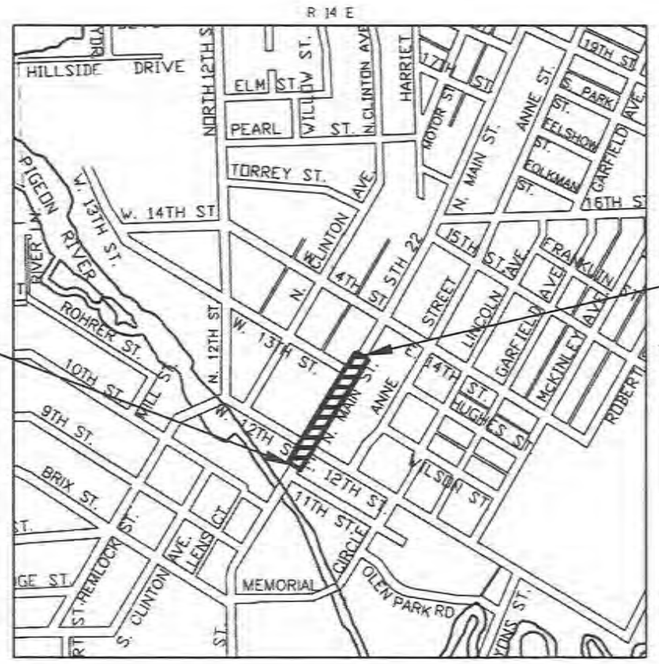
11TH STREET TO 13TH STREET

STH 22

WAUPACA COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6250-01-76	WISC 2014443	1

STATE PROJECT NUMBER
6250-01-76



BEGIN PROJECT
STA 122+67.37
Y=438374.001
X=621676.689

END PROJECT
STA 130+75.00

LAYOUT
SCALE 0 500'

TOTAL NET LENGTH OF CENTERLINE = 0.153 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), WAUPACA COUNTY.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 NAVD 88 (2007).

ORIGINAL PLANS PREPARED BY:
CBS SQUARED INC.

cbs²

WISCONSIN
BRIAN E. SMITS
E-27284
CHIPPEWA FALLS, WI
PROFESSIONAL ENGINEER
7-1-2014

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	CBS SQUARED INC.
Designer	CBS SQUARED INC.
Project Manager	MARK STEIDL
Regional Examiner	CHERYL SIMON
Regional Supervisor	SHANNON RILEY

APPROVED FOR THE DEPARTMENT
DATE: 7/2/14 (Signature)

E

GENERAL NOTES:

WHEN THE QUANTITY OF BASE AGGREGATE IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD, 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.

ANY TREES OR SHRUBS NOT MARKED FOR REMOVAL IN THE PLANS SHALL NOT BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, ARE TO BE 6-INCH TOPSOILED, FERTILIZED, SEEDED, AND EROSION MATTED AS SHOWN IN THE PLANS. FINISHED SEEDED SURFACE SHALL BE 1-INCH BELOW THE TOP OF ADJACENT CONCRETE.

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

CONSTRUCT INSIDE EDGE OF SIDEWALK 1/4 INCH HIGHER THAN THE TOP OF CURB, WHEN THEY ARE ADJACENT TO EACH OTHER.

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

TOP OF CASTING ELEVATIONS SHOWN FOR CATCH BASINS REFER TO THE NORMAL CASTING FLOWLINE.

ALL STORM SEWER INVERT ELEVATIONS AND GRADES ARE COMPUTED OUTSIDE-TO-OUTSIDE OF STRUCTURE. STORM SEWER PIPE LENGTHS ARE COMPUTED CENTER-TO-CENTER OF STRUCTURE.

HMA PAVEMENT SHALL BE CONSTRUCTED WITH THE FOLLOWING LAYER THICKNESSES:

PAVEMENT THICKNESS (INCH)	LOWER (INCH)	NOM AGG SIZE (mm)	LOWER ASPHALT BINDER	MIDDLE (INCH)	NOM AGG SIZE (mm)	MIDDLE ASPHALT BINDER	UPPER (INCH)	NOM AGG SIZE (mm)	UPPER ASPHALT BINDER
3	-	-		-	-	-	3	19.0	PG 64-28
4	2.25	19.0	PG 58-28	-	-	-	1.75	12.5	PG 64-28
5.5	2.0	19.0	PG 58-28	1.75	12.5	PG 64-28	1.75	12.5	PG 64-28

ORDER OF TYPICAL SECTION AND DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
RETAINING WALL DETAILS
INTERSECTION DETAILS
STORM SEWER
PERMANENT SIGNING
STREET LIGHTING
TRAFFIC SIGNALS
PAVEMENT MARKING
TRAFFIC CONTROL AND DETOUR SIGNING

UTILITY CONTACTS

RUDI RUDIGER
CHARTER COMMUNICATIONS - COMMUNICATION LINE
5025 HEFFRON ST
STEVENS POINT, WI 54481
(715) 204-5339 (MOBILE)
RUDIRUDIGER@CHARTER.NET

BRIAN ELLICKSON
CLINTONVILLE UTILITIES - ELECTRICITY
50 TENTH ST
CLINTONVILLE, WI 54929
(715) 823-7600
(715) 250-2870 (MOBILE)
BELLICKSON@CLINTONVILLEWI.ORG

JAMES JASKOLSKI
FRONTIER COMMUNICATIONS OF WI LLC - COMMUNICATION LINE
26 WEST 12TH ST
CLINTONVILLE, WI 54929
(715) 823-1227
(715) 853-6843 (MOBILE)
JAMES.JASKOLSKI@FTR.COM

SEND ALL WE ENERGIES CORRESPONDENCE TO:
LATROY BRUMFIELD
WE ENERGIES - GAS/ELECTRIC
333 W EVERETT ST, A299
MILWAUKEE, WI 53203
(414) 221-5617
LATROY.BRUMFIELD@WE-ENERGIES.COM

WE ENERGIES CONSTRUCTION FIELD CONTACT:
CODY BECKMAN
800 S LYNDLE DR
APPLETON, WI 54914
(920) 380-3422
(920) 428-1038 (MOBILE)
CODY.BECKMAN@WE-ENERGIES.COM

BOB STANISLAWSKI
CLINTONVILLE UTILITIES - WATER
50 TENTH ST
CLINTONVILLE, WI 54929
(715) 823-7600
(715) 250-0200 (MOBILE)
BSTANISLAWSKI@CLINTONVILLEWI.ORG

DARRELL TEALL
CLINTONVILLE UTILITIES - SANITARY
50 TENTH ST
CLINTONVILLE, WI 54929
(715) 823-7600
(715) 250-0067 (MOBILE)
DTEALL@CLINTONVILLEWI.ORG

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

WDNR CONTACT

BOBBIE JO FISCHER
WDNR
WAUTOMA SERVICE CENTER
427 EAST TOWER DRIVE, SUITE 100
WAUTOMA, WI 54982
(920)787-3015
BOBBI.FISCHER@WISCONSIN.GOV

2



PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	PROJECT OVERVIEW	SHEET	E

FILE NAME : P:\WIDOT\11003 - STH 22\Cad\6250-01-76 (11th -13th)\POSTH2201.dgn PLOT DATE : 5/29/2014 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

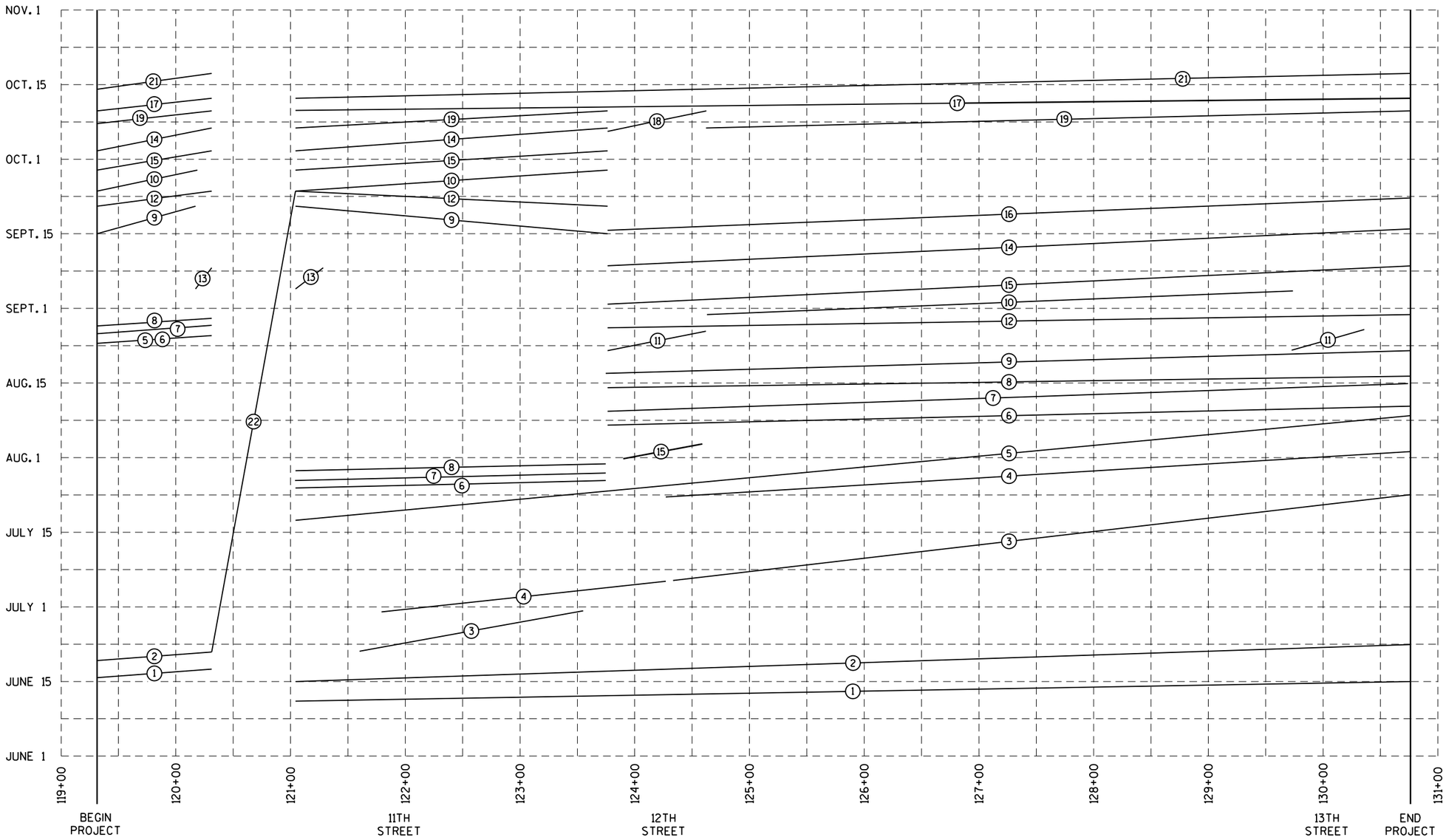
2

2

NOTES:

THIS LINEAR SCHEDULE INDICATES ONE POSSIBLE SCENARIO IN WHICH THE CONTRACT WORK COULD BE COMPLETED ACCORDING TO THE TIME FRAME & WORK RESTRICTIONS. THIS IS PRESENTED FOR INFORMATION PURPOSES ONLY.

THIS SCHEDULE REFLECTS AN ANTICIPATED START DATE OF JUNE 1ST BEGINNING WITH DETOUR IMPROVEMENTS AT THE INTERSECTION OF LYON STREET AND E 12TH STREET. THESE IMPROVEMENTS INCLUDE REMOVING ASPHALTIC SURFACE MILLING, BASE AGGREGATE DENSE, HMA PAVING AND PAVEMENT MARKING.

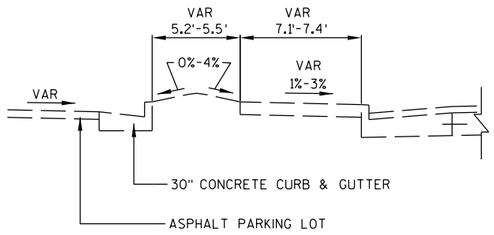


LEGEND

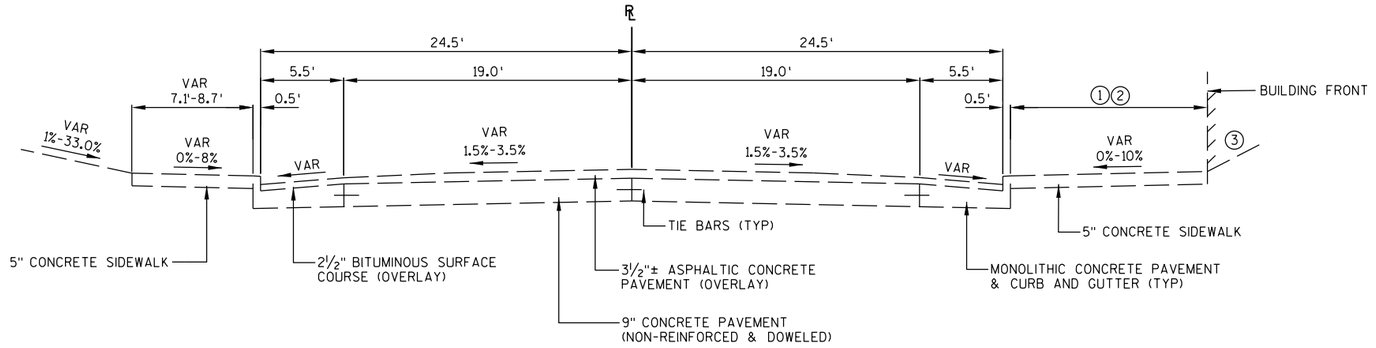
1. REMOVING PAVEMENT
2. COMMON EXCAVATION
3. SANITARY SEWER
4. WATER MAIN
5. STORM SEWER
6. PIPE UNDERDRAIN
7. SELECT CRUSHED MATERIAL
8. BASE AGGREGATE DENSE 1¼-INCH
9. CONCRETE PAVEMENT 8½-INCH (CENTER LANES)
10. CONCRETE PAVEMENT 8½-INCH (PARKING LANES)
11. CONCRETE PAVEMENT (INTERSECTION)
12. CONCRETE CURB & GUTTER
13. CONCRETE APPROACH SLAB
14. CONCRETE SIDEWALKS, DRIVEWAYS & TERRACES
15. ELECTRICAL CONDUIT & CONCRETE BASES
16. TOPSOIL & RESTORATION
17. ASPHALTIC PAVING & SIGNING
18. TRAFFIC SIGNALS
19. STREET LIGHTING
20. ASPHALTIC PAVING & SIGNING
21. PAVEMENT MARKING & FINISHING ROADWAY
22. STRUCTURE B-68-0131

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	LINEAR SCHEDULE FOR 2015 CONSTRUCTION SEASON	SHEET 4	E

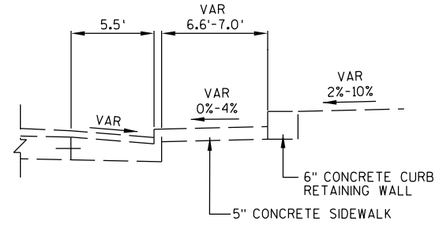
2



TYPICAL EXISTING SECTION
PARKING LOT
STA 122+67.0 TO STA 123+84.0 LT

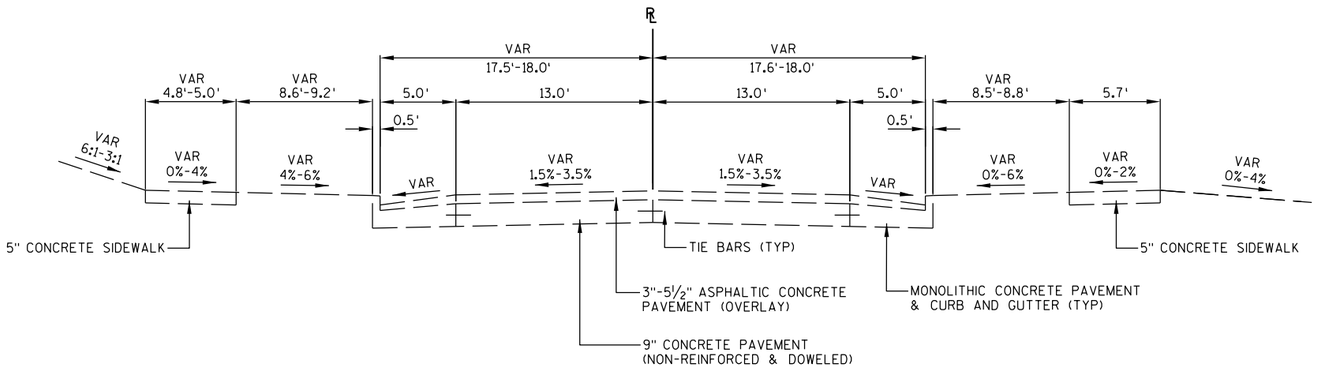


TYPICAL EXISTING SECTION
STH 22
STA 122+67.37 TO STA 129+54.6

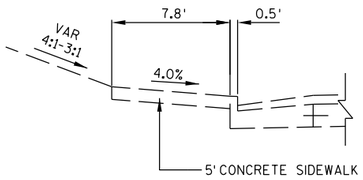


TYPICAL EXISTING SECTION
RETAINING WALL
STA 128+51.6 TO STA 128+89.6 RT

TYPICAL EXISTING SECTION
PARKING LOT
STA 125+46.3 TO STA 127+67.8 LT



TYPICAL EXISTING SECTION
STH 22
STA 129+54.6 TO STA 130+75.0



TYPICAL EXISTING SECTION
STA 129+54.6 TO STA 129+82.8 LT

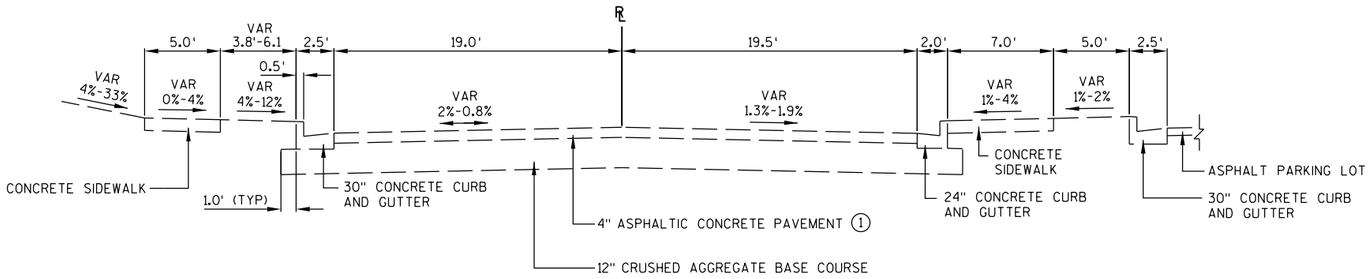
NOTES:

① EXISTING SIDEWALK WIDTHS AT BUILDING FRONTS VARY FROM 7.1' TO 16.0'

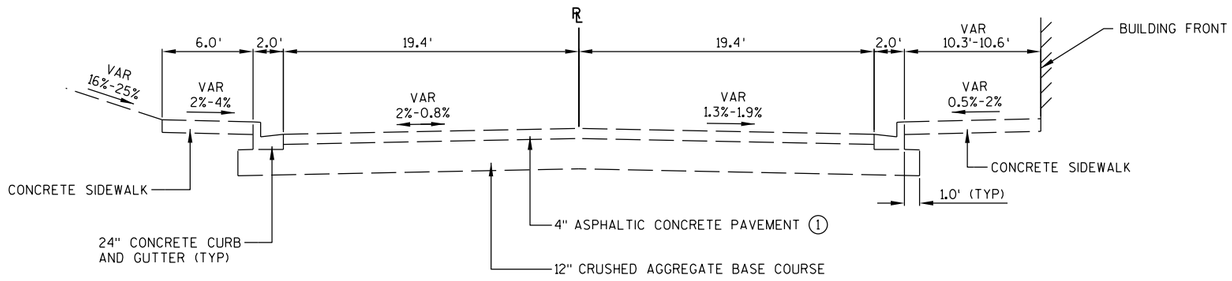
② SIDEWALK WIDTHS VARIES 6.2' TO 8.6' BETWEEN STA 126+60.4 AND STA 129+45.8 RT

③ EXISTING BACK SLOPE VARIES 0 - 4:1 BETWEEN STA 126+60.4 TO STA 129+45.8

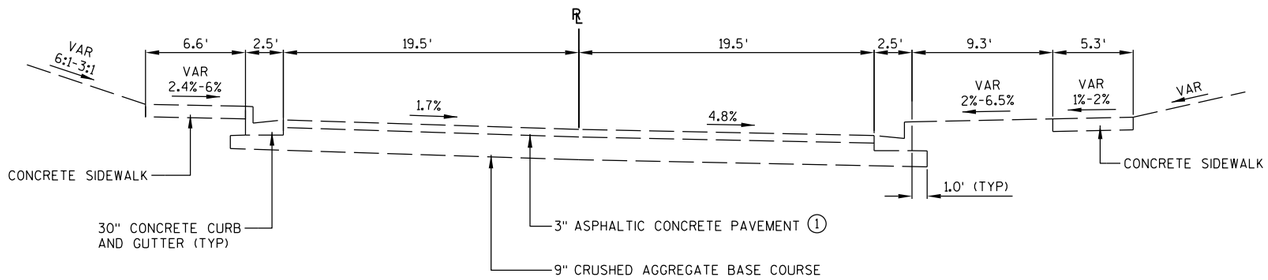
PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	TYPICAL SECTIONS	SHEET 5	E



TYPICAL EXISTING SIDEROAD SECTION
W 12TH STREET



TYPICAL EXISTING SIDEROAD SECTION
E 12TH STREET



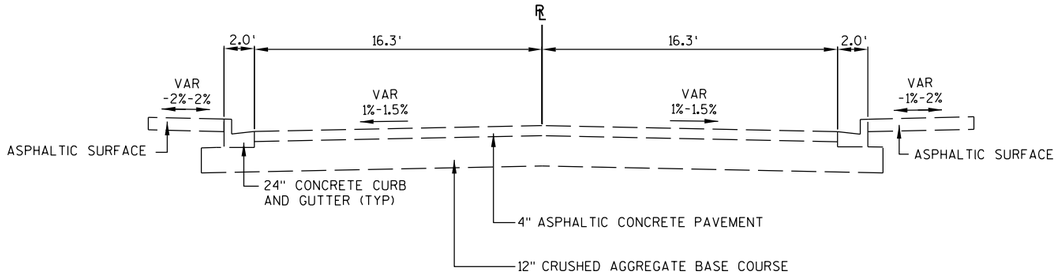
TYPICAL EXISTING SIDEROAD SECTION
W 13TH STREET

NOTES:

(1) STH 22 (MAINLINE) CONCRETE PAVEMENT ENDS AND SIDEROAD ASPHALTIC PAVEMENT BEGINS AT SIDEROAD RADIUS RETURNS

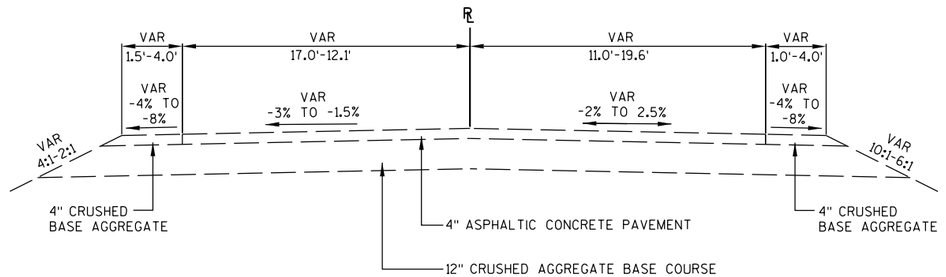
PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	TYPICAL SECTIONS	SHEET 6	E

2



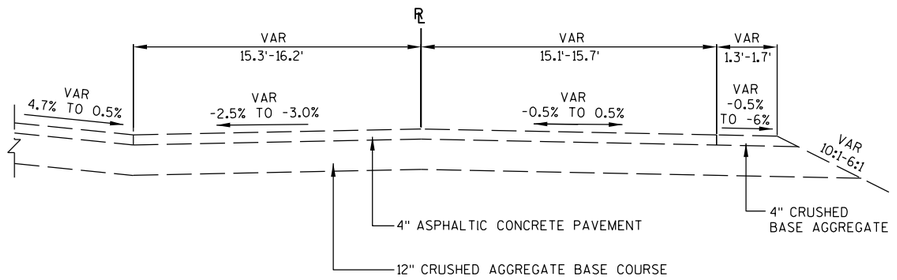
TYPICAL EXISTING SECTION (DETOUR)

LYON STREET
STA 338+72.80L TO STA 339+94.70L



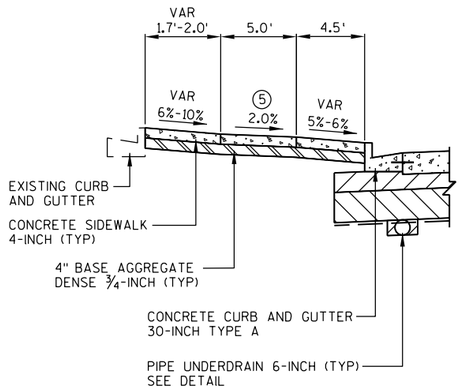
TYPICAL EXISTING SECTION (DETOUR)

E 12TH STREET
STA 333+22.7W TO STA 334+91.0W

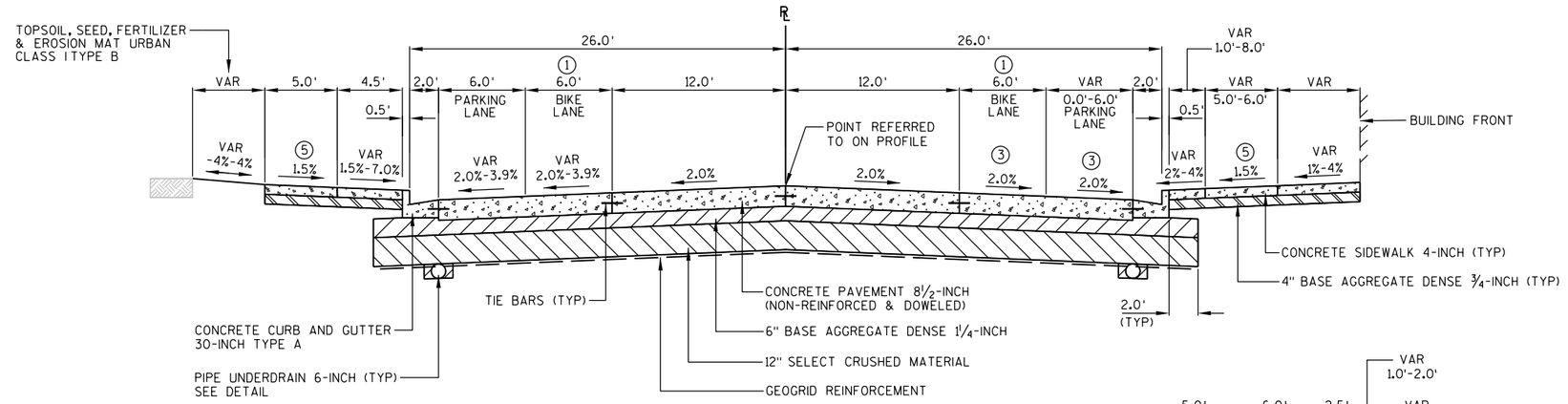


TYPICAL EXISTING SECTION (DETOUR)

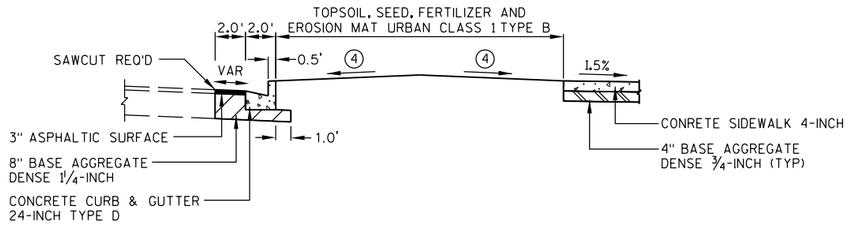
E 12TH STREET
STA 332+69.7W TO STA 333+22.7W



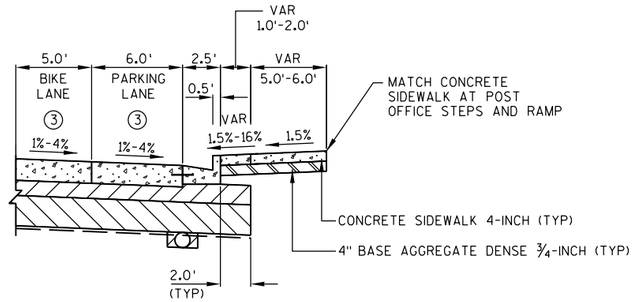
TYPICAL FINISHED SECTION
STH 22
STA 122+67.37 TO STA 124+25.00 LT



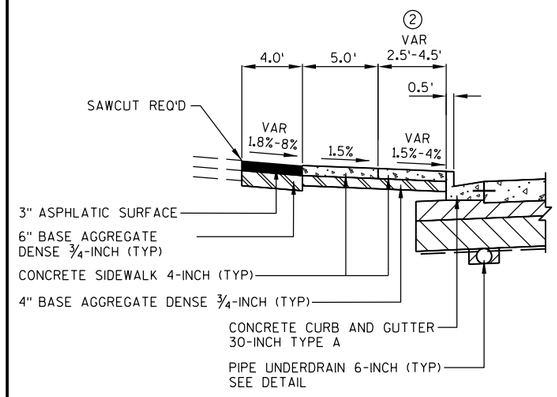
TYPICAL FINISHED SECTION
STH 22
STA 122+67.37 TO STA 125+85.85



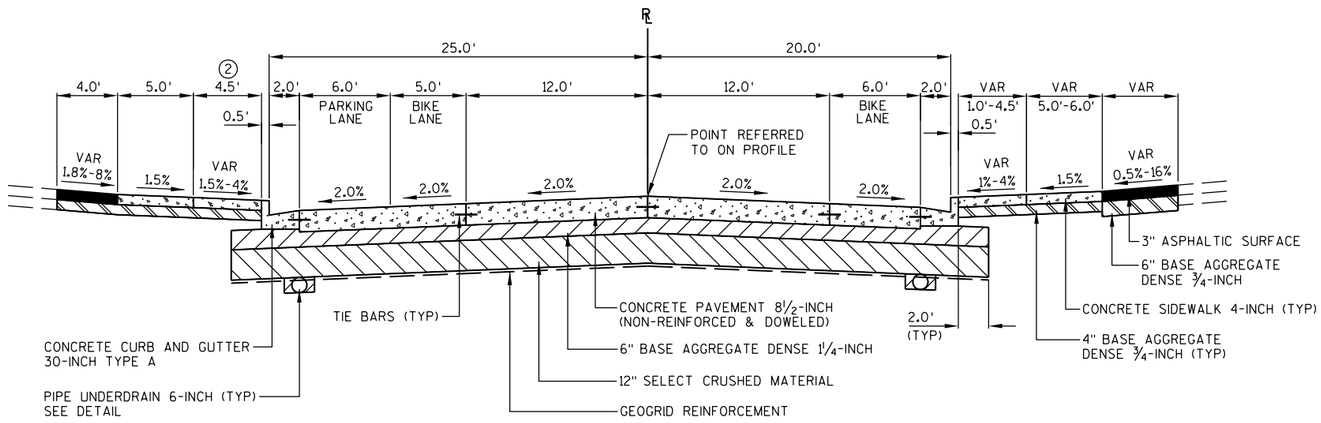
TYPICAL FINISHED SECTION
PARKING LOT
STH 22
STA 123+46.41 TO STA 123+90.95 LT



TYPICAL FINISHED SECTION
STH 22
STA 124+63.03 TO STA 125+14.00 RT



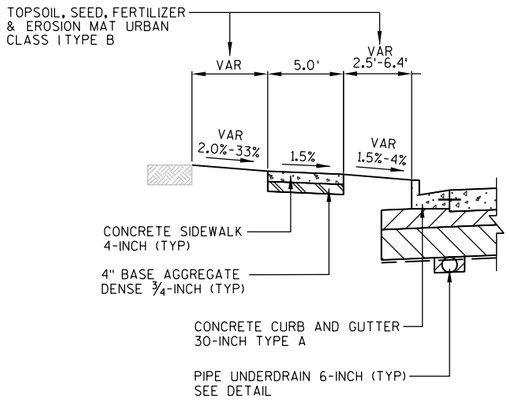
TYPICAL FINISHED SECTION
PARKING LOT
STA 125+46.3 TO STA 127+67.8 LT



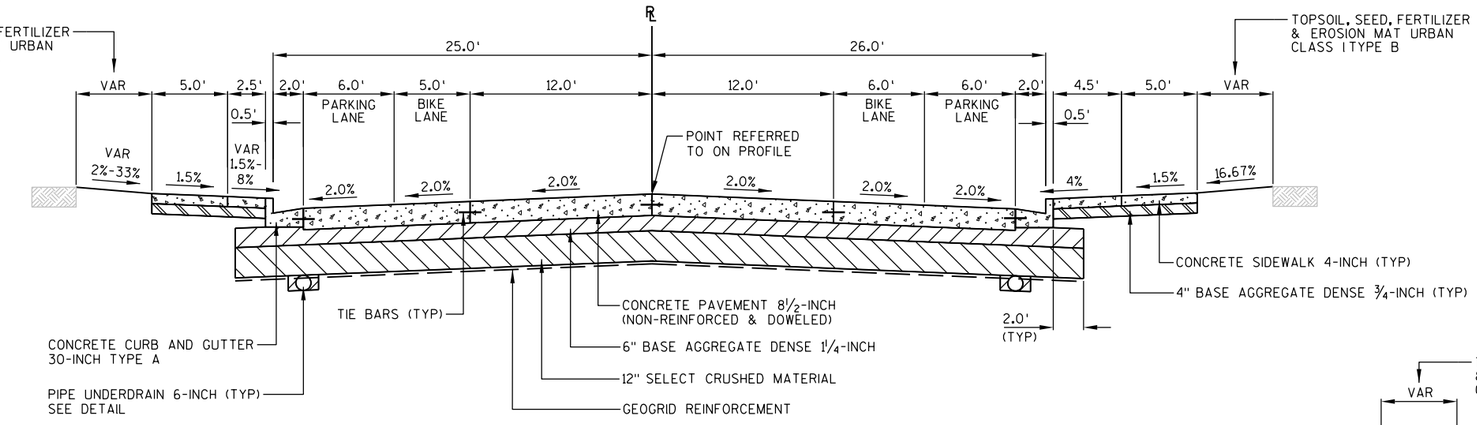
TYPICAL FINISHED SECTION
STH 22
STA 125+85.85 TO STA 126+88.45

NOTES:

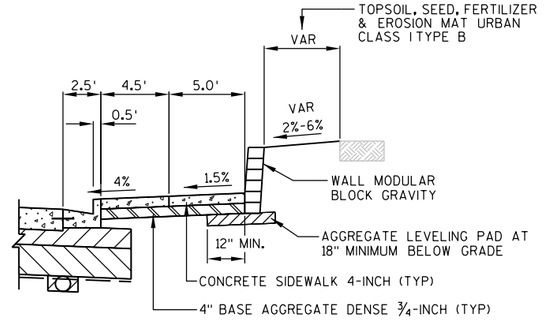
1. 5' WIDE BIKE LANE FROM:
   STA 124+25.00 TO STA 125+86.18 RT
   STA 124+25.00 TO STA 125+86.18 LT
2. 2.5' TERRACE WIDTH FROM
   STA 126+66.66 TO STA 126+88.78 LT
3. TRANSITION CROSS SLOPE ON BIKE LANE AND PARKING LANE BETWEEN 1% TO 4% FROM STA 124+63.03 TO STA 125+27.00
4. GRADE TOPSOIL TO DRAIN TO CONCRETE CURB AND GUTTER AND CONCRETE SIDEWALK 2% TO 4% GRADES.
5. SIDEWALK SLOPE IS WITH NEGATIVE 1.0% AND POSITIVE 0.0% FOR CONSTRUCTION TOLERANCE FROM:
   STA 122+67.37 TO STA 124+25.00 LT&RT
6. REFER TO PLAN 6250-01-77 FOR CONCRETE CURB & GUTTER 24-INCH, TYPE D LOCATION



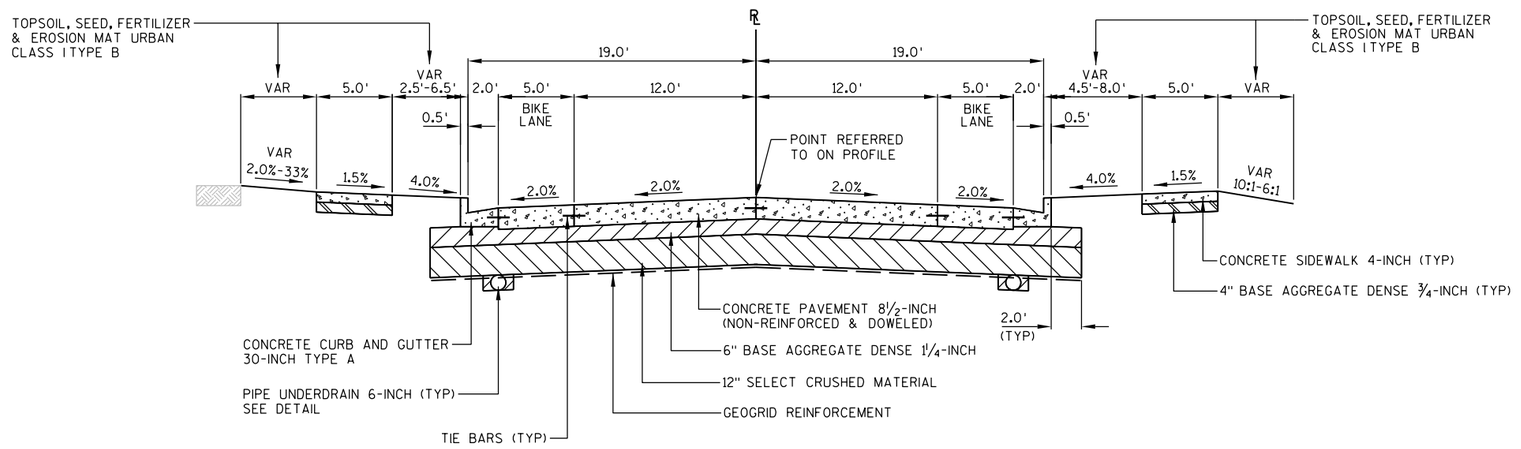
TYPICAL FINISHED SECTION
STH 22
STA 129+48.0 TO STA 130+04.7 LT



TYPICAL FINISHED SECTION
STH 22
STA 126+88.45 TO STA 129+42.00



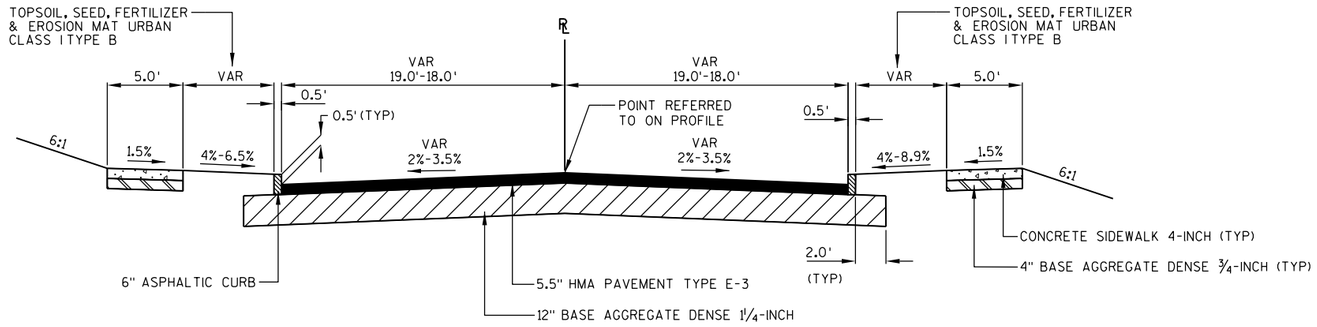
TYPICAL CROSS SECTION AT RETAINING WALL
STH 22
STA 128+50.3 RT TO STA 129+05.0 RT



TYPICAL FINISHED SECTION
STH 22
STA 129+42.00 TO STA 130+50.00

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	TYPICAL SECTIONS	SHEET 9	E

2

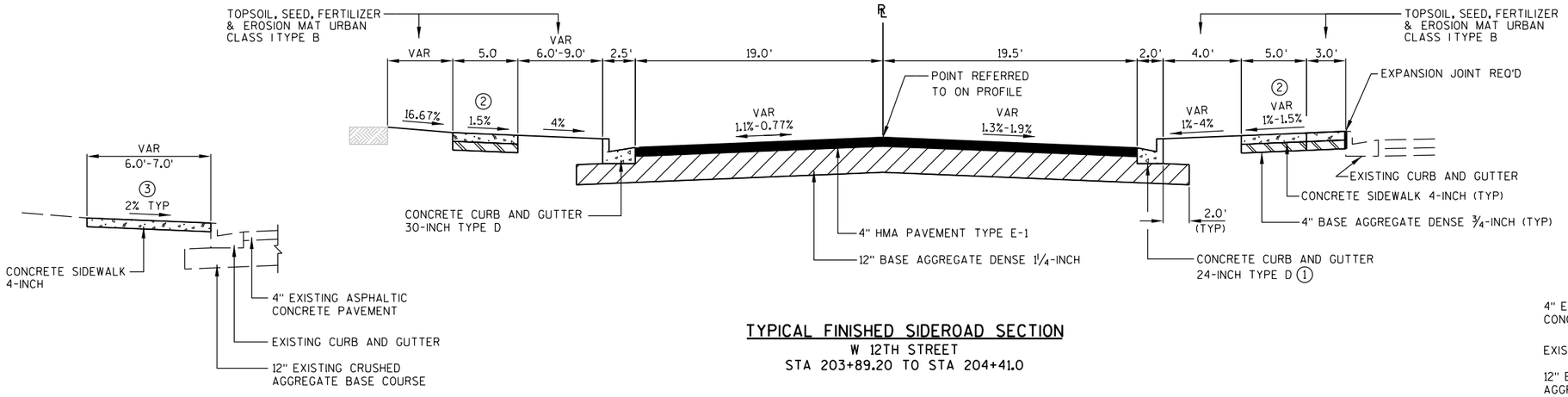


TYPICAL FINISHED SECTION

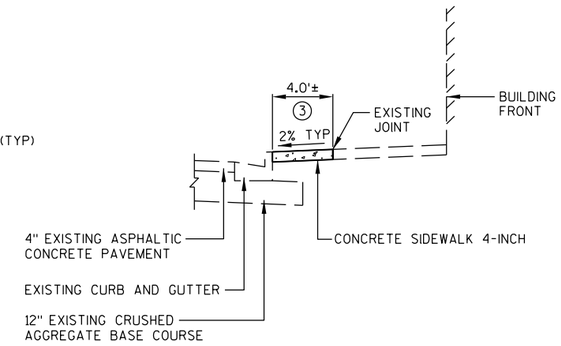
STH 22

STA 130+50.00 TO STA 130+75.00

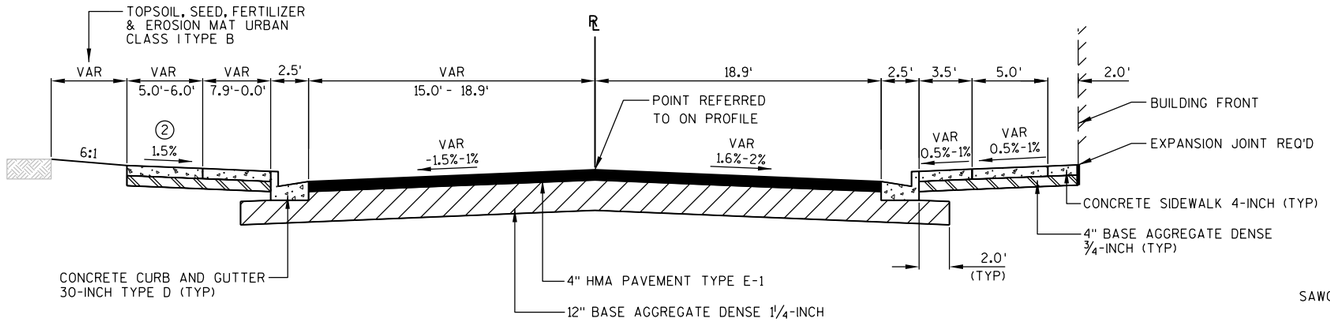
PROJECT NO:6250-01-76	HWY:STH 22	COUNTY:WAUPACA	TYPICAL SECTIONS	SHEET 10	E



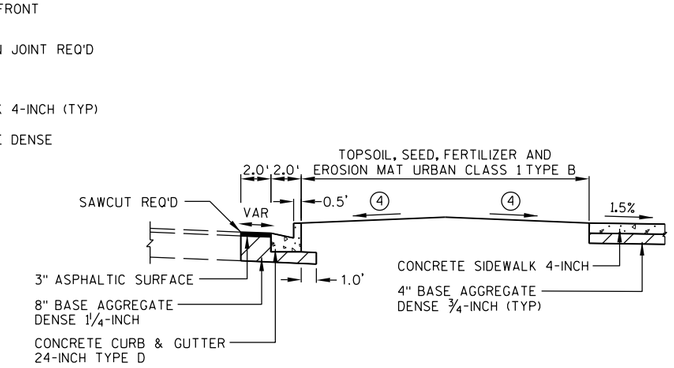
TYPICAL FINISHED SIDEROAD SECTION
W 12TH STREET
STA 203+89.20 TO STA 204+41.0



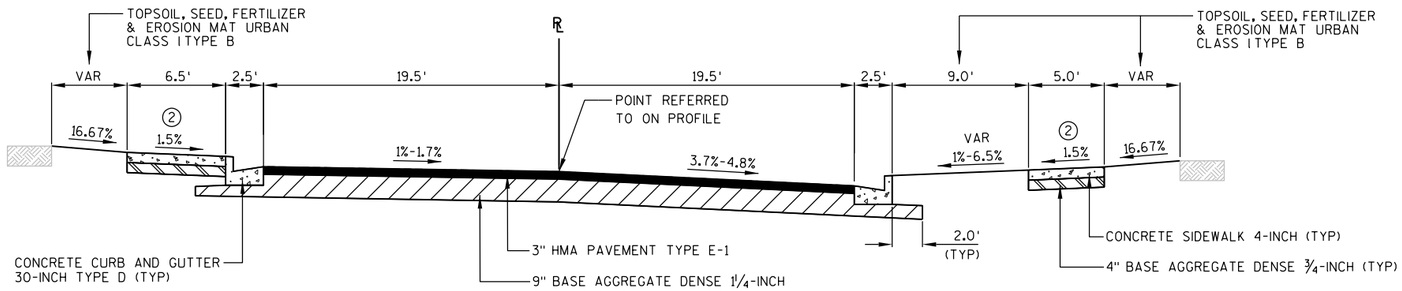
TYPICAL FINISHED SECTION
STA 205+72.0 TO STA 206+27.20 LT



TYPICAL FINISHED SIDEROAD SECTION
E 12TH STREET
STA 205+38.45 TO STA 205+72.0



TYPICAL FINISHED SECTION
STA 203+39.0 TO STA 203+52.0 RT

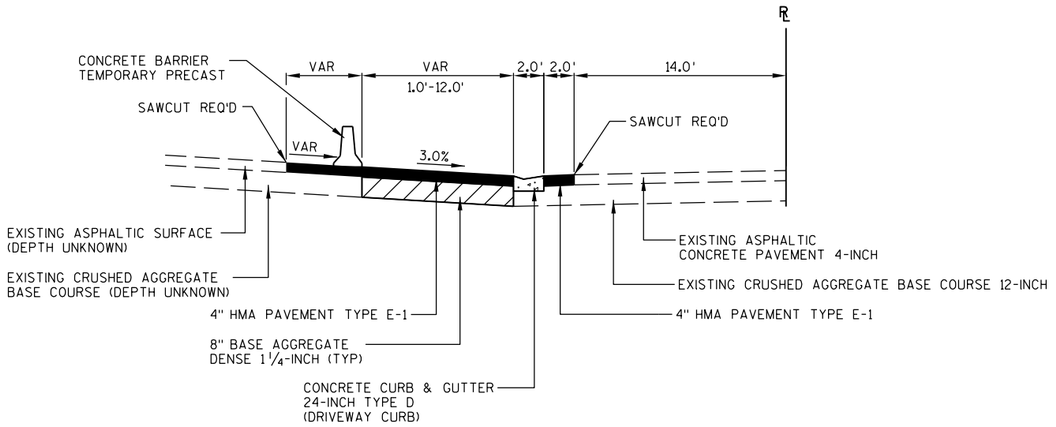


TYPICAL FINISHED SIDEROAD SECTION
W 13TH STREET
STA 214+35.0 TO STA 214+67.91

TYPICAL FINISHED SECTION
PARKING LOT
STA 203+59.30 TO STA 203+90.90 LT

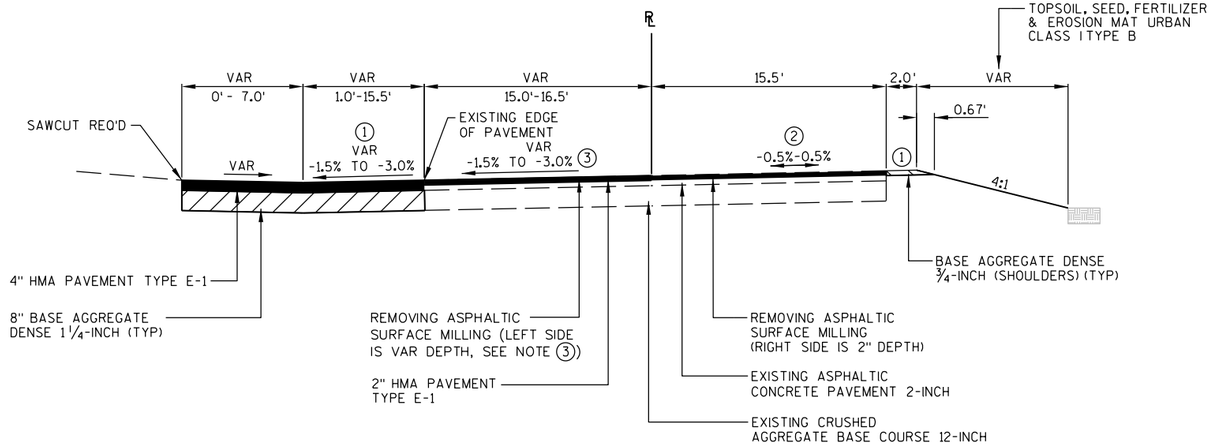
NOTES:

1. BEGIN 24" CONCRETE CURB AND GUTTER AND CONCRETE SIDEWALK 4-INCH AT STA 204+00 RT.
2. MATCH EXISTING CROSS SLOPE AT SAWCUT.
3. MATCH EXISTING SIDEWALK CROSS SLOPE.



TYPICAL SECTION (DETOUR)

LYON STREET
STA 338+72.80L TO STA 339+94.70L



TYPICAL FINISHED SECTION (DETOUR)

E 12TH STREET
STA 332+69.7W TO STA 333+22.7W

NOTES:

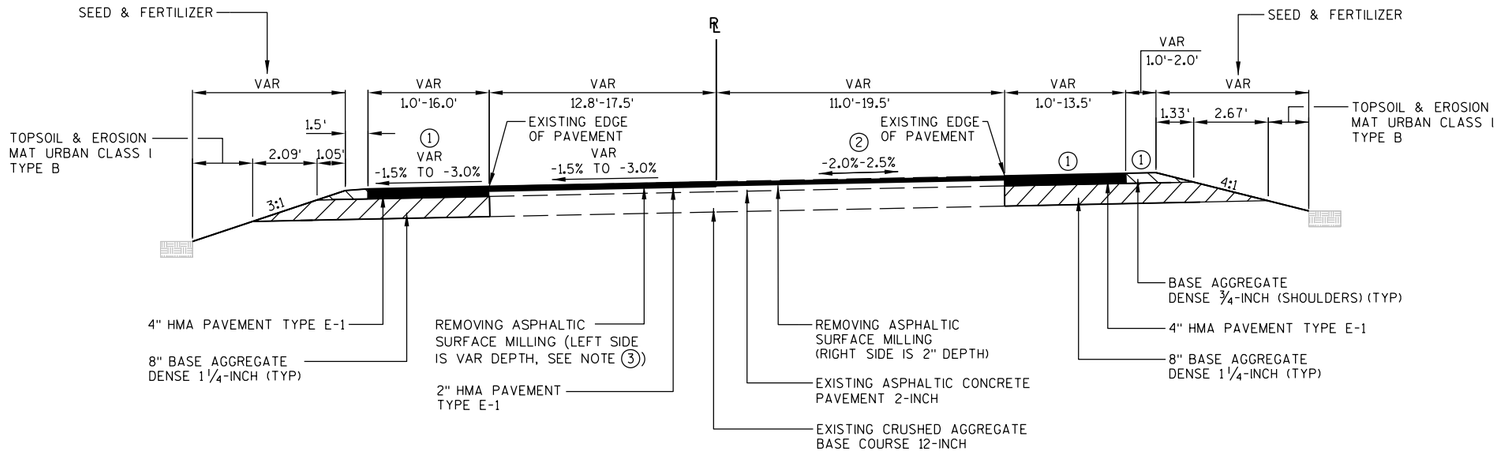
① MATCH ADJACENT EXISTING CROSS SLOPE

② MATCH EXISTING CROSS SLOPE

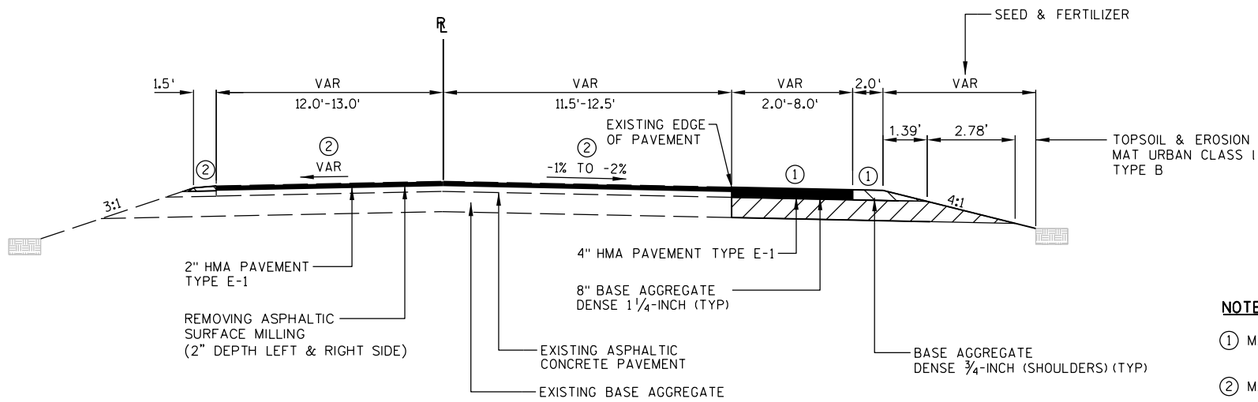
③ MILL & OVERLAY TO THE FOLLOWING CROSS SLOPES (NEGATIVE SLOPE DRAINS AWAY FROM ℄):

STATION	CROSS SLOPES
332+69.00	MATCH EXISTING
332+95.50	-1.50%
333+40.00	-1.50%
333+50.00	-1.75%
334+24.60	MATCH EXISTING

2



TYPICAL FINISHED SECTION (DETOUR)
E 12TH STREET / SSGT WARREN HANSEN DRIVE
STA 333+22.7 TO STA 334+24.6



TYPICAL FINISHED SECTION (DETOUR)
E 12TH STREET / SSGT WARREN HANSEN DRIVE
STA 334+24.6 TO STA 334+91.0

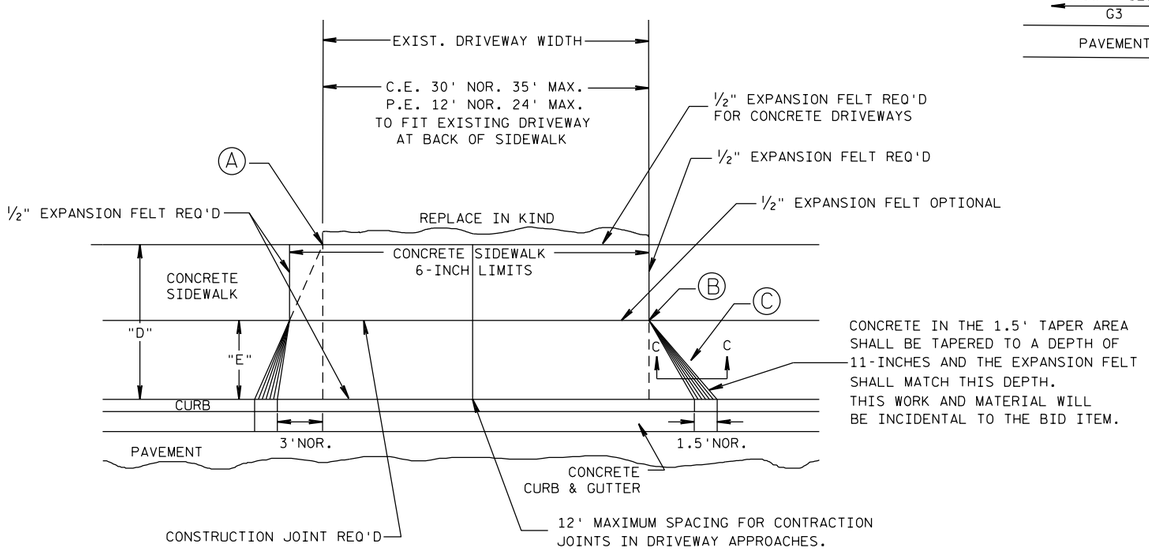
NOTES:

1. MATCH ADJACENT EXISTING CROSS SLOPE
2. MATCH EXISTING CROSS SLOPE
3. MILL & OVERLAY TO THE FOLLOWING CROSS SLOPES (NEGATIVE SLOPE DRAINS AWAY FROM ℄):

STATION	CROSS SLOPES
332+69.00	MATCH EXISTING
332+95.50	-1.50%
333+40.00	-1.50%
333+50.00	-1.75%
334+24.60	MATCH EXISTING

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	TYPICAL SECTIONS	SHEET 13	E

DRIVEWAY ENTRANCE DETAIL WITH SIDEWALK, CURB & GUTTER



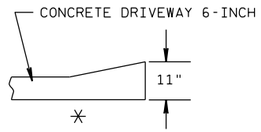
CONCRETE IN THE 1.5' TAPER AREA SHALL BE TAPERED TO A DEPTH OF 11-INCHES AND THE EXPANSION FELT SHALL MATCH THIS DEPTH. THIS WORK AND MATERIAL WILL BE INCIDENTAL TO THE BID ITEM.

PLAN VIEW

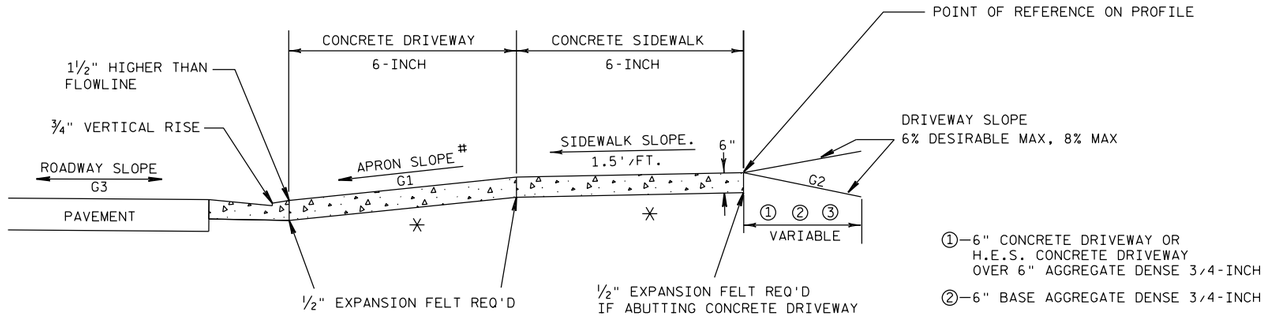
Ⓐ WHEN "D" IS 13' OR LESS, ALIGN TAPER WITH BACK OF SIDEWALK

Ⓑ WHEN "D" IS GREATER THAN 13', ALIGN TAPER WITH FRONT OF SIDEWALK

Ⓒ ✳ WHEN "E" = 0 MAKE CURB TAPER 5'



SECTION C-C



TYPICAL SIDEWALK SECTION

①—6" CONCRETE DRIVEWAY OR H.E.S. CONCRETE DRIVEWAY OVER 6" AGGREGATE DENSE 3/4-INCH

②—6" BASE AGGREGATE DENSE 3/4-INCH

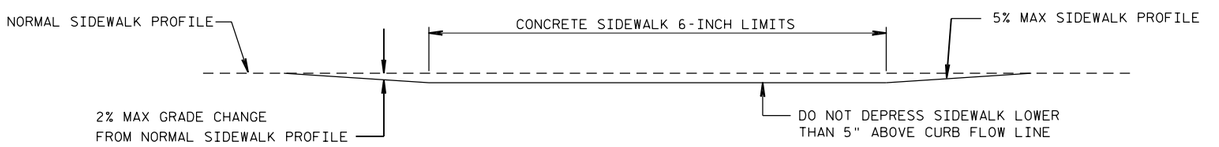
③—3" ASPHALTIC SURFACE OVER 6" BASE AGGREGATE DENSE ¾-INCH

✳ = 6" BASE AGGREGATE DENSE ¾-INCH REQ'D UNDER CONCRETE DRIVEWAY AND CONCRETE SIDEWALK

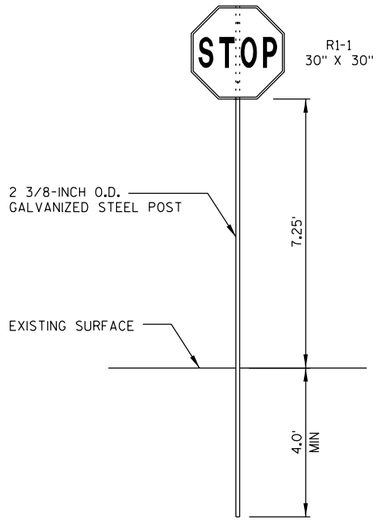
| TERRACE WIDTH | APRON SLOPE (G1) MIN % | DESIRABLE % | MAX % |
|---|---|---|---|
| 3 FT | 5.0 | 6.0 | 8.0 |
| 4 FT | 5.0 | 6.0 | 8.0 |
| 5 FT | 4.0 | 6.0 | 8.0 |
| 6 FT | 4.0 | 6.0 | 8.0 |
| 7 FT | 3.5 | 6.0 | 8.0 |
| 8 FT | 3.0 | 6.0 | 8.0 |

NOTE: ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G1 & G2 TO NOT EXCEED 15%

DEPRESS SIDEWALK PROFILE IF DRIVEWAY APRON EXCEEDS MAX SLOPE

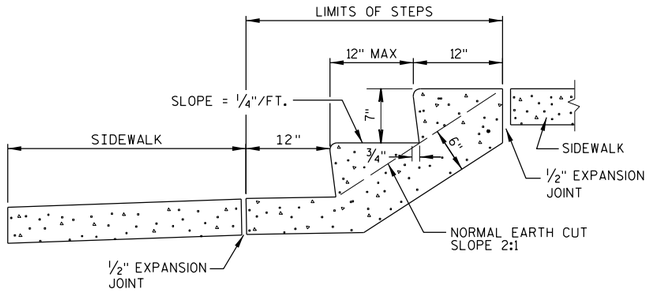


DEPRESSED SIDEWALK PROFILE DETAIL



POSTS STEEL 2 3/8-INCH DIAMETER (LENGTH)

NOTE:
THE EXACT LOCATION, WIDTHS, & NUMBER OF STEPS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

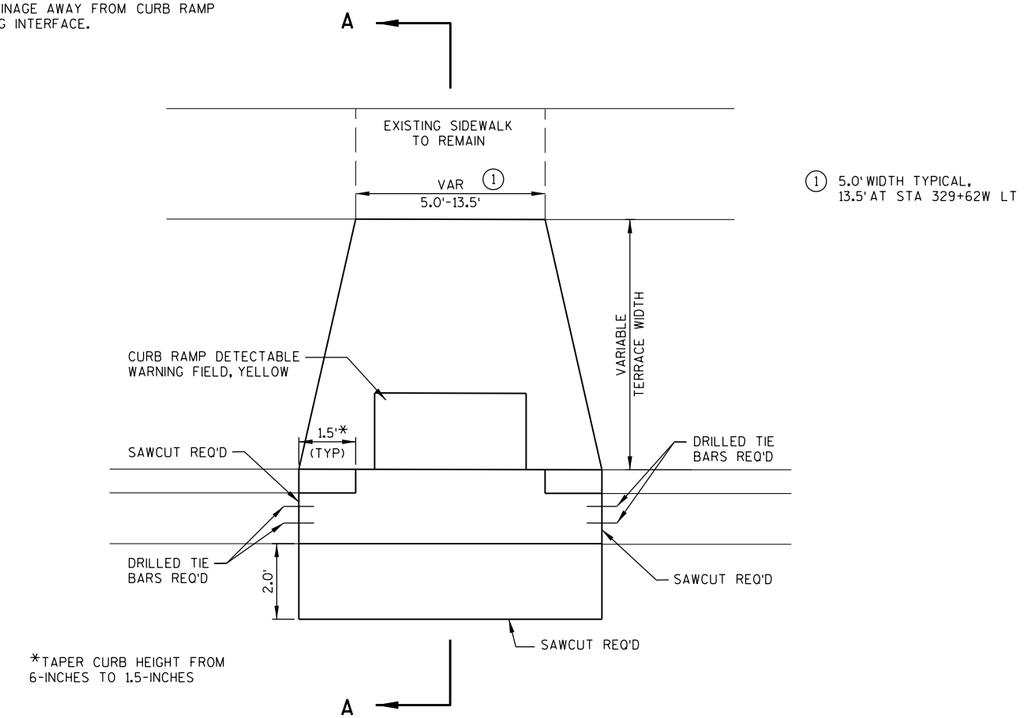


CONCRETE STEPS AT 128+75 RT

NOTES:

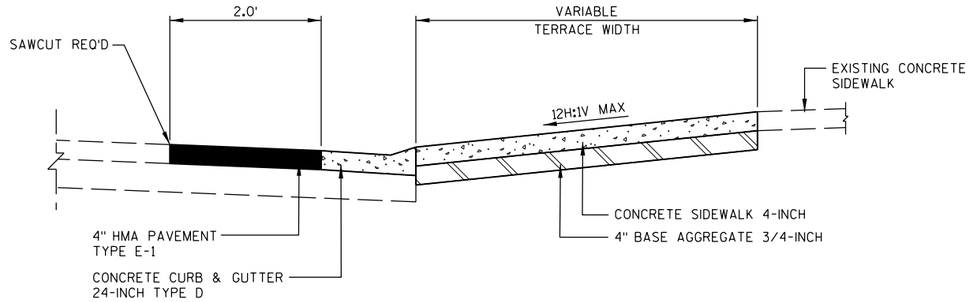
SEE SDD 8D5 SHEET B, "CURB RAMPS TYPES 2 AND 3" FOR PEDESTRIAN CURB RAMP REQUIREMENTS.

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.

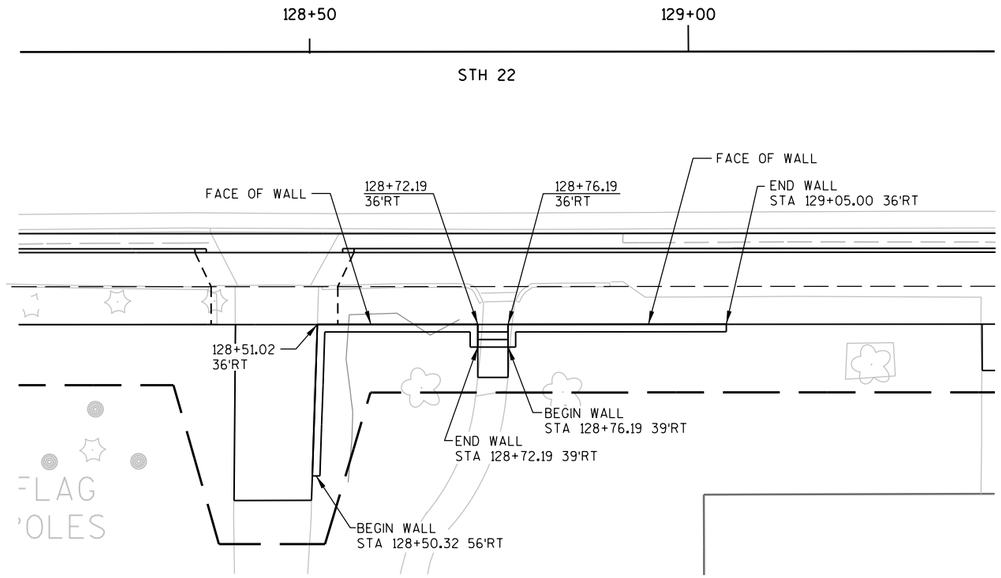


(1) 5.0' WIDTH TYPICAL, 13.5' AT STA 329+62W LT

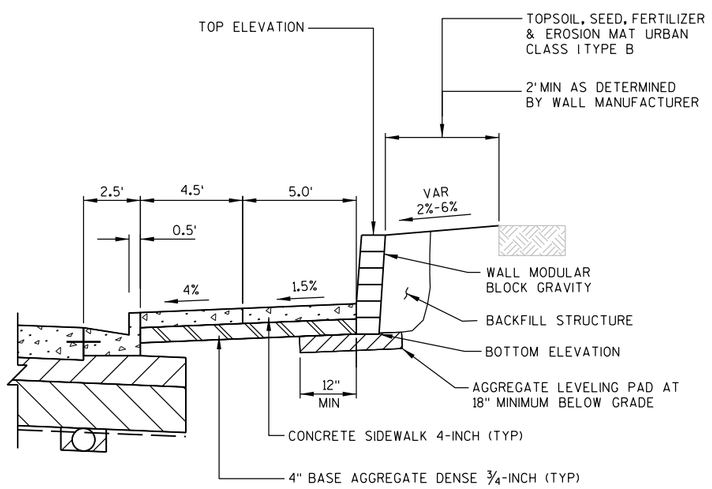
PEDESTRIAN CURB RAMP
E 12TH STREET
STA 324+69W TO STA 324+78W LT & RT
STA 325+55W TO STA 325+64W LT & RT
STA 329+54W TO STA 329+69W LT



SECTION A-A

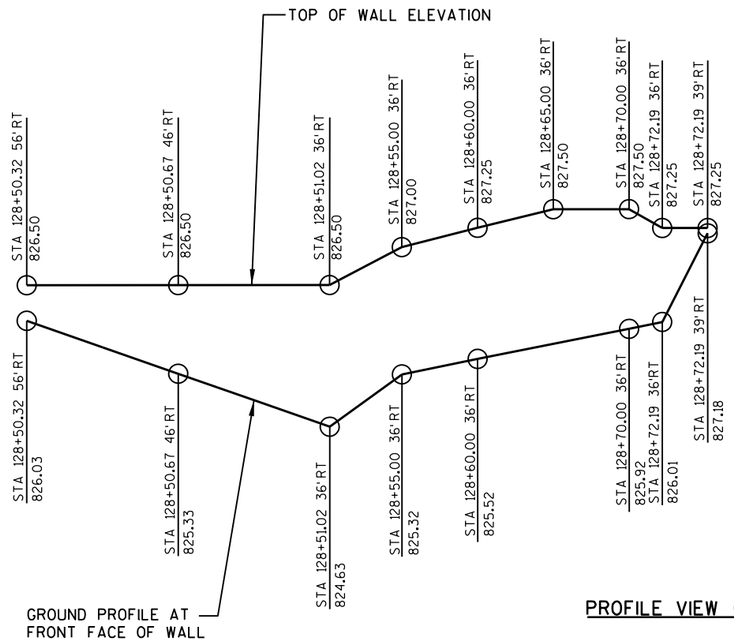


PLAN VIEW OF RETAINING WALL

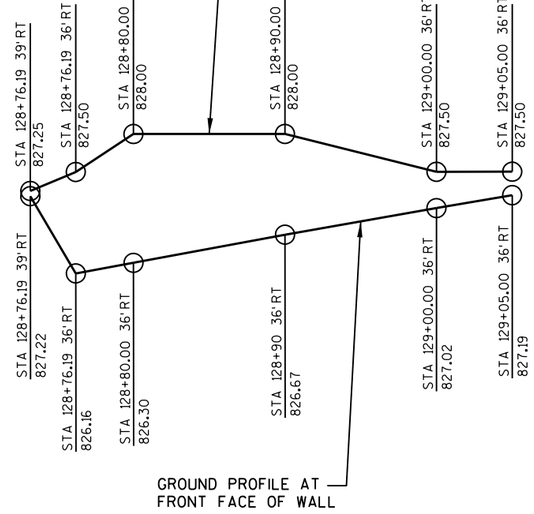


TYPICAL CROSS SECTION AT RETAINING WALL

STH 22
STA 128+50.3 RT TO STA 129+05.0 RT



PROFILE VIEW OF RETAINING WALL



NOTES:

PROVIDE COMPLETE DESIGN PLANS, DETAILS, SPECIFICATIONS AND SHOP DRAWINGS FOR THE RETAINING WALLS IN ACCORDANCE WITH THE SPECIAL PROVISIONS, THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO CONTRACTOR DURING CONSTRUCTION, THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM "WALL MODULAR BLOCK GRAVITY".

PLANS, ELEVATIONS AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL SHALL BE DESIGNED USING THE ELEVATIONS GIVEN ON THIS SHEET.

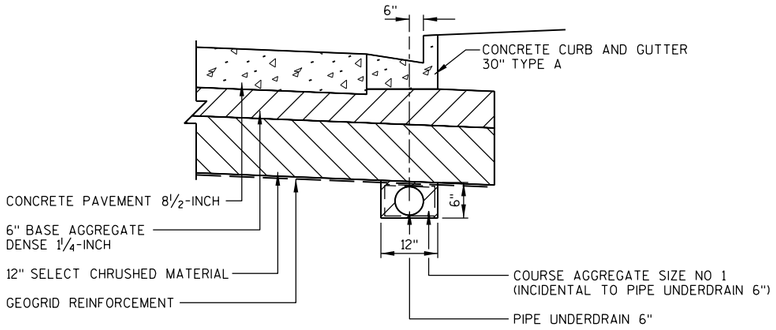
DESIGN FOR THE RETAINING WALL TO PROVIDE FOR APPROXIMATELY 4% FINISHED GRADE SLOPED BEHIND THE WALL AS SHOWN.

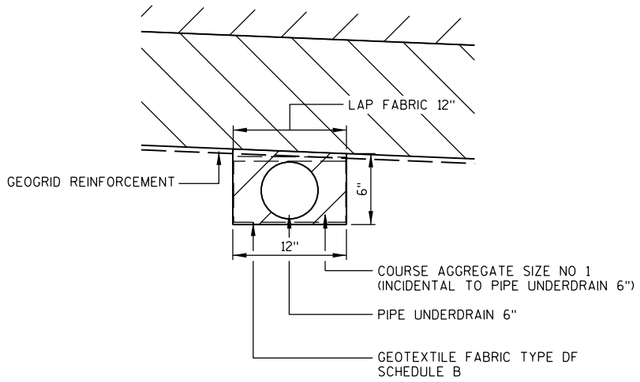
SEE SPECIAL PROVISIONS FOR AESTHETIC TREATMENT WALL.

ELEVATIONS ON "PROFILE VIEW OF RETAINING WALL" ARE FOR GUIDANCE ONLY.

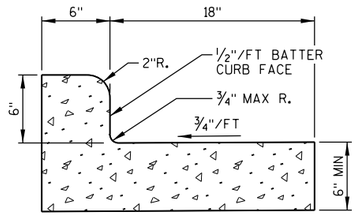
BENCHMARK TABLE

NO.	STATION	DESCRIPTION	ELEVATION
114	126+99.96, 36.2' RT	PK IN PP, NW CORNER OF CLINTONVILLE AREA AMBULANCE	820.18

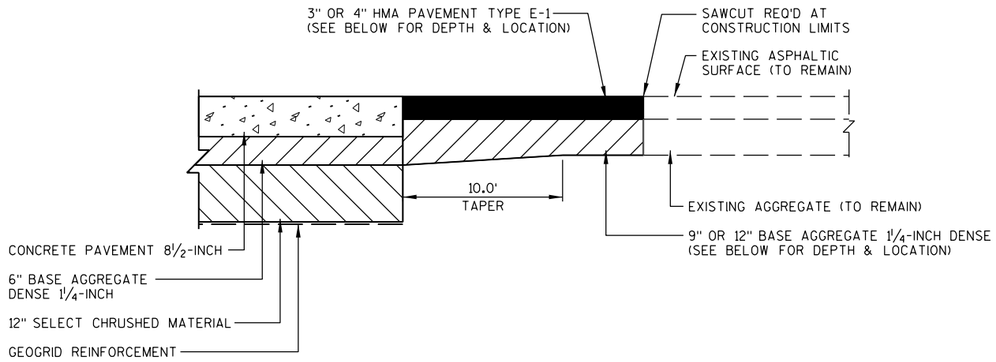




PIPE UNDERDRAIN



CONCRETE CURB & GUTTER 24-INCH, TYPE D



PAVEMENT TRANSITION AT SIDE ROADS

4" HMA OVER 12" BASE AGGREGATE
W 12TH STREET
E 12TH STREET

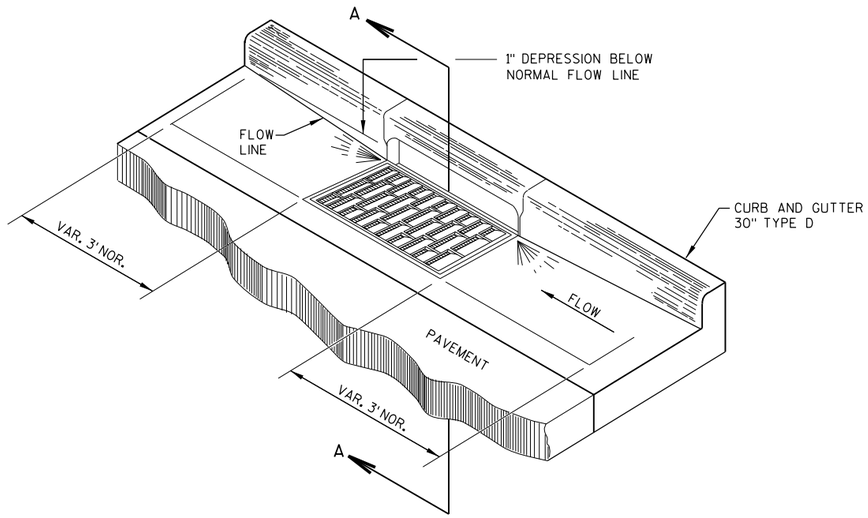
3" HMA OVER 9" BASE AGGREGATE
W 13TH STREET

RUNOFF COEFFICIENT TABLE

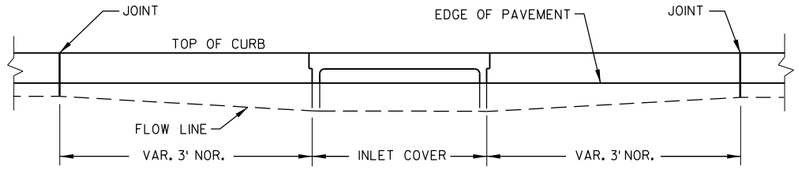
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33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

TOTAL PROJECT AREA = 1.91 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 1.95 ACRES

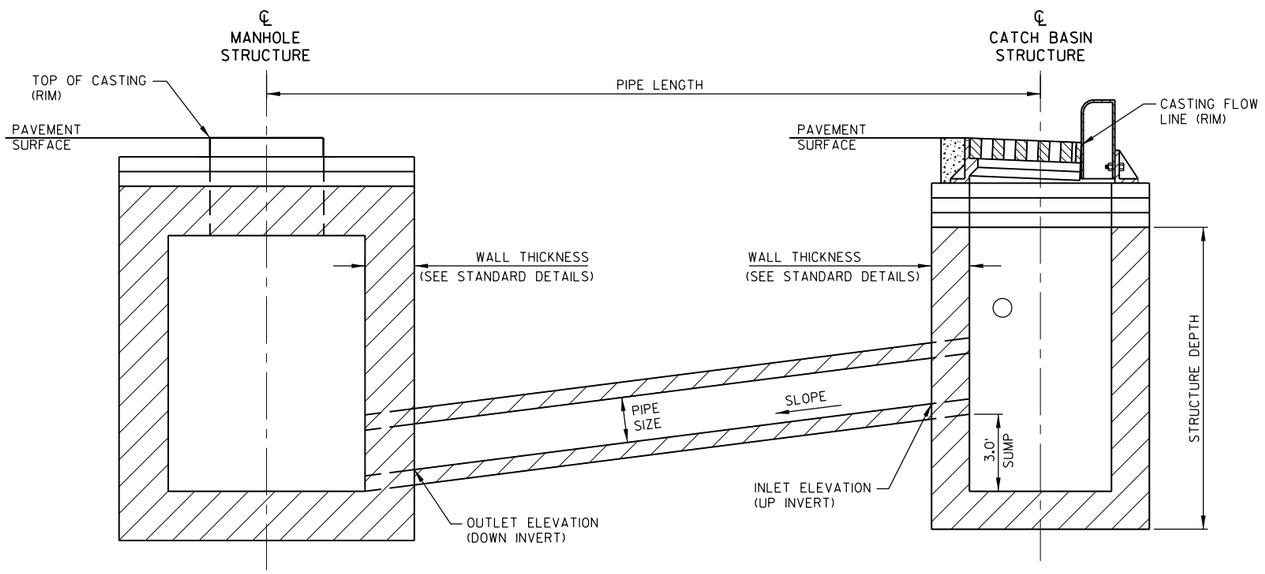
2



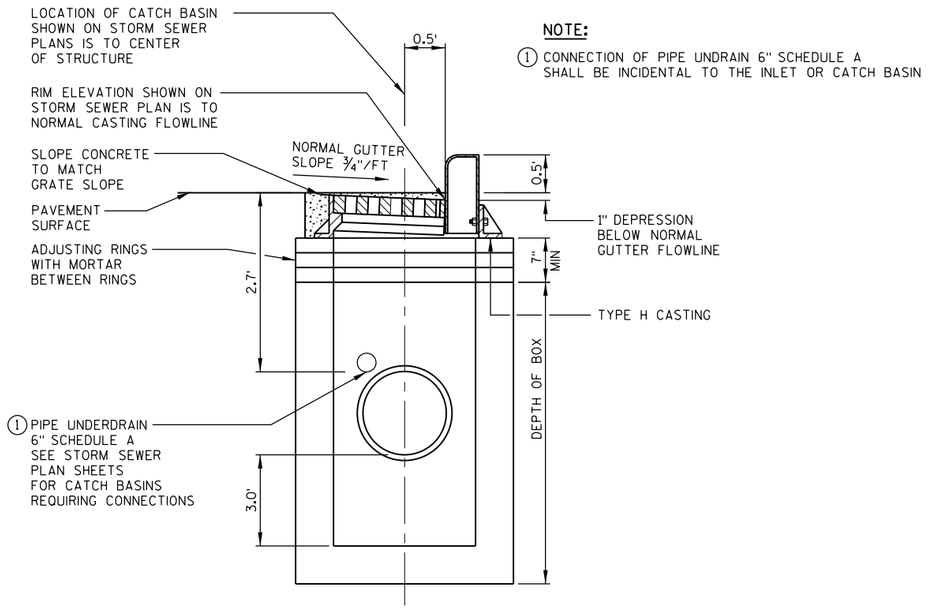
CATCH BASIN



ELEVATION



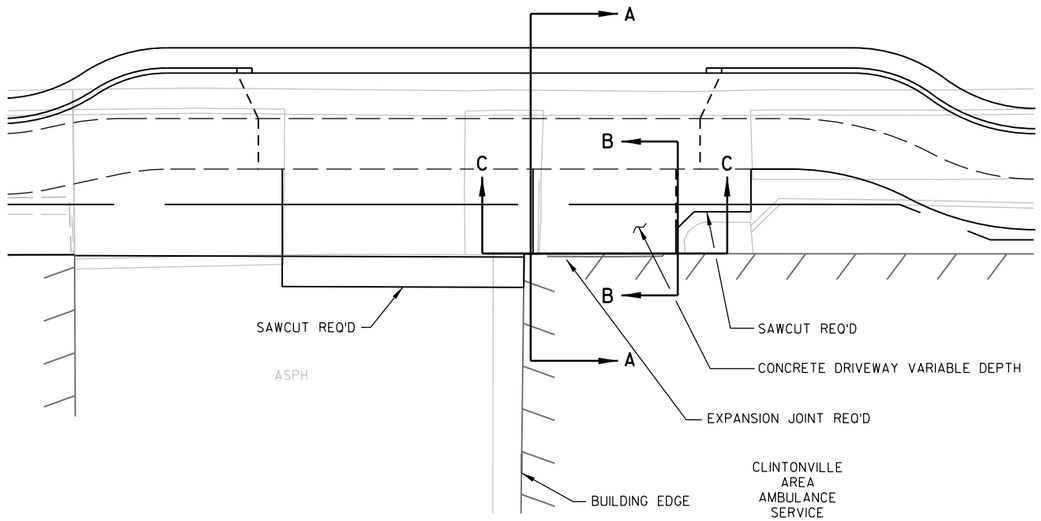
STORM SEWER MEASUREMENT

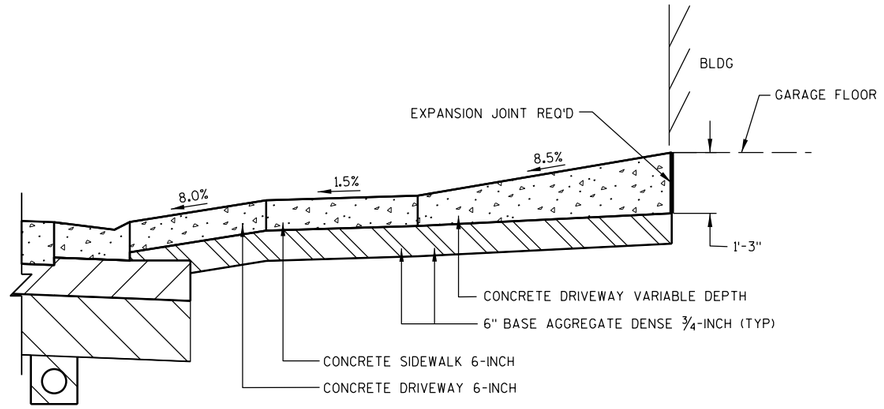


NOTE:

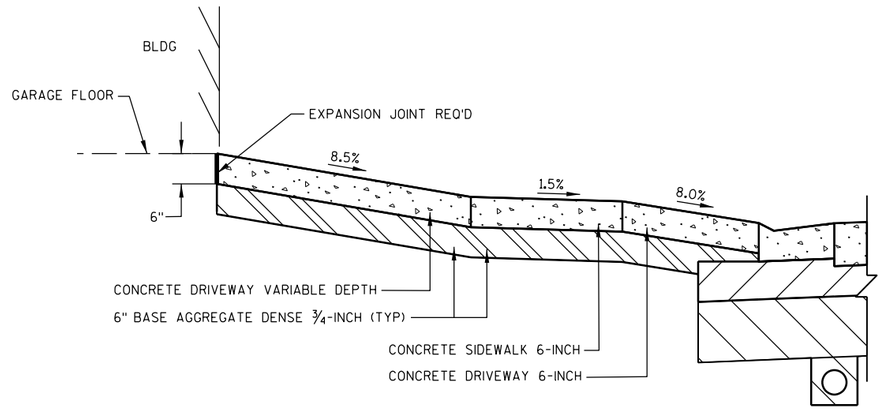
1. CONNECTION OF PIPE UNDRAIN 6" SCHEDULE A SHALL BE INCIDENTAL TO THE INLET OR CATCH BASIN

SECTION A-A

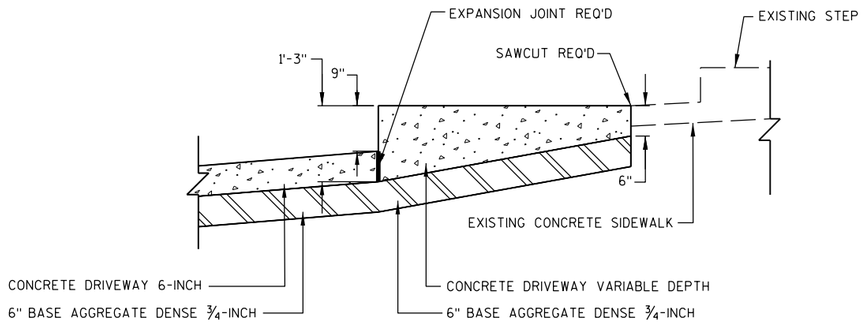




SECTION A-A



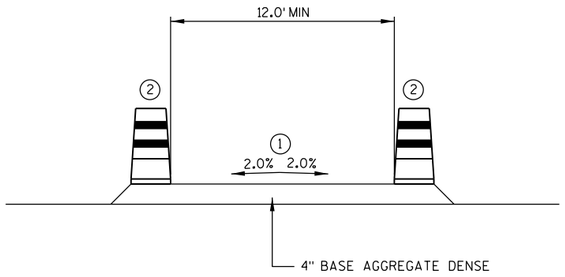
SECTION B-B



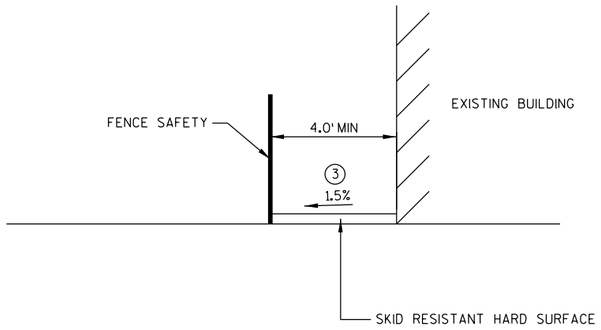
SECTION C-C

CONCRETE DRIVEWAY VARIABLE DEPTH

STA 126+45.9 RT



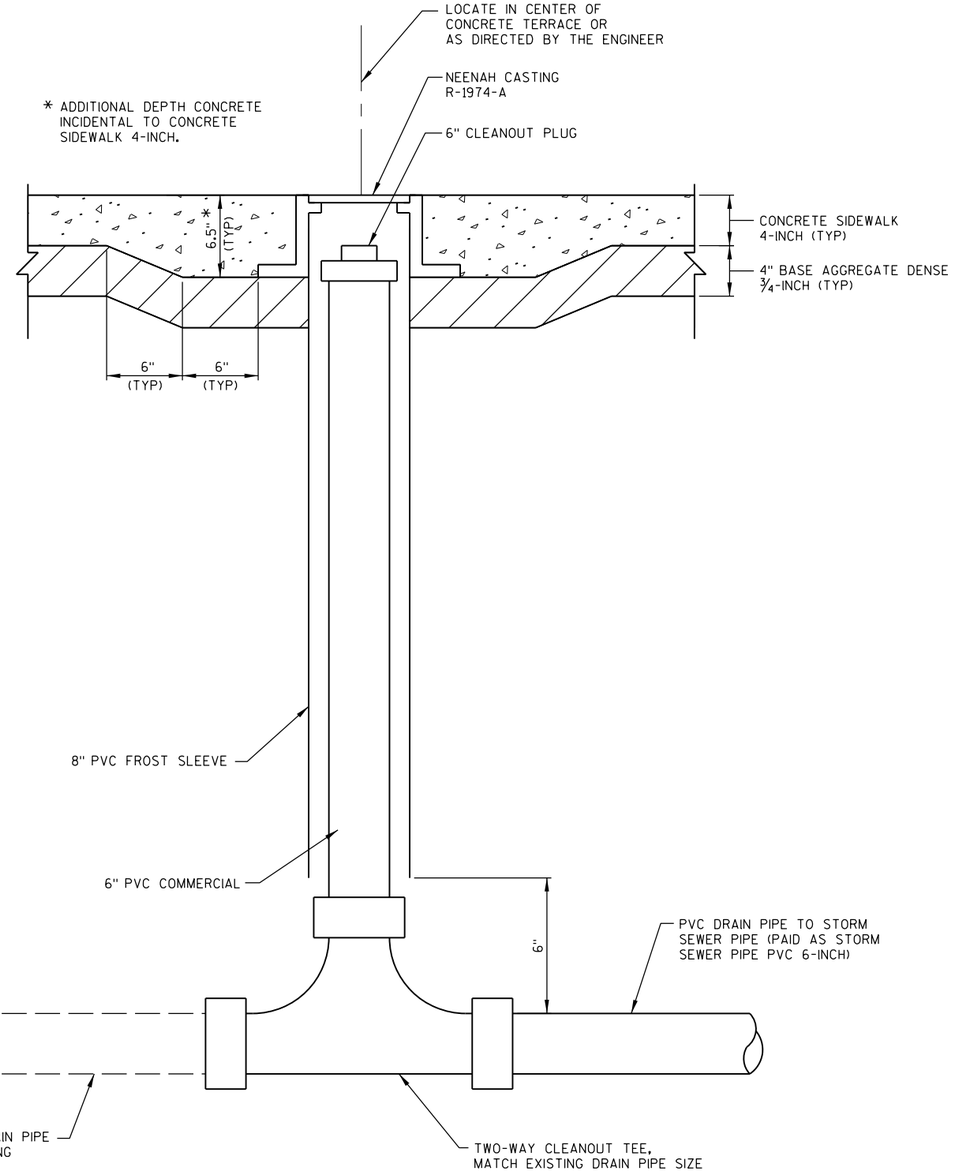
TEMPORARY VEHICLE ACCESS



TEMPORARY SIDEWALK ACCESS

NOTES:

1. SLOPE BASE AGGREGATE DENSE TOWARDS EDGE OF ROADWAY.
2. MAINTAIN 10.0' SPACING WITH TRAFFIC CONTROL DRUMS OR AS SPECIFIED BY THE FIELD ENGINEER.
3. SLOPE AWAY FROM EXISTING BUILDING.

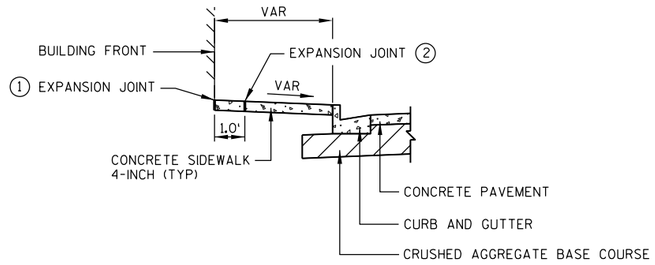


ROOF DRAIN CLEANOUT

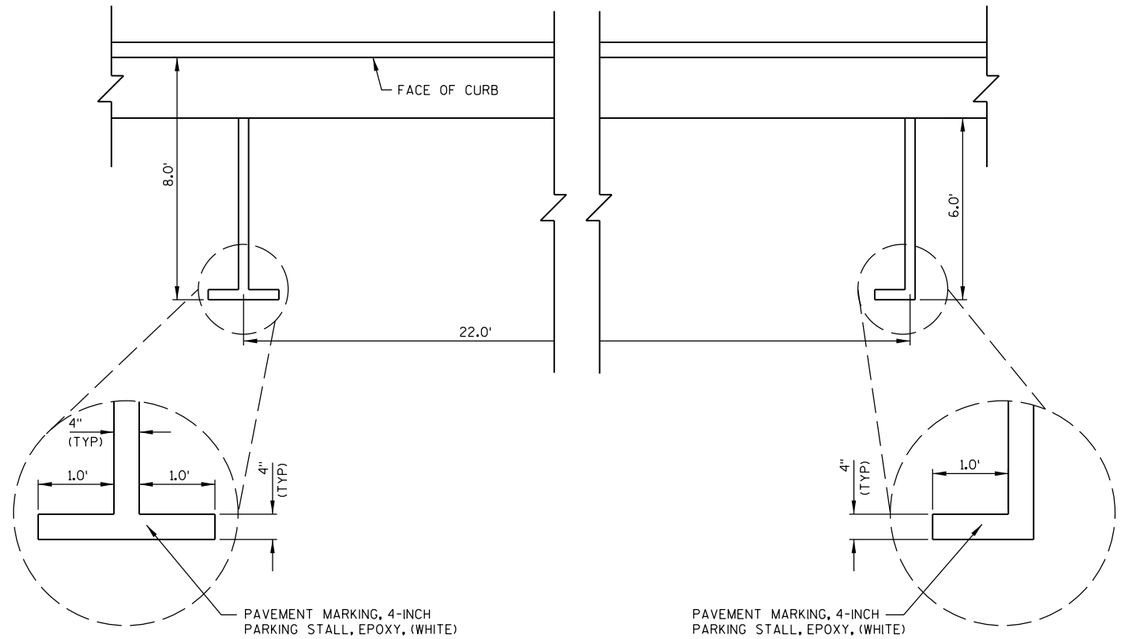
NOTES:

① EXPANSION JOINT PLACEMENT FOR SMOOTH BUILDING FACE

② EXPANSION JOINT PLACEMENT WHERE BUILDING FACE IS ROUGH



EXPANSION JOINT AT BUILDING FACES

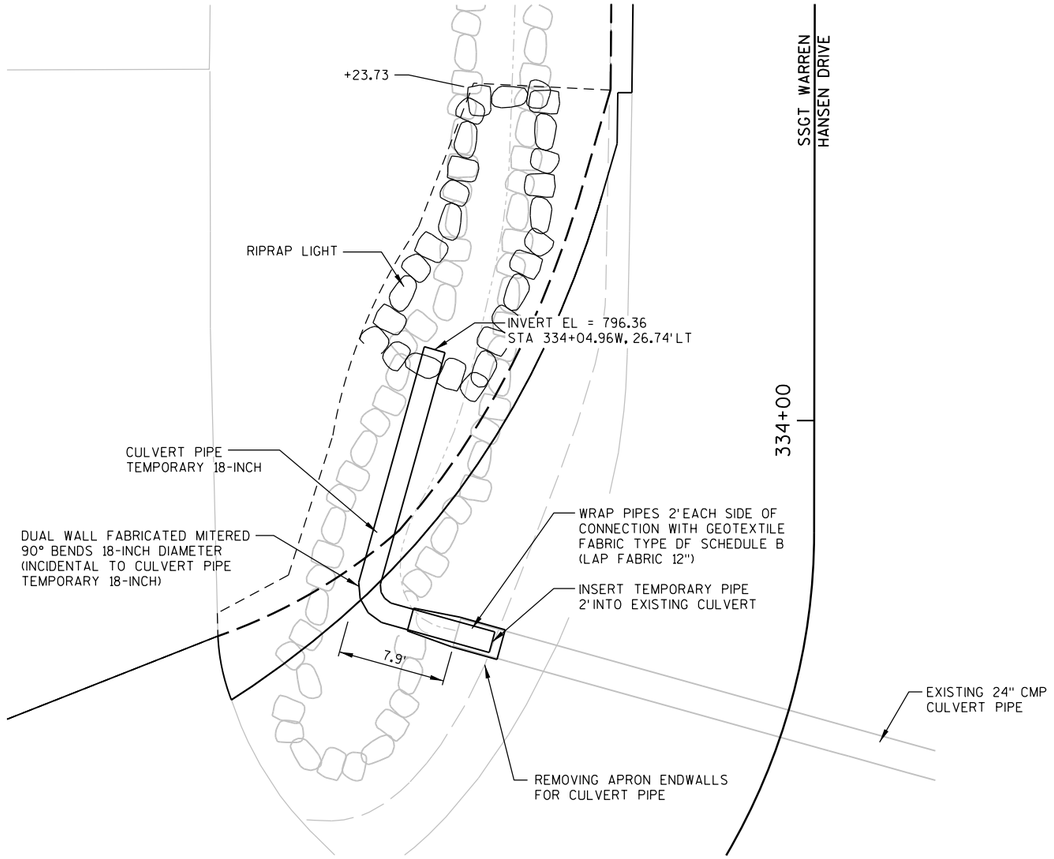


PARKING STALLS

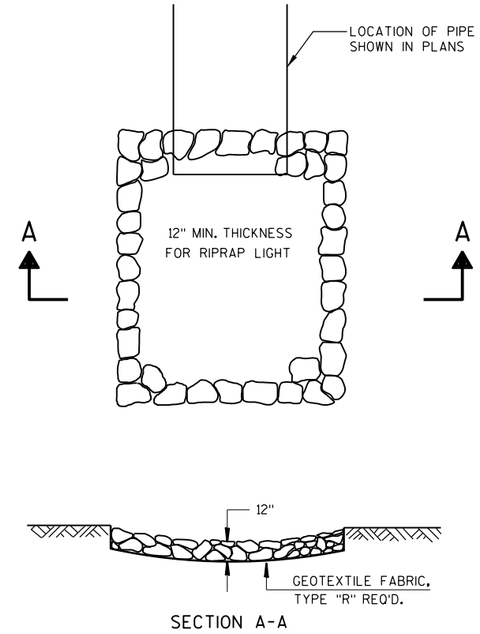
NOTE:

PARKING STALL WIDTH IS 22.0' UNLESS OTHERWISE NOTED IN PAVEMENT MARKING PLAN.

2

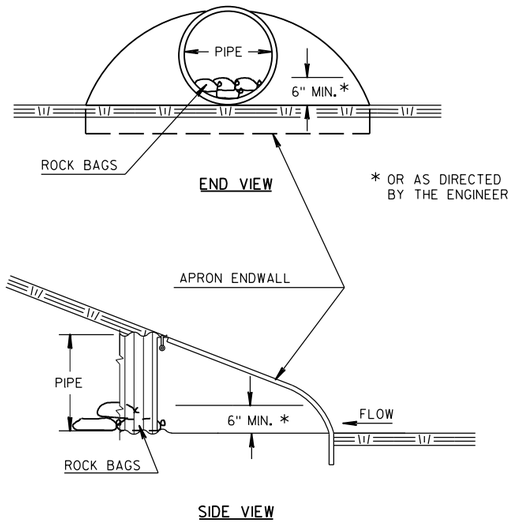


TEMPORARY PIPE CONNECTION



SECTION A-A

RIPRAP TREATMENT



END VIEW

SIDE VIEW

CULVERT PIPE CHECKS

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	CONSTRUCTION DETAILS	SHEET 22	E

BEGIN CONSTRUCTION
STA 202+39.00

FRONTIER COMMUNICATIONS
(UG FIBER OPTIC)

S 58°37'27" E

W 12TH STREET

FOX COMMUNITY CREDIT UNION

BANK

BEGIN HMA PAVEMENT
STA 203+89.20
SAWCUT REQ'D

204+00

19.5'

19.0'

END HMA PAVEMENT
BEGIN CONCRETE PAVEMENT
STA 204+41.00

FRONTIER COMMUNICATIONS
(UG TELEPHONE)

CITY OF CLINTONVILLE
(WATER MAIN)

ABANDONED EXTRACTION WELL

SANITARY CLEAN-OUT

CC1 CC2 CC3 CC4 CC5 CC6 CC7 CC8 CC9 CC10 CC11 CC12 CC13 CC15 CC16 CC17 CC18 CC19 CC20 CC21 CC22

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 AA BB CC DD EE FF GG

WE ENERGIES
(GAS MAIN)

CITY OF CLINTONVILLE
(SANITARY SEWER)

SIGN

CAUTION

STH 22 (N MAIN ST)

123+00 124+00 125+00 126+00 127+00 128+00

24.0' 18.0' 23.0' 17.0' 18.0' 24.0'

N 31°22'55" E

STA 124+24.56 STH 22 =
STA 205+00.00 W & E 12TH STREET

END CONCRETE PAVEMENT
BEGIN HMA PAVEMENT
STA 205+38.45

END HMA PAVEMENT
STA 205+72.00
SAWCUT REQ'D

END CONSTRUCTION
STA 206+27.20

18.9' 18.9'

S 57°57'05" E

E 12TH STREET

206+00 206+50

CITY OF CLINTONVILLE
(OH ELECTRIC)

CHARTER COMMUNICATIONS
(OH COMMUNICATIONS ATTACHED)

SEE CONCRETE DRIVEWAY VARIABLE DEPTH DETAIL

ABANDONED EXTRACTION PIPING

AUTO SERVICE PLUS

D.E.N SERVICES INC

JUST ONE MORE

CLINTONVILLE AMBULANCE SERVICE BUSINESS OFFICE

CLINTONVILLE CHAMBER OF COMMERCE

(CITY CENTER OFFICE SUITES)

OFFICE BLOCK

ULTRA COM WIRELESS

CLINTONVILLE CHRONICLE

CLINTONVILLE AREA AMBULANCE SERVICE

STOP SIGN

ROOF OVERHANG

CANOPY

RAMP

LEGEND

1. REFER TO 6250-01-77 PLANS FOR ADDITIONAL CURB AND GUTTER REPLACEMENT
2. TYPE 2 CURB RAMP SEE "PEDESTRIAN CURB RAMP" DETAIL

RADIUS POINT TABLE

POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	123+70.55 STH 22 204+41.00 W 12TH ST	59.0' LT 54.0' RT	35.0'	Y= 438492.818 X= 621680.054
CC2	125+18.55 STH 22 204+27.10 W 12TH ST	72.9' LT 94.0' LT	75.0'	Y= 438626.408 X= 621745.251
CC3	124+72.40 STH 22 204+57.00 W 12TH ST	43.0' LT 47.8' LT	20.0'	Y= 438571.428 X= 621746.746
CC4	124+81.03 STH 22 205+07.34 E 12TH ST	8.0' RT 56.6' LT	15.0'	Y= 438552.245 X= 621794.783
CC5	124+63.03 STH 22 205+31.55 E 12TH ST	32.0' RT 38.8' LT	15.0'	Y= 438524.381 X= 621805.899
CC6	124+63.03 STH 22 205+36.55 E 12TH ST	37.0' RT 38.9' LT	20.0'	Y= 438521.777 X= 621810.168
CC7	123+85.22 STH 22 205+38.45 E 12TH ST	38.0' RT 38.9' RT	20.0'	Y= 438454.823 X= 621770.499
CC8	123+85.22 STH 22 205+33.45 E 12TH ST	33.0' RT 38.9' RT	15.0'	Y= 438457.426 X= 621766.231
CC9	123+67.22 STH 22 205+09.67 E 12TH ST	9.0' RT 57.2' LT	15.0'	Y= 438454.557 X= 621736.368
CC10	125+85.85 STH 22	8.0' RT	15.0' (C&G) 24.5' (SDWLK)	Y= 438641.728 X= 621849.365
CC11	126+02.43 STH 22	33.0' RT	15.0'	Y= 438642.867 X= 621879.343
CC12	126+70.44 STH 22	33.0' RT	15.0'	Y= 438700.933 X= 621914.762
CC13	126+88.45 STH 22	9.0' RT	15.0' (C&G) 27.0' (SDWLK)	Y= 438728.798 X= 621903.647
CC14	123+46.42 STH 22	41.3' LT	3.5'	Y=438462.981 X=621682.610
CC15	123+43.35 STH 22	54.7' LT	3.0'	Y=438467.371 X=621669.530
CC16	123+86.95 STH 22 204+40.26 W 12TH ST	59.7' LT 37.6' RT	4.0'	Y=438507.197 X=621687.965

RADIUS POINT TABLE (CONT.)

CC17	124+72.06 STH 22 204+33.35 W 12TH ST	66.7' LT 55.6' RT	15.0'	Y=438583.457 X=621726.371
CC18	124+45.58 STH 22 204+56.24 W 12TH ST	43.8' RT 55.6' RT	20.0'	Y=438548.934 X=621732.130
CC19	124+65.58 STH 22 204+71.25 W 12TH ST	28.8' RT 55.6' RT	15.0'	Y=438558.187 X=621755.361
CC20	124+86.76 STH 22 204+50.01 W 12TH ST	50.0' LT 55.6' RT	15.0'	Y=438587.332 X=621748.247
CC21	126+02.80 STH 22	55.0' RT	25.0'	Y=438631.721 X=621898.314
CC22	126+64.20 STH 22	55.0' RT	25.0'	Y=438684.143 X=621930.290

ELEVATION TABLE

POINT	ELEVATION	COMMENTS
A	806.71	EOR
B	806.97	QOR
C	807.33	MOR
D	807.47	QOR
E	807.55	EOR
F	807.84	EOR
G	808.04	MOR
H	808.66	EOR
I	808.88	MOR
J	809.19	EOR
K	806.65	EOR
L	806.88	EOR
M	807.18	MOR
N	807.47	MOR
O	807.42	EOR
P	807.95	EOR
Q	808.09	EOR

ELEVATION TABLE

POINT	ELEVATION	COMMENTS
R	808.65	MOR
S	809.12	EOR
T	809.42	EOR
U	809.65	EOR
V	813.42	EOR
W	813.80	EOR
X	814.19	EOR
Y	816.95	EOR
Z	817.25	EOR
AA	817.56	EOR
BB	806.70	EXISTING
CC	806.79	EOR
DD	806.99	EOR
EE	807.15	EOR
FF	807.76	EOR
GG	807.78	EXISTING

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	INTERSECTION DETAIL	SHEET 23	E

2

REFER TO 6250-01-70

STA 204+00.00, 12.9'RT
MH 4-FT DIA / J

STA 204+50.00, 21.7'RT
CB 4-FT / H
REMOVE SS, MH & INLETS

BEGIN PROJECT STA 122+67.37

ABANDONED EXTRACTION WELL

SANITARY CLEAN-OUT

S 58°37'27" E
W 12TH ST

204+00

EX P-3

P-14

P-13

P-16

P-17

BM100

STA 204+25.00, 20.5'LT
CB 2X3-FT / H-S
REMOVE SS & INLETS

STA 124+73.90, 24.5'LT
CB 2X3-FT / H

STA 124+83.90, 24.5'LT
CB 2X3-FT / H

STA 124+73.90, 12.0'RT
MH 7-FT DIA / J
REMOVE SS & MH

REMOVE SS & MH

STA 126+24.06, 12.0'RT
MH 6-FT DIA / J

STA 127+27.47, 24.5'LT
CB 2X3-FT / H

LOCATION UNKNOWN, FIELD VERIFY
ROOF DRAIN CLEANOUT (SEE DETAIL)
CONNECT DIRECTLY TO
STORM SEWER PIPE

P-23

STH 22 (N MAIN ST)

MATCHLINE STA 129+00

122+00 123+00 124+00 125+00 126+00 127+00 128+00

N 31°22'55" E

P-11 P-12 P-15 P-18 P-19 P-20 P-21 P-22 P-24 P-25 P-25A

CAUTION

POD-2

RD-1

BM114

STA 123+65.72, 25.5'RT
CB 2X3-FT / H

STA 123+75.00, 6.0'RT
MH 7-FT DIA / J
REMOVE SS & INLET

STA 124+90.23, 24.5'RT
CB 2X3-FT / H

STA 124+80.23, 24.5'RT
CB 2X3-FT / H

REMOVE SS & INLETS

STA 126+89.95, 12.0'RT
MH 6X6-FT / J

STA 126+89.95, 25.5'RT
CB 2X3-FT / H

STA 128+40.20, 12.0'RT
MH 5-FT DIA / J

S 57°57'05" E
12TH ST

206+00

REFER TO 6250-01-70

REFER TO 6250-01-70

AUTO SERVICE PLUS

ABANDONED EXTRACTION PIPING

CLINTONVILLE CHAMBER OF COMMERCE

POST OFFICE

CLINTONVILLE AREA AMBULANCE SERVICE

FLAG POLES

HSE #26

LEGEND

- UNDERDRAIN
- [1] CB WITH 1 UNDERDRAIN CONNECTION
- [2] CB WITH 2 UNDERDRAIN CONNECTIONS
- FLOW DIRECTION

BENCHMARK TABLE

NO.	STATION	DESCRIPTION	ELEVATION
100	124+50.57, 38.9'LT	TOP NUT ON HYD/NW QUAD OF STH 22 AND W. 12TH ST	812.57
114	126+99.96, 36.2'RT	PK IN PP, NW CORNER OF CLINTONVILLE AREA AMBULANCE	820.18

LABEL : MH 4
RIM : 807.95
SUMP : 0.21

LABEL : EX P-3
UP. INV. : 800.88
DN. INV. : 800.01
L : 92'
SIZE : 18"
MAT. : SSPRC CL III
SLOPE : 1.08% *

EXISTING 18" SS TO BE REMOVED

CONNECT EXISTING PIPE TO NEW MH

LABEL : MH 3
RIM : 807.15
SUMP : 0.33'

LABEL : P-11
UP. INV. : 800.20
DN. INV. : 798.69
L : 108'
SIZE : 29" X 45"
MAT. : SSPRCHE CL III
SLOPE : 1.40% *

LABEL : MH 5
RIM : 809.67
SUMP : 0.33'

LABEL : P-15
UP. INV. : 801.69
DN. INV. : 800.38
L : 99'
SIZE : 36"
MAT. : SSPRC CL III
SLOPE : 1.42% *

LABEL : P-20
UP. INV. : 805.00
DN. INV. : 802.45
L : 150'
SIZE : 36"
MAT. : SSPRC CL III
SLOPE : 1.77% *

LABEL : MH 6
RIM : 815.24
SUMP : 0.33'

LABEL : P-22
UP. INV. : 809.25
DN. INV. : 808.50
L : 66'
SIZE : 36"
MAT. : SSPRC CL III
SLOPE : 1.25% *

LABEL : MH 7
RIM : 817.90
SUMP : 0.33'

LABEL : P-25
UP. INV. : 813.50
DN. INV. : 811.00
L : 150'
SIZE : 36"
MAT. : SSPRC CL III
SLOPE : 1.73% *

LABEL : MH 7C
RIM : 824.32
SUMP : 0.33'

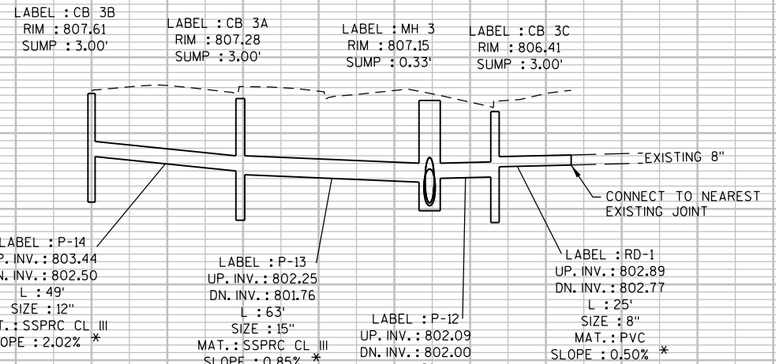
LABEL : P-25A
UP. INV. : 818.40
DN. INV. : 817.00
L : 150'
SIZE : 36"
MAT. : SSPRC CL III
SLOPE : 0.96% *

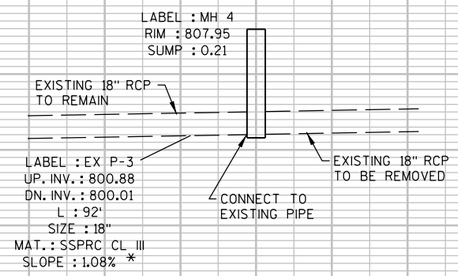
825 820 815 810 805 800 795 790

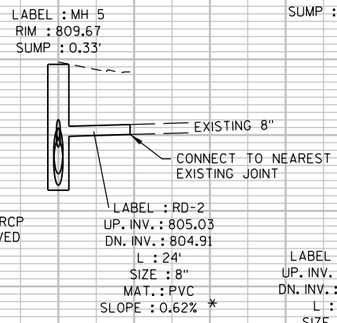
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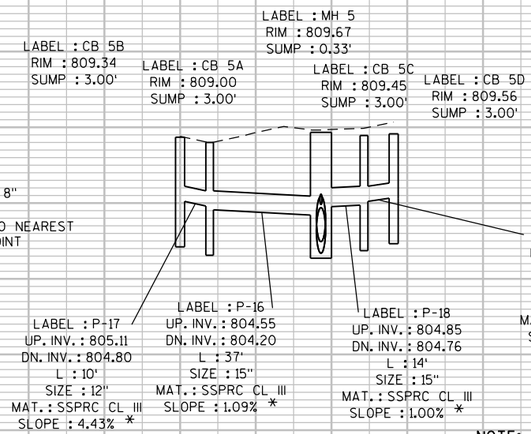
* GRADES COMPUTED FROM OUTSIDE OF STRUCTURE TO OUTSIDE OF STRUCTURE.

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	STORM SEWER	SHEET 24	E



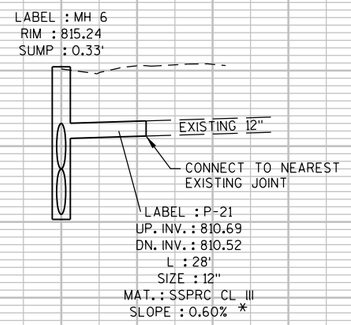


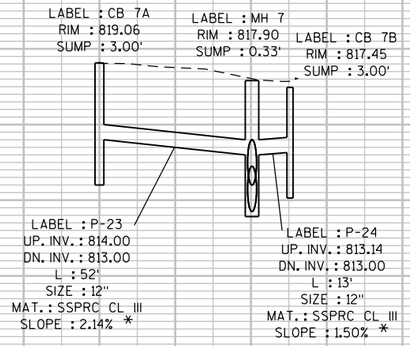


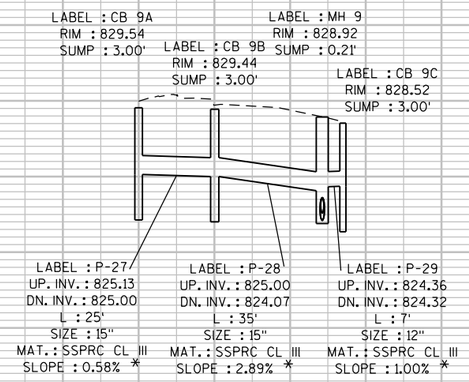


NOTE:

* DENOTES GRADES COMPUTED FROM OUTSIDE OF STRUCTURE TO OUTSIDE OF STRUCTURE.





