NWL MAY 2013

PROJECT ID: 8997-00-32
WITH:

COUNTY: BARRON

ORDER OF SHEETS

TOTAL SHEETS = 54

PROJECT LOCATION

50

DESIGN DESIGNATION

A.D.T. (2011)	= 950
A.D.T. (2033)	= 1250
D.H.V.	= 213
D.D.	= 50/50
T. (A.D.T.)	= 2.8%
DESIGN SPEED	= 30 MPH
ESALS	= 240,900

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
- TREE (WITH DIAMETER), CONIFEROUS, DECIDUOUS (30, 30)
- SIGN
- DETECTABLE WARNING FIELD

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 (S)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- WATER VALVE
- FIRE HYDRANT
- WATER SERVICE CURB STOP (C.S.)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE
- STORM SEWER MANHOLE (ST)
- SANITARY SEWER MANHOLE (S)
- GAS VALVE
- STORM SEWER INLET-SQUARE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
CITY OF RICE LAKE, MARSHALL STREET
(WILSON AVENUE – MAIN STREET)
LOCAL STREET
BARRON COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
8997-00-32	WISC 2013292	1

STATE PROJECT NUMBER
8997-00-32

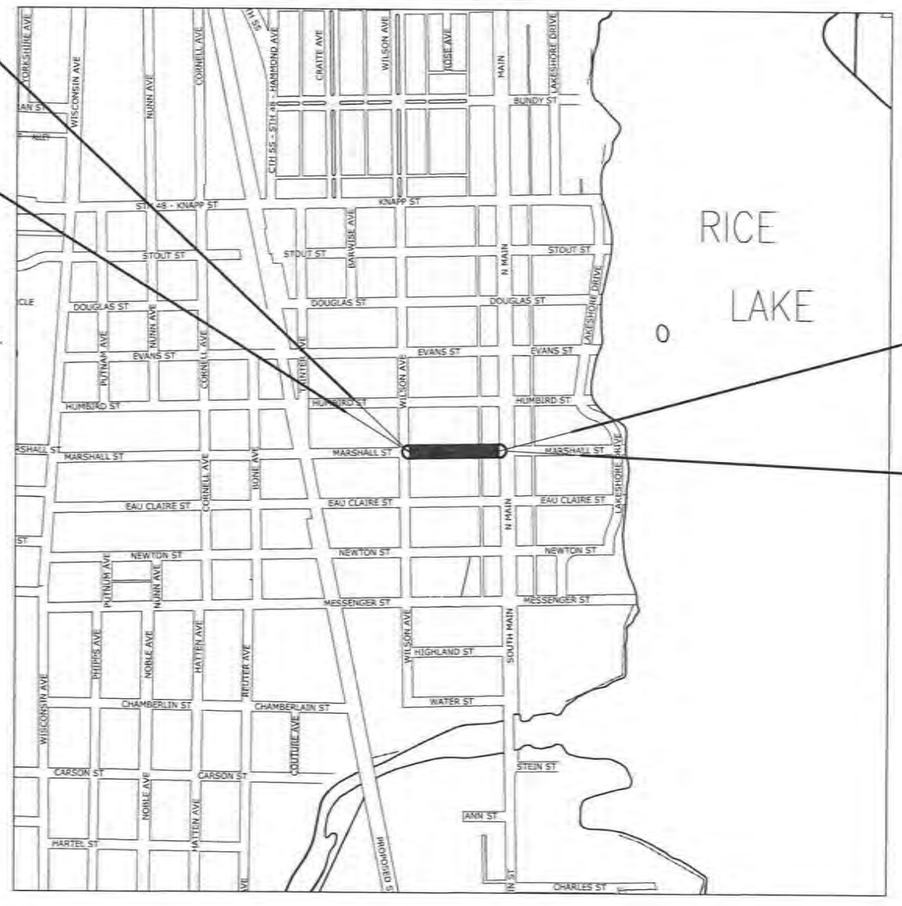
R-11-W

T.-35-N.

N

BEGIN CONSTRUCTION
STA. 100+24.75
Y = 135,309
X = 334,830

BEGIN PROJECT
STA. 100+34.51
Y = 135,310
X = 334,840



END PROJECT
STA. 106+28.50
Y = 135,321
X = 335,434

END CONSTRUCTION
STA. 106+92
Y = 135,323
X = 335,497

LAYOUT
SCALE 0 500 ft

TOTAL NET LENGTH OF CENTERLINE = 0.112 MI.

COORDINATE NOTE:
COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, BARRON COUNTY.

ACCEPTED FOR

CITY of RICE LAKE

1-14-13 (Date) Steve Hannington (Signature)

Mayor (Title)

PREPARED BY

WISCONSIN PROFESSIONAL ENGINEER
AARON SCHARF
E-37704
RICE LAKE
WI
1-14-13

COOPER ENGINEERING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	COOPER ENGINEERING
Designer	COOPER ENGINEERING
Management Consultant	KNIGHT E/A INC.
C.O. Examiner	

APPROVED FOR THE DEPARTMENT

DATE: 1/25/2013

Ryan B McKane
Management Consultant Signature

E

FILE NAME: G:\2011-proj\11115081\DWG\010101_tl.dwg PLOT DATE: Jan 09, 2013 - 08:15am PLOT BY:Owner PLOT NAME: CEC-PLAN ORG. DATE: Dec 05, 2007 Originator : Originator PLOT SCALE : Half-Scale

LIST OF STANDARD ABBREVIATIONS

ABUT	ABUTMENT
AC	ACRES
AGG	AGGREGATE
AH	AHEAD
ADT	AVERAGE DAILY TRAFFIC
AVG.	AVERAGE
ASPH	ASPHALTIC
BK.	BACK
BM	BENCHMARK
△	CENTRAL ANGLE OR DELTA
℄ , C/L	CENTERLINE
C & G	CURB AND GUTTER
CABC	CRUSHED AGGREGATE BASE COURSE
CONC.	CONCRETE
COR	CORNER
CORR	CORRUGATED
CSCP	CORRUGATED STEEL CULVERT PIPE
CSPA	CORRUGATED STEEL PIPE ARCH
CTH	COUNTY TRUNK HIGHWAY
CP.	CULVERT PIPE
CY	CUBIC YARD
CWT.	HUNDREDWEIGHT
DIA	DIAMETER
D	DEGREE OF CURVE
DHV	DESIGN HOURLY VOLUME
DWY	DRIVEWAY
EBS	EXC. BELOW SUB GRADE
ELEV., EL	ELEVATION
ELEC.	ELECTRIC
EXC	EXCAVATION
EXIST	EXISTING
E	EAST
FE	FIELD ENTRANCE
FF.	FACE TO FACE
FL, F/L	FLOW LINE
G	GARAGE
GN	GRID NORTH
H	HOUSE
HYD	HYDRANT
I	INTERSECTION ANGLE
INTERS	INTERSECTION
INV.	INVERT
IP	IRON PIN OR PIPE
LC	LONG CHORD OF CURVE
LF	LINEAR FOOT
LHF	LEFT HAND FORWARD
L	LENGTH OF CURVE
LT.	LEFT
LS	LUMP SUM
MH	MANHOLE
N	NORTH
PAVT	PAVEMENT
PC	POINT OF CURVATURE
PE	PRIVATE ENTRANCE
PI	POINT OF INTERSECTION
PL	PROPERTY LINE
PP	POWER POLE
PT	POINT OF TANGENCY
R	RANGE , RADIUS
RCCP	REINFORCED CONCRETE CULVERT PIPE
RD	ROAD
REBAR	REINFORCEMENT BAR
REQD	REQUIRED
RDWY	ROADWAY
RHF	RIGHT HAND FORWARD
RL, R/L	REFERENCE LINE
RR	RAILROAD
RT.	RIGHT
R/W, ROW	RIGHT-OF-WAY
S	SOUTH
SAN S	SANITARY SEWER
SDD	STANDARD DETAIL DRAWING
SE	SUPER ELEVATION
SF.	SQUARE FEET
SHLDR	SHOULDER
SPECS	SPECIFICATIONS
SQ.	SQUARE
SS.	STORM SEWER
SY.	SQUARE YARD
STH	STATE TRUNK HIGHWAY
ST.	STREET
STA.	STATION
SW	SIDEWALK
T	TANGENT
TC	TOP OF CURB
℡ , T/L	TRANSIT LINE
TEL	TELEPHONE
TEMP	TEMPORARY
TLE	TEMPORARY LIMITED EASEMENT
TYP	TYPICAL
USH	UNITED STATES HIGHWAY
UG	UNDERGROUND
V	DESIGN SPEED
VAR.	VARIABLE
VERT	VERTICAL
YD	YARD

UTILITIES

ELECTRIC
RICE LAKE UTILITIES
ATTN.: LEO DIEHL
320 W. COLEMAN
RICE LAKE, WI 54868
TEL.: 715-234-7004
EMAIL: leod@ricelakeutilities.com

CABLE TELEVISION
CHARTER COMMUNICATIONS
ATTN.: TOM HAASE
2304 S. MAIN ST.
RICE LAKE, WI 54868
TEL.: 715-234-5341
EMAIL: thomas.haase@chartercom.com

TELEPHONE
CENTURYLINK
ATTN.: REED LECHNIR
20 S. WILSON STREET
RICE LAKE, WI 54868
TEL.: 715-234-5526
EMAIL: reed.lechnir@centurylink.com
FAX.: 715-234-1483

NATURAL GAS
WE ENERGIES
ATTN.: LEWIS KNAPP
104 W. SOUTH STREET
RICE LAKE, WI 54868
TEL.: 715-234-9605
EMAIL: lewis.knapp@we-energies.com
EMERGENCY TEL.:
GAS: 800-261-5325
ELECTRIC: 800-662-4797

WATER & SANITARY SEWER
RICE LAKE UTILITIES
ATTN.: WALLY THOM
320 W. COLEMAN
RICE LAKE, WI 54868
TEL.: 715-234-7004
EMAIL: wallyt@ricelakeutilities.com

DIGGERS HOTLINE
Call 811 or (800) 242-8511
Milwaukee Area (414) 259-1181
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com
2040 W. WISCONSIN AVE.
SUITE 10
MILWAUKEE, WI 53233

** NOT A MEMBER OF DIGGERS HOTLINE.

OTHER CONTACTS

D.N.R. ENVIRONMENTAL REVIEW COORDINATOR
BILL GANTZ
810 W. MAPLE ST.
SPOONER, WI 54801
TEL.: 715-635-2101
EMAIL: william.gantz@wisconsin.gov

STORM SEWER
RICE LAKE STREET DEPT.
ATTN.: JIM ANDERSON
326 S. MAIN STREET
RICE LAKE, WI 54868
TEL.: 715-234-7402
EMAIL: janderson@ricelakegov.org

DESIGN CONSULTANT
COOPER ENGINEERING
2600 COLLEGE DRIVE, P.O.B. 230
RICE LAKE, WISCONSIN 54868-0230
TELEPHONE (715) 234-7008
FAX (715) 234-1025

GENERAL NOTES:

NO TREES OR SHRUBS SHALL BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE BEEN DESIGNATED FOR REMOVAL BY THE ENGINEER.

DISTURBED AREAS WITHIN THE RIGHT OF WAY ARE TO BE TOPSOILED, FERTILIZED, MULCHED, AND SEEDED AS DIRECTED BY THE ENGINEER.

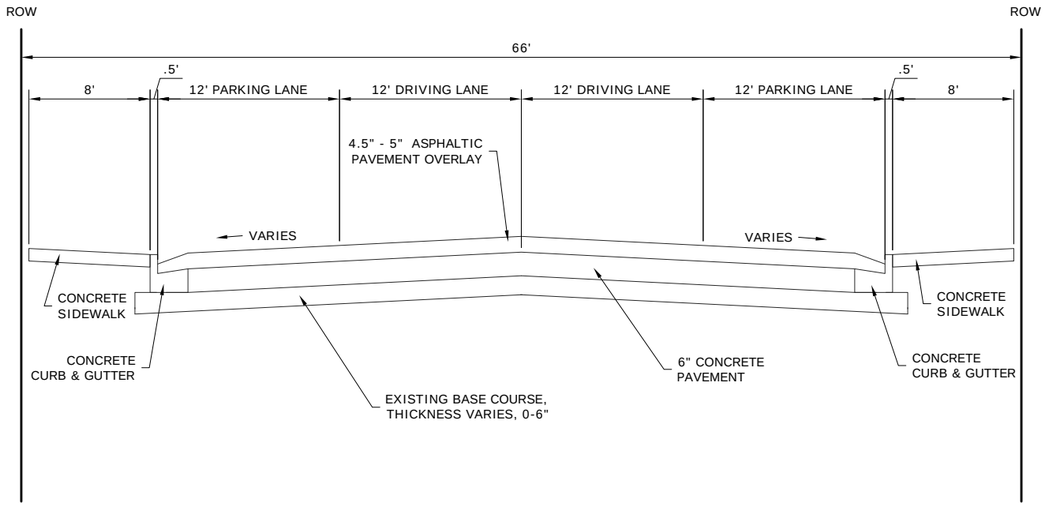
THE EXACT CONSTRUCTION LIMITS OF PRIVATE ENTRANCES SHALL BE COORDINATED WITH THE ENGINEER IN THE FIELD

PLAN SHEETS SHOW EXISTING UTILITIES THAT ARE WITHIN THE LIMITS OF THE PROPOSED CONSTRUCTION. THERE MAY BE UTILITIES WITHIN THE RIGHT OF WAY THAT ARE NOT SHOWN ON THE PLANS.

ALL SIGNS WILL BE MOVED BY THE CITY OF RICE LAKE.

2

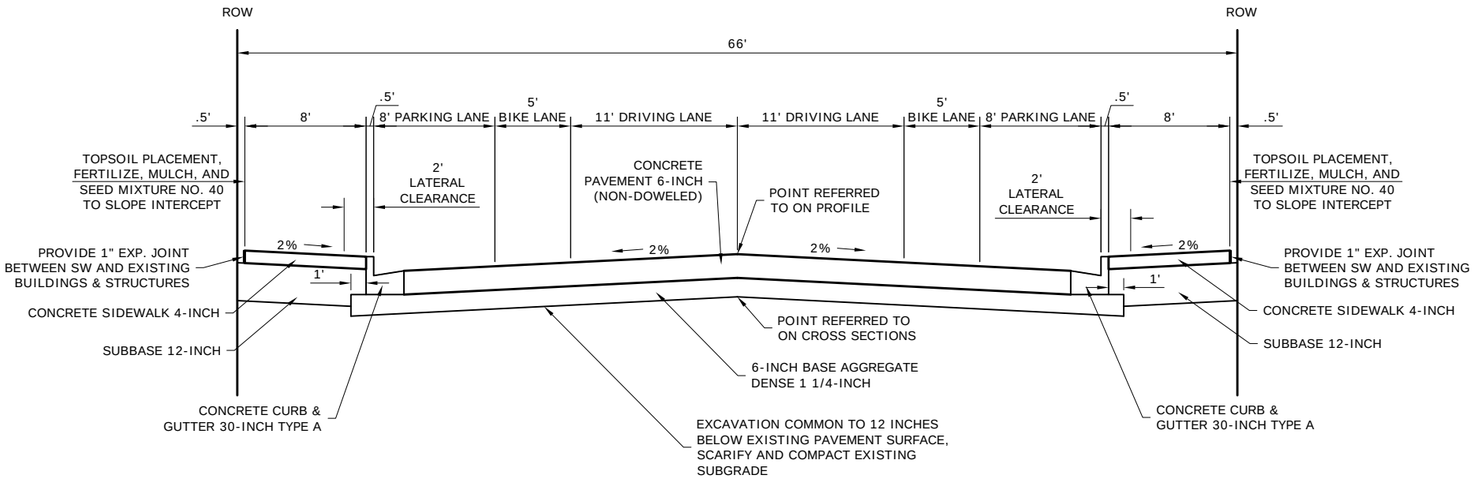
PROJECT NUMBER: 8997-00-32	HWY: LOCAL STREET	COUNTY: BARRON	GENERAL NOTES	SHEET NO: 2	E



TYPICAL EXISTING SECTION

MARSHALL STREET

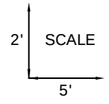
STA 100+34.51 TO STA 106+28.50



TYPICAL FINISHED SECTION

MARSHALL STREET

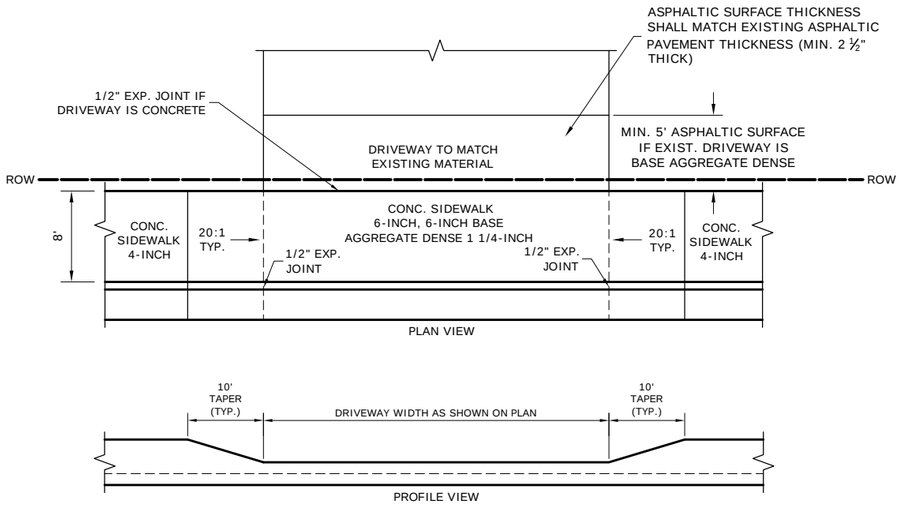
STA 100+34.51 TO STA 106+28.50



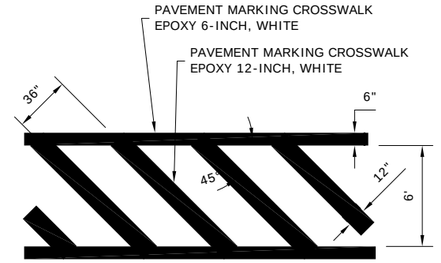
PROJECT NUMBER: 8997-00-32	HWY: LOCAL STREET	COUNTY: BARRON	MARSHALL STREET TYPICAL SECTION SHEET	SHEET NO: 3	E

FILE NAME: G:\2011-proj\11115081\DWG\020301_ts.dwg PLOT DATE: Jan 17, 2013 - 02:25pm PLOT BY:Owner PLOT NAME: Layout1 ORG. DATE: Oct 18, 1999 Originator : J.C.A. PLOT SCALE :

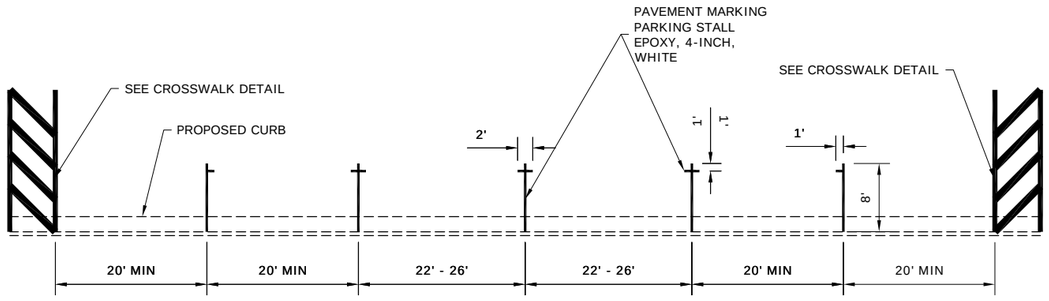
WISDOT/CADDS SHEET 42



DRIVEWAY DETAIL
MARSHALL STREET



CROSS WALK DETAIL
NO SCALE

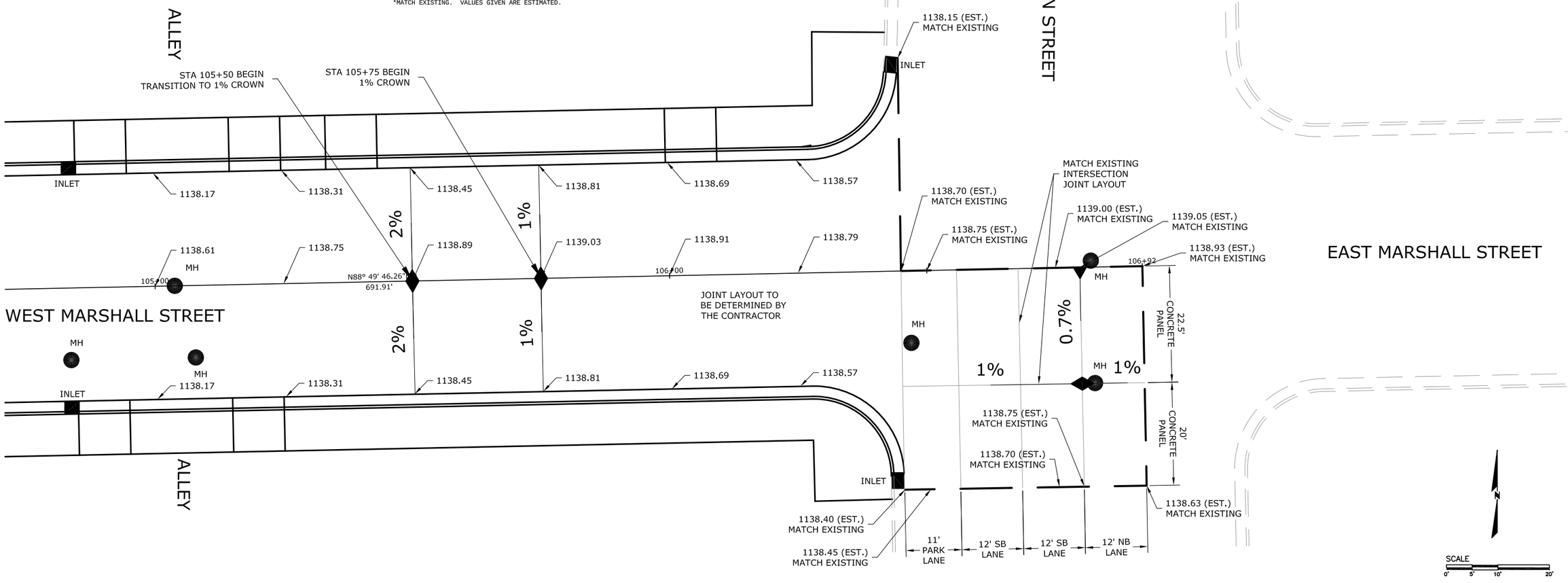


PARKING STALL DETAIL
MARSHALL STREET

MARSHALL STREET PAVEMENT GRADES

STA	LT OFFSET	LT ELEV	CL ELEV	RT OFFSET	RT ELEV	REMARKS
100+24.75	21.8*	1139.35*	1139.85	21.7*	1139.15*	BEGIN CONSTRUCTION
100+34.50	22.0*	1139.28*	1139.80	21.7*	1139.17*	BEGIN PROJECT
100+50	22	1139.23	1139.73	22	1139.29	
100+75	22	1139.17	1139.61	22	1139.17	
101+00	22	1139.04	1139.48	22	1139.04	
101+25	22	1138.92	1139.36	22	1138.92	
101+50	22	1138.80	1139.24	22	1138.80	
101+75	22	1138.68	1139.12	22	1138.68	
102+00	22	1138.56	1139.00	22	1138.56	
102+25	22	1138.42	1138.86	22	1138.42	
102+50	22	1138.28	1138.72	22	1138.28	
102+75	22	1138.14	1138.58	22	1138.14	
103+00	22	1138.00	1138.44	22	1138.00	
103+25	22	1137.86	1138.30	22	1137.86	
103+41	22	1137.77	1138.21	22	1137.77	LOW POINT
103+50	22	1137.81	1138.25	22	1137.81	
103+75	22	1137.93	1138.37	22	1137.93	
104+00	22	1138.05	1138.49	22	1138.05	
104+25	22	1138.17	1138.61	22	1138.17	
104+50	22	1138.29	1138.73	22	1138.29	HIGH POINT
104+75	22	1138.13	1138.57	22	1138.13	
104+83.50	22	1138.08	1138.52	22	1138.08	LOW POINT
105+00	22	1138.17	1138.61	22	1138.17	
105+25	22	1138.31	1138.75	22	1138.31	
105+50	22	1138.45	1138.89	22	1138.45	
105+75	22	1138.81	1139.03	22	1138.81	HIGH POINT
106+00	22	1138.69	1138.91	22	1138.69	
106+27.30	22	1138.56	1138.78	22	1138.56	BEGIN RT RADIUS
106+27.38	22	1138.56	1138.78	22	1138.56	BEGIN LT RADIUS
106+28.50	22.05	1138.55	1138.77	22.03	1138.55	END PROJECT
106+45*	41.5*	1138.15*	1138.70*	42.5*	1138.40*	LOW POINT
106+50	-	-	1138.75*	42.5*	1138.45*	
106+75	-	-	1139.00*	42.5*	1138.70*	
106+80*	-	-	1139.05*	42.5*	1138.75*	HIGH POINT (CL MAIN ST.)
106+92*	-	-	1138.93*	42.5*	1138.63*	END CONSTRUCTION

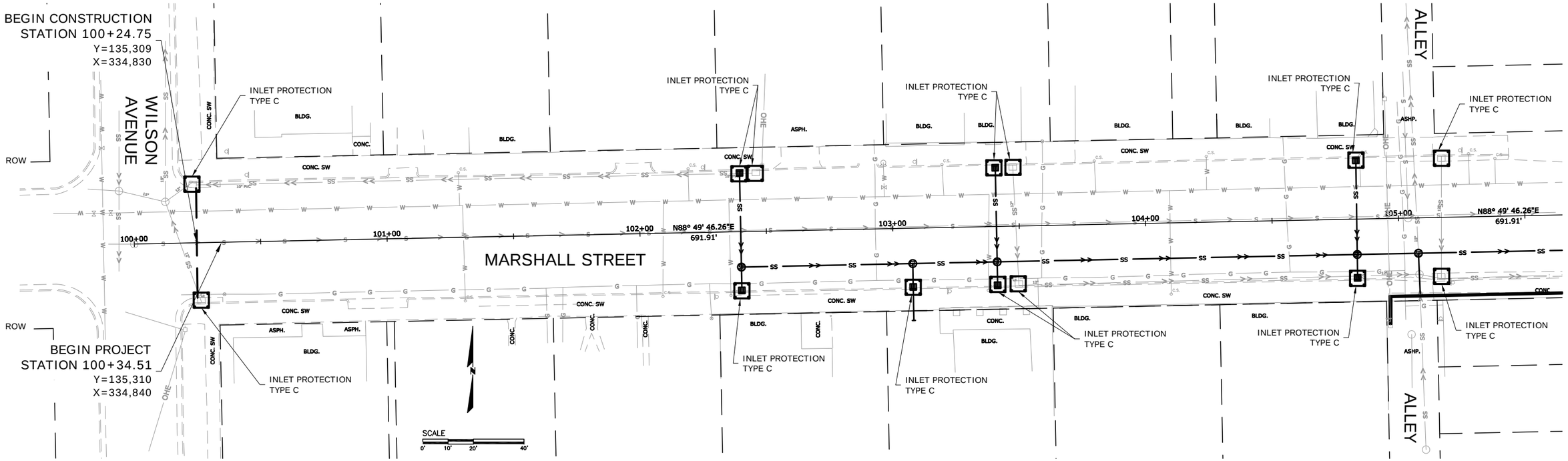
*MATCH EXISTING. VALUES GIVEN ARE ESTIMATED.

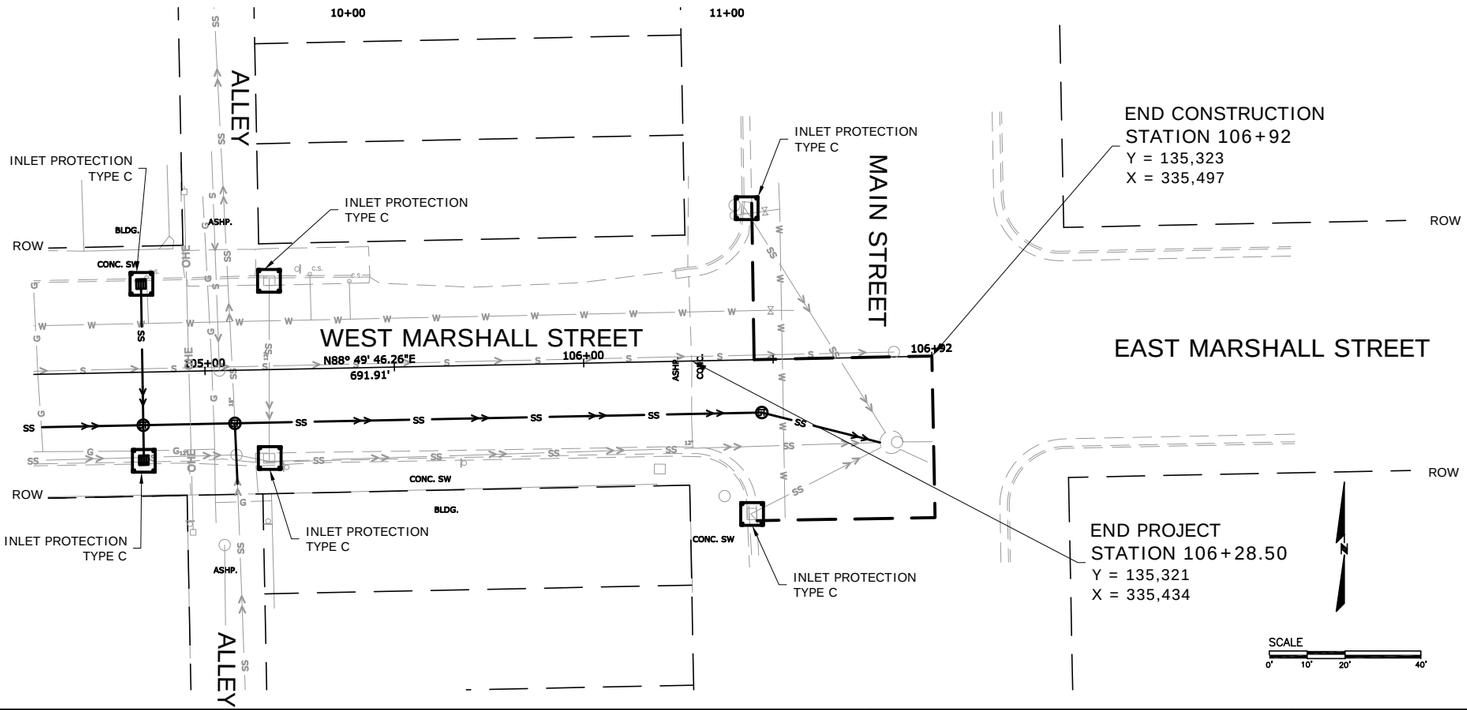


PROJECT NUMBER: 8997-00-32	HWY: LOCAL STREET	COUNTY: BARRON	INTERSECTION PAVEMENT GRADE DETAIL	SHEET NO: 5	E

FILE NAME: \\cei02\projects\2011-proj\11115081\DWG\021101_id.dwg PLOT DATE: Jan 28, 2013 - 12:03pm PLOT BY:Owner PLOT NAME: CEC-PL-PL-FULL (5) ORG. DATE: Feb 13, 2009 Originator : PLOT SCALE :

