

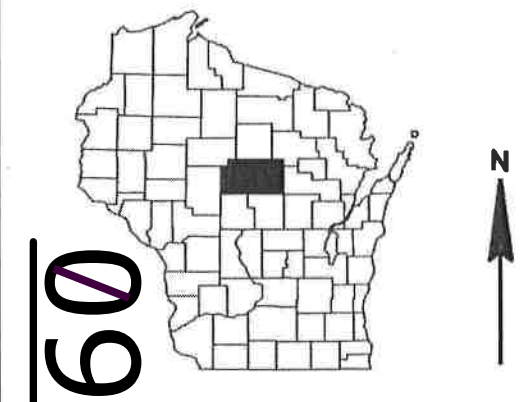
WISCONSIN
PROJECT ID: 1620-03-72
WITH: N/A
COUNTY: MARATHON

AUGUST 2023

ORDER OF SHEETS

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

TOTAL SHEETS = 158



DESIGN DESIGNATION

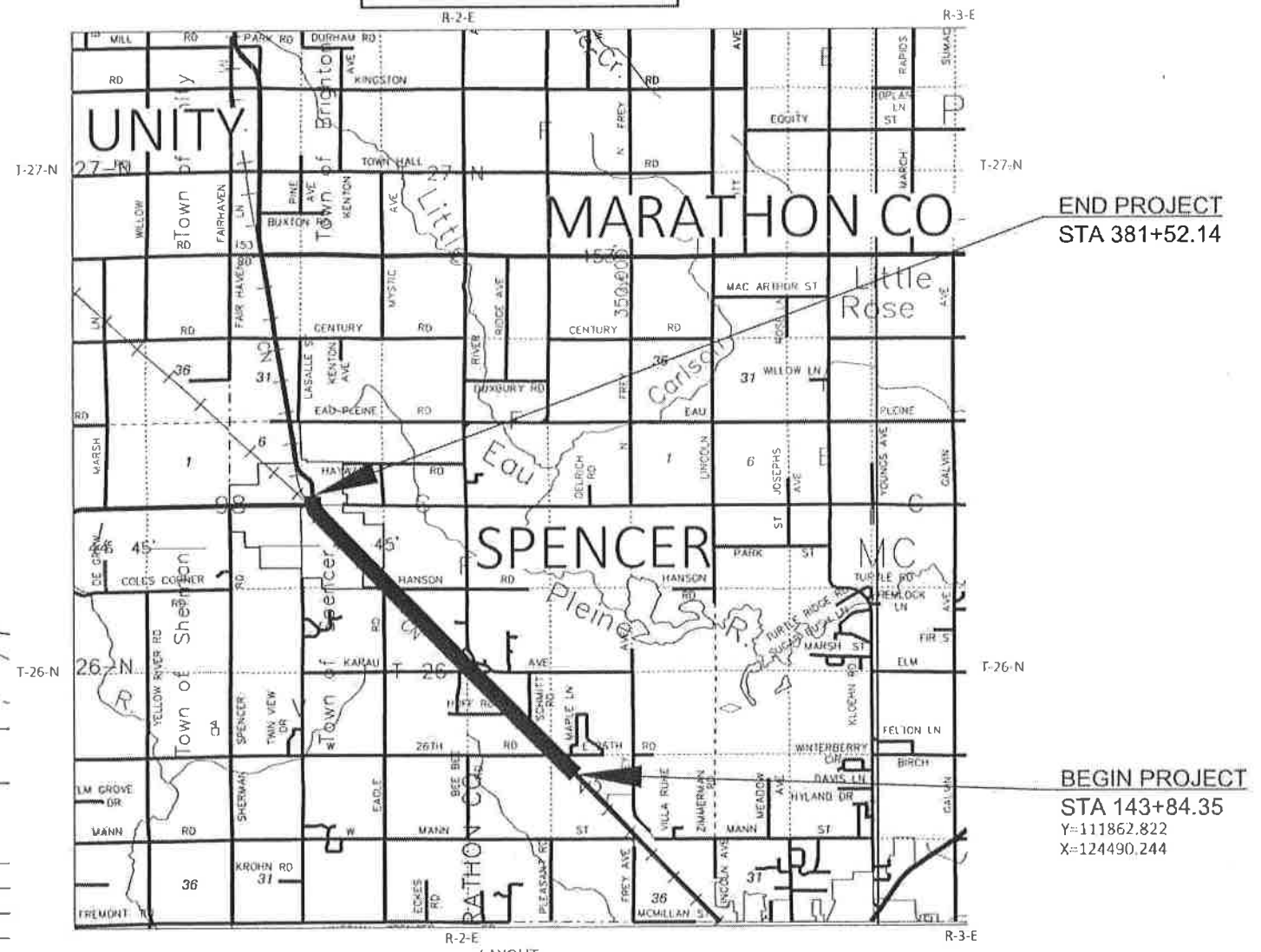
A.A.D.T.	2023	=	10300
A.A.D.T.	2043	=	11700
D.H.V.		=	1228.50
D.D.		=	60/40
T		=	16.7%
DESIGN SPEED		=	35-55 MPH
ESALS		=	4,100,000

CONVENTIONAL SYMBOLS

PLAN	PROFILE
CORPORATE LIMITS	GRADE LINE
PROPERTY LINE	ORIGINAL GROUND
LOT LINE	MARSH OR ROCK PROFILE (To be noted as such)
LIMITED HIGHWAY EASEMENT	SPECIAL DITCH
EXISTING RIGHT OF WAY	GRADE ELEVATION
PROPOSED OR NEW R/W LINE	CULVERT (Profile View)
SLOPE INTERCEPT	UTILITIES
REFERENCE LINE	ELECTRIC
EXISTING CULVERT	FIBER OPTIC
PROPOSED CULVERT (Box or Pipe)	GAS
COMBUSTIBLE FLUIDS	SANITARY SEWER
	STORM SEWER
	TELEPHONE
	WATER
	UTILITY PEDESTAL
	POWER POLE
	TELEPHONE POLE
MARSH AREA	
WOODED OR SHRUB AREA	

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
MARSHFIELD - ABBOTSFORD
26TH ROAD TO STH 98
STH 13
MARATHON COUNTY

STATE PROJECT NUMBER
1620-03-72



LAYOUT
SCALE 0 2.0 MI
TOTAL NET LENGTH OF CENTERLINE = 4.50 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), MARATHON 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	FEDERAL PROJECT	
	PROJECT	CONTRACT
1620-03-72		

ORIGINAL PLANS PREPARED BY
JT ENGINEERING, INC.

ANDREW W. BLOCK
E-41224-6
APPLETON
WI.

DATE: 10/12/2022 *Andrew W. Block*
(Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	JT ENGINEERING, INC.
Designer	JT ENGINEERING, INC.
Project Manager	PRESTON BOHN, P.E.
Regional Examiner	ZACH GRUBING, P.E.
Regional Supervisor	MIKE KRETSCHMER, P.E.

APPROVED FOR THE DEPARTMENT

DATE: 10/18/2022 *Preston Bohn*
(Signature)

E

RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = 79.36 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.12 ACRES

GENERAL NOTES

IF THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGER'S HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA.

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

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

ALL RADII DIMENSIONS ARE PROVIDED TO THE FLAG LINE OF CURB & GUTTER UNLESS NOTED OTHERWISE.

LIMIT SHOULDER AGGREGATE PLACEMENT TO THE AREA BETWEEN THE EDGE OF PAVEMENT AND EXISTING SHOULDER HINGE POINT.

TURF RESTORATION REQUIRED AT ALL SIDEWALK/CURB & GUTTER REPLACEMENT LOCATIONS UNLESS NOTED OTHERWISE.

MATCH EXISTING GUTTER SLOPE IN LOCATIONS WHERE NEW CURB & GUTTER TIES INTO EXISTING.

EXISTING STREET LIGHTING SHOWN ON THE PLANS IS OWNED AND OPERATED BY THE VILLAGE OF SPENCER.

UTILITY CONTACTS

SPECTRUM - COMMUNICATION LINE
JESSE GRUNY
503 E IVES ST
MARSHFIELD, WI 54449
(715) 651-5605
JESSE.GRUNY@CHARTER.COM

CLARK ELECTRIC COOPERATIVE - ELECTRICITY
KENT WEIGEL
1209 W DALL-BERG RD
GREENWOOD, WI 54437
(715) 267-7955
KWEIGEL@CECOOP.COM

FRONTIER COMMUNICATIONS OF WI LLC - COMMUNICATION LINE
DAVID KAMKE
(715) 393-7028
DKAMKE@MSCON.COM

MARSHFIELD ELECTRIC AND WATER DEPT - ELECTRICITY
CODY KOLPACK
2000 S. CENTRAL AVE
MARSHFIELD, WI 54449
(715) 898-2143
MOBILE: (715) 219-2262
CODY.KOLPACK@MARSHFIELDUTILITIES.COM

VILLAGE OF SPENCER - SEWER
CHRIS HELGESTAD
105 PARK ST
P.O. BOX 360
SPENCER, WI 54479
(715) 659-5404
MOBILE: (715) 507-0537
CHRIS.HELGESTAD@VIL.SPENCER.WI.US

VILLAGE OF SPENCER - WATER
JOHN DUNBAR
105 PARK ST
P.O. BOX 360
SPENCER, WI 54479
659-54644
MOBILE: (715) 507-0850
JOHN.DUNBAR@VIL.SPENCER.WI.US

WE ENERGIES - GAS/PETROLEUM
JEREMY SLOWINSKI
1921 8TH ST. SOUTH
WISCONSIN RAPIDS, WI 54494
(715) 421-7251
MOBILE: (715) 418-1831
JEREMY.SLOWINSKI@WE-ENERGIES.COM

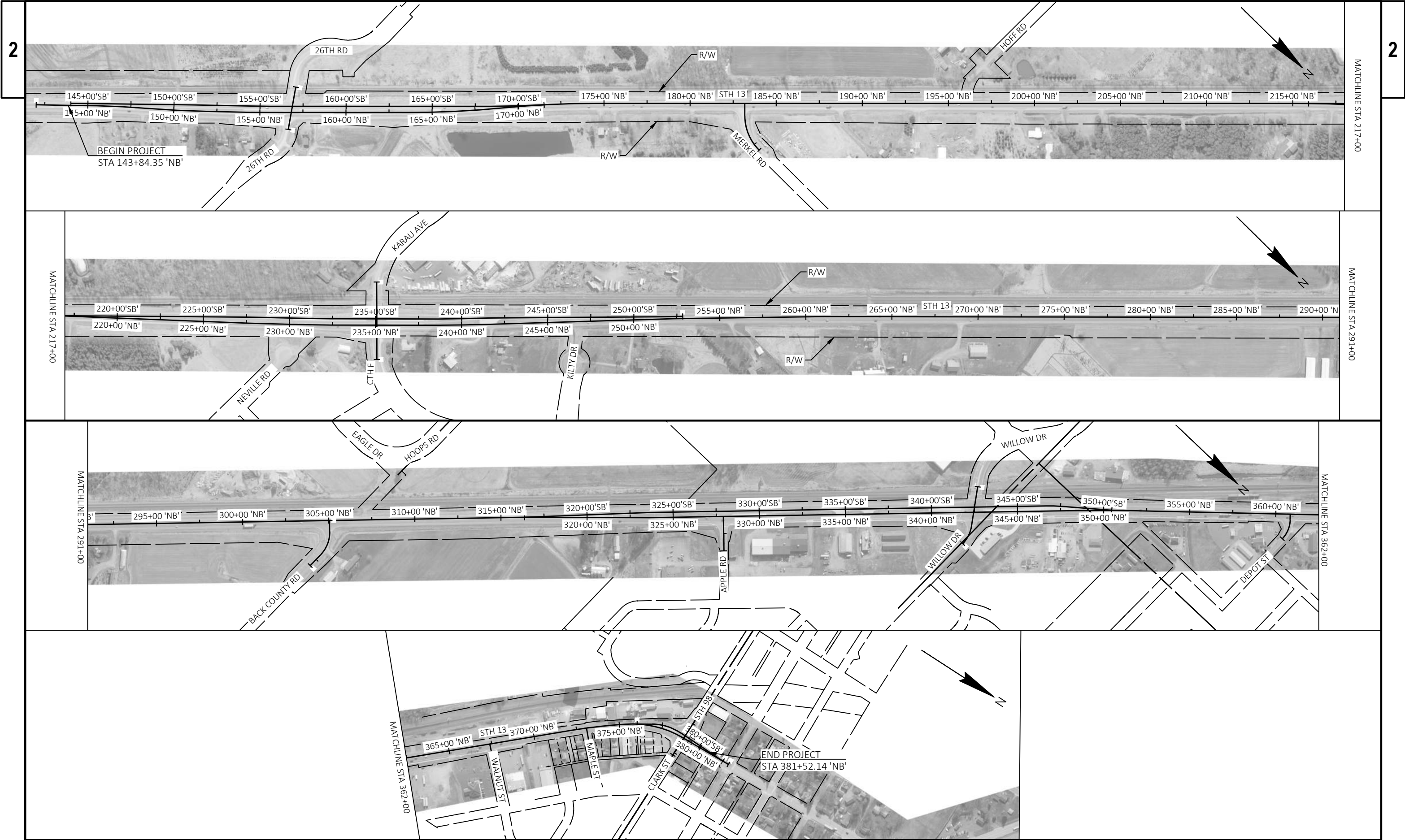
XCEL ENERGY - ELECTRICITY
PAMELA DENZINE
500 N. 5TH ST.
ABBOTSFORD, WI 54405
(715) 737-7174
MOBILE: (715) 721-5050
PAMELA.DENZINE@XCELENERGY.COM

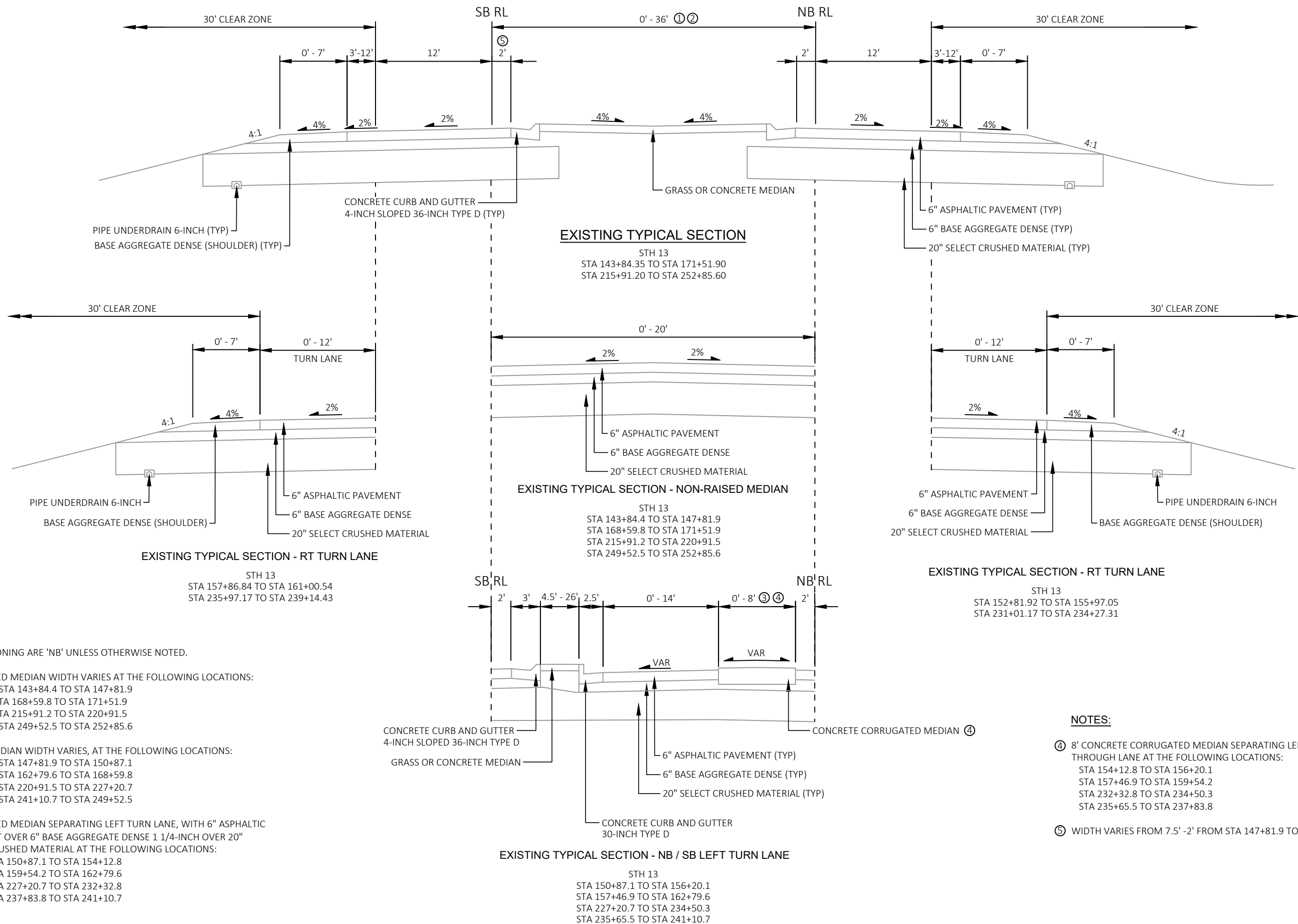


Dial 811 or (800)242-8511
www.DiggersHotline.com

WISCONSIN DNR LIAISON

CASEY JONES
625 EAST COUNTY ROAD Y, SUITE 700
OSHKOSH, WI 54901
PHONE: 715-213-6571
E-MAIL: CASEY.JONES@WISCONSIN.GOV



**NOTES:**

ALL STATIONING ARE 'NB' UNLESS OTHERWISE NOTED.

① NON-RAISED MEDIAN WIDTH VARIES AT THE FOLLOWING LOCATIONS:

12'-20' - STA 143+84.4 TO STA 147+81.9
14'-0' - STA 168+59.8 TO STA 171+51.9
0'-14' - STA 215+91.2 TO STA 220+91.5
18'-12' - STA 249+52.5 TO STA 252+85.6

② RAISED MEDIAN WIDTH VARIES, AT THE FOLLOWING LOCATIONS:

20'-36' - STA 147+81.9 TO STA 150+87.1
36'-14' - STA 162+79.6 TO STA 168+59.8
14'-36' - STA 220+91.5 TO STA 227+20.7
36'-18' - STA 241+10.7 TO STA 249+52.5

③ NON-RAISED MEDIAN SEPARATING LEFT TURN LANE, WITH 6" ASPHALTIC PAVEMENT OVER 6" BASE AGGREGATE DENSE 1 1/4-INCH OVER 20" SELECT CRUSHED MATERIAL AT THE FOLLOWING LOCATIONS:

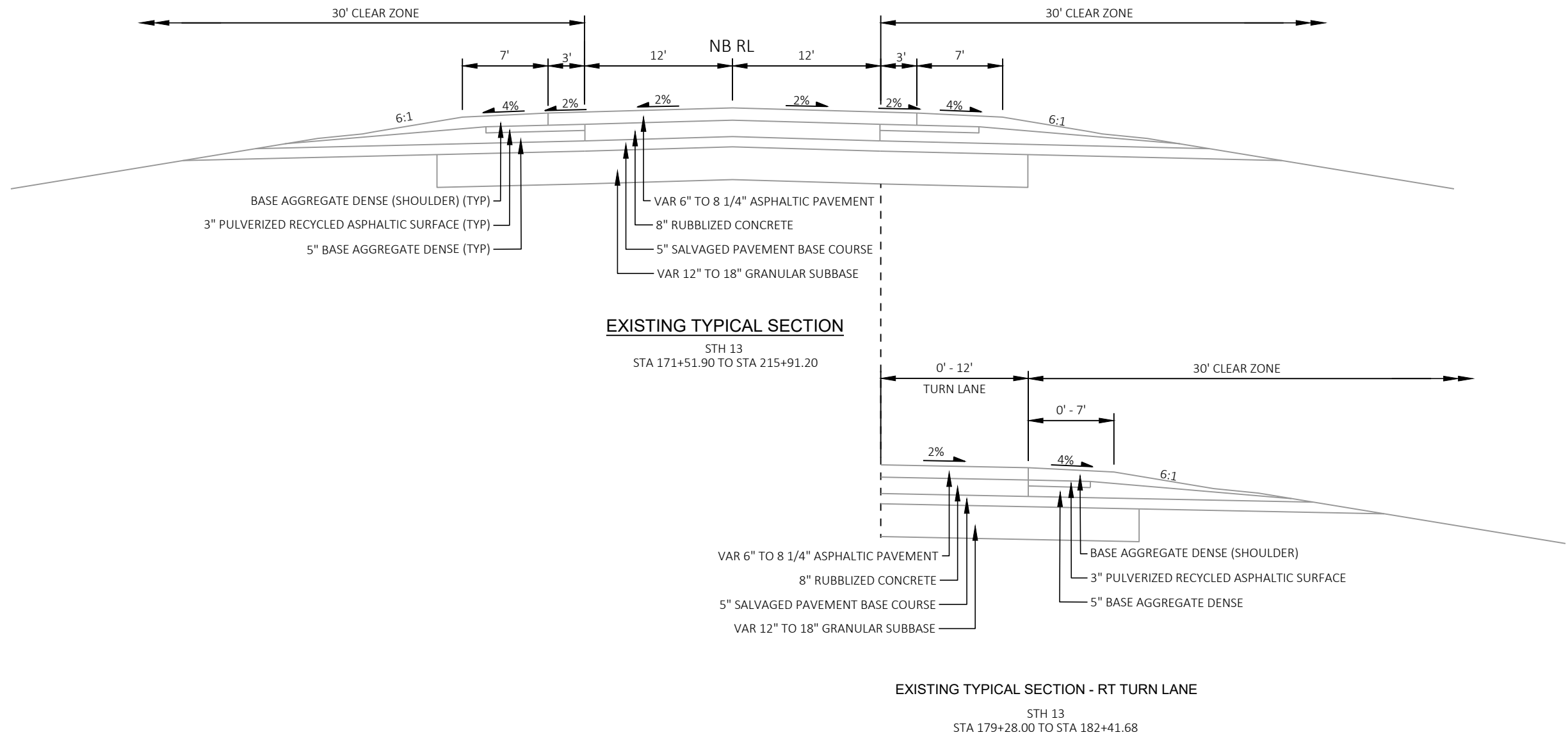
0'-8' - STA 150+87.1 TO STA 154+12.8
8'-0' - STA 159+54.2 TO STA 162+79.6
0'-8' - STA 227+20.7 TO STA 232+32.8
8'-0' - STA 237+83.8 TO STA 241+10.7

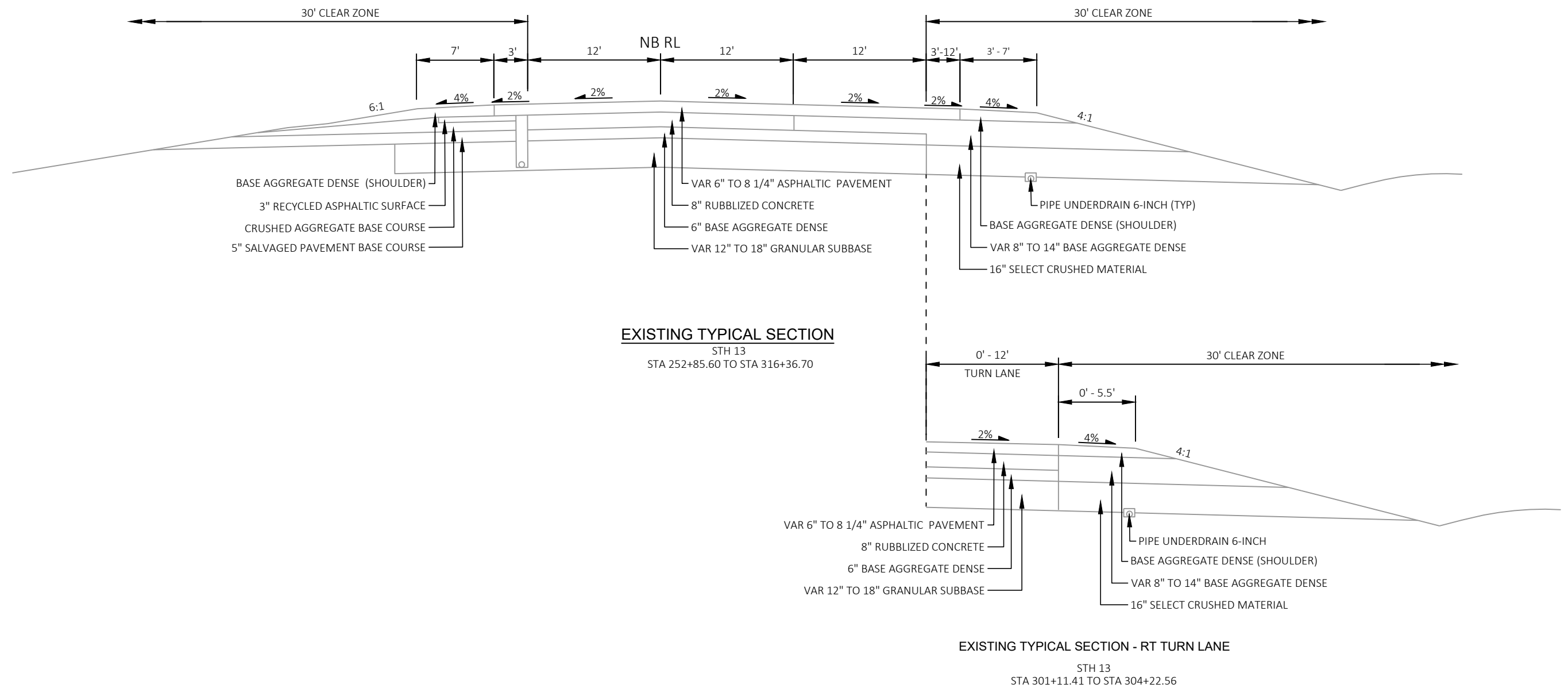
NOTES:

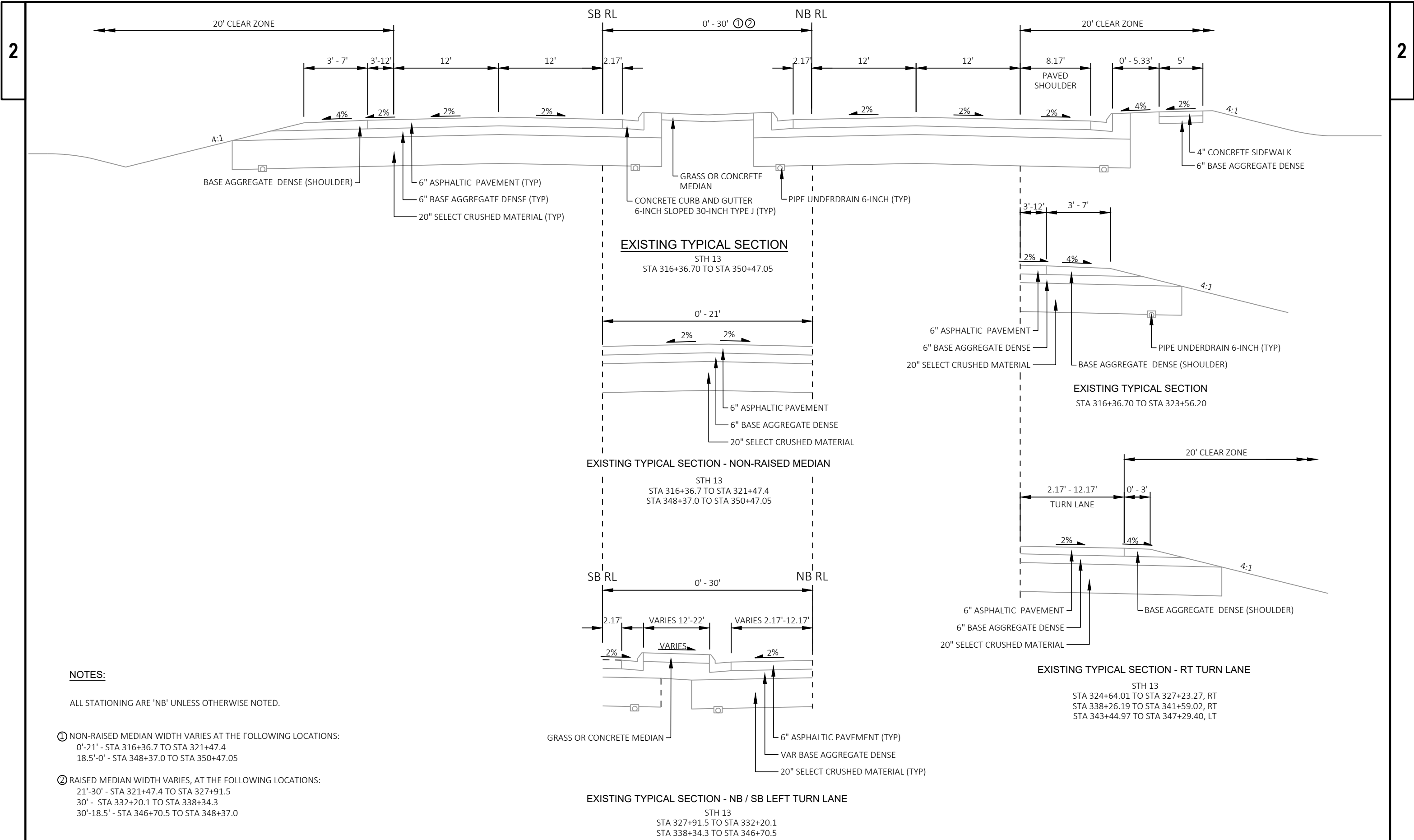
④ 8' CONCRETE CORRUGATED MEDIAN SEPARATING LEFT TURN LANE FROM THROUGH LANE AT THE FOLLOWING LOCATIONS:

STA 154+12.8 TO STA 156+20.1
STA 157+46.9 TO STA 159+54.2
STA 232+32.8 TO STA 234+50.3
STA 235+65.5 TO STA 237+83.8

⑤ WIDTH VARIES FROM 7.5' -2' FROM STA 147+81.9 TO STA 151+00.0



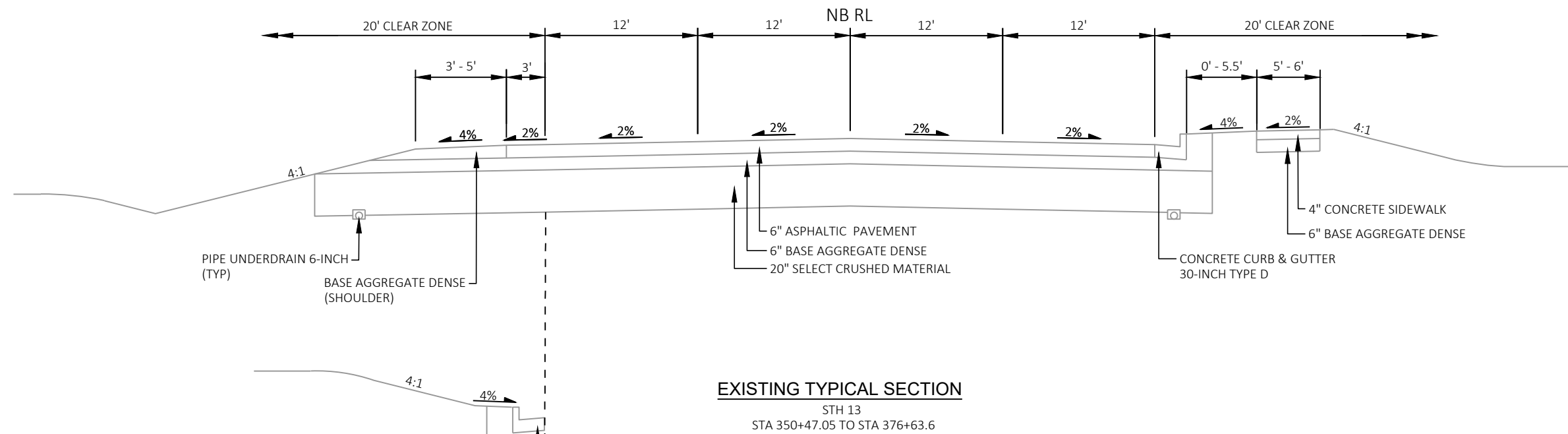




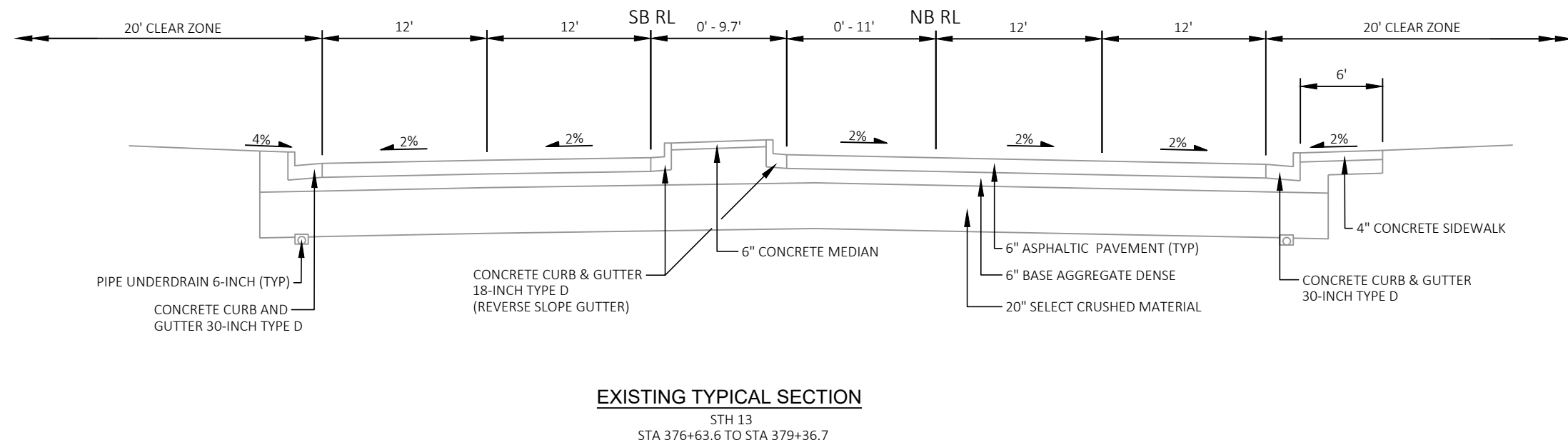
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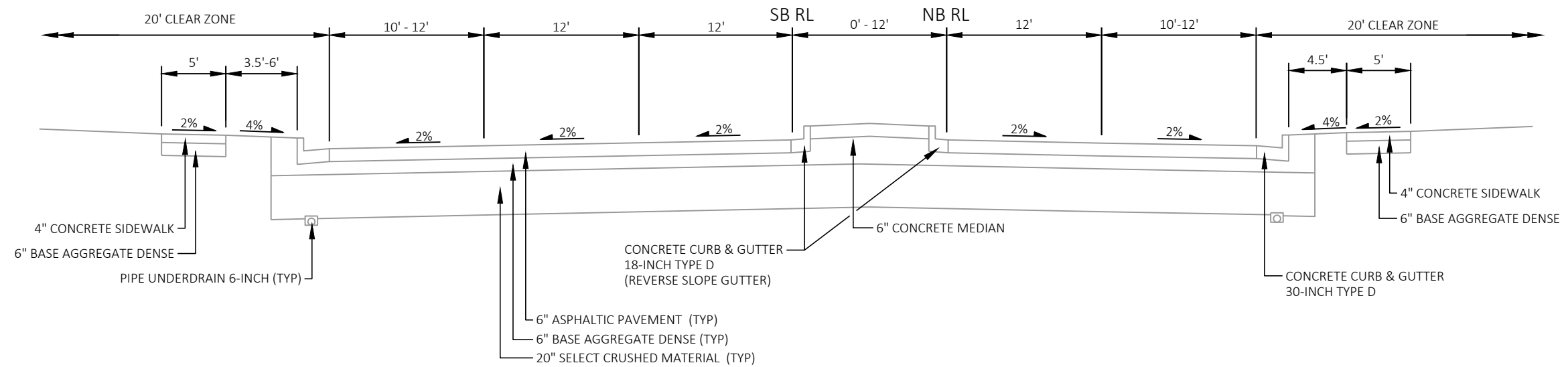
ALL STATIONING ARE 'NB' UNLESS OTHERWISE NOTED.

