

WIS

PROJECT ID:
WITH: N/A

1430-08-82

AUGUST 2025
ORDER OF SHEETS

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

TOTAL SHEETS = 188



DESIGN DESIGNATION

A.A.D.T.	(2026)	=	8,720
A.A.D.T.	(2046)	=	8,720
D.H.V.		=	935
D.D.		=	50%
T.		=	14.3%
DESIGN SPEED		=	55 M.P.H.
ESALS		=	2,210,000

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

MARSH AREA

WOODED OR SHRUB AREA

PROFILE

GRADE LINE

ORIGINAL GROUND
MARSH OR ROCK PROFILE
(To be noted as such)

SPECIAL DITCH

GRADE ELEVATION

CULVERT (Profile View)

UTILITIES

ELECTRIC

FIBER OPTIC

GAS

SANITARY SEWER

STORM SEWER

TELEPHONE

WATER

UTILITY PEDESTAL

POWER POLE

TELEPHONE POLE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

PRINCETON - RIPON

CTH A TO FOND DU LAC COUNTY LINE

STH 23

GREEN LAKE COUNTY

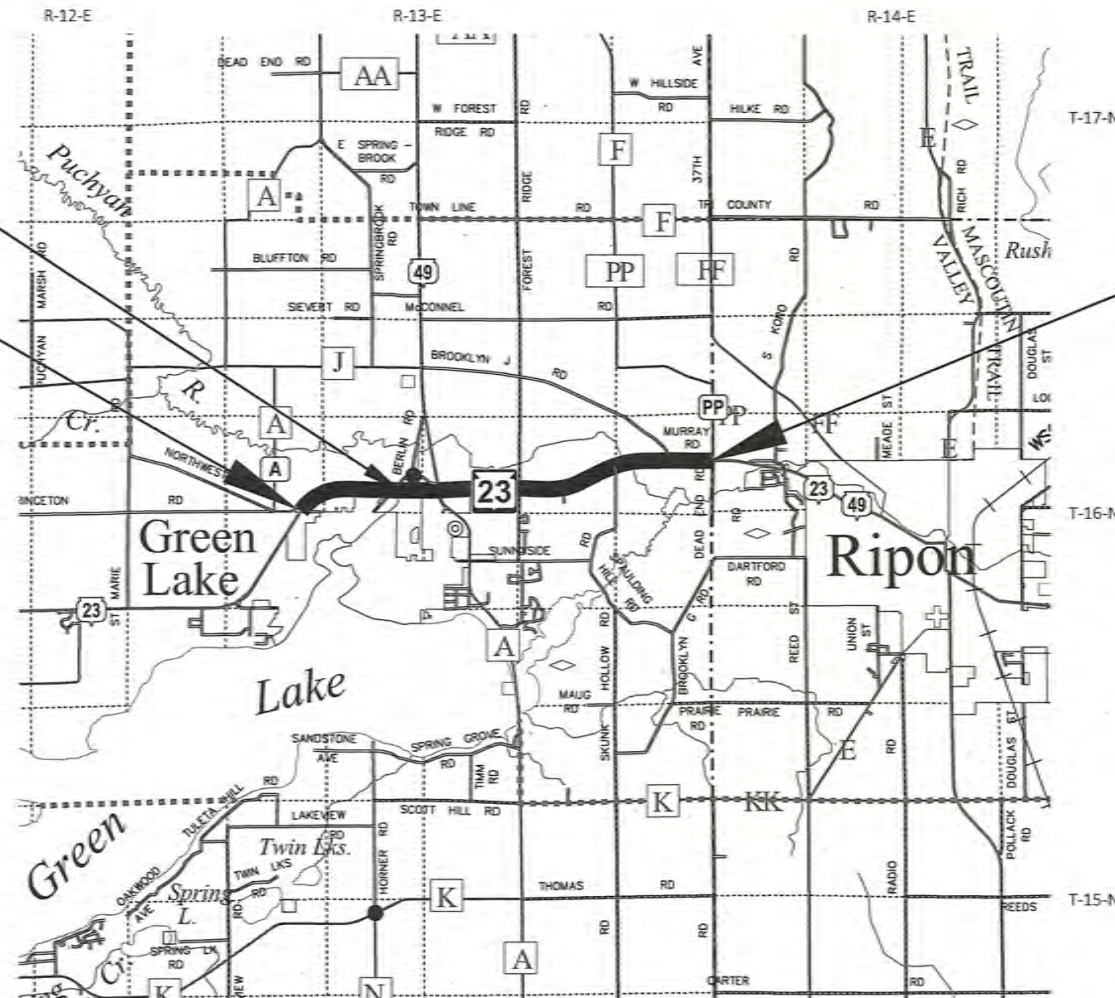
STATE PROJECT NUMBER

1430-08-82

NET EXCEPTION TO CL LENGTH
STA 283+11 - STA 287+13
(B-24-009)

BEGIN PROJECT
STA 210+72.52
Y=275,043.346
X=565,674.105

END PROJECT
STA 457+76.81



LAYOUT
SCALE 0 2 Mi

TOTAL NET LENGTH OF CENTERLINE = 4.603 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN
COORDINATE REFERENCE SYSTEM (WISCRS), GREEN LAKE COUNTY,
NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID
COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES
ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED
ELEVATIONS ARE BASED ON GEOID 12A

STATE PROJECT

1430-08-82

FEDERAL PROJECT

PROJECT

CONTRACT

ORIGINAL PLANS PREPARED BY



DATE: 4/24/2025

(Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	CBS SQUARED INC.
Designer	CBS SQUARED INC.
Project Manager	TIM HANLEY, PE
Regional Examiner	FRED SCHUNK, PE
Regional Supervisor	NICHOLE LYSNE, PE

APPROVED FOR THE DEPARTMENT

DATE: 4-29-25

(Signature)

UTILITIES CONTACTS

ALLIANT ENERGY - ELECTRICITY
506 FELTON STREET
RIPON, WI 54971
CODY JACKSON
(920) 748-4013
CODYJACKSON@ALLIANTENERGY.COM

BUG TUSSEL WIRELESS, LLC - COMMUNICATION LINE
1262 CAMBER STREET
DE PERE, WI 54301
DUSTIN TEAFF
(920) 254-3539
DUSTIN.TEAFF@BTUSSEL.COM

ALLIANT ENERGY - GAS/PETROLEUM
506 FELTON STREET
RIPON, WI 54971
CODY JACKSON
(920) 748-4013
CODYJACKSON@ALLIANTENERGY.COM

FLINT HILLS RESOURCES, LC - GAS/PETROLEUM
N4240 HWY 26
WAUPUN, WI 53963
(920) 324-9300
TIM.KAROW@FHR.COM

BRIGHTSPEED OF NORTH CENTRAL WISCONSIN, LLC
COMMUNICATION LINE
144 N PEARL STREET
BERLIN, WI 54923
SCOTT HEINZELMAN
(608) 716-5964
SCOTT.HEINZELMAN@BRIGHTSPEED.COM

SPECTRUM - COMMUNICATION LINE
165 KNIGHTS WAY, SUITE 100
FOND DU LAC, WI 54935
DEREK SMET
(920) 204-1859
DEREK.SMET@CHARTER.COM

BRIGHTSPEED OF WESTERN WISCONSIN, LLC
COMMUNICATION LINE
144 N PEARL STREET
BERLIN, WI 54923
SCOTT HEINZELMAN
(608) 716-5964
SCOTT.HEINZELMAN@BRIGHTSPEED.COM

WISCONSIN DNR LIAISON

MARTY DILLENBURG
OSHKOSH SERVICE CENTER
625 E COUNTY ROAD Y, SUITE 70
OSHKOSH, WI 54901
(920) 410-7428
MARTY.DILLENBURG@WISCONSIN.GOV

GENERAL NOTES

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

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.

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

DO NOT DRIVE OR STORE EQUIPMENT, OR STORE CONSTRUCTION MATERIALS IN ENVIRONMENTALLY SENSITIVE AREAS, WETLANDS OR WATERWAYS.

RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = 114.5 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.20 ACRES

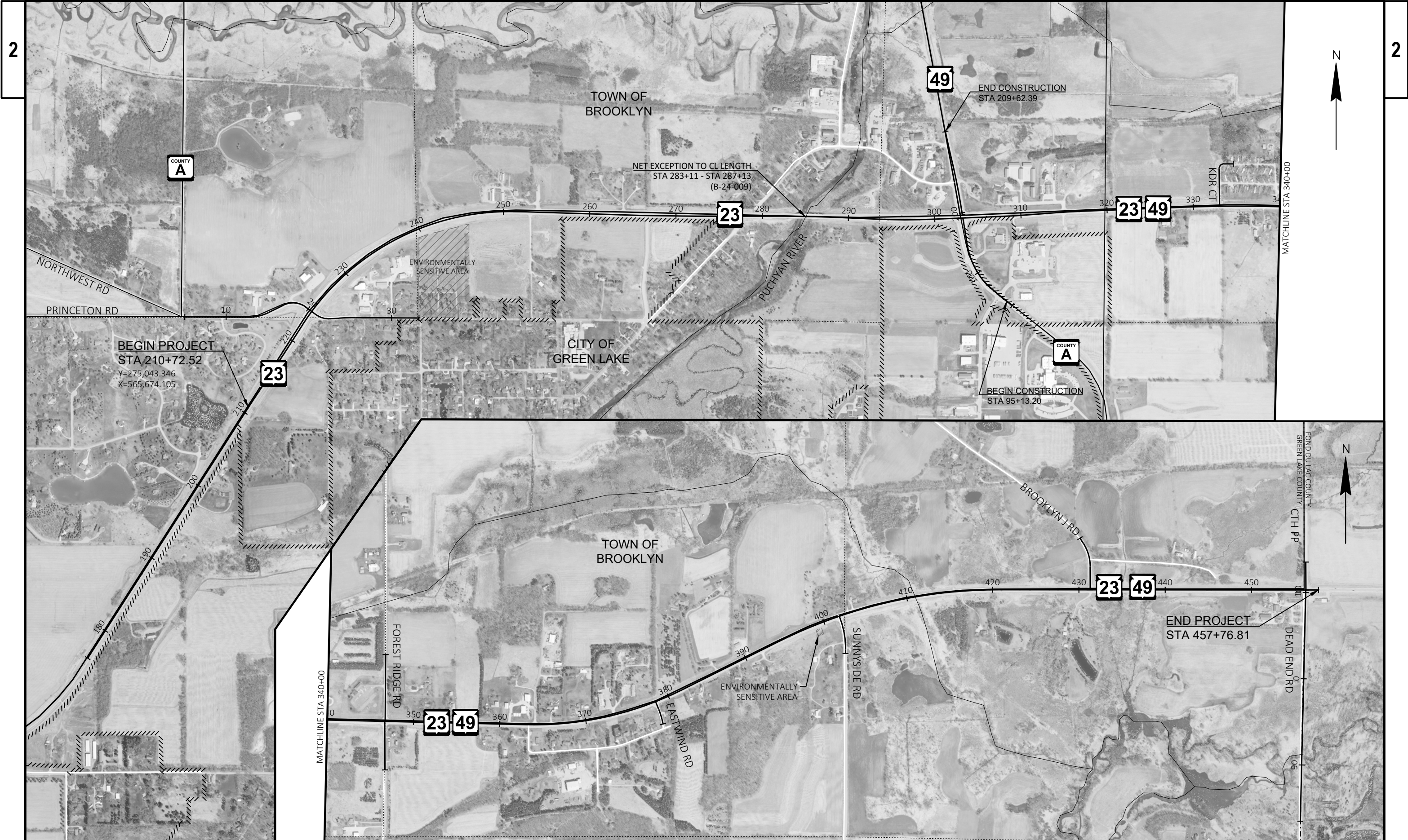
ORDER OF SECTION 2 DETAIL SHEETS

- GENERAL NOTES
- PROJECT OVERVIEW
- TYPICAL SECTIONS
- CONSTRUCTION DETAILS
- REMOVALS
- CURB RAMP DETAILS
- TRAFFIC SIGNAL PLAN
- PAVEMENT MARKING AND SIGNING
- ADVANCED WIDTH RESTRICTION SIGNING
- TRAFFIC CONTROL

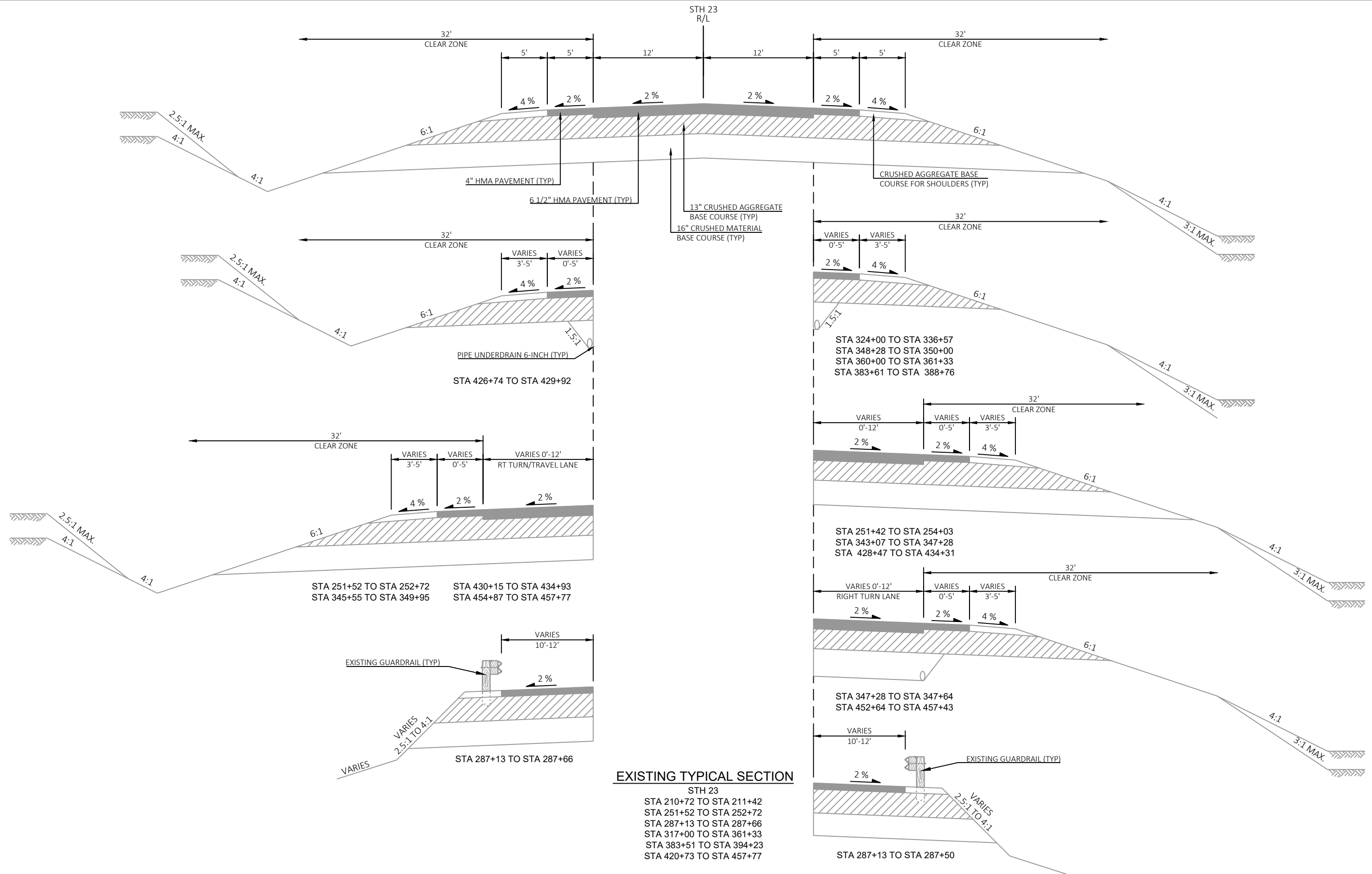
DIGGERSHOTLINE

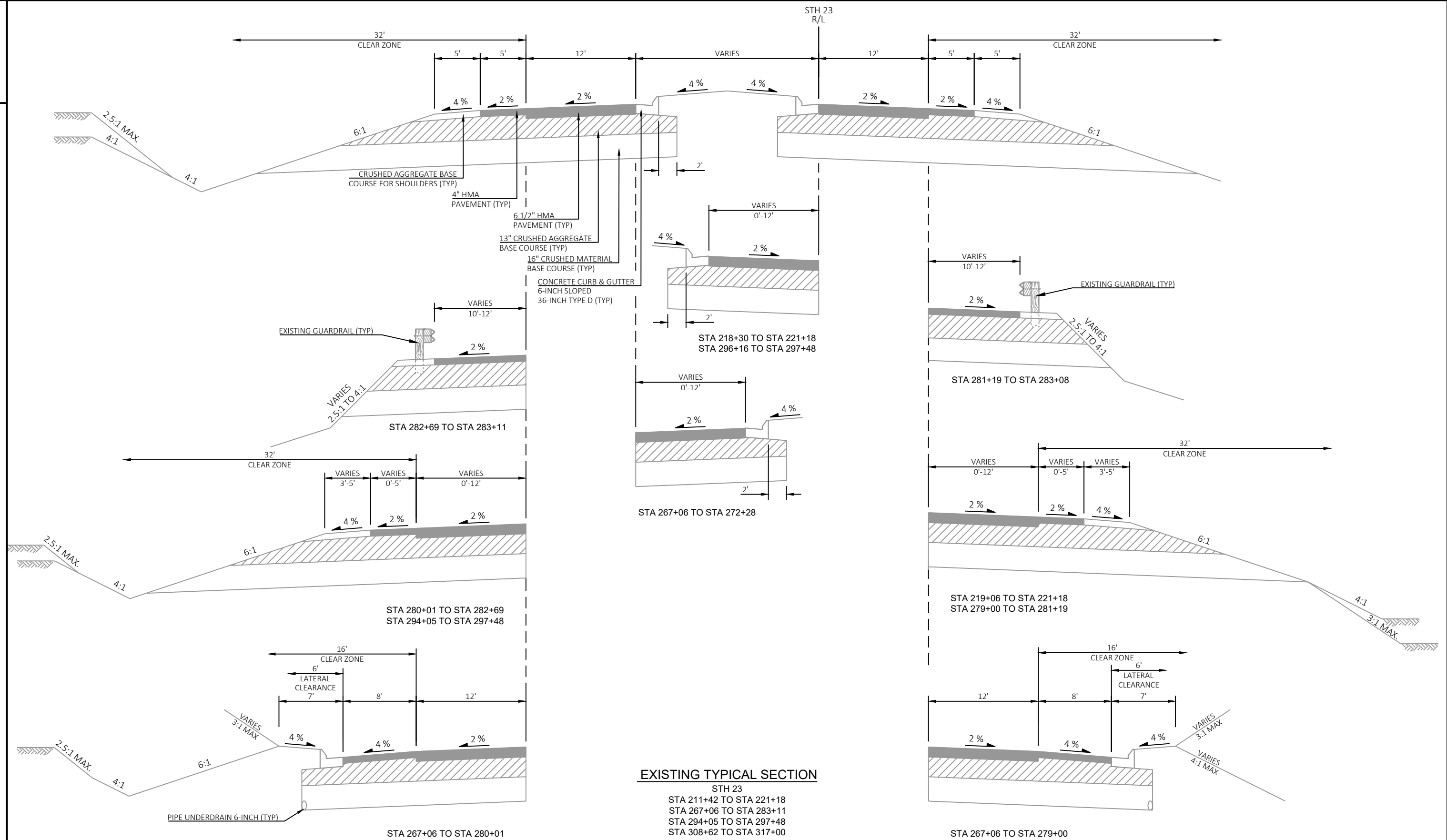
Dial 811 or (800)242-8511

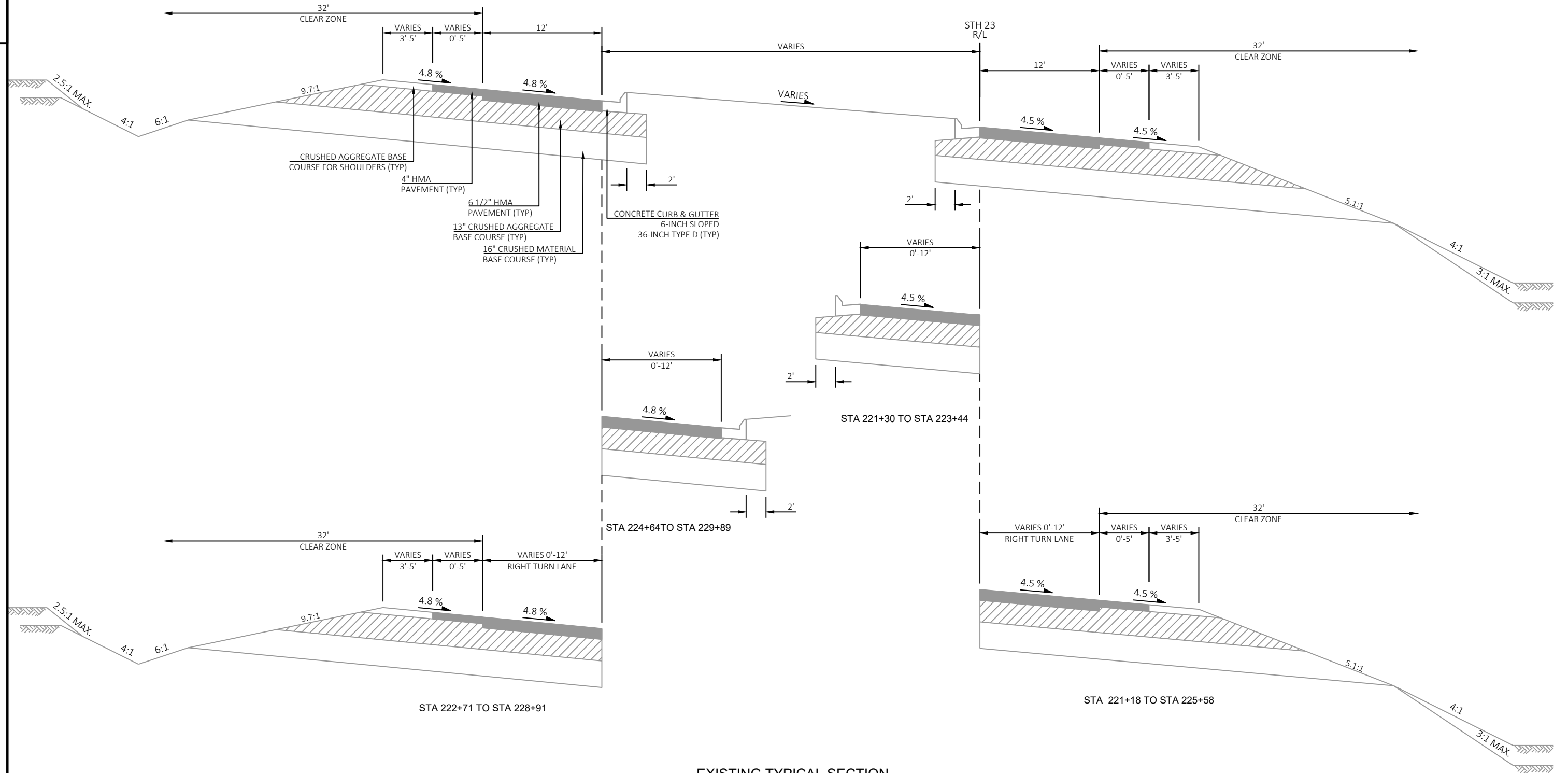
www.DiggersHotline.com



PROJECT NO: 1430-08-82	HWY: STH 23	COUNTY: GREEN LAKE	PROJECT OVERVIEW	SHEET	E
------------------------	-------------	--------------------	------------------	-------	---

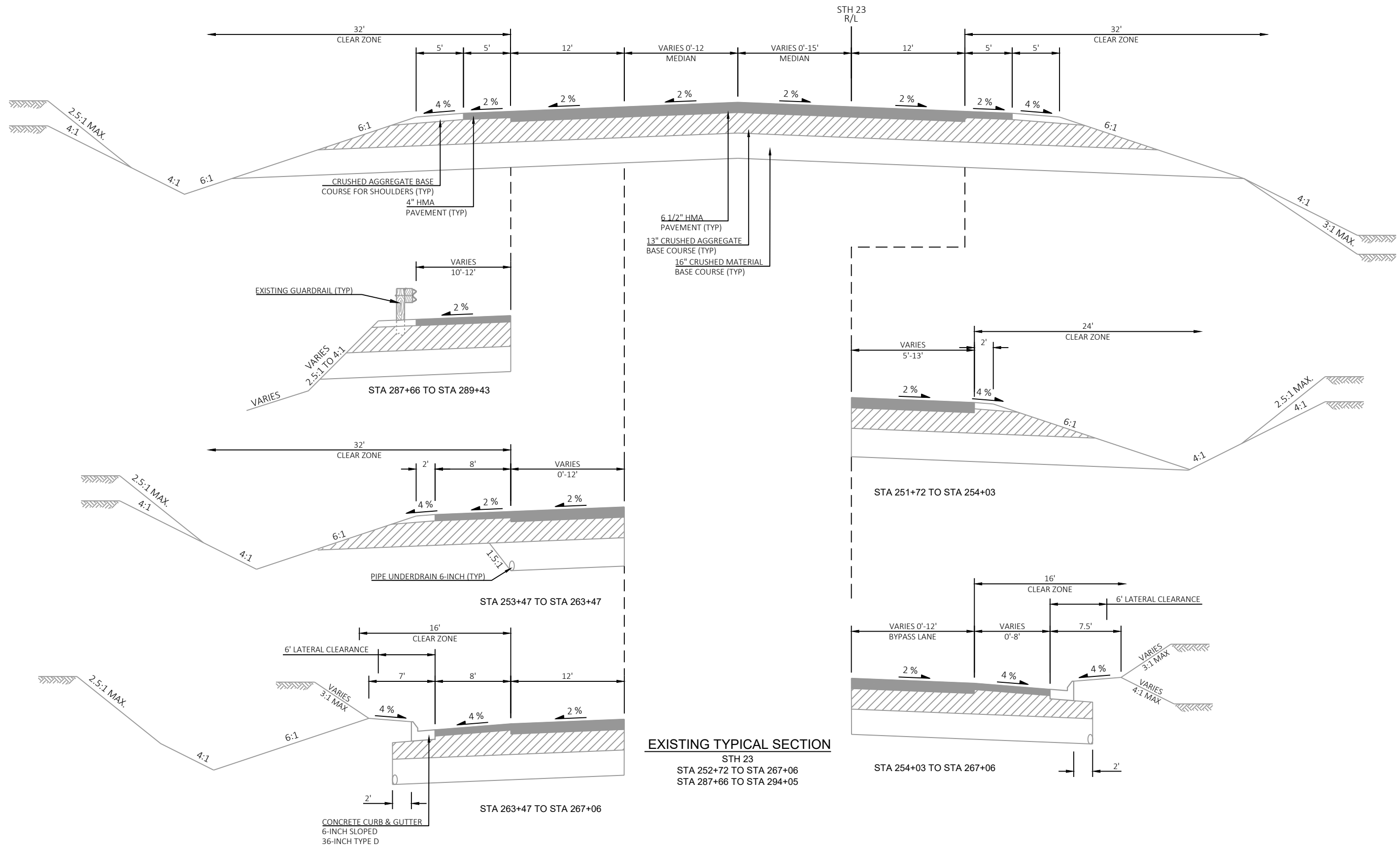


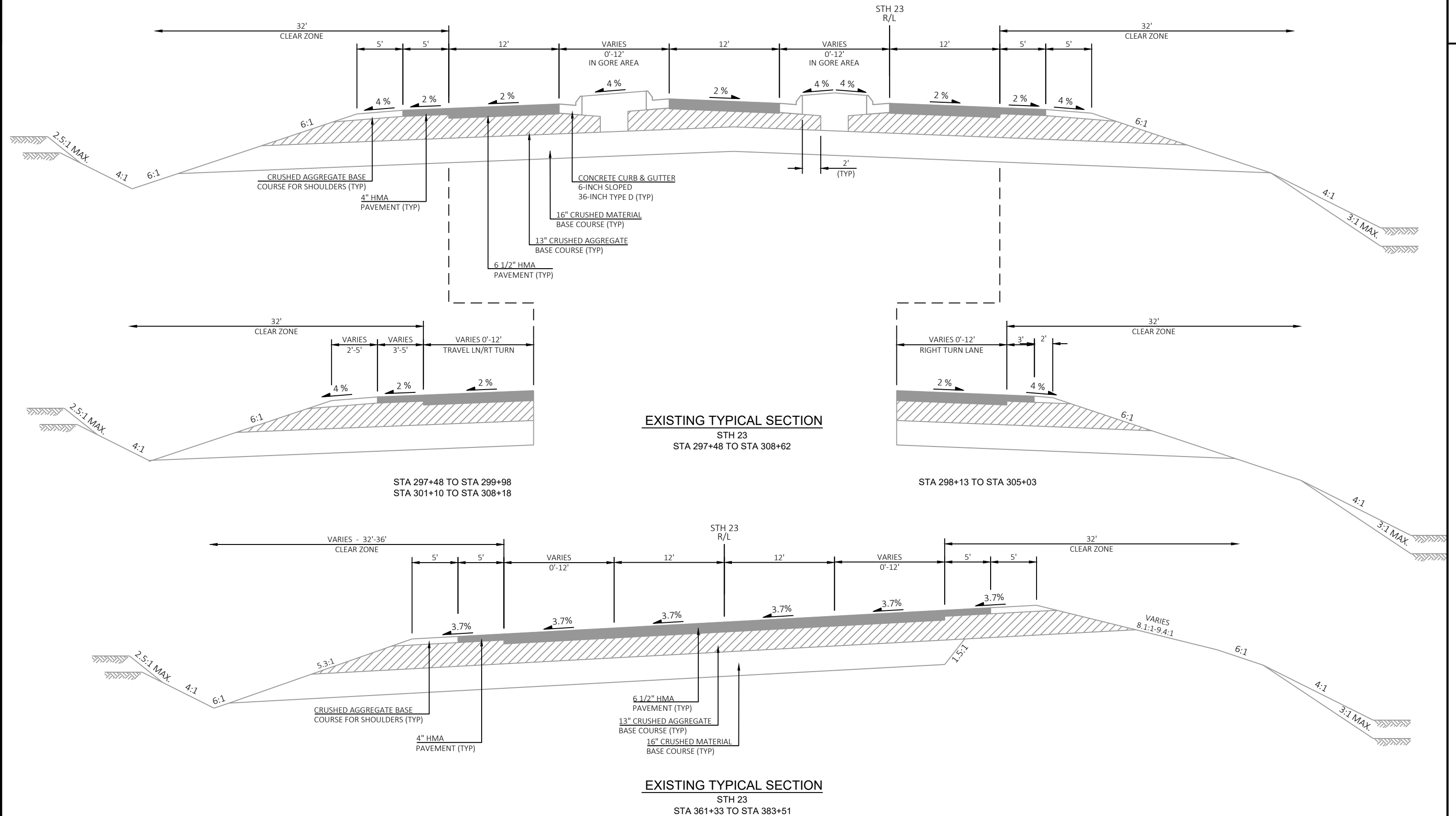


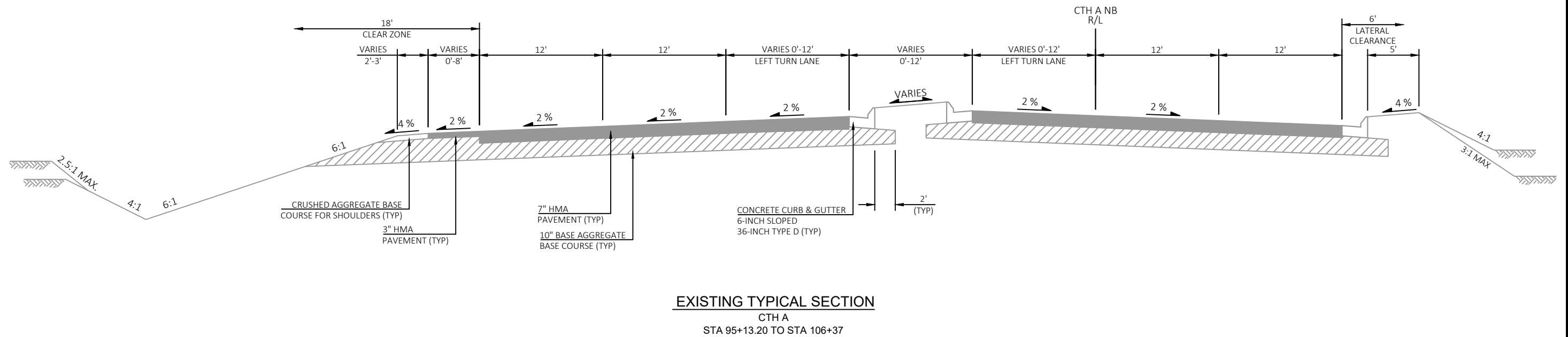
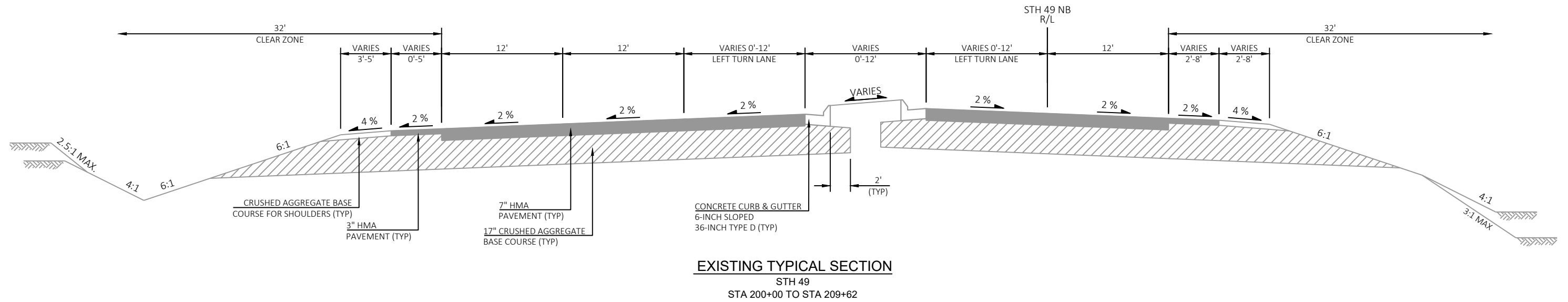


EXISTING TYPICAL SECTION

STH 23
STA 221+18 TO STA 243+27

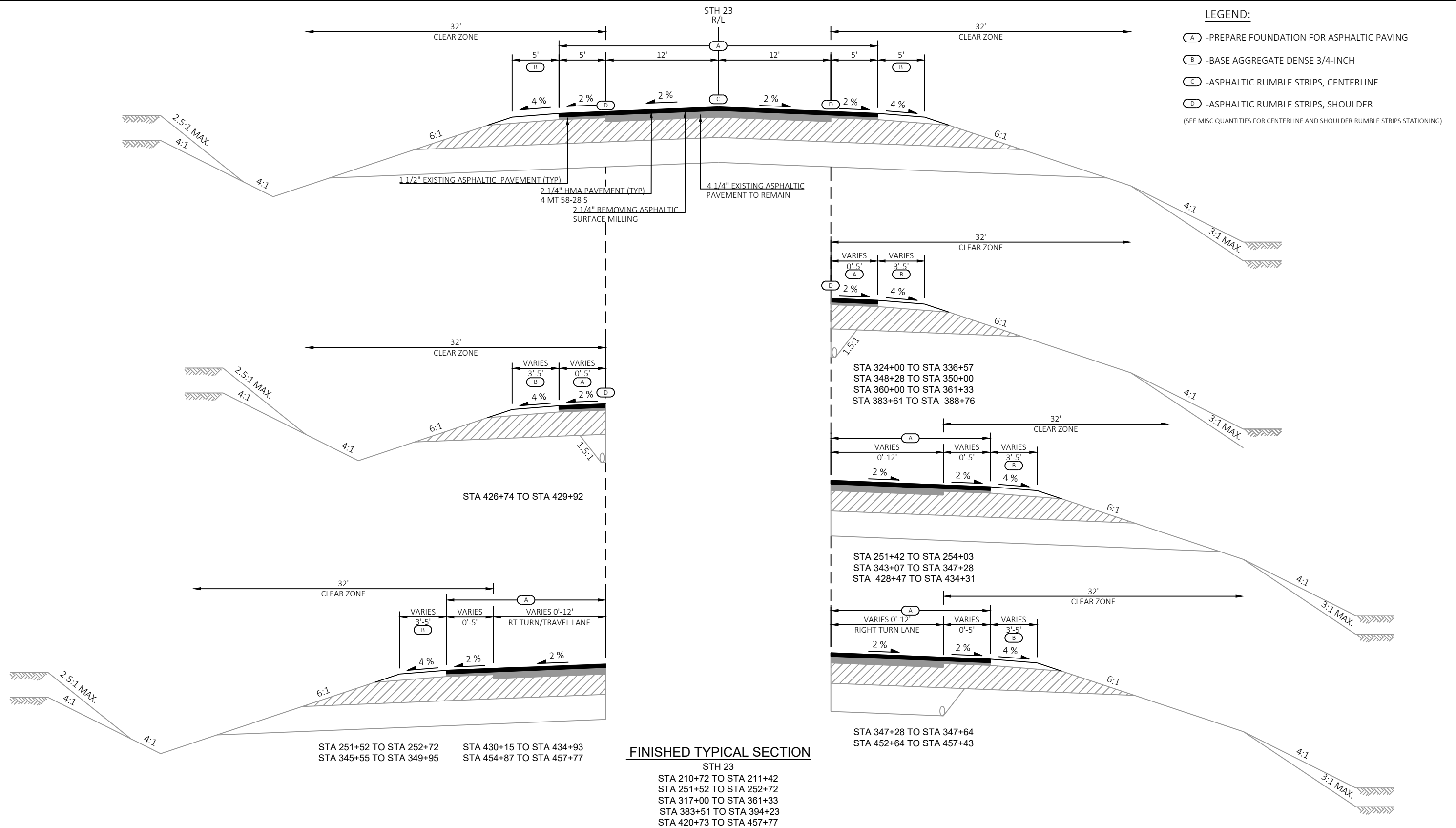


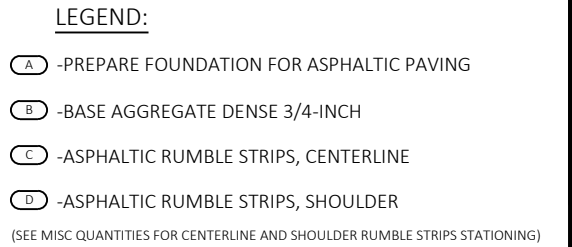


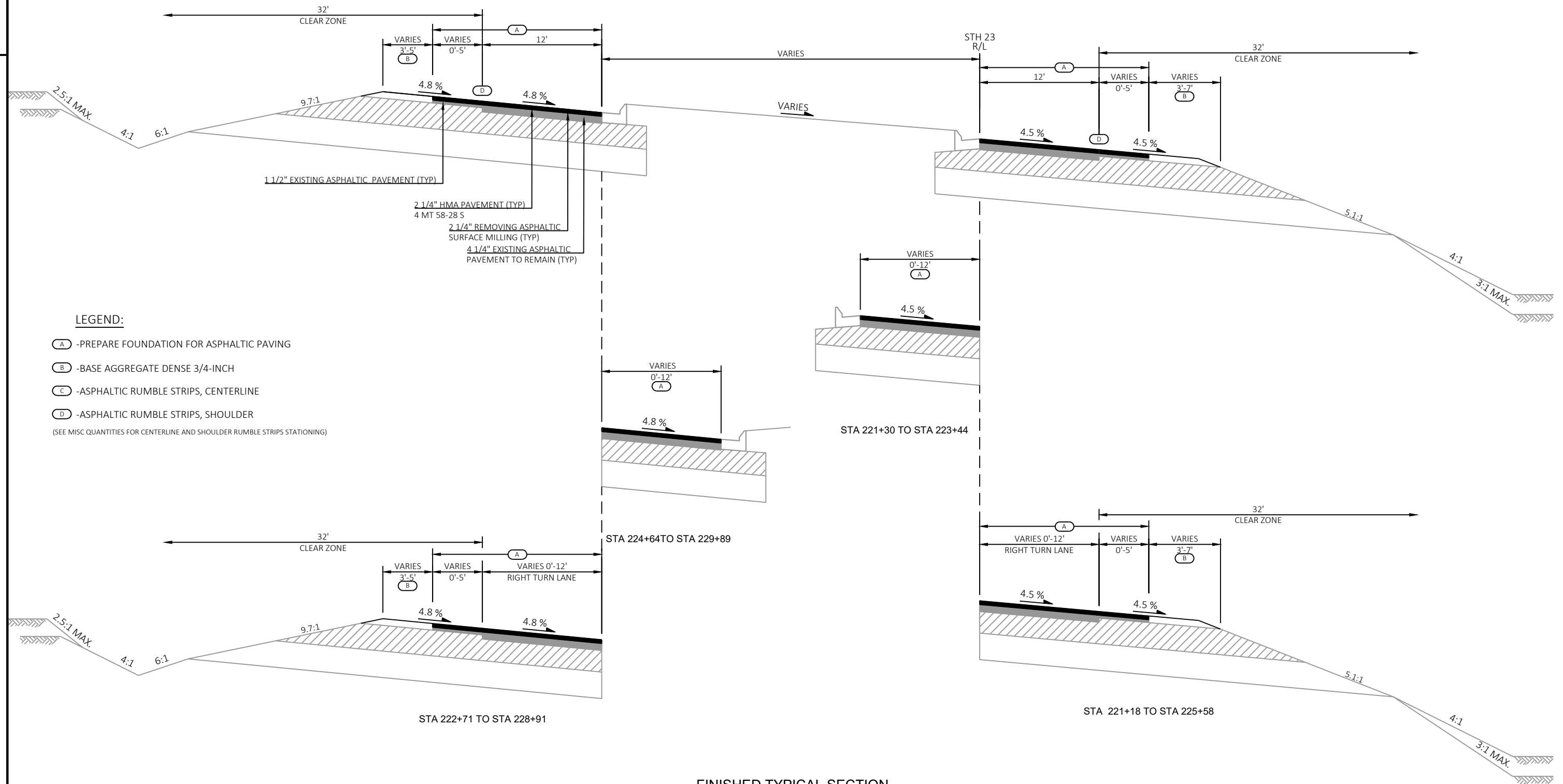


2

2 |

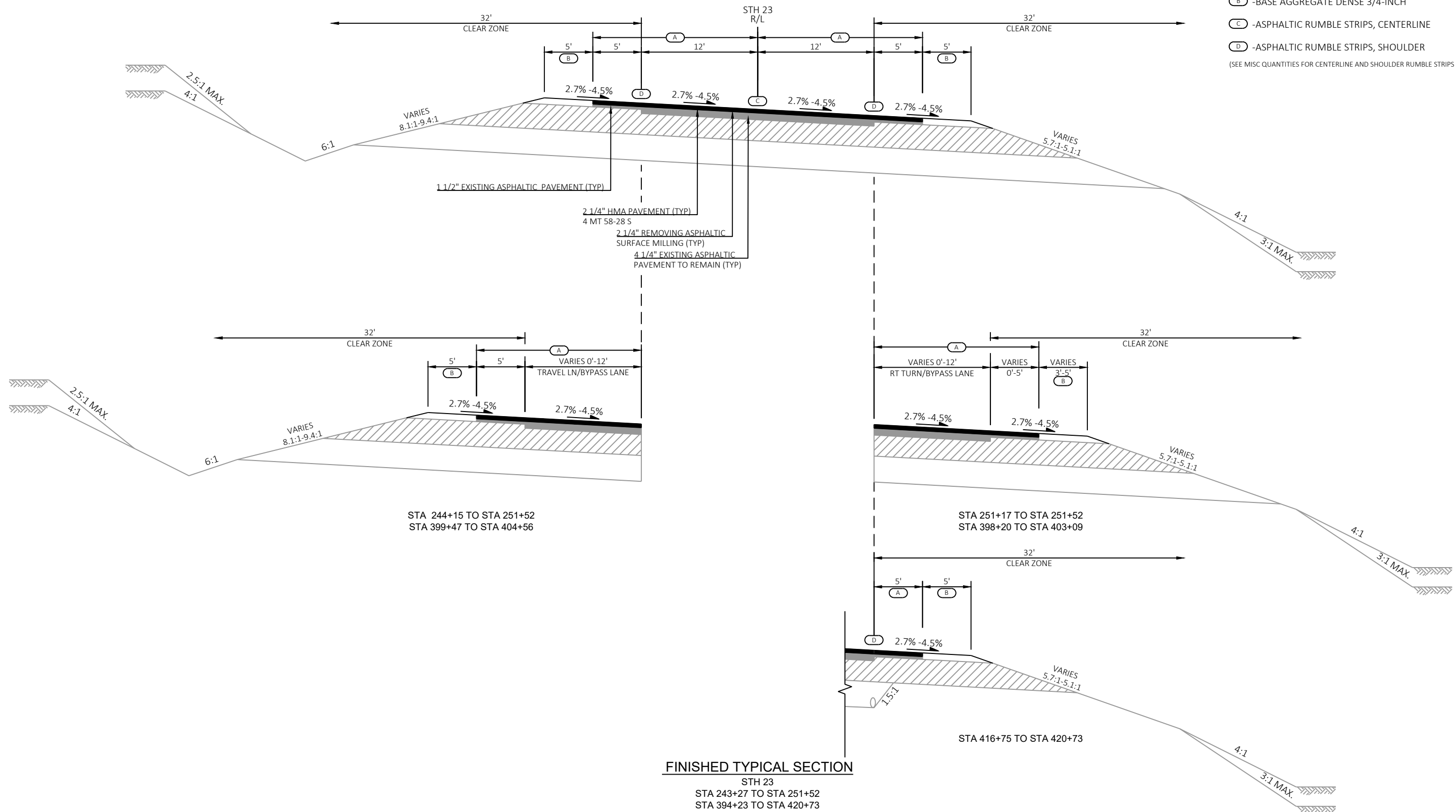


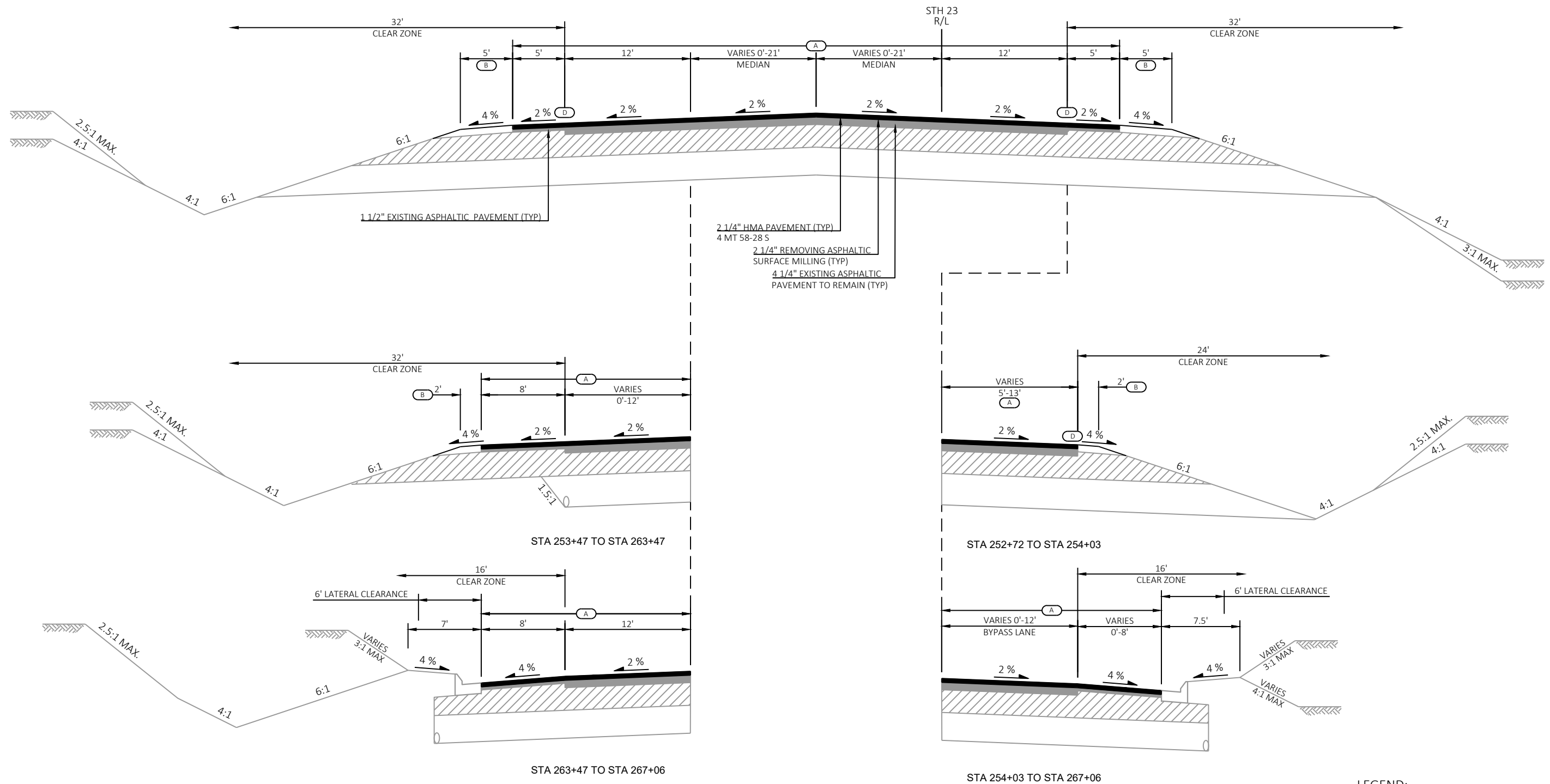




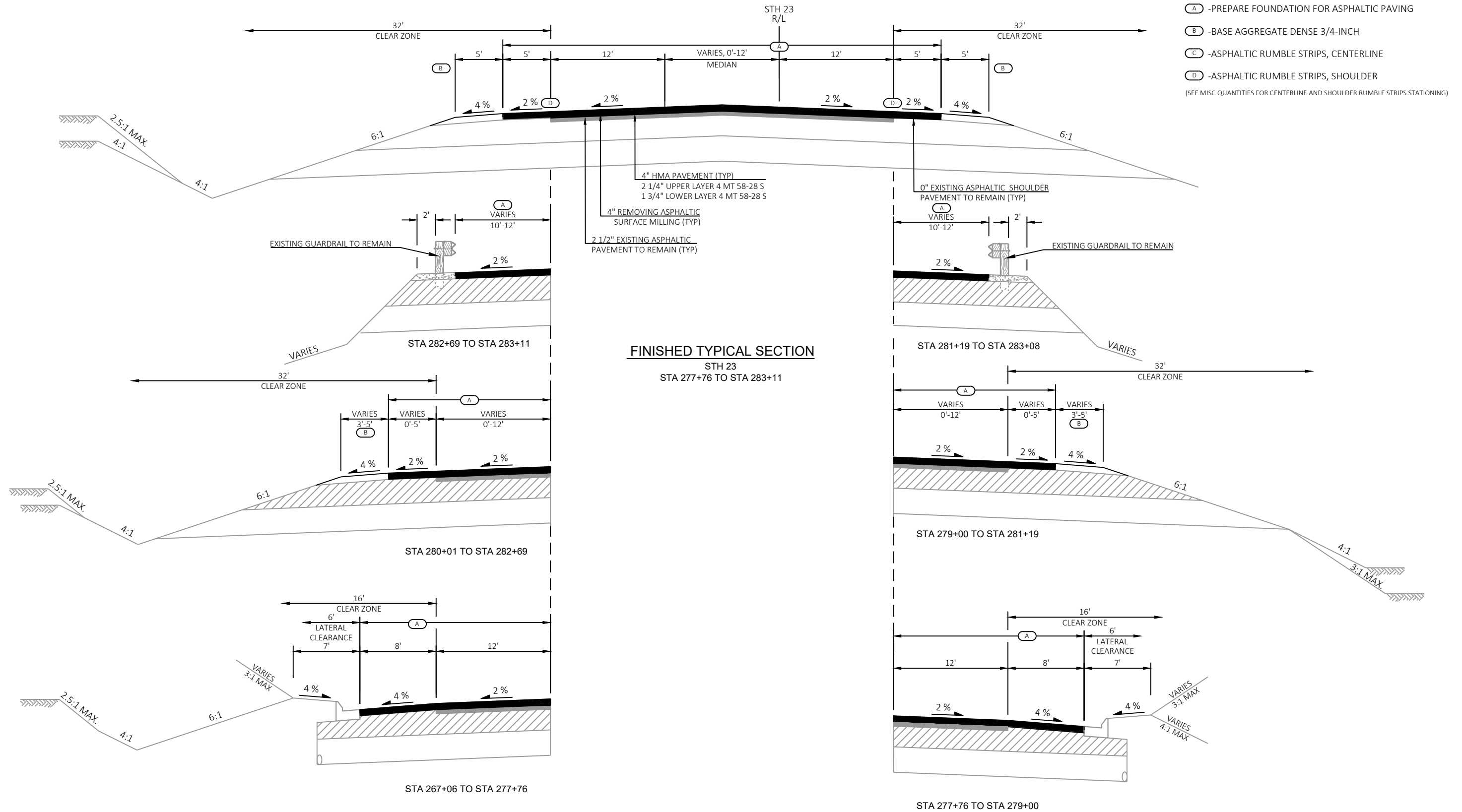
LEGEND:

- (A) -PREPARE FOUNDATION FOR ASPHALTIC PAVING
(B) -BASE AGGREGATE DENSE 3/4-INCH
(C) -ASPHALTIC RUMBLE STRIPS, CENTERLINE
(D) -ASPHALTIC RUMBLE STRIPS, SHOULDER
(SEE MISC QUANTITIES FOR CENTERLINE AND SHOULDER RUMBLE STRIPS STATIONING)



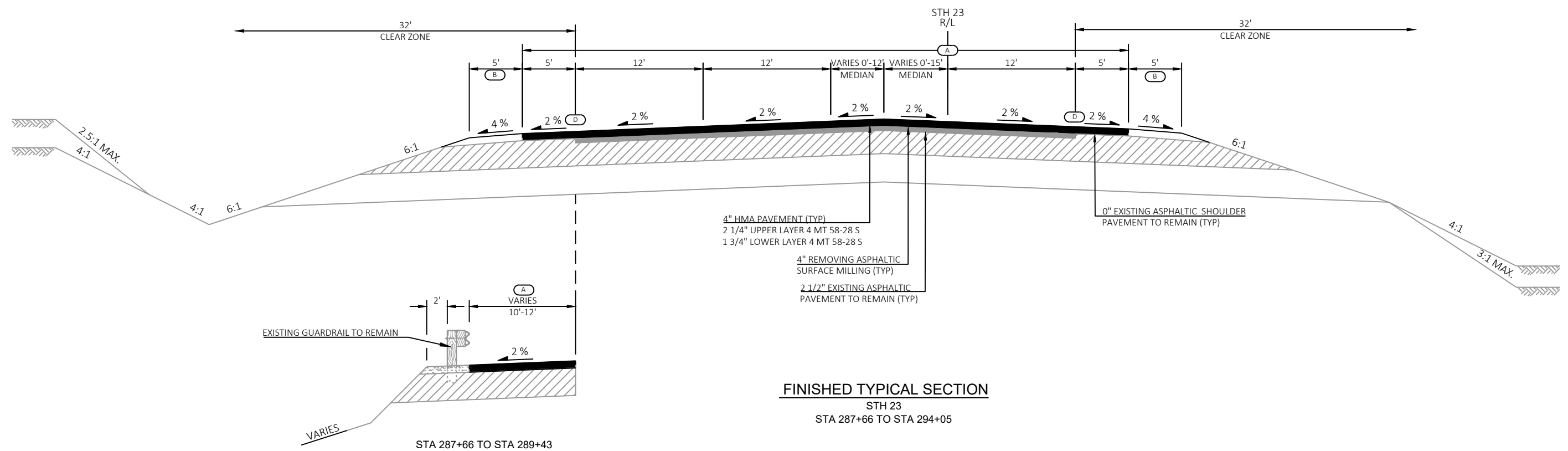
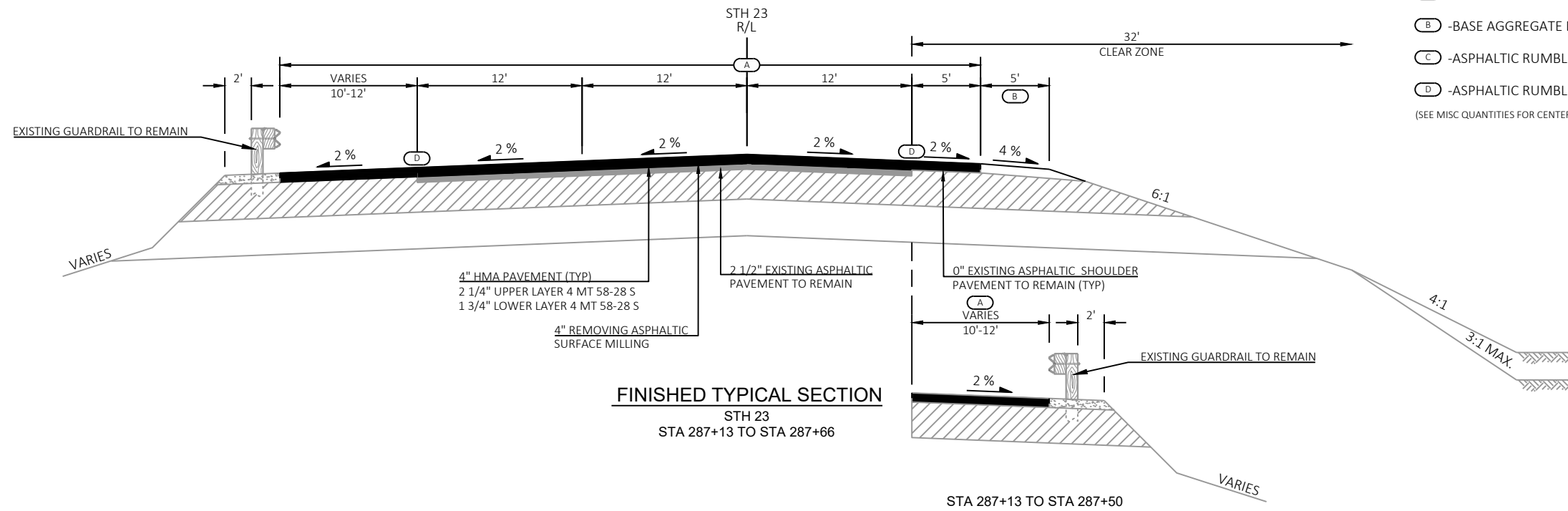
**FINISHED TYPICAL SECTION**STH 23
STA 252+72 TO STA 267+06**LEGEND:**

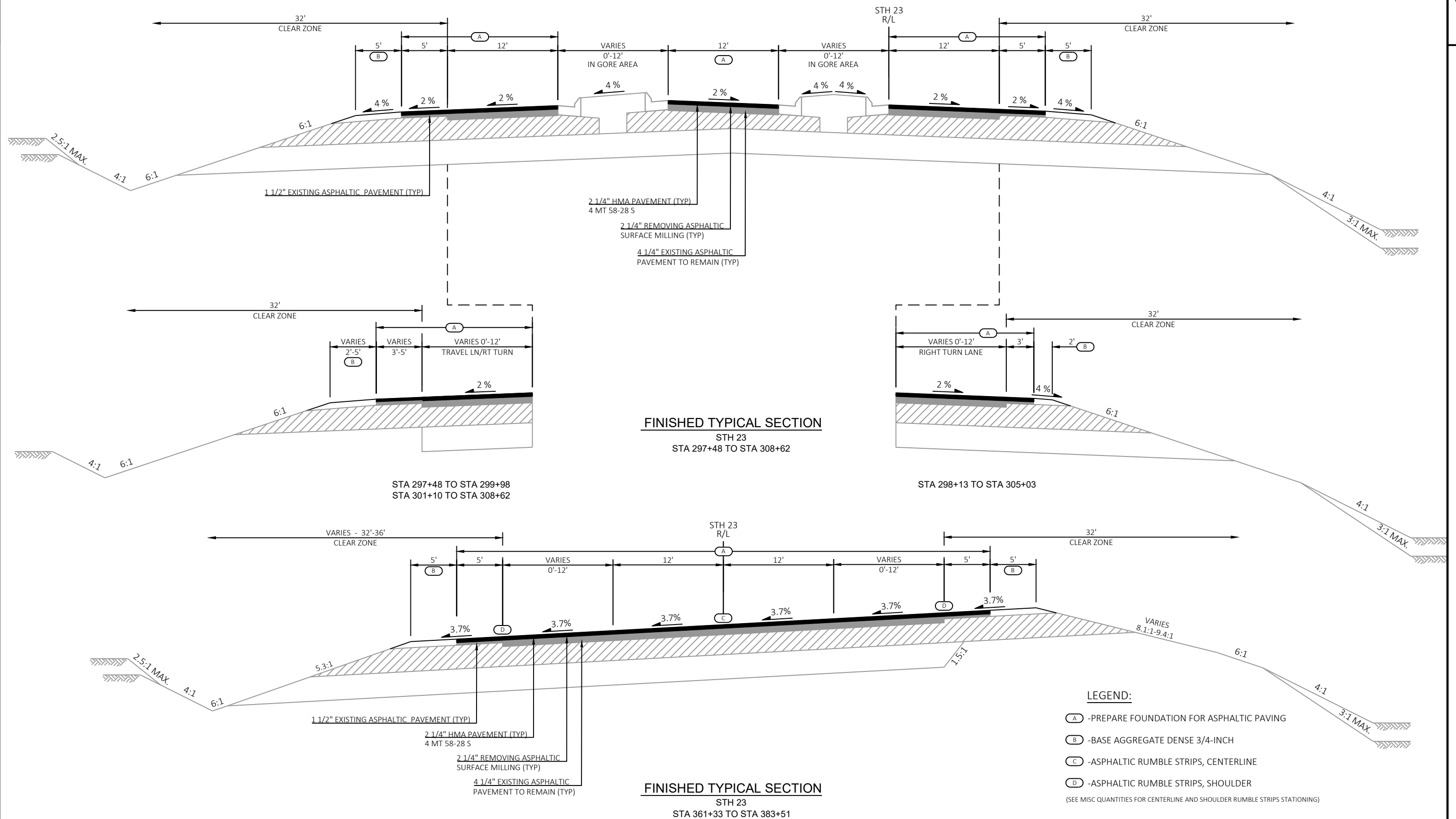
- (A) -PREPARE FOUNDATION FOR ASPHALTIC PAVING
 - (B) -BASE AGGREGATE DENSE 3/4-INCH
 - (C) -ASPHALTIC RUMBLE STRIPS, CENTERLINE
 - (D) -ASPHALTIC RUMBLE STRIPS, SHOULDER
- (SEE MISC QUANTITIES FOR CENTERLINE AND SHOULDER RUMBLE STRIPS STATIONING)

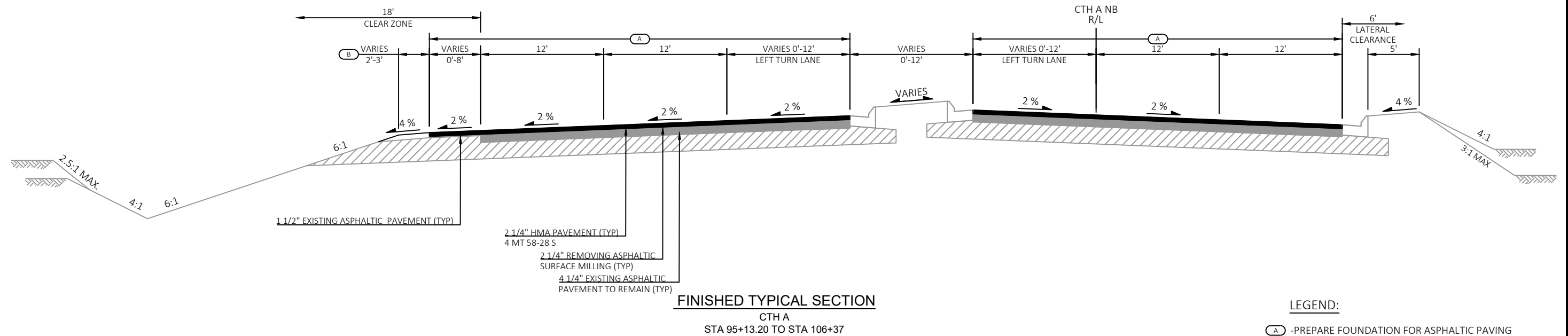
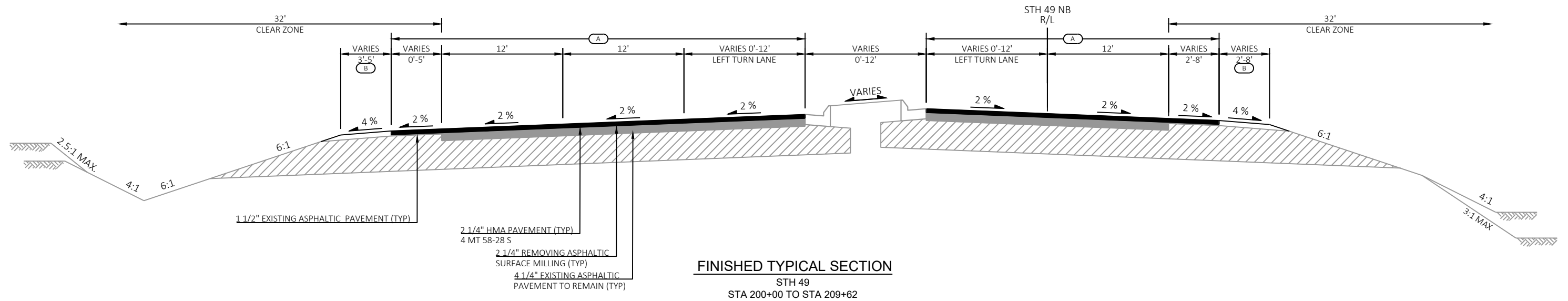


LEGEND:

- (A) -PREPARE FOUNDATION FOR ASPHALTIC PAVING
(B) -BASE AGGREGATE DENSE 3/4-INCH
(C) -ASPHALTIC RUMBLE STRIPS, CENTERLINE
(D) -ASPHALTIC RUMBLE STRIPS, SHOULDER
(SEE MISC QUANTITIES FOR CENTERLINE AND SHOULDER RUMBLE STRIPS STATIONING)

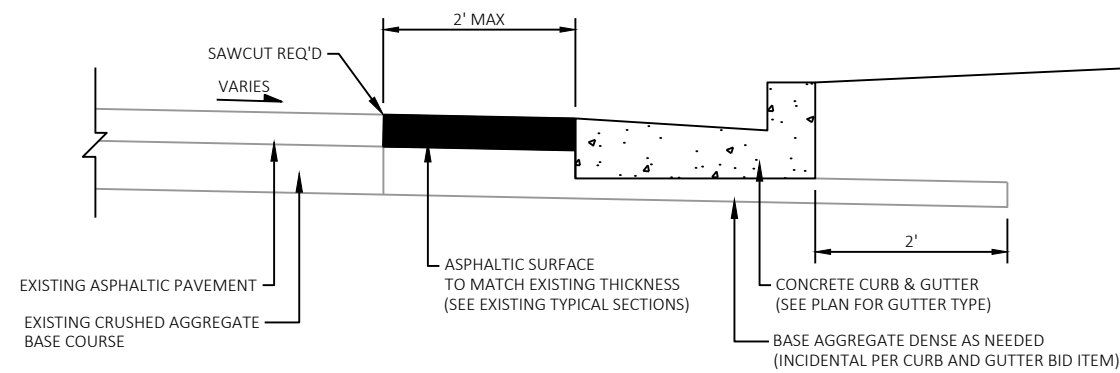




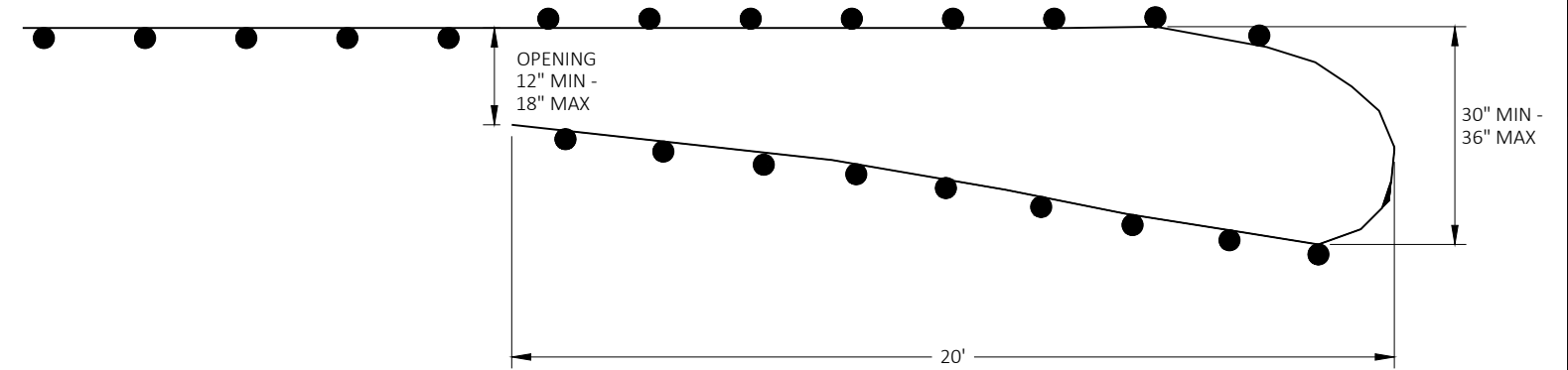


LEGEND:

- (A) -PREPARE FOUNDATION FOR ASPHALTIC PAVING
- (B) -BASE AGGREGATE DENSE 3/4-INCH
- (C) -ASPHALTIC RUMBLE STRIPS, CENTERLINE
- (D) -ASPHALTIC RUMBLE STRIPS, SHOULDER
- (SEE MISC QUANTITIES FOR CENTERLINE AND SHOULDER RUMBLE STRIPS STATIONING)



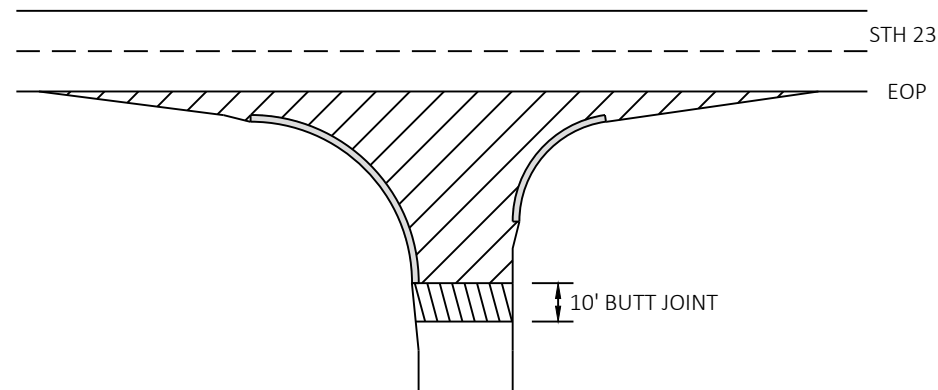
CONCRETE CURB AND GUTTER REPLACEMENT
SEE SHEET PLANS FOR REPLACEMENT LOCATIONS



PLAN VIEW

TEMPORARY SMALL ANIMAL TURN-AROUND

GENERAL NOTES:
SILT FENCE POSTS FOR THE TURN-AROUND SHOULD BE ON THE OUTSIDE OF THE TURN-AROUND. AND TRENCHED IN ACCORDING TO SILT FENCE REQUIREMENTS.



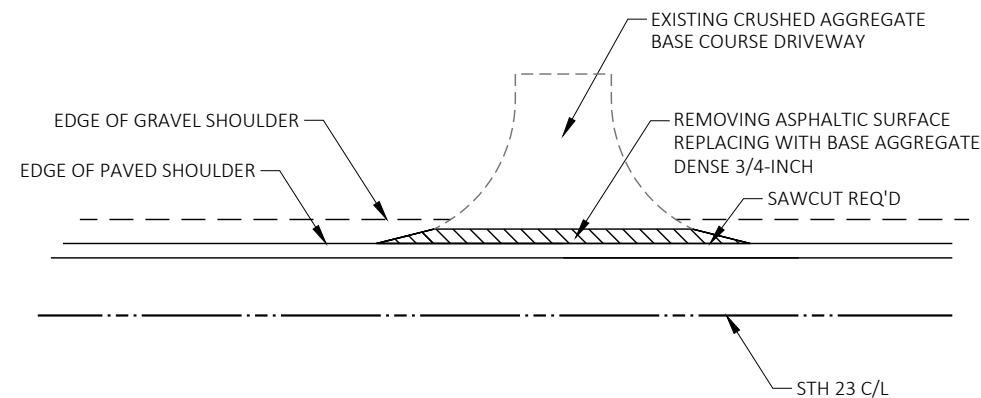
- REMOVING ASPHALTIC SURFACE MILLING
- REMOVING ASPHALTIC SURFACE BUTT JOINTS
SEE BUTT JOINT DETAIL

NOTE: WHEN MATCHING TO AN UNPAVED SURFACE
BUTT JOINT IS NOT REQUIRED

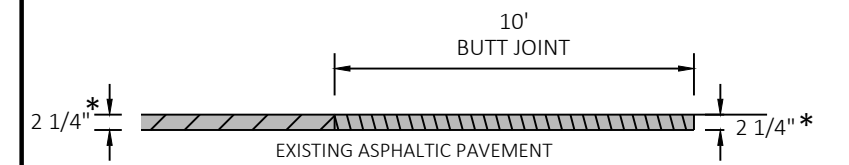
SIDE ROADS

WITH CURB AND GUTTER

CTH A (NORTH)	FOREST RIDGE RD
NORTH ST	EASTWIND RD
THRASHER RD	SUNNYSIDE RD
STH 49	BROOKLYN J RD
CTH A (SOUTH)	CTH PP
BUSSE RD	DEAD END RD
KDR CT	N LAWSON DR



APRON REMOVAL FOR UNPAVED DRIVEWAYS



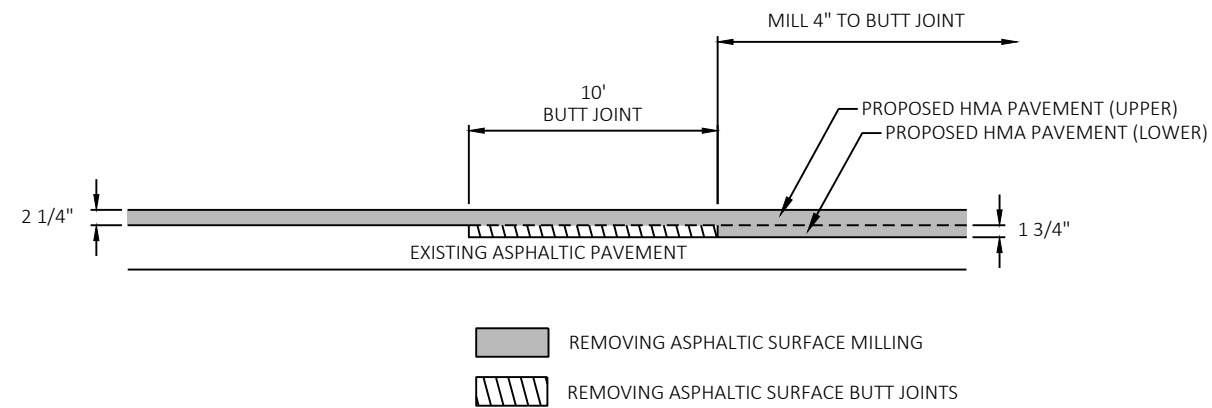
- HMA PAVEMENT
- REMOVING ASPHALTIC SURFACE MILLING
- REMOVING ASPHALTIC SURFACE BUTT JOINTS

* 4" FOR EAST AND WEST OF B-24-009

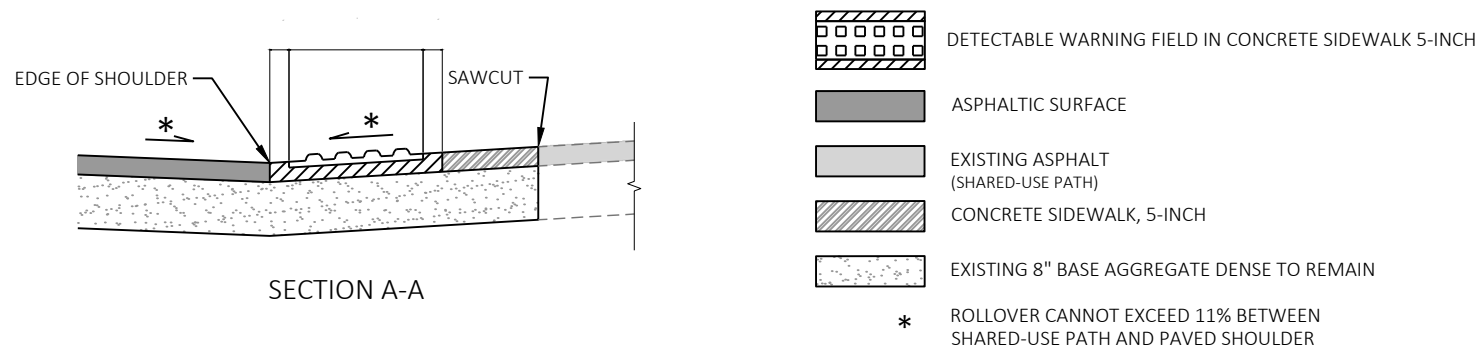
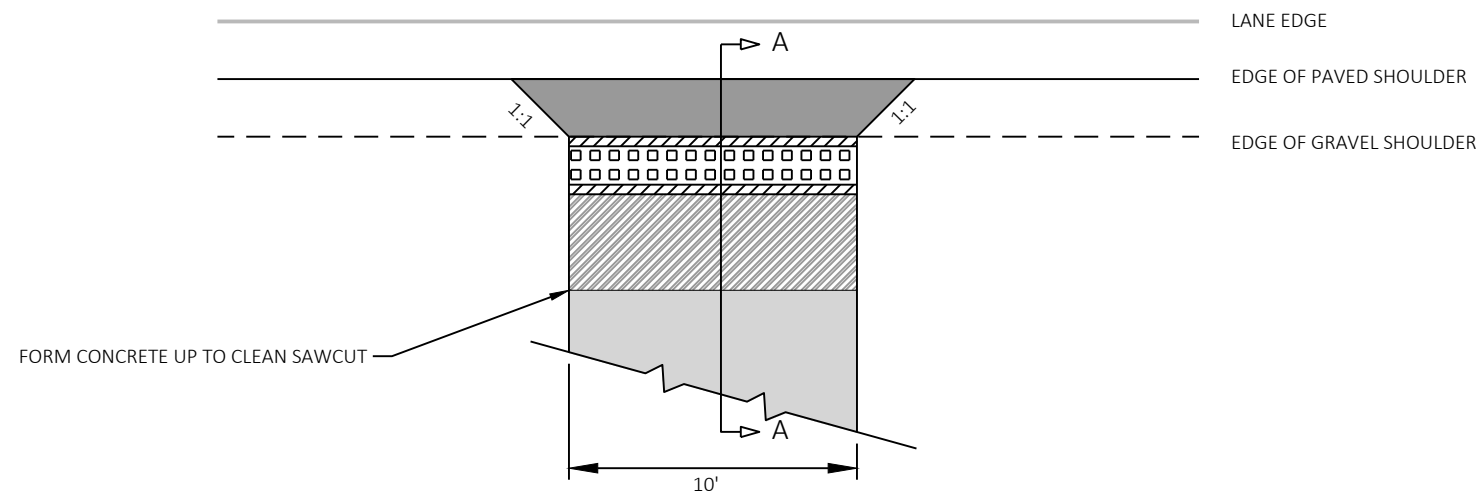
BUTT JOINT

BEGINNING OF PROJECT
END OF PROJECT

CTH A (NORTH)	FOREST RIDGE RD
NORTH ST	EASTWIND RD
THRASHER RD	SUNNYSIDE RD
B-24-009	BROOKLYN J RD
STH 49	CTH PP
CTH A (SOUTH)	DEAD END RD
BUSSE RD	N LAWSON DR
KDR CT	

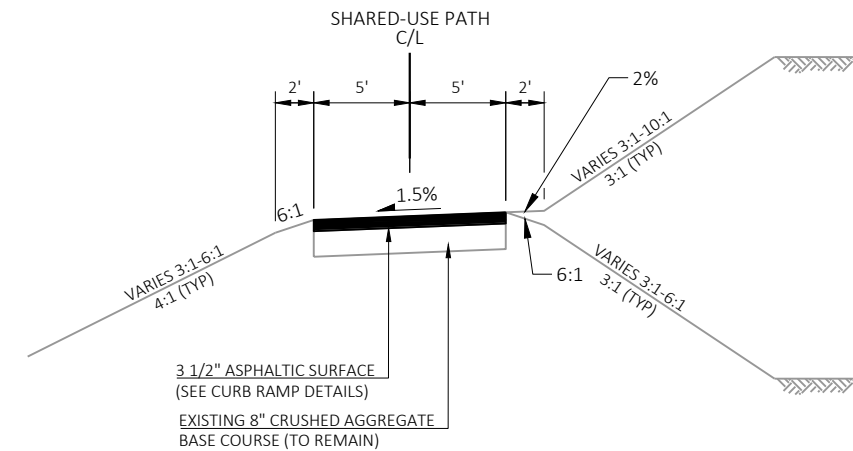


MILL DEPTH TRANSITION DETAIL



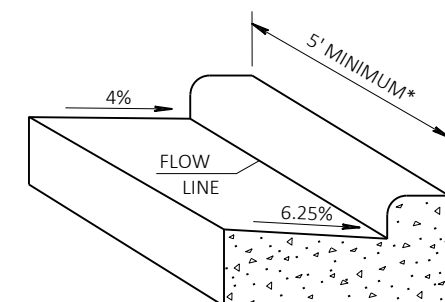
RURAL SIDEWALK / SHARED-USE PATH CROSSING WITH DETECTABLE WARNING FIELD

BUSSE RD
FOREST RIDGE RD
BROOKLYN J RD



FINISHED TYPICAL SECTION
SHARED-USE PATH

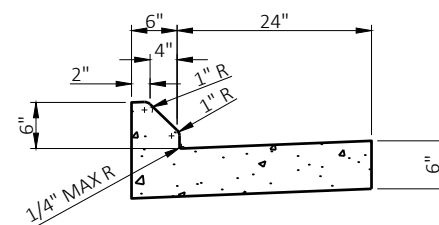
STA 210+79 TO STA 224+03
STA 305+22 TO STA 457+77
(AT CURB RAMP REPLACEMENT LOCATIONS ONLY. SEE CURB RAMP DETAILS.)



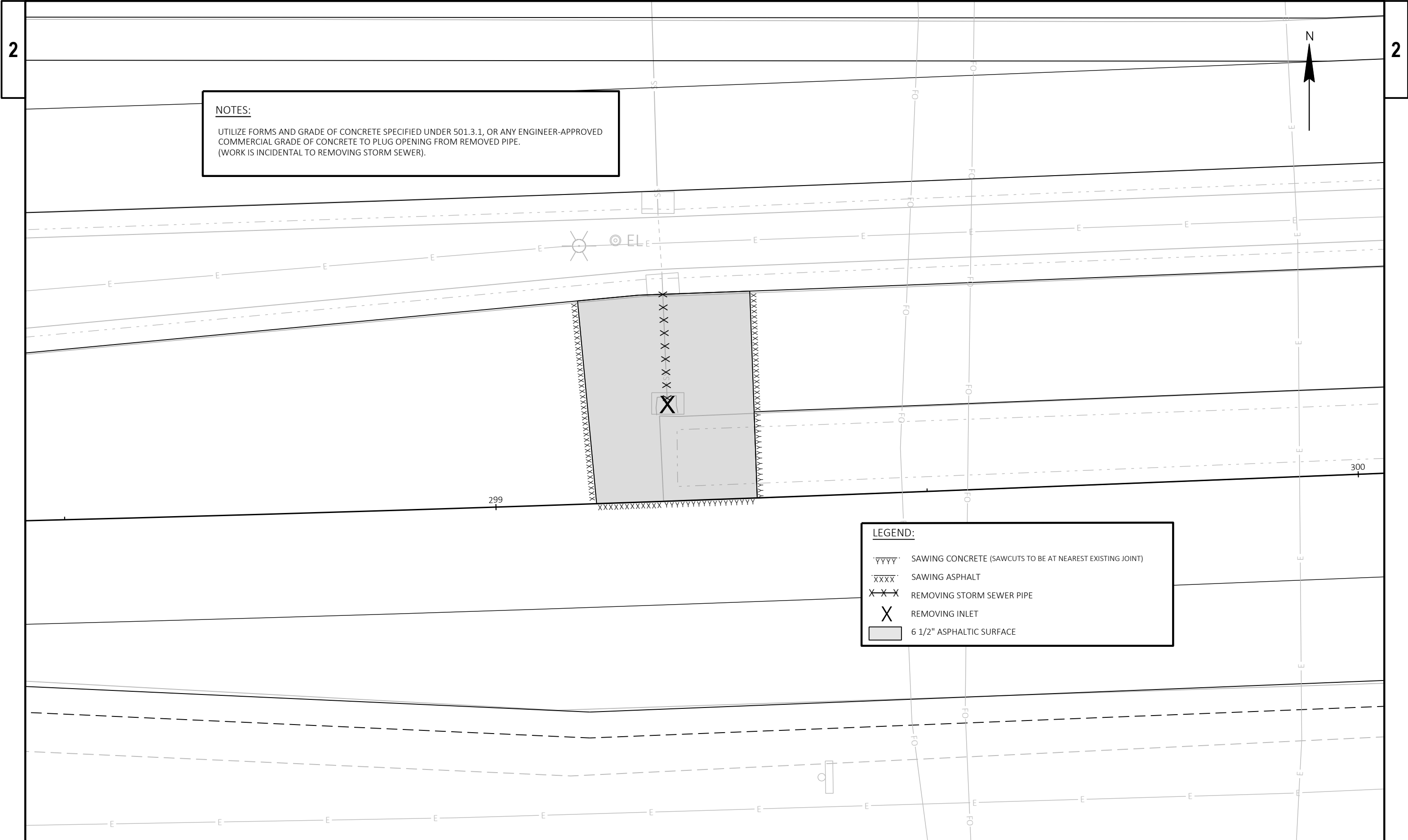
*SEE CURB RAMP DETAILS FOR LOCATIONS & EXACT LENGTH. ADJUST AS NECESSARY TO MAINTAIN DRAINAGE.

DETAIL OF GUTTER SLOPE TRANSITION

MEDIAN REPLACEMENT TO ACCESS PEDESTRIAN BUTTON



NOTE:
PAID AS BID ITEM 'CONCRETE CURB &
GUTTER 6" SLOPED 30-INCH TYPE J'



NOTES:
UTILIZE FORMS AND GRADE OF CONCRETE SPECIFIED UNDER 501.3.1, OR ANY ENGINEER-APPROVED COMMERCIAL GRADE OF CONCRETE TO PLUG OPENING FROM REMOVED PIPE.
(WORK IS INCIDENTAL TO REMOVING STORM SEWER).

LEGEND:

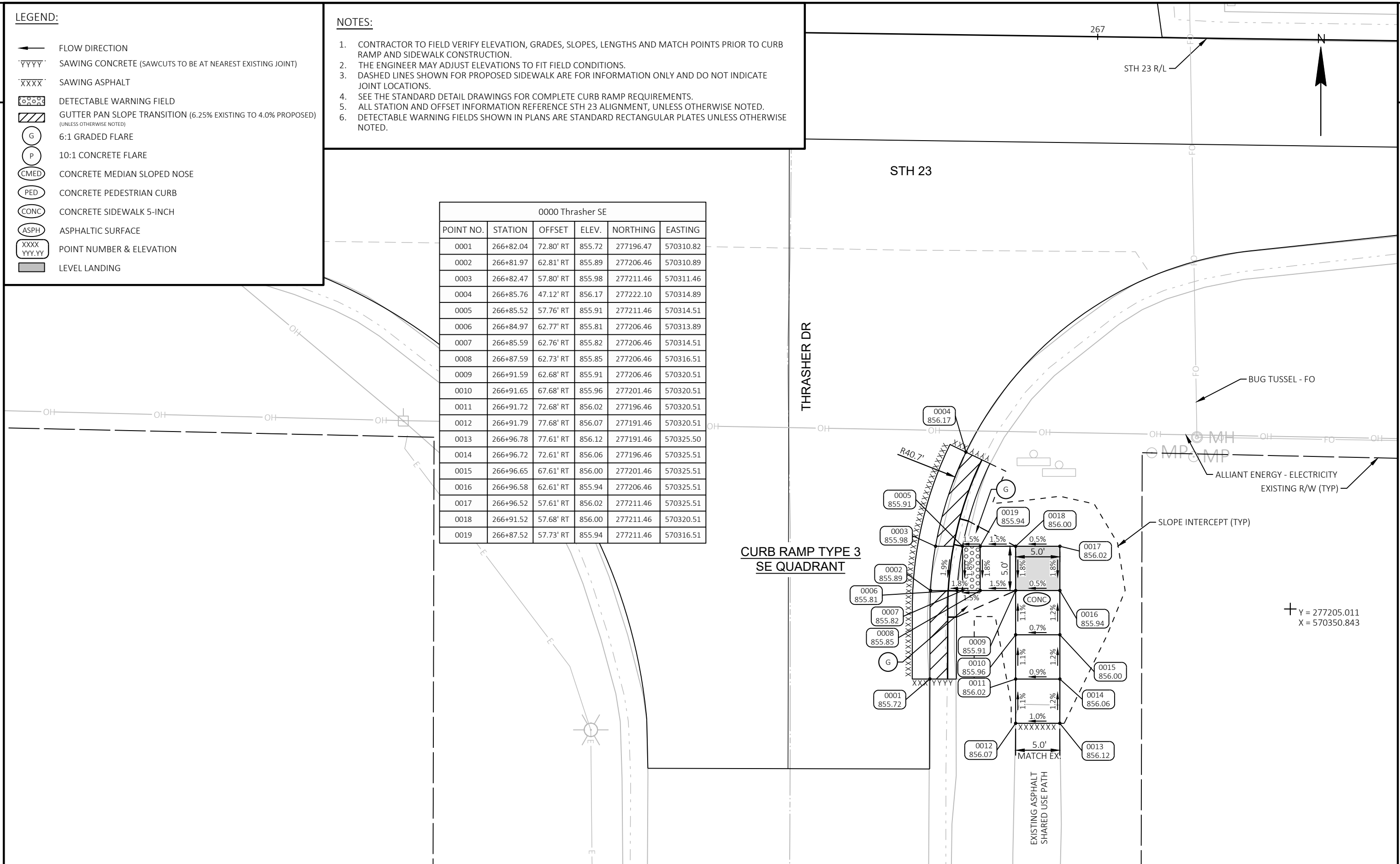
- Y·Y·Y· SAWING CONCRETE (SAWCUTS TO BE AT NEAREST EXISTING JOINT)
- X·X·X· SAWING ASPHALT
- X-X-X REMOVING STORM SEWER PIPE
- X REMOVING INLET
- 6 1/2" ASPHALTIC SURFACE

NOTES:

1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
5. ALL STATION AND OFFSET INFORMATION REFERENCE STH 23 ALIGNMENT, UNLESS OTHERWISE NOTED.
6. DETECTABLE WARNING FIELDS SHOWN IN PLANS ARE STANDARD RECTANGULAR PLATES UNLESS OTHERWISE NOTED.

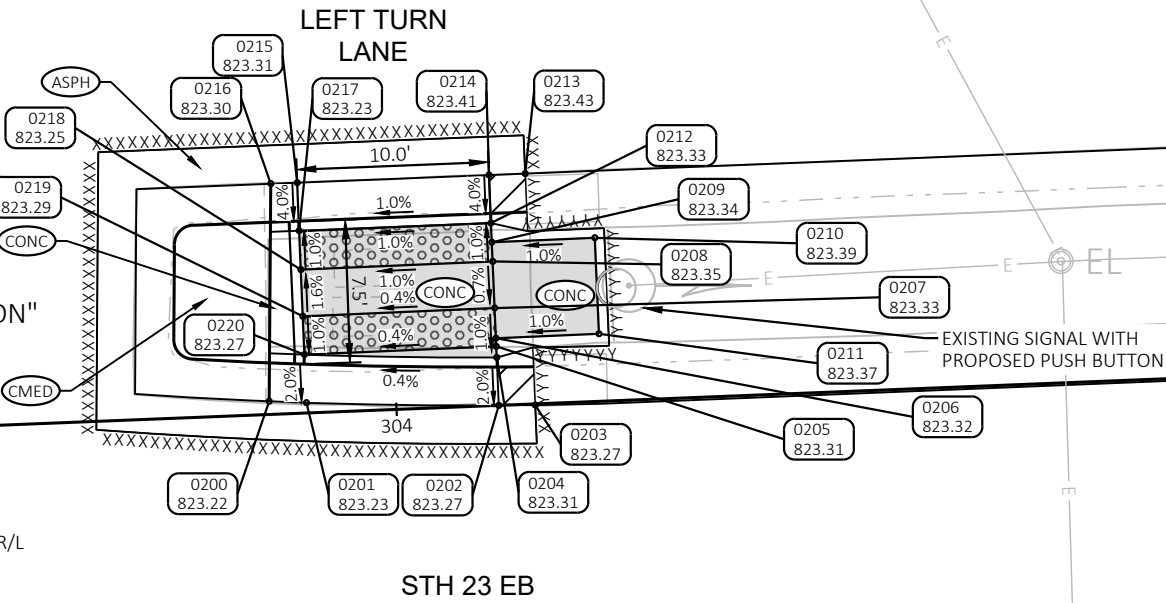
0000 Thrasher SE					
POINT NO.	STATION	OFFSET	ELEV.	NORTHING	EASTING
0001	266+82.04	72.80' RT	855.72	277196.47	570310.82
0002	266+81.97	62.81' RT	855.89	277206.46	570310.89
0003	266+82.47	57.80' RT	855.98	277211.46	570311.46
0004	266+85.76	47.12' RT	856.17	277222.10	570314.89
0005	266+85.52	57.76' RT	855.91	277211.46	570314.51
0006	266+84.97	62.77' RT	855.81	277206.46	570313.89
0007	266+85.59	62.76' RT	855.82	277206.46	570314.51
0008	266+87.59	62.73' RT	855.85	277206.46	570316.51
0009	266+91.59	62.68' RT	855.91	277206.46	570320.51
0010	266+91.65	67.68' RT	855.96	277201.46	570320.51
0011	266+91.72	72.68' RT	856.02	277196.46	570320.51
0012	266+91.79	77.68' RT	856.07	277191.46	570320.51
0013	266+96.78	77.61' RT	856.12	277191.46	570325.50
0014	266+96.72	72.61' RT	856.06	277196.46	570325.51
0015	266+96.65	67.61' RT	856.00	277201.46	570325.51
0016	266+96.58	62.61' RT	855.94	277206.46	570325.51
0017	266+96.52	57.61' RT	856.02	277211.46	570325.51
0018	266+91.52	57.68' RT	856.00	277211.46	570320.51
0019	266+87.52	57.73' RT	855.94	277211.46	570316.51

CURB RAMP TYPE 3 SE QUADRANT



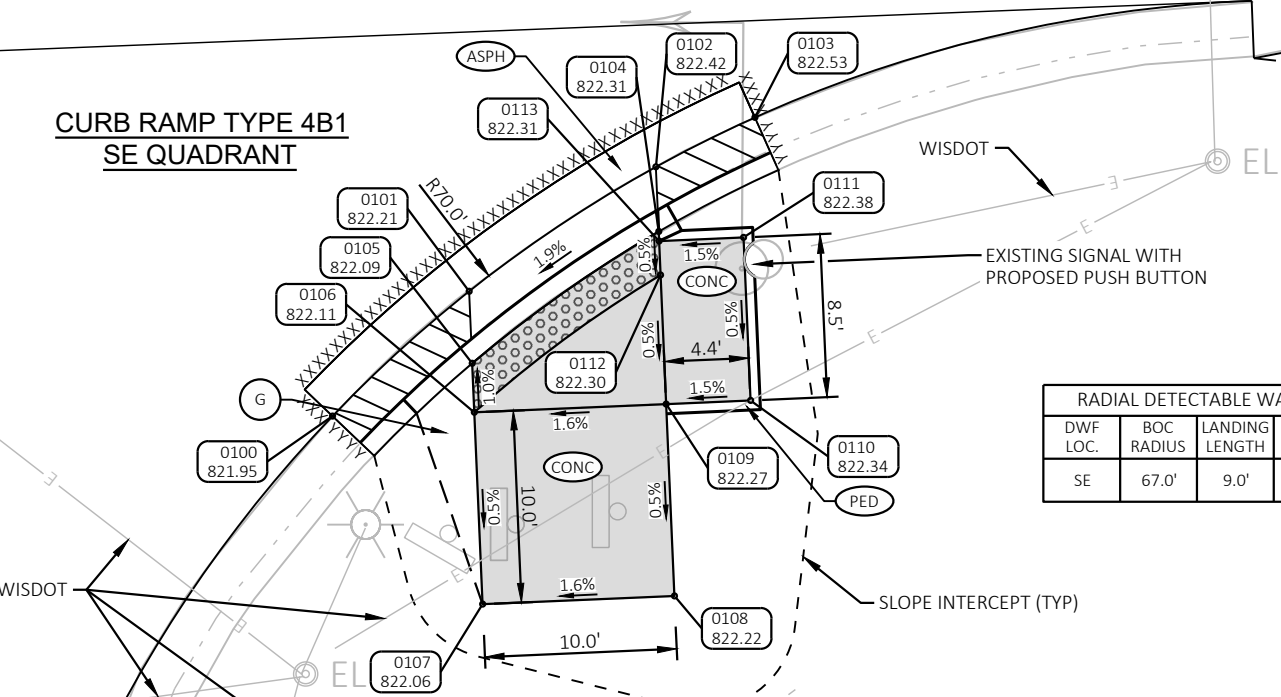
CURB RAMP TYPE 5

SEE CONSTRUCTION DETAIL
"MEDIAN REPLACEMENT TO ACCESS PEDESTRIAN BUTTON"



0200 CTH A S ISLAND					
POINT NO.	STATION	OFFSET	ELEV.	NORTHING	EASTING
0200	303+93.39	0.68' LT	823.22	277244.00	574021.90
0201	303+95.33	0.53' LT	823.23	277243.93	574023.85
0202	304+05.33	0.01' RT	823.27	277243.79	574033.86
0203	304+07.22	0.06' RT	823.27	277243.81	574035.76
0204	304+05.32	2.50' LT	823.31	277246.29	574033.75
0205	304+05.32	3.07' LT	823.31	277246.87	574033.73
0206	304+05.32	3.50' LT	823.32	277247.29	574033.71
0207	304+05.31	5.07' LT	823.33	277248.86	574033.64
0208	304+05.31	7.50' LT	823.35	277251.29	574033.54
0209	304+05.30	8.50' LT	823.34	277252.29	574033.49
0210	304+10.67	8.52' LT	823.39	277252.52	574038.86
0211	304+10.69	3.52' LT	823.37	277247.53	574039.08
0212	304+05.30	9.50' LT	823.33	277253.29	574033.45
0213	304+07.19	12.00' LT	823.43	277255.86	574035.24
0214	304+05.30	12.00' LT	823.41	277255.79	574033.35
0215	303+95.30	12.00' LT	823.31	277255.39	574023.36
0216	303+93.92	12.00' LT	823.30	277255.33	574021.98
0217	303+95.30	9.50' LT	823.23	277252.89	574023.46
0218	303+95.31	7.47' LT	823.25	277250.86	574023.55
0219	303+95.31	5.04' LT	823.29	277248.43	574023.65
0220	303+95.32	3.04' LT	823.27	277246.44	574023.74

CURB RAMP TYPE 4B1
SE QUADRANT



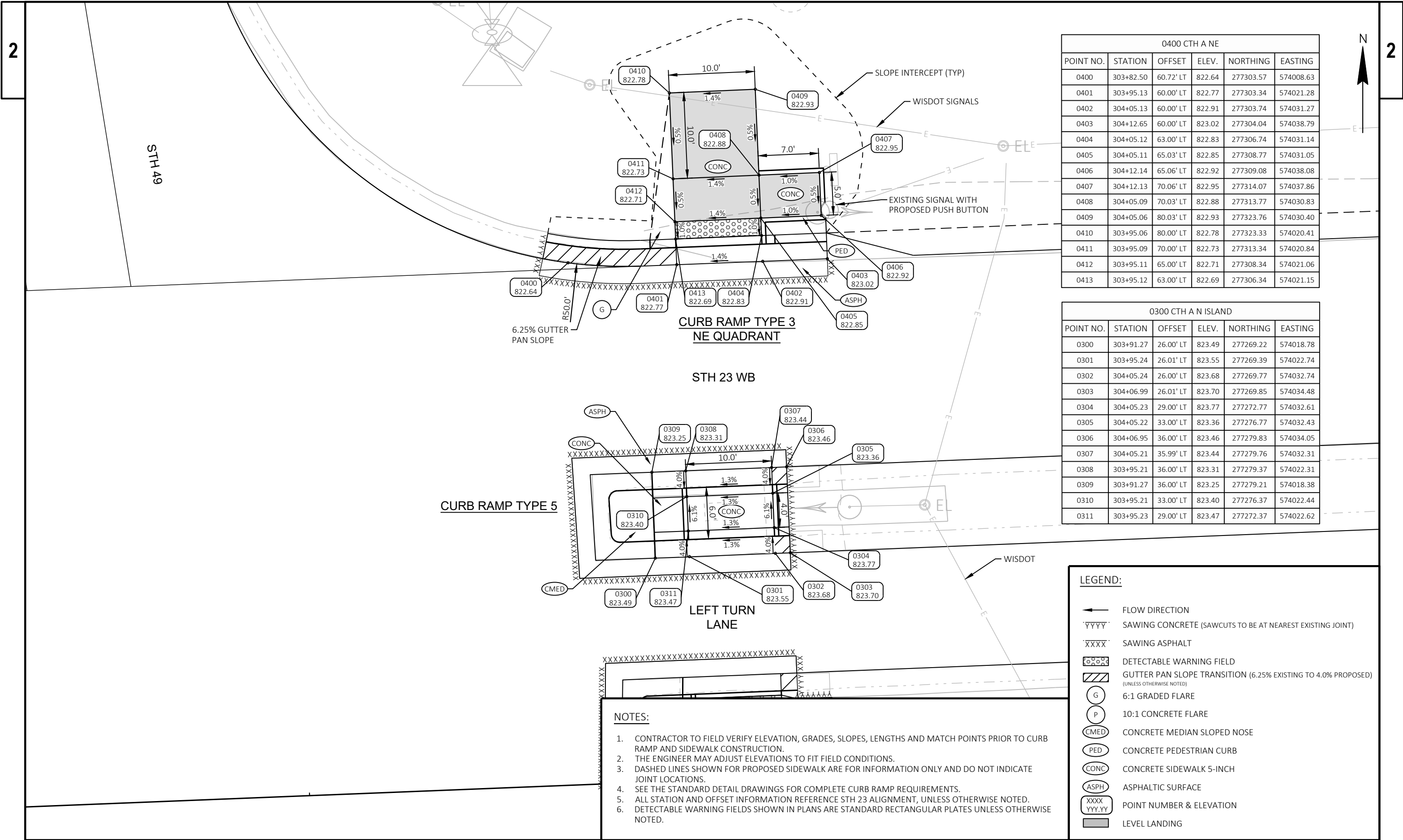
RADIAL DETECTABLE WARNING FIELD				
DWF LOC.	BOC RADIUS	LANDING LENGTH	AREA	LONG CHORD
SE	67.0'	9.0'	23.8 SF	11.9'

NOTES:

1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
5. ALL STATION AND OFFSET INFORMATION REFERENCE STH 23 ALIGNMENT, UNLESS OTHERWISE NOTED.
6. DETECTABLE WARNING FIELDS SHOWN IN PLANS ARE STANDARD RECTANGULAR PLATES UNLESS OTHERWISE NOTED.

LEGEND:

- ← FLOW DIRECTION
- 'YYYY' SAWING CONCRETE (SAWCUTS TO BE AT NEAREST EXISTING JOINT)
- 'XXXX' SAWING ASPHALT
- [Pattern] DETECTABLE WARNING FIELD
- [Pattern] GUTTER PAN SLOPE TRANSITION (6.25% EXISTING TO 4.0% PROPOSED) (UNLESS OTHERWISE NOTED)
- (G) 6:1 GRADED FLARE
- (P) 10:1 CONCRETE FLARE
- (CMED) CONCRETE MEDIAN SLOPED NOSE
- (PED) CONCRETE PEDESTRIAN CURB
- (CONC) CONCRETE SIDEWALK 5-INCH
- (ASPH) ASPHALTIC SURFACE
- [Box] POINT NUMBER & ELEVATION
- [Shaded Box] LEVEL LANDING



0400 CTH A NE					
POINT NO.	STATION	OFFSET	ELEV.	NORTHING	EASTING
0400	303+82.50	60.72' LT	822.64	277303.57	574008.63
0401	303+95.13	60.00' LT	822.77	277303.34	574021.28
0402	304+05.13	60.00' LT	822.91	277303.74	574031.27
0403	304+12.65	60.00' LT	823.02	277304.04	574038.79
0404	304+05.12	63.00' LT	822.83	277306.74	574031.14
0405	304+05.11	65.03' LT	822.85	277308.77	574031.05
0406	304+12.14	65.06' LT	822.92	277309.08	574038.08
0407	304+12.13	70.06' LT	822.95	277314.07	574037.86
0408	304+05.09	70.03' LT	822.88	277313.77	574030.83
0409	304+05.06	80.03' LT	822.93	277323.76	574030.40
0410	303+95.06	80.00' LT	822.78	277323.33	574020.41
0411	303+95.09	70.00' LT	822.73	277313.34	574020.84
0412	303+95.11	65.00' LT	822.71	277308.34	574021.06
0413	303+95.12	63.00' LT	822.69	277306.34	574021.15

0300 CTH A N ISLAND					
POINT NO.	STATION	OFFSET	ELEV.	NORTHING	EASTING
0300	303+91.27	26.00' LT	823.49	277269.22	574018.78
0301	303+95.24	26.01' LT	823.55	277269.39	574022.74
0302	304+05.24	26.00' LT	823.68	277269.77	574032.74
0303	304+06.99	26.01' LT	823.70	277269.85	574034.48
0304	304+05.23	29.00' LT	823.77	277272.77	574032.61
0305	304+05.22	33.00' LT	823.36	277276.77	574032.43
0306	304+06.95	36.00' LT	823.46	277279.83	574034.05
0307	304+05.21	35.99' LT	823.44	277279.76	574032.31
0308	303+95.21	36.00' LT	823.31	277279.37	574022.31
0309	303+91.27	36.00' LT	823.25	277279.21	574018.38
0310	303+95.21	33.00' LT	823.40	277276.37	574022.44
0311	303+95.23	29.00' LT	823.47	277272.37	574022.62

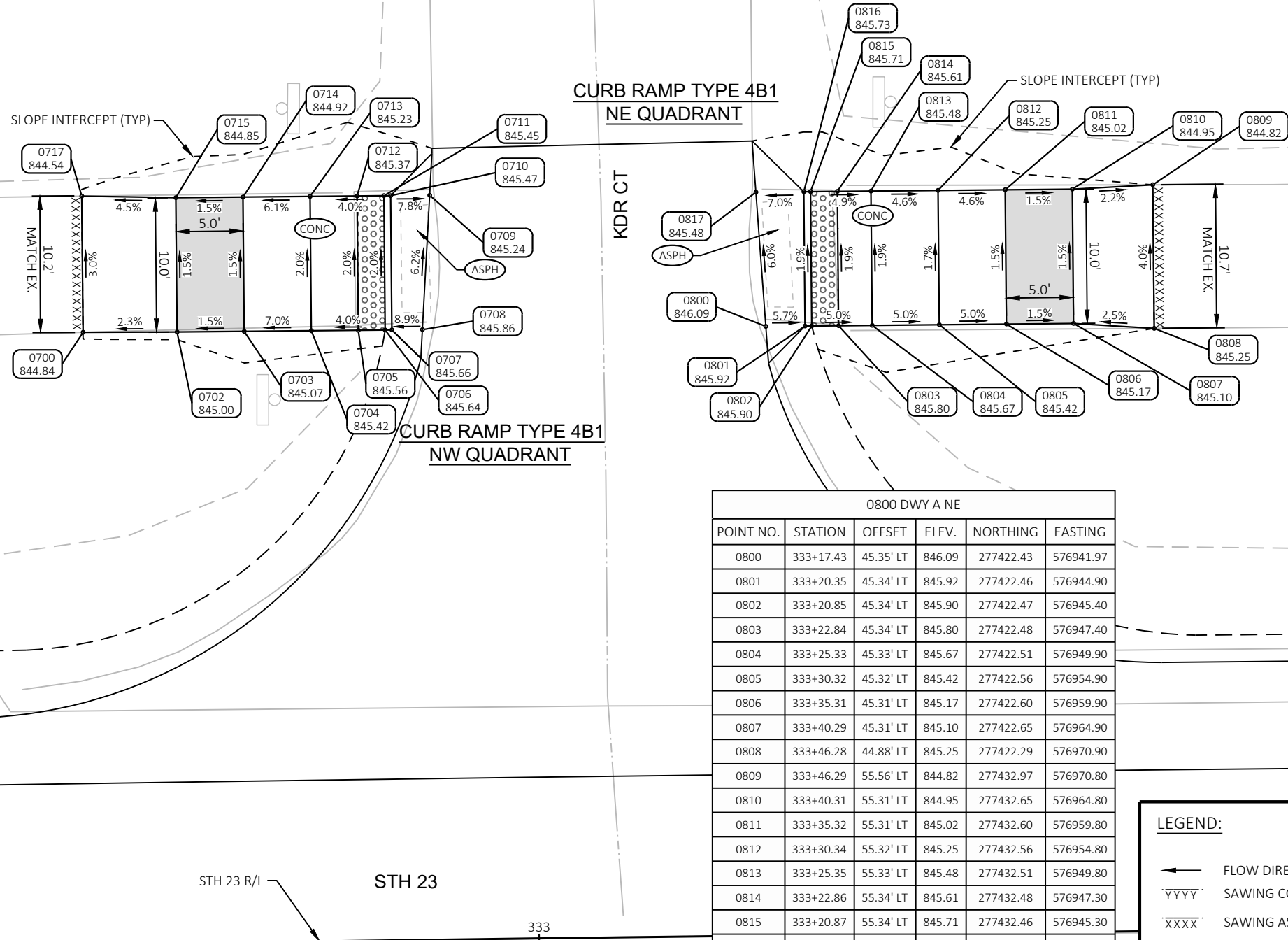
- NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
 2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.
 3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
 4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
 5. ALL STATION AND OFFSET INFORMATION REFERENCE STH 23 ALIGNMENT, UNLESS OTHERWISE NOTED.
 6. DETECTABLE WARNING FIELDS SHOWN IN PLANS ARE STANDARD RECTANGULAR PLATES UNLESS OTHERWISE NOTED.