WISDOT/CADDS SHEET 42

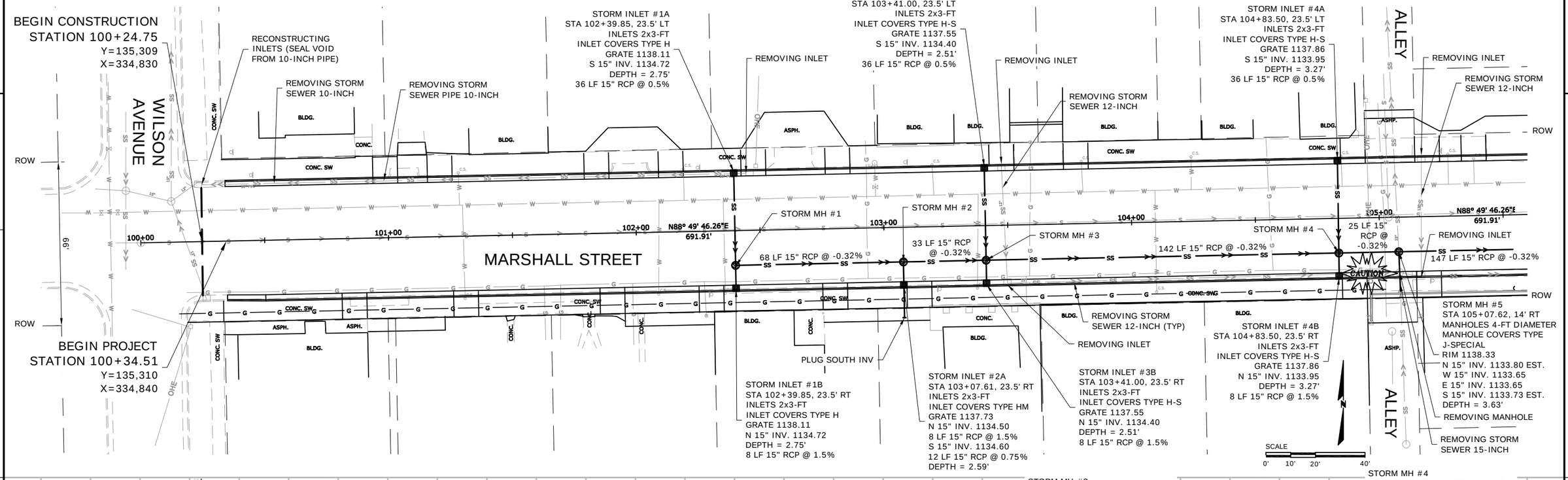


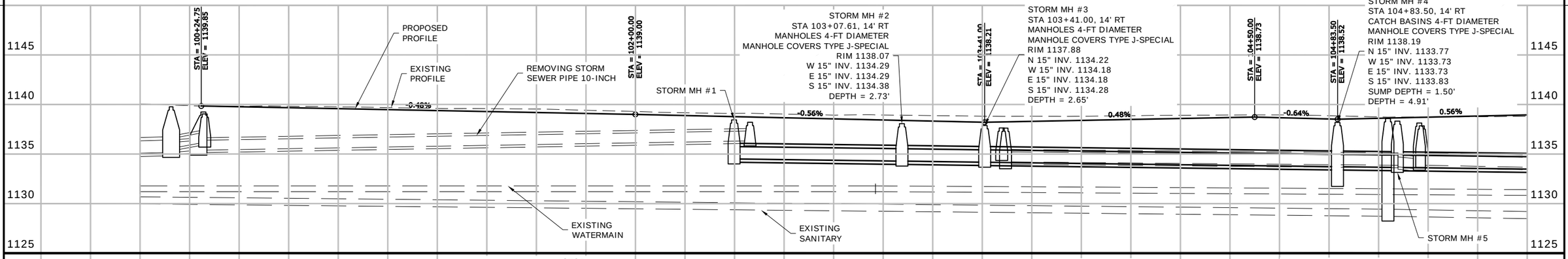


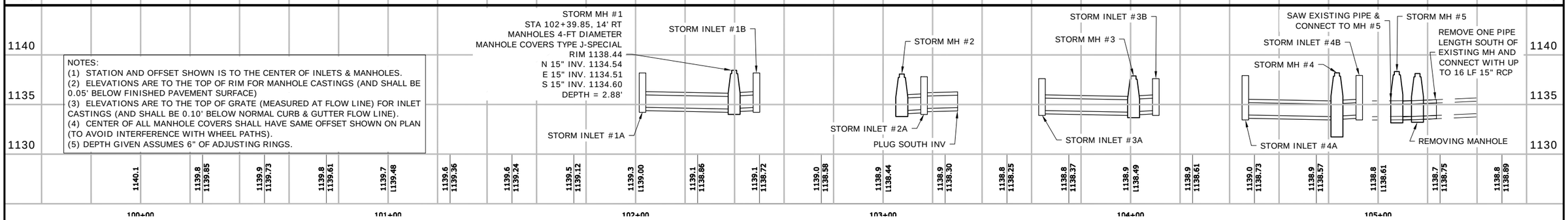
RUNOFF COEFFICIENT TABLE

	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											

PROJECT NUMBER: 8997-00-32	HWY: LOCAL STREET	COUNTY: BARRON	**EROSION CONTROL PLAN**	SHEET NO: 6	E

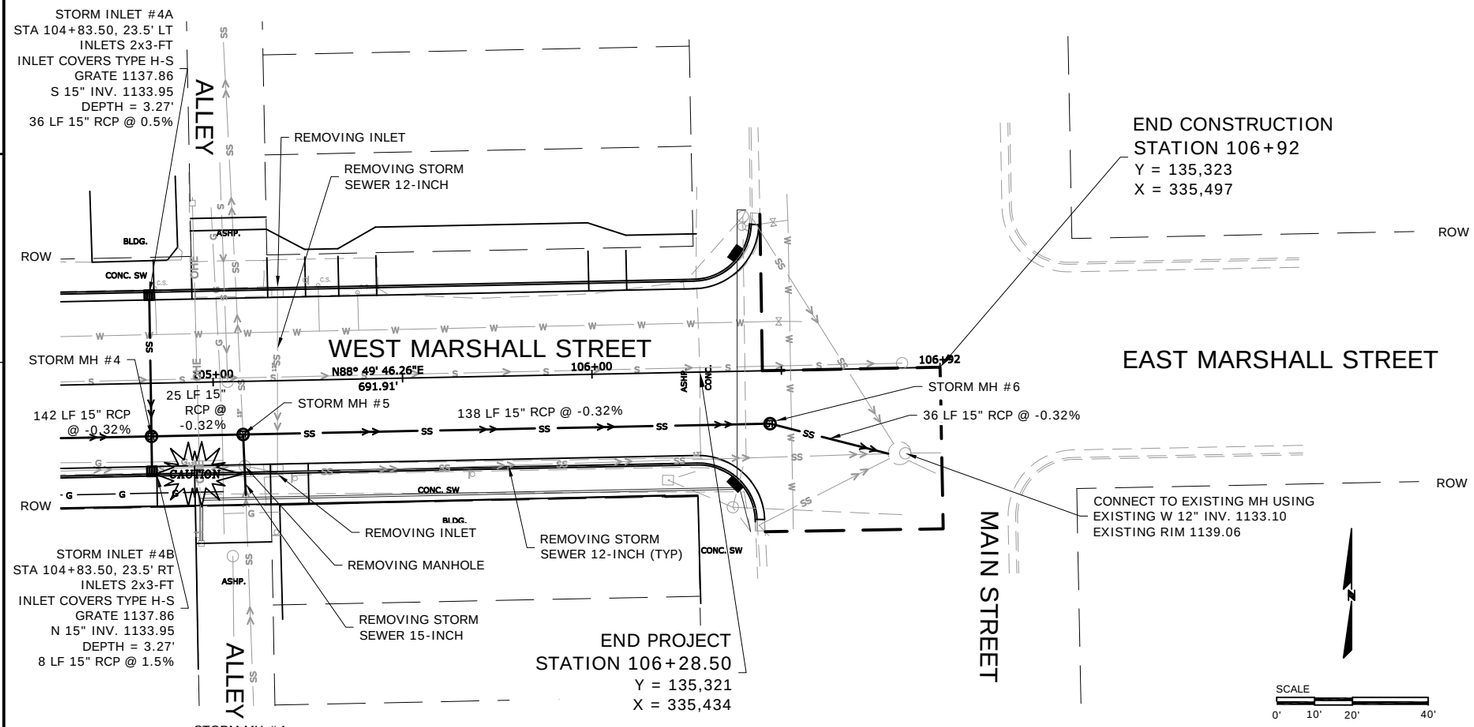


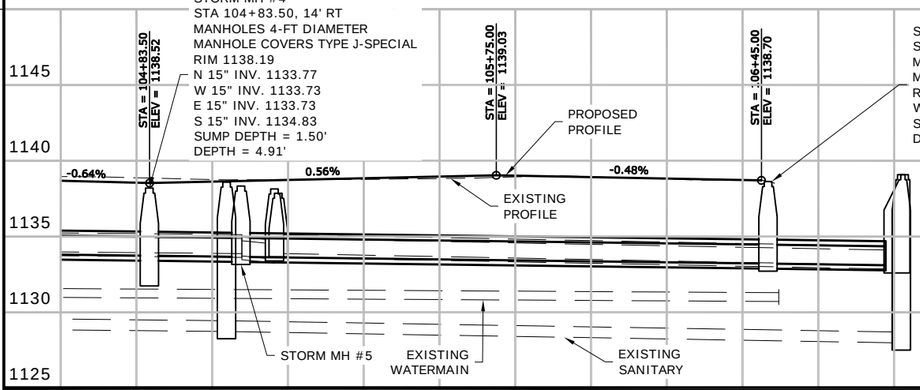




NOTES:
(1) STATION AND OFFSET SHOWN IS TO THE CENTER OF INLETS & MANHOLES.
(2) ELEVATIONS ARE TO THE TOP OF RIM FOR MANHOLE CASTINGS (AND SHALL BE 0.05' BELOW FINISHED PAVEMENT SURFACE)
(3) ELEVATIONS ARE TO THE TOP OF GRATE (MEASURED AT FLOW LINE) FOR INLET CASTINGS (AND SHALL BE 0.10' BELOW NORMAL CURB & GUTTER FLOW LINE).
(4) CENTER OF ALL MANHOLE COVERS SHALL HAVE SAME OFFSET SHOWN ON PLAN (TO AVOID INTERFERENCE WITH WHEEL PATHS).
(5) DEPTH GIVEN ASSUMES 6" OF ADJUSTING RINGS.

PROJECT NUMBER: 8997-00-32	HWY: LOCAL STREET	COUNTY: BARRON	STORM SEWER PLAN	SHEET NO: 7	E





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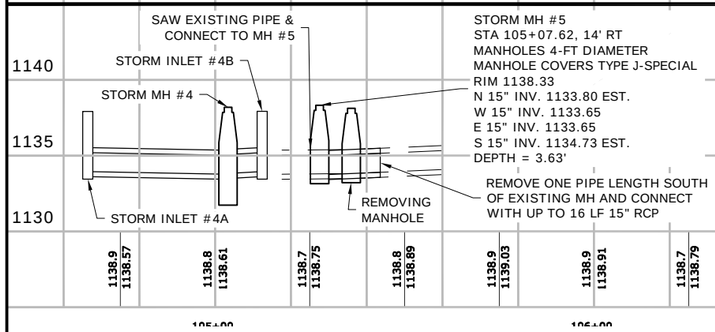
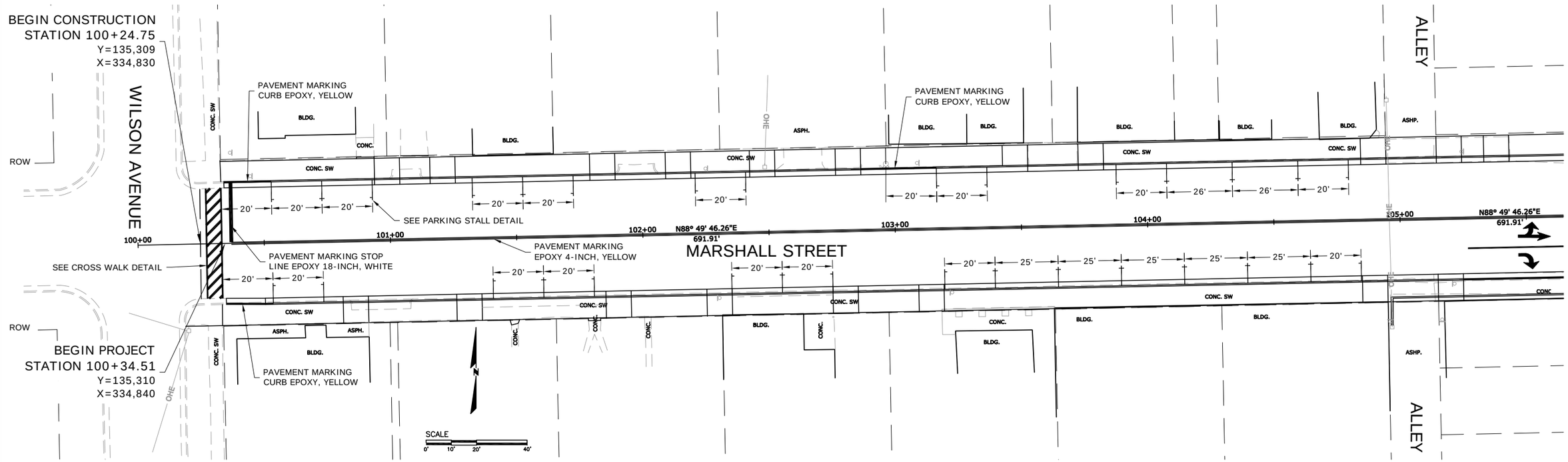
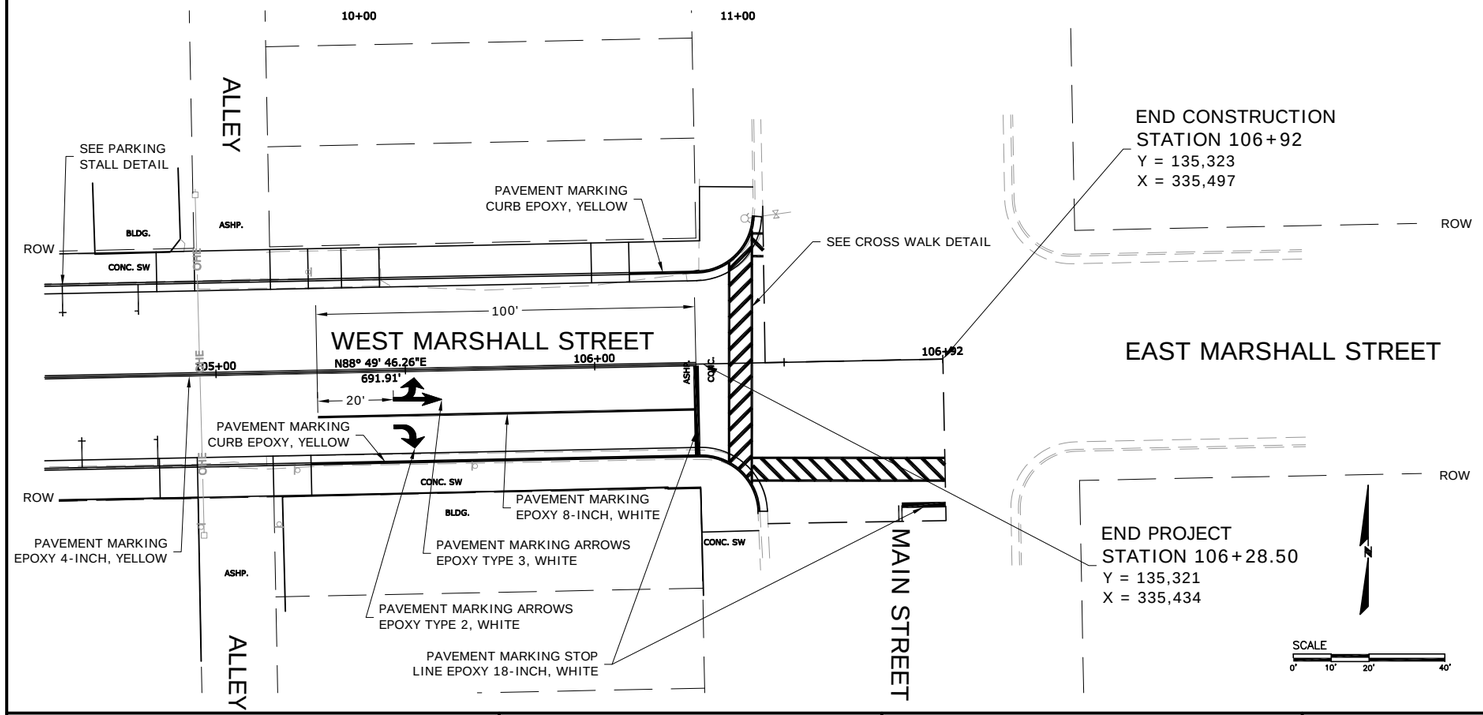
(5) DEPTH GIVEN ASSUMES 6" OF ADJUSTING RINGS.



PROJECT NUMBER: 8997-00-32	HWY: LOCAL STREET	COUNTY: BARRON	STORM SEWER PLAN	SHEET NO: 8	E





NOTE:
CENTER ALL PARKING STALLS BETWEEN
DRIVEWAYS WITH THE NUMBER OF STALLS SHOWN.
EXACT DIMENSIONS AND LOCATIONS SHALL BE
DETERMINED BY THE ENGINEER IN THE FIELD.

PROJECT NUMBER: 8997-00-32	HWY: LOCAL STREET	COUNTY: BARRON	**PAVEMENT MARKING PLAN**	SHEET NO: 9	E

2

HUMBIRD ST

HUMBIRD ST

HUMBIRD ST

ROAD WORK AHEAD W20-1

ROAD CLOSED AHEAD W20-3

ROAD WORK AHEAD W20-1

ALLEY

(2) TYPE III BARRICADES W/ TYPE A WARNING LIGHTS & R11-4 SIGN

(4) TYPE III BARRICADES W/ TYPE A WARNING LIGHTS & R11-4 SIGN

ROAD CLOSED TO THRU TRAFFIC R11-4

50'

(4) TYPE III BARRICADES W/ TYPE A WARNING LIGHTS & R11-4 SIGN

ROAD CLOSED AHEAD W20-3

200' FROM SIGNAL

MARSHALL ST

MARSHALL ST

200' FROM STOP SIGN

ROAD CLOSED AHEAD W20-3

ROAD CLOSED TO THRU TRAFFIC R11-4

50'

ROAD CLOSED TO THRU TRAFFIC R11-4

ROAD CLOSED TO THRU TRAFFIC R11-4

(2) TYPE III BARRICADES W/ TYPE A WARNING LIGHTS & R11-4 SIGN

ALLEY

N MAIN

ROAD WORK AHEAD W20-1

ROAD WORK AHEAD W20-1

ROAD CLOSED AHEAD W20-3

EAU CLAIRE ST

EAU CLAIRE ST

WILSON AVE

LEGEND

TYPE III BARRICADE WITH TYPE A WARNING LIGHTS

TRAFFIC CONTROL SIGN

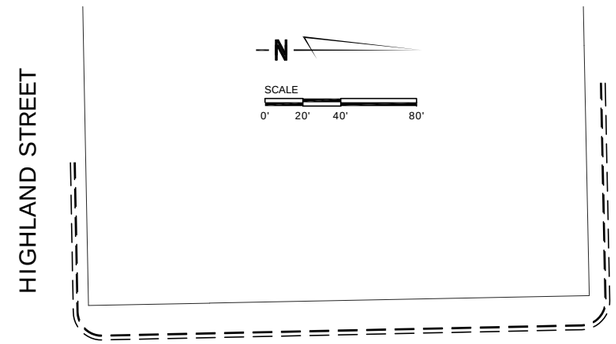
WORK ZONE

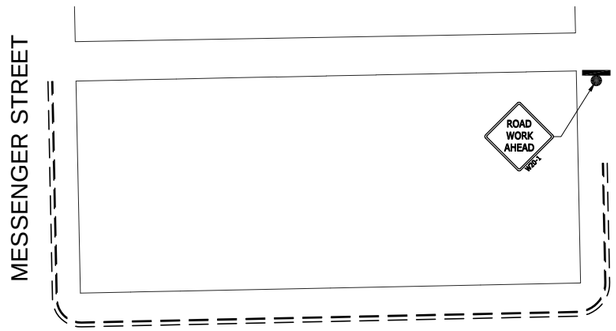
N

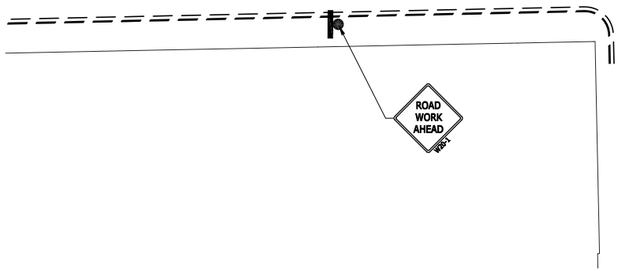
NOTES:
ALL SIGNS SHALL BE 48" X 48"
EXCEPT R11-4 SHALL BE 60" X 30"

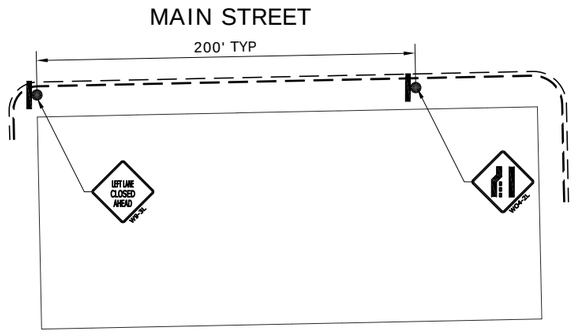
PROJECT NUMBER: 8997-00-32	HWY: LOCAL STREET	COUNTY: BARRON	TRAFFIC CONTROL OVERVIEW	SHEET NO: 10	E

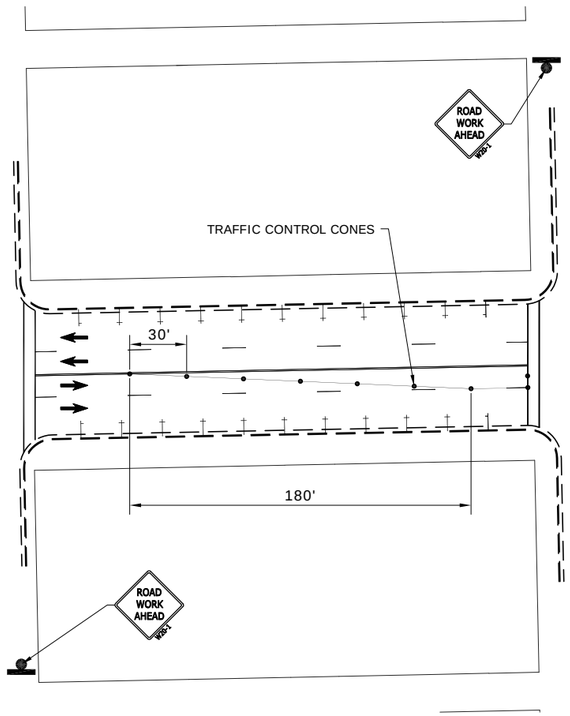
2

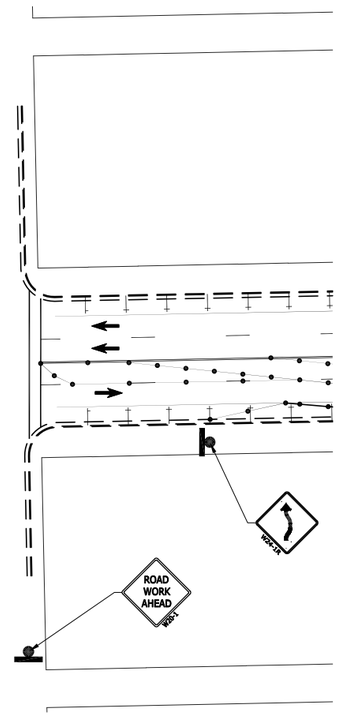


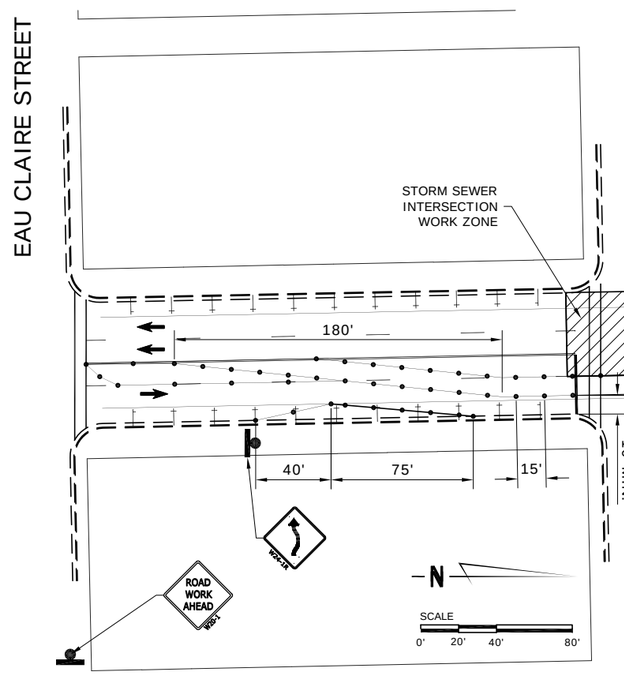


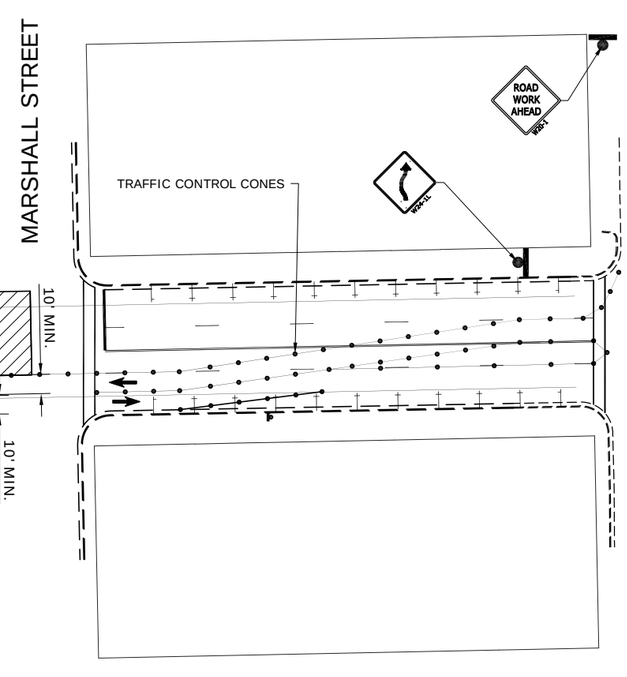


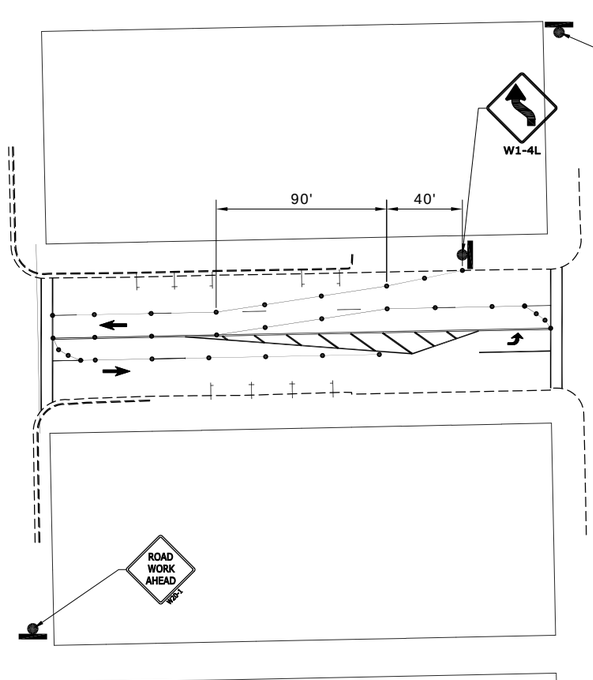


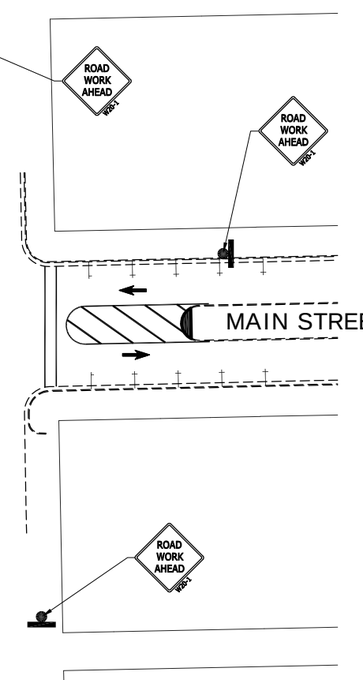












PROJECT NUMBER: 8997-00-32	HWY: LOCAL STREET	COUNTY: BARRON	TRAFFIC CONTROL - STORM SEWER INTERSECTION WORK	SHEET NO: 11	E

FILE NAME: G:\2011-proj\11115081\DWG\025001_tc.dwg PLOT DATE: Jan 17, 2013 - 02:32pm PLOT BY:Owner PLOT NAME: CEC-PLAN-FULL (2) ORG. DATE: Mar 18, 2009 Originator : PLOT SCALE :
WISDOT/CADDS SHEET 42

DATE 07MAR13 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	8997-00-32 QUANTITY
0010	204.0100	REMOVING PAVEMENT	SY	3,600.000	3,600.000
0020	204.0155	REMOVING CONCRETE SIDEWALK	SY	1,100.000	1,100.000
0030	204.0210	REMOVING MANHOLES	EACH	1.000	1.000
0040	204.0220	REMOVING INLETS	EACH	5.000	5.000
0050	204.0245	REMOVING STORM SEWER (SIZE) 01. 10-INCH	LF	220.000	220.000
0060	204.0245	REMOVING STORM SEWER (SIZE) 01. 12-INCH	LF	430.000	430.000
0070	204.0245	REMOVING STORM SEWER (SIZE) 01. 15-INCH	LF	15.000	15.000
0080	205.0100	EXCAVATION COMMON	CY	3,200.000	3,200.000
0090	213.0100	FINISHING ROADWAY (PROJECT) 01. 8997-00-32	EACH	1.000	1.000
0100	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	1,300.000	1,300.000
0110	350.0104	SUBBASE	TON	2,250.000	2,250.000
0120	350.0145	SUBBASE 12-INCH	SY	900.000	900.000
0130	415.0060	CONCRETE PAVEMENT 6-INCH	SY	3,030.000	3,030.000
0140	415.1080	CONCRETE PAVEMENT HES 8-INCH	SY	220.000	220.000
0150	416.0610	DRILLED TIE BARS	EACH	30.000	30.000
0160	416.0620	DRILLED DOWEL BARS	EACH	48.000	48.000
0170	465.0105	ASPHALTIC SURFACE	TON	275.000	275.000
0180	601.0409	CONCRETE CURB & GUTTER 30-INCH TYPE A	LF	1,240.000	1,240.000
0190	602.0405	CONCRETE SIDEWALK 4-INCH	SF	8,000.000	8,000.000
0200	602.0415	CONCRETE SIDEWALK 6-INCH	SF	2,100.000	2,100.000
0210	602.0515	CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA	SF	16.000	16.000
0220	608.0315	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH	LF	614.000	614.000
0230	611.0430	RECONSTRUCTING INLETS	EACH	1.000	1.000
0240	611.0535	MANHOLE COVERS TYPE J-SPECIAL	EACH	6.000	6.000
0250	611.0624	INLET COVERS TYPE H	EACH	2.000	2.000
0260	611.0627	INLET COVERS TYPE HM	EACH	1.000	1.000
0270	611.0639	INLET COVERS TYPE H-S	EACH	4.000	4.000
0280	611.1004	CATCH BASINS 4-FT DIAMETER	EACH	1.000	1.000
0290	611.2004	MANHOLES 4-FT DIAMETER	EACH	5.000	5.000
0300	611.3230	INLETS 2X3-FT	EACH	7.000	7.000
0310	611.8110	ADJUSTING MANHOLE COVERS	EACH	1.000	1.000
0320	611.8120.S	COVER PLATES TEMPORARY	EACH	14.000	14.000
0330	612.0902.S	INSULATION BOARD POLYSTYRENE (INCH) 01. 2-INCH	SY	12.000	12.000
0340	619.1000	MOBILIZATION	EACH	1.000	1.000
0350	624.0100	WATER	MGAL	5.000	5.000
0360	625.0100	TOPSOIL	SY	50.000	50.000
0370	627.0200	MULCHING	SY	50.000	50.000
0380	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	1.000	1.000
0390	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	1.000	1.000
0400	628.7015	INLET PROTECTION TYPE C	EACH	16.000	16.000
0410	629.0205	FERTILIZER TYPE A	CWT	1.000	1.000
0420	630.0140	SEEDING MIXTURE NO. 40	LB	1.000	1.000
0430	642.5001	FIELD OFFICE TYPE B	EACH	1.000	1.000
0440	643.0100	TRAFFIC CONTROL (PROJECT) 01. 8997-00-32	EACH	1.000	1.000
0450	643.0300	TRAFFIC CONTROL DRUMS	DAY	1,600.000	1,600.000
0460	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	640.000	640.000
0470	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	1,280.000	1,280.000
0480	643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	DAY	640.000	640.000
0490	643.0900	TRAFFIC CONTROL SIGNS	DAY	800.000	800.000
0500	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	1,200.000	1,200.000

3

DATE 07MAR13 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	8997-00-32 QUANTITY
0510	646.0126	PAVEMENT MARKING EPOXY 8-INCH	LF	100.000	100.000
0520	647.0166	PAVEMENT MARKING ARROWS EPOXY TYPE 2	EACH	1.000	1.000
0530	647.0176	PAVEMENT MARKING ARROWS EPOXY TYPE 3	EACH	1.000	1.000
0540	647.0456	PAVEMENT MARKING CURB EPOXY	LF	250.000	250.000
0550	647.0566	PAVEMENT MARKING STOP LINE EPOXY 18-INCH	LF	60.000	60.000
0560	647.0656	PAVEMENT MARKING PARKING STALL EPOXY	LF	350.000	350.000
0570	647.0766	PAVEMENT MARKING CROSSWALK EPOXY 6-INCH	LF	320.000	320.000
0580	647.0776	PAVEMENT MARKING CROSSWALK EPOXY 12-INCH	LF	320.000	320.000
0590	650.4000	CONSTRUCTION STAKING STORM SEWER	EACH	12.000	12.000
0600	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	670.000	670.000
0610	650.7000	CONSTRUCTION STAKING CONCRETE PAVEMENT	LF	670.000	670.000
0620	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 8997-00-32	LS	1.000	1.000
0630	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	400.000	400.000
0640	690.0150	SAWING ASPHALT	LF	400.000	400.000
0650	690.0250	SAWING CONCRETE	LF	275.000	275.000
0660	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT $5. 00/HR	HRS	1,200.000	1,200.000
0670	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT $5.00/HR	HRS	300.000	300.000
0680	SPV.0060	SPECIAL 01. ADJUSTING GATE VALVE	EACH	1.000	1.000
0690	SPV.0060	SPECIAL 02. ADJUSTING CURB STOP	EACH	11.000	11.000
0700	SPV.0090	SPECIAL 01. CONCRETE CURB & GUTTER CURE AND SEAL TREATMENT	LF	1,240.000	1,240.000
0710	SPV.0105	SPECIAL 01. CONSTRUCTION STAKING CONCRETE PAVEMENT JOINT LAYOUT	LS	1.000	1.000
0720	SPV.0105	SPECIAL 02. PROJECT CONCRETE CRACK MITIGATION AND REPAIR SPECIAL	LS	1.000	1.000
0730	SPV.0105	SPECIAL 03. TRAFFIC CONTROL INTERSECTION	LS	1.000	1.000
0740	SPV.0165	SPECIAL 01. CONCRETE SIDEWALK CURE AND SEAL TREATMENT	SF	10,100.000	10,100.000

CATEGORY	STATION TO STATION	SIDE	WIDTH (FT)	REMOVING PAVEMENT 204.0100 SY	CONCRETE PAVEMENT 6-INCH 415.0060 SY	CONCRETE PAVEMENT HES 8-INCH 415.1080 SY	DRILLED TIE BARS 416.0610 EACH	DRILLED DOWEL BARS 416.0620 EACH	SAWING CONCRETE 690.0250 LF	REMARKS
0010	100+25 - 106+45	LT/RT	44	3,380	3,030	-	15	-	-	
0010	106+45 - 106+92	RT	41	220	-	220	15	48	-	
0010	100+25	LT/RT		-	-	-	-	-	49	
0010	106+45 - 106+92	LT/RT		-	-	-	-	-	180	
0010	UNDISTRIBUTED			-	-	-	-	-	46	SIDEWALKS
	TOTAL 0010			3,600	3,030	220	30	48	275	

CATEGORY	STATION TO STATION	EXCAVATION COMMON 205.0100 CY	
0010	100+25 - 102+35	660	WEST STAGE
0010	102+35 - 106+29	1200	EAST STAGE
0010	106+29 - 106+92	140	INTERSECTION WORK
0010	UNDISTRIBUTED	1200	ESTIMATED EBS
	TOTAL 0010	3200	

STATION TO STATION	SIDE	ASPHALTIC SURFACE 465.0105 TON	SAWING ASPHALT 690.0150 LF
100+33 - 101+26	RT	10	-
101+10	LT	5	-
102+00	LT	5	47
102+09	RT	15	-
102+65	LT	10	58
102+96	RT	10	43
103+63	LT	5	22
104+96 - 106+28	LT	200	143
105+05	RT	5	22
UNDISTRIBUTED		10	65
		275	400