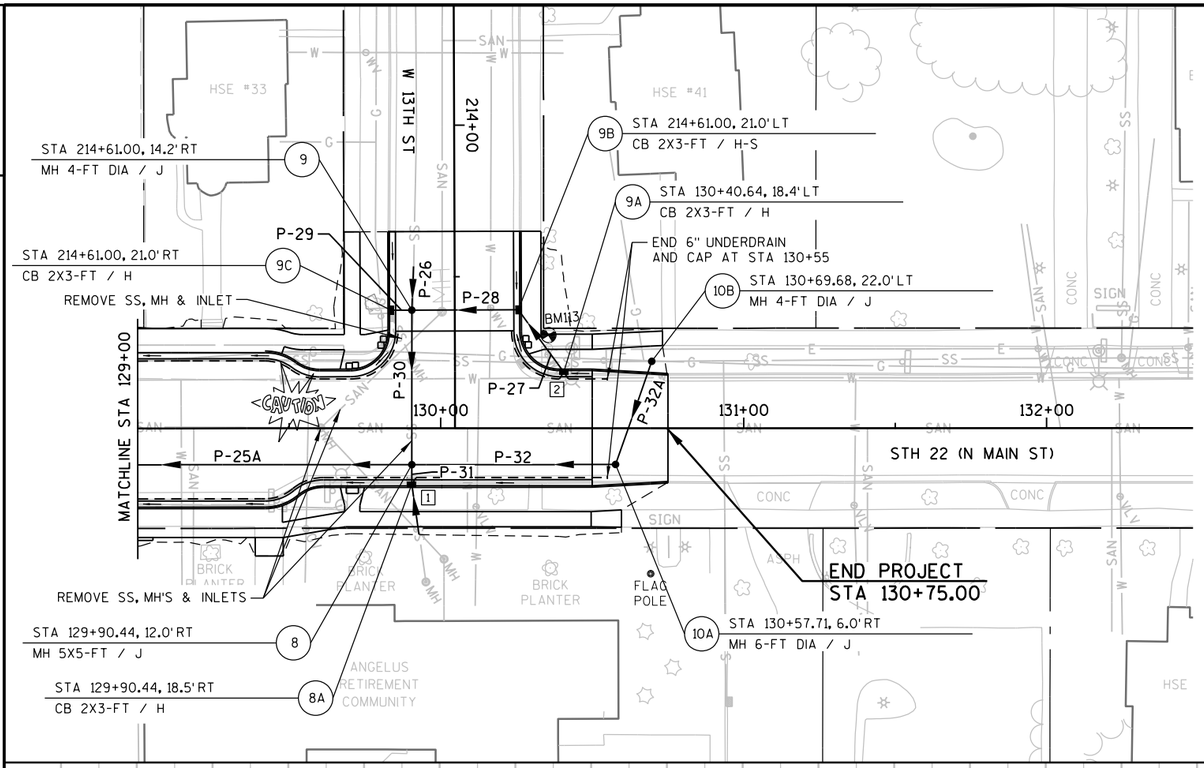


PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	STORM SEWER	SHEET 25	E

STRUCT NO	STATION	LOCATION	PAY LENGTH C-C FT	TO	INLET OR MANHOLE	TYPE	FLOW LINE/ RIM ELEV	TOP OF STRUCT ELEV	STRUCT DEPTH FT	DISCHARGE PIPE				
										INLET ELEV	OUTLET ELEV	SIZE IN	INSTALL LENGTH FT	SLOPE %
3	123+75.00	6.0' RT	108	*	MH	7-FT DIA	807.15	805.82	5.95	800.20	798.69	29X45	108	1.40%
3B	204+25.00	20.5' LT	49	3A	CB	2X3-FT	807.61	806.65	6.21	803.44	802.50	12	49	2.02%
3A	204+50.00	21.7' RT	63	3	CB	4-FT	807.28	806.32	7.07	802.25	801.76	15	63	0.85%
ROOF DRAIN	N/A	N/A	25	3C	N/A	N/A	N/A	N/A	N/A	802.89	802.77	8	25	0.50%
3C	123+65.72	25.5' RT	21	3	CB	2X3-FT	806.41	805.45	6.36	802.09	802.00	12	21	0.50%
4	204+00.00	12.9' RT	N/A	EXIST	MH	4-FT DIA	807.95	806.62	5.95	800.88	N/A	N/A	N/A	N/A
5	124+73.90	12.0' RT	99	3	MH	7-FT DIA	809.67	808.34	6.98	801.69	800.38	36	99	1.42%
ROOF DRAIN	N/A	N/A	24	5	N/A	N/A	N/A	N/A	N/A	805.03	804.91	8	24	0.62%
5B	124+83.90	24.5' LT	10	5A	CB	2X3-FT	809.34	808.38	6.27	805.11	804.80	12	10	4.43%
5A	124+73.90	24.5' LT	37	5	CB	2X3-FT	809.00	808.04	6.49	804.55	804.20	15	37	1.09%
5D	124+90.23	24.5' RT	10	5C	CB	2X3-FT	809.56	808.60	6.28	805.32	805.10	12	10	3.14%
5C	124+80.23	24.5' RT	14	5	CB	2X3-FT	809.45	808.49	6.64	804.85	804.76	15	14	1.00%
6	126+24.06	12.0' RT	150	5	MH	6-FT DIA	815.24	813.91	9.24	805.00	802.45	36	150	1.77%
EXIST	N/A	N/A	28	6	N/A	N/A	N/A	N/A	N/A	810.69	810.52	12	28	0.60%
7	126+89.95	12.0' RT	66	6	MH	6X6-FT	817.90	816.57	7.65	809.25	808.50	36	66	1.25%
7A	127+27.47	24.5' LT	52	7	CB	2X3-FT	819.06	818.10	7.10	814.00	813.00	12	52	2.14%
7B	126+89.95	25.5' RT	13	7	CB	2X3-FT	817.45	816.49	6.35	813.14	813.00	12	13	1.50%
7C	128+40.20	12.0' RT	150	7	MH	5-FT DIA	824.32	822.99	9.82	813.50	811.00	36	150	1.73%

* PIPE ON PROJECT 6250-01-70

MANHOLE TYPE					CATCH BASIN TYPE		MH COVERS TYPE	INLET COVERS		SSPRC-CLASS III			SSPRCHE-CLASS III	PVC PIPE
4-FT DIA	5-FT DIA	6-FT DIA	7-FT DIA	6X6-FT	2X3-FT	4-FT	J	H	H-S	12-INCH	15-INCH	36-INCH	29X45	8-INCH
1	1	1	2	1	8	1	6	8	1	183	114	465	108	49



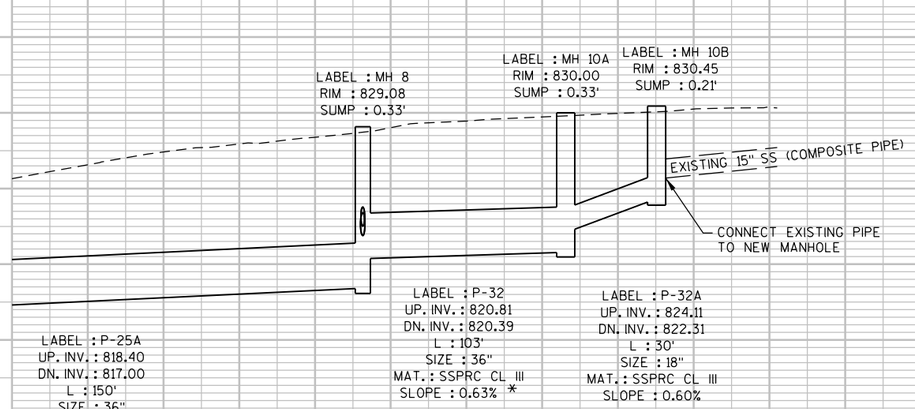
STRUCT NO	STATION	LOCATION	PAY LENGTH C-C FT	TO	INLET OR MANHOLE	TYPE	FLOW LINE/ RIM ELEV	TOP OF STRUCT ELEV	STRUCT DEPTH FT	DISCHARGE PIPE				
										INLET ELEV	OUTLET ELEV	SIZE IN	INSTALL LENGTH FT	SLOPE %
8	129+90.44	12.0' RT	150	7C	MH	5X5-FT	829.08	827.75	9.68	818.40	817.00	36	150	0.96%
EXIST	N/A	N/A	17	8A	EXIST	N/A	N/A	N/A	N/A	825.57	823.49	10	17	6.58%
8A	129+90.44	18.5' RT	6	8	CB	2X3-FT	828.77	827.81	8.23	822.58	822.52	15	6	2.00%
9	214+61.00	14.2' RT	51	8	MH	4-FT DIA	828.92	827.59	5.70	822.10	821.90	18	51	0.44%
EXIST	N/A	N/A	15	9	N/A	N/A	N/A	N/A	N/A	822.67	822.59	12	15	0.51%
9A	130+40.64	18.4' LT	25	9B	CB	2X3-FT	829.54	828.58	6.45	825.13	825.00	15	25	0.58%
9B	214+61.00	21.0' LT	35	9	CB	2X3-FT	829.44	828.48	6.48	825.00	824.07	15	35	2.89%
9C	214+61.00	21.0 RT	7	9	CB	2X3-FT	828.52	827.56	6.20	824.36	824.32	12	7	1.00%
10A	130+57.71	6.0' RT	103	8	MH	6-FT DIA	830.00	828.67	8.19	820.81	820.39	36	103	0.63%
10B	130+69.68	22.0' LT	30	10A	MH	4-FT DIA	830.45	829.12	5.22	824.11	822.31	18	30	0.60%
EXIST	N/A	N/A	0	10B	N/A	N/A	N/A	N/A	N/A	N/A	825.70	15	0	0.15%

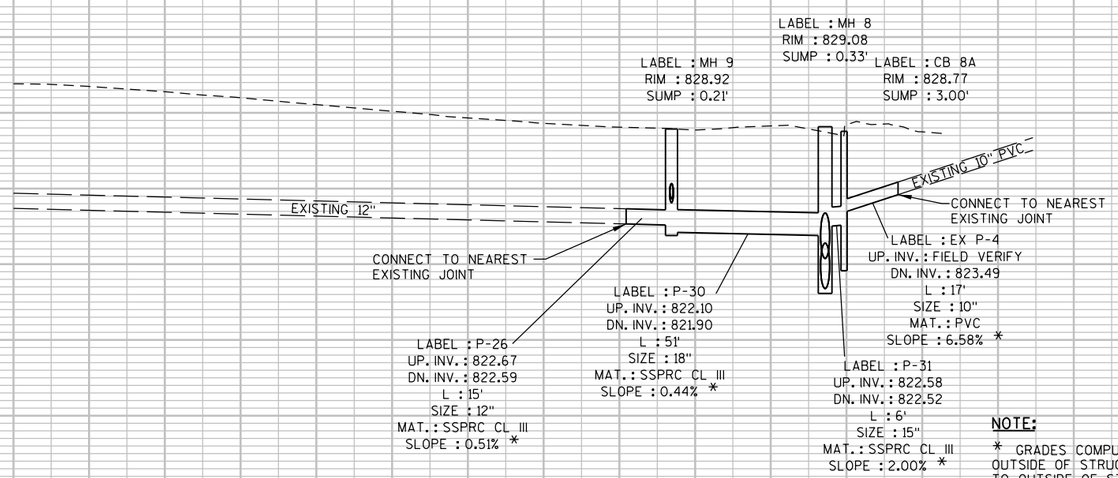
MANHOLE TYPE			CATCH BASIN TYPE	MH COVERS TYPE	INLET COVERS TYPE		SSPRC-CLASS III				PVC PIPE
4-FT DIA	6-FT DIA	5X5-FT	2X3-FT	TYPE J	H	H-S	12-INCH	15-INCH	18-INCH	36-INCH	10-INCH
2	1	1	4	4	3	1	22	66	81	253	17

LEGEND
- UNDERDRAIN
- [1] CB WITH 1 UNDERDRAIN CONNECTION
- [2] CB WITH 2 UNDERDRAIN CONNECTIONS
- FLOW DIRECTION

BENCHMARK TABLE

NO.	STATION	DESCRIPTION	ELEVATION
113	130+35.58, 26.4' LT	TOP NUT ON HYD/NW QUAD OF STH 22 AND 13TH STREET	833.36





NOTE:
* GRADES COMPUTED FROM OUTSIDE OF STRUCTURE TO OUTSIDE OF STRUCTURE.

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	STORM SEWER	SHEET 27	E

2

SIGNING GENERAL NOTES

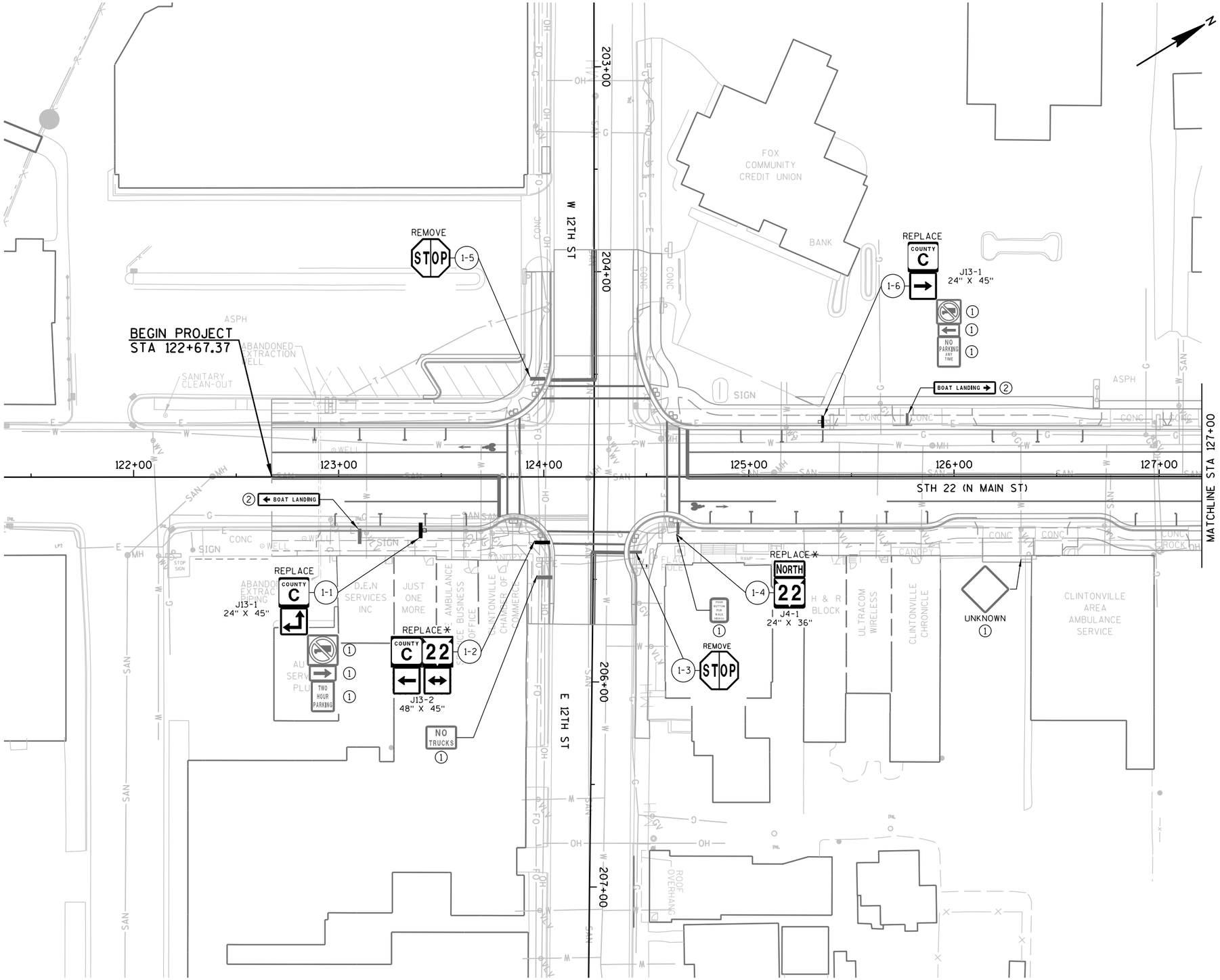
ALL SIGNS THAT ARE MOUNTED TO LIGHT POLES AND OVERHANG THE SIDEWALK SHALL HAVE A MOUNTING HEIGHT OF 7'-3" MIN.

REMOVE = REMOVING SIGNS TYPE II AND REMOVING SMALL SIGN SUPPORTS.

REPLACE = REMOVING SIGNS TYPE II, REMOVING SMALL SIGN SUPPORTS, SIGNS TYPE II REFLECTIVE H/F AND POSTS WOOD (SIZE) OR POSTS TUBULAR STEEL (SIZE).

INSTALL = SIGNS TYPE II REFLECTIVE H/F, AND POSTS WOOD (SIZE) OR POSTS TUBULAR STEEL (SIZE).

REFER TO TRAFFIC SIGNAL PLANS FOR LOCATION OF NEW FOLDING STOP SIGNS (R1-1F)



SIGN LEGEND

X-X	SIGN GROUP NUMBER
	SIGNS TYPE II REFLECTIVE H/F ON POSTS WOOD
	SIGNS TYPE II REFLECTIVE H/F ON POSTS TUBULAR STEEL WITH BOX OUT
	SIGNS TYPE II REFLECTIVE H/F ON POSTS STEEL 2⅜" DIAMETER
	DECORATIVE STREET LIGHT
*	BAND SIGN TO STREET LIGHT/ TRAFFIC SIGNAL POLE
①	FOR REFERENCE ONLY. CITY OWNED SIGNS TO BE REMOVED AND INSTALLED BY CITY PERSONNEL INCLUDING ANY CITY OWNED SIGNS NOT SHOWN ON THIS PLAN
②	CITY WAYFINDING SIGNS TO BE INSTALLED BY CITY PERSONNEL ON STREET LIGHT POLE

2

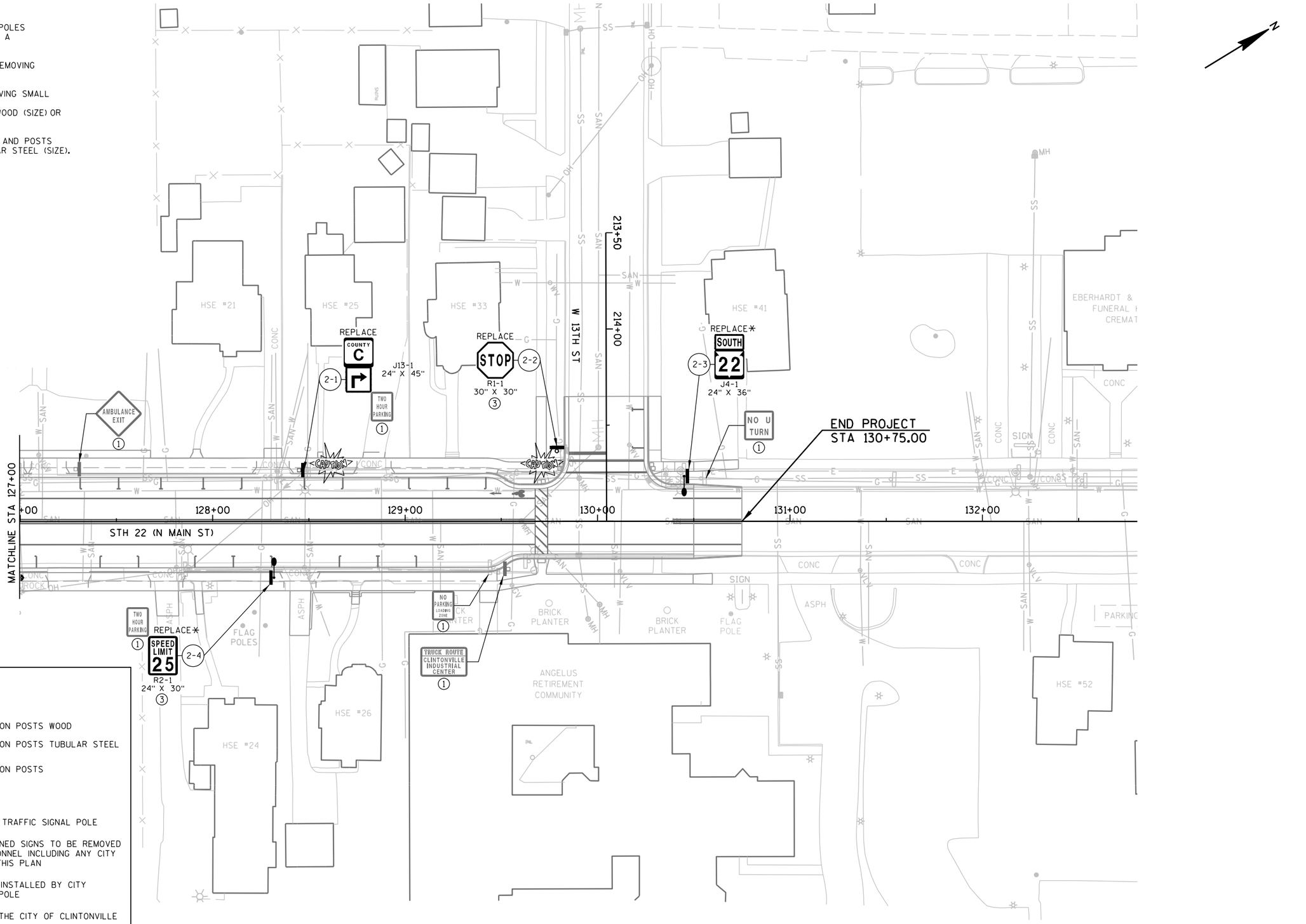
SIGNING GENERAL NOTES

ALL SIGNS THAT ARE MOUNTED TO LIGHT POLES AND OVERHANG THE SIDEWALK SHALL HAVE A MOUNTING HEIGHT OF 7'-3" MIN.

REMOVE = REMOVING SIGNS TYPE II AND REMOVING SMALL SIGN SUPPORTS.

REPLACE = REMOVING SIGNS TYPE II, REMOVING SMALL SIGN SUPPORTS, SIGNS TYPE II REFLECTIVE H/F AND POSTS WOOD (SIZE) OR POSTS TUBULAR STEEL (SIZE).

INSTALL = SIGNS TYPE II REFLECTIVE H/F, AND POSTS WOOD (SIZE) OR POSTS TUBULAR STEEL (SIZE).



SIGN LEGEND

X-X	SIGN GROUP NUMBER
	SIGNS TYPE II REFLECTIVE H/F ON POSTS WOOD
	SIGNS TYPE II REFLECTIVE H/F ON POSTS TUBULAR STEEL WITH BOX OUT
	SIGNS TYPE II REFLECTIVE H/F ON POSTS STEEL 2⅜" DIAMETER
	DECORATIVE STREET LIGHT
*	BAND SIGN TO STREET LIGHT/ TRAFFIC SIGNAL POLE
1	FOR REFERENCE ONLY. CITY OWNED SIGNS TO BE REMOVED AND INSTALLED BY CITY PERSONNEL INCLUDING ANY CITY OWNED SIGNS NOT SHOWN ON THIS PLAN
2	CITY WAYFINDING SIGNS TO BE INSTALLED BY CITY PERSONNEL ON STREET LIGHT POLE
3	SIGN SHALL BE SALVAGED TO THE CITY OF CLINTONVILLE

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	PERMANENT SIGNING	SHEET 29	E

2

SIGN LEGEND

(X-X)	SIGN GROUP NUMBER
	SIGNS TYPE II REFLECTIVE H/F ON POSTS WOOD
	SIGNS TYPE II REFLECTIVE H/F ON POSTS TUBULAR STEEL
	SIGNS TYPE II REFLECTIVE H/F ON POSTS STEEL 2⅜" DIAMETER
*	BAND SIGN TO STREET LIGHT/ TRAFFIC SIGNAL POLE/ POWER POLE
3	SIGN SHALL BE SALVAGED TO THE CITY OF CLINTONVILLE
4	NEW SIGN SHALL BE IN PLACE BEFORE STH 22 IS CLOSED TO TRAFFIC

SIGNING GENERAL NOTES

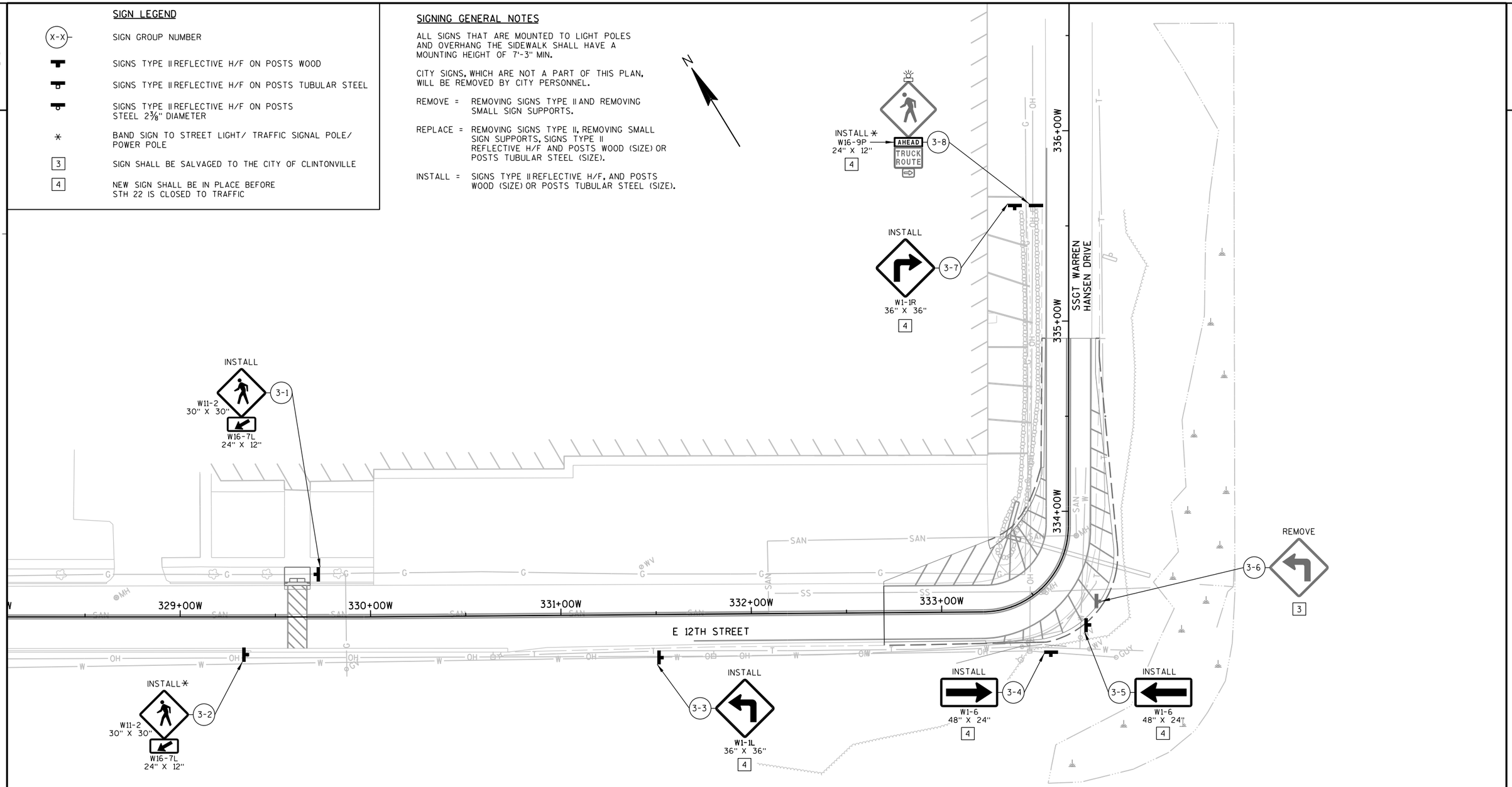
ALL SIGNS THAT ARE MOUNTED TO LIGHT POLES AND OVERHANG THE SIDEWALK SHALL HAVE A MOUNTING HEIGHT OF 7'-3" MIN.

CITY SIGNS, WHICH ARE NOT A PART OF THIS PLAN, WILL BE REMOVED BY CITY PERSONNEL.

REMOVE = REMOVING SIGNS TYPE II AND REMOVING SMALL SIGN SUPPORTS.

REPLACE = REMOVING SIGNS TYPE II, REMOVING SMALL SIGN SUPPORTS, SIGNS TYPE II REFLECTIVE H/F AND POSTS WOOD (SIZE) OR POSTS TUBULAR STEEL (SIZE).

INSTALL = SIGNS TYPE II REFLECTIVE H/F, AND POSTS WOOD (SIZE) OR POSTS TUBULAR STEEL (SIZE).



PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	PERMANENT SIGNING	SHEET 30	E

2

2

N

FOX COMMUNITY CREDIT UNION

BANK

ASPH

CONC

W 12TH ST

E 12TH ST

203+00

204+00

206+00

207+00

ABANDONED EXTRACTION WELL

SIGN

121+00

122+00

123+00

124+00

125+00

126+00

127

STH 22 (N MAIN ST)

6.0'

MATCHLINE STA 127+00

20.0'

12.0'

11.0'

WELL

STOP SIGN

CANOPY

RAMP

FLAG POLE

ABANDONED EXTRACTION PIPING

D.E.N SERVICES INC

JUST ONE MORE

CLINTONVILLE AMBULANCE SERVICE BUSINESS OFFICE

CLINTONVILLE CHAMBER OF COMMERCE

AUTO SERVICE PLUS

(CITY CENTER OFFICE SUITES)

POST OFFICE

H & R BLOCK

ULTRACOM WIRELESS

CLINTONVILLE CHRONICLE

CLINTONVILLE AREA AMBULANCE SERVICE

ROOF OVERHANG

PAVEMENT MARKING LEGEND

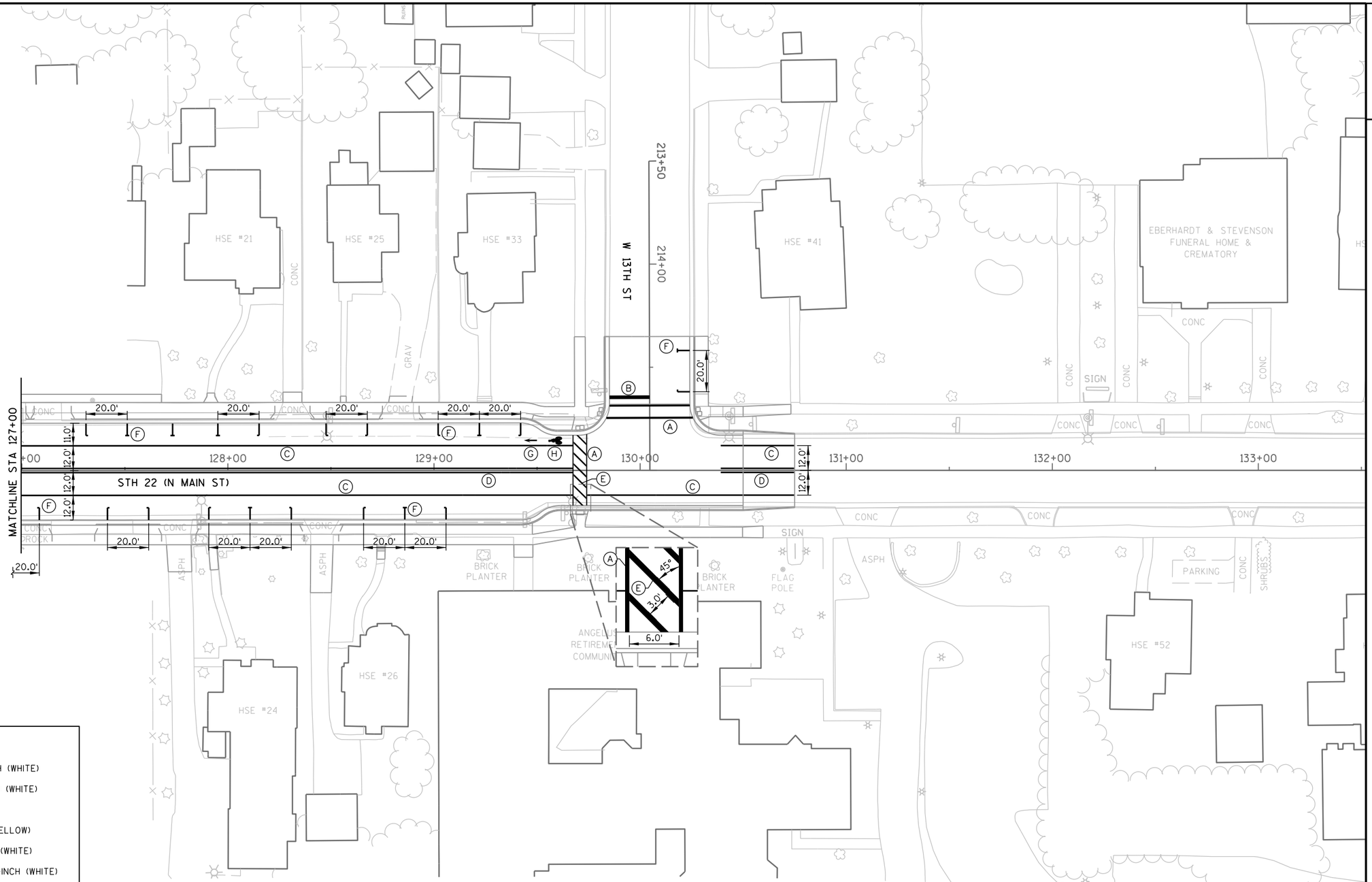
- (A) PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
- (B) PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (C) PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- (D) PAVEMENT MARKING EPOXY 4-INCH (DOUBLE, YELLOW)
- (E) PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE)
- (F) PAVEMENT MARKING PARKING STALL EPOXY 4-INCH (WHITE)
- (G) PAVEMENT MARKING ARROWS BIKE LANE EPOXY (WHITE)
- (H) PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY (WHITE)
- (I) PAVEMENT MARKING PAINT 4-INCH (WHITE)
- (J) PAVEMENT MARKING 4-INCH (DOUBLE, YELLOW)
- (K) PAVEMENT MARKING DIAGONAL PAINT 12-INCH (WHITE)
- (L) PAVEMENT MARKING STOP LINE 18-INCH (WHITE)

NOTE:

PARKING STALLS ARE 22.0' LONG UNLESS OTHERWISE NOTED.

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	PAVEMENT MARKING	SHEET 31	E

2



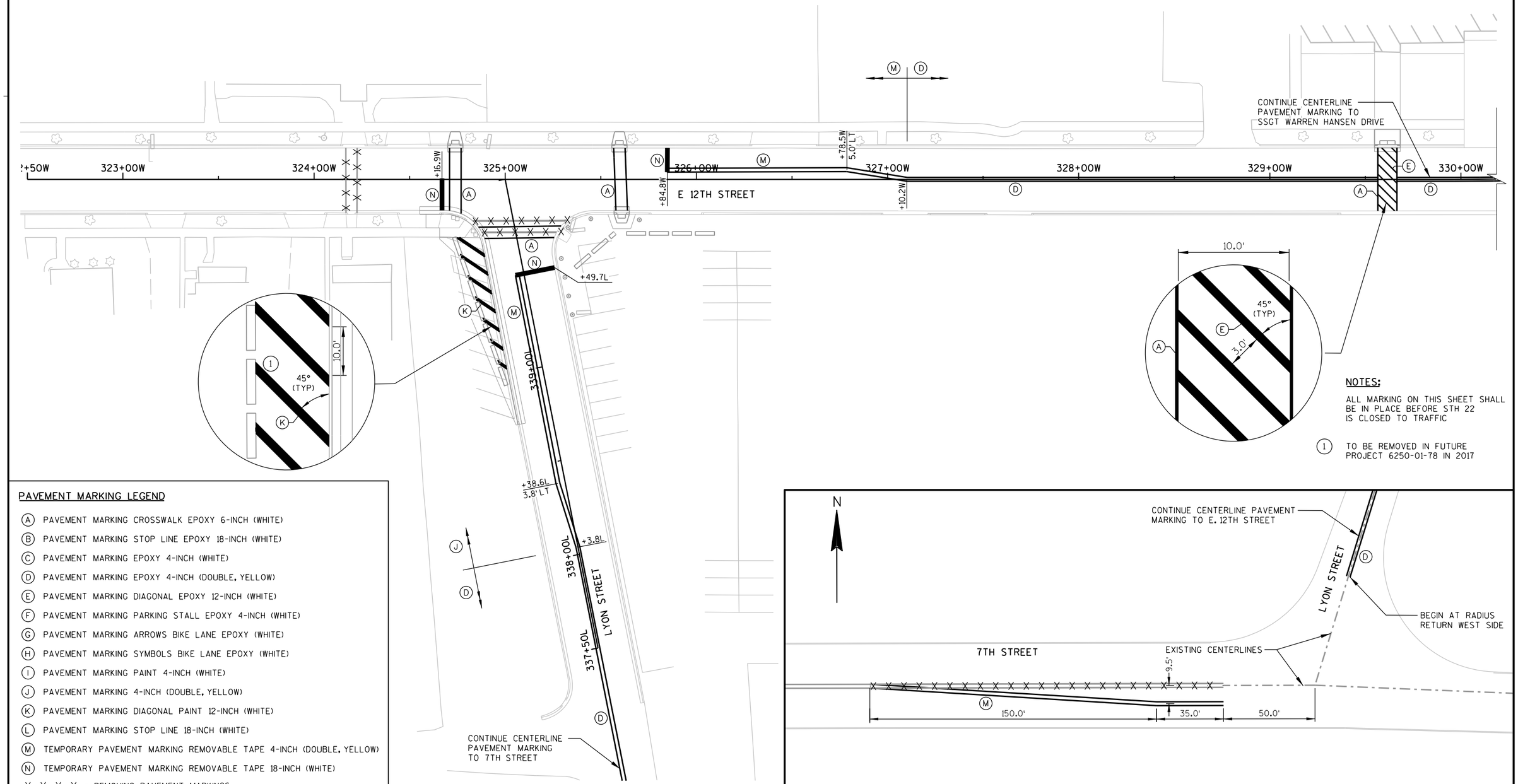
PAVEMENT MARKING LEGEND

- (A) PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
- (B) PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (C) PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- (D) PAVEMENT MARKING EPOXY 4-INCH (DOUBLE, YELLOW)
- (E) PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE)
- (F) PAVEMENT MARKING PARKING STALL EPOXY 4-INCH (WHITE)
- (G) PAVEMENT MARKING ARROWS BIKE LANE EPOXY (WHITE)
- (H) PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY (WHITE)
- (I) PAVEMENT MARKING PAINT 4-INCH (WHITE)
- (J) PAVEMENT MARKING 4-INCH (DOUBLE, YELLOW)
- (K) PAVEMENT MARKING DIAGONAL PAINT 12-INCH (WHITE)
- (L) PAVEMENT MARKING STOP LINE 18-INCH (WHITE)

NOTE:
PARKING STALLS ARE 22.0'LONG UNLESS OTHERWISE NOTED.

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	PAVEMENT MARKING	SHEET 32	E

2



NOTES:

ALL MARKING ON THIS SHEET SHALL BE IN PLACE BEFORE STH 22 IS CLOSED TO TRAFFIC

(1) TO BE REMOVED IN FUTURE PROJECT 6250-01-78 IN 2017

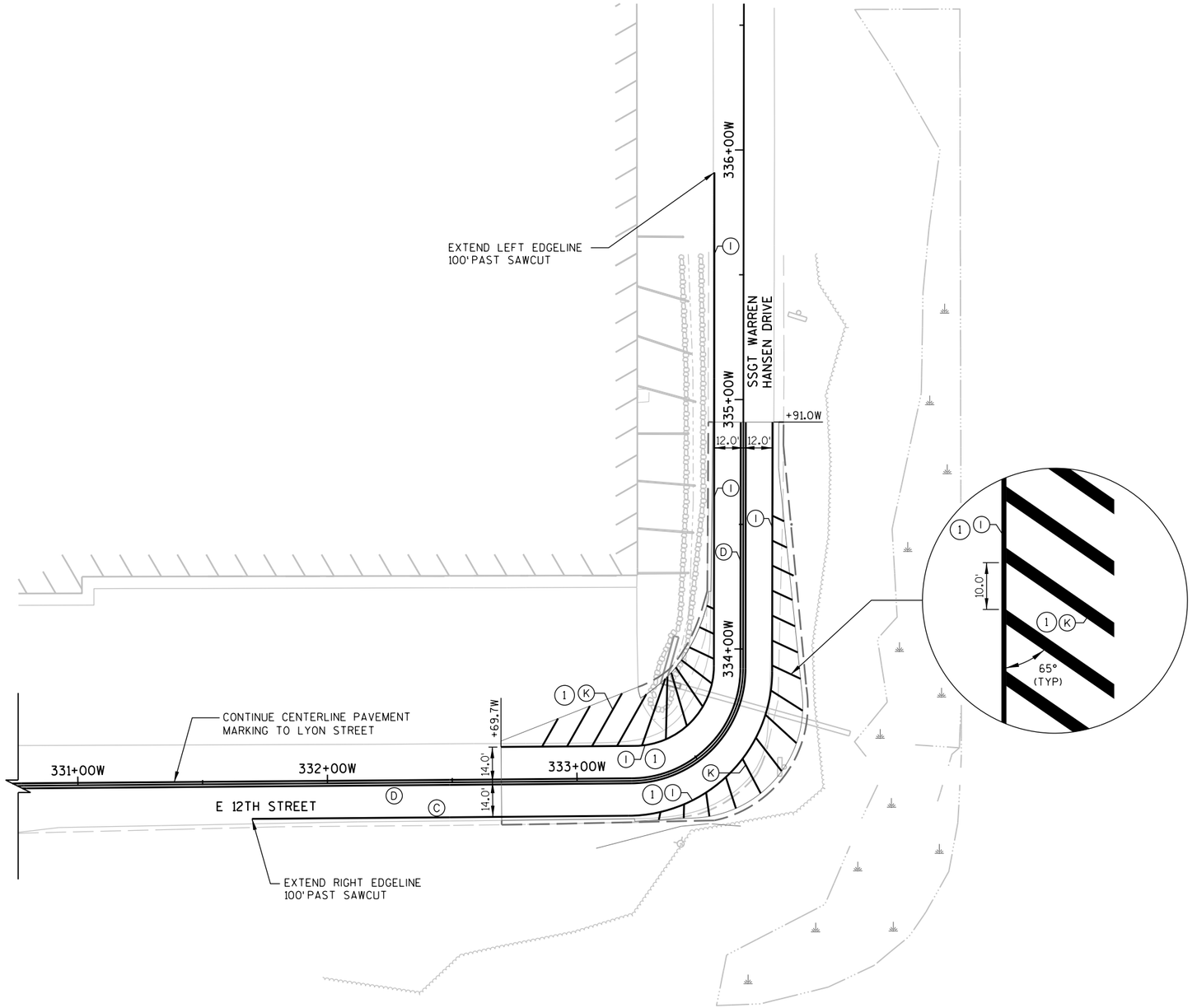
PAVEMENT MARKING LEGEND

- (A) PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
- (B) PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (C) PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- (D) PAVEMENT MARKING EPOXY 4-INCH (DOUBLE, YELLOW)
- (E) PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE)
- (F) PAVEMENT MARKING PARKING STALL EPOXY 4-INCH (WHITE)
- (G) PAVEMENT MARKING ARROWS BIKE LANE EPOXY (WHITE)
- (H) PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY (WHITE)
- (I) PAVEMENT MARKING PAINT 4-INCH (WHITE)
- (J) PAVEMENT MARKING 4-INCH (DOUBLE, YELLOW)
- (K) PAVEMENT MARKING DIAGONAL PAINT 12-INCH (WHITE)
- (L) PAVEMENT MARKING STOP LINE 18-INCH (WHITE)
- (M) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (DOUBLE, YELLOW)
- (N) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 18-INCH (WHITE)

X X X X = REMOVING PAVEMENT MARKINGS

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	DETOUR PAVEMENT MARKING - PHASE ONE	SHEET 33	E

2



PAVEMENT MARKING LEGEND

- (A) PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
- (B) PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (C) PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- (D) PAVEMENT MARKING EPOXY 4-INCH (DOUBLE, YELLOW)
- (E) PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE)
- (F) PAVEMENT MARKING PARKING STALL EPOXY 4-INCH (WHITE)
- (G) PAVEMENT MARKING ARROWS BIKE LANE EPOXY (WHITE)
- (H) PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY (WHITE)
- (I) PAVEMENT MARKING PAINT 4-INCH (WHITE)
- (J) PAVEMENT MARKING 4-INCH (DOUBLE, YELLOW)
- (K) PAVEMENT MARKING DIAGONAL PAINT 12-INCH (WHITE)
- (L) PAVEMENT MARKING STOP LINE 18-INCH (WHITE)

NOTES:

ALL MARKING ON THIS SHEET SHALL BE IN PLACE BEFORE STH 22 IS CLOSED TO TRAFFIC

(1) TO BE REMOVED IN FUTURE PROJECT 6250-01-78

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	DETOUR PAVEMENT MARKING - PHASE ONE	SHEET 34	E

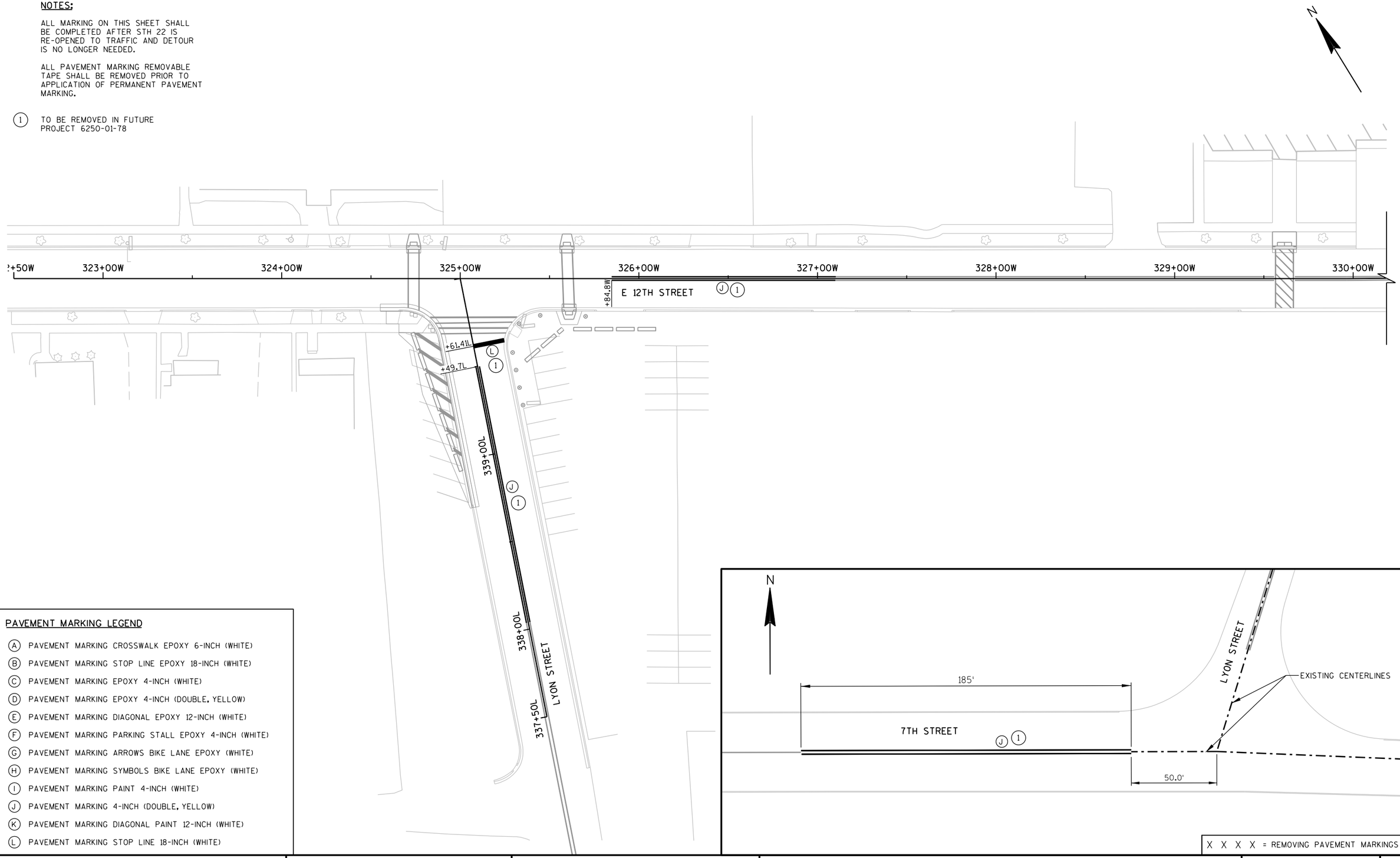
2

NOTES:

ALL MARKING ON THIS SHEET SHALL BE COMPLETED AFTER STH 22 IS RE-OPENED TO TRAFFIC AND DETOUR IS NO LONGER NEEDED.

ALL PAVEMENT MARKING REMOVABLE TAPE SHALL BE REMOVED PRIOR TO APPLICATION OF PERMANENT PAVEMENT MARKING.

(1) TO BE REMOVED IN FUTURE PROJECT 6250-01-78



PAVEMENT MARKING LEGEND

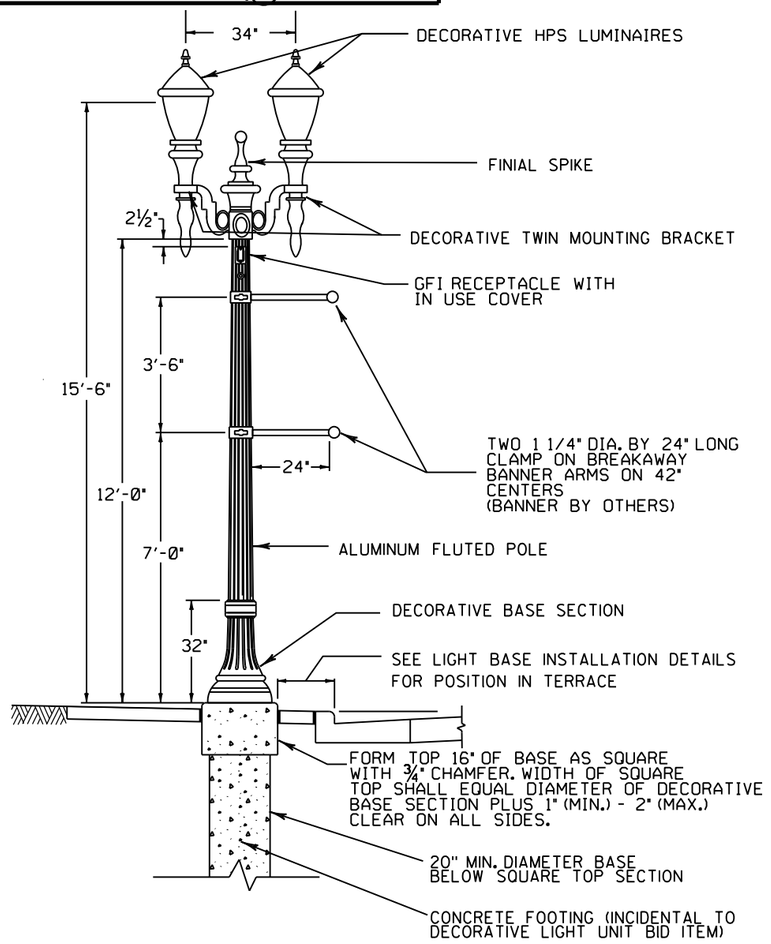
- (A) PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
- (B) PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (C) PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- (D) PAVEMENT MARKING EPOXY 4-INCH (DOUBLE, YELLOW)
- (E) PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE)
- (F) PAVEMENT MARKING PARKING STALL EPOXY 4-INCH (WHITE)
- (G) PAVEMENT MARKING ARROWS BIKE LANE EPOXY (WHITE)
- (H) PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY (WHITE)
- (I) PAVEMENT MARKING PAINT 4-INCH (WHITE)
- (J) PAVEMENT MARKING 4-INCH (DOUBLE, YELLOW)
- (K) PAVEMENT MARKING DIAGONAL PAINT 12-INCH (WHITE)
- (L) PAVEMENT MARKING STOP LINE 18-INCH (WHITE)

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	DETOUR PAVEMENT MARKING - PHASE TWO	SHEET 35	E

STREET LIGHTING PLANS PREPARED BY

WISCONSIN
MIKE D.
SCARMON
E-37613
EVANSVILLE,
WI
PROFESSIONAL ENGINEER

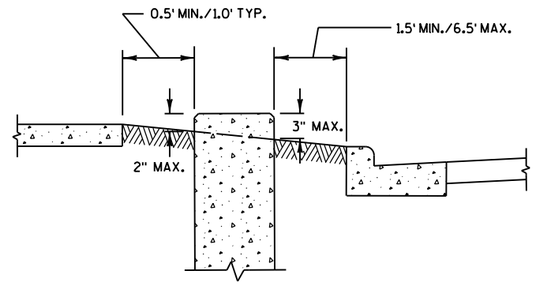
5/28/2014
(DATE) (SIGNATURE)



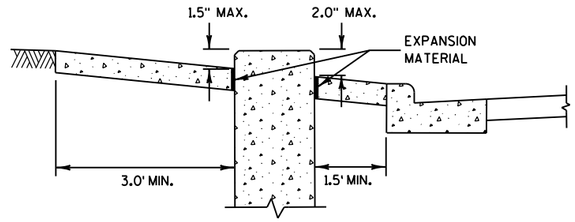
DECORATIVE LIGHT UNIT DETAIL

NO SCALE

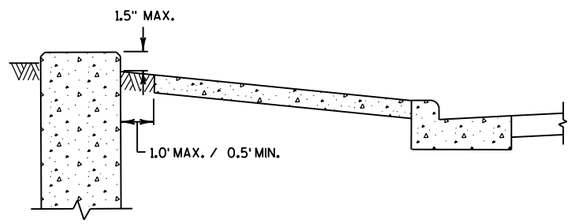
NOTE: TRUE POSITION OF BANNER ARMS SHALL BE 270 DEGREES FROM WHAT IS SHOWN IN THE DETAIL



IN GRASS TERRACE



IN CONCRETE TERRACE



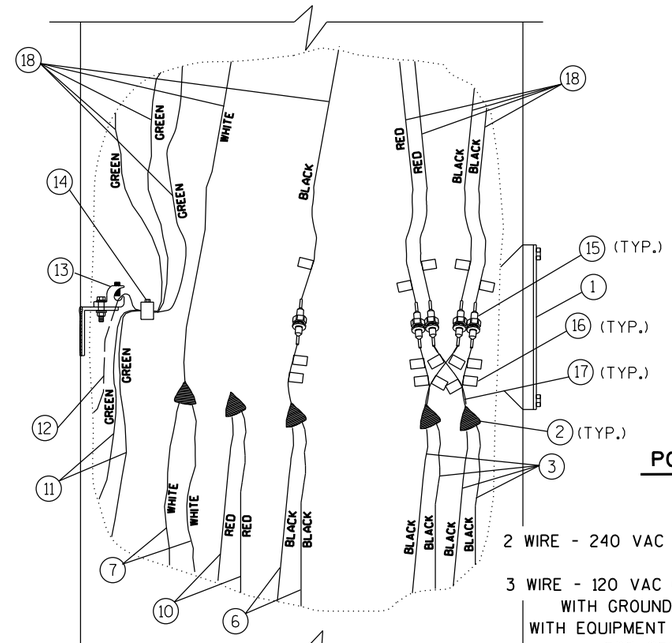
BACK OF SIDEWALK

LIGHT BASE INSTALLATION DETAIL

NO SCALE

SEE SDD'S "NON FREEWAY LIGHTING UNIT POLE WIRING" FOR ADDITIONAL INFORMATION NOT SHOWN ON THIS DETAIL

1. HANDHOLE AND COVER
2. APPROVED INSULATED MULTITAP TERMINAL BLOCK TYPE CONNECTORS. COMPRESSION, CRIMP OR WIRE NUT CONNECTORS ARE NOT ALLOWED.
3. INSULATED UNGROUNDED LIGHTING CKT CONDUCTORS FROM SYSTEM RACEWAY (240V)
4. NOT USED
5. NOT USED
6. INSULATED UNGROUNDED RECEPTACLE CKT CONDUCTORS FROM SYSTEM RACEWAY (120V)
7. RECEPTACLE CKT GROUNDED CONDUCTORS FROM SYSTEM RACEWAY
8. NOT USED
9. NOT USED
10. ALTERNATE INSULATED UNGROUNDED RECEPTACLE CKT CONDUCTORS FROM SYSTEM RACEWAY PASSING THROUGH THIS POLE (120V)
11. SHARED SYSTEM INSULATED EQUIPMENT GROUNDING CONDUCTORS FROM SYSTEM RACEWAY
12. #4 BARE EQUIPMENT GROUNDING CONDUCTOR TO GROUND ROD (SEE S.D.D. FOR ADDITIONAL INFORMATION)
13. TYPICAL GROUNDING CONNECTION STAINLESS STEEL BOLT, NUT AND WASHERS ½" X 1½" X 13 TPI
14. APPROVED MECHANICAL TYPE CONNECTOR FOR EQUIPMENT GROUNDING CONDUCTORS. COMPRESSION, CRIMP OR WIRE NUT CONNECTORS ARE NOT ALLOWED.
15. FUSE ASSEMBLY. (SEE S.D.D. FOR ADDITIONAL INFORMATION)
16. CIRCUIT TAG, BOTH SIDES OF ALL FUSES (TYP.)
17. 18" PIGTAIL BETWEEN SPLICE AND FUSE ASSEMBLY
18. #12 AWG CONDUCTORS TO LUMINAIRE(S) & RECEPTACLES (SEE S.D.D. FOR ADDITIONAL INFORMATION)



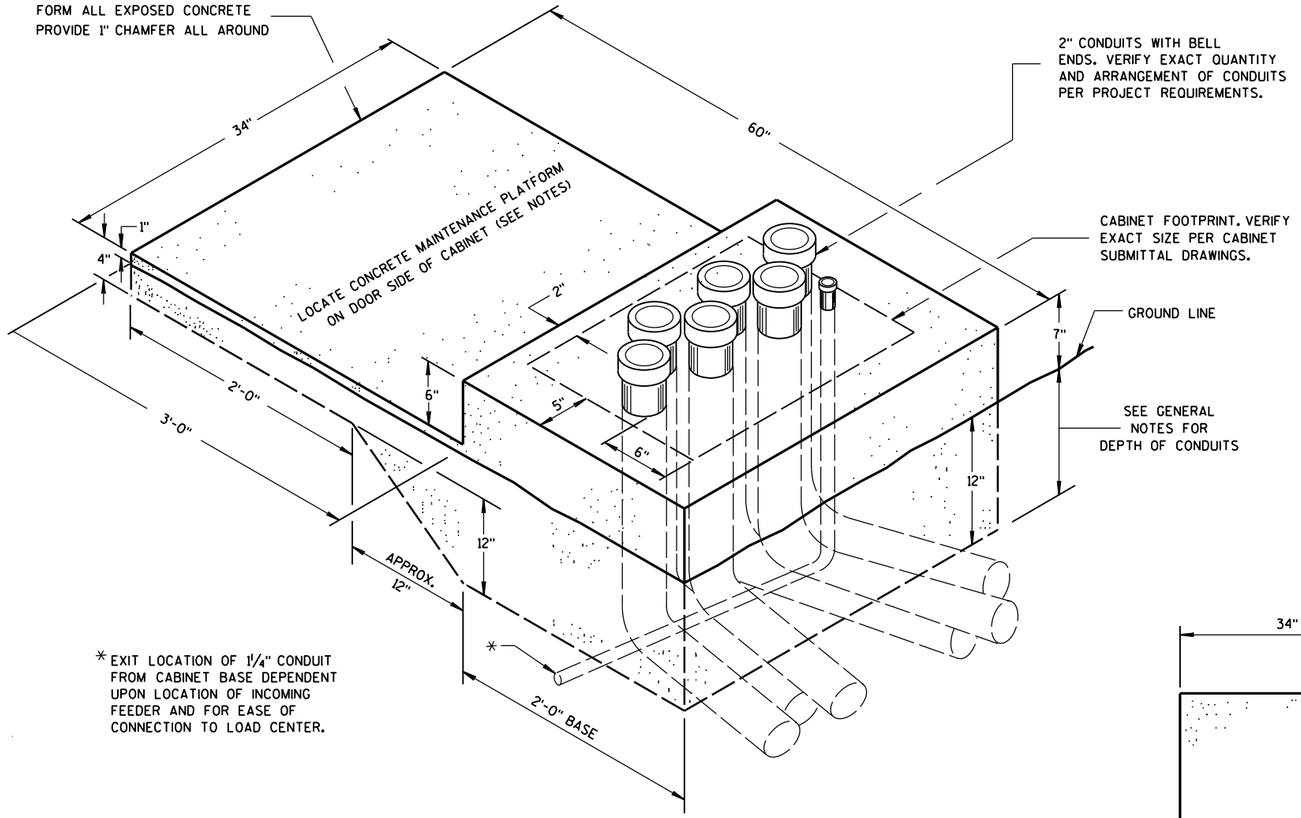
POLE WIRING DETAIL

NO SCALE

2 WIRE - 240 VAC (UNGROUNDED CONDUCTOR) AND
3 WIRE - 120 VAC (UNGROUNDED CONDUCTOR) WITH GROUNDED CONDUCTOR AND WITH EQUIPMENT GROUNDING CONDUCTOR FOR GFCI RECEPTACLES

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	LIGHTING CONSTRUCTION DETAILS	SHEET	E

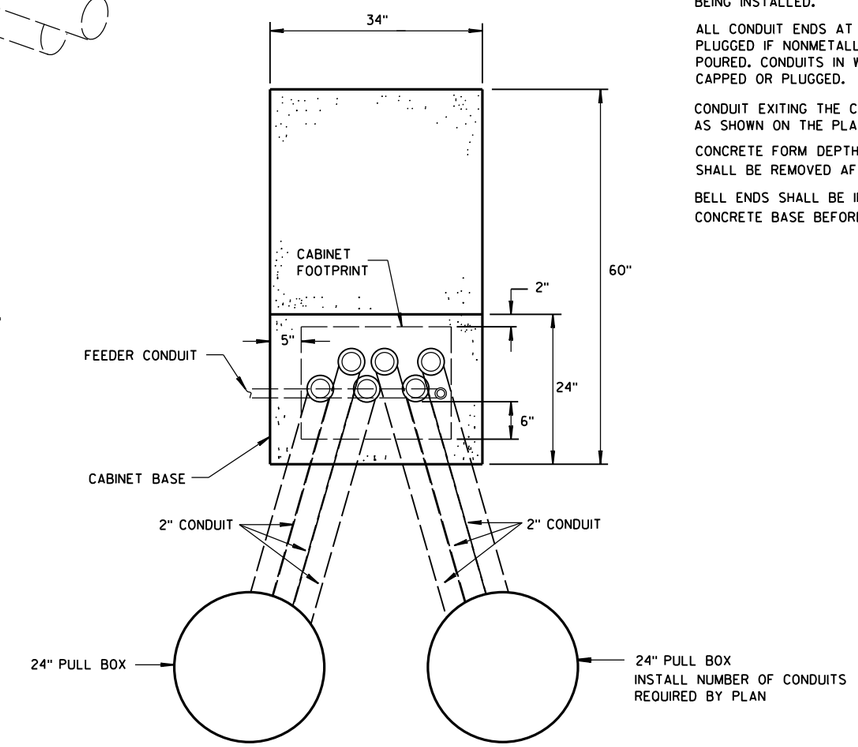
FILE NAME : G:\CBS Squared\12001\DGN\PLAN SHEETS-76\021001_cd.dgn PLOT DATE : 5/28/2014 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :
WISDOT/CADDS SHEET 42



ISOMETRIC VIEW

CONCRETE CONTROL CABINET BASE TYPE SPECIAL

(C.Y. CONCRETE = APPROX. 0.4)



PLAN VIEW

CONCRETE CONTROL CABINET BASE TYPE SPECIAL

GENERAL NOTES

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

INSTALL FOUR STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET BASES. THE ANCHORS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

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

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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

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

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

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

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

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

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

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

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

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

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

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

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

2

2

LIGHTING PLAN LEGEND

STATION — OFFSET

122+51 - 29.5 LT

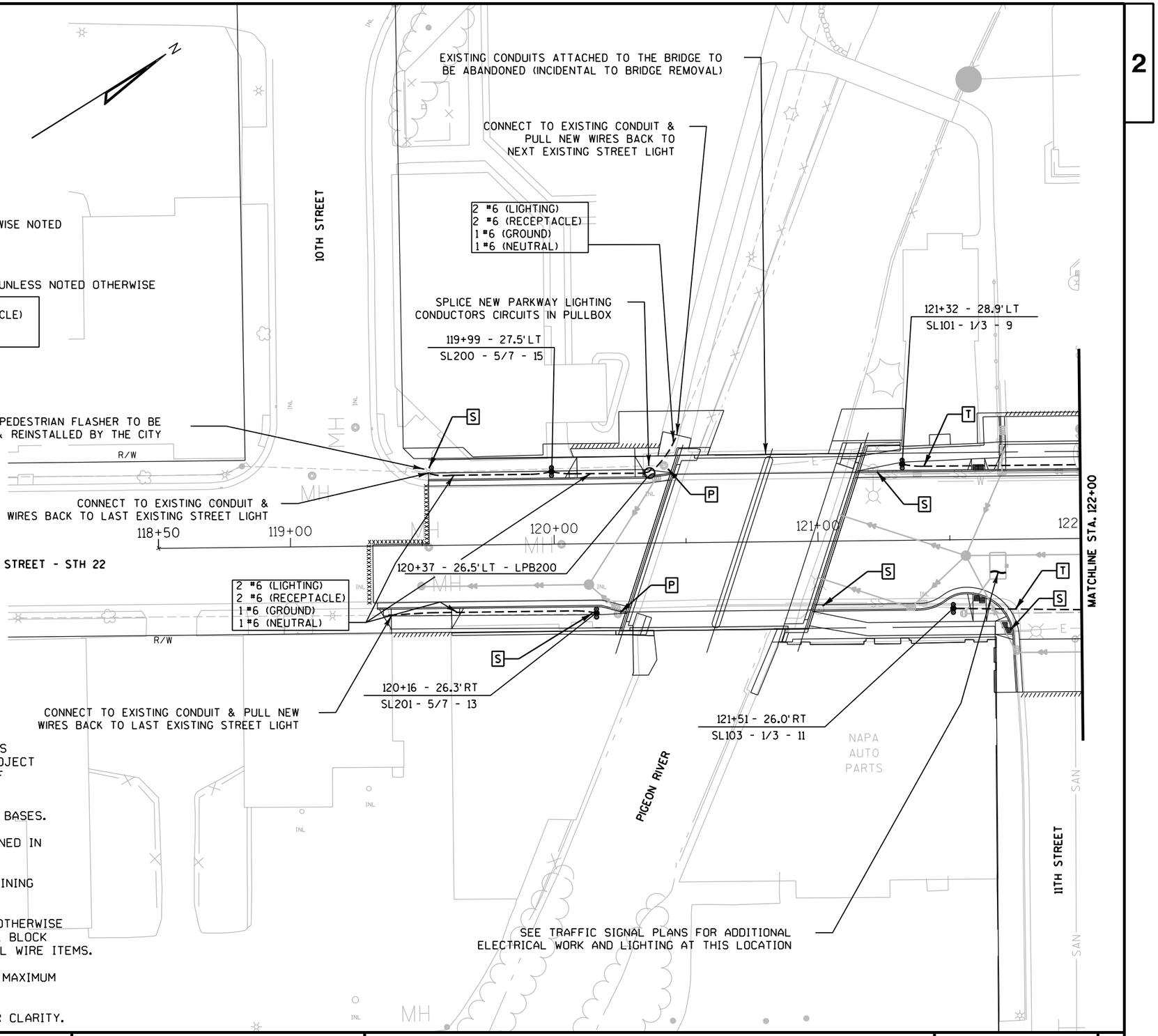
SL100 - 3/1 - 11

- RECEPTACLE CIRCUIT
- LUMINAIRE CIRCUITS (LT/RT)
- STREET LIGHT NUMBER

- CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH (UNLESS OTHERWISE NOTED
- EXISTING UNDERGROUND CONDUIT / WIRING
- DECORATIVE LIGHTING UNIT
- TYPE 5 LIGHTING UNIT
- EXISTING LIGHTING UNIT
- PULL BOXES STEEL 24X42-INCH
- LIGHTING CONTROL CABINET & BASE
- [S] SALVAGE EXISTING STREET LIGHT & REMOVE CONCRETE BASE
- [P] EXISTING PULL BOX TO BE REMOVED

[T] = TYPICAL UNLESS NOTED OTHERWISE

2 #8 (LIGHTING)
2 #8 (RECEPTACLE)
1 #8 (GROUND)
1 #8 (NEUTRAL)



GENERAL STREET LIGHTING NOTES:

1. THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

2. CHECK FOR OVERHEAD UTILITY CONFLICTS PRIOR TO CONSTRUCTING CONCRETE BASES.

3. THE EXACT LOCATION OF THE LIGHTING CONTROL CABINET SHALL BE DETERMINED IN THE FIELD BY THE CITY OF CLINTONVILLE AND THE ENGINEER.

4. CLEARLY LABEL UNUSED CONDUCTORS AS "SPARE" IN ALL CONDUIT RUNS CONTAINING UNUSED CONDUCTORS.

5. CONDUCTOR SPLICES SHALL BE MADE IN POLE HANDHOLES UNLESS INDICATED OTHERWISE ON THE PLANS. PULLBOX SPLICES SHALL BE MADE USING SUBMERSIBLE TERMINAL BLOCK CONNECTORS. CONNECTORS SHALL BE CONSIDERED INCIDENTAL TO THE ELECTRICAL WIRE ITEMS.

6. MAINTAIN EXISTING STREET LIGHT OPERATION DURING CONSTRUCTION FOR THE MAXIMUM POSSIBLE DURATION.

7. PROPOSED STORM SEWER AND TRAFFIC SIGNALS ARE SHOWN IN GRAYSHADE FOR CLARITY.

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	LIGHTING PLANS	SHEET	E

FILE NAME : G:\CBS Squared\12001\DGN\PLAN SHEETS-76\023501_lp.dgn PLOT DATE : 7/11/2014 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :
WISDOT/CADDS SHEET 42

RE-WIRE EXISTING STREET LIGHT AND CIRCUITS TO THE WEST

REMOVE EXISTING LIGHTING CABINET AND BASE

COORDINATE NEW CABINET INSTALLATION AS REQ'D TO MAINTAIN EXISTING LIGHTING OPERATION AS LONG AS POSSIBLE

SEE TRAFFIC SIGNAL PLANS FOR ADDITIONAL ELECTRICAL WORK AND LIGHTING AT THIS INTERSECTION

2 #6 (LIGHTING)
1 #6 (GROUND)

2-3"

203+05 - 24.2'LT - LPB100
(FIELD LOCATE)

203+14 - 25.2'LT - LCB100
(FIELD LOCATE)

203+21 - 24.2'LT - LPB101
(FIELD LOCATE)

4 #8 (LIGHTING)
4 #8 (RECEPTACLE)
2 #8 (GROUND)
2 #8 (NEUTRAL)

1-3"

SPLICE CONDUCTORS IN PULLBOX

4 #8 (LIGHTING)
4 #8 (RECEPTACLE)
2 #8 (GROUND)
2 #8 (NEUTRAL)

124+01 - 64.0'LT - LPB103
(FIELD LOCATE)

122+51 - 29.5'LT
SL100 - 3/1 - 11

124+68 - 36.3'LT - LPB102

125+75 - 29.0'LT
SL104 - 2/4 - 10

1-3"

123+12 - 29.5'RT
SL102 - 3/1 - 9

123+73 - 26.7' RT - LPB105
(FIELD LOCATE)

124+58 - 26.0' RT - LPB104
(FIELD LOCATE)

127+00 - 29.5'RT
SL105 - 2/4 - 12

REMOVE EXISTING UTILITY POLE

2 #8 (LIGHTING)
1 #8 (GROUND)

N. MAIN STREET - STH 22

11TH STREET

12TH STREET

MATCHLINE STA. 122+00

MATCHLINE STA. 128+00

LIGHTING PLAN LEGEND

STATION
OFFSET
122+51 - 29.5 LT
SL100 - 3/1 - 11
RECEPTACLE CIRCUIT
LUMINAIRE CIRCUITS (LT/RT)
STREET LIGHT NUMBER

CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH (UNLESS OTHERWISE NOTED

EXISTING UNDERGROUND CONDUIT / WIRING

DECORATIVE LIGHTING UNIT

TYPE 5 LIGHTING UNIT

EXISTING LIGHTING UNIT

PULL BOXES STEEL 24X42-INCH

LIGHTING CONTROL CABINET & BASE

S SALVAGE EXISTING STREET LIGHT & REMOVE CONCRETE BASE

P EXISTING PULL BOX TO BE REMOVED

T = TYPICAL UNLESS NOTED OTHERWISE
2 #8 (LIGHTING)
2 #8 (RECEPTACLE)
1 #8 (GROUND)
1 #8 (NEUTRAL)

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	LIGHTING PLANS	SHEET 39	E

2

LIGHTING PLAN LEGEND

STATION
OFFSET
122+51 - 29.5 LT
SL100 - 3/1 - 11
RECEPTACLE CIRCUIT
LUMINAIRE CIRCUITS (LT/RT)
STREET LIGHT NUMBER

CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH (UNLESS OTHERWISE NOTED
EXISTING UNDERGROUND CONDUIT / WIRING
DECORATIVE LIGHTING UNIT
TYPE 5 LIGHTING UNIT
EXISTING LIGHTING UNIT
PULL BOXES STEEL 24X42-INCH
LIGHTING CONTROL CABINET & BASE
[S] SALVAGE EXISTING STREET LIGHT & REMOVE CONCRETE BASE
[P] EXISTING PULL BOX TO BE REMOVED

[T] = TYPICAL UNLESS NOTED OTHERWISE

2 #8 (LIGHTING)
2 #8 (RECEPTACLE)
1 #8 (GROUND)
1 #8 (NEUTRAL)

MATCHLINE STA. 128+00

128+04 - 27.0' LT - LPB106

128+31 - 29.5' RT
SL106 - 2/4 - NONE

130+33 - 24.4' LT
SL107 - 2/4 - NONE

2 #8 (LIGHTING)
1 #8 (GROUND)

2 #8 (LIGHTING)
1 #8 (GROUND)

PULL WIRE ONLY

PULL WIRE ONLY

ABANDON WIRING BACK TO NEXT EXISTING LIGHT

TERMINATE CONDUIT AT GRADE AT PROJECT LIMITS (NO WIRE)

13TH STREET

N. MAIN STREET - STH 22

213+50

214+00

129+00

130+00

131+00

132+00

133+00

134+00

HSE #21
HSE #25
HSE #33
HSE #41
HSE #24
HSE #26
HSE #52
HSE #62

ANGELUS RETIREMENT COMMUNITY

BRICK PLANTER
BRICK PLANTER
BRICK PLANTER

FLAG POLES
FLAG POLE

PARKING

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	LIGHTING PLANS	SHEET 40	E

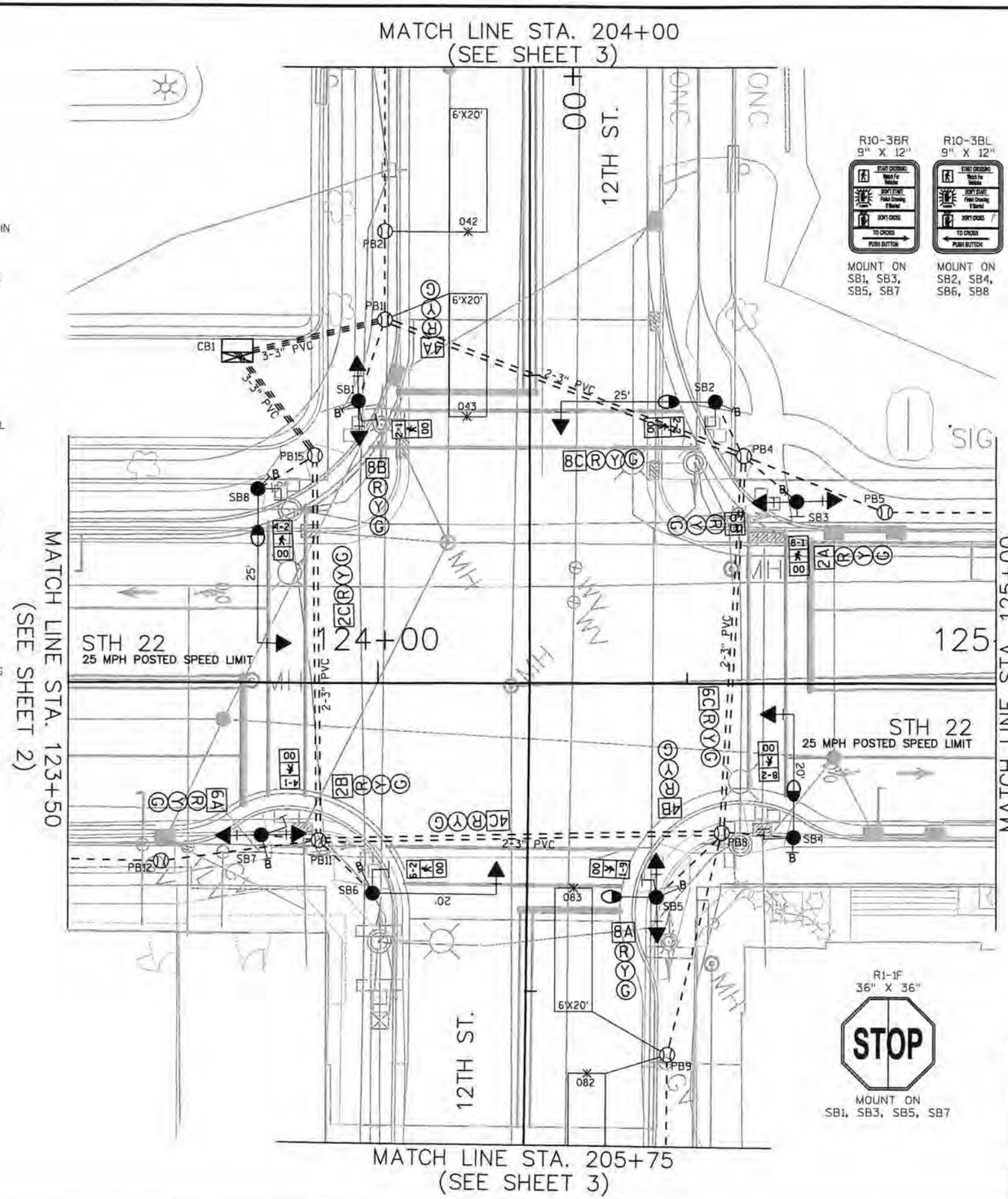
2

CONSTRUCTION NOTES

1. *LOCATION IS TO FRONT CENTER OF DETECTOR LOOP. LOOP SHALL BE CENTERED IN TRAFFIC LANE. INSTALL LOOPS IN THE AGGREGATE BASE COURSE. DISTANCE BETWEEN MULTIPLE STOP BAR LOOPS SHALL BE 8 FEET.
2. ALL SIGNAL EQUIPMENT SHALL BE INSTALLED WITH A 2-FOOT MINIMUM CLEARANCE TO THE FACE OF THE CURB UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
3. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED BEFORE PLACING SIGNAL CABLE INTO THE SYSTEM.
4. BOND ALL METAL PULL BOXES AND ASSOCIATED COVERS THAT CONTAIN CONDUCTORS CARRYING 50 VOLTS OR MORE.
5. TERMINATION OF BONDING JUMPERS IN PULL BOXES TO BE LUG AND BOLT CONNECTIONS AND CAULKED (SILICONE) AFTER INSTALLATION.
6. EACH LOOP DETECTOR SHALL HAVE A SEPARATE LEAD-IN CABLE TO THE CONTROL CABINET.
7. FURNISH AND INSTALL FOLDING STOP SIGNS (36" X 36") ON SIGNAL POLES SB1, SB3, SB5, AND SB7.
8. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
9. THE ENGINEER WILL ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
10. ALL CONDUIT RUNS SHALL HAVE EXTRA PULL WIRE INSTALLED TO PULL FUTURE CABLE. COST SHALL BE INCIDENTAL TO TRAFFIC SIGNAL CABLE, NO. 14.
11. INSTALL 13-FT SIGNAL STANDARDS AT SB1, SB3, AND SB7.
    INSTALL TYPE 2 (20 FT) POLES AT SB6.
    INSTALL TYPE 4 (30 FT) POLES AT SB2, SB4, SB5, AND SB8
12. INSTALL PUSH BUTTON SIGNS (SIGN CODE R10-3B, 6" X 9") WITH ARROWS POINTING TO THE CROSSWALK ASSOCIATED WITH THE PUSH BUTTONS. SIGNS ARE INCIDENTAL TO THE PED PUSH BUTTONS.

CONFIGURATION WITH HEAD NUMBERS		
3-V	3-H	PED
R Y G	R Y G	00
2A, 2B, 4A, 4B, 6A, 6B, 8A, 8B	2C, 4C, 6C, 8C	2-1, 2-2, 4-1, 4-2, 6-1, 6-2, 8-1, 8-2

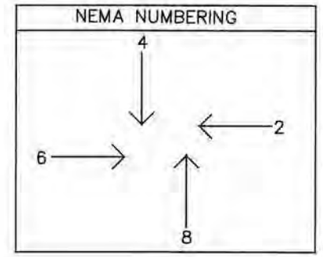




LEGEND

- CONTROL CABINET (TYPE 9, SPECIAL)
- NONMETALLIC CONDUIT, 2" UNLESS OTHERWISE NOTED
- SIGNAL HEAD, PEDESTAL MOUNT TYPE 1 BASE (WITH BACK PLATE)
- (FEET) SIGNAL HEAD, MAST ARM MOUNT TYPE 2 BASE (WITH BACK PLATE)
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LUMINAIRE OUT OF SIGNAL CABINET (TYPE 2 BASE REQUIRED)
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT SIDE PULL (LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL BOX OFF ROADWAY (OPTION 2))
- PULL BOX, STEEL 24" X 42"
- 2A SIGNAL HEAD NUMBER
- PEDESTRIAN SIGNAL HEAD
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- LANE DESIGNATION ARROW FOR INFO ONLY

NOTE: ALL LENSES ARE 12-INCH LED



TRAFFIC CONTROL SIGNAL
STH 22 & 12TH STREET
CITY OF CLINTONVILLE
WAUPACA COUNTY

SIGNAL NO.

MUNICIPAL CONTACT:
DESIGNED BY: JEWELL ASSOCIATES ENGINEERS, INC. PAGE 1 OF 5
REVISED BY:

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	TRAFFIC SIGNAL PLAN	SHEET E

FILE NAME : R:\PROJECTS\C09010 STH 22 CLINTONVILLE\CAD FILES\62500176_SIGNAL PLAN_FINAL.DWG
LAYOUT : SP-1
PLOT DATE : 7/22/2014
PLOT TIME : 9:19:56 AM
PLOT BY : ECKELBERG, PATRICK
PLOT SCALE : 1" = 1'

2

121+00

STH 22

122+00

123+00

MATCH LINE STA. 123+50

210' TO NEAR
RIGHT SIGNAL

6X10
061

PB14

PB13

11TH ST.

MATCH LINE STA. 125+00

+00

126+00

PB6

PB7

185' TO NEAR
RIGHT SIGNAL

6X6
021

127+00

STH 22

SEE "LEGEND & CONSTRUCTION NOTE"
ON MAIN PLAN SHEET

TRAFFIC CONTROL SIGNAL

STH 22 & 12TH STREET
CITY OF CLINTONVILLE
WAUPACA COUNTY

0 20

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	TRAFFIC SIGNAL PLAN	SHEET 42	E

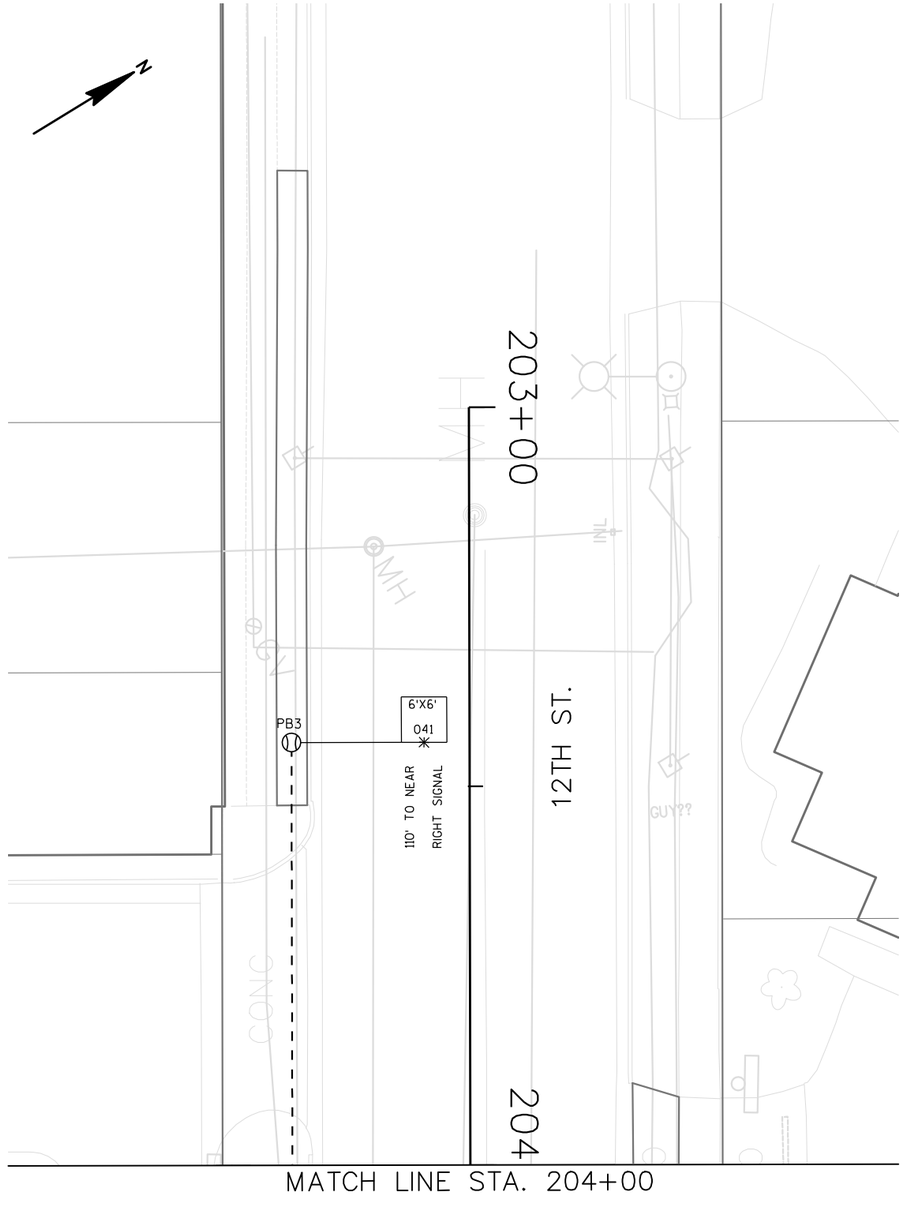
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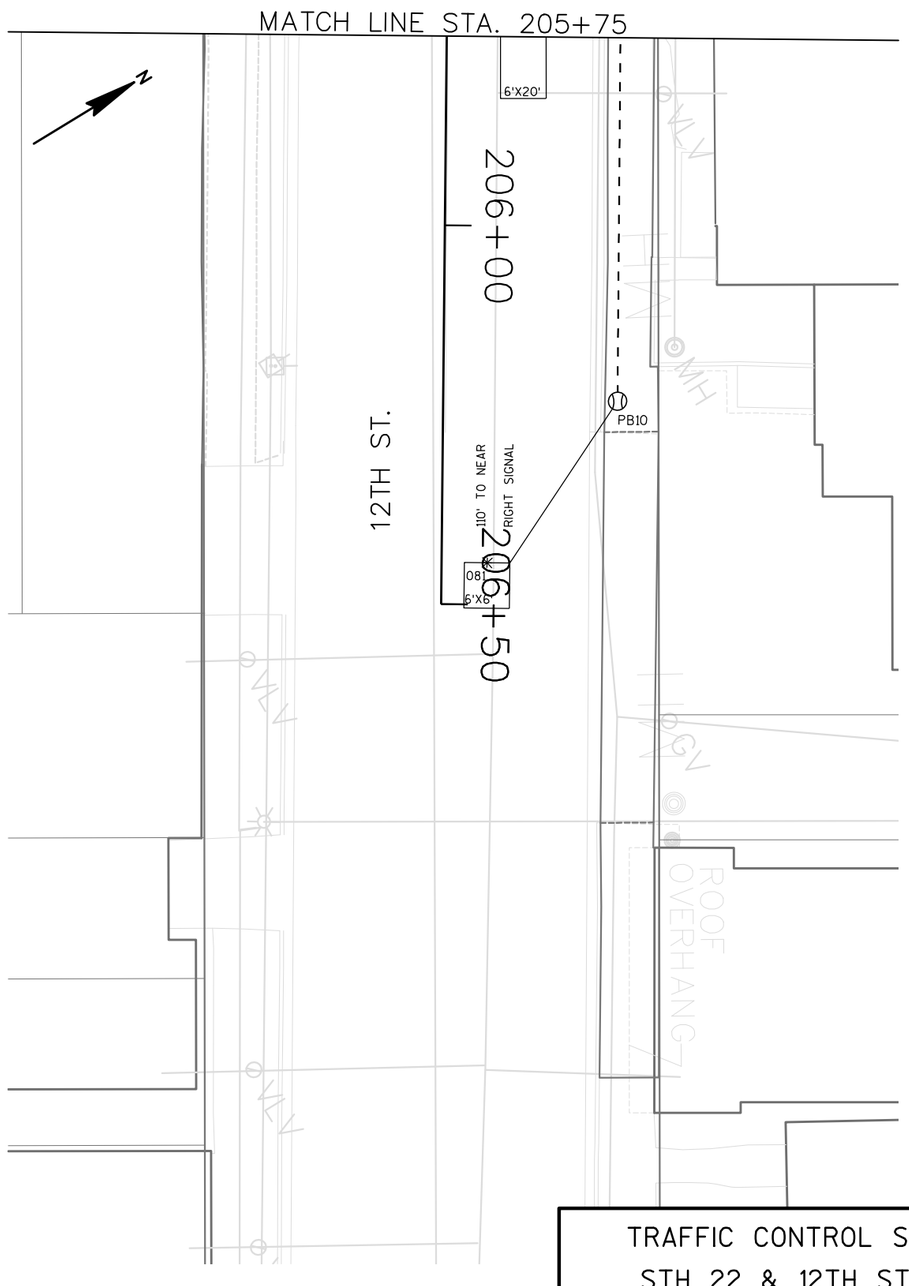
PLOT DATE : 7/7/2014
PLOT TIME : 11:48:12 AM

PLOT BY : ECKELBERG, PATRICK

PLOT SCALE : 1" = 1'

2





SEE "LEGEND & CONSTRUCTION NOTE" ON MAIN PLAN SHEET

TRAFFIC CONTROL SIGNAL

STH 22 & 12TH STREET
CITY OF CLINTONVILLE
WAUPACA COUNTY

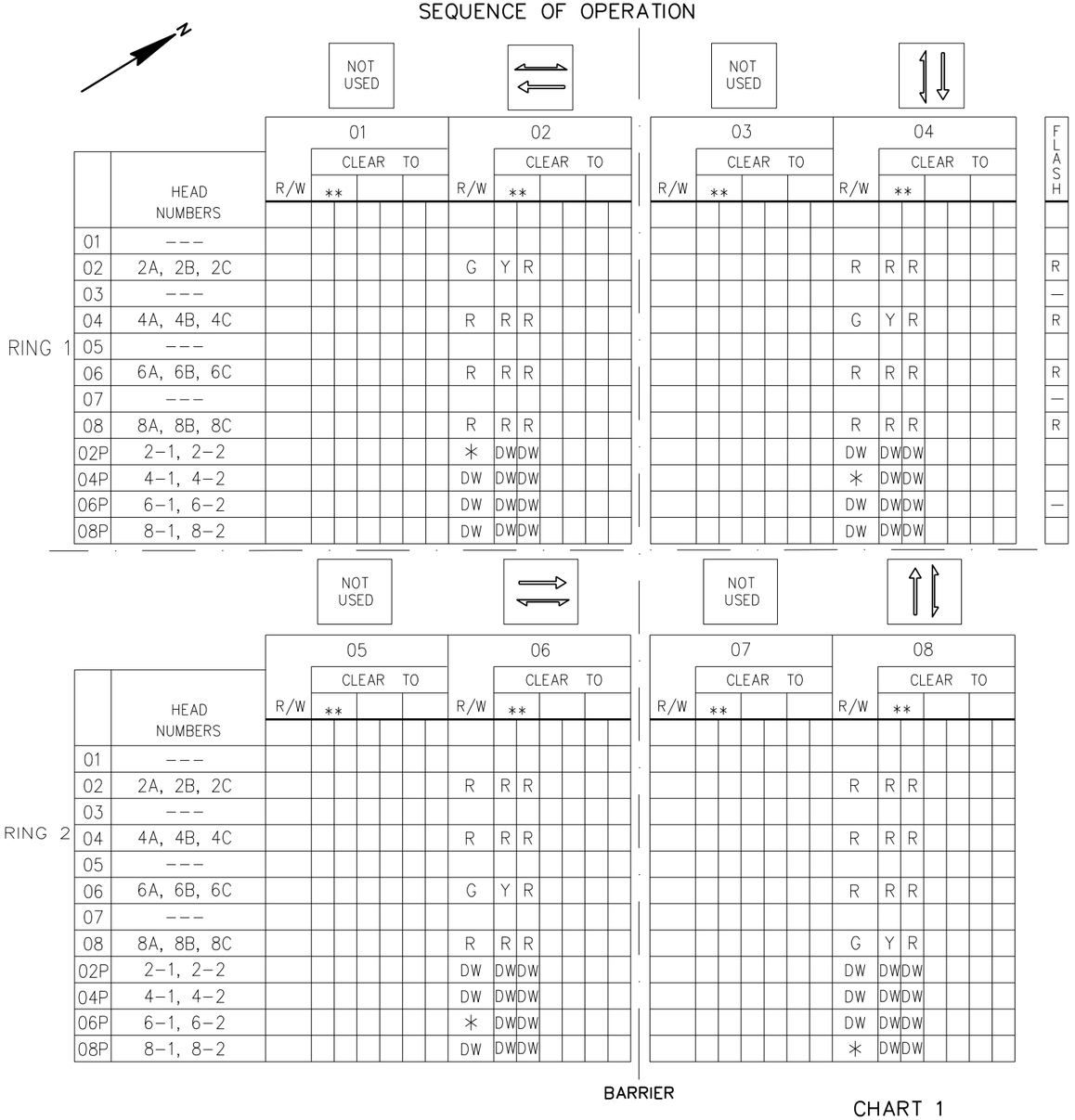
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PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	TRAFFIC SIGNAL PLAN	SHEET 43	E

FILE NAME : R:\PROJECTS\C09010 STH 22 CLINTONVILLE\CAD FILES\62500176_SIGNAL PLAN_FINAL.DWG
LAYOUT : SP-3
PLOT DATE : 7/7/2014
PLOT TIME : 11:58:02 AM
PLOT BY : ECKELBERG, PATRICK
PLOT SCALE : 1" = 1'

2

SEQUENCE OF OPERATION



** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1)

* WHEN CALLED, TIMED STEADY WALK,THEN FLASHING DON'T WALK, THEN GOES TO STEADY DON'T WALK

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1	---	---
2	6	4,8
3	---	---
4	8	2,6
5	---	---
6	2	4,8
7	---	---
8	4	2,6

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	DETECTOR OPERATION: CALLS ONLY	DETECTOR OPERATION: EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
21	1	X			2	2				6'X6'	4
41	2			X		4			X	6'X6'	4
42	3	X			4	4				6'X20'	3
43	4	X			4	4		X		6'X20'	3
61	5	X			6	6				6'X10'	4
81	6			X		8			X	6'X6'	4
82	7	X			8	8				6'X20'	3
83	8	X			8	8		X		6'X20'	3

* LOOPS INSTALLED FOR FUTURE USE

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL
1			
2	X	6	MIN
3			
4		8	
5			
6	X	2	MIN
7			
8		4	

OVERLAPS

O.L. "A" = NONE
O.L. "B" = NONE
O.L. "C" = NONE
O.L. "D" = NONE

TYPE OF INTERCONNECT COMMUNICATION	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
RADIO	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM #:	SS- -

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
3M	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 ABOVE.)
3. WHEN OPPOSING THRU PHASES ARE TIMIING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.

TRAFFIC CONTROL SIGNAL

STH 22 & 12TH STREET
CITY OF CLINTONVILLE
WAUPACA COUNTY

SIGNAL NO.

CONTROLLER TYPE:

DATE

FILE NAME : R:\PROJECTS\C09010 STH 22 CLINTONVILLE\CAD FILES\62500176_SIGNAL PLAN_FINAL.DWG
LAYOUT : SEQ OF OP
PLOT DATE : 7/7/2014
PLOT TIME : 11:58:15 AM
PLOT BY : ECKELBERG, PATRICK
PLOT SCALE : 1" = 1'
WISDOT/CADDS SHEET 42

PROJECT ID:	6250-01-76
INTERSECTION	STH 22 & 12TH STREET

SIGNAL WIRE COLOR CODING	BLK - BLACK	RED - RED	GRN - GREEN
	WHT - WHITE	BLU - BLUE	ORG - ORANGE

CB1 TO	JUMPER	# OF COND.	HEAD NO.	PHASE	SIGNAL INDICATION WIRE COLOR					
					RED	YELLOW	GREEN	DON'T WALK	WALK	PED BUTTON
SB1		12	4A	4	RED	ORANGE	GREEN			
			8B	8	RED/BLACK	ORANGE/BLACK	GREEN/BLACK			
			2-1	2P				BLACK/WHITE	BLUE/WHITE	WHITE/BLACK
SB2		12	8C	8	RED/BLACK	ORANGE/BLACK	GREEN/BLACK			
			2-2	2P				BLACK/WHITE	BLUE/WHITE	WHITE/BLACK
SB3		12	2A	2	RED/BLACK	ORANGE/BLACK	GREEN/BLACK			
			6B	6	RED	ORANGE	GREEN			
			8-1	8P				BLACK/WHITE	BLUE/WHITE	WHITE/BLACK
SB4		12	6C	6	RED	ORANGE	GREEN			
			8-2	8P				BLACK/WHITE	BLUE/WHITE	WHITE/BLACK
SB5		12	4B	4	RED	ORANGE	GREEN			
			8A	8	RED/BLACK	ORANGE/BLACK	GREEN/BLACK			
			6-1	6P				BLACK/WHITE	BLUE/WHITE	WHITE/BLACK
SB6		12	4C	4	RED	ORANGE	GREEN			
			6-2					BLACK/WHITE	BLUE/WHITE	WHITE/BLACK
SB7		12	2B	2	RED/BLACK	ORANGE/BLACK	GREEN/BLACK			
			6A	6	RED	ORANGE	GREEN	BLACK/WHITE	BLUE/WHITE	WHITE/BLACK
			4-1	4P						
SB8		12	2C	2	RED/BLACK	ORANGE/BLACK	GREEN/BLACK			
			4-2	4P				BLACK/WHITE	BLUE/WHITE	WHITE/BLACK

PULL BOX BONDING JUMPER GREEN NO. 10, 10 AWG, XLP (STRANDED)	
FROM	TO
CB1	PB1
SB2	PB4
SB4	PB8
SB6	PB11
SB8	PB15

EQUIPMENT GROUNDING CONDUCTOR, GREEN NO. 10, 10 AWG, XLP (STRANDED)	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	CB1

TRAFFIC CONTROL SIGNAL

STH 22 & 12TH STREET
CITY OF CLINTONVILLE
WAUPACA COUNTY

SIGNAL NO.

0 20

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	CABLE ROUTING	SHEET 45	E

FILE NAME : R:\PROJECTS\C09010 STH 22 CLINTONVILLE\CAD FILES\62500176_SIGNAL PLAN_FINAL.DWG
LAYOUT : CABLE ROUTE

PLOT DATE : 7/7/2014
PLOT TIME : 11:58:27 AM

PLOT BY : ECKELBERG, PATRICK

PLOT SCALE : 1" = 1'

2

TRAFFIC CONTROL NOTES:

REFER TO SDD 15C3 "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" DETAILS 1 & 4, FOR SIGNING/BARRICADE REQUIREMENTS AT PROJECT ACCESS LOCATIONS.

REFER TO SDD 15D30 "TRAFFIC CONTROL, SIDEWALK CLOSURE" FOR SIGNING/BARRICADE REQUIREMENTS AT SIDEWALK ACCESS LOCATIONS.

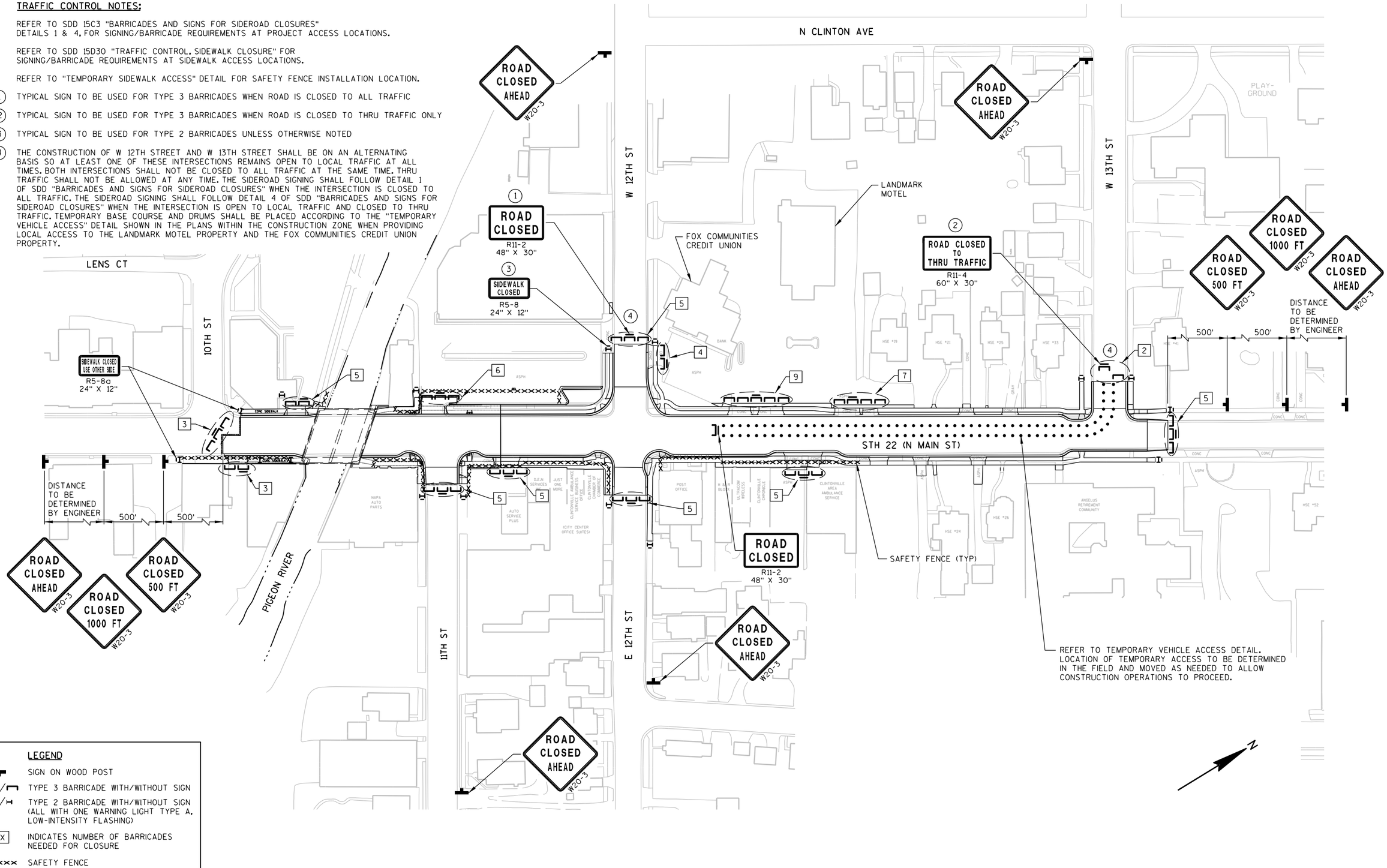
REFER TO "TEMPORARY SIDEWALK ACCESS" DETAIL FOR SAFETY FENCE INSTALLATION LOCATION.

(1) TYPICAL SIGN TO BE USED FOR TYPE 3 BARRICADES WHEN ROAD IS CLOSED TO ALL TRAFFIC

(2) TYPICAL SIGN TO BE USED FOR TYPE 3 BARRICADES WHEN ROAD IS CLOSED TO THRU TRAFFIC ONLY

(3) TYPICAL SIGN TO BE USED FOR TYPE 2 BARRICADES UNLESS OTHERWISE NOTED

(4) THE CONSTRUCTION OF W 12TH STREET AND W 13TH STREET SHALL BE ON AN ALTERNATING BASIS SO AT LEAST ONE OF THESE INTERSECTIONS REMAINS OPEN TO LOCAL TRAFFIC AT ALL TIMES. BOTH INTERSECTIONS SHALL NOT BE CLOSED TO ALL TRAFFIC AT THE SAME TIME. THRU TRAFFIC SHALL NOT BE ALLOWED AT ANY TIME. THE SIDEROAD SIGNING SHALL FOLLOW DETAIL 1 OF SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" WHEN THE INTERSECTION IS CLOSED TO ALL TRAFFIC. THE SIDEROAD SIGNING SHALL FOLLOW DETAIL 4 OF SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" WHEN THE INTERSECTION IS OPEN TO LOCAL TRAFFIC AND CLOSED TO THRU TRAFFIC. TEMPORARY BASE COURSE AND DRUMS SHALL BE PLACED ACCORDING TO THE "TEMPORARY VEHICLE ACCESS" DETAIL SHOWN IN THE PLANS WITHIN THE CONSTRUCTION ZONE WHEN PROVIDING LOCAL ACCESS TO THE LANDMARK MOTEL PROPERTY AND THE FOX COMMUNITIES CREDIT UNION PROPERTY.



LEGEND

- SIGN ON WOOD POST
- TYPE 3 BARRICADE WITH/WITHOUT SIGN
- TYPE 2 BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT TYPE A, LOW-INTENSITY FLASHING)
- [X] INDICATES NUMBER OF BARRICADES NEEDED FOR CLOSURE
- ×××× SAFETY FENCE

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	TRAFFIC CONTROL	SHEET 46	E

2

TRAFFIC CONTROL NOTES:

REFER TO SDD 15C3 "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" DETAILS 1 & 4, FOR SIGNING/BARRICADE REQUIREMENTS AT PROJECT ACCESS LOCATIONS.

REFER TO SDD 15D30 "TRAFFIC CONTROL, SIDEWALK CLOSURE" FOR SIGNING/BARRICADE REQUIREMENTS AT SIDEWALK ACCESS LOCATIONS.

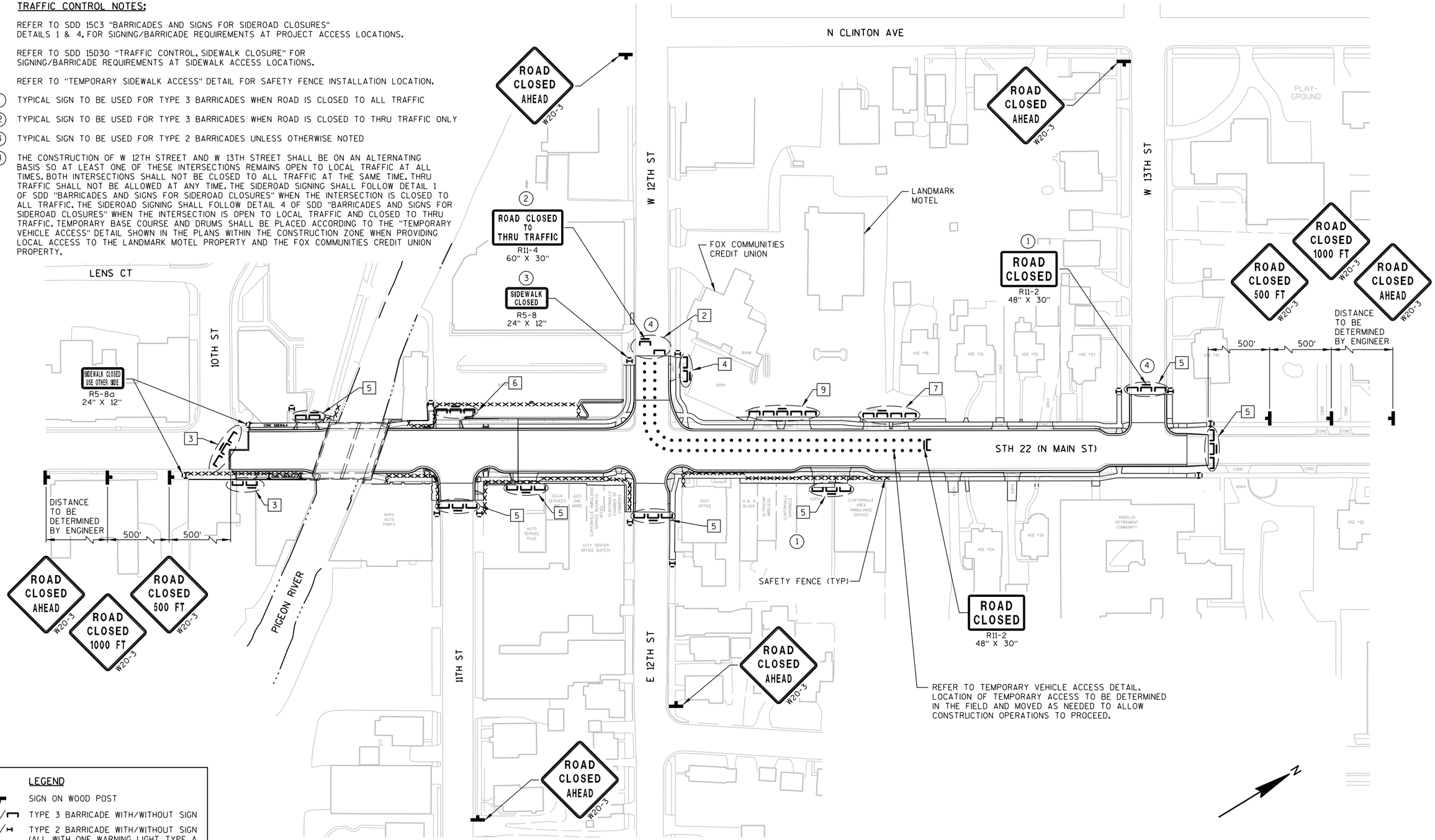
REFER TO "TEMPORARY SIDEWALK ACCESS" DETAIL FOR SAFETY FENCE INSTALLATION LOCATION.

(1) TYPICAL SIGN TO BE USED FOR TYPE 3 BARRICADES WHEN ROAD IS CLOSED TO ALL TRAFFIC

(2) TYPICAL SIGN TO BE USED FOR TYPE 3 BARRICADES WHEN ROAD IS CLOSED TO THRU TRAFFIC ONLY

(3) TYPICAL SIGN TO BE USED FOR TYPE 2 BARRICADES UNLESS OTHERWISE NOTED

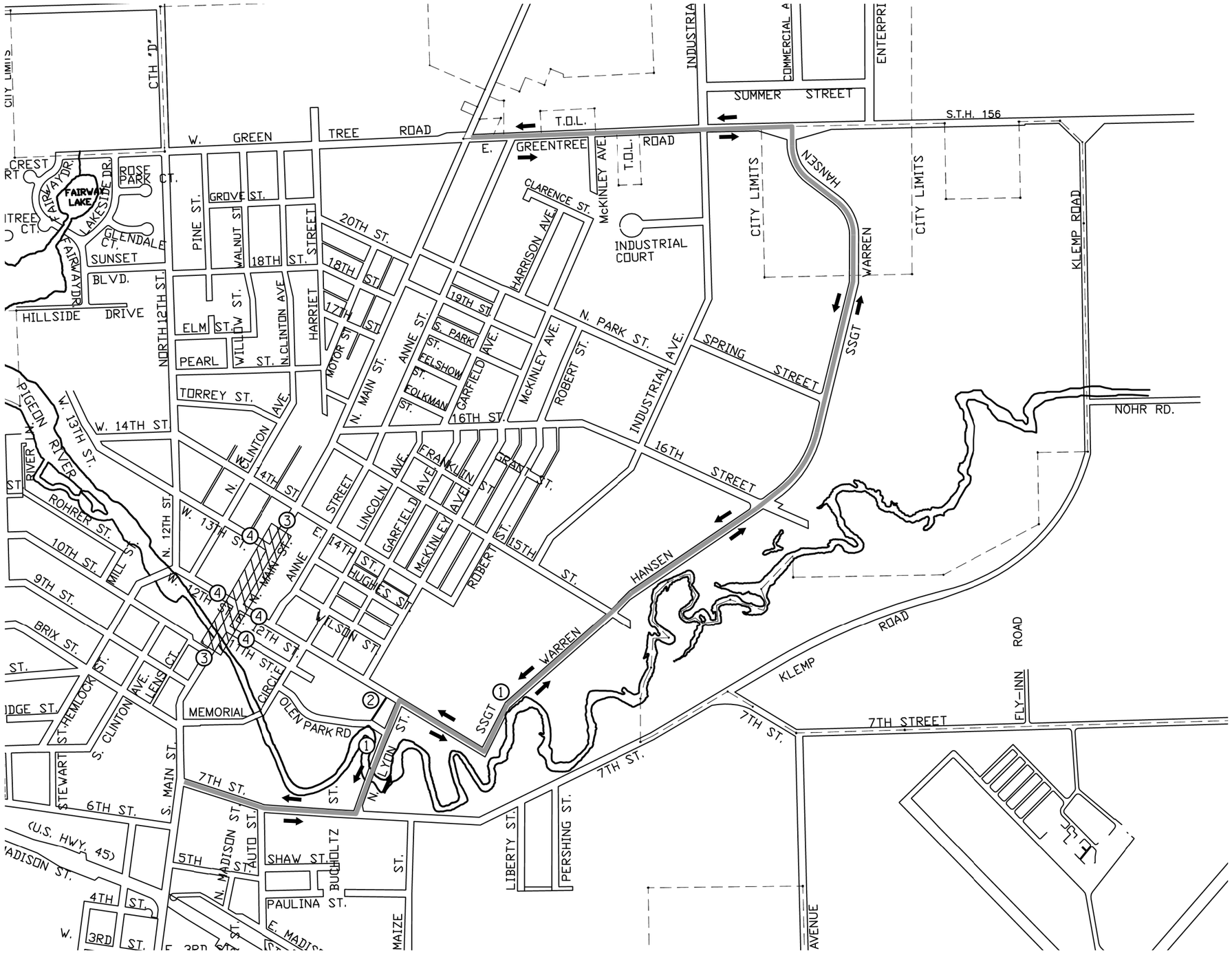
(4) THE CONSTRUCTION OF W 12TH STREET AND W 13TH STREET SHALL BE ON AN ALTERNATING BASIS SO AT LEAST ONE OF THESE INTERSECTIONS REMAINS OPEN TO LOCAL TRAFFIC AT ALL TIMES. BOTH INTERSECTIONS SHALL NOT BE CLOSED TO ALL TRAFFIC AT THE SAME TIME. THRU TRAFFIC SHALL NOT BE ALLOWED AT ANY TIME. THE SIDEROAD SIGNING SHALL FOLLOW DETAIL 1 OF SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" WHEN THE INTERSECTION IS CLOSED TO ALL TRAFFIC. THE SIDEROAD SIGNING SHALL FOLLOW DETAIL 4 OF SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" WHEN THE INTERSECTION IS OPEN TO LOCAL TRAFFIC AND CLOSED TO THRU TRAFFIC. TEMPORARY BASE COURSE AND DRUMS SHALL BE PLACED ACCORDING TO THE "TEMPORARY VEHICLE ACCESS" DETAIL SHOWN IN THE PLANS WITHIN THE CONSTRUCTION ZONE WHEN PROVIDING LOCAL ACCESS TO THE LANDMARK MOTEL PROPERTY AND THE FOX COMMUNITIES CREDIT UNION PROPERTY.



LEGEND

- SIGN ON WOOD POST
- TYPE 3 BARRICADE WITH/WITHOUT SIGN
- TYPE 2 BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT TYPE A, LOW-INTENSITY FLASHING)
- [X] INDICATES NUMBER OF BARRICADES NEEDED FOR CLOSURE
- ×××× SAFETY FENCE

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	TRAFFIC CONTROL	SHEET 47	E



NOTES:

ALL SIGNS SHALL BE FURNISHED BY THE CONTRACTOR

TRAFFIC CONTROL ITEMS SOUTH OF STATION 122+67 ARE INCLUDED UNDER PROJECT 6250-01-70 AND TRAFFIC CONTROL ITEMS NORTH OF STATION 122+67 ARE INCLUDED UNDER PROJECT 6250-01-76.

REMOVED SIDEWALKS SHALL BE BARRICADED AND SIGNED IN ACCORDANCE WITH SDD "TRAFFIC CONTROL, SIDEWALK CLOSURE".

TYPICAL SIGN SPACING, SIGN CODES, SIGN SIZES AND ADDITIONAL GENERAL NOTES SHALL BE IN ACCORDANCE WITH SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" AND "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES".

ALL IMPROVEMENTS TO THE LYON STREET & E. 12TH STREET INTERSECTION AND THE E. 12TH STREET & SSGT WARREN HANSEN DRIVE INSTERSECTION SHALL BE COMPLETED WHILE THE INTERSECTIONS REMAIN OPEN TO THROUGH TRAFFIC UTILIZING FLAGGERS IN ACCORDANCE WITH SDD "TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)".

(1) ADVANCE SIGNING ALONG LYON STREET AND SSGT WARREN HANSEN DRIVE FOR THE IMPROVEMENTS AT THE INTERESECTIONS OF LYON STREET/ E. 12TH STREET AND E. 12TH STREET/ SSGT WARREN HANSEN DRIVE SHALL BE IN ACCORDANCE WITH SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO WAY UNDIVIDED ROAD TO TRAFFIC".

(2) ADVANCE SIGNING ALONG THE WEST LEG OF E. 12TH STREET FOR THE IMPROVEMENTS AT THE INTERSECTIONS OF LYON STREET/ E. 12TH STREET AND E. 12TH STREET/ SSGT WARREN HANSEN DRIVE SHALL BE IN ACCORDANCE WITH THE "TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL" AS SHOWN IN SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO WAY UNDIVIDED ROAD TO TRAFFIC".

(3) STH 22 SHALL BE CLOSED TO TRAFFIC AT THE PROJECT BEGIN AND END LOCATIONS AS SHOWN IN THE 6250-01-70 AND 6250-01-76 PLANS. SIGNING AND DEVICES SHALL BE IN ACCORDANCE WITH SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES".

(4) ALL SIDEROAD INTERSECTIONS WITHIN THE PROJECT LIMITS SHALL BE CLOSED AND SIGNED IN ACCORDANCE WITH DETAIL 1 OF THE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES".