LEGEND:

- ← FLOW DIRECTION
- 'YYYY' SAWING CONCRETE (SAWCUTS TO BE AT NEAREST EXISTING JOINT)
- 'XXXX' SAWING ASPHALT
- [Symbol] DETECTABLE WARNING FIELD
- [Symbol] GUTTER PAN SLOPE TRANSITION (6.25% EXISTING TO 4.0% PROPOSED) (UNLESS OTHERWISE NOTED)
- (G) 6:1 GRADED FLARE
- (P) 10:1 CONCRETE FLARE
- (CMED) CONCRETE MEDIAN SLOPED NOSE
- (PED) CONCRETE PEDESTRIAN CURB
- (CONC) CONCRETE SIDEWALK 5-INCH
- (ASPH) ASPHALTIC SURFACE
- [Symbol] POINT NUMBER & ELEVATION
- [Symbol] LEVEL LANDING



0700 DWY A NW					
POINT NO.	STATION	OFFSET	ELEV.	NORTHING	EASTING
0700	332+66.71	45.60' LT	844.84	277421.99	576891.12
0702	332+73.69	45.52' LT	845.00	277422.01	576898.12
0703	332+78.68	45.49' LT	845.07	277422.06	576903.12
0704	332+83.67	45.47' LT	845.42	277422.11	576908.12
0705	332+87.16	45.46' LT	845.56	277422.14	576911.62
0706	332+89.15	45.45' LT	845.64	277422.16	576913.62
0707	332+89.65	45.45' LT	845.66	277422.17	576914.12
0708	332+91.92	45.44' LT	845.86	277422.19	576916.40
0709	332+92.60	55.43' LT	845.24	277432.19	576916.94
0710	332+89.69	55.45' LT	845.47	277432.17	576914.03
0711	332+89.20	55.45' LT	845.45	277432.16	576913.53
0712	332+87.20	55.46' LT	845.37	277432.14	576911.53
0713	332+83.71	55.47' LT	845.23	277432.11	576908.03
0714	332+78.73	55.49' LT	844.92	277432.06	576903.03
0715	332+73.75	55.52' LT	844.85	277432.01	576898.03
0717	332+66.77	55.74' LT	844.54	277432.13	576891.03



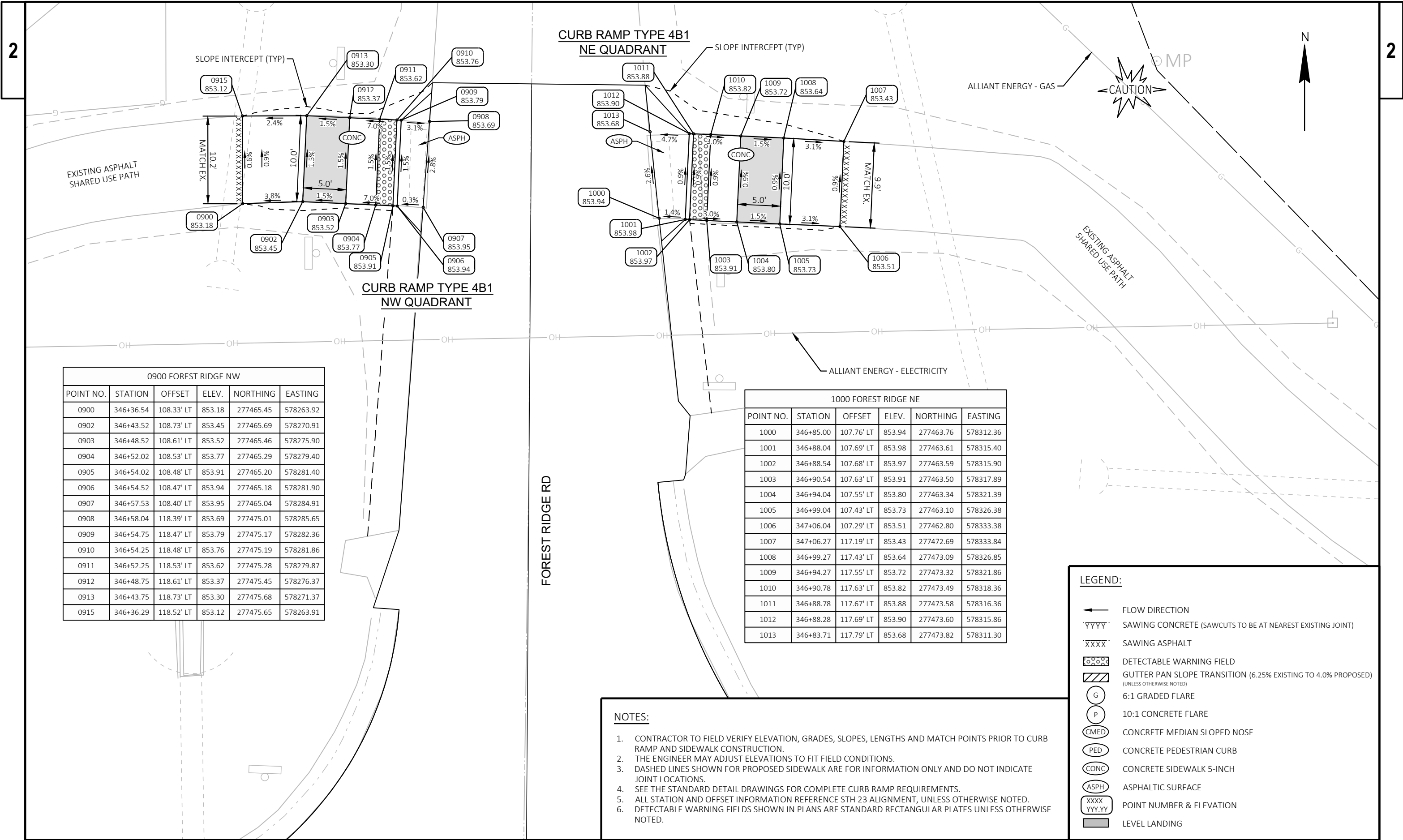
0800 DWY A NE					
POINT NO.	STATION	OFFSET	ELEV.	NORTHING	EASTING
0800	333+17.43	45.35' LT	846.09	277422.43	576941.97
0801	333+20.35	45.34' LT	845.92	277422.46	576944.90
0802	333+20.85	45.34' LT	845.90	277422.47	576945.40
0803	333+22.84	45.34' LT	845.80	277422.48	576947.40
0804	333+25.33	45.33' LT	845.67	277422.51	576949.90
0805	333+30.32	45.32' LT	845.42	277422.56	576954.90
0806	333+35.31	45.31' LT	845.17	277422.60	576959.90
0807	333+40.29	45.31' LT	845.10	277422.65	576964.90
0808	333+46.28	44.88' LT	845.25	277422.29	576970.90
0809	333+46.29	55.56' LT	844.82	277432.97	576970.80
0810	333+40.31	55.31' LT	844.95	277432.65	576964.80
0811	333+35.32	55.31' LT	845.02	277432.60	576959.80
0812	333+30.34	55.32' LT	845.25	277432.56	576954.80
0813	333+25.35	55.33' LT	845.48	277432.51	576949.80
0814	333+22.86	55.34' LT	845.61	277432.48	576947.30
0815	333+20.87	55.34' LT	845.71	277432.46	576945.30
0816	333+20.37	55.34' LT	845.73	277432.46	576944.80
0817	333+16.82	55.35' LT	845.48	277432.43	576941.24

NOTES:

1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
5. ALL STATION AND OFFSET INFORMATION REFERENCE STH 23 ALIGNMENT, UNLESS OTHERWISE NOTED.
6. DETECTABLE WARNING FIELDS SHOWN IN PLANS ARE STANDARD RECTANGULAR PLATES UNLESS OTHERWISE NOTED.

LEGEND:

- ← FLOW DIRECTION
- 'YYYY' SAWING CONCRETE (SAWCUTS TO BE AT NEAREST EXISTING JOINT)
- 'XXXX' SAWING ASPHALT
- [Symbol] DETECTABLE WARNING FIELD
- [Symbol] GUTTER PAN SLOPE TRANSITION (6.25% EXISTING TO 4.0% PROPOSED) (UNLESS OTHERWISE NOTED)
- (G) 6:1 GRADED FLARE
- (P) 10:1 CONCRETE FLARE
- (CMED) CONCRETE MEDIAN SLOPED NOSE
- (PED) CONCRETE PEDESTRIAN CURB
- (CONC) CONCRETE SIDEWALK 5-INCH
- (ASPH) ASPHALTIC SURFACE
- [Symbol] POINT NUMBER & ELEVATION
- [Symbol] LEVEL LANDING



0900 FOREST RIDGE NW					
POINT NO.	STATION	OFFSET	ELEV.	NORTHING	EASTING
0900	346+36.54	108.33' LT	853.18	277465.45	578263.92
0902	346+43.52	108.73' LT	853.45	277465.69	578270.91
0903	346+48.52	108.61' LT	853.52	277465.46	578275.90
0904	346+52.02	108.53' LT	853.77	277465.29	578279.40
0905	346+54.02	108.48' LT	853.91	277465.20	578281.40
0906	346+54.52	108.47' LT	853.94	277465.18	578281.90
0907	346+57.53	108.40' LT	853.95	277465.04	578284.91
0908	346+58.04	118.39' LT	853.69	277475.01	578285.65
0909	346+54.75	118.47' LT	853.79	277475.17	578282.36
0910	346+54.25	118.48' LT	853.76	277475.19	578281.86
0911	346+52.25	118.53' LT	853.62	277475.28	578279.87
0912	346+48.75	118.61' LT	853.37	277475.45	578276.37
0913	346+43.75	118.73' LT	853.30	277475.68	578271.37
0915	346+36.29	118.52' LT	853.12	277475.65	578263.91

1000 FOREST RIDGE NE					
POINT NO.	STATION	OFFSET	ELEV.	NORTHING	EASTING
1000	346+85.00	107.76' LT	853.94	277463.76	578312.36
1001	346+88.04	107.69' LT	853.98	277463.61	578315.40
1002	346+88.54	107.68' LT	853.97	277463.59	578315.90
1003	346+90.54	107.63' LT	853.91	277463.50	578317.89
1004	346+94.04	107.55' LT	853.80	277463.34	578321.39
1005	346+99.04	107.43' LT	853.73	277463.10	578326.38
1006	347+06.04	107.29' LT	853.51	277462.80	578333.38
1007	347+06.27	117.19' LT	853.43	277472.69	578333.84
1008	346+99.27	117.43' LT	853.64	277473.09	578326.85
1009	346+94.27	117.55' LT	853.72	277473.32	578321.86
1010	346+90.78	117.63' LT	853.82	277473.49	578318.36
1011	346+88.78	117.67' LT	853.88	277473.58	578316.36
1012	346+88.28	117.69' LT	853.90	277473.60	578315.86
1013	346+83.71	117.79' LT	853.68	277473.82	578311.30

- NOTES:**
- CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
 - THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.
 - DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
 - SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
 - ALL STATION AND OFFSET INFORMATION REFERENCE STH 23 ALIGNMENT, UNLESS OTHERWISE NOTED.
 - DETECTABLE WARNING FIELDS SHOWN IN PLANS ARE STANDARD RECTANGULAR PLATES UNLESS OTHERWISE NOTED.

LEGEND:

- ← FLOW DIRECTION
- 'YYYY' SAWING CONCRETE (SAWCUTS TO BE AT NEAREST EXISTING JOINT)
- 'XXXX' SAWING ASPHALT
- [Pattern] DETECTABLE WARNING FIELD
- [Pattern] GUTTER PAN SLOPE TRANSITION (6.25% EXISTING TO 4.0% PROPOSED) (UNLESS OTHERWISE NOTED)
- (G) 6:1 GRADED FLARE
- (P) 10:1 CONCRETE FLARE
- (CMED) CONCRETE MEDIAN SLOPED NOSE
- (PED) CONCRETE PEDESTRIAN CURB
- (CONC) CONCRETE SIDEWALK 5-INCH
- (ASPH) ASPHALTIC SURFACE
- [Box] POINT NUMBER & ELEVATION
- [Shaded Box] LEVEL LANDING

1100 BROOKLYN J NW					
POINT NO.	STATION	OFFSET	ELEV.	NORTHING	EASTING
1100	430+94.73	117.75' LT	811.24	278999.46	586430.72
1101	431+01.23	120.60' LT	811.14	279002.31	586437.22
1102	431+04.02	121.82' LT	811.10	279003.53	586440.01
1103	431+09.02	121.89' LT	811.02	279003.60	586445.01
1104	431+12.52	121.94' LT	810.95	279003.65	586448.51
1105	431+14.46	121.97' LT	810.91	279003.67	586450.46
1106	431+15.02	121.98' LT	810.90	279003.68	586451.01
1107	431+17.84	122.02' LT	810.82	279003.72	586453.83
1108	431+18.17	132.02' LT	810.88	279013.72	586454.17
1109	431+14.87	131.98' LT	810.93	279013.68	586450.87
1110	431+14.37	131.97' LT	810.94	279013.67	586450.37
1111	431+12.37	131.94' LT	810.98	279013.65	586448.37
1112	431+08.87	131.89' LT	811.05	279013.60	586444.87
1113	431+03.87	131.82' LT	811.12	279013.53	586439.87
1114	430+98.87	129.97' LT	811.23	279011.69	586434.87
1115	430+92.27	127.54' LT	811.37	279009.25	586428.26

NOTES:

1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
5. ALL STATION AND OFFSET INFORMATION REFERENCE STH 23 ALIGNMENT, UNLESS OTHERWISE NOTED.
6. DETECTABLE WARNING FIELDS SHOWN IN PLANS ARE STANDARD RECTANGULAR PLATES UNLESS OTHERWISE NOTED.

BROOKLYN J RD

**CURB RAMP TYPE 4B1
NE QUADRANT****CURB RAMP TYPE 4B1
NW QUADRANT**

1200 BROOKLYN J NE					
POINT NO.	STATION	OFFSET	ELEV.	NORTHING	EASTING
1200	431+45.38	122.41' LT	810.75	279004.09	586481.37
1201	431+47.98	122.45' LT	810.61	279004.12	586483.98
1202	431+48.48	122.45' LT	810.57	279004.13	586484.48
1203	431+50.48	122.48' LT	810.42	279004.16	586486.48
1204	431+53.98	122.53' LT	810.17	279004.21	586489.98
1205	431+58.98	122.60' LT	809.80	279004.27	586494.98
1206	431+63.98	122.67' LT	809.72	279004.34	586499.98
1207	431+65.84	122.65' LT	809.63	279004.31	586501.83
1208	431+67.43	132.88' LT	809.59	279014.54	586503.43
1209	431+63.84	132.67' LT	809.75	279014.34	586499.84
1210	431+58.84	132.60' LT	809.83	279014.27	586494.84
1211	431+53.84	132.53' LT	810.20	279014.20	586489.84
1212	431+50.34	132.48' LT	810.45	279014.16	586486.34
1213	431+48.34	132.45' LT	810.60	279014.13	586484.34
1214	431+47.84	132.45' LT	810.64	279014.12	586483.84
1215	431+44.34	132.40' LT	810.89	279014.08	586480.34

LEGEND:

	FLOW DIRECTION
	SAWING CONCRETE (SAWCUTS TO BE AT NEAREST EXISTING JOINT)
	SAWING ASPHALT
	DETECTABLE WARNING FIELD
	GUTTER PAN SLOPE TRANSITION (6.25% EXISTING TO 4.0% PROPOSED) (UNLESS OTHERWISE NOTED)
	6:1 GRADED FLARE
	10:1 CONCRETE FLARE
	CONCRETE MEDIAN SLOPED NOSE
	CONCRETE PEDESTRIAN CURB
	CONCRETE SIDEWALK 5-INCH
	ASPHALTIC SURFACE
	POINT NUMBER & ELEVATION
	LEVEL LANDING

PROJECT NO: 1430-08-82

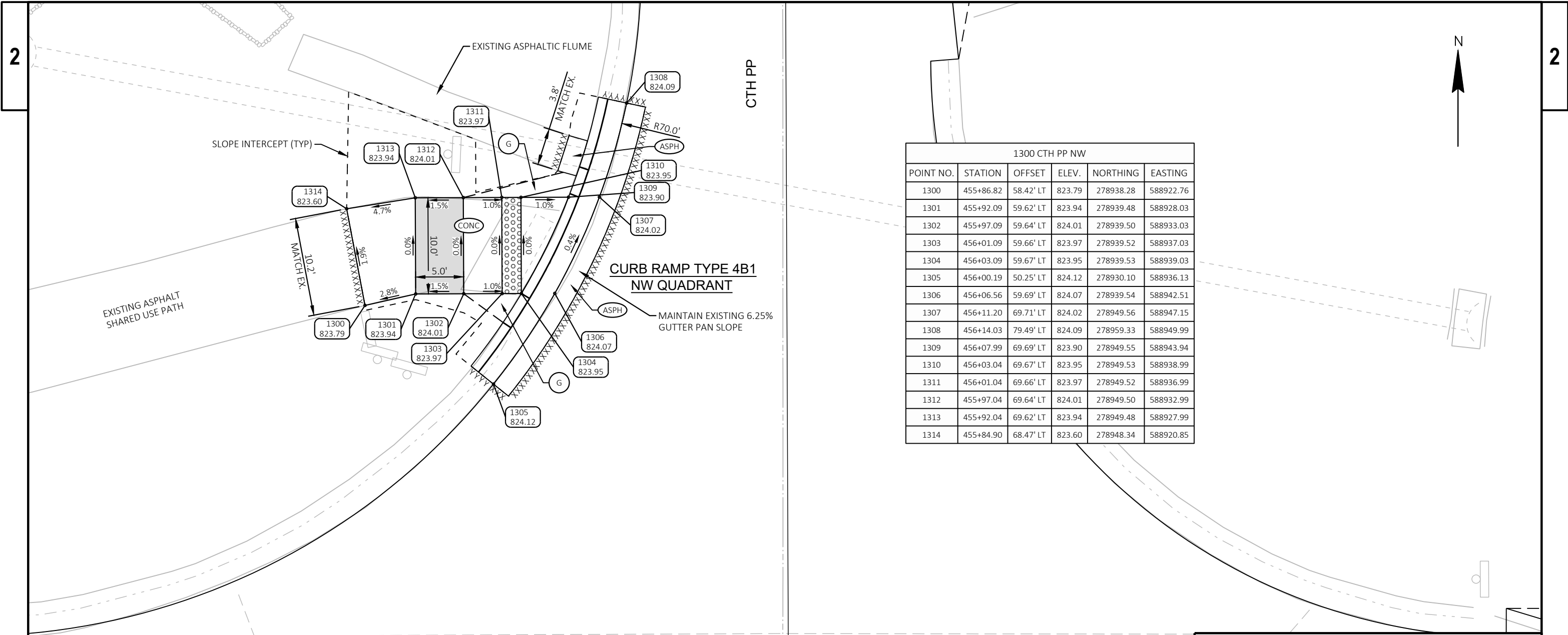
HWY: STH 23

COUNTY: GREEN LAKE

CURB RAMP DETAILS

SHEET

E



1300 CTH PP NW					
POINT NO.	STATION	OFFSET	ELEV.	NORTHING	EASTING
1300	455+86.82	58.42' LT	823.79	278938.28	588922.76
1301	455+92.09	59.62' LT	823.94	278939.48	588928.03
1302	455+97.09	59.64' LT	824.01	278939.50	588933.03
1303	456+01.09	59.66' LT	823.97	278939.52	588937.03
1304	456+03.09	59.67' LT	823.95	278939.53	588939.03
1305	456+00.19	50.25' LT	824.12	278930.10	588936.13
1306	456+06.56	59.69' LT	824.07	278939.54	588942.51
1307	456+11.20	69.71' LT	824.02	278949.56	588947.15
1308	456+14.03	79.49' LT	824.09	278959.33	588949.99
1309	456+07.99	69.69' LT	823.90	278949.55	588943.94
1310	456+03.04	69.67' LT	823.95	278949.53	588938.99
1311	456+01.04	69.66' LT	823.97	278949.52	588936.99
1312	455+97.04	69.64' LT	824.01	278949.50	588932.99
1313	455+92.04	69.62' LT	823.94	278949.48	588927.99
1314	455+84.90	68.47' LT	823.60	278948.34	588920.85

STH 23 R/L

456

STH 23

NOTES:

1.

CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.

2.

THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.

3.

DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.

4.

SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.

5.

ALL STATION AND OFFSET INFORMATION REFERENCE STH 23 ALIGNMENT, UNLESS OTHERWISE NOTED.

6.

DETECTABLE WARNING FIELDS SHOWN IN PLANS ARE STANDARD RECTANGULAR PLATES UNLESS OTHERWISE NOTED.

LEGEND:

←

FLOW DIRECTION

‘YYYY’

SAWING CONCRETE (SAWCUTS TO BE AT NEAREST EXISTING JOINT)

‘XXXX’

SAWING ASPHALT

◻

DETECTABLE WARNING FIELD

▨

GUTTER PAN SLOPE TRANSITION (6.25% EXISTING TO 4.0% PROPOSED)
(UNLESS OTHERWISE NOTED)

G

6:1 GRADED FLARE

P

10:1 CONCRETE FLARE

CMED

CONCRETE MEDIAN SLOPED NOSE

PED

CONCRETE PEDESTRIAN CURB

CONC

CONCRETE SIDEWALK 5-INCH

ASPH

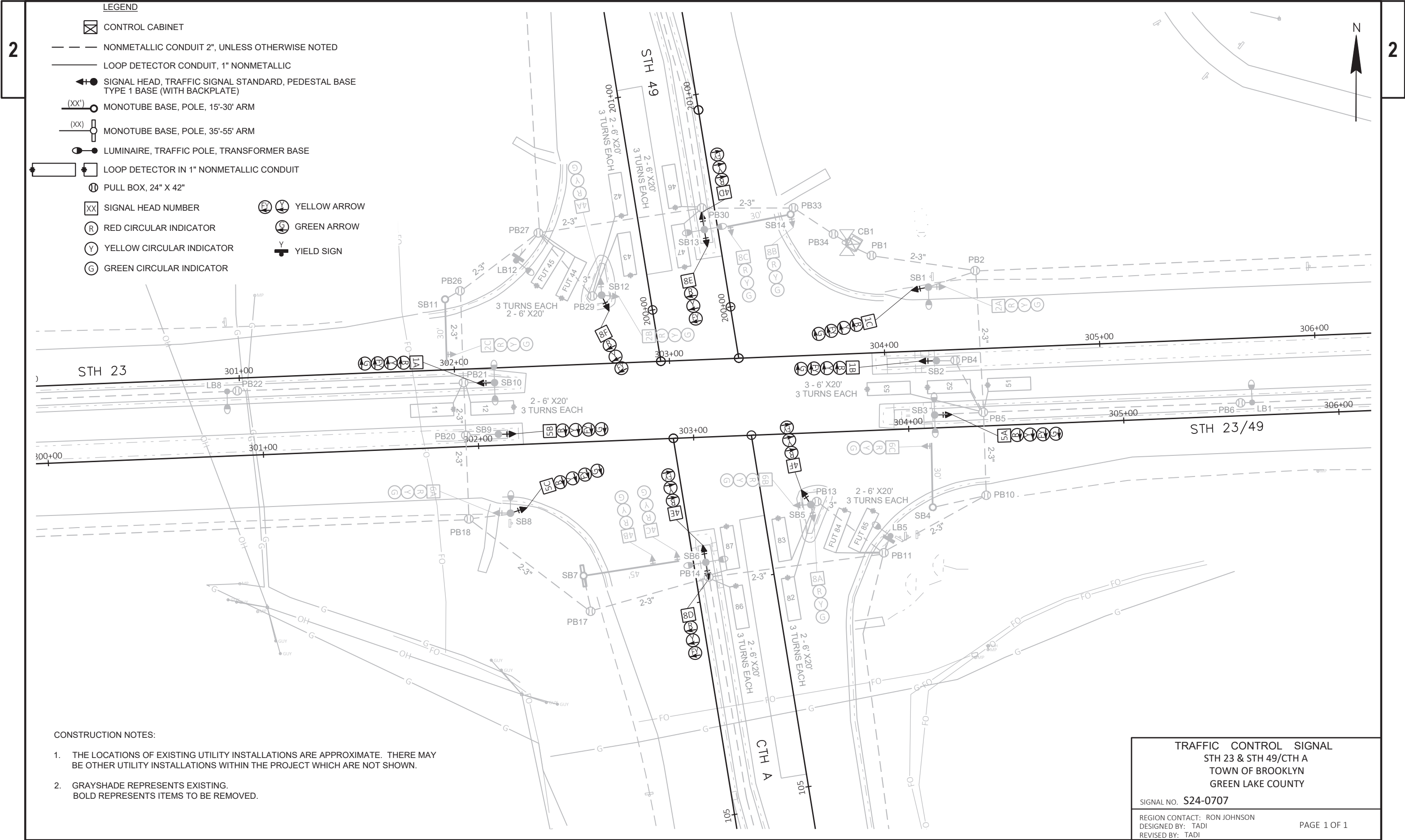
ASPHALTIC SURFACE

XXXX
YYY.YY

POINT NUMBER & ELEVATION

■

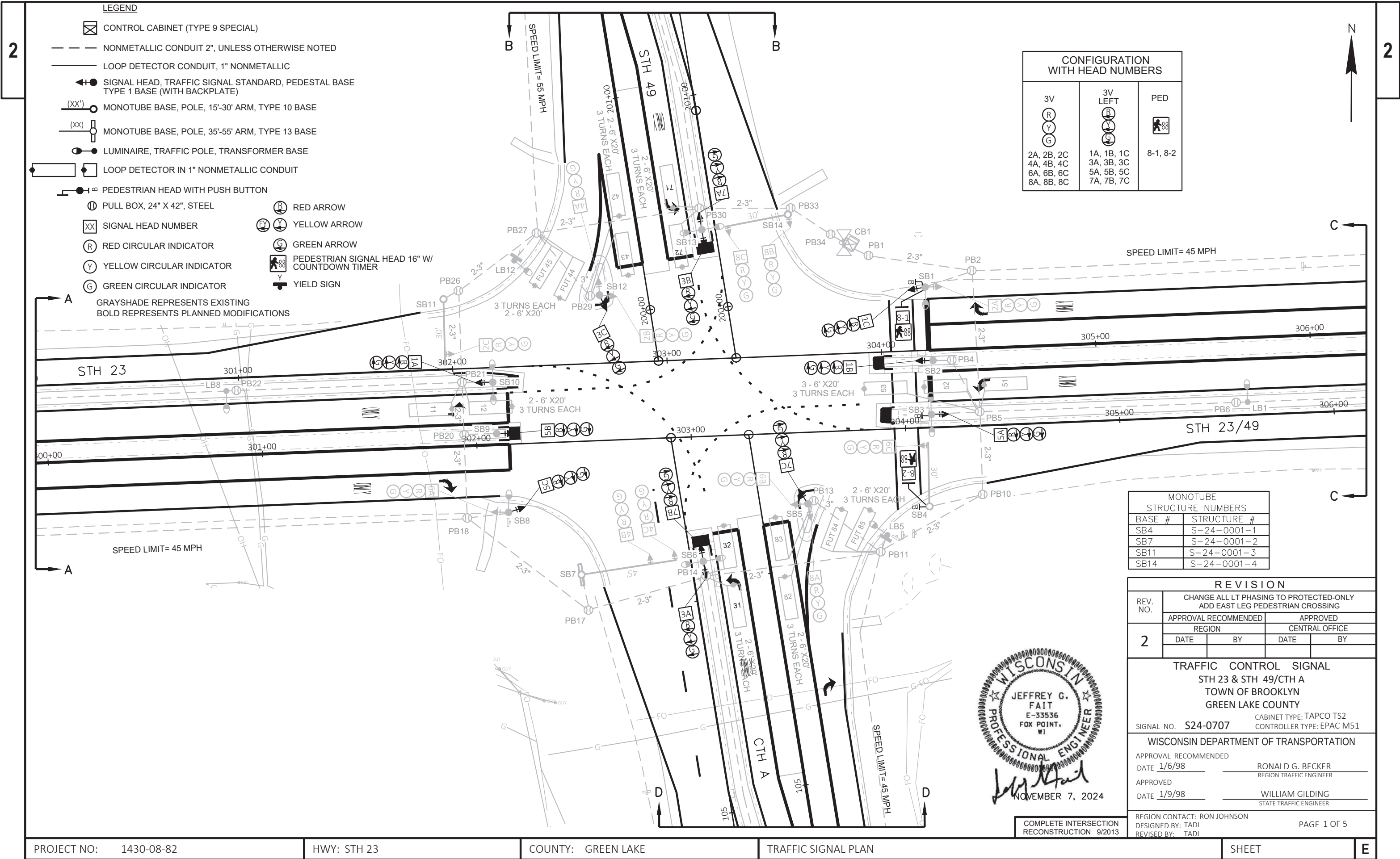
LEVEL LANDING



CONSTRUCTION NOTES:

1. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
2. GRAYSHADE REPRESENTS EXISTING.
BOLD REPRESENTS ITEMS TO BE REMOVED.

TRAFFIC CONTROL SIGNAL STH 23 & STH 49/CTH A TOWN OF BROOKLYN GREEN LAKE COUNTY	
SIGNAL NO. S24-0707	
REGION CONTACT: RON JOHNSON DESIGNED BY: TADI REVISED BY: TADI	PAGE 1 OF 1



PROJECT NO: 1430-08-82

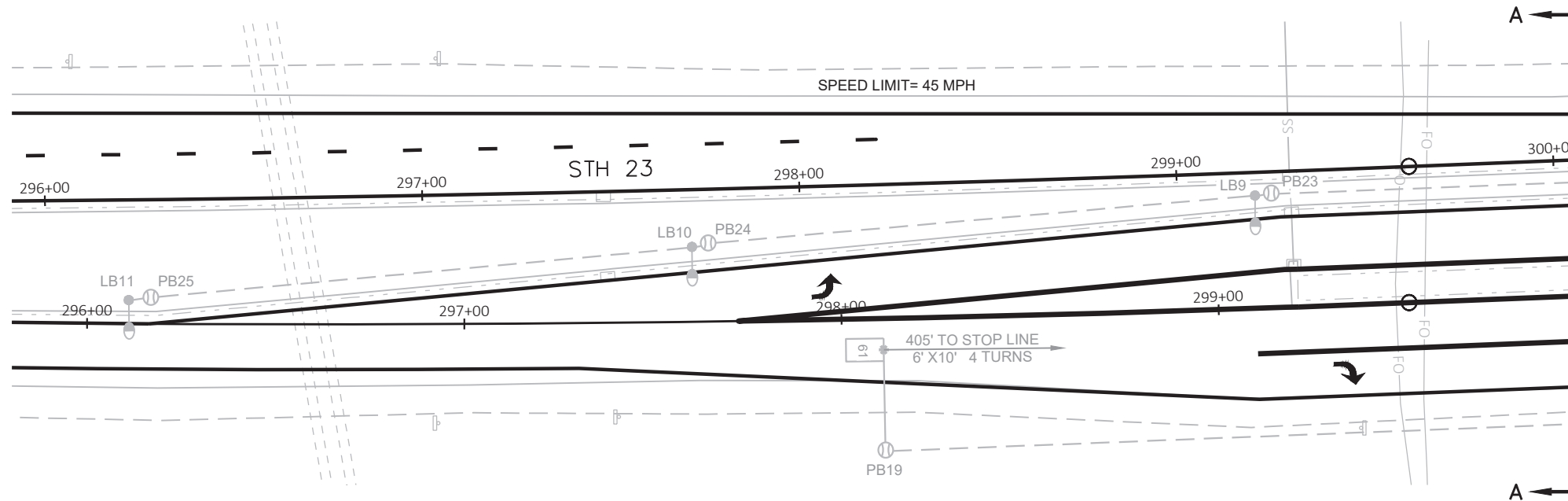
HWY: STH 23

COUNTY: GREEN LAKE

TRAFFIC SIGNAL PLAN

SHEET

E

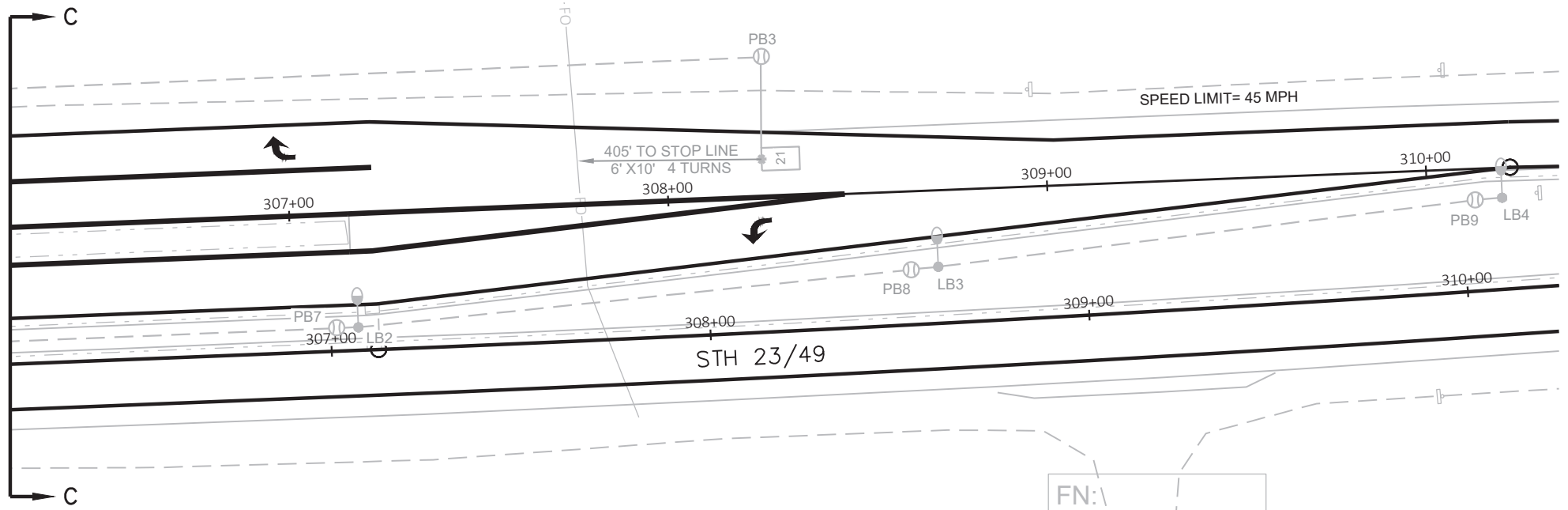


GENERAL NOTES:

1. * LOCATION IS TO FRONT CENTER OF THE DETECTOR LOOP. LOOP SHALL BE CENTERED IN TRAFFIC LANE. INSTALL LOOPS IN THE AGGREGATE BASE COURSE. DISTANCE BETWEEN MULTIPLE STOP BAR LOOPS SHALL BE 8 FEET.
2. ALL SIGNAL EQUIPMENT SHALL BE INSTALLED WITH A 2-FOOT MINIMUM, 3-FOOT DESIREABLE CLEARANCE TO THE FACE OF THE CURB UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
3. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED BEFORE PLACING SIGNAL CABLE INTO THE SYSTEM.
4. ALL WISDOT LUMINAIRES SHOWN ARE 120 VOLT, CATEGORY C LED, MOUNTED ON A 30 FOOT POLE. LUMINAIRE ARM LENGTHS ARE LISTED IN MISCELLANEOUS QUANTITIES.
5. BOND ALL METAL PULL BOXES AND ASSOCIATED COVERS THAT CONTAIN CONDUCTORS CARRYING 50 VOLTS OR MORE.
6. TERMINATION OF BONDING JUMPERS IN PULL BOXES TO BE LUG AND BOLT CONNECTIONS AND ARE TO BE CAULKED (SILICONE) AFTER INSTALLATION.
7. EACH LOOP DETECTOR SHALL HAVE A SEPARATE LEAD-IN CABLE TO THE CONTROL CABINET.
8. FURNISH AND INSTALL FOLDING STOP SIGNS (36"X36") ON SIGNAL BASES SB1, SB2, SB3, SB5, SB6, SB8, SB9, SB10, SB12, AND SB13.
9. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
10. THE ENGINEER WILL ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
11. ALL CONDUIT RUNS SHALL HAVE EXTRA PULL WIRE INSTALLED TO PULL FUTURE CABLE. THE COST SHALL BE INCIDENTAL TO TRAFFIC SIGNAL CABLE, NO. 14.
12. INSTALLED 13-FT SIGNAL STANDARDS AT SB5 AND SB12.
INSTALLED 15-FT SIGNAL STANDARDS AT SB2 AND SB9.
INSTALLED TYPE 4 (30-FT) POLES AT SB1, SB3, SB6, SB8, SB10, SB13, LB5, AND LB12.
INSTALLED TYPE 5 (30-FT) LIGHT POLES AT LB1, LB2, LB3, LB4, LB6, LB7, LB8, LB9, LB10, LB11, LB13, AND LB14.
INSTALLED TYPE 9 MONOTUBE, 30-FT ARM AT SB4, SB11, AND SB14.
INSTALLED TYPE 12 MONOTUBE, 45-FT ARM AT SB7.
13. LOOP DETECTORS FUT.44, FUT.45, FUT.84, AND FUT.85 ARE BEING INSTALLED FOR FUTURE USE.
INSTALL LOOP DETECTOR CONDUIT, LEAD-IN CABLE, AND DETECTOR WIRE. THE LEAD-IN CABLE SHALL BE PROPERLY TERMINATED IN THE CABINET AND AVAILABLE FOR FUTURE CONNECTION.

CONSTRUCTION NOTES:

1. REPLACE SIGNAL HEADS AS SHOWN, USING EXISTING CONDUCTORS.
2. REPROGRAM TRAFFIC SIGNAL CONTROLLER TO REFLECT NEW PROTECTED-ONLY LEFT TURN PHASING AND REVISED DETECTION ZONE NUMBERING (CONTROLLER AND MMU).
3. INSTALL PEDESTRIAN SIGNAL HEADS AND PUSH BUTTONS ON SB1 AND SB4.
4. INSTALL PEDESTRIAN PUSH BUTTON ON SB3.



TRAFFIC CONTROL SIGNAL
STH 23 & STH 49/CTH A
TOWN OF BROOKLYN
GREEN LAKE COUNTY

SIGNAL NO. S24-0707

REGION CONTACT: RON JOHNSON
DESIGNED BY: TADI
REVISED BY: TADI

PAGE 2 OF 5

PROJECT NO: 1430-08-82

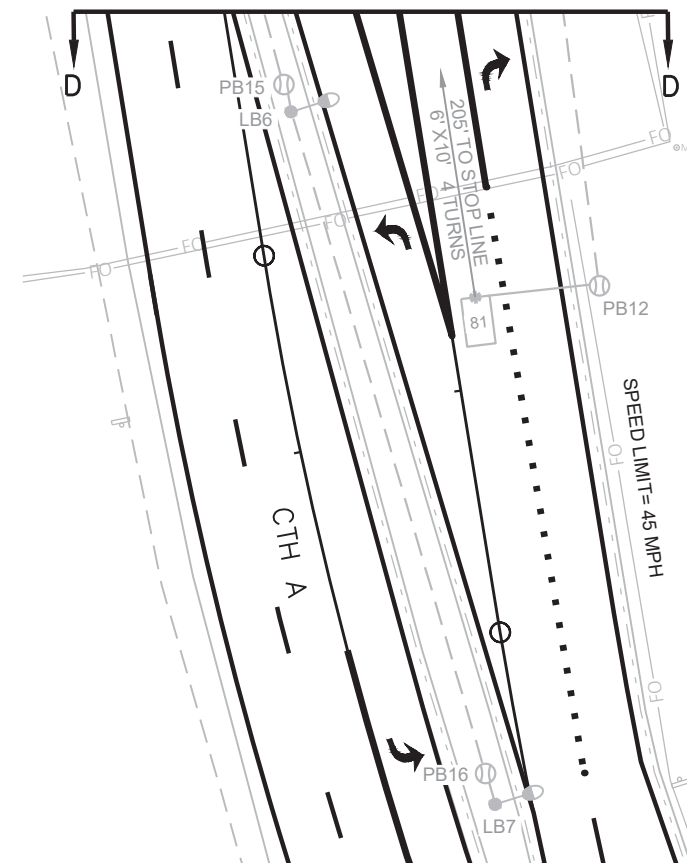
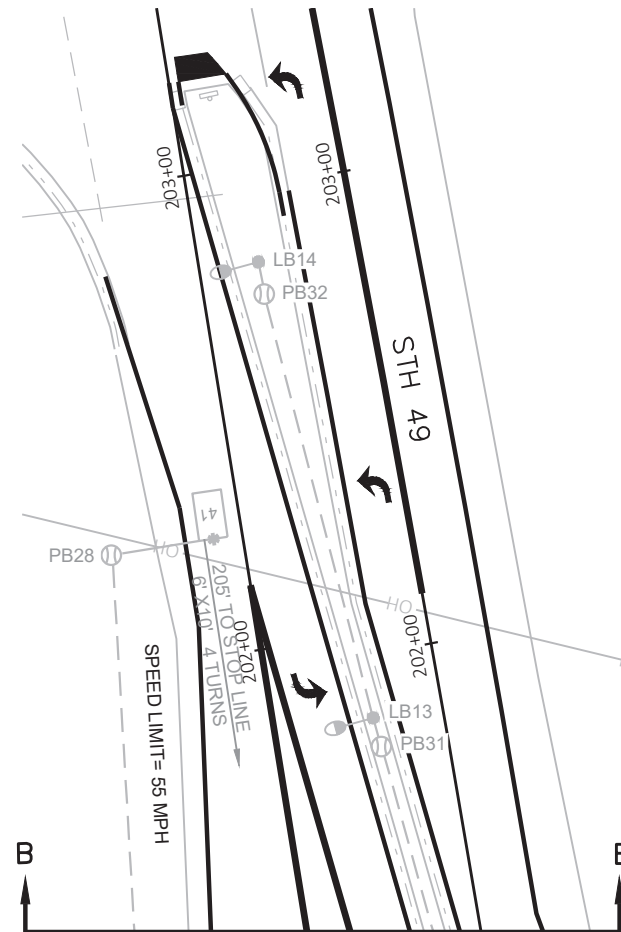
HWY: STH 23

COUNTY: GREEN LAKE

TRAFFIC SIGNAL PLAN

SHEET

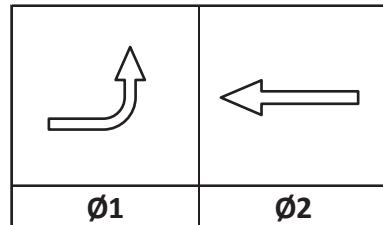
E



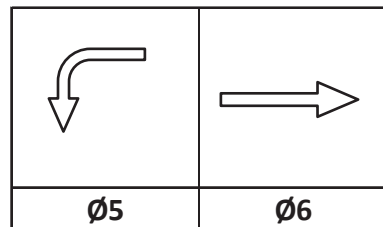
PAGE 3 OF 5

	HEAD NUMBERS	F L A S H
Ø1	1A,1B,1C	R ←
Ø2	2A,2B,2C	R
Ø3	3A,3B,3C	R ←
Ø4	4A,4B,4C	R
Ø5	5A,5B,5C	R ←
Ø6	6A,6B,6C	R
Ø7	7A,7B,7C	R ←
Ø8	8A,8B,8C	R
Ø2P		
Ø4P		
Ø6P		
Ø8P	8-1,8-2	
OLE		
OLF		
OLG		
OLH		

RING 1



RING 2



BARRIER

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	61	11	21	51	41	42	FUT 44	71
PHASE	6	1	2	5	4	4	4	7
CALL OPTION	X	X	X	X		X	X	X
DELAY TIME							X	
EXTENTION OPTION	X	X	X	X	X	X	X	X
EXTEND TIME					X			
USE ADDED INITIAL	X		X					
CROSS SWITCH PHASE								
LOOP SIZE	6X10	6X20	6X10	6X20	6X10	6X20	6X20	6X20
NUMBER OF TURNS	4	3	4	3	4	3	3	3

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	53	12		52		43	FUT 45	72
PHASE	5	1		5		4	4	7
CALL OPTION	X	X		X		X	X	X
DELAY TIME							X	
EXTENTION OPTION	X	X		X		X	X	X
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								
LOOP SIZE	6X20	6X20		6X20		6X20	6X20	6X20
NUMBER OF TURNS	3	3		3		3	3	3

N

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN	X
3		8		X
4		8		X
5		2		X
6	X	2	MIN	X
7		4		X
8		4		X

TYPE OF INTERCONNECT/COMMUNICATION

NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	
CELL MODEM	X

TYPE OF COORDINATION

NONE	X
TBC	
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER	
CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS-

TYPE OF LIGHTING

BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT

NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
CONFIRMATION LIGHTS	
LIFT BRIDGE	
QUEUE DETECTION	

OVERLAPS

OL"A" =	NONE
OL"B" =	NONE
OL"C" =	NONE
OL"D" =	NONE

STH 23 & STH 49/CTH A

TOWN OF BROOKLYN

GREEN LAKE COUNTY

SIGNAL NO: S24-0707 CABINET TYPE: TAPCO TS2

CONTROLLER TYPE: EPAC M51

DATE: 11/24 PAGE NUMBER: 4 OF 5

PROJECT NO: 1430-08-82

HWY: STH 23

COUNTY: GREEN LAKE

SEQUENCE OF OPERATIONS

SHEET NO:

E

PROJECT ID:	1430-08-82
INTERSECTION:	S24-0707 STH 23 & STH 49/CTH A

SIGNAL WIRE COLOR	BLK-BLACK	RED-RED	GRN-GREEN
CODING	WHT-WHITE	BLU-BLUE	ORG-ORANGE

CB1 TO	JUMPER	# OF COND. AWG 14	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	PED BUTTON 2
				RED	YELLOW	GREEN	<RED	<YELLOW>	<FL YELLOW>	<GREEN>	D/WALK	WALK		
SB1		12	1C				RED	ORG	BLK/WHT	GRN				
			2A	RED/BLK	ORG/BLK	GRN/BLK								
			8-1								BLK	BLU	WHT/BLK	
SB2		7	1B				RED	ORG	BLK	GRN				
SB3		7	5A				RED	ORG	BLK	GRN				
			B										WHT/BLK	
SB4		12	6C	RED	ORG	GRN								
			8-2								BLK	BLU	WHT/BLK	
SB5		12	7C				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
			6B	BLK	BLU/BLK	BLU								
			8A	RED	ORG	GRN								
SB6		12	7B				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
			3A				RED	ORG	BLK	GRN				
SB7		7	4B	RED	ORG	GRN								
			4C	RED	ORG	GRN								
SB8		12	5C				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
			6A	RED	ORG	GRN								
SB9		7	5B				RED	ORG	BLK	GRN				
SB10		7	1A				RED	ORG	BLK	GRN				
SB11		7	2C	RED	ORG	GRN								
SB12		12	2B	BLK/WHT	BLU	GRN								
			4A	RED/BLK	ORG/BLK	GRN/BLK								
			3C				RED	ORG	BLK	GRN				
SB13		12	7A				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
			3B				RED	ORG	BLK	GRN				
SB14		7	8B	RED	ORG	GRN								
			8C	RED	ORG	GRN								

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	LB4
LB4	LB3
LB3	LB2
LB2	LB1
LB1	SB3
SB3	SB4
SB4	LB5
LB5	SB5
SB5	LB7
LB7	LB6
LB6	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	LB11
LB11	LB10
LB10	LB9
LB9	LB8
LB8	SB10
SB10	SB11
SB11	LB12
LB12	SB12
SB12	LB14
LB14	LB13
LB13	SB13
SB13	SB14
SB14	CB1

PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
CB1	PB1
SB1	PB2
SB2	PB4
SB3	PB5
LB1	PB6
LB2	PB7
LB3	PB8
LB4	PB9
SB4	PB10
LB5	PB11
SB5	PB13
SB6	PB14
LB6	PB15
LB7	PB16
SB7	PB17
SB8	PB18
SB9	PB20
SB10	PB21
LB8	PB22
LB9	PB23
LB10	PB24
LB11	PB25
SB11	PB26
LB12	PB27
SB12	PB29
SB13	PB30
LB13	PB31
LB14	PB32
SB14	PB33
CB1	PB34

LIGHTING UF 12 AWG W/GROUND	
FROM	TO
CB1	SB1
SB1	SB3
SB3	LB1
LB1	LB2
LB2	LB3
LB3	LB4
CB1	LB5
LB5	SB6
SB6	LB6
LB6	LB7
CB1	SB13
SB13	LB13
LB13	LB14
CB1	LB12
LB12	SB10
SB10	SB8
SB10	LB8
LB8	LB9
LB9	LB10
LB10	LB11

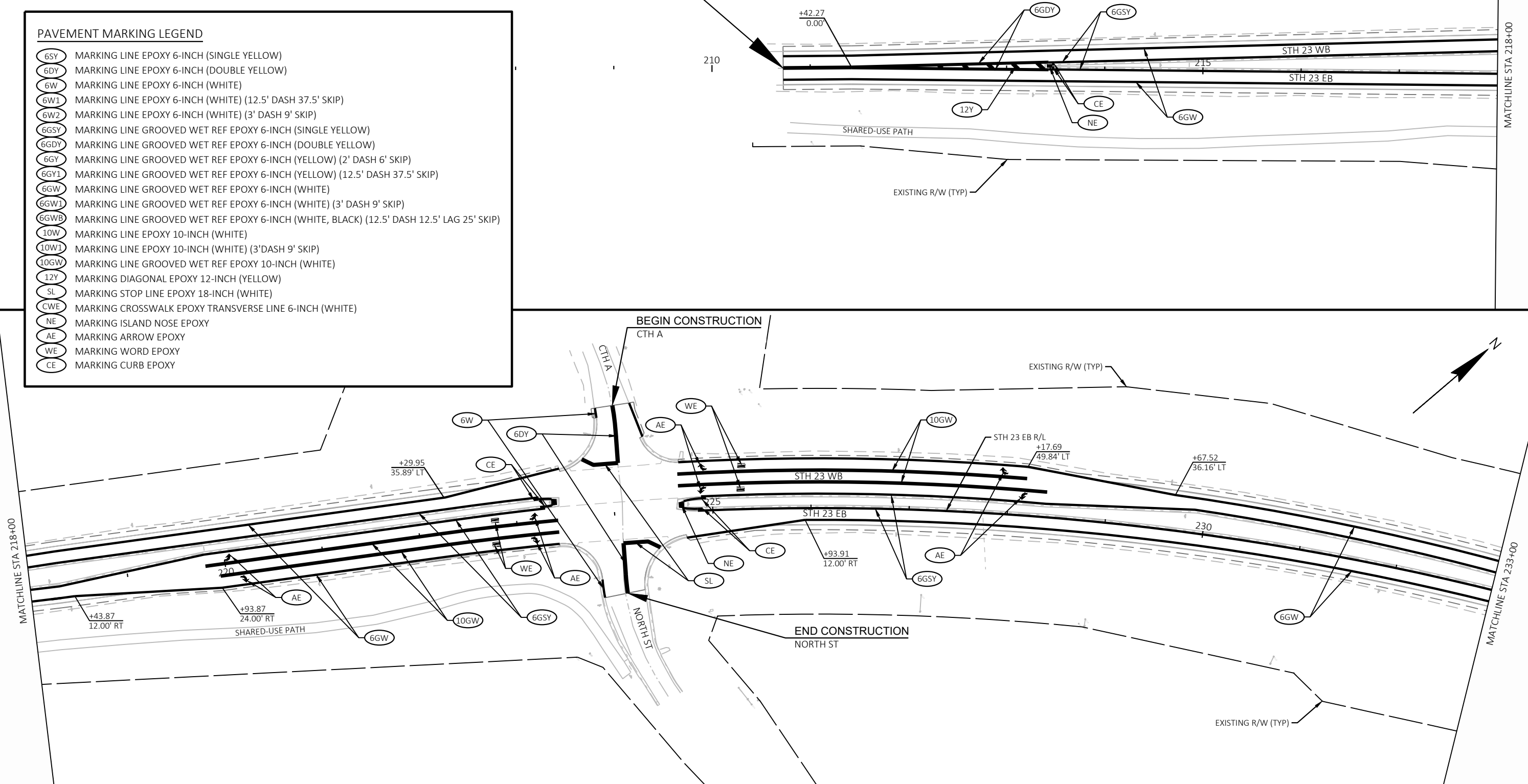
- NOTES:
- USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
 - ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
 - AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART.
CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.

PAVEMENT MARKING LEGEND

6SY	MARKING LINE EPOXY 6-INCH (SINGLE YELLOW)
6DY	MARKING LINE EPOXY 6-INCH (DOUBLE YELLOW)
6W	MARKING LINE EPOXY 6-INCH (WHITE)
6W1	MARKING LINE EPOXY 6-INCH (WHITE) (12.5' DASH 37.5' SKIP)
6W2	MARKING LINE EPOXY 6-INCH (WHITE) (3' DASH 9' SKIP)
6GSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (SINGLE YELLOW)
6GDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
6GY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW) (2' DASH 6' SKIP)
6GY1	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW) (12.5' DASH 37.5' SKIP)
6GW	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
6GW1	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE) (3' DASH 9' SKIP)
6GW2	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE, BLACK) (12.5' DASH 12.5' LAG 25' SKIP)
10W	MARKING LINE EPOXY 10-INCH (WHITE)
10W1	MARKING LINE EPOXY 10-INCH (WHITE) (3' DASH 9' SKIP)
10GW	MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
12Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
SL	MARKING STOP LINE EPOXY 18-INCH (WHITE)
CWE	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
NE	MARKING ISLAND NOSE EPOXY
AE	MARKING ARROW EPOXY
WE	MARKING WORD EPOXY
CE	MARKING CURB EPOXY

BEGIN PROJECT
STA 210+72.52

Y=275,043.346
X=565,674.105



PROJECT NO: 1430-08-82

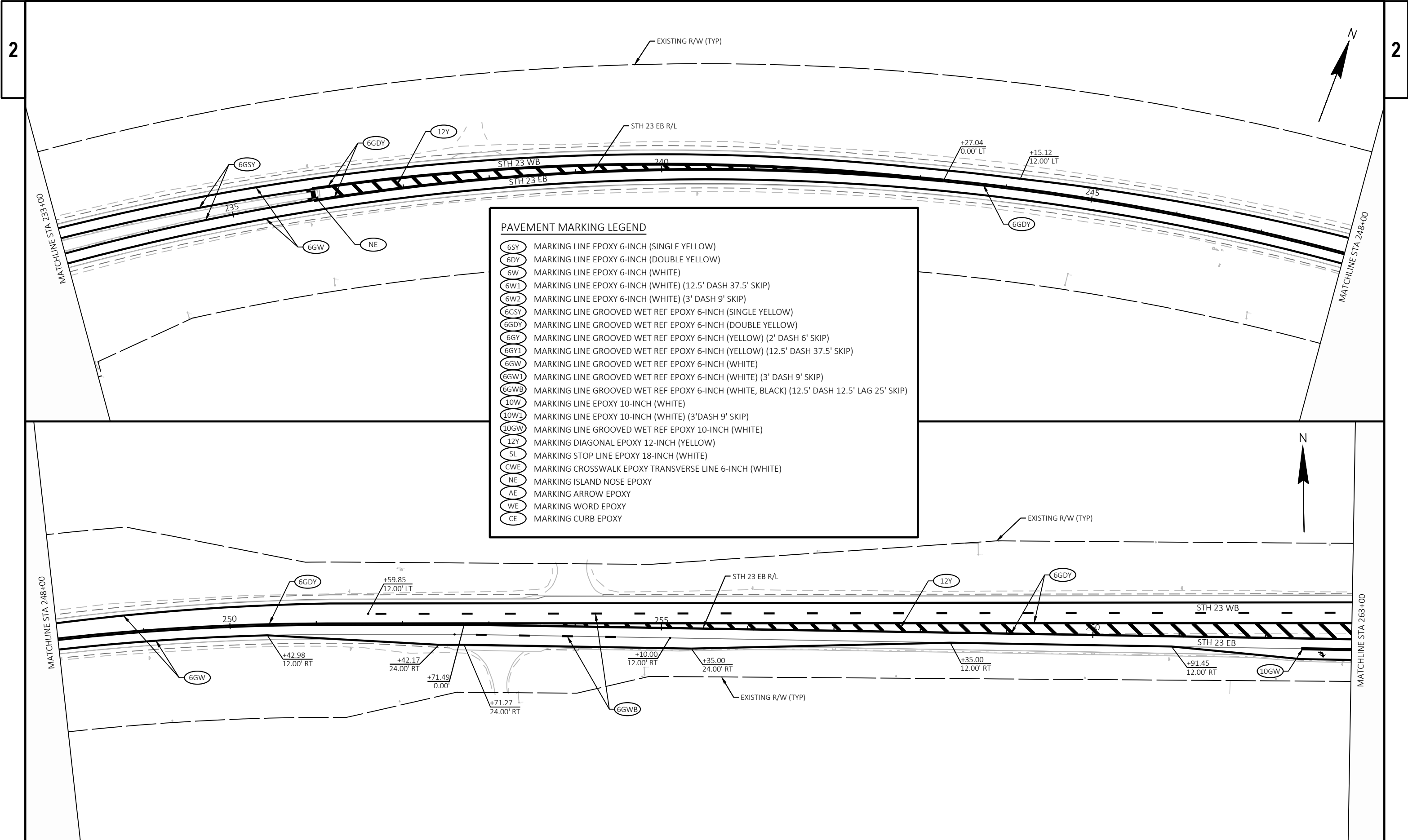
HWY: STH 23

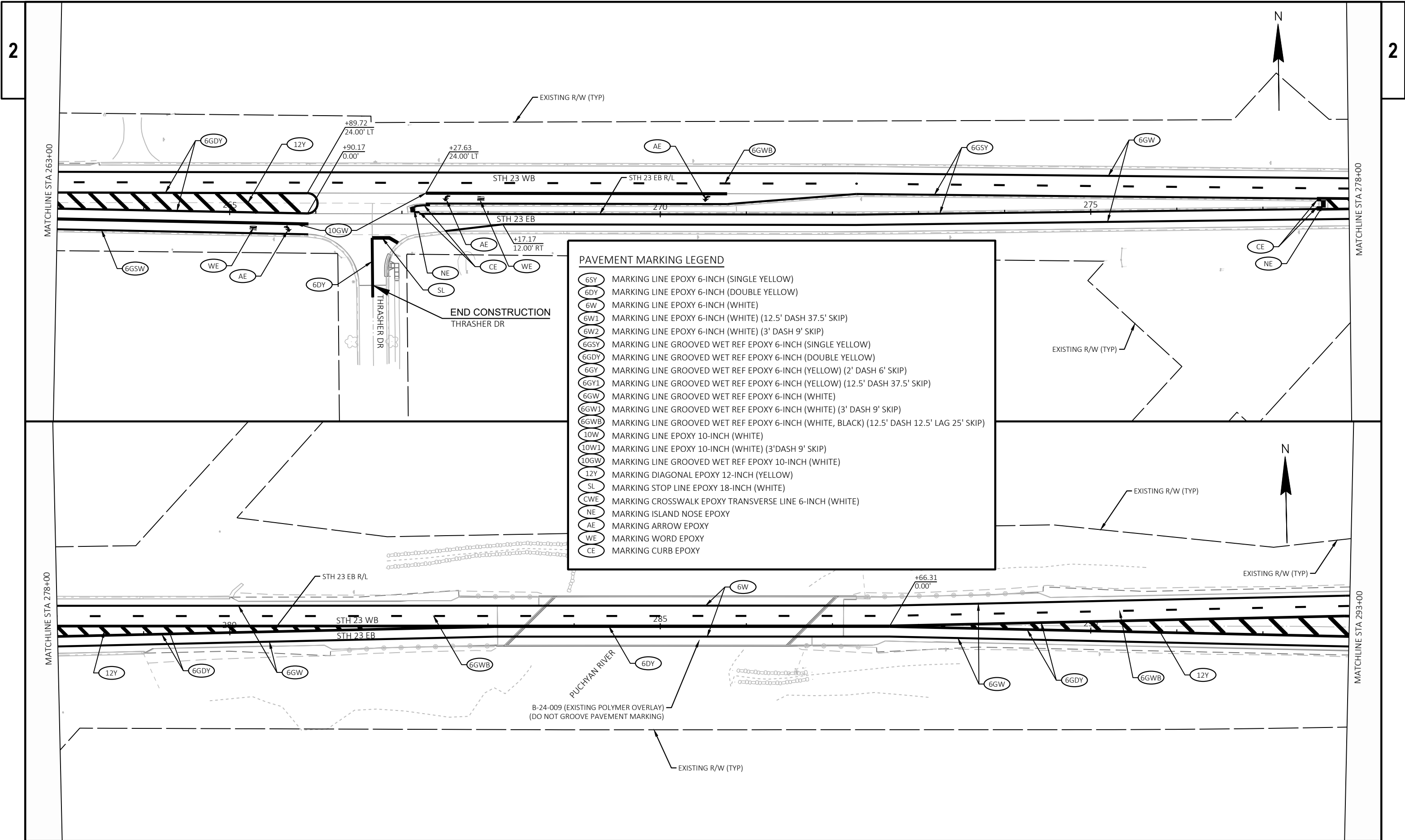
COUNTY: GREEN LAKE

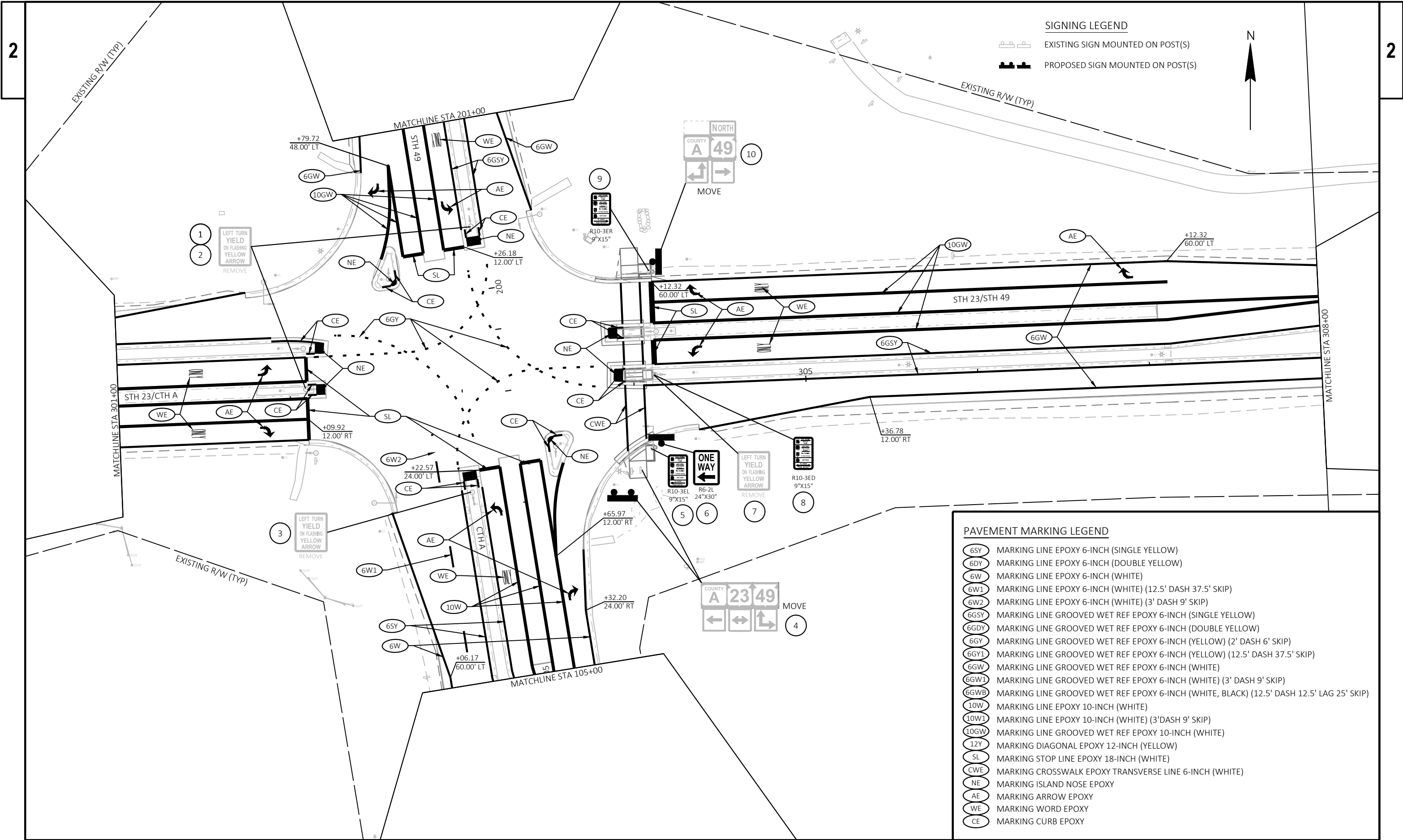
PAVEMENT MARKING AND SIGNING

SHEET

E







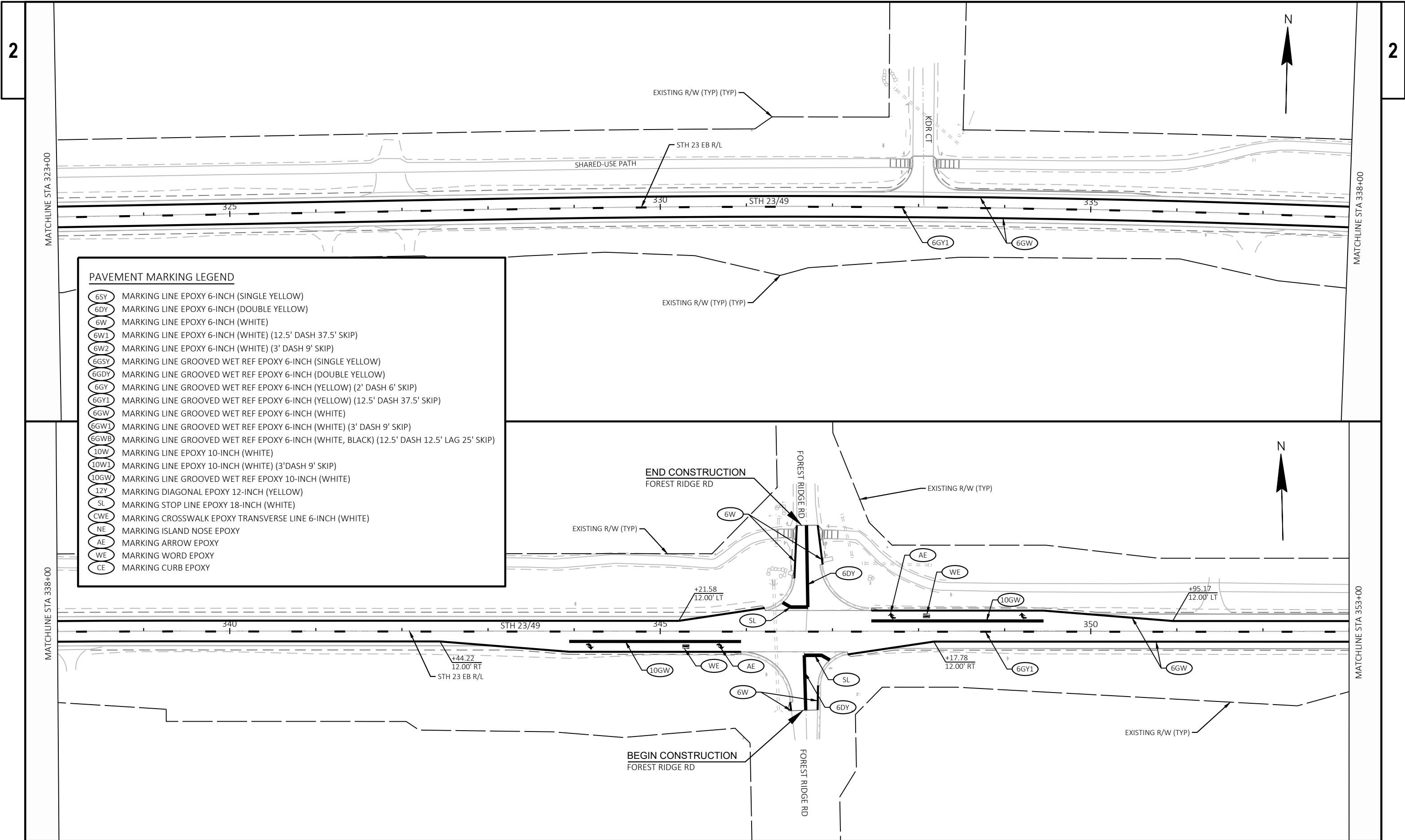
SIGNING LEGEND

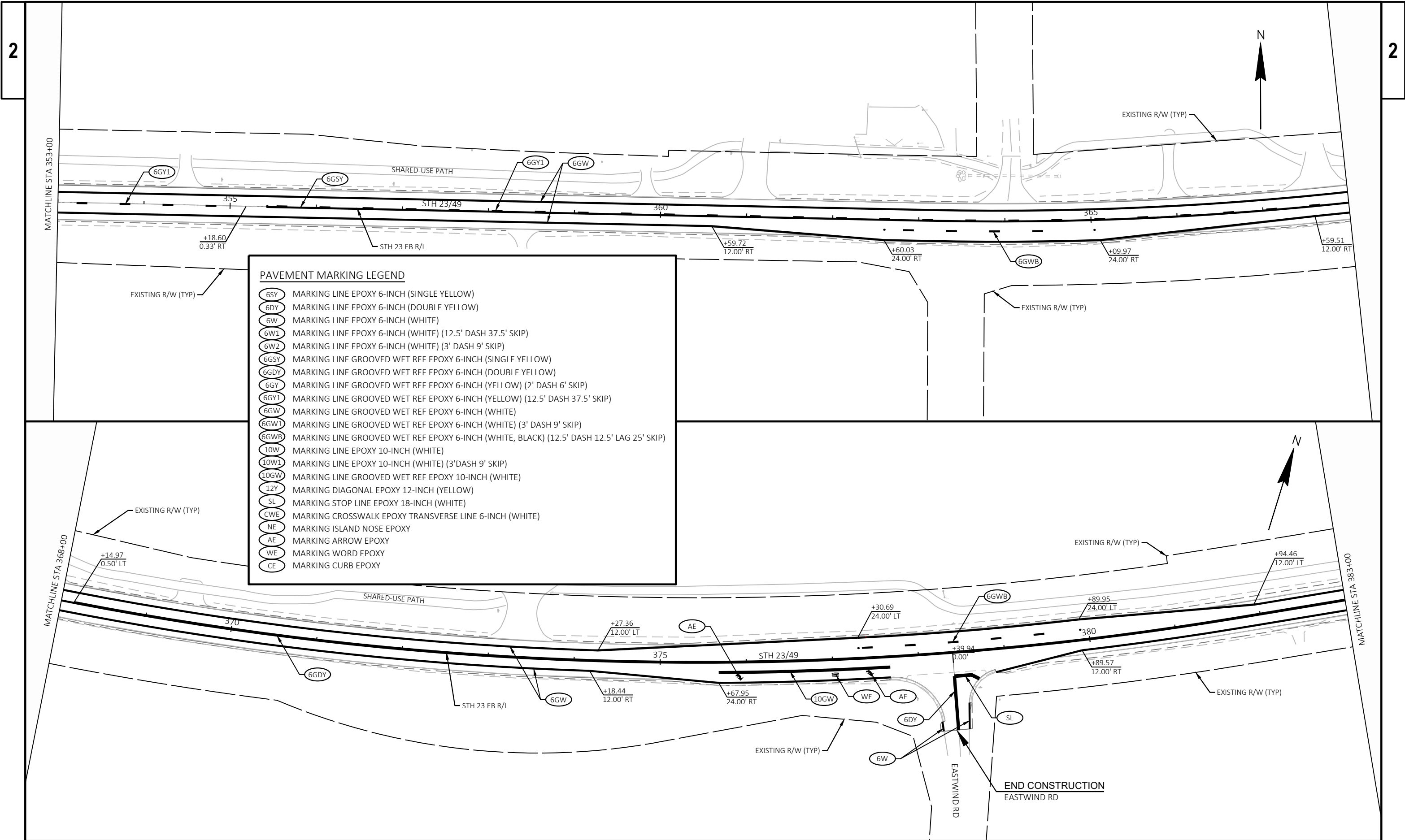
EXISTING SIGN MOUNTED ON POST(S)

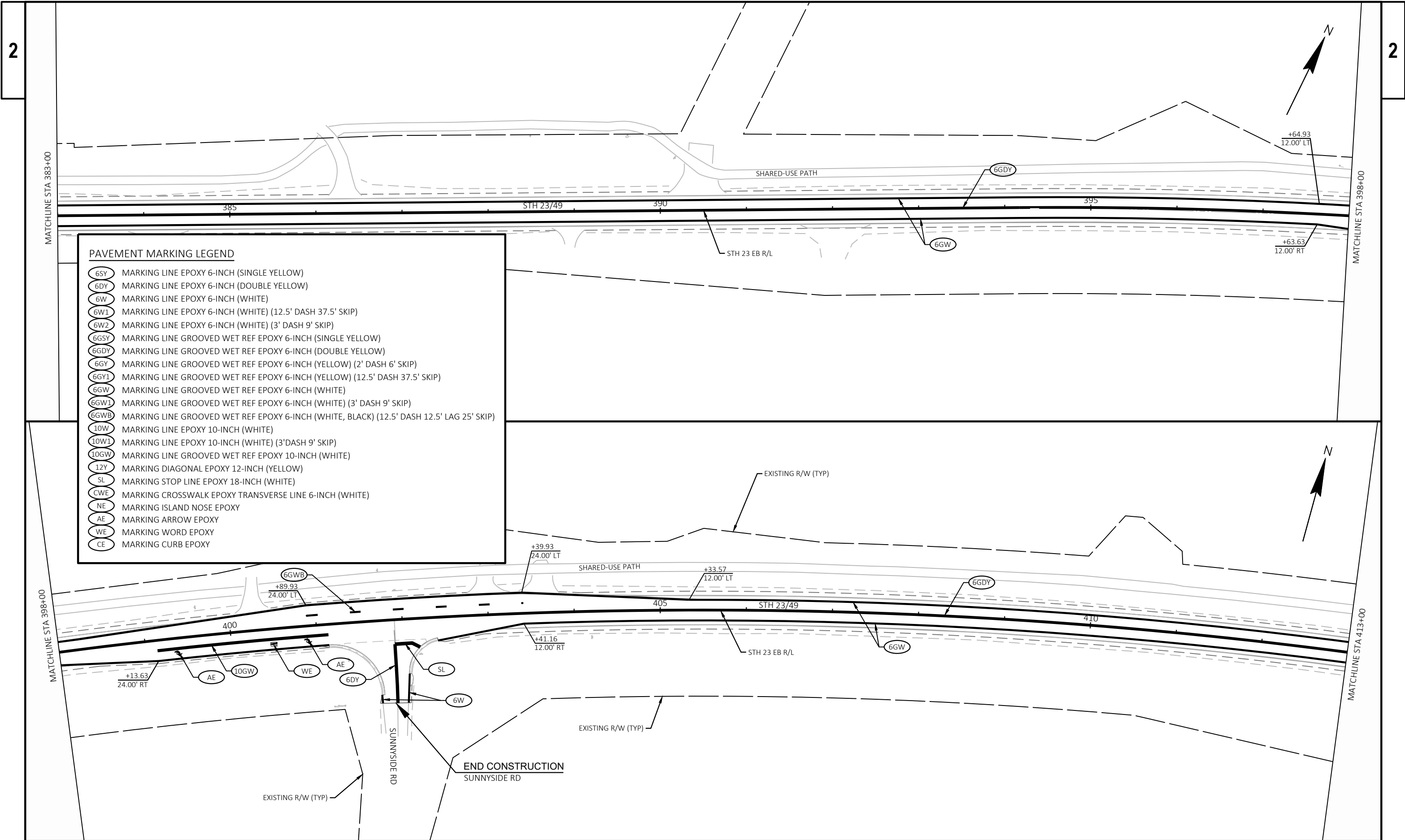
PROPOSED SIGN MOUNTED ON POST(S)

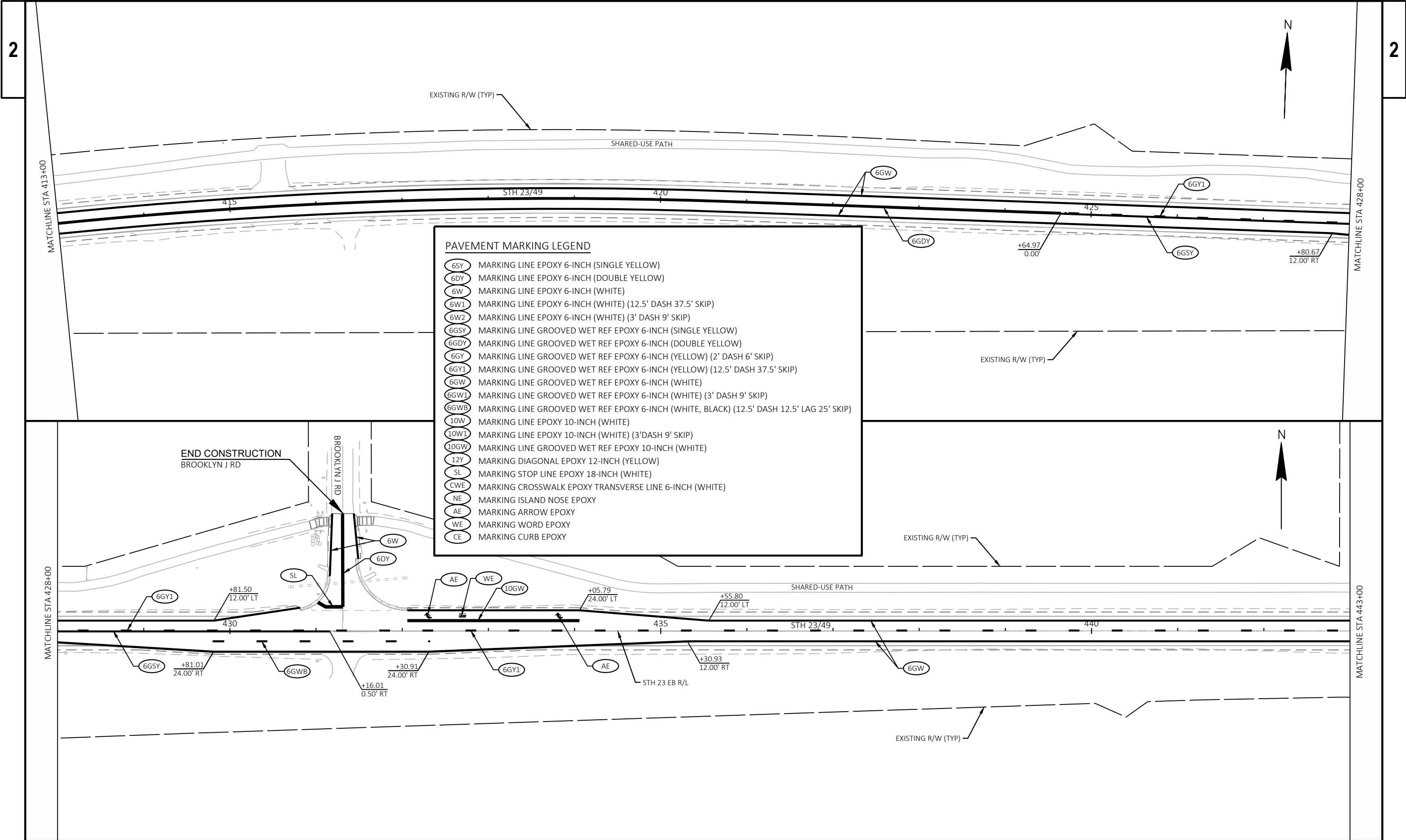
PAVEMENT MARKING LEGEND

- 6SY MARKING LINE EPOXY 6-INCH (SINGLE YELLOW)
- 6DY MARKING LINE EPOXY 6-INCH (DOUBLE YELLOW)
- 6W MARKING LINE EPOXY 6-INCH (WHITE)
- 6W1 MARKING LINE EPOXY 6-INCH (WHITE) (12.5' DASH 37.5' SKIP)
- 6W2 MARKING LINE EPOXY 6-INCH (WHITE) (3' DASH 9' SKIP)
- 6GSY MARKING LINE GROOVED WET REF EPOXY 6-INCH (SINGLE YELLOW)
- 6GDY MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
- 6GY MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW) (2' DASH 6' SKIP)
- 6GY1 MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW) (12.5' DASH 37.5' SKIP)
- 6GW MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
- 6GW1 MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE) (3' DASH 9' SKIP)
- 6GWB MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE, BLACK) (12.5' DASH 12.5' LAG 25' SKIP)
- 10W MARKING LINE EPOXY 10-INCH (WHITE)
- 10W1 MARKING LINE EPOXY 10-INCH (WHITE) (3'DASH 9' SKIP)
- 10GW MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
- 12Y MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- SL MARKING STOP LINE EPOXY 18-INCH (WHITE)
- CWE MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- NE MARKING ISLAND NOSE EPOXY
- AE MARKING ARROW EPOXY
- WE MARKING WORD EPOXY
- CE MARKING CURB EPOXY

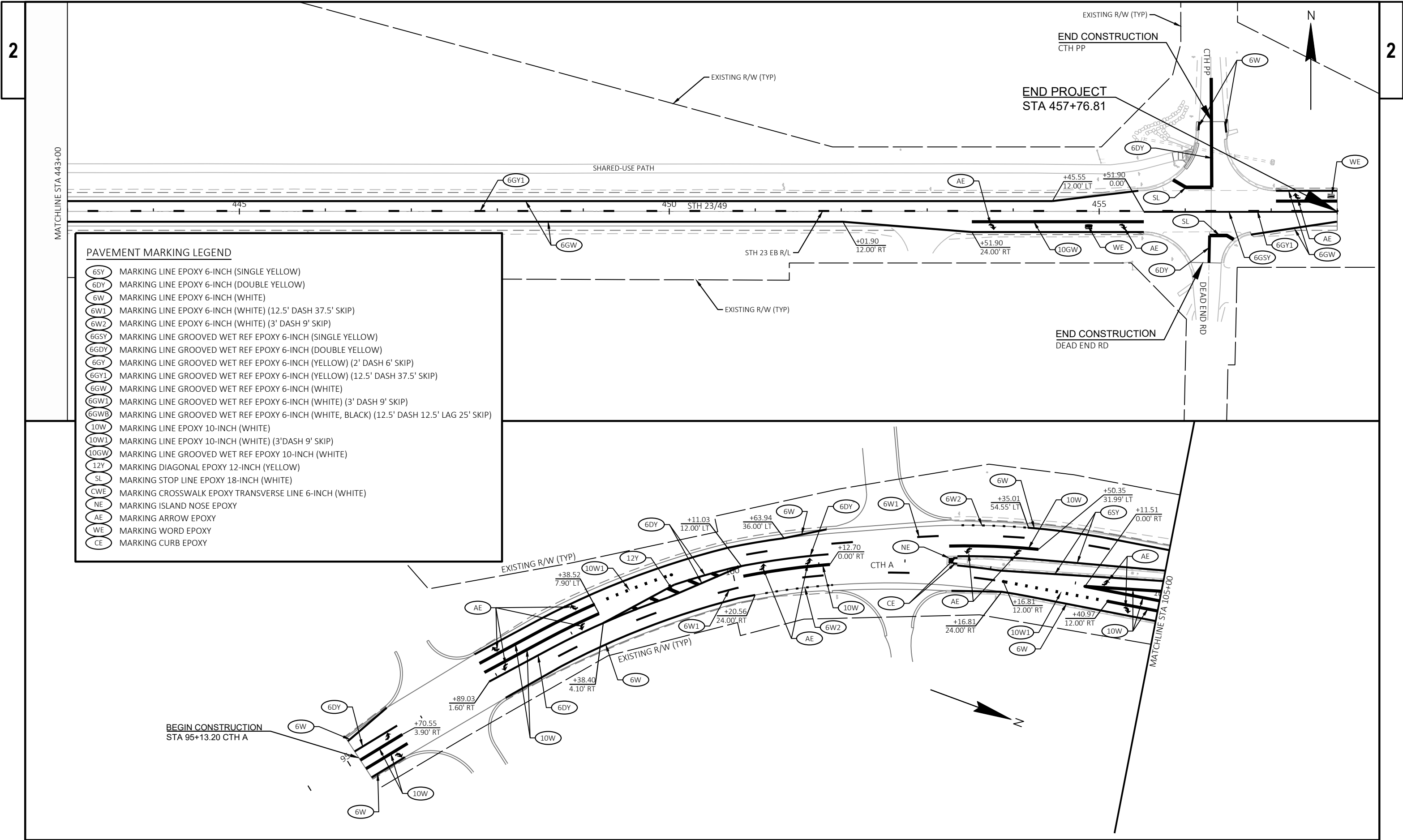




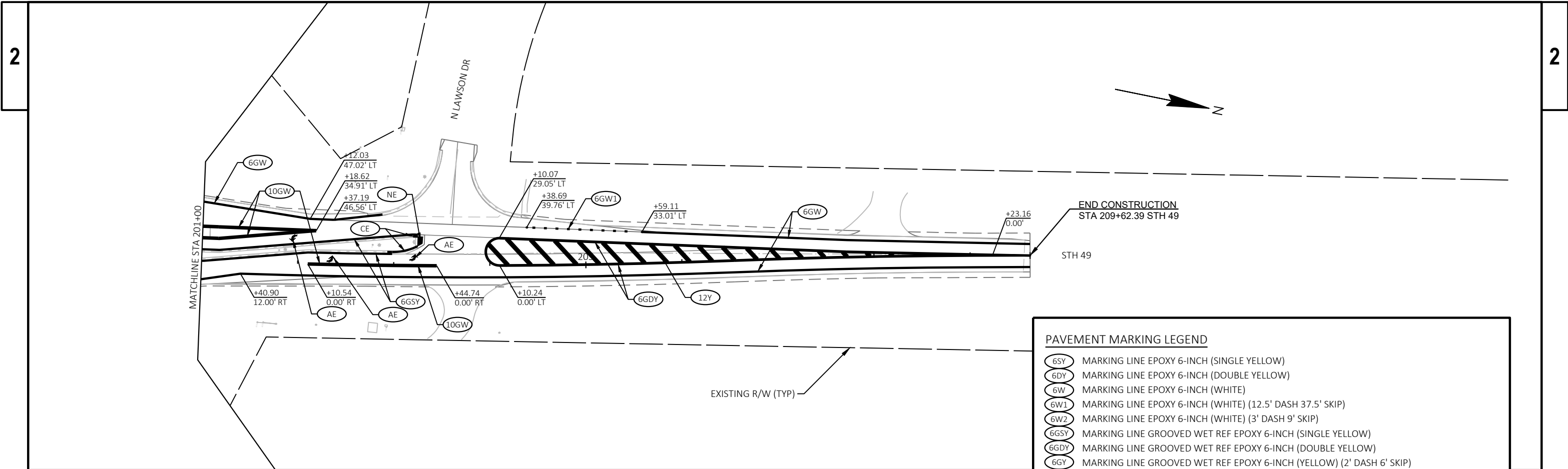




PAVEMENT MARKING LEGEND	
6SY	MARKING LINE EPOXY 6-INCH (SINGLE YELLOW)
6DY	MARKING LINE EPOXY 6-INCH (DOUBLE YELLOW)
6W	MARKING LINE EPOXY 6-INCH (WHITE)
6W1	MARKING LINE EPOXY 6-INCH (WHITE) (12.5' DASH 37.5' SKIP)
6W2	MARKING LINE EPOXY 6-INCH (WHITE) (3' DASH 9' SKIP)
6GSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (SINGLE YELLOW)
6GDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
6GY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW) (2' DASH 6' SKIP)
6GY1	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW) (12.5' DASH 37.5' SKIP)
6GW	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
6GW1	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE) (3' DASH 9' SKIP)
6GWB	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE, BLACK) (12.5' DASH 12.5' LAG 25' SKIP)
10W	MARKING LINE EPOXY 10-INCH (WHITE)
10W1	MARKING LINE EPOXY 10-INCH (WHITE) (3'DASH 9' SKIP)
10GW	MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
12Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
SL	MARKING STOP LINE EPOXY 18-INCH (WHITE)
CWE	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
NE	MARKING ISLAND NOSE EPOXY
AE	MARKING ARROW EPOXY
WE	MARKING WORD EPOXY
CE	MARKING CURB EPOXY

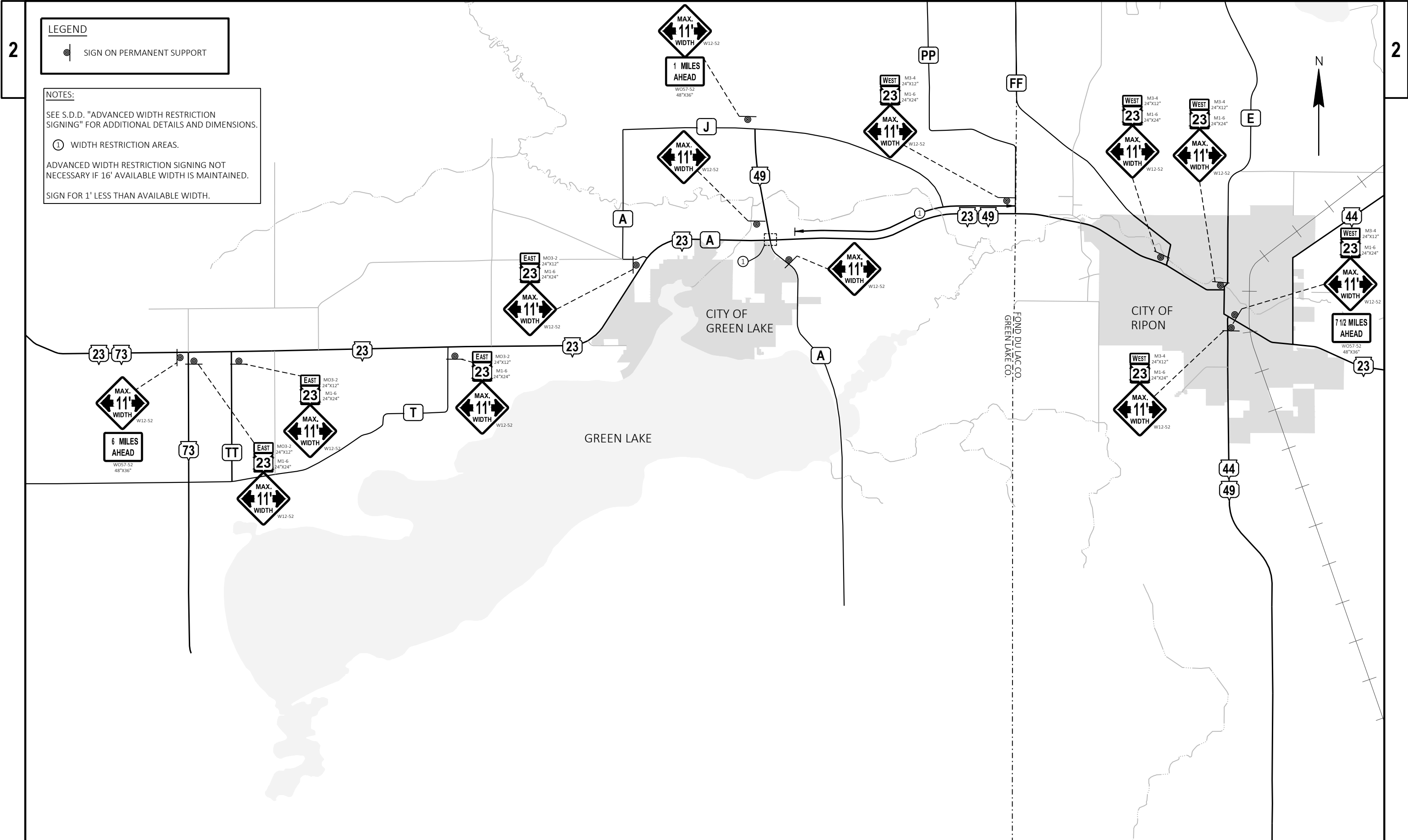


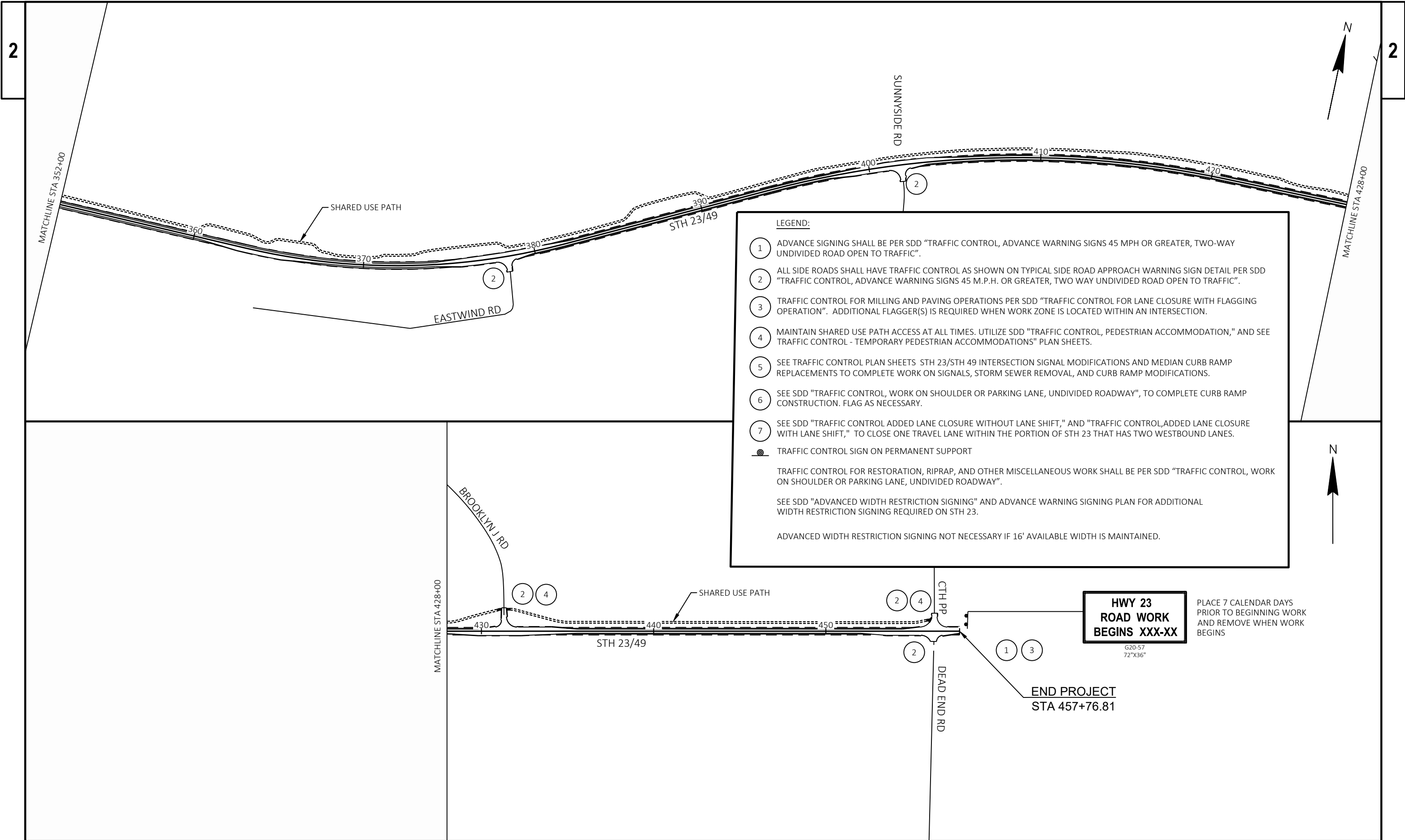
PAVEMENT MARKING LEGEND	
6SY	MARKING LINE EPOXY 6-INCH (SINGLE YELLOW)
6DY	MARKING LINE EPOXY 6-INCH (DOUBLE YELLOW)
6W	MARKING LINE EPOXY 6-INCH (WHITE)
6W1	MARKING LINE EPOXY 6-INCH (WHITE) (12.5' DASH 37.5' SKIP)
6W2	MARKING LINE EPOXY 6-INCH (WHITE) (3' DASH 9' SKIP)
6GSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (SINGLE YELLOW)
6GDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
6GY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW) (2' DASH 6' SKIP)
6GY1	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW) (12.5' DASH 37.5' SKIP)
6GW	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
6GW1	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE) (3' DASH 9' SKIP)
6GWB	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE, BLACK) (12.5' DASH 12.5' LAG 25' SKIP)
10W	MARKING LINE EPOXY 10-INCH (WHITE)
10W1	MARKING LINE EPOXY 10-INCH (WHITE) (3'DASH 9' SKIP)
10GW	MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
12Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
SL	MARKING STOP LINE EPOXY 18-INCH (WHITE)
CWE	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
NE	MARKING ISLAND NOSE EPOXY
AE	MARKING ARROW EPOXY
WE	MARKING WORD EPOXY
CE	MARKING CURB EPOXY



PAVEMENT MARKING LEGEND	
6SY	MARKING LINE EPOXY 6-INCH (SINGLE YELLOW)
6DY	MARKING LINE EPOXY 6-INCH (DOUBLE YELLOW)
6W	MARKING LINE EPOXY 6-INCH (WHITE)
6W1	MARKING LINE EPOXY 6-INCH (WHITE) (12.5' DASH 37.5' SKIP)
6W2	MARKING LINE EPOXY 6-INCH (WHITE) (3' DASH 9' SKIP)
6GSY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (SINGLE YELLOW)
6GDY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (DOUBLE YELLOW)
6GY	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW) (2' DASH 6' SKIP)
6GY1	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW) (12.5' DASH 37.5' SKIP)
6GW	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
6GW1	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE) (3' DASH 9' SKIP)
6GWB	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE, BLACK) (12.5' DASH 12.5' LAG 25' SKIP)
10W	MARKING LINE EPOXY 10-INCH (WHITE)
10W1	MARKING LINE EPOXY 10-INCH (WHITE) (3'DASH 9' SKIP)
10GW	MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
12Y	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
SL	MARKING STOP LINE EPOXY 18-INCH (WHITE)
CWE	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
NE	MARKING ISLAND NOSE EPOXY
AE	MARKING ARROW EPOXY
WE	MARKING WORD EPOXY
CE	MARKING CURB EPOXY

THIS FRAME INTENTIONALLY LEFT BLANK





LEGEND:

- 1 ADVANCE SIGNING SHALL BE PER SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC".
- 2 ALL SIDE ROADS SHALL HAVE TRAFFIC CONTROL AS SHOWN ON TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL PER SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC".
- 3 TRAFFIC CONTROL FOR MILLING AND PAVING OPERATIONS PER SDD "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION". ADDITIONAL FLAGGER(S) IS REQUIRED WHEN WORK ZONE IS LOCATED WITHIN AN INTERSECTION.
- 4 MAINTAIN SHARED USE PATH ACCESS AT ALL TIMES. UTILIZE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION," AND SEE TRAFFIC CONTROL - TEMPORARY PEDESTRIAN ACCOMMODATIONS" PLAN SHEETS.
- 5 SEE TRAFFIC CONTROL PLAN SHEETS STH 23/STH 49 INTERSECTION SIGNAL MODIFICATIONS AND MEDIAN CURB RAMP REPLACEMENTS TO COMPLETE WORK ON SIGNALS, STORM SEWER REMOVAL, AND CURB RAMP MODIFICATIONS.
- 6 SEE SDD "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY", TO COMPLETE CURB RAMP CONSTRUCTION. FLAG AS NECESSARY.
- 7 SEE SDD "TRAFFIC CONTROL ADDED LANE CLOSURE WITHOUT LANE SHIFT," AND "TRAFFIC CONTROL, ADDED LANE CLOSURE WITH LANE SHIFT," TO CLOSE ONE TRAVEL LANE WITHIN THE PORTION OF STH 23 THAT HAS TWO WESTBOUND LANES.

TRAFFIC CONTROL SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL FOR RESTORATION, RIPRAP, AND OTHER MISCELLANEOUS WORK SHALL BE PER SDD "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY".

SEE SDD "ADVANCED WIDTH RESTRICTION SIGNING" AND ADVANCE WARNING SIGNING PLAN FOR ADDITIONAL WIDTH RESTRICTION SIGNING REQUIRED ON STH 23.

ADVANCED WIDTH RESTRICTION SIGNING NOT NECESSARY IF 16' AVAILABLE WIDTH IS MAINTAINED.

TRAFFIC CONTROL NOTES

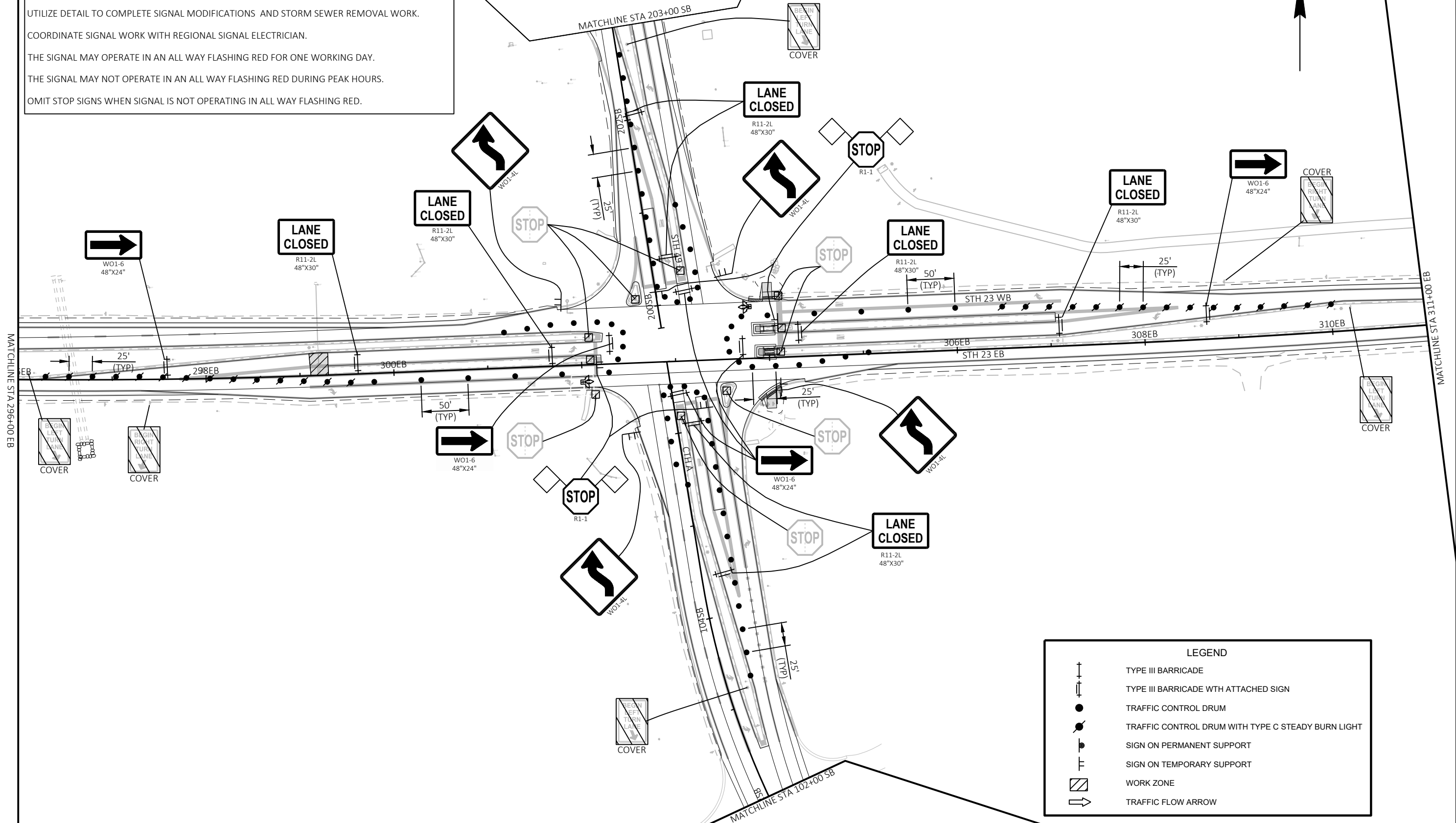
UTILIZE DETAIL TO COMPLETE SIGNAL MODIFICATIONS AND STORM SEWER REMOVAL WORK.

COORDINATE SIGNAL WORK WITH REGIONAL SIGNAL ELECTRICIAN.

THE SIGNAL MAY OPERATE IN AN ALL WAY FLASHING RED FOR ONE WORKING DAY.

THE SIGNAL MAY NOT OPERATE IN AN ALL WAY FLASHING RED DURING PEAK HOURS.

OMIT STOP SIGNS WHEN SIGNAL IS NOT OPERATING IN ALL WAY FLASHING RED.



PROJECT NO: 1430-08-82

HWY: STH 23

COUNTY: GREEN LAKE

TRAFFIC CONTROL: STH 23/STH 49 INTERSECTION SIGNAL MODIFICATIONS

SHEET

E

FILE NAME : O:\PD5\C3D\14300812\SHEETS\026001-TC.DWG
LAYOUT NAME - 01

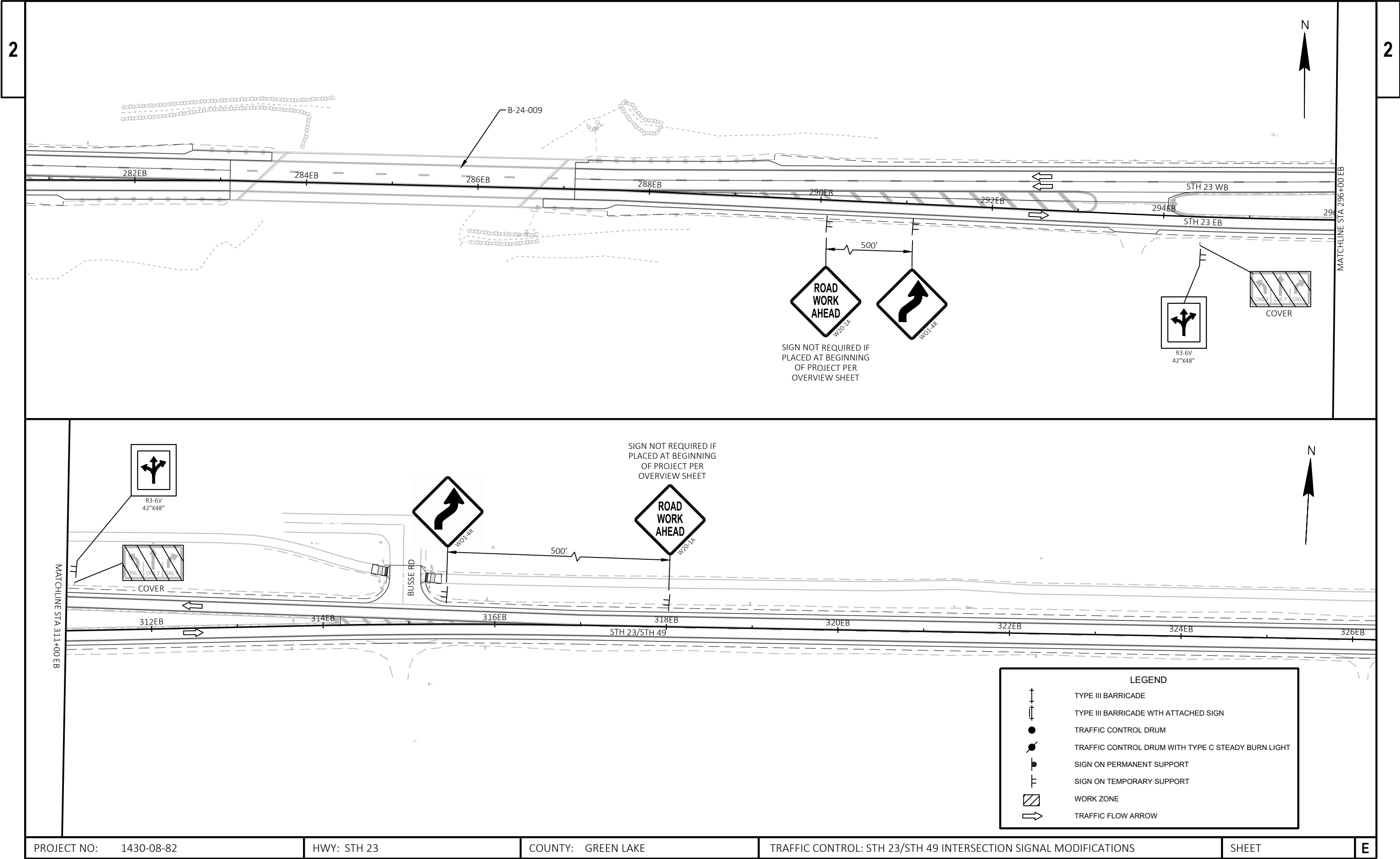
PLOT DATE : 4/29/2025 12:11 PM

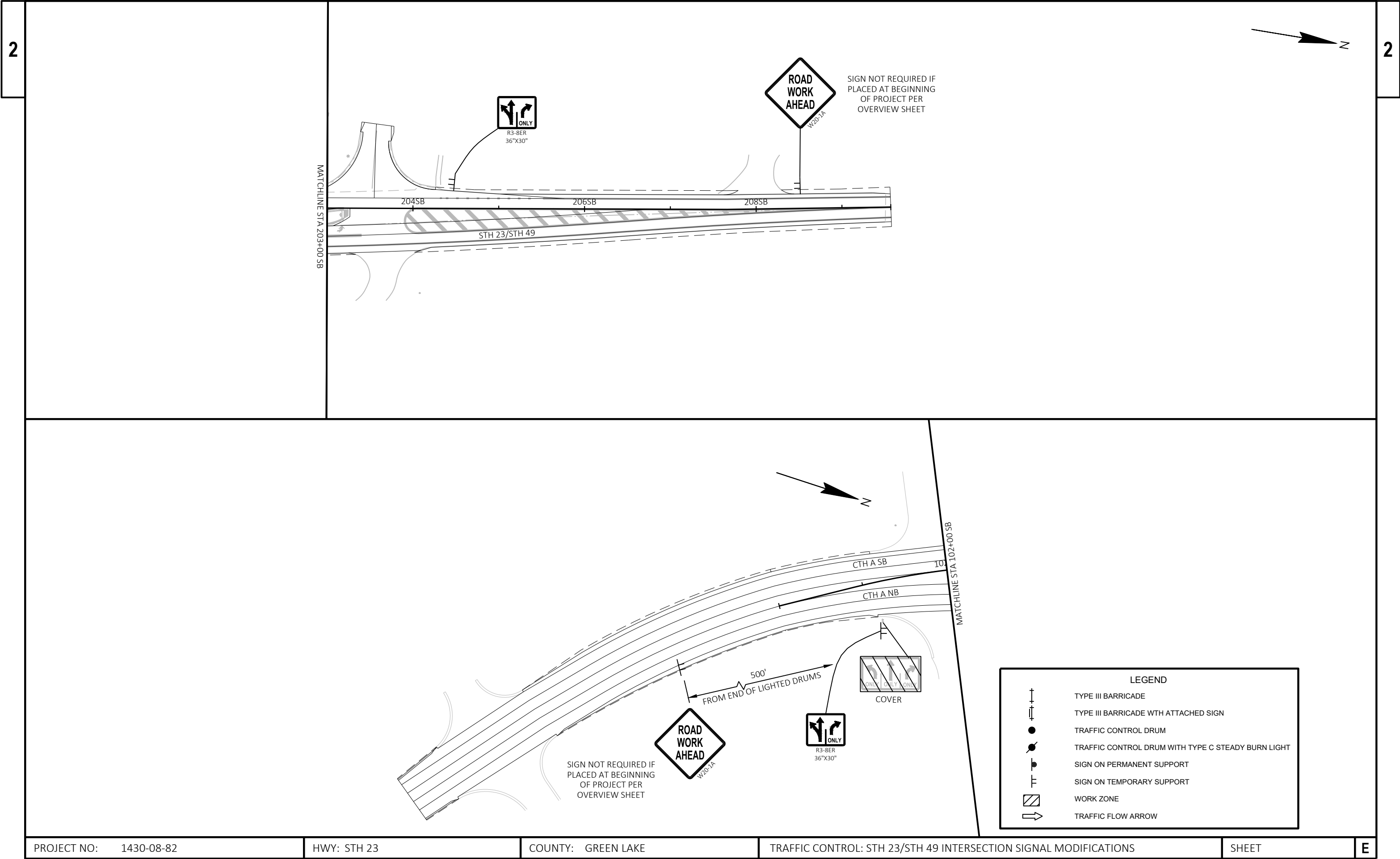
PLOT BY : CORY IHDE

PLOT NAME :

PLOT SCALE : 1 IN:100 FT

WISDOT/CADDs SHEET 44





TRAFFIC CONTROL NOTES

UTILIZE DETAIL TO COMPLETE THE MEDIAN CURB RAMP REPLACEMENTS AT THE INTERSECTION OF STH 23 AND STH 49/CTH A.

LEFT TURN LANE CLOSURE IS ALLOWED DURING OFF PEAK HOURS. REMOVE TRAFFIC CONTROL AND RETURN TO NORMAL LANE CONFIGURATION DURING PEAK HOURS.

COORDINATE WORK WITH REGIONAL TRAFFIC SIGNAL ELECTRICIAN FOR MODIFICATIONS TO EXISTING SIGNAL TIMING.