CATEGORY	STATION TO STATION	SIDE	REMOVING CONCRETE SIDEWALK 204.0155 SY	SUBBASE 12-INCH 350.0145 SY	CONCRETE SIDEWALK 4-INCH 602.0405 SF	CONCRETE SIDEWALK 6-INCH 602.0415 SF	CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA 602.0515 SF	CONCRETE SIDEWALK CURE AND SEAL TREATMENT SPV.0165.01 SF
0010	100+33 - 105+44	LT	485	-	-	-	-	-
0010	100+33 - 106+28	RT	560	-	-	-	-	-
0010	106+28 - 106+42	LT/RT	55	55	510	-	16	510
0010	100+33 - 106+28	LT	-	400	3545	-	-	3545
0010	100+33 - 106+28	RT	-	445	3895	-	-	3895
0010	101+04 - 101+16	LT	-	-	-	100	-	100
0010	101+89 - 102+09	LT	-	-	-	160	-	160
0010	102+52 - 102+76	LT	-	-	-	195	-	195
0010	103+52 - 103+72	LT	-	-	-	160	-	160
0010	104+94 - 105+14	LT	-	-	-	160	-	160
0010	105+43 - 105+99	LT	-	-	-	450	-	450
0010	100+91 - 101+26	RT	-	-	-	280	-	280
0010	101+95 - 102+25	RT	-	-	-	240	-	240
0010	102+85 - 103+09	RT	-	-	-	195	-	195
0010	104+95 - 105+15	RT	-	-	-	160	-	160
0010	UNDISTRIBUTED		-	-	50	-	-	50
	TOTAL 0010		1100	900	8000	2100	16	10100

CATEGORY	STATION TO STATION	SIDE	BASE AGGREGATE DENSE 1 1/4-INCH 305.0120 TON	SUBBASE 350.0104 TON	
0010	100+25 - 106+45	LT/RT	1150		Marshall 1' BEHIND NEW CURB, ACAD AREAS
0010	106+45 - 106+92	RT	70		HES CONCRETE PATCH
0010	101+04 - 101+16	LT	6		DRIVEWAY (6" Sidewalk)
0010	101+89 - 102+09	LT	6		DRIVEWAY (6" Sidewalk)
0010	102+52 - 102+76	RT	6		DRIVEWAY (6" Sidewalk)
0010	103+52 - 103+72	LT	6		DRIVEWAY (6" Sidewalk)
0010	104+94 - 105+14	RT	6		DRIVEWAY (6" Sidewalk)
0010	105+43 - 105+99	RT	16		DRIVEWAY (6" Sidewalk)
0010	100+91 - 101+26	LT	11		DRIVEWAY (6" Sidewalk)
0010	101+95 - 102+25	LT	11		DRIVEWAY (6" Sidewalk)
0010	102+85 - 103+09	RT	6		DRIVEWAY (6" Sidewalk)
0010	104+95 - 105+15	LT	6		DRIVEWAY (6" Sidewalk)
0010	UNDISTRIBUTED		-	2250	ESTIMATED EBS
	TOTAL 0010		1300	2250	

CATEGORY	STATION TO STATION	SIDE	CONCRETE CURB & GUTTER 30-INCH TYPE A 601.0409 LF	CONCRETE CURB & GUTTER CURE AND SEAL TREATMENT SPV.0090.01 LF
0010	100+35 - 106+45	LT	620	620
0010	100+35 - 106+45	RT	620	620
	TOTAL 0010		1240	1240

CATEGORY	STATION to STATION	OFFSET SIDE	REMOVING MANHOLES 204.0210 EACH	REMOVING INLETS 204.0220 EACH	REMOVING STORM SEWER (10-INCH) 204.0245 LF	REMOVING STORM SEWER (12-INCH) 204.0245 LF	REMOVING STORM SEWER (15-INCH) 204.0245 LF	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH 608.0315 LF	RECONSTRUCTING INLETS 611.0430 EACH	MANHOLE COVERS TYPE J-SPECIAL 611.0535 EACH	INLET COVERS TYPE H 611.0624 EACH	INLET COVERS TYPE HM 611.0627 EACH	INLET COVERS TYPE H-S 611.0639 EACH	CATCH BASINS 4-FT DIAMETER 611.1004 EACH	MANHOLES 4-FT DIAMETER 611.2004 EACH	INLETS 2X3-FT 611.3230 EACH	ADJUSTING MANHOLE COVERS 611.8110 EACH	COVER PLATES TEMPORARY 611.8120.S EACH	INSULATION BOARD POLYSTYRENE (2-INCH) 612.0902.S SY	INLET PROTECTION TYPE C 628.7015 EACH	REMARKS
0010	100+25 - 102+45	23.5' LT	-	-	220	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	
0010	102+40	LT/RT	-	-	-	-	-	44	-	1	2	-	-	-	1	2	-	3	4	2	MH#1, INLET #1A & 1B*
0010	102+40 - 103+08	14' RT	-	-	-	-	-	68	-	-	-	-	-	-	-	-	-	-	-	-	
0010	102+46	23.5' LT	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
0010	103+08	RT	-	-	-	-	-	24	-	1	-	1	-	-	1	1	-	2	-	1	MH#2, INLET #2A
0010	103+08 - 103+41	14' RT	-	-	-	-	-	33	-	-	-	-	-	-	-	-	-	-	-	-	
0010	103+41	LT/RT	-	-	-	-	-	44	-	1	-	-	2	-	1	2	-	3	4	2	MH#3, INLET #3A & 3B*
0010	103+41 - 104+83	14' RT	-	-	-	-	-	142	-	-	-	-	-	-	-	-	-	-	-	-	
0010	103+48	LT/RT	-	2	-	48	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
0010	103+50 - 105+08	23.5' RT	-	-	-	160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
0010	104+83	LT/RT	-	-	-	-	-	44	-	1	-	-	2	1	-	2	-	3	4	2	MH#4, INLET #4A & 4B*
0010	104+83 - 105+08	14' RT	-	-	-	-	-	25	-	-	-	-	-	-	-	-	-	-	-	-	
0010	105+04	0' RT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	
0010	105+08	RT	1	-	-	-	15	16	-	1	-	-	-	-	1	-	-	1	-	-	MH#5
0010	105+08 - 105+17	23.5' RT	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
0010	105+08 - 106+46	14' RT	-	-	-	-	-	138	-	-	-	-	-	-	-	-	-	-	-	-	
0010	105+17	LT/RT	-	2	-	48	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
0010	105+17 - 106+82	23.5' RT	-	-	-	164	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
0010	106+46	14' RT	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	1	-	-	MH#6
0010	106+46 - 106+82	RT	-	-	-	-	-	36	-	-	-	-	-	-	-	-	-	-	-	-	
0010	UNDISTRIBUTED		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	
	TOTAL 0010		1	5	220	430	15	614	1	6	2	1	4	1	5	7	1	14	12	16	

*INSULATE AT WATER CROSSING 1' BELOW STORM INVERT.

CATEGORY	STATION TO	STATION	SIDE	WATER 624.0100 MGAL	TOPSOIL 625.0100 SY	MULCHING 627.0200 SY	FERTILIZER TYPE A 629.0205 CWT	SEEDING MIXTURE NO. 40 630.0140 LB
0010	UNDISTRIBUTED			5	50	50	1	1
			TOTAL 0010	5	50	50	1	1

CATEGORY	DAYS	TRAFFIC CONTROL DRUMS 643.0300 # DRUMS	DAYS	TRAFFIC CONTROL BARRICADES TYPE III 643.0420 # DRUMS	DAYS	TRAFFIC CONTROL WARNING LIGHTS TYPE A 643.0705 # LIGHTS	DAYS	TRAFFIC CONTROL WARNING LIGHTS TYPE C 643.0715 # LIGHTS	DAYS	TRAFFIC CONTROL SIGNS 643.0900 # SIGNS	DAYS
0010	32	50	1,600	20	640	40	1,280	20	640	25	800
			1,600		640		1,280		640		800

CATEGORY	STATION TO	STATION	SIDE	PAVEMENT MARKING EPOXY 4-INCH 646.0106 LF	PAVEMENT MARKING EPOXY 8-INCH 646.0126 LF	PAVEMENT MARKING ARROWS EPOXY TYPE 2 647.0166 LF	PAVEMENT MARKING ARROWS EPOXY TYPE 3 647.0176 LF	PAVEMENT MARKING CURB EPOXY 647.0456 LF	PAVEMENT MARKING STOP LINE EPOXY 18-INCH 647.0566 LF	PAVEMENT MARKING PARKING STALL EPOXY 647.0656 LF	PAVEMENT MARKING CROSSWALK EPOXY 6-INCH 647.0766 LF	PAVEMENT MARKING CROSSWALK EPOXY 12-INCH 647.0776 LF
0010	100+37	- 106+27		1180	-	-	-	-	-	-	-	-
0010	100+35	- 105+05	LT	-	-	-	-	-	-	-	-	-
0010	100+35	- 105+05	RT	-	-	-	-	-	-	-	-	-
0010	100+33	- 100+53	LT	-	-	-	-	20	-	-	-	-
0010	100+36	- 100+53	RT	-	-	-	-	17	-	-	-	-
0010	102+87	- 103+17	LT	-	-	-	-	30	-	-	-	-
0010	105+25	- 106+45	RT	-	-	-	-	125	-	-	-	-
0010	106+10	- 106+45	LT	-	-	-	-	40	-	-	-	-
0010	105+27	- 106+27	RT	-	100	-	-	-	-	-	-	-
		UNDISTRIBUTED		20	-	1	1	18	60	350	320	320
			TOTAL 0010	1200	100	1	1	250	60	350	320	320

CATEGORY	STATION TO	STATION	CONSTRUCTION STAKING STORM SEWER 650.4000 EACH	CONSTRUCTION STAKING SUBGRADE 650.4500 LF	CONSTRUCTION STAKING CONCRETE PAVEMENT 650.7000 LF
0010	100+25	- 106+92	12	670	670
		TOTAL 0010	12	670	670

CATEGORY	STATION TO	STATION	SIDE	CONDUIT RIGID NONMETTALIC SCHEDULE 40 2-INCH 652.0225 LF	REMARKS
0020	104+96	- 106+41	RT	170	SW CORNER TO ALLEY
0020	104+96	- 106+45	LT/RT	230	NW CORNER TO ALLEY
	VERIFY SIZE & LOCATION WITH RICE LAKE UTILITIES				
			TOTAL 0010	400	

CATEGORY	STATION to	STATION	OFFSET	SIDE	ADJUSTING GATE VALVE SPV.0060.01 EACH	ADJUSTING CURB STOP SPV.0060.02 EACH
0020	102+97		16'	LT	1	-
0020	101+29		25'	LT	-	1
0020	101+30		25'	LT	-	1
0020	102+09		25'	LT	-	1
0020	102+20		25'	RT	-	1
0020	102+35		25'	LT	-	1
0020	103+20		25'	LT	-	1
0020	103+37		25'	LT	-	1
0020	103+80		25'	RT	-	1
0020	104+10		28'	LT	-	1
0020	104+25		26'	LT	-	1
0020	104+85		25'	LT	-	1
0020	105+28		25'	LT	-	1
0020	105+39		23'	LT	-	1
			TOTAL 0020		1	11

NOTE: DIMENSIONS TO CONSTRUCTION EASEMENT LINES ARE FROM THE EXISTING RIGHT OF WAY, DIMENSIONS TO THE DRIVEWAY PAVING LIMITS ARE FROM THE PROPOSED EDGE OF SIDEWALK.

BEGIN CONSTRUCTION
STATION 100+24.75
Y=135,309
X=334,830

BEGIN PROJECT
STATION 100+34.51
Y=135,310
X=334,840

WILSON AVENUE

ALLEY

MARSHALL STREET

"MOM'S BAR"
ROCHELLE MILLER
(35 W MARSHALL ST)
PO BOX 43

"HAPPY PINES BOOKKEEPING"
STEPHEN ROBERGE
(31 W MARSHALL ST)
(29 W MARSHALL ST)
612 FERRY STREET
LA CROSSE, WI 54601

"24 HOUR PARKING"
CITY OF RICE LAKE

"PIONEER BARBER SHOP"
"MIDWAY BAR"
BODA REAL ESTATE LLC
(19 W MARSHALL ST)
(17 W MARSHALL ST)
PO BOX 757

"MSA PROFESSIONAL SERVICES"
JOSEPH & JANICE KIEWIT
(15 W MARSHALL ST)
2292 20 ½ STREET

JEFFRY ABBOUD
(13 W MARSHALL ST)
3006 BLAKELEY AVE
EAU CLAIRE, WI 54701

"TERRI'S LOVING TOUCH
PROFESSIONAL DOG GROOMING"
"THE BAR"
KIMBERLY CHERNEY
(11 W MARSHALL ST)
(9 W MARSHALL ST)
9 W MARSHALL ST

"CHARM HAIR CARE CENTER"
CHARM HAIR CARE LLC
308 N MAIN ST

"STOVE WORKS"
KENNETH & MARY MARIENFIELD
(238 N MAIN ST)
15451 CTH KK
HAYWARD, WI 54843

"THE MILK PAIL"
MARK ANGELL
(36 W MARSHALL ST)
607 W MESSENGER ST

"CASA NUEVA VIDA"
ROLAND & KAREN AMUNDSON
(32 W MARSHALL ST)
102 N MAIN STREET

JON BERG
28 W MARSHALL ST

"COE & ZABEL, S.C. LAW OFFICE"
MARK COE
24 W MARSHALL ST

"NORTHWOODS PROMOTIONS"
JAMES & MARGARET GAREY
20 W MARSHALL ST

"MARSHALL TWELVE"
F & D PARTNERSHIP
(12 W MARSHALL ST)
474 APOLLO DRIVE
CIRCLE PINES, MN 55014

"ABR COUNSELING"
"CROTTEAU CHIROPRACTIC LLC"
"SUN HEALTH CENTER"
"WEST CENTRAL WI PRIVATE INDUSTRY COUNCIL"

"AMUNDSON APPLIANCE"
ROLAND & KAREN AMUNDSON
(31 W EAU CLAIRE ST)
102 N MAIN STREET

"AUTO ATTITUDE"
BRANDON HATFIELD
27 W EAU CLAIRE ST

"RED CEDAR COMMUNITY CHURCH"
WISCONSIN DISTRICT OF THE WESLEYAN CHURCH
23 W EAU CLAIRE ST

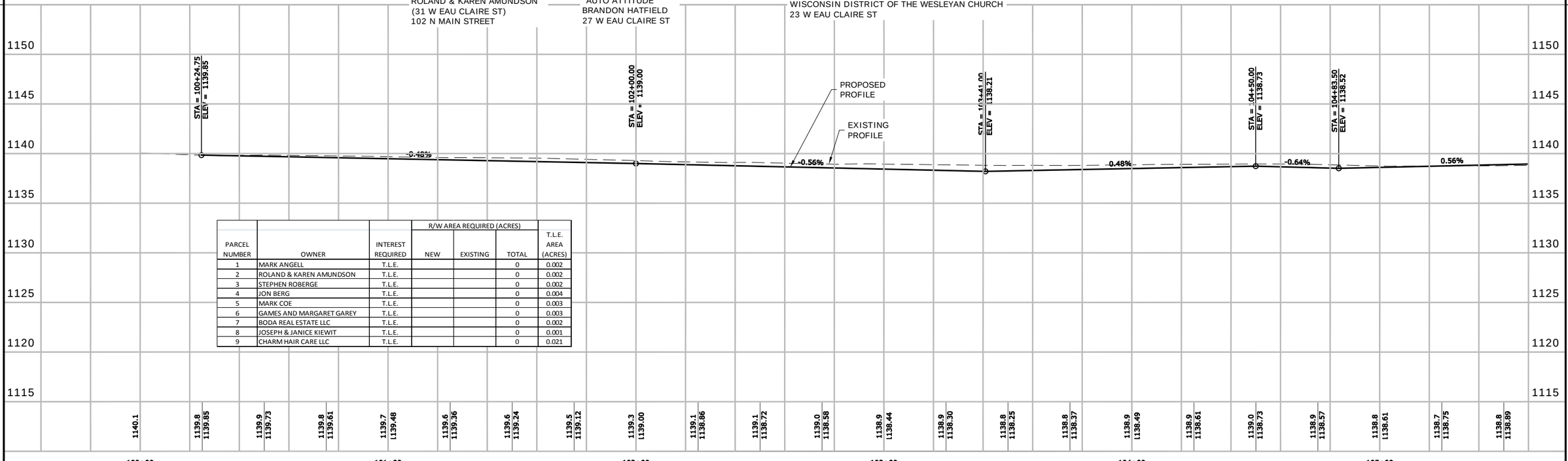
ASPHALT DW REQ'D MATCH EXISTING GRAVEL @ 38' LT
ASPHALT DW REQ'D SAWCUT & MATCH EXISTING @ 43' LT
ASPHALT DW REQ'D SAWCUT & MATCH EXISTING @ 48' LT
ASPHALT DW REQ'D SAWCUT & MATCH EXISTING @ 40' LT
ASPHALT DW REQ'D SAWCUT & MATCH EXISTING @ 43' LT
ASPHALT DW REQ'D MATCH EXISTING GRAVEL @ 38' RT
ASPHALT DW REQ'D SAWCUT & MATCH EXISTING @ 38' RT
ASPHALT DW REQ'D SAWCUT & MATCH EXISTING @ 43' RT

15'X5' TLE
12'X8' TLE
8'X8' TLE
20'X5' TLE
35'X5' TLE
24'X5' TLE

PROVIDE ACCESS TO PARKING LOT DURING CONSTRUCTION
10' TAPER TYP.
ADJUSTING CURB STOP (TYP)
ADJUSTING GATE VALVE
ADJUSTING MANHOLE COVERS
PROPOSED GAS LINE BY WE ENERGIES
STA 100+50 C&G HIGH PT BEGIN TRANSITION TO MATCH EXISTING
SAW CUT
MATCH EXISTING C&G ELEVATION & OFFSET

N88° 49' 46.26"E
691.91'

SCALE
0' 10' 20' 40'



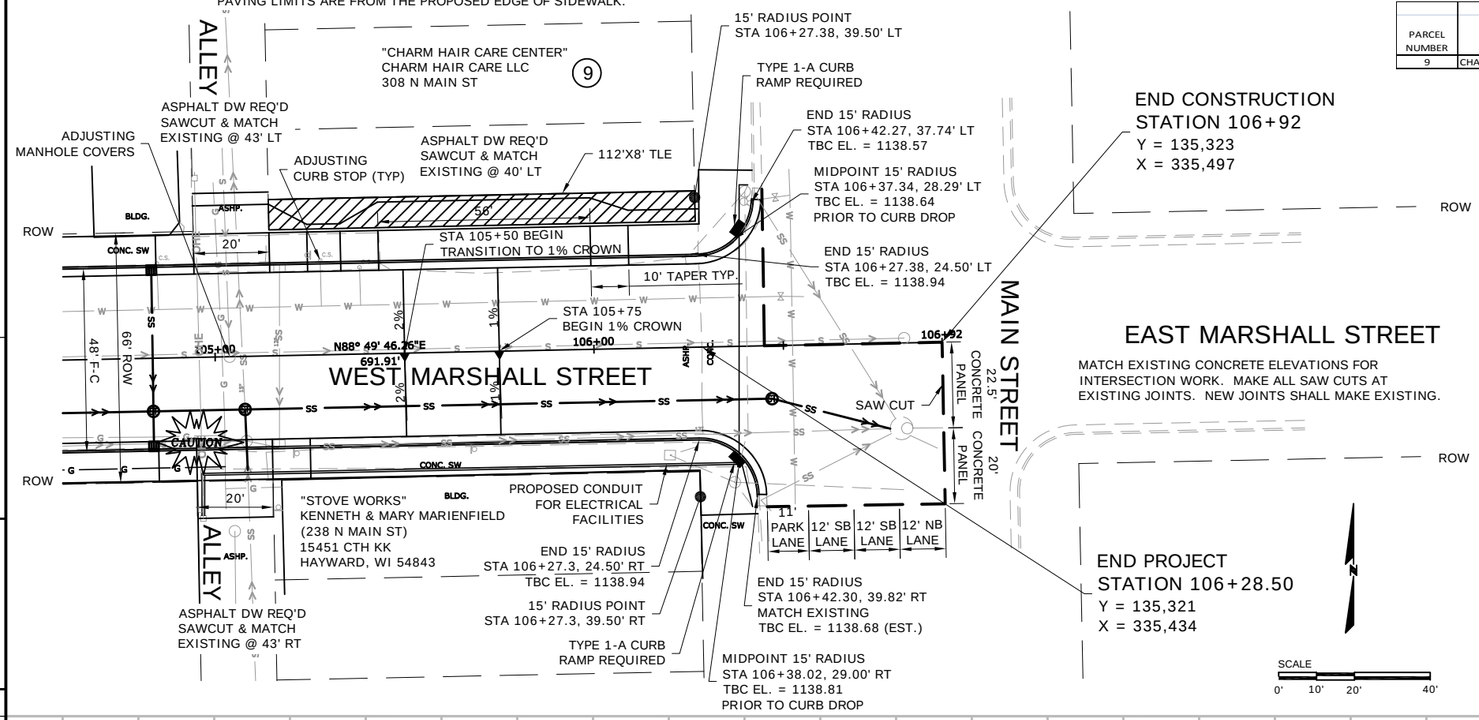
PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W AREA REQUIRED (ACRES) NEW	EXISTING	TOTAL	T.L.E. AREA (ACRES)
1	MARK ANGELL	T.L.E.			0	0.002
2	ROLAND & KAREN AMUNDSON	T.L.E.			0	0.002
3	STEPHEN ROBERGE	T.L.E.			0	0.002
4	JON BERG	T.L.E.			0	0.004
5	MARK COE	T.L.E.			0	0.003
6	GAMES AND MARGARET GAREY	T.L.E.			0	0.003
7	BODA REAL ESTATE LLC	T.L.E.			0	0.002
8	JOSEPH & JANICE KIEWIT	T.L.E.			0	0.001
9	CHARM HAIR CARE LLC	T.L.E.			0	0.021

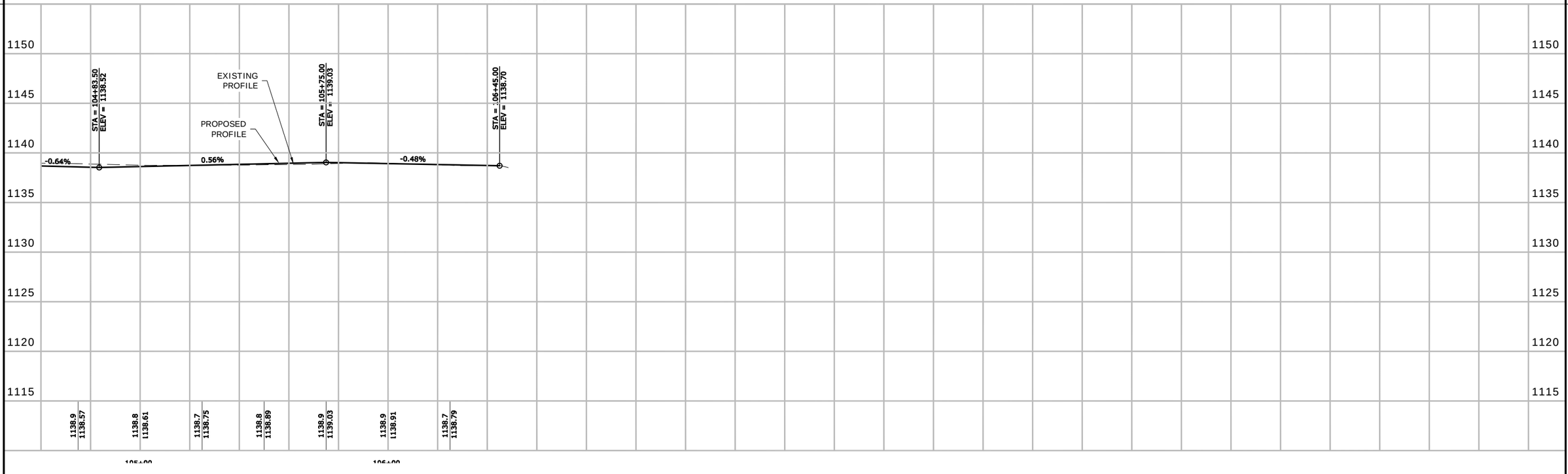
PROJECT NUMBER: 8997-00-32	HWY: LOCAL STREET	COUNTY: BARRON	MARSHALL STREET PLAN & PROFILE	SHEET NO: 16	E

NOTE: DIMENSIONS TO CONSTRUCTION EASEMENT LINES ARE FROM THE EXISTING RIGHT OF WAY, DIMENSIONS TO THE DRIVEWAY PAVING LIMITS ARE FROM THE PROPOSED EDGE OF SIDEWALK.

STATION & OFFSET OF CURB & GUTTER RADIUS POINTS IS TO THE TOP BACK OF CURB (TBC)

PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W AREA REQUIRED (ACRES) NEW	EXISTING	TOTAL	T.L.E. AREA (ACRES)
9	CHARM HAIR CARE LLC	T.L.E.			0	0.021





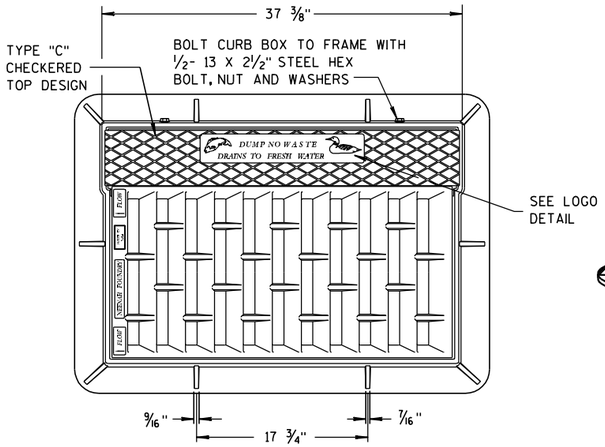
PROJECT NUMBER: 8997-00-32	HWY: LOCAL STREET	COUNTY: BARRON	MARSHALL STREET PLAN & PROFILE	SHEET NO: 17	E

FILE NAME: G:\2011-proj\11115081\DWG\050201_pn.dwg PLOT DATE: Jan 17, 2013 - 02:35pm PLOT BY:Owner PLOT NAME: PP 105+00 - 106+50 ORG. DATE: Jun 02, 2009 Originator : PLOT SCALE :

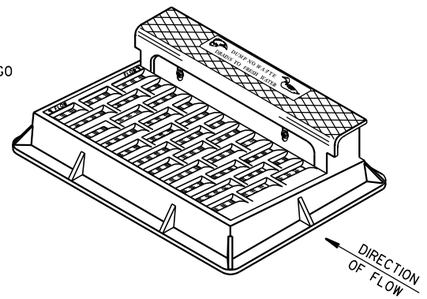
WISDOT/CADDS SHEET 42

Standard Detail Drawing List

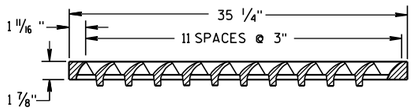
08A05-18A	INLET COVERS TYPE A, H, A-S, & H-S
08A05-18C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-18D	INLET COVER, TYPE BW, Z MANHOLE COVERS, TYPE K, J, J-S, L & M
08A08-01	CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C07-01	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D05-14A	CURB RAMPS TYPES 1 AND 1-A
08D05-14B	CURB RAMPS TYPES 2 AND 3
08D05-14C	CURB RAMPS TYPE 4A
08D05-14D	CURB RAMPS TYPE 4B
08D05-14E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E10-02	INLET PROTECTION TYPE A, B, C AND D
09B02-07	CONDUIT
13C01-15	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C04-15	URBAN NON-DOWELED CONCRETE PAVEMENT
13C18-01A	CONCRETE PAVEMENT JOINTING
13C18-01B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-01C	CONCRETE PAVEMENT JOINT TIES
13C18-01D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
15C02-04A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-04B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C03-01	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C05-01	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-12C	PAVEMENT MARKING ARROWS
15C08-15A	PAVEMENT MARKING (MAINLINE)
15C08-15B	PAVEMENT MARKING (INTERSECTIONS)
15C08-15E	PAVEMENT MARKING (LEFT TURN LANE)
15C08-15F	PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)
15C12-03	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15D30-01	TRAFFIC CONTROL, SIDEWALK CLOSURE

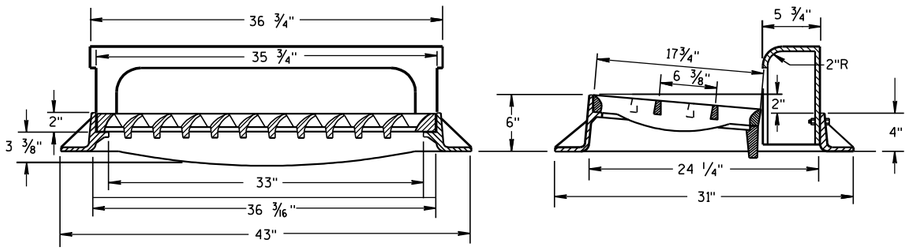


NOTE:
GRATE IS REVERSIBLE.



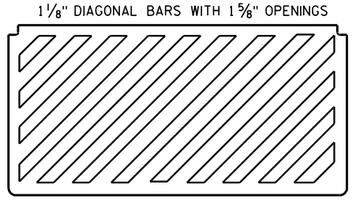
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"





TYPE "H"

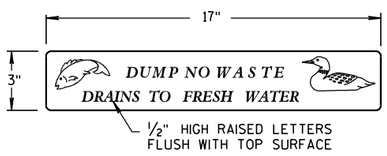
(APPROXIMATE WEIGHT 441 LBS.)
FRAME..... 181 LBS.
GRATE..... 146 LBS.
CURB BOX..... 114 LBS.



SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")
(APPROXIMATE WEIGHT 159 LBS.)
GRATE..... 159 LBS.

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL

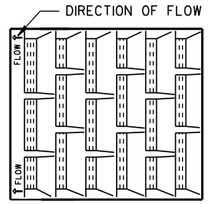
GENERAL NOTES

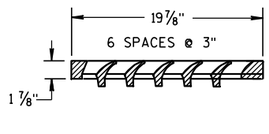
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

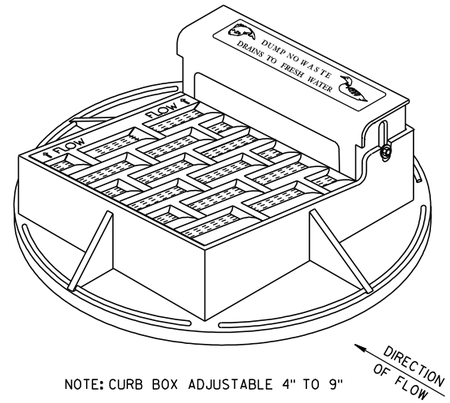
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

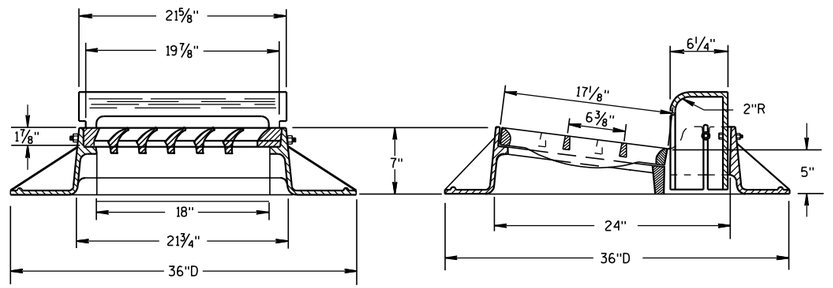
THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.





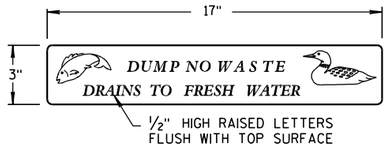


NOTE: CURB BOX ADJUSTABLE 4" TO 9"



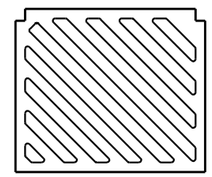
TYPE "A"

(APPROXIMATE WEIGHT 340 LBS.)
FRAME..... 185 LBS.
GRATE..... 71 LBS.
CURB BOX..... 84 LBS.



LOGO DETAIL

NOTE:
GRATE IS REVERSIBLE.



SPECIAL GRATE FOR TYPE "A" COVER

(MEASURES 19 3/4" X 17" X 1 7/8"
GRATE..... 84 LBS.

(NOTED AS TYPE A-S ON DRAINAGE TABLE)

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

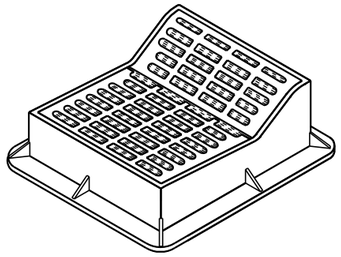
APPROVED
6/5/2012 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
FHWA

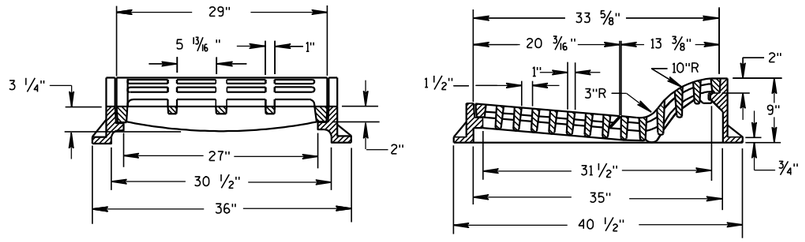
6

S.D.D. 8 A 5-18a

6

S.D.D. 8 A 5-18a



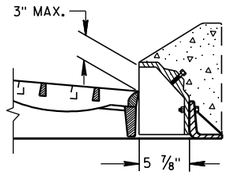


TYPE "F"

(APPROXIMATE WEIGHT 644 LBS.)

FRAME.....302 LBS.
GRATE.....160 LBS.
GRATE.....182 LBS.

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

(APPROXIMATE WEIGHT CURB BOX 68 LBS.)

USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

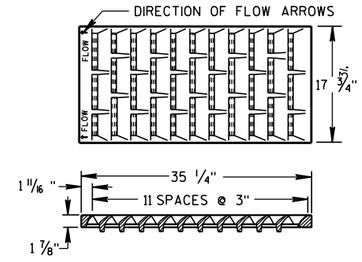
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

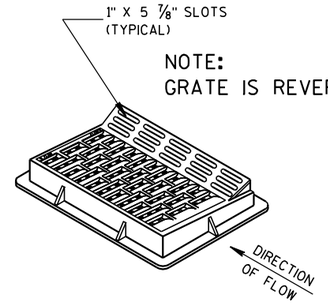
GENERAL NOTES

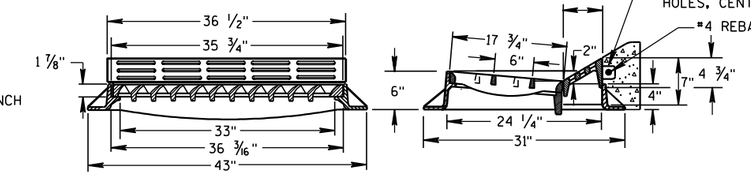
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.