- ① NON-RAISED MEDIAN WIDTH VARIES AT THE FOLLOWING LOCATIONS:
0'-21' - STA 316+36.7 TO STA 321+47.4
18.5'-0' - STA 348+37.0 TO STA 350+47.05
- ② RAISED MEDIAN WIDTH VARIES, AT THE FOLLOWING LOCATIONS:
21'-30' - STA 321+47.4 TO STA 327+91.5
30' - STA 332+20.1 TO STA 338+34.3
30'-18.5' - STA 346+70.5 TO STA 348+37.0



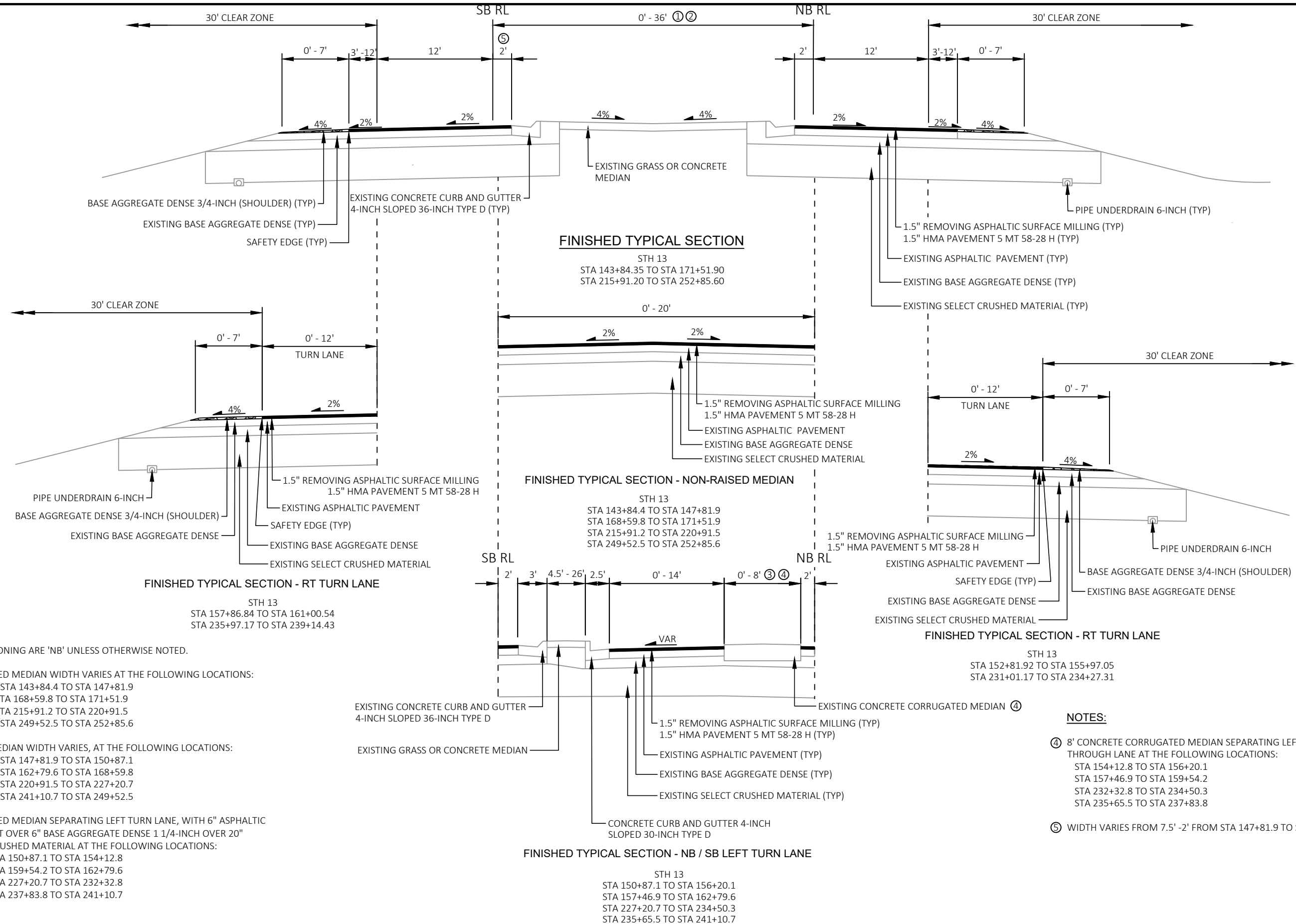
EXISTING TYPICAL SECTION
STH 13
STA 364+02.20 TO STA 376+63.6

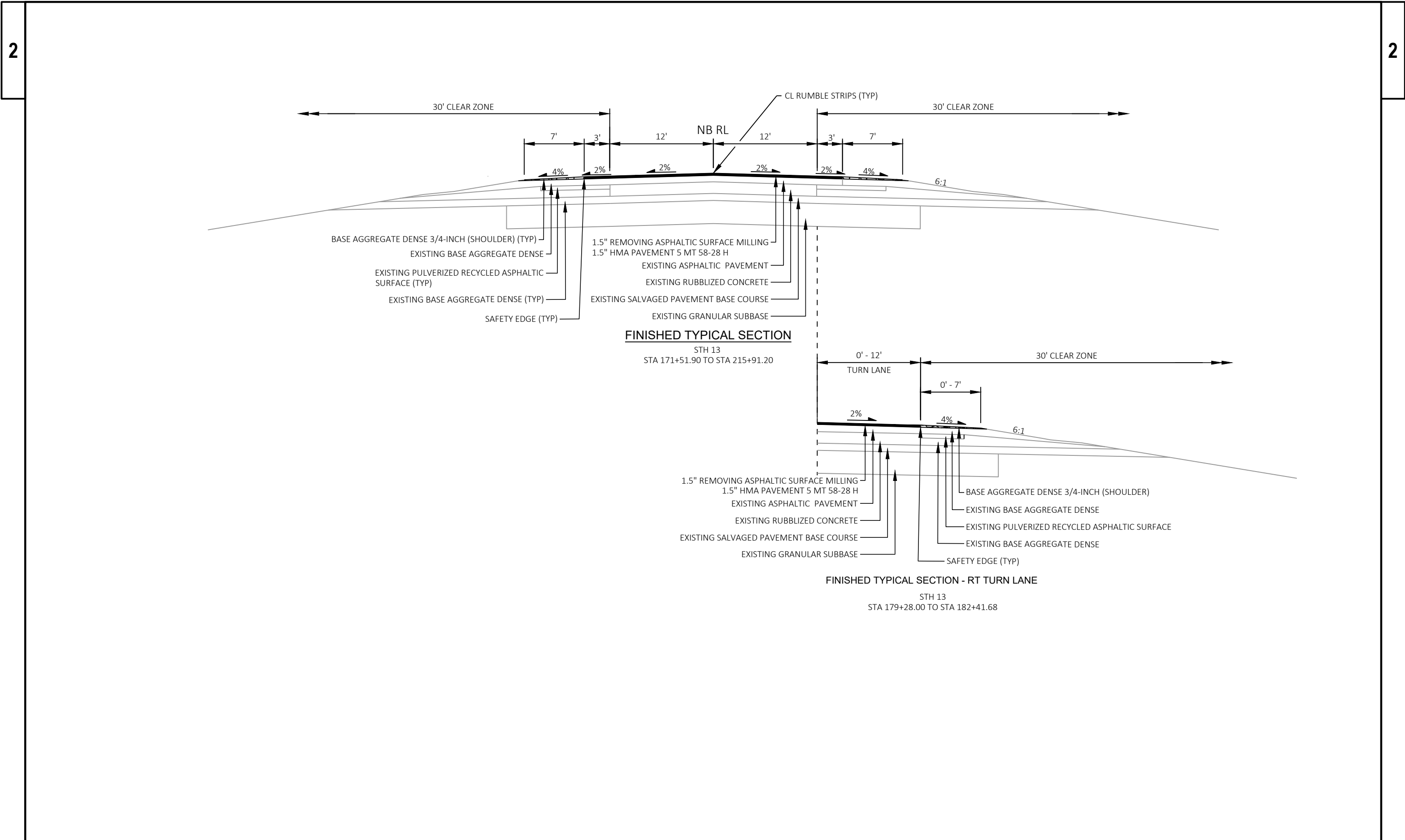


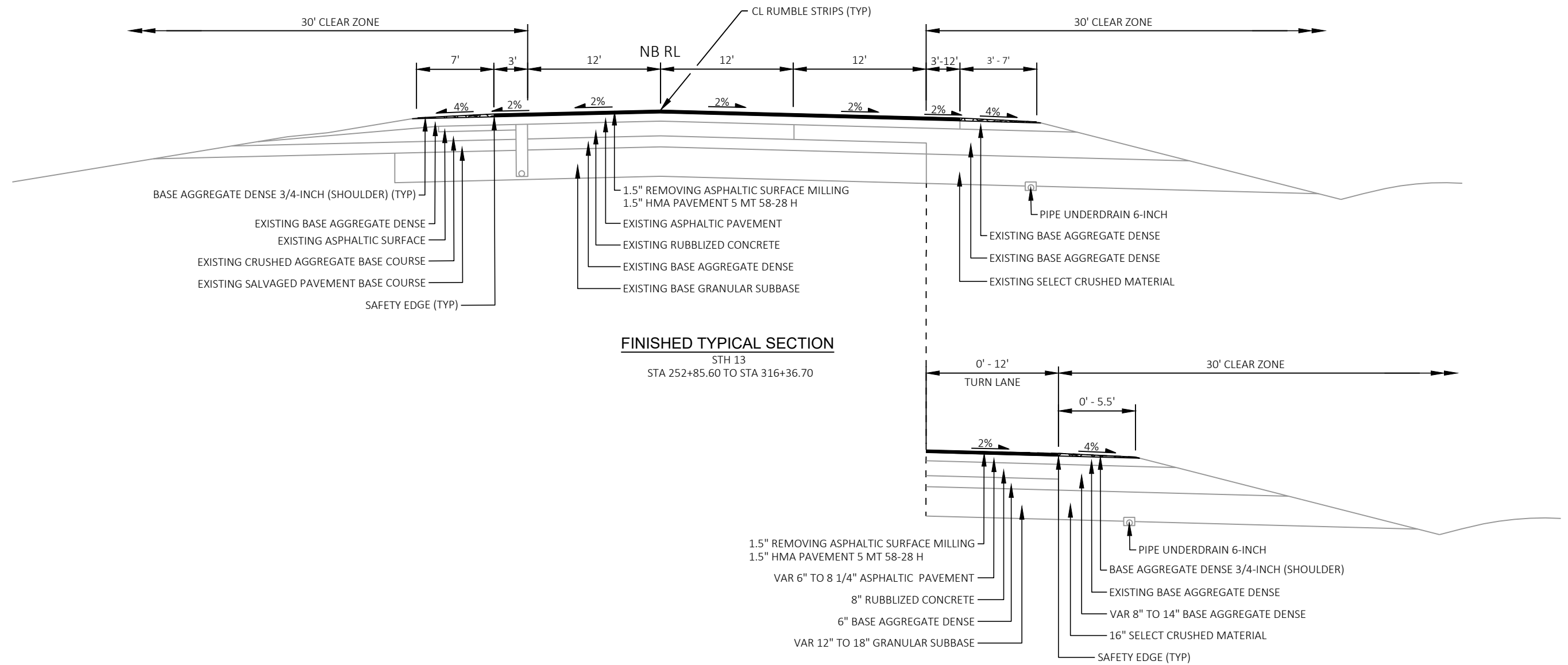


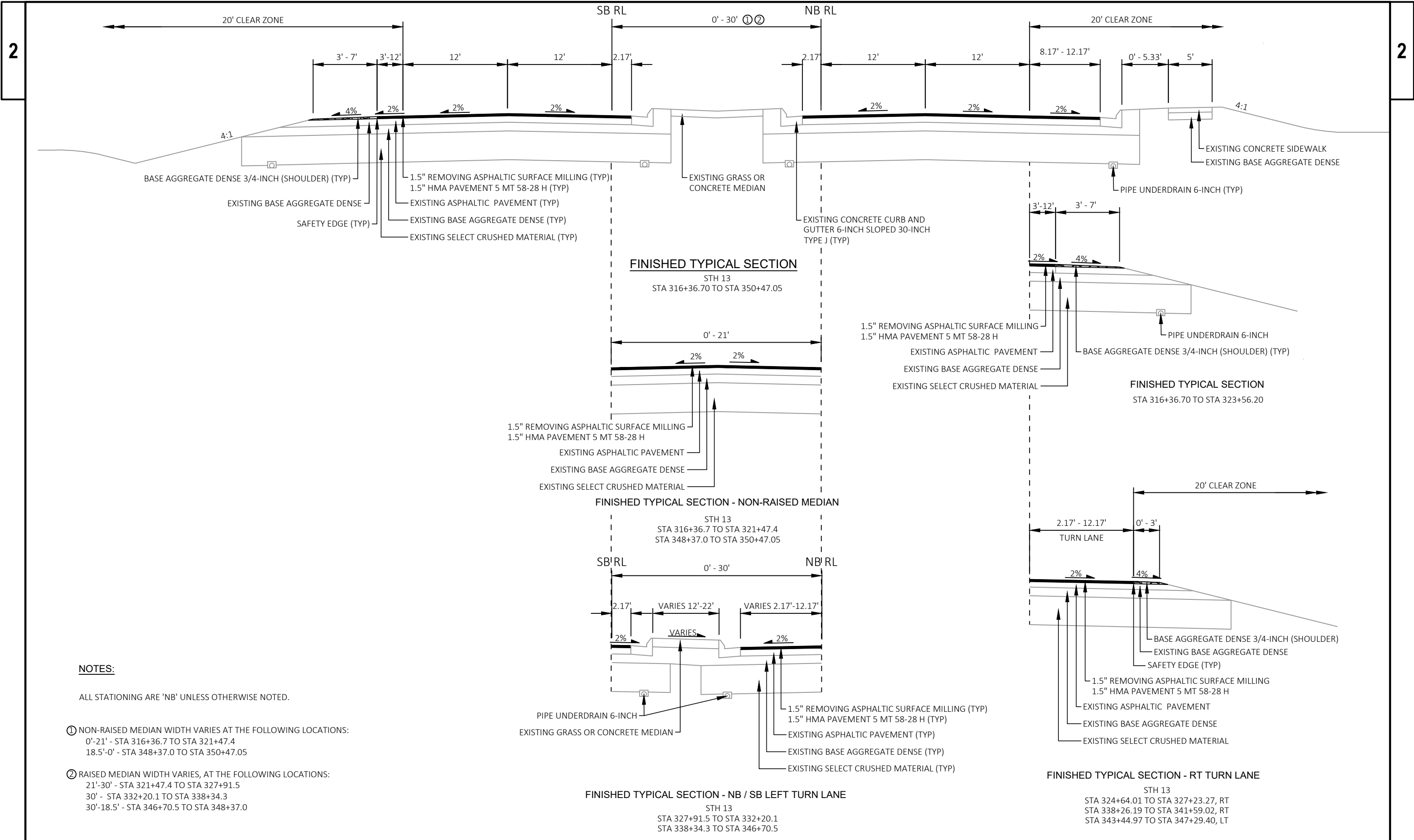
EXISTING TYPICAL SECTION

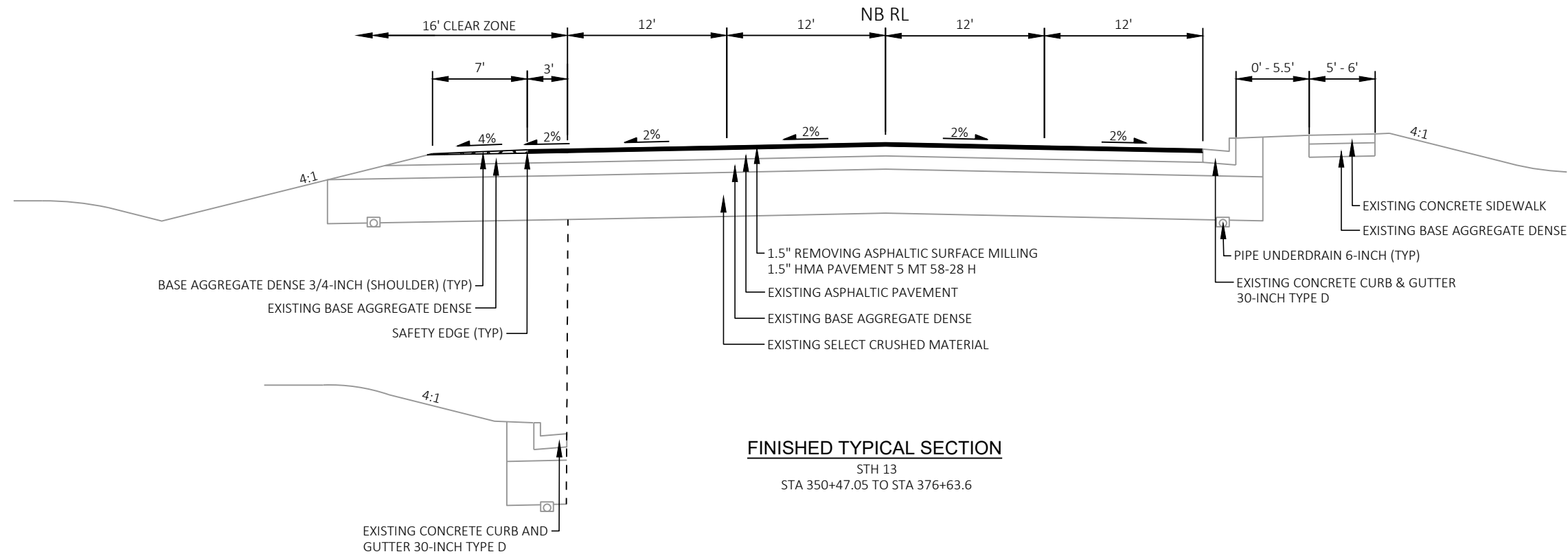
STH 13
STA 379+36.7 TO STA 381+52.14







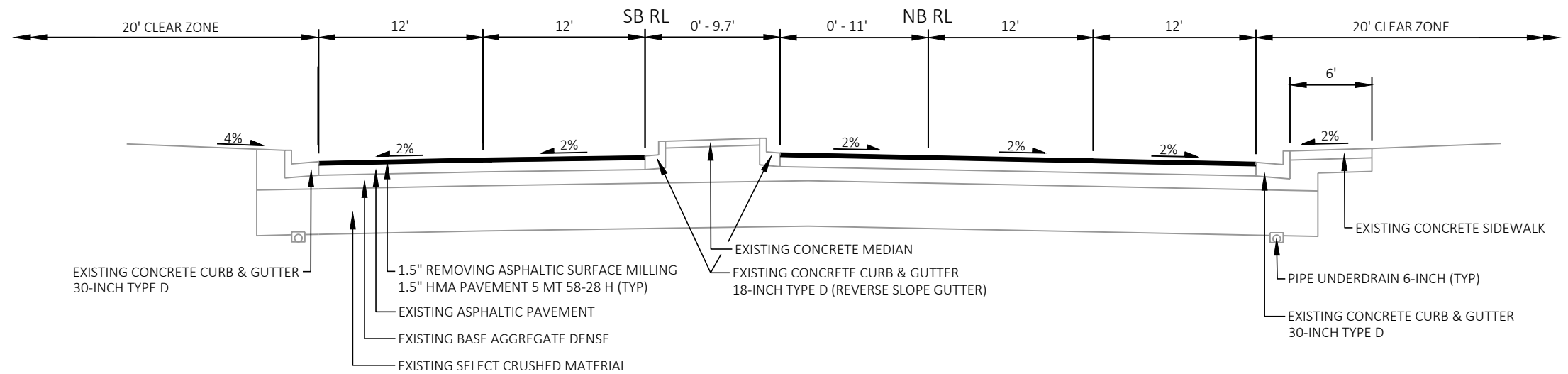


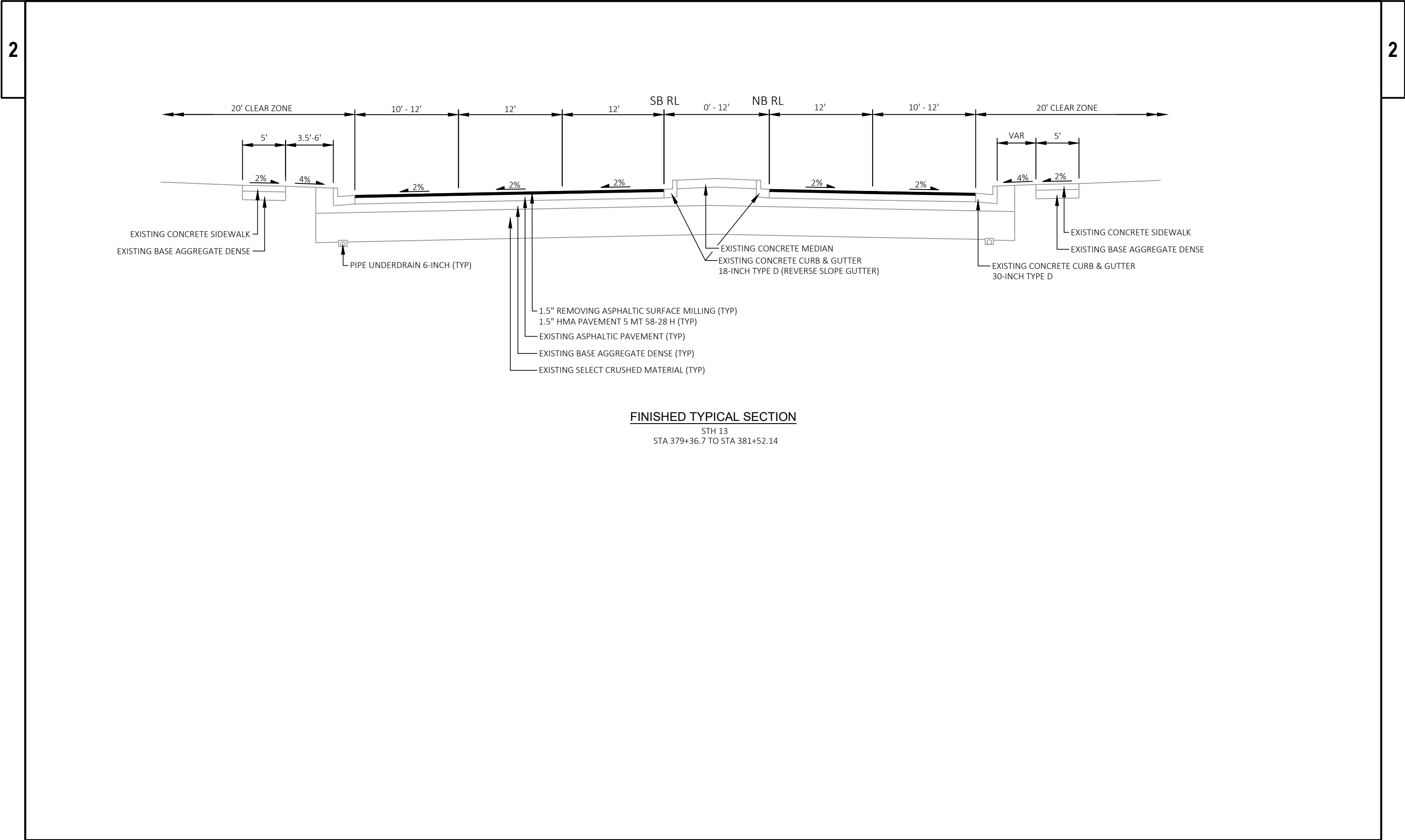


FINISHED TYPICAL SECTION

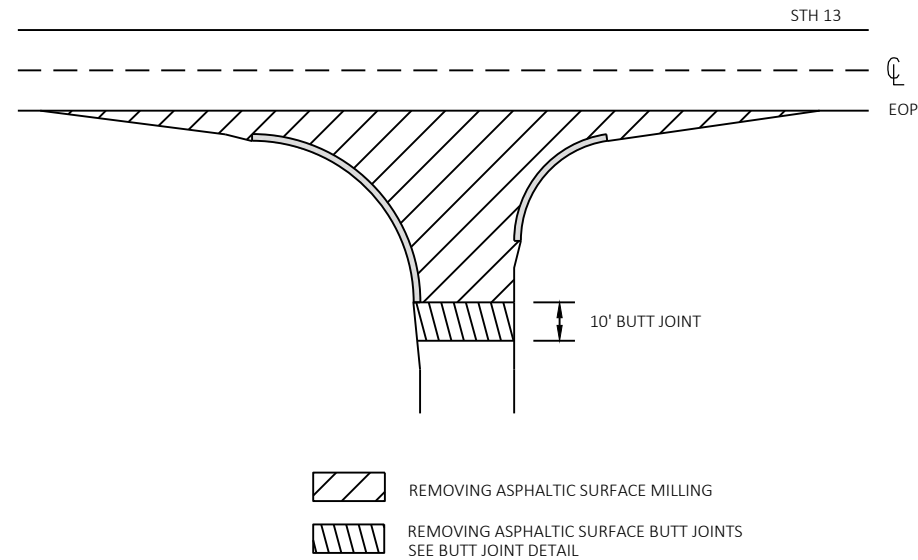
STH 13

STA 364+02.20 TO STA 376+63.6





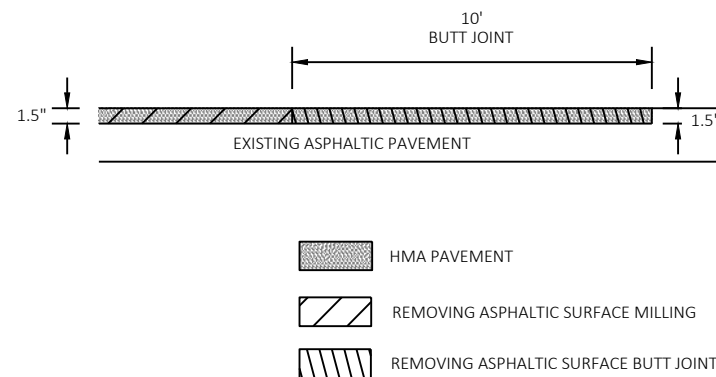
FINISHED TYPICAL SECTION
STH 13
STA 379+36.7 TO STA 381+52.14



SIDE ROAD CONSTRUCTION LIMITS WITHOUT ADJACENT RAILROAD CROSSING

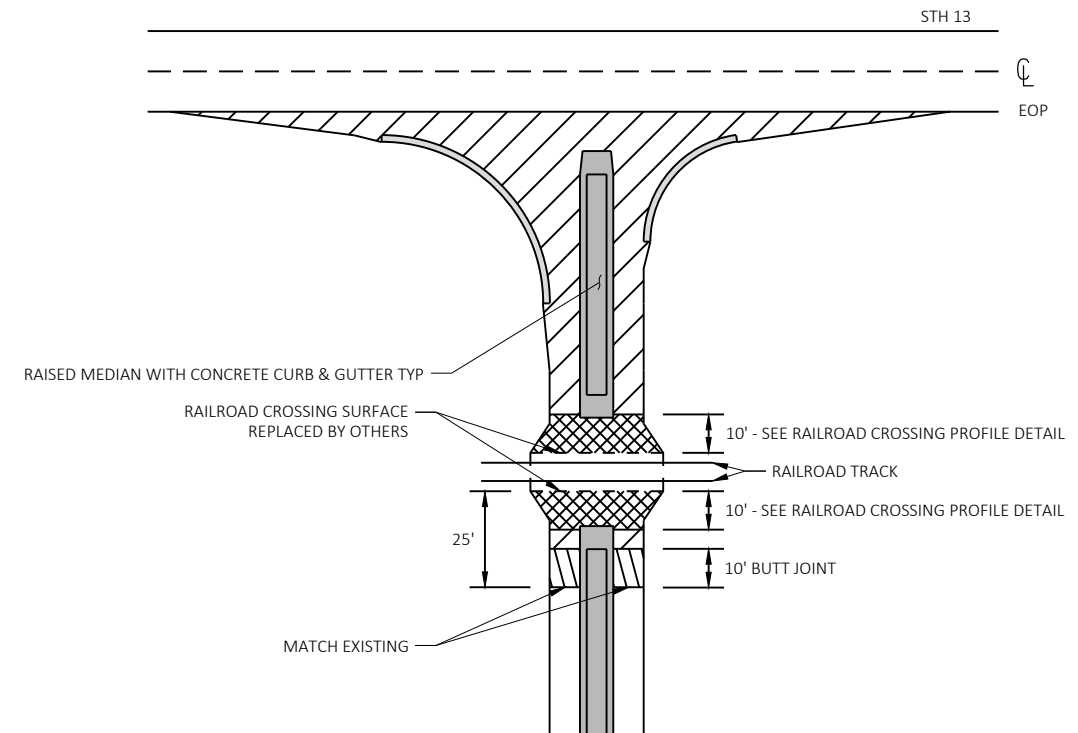
26TH ROAD (EAST LEG)
MERKEL ROAD
CTH F
BACK COUNTRY ROAD
APPLE ROAD
WILLOW DRIVE (EAST LEG)
WALNUT STREET
MAPLE STREET

NOTE: SEE PLAN FOR CONSTRUCTION LIMITS
ON DEPOT STREET, STH 98 AND CLARK STREET



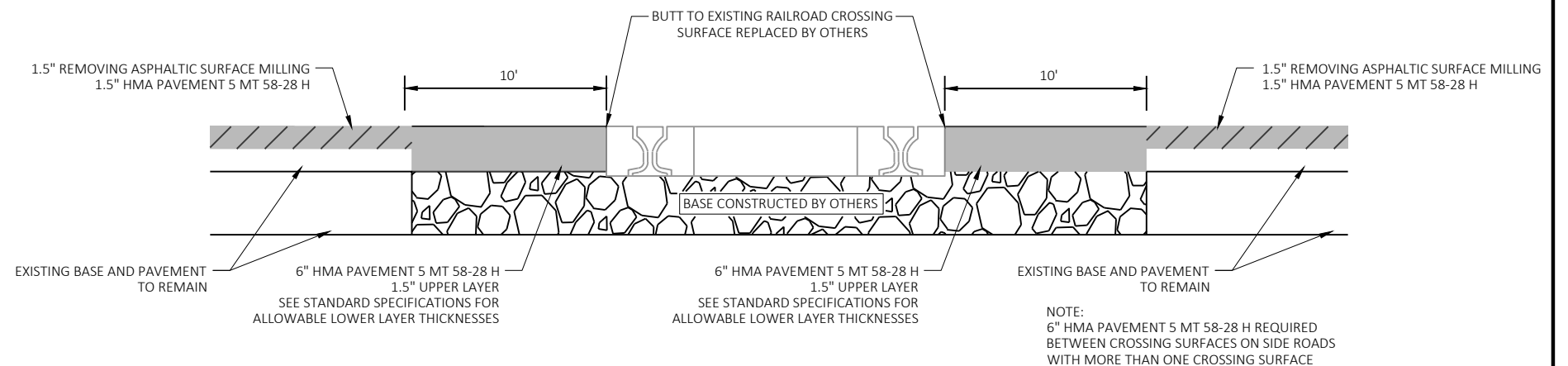
BUTT JOINT

MAINLINE AND SIDE ROADS

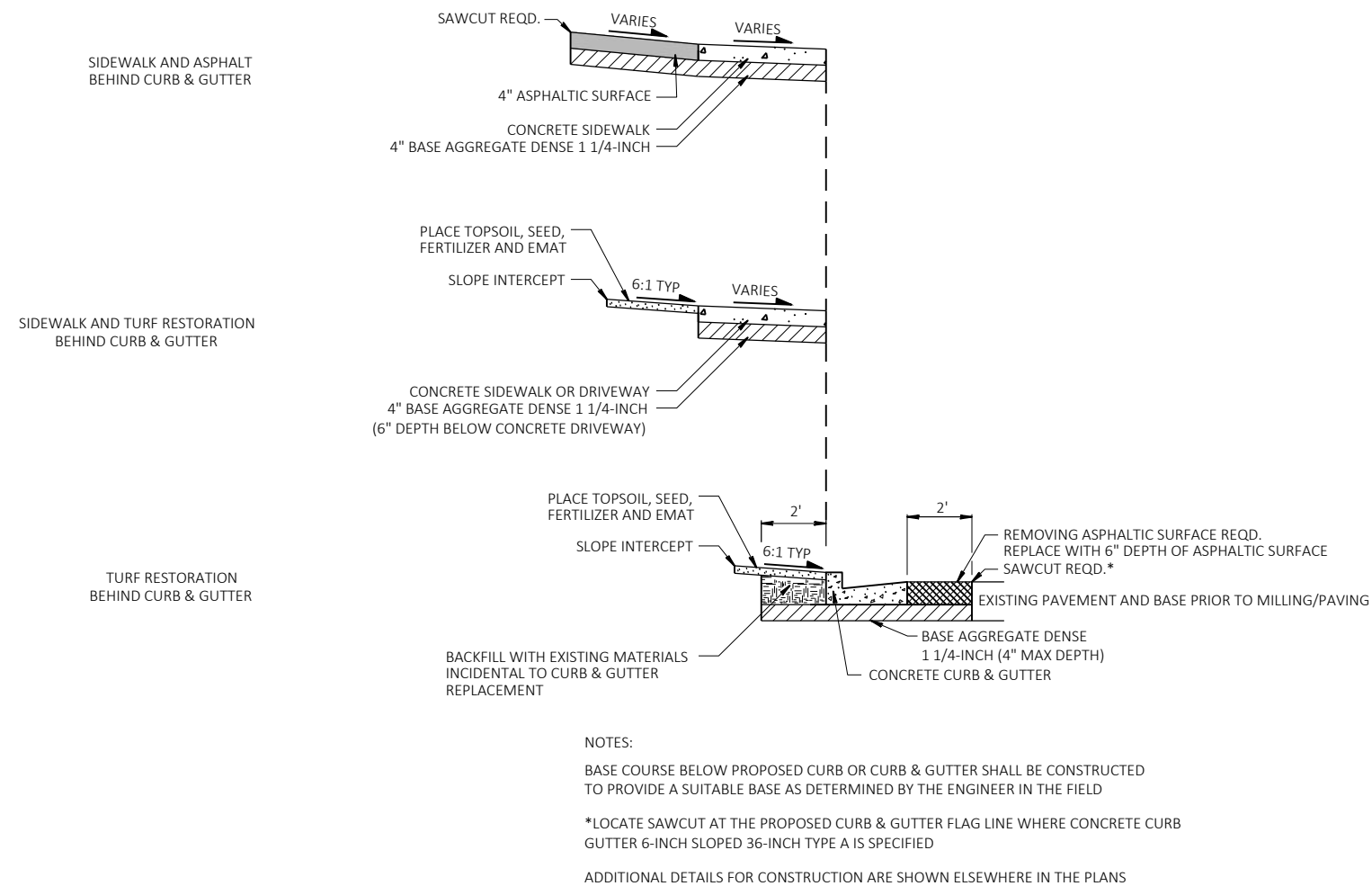


SIDE ROAD CONSTRUCTION LIMITS WITH ADJACENT RAILROAD CROSSING

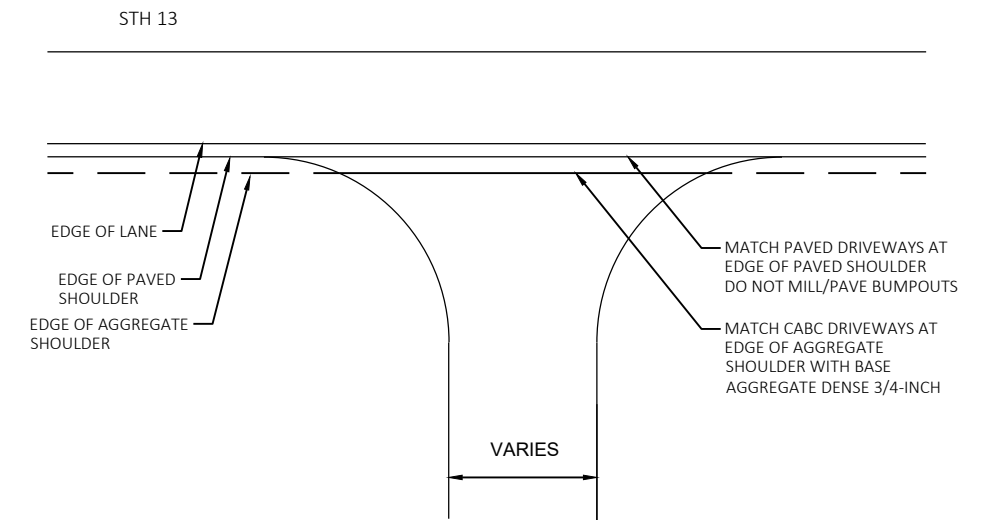
26TH ROAD (WEST LEG)
KARAU AVENUE
WILLOW DRIVE (WEST LEG)
NOTE: DO NOT PAVE IN GUTTER



RAILROAD CROSSING PROFILE



CURB & GUTTER AND SIDEWALK REPLACEMENT DETAIL

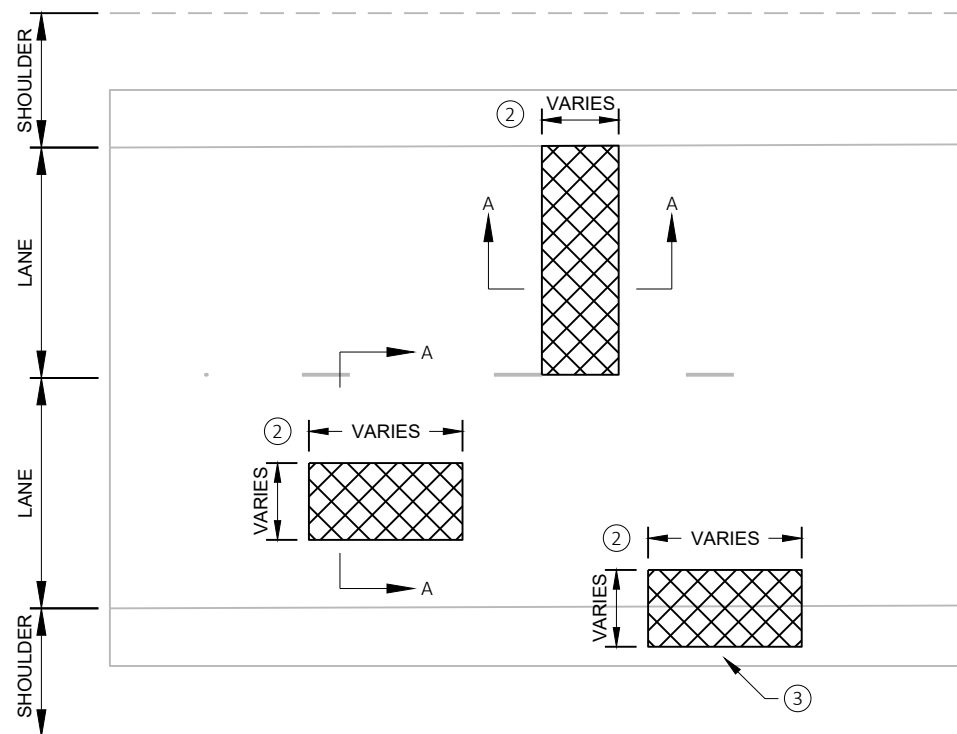


DETAIL FOR TYPICAL RURAL DRIVEWAY CONSTRUCTION LIMITS

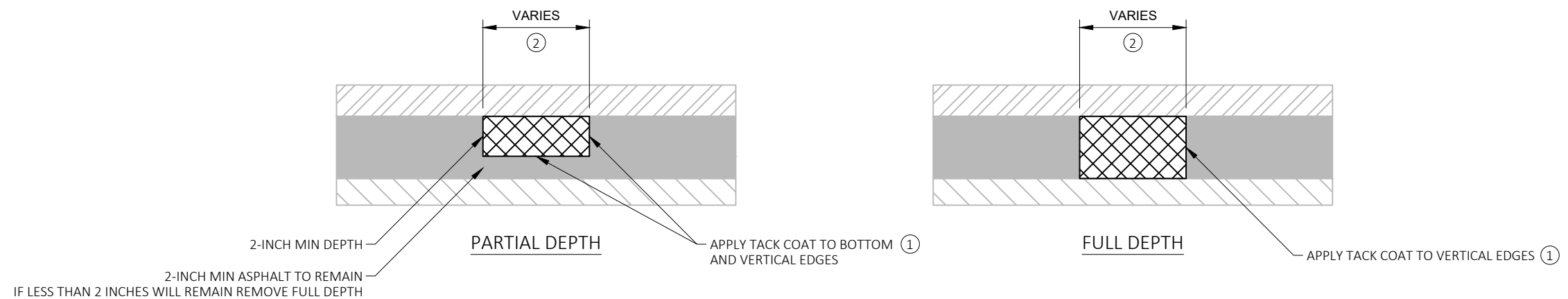
NOTES:

PERFORM REMOVING ASPHALTIC SURFACE MILLING PRIOR TO REMOVING DISTRESSED ASPHALTIC SURFACE MILLING

- ① MILLED VERTICAL EDGES ARE ACCEPTABLE, SAW CUTS ARE NOT REQUIRED.
- ② THE SMALLEST DIMENSION OF REMOVING DISTRESSED ASPHALTIC SURFACE MILLING IS 4 FEET IN ANY DIRECTION.
- ③ WHEN THE DISTANCE FROM THE EDGE OF PAVEMENT TO EDGE OF REMOVING DISTRESSED ASPHALTIC SURFACE MILLING IS LESS THAN 1-FOOT, EXTEND THE REMOVING DISTRESSED ASPHALTIC SURFACE MILLING TO THE EDGE OF PAVEMENT.