MATCHLINE STA 296+00 EB

MATCHLINE STA 311+00 EB

N

LEGEND	
	TYPE III BARRICADE
	TYPE III BARRICADE WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	WORK ZONE
	TRAFFIC FLOW ARROW

PROJECT NO: 1430-08-82

HWY: STH 23

COUNTY: GREEN LAKE

TRAFFIC CONTROL: MEDIAN CURB RAMP REPLACEMENTS

SHEET

E

FILE NAME : O:\PD5\C3D\14300812\14300812\026002-TC.DWG
LAYOUT NAME - 01

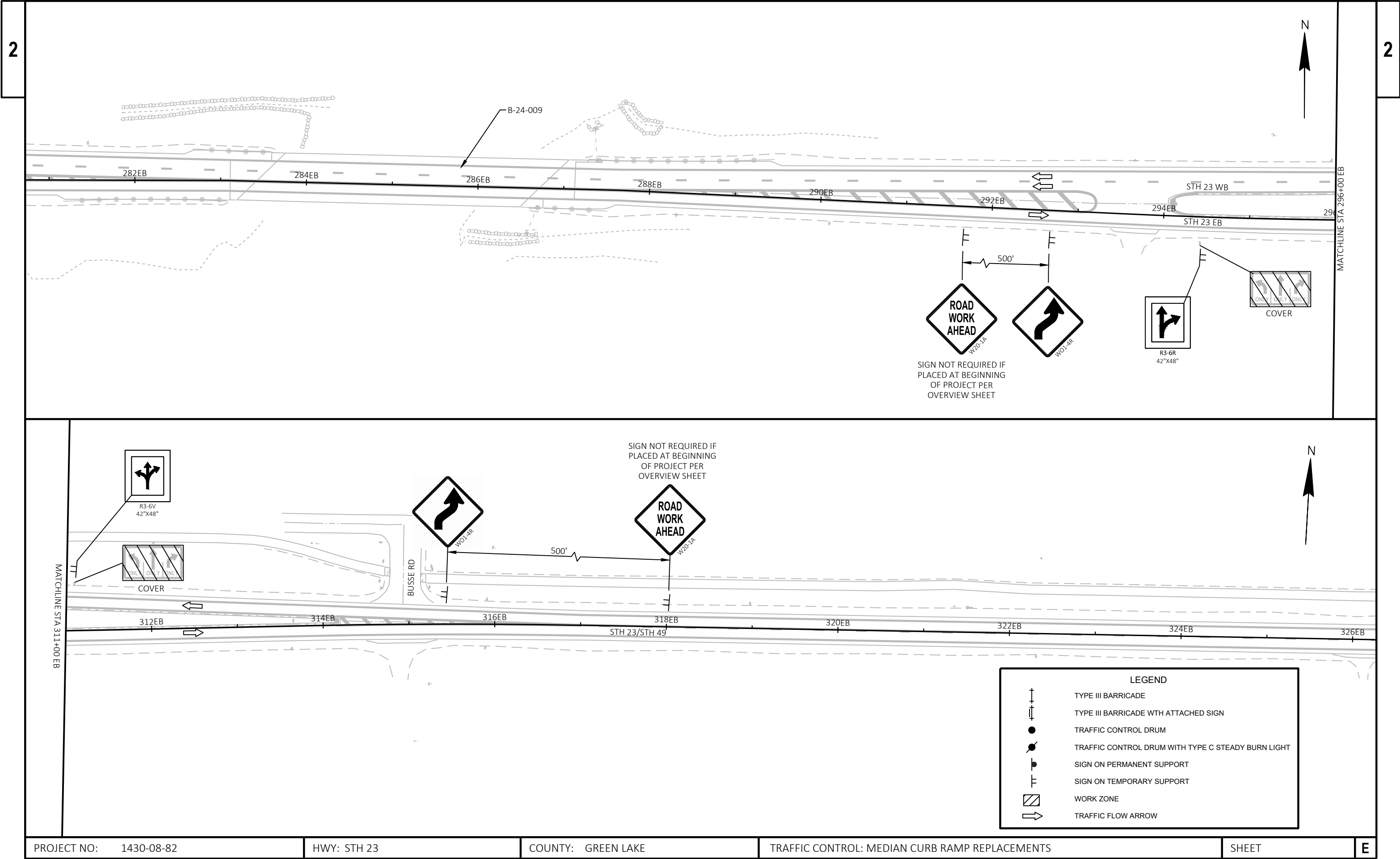
PLOT DATE : 4/28/2025 3:02 PM

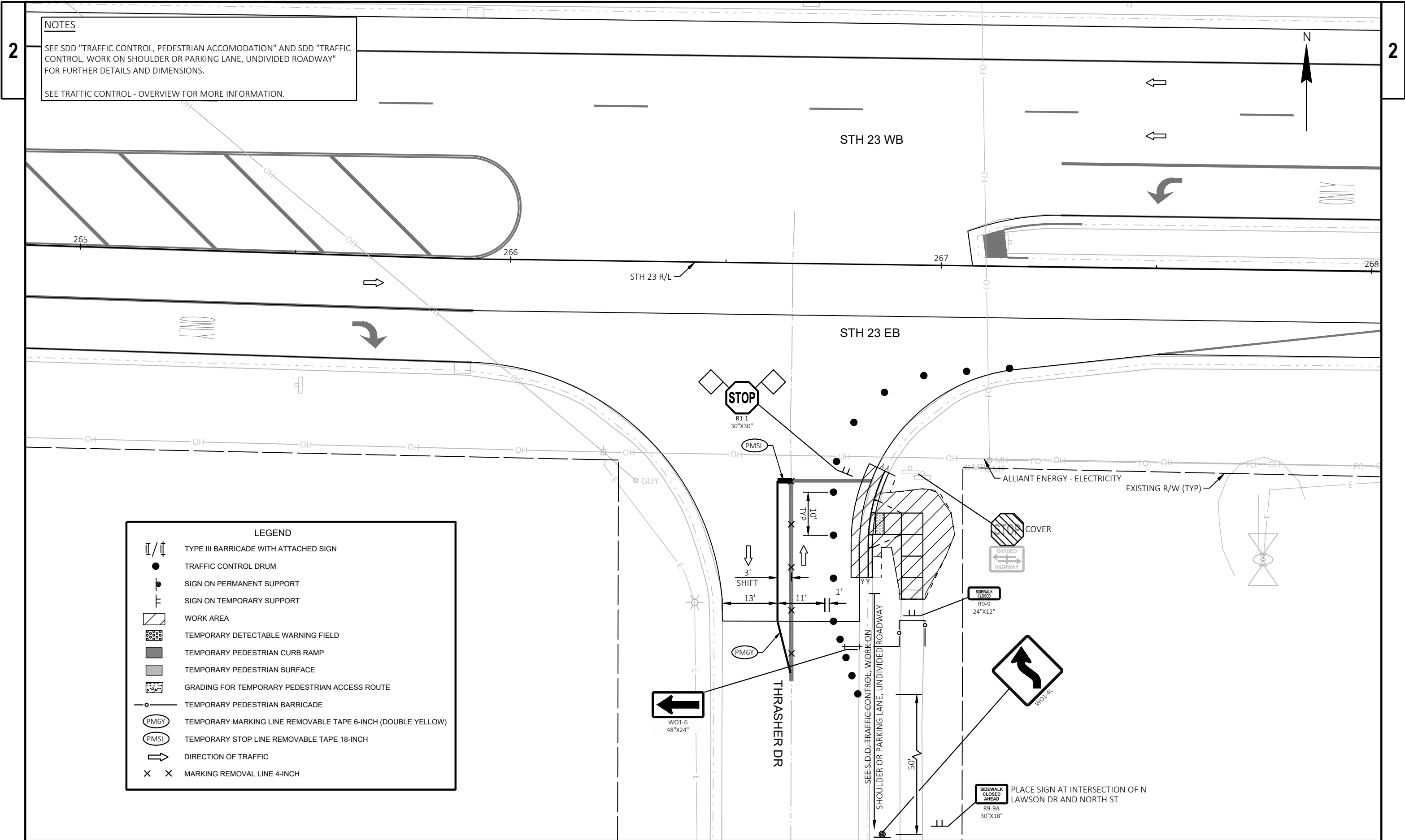
PLOT BY : CORY IHDE

PLOT NAME :

PLOT SCALE : 1 IN:100 FT

WISDOT/CADDs SHEET 44



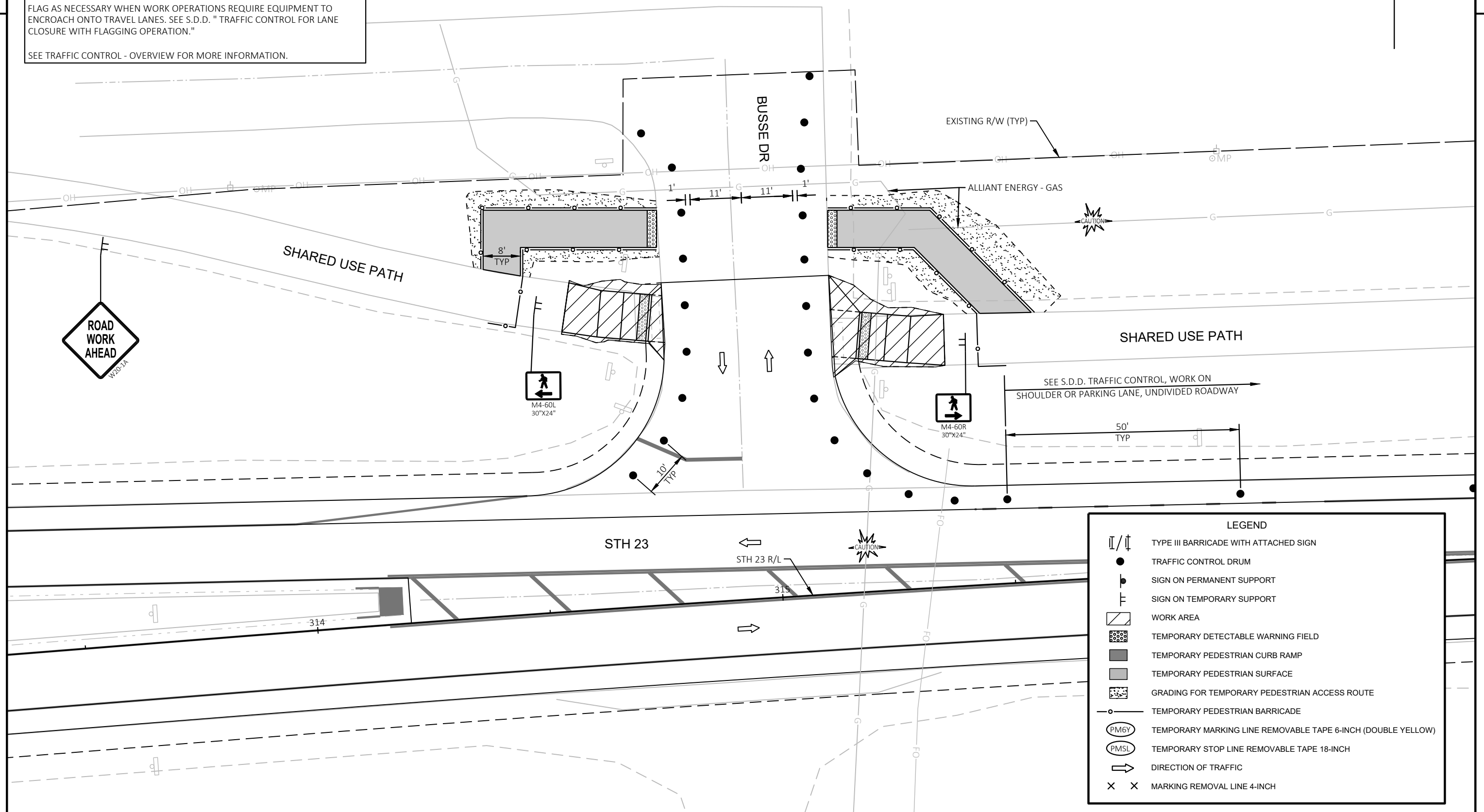


NOTES

SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" AND SDD "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" FOR FURTHER DETAILS AND DIMENSIONS.

FLAG AS NECESSARY WHEN WORK OPERATIONS REQUIRE EQUIPMENT TO ENCROACH ONTO TRAVEL LANES. SEE S.D.D. " TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION."

SEE TRAFFIC CONTROL - OVERVIEW FOR MORE INFORMATION.



PROJECT NO: 1430-08-82

HWY: STH 23

COUNTY: GREEN LAKE

TRAFFIC CONTROL- TEMPORARY PEDESTRIAN ACCOMMODATIONS

SHEET

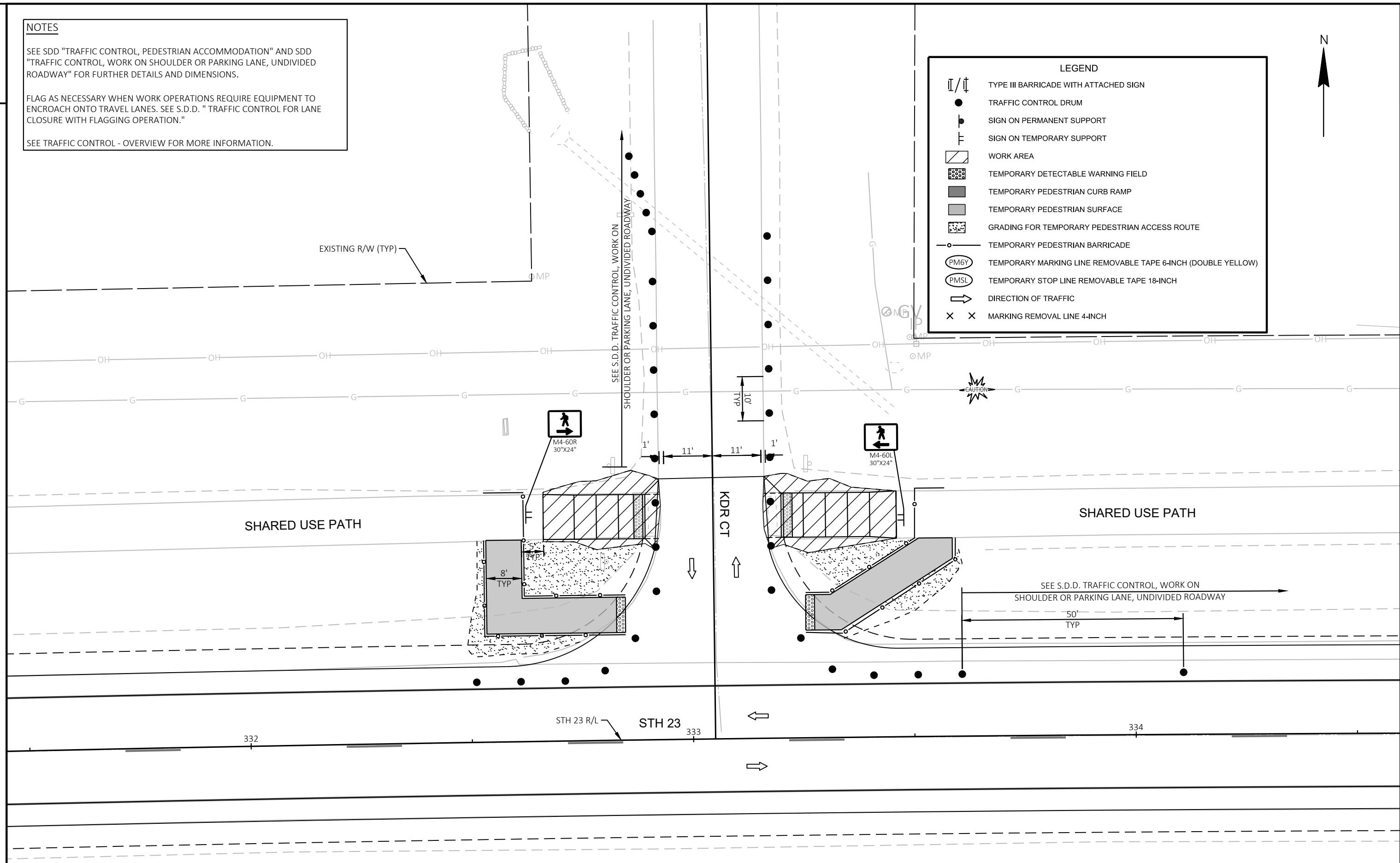
E

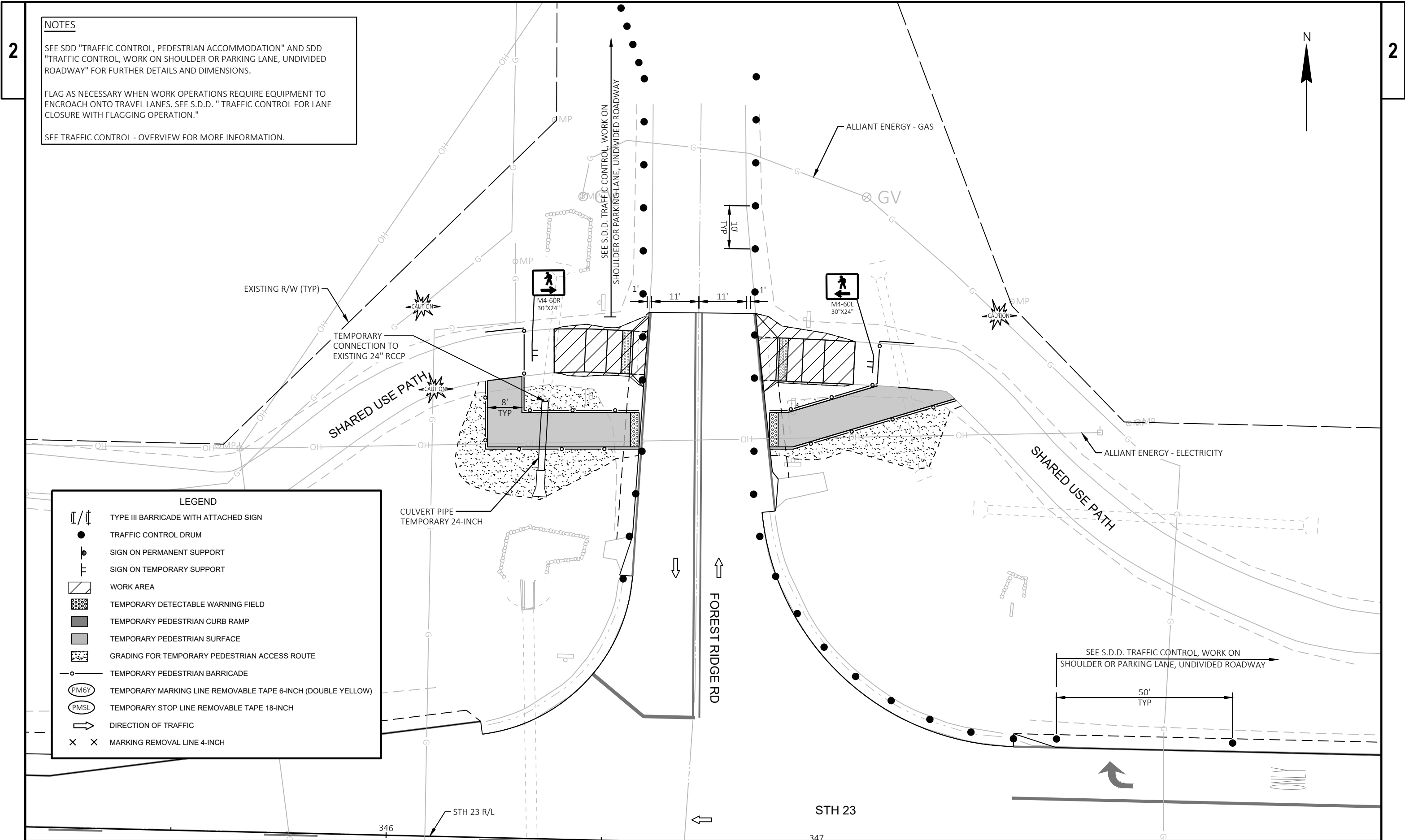
NOTES

SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" AND SDD "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" FOR FURTHER DETAILS AND DIMENSIONS.

FLAG AS NECESSARY WHEN WORK OPERATIONS REQUIRE EQUIPMENT TO ENCR OACH ONTO TRAVEL LANES. SEE S.D.D. " TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION."

SEE TRAFFIC CONTROL - OVERVIEW FOR MORE INFORMATION.



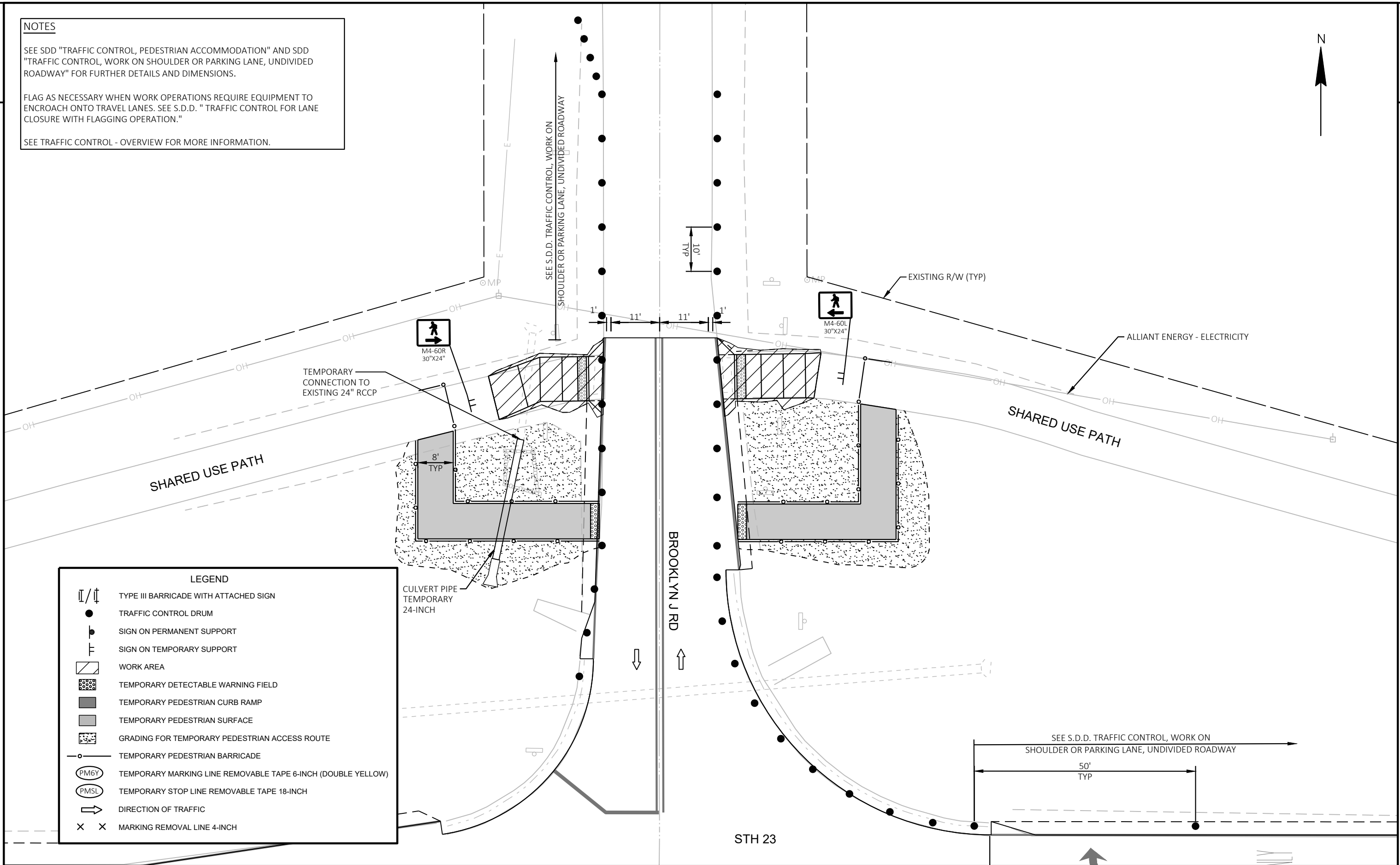


NOTES

SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" AND SDD "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" FOR FURTHER DETAILS AND DIMENSIONS.

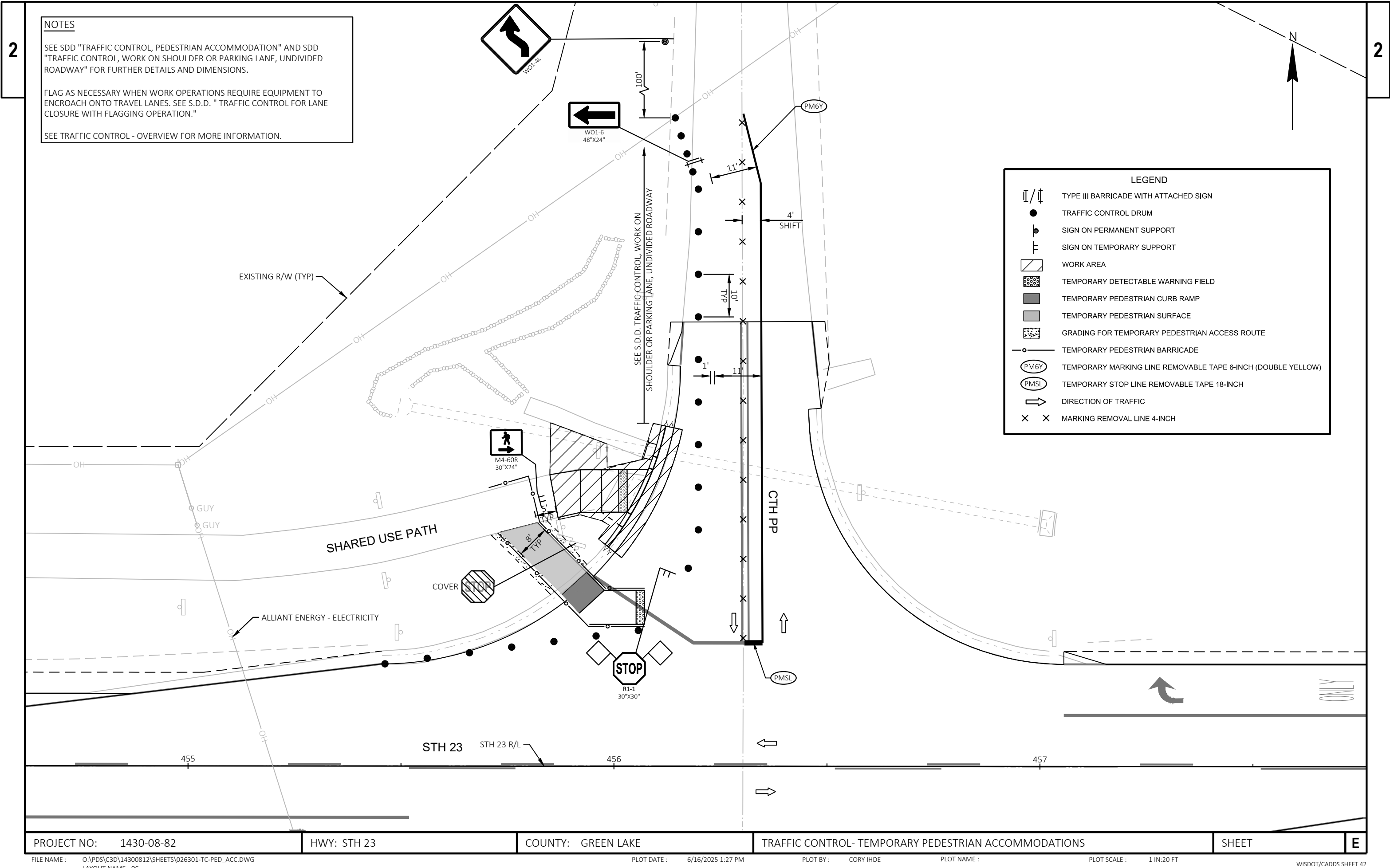
FLAG AS NECESSARY WHEN WORK OPERATIONS REQUIRE EQUIPMENT TO ENCROACH ONTO TRAVEL LANES. SEE S.D.D. " TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION."

SEE TRAFFIC CONTROL - OVERVIEW FOR MORE INFORMATION.



LEGEND

	TYPE III BARRICADE WITH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	WORK AREA
	TEMPORARY DETECTABLE WARNING FIELD
	TEMPORARY PEDESTRIAN CURB RAMP
	TEMPORARY PEDESTRIAN SURFACE
	GRADING FOR TEMPORARY PEDESTRIAN ACCESS ROUTE
	TEMPORARY PEDESTRIAN BARRICADE
	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (DOUBLE YELLOW)
	TEMPORARY STOP LINE REMOVABLE TAPE 18-INCH
	DIRECTION OF TRAFFIC
	MARKING REMOVAL LINE 4-INCH



Estimate Of Quantities

1430-08-82

Line	Item	Item Description	Unit	Total	Qty
0002	204.0100	Removing Concrete Pavement	SY	39.000	39.000
0004	204.0110	Removing Asphaltic Surface	SY	449.000	449.000
0006	204.0115	Removing Asphaltic Surface Butt Joints	SY	930.000	930.000
0008	204.0120	Removing Asphaltic Surface Milling	SY	135,600.000	135,600.000
0010	204.0150	Removing Curb & Gutter	LF	154.000	154.000
0012	204.0155	Removing Concrete Sidewalk	SY	80.000	80.000
0014	204.0220	Removing Inlets	EACH	1.000	1.000
0016	204.0245	Removing Storm Sewer (size) 01. 18-Inch	LF	14.000	14.000
0018	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 1430-08-82	EACH	1.000	1.000
0020	213.0100	Finishing Roadway (project) 01. 1430-08-82	EACH	1.000	1.000
0022	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,431.000	1,431.000
0024	455.0605	Tack Coat	GAL	8,200.000	8,200.000
0026	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0028	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.000	1.000
0030	460.2000	Incentive Density HMA Pavement	DOL	520.000	520.000
0032	460.2005	Incentive Density PWL HMA Pavement	DOL	8,040.000	8,040.000
0034	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	5,170.000	5,170.000
0036	460.2010	Incentive Air Voids HMA Pavement	DOL	18,000.000	18,000.000
0038	460.6224	HMA Pavement 4 MT 58-28 S	TON	18,000.000	18,000.000
0040	465.0105	Asphaltic Surface	TON	57.000	57.000
0042	465.0110	Asphaltic Surface Patching	TON	50.000	50.000
0044	465.0520	Asphaltic Rumble Strips, Shoulder	LF	28,040.000	28,040.000
0046	465.0560	Asphaltic Rumble Strips, Centerline	LF	12,350.000	12,350.000
0048	520.1024	Apron Endwalls for Culvert Pipe 24-Inch	EACH	2.000	2.000
0050	520.2024	Culvert Pipe Temporary 24-Inch	LF	44.000	44.000
0052	520.8700	Cleaning Culvert Pipes	EACH	3.000	3.000
0054	601.0415	Concrete Curb & Gutter 6-Inch Sloped 30-Inch Type J	LF	24.000	24.000
0056	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	154.000	154.000
0058	601.0600	Concrete Curb Pedestrian	LF	71.000	71.000
0060	602.0410	Concrete Sidewalk 5-Inch	SF	2,580.000	2,580.000
0062	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	250.000	250.000
0064	602.0605	Curb Ramp Detectable Warning Field Radial Yellow	SF	24.000	24.000
0066	606.0200	Riprap Medium	CY	25.000	25.000
0068	618.0100	Maintenance and Repair of Haul Roads (project) 01. 1430-08-82	EACH	1.000	1.000
0070	619.1000	Mobilization	EACH	1.000	1.000
0072	620.0300	Concrete Median Sloped Nose	SF	148.000	148.000
0074	621.0100	Landmark Reference Monuments	EACH	4.000	4.000
0076	624.0100	Water	MGAL	22.000	22.000
0078	625.0100	Topsoil	SY	1,000.000	1,000.000
0080	628.1504	Silt Fence	LF	4,580.000	4,580.000
0082	628.1520	Silt Fence Maintenance	LF	4,580.000	4,580.000
0084	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0086	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0088	628.2008	Erosion Mat Urban Class I Type B	SY	1,000.000	1,000.000
0090	628.7015	Inlet Protection Type C	EACH	65.000	65.000
0092	628.7555	Culvert Pipe Checks	EACH	10.000	10.000
0094	629.0210	Fertilizer Type B	CWT	1.000	1.000
0096	630.0130	Seeding Mixture No. 30	LB	46.000	46.000
0098	630.0200	Seeding Temporary	LB	35.000	35.000

Estimate Of Quantities

1430-08-82

Line	Item	Item Description	Unit	Total	Qty
0100	630.0500	Seed Water	MGAL	23.000	23.000
0102	633.5200	Markers Culvert End	EACH	4.000	4.000
0104	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	4.000	4.000
0106	637.2210	Signs Type II Reflective H	SF	7.820	7.820
0108	638.2102	Moving Signs Type II	EACH	2.000	2.000
0110	638.2602	Removing Signs Type II	EACH	5.000	5.000
0112	638.3000	Removing Small Sign Supports	EACH	4.000	4.000
0114	642.5201	Field Office Type C	EACH	1.000	1.000
0116	643.0300	Traffic Control Drums	DAY	2,900.000	2,900.000
0118	643.0420	Traffic Control Barricades Type III	DAY	185.000	185.000
0120	643.0705	Traffic Control Warning Lights Type A	DAY	350.000	350.000
0122	643.0715	Traffic Control Warning Lights Type C	DAY	825.000	825.000
0124	643.0900	Traffic Control Signs	DAY	3,740.000	3,740.000
0126	643.0920	Traffic Control Covering Signs Type II	EACH	26.000	26.000
0128	643.1000	Traffic Control Signs Fixed Message	SF	54.000	54.000
0130	643.3165	Temporary Marking Line Paint 6-Inch	LF	119,560.000	119,560.000
0132	643.3180	Temporary Marking Line Removable Tape 6-Inch	LF	340.000	340.000
0134	643.3265	Temporary Marking Line Paint 10-Inch	LF	6,033.000	6,033.000
0136	643.3270	Temporary Marking Line Epoxy 10-Inch	LF	6,033.000	6,033.000
0138	643.3850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	9.000	9.000
0140	643.5000	Traffic Control	EACH	1.000	1.000
0142	644.1440	Temporary Pedestrian Surface Matting	SF	2,984.000	2,984.000
0144	644.1601	Temporary Pedestrian Curb Ramp	DAY	5.000	5.000
0146	644.1605	Temporary Pedestrian Detectable Warning Field	SF	144.000	144.000
0148	644.1810	Temporary Pedestrian Barricade	LF	1,008.000	1,008.000
0150	645.0120	Geotextile Type HR	SY	36.000	36.000
0152	646.2020	Marking Line Epoxy 6-Inch	LF	3,451.000	3,451.000
0154	646.2025	Marking Line Grooved Black Epoxy 6-Inch	LF	1,399.000	1,399.000
0156	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	95,232.000	95,232.000
0158	646.4020	Marking Line Epoxy 10-Inch	LF	1,316.000	1,316.000
0160	646.4040	Marking Line Grooved Wet Ref Epoxy 10-Inch	LF	6,033.000	6,033.000
0162	646.4720	Marking Line Same Day Epoxy 6-Inch	LF	3,783.000	3,783.000
0164	646.5020	Marking Arrow Epoxy	EACH	50.000	50.000
0166	646.5120	Marking Word Epoxy	EACH	21.000	21.000
0168	646.6120	Marking Stop Line Epoxy 18-Inch	LF	490.000	490.000
0170	646.7120	Marking Diagonal Epoxy 12-Inch	LF	2,099.000	2,099.000
0172	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	146.000	146.000
0174	646.8120	Marking Curb Epoxy	LF	323.000	323.000
0176	646.8220	Marking Island Nose Epoxy	EACH	18.000	18.000
0178	646.9000	Marking Removal Line 4-Inch	LF	340.000	340.000
0180	650.8000	Construction Staking Resurfacing Reference	LF	24,304.000	24,304.000
0182	650.9000	Construction Staking Curb Ramps	EACH	12.000	12.000
0184	650.9500	Construction Staking Sidewalk (project) 01. 1430-08-82	EACH	1.000	1.000
0186	650.9911	Construction Staking Supplemental Control (project) 01. 1430-08-82	EACH	1.000	1.000
0188	658.0173	Traffic Signal Face 3S 12-Inch	EACH	12.000	12.000
0190	658.0416	Pedestrian Signal Face 16-Inch 01. 1430-08-82	EACH	2.000	2.000
0192	658.0500	Pedestrian Push Buttons	EACH	3.000	3.000
0194	658.5070	Signal Mounting Hardware (location) 01. STH 23 & STH 49	EACH	1.000	1.000
0196	690.0150	Sawing Asphalt	LF	1,296.000	1,296.000

Estimate Of Quantities

1430-08-82

Line	Item	Item Description	Unit	Total	Qty
0198	690.0250	Sawing Concrete	LF	72.000	72.000
0200	740.0440	Incentive IRI Ride	DOL	21,420.000	21,420.000
0202	SPV.0060	Special 01. Cleaning Inlets	EACH	4.000	4.000
0204	SPV.0060	Special 02. Grading for Temporary Pedestrian Access Route	EACH	9.000	9.000
0206	SPV.0060	Special 03. Reestablish Section Corner Monuments	EACH	1.000	1.000
0208	SPV.0060	Special 04. Temporary Culvert Pipe Connection 24-Inch	EACH	2.000	2.000
0210	SPV.0060	Special 05. Modify Traffic Signals STH 23 & STH 49	EACH	1.000	1.000

3

CATEGORY	STATION	LOCATION	*	*	*	*
			204.0110	305.0110	624.0100	690.0150
			REMOVING	BASE AGGREGATE		SAWING
			ASPHALTIC SURFACE	DENSE 3/4-INCH	WATER	ASPHALT
			SY	TON	MGAL	LF
0010	237+89	STH 23 LT	30	2	0.04	64
0010	293+68	STH 23 RT	27	2	0.03	60
0010	314+90	STH 23 RT	37	2	0.04	93
0010	326+12	STH 23 RT	29	2	0.03	83
0010	327+09	STH 23 RT	32	2	0.04	84
0010	336+88	STH 23 RT	28	2	0.04	79
0010	382+41	STH 23 RT	28	2	0.04	74
0010	384+16	STH 23 RT	31	2	0.04	80
0010	392+07	STH 23 RT	35	2	0.04	86
0010	414+14	STH 23 RT	25	1	0.02	63
0010	415+51	STH 23 RT	24	1	0.02	61
0010	416+40	STH 23 RT	23	1	0.02	60
		TOTAL 0010	349	21	0.40	887

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

204.0115				
REMOVING ASPHALTIC				
SURFACE BUTT JOINTS				
CATEGORY	STATION	LOCATION	SY	REMARKS
0010	210+73	STH 23	38	STH 23 BOP
0010	224+05	STH 23	39	CTH A WEST
0010	224+05	STH 23	47	NORTH ST
0010	266+66	STH 23	36	THRASHER DR
0010	277+81	STH 23	73	4" MILL DEPTH SECTION
0010	283+11	STH 23	63	BRIDGE WEST
0010	287+13	STH 23	63	BRIDGE EAST
0010	293+98	STH 23	85	4" MILL DEPTH SECTION
0010	102+52	CTH A	92	CTH A SOUTH
0010	209+62	STH 49	37	STH 49 NORTH
0010	203+68	STH 49	36	N LAWSON DR
0010	314+95	STH 23	40	BUSSE DR
0010	346+67	STH 23	35	FOREST RIDGE RD SOUTH
0010	346+72	STH 23	28	FOREST RIDGE RD NORTH
0010	378+38	STH 23	34	EASTWIND RD
0010	401+87	STH 23	34	SUNNYSIDE RD
0010	431+33	STH 23	29	BROOKLYN J RD
0010	456+24	STH 23	35	DEAD END RD
0010	456+31	STH 23	40	CTH PP
0010	457+77	STH 23	46	STH 23 EOP
TOTAL 0010			930	

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

3

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

HMA									
					204.0120 REMOVING ASPHALTIC SURFACE MILLING	455.0605 TACK COAT	460.6224 HMA PAVEMENT 4 MT 58-28 S	465.0110 ASPHALTIC SURFACE PATCHING	
CATEGORY	STATION	TO	STATION	LOCATION	SY	GAL	TON	TON	REMARKS
0010	210+73	-	224+05	STH 23	6,300	381	799	--	CTH A/NORTH ST
0010	223+41	-	224+72	STH 23	650	45	93	--	
0010	224+05	-	266+66	STH 23	23,727	1424	2,986	--	
0010	265+92	-	267+17	STH 23	296	18	42	--	THRASHER DR
0010	266+66	-	277+76	STH 23	7,155	430	902	--	4" MILL LIMITS - BRIDGE BRIDGE - 4" MILL LIMITS MEDIAN END - MEDIAN END
0010	277+76	-	283+59	STH 23	3,275	205	765	--	
0010	286+76	-	294+05	STH 23	4,572	284	1,058	--	
0010	294+05	-	314+20	STH 23	11,646	699	1,468	--	CTH A
0010	102+52	-	106+49	CTH A	8,947	543	1,139	--	
0010	200+57	-	209+62	STH 49	6,079	367	771	--	STH 49
0010	202+72	-	204+33	STH 49	431	29	59	--	N LAWSON DR
0010	314+20	-	346+70	STH 23	13,179	794	1,666	--	FOREST RIDGE RD
0010	345+94	-	347+45	STH 23	739	49	102	--	
0010	346+70	-	378+38	STH 23	14,719	884	1,855	--	
0010	377+67	-	378+88	STH 23	339	21	43	--	EASTWIND RD
0010	378+38	-	401+87	STH 23	9,528	574	1,205	--	SUNNYSIDE RD
0010	401+13	-	402+40	STH 23	503	31	64	--	
0010	401+87	-	431+33	STH 23	11,641	699	1,467	--	
0010	430+82	-	423+06	STH 23	330	22	46	--	BROOKLYN J RD
0010	431+33	-	457+77	STH 23	10,905	658	1,380	--	CTH PP/DEAD END RD
0010	455+46	-	457+06	STH 23	639	43	90	--	
0010	UNDISTRIBUTED			STH 23	--	--	--	50	
TOTAL 0010					135,600	8,200	18,000	50	MISC PATCHING AND RAMPING

RUMBLE STRIPS							

MONUMENTS				
621.0100 SPV.0060.03 LANDMARK REFERENCE SPECIAL (03. REESTABLISH MONUMENTS SECTION CORNER MONUMENTS)				
CATEGORY	STATION	LOCATION	EACH	EACH
0010	456+28	STH 23	4	1
TOTAL 0010			4	1

INLET PROTECTION						
628.7015						
INLET PROTECTION						
TYPE C						
CATEGORY	STATION	TO	STATION	LOCATION	EACH	REMARKS
0010	216+48	-	220+52	STH 23	8	DROP INLETS
0010	224+70	-	233+77	STH 23	9	
0010	254+04	-	279+01	STH 23	23	
0010	286+68	-	287+39	STH 23	2	
0010	294+29	-	299+22	STH 23	8	
0010	105+06	-	106+26	CTH A	5	
0010	203+19	-	203+24	STH 49	2	
0010	304+07	-	310+65	STH 23	8	
TOTAL 0010					65	

PWL TABLE								
Location	Station	Mixture Use	Underlying Surface	Bid Item	Tons	Thickness	Quality Management Program to be used for:	
							Mixture Acceptance	Density Acceptance
12-Ft Driving Lanes - STH 23	210+73 - 277+76	Upper Layer	Milled Existing HMA Surface	4 MT 58-28 S	2,254	2.25"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
Shoulders, Bypass Lane, Turn Lane, & Side Roads - STH 23	210+73 - 277+76	Upper Layer	Milled Existing HMA Surface	4 MT 58-28 S	2,120	2.25"	PWL Incentive Air Voids HMA Pavement 460.2010	Department Acceptance (SS 460.3.3.2) *Not eligible for incentive
12-Ft WB Passing Lane - STH 23	251+12 - 277+76 294+06 - 294+56	Upper Layer	Milled Existing HMA Surface	4 MT 58-28 S	457	2.25"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
12-Ft Driving Lanes - STH 23	277+76 - 283+11 287+13 - 294+06	Lower Layer	Milled Existing HMA Surface	4 MT 58-28 S	322	1.75"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density HMA Pavement 460.2000
12-Ft Driving Lanes - STH 23	277+76 - 283+11 287+13 - 294+06	Upper Layer	4 MT 58-28 S	4 MT 58-28 S	414	2.25"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
12-Ft WB Passing Lane - STH 23	277+76 - 283+11 287+13 - 294+06	Lower Layer	Milled Existing HMA Surface	4 MT 58-28 S	161	1.75"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density HMA Pavement 460.2000
12-Ft WB Passing Lane - STH 23	277+76 - 283+11 287+13 - 294+06	Upper Layer	4 MT 58-28 S	4 MT 58-28 S	207	2.25"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
Shoulders & Median - STH 23	277+76 - 283+59 287+13 - 294+06	Lower Layer	Milled Existing HMA Surface/Base Aggregate	4 MT 58-28 S	317	1.75"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density HMA Pavement 460.2000
Shoulders & Median - STH 23	277+76 - 283+59 287+13 - 294+06	Upper Layer	4 MT 58-28 S	4 MT 58-28 S	406	2.25"	PWL Incentive Air Voids HMA Pavement 460.2010	Department Acceptance (SS 460.3.3.2) *Not eligible for incentive
12-Ft Driving Lanes - STH 23	294+06 - 457+77	Upper Layer	Milled Existing HMA Surface	4 MT 58-28 S	5,500	2.25"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
Shoulders, Bypass Lane, Turn Lane, & Side Roads - STH 23	294+06 - 457+77	Upper Layer	Milled Existing HMA Surface	4 MT 58-28 S	3,873	2.25"	PWL Incentive Air Voids HMA Pavement 460.2010	Department Acceptance (SS 460.3.3.2) *Not eligible for incentive
12-Ft Driving Lanes, Shoulders, Bypass Lane, Turn Lane - CTH A	102+52 - 106+49	Upper Layer	Milled Existing HMA Surface	4 MT 58-28 S	1,139	2.25"	PWL Incentive Air Voids HMA Pavement 460.2010	Department Acceptance (SS 460.3.3.2) *Not eligible for incentive
12-Ft Driving Lanes, Shoulders, Bypass Lane, Turn Lane - STH 49	200+57 - 209+62	Upper Layer	Milled Existing HMA Surface	4 MT 58-28 S	830	2.25"	PWL Incentive Air Voids HMA Pavement 460.2010	Department Acceptance (SS 460.3.3.2) *Not eligible for incentive
Project	10+00 - 267+00	Patching	Base Aggregate	Asphaltic Surface	57	Varies	(SS 465)	Ordinary Compaction (SS 450.3.2.6.2)
Project	10+00 - 267+00	Patching	Base Aggregate	Asphaltic Surface Patching	50	Varies	(SS 465)	Ordinary Compaction (SS 450.3.2.6.2)

TEMP CULVERTS								
520.1024 520.2024 SPV.0060.04								
APRON ENDWALLS CULVERT PIPE SPECIAL (04. TEMPORARY								
FOR CULVERT PIPE TEMPORARY CULVERT PIPE								
24-INCH 24-INCH CONNECTION 24-INCH)								
CATEGORY	STATION	TO	STATION	LOCATION	EACH	LF	EACH	REMARKS
0010	346+00	-	348+50	STH 23	1	16	1	FOREST RIDGE RD CURB RAMPS
0010	430+50	-	432+50	STH 23	1	28	1	BROOKLYN J RD CURB RAMPS
TOTAL 0010					2	44	2	

GRADING FOR TEMPORARY PEDESTRIAN ACCESS ROUTE (FOR INFORMATION ONLY QUANTITIES)								
205.0100** 208.0100** 305.0120**								
EXCAVATION BASE AGGREGATE								
COMMON BORROW DENSE 1 1/4-INCH								
CATEGORY	STATION	TO	STATION	LOCATION	CY	CY	TON	REMARKS
0010	314+57	-	315+38	STH 23	--	30	25	BUSSE RD
0010	332+67	-	333+38	STH 23	40	--	22	KDR CT
0010	346+36	-	347+06	STH 23	--	57	23	FOREST RIDGE RD
0010	430+92	-	431+68	STH 23	--	85	33	BROOKLYN J RD
0010	455+85	-	456+16	STH 23	5	1	9	CTH PP
TOTAL 0010					45	173	112	

** FOR INFORMATION ONLY
1.25 EXPANSION FACTOR FOR ESTIMATED BORROW VOLUMES

CURB RAMPS																			
* * * * *																			
204.0100 204.0110 204.0150 204.0155 465.0105 601.0415 601.0557 601.0600 602.0410 602.0505 602.0605 620.0300 690.0150 690.0250 SPV.0060.02																			
REMOVING REMOVING REMOVING REMOVING CONCRETE CONCRETE CURB RAMP CURB RAMP																			
CONCRETE ASPHALTIC CULB & CONCRETE ASPHALTIC 6-INCH SLOPED 6-INCH SLOPED CONCRETE CONCRETE DETECTABLE DETECTABLE CONCRETE																			
PAVEMENT SURFACE GUTTER SIDEWALK SURFACE 30-INCH TYPE J 36-INCH TYPE D PEDESTRIAN 5-INCH YELLOW YELLOW NOSE SAWING SAWING PEDESTRIAN																			
CATEGORY	STATION	TO	STATION	LOCATION	SY	SY	LF	SY	TON	LF	LF	LF	SF	SF	SF	SF	LF	LF	EACH
0010	266+80	-	266+97	STH 23	--	--	25	--	3	--	25	--	132	10	--	--	36	6	--
0010	303+82	-	304+15	STH 23	--	8	9	--	3	--	33	21	271	20	--	--	35	3	--
0010	303+82	-	304+15	STH 23	14	14	32	8	5	--	32	8	40	--	--	71	68	10	--
0010	303+82	-	304+15	STH 23	13	13	28	9	5	24	4	25	95	40	--	77	64	20	--
0010	303+82	-	304+15	STH 23	--	7	27	--	3	--	27	17	198	--	24	--	32	6	--
0010	314+57	-	315+38	STH 23	--	--	--	15	4	--	--	--	376	40	--	--	20	--	2
0010	332+67	-	333+38	STH 23	--	--	--	14	3	--	--	--	495	40	--	--	20	--	2
0010	346+36	-	347+06	STH 23	--	--	--	14	3	--	--	--	364	40	--	--	20	--	2
0010	430+92	-	431+68	STH 23	--	--	--	13	3	--	--	--	409	40	--	--	20	--	2
0010	455+85	-	456+16	STH 23	--	18	33	7	6	--	33	--	200	20	--	--	48	6	1
TOTAL 0010					27	60	154	80	38	24	154	71	2,580	250	24	148	363	51	9

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

EROSION CONTROL

					625.0100	628.1504	628.1520	628.1905	628.1910	628.2008	628.7555	629.0210	630.0130	630.0200	630.0500	REMARKS	
								MOBILIZATIONS	MOBILIZATIONS	EROSION MAT			SEEDING				
					TOPSOIL	SILT FENCE	SILT FENCE MAINTENANCE	EROSION CONTROL	EMERGENCY EROSION CONTROL	URBAN CLASS I TYPE B	CULVERT PIPE CHECKS	FERTILIZER TYPE B	MIXTURE NO. 30	SEEDING TEMPORARY	SEED WATER		
CATEGORY	STATION	TO	STATION	LOCATION	SY	LF	LF	EACH	EACH	SY	EACH	CWT	LB	LB	MGAL		
0010	266+80	-	266+97	STH 23	24	--	--	--	--	24	--	0.1	1.1	0.9	0.6	THRASHER DR	
0010	277+00		303+00	STH 23	--	3,930	3,930	--	--	--	--	--	--	--	--	TURTLE EXCLUSION FENCING	
0010	303+82	-	304+15	STH 23	63	86	86	--	--	63	--	0.1	2.9	2.2	1.5	STH 49/23/CTH A	
0010	314+57	-	315+38	STH 23	135	87	87	--	--	135	--	0.1	6.1	4.6	3.1	BUSSE DR	
0010	332+67	-	333+38	STH 23	115	61	61	--	--	115	--	0.1	5.2	3.9	2.6	KDR CT	
0010	346+36	-	347+06	STH 23	143	121	121	--	--	143	6	0.1	6.5	4.9	3.3	FOREST RIDGE RD	
0010	430+92	-	431+68	STH 23	288	115	115	--	--	288	2	0.2	13.0	9.8	6.6	BROOKLYN J RD	
0010	455+85	-	456+16	STH 23	41	45	45	--	--	41	--	0.1	1.9	1.5	1.0	CTH PP	
0010	PROJECT				STH 23	191	135	135	4	2	191	2	0.2	9.3	7.2	4.3	UNDISTRIBUTED
TOTAL 0010					1,000	4,580	4,580	4	2	1,000	10	1	46.0	35.0	23		

STORM SEWER

						520.8700	606.0200	633.5200	645.0120	SPV.0060.01
						CLEANING	RIPRAP	MARKERS	GEOTEXTILE	SPECIAL (01.
						CULVERT PIPES	MEDIUM	CULVERT END	TYPE HR	CLEANING INLETS)
CATEGORY	STATION	OFFSET	LOCATION			EACH	CY	EACH	SY	EACH
0010	216+50	16 LT	STH 23			--	--	--	--	1
0010	217+78	70 RT	STH 23			--	4	--	--	--
0010	220+56	41 RT	STH 23			1	--	--	--	--
0010	227+81	57 RT	STH 23			--	4	1	--	--
0010	253+70	50 RT	STH 23			1	--	--	--	--
0010	279+19	68 RT	STH 23			--	4	--	--	--
0010	294+31	1 LT	STH 23			--	--	--	--	1
0010	294+35	27 LT	STH 23			--	--	--	--	1
0010	295+19	80 LT	STH 23			1	--	--	--	--
0010	296+34	103 LT	STH 23			--	--	1	--	--
0010	296+41	117 LT	STH 23			--	13	1	36	--
0010	304+00	74 RT	STH 23			--	--	1	--	--
0010	310+63	1 LT	STH 23			--	--	--	--	1
TOTAL 0010						3	25	4	36	4

SIGNS

						634.0618	637.2210	638.2102	638.2602	638.3000
						POSTS WOOD 4X6-	SIGNS TYPE II	MOVING	REMOVING	REMOVING
						SIGN SIZE	INCH X 18-FT	REFLECTIVE H	SIGNS TYPE II	SIGNS TYPE II
CATEGORY	SIGN NO	SIGN CODE	W (IN) X H (IN)			EACH	SF	EACH	EACH	EACH
0010	1	R10-50L	30" X 36"			--	--	--	1	--
0010	2	R10-50L	30" X 36"			--	--	--	1	--
0010	3	R10-50L	30" X 36"			--	--	--	1	--
0010	4	J2-3	72" X 57"			2	--	1	1	2
0010	5	R10-3EL	9" X 15"			--	0.94	--	--	--
0010	6	R6-2L	24" X 30"			--	5.00	--	--	--
0010	7	R10-50L	30" X 36"			--	--	--	1	--
0010	8	R10-3ED	9" X 15"			--	0.94	--	--	--
0010	9	R10-3ER	9" X 15"			--	0.94	--	--	--
0010	10	J2-2	48" X 57"			2	--	1	--	2
TOTAL 0010						4	7.82	2	5	4

COVERING SIGNS

							643.0920	
							TRAFFIC CONTROL	
							COVERING SIGNS TYPE II	
CATEGORY	STATION	TO	STATION	LOCATION	NO SIGNS**	NO CYCLES**	EACH	REMARKS
0010	266+75	-	267+75	STH 23	1	1	1	THRASHER
0010	291+00	-	315+50	STH 23	9	1	9	SIGNAL WORK
0010	292+50	-	315+50	STH 23	5	3	15	STH 49/CTH A CURB RAMPS
0010	455+50	-	456+50	STH 23	1	1	1	CTH PP
TOTAL 0010							26	

** FOR INFORMATION ONLY

TRAFFIC CONTROL

			643.0300		643.0420		643.0705		643.0715		643.0900		643.1000	644.1440		644.1601		644.1605	644.1810						
					TRAFFIC CONTROL		TRAFFIC CONTROL BARRICADES		TRAFFIC CONTROL WARNING		TRAFFIC CONTROL WARNING		TRAFFIC CONTROL SIGNS		TRAFFIC CONTROL SIGNS FIXED MESSAGE		TEMPORARY PEDESTRIAN		TEMPORARY PEDESTRIAN		TEMPORARY PEDESTRIAN				
			DURATION		DRUMS		TYPE III		LIGHTS TYPE A		LIGHTS TYPE C		SIGNS		SF		SURFACE MATTING		CURB RAMP		FIELD				
CATEGORY	STATION	TO STATION	LOCATION	DAYS**	EACH**	DAY	EACH**	DAY	EACH**	DAY	EACH**	DAY	EACH**	DAY	SF	SF	EACH**	DAY	SF	LF	REMARKS				
0010	PROJECT		STH 23	70	--	--	--	--	--	--	--	--	20	1,421	54	--	--	--	--	--	MAINLINE ADV WARNING				
0010	PROJECT		STH 23	70	--	--	--	--	--	--	--	--	12	840	--	--	--	--	--	--	SIDE ROAD ADV WARNING				
0010	PROJECT		STH 23	15	--	--	--	--	--	--	--	--	34	510	--	--	--	--	--	--	ADV WARNING WIDTH RESTRICTION				
0010	266+50	- 267+50	STH 23	5	9	45	1	5	--	--	5	25	10	50	--	--	--	--	--	24	THRASHER DR CURB RAMP				
0010	292+50	- 315+50	STH 23	10	73	730	6	60	12	120	33	330	16	160	--	--	--	--	--	--	STH 49/CTH A CURB RAMPS				
0010	314+25	- 316+50	STH 23	5	29	145	--	--	--	--	6	30	7	35	--	675	--	--	32	216	BUSSE DR CURB RAMPS				
0010	332+50	- 335+00	STH 23	5	40	200	--	--	--	--	11	55	7	35	--	585	--	--	32	198	KDR CT CURB RAMPS				
0010	346+00	- 348+50	STH 23	5	43	215	--	--	--	--	11	55	7	35	--	610	--	--	32	204	FOREST RIDGE RD CURB RAMPS				
0010	430+50	- 432+50	STH 23	5	46	230	--	--	--	--	11	55	7	35	--	882	--	--	32	264	BROOKLYN J RD CURB RAMPS				
0010	455+30	- 456+50	STH 23	5	24	120	1	5	--	--	5	25	9	45	--	232	1	5	16	102	CTH PP CURB RAMP				
0010	291+00	- 315+50	STH 23	5	100	500	13	65	26	130	29	145	32	160	--	--	--	--	--	--	SIGNAL WORK				
0010	217+78	- 296+41	STH 23	4	12	48	--	--	--	--	6	24	5	20	--	--	--	--	--	--	RIPRAP INSTALL				
0010	252+72	- 300+00	STH 23	7	54	378	5	35	10	70	--	--	7	49	--	--	--	--	--	--	WB OUTSIDE LANE CLOSURE				
0010	PROJECT		STH 23	--	--	289	--	15	--	30	--	81	--	345	--	--	--	--	--	--	UNDISTRIBUTED				
TOTAL 0010						2,900		185		350		825		3,740		54		2,984		5		144		1,008	

** FOR INFORMATION ONLY

TEMP MARKING

			643.3165				643.3180				643.3265		643.3270		643.3850			646.9000			
			TEMPORARY MARKING LINE PAINT 6-INCH				TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH				TEMPORARY MARKING LINE PAINT 10-INCH		TEMPORARY MARKING LINE EPOXY 10-INCH		TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH			MARKING REMOVAL LINE 4-INCH			
			SOLID WHITE		4'SKIPS YELLOW		SOLID YELLOW				SOLID WHITE		SOLID WHITE		SOLID WHITE						
CATEGORY	STATION	TO STATION	LOCATION	LF	LF	LF	LF	LF			LF	LF	LF	LF	LF	LF	LF	LF			REMARKS
0010	210+73	- 223+49	STH 23	2,533	--	1,884	--	--			710		710		--		--	--			
0010	223+49	- 224+64	STH 23	66	--	--	--	--			--		--		--		--	--			
0010	224+64	- 266+66	STH 23	8,131	282	19,964	--	90			1,083		1,083		4		--	90			
0010	266+66	- 283+42	STH 23	3,280	272	4,474	--	--			--		--		--		--	--			
0010	283+42	- 286+72	STH 23	--	--	--	--	--			--		--		--		--	--			BRIDGE
0010	286+72	- 302+25	STH 23	2,853	180	4,860	--	--			1,191		1,191		--		--	--			
0010	95+13	- 106+54	CTH A	--	216	2,632	--	--			--		--		--		--	--			
0010	200+26	- 209+62	STH 49	1,537	--	4,262	--	--			627		627		--		--	--			
0010	303+75	- 346+69	STH 23	8,294	--	3,340	428	--			1,350		1,350		--		--	--			
0010	346+69	- 378+40	STH 23	6,148	60	7,352	344	--			400		400		--		--	--			
0010	378+40	- 401+90	STH 23	4,577	40	9,380	--	--			200		200		--		--	--			
0010	401+90	- 431+31	STH 23	5,771	46	10,402	104	--			--		--		--		--	--			
0010	431+31	- 456+30	STH 23	4,778	20	156	404	--			401		401		--		--	--			
0010	456+30	- 457+77	STH 23	172	--	294	24	250			71		71		5		--	250			
			SUBTOTAL	48,140	1,116	69,000	1,304	340			6,033		6,033		9		--	340			
			TOTAL 0010			119,560		340			6,033		6,033		9		--	340			

3

3

CATEGORY STATION TO STATION LOCATION					646.2020				646.2025				646.2040				646.4020			646.4040			646.4720			646.5020		646.5120		646.6120		646.7120		646.7420		646.8120		646.8220		REMARKS	
					MARKING LINE GROOVED				MARKING LINE GROOVED				MARKING LINE			MARKING LINE			MARKING LINE SAME					MARKING		MARKING		MARKING													
					MARKING LINE EPOXY 6-INCH				BLACK EPOXY 6-INCH				WET REF EPOXY 6-INCH				EPOXY 10-INCH			GROOVED WET			DAY EPOXY 6-INCH			MARKING		MARKING		STOP LINE		DIAGONAL		CROSSWALK		MARKING		ISLAND			
					12.5'		3'		SOLID		12.5'		SOLID		12.5'		3'		SOLID		10-INCH		REF EPOXY		12.5'		ARROW		WORD		EPOXY		EPOXY		EPOXY		CURB		NOSE		
					SOLID	SKIPS	SKIP	YELLOW	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE		
WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE							
LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF							
0010	210+73	-	223+49	STH 23	--	--	--	--	--	2,533	--	--	2,913	--	--	--	--	710	--	--	--	2	4	--	36	--	--	--	40	2											
0010	223+49	-	224+64	STH 23	66	--	--	220	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	78	67	--	--	--	--	--	--	--	--								
0010	224+64	-	266+66	STH 23	--	--	--	--	439	8,131	439	--	12,290	--	--	--	--	1,083	--	--	--	6	3	--	1,131	--	--	--	52	2											
0010	266+66	-	283+42	STH 23	--	--	--	138	422	3,280	422	--	4,325	--	--	--	--	--	--	--	--	2	1	32	171	--	--	--	33	2											
0010	283+42	-	286+72	STH 23	662	83	--	662	83*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	BRIDGE							
0010	286+72	-	302+25	STH 23	--	--	--	--	281	2,853	281	--	3,965	--	63	--	--	1,191	--	--	--	4	2	38	251	--	--	--	97	3											
0010	95+13	-	106+54	CTH A	--	--	45	--	--	--	--	--	--	--	1,261	55	--	--	1,420	338	2,025	14	1	24	--	--	--	30	3												
0010	200+26	-	209+62	STH 49	--	--	--	--	--	1,537	--	30	2,616	--	--	--	--	627	--	--	--	5	1	24	383	--	--	--	47	3											
0010	303+75	-	346+69	STH 23	--	--	--	77	--	8,294	--	19	3,653	668	60	--	--	1,350	--	--	--	4	2	63	60	146	--	--	24	3											
0010	346+69			STH 23	147	--	--	318	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	62	--	--	--	--	--	--	--	--	FOREST RIDGE RD								
0010	346+69	-	378+40	STH 23	--	--	--	--	93	6,148	93	--	3,676	537	--	--	--	400	--	--	--	4	2	--	--	--	--	--	--	--	--	--	--								
0010	378+40			STH 23	42	--	--	126	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--	--	--	--	--	--	--	EASTWIND RD								
0010	378+40	-	401+90	STH 23	--	--	--	--	63	4,577	63	--	4,690	--</																											

				650.8000	650.9000
				CONSTRUCTION STAKING	CONSTRUCTION
CATEGORY	STATION	TO	STATION	RESURFACING LF	STAKING CURB EACH
0010	PROJECT		STH 23	24,304	12
TOTAL 0010				24,304	12

3

3

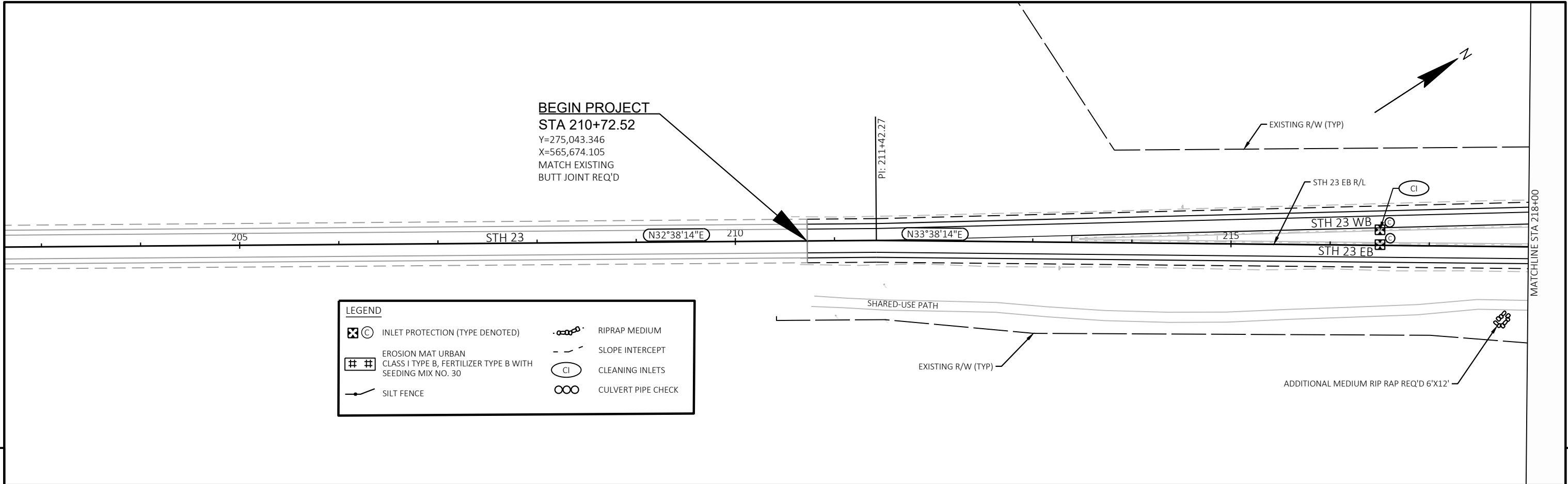
FACES			
		658.0173	658.0416
		TRAFFIC	PEDESTRIAN
		SIGNAL FACE	SIGNAL FACE
SIGNAL	SIGNAL	3S-12 INCH	16-INCH
BASE NO.	HEAD NO.	EACH	EACH
SB1	8-1	--	1
SB1	1C	1	--
SB2	1B	1	--
SB3	5A	1	--
SB4	8-2	--	1
SB5	7C	1	--
SB6	3A	1	--
SB6	7B	1	--
SB8	5C	1	--
SB9	5B	1	--
SB10	1A	1	--
SB12	3C	1	--
SB13	3B	1	--
SB13	7A	1	--
TOTAL		12	2

TRAFFIC SIGNAL MOUNTING HARDWARE	
	658.5070.01
	SIGNAL
	MOUNTING
	HARDWARE
LOCATION	EACH
STH 23 & STH 49/CTH A	1
TOTAL	1

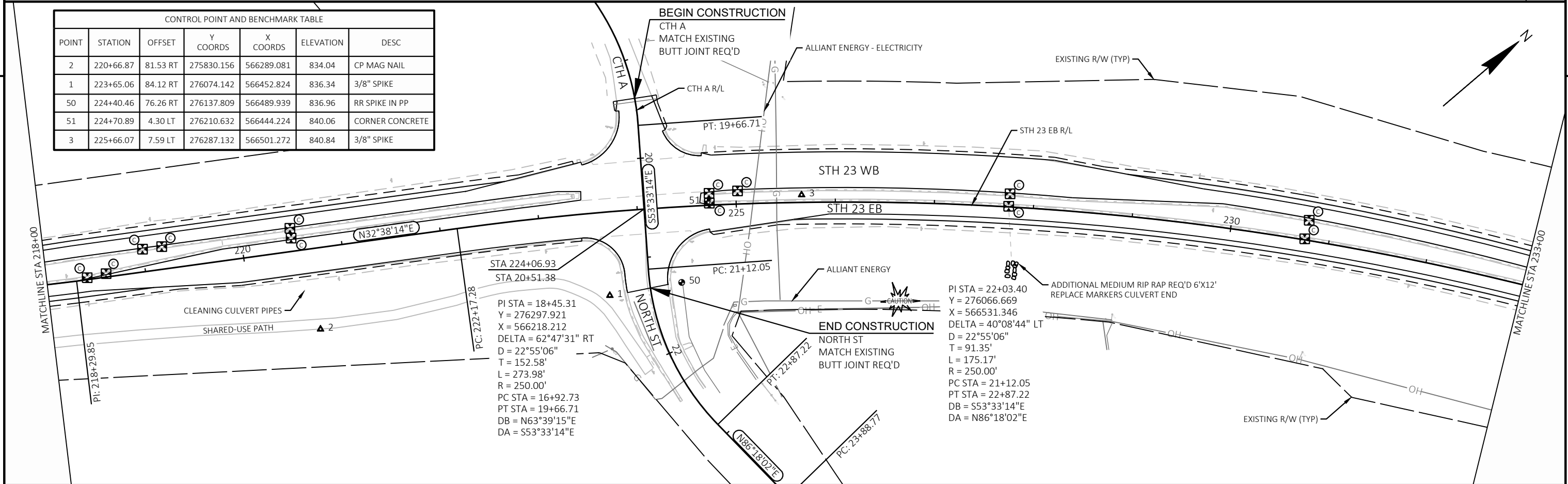
MODIFY TRAFFIC SIGNALS	
	SPV.0060.01
	MODIFY
	TRAFFIC
	SIGNALS
LOCATION	EACH
STH 23 & STH 49/CTH A	1
TOTAL	1

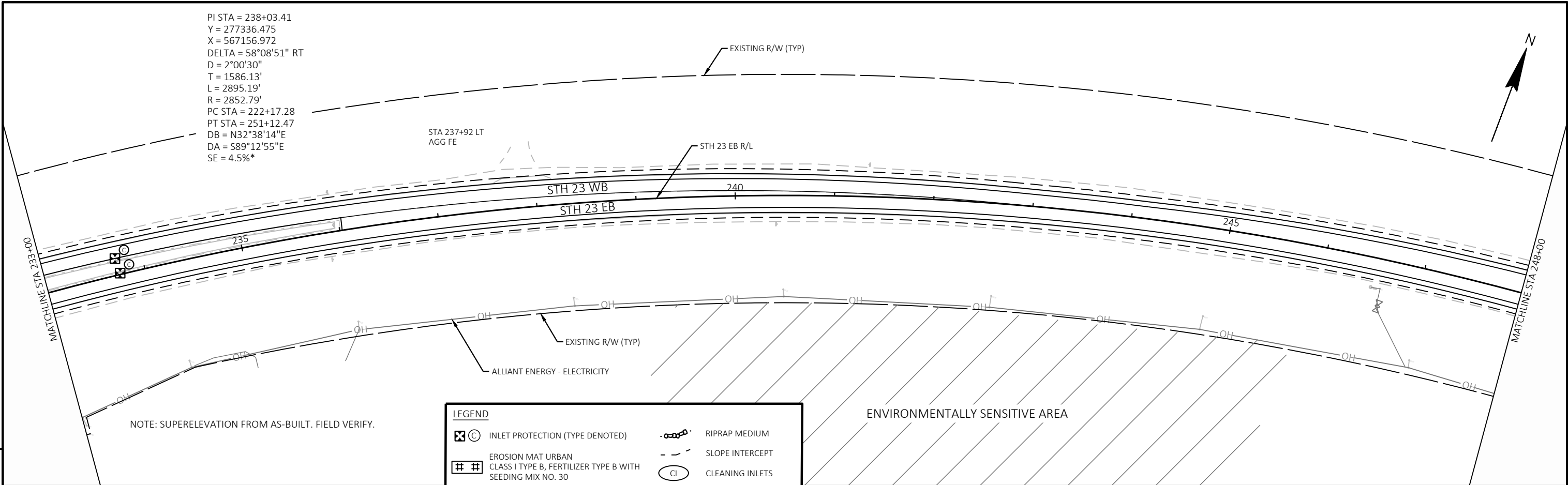
PUSH BUTTONS	
	658.0500
	PEDESTRIAN
	PUSH
SIGNAL	BUTTONS
BASE NO.	EACH
SB1	1
SB3	1
SB4	1
TOTAL	3

ALL ITEMS ARE CATEGORY 0020



CONTROL POINT AND BENCHMARK TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESC
2	220+66.87	81.53 RT	275830.156	566289.081	834.04	CP MAG NAIL
1	223+65.06	84.12 RT	276074.142	566452.824	836.34	3/8" SPIKE
50	224+40.46	76.26 RT	276137.809	566489.939	836.96	RR SPIKE IN PP
51	224+70.89	4.30 LT	276210.632	566444.224	840.06	CORNER CONCRETE
3	225+66.07	7.59 LT	276287.132	566501.272	840.84	3/8" SPIKE





PI STA = 238+03.41
Y = 277336.475
X = 567156.972
DELTA = 58°08'51" RT
D = 2°00'30"
T = 1586.13'
L = 2895.19'
R = 2852.79'
PC STA = 222+17.28
PT STA = 251+12.47
DB = N32°38'14"E
DA = S89°12'55"E
SE = 4.5%*

NOTE: SUPERELEVATION FROM AS-BUILT. FIELD VERIFY.

LEGEND

INLET PROTECTION (TYPE DENOTED)

EROSION MAT URBAN
CLASS I TYPE B, FERTILIZER TYPE B WITH
SEEDING MIX NO. 30

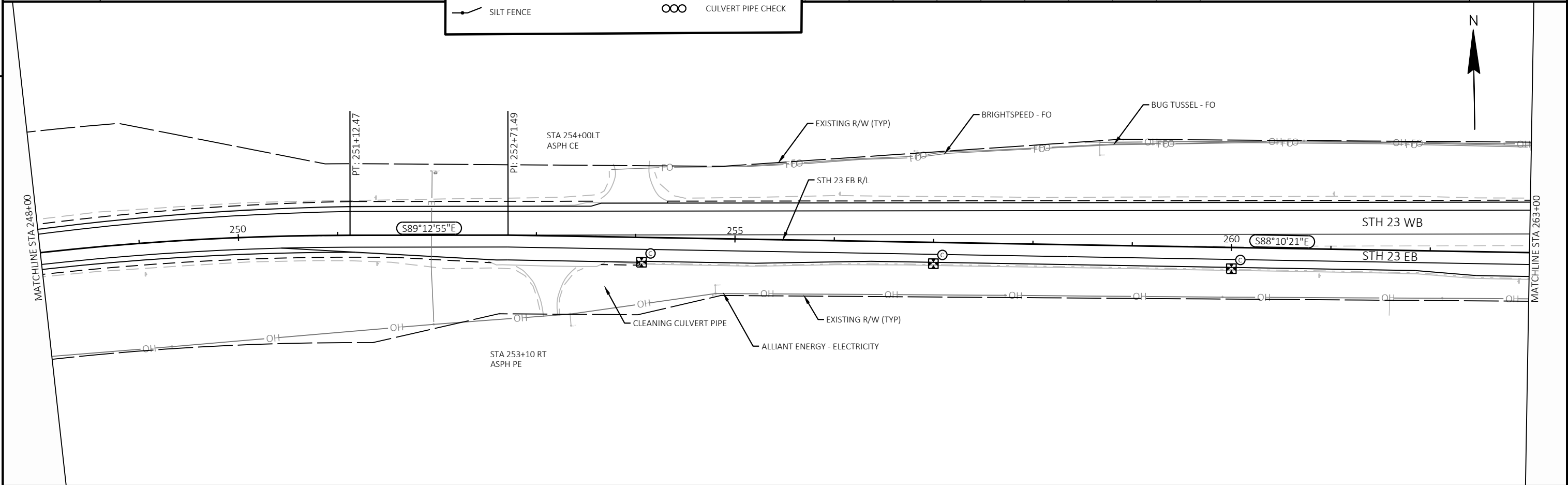
SILT FENCE

RIPRAP MEDIUM

SLOPE INTERCEPT

CLEANING INLETS

CULVERT PIPE CHECK



PROJECT NO: 1430-08-82

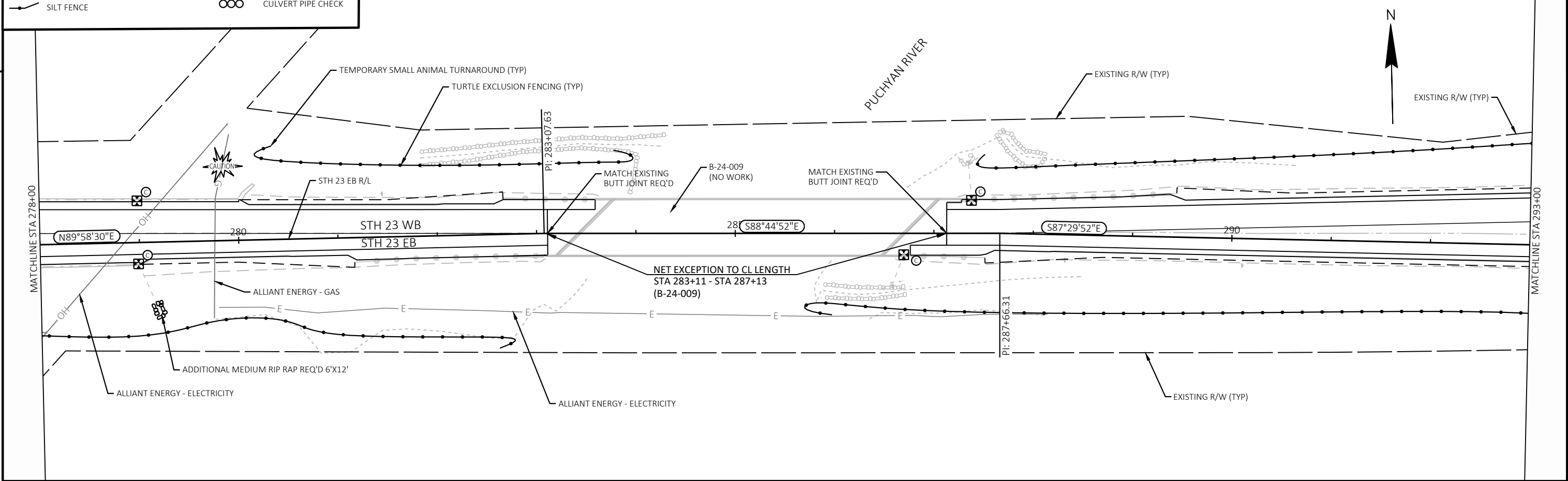
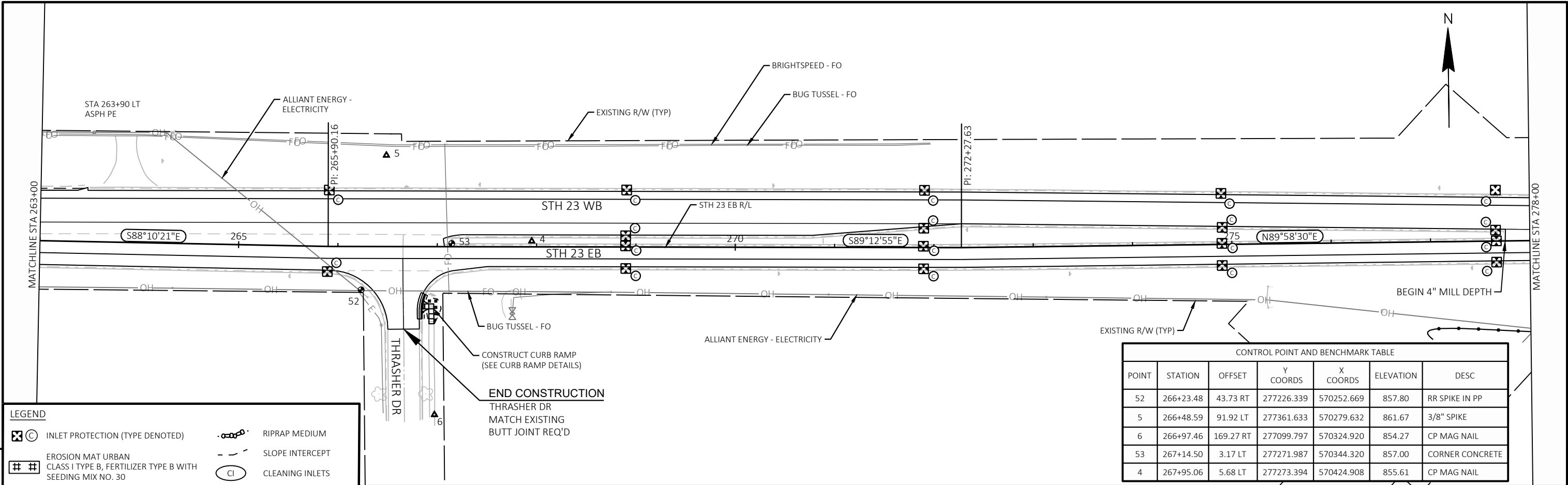
HWY: STH 23

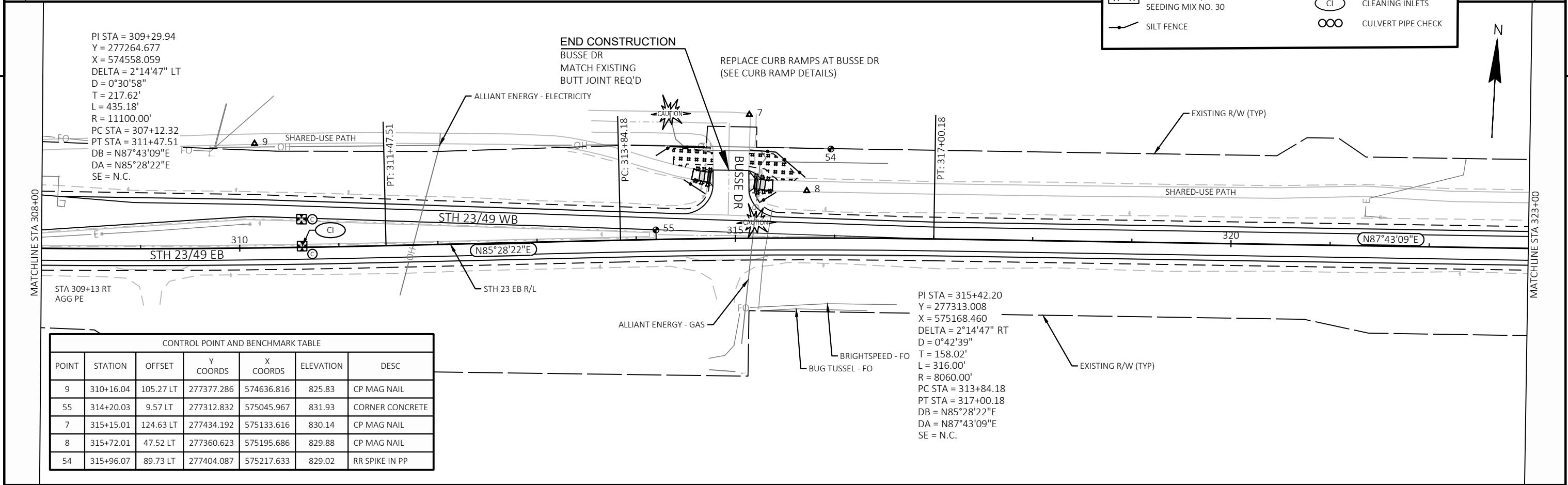
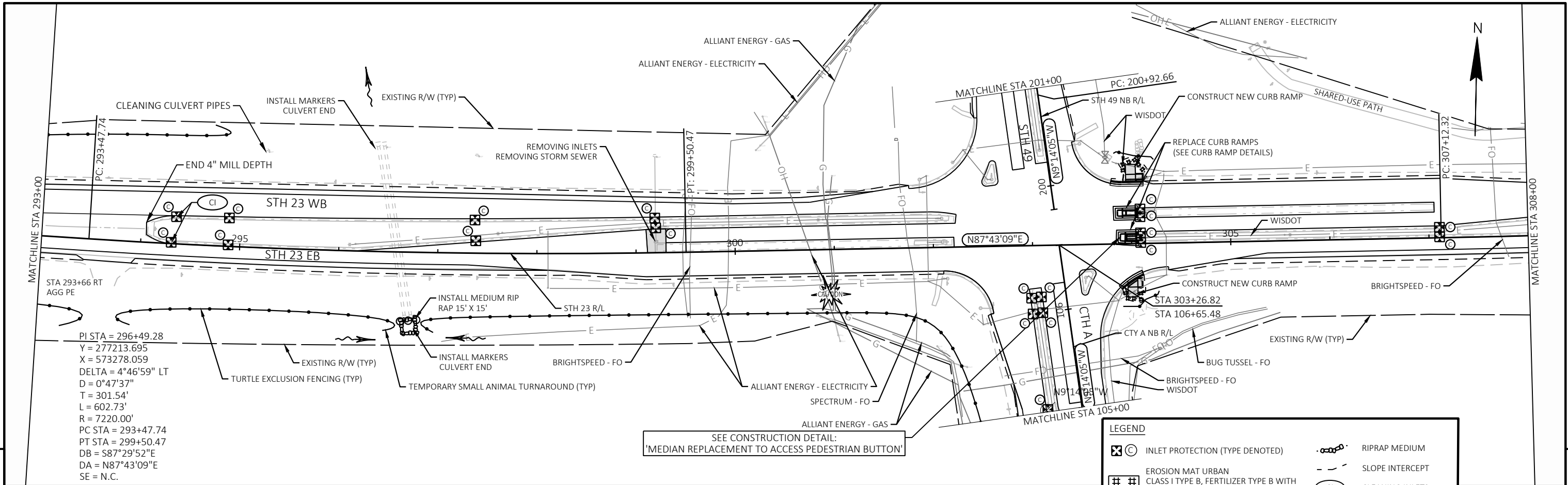
COUNTY: GREEN LAKE

PLAN

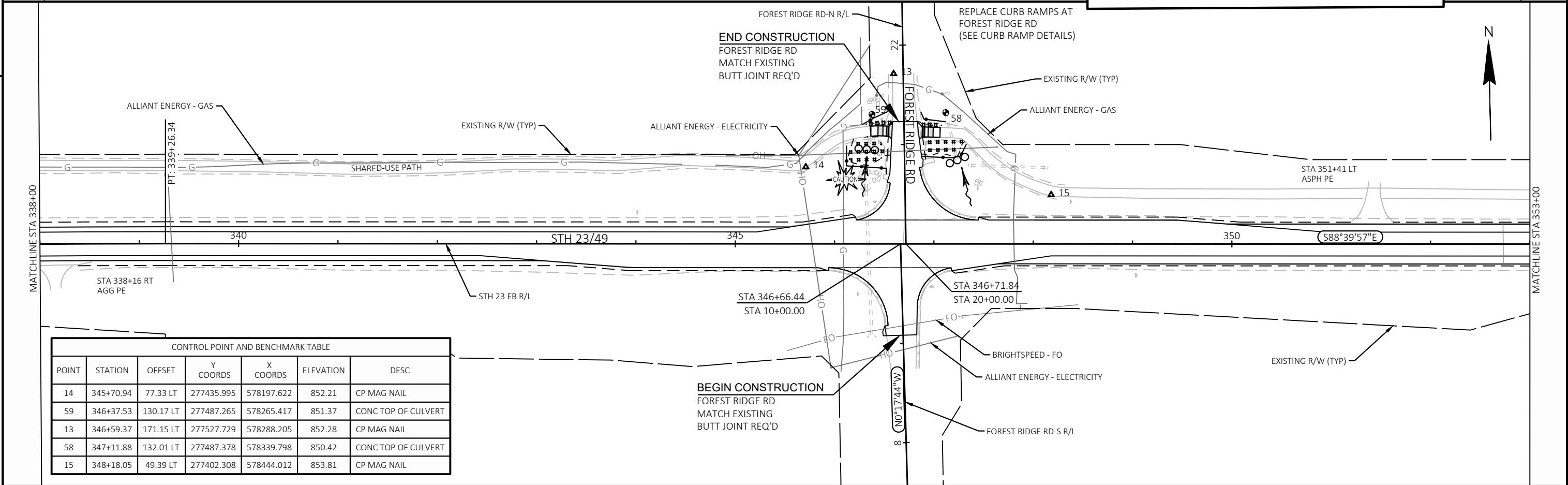
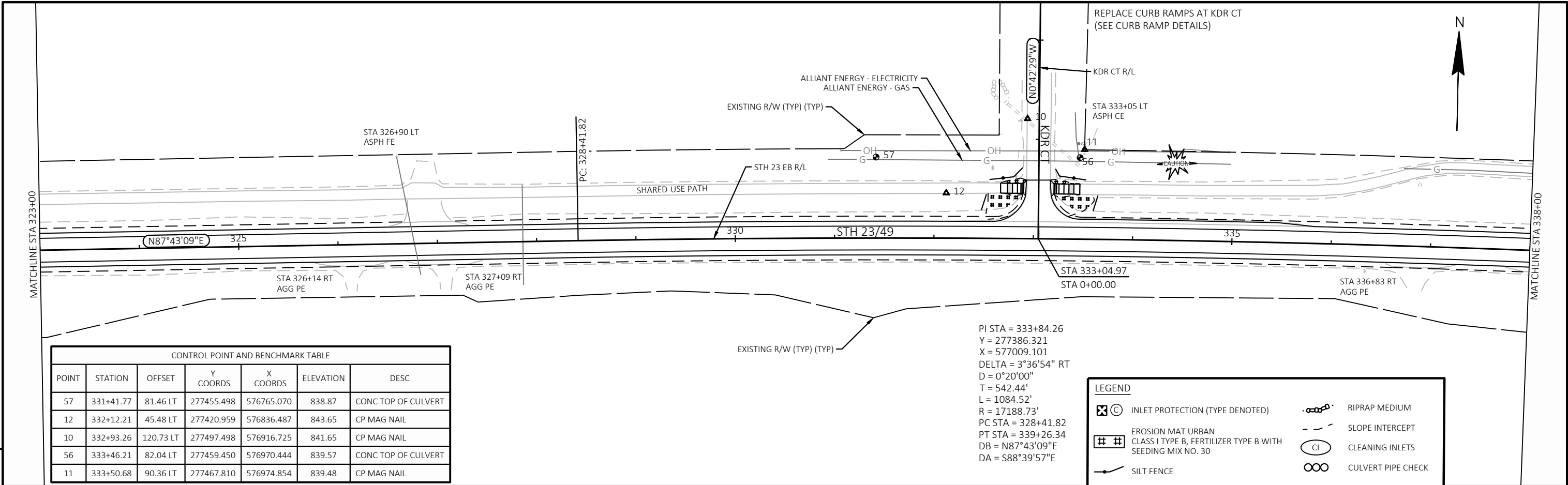
SHEET

E

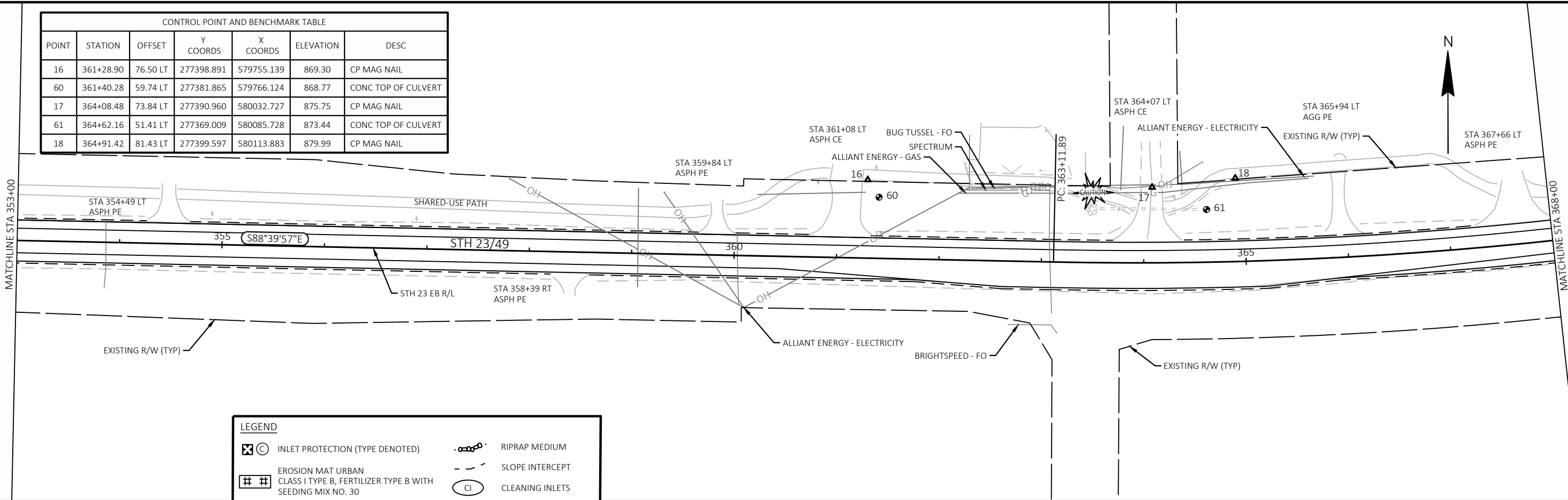




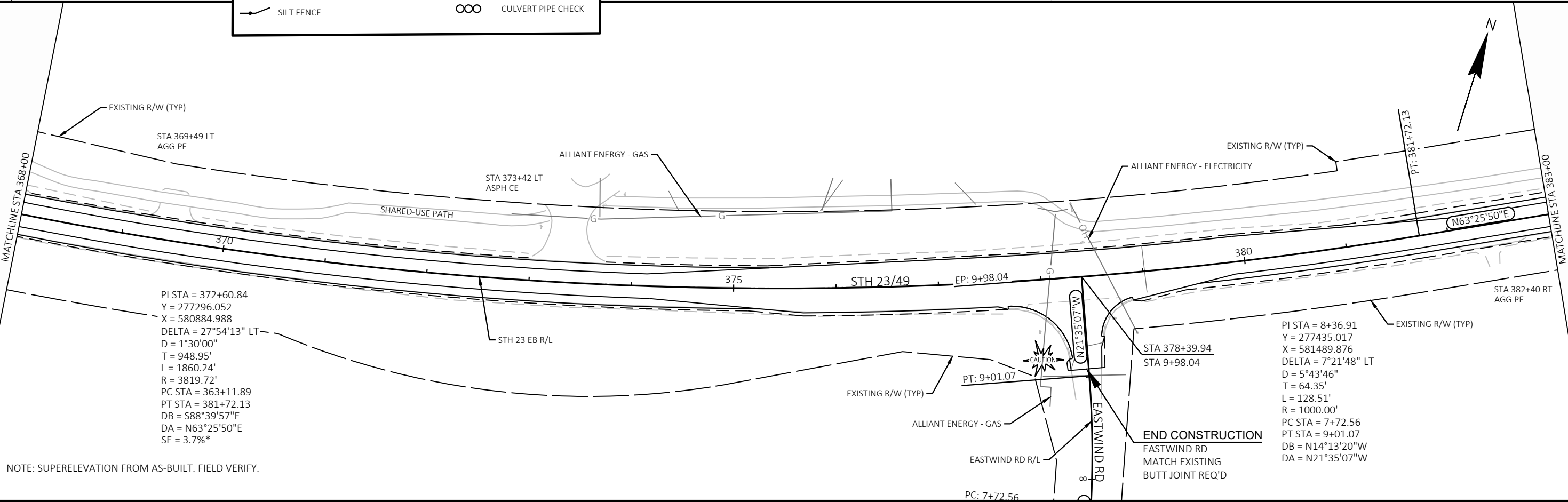
CONTROL POINT AND BENCHMARK TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESC
9	310+16.04	105.27 LT	277377.286	574636.816	825.83	CP MAG NAIL
55	314+20.03	9.57 LT	277312.832	575045.967	831.93	CORNER CONCRETE
7	315+15.01	124.63 LT	277434.192	575133.616	830.14	CP MAG NAIL
8	315+72.01	47.52 LT	277360.623	575195.686	829.88	CP MAG NAIL
54	315+96.07	89.73 LT	277404.087	575217.633	829.02	RR SPIKE IN PP



CONTROL POINT AND BENCHMARK TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESC
16	361+28.90	76.50 LT	277398.891	579755.139	869.30	CP MAG NAIL
60	361+40.28	59.74 LT	277381.865	579766.124	868.77	CONC TOP OF CULVERT
17	364+08.48	73.84 LT	277390.960	580032.727	875.75	CP MAG NAIL
61	364+62.16	51.41 LT	277369.009	580085.728	873.44	CONC TOP OF CULVERT
18	364+91.42	81.43 LT	277399.597	580113.883	879.99	CP MAG NAIL

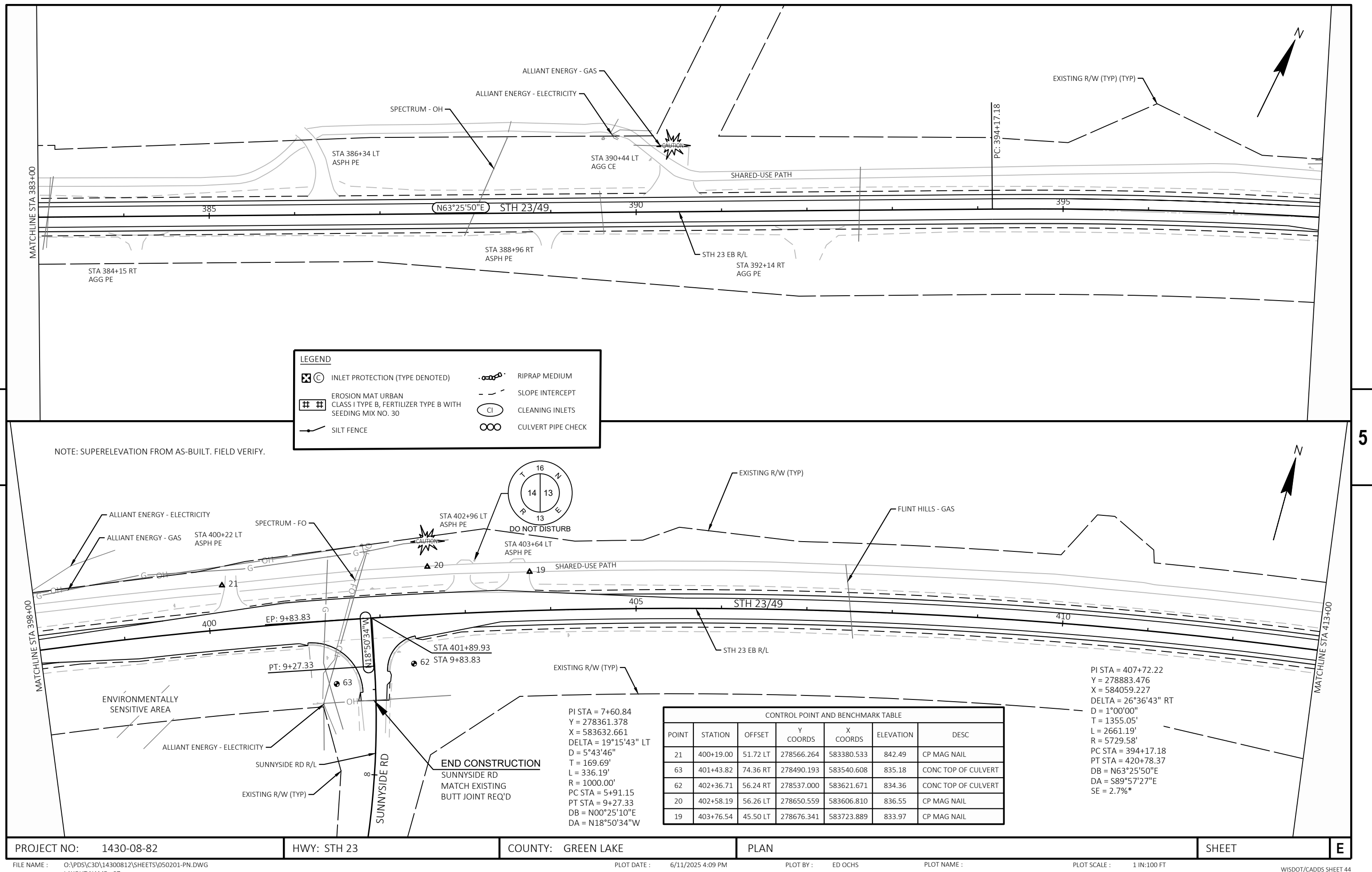


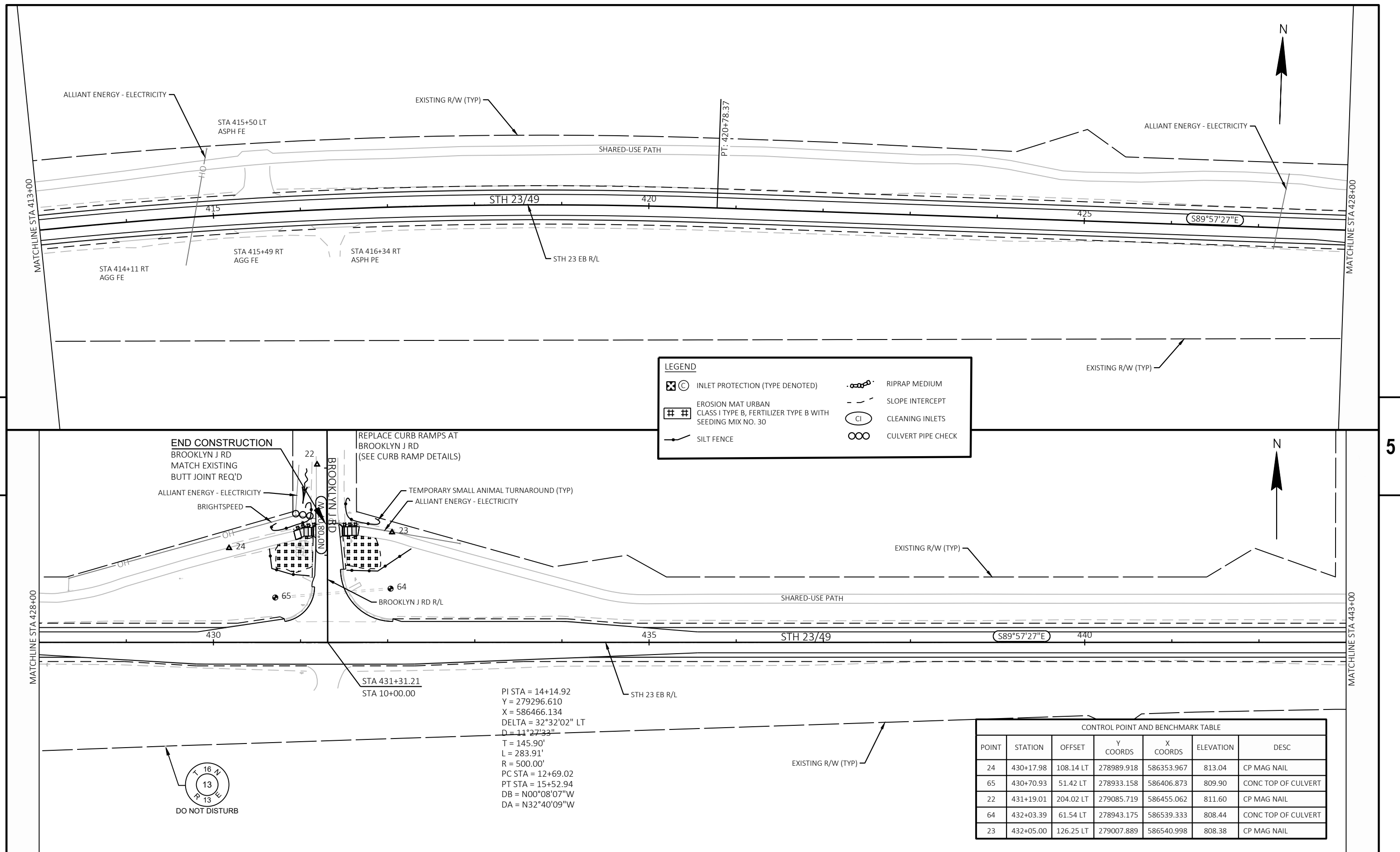
LEGEND			
	INLET PROTECTION (TYPE DENOTED)		RIPRAP MEDIUM
	EROSION MAT URBAN CLASS I TYPE B, FERTILIZER TYPE B WITH SEEDING MIX NO. 30		SLOPE INTERCEPT
	SILT FENCE		CLEANING INLETS
			CULVERT PIPE CHECK

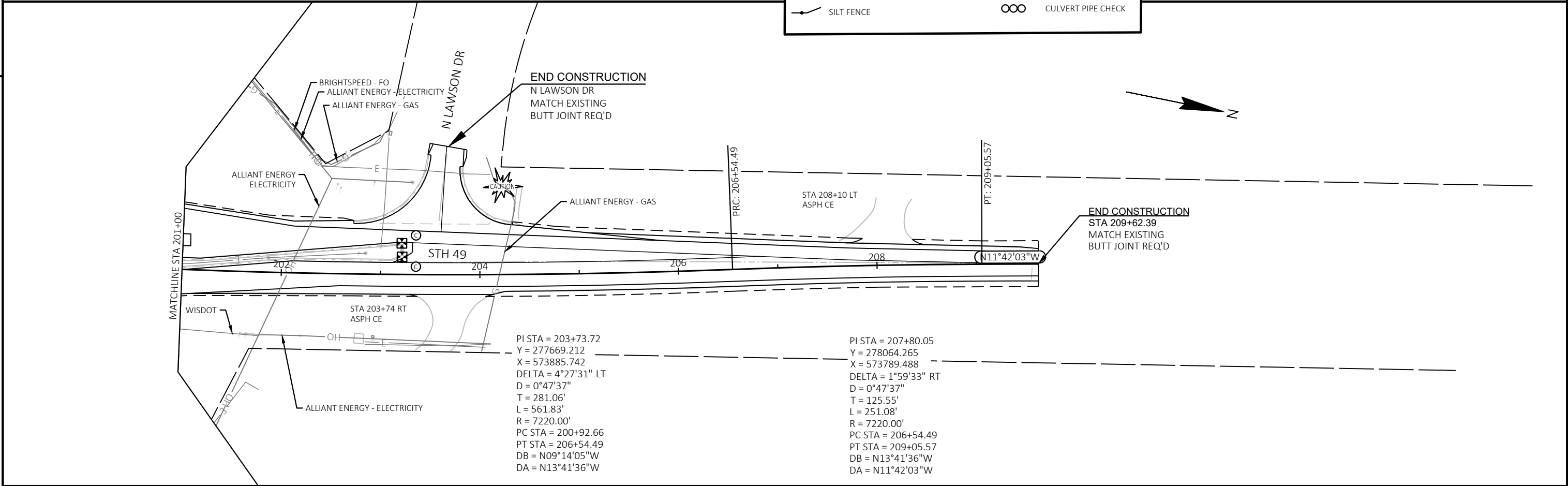
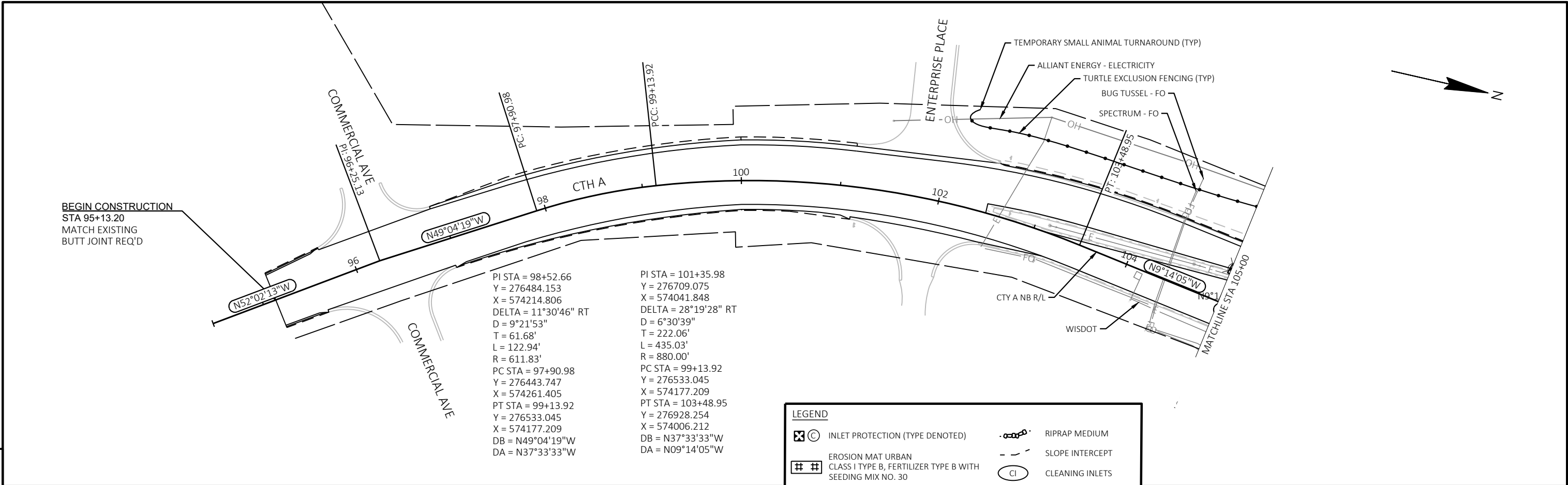


NOTE: SUPERELEVATION FROM AS-BUILT. FIELD VERIFY.