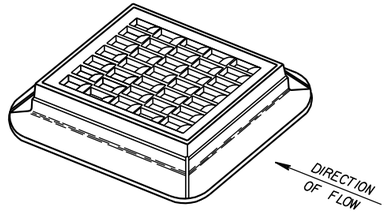


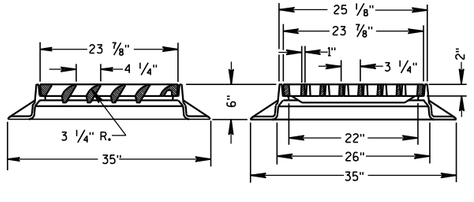
TYPE "HM"

(APPROXIMATE WEIGHT 414 LBS.)
FRAME..... 181 LBS.
GRATE..... 159 LBS.
CURB BOX..... 74 LBS.

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE

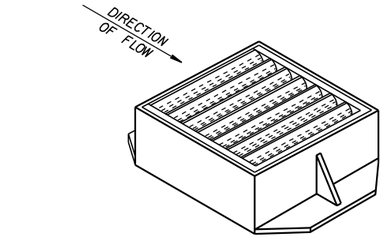


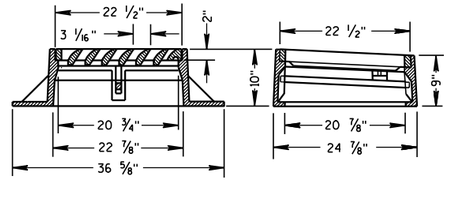


TYPE "S"

(APPROXIMATE WEIGHT 333 LBS.)

FRAME.....164 LBS.
GRATE..... 169 LBS.

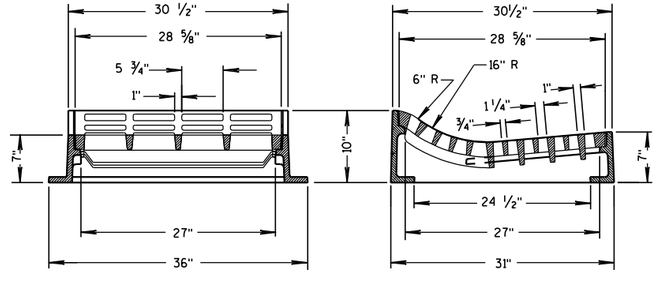




TYPE "V"

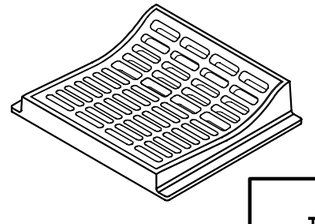
(APPROXIMATE WEIGHT 410 LBS.)

FRAME..... 269 LBS.
GRATE..... 136 LBS.
SAFETY BAR..... 5 LBS.



TYPE "T"

(APPROXIMATE WEIGHT 530 LBS.)
FRAME.....270 LBS.
GRATE.....260 LBS.
USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.



INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

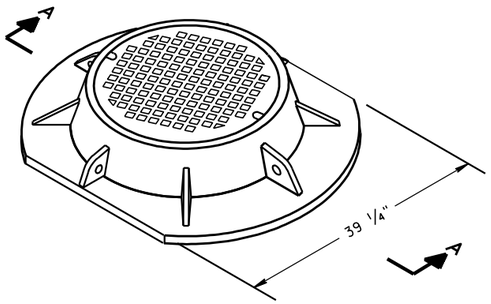
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

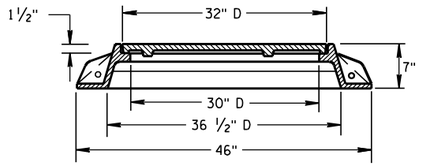
6

S.D.D. 8 A 5-18c

6

S.D.D. 8 A 5-18c



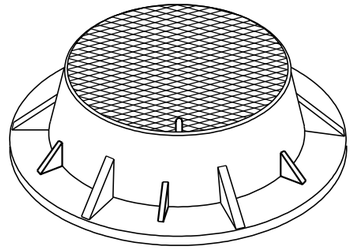


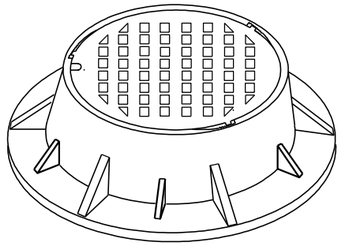
SECTION A-A

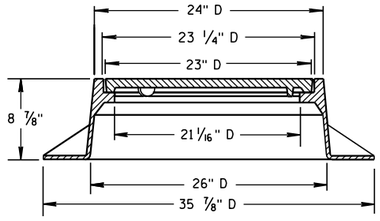
TYPE "K"

(APPROXIMATE WEIGHT 439 LBS.)

FRAME.....216 LBS.
LID.....223 LBS.



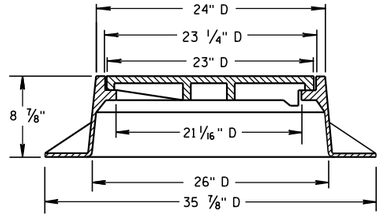




TYPE "J"

(APPROXIMATE WEIGHT 267 LBS.)

FRAME.....152 LBS.
LID.....115 LBS.



TYPE "J" SPECIAL

TYPE "B" NON-ROCKING SELF-SEAL LID

(APPROXIMATE WEIGHT 267 LBS.)

FRAME.....158 LBS.
LID.....109 LBS.

(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

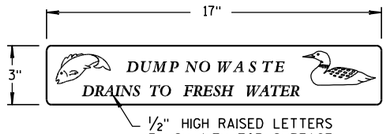
GENERAL NOTES

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.

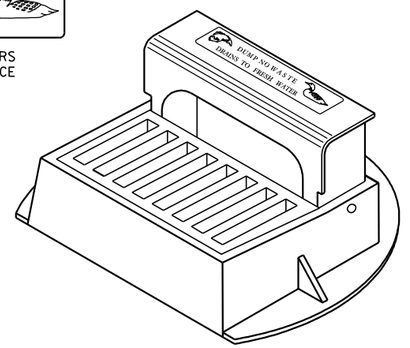
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

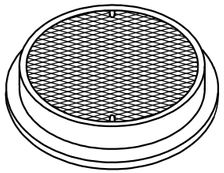
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

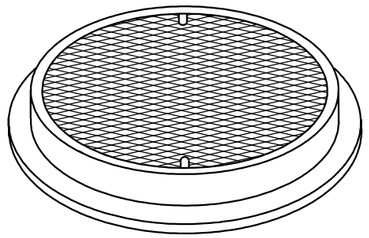
THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

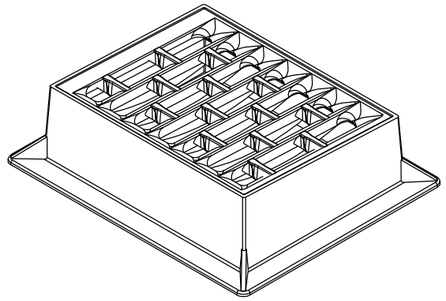


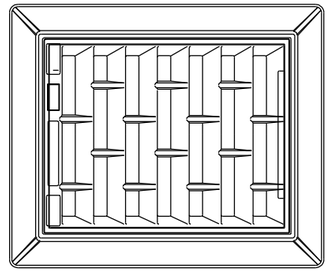
LOGO DETAIL

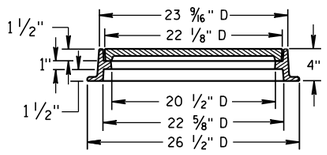








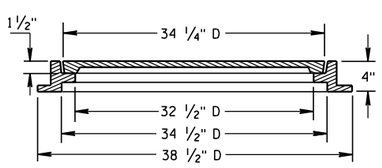




TYPE "L"

(APPROXIMATE WEIGHT 158 LBS.)

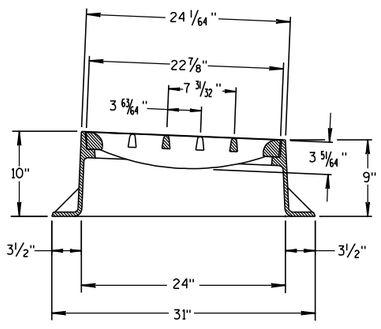
FRAME.....81 LBS.
LID.....77 LBS.

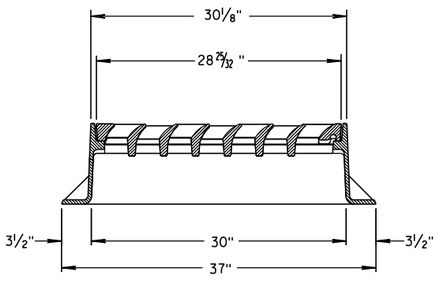


TYPE "M"

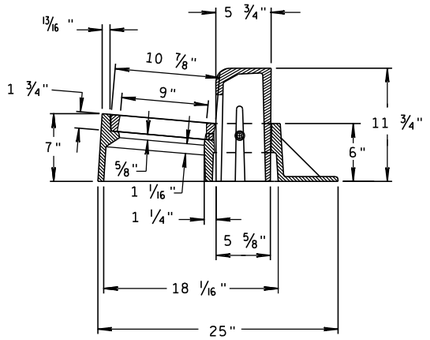
(APPROXIMATE WEIGHT 377 LBS.)

FRAME..... 125 LBS.
LID..... 252 LBS.





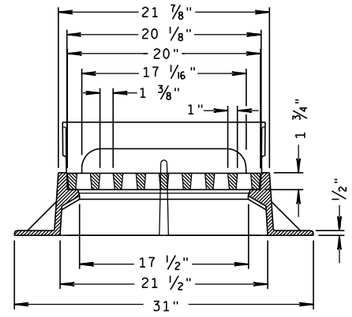
INLET COVER TYPE "BW"



INLET COVER TYPE "Z"

(APPROXIMATE WEIGHT 344 LBS.)

FRAME.....206 LBS.
GRATE..... 46 LBS.
CURB BOX..... 92 LBS.



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/5/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

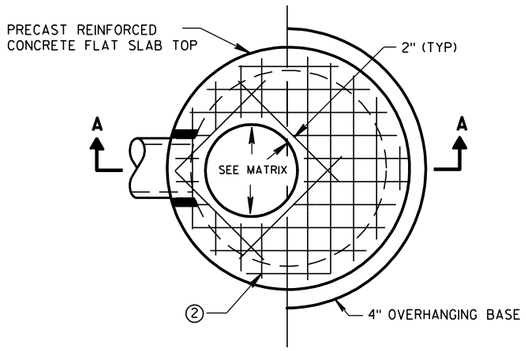
FHWA

6

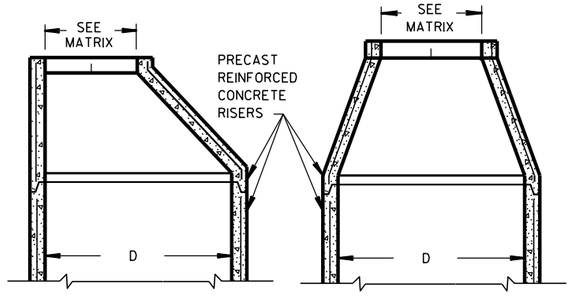
S.D.D. 8 A 5-18d

6

S.D.D. 8 A 5-18d

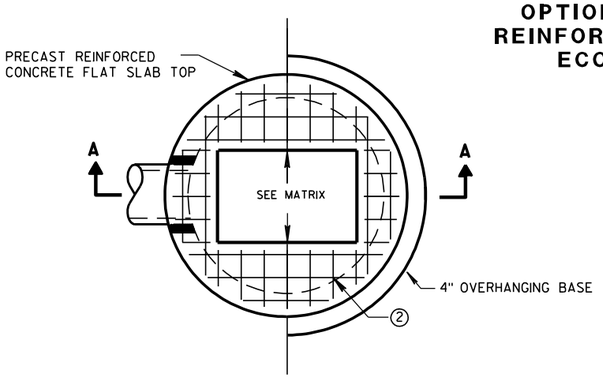


PLAN VIEW CIRCULAR OPENING

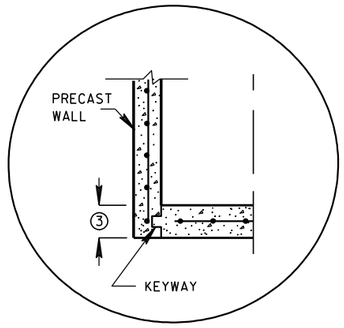


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

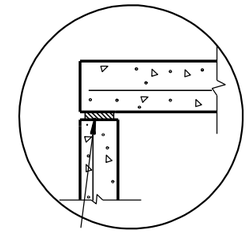
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



PLAN VIEW RECTANGULAR OPENING

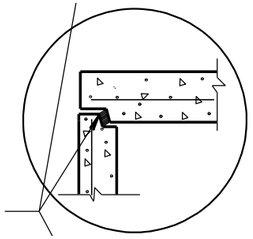


PRECAST REINFORCED
CONCRETE WITH INTEGRAL BASE OPTION

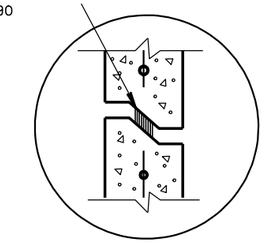


TOP WITH PLAIN END JOINT

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

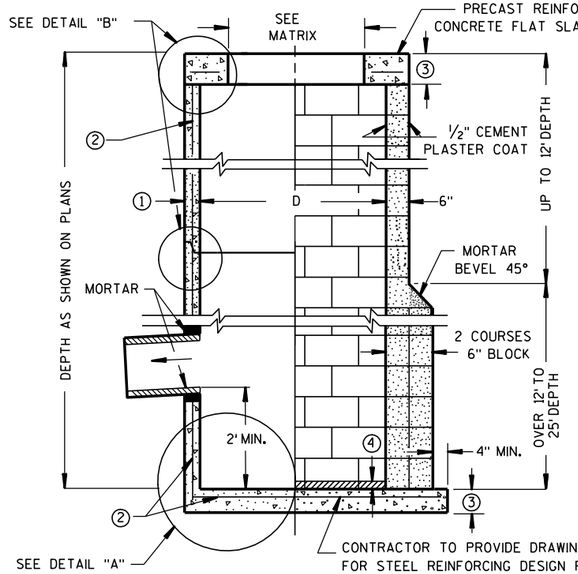


TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

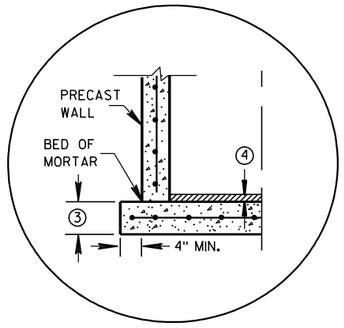


CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES

SECTION A-A

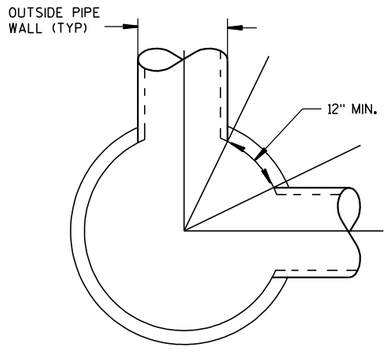
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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



SEPERATE 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 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 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.

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 SEPERATE 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

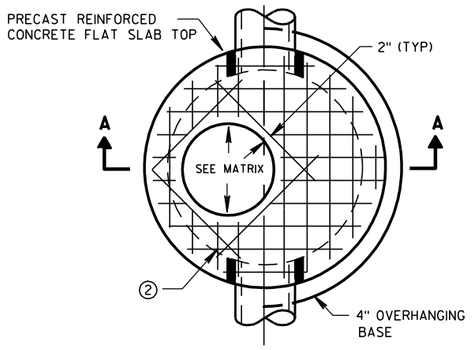
CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

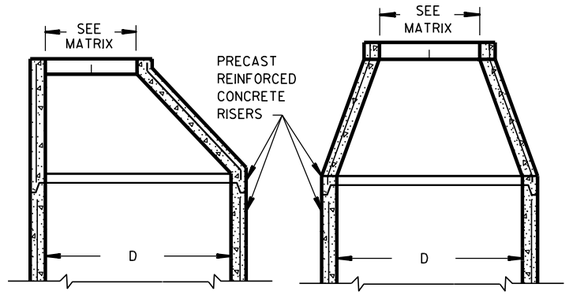
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

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

6
S.D.D. 8 A 8-1

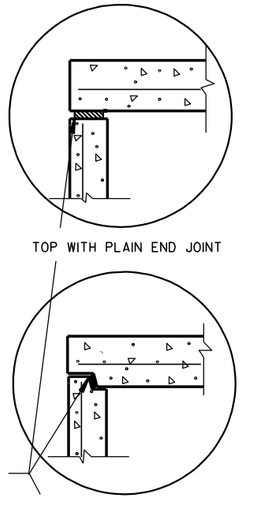


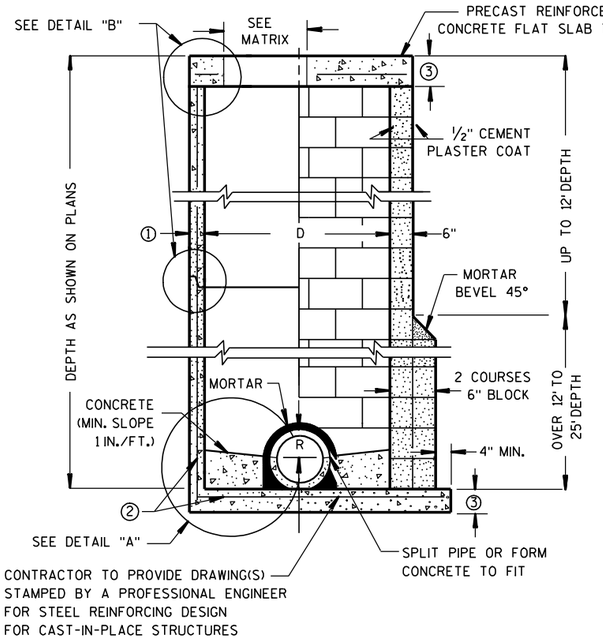
PLAN VIEW CIRCULAR OPENING



OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

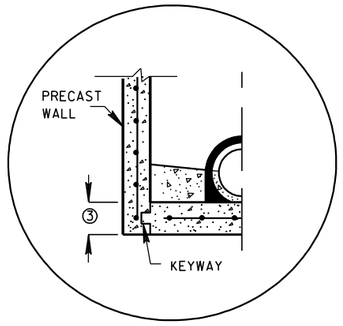
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



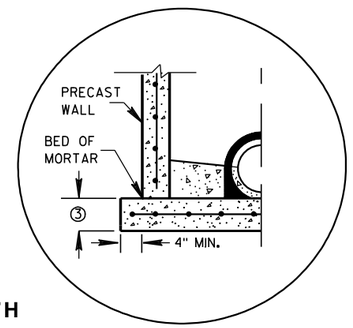


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

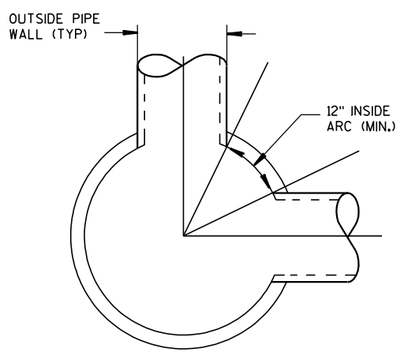


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

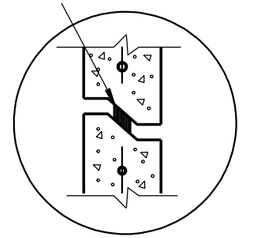


SEPERATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"



DETAIL "B"

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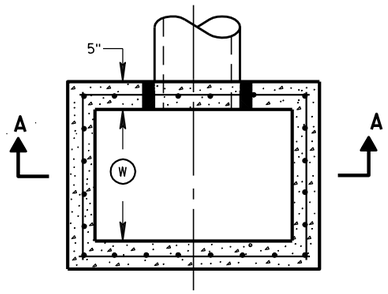
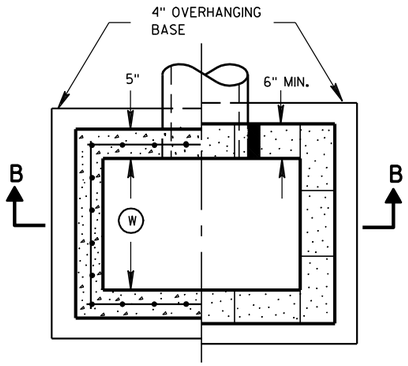
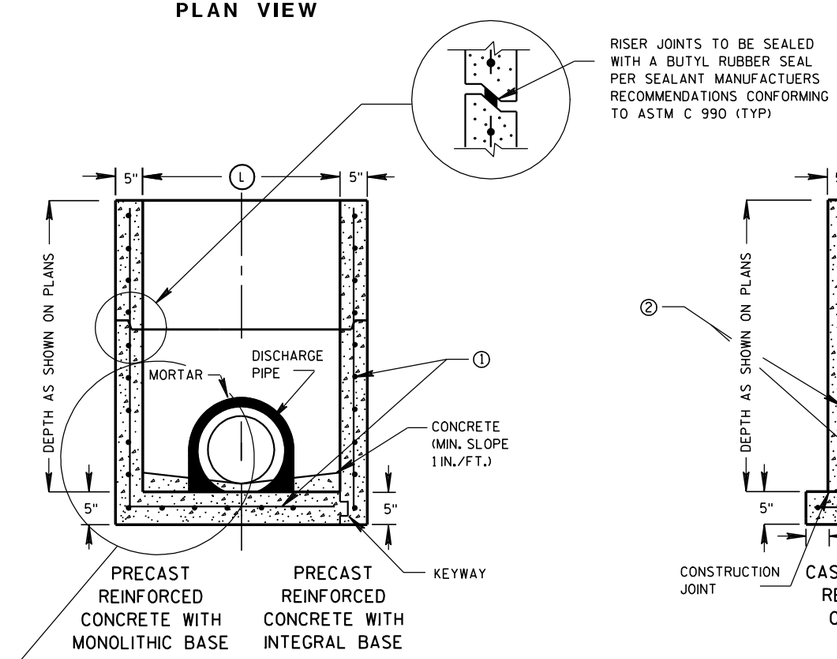
S.D.D. 8 B 9-1



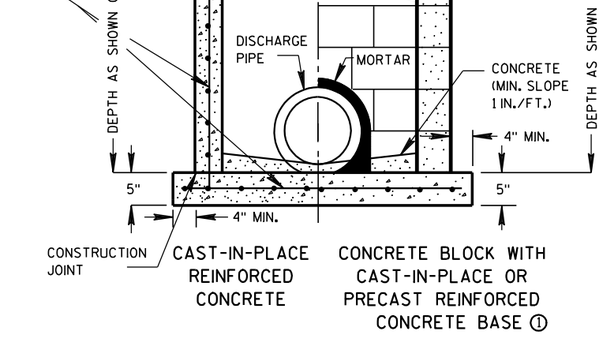
PLAN VIEW



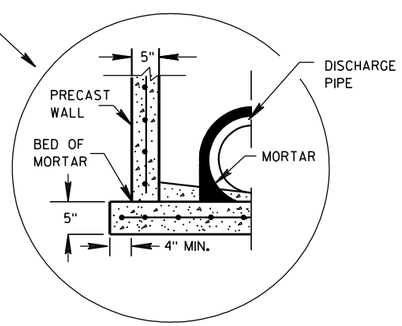
PLAN VIEW



SECTION A-A



SECTION B-B



SEPERATE PRECAST REINFORCED CONCRETE BASE OPTION

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 INLET 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 INLET 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 SEPERATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

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

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

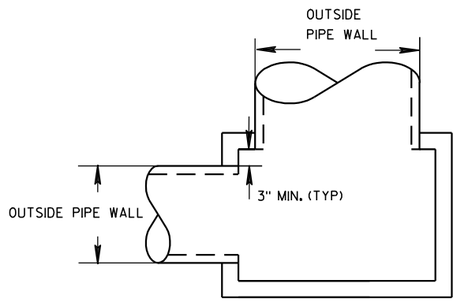
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

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

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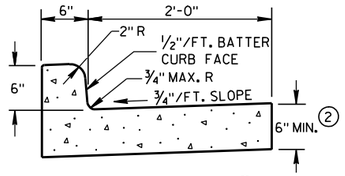
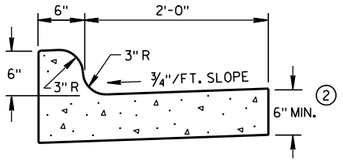
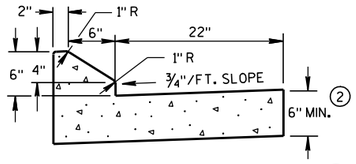


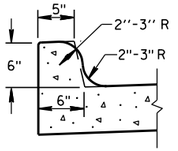
TYPES A & D (1)



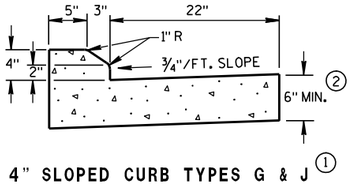
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

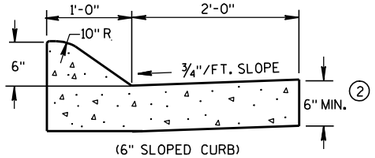


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

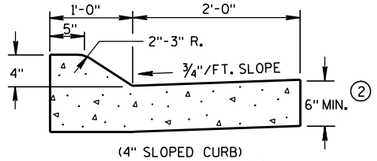


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

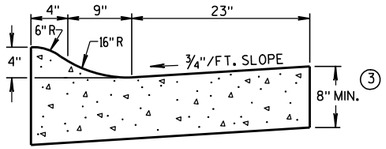


(6" SLOPED CURB)



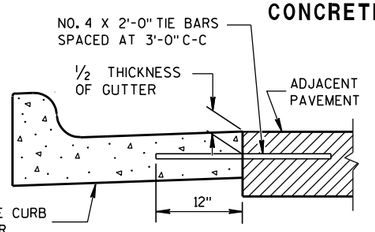
(4" SLOPED CURB)

TYPES A & D (1)

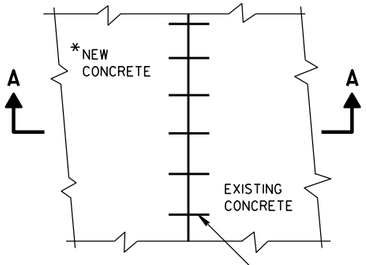


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"

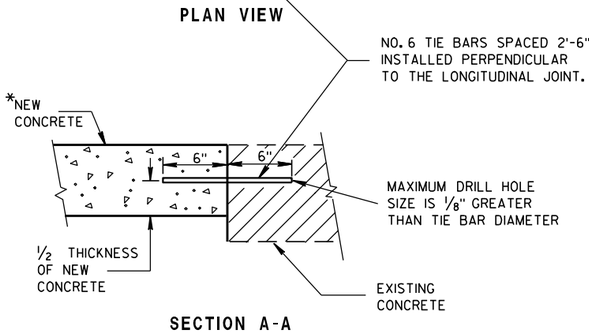


TYPICAL TIE BAR LOCATION (1)



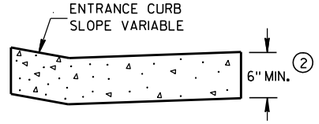
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

PLAN VIEW



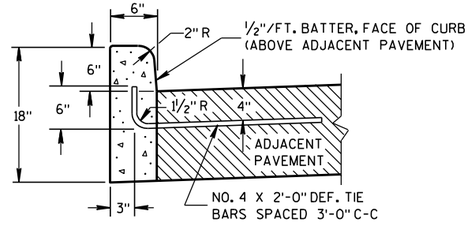
SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT



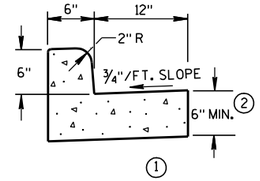
DRIVEWAY ENTRANCE CURB

(WHEN DIRECTED BY THE ENGINEER)



(1)

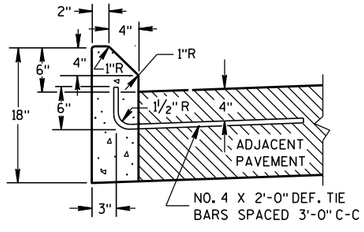
TYPES A & D



(1)

TYPES A & D

CONCRETE CURB & GUTTER 18"



(1)

TYPES G & J

CONCRETE CURB

(5)

REVERSE SLOPE GUTTER

(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.

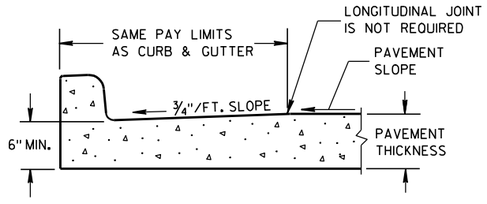
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.

(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.

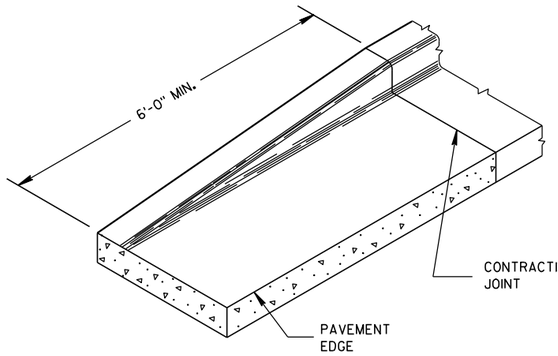
(3) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(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

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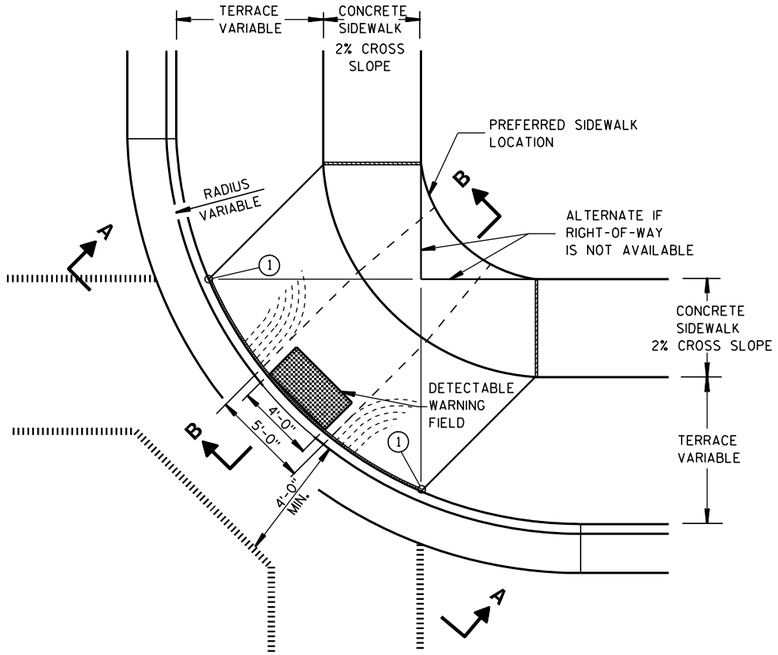
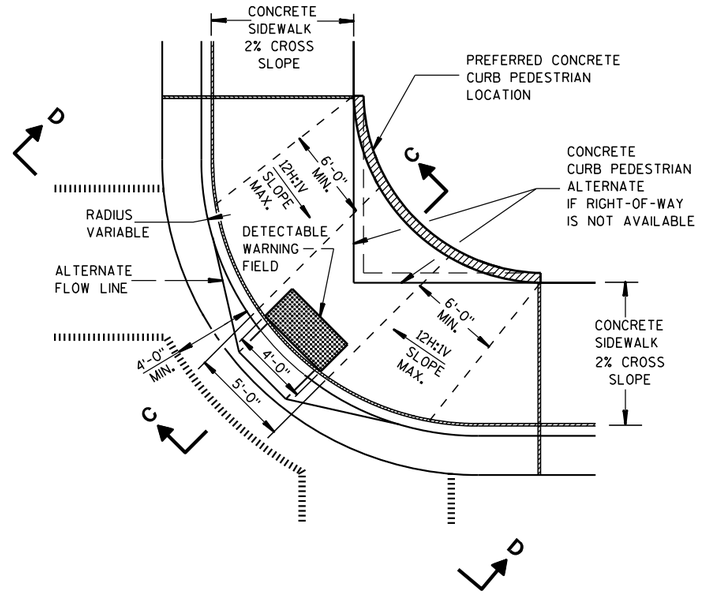


PLAN VIEW

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".