N

LEGEND

- EXISTING SIGN ON EXISTING POST
- TRAFFIC CONTROL DETOUR SIGN ON WOOD POST
- TRAFFIC CONTROL DETOUR SIGN ON TWO WOOD POSTS
- DIRECTION OF TRAFFIC
- TYPE 3 BARRICADE
- TYPE 3 BARRICADE WITH SIGN
- WORK ZONE (CLOSED TO TRAFFIC)
- DETOUR ROUTE
- COVERING SIGNS TYPE II

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	TRAFFIC CONTROL & DETOUR SIGNING	SHEET 48	E

2

LEGEND

- EXISTING SIGN ON EXISTING POST
- TRAFFIC CONTROL DETOUR SIGN ON WOOD POST
- TRAFFIC CONTROL DETOUR SIGN ON TWO WOOD POSTS
- DIRECTION OF TRAFFIC
- TYPE 3 BARRICADE
- TYPE 3 BARRICADE WITH SIGN
- WORK ZONE (CLOSED TO TRAFFIC)
- DETOUR ROUTE
- COVERING SIGNS TYPE II

N

ROAD CLOSED 1/4 MILES AHEAD LOCAL TRAFFIC ONLY
R11-3
60" X 30"

DETOUR
M04-9R
30" X 24"

DETOUR SOUTH 22
M04-8 24" X 12"
M3-3 24" X 12"
M1-6 24" X 24"
M06-1 21" X 21"

DETOUR SOUTH 22
M04-8 24" X 12"
M3-3 24" X 12"
M1-6 24" X 24"
M05-1L 21" X 21"

END DETOUR SOUTH 22
M04-8A 24" X 18"
M3-1 24" X 12"
M1-6 24" X 24"

DETOUR NORTH 22
M04-8 24" X 12"
M3-1 24" X 12"
M1-6 24" X 24"
M06-1 21" X 21"

7TH STREET

6TH STREET

STH 22 / S MAIN STREET

DETOUR NORTH 22
M04-8 24" X 12"
M3-1 24" X 12"
M1-6 24" X 24"

AUTO STREET

DETOUR NORTH 22
M04-8 24" X 12"
M3-1 24" X 12"
M1-6 24" X 24"
M05-1R 21" X 21"

DETOUR AHEAD
W20-2A

N

DETOUR SOUTH 22
M04-8 24" X 12"
M3-3 24" X 12"
M1-6 24" X 24"
M05-1R 21" X 21"

LYON STREET

DETOUR NORTH 22
M04-8 24" X 12"
M3-1 24" X 12"
M1-6 24" X 24"

DETOUR SOUTH 22
M04-8 24" X 12"
M3-3 24" X 12"
M1-6 24" X 24"

PIGEON RIVER

DETOUR SOUTH 22
M04-8 24" X 12"
M3-3 24" X 12"
M1-6 24" X 24"
M06-1 21" X 21"

NO PARKING ANY TIME
R7-1D
18" X 24"

YIELD

NO PARKING ANY TIME
R7-1R
18" X 24"

NO PARKING ANY TIME
R7-1D
18" X 24"

DETOUR NORTH 22
M04-8 24" X 12"
M3-1 24" X 12"
M1-6 24" X 24"
M06-1 21" X 21"

DETOUR NORTH 22
M04-8 24" X 12"
M3-1 24" X 12"
M1-6 24" X 24"
M05-1R 21" X 21"

NORTH 22
M3-1 24" X 12"
M1-6 24" X 24"

DETOUR AHEAD
W20-2A

250'

100'

7TH STREET

NO PARKING ANY TIME
R7-1L
18" X 24"

NO PARKING ANY TIME
R7-1R
18" X 24"

DETOUR NORTH 22
M04-8 24" X 12"
M3-1 24" X 12"
M1-6 24" X 24"
M05-1L 21" X 21"

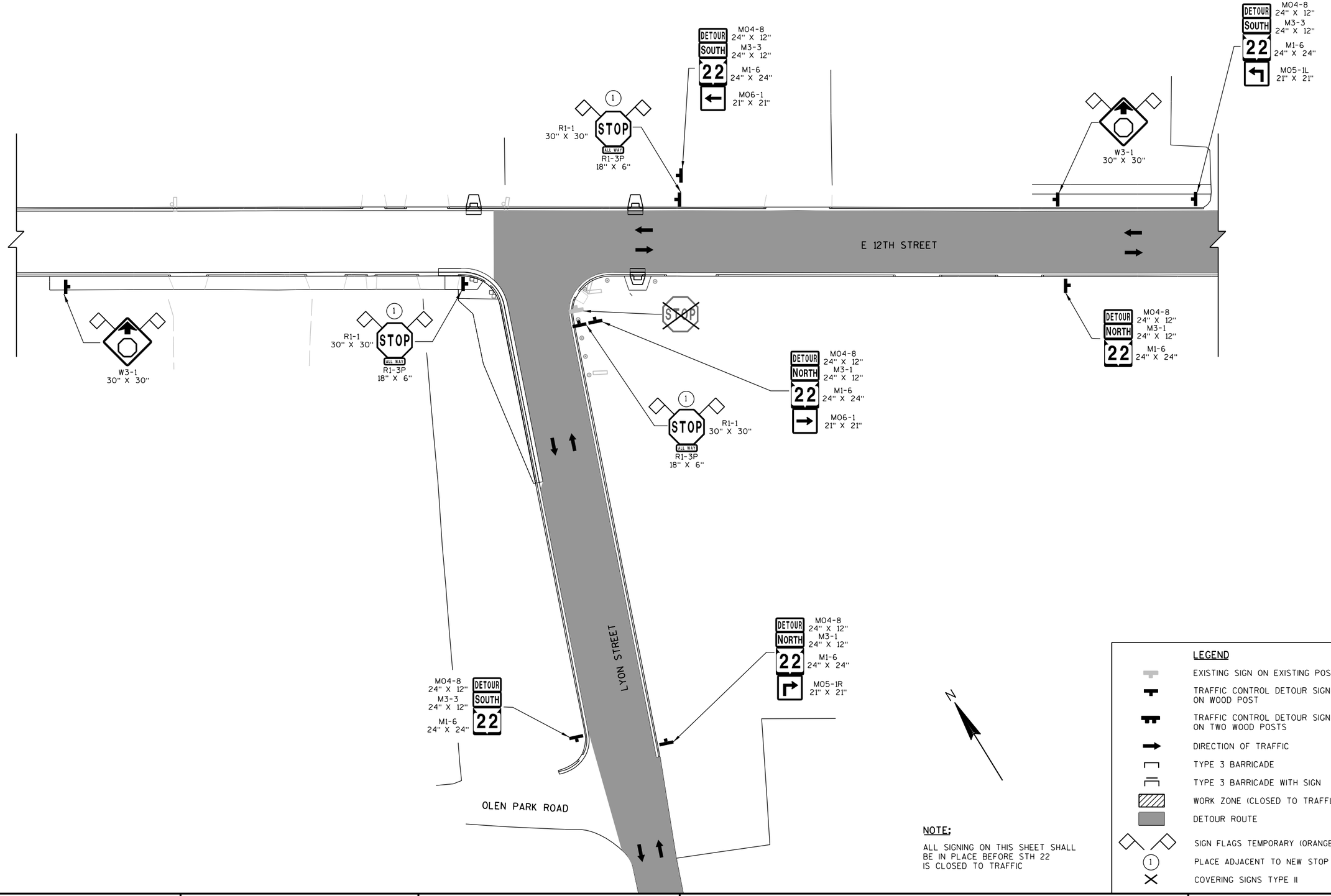
DETOUR NORTH 22
M04-8 24" X 12"
M3-1 24" X 12"
M1-6 24" X 24"
M06-1 21" X 21"

MAIZE STREET

2

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	TRAFFIC CONTROL & DETOUR SIGNING	SHEET 49	E

2



NOTE:

ALL SIGNING ON THIS SHEET SHALL BE IN PLACE BEFORE STH 22 IS CLOSED TO TRAFFIC

LEGEND

- EXISTING SIGN ON EXISTING POST
- TRAFFIC CONTROL DETOUR SIGN ON WOOD POST
- TRAFFIC CONTROL DETOUR SIGN ON TWO WOOD POSTS
- DIRECTION OF TRAFFIC
- TYPE 3 BARRICADE
- TYPE 3 BARRICADE WITH SIGN
- WORK ZONE (CLOSED TO TRAFFIC)
- DETOUR ROUTE
- SIGN FLAGS TEMPORARY (ORANGE)
- (1) PLACE ADJACENT TO NEW STOP BAR
- COVERING SIGNS TYPE II

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	TRAFFIC CONTROL & DETOUR SIGNING	SHEET 50	E

2

N

SPRING STREET

SSGT WARREN HANSEN DRIVE

M04-8
24" X 12"
M3-3
24" X 12"
M1-6
24" X 24"

DETOUR
SOUTH
22

M04-8
24" X 12"
M3-3
24" X 12"
M1-6
24" X 24"

DETOUR
NORTH
22

16TH STREET

SSGT WARREN HANSEN DRIVE

N

2

STH 156 (E GREENTREE ROAD)

INDUSTRIAL AVENUE

M04-8
24" X 12"
M3-1
24" X 12"
M1-6
24" X 24"

DETOUR
NORTH
22

M04-8
24" X 12"
M3-3
24" X 12"
M1-6
24" X 24"
M06-1
21" X 21"

DETOUR
SOUTH
22

M04-8
24" X 12"
M3-3
24" X 12"
M1-6
24" X 24"
M05-1L
21" X 21"

DETOUR
SOUTH
22

M3-3
24" X 12"
M1-6
24" X 24"

DETOUR
AHEAD

W20-2A

M04-8
24" X 12"
M3-3
24" X 12"
M1-6
24" X 24"
M05-1R
21" X 21"

DETOUR
SOUTH
22

M04-8
24" X 12"
M3-3
24" X 12"
M1-6
24" X 24"
M06-1
21" X 21"

DETOUR
SOUTH
22

STOP

M04-8
24" X 12"
M3-1
24" X 12"
M1-6
24" X 24"
M06-1
21" X 21"

DETOUR
NORTH
WEST
EAST
22
156
156

M3-2
24" X 12"
M1-6
24" X 24"
M06-1
21" X 21"
M3-4
24" X 12"
M1-6
24" X 24"
M06-1
21" X 21"

M04-8
24" X 12"
M3-1
24" X 12"
M1-6
24" X 24"
M05-1L
21" X 21"

DETOUR
NORTH
22

SSGT WARREN HANSEN DRIVE

M04-8
24" X 12"
M3-3
24" X 12"
M1-6
24" X 24"

DETOUR
SOUTH
22

LEGEND

- EXISTING SIGN ON EXISTING POST
- TRAFFIC CONTROL DETOUR SIGN ON WOOD POST
- TRAFFIC CONTROL DETOUR SIGN ON TWO WOOD POSTS
- DIRECTION OF TRAFFIC
- TYPE 3 BARRICADE
- TYPE 3 BARRICADE WITH SIGN
- WORK ZONE (CLOSED TO TRAFFIC)
- DETOUR ROUTE
- COVERING SIGNS TYPE II

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	TRAFFIC CONTROL & DETOUR SIGNING	SHEET 51	E

2

N

DETOUR AHEAD
W20-2

M04-8
24" X 12"
DETOUR
EAST SOUTH
156 22
M05-1L
24" X 12"

STH 22

END DETOUR
NORTH
22
M04-8A
24" X 18"
M3-3
24" X 12"
M1-6
24" X 24"

STOP

M04-8
24" X 12"
DETOUR
SOUTH
22
M3-3
24" X 12"
M1-6
24" X 24"
M06-1
21" X 21"

~~SOUTH~~ NORTH
~~22~~ 22

M04-8
24" X 12"
DETOUR
NORTH END
22 156
M3-3
24" X 12"
M05-1R
24" X 12"

STH 156 (E GREENTREE ROAD)

W GREENTREE ROAD

DETOUR
M04-9L
30" X 24"

M04-8
24" X 12"
DETOUR
SOUTH EAST
22 156
M3-3
24" X 12"
M1-6
24" X 24"

STH 22 (N MAIN STREET)

ROAD CLOSED
XX MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3
60" X 30"

ANNE STREET

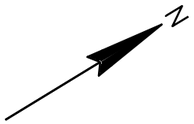
MCKINLEY AVENUE

LEGEND

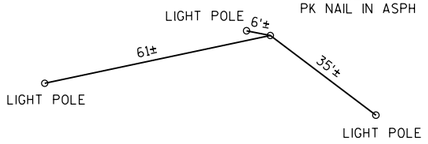
- EXISTING SIGN ON EXISTING POST
- TRAFFIC CONTROL DETOUR SIGN ON WOOD POST
- TRAFFIC CONTROL DETOUR SIGN ON TWO WOOD POSTS
- DIRECTION OF TRAFFIC
- TYPE 3 BARRICADE
- TYPE 3 BARRICADE WITH SIGN
- WORK ZONE (CLOSED TO TRAFFIC)
- DETOUR ROUTE
- COVERING SIGNS TYPE II

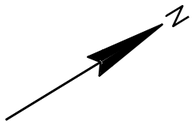
PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	TRAFFIC CONTROL & DETOUR SIGNING	SHEET 52	E

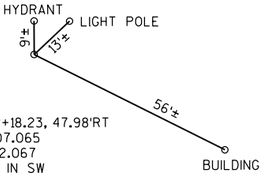
2



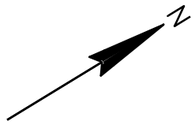
CP100
STA 125+10.93, 48.80'LT
Y=438606.922
X=621762.545
PK NAIL IN ASPH

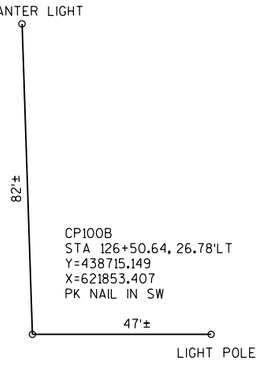




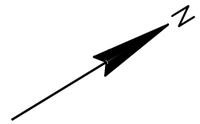


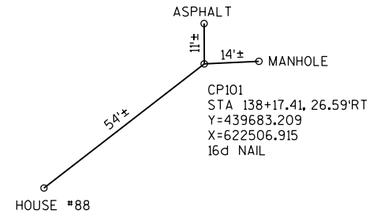
CP100A
STA 122+18.23, 47.98'RT
Y=438307.065
X=621692.067
PK NAIL IN SW





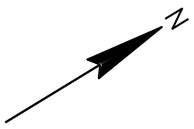
CP100B
STA 126+50.64, 26.78'LT
Y=438715.149
X=621853.407
PK NAIL IN SW





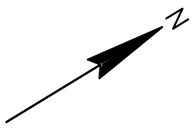
CP101
STA 138+17.41, 26.59'RT
Y=439683.209
X=622506.915
16d NAIL

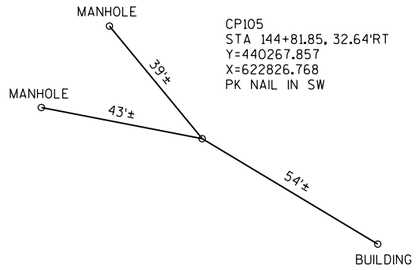
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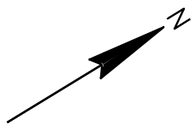
CP104
STA 141+79.14, 33.00'RT
Y=439996.504
X=622692.599
REBAR R/W

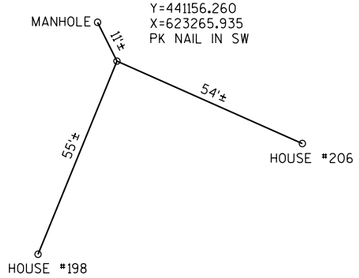




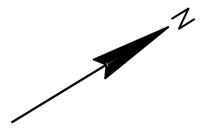


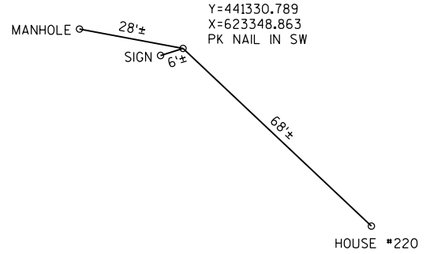
CP105
STA 144+81.85, 32.64'RT
Y=440267.857
X=622826.768
PK NAIL IN SW





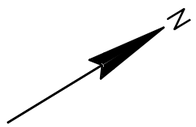
CP106
STA 154+72.87, 31.38'RT
Y=441156.260
X=623265.935
PK NAIL IN SW



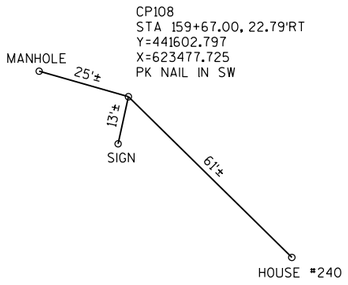


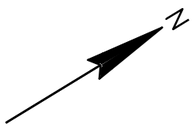
CP107
STA 156+66.07, 28.13'RT
Y=441330.789
X=623348.863
PK NAIL IN SW

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	ALIGNMENT TIES	SHEET 53	E

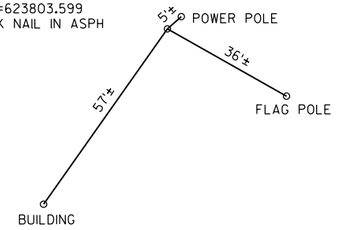


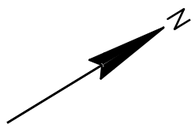
CP108
STA 159+67.00, 22.79'RT
Y=441602.797
X=623477.725
PK NAIL IN SW

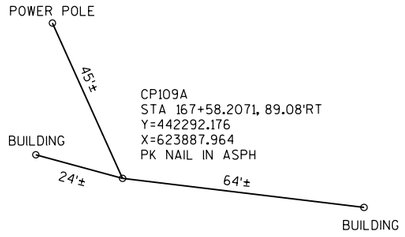


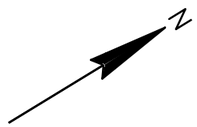


CP109
STA 166+74.83, 35.77'RT
Y=442231.288
X=623803.599
PK NAIL IN ASPH

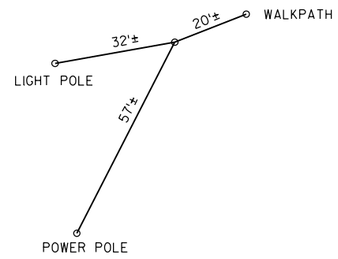


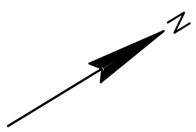




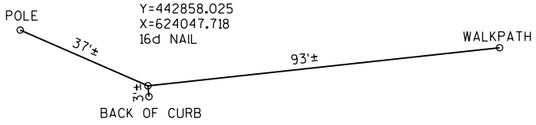


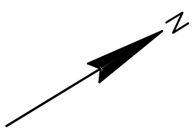
CP112
STA 161+49.36, 27.20'LT
Y=441788.394
X=623513.889
PK NAIL IN SW



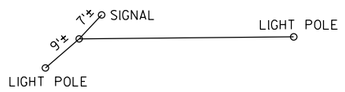


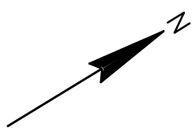
CP113
STA 173+4592, 23.83'LT
Y=442858.025
X=624047.718
16d NAIL



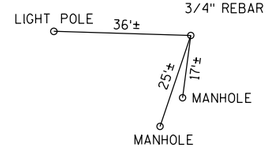


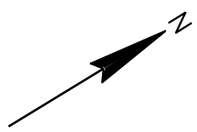
CP200
STA 132+94.60, 35.6'LT
Y=438501.181
X=621712.507
3/4" REBAR

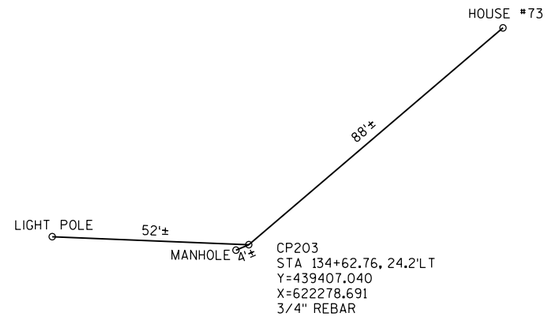




CP202
STA 130+3.39, 28.8'RT
Y=438988.456
X=622082.768
3/4" REBAR

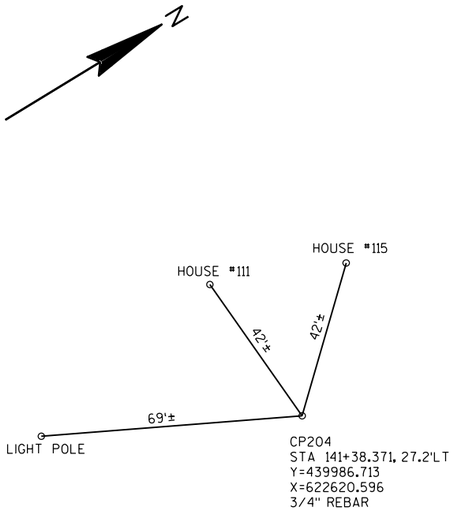


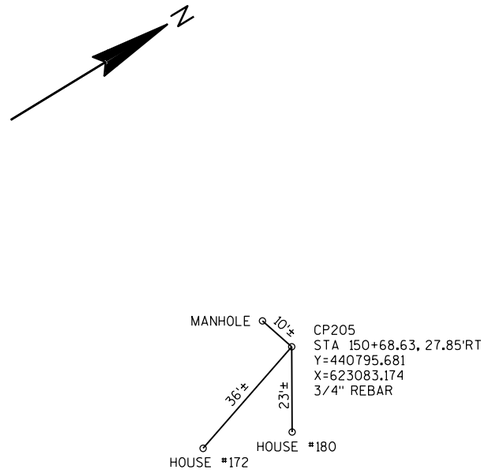


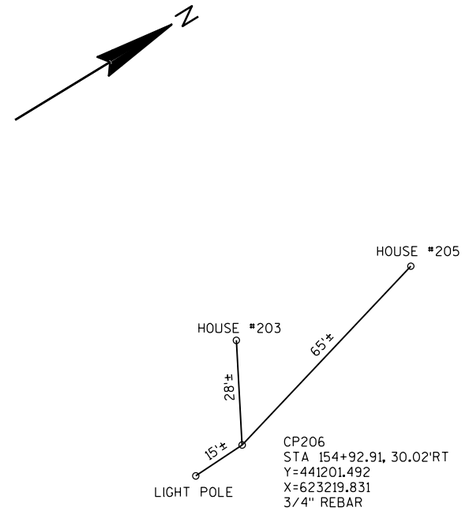


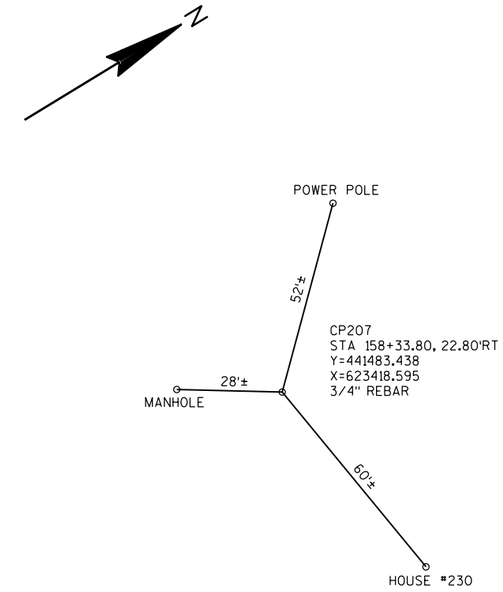
CP203
STA 134+62.76, 24.2'LT
Y=439407.040
X=622278.691
3/4" REBAR

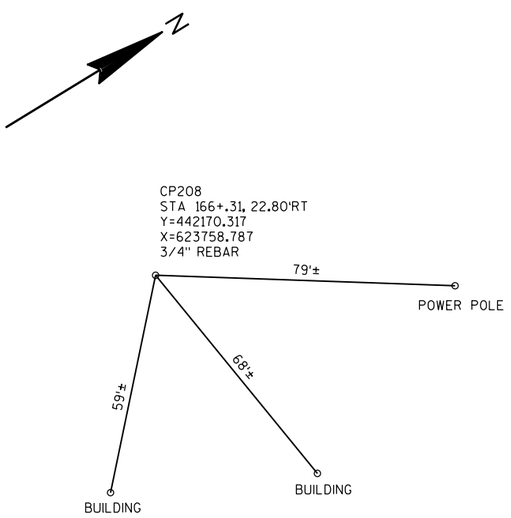
PROJECT NO:6250-01-76	HWY:STH 22	COUNTY:WAUPACA	ALIGNMENT TIES	SHEET 54	E

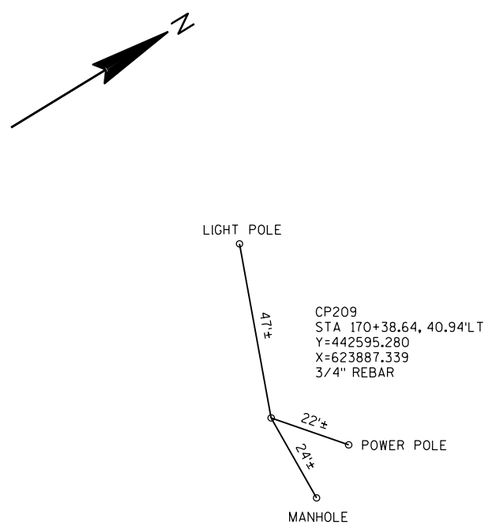


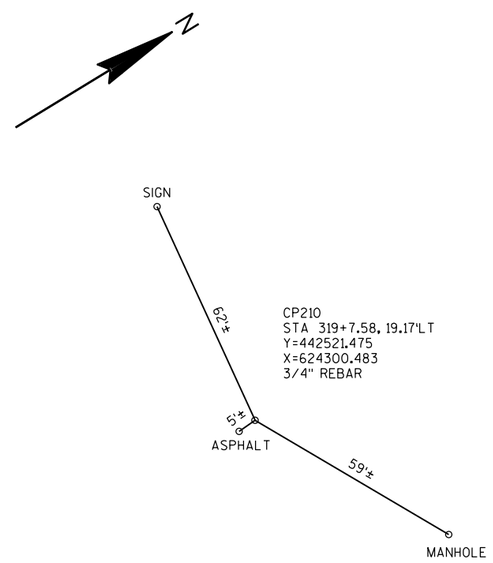


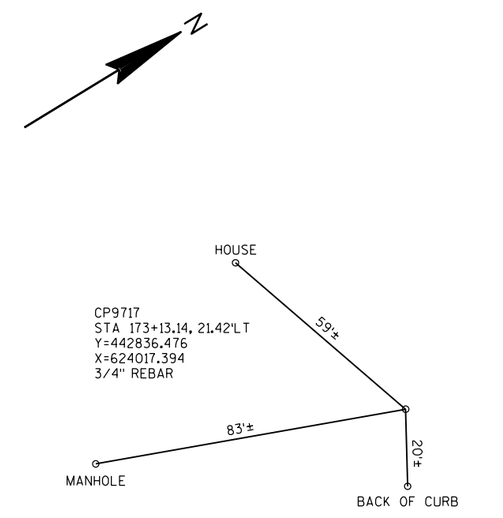












PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	ALIGNMENT TIES	SHEET 55	E

2

POT STA 202+50.00
Y=438638.363
X=621545.104

202+50

W 12TH ST

S 58°37'27" E

POT STA 122+00.00
Y=438316.486
X=621641.607

125+00

STH 22 (N MAIN ST)

N 31°22'55" E

N 31°22'55" E

BEGIN PROJECT
STA 122+67.37
MATCH PROJECT
ID 6250-01-70

STA 124+24.56 STH 22 =
STA 205+00.00 W & E 12TH STREET
Y = 438508.200
X = 621758.547

E 12TH ST

S 57°57'05" E

POT STA 207+50.00
Y=438375.541
X=621970.446

207+50

POT STA 213+50.00
Y=439081.290
X=621932.414

213+50

W 13TH ST

S 58°45'42" E

130+00

N 31°24'42" E

END PROJECT
STA 130+75.00

POT STA 131+00.00
Y=439084.803
X=622110.317

PI 130+00.51
DELTA=0°01'48" RT
Y=438999.893
X=622058.464

STA 130+04.73 STH 22=
STA 215+00.00 W 13TH STREET
Y = 439003.500
X = 622060.667

N

POT STA 337+00.00W
Y=437486.891
X=624104.547

335+00W

N 31°34'54" E

CURVE 1

PT 333+92.12W

PC 333+21.86W

325+00W

S 58°29'25" E

S 58°29'25" E

330+00W

S 58°57'25" E

POT STA 322+50.00W
Y=437767.555
X=622966.576

STA 325+00.00W E 12TH STREET =
STA 340+00.00L LYON STREET
Y = 437636.894
X = 623179.714

LYON STREET

N 20°19'28" E

PI 329+96.50W
DELTA=0°28'01" LT
Y=437377.399
X=623603.009

POT STA 337+50.00L
Y=437402.459
X=623092.880

CURVE 1
DELTA= 89°27'41" LT
T=44.58'
L=70.26'
R=45.00'
PC STA 333+21.86W
PC Y=437209.621
PC X=623881.764
PI STA 333+66.43W
PI Y=437186.632
PI X=623919.958
PT STA 333+92.12W
PT Y=437224.609
PT X=623943.305
SE= NA

N

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	ALIGNMENT	SHEET 56	E

DATE 21OCT14 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	6250-01-76 QUANTITY
0010	201.0105	CLEARING	STA	1.000	1.000
0020	201.0120	CLEARING	ID	110.000	110.000
0030	201.0205	GRUBBING	STA	1.000	1.000
0040	201.0220	GRUBBING	ID	110.000	110.000
0060	204.0100	REMOVING PAVEMENT	SY	4,797.000	4,797.000
0080	204.0120	REMOVING ASPHALTIC SURFACE MILLING	SY	705.000	705.000
0090	204.0150	REMOVING CURB & GUTTER	LF	442.000	442.000
0100	204.0155	REMOVING CONCRETE SIDEWALK	SY	1,447.000	1,447.000
0110	204.0195	REMOVING CONCRETE BASES	EACH	24.000	24.000
0120	204.0205	REMOVING UTILITY POLES	EACH	1.000	1.000
0130	204.0210	REMOVING MANHOLES	EACH	12.000	12.000
0140	204.0220	REMOVING INLETS	EACH	11.000	11.000
0150	204.0245	REMOVING STORM SEWER (SIZE) 01. 6-INCH	LF	19.000	19.000
0160	204.0245	REMOVING STORM SEWER (SIZE) 02. 8-INCH	LF	57.000	57.000
0170	204.0245	REMOVING STORM SEWER (SIZE) 03. 10-INCH	LF	75.000	75.000
0180	204.0245	REMOVING STORM SEWER (SIZE) 04. 12-INCH	LF	210.000	210.000
0190	204.0245	REMOVING STORM SEWER (SIZE) 05. 15-INCH	LF	657.000	657.000
0200	204.0245	REMOVING STORM SEWER (SIZE) 06. 18-INCH	LF	67.000	67.000
0220	204.0280	SEALING PIPES	EACH	1.000	1.000
0230	204.9060.S	REMOVING (ITEM DESCRIPTION) 01. WELL CASING	EACH	3.000	3.000
0240	204.9060.S	REMOVING (ITEM DESCRIPTION) 02. APRON ENDWALLS FOR CULVERT PIPE	EACH	1.000	1.000
0260	205.0100	EXCAVATION COMMON	CY	4,945.000	4,945.000
0290	210.0100	BACKFILL STRUCTURE	CY	15.000	15.000
0310	213.0100	FINISHING ROADWAY (PROJECT) 02. 6250-01-76	EACH	1.000	1.000
0320	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	510.000	510.000
0330	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	2,713.000	2,713.000
0350	312.0110	SELECT CRUSHED MATERIAL	TON	2,903.000	2,903.000
0360	415.0085	CONCRETE PAVEMENT 8 1/2-INCH	SY	4,213.000	4,213.000
0390	416.0160	CONCRETE DRIVEWAY 6-INCH	SY	173.000	173.000
0400	416.0610	DRILLED TIE BARS	EACH	36.000	36.000
0420	440.4410.S	INCENTIVE IRI RIDE	DOL	612.000	612.000
0430	455.0105	ASPHALTIC MATERIAL PG58-28	TON	7.000	7.000
0440	455.0120	ASPHALTIC MATERIAL PG64-28	TON	12.300	12.300
0450	455.0605	TACK COAT	GAL	43.000	43.000
0460	460.1101	HMA PAVEMENT TYPE E-1	TON	287.000	287.000
0470	460.1103	HMA PAVEMENT TYPE E-3	TON	31.000	31.000
0480	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	204.000	204.000
0490	465.0105	ASPHALTIC SURFACE	TON	32.000	32.000
0500	465.0310	ASPHALTIC CURB	LF	50.000	50.000
0600	520.4018	CULVERT PIPE TEMPORARY 18-INCH	LF	26.000	26.000
0610	532.0200.S	WALL MODULAR BLOCK GRAVITY	SF	211.000	211.000
0640	601.0409	CONCRETE CURB & GUTTER 30-INCH TYPE A	LF	1,525.000	1,525.000
0650	601.0411	CONCRETE CURB & GUTTER 30-INCH TYPE D	LF	187.000	187.000
0670	602.0405	CONCRETE SIDEWALK 4-INCH	SF	13,713.000	13,713.000
0680	602.0415	CONCRETE SIDEWALK 6-INCH	SF	1,372.000	1,372.000
0690	602.0505	CURB RAMP DETECTABLE WARNING FIELD YELLOW	SF	152.000	152.000
0700	602.1500	CONCRETE STEPS	SF	12.000	12.000
0710	603.8000	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED	LF	220.000	220.000
0720	603.8125	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	LF	220.000	220.000

3

DATE 21OCT14 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	6250-01-76 QUANTITY
0740	606.0100	RIPRAP LIGHT	CY	9.000	9.000
0760	608.0312	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH	LF	205.000	205.000
0770	608.0315	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH	LF	180.000	180.000
0780	608.0318	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH	LF	81.000	81.000
0800	608.0336	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 36-INCH	LF	718.000	718.000
0810	610.0129	STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 29X45-INCH	LF	108.000	108.000
0820	611.0530	MANHOLE COVERS TYPE J	EACH	10.000	10.000
0840	611.0624	INLET COVERS TYPE H	EACH	11.000	11.000
0850	611.0639	INLET COVERS TYPE H-S	EACH	2.000	2.000
0860	611.1004	CATCH BASINS 4-FT DIAMETER	EACH	1.000	1.000
0880	611.1230	CATCH BASINS 2X3-FT	EACH	12.000	12.000
0890	611.2004	MANHOLES 4-FT DIAMETER	EACH	3.000	3.000
0900	611.2005	MANHOLES 5-FT DIAMETER	EACH	1.000	1.000
0910	611.2006	MANHOLES 6-FT DIAMETER	EACH	2.000	2.000
0920	611.2007	MANHOLES 7-FT DIAMETER	EACH	2.000	2.000
0940	611.2055	MANHOLES 5X5-FT	EACH	1.000	1.000
0950	611.2066	MANHOLES 6X6-FT	EACH	1.000	1.000
0960	611.8110	ADJUSTING MANHOLE COVERS	EACH	2.000	2.000
0970	612.0106	PIPE UNDERDRAIN 6-INCH	LF	1,433.000	1,433.000
1000	616.0700.S	FENCE SAFETY	LF	550.000	550.000
1010	619.1000	MOBILIZATION	EACH	0.350	0.350
1020	624.0100	WATER	MGAL	76.000	76.000
1030	625.0100	TOPSOIL	SY	847.000	847.000
1040	628.1504	SILT FENCE	LF	248.000	248.000
1050	628.1520	SILT FENCE MAINTENANCE	LF	500.000	500.000
1060	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	6.000	6.000
1070	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	4.000	4.000
1080	628.2008	EROSION MAT URBAN CLASS I TYPE B	SY	746.000	746.000
1100	628.7005	INLET PROTECTION TYPE A	EACH	24.000	24.000
1110	628.7015	INLET PROTECTION TYPE C	EACH	13.000	13.000
1120	628.7555	CULVERT PIPE CHECKS	EACH	8.000	8.000
1130	629.0205	FERTILIZER TYPE A	CWT	0.064	0.064
1140	630.0140	SEEDING MIXTURE NO. 40	LB	15.400	15.400
1150	630.0200	SEEDING TEMPORARY	LB	2.800	2.800
1160	634.0614	POSTS WOOD 4X6-INCH X 14-FT	EACH	2.000	2.000
1170	634.0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	3.000	3.000
1180	634.0816	POSTS TUBULAR STEEL 2X2-INCH X 16-FT	EACH	3.000	3.000
1190	637.2210	SIGNS TYPE II REFLECTIVE H	SF	57.680	57.680
1200	637.2215	SIGNS TYPE II REFLECTIVE H FOLDING	SF	29.840	29.840
1210	637.2230	SIGNS TYPE II REFLECTIVE F	SF	53.000	53.000
1220	638.2602	REMOVING SIGNS TYPE II	EACH	11.000	11.000
1230	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	2.000	2.000
1240	642.5201	FIELD OFFICE TYPE C	EACH	0.550	0.550
1260	643.0100	TRAFFIC CONTROL (PROJECT) 02. 6250-01-76	EACH	1.000	1.000
1270	643.0300	TRAFFIC CONTROL DRUMS	DAY	1,847.000	1,847.000
1280	643.0410	TRAFFIC CONTROL BARRICADES TYPE II	DAY	6,550.000	6,550.000
1290	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	3,144.000	3,144.000

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DATE 21OCT14 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	6250-01-76 QUANTITY
1300	643.0500	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS	EACH	7.000	7.000
1310	643.0600	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES	EACH	7.000	7.000
1320	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	10,742.000	10,742.000
1330	643.0900	TRAFFIC CONTROL SIGNS	DAY	3,494.000	3,494.000
1340	643.0920	TRAFFIC CONTROL COVERING SIGNS TYPE II	EACH	4.000	4.000
1350	643.2000	TRAFFIC CONTROL DETOUR (PROJECT) 01. 6250-01-76	EACH	1.000	1.000
1360	643.3000	TRAFFIC CONTROL DETOUR SIGNS	DAY	20,305.000	20,305.000
1370	645.0112	GEOTEXTILE FABRIC TYPE DF SCHEDULE B	SY	721.000	721.000
1390	645.0130	GEOTEXTILE FABRIC TYPE R	SY	26.000	26.000
1400	646.0103	PAVEMENT MARKING PAINT 4-INCH	LF	1,307.000	1,307.000
1410	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	6,341.000	6,341.000
1420	646.0600	REMOVING PAVEMENT MARKINGS	LF	546.000	546.000
1430	647.0206	PAVEMENT MARKING ARROWS BIKE LANE EPOXY	EACH	3.000	3.000
1440	647.0306	PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY	EACH	3.000	3.000
1450	647.0563	PAVEMENT MARKING STOP LINE PAINT 18-INCH	LF	18.000	18.000
1460	647.0566	PAVEMENT MARKING STOP LINE EPOXY 18-INCH	LF	103.000	103.000
1470	647.0656	PAVEMENT MARKING PARKING STALL EPOXY	LF	312.000	312.000
1480	647.0723	PAVEMENT MARKING DIAGONAL PAINT 12-INCH	LF	461.000	461.000
1490	647.0726	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH	LF	171.000	171.000
1500	647.0766	PAVEMENT MARKING CROSSWALK EPOXY 6-INCH	LF	783.000	783.000
1510	649.0400	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH	LF	729.000	729.000
1520	649.1200	TEMPORARY PAVEMENT MARKING STOP LINE REMOVABLE TAPE 18-INCH	LF	51.000	51.000
1530	650.4000	CONSTRUCTION STAKING STORM SEWER	EACH	23.000	23.000
1540	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	1,311.000	1,311.000
1550	650.5000	CONSTRUCTION STAKING BASE	LF	374.000	374.000
1560	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	476.000	476.000
1570	650.6000	CONSTRUCTION STAKING PIPE CULVERTS	EACH	1.000	1.000
1580	650.7000	CONSTRUCTION STAKING CONCRETE PAVEMENT	LF	938.000	938.000
1590	650.8000	CONSTRUCTION STAKING RESURFACING REFERENCE	LF	122.000	122.000
1600	650.8500	CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT) 01. 6250-01-76	LS	1.000	1.000
1620	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 02. 6250-01-76	LS	1.000	1.000
1630	650.9920	CONSTRUCTION STAKING SLOPE STAKES	LF	1,311.000	1,311.000
1640	651.1000.S	SIGNAL CONTROLLER TRAINING	LS	1.000	1.000
1650	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	2,767.000	2,767.000
1660	652.0235	CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	LF	875.000	875.000
1670	652.0800	CONDUIT LOOP DETECTOR	LF	424.000	424.000
1680	652.0900	LOOP DETECTOR SLOTS	LF	102.000	102.000
1690	653.0140	PULL BOXES STEEL 24X42-INCH	EACH	23.000	23.000
1700	653.0905	REMOVING PULL BOXES	EACH	2.000	2.000
1710	654.0101	CONCRETE BASES TYPE 1	EACH	3.000	3.000
1720	654.0102	CONCRETE BASES TYPE 2	EACH	5.000	5.000
1730	654.0105	CONCRETE BASES TYPE 5	EACH	2.000	2.000
1740	654.0217	CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL	EACH	1.000	1.000
1750	655.0230	CABLE TRAFFIC SIGNAL 5-14 AWG	LF	390.000	390.000

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DATE 21OCT14 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	6250-01-76 QUANTITY
1760	655.0260	CABLE TRAFFIC SIGNAL 12-14 AWG	LF	1,250.000	1,250.000
1770	655.0305	CABLE TYPE UF 2-12 AWG GROUNDED	LF	376.000	376.000
1780	655.0515	ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG	LF	880.000	880.000
1790	655.0610	ELECTRICAL WIRE LIGHTING 12 AWG	LF	2,316.000	2,316.000
1800	655.0620	ELECTRICAL WIRE LIGHTING 8 AWG	LF	11,730.000	11,730.000
1810	655.0625	ELECTRICAL WIRE LIGHTING 6 AWG	LF	2,196.000	2,196.000
1820	655.0700	LOOP DETECTOR LEAD IN CABLE	LF	2,090.000	2,090.000
1830	655.0800	LOOP DETECTOR WIRE	LF	1,990.000	1,990.000
1840	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 01. STH 22 & 12TH STREET	LS	1.000	1.000
1850	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 02. LCB 100	LS	1.000	1.000
1860	657.0100	PEDESTAL BASES	EACH	3.000	3.000
1870	657.0255	TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE	EACH	5.000	5.000
1880	657.0305	POLES TYPE 2	EACH	1.000	1.000
1890	657.0315	POLES TYPE 4	EACH	4.000	4.000
1900	657.0420	TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT	EACH	3.000	3.000
1910	657.0590	TROMBONE ARMS 20-FT	EACH	2.000	2.000
1920	657.0595	TROMBONE ARMS 25-FT	EACH	2.000	2.000
1930	657.0614	LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 8-FT	EACH	4.000	4.000
1940	658.0110	TRAFFIC SIGNAL FACE 3-12 INCH VERTICAL	EACH	8.000	8.000
1950	658.0155	TRAFFIC SIGNAL FACE 3-12 INCH HORIZONTAL	EACH	4.000	4.000
1960	658.0215	BACKPLATES SIGNAL FACE 3 SECTION 12-INCH	EACH	12.000	12.000
1970	658.0416	PEDESTRIAN SIGNAL FACE 16-INCH	EACH	8.000	8.000
1980	658.0500	PEDESTRIAN PUSH BUTTONS	EACH	8.000	8.000
1990	658.0600	LED MODULES 12-INCH RED BALL	EACH	12.000	12.000
2000	658.0605	LED MODULES 12-INCH YELLOW BALL	EACH	12.000	12.000
2010	658.0610	LED MODULES 12-INCH GREEN BALL	EACH	12.000	12.000
2020	658.0635	LED MODULES PEDESTRIAN COUNTDOWN TIMER 16-INCH	EACH	8.000	8.000
2030	658.5069	SIGNAL MOUNTING HARDWARE (LOCATION) 01. STH 22 & 12TH STREET	LS	1.000	1.000
2040	659.1115	LUMINAIRES UTILITY LED A	EACH	4.000	4.000
2050	690.0150	SAWING ASPHALT	LF	972.000	972.000
2060	690.0250	SAWING CONCRETE	LF	666.000	666.000
2070	715.0415	INCENTIVE STRENGTH CONCRETE PAVEMENT	DOL	500.000	500.000
2090	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT $5. 00/HR	HRS	2,000.000	2,000.000
2100	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT $5.00/HR	HRS	1,260.000	1,260.000
2110	SPV.0030	SPECIAL 20. FERTILIZER FOR LAWN TYPE TURF	CWT	0.490	0.490
2140	SPV.0060	SPECIAL 20. POSTS STEEL 2 3/8-INCH DIAMETER X 14-FT	EACH	1.000	1.000
2150	SPV.0060	SPECIAL 21. REMOVING EXISTING LIGHTING CONTROL	EACH	1.000	1.000
2160	SPV.0060	SPECIAL 22. SALVAGE LIGHTING UNIT	EACH	13.000	13.000
2170	SPV.0060	SPECIAL 23. CONCRETE CONTROL CABINET BASE TYPE SPECIAL	EACH	1.000	1.000
2180	SPV.0060	SPECIAL 24. LIGHTING CONTROL CABINET	EACH	1.000	1.000
2190	SPV.0060	SPECIAL 25. TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE BROWN	EACH	2.000	2.000
2200	SPV.0060	SPECIAL 26. POLES TYPE 5-ALUMINUM BROWN	EACH	2.000	2.000

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DATE 21OCT14 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	6250-01-76 QUANTITY
2210	SPV.0060	SPECIAL 27. LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT - BROWN	EACH	2.000	2.000
2220	SPV.0060	SPECIAL 28. LUMINAIRES UTILITY LED CATEGORY C BROWN	EACH	2.000	2.000
2230	SPV.0060	SPECIAL 29. DECORATIVE LIGHTING UNIT	EACH	8.000	8.000
2240	SPV.0060	SPECIAL 30. TREE ROOT CUTTING AND REMOVAL	EACH	16.000	16.000
2250	SPV.0060	SPECIAL 31. ROOF DRAIN CLEAN OUT	EACH	1.000	1.000
2570	SPV.0090	SPECIAL 01. CONCRETE CURB & GUTTER 24-INCH TYPE D	LF	289.000	289.000
2580	SPV.0090	SPECIAL 20. STORM SEWER PIPE PVC 6-INCH	LF	58.000	58.000
2590	SPV.0090	SPECIAL 21. STORM SEWER PIPE PVC 8-INCH	LF	49.000	49.000
2600	SPV.0090	SPECIAL 22. STORM SEWER PIPE PVC 10-INCH	LF	17.000	17.000
2800	SPV.0105	SPECIAL 20. REMOVE AND SALVAGE TRAFFIC SIGNALS STH 22 AND 12TH STREET	LS	1.000	1.000
2810	SPV.0105	SPECIAL 21. TRAFFIC SIGNAL CONTROL CABINET AND CONTROLLER STH 22 AND 12TH STREET	LS	1.000	1.000
2830	SPV.0105	SPECIAL 23. RESEARCH AND LOCATE EXISTING PROPERTY MONUMENTS PROJECT 6250-01-76	LS	1.000	1.000
2850	SPV.0105	SPECIAL 25. VERIFY AND REPLACE EXISTING PROPERTY MONUMENTS PROJECT 6250-01-76	LS	1.000	1.000
2860	SPV.0120	SPECIAL 20. WATER FOR SEEDED AREAS	MGAL	19.000	19.000
2870	SPV.0165	SPECIAL 20. CONCRETE SIDEWALK HES 4-INCH	SF	130.000	130.000
2880	SPV.0180	SPECIAL 01. GEOGRID REINFORCEMENT	SY	4,976.000	4,976.000
2890	SPV.0180	SPECIAL 20. PREPARING TOPSOIL FOR LAWN TYPE TURF	SY	772.000	772.000
2900	SPV.0180	SPECIAL 21. CONCRETE DRIVEWAY VARIABLE DEPTH	SY	13.000	13.000

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CLEARING AND GRUBBING ITEMS

STATION - STATION	LOCATION	201.0105 CLEARING STA	201.0120 CLEARING ID	201.0205 GRUBBING STA	201.0220 GRUBBING ID
STH 22					
127+86	RT		24		24
130+19	RT		8		8
130+57	RT		1.5		1.5
12TH STREET					
204+42	LT		28		28
13TH STREET					
214+60	RT		24		24
214+46	LT		24		24
E 12TH STREET/SSGT WARREN HANSEN DRIVE					
333+37W - 334+15W	RT	1		1	
ITEM TOTAL		1	110	1	110

REMOVING CURB & GUTTER

STATION - STATION	LOCATION	204.0150 LF
12TH STREET		
204+00 - 204+66	LT & RT	143
205+39 - 205+72	LT & RT	66
13TH STREET		
214+35 - 214+64	LT & RT	58
LYON STREET		
338+72L - 339+95L	LT	138
E 12TH STREET/SSGT WARREN HANSEN DRIVE		
324+74W	LT	8
325+60W	LT & RT	16
329+61W	LT	13
ITEM TOTAL		442

REMOVING MANHOLES

STATION	LOCATION	204.0210 EACH
STH 22		
123+80	LT	1
124+11	LT	1
124+22	RT	1
124+57	LT	1
125+12	LT	2
125+89	LT	1
126+25	LT	1
129+60	LT	1
129+90	LT	1
12TH STREET		
205+45	LT	1
13TH STREET		
214+63	RT	1
ITEM TOTAL		12

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REMOVING PAVEMENT

STATION - STATION	LOCATION	204.0100 SY	REMARKS
STH 22			
122+67 - 125+00	MAINLINE	1420	MAINLINE PAVEMENT
125+00 - 130+75	MAINLINE	3089	MAINLINE PAVEMENT
122+67 - 125+00	LT	214	DRIVEWAYS
125+00 - 130+75	LT & RT	50	DRIVEWAYS
12TH STREET			
203+89 - 204+16	LT	17	DRIVEWAYS
LYON STREET			
324+58W - 324+67W	RT	6	DRIVEWAY
ITEM TOTAL		4797	

REMOVING CONCRETE SIDEWALK

STATION - STATION	LOCATION	204.0155 SY
STH 22		
122+67 - 125+00	LT & RT	384
125+00 - 130+75	LT & RT	801
12TH STREET		
203+39 - 204+66	LT & RT	103
205+39 - 206+28	LT & RT	97
13TH STREET		
214+35 - 214+64	LT & RT	40
LYON STREET		
339+74L - 339+84L	LT	10
E 12TH STREET/SSGT WARREN HANSEN DRIVE		
339+54W - 339+69W	LT	12
ITEM TOTAL		1447

LIGHTING REMOVAL ITEMS

STATION	LOCATION	204.0195 REMOVING CONCRETE BASES EACH	204.0205 REMOVING UTILITY POLE EACH	653.0905 REMOVING PULLBOXES EACH	SPV.0060.22 SALVAGE LIGHTING UNIT EACH
CATEGORY 0020					
STH 22					
120+15	RT	1			1
120+25	RT			1	
102+40	LT			1	
121+00	RT	1			1
121+25	LT	1			1
121+75	RT	1			1
122+30	RT	1			1
122+85	LT	1			1
123+45	RT	1			1
125+45	LT	1			1
127+00	RT		1		
127+00	LT	1			1
127+80	RT	1			1
128+50	LT	1			1
129+70	RT	1			1
130+45	LT	1			1
		13*	1	2	13

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVING ASPHALTIC SURFACE MILLING

STATION - STATION	LOCATION	204.0120 SY
E 12TH STREET/SSGT WARREN HANSEN DRIVE		
332+69W - 334+91W	LT & RT	705
ITEM TOTAL		705

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

REMOVING CONCRETE BASES

STATION	LOCATION	204.0195 EACH	REMARKS
STH 22			
122+96	LT	1	BILLBOARD BASE
123+01	LT	1	TELEPHONE BASE
123+86	LT	1	
123+91	RT	1	
124+58	LT	1	
124+59	RT	1	
12TH STREET			
204+58	RT	1	
204+64	LT	1	
205+42	LT	1	
205+42	RT	1	
205+55	RT	1	
ITEM TOTAL		11*	

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

SEALING PIPES

STATION	LOCATION	204.0280 EACH
12TH STREET		
205+45	LT	1
ITEM TOTAL		1

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	MISCELLANEOUS QUANTITIES	SHEET 62	E

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EARTHWORK SUMMARY

STATION - STATION	LOCATION	205.0100 EXCAVATION COMMON CY	UNUSABLE PAVEMENT MATERIAL CY	AVAILABLE MATERIAL CY	UNEXPANDED FILL CY	EXPANDED FILL CY	208.0100 BORROW CY	MASS ORDINATE CY	WASTE CY	REMARKS
STH 22										
122+67 - 125+00	LT & RT	1339	536	803	4	5	0	798	798	
123+59 - 123+91	LT	15	9	6	7	9	0	-3	-3	PARKING LOT
125+00 - 130+75	LT & RT	2790	1253	1537	12	16	0	1521	1521	
12TH STREET										
202+69 - 204+73	LT & RT	369	59	310	0	0	0	310	310	
205+22 - 207+12	LT & RT	186	33	153	0	0	0	153	153	
13TH STREET										
214+35 - 214+79	LT & RT	123	20	103	0	0	0	103	103	
LYON STREET										
338+73L - 339+95L	LT	42	24	18	0	0	0	18	18	DETOUR ROUTE
E 12TH STREET/SSGT WARREN HANSEN DRIVE										
324+70W - 329+68W	LT & RT	10	3	7	0	0	0	7	7	DETOUR ROUTE (PED RAMPS)
332+70W - 334+91W	LT & RT	71	7	64	22	28	0	36	36	DETOUR ROUTE
ITEM TOTAL		4945	1944	3001	45	58	0	2943	2943	

(1) EXCAVATION COMMON, ITEM NUMBER 205.0100, IS THE TOTAL VOLUME OF CUT AND INCLUDES THE UNUSABLE PAVEMENT MATERIAL.
(2) UNUSABLE MATERIAL IS INCLUDED IN THE EXCAVATION COMMON, UNUSABLE PAVEMENT/CONCRETE MATERIAL WITHIN PROJECT LIMITS SHALL NOT BE USED AS RECYCLEED BASE MATERIAL FOR THIS PROJECT.
(3) AVAILABLE MATERIAL = EXCAVATION COMMON - UNUSABLE PAVEMENT MATERIAL.
(4) EXPANDED FILL FACTOR = 1.30
(5) BORROW MATERIAL.
(5) THE MASS ORDINATE + OR - QTY FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL AND A MINUS QUANTITY INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
THE MASS ORDINATE IS = EXCAVATION COMMON - UNUSABLE PAVEMENT MATERIAL - EXPANDED FILL.

REMOVING INLETS

STATION	LOCATION	204.0220 EACH
STH 22		
123+87	RT	1
123+88	LT	1
124+62	LT & RT	2
124+64	LT	1
129+90	RT	1
130+26	LT	1
12TH STREET		
204+41	LT	1
204+62	RT	1
204+65	LT	1
13TH STREET		
214+63	RT	1
ITEM TOTAL		11

REMOVING STORM SEWER

STATION - STATION	LOCATION	204.0245.01 6-INCH LF	204.0245.02 8-INCH LF	204.0245.03 10-INCH LF	204.0245.04 12-INCH LF	204.0245.05 15-INCH LF	204.0245.06 18-INCH LF
STH 22							
123+88	RT	15					
123+88 - 124+11	LT & RT				52		
123 +89 - 124+11	LT				23		
124+11 - 124+62	LT					51	
124+62	RT	4					
124+62	LT		46				
124+62 - 125+00	LT					37	
125+00 - 125+12	LT					12	
125+12 - 126+25	LT					113	
126+24	RT				28		
126+25	LT & RT				35		
126+25 - 129+90	LT					365	
129+90 - 130+26	LT					36	
129+90	LT & RT				41		
129+90 - 129+92	RT			17			
130+26 - 130+69	LT					43	
12TH STREET							
204+10 - 204+77	RT						67
204+62 - 204+77	RT			17			
204+41 - 204+66	LT			25			
204+66 - 204+77	LT		11				
13TH STREET							
214+47 - 214+78	RT				31		
214+63 - 214+78	RT			16			
ITEM TOTAL		19	57	75	210	657	67

REMOVING WELL CASING

STATION	LOCATION	204.9060.S.01 EACH	REMARKS
STH 22			
122+83	30' RT	1	MONITORING WELL
122+90	31' LT	1	EXTRACTION WELL
122+98	13' LT	1	MONITORING WELL
ITEM TOTAL		3	

REMOVING APRON ENDWALLS FOR CULVERT PIPE

STATION - STATION	LOCATION	204.9060.S.02 EACH	REMARKS
E 12TH STREET/SSGT WARREN HANSEN DRIVE			
333+76W	LT	1	24-INCH
ITEM TOTAL		1	

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

3

BASE COURSE ITEMS

STATION - STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	312.0110 SELECT CRUSHED MATERIAL TON
STH 22				
122+67 - 125+00	LT & RT	118	597	991
125+00 - 130+75	LT & RT	178	1244	1912
12TH STREET				
203+39 - 204+66	LT & RT	14	173	
205+39 - 206+28	LT & RT	20	111	
13TH STREET				
214+35 - 214+68	LT & RT	10	82	
PARKING LOTS				
122+67 - 125+00	LT		10	
125+00 - 130+75	LT & RT	27		
DRIVEWAYS				
122+74	RT	8		
125+57	LT	9		
125+95	LT	10		
126+33	RT	28		
126+87	LT	9		
127+15	LT	5		
127+25	RT	8		
127+76	RT	10		
128+31	LT	7		
128+45	RT	12		
128+84	LT	6		
204+04	LT	11		
LYON STREET				
338+72L - 339+95L	LT		45	
E 12TH STREET/SSGT WARREN HANSEN DRIVE				
324+69W - 334+91W		20	176	
STH 22 TEMPORARY VEHICLE ACCESS				
122+67 - 125+00	LT& RT		275	
ITEM TOTAL		510	2713	2903

CONCRETE PAVEMENT 8 1/2-INCH

STATION - STATION	LOCATION	415.0085 SY	REMARKS
STH 22			
122+67 - 125+00	MAINLINE	1474	MAINLINE PAVEMENT
125+00 - 130+50	MAINLINE	2739	MAINLINE PAVEMENT
ITEM TOTAL		4213	

DRILLED TIE BARS

STATION	LOCATION	416.0610 EACH
12TH STREET		
204+00	RT	2
203+89	LT	2
205+72	LT & RT	4
13TH STREET		
214+35	LT & RT	4
LYON STREET		
338+73L		4
E 12TH STREET/SSGT WARREN HANSEN DRIVE		
324+74W	LT	4
325+60W	LT & RT	8
329+61W	LT	4
324+05W	RT	2
	LT	2
ITEM TOTAL		36

DRIVEWAY ITEMS

STATION	LOCATION	416.0160 CONCRETE DRIVEWAY 6-INCH SY	602.0415 CONCRETE SIDEWALK 6-INCH SF	SPV.0180.21 CONCRETE DRIVEWAY VARIABLE DEPTH SY
STH 22				
122+74.1	RT	18	56	
125+56.9	LT	14	129	
125+94.5	LT	15	144	
126+33.4	RT	47	219	13
126+87.0	LT	9	150	
127+15.0	LT	5	90	
127+25.0	RT	11	104	
127+76.1	RT	9	84	
128+31.3	LT	10	85	
128+45.3	RT	9	84	
128+84.0	LT	5	89	
12TH STREET				
204+04.1	LT	19	138	
ITEM TOTAL		173	1372	13

ASPHALTIC CONCRETE PAVEMENT ITEMS

STATION - STATION	LOCATION	455.0105 ASPHALTIC MATERIAL PG58-28 TON	455.0120 ASPHALTIC MATERIAL PG64-28 TON	455.0605 TACK COAT GAL	460.1101 HMA PAVEMENT TYPE E-1 TON	460.1103 HMA PAVEMENT TYPE E-3 TON	465.0105 ASPHALTIC SURFACE TON	465.0310 ASPHALTIC CURB LF
STH 22								
122+67 - 125+00	LT & RT							
125+00 - 130+75	LT & RT	0.7	1.2	5		31		50
DRIVEWAYS/PARKING LOTS/SIDEWALKS								
122+67 - 125+00	LT						3	
125+00 - 130+75	LT & RT						29	
12TH STREET								
204+00 - 204+41		1.7	1.3	6	50			
205+39 - 205+72		1.1	0.8	3	31			
13TH STREET								
214+35 - 214+68			1.5		24			
LYON STREET								
338+72 L - 339+95 L		1.3	1	4	37			
E 12TH STREET/SSGT WARREN HANSEN DRIVE								
324+69 W - 334+91 W		2.2	6.5	25	145			
ITEM TOTAL		7.0	12.3	43	287	31	32	50

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

3

CULVERT PIPE TEMPORARY 18-INCH

STATION - STATION	LOCATION	520.4018 CULVERT PIPE TEMPORARY 18-INCH LF
E 12TH STREET/SSGT WARREN HANSEN DRIVE		
333+76 W	LT	26
ITEM TOTAL		26

UNDERDRAIN ITEMS

STATION - STATION	LOCATION	612.0106 PIPE UNDERDRAIN 6-INCH LF	645.0112 GEOTEXTILE FABRIC TYPE DF SCHEDULE B SY
STH 22			
122+67 - 125+00	LT & RT	349	175
125+00 - 130+75	LT & RT	1084	542
E 12TH STREET/SSGT WARREN HANSEN DRIVE			
333+76 W	LT		4
ITEM TOTAL		1433	721

RETAINING WALL ITEMS

STATION - STATION	LOCATION	532.0200.S WALL MODULAR BLOCK GRAVITY SF	210.0100 BACKFILL STRUCTURE CY
STH 22			
128+50 - 128+72	RT	129	9
128+76 - 129+05	RT	82	6
ITEM TOTAL		211	15

CONCRETE CURB & GUTTER ITEMS

STATION - STATION	LOCATION	601.0409 CONCRETE CURB & GUTTER 30 - INCH TYPE A LF	601.0411 CONCRETE CURB & GUTTER 30 - INCH TYPE D LF	SPV.0090.01 CONCRETE CURB & GUTTER 24 - INCH TYPE D LF	REMARKS
STH 22					
122+67 - 125+00	LT & RT	448			
123+69 - 123+91	LT			72	PARKING LOT
125+00 - 130+50	LT & RT	1077			
12TH STREET					
204+00 - 204+41	LT & RT		53	41	
205+39 - 205+72	LT & RT		68		
13TH STREET					
214+35 - 214+68	LT & RT		66		
LYON STREET					
338+72L - 339+95L	LT			138	
E 12TH STREET/SSGT WARREN HANSEN DRIVE					
324+74W	LT			8	
325+60W	LT & RT			16	
329+61W	LT			14	
ITEM TOTAL		1525	187	289	

CONCRETE SIDEWALK 4-INCH

STATION - STATION	LOCATION	602.0405 SF
STH 22		
122+67 - 125+00	LT & RT	4453
125+00 - 130+75	LT & RT	7127
12TH STREET		
202+69 - 204+41	LT & RT	570
205+40 - 207+12	LT & RT	788
13TH STREET		
214+35 - 214+69	LT& RT	400
E 12TH STREET/SSGT WARREN HANSEN DRIVE		
324+65W-324+87W	LT + RT	197
325+55W-325+64W	LT + RT	72
329+54W-329+69W	LT	106
ITEM TOTAL		13713

CURB RAMP DETECABLE WARNING FIELD YELLOW

STATION - STATION	LOCATION	602.0505 SF
STH 22		
122+67 - 125+00	LT & RT	64
125+00 - 130+75	LT & RT	32
LYON STREET/E 12TH STREET		
324+69W-324+78W	LT + RT	24
325+55W-325+64W	LT + RT	16
329+54W-329+69W	LT	16
ITEM TOTAL		152

CONCRETE STEPS

STATION - STATION	LOCATION	602.1500 SF
STH 22		
128+72 - 128+76	RT	12
ITEM TOTAL		12

CONCRETE BARRIER TEMPORARY PRECAST

STATION - STATION	LOCATION	603.8000 DELIVERED LF	603.8125 INSTALLED LF
LYON STREET			
338+72L - 339+95L	LT & RT	160	160
E 12TH STREET/SSGT WARREN HANSEN DRIVE			
333+08W - 333+49W	RT	60	60
ITEM TOTAL		220	220

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

3

EROSION CONTROL ITEMS

STATION - STATION	LOCATION	606.0100 RIPRAP LIGHT CY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.7555 CULVERT PIPE CHECKS EACH	645.0130 GEOTEXTILE FABRIC TYPE R SY
STH 22									
122+67 - 125+00	LT & RT						85		
125+00 - 130+75	LT & RT						332		
12TH STREET									
204+00 - 204+41	LT & RT						60		
13TH STREET									
214+35 - 214+68	LT & RT						70		
E 12TH STREET/SSGT WARREN HANSEN DRIVE									
332+69W - 334+91W	LT & RT	7	198	400			50	6	21
SUBTOTAL		7	198	400	0	0	597	6	21
UNDISTRIBUTED		2	50	100	6	4	149	2	5
ITEM TOTAL		9	248	500	6	4	746	8	26

ADJUSTING MANHOLE COVERS

STATION - STATION	LOCATION	611.8110 EACH
E 12TH STREET/SSGT WARREN HANSEN DRIVE		
333+08W - 333+49W	RT	2
ITEM TOTAL		2

3

FENCE SAFETY

STATION - STATION	LOCATION	616.0700.S LF
STH 22		
122+67 - 130+75	LT & RT	550
ITEM TOTAL		550

STORM SEWER PIPE

STATION - STATION	LOCATION	SPV.0090.20 PVC 6-INCH LF	SPV.0090.21 PVC 8-INCH LF	SPV.0090.22 PVC 10-INCH LF	608.0312 SSPRC-CLASS III 12-INCH LF	608.0315 SSPRC-CLASS III 15-INCH LF	608.0318 SSPRC-CLASS III 18-INCH LF	608.0336 SSPRC-CLASS III 36-INCH LF	610.0129 STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 29x45-INCH LF	REMARKS
CATEGORY 0010										
STH 22										
122+67 - 125+00	LT & RT		49		41	114		125	108	
125+00 - 130+75	LT & RT			17	100	31	81	593		
127+82	LT	58								LOCATION UNKNOWN SHALL BE FIELD VERIFIED
12TH STREET										
204+00 - 205+72	LT & RT				49					
13TH STREET										
214+42 - 214+89	LT & RT				15	35				
ITEM TOTAL		58	49	17	205	180	81	718	108	

STORM SEWER STRUCTURE ITEMS

STATION - STATION	LOCATION	611.0530 MANHOLE COVERS TYPE J EACH	611.0624 INLET COVERS TYPE H EACH	611.0639 INLET COVERS TYPE H-S EACH	611.1004 CATCH BASINS 4-FT DIAMETER EACH	611.1230 CATCH BASINS 2X3-FT EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.2006 MANHOLES 6-FT DIAMETER EACH	611.2007 MANHOLES 7-FT DIAMETER EACH	611.2055 MANHOLES 5X5-FT EACH	611.2066 MANHOLES 6X6-FT EACH
STH 22												
122+67 - 125+00	LT & RT	2	5			5				2		
125+00 - 130+75	LT & RT	6	4			4	1	1	2		1	1
12TH STREET												
204+00 - 205+72	LT & RT	1	1	1	1	1	1					
13TH STREET												
214+42 - 214+89	LT & RT	1	1	1		2	1					
ITEM TOTAL		10	11	2	1	12	3	1	2	2	1	1

WATER

STATION - STATION	LOCATION	624.0100 MGAL
STH 22		
122+67 - 125+00	LT & RT	18.4
125+00 - 130+75	LT & RT	34.2
12TH STREET		
204+00 - 204+41	LT & RT	2.8
205+39 - 205+72		1.7
13TH STREET		
214+42 - 214+89	LT & RT	1.8
UNDISTRIBUTED		17.5
ITEM TOTAL		76

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

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TURF ESTABLISHMENT ITEMS

STATION - STATION	LOCATION	625.0100 TOPSOIL SY	629.0205 FERTILIZER TYPE A CWT	630.0140 SEEDING MIXTURE NO. 40 LBS	630.0200 SEEDING TEMPORARY LB	SPV.0030.20 FERTILIZER FOR LAWN TYPE TURF CWT	SPV.0180.20 PREPARING TOPSOIL FOR LAWN TYPE TURF SY	SPV.0120.20 WATER FOR SEEDED AREAS MGAL
STH 22								
122+67 - 125+00	LT & RT	139		2.4		0.09	139	2.6
125+00 - 130+75	LT & RT	338		6.0		0.21	338	7.6
12TH STREET								
204+00 - 204+41	LT & RT	60		1.1		0.04	60	1.3
205+39 - 205+72	LT	11				0.01	11	0.3
13TH STREET								
214+35 - 214+68	LT & RT	70		1.3		0.04	70	1.6
E 12TH STREET/SSGT WARREN HANSEN DRIVE								
332+69W - 334+91W	LT & RT	60	0.051	1.5	2.2			1.8
UNDISTRIBUTED		169	0.013	3	0.6	0.10	154	3.8
ITEM TOTAL		847	0.064	15.4	2.8	0.49	772	19.0

3

INLET PROTECTION

STATION - STATION	LOCATION	628.7005 TYPE A EACH	628.7015 TYPE C EACH
STH 22			
122+67 - 125+00	LT & RT	10	5
125+00 - 130+75	LT & RT	6	4
12TH STREET			
204+00 - 205+72	LT & RT	5	2
13TH STREET			
214+42 - 214+89	LT & RT	3	2
ITEM TOTAL		24	13

TRAFFIC CONTROL

STATION - STATION	643.0300 DRUMS DAY	643.0410 BARRICADES TYPE II DAY	643.0420 BARRICADES TYPE III DAY	643.0500 FLEXIBLE TUBULAR MARKER POSTS EACH	643.0600 FLEXIBLE TUBULAR MARKER BASES EACH	643.0705 WARNING LIGHTS TYPE A DAY	643.0900 SIGNS DAY	643.3000 DETOUR SIGNS DAY
STH 22	1847	786	1179			2620	1048	3144
12TH STREET		4847	1310			6419	1834	
13TH STREET		917	655			1703	524	
7TH STREET								4847
LYON STREET				7	7		44	3406
E 12TH STREET/SSGT WARREN HANSEN DRIVE							44	5240
STH 156								3668
DETOUR								
ITEM TOTAL	1847	6550	3144	7	7	10742	3494	20305

TRAFFIC CONTROL COVERING SIGNS TYPE II

STAGE 1	643.0920 EACH	NUMBER OF CYCLES	NUMBER OF SIGNS
STAGE 1	4	1	4
ITEM TOTAL	4		

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

PERMANENT SIGNING ITEMS

SIGN NO./SIGNAL BASE	SIGN CODE	SIGN MESSAGE	SIZE	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	634.0614 POSTS WOOD 4" X 6" 14-FT EACH	634.0616 POSTS WOOD 4" X 6" 16-FT EACH	634.0816 POSTS TUBULAR STEEL 2X2-INCH 16-FT EACH	SPV.0060.20 POSTS STEEL 2 3/8-INCH DIAMETER X 14-FT EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
1-1	J13-1	CTH C/ARROW	24 X 45	7.5					1		1		
1-2	J13-2	CTH C/ARROW/STH 22/ARROW	48 X 45	15.0							1		BAND TO TRAFFIC SIGNAL
1-3		STOP (FOLDING SIGN)									1		
1-4	J4-1	STH 22 NORTH	24 X 36	6.0							1		BAND TO TRAFFIC SIGNAL
1-5		STOP (FOLDING SIGN)									1		
1-6	J13-1	CTH C/ARROW	24 X 45	7.5					1		1		
2-1	J13-1	CTH C/ARROW	24 X 45	7.5					1		1		
2-2	R1-1	STOP	30 X 30	5.2						1	1	1	
2-3	J4-1	STH 22 SOUTH	24 X 36	6.0							1		BAND TO STREET LIGHT
2-4	R2-1	SPEED LIMIT 25	24 X 30	3.0							1		
3-1	W11-2	PED CROSSING	30 X 30		6.25			1					
	W16-7L	ARROW	24 X 12		2								
3-2	W11-2	PED CROSSING	30 X 30		6.25								BAND TO POWER POLE
	W16-7L	ARROW	24 X 12		2								
3-3	W1-1L	ARROW	36 X 36		9			1					
3-4	W1-6	ARROW	48 X 24		8		1						
3-5	W1-6	ARROW	48 X 24		8		1						
3-6		ARROW									1	1	
3-7	W1-1R	ARROW	36 X 36		9			1					
3-8	W16-9P	AHEAD	24 X 12		2								BAND TO POWER POLE
SB1	R1-1F	STOP	36 X 36			7.46							FOLDING SIGN (PUSH BUTTON SIGNS ARE INCIDENTAL)
SB3	R1-1F	STOP	36 X 36			7.46							FOLDING SIGN (PUSH BUTTON SIGNS ARE INCIDENTAL)
SB5	R1-1F	STOP	36 X 36			7.46							FOLDING SIGN (PUSH BUTTON SIGNS ARE INCIDENTAL)
SB7	R1-1F	STOP	36 X 36			7.46							FOLDING SIGN (PUSH BUTTON SIGNS ARE INCIDENTAL)
ITEM TOTAL				57.68	53	29.84	2	3	3	1	11	2	

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

PAVEMENT MARKING ITEMS

STATION - STATION	LOCATION	PAVEMENT MARKING 646.0103 PAINT 4-INCH (YELLOW) LF	646.0103 PAINT 4-INCH (WHITE) LF	646.0106 EPOXY 4-INCH (YELLOW) LF	646.0106 EPOXY 4-INCH (WHITE) LF	647.0206 ARROWS BIKE LANE EPOXY EACH	647.0306 SYMBOLS BIKE LANE EPOXY EACH	647.0563 STOP LINE PAINT 18-INCH LF	647.0566 STOP LINE EPOXY 18-INCH LF	647.0656 PARKING STALL EPOXY LF	647.0723 DIAGONAL PAINT 12-INCH (WHITE) LF	647.0726 DIAGONAL EPOXY 12-INCH (WHITE) LF	647.0766 CROSSWALK EPOXY 6-INCH LF	TEMPORARY PAVEMENT MARKING 649.0400 REMOVABLE TAPE 4-INCH (YELLOW) LF	649.1200 STOP LINE REMOVABLE TAPE 18-INCH (WHITE) LF
STH 22															
122+67 - 125+00	LT & RT			282	290	2	2		45	75			354		
125+00 - 130+75	LT & RT			1008	1073	1	1			222		55	150		
12TH STREET															
204+00 - 204+41	LT & RT			128					22						
205+39 - 205+72	LT & RT			70					16						
13TH STREET															
214+35 - 214+68	LT & RT								20	15					
7TH STREET	LT & RT	370												185	
LYON STREET	LT & RT	292		1630				18			91		66	292	30
E 12TH STREET/SSGT WARREN HANSEN DRIVE	LT & RT		645	1560							370	116	213	252	21
UNDISTRIBUTED				300											
SUBTOTAL		662	645	4978	1363	3	3	18	103	312	461	171	783	729	51
ITEM TOTAL		1307		6341		3	3	18	103	312	461	171	783	729	51

CONSTRUCTION STAKING

STATION - STATION	LOCATION	650.4000 STORM SEWER EACH	650.4500 SUBGRADE LF	650.5000 BASE LF	650.5500 CURB GUTTER AND CURB & GUTTER LF	650.6000 PIPE CULVERTS EACH	650.7000 CONCRETE PAVEMENT LF	650.8000 RESURFACING REFERENCE LF	650.9920 SLOPE STAKES LF
STH 22									
122+67 - 130+75	LT & RT	17	1055	118	72		808		1055
12TH STREET									
204+00 - 205+72	LT & RT	3			162				
13TH STREET									
214+35 - 214+68	LT & RT	3			66				
LYON STREET									
338+72L - 339+95L	LT		102	102	138		98		102
E 12TH STREET/SSGT WARREN HANSEN DRIVE									
324+74W	LT				8				
325+60W	LT & RT				16				
329+61W	LT				14				
333+76W	LT					1			
332+69W - 334+91W	LT & RT		154	154			32	122	154
ITEM TOTAL		23	1311	374	476	1	938	122	1311

REMOVING PAVEMENT MARKINGS

STATION - STATION	LOCATION	646.0600 LF
7TH STREET	LT & RT	370
LYON STREET	LT & RT	88
E 12TH STREET	LT & RT	88
ITEM TOTAL		546

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

CONDUIT RIGID NOMETALLIC SCHEDULE 40

FROM - TO	652.0225 2-INCH LF	652.0235 3-INCH LF
STH 22 & 12TH ST.		
CB1 - PB1		66
PB1 - PB2	14	
PB1 - PB4		124
PB1 - SB1	14	
PB2 - PB3	83	
PB4 - PB5	25	
PB4 - PB8		122
PB4 - SB2	10	
PB4 - SB3	11	
PB5 - PB6	43	
PB6 - PB7	122	
PB8 - PB9	37	
PB8 - PB11		131
PB8 - SB4	12	
PB8 - SB5	15	
PB9 - PB10	80	
PB11 - PB12	26	
PB11 - PB15		124
PB11 - SB6	12	
PB11 - SB7	9	
PB12 - PB13	45	
PB13 - PB14	166	
PB15 - CB1		63
PB15 - SB8	11	
ITEM TOTAL	735*	630*

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

3

LIGHTING CONDUIT AND WIRE ITEMS

FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 3-INCH LF	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG LF	655.0625 6AWG LF
CATEGORY 0020					
EXISTING	SL200	47			822
SL200	LPB200	37			72
LPB200	EXISTING	17			624
EXISTING	SL201	79			678
SL101	SL100	120		792	
SL103	SL102	162		1,044	
SL102	LPB105	61		438	
SL100	LPB103	163		1,050	
LPB103	LPB102	71		498	
LPB102	LPB101		149	1,932	
LPB101	LCB100		7	114	
LPB101	LCB100		7	114	
LCB100	LPB100		10	66	
LCB100	LPB100		10		
LPB100	EXISTING SI	7		57	
LPB102	LPB104		62	888	
LPB104	LPB105	85		582	
LPB104	SL105	243		1,530	
SL105	SL106	132		432	
SL106	STUB	220			
LPB102	SL104	112		744	
SL104	LPB106	229		723	
LPB106	SL107	230		726	
SL107	EXISTING	17			
ITEM TOTAL		2032*	245*	11730	2196

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

PULL BOXES STEEL 24X42-INCH

PULLBOX NUMBER	STATION	LOCATION	653.0140 EACH	REMARKS
STH 22				
PB14	121+55.00	28.0' RT	1	TRAFFIC SIGNALS
PB13	123+20.00	28.0' RT	1	TRAFFIC SIGNALS
PB12	123+65.00	29.0' RT	1	TRAFFIC SIGNALS
PB15	123+89.65	36.9' LT	1	TRAFFIC SIGNALS
PB11	123+90.35	29.0' RT	1	TRAFFIC SIGNALS
PB8	124+54.60	24.2' RT	1	TRAFFIC SIGNALS
PB4	124+59.25	37.0' LT	1	TRAFFIC SIGNALS
PB5	124+82.00	27.8' LT	1	TRAFFIC SIGNALS
PB6	125+25.00	27.8' LT	1	TRAFFIC SIGNALS
PB7	126+46.65	27.8' LT	1	TRAFFIC SIGNALS
12TH STREET				
PB3	202+74.00	23.0' RT	1	TRAFFIC SIGNALS
PB2	204+26.65	23.5' RT	1	TRAFFIC SIGNALS
PB1	204+41.00	23.5' RT	1	TRAFFIC SIGNALS
PB9	205+60.00	22.9' LT	1	TRAFFIC SIGNALS
PB10	207+10.00	23.0' LT	1	TRAFFIC SIGNALS
ITEM TOTAL			15*	

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

PULL BOXES STEEL 24X42-INCH

PULLBOX NUMBER	STATION	LOCATION	653.0140 EACH	REMARKS
CATEGORY 0020				
STH 22				
LPB200	120+37	LT	1	LIGHTING
LPB105	123+73	RT	1	LIGHTING
LPB103	124+01	LT	1	LIGHTING
LPB106	124+04	LT	1	LIGHTING
LPB104	124+58	RT	1	LIGHTING
LPB102	124+68	LT	1	LIGHTING
12TH STREET				
LPB100	203+05	LT	1	LIGHTING
LPB101	203+21	LT	1	LIGHTING
			8*	

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

LOOP DETECTOR ITEMS

STATION	LOOP NUMBER	LOCATION	SIZE	TURNS EACH	652.0800 CONDUIT LOOP DETECTOR LF	652.0900 LOOP DETECTOR SLOTS LF	655.0700 LOOP DETECTOR LEAD IN CABLE LF	655.0800 LOOP DETECTOR WIRE LF
STH 22								
121+71	61	10.0' RT	6 X 10	4	48		409	256
126+55	21	6.0' LT	6 X 6	4	44		364	340
12TH STREET								
202+74	41	6.0' RT	6 X 6	4	38	36	247	216
204+27	42	10.0' RT	6 X 20	3	63		78	237
204+57	43	10.0' RT	6 X 20	3	63		48	237
207+17	81	6.0' LT	6 X 6	4	40	38	426	224
205+63	82	10.0' LT	6 X 20	3	62	28	259	234
205+33	83	7.5' LT	6 X 20	3	66		259	246
ITEM TOTAL					424	102	2090	1990

CONCRETE BASES

SIGNAL BASE NUMBER	STATION	LOCATION	654.0101 TYPE 1 EACH	654.0102 TYPE 2 EACH
STH 22				
SB8	123+80	31.4' LT		1
SB7	123+81	24.7' RT	1	
SB4	124+67	25.0' RT		1
SB3	124+68	29.5' LT	1	
12TH STREET				
SB1	204+54	27.8' RT	1	
SB2	204+54	30.0' LT		1
SB6	205+34	25.0' RT		1
SB5	205+34	20.9' LT		1
ITEM TOTAL			3	5

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

STREET LIGHT ITEMS

LIGHT NUMBER	STATION	LOCATION	654.0105 CONCRETE BASES TYPE 5 EACH	SPV.0060.25 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE BROWN EACH	SPV.0060.26 POLES TYPE 5 ALUMINUM BROWN EACH	SPV.0060.27 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT - BROWN EACH	SPV.0060.28 LUMINAIRES UTLITY LED CATEGORY C BROWN EACH	SPV.0060.29 DECORATIVE LIGHTING UNIT EACH	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG EACH
CATEGORY 0020									
SL100	122+51	LT						1	192
SL101	121+32	LT						1	192
SL102	123+12	RT						1	192
SL103	121+51	RT						1	192
SL104	125+75	LT						1	192
SL105	127+00	RT						1	192
SL106	128+31	RT	1	1	1	1	1		138
SL107	130+33	LT	1	1	1	1	1		138
SL200	119+99	LT						1	192
SL201	120+16	RT						1	192
ITEM TOTAL			2	2	2	2	2	8	1812*

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CABLE TRAFFIC SIGNAL 12-14 AWG SCHEDULE

FROM	TO	655.0260 LF
STH 22 & 12TH ST.		
CB1	SB1	81
CB1	SB2	155
CB1	SB3	156
CB1	SB4	234
CB1	SB5	238
CB1	SB6	156
CB1	SB7	153
CB1	SB8	77
ITEM TOTAL		1250

ELECTRICAL WIRE TRAFFIC SIGNALS

FROM - TO	655.0515 10 AWG (EQUIPMENT GROUNDING CONDUCTOR) LF	10 AWG (PULL BOX JUMPER) LF
STH 22 & 12TH ST.		
CB1 - SB1	66	
SB1 - SB2	126	
SB2 -SB3	45	
SB3 - SB4	124	
SB4 - SB5	51	
SB5 - SB6	131	
SB6 - SB7	45	
SB7 - SB8	122	
SB8 - CB1	62	
CB1 - PB15		35
SB2 - PB4		17
SB4 - PB8		19
SB6 - PB11		19
SB8 - PB15		18
SUBTOTAL	772	108
ITEM TOTAL	880	

TRAFFIC SIGNALS ELECTRICAL WIRE LIGHTING ITEMS

FROM	655.0305 CABLE TYPE UF 2-12 AWG GROUNDED LF	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG LF
STH 22 & 12TH ST.		
CB1 - SB2	140	
SB2 - LUMINAIRE		126
SB2 - SB4	123	
SB4 - LUMINAIRE		126
SB4 - SB5	51	
SB5 - LUMINAIRE		126
CB1 - SB8	62	
SB8 - LUMINAIRE		126
ITEM TOTAL	376	504*

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL

STATION	LOCATION	654.0217 EACH
STH 22 123+77	53.5' LT	1
ITEM TOTAL		1

CABLE TRAFFIC SIGNAL 5-14 AWG SCHEDULE

FROM	TO	655.0230 LF
STH 22 & 12TH ST.		
SB1	4A	15
	8B	15
	40940	11
SB2	8C	48
	40941	11
SB3	2A	15
	6B	15
	41122	11
SB4	6C	43
	41123	11
SB5	4B	15
	8A	15
	41061	11
SB6	4C	43
	41062	11
SB7	6A	15
	2B	15
	41000	11
SB8	2C	48
	41001	11
ITEM TOTAL		390

SAWING ASPHALT

STATION - STATION	LOCATION	690.0150 LF
STH 22		
122+67 - 123+89	LT & RT	87
125+23 - 127+68	LT & RT	292
127+71 - 128+50	RT	21
12TH STREET		
203+89 - 204+00	LT & RT	50
205+72	LT & RT	39
13TH STREET		
214+35	LT & RT	39
LYON STREET		
338+72L - 339+95L		250
E 12TH STREET/SSGT WARREN HANSEN DRIVE		
324+74W	LT	12
325+60W	LT & RT	49
329+61W	LT	18
332+69W - 333+39W	LT & RT	90
334+91W		25
ITEM TOTAL		972

ELECTRICAL SERVICE METER BREAKER PEDESTAL

STATION	LOCATION	656.0200.01 LS	REMARKS
STH 22 123+75	STH 22 & 12TH ST	1	STH 22 & 12TH ST
ITEM TOTAL		1*	

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

LIGHTING SERVICE ITEMS

CABINET NUMBER	STATION	LOCATION	656.0200.02 ELECTRICAL SERVICE METER BREAKER PEDESTAL LS	SPV.0060.21 REMOVE EXISTING LIGHTING CONTROL EACH	SPV.0060.23 CONCRETE CONTROL CABINET BASE TYPE SPECIAL EACH	SPV.0060.24 LIGHTING CONTROL CABINET EACH
CATEGORY 0020 LCB100	203+14	25.2' LT	1	1	1	1
ITEM TOTAL			1	1	1	1

CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (6250-01-76)

STATION	LOCATION	650.8500.01 LS	REMARKS
119+31 - 130+75	LT & RT	1	TRAFFIC SIGNALS AND LIGHTING
ITEM TOTAL		1	

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

3

TRAFFIC SIGNAL SCHEDULE

SIGNAL BASE NUMBER	STATION	LOCATION	657.0100 PEDESTAL BASES EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0305 POLES TYPE 2 20-FT EACH	657.0315 POLES TYPE 4 30-FT EACH	657.0420 SIGNAL STANDARDS ALUMINUM 13-FT EACH	657.0590 TROMBONE ARMS 20-FT EACH	657.0595 TROMBONE ARMS 25-FT EACH	657.0614 LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 8-FT EACH
STH 22										
SB8	123+80	31.4' LT		1		1			1	1
SB7	123+81	24.7' RT	1				1			
SB4	124+67	25.0' RT		1		1		1		1
SB3	124+68	29.5' LT	1				1			
12TH STREET										
SB1	204+54	27.8' RT	1				1			
SB2	204+54	30.0' LT		1		1			1	1
SB5	205+34	20.9' LT		1		1				1
SB6	205+34	25.0' RT		1	1			1		
ITEM TOTAL			3	5	1	4	3	2	2	4

TRAFFIC SIGNAL SCHEDULE (CON'T)

SIGNAL BASE NUMBER	STATION	LOCATION	658.0110 TRAFFIC SIGNAL FACE 3-12 INCH VERTICAL EACH	658.0155 TRAFFIC SIGNAL FACE 3-12 INCH HORIZONTAL EACH	658.0215 BACKPLATES SIGNAL FACE 3 SECTION 12-INCH EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH	658.0500 PEDESTRIAN PUSH BUTTONS EACH	658.0600 LED MODULES 12-INCH RED BALL EACH	658.0605 LED MODULES 12-INCH YELLOW BALL EACH	658.0610 LED MODULES 12-INCH GREEN BALL EACH	658.0635 LED MODULES PEDESTRIAN COUNTDOWN TIMER 16-INCH EACH	659.1115 LUMINAIRES UTILITY LED A EACH
STH 22												
SB8	123+80	31.4' LT		1	1	1	1	1	1	1	1	1
SB7	123+81	24.7' RT	2		2	1	1	2	2	2	1	
SB4	124+67	25.0' RT		1	1	1	1	1	1	1	1	1
SB3	124+68	29.5' LT	2		2	1	1	2	2	2	1	
12TH STREET												
SB1	204+54	27.8' RT	2		2	1	1	2	2	2	1	
SB2	204+54	30.0' LT		1	1	1	1	1	1	1	1	1
SB6	205+34	25.0' RT		1	1	1	1	1	1	1	1	
SB5	205+34	20.9' LT	2		2	1	1	2	2	2	1	1
ITEM TOTAL			8	4	12	8	8	12	12	12	8	4

CONCRETE SIDEWALK HES 4-INCH

STATION	LOCATION	SPV.0165.20 SF
STH 22		
123+44	36' RT	15
125+13	26' RT	51
125+66	33' RT	36
125+81	34' RT	28
ITEM TOTAL		130

GEOGRID REINFORCEMENT

STATION - STATION	LOCATION	SPV.0180.01 SY
STH 22		
122+67 - 125+00	LT & RT	1698
125+00 - 130+75	LT & RT	3278
ITEM TOTAL		4976

TREE ROOT CUTTING AND REMOVAL

STATION - STATION	LOCATION	SPV.0060.30 EACH
STH 22		
127+81.7	37.2' LT	2
128+01.0	36.9' LT	2
128+23.5	36.2' LT	2
128+66.8	37.2' LT	3
129+58.5	38.0' LT	2
130+48.3	35.3' LT	3
13TH STREET		
214+36.5	31.1' LT	2
ITEM TOTAL		16

ROOF DRAIN CLEANOUT

STATION - STATION	LOCATION	SPV.0060.31 EACH	REMARKS
CATEGORY 0030			
STH 22			
127+82	26.3' LT	1	LOCATION UNKNOWN SHALL BE FIELD VERIFIED
ITEM TOTAL		1	

TRAFFIC SIGNAL CONTROL CABINET AND CONTROLLER

LOCATION	SPV.0105.21 LS
STH 22 & 12TH ST INTERSECTION	1
ITEM TOTAL	1

SAWING CONCRETE

STATION - STATION	LOCATION	690.0250 LF
STH 22		
122+67 - 123+68	LT	103
124+73 - 124+97	RT	24
125+10 - 125+17	RT	7
126+52 - 126+60	RT	17
127+90 - 129+48	LT & RT	40
130+60 - 130+75	LT & RT	47
12TH STREET		
202+69 - 203+52	RT	174
203+89 - 204+40	LT & RT	51
205+62 - 206+27	LT & RT	95
206+79 - 207+12	LT	51
13TH STREET		
214+35	LT & RT	17
LYON STREET		
338+72L - 339+95L		24
E 12TH STREET/SSGT WARREN HANSEN DRIVE		
324+74W	LT	4
325+60W	LT & RT	8
329+61W	LT	4
ITEM TOTAL		666

REMOVE AND SALVAGE TRAFFIC SIGNALS

LOCATION	SPV.0105.20 LS
STH 22 & 12TH ST INTERSECTION	1
ITEM TOTAL	1

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

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6250-01-26 - 4.01
SHEET 2 OF 2
AMENDMENT NO:

4

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

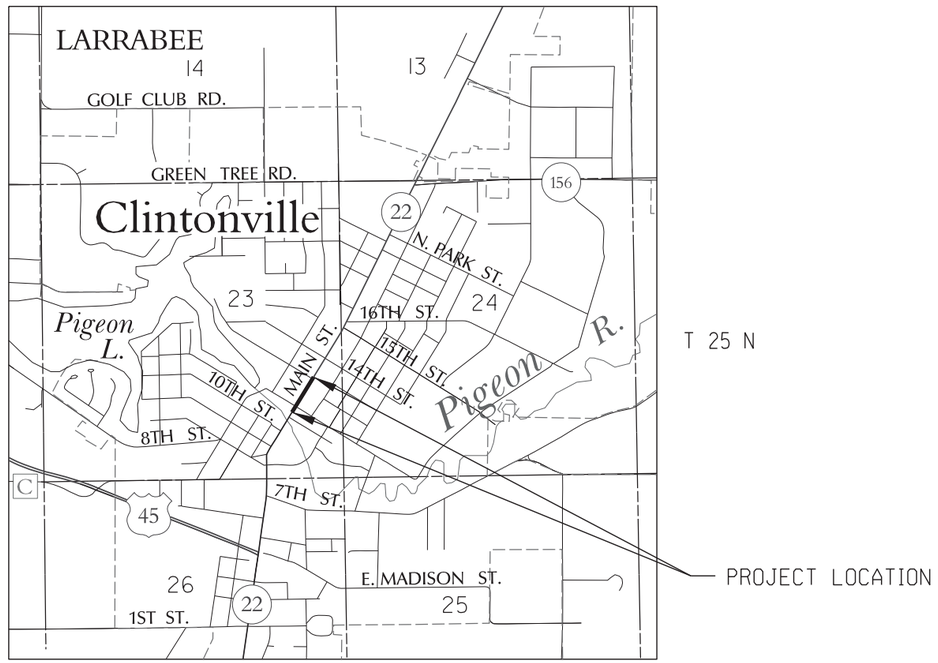
TRANSPORTATION PROJECT PLAT TITLE SHEET

PROJECT NO. 6250-01-26

C CLINTONVILLE, MAIN STREET
(11TH STREET TO 13TH STREET)

STH 22
WAUPACA COUNTY







LAYOUT
SCALE 0 0.5 MI.

NOTES:

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, WAUPACA COUNTY ZONE, NAD83 ((2007) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD".

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 22 ESTABLISHED FROM THE PLAT OF THE VILLAGE OF CLINTONVILLE, CLINTON AND WAY'S ADDITION TO CLINTONVILLE, CERTIFIED SURVEY MAP 1983, AND CERTIFIED SURVEY MAP 5741. EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CERTIFIED SURVEY MAP 4095 AND CENTERLINE OF EXISTING PAVEMENTS.

A **TEMPORARY LIMITED EASEMENT** (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A **PERMANENT LIMITED EASEMENT** (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

A **HIGHWAY EASEMENT** (HE) IS AN EASEMENT FOR HIGHWAY PURPOSES, AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

DISTANCES SHOWN TO BUILDINGS ARE APPROXIMATE.

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.	**CURVE DATA**	
HIGHWAY EASEMENT	H.E.	LONG CHORD	LCH
LAND CONTRACT	LC	LONG CHORD BEARING	LCB
MONUMENT	MON.	RADIUS	R
PAGE	P.	DEGREE OF CURVE	D
PERMANENT LIMITED EASEMENT	PLE	CENTRAL ANGLE OR DELTA	DELTA
PROPERTY LINE	PL	LENGTH OF CURVE	L
RECORDED AS	(100')	TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	LE (1" UNLESS NOTED)	PROPOSED R/W LINE	
		EXISTING H.E. LINE	
R/W MONUMENT	●(SET)	PROPERTY LINE	
R/W STANDARD	▲(SET)	LOT & TIE LINES	
SIGN	SIGN	SLOPE INTERCEPTS	
SECTION CORNER MONUMENT		CORPORATE LIMITS	
SECTION CORNER SYMBOL		NO ACCESS (BY PREVIOUS ACQUISITION/CONTROL)	
FEE (HATCH VARIES)		NO ACCESS (BY ACQUISITION)	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
PERMANENT LIMITED EASEMENT		SECTION LINE	
R/W BOUNDARY POINT	RWB20	QUARTER LINE	
PARCEL NUMBER	102	SIXTEENTH LINE	
UTILITY PARCEL NUMBER	92	EXISTING CENTERLINE	
SIGN NUMBER (OFF PREMISE)	21-1	PROPOSED REFERENCE LINE	
BUILDING		PARALLEL OFFSET	

CONVENTIONAL UTILITY SYMBOLS

	NON COMPENSABLE	COMPENSABLE
WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES	OH	
ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

cbs2
5[illegible] COUNTY HWY RD.
C 73 W154729

TRANSPORTATION PROJECT PLAT NO: 6250-01-26 - 4.01 AMENDMENT NO: 2
AMENDS PARCEL NO: 8 OF TRANSPORTATION PROJECT PLAT 6250-01-26 - 4.01 AMENDMENT NO. 1
RECORDED AS DOCUMENT NO: 816610 IN PLAT FILE C-80

C CLINTONVILLE, MAIN STREET (11TH STREET TO 13TH STREET)

PART OF LOTS 2, 3 AND 4, BLOCK N, PLAT OF THE VILLAGE OF CLINTONVILLE, PART OF LOTS 9 AND 10, BLOCK 2, CLINTON AND WAY'S ADDITION TO CLINTONVILLE, LOCATED IN AND INCLUDING PART OF THE SE 1/4 OF THE SE 1/4, PART OF LOTS 1 AND 2, BLOCK M, PLAT OF THE VILLAGE OF CLINTONVILLE, PART OF LOTS 1 AND 2 OF CSM 1983-6-252, PART OF LOTS 12, 13, 14 AND 15, BLOCK 1, CLINTON AND WAY'S ADDITION TO CLINTONVILLE, LOCATED IN AND INCLUDING PART OF THE NE 1/4 OF THE SE 1/4, ALL IN SECTION 23, T25N, R14E, CITY OF CLINTONVILLE, WAUPACA COUNTY, WISCONSIN.

RELOCATION ORDER STH 22, WAUPACA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF CLINTONVILLE DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09 AND 62.22 WISCONSIN STATUTES, THE CITY OF CLINTONVILLE HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF CLINTONVILLE, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

EASEMENT TABLE		
UTILITY	RECORDING INFORMATION	PARCEL
200	NO RECORDED EASEMENT	1

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
200	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

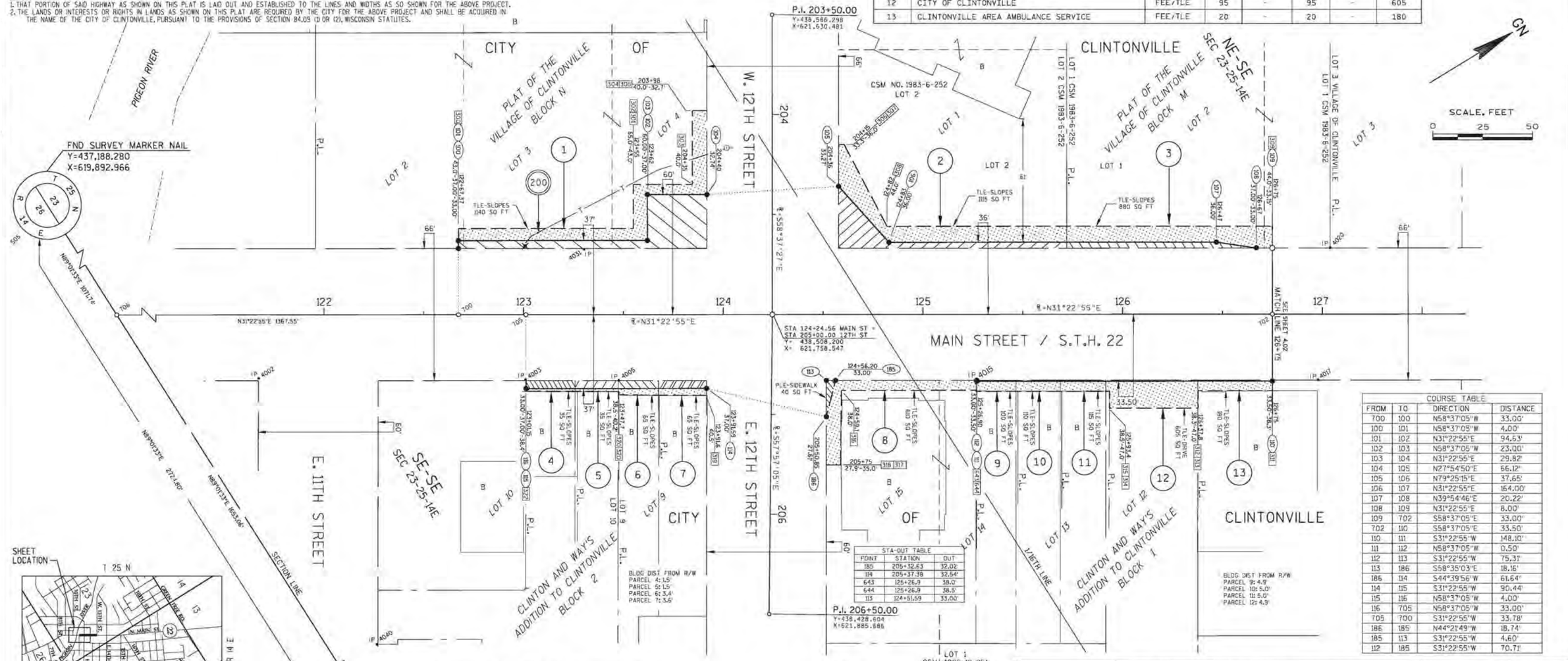
PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	EXISTING	TOTAL	PLE S.F.	TLE S.F.
1	REDEVELOPMENT AUTHORITY CITY OF CLINTONVILLE	FEE/TLE	1185	-	1185	-	1140
2	FOX COMMUNITIES CREDIT UNION	FEE/TLE	695	-	695	-	1115
3	THE LANDMARK MOTEL, LLC	FEE/TLE	255	-	255	-	880
4	JOHN AND CAROLE DeWOLF	FEE/TLE	100	-	100	-	35
5	JAMES A. McCORMICK	FEE/TLE	85	-	85	-	35
6	RICHARD & SANDRA PFEFFERMAN	FEE/TLE	80	-	80	-	65
7	CLINTONVILLE AREA CHAMBER OF COMMERCE, INC	FEE/TLE	95	-	95	-	85
8	UNITED STATES OF AMERICA (POST OFFICE)	PLE/TLE	-	-	-	40	610
9	KATHY REISSMANN	FEE/TLE	10	-	10	-	100
10	GERARD J. & PAM O'CONNOR	FEE/TLE	10	-	10	-	110
11	GREGORY C. & PATRICIA L. ROSE	FEE/TLE	10	-	10	-	115
12	CITY OF CLINTONVILLE	FEE/TLE	95	-	95	-	605
13	CLINTONVILLE AREA AMBULANCE SERVICE	FEE/TLE	20	-	20	-	180

824350

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN WAUPACA COUNTY, WISCONSIN AT 2:50 PM ON July 8, 2014 AS DOCUMENT # 824350 AND FILED IN C-80

Michael Mazemke
SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6250-01-26-4.01
SHEET 1 OF 2
AMENDMENT NO: 2



STA-OUT TABLE		
POINT	STATION	OUT
185	205+32.63	32.02'
114	205+37.38	32.54'
643	125+26.9	38.0'
644	125+26.9	38.5'
113	124+51.59	33.00'

COURSE TABLE			
FROM	TO	DIRECTION	DISTANCE
700	100	N58°37'05"W	33.00'
100	101	N58°37'05"W	4.00'
101	102	N31°22'55"E	94.53'
102	103	N58°37'05"W	23.00'
103	104	N31°22'55"E	29.82'
104	105	N27°54'50"E	66.12'
105	106	N79°25'15"E	37.65'
106	107	N31°22'55"E	164.00'
107	108	N39°54'46"E	20.22'
108	109	N31°22'55"E	8.00'
109	702	S58°37'05"E	33.00'
702	110	S58°37'05"E	33.50'
110	111	S31°22'55"W	148.10'
111	112	N58°37'05"W	0.50'
112	113	S31°22'55"W	75.31'
113	186	S58°35'03"E	18.16'
186	114	S44°39'56"W	61.64'
114	115	S31°22'55"W	90.44'
115	116	N58°37'05"W	4.00'
116	705	N58°37'05"W	33.00'
705	700	S31°22'55"W	33.78'
186	185	N44°21'49"W	18.74'
185	113	S31°22'55"W	4.60'
112	185	S31°22'55"W	70.71'

BLDG DIST FROM R/W
PARCEL 4: 1.5'
PARCEL 5: 1.5'
PARCEL 6: 3.4'
PARCEL 7: 3.6'

BLDG DIST FROM R/W
PARCEL 9: 4.9'
PARCEL 10: 5.0'
PARCEL 11: 5.0'
PARCEL 12: 4.9'

RECOVERED MONUMENTS			
POINT	Y	X	DESCRIPTION
4002	438271.99	621651.74	CHISELED 'X' IN CONC.
4003	438385.68	621721.94	1" REBAR
4005	438425.40	621746.59	1" IRON PIPE
4006	438436.87	621927.23	CHISELED 'X' IN CONC. SQ.
4015	438578.04	621839.85	CHISELED 'X' IN CONC.
4017	438724.41	621928.90	3/4" REBAR
4020	438764.04	621875.73	3/4" REBAR
4031	438444.69	621681.59	CHISELED 'X' IN CONC.
4040	438253.19	621796.25	CHISELED 'X' IN CONC.

ROAD NAME	BASIS OF EXISTING R/W	YEAR
STH 22	PLAT OF THE VILLAGE OF CLINTONVILLE	1872
STH 22	CLINTON AND WAY'S ADD. TO CLINTONVILLE	1899
STH 22	CSM 1983, V.6 P.252	1984
12TH ST.	CSM 4095, V.12 P.251	1995

SHEET LOCATION



LOCATION SKETCH
NOT TO SCALE

FND SPIKE OVER STONE W/ NOTCH
Y=437,234.605
X=622,617.371

cbs²
515 W. PRAIRIE VIEW ROAD
CHIPPEWA FALLS, WI 54729

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

NEIL C. BOWE — PRINTED NAME
SIGNATURE
6-25-14 — DATE

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF CLINTONVILLE

LISA A. KOTTER — PRINTED NAME
SIGNATURE
06-25-14 — DATE

WISCONSIN
NEIL C. BOWE
S-2827
CHIPPEWA FALLS WI
LAND SURVEYOR

FILE NAME : P:\WIDOT\11003 - STH 22\Cad\6250-01-76 (11th -13th)\RDSTH22001-amendment2.dgn
APPRAISAL PLAT DATE : 6-1-13
PLOT DATE : 6/25/2014

WISDOT/CADDS SHEET 70

TRANSPORTATION PROJECT PLAT NO: 6250-01-26 - 4.02

C CLINTONVILLE, MAIN STREET (11TH STREET TO 13TH STREET)

PART OF LOTS 2, 3, 4 AND 5 BLOCK M, PLAT OF THE VILLAGE OF CLINTONVILLE, PART OF LOT 2 OF CSM 1983-6-252, PART OF LOT 1, BLOCK L, PLAT OF THE VILLAGE OF CLINTONVILLE, PART OF LOT 2 OF CSM 5741-19-315, LOCATED IN AND INCLUDING PART OF THE NE 1/4 OF THE SE 1/4, ALL IN SECTION 23, T25N. R14E, CITY OF CLINTONVILLE, WAUPACA COUNTY, WISCONSIN.

RELOCATION ORDER STH 22, WAUPACA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF CLINTONVILLE DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09 AND 62.22 WISCONSIN STATUTES, THE CITY OF CLINTONVILLE HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF CLINTONVILLE, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

ROAD NAME	BASIS OF EXISTING R/W	YEAR
STH 22	PLAT OF THE VILLAGE OF CLINTONVILLE	1872
STH 22	CLINTON AND WAY'S ADD. TO CLINTONVILLE	1899
STH 22	CSM 1983, V.6 P.252	1984
STH 22	CSM 5741, V.19 P.315	2002

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	R/W S.F. REQUIRED EXISTING	R/W S.F. REQUIRED TOTAL	PLE S.F.	TLE S.F.
3	THE LANDMARK MOTEL, LLC.	TLE	-	-	-	-	260
13	CLINTONVILLE AREA AMBULANCE SERVICE	FEE/TLE	365	-	365	-	720
15	CHRISTOPHER & THERESE GILLING	TLE	-	-	-	-	595
16	GARY & CHERYL SMITH	TLE	-	-	-	-	595
17	MARK & DESIREE ARNESON	TLE	-	-	-	-	595
18	JESSE & WENDY KRUEGER	TLE	-	-	-	-	755
19	BOARD OF TRUSTEES FIRST METHODIST CHURCH	TLE	-	-	-	-	705
20	DONALD A.& MARY A. JIRSCHELE	FEE/TLE	265	-	265	-	800
21	LAWRENCE HETCHLER	FEE/TLE	220	-	220	-	815
22	ADDISON REALTY CORPORATION AND CLINTONVILLE CASTLEBERG, LLC	FEE/TLE	285	-	285	-	1300

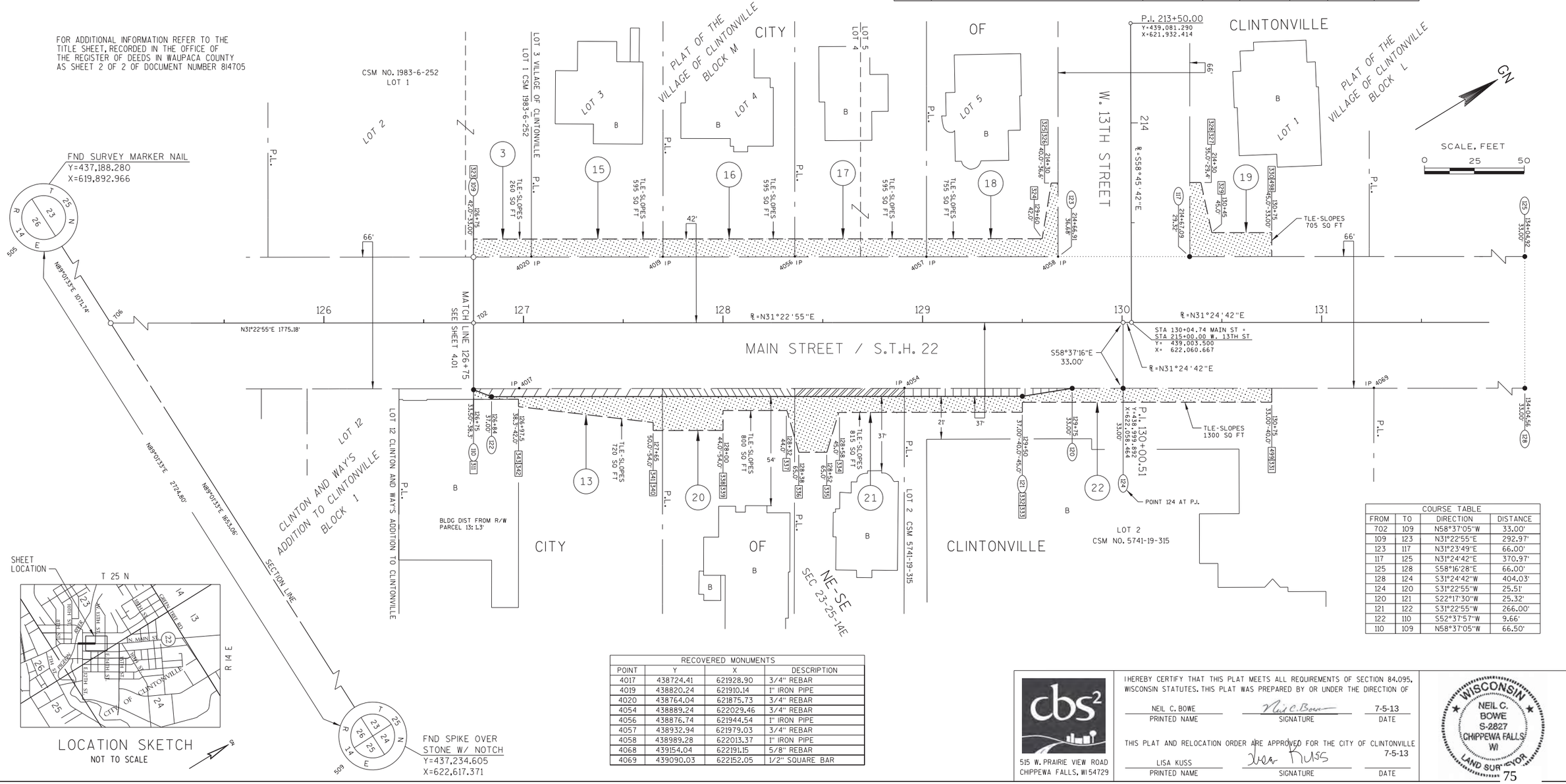
814852

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN WAUPACA COUNTY, WISCONSIN AT 10:00AM ON July 9, 2013 AS DOCUMENT # 814852 AND FILED IN Cabs

Michael Mazemke
SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6250-01-26-4.02
AMENDMENT NO:

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN WAUPACA COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 814705



COURSE TABLE			
FROM	TO	DIRECTION	DISTANCE
702	109	N58°37'05"W	33.00'
109	123	N31°22'55"E	292.97'
123	117	N31°23'49"E	66.00'
117	125	N31°24'42"E	370.97'
125	128	S58°16'28"E	66.00'
128	124	S31°24'42"W	404.03'
124	120	S31°22'55"W	25.51'
120	121	S22°17'30"W	25.32'
121	122	S31°22'55"W	266.00'
122	110	S52°37'57"W	9.66'
110	109	N58°37'05"W	66.50'

RECOVERED MONUMENTS			
POINT	Y	X	DESCRIPTION
4017	438724.41	621928.90	3/4" REBAR
4019	438820.24	621910.14	1" IRON PIPE
4020	438764.04	621875.73	3/4" REBAR
4054	438889.24	622029.46	3/4" REBAR
4056	438876.74	621944.54	1" IRON PIPE
4057	438932.94	621979.03	3/4" REBAR
4058	438989.28	622013.37	1" IRON PIPE
4068	439154.04	622191.15	5/8" REBAR
4069	439090.03	622152.05	1/2" SQUARE BAR

cbs2
515 W. PRAIRIE VIEW ROAD
CHIPPEWA FALLS, WI 54729

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

NEIL C. BOWE	Neil C. Bowe	7-5-13
PRINTED NAME	SIGNATURE	DATE

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF CLINTONVILLE

LISA KUSS	Lisa Kuss	7-5-13
PRINTED NAME	SIGNATURE	DATE

WISCONSIN
NEIL C. BOWE
S-2827
CHIPPEWA FALLS
WI
LAND SURVEYOR

FILE NAME : P:\WIDOT\11003 - STH 22\Cad\6250-01-76 (11th -13th)\RDSTH22002.dgn
APPRAISAL PLAT DATE : 6-1-13
PLOT DATE : 7/5/2013

TRANSPORTATION PROJECT PLAT NO: 6250-01-26 - 4.03 AMENDMENT NO. 1 RENUMBERS PARCEL NO: 1 & 2 TO 23 & 24 OF TRANSPORTATION PROJECT PLAT 6250-01-26 - 4.03 RECORDED AS DOCUMENT NO: 820294 IN PLAT FILE C-80

C CLINTONVILLE, MAIN STREET (11TH STREET TO 13TH STREET)

PART OF LOT 1 CSM 6646, V. 24, P. 120, LOTS 2 AND 3, CSM 6108, V. 21, P. 225, LOCATED IN AND INCLUDING PART OF THE SW 1/4 OF THE SW 1/4 AND THE SE 1/4 OF THE SW 1/4, SECTION 24, PART OF LOT 1 CSM 6646, V. 24, P. 120, LOCATED IN AND INCLUDING PART OF THE NW 1/4 OF THE NW 1/4, SECTION 25, T25N, R14E, CITY OF CLINTONVILLE, WAUPACA COUNTY, WISCONSIN.