PROJECT NO: 1430-08-82	HWY: STH 23	COUNTY: GREEN LAKE	PLAN	SHEET	E
------------------------	-------------	--------------------	------	-------	---

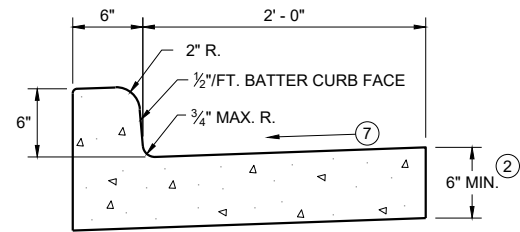




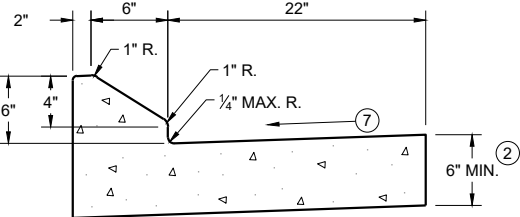


Standard Detail Drawing List

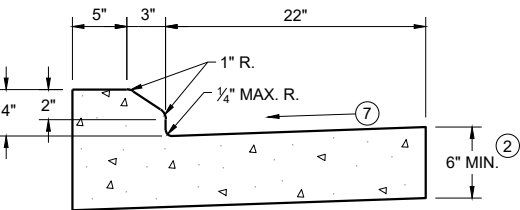
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-21A	CURB RAMPS TYPES 1 AND 1-A
08D05-21B	CURB RAMPS TYPES 2 AND 3
08D05-21C	CURB RAMPS TYPES 4A AND 4A1
08D05-21D	CURB RAMPS TYPE 4B AND 4B1
08D05-21E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-21F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-21G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E07-06	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
11B02-02	CONCRETE MEDIAN NOSE
13A10-03A	SHOULDER RUMBLE STRIPS - ASPHALT
13A10-03E	EDGE LINE RUMBLE STRIPS - ASPHALT
13A10-03G	SHOULDER AND EDGE LINE RUMBLE STRIPS - CROSSINGS, INTERSECTIONS, BRIDGES, DRIVEWAYS
13A10-03H	SHOULDER AND EDGE LINE RUMBLE STRIPS - RAILROAD, PASSING, CLIMBING AND BYPASS LANES
13A11-04A	CENTERLINE RUMBLE STRIPS - ASPHALT
13A11-04D	CENTERLINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAILROADS
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-09F	ADVANCED WIDTH RESTRICTION SIGNING
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C07-16A	PAVEMENT MARKING SYMBOLS
15C07-16B	PAVEMENT MARKING WORDS
15C07-16C	PAVEMENT MARKING ARROWS
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-23C	PAVEMENT MARKING (TURN LANES)
15C08-23D	PAVEMENT MARKING (TURN LANES)
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C12-09B	TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE
15C18-09A	MEDIAN ISLAND MARKINGS
15C18-09B	PAVEMENT MARKINGS, MEDIAN ISLAND NOSE
15C19-09A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C19-09B	MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY
15C21-11	SIGNING AND MARKING FOR TWO LANE TO FOUR LANE DIVIDED TRANSITIONS
15C33-05	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-10A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10G	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10H	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10I	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10J	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10K	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D40-05A	TRAFFIC CONTROL, FULL LANE SHIFT NON-FREEWAY OR MULTILANE DIVIDED 45 MPH AND UNDER
15D40-05B	TRAFFIC CONTROL, FULL LANE SHIFT MULTILANE DIVIDED 50 MPH AND OVER
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D50-03A	TRAFFIC CONTROL, ADDED LANE CLOSURE WITHOUT LANE SHIFT
15D50-03B	TRAFFIC CONTROL, ADDED LANE CLOSURE WITH LANE SHIFT
16A01-07	LANDMARK REFERENCE MONUMENTS AND COVERS



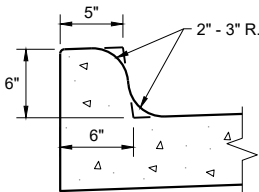
TYPES A^① & D



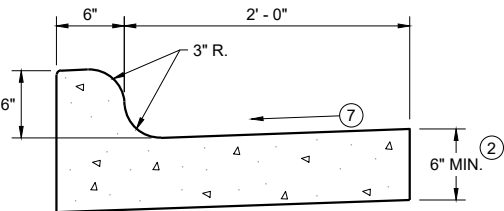
6" SLOPED CURB TYPES G^① & J



4" SLOPED CURB TYPES G^① & J

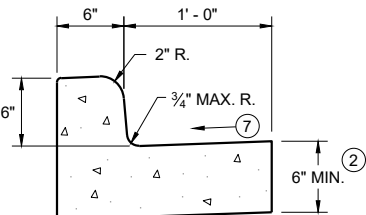


TYPES K^① & L
(OPTIONAL CURB SHAPE)



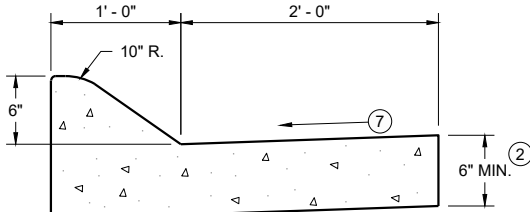
TYPES K^① & L

CONCRETE CURB AND GUTTER 30"

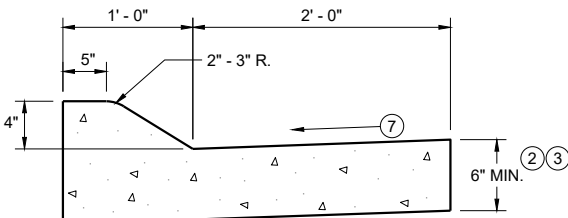


TYPES A^① & D

CONCRETE CURB AND GUTTER 18"

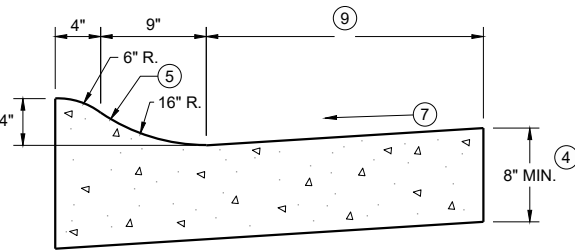


6" SLOPED CURB TYPES A^① & D



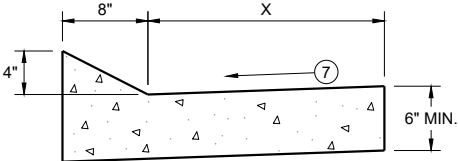
4" SLOPED CURB TYPES A^① & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R^① & T

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

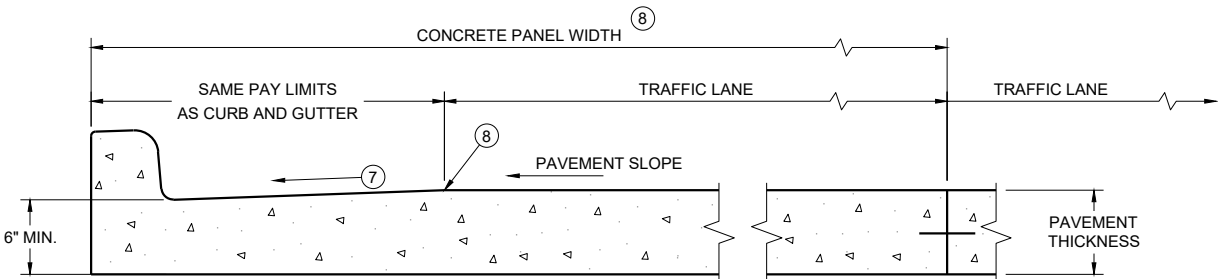


TYPES TBT & TBTT^①

CONCRETE CURB AND GUTTER

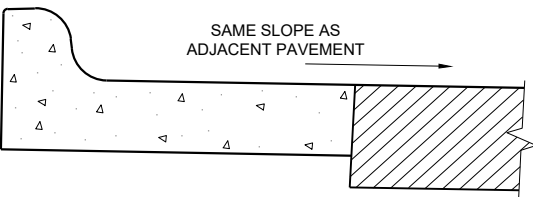
PAVEMENT THICKNESS
AND MAXIMUM CONCRETE
PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER^⑥
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

DETAILS OF CONSTRUCTION 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.

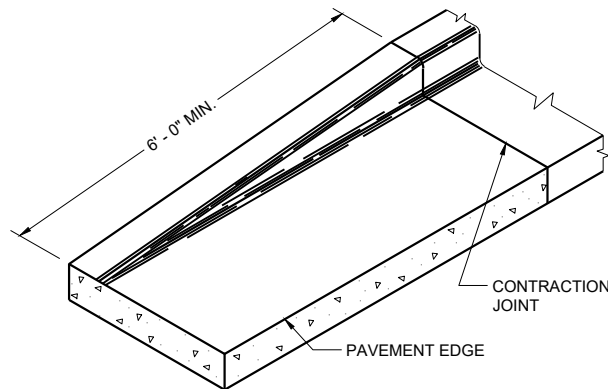
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

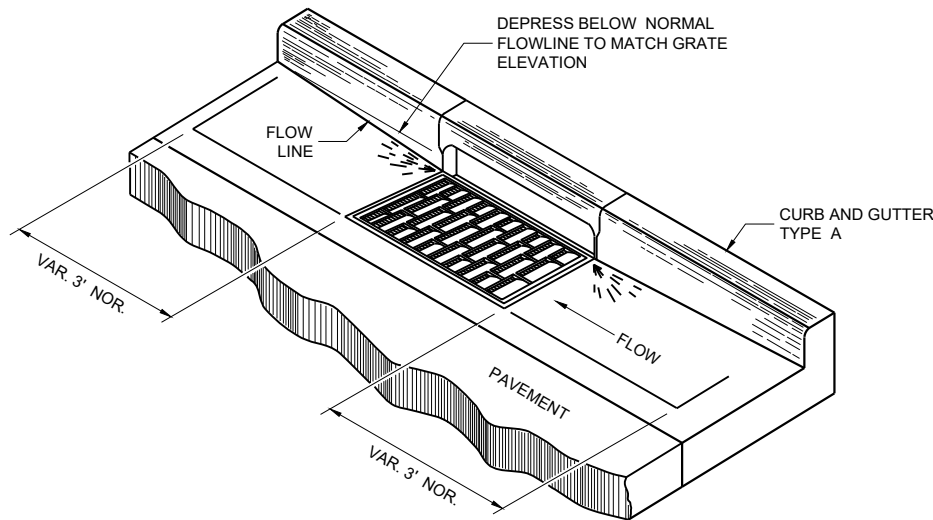
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.
- ④ 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.
- ⑤ UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑥ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.
- ⑦ USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.
- ⑧ INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.
- ⑨ CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

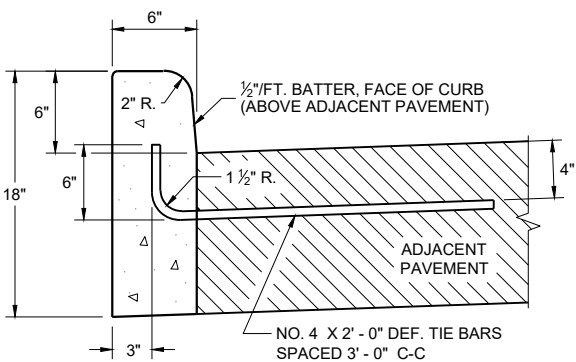


END SECTION CURB AND GUTTER

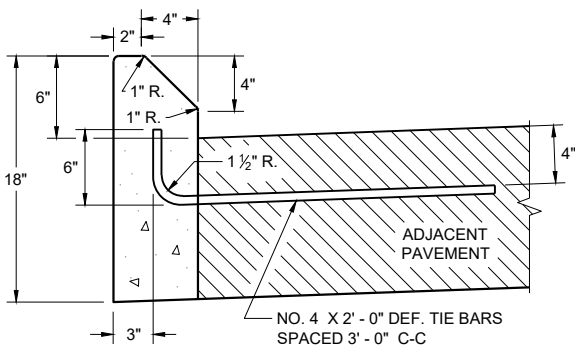


DETAIL OF CURB AND GUTTER AT INLETS

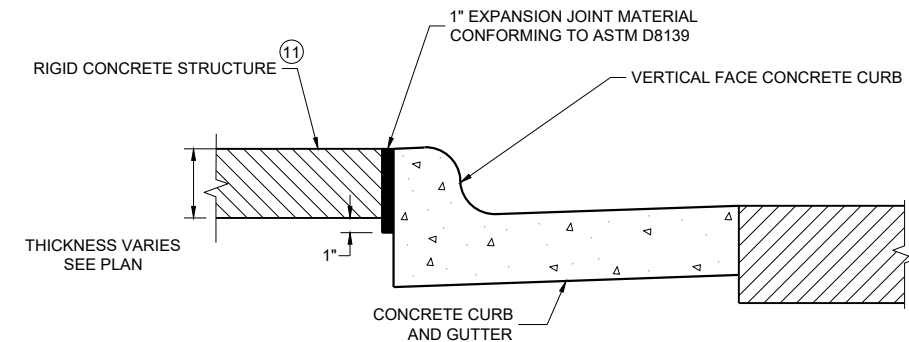
(TYPICAL H INLET COVER SHOWN)



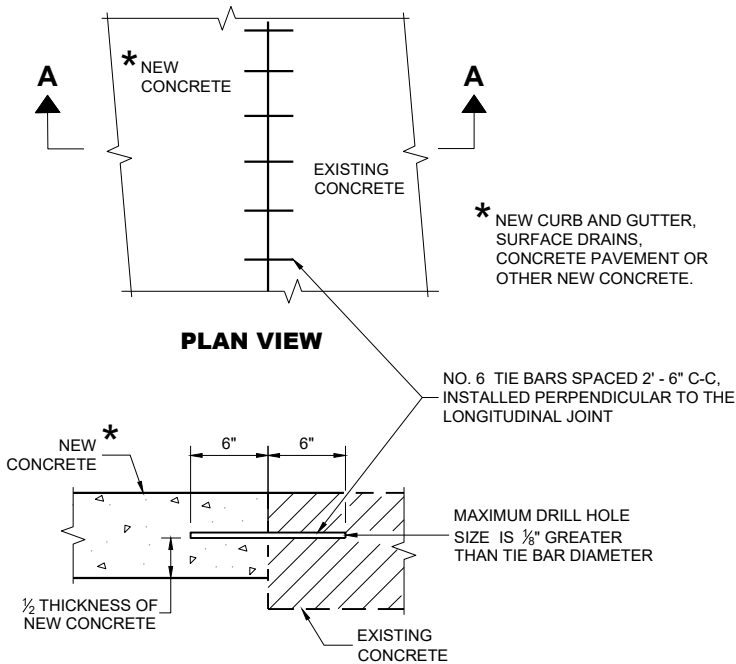
TYPES A^① & D



TYPES G^① & J
CONCRETE CURB



EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE^⑪



SECTION A - A
TIE BARS DRILLED INTO EXISTING PAVEMENT

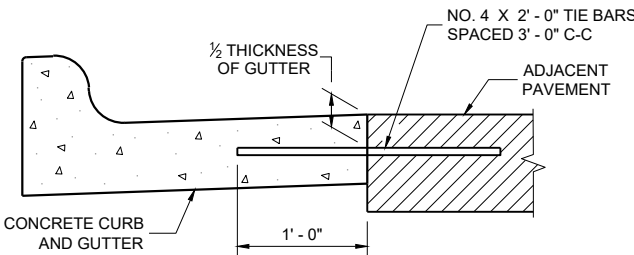
GENERAL NOTES

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

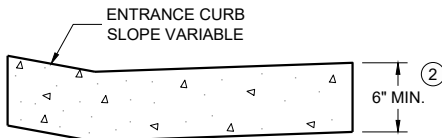
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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 GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑩ REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.
- ⑪ PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.



TYPICAL TIE BAR LOCATION^①

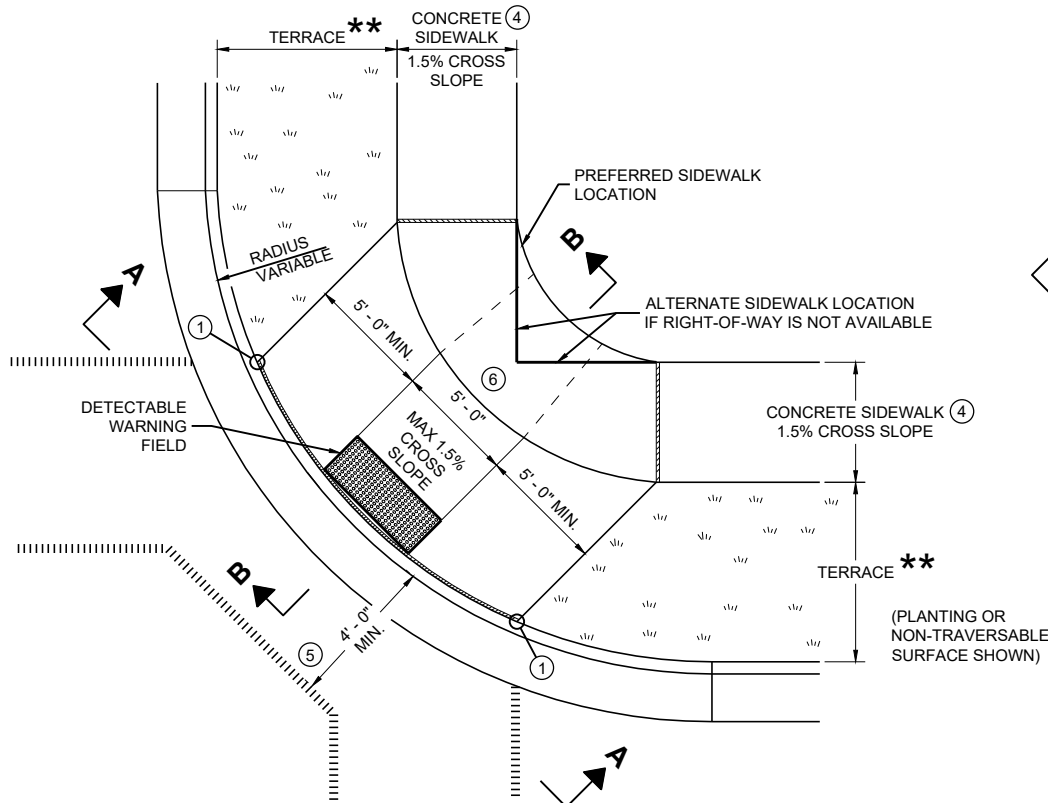


DRIVEWAY ENTRANCE CURB^⑩
(WHEN DIRECTED BY THE ENGINEER)

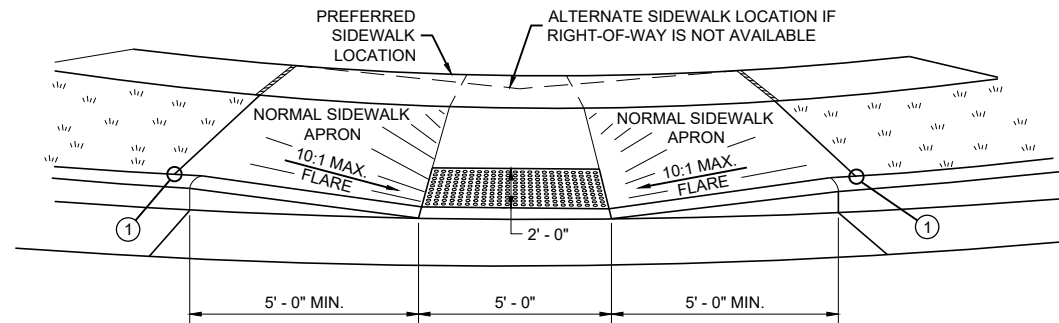
CONCRETE CURB, TIES
AND CURB AND GUTTER
APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR

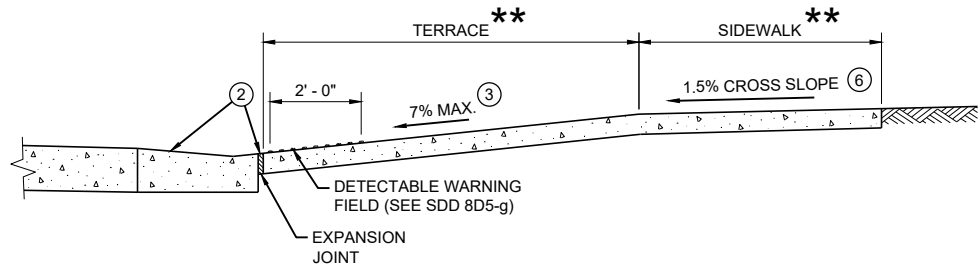


PLAN VIEW
CURB RAMP TYPE 1
(CENTER OF CORNER RADIUS)

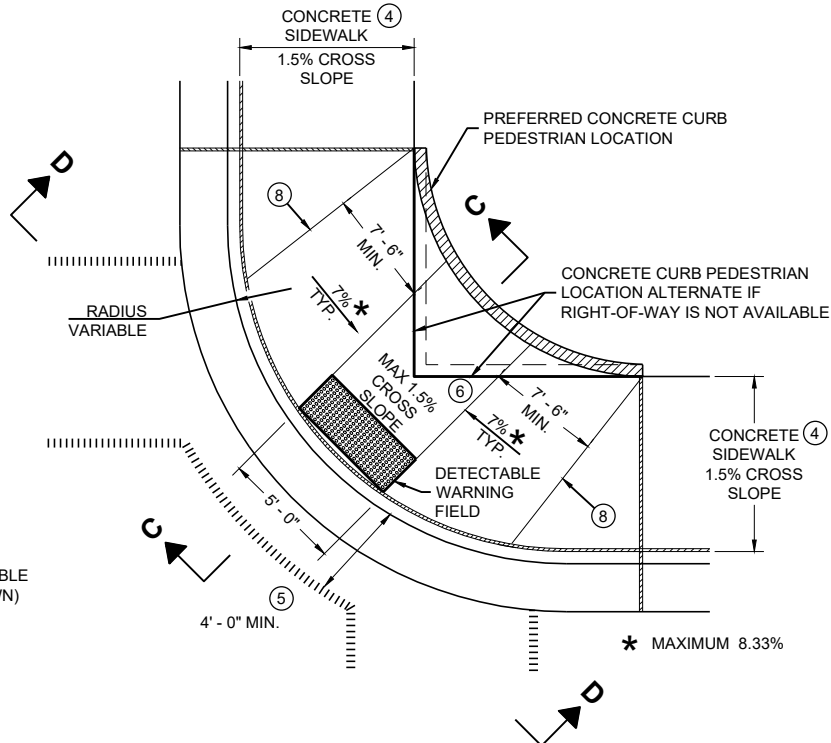


VIEW A - A FOR TYPE 1

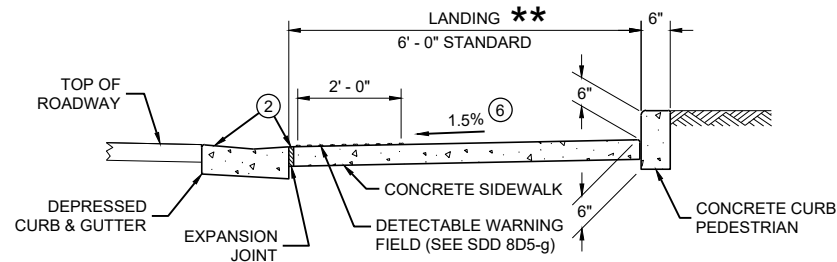
** WIDTH SHOWN ELSEWHERE
IN THE PLANS



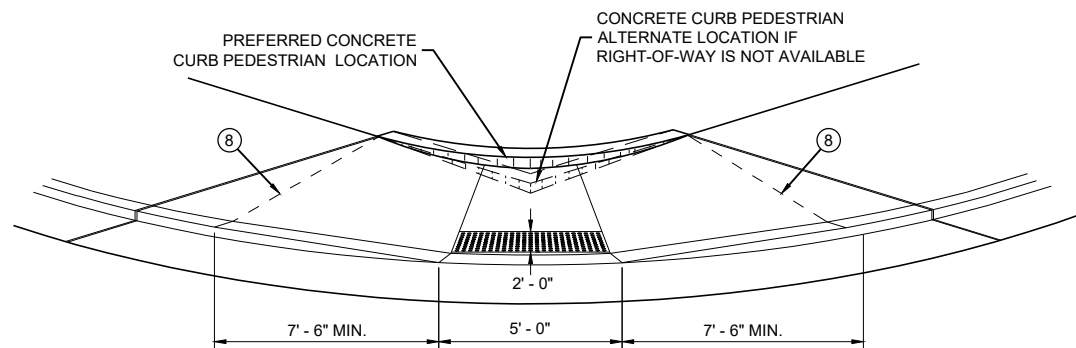
SECTION B - B FOR TYPE 1



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



SECTION C - C FOR TYPE 1 - A



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

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

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.

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 CURB 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 LINEAR FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

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

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

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

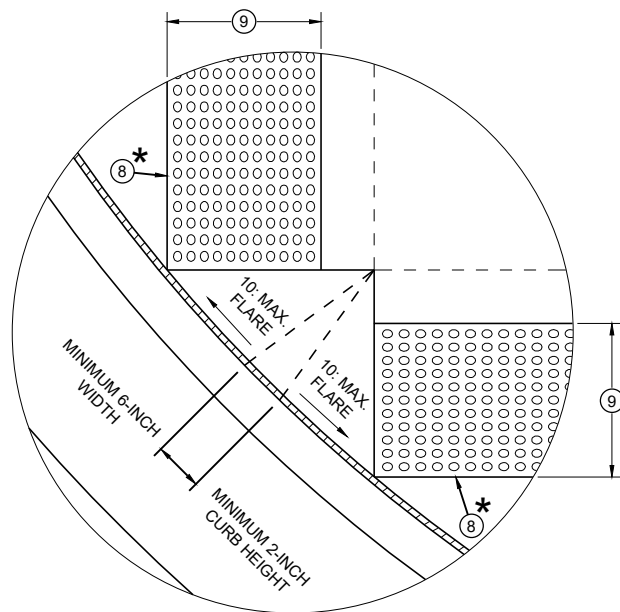
- 1 THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.
- 2 GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- 3 MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- 4 ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- 5 PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA. 4 FOOT WIDTH IS MEASURED FROM THE FLANGE LINE
- 6 PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- 8 PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

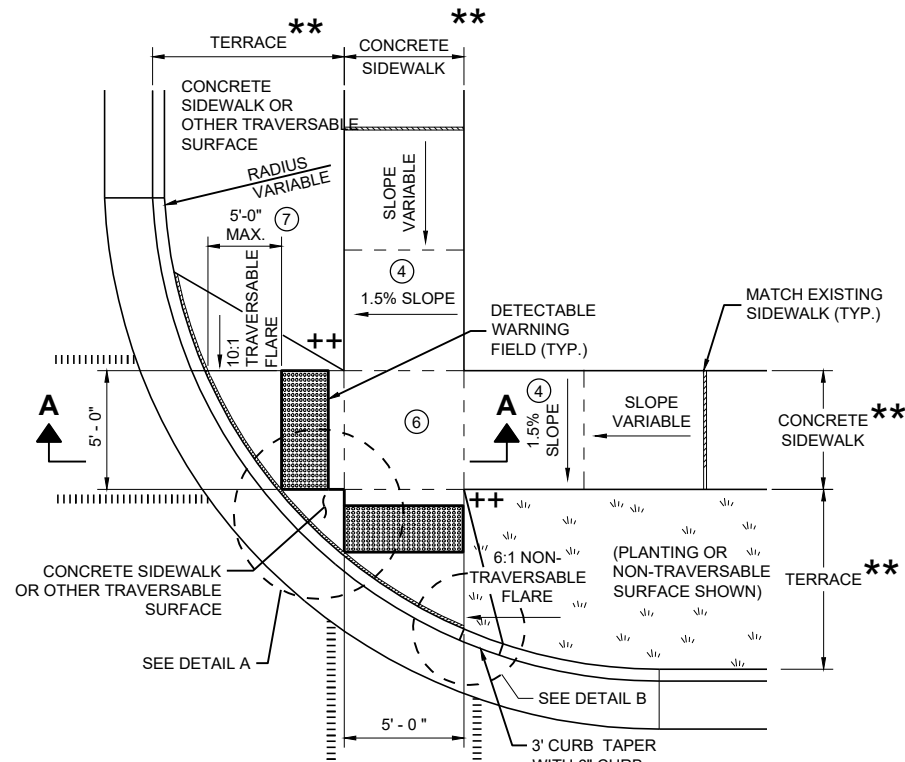
- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 1 AND 1-A

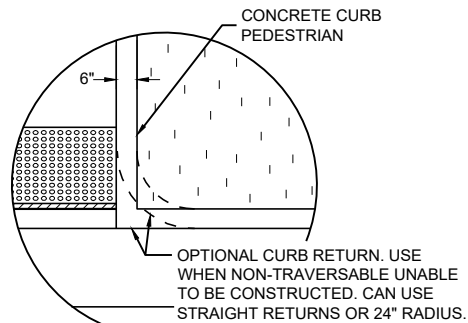
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



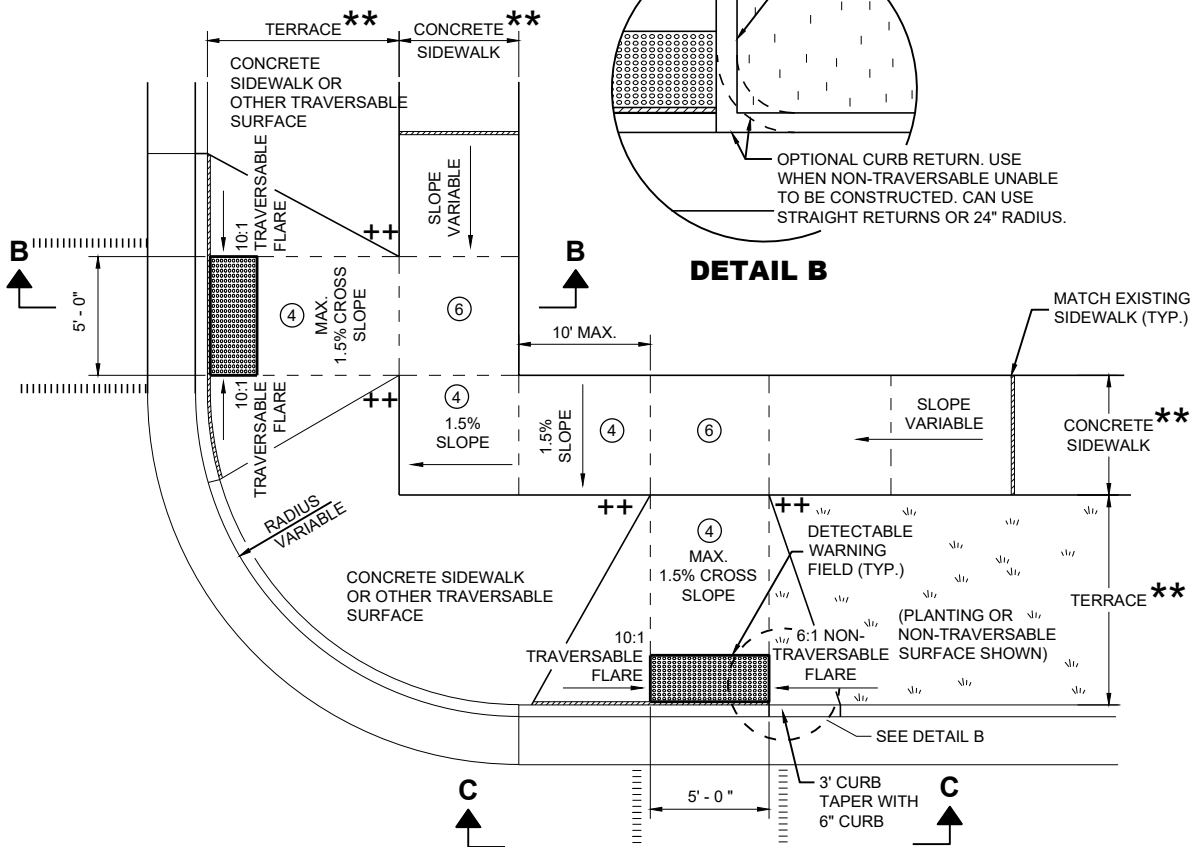
DETAIL A



PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)



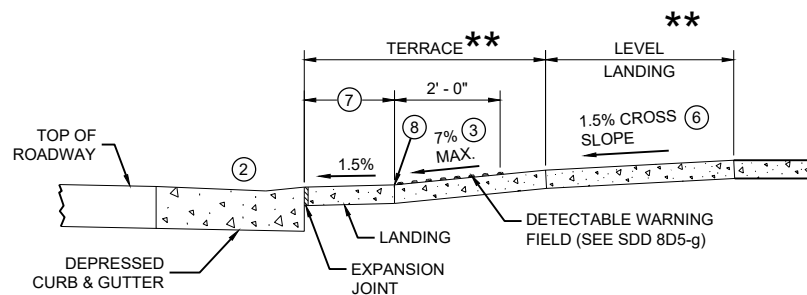
DETAIL B



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

GENERAL NOTES

- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- 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.
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.
- GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
 - AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.
 - ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
 - PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.
 - WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
 - PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
 - WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

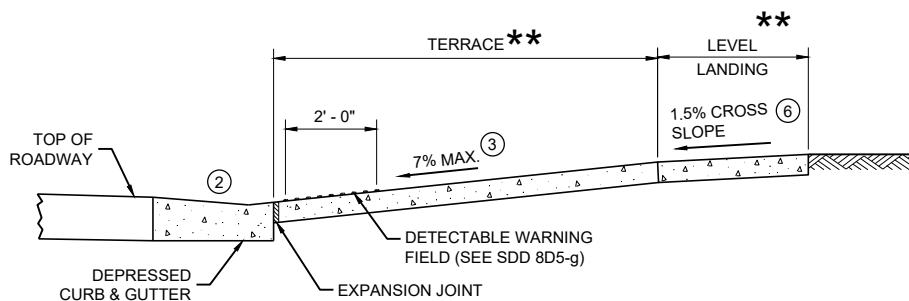


SECTION A - A FOR TYPE 2

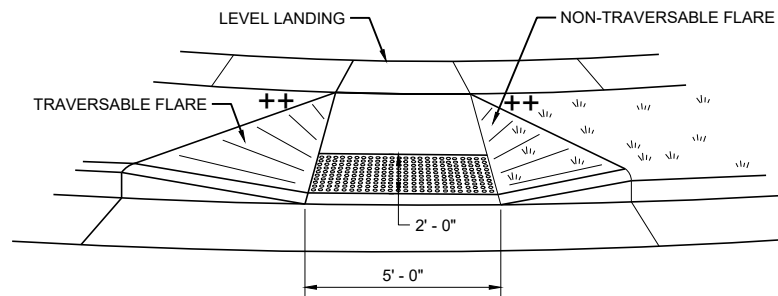
- ★ MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK
- ★★ WIDTH SHOWN ELSEWHERE IN THE PLANS
- ++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

LEGEND

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



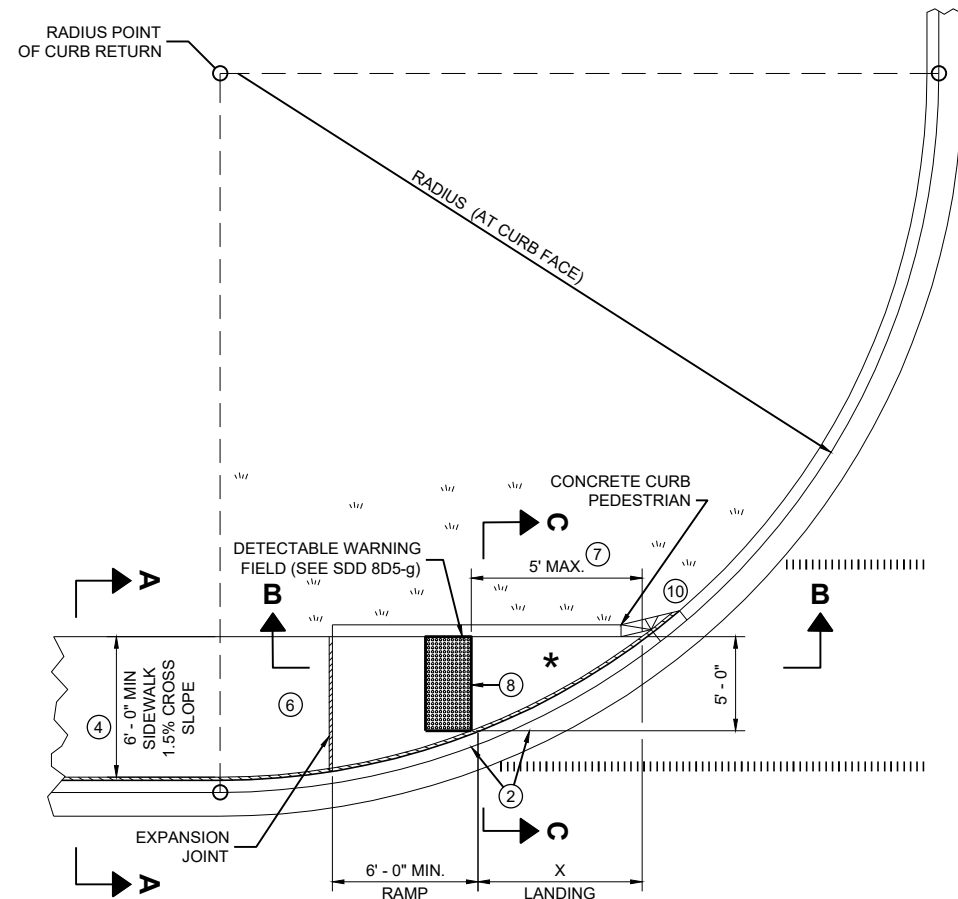
SECTION B - B FOR TYPE 3



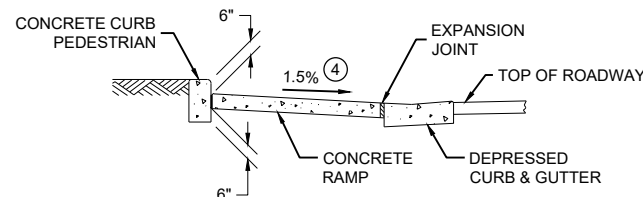
VIEW C - C FOR TYPE 3

CURB RAMPS
TYPE 2 AND 3

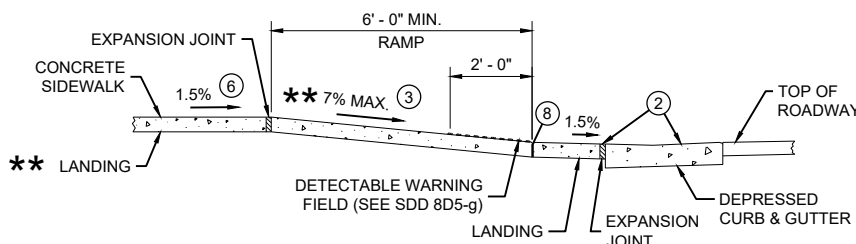
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PLAN VIEW
CURB RAMP TYPE 4A



SECTION C - C FOR TYPE 4A

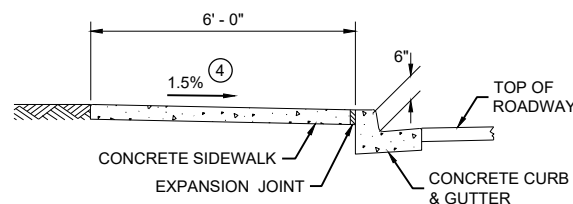


** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

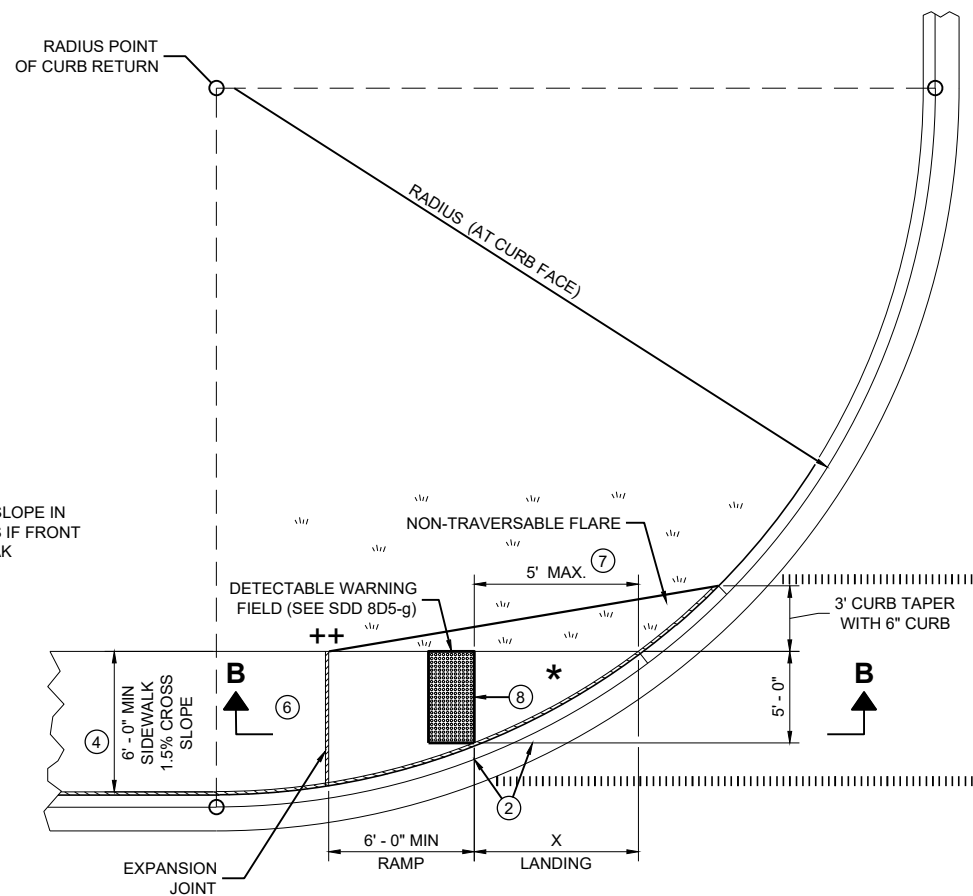
SECTION B - B FOR
TYPE 4A AND TYPE 4A1

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A



PLAN VIEW
CURB RAMP TYPE 4A1

GENERAL NOTES

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

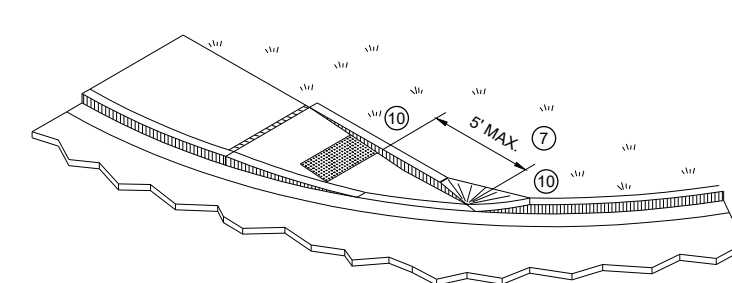
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

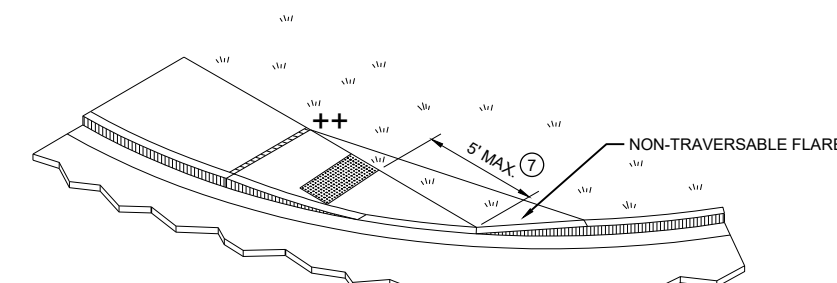
- GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

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



ISOMETRIC VIEW FOR TYPE 4A

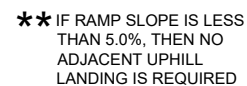


ISOMETRIC VIEW FOR TYPE 4A1

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

CURB RAMPS TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



SECTION B - B FOR TYPE 4B AND TYPE 4B1

INTERMEDIATE RADII CAN BE INTERPOLATED
 DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
 DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH



++ CONSTRUCT 6" WEDGE TO
AVOID CONCRETE BREAKAGE

GENERAL NOTES

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

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.

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

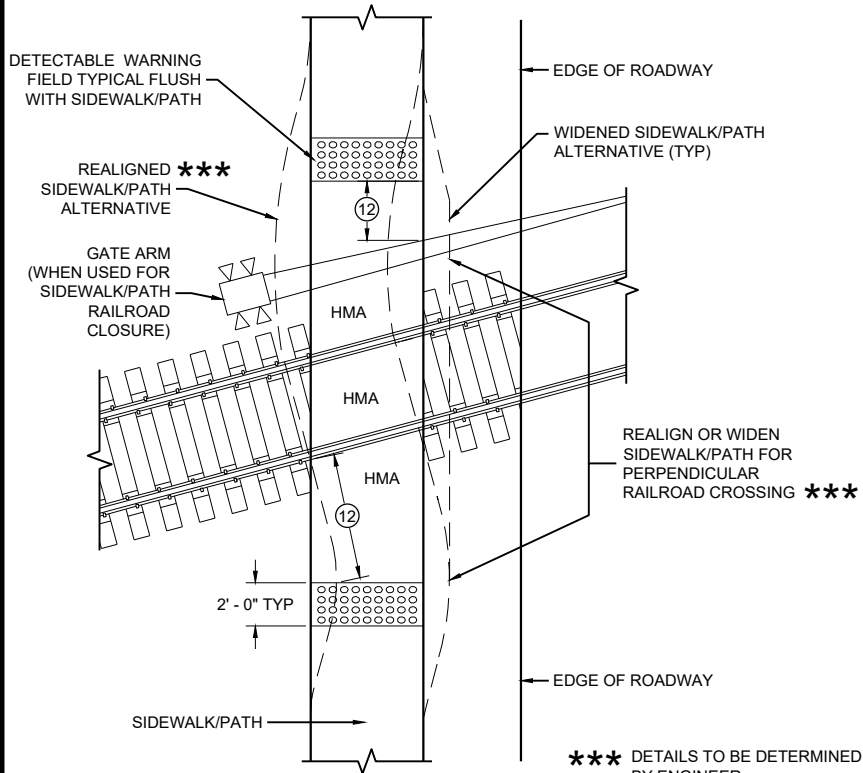
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/8" - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE. MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- ⑦ WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- ⑩ INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



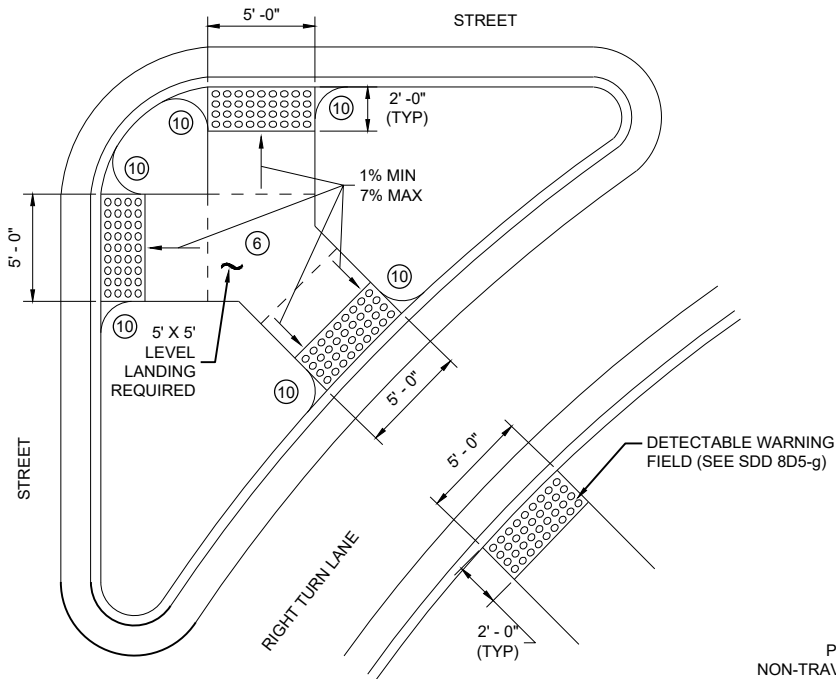
CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

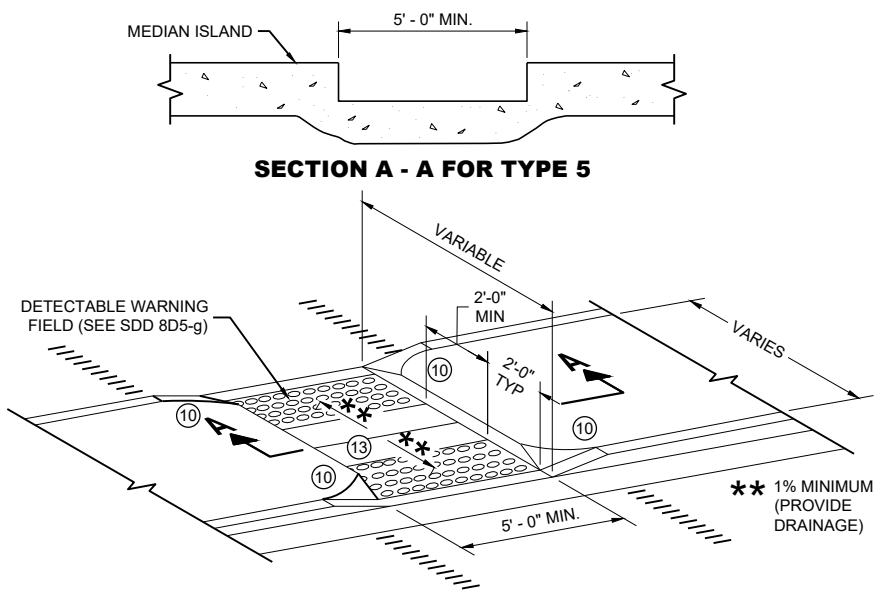


CURB RAMP TYPE 8
DETECTABLE WARNINGS
FOR SIDEWALKS OR SHARED USE PATHS
AT RAILROAD CROSSINGS

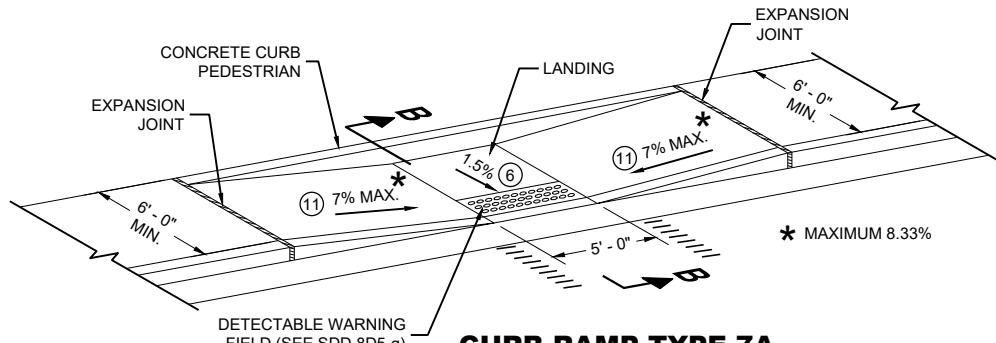


CURB RAMP TYPE 6
DETECTABLE WARNING AT ISLANDS

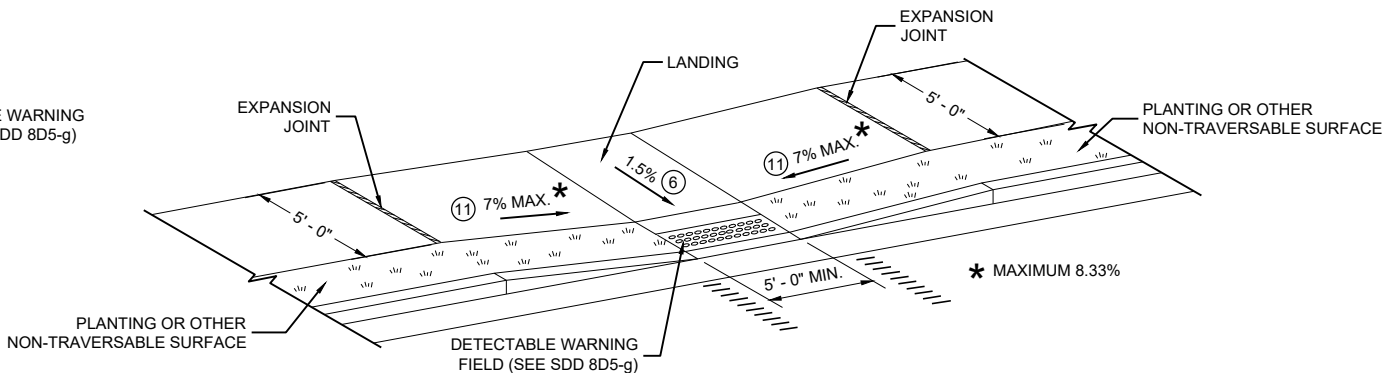
REFER TO GENERAL NOTES ② AND ③
FOR ALL ISLAND CURB RAMPS



CURB RAMP TYPE 5
MEDIAN ISLAND
NON-ELEVATED PEDESTRIAN CROSSING



CURB RAMP TYPE 7A
FOR INTERSECTIONS AND
MID BLOCK CROSSINGS



CURB RAMP TYPE 7B
FOR INTERSECTIONS AND
MID BLOCK CROSSINGS

GENERAL NOTES

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

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.

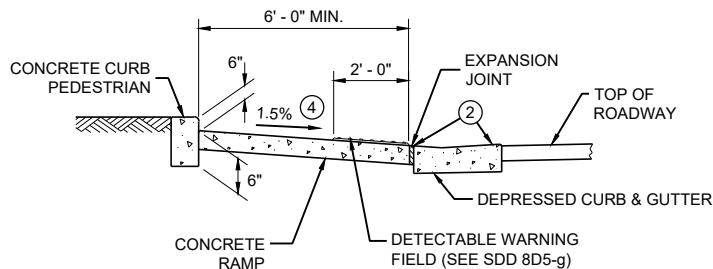
SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/8 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- ⑩ INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.
- ⑪ SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- ⑫ 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/PATH. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD TRACK IS 15 FEET MAXIMUM AND 12 FEET MINIMUM, 15 FEET TYPICAL FROM THE NEAREST RAIL.
- ⑬ DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

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

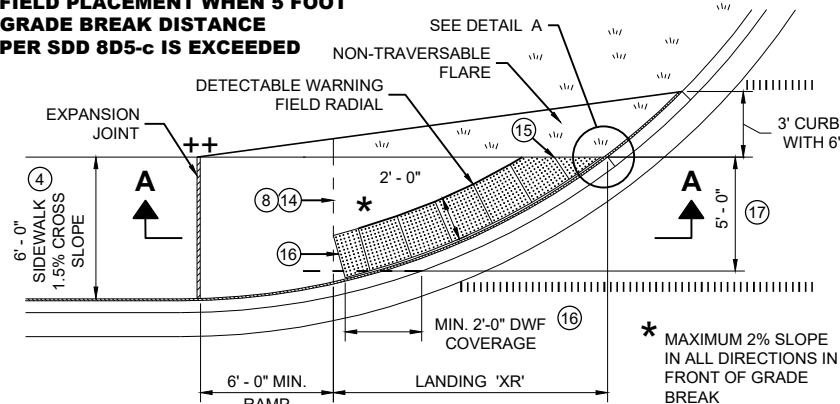


SECTION B - B FOR TYPE 7A

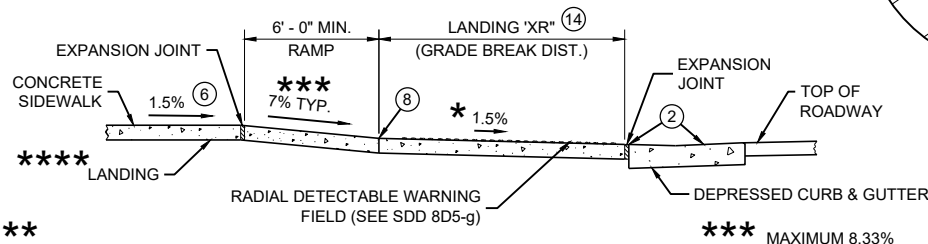
CURB RAMPS
TYPE 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**RADIAL DETECTABLE WARNING
FIELD PLACEMENT WHEN 5 FOOT
GRADE BREAK DISTANCE
PER SDD 8D5-c IS EXCEEDED**

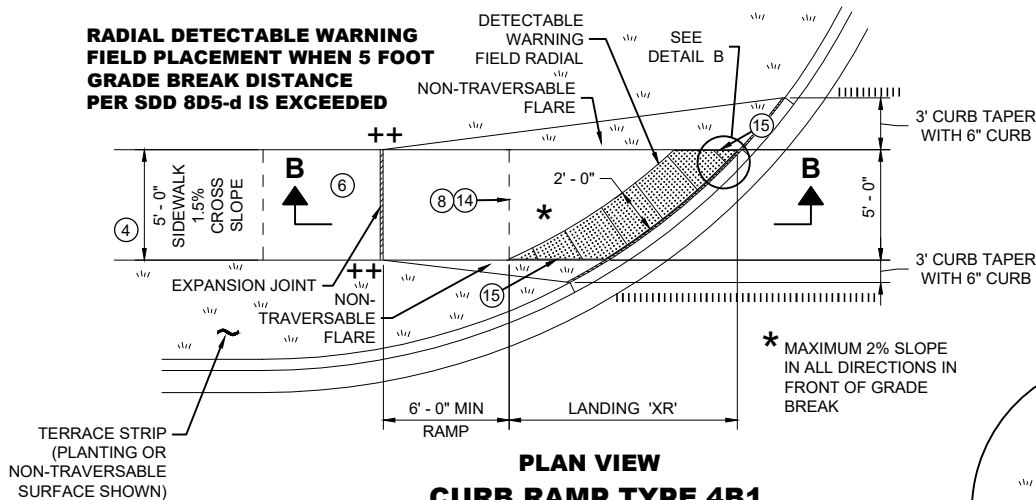


**PLAN VIEW
CURB RAMP TYPE 4A1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**

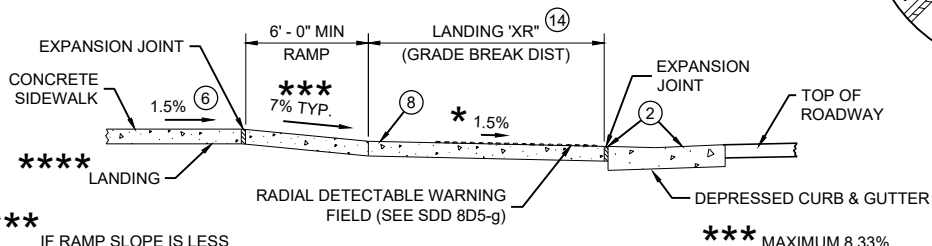


SECTION A - A FOR TYPE 4A1

**RADIAL DETECTABLE WARNING
FIELD PLACEMENT WHEN 5 FOOT
GRADE BREAK DISTANCE
PER SDD 8D5-d IS EXCEEDED**



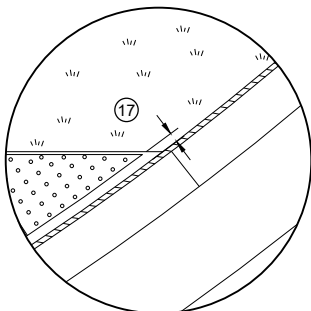
**PLAN VIEW
CURB RAMP TYPE 4B1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**



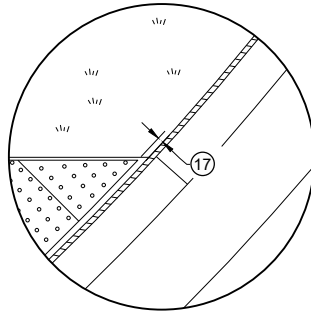
SECTION B - B FOR TYPE 4B1

LEGEND

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



DETAIL A

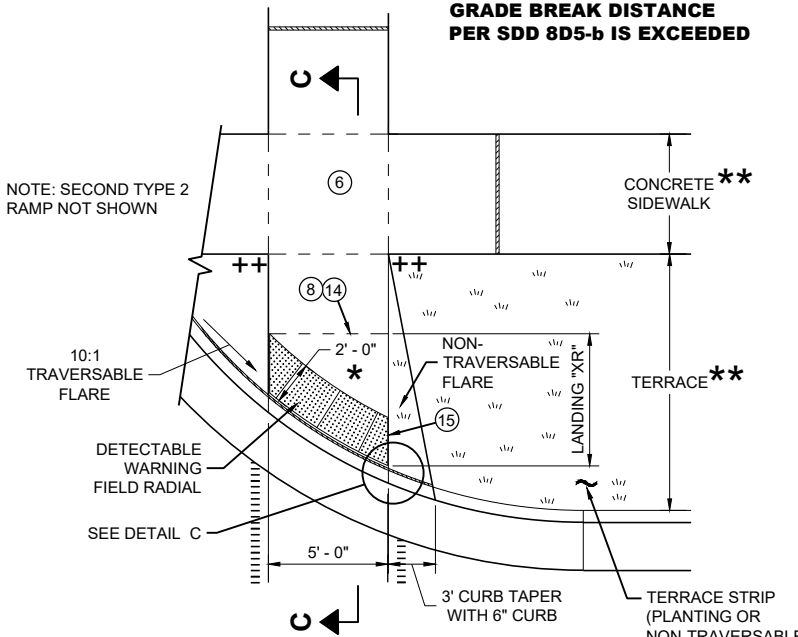


DETAIL B

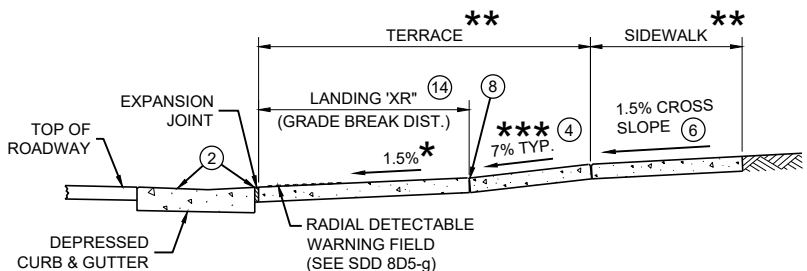
GENERAL NOTES

- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- 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.
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.
- REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.
- FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.
- DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.
- GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4" INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.
- PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.
- FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/2" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.
- USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2'-0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.
- A MAXIMUM 3 INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

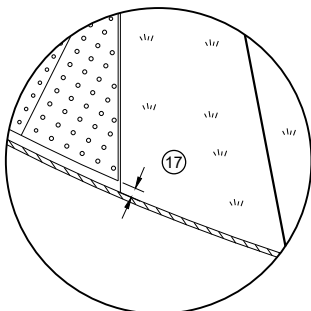
**RADIAL DETECTABLE WARNING
FIELD PLACEMENT WHEN 5 FOOT
GRADE BREAK DISTANCE
PER SDD 8D5-b IS EXCEEDED**



**PLAN VIEW
CURB RAMP TYPE 2
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)**



SECTION C - C FOR TYPE 2

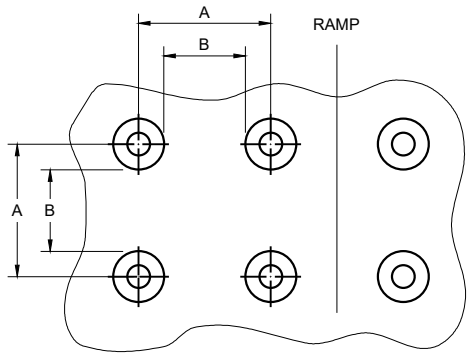


DETAIL C

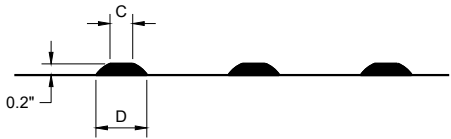
- MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK
- WIDTH SHOWN ELSEWHERE IN THE PLANS
- MAXIMUM 8.33%
- CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

	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.

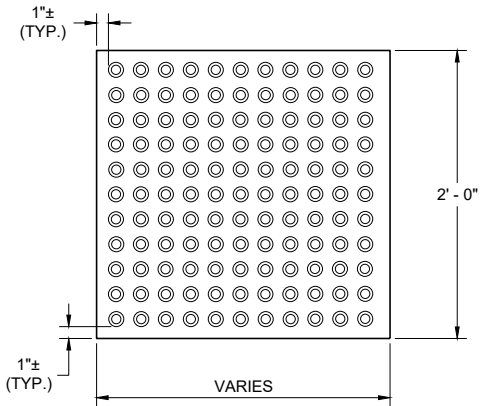


PLAN VIEW

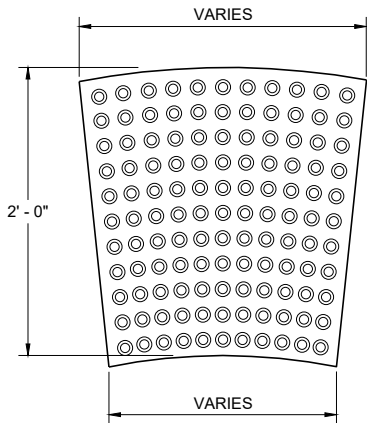


ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

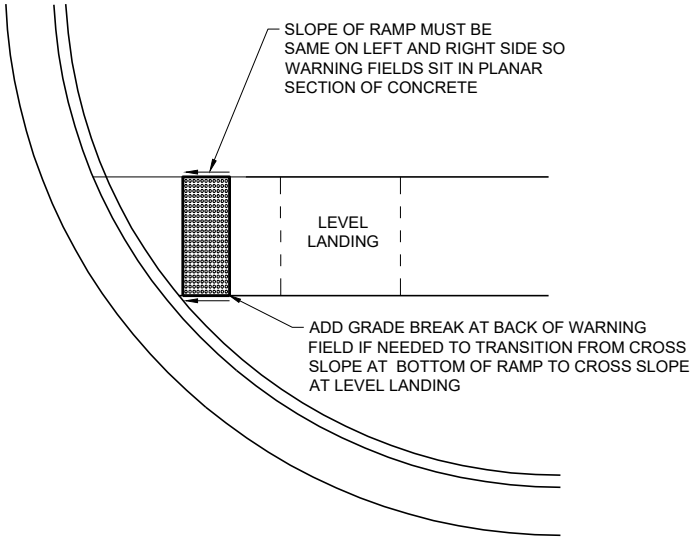


RECTANGULAR
PLATES

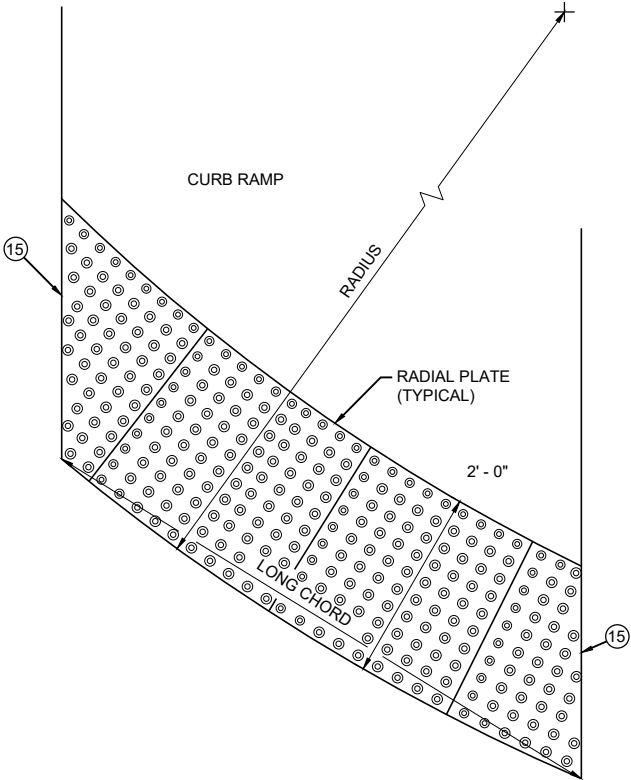


RADIAL
PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



DETECTABLE WARNING FIELD
PLANAR INSTALLATION



PLAN VIEW
RADIAL DETECTABLE
WARNING FIELD ATTRIBUTES

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

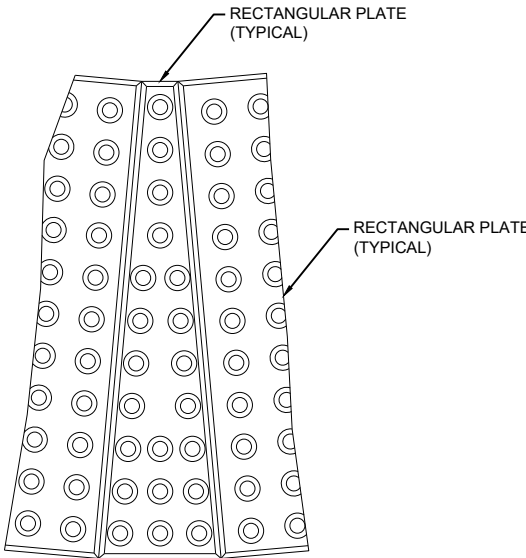
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

15 FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8\"/>

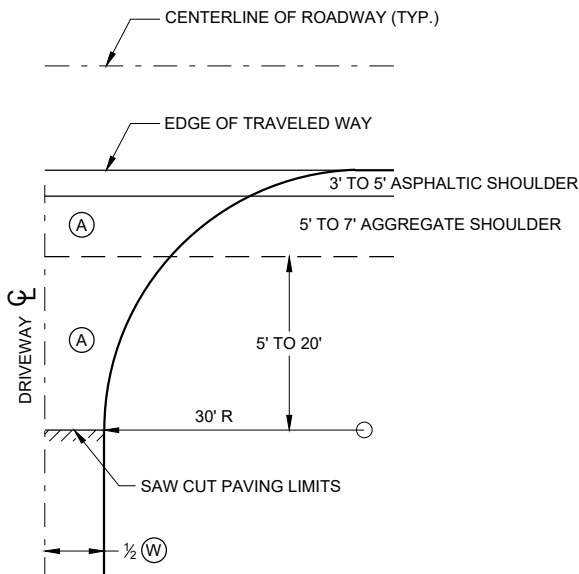


PLAN VIEW
RADIAL WEDGE PLATE
CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

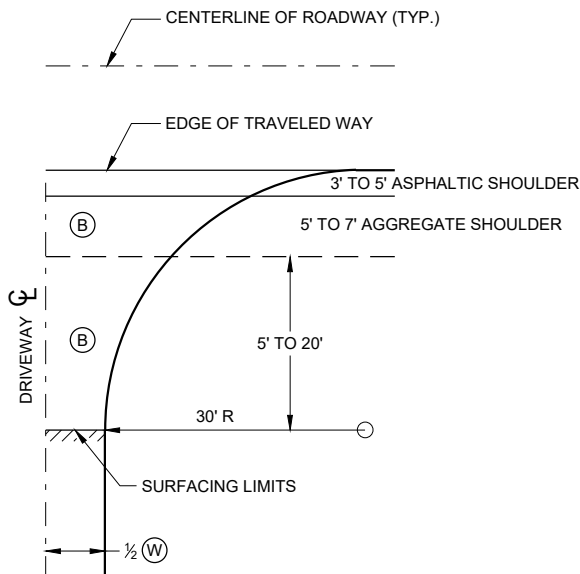
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2023 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR

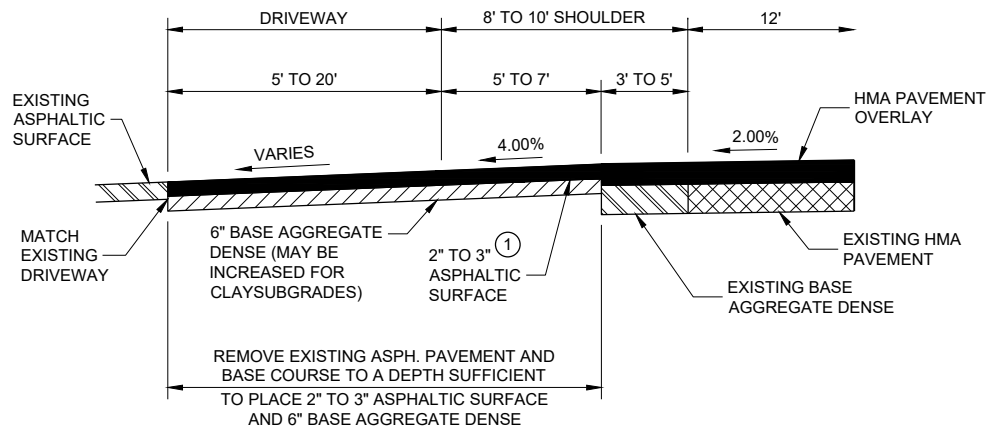


**PLAN VIEW
HALF SECTION**

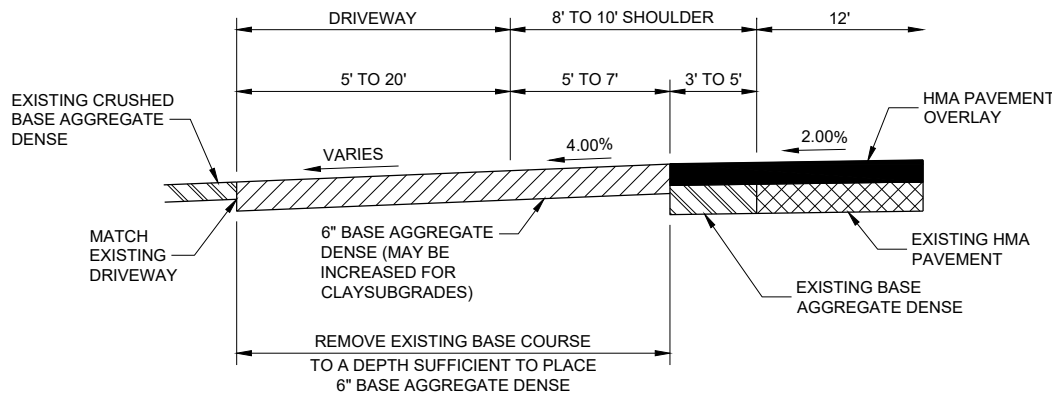
- (A) : PAID FOR AS ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES. (TON)
- (B) : PAID FOR AS BASE AGGREGATE DENSE 1 1/4" (TON)
- (W) : DRIVEWAY WIDTH 16' MIN. - 24' MAX.



**PLAN VIEW
HALF SECTION**



**PROFILE VIEW
RURAL ENTRANCE
WITH ASPHALTIC SURFACE
RESURFACING PROJECTS**



**PROFILE VIEW
RURAL ENTRANCE
WITH AGGREGATE SURFACE
6" BASE AGGREGATE DENSE
RESURFACING PROJECTS**

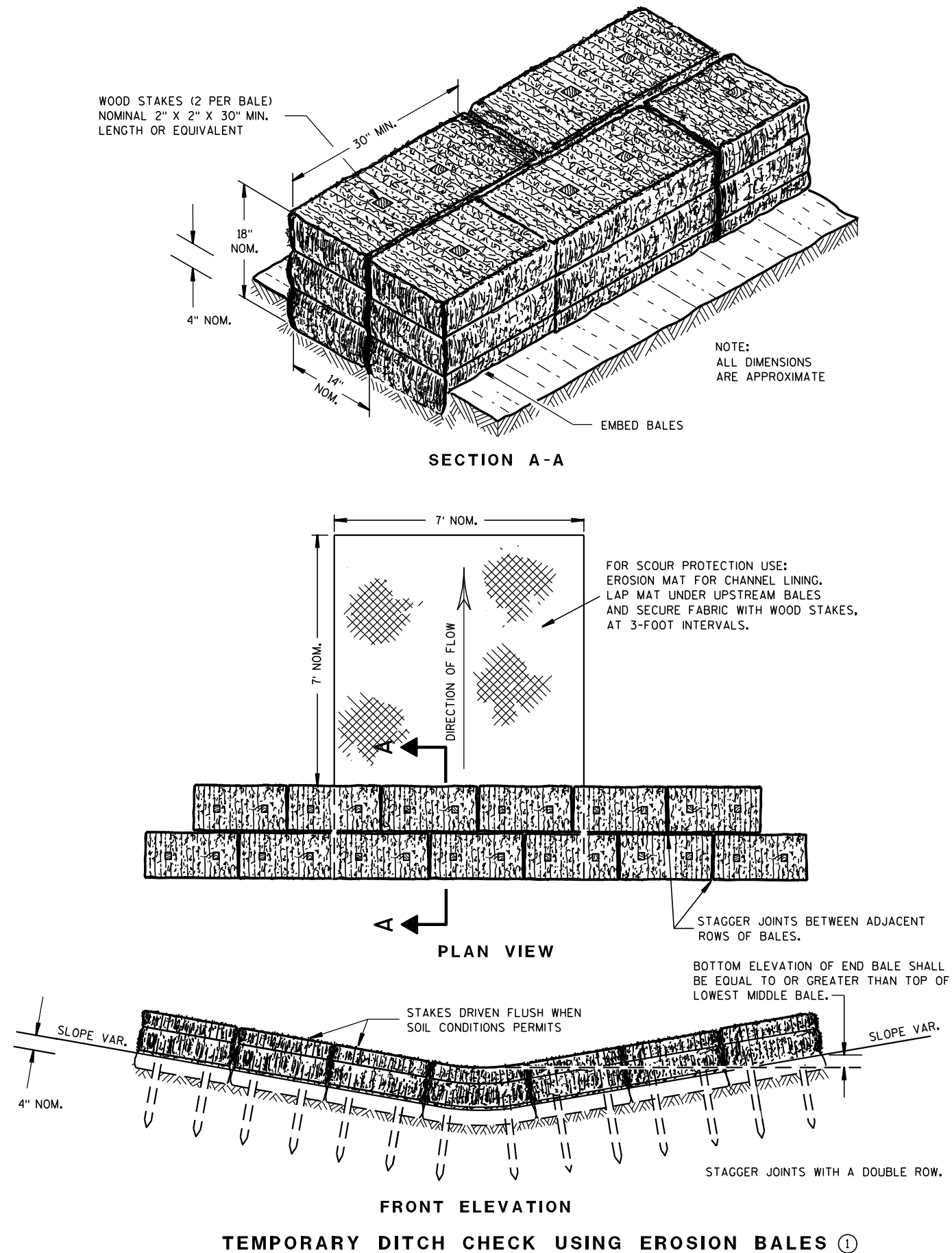
GENERAL NOTES

- ① DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS BASED ON TYPE OF USAGE AND LOADINGS.

**DRIVEWAYS WITHOUT CURB
AND GUTTER RESURFACING
PROJECTS RURAL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

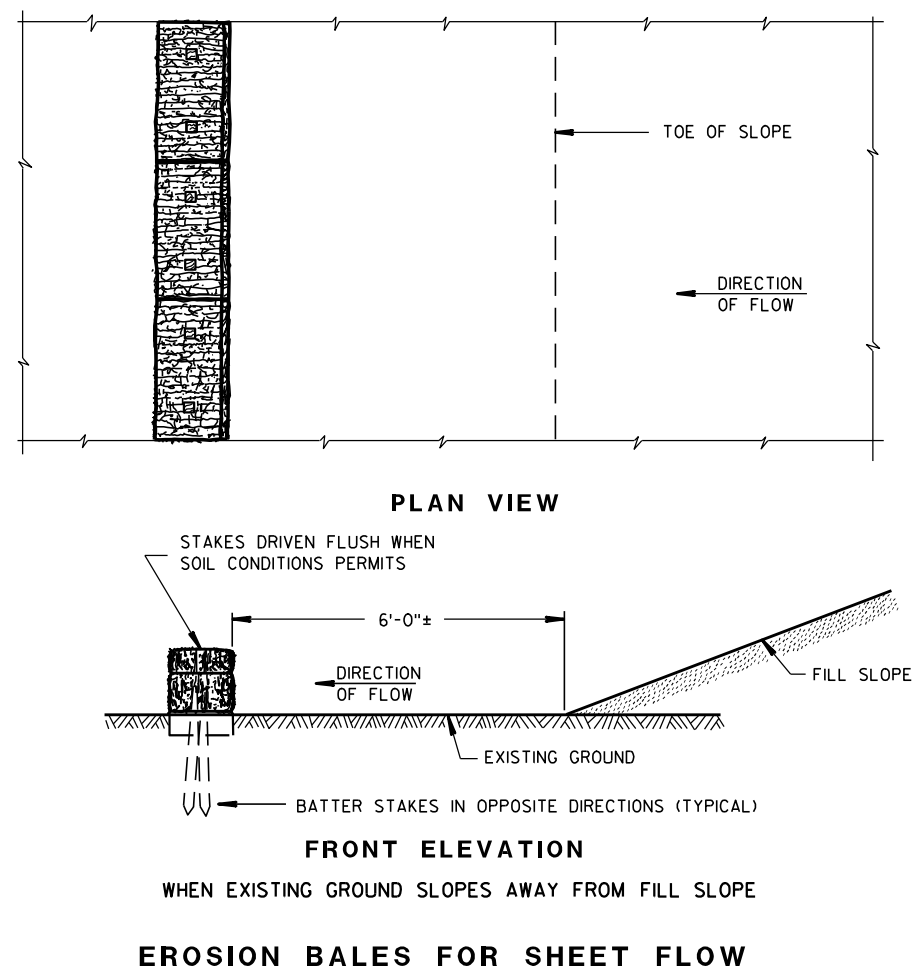
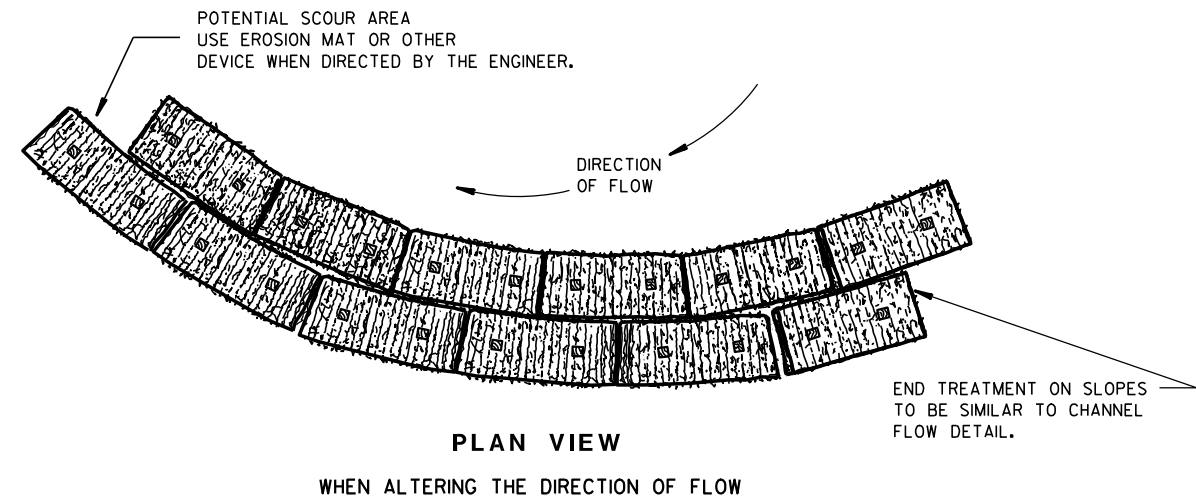
APPROVED
December 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA ENGINEER



GENERAL NOTES

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

- ① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

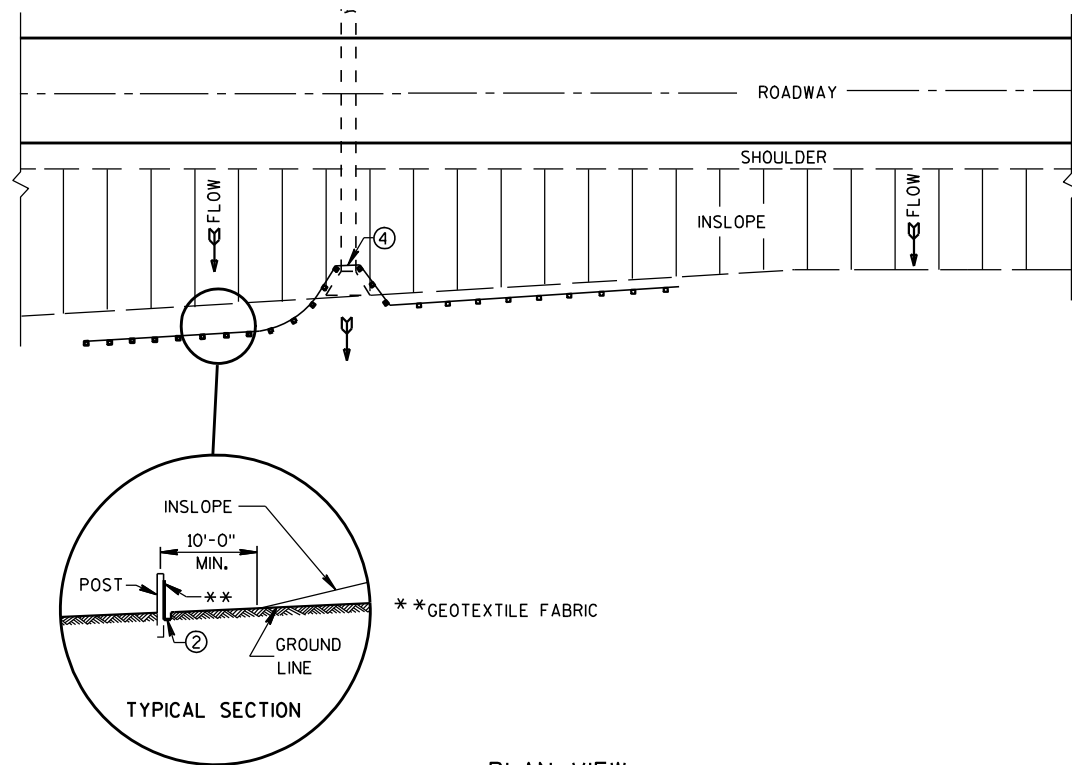
TYPICAL INSTALLATIONS OF
EROSION BALES / TEMPORARY
DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

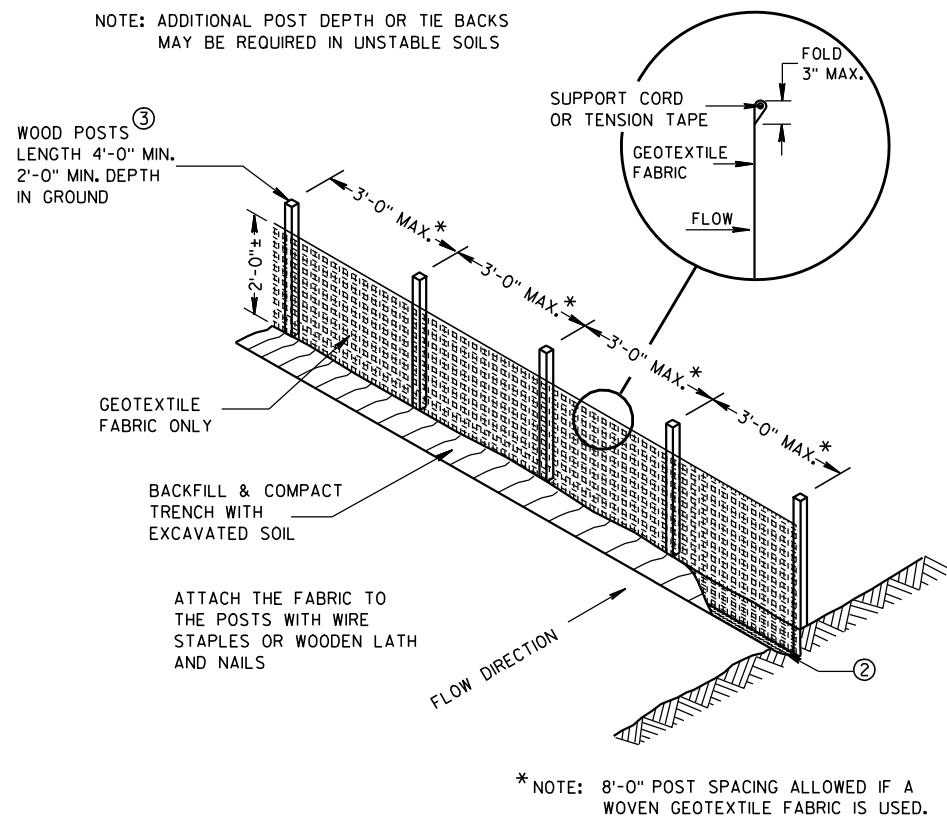
APPROVED

6/04/02
DATE/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

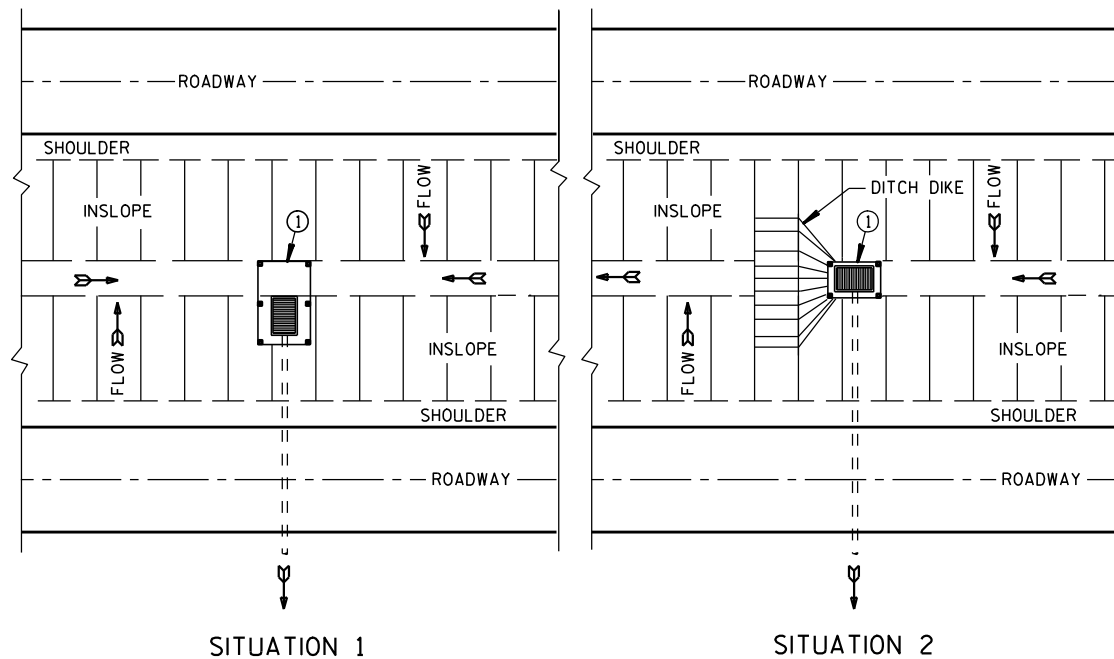
FHWA



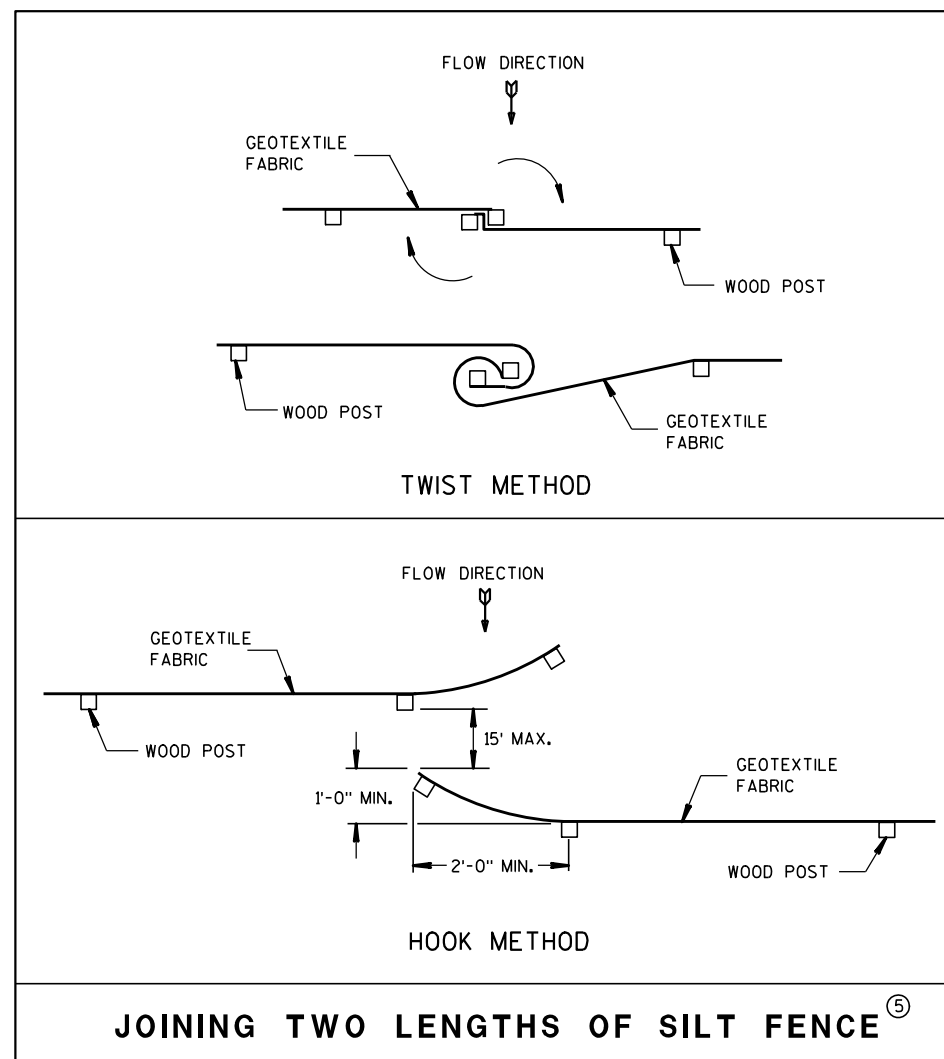
TYPICAL APPLICATION OF SILT FENCE



SILT FENCE



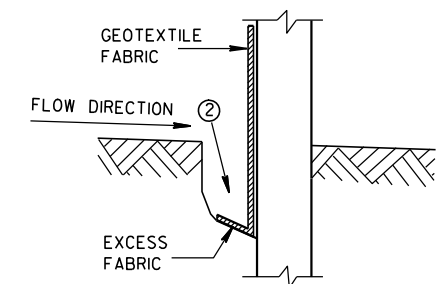
SILT FENCE AT MEDIAN SURFACE DRAINS



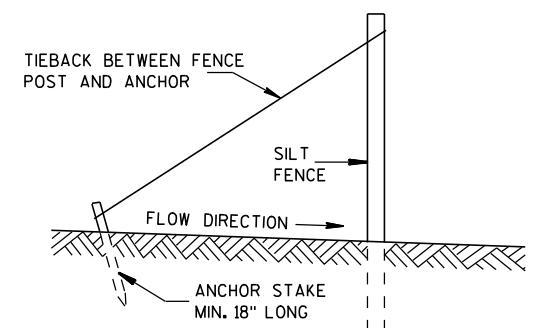
GENERAL NOTES

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

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



TRENCH DETAIL



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

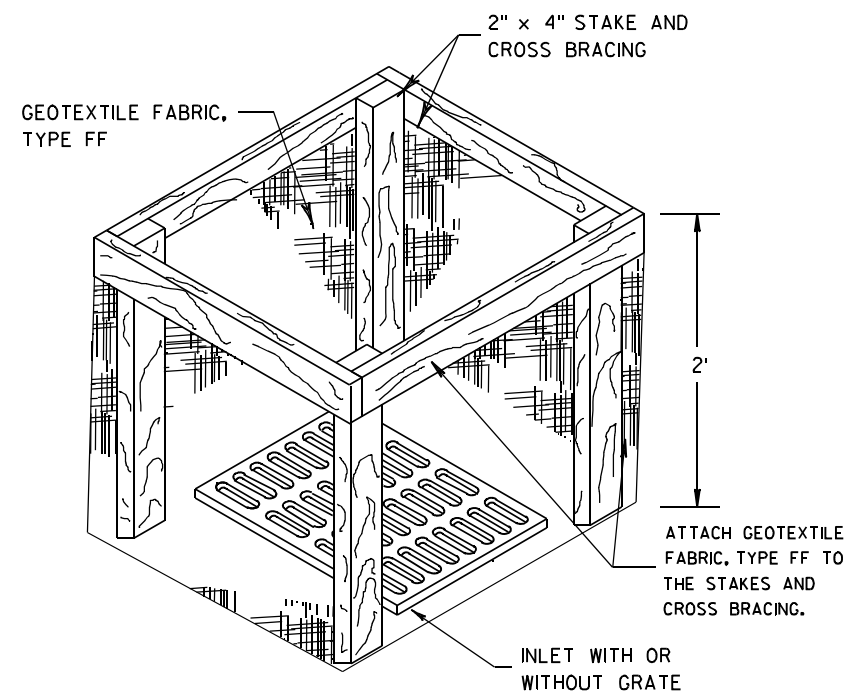
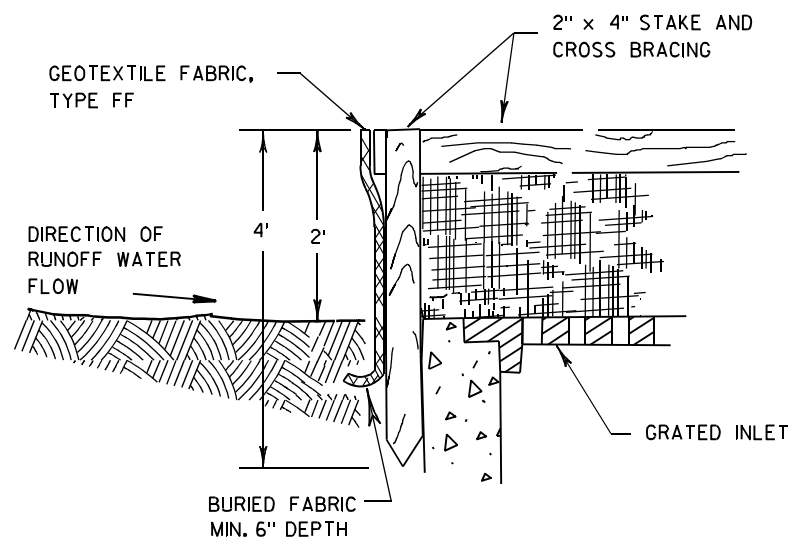
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-29-05
DATE

FHWA

/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER



INLET PROTECTION, TYPE A

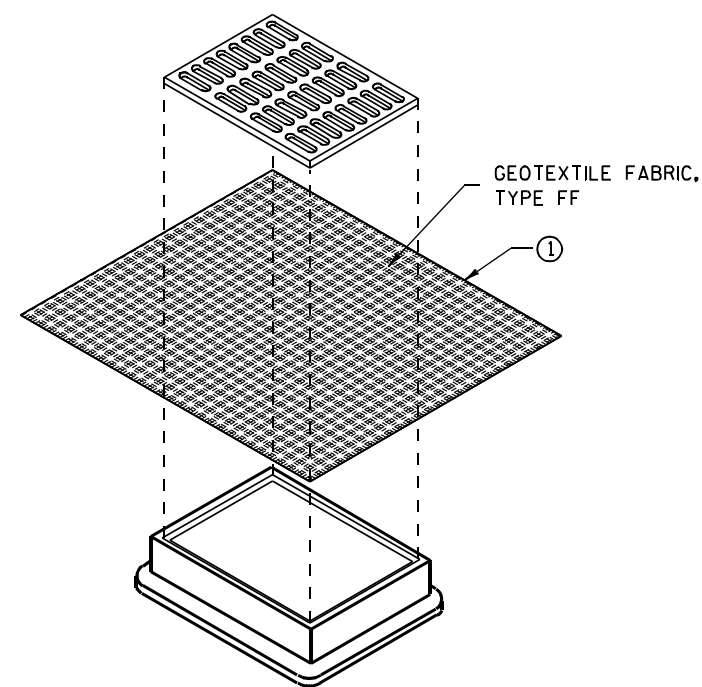
GENERAL NOTES

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.

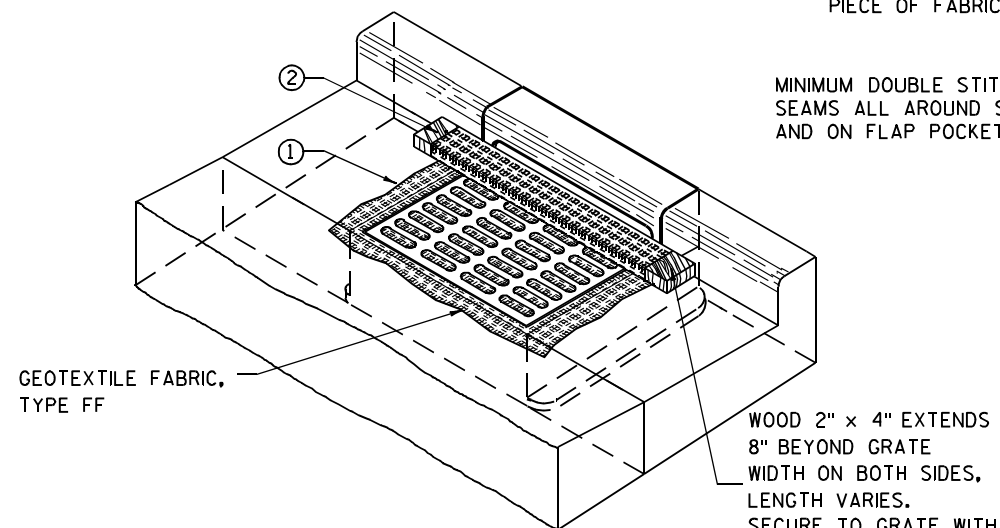
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- 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.



**INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)**

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

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

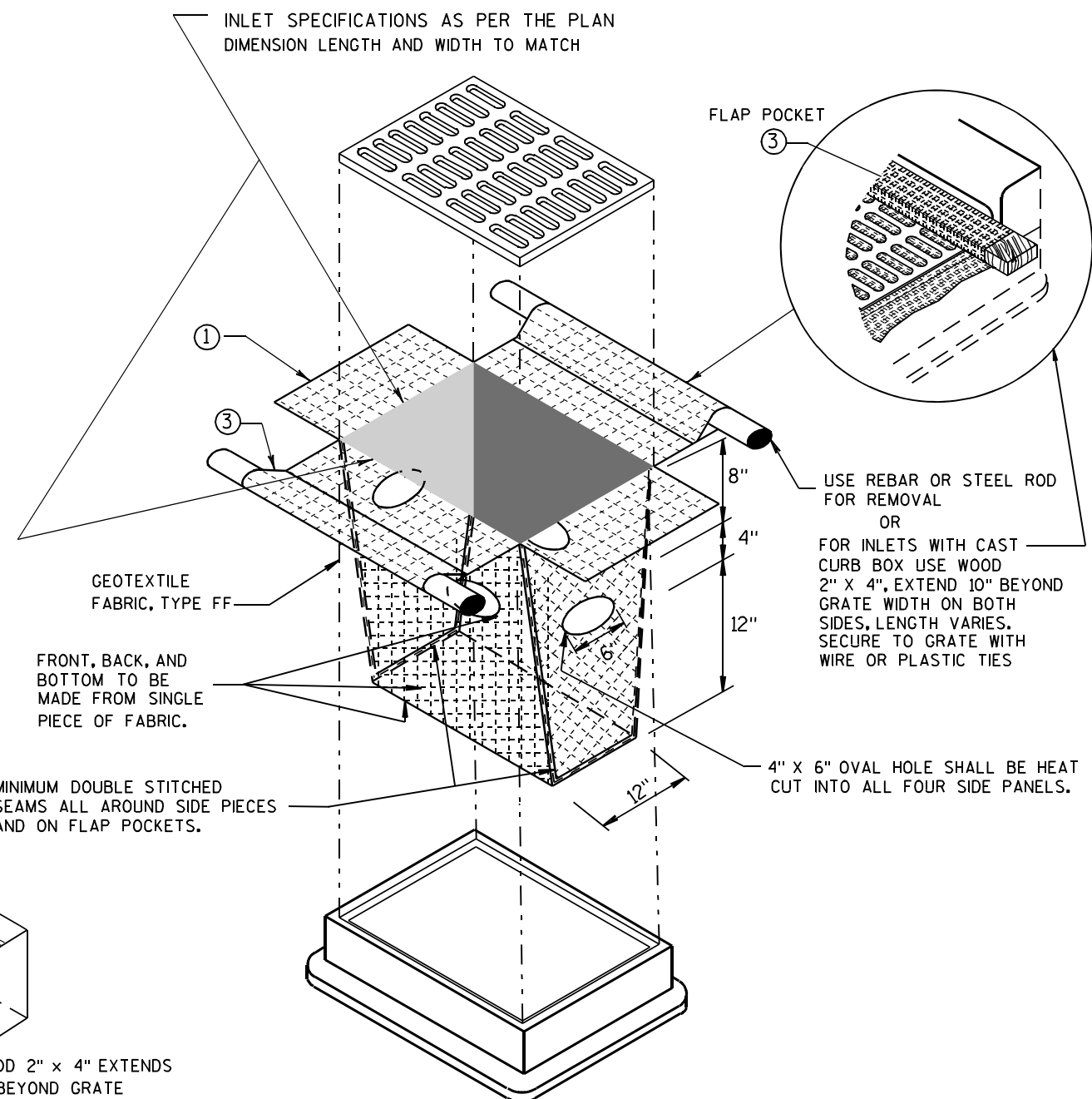
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

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.

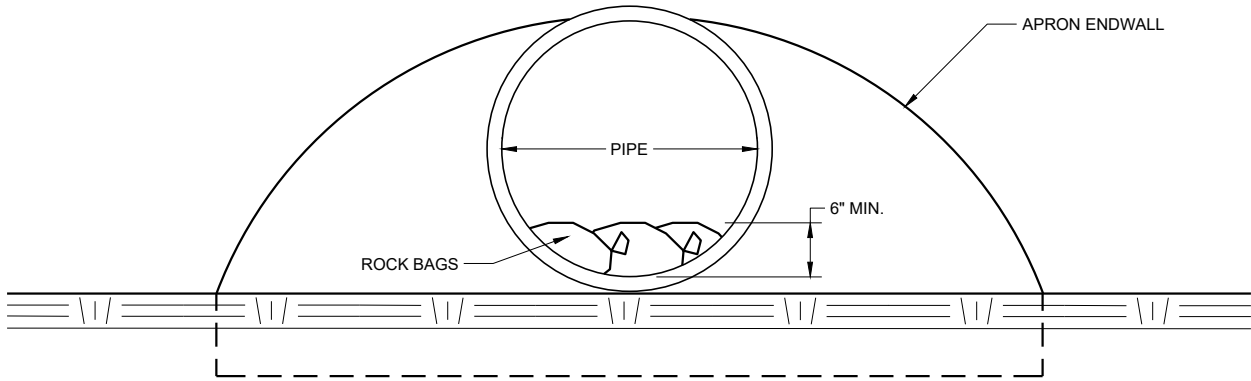
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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



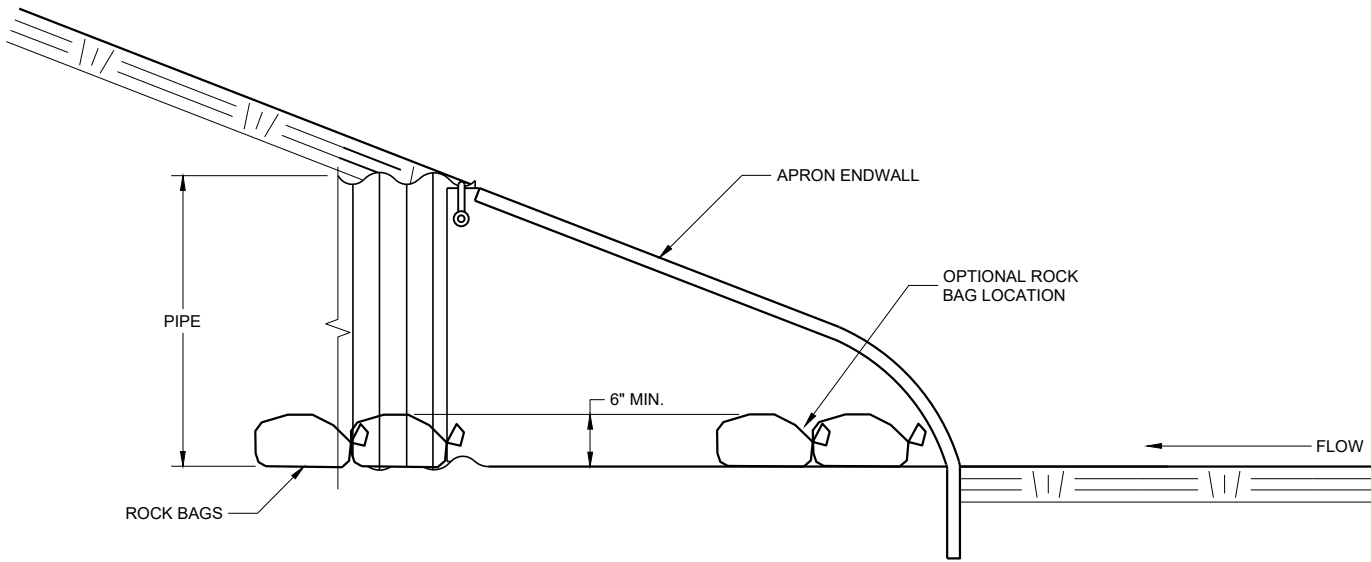
INLET PROTECTION, TYPE D

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

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	



END VIEW



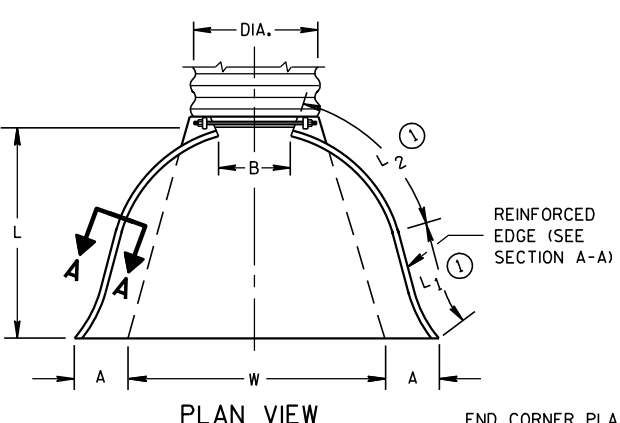
SIDE VIEW

CULVERT PIPE CHECK
(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2019 DATE	/S/ Daniel Schave EROSION CONTROL ENGINEER
FHWA	

METAL APRON ENDWALLS												
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY	
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1½")	L ₁ ①	L ₂ ①	W (±2")			
12	.064	.060	6	6	6	21	12	17½	24	2½ to 1	1 Pc.	
15	.064	.060	7	8	6	26	14	21¾	30	2½ to 1	1 Pc.	
18	.064	.060	8	10	6	31	15	28¼	36	2½ to 1	1 Pc.	
21	.064	.060	9	12	6	36	18	29⅝	42	2½ to 1	1 Pc.	
24	.064	.075	10	13	6	41	18	37¼	48	2½ to 1	1 Pc.	
30	.079	.075	12	16	8	51	18	52¼	60	2½ to 1	1 Pc.	
36	.079	.105	14	19	9	60	24	59¾	72	2½ to 1	2 Pc.	
42	.109	.105	16	22	11	69	24	75⅝	84	2½ to 1	2 Pc.	
48	.109	.105	18	27	12	78	24	81	90	2¼ to 1	3 Pc.	
54	.109	.105	18	30	12	84	30	85½	102	2¼ to 1	3 Pc.	
60	.109x	.105x	18	33	12	87	—	—	114	2 to 1	3 Pc.	
66	.109x	.105x	18	36	12	87	—	—	120	2 to 1	3 Pc.	
72	.109x	.105x	18	39	12	87	—	—	126	2 to 1	3 Pc.	
78	.109x	.105x	18	42	12	87	—	—	132	1½ to 1	3 Pc.	
84	.109x	.105x	18	45	12	87	—	—	138	1½ to 1	3 Pc.	
90	.109x	.105x	18	37	12	87	—	—	144	1½ to 1	3 Pc.	
96	.109x	.105x	18	35	12	87	—	—	150	1½ to 1	3 Pc.	