PLAN VIEW



SECTION A-A

	REMOVING ASPHALTIC SURFACE MILLING
	REMOVING DISTRESSED ASPHALTIC SURFACE MILLING ASPHALTIC SURFACE PATCHING
	EXISTING ASPHALT
	EXISTING BASE COURSE

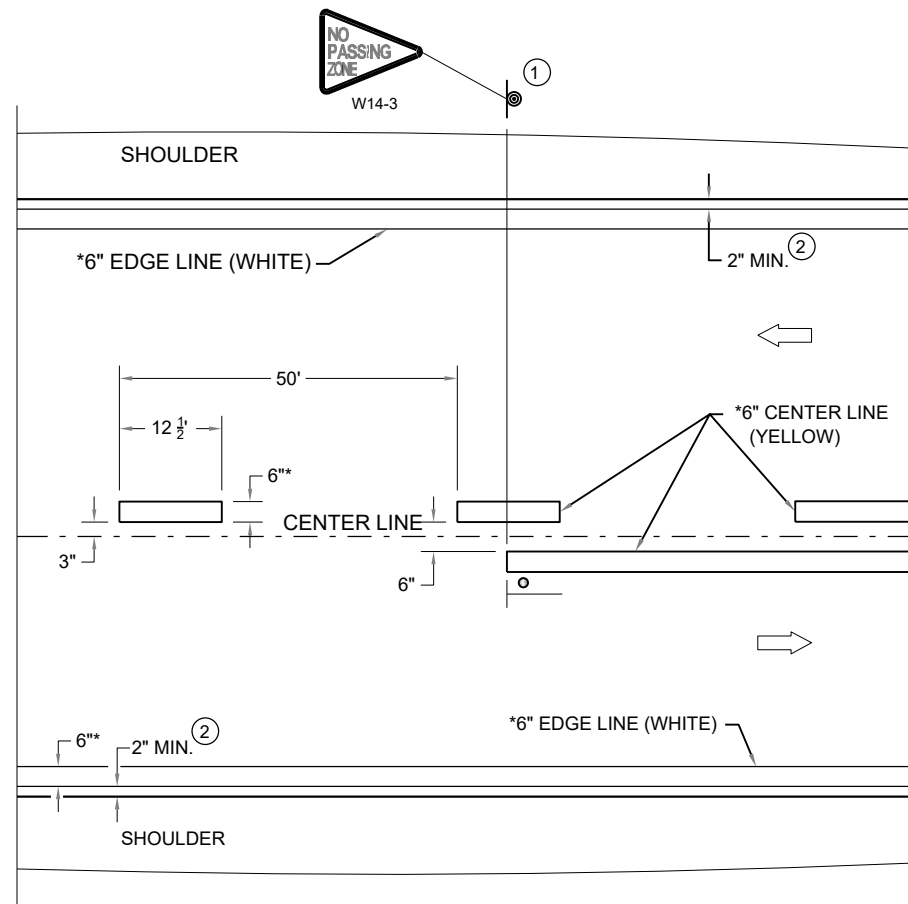
REMOVING DISTRESSED ASPHALTIC SURFACE MILLING

LOCATIONS AND LIMITS DETERMINED BY THE ENGINEER IN THE FIELD

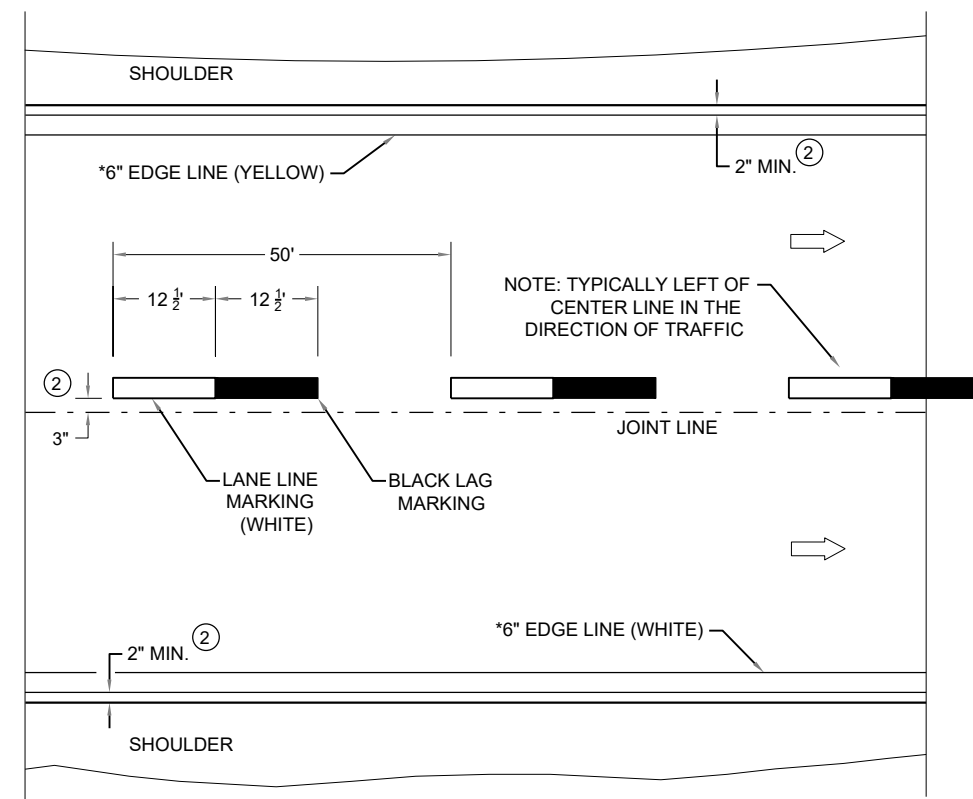
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

- 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.

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES.



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

LEGEND

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

RADIUS POINT TABLE

POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	327+16.63 - STH 13 'NB' 50+97.02 - APPLE ST	97.0' RT 75.8' RT	61.0' R	Y = 124986.23 X = 111697.31

LEGEND

- #

INLET PROTECTION TYPE #
- XXX

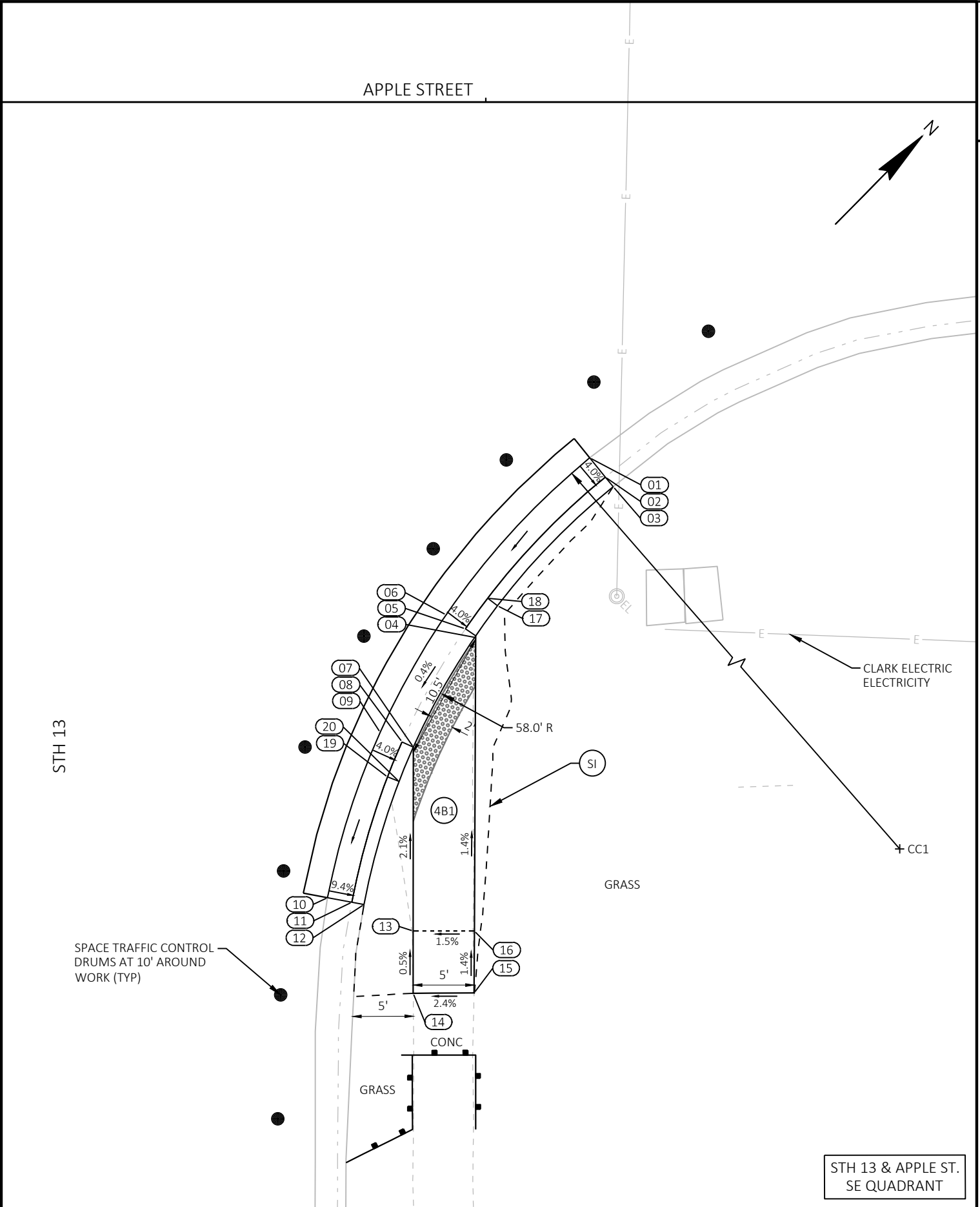
CURB RAMP TYPE
- SI

SLOPE INTERCEPT
- TPSP

TEMPORARY PEDESTRIAN SURFACE
- TCW

TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH
- TEMPORARY CURB RAMP
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- TRAFFIC CONTROL DRUMS

STH 13 & APPLE ST - SE QUAD					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
01	327+62.77	58.39' RT	1301.30	124992.69	111636.71
02	327+61.22	59.65' RT	1301.22	124992.47	111638.70
03	327+60.44	60.28' RT	1301.72	124992.36	111639.70
04	327+48.28	49.18' RT	1301.12	124975.91	111640.33
05	327+48.98	48.36' RT	1301.08	124975.83	111639.25
06	327+50.10	46.79' RT	1301.16	124975.53	111637.35
07	327+39.43	44.15' RT	1301.07	124966.08	111642.95
08	327+39.84	43.24' RT	1301.03	124965.73	111642.02
09	327+40.63	41.48' RT	1301.08	124965.05	111640.21
10	327+27.29	37.23' RT	1301.13	124952.57	111646.55
11	327+26.92	39.20' RT	1300.94	124953.68	111648.21
12	327+26.73	40.18' RT	1301.33	124954.24	111649.04
13	327+24.60	44.15' RT	1301.38	124955.51	111653.36
14	327+19.57	44.14' RT	1301.41	124951.93	111656.89
15	327+19.59	49.06' RT	1301.53	124955.39	111660.38
16	327+24.59	49.08' RT	1301.46	124958.97	111656.88
17	327+50.84	50.94' RT	1301.28	124978.97	111639.79
18	327+51.45	50.15' RT	1301.11	124978.85	111638.79
19	327+37.02	42.07' RT	1300.97	124962.90	111643.16
20	327+36.66	43.00' RT	1301.15	124963.30	111644.08



2

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	328+53.99 - STH 13 'NB' 50+77.46 - APPLE ST	77.5' RT 62.5' LT	40.0' R	Y = 125071.05 X = 111586.27

LEGEND

#

INLET PROTECTION TYPE #

XXX

CURB RAMP TYPE

SI

SLOPE INTERCEPT

TPSP

TEMPORARY PEDESTRIAN SURFACE

TCW

TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH

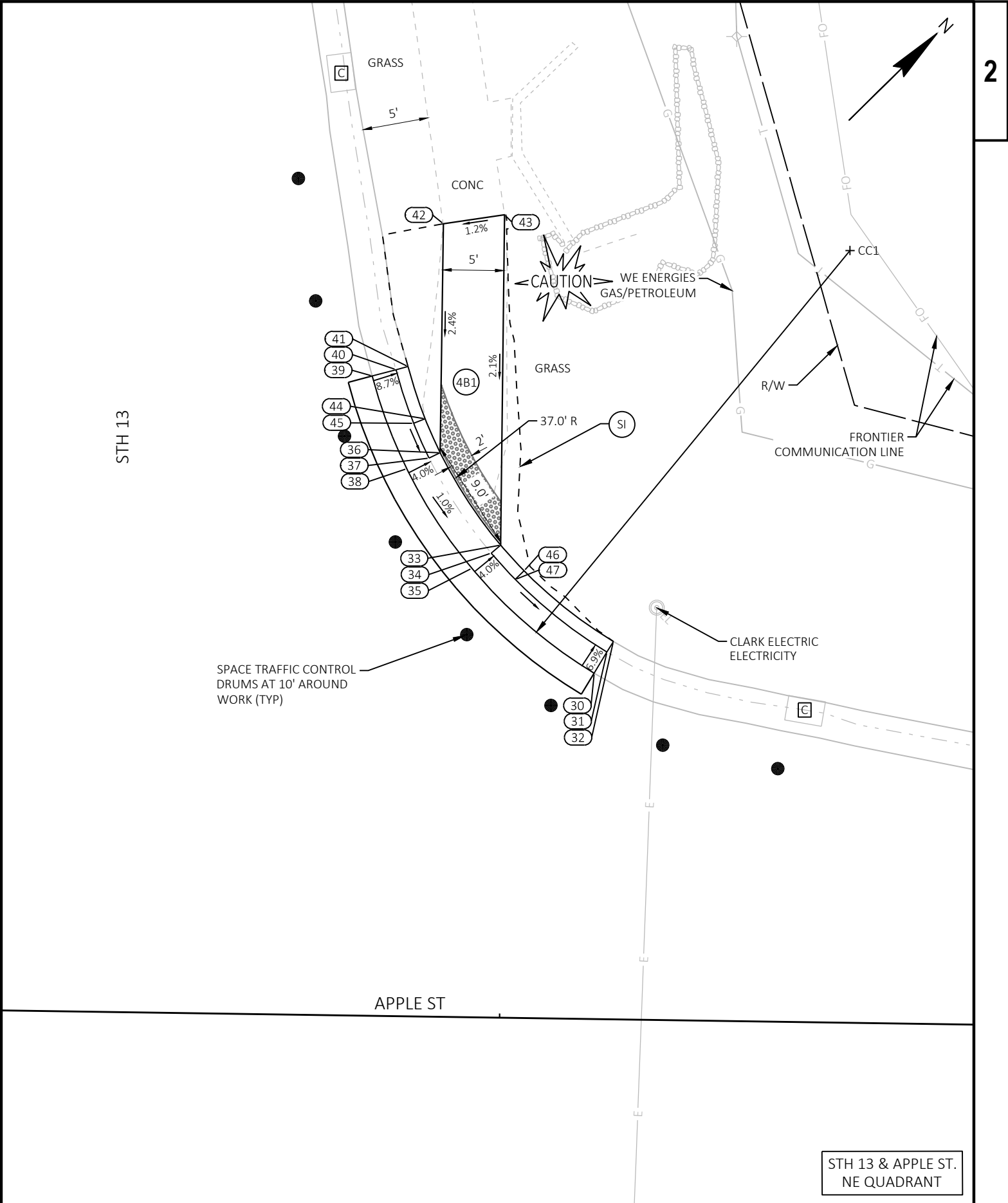
TEMPORARY CURB RAMP

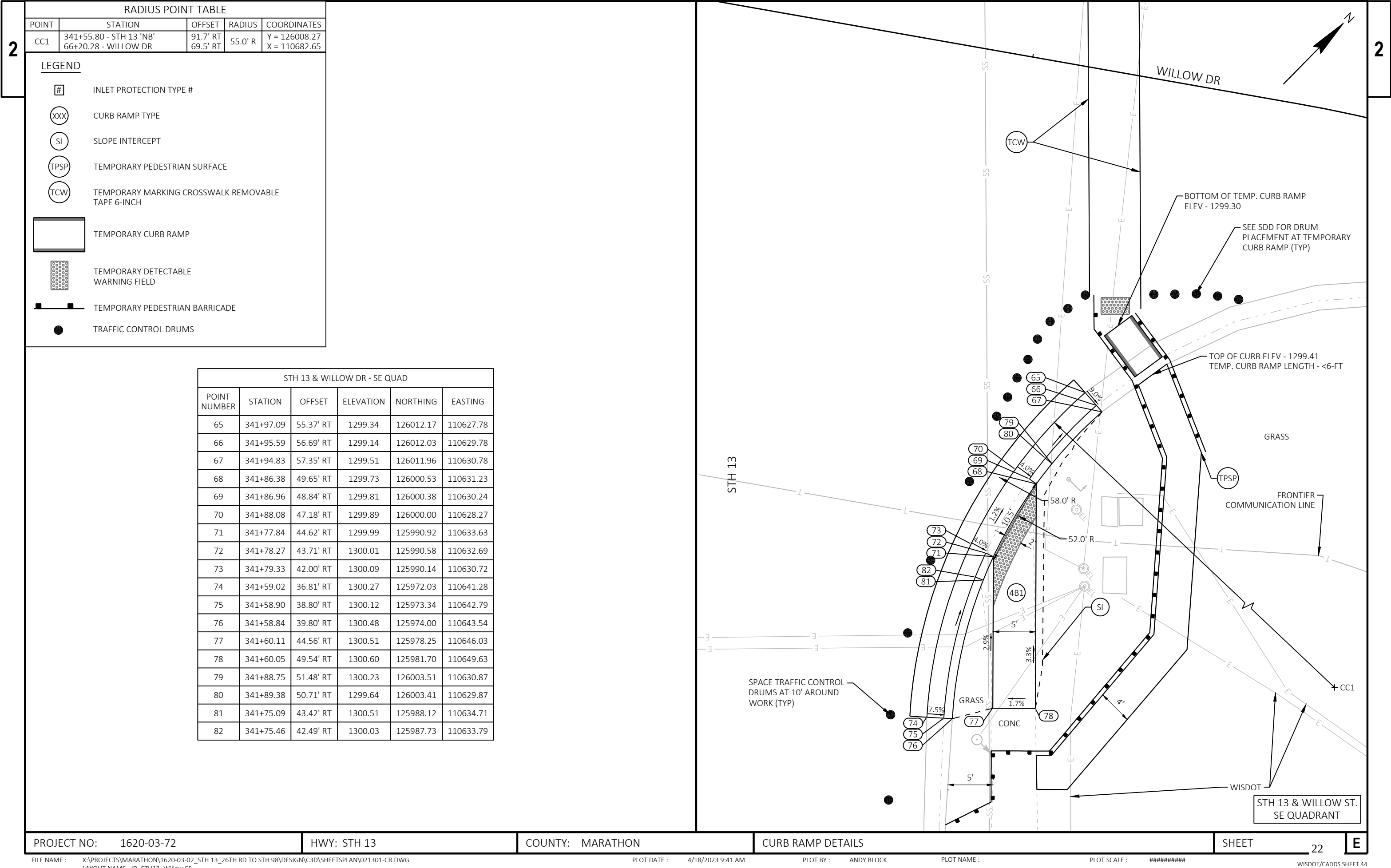
TEMPORARY DETECTABLE WARNING FIELD

TEMPORARY PEDESTRIAN BARRICADE

TRAFFIC CONTROL DRUMS

STH 13 & APPLE ST - NE QUAD					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
30	328+19.47	57.25' RT	1301.51	125032.28	111596.10
31	328+21.20	58.26' RT	1301.35	125034.22	111595.61
32	328+22.06	58.76' RT	1301.70	125035.19	111595.36
33	328+29.73	49.53' RT	1301.41	125034.16	111583.40
34	328+29.07	48.77' RT	1301.38	125033.17	111583.33
35	328+27.81	47.22' RT	1301.46	125031.18	111583.11
36	328+37.14	44.52' RT	1301.44	125035.93	111574.64
37	328+36.68	43.63' RT	1301.40	125034.98	111574.32
38	328+35.80	41.84' RT	1301.48	125033.09	111573.66
39	328+43.27	38.93' RT	1301.60	125036.37	111566.35
40	328+43.80	40.85' RT	1301.42	125038.10	111567.34
41	328+44.07	41.82' RT	1301.78	125038.97	111567.84
42	328+55.67	44.51' RT	1301.88	125049.12	111561.62
43	328+56.47	49.45' RT	1301.94	125053.16	111564.57
44	328+39.86	43.27' RT	1301.46	125036.99	111571.83
45	328+39.48	42.34' RT	1301.41	125036.07	111571.44
46	328+27.68	51.45' RT	1301.86	125034.05	111586.21
47	328+26.97	50.75' RT	1301.37	125033.05	111586.21





2

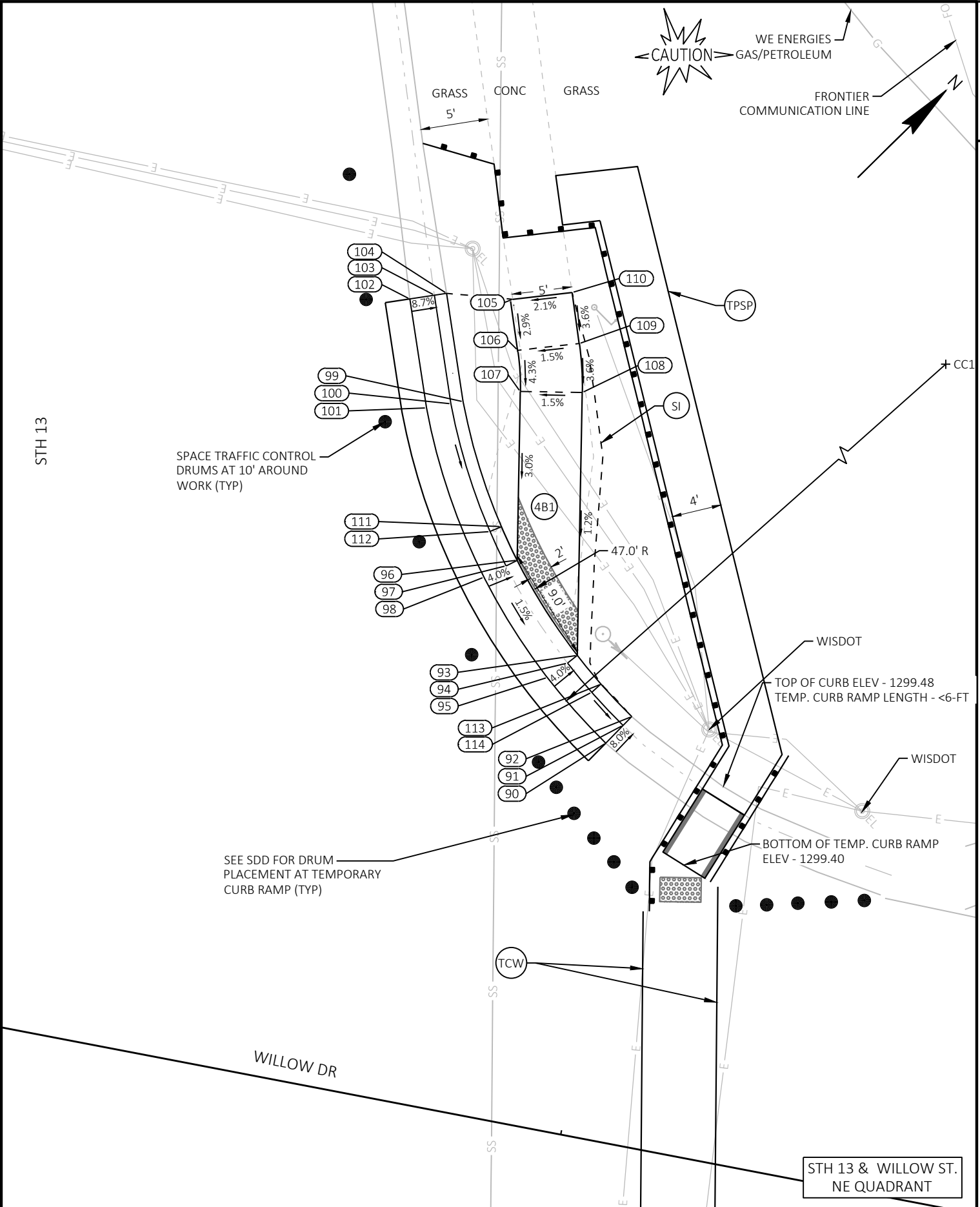
RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	343+05.09 - 5TH 13'NB' 65+74.31 - WILLOW DR	86.0' RT 74.0' LT	50.0' R	Y = 126110.62 X = 110573.81

LEGEND

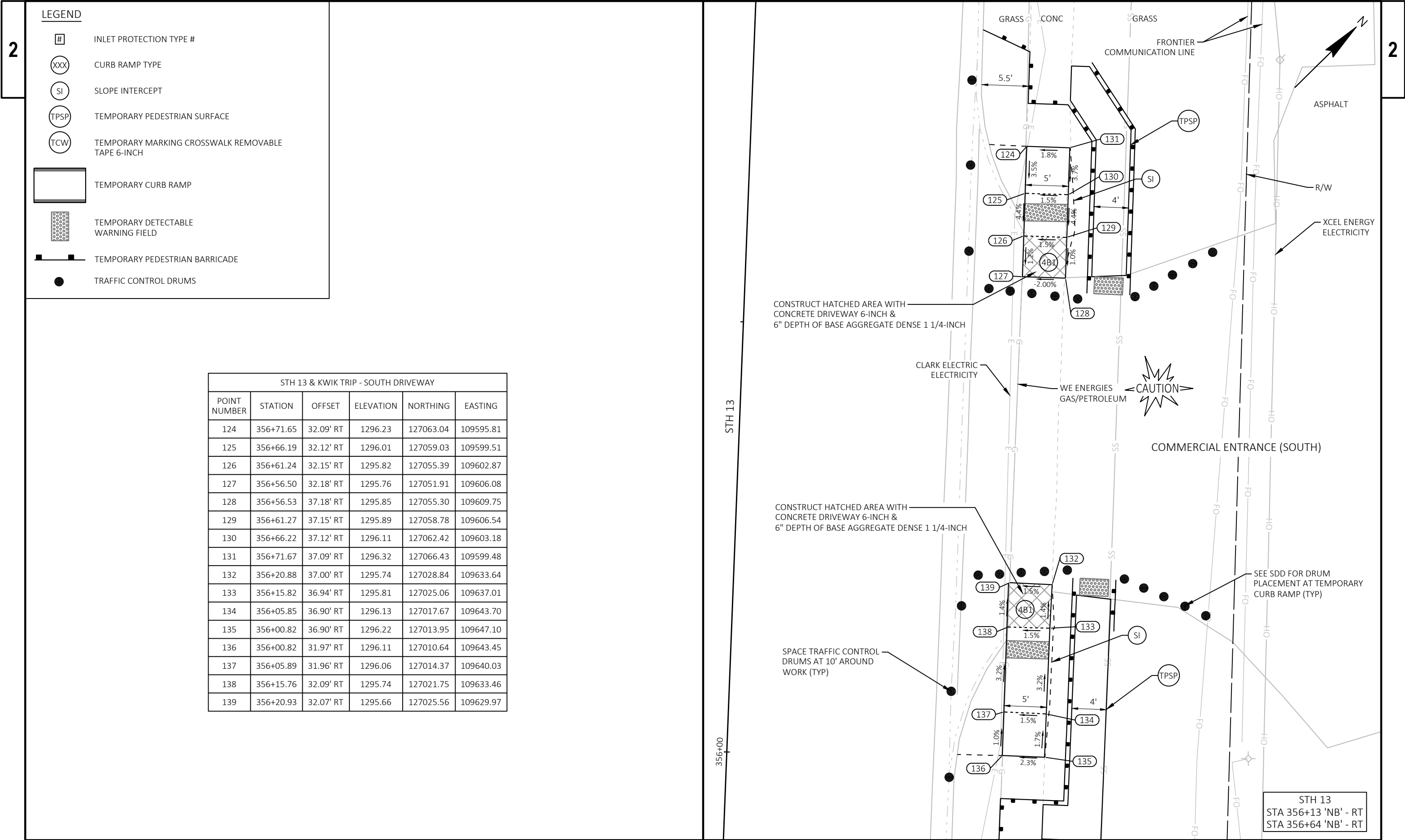
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|---|---|
| # | INLET PROTECTION TYPE # |
| XXX | CURB RAMP TYPE |
| SI | SLOPE INTERCEPT |
| TPSP | TEMPORARY PEDESTRIAN SURFACE |
| TCW | TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH |
|  | TEMPORARY CURB RAMP |
|  | TEMPORARY DETECTABLE WARNING FIELD |
|  | TEMPORARY PEDESTRIAN BARRICADE |
|  | TRAFFIC CONTROL DRUMS |

STH 13 & WILLOW DR - NE QUAD					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
90	342+68.08	52.41' RT	1299.62	126060.66	110575.84
91	342+69.53	53.79' RT	1299.46	126062.66	110575.81
92	342+70.26	54.48' RT	1299.79	126063.66	110575.79
93	342+75.12	50.01' RT	1300.32	126063.99	110569.19
94	342+74.50	49.23' RT	1299.83	126063.00	110569.08
95	342+73.30	47.62' RT	1299.91	126061.02	110568.77
96	342+82.72	45.04' RT	1300.10	126065.92	110560.32
97	342+82.26	44.16' RT	1300.10	126064.96	110560.01
98	342+81.32	42.39' RT	1300.17	126063.05	110559.42
99	342+95.45	40.50' RT	1300.83	126071.79	110548.15
100	342+95.27	39.52' RT	1300.33	126070.97	110547.58
101	342+94.90	37.55' RT	1300.41	126069.33	110546.43
102	343+03.68	36.08' RT	1300.67	126074.55	110539.22
103	343+04.01	38.05' RT	1300.49	126076.17	110540.39
104	343+04.18	39.04' RT	1300.83	126076.98	110540.98
105	343+03.78	44.39' RT	1300.77	126080.46	110545.08
106	342+99.67	44.84' RT	1300.66	126077.84	110548.28
107	342+96.35	45.10' RT	1300.51	126075.66	110550.79
108	342+96.33	50.10' RT	1300.58	126079.16	110554.37
109	343+00.28	49.80' RT	1300.73	126081.76	110551.38

STH 13 & WILLOW DR - NE QUAD					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
110	343+04.39	49.16' RT	1300.88	126084.24	110548.04
111	342+85.42	43.73' RT	1300.23	126066.92	110557.49
112	342+85.01	42.82' RT	1300.14	126065.98	110557.13
113	342+72.83	51.96' RT	1300.08	126063.73	110572.18
114	342+72.16	51.22' RT	1299.67	126062.73	110572.13

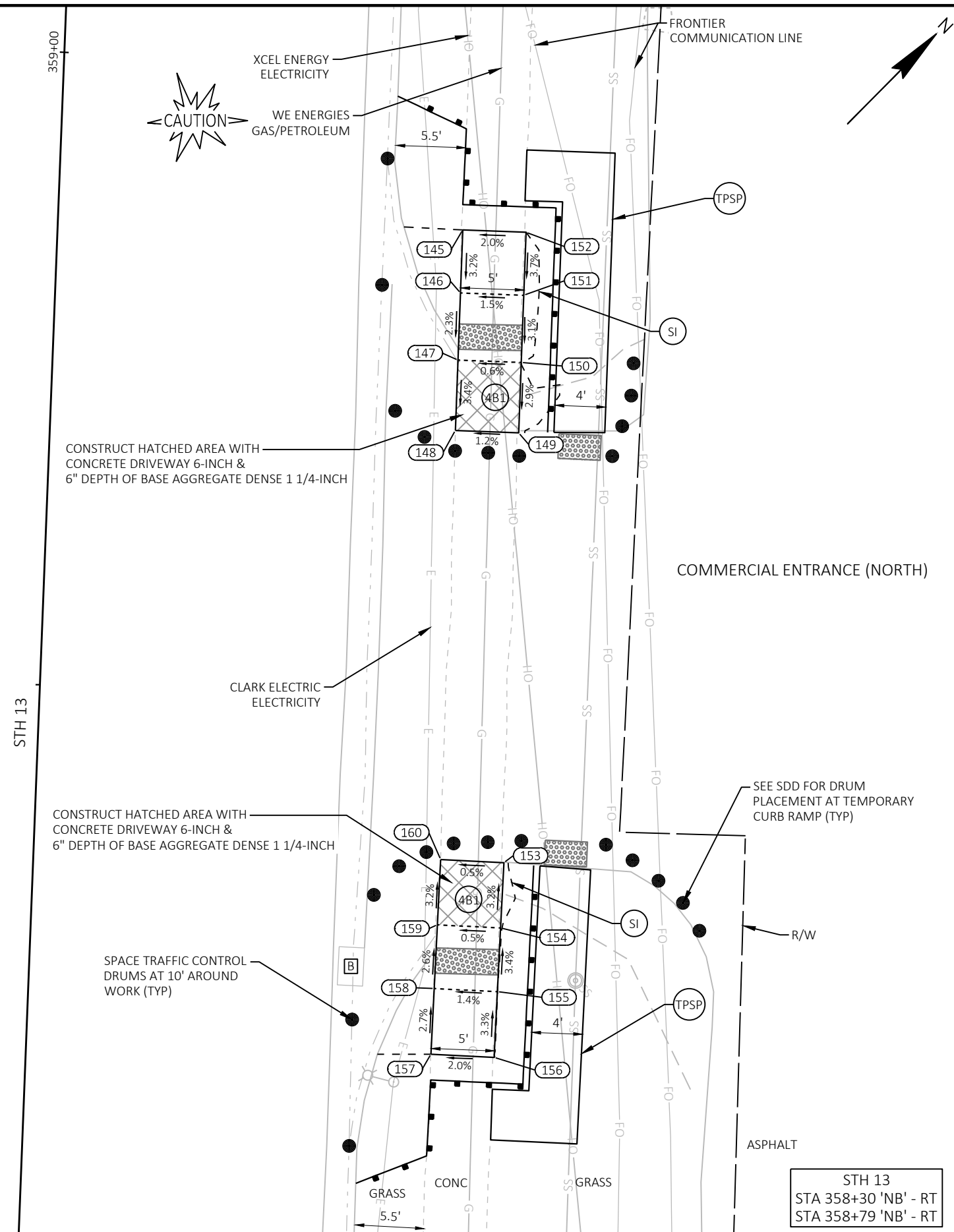


2



 TRAFFIC CONTROL DRUMS

STH 13 & KWIK TRIP - NORTH DRIVEWAY					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
145	358+87.20	32.00' RT	1297.00	127222.22	109450.47
146	358+82.21	32.00' RT	1296.84	127218.55	109453.83
147	358+76.91	32.01' RT	1296.72	127214.63	109457.42
148	358+71.34	32.02' RT	1296.53	127210.52	109461.17
149	358+71.35	37.02' RT	1296.59	127213.90	109464.86
150	358+76.91	37.01' RT	1296.75	127218.00	109461.11
151	358+82.22	37.00' RT	1296.91	127221.92	109457.52
152	358+87.21	37.00' RT	1297.10	127225.60	109454.16
153	358+37.37	37.16' RT	1296.35	127188.90	109487.87
154	358+32.20	37.10' RT	1296.52	127185.04	109491.31
155	358+27.17	37.05' RT	1296.69	127181.28	109494.66
156	358+21.97	36.99' RT	1296.86	127177.40	109498.12
157	358+22.03	31.99' RT	1296.76	127174.07	109494.38
158	358+27.22	32.05' RT	1296.62	127177.95	109490.93
159	358+32.26	32.10' RT	1296.49	127181.71	109487.57
160	358+37.43	32.16' RT	1296.33	127185.57	109484.13



RADIUS POINT TABLE

POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	359+95.35 - STH 13 'NB' 71+30.43 - DEPOT ST	84.1' RT 72.3' RT	60.0' R	Y = 127337.28 X = 109416.11