RELOCATION ORDER STH 22, WAUPACA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF CLINTONVILLE DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09 AND 62.22 WISCONSIN STATUTES, THE CITY OF CLINTONVILLE HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF CLINTONVILLE, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN WAUPACA COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 814705

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

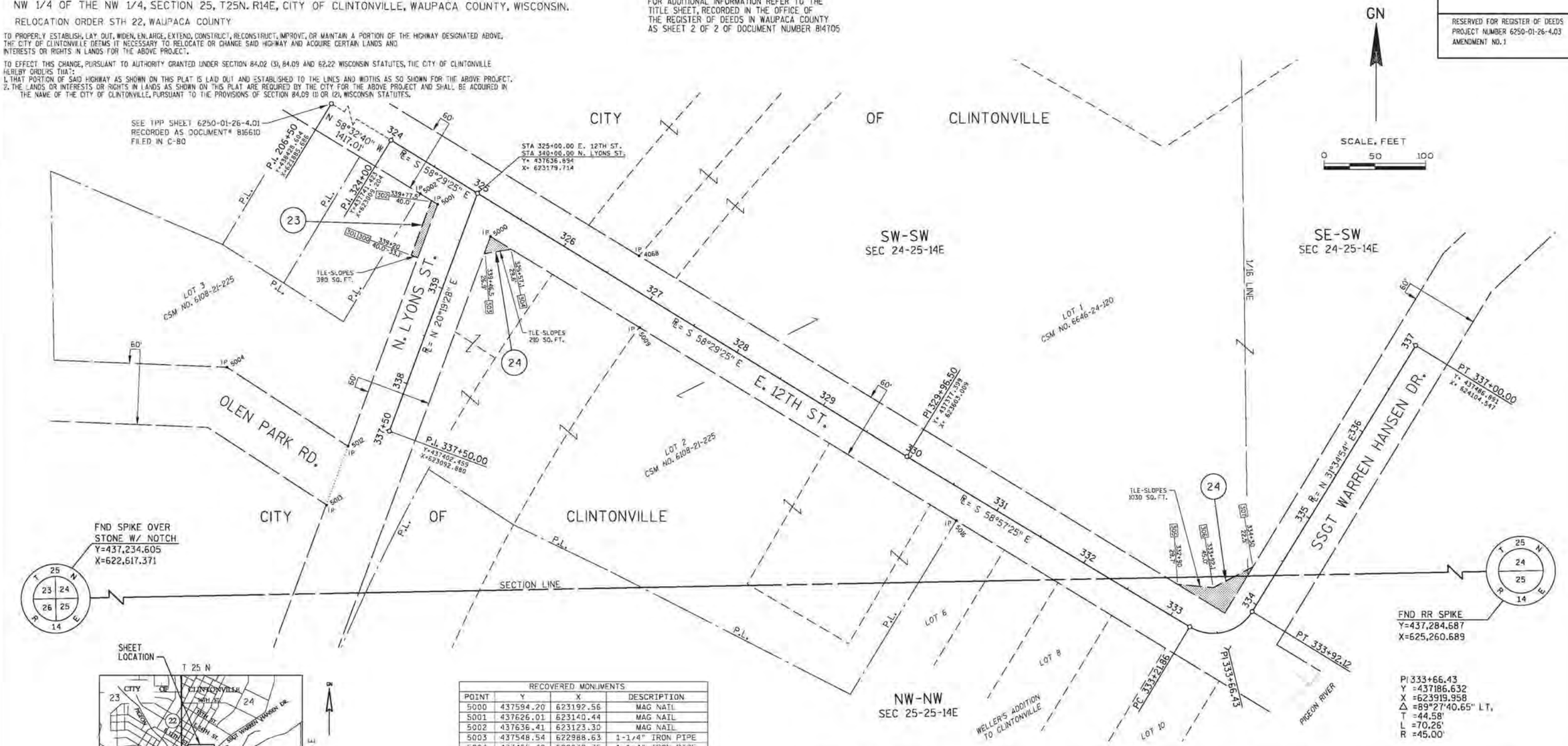
PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W SQ.FT. REQUIRED			TLE SQ.FT.
			NEW	EXISTING	TOTAL	
23	CITY OF CLINTONVILLE REDEVELOPMENT AUTHORITY	TLE	-	-	-	390
24	SEAGRAVE FIRE APPARATUS, LLC.	TLE	-	-	-	1240

820554

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN WAUPACA COUNTY, WISCONSIN AT 2:08P.M ON February 4, 2014 AS DOCUMENT # 820554 AND FILED IN C-80

Michael Mazemke
SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6250-01-26-4.03
AMENDMENT NO. 1



SHEET LOCATION



LOCATION SKETCH
NOT TO SCALE

RECOVERED MONUMENTS			
POINT	Y	X	DESCRIPTION
5000	437594.20	623192.56	MAG NAIL
5001	437626.01	623140.44	MAG NAIL
5002	437636.41	623123.30	MAG NAIL
5003	437548.54	622988.63	1-1/4" IRON PIPE
5004	437465.40	622932.75	1-1/4" IRON PIPE
5005	437364.92	623131.35	MAG NAIL
5007	437310.20	623215.16	1" IRON PIPE
5008	437575.32	623338.94	1" IRON PIPE
5009	437504.49	623339.61	MAG NAIL
5012	437387.61	623052.09	MAG NAIL
5013	437329.65	623030.80	3/4"REBAR
5015	437263.74	623311.38	1" IRON PIPE
5016	437314.19	623651.74	1" IRON PIPE
5023	437147.28	623538.98	1" IRON PIPE

BASIS OF R/W	
INSTRUMENT	YEAR
CSM 6646, V.24, PG.12	2006
CSM 6108, V.21, PG.225	2003
CSM 5177, V.17, PG.3	1999
PLAT OF DORAU'S ADDITION	1918
WELLER'S ADDITION TO CLINTONVILLE	1911

cbs²
515 W. PRAIRIE VIEW ROAD
CHIPPEWA FALLS, WI 54729

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

NEIL C. BOWE — PRINTED NAME — SIGNATURE — 2-3-14 DATE

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF CLINTONVILLE

LISA KUSS — PRINTED NAME — SIGNATURE — 2-3-14 DATE

WISCONSIN NEIL C. BOWE S-2827 CHIPPEWA FALLS WI LAND SURVEYOR

FILE NAME : P:\WIDOT\11003 - STH 22\Cad\6250-01-76 (Detour Route)\RDSTH22Detour001-amend.dgn
APPRAISAL PLAT DATE :

PLOT DATE : 2/3/2014

LEGEND

(2) TYPE 2 CURB RAMP SEE "PEDESTRIAN CURB RAMP" DETAIL

X TREE REMOVAL

BENCHMARK TABLE

NO.	STATION	DESCRIPTION	ELEVATION
100	124+50.57, 38.9'LT	TOP NUT ON HYD/NW QUAD OF STH 22 AND W. 12TH ST	812.57
114	126+99.96, 36.2'RT	PK IN PP, NW CORNER OF CLINTONVILLE AREA AMBULANCE	820.18

FRONTIER COMMUNICATIONS (UG FIBER OPTIC)
CHARTER COMMUNICATIONS (OH COMMUNICATIONS ATTACHED)
FRONTIER COMMUNICATIONS (UG TELEPHONE)
CONSTRUCTION PERMIT LIMITS STA 123+40 TO STA 123+55, 65'LEFT
REFER TO 6250-01-70
REFER TO PLAN 6250-01-77 FOR REMAINDER OF SAWCUT LOCATION AND CONSTRUCTION PERMIT LIMIT
ABANDONED EXTRACTION WELL
CITY OF CLINTONVILLE (WATER MAIN)
SANITARY CLEAN-OUT
S 58°37'27" E
S. 12TH ST
204+00
19.5'
19.0'
BEGIN HMA PAVEMENT STA 203+89.20 SAWCUT REQ'D
+91.1
STA 204+04.10 LT CONSTRUCT ASPH CE
END HMA PAVEMENT
BEGIN CONCRETE PAVEMENT STA 204+41.00
STA 125+56.9 LT CONSTRUCT 21.1' WIDE ASPH CE
SIGN, SHRUBS & LANDSCAPE ROCK TO REMAIN
BM100
CAUTION
STA 125+94.5 LT CONSTRUCT 24.0' WIDE ASPH CE
STA 126+87.0 LT CONSTRUCT 24.0' WIDE ASPH CE
WE ENERGIES (GAS MAIN)
SAWCUT 39'LT
CITY OF CLINTONVILLE (SANITARY SEWER)
STA 127+15.0 LT CONSTRUCT 12.0' WIDE ASPH PE
SIGN & PLANTER TO REMAIN
SAWCUT 37'LT
SLOPE INTERCEPTS (TYP)
STA 128+31.3 LT CONSTRUCT 12.0' WIDE CONC PE
STA 128+84.1 LT CONSTRUCT 12.0' WIDE AGG PE
122+00
123+00
124+00
125+00
126+00
127+00
STH 22 (N MAIN ST)
128+00
24.0'
23.0'
18.0'
17.0'
MATCHLINE STA 129+00
N 31°22'55" E
FLAG POLE & SHRUBS TO REMAIN
STEPS, SHRUBS & RAMP TO REMAIN
CITY OF CLINTONVILLE (OH ELECTRIC)
ABANDONED EXTRACTION PIPING
D.E.N SERVICES INC
JUST ONE MORE
CLINTONVILLE AMBULANCE BUSINESS OFFICE
CLINTONVILLE CHAMBER OF COMMERCE
POST OFFICE
H & R BLOCK
ULTRACOM WIRELESS
CLINTONVILLE CHRONICLE
CLINTONVILLE AREA AMBULANCE SERVICE
FLAG POLES
BM114
18.9'
STA 124+24.56 STH 22 = STA 205+00.00 W & E 12TH STREET
END CONCRETE PAVEMENT
BEGIN HMA PAVEMENT STA 205+38.45
END HMA PAVEMENT STA 205+72.00 SAWCUT REQ'D
STA 122+74.1 RT CONSTRUCT 30.0' WIDE ASPH CE
AUTO SERVICE PLUS
BEGIN PROJECT STA 122+67.37 MATCH PROJECT ID 6250-01-70
REFER TO 6250-01-70
S 57°57'05" E
E. 12TH ST
206+00
STA 126+33.4 RT CONSTRUCT 39.0' WIDE ASPH CE
STA 127+25.0 RT CONSTRUCT 16.0' WIDE ASPH CE
STA 127+76.1 RT CONSTRUCT 12.0' WIDE ASPH PE
STA 128+45.4 RT CONSTRUCT 12.0' WIDE ASPH PE
RETAINING WALL REQ'D (SEE DETAIL)
CONCRETE STEPS (SEE DETAIL)

5 5

830 825 820 815 810 805 800 795

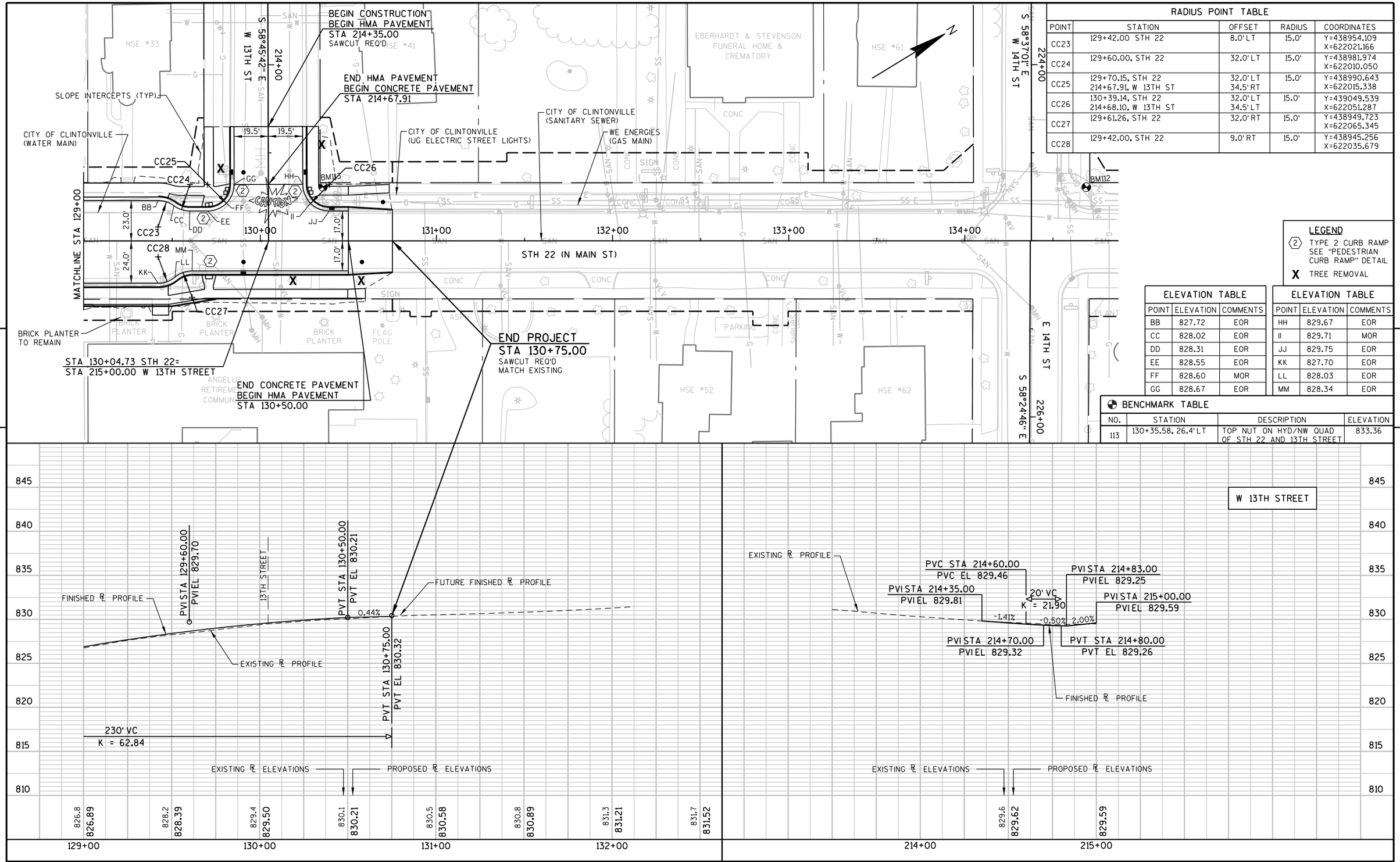
REFER TO 6250-01-70
100' VC
K = 37.36
1.91%
PVI STA 121+92.00
PVI EL 803.78
PVT STA 122+42.00
PVT EL 804.73
PVI STA 123+75.00
PVI EL 807.27
℄ 12TH STREET
2.66%
80' VC
K = 58.02
PVC STA 124+70.00
PVC EL 809.80
PVI STA 125+10.00
PVI EL 810.87
EXISTING ℄ PROFILE
PVT STA 125+50.00
PVT EL 812.49
FINISHED ℄ PROFILE
4.04%
PVI STA 127+00.00
PVI EL 818.55
4.29%
PVC STA 128+45.00
PVC EL 824.77

EXISTING ℄ ELEVATIONS — PROPOSED ℄ ELEVATIONS

804.9	804.17	805.6	804.89	806.5	805.84	807.4	806.79	808.3	807.94	809.3	809.27	811.0	810.68	812.8	812.49	814.7	814.51	816.4	816.53	818.5	818.55	820.7	820.69	822.8	822.84	824.8	824.98	826.8	826.89

122+00 123+00 124+00 125+00 126+00 127+00 128+00 129+00

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	PLAN AND PROFILE	SHEET 77	E



RADIUS POINT TABLE

POINT	STATION	OFFSET	RADIUS	COORDINATES
CC23	129+42.00 STH 22	8.0' LT	15.0'	Y=438954.109 X=622021.166
CC24	129+60.00, STH 22	32.0' LT	15.0'	Y=438981.974 X=622010.050
CC25	129+70.15, STH 22 214+67.91, W 13TH ST	32.0' LT 34.5' RT	15.0'	Y=438990.643 X=622015.338
CC26	130+39.14, STH 22 214+68.10, W 13TH ST	32.0' LT 34.5' LT	15.0'	Y=439049.539 X=622051.287
CC27	129+61.26, STH 22	32.0' RT	15.0'	Y=438949.723 X=622065.345
CC28	129+42.00, STH 22	9.0' RT	15.0'	Y=438945.256 X=622035.679

LEGEND

(2) TYPE 2 CURB RAMP SEE "PEDESTRIAN CURB RAMP" DETAIL

X TREE REMOVAL

ELEVATION TABLE

POINT	ELEVATION	COMMENTS
BB	827.72	EOR
CC	828.02	EOR
DD	828.31	EOR
EE	828.55	EOR
FF	828.60	MOR
GG	828.67	EOR

ELEVATION TABLE

POINT	ELEVATION	COMMENTS
HH	829.67	EOR
II	829.71	MOR
JJ	829.75	EOR
KK	827.70	EOR
LL	828.03	EOR
MM	828.34	EOR

BENCHMARK TABLE

NO.	STATION	DESCRIPTION	ELEVATION
113	130+35.58, 26.4' LT	TOP NUT ON HYD/NW QUAD OF STH 22 AND 13TH STREET	833.36

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	PLAN AND PROFILE	SHEET 78	E

END HMA PAVEMENT
BEGIN CONCRETE PAVEMENT
STA 204+41.00

SLOPE INTERCEPTS (TYP)

BEGIN HMA PAVEMENT
STA 203+89.20
SAWCUT REQ'D

END CONCRETE PAVEMENT
BEGIN HMA PAVEMENT
STA 205+38.45

REMOVE CONC SIDEWALK
6" CONC SIDEWALK REQ'D

END CONSTRUCTION
STA 206+27.20

STH 22 (N MAIN ST)

W 12TH ST

E 12TH ST

S 58°37'27" E

S 57°57'05" E

N 31°22'55" E

203+00 204+00 206+00 207+00

125+00 124+00 3+00

23.0' 23.0' 17.0' 15.0' 18.9' 18.9' 19.0' 19.5' 18.0' 24.0' 24.0'

+27.2

+39.0 +52.0 +00.0

FRONTIER COMMUNICATIONS
(UG FIBER OPTIC)

BEGIN CONSTRUCTION
STA 202+39.00

REMOVE CONC SIDEWALK
4" CONC SIDEWALK REQ'D
SAWCUT REQ'D

FRONTIER COMMUNICATIONS
(UG TELEPHONE)

STA 205+00.00 W & E 12TH STREET =
STA 124+24.56 STH 22

CHARTER COMMUNICATIONS
(OH COMMUNICATIONS ATTACHED)

CITY OF CLINTONVILLE
(OH ELECTRIC)

END HMA PAVEMENT
STA 205+72.00
SAWCUT REQ'D

CAUTION

BMOD

POST OFFICE

ROOF OVERHANG

CHAMBER OF COMMERCE

CLINTONVILLE AMBULANCE SERVICE BUSINESS OFFICE

CITY CENTER (OFFICE SUITES)

JUST ONE MORE

D.E.N. SERVICES INC

FOX COMMUNITY CREDIT UNION

LEGEND

(2) TYPE 2 CURB RAMP SEE "PEDESTRIAN CURB RAMP" DETAIL

X TREE REMOVAL

BENCHMARK TABLE

NO.	STATION	DESCRIPTION	ELEVATION
100	124+50.57, 38.9'LT	TOP NUT ON HYD/NW QUAD OF STH 22 AND W. 12TH ST	812.57

PVC STA 204+45.00
PVC EL 807.87

PVI STA 203+89.2
PVI EL 808.18

30' VC
K = 11.76

PVI STA 205+00.00
PVI EL 808.59

PVI STA 205+36.00
PVI EL 807.87

PVT STA 204+75.00
PVT EL 808.09

PVI STA 204+60.00
PVI EL 807.79

PVI STA 205+72.00
PVI EL 807.65

-0.55% 2.00% -2.00% -0.61%

EXISTING ℄ PROFILE

FINISHED ℄ PROFILE

EXISTING ℄ ELEVATIONS

PROPOSED ℄ ELEVATIONS

808.3 808.2 808.1 808.12 808.2 807.86 808.7 808.59 807.8 807.78 807.4 806.8

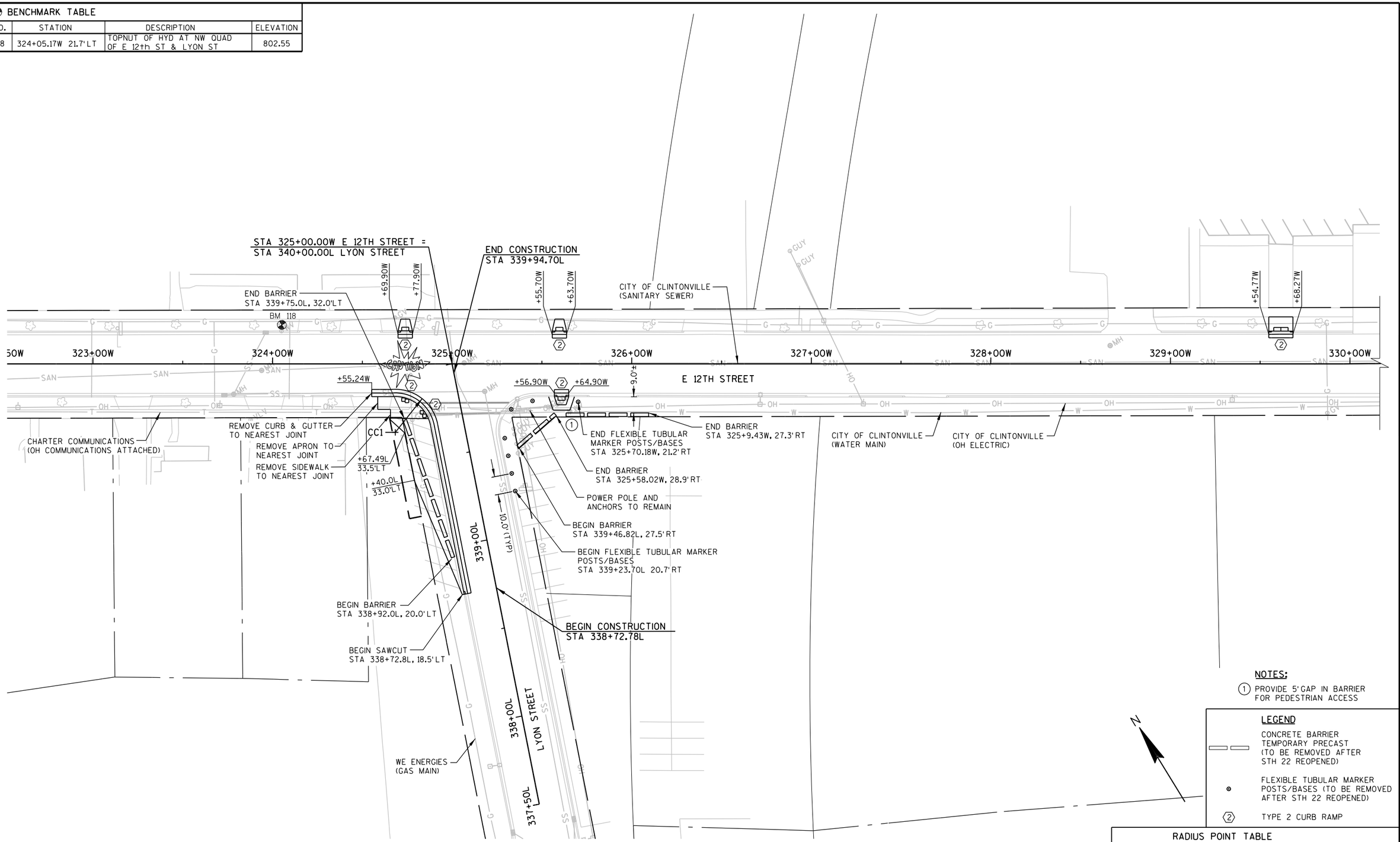
820 815 810 805 800 795 790 785

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	PLAN AND PROFILE	SHEET 79	E

FILE NAME : P:\WIDOT\11003 - STH 22\Cad\6250-01-76 (11th -13th)\PPSTH2203.dgn PLOT DATE : 7/23/2014 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 40

BENCHMARK TABLE			
NO.	STATION	DESCRIPTION	ELEVATION
118	324+05.17W 21.7'LT	TOPNUT OF HYD AT NW QUAD OF E 12th ST & LYON ST	802.55



NOTES:

(1) PROVIDE 5' GAP IN BARRIER FOR PEDESTRIAN ACCESS

LEGEND

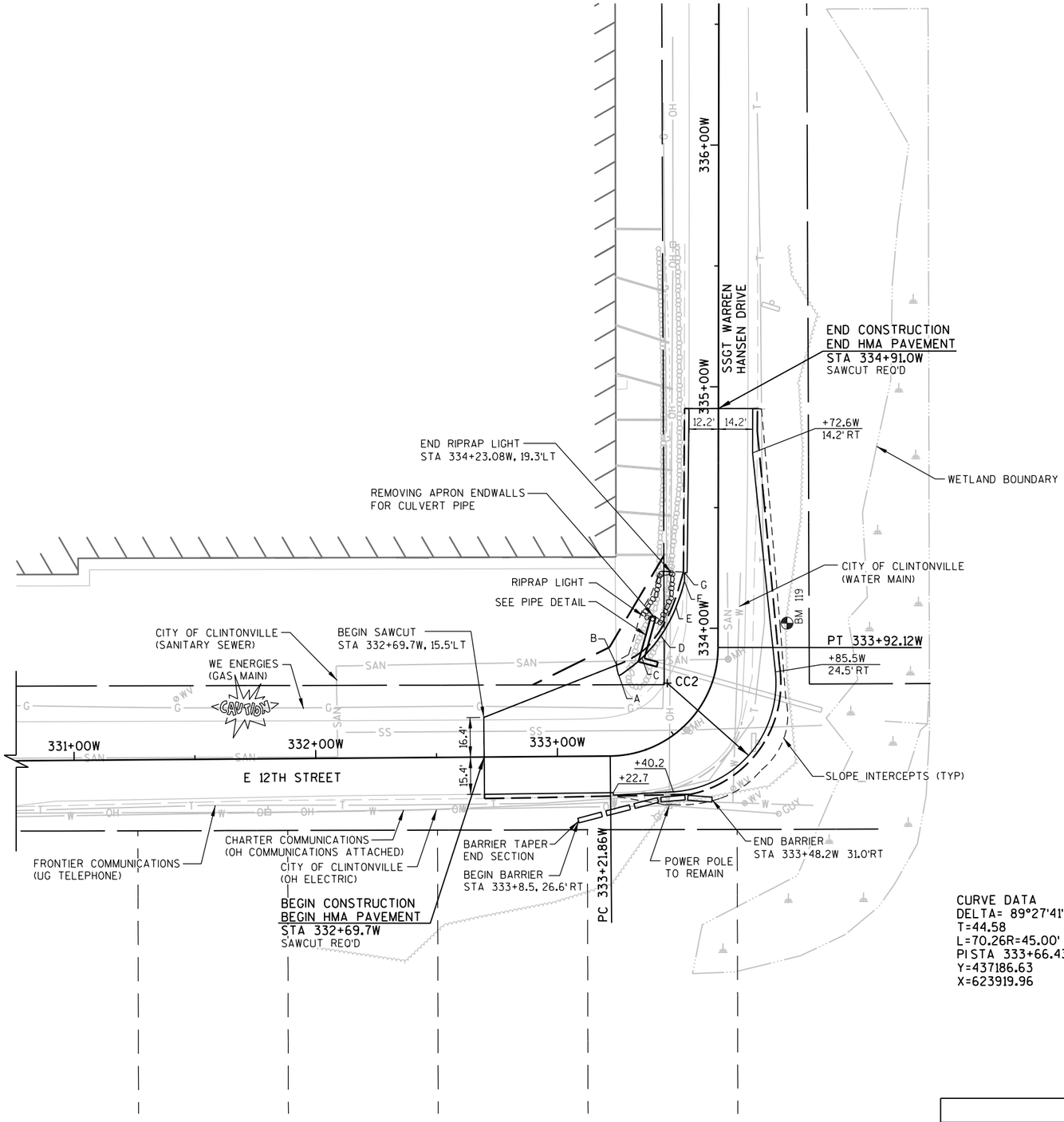
- CONCRETE BARRIER TEMPORARY PRECAST (TO BE REMOVED AFTER STH 22 REOPENED)
- FLEXIBLE TUBULAR MARKER POSTS/BASES (TO BE REMOVED AFTER STH 22 REOPENED)
- (2) TYPE 2 CURB RAMP

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	324+68.37W 339+68.68L	38.2'RT 38.4'LT	24.0'	Y= 437620.873 X= 623132.790

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	DETOUR IMPROVEMENT PLAN	SHEET 80	E

FILE NAME : P:\WIDOT\11003 - STH 22\Cad\6250-01-76 (Detour Route)\PPSTH22DETOUR01.dgn PLOT DATE : 5/29/2014 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

BENCHMARK TABLE			
NO.	STATION	DESCRIPTION	ELEVATION
119	334+02.18W, 28.5' RT	SPIKE IN BASE OF 18" TREE EAST OF SSGT WARREN HANSEN DR.	798.18



STATION/OFFSET TABLE		
POINT	STATION	OFFSET
A	333+36.03W	32.5' LT
B	333+38.99W	37.1' LT
C	333+78.03W	30.8' LT
D	333+96.90W	23.7' LT
E	334+08.87W	17.4' LT
F	334+19.49W	13.9' LT
G	334+23.08W	13.9' LT

CURVE DATA
DELTA= 89°27'41"
T=44.58
L=70.26R=45.00'
PI STA 333+66.43
Y=437186.63
X=623919.96

LEGEND

CONCRETE BARRIER TEMPORARY PRECAST (TO BE REMOVED AFTER STH 22 IS RE-OPENED)

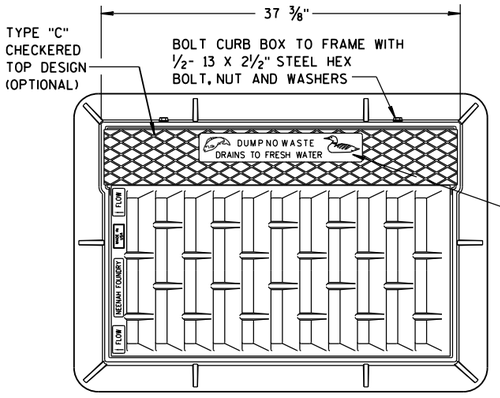
RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC2	333+17.18W E 12TH ST	16.8' LT	45.0'	Y= 437222.974 X= 623917.623

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	DETOUR IMPROVEMENT PLAN	SHEET 81	E

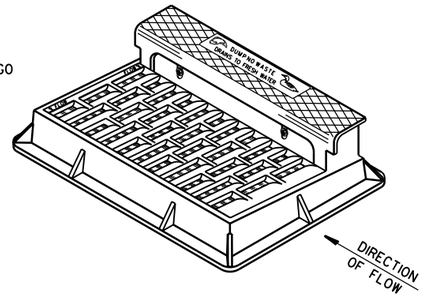
Standard Detail Drawing List

08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08A08-01	CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER
08A09-01	CATCH BASINS 2X3-FT AND 2.5X3-FT
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08B10-01	MANHOLES 3X3-FT, 4X4-FT, 5X5-FT AND 6X6-FT
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
08E10-02	INLET PROTECTION TYPE A, B, C AND D
09B02-07	CONDUIT
09B04-10	PULL BOX
09C02-06	CONCRETE BASES, TYPES 1, 2 & 5
09C03-03	TRANSFORMER/PEDESTAL BASES
09C06-06	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09D01-04	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-02	SIGNAL OR LIGHTING CONTROL CABINET
09E01-12A	POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2
09E01-12C	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4
09E01-12D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-12G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-04	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E05-06	TRAFFIC SIGNAL STANDARD ORNAMENTAL BRACKET MOUNTINGS TYPICAL FOR 13 FT. OR 15 FT.
09E07-05	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
09F08-03	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)
09F09-03	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT)
09F13-03	LOOP DETECTOR INSTALLED IN EXISTING ASPHALTIC PAVEMENT
12A04-03	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORTS & TRAFFIC SIGNALS
13C01-16	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-08	URBAN DOWELED CONCRETE PAVEMENT
13C18-02A	CONCRETE PAVEMENT JOINTING
13C18-02B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-02C	CONCRETE PAVEMENT JOINT TIES
13C18-02D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
14B07-14A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-02	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C05-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16E	PAVEMENT MARKING (LEFT TURN LANE)
15C11-05	FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C29-03A	BICYCLE LANE MARKING
15C29-03C	URBAN BICYCLE LANE MARKING
15C29-03E	PAVEMENT MARKING FOR BIKE LANES
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D30-01	TRAFFIC CONTROL, SIDEWALK CLOSURE

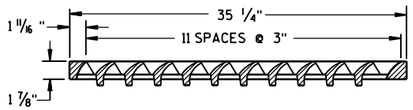
6

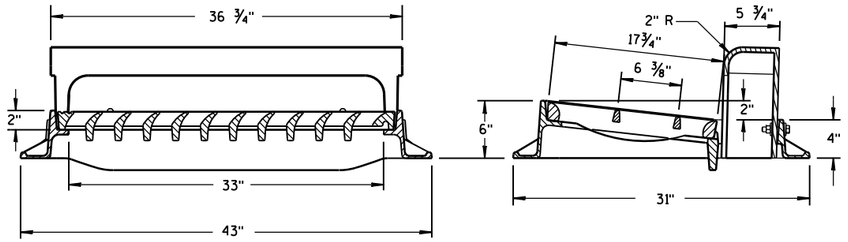


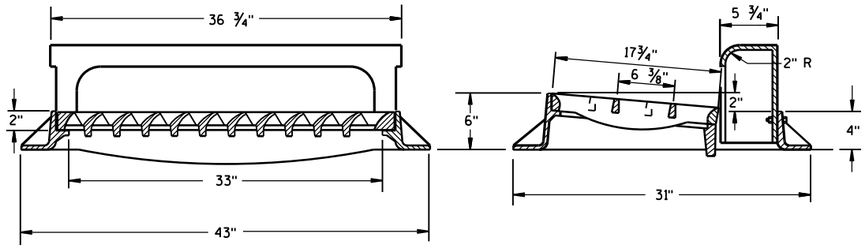
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

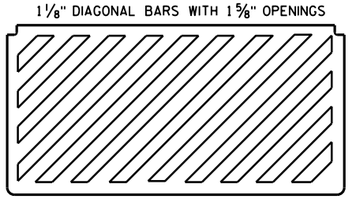






TYPE "H"

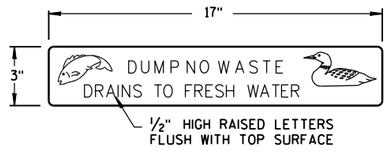
NOTE: EITHER CASTING IS ACCEPTABLE



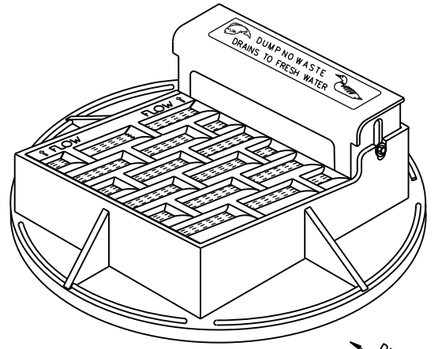
SPECIAL GRATE FOR TYPE "H" COVER

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

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

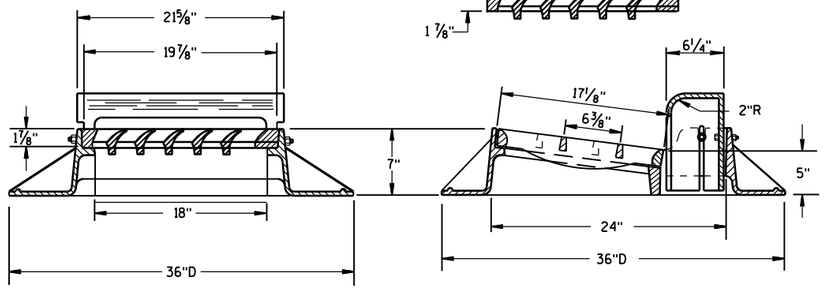


LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

NOTE:
GRATE IS REVERSIBLE.



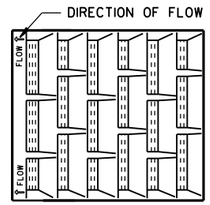
TYPE "A"

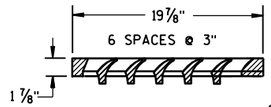
GENERAL NOTES

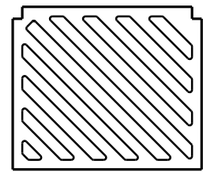
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

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



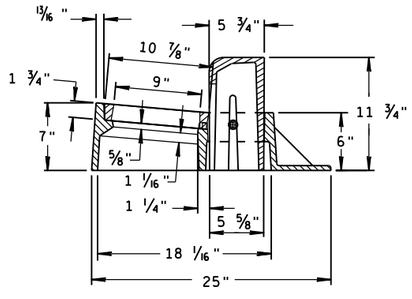


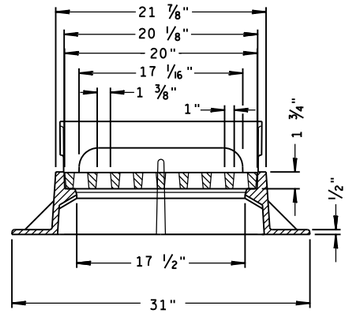


SPECIAL GRATE FOR TYPE "A" COVER

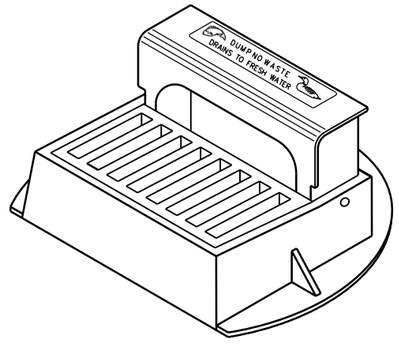
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)





TYPE "Z"

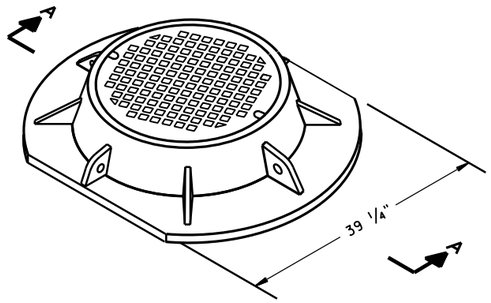


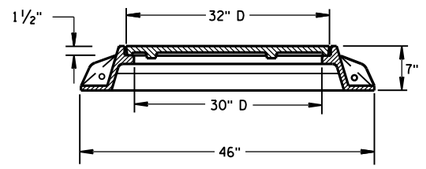
INLET COVERS TYPE A, H, A-S, H-S & Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

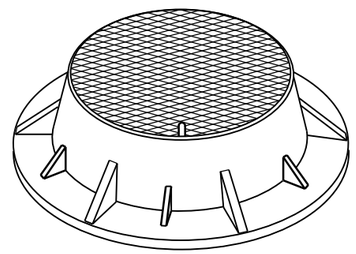
APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

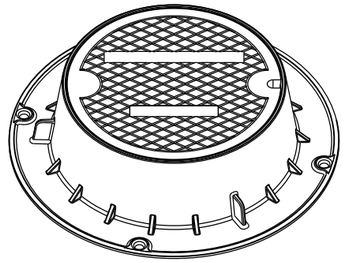
S.D.D. 8 A 5-19a

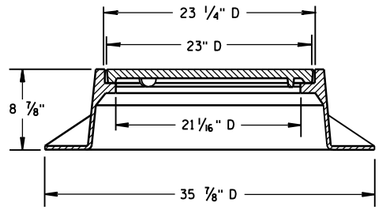


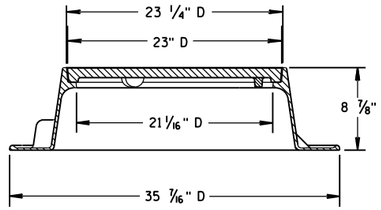


SECTION A-A
TYPE "K"









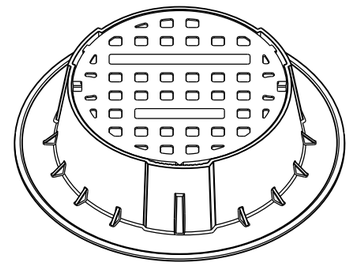
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

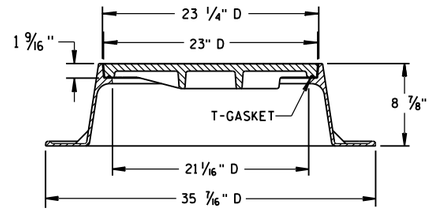
GENERAL NOTES

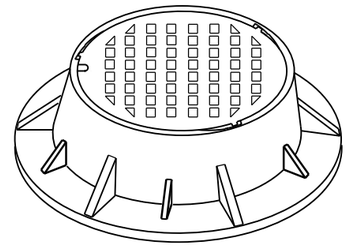
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

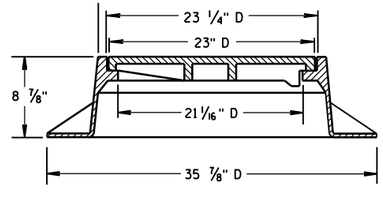
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

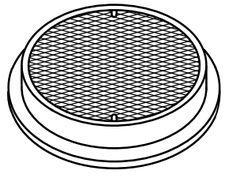


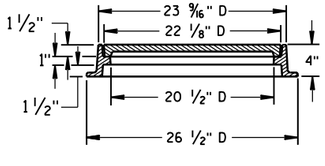




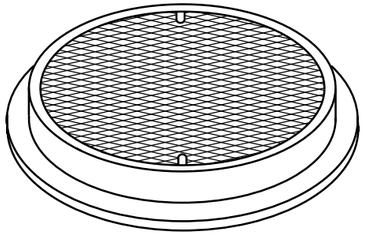


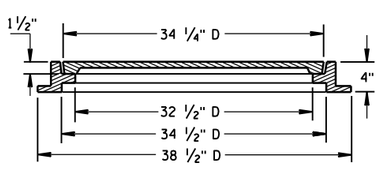
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



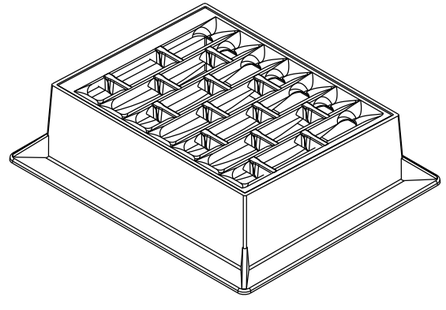


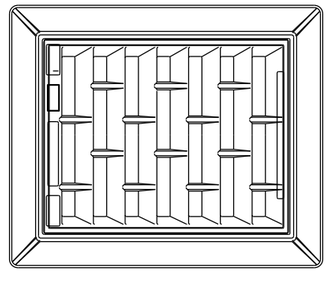
TYPE "L"

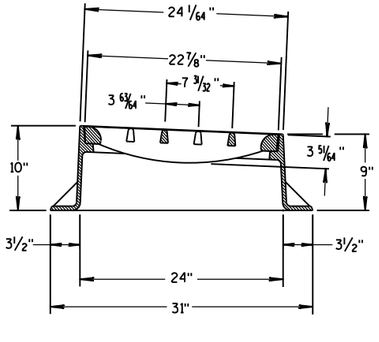


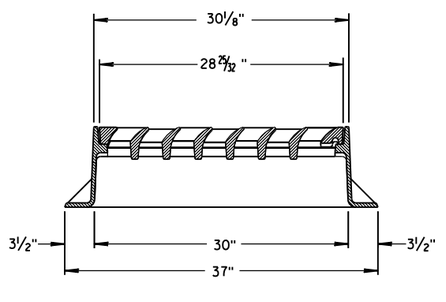


TYPE "M"









INLET COVER TYPE "BW"

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

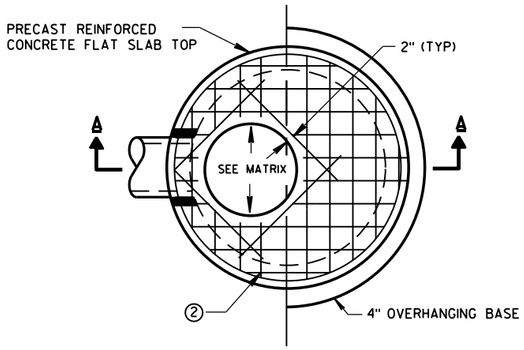
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DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

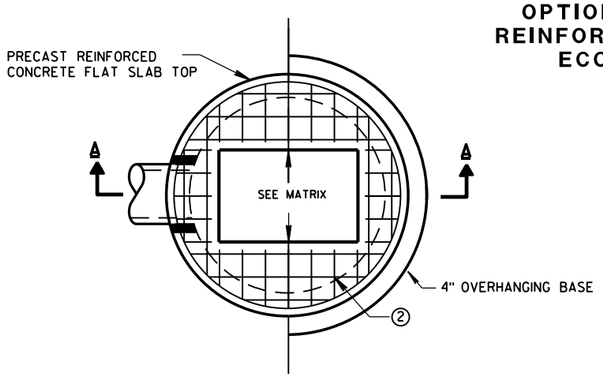
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

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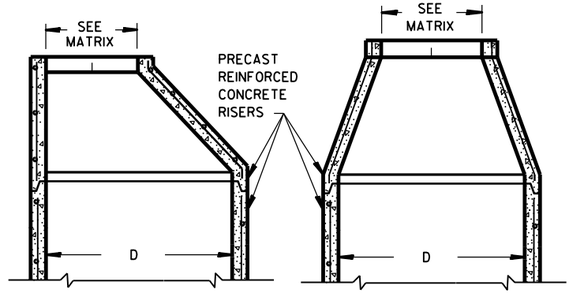
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PLAN VIEW CIRCULAR OPENING

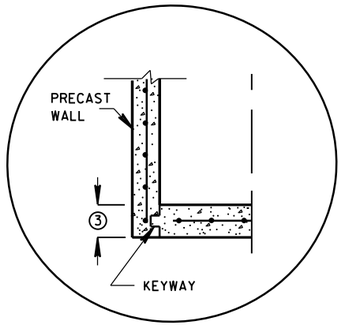


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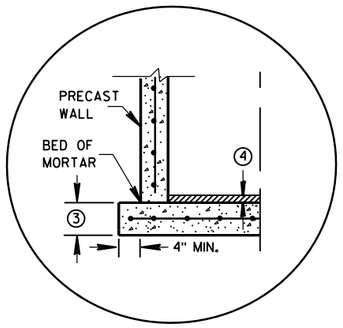


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

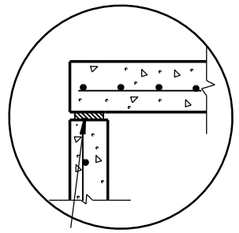


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



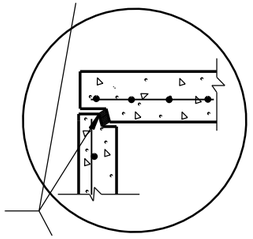
SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"

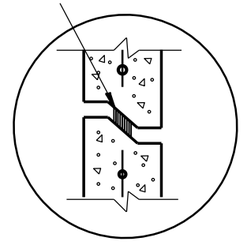


TOP WITH PLAIN END JOINT

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)

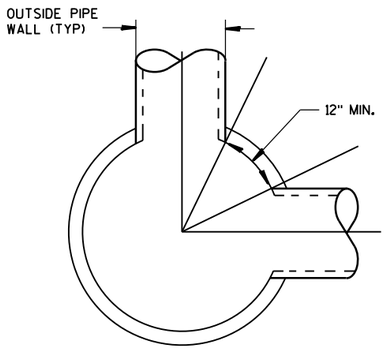


TOP WITH TONGUE AND GROOVE JOINT

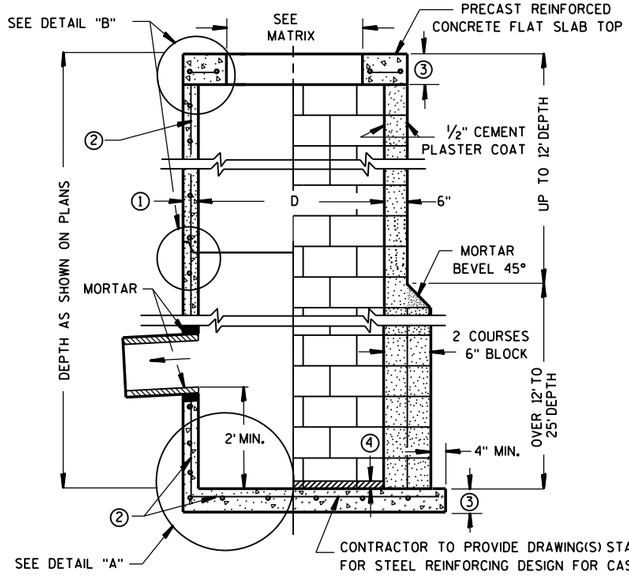


RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"



DETAIL "C"



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

SECTION A-A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

GENERAL NOTES

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

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

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

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

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

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF 1/2 INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

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

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT AND 7 INCHES FOR 6-FT DIAMETER PRECAST CATCH BASINS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

④ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER OPENING MATRIX

CATCH BASIN SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
	OPENING SIZE (FT)											
3-FT	2X2	X	X					X		X		
	2 DIA.				X							X
4-FT-6-FT	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2 DIA.				X							X
	2X3						X					
	2.5X3					X						

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	30

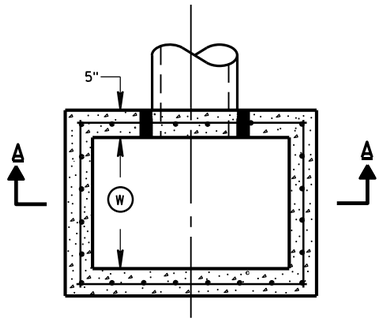
CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

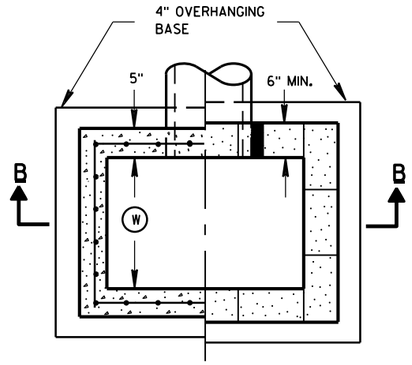
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

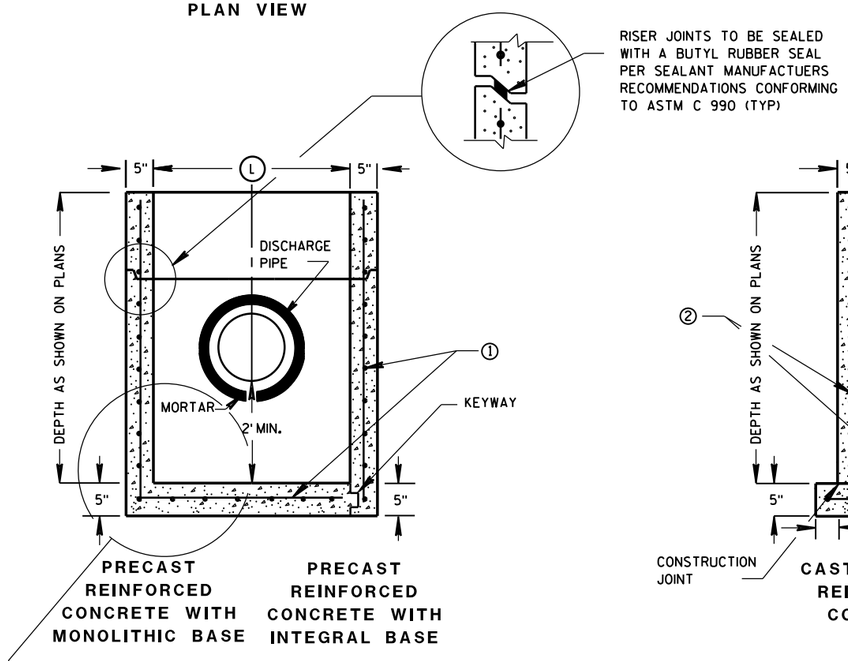
S.D.D. 8 A 8-1



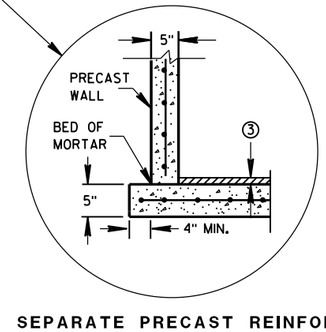
PLAN VIEW



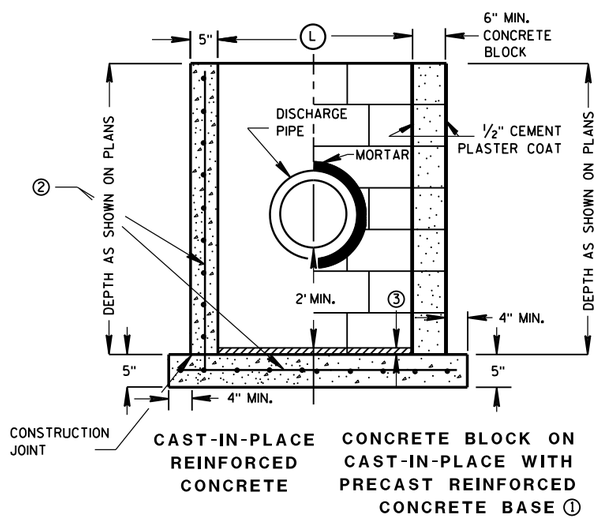
PLAN VIEW



SECTION A-A



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION



SECTION B-B

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

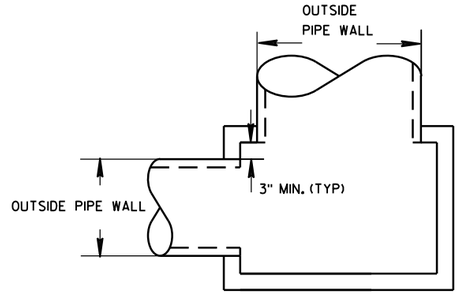
③ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER MATRIX

CATCH BASIN SIZE		INLET COVER TYPE	F	ALL H'S
	WIDTH (W) (FT)	LENGTH (L) (FT)		
2X3-FT	2	3		X
2.5X3-FT	2.5	3	X	

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

CATCH BASINS 2X3-FT AND 2.5X3-FT

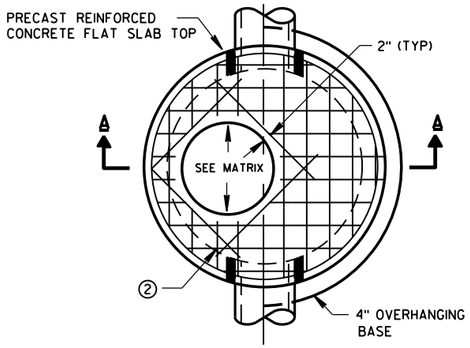
CATCH BASINS 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
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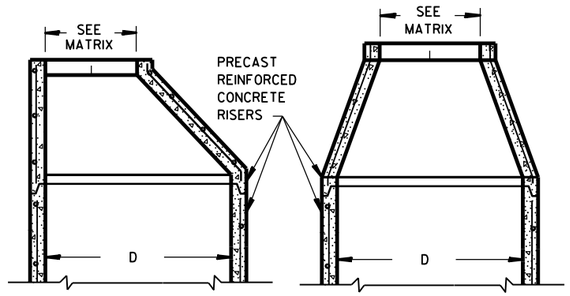
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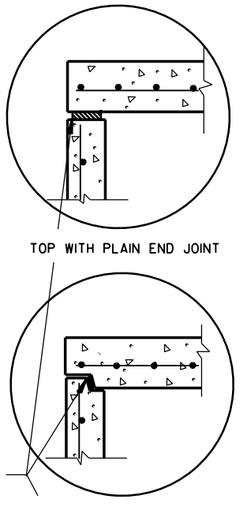


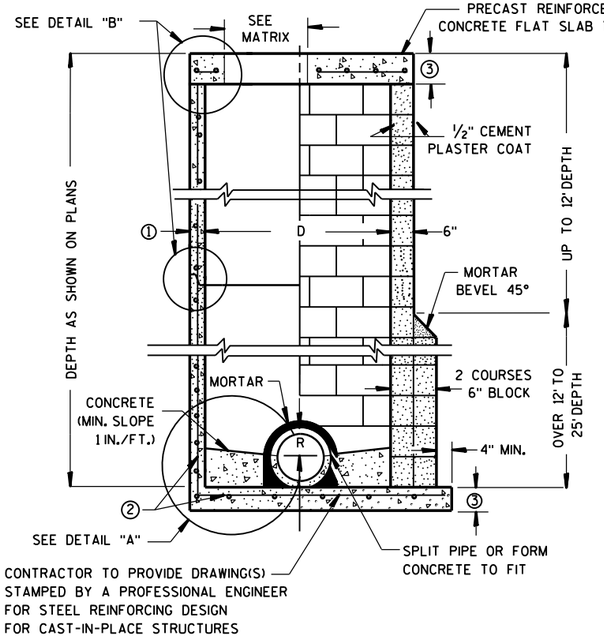
PLAN VIEW CIRCULAR OPENING



OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

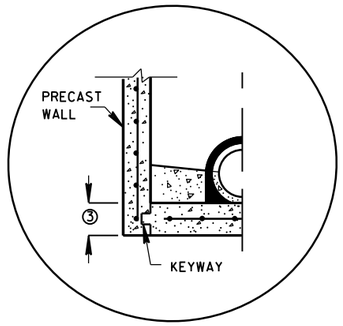
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



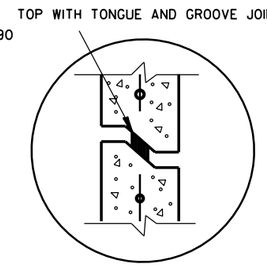


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

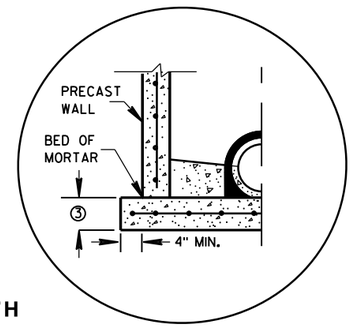
CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②



PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

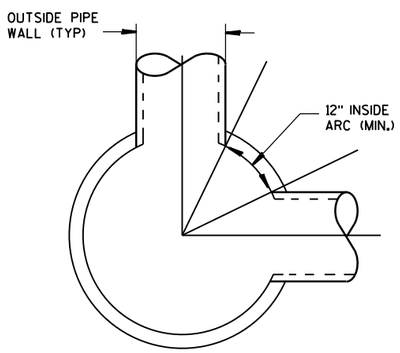


DETAIL "B"



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

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

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

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

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

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE CONE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

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

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

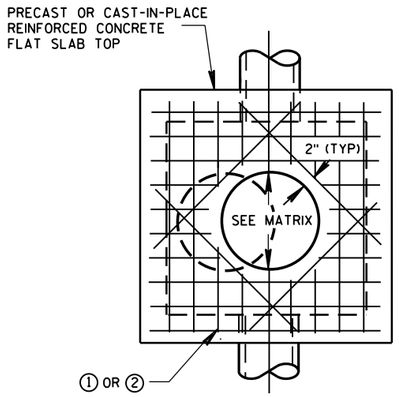
MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

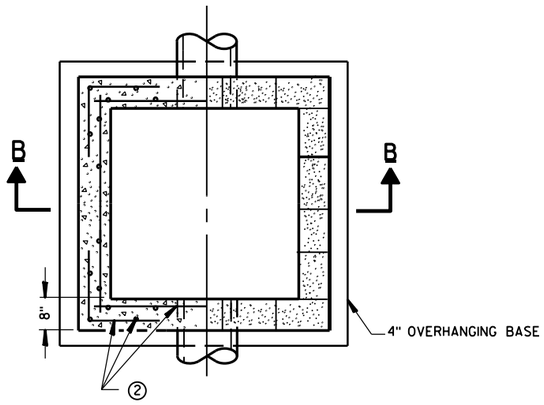
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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S.D.D. 8 B 9-1

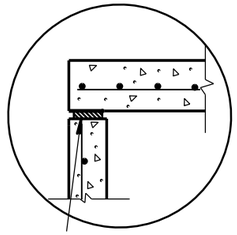
MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER



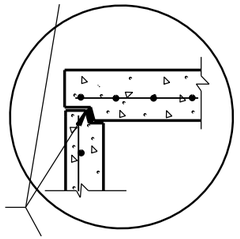
PLAN VIEW
CIRCULAR OPENING



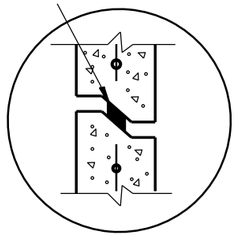
SECTION A-A
PLAN VIEW



TOP WITH PLAIN END JOINT

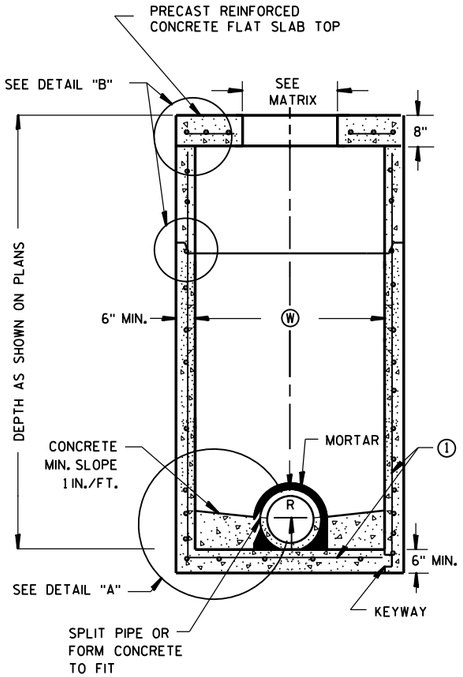


TOP WITH TONGUE AND GROOVE JOINT

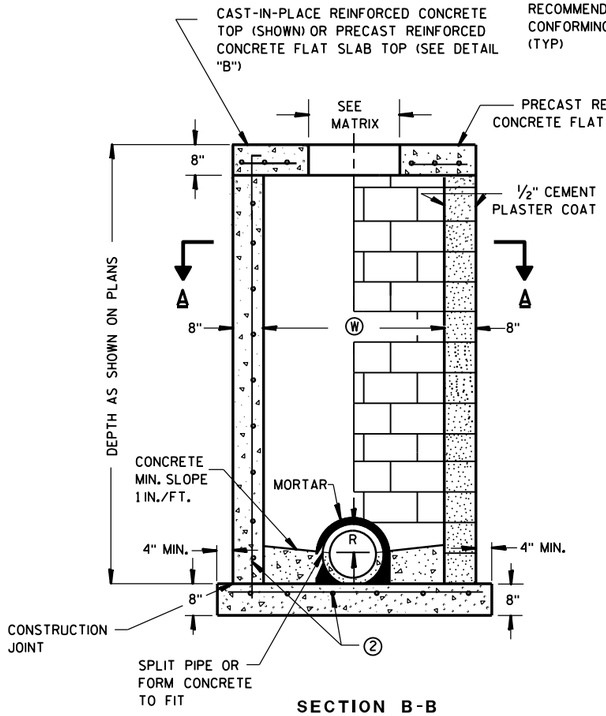


RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"



PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

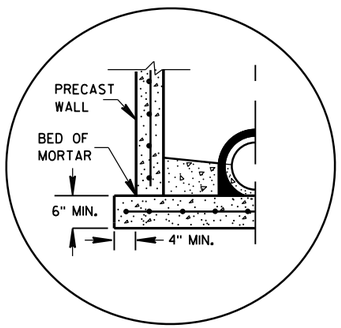


SECTION B-B

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

CAST-IN-PLACE REINFORCED CONCRETE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"

GENERAL NOTES

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

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

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

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

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

PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN WIDTH.

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

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

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

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

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

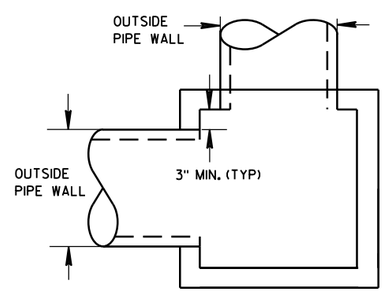
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (W) (IN)	LENGTH (L) (IN)
3X3-FT	24	24
4X4-FT	30	30
5X5-FT	42	42
6X6-FT	54	54



DETAIL "C"

SQUARE MANHOLES W/ FLAT TOP

MANHOLES 3X3-FT, 4X4-FT, 5X5-FT AND 6X6-FT

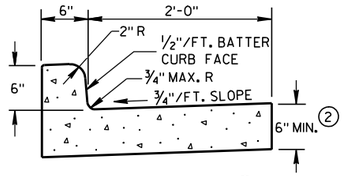
MANHOLES 3X3-FT, 4X4-FT 5X5-FT AND 6X6-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

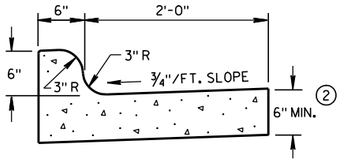
APPROVED
6/5/2012
DATE
/S/ Jerry H. Zoda
ROADWAY STANDARDS ENGINEER
FHWA

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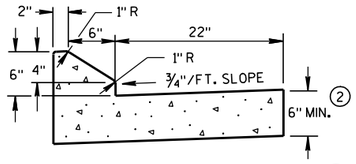
S.D.D. 8 B 10-1



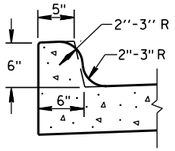
TYPES A & D (1)



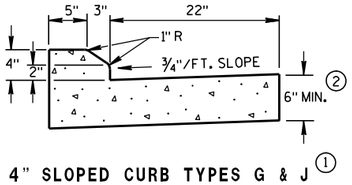
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

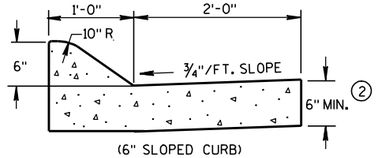


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

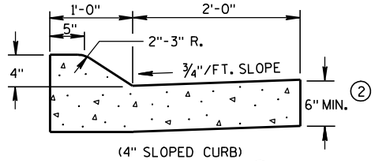


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

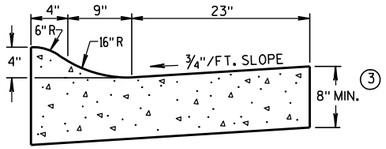


(6" SLOPED CURB)



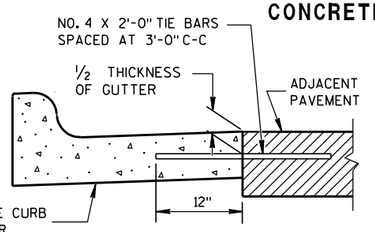
(4" SLOPED CURB)

TYPES A & D (1)

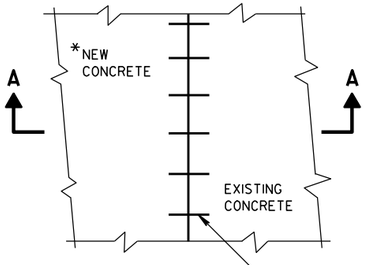


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"

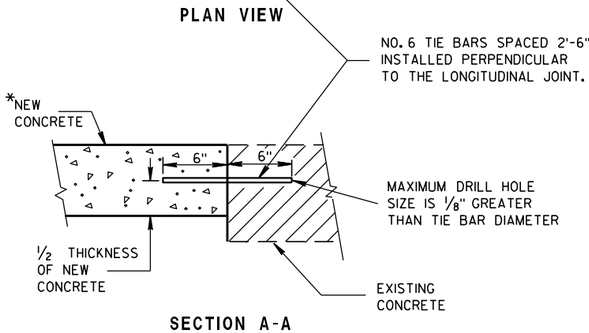


TYPICAL TIE BAR LOCATION (1)



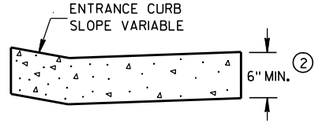
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

PLAN VIEW

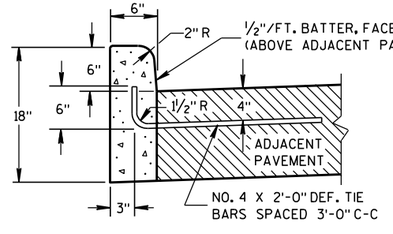


SECTION A-A

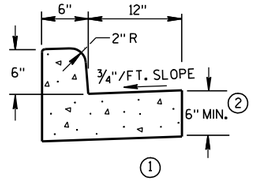
TIE BARS DRILLED INTO EXISTING PAVEMENT



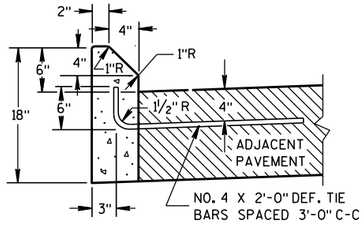
DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)



(1)
TYPES A & D

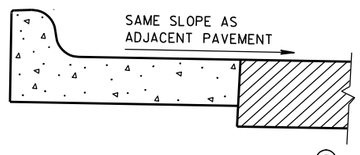


(1)
TYPES A & D
CONCRETE CURB & GUTTER 18"



(1)
TYPES G & J

CONCRETE CURB



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

GENERAL NOTES

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

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

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

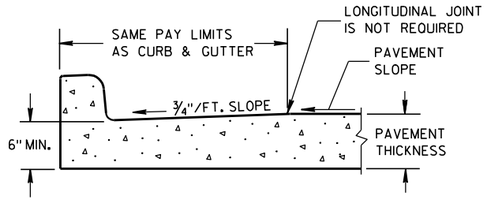
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.

(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.

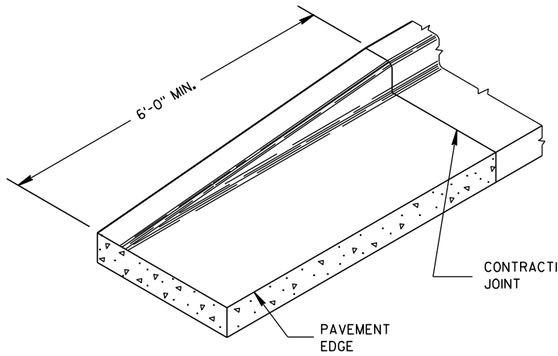
(3) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(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 & GUTTER

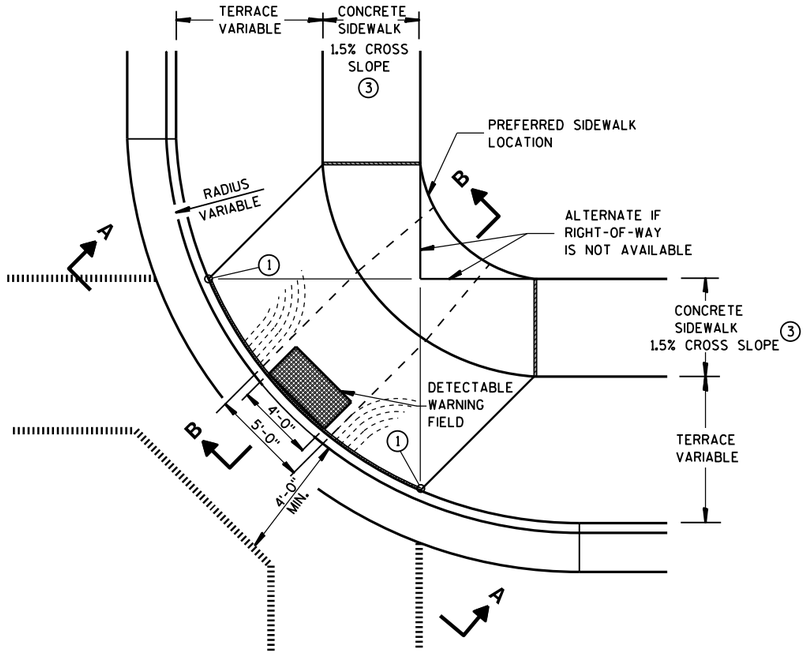
CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/4/08 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
FHWA

6

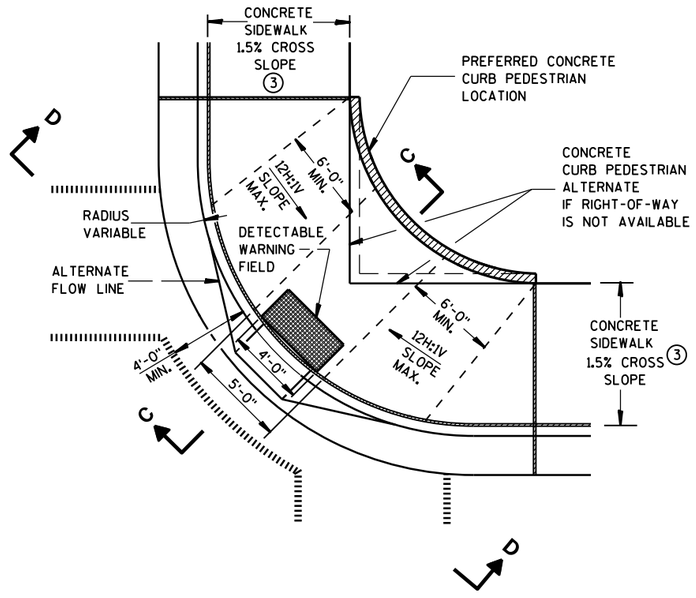
S.D.D. 8 D 1-17



PLAN VIEW

TYPE 1 RAMP

(CENTER OF CORNER RADIUS)



PLAN VIEW

TYPE 1-A RAMP

(NO TERRACE)

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.

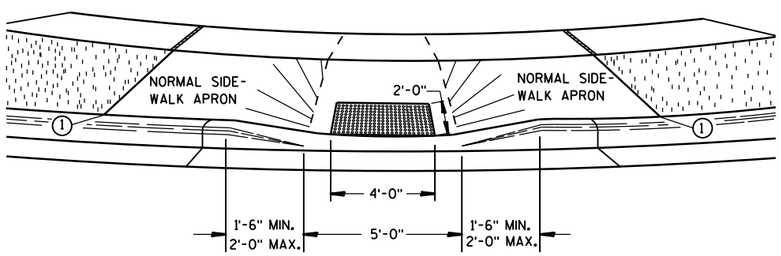
① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.

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.

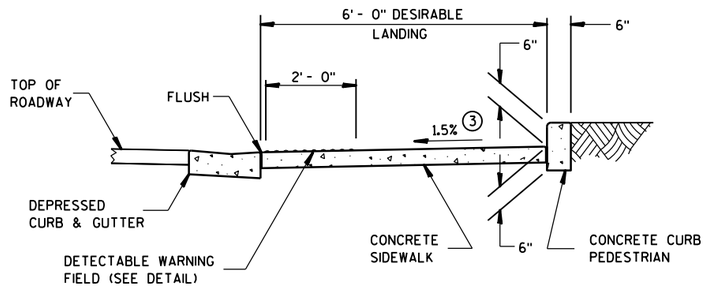
③ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

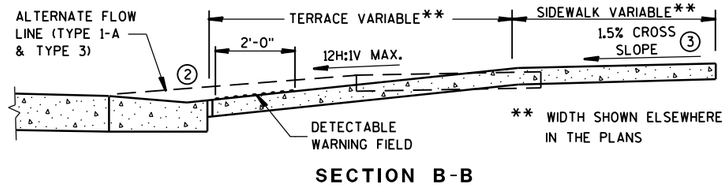
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



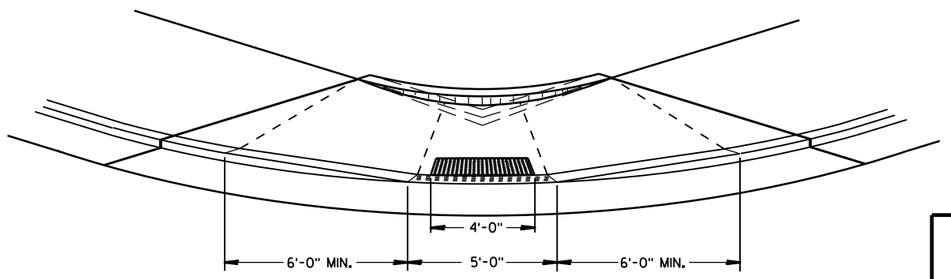
VIEW A-A



SECTION C-C



SECTION B-B



VIEW D-D

CURB RAMPS TYPES 1 AND 1-A

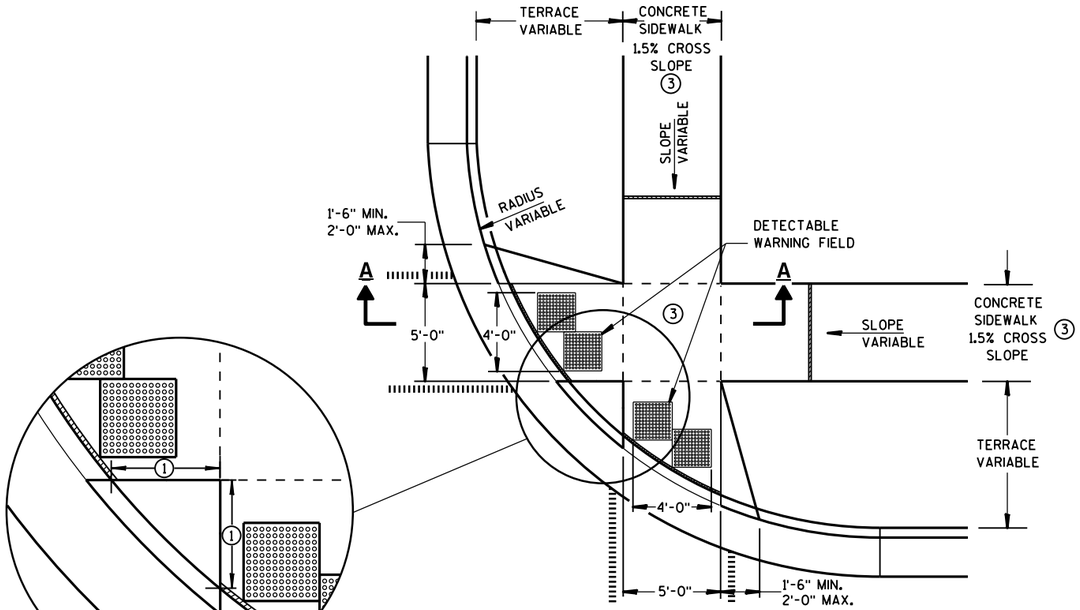
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

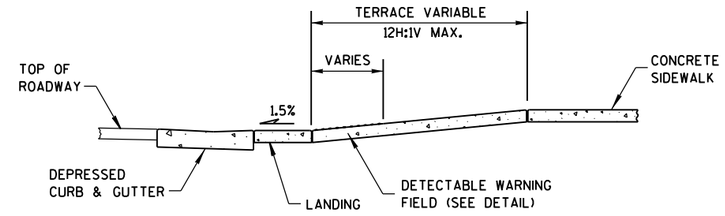
S.D.D. 8 D 5-15a

6

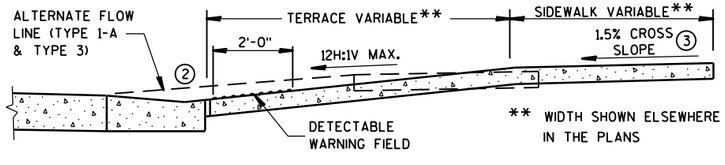
S.D.D. 8 D 5-15a



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.

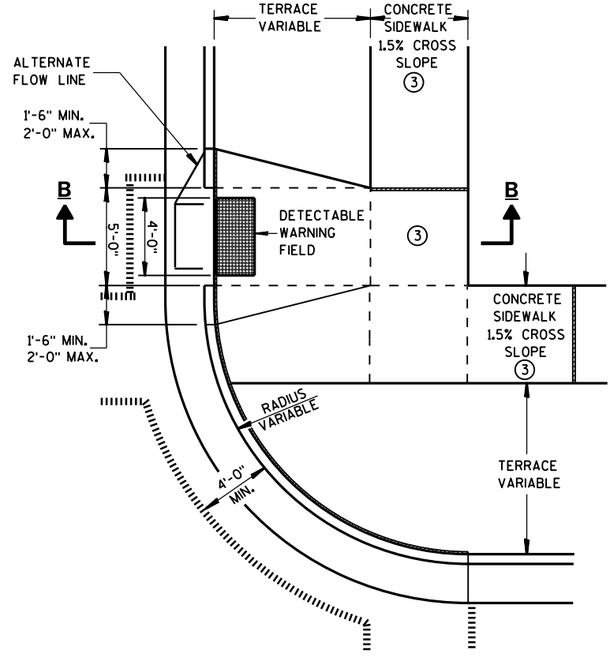
① WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.

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

LEGEND

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



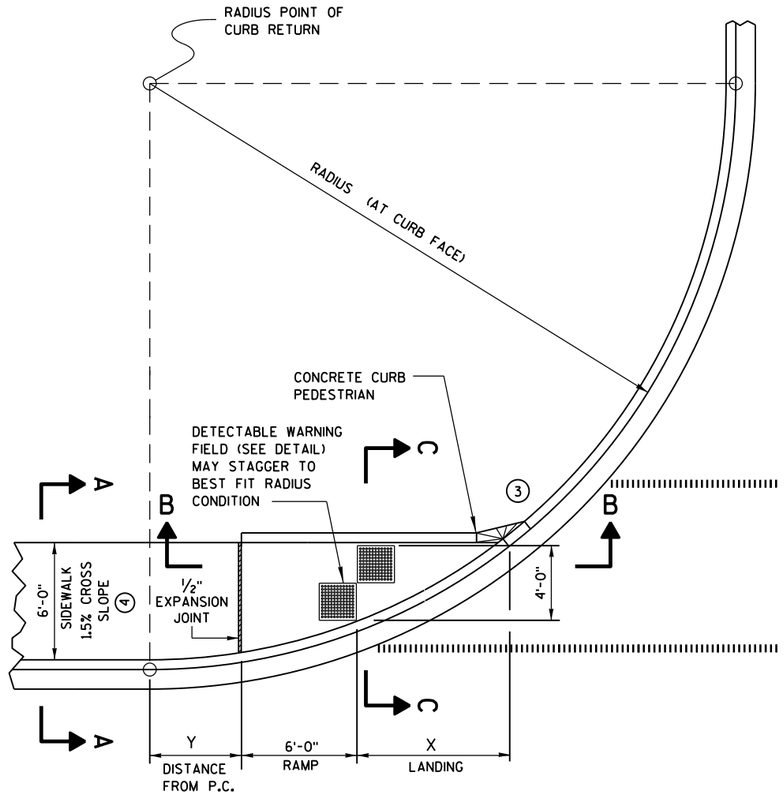
PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

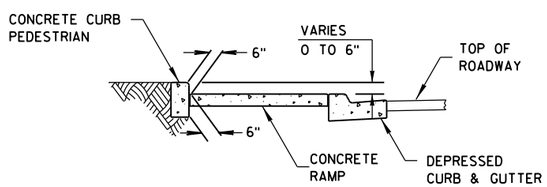
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

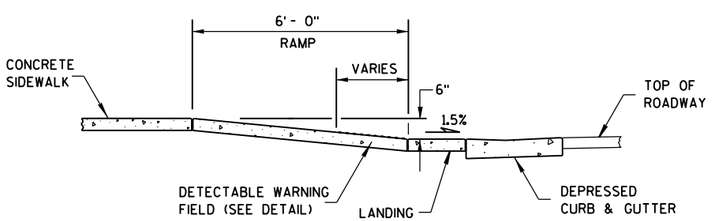
S.D.D. 8 D 5-15b



CURB RAMP TYPE 4A
PLAN VIEW



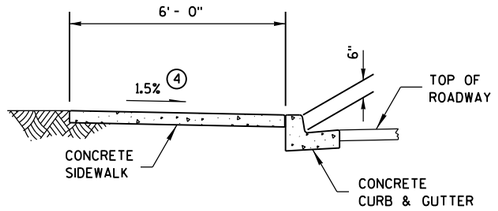
SECTION C-C FOR TYPE 4A



SECTION B-B FOR TYPE 4A

RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-1¾"	2'-7¼"
30 FEET	7'-11¾"	4'-8¼"
40 FEET	9'-5¼"	6'-5"
50 FEET	10'-8¾"	7'-11¼"
60 FEET	11'-10¼"	9'-3½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A

GENERAL NOTES

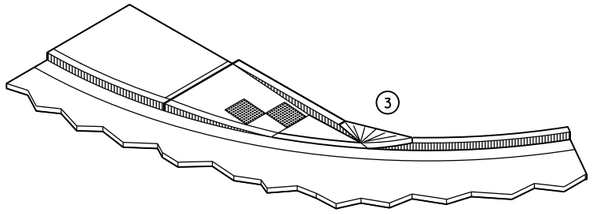
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

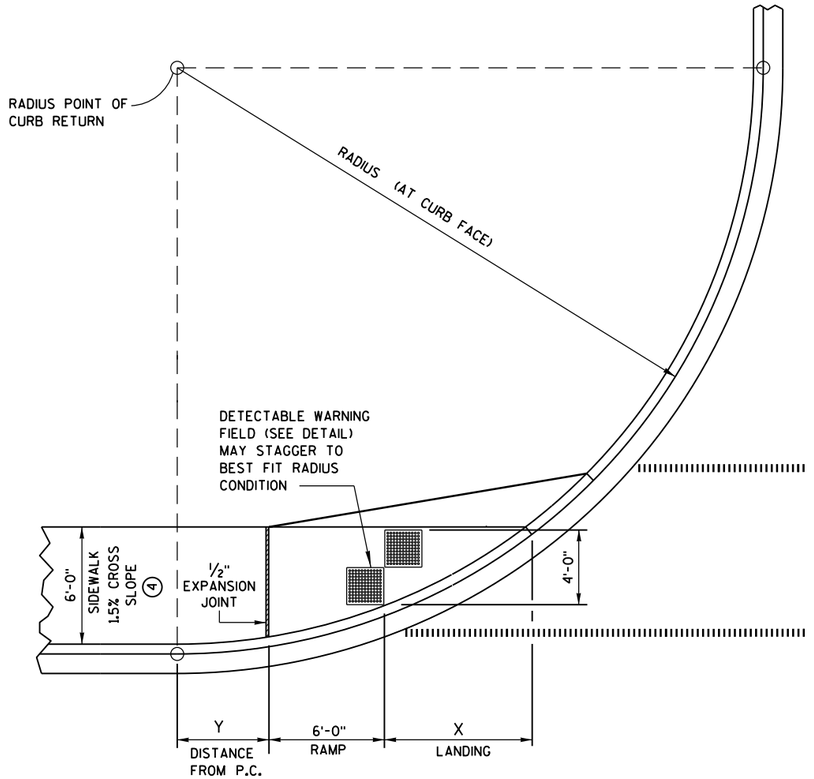
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

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

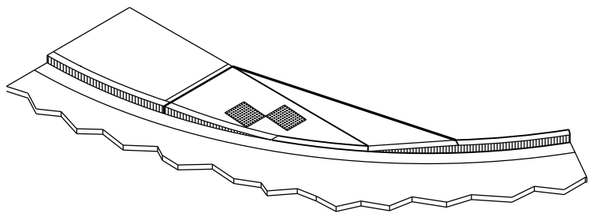
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



ISOMETRIC VIEW FOR TYPE 4A



CURB RAMP TYPE 4A1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

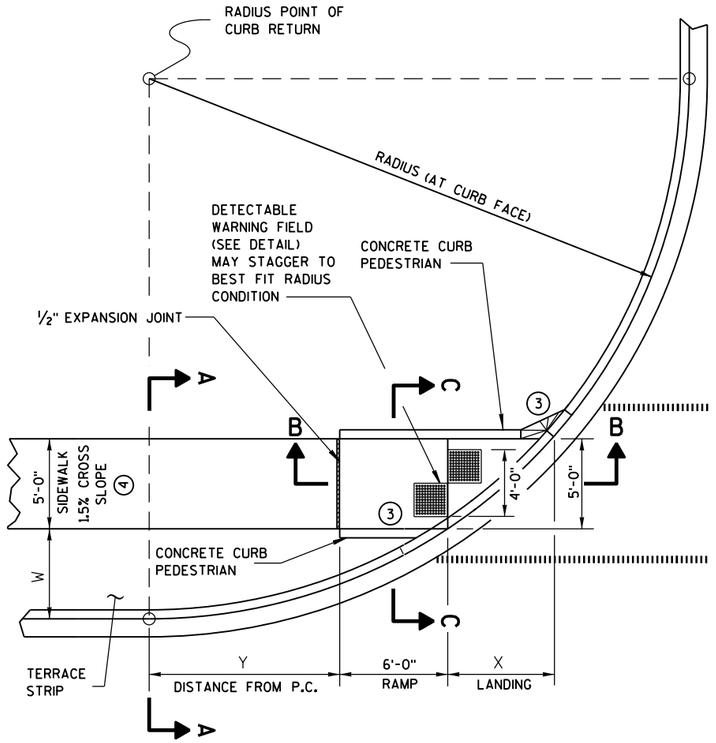
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 4A AND 4A1

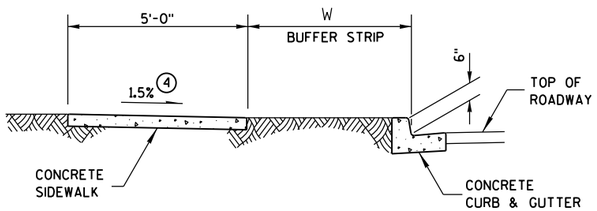
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

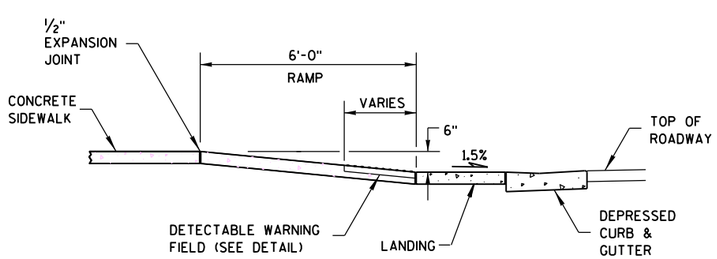
S.D.D. 8 D 5-15c



CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A FOR TYPE 4B



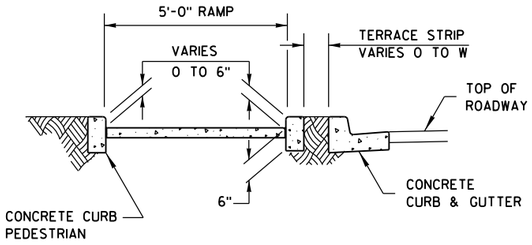
SECTION B-B FOR TYPE 4B

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

PAVEMENT MARKING CROSSWALK (WHITE)



SECTION C-C FOR TYPE 4B

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'-5½"	4'-6½"	4'-8½"	6'-0"	4'-1"	7'-2¾"	3'-7"	8'-3½"	3'-1½"	9'-2½"
30 FEET	7'-3¾"	7'-1"	6'-5½"	8'-11½"	5'-9¼"	10'-7"	5'-2½"	12'-0"	4'-8¾"	13'-3¼"
40 FEET	8'-9½"	9'-2½"	7'-10"	11'-5¼"	7'-1"	13'-4½"	6'-5¾"	15'-¾"	5'-11½"	16'-7¼"
50 FEET	10'-¾"	11'-¾"	9'-¼"	13'-7¼"	8'-2½"	15'-9½"	7'-6½"	17'-9"	6'-11¾"	19'-6¼"
60 FEET	11'-2½"	12'-8¾"	10'-¾"	15'-6½"	9'-2¼"	17'-11¾"	8'-5¾"	20'-1¾"	7'-10½"	22'-1½"

INTERMEDIATE RADII CAN BE INTERPOLATED

GENERAL NOTES

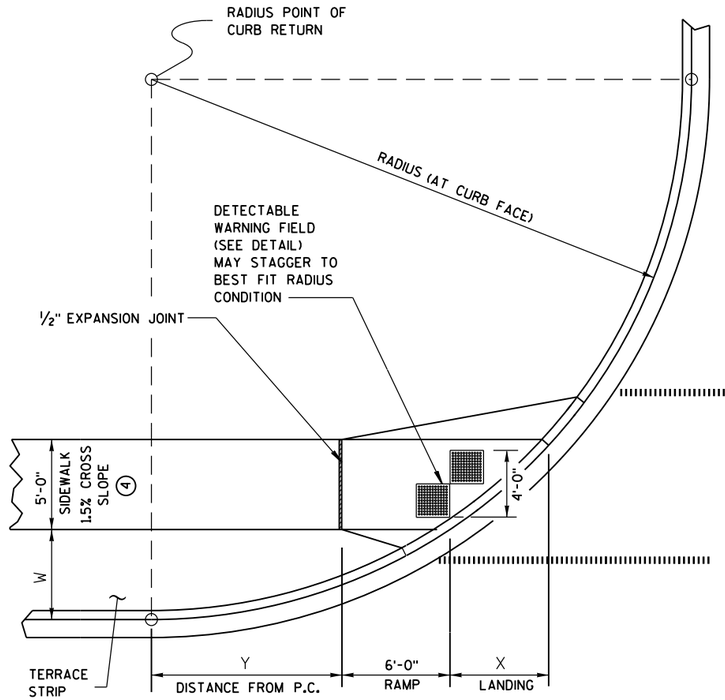
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

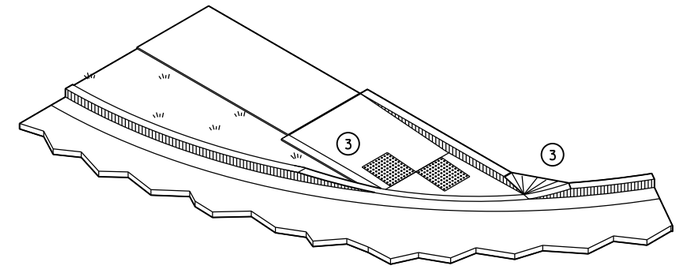
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

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

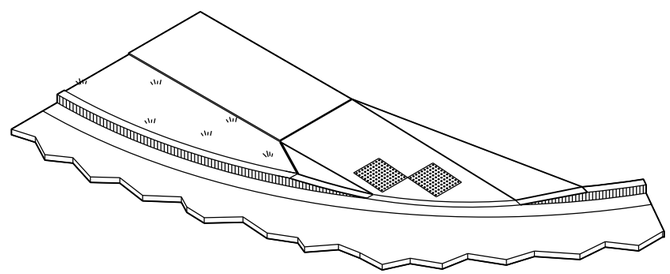
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



CURB RAMP TYPE 4B1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4B



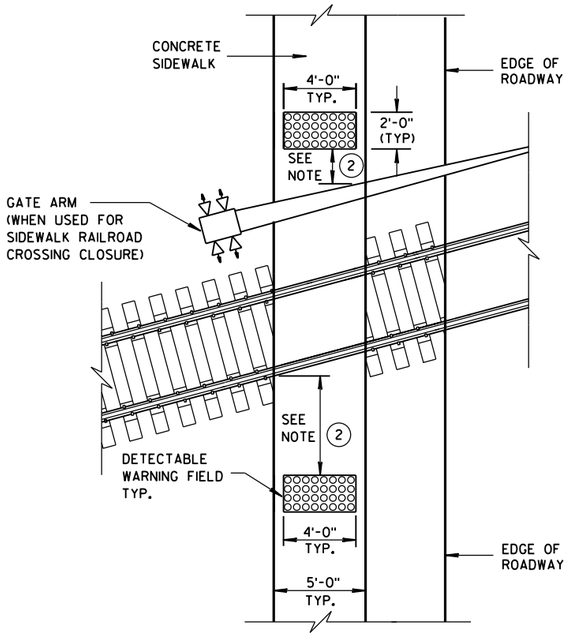
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS TYPE 4B AND 4B1

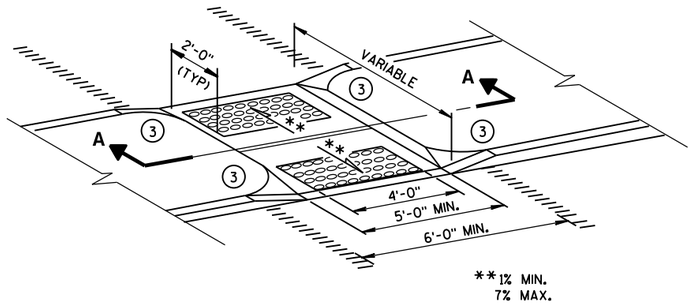
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 8 D 5-15d



TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5

GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

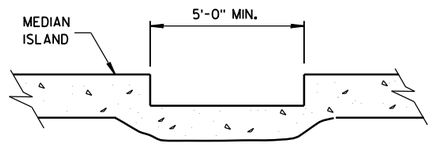
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

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

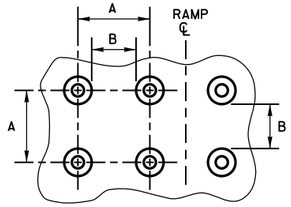
(2) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET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

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

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



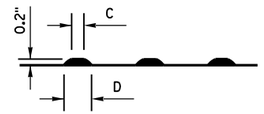
SECTION A-A



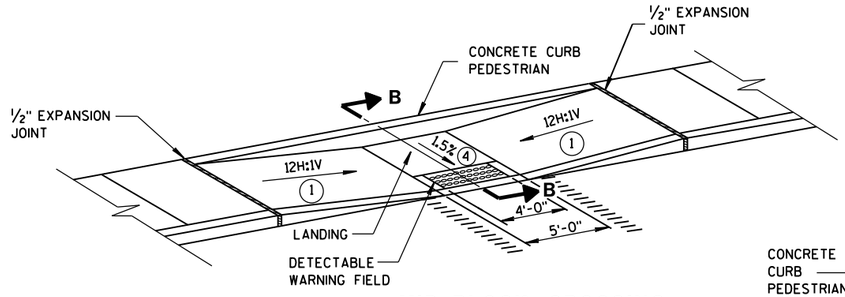
PLAN VIEW

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

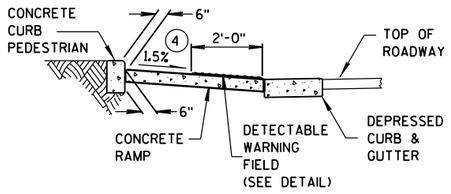
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



ELEVATION VIEW

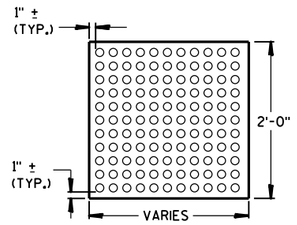


MID-BLOCK CROSSING
TYPE 7A



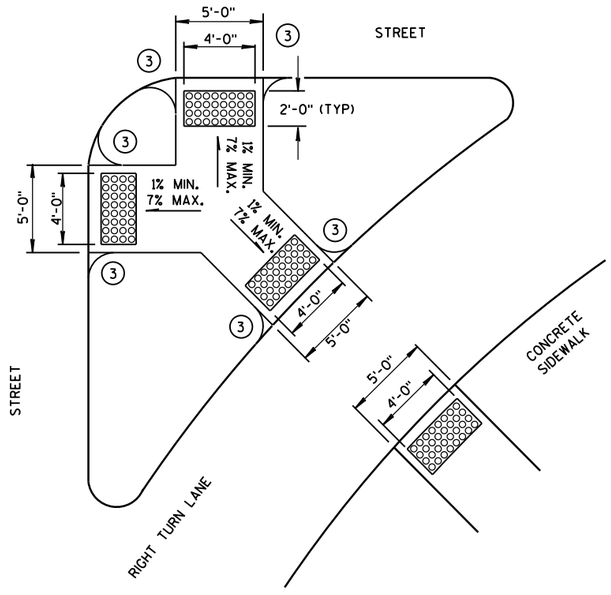
SECTION B-B

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

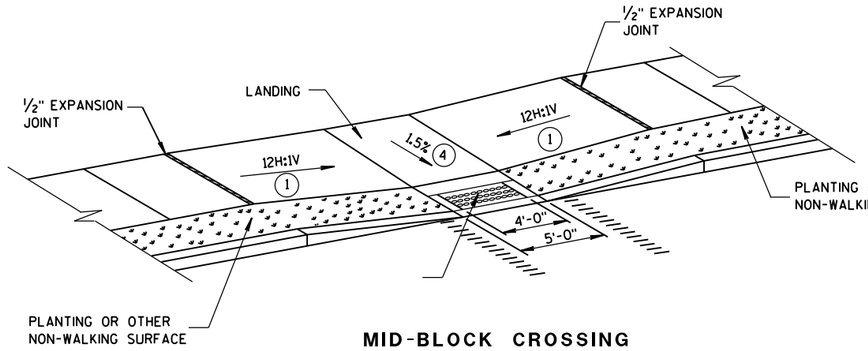


PLAN VIEW

DETECTABLE WARNING FIELD (TYPICAL)



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

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

LEGEND

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

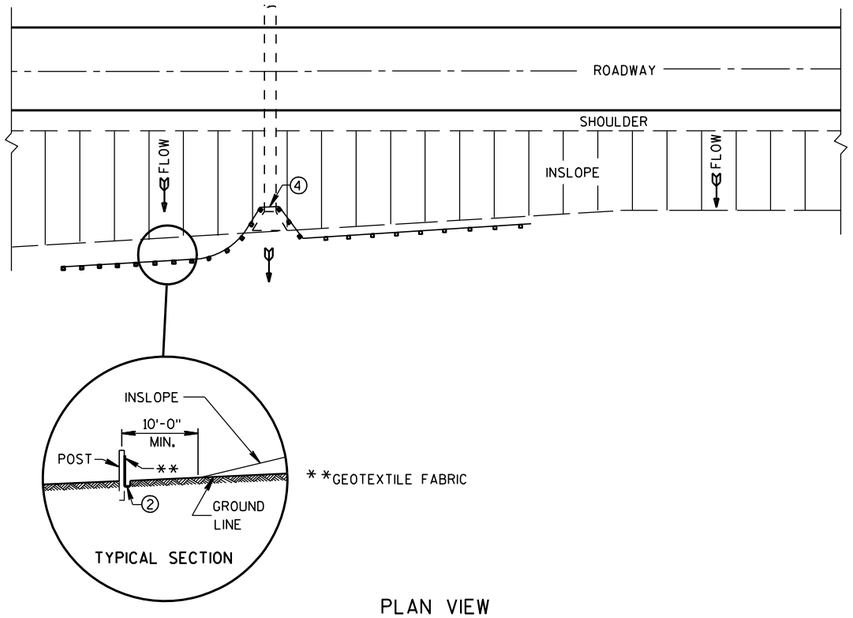
CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2-6-2013 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

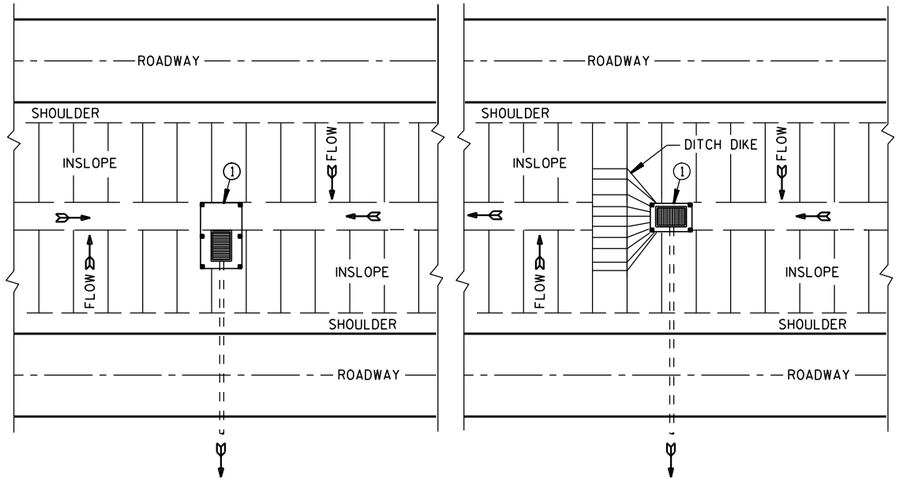
6

S.D.D. 8 D 5-15e



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

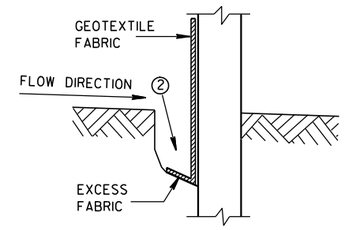
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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

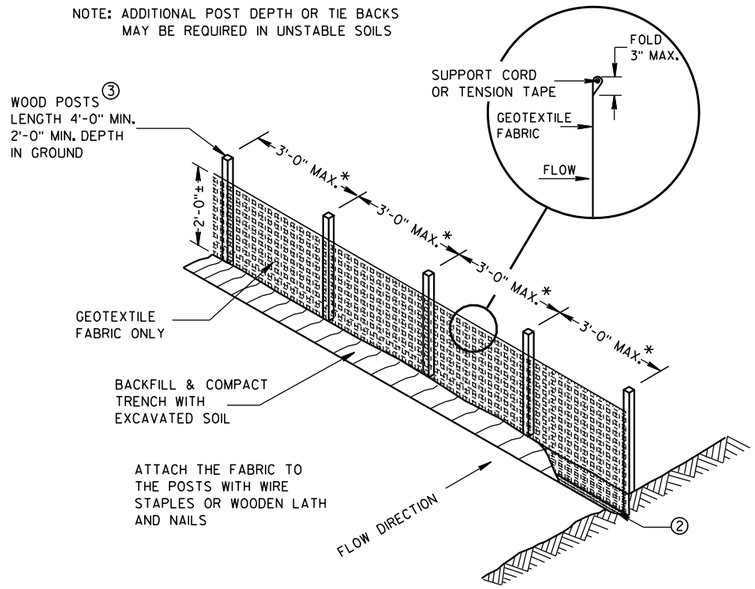
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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

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

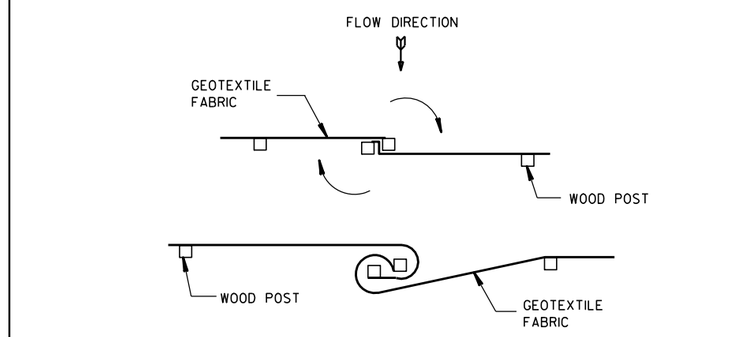


TRENCH DETAIL

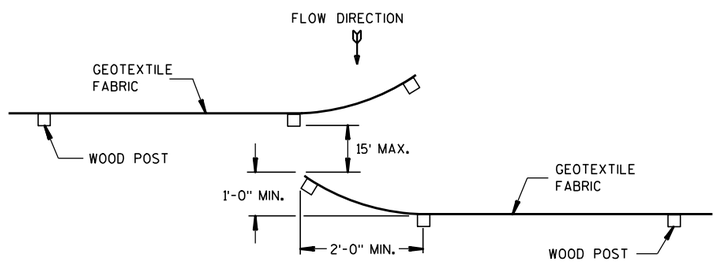


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

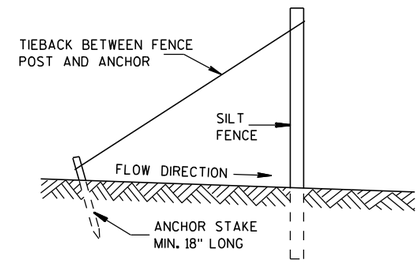


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

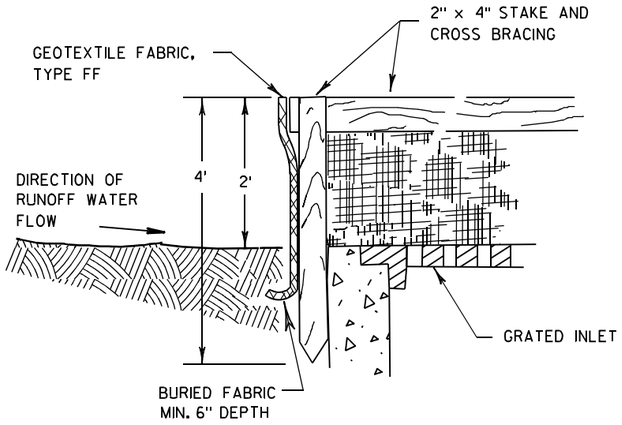
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

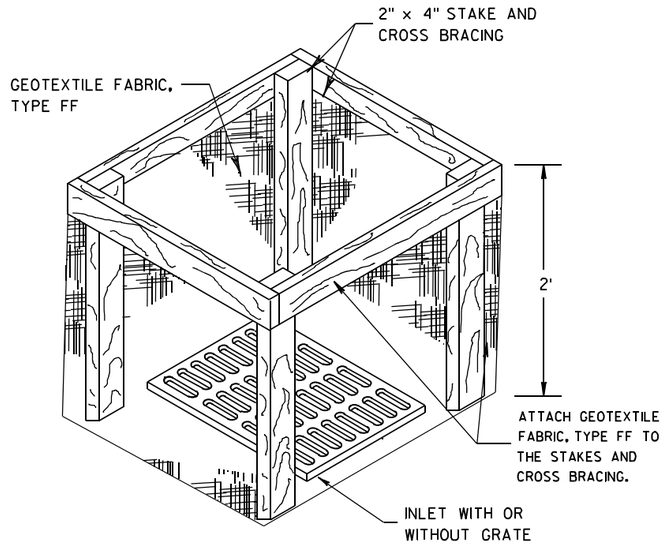
6

S.D.D. 8 E 9-6

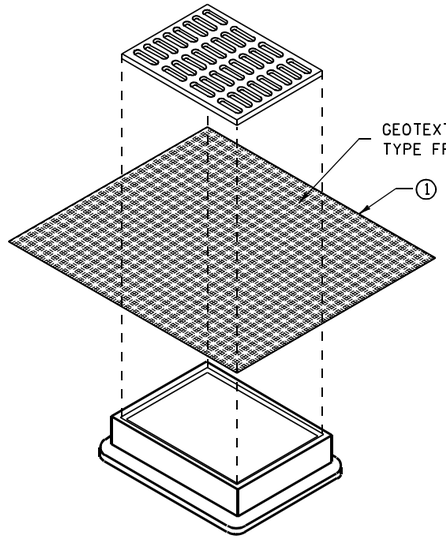
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S.D.D. 8 E 9-6



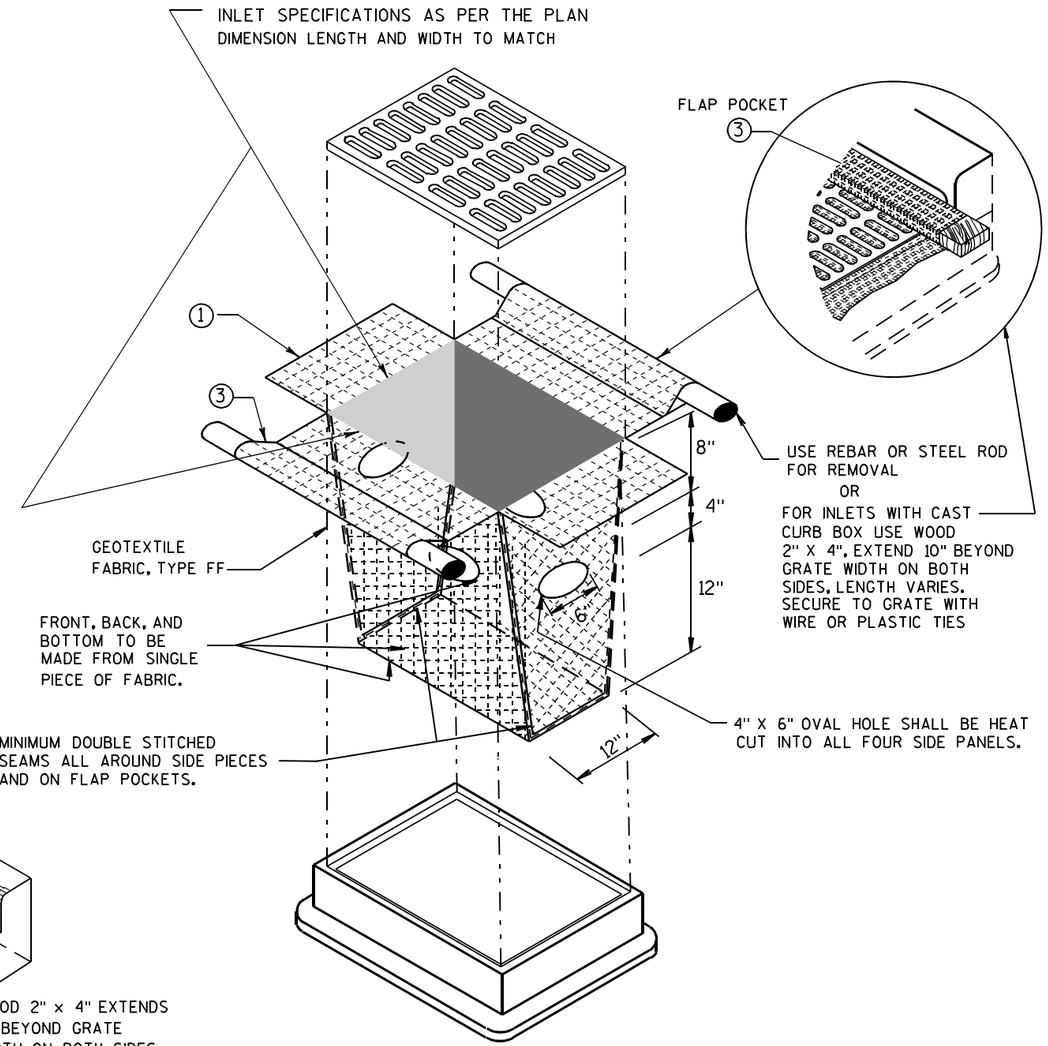


INLET PROTECTION, TYPE A



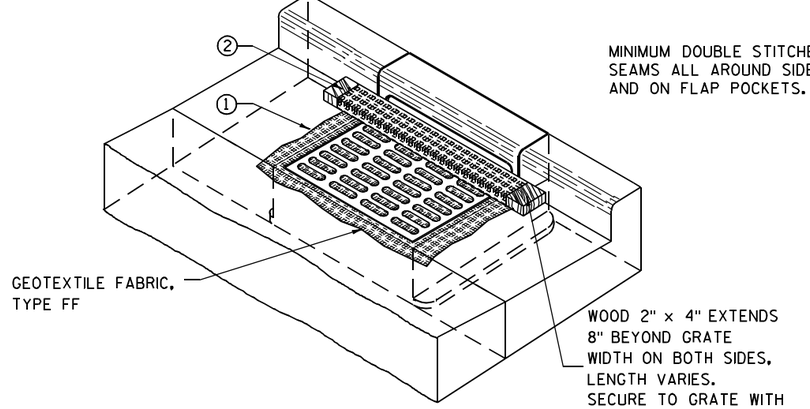
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE D

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

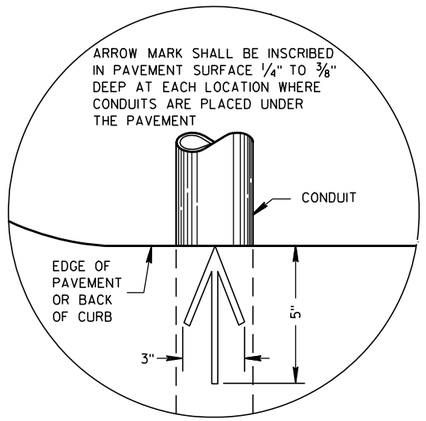
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

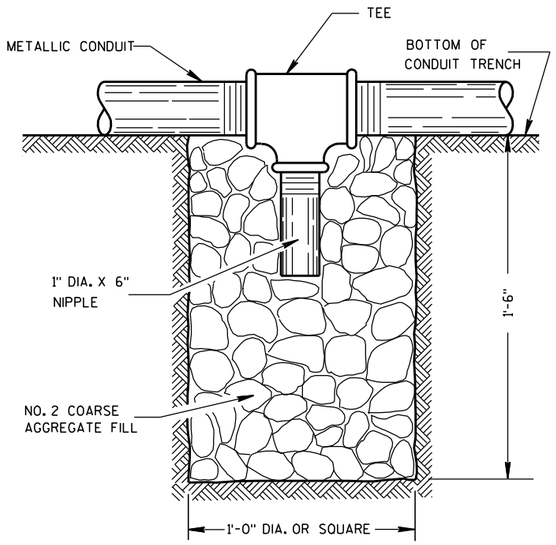
APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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



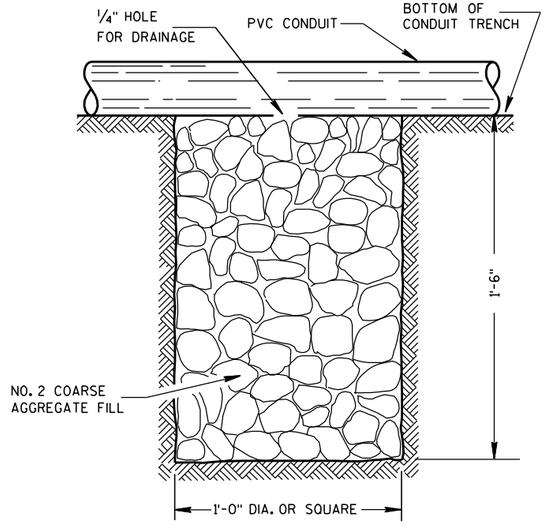
PLAN VIEW

ARROW MARK



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

GENERAL NOTES

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

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

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

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

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

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

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

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

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

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

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

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

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

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

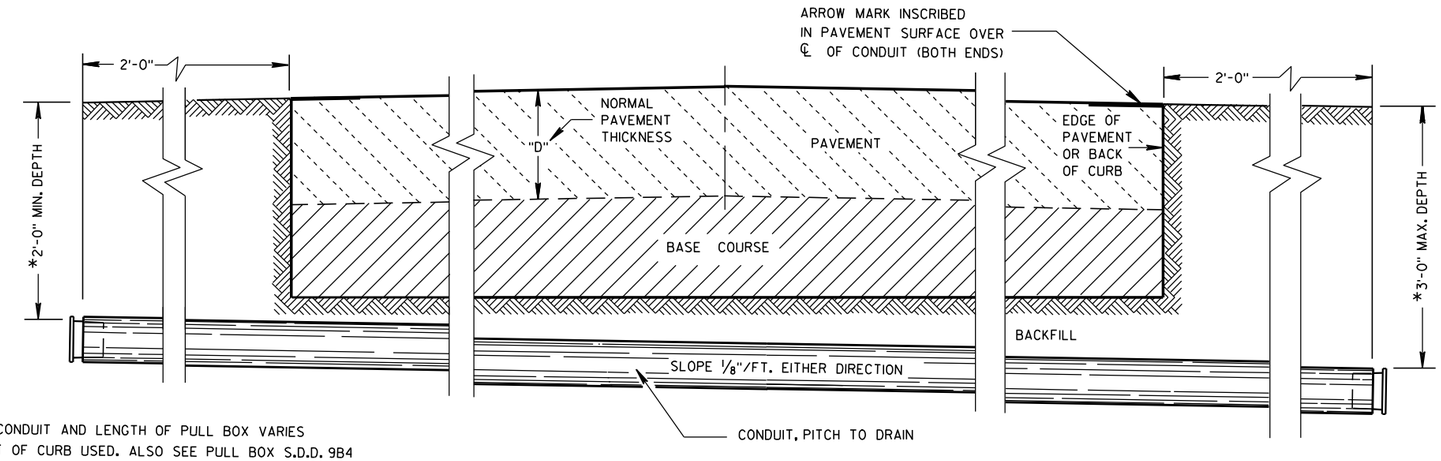
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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

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

POLY ROPE OR A PULL WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

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



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

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/23/03 — DATE

/S/ Balu Ananthanarayanan — STATE ELECTRICAL ENGI

97 HWYS

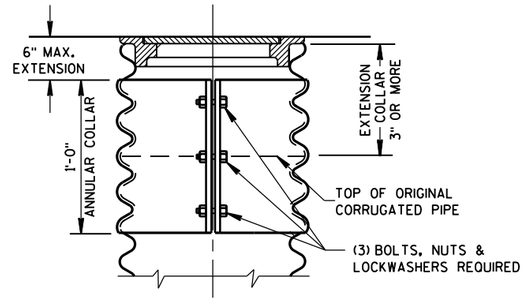
FHWA

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

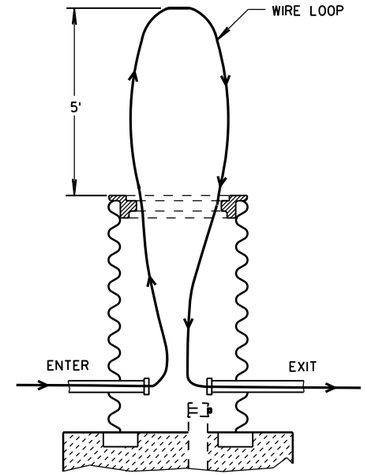
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2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

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

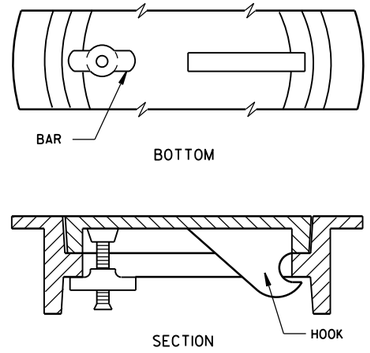
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

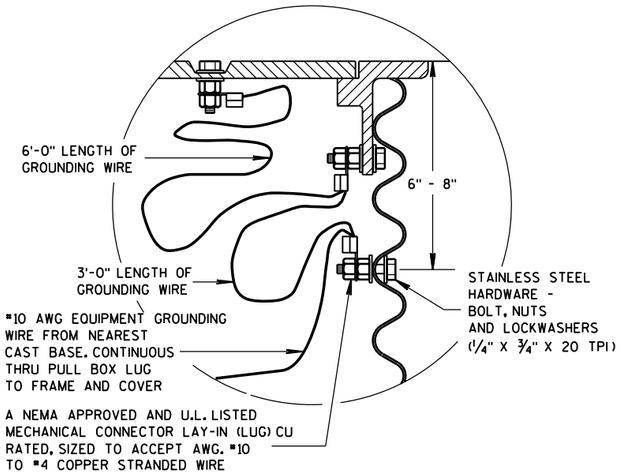


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

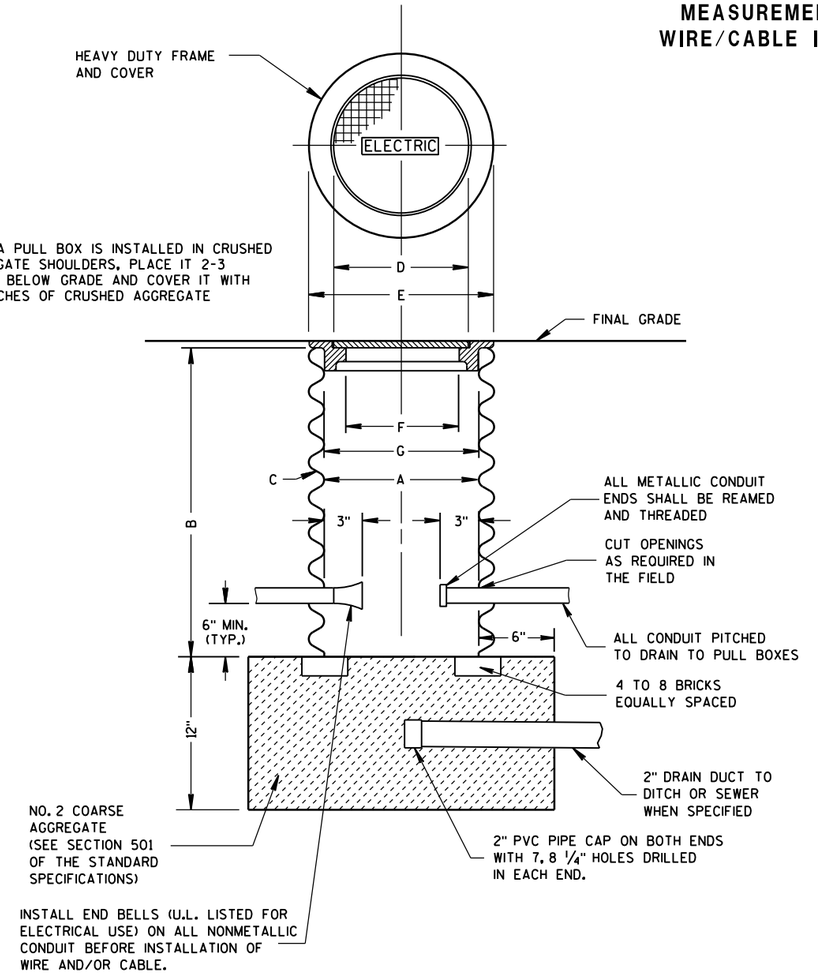


ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX

GENERAL NOTES

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

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

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

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

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

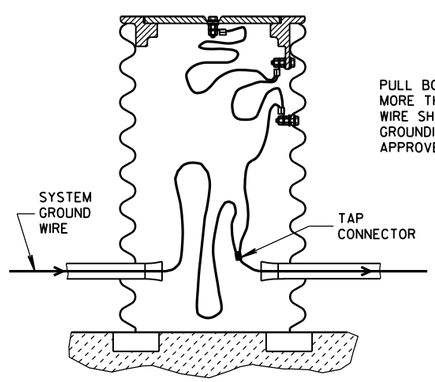
GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

GROUNDING LUGS ARE NOT REQUIRED IN PULL BOXES WHEN VOLTAGES OF LESS THAN 50 VOLTS AC ARE THE ONLY VOLTAGES ENCOUNTERED IN THE BOXES.

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

S.D.D. 9B2, "CONDUIT", APPLIES TO THIS DRAWING.

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



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

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

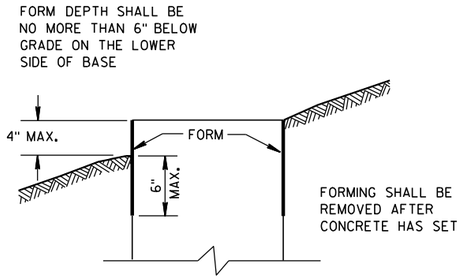
PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2-7-2013 DATE
/S/ Ahmet Demirbilek STATE ELECTRICAL
FHWA

6

S.D.D. 9 B 4-10



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

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

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

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

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

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

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

GENERAL NOTES (CONTINUED)

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

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

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

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

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2 AND TYPE 5 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND 641.2.2 OF THE STANDARD SPECIFICATIONS, ASTM A-449, OR ASTM A-687 (GRADE 105).

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

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

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

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

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

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

(2) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(3) (4) 1" DIA. X 5'-0" ANCHOR RODS.

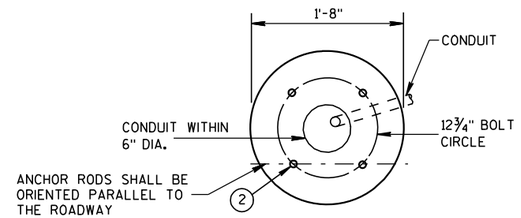
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

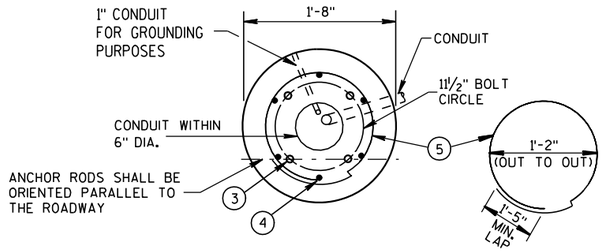
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

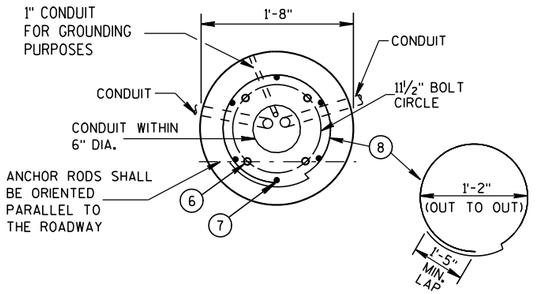
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

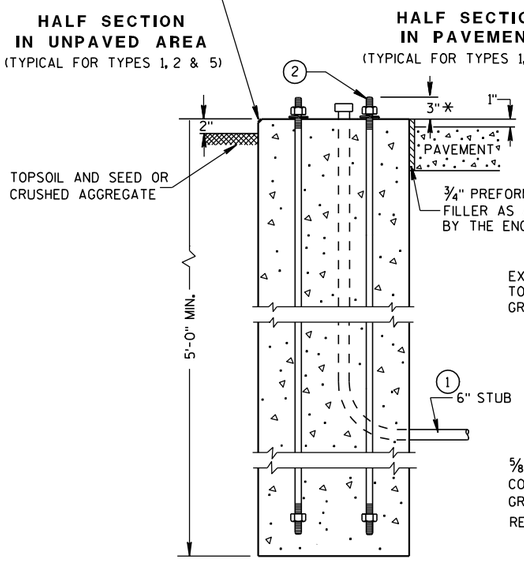






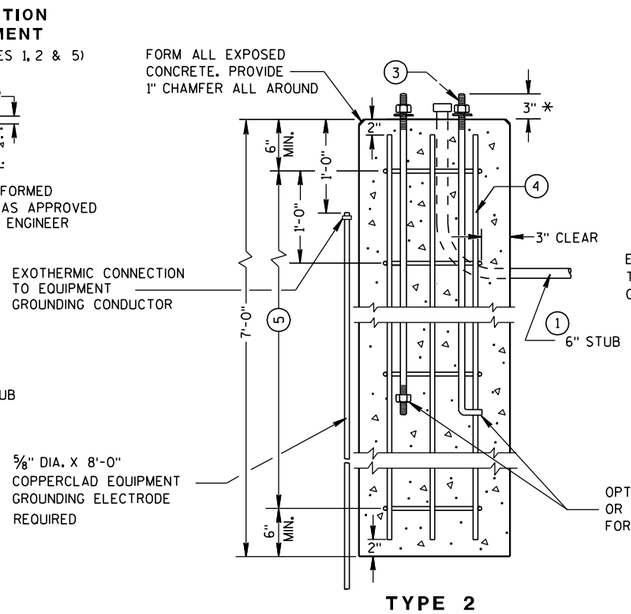
FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND

HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2 & 5)

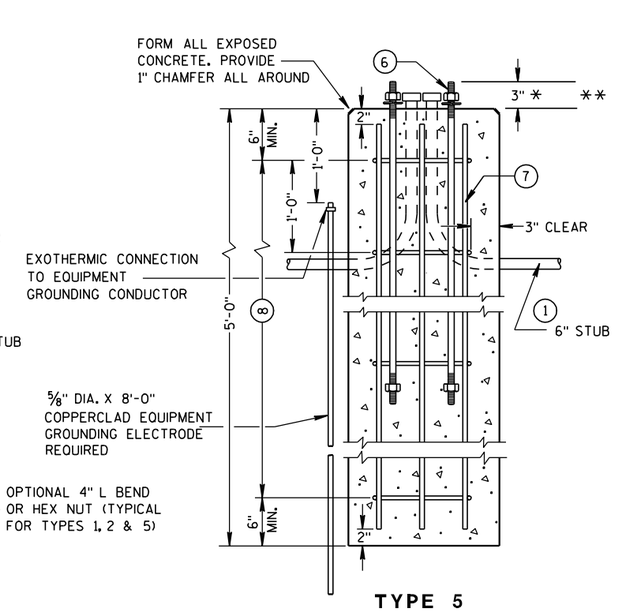


HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2 & 5)

TYPE 1



TYPE 2



TYPE 5

CONCRETE BASES

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

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

CONCRETE BASES, TYPES 1, 2 & 5

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/3/10 — DATE
/S/ Joanna L. Rush — STATE ELECTRICAL ENGI
99
HWYS
FHWA

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S.D.D. 9 C 2-6

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS, ASTM A-325, (92,000 YIELD) HEAVY HEX NUT AND BE GALVANIZED IN ACCORDANCE WITH ASTM A-153, CLASS C.