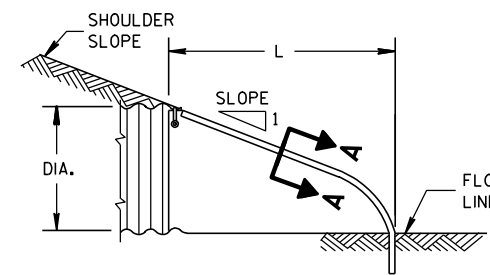
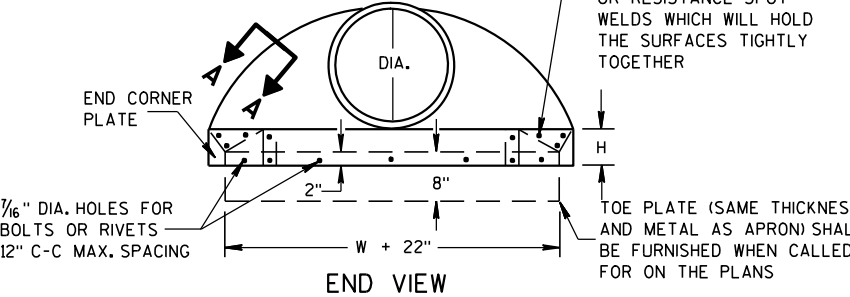
* EXCEPT CENTER PANEL
SEE GENERAL NOTES



REINFORCED
EDGE (SEE
SECTION A-A)

END CORNER PLATES MAY
BE FASTENED TO APRON
PROPER BY BOLTS, RIVETS,
OR RESISTANCE SPOT
WELDS WHICH WILL HOLD
THE SURFACES TIGHTLY
TOGETHER

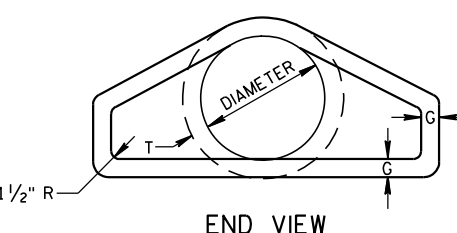
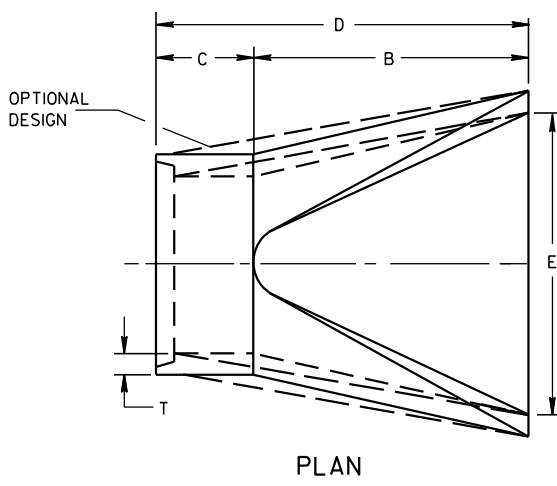
TOE PLATE (SAME THICKNESS
AND METAL AS APRON) SHALL
BE FURNISHED WHEN CALLED
FOR ON THE PLANS



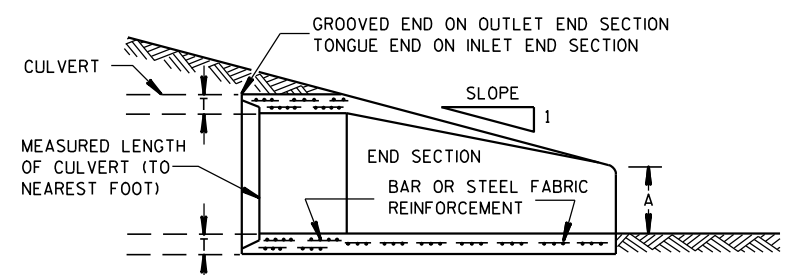
SIDE ELEVATION
METAL ENDWALLS

REINFORCED CONCRETE APRON ENDWALLS								
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE
	T	A	B	C	D	E	G	
12	2	4	24	48 ⁷ / ₈	72 ⁷ / ₈	24	2	3 to 1
15	2 ¹ / ₄	6	27	46	73	30	2 ¹ / ₄	3 to 1
18	2 ² / ₂	9	27	46	73	36	2 ² / ₂	3 to 1
21	2 ³ / ₄	9	36	37 ¹ / ₂	73 ¹ / ₂	42	2 ³ / ₄	3 to 1
24	3	9 ¹ / ₂	43 ¹ / ₂	30	73 ¹ / ₂	48	3	3 to 1
27	3 ¹ / ₄	10 ¹ / ₂	49 ¹ / ₂	24	73 ¹ / ₂	54	3 ¹ / ₄	3 to 1
30	3 ¹ / ₂	12	54	19 ³ / ₄	73 ¹ / ₂	60	3 ¹ / ₂	3 to 1
36	4	15	63	34 ³ / ₄	97 ³ / ₄	72	4	3 to 1
42	4 ¹ / ₂	21	63	35	98	78	4 ¹ / ₂	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 ¹ / ₂	27	65	^{**} / ₃₃ 4- ^{**} / ₃₅	[*] / ₉₈ 4- ^{**} / ₁₀₀	90	5 ¹ / ₂	2 ⁵ / ₅ to 1
60	6	[*] / ₃₀ - ^{**} / ₃₅	60	39	99	96	5	2 to 1
66	6 ¹ / ₂	^{**} / ₂₄ - ^{**} / ₃₀	^{**} / ₇₂ - ^{**} / ₇₈	[*] / ₂₁ - ^{**} / ₂₇	99	102	5 ¹ / ₂	2 to 1
72	7	[*] / ₂₄ - ^{**} / ₃₆	78	21	99	108	6	2 to 1
78	7 ¹ / ₂	[*] / ₂₄ - ^{**} / ₃₆	78	21	99	114	6 ¹ / ₂	2 to 1
84	8	36	90 ¹ / ₂	21	111 ¹ / ₂	120	6 ¹ / ₂	1 ¹ / ₂ to 1
90	8 ¹ / ₂	41	87 ¹ / ₂	24	111 ¹ / ₂	132	6 ¹ / ₂	1 ¹ / ₂ to 1

*MINIMUM
**MAXIMUM

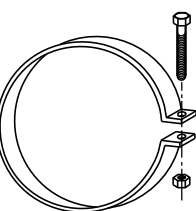


END VIEW

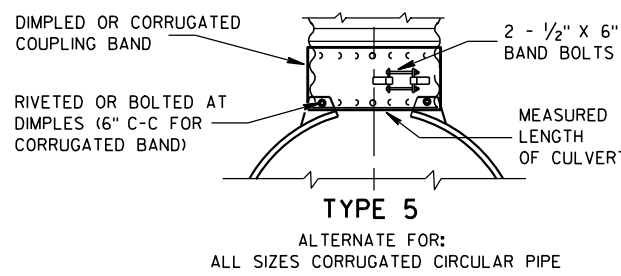
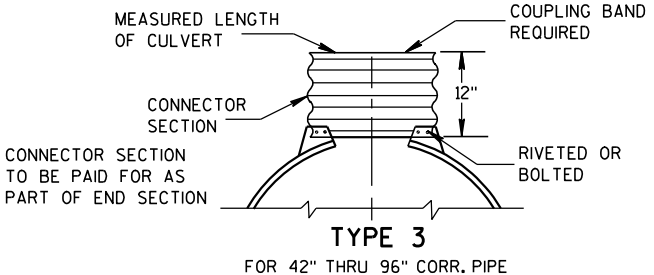
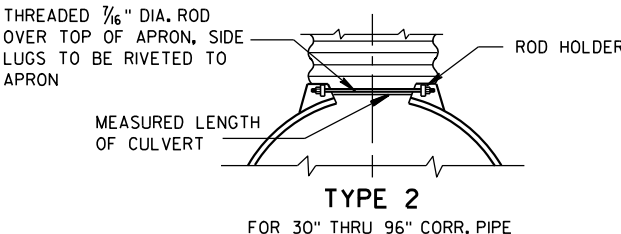
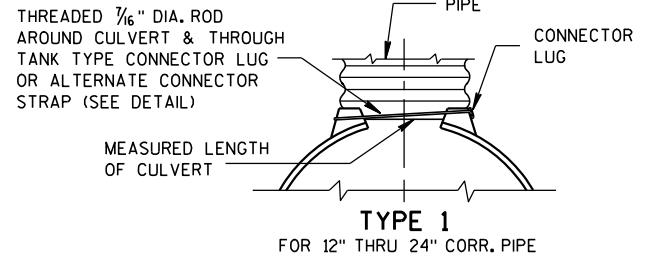


LONGITUDINAL SECTION
CONCRETE ENDWALLS

1" WIDE, 12 GA. (0.109"
THICK) GALVANIZED STRAP
WITH STANDARD 6" X 1/2"
BAND BOLT AND NUT



ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



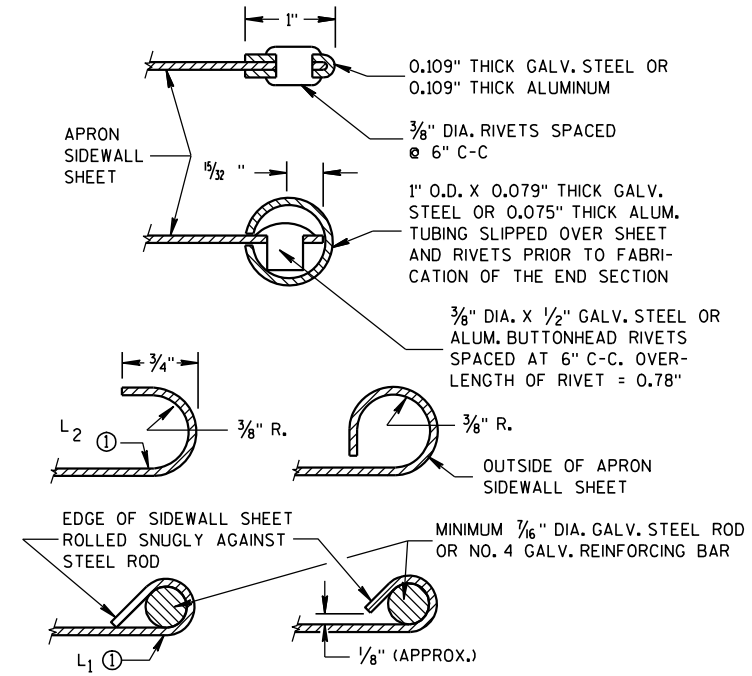
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL,
AND CORRUGATED BAND FITS INSIDE ENDWALL.
DIMPLED BAND MAY BE USED WITH HELICALLY
CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE
ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5
AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL
CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO
CIRCUMFERENTIAL CORRUGATIONS AT EACH END
USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL
OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR
ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE
OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND
LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL
THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND
LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH
OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE
PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS
FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS.
FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED
EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH
GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE
ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM
NUTS AND BOLTS FOR ALUMINUM UNITS.

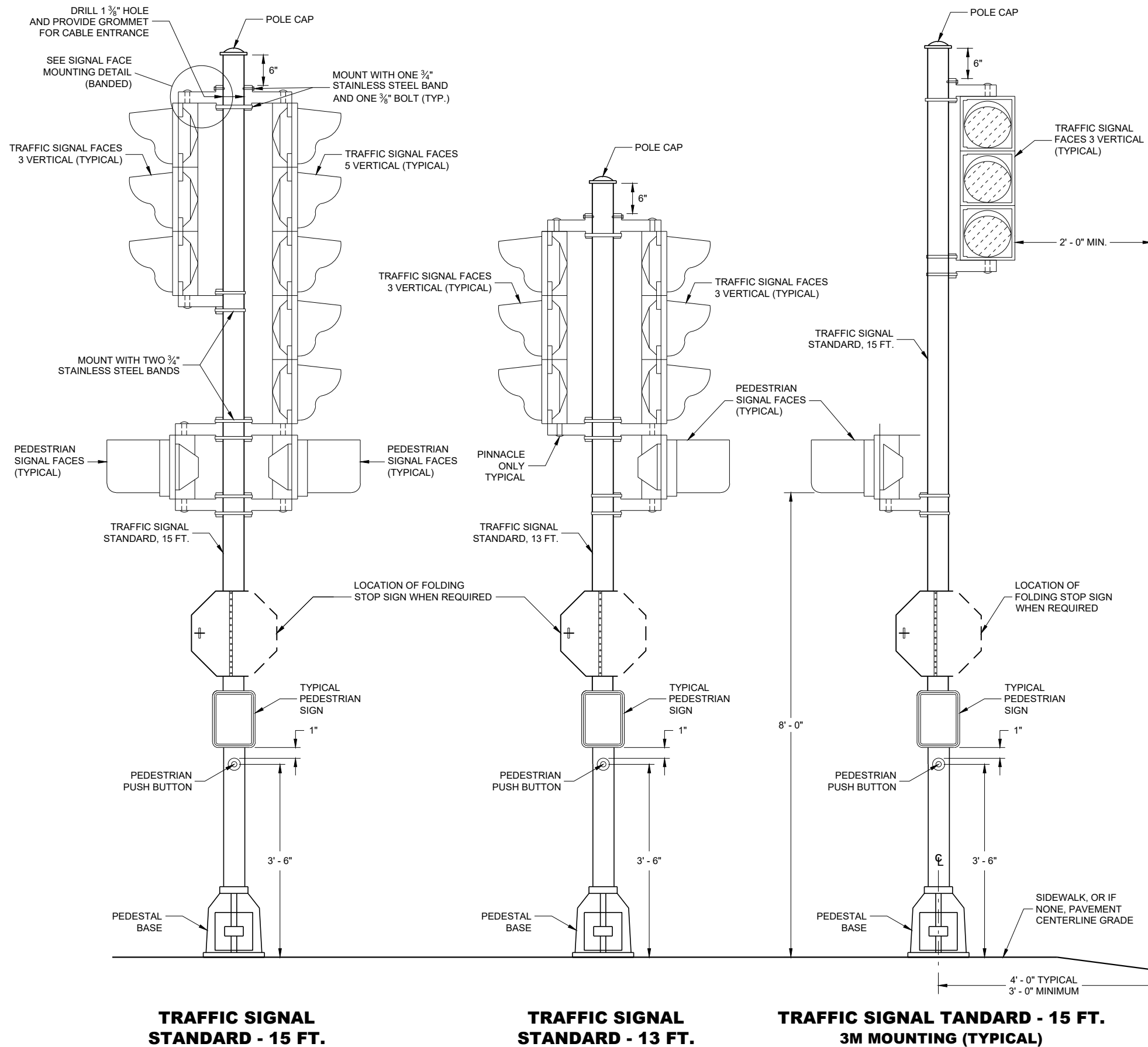
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT
TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT
TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED
INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94
DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

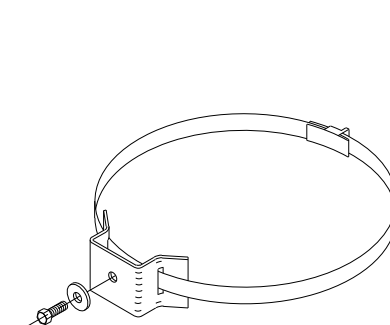
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

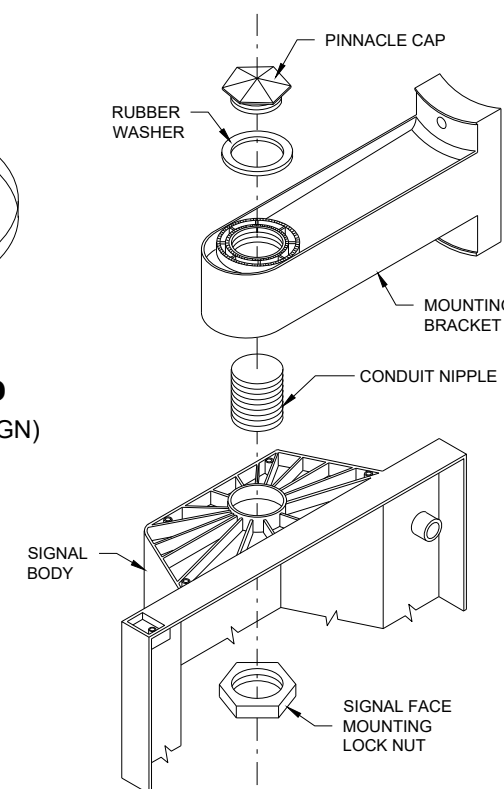
FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



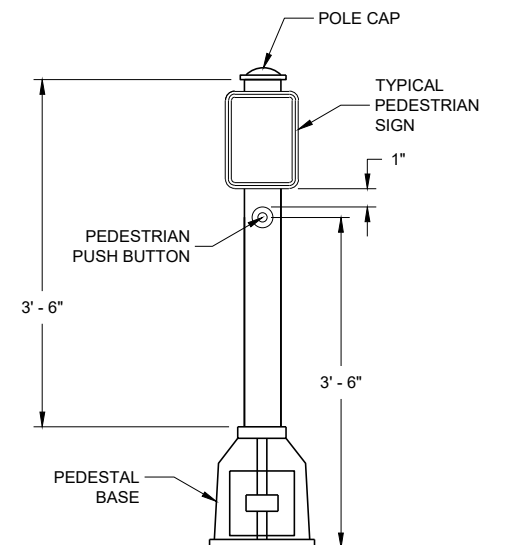
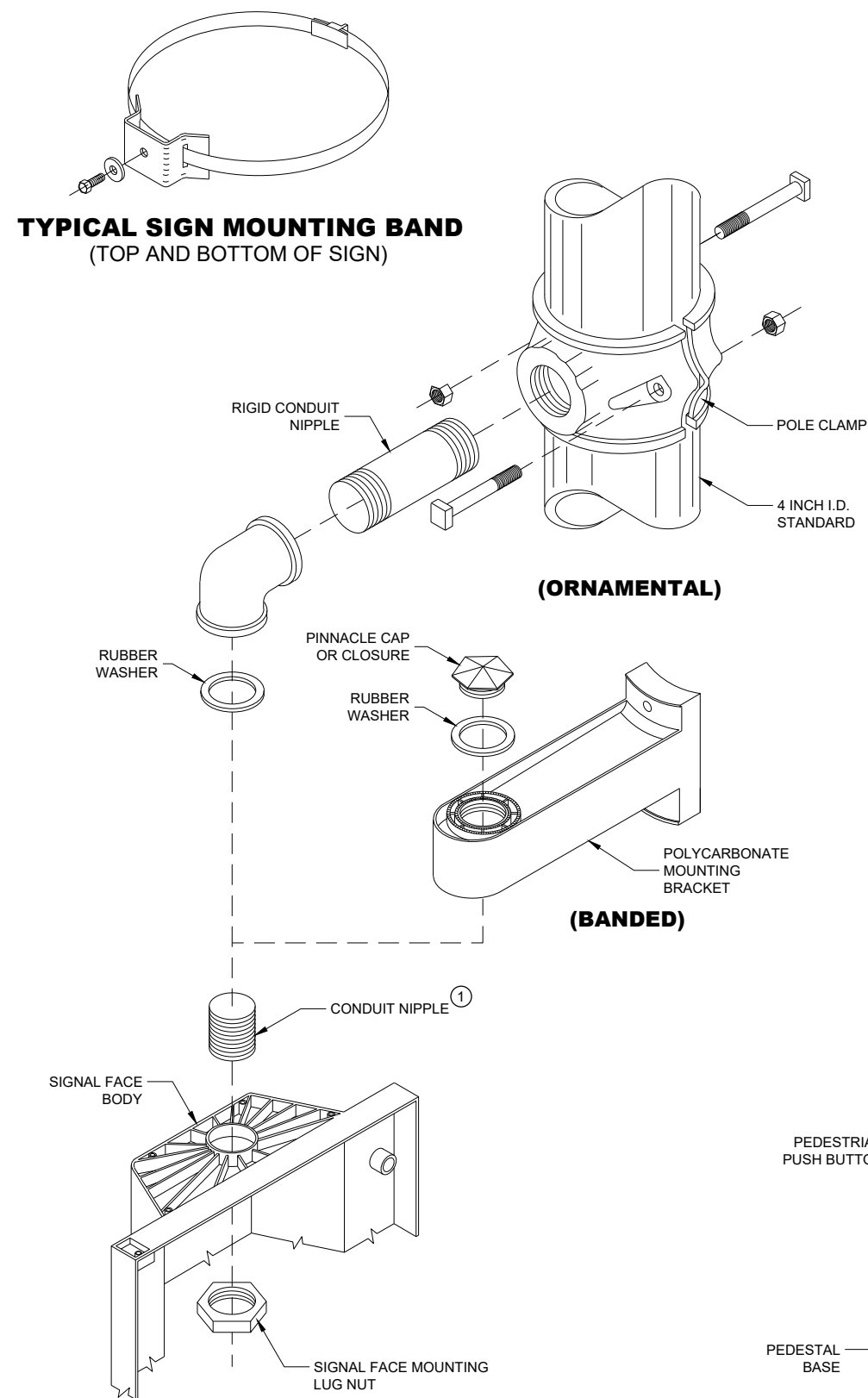
SIGNAL FACE MOUNTING DETAIL (BANDED)

**TRAFFIC SIGNAL STANDARD
POLY BRACKET MOUNTINGS
(TYPICAL) 13 FT. OR 15 FT.**

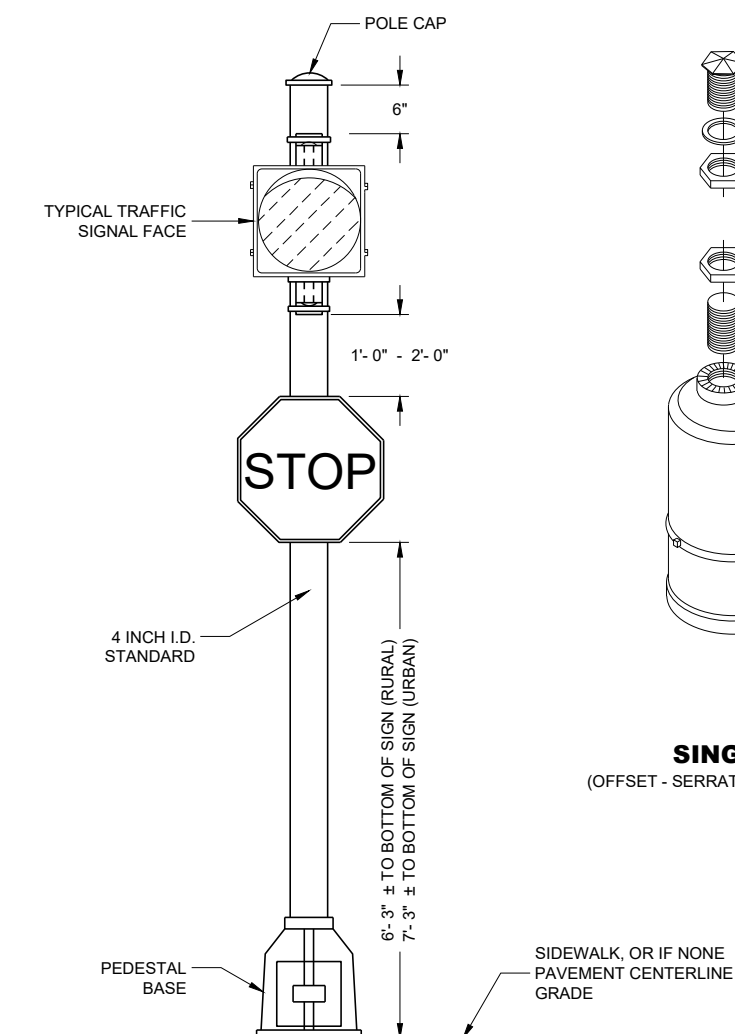
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/28/2013 DATE /S/ Ahmet Demirelek
STATE ELECTRICAL ENGINEER

FHWA



**PEDESTRIAN PUSH BUTTON
TYPICAL MOUNTING**



STANDARD FLASHER
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS, UNLESS APPROVED BY THE ENGINEER IN THE FIELD.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

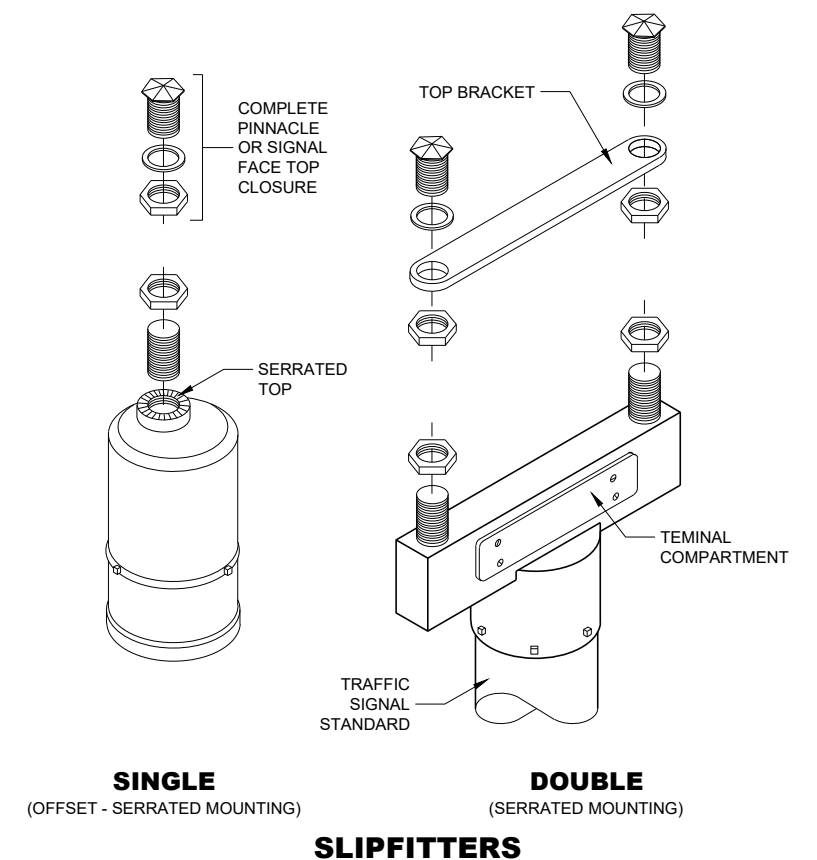
LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE REGION TRAFFIC ENGINEER).

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/2" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

- ① USE 1 1/2" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 1/2" OPENING IN SIGNAL FACES AND BRACKET ENDS.

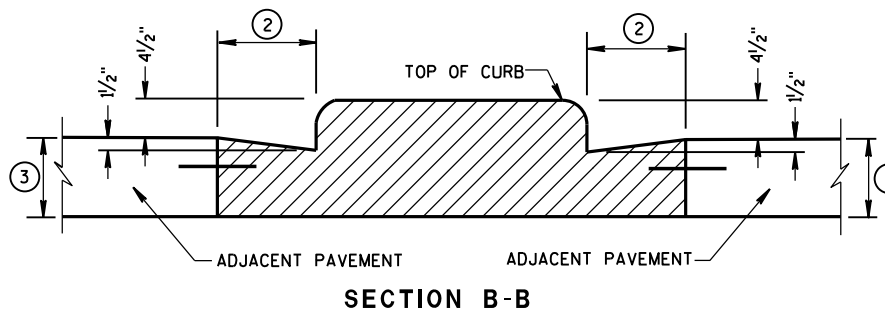
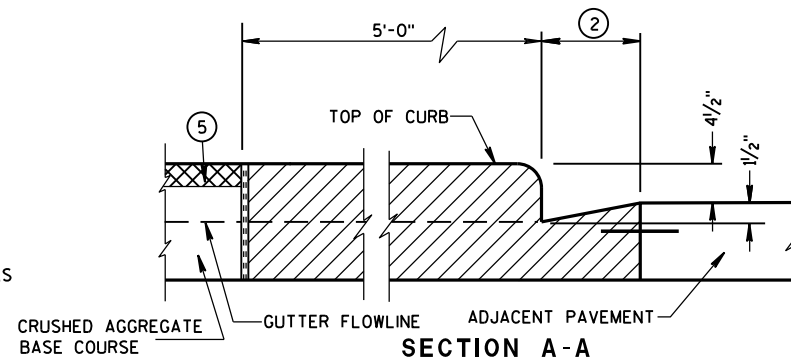
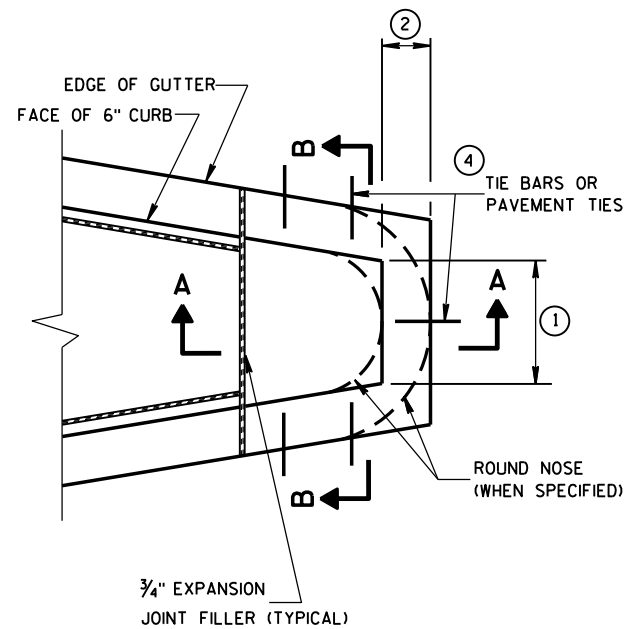
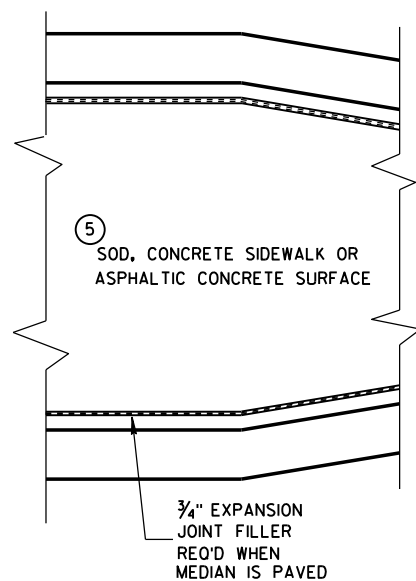


SLIPFITTERS

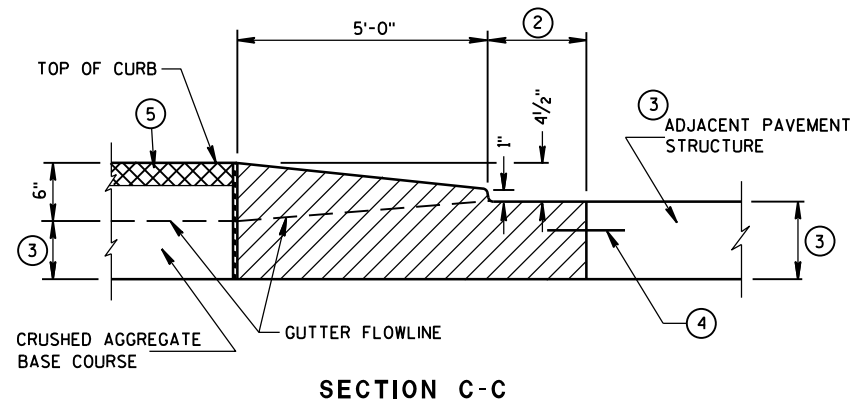
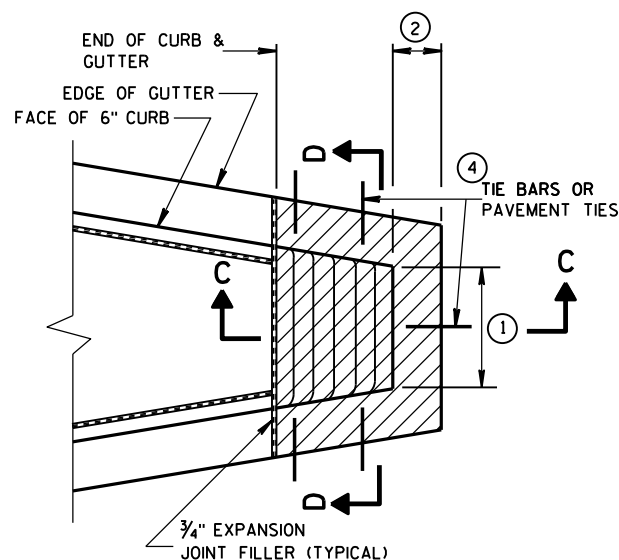
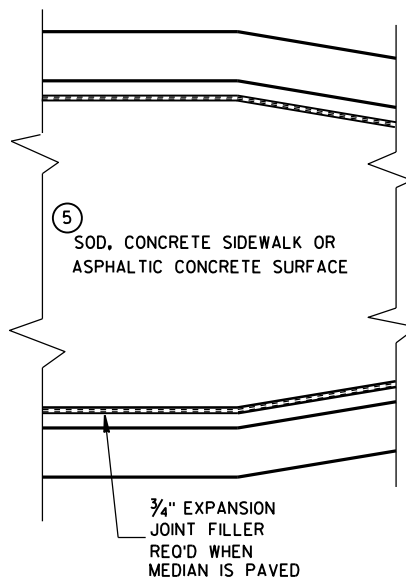
TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

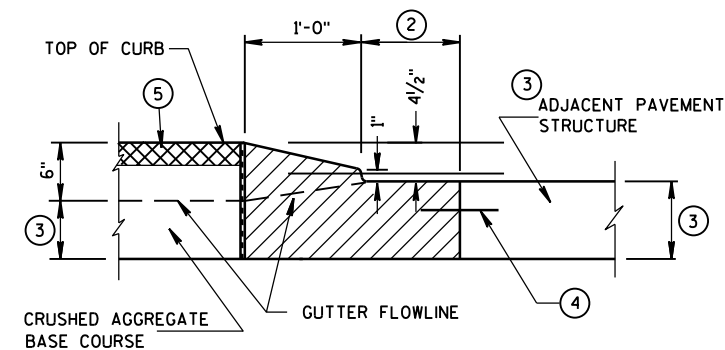
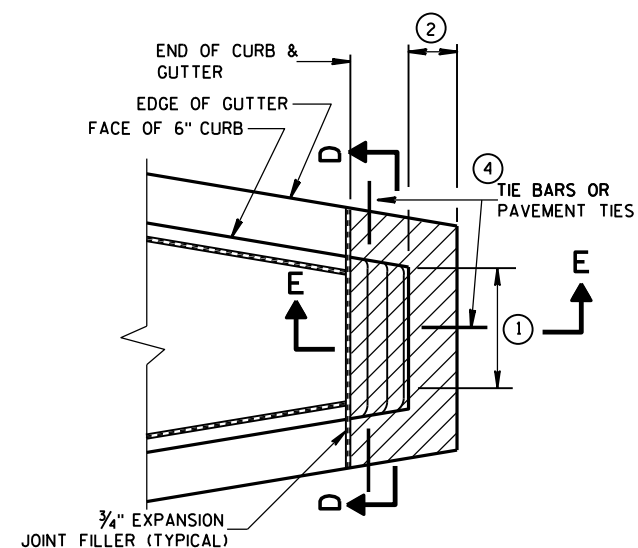
APPROVED
November 2018 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL ENGINEER
FHWA



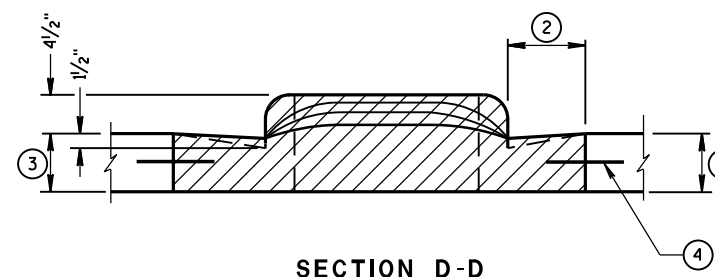
CONCRETE MEDIAN BLUNT NOSE DETAIL



CONCRETE MEDIAN SLOPED NOSE TYPE 1



CONCRETE MEDIAN SLOPED NOSE TYPE 2



GENERAL NOTES

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

- ① SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).
- ② WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.
- ③ DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:
 - (1) NEW OR EXISTING CONCRETE PAVEMENT.
 - (2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.
 - (3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

- ④ TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

- ⑤ SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

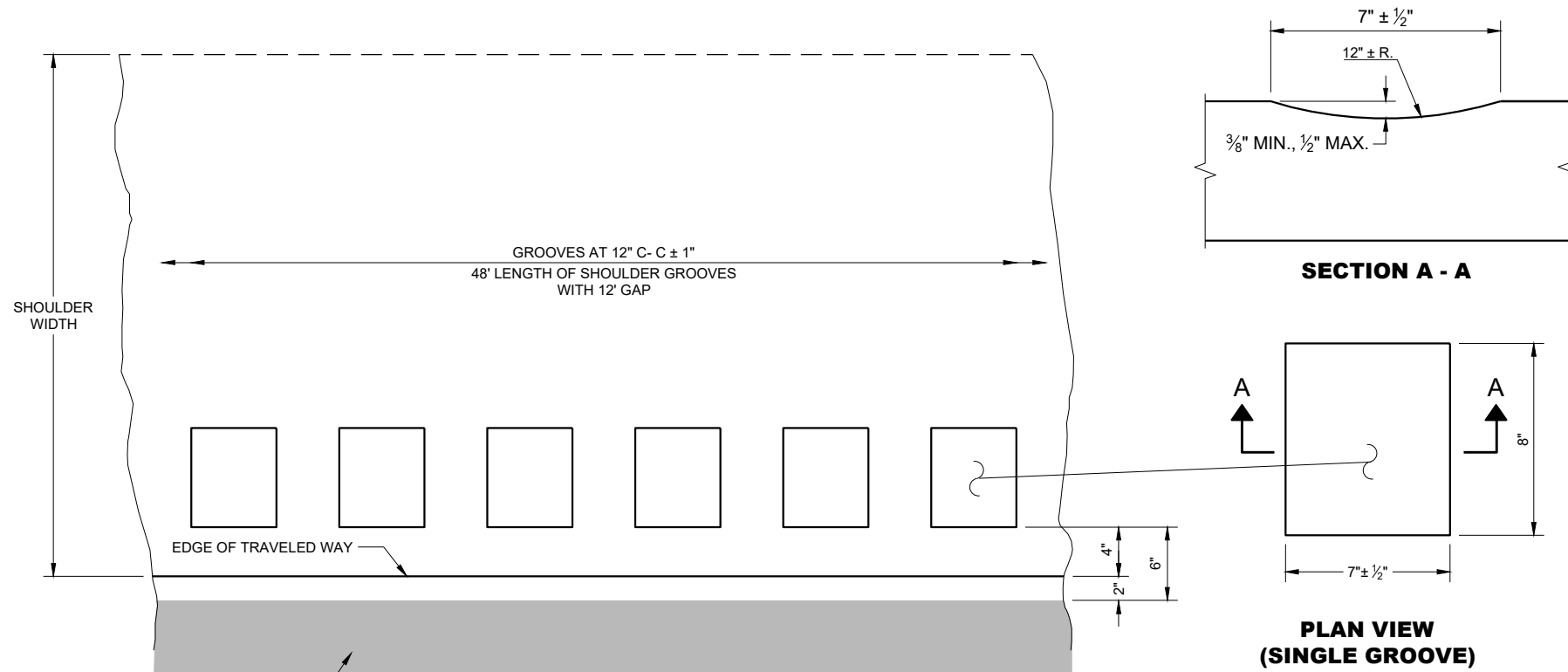
APPROVED

6/8/2006

DATE

FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

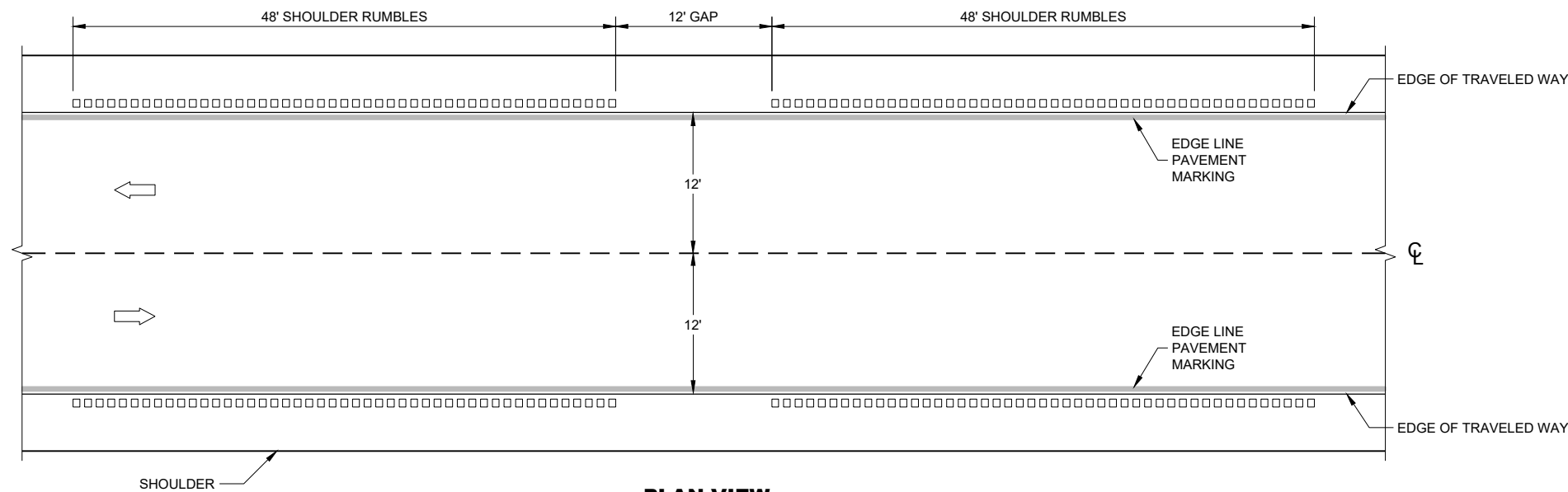
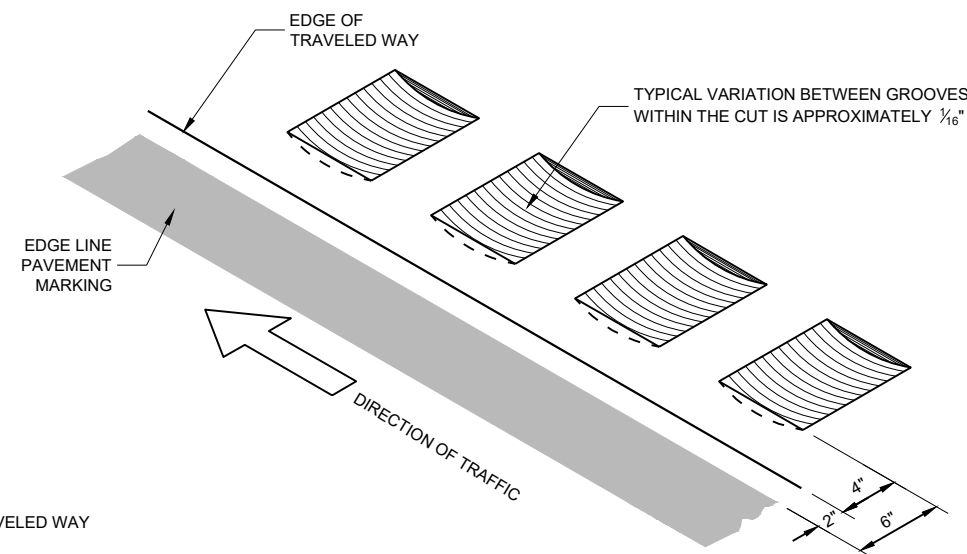


PLAN DETAIL VIEW
SHOULDER WITH GROOVES

GENERAL NOTES

DO NOT MILL SHOULDER GROOVES THROUGH INTERSECTIONS, MARKED CROSSWALKS, NON-MOTORIZED PATH CROSSINGS, ETC. REFER TO SDD 13A10 SHEETS "g" AND "h".

SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.

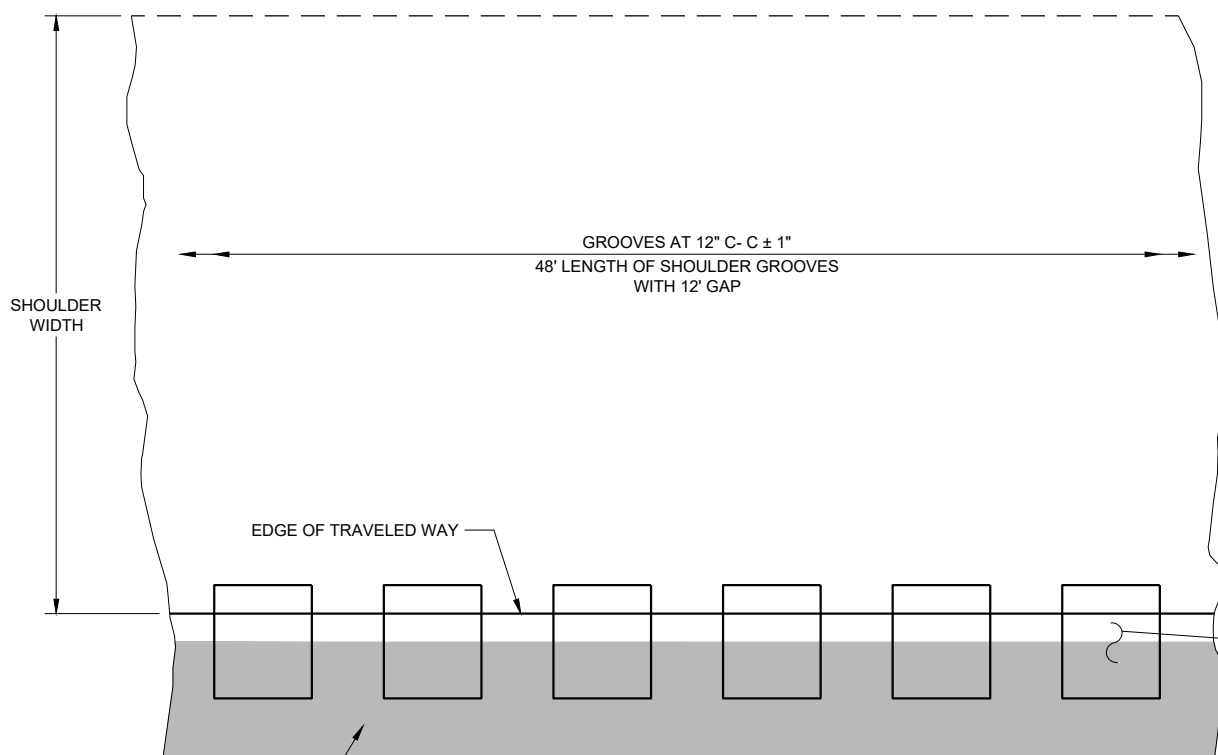


PLAN VIEW

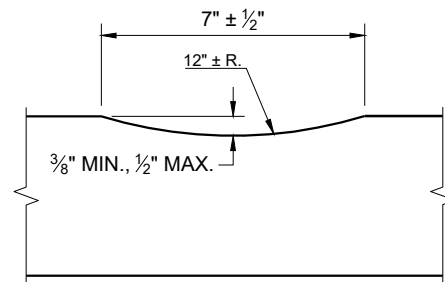
SHOULDER RUMBLE STRIPS - ASPHALT

**SHOULDER RUMBLE
STRIPS ASPHALT**

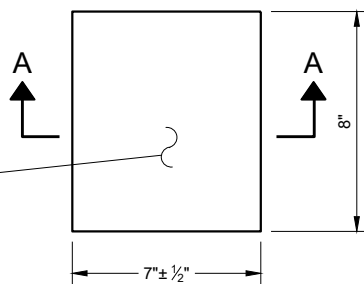
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PLAN DETAIL VIEW
SHOULDER WITH GROOVES



SECTION A - A

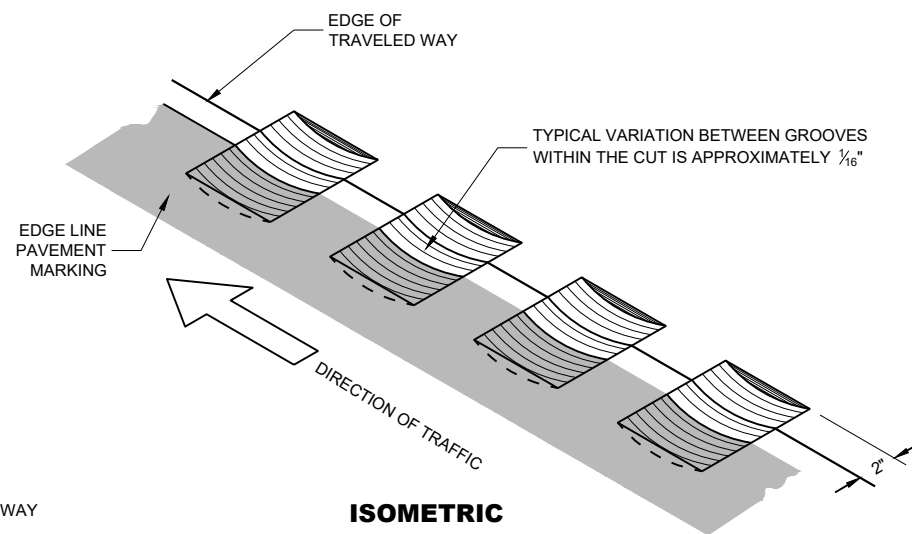


PLAN VIEW
(SINGLE GROOVE)

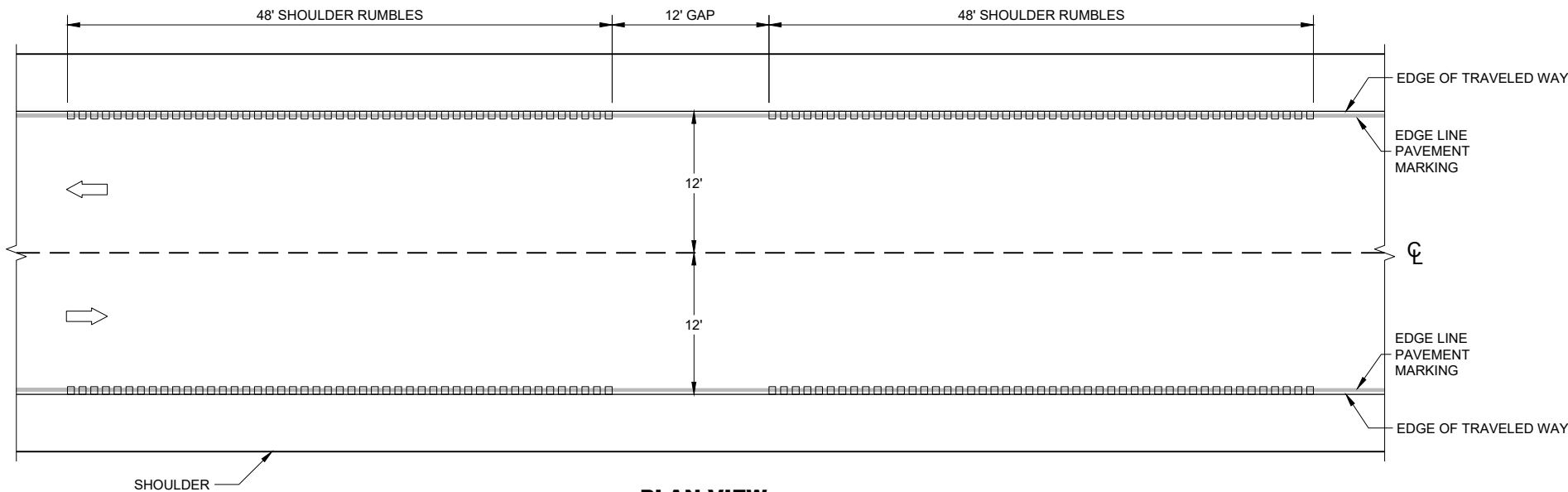
GENERAL NOTES

DO NOT MILL SHOULDER GROOVES THROUGH INTERSECTIONS, MARKED CROSSWALKS, NON-MOTORIZED PATH CROSSINGS, ETC. REFER TO SDD 13A10 SHEETS "g" AND "h".

SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



ISOMETRIC

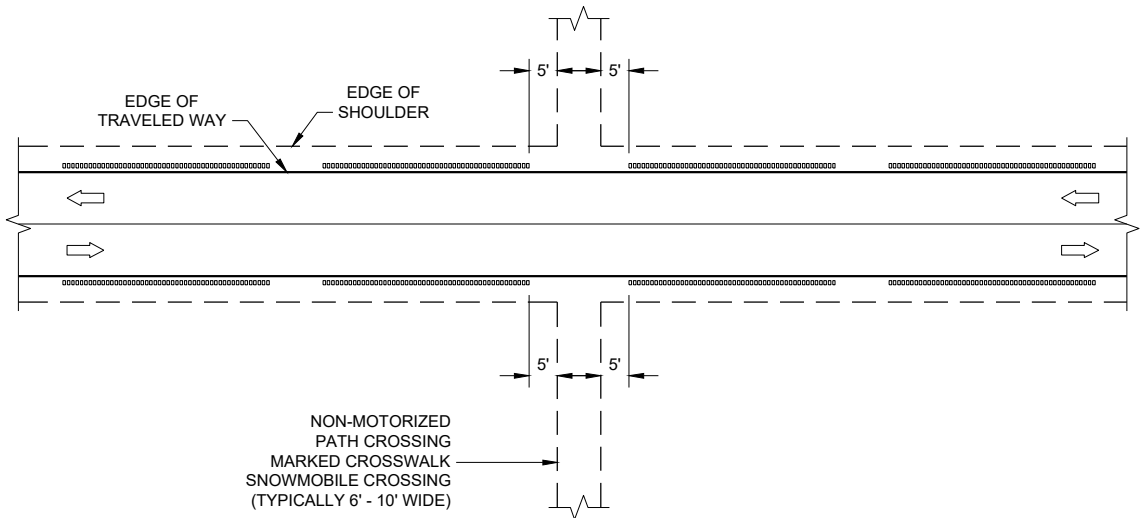


PLAN VIEW

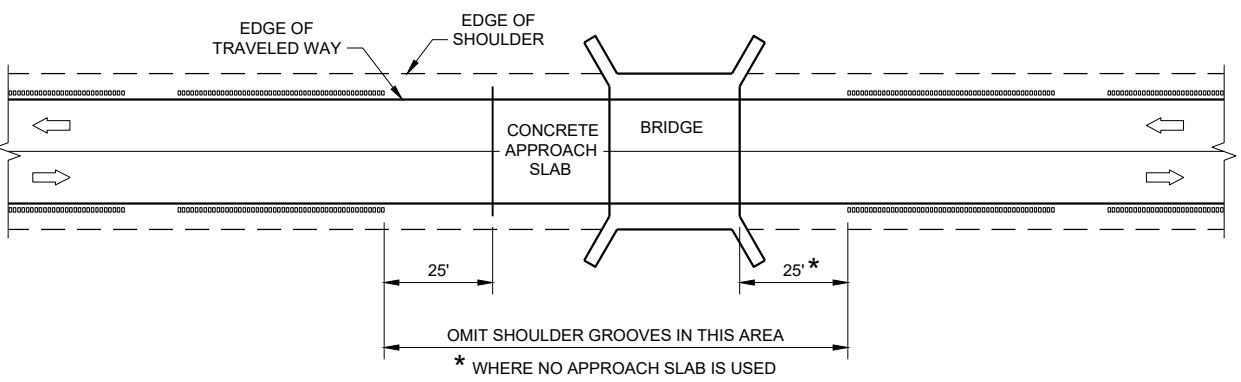
EDGE LINE RUMBLE STRIPS - ASPHALT

EDGE LINE RUMBLE
STRIPS - ASPHALT

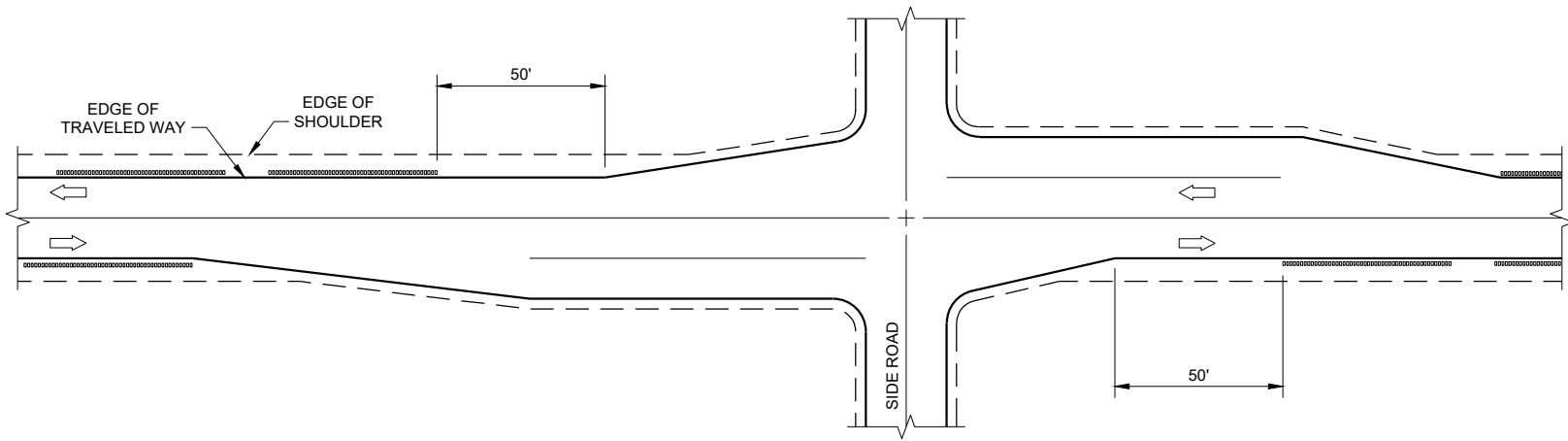
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



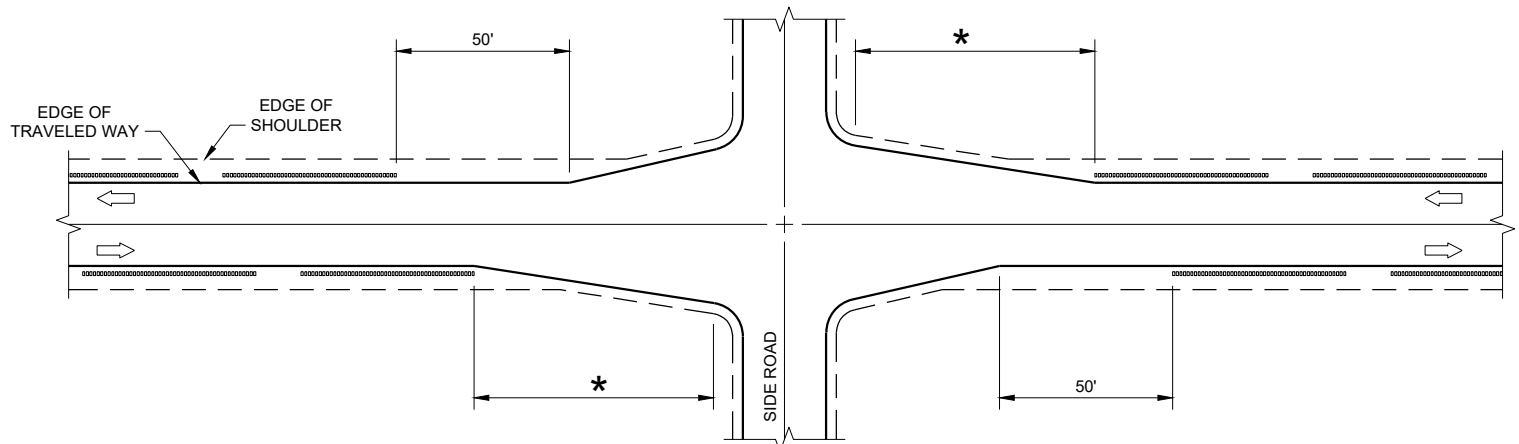
GROOVES AT MISCELLANEOUS CROSSINGS



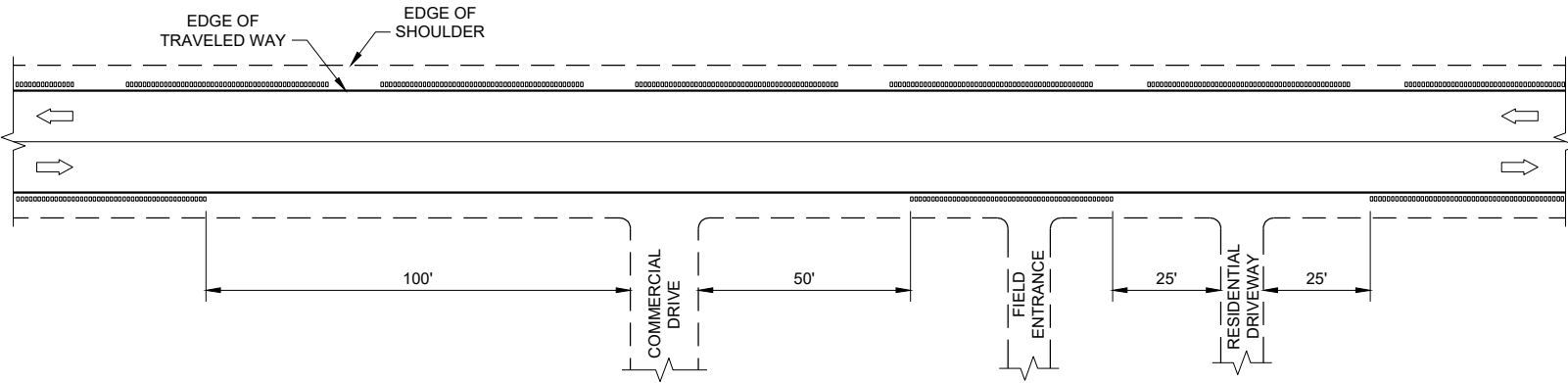
GROOVES AT BRIDGES



GROOVES AT RIGHT TURN LANE



GROOVES AT INTERSECTIONS WITH APPROACH TAPER



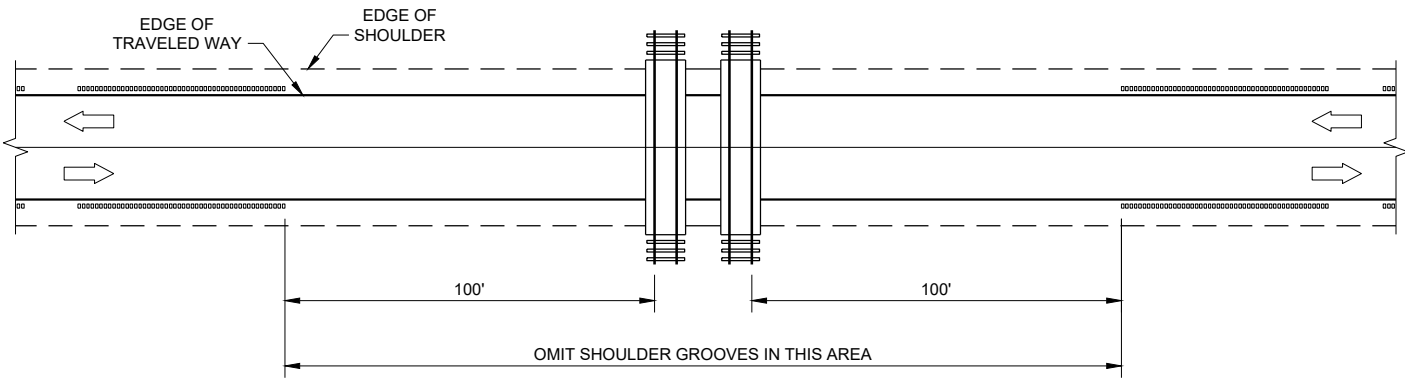
GROOVES AT DRIVEWAYS

GENERAL NOTES

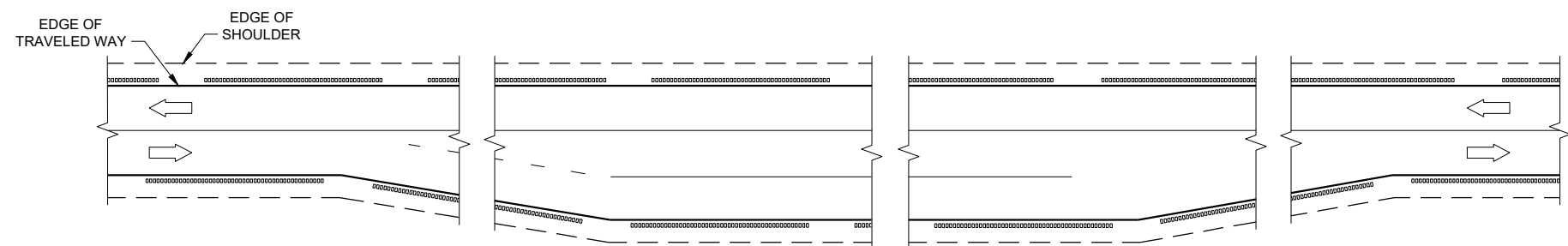
- ① SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

SHOULDER AND EDGE LINE
RUMBLE STRIPS
CROSSINGS, INTERSECTIONS,
BRIDGES, DRIVEWAYS

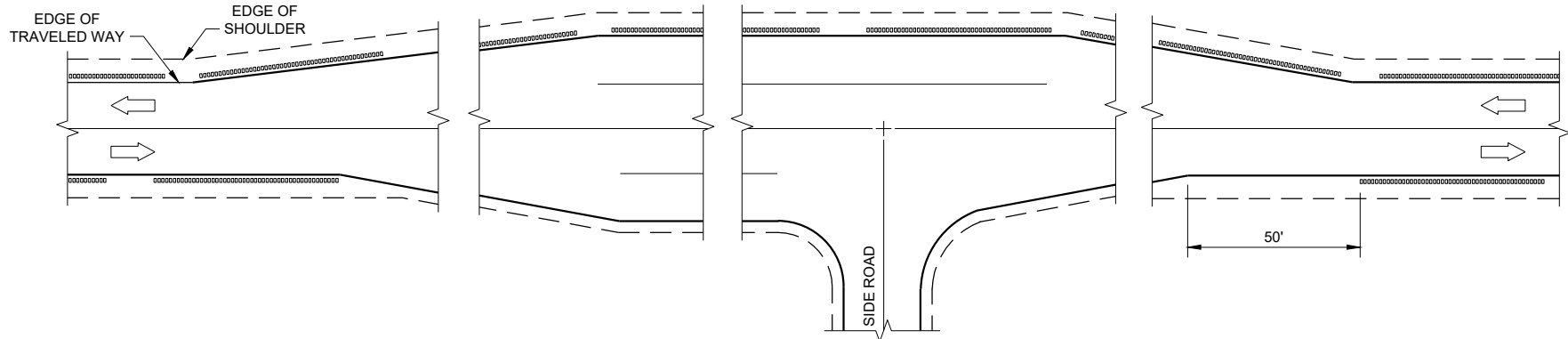
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



GROOVES AT RAILROADS



GROOVES AT PASSING AND CLIMBING LANES



GROOVES AT BYPASS LANES

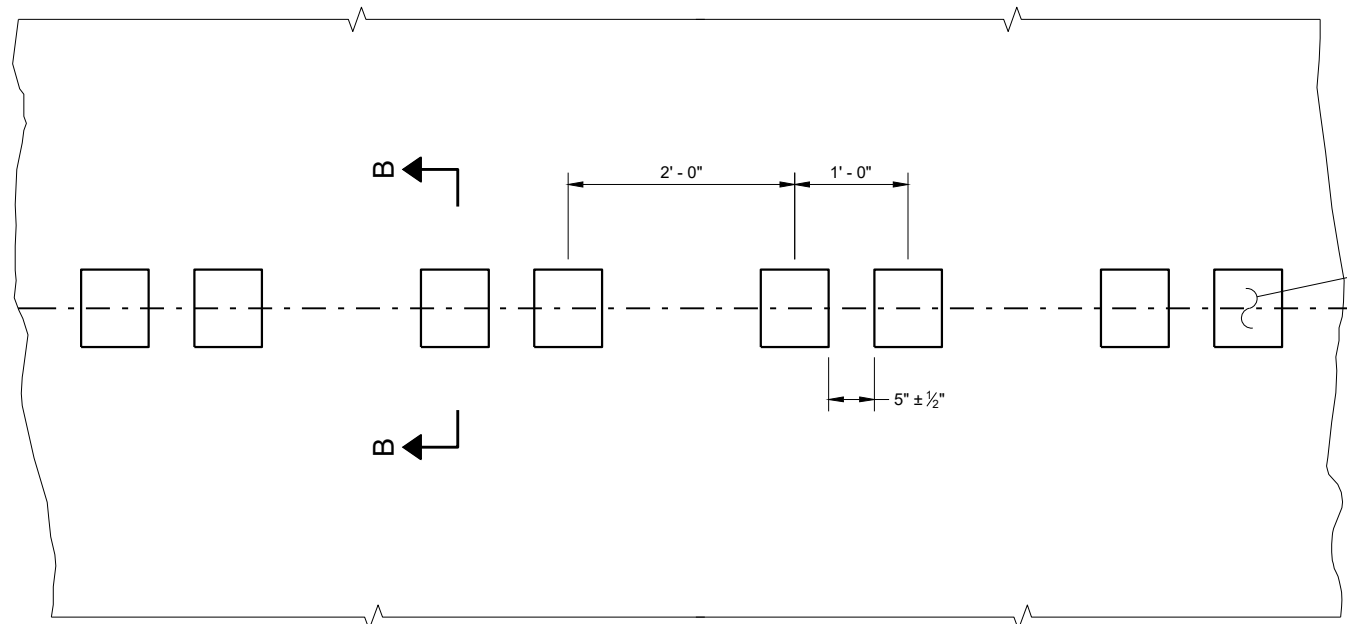
**SHOULDER AND EDGE LINE
RUMBLE STRIPS -
RAILROAD, PASSING,
CLIMBING AND BYPASS LANES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

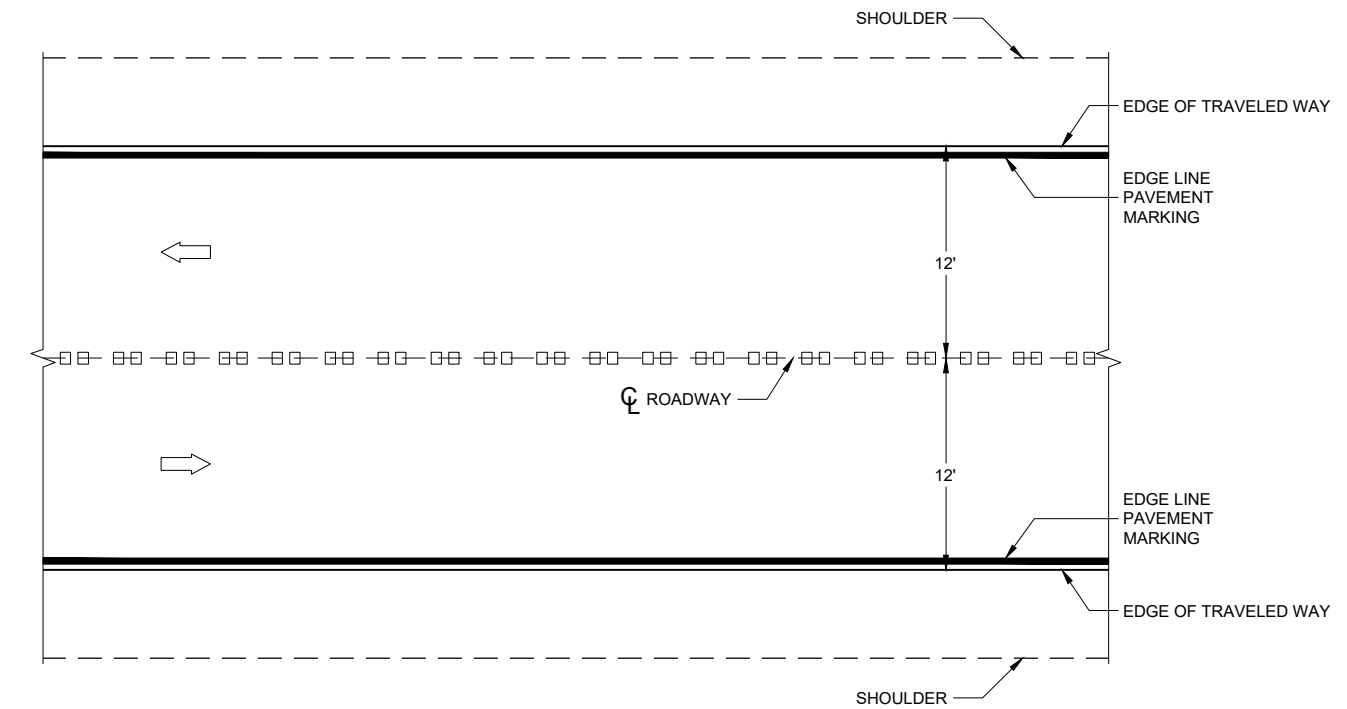
APPROVED
May 2023
DATE

/S/ John Jenkins
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

FHWA

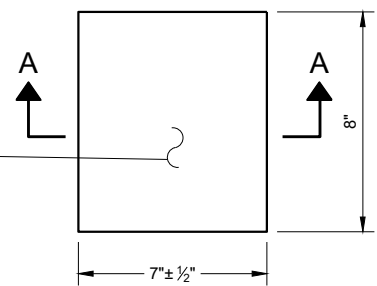


PLAN DETAIL VIEW

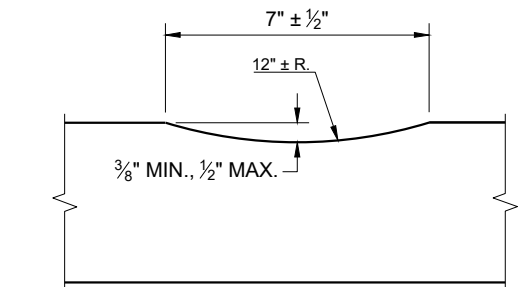


PLAN VIEW

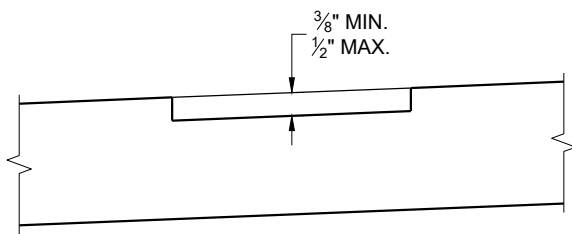
CENTERLINE RUMBLE STRIPS - ASPHALT



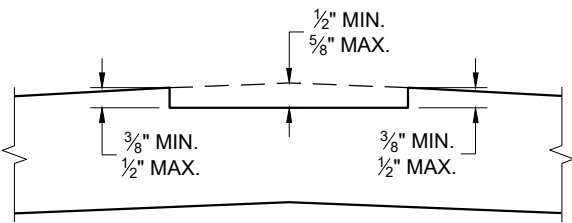
PLAN VIEW
(SINGLE GROOVE)



SECTION A - A



SECTION B - B
SUPERELEVATED ROADWAY

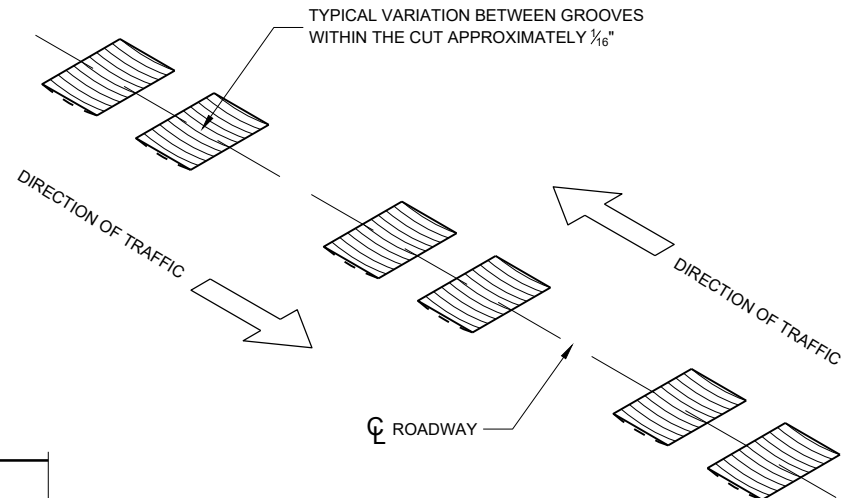


SECTION B - B
CROWNED ROADWAY

GENERAL NOTES

DO NOT MILL SHOULDER GROOVES THROUGH INTERSECTIONS, MARKED CROSSWALKS, NON-MOTORIZED PATH CROSSINGS, ETC. REFER TO SDD 13A11 SHEETS "d" AND "e".

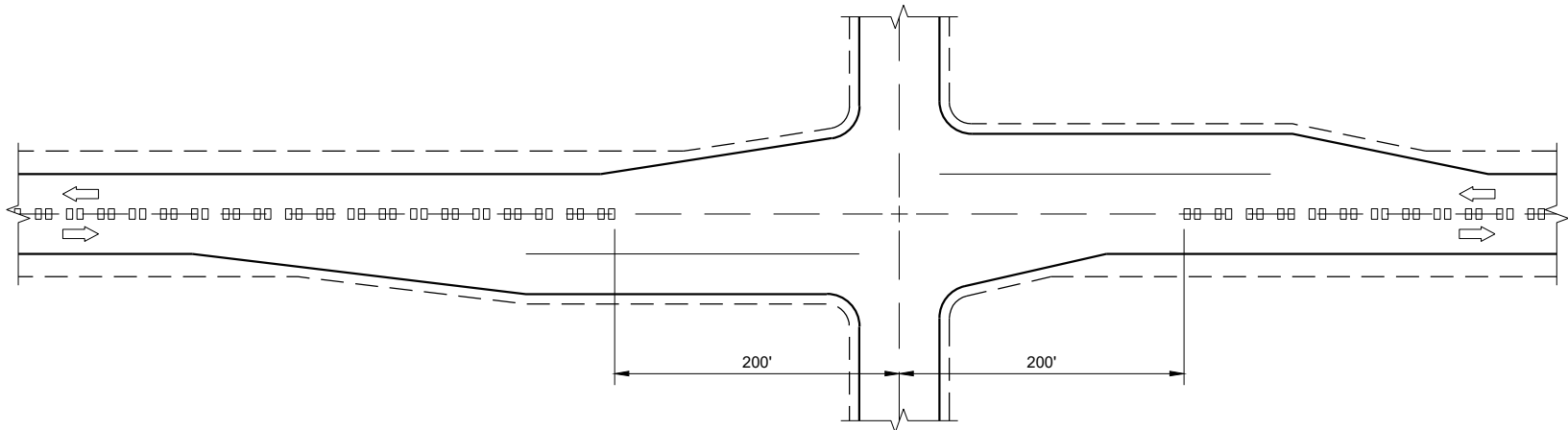
CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



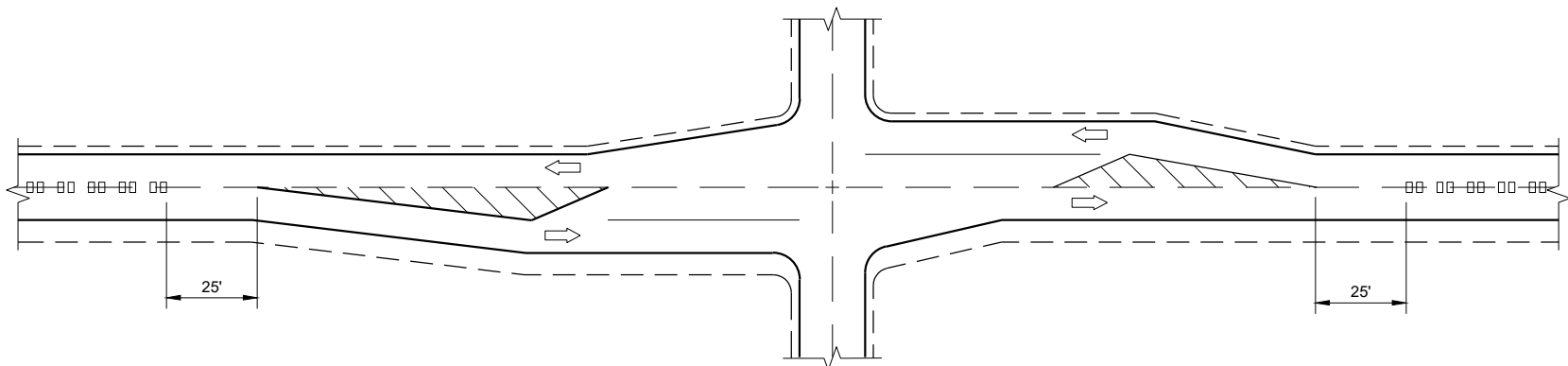
ISOMETRIC

CENTERLINE RUMBLE STRIPS - ASPHALT

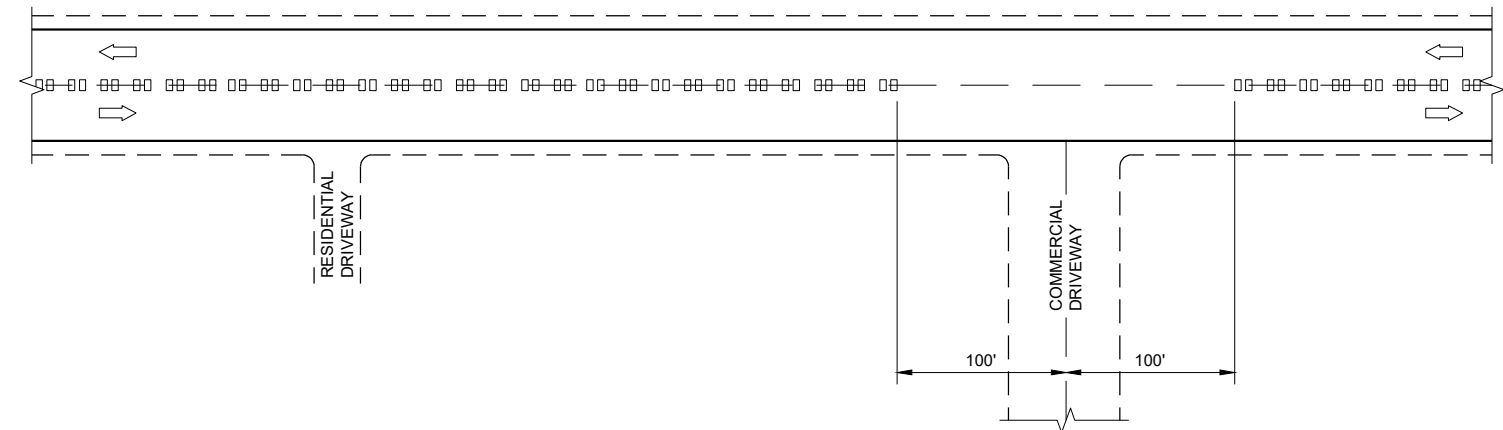
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CENTERLINE GROOVES AT INTERSECTIONS



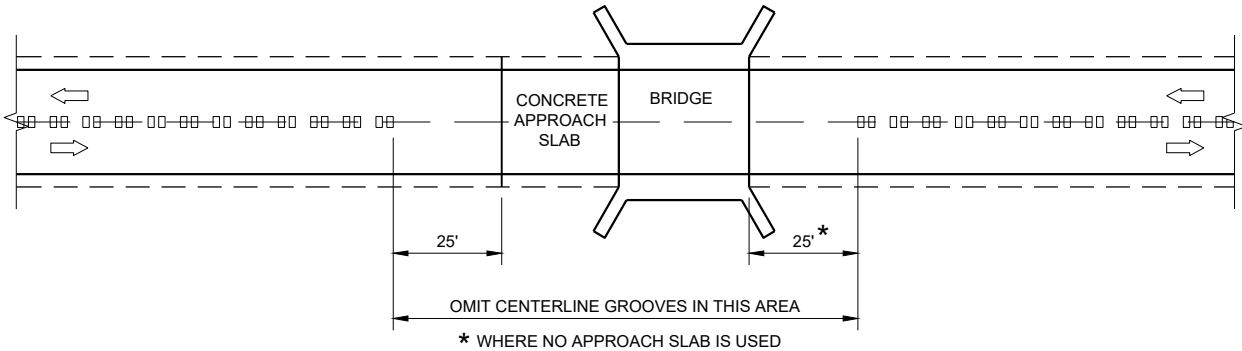
CENTERLINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)



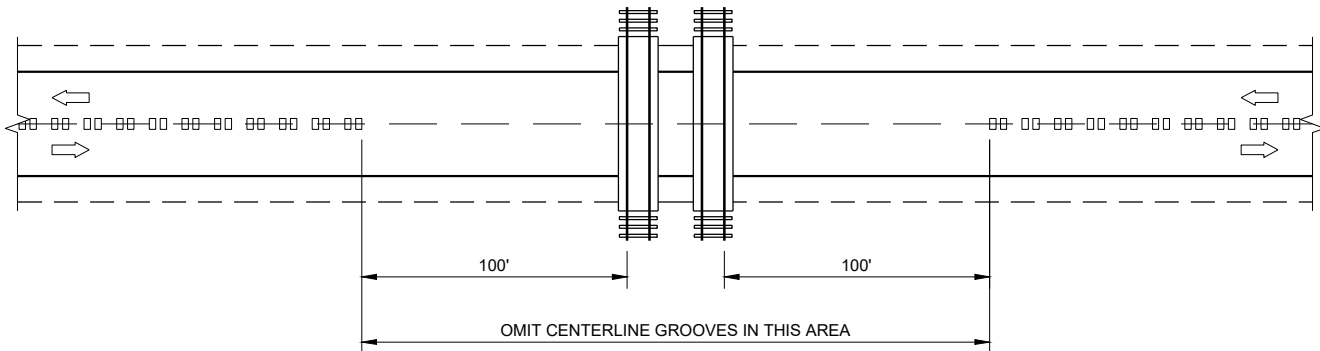
CENTERLINE GROOVES AT DRIVEWAYS^①

GENERAL NOTES

- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



CENTERLINE GROOVES AT BRIDGES

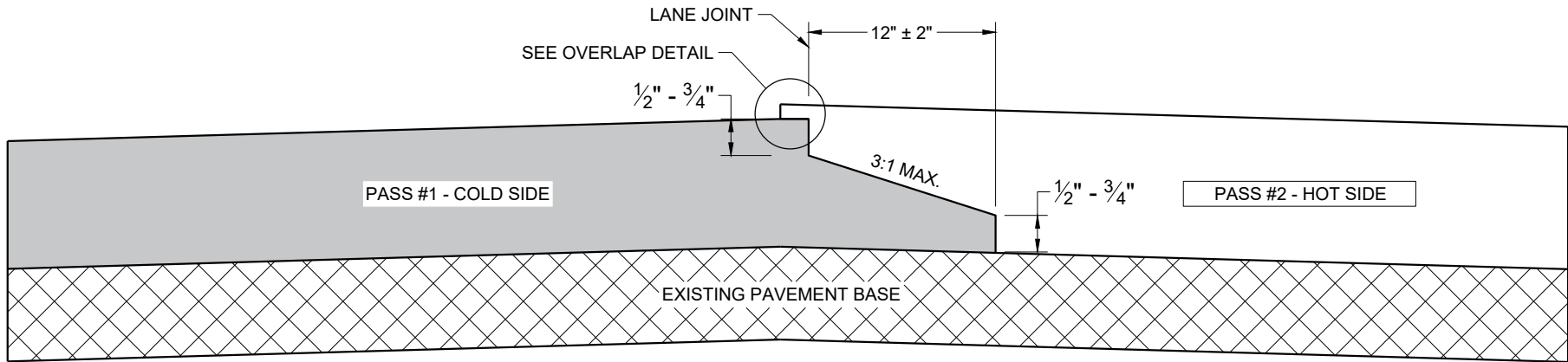


CENTERLINE GROOVES AT RAILROADS

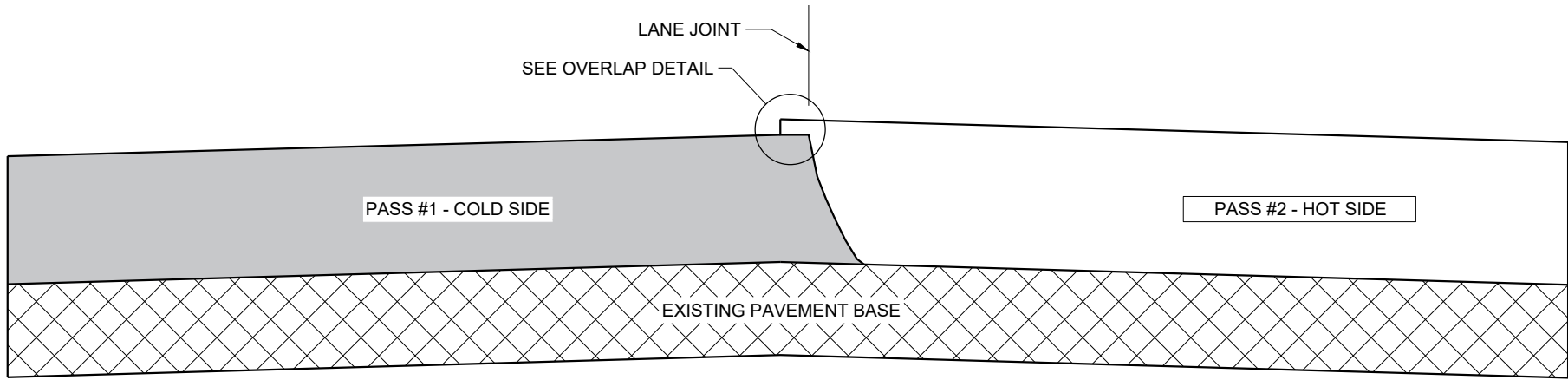
CENTER LINE
RUMBLE STRIPS -
INTERSECTIONS, DRIVEWAYS,
BRIDGES, RAIL ROADS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

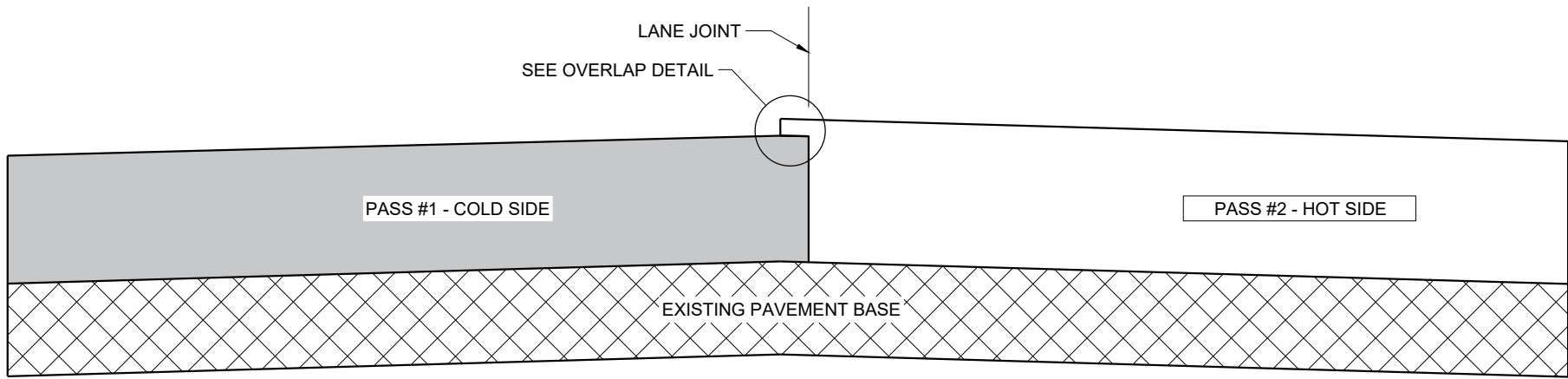
APPROVED
May 2023
DATE
/S/ John Jenkins
ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA



**TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT**



**TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT**



**TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)**

GENERAL NOTES

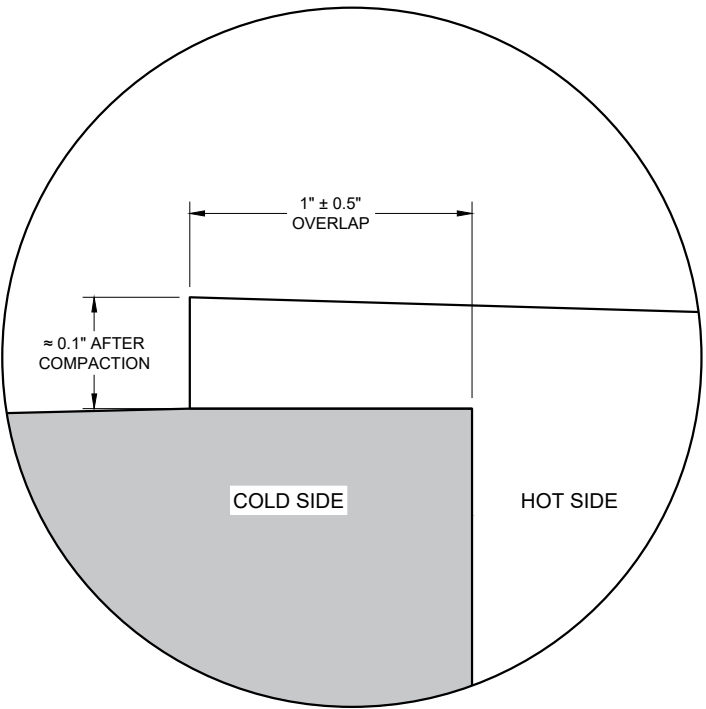
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY $1" \pm 0.5"$ AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY $0.1"$ AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO $2"$ FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.

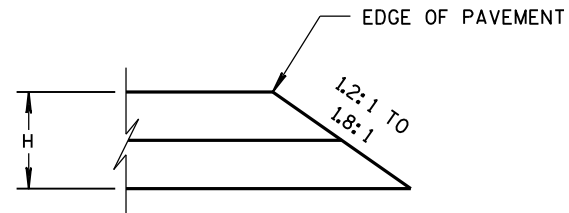


OVERLAP DETAIL (TYPICAL)

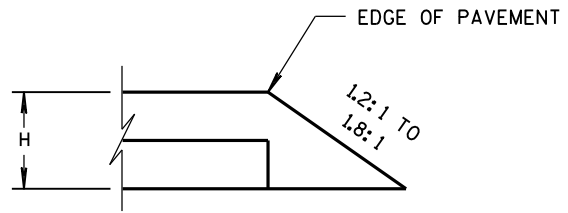
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

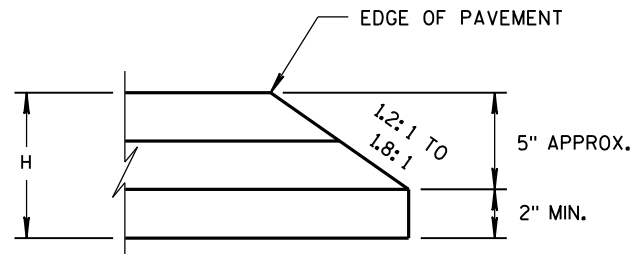
APPROVED
November 2020
DATE /S/ Steven Hefel
HMA PAVEMENT ENGINEER
FHWA



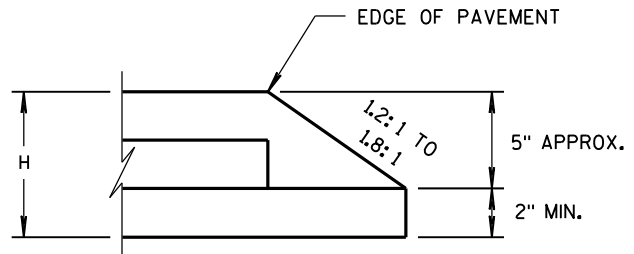
CONSTRUCTED WITH FINAL TWO LAYERS
FOR H 5" OR LESS



CONSTRUCTED WITH FINAL LAYER
FOR H 5" OR LESS

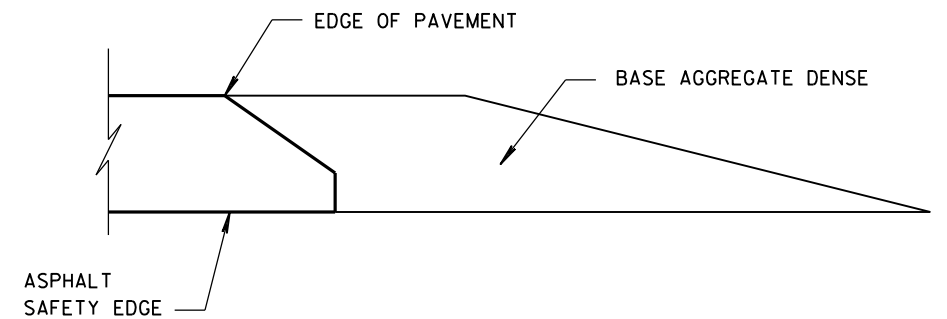


CONSTRUCTED WITH FINAL TWO LAYERS
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER
FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

SAFETY EDGE_{SM}

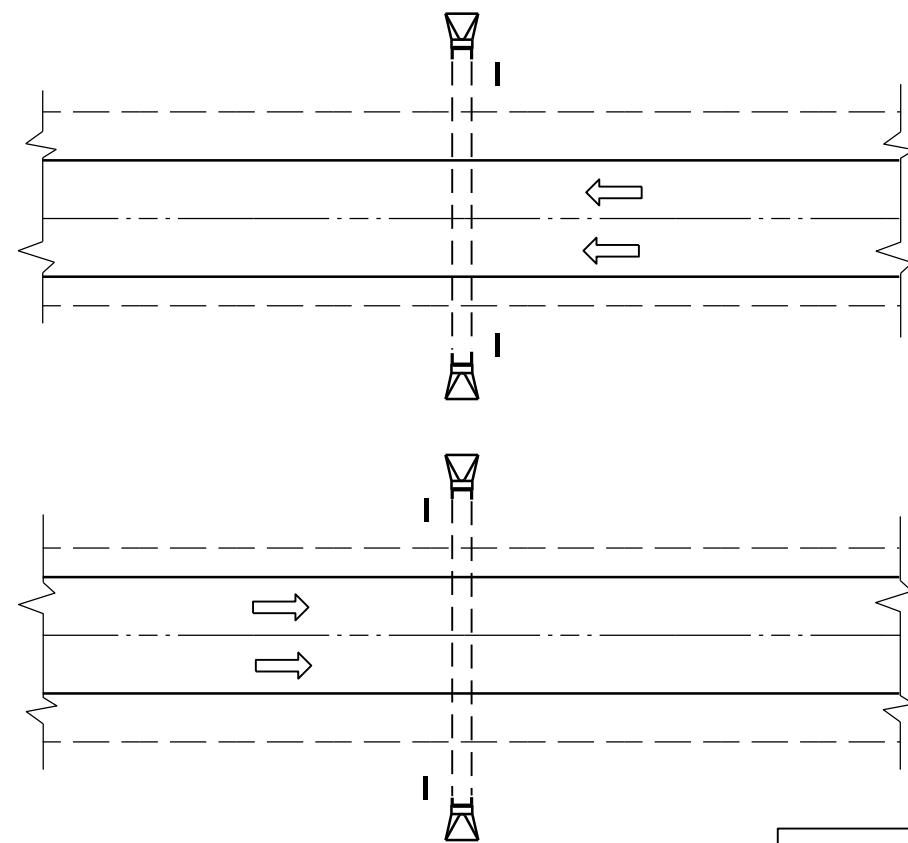
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

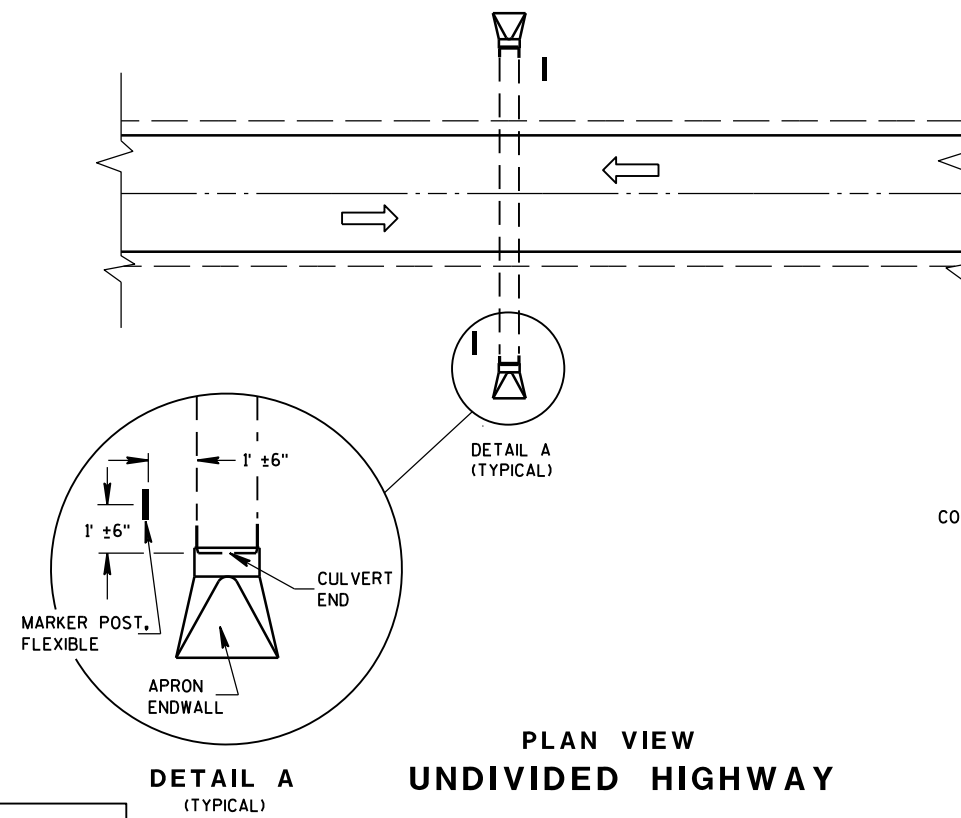
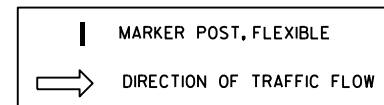
11/30/2012
DATE

FHWA

/s/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



PLAN VIEW
DIVIDED HIGHWAY

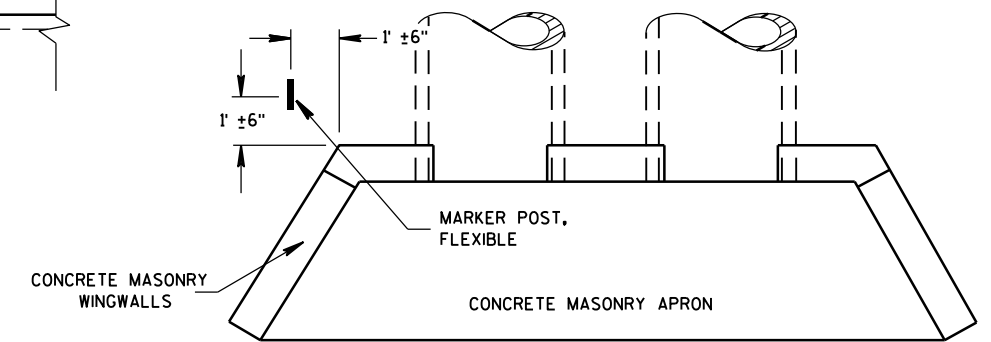


PLAN VIEW
UNDIVIDED HIGHWAY

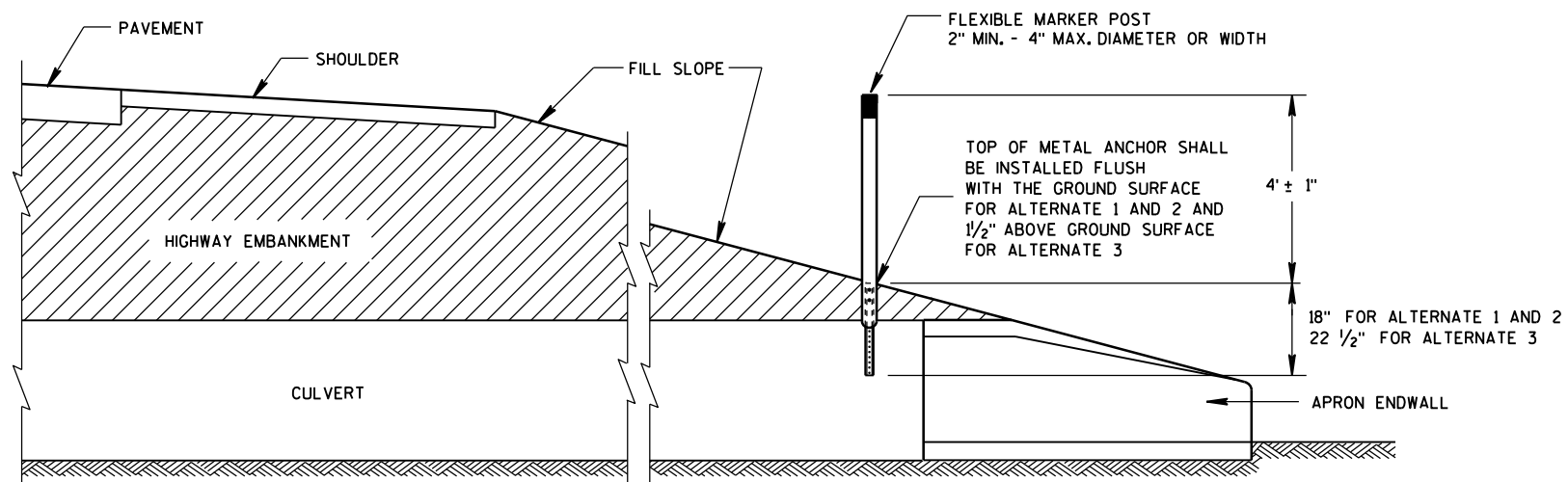
FLEXIBLE MARKER POST LOCATION

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.



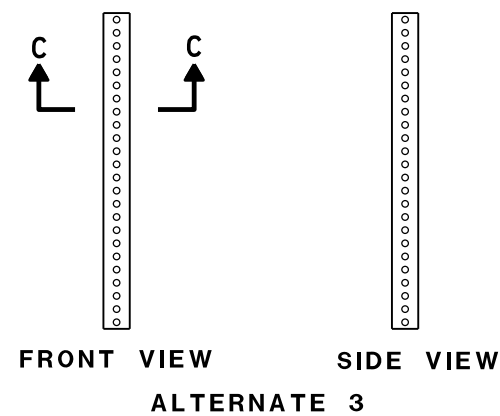
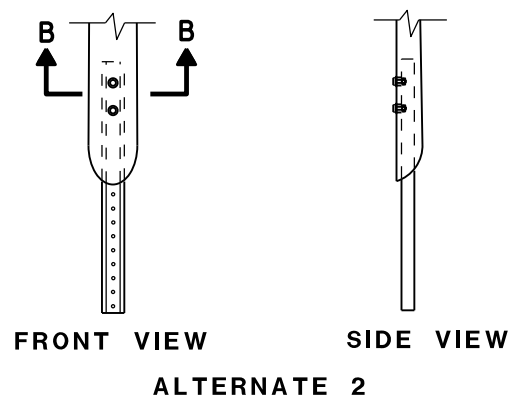
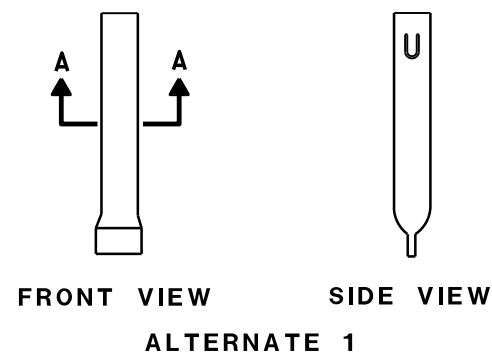
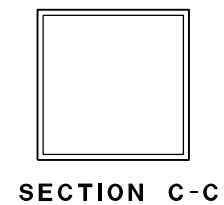
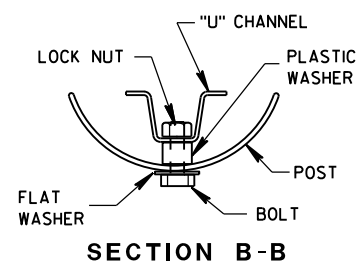
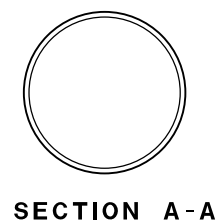
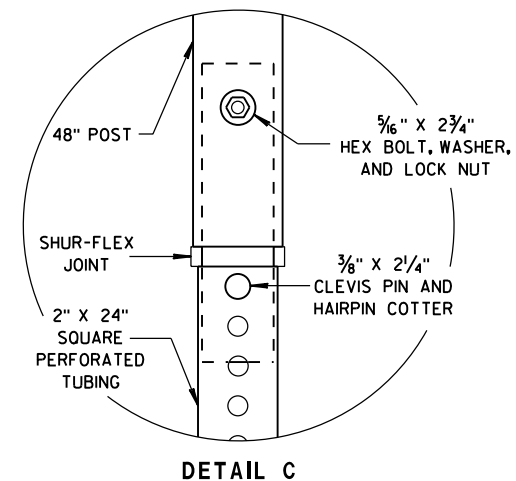
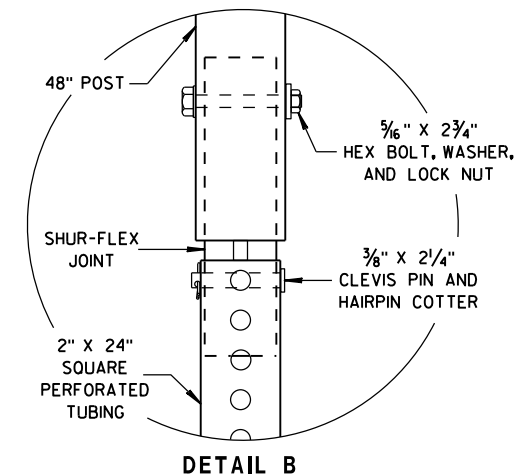
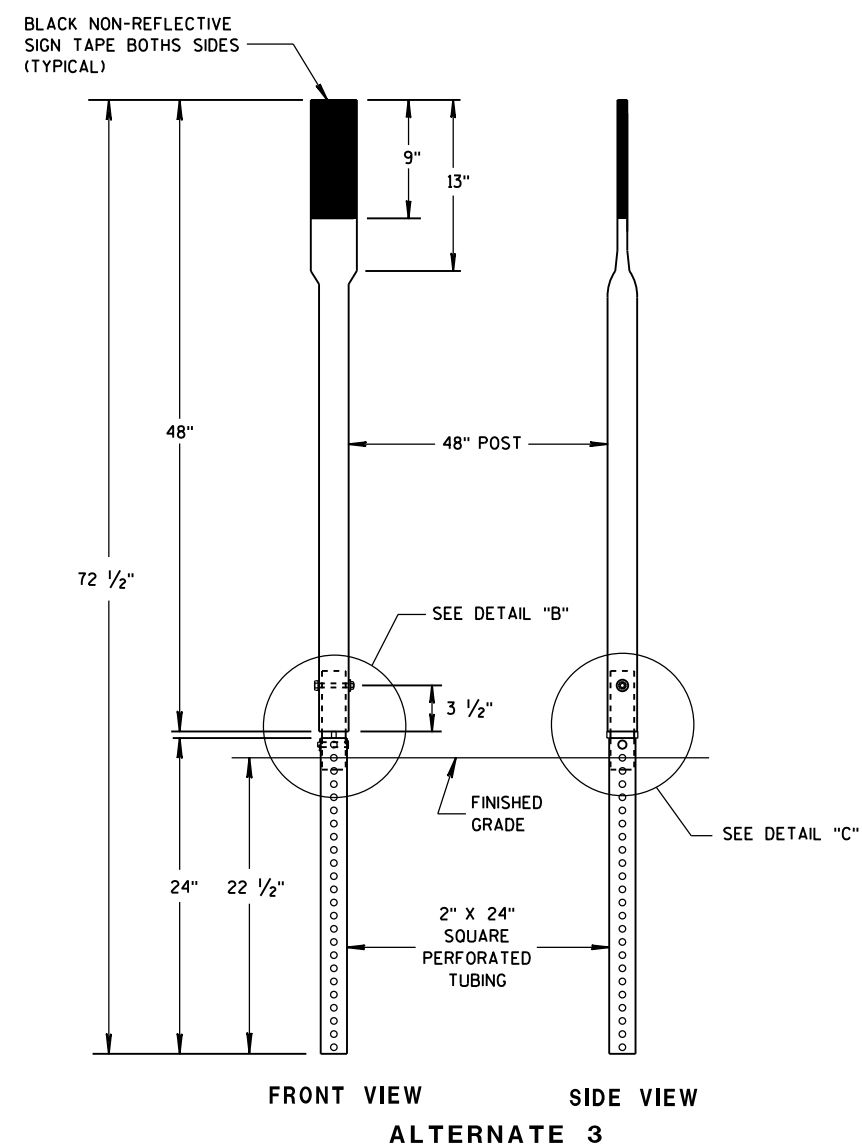
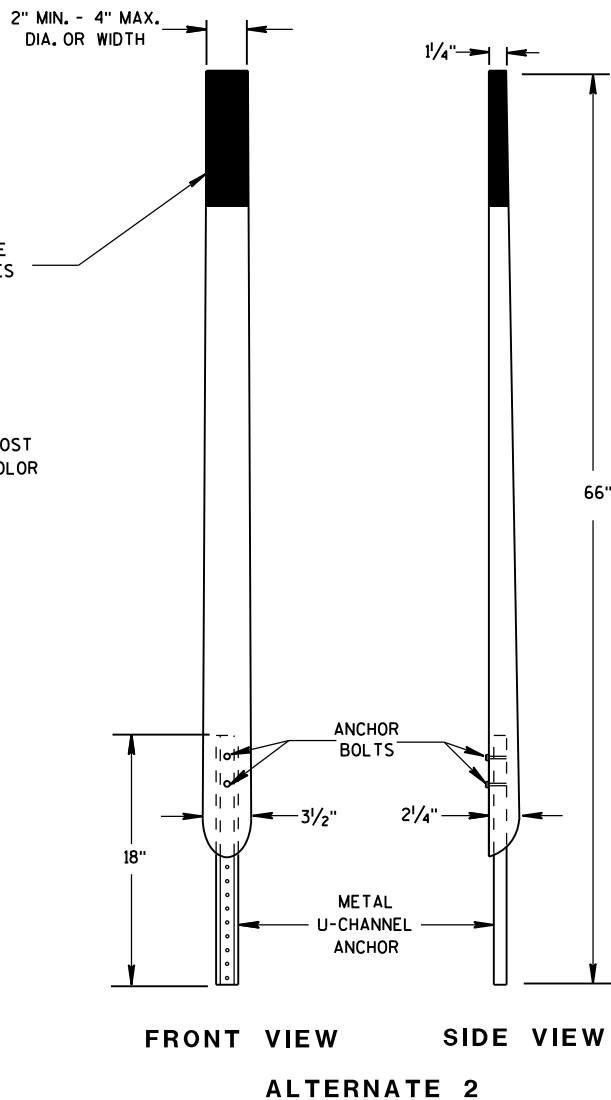
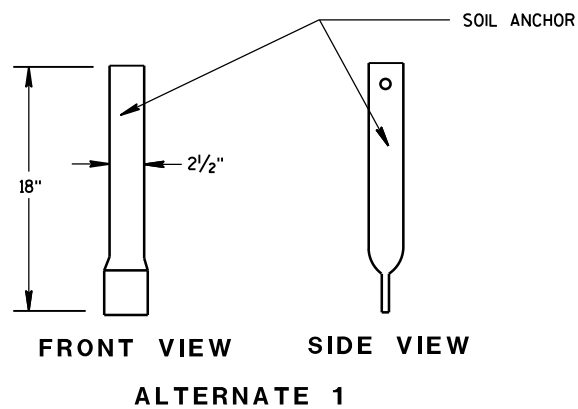
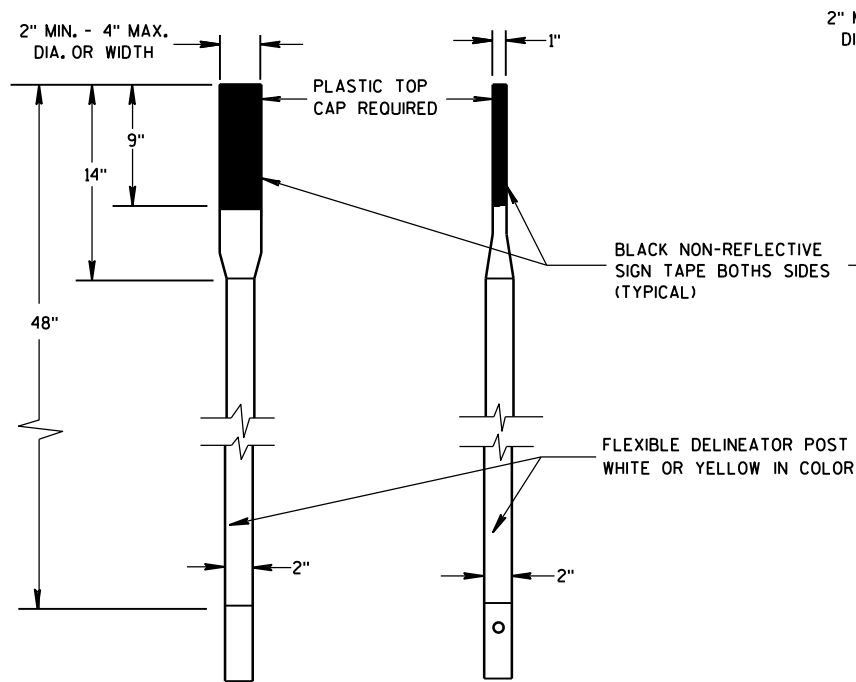
PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH



CROSS SECTION
FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

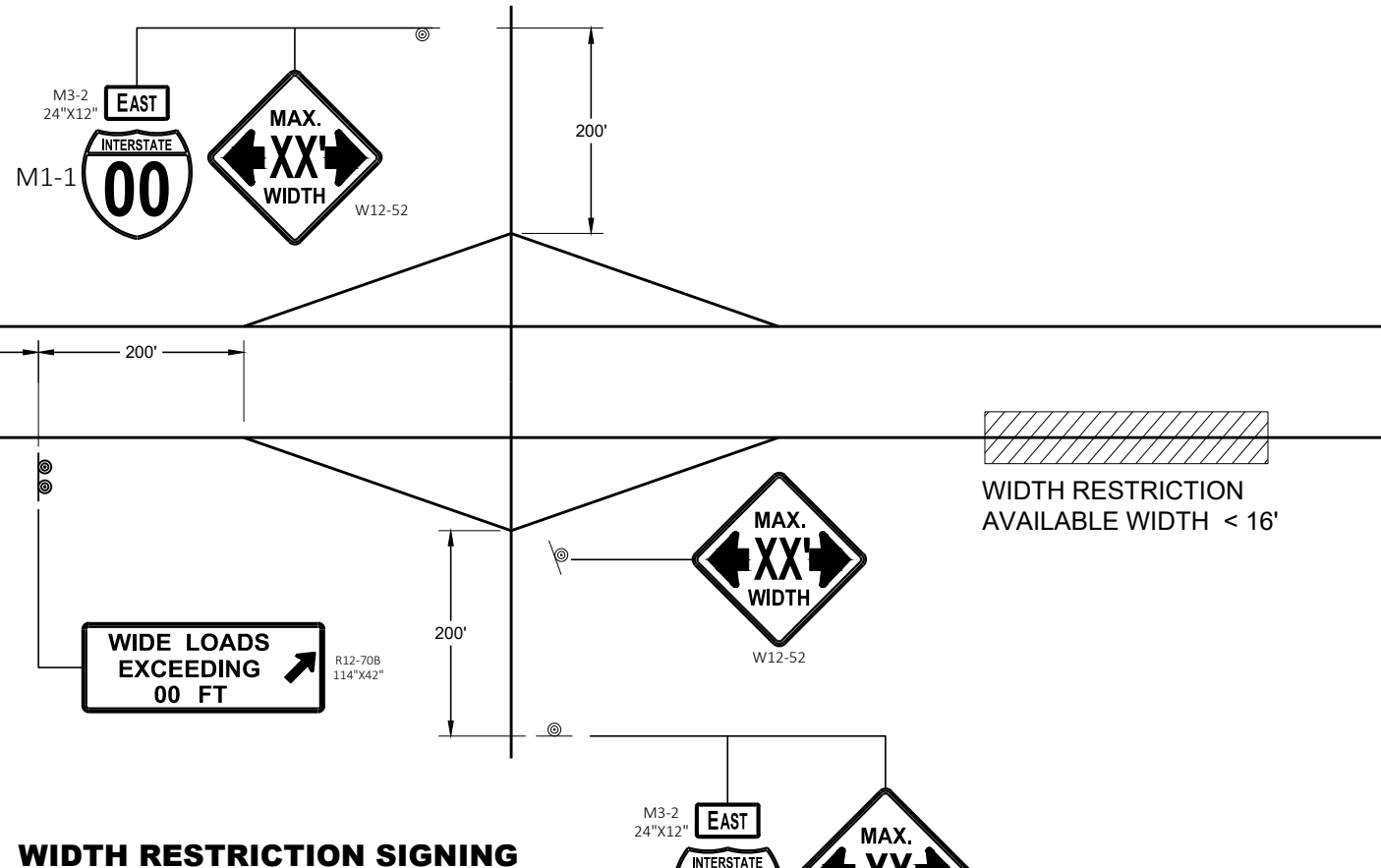


FLEXIBLE MARKER POST FOR CULVERT END

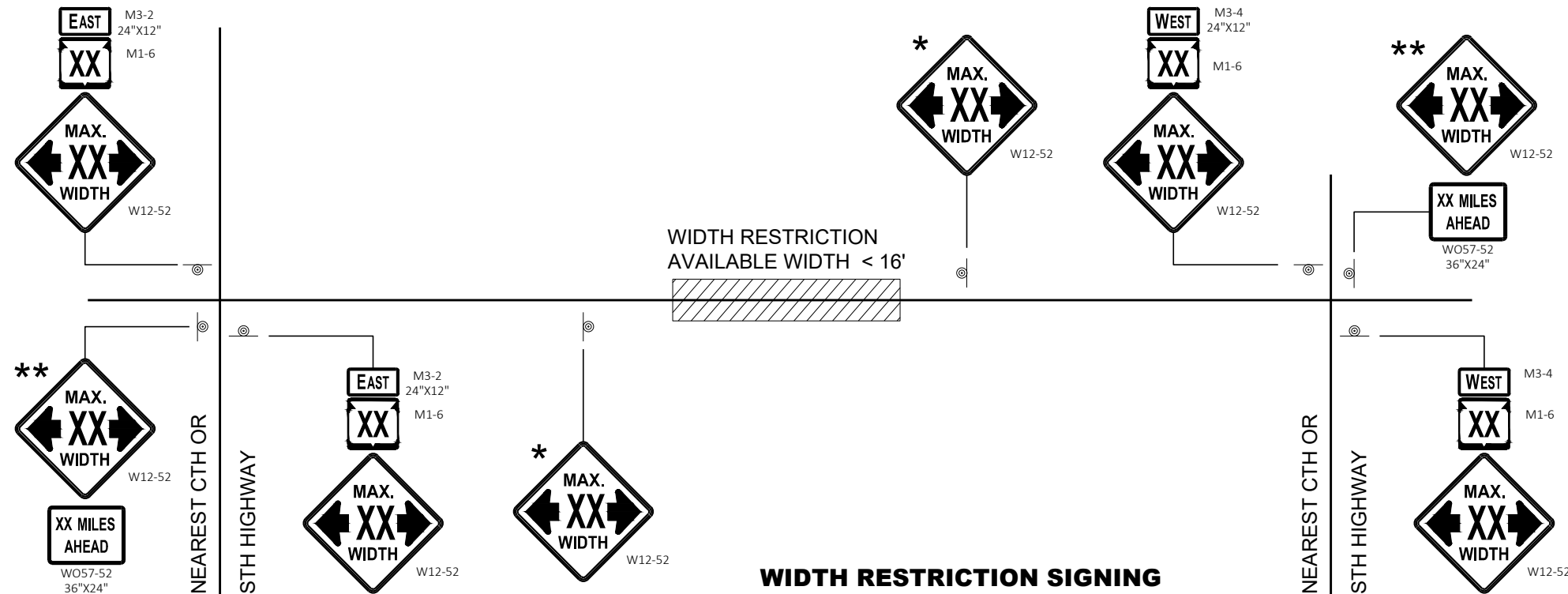
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/2012
DATE
FHWA

/S/ Travis Feltes
STATE TRAFFIC ENGINEER OF DESIGN



WIDTH RESTRICTION SIGNING



WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY

LEGEND

⊙ SIGN ON PERMANENT SUPPORT

GENERAL NOTES

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

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

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

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

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

WIDTH ON SIGN TO BE APPROXIMATELY ONE FOOT LESS THAN AVAILABLE WIDTH.