LEGEND

#

INLET PROTECTION TYPE #

XXX

CURB RAMP TYPE

SI

SLOPE INTERCEPT

TPSP

TEMPORARY PEDESTRIAN SURFACE

TCW

TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH

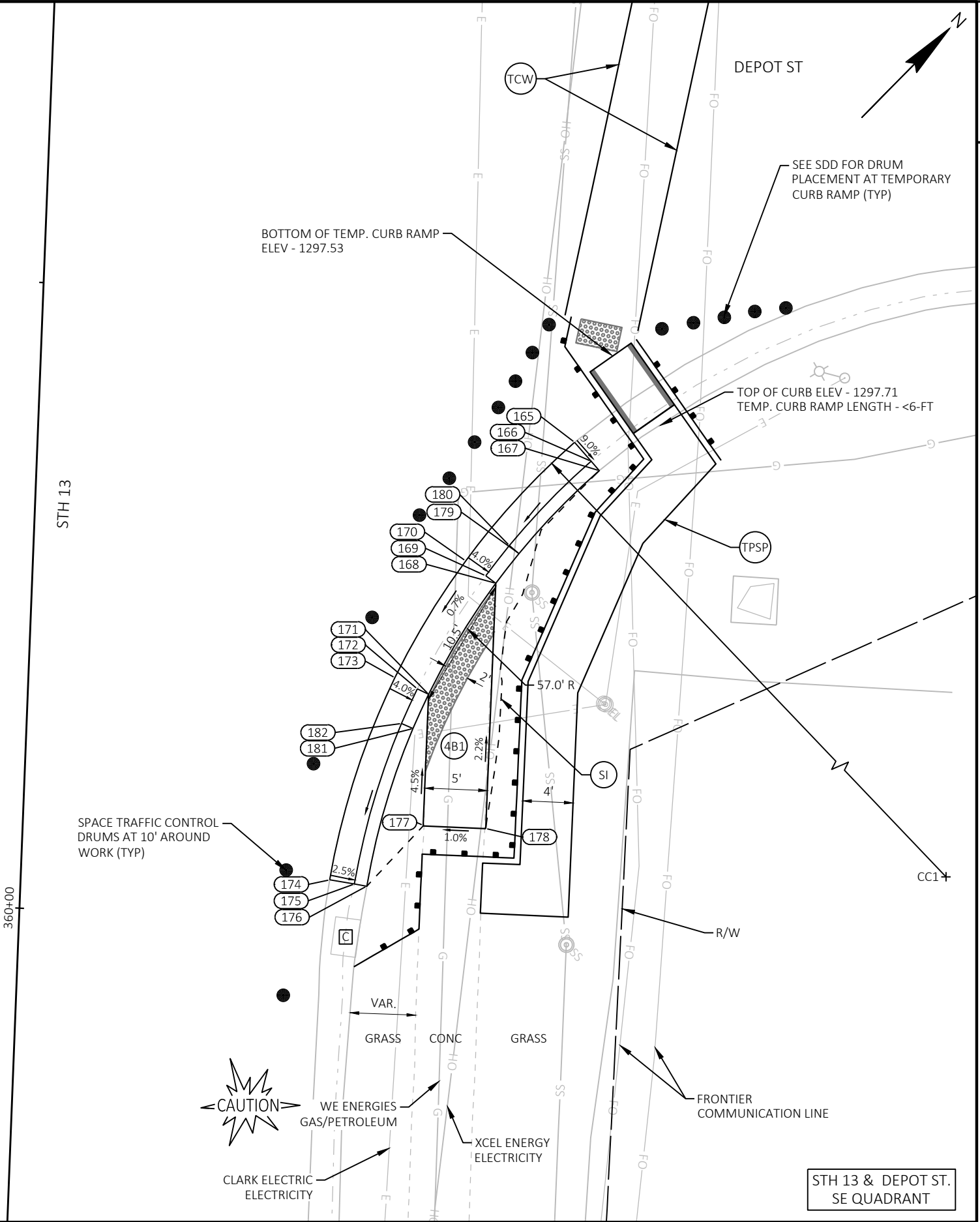
TEMPORARY CURB RAMP

TEMPORARY DETECTABLE WARNING FIELD

TEMPORARY PEDESTRIAN BARRICADE

TRAFFIC CONTROL DRUMS

STH 13 & E DEPOT ST - SE QUAD					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
165	360+38.88	42.86' RT	1297.45	127341.61	109356.26
166	360+37.43	44.23' RT	1297.27	127341.46	109358.26
167	360+36.71	44.92' RT	1297.65	127341.39	109359.26
168	360+27.40	37.01' RT	1297.16	127329.19	109359.69
169	360+27.97	36.19' RT	1297.16	127329.04	109358.70
170	360+29.09	34.53' RT	1297.24	127328.76	109356.72
171	360+18.33	31.98' RT	1297.07	127319.10	109362.09
172	360+18.73	31.07' RT	1297.07	127318.78	109361.14
173	360+19.54	29.24' RT	1297.15	127318.14	109359.24
174	360+03.22	24.67' RT	1297.09	127303.00	109366.86
175	360+02.96	26.65' RT	1297.04	127304.14	109368.50
176	360+02.83	27.64' RT	1297.40	127304.72	109369.32
177	360+07.85	31.95' RT	1297.55	127311.33	109369.12
178	360+07.79	36.95' RT	1297.60	127314.65	109372.86
179	360+29.84	38.76' RT	1297.69	127332.17	109359.34
180	360+30.44	37.97' RT	1297.19	127332.08	109358.34
181	360+15.55	30.85' RT	1297.57	127316.28	109363.12
182	360+15.91	29.91' RT	1297.07	127315.91	109362.19



2

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	361+38.68 - STH 13 'NB' 70+55.65 - DEPOT ST	63.7' RT 57.3' LT	40.0' R	Y = 127429.40 X = 109304.44

LEGEND

#

INLET PROTECTION TYPE #

XXX

CURB RAMP TYPE

SI

SLOPE INTERCEPT

TPSP

TEMPORARY PEDESTRIAN SURFACE

TCW

TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH

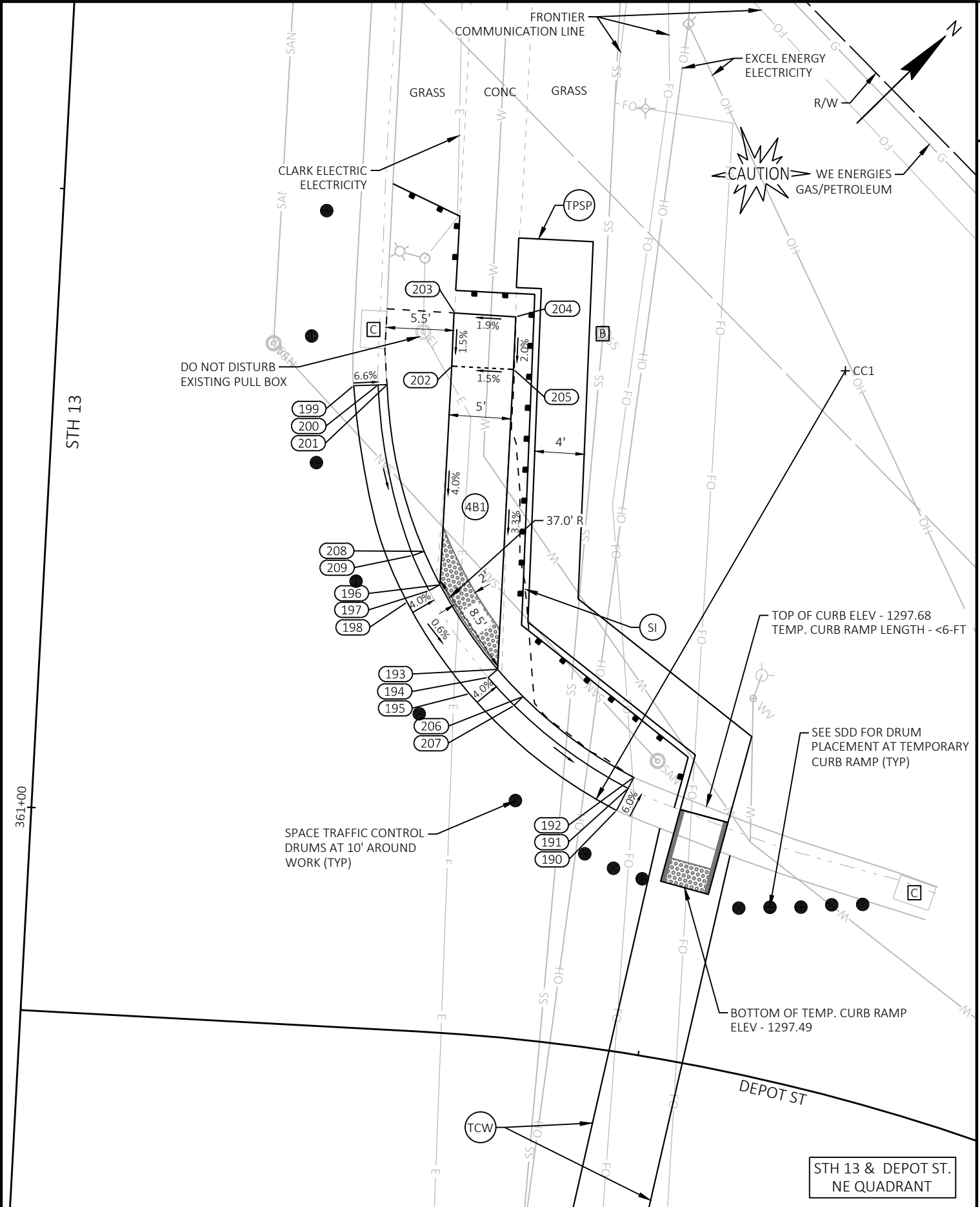
TEMPORARY CURB RAMP

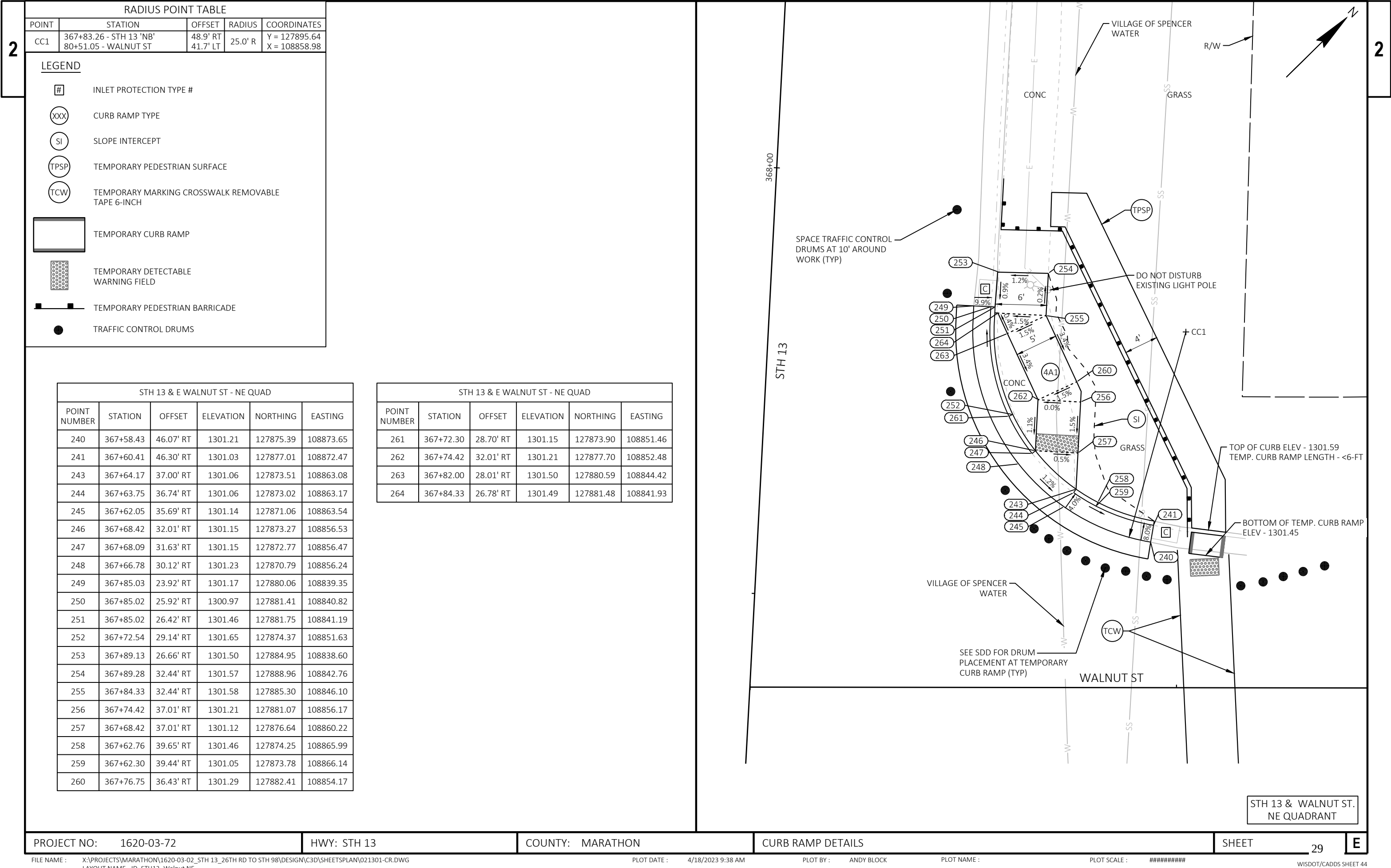
TEMPORARY DETECTABLE WARNING FIELD

TEMPORARY PEDESTRIAN BARRICADE

TRAFFIC CONTROL DRUMS

STH 13 & E DEPOT ST - NE QUAD					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
190	361+02.27	47.18' RT	1297.49	127391.34	109316.74
191	361+04.09	48.00' RT	1297.37	127393.25	109316.13
192	361+05.00	48.42' RT	1297.74	127394.20	109315.82
193	361+13.12	36.98' RT	1297.42	127392.49	109301.89
194	361+12.43	36.26' RT	1297.42	127391.49	109301.82
195	361+11.05	34.81' RT	1297.50	127389.50	109301.69
196	361+19.69	31.98' RT	1297.45	127393.97	109293.78
197	361+19.17	31.12' RT	1297.45	127393.02	109293.49
198	361+18.15	29.41' RT	1297.53	127391.10	109292.91
199	361+35.36	24.16' RT	1297.64	127400.28	109277.44
200	361+35.52	26.12' RT	1297.51	127401.73	109278.77
201	361+35.59	26.86' RT	1297.95	127402.27	109279.28
202	361+37.36	31.98' RT	1298.15	127407.03	109281.87
203	361+41.65	32.01' RT	1298.22	127410.21	109278.99
204	361+41.60	36.94' RT	1298.31	127413.50	109282.67
205	361+37.36	36.98' RT	1298.23	127410.40	109285.56
206	361+11.04	39.14' RT	1297.91	127392.41	109304.89
207	361+10.29	38.47' RT	1297.41	127391.41	109304.90
208	361+22.32	30.55' RT	1297.96	127394.95	109290.94
209	361+21.92	29.63' RT	1297.46	127394.04	109290.53





RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	373+49.43 - STH 13 'NB' 90+50.81 - MAPLE ST	49.0' RT 38.6' LT	25.0' R	Y = 128313.68 X = 108480.47

LEGEND

#

INLET PROTECTION TYPE #

XXX

CURB RAMP TYPE

SI

SLOPE INTERCEPT

TPSP

TEMPORARY PEDESTRIAN SURFACE

TCW

TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH

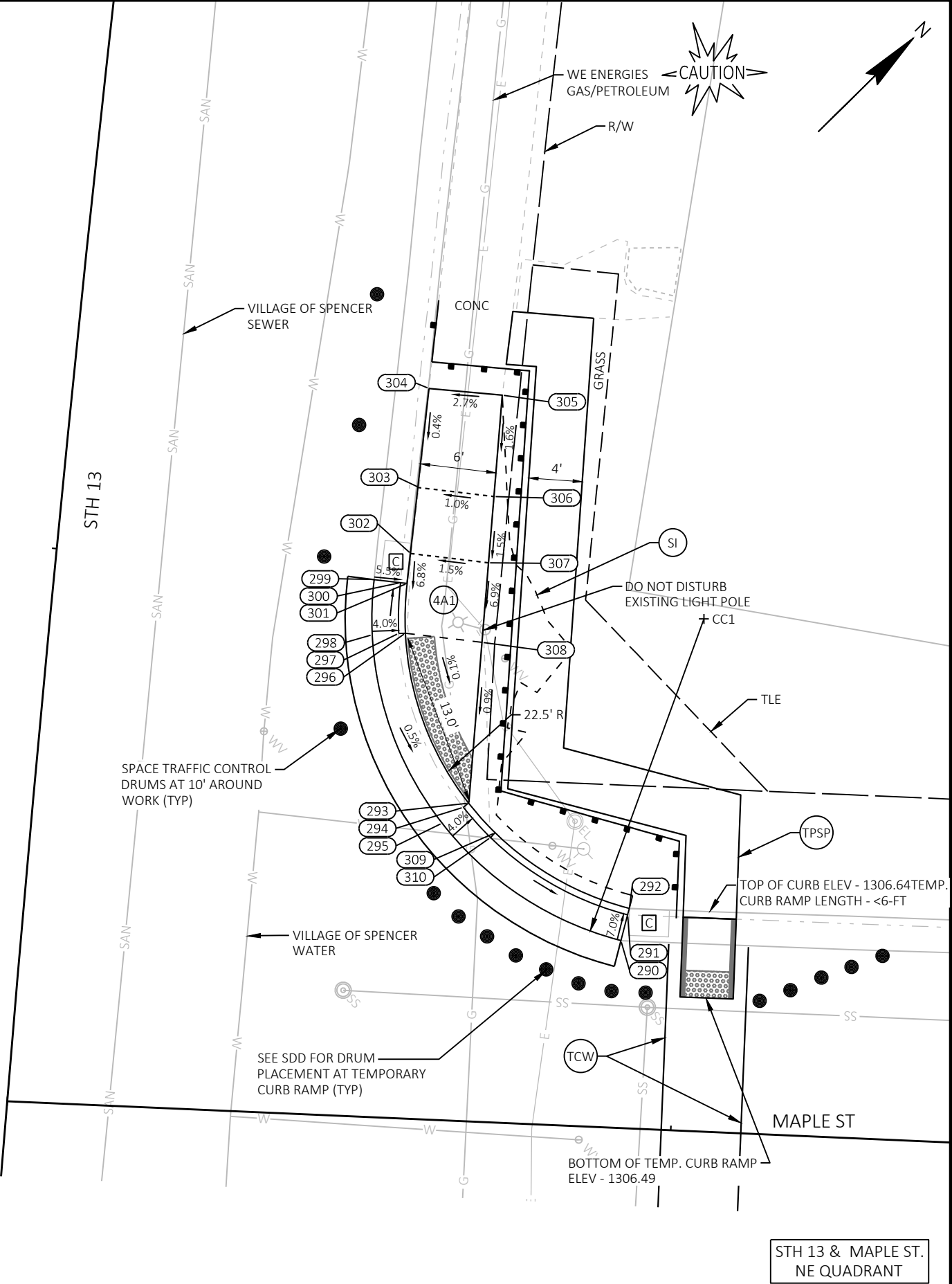
TEMPORARY CURB RAMP

TEMPORARY DETECTABLE WARNING FIELD

TEMPORARY PEDESTRIAN BARRICADE

TRAFFIC CONTROL DRUMS

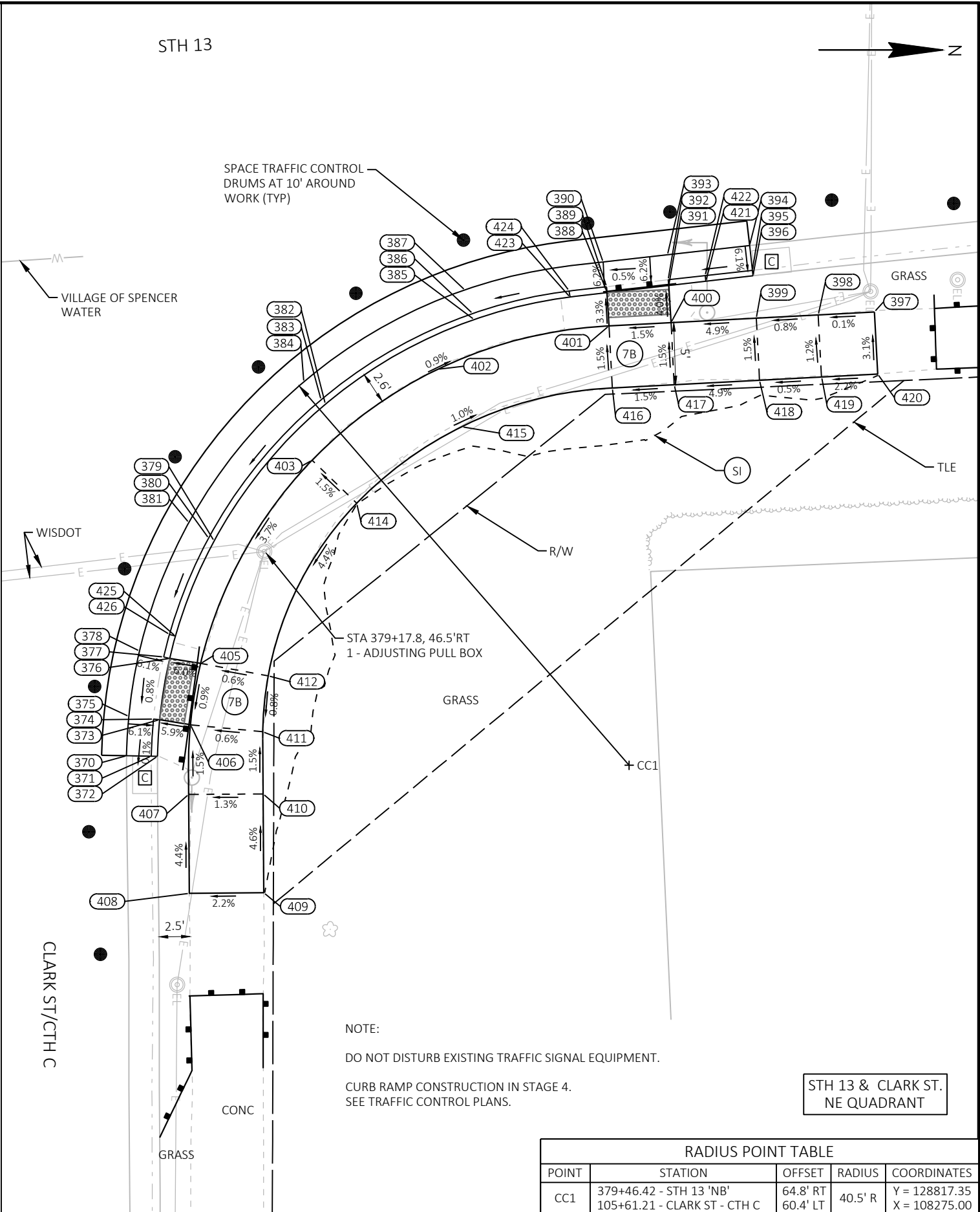
STH 13 & MAPLE ST - NE QUAD					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
290	373+24.34	45.01' RT	1306.36	128292.25	108493.33
291	373+26.35	45.34' RT	1306.22	128293.96	108492.30
292	373+26.85	45.42' RT	1306.76	128294.39	108492.04
293	373+33.75	32.66' RT	1306.76	128291.33	108477.91
294	373+33.40	32.29' RT	1306.63	128290.84	108477.85
295	373+32.04	30.81' RT	1306.71	128288.85	108477.59
296	373+46.17	26.73' RT	1306.67	128296.92	108465.46
297	373+46.09	26.24' RT	1306.67	128296.55	108465.13
298	373+45.81	24.26' RT	1306.75	128295.06	108463.79
299	373+49.99	24.01' RT	1306.76	128298.08	108460.94
300	373+49.95	26.01' RT	1306.65	128299.33	108462.50
301	373+49.94	26.51' RT	1306.93	128299.64	108462.89
302	373+52.23	26.56' RT	1307.08	128301.42	108461.47
303	373+57.29	26.68' RT	1307.19	128305.35	108458.36
304	373+64.84	26.69' RT	1307.22	128311.12	108453.59
305	373+64.90	32.23' RT	1307.37	128314.69	108457.82
306	373+57.16	32.38' RT	1307.25	128308.89	108462.82
307	373+52.10	32.46' RT	1307.17	128305.10	108466.09
308	373+46.03	32.55' RT	1306.76	128300.55	108470.00
309	373+31.68	34.85' RT	1307.04	128291.19	108480.90
310	373+31.29	34.54' RT	1306.55	128290.69	108480.91

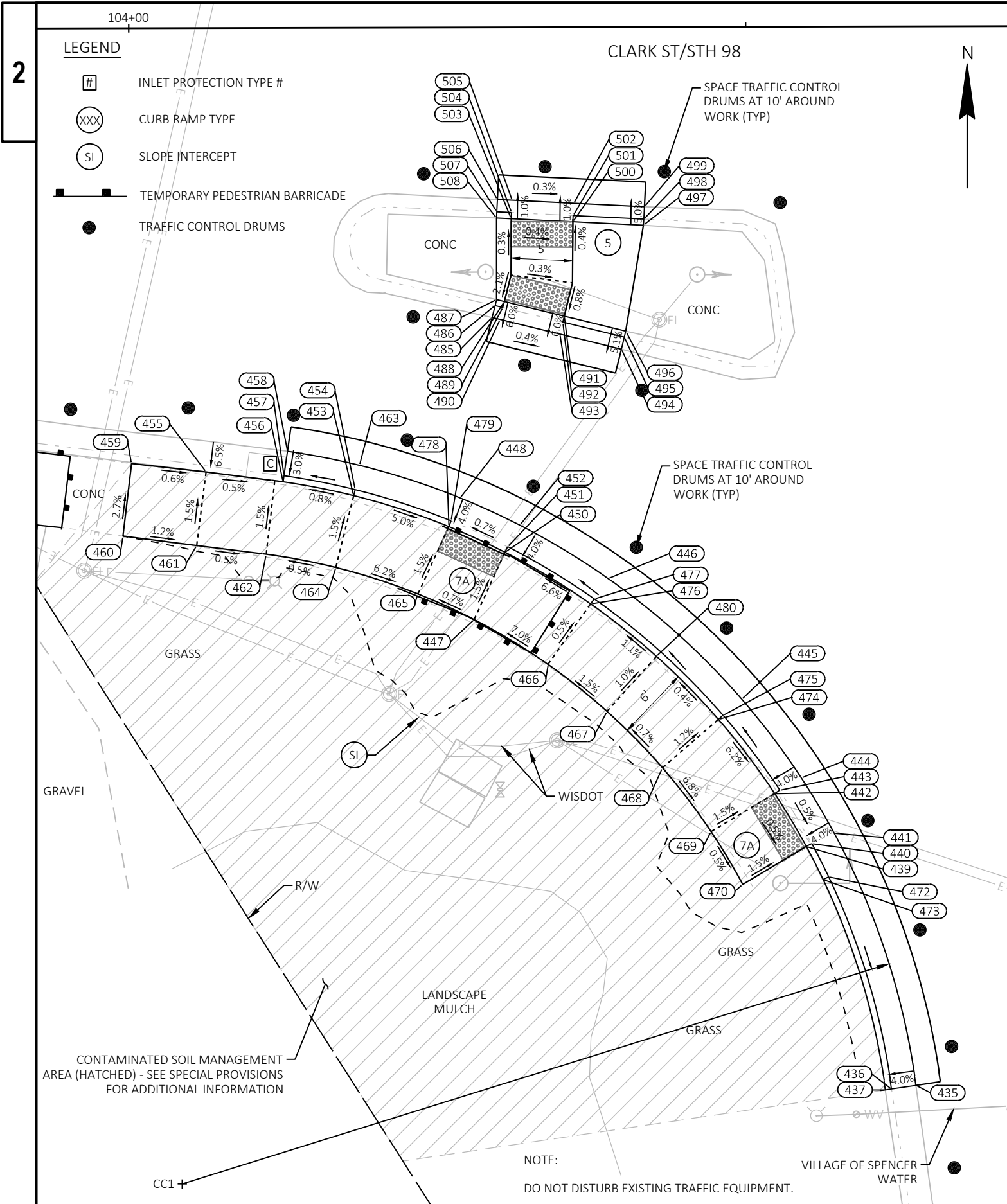


TEMPORARY DETECTABLE
WARNING FIELD

 TRAFFIC CONTROL DRUMS

STH 13 & E CLARK ST - NE QUAD					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
399	379+58.35	29.62' RT	1311.07	128827.59	108239.00
400	379+50.48	29.66' RT	1310.72	128819.72	108239.41
401	379+45.47	29.69' RT	1310.66	128814.73	108239.66
402	379+32.53	32.50' RT	1310.78	128801.93	108243.11
403	379+22.06	39.33' RT	1310.89	128791.81	108250.43
405	379+12.32	55.26' RT	1310.14	128782.83	108266.80
406	379+11.26	60.14' RT	1310.09	128782.01	108271.74
407	379+10.73	68.70' RT	1310.48	128781.89	108280.31
408	379+10.53	73.70' RT	1310.58	128781.93	108285.31
409	379+16.52	73.94' RT	1310.71	128787.92	108285.26
410	379+16.69	68.94' RT	1310.57	128787.85	108280.26
411	379+17.06	60.98' RT	1310.18	128787.84	108272.29
412	379+17.71	56.50' RT	1310.22	128788.27	108267.79
414	379+25.50	42.97' RT	1310.96	128795.41	108253.90
415	379+34.24	37.22' RT	1310.86	128803.87	108247.74
416	379+45.61	34.69' RT	1310.74	128815.10	108244.67
417	379+50.61	34.65' RT	1310.80	128820.09	108244.40
418	379+58.37	34.62' RT	1311.14	128827.85	108243.99
419	379+63.37	34.59' RT	1311.17	128832.84	108243.73
420	379+67.91	34.57' RT	1311.27	128837.37	108243.49
421	379+53.43	26.52' RT	1311.12	128822.53	108236.14
422	379+53.40	26.06' RT	1310.63	128822.48	108235.68
423	379+42.45	27.29' RT	1311.03	128811.60	108237.44
424	379+42.40	26.80' RT	1310.53	128811.52	108236.94
425	379+10.40	52.95' RT	1310.36	128780.80	108264.59
426	379+09.92	52.79' RT	1310.06	128780.32	108264.46





STH 13 & E CLARK ST - SW QUAD					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
435	378+09.91	44.44' LT	1309.93	128670.87	108176.73
436	378+09.95	46.44' LT	1309.85	128670.58	108174.75
437	378+09.96	46.94' LT	1310.30	128670.51	108174.26
439	378+28.82	50.33' LT	1309.94	128690.23	108167.84
440	378+28.98	49.87' LT	1309.94	128690.47	108168.28
441	378+29.53	47.95' LT	1310.02	128691.31	108170.09
442	378+33.03	52.32' LT	1309.97	128694.52	108165.27
443	378+33.23	51.87' LT	1309.97	128694.79	108165.69
444	378+33.94	50.02' LT	1310.05	128695.79	108167.43
445	378+40.27	54.05' LT	1310.01	128702.17	108162.60
446	378+50.12	63.78' LT	1309.93	128711.95	108151.78
447	378+48.12	74.92' LT	1309.88	128708.61	108140.92
448	378+56.90	75.14' LT	1309.83	128718.48	108139.79
450	378+52.72	71.91' LT	1309.78	128714.08	108143.42
451	378+53.10	71.64' LT	1309.78	128714.52	108143.65
452	378+54.57	70.51' LT	1309.86	128716.27	108144.62
453	378+57.70	83.71' LT	1310.18	128718.67	108131.17
454	378+58.11	83.55' LT	1309.69	128719.15	108131.29
455	378+60.20	95.48' LT	1310.18	128720.59	108119.20
456	378+59.08	89.32' LT	1310.14	128719.79	108125.45
457	378+59.50	89.21' LT	1309.67	128720.28	108125.52
458	378+61.19	88.77' LT	1309.72	128722.26	108125.80
459	378+61.19	101.44' LT	1310.18	128721.28	108113.16

STH 13 & E CLARK ST - WEST MEDIAN					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
485	378+69.66	71.46' LT	1310.11	128733.11	108142.39
486	378+70.51	71.16' LT	1310.26	128734.08	108142.63
487	378+70.93	71.01' LT	1310.61	128734.57	108142.75
488	378+70.76	70.39' LT	1310.17	128734.41	108143.38
489	378+70.34	70.54' LT	1310.17	128733.93	108143.26
490	378+69.48	70.82' LT	1310.11	128732.95	108143.04
491	378+69.44	65.62' LT	1310.14	128733.23	108148.24
492	378+69.01	65.77' LT	1310.14	128732.74	108148.12
493	378+68.15	66.07' LT	1310.09	128731.77	108147.88
494	378+66.76	61.17' LT	1309.99	128730.55	108152.86
495	378+67.62	60.87' LT	1310.05	128731.52	108153.10
496	378+68.05	60.72' LT	1310.63	128732.01	108153.22

NOTE:

DO NOT DISTURB EXISTING TRAFFIC SIGNAL EQUIPMENT.

CURB RAMP CONSTRUCTION IN STAGE 1.
SEE TRAFFIC CONTROL PLANS.

SEE PREVIOUS PAGE FOR LEGEND INFORMATION.

STH 13 & CLARK ST.
SW QUADRANT

STH 13 & E CLARK ST - SW QUAD					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
460	378+56.25	102.62' LT	1310.34	128715.39	108112.46
461	378+55.17	96.73' LT	1310.27	128714.64	108118.45
462	378+54.12	91.19' LT	1310.24	128713.92	108124.07
463	378+59.80	83.05' LT	1309.77	128721.13	108131.63
464	378+52.75	85.67' LT	1310.27	128712.84	108129.71
465	378+50.33	79.24' LT	1309.87	128710.69	108136.38
466	378+44.39	69.31' LT	1310.37	128705.02	108146.94
467	378+40.51	64.99' LT	1310.46	128701.19	108151.70
468	378+35.93	61.08' LT	1310.50	128696.60	108156.18
469	378+30.84	57.83' LT	1310.06	128691.43	108160.12
470	378+26.66	55.86' LT	1310.03	128687.14	108162.69
472	378+26.35	48.87' LT	1309.93	128687.77	108169.65
473	378+26.21	49.35' LT	1310.44	128687.55	108169.20
474	378+38.99	56.12' LT	1310.43	128700.53	108160.71
475	378+39.24	55.70' LT	1309.93	128700.86	108161.09
476	378+48.41	65.40' LT	1310.34	128709.89	108150.36
477	378+48.75	65.07' LT	1309.85	128710.30	108150.65
478	378+54.94	76.24' LT	1309.75	128716.18	108138.88
479	378+55.31	76.02' LT	1309.75	128716.62	108139.06
480	378+44.10	60.53' LT	1310.40	128705.64	108155.70

STH 13 & E CLARK ST - WEST MEDIAN					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
497	378+75.73	58.78' LT	1310.70	128740.59	108154.66
498	378+76.19	58.73' LT	1310.18	128741.09	108154.68
499	378+77.09	58.63' LT	1310.12	128742.09	108154.73
500	378+76.26	64.49' LT	1310.18	128740.87	108148.93
501	378+76.70	64.44' LT	1310.18	128741.37	108148.96
502	378+77.60	64.34' LT	1310.17	128742.37	108149.00
503	378+76.71	69.47' LT	1310.20	128741.12	108143.93
504	378+77.15	69.42' LT	1310.20	128741.62	108143.96
505	378+78.04	69.32' LT	1310.19	128742.62	108144.01
506	378+78.14	70.50' LT	1310.19	128742.68	108142.82
507	378+77.25	70.60' LT	1310.20	128741.68	108142.77
508	378+76.81	70.65' LT	1310.69	128741.18	108142.75

RADIUS POINT TABLE

POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	379+76.71 - STH 13 'SB4' 103+88.89 - CLARK ST - STH 89	95.9' LT 81.0' LT	60.0' R	Y = 128837.56 X = 108101.64

PROJECT NO: 1620-03-72

HWY: STH 13

COUNTY: MARATHON

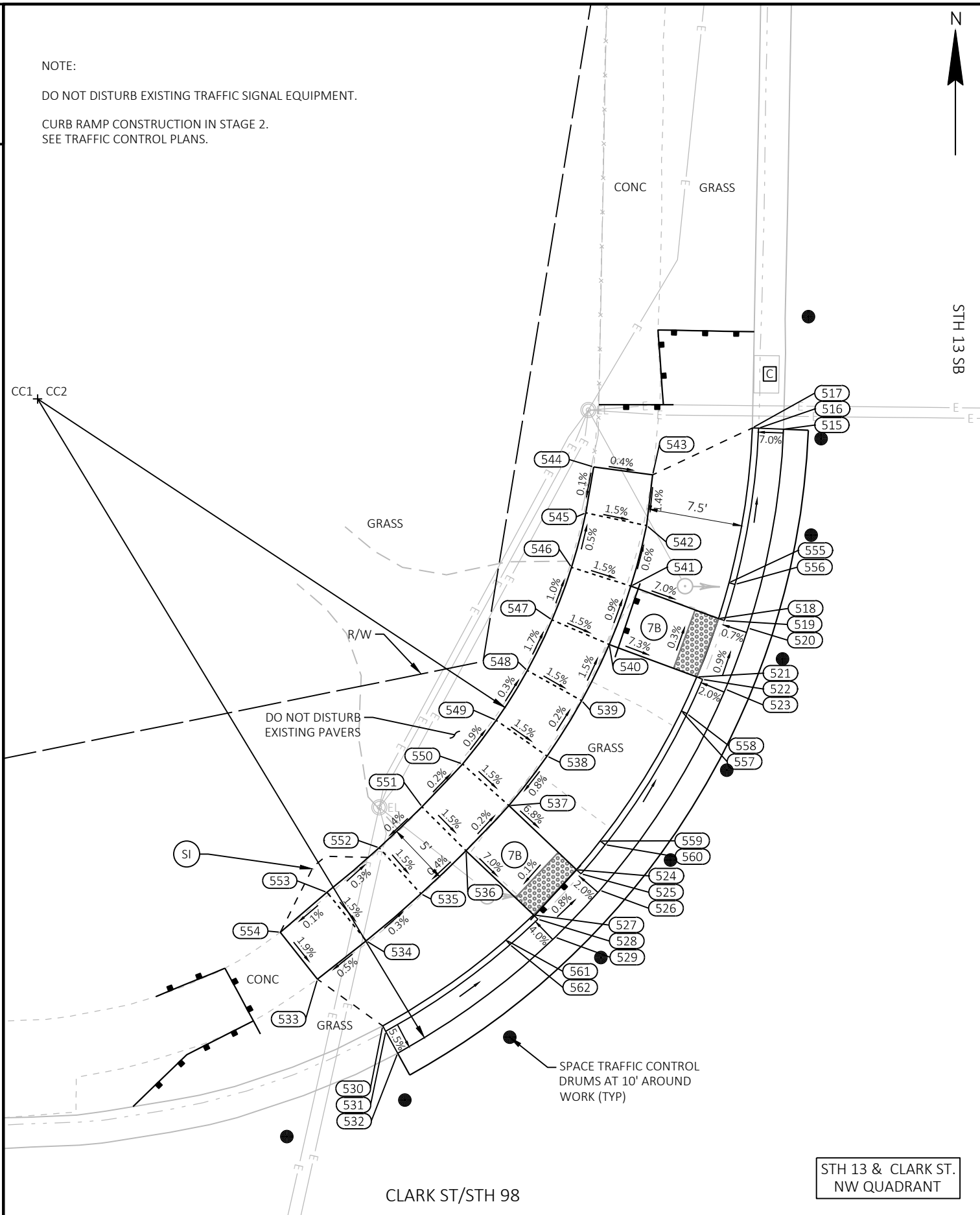
CURB RAMP DETAILS

SHEET

34

E

NOTE:
DO NOT DISTURB EXISTING TRAFFIC SIGNAL EQUIPMENT.
CURB RAMP CONSTRUCTION IN STAGE 2.
SEE TRAFFIC CONTROL PLANS.