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

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

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED AND U.L. LISTED MECHANICAL CONNECTOR (LUG) AL/CU RATED AND SIZED TO ACCEPT #10 AWG STRANDED WIRE, SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

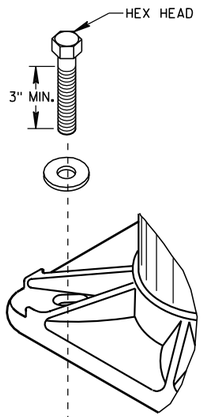
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

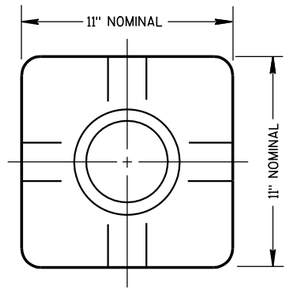
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

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

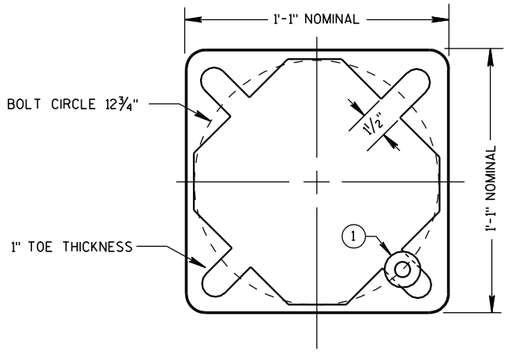
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1½", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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

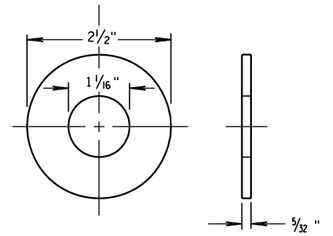




TOP VIEW
(PEDESTAL BASE)

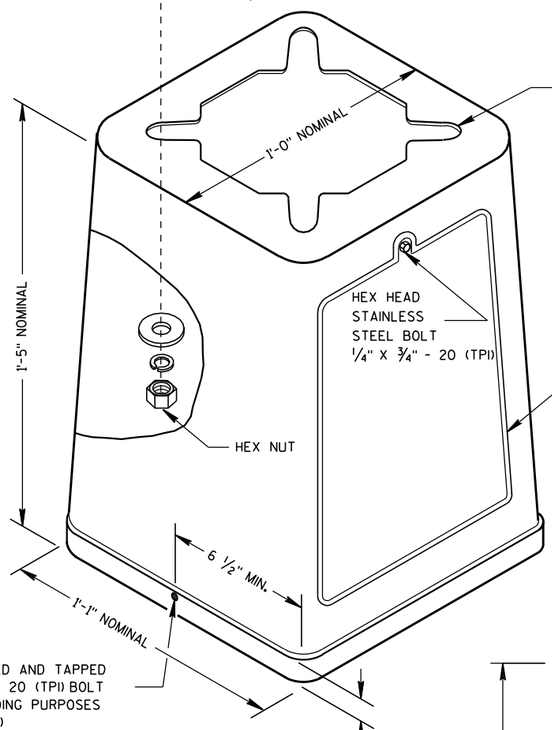


BOTTOM VIEW
(PEDESTAL BASE)

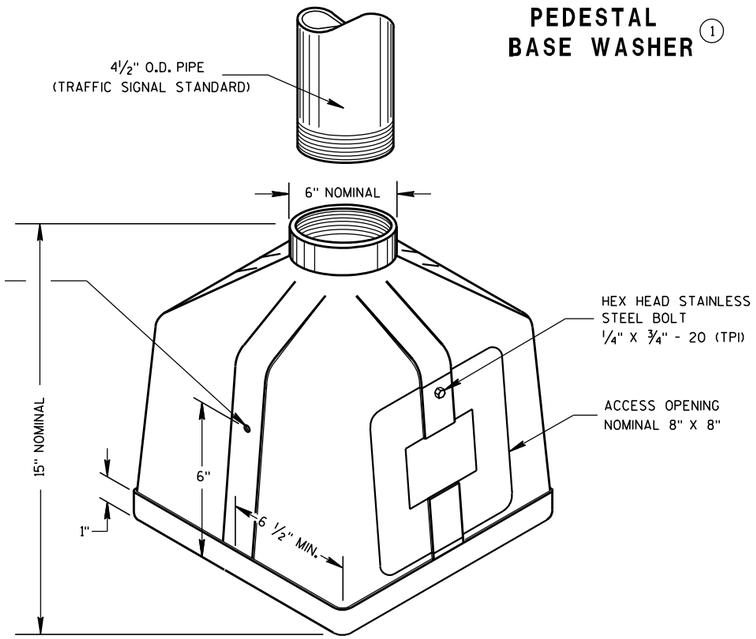


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

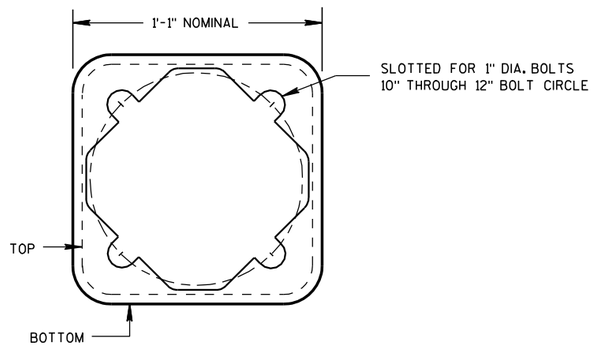


ISOMETRIC VIEW

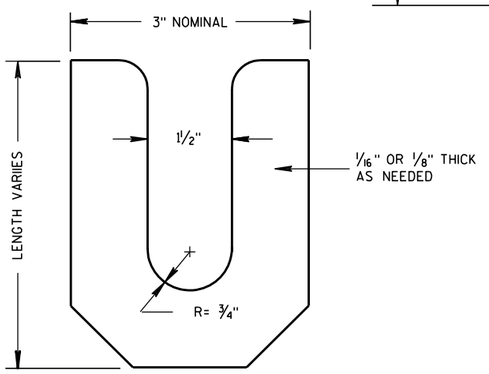


ISOMETRIC VIEW

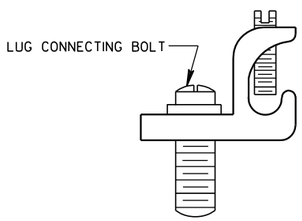
PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)



LEVELING SHIM



TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

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

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

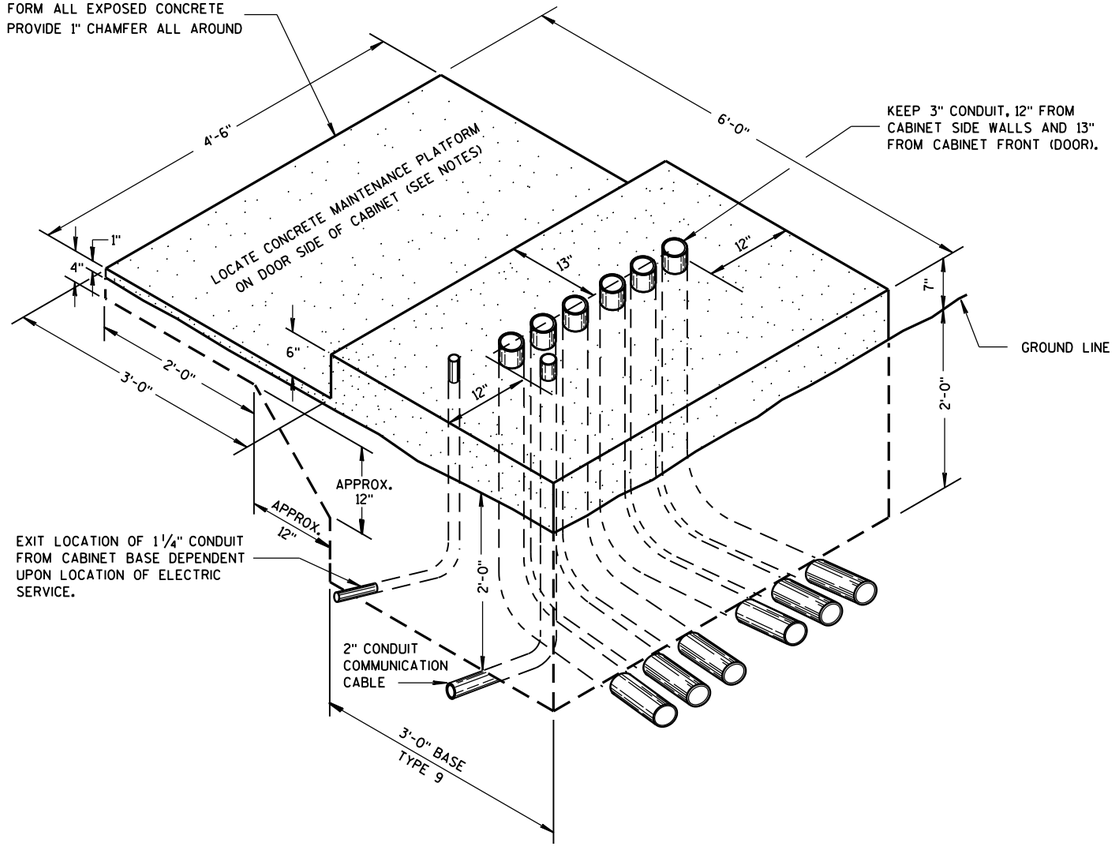
APPROVED
10/27/09 — DATE
/S/ Joanna L. Rich — STATE ELECTRICAL ENGI
100 — HWYS
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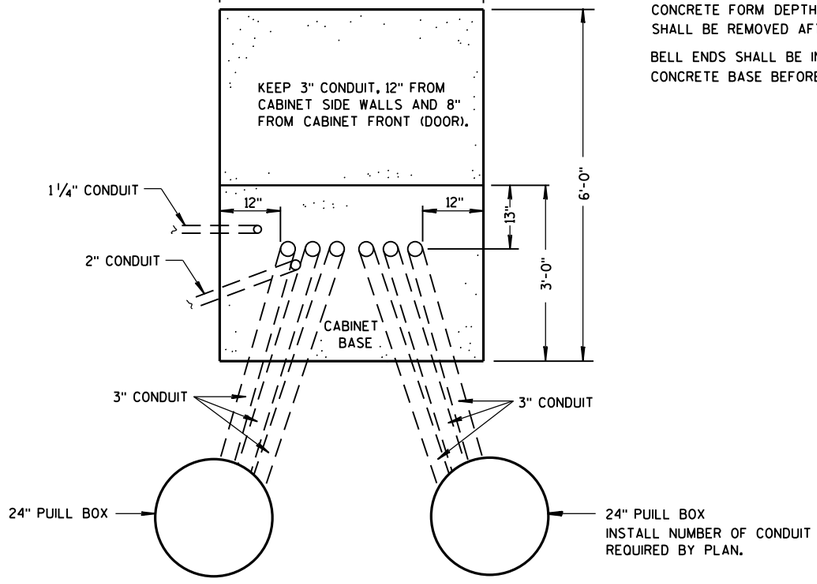
S.D.D. 9 C 3-3



ISOMETRIC VIEW

TYPE 9, SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

GENERAL NOTES

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

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

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

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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

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

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

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

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

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

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

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

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

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

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

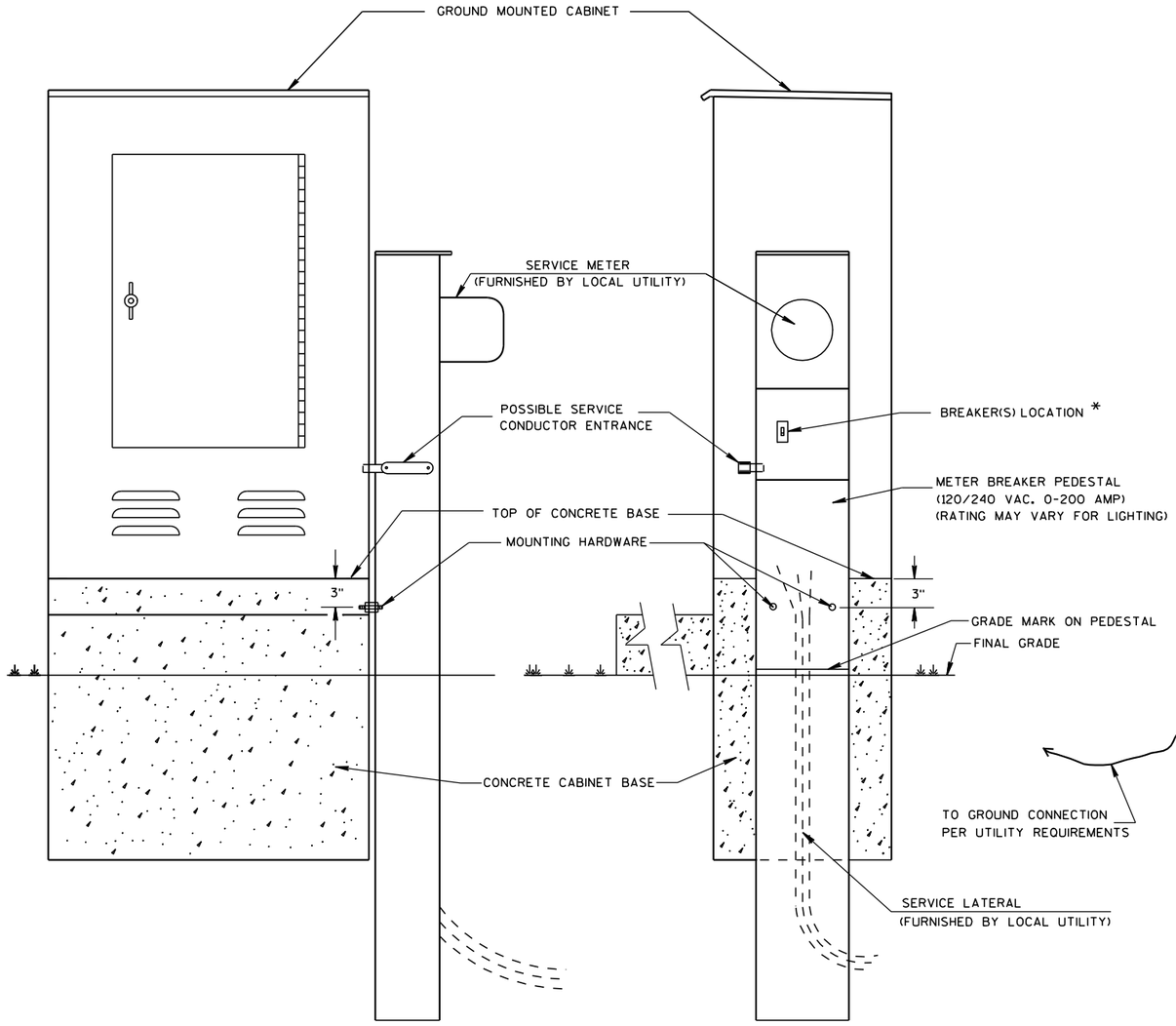
CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

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

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/26/2013
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL
FHWA



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

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

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

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

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

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

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

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

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

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S.D.D. 9 D 1-4

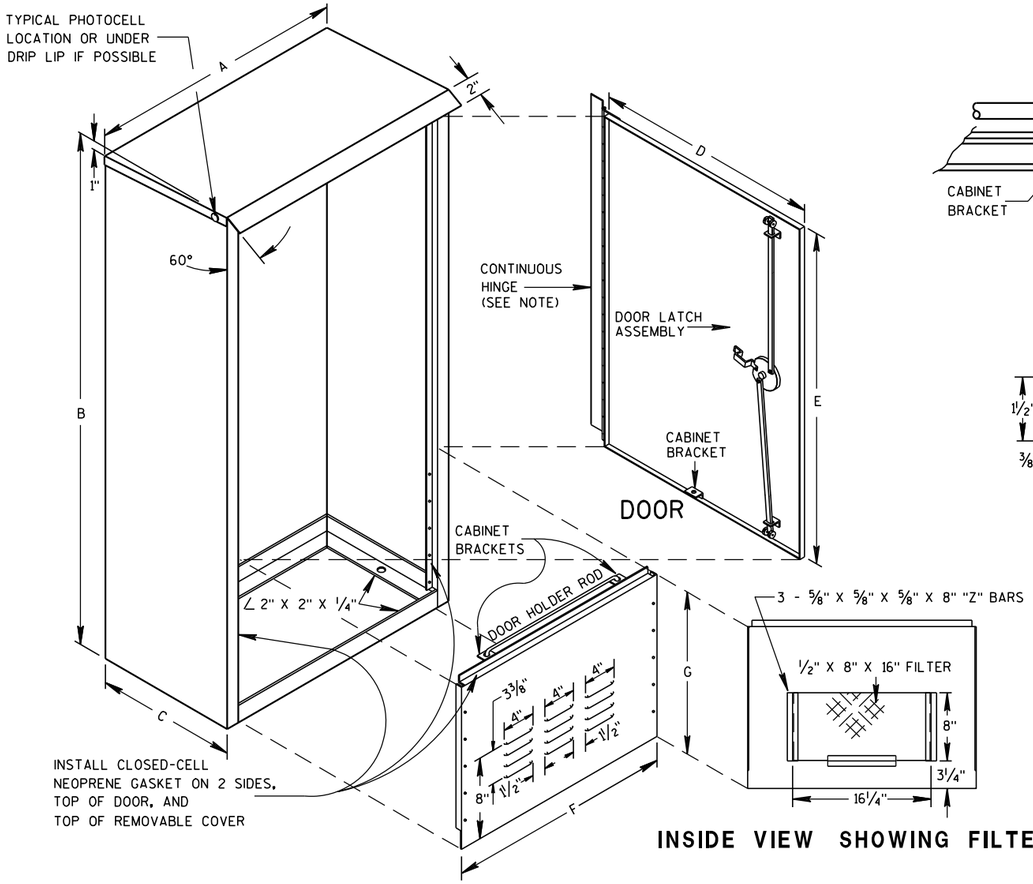
CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/27/09 DATE
/S/ Joanna L. Bush STATE ELECTRICAL ENGI
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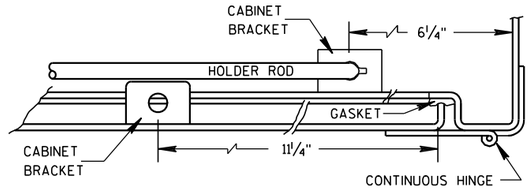
S.D.D. 9 D 1-4



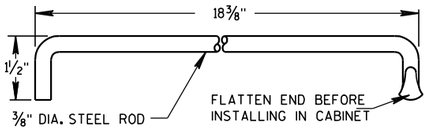
DOOR

REMOVABLE COVER

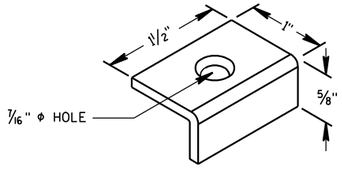
INSIDE VIEW SHOWING FILTER



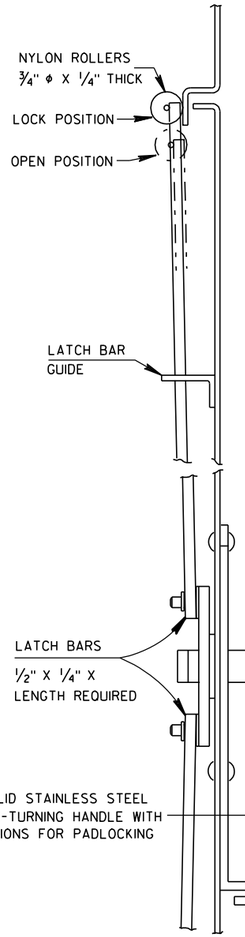
HINGE & DOOR HOLDER



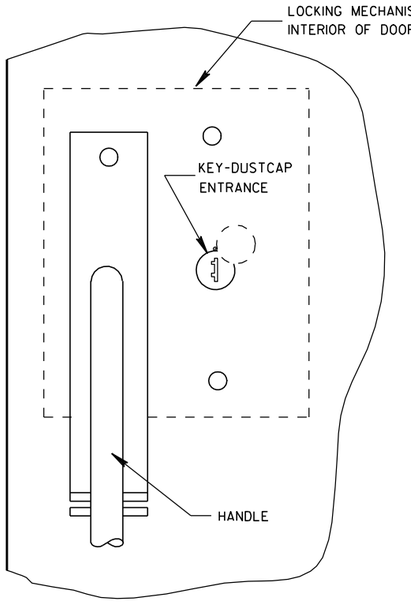
HOLDER ROD



CABINET BRACKET

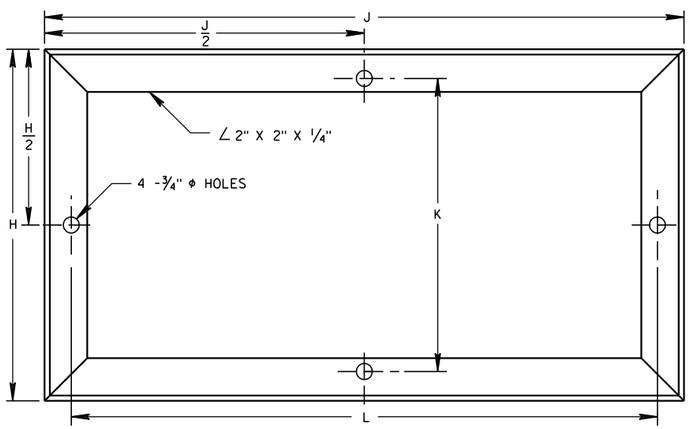


SIDE VIEW



FRONT VIEW

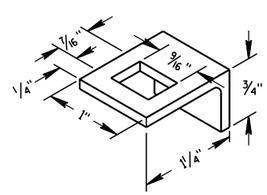
LATCH ASSEMBLY



MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

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



LATCH BAR GUIDE

GENERAL NOTES

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

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

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

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

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

ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

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

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

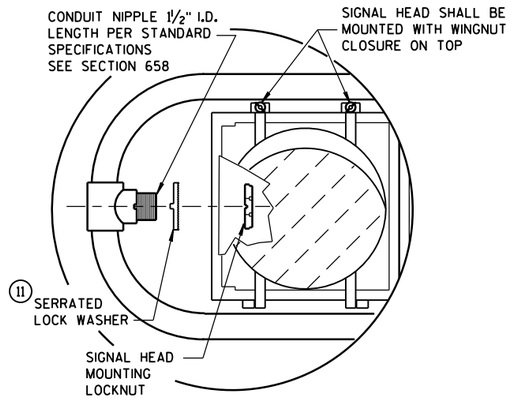
DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.

SIGNAL OR LIGHTING CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

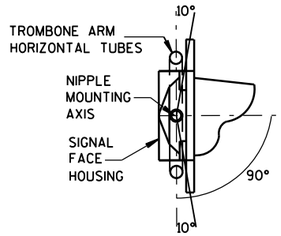
APPROVED
10/21/96 — DATE
/S/ Balu Ananthanarayanan — STATE ELECTRICAL ENGI
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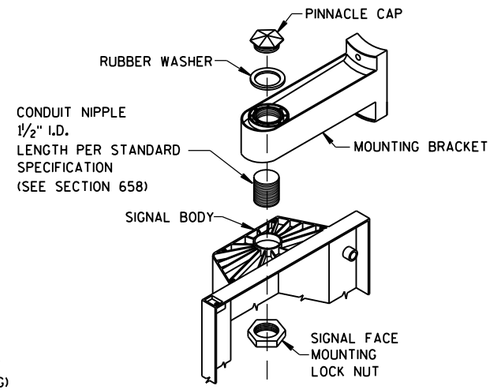
HORIZONTAL SIGNAL HEAD MOUNTING DETAIL *

* SIGNAL HEAD ATTACHMENT ALSO APPLYS TO MOUNTING AT CROSS BAR



SECTION A-A

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



SIGNAL FACE MOUNTING DETAIL

(BANDED)

GENERAL NOTES

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

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

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

A PULL WIRE/ROPE IN ACCORDANCE WITH STANDARD SPECIFICATION 652 SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

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

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

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

(2) SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658)

(3) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

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

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACES.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(7) MOUNTING BRACKET NIPPLES FOR THE SIGNAL FACE(S) SHALL BE 2 INCHES IN LENGTH AND 1½ INCHES IN DIAMETER. (SEE STANDARD SPECIFICATION - SECTION 658).

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

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

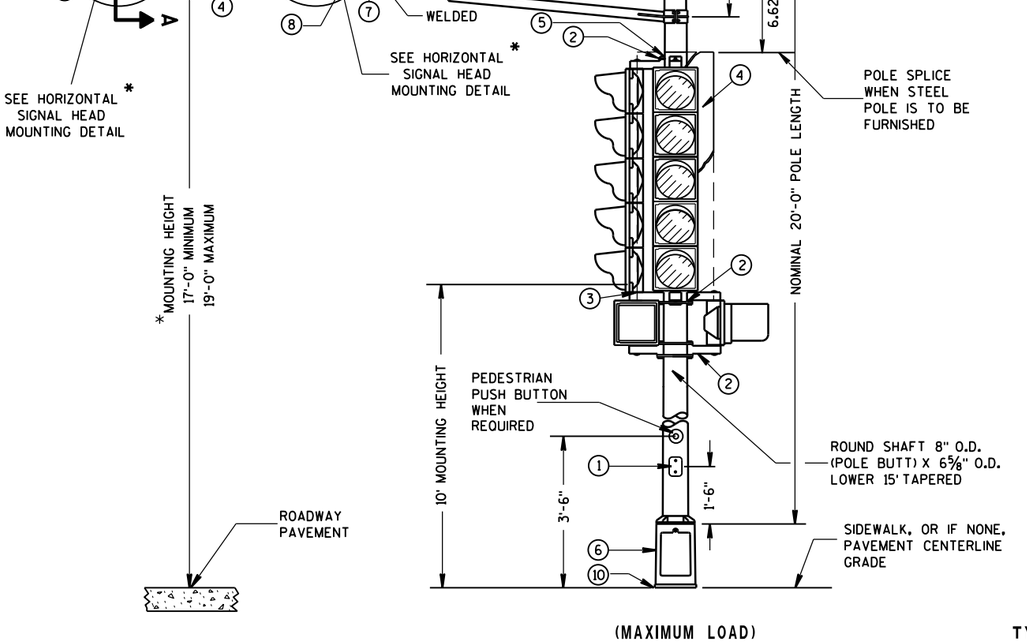
(10) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

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

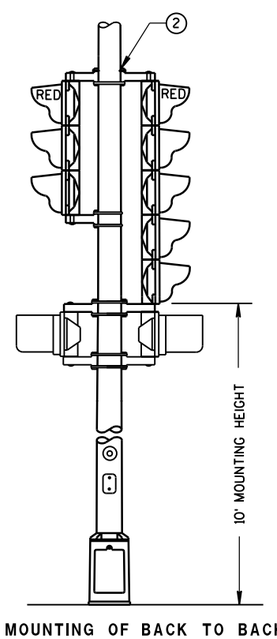
*MOUNTING HEIGHT LIMITATION DIMENSIONS OF THE TROMBONE MAST ARM WILL BE DEPENDENT UPON THE USE/NON-USE OF A TRANSFORMER BASE.

FOR MANUFACTURERS USE ONLY

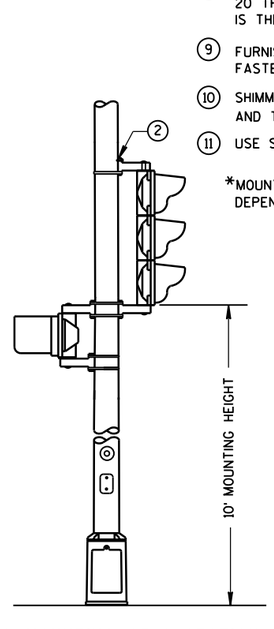
WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN/BRIDGE FOR VERIFICATION AND APPROVAL.



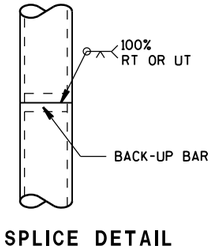
(MAXIMUM LOAD)



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



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE



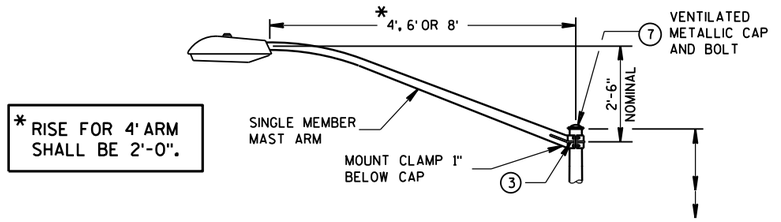
POLE SPLICE DETAIL

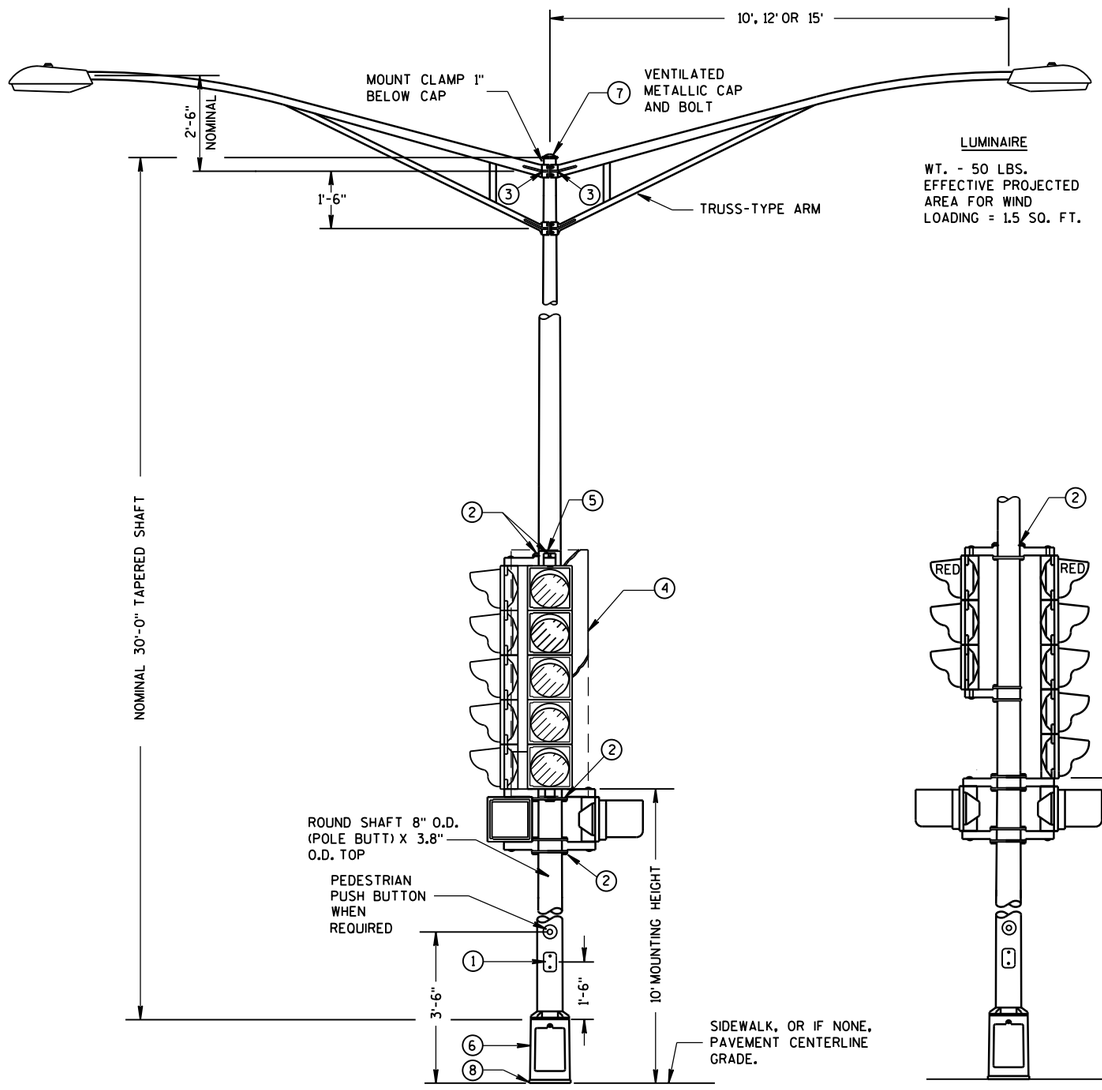
TYPE 2 POLE MOUNTING CONFIGURATION

POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 104

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S.D.D. 9 E 1-12a

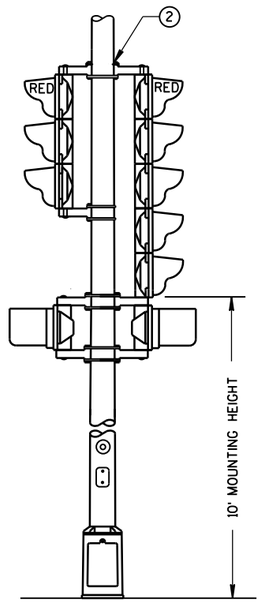




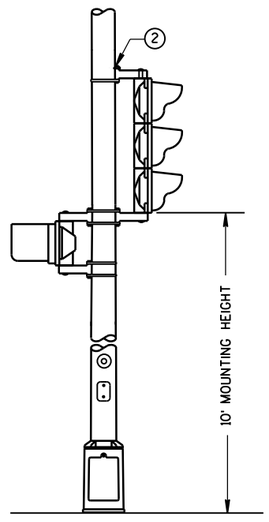
LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED AREA FOR WIND LOADING = 1.5 SQ. FT.

(MAXIMUM LOAD)

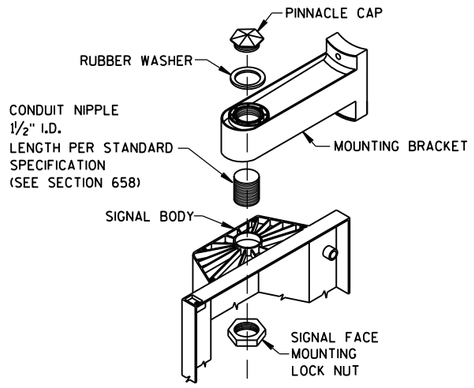


TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE

TYPE 4 POLE MOUNTING CONFIGURATION



SIGNAL FACE MOUNTING DETAIL

(BANDED)

GENERAL NOTES

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

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

POLES SHALL BE GALVANIZED STEEL WITH A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

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

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

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

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

(2) SIGNAL FACE MOUNTING BRACKETS, MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658).

(3) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

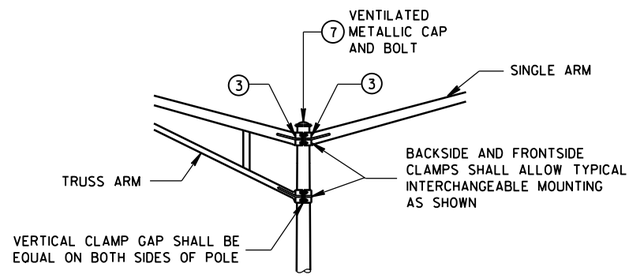
(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

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

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



INTERCHANGEABLE MOUNTING DETAIL

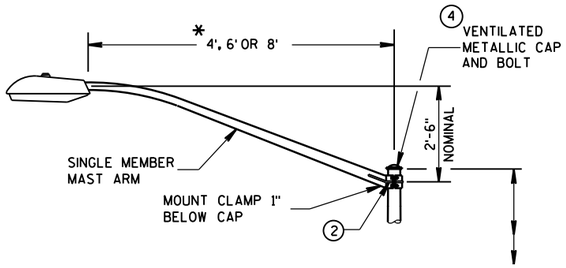
POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4

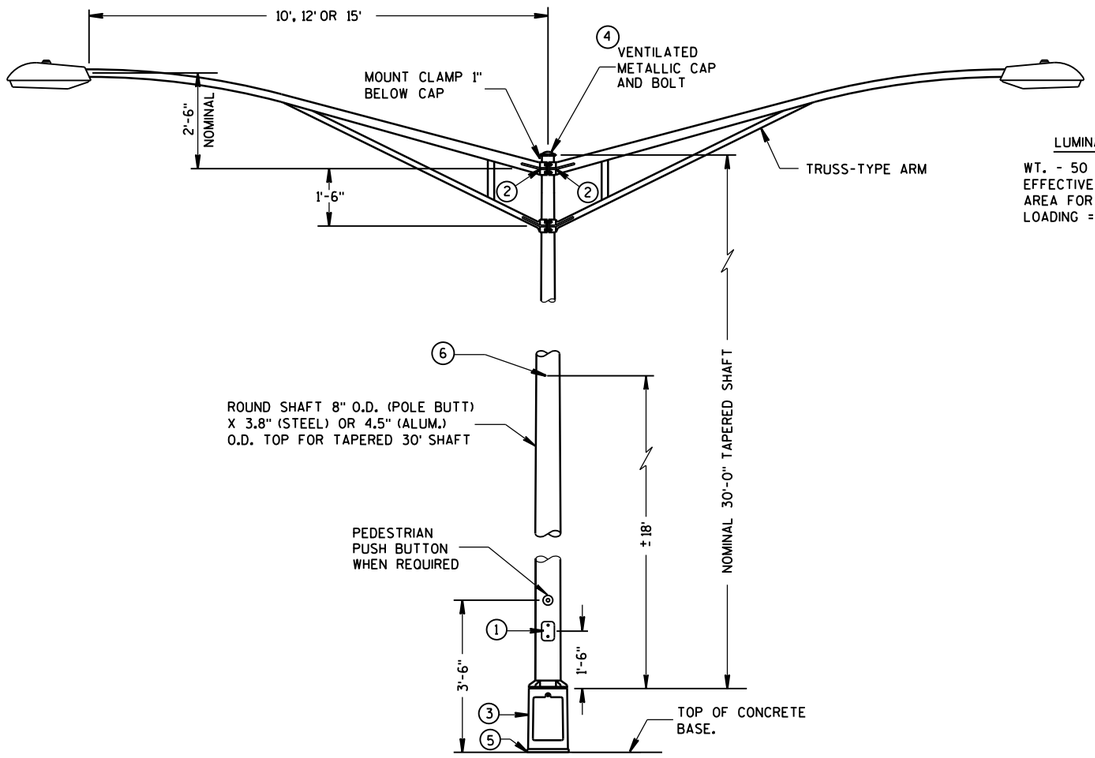
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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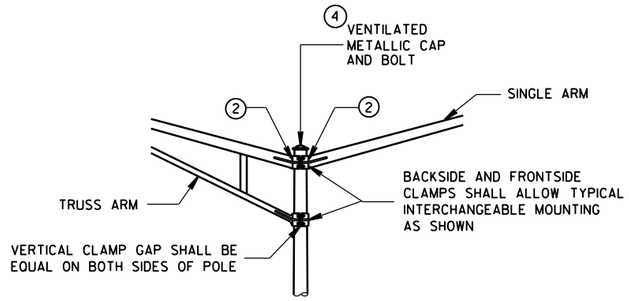
S.D.D. 9 E 1-12c

*RISE FOR 4' ARM SHALL BE 2'-0".





TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY



INTERCHANGEABLE MOUNTING DETAIL

LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED
AREA FOR WIND
LOADING = 1.5 SQ. FT.

GENERAL NOTES

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

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

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

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

THE TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.188".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

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

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

(2) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

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

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

(6) INTERNAL DUMBBELL-TYPE VIBRATION DAMPER.

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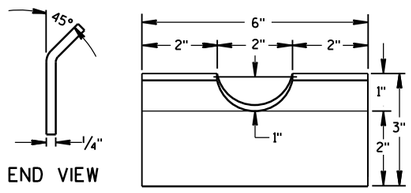
S.D.D. 9 E 1-12d

POLE MONTINGS FOR
LIGHTING UNITS, TYPE 5
(30 FEET)

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DEPARTMENT OF TRANSPOI

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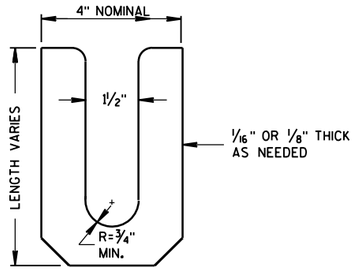
S.D.D. 9 E 1-12d



FRONT VIEW

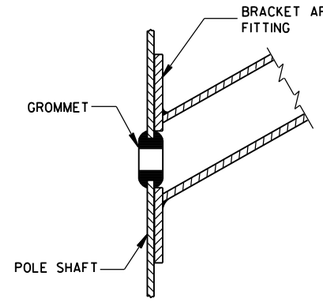
RECTANGULAR CLAMP SHIM

(4 TO A SET)

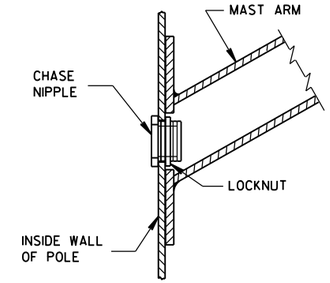


LEVELING SHIM (15)

SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

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

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

(13) OUTSIDE SHIM DIAMETER - (4.5" O.D. FOR LUMINAIRE MAST ARM)
(6.625" O.D. FOR TROMBONE MAST ARM)

(14) VARIABLE SHIM THICKNESS - (0.10", 0.25", 0.35", 0.53" OR 0.70")

SHIM THICKNESS FOR TROMBONE MAST ARMS MAY BE TYPICALLY 0.25", 0.35", 0.53" OR 0.70".

SHIM THICKNESS FOR LUMINAIRE MAST ARMS MAY BE TYPICALLY 0.10", 0.25" OR 0.35".

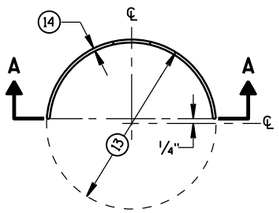
SHIM MATERIAL SHALL BE ALUMINUM ALLOY.

SHIM THICKNESS SHALL BE IMPRESSED INTO EACH SHIM. NUMERALS SHALL BE 1/4" HIGH AND LEGIBLE.

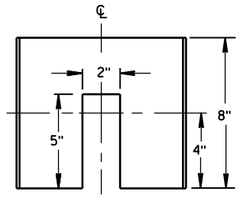
THE CONTRACTOR SHALL SUBMIT TWO COPIES OF ALL SHIM SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL.

(15) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

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



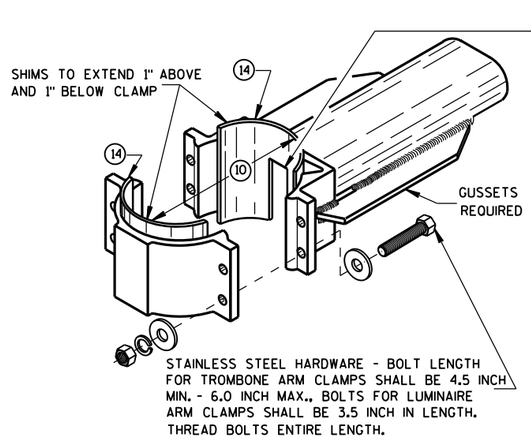
PLAN VIEW



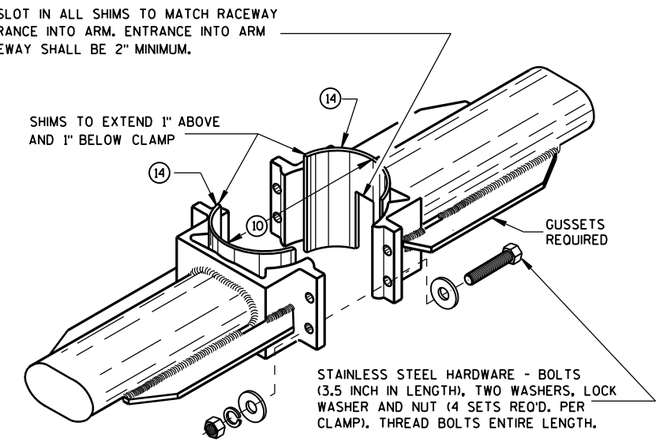
SECTION A-A

CIRCULAR CLAMP SHIM

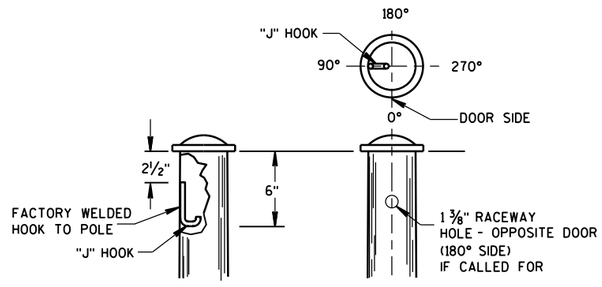
(2 TO A SET)



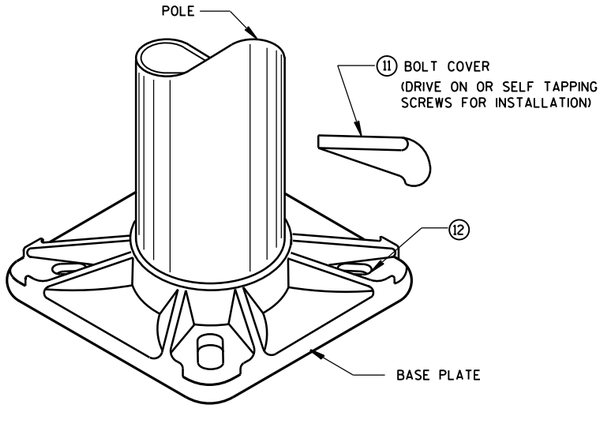
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



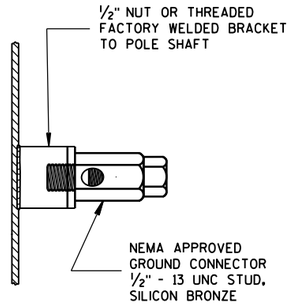
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

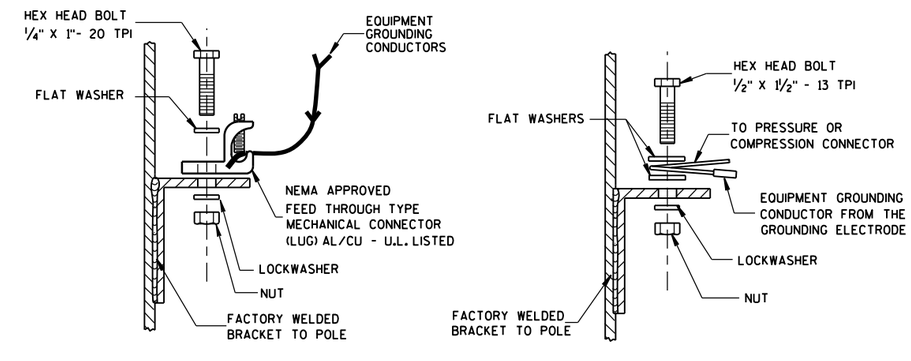


TYPICAL "J" HOOK LOCATION



BASE PLATE





TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

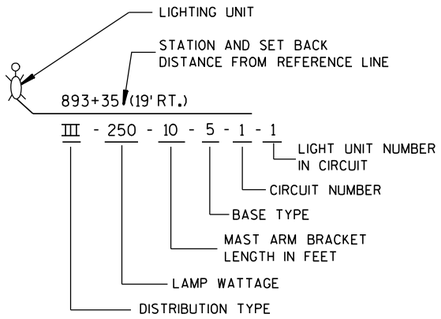
HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

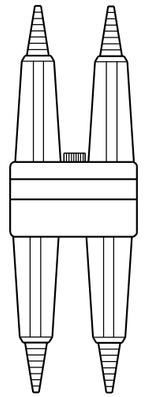
APPROVED
2/7/2013 DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL
FHWA

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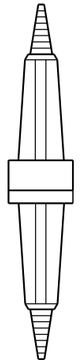
S.D.D. 9 E 1-12g



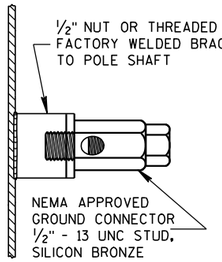
LIGHTING UNIT CODE
(TYPICAL)

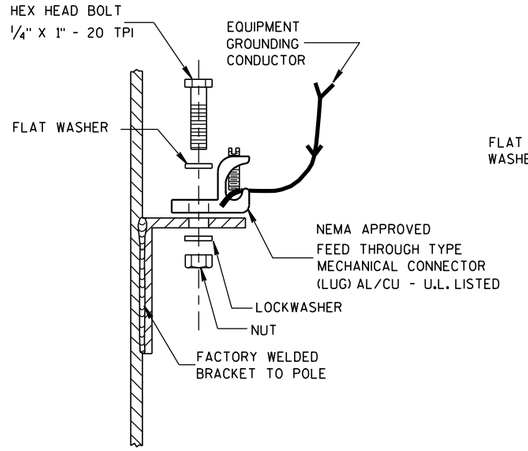


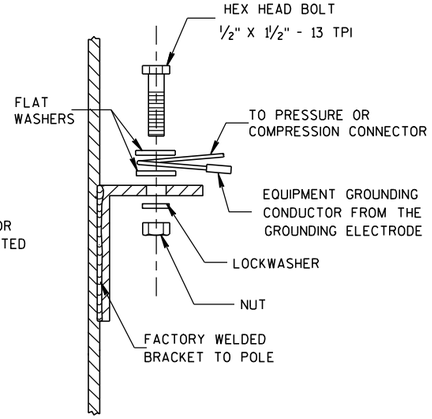
DETAIL "A"
BREAKAWY
DOUBLE POLE WITH
WATERPROOF
INSULATING BOOT



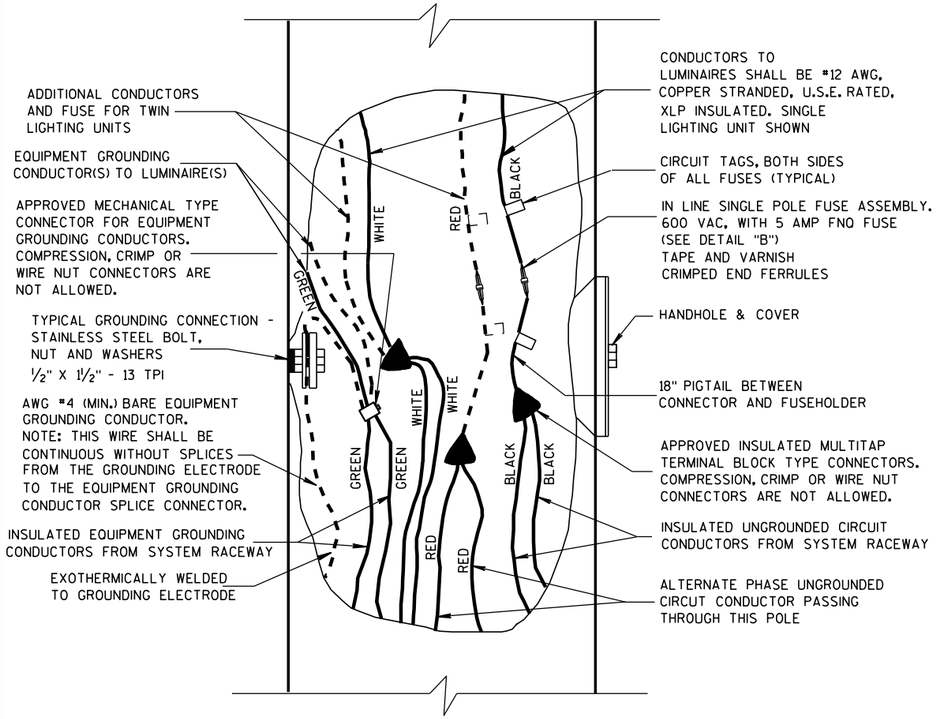
DETAIL "B"
BREAKAWY
SINGLE POLE WITH
WATERPROOF
INSULATING BOOT



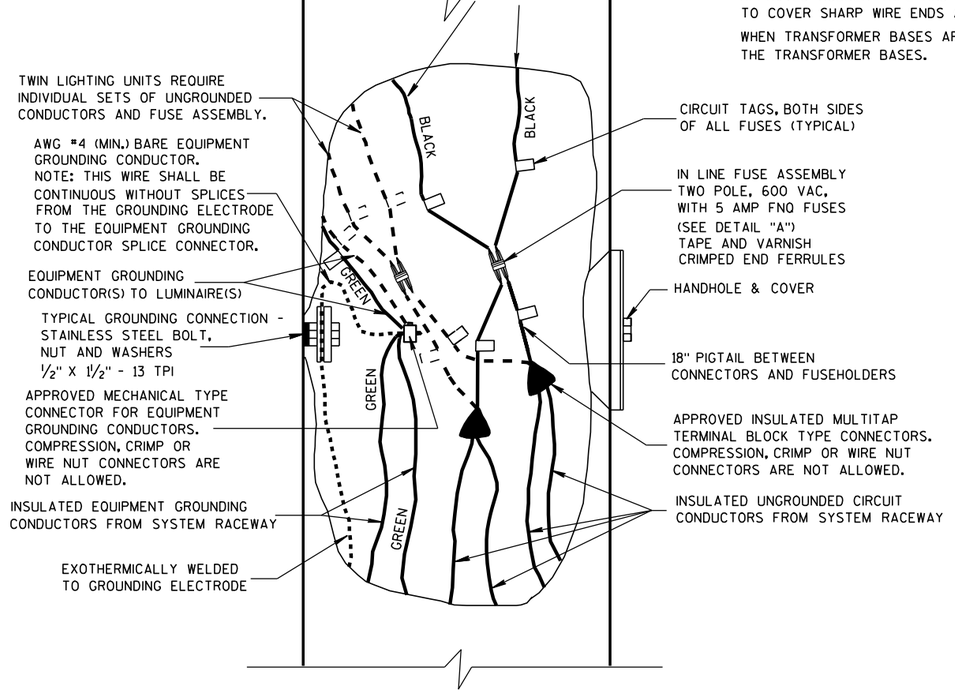




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



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



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

GENERAL NOTES

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

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

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

NON-FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/2/2011 — DATE

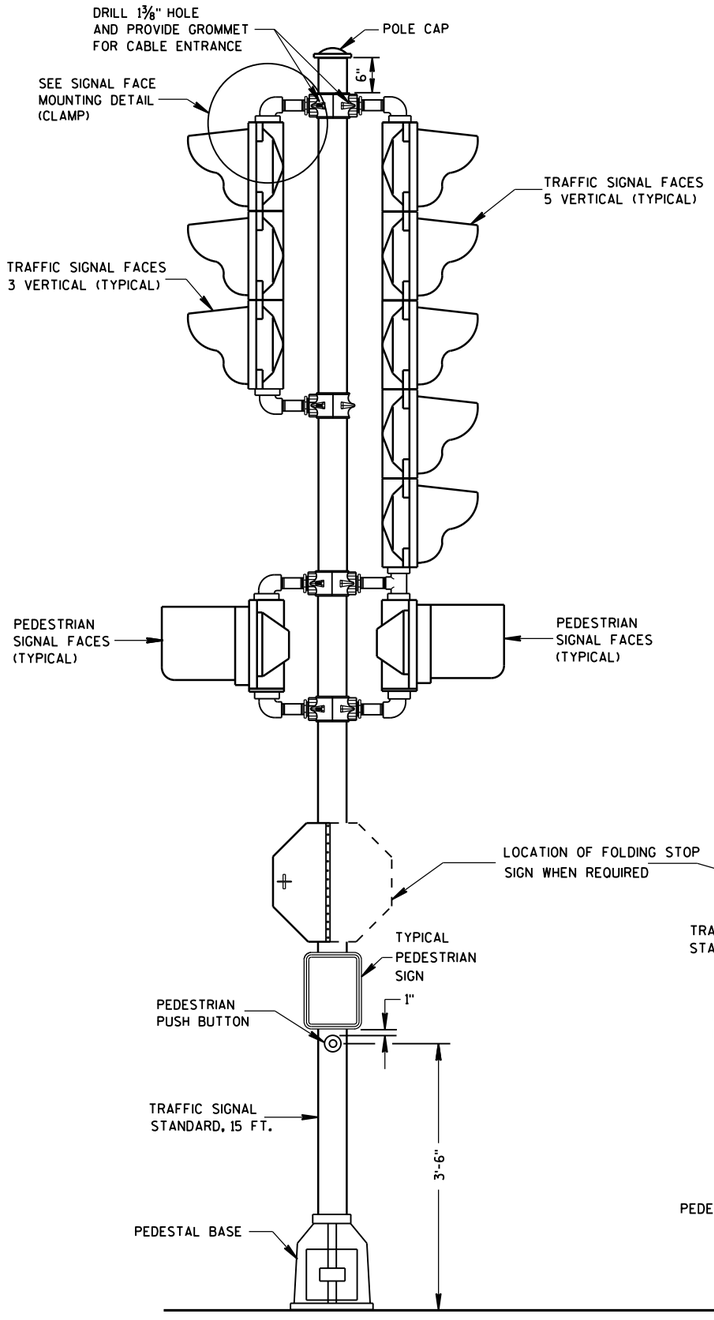
/S/ Thomas J. Gosnell — STATE ELECTRICAL ENGI

HWYS

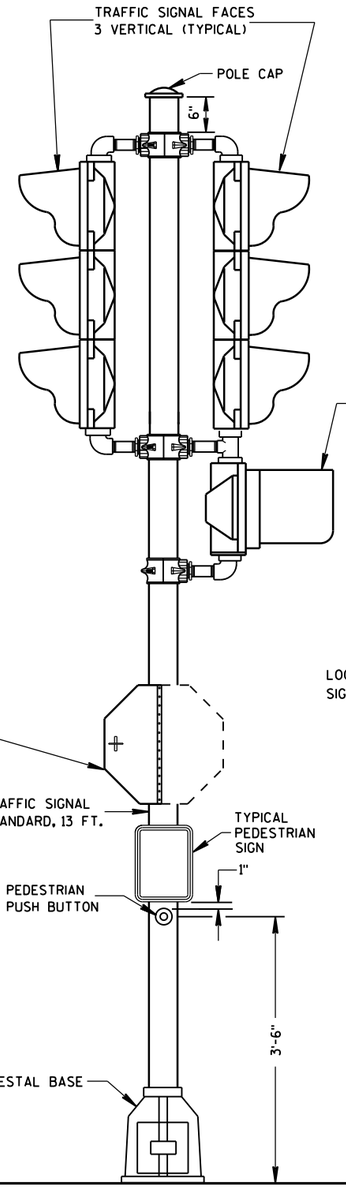
FHWA

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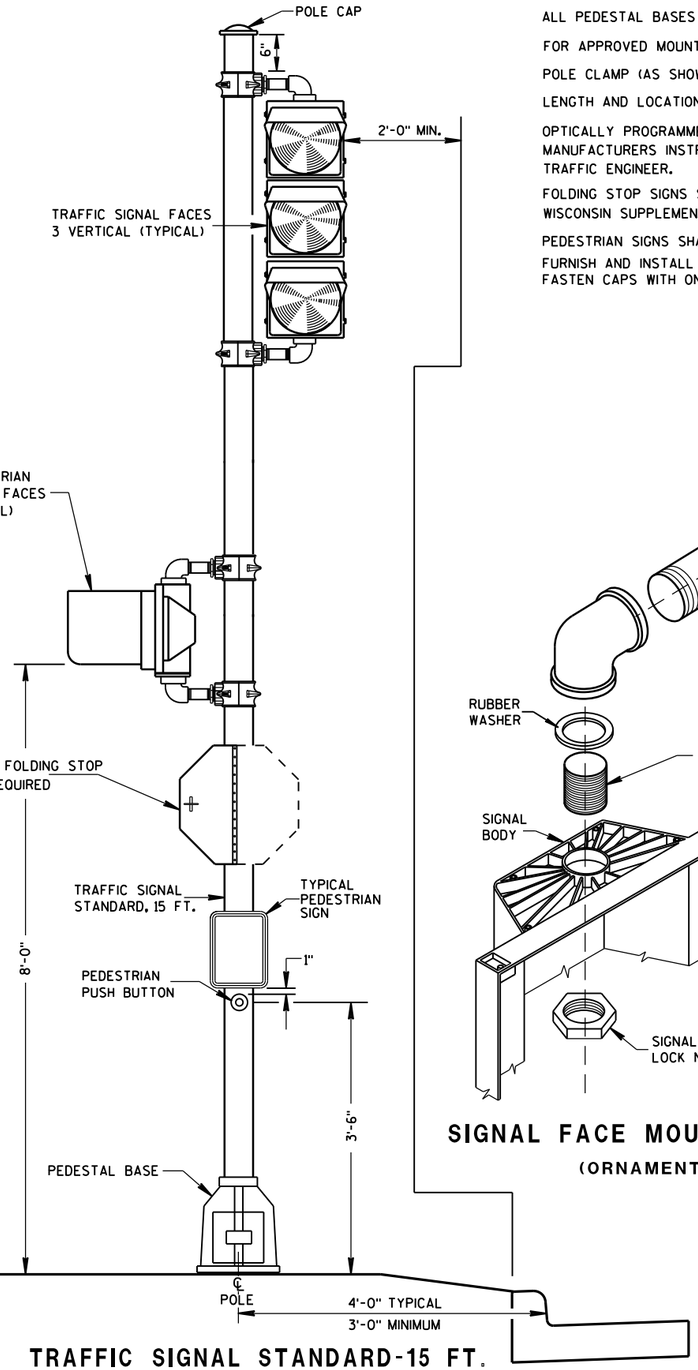
S.D.D. 9 E 3-4



TRAFFIC SIGNAL STANDARD-15 FT.



TRAFFIC SIGNAL STANDARD-13 FT.



TRAFFIC SIGNAL STANDARD-15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLE CLAMP (AS SHOWN) MOUNTING BRACKETS SHALL BE USED.

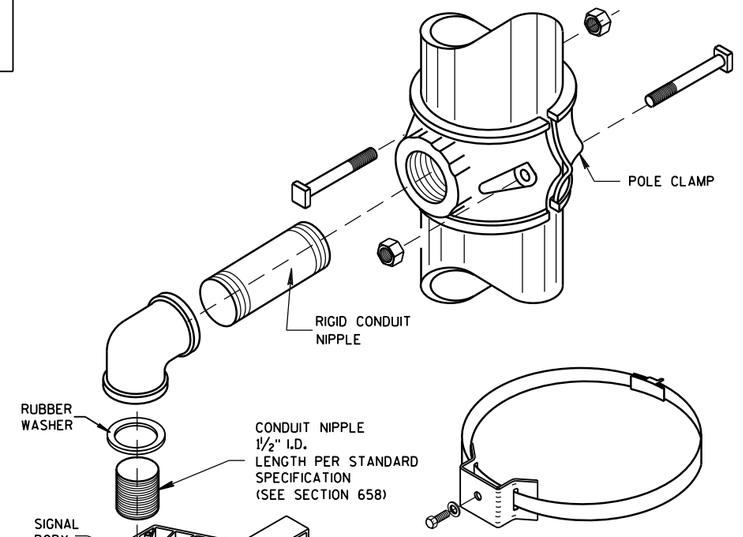
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

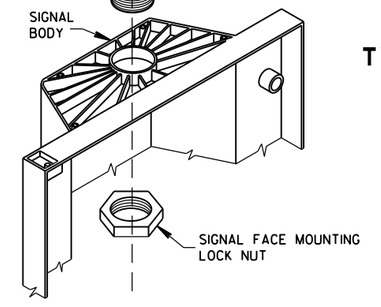
FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



SIGNAL FACE MOUNTING DETAIL
(ORNAMENTAL)

TRAFFIC SIGNAL STANDARD
ORNAMENTAL BRACKET MOUNTINGS
TYPICAL FOR 13 FT. OR 15 FT.

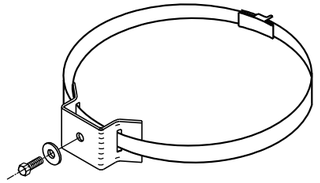
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/28/2013 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

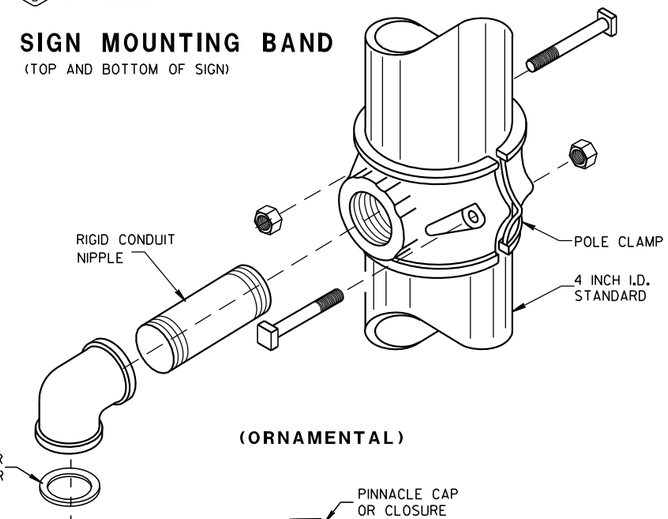
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S.D.D. 9 E 5-6

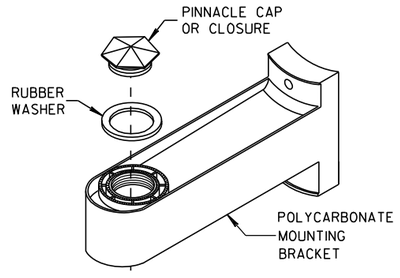
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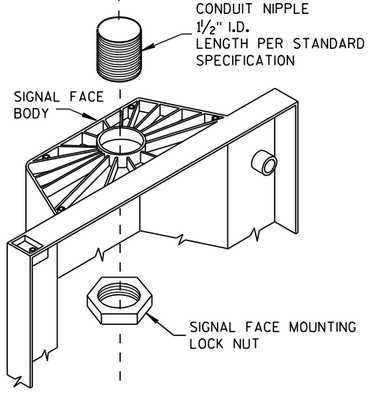
TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



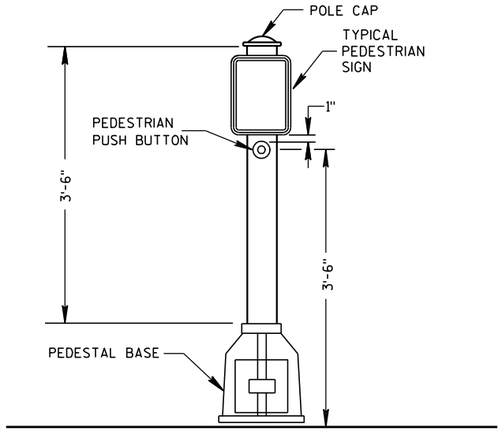
(ORNAMENTAL)



(BANDED)



SIGNAL FACE MOUNTING DETAILS



PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

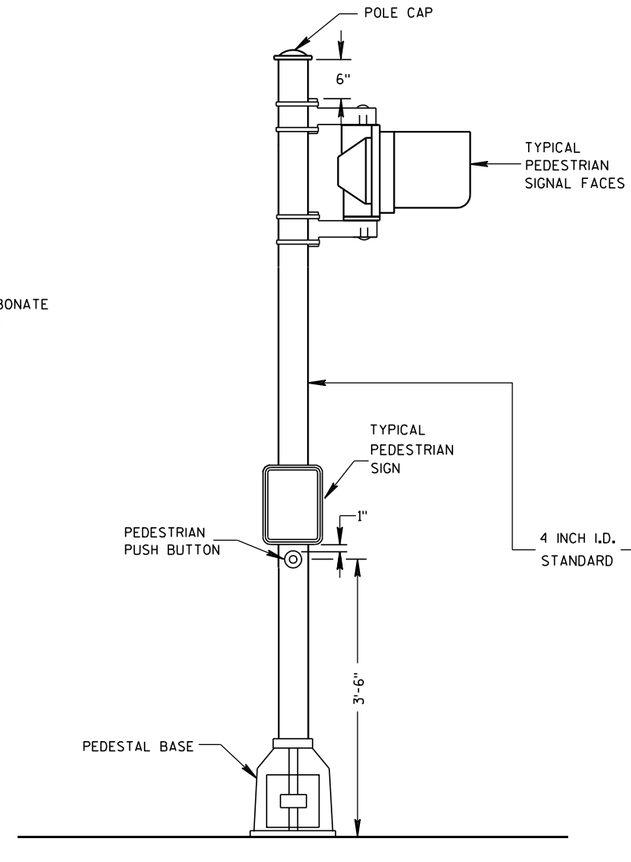
POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

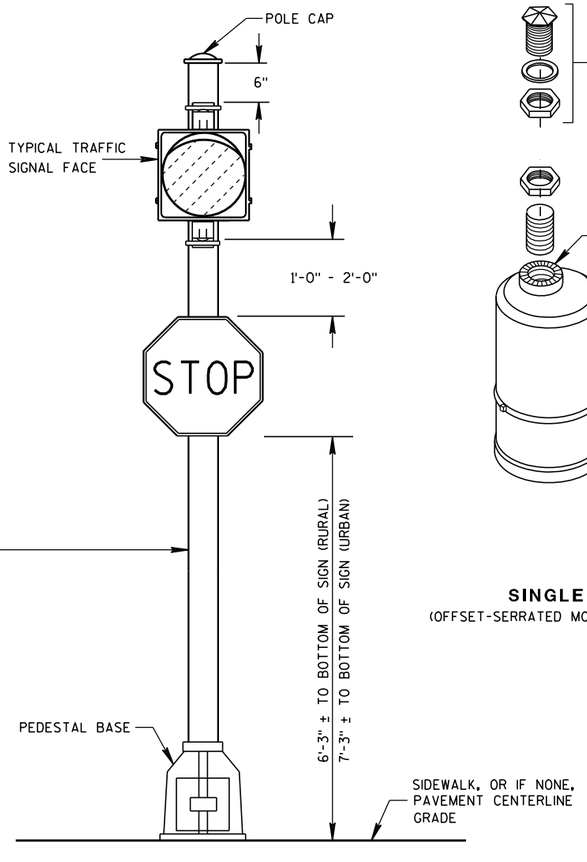
MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE DISTRICT TRAFFIC ENGINEER).

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

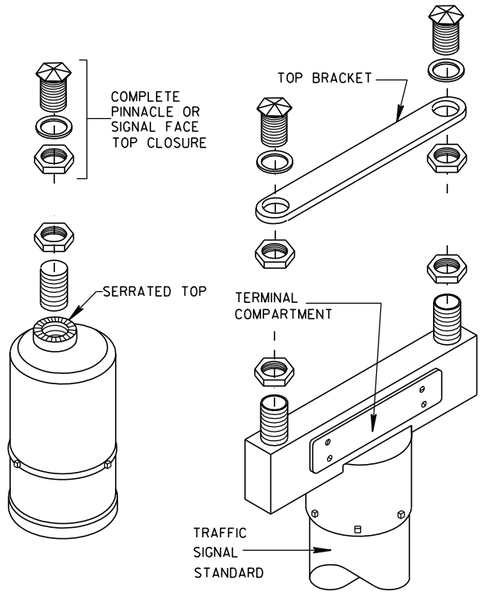
FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



PEDESTRIAN FACE STANDARD-10 FT.
(WALK-DON'T WALK)



STANDARD FLASHER.
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED



SINGLE
(OFFSET-SERRATED MOUNTING)

DOUBLE
(SERRATED MOUNTING)

SLIPFITTERS

TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/11/10
DATE

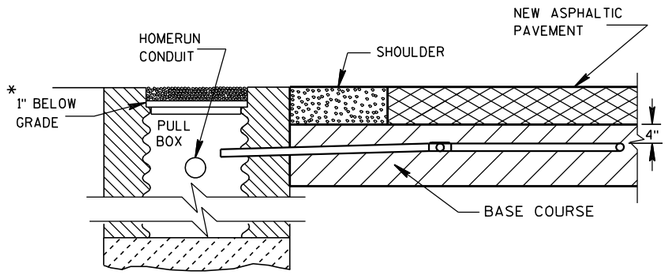
/S/ John Corbin
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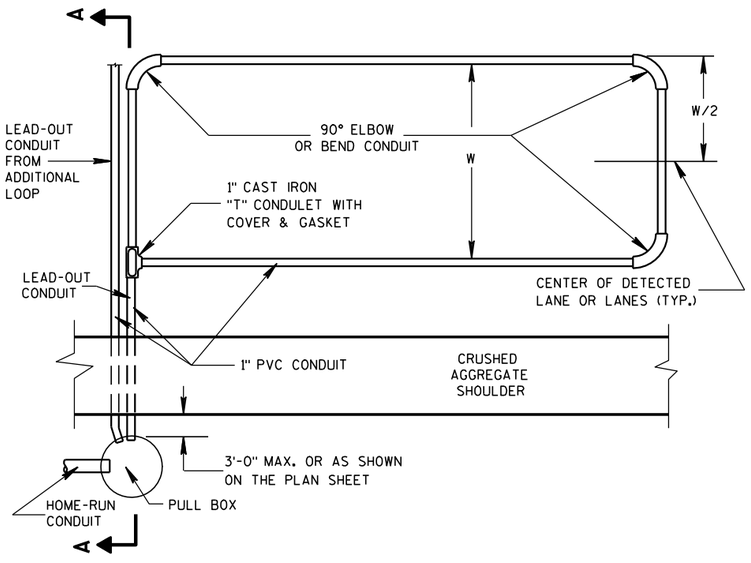
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SECTION A-A
NO CURB & GUTTER

DETECTOR LOOP INSTALLATION DETAIL

*RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.



TYPICAL PLAN OF LOOP DETECTOR

GENERAL NOTES

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

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD-OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS SUCH AS 3M TYPE 82A1 OR APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

ANTI-SIEZE LUBRICATING MATERIAL SHALL BE USED ON ALL THREADS OF THREADED ASSEMBLIES BEFORE INSTALLATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

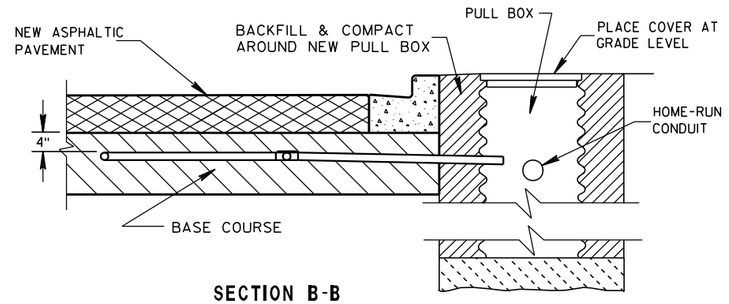
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, THROUGH THE LOOP DUCT, BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED, CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT AND CONDULET SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE THE ASPHALTIC PAVEMENT IS PLACED.

WHEN MULTIPLE LAYERS OF ASPHALTIC PAVEMENT ARE TO BE PLACED, LOOPS MAY BE INSTALLED BY SAWING A TWO INCH WIDE SLOT IN THE FIRST LAYER, DIG OUT THE ASPHALTIC MATERIAL AND BASE COURSE. PLACE THE LOOP, FILL THE SLOT WITH BASE COURSE MATERIAL AND NEW ASPHALTIC MATERIAL AND TAMP THE ASPHALTIC MATERIAL IN PLACE.

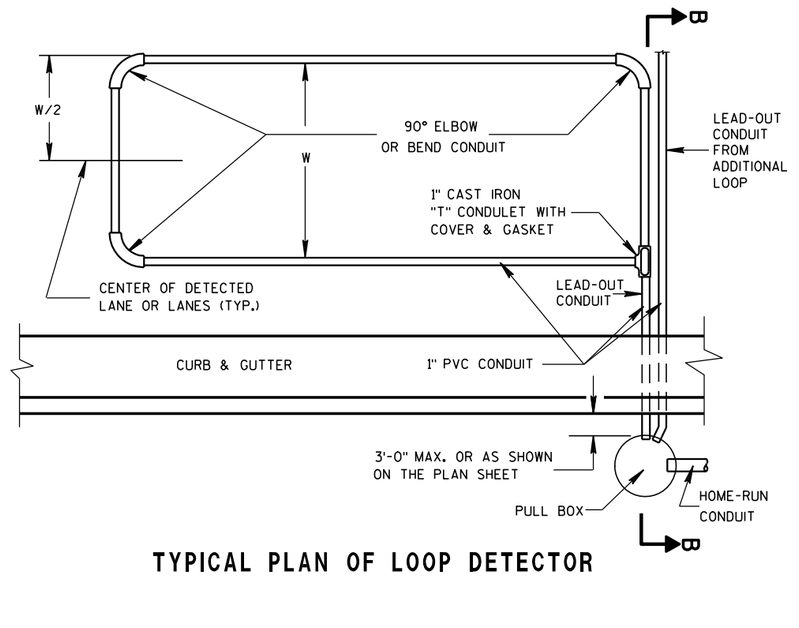
SHOULD TRAFFIC BE ALLOWED TO USE THE AREA OF ROADWAY WITH THE NEWLY INSTALLED LOOP BEFORE THE PLACEMENT OF THE NEXT LAYER OF ASPHALTIC PAVEMENT, THE SLOT/PAVEMENT OPENING SHALL BE SEALED WITH HOT POURED ELASTIC TYPE MATERIAL CONFORMING TO THE REQUIREMENTS OF THE "SPECIFICATION FOR JOINT SEALANTS, HOT POURED, FOR CONCRETE AND ASPHALT PAVEMENTS, ASTM DESIGNATION: D3405".

DRIVE A 1½" MAX. PK NAIL INTO THE NEW ASPHALTIC PAVEMENT AND DIRECTLY ABOVE THE CONDULET AFTER THE FINAL LAYER OF NEW ASPHALTIC PAVEMENT IS COMPLETELY INSTALLED, IF REQUIRED BY THE DISTRICT TRAFFIC SECTION.



SECTION B-B
CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAIL



TYPICAL PLAN OF LOOP DETECTOR

LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/7/06 — DATE

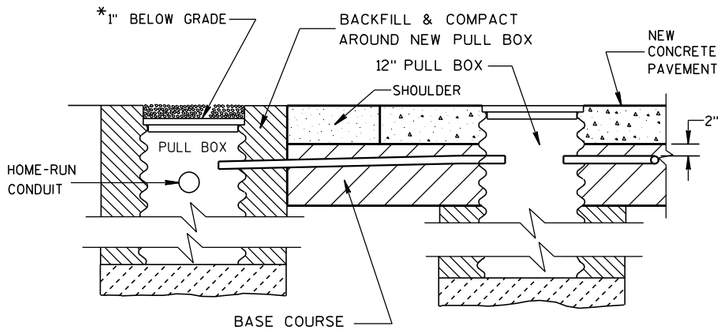
/S/ Balu Ananthar[illegible]an — STATE ELECTRICAL ENGI

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SECTION A-A

NO CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAILS

*RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

GENERAL NOTES

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

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS SUCH AS 3M TYPE 82A1 OR APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

ANTI-SIEZE LUBRICATING MATERIAL SHALL BE USED ON ALL THREADS OF THREADED ASSEMBLIES BEFORE INSTALLATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

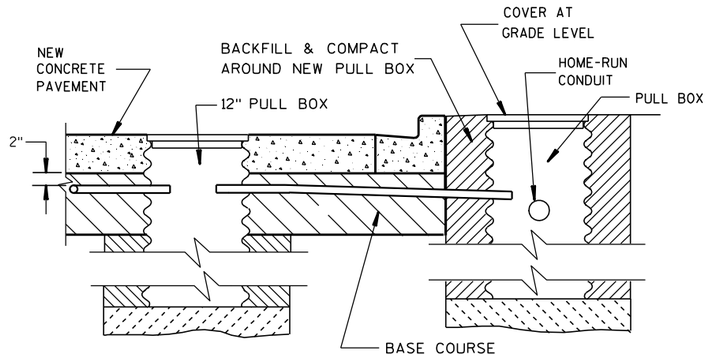
THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, THROUGH THE LOOP DUCT, BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED, CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT, CONDULET AND PULL BOX SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE THE NEW CONCRETE PAVEMENT IS PLACED.

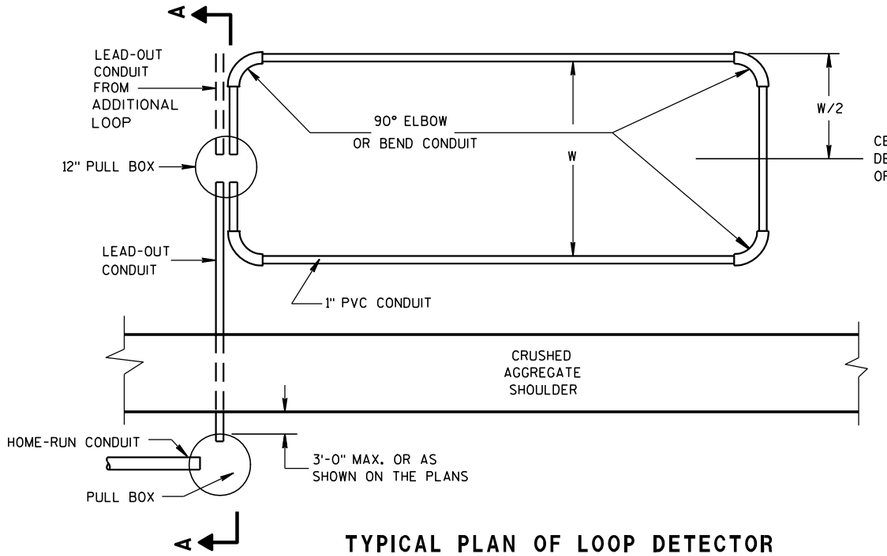
12" PULL BOXES IN PAVEMENT SHALL BE CORRUGATED STEEL ONLY.



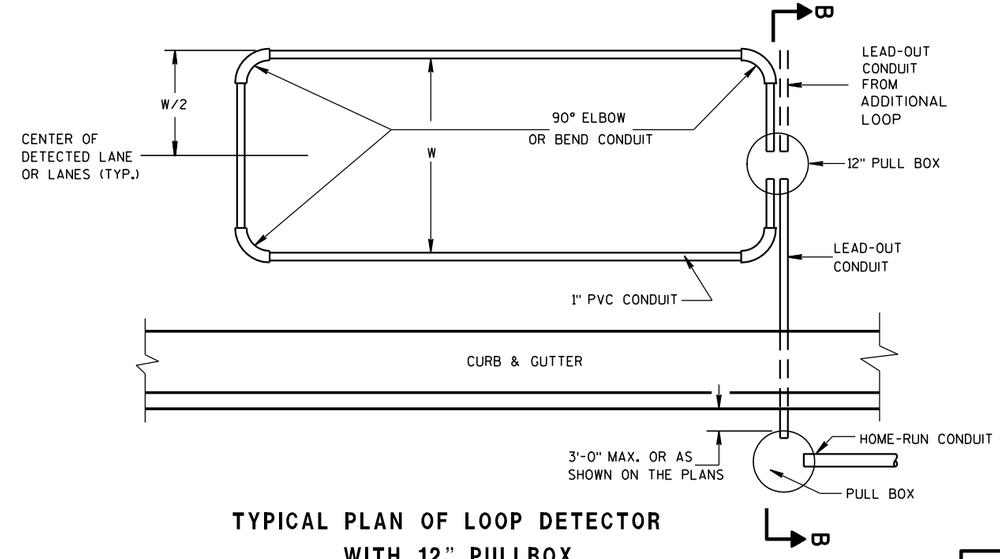
SECTION B-B

CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAILS



TYPICAL PLAN OF LOOP DETECTOR WITH 12" PULLBOX



TYPICAL PLAN OF LOOP DETECTOR WITH 12" PULLBOX

LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMNET)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

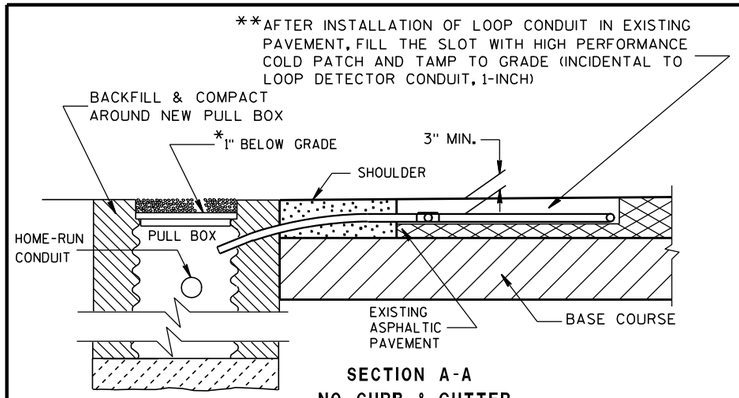
APPROVED

6-7-06 DATE — /S/ Balu Ananthanarayanan, STATE ELECTRICAL ENGI — HWYS

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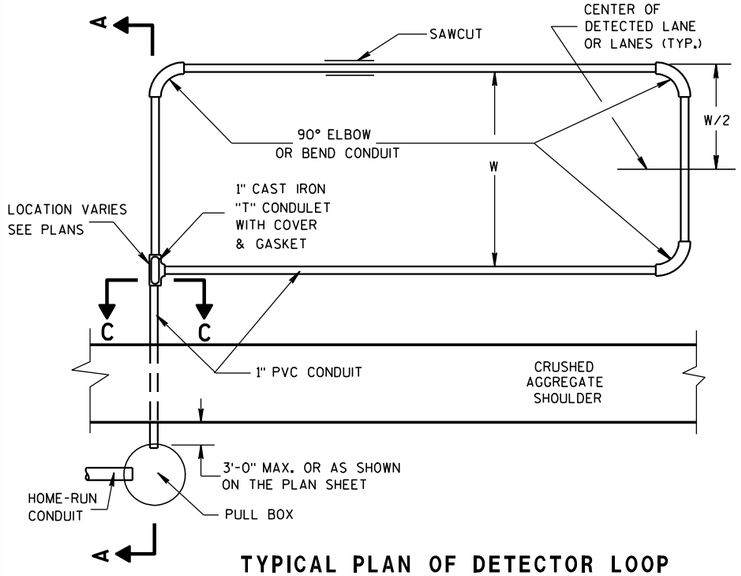
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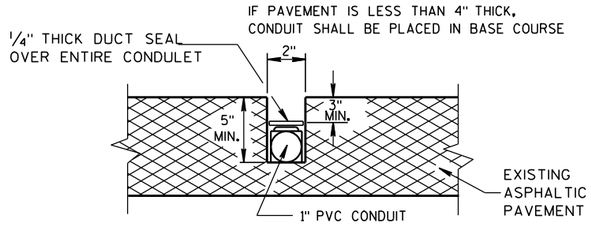
SECTION A-A
NO CURB & GUTTER

TYPICAL PLAN OF LOOP DETECTOR

*RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.



TYPICAL PLAN OF DETECTOR LOOP



SIDE VIEW
SECTION C-C

LOOP DETECTOR SLOT DETAIL

GENERAL NOTES

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

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS SUCH AS 3M TYPE 82A1 OR APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISITANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

ANTI-SIEZE LUBRICATING MATERIAL SHALL BE USED ON ALL THREADS OF THREADED ASSEMBLIES BEFORE INSTALLATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

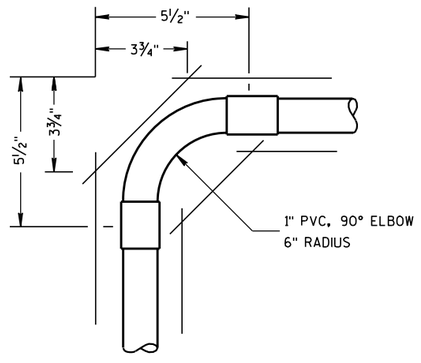
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED, CONTINUOUS LENGTH.

IN THE EVENT THAT THE EXISTING PAVEMENT IS MORE THAN 5 INCHES THICK, AND THEREFORE , THE 1 INCH CONDUIT DOES NOT REQUIRE INSTALLATION BELOW THE PAVEMENT INTO THE BASE COURSE, PLACE SOME OF THE TAR OR EPOXY SEALANT IN THE SLOT TO A DEPTH OF APPROXIMATELY 1/2 INCH BEFORE INSTALLATION OF THE CONDUIT. IF THE CONDUIT MUST BE PLACED IN THE BASE COURSE, DO NOT PLACE THE TAR OR EPOXY SEALANT IN THE SLOT.

ONCE THE 2" LOOP SLOT HAS BEEN CHIPPED OUT, THE LOOP INSTALLATION SHALL BE COMPLETED PRIOR TO OPENING THE LANE(S) TO TRAFFIC.

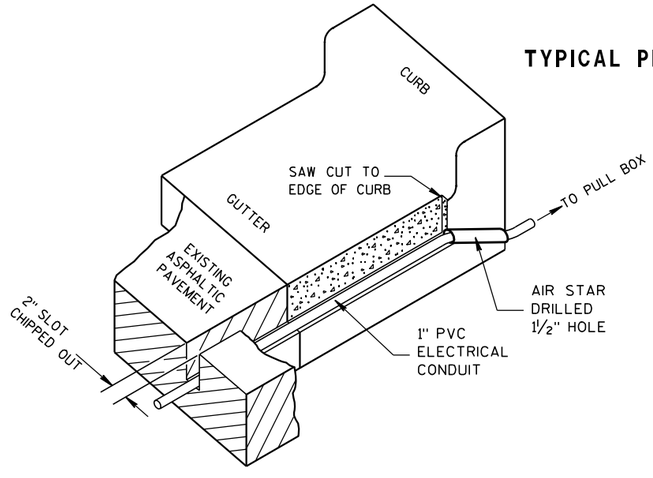
** AFTER THE HIGH PERFORMANCE COLD PATCH HAS BEEN TAMPED, SEAL THE SLOT/HIGH PERFORMANCE COLD PATCH/ PAVEMENT OPENING WITH HOT POURED ELASTIC TYPE MATERIAL CONFORMING TO THE REQUIREMENTS OF THE "SPECIFICATION FOR JOINT SEALANTS, HOT POURED, FOR CONCRETE AND ASPHALT PAVEMENTS, ASTM DESIGNATION: D3405".

IN THE EVENT HIGH PERFORMANCE COLD PATCH IS NOT AVAILABLE, AND FLEXIBLE TYPE EPOXY IS USED AS A LOOP SLOT FILLER, THE 2 INCH SLOT SHALL BE TOTALLY CLEAN AND DRY BEFORE ITS INSTALLATION. EPOXY USE SHALL BE APPROVED BY THE DISTRICT TRAFFIC ENGINEER AND THE FURNISHED EPOXY SHALL BE INSTALLED AFTER WRITTEN APPROVAL BY THE PROJECT ENGINEER.



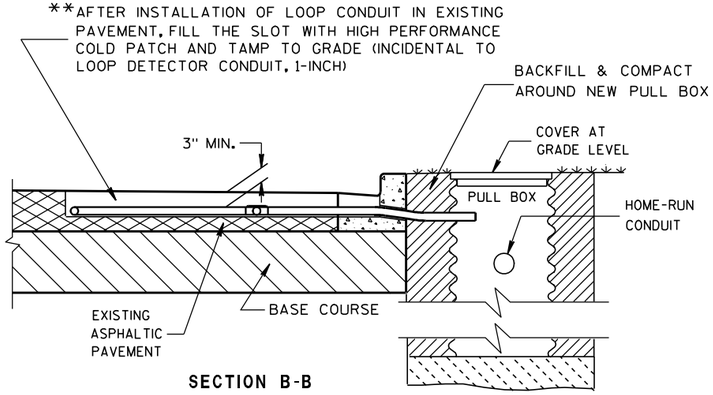
TOP VIEW

CORNER SAW SLOT DETAIL



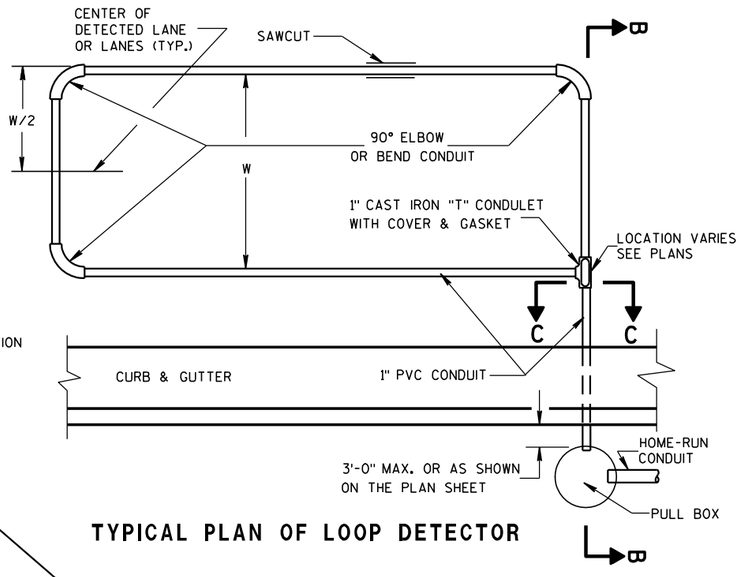
ISOMETRIC VIEW

TYPICAL SAW CUT DETAIL FOR LEAD-IN CONDUIT



SECTION B-B
CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAIL



TYPICAL PLAN OF LOOP DETECTOR

LOOP DETECTOR INSTALLED IN EXISTING ASPHALTIC PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

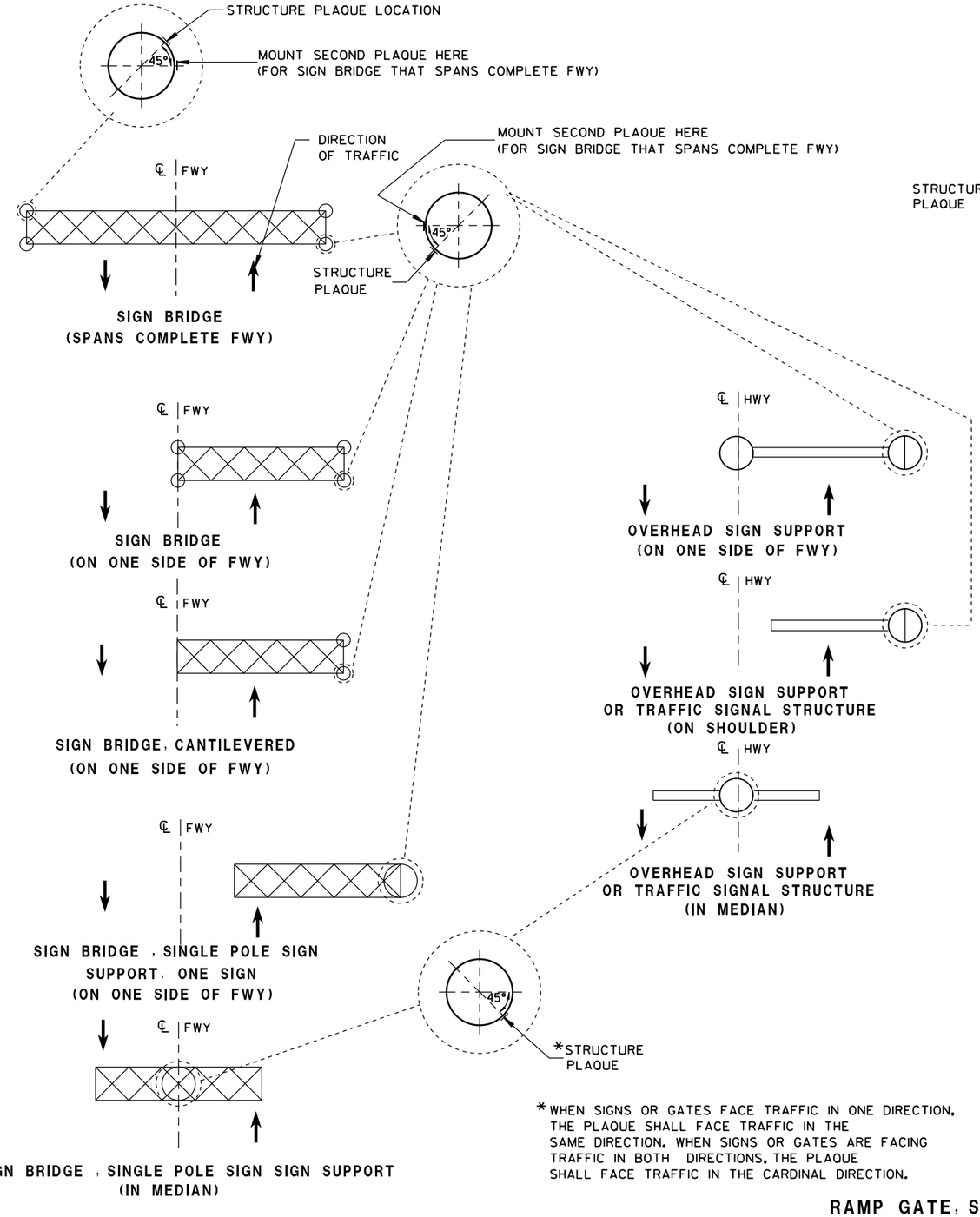
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6/7/06 DATE
/S/ Balu Ananthanarayanan
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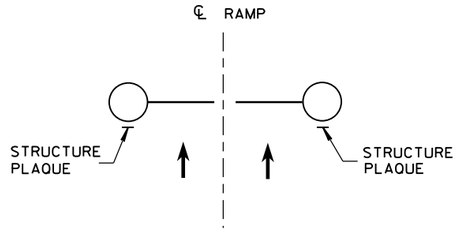
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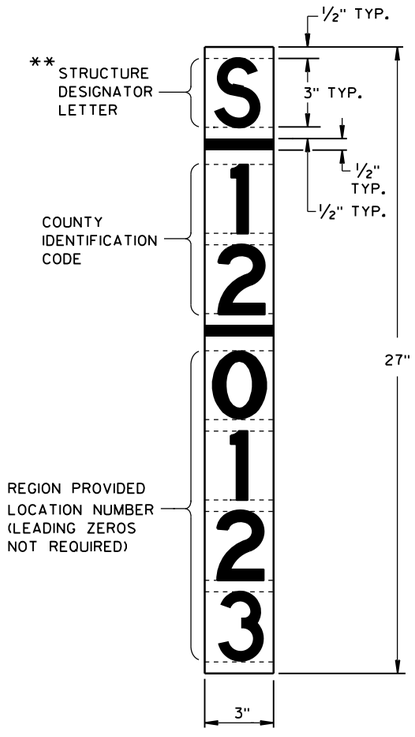


*WHEN SIGNS OR GATES FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS OR GATES ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.

LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES



RAMP GATE
(ACROSS FWY ON-RAMP)



** LETTER "G" UTILIZED FOR RAMP GATES. LETTER "S" UTILIZED FOR SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, AND TRAFFIC SIGNALS.

RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT AND TRAFFIC SIGNAL STRUCTURE PLAQUE FOR SIGN BRIDGES AND OVERHEAD SIGN SUPPORT WHICH ARE NOT STRUCTURE MOUNTED

GENERAL NOTES

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

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

IF THE PROPOSED SIGN BRIDGE OR OVERHEAD SIGN SUPPORT IS REPLACING AN EXISTING SIGN BRIDGE OR OVERHEAD SIGN SUPPORT, A NEW IDENTIFICATION PLAQUE WILL BE REQUIRED.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - 3 STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - 3 ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 5.0' ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 0.060" THICK.

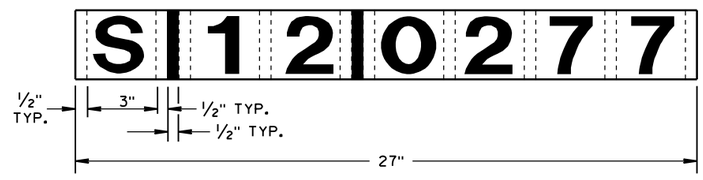
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

LINES - BLACK, ½" WIDE, SELF-ADHESIVE

CHARACTERS:- BLACK, SELF ADHESIVE, SERIES "D", SIZE AS SHOWN.

FOR SIGN BRIDGES, STRUCTURE MOUNTED, THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY AS SHOWN ON THE DRAWING. THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY TO THE BACK OF THE SIGN, BETWEEN THE ALUMINUM EXTRUSIONS, NEAR THE TOP LEFT HAND CORNER OF THE SIGN. THE BASE MATERIAL SHALL BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE ALUMINUM SURFACE. PRIOR TO ADHERING THE MATERIAL, THE ALUMINUM SURFACE SHALL BE SMOOTH, CLEAN AND DRY.

WHERE SIGN BRIDGE ILLUMINATION IS PROVIDED, THE STRUCTURE MUST ALSO HAVE A SIGN BRIDGE CIRCUIT PLAQUE AS SHOWN IN THE ELECTRICAL DETAILS.



IDENTIFICATION PLAQUE FOR SIGN BRIDGE, STRUCTURE MOUNTED

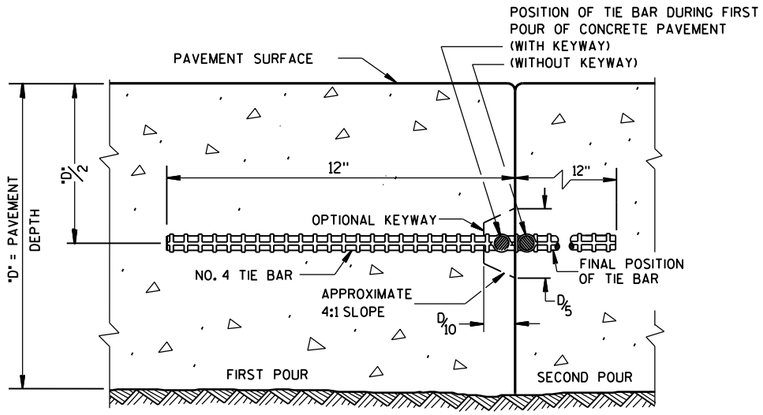
STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, & TRAFFIC SIGNALS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

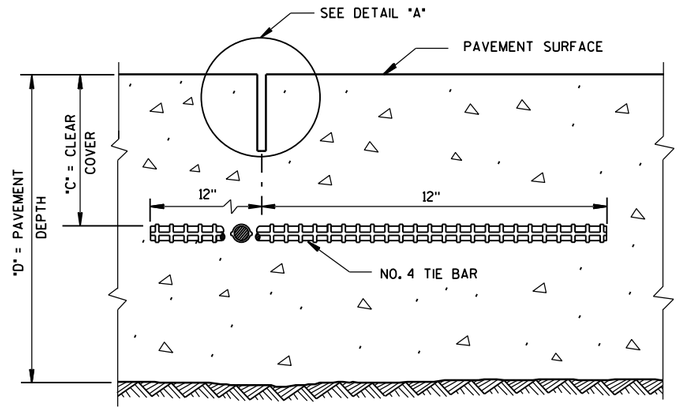
APPROVED
12/4/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 12 A 4-3



CONSTRUCTION JOINT



SAWED JOINT

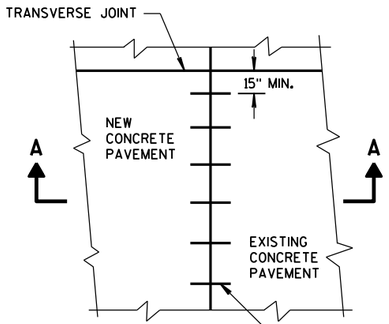
GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

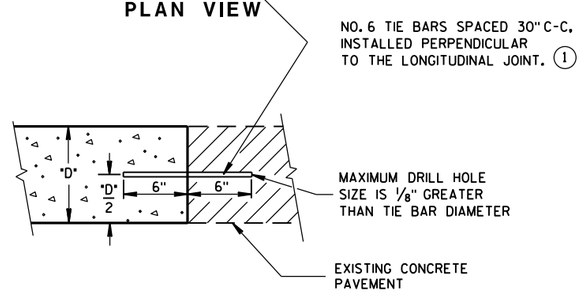
CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

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

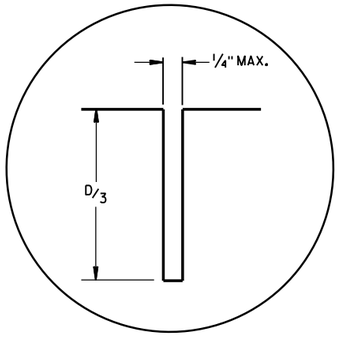


PLAN VIEW



SECTION A-A

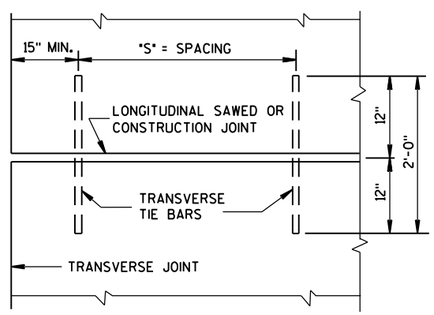
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"

TIE BAR TABLE

PAVEMENT DEPTH "D"	CLEAR COVER "C"	MAXIMUM TIE BAR SPACING "S"	
		PAVEMENT WIDTH	
		24' OR 26'	≥ 30'
6, 6 1/2"	3"±1/2"	48"	42"
7, 7 1/2"	3 1/4"±1"	45"	36"
8, 8 1/2"	3 3/4"±1"	39"	30"
9, 9 1/2"	4 1/4"±1"	33"	27"
10, 10 1/2"	4 3/4"±1"	30"	24"
11, 11 1/2"	5 1/4"±1"	27"	21"
12"	5 3/4"±1"	24"	21"



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

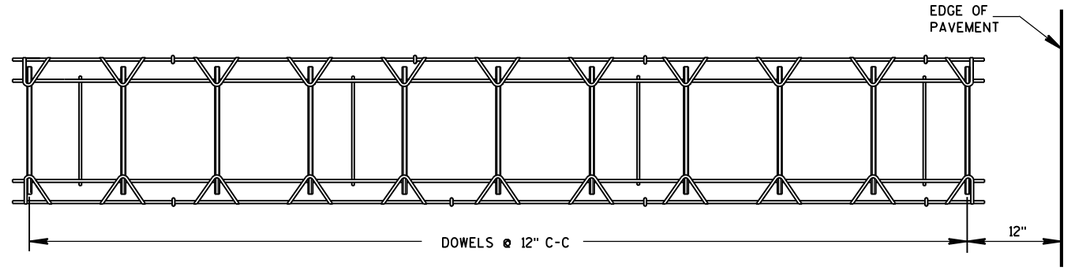
5-3-2013
DATE

/S/ Deb Bischoff
PAVEMENT POLICY & DE ...NEER

FHWA

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S.D.D. 13 C 1-16
S.D.D. 13 C 1-16

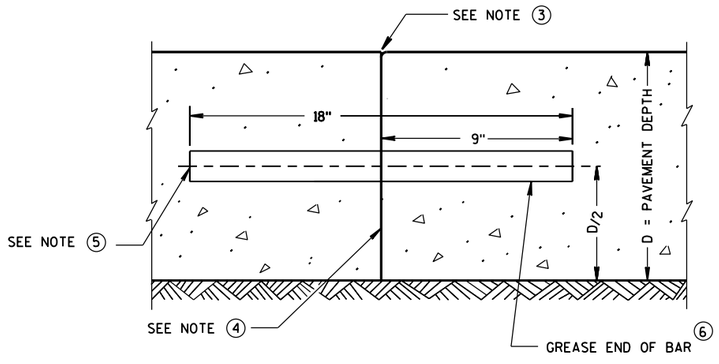


PLAN VIEW

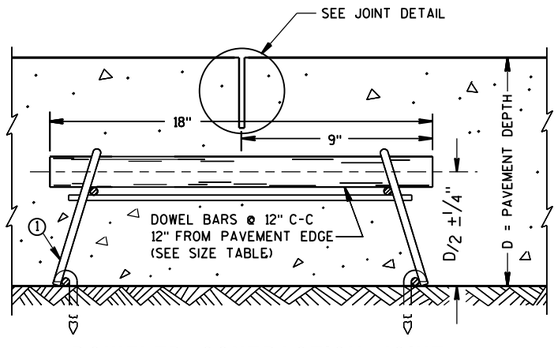


SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①



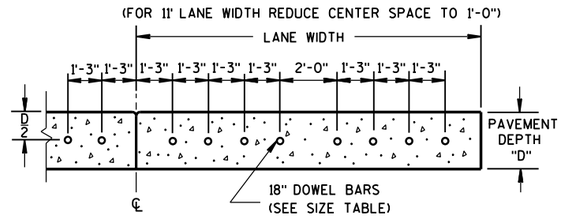
TRANSVERSE CONSTRUCTION JOINT



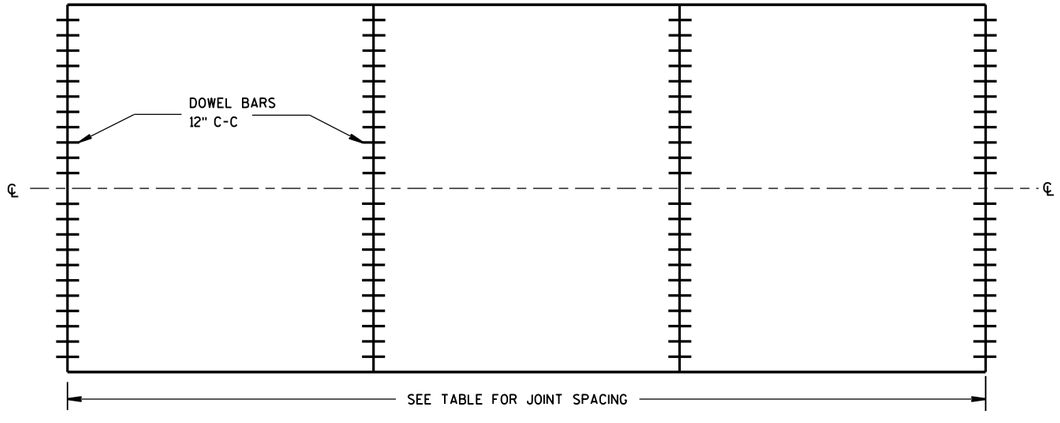
DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



CONTRACTION JOINT LOCATIONS

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE LONGITUDINAL JOINT AND THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① **OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.**

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

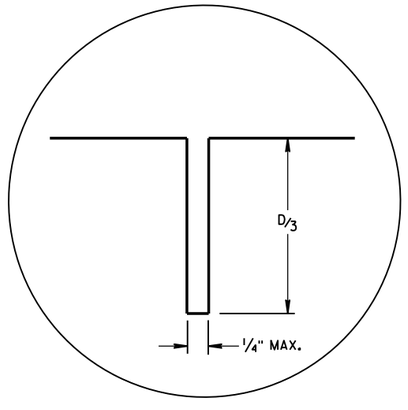
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



JOINT DETAIL

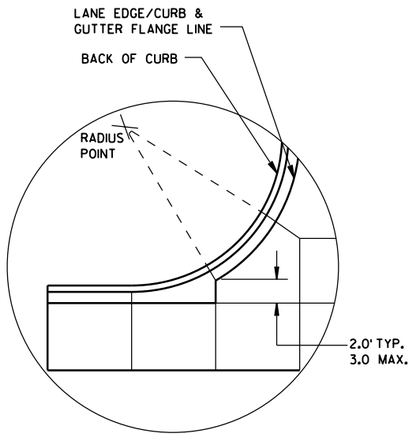
URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

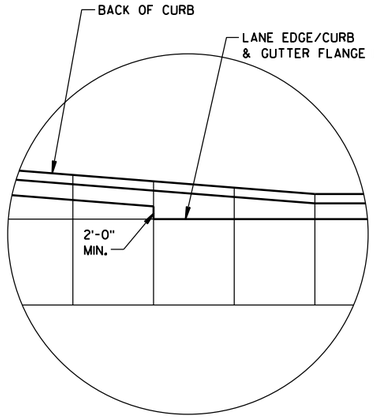
APPROVED
5/3/2013 DATE
/S/ Deb Bischoff
PAVEMENT POLICY & DE ...NEER
FHWA

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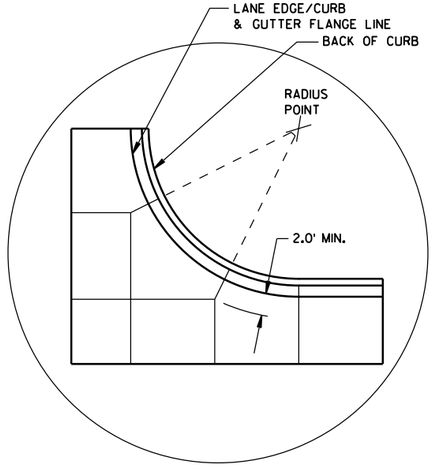
S.D.D. 13 C 13-8



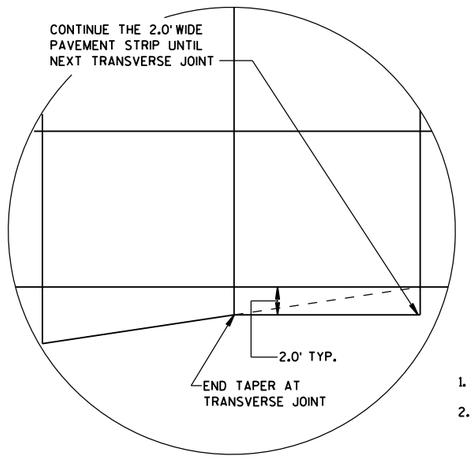
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G. MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

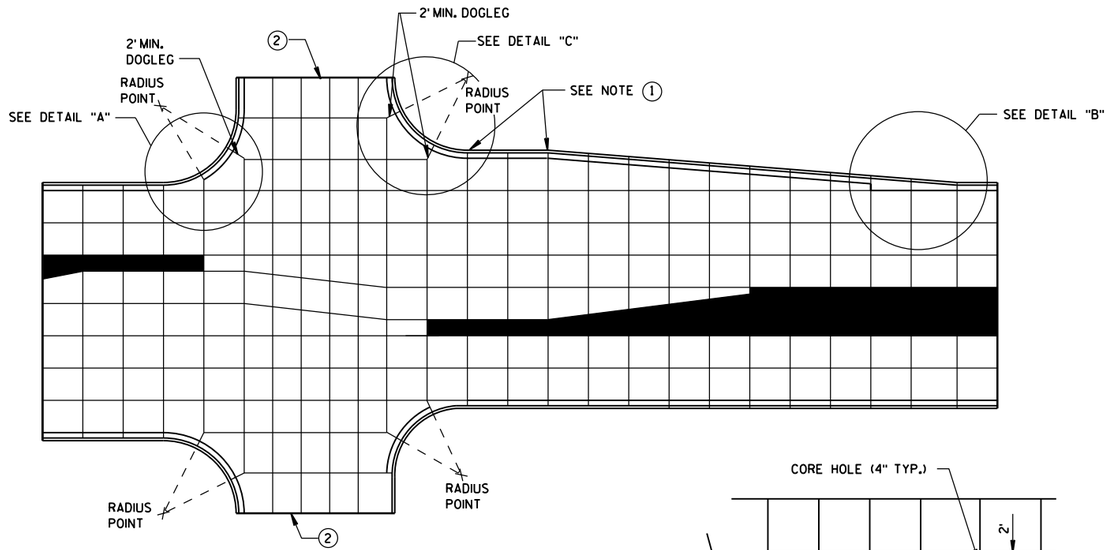
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.

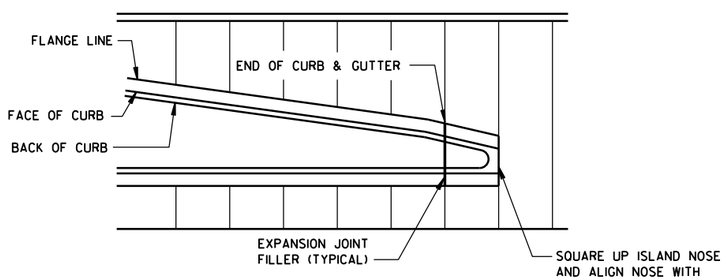


STANDARD INTERSECTION

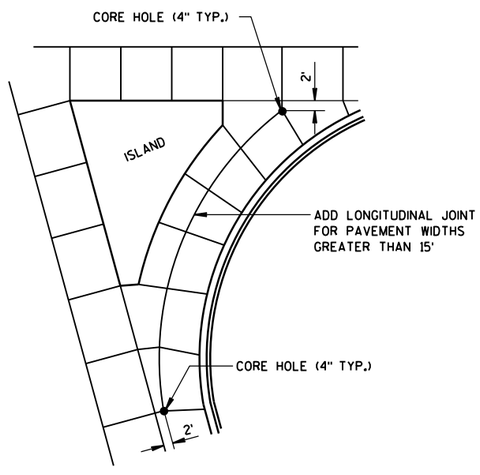
PAVEMENT DEPTH AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'

SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

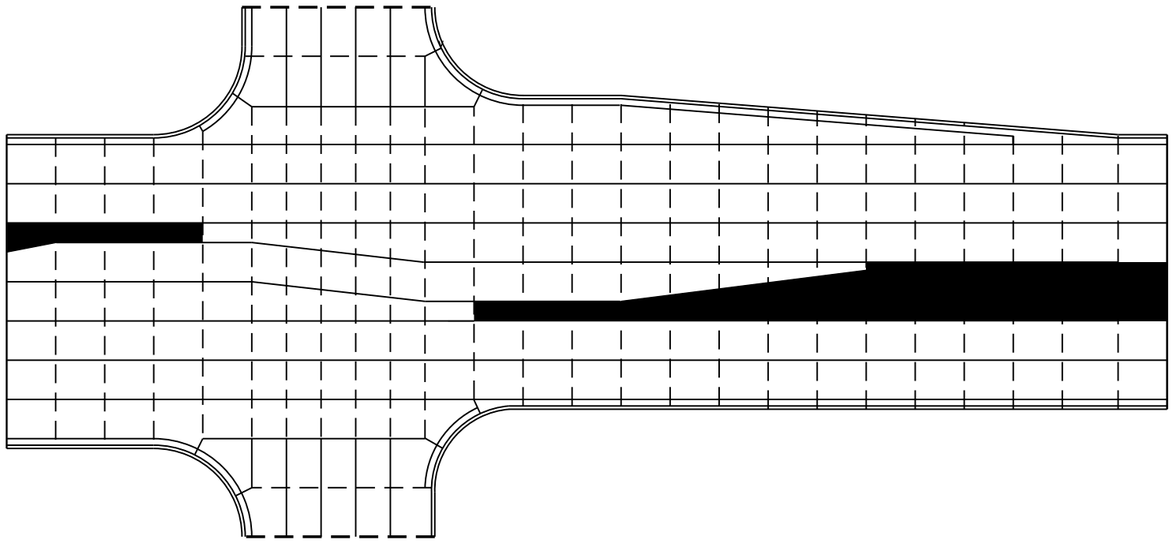
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S.D.D. 13 C 18-2a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

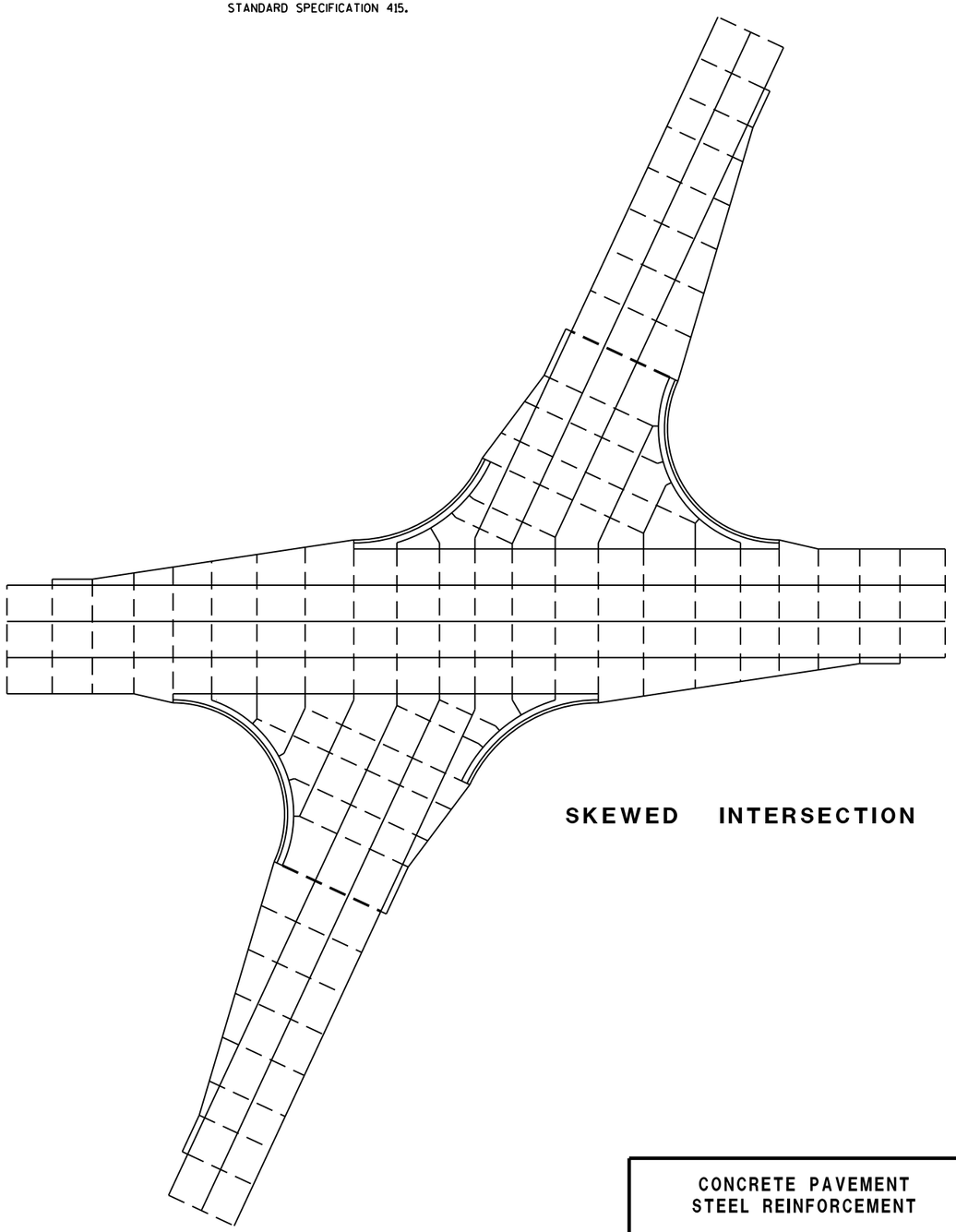
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

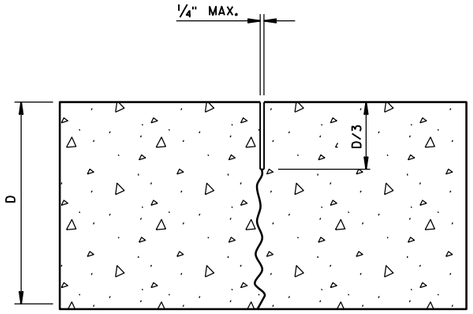
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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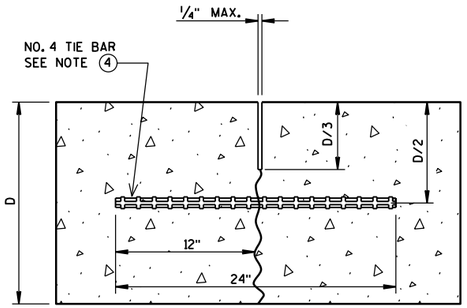
S.D.D. 13 C 18-2b

6

S.D.D. 13 C 18-2b



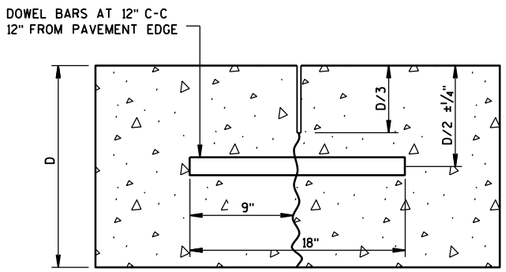
UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

GENERAL NOTES

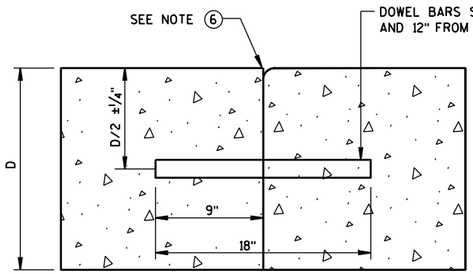
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. SPACE TIE BARS AT LONGITUDINAL CONSTRUCTION OR CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C1.
5. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
6. IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.