- * PLACE 500 FEET AFTER THE W20 - 1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE - CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.
- ** SIGN SHALL BE VISIBLE FROM ROADWAY.
- *** ADDITIONAL SIGNS NEEDED IF THERE IS AN ON RAMP BETWEEN SIGNS.



WIDTH ON SIGN TO BE APPROX. 1 - FOOT LESS THAN AVAILABLE WIDTH

ADVANCED WIDTH
RESTRICTION SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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 MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

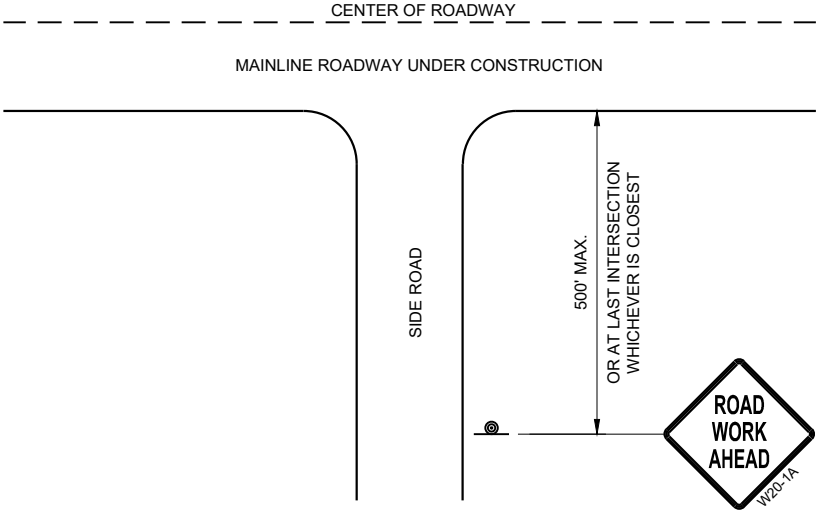
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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 REESTABLISHED.

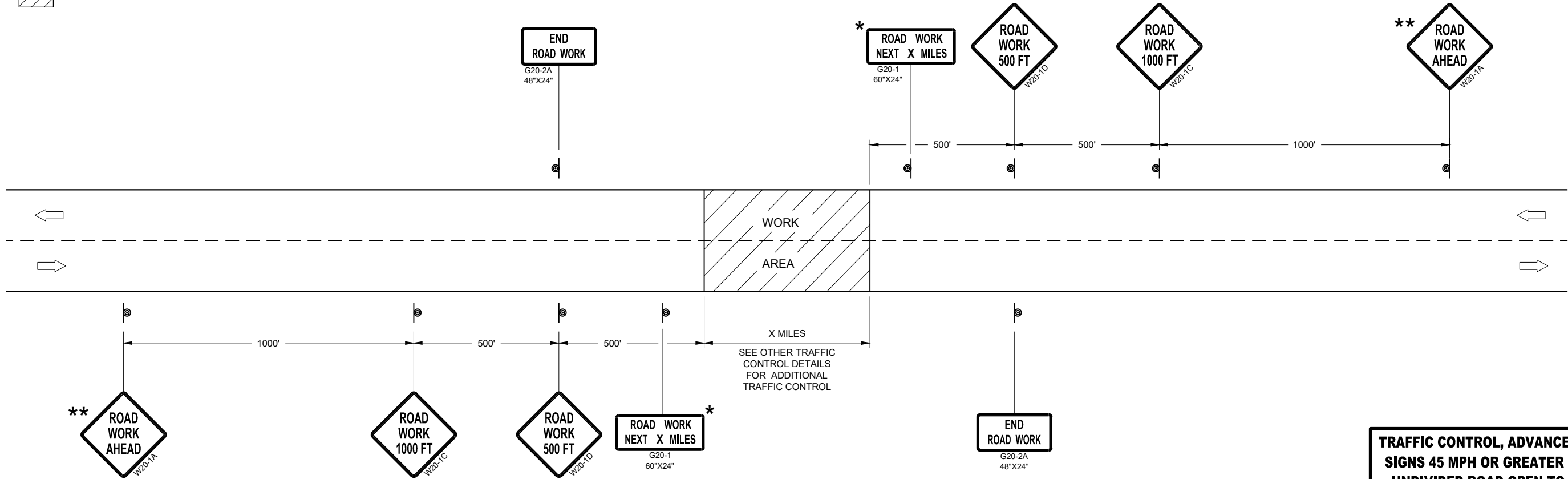
- * OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS
- ** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.

LEGEND

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



TYPICAL SIDE ROAD APPROACH
WARNING SIGN DETAIL

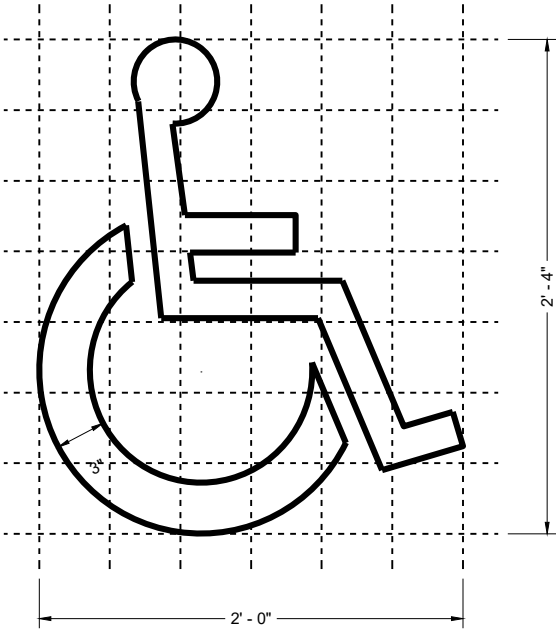


TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

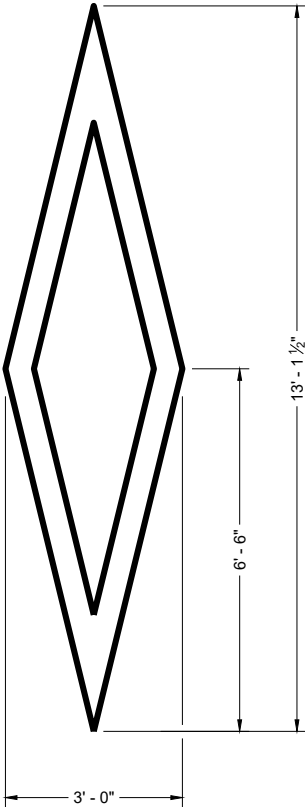
TRAFFIC CONTROL, ADVANCE WARNING
SIGNS 45 MPH OR GREATER TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA



HANDICAP SYMBOL

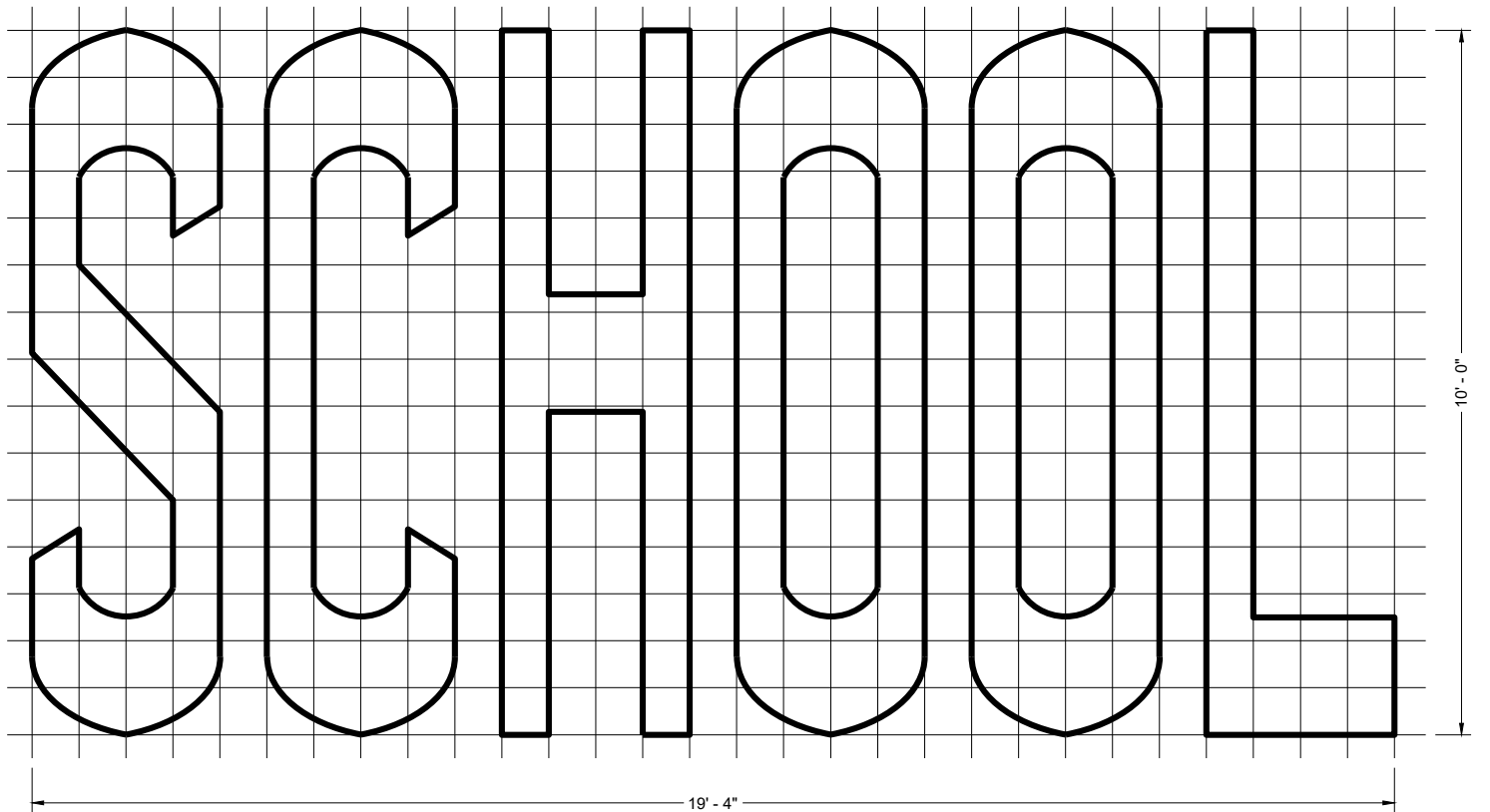
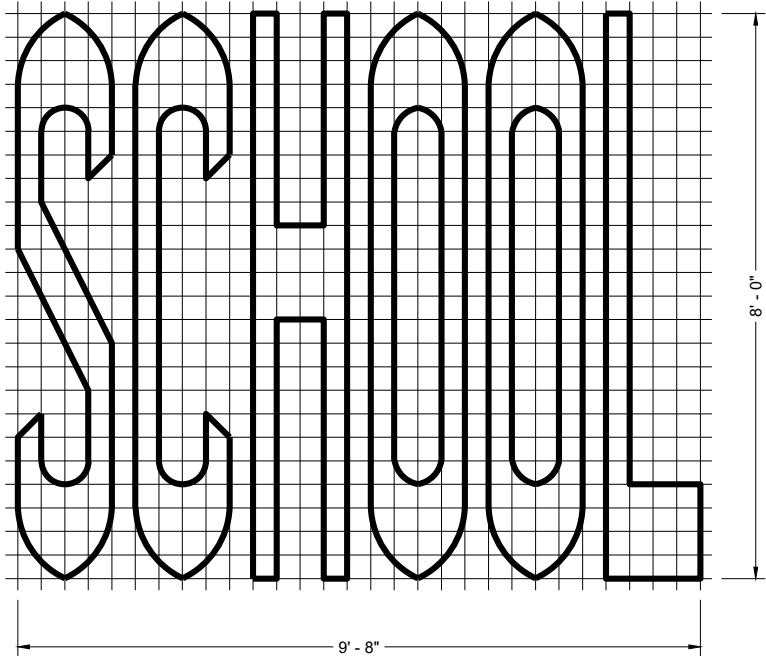
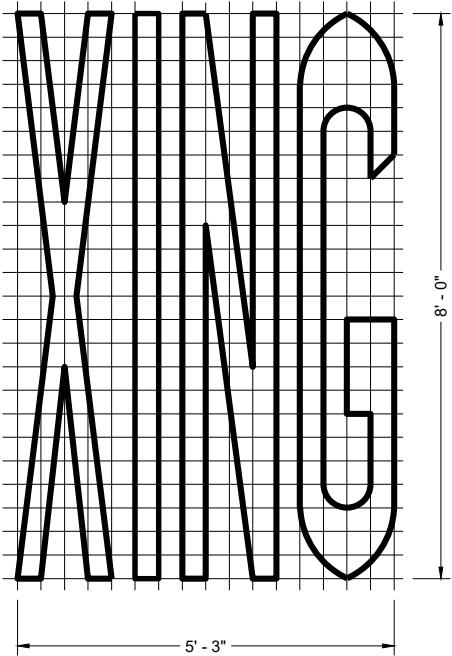
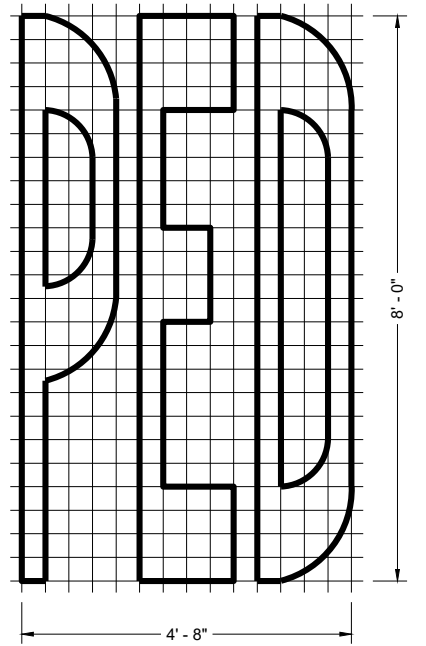
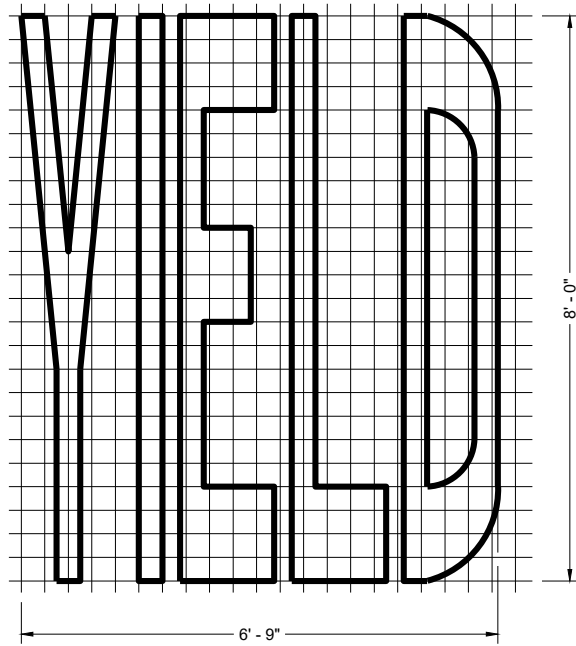
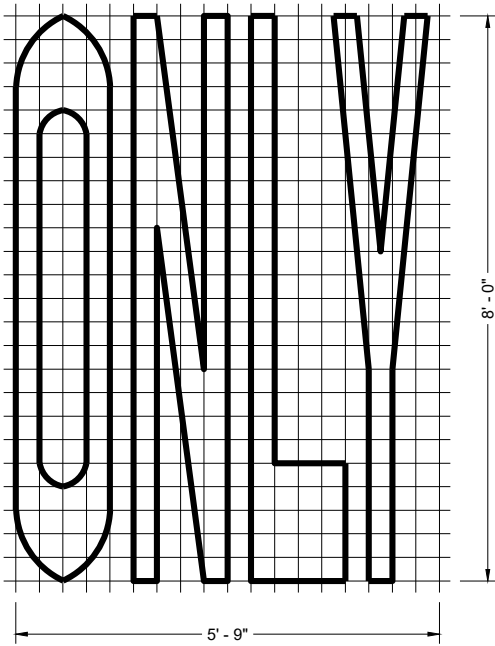
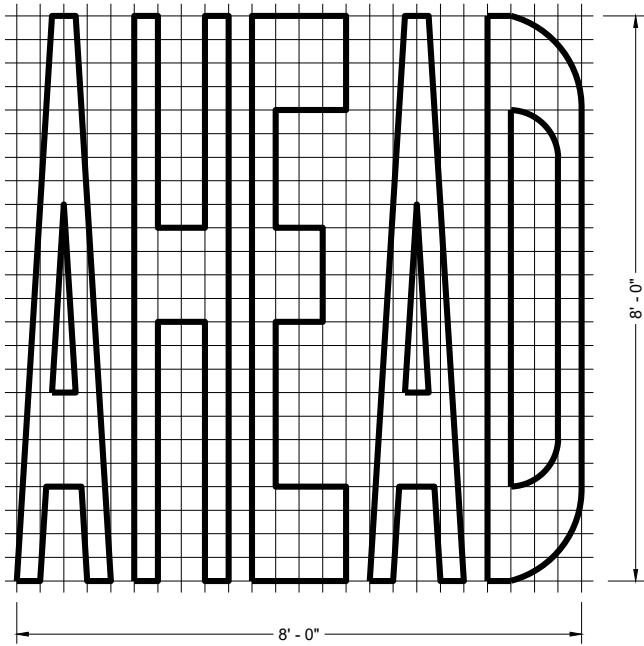
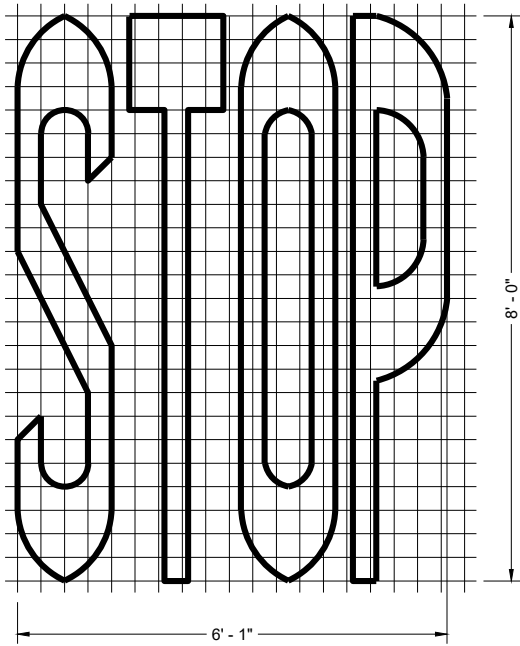


PREFERENTIAL
LANE SYMBOL

GENERAL NOTES

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

PAVEMENT MARKING SYMBOLS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2024 DATE	/S/ Matthew Rauch STATE SIGNING AND MARKING ENGINEER
FHWA	



SINGLE LANE

TWO - LANE

GENERAL NOTES

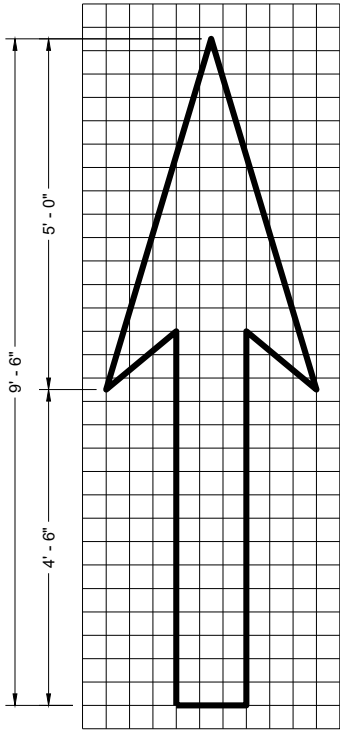
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

PAVEMENT MARKING WORDS

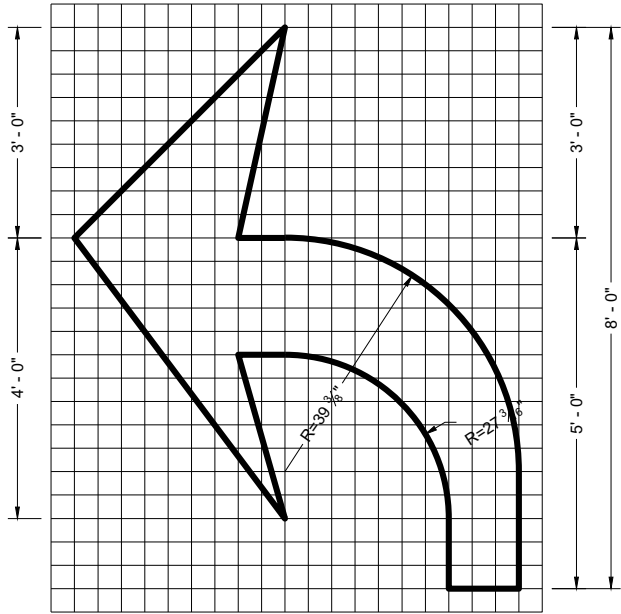
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 /S/ Matthew Rauch
DATE STATE SIGNING AND MARKING ENGINEER

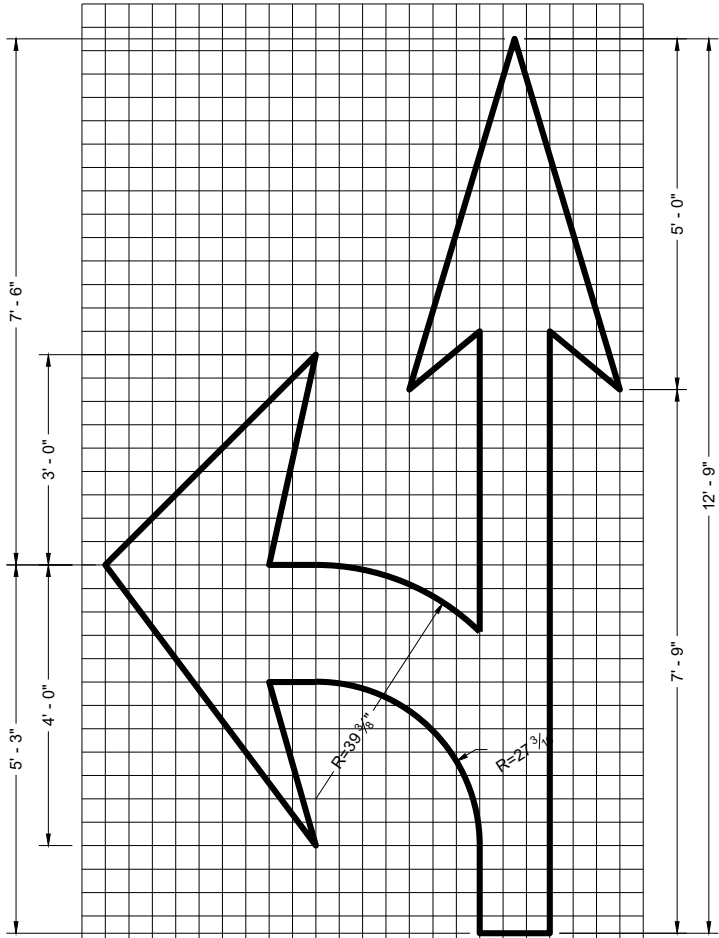
FHWA



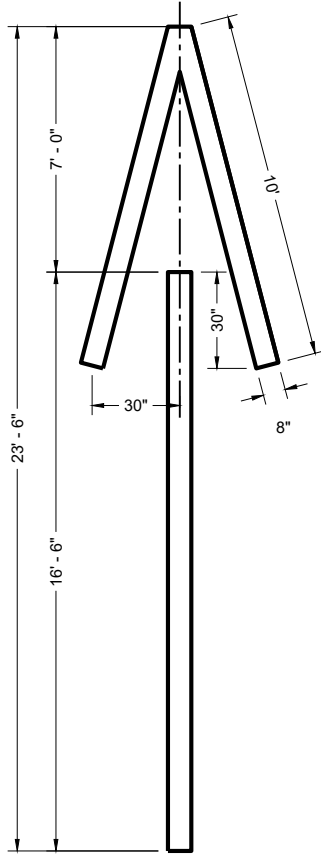
TYPE 1



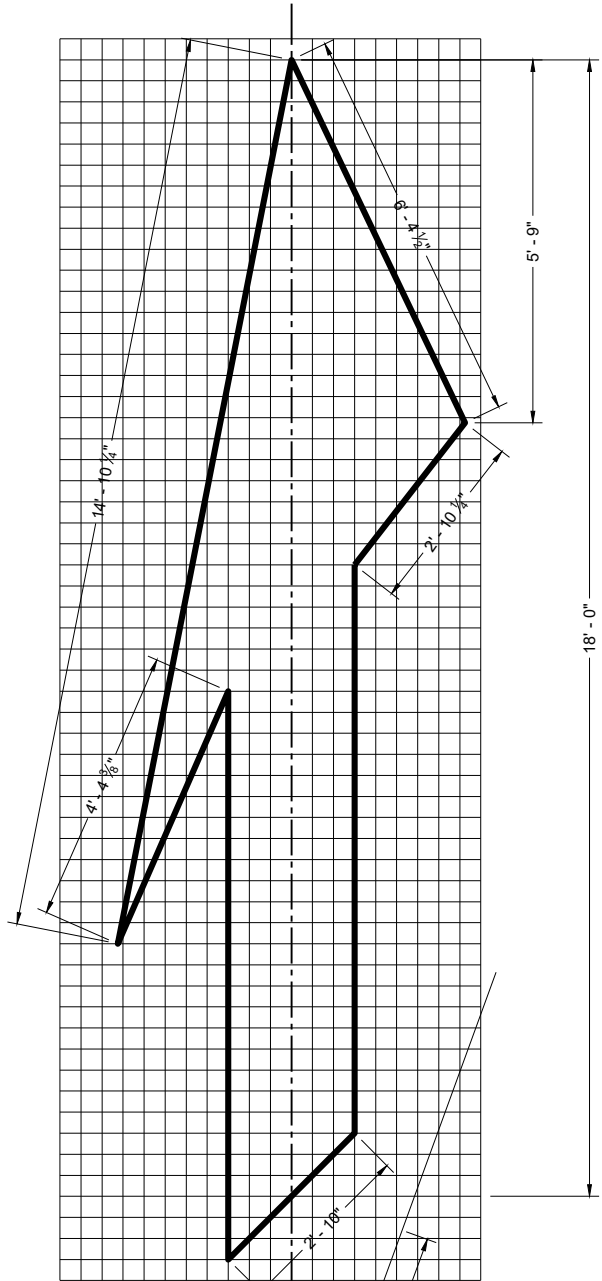
TYPE 2



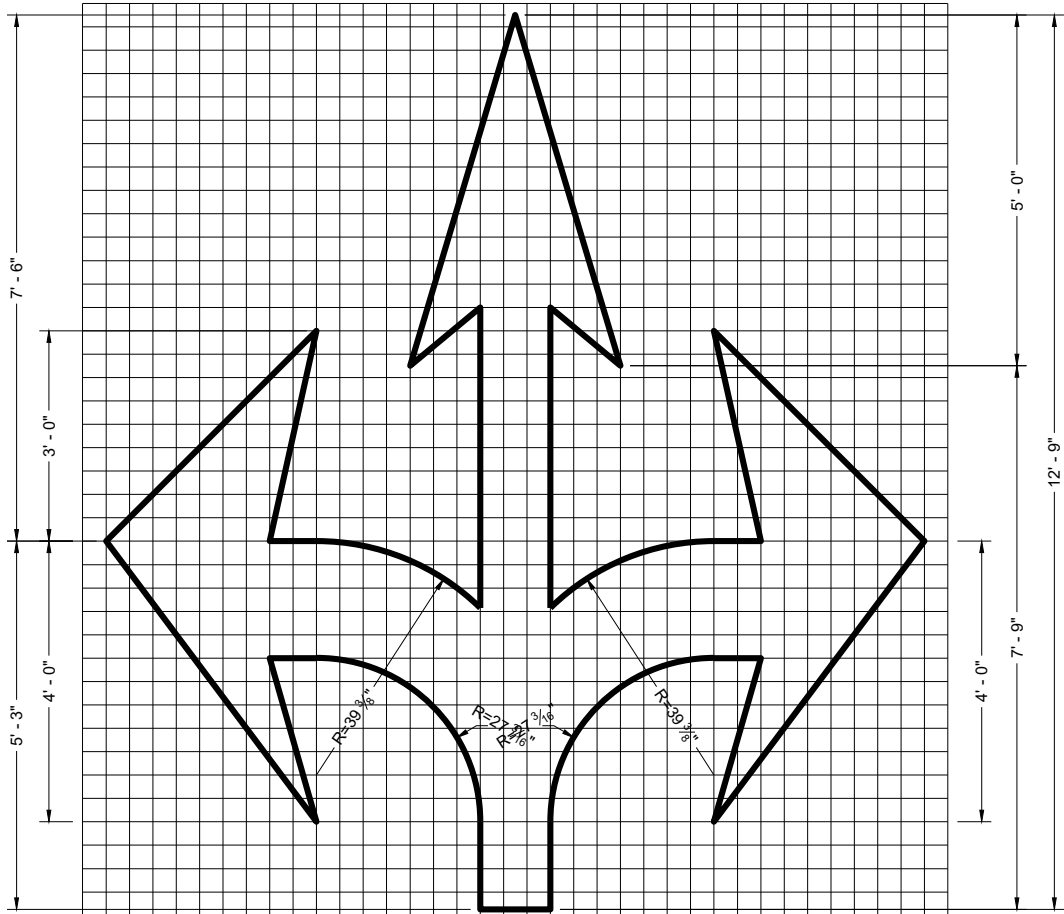
TYPE 3



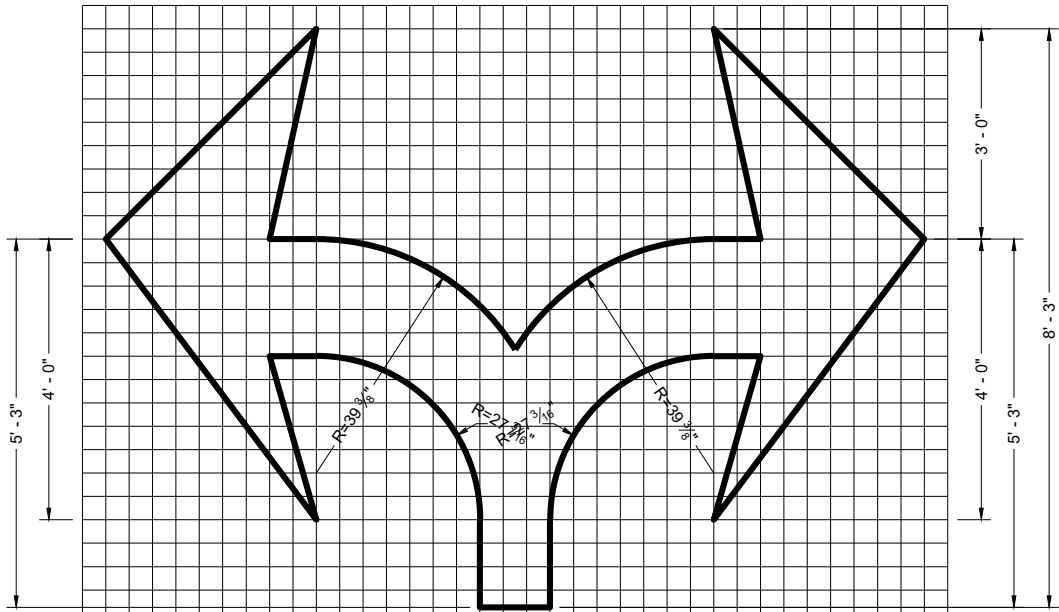
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

GENERAL NOTES

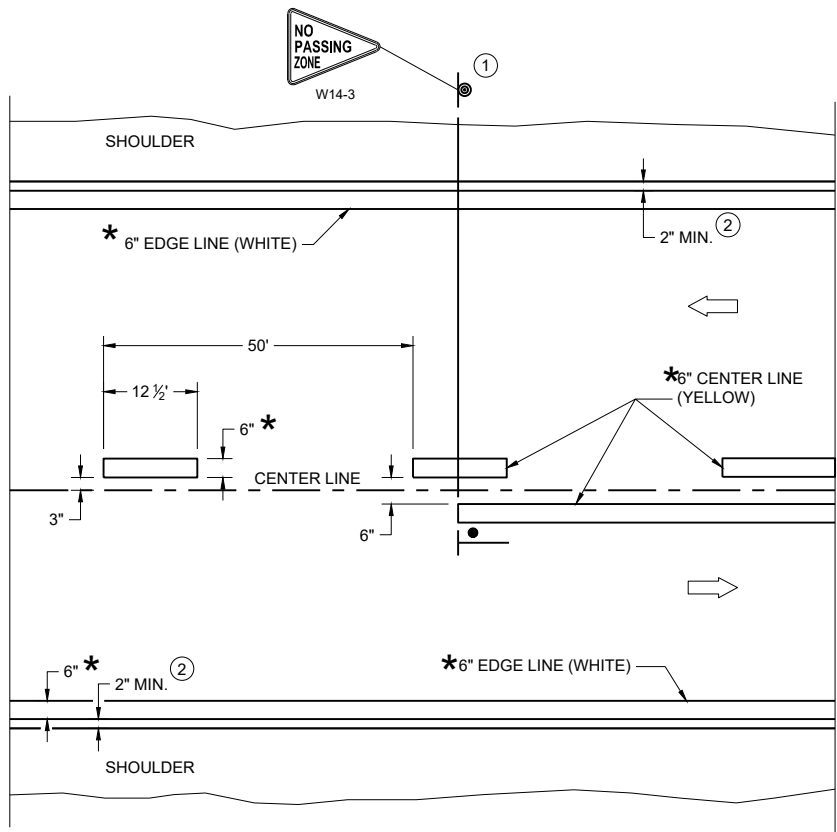
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

PAVEMENT MARKING ARROWS

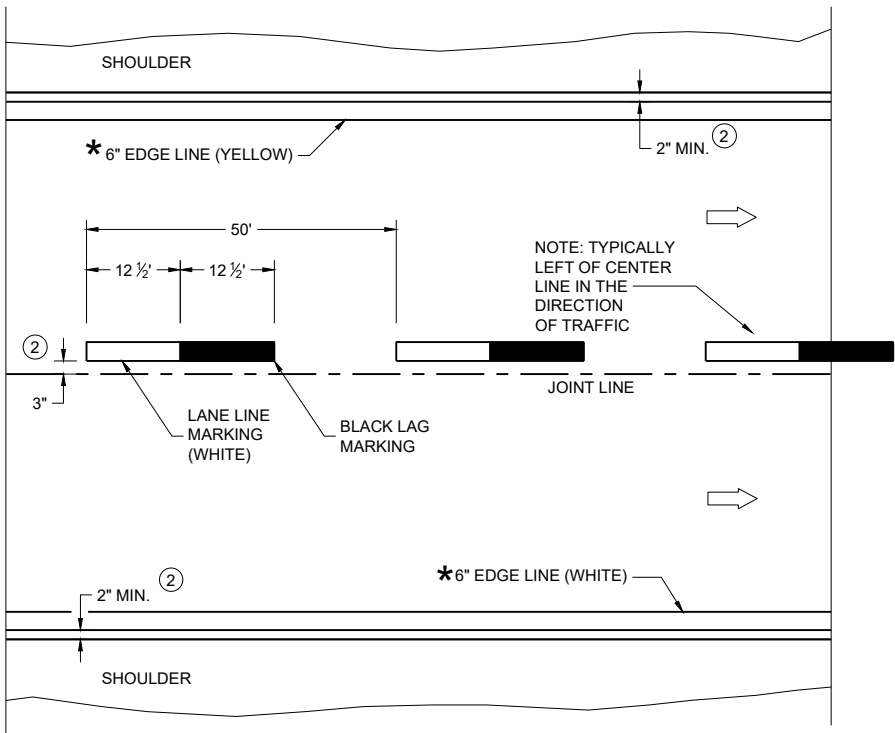
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 /S/ Matthew Rauch
DATE STATE SIGNING AND MARKING ENGINEER

FHWA



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

GENERAL NOTES

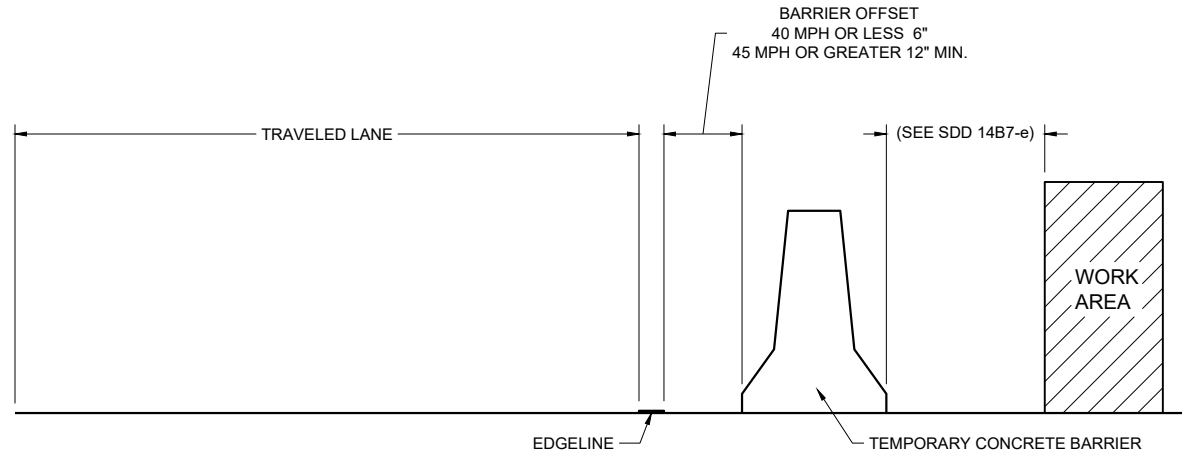
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

- ① LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
- ② MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

- "T" MARKING
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC

PERMANENT LONGITUDINAL PAVEMENT MARKINGS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2023 DATE	/S/ Jeannie Silver Statewide Pavement Marking Engineer
FHWA	



TEMPORARY BARRIER OFFSET FROM EDGE LINE

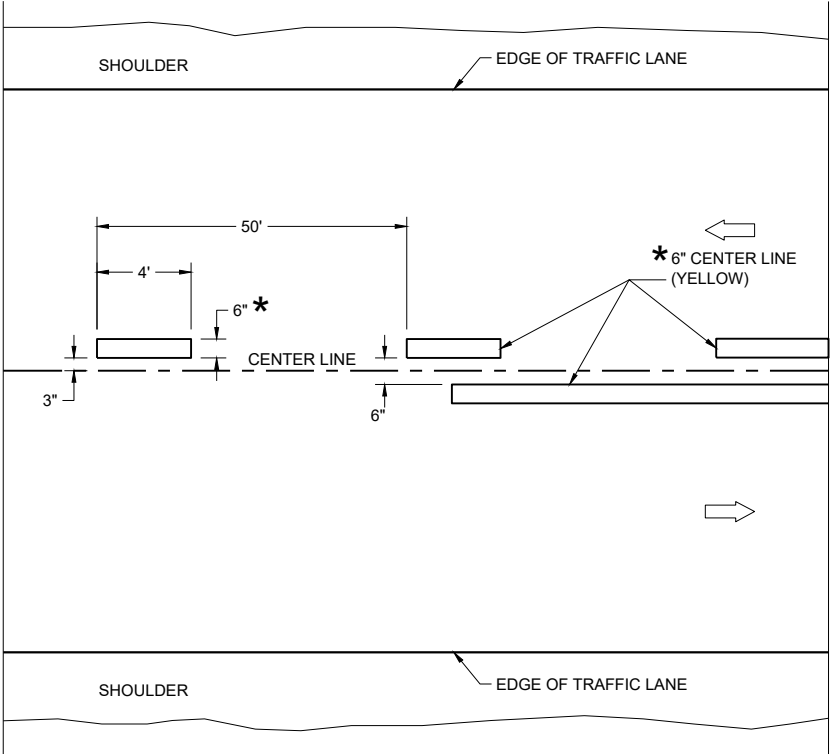
GENERAL NOTES

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

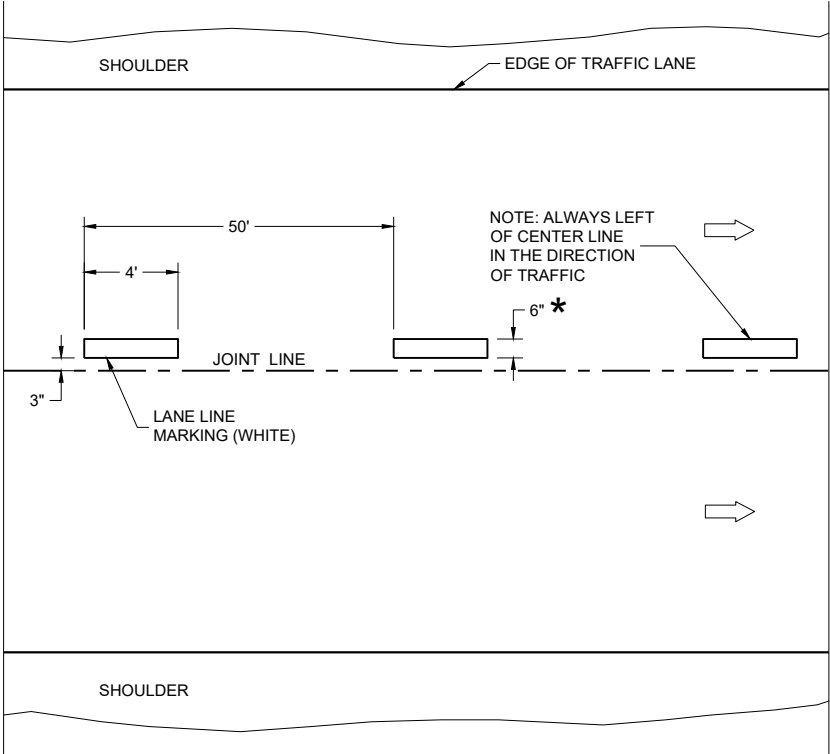
LEGEND

DIRECTION OF TRAFFIC

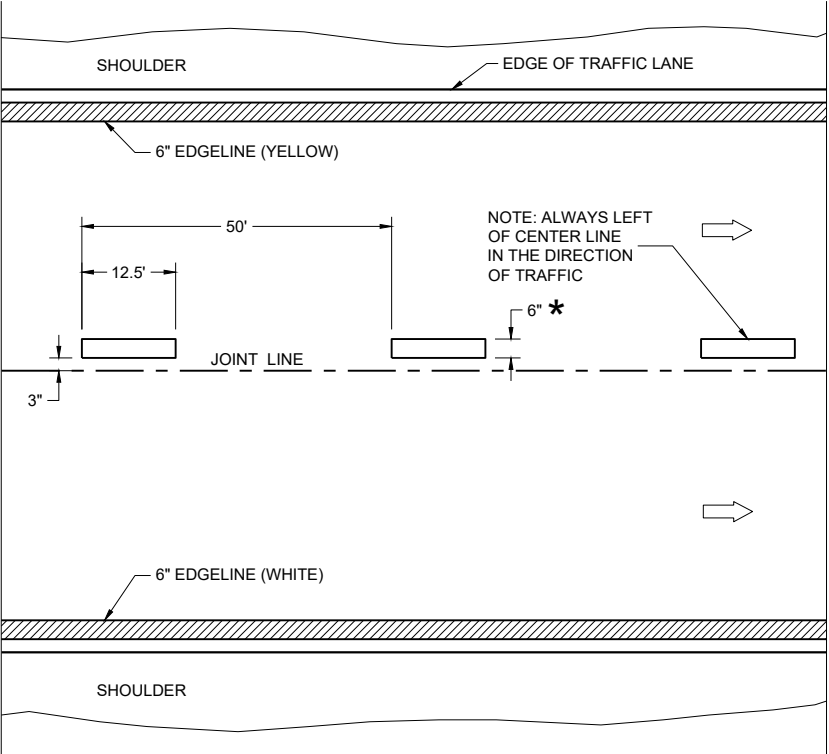
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



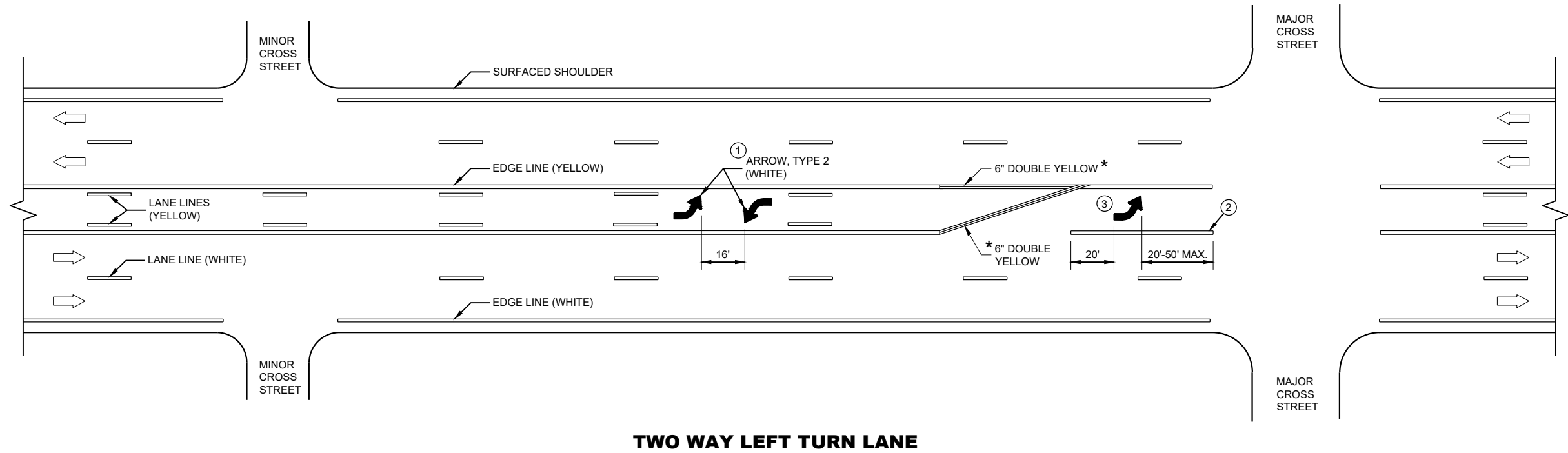
ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2023 DATE	/S/ Jeannie Silver Statewide Pavement Marking Engineer
FHWA	



GENERAL NOTES

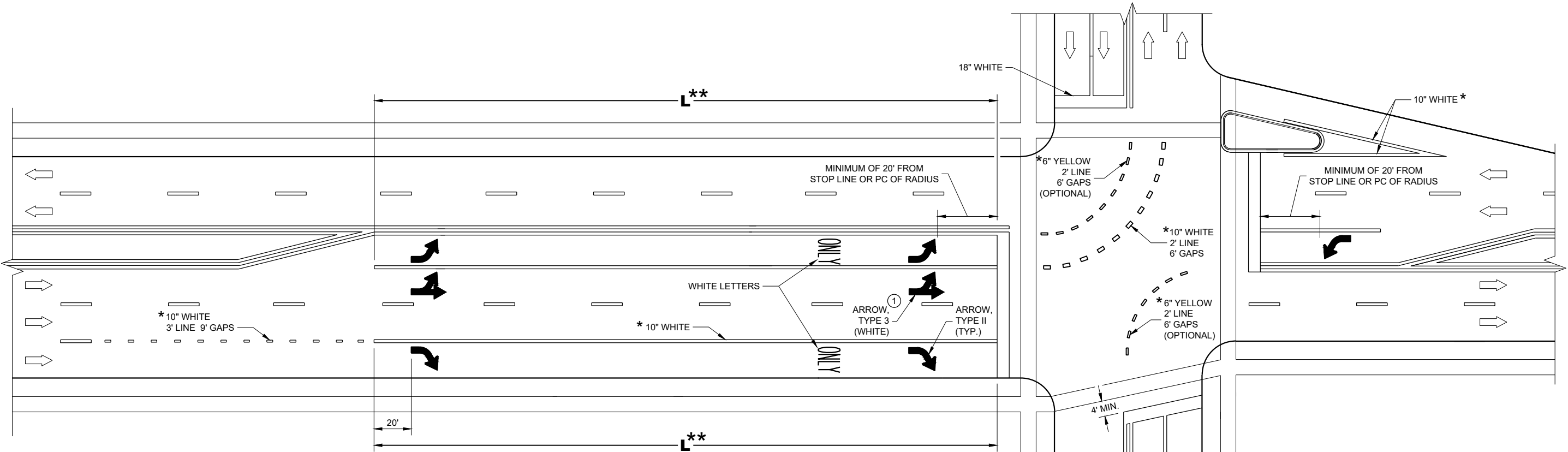
- ① A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
- ② 10" WHITE
- ③ TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

➡ DIRECTION OF TRAFFIC

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

**PAVEMENT MARKING
(TURN LANES)**

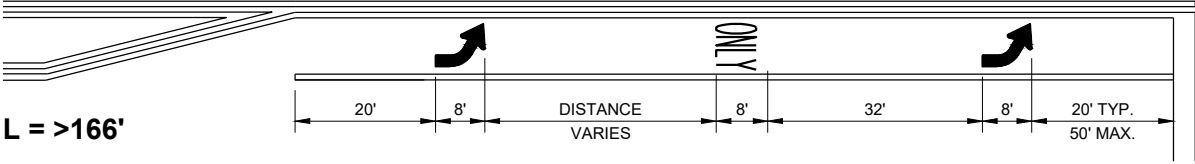
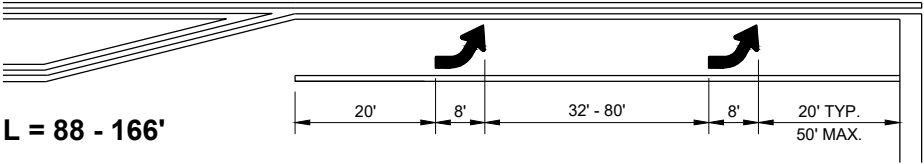
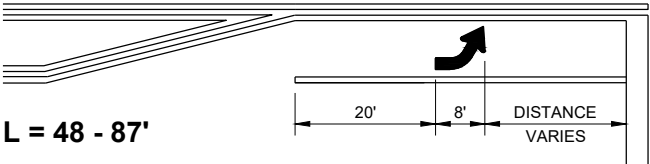
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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

TURN LANE OPTIONS

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



GENERAL NOTES

① QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

➡ DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING
(TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



BALLAST WIDTHS
RANGE FROM 24"-36"



DO NOT USE IN TAPERS
 1/2 SPACING OF DRUMS
 BALLAST WIDTHS
 RANGE FROM 14"-20"



THE STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

GENERAL NOTES

- ① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
- ② LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022 _____ /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

LEGEND

-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  TEMPORARY PORTABLE RUMBLE STRIP ARRAY
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

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.

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

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

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS, DEVICES, AND 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.

FLAGGING

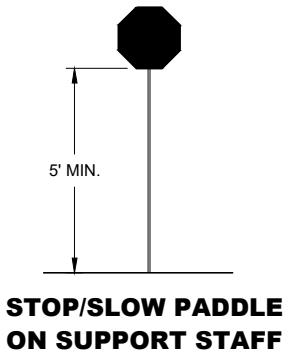
FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

- ① FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' 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.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

- UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.
- ③ EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER
- ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.
- INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.
- PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.
- DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

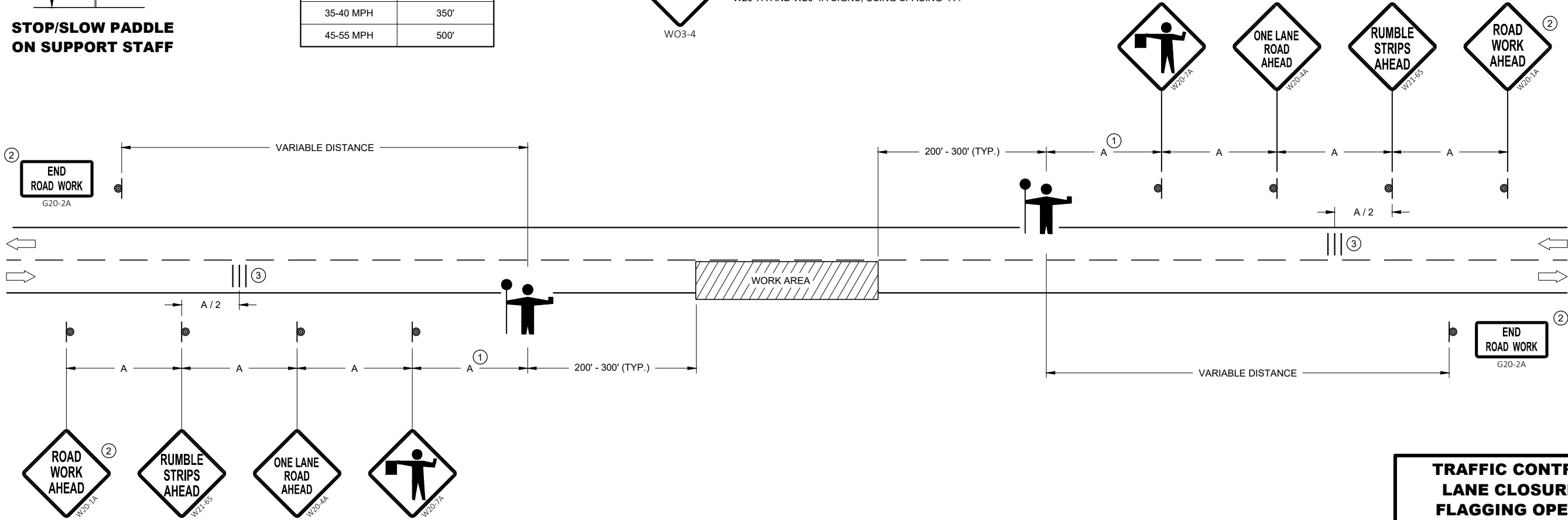


SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



USE OF W03-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2022 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

GENERAL NOTES

-  SIGN ON PERMANENT SUPPORT
-  TRAFFIC CONTROL CONE 42-INCH
-  TRAFFIC CONTROL DRUM
-  TEMPORARY PORTABLE RUMBLE STRIP ARRAY
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD)

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.

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

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

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS, DEVICES, AND 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.

FLAGGING

IF THE AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD) STOPS WORKING, 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 REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

- ① SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.
- ② IF FLAGGERS ARE PHYSICALLY NEEDED TO FLAG, REPLACE WO3-4 SIGNS WITH W20-7A SIGNS.

TEMPORARY PORTABLE RUMBLE STRIPS

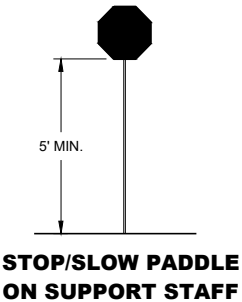
UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

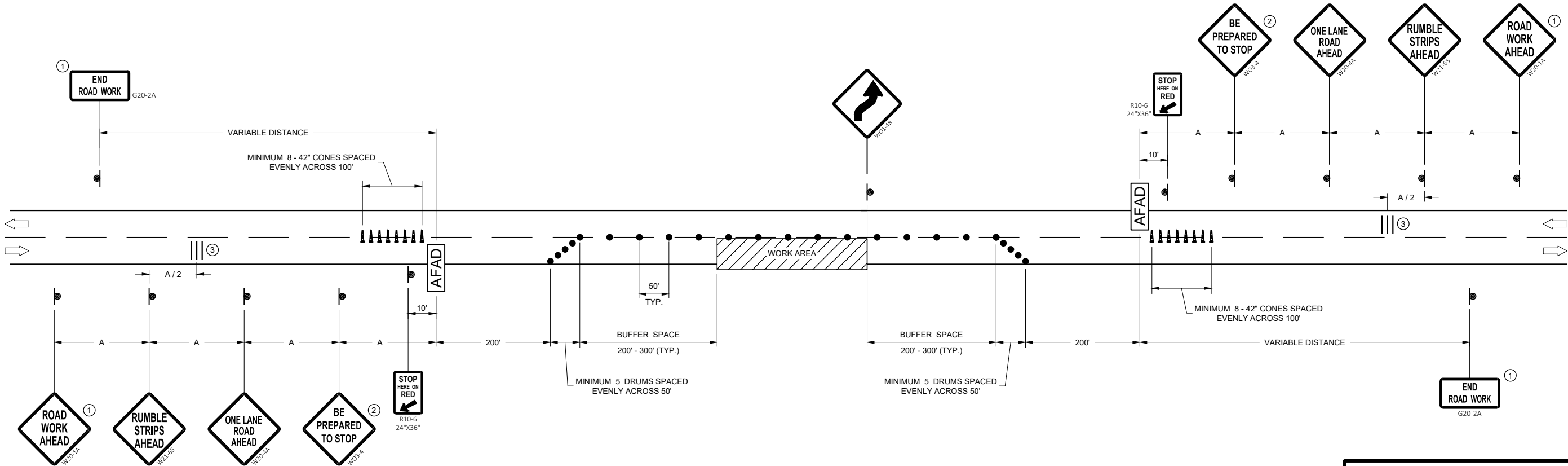
DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

③ EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSELY AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER.



SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

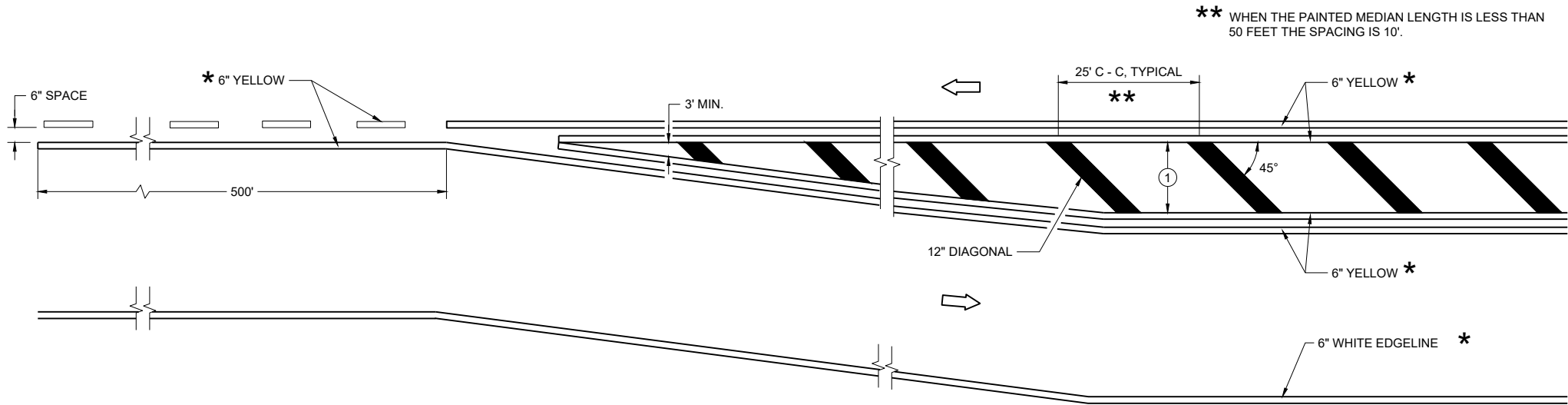


TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE

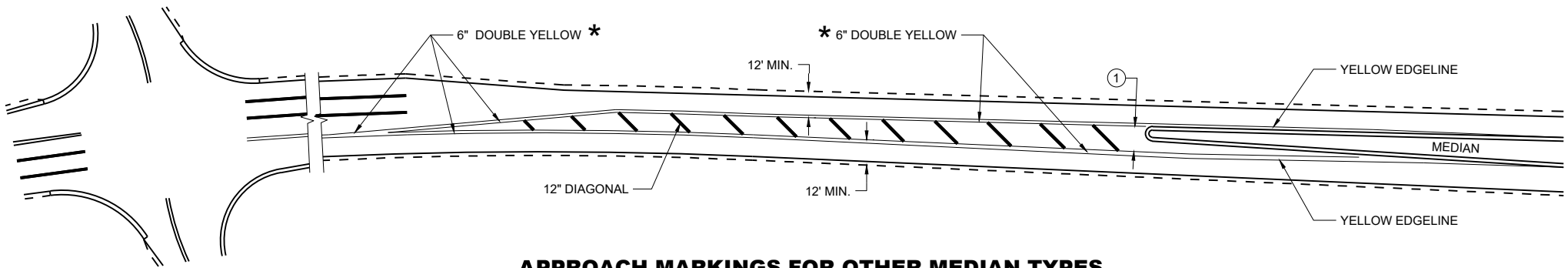
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

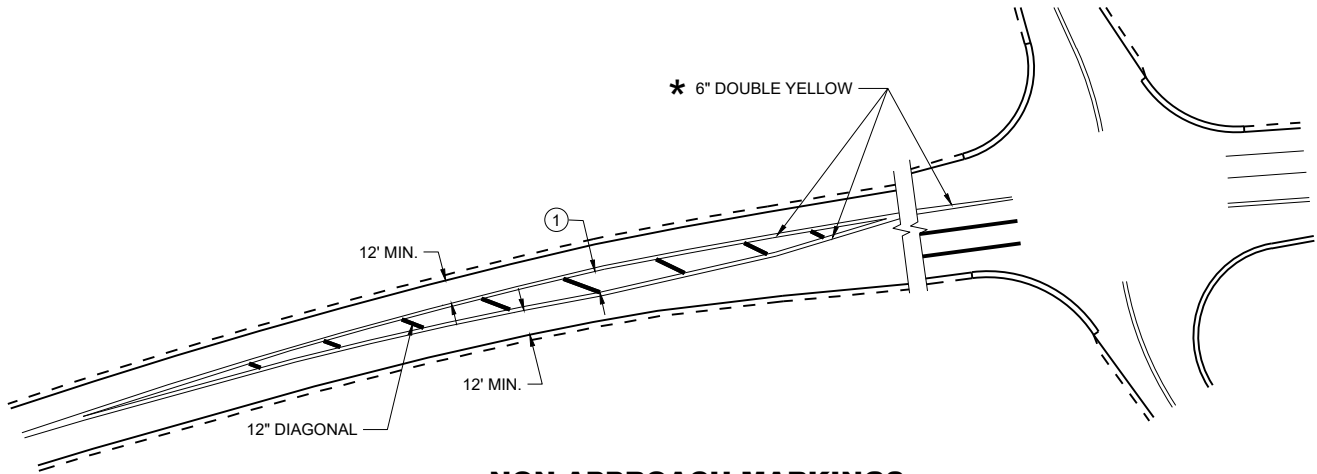
FHWA



MEDIAN ISLAND DETAIL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON-APPROACH MARKINGS

GENERAL NOTES

- ① DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

DIRECTION OF TRAVEL

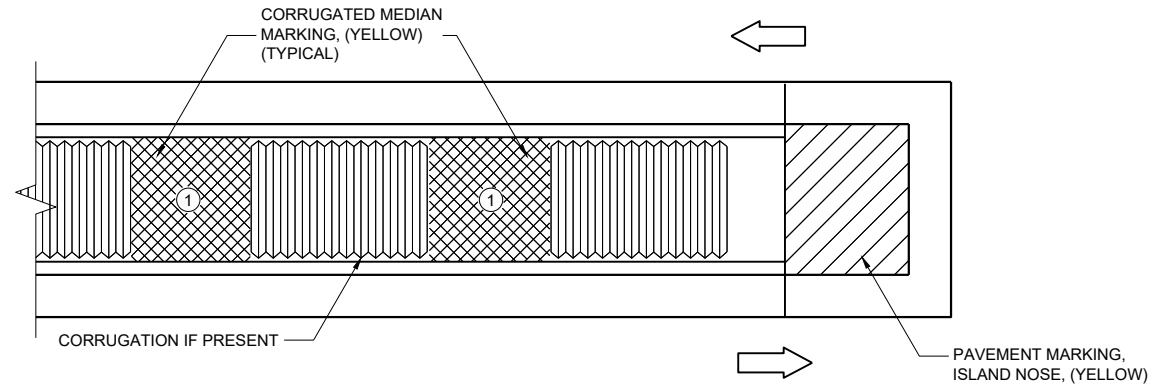
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

MEDIAN ISLAND
PAVEMENT MARKINGS

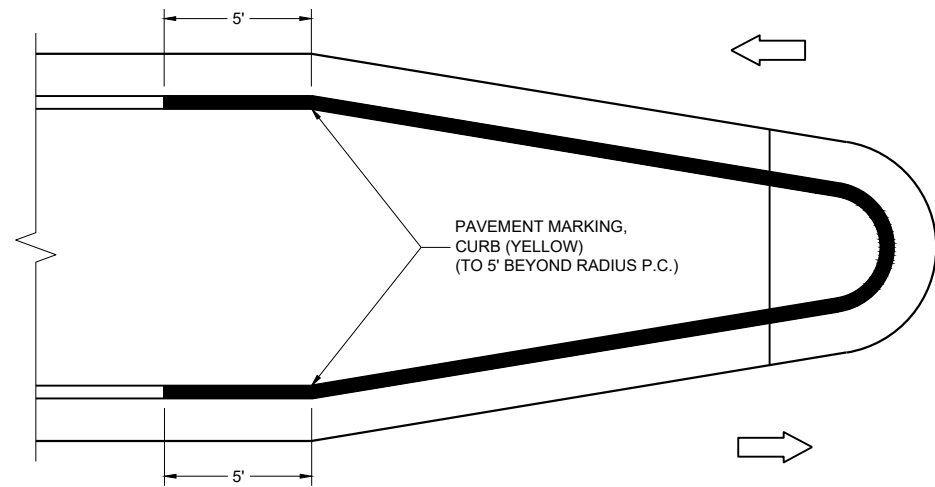
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2024 /S/ Jeannie Silver
DATE Statewide Pavement Marking Engineer

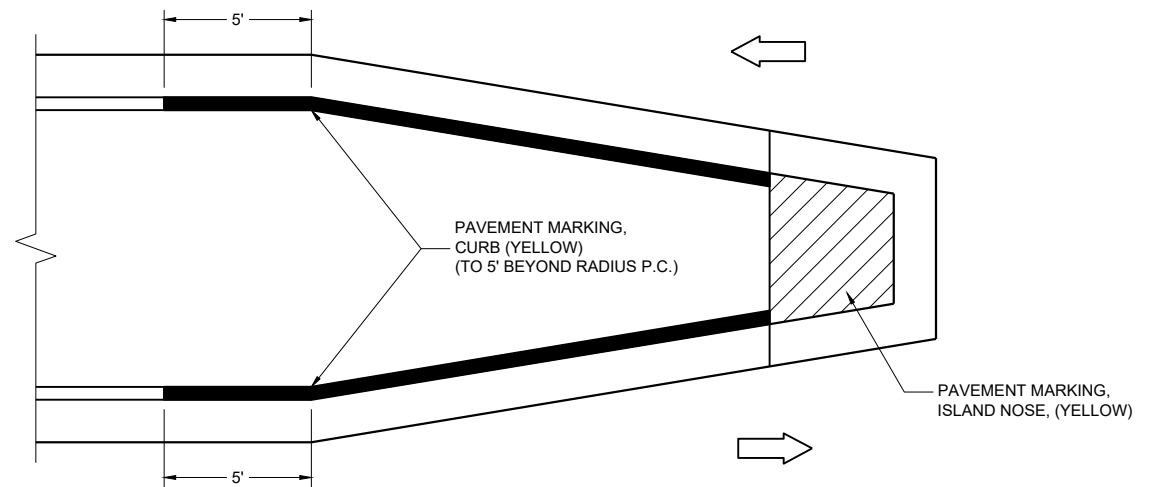
FHWA



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

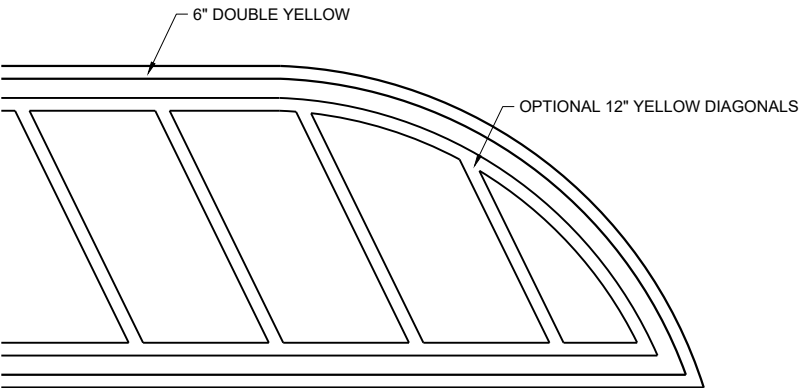
**TYPICAL PLACEMENT OF
PAVEMENT MARKING ON MEDIAN ISLANDS**

GENERAL NOTES

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 ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

① APPLY PAVEMENT MARKING TO THE FLAT PORTION OF CORRUGATED MEDIAN.

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



FLUSH MEDIAN ISLAND NOSE

**PAVEMENT MARKINGS,
MEDIAN ISLAND NOSE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2024 /S/ Jeannie Silver
DATE Statewide Pavement Marking Engineer
FHWA

LEGEND

- V1

LEAD VEHICLE
- V2

MARKING VEHICLE
- V3

SHADOW VEHICLE
- TRUCK MOUNTED ATTENUATOR (TMA)
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

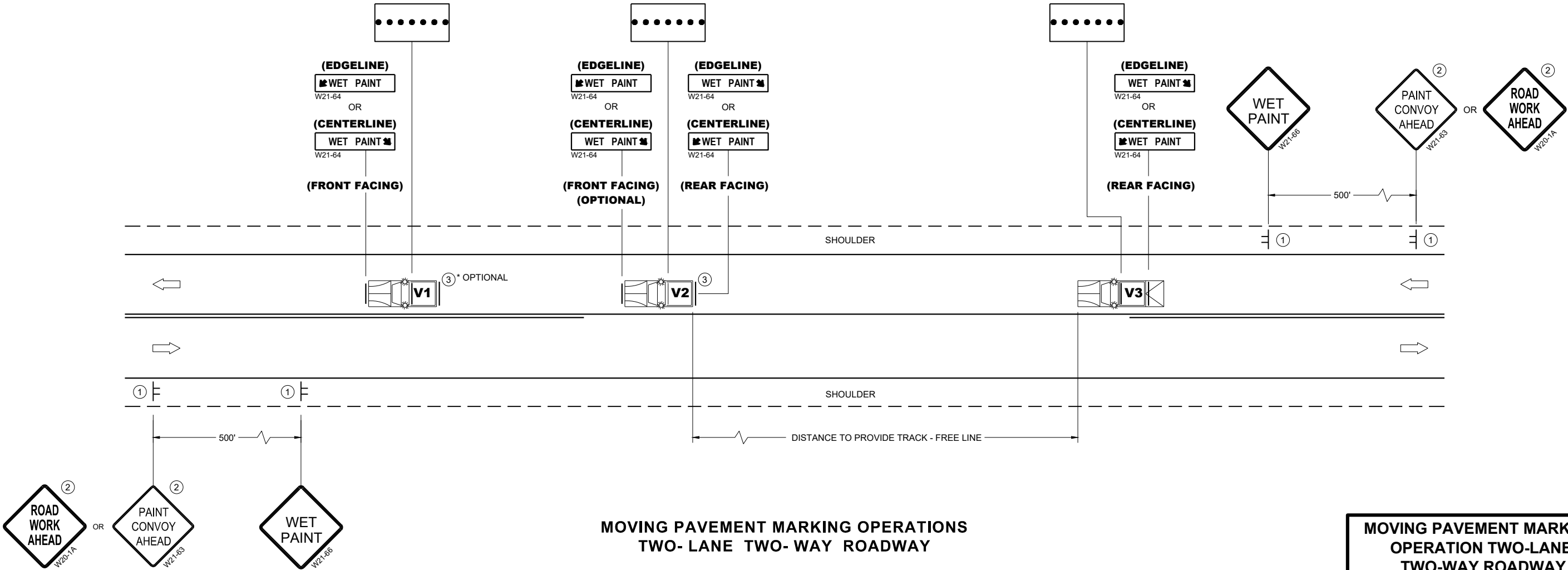
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH

UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 28" FOR WET PAVEMENT MARKING .

- ① SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES AND AFTER EVERY MAJOR INTERSECTION.
- ② IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.
- ③ V1 AND V2 CAN BE SWITCHED SO THAT THE MARKER IS THE LEAD VEHICLE.



MOVING PAVEMENT MARKING OPERATIONS
TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING
OPERATION TWO-LANE
TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

LEGEND

- V1

LEAD VEHICLE
- V2

MARKING VEHICLE
- V3

SHADOW VEHICLE
- 

TRUCK MOUNTED ATTENUATOR (TMA)
- 

SIGN ON TEMPORARY SUPPORT
- 

DIRECTION OF TRAFFIC
- 

FLASHING ARROW PANEL (MERGE)

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

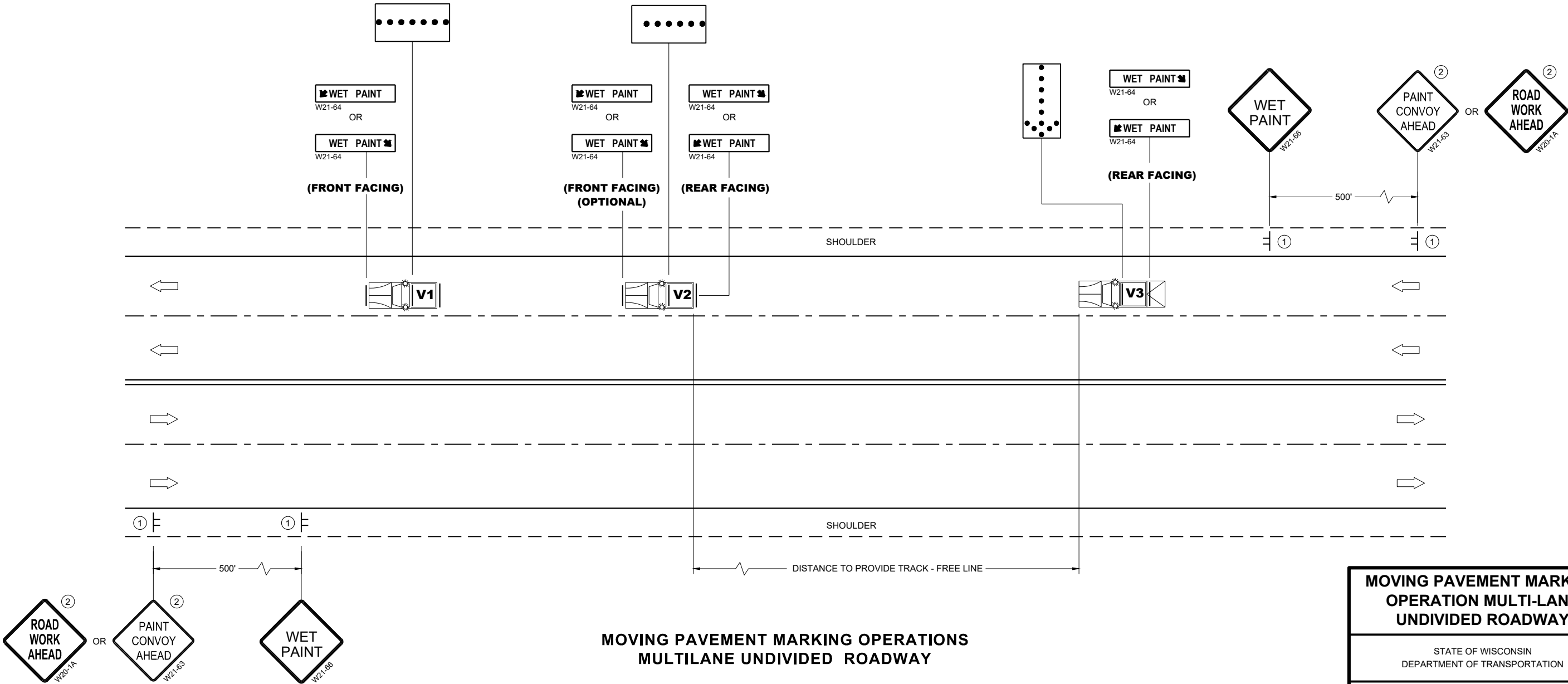
WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLES AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL HAVE A MINIMUM HEIGHT OF 28" FOR WET PAVEMENT MARKINGS.

- ① SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES AND AFTER EVERY MAJOR INTERSECTION.
- ② IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



MOVING PAVEMENT MARKING
OPERATION MULTI-LANE
UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA

GENERAL NOTES

SIGNING AND MARKING IS SHOWN AS TYPICAL PLACEMENT. FIELD CONDITIONS MAY DICTATE CHANGES IN SIGNING AND MARKING PLACEMENT.

① USED ONLY WHEN APPROVED BY REGION TRAFFIC ENGINEER.

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

** SIGNS MAY BE OMITTED IF SPACE DOES NOT PERMIT PLACEMENT.

*** IF POSTED SPEED IS 45 MPH OR GREATER, PLACE W5-54 SIGN UNDER R4-7 SIGN. MOUNT W5-54 SIGN AT 4' MOUNTING HEIGHT (TOP OF ROADWAY TO BOTTOM OF SIGN).

LEGEND

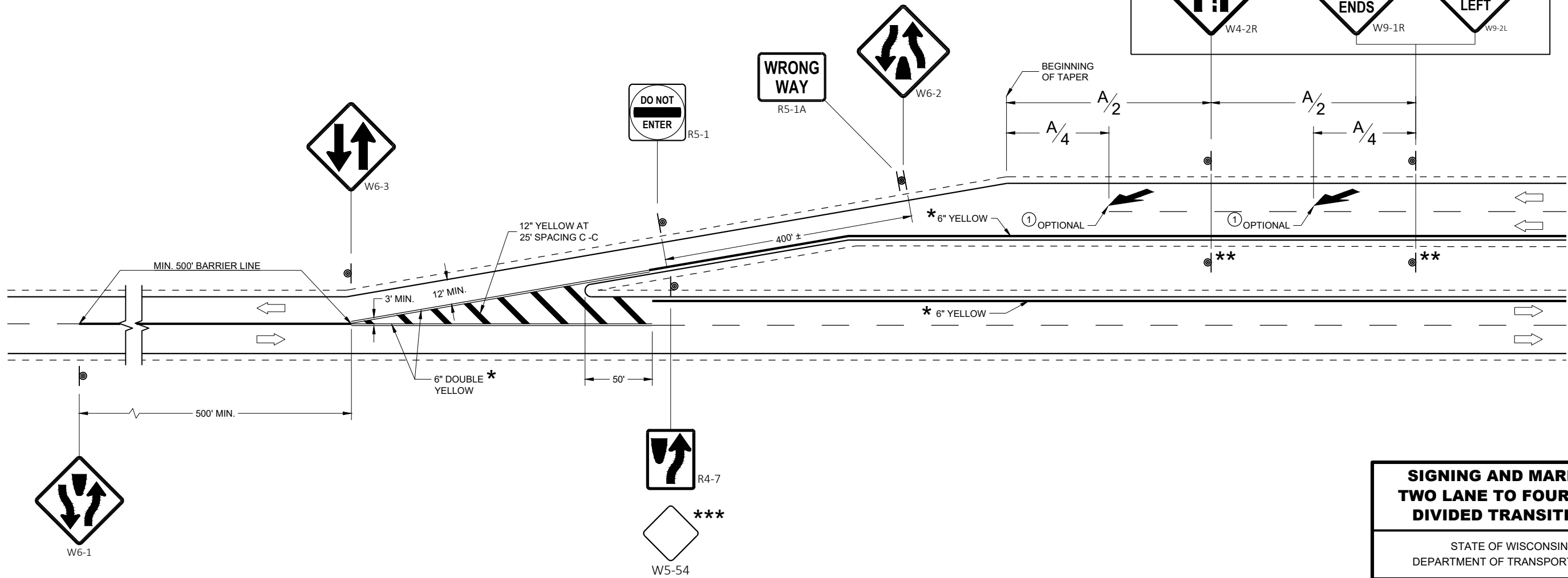
A DISTANCE DEPENDENT ON SPEED (SEE TABLE)

⦿ SIGN MOUNTED ON PERMANENT SUPPORT

➡ DIRECTION OF TRAFFIC

DISTANCE TABLE

POSTED OR 85TH PERCENTILE SPEED	DISTANCE "A"
25	325'
30	460'
35	565'
40	670'
45	775'
50	885'
55	990'
65	1200'
70	1250'



SIGNING AND MARKING
TWO LANE TO FOUR LANE
DIVIDED TRANSITIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023

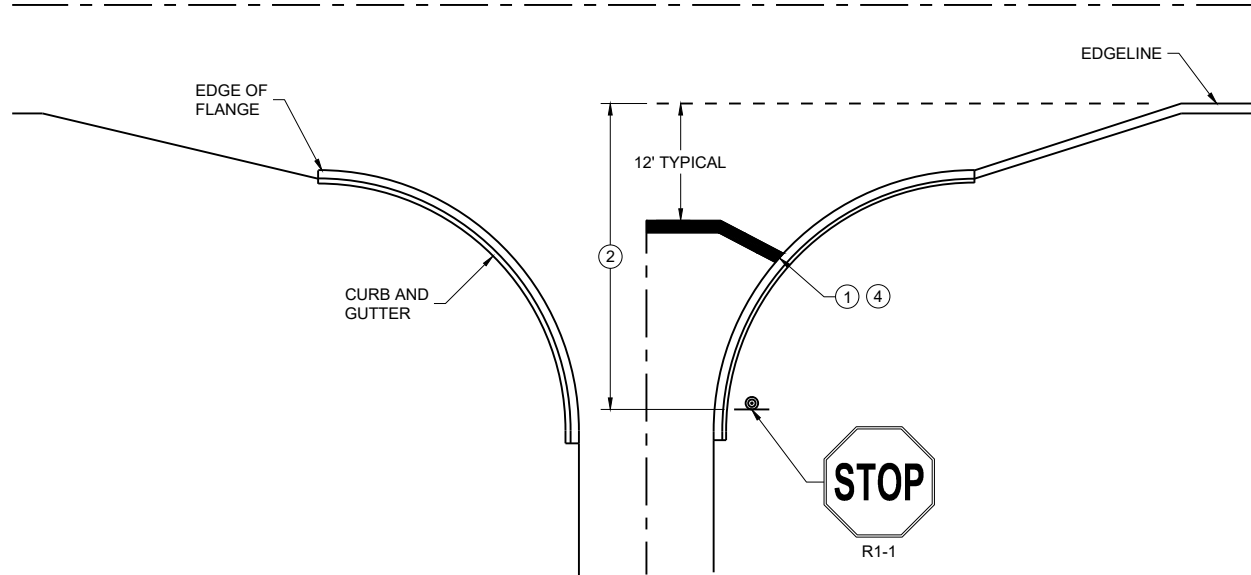
DATE

FHWA

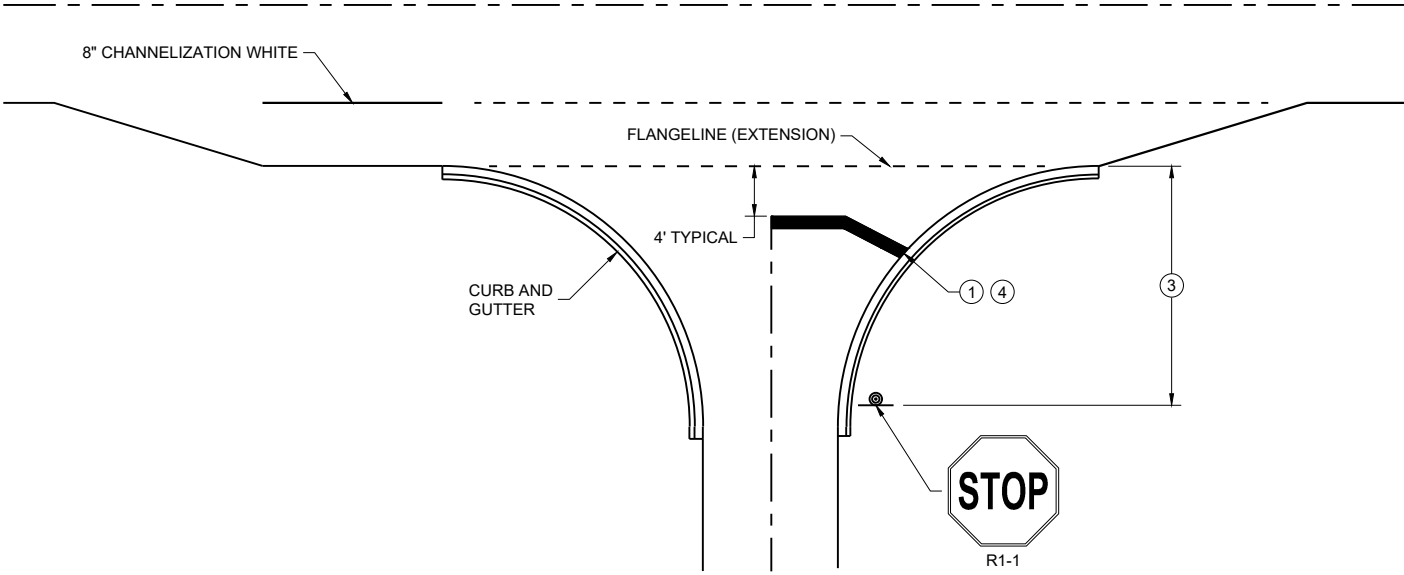
/S/ Matthew Rauch

STATE SIGNING AND MARKING

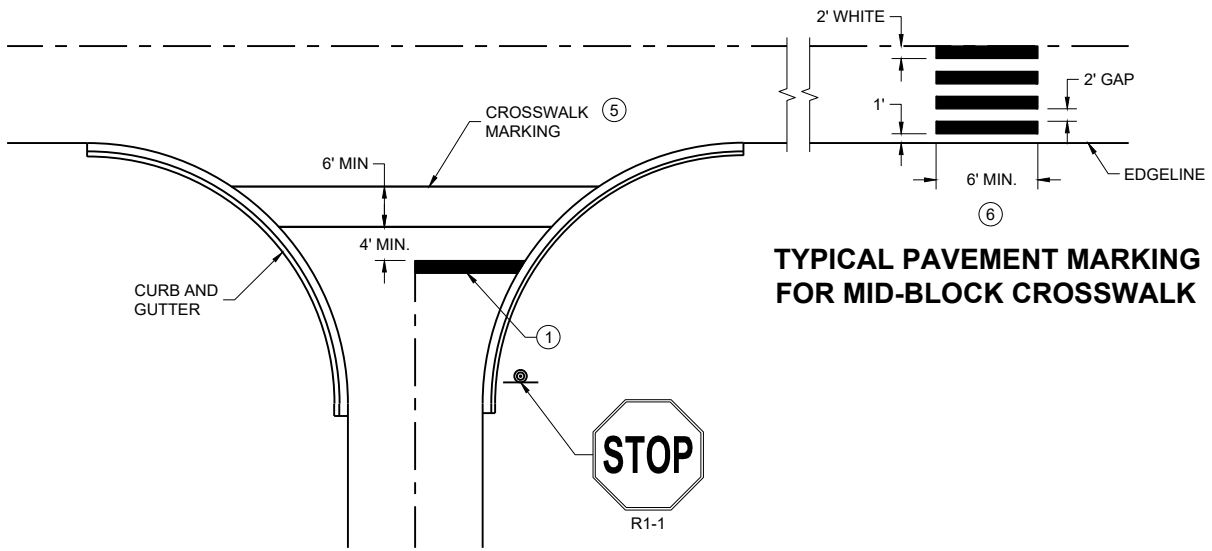
ENGINEER



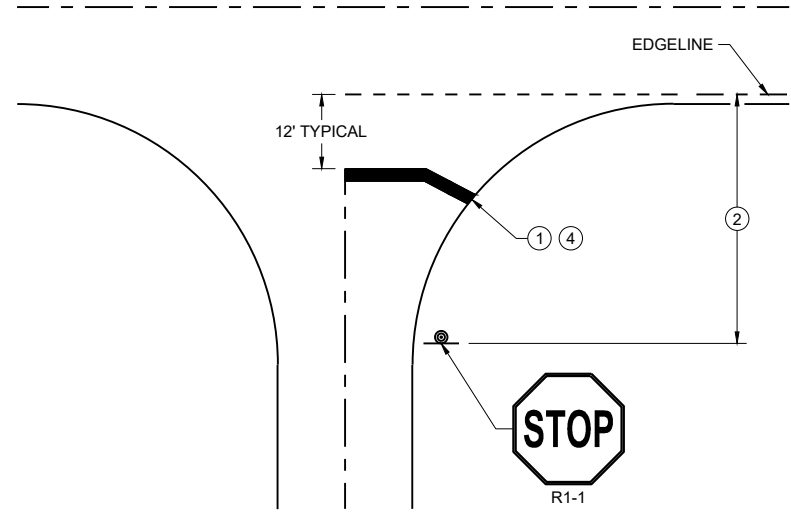
TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDE ROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR
SIDE ROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING
WITHOUT CURB AND GUTTER

GENERAL NOTES

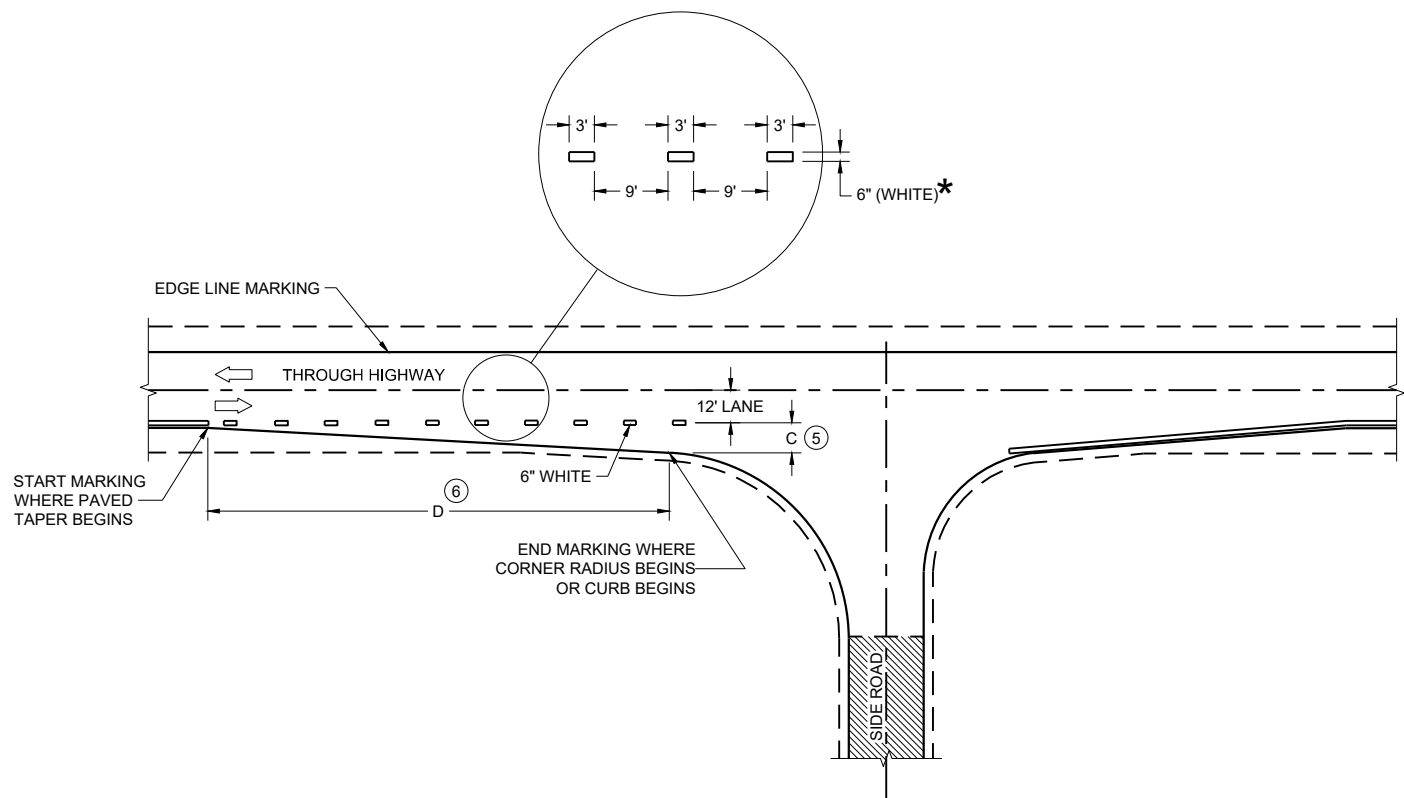
STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

- 1 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- 2 NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
- 3 NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGE LINE EXTENSION.
- 4 MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
- 5 LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES.
- 6 POSTED SPEED LIMITS OF 40 MPH OR GREATER USE A MINIMUM WIDTH OF 8' FOR MIDBLOCK CROSSWALKS

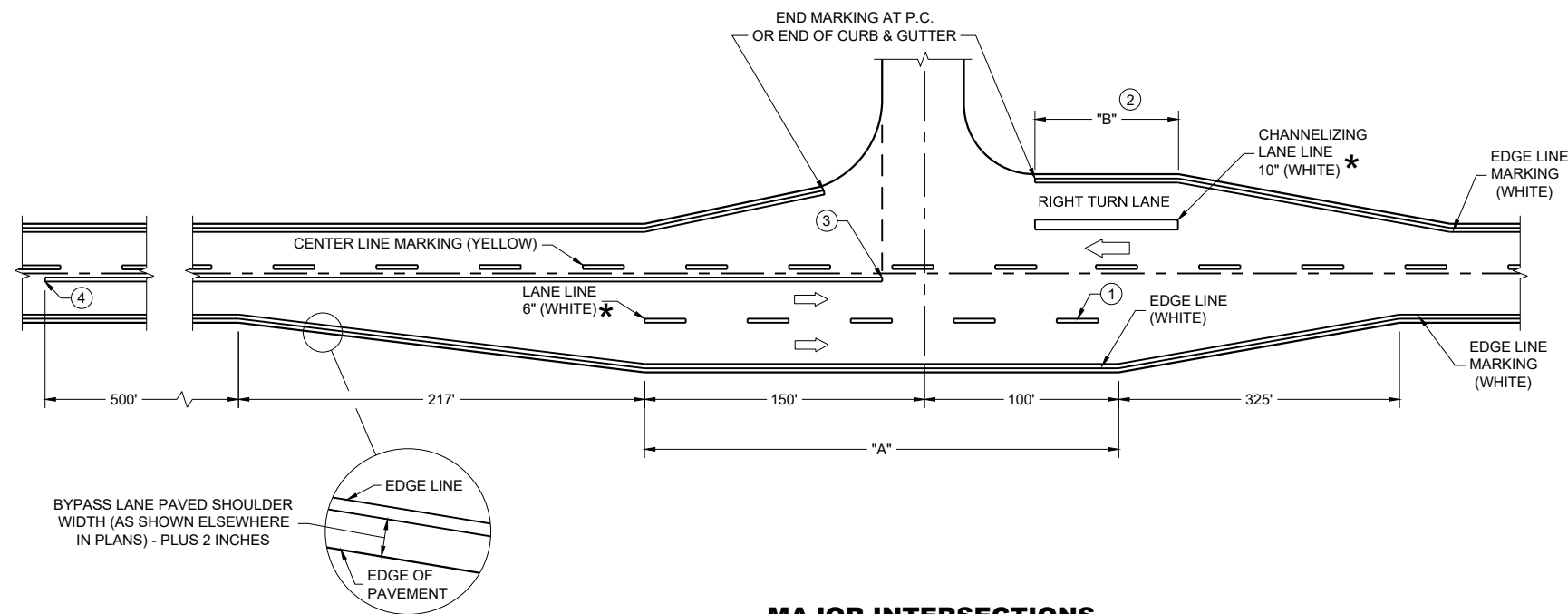
STOP LINE AND CROSSWALK
PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024 /S/ Matthew Rauch
DATE STATE SIGNING AND MARKING
ENGINEER
FHWA



MINOR INTERSECTION



MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

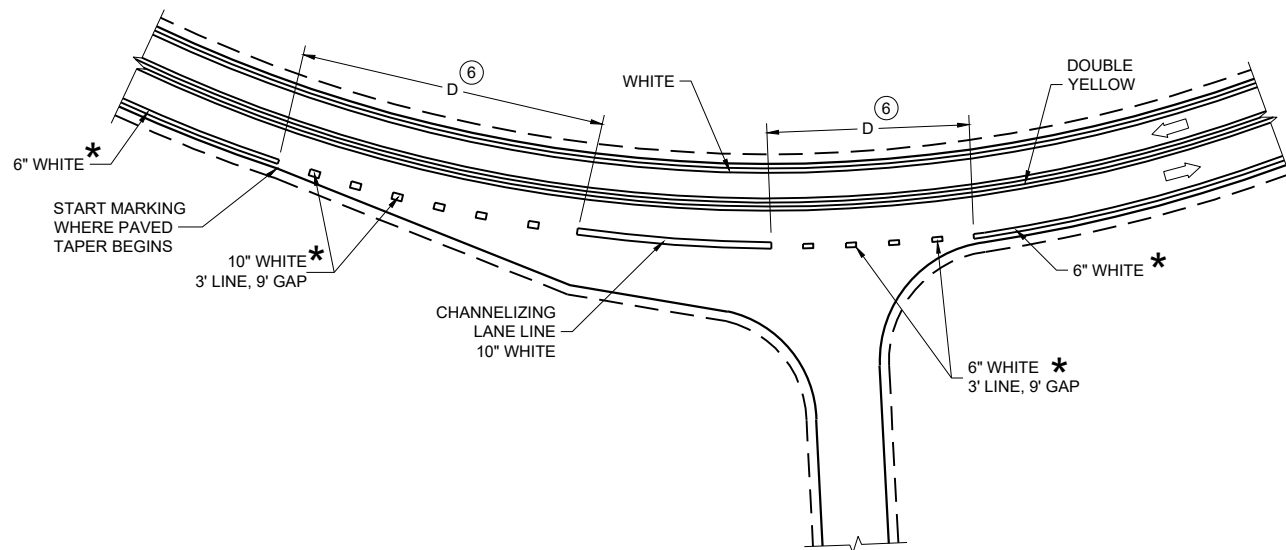
GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES 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 BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
- ④ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
- ⑤ WHEN DISTANCE "C" IS LESS THAN 4 FEET, OMIT DOTTED EXTENSION.
- ⑥ WHEN DISTANCE "D" IS LESS THAN 50 FEET, OMIT DOTTED EXTENSION.

LEGEND

➡ DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

- TRAFFIC CONTROL DRUM
- ⦿ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ⚡➡ FLASHING ARROW BOARD
- ▨ WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

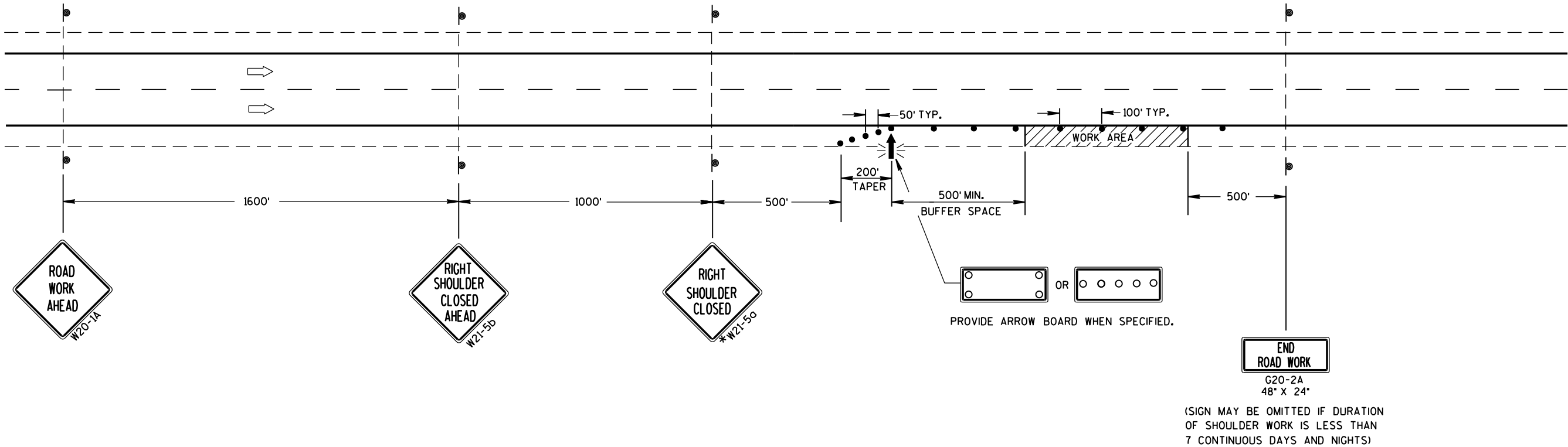
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WHEN A 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.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL
SHOULDER CLOSURE ON DIVIDED
ROADWAY, SPEEDS GREATER
THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 /S/ Peter Amakobe Atepe
DATE STATEWIDE WORK ZONE TRAFFIC
FHWA SAFETY ENGINEER

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  TRAFFIC CONTROL DRUM
-  DIRECTION OF TRAFFIC
-  WORK ZONE

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

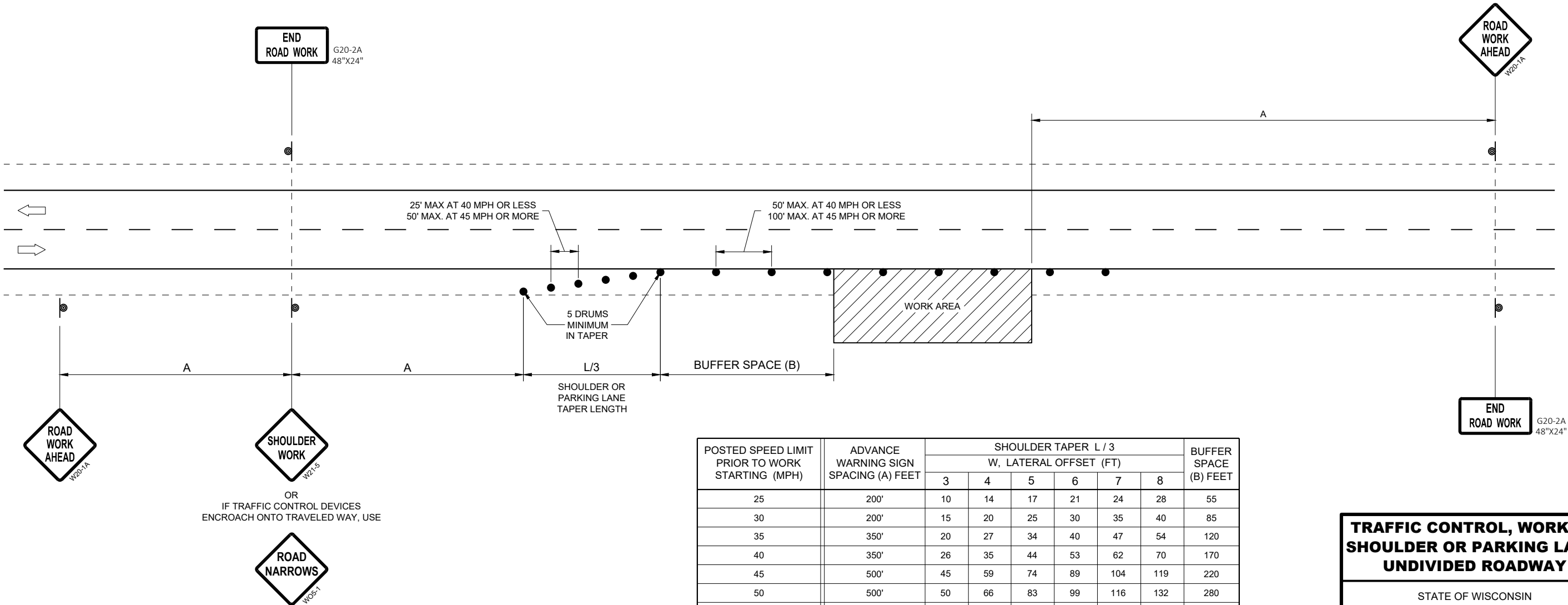
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45	59	74	89	104	119	220
50	500'	50	66	83	99	116	132	280
55	500'	54	73	91	109	127	145	335'

TRAFFIC CONTROL, WORK ON
SHOULDER OR PARKING LANE,
UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE TRAFFIC
SAFETY ENGINEER

FHWA



BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

- ① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
- ② SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.
- ③ PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.
- ✱ USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.
- ④ WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.



CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED $\frac{1}{2}$ ". LATERAL EDGES MAY BE VERTICAL UP TO $\frac{1}{4}$ " HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN $\frac{1}{4}$ " AND $\frac{1}{2}$ ".