N
STH 13 SB

RADIUS POINT TABLE

POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	379+76.71 - STH 13 'SB4'	95.9' LT	60.0' R	Y = 128837.56
	103+88.89 - CLARK ST - STH 89	81.0' LT		X = 108101.64
CC2	379+76.71 - STH 13 'SB4'	95.9' LT	45.5' R	Y = 128837.56
	103+88.89 - CLARK ST - STH 89	81.0' LT		X = 108101.64

STH 13 & E CLARK ST - NW QUAD

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
515	379+69.56	47.35' LT	1310.55	128835.12	108161.59
516	379+69.74	49.34' LT	1310.41	128835.20	108159.59
517	379+69.78	49.84' LT	1310.90	128835.22	108159.09
518	379+54.62	53.29' LT	1310.55	128819.91	108156.36
519	379+54.44	52.82' LT	1310.55	128819.76	108156.84
520	379+53.74	50.95' LT	1310.56	128819.14	108158.74
521	379+50.02	55.25' LT	1310.57	128815.22	108154.62
522	379+49.80	54.80' LT	1310.57	128815.03	108155.08
523	379+48.94	53.00' LT	1310.61	128814.25	108156.93
524	379+35.02	65.65' LT	1310.64	128799.74	108144.95
525	379+34.67	65.29' LT	1310.64	128799.41	108145.33
526	379+33.28	63.85' LT	1310.68	128798.10	108146.83
527	379+31.57	69.27' LT	1310.65	128796.12	108141.50
528	379+31.19	68.94' LT	1310.65	128795.76	108141.85
529	379+29.68	67.63' LT	1310.73	128794.32	108143.23
530	379+23.23	81.80' LT	1311.11	128787.20	108129.38
531	379+22.78	81.58' LT	1310.68	128786.76	108129.62
532	379+20.98	80.70' LT	1310.57	128785.01	108130.59
533	379+27.23	86.85' LT	1311.15	128790.95	108124.14
534	379+30.12	82.81' LT	1311.17	128794.04	108128.05
535	379+33.68	78.23' LT	1311.16	128797.81	108132.46
536	379+36.96	74.44' LT	1311.17	128801.26	108136.08
537	379+40.42	70.83' LT	1311.16	128804.89	108139.52
538	379+44.25	67.58' LT	1311.20	128808.87	108142.59

STH 13 & E CLARK ST - NW QUAD

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
539	379+48.56	64.59' LT	1311.20	128813.32	108145.37
540	379+52.96	62.16' LT	1311.12	128817.84	108147.58
541	379+57.56	60.20' LT	1311.07	128822.52	108149.32
542	379+62.36	58.70' LT	1311.04	128827.39	108150.59
543	379+66.40	58.03' LT	1311.10	128831.45	108151.07
544	379+67.26	62.72' LT	1311.12	128832.09	108146.34
545	379+63.61	63.54' LT	1311.12	128828.40	108145.70
546	379+59.29	64.89' LT	1311.15	128824.03	108144.56
547	379+55.15	66.66' LT	1311.20	128819.81	108142.99
548	379+51.19	68.84' LT	1311.27	128815.75	108141.00
549	379+47.32	71.53' LT	1311.28	128811.75	108138.50
550	379+43.93	74.39' LT	1311.24	128808.23	108135.79
551	379+40.65	77.81' LT	1311.25	128804.79	108132.54
552	379+37.54	81.41' LT	1311.23	128801.51	108129.10
553	379+34.16	85.76' LT	1311.25	128797.93	108124.91
554	379+31.13	89.66' LT	1311.24	128794.72	108121.15
555	379+57.45	52.31' LT	1310.78	128822.79	108157.21
556	379+57.30	51.83' LT	1310.54	128822.66	108157.69
557	379+47.35	56.62' LT	1310.88	128812.49	108153.39
558	379+47.11	56.18' LT	1310.58	128812.27	108153.84
559	379+37.23	63.63' LT	1310.93	128802.05	108146.86
560	379+36.91	63.25' LT	1310.63	128801.74	108147.26
561	379+29.65	71.58' LT	1310.96	128794.10	108139.29
562	379+29.26	71.27' LT	1310.66	128793.72	108139.61

LEGEND

- # INLET PROTECTION TYPE #
- XXX CURB RAMP TYPE
- SI SLOPE INTERCEPT
- TPSP TEMPORARY PEDESTRIAN SURFACE
- TCW TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH



TEMPORARY CURB RAMP



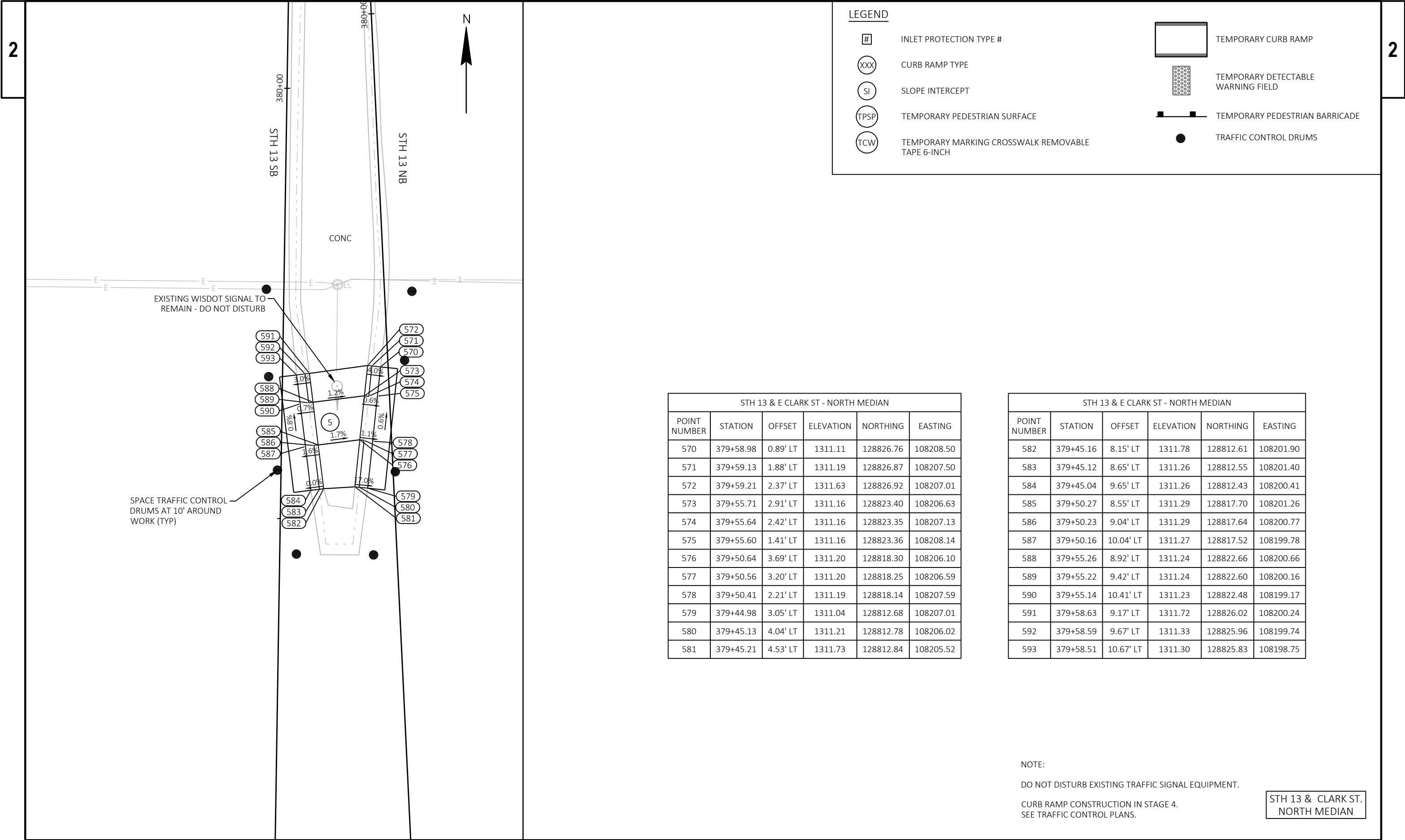
TEMPORARY DETECTABLE WARNING FIELD



TEMPORARY PEDESTRIAN BARRICADE



TRAFFIC CONTROL DRUMS

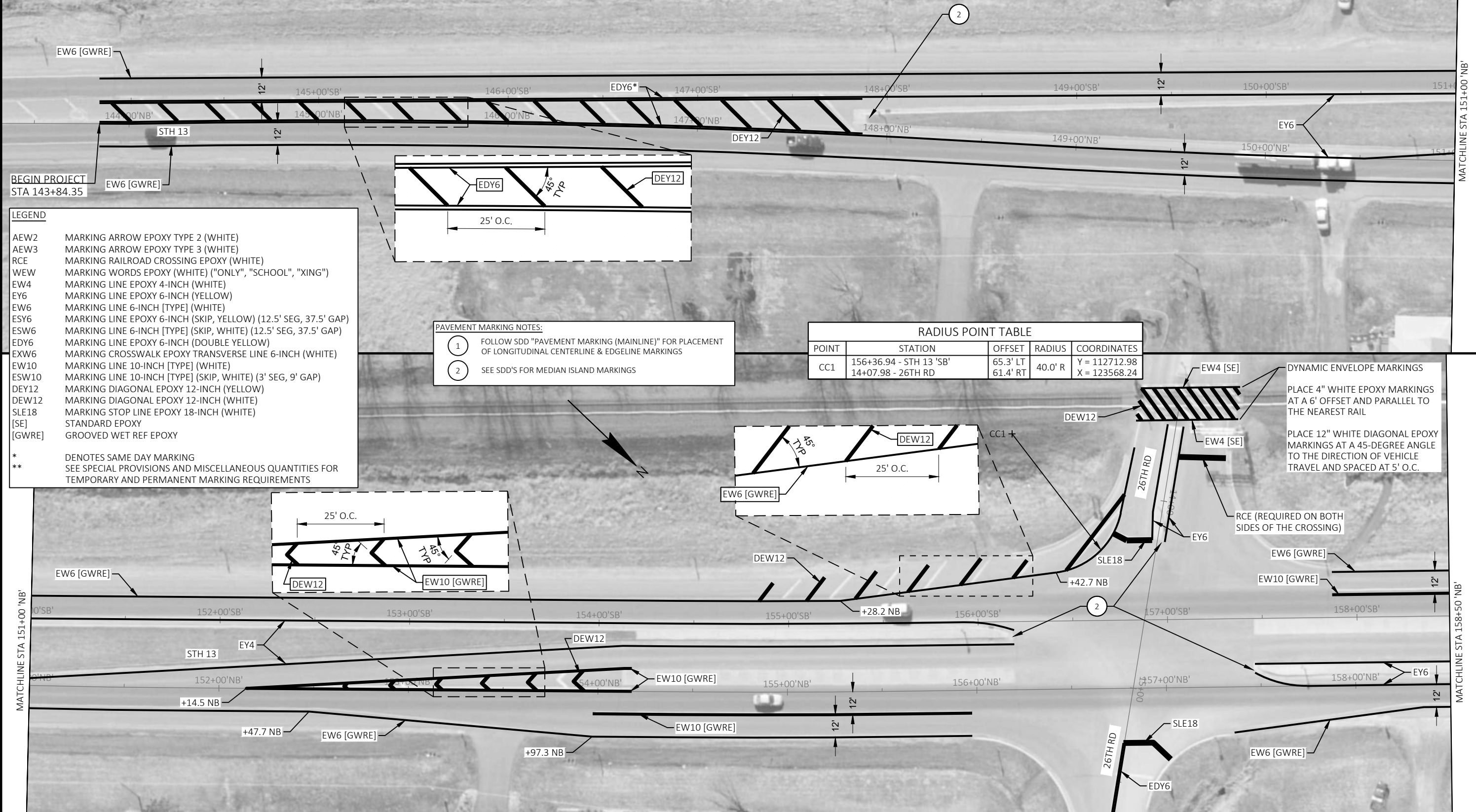


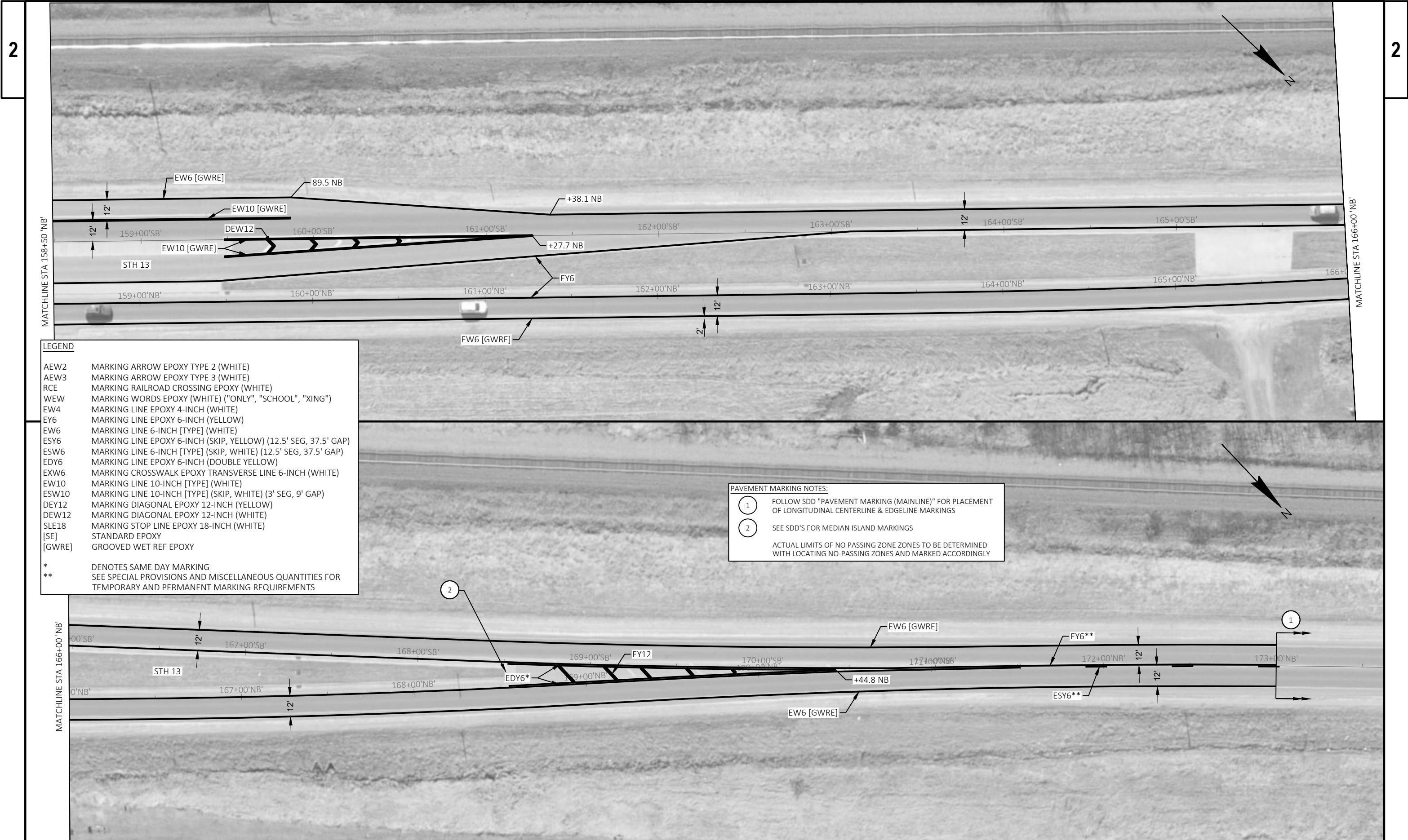
STH 13 & E CLARK ST - NORTH MEDIAN					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
570	379+58.98	0.89' LT	1311.11	128826.76	108208.50
571	379+59.13	1.88' LT	1311.19	128826.87	108207.50
572	379+59.21	2.37' LT	1311.63	128826.92	108207.01
573	379+55.71	2.91' LT	1311.16	128823.40	108206.63
574	379+55.64	2.42' LT	1311.16	128823.35	108207.13
575	379+55.60	1.41' LT	1311.16	128823.36	108208.14
576	379+50.64	3.69' LT	1311.20	128818.30	108206.10
577	379+50.56	3.20' LT	1311.20	128818.25	108206.59
578	379+50.41	2.21' LT	1311.19	128818.14	108207.59
579	379+44.98	3.05' LT	1311.04	128812.68	108207.01
580	379+45.13	4.04' LT	1311.21	128812.78	108206.02
581	379+45.21	4.53' LT	1311.73	128812.84	108205.52

STH 13 & E CLARK ST - NORTH MEDIAN					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
582	379+45.16	8.15' LT	1311.78	128812.61	108201.90
583	379+45.12	8.65' LT	1311.26	128812.55	108201.40
584	379+45.04	9.65' LT	1311.26	128812.43	108200.41
585	379+50.27	8.55' LT	1311.29	128817.70	108201.26
586	379+50.23	9.04' LT	1311.29	128817.64	108200.77
587	379+50.16	10.04' LT	1311.27	128817.52	108199.78
588	379+55.26	8.92' LT	1311.24	128822.66	108200.66
589	379+55.22	9.42' LT	1311.24	128822.60	108200.16
590	379+55.14	10.41' LT	1311.23	128822.48	108199.17
591	379+58.63	9.17' LT	1311.72	128826.02	108200.24
592	379+58.59	9.67' LT	1311.33	128825.96	108199.74
593	379+58.51	10.67' LT	1311.30	128825.83	108198.75

NOTE:
DO NOT DISTURB EXISTING TRAFFIC SIGNAL EQUIPMENT.
CURB RAMP CONSTRUCTION IN STAGE 4.
SEE TRAFFIC CONTROL PLANS.

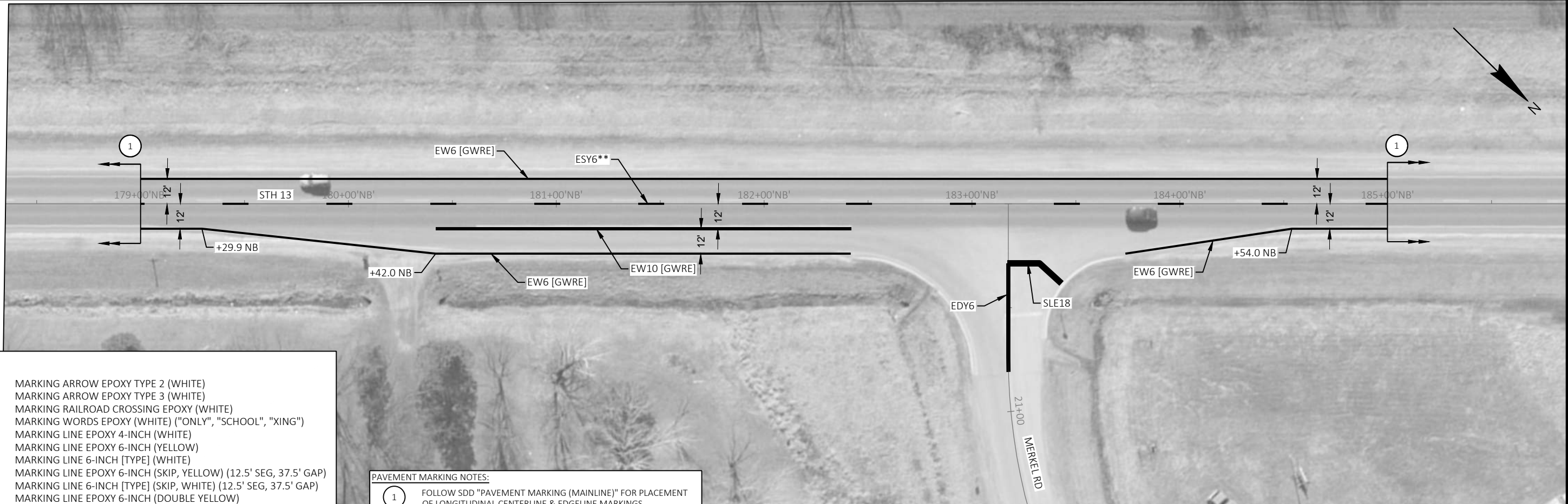
STH 13 & CLARK ST.
NORTH MEDIAN





LEGEND	
AEW2	MARKING ARROW EPOXY TYPE 2 (WHITE)
AEW3	MARKING ARROW EPOXY TYPE 3 (WHITE)
RCE	MARKING RAILROAD CROSSING EPOXY (WHITE)
WEW	MARKING WORDS EPOXY (WHITE) ("ONLY", "SCHOOL", "XING")
EW4	MARKING LINE EPOXY 4-INCH (WHITE)
EY6	MARKING LINE EPOXY 6-INCH (YELLOW)
EW6	MARKING LINE 6-INCH [TYPE] (WHITE)
ESY6	MARKING LINE EPOXY 6-INCH (SKIP, YELLOW) (12.5' SEG, 37.5' GAP)
ESW6	MARKING LINE 6-INCH [TYPE] (SKIP, WHITE) (12.5' SEG, 37.5' GAP)
EDY6	MARKING LINE EPOXY 6-INCH (DOUBLE YELLOW)
EXW6	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
EW10	MARKING LINE 10-INCH [TYPE] (WHITE)
ESW10	MARKING LINE 10-INCH [TYPE] (SKIP, WHITE) (3' SEG, 9' GAP)
DEY12	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
DEW12	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
SLE18	MARKING STOP LINE EPOXY 18-INCH (WHITE)
[SE]	STANDARD EPOXY
[GWRE]	GROOVED WET REF EPOXY
*	DENOTES SAME DAY MARKING
**	SEE SPECIAL PROVISIONS AND MISCELLANEOUS QUANTITIES FOR TEMPORARY AND PERMANENT MARKING REQUIREMENTS

PAVEMENT MARKING NOTES:	
1	FOLLOW SDD "PAVEMENT MARKING (MAINLINE)" FOR PLACEMENT OF LONGITUDINAL CENTERLINE & EDGELINE MARKINGS
2	SEE SDD'S FOR MEDIAN ISLAND MARKINGS
ACTUAL LIMITS OF NO PASSING ZONE ZONES TO BE DETERMINED WITH LOCATING NO-PASSING ZONES AND MARKED ACCORDINGLY	



LEGEND	
AEW2	MARKING ARROW EPOXY TYPE 2 (WHITE)
AEW3	MARKING ARROW EPOXY TYPE 3 (WHITE)
RCE	MARKING RAILROAD CROSSING EPOXY (WHITE)
WEW	MARKING WORDS EPOXY (WHITE) ("ONLY", "SCHOOL", "XING")
EW4	MARKING LINE EPOXY 4-INCH (WHITE)
EY6	MARKING LINE EPOXY 6-INCH (YELLOW)
EW6	MARKING LINE 6-INCH [TYPE] (WHITE)
ESY6	MARKING LINE EPOXY 6-INCH (SKIP, YELLOW) (12.5' SEG, 37.5' GAP)
ESW6	MARKING LINE 6-INCH [TYPE] (SKIP, WHITE) (12.5' SEG, 37.5' GAP)
EDY6	MARKING LINE EPOXY 6-INCH (DOUBLE YELLOW)
EXW6	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
EW10	MARKING LINE 10-INCH [TYPE] (WHITE)
ESW10	MARKING LINE 10-INCH [TYPE] (SKIP, WHITE) (3' SEG, 9' GAP)
DEY12	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
DEW12	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
SLE18	MARKING STOP LINE EPOXY 18-INCH (WHITE)
[SE]	STANDARD EPOXY
[GWRE]	GROOVED WET REF EPOXY
* DENOTES SAME DAY MARKING	
** SEE SPECIAL PROVISIONS AND MISCELLANEOUS QUANTITIES FOR TEMPORARY AND PERMANENT MARKING REQUIREMENTS	

PAVEMENT MARKING NOTES:	
1	FOLLOW SDD "PAVEMENT MARKING (MAINLINE)" FOR PLACEMENT OF LONGITUDINAL CENTERLINE & EDGE LINE MARKINGS
2	SEE SDD'S FOR MEDIAN ISLAND MARKINGS
ACTUAL LIMITS OF NO PASSING ZONE ZONES TO BE DETERMINED WITH LOCATING NO-PASSING ZONES AND MARKED ACCORDINGLY	





LEGEND

AEW2 MARKING ARROW EPOXY TYPE 2 (WHITE)
AEW3 MARKING ARROW EPOXY TYPE 3 (WHITE)
RCE MARKING RAILROAD CROSSING EPOXY (WHITE)
WEW MARKING WORDS EPOXY (WHITE) ("ONLY", "SCHOOL", "XING")
EW4 MARKING LINE EPOXY 4-INCH (WHITE)
EY6 MARKING LINE EPOXY 6-INCH (YELLOW)
EW6 MARKING LINE 6-INCH [TYPE] (WHITE)
ESY6 MARKING LINE EPOXY 6-INCH (SKIP, YELLOW) (12.5' SEG, 37.5' GAP)
ESW6 MARKING LINE 6-INCH [TYPE] (SKIP, WHITE) (12.5' SEG, 37.5' GAP)
EDY6 MARKING LINE EPOXY 6-INCH (DOUBLE YELLOW)
EXW6 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
EW10 MARKING LINE 10-INCH [TYPE] (WHITE)
ESW10 MARKING LINE 10-INCH [TYPE] (SKIP, WHITE) (3' SEG, 9' GAP)
DEY12 MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
DEW12 MARKING DIAGONAL EPOXY 12-INCH (WHITE)
SLE18 MARKING STOP LINE EPOXY 18-INCH (WHITE)
[SE] STANDARD EPOXY
[GWRE] GROOVED WET REF EPOXY

* DENOTES SAME DAY MARKING
** SEE SPECIAL PROVISIONS AND MISCELLANEOUS QUANTITIES FOR TEMPORARY AND PERMANENT MARKING REQUIREMENTS

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC2	234+46.67 - STH 13 'SB'	63.9' LT	40.0' R	Y = 118274.33
	33+99.71 - KARAU AV	60.5' RT		X = 118089.42

PAVEMENT MARKING NOTES:

1

FOLLOW SDD "PAVEMENT MARKING (MAINLINE)" FOR PLACEMENT OF LONGITUDINAL CENTERLINE & EDGELINE MARKINGS

2

SEE SDD'S FOR MEDIAN ISLAND MARKINGS

DYNAMIC ENVELOPE MARKINGS

PLACE 4" WHITE EPOXY MARKINGS AT A 6" OFFSET AND PARALLEL TO THE NEAREST RAIL

PLACE 12" WHITE DIAGONAL EPOXY MARKINGS AT A 45-DEGREE ANGLE TO THE DIRECTION OF VEHICLE TRAVEL AND SPACED AT 5' O.C.

EW4 [SE]
DEW12
EW4 [SE]
RCE (REQUIRED ON BOTH SIDES OF THE CROSSING)



LEGEND	
AEW2	MARKING ARROW EPOXY TYPE 2 (WHITE)
AEW3	MARKING ARROW EPOXY TYPE 3 (WHITE)
RCE	MARKING RAILROAD CROSSING EPOXY (WHITE)
WEW	MARKING WORDS EPOXY (WHITE) ("ONLY", "SCHOOL", "XING")
EW4	MARKING LINE EPOXY 4-INCH (WHITE)
EY6	MARKING LINE EPOXY 6-INCH (YELLOW)
EW6	MARKING LINE 6-INCH [TYPE] (WHITE)
ESY6	MARKING LINE EPOXY 6-INCH (SKIP, YELLOW) (12.5' SEG, 37.5' GAP)
ESW6	MARKING LINE 6-INCH [TYPE] (SKIP, WHITE) (12.5' SEG, 37.5' GAP)
EDY6	MARKING LINE EPOXY 6-INCH (DOUBLE YELLOW)
EXW6	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
EW10	MARKING LINE 10-INCH [TYPE] (WHITE)
ESW10	MARKING LINE 10-INCH [TYPE] (SKIP, WHITE) (3' SEG, 9' GAP)
DEY12	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
DEW12	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
SLE18	MARKING STOP LINE EPOXY 18-INCH (WHITE)
[SE]	STANDARD EPOXY
[GWRE]	GROOVED WET REF EPOXY
* DENOTES SAME DAY MARKING	
** SEE SPECIAL PROVISIONS AND MISCELLANEOUS QUANTITIES FOR TEMPORARY AND PERMANENT MARKING REQUIREMENTS	

PAVEMENT MARKING NOTES:	
1	FOLLOW SDD "PAVEMENT MARKING (MAINLINE)" FOR PLACEMENT OF LONGITUDINAL CENTERLINE & EDGELINE MARKINGS
2	SEE SDD'S FOR MEDIAN ISLAND MARKINGS





LEGEND

AEW2	MARKING ARROW EPOXY TYPE 2 (WHITE)
AEW3	MARKING ARROW EPOXY TYPE 3 (WHITE)
RCE	MARKING RAILROAD CROSSING EPOXY (WHITE)
WEW	MARKING WORDS EPOXY (WHITE) ("ONLY", "SCHOOL", "XING")
EW4	MARKING LINE EPOXY 4-INCH (WHITE)
EY6	MARKING LINE EPOXY 6-INCH (YELLOW)
EW6	MARKING LINE 6-INCH [TYPE] (WHITE)
ESY6	MARKING LINE EPOXY 6-INCH (SKIP, YELLOW) (12.5' SEG, 37.5' GAP)
ESW6	MARKING LINE 6-INCH [TYPE] (SKIP, WHITE) (12.5' SEG, 37.5' GAP)
EDY6	MARKING LINE EPOXY 6-INCH (DOUBLE YELLOW)
EXW6	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
EW10	MARKING LINE 10-INCH [TYPE] (WHITE)
ESW10	MARKING LINE 10-INCH [TYPE] (SKIP, WHITE) (3' SEG, 9' GAP)
DEY12	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
DEW12	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
SLE18	MARKING STOP LINE EPOXY 18-INCH (WHITE)
[SE]	STANDARD EPOXY
[GWRE]	GROOVED WET REF EPOXY

* DENOTES SAME DAY MARKING
** SEE SPECIAL PROVISIONS AND MISCELLANEOUS QUANTITIES FOR TEMPORARY AND PERMANENT MARKING REQUIREMENTS

PAVEMENT MARKING NOTES:

1

FOLLOW SDD "PAVEMENT MARKING (MAINLINE)" FOR PLACEMENT OF LONGITUDINAL CENTERLINE & EDGELINE MARKINGS

2

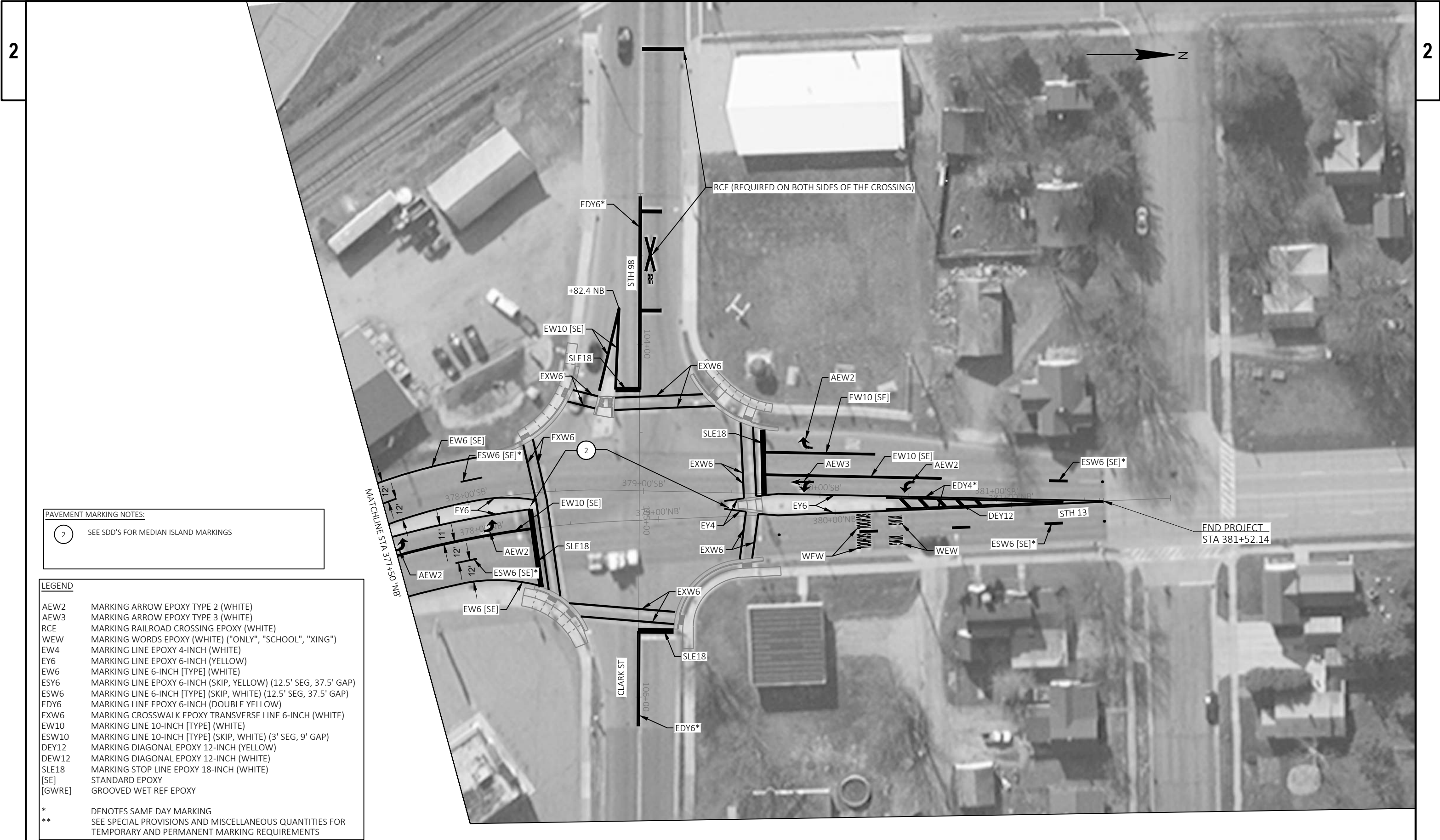
SEE SDD'S FOR MEDIAN ISLAND MARKINGS

ACTUAL LIMITS OF NO PASSING ZONE ZONES TO BE DETERMINED WITH LOCATING NO-PASSING ZONES AND MARKED ACCORDINGLY









PAVEMENT MARKING NOTES:

2 SEE SDD'S FOR MEDIAN ISLAND MARKINGS

LEGEND	
AEW2	MARKING ARROW EPOXY TYPE 2 (WHITE)
AEW3	MARKING ARROW EPOXY TYPE 3 (WHITE)
RCE	MARKING RAILROAD CROSSING EPOXY (WHITE)
WEW	MARKING WORDS EPOXY (WHITE) ("ONLY", "SCHOOL", "XING")
EW4	MARKING LINE EPOXY 4-INCH (WHITE)
EY6	MARKING LINE EPOXY 6-INCH (YELLOW)
EW6	MARKING LINE 6-INCH [TYPE] (WHITE)
ESY6	MARKING LINE EPOXY 6-INCH (SKIP, YELLOW) (12.5' SEG, 37.5' GAP)
ESW6	MARKING LINE 6-INCH [TYPE] (SKIP, WHITE) (12.5' SEG, 37.5' GAP)
EDY6	MARKING LINE EPOXY 6-INCH (DOUBLE YELLOW)
EXW6	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
EW10	MARKING LINE 10-INCH [TYPE] (WHITE)
ESW10	MARKING LINE 10-INCH [TYPE] (SKIP, WHITE) (3' SEG, 9' GAP)
DEY12	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
DEW12	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
SLE18	MARKING STOP LINE EPOXY 18-INCH (WHITE)
[SE]	STANDARD EPOXY
[GWRE]	GROOVED WET REF EPOXY
* DENOTES SAME DAY MARKING	
** SEE SPECIAL PROVISIONS AND MISCELLANEOUS QUANTITIES FOR TEMPORARY AND PERMANENT MARKING REQUIREMENTS	

LEGEND:

-  WORK ZONE
-  TRAFFIC CONTROL SIGN ON TWO POSTS
-  TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL GENERAL NOTES:

ADJUST THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES TO FIT FIELD CONDITIONS AS DIRECTED 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.

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

IMMEDIATELY REESTABLISH ALL BARRICADES AND/OR DRUMS THAT MUST BE MOVED FOR A WORK OPERATION UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORK DAY.