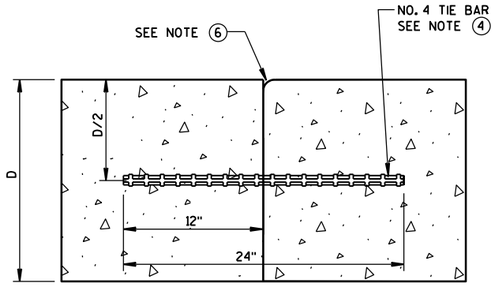
DOWELED-TRANSVERSE

CONTRACTION JOINTS

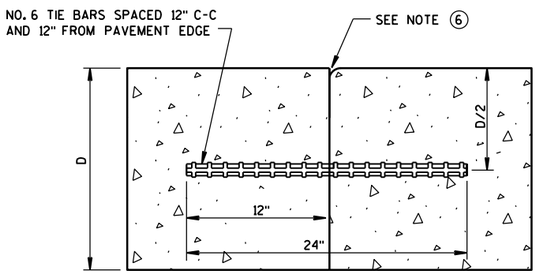
SEE NOTE (2)



DOWELED TRANSVERSE

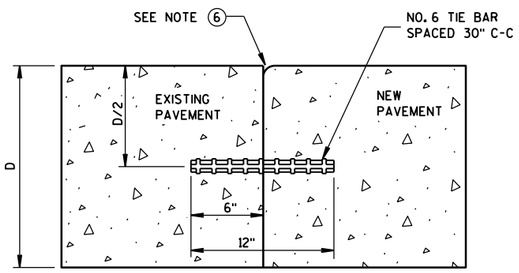


TIED LONGITUDINAL



TIED TRANSVERSE

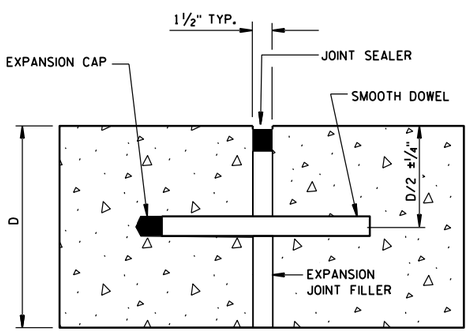
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

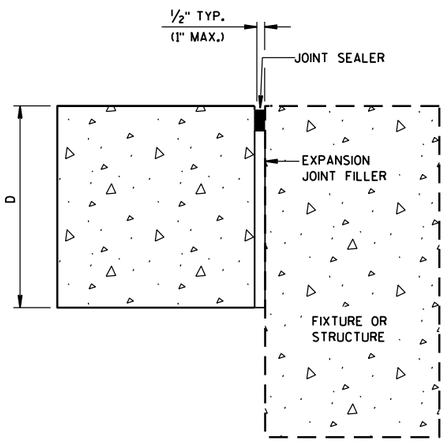
CONSTRUCTION JOINTS

SEE NOTE (5)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

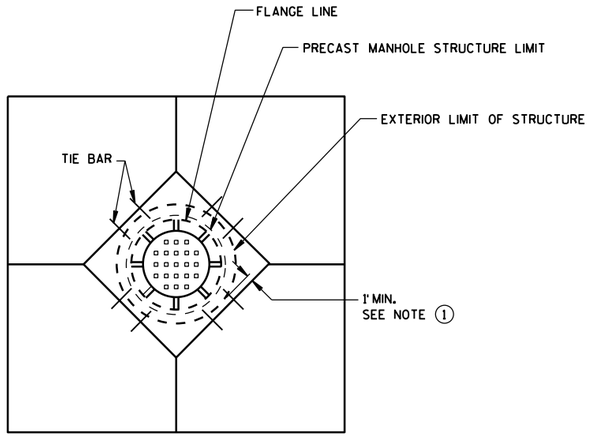
EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

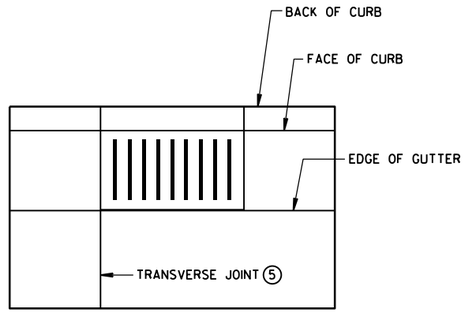
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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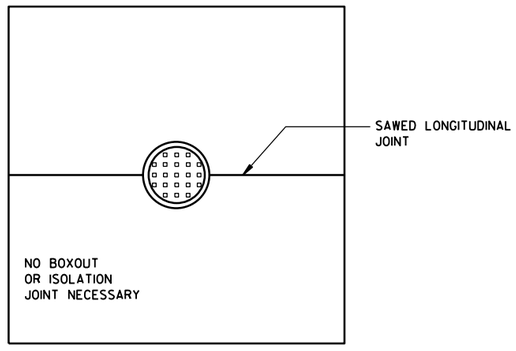
S.D.D. 13 C 18-2c



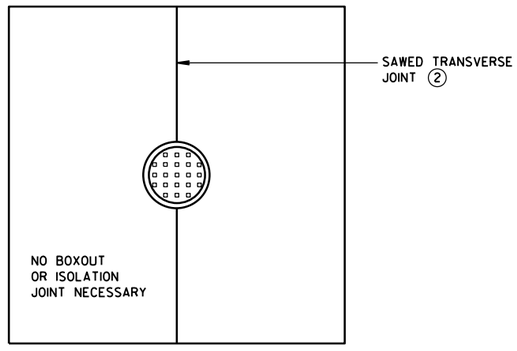
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



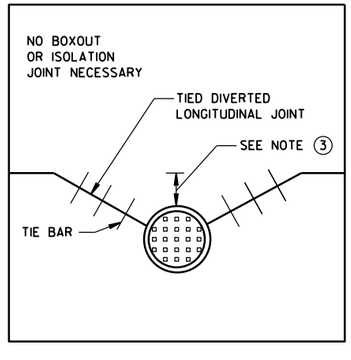
INLET WITH TRANSVERSE JOINT



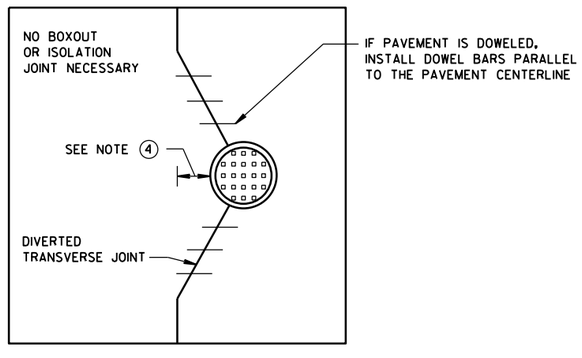
MANHOLE WITH LONGITUDINAL JOINT



MANHOLE WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT

GENERAL NOTES

(1) USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1-FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.

(2) ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.

(3) IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDIAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(4) IF DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(5) ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-3-2013
DATE

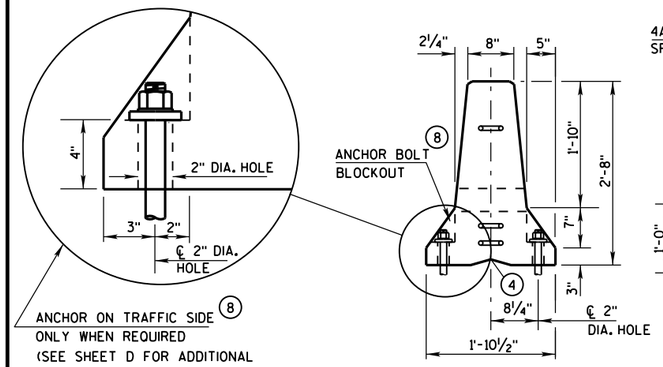
/S/ Deb Bischoff
PAVEMENT POLICY & DE

NEER

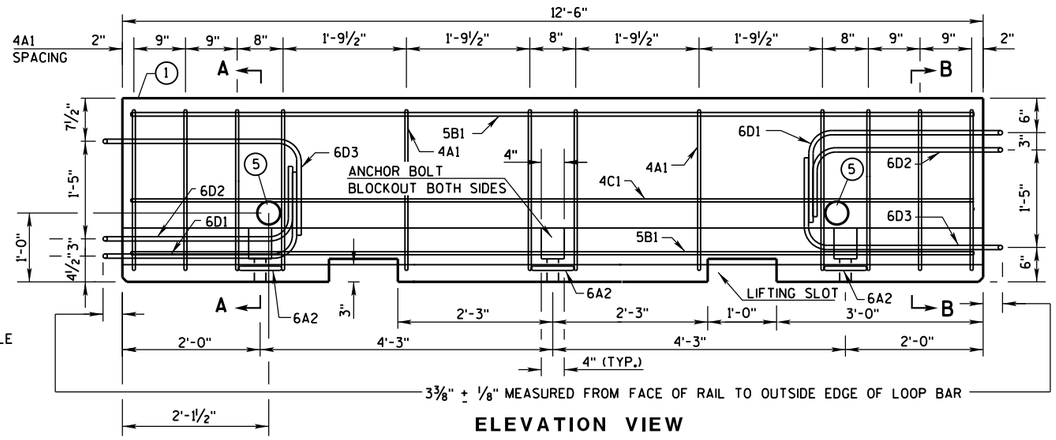
FHWA

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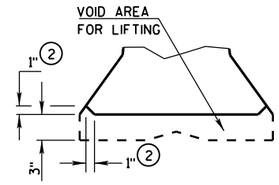
S.D.D. 13 C 18-2d



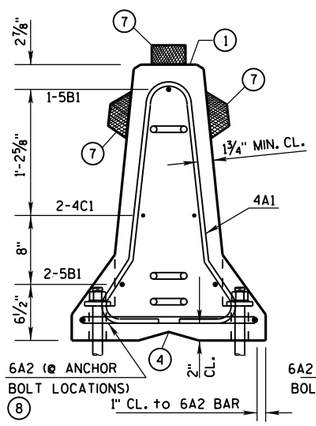
END VIEW



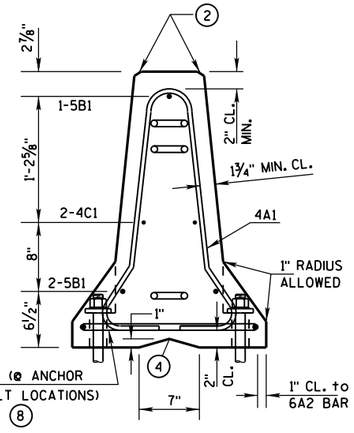
ELEVATION VIEW



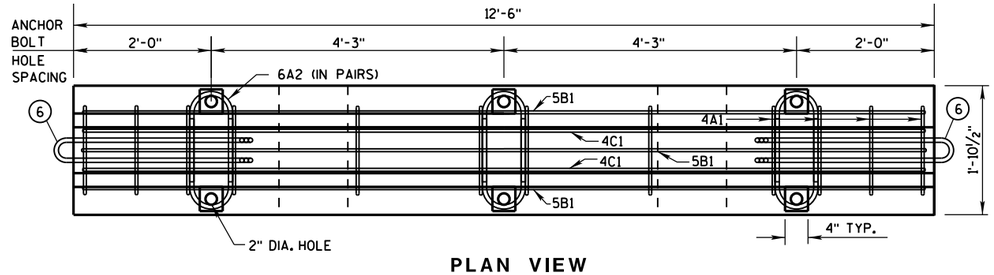
DETAIL "B"
LIFTING SLOT DETAIL



SECTION A-A
(STIRRUP PLACEMENT)

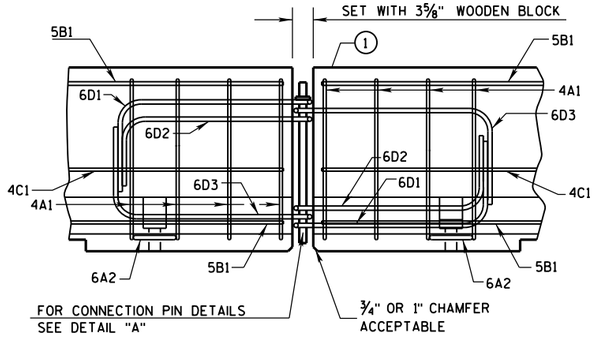


SECTION B-B
(STIRRUP PLACEMENT)

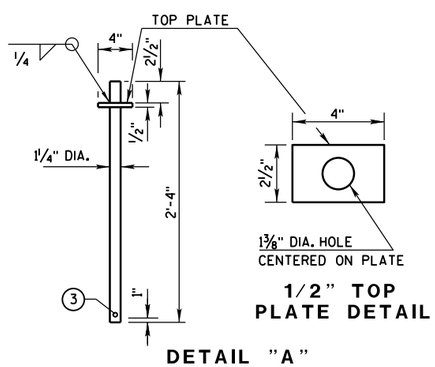


PLAN VIEW

DETAILS OF BARRIER SECTION

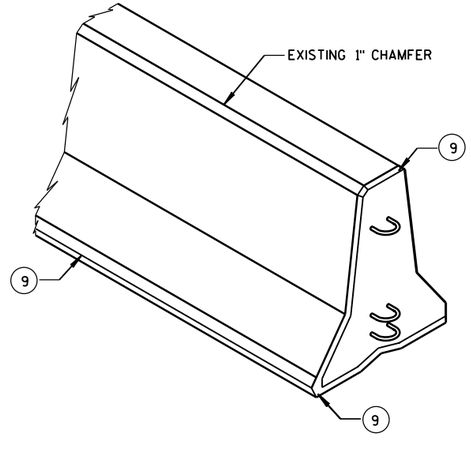


DETAILS OF BARRIER CONNECTION



1/2" TOP
PLATE DETAIL

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



GENERAL NOTES

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

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

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

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

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

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

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

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

(2) 1" CHAMFER TO PREVENT SPALLING.

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

(4) "V" NOTCH IS OPTIONAL.

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

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

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

(8) SEE SHEET D FOR ANCHORING CRITERIA.

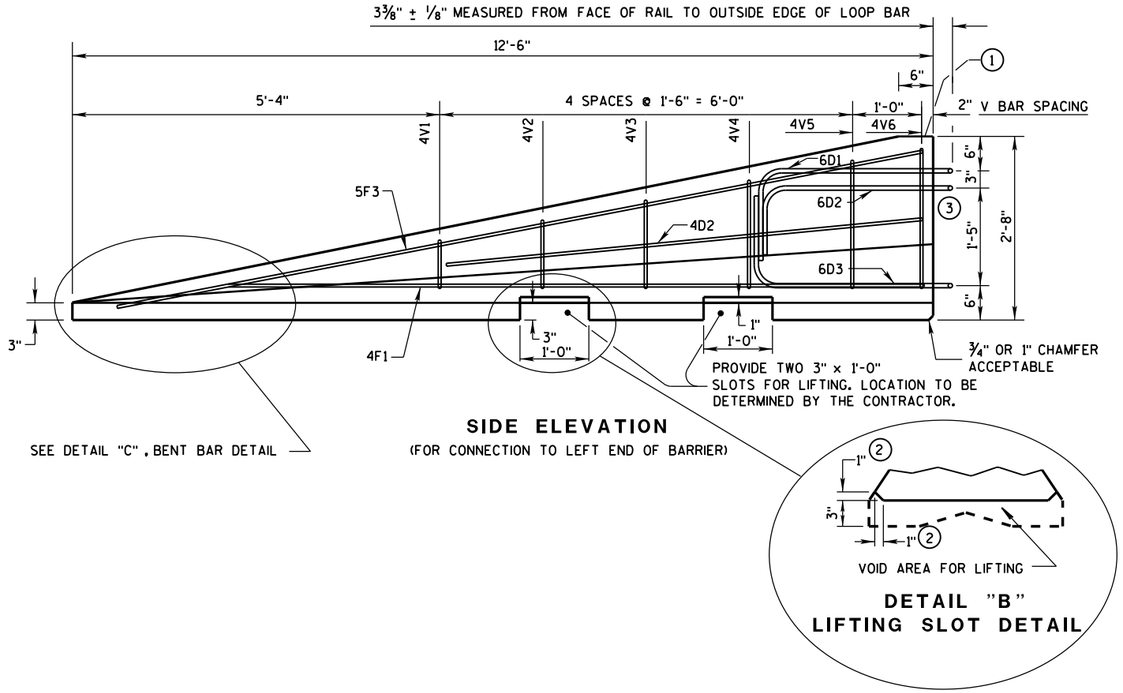
(9) 1" CHAMFER OPTIONAL.

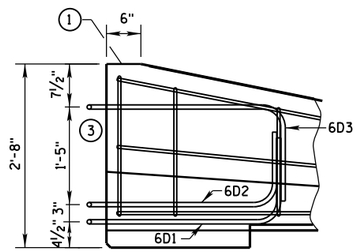
CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

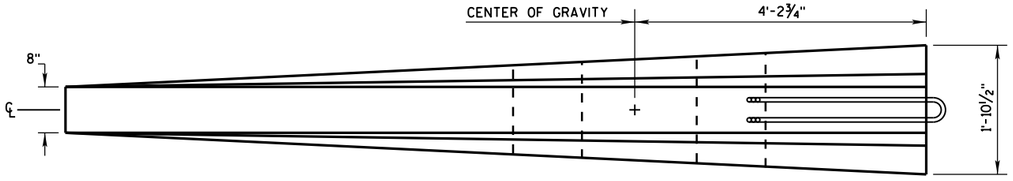
S.D.D. 14 B 7-14a

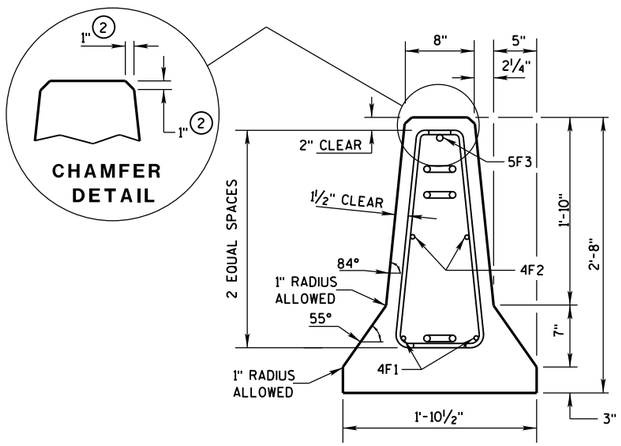


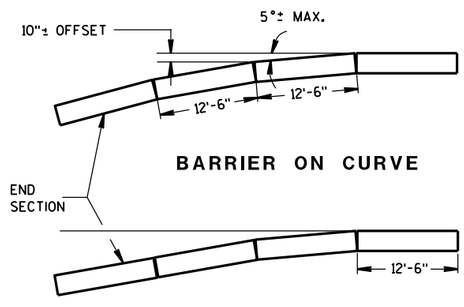


GENERAL NOTES

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







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

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

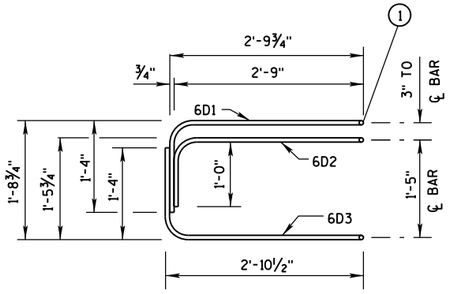
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 7-14b

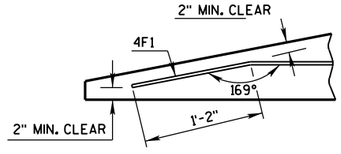
BARRIER TAPER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

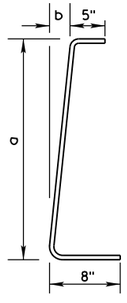
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



ELEVATION
LOOP BAR ASSEMBLY



DETAIL "C"
BENT BAR DETAIL



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

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

TAPER BARRIER SECTION

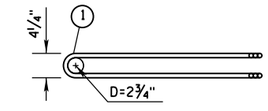
GENERAL NOTES

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

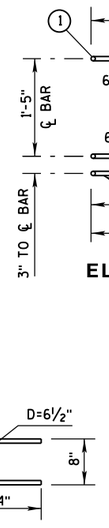
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

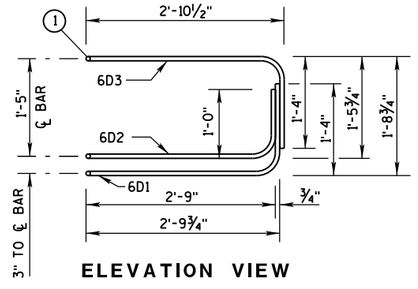
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



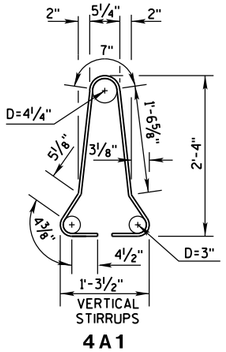
PLAN VIEW
LOOP BAR ASSEMBLY
(MARKED END SHOWN, INVERT FOR OTHER END)



6A2



ELEVATION VIEW



4A1

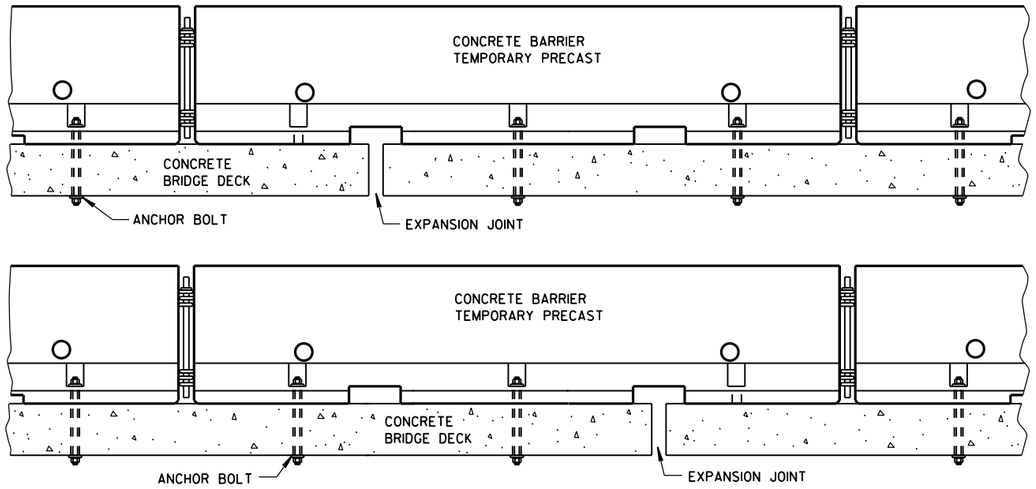
BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

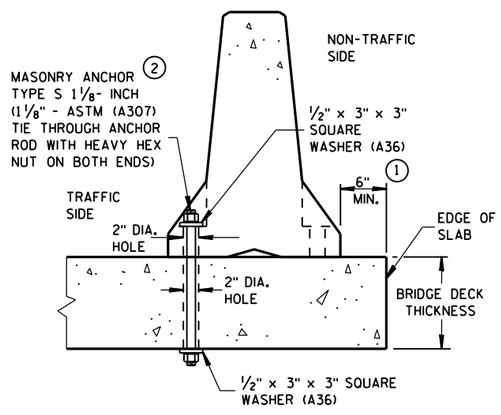
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S.D.D. 14 B 7-14c



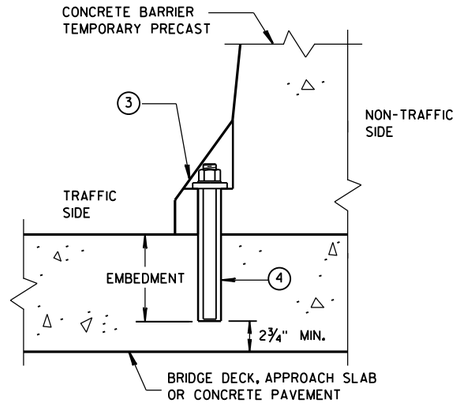
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

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



THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)



REMOVABLE ADHESIVE BONDED ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT ②

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)

GENERAL NOTES

① CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" SHALL BE ANCHORED IF:
THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 4 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 45 MPH OR GREATER, OR

THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT. IS LESS THAN 2 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 40 MPH OR LESS.

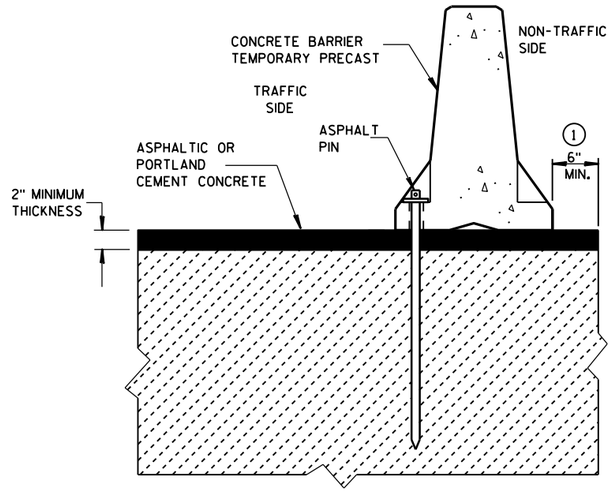
② ANCHORING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST.

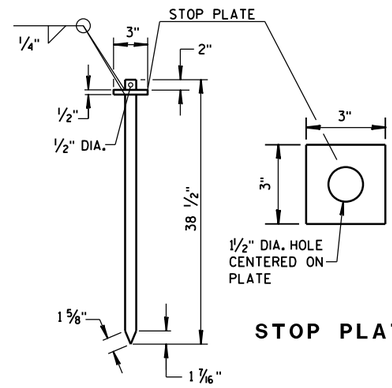
WITH THE APPROVAL OF THE ENGINEER, REMOVABLE ADHESIVE BONDED (EPOXY) ANCHOR BOLT INSTALLATION MAY BE USED IN LIEU OF THROUGH BOLTED ANCHOR INSTALLATION. THE ADHESIVE BONDED ANCHOR BOLT MUST BE REMOVABLE. USE ASTM (A307) MASONRY ANCHORS TYPE S 1⅛-INCH, EMBEDDED TO A DEPTH SUFFICIENT TO DEVELOP THE ULTIMATE CAPACITY OF THE ANCHOR BOLT AND PROVIDE DOCUMENTATION TO CONFIRM THIS.

UPON REMOVAL OR RELOCATION OF THE BARRIER UNITS, REMOVE ALLANCHOR BOLTS AND COMPLETELY FILL IN THE REMAINING HOLES IN CONCRETE BRIDGE DECKS, CONCRETE APPROACH SLABS AND CONCRETE PAVEMENTS THAT ARE TO REMAIN, WITH A NON-SHRINK COMMERICAL GROUT OR EPOXY MATERIAL IDENTIFIED ON THE CURRENT WISDOT APPROVED PRODUCTS LIST.

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

④ ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5¼" EMBEDMENT. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.



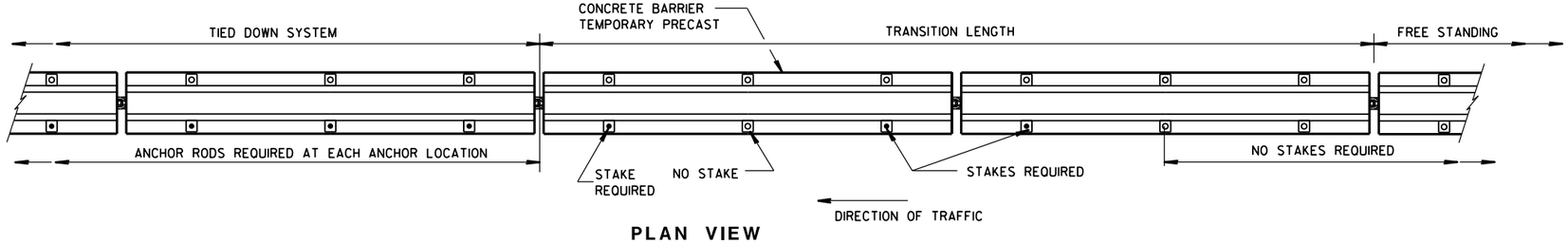


STOP PLATE

ASPHALT PIN
(ASTM A36 STEEL)

STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE

(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



PLAN VIEW

FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

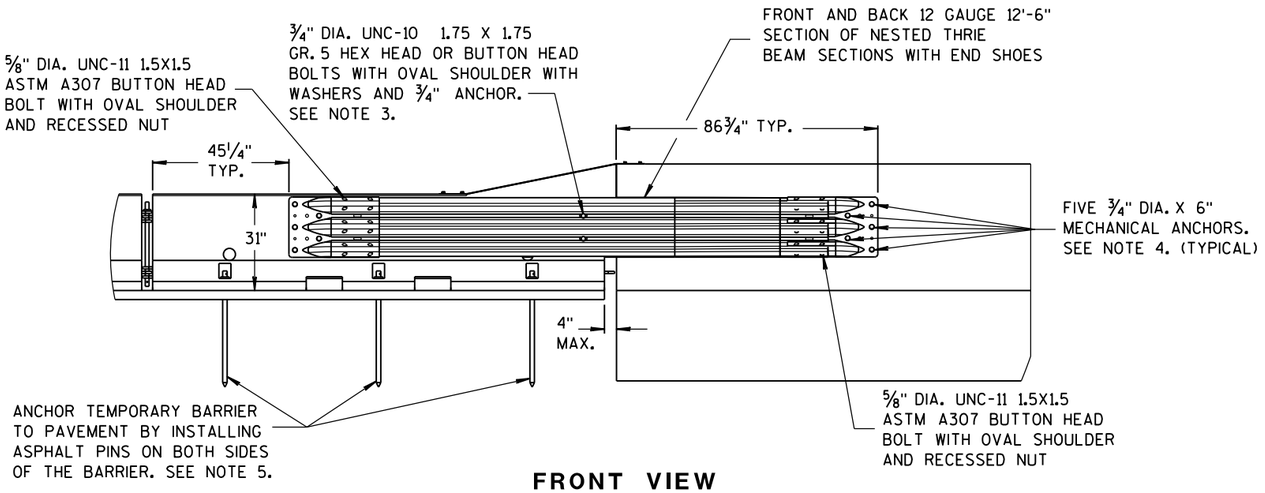
(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

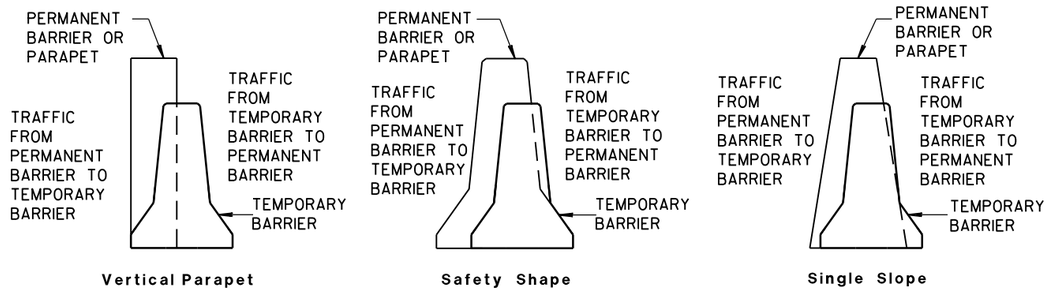
STATE OF WISCONSIN
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S.D.D. 14 B 7-14d



FRONT VIEW



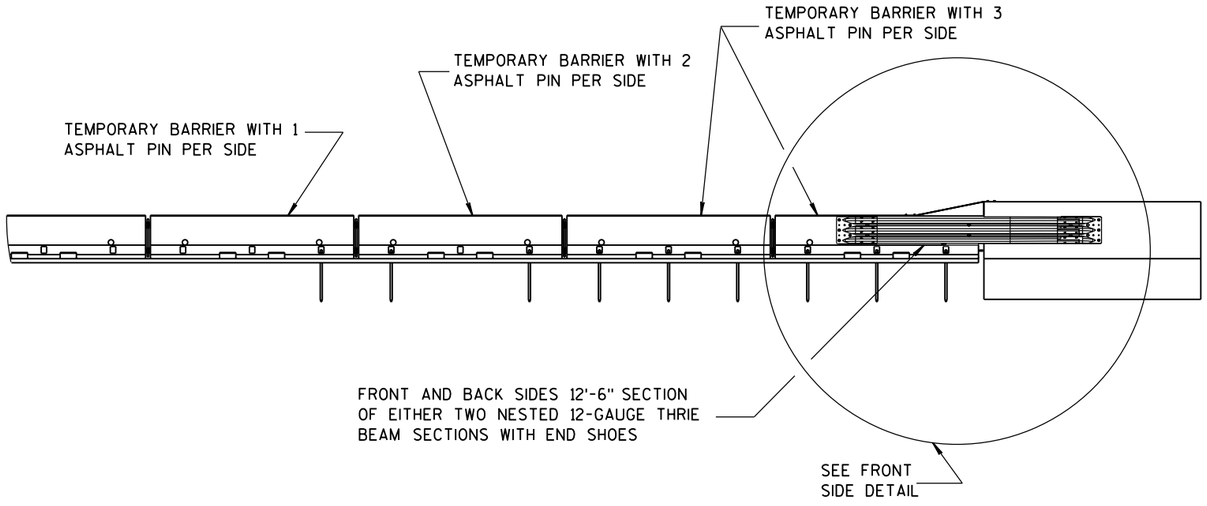
TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

NOTES

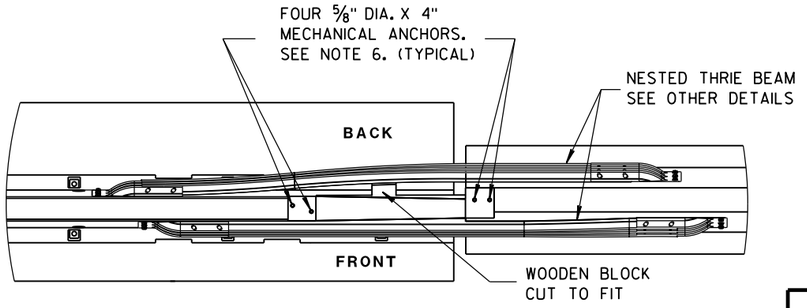
NESTED THRIE BEAM IS REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS.

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

BACK VIEW



FRONT VIEW



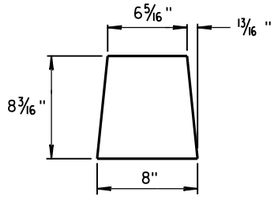
PLAN VIEW

BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

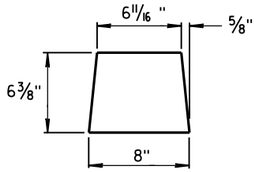
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

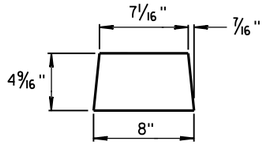
6
S.D.D. 14 B 7-14e



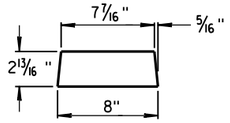
GUSSET 1



GUSSET 2

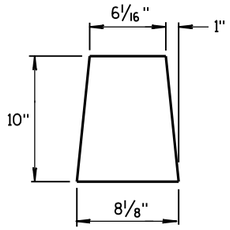


GUSSET 3

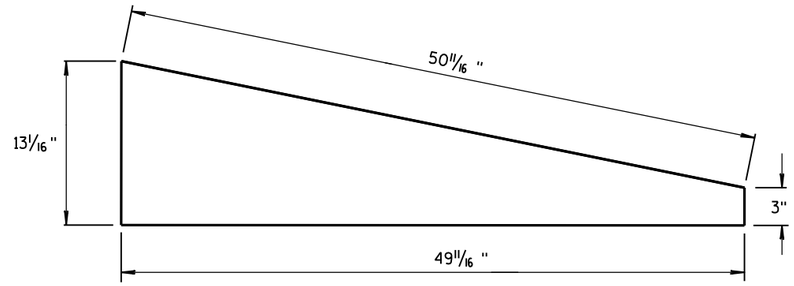


GUSSET 4

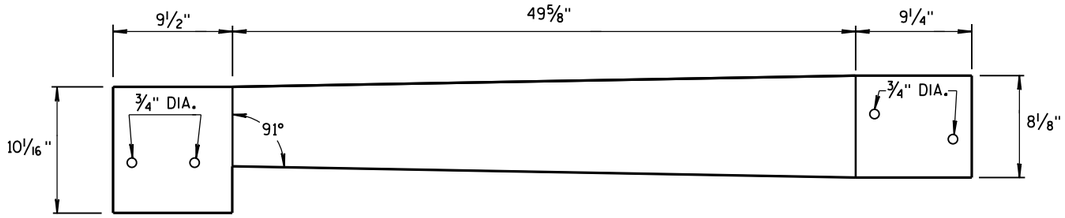
GUSSETS

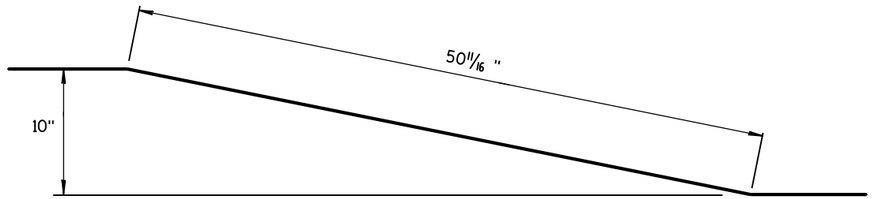


END PLATE



SIDE PLATE

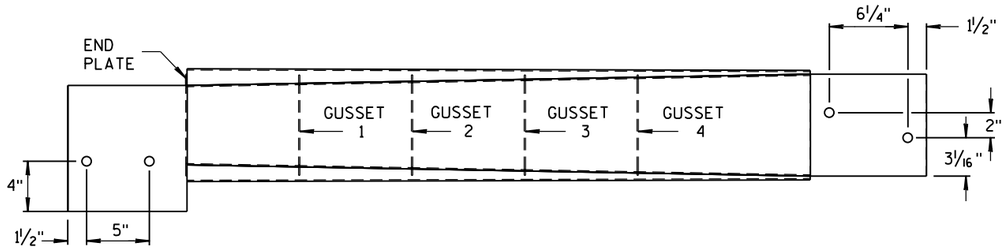


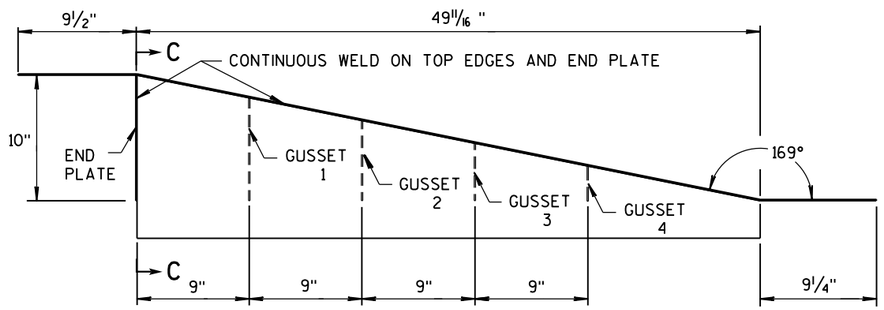


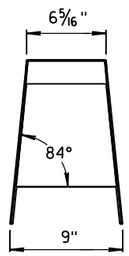
TOP PLATE

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

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







SECTION C-C

NOTES

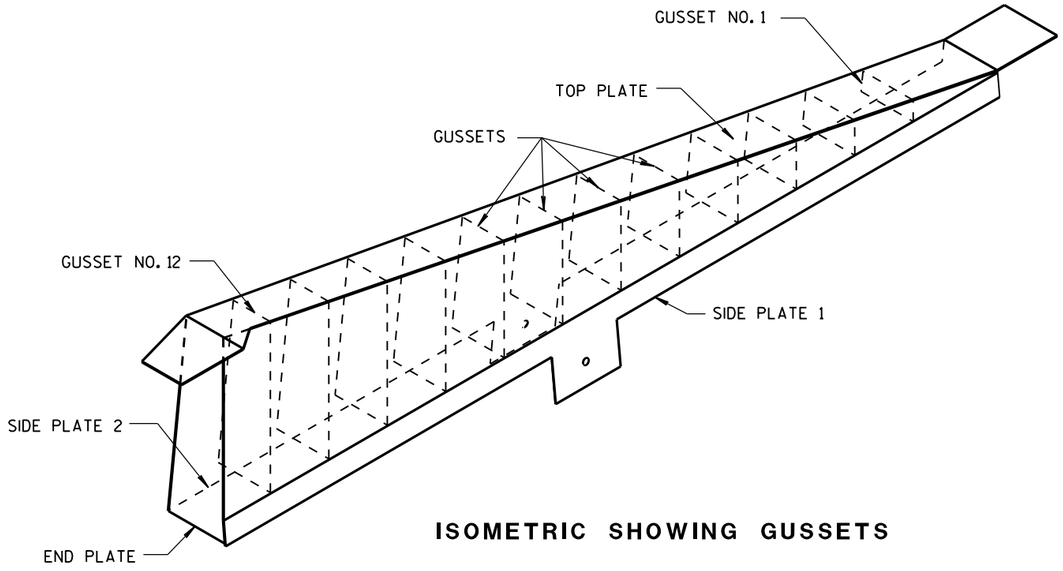
1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

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

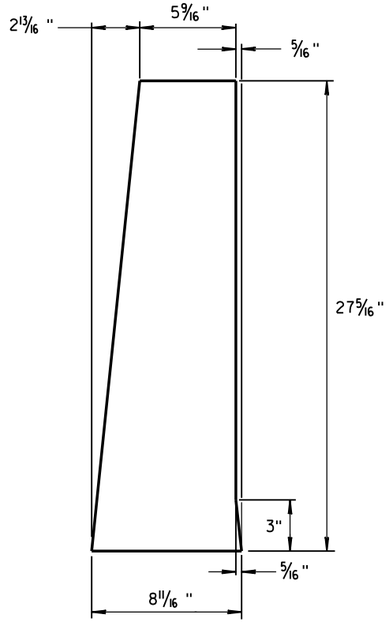
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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

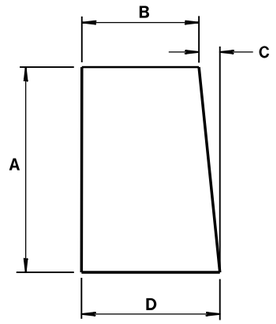


ISOMETRIC SHOWING GUSSETS



END PLATE

1/8" STEEL PLATE



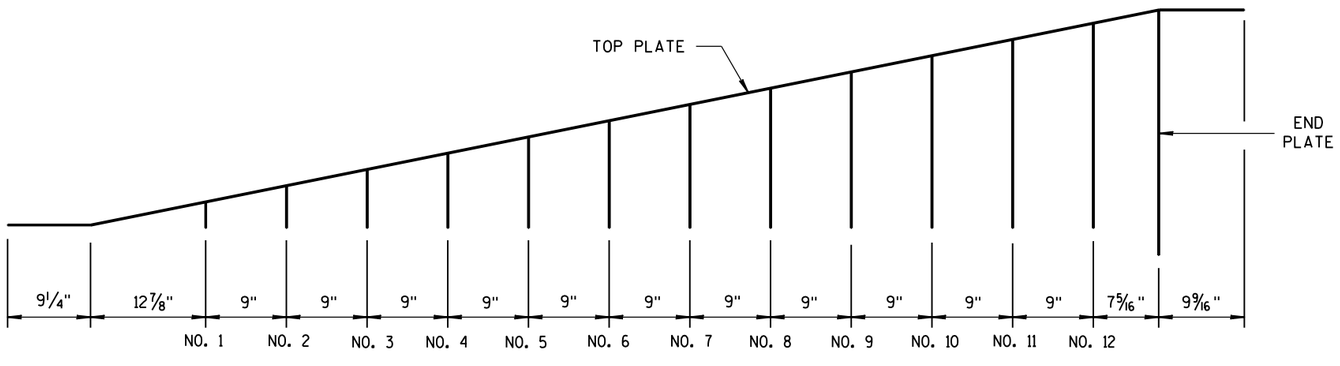
GUSSETS 1 - 12

ALL GUSSETS 1/8" STEEL PLATE

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

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

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



GUSSET LOCATION

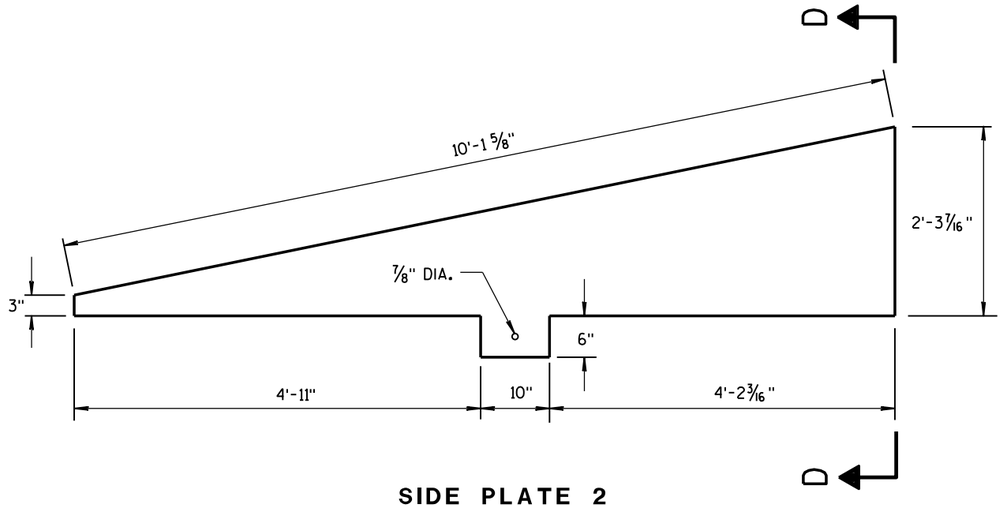
CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

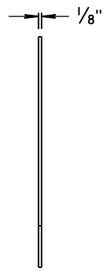
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

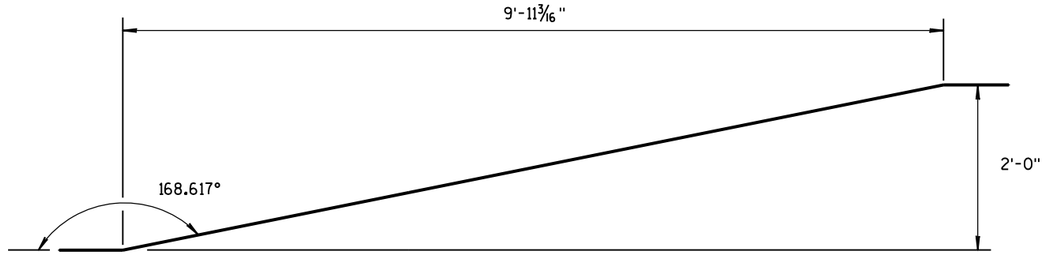
S.D.D. 14 B 7-14g



SIDE PLATE 2

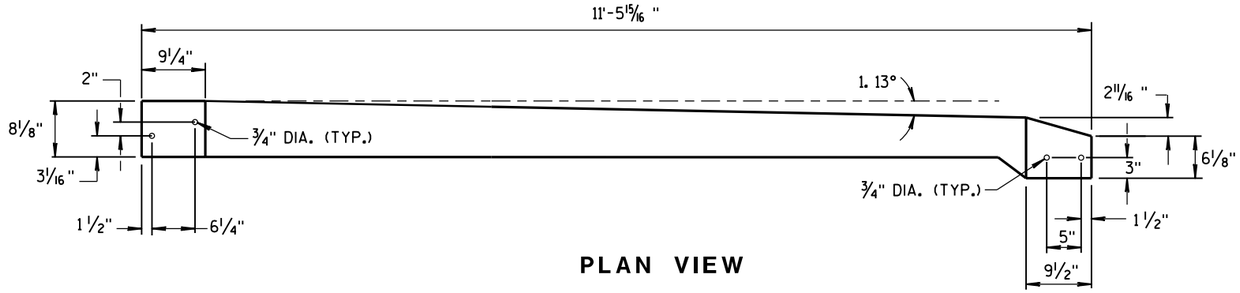


END VIEW



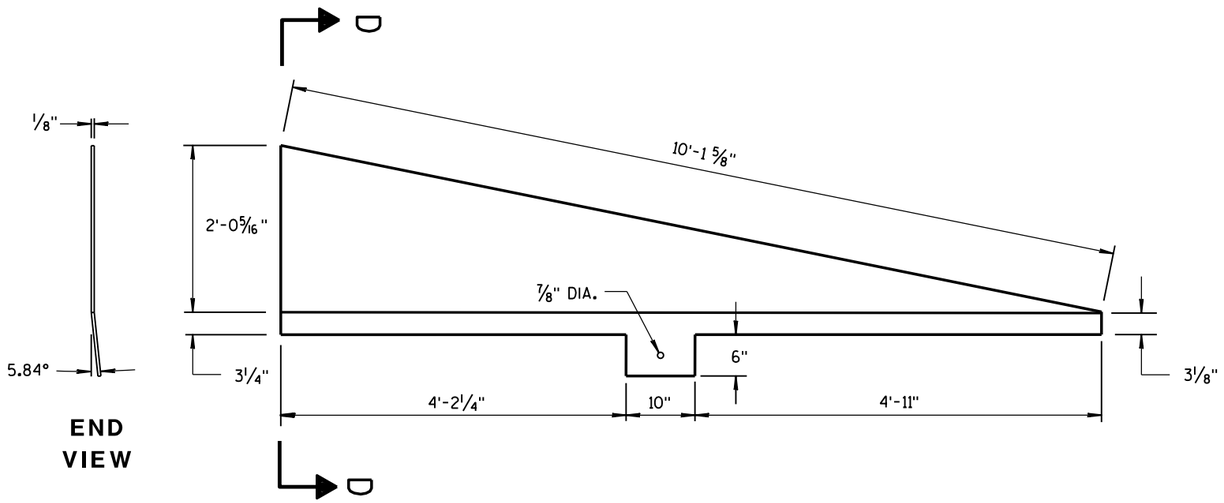
SIDE VIEW

TOP PLATE



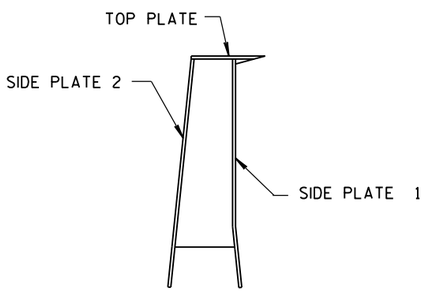
PLAN VIEW

TOP PLATE



END VIEW

SIDE PLATE 1



SECTION D-D

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

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

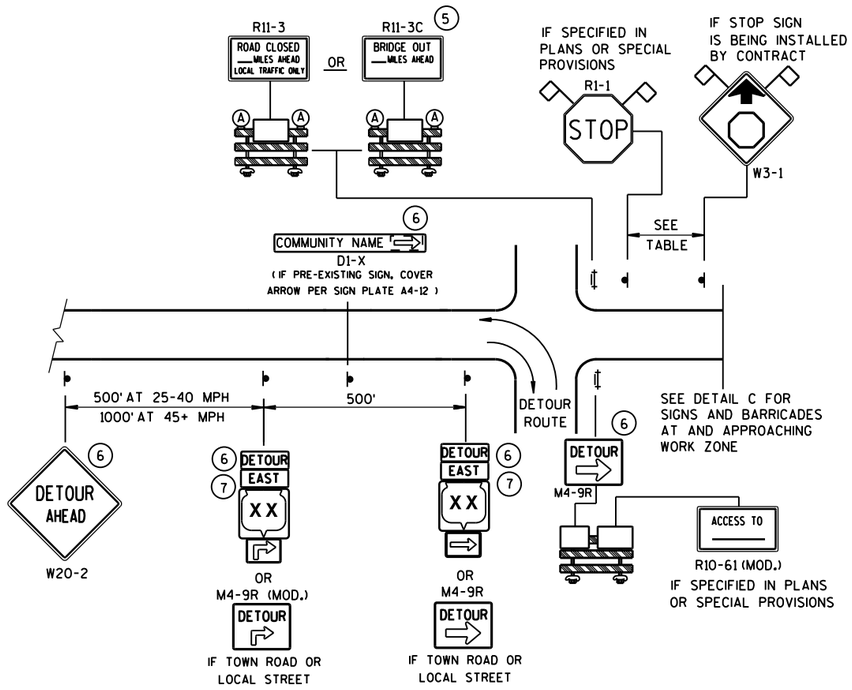
APPROVED
June 2014 — DATE
/S/ Jerry H. Zoda — ROADWAY STANDARD DEVELOPMENT ENGINEER
FHWA

6

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

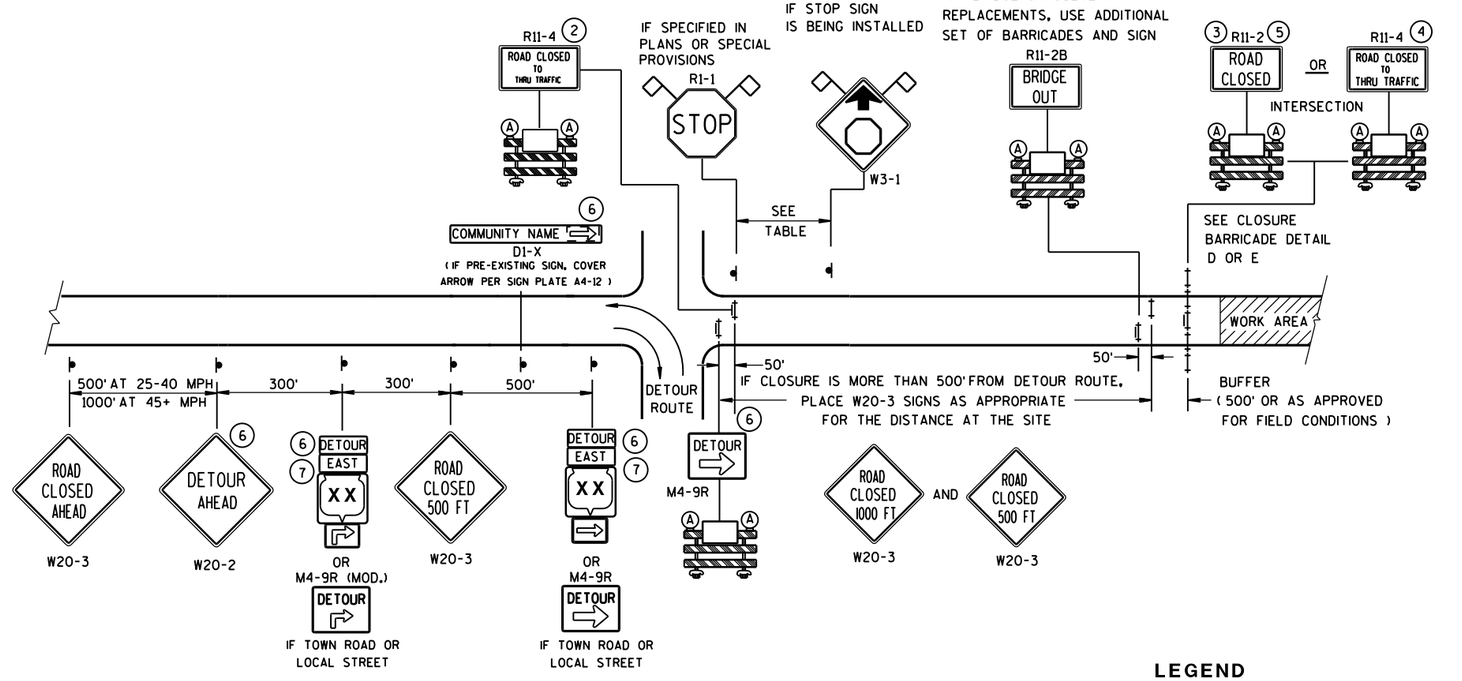
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S.D.D. 14 B 7-14h



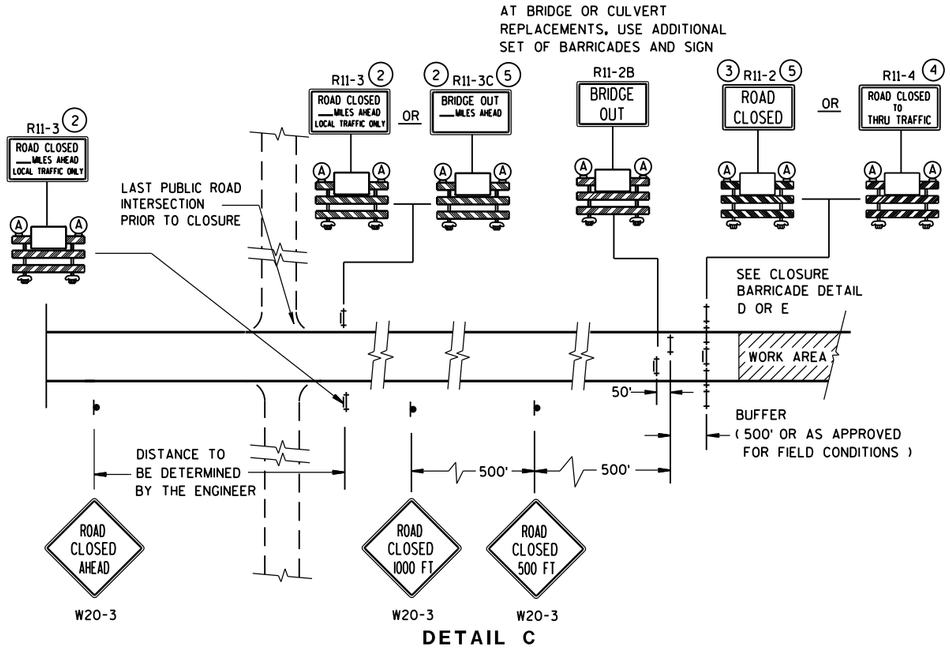
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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

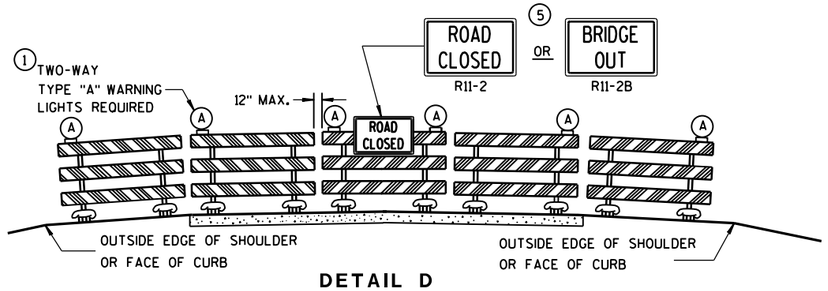
8/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

FHWA

6

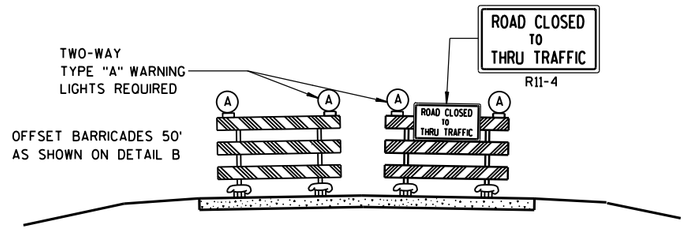
S.D.D. 15 C 2-5a



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
DESIGN
FHWA

6

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

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

GENERAL NOTES

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

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. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

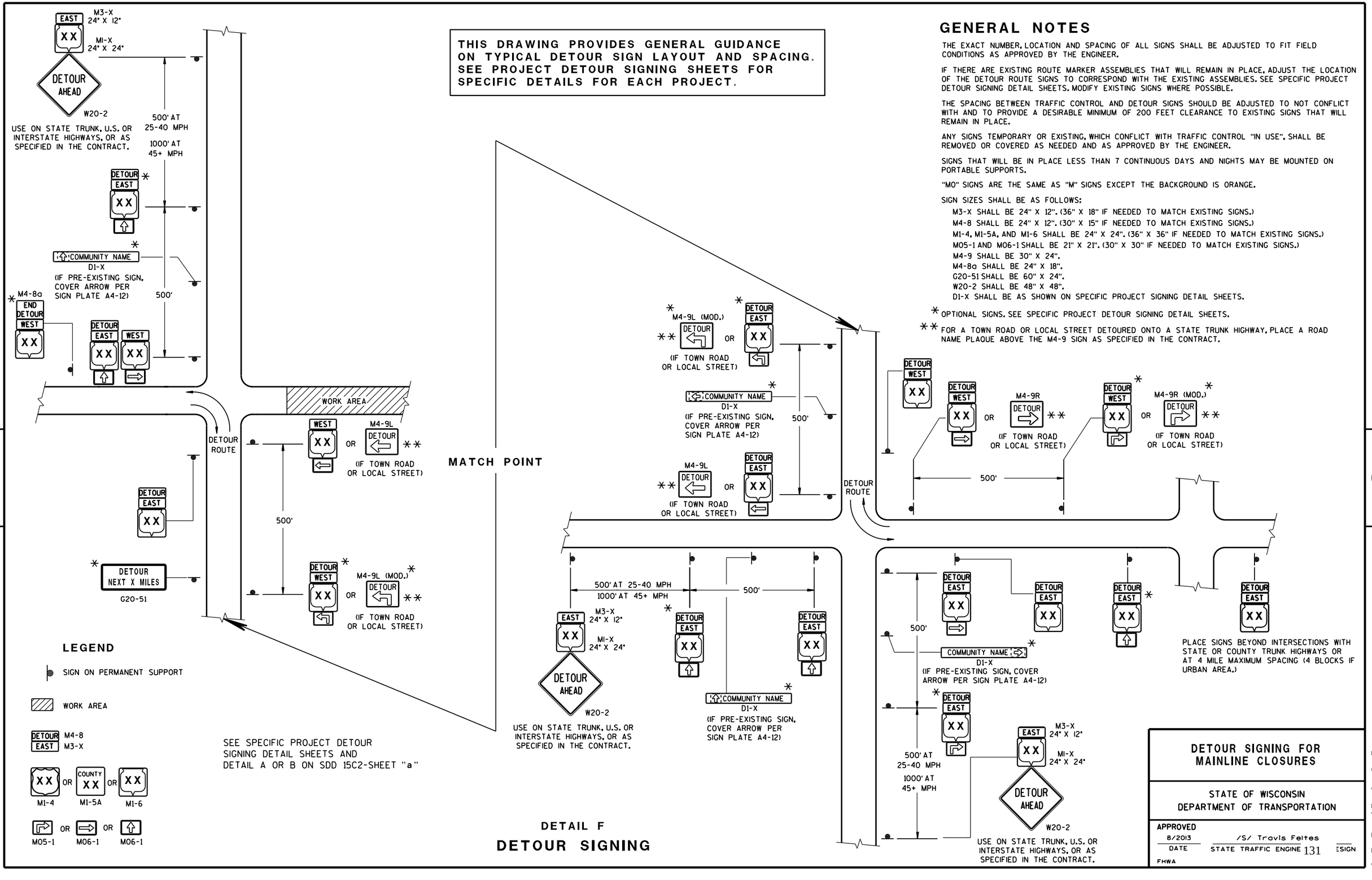
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- 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.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR EAST — M4-8 / M3-X
- XX OR COUNTY XX OR XX — M1-4 / M1-5A / M1-6
- MO5-1 OR MO6-1 OR MO6-1

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD 15C2-SHEET "a"

DETAIL F

DETOUR SIGNING

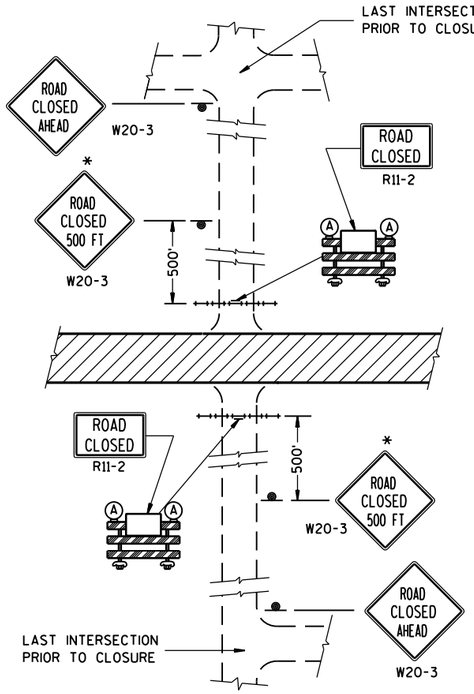
DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

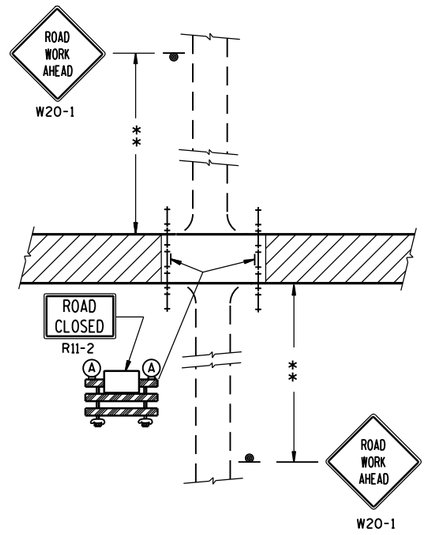
S.D.D. 15 C 2-5c

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



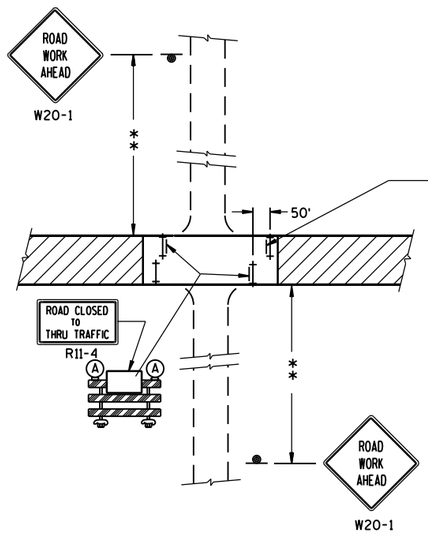
DETAIL 1

(NO ACCESS TO PROJECT)



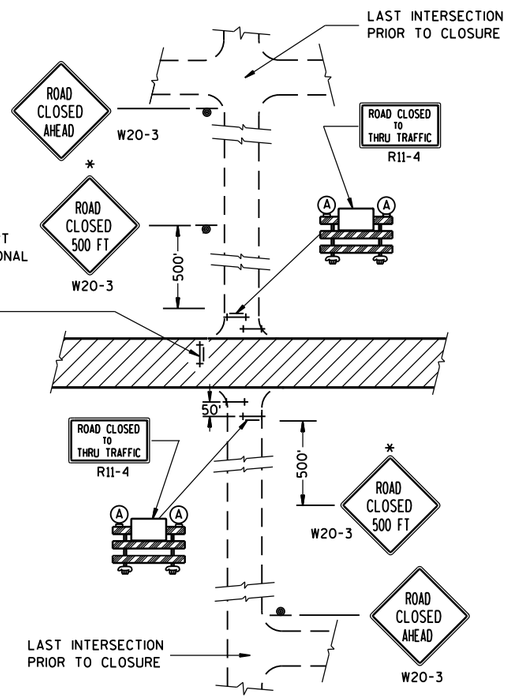
DETAIL 2

(PUBLIC CROSS-TRAFFIC MAINTAINED. NO ACCESS TO PROJECT).



DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

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.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

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 AND R11-4 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.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

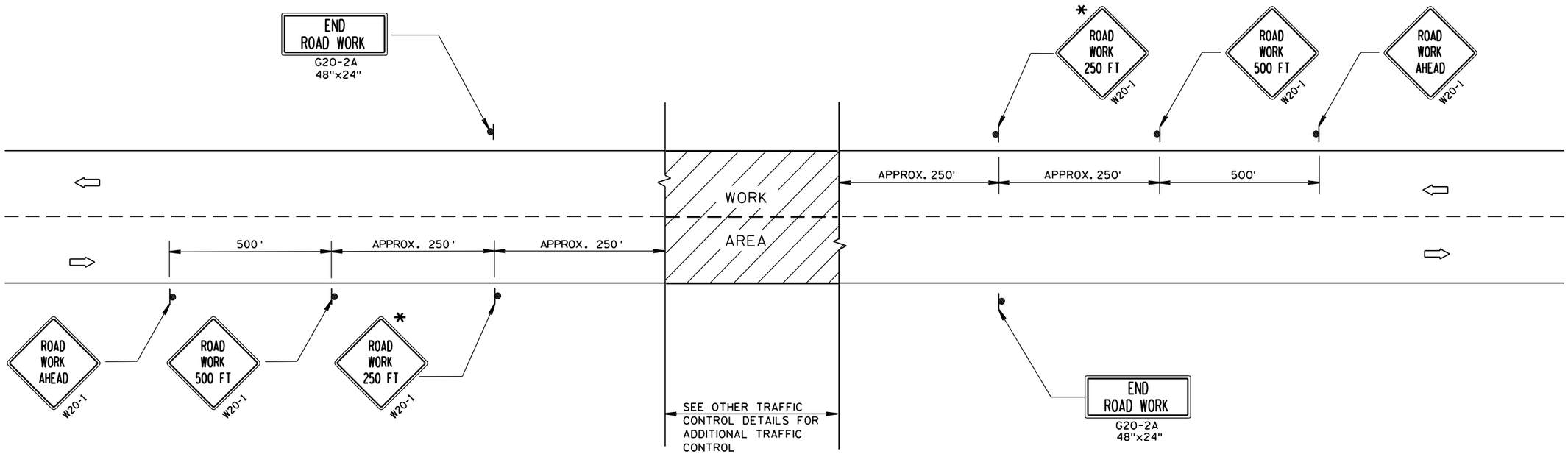
BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

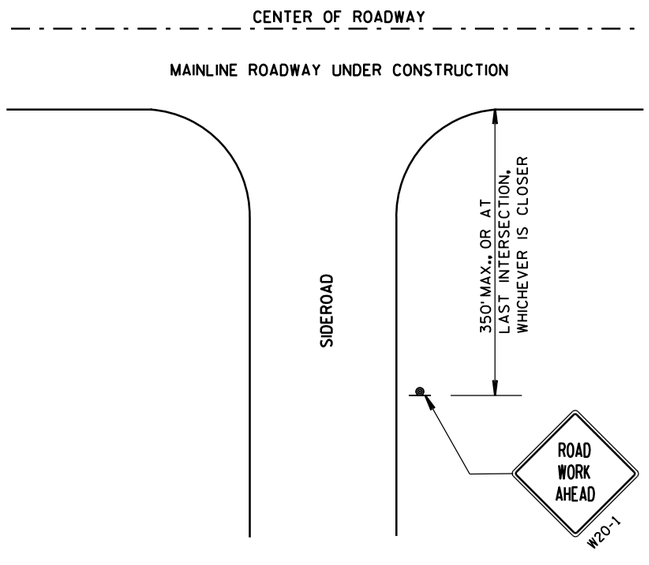
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8/2013 — DATE
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S.D.D. 15 C 3-2



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS.

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

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.

LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

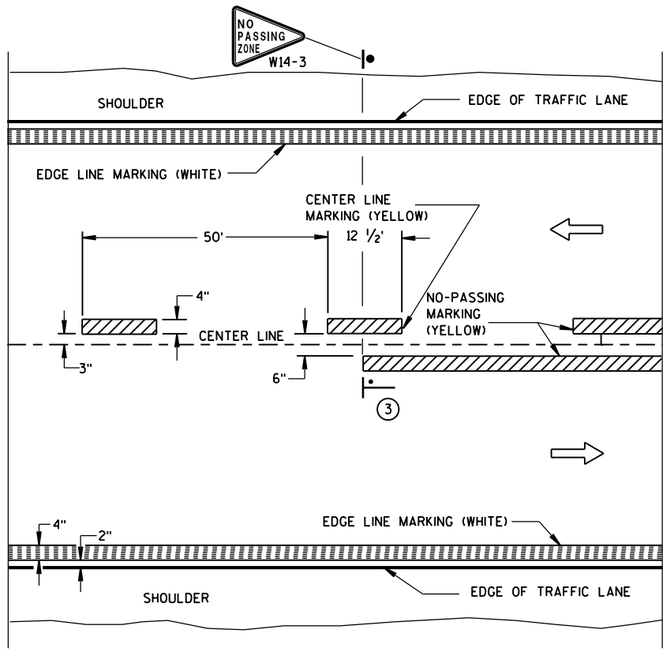
APPROVED

8/2013 DATE — /S/ Travis Feltes STATE TRAFFIC ENGINEER — SIGN

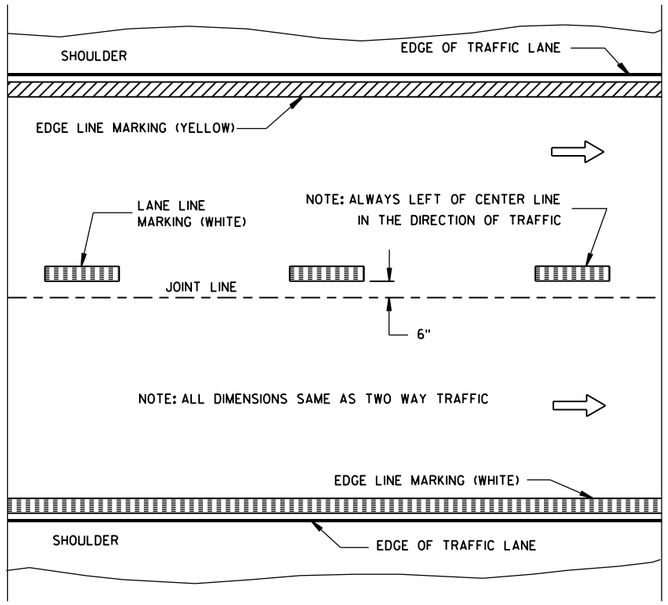
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S.D.D. 15 C 5-2

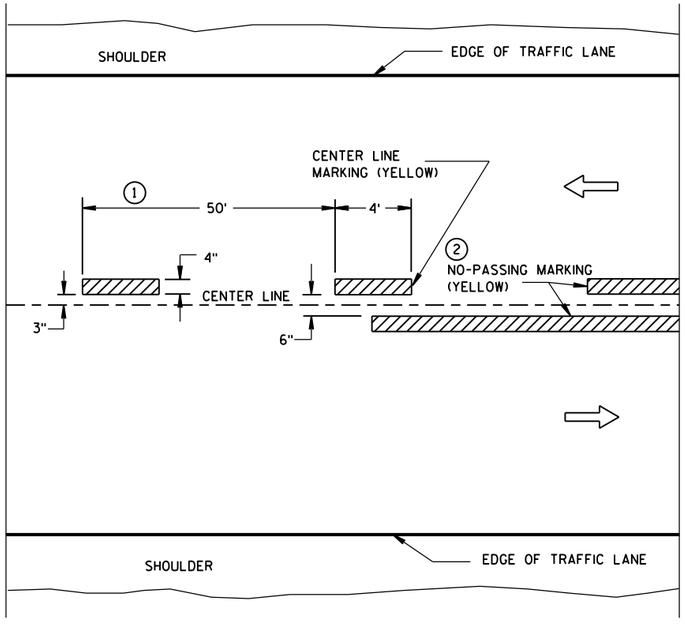


TWO WAY TRAFFIC

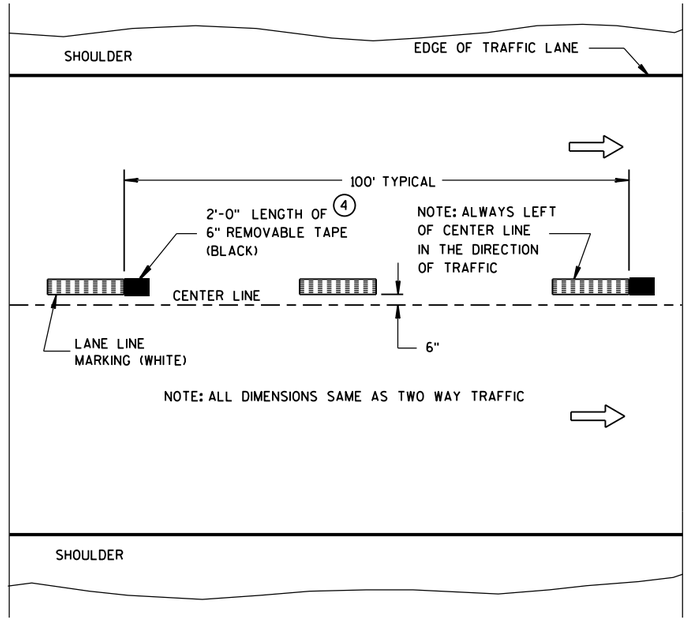


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

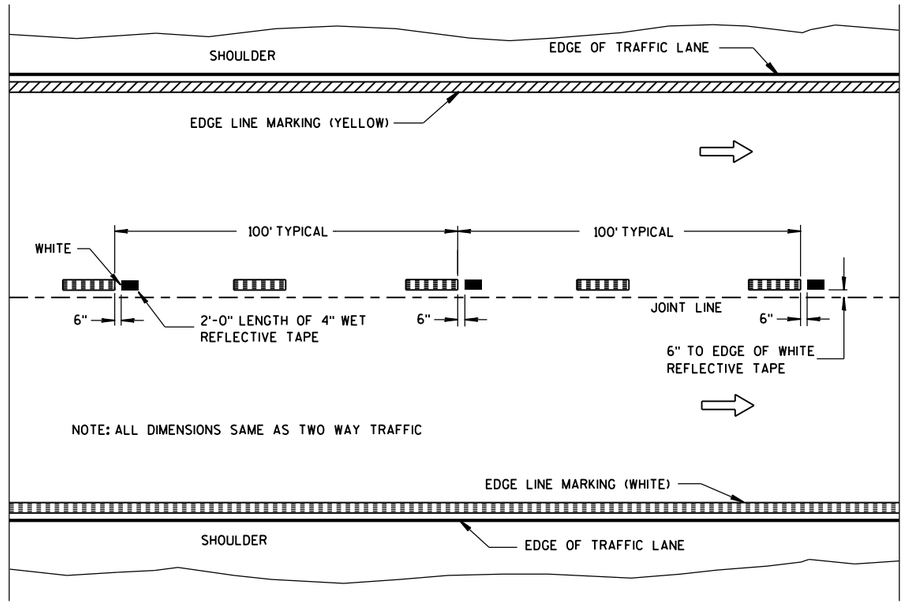
GENERAL NOTES

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

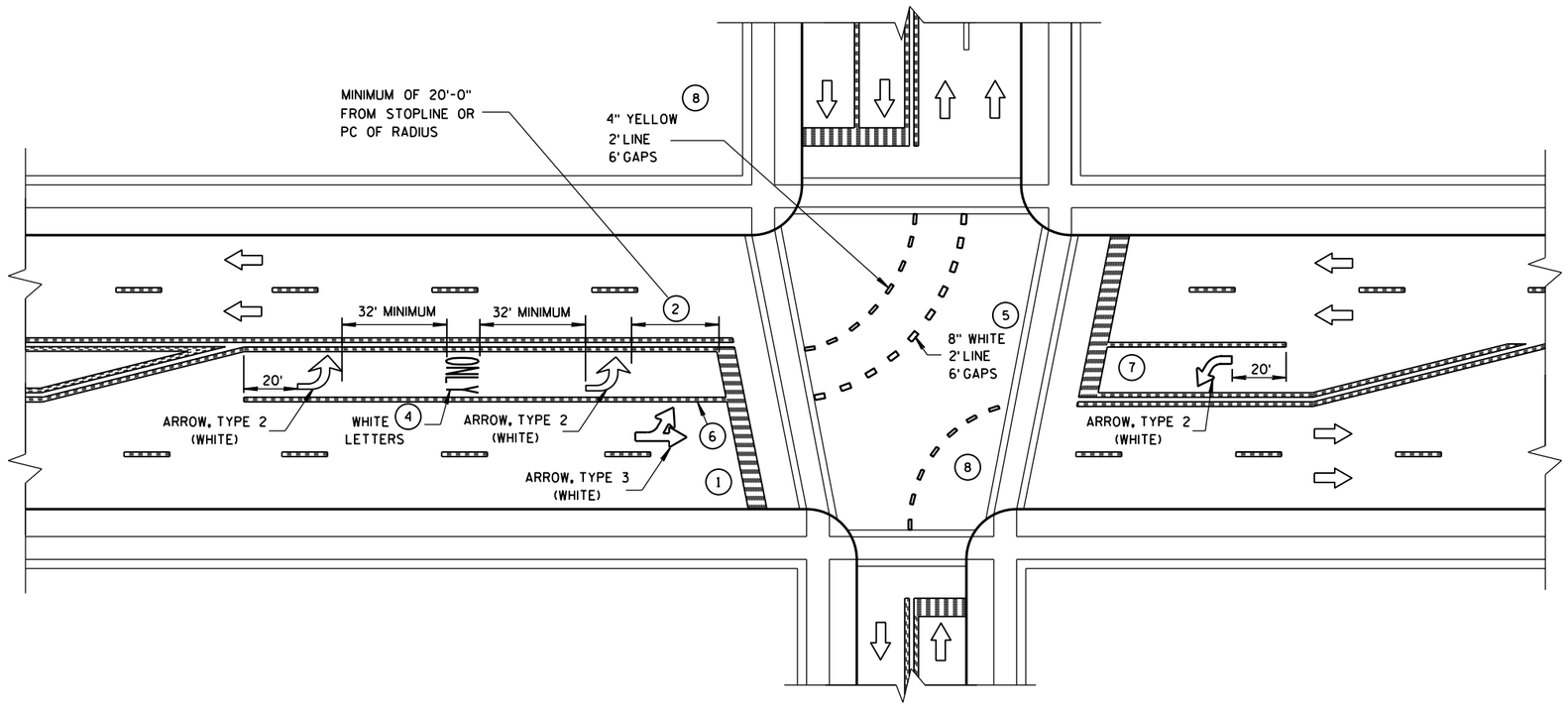
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S.D.D. 15 C 8-16a

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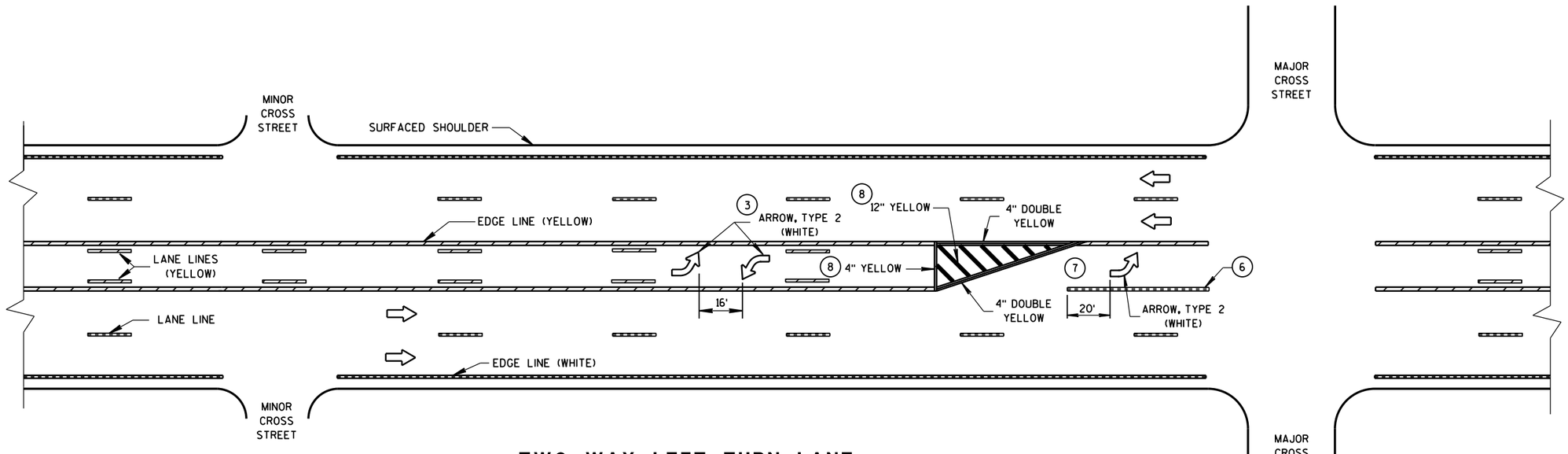
S.D.D. 15 C 8-16a



GENERAL NOTES

1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA SETS OF ONE ARROW AND ONE ONLY PER 160 FEET OR WHEN ON A CURVE.
5. 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
6. 8" WHITE
7. ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108 FEET.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TWO WAY LEFT TURN LANE

PAVEMENT MARKING (LEFT TURN LANE)

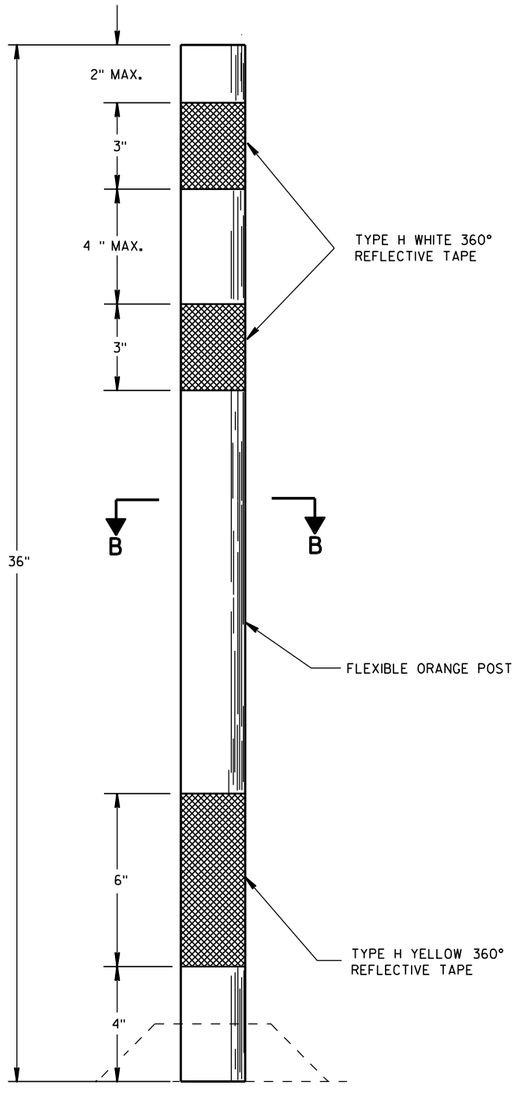
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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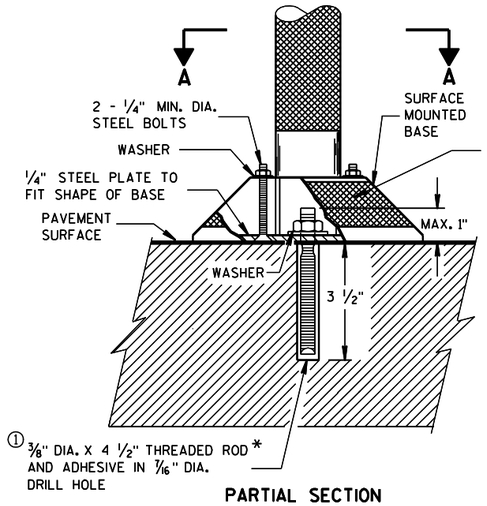
S.D.D. 15 C 8-16e

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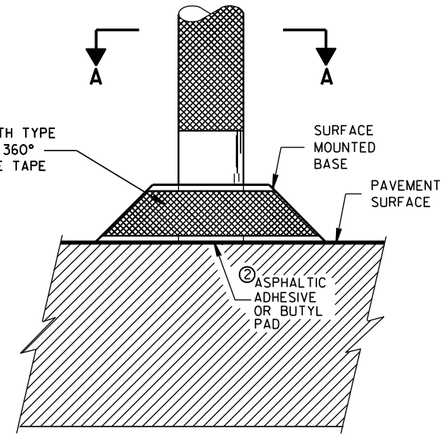
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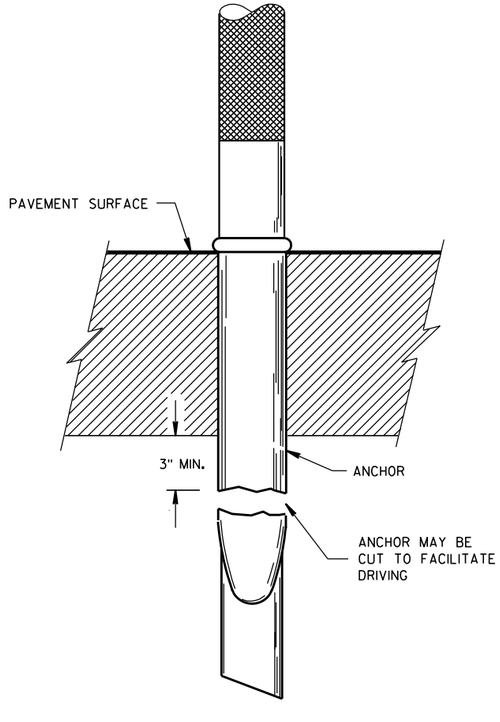
FLEXIBLE TUBULAR MARKER POST

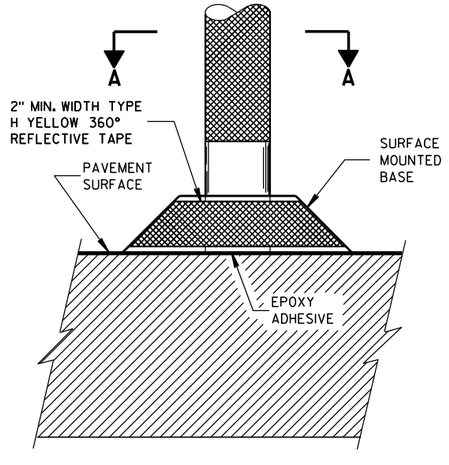


PARTIAL SECTION TO SHOW BOLTS



POST BASES ON NEW OR EXISTING PAVEMENT





POST ANCHOR AND BASE ON PAVEMENT WHICH WILL BE REMOVED

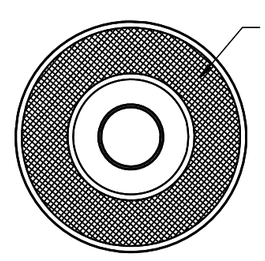
GENERAL NOTES

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

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

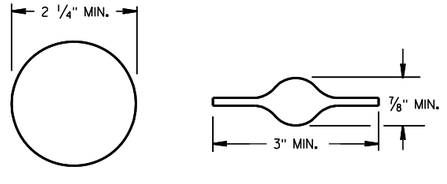
① THREADED ROD SHALL BE MACHINED DOWN TO 0.280 INCH DIA. 1 1/4 INCHES FROM THE TOP.

② THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.



SECTION A-A

SURFACE MOUNTED BASE



SECTION B-B

ALTERNATIVE SHAPES

FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2/17/94 DATE

/S/ Chester J. [illegible] DIRECTOR, OFFICE O

FHWA

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S.D.D. 15 C 11-5

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S.D.D. 15 C 11-5

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

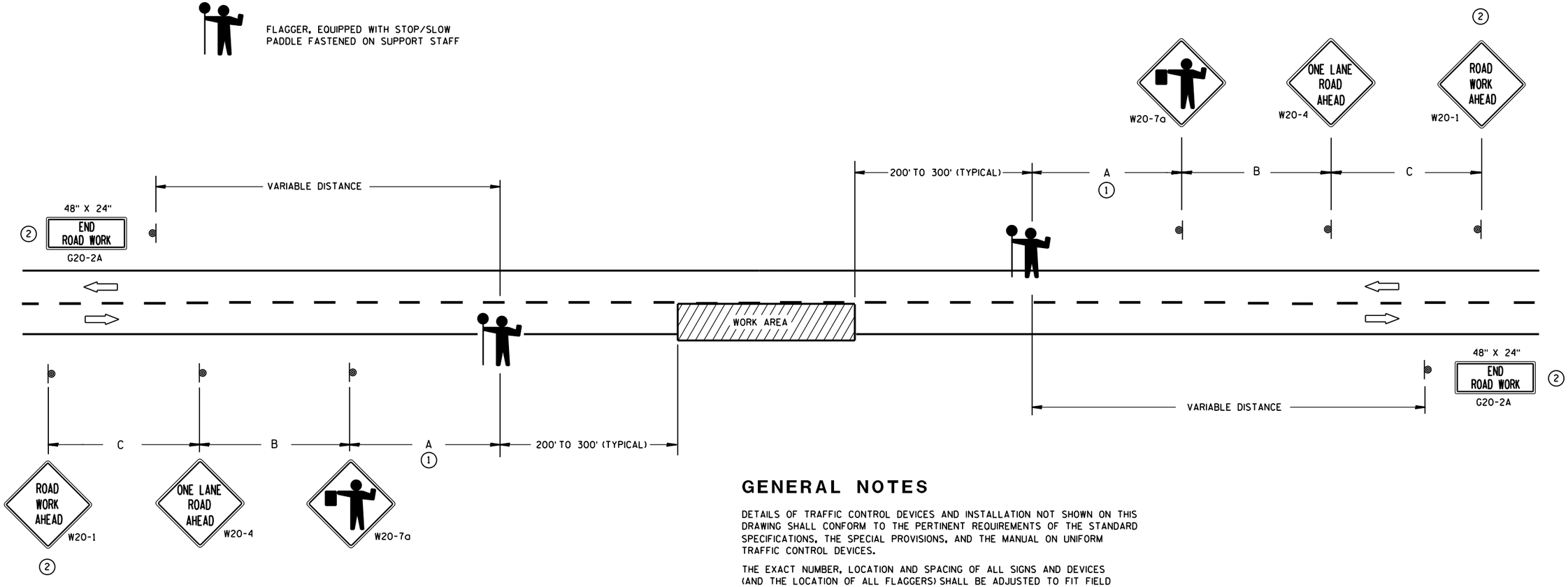
SIGN SPACING TABLE

SPEED LIMIT	SIGN SPACING A,B,C
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



W3-4

USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



(1) FOR A MOVING WORK OPERATION,
SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.

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

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

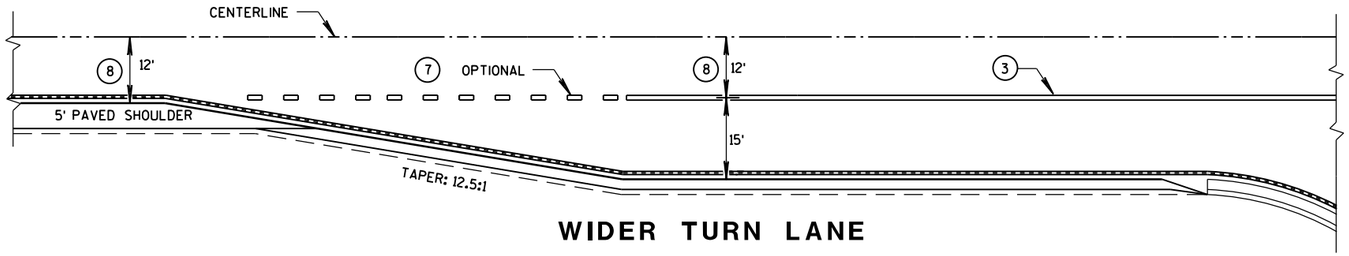
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/S/ Travis Feltes — STATE TRAFFIC ENGINEER
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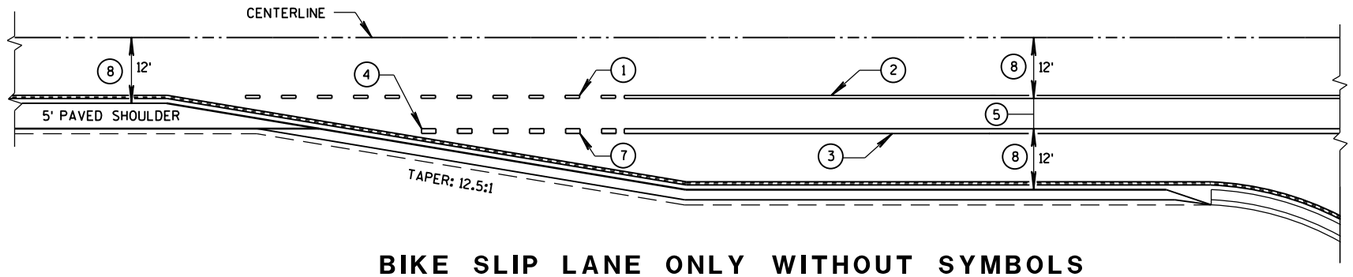
S.D.D. 15 C 12-4

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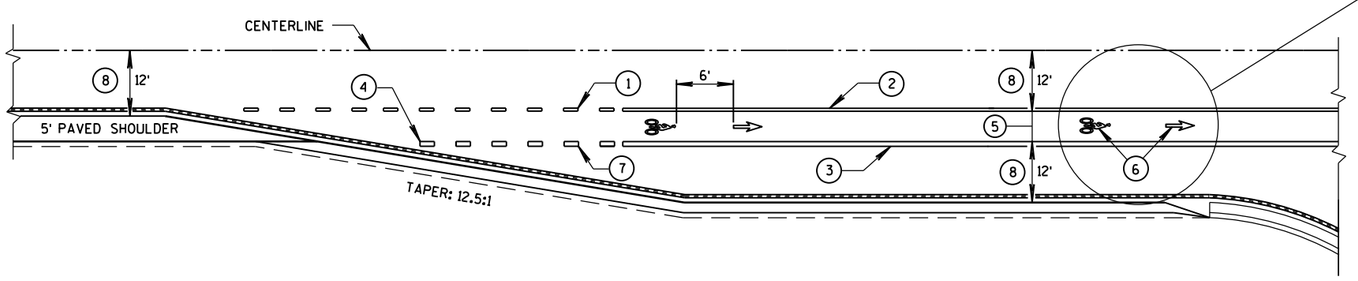
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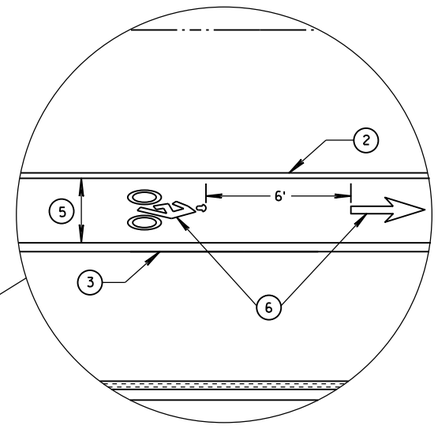
WIDER TURN LANE



BIKE SLIP LANE ONLY WITHOUT SYMBOLS



BIKE LANE WITH SYMBOLS



GENERAL NOTES

1. 3' LINE, 9' GAP - 4-INCH WIDE, WHITE.
2. 4-INCH, WHITE.
3. 8-INCH, WHITE.
4. IF SIGNED AND/OR MARKED AS A BICYCLE FACILITY INCLUDE SECOND LINE OF LINE-SPACE MARKING, OTHERWISE DO NOT.
5. BIKE ACCOMMODATION FOR CONCRETE PAVEMENT IS 5' WIDE. BIKE ACCOMMODATION FOR ASPHALT PAVEMENT IS A MINIMUM OF 4', 5' AT ≥ 45 MPH.
6. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
7. 3' LINE, 9' GAP - 8-INCH WIDE, WHITE.
8. REFER TO CONTRACT PLANS.

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S.D.D. 15 C 29-3a

BICYCLE LANE MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

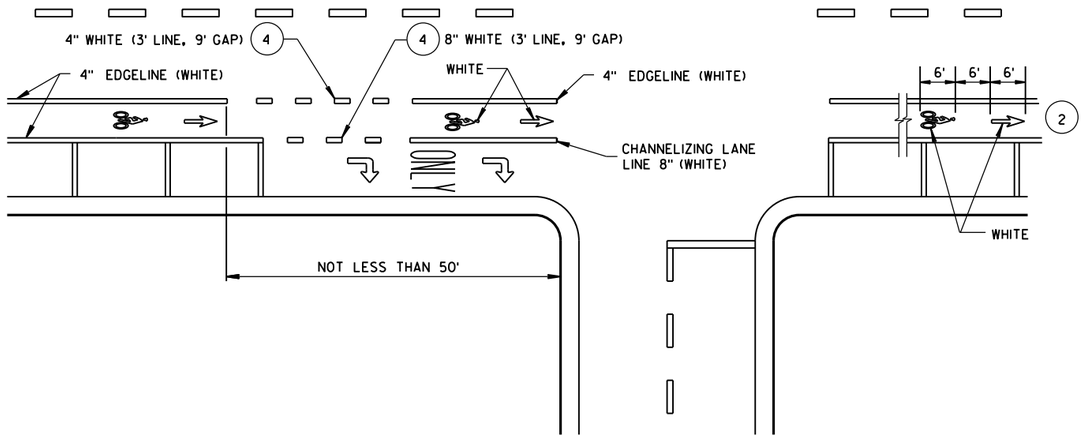
4/30/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

FHWA

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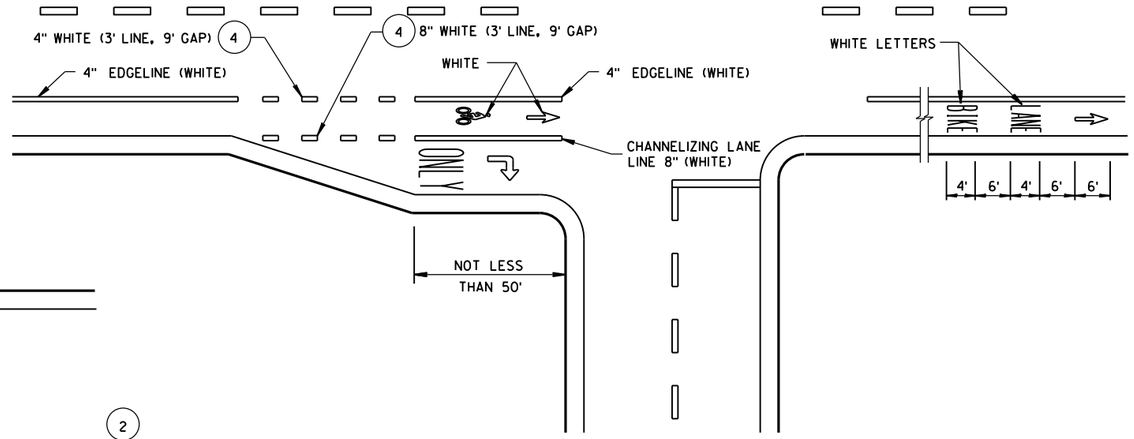
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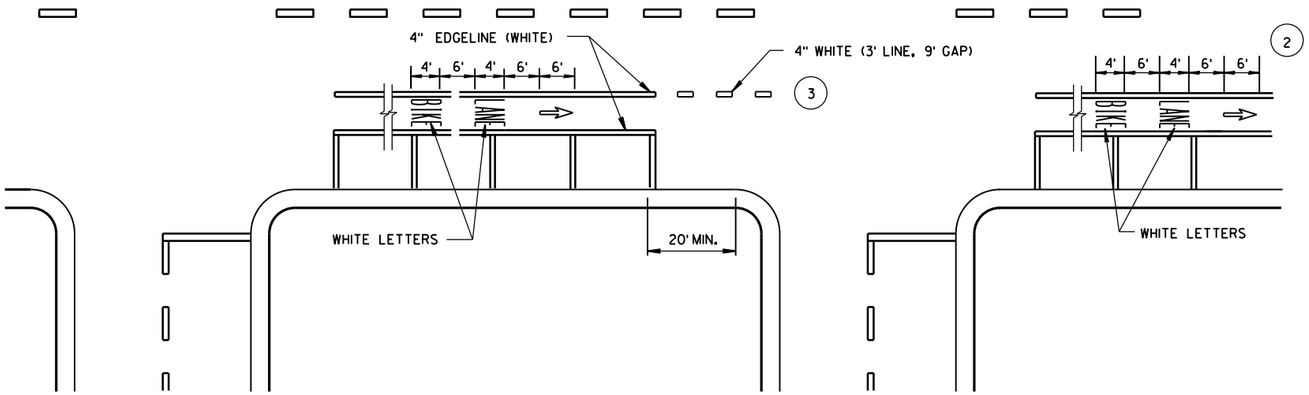
DESIGNATED BICYCLE LANE

GENERAL NOTES

1. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. THE SERIES OF PAVEMENT MARKING SYMBOLS SHALL BE REPEATED AFTER INTERSECTIONS AND SPACED A MAXIMUM OF 250'. NO PAVEMENT MARKING WILL TAKE PLACE IN THE CROSSWALK.
3. DOTTED LINES SHOULD BE USED 50' TO 200' IN ADVANCE OF AN INTERSECTION WHERE THERE IS NO RIGHT TURN ONLY LANE AND THERE IS HEAVY RIGHT TURN TRAFFIC OR THERE IS A NEAR-SIDE BUS STOP. AT OTHER INTERSECTIONS WHERE RIGHT TURN TRAFFIC IS LIGHT TO MODERATE, A SOLID LINE CAN BE USED UP TO THE INTERSECTION.
4. WHEN SPECIFIED IN THE CONTRACT.



DESIGNATED BICYCLE LANE
NO PARKING, RIGHT TURN LANE



DESIGNATED BICYCLE LANE
WITH PARKING, NO RIGHT TURN LANE

URBAN BICYCLE LANE MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/30/2013 DATE
/S/ Travis Feltes
STATE TRAFFIC E
FHWA

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S.D.D. 15 C 29-3c

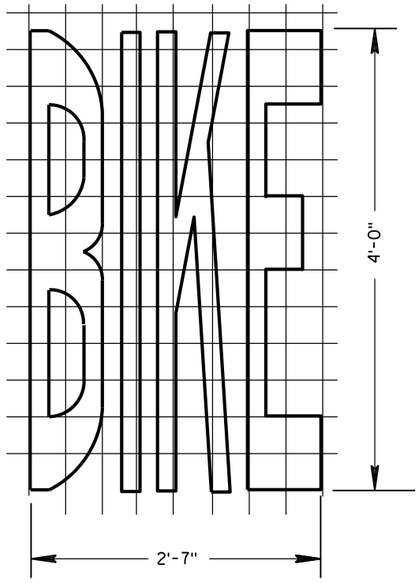
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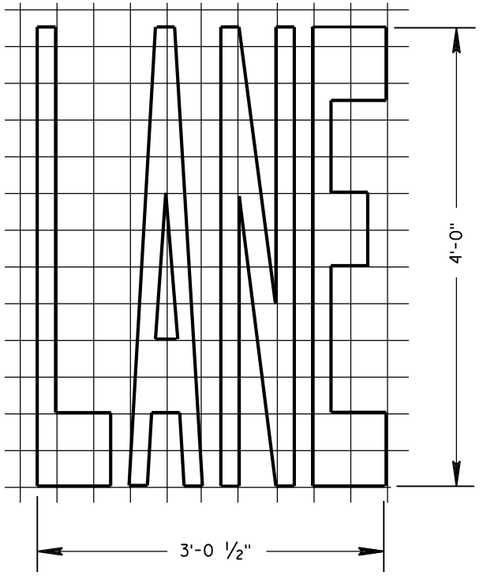
S.D.D. 15 C 29-3c

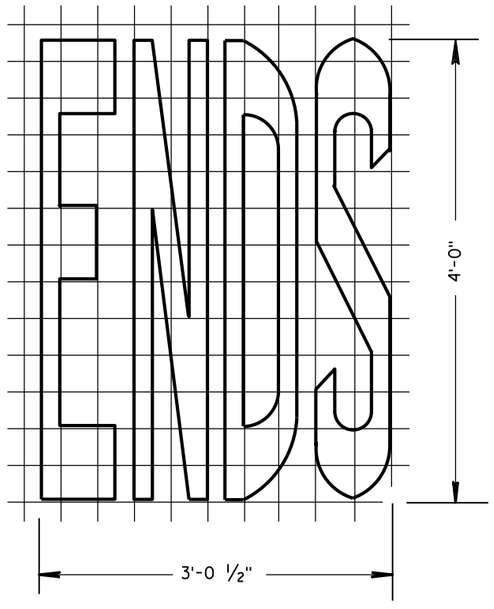
GENERAL NOTES

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

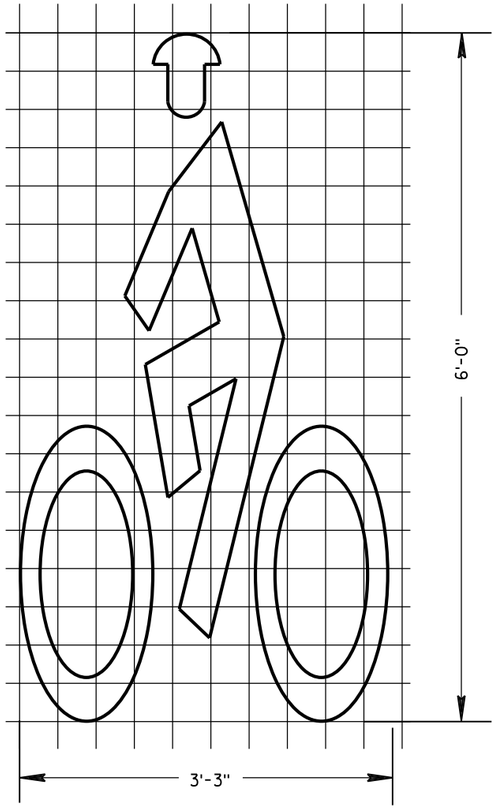
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



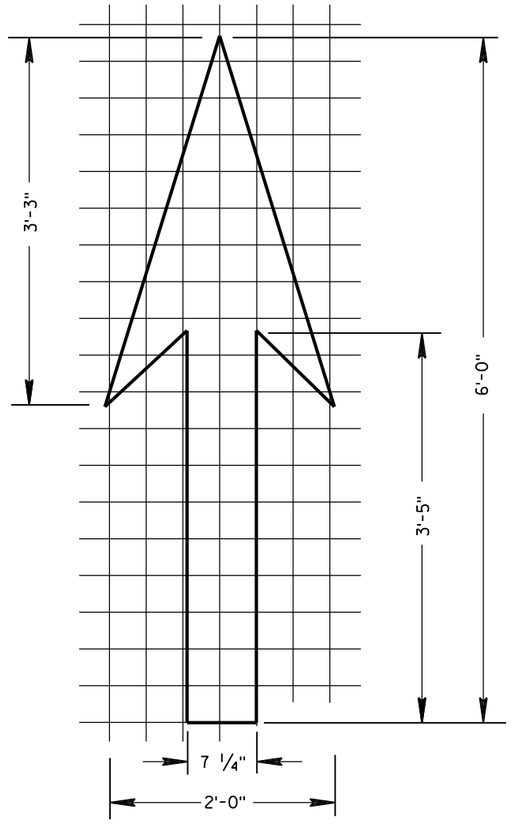




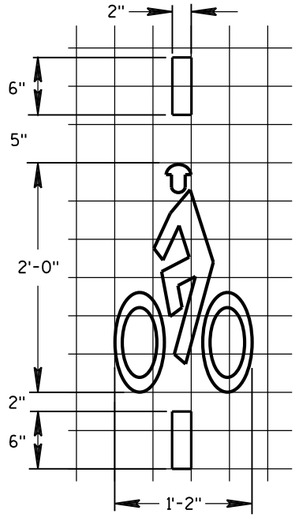
BIKE LANE WORDS



BIKE LANE SYMBOL



BIKE LANE ARROW



BICYCLE DETECTOR PAVEMENT MARKING

PAVEMENT MARKING FOR BIKE LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-30-2013
DATE

/S/ Travis Feltes
STATE TRAFFIC EN

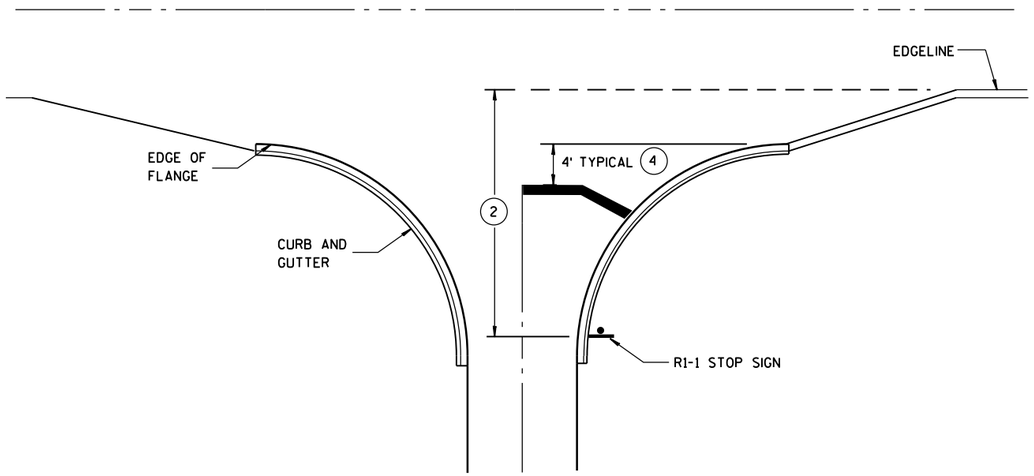
FHWA

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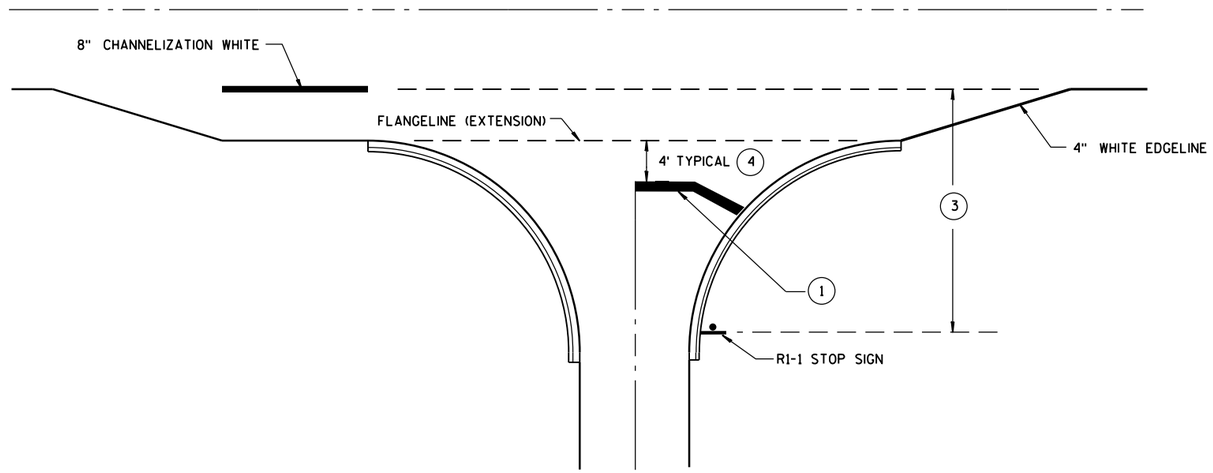
S.D.D. 15 C 29-3e

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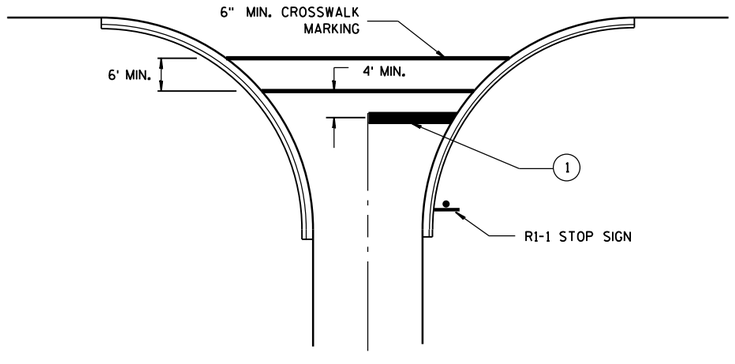
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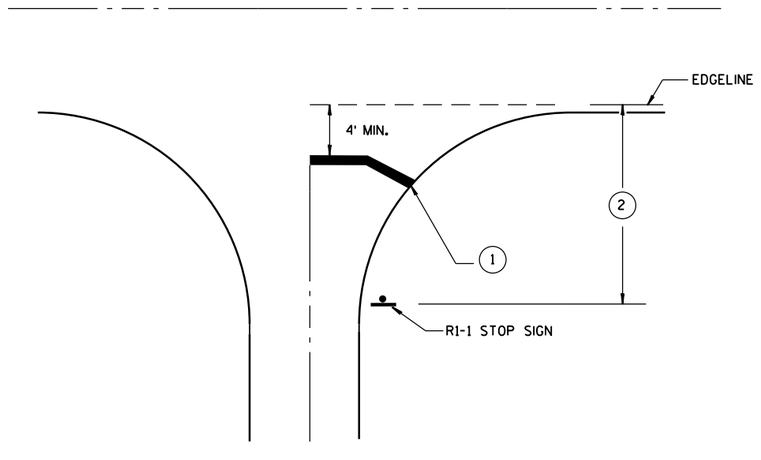
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



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 EDGELINE 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

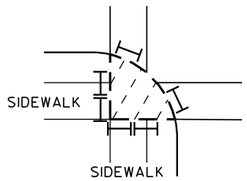
/S/ Travis Feltes
STATE TRAFFIC E

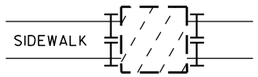
FHWA

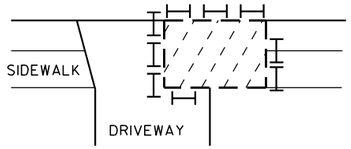
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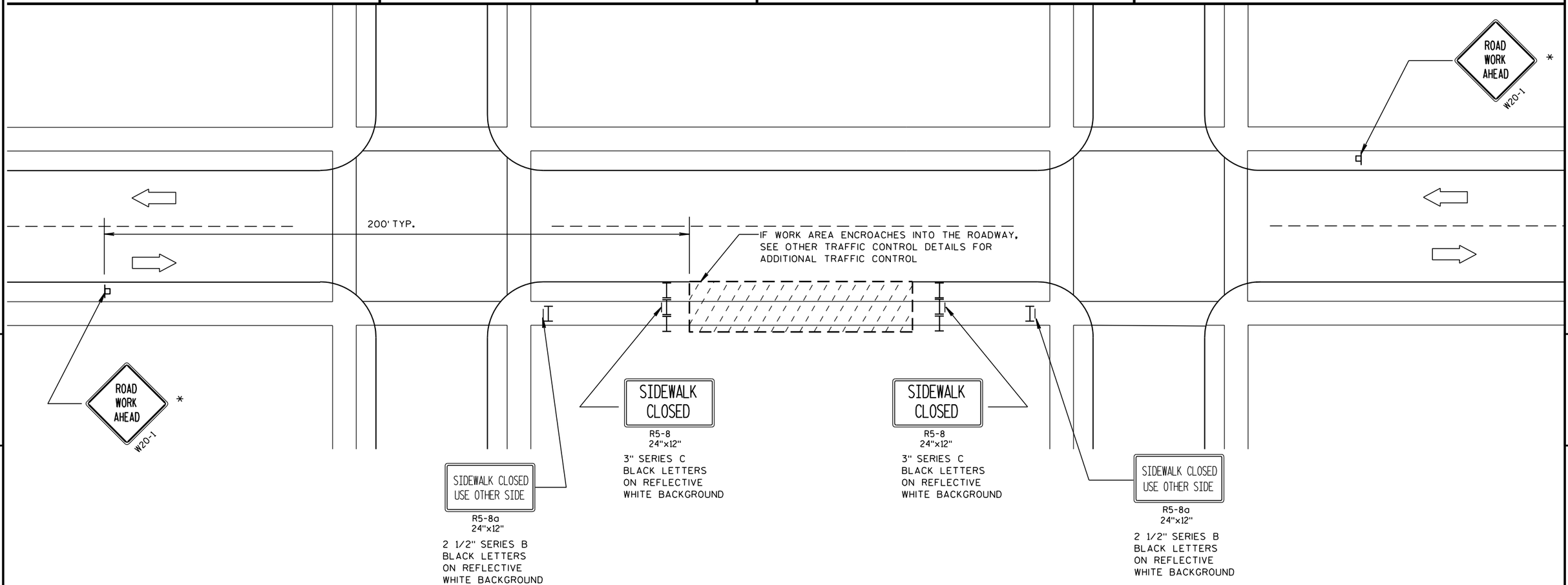
S.D.D. 15 C 33-1

WARNING OF LOCALIZED SIDEWALK WORK AREAS









LEGEND

- POST MOUNTED SIGN
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- WORK AREA
- DIRECTION OF TRAFFIC FLOW

GENERAL NOTES :

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS, IF APPROVED BY DISTRICT TRAFFIC UNIT.

THE EXACT LOCATION AND PLACEMENT OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

* "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

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

TRAFFIC CONTROL, SIDEWALK CLOSURE

TRAFFIC CONTROL, SIDEWALK CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/2000 DATE
/S/ Chester J. [illegible]
CHIEF SIGNS AND MARK[illegible]NEER
FHWA

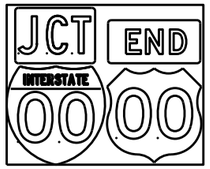
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S.D.D. 15 D 30-1

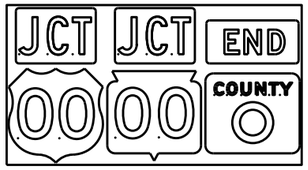
TYPICAL ASSEMBLIES



J1-1



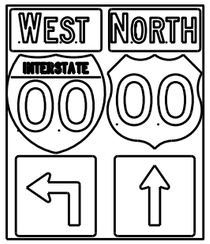
J1-2



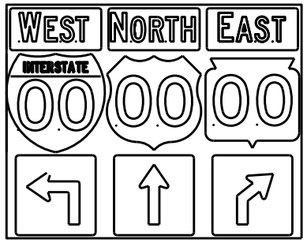
J1-3



J2-1



J2-2

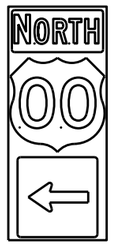


J2-3

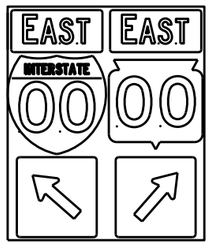


JV

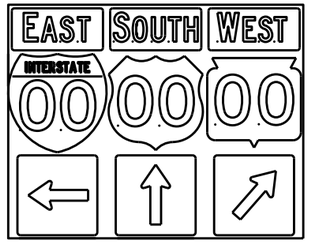
(Typical Vertical J-Assembly
See Note 10 and 11)



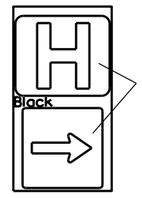
J3-1



J3-2



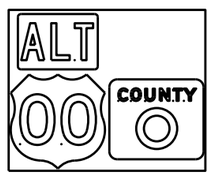
J3-3



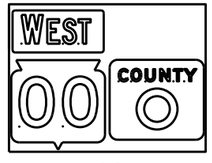
JH-1



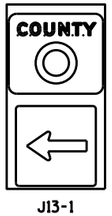
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

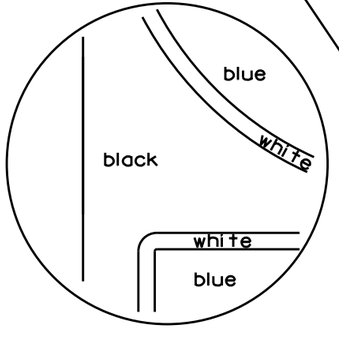


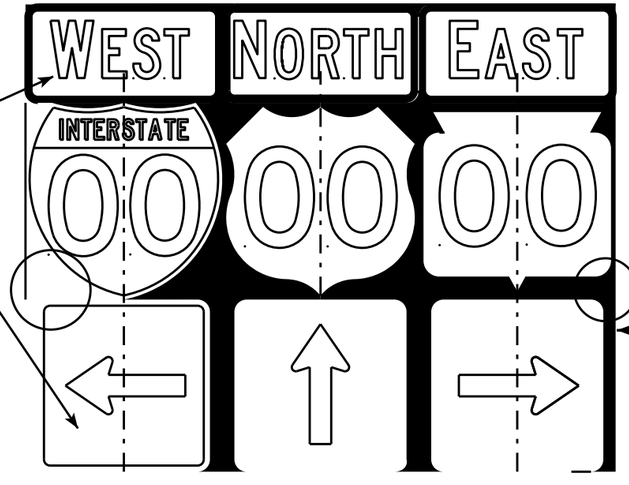
J23-1

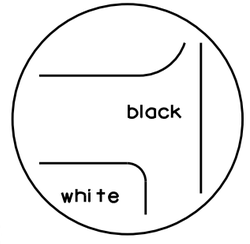


J22-1

[blue background with interstate]







[black background]

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.