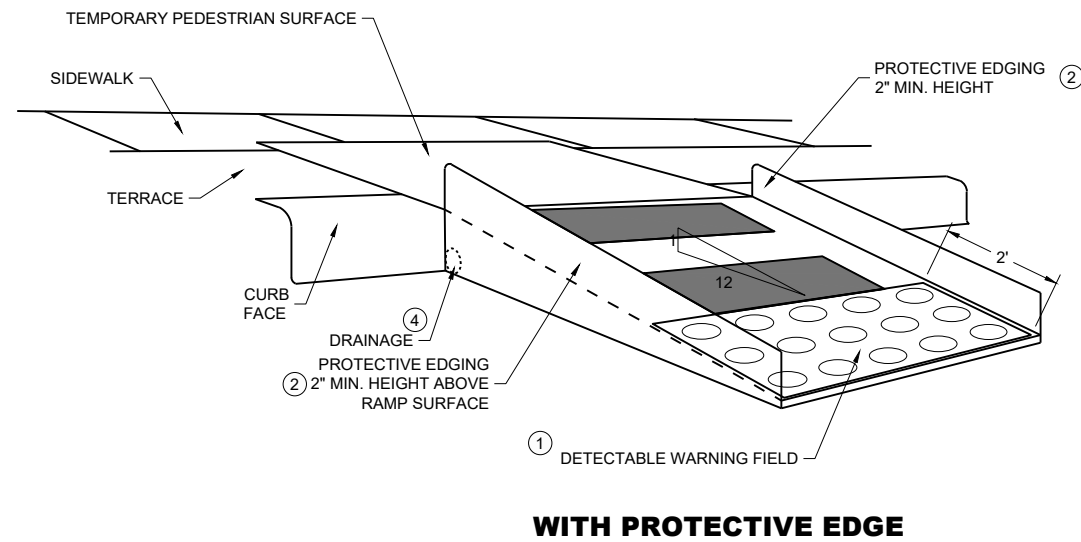
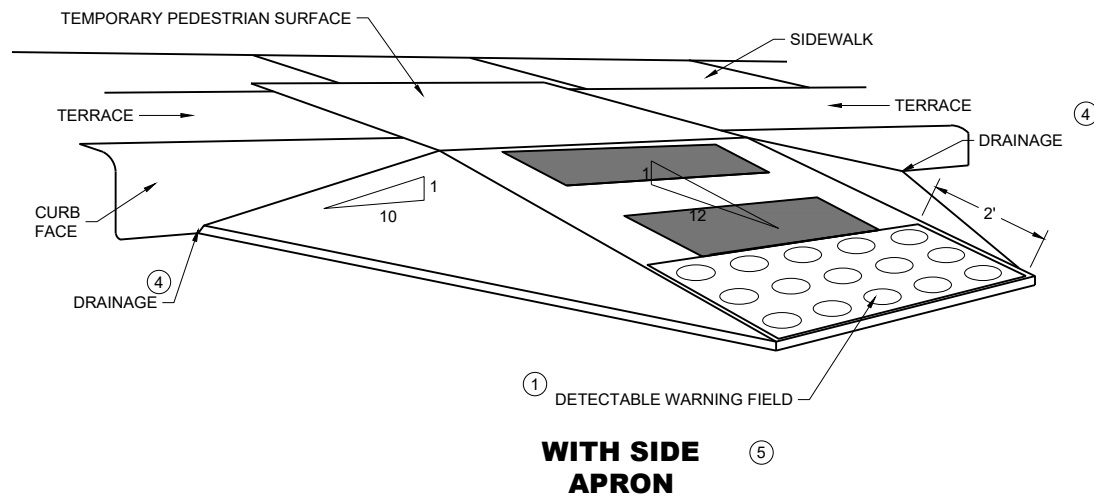
- ① INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.
- ② PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
- ③ DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
- ④ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
- ⑤ ENSURE CURB RAMP IS OUT OF THE GUTTER PAN.
- ⑥ IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.



TEMPORARY CURB RAMP PARALLEL TO CURB

**TRAFFIC CONTROL,
PEDESTRIAN
ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

- ① INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS
- ② PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
- ③ DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
- ④ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
- ⑤ CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

**TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

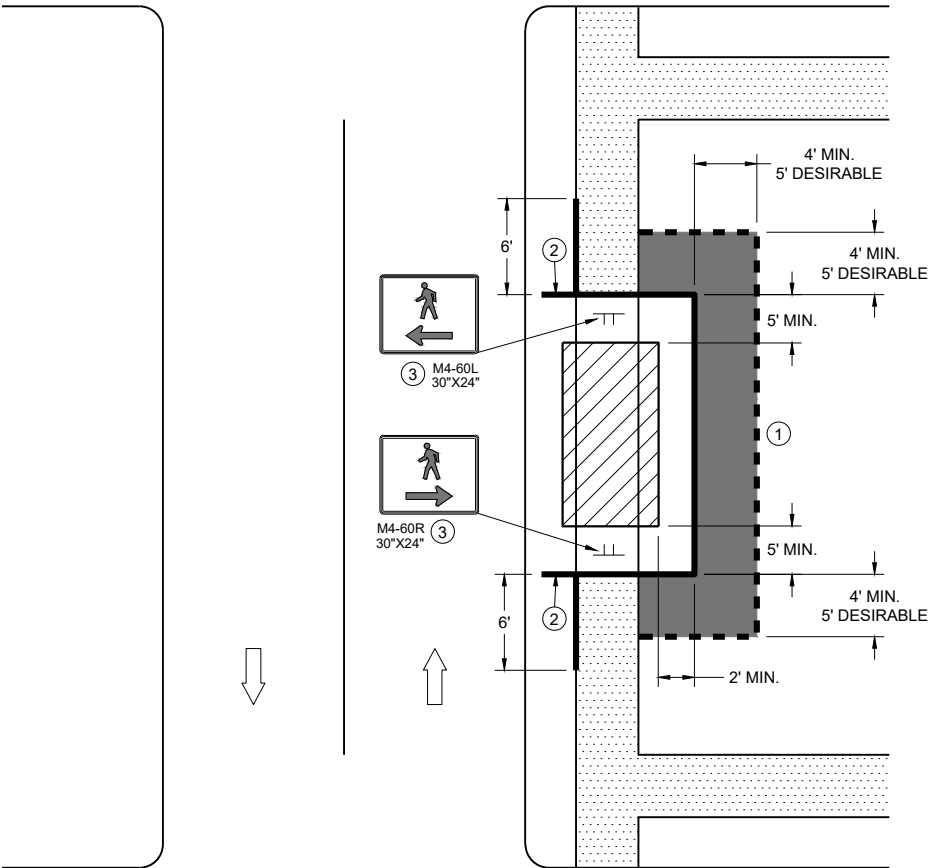
GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

- ① USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
- ② IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
- ③ MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



SIDEWALK BYPASS
SINGLE SIDE

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

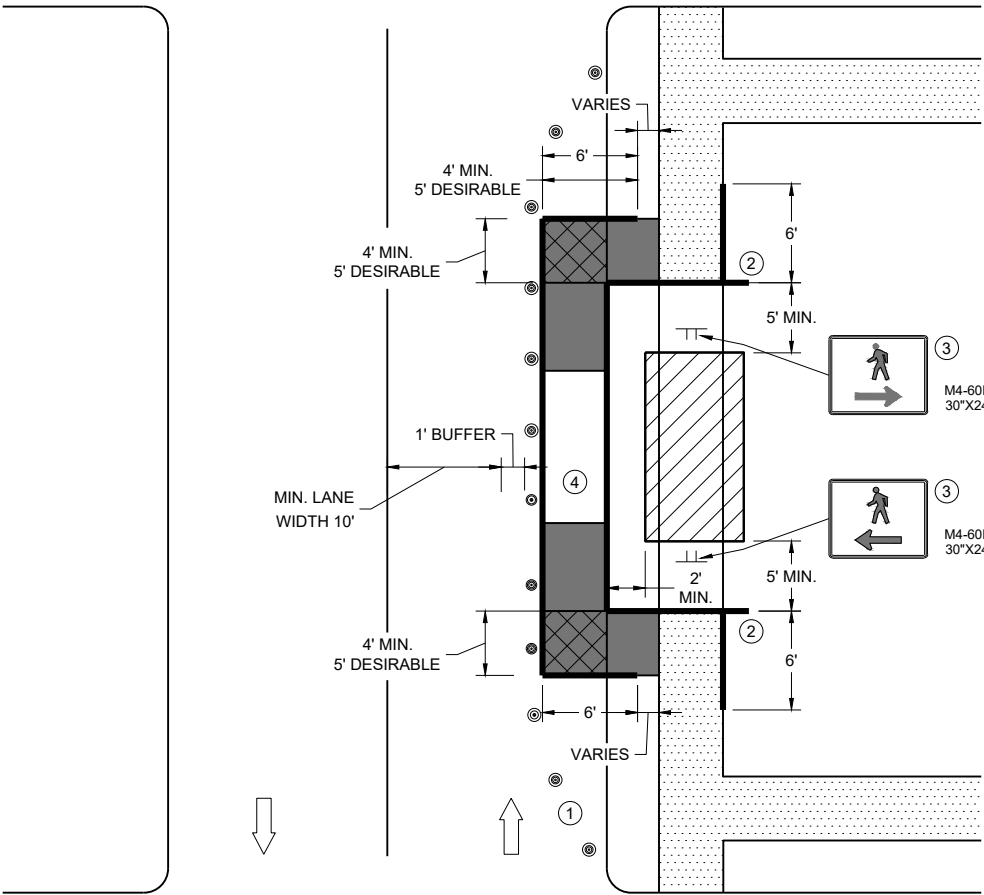
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

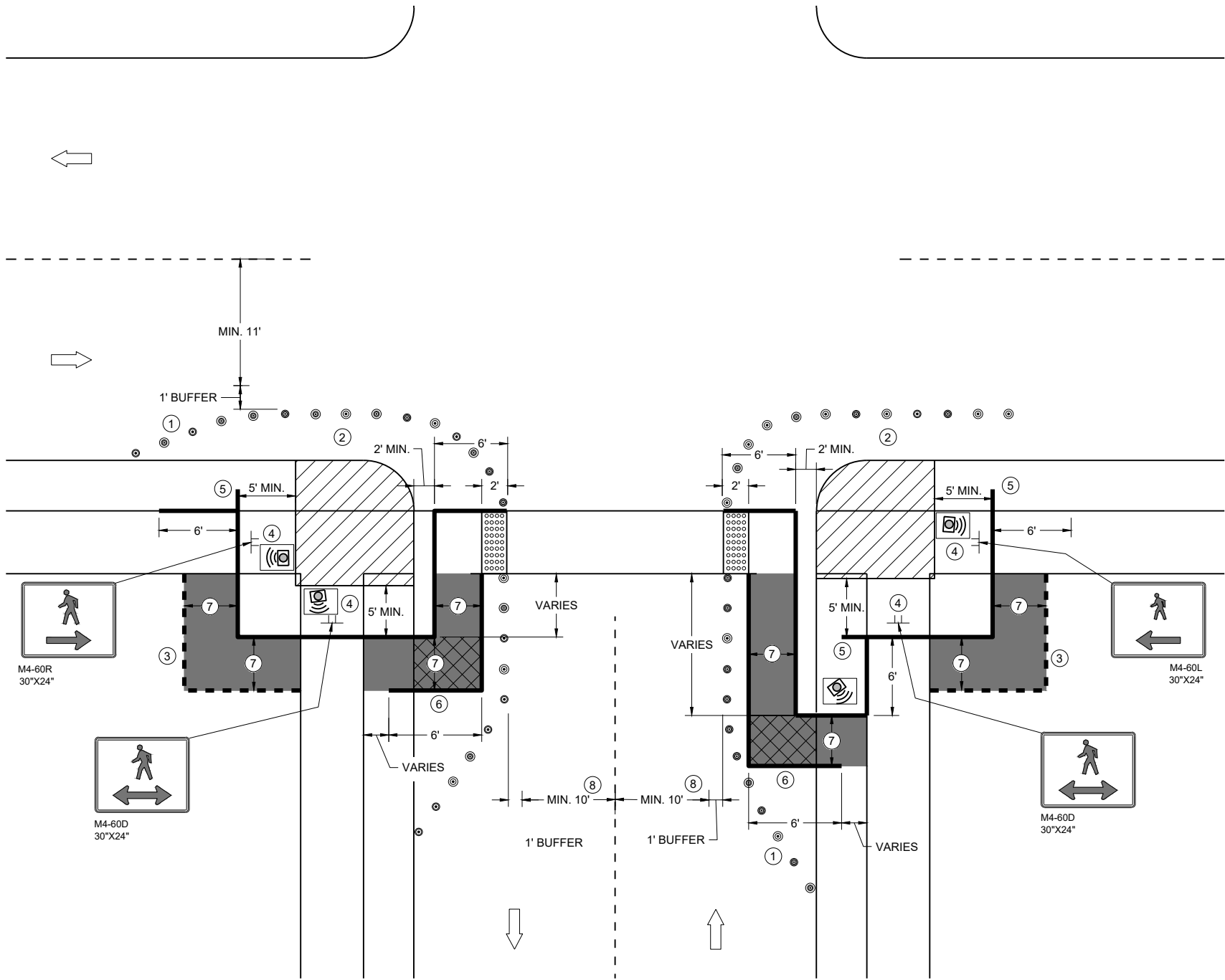
- ① SHOULDER OR LANE CLOSURE ADVANCE WARNING AND BUFFER SPACE REQUIRED.
- ② PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL PAST THE SIDEWALK ON THE SIDE AWAY FROM THE ROAD.
- ③ MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.
- ④ USE EXISTING PAVEMENT SURFACE. IF EXISTING PAVEMENT SURFACE HAS BEEN REMOVED, USE A TEMPORARY PEDESTRIAN SURFACE. WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.



SIDEWALK BYPASS, SINGLE SIDE

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



**CURB RAMP PEDESTRIAN TRAFFIC CONTROL
SIDEWALK ON SINGLE SIDE**

GENERAL NOTES

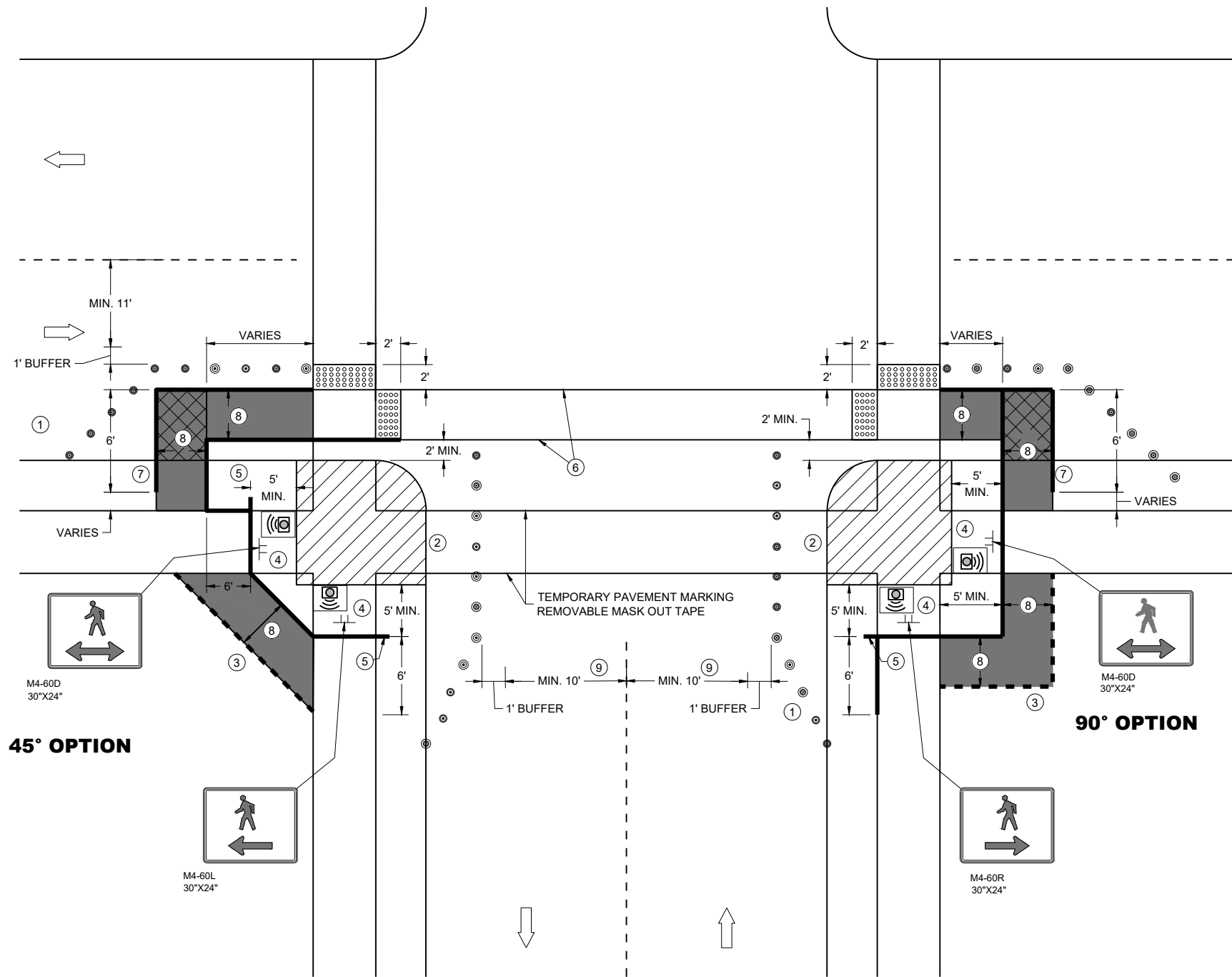
- IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.
- TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG
- WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.
- WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.
- ① SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
 - ② PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
 - ③ USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
 - ④ MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
 - ⑤ PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
 - ⑥ IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
 - ⑦ 4 FEET MINIMUM, 5 FEET DESIRABLE
 - ⑧ IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

**TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP PEDESTRIAN TRAFFIC CONTROL

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.

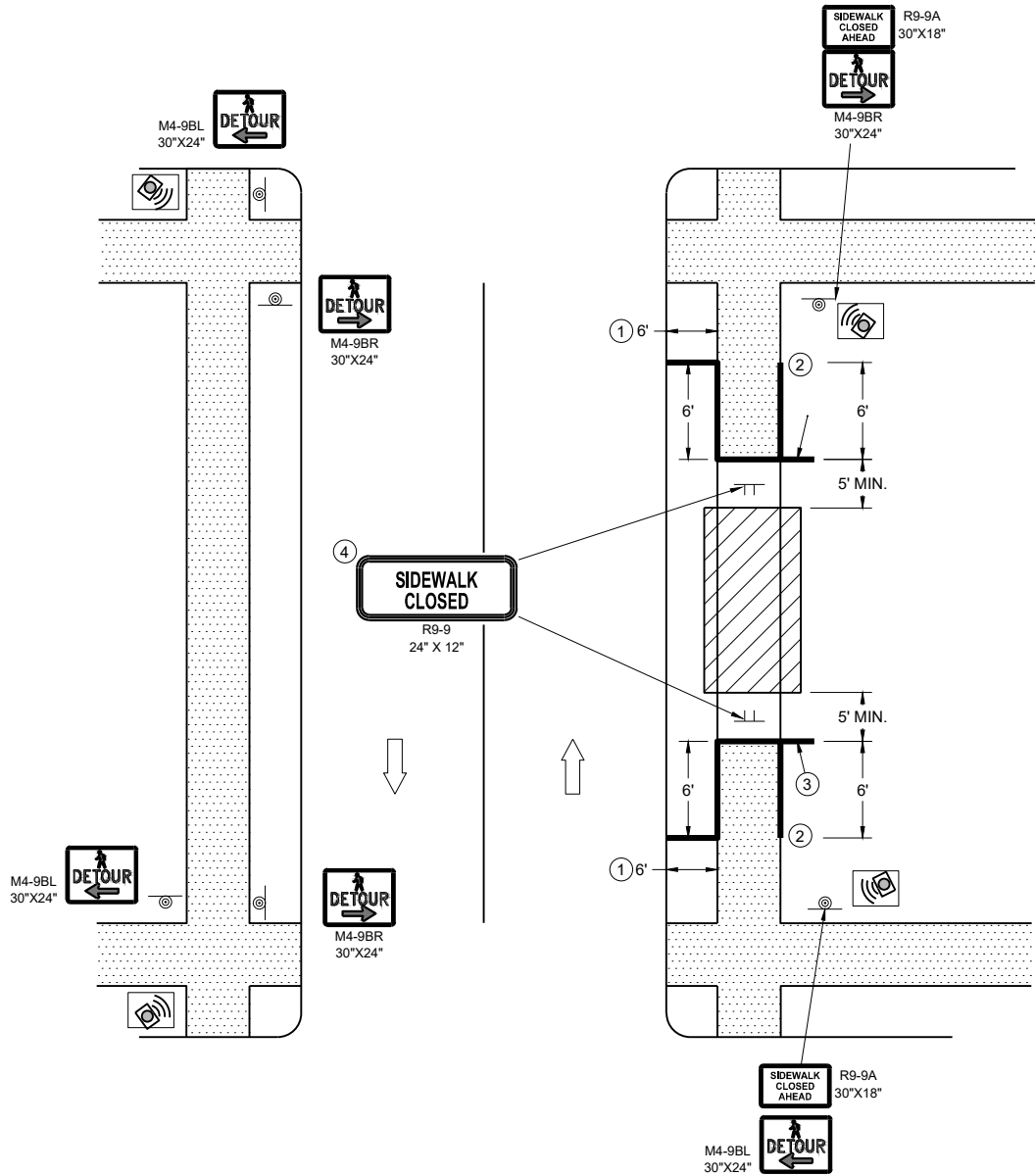
- 1 SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
- 2 PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
- 3 USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
- 4 MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
- 5 PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
- 6 WHITE 6" TEMPORARY PAVEMENT MARKING
- 7 IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
- 8 4 FEET MINIMUM, 5 FEET DESIRABLE
- 9 IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)



SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES

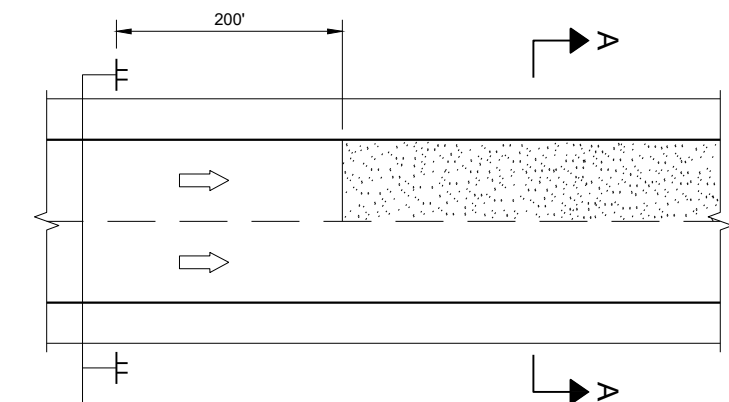
GENERAL NOTES

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

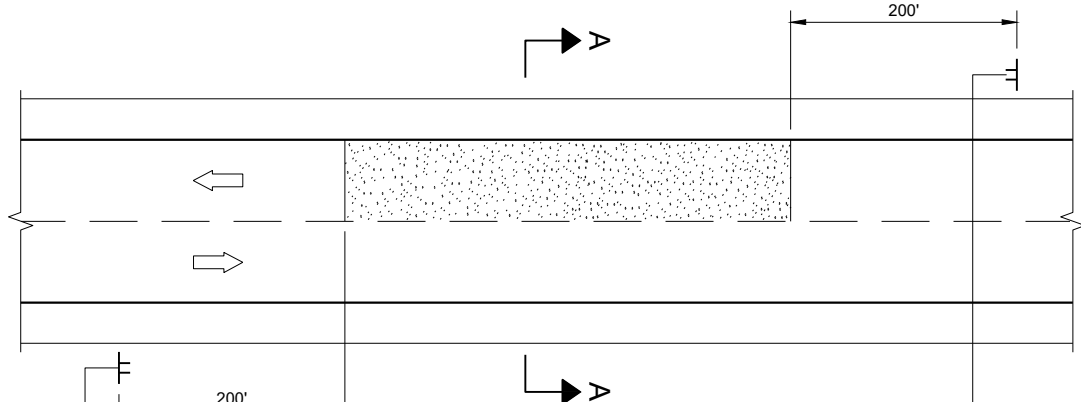
SIGNS THAT REMAIN IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICT WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

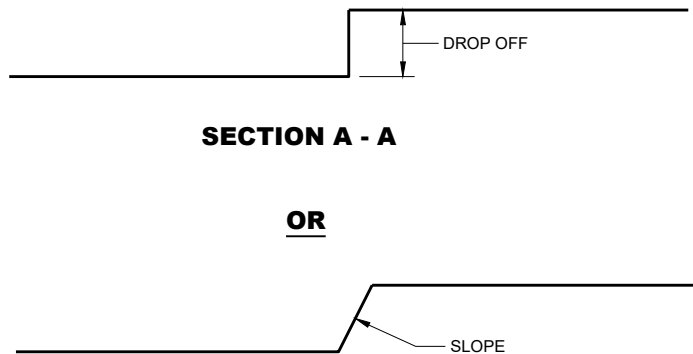
- ① IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
- ② PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
- ③ IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
- ④ MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



MULTI-LANE



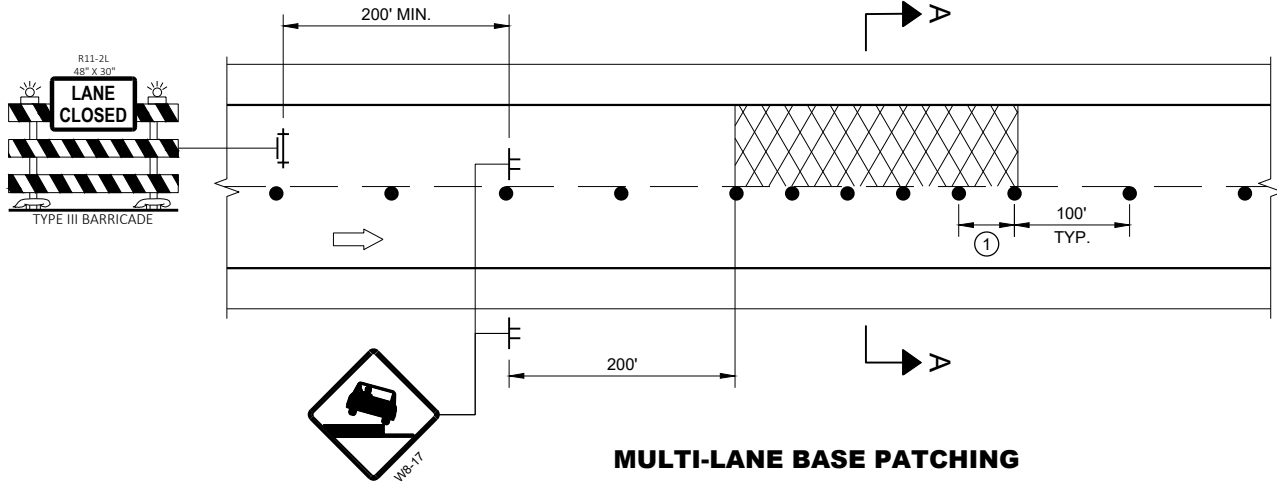
TWO-WAY TWO LANE



SECTION A - A

OR

SECTION A - A



MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

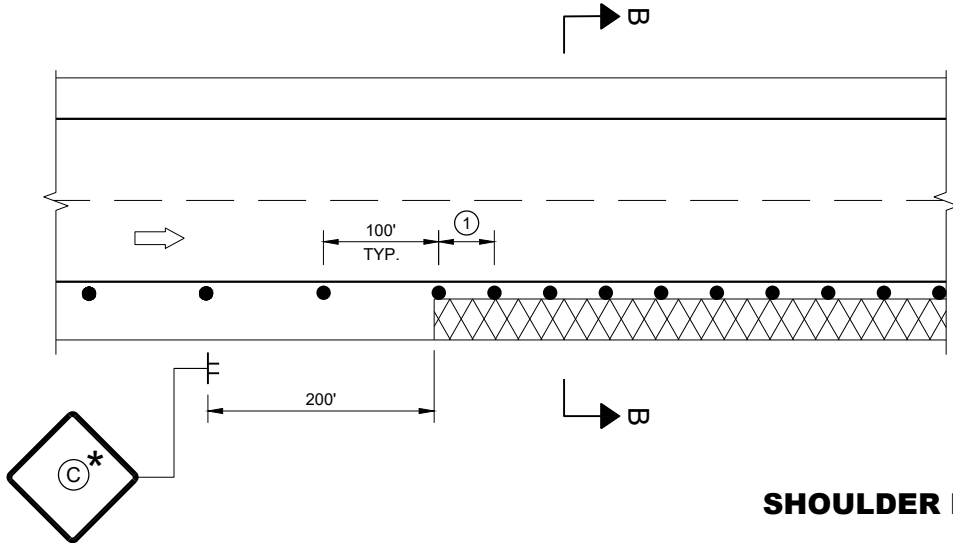
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

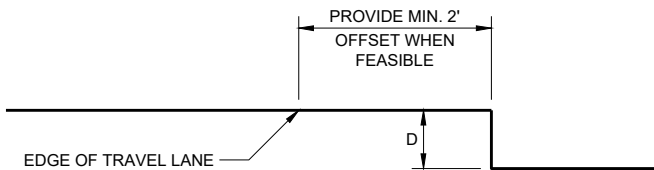
① USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP - OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

TRAFFIC CONTROL,
DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

LEGEND



TYPE III BARRICADE WITH ATTACHED SIGN



SIGN ON PERMANENT SUPPORT



TRAFFIC CONTROL DRUM



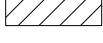
TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT



TYPE "A" WARNING LIGHT (FLASHING)



DIRECTION OF TRAFFIC



WORK AREA



REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

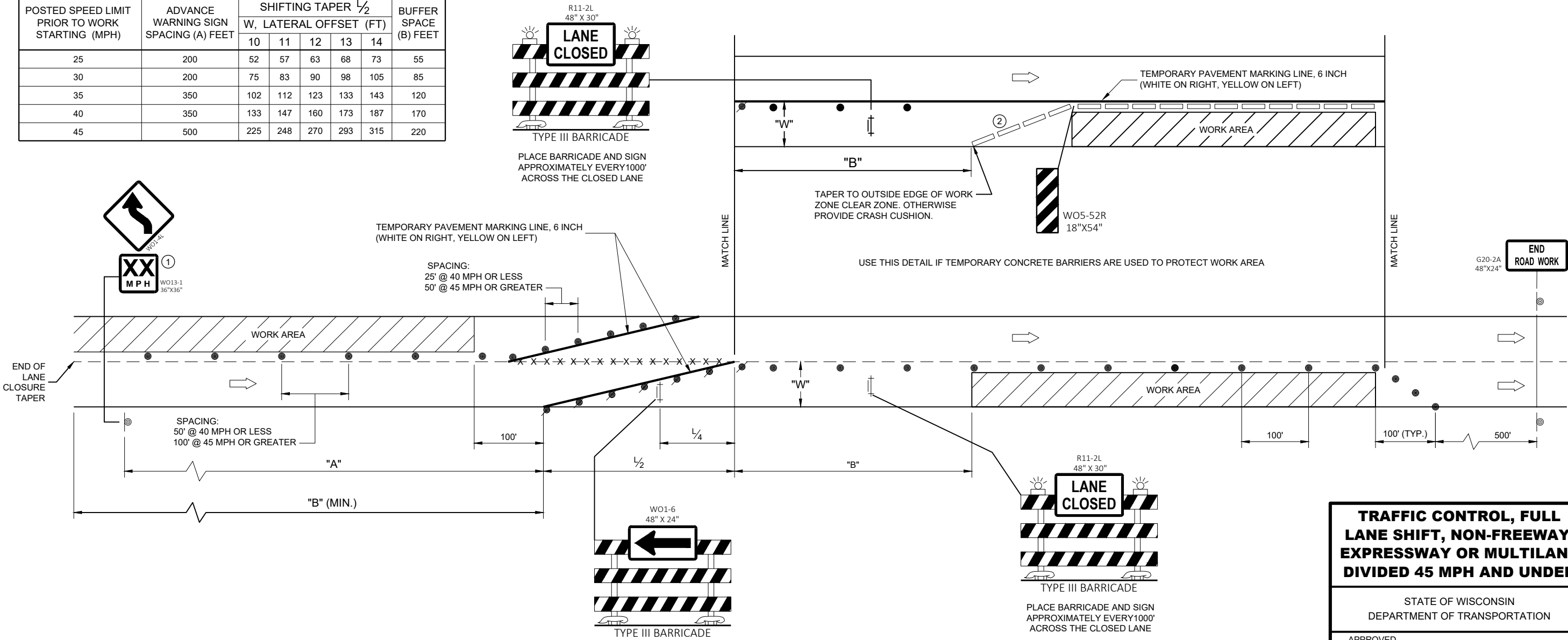


CONCRETE BARRIER TEMPORARY PRECAST

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER $\frac{L}{2}$ W, LATERAL OFFSET (FT)					BUFFER SPACE (B) FEET
		10	11	12	13	14	
25	200	52	57	63	68	73	55
30	200	75	83	90	98	105	85
35	350	102	112	123	133	143	120
40	350	133	147	160	173	187	170
45	500	225	248	270	293	315	220

GENERAL NOTES

- THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
- THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.
- THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT RIGHT - REVERSE FOR SHIFTING LEFT.
- ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.
- "WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.
- 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. NO WARNING LIGHTS SHALL BE WORKING ON ANY "COVERED" OR "DOWNED" SIGNS.
- CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.
- FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.
- REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.
- WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.
- IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.
- ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.
- ① USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.
- ② BARRIER FLARE RATE: 6:1 @ 40 MPH OR LESS
8:1 @ 45 MPH OR GREATER



TRAFFIC CONTROL, FULL
LANE SHIFT, NON-FREEWAY/
EXPRESSWAY OR MULTILANE
DIVIDED 45 MPH AND UNDER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

	TYPE III BARRICADE WITH ATTACHED SIGN
	SIGN ON PERMANENT SUPPORT
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
	TYPE "A" WARNING LIGHT (FLASHING)
	DIRECTION OF TRAFFIC
	WORK AREA
	REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
	CONCRETE BARRIER TEMPORARY PRECAST

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

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT RIGHT - REVERSE FOR SHIFTING LEFT.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

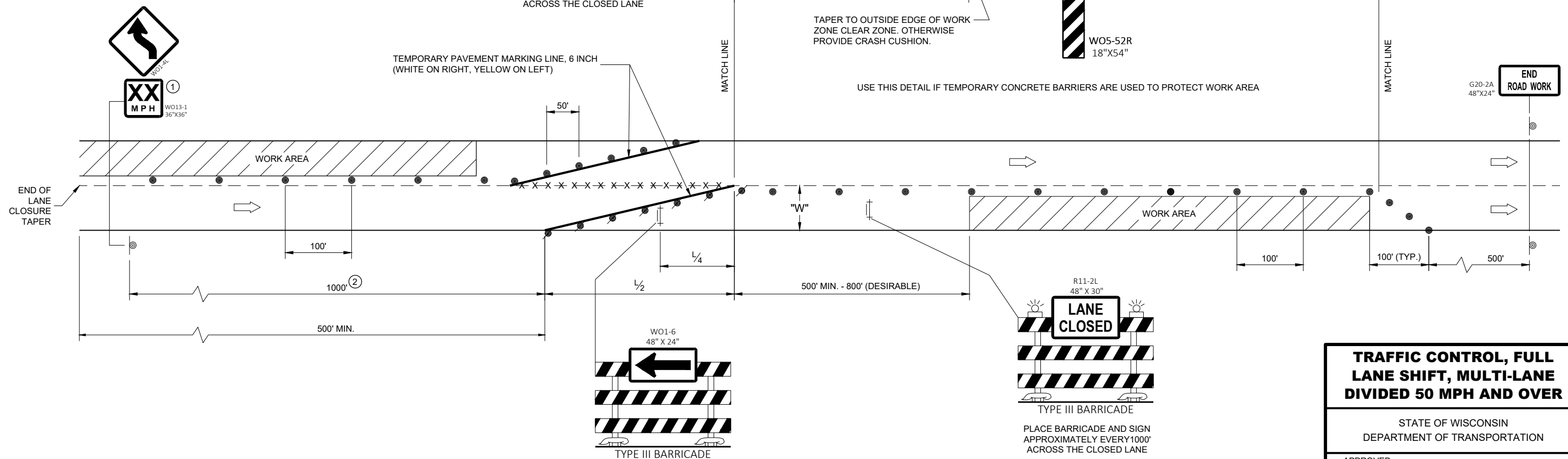
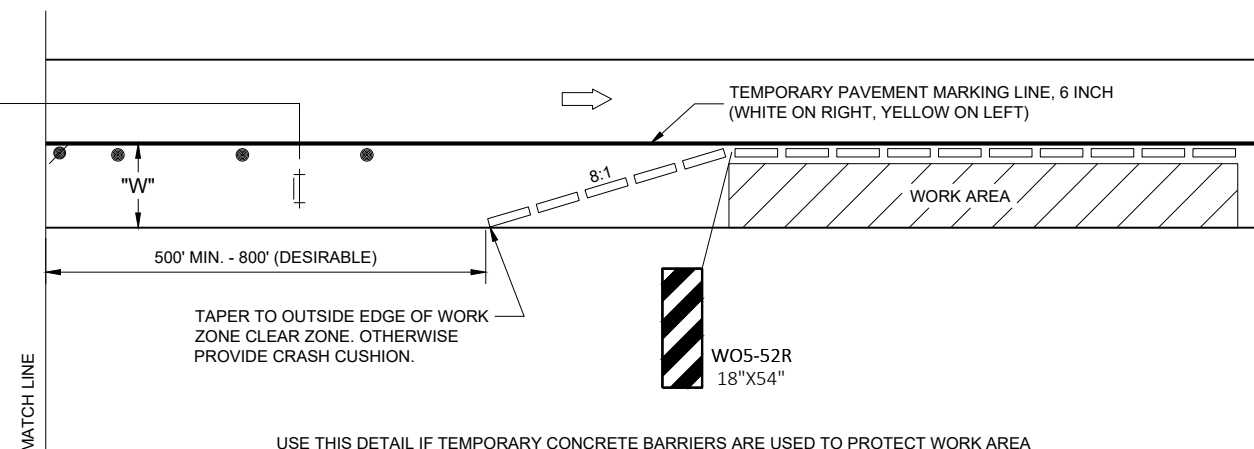
FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS,
THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ½ THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A Crossover MANEUVER.

- ① USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.
- ② IF BEGINNING OF LANE SHIFT IS 1200' OF LESS FROM THE END OF THE LANE CLOSURE TAPER, PLACE THE W01-4L SIGN 200 FEET AFTER THE END OF THE LANE CLOSURE TAPER.

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	SHIFTING TAPER $L/2$				
	W, LATERAL OFFSET (FT)				
	10	11	12	13	14
50	250	275	300	325	350
55	275	303	330	358	385
60	300	330	360	390	420
65	325	358	390	423	455
70	350	385	420	455	490



**TRAFFIC CONTROL, FULL
LANE SHIFT, MULTI-LANE
DIVIDED 50 MPH AND OVER**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

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

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

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

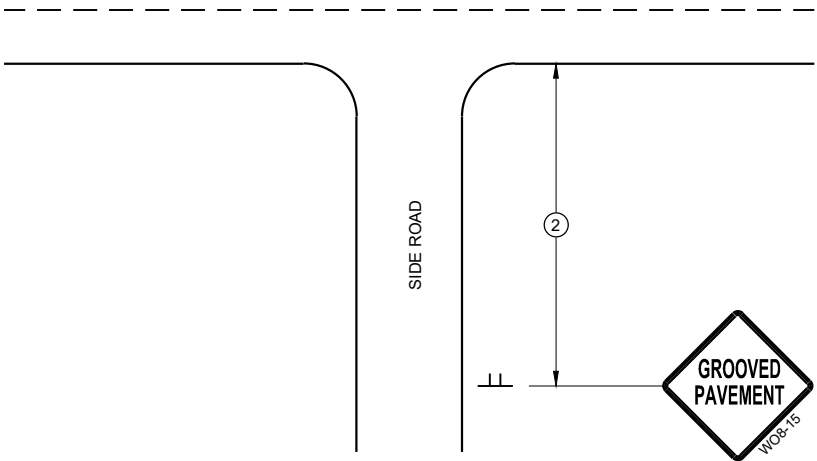
ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

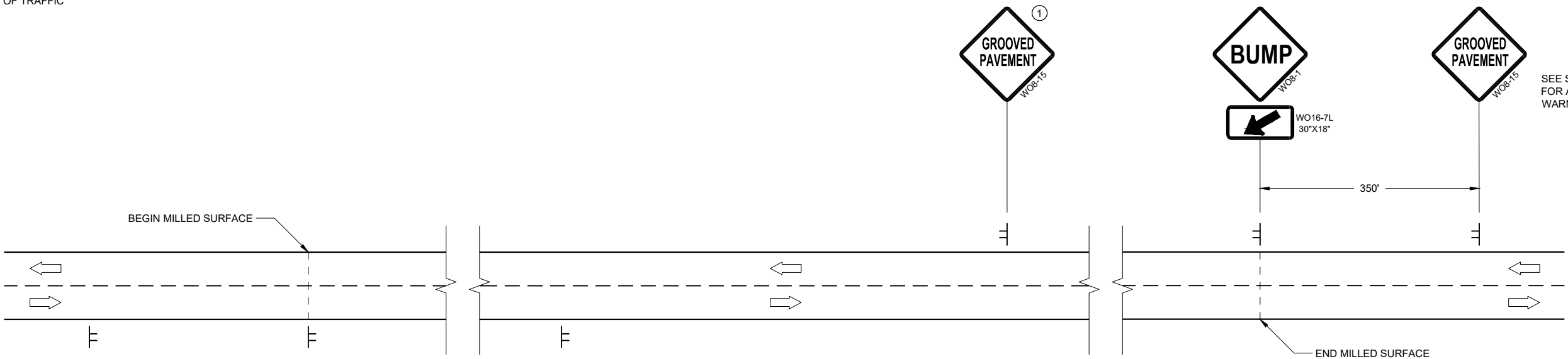
- 1 PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.
- 2 PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

LEGEND

-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH
SIGN DETAIL



SEE SDD15C04
FOR ADVANCE
WARNING SIGNS

SEE SDD15C04
FOR ADVANCE
WARNING SIGNS

DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL,
SIGNING ON ROADWAYS
WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

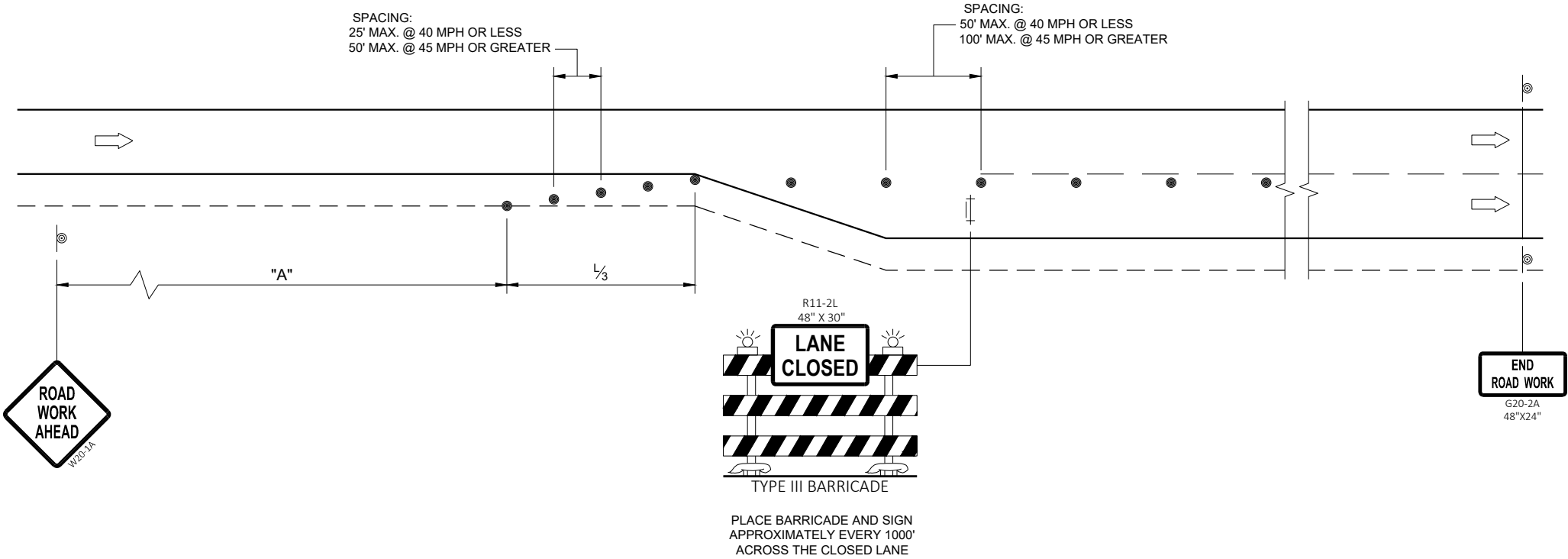
LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER $L\frac{1}{2}$					
		W, LATERAL OFFSET (FT)					
		3	4	5	6	7	8
25	200	10	14	17	21	24	28
30	200	15	20	25	30	35	40
35	350	20	27	34	40	47	54
40	350	26	35	44	53	62	70
45	500	45	59	74	89	104	119
50	500	50	66	83	99	116	132
55	500	54	73	91	109	127	145

GENERAL NOTES

- THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
- ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"x36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.
- "WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.
- 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.
- CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.
- SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.
- W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION WORK IS LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS.



**TRAFFIC CONTROL
ADDED LANE CLOSURE
WITHOUT LANE SHIFT**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

LEGEND

- 
- TYPE III BARRICADE WITH ATTACHED SIGN
- 
- SIGN ON PERMANENT SUPPORT
- 
- TRAFFIC CONTROL DRUM
- 
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- 
- TYPE "A" WARNING LIGHT (FLASHING)
- 
- DIRECTION OF TRAFFIC
- 
- WORK AREA

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER (L/2) FEET
25	200	60
30	200	90
35	350	120
40	350	160
45	500	270
50	500	300
55	500	330

GENERAL NOTES

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"x36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

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

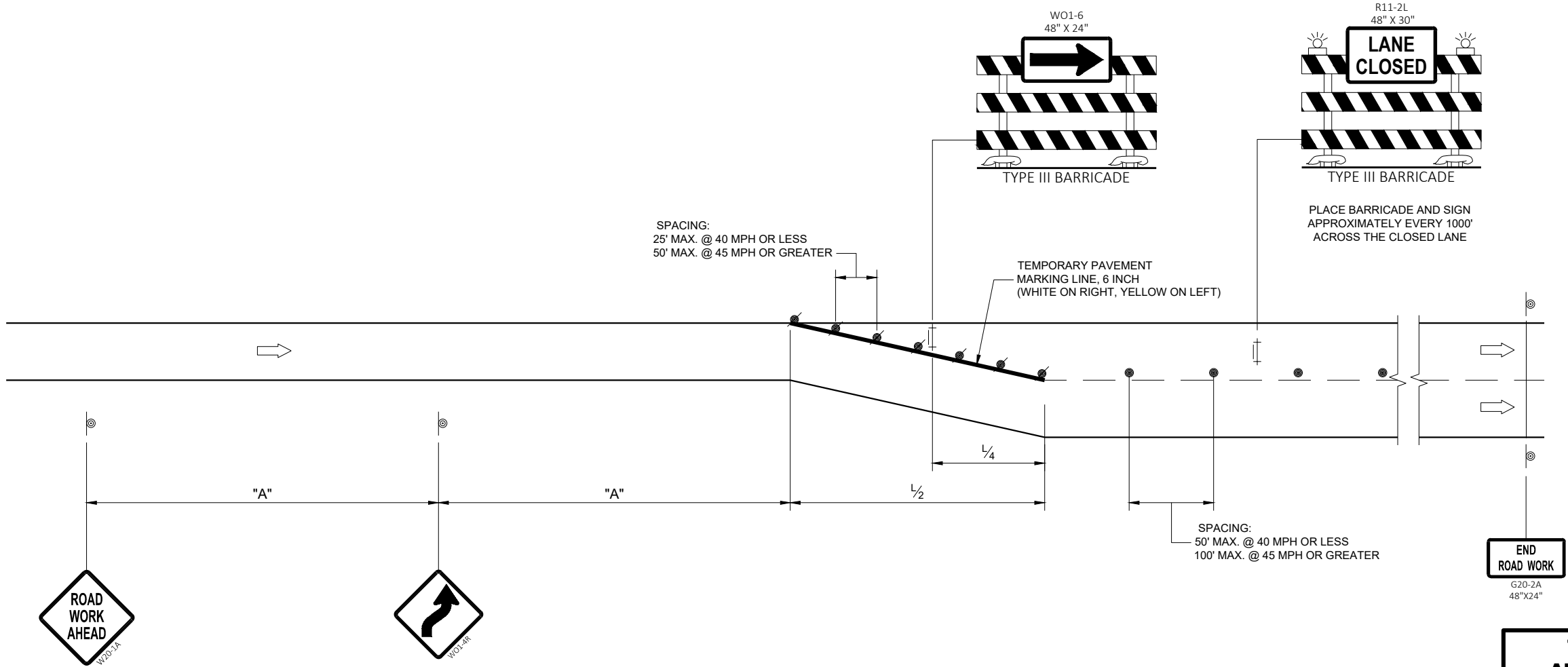
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION WORK IS LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS.

PLACE TEMPORARY PAVEMENT MARKING AND PLACE TEMPORARY PAVEMENT LINE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.



**TRAFFIC CONTROL,
ADDED LANE CLOSURE
WITH LANE SHIFT**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

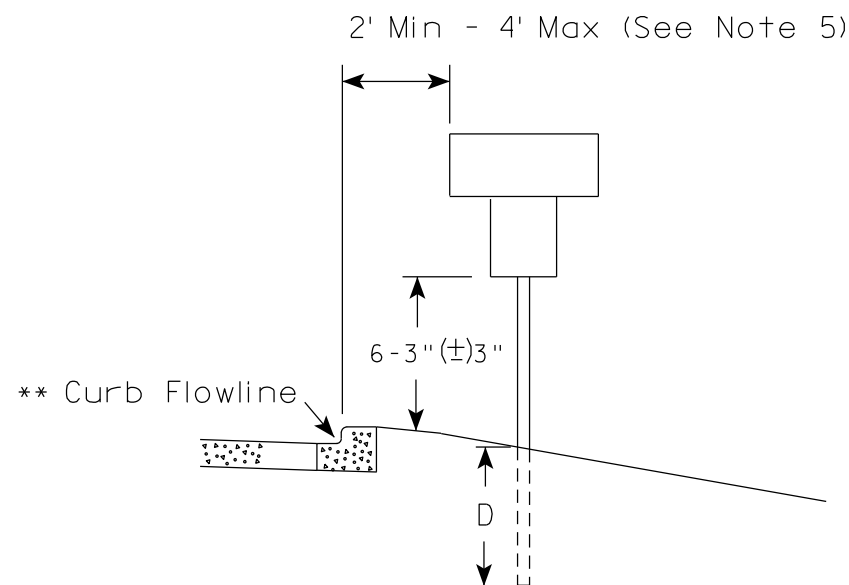
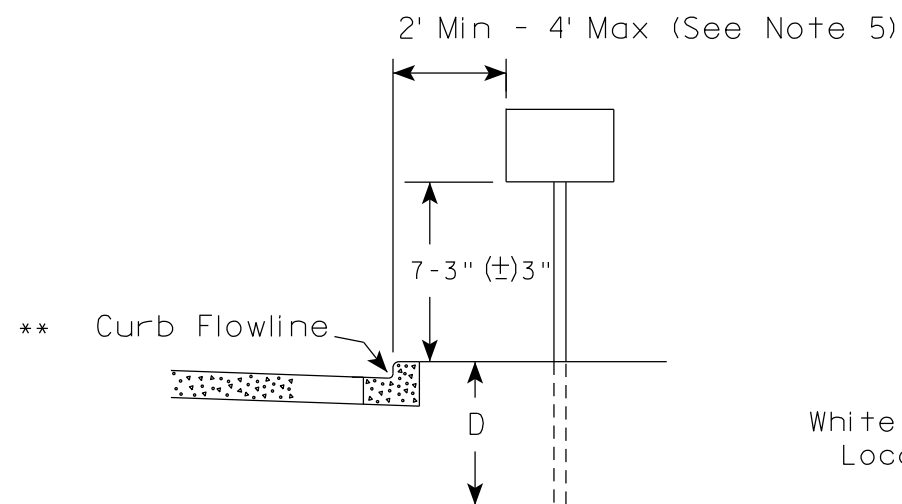


TOP VIEW



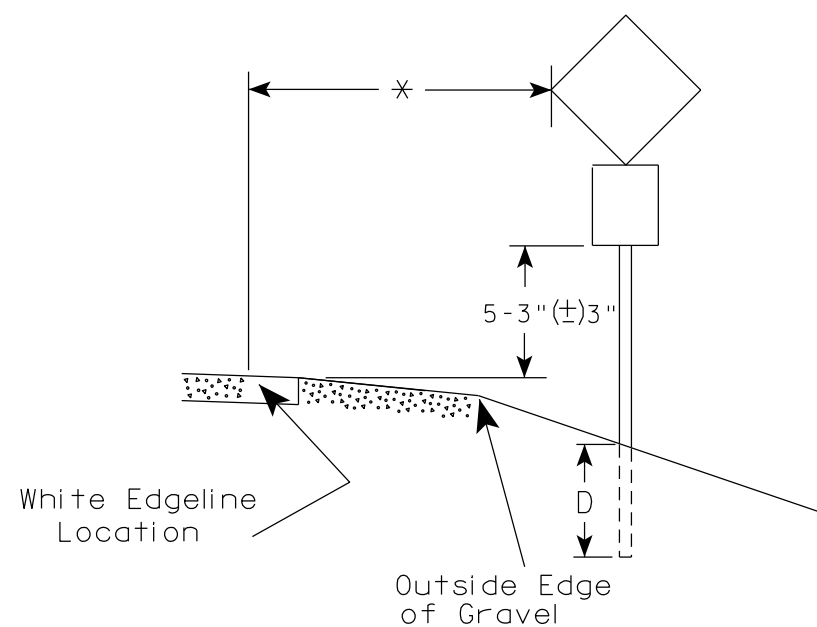
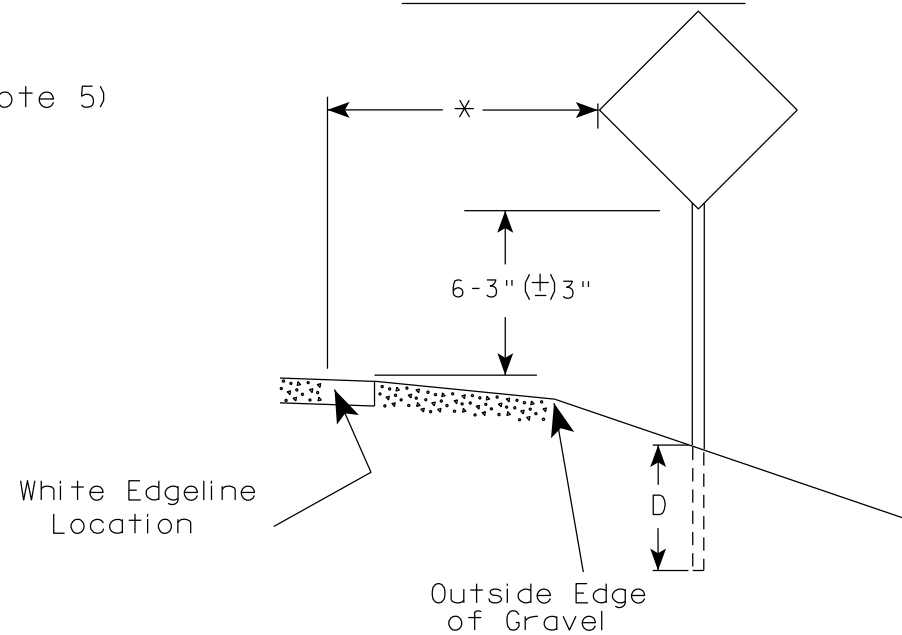
LANDMARK REFERENCE MONUMENTS AND COVERS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED <u>March 2018</u> DATE	<u>/S/ Raymond A. Kumapayii</u> CHIEF SURVEYING AND MAPPING ENGINEER
FHWA	

URBAN AREA



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

RURAL AREA (See Note 2)



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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

- Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
- If signs are mounted on or behind barrier wall, see A4-10 sign plate.
The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".
- For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
- Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
- Offset distance shall be consistent with existing signs or consistent throughout length of project.
- Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the Engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 12/6/23

PLATE NO. A4-3.23

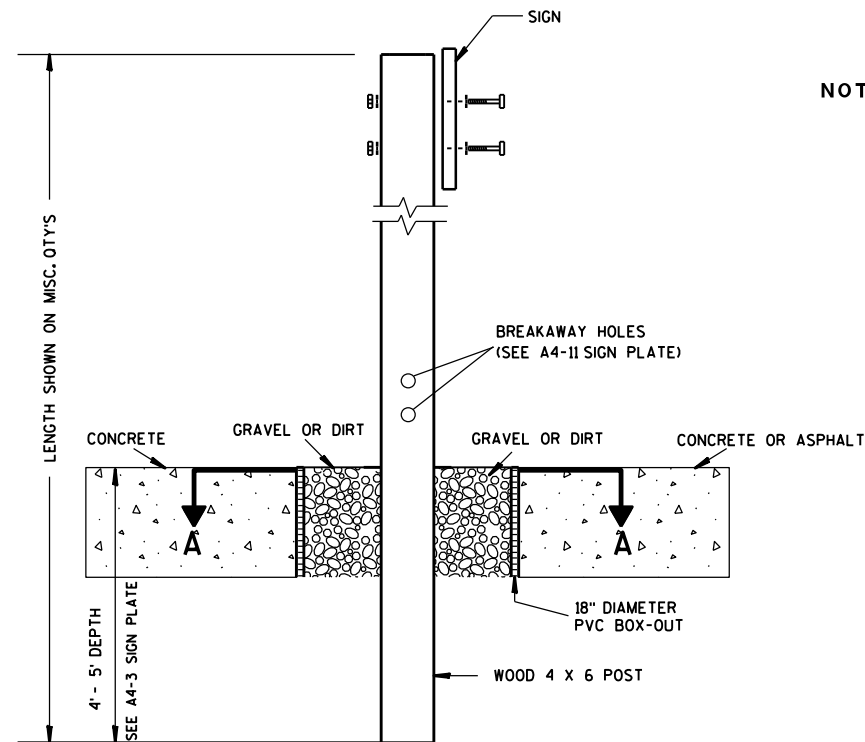
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

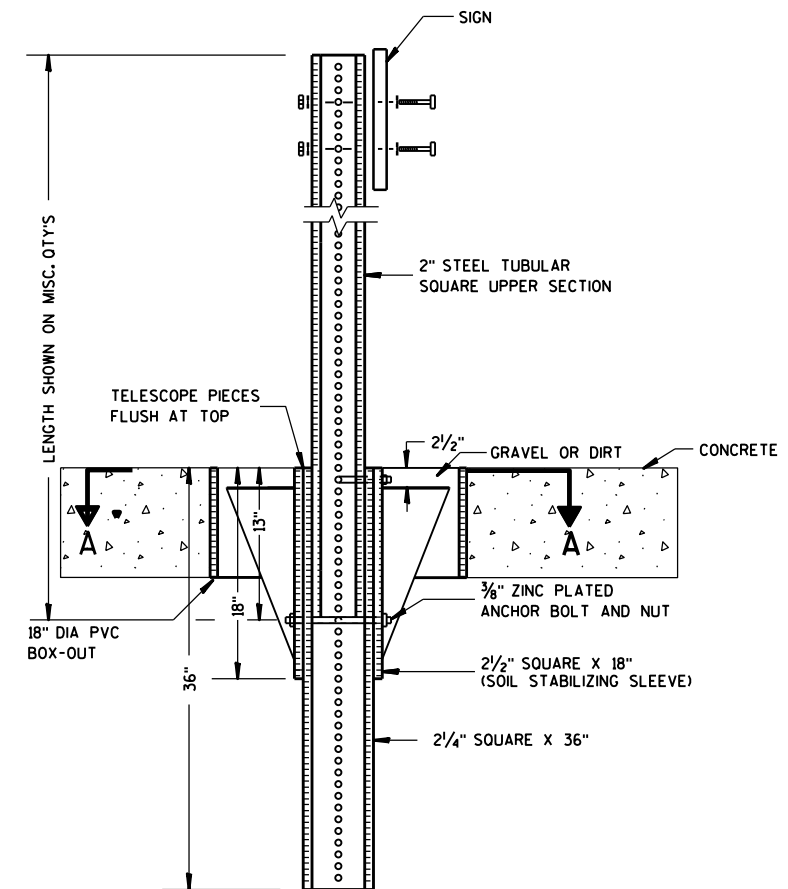
E



ELEVATION VIEW

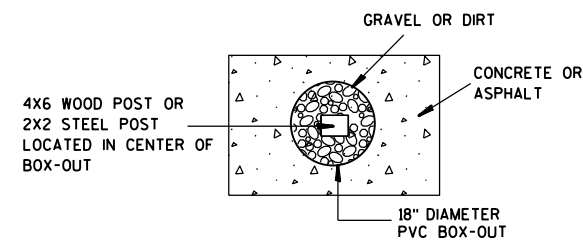
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- NOTES: 1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST
BOX-OUTS
A4-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

PROJECT NO:

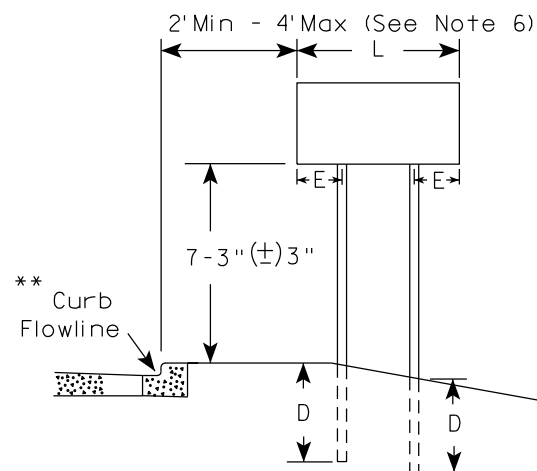
HWY:

COUNTY:

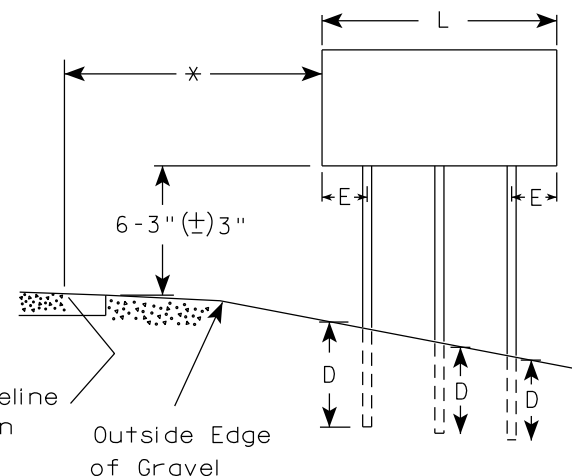
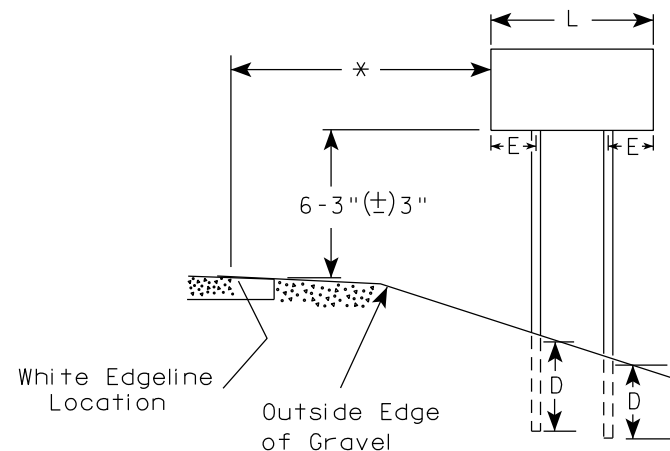
SHEET NO:

E

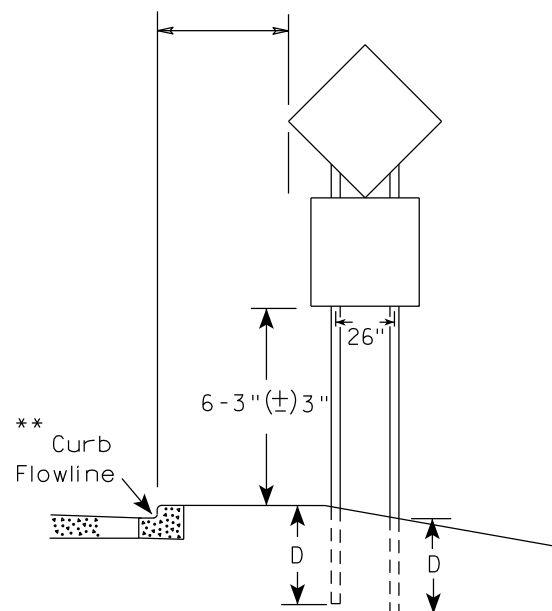
URBAN AREA



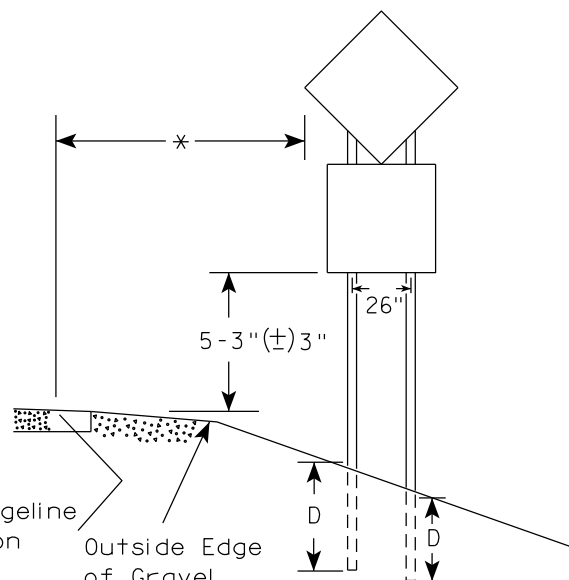
RURAL AREA (See Note 3)



2' Min - 4' Max (See Note 6)



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) 3" or 6'-3" (±) 3" depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".

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

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

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

POST EMBEDMENT DEPTH

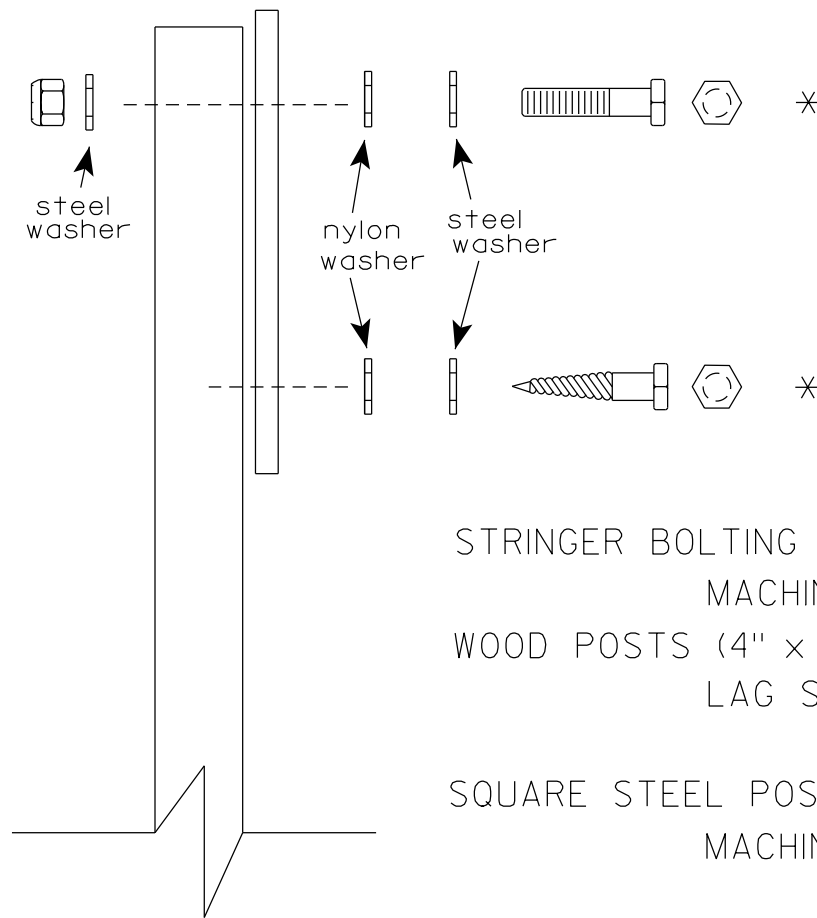
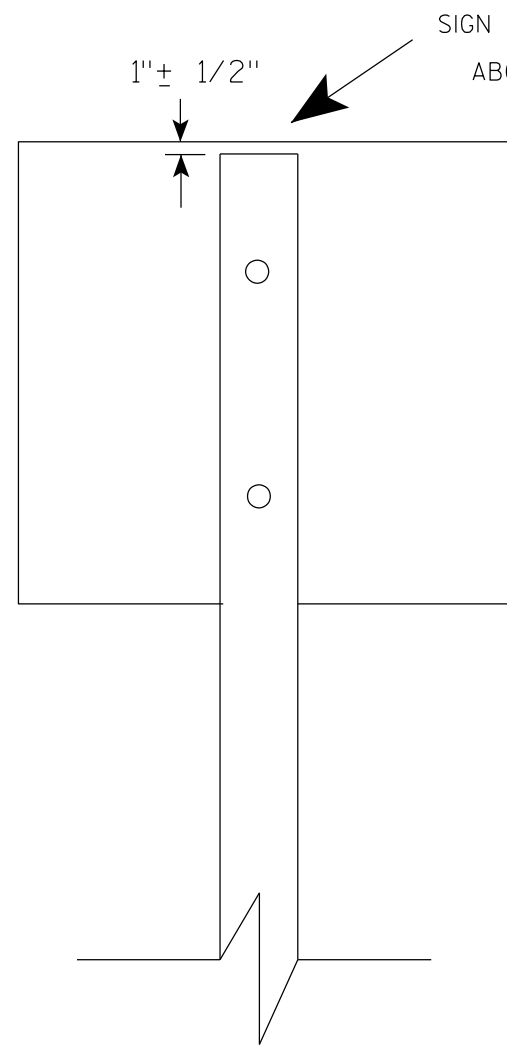
Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16



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

- a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - $\frac{5}{16}$ " X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 6")
- LAG SCREWS - $\frac{3}{8}$ " X 3" (NO STRINGERS ON BACK OF SIGN)
 $\frac{3}{8}$ " X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - $\frac{3}{8}$ " X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
 $\frac{3}{8}$ " X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- RIVETS - $\frac{9}{32}$ " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
- 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
 - 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON

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

ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 4/1/2020	PLATE NO. A4-8.9

**2 1/4" SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH**

4" x 10" x 10 GA. ———→
STEEL PLATE (CUT
AS SHOWN) WELDED
TO ALL FOUR CORNERS
OF TELESPAR TUBE

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

Diagram illustrating the construction of a vertical antenna assembly. The assembly consists of a central vertical tube and four corner plates.

Dimensions:

- Top section height: $2\frac{1}{2}$ "
- Middle section height: 10"
- Bottom section height: $3\frac{1}{2}$ "
- Total height: 16"
- Top section width: 4"

Components and Labels:

- 2 $\frac{1}{2}$ " TELESPAR TUBE (pointing to the top section)
- 4" $\times$ 10" $\times$ 10 GA. STEEL PLATE (CUT AS SHOWN) WELDED TO ALL FOUR CORNERS OF TELESPAR TUBE (pointing to the corner plates)

LENGTH SHOWN ON MISC. QTYS

TELESCOPE PIECES FLUSH AT TOP

18" DIA SCHEDULE 40 PVC BOX-OUT

36"

18"

13"

2 1/2"

2 1/4" SQUARE X 36"

2 1/2" SQUARE X 18" (SOIL STABILIZING SLEEVE)

3/8" ZINC PLATED ANCHOR BOLT AND NUT

2 1/2" GRAVEL OR DIRT

2" STEEL TUBULAR SQUARE UPPER SECTION

ALL HOLES 7/16" SPACED 1" C-C ALL FOUR SIDES

3/8" ZINC PLATED CORNER ANCHOR BOLT AND NUT

SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL

SIGN

TECHNICAL DRAWING OF A SIGNPOST ASSEMBLY:

- Dimensions:**
 - Overall height: LENGTH SHOWN ON MISC. QTY'S
 - Section A-A: 36" (total), 18" (upper), 12" (lower)
 - Section B-B: 1"
- Components:**
 - SIGN
 - SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL
 - 2" STEEL TUBULAR SQUARE UPPER SECTION
 - ALL HOLES $\frac{7}{16}$ " SPACED 1" C-C ALL FOUR SIDES
 - $\frac{3}{8}$ " ZINC PLATED CORNER ANCHOR BOLT AND NUT
 - TELESCOPE PIECES FLUSH AT TOP
 - $\frac{3}{8}$ " ZINC PLATED ANCHOR BOLT AND NUT
 - 2 1/2" SQUARE X 18" (SOIL STABILIZING SLEEVE)
 - 2 1/4" SQUARE X 36"

3/8" ZINC PLATED CORNER
ANCHOR BOLT AND NUT

DIRECTION
OF TRAFFIC

SECTION A-A

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

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

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R. Rauch

for State Traffic Engineer

DATE 2/05/15 PLATE NO. A4-9.9

PROJECT NO:

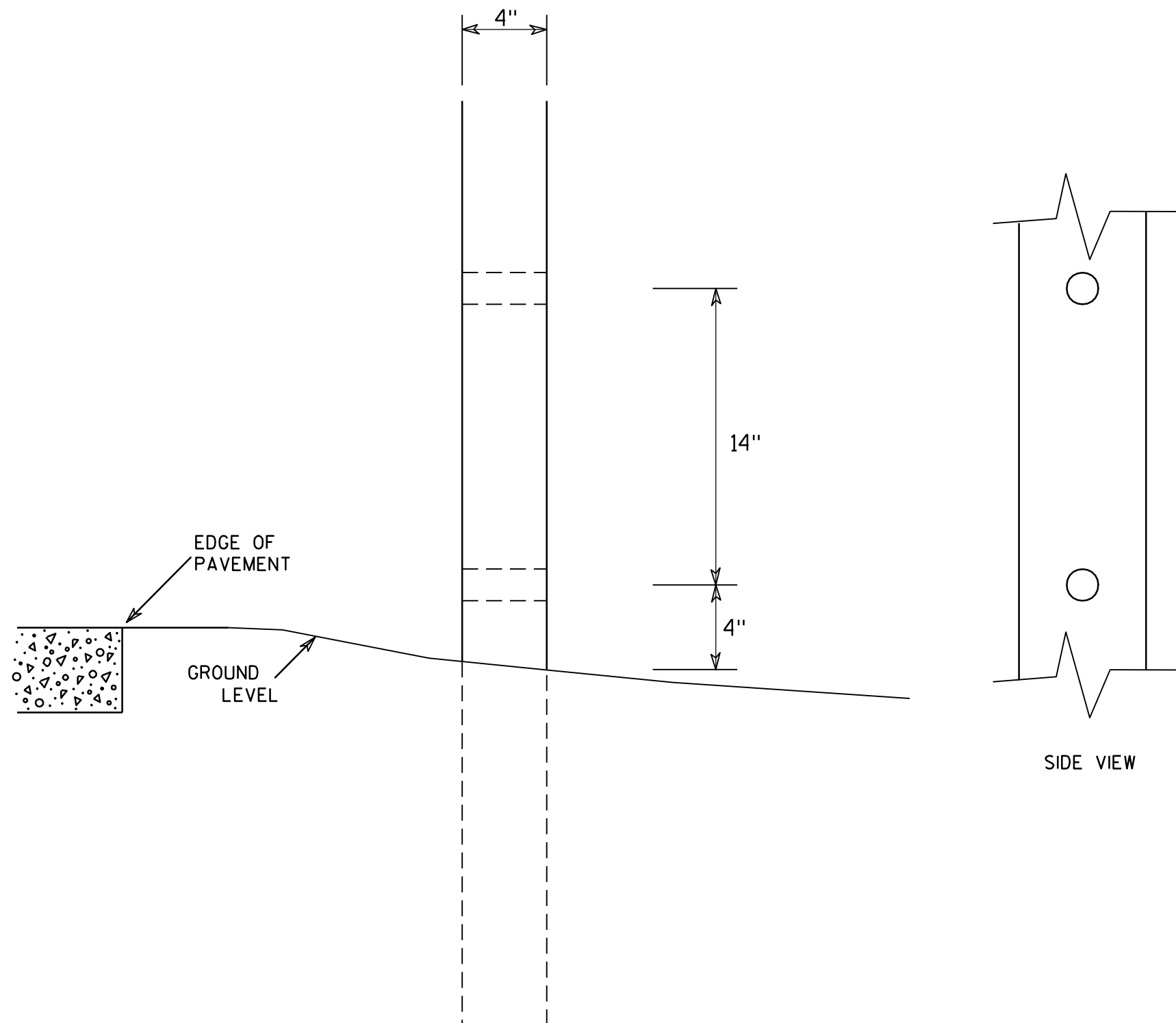
HWY:

COUNTY:

SHEET NO:

E

7



GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

HWY:

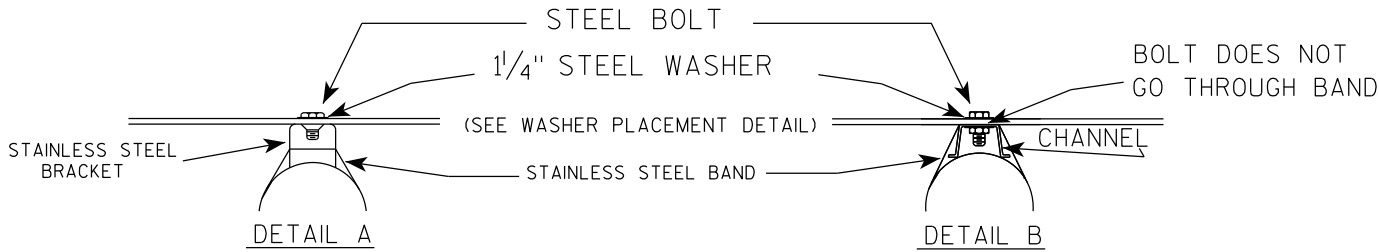
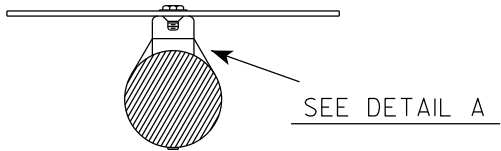
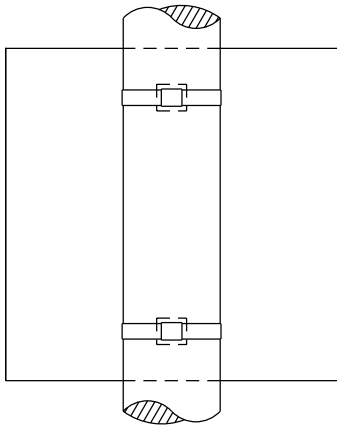
COUNTY:

SHEET NO:

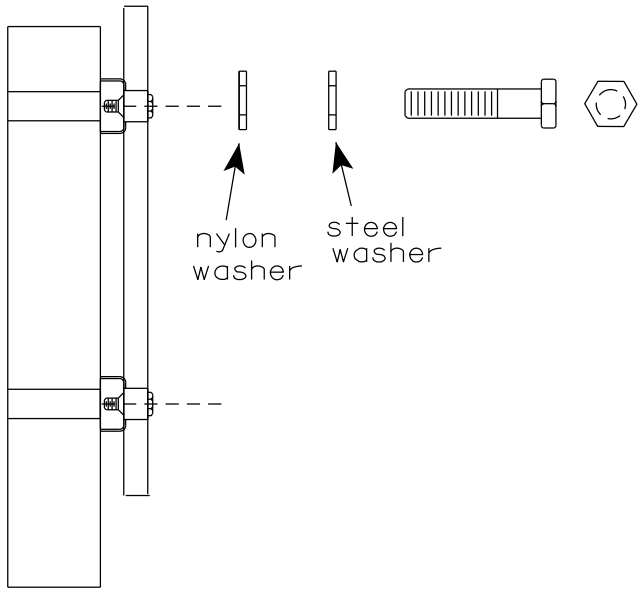
E

BANDING

SINGLE SIGN



WASHER PLACEMENT

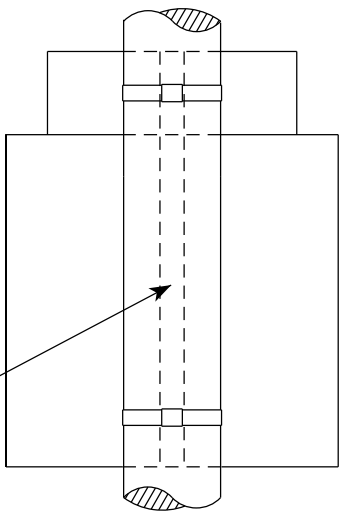


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

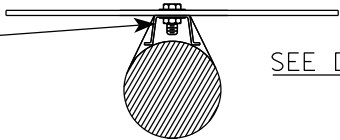
GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
 - a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
 - b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



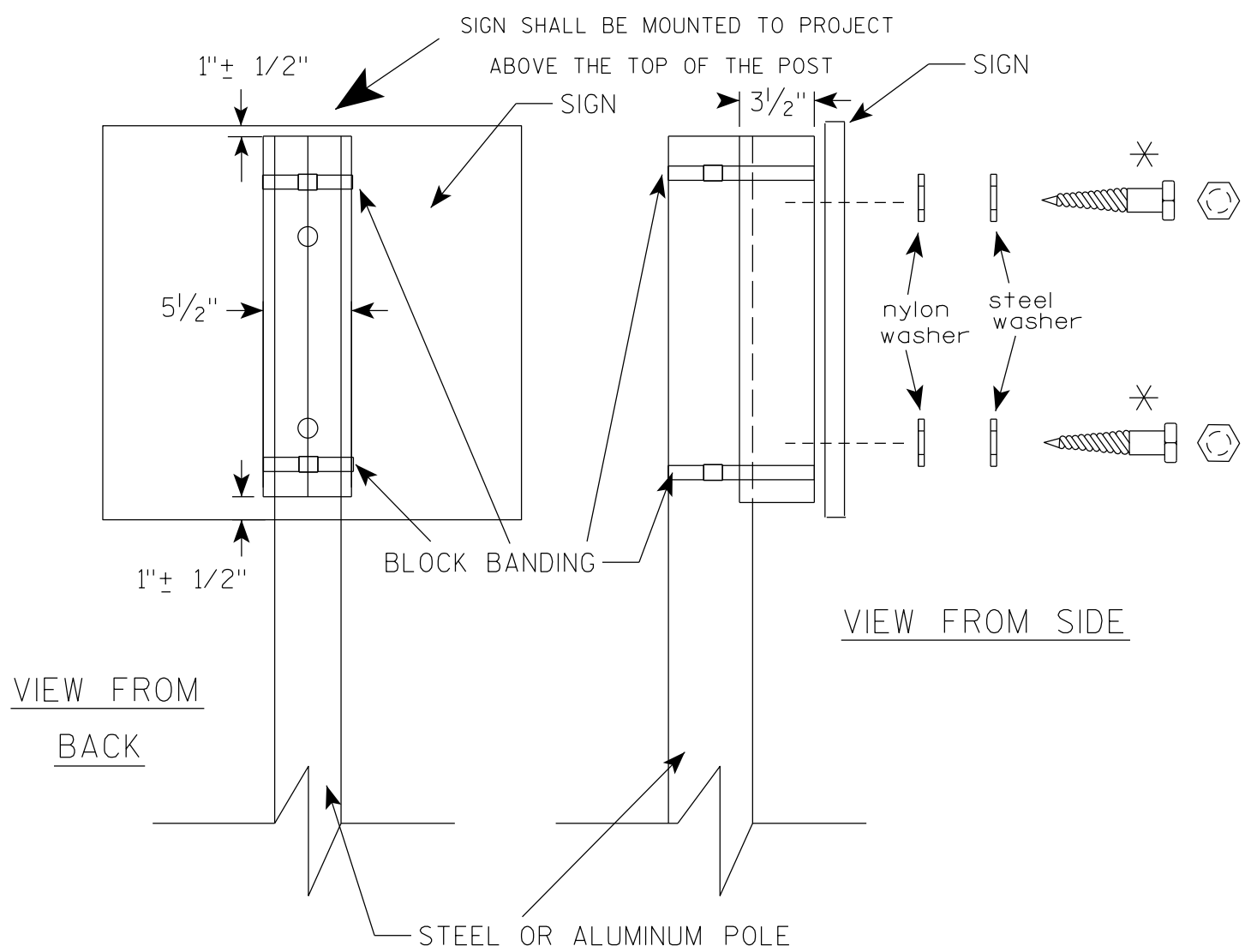
CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



STANDARD SIGN
SIGN BANDING DETAILS

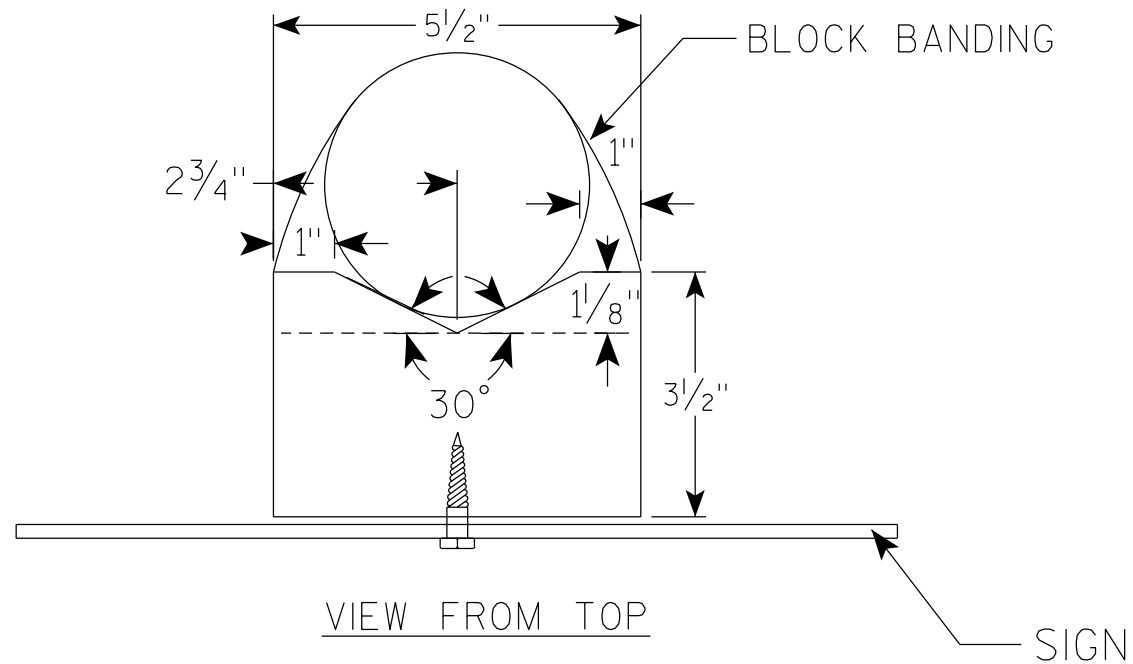
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/10/19 PLATE NO. A5-9.4



VIEW FROM
BACK

VIEW FROM SIDE



VIEW FROM TOP

GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WISDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, $\frac{3}{4}$ " WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORMALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
 - a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
 - b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE $\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ "
8. NYLON WASHERS SHALL BE $\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✱ LAG BOLTS SHALL BE $\frac{3}{8}$ " X $2\frac{1}{2}$ "

BLOCK BANDING DETAIL
(V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO:

E

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
 - Background - Orange
 - Message - Black
- 3. Message Series - D
- 4. Substitute appropriate numeral and adjust spacing to achieve proper balance.



G20-57

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2																											
3	72	36	1 1/8	1/2	5/8	6	5	4	15 5/8	1 5/8	5	9 1/4	21 1/4	3 1/2	1 1/2	23 1/4		29 7/8	1 3/4	3 1/4	28 1/2						18.0
4	96	48	2 1/4	3/4	1	8	6 1/2	5 1/2	20 5/8	2 1/4	6	12 1/4	28 1/4	4 3/8	1 5/8	31		39 1/4	2	4	37 7/8						32.0
5																											

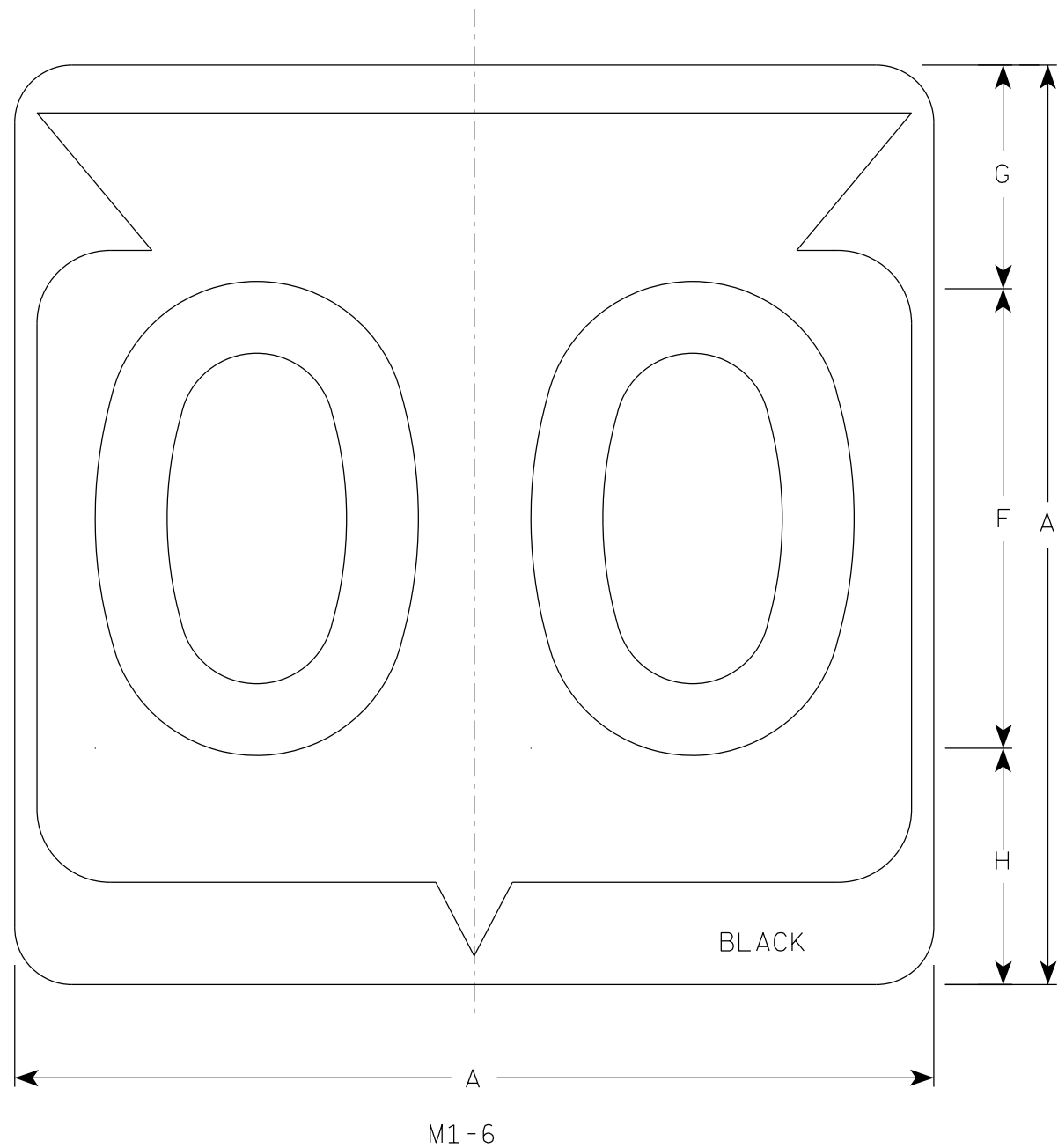
STANDARD SIGN
G20-57

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

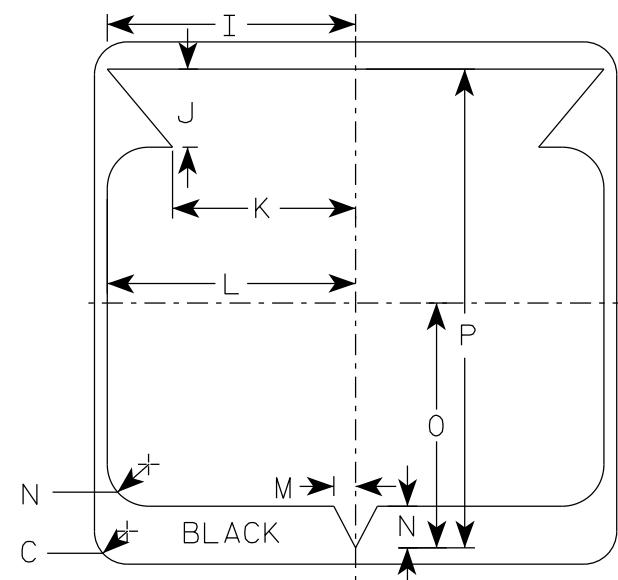
DATE 1/22/19 PLATE NO. G20-57.3

7



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
Background - White
Message - Black
3. Message Series - D except 3 number signs Series C



7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	v	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
2M	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

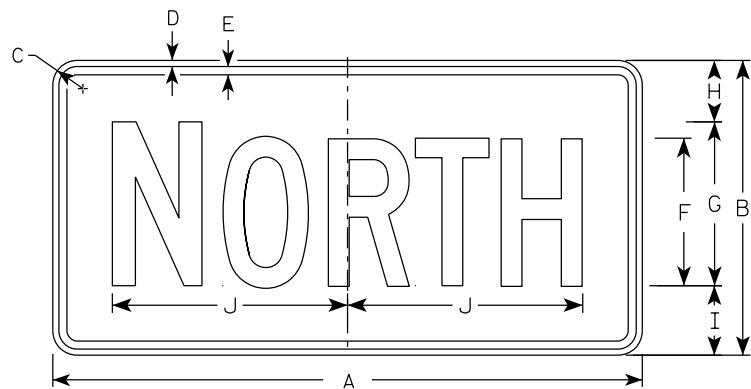
STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

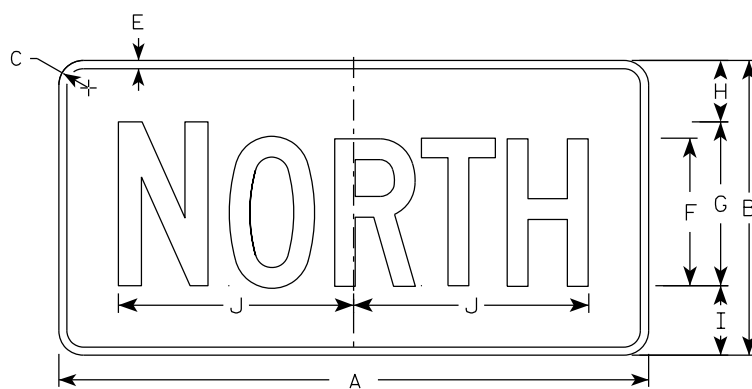
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/8/2022 PLATE NO. M1-6.11

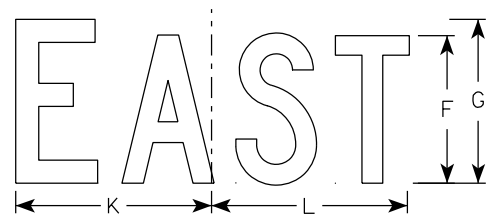
PROJECT NO: HWY: COUNTY: SHEET NO: **E**



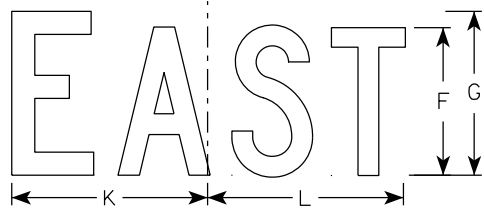
M3-1
MM3-1
MP3-1



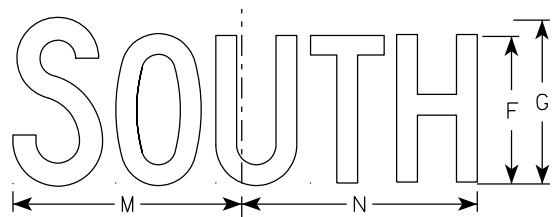
MB3-1
MK3-1
MN3-1



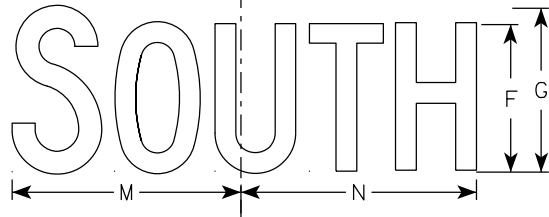
M3-2
MM3-2
MP3-2



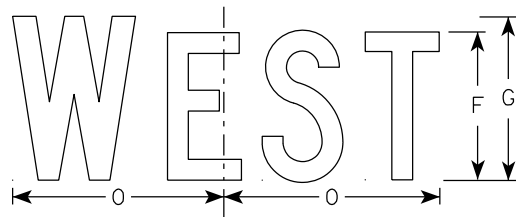
MB3-2
MK3-2
MN3-2



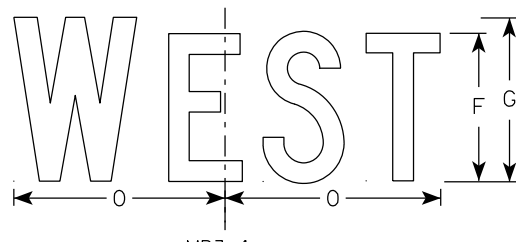
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

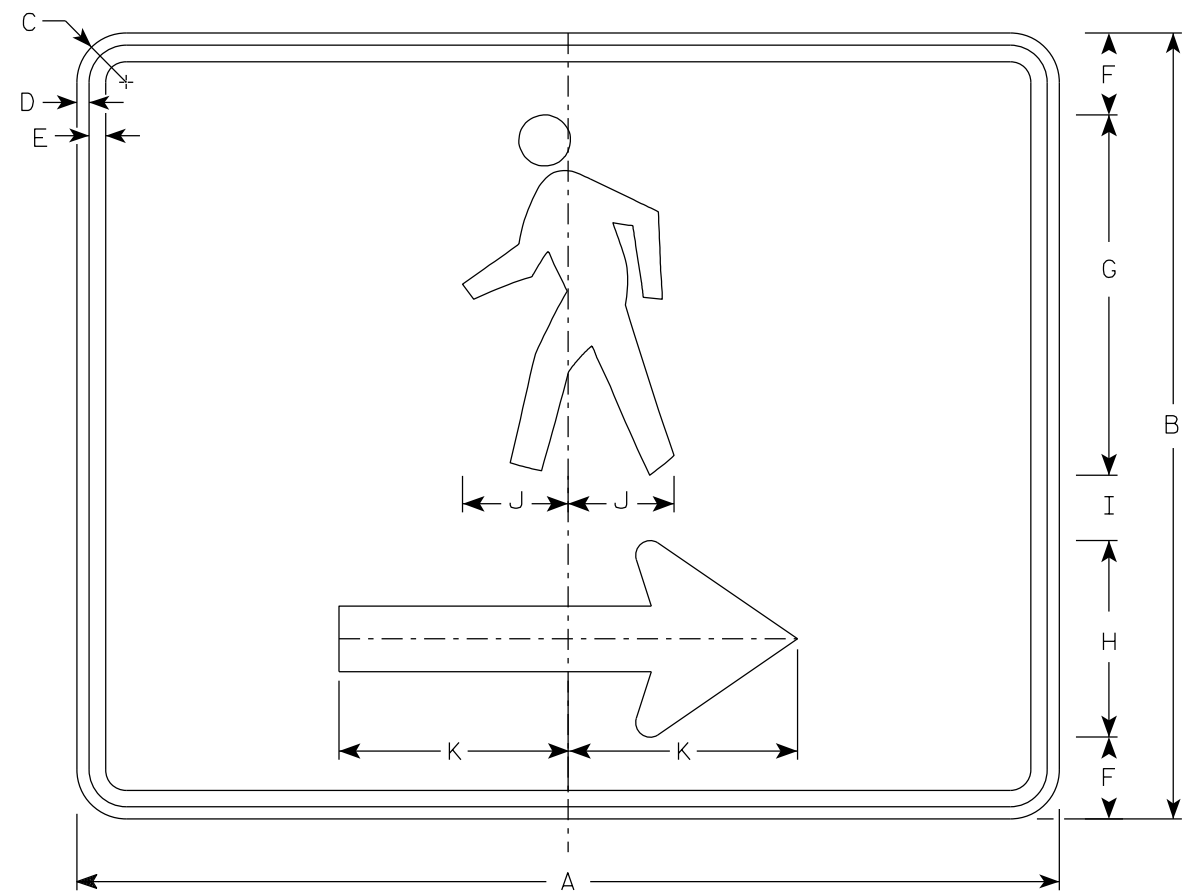
- All Signs Type II - Type H Reflective
- Color:
 - Background - See note 5
 - Message - See note 5
- Message Series - C
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M3-1 thru M3-4 Background - White
Message - Black
MB3-1 thru MB3-4 Background - Blue
Message - White
MK3-1 thru MK3-4 Background - Green
Message - White
MM3-1 thru MM3-4 Background - White
Message - Green
MN3-1 thru MN3-4 Background - Brown
Message - White
MP3-1 thru MP3-4 Background - White
Message - Blue
- Note the first letter of each direction is larger than the remainder of the message.

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/2	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4												2.00
2M	24	12	1 1/2	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4												2.00
3	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
4	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
5	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5

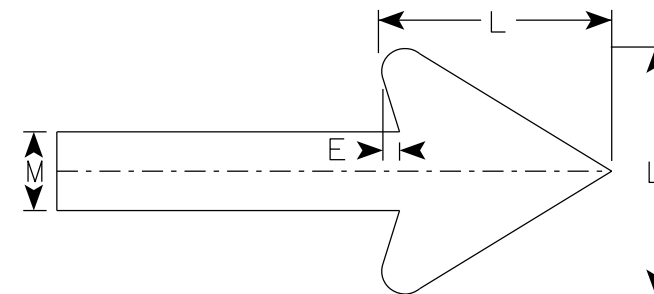
PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
-------------	------	---------	-----------	---



M4-60R

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
Background - Orange
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M4-60L is the same as M4-60R except the arrow is reversed.

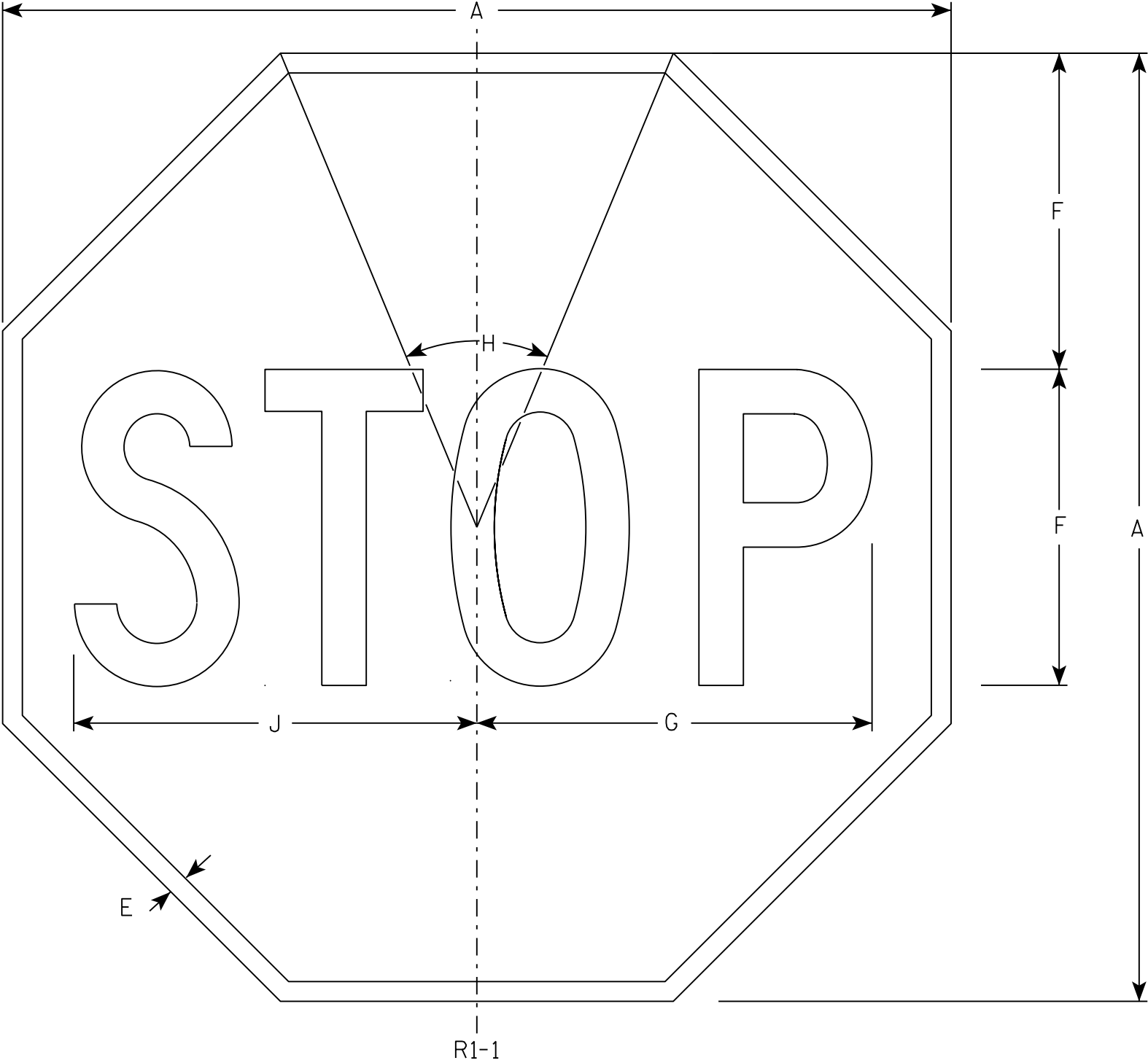


Arrow Detail

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

PROJECT NO:		HWY:		COUNTY:		SHEET NO:		E
-------------	--	------	--	---------	--	-----------	--	---

7



NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Red
Message - White
- 3. Message Series - C

7

R1-1

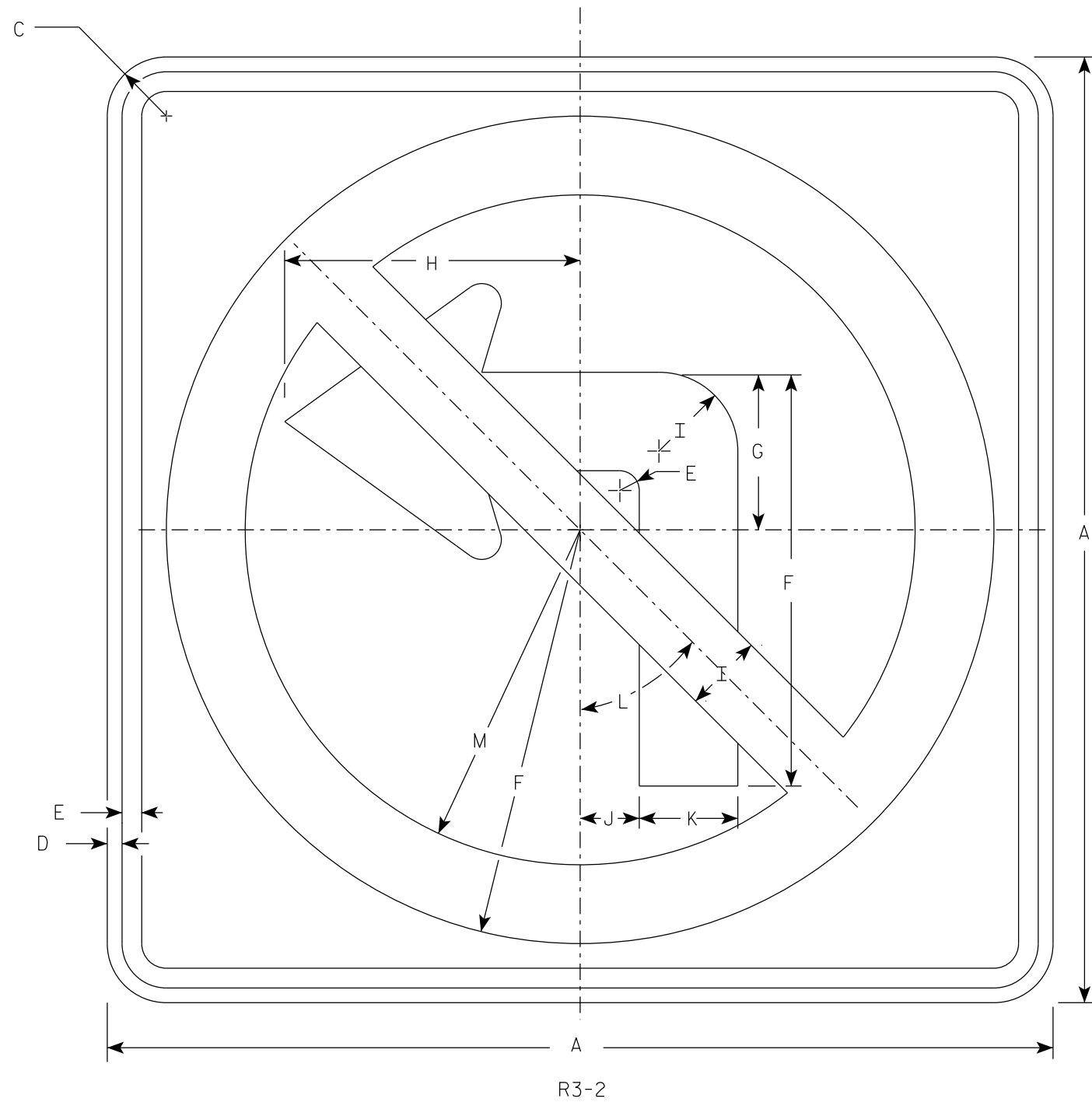
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°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

STANDARD SIGN
R1 - 1

WISCONSIN DEPT OF TRANSPORTATION

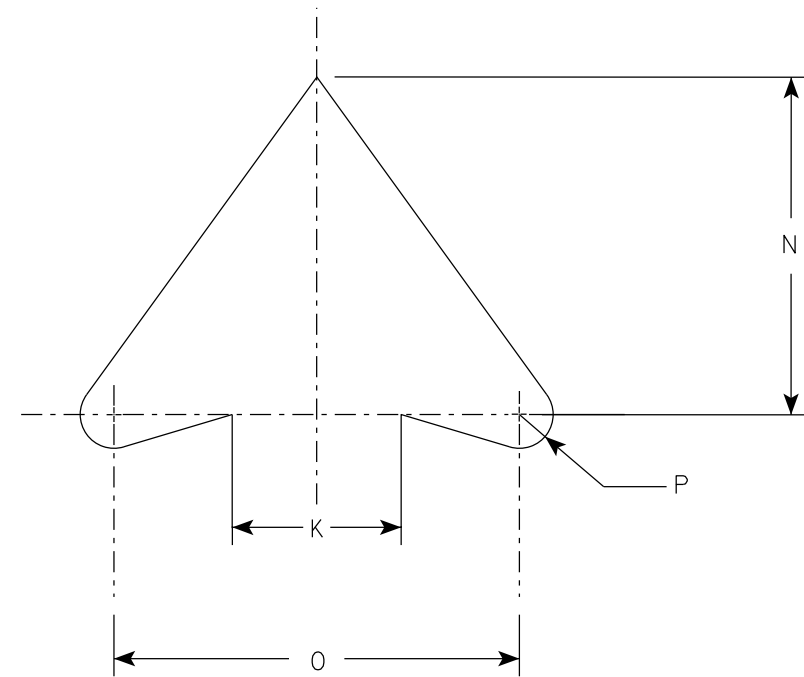
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13



NOTES

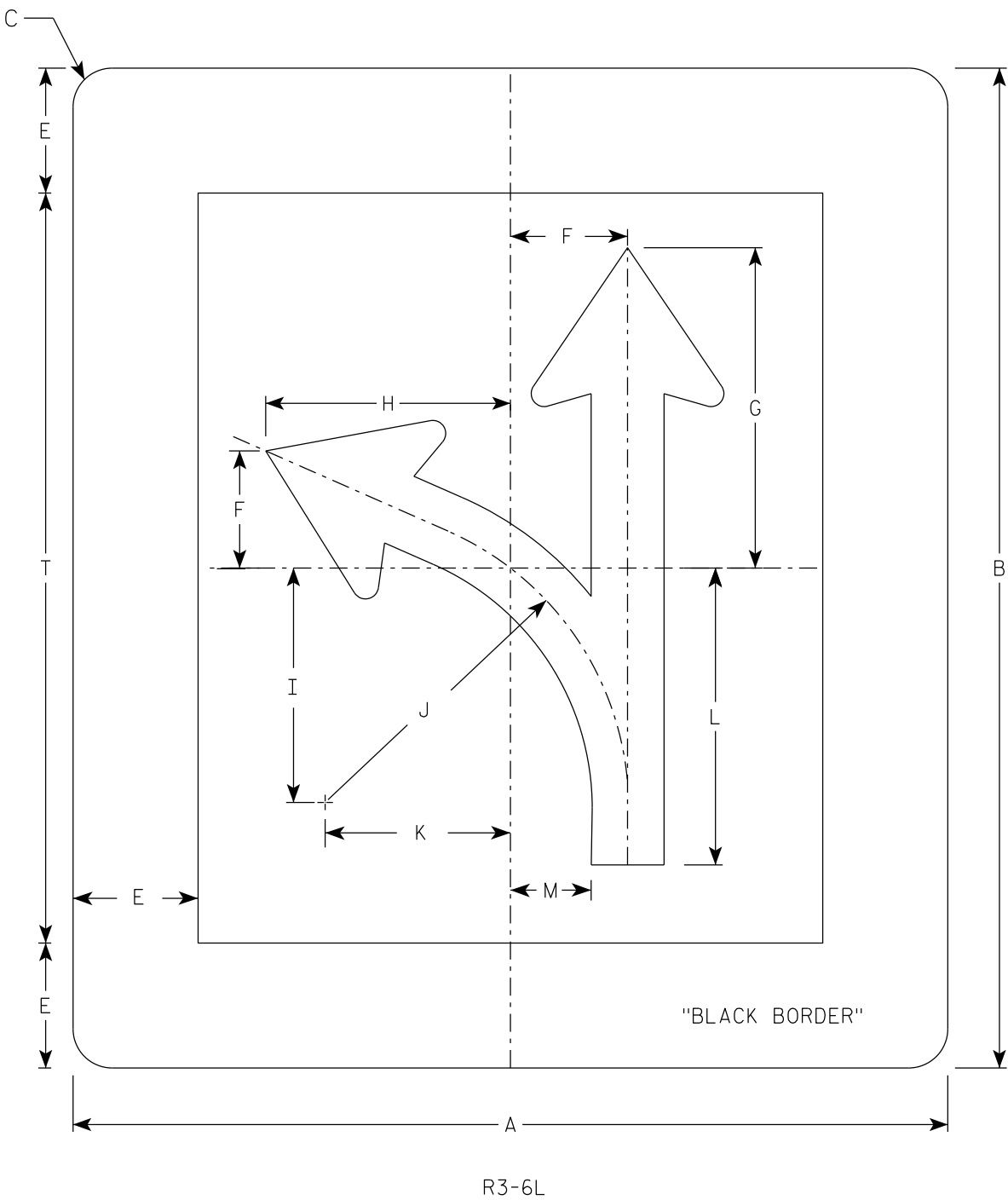
1. Sign is Type II - Type H Reflective
2. Color:
Background - White
Message - See note 3
3. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

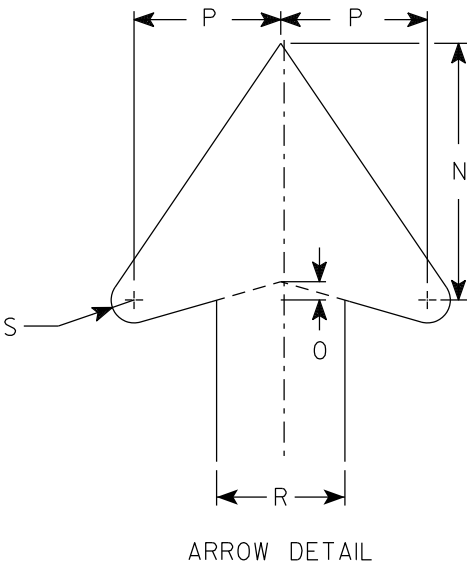
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/2	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/2	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		2 1/4	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2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

PROJECT NO:		HWY:		COUNTY:		SHEET NO:		E
-------------	--	------	--	---------	--	-----------	--	---



NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - Black
- 4. R3-6R is the same as R3-6L except curved portion of arrow points right.
- 5. The 6" border is non-reflective black.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	42	48	1 7/8		6	5 5/8	15 3/8	11 3/4	11 1/4	14 1/2	8 7/8	14 1/4	3 7/8	7	1/2	4		3 1/2	5/8	36							14.0
2M	42	48	1 7/8		6	5 5/8	15 3/8	11 3/4	11 1/4	14 1/2	8 7/8	14 1/4	3 7/8	7	1/2	4		3 1/2	5/8	36							14.0
3																											
4																											
5																											

PROJECT NO:

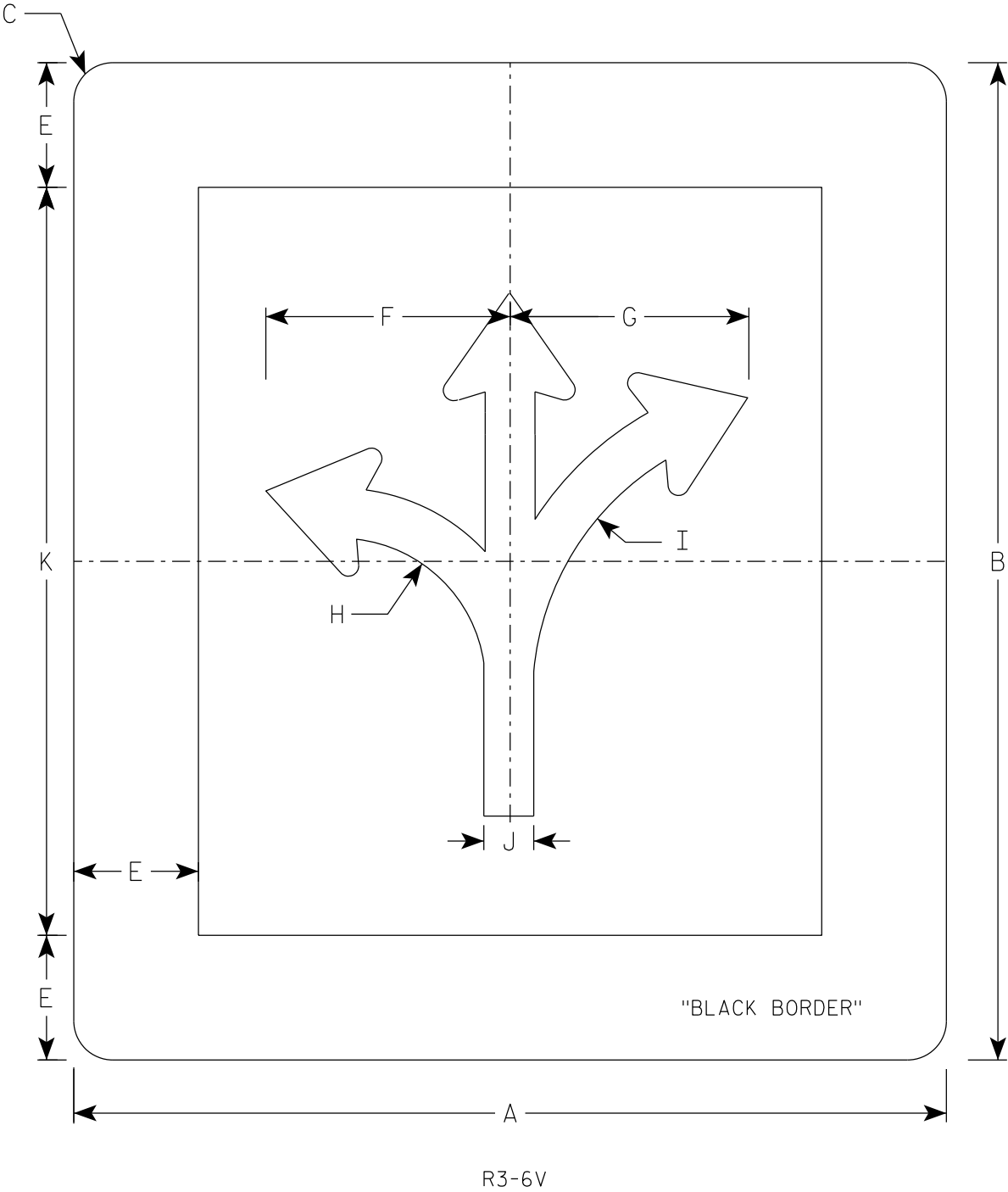
HWY:

COUNTY:

SHEET NO:

E

7



NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - Black
- 3. The 6" border is non-reflective black.