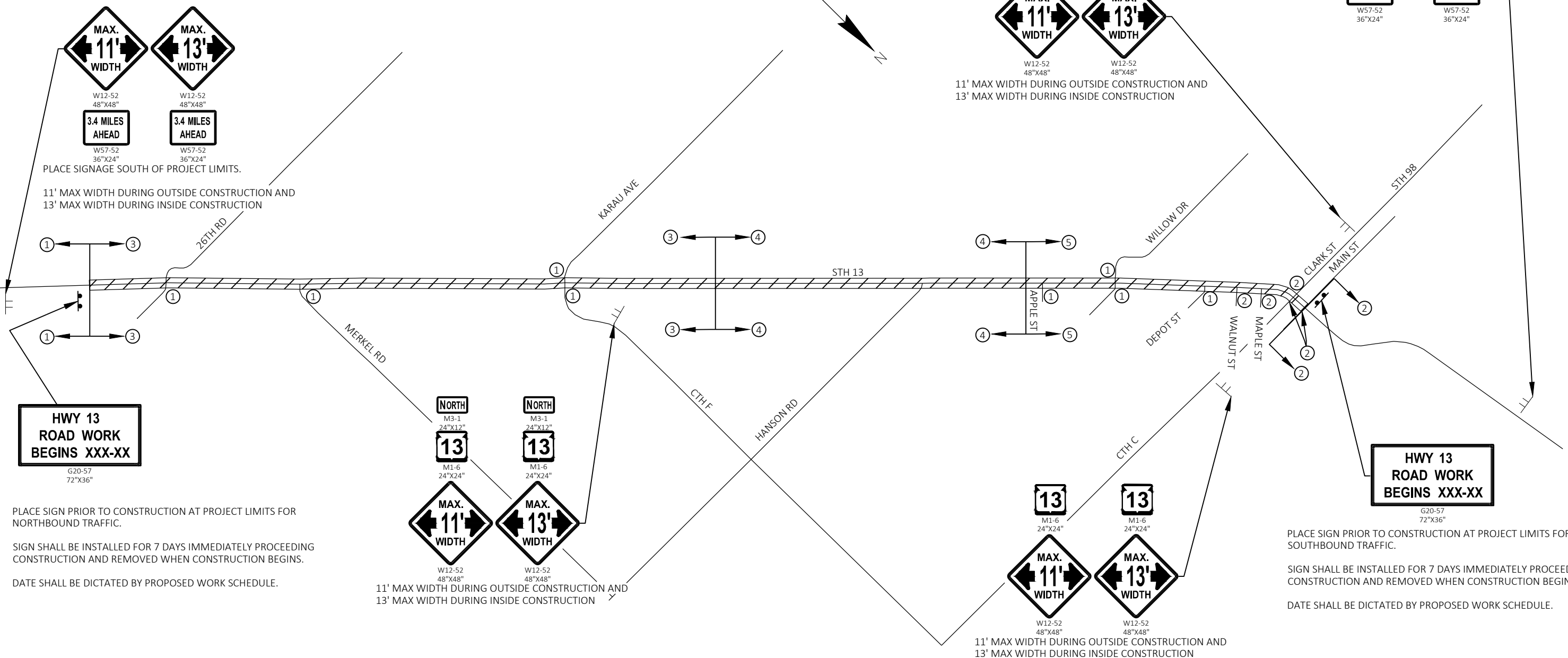
- ① INSTALL ADVANCED WARNING SIGNS ON STH 13 PRIOR TO THE PROJECT BEGINNING WORK ZONE AND ON THE DESIGNATED SIDEROADS, IN ACCORDANCE WITH SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"

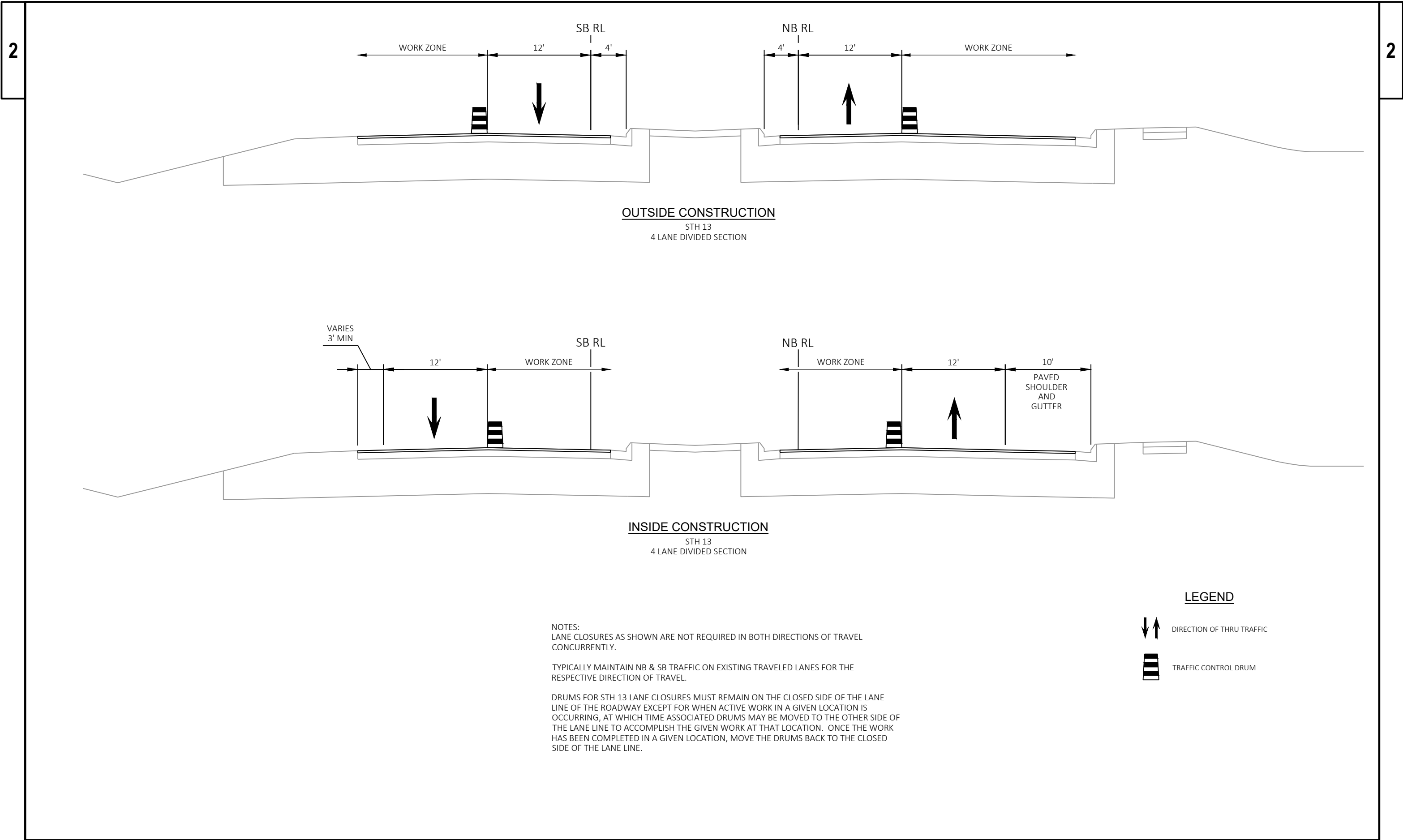
- ② INSTALL ADVANCED WARNING SIGNS ON STH 13 PRIOR TO THE PROJECT ENDING WORK ZONE AND ON THE DESIGNATED SIDEROADS, IN ACCORDANCE WITH SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
- ③ UTILIZE A ONE LANE OPERATION WITH FLAGGERS CONFORMING TO THE STANDARD SPECIFICATIONS AND WITH SDD "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION" WHEN THE WORK OPERATIONS ARE OCCURRING WITHIN THE TWO-LANE SEGMENT OF STH 13, SOUTH OF CTH F STA. 260+00 APPROXIMATELY.
- ④ CLOSE ONE NORTHBOUND LANE WITHIN THE 3-LANE SEGMENT OF STH 13 USING SDD "TRAFFIC CONTROL, ADDED LANE CLOSURE WITHOUT/WITH LANE SHIFT" OR "TRAFFIC CONTROL, SINGLE RIGHT/LEFT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY". UTILIZE A ONE LANE OPERATION WITH FLAGGERS CONFORMING TO THE STANDARD SPECIFICATIONS AND WITH SDD "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION" WITHIN THE REMAINING TWO LANES OF STH 13 FROM APPROXIMATELY STA. 260+00 TO STA. 316+00.

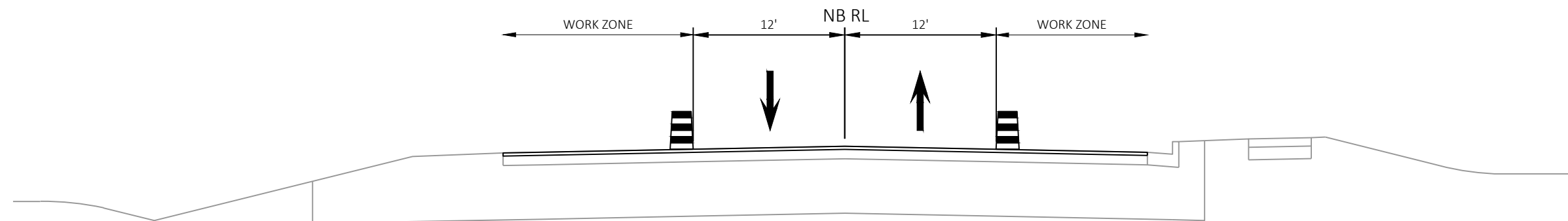
- ⑤ WHEN WORK OPERATIONS ARE OCCURRING WITHIN THE FOUR-LANE DIVIDED SEGMENTS OF STH 13, SIGN THE SINGLE LANE CLOSURES IN ACCORDANCE WITH SDD "TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY".
- WHEN WORK OPERATIONS ARE OCCURRING WITHIN THE FOUR-LANE UNDIVIDED SEGMENTS OF STH 13, SIGN THE SINGLE LANE CLOSURES IN ACCORDANCE WITH SDD "TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY" AND SDD "TRAFFIC CONTROL, SINGLE LEFT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY".

PLACE SIGNAGE NORTH OF STH 13/STH 153 INTERSECTION.

11' MAX WIDTH DURING OUTSIDE CONSTRUCTION AND 13' MAX WIDTH DURING INSIDE CONSTRUCTION

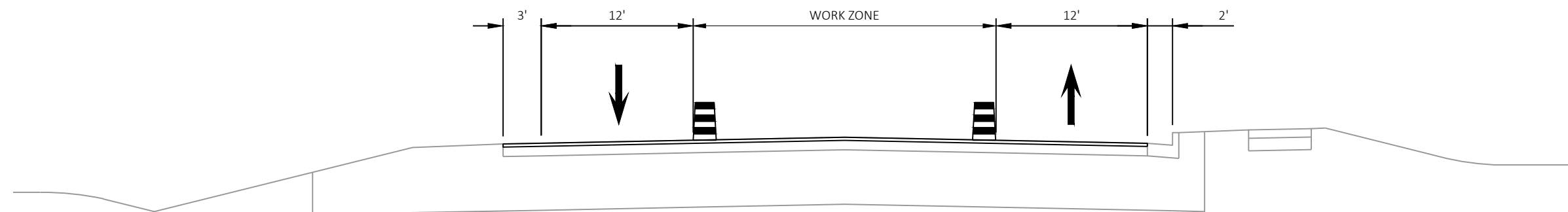






OUTSIDE CONSTRUCTION

STH 13
4 LANE UNDIVIDED SECTION



INSIDE CONSTRUCTION

STH 13
4 LANE UNDIVIDED SECTION

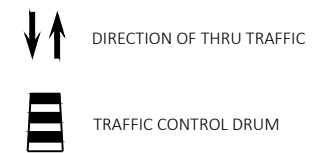
NOTES:
OUTSIDE LANE CLOSURES AS SHOWN ARE NOT REQUIRED IN BOTH DIRECTIONS OF TRAVEL CONCURRENTLY.

INSIDE LANE CLOSURES, WHEN USED, ARE REQUIRED FOR BOTH DIRECTIONS OF TRAVEL CONCURRENTLY IN ACCORDANCE WITH SDD "TRAFFIC CONTROL, SINGLE LEFT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY".

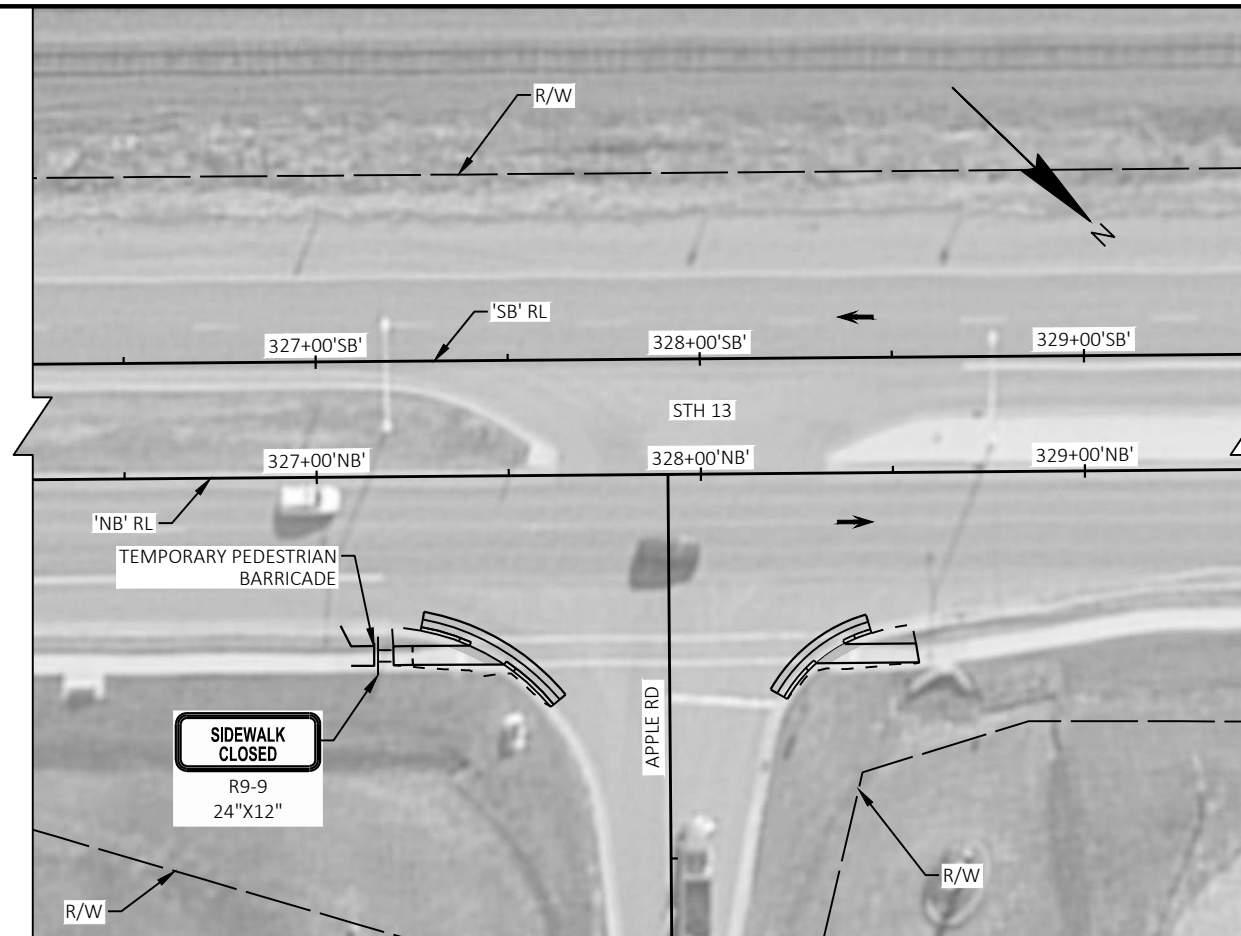
TYPICALLY MAINTAIN NB & SB TRAFFIC ON EXISTING TRAVELED LANES FOR THE RESPECTIVE DIRECTION OF TRAVEL.

DRUMS FOR STH 13 LANE CLOSURES MUST REMAIN ON THE CLOSED SIDE OF THE LANE LINE OF THE ROADWAY EXCEPT FOR WHEN ACTIVE WORK IN A GIVEN LOCATION IS OCCURRING, AT WHICH TIME ASSOCIATED DRUMS MAY BE MOVED TO THE OTHER SIDE OF THE LANE LINE TO ACCOMPLISH THE GIVEN WORK AT THAT LOCATION. ONCE THE WORK HAS BEEN COMPLETED IN A GIVEN LOCATION, MOVE THE DRUMS BACK TO THE CLOSED SIDE OF THE LANE LINE.

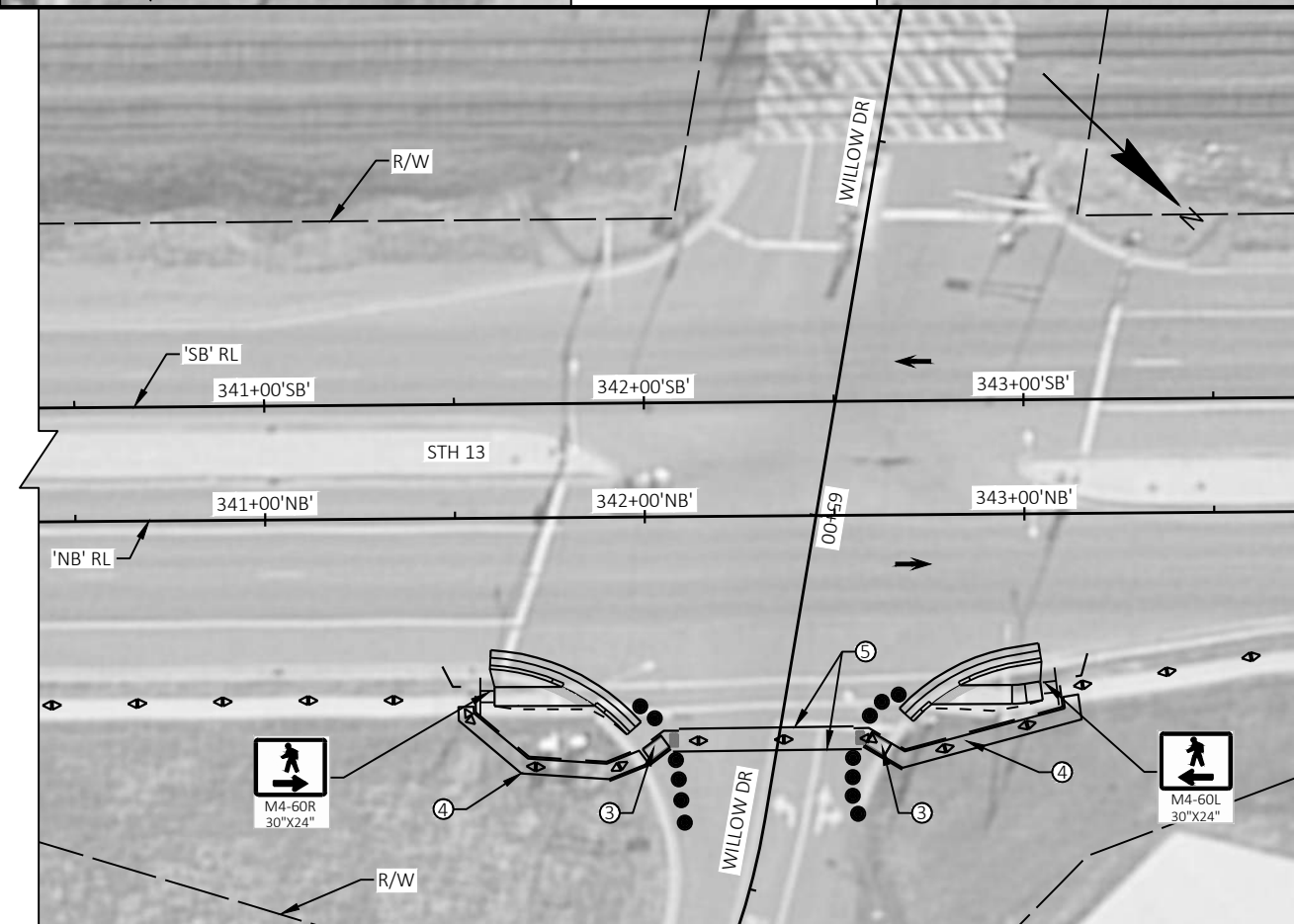
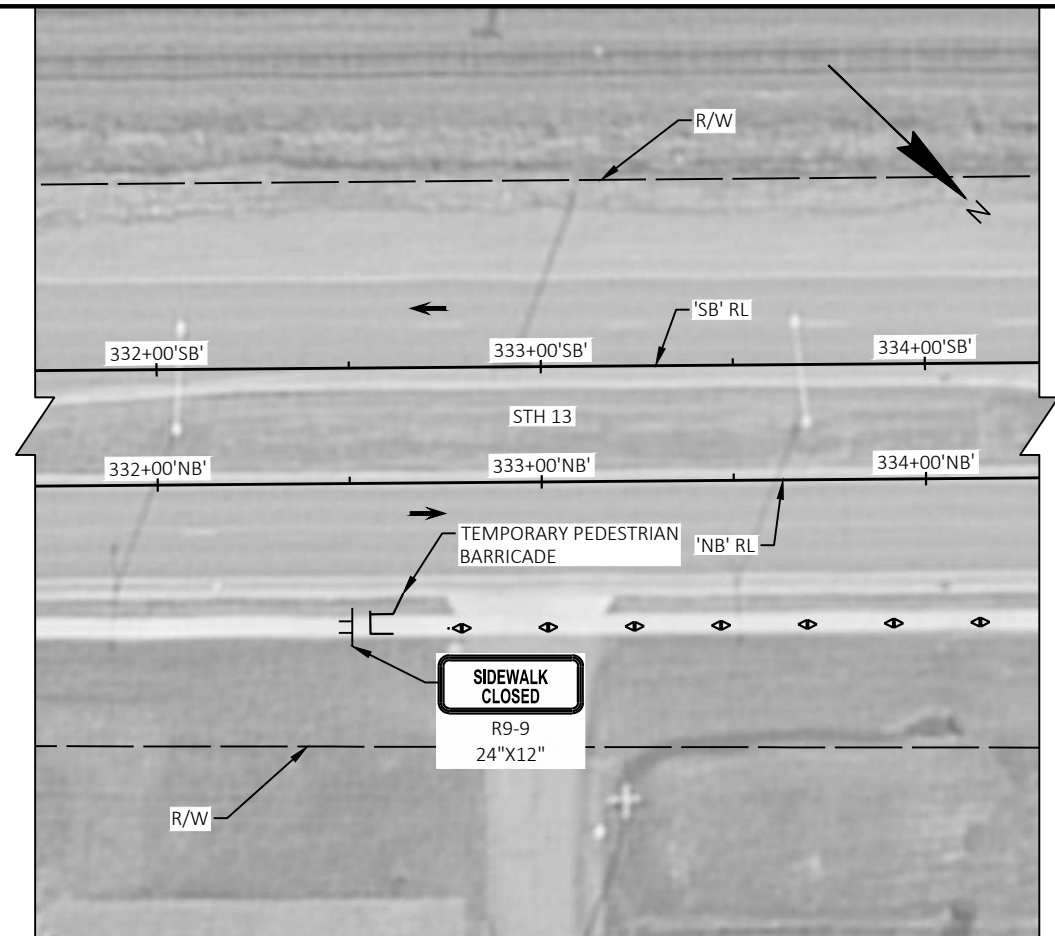
LEGEND



2



2



NOTES

- ① REFER TO CURB RAMP DETAILS FOR TEMPORARY SIDEWALK AND CURB RAMP LAYOUT INFORMATION.
- ② USE EXISTING CROSSWALK.
- ③ USE TEMPORARY CURB RAMP.
- ④ TEMPORARY PEDESTRIAN SURFACE.
- ⑤ TEMPORARY CROSSWALK (MARKED WITH TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH)

LEGEND

- | | |
|---|---|
|  | TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT |
|  | TRAFFIC CONTROL DRUM (SEE SDD FOR LAYOUT NEAR TEMPORARY CURB RAMPS) |
|  | DIRECTION OF VEHICLE TRAFFIC |
|  | PERMANENT/TEMPORARY SIDEWALK AND CROSSWALK OPEN TO PEDESTRIANS |

PROJECT NO:	1620-03-72
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HWY: STH 13

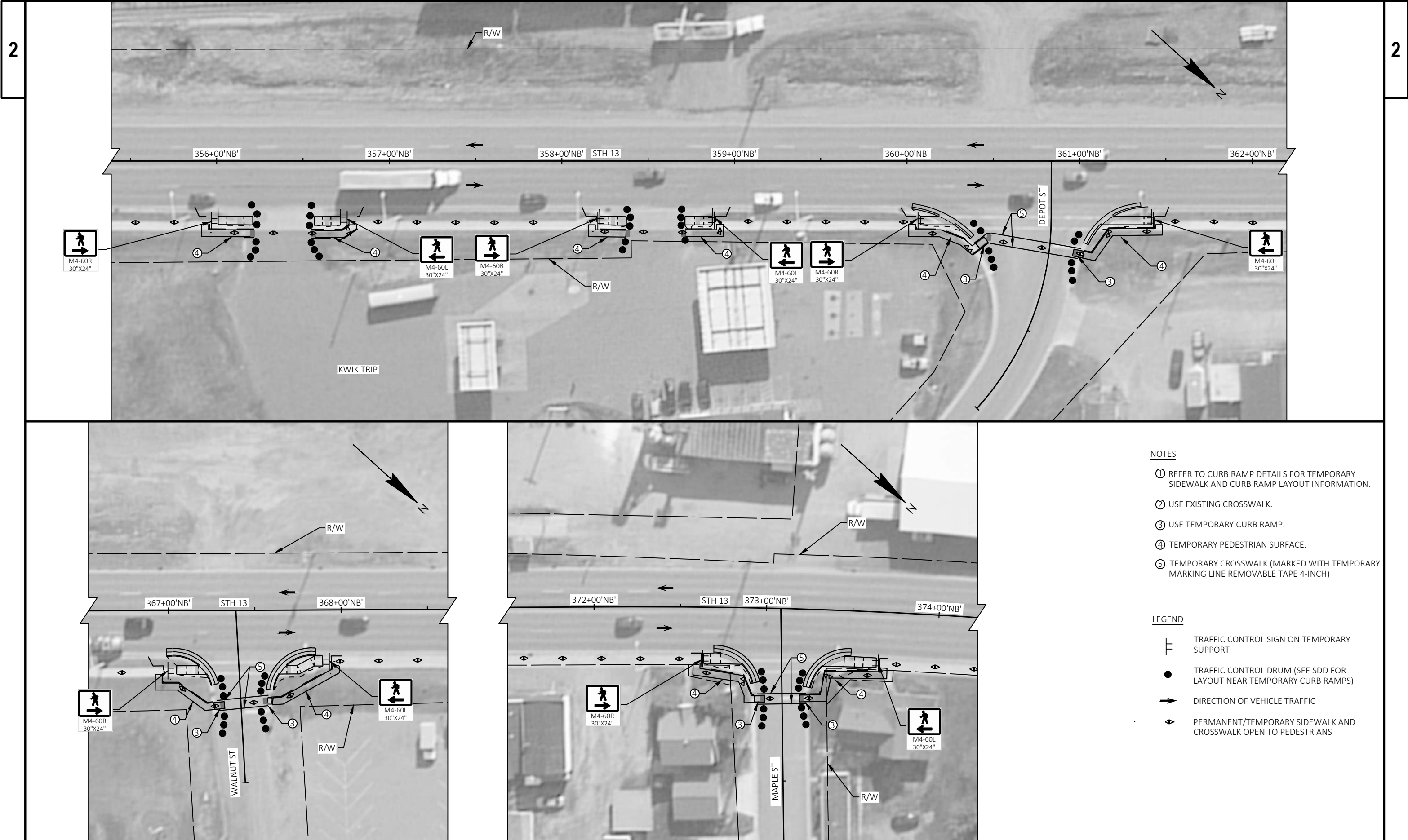
COUNTY: MARATHON

TRAFFIC CONTROL - STAGE 1 PEDESTRIAN ACCOMMODATION

SHEET

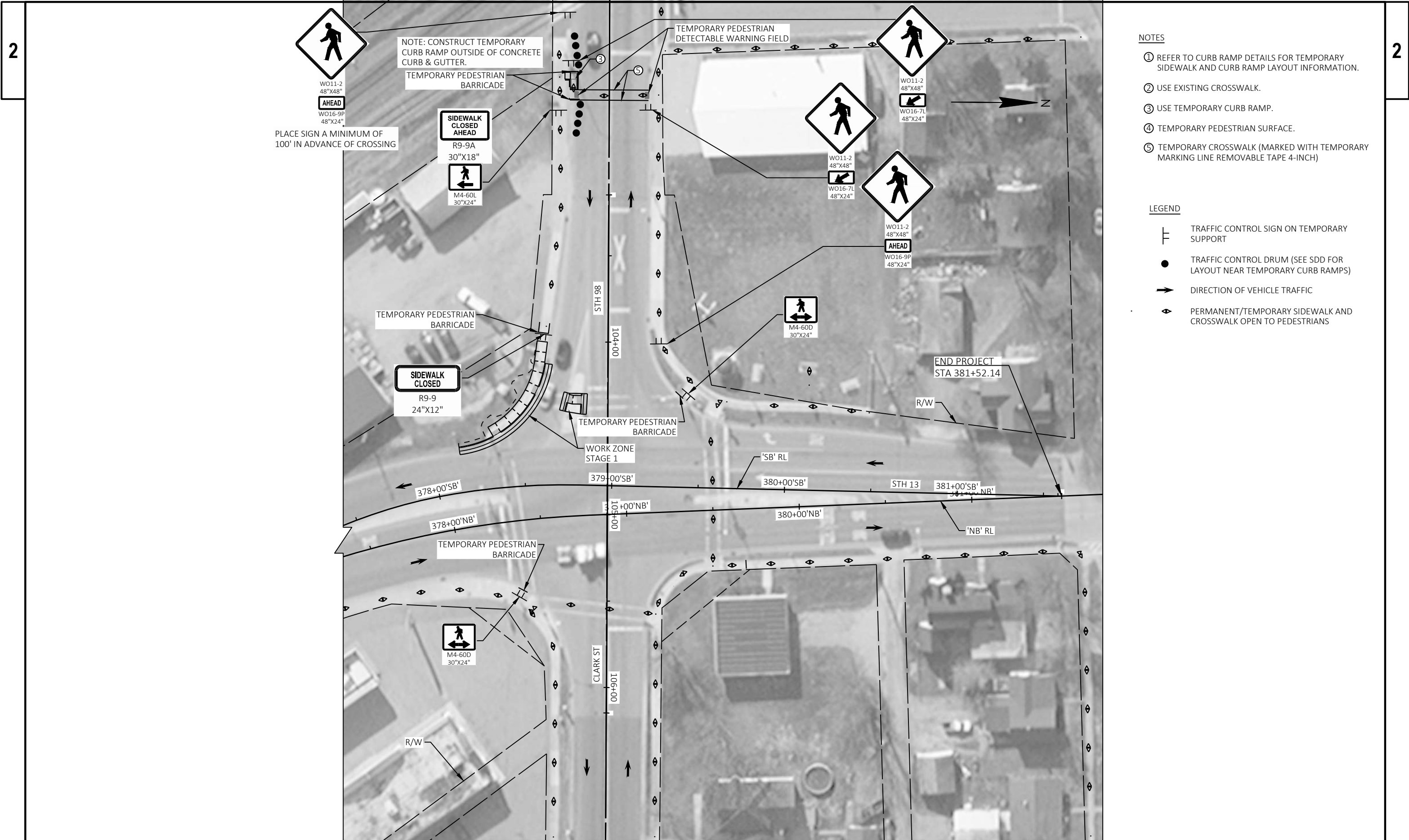
51

11



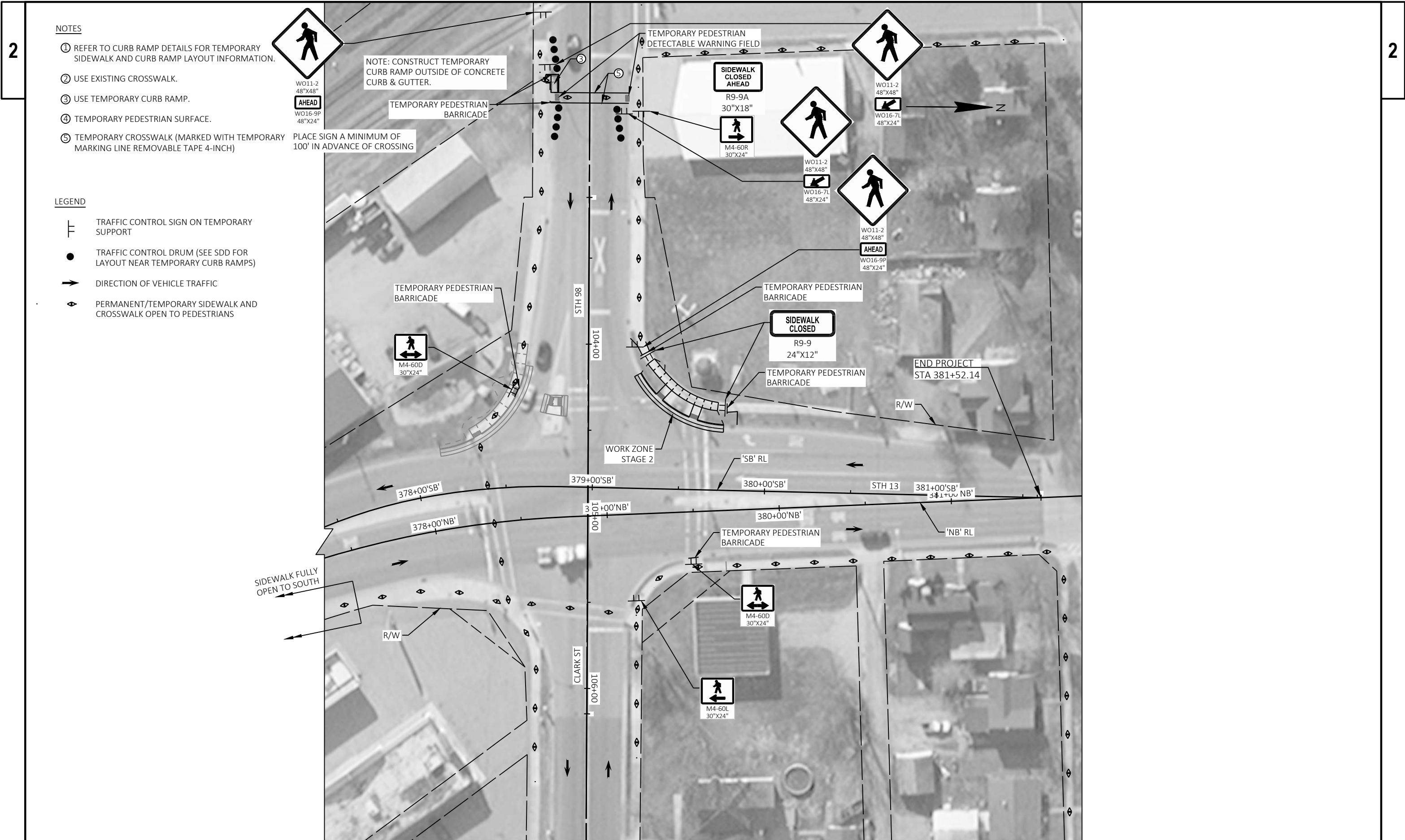
- NOTES
- ① REFER TO CURB RAMP DETAILS FOR TEMPORARY SIDEWALK AND CURB RAMP LAYOUT INFORMATION.
 - ② USE EXISTING CROSSWALK.
 - ③ USE TEMPORARY CURB RAMP.
 - ④ TEMPORARY PEDESTRIAN SURFACE.
 - ⑤ TEMPORARY CROSSWALK (MARKED WITH TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH)

- LEGEND
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
 - TRAFFIC CONTROL DRUM (SEE SDD FOR LAYOUT NEAR TEMPORARY CURB RAMP)
 - DIRECTION OF VEHICLE TRAFFIC
 - PERMANENT/TEMPORARY SIDEWALK AND CROSSWALK OPEN TO PEDESTRIANS



- NOTES
- ① REFER TO CURB RAMP DETAILS FOR TEMPORARY SIDEWALK AND CURB RAMP LAYOUT INFORMATION.
 - ② USE EXISTING CROSSWALK.
 - ③ USE TEMPORARY CURB RAMP.
 - ④ TEMPORARY PEDESTRIAN SURFACE.
 - ⑤ TEMPORARY CROSSWALK (MARKED WITH TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH)

- LEGEND
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
 - TRAFFIC CONTROL DRUM (SEE SDD FOR LAYOUT NEAR TEMPORARY CURB RAMP)
 - DIRECTION OF VEHICLE TRAFFIC
 - PERMANENT/TEMPORARY SIDEWALK AND CROSSWALK OPEN TO PEDESTRIANS