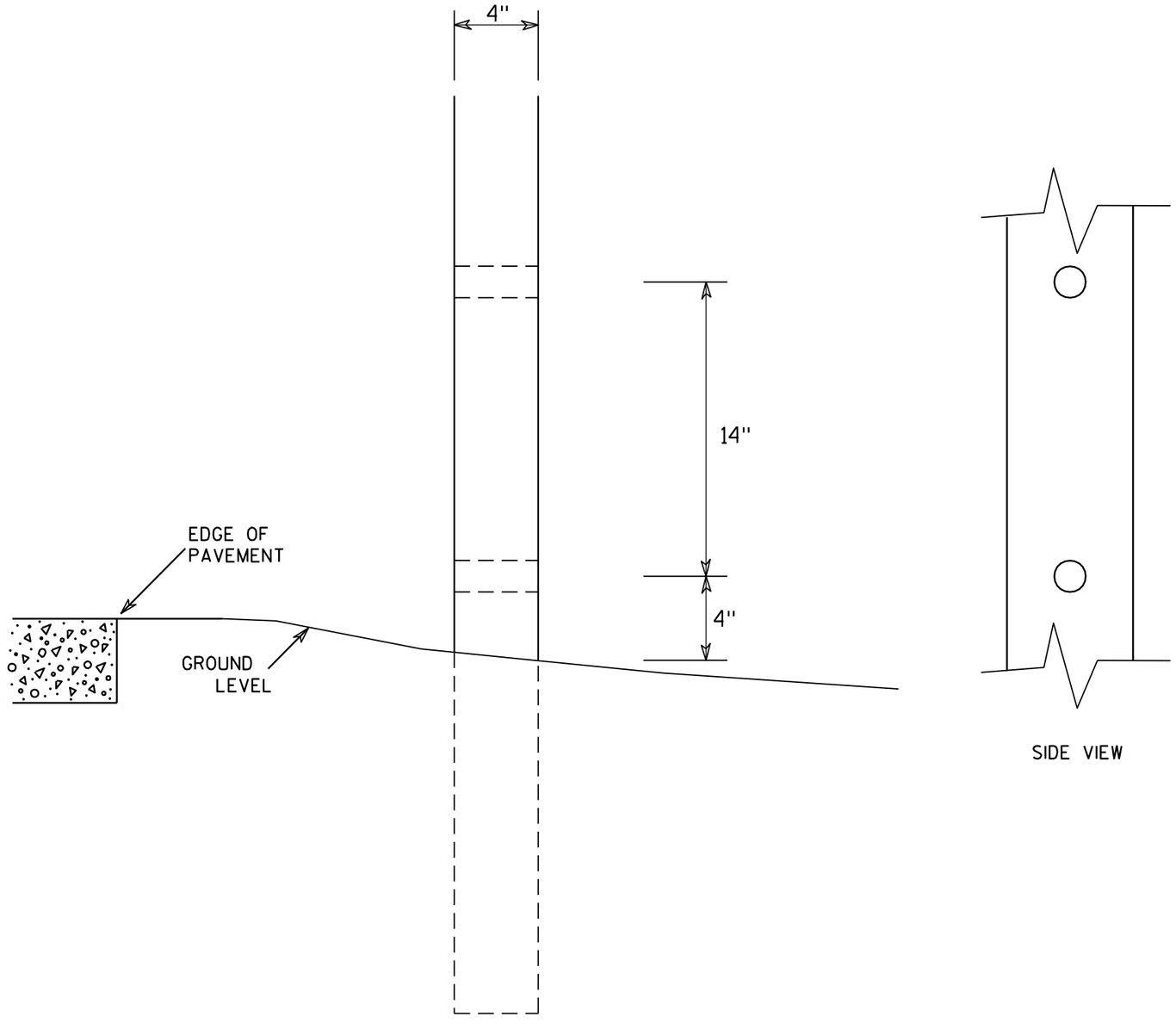
ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

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



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

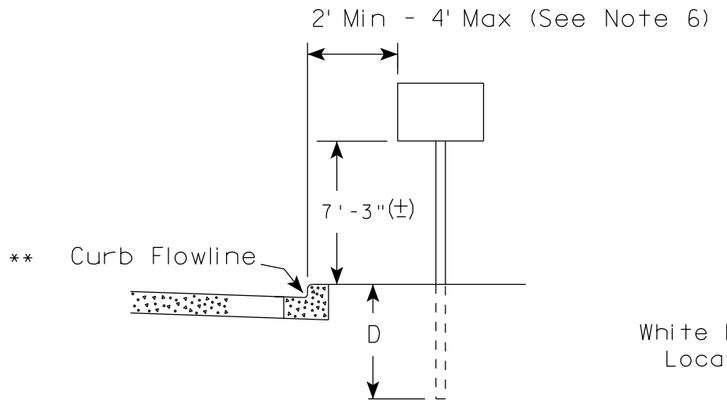
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

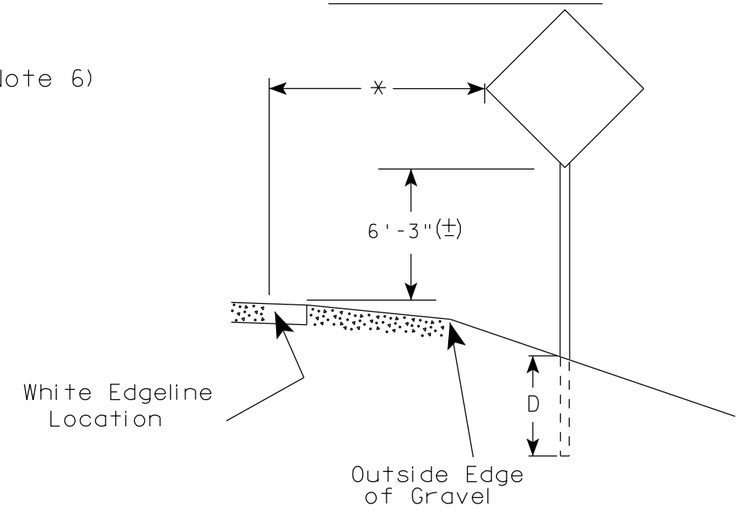
DATE 3/27/97 PLATE NO. A4-11.2

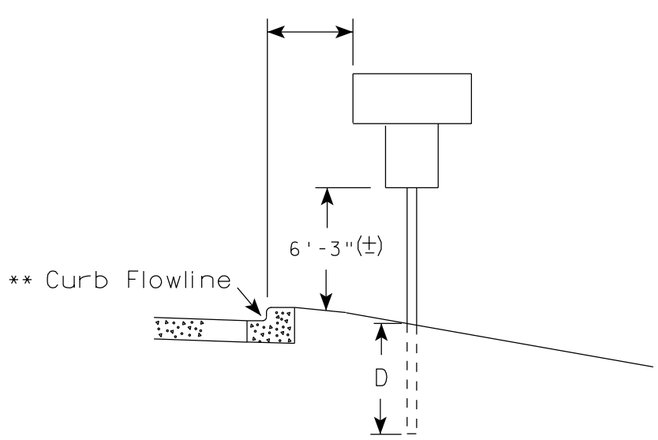
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 144	E

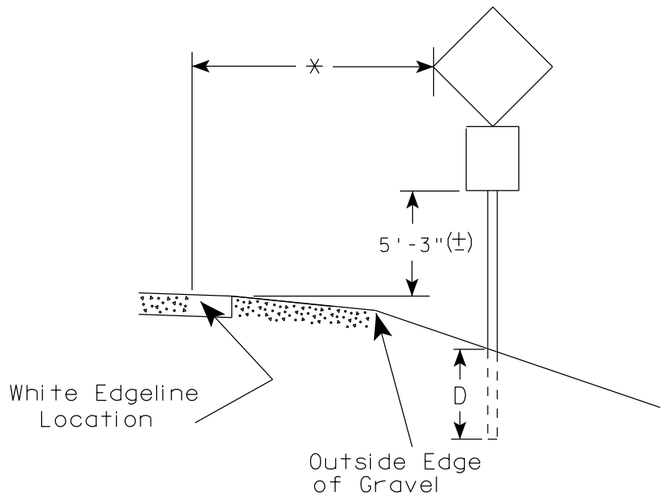
URBAN AREA



RURAL AREA (See Note 2)







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

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

GENERAL NOTES

1. Signs wider than 4 feet, 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 Rod Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (+).

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

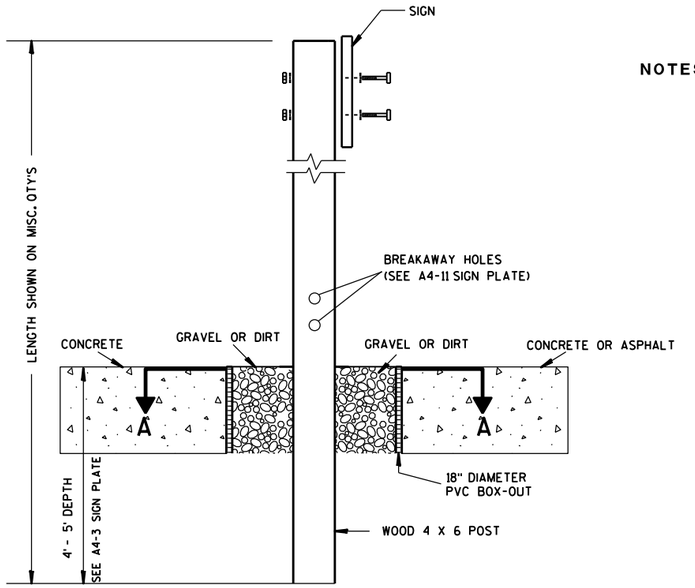
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

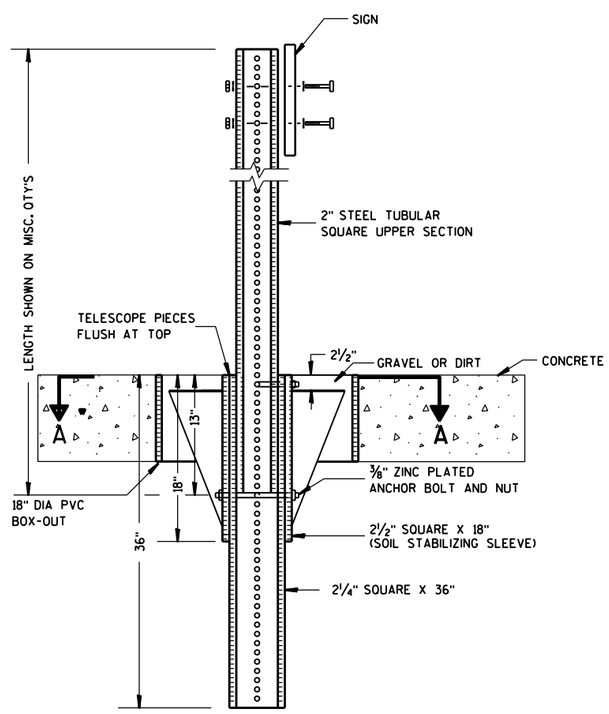
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ELEVATION VIEW

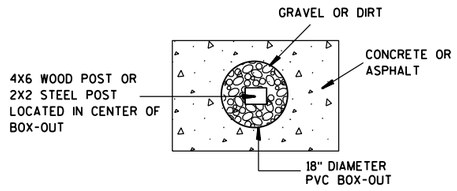
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

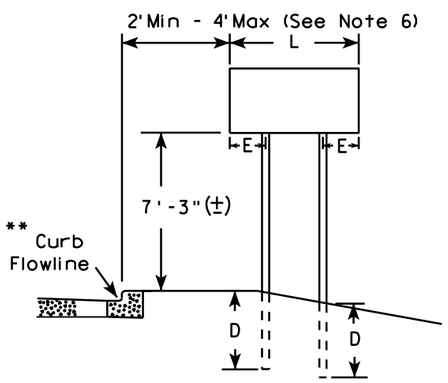
APPROVED Matthew R Rauch
for State Traffic Engineer

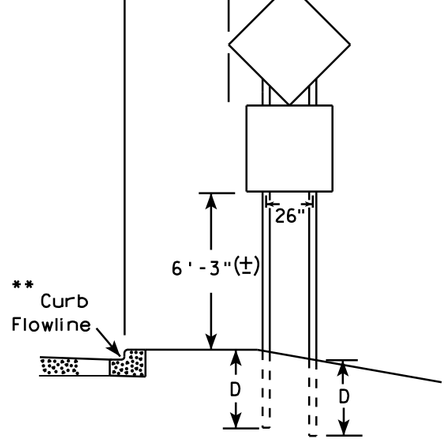
DATE 1/27/14 PLATE NO. A4-3B.1

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

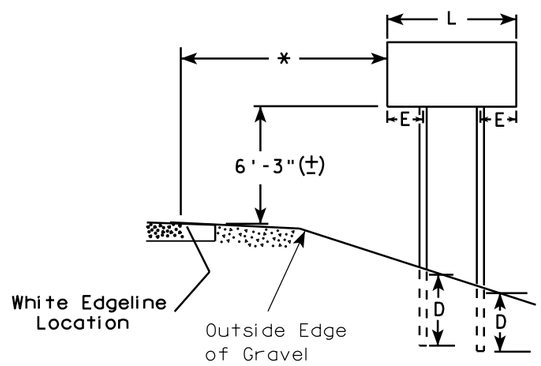
URBAN AREA

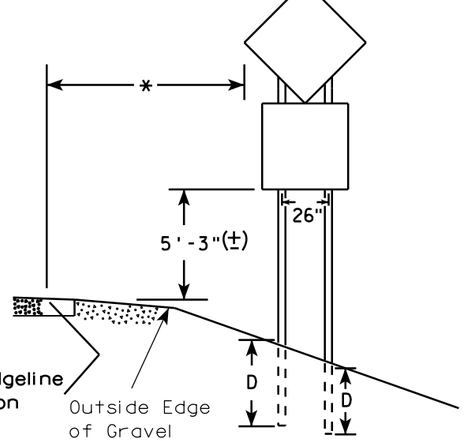




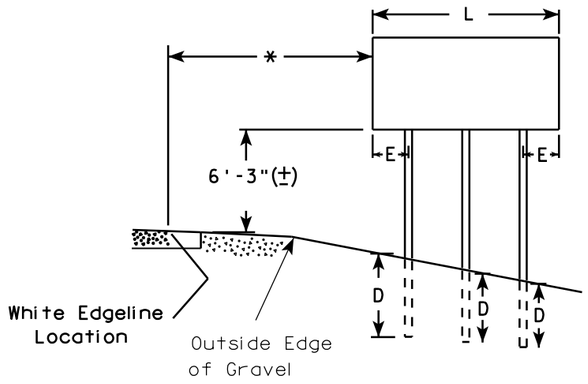
48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)





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 (A4-5) 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 stop signs (R1-1F) 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) & End of Road Markers (W5-56 & W5-56A) 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 or 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'

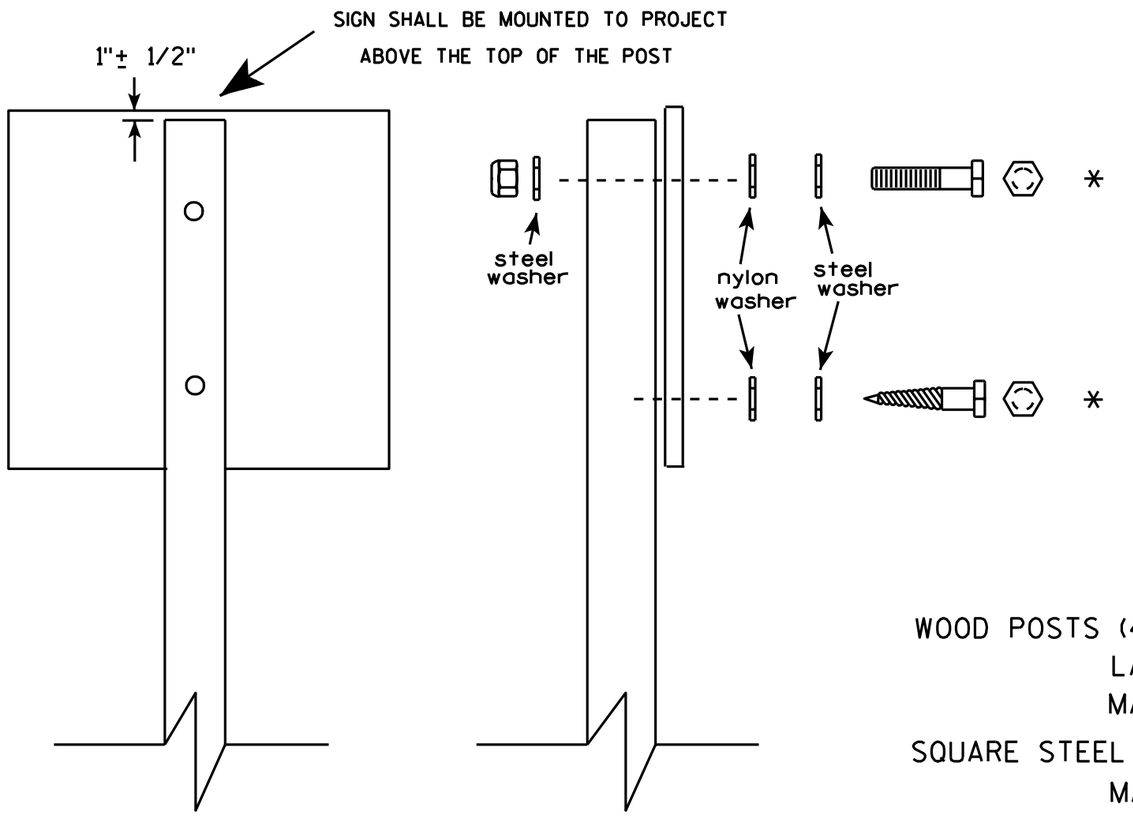
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/29/14 PLATE NO. A4-4 13

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



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

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

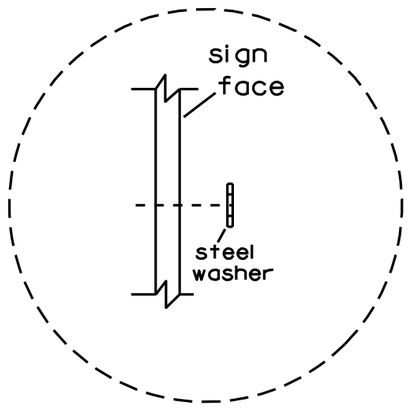
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

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

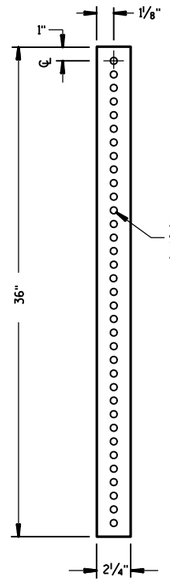
7

PROJECT NO:

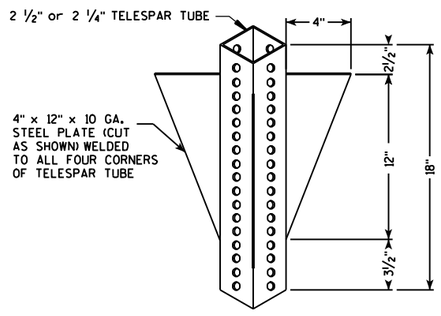
SHEET NO: 148 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

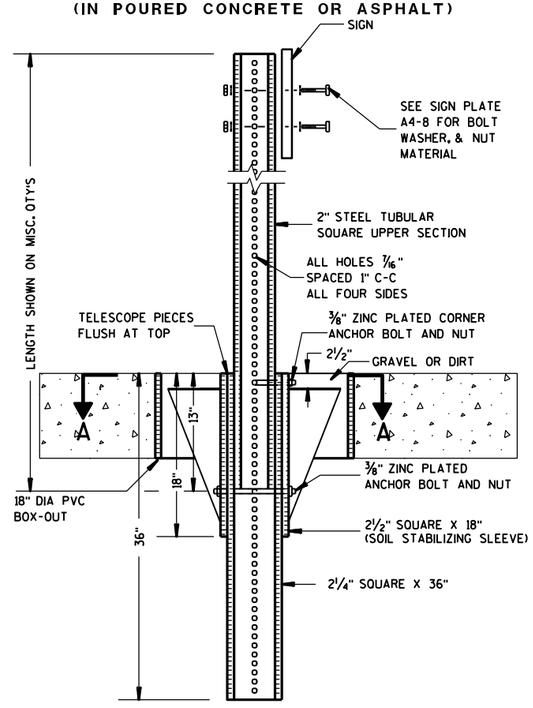
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



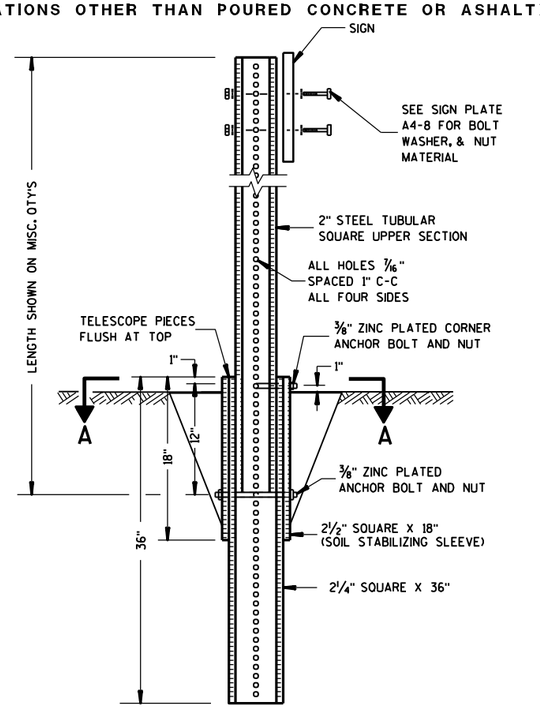
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

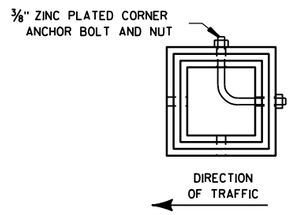


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





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

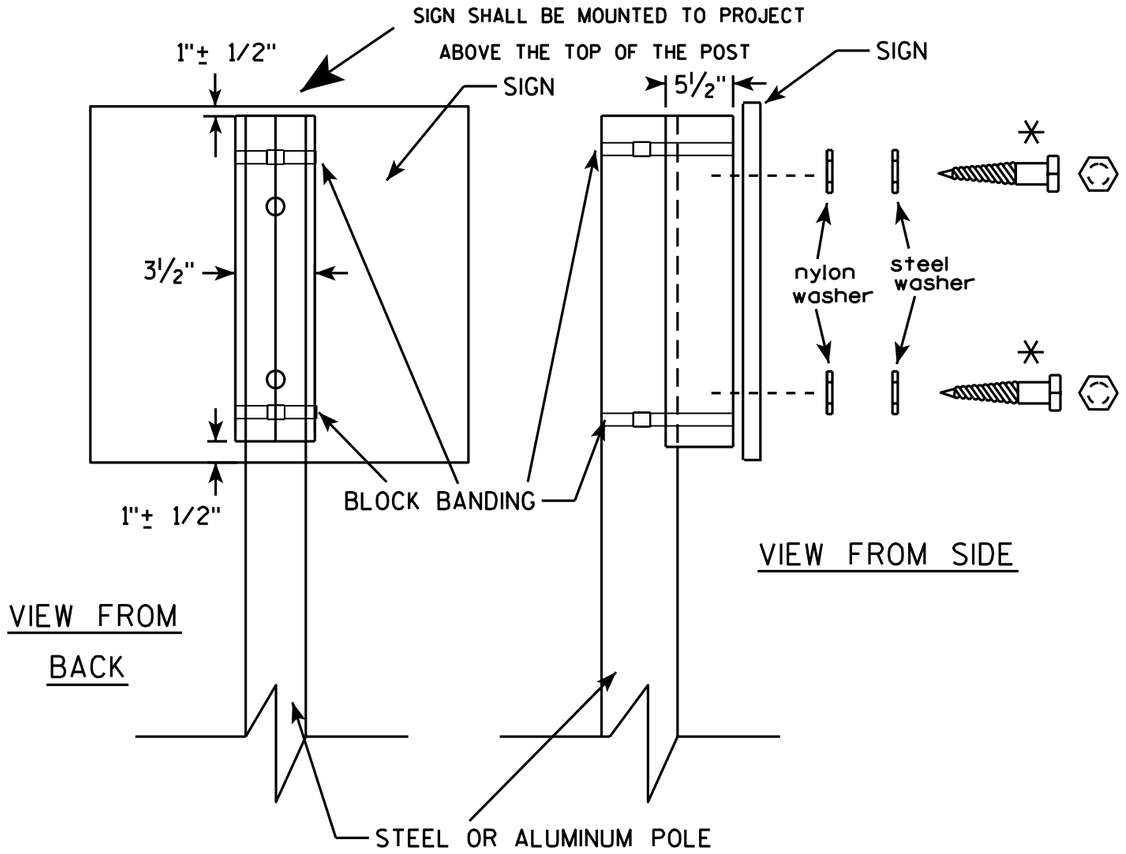
Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

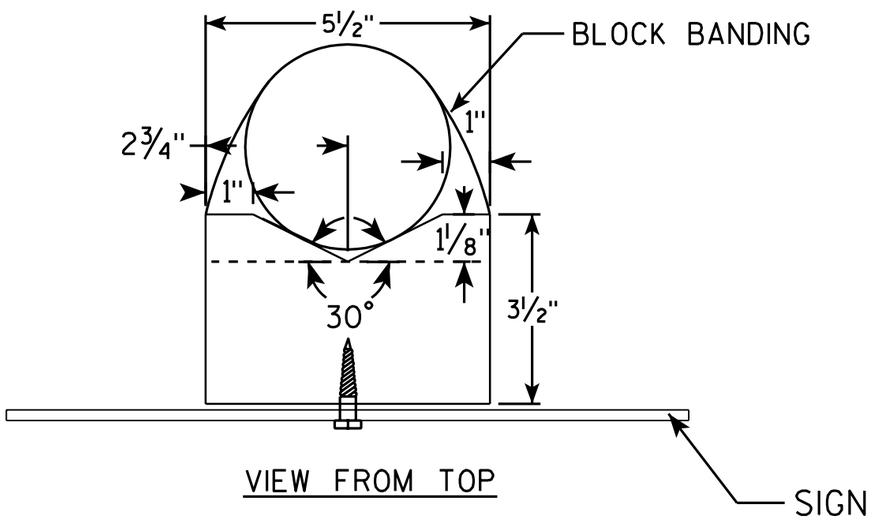
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 5/30/12 PLATE NO. A4-9.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 149	E





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
   b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
   c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:

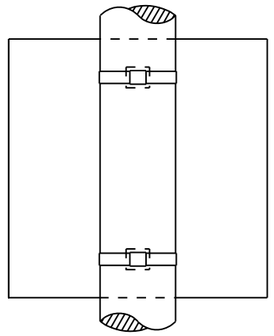
SHEET NO: 150 E

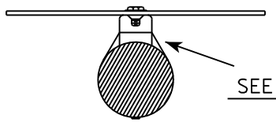
FILE NAME : C:\Users\Projects\tr_stdplate\A510.dgn PLOT DATE : 06-AUG-2007 13:37 PLOT BY : ditjph

WISDOT/CADDS SHEET 42

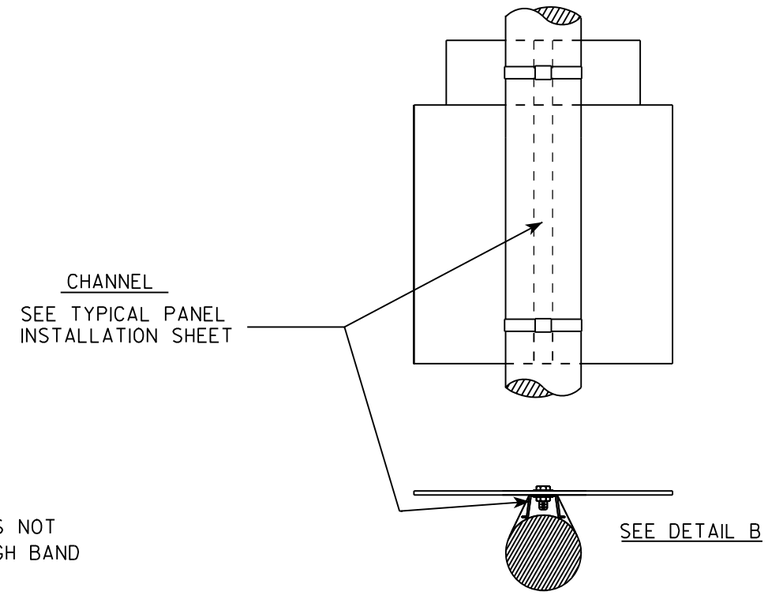
BANDING

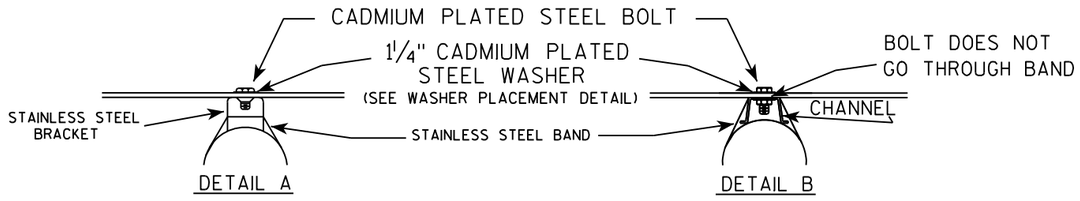
SINGLE SIGN



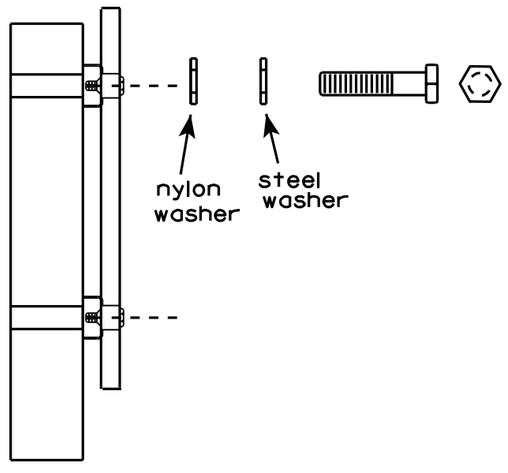


"J" ASSEMBLY





WASHER PLACEMENT



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

GENERAL NOTES

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

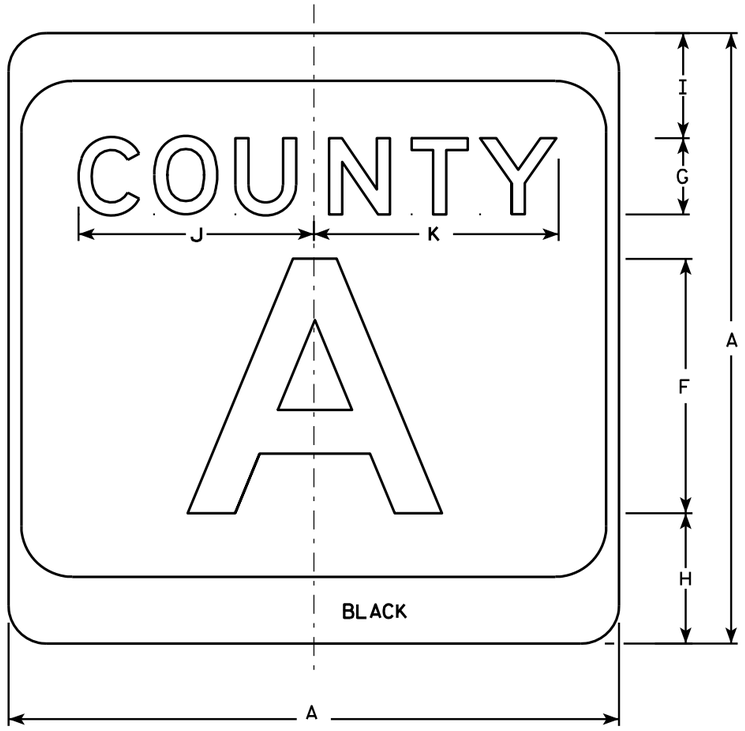
STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

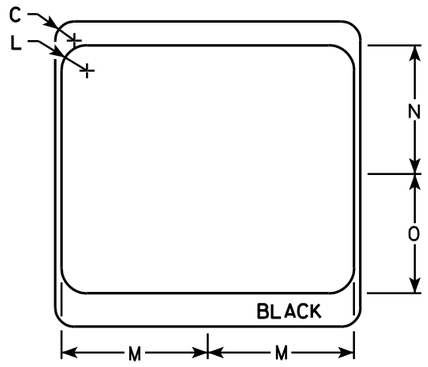
APPROVED Matthew R Rauch
for State Traffic Engineer

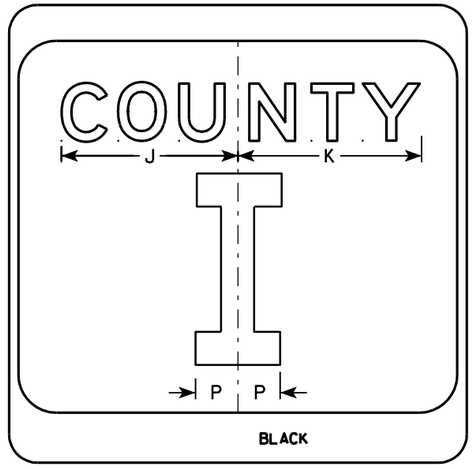
DATE 8/16/13 PLATE NO. A5-9.3

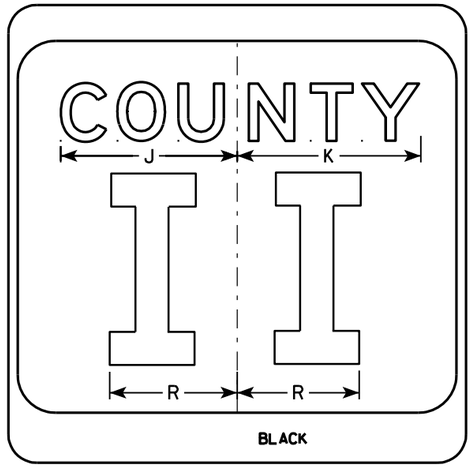
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 151	E



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   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. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or 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		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

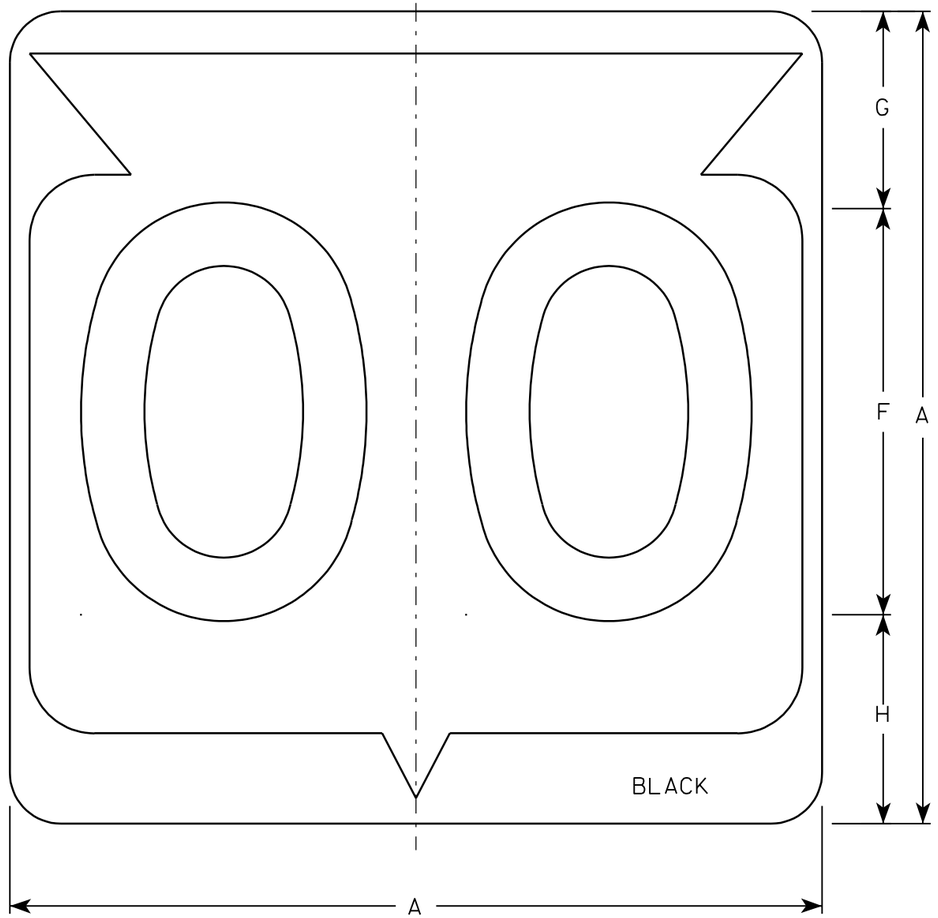
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

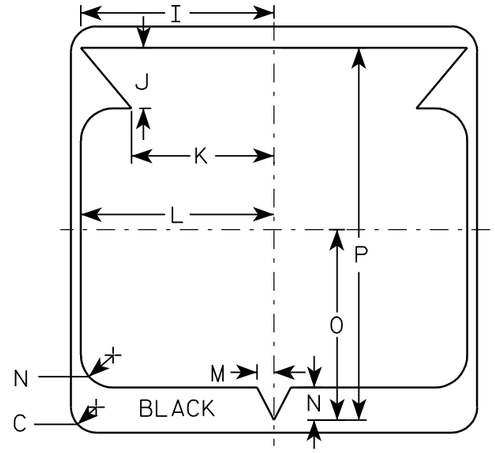
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 152 | E



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

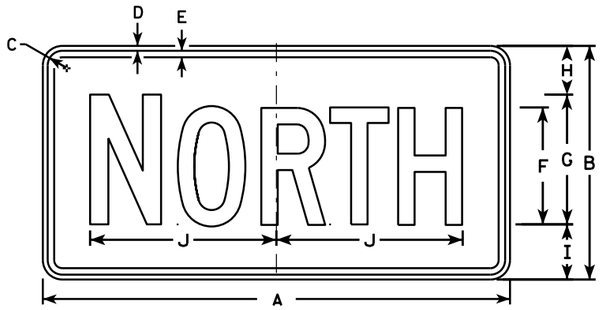
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

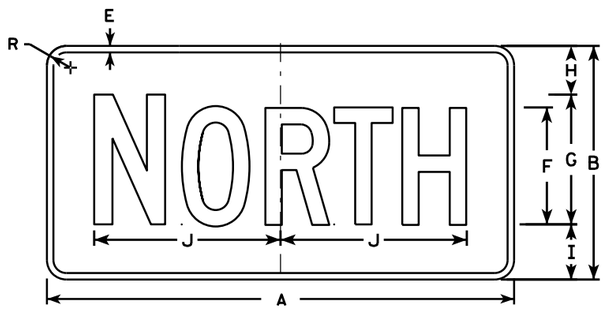
APPROVED Chester J Spang for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 153	E



M3-1
MK3-1
MM3-1
MN3-1



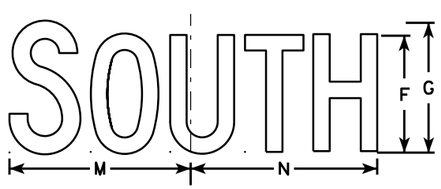
MB3-1



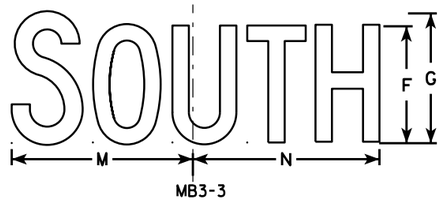
M3-2
MK3-2
MM3-2
MN3-2



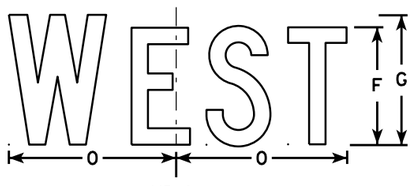
MB3-2



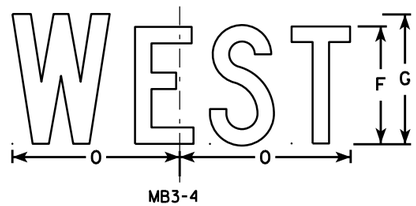
M3-3
MK3-3
MM3-3
MN3-3



MB3-3



M3-4
MK3-4
MM3-4
MN3-4



MB3-4

NOTES

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

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

STANDARD SIGNS
M3-1 thur M3-4
SERIES

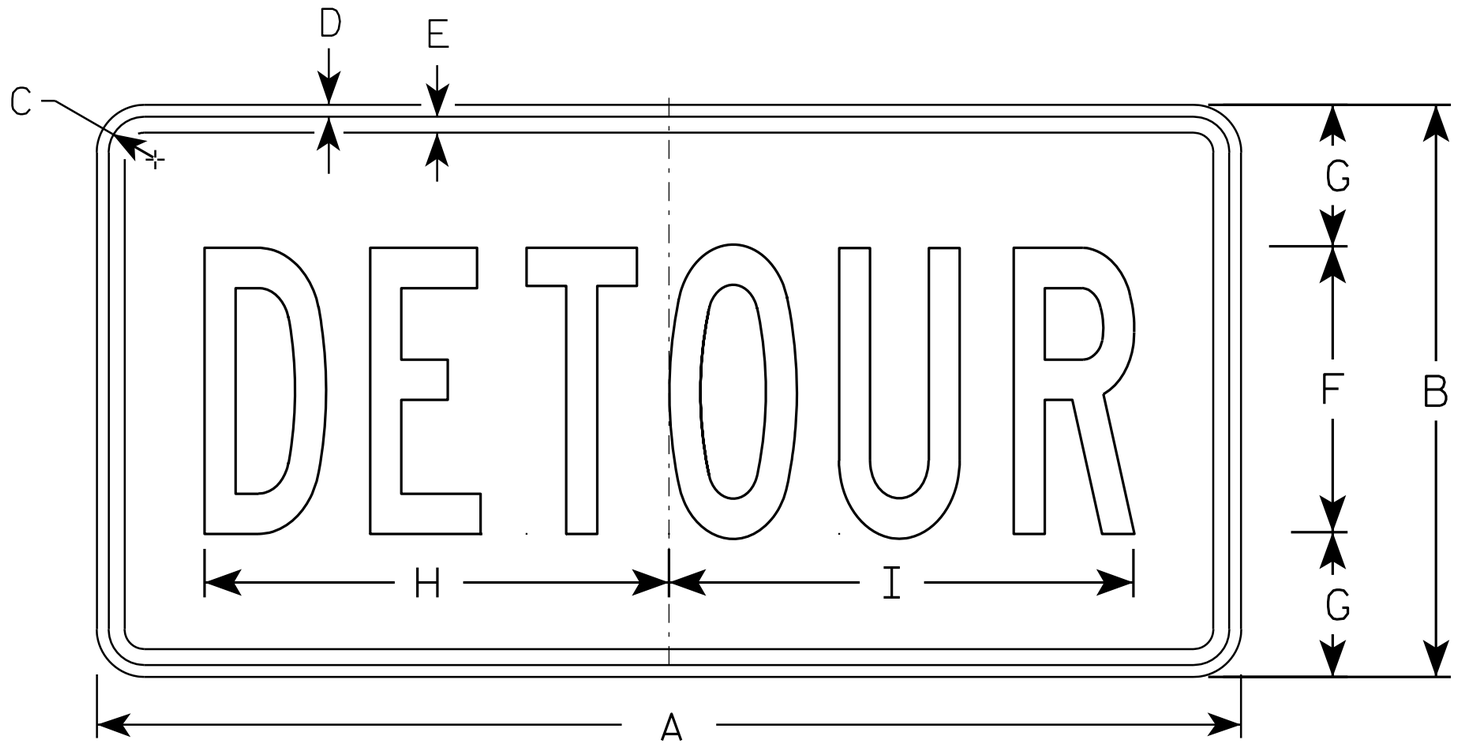
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 6/30/14 PLATE NO M3-1.13

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

7



M4-8

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 - 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.

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	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

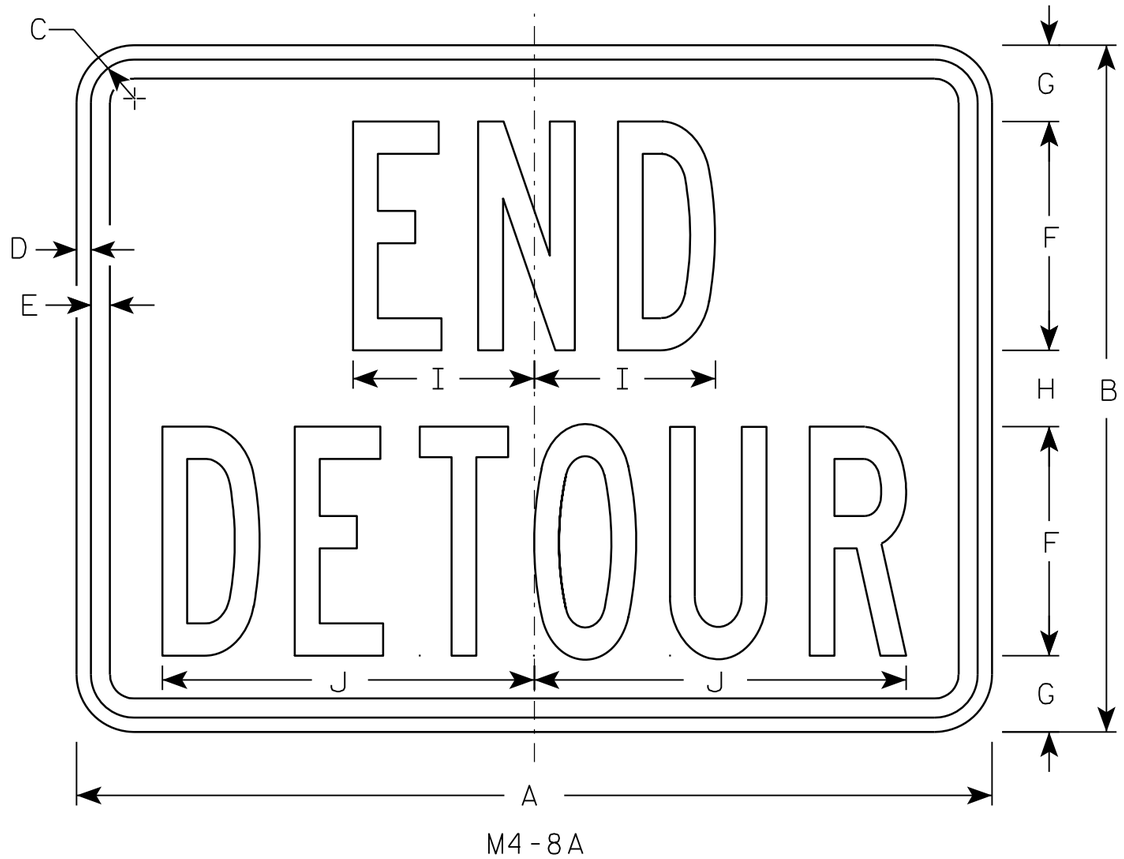
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 155	E



M4-8A

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 - 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.

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	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

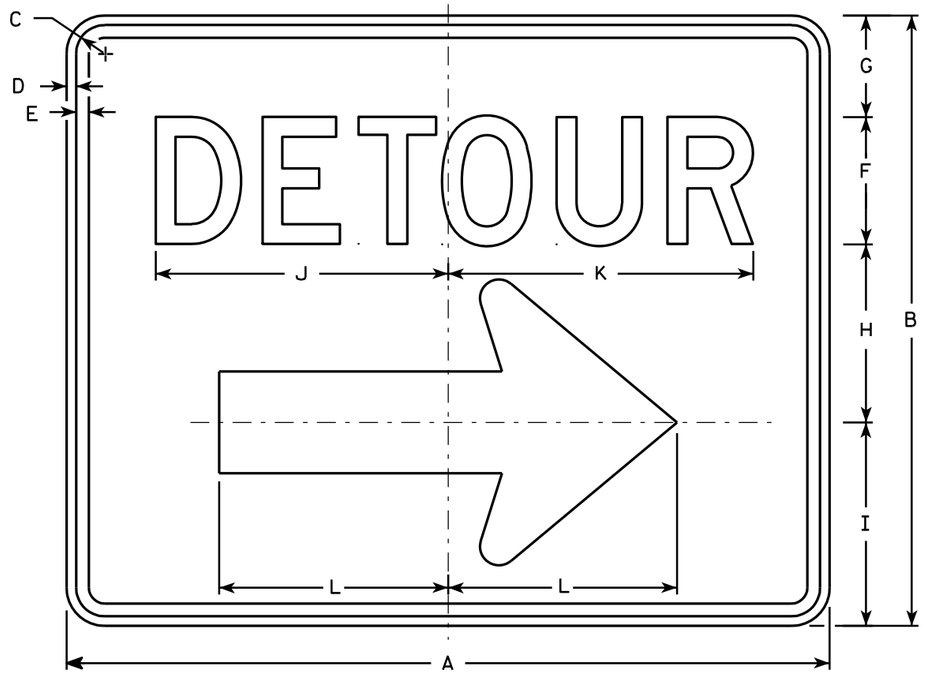
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

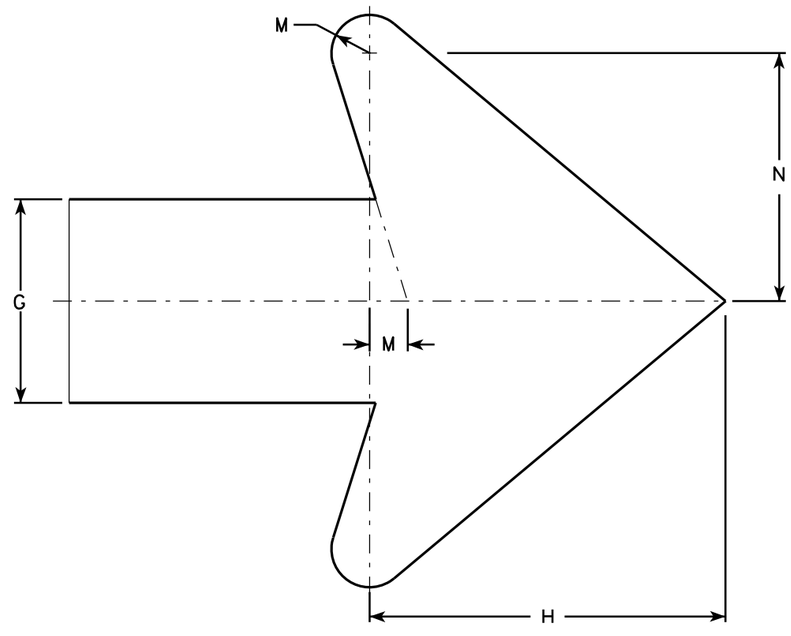
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 156	E



M4-9R

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. M4-9L is the same as M4-9R 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	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
3	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
4	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0
5	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0

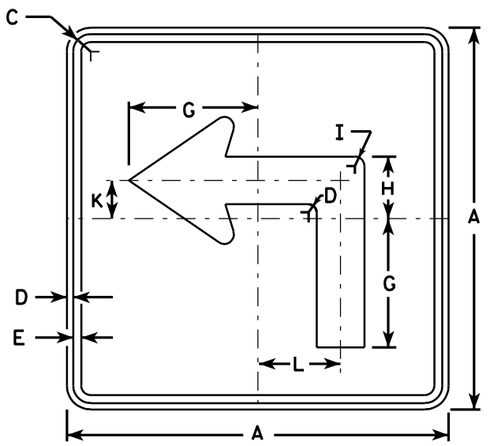
STANDARD SIGN
M4-9 R & L

WISCONSIN DEPT OF TRANSPORTATION

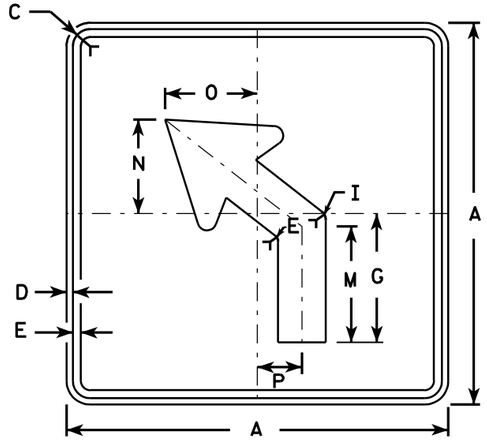
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-9R.4

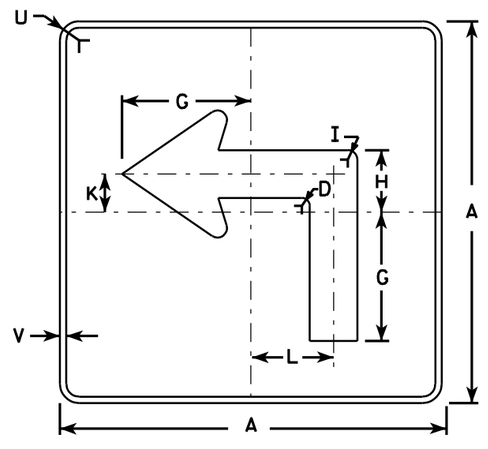
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 157	E



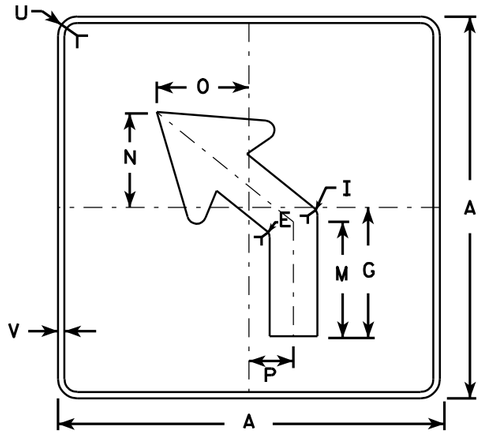
M5-1L
MK5-1L
MM5-1L
MO5-1L
MP5-1L
MR5-1L



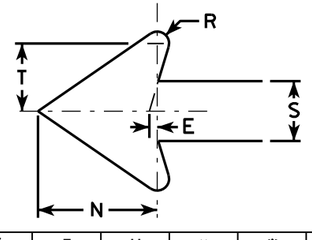
M5-2L
MK5-2L
MM5-2L
MO5-2L
MP5-2L
MR5-2L



MB5-1L
MG5-1L
MN5-1L



MB5-2L
MG5-2L
MN5-2L



NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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. M5-1 and M5-2 Background - White - Type H Reflective
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White - Type H Reflective
   MG5-1 and MG5-2 Background - Green
   Message - White - Type H Reflective
   MK5-1 and MK5-2 Background - Green
   Message - White Type H Reflective
   MM5-1 and MM5-2 Background - White - Type H Reflective
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White - Type H Reflective
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow - Type H Reflective
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts 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	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

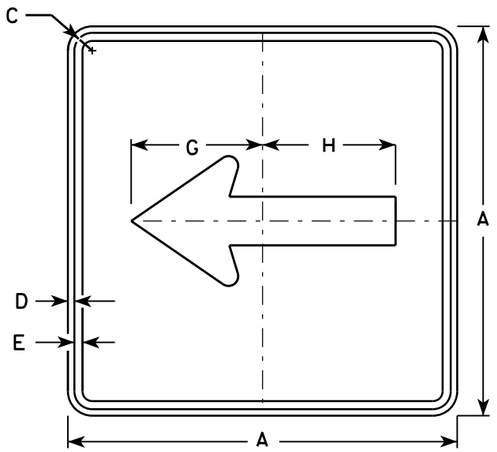
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/29/13 PLATE NO. M5-1.12

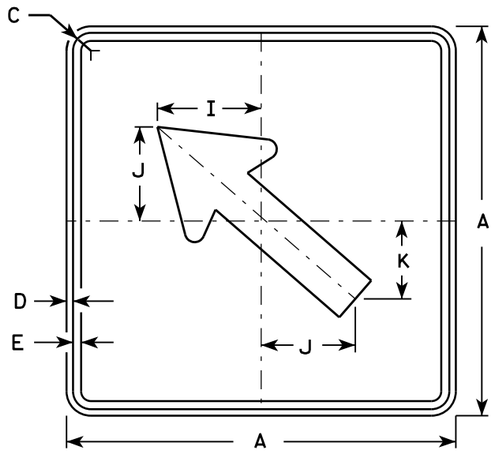
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 158	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 29-JUL-2013 13:34 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.908552:1.000000

WISDOT/CADDS SHEET 42



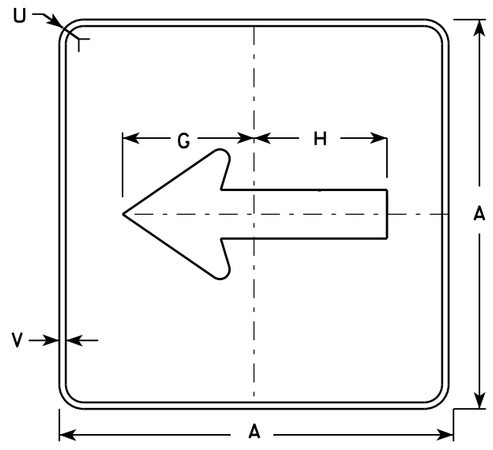
M6-1
MK6-1
MM6-1
MN6-1
MO6-1
MP6-1
MR6-1



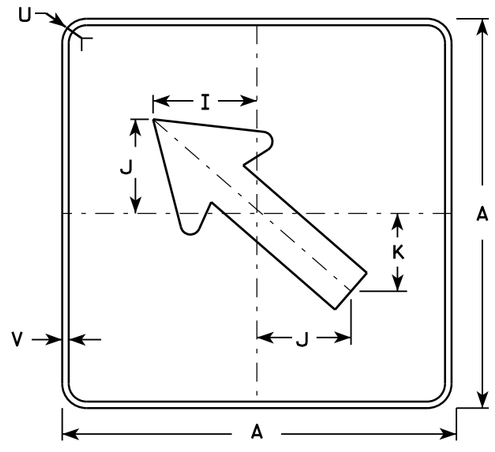
M6-2
MK6-2
MM6-2
MN6-2
MO6-2
MP6-2
MR6-2

NOTES

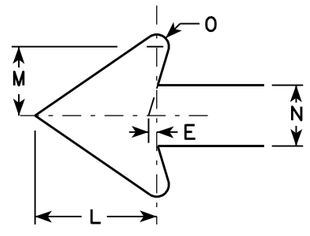
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MG6-1 and MG6-2 Background - Green
   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



MB6-2



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

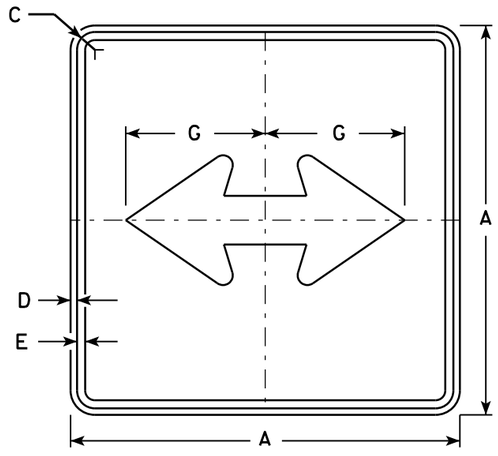
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

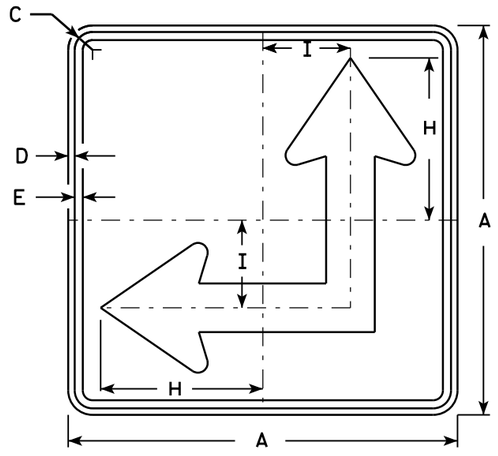
DATE 7/03/14 PLATE M6-1.14

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

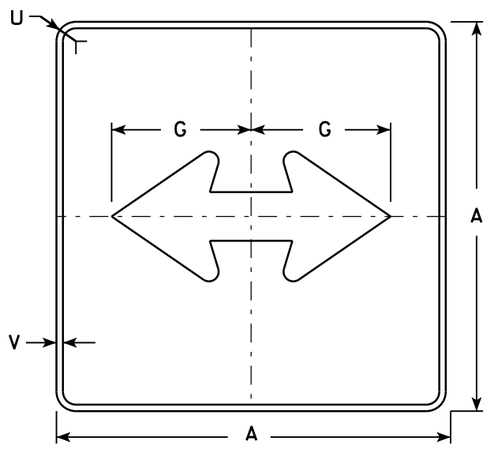
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 03-JUL-2014 14:28 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 11.675051:1.000000
WISDOT/CADDS SHEET 42



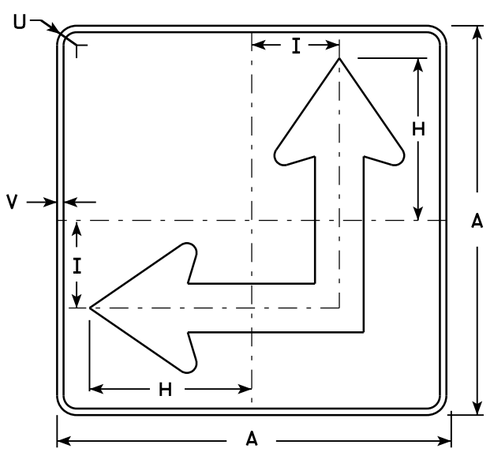
M6-4
MK6-4
MM6-4
MN6-4
MO6-4
MP6-4
MR6-4



M6-6
MK6-6
MM6-6
MN6-6
MO6-6
MP6-6
MR6-6



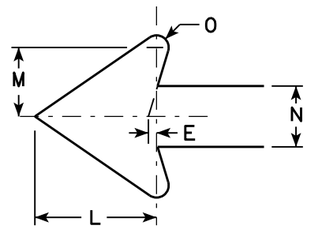
MB6-4



MB6-6

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

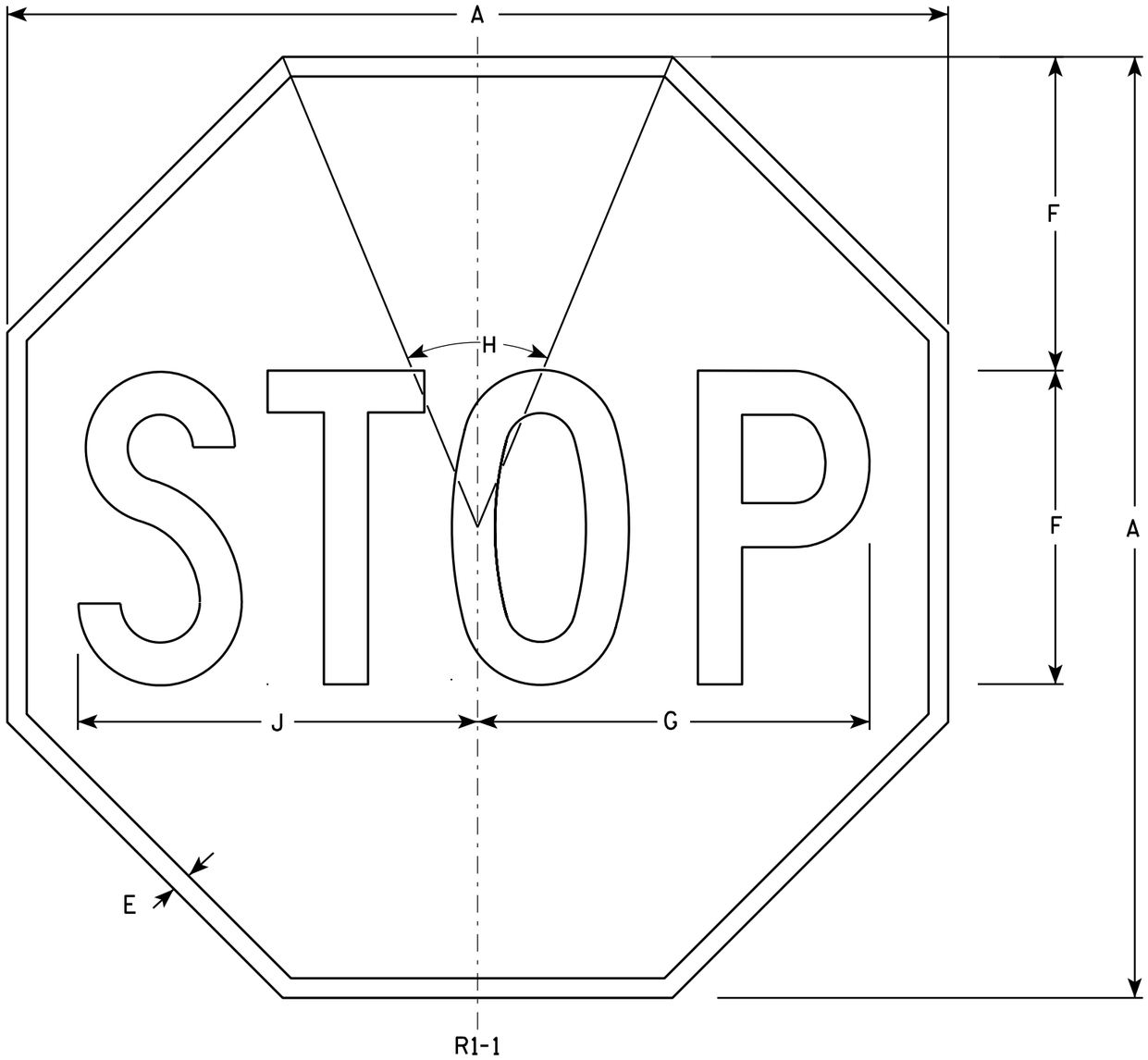
STANDARD SIGN M6-4 & M6-6 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 7/03/14 PLATE 160 M6-4.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



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 - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24				3/8	8	10	45°		10 1/4																	3.31
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

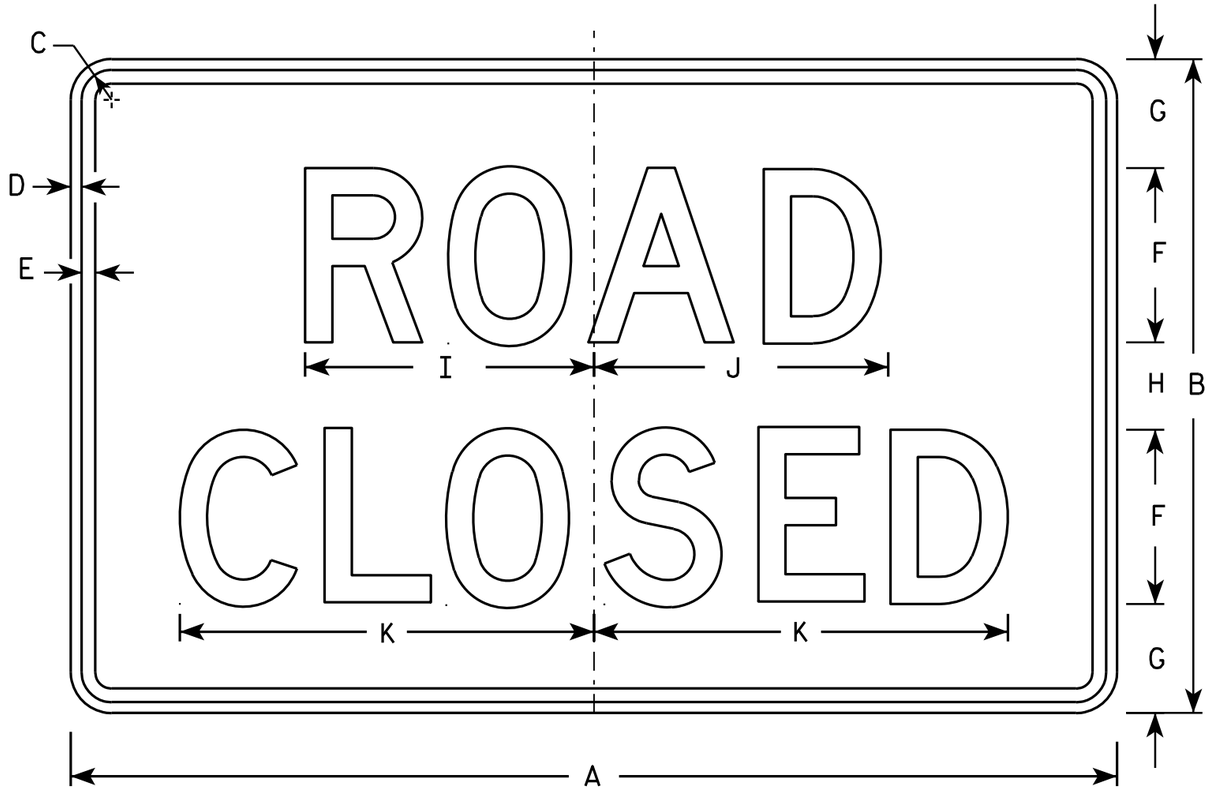
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1.12

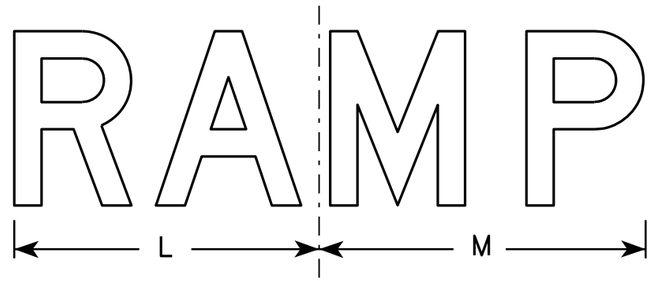
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 161	E



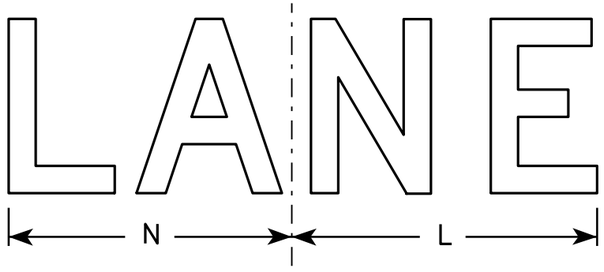
R11-2

NOTES

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



R11-2R



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0

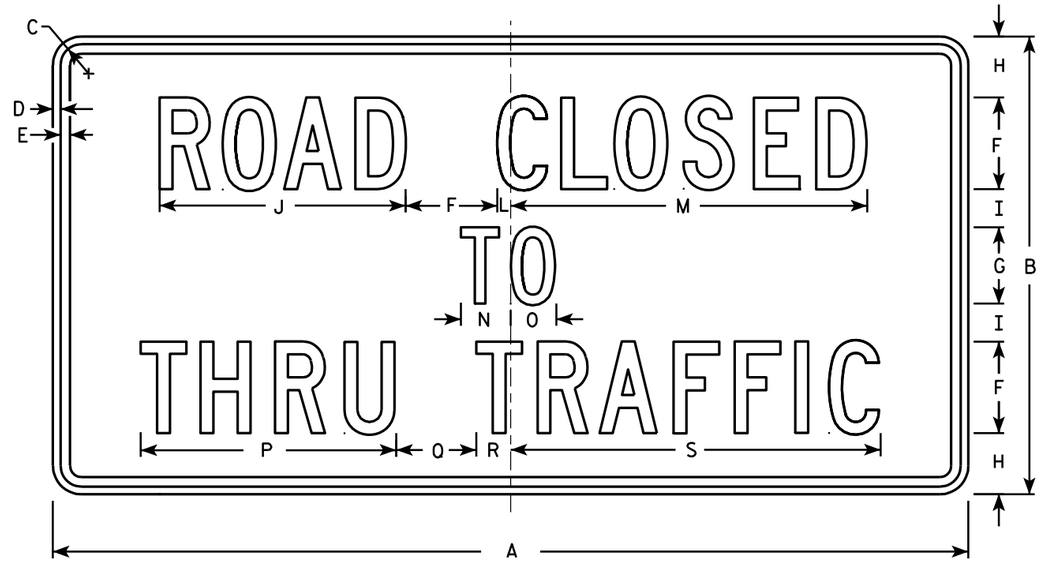
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 162	E



R11-4

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	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

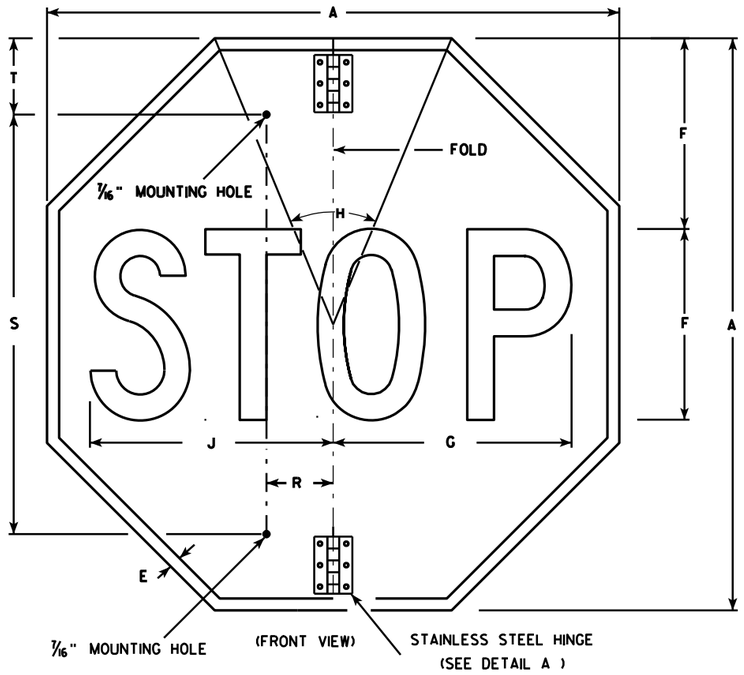
STANDARD SIGN
R11 - 4

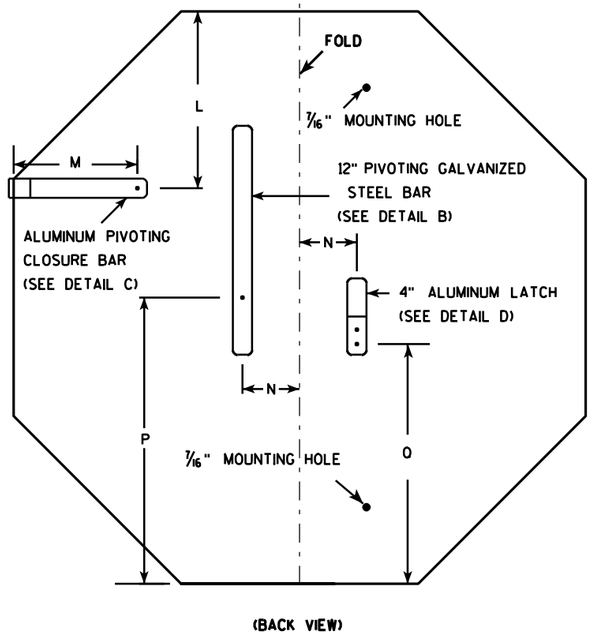
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

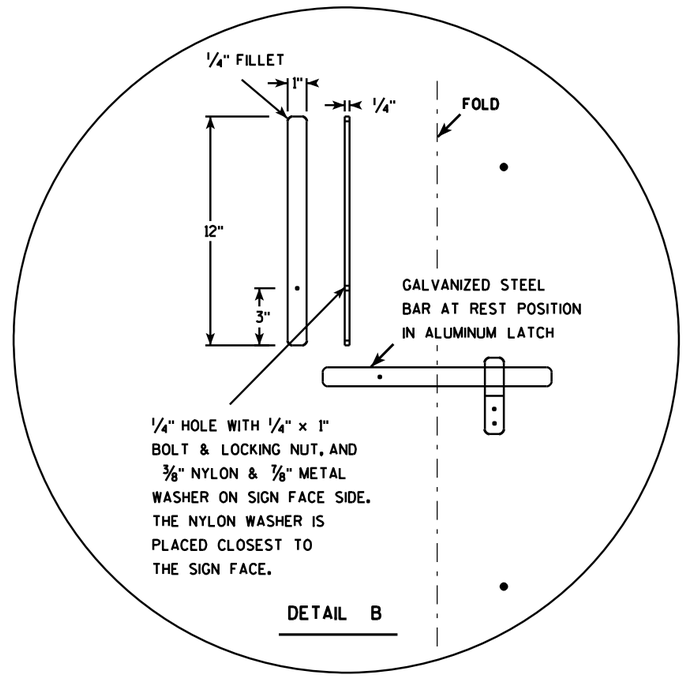
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 163 | E



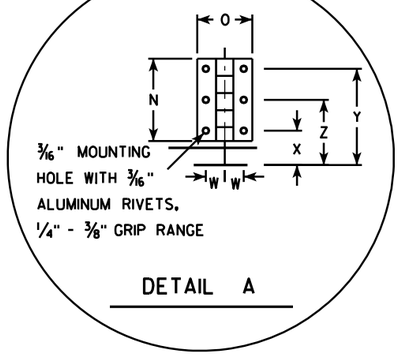


NOTES

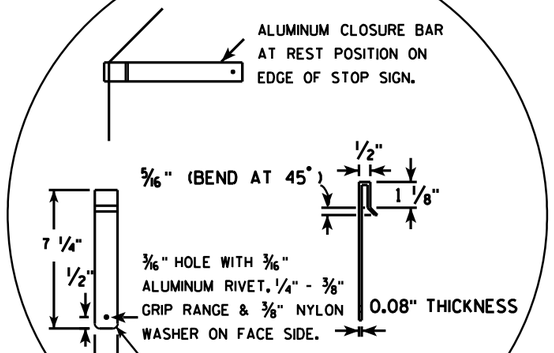
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.



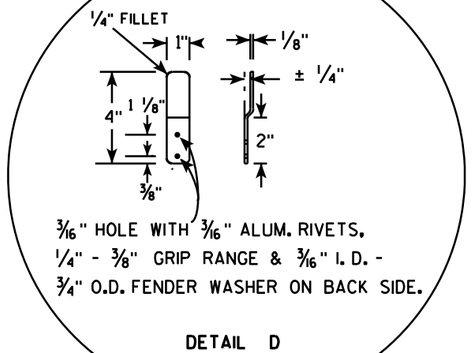
DETAIL B



DETAIL A



DETAIL C



DETAIL D

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																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

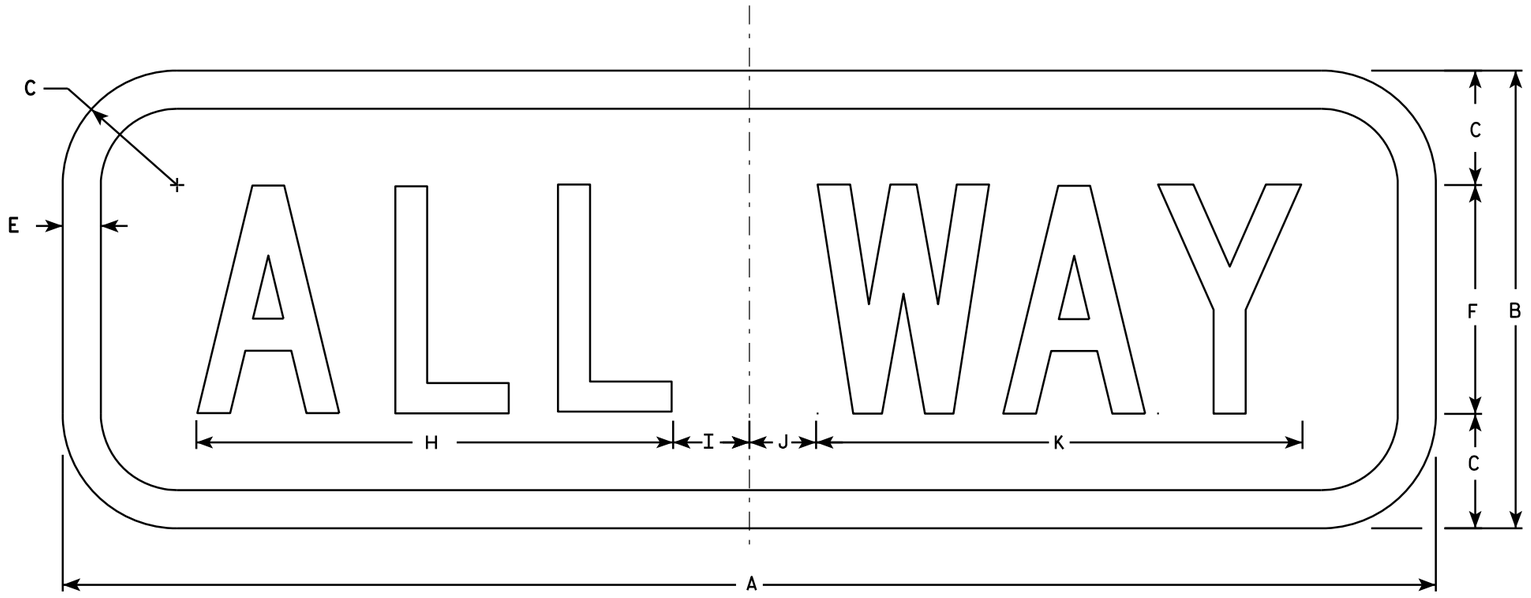
STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 164 | E



R1-3P

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 - 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	18	6	1 1/2		1/2	3		6 1/4	1 1/4	7/8	6 3/8																0.75
2S	18	6	1 1/2		1/2	3		6 1/4	1 1/4	7/8	6 3/8																1.5
2M	24	9	1 1/2		1/2	5		9 1/4	1 1/4	3/4	9 3/4																1.5
3	30	12	2 1/4		5/8	6		11	2 1/4	1 1/2	11 3/4																2.5
4																											
5																											

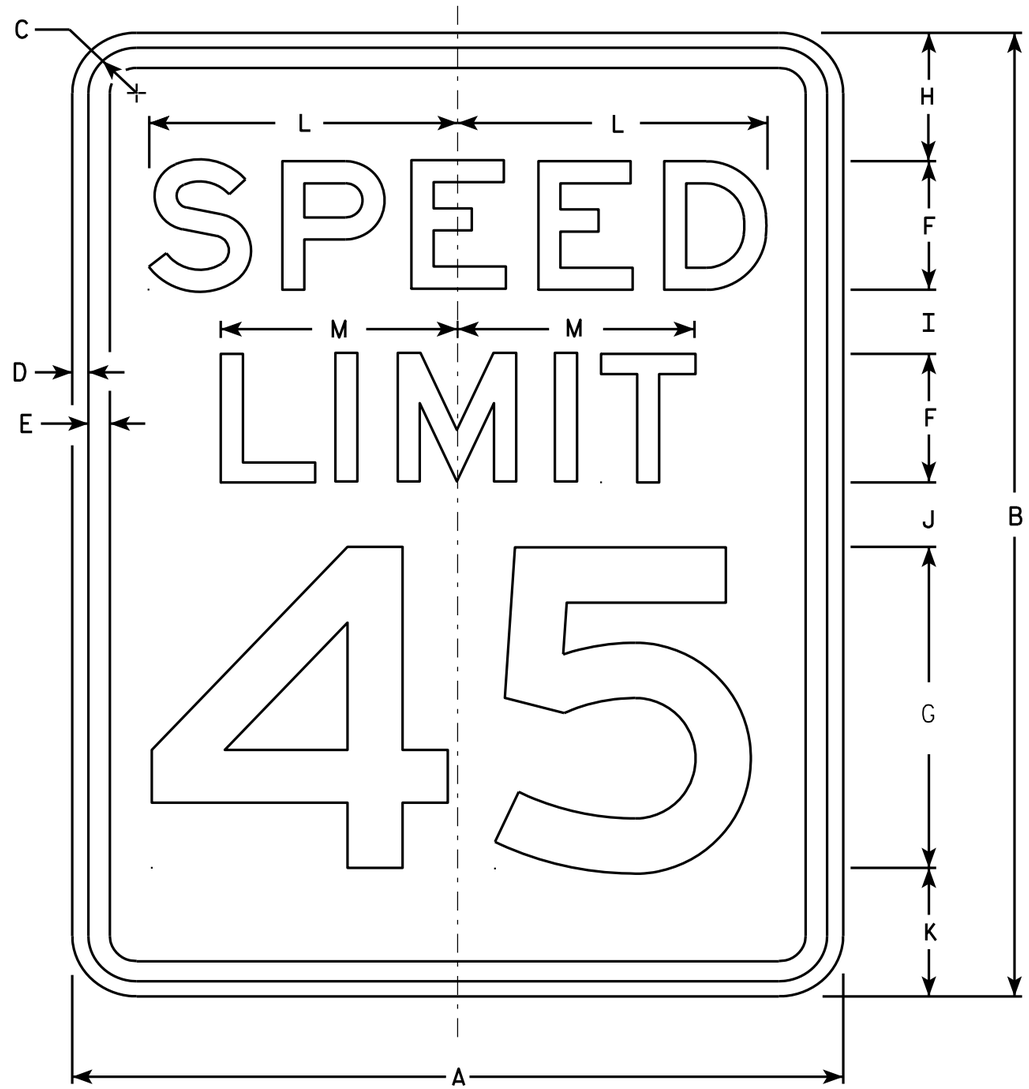
STANDARD SIGN
R1-3P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/02/10 PLATE NO. R1-3P.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 165 | 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

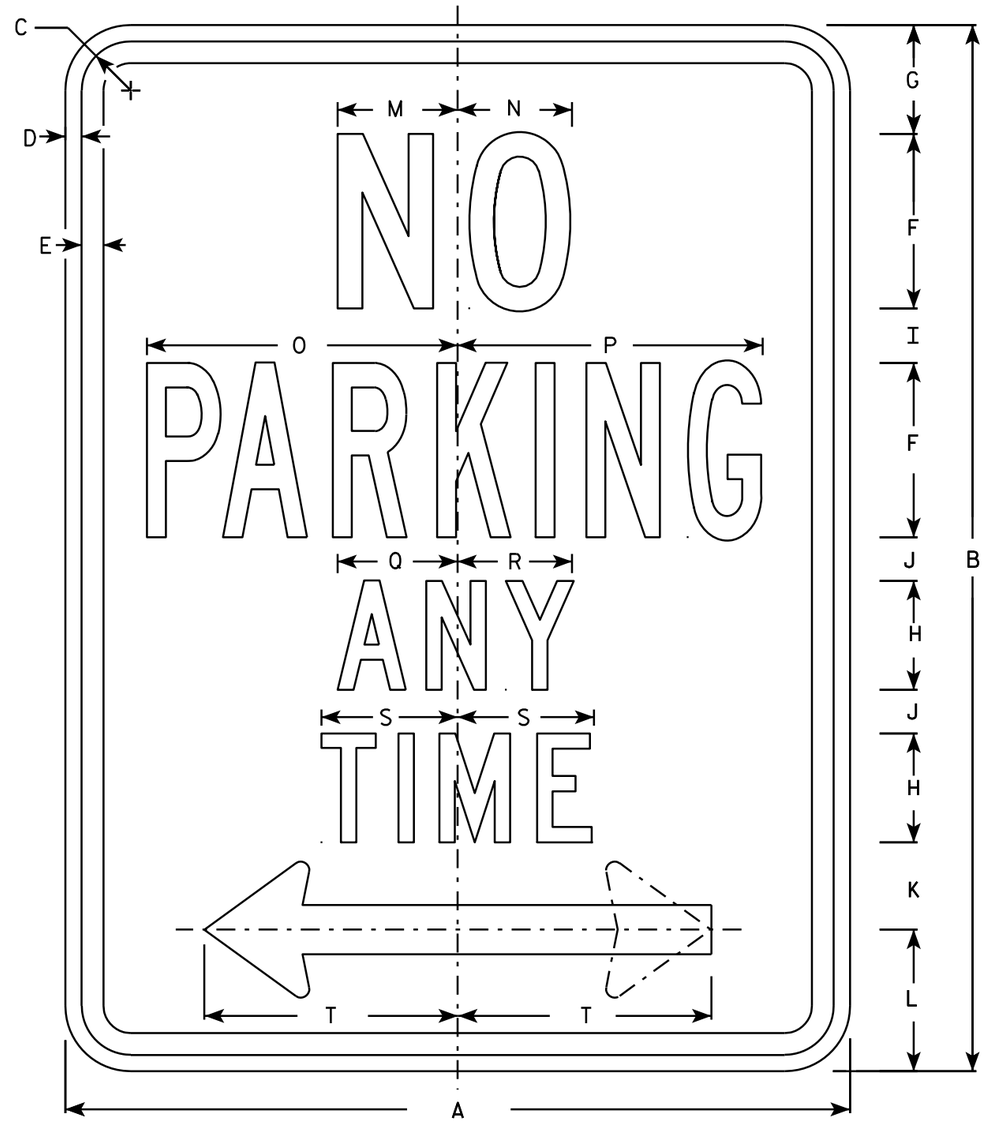
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

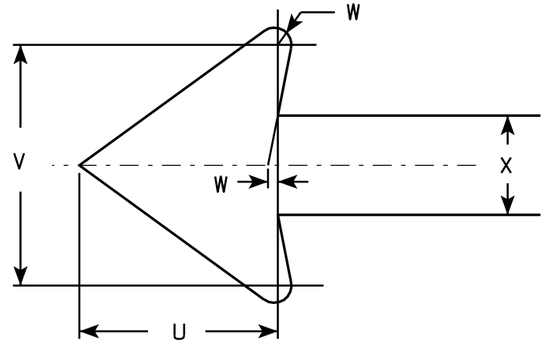
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 166	E



R7-1

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 - Red
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. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)



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	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

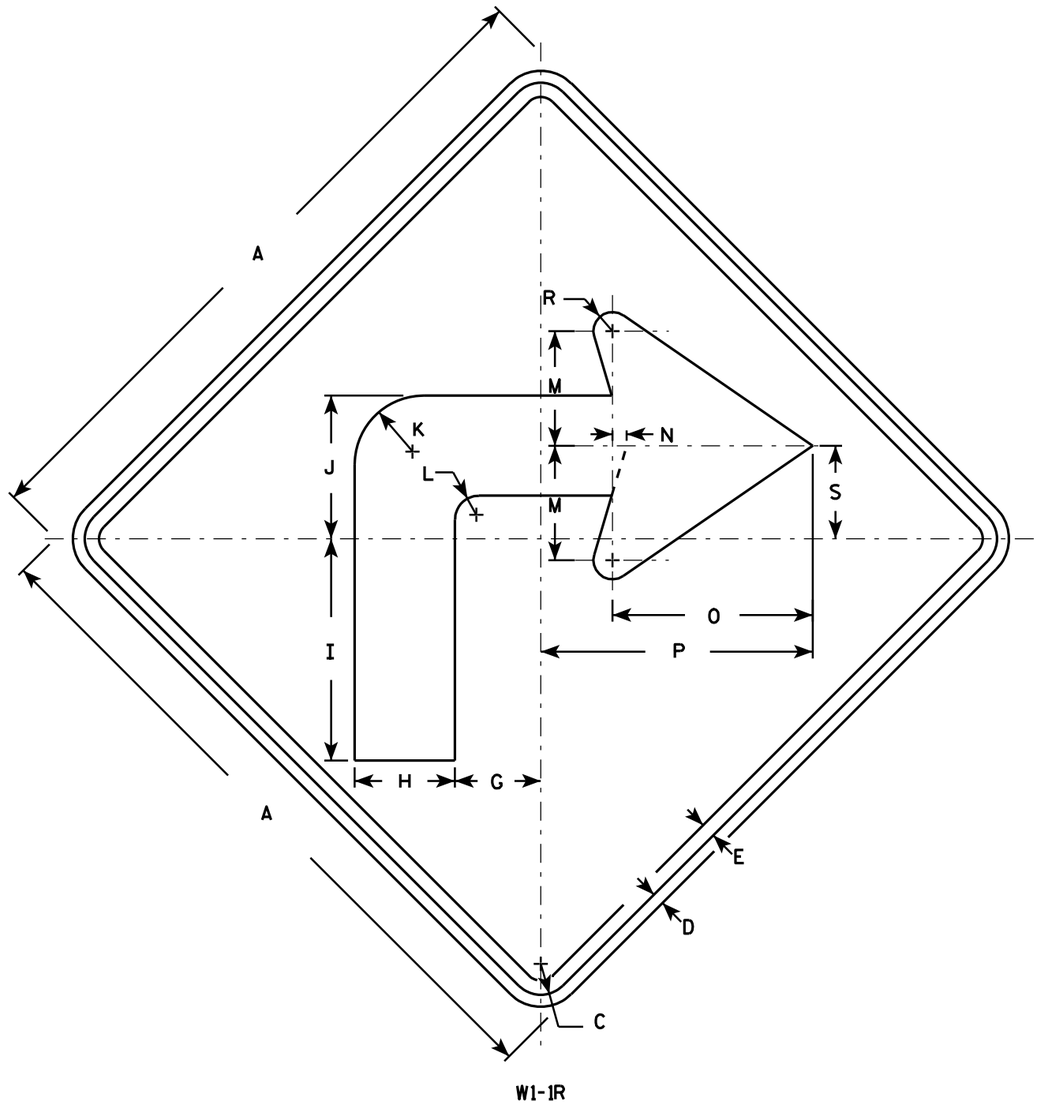
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-1.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 167	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R71.DGN PLOT DATE : 31-MAR-2011 09:20 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 3.476110:1.000000

WISDOT/CADDS SHEET 42



W1-1R

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. W1-1L is the same as W1-1R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		3	3 1/2	7 3/4	5	2 1/2	7/8	4	1/2	7	9 1/2		5/8	3 1/4								4.0
2S	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
2M	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
3	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
4	48		2 1/4	3/4	1		6	7	15 1/2	10	4 7/8	1 5/8	8	1	14	19		1 1/4	6 1/2								16.0
5	48		2 1/4	3/4	1		6	7	15 1/2	10	4 7/8	1 5/8	8	1	14	19		1 1/4	6 1/2								16.0

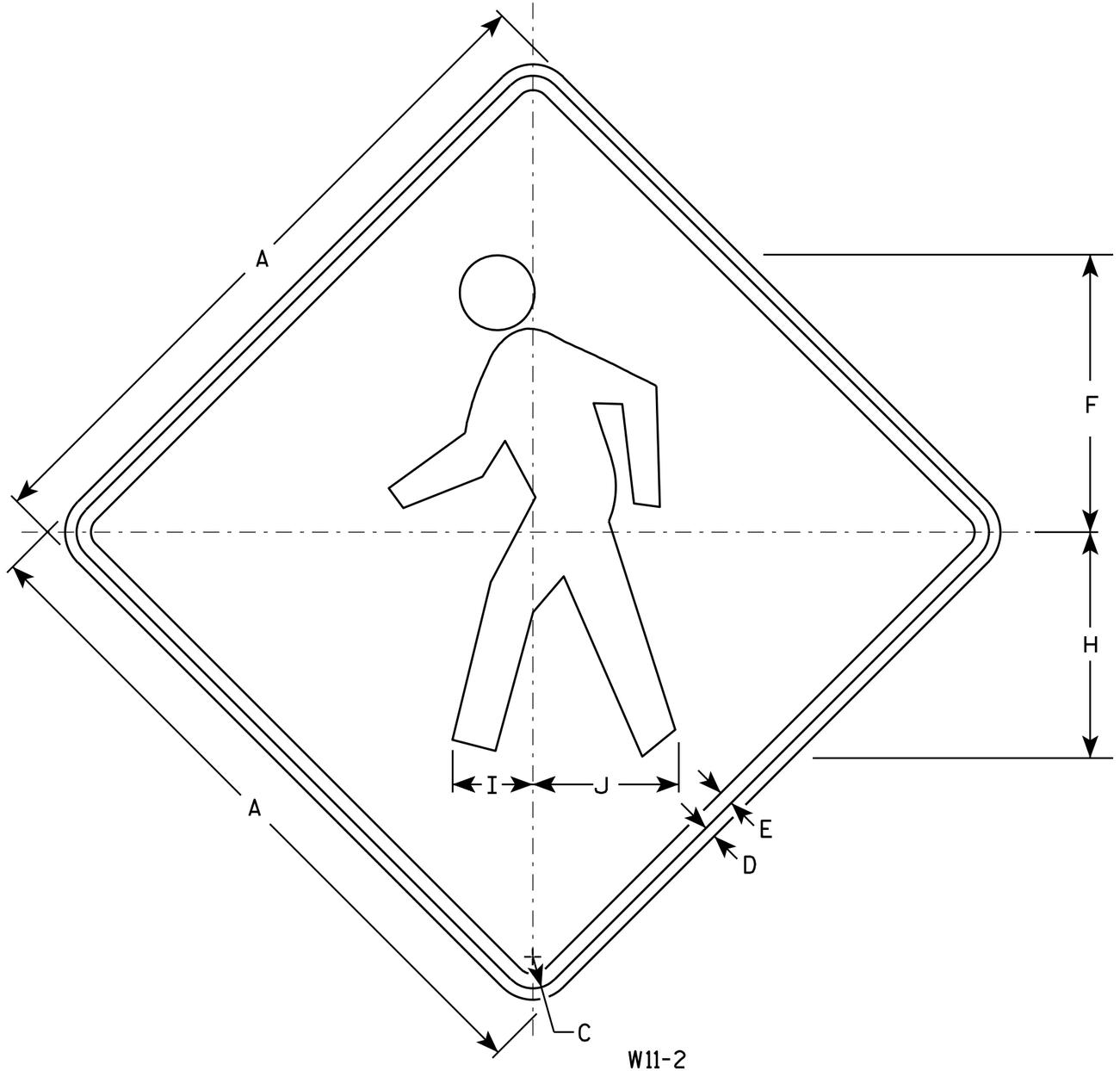
STANDARD SIGN
W1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-1.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 168 | E



W11-2

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.

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	9 3/4		7 7/8	2 7/8	5 1/8																	4.0
2S	30		1 3/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25
2M	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
3	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
4	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

STANDARD SIGN
W11-2

WISCONSIN DEPT OF TRANSPORTATION

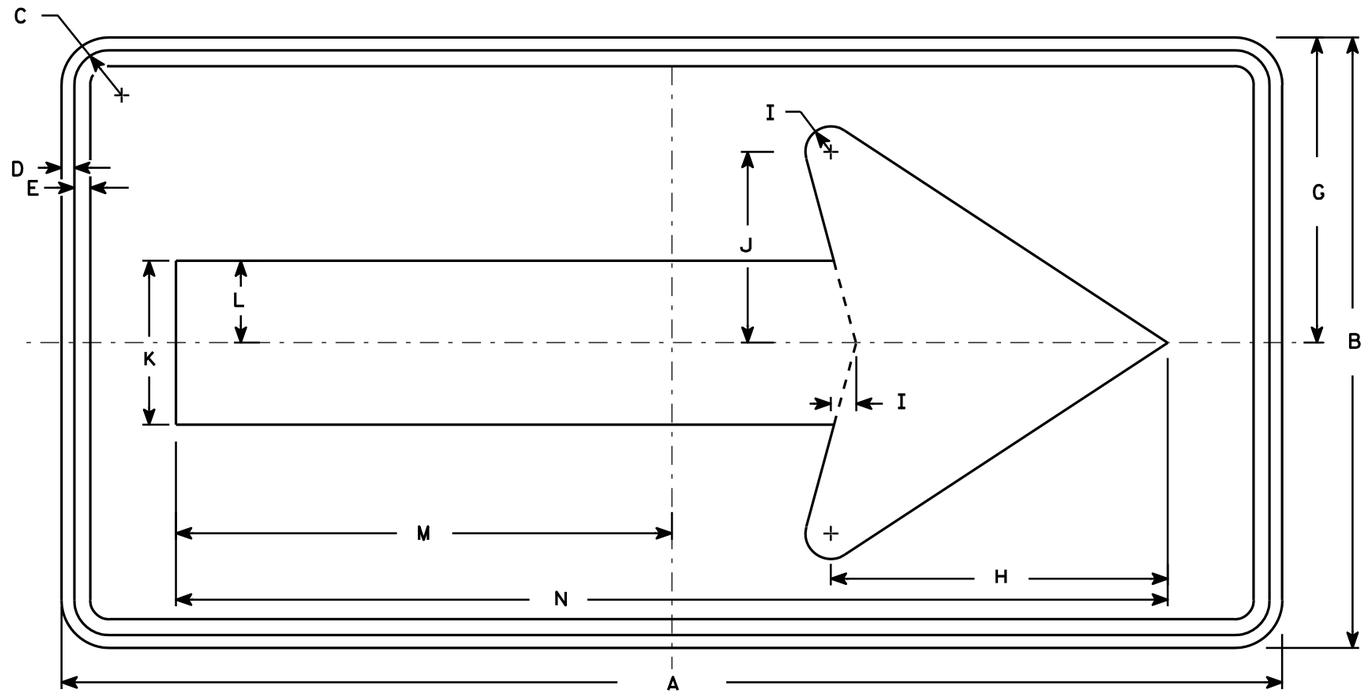
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W11-2.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 169	E

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.



W1-6

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	3/8		9	10	3/4	5 5/8	4 3/4	2 3/8	14 5/8	29 1/4													4.5
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	96	48	2 1/4	3/4	1		24	26 1/2	2	15	13	6 1/2	39	78													32.0

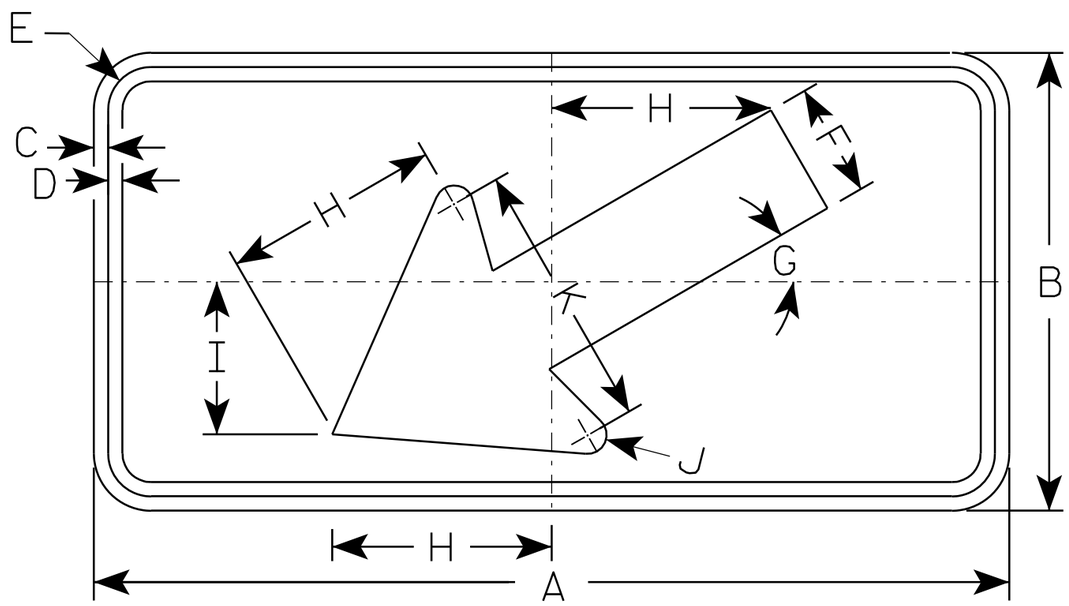
STANDARD SIGN
W1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-6.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 170



W16-7L

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. W16-7R is the same as W16-L except the arrow is reversed along the vertical centerline.

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

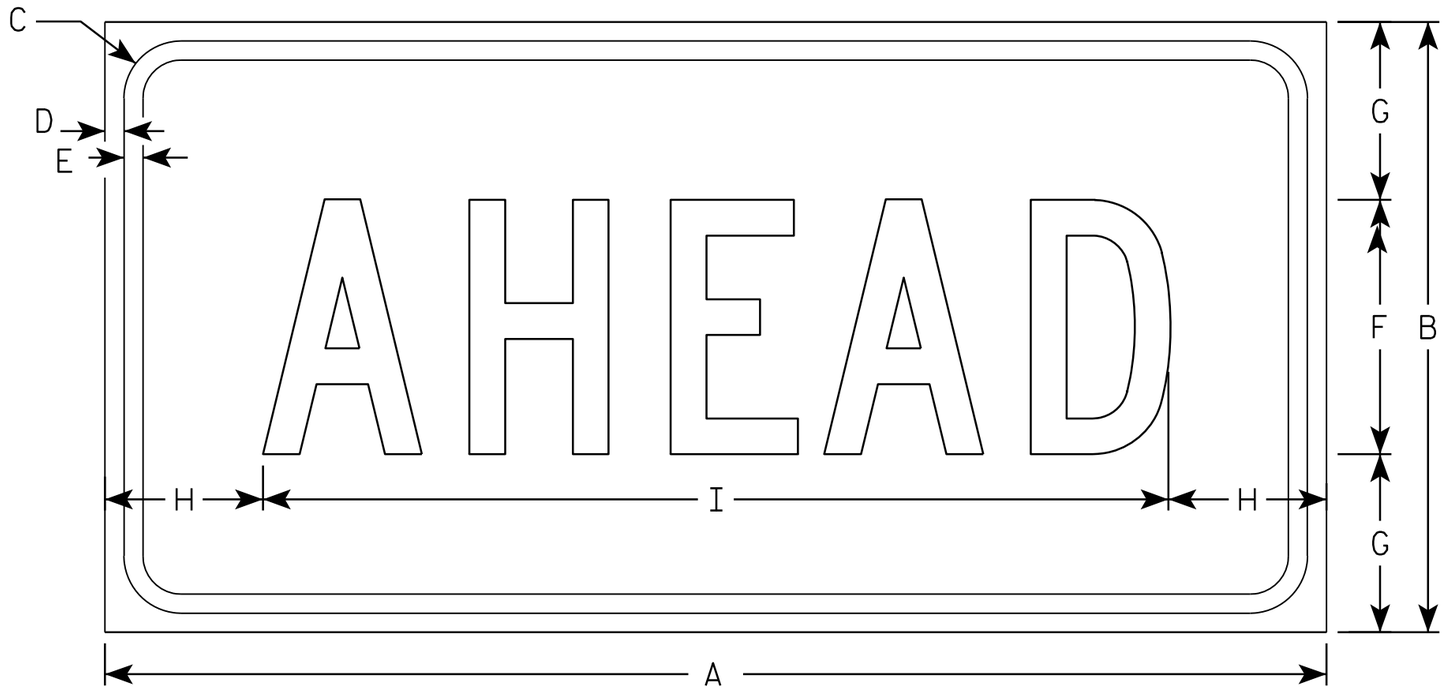
STANDARD SIGN
W16-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/02/10 PLATE NO. W16-7.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 171	E



W16-9P

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

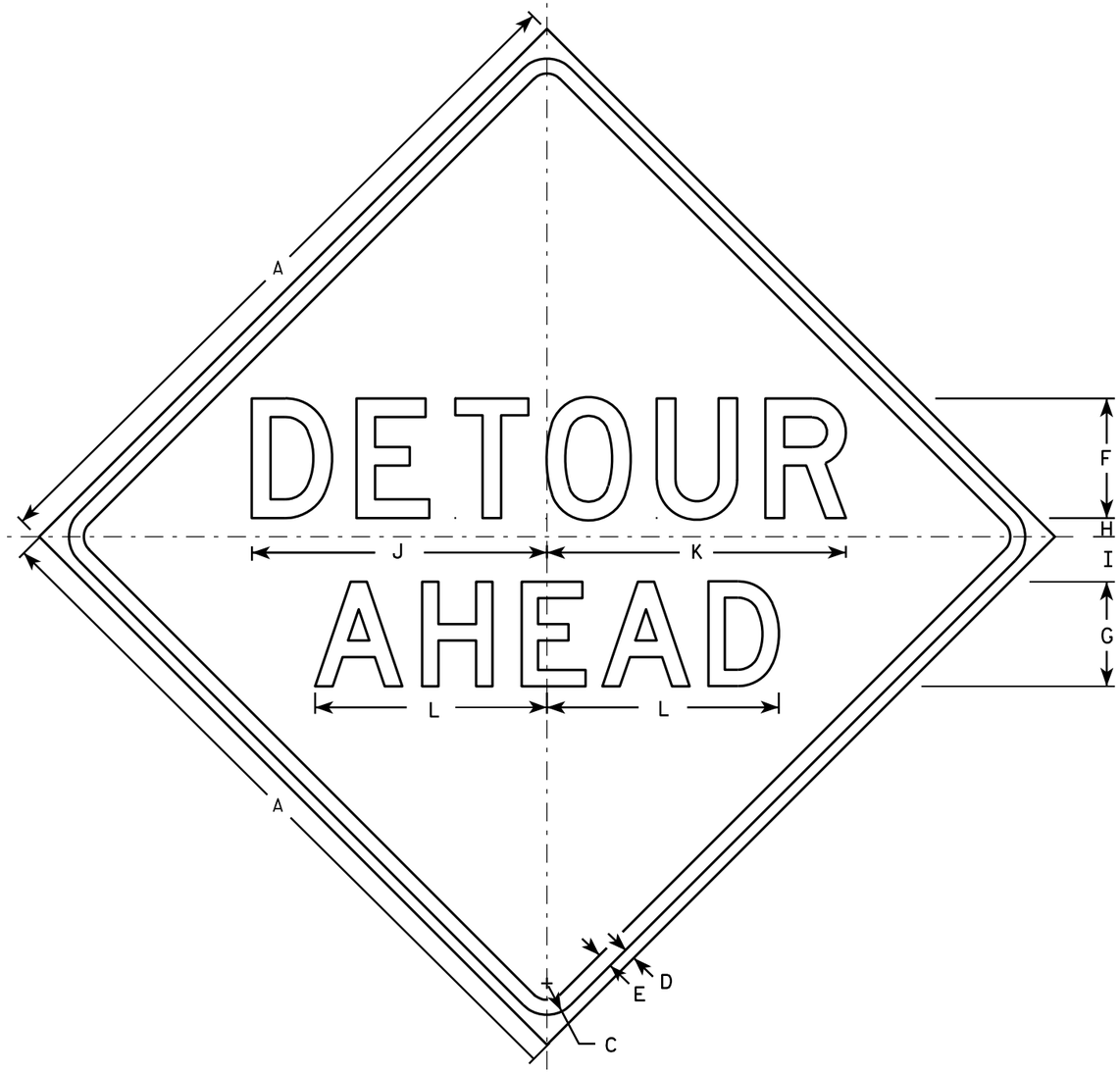
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

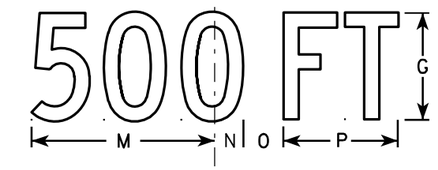
DATE 12/28/10 PLATE NO. W16-9P.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 172 | E

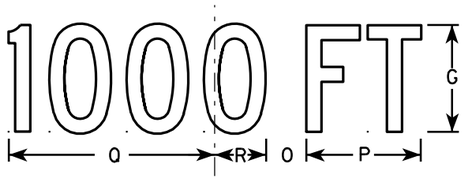
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W169P.DGN PLOT DATE : 28-DEC-2010 13:39 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 2.979524:1.000000
WISDOT/CADDS SHEET 42



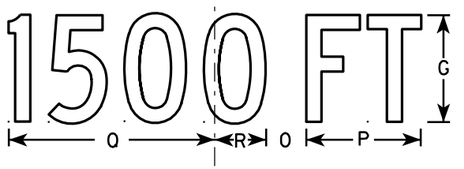
W20-2A



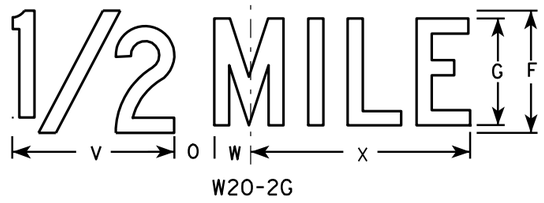
W20-2D



W20-2C



W20-2B



W20-2G



W20-2F

NOTES

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

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	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

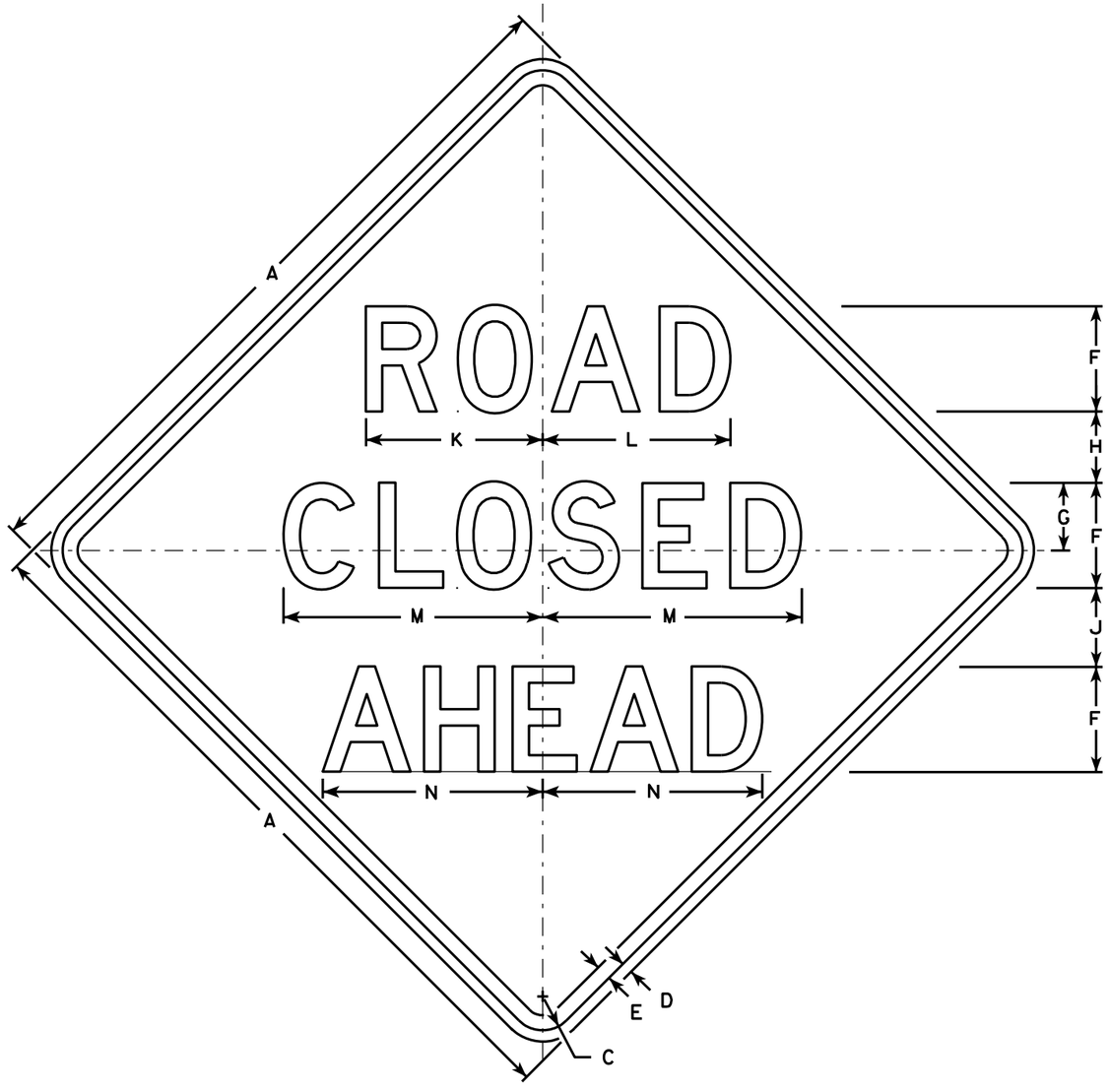
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

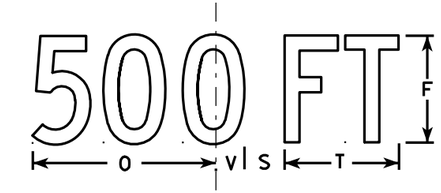
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 173 | E

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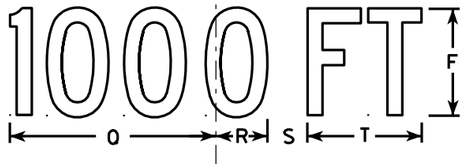
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W202.DGN PLOT DATE : 18-MAR-2011 10:00 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000
WISDOT/CADDS SHEET 42



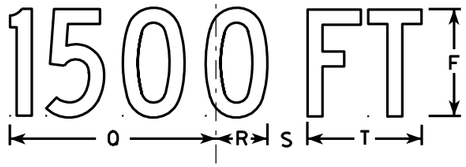
W20-3A



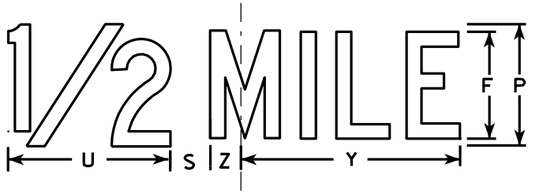
W20-3D



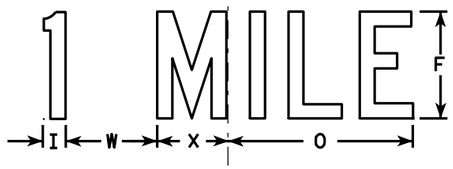
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

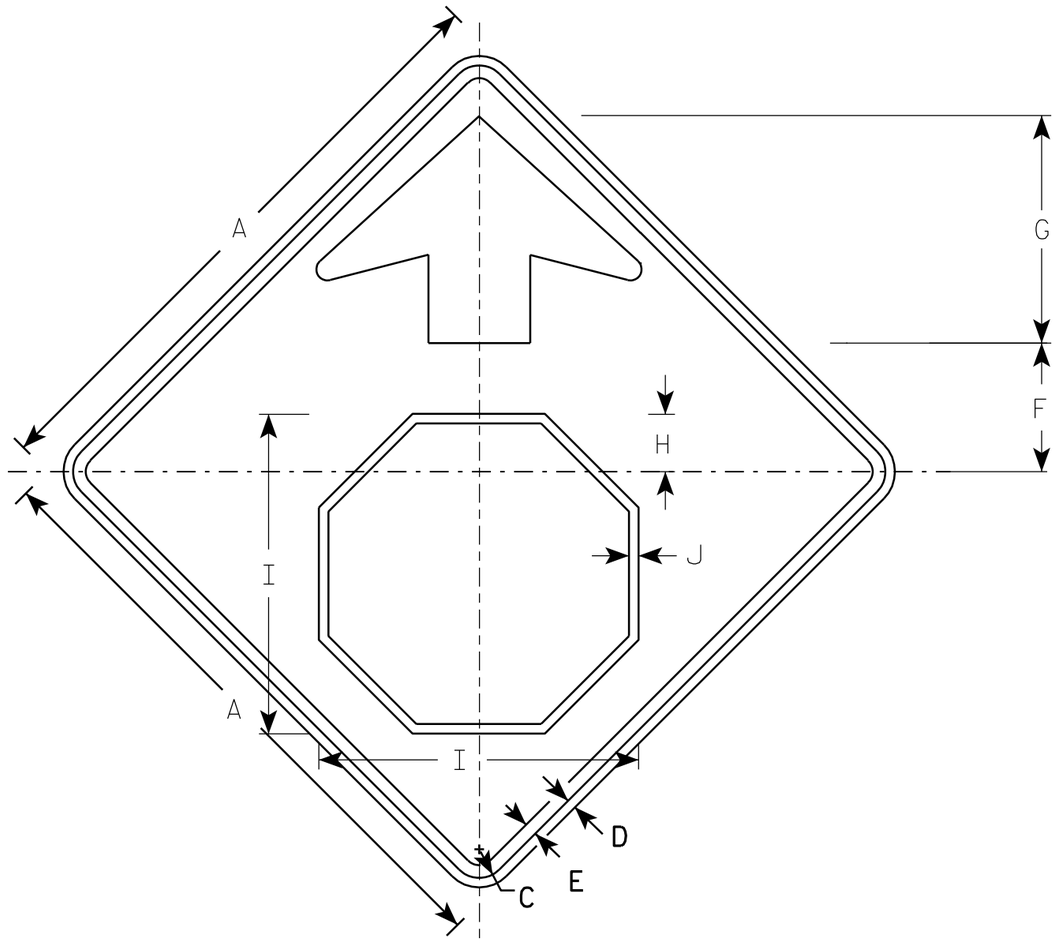
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 174 | E

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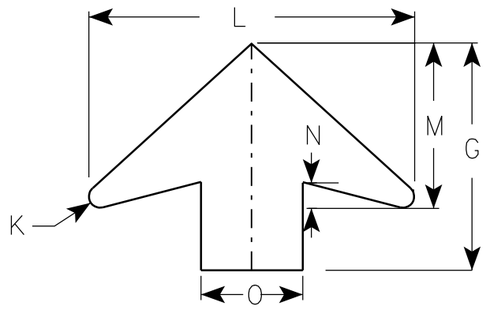
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W203.DGN PLOT DATE : 18-MAR-2011 12:08 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000
WISDOT/CADDS SHEET 42



W3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Arrow & Border - BLACK
   Stop Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-1.12

PROJECT NO:

SHEET NO: 175 E

STH 22 — *Expanded = 1.3

STATION	END AREA CUT (S.F.)	END AREA FILL (S.F.)	VOLUME CUT (C.Y.)	VOLUME FILL (C.Y.)	CUMULATIVE VOLUME CUT (C.Y.)	CUMULATIVE VOLUME *FILL (C.Y.)	MASS HAUL (C.Y.)
122+67	175.4	0.0					
123+00	176.7	0.0	212.5	0.0	213	0	213
123+25	172.5	0.0	161.7	0.0	374	0	374
123+50	170.4	0.0	158.7	0.0	533	0	533
123+67	169.7	0.0	108.3	0.0	641	0	641
123+85	157.3	0.0	109.0	0.0	750	0	750
124+59	121.9	2.1	382.1	2.9	1132	4	1129
124+72	129.1	0.0	61.8	0.5	1194	4	1190
124+77	134.3	1.0	22.0	0.1	1216	5	1212
124+94	148.6	0.0	88.0	0.3	1304	5	1299
125+00	149.8	0.0	34.8	0.0	1339	5	1334
125+14	150.6	0.0	77.9	0.0	1417	5	1412
125+27	155.6	0.0	74.3	0.0	1491	5	1486
125+57	156.0	0.0	172.0	0.0	1663	5	1658
125+90	146.8	0.0	183.4	0.0	1847	5	1842
126+00	136.3	0.0	54.5	0.0	1901	5	1896
126+24	125.1	0.0	116.2	0.0	2017	5	2012
126+46	125.0	0.0	101.4	0.0	2119	5	2114
126+87	138.6	0.0	200.6	0.0	2319	5	2314
127+00	137.8	0.0	66.5	0.0	2386	5	2381
127+15	144.3	0.0	78.3	0.0	2464	5	2459
127+50	143.3	0.0	186.4	0.0	2650	5	2645
127+76	150.2	0.1	141.9	0.0	2792	5	2787
128+00	139.3	0.0	128.1	0.0	2920	5	2915
128+31	148.2	0.0	166.6	0.0	3087	5	3082
128+45	160.3	0.1	80.5	0.0	3168	5	3163
128+84	137.5	0.0	213.4	0.1	3381	5	3376
129+00	130.3	0.0	78.8	0.0	3460	5	3455
129+25	132.5	0.0	121.6	0.0	3581	5	3576
129+50	115.5	0.4	114.8	0.2	3696	5	3691
129+70	93.8	4.1	78.3	1.7	3774	8	3767
130+39	96.6	2.6	243.0	8.5	4017	19	3999
130+50	96.5	1.9	39.0	0.9	4056	20	4037
130+75	59.4	0.0	72.2	0.9	4129	21	4108