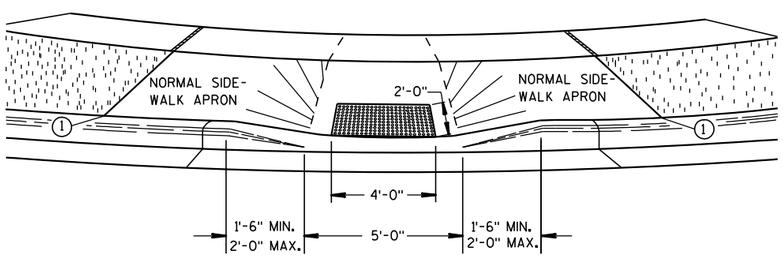
SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

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

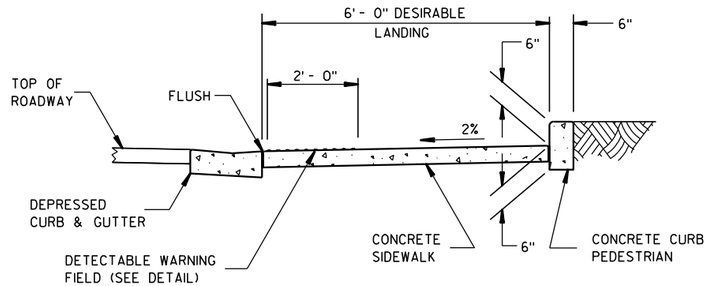
(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

LEGEND

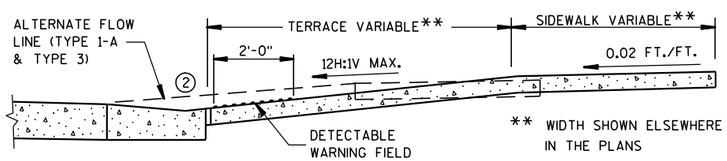
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



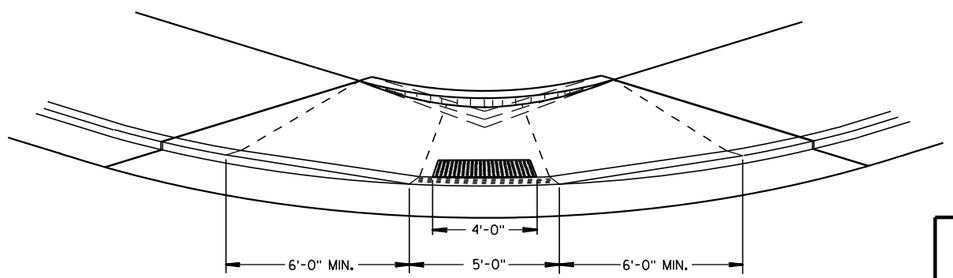
VIEW A-A



SECTION C-C



SECTION B-B



VIEW D-D

CURB RAMPS TYPES 1 AND 1-A

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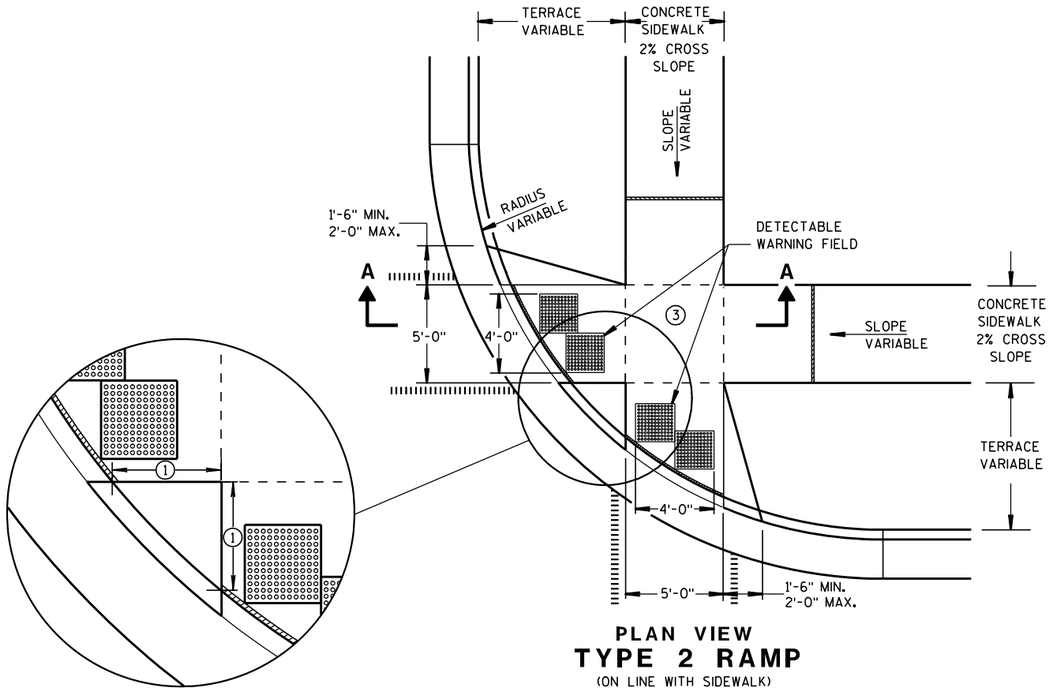
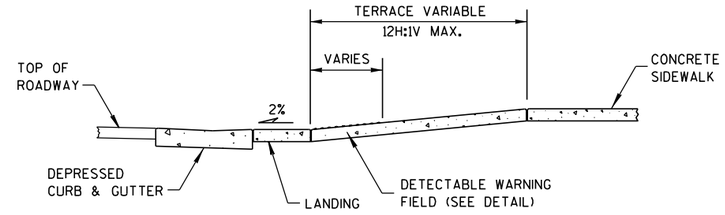
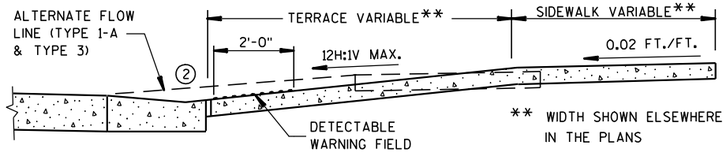


PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)



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.

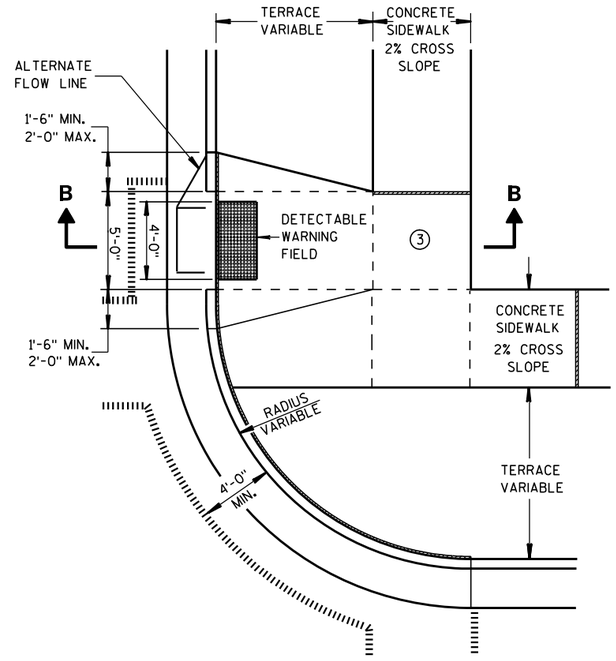
(1) WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.

(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) PROVIDE LANDING AT TOP OF RAMP WITH NO MORE THAN 2% SLOPE IN ANY DIRECTION.

LEGEND

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

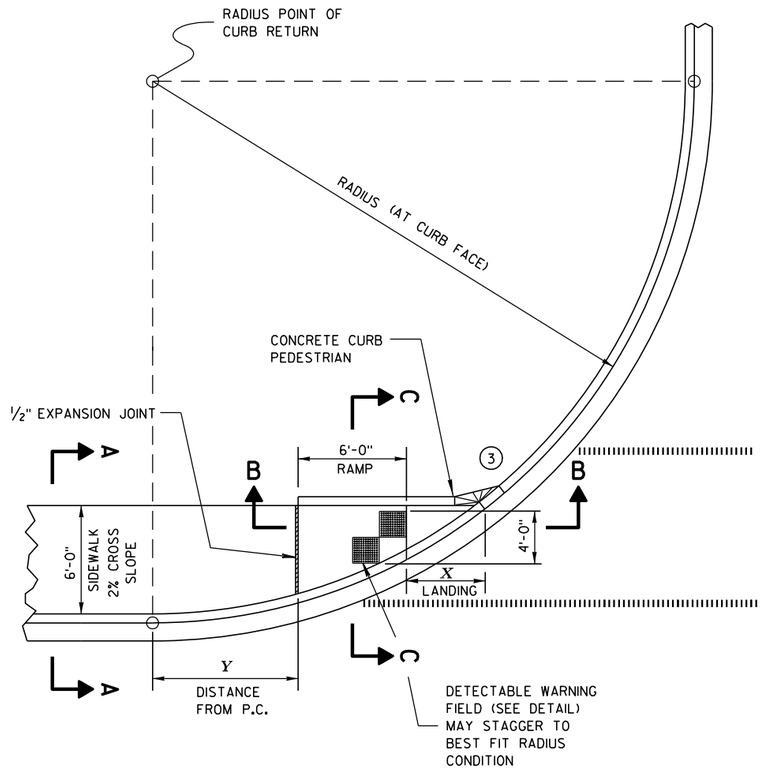


PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

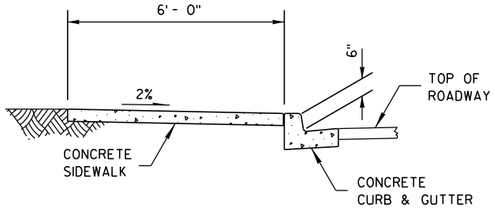
6
S.D.D. 8 D 5-14b



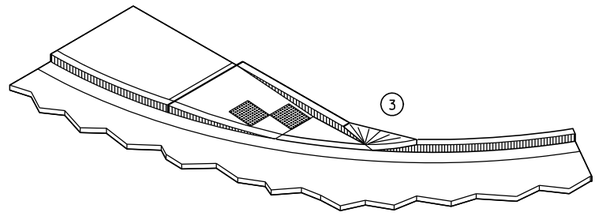
CURB RAMP TYPE 4A
PLAN VIEW

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"

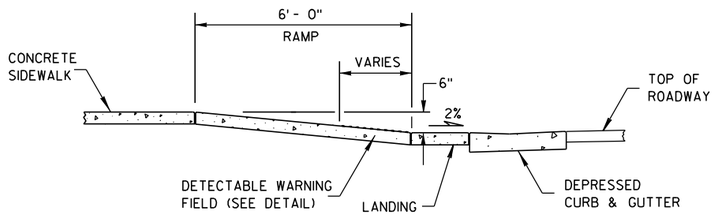
INTERMEDIATE RADII CAN BE INTERPOLATED



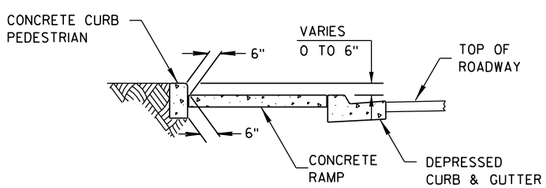
SECTION A-A



ISOMETRIC VIEW



SECTION B-B



SECTION C-C

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.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

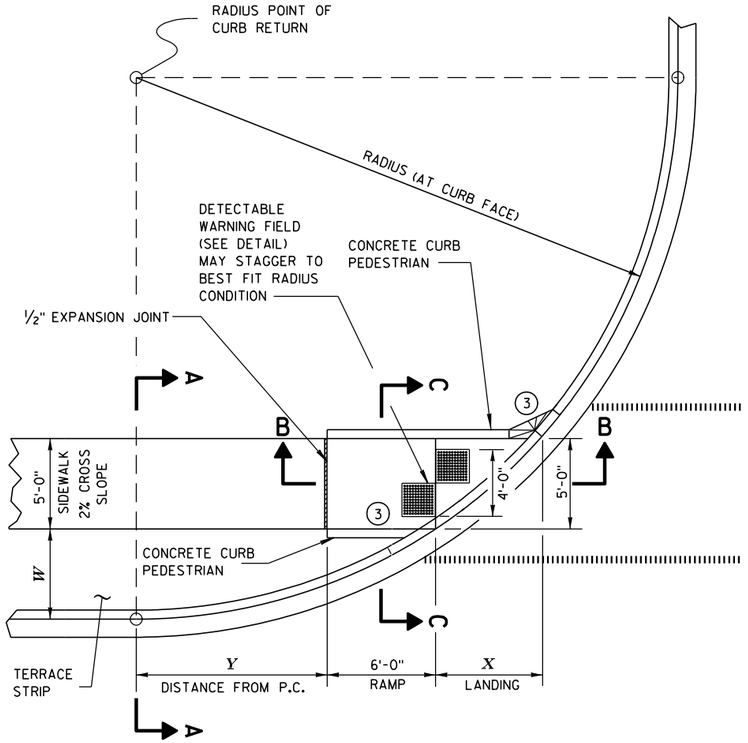
LEGEND

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

CURB RAMPS TYPE 4A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 8 D 5-14c



CURB RAMP TYPE 4B
PLAN VIEW

GENERAL NOTES

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

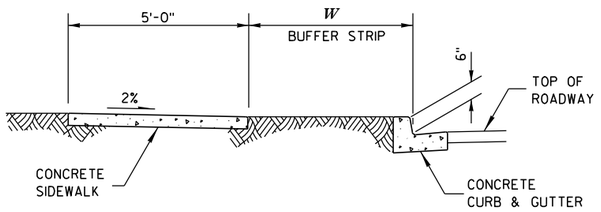
RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

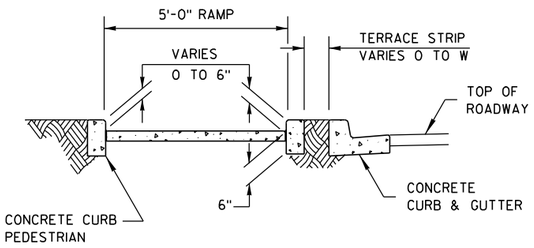
(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

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"
70 FEET	12'-2¾"	14'-3¼"	11'-¼"	17'-4"	10'-1"	19'-11¾"	9'-3¾"	22'-4¼"	8'-8¼"	24'-6¼"
80 FEET	13'-2"	15'-8½"	11'-10½"	18'-11¾"	10'-10¾"	21'-10"	10'-1"	24'-4¾"	9'-5"	26'-8¾"
90 FEET	14'- ½"	17'-½"	12'-8¼"	20'-6½"	11'-7¾"	23'-7"	10'-9¾"	26'-3¾"	10'-1¼"	28'-9½"
100 FEET	14'-10½"	18'-3¾"	13'-5½"	22'-0"	12'-4¼"	25'-2¾"	11'-5¾"	28'-1½"	10'-9"	30'-9"

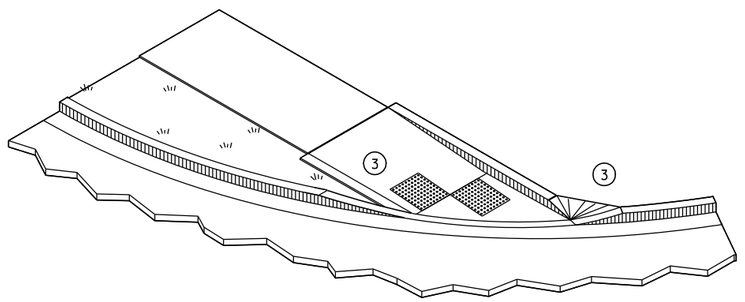
INTERMEDIATE RADII CAN BE INTERPOLATED



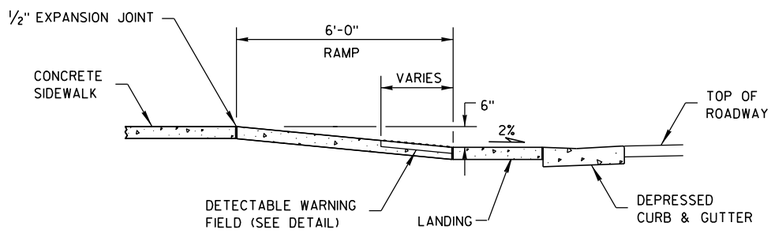
SECTION A-A



SECTION C-C



ISOMETRIC VIEW



SECTION B-B

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

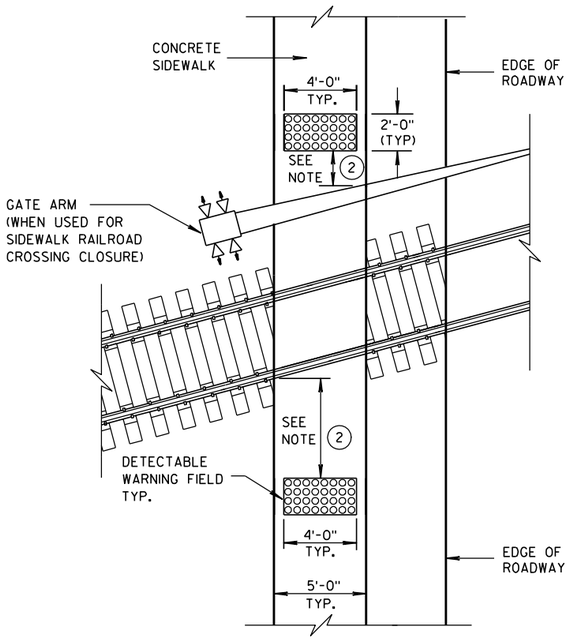
PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 4B

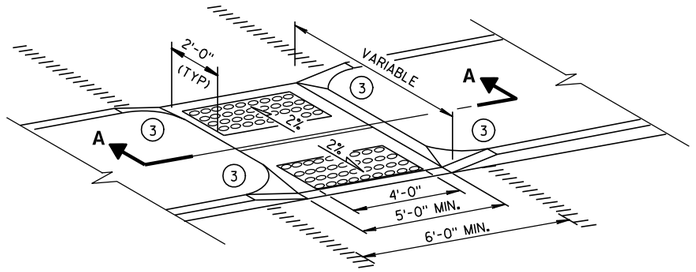
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

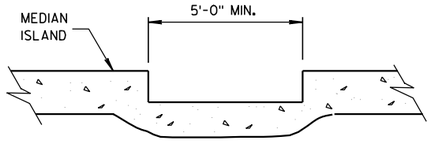
S.D.D. 8 D 5-14d



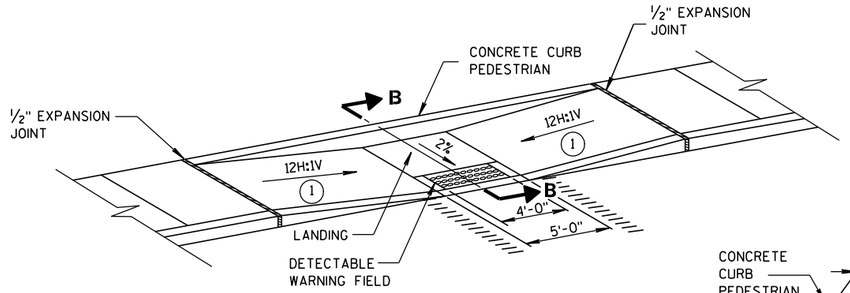
TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



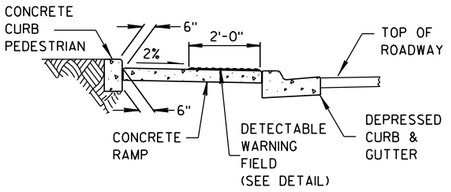
MEDIAN ISLAND NON-ELEVATED CROSSING
TYPE 5



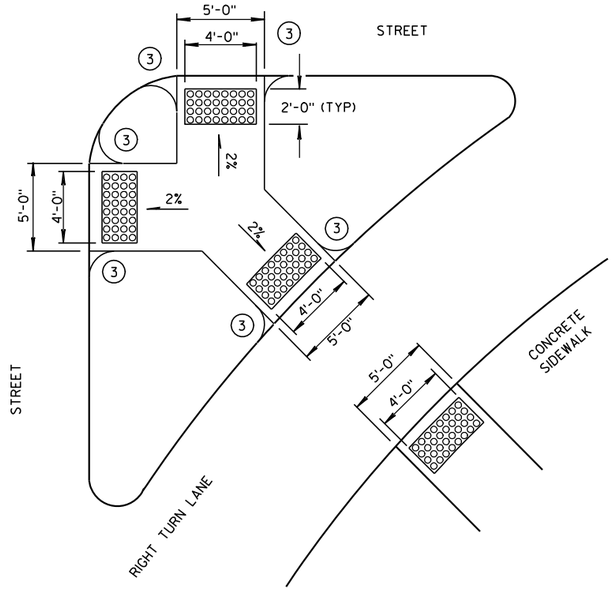
SECTION A-A



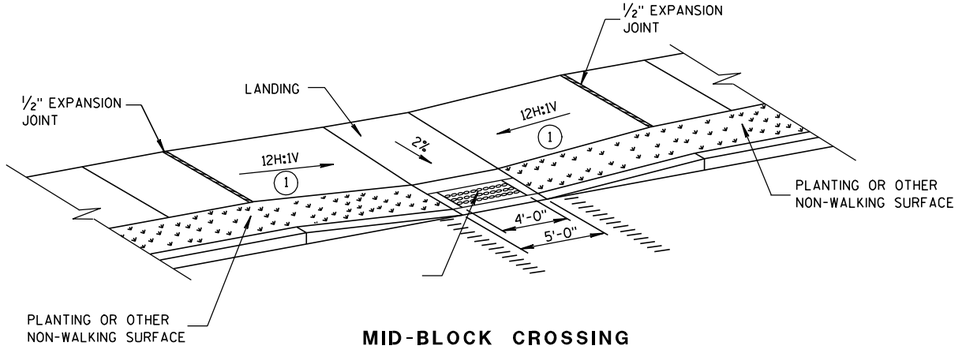
MID-BLOCK CROSSING
TYPE 7A



SECTION B-B



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.

GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

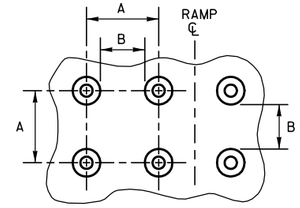
(1) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(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.

LEGEND

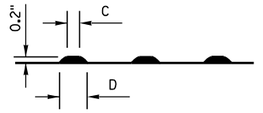
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



PLAN VIEW

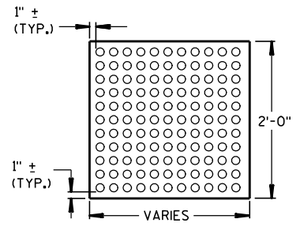
	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

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



ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



PLAN VIEW

DETECTABLE WARNING FIELD (TYPICAL)

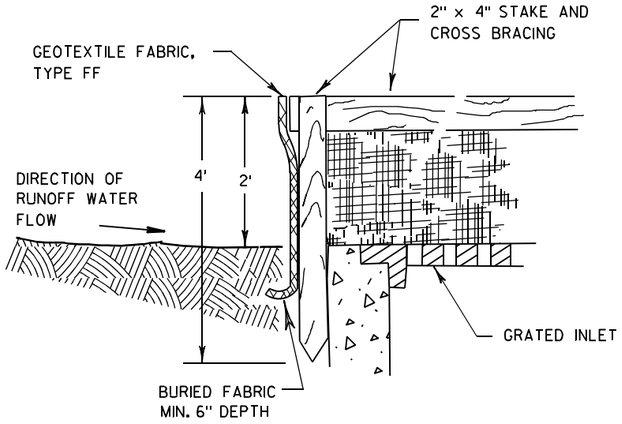
CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

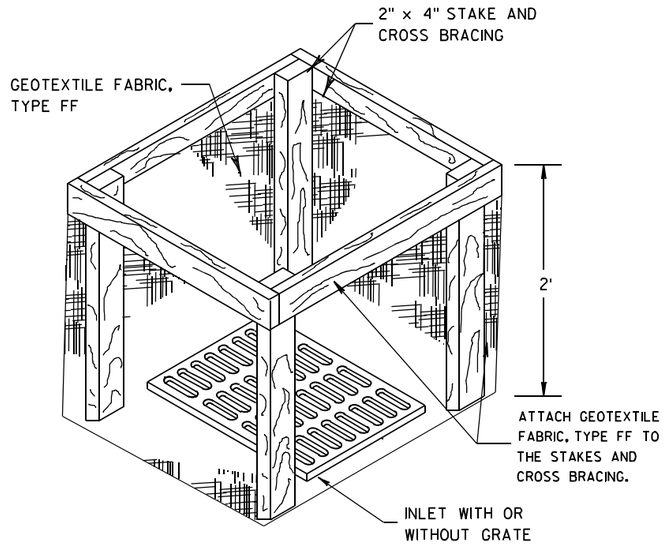
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2-9-10 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
FHWA

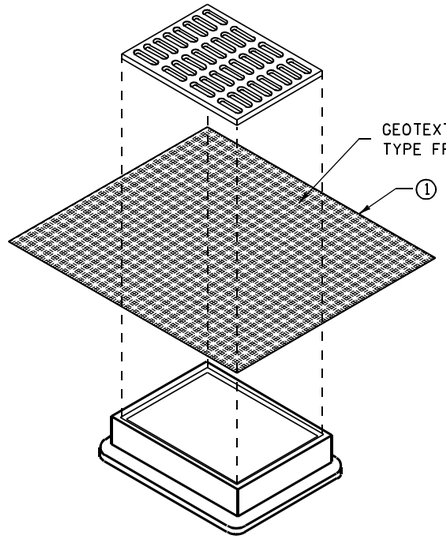
6

S.D.D. 8 D 5-14e



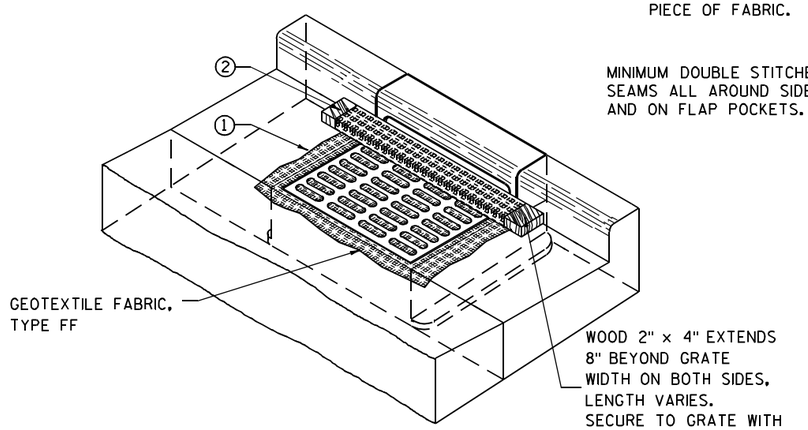


INLET PROTECTION, TYPE A

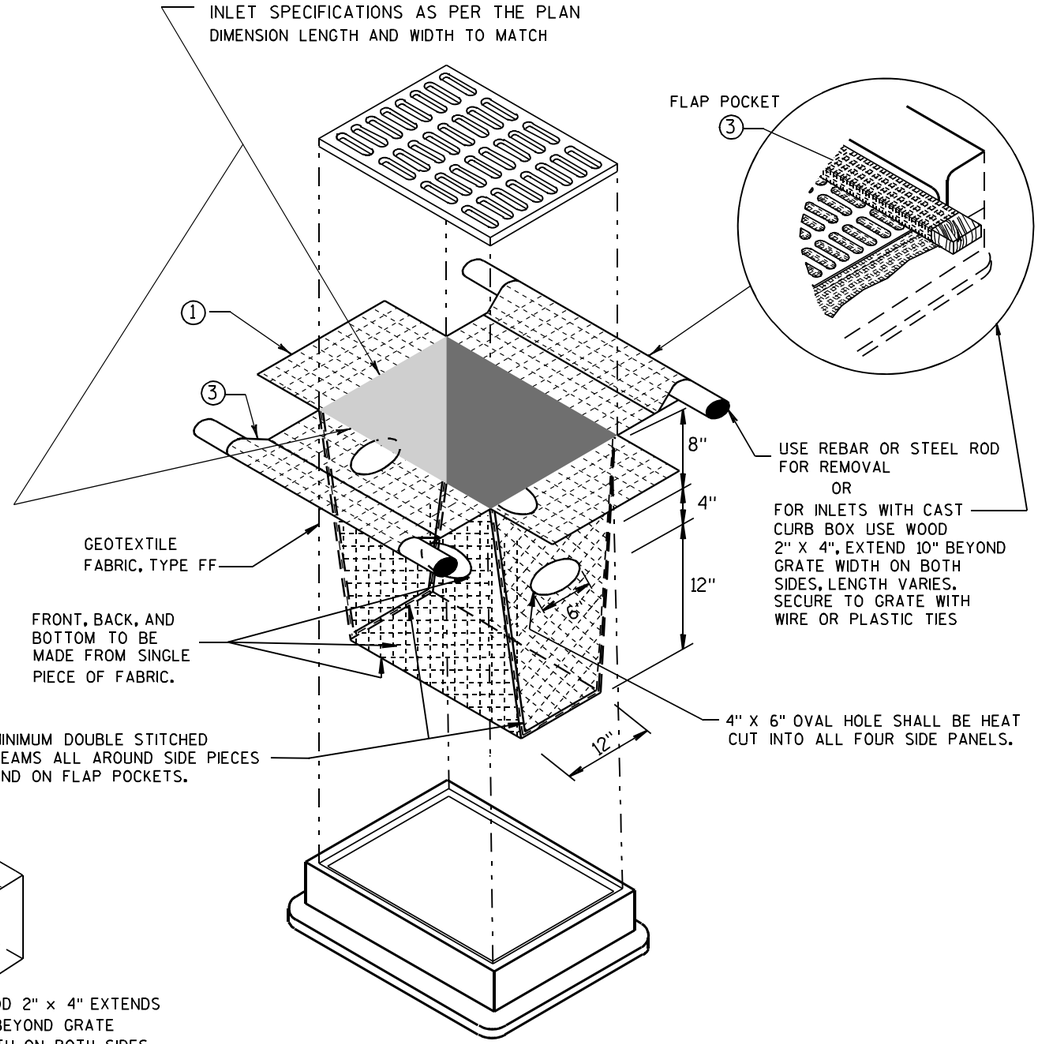


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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.

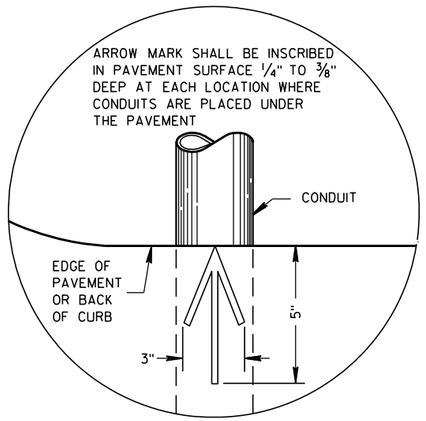
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

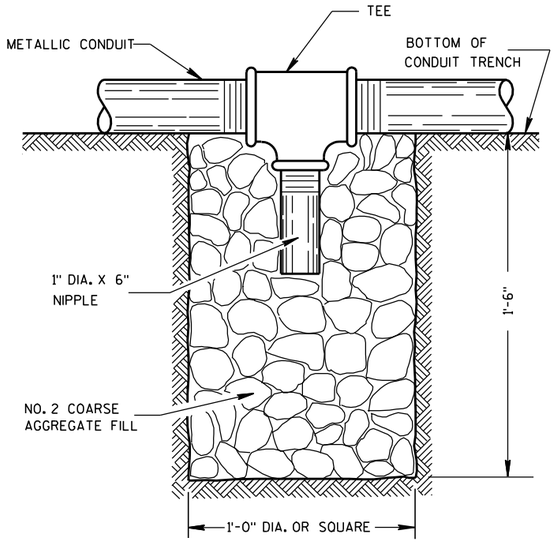
APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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



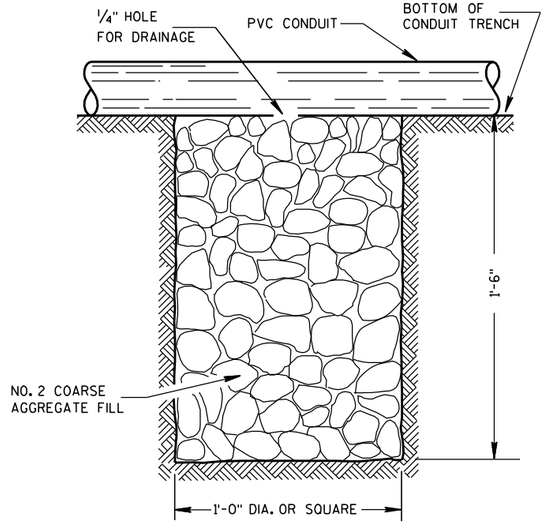
PLAN VIEW

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.

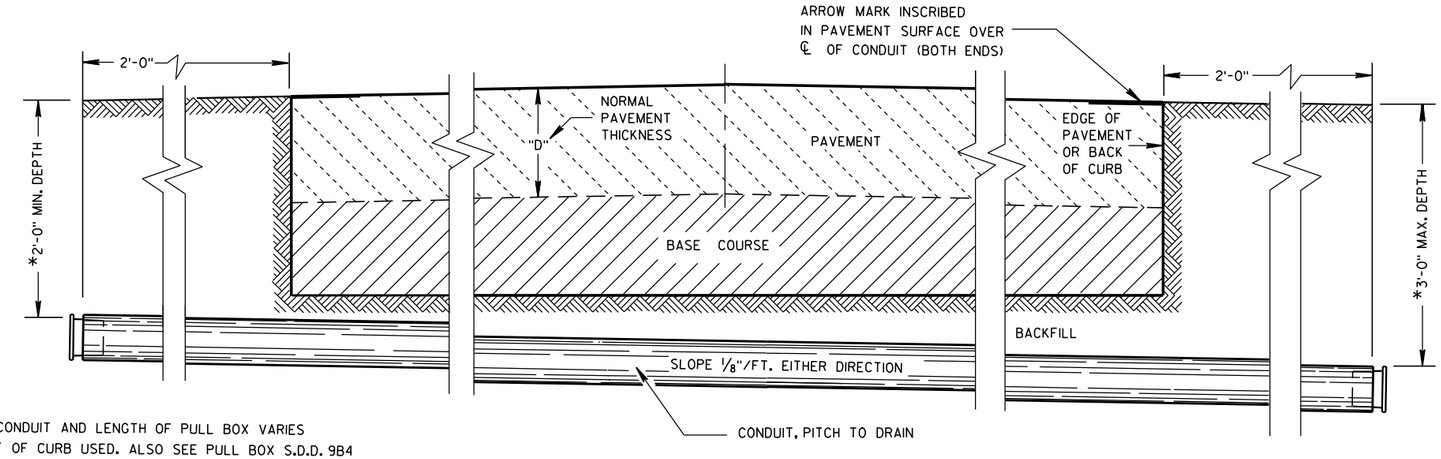
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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

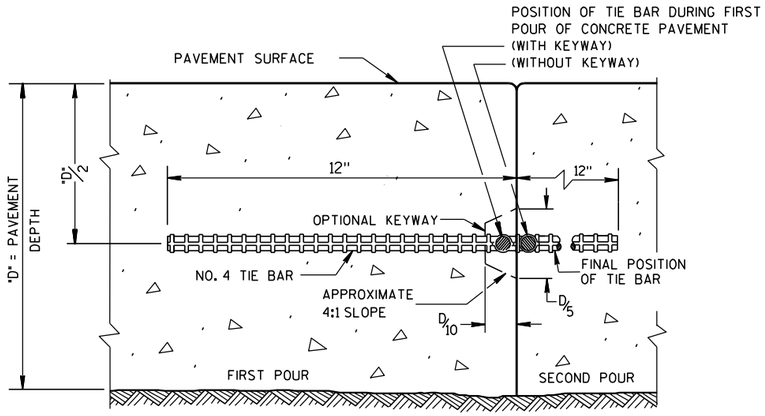
/S/ Balu Ananthanarayanan — STATE ELECTRICAL ENGI

FHWA

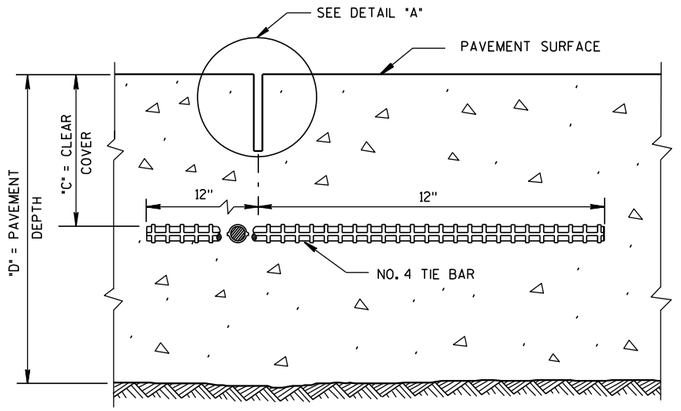
HWYS

6

S.D.D. 9 B 2-7



CONSTRUCTION JOINT



SAWED JOINT

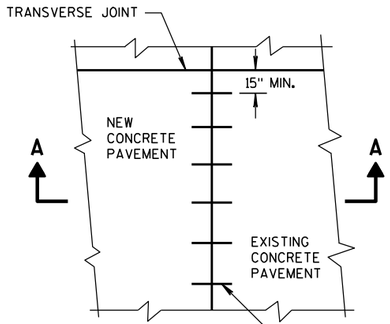
GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

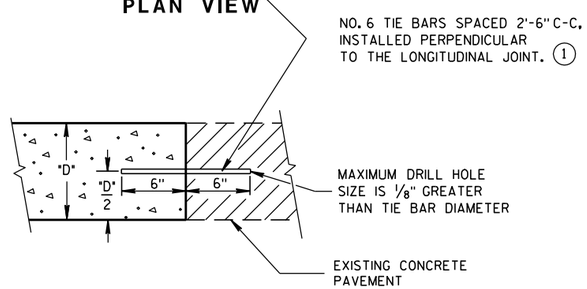
CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

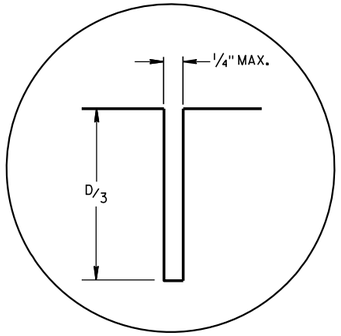
(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW

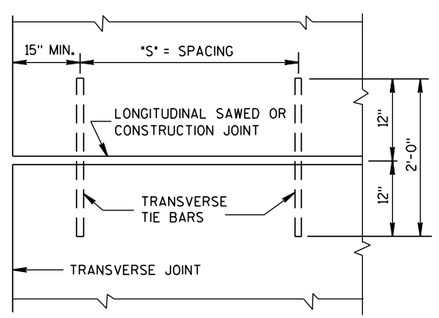


SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"

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

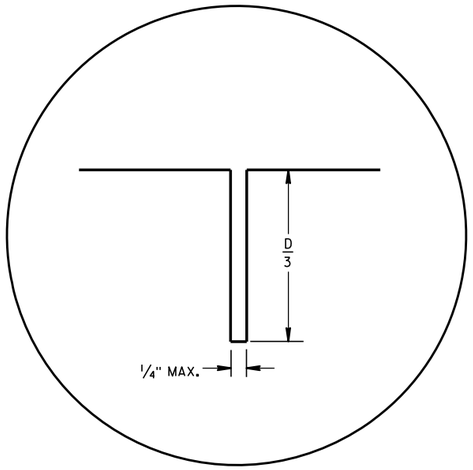
10-5-2010 DATE

/S/ Deb Bischoff
PAVEMENT POLICY & DESIGN ENGINEER

FHWA

6

S.D.D. 13 C 1-15



JOINT DETAIL

PAVEMENT DEPTH AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6",6 1/2"	12'
7",7 1/2"	14'
8" & ABOVE	15'

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT CONTRACTION JOINTS NORMAL TO THE CENTERLINE.