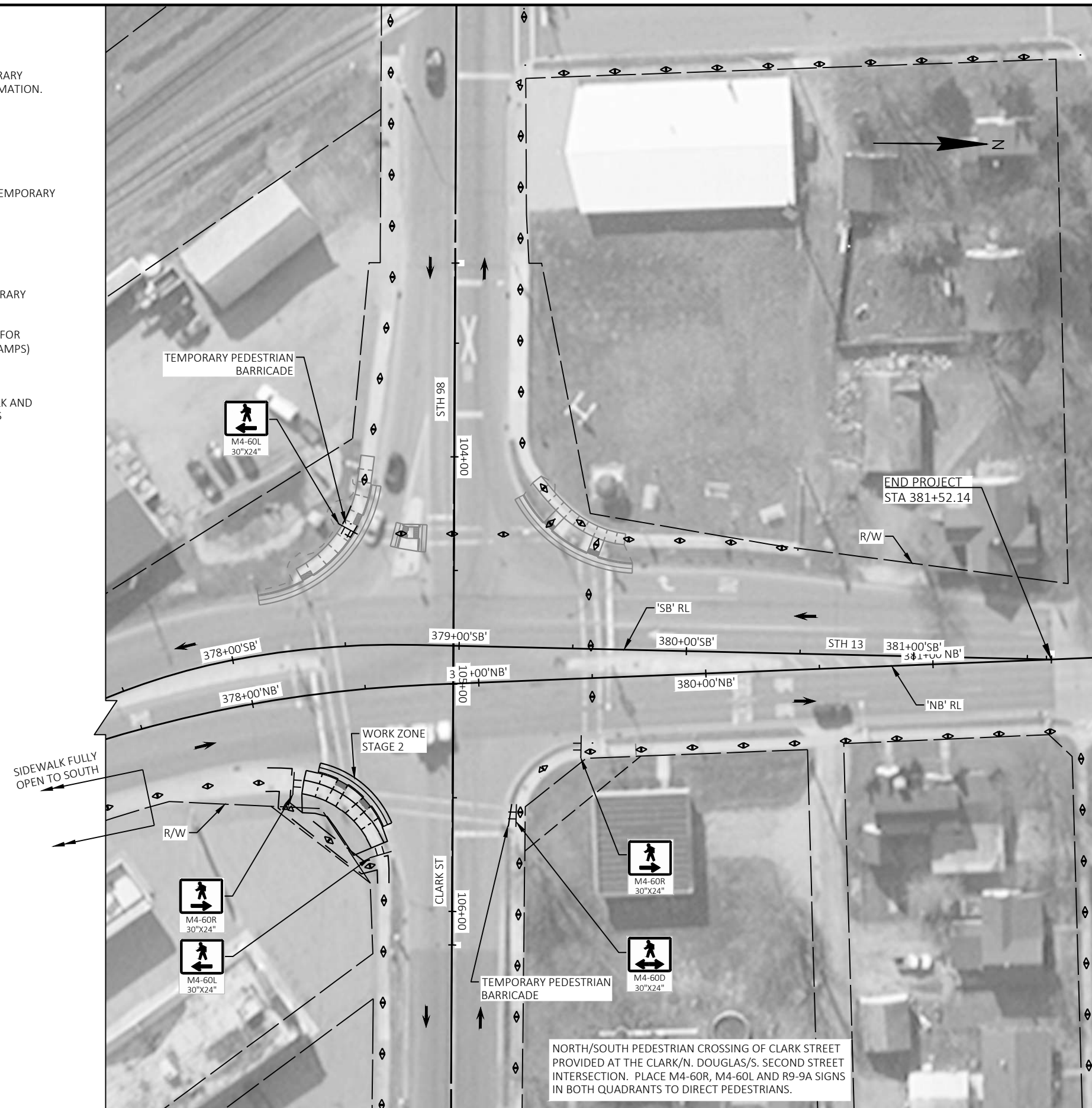


NOTES

- ① REFER TO CURB RAMP DETAILS FOR TEMPORARY SIDEWALK AND CURB RAMP LAYOUT INFORMATION.
- ② USE EXISTING CROSSWALK.
- ③ USE TEMPORARY CURB RAMP.
- ④ TEMPORARY PEDESTRIAN SURFACE.
- ⑤ TEMPORARY CROSSWALK (MARKED WITH TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH)

LEGEND

-  TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
-  TRAFFIC CONTROL DRUM (SEE SDD FOR LAYOUT NEAR TEMPORARY CURB RAMPS)
-  DIRECTION OF VEHICLE TRAFFIC
-  PERMANENT/TEMPORARY SIDEWALK AND CROSSWALK OPEN TO PEDESTRIANS



PROJECT NO: 1620-03-72

HWY: STH 13

COUNTY: MARATHON

TRAFFIC CONTROL - STAGE 3 PEDESTRIAN ACCOMMODATION

SHEET

55

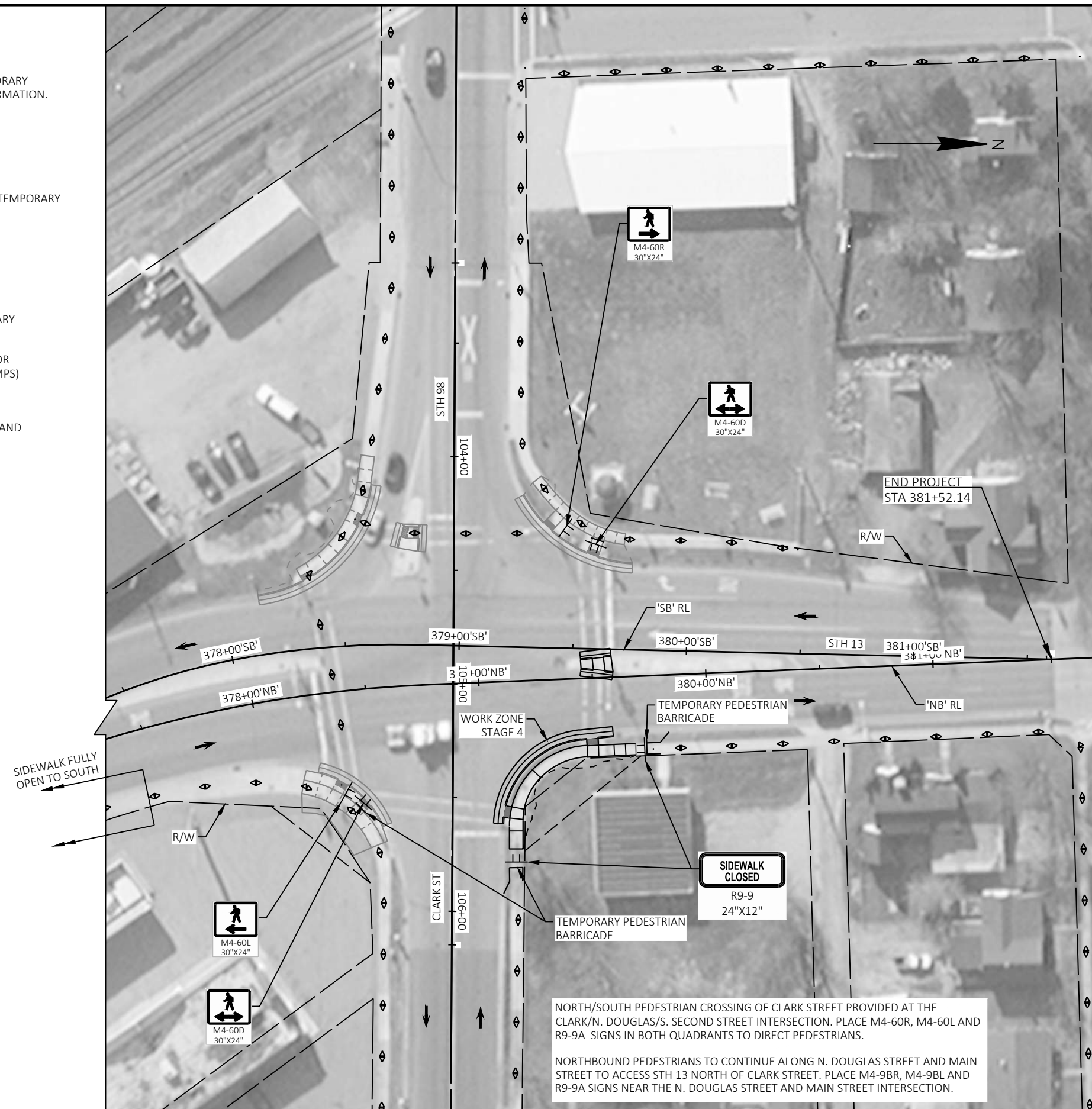
E

NOTES

- ① REFER TO CURB RAMP DETAILS FOR TEMPORARY SIDEWALK AND CURB RAMP LAYOUT INFORMATION.
- ② USE EXISTING CROSSWALK.
- ③ USE TEMPORARY CURB RAMP.
- ④ TEMPORARY PEDESTRIAN SURFACE.
- ⑤ TEMPORARY CROSSWALK (MARKED WITH TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH)

LEGEND

- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM (SEE SDD FOR LAYOUT NEAR TEMPORARY CURB RAMPS)
- DIRECTION OF VEHICLE TRAFFIC
- PERMANENT/TEMPORARY SIDEWALK AND CROSSWALK OPEN TO PEDESTRIANS



PROJECT NO: 1620-03-72

HWY: STH 13

COUNTY: MARATHON

TRAFFIC CONTROL - STAGE 4 PEDESTRIAN ACCOMMODATION

SHEET

56

E

Estimate Of Quantities

1620-03-72

Line	Item	Item Description	Unit	Total	Qty
0002	204.0100	Removing Concrete Pavement	SY	12.000	12.000
0004	204.0110	Removing Asphaltic Surface	SY	175.000	175.000
0006	204.0115	Removing Asphaltic Surface Butt Joints	SY	885.000	885.000
0008	204.0120	Removing Asphaltic Surface Milling	SY	129,625.000	129,625.000
0010	204.0150	Removing Curb & Gutter	LF	675.000	675.000
0012	204.0155	Removing Concrete Sidewalk	SY	390.000	390.000
0014	205.0501.S	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	TON	28.000	28.000
0016	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 1620-03-72	EACH	1.000	1.000
0018	213.0100	Finishing Roadway (project) 01. 1620-03-72	EACH	1.000	1.000
0020	305.0110	Base Aggregate Dense 3/4-Inch	TON	2,000.000	2,000.000
0022	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	190.000	190.000
0024	416.0160	Concrete Driveway 6-Inch	SY	12.000	12.000
0026	416.0610	Drilled Tie Bars	EACH	44.000	44.000
0028	455.0605	Tack Coat	GAL	9,375.000	9,375.000
0030	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0032	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.000	1.000
0034	460.2005	Incentive Density PWL HMA Pavement	DOL	7,430.000	7,430.000
0036	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	28,910.000	28,910.000
0038	460.2010	Incentive Air Voids HMA Pavement	DOL	11,095.000	11,095.000
0040	460.6425	HMA Pavement 5 MT 58-28 H	TON	11,095.000	11,095.000
0042	465.0105	Asphaltic Surface	TON	65.000	65.000
0044	465.0110	Asphaltic Surface Patching	TON	225.000	225.000
0046	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	1,975.000	1,975.000
0048	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	10,005.000	10,005.000
0050	601.0407	Concrete Curb & Gutter 18-Inch Type D	LF	52.000	52.000
0052	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	389.000	389.000
0054	601.0555	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type A	LF	81.000	81.000
0056	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	153.000	153.000
0058	602.0405	Concrete Sidewalk 4-Inch	SF	3,200.000	3,200.000
0060	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	150.000	150.000
0062	602.0605	Curb Ramp Detectable Warning Field Radial Yellow	SF	236.000	236.000
0064	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1620-03-72	EACH	1.000	1.000
0066	619.1000	Mobilization	EACH	1.000	1.000
0068	624.0100	Water	MGAL	40.000	40.000
0070	625.0100	Topsoil	SY	575.000	575.000
0072	628.1504	Silt Fence	LF	200.000	200.000
0074	628.1520	Silt Fence Maintenance	LF	200.000	200.000
0076	628.1905	Mobilizations Erosion Control	EACH	5.000	5.000
0078	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0080	628.2006	Erosion Mat Urban Class I Type A	SY	575.000	575.000
0082	628.7010	Inlet Protection Type B	EACH	2.000	2.000
0084	628.7015	Inlet Protection Type C	EACH	98.000	98.000
0086	630.0140	Seeding Mixture No. 40	LB	10.000	10.000
0088	630.0500	Seed Water	MGAL	12.000	12.000
0090	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	2.000	2.000
0092	638.2102	Moving Signs Type II	EACH	3.000	3.000
0094	638.4000	Moving Small Sign Supports	EACH	3.000	3.000
0096	642.5001	Field Office Type B	EACH	1.000	1.000
0098	643.0300	Traffic Control Drums	DAY	20,125.000	20,125.000

Estimate Of Quantities

1620-03-72

Line	Item	Item Description	Unit	Total	Qty
0100	643.0420	Traffic Control Barricades Type III	DAY	948.000	948.000
0102	643.0705	Traffic Control Warning Lights Type A	DAY	1,896.000	1,896.000
0104	643.0715	Traffic Control Warning Lights Type C	DAY	2,115.000	2,115.000
0106	643.0800	Traffic Control Arrow Boards	DAY	132.000	132.000
0108	643.0900	Traffic Control Signs	DAY	5,618.000	5,618.000
0110	643.1000	Traffic Control Signs Fixed Message	SF	36.000	36.000
0112	643.3150	Temporary Marking Line Removable Tape 4-Inch	LF	555.000	555.000
0114	643.3850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	110.000	110.000
0116	643.5000	Traffic Control	EACH	1.000	1.000
0118	644.1430	Temporary Pedestrian Surface Plate	SF	15.000	15.000
0120	644.1440	Temporary Pedestrian Surface Matting	SF	2,045.000	2,045.000
0122	644.1601	Temporary Pedestrian Curb Ramp	DAY	200.000	200.000
0124	644.1605	Temporary Pedestrian Detectable Warning Field	SF	112.000	112.000
0126	644.1810	Temporary Pedestrian Barricade	LF	1,160.000	1,160.000
0128	646.1020	Marking Line Epoxy 4-Inch	LF	355.000	355.000
0130	646.5020	Marking Arrow Epoxy	EACH	7.000	7.000
0132	646.5120	Marking Word Epoxy	EACH	5.000	5.000
0134	646.5320	Marking Railroad Crossings Epoxy	EACH	8.000	8.000
0136	646.6120	Marking Stop Line Epoxy 18-Inch	LF	620.000	620.000
0138	646.7120	Marking Diagonal Epoxy 12-Inch	LF	2,685.000	2,685.000
0140	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	1,060.000	1,060.000
0142	646.8120	Marking Curb Epoxy	LF	685.000	685.000
0144	646.8220	Marking Island Nose Epoxy	EACH	30.000	30.000
0146	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	675.000	675.000
0148	650.8000	Construction Staking Resurfacing Reference	LF	23,767.000	23,767.000
0150	650.9000	Construction Staking Curb Ramps	EACH	24.000	24.000
0152	650.9500	Construction Staking Sidewalk (project) 01. 1620-03-72	EACH	1.000	1.000
0154	650.9911	Construction Staking Supplemental Control (project) 01. 1620-03-72	EACH	1.000	1.000
0156	653.0900	Adjusting Pull Boxes	EACH	3.000	3.000
0158	690.0150	Sawing Asphalt	LF	1,045.000	1,045.000
0160	690.0250	Sawing Concrete	LF	345.000	345.000
0162	740.0440	Incentive IRI Ride	DOL	24,830.000	24,830.000
0164	SPV.0030	Special 01. Fertilizer For Lawn Type Turf	CWT	2.000	2.000
0166	SPV.0060	Special 01. Research and Locate Existing Land Parcel Monuments	EACH	4.000	4.000
0168	SPV.0060	Special 02. Verify and Replace Existing Land Parcel Monuments	EACH	4.000	4.000
0170	SPV.0090	Special 01. Temporary Marking Line Paint 6-Inch	LF	2,410.000	2,410.000
0172	SPV.0090	Special 02. Temporary Marking Line Epoxy 6-Inch	LF	9,900.000	9,900.000
0174	SPV.0090	Special 03. Marking Line Epoxy 6-Inch	LF	38,550.000	38,550.000
0176	SPV.0090	Special 04. Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	30,890.000	30,890.000
0178	SPV.0090	Special 05. Marking Line Epoxy 10-Inch	LF	3,055.000	3,055.000
0180	SPV.0090	Special 06. Marking Line Grooved Wet Ref Epoxy 10-Inch	LF	925.000	925.000
0182	SPV.0090	Special 07. Marking Line Same Day Epoxy 6-Inch	LF	19,350.000	19,350.000
0184	SPV.0180	Special 01. Preparing Topsoil For Lawn Type Turf	SY	575.000	575.000
0186	SPV.0180	Special 02. Removing Distressed Asphaltic Surface Milling	SY	2,000.000	2,000.000

REMOVING CONCRETE ITEMS

STATION	TO	STATION	QUADRANT	204.0100	204.0150	204.0155
				PAVEMENT SY	CURB & GUTTER LF	SIDEWALK SY
327+20	-	327+65	APPLE SE	-	41	15
328+20	-	328+55	APPLE NE	-	30	15
341+60	-	341+95	WILLOW SE	-	42	13
342+70	-	343+05	WILLOW NE	-	40	17
356+00	-	356+20	S COMMERCIAL ENTRANCE SE	3	-	12
356+55	-	356+70	S COMMERCIAL ENTRANCE NE	3	-	9
358+20	-	358+35	N COMMERCIAL ENTRANCE SE	3	-	9
358+70	-	358+85	N COMMERCIAL ENTRANCE NE	3	-	9
360+00	-	360+40	DEPOT SE	-	40	9
361+00	-	361+40	DEPOT NE	-	41	15
367+00	-	367+25	WALNUT SE	-	35	10
367+60	-	367+90	WALNUT NE	-	36	17
372+65	-	372+95	MAPLE SE	-	32	15
373+25	-	373+65	MAPLE NE	-	34	18
378+10	-	378+65	CLARK SW	-	82	42
378+15	-	378+55	CLARK SE	-	40	50
378+65	-	378+80	W MEDIAN	-	24	10
379+20	-	379+70	CLARK NW	-	60	42
379+05	-	379+70	CLARK NE	-	70	55
379+45	-	379+60	N MEDIAN	-	28	8
ITEM TOTAL				12	675	390

REMOVING ASPHALTIC SURFACE ITEMS

STATION	TO	STATION	204.0110	204.0115	204.0120
			REMOVING ASPHALTIC SURFACE SY	REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	REMOVING ASPHALTIC SURFACE MILLING SY
143+85	-	172+00	-	197	16,775
172+00	-	215+00	-	36	15,320
215+00	-	257+00	-	161	23,160
257+00	-	316+00	-	32	28,770
316+00	-	350+00	36	246	26,410
350+00	-	376+00	38	68	14,195
376+00	-	381+52	101	145	4,995
ITEM TOTAL			175	885	129,625

CONTAMINATED SOIL REMOVAL

STATION	TO	STATION	QUADRANT	205.0501.S
				EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL TON
378+10	-	378+65	CLARK SW	28
ITEM TOTAL				28

PREPARE FOUNDATION FOR ASPHALTIC PAVING

STATION	TO	STATION	211.0101
			EACH
143+85	-	381+52	1
ITEM TOTAL			1

AGGREGATE ITEMS

STATION	TO	STATION	LOCATION	305.0110	305.0120	624.0100
				BASE AGGREGATE DENSE		WATER MGAL
				3/4-INCH TON	1 1/4-INCH TON	
143+85	-	172+00	STH 13	200	-	4
172+00	-	215+00	STH 13	550	-	10
215+00	-	257+00	STH 13	370	-	6
257+00	-	316+00	STH 13	690	-	11
316+00	-	350+00	STH 13	160	-	4
350+00	-	376+00	STH 13	30	-	1
327+20	-	327+65	APPLE SE	-	8	0.2
328+20	-	328+55	APPLE NE	-	7	0.2
341+60	-	341+95	WILLOW SE	-	8	0.2
342+70	-	343+05	WILLOW NE	-	8	0.2
356+00	-	356+20	S COMMERCIAL ENTRANCE SE	-	3	0.1
356+55	-	356+70	S COMMERCIAL ENTRANCE NE	-	2	0.1
358+20	-	358+35	N COMMERCIAL ENTRANCE SE	-	2	0.1
358+70	-	358+85	N COMMERCIAL ENTRANCE NE	-	2	0.1
360+00	-	360+40	DEPOT SE	-	7	0.2
361+00	-	361+40	DEPOT NE	-	8	0.2
367+00	-	367+25	WALNUT SE	-	6	0.1
367+60	-	367+90	WALNUT NE	-	8	0.2
372+65	-	372+95	MAPLE SE	-	6	0.1
373+25	-	373+65	MAPLE NE	-	8	0.2
378+10	-	378+65	CLARK SW	-	28	0.6
378+15	-	378+55	CLARK SE	-	22	0.4
378+65	-	378+80	W MEDIAN	-	4	0.1
379+20	-	379+70	CLARK NW	-	15	0.3
379+05	-	379+70	CLARK NE	-	19	0.3
379+45	-	379+60	N MEDIAN	-	4	0.1
UNDISTRIBUTED				-	15	-
ITEM TOTAL				2,000	190	40

NOTE: ALL STATIONS ARE NORTHBOUND (NB)
UNLESS OTHERWISE NOTED
NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET
ARE FOR ENGINEER ESTIMATE CATEGORY 0010
UNLESS OTHERWISE NOTED.

ASPHALTIC ITEMS							
				455.0605	460.6425	465.0105	465.0110
				TACK COAT	HMA PAVEMENT 5 MT 58-28 H	ASPHALTIC SURFACE	ASPHALTIC SURFACE PATCHING
STATION	TO	STATION	LOCATION	GAL	TON	TON	TON
143+85	-	172+00	STH 13	1,113	1,335	-	-
172+00	-	215+00	STH 13	1,060	1,270	-	-
215+00	-	257+00	STH 13	1,572	1,885	-	-
257+00	-	316+00	STH 13	1,993	2,390	-	-
316+00	-	350+00	STH 13	1,780	2,135	-	-
350+00	-	376+00	STH 13	1,030	1,235	-	-
376+00	-	381+52	STH 13	260	315	-	-
155+97	-	157+87	26TH RD	75	100	-	-
182+42	-	183+74	MERKEL RD	23	27	-	-
234+27	-	235+98	CTH F/KARAU AVE	74	96	-	-
304+22	-	305+62	BACK COUNTY RD	30	35	-	-
327+27	-	328+43	APPLE RD	24	28	7	-
342+59	-	343+45	WILLOW DR	74	97	8	-
360+03	-	361+36	DEPOT ST	-	-	-	-
366+99	-	367+85	WALNUT ST	10	10	7	-
372+70	-	373+50	MAPLE ST	10	10	7	-
378+10	-	379+70	STH 98/CLARK ST	107	127	36	-
UNDISTRIBUTED				140	-	-	225
ITEM TOTAL				9,375	11,095	65	225

CONCRETE ITEMS

				416.0160	416.0610	601.0407	601.0411	601.0555	601.0557	602.0405	602.0505	602.0605
				CONCRETE DRIVEWAY	DRILLED TIE	CONCRETE CURB & GUTTER				CONCRETE SIDEWALK 4-INCH	CURB RAMP DETECTABLE WARNING FIELD	
STATION	TO	STATION	QUADRANT	6-INCH SY	BARS EA	18-INCH TYPE D LF	30-INCH TYPE D LF	6-INCH SLOPED 36-INCH TYPE A LF	6-INCH SLOPED 36-INCH TYPE D LF		YELLOW SF	RADIAL YELLOW SF
327+20	-	327+65	APPLE SE	-	-	-	-	-	41	123	-	23
328+20	-	328+55	APPLE NE	-	-	-	-	-	30	115	-	20
341+60	-	341+95	WILLOW SE	-	-	-	-	-	42	112	-	22
342+70	-	343+05	WILLOW NE	-	-	-	-	-	40	130	-	20
356+00	-	356+20	S COMMERCIAL ENTRANCE SE	3	4	-	-	-	-	75	10	23
356+55	-	356+70	S COMMERCIAL ENTRANCE NE	3	4	-	-	-	-	51	10	18
358+20	-	358+35	N COMMERCIAL ENTRANCE SE	3	4	-	-	-	-	53	10	-
358+70	-	358+85	N COMMERCIAL ENTRANCE NE	3	4	-	-	-	-	55	10	-
360+00	-	360+40	DEPOT SE	-	14	-	-	40	-	77	-	23
361+00	-	361+40	DEPOT NE	-	14	-	-	41	-	128	-	18
367+00	-	367+25	WALNUT SE	-	-	-	35	-	-	73	10	-
367+60	-	367+90	WALNUT NE	-	-	-	36	-	-	150	-	23
372+65	-	372+95	MAPLE SE	-	-	-	32	-	-	105	-	23
373+25	-	373+65	MAPLE NE	-	-	-	34	-	-	155	-	23
378+10	-	378+65	CLARK SW	-	-	-	82	-	-	420	20	-
378+15	-	378+55	CLARK SE	-	-	-	40	-	-	448	20	-
378+65	-	378+80	W MEDIAN	-	-	23	-	-	-	87	20	-
379+20	-	379+70	CLARK NW	-	-	-	60	-	-	316	20	-
379+05	-	379+70	CLARK NE	-	-	-	70	-	-	455	20	-
379+45	-	379+60	N MEDIAN	-	-	29	-	-	-	72	-	-
ITEM TOTAL				12	44	52	389	81	153	3,200	150	236

NOTE: ALL STATIONS ARE NORTHBOUND (NB) UNLESS OTHERWISE NOTED

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PWL MIXTURE USE TABLE

LOCATION	STATION	TO	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR:	
									MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
NB/SB DRIVING LANES	143+85	-	172+00	UPPER LAYER	MILLED EXISTING HMA	460.6425	640	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
NB/SB SHOULDERS, TURN LANES AND MEDIAN	143+85	-	172+00	UPPER LAYER	MILLED EXISTING HMA	460.6425	695	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
NB/SB DRIVING LANES	172+00	-	215+00	UPPER LAYER	MILLED EXISTING HMA	460.6425	970	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
NB/SB SHOULDERS, TURN LANES AND MEDIAN	172+00	-	215+00	UPPER LAYER	MILLED EXISTING HMA	460.6425	300	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
NB/SB DRIVING LANES	215+00	-	257+00	UPPER LAYER	MILLED EXISTING HMA	460.6425	960	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
NB/SB SHOULDERS, TURN LANES AND MEDIAN	215+00	-	257+00	UPPER LAYER	MILLED EXISTING HMA	460.6425	925	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
NB/SB DRIVING LANES	257+00	-	316+00	UPPER LAYER	MILLED EXISTING HMA	460.6425	1980	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
NB/SB SHOULDERS, TURN LANES AND MEDIAN	257+00	-	316+00	UPPER LAYER	MILLED EXISTING HMA	460.6425	410	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
NB/SB DRIVING LANES	316+00	-	350+00	UPPER LAYER	MILLED EXISTING HMA	460.6425	1485	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
NB/SB SHOULDERS, TURN LANES AND MEDIAN	316+00	-	350+00	UPPER LAYER	MILLED EXISTING HMA	460.6425	650	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
NB/SB DRIVING LANES	350+00	-	376+00	UPPER LAYER	MILLED EXISTING HMA	460.6425	1175	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
NB/SB SHOULDERS, TURN LANES AND MEDIAN	350+00	-	376+00	UPPER LAYER	MILLED EXISTING HMA	460.6425	60	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
NB/SB DRIVING LANES	376+00	-	381+52	UPPER LAYER	MILLED EXISTING HMA	460.6425	255	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
NB/SB SHOULDERS, TURN LANES AND MEDIAN	376+00	-	381+52	UPPER LAYER	MILLED EXISTING HMA	460.6425	60	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
26TH RD	155+97	-	157+87	UPPER LAYER	MILLED EXISTING HMA	460.6425	100	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
MERKEL RD	182+42	-	183+74	UPPER LAYER	MILLED EXISTING HMA	460.6425	27	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
CTH F/KARAU AVE	234+27	-	235+98	UPPER LAYER	MILLED EXISTING HMA	460.6425	96	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
BACK COUNTRY RD	304+22	-	305+62	UPPER LAYER	MILLED EXISTING HMA	460.6425	35	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
APPLE RD	327+27	-	328+43	UPPER LAYER	MILLED EXISTING HMA	460.6425	28	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
WILLOW DR	342+59	-	343+45	UPPER LAYER	MILLED EXISTING HMA	460.6425	97	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
WALNUT ST	366+99	-	367+85	UPPER LAYER	MILLED EXISTING HMA	460.6425	10	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
MAPLE ST	372+70	-	373+50	UPPER LAYER	MILLED EXISTING HMA	460.6425	10	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
STH 98/CLARK ST	378+10	-	379+70	UPPER LAYER	MILLED EXISTING HMA	460.6425	127	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE

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TURF ESTABLISHMENT ITEMS

				625.0100	628.2006	630.0140	630.0500	SPV.0030.01	SPV.0180.01	REMARKS
				TOPSOIL	EROSION MAT URBAN	SEEDING MIXTURE	SEED WATER	FERTILIZER FOR	PREPARING TOPSOIL	
STATION	TO	STATION	QUADRANT	SY	CLASS I TYPE A	NO. 40	MGAL	LAWN TYPE TURF	FOR LAWN TYPE TURF	
					SY	LB		CWT	SY	
327+20	-	327+65	APPLE SE	25	25	0.45	0.56	0.1	25	-
328+20	-	328+55	APPLE NE	20	20	0.41	0.51	0.1	20	-
341+60	-	341+95	WILLOW SE	25	25	0.41	0.51	0.1	25	-
342+70	-	343+05	WILLOW NE	30	30	0.48	0.60	0.1	30	-
356+00	-	356+20	S COMMERCIAL ENTRANCE SE	20	20	0.29	0.37	0.1	20	-
356+55	-	356+70	S COMMERCIAL ENTRANCE NE	15	15	0.20	0.25	0.1	15	-
358+20	-	358+35	N COMMERCIAL ENTRANCE SE	15	15	0.20	0.25	0.1	15	-
358+70	-	358+85	N COMMERCIAL ENTRANCE NE	15	15	0.21	0.27	0.1	15	-
360+00	-	360+40	DEPOT SE	20	20	0.29	0.36	0.1	20	-
361+00	-	361+40	DEPOT NE	30	30	0.48	0.60	0.1	30	-
367+00	-	367+25	WALNUT SE	20	20	0.29	0.37	0.1	20	-
367+60	-	367+90	WALNUT NE	15	15	0.27	0.34	0.1	15	-
372+65	-	372+95	MAPLE SE	15	15	0.25	0.31	0.1	15	-
373+25	-	373+65	MAPLE NE	20	20	0.34	0.42	0.1	20	-
378+10	-	378+65	CLARK SW	45	45	0.80	1.00	0.1	45	-
379+20	-	379+70	CLARK NW	65	65	1.11	1.38	0.1	65	-
379+05	-	379+70	CLARK NE	65	65	1.16	1.45	0.1	65	-
UNDISTRIBUTED				115	115	2.36	2.45	0.3	115	RESTORE AREA DISTURBED BY TEMP SIDEWALK
ITEM TOTAL				575	575	10	12	2	575	

EROSION CONTROL

			628.1504	628.1520	628.7010	628.7015
			SILT	SILT	INLET	INLET
			FENCE	FENCE	PROTECTION	PROTECTION
STATION	TO	STATION	LF	LF	TYPE B	TYPE C
					EACH	EACH
143+85	-	172+00	-	-	-	10
172+00	-	215+00	-	-	-	-
215+00	-	257+00	-	-	-	9
257+00	-	316+00	-	-	-	-
316+00	-	350+00	-	-	-	36
350+00	-	376+00	-	-	2	30
376+00	-	381+52	-	-	-	13
UNDISTRIBUTED			200	200	-	-
ITEM TOTAL			200	200	2	98

EROSION CONTROL MOBILIZATION

			628.1905	628.1910
			MOBILIZATIONS	MOBILIZATIONS EMERGENCY
			EROSION CONTROL	EROSION CONTROL
STATION	TO	STATION	EACH	EACH
143+85	-	381+52	5	2
ITEM TOTAL			5	2

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TRAFFIC CONTROL ITEMS																		
			643.0300*			643.0420		643.0705		643.0715		643.0900*		643.0800		643.1000		
			DRUMS			BARRICADE TYPE III		WARNING LIGHTS				SIGNS		ARROW BOARDS		SIGNS FIXED MESSAGE		
			APROX SERVICE					TYPE A		TYPE C								
STATION	TO	STATION	DAY	NO. IN SERVICE	DAY	NO. IN SERVICE	DAY	NO. IN SERVICE	DAY	NO. IN SERVICE	TYPE C DAY	NO. IN SERVICE	DAY	NO. IN SERVICE	DAY	SF	REMARKS	
143+85	-	381+52	7	-	-	-	-	-	-	-	-	-	-	-	-	36	PROJECT ADVANCED NOTIFICATION	
143+85	-	381+52	75	-	-	-	-	-	-	-	-	12	900	-	-	-	ADVANCED WARNING	
SIDEROADS			75	-	-	-	-	-	-	-	-	18	1,350	-	-	-	ADVANCED WARNING	
260+00	-	315+00	9	70	630	10	90	20	180	15	135	12	108	-	-	-		
315+00	-	381+52	53	185	9,805	13	689	26	1,378	30	1,590	30	1,590	2	106	-	OUTSIDE LANE CLOSURES FOR PED RAMPS AND STAGED MILLING/PAVING	
315+00	-	381+52	13	190	2,470	13	169	26	338	30	390	30	390	2	26	-	INSIDE LANE CLOSURES FOR STAGED MILLING/PAVING	
ITEM TOTAL					12,905		948		1,896		2,115		4,338		132		36	
* ADDITIONAL QUANTITIES LISTED ELSEWHERE																		

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PEDESTRIAN ACCOMMODATION																					
				643.0300*		643.0900*				644.1430		644.1440		644.1601		644.1605		644.1810			
				TRAFFIC CONTROL								TEMPORARY PEDESTRIAN									
				DRUMS				SIGNS				SURFACE PLATE		SURFACE MATTING		CURB RAMP		DETECTABLE WARNING FIELD		BARRICADE	
STATION	TO	STATION	QUADRANT	APPROX SERVICE DAY	NO. IN SERVICE	DAY	NO. IN SERVICE	DAY	SF	SF	NO. IN SERVICE	DAY	SF	LF							
327+20	-	327+65	APPLE SE	20	9	180	1	20	-	-	-	-		25							
328+20	-	328+55	APPLE NE	20	9	180	1	20	-	-	-	-		20							
341+60	-	341+95	WILLOW SE	20	19	380	1	20	-	225	1	20	8	105							
342+70	-	343+05	WILLOW NE	20	18	360	1	20	-	225	1	20	8	90							
356+00	-	356+20	S COMMERCIAL SE	20	17	340	1	20	-	100	-	-	8	45							
356+55	-	356+70	S COMMERCIAL NE	20	17	340	1	20	-	100	-	-	8	40							
358+20	-	358+35	N COMMERCIAL SE	20	17	340	1	20	-	100	-	-	8	40							
358+70	-	358+85	N COMMERCIAL NE	20	17	340	1	20	-	100	-	-	8	40							
360+00	-	360+40	DEPOT SE	20	18	360	1	20	-	190	1	20	8	85							
361+00	-	361+40	DEPOT NE	20	19	380	1	20	-	225	1	20	8	70							
367+00	-	367+25	WALNUT SE	20	18	360	1	20	-	170	1	20	8	50							
367+60	-	367+90	WALNUT NE	20	19	380	1	20	-	180	1	20	8	55							
372+65	-	372+95	MAPLE SE	20	17	340	1	20	-	195	1	20	8	55							
373+25	-	373+65	MAPLE NE	20	19	380	1	20	-	235	1	20	8	65							
378+10	-	378+65	CLARK SW	20	22	440	13	260	15	-	2	40	8	85							
378+65	-	378+80	W MEDIAN	20	17	340	-	-	-	-	-	-	-	-							
378+15	-	378+55	CLARK SE	20	19	380	9	180	-	-	-	-	-	170							
379+20	-	379+70	CLARK NW	20	30	600	15	300	-	-	-	-	8	60							
379+05	-	379+70	CLARK NE	20	22	440	13	260	-	-	-	-	-	60							
379+45	-	379+60	N MEDIAN	20	18	360	-	-	-	-	-	-	-	-							
ITEM TOTAL						7,220	1,280		15	2,045		200	112	1,160							
* ADDITIONAL QUANTITIES LISTED ELSEWHERE																					
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PAVEMENT MARKING ITEMS

			646.1020	SPV.0090.03		SPV.0090.04	SPV.0090.05	SPV.0090.06	SPV.0090.07		646.5020	646.5120
			MARKING LINE								MARKING	
			EPOXY 4-INCH (WHITE)	EPOXY 6-INCH (WHITE)	EPOXY 6-INCH (YELLOW)	GROOVED WET REF EPOXY 6-INCH (WHITE)	EPOXY 10-INCH (WHITE)	GROOVED WET REF EPOXY 10-INCH (WHITE)	SAME DAY EPOXY 6-INCH (WHITE)	SAME DAY EPOXY 6-INCH (YELLOW)	ARROW EPOXY (WHITE)	WORD EPOXY (WHITE)
STATION	TO	STATION	LF	LF	LF	LF	LF	LF	LF	LF	EACH	EACH
143+85	-	172+00	110	-	3,420	5,460	1,170	-	-	2,640	-	-
172+00	-	215+00	-	-	2,090	8,490	200	-	-	-	-	-
215+00	-	257+00	110	-	4,350	8,230	1,420	-	-	4,830	-	-
257+00	-	316+00	-	5,420	7,910	6,660	-	200	-	1,340	-	-
316+00	-	350+00	135	5,630	3,910	2,050	-	725	-	2,730	2	1
350+00	-	376+00	-	4,820	-	-	-	-	1,300	5,160	-	-
376+00	-	381+52	-	630	370	-	265	-	100	1,250	5	4
TOTALS			355	16,500	22,050	30,890	3,055	925	1,400	17,950	7	5
ITEM TOTALS			355	38,550		30,890	3,055	925	19,350		7	5

PERMANENT SIGNING ITEMS

LOCATION	634.0614	638.2102	638.4000
	POSTS WOOD	MOVING	MOVING SMALL
	4X6-INCH X 14-FT EACH	SIGNS TYPE II EACH	SIGN SUPPORTS EACH
UNDISTRIBUTED	2	3	3
ITEM TOTAL	2	3	3

PAVEMENT MARKING ITEMS CONTINUED

STATION	TO	STATION	646.5320	646.6120	646.7120		646.7420	646.8120	646.8220	SPV.0090.01	SPV.0090.02	643.3150	643.3850
			MARKING		MARKING DIAGONAL		MARKING			TEMPORARY MARKING			
			RAILROAD CROSSINGS	STOP LINE EPOXY	EPOXY	EPOXY	CROSSWALK EPOXY	CURB	ISLAND NOSE	LINE PAINT	LINE EPOXY	LINE REMOVABLE	STOP LINE REMOVABLE
			EPOXY (WHITE)	EPOXY 18-INCH (WHITE)	12-INCH (WHITE)	12-INCH (YELLOW)	TRANSVERSE LINE 6-INCH (WHITE)	EPOXY (YELLOW)	EPOXY (YELLOW)	6-INCH (WHITE)	6-INCH (YELLOW)	TAPE 4-INCH (WHITE)	TAPE 18-INCH (WHITE)
			EACH	LF	LF		LF	LF	EACH	LF	LF	LF	LF
143+85	-	172+00	2	55	425	315	-	80	6	-	-	-	-
172+00	-	215+00	-	30	-	-	-	-	-	-	1,980	-	-
215+00	-	257+00	2	65	775	360	-	160	8	-	115	-	-
257+00	-	316+00	-	30	-	20	-	-	-	1,110	7,760	-	-
316+00	-	350+00	2	255	445	310	340	390	12	1,300	45	135	25
350+00	-	376+00	-	60	-	-	190	-	-	-	-	240	45
376+00	-	381+52	2	125	-	35	530	55	4	-	-	180	40
TOTALS			8	620	1,645	1,040	1,060	685	30	2,410	9,900	555	110
ITEM TOTALS			8	620		2,685	1,060	685	30	2,410	9,900	555	110

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RUMBLE STRIP ITEMS

STATION	TO	STATION	LOCATION	465.0425**	465.0475
				ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL	ASPHALT CENTERLINE RUMBLE STRIPS 2-LANE RURAL
				LF	LF
143+84.35	-	152+48	RT	865	-
143+84.35	-	154+94	LT	1,110	-
171+52	-	215+91	-	-	4,440
260+75	-	316+37	-	-	5,565
ITEM TOTAL				1,975	10,005

** 2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING -TYPE 1

LAND PARCEL MONUMENT ITEMS

STATION	LOCATION	SPV.0060.01	SPV.0060.02
		RESEARCH AND LOCATE EXISITNG LAND PARCEL MONUMENTS	VERIFY AND REPLACE EXISTING LAND PARCEL MONUMENTS
		EACH	EACH
372+76.1	33.6' RT	1	1
373+41.8	39.7' RT	1	1
378+23.5	50.2' RT	1	1
379+18.6	55.2' RT	1	1
ITEM TOTAL		4	4

CONSTRUCTION STAKING

STATION	TO	STATION	650.5500	650.8000	650.9000	650.9500
			CURB GUTTER AND CURB & GUTTER LF	RESURFACING REFERENCE LF	CURB RAMPS EACH	SIDEWALK EA
143+85	-	381+52	675	23,767	24	1
ITEM TOTAL			675	23,767	24	1

SAWING

STATION	LOCATION	690.0150	690.0250
		ASPHALT LF	CONCRETE LF
156+83	26TH RD	90	-
183+17	MERKEL RD	-	-
235+09	CTH F/KARAU AVE	100	-
305+05	BACK COUNTY RD	-	-
327+92	APPLE RD	85	22
342+46	WILLOW DR	185	22
356+00	S COMMERCIAL DRIVEWAY	-	20
358+70	N COMMERCIAL DRIVEWAY	-	20
360+84	DEPOT ST	-	107
367+40	WALNUT ST	90	22
373+09	MAPLE ST	85	22
378+90	CLARK ST	410	110
ITEM TOTAL		1,045	345

ADJUSTMENT ITEMS

STATION	TO	STATION	QUADRANT	653.0900
				ADJUSTING PULL BOXES EACH
378+15	-	378+55	CLARK SE	2
379+05	-	379+70	CLARK NE	1
ITEM TOTAL				3

REMOVING DISTRESSED ASPHALTIC SURFACE MILLING

LOCATION	SPV.0180.02
	SY
UNDISTRIBUTED	2,000
ITEM TOTAL	2,000

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NOTES:
THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY. REFER TO THE CONVEYANCE DOCUMENT FOR PARCEL RELATED DETAILS.