13TH STREET — *Expanded = 1.3

STATION	END AREA CUT (S.F.)	END AREA FILL (S.F.)	VOLUME CUT (C.Y.)	VOLUME FILL (C.Y.)	CUMULATIVE VOLUME CUT (C.Y.)	CUMULATIVE VOLUME *FILL (C.Y.)	MASS HAUL (C.Y.)
214+35	59.1	0.0					
214+50	68.2	0.0	35.4	0.0	35	0	35
214+61	73.0	0.0	28.8	0.0	64	0	64
214+68	57.4	0.9	17.1	0.1	81	0	81
214+79	158.7	0.0	41.6	0.2	123	0	123

LYON STREET — *Expanded = 1.3

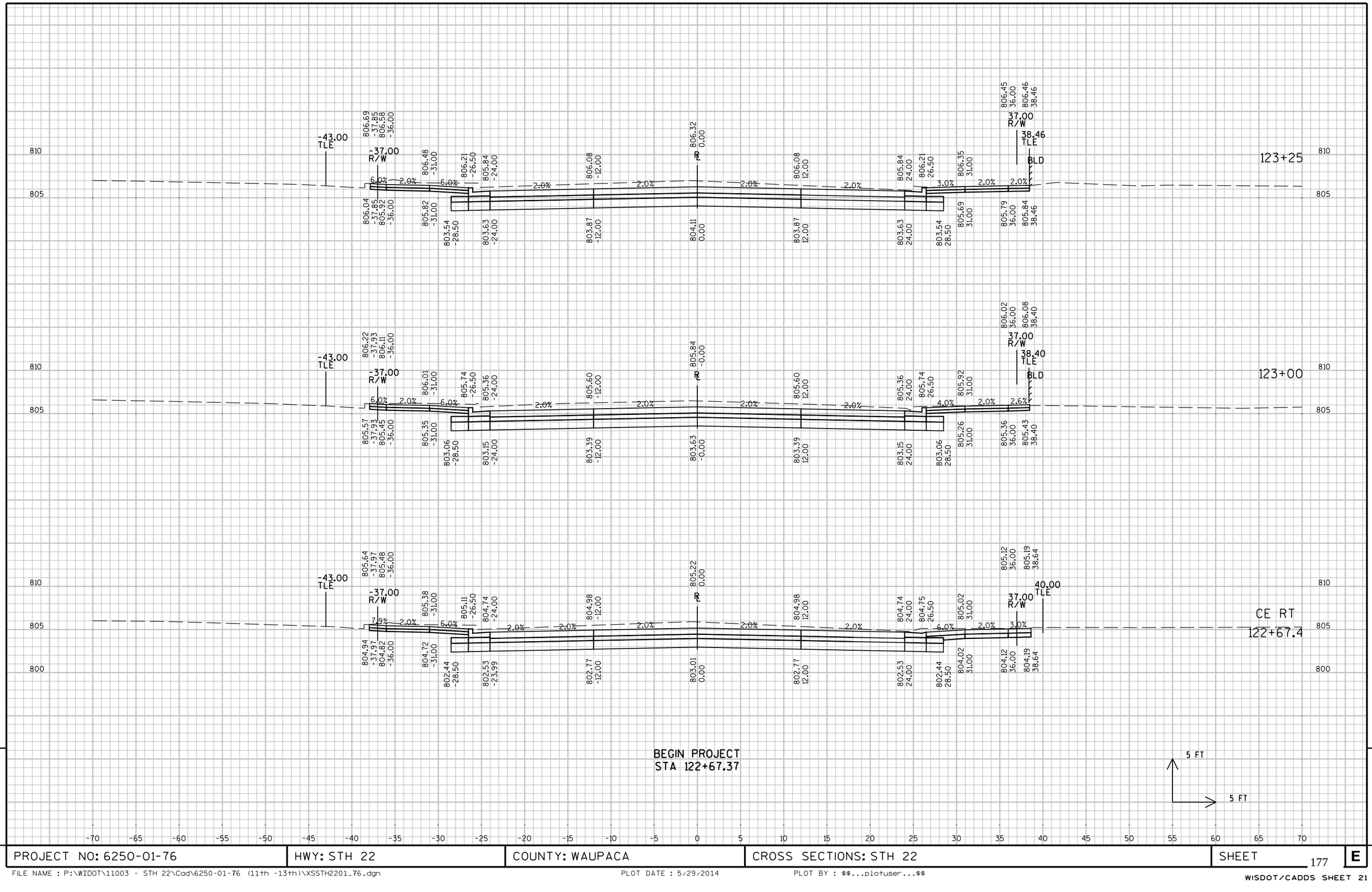
STATION	END AREA CUT (S.F.)	END AREA FILL (S.F.)	VOLUME CUT (C.Y.)	VOLUME FILL (C.Y.)	CUMULATIVE VOLUME CUT (C.Y.)	CUMULATIVE VOLUME *FILL (C.Y.)	MASS HAUL (C.Y.)
338+73	2.0	0.0					
339+00	4.0	0.0	3.0	0.0	3	0	3
339+50	19.0	0.0	21.3	0.0	24	0	24
339+95	2.0	0.0	17.4	0.0	42	0	42

12TH STREET (WEST & EAST) — *Expanded = 1.3

STATION	END AREA CUT (S.F.)	END AREA FILL (S.F.)	VOLUME CUT (C.Y.)	VOLUME FILL (C.Y.)	CUMULATIVE VOLUME CUT (C.Y.)	CUMULATIVE VOLUME *FILL (C.Y.)	MASS HAUL (C.Y.)
202+69	1.3	0.0					
203+52	1.3	0.0	4.1	0.0	4	0	4
203+89	68.3	0.0					
204+00	71.8	0.0	28.0	0.0	32	0	32
204+25	81.7	0.0	71.0	0.0	103	0	103
204+50	138.6	0.0	102.0	0.0	205	0	205
204+73	254.0	0.0	163.6	0.0	369	0	369
205+22	170.0	0.0					
205+37	107.3	0.0	73.4	0.0	442	0	442
205+53	72.9	0.0	53.4	0.0	496	0	496
205+72	72.4	0.0	52.2	0.0	548	0	548
205+72	2.0	0.0					
206+27	2.4	0.0	4.5	0.0	552	0	552
206+79	2.5	0.0					
207+12	2.6	0.0	3.2	0.0	555	0	555

12TH STREET/SSG WARREN HANSEN DRIVE — *Expanded = 1.3

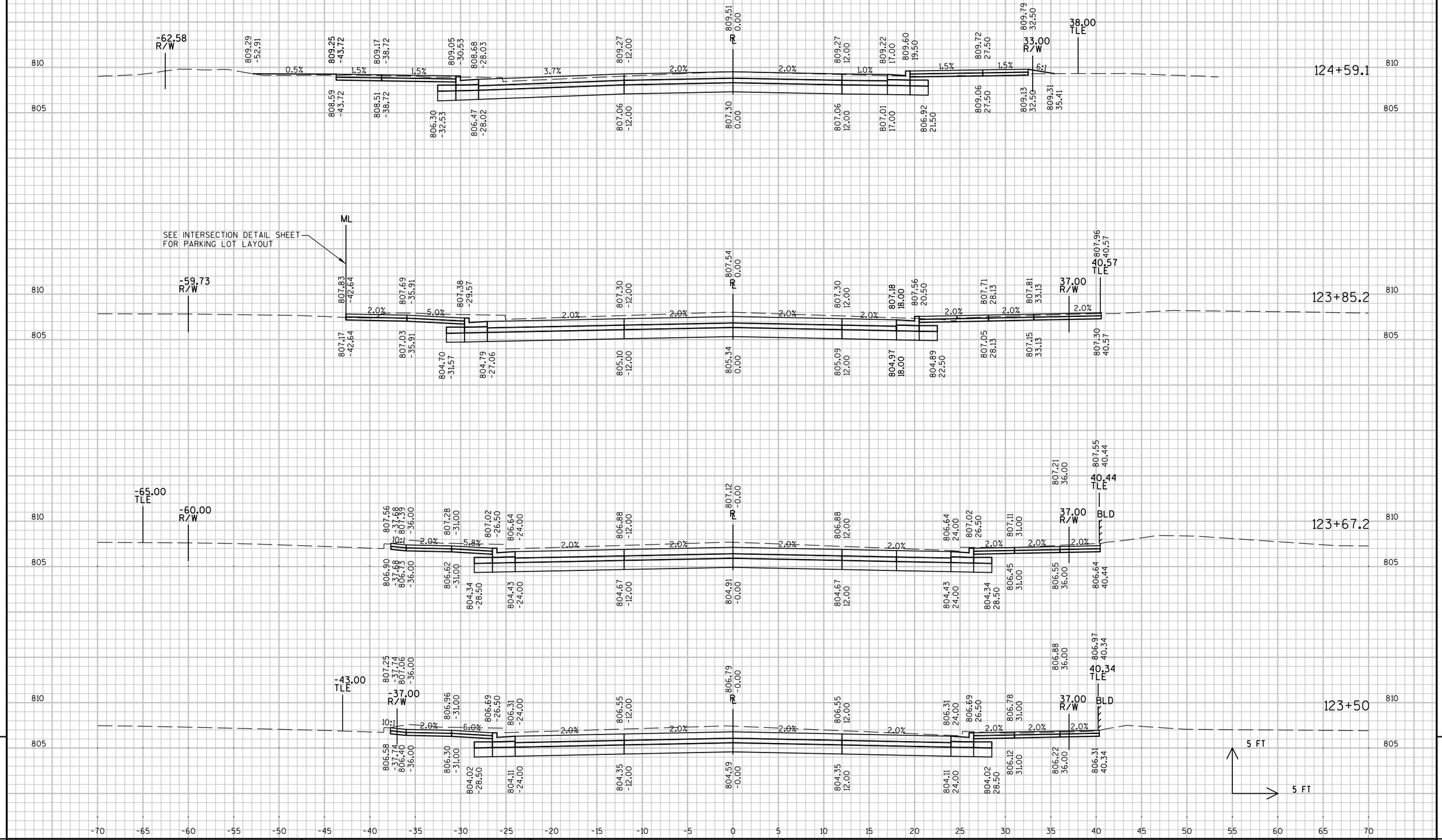
STATION	END AREA CUT (S.F.)	END AREA FILL (S.F.)	VOLUME CUT (C.Y.)	VOLUME FILL (C.Y.)	CUMULATIVE VOLUME CUT (C.Y.)	CUMULATIVE VOLUME *FILL (C.Y.)	MASS HAUL (C.Y.)
332+70	0.2	0.0					
333+00	10.7	0.0	6.1	0.0	6	0	6
333+50	13.2	3.6	22.2	3.4	28	4	24
334+00	10.2	7.9	21.7	10.7	50	18	32
334+50	6.0	0.1	15.0	7.4	65	28	37
334+91	1.6	0.0	5.8	0.0	71	28	43



9

9

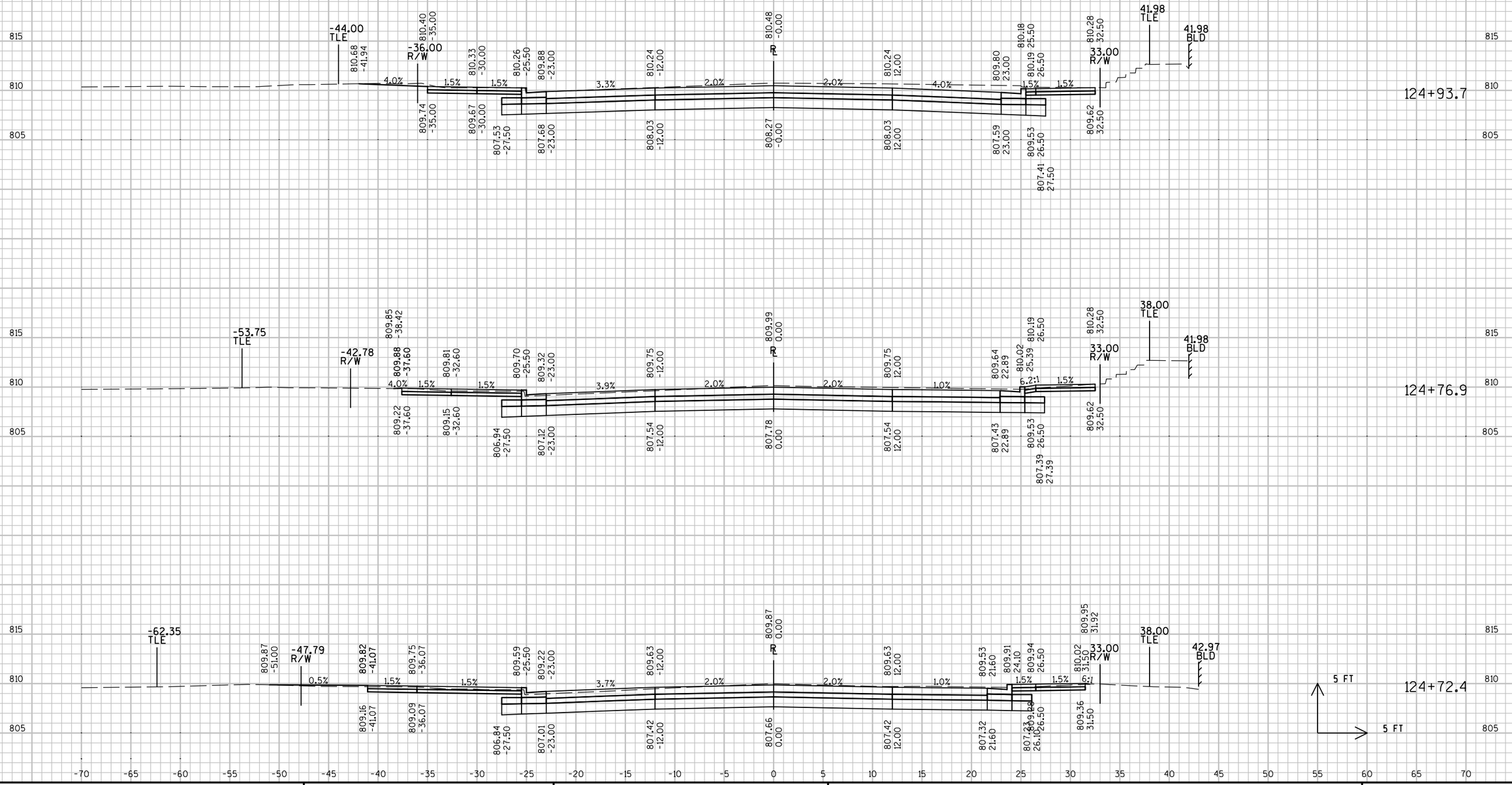
PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	CROSS SECTIONS: STH 22	SHEET 177	E



9

9

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	CROSS SECTIONS: STH 22	SHEET 178	E



9

9

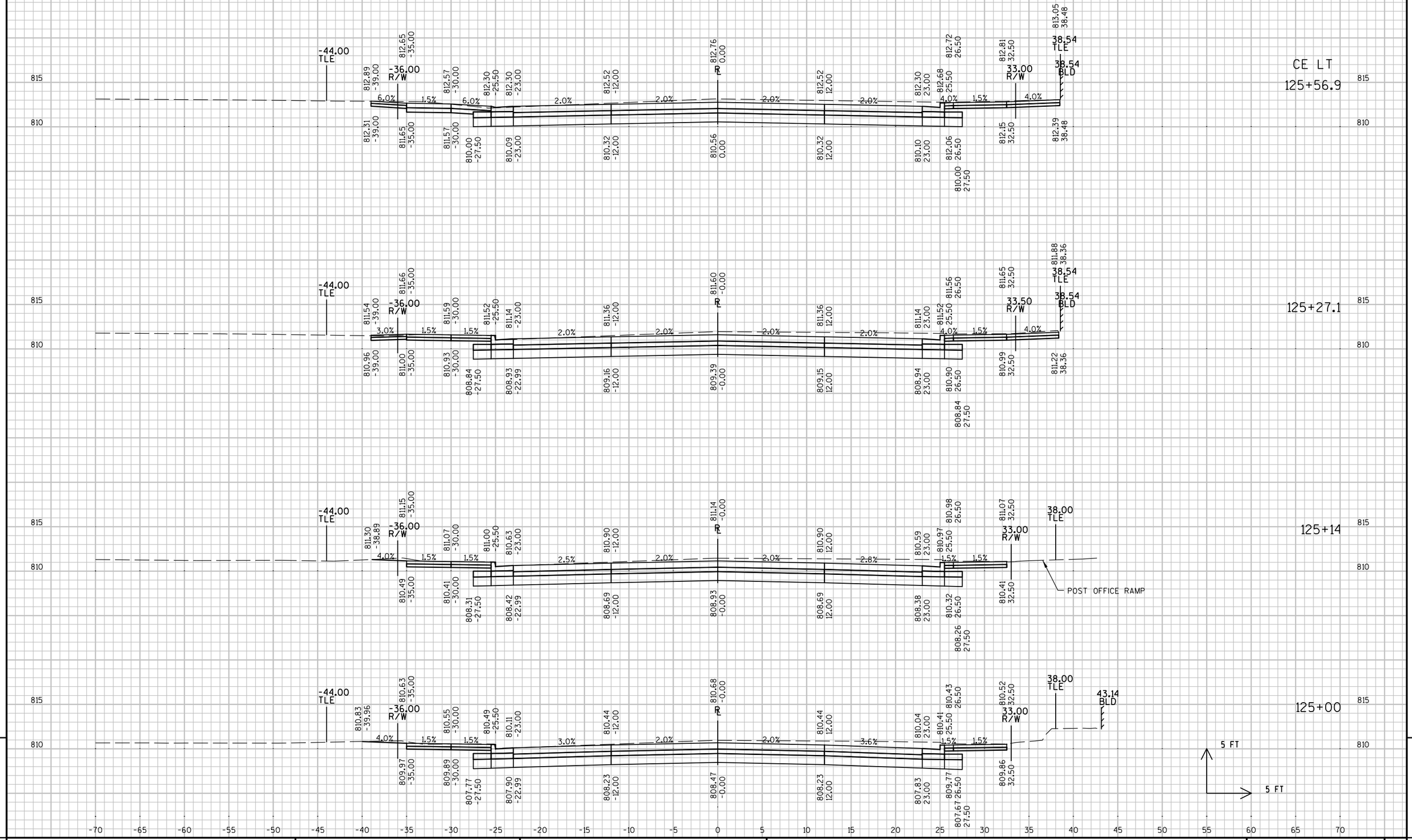
PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	CROSS SECTIONS: STH 22	SHEET 179	E

FILE NAME : P:\WIDOT\11003 - STH 22\Cad\6250-01-76 (11th -13th)\XSSTH2201_76.dgn

PLOT DATE : 5/29/2014

PLOT BY : $$...plotuser...$$

WISDOT/CADDS SHEET 21



9

9

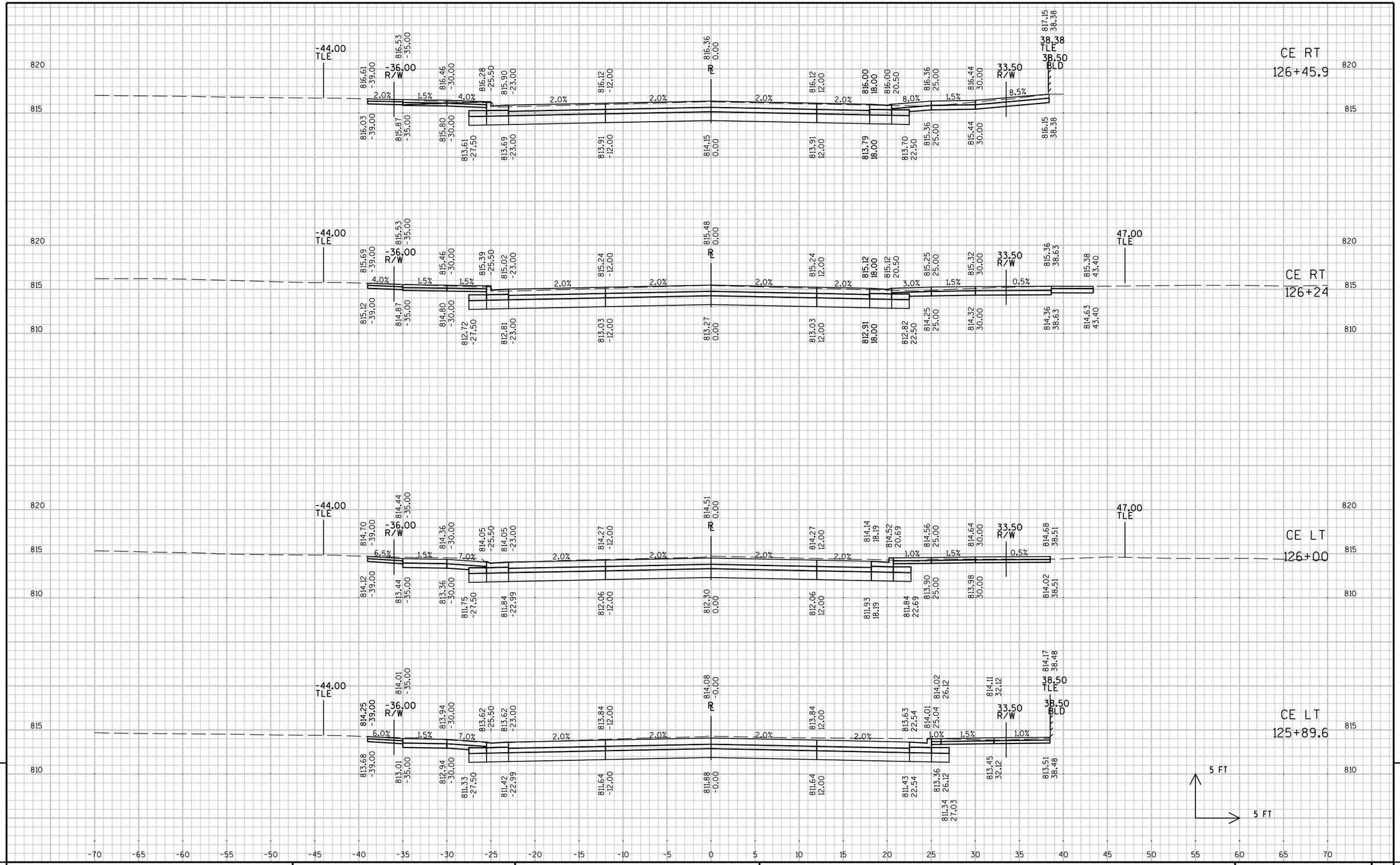
PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	CROSS SECTIONS: STH 22	SHEET 180	E

FILE NAME : P:\WIDOT\11003 - STH 22\Cad\6250-01-76 (11th -13th)\XSSTH2201_76.dgn

PLOT DATE : 5/29/2014

PLOT BY : $$...plotuser...$$

WISDOT/CADDS SHEET 21



9

9

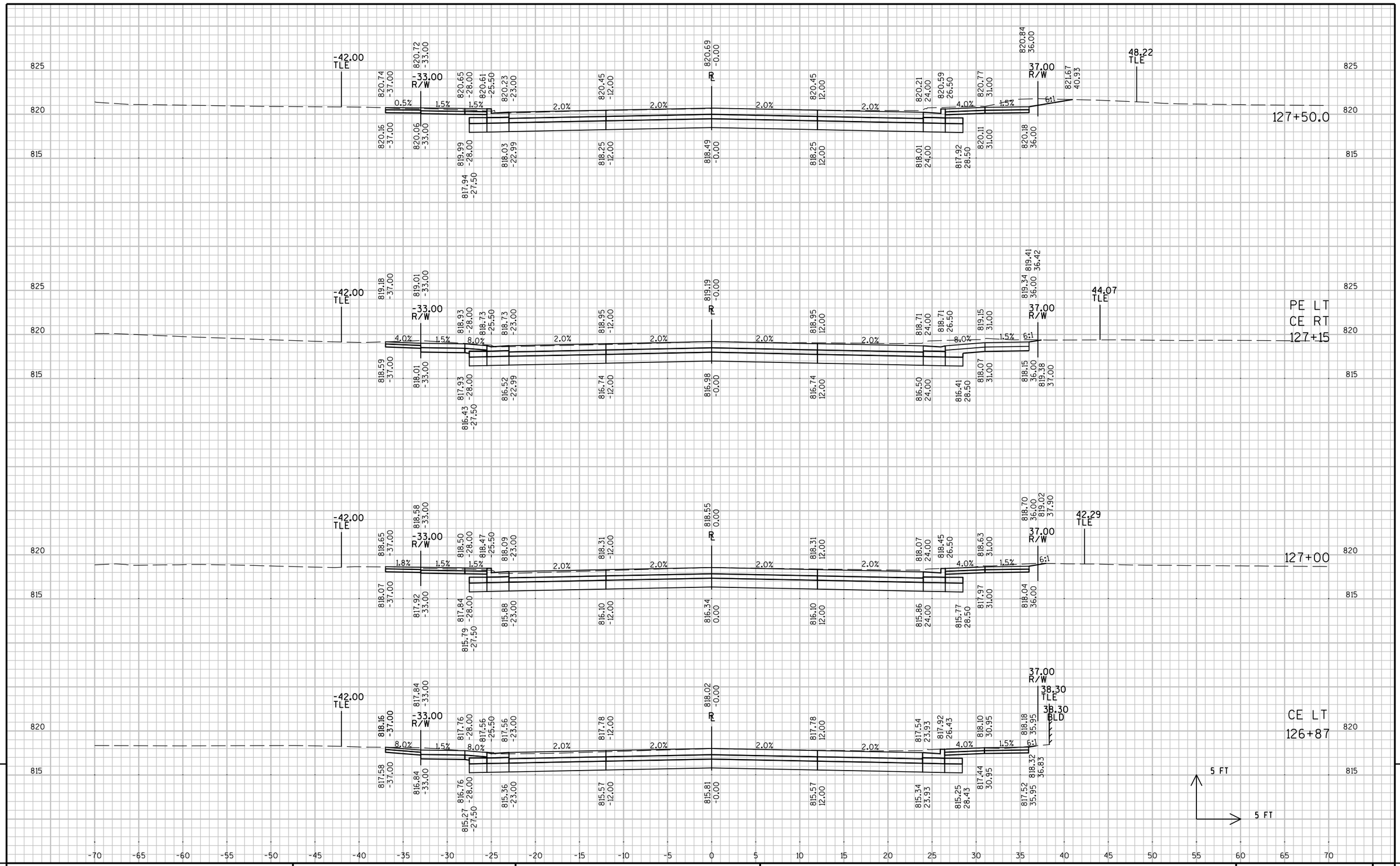
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FILE NAME : P:\WIDOT\11003 - STH 22\Cad\6250-01-76 (11th -13th)\XSSTH2201_76.dgn

PLOT DATE : 7/30/2014

PLOT BY : $$...plotuser...$$

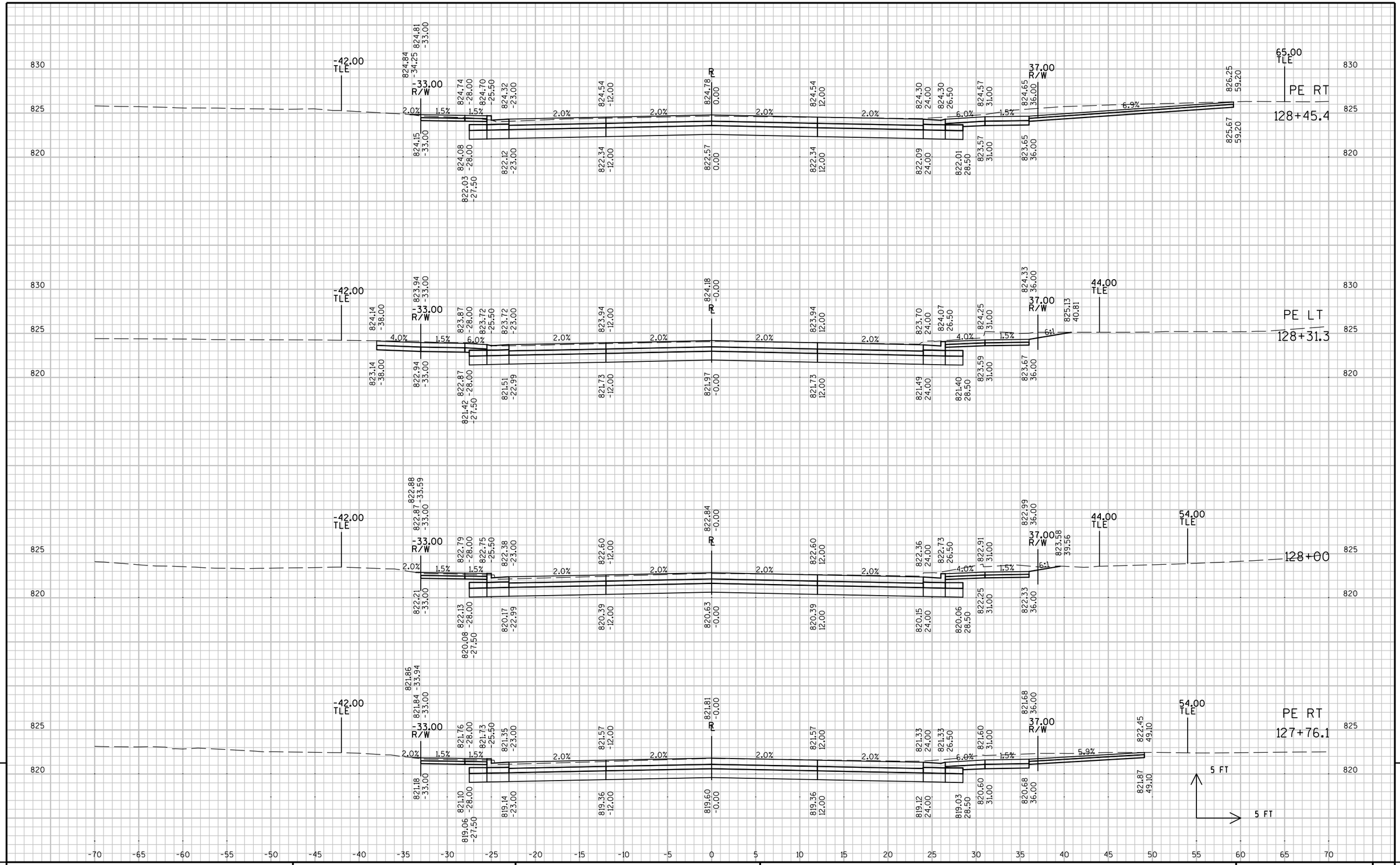
WISDOT/CADDS SHEET 21



9

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PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	CROSS SECTIONS: STH 22	SHEET 182	E



9

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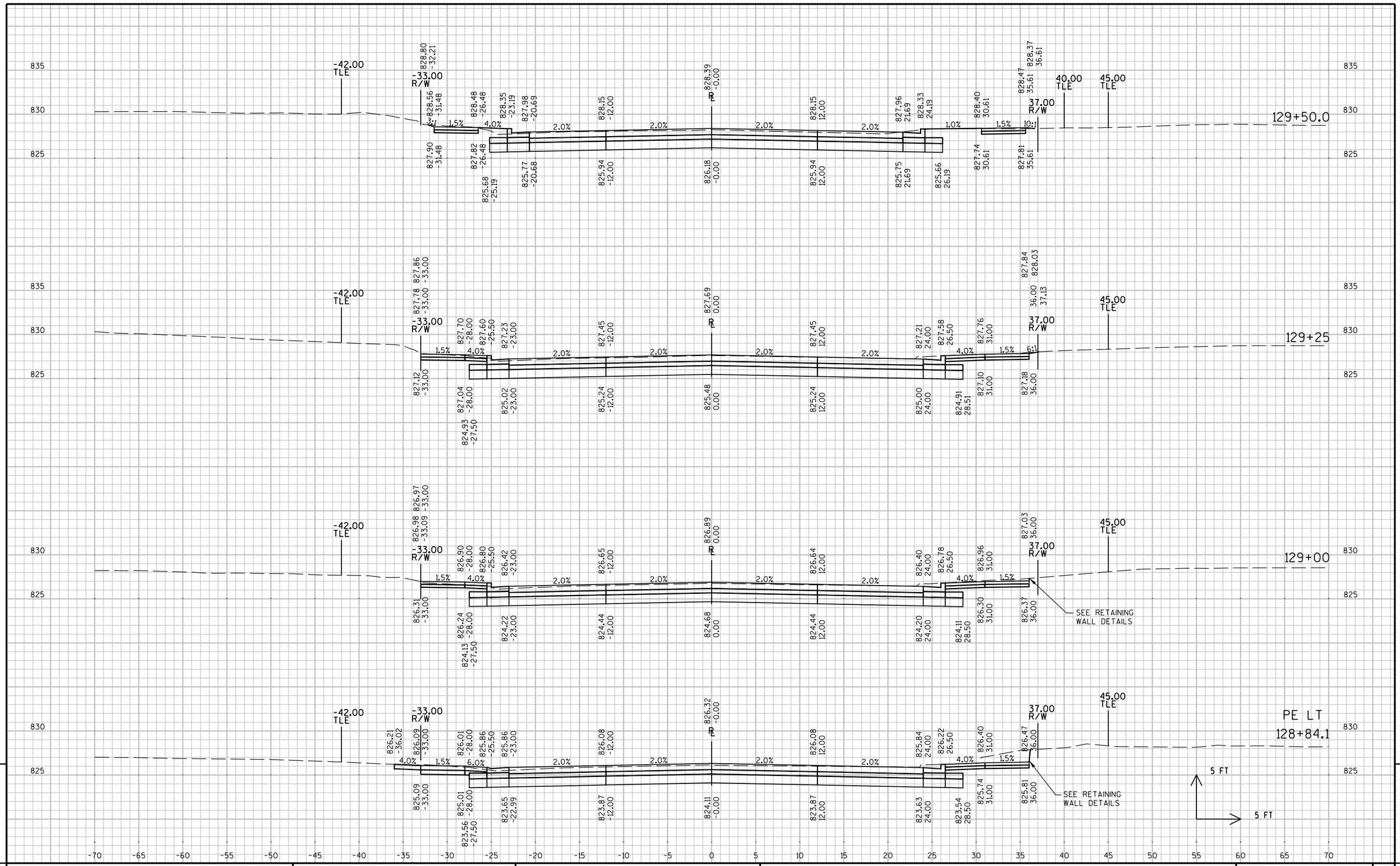
PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	CROSS SECTIONS: STH 22	SHEET 183	E

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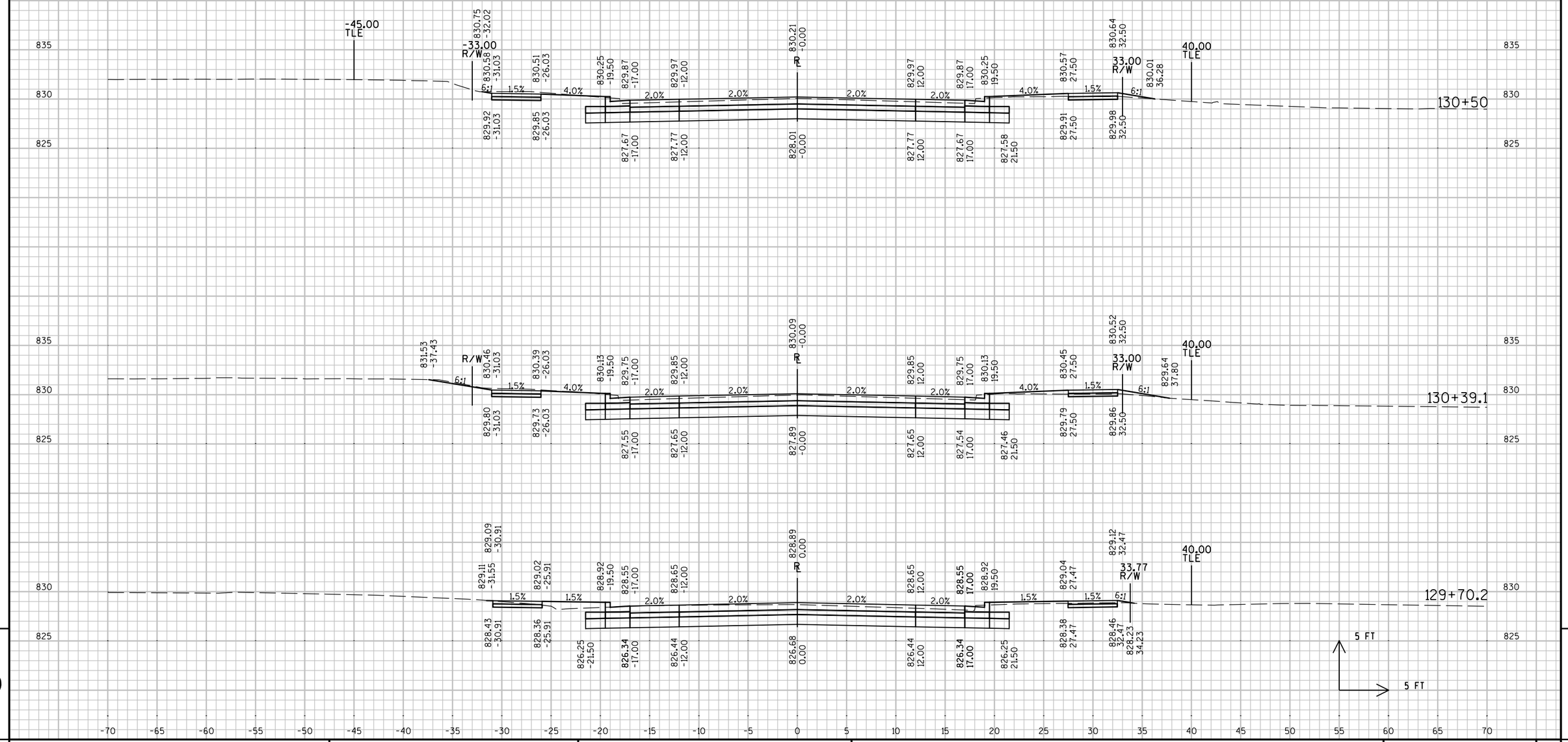
WISDOT/CADDS SHEET 21



9

9

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	CROSS SECTIONS: STH 22	SHEET 184	E



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9

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	CROSS SECTIONS: STH 22	SHEET 185	E

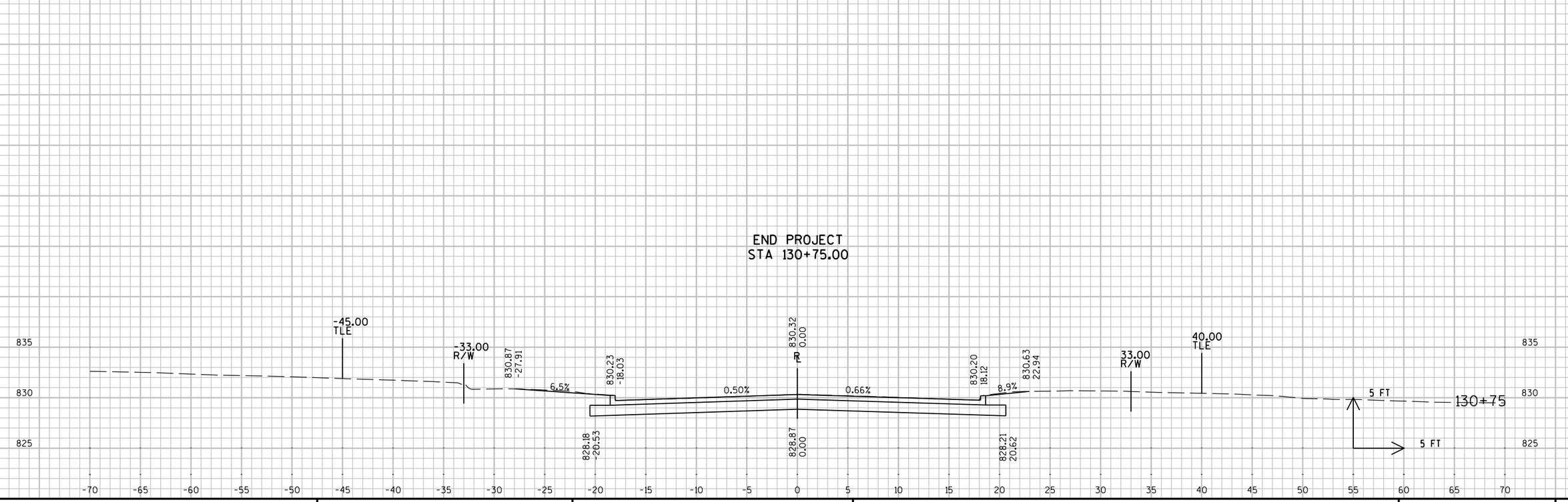
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PLOT DATE : 5/29/2014

PLOT BY : $$...plotuser...$$

WISDOT/CADDS SHEET 21

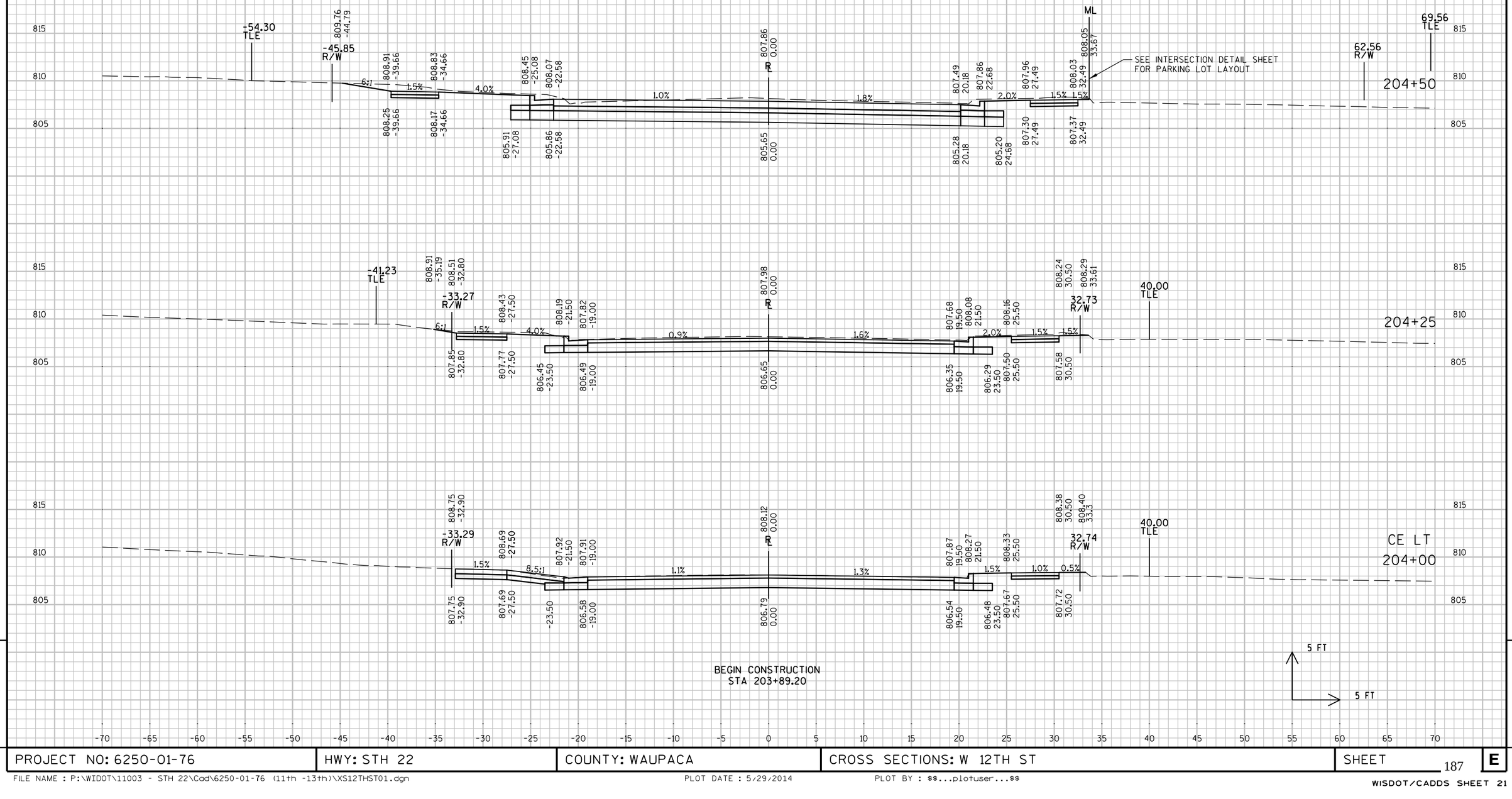
END PROJECT
STA 130+75.00



PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	CROSS SECTIONS: STH 22	SHEET 186	E

FILE NAME : P:\WIDOT\11003 - STH 22\Cad\6250-01-76 (11th -13th)\XSSTH2201_76.dgn PLOT DATE : 5/29/2014 PLOT BY : $$...plotuser...$$

WISDOT/CADDS SHEET 21



PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	CROSS SECTIONS: W 12TH ST	SHEET 187	E

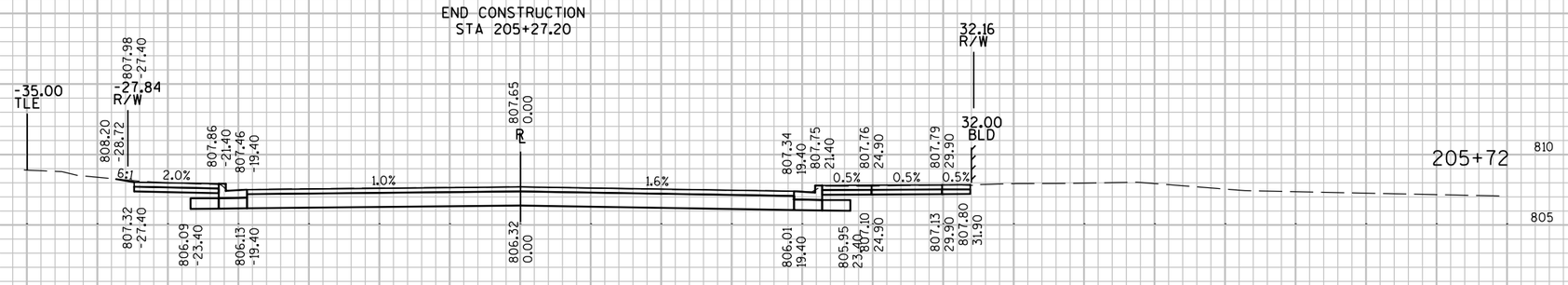
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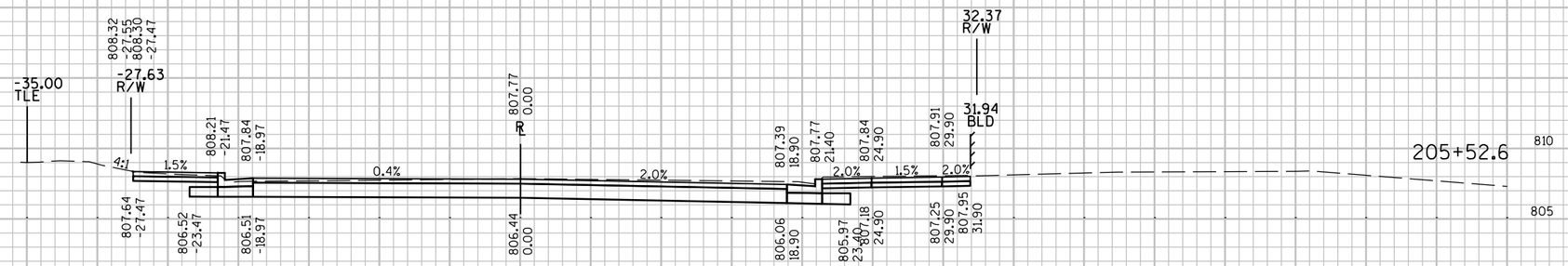
PLOT DATE : 5/29/2014

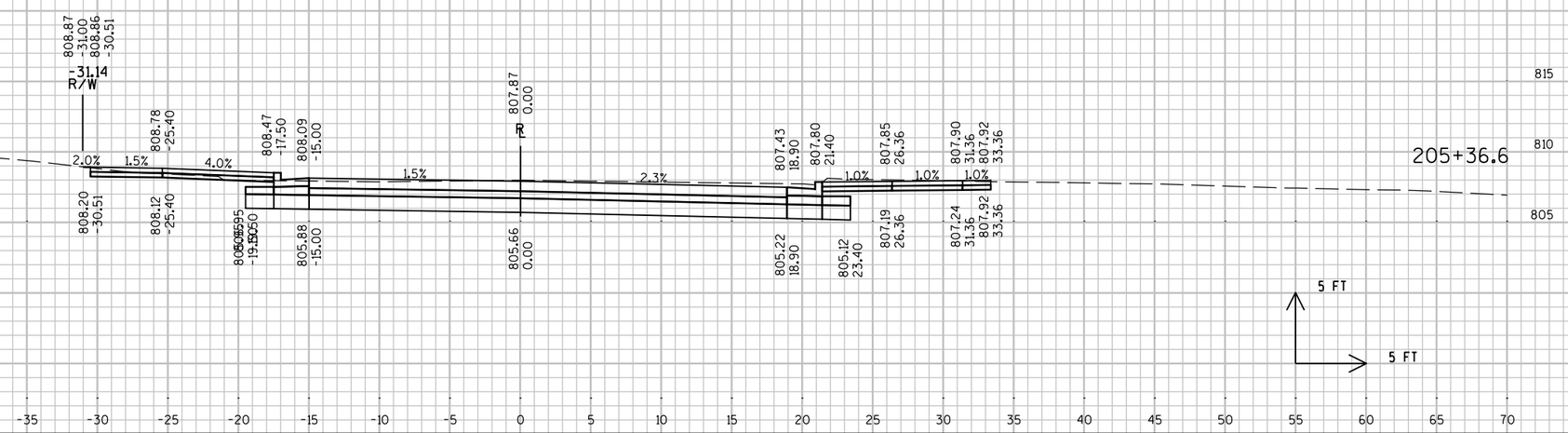
PLOT BY : $$...plotuser...$$

WISDOT/CADDS SHEET 21

END CONSTRUCTION
STA 205+27.20





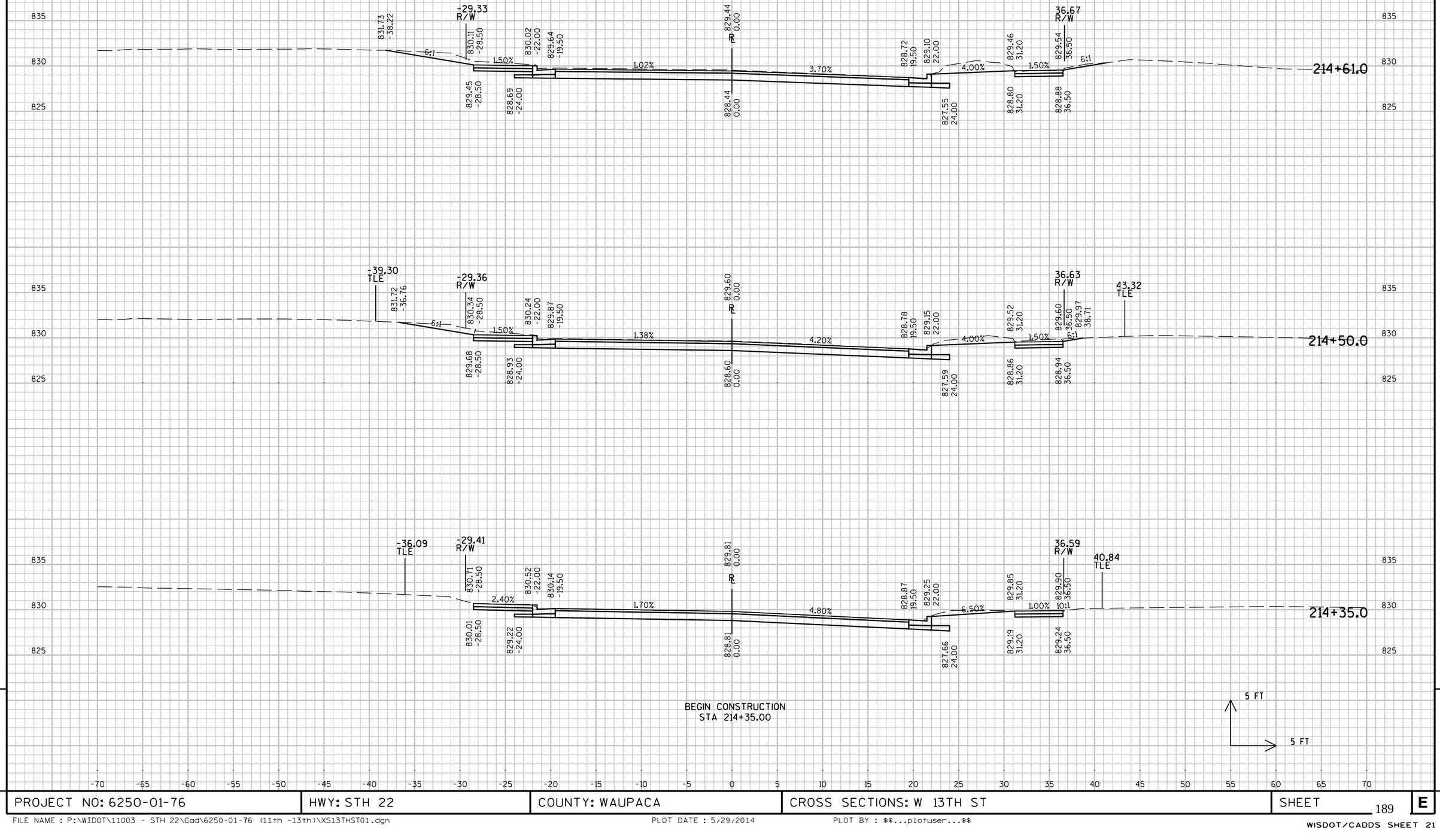


-70 -65 -60 -55 -50 -45 -40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

9 9

PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	CROSS SECTIONS: E 12TH ST	SHEET 188	E

FILE NAME : P:\WIDOT\11003 - STH 22\Cad\6250-01-76 (11th -13th)\XS12THST01.dgn
PLOT DATE : 7/7/2014
PLOT BY : $$...plotuser...$$



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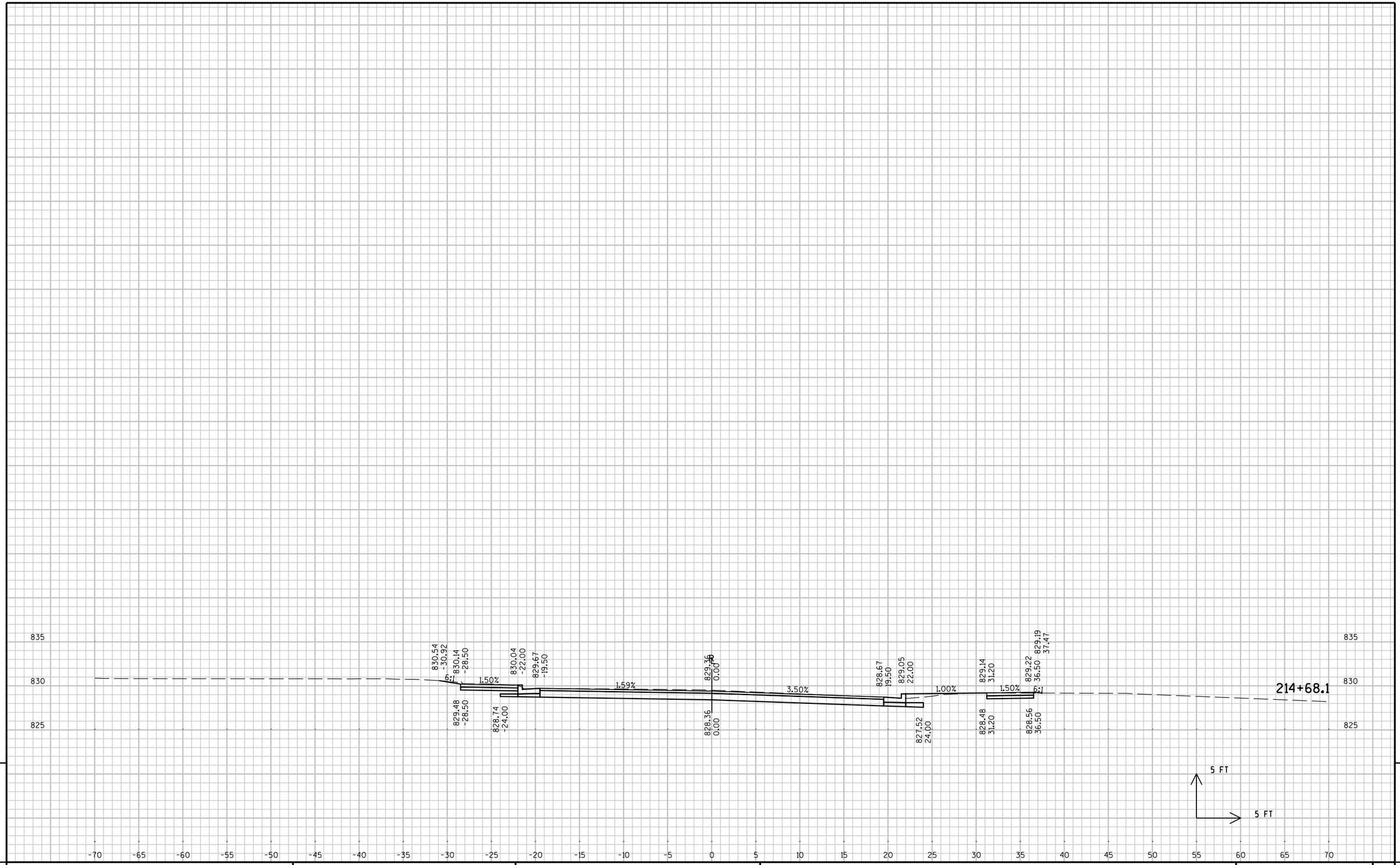
PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	CROSS SECTIONS: W 13TH ST	SHEET 189	E

FILE NAME : P:\WIDOT\11003 - STH 22\Cad\6250-01-76 (11th -13th)\XS13THST01.dgn

PLOT DATE : 5/29/2014

PLOT BY : $$...plotuser...$$

WISDOT/CADDS SHEET 21



9

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PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	CROSS SECTIONS: W 13TH ST	SHEET 190	E

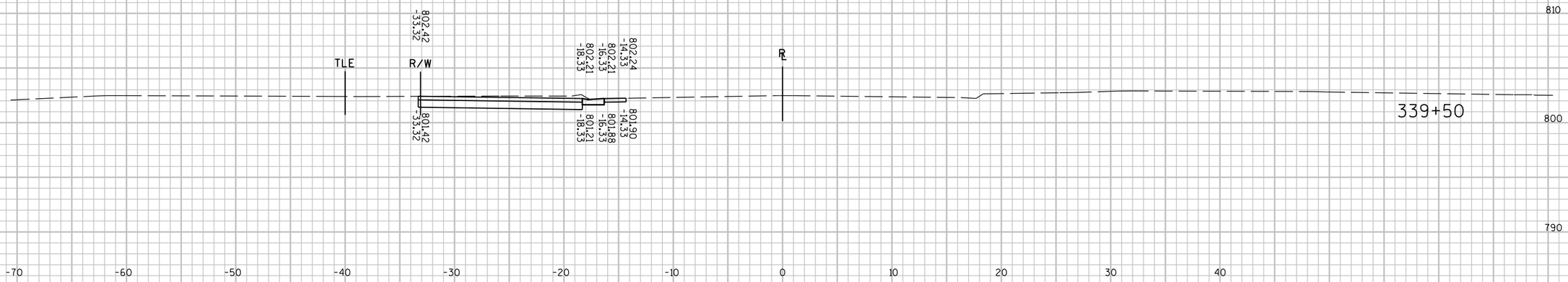
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PLOT DATE : 5/29/2014

PLOT BY : $$...plotuser...$$

WISDOT/CADDS SHEET 21

END CONSTRUCTION
STA 339+94.7



BEGIN CONSTRUCTION
STA 338+72.8

9

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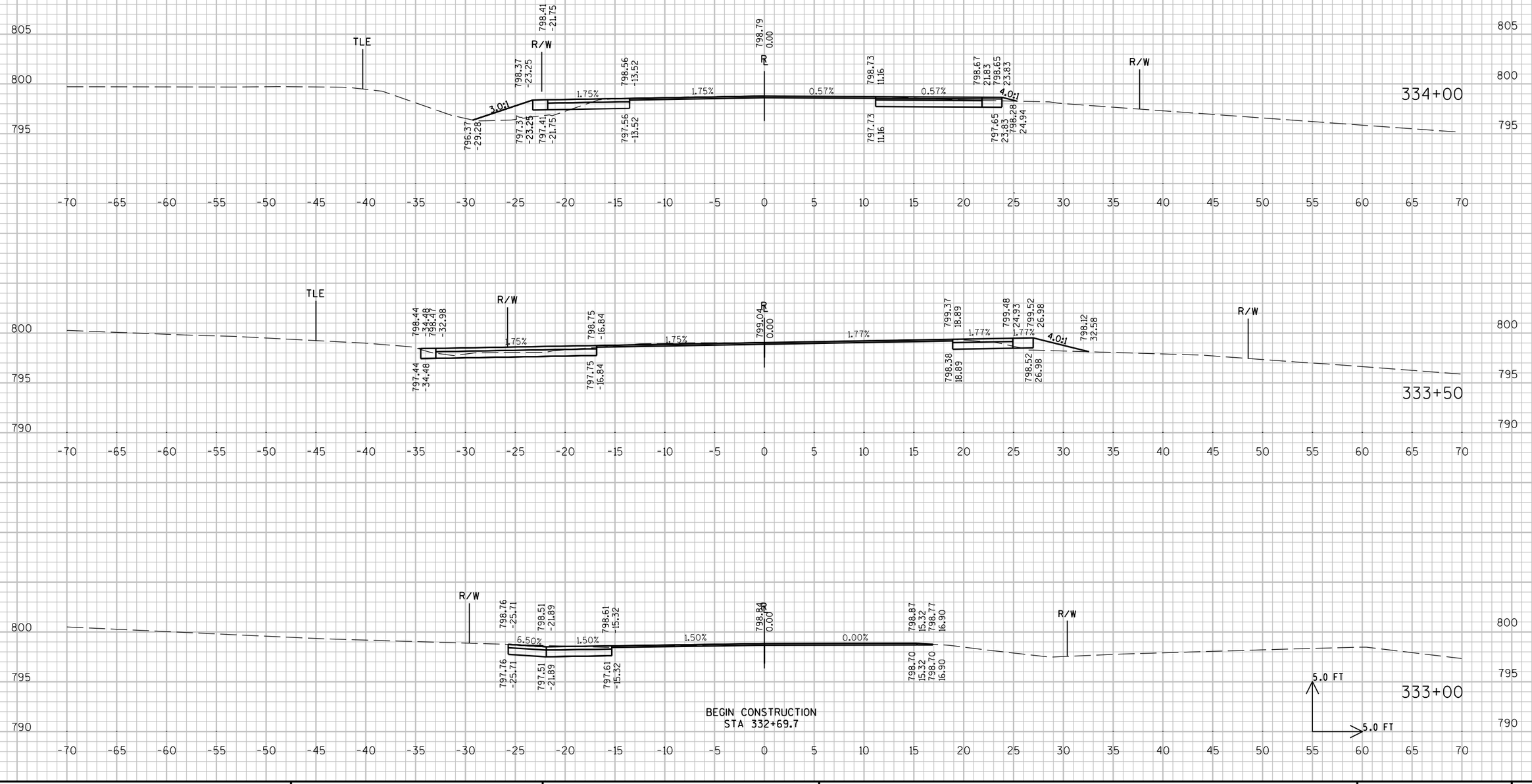
PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	CROSS SECTIONS: LYON STREET	SHEET 191	E

FILE NAME : P:\WIDOT\11003 - STH 22\Cad\6250-01-76 (Detour Route)\XS Lyon Street.dgn

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PLOT BY : $$...plotuser...$$

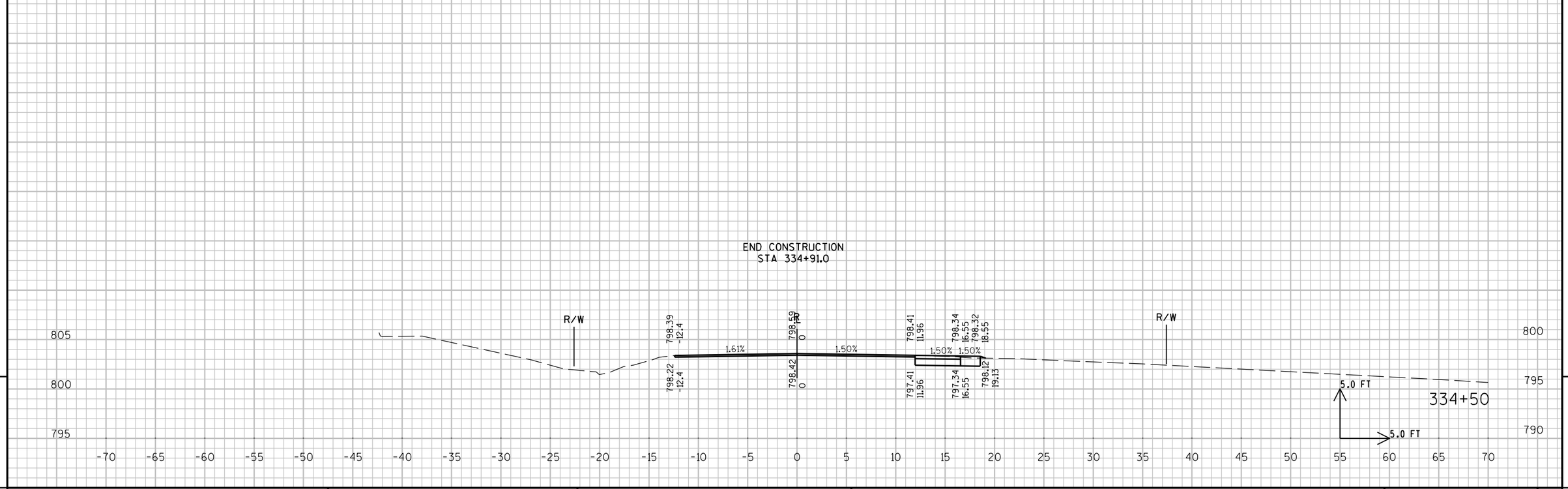
WISDOT/CADDS SHEET 21



PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	CROSS SECTIONS: E 12TH STREET	SHEET 192	E

FILE NAME : P:\WIDOT\11003 - STH 22\Cad\6250-01-76 (Detour Route)\XS E 12th Street.dgn PLOT DATE : 5/29/2014 PLOT BY : $$...plotuser...$$

WISDOT/CADDS SHEET 21



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PROJECT NO: 6250-01-76	HWY: STH 22	COUNTY: WAUPACA	CROSS SECTIONS: E 12TH STREET	SHEET 193	E

FILE NAME : P:\WIDOT\11003 - STH 22\Cad\6250-01-76 (Detour Route)\XS E 12th Street.dgn

PLOT DATE : 5/29/2014

PLOT BY : $$...plotuser...$$

WISDOT/CADDS SHEET 21

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

WIS DEC 2014

PROJECT ID: 6250-01-77

COUNTY: WAUPACA

ORDER OF SHEETS

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

TOTAL SHEETS = 12

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

C CLINTONVILLE, MAIN STREET

11TH STREET TO 13TH STREET

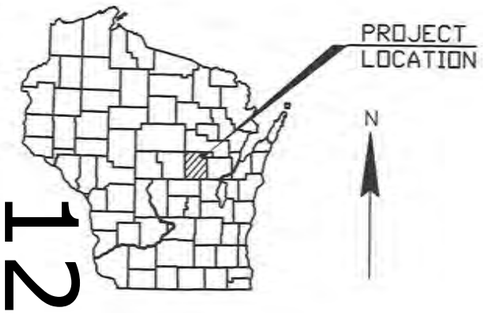
STH 22

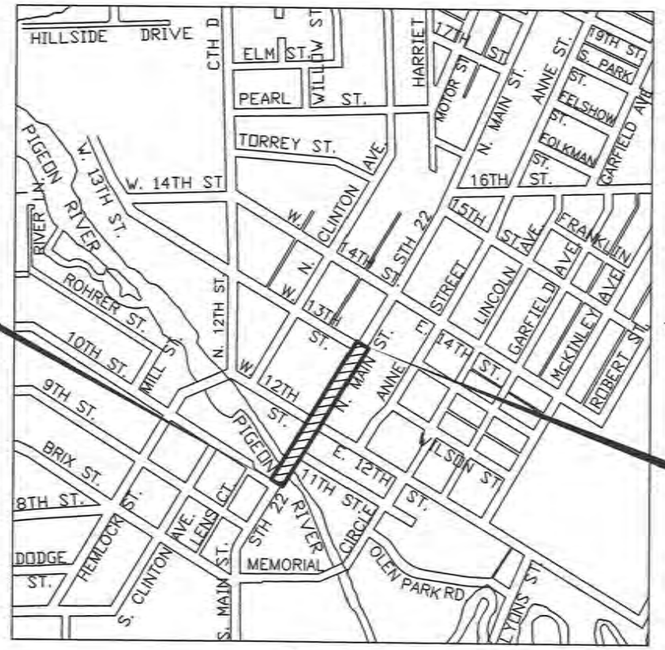
WAUPACA COUNTY

LOCAL UTILITY, SANITARY SEWER & WATER MAIN

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6250-01-77		

STATE PROJECT NUMBER
6250-01-77





T-25-N

R-14-E

BEGIN PROJECT
STA 119+31.22
Y=438087.025
X=621501.643

END PROJECT
STA 130+75.00

DESIGN DESIGNATION

A.A.D.T.(2015)	=	15,300
A.A.D.T.(2035)	=	18,400
D.H.V. (2035)	=	2,190
D.D.	=	58/42
T.	=	5.3%
DESIGN SPEED	=	30 M.P.H.
ESALS	=	3,117,100

CONVENTIONAL SYMBOLS

PLAN		PROFILE	
CORPORATE LIMITS		GRADE LINE	
PROPERTY LINE	PL	ORIGINAL GROUND	
LOT LINE		MARSH OR ROCK PROFILE (To be noted as such)	ROCK
LIMITED HIGHWAY EASEMENT		SPECIAL DITCH	LABEL
EXISTING RIGHT OF WAY		GRADE ELEVATION	05.36
PROPOSED OR NEW R/W LINE		CULVERT (Profile View)	
SLOPE INTERCEPT		UTILITIES	
REFERENCE LINE		ELECTRIC	E
EXISTING CULVERT		FIBER OPTIC	FO
PROPOSED CULVERT OR STORM SEWER		GAS	G
COMBUSTIBLE FLUIDS	CAUTION	SANITARY SEWER	SAN
		TELEPHONE	T
		WATER	W / WM
MARSH AREA		TELEPHONE PEDESTAL	T
WOODED OR SHRUB AREA		POWER / TELEPHONE POLE	

LAYOUT
SCALE 0 500' MI.

TOTAL NET LENGTH OF CENTERLINE = 0.808 MI.

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

ACCEPTED FOR CITY OF CLINTONVILLE

7/17/14 Date — Judith A Magee Mayor

ORIGINAL PLANS PREPARED BY

NORDIN DESIGN GROUP, INC.
N5841 HWY 47-55 SHAWANO WI 54166
(715)526-2827

WISCONSIN MARY T. NORDIN E-25033 SHAWANO, WIS. PROFESSIONAL ENGINEER 7-17-14

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	CBS SQUARED INC.
Designer	NORDIN DESIGN GROUP
Project Manager	MARK STEIDL
Regional Examiner	CHERYL SIMON
Regional Supervisor	SHANNON RILEY

APPROVED FOR THE DEPARTMENT

DATE: 7/21/14 (Signature)

E

GENERAL NOTES

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.

UTILITY CONTACTS

TOBY KERSTEN
CITY OF CLINTONVILLE - STORM SEWER
50 TENTH ST
CLINTONVILLE, WI 54929
(715)823-7600
(715)250-0220 (MOBILE)
TKERSTEN@CLINTONVILLEWI.ORG

BRIAN ELLICKSON
CLINTONVILLE UTILITIES - ELECTRICITY
50 TENTH ST
CLINTONVILLE, WI 54929
(715)823-7600
(715)250-2870 (MOBILE)
BELLICKSON@CLINTONVILLEWI.ORG

JAMES JASKOLSKI
FRONTIER COMMUNICATION OF WI LLC - COMMUNICATION LINE
26 WEST 12TH ST
CLINTONVILLE, WI 54929
(715)823-1227
JAMES.JASKOLSKI@FTR.COM

Send all WE Energies Correspondence to:
WE ENERGIES (GAS)
ATTN: LATROY BRUMFIELD
333 W EVERET ST, A299
MILWAUKEE, WI 53203
(414)221-5617
LATROY.BRUMFIELD@WE-ENERGIES.COM

WE ENERGIES CONSTRUCTION FIELD CONTACT:
CODY BECKMAN
WE ENERGIES - GAS/PETROLEUM
800 S LYNDALE DR
APPLETON, WI 54914
(920)380-3422
(920)428-1038 (MOBILE)
CODY.BECKMAN@WE-ENERGIES.COM

BOB STANISLAWSKI
CLINTONVILLE UTILITIES - WATER
50 TENTH ST
CLINTONVILLE WI 54929
(715)823-760
(715)250-0200 (MOBILE)
BSTANISLAWSKI@CLINTONVILLEWI.ORG

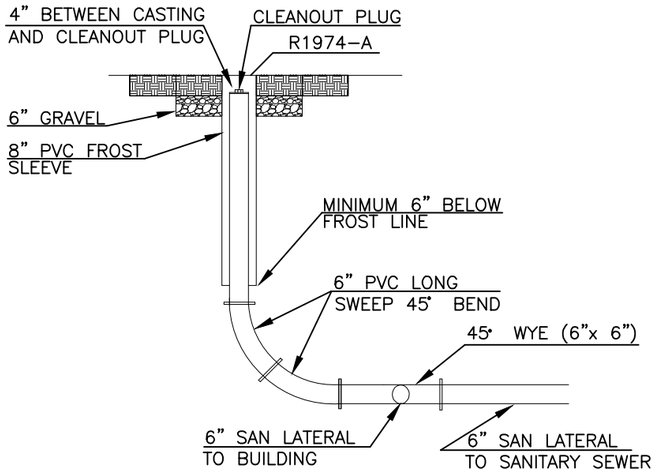
DARRELL TEALL
CLINTONVILLE UTILITIES - SANITARY
50 TENTH ST
CLINTONVILLE, WI 54929
(715)823-7600
(715)250-0067 (MOBILE)
DTEALL@CLINTONVILLEWI.ORG

RUDI RUDIGER
CHARTER COMMUNICATIONS - COMMUNICATION LINE
5025 HEFFRON ST
STEVENS POINT, WI 54481
(715)204-5339 (MOBILE)
RUDIRUDIGER@CHARTER.NET

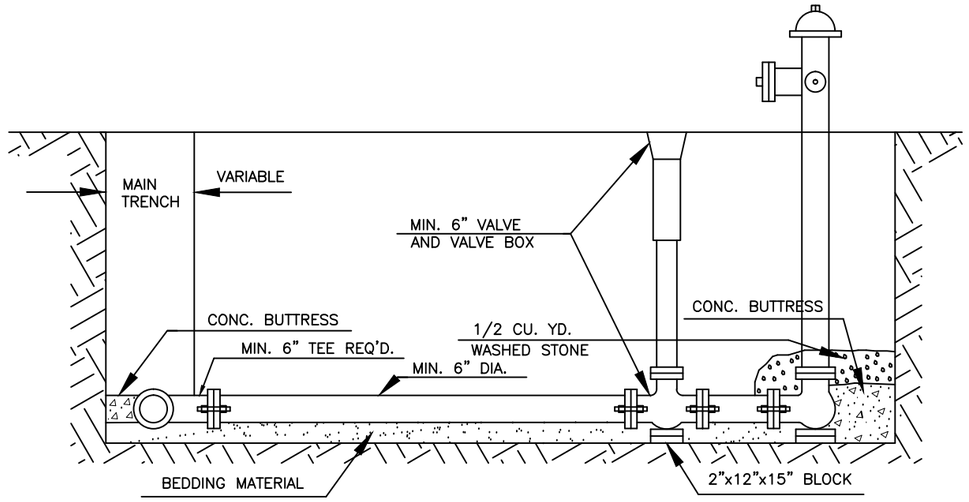
DIGGERS HOTLINE
Dial 811 or (800) 242-8511
www.DiggersHotline.com

WDNR CONTACT

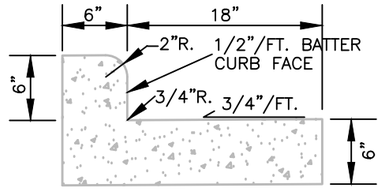
BOBBIE JO FISCHER
WDNR
WAUTOMA SERVICE CENTER
427 EAST TOWER DRIVE, SUITE 100
WAUTOMA, WI 54982
(920)787-3015
BOBBI.FISCHER@WISCONSIN.GOV



SANITARY CLEANOUT DETAIL

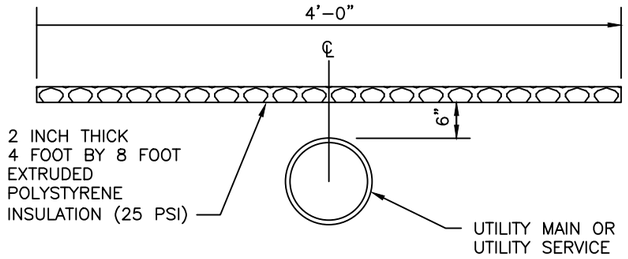


STANDARD HYDRANT ASSEMBLY



CONCRETE CURB & GUTTER 24-INCH, TYPE D

SCALE: NONE

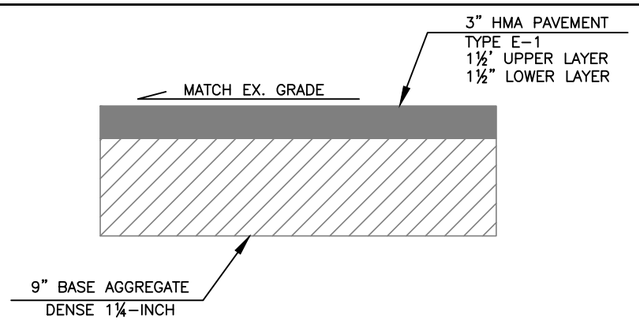


PIPE INSULATION DETAIL

SCALE: NONE

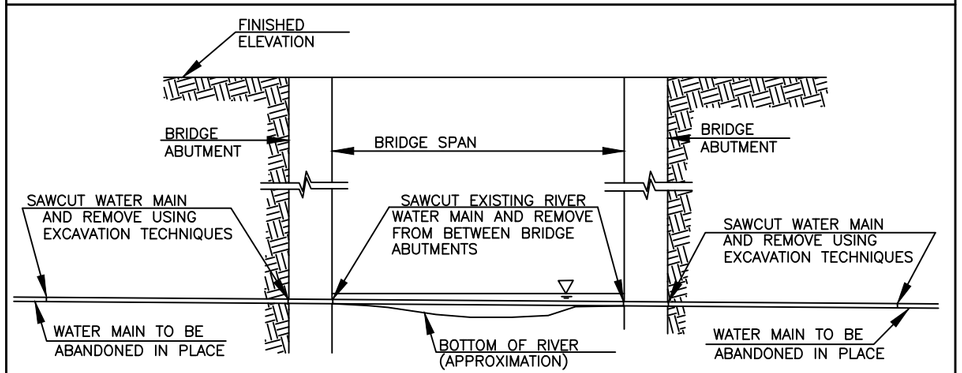
ALL SANITARY SEWER AND WATER MAIN CONSTRUCTION UNLESS NOTED OTHERWISE IN THE SPECIAL PROVISIONS SHALL COMPLY WITH APPLICABLE PROVISIONS OF 'STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN', 6TH EDITION, DATED DECEMBER 22, 2003, WITH ADDENDUM NO. 1 DATED DECEMBER 22, 2004 AND ADDENDUM NO. 2, DATED APRIL 22, 2008. APPLICABLE DETAIL DRAWINGS ARE AS FOLLOWS:

FILE NO. 3	COMPACTED SECTION (CLASS 'C' BEDDING)
FILE NO. 10E	RISER DETAIL 'TYPE D' FLEXIBLE RISER TO FLEXIBLE MAIN
FILE NO. 12A	FLEXIBLE WATERTIGHT FRAME/CHIMNEY SEALS
FILE NO. 13	STANDARD MANHOLE INVERTS
FILE NO. 24A	TRACER WIRE DETAIL
FILE NO. 24B	TRACER WIRE SPLICE CONNECTION DETAIL
FILE NO. 30	GO-NO GO MANDREL FOR FLEXIBLE PIPE
FILE NO. 30B	MANDREL DIMENSIONS
FILE NO. 36	STANDARD WATERMAIN TRENCH SECTION
FILE NO. 37	STANDARD GATE VALVE BOX SETTING
FILE NO. 38	STANDARD HYDRANT SETTING
FILE NO. 44	BUTTRESS FOR 45 DEG. & 90 DEG. BENDS
FILE NO. 44A	BUTTRESS FOR 11.25 DEG. & 22.5 DEG. BENDS
FILE NO. 46	BUTTRESS FOR TEES
FILE NO. 47A	RETAINING GLAND RESTRAINT
FILE NO. 50	STANDARD SECTION FOR BUILDING SEWER AND WATER SERVICES
FILE NO. 51	TAP SERVICE PIPING (COPPER)
FILE NO. 52	TAP SERVICE PIPING FROM NEW WATERMAIN TO EXISTING COPPER OR LEAD SERVICE



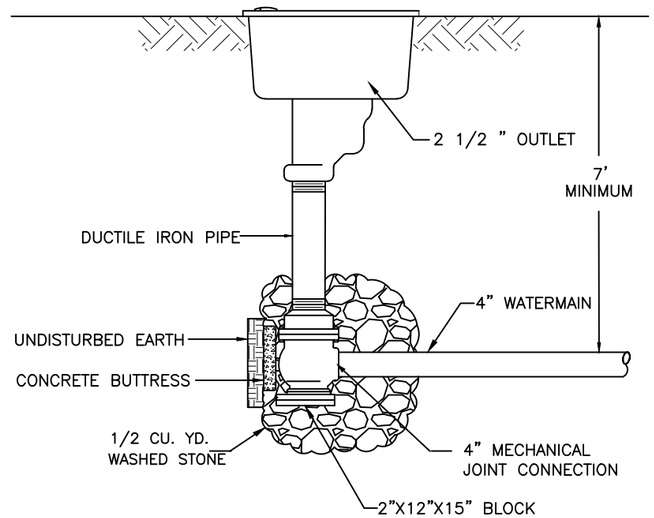
TYPICAL FINISHED SECTION

PARKING LOT
120+25 LT TO 120+43 LT
121+68 LT TO 123+41 LT



REMOVE EXISTING RIVER WATER MAIN DETAIL

SCHEMATIC ONLY
STA. 120+34, 23' LT. TO STA. 121+26, 23' LT.



FLUSHING HYDRANT DETAIL

DATE 21OCT14 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	6250-01-77 QUANTITY
0070	204.0110	REMOVING ASPHALTIC SURFACE	SY	298.000	298.000
0090	204.0150	REMOVING CURB & GUTTER	LF	20.000	20.000
0280	209.0100	BACKFILL GRANULAR	CY	200.000	200.000
0330	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	149.000	149.000
0490	465.0105	ASPHALTIC SURFACE	TON	52.000	52.000
0830	611.0535	MANHOLE COVERS TYPE J-SPECIAL	EACH	9.000	9.000
0990	612.0902.S	INSULATION BOARD POLYSTYRENE (INCH) 01. 2-INCH	SY	53.300	53.300
1010	619.1000	MOBILIZATION	EACH	0.100	0.100
1270	643.0300	TRAFFIC CONTROL DRUMS	DAY	90.000	90.000
1470	647.0656	PAVEMENT MARKING PARKING STALL EPOXY	LF	140.000	140.000
2050	690.0150	SAWING ASPHALT	LF	215.000	215.000
2260	SPV.0060	SPECIAL 40. ABANDON WATER SERVICE	EACH	9.000	9.000
2270	SPV.0060	SPECIAL 41. REMOVE HYDRANT & BRANCH PIPING	EACH	2.000	2.000
2280	SPV.0060	SPECIAL 42. REMOVE WATER VALVE & BOX	EACH	7.000	7.000
2290	SPV.0060	SPECIAL 43. REMOVE WATER VALVE MANHOLE & VALVE	EACH	2.000	2.000
2300	SPV.0060	SPECIAL 44. CORPORATION, CURB STOP & BOX	EACH	14.000	14.000
2310	SPV.0060	SPECIAL 45. WATER MAIN, 8"X6" REDUCER	EACH	3.000	3.000
2320	SPV.0060	SPECIAL 46. WATER MAIN, 8"X4" REDUCER	EACH	1.000	1.000
2330	SPV.0060	SPECIAL 47. WATER MAIN, 8" 90 DEGREE BEND	EACH	2.000	2.000
2340	SPV.0060	SPECIAL 48. WATER MAIN, 4" 90 DEGREE BEND	EACH	1.000	1.000
2350	SPV.0060	SPECIAL 49. WATER MAIN, 8"X8" CROSS	EACH	1.000	1.000
2360	SPV.0060	SPECIAL 50. WATER MAIN, 8"X6" TEE	EACH	4.000	4.000
2370	SPV.0060	SPECIAL 51. WATER MAIN, 8"X8" TEE	EACH	1.000	1.000
2380	SPV.0060	SPECIAL 52. WATER MAIN, 8" 45 DEGREE BEND	EACH	10.000	10.000
2390	SPV.0060	SPECIAL 53. WATER MAIN, 8" 22.5 DEGREE BEND	EACH	1.000	1.000
2400	SPV.0060	SPECIAL 54. WATER MAIN, 8" CUT-IN SLEEVE	EACH	2.000	2.000
2410	SPV.0060	SPECIAL 55. WATER MAIN, 6" CUT-IN SLEEVE	EACH	3.000	3.000
2420	SPV.0060	SPECIAL 56. WATER MAIN CONNECTION	EACH	6.000	6.000
2430	SPV.0060	SPECIAL 57. ADJUST WATER VALVE BOX	EACH	1.000	1.000
2440	SPV.0060	SPECIAL 58. 8" VALVE & VALVE BOX	EACH	8.000	8.000
2450	SPV.0060	SPECIAL 59. 6" VALVE & VALVE BOX	EACH	3.000	3.000
2460	SPV.0060	SPECIAL 60. HYDRANT	EACH	2.000	2.000
2470	SPV.0060	SPECIAL 61. FLUSHING HYDRANT	EACH	1.000	1.000
2480	SPV.0060	SPECIAL 62. REMOVE SANITARY MANHOLE	EACH	7.000	7.000
2490	SPV.0060	SPECIAL 63. SANITARY CONNECTION	EACH	6.000	6.000
2500	SPV.0060	SPECIAL 64. ABANDON SANITARY LATERAL	EACH	3.000	3.000
2510	SPV.0060	SPECIAL 65. REMOVE CLEAN OUT	EACH	1.000	1.000
2520	SPV.0060	SPECIAL 66. ADJUST SANITARY MANHOLE	EACH	1.000	1.000
2530	SPV.0060	SPECIAL 67. SANITARY MANHOLE, 4-FT W/ECCENTRIC TOP	EACH	9.000	9.000
2540	SPV.0060	SPECIAL 68. CHIMNEY SEAL	EACH	10.000	10.000
2550	SPV.0060	SPECIAL 69. WYE, PVC, 8"X6"	EACH	18.000	18.000
2560	SPV.0060	SPECIAL 70. CLEAN-OUT, PVC, 6-INCH	EACH	2.000	2.000
2570	SPV.0090	SPECIAL 01. CONCRETE CURB & GUTTER 24-INCH TYPE D	LF	20.000	20.000
2610	SPV.0090	SPECIAL 71. ABANDON WATER MAIN	LF	939.000	939.000
2620	SPV.0090	SPECIAL 72. REMOVE WATER MAIN	LF	237.000	237.000
2630	SPV.0090	SPECIAL 73. REMOVE WATER SERVICE	LF	336.000	336.000

DATE 21OCT14 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	6250-01-77 QUANTITY
2640	SPV.0090	SPECIAL 74. REMOVE EXISTING RIVER WATER MAIN	LF	92.000	92.000
2650	SPV.0090	SPECIAL 75. WATER MAIN, 4-INCH	LF	16.000	16.000
2660	SPV.0090	SPECIAL 76. WATER MAIN, 6-INCH	LF	76.000	76.000
2670	SPV.0090	SPECIAL 77. WATER MAIN, 8-INCH	LF	1,111.000	1,111.000
2680	SPV.0090	SPECIAL 78. WATER MAIN, STAKING	LF	1,203.000	1,203.000
2690	SPV.0090	SPECIAL 79. WATER SERVICE, HDPE, 1"	LF	592.000	592.000
2700	SPV.0090	SPECIAL 80. ABANDON EXISTING SANITARY	LF	56.000	56.000
2710	SPV.0090	SPECIAL 81. REMOVE SANITARY SEWER	LF	987.000	987.000
2720	SPV.0090	SPECIAL 82. REMOVE SANITARY LATERAL	LF	533.000	533.000
2730	SPV.0090	SPECIAL 83. SANITARY LATERAL, PVC, 6-INCH	LF	559.000	559.000
2740	SPV.0090	SPECIAL 84. SANITARY SEWER, 8-INCH	LF	451.000	451.000
2750	SPV.0090	SPECIAL 85. SANITARY SEWER, 10-INCH	LF	702.000	702.000
2760	SPV.0090	SPECIAL 86. SANITARY SEWER, 12-INCH	LF	60.000	60.000
2770	SPV.0090	SPECIAL 87. SANITARY SEWER STAKING	LF	1,213.000	1,213.000

WATER MAIN

STREET	FROM STATION	FROM LOCATION	TO STATION	TO LOCATION	SPV.0090.75 4-INCH LF	SPV.0090.76 6-INCH LF	SPV.0090.77 8-INCH LF	SPV.0090.78 STAKING LF
MAIN STREET	120+33	23' LT	120+33	34' LT	11	-	-	11
MAIN STREET	120+33	34' LT	FLUSHING HYDRANT		5	-	-	5
11TH STREET	122+09	51.4' RT	122+09	12.5' LT	-	-	64	64
MAIN STREET	122+09	12.5' LT	124+31.6	12.0' LT	-	-	223	223
MAIN STREET	123+75	12.0' LT	HYDRANT		-	27	-	27
W. 12TH STREET	124+31.6	12.0' LT	124+32.5	90.0' LT	-	-	78	78
E. 12TH STREET	124+31.6	12.0' LT	124+30.7	45.0' RT	-	-	57	57
MAIN STREET	124+31.6	12.0' LT	130+16.5	12.0' LT	-	-	585	585
MAIN STREET	125+18.9	12.0' LT	125+18.9	39.0' LT	-	27	-	27
MAIN STREET	129+74.5	12.0' LT	HYDRANT		-	22	-	22
W. 13TH STREET	130+16.5	12.0' LT	130+16.5	55.2' LT	-	-	43	43
MAIN STREET	130+16.5	12.0' LT	130+70.0	12.0' LT	-	-	54	54
MAIN STREET	130+70.0	12.0' LT	130+75.0	17.0' LT	-	-	7	7
				TOTALS	16	76	1111	1203

ABANDON WATER MAIN

FROM STATION	FROM LOCATION	TO STATION	TO LOCATION	SPV.0090.71 WATER MAIN LF
121+45	22' LT	124+32	16' LT	287
122+09	13' LT	122+09	22' LT	9
124+32	16' LT	125+89	15' LT	157
125+89	15' LT	130+16	16' LT	427
130+16	16' LT	130+75	17' LT	59
			TOTALS	939

REMOVE WATER MAIN

FROM STATION	FROM LOCATION	TO STATION	TO LOCATION	SPV.0090.72 WATER MAIN LF	SPV.0090.74 EXISTING RIVER WATER MAIN LF
120+34	23' LT	121+26	23' LT	-	92
122+09	12' LT	122+09	51' RT	63	-
124+31.6	12' LT	124+30.7	45' RT	57	-
124+31.6	12' LT	124+32.5	90' LT	78	-
130+16.5	12' LT	130+16.5	55' LT	43	-
			TOTALS	237	92

WATER MAIN FITTINGS

STATION	LOCATION	SPV.0060.45 8"X6" REDUCER EACH	SPV.0060.46 8"X4" REDUCER EACH	SPV.0060.47 8" 90 DEG. BEND EACH	SPV.0060.48 4" 90 DEG. BEND EACH	SPV.0060.49 8"X8" CROSS EACH	SPV.0060.50 8"X6" TEE EACH	SPV.0060.51 8"X8" TEE EACH	SPV.0060.52 8" 45 DEG. BEND EACH	SPV.0060.53 8" 22-1/2 DEG. BEND EACH	SPV.0060.54 8" CUT-IN SLEEVE EACH	SPV.0060.55 6" CUT-IN SLEEVE EACH
120+33	23' LT	-	-	1	-	-	-	-	-	-	-	-
120+33	24' LT	-	1	-	-	-	-	-	-	-	-	-
120+33	34' LT	-	-	-	1	-	-	-	-	-	-	-
122+09	51.4' RT	1	-	-	-	-	-	-	-	-	-	1
122+09	39' RT	-	-	-	-	-	1	-	-	-	-	-
122+09	19' RT	-	-	-	-	-	-	-	1	-	-	-
122+09	17' RT	-	-	-	-	-	-	-	1	-	-	-
122+09	7' RT	-	-	-	-	-	-	-	1	-	-	-
122+09	3' RT	-	-	-	-	-	-	-	1	-	-	-
122+09	12.0' LT	-	-	1	-	-	-	-	-	-	-	-
123+27	12' LT	-	-	-	-	-	-	-	1	-	-	-
123+42	12' LT	-	-	-	-	-	-	-	1	-	-	-
123+49	12' LT	-	-	-	-	-	-	-	1	-	-	-
123+63	12' LT	-	-	-	-	-	-	-	1	-	-	-
123+75	12.0' LT	-	-	-	-	-	1	-	-	-	-	-
124+31.6	12.0' LT	-	-	-	-	1	-	-	-	-	-	-
124+32.5	90.0' LT	1	-	-	-	-	-	-	-	-	-	1
124+30.7	45.0' RT	-	-	-	-	-	-	-	-	-	1	-
125+18.9	12.0' LT	-	-	-	-	-	1	-	-	-	-	-
129+05	12.0' LT	-	-	-	-	-	-	-	-	1	-	-
129+74.5	12.0' LT	-	-	-	-	-	1	-	-	-	-	-
130+16.5	12.0' LT	-	-	-	-	-	-	1	-	-	-	-
130+16.5	55.2' LT	1	-	-	-	-	-	-	-	-	-	1
130+70.0	12.0' LT	-	-	-	-	-	-	-	1	-	-	-
130+75.0	17.0' LT.	-	-	-	-	-	-	-	1	-	1	-
	TOTALS	3	1	2	1	1	4	1	10	1	2	3

WATER MAIN REMOVALS

STATION	LOCATION	SPV.0060.42 WATER VALVE & BOX EACH	SPV.0060.41 HYDRANT & BRANCH PIPING EACH	SPV.0060.43 WATER VALVE MANHOLE & VALVE EACH
121+30	23' LT	1	-	-
122+09	18' LT	1	-	-
124+32	12' LT	1	-	-
124+32	19' RT	1	-	-
124+52	40' LT	-	1	-
124+57	19' RT	-	-	1
125+89	15' LT	-	-	1
130+12	26' RT	1	-	-
130+15.5	40' LT	1	-	-
130+35	26' LT	-	1	-
130+35	24' LT	1	-	-
	TOTALS	7	2	2

REMOVE WATER SERVICE

STATION	LOCATION TO CURB STOP	SPV.0090.73 WATER SERVICE LF
125+18	35' LT	20
125+44	36' RT	52
125+63	36' RT	52
125+85	36' RT	51
126+75	35' RT	50
127+09	35' LT	20
127+81	38' RT	53
128+33	34' LT	19
128+37	34' LT	19
	TOTAL	336

ABANDON WATER SERVICE

STATION	LOCATION TO CURB STOP	SPV.0060.40 WATER SERVICE EACH
121+73	LT	1
123+14	RT	1
123+27	RT	1
123+58	RT	1
123+69	RT	1
126+32	RT	1
127+33	RT	1
128+48	RT	1
130+12	RT	1
	TOTAL	9

ADJUST WATER VALVE BOX

STATION	LOCATION	SPV.0060.57 EACH
120+32.0	23' LT	1
	TOTAL	1

WATER MAIN CONNECTION

STATION	LOCATION	SPV.0060.56 EACH
122+09	51.4' RT	1
122+09	39.0' RT.	1
124+32.5	90.0' LT	1
124+30.7	45.0' RT	1
130+16.5	55.2' LT	1
130+75	17.0' LT	1
	TOTAL	6

VALVES

STATION	LOCATION TO CURB STOP	SPV.0060.58 8" VALVE & VALVE BOX EACH	SPV.0060.59 6" VALVE & VALVE BOX EACH
122+09	47.5' RT	1	-
123+75	20' LT	-	1
123+91.3	12.0' LT	1	-
124+32.5	84.0' LT	1	-
124+30.7	42.0' RT	1	-
124+39.5	12.0' LT	1	-
125+18.9	36.0' LT	-	1
129+74.5	27' LT	-	1
129+79.5	12.0' LT	1	-
130+15.5	43.1' LT	1	-
130+24.0	12.0' LT	1	-
	TOTALS	8	3

HYDRANTS

STATION	LOCATION	SPV.0060.60 HYDRANT EACH	SPV.0060.61 FLUSHING HYDRANT EACH
120+38	34' LT	-	1
123+75	39' LT	1	-
129+74.5	34' LT	1	-
	TOTALS	2	1

WATER SERVICE

STATION	LOCATION TO CURB STOP	SPV.0090.79 WATER SERVICE HDPE, 1" LF	SPV.0060.44 CORPORATION, CURB STOP & BOX EACH
121+73	37' LT	44	1
123+14	36' RT	48	1
123+27	36' RT	48	1
123+58	36' RT	48	1
123+69	36' RT	48	1
125+44	36' RT	48	1
125+63	36' RT	48	1
125+85	36' RT	48	1
126+75	35' RT	47	1
127+09	35' LT	23	1
127+81	38' RT	50	1
128+33	34' LT	22	1
128+37	34' LT	22	1
128+55	36' RT	48	1
	TOTALS	592	14

SANITARY SEWER

LOCATION	FROM	TO	DISCHARGE ELEVATION	INLET ELEVATION	SLOPE	SPV.0090.84 8-INCH LF	SPV.0090.85 10-INCH LF	SPV.0090.86 12-INCH LF	SPV.0090.87 STAKING LF
11TH STREET	1A	1	797.44	797.57	0.30%	45	-	-	45
MAIN STREET	1	2	797.57	798.03	0.30%	154	-	-	154
MAIN STREET	2	3	798.03	798.22	0.30%	62	-	-	62
MAIN STREET	3	4	798.22	798.64	0.30%	144	-	-	144
MAIN STREET	5	6	798.67	804.37	2.63%	-	217	-	217
W. 12TH STREET	5B	5	798.67	799.15	0.77%	-	-	60	60
MAIN STREET	6	7	804.37	815.45	3.45%	-	321	-	321
MAIN STREET	7	7A	816.37	FIELD VERIFY		46	-	-	46
MAIN STREET	7	8	815.45	816.85	3.45%	-	41	-	41
W. 13TH STREET	8	8A	817.85	818.07	0.40%	-	55	-	55
MAIN STREET	8	9	816.85	817.60	1.11%	-	68	-	68
					TOTALS	451	702	60	1213

REMOVE SANITARY MANHOLE

STATION	LOCATION	SPV.0060.62 EACH
121+97	38' RT.	1
122+38	0' RT.	1
123+80	0' RT.	1
124+21.5	0.5' RT.	1
125+12	2' LT.	1
129+60	0' RT.	1
130+00	38' LT.	1
	TOTAL	7

REMOVE SANITARY SEWER

FROM STATION	FROM LOCATION	TO STATION	TO LOCATION	SPV.0090.81 LF
121+97	45' RT	121+97	38' RT	7
121+97	38' RT	122+38	0' RT	57
122+38	0' RT	123+80	0' RT	142
124+21.5	0.5' RT	204+10	1.2' RT	90
124+21.5	0.5' RT	129+60	0' RT	538
129+60	0' RT	129+92	33' RT	46
129+60	0' RT	130+67	0' RT	107
			TOTAL	987

TRAFFIC CONTROL

STATION	TO	STATION	LOCATION	ITEM 643.0300 DRUMS DAY	REMARKS
121+62	-	123+40	60' LT	90	SPACING 10' APART

SANITARY SEWER INSULATION

FROM STATION	FROM LOCATION	TO STATION	TO LOCATION	ITEM 612.0902.S INSULATION BOARD POLYSTYRENE, 2-INCH* SY
121+86	46.3' LT.	122+60	46.3' LT	39.1
			TOTAL	39.1

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SANITARY CONNECTION

REFERENCE	LOCATION	STATION	LOCATION	SPV.0060.63 MAIN EACH
1A	11TH STREET	121+97	45' RT	1
5A	12TH STREET	124+22.5	2.5' RT	1
5B	12TH STREET	124+23	90' LT	1
7A	MAIN STREET	129+91.7	33' RT	1
8A	13TH STREET	130+01	55' LT	1
	MAIN STREET	130+71	0' RT	1
			TOTAL	6

ABANDON SANITARY

FROM STATION	FROM LOCATION	TO STATION	TO LOCATION	SPV.0090.80 EXISTING SANITARY LF	SPV.0060.64 SANITARY LATERAL EACH
121+64	LT				1
126+33	RT				1
127+37	RT				1
129+60.4	0' RT	130+00	38' LT.	56	
			TOTALS	56	3

SANITARY MANHOLES

MANHOLE	STATION	LOCATION	SPV.0060.67 MANHOLES 4-FT DIAMETER W/ ECCENTRIC TOP EACH	ITEM 611.0535 MANHOLE COVER TYPE J-SPECIAL EACH	SPV.0060.68 CHIMNEY SEAL* EACH
1	121+97	12' RT	1	1	1
2	123+51	12' RT	1	1	1
3	123+29.5	46.3' LT	1	1	1
4	121+86	46.3' LT	1	1	1
5	124+21.5	0.5' RT	1	1	1
6	126+39	0' RT	1	1	1
7	129+60.4	0' RT	1	1	1
8	130+01	0' RT	1	1	1
9	130+69	0' RT	1	1	1
		TOTALS	9	9	9

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVE SANITARY LATERALS

STATION	LOCATION	SPV.0090.82 SANITARY LATERAL LF	SPV.0060.65 CLEAN OUT EACH
122+15	LT	4	1
123+12	RT	24	-
123+25	RT	24	-
123+37	RT	32	-
123+48	RT	32	-
124+54	RT	35	-
125+16	LT	35	-
125+42	RT	35	-
125+60	RT	35	-
125+82	RT	35	-
126+76	RT	35	-
127+11	LT	35	-
127+85	RT	35	-
128+30	LT	34	-
128+39	LT	34	-
128+51	RT	36	-
129+66	LT	33	-
	TOTALS	533	1

SAWING PAVEMENT

FROM STATION	FROM LOCATION	TO STATION	TO LOCATION	ITEM 690.0150 SAWING ASPHALT LF
120+25	36' LT	120+25	43' LT	7
120+25	43' LT	120+42	43' LT	17
121+68	55' LT	123+41	55' LT	173
123+41	37' LT	123+41	55' LT	18
			TOTALS	215

ADJUST SANITARY MANHOLE

STATION	LOCATION	SPV.0060.66 EACH	SPV.0060.68 CHIMNEY SEAL* EACH
120+03	0' RT.	1	1
		TOTAL 1	TOTAL 1

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SANITARY LATERALS

STATION	LOCATION	SPV.0090.83 SANITARY LATERAL PVC 6-INCH LF	SPV.0060.69 WYE PVC 8"X6" EACH	SPV.0060.70 CLEAN-OUT PVC 6-INCH EACH	ITEM 612.0902.S INSULATION BOARD POLYSTYRENE, 2-INCH* SY
121+64	LT	26	1	1	14.2
122+15	LT	4	1	-	-
123+12	RT	24	1	-	-
123+25	RT	24	1	-	-
123+37	RT	32	1	-	-
123+48	RT	32	1	-	-
124+54	RT	35	1	-	-
125+16	LT	35	1	-	-
125+42	RT	35	1	-	-
125+60	RT	35	1	-	-
125+82	RT	35	1	-	-
126+76	RT	35	1	-	-
127+11	LT	35	1	-	-
127+85	RT	35	1	-	-
128+30	LT	34	1	-	-
128+39	LT	34	1	-	-
128+51	RT	36	1	-	-
129+66	LT	33	1	1	-
		TOTALS 559	18	2	14.2

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

NOTE: THE LOCATION OF EXISTING SANITARY LATERALS IS APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL EXISTING SANITARY LATERALS PRIOR TO CONSTRUCTION OF NEW SANITARY LATERAL.

REMOVE & REPLACE ASPHALT PAVEMENT

FROM STATION	FROM LOCATION	TO STATION	TO LOCATION	ITEM 204.0110 REMOVING ASPHALTIC SURFACE SY	ITEM 305.0120 BASE AGGREGATE DENSE, 1-1/4" TON	ITEM 465.0105 ASPHALTIC SURFACE TON
120+25	36' LT TO 43' LT	120+40, 36' LT TO	120+43, 43' LT	12	6	2
121+68	46' LT TO 55' LT	122+14	46' LT TO 55' LT	46	23	8
122+14	38' LT TO 55' LT	123+41	38' LT TO 55' LT	240	120	42
			TOTALS	298	149	52

PAVEMENT MARKING

STATION	TO	STATION	LOCATION	ITEM 647.0656 PARKING STALL EPOXY (WHITE) LF
122+65	-	123+49	LT	140

REMOVE & REPLACE CURB & GUTTER

FROM STATION	FROM LOCATION	TO STATION	TO LOCATION	ITEM 204.0150 REMOVING CURB & GUTTER LF	SPV.0090.01 CONCRETE CURB & GUTTER 24-INCH, TYPE D LF
123+23	37' LT	123+43	37' LT.	20	20
			TOTALS	20	20

BACKFILL GRANULAR

LOCATION	ITEM 209.0100 CY
UNDISTRIBUTED	200

SCALES:
1" = 50' HOR
1" = 10' VER

NOTE A
EX. WATER SERVICES FOR DEN SERVICES INC., BITS N SPURS PUB, CLINTONVILLE AMBULANCE OFFICE AND THE CHAMBER OF COMMERCE EXTEND WEST TO CURB, THEN NORTH TO 12TH STREET WATERMAIN.

NOTE B
SAWCUT & REMOVE EX. CURB & GUTTER. 20 LF OF 24" TYPE D CONC. CURB & GUTTER REQ'D

FLUSHING HYDRANT
4' 90° BEND
16' - 4' WM
8"X4" REDUCER
8' 90° BEND
120+38.5, 34.0' LT

SAWCUT REQUIRED

REMOVE & REPLACE EX. ASPHALT SURFACE SEE DETAIL

WATERMAIN TO REMAIN

ADJUST WATER VALVE BOX.

ADJUST SANITARY MANHOLE

REMOVE EXISTING RIVER WATERMAIN

REMOVE WATER VALVE & BOX

ABANDON WATERMAIN

REMOVE & REPLACE EX. ASPHALT SURFACE SEE DETAIL

STA 121+86, 46.3' LT
SANITARY MANHOLE 4

CONSTRUCT & INSULATE 6' SANITARY LATERAL. CLEAN-OUT REQ'D. CONSTRUCT 1" WATER SERVICE. CONNECT TO EX. SERVICES.

REMOVE WATER VALVE & BOX

ABANDON SANITARY LATERAL

STA 121+97, 12' RT
SANITARY MANHOLE 1

REMOVE SANITARY MANHOLE

STA 121+97, 45' RT
SANITARY CONNECTION 1A

REMOVE WATER VALVE & BOX

90° BEND (HORIZ) & BEGIN HORIZONTAL DEFLECTION
122+09, 12.5' LT

REMOVE CLEAN-OUT
CONNECT SAN LATERAL TO NEW SANITARY SEWER

173'

SAWCUT REQUIRED

45'

109'

ABANDON WATERMAIN

REMOVE SANITARY SEWER

REMOVE SANITARY SEWER & MANHOLE

CONNECT EXISTING 6' HYDRANT LEAD TO 8" WM. 8"x6" TEE 122+09, 39' RT.

8" VALVE & VALVE BOX 122+09, 47.5' RT

CONNECT TO EXISTING 6" WM W/ 8" X 6" REDUCER FIELD VERIFY HORIZ & VERT
122+09, 51.4' RT

11th ST.

STA 123+29.5, 46.3' LT
SANITARY MANHOLE 3

CONSTRUCTION PERMIT LIMITS
121+62 TO 123+40, 65' LT.

CONNECT TO EXISTING 6" WM W/ 8" X 6" REDUCER FIELD VERIFY HORIZ & VERT
124+32.5, 90.0' LT

STA 124+23, 90' LT
SANITARY CONNECTION 5B

STANDARD HYDRANT
6' VALVE & VALVE BOX
27' - 6" WM
8" X 6" TEE
123+75, 39.0' LT

SEE NOTE B

8" VALVE & VALVE BOX
123+91.3, 12.0' LT

8" X 8" CROSS
124+31.6, 12.0' LT

STA 123+51, 12' RT
SANITARY MANHOLE 2

CONSTRUCT 6' SAN LATERAL & 1" WATER SERVICE. (TYP)
CONNECT TO EXISTING SERVICES.

12th ST.

SEE NOTE A

6' VALVE & VALVE BOX
27' - 6"WM
8" X 6" TEE
125+18.9, 12.0' LT

8" VALVE & VALVE BOX
124+32.5, 84.0' LT

REMOVE HYDRANT & BRANCH PIPING RETURN HYDRANT TO CITY OF CLINTONVILLE

8" VALVE & VALVE BOX
124+39.5, 12.0' LT

REMOVE WATER VALVE MANHOLE & VALVE

ABANDON WATER MAIN

REMOVE WATER VALVES & BOXES

REMOVE SANITARY MANHOLE

6' SANITARY LATERAL

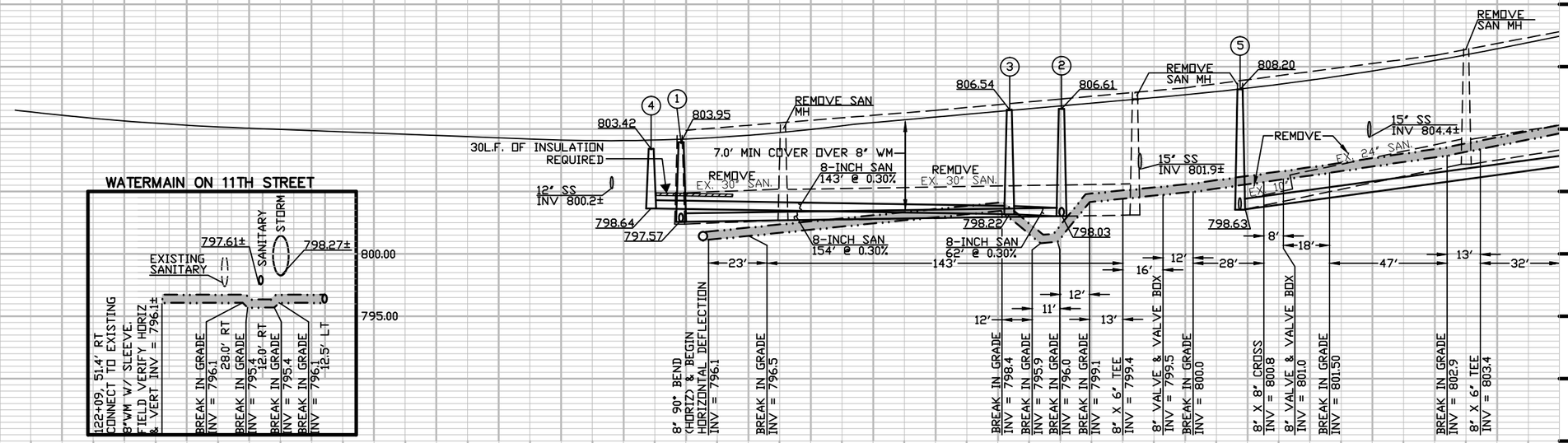
STA 124+21.5, 0.5' RT
SANITARY MANHOLE 5

STA 124+21.5, 2.5' RT
SANITARY CONNECTION 5A

8" VALVE & VALVE BOX
124+30.7, 42.0' RT

CONNECT TO EXISTING 8" WM FIELD VERIFY HORIZ & VERT
124+30.7, 45.0' RT

WATERMAIN ON 11TH STREET

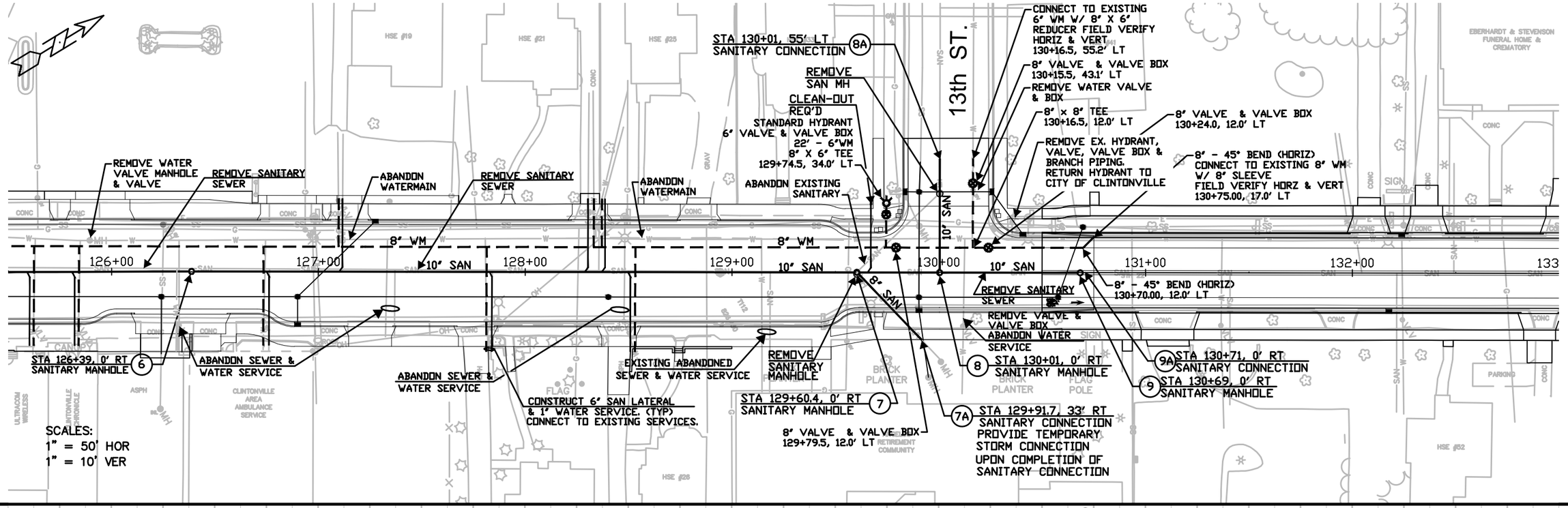


805.31 | 804.49 | 804.21 | 805.96 | 807.74 | 810.49

815 810 805 800 795 790 785 780

118+00 118+50 119+00 119+50 120+00 120+50 121+00 121+50 122+00 122+50 123+00 123+50 124+00 124+50 125+00 125+50

PROJECT NO: 6250-01-77	HWY: STH 22	COUNTY: WAUPACA	SANITARY SEWER / WATER MAIN	SHEET 8	E



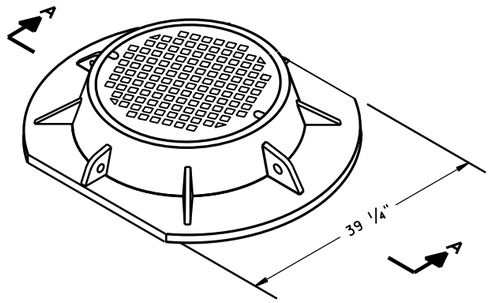
PROJECT NO: 6250-01-77	HWY: STH 22	COUNTY: WAUPACA	SANITARY SEWER / WATER MAIN	SHEET	E

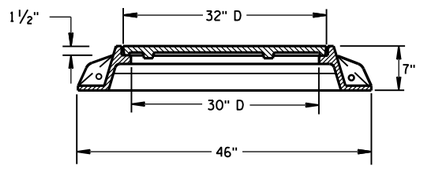
Standard Detail Drawing List

08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M

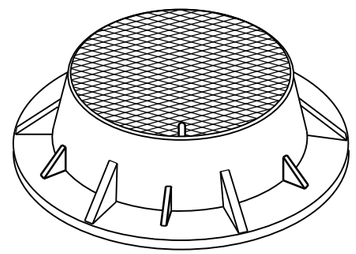
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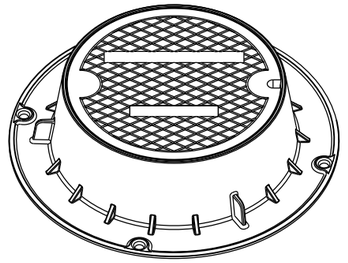
6

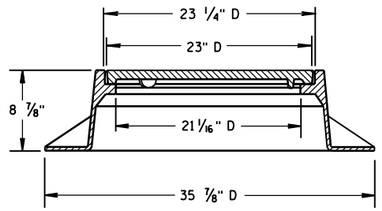


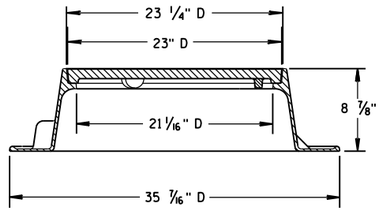


SECTION A-A
TYPE "K"









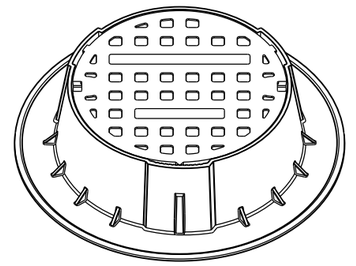
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

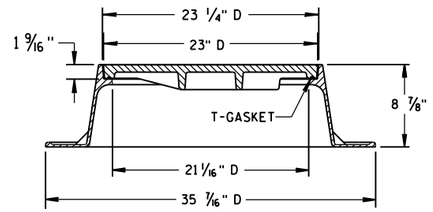
GENERAL NOTES

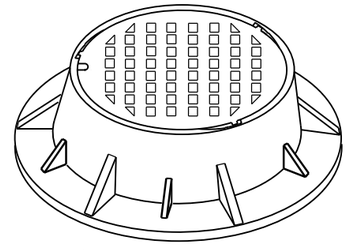
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

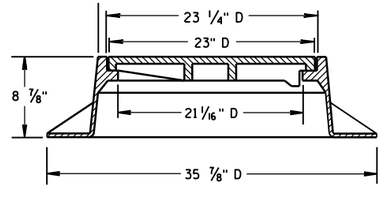
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

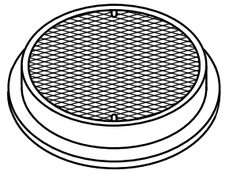


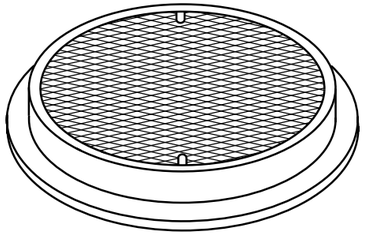


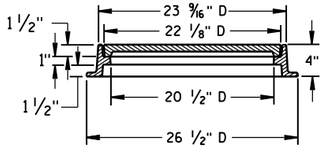




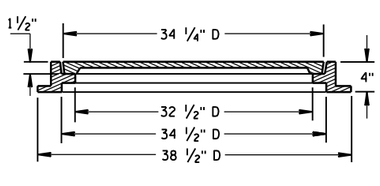
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



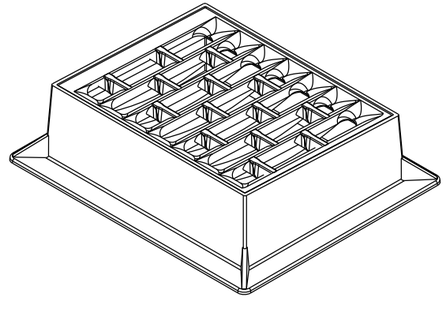


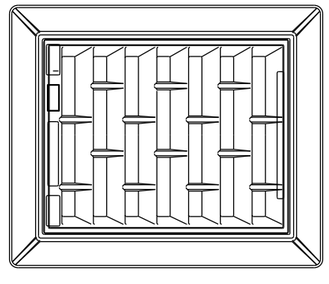


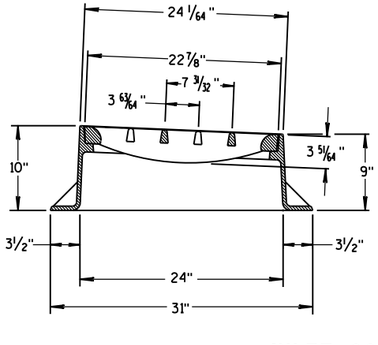
TYPE "L"

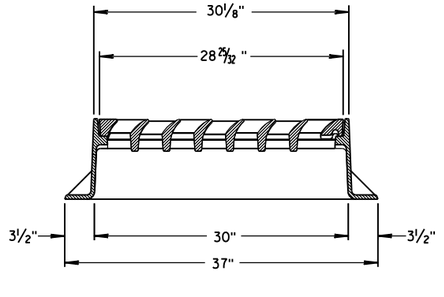


TYPE "M"









INLET COVER TYPE "BW"

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

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

Wisconsin Department of Transportation

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