LOCATE AND ORIENT CONTRACTION JOINTS THROUGH INTERSECTIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

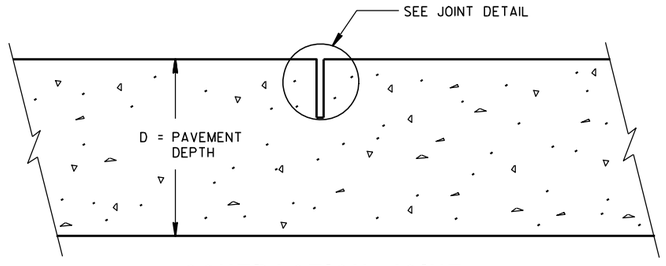
DO NOT SEAL OR FILL CONTRACTION JOINTS.

CONSTRUCTION JOINTS

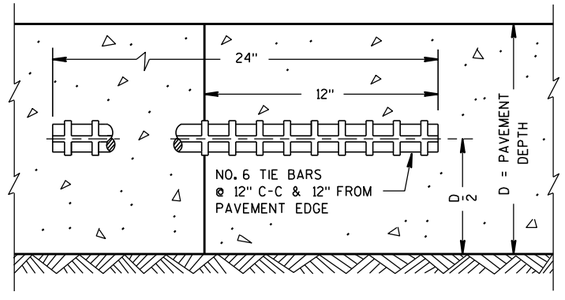
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 4 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

THE CONTRACTOR MAY INSERT TIE BARS THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN PLACED.

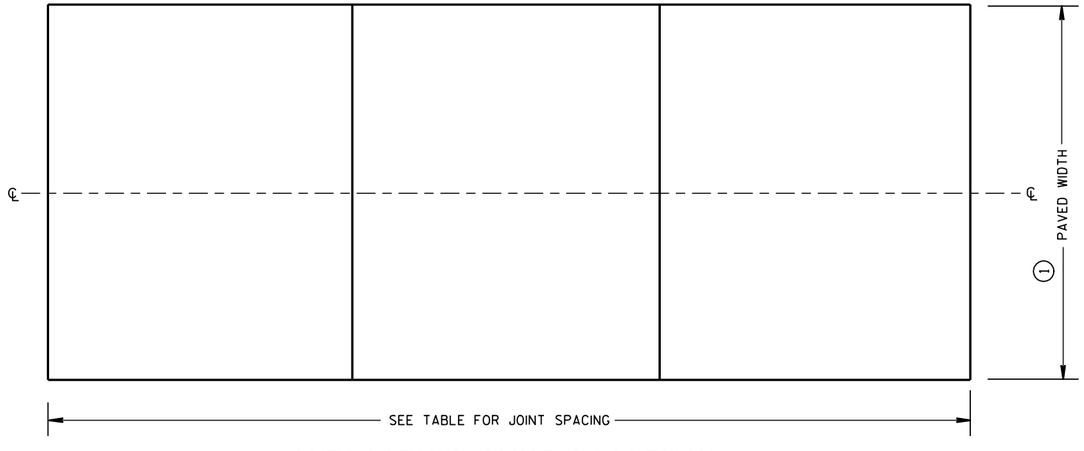
(1) REFER TO TYPICAL CROSS SECTIONS FOR PAVED WIDTH AND LOCATION OF LONGITUDINAL JOINTS.



CONTRACTION JOINT



CONSTRUCTION JOINT



CONTRACTION JOINT LOCATIONS

URBAN NON-DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12/11/2009 — DATE

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

FHWA

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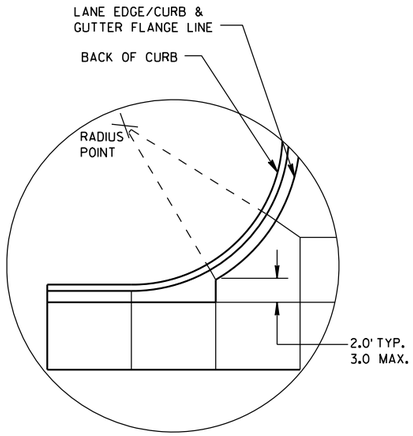
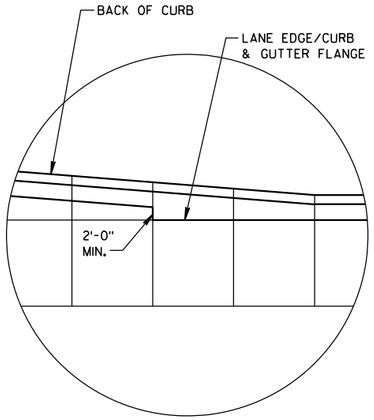
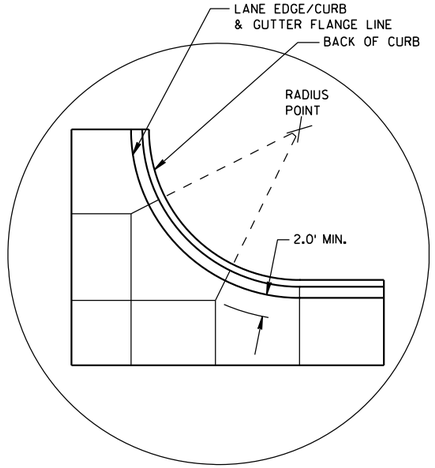
S.D.D. 13 C 4-15



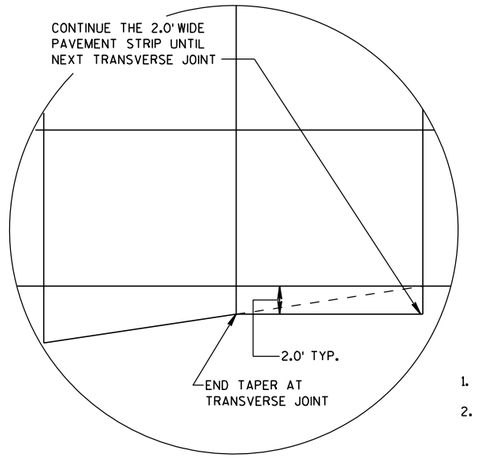
DETAIL "A"



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.

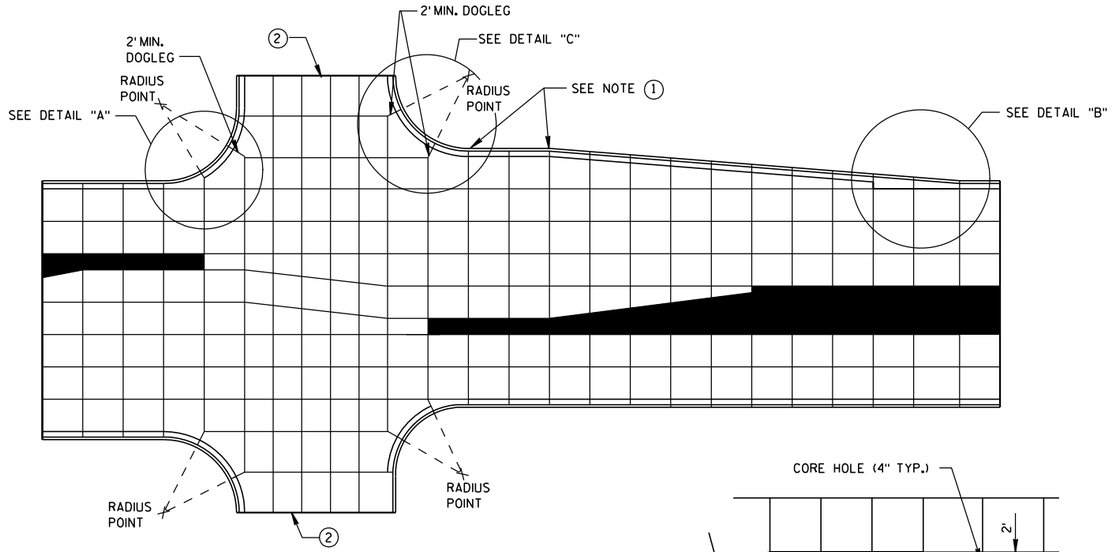
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

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.

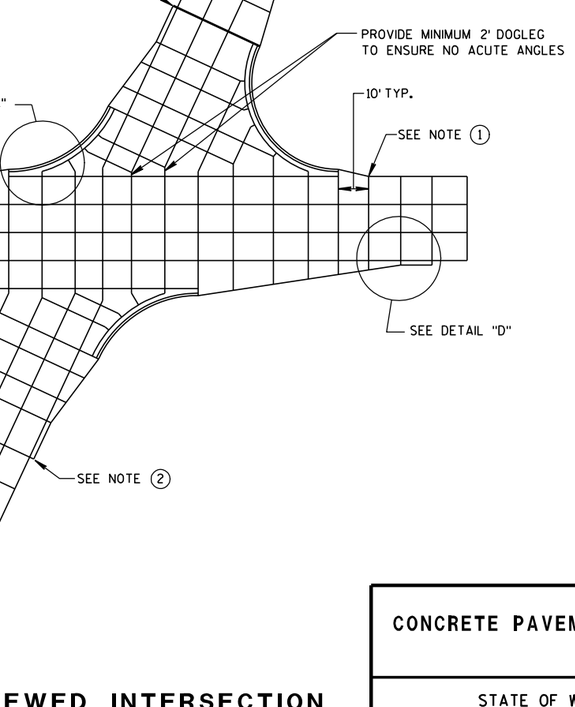
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM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



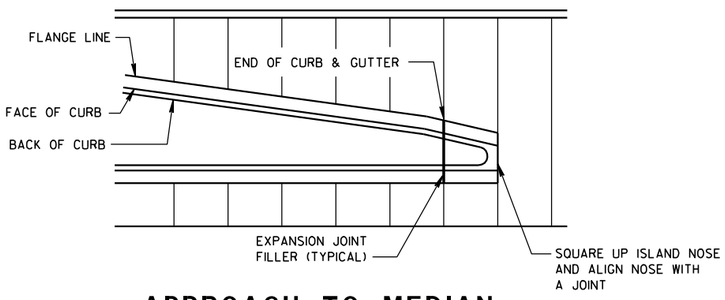
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

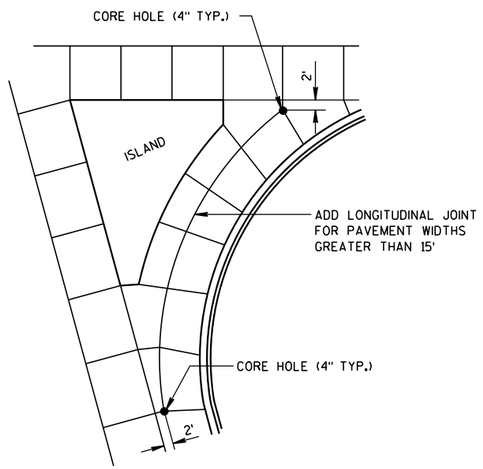
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

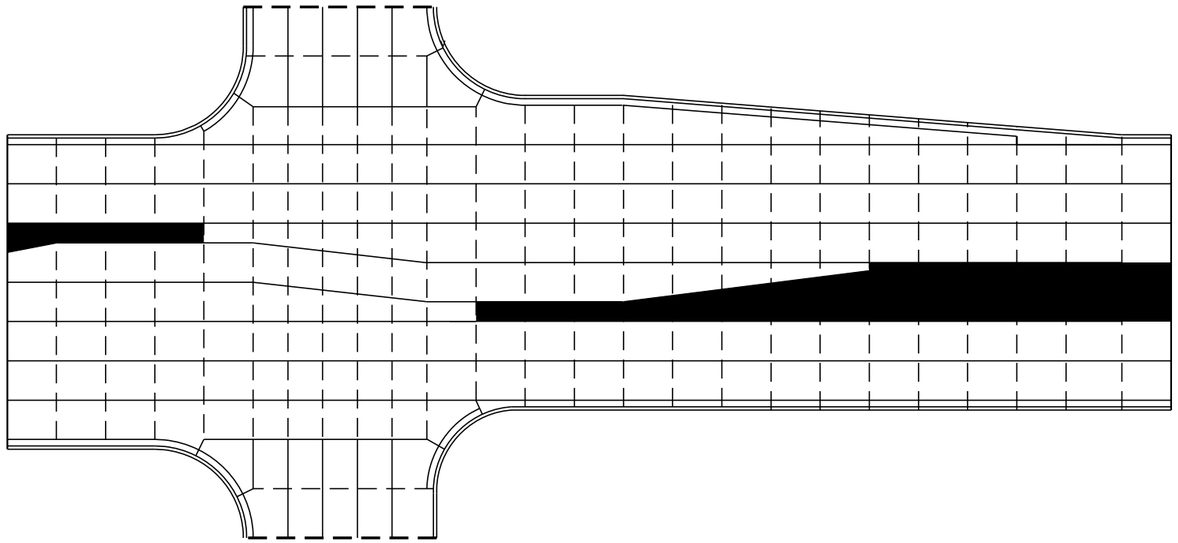
S.D.D. 13 C 18-1a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

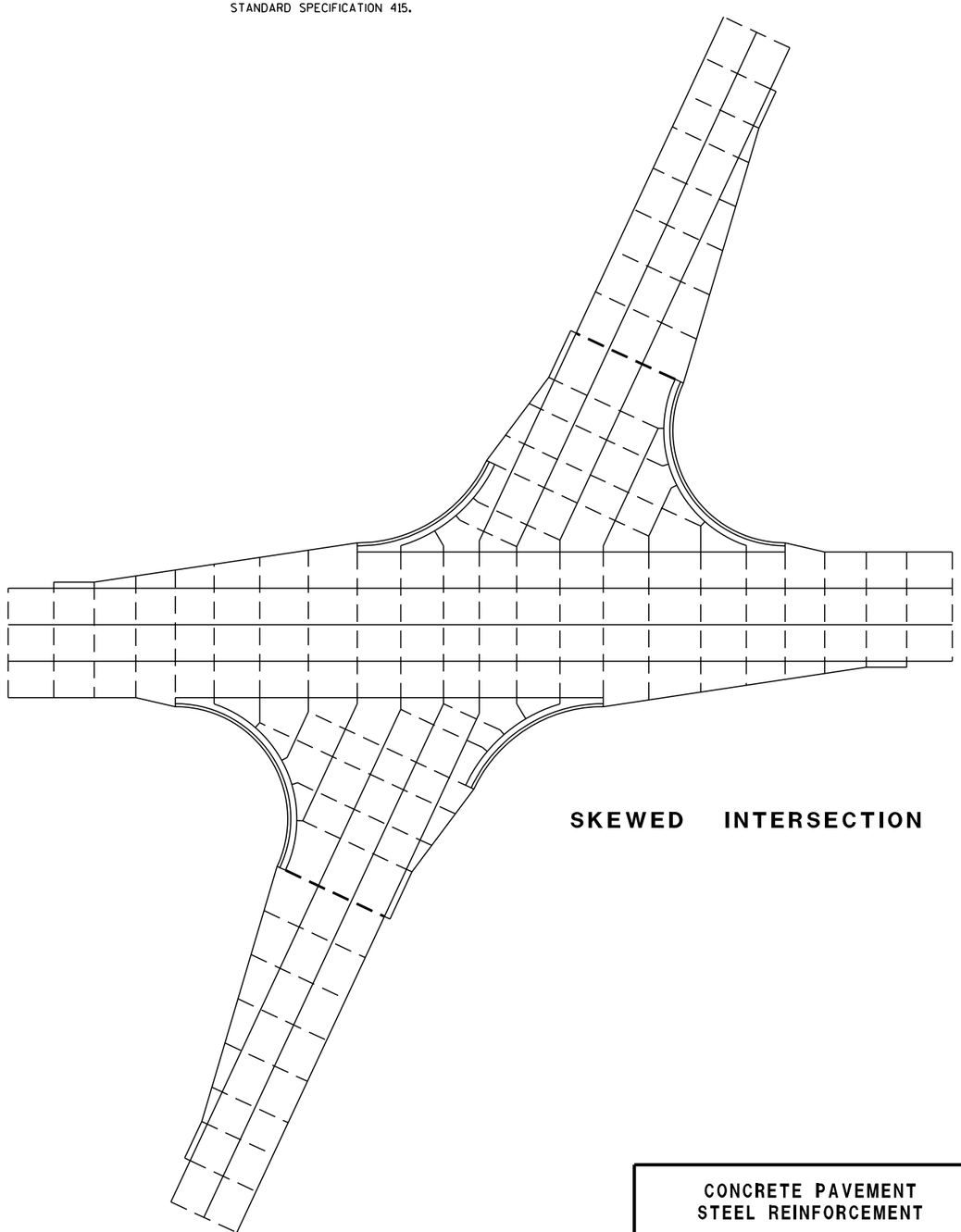
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

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



SKEWED INTERSECTION

6

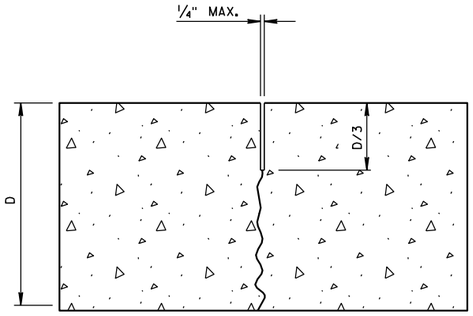
6

S.D.D. 13 C 18-1b

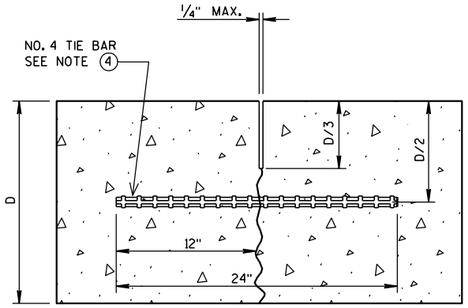
S.D.D. 13 C 18-1b

CONCRETE PAVEMENT
STEEL REINFORCEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



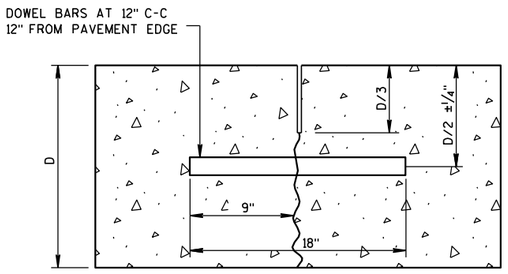
UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

GENERAL NOTES

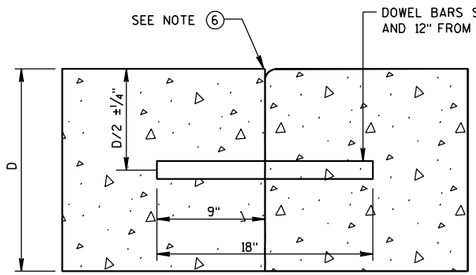
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 4 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE 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.



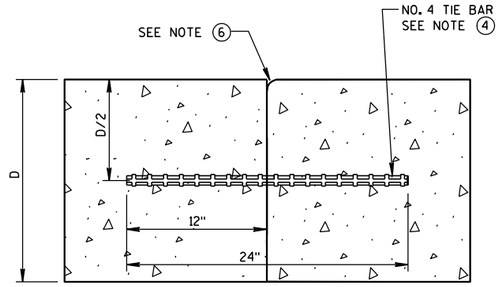
DOWELED-TRANSVERSE

CONTRACTION JOINTS

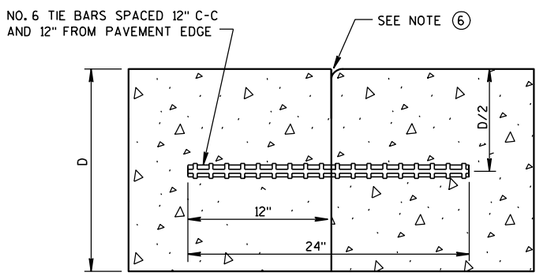
SEE NOTE (2)



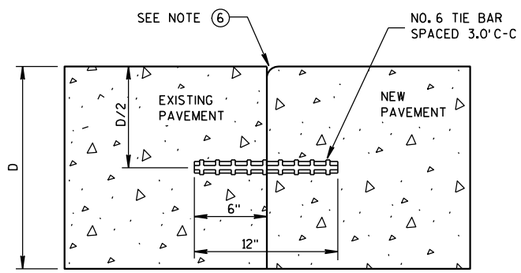
DOWELED TRANSVERSE



TIED LONGITUDINAL



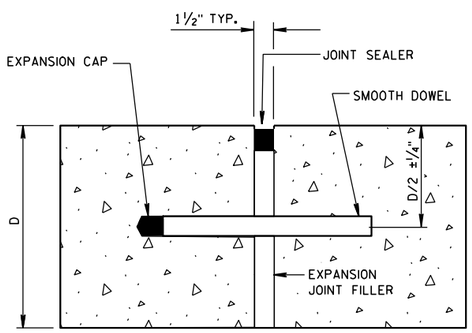
TIED TRANSVERSE
SEE NOTE (3)



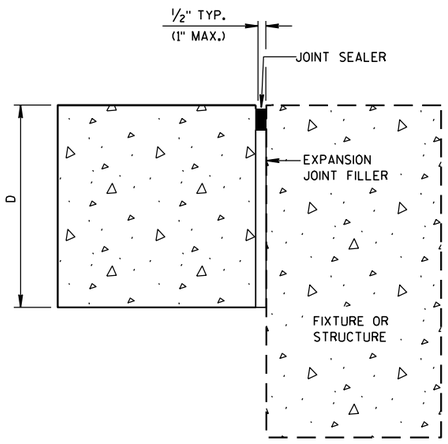
TIED LONGITUDINAL TO EXISTING

CONSTRUCTION JOINTS

SEE NOTE (5)



DOWELED-TRANSVERSE
SEE NOTE (1)



UNTIED-LONGITUDINAL

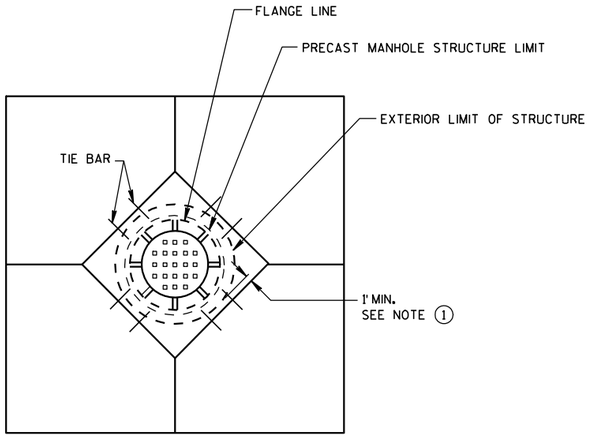
EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

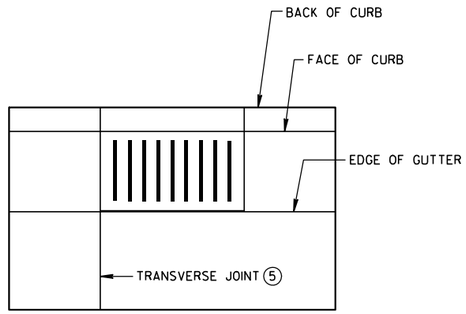
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

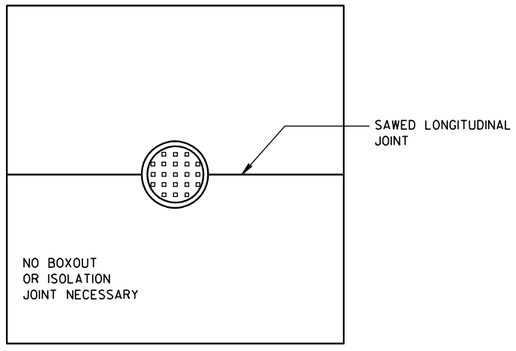
S.D.D. 13 C 18-1c



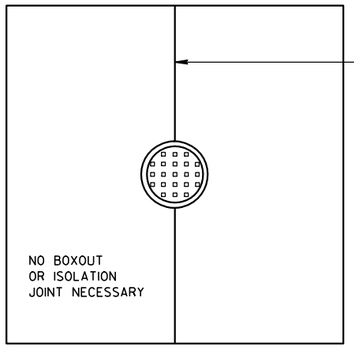
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



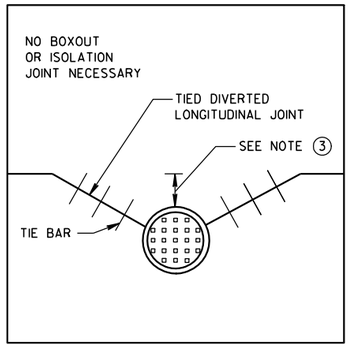
INLET WITH TRANSVERSE JOINT



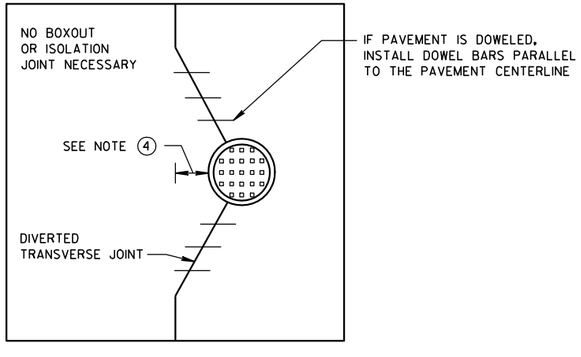
MANHOLE WITH LONGITUDINAL JOINT



MANHOLE WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT

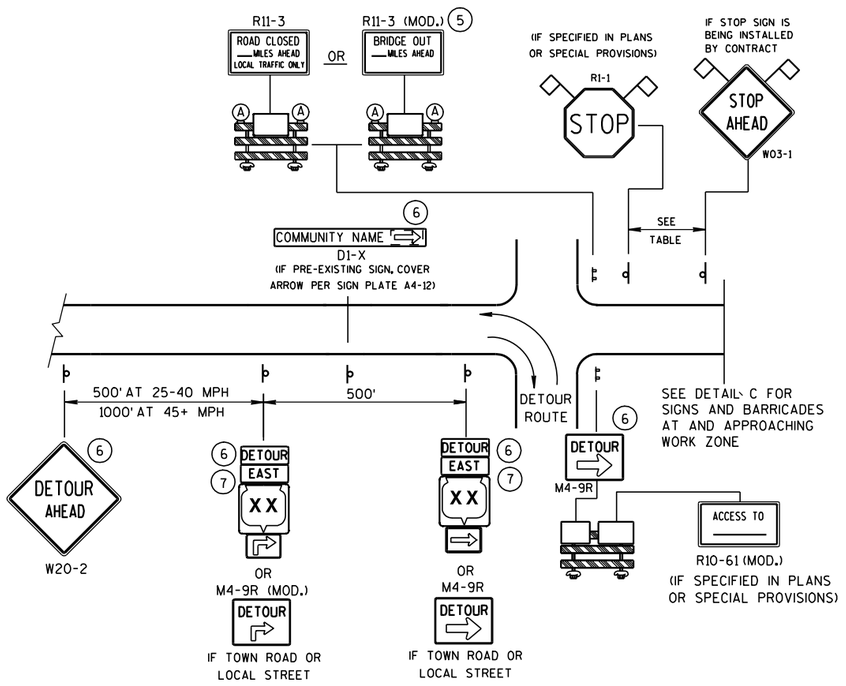
GENERAL NOTES

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 GREATER THAN 2 FEET, DO NOT DIVERT JOINT AND SAW LONGITUDINAL JOINT AS NORMAL. IF DISTANCE IS 2 FEET OR LESS, DIVERT LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE.
4. IF DISTANCE FROM THE EDGE OF MANHOLE TO THE NEAREST TRANSVERSE JOINT IS GREATER THAN 4 FEET, REDIRECT JOINT TO INTERSECT MANHOLE. IF DISTANCE IS 4 FEET OR LESS, PLACE REBAR REINFORCEMENT AROUND MANHOLE.
5. ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

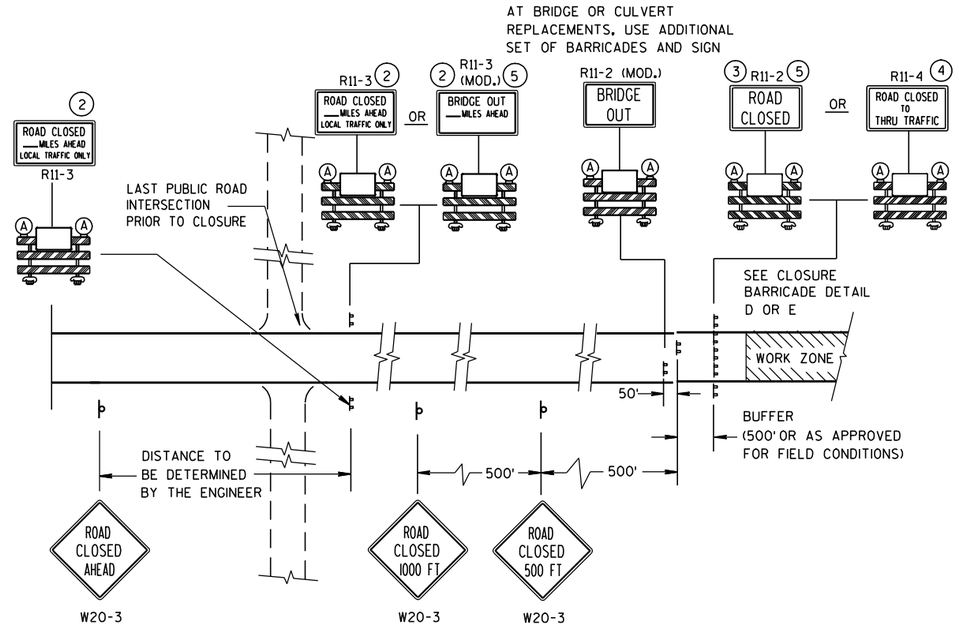
APPROVED
10-5-2010 — DATE
/S/ Deb Bischoff — PAVEMENT POLICY & D38 ENGINEER
FHWA



DETAIL A

MAINLINE CLOSURE WITH POSTED DETOUR

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

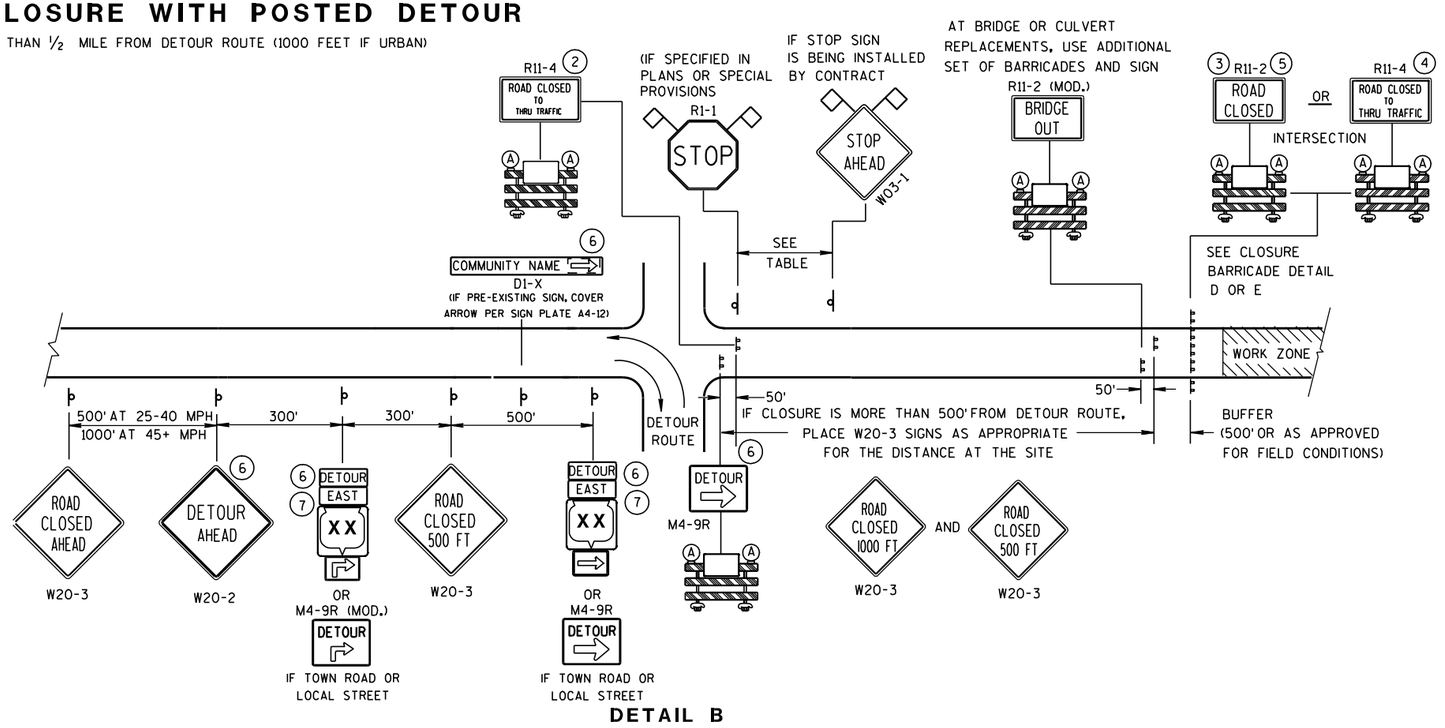


SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

DETAIL C

MAINLINE CLOSURE, NO POSTED DETOUR

SEE SDD 15C2-4b FOR GENERAL NOTES AND FOOTNOTES ① THROUGH ⑦



DETAIL B

MAINLINE CLOSURE WITH POSTED DETOUR

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

LEGEND

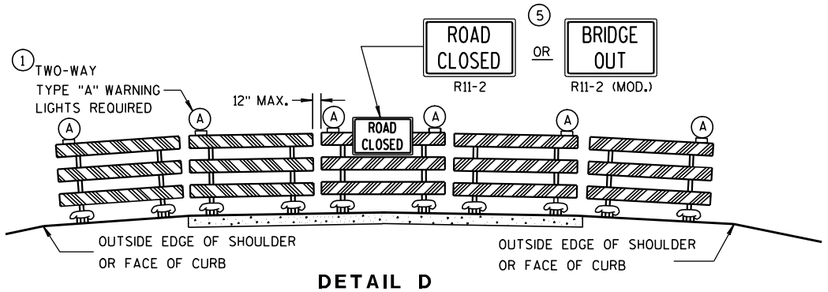
- POST MOUNTED SIGN
- TYPE III BARRICADES
- (A) TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- WORK ZONE
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4
- COUNTY XX — M1-5A
- XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

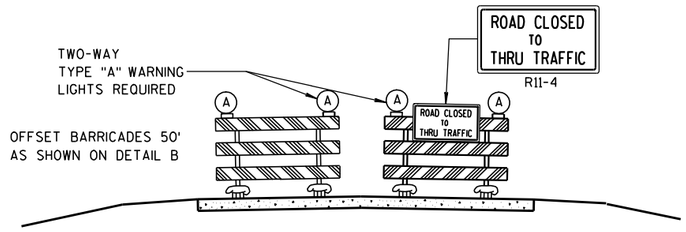
S.D.D. 15 C 2-4a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-4a 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.