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	42	48	1 7/8		6	11 3/4	11 1/2	7	13 1/4	2 3/8	36																14.0
2M	42	48	1 7/8		6	11 3/4	11 1/2	7	13 1/4	2 3/8	36																14.0
3																											
4																											
5																											

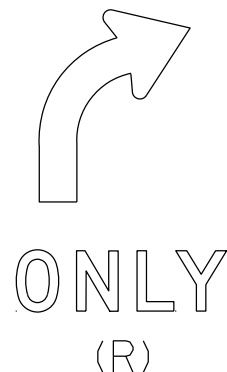
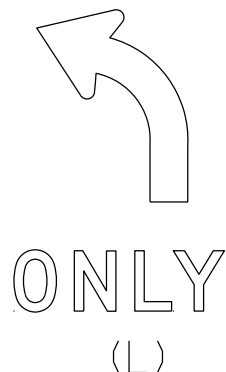
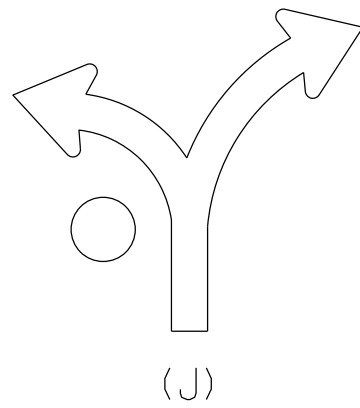
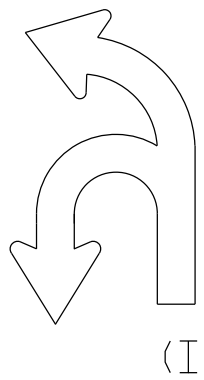
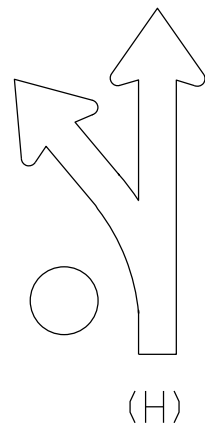
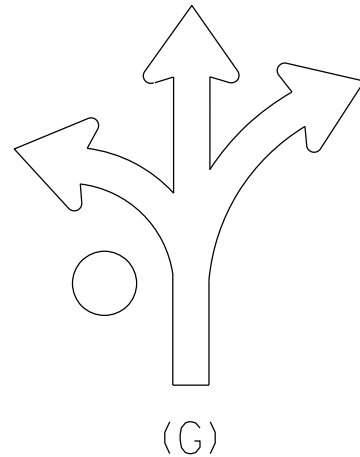
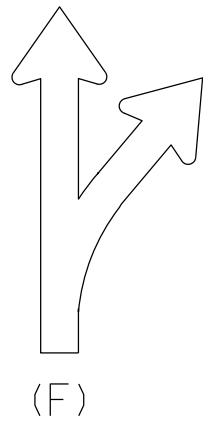
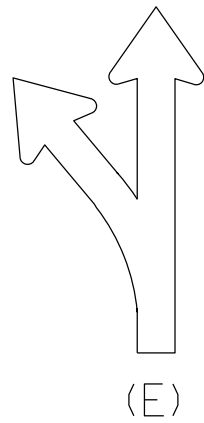
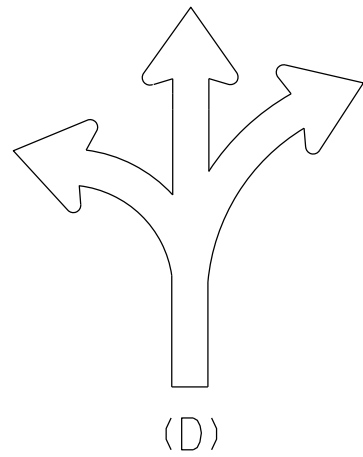
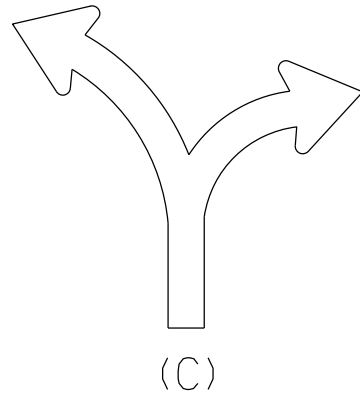
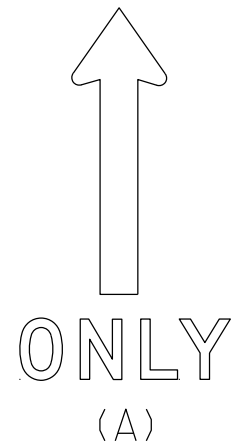
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



NOTES

1. Sigs are Type II - Type H Reflective
2. Color:
Background - White
Message - Black
3. Message Series - D
4. Use appropriate Letter for Sign Code
Each letter added makes sign wider. Example R3-8EAR
5. Square footage of sign varies by letters

1 Letter = 3.75 sq ft for Size 2

6.0 sq ft for Size 3

10.0 sq ft for Size 4 or 5

2 Letters = 7.5 sq ft for Size 2

12.0 sq ft for Size 3

20.0 sq ft for Size 4 or 5

3 Letters = 11.25 sq ft for Size 2

18.0 sq ft for Size 3

30.0 sq ft for Size 4 or 5

4 Letters = 15.0 sq ft for Size 2

24.0 sq ft for Size 3

40.0 sq ft for Size 4 or 5

5 Letters = 18.75 sq ft for Size 2

30.0 sq ft for Size 3

50.0 sq ft for Size 4 or 5

6 Letters = 22.5 sq ft for Size 2

36.0 sq ft for Size 3

60.0 sq ft for Size 4 or 5

6. When letters C,D,G,J are used on the Left or Right end of the sign the Sq.Ft. changes.

Add the amounts when these letters are used:

1.25 sq ft for Size 2

1.5 sq ft for Size 3

2.0 sq ft for Size 4 or 5

STANDARD SIGN
R3-8 Series

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

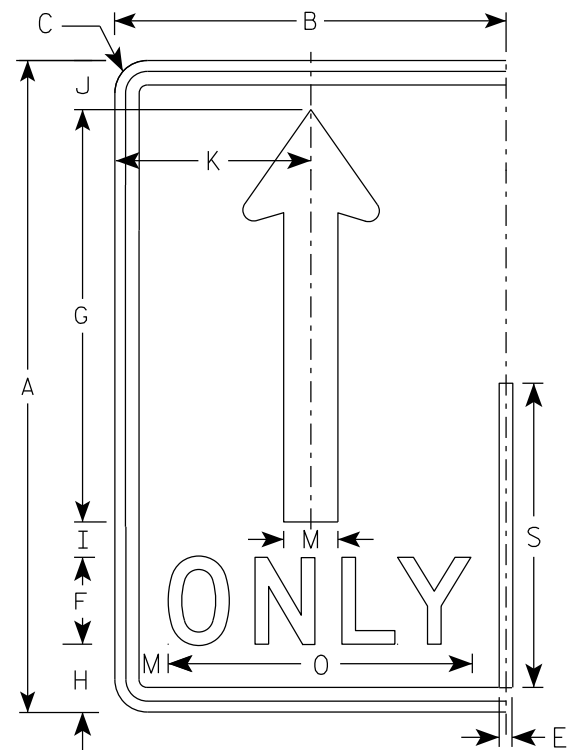
PROJECT NO:

SHEET NO:

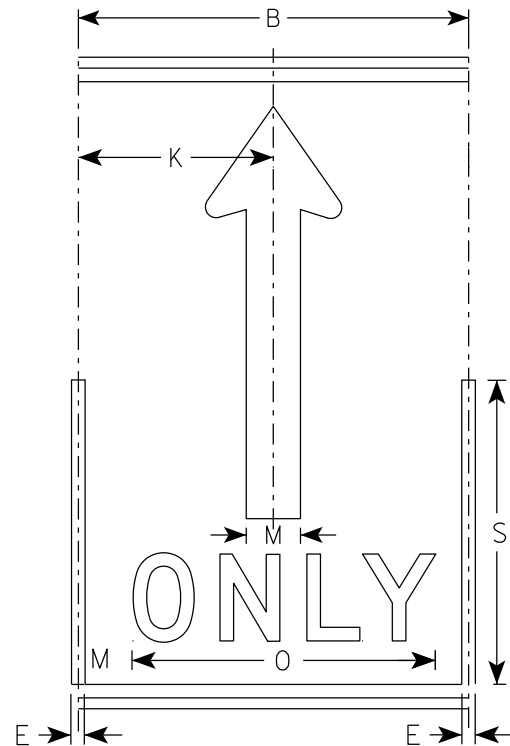
E

NOTES

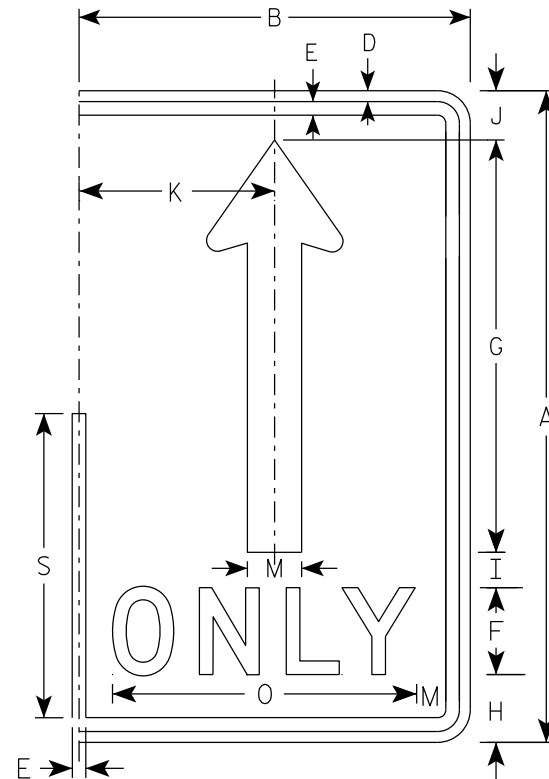
- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - Black
- 3. Message Series - D



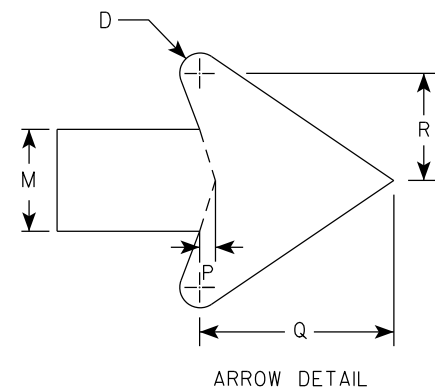
(A)



(A)



(A)



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8	4	19	3 1/8	1 5/8	2 1/4	9		2 1/2		14	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 1/2	1/2	5/8	4	19	3 1/8	1 5/8	2 1/4	9		2 1/2		14	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 1/2	1/2	5/8	5	22 3/4	3 3/4	1 3/4	2 3/4	12		3		17 5/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1	6	30 3/8	5 1/8	2 7/8	3 5/8	15		4		21 3/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1	6	30 3/8	5 1/8	2 7/8	3 5/8	15		4		21 3/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (A) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

7

7

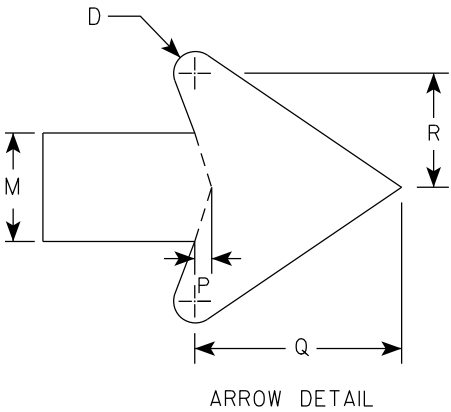
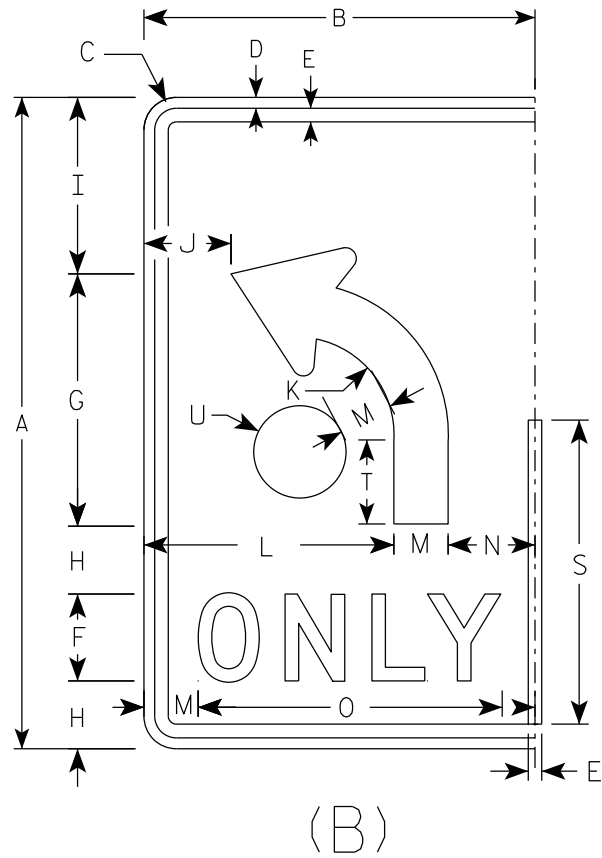
NOTES

1. Sign is Type II - Type H Reflective
2. Color:

Background - White

Message - Black

Message Series - D



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8	2 1/8						3.75
2M	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8	2 1/8						3.75
3	36	24	1 1/2	1/2	5/8	5	14	3 1/2	9 3/4	6	5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8	2 1/2						6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4	3 3/8						10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4	3 3/8						10.0

STANDARD SIGN

R3-8 (B) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*

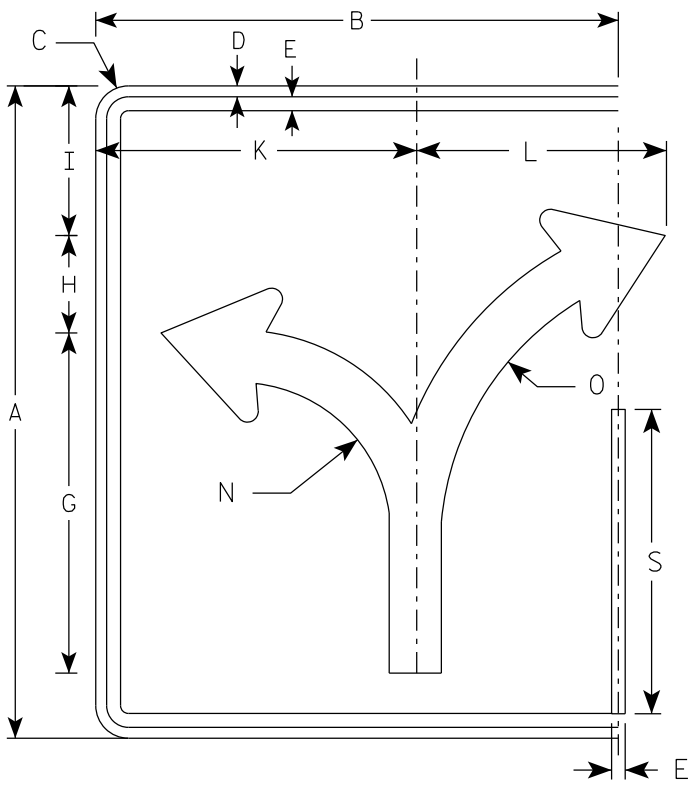
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

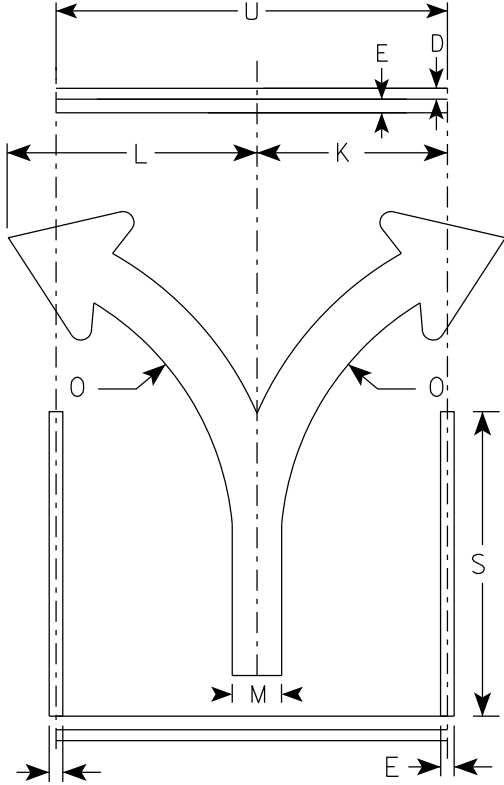
7

NOTES

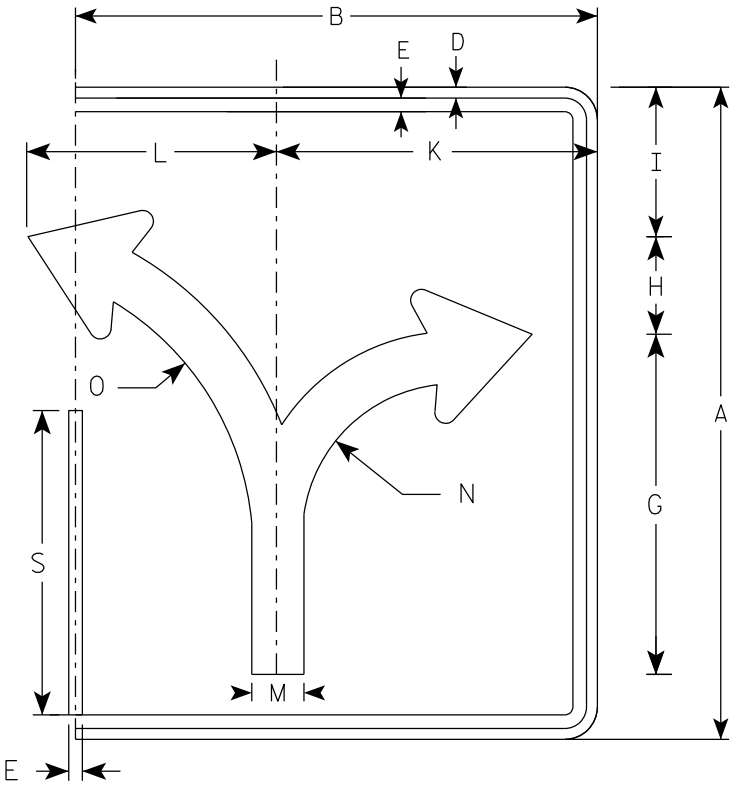
- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - Black
- 3. Message Series - None



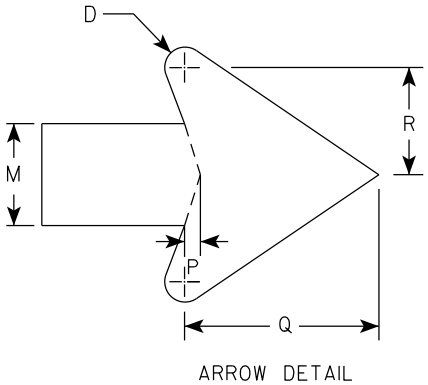
(C)



(C)



(C)



																											ENDS	MIDDLE
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq. ft.
1																												
2S	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	8 1/4		17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		24						7.5	6.0
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0

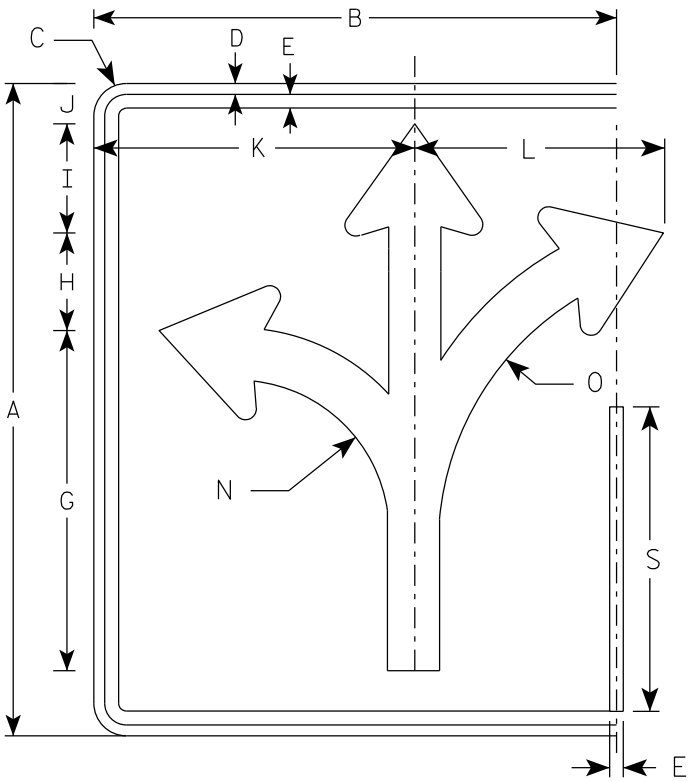
7

NOTES

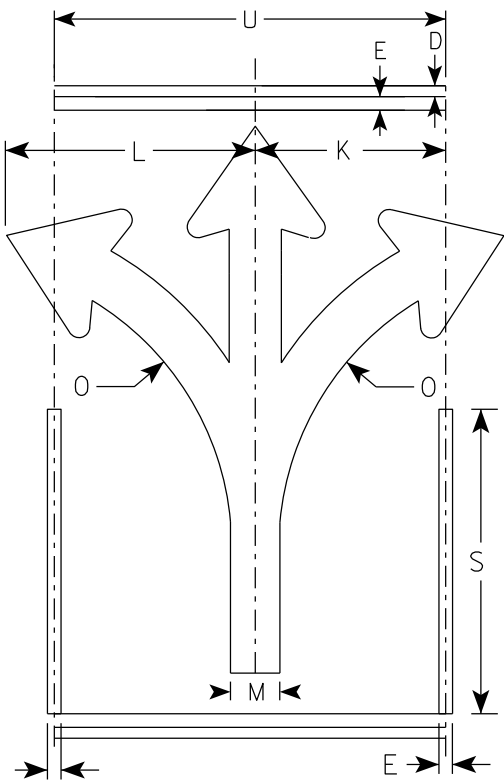
1. Sign is Type II - Type H Reflective
2. Color:

Background - White

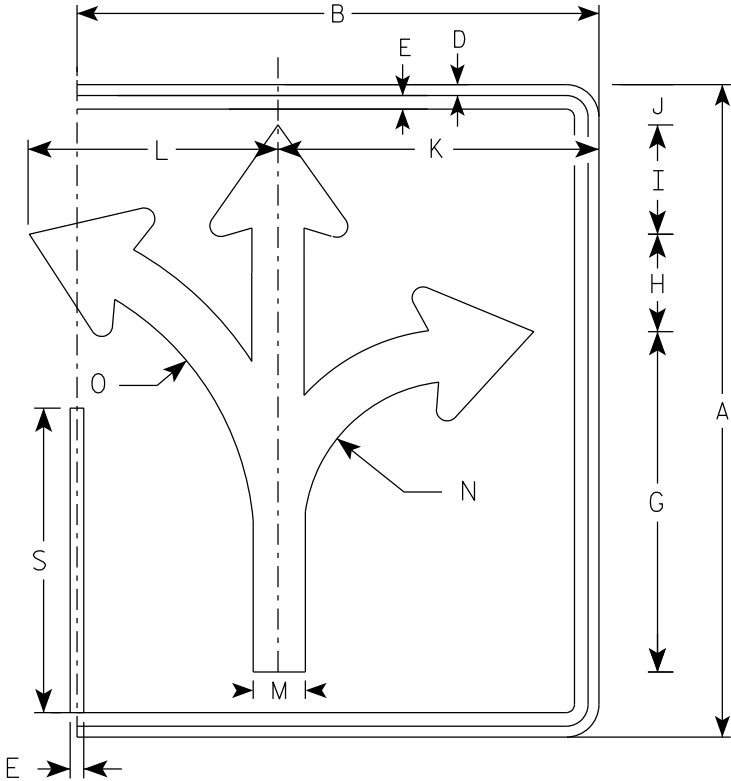
Message - Black
3. Message Series - None



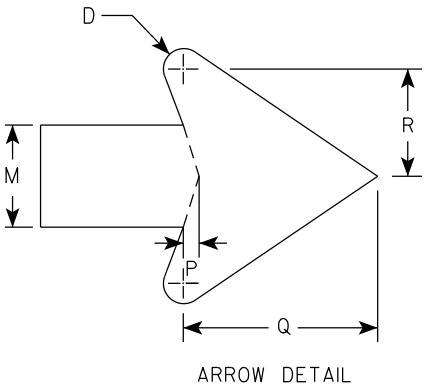
(D)



(D)



(D)



ARROW DETAIL

																												ENDS	MIDDLE
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq. ft.	
1																													
2S	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75	
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75	
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	6	2 1/4	17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		24						7.5	6.0	
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0	
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0	

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

STANDARD SIGN

R3-8 (D) Arrow

WISCONSIN DEPT OF TRANSPORTATION

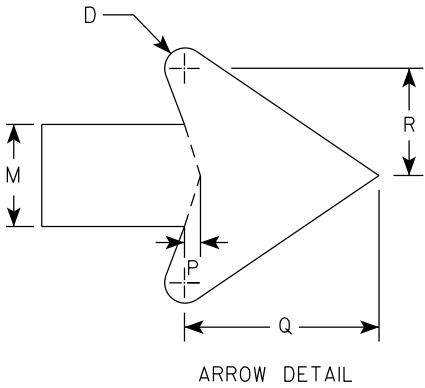
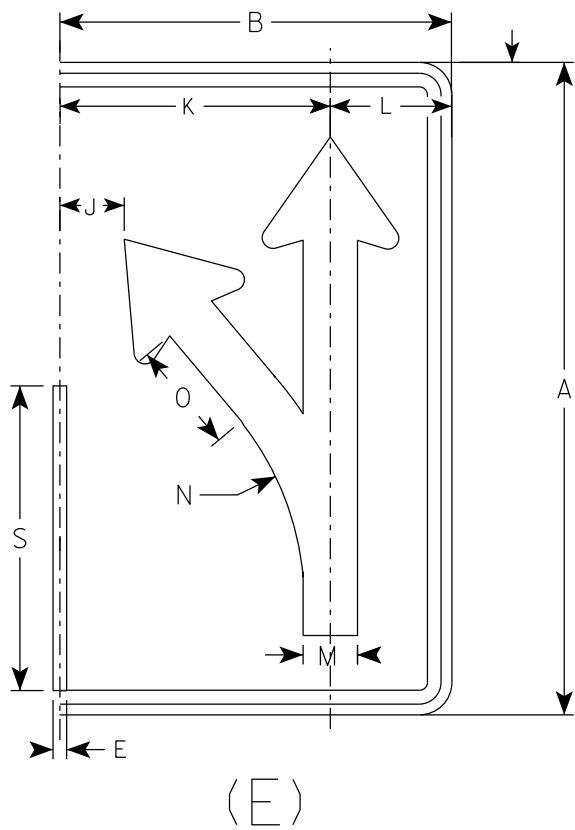
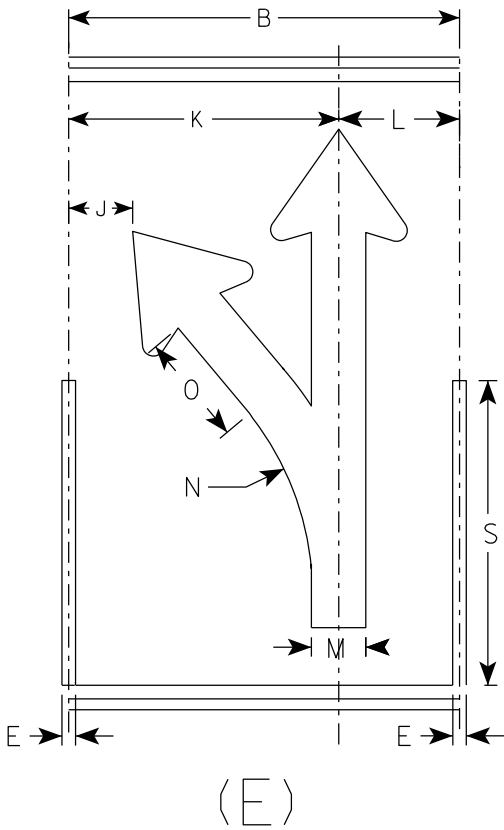
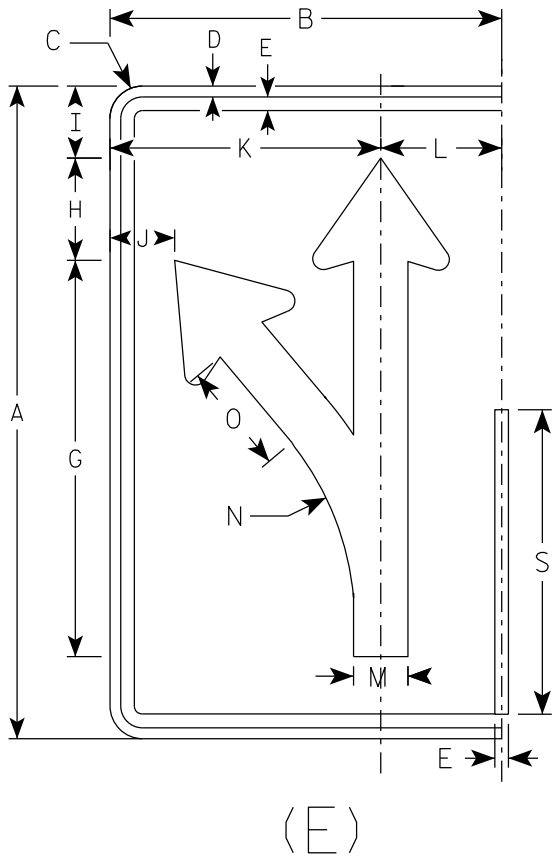
APPROVED *Matthew R. Rauch*

for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - Black
- 3. Message Series - None



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

STANDARD SIGN
R3-8 (E) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

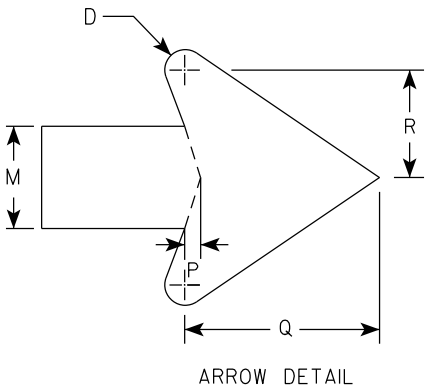
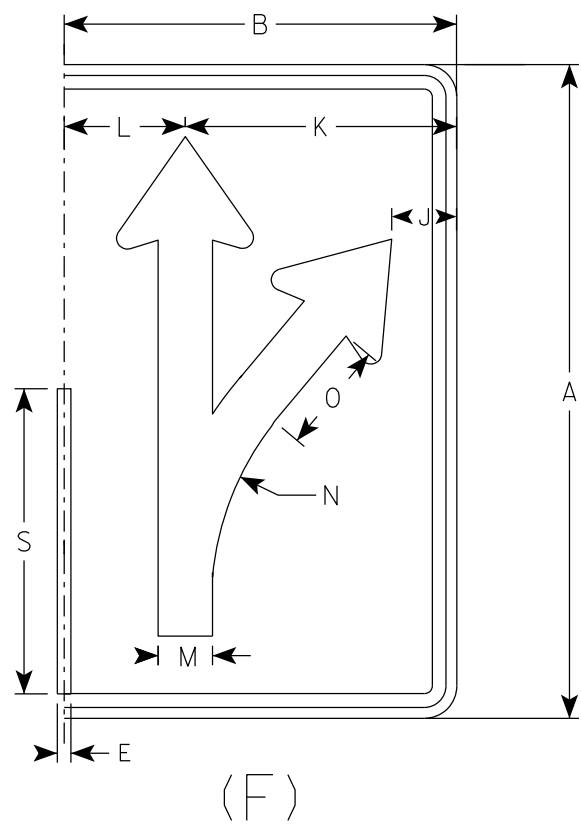
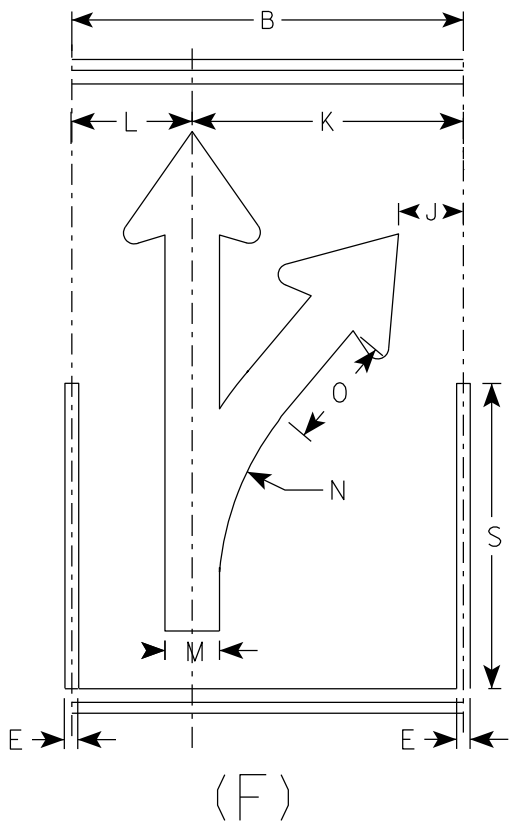
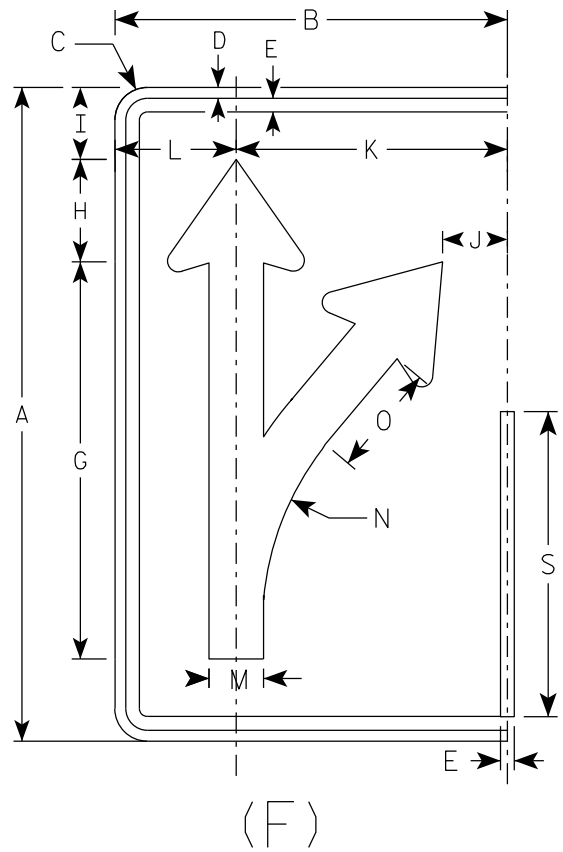
DATE 2/14/23 PLATE NO. R3-8.2

NOTES

1. Sign is Type II - Type H Reflective
2. Color:

Background - White

Message - Black
3. Message Series - None



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

7

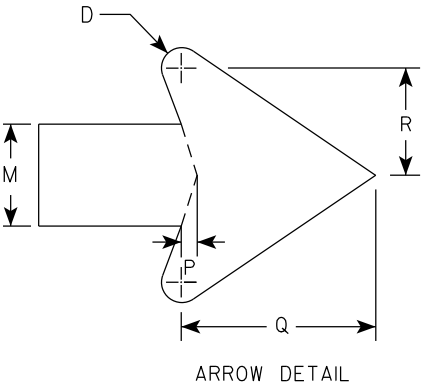
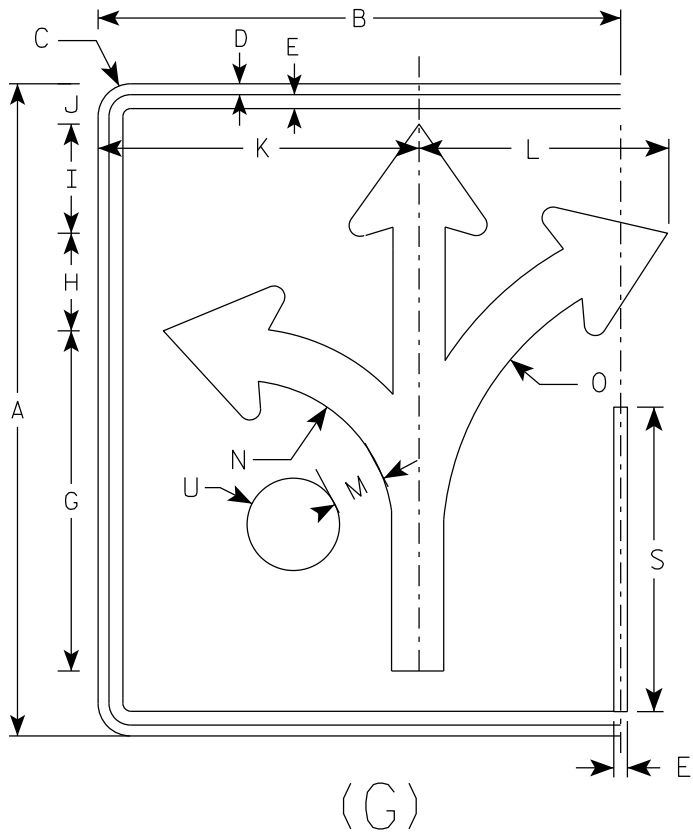
7

NOTES

1. Sign is Type II - Type H Reflective
2. Color:

Background - White

Message - Black
3. Message Series - None



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	6	3 1/8	17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		2 1/2						7.5
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

STANDARD SIGN

R3-8 (G) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

7

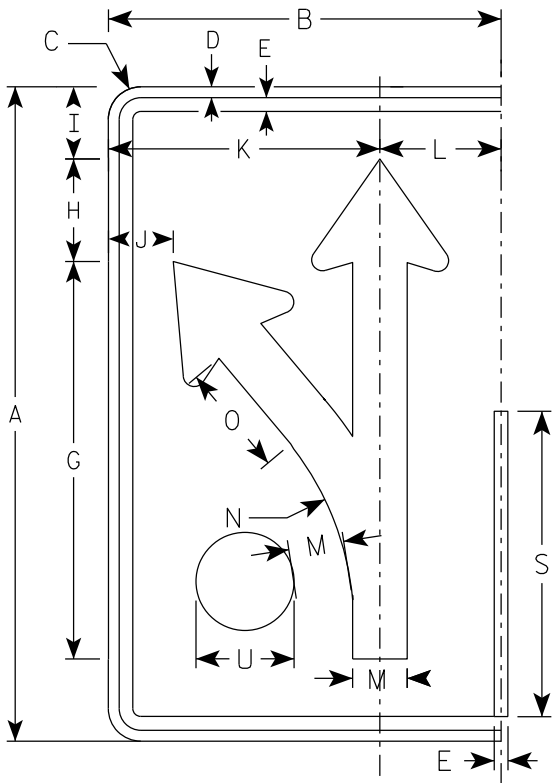
7

NOTES

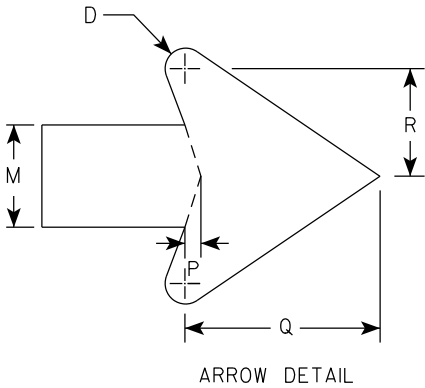
1. Sign is Type II - Type H Reflective
2. Color:

Background - White

Message - Black
3. Message Series - None



(H)



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14		2 1/8						3.75
2M	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14		2 1/8						3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4		2 1/2						6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8		3 3/8						10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8		3 3/8						10.0

STANDARD SIGN

R3-8 (H) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

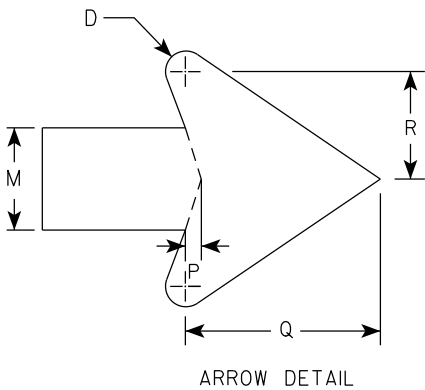
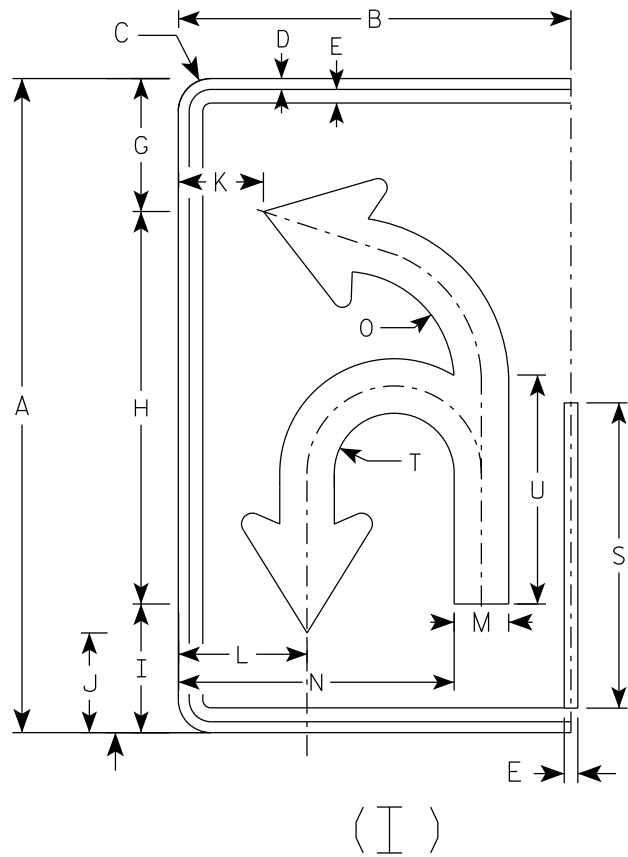
DATE 2/14/23 PLATE NO. R3-8.2

NOTES

1. Sign is Type II - Type H Reflective
2. Color:

Background - White

Message - Black
3. Message Series - None



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8		6 1/8	18	5 7/8	4 5/8	3 7/8	5 7/8	2 1/2	12 5/8	5 1/8	3/8	4 3/4	2 5/8	14	2 3/4	10 1/2						3.75
2M	30	18	1 1/2	1/2	5/8		6 1/8	18	5 7/8	4 5/8	3 7/8	5 7/8	2 1/2	12 5/8	5 1/8	3/8	4 3/4	2 5/8	14	2 3/4	10 1/2						3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	21 5/8	7 1/8	5 1/2	5 7/8	8 1/4	3	16 3/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4	3 1/4	12 5/8						6.0
4	48	30	2 1/4	3/4	1		29 1/8	28 3/4	9 3/8	7 1/4	6 7/8	10	4	20 7/8	8 1/8	5/8	7 5/8	4 1/4	22 3/8	4 3/8	16 3/4						10.0
5	48	30	2 1/4	3/4	1		29 1/8	28 3/4	9 3/8	7 1/4	6 7/8	10	4	20 7/8	8 1/8	5/8	7 5/8	4 1/4	22 3/8	4 3/8	16 3/4						10.0

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

STANDARD SIGN

R3-8 (I) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

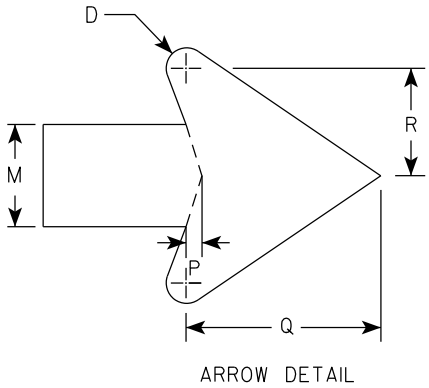
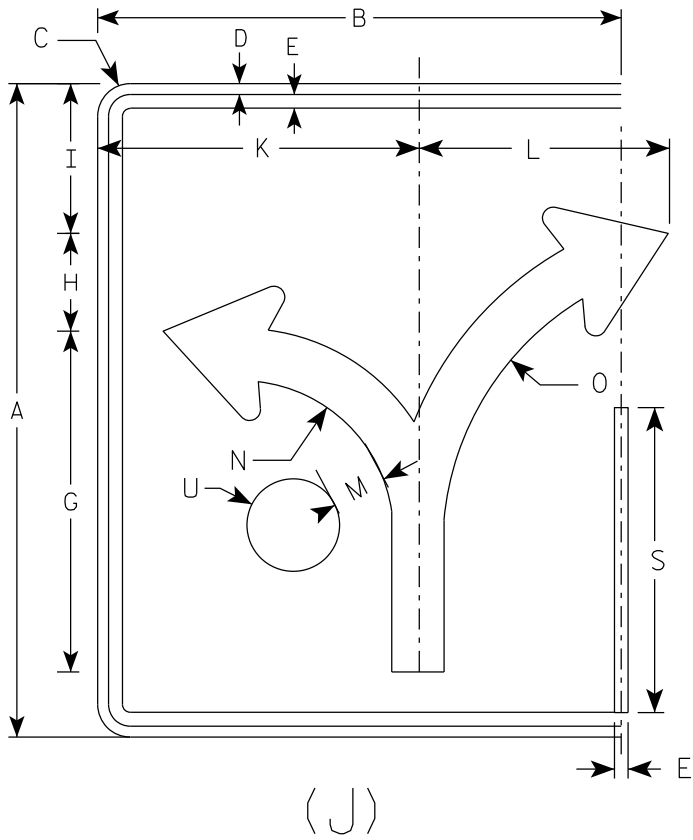
DATE 2/14/23 PLATE NO. R3-8.2

NOTES

1. Sign is Type II - Type H Reflective
2. Color:

Background - White

Message - Black
3. Message Series - None



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	8 1/4		17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		2 1/2						7.5
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

STANDARD SIGN

R3-8 (J) Arrow

WISCONSIN DEPT OF TRANSPORTATION

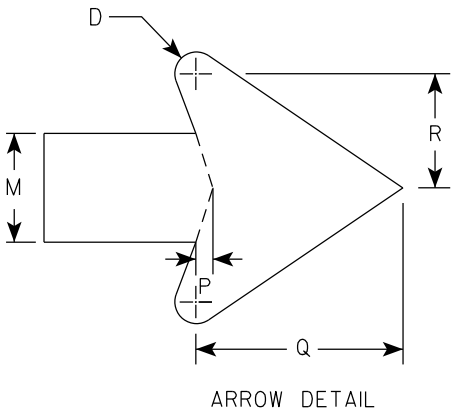
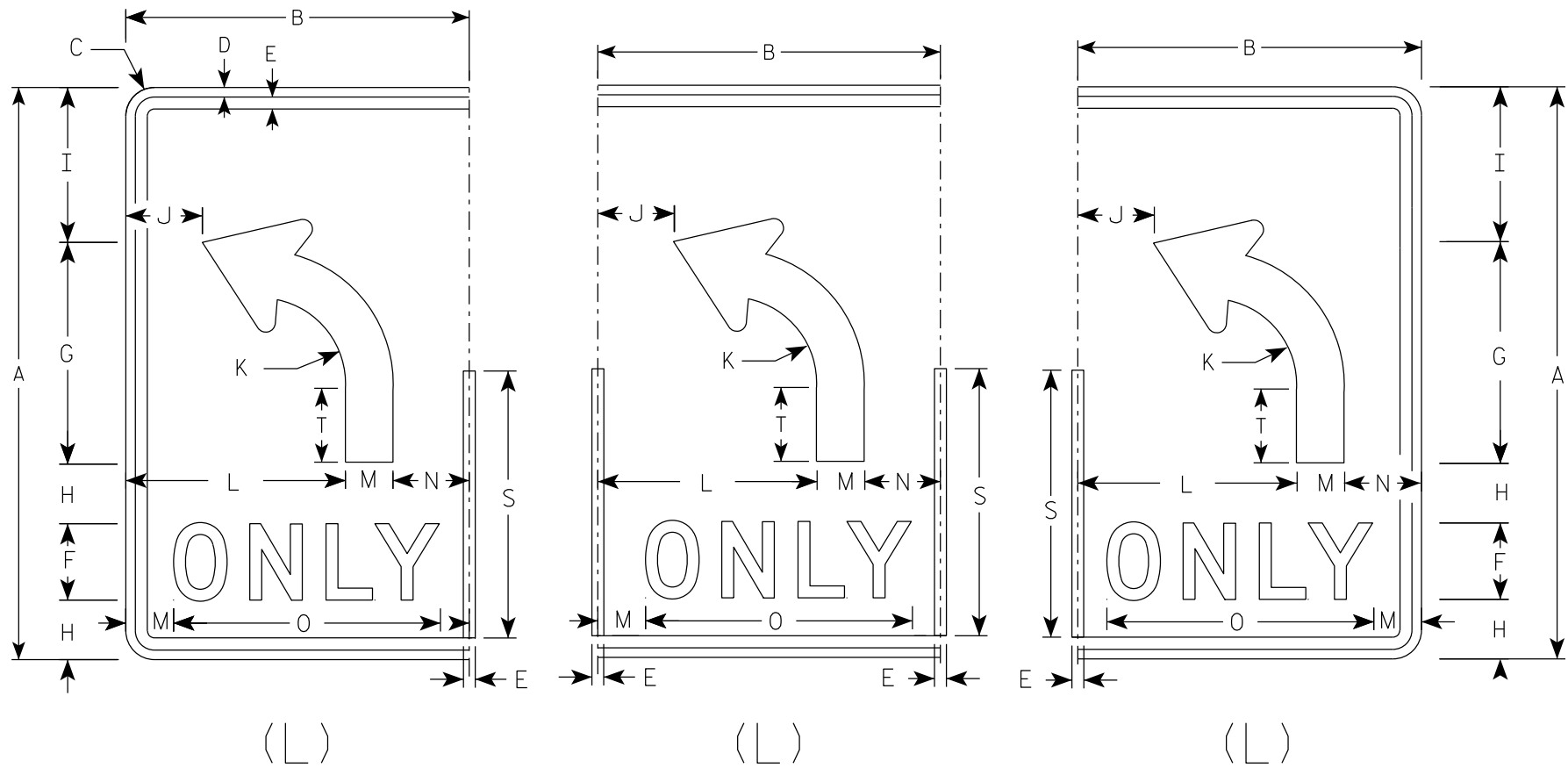
APPROVED *Matthew R. Rauch*

for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - Black
- 3. Message Series - D



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
2M	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
3	36	24	1 1/2	1/2	5/8	5	14	3 1/2	9 3/4	6	5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8							6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0

STANDARD SIGN

R3-8 (L) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*

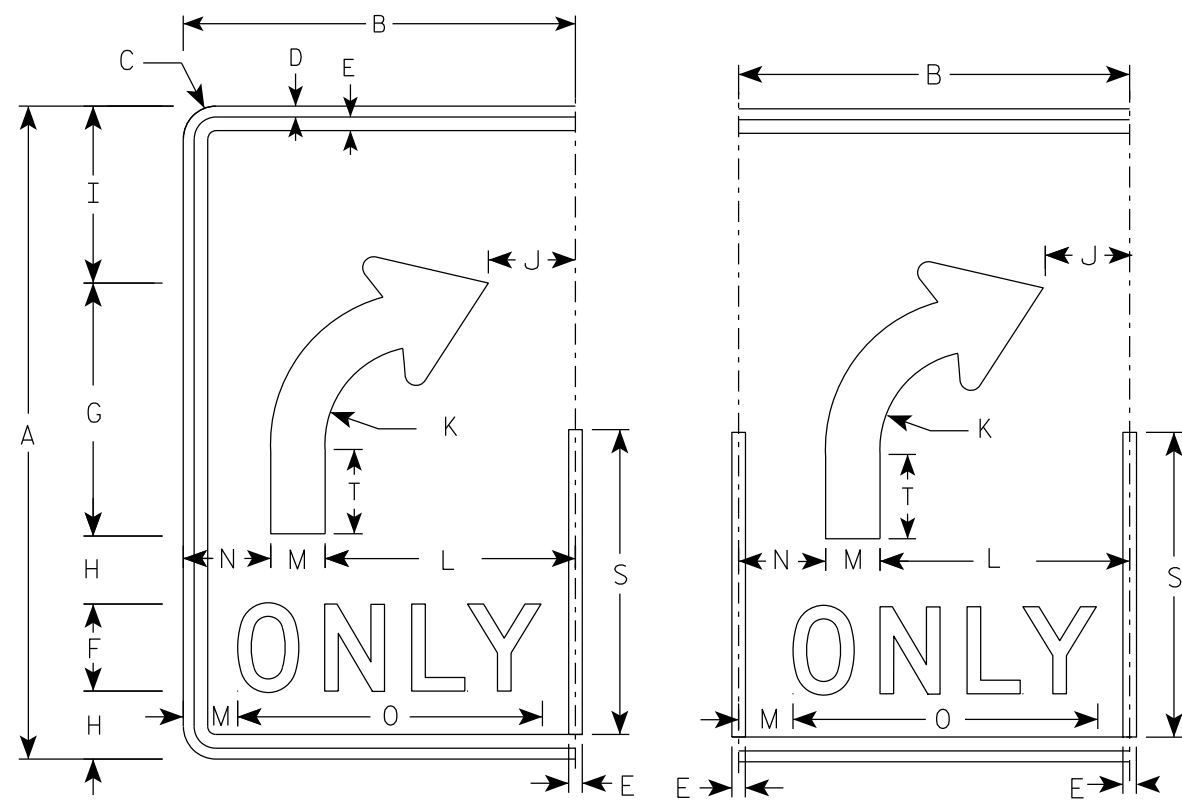
for State Traffic Engineer

DATE 2/14/23

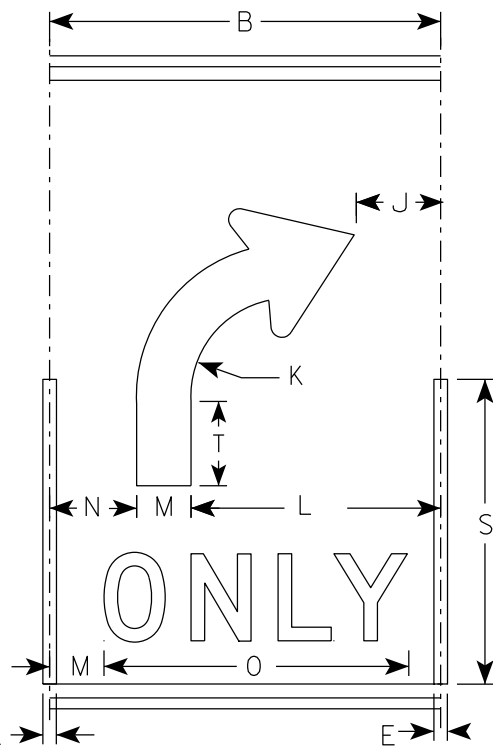
PLATE NO. R3-8.2

NOTES

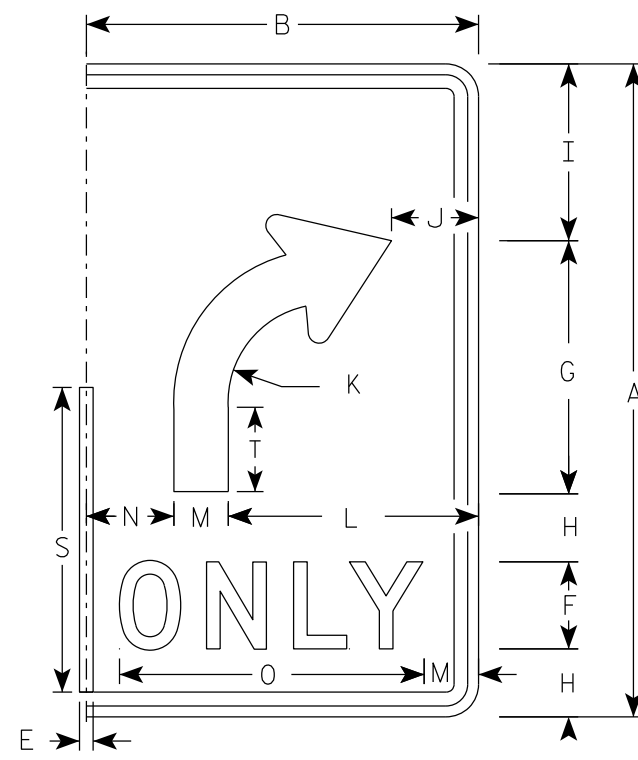
- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - Black
- 3. Message Series - D



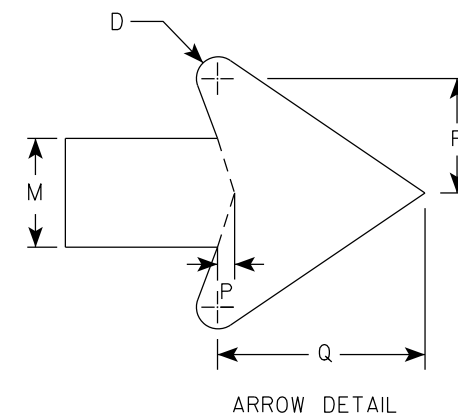
(R)



(R)



(R)



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
2M	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
3	36	24	1 1/2	1/2	5/8	5	14	3 1/2	9 3/4	6	5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8							6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0

STANDARD SIGN

R3-8 (R) Arrow

WISCONSIN DEPT OF TRANSPORTATION

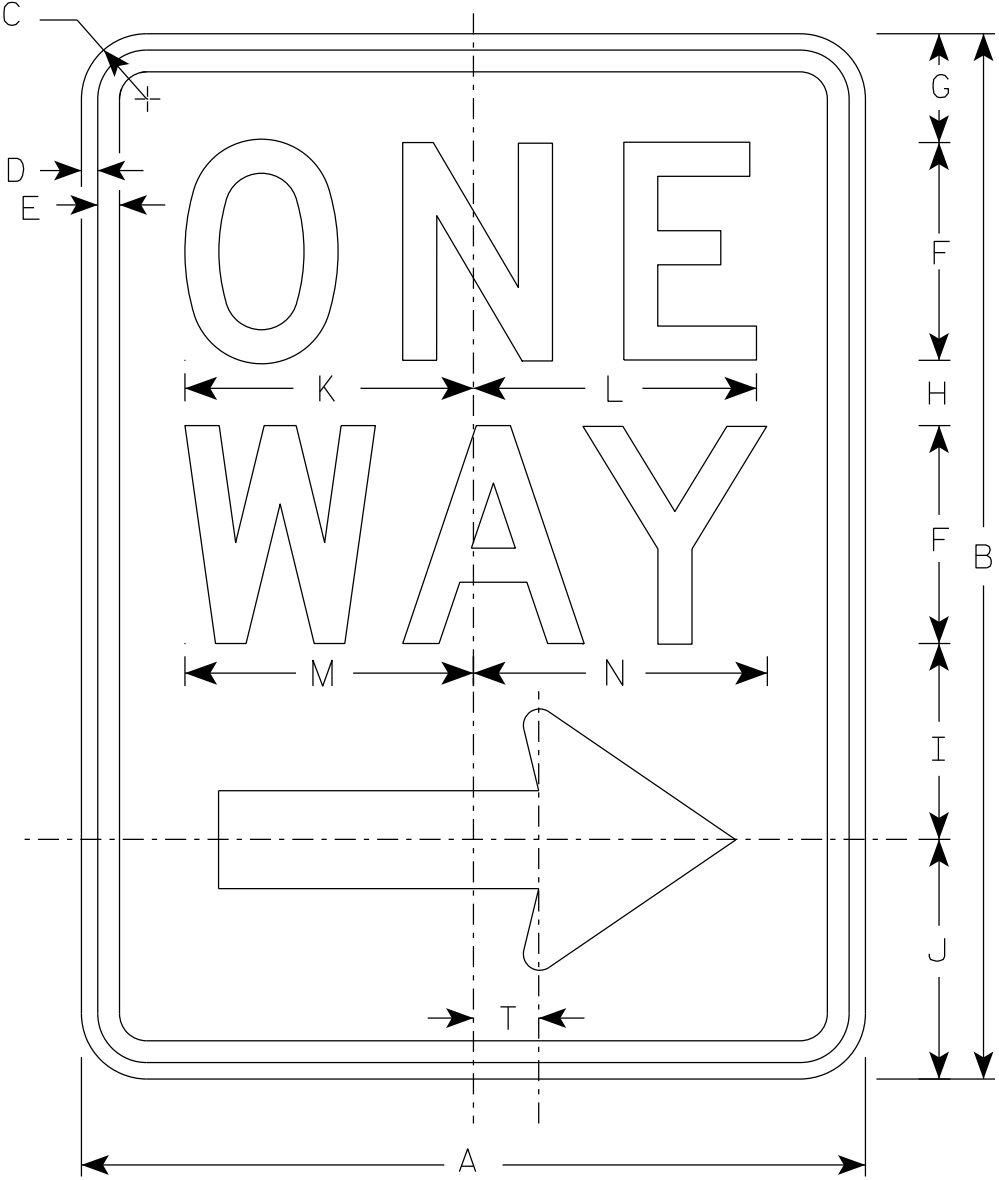
APPROVED *Matthew R. Rauch*

for State Traffic Engineer

DATE 2/14/23

PLATE NO. R3-8.2

7

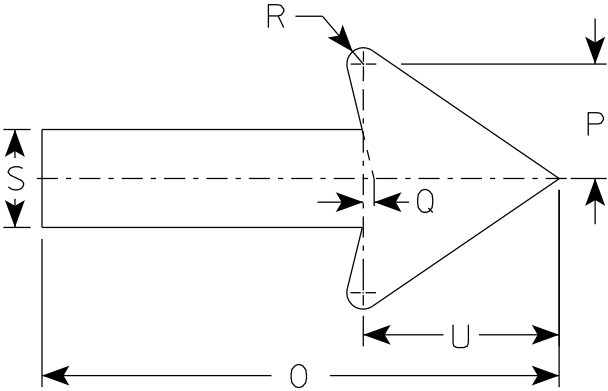


R6 - 2R

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - Black
- 3. Message Series - D
- 4. R6-2L same as R6-2R except arrow points to the left.

Arrow Detail



7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/2	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	36	1 1/2	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 7/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

PROJECT NO:

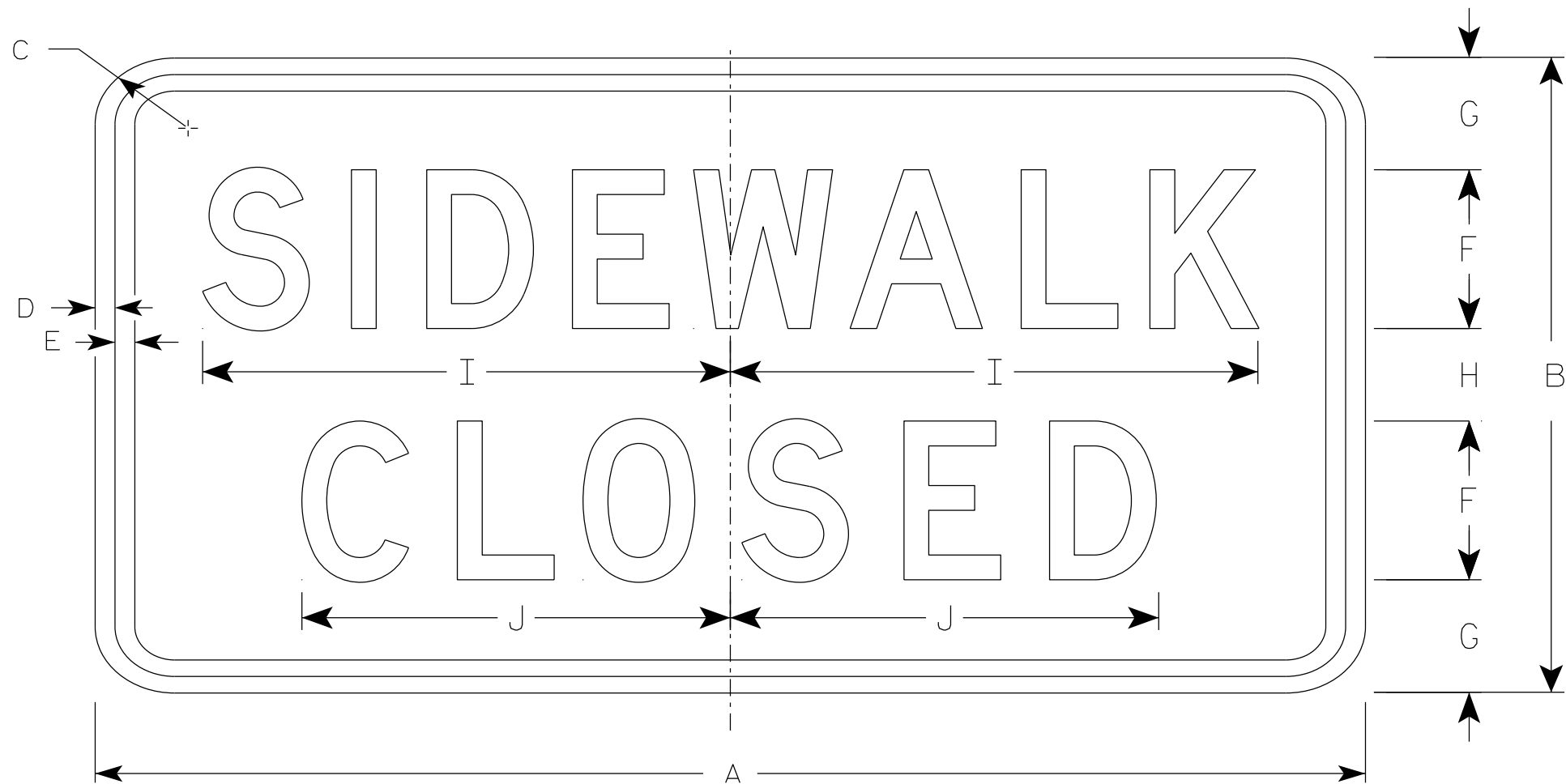
HWY:

COUNTY:

SHEET NO:

E

7



R9-9

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
 - Background - White
 - Message - Black
- 3. Message Series - C
- 4. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

7

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

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

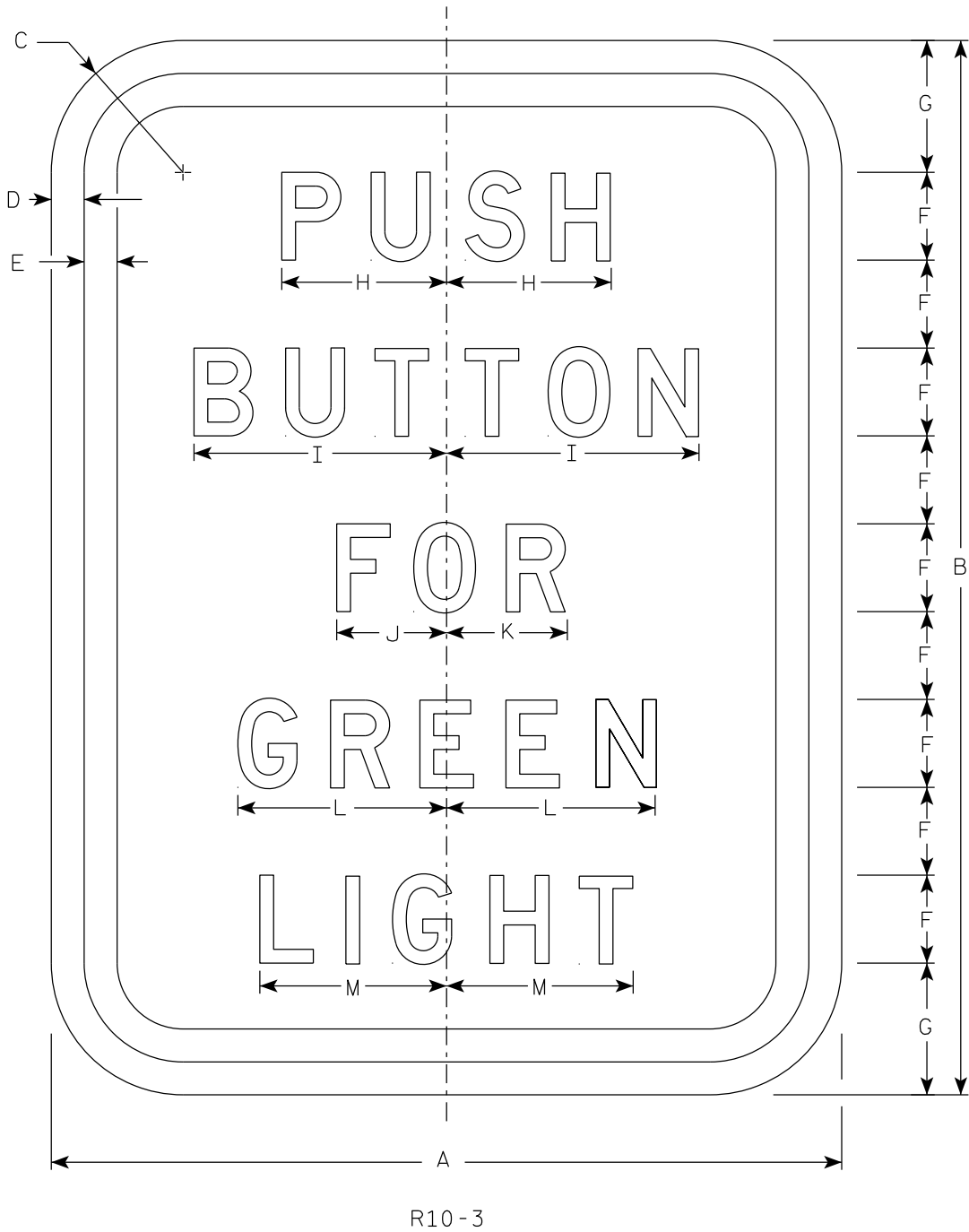
STANDARD SIGN
R9-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 1/24/24 PLATE NO. R9-9.7

7



NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - Black
- 3. Message Series - D

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	6	9	1 1/2	1/4	1/4	3/4	1 1/8	1 1/4	2	7/8	1	1 5/8	1 1/2														0.38
2S	9	12	1 1/2	3/8	3/8	1	1 1/2	1 7/8	2 7/8	1 1/4	1 3/8	2 3/8	2 1/8														0.75
2M	9	12	1 1/2	3/8	3/8	1	1 1/2	1 7/8	2 7/8	1 1/4	1 3/8	2 3/8	2 1/8														0.75
3																											
4																											
5																											

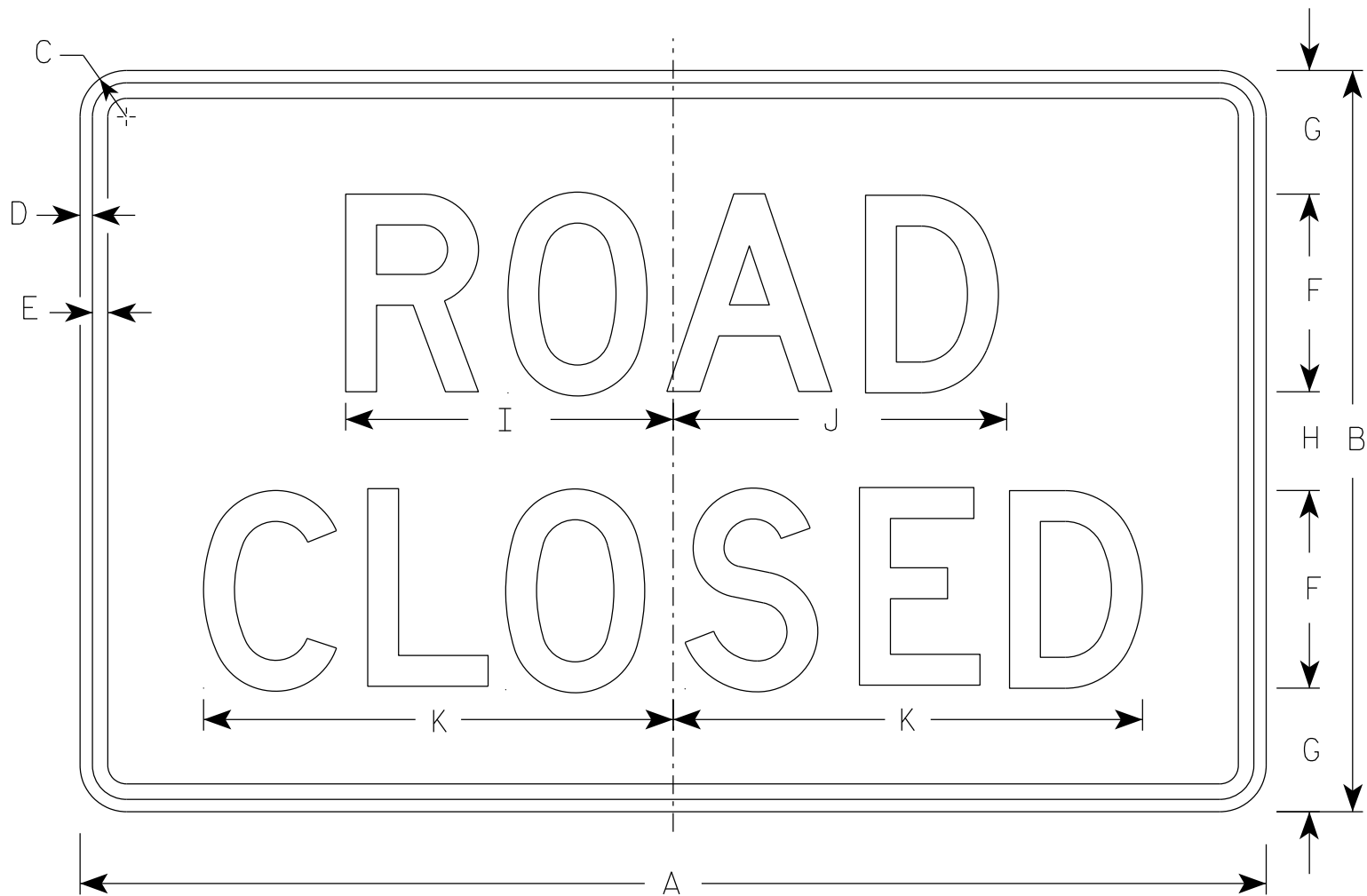
PROJECT NO:

HWY:

COUNTY:

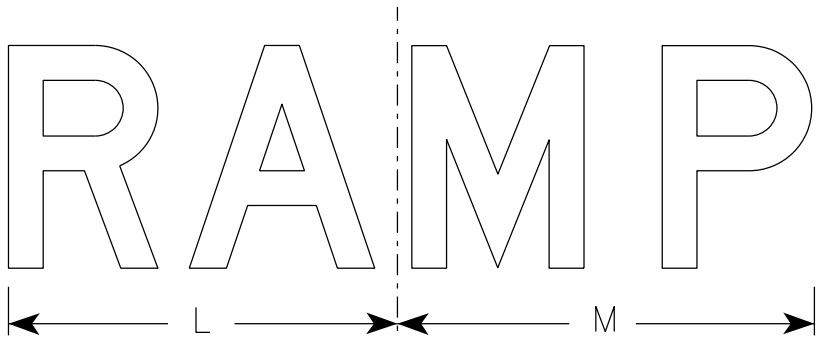
SHEET NO:

E

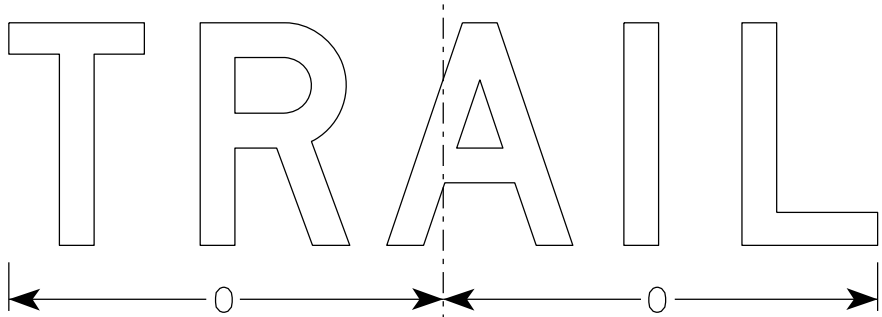


R11-2

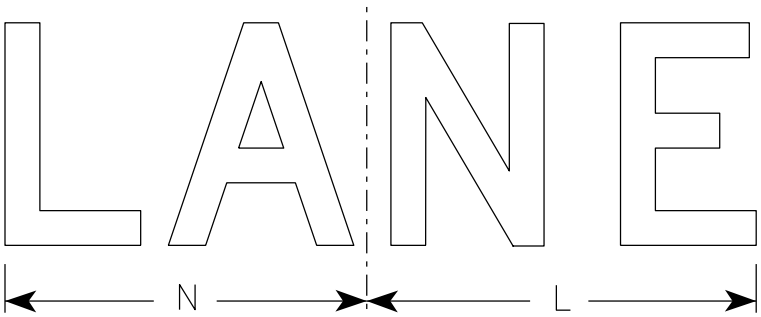
- NOTES
1. Sign is Type II - Type H Reflective
 2. Color:
Background - White
Message - Black
 3. Message Series - D
 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
 5. Modify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



R11-2R



R11-2T

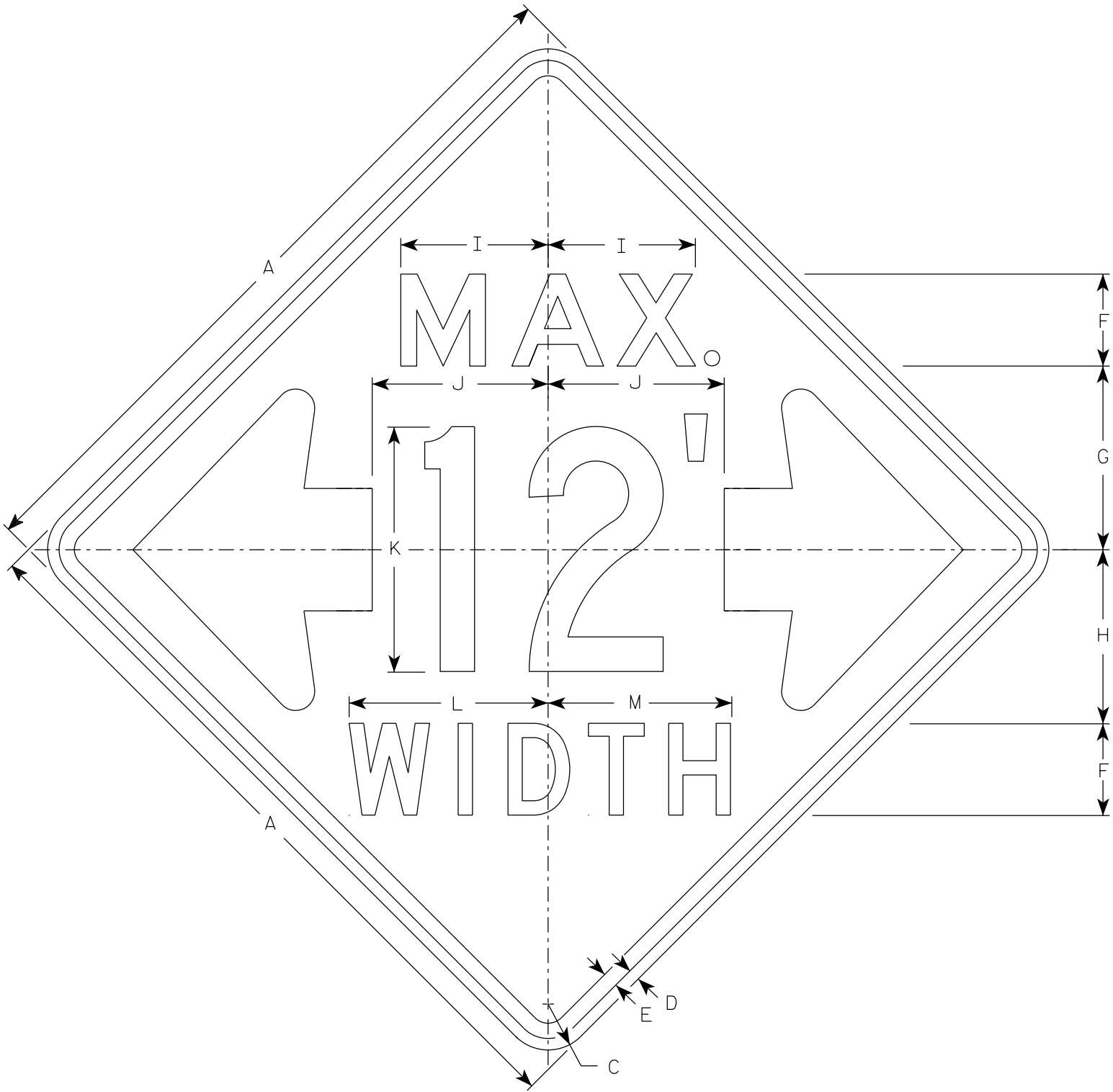


R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

STANDARD SIGN R11-2	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 2/5/24	PLATE NO. R11-2.12

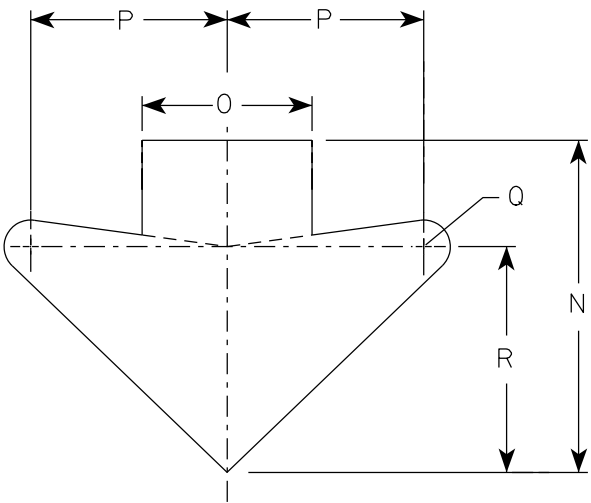
PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
-------------	------	---------	-----------	---



W12-52

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Orange
Message - Black
- 3. Message Series - See note 5
- 4. The top line is series E, the numerals are series C, and the bottom line is series D.
- 5. Substitute appropriate numerals and adjust spacing as required.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48		3	¾	1	6	12	11 ⅜	9 ⅝	11 ½	16	13	12	15 ⅝	8	9 ¼	1 ¼	10 ⅝									16.0
2M	48		3	¾	1	6	12	11 ⅜	9 ⅝	11 ½	16	13	12	15 ⅝	8	9 ¼	1 ¼	10 ⅝									16.0
3																											
4																											
5																											

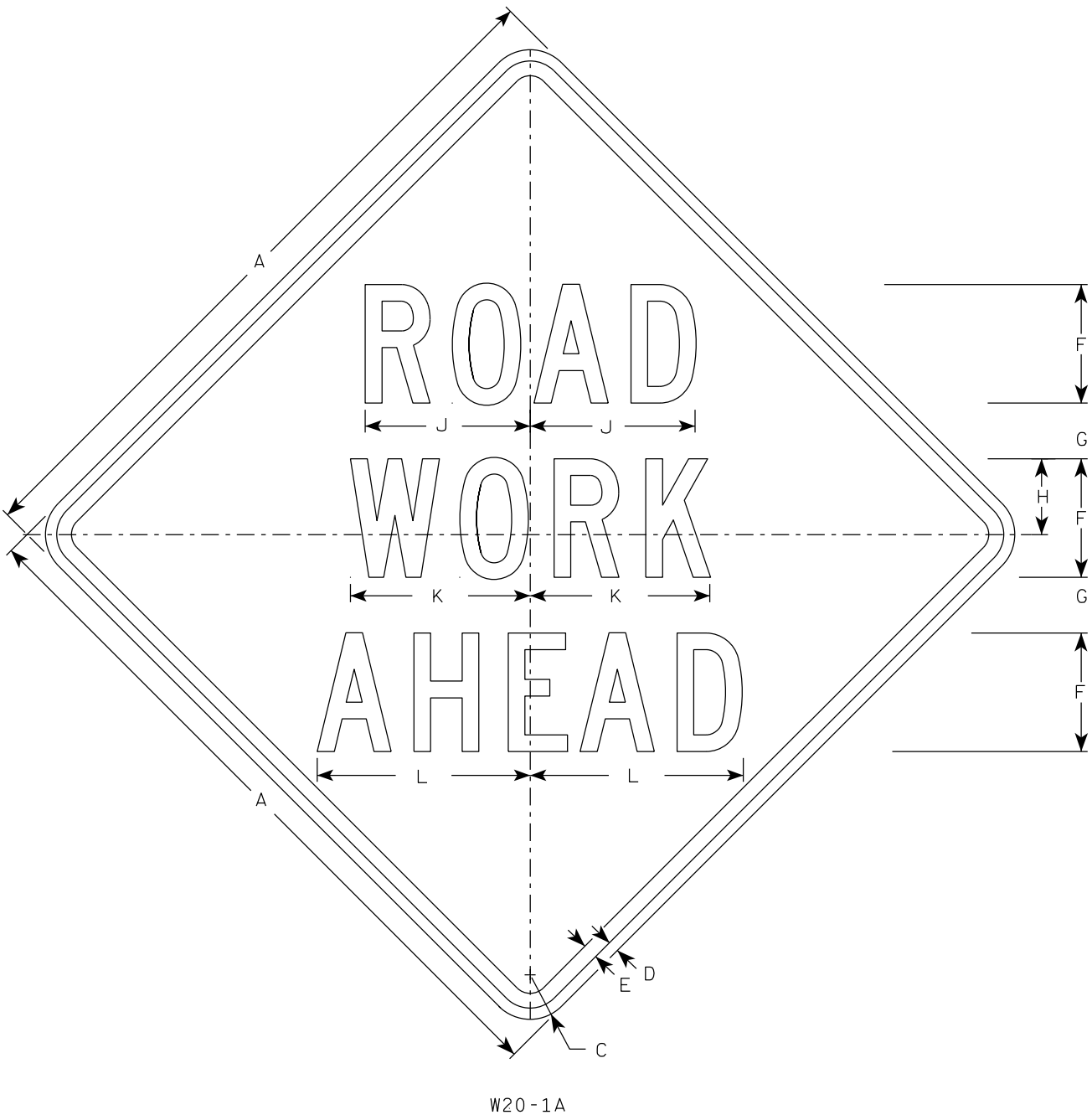
STANDARD SIGN

W12-52

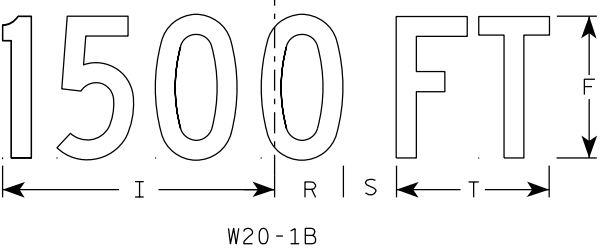
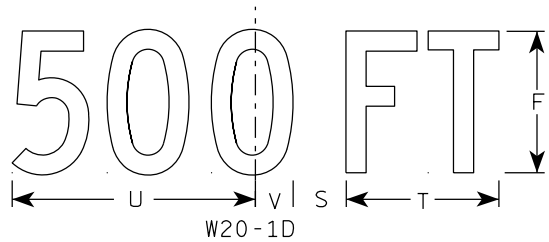
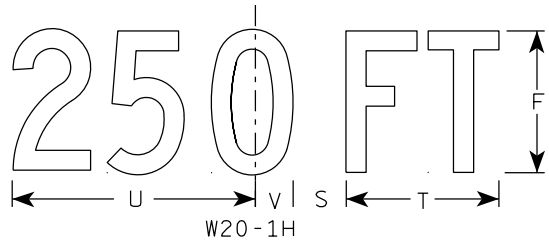
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/10/2024 PLATE NO. W12-52.8

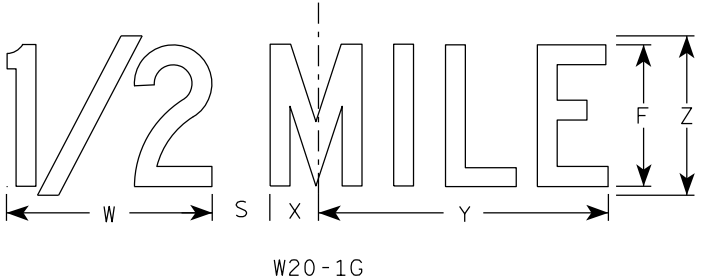


W20-1A

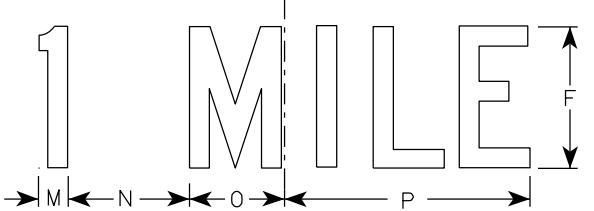


W20-1B

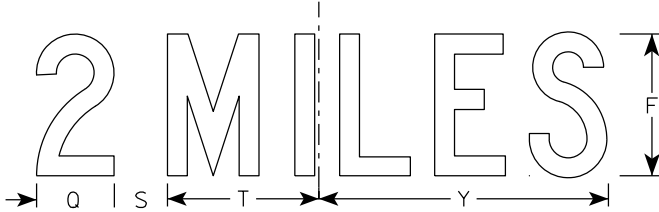
- NOTES
1. Sign is Type II - Type F Reflective
 2. Color:
Background - Orange
Message - Black
 3. Message Series - C
 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1G

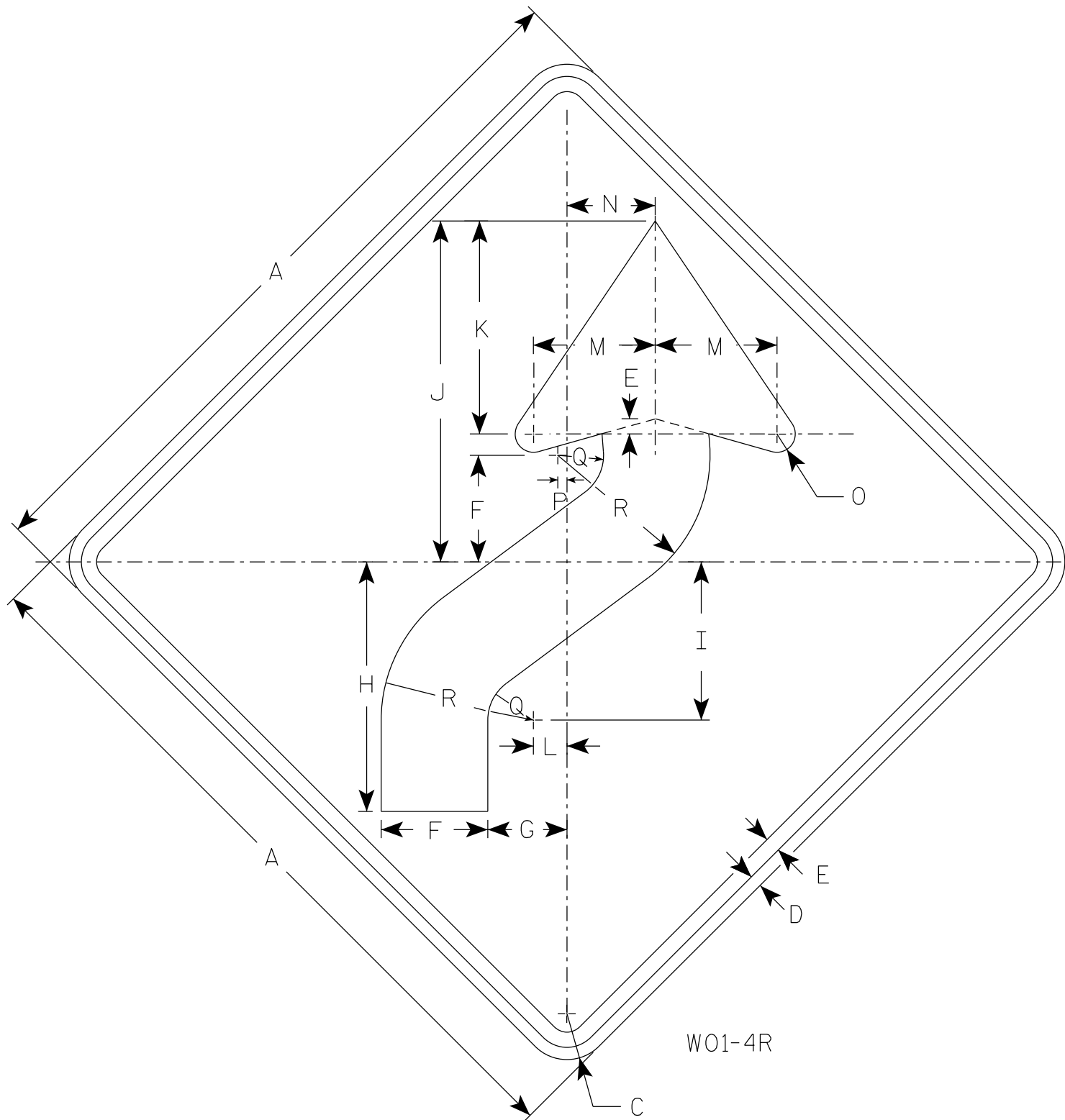


W20-1F



W20-1E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	v	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
Background - Orange
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

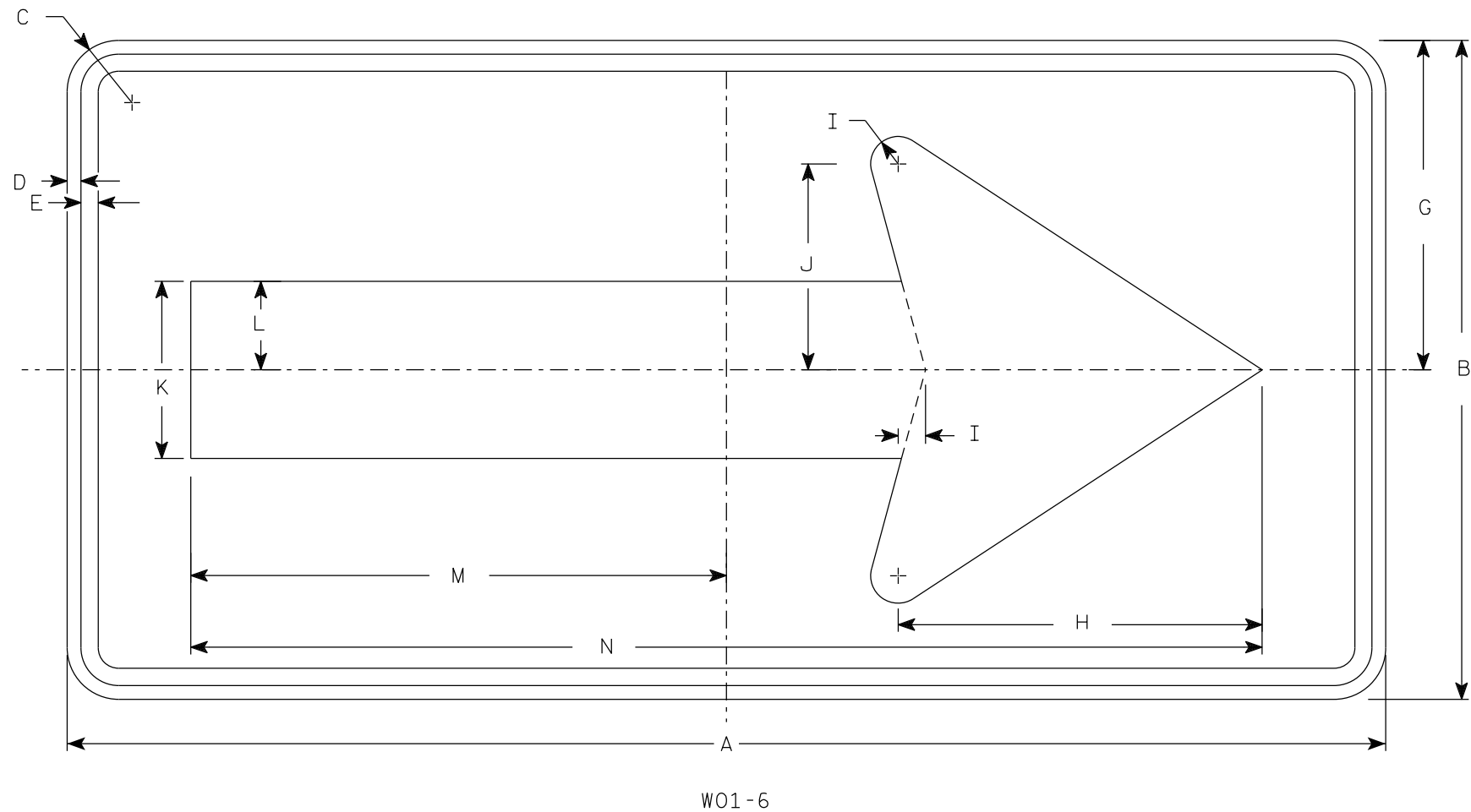
STANDARD SIGN
W01-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. W01-4.2

7



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
Background - Orange
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 7/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 7/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. W01-6.2

PROJECT NO:

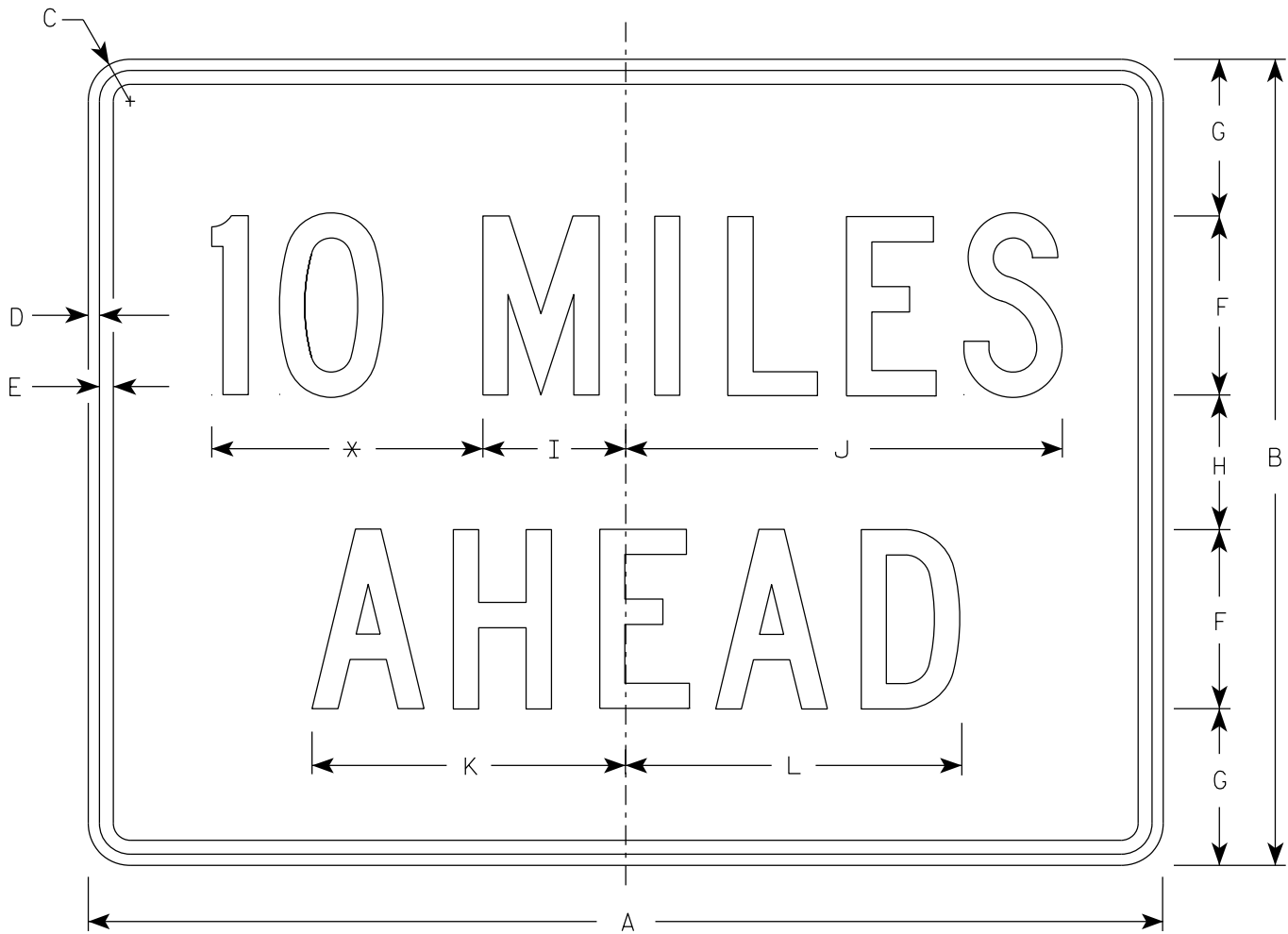
HWY:

COUNTY:

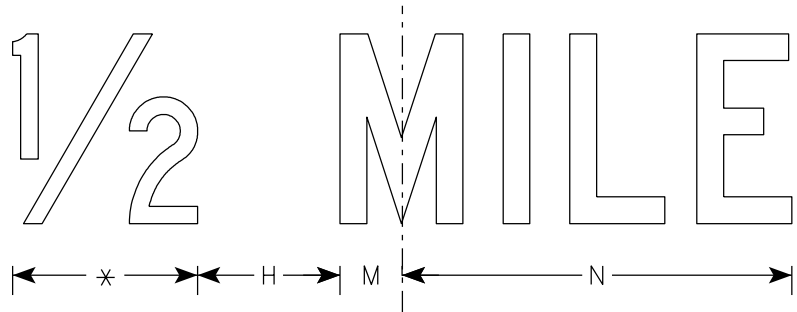
SHEET NO:

E

7



W057-52



* See note 5

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Orange
Message - Black
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. Substitute appropriate numerals to the nearest quarter mile and optically adjust spacing to achieve proper balance.

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	24	1 1/2	3/8	1/2	6	4 1/2	3	4 3/4	14 5/8	10 5/8	11 3/8	2	12													6.0
2S	48	36	2 1/4	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
2M	48	36	2 1/4	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
3	48	36	2 1/4	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
4	48	36	2 1/4	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
5	48	36	2 1/4	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0

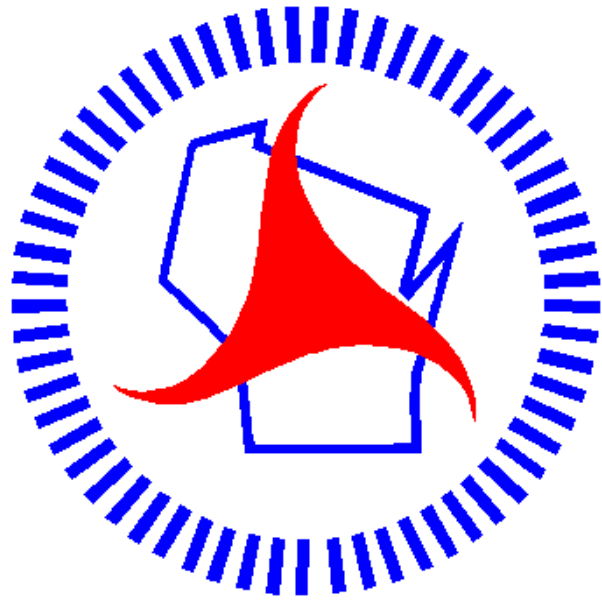
STANDARD SIGN
W057-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/1/2024 PLATE NO. W057-52.3

Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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