THE REFLECTIVE SHEETING USED ON R11-2, R11-3, R11-4, R10-61 AND R1-1 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

"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 AND 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

APPROVED

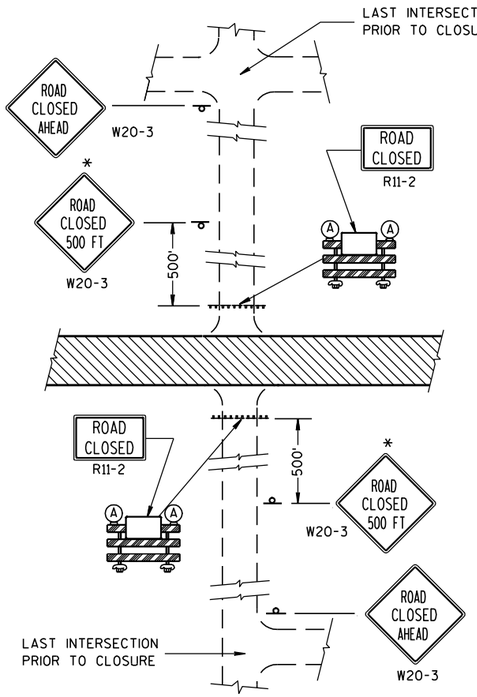
9/16/03 — DATE

/S/ Thomas N. N[illegible] — CHIEF SIGNS AND MARKINGS ENGINEER

FHWA

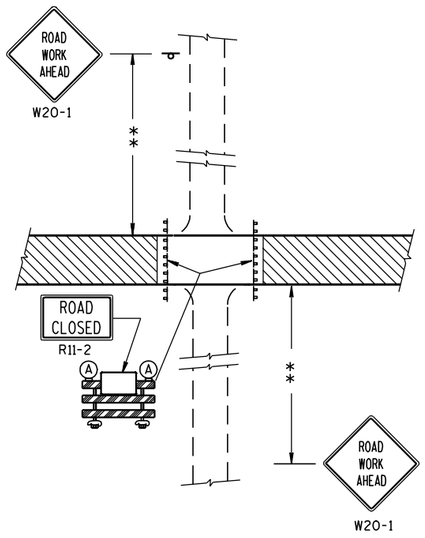
6

S.D.D. 15 C 2-4b



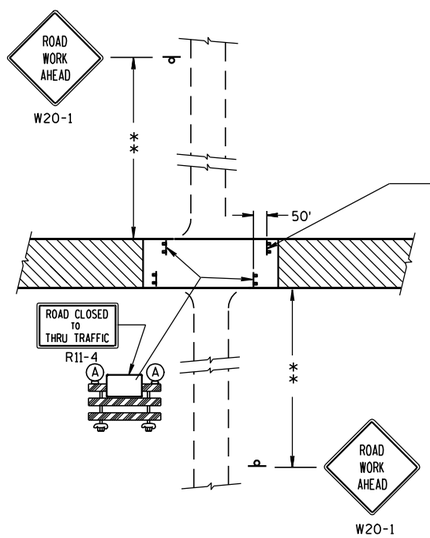
DETAIL 1

(NO ACCESS TO PROJECT)



DETAIL 2

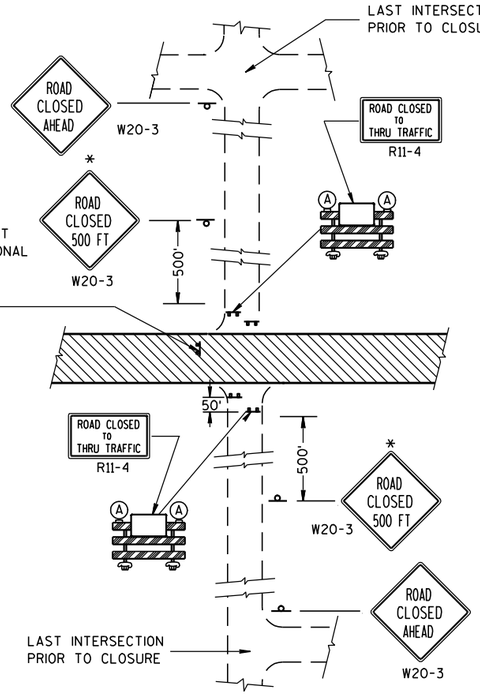
(PUBLIC CROSS-TRAFFIC MAINTAINED. NO ACCESS TO PROJECT).



DETAIL 3

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

FOR BRIDGE OR CULVERT REPLACEMENT, USE ADDITIONAL SIGN ON BARRICADE



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.

THE REFLECTIVE SHEETING USED ON R11-2, R11-3 AND R11-4 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

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

- p — POST MOUNTED WARNING SIGN
- p — TYPE III BARRICADES
- (A) — TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9-16-03 DATE

/S/ Thomas N. N[illegible] INEER
CHIEF SIGNS AND MAR

FHWA

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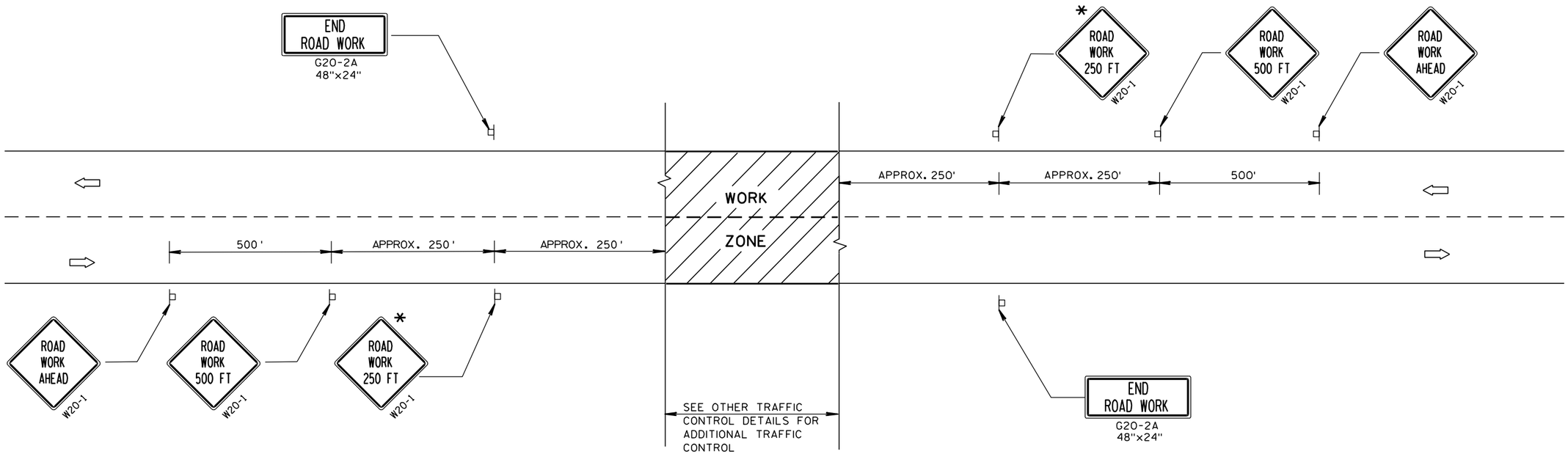
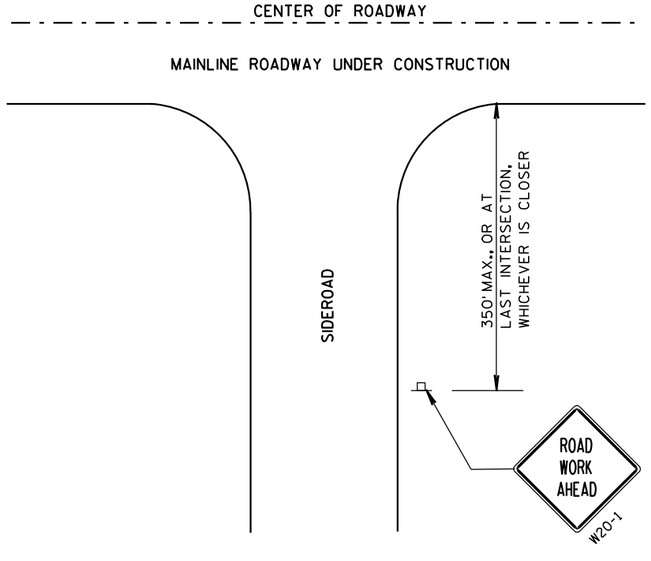
S.D.D. 15 C 3-1



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, IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

POST MOUNTED SIGN

DIRECTION OF TRAFFIC FLOW

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

5/23/00
DATE

/S/ Chester J. [illegible]
CHIEF SIGNS AND MARKING ENGINEER

FHWA

6

S.D.D. 15 C 5-1

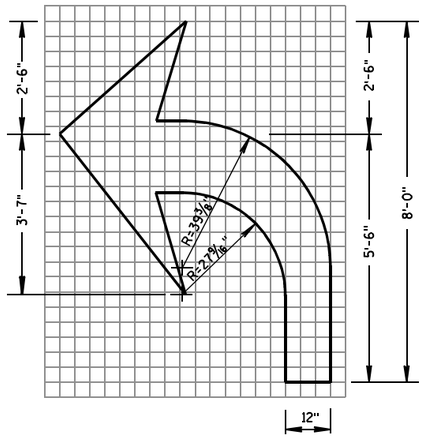
6

S.D.D. 15 C 5-1

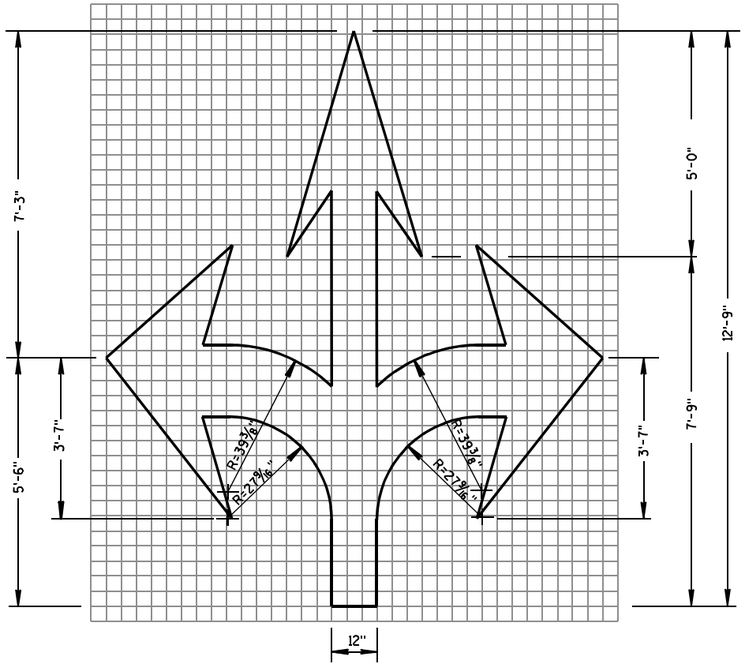
GENERAL NOTES

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.

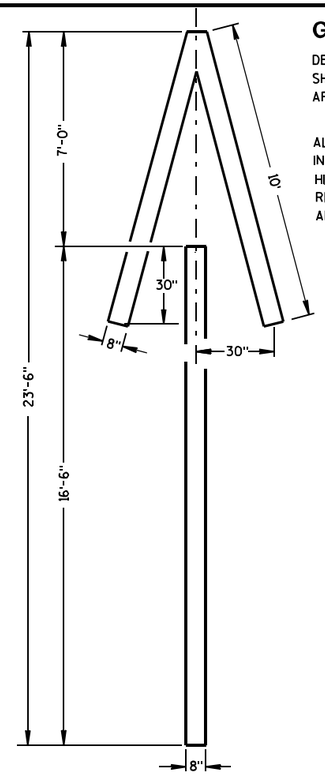
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



TYPE 2



TYPE 6



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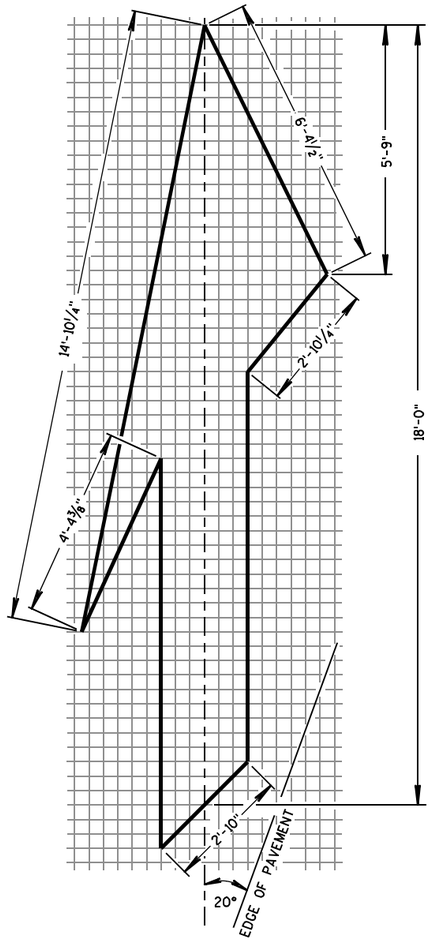
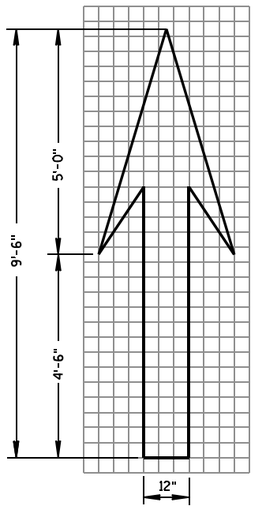
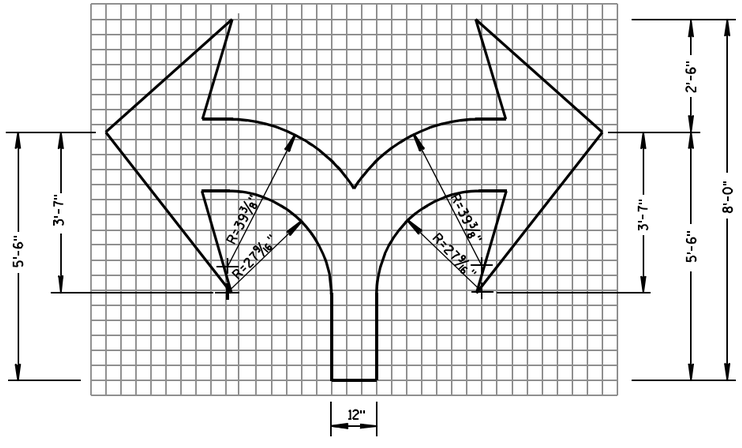


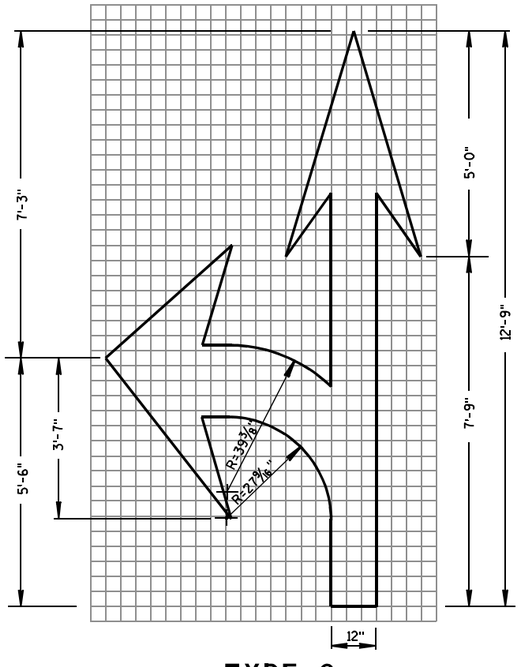
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 — DATE

/S/ Thomas N. Nothdurft — STATE TRAFFIC ENGINEER

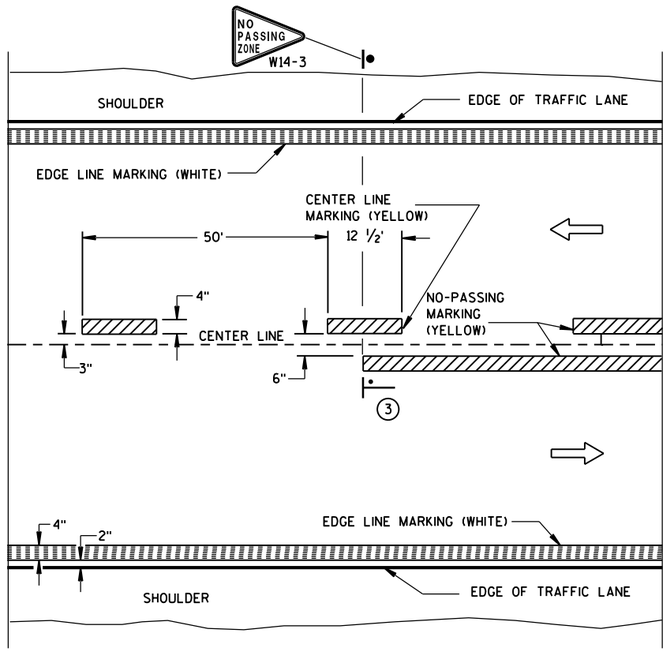
FHWA

6

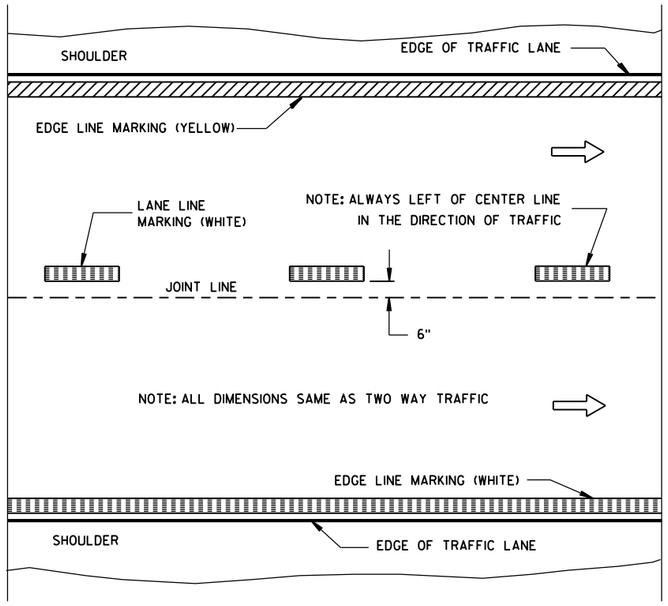
S.D.D. 15 C 7-12c

6

S.D.D. 15 C 7-12c

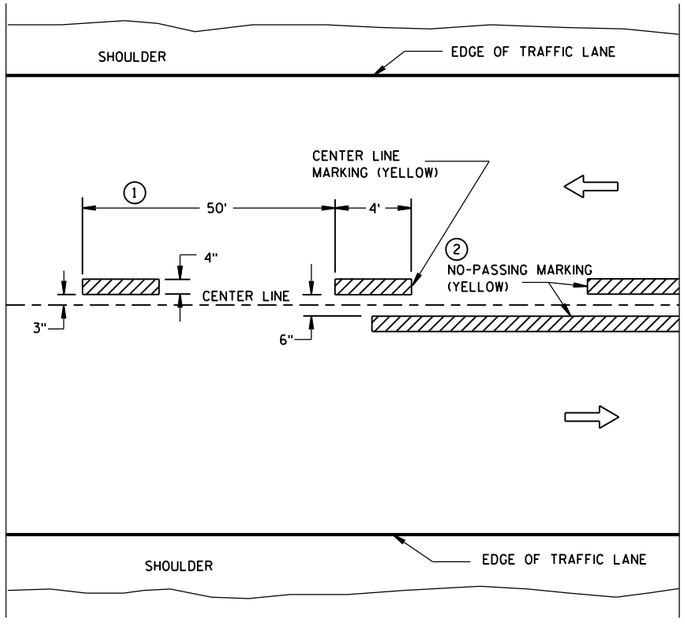


TWO WAY TRAFFIC

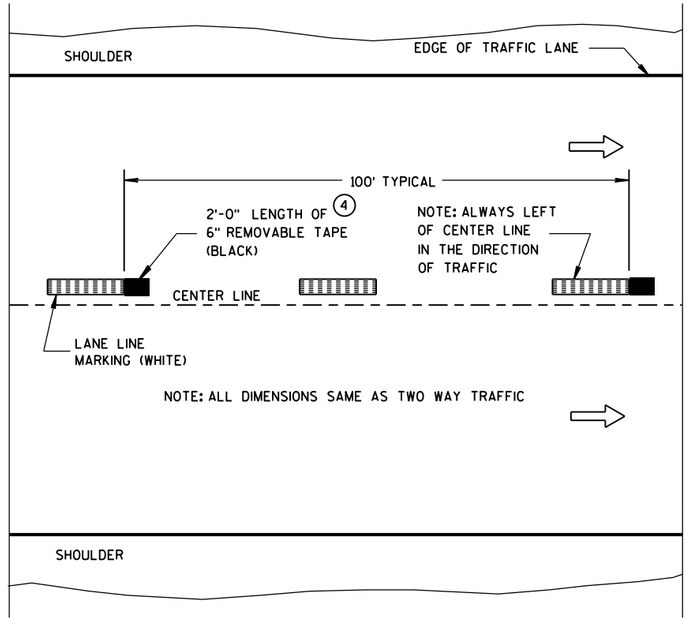


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

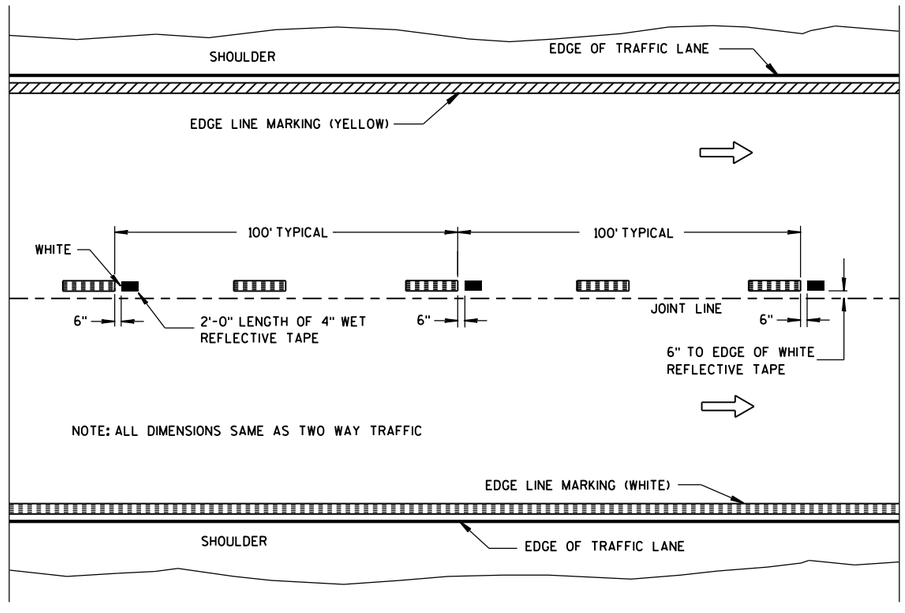
GENERAL NOTES

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

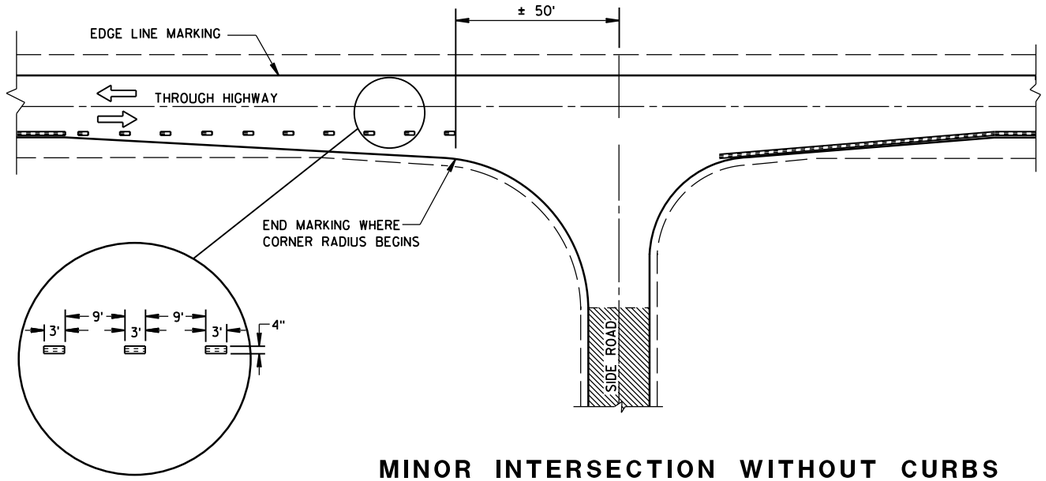
APPROVED
10-1-2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

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

6

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



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.

(2) WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.

(3) ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.

(4) THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.

(5) BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.

(6) BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

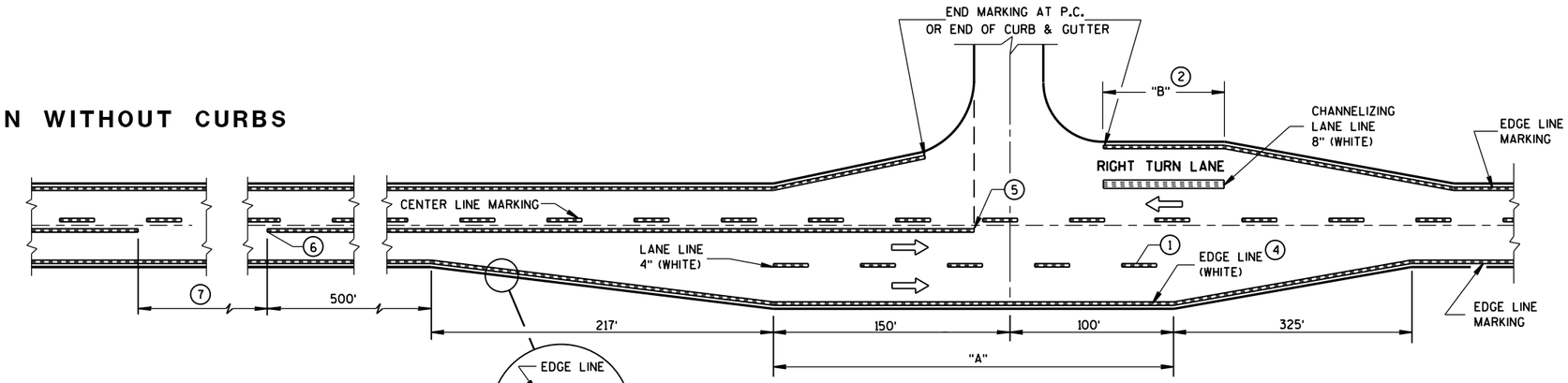
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

(8) 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

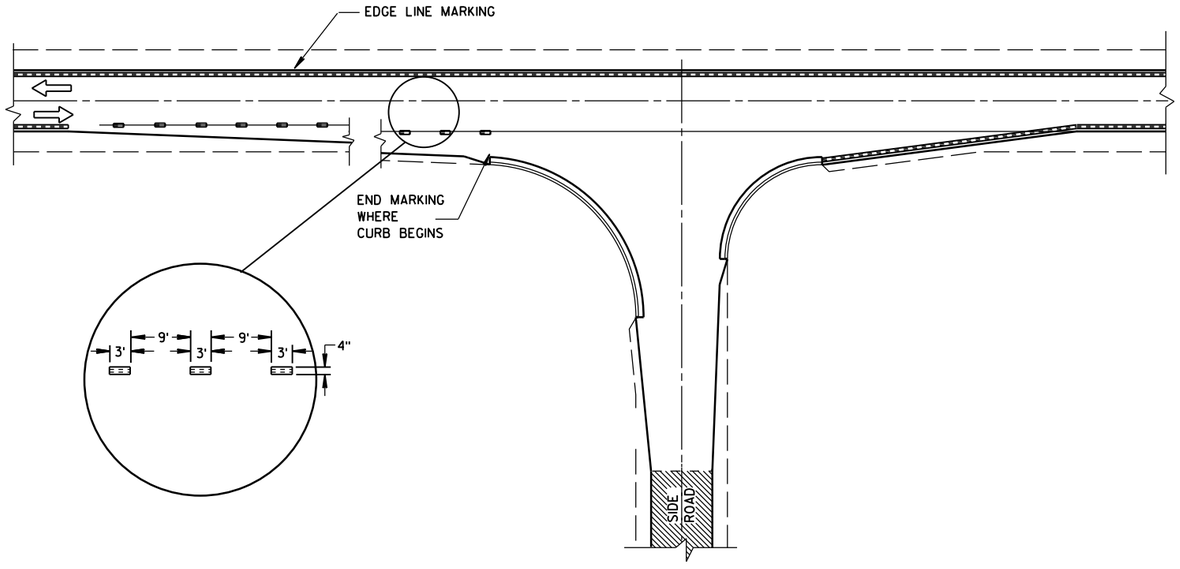
(7)

POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



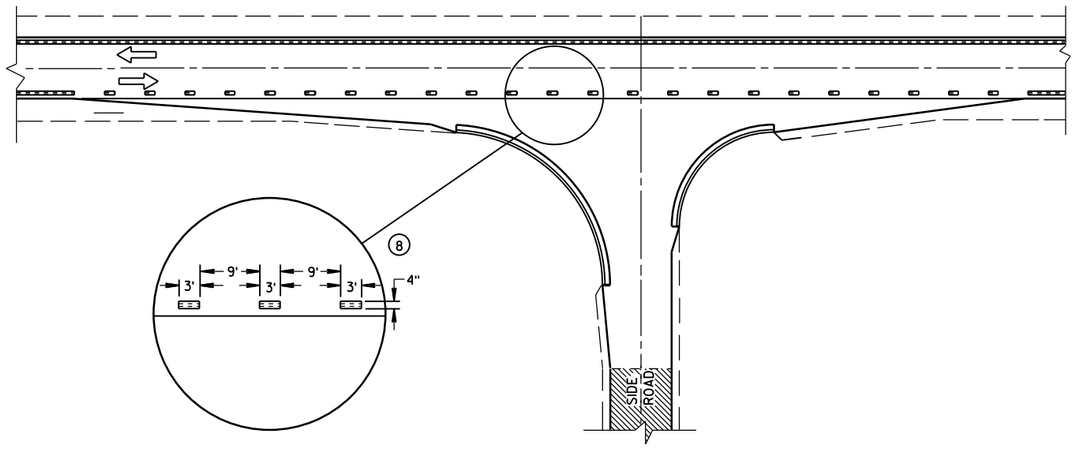
MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS

(3) (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING
(INTERSECTIONS)

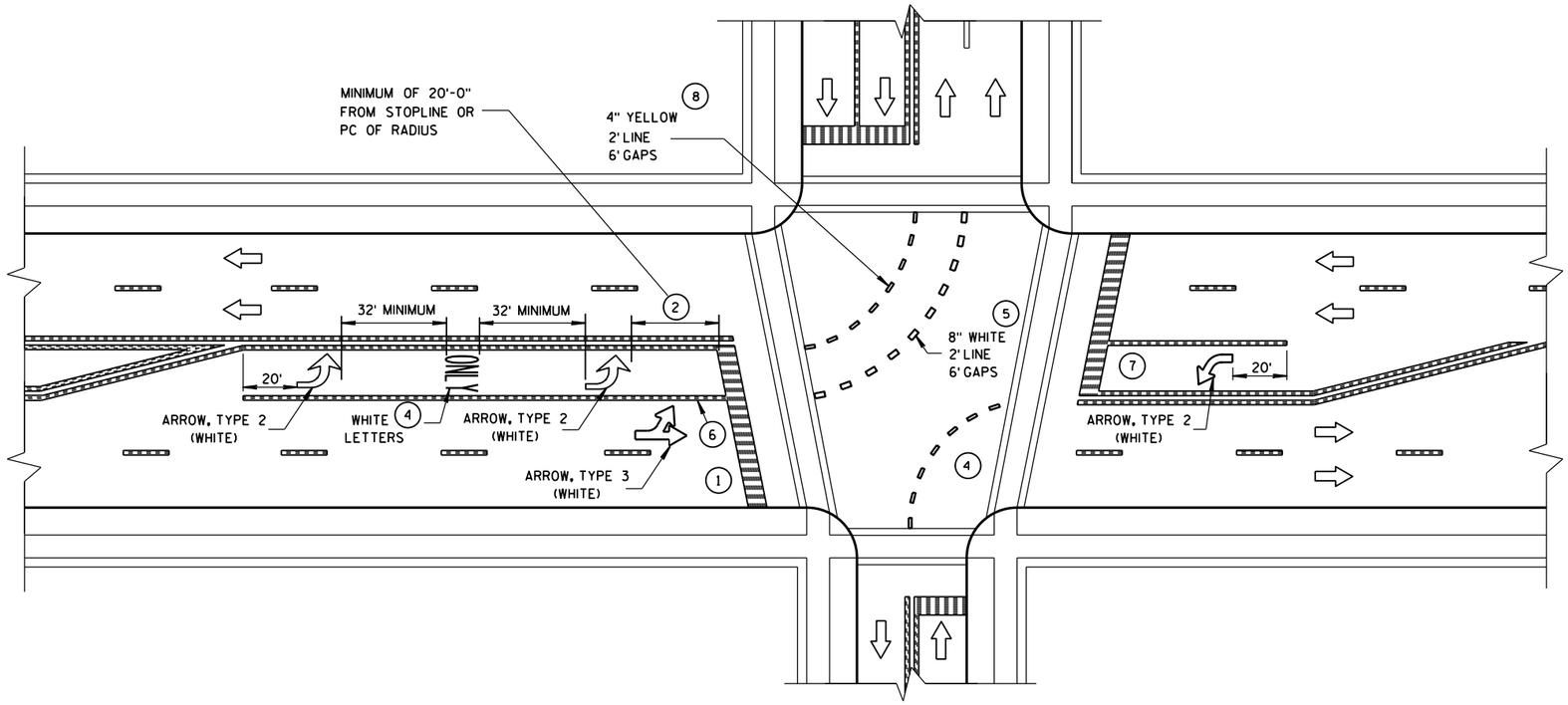
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 15 C 8-15b

6

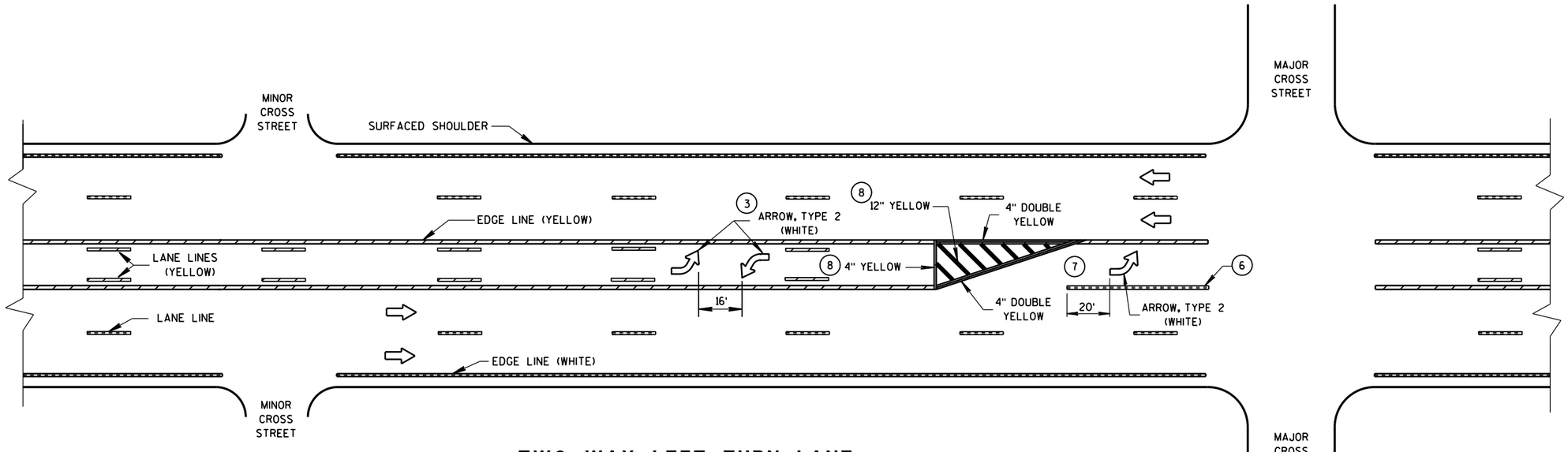
S.D.D. 15 C 8-15b



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' OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA ARROW AND ONLY PER 160' 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'.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



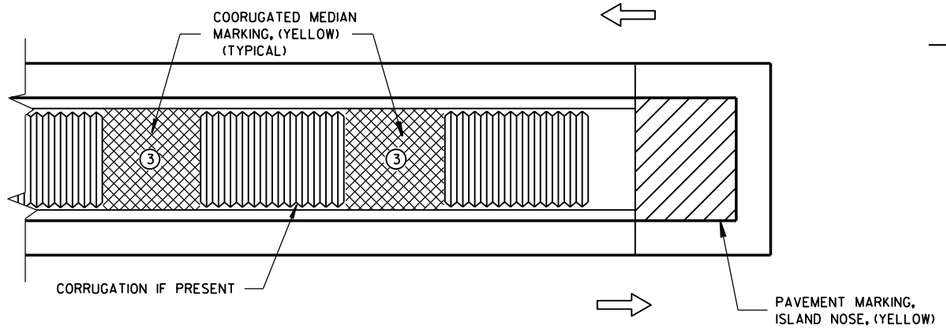
TWO WAY LEFT TURN LANE

PAVEMENT MARKING (LEFT TURN LANE)

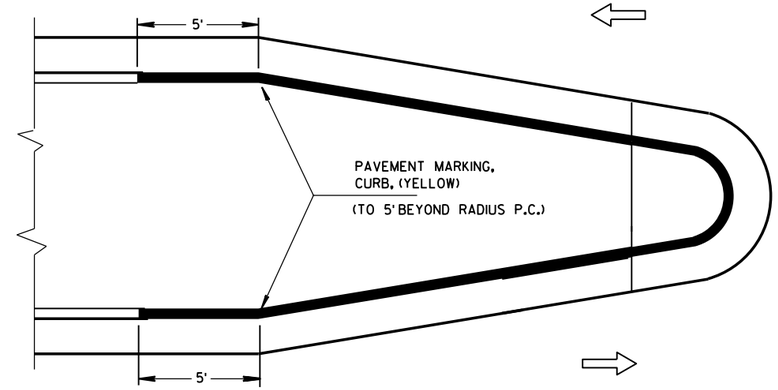
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

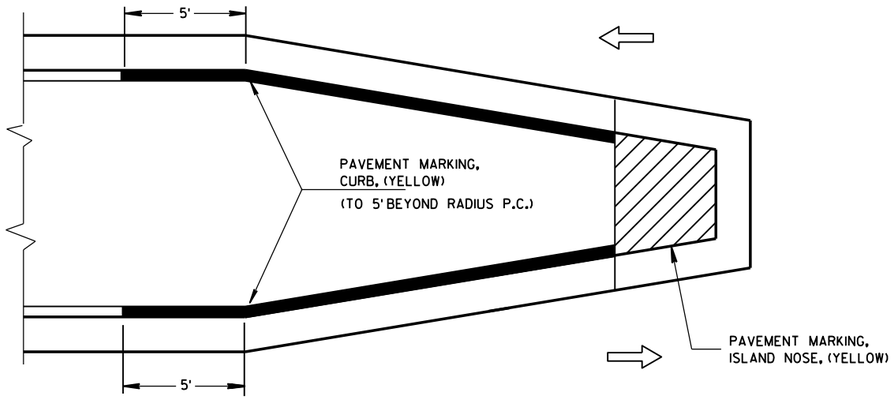
S.D.D. 15 C 8-15e



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

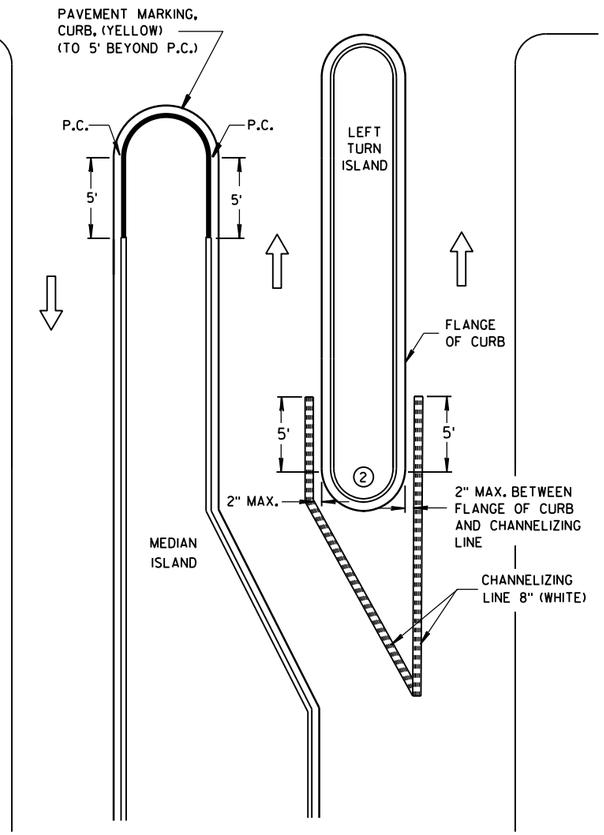


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

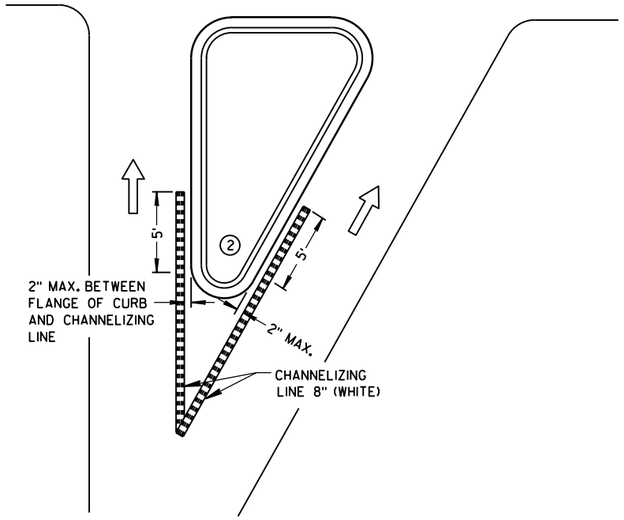
TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS



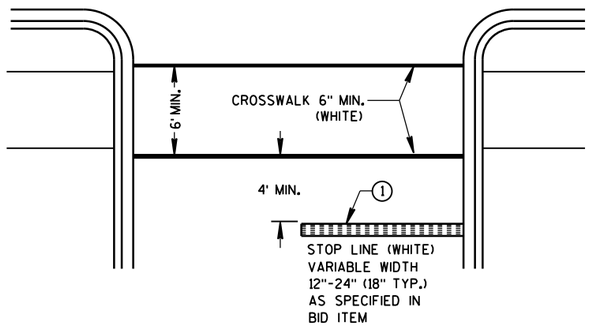
LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

1. STOP LINE IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.
3. 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



STOP LINE AND CROSSWALK

LEGEND

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

PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

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

6

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

TWO-LANE ROADWAY

SYMBOLS

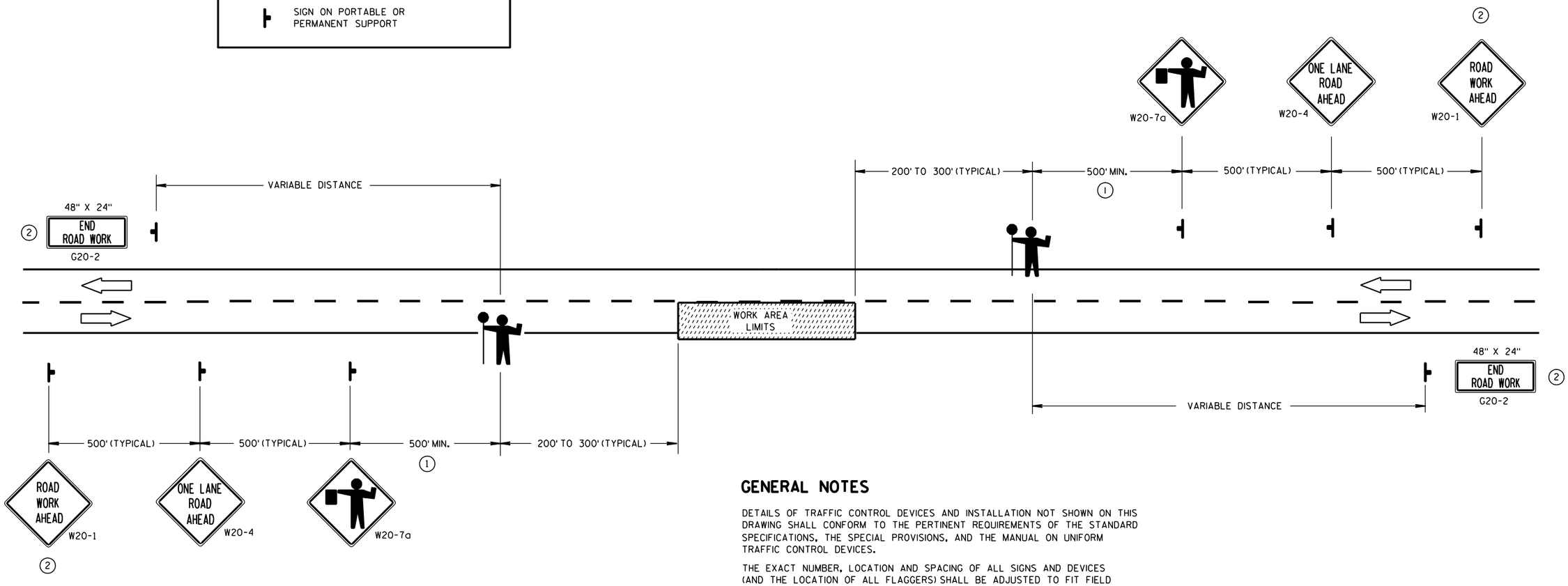
WORK AREA

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

SIGN ON PORTABLE OR PERMANENT SUPPORT

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, THE "FLAGGER AHEAD", THE "ROAD WORK AHEAD" AND THE ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

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

9/5/06 — DATE

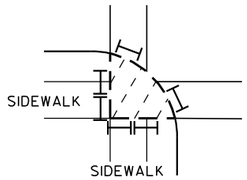
/S/ Thomas N. Nathaam — STATE TRAFFIC ENGINEER

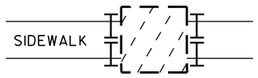
FHWA

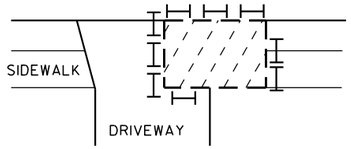
6

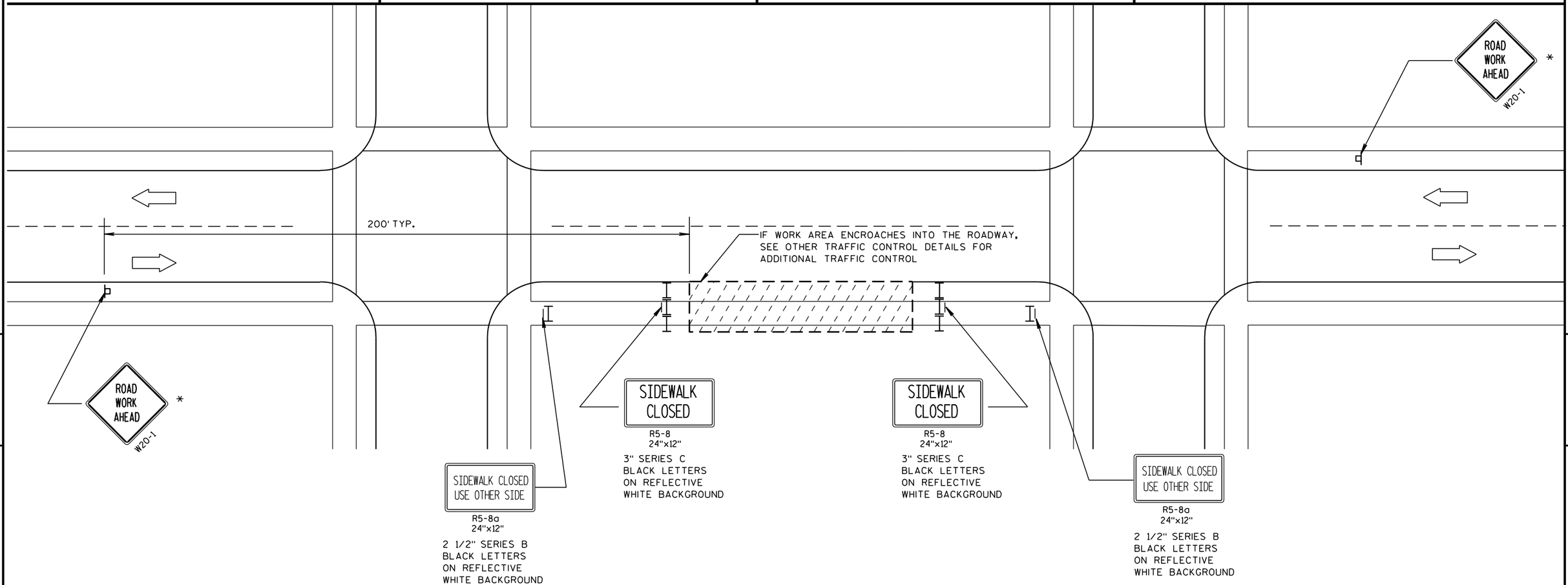
S.D.D. 15 C 12-3

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] ENGINEER
FHWA

6

S.D.D. 15 D 30-1

	AREA (SF)					INCREMENTAL VOLUME (CY) (UNADJUSTED)					CUMULATIVE VOLUME (CY)					
STATION	CUT	Salvaged/ Unusable Pavement Material	FILL	MARSH EXCAVATION	MARSH DISPOSAL	CUT	Salvaged/ Unusable Pavement Material	FILL	MARSH EXCAVATION	MARSH DISPOSAL	CUT 1.0	EXPANDED FILL 1.3	MARSH EXCAVATION 1.0	MARSH DISPOSAL 1.0	MASS ORDINATE	REMARKS
100+25	44.0	22.0	0.0													BEGIN CONSTRUCTION
100+35	71.9	46.5	0.0			30	20	0			30	0			30	BEGIN PROJECT
100+50	72.5	46.5	0.0			50	30	0			80	0			80	
101+00	81.1	46.5	0.0			150	90	0			230	0			230	
101+50	81.2	46.5	0.2			150	90	0			380	0			380	
102+00	90.1	46.5	0.2			160	90	0			540	0			540	
102+35	87.4	46.5	0.1			120	70	0			660	0			660	
					WEST STAGE SUBTOTAL	660	390	0	0	0					660	WASTE
102+35	87.4	46.5	0.1													
102+50	84.7	46.5	0.0			50	30	0			50	0			50	
103+00	95.8	46.5	0.4			170	90	0			220	0			220	
103+50	92.2	46.5	0.0			170	90	0			390	0			390	
104+00	85.0	46.5	0.0			160	90	0			550	0			550	
104+50	76.3	46.5	0.0			150	90	0			700	0			700	
105+00	90.4	46.5	0.0			150	90	0			850	0			850	
105+50	75.1	46.5	0.0			150	90	0			1000	0			1000	
106+00	70.4	46.5	0.0			130	90	0			1130	0			1130	
106+29	61.5	46.5	0.3			70	50	0			1200	0			1200	END PROJECT
					EAST STAGE SUBTOTAL	1200	710	0	0	0					1200	WASTE
					INTERSECTION WORK	140	140	0	0	0					140	WASTE
					UNDISTRIBUTED EBS	1200	0	0	0	0					1200	WASTE
					TOTAL	3200	1240	0	0	0					3200	WASTE

1) Common Excavation is the Cut column. Item number 205.0100
2) Salvaged/Unsuable Pavement Material is included in Cut.
3) EBS Excavation to be backfilled with Subbase. Item number 350.0104
4) Salvaged/Unusable Pavement Material includes Aspahlt Overlay, Concrete Pavement, Curb & Gutter, and Sidewalk.
5) 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.

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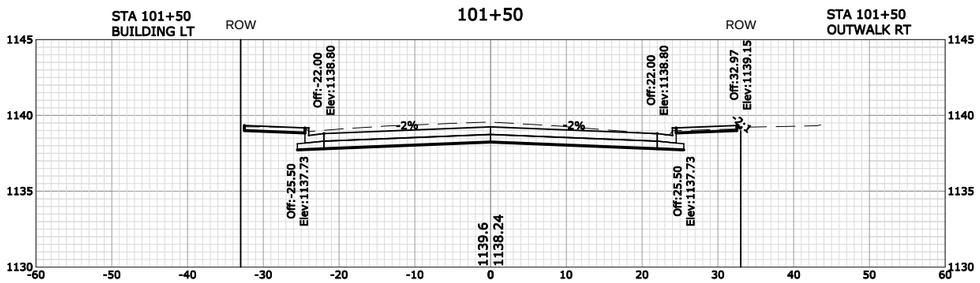
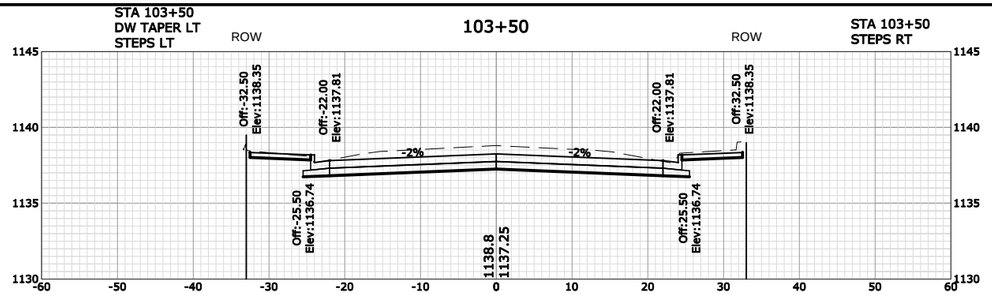
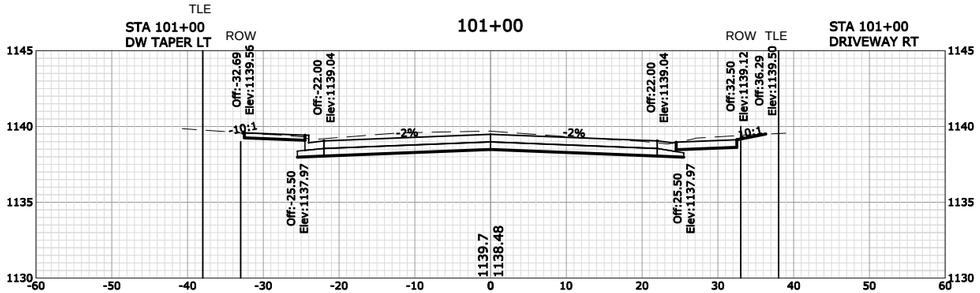
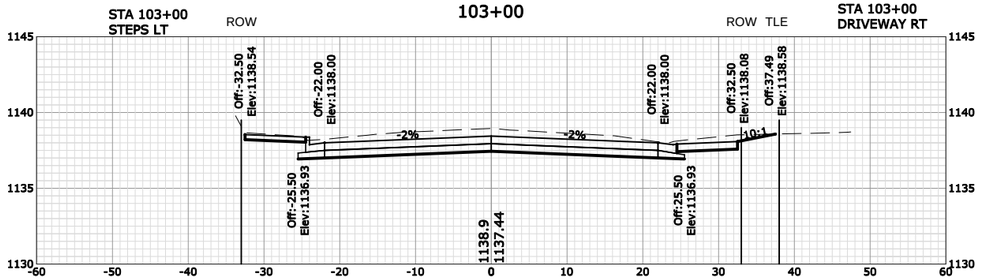
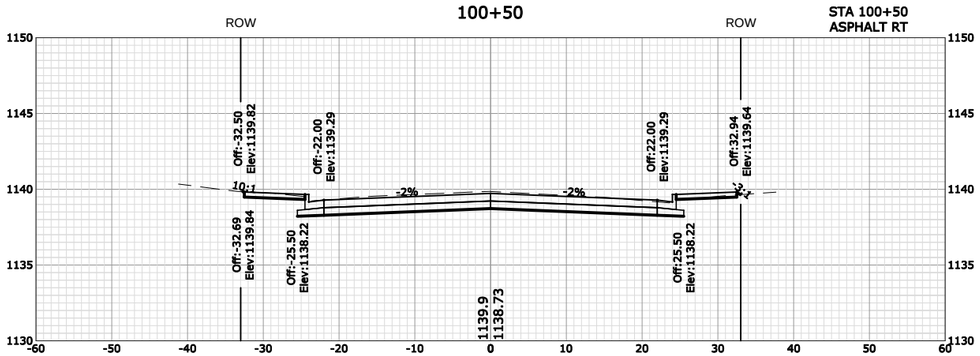
STATE PROJECT NUMBER: 8997-00-32	HWY: LOCAL STREET	COUNTY: BARRON	MARSHALL STREET EARTH WORK SUMMARY	SHEET NO: 50	E

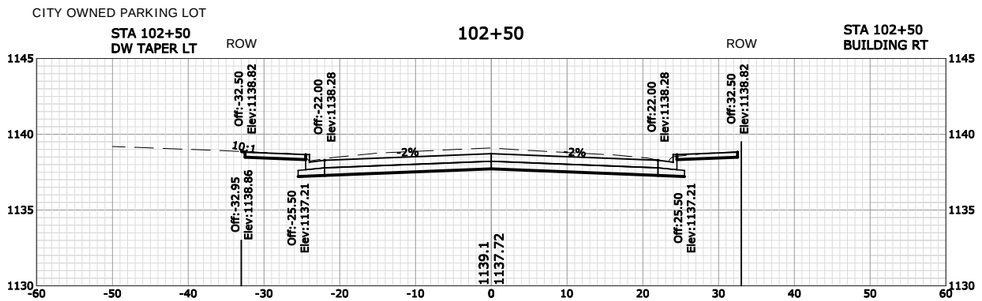


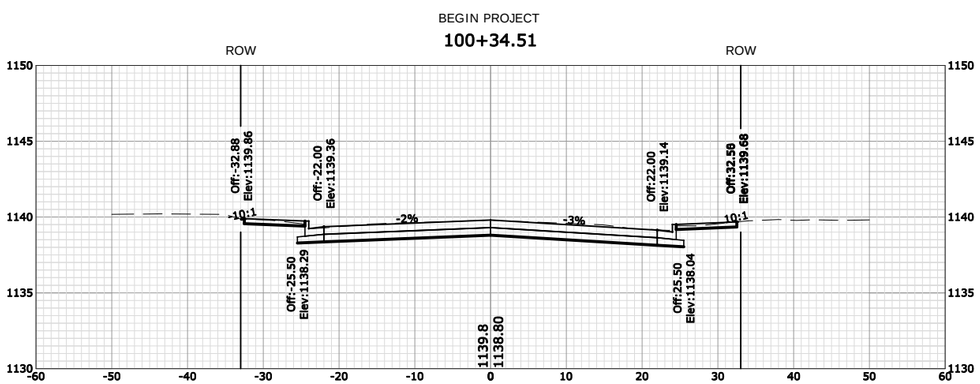


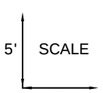


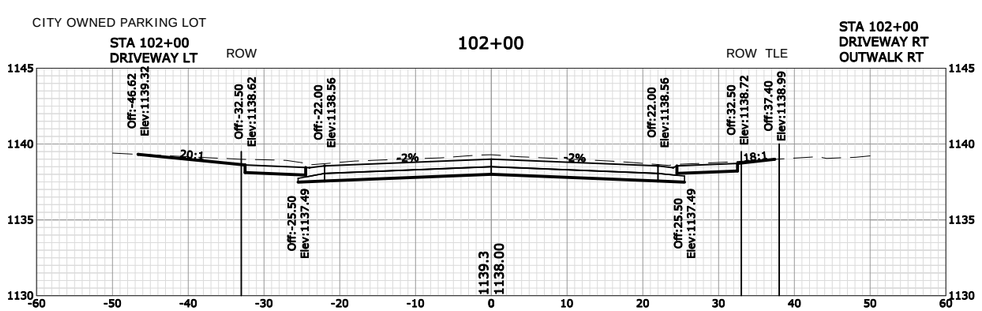












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STATE PROJECT NUMBER: 8997-00-32	HWY: LOCAL STREET	COUNTY: BARRON	MARSHALL STREET CROSS SECTION	SHEET NO: 51	E

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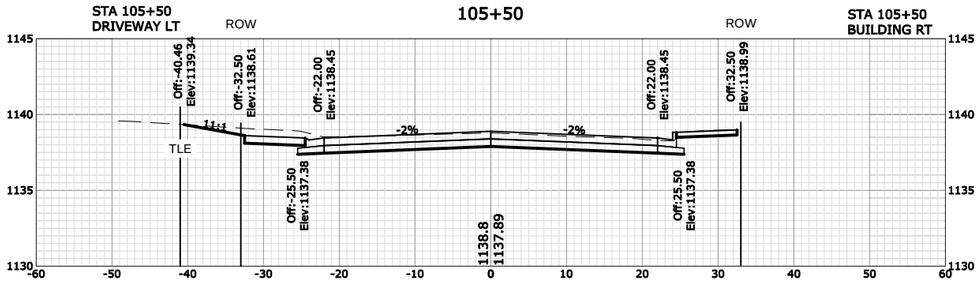

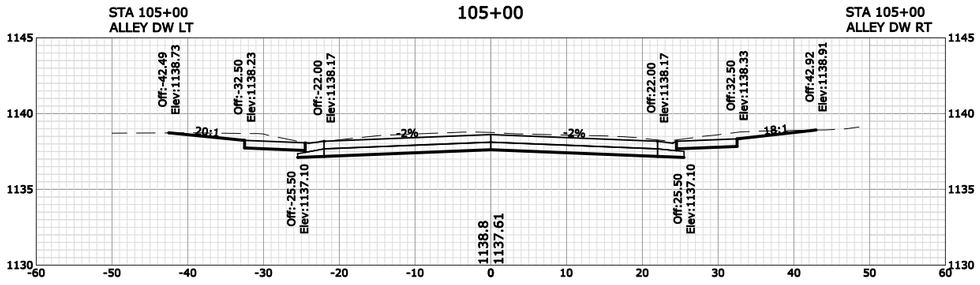

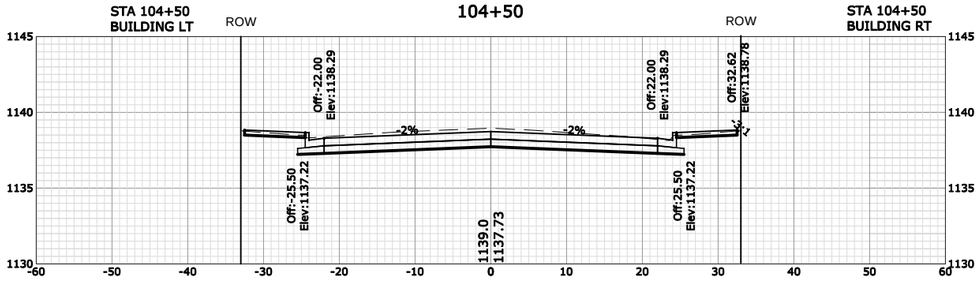

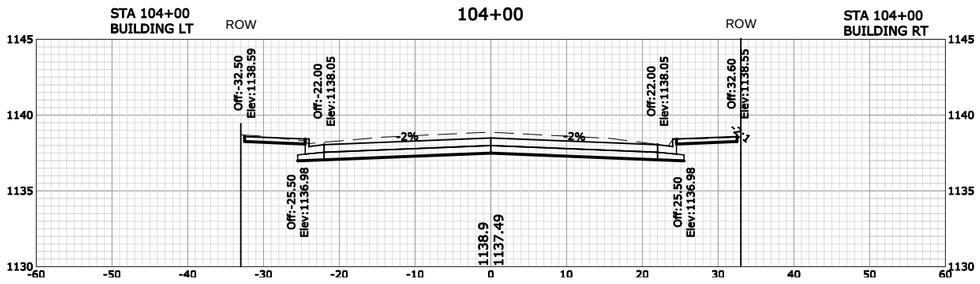

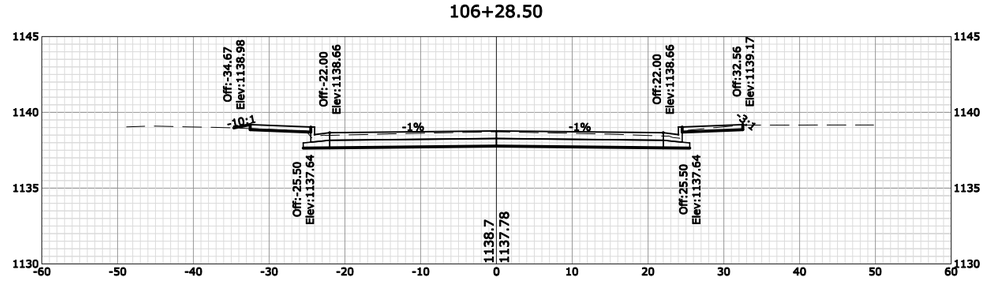

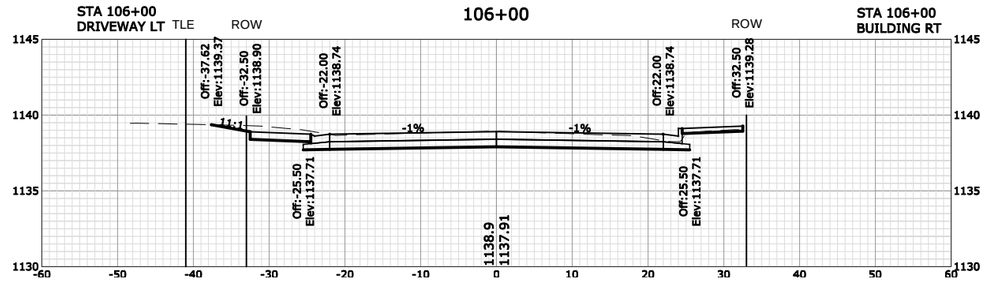

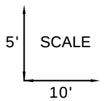

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STATE PROJECT NUMBER: 8997-00-32	HWY: LOCAL STREET	COUNTY: BARRON	MARSHALL STREET CROSS SECTION	SHEET NO: 52	E

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WISDOT/CADDS SHEET 42

Notes

Wisconsin Department of Transportation

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through innovation and exceptional service.

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