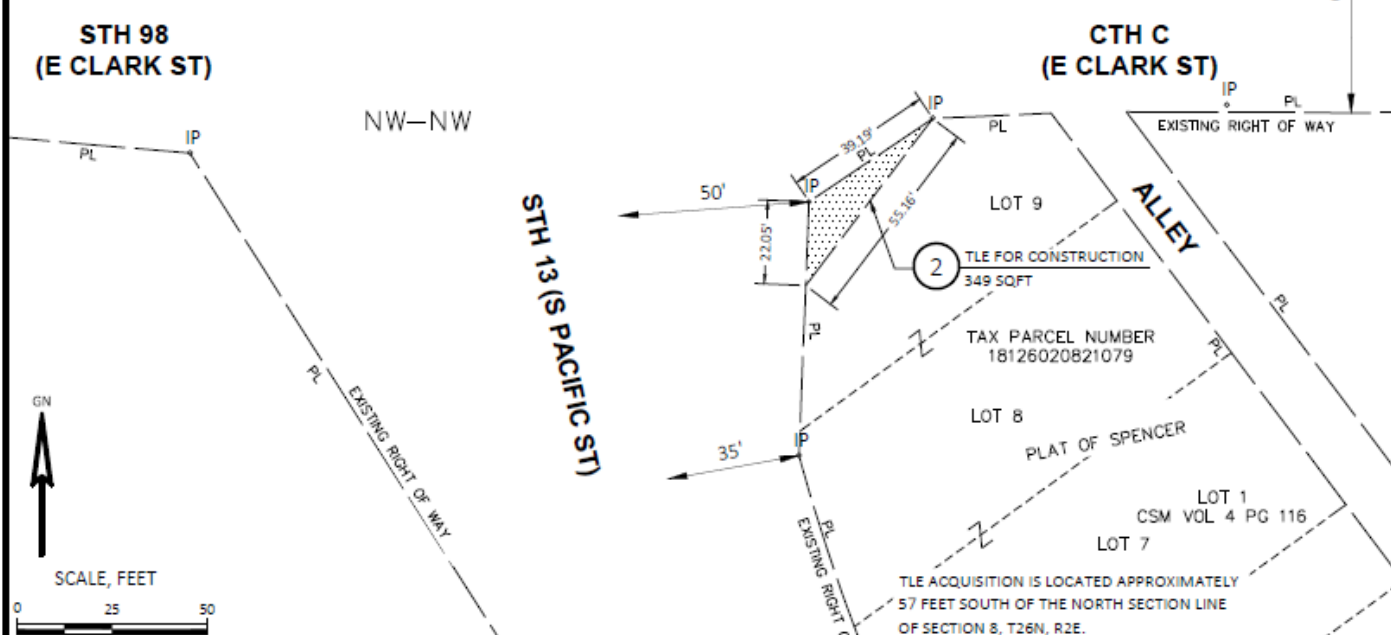
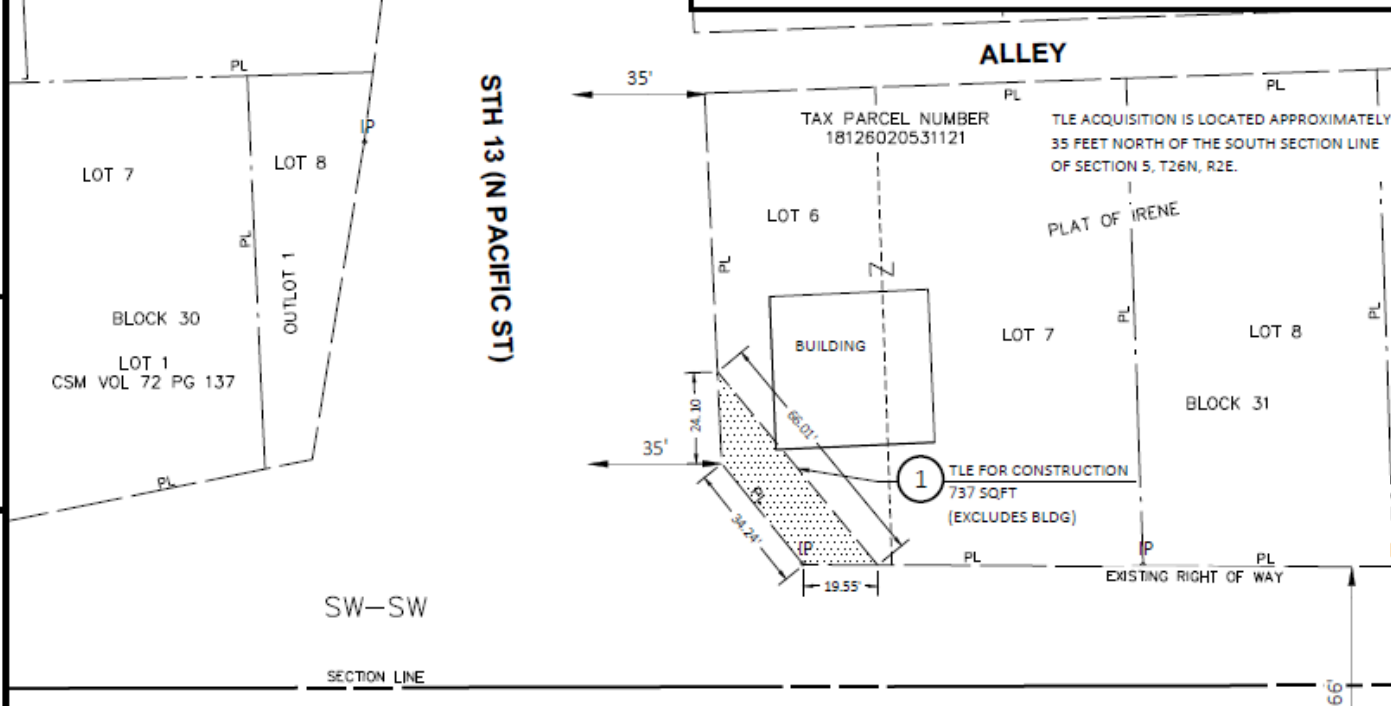
THE PURPOSE OF THE TLE IS FOR CURB RAMP CONSTRUCTION.

R/W PROJECT NUMBER: 1620-03-22 SHEET NUMBER: 1

TLE ACQUISITION EXHIBIT
MARSHFIELD - ABBOTSFORD
26TH ROAD - STH 98

STH 13 MARATHON COUNTY

PART OF THE SW 1/4 OF THE SW 1/4 OF SECTION 5 AND PART OF THE NW 1/4 OF THE NW 1/4 OF SECTION 8, T 26 N, R 2 E, VILLAGE OF SPENCER, MARATHON COUNTY, WISCONSIN



SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE S.F.
1	GENERAL TELEPHONE CO OF WISCONSIN	TLE	737
2	MICHAEL T & RHONDA SUE FOLEY	TLE	349

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
N/A	N/A	N/A

EXHIBIT PREPARED BY JT ENGINEERING FOR THE WISDOT NORTH CENTRAL REGION

THIS MAP IS APPROVED FOR THE DEPARTMENT OF TRANSPORTATION NORTH CENTRAL REGION OFFICE

SIGNATURE: *Brent L Stella* DATE: 2/21/22

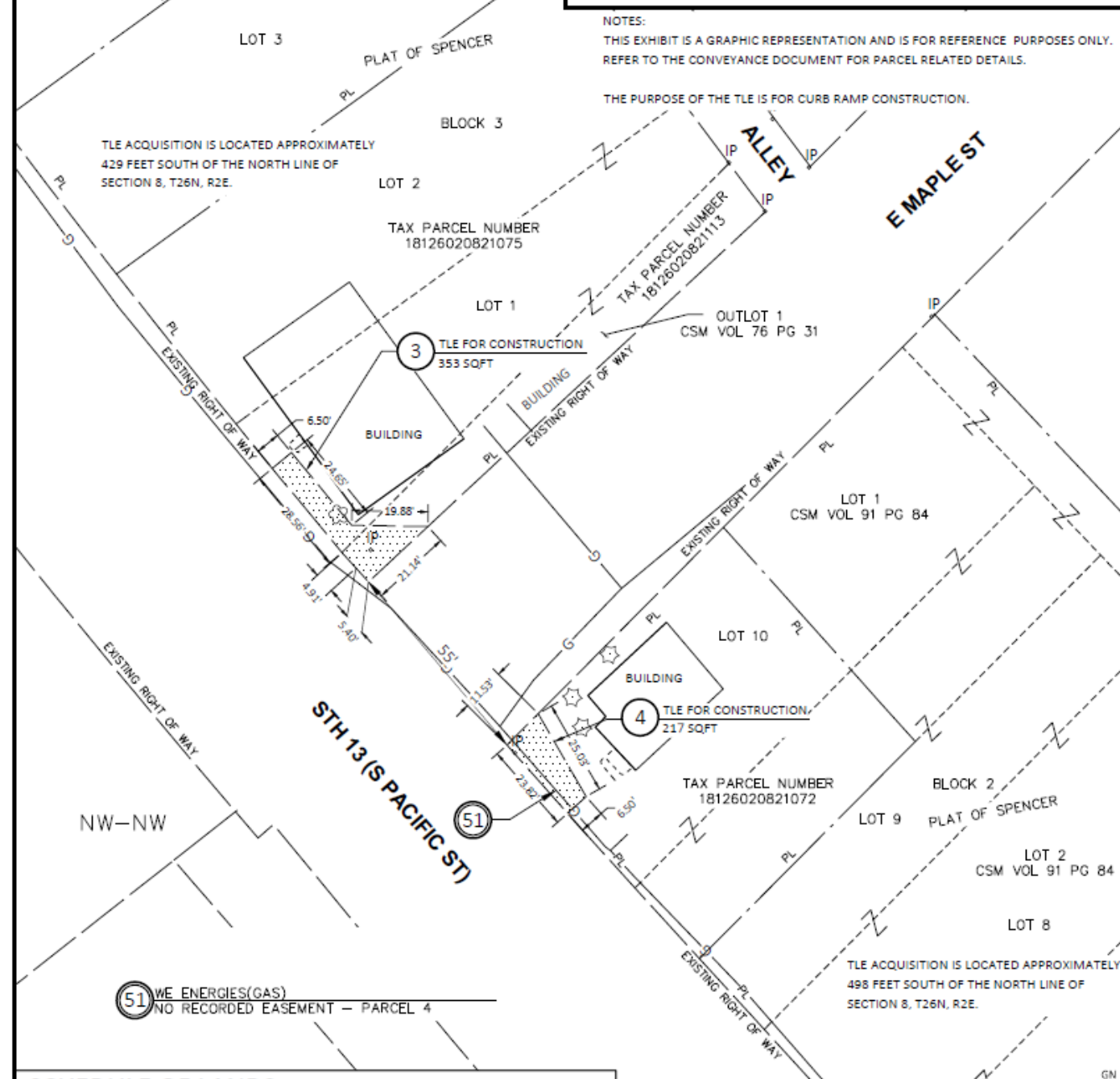
PRINT NAME: Brent L Stella

R/W PROJECT NUMBER: 1620-03-22 SHEET NUMBER: 2

TLE ACQUISITION EXHIBIT
MARSHFIELD - ABBOTSFORD
26TH ROAD - STH 98

STH 13 MARATHON COUNTY

PART OF THE NW 1/4 OF THE NW 1/4 OF SECTION 8, T 26 N, R 2 E, VILLAGE OF SPENCER, MARATHON COUNTY, WISCONSIN



SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE S.F.
3	ANDREW & MAGGIE GEIGER	TLE	353
4	JACKIE L & JANICE SHORTT JOINT REVOCABLE TRUST	TLE	217

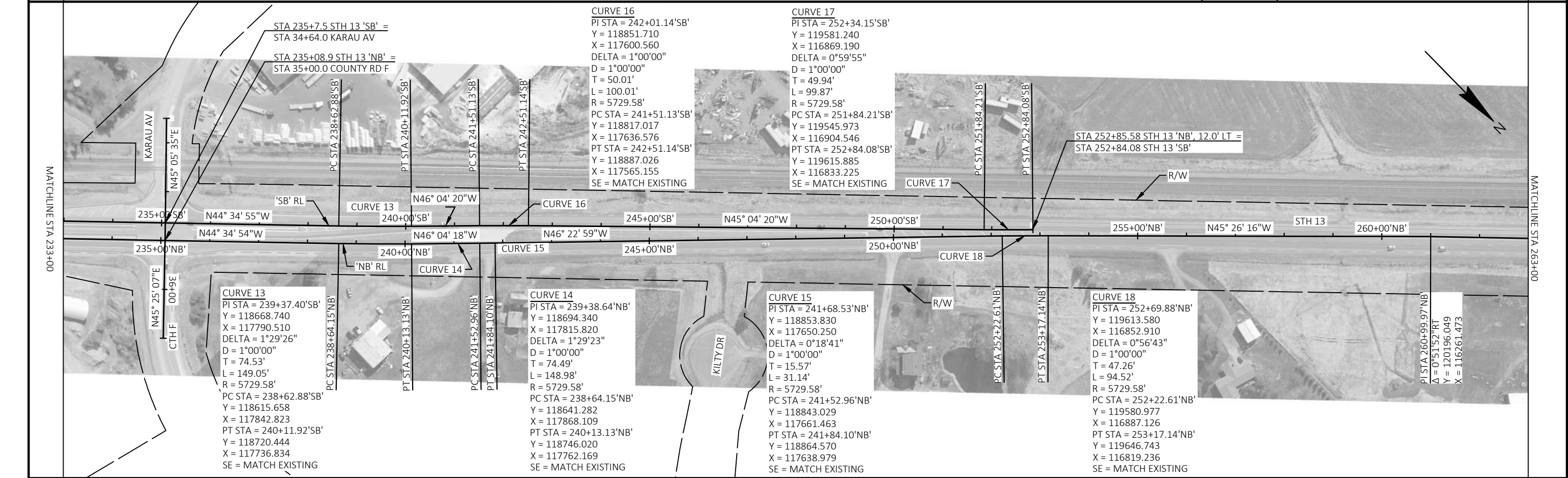
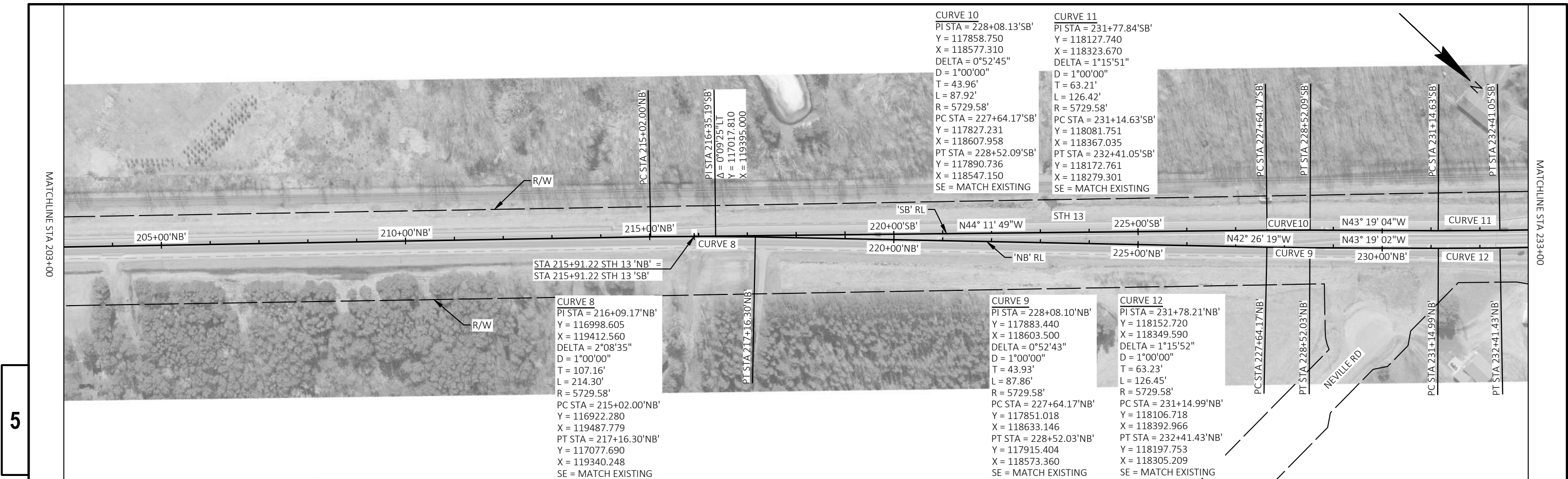
UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
51	WE ENERGIES(GAS)	RELEASE OF RIGHTS

EXHIBIT PREPARED BY JT ENGINEERING FOR THE WISDOT NORTH CENTRAL REGION

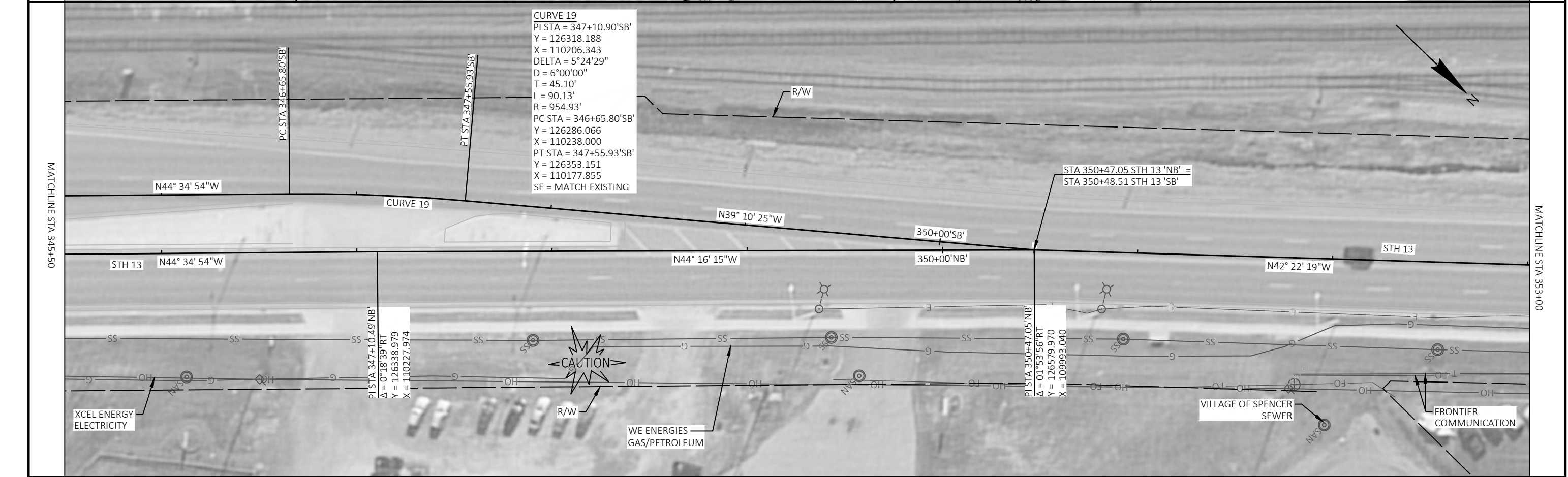
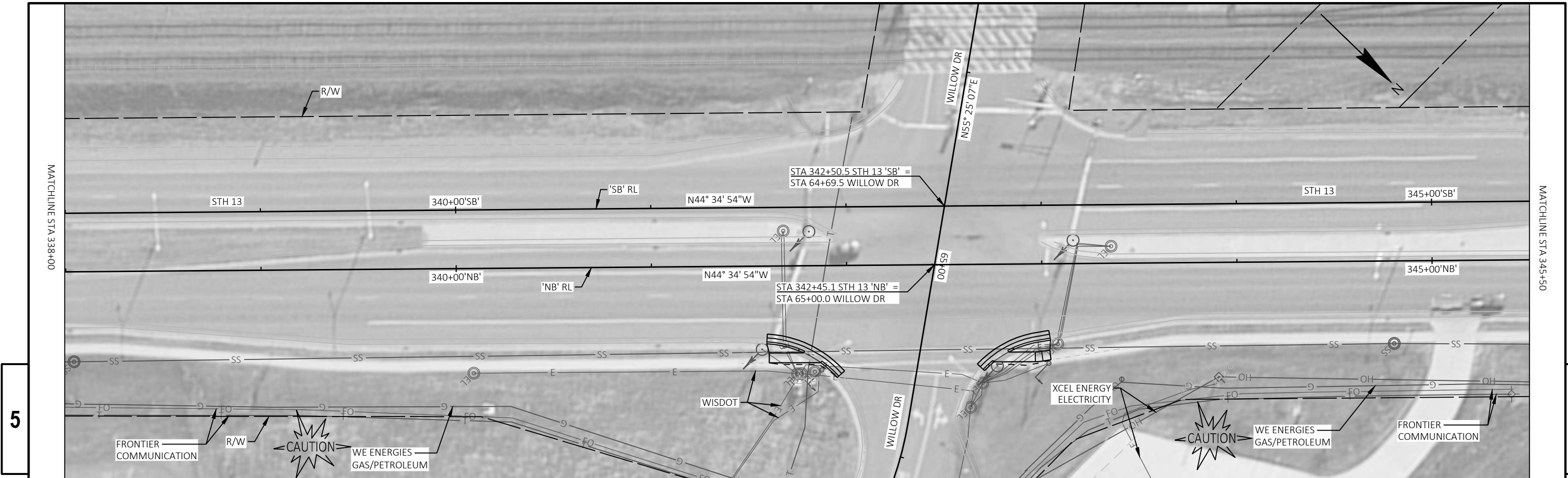
THIS MAP IS APPROVED FOR THE DEPARTMENT OF TRANSPORTATION NORTH CENTRAL REGION OFFICE

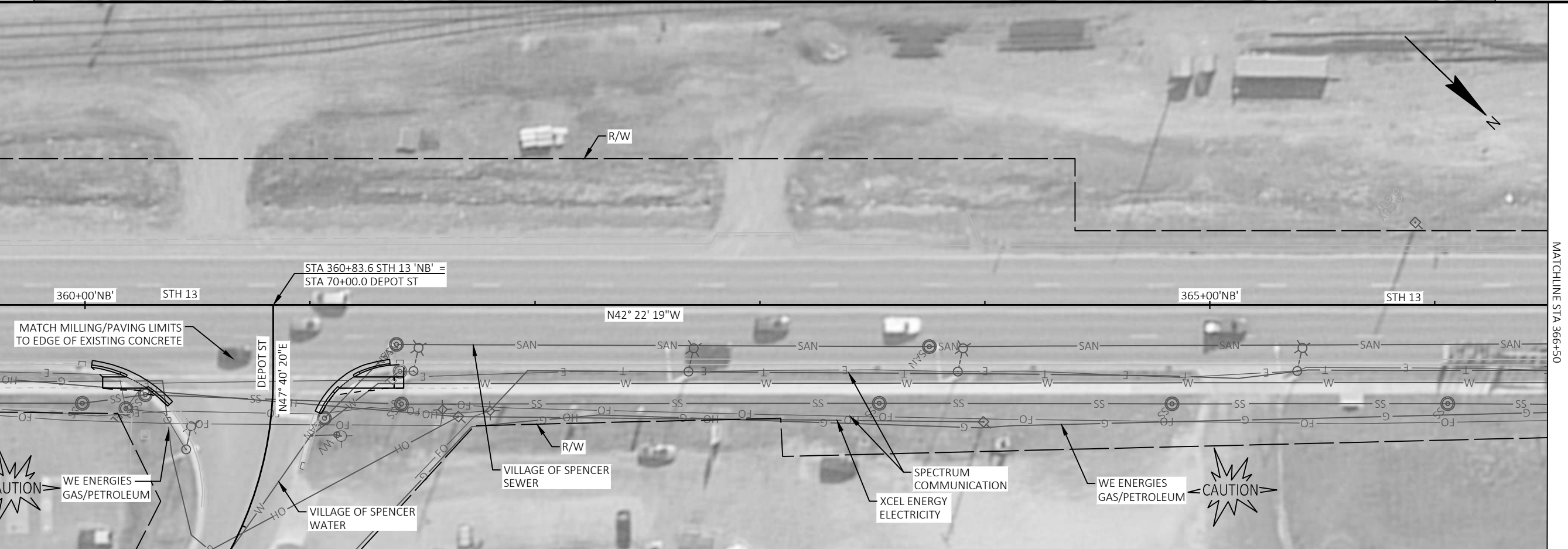
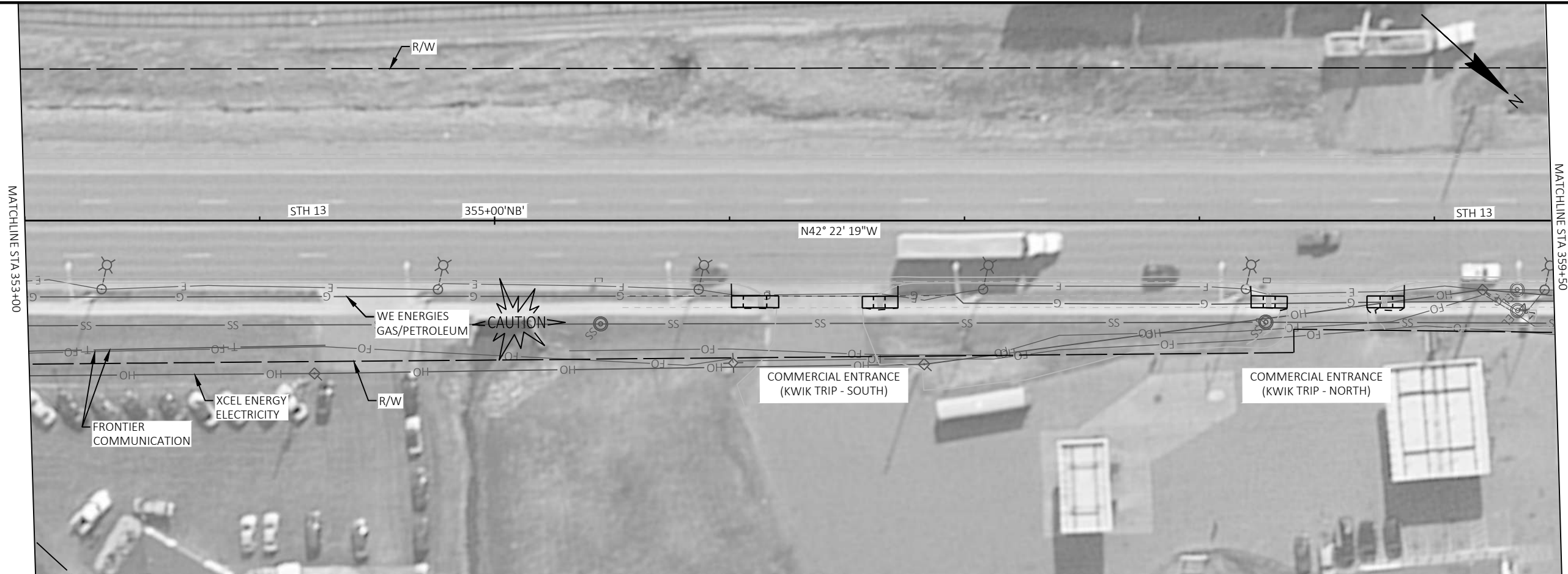
SIGNATURE: *Brent L Stella* DATE: 2/21/22

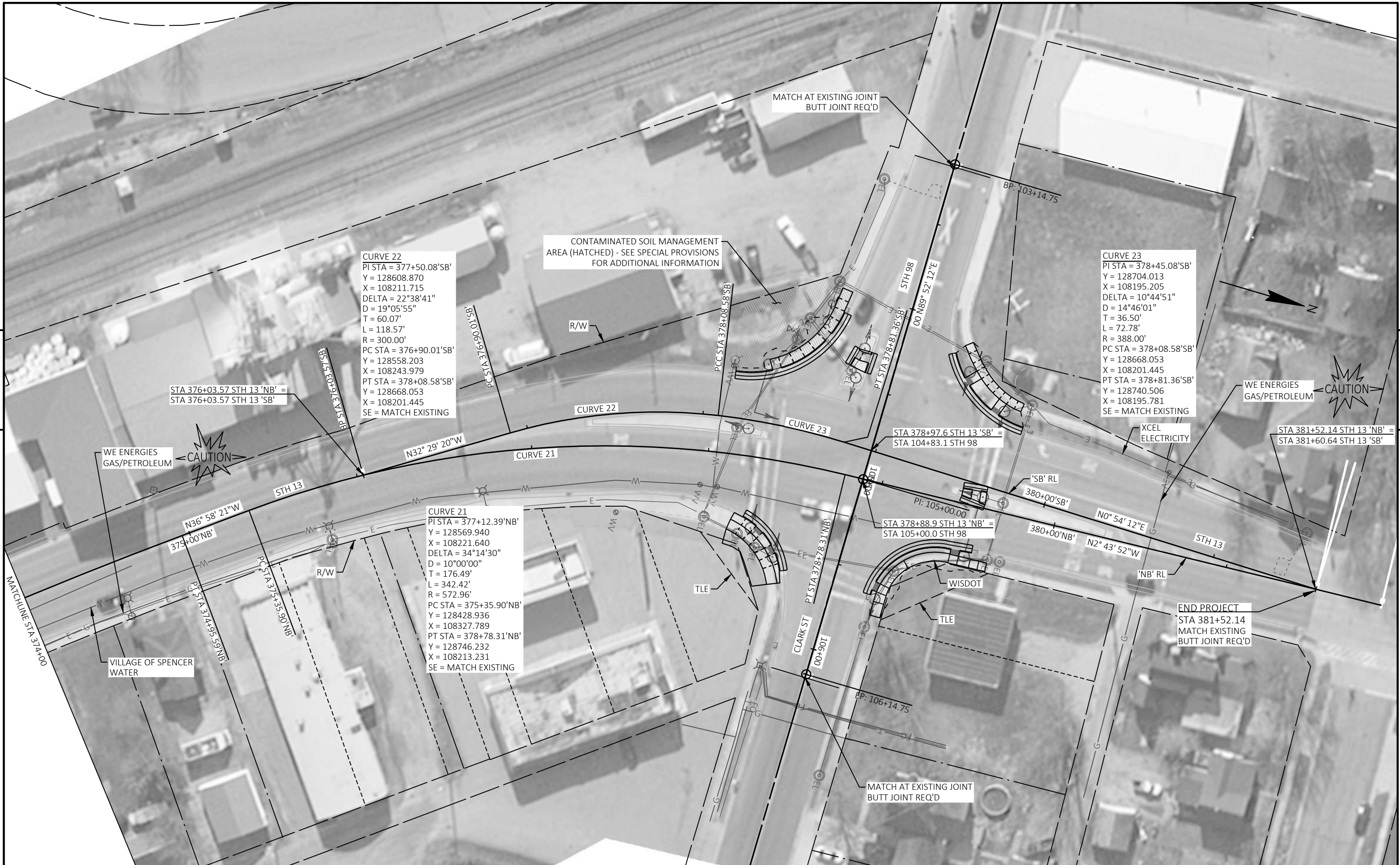
PRINT NAME: Brent L Stella





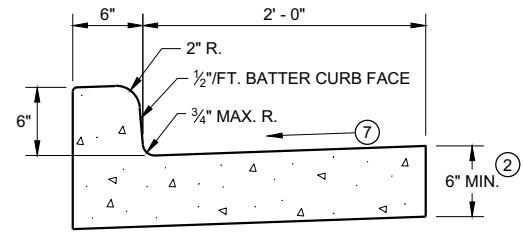




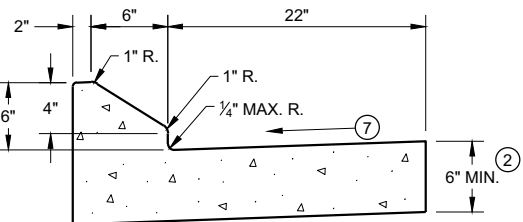


Standard Detail Drawing List

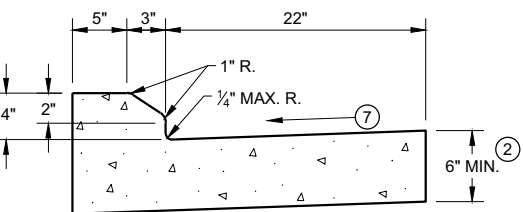
08D01-22A	CONCRETE CURB & GUTTER
08D01-22B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-20A	CURB RAMPS TYPES 1 AND 1-A
08D05-20B	CURB RAMPS TYPES 2 AND 3
08D05-20C	CURB RAMPS TYPES 4A AND 4A1
08D05-20D	CURB RAMPS TYPE 4B AND 4B1
08D05-20E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
13A10-02A	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02B	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02C	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02D	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
15C02-08F	ADVANCED WIDTH RESTRICTION SIGNING
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-22A	LONGITUDINAL MARKING (MAINLINE)
15C08-22B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-22C	PAVEMENT MARKING (TURN LANES)
15C08-22D	PAVEMENT MARKING (TURN LANES)
15C09-12A	SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS
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
15C18-07A	MEDIAN ISLAND MARKING PAVEMENT MARKINGS
15C18-07B	MEDIAN ISLAND MARKING MEDIAN ISLAND NOSE
15C18-07C	MEDIAN PAVEMENT MARKINGS DOUBLE ARROW WARNING SIGN PLACEMENT
15C19-08A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C19-08B	MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY
15C19-08C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D12-10A	TRAFFIC CONTROL, LANE CLOSURE
15D20-06A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D20-06B	TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY
15D20-06C	TRAFFIC CONTROL, SINGLE LEFT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY
15D21-07A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D21-07B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
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
15D30-08A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-08B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-08C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-08D	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-08E	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-08F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-08G	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-08H	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-08I	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-08J	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D43-02	TRAFFIC CONTROL, SHORT DURATION MOBILE OPERATIONS
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D50-02A	TRAFFIC CONTROL, ADDED LANE CLOSURE WITHOUT LANE SHIFT
15D50-02B	TRAFFIC CONTROL, ADDED LANE CLOSURE WITH LANE SHIFT
15D51-01	TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY



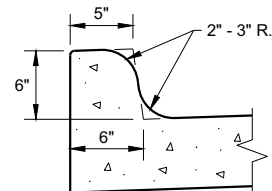
TYPES A^① & D



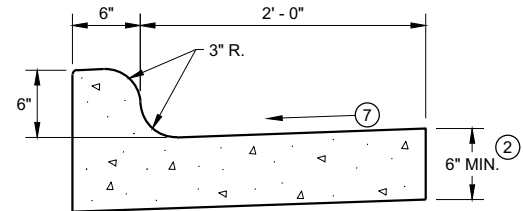
6" SLOPED CURB TYPES G^① & J



4" SLOPED CURB TYPES G^① & J

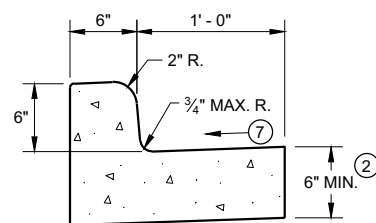


TYPES K^① & L
(OPTIONAL CURB SHAPE)



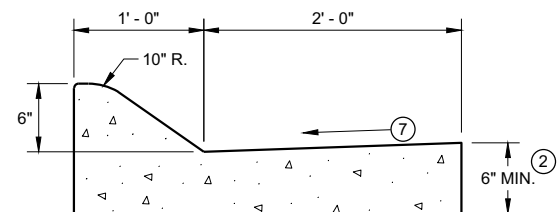
TYPES K^① & L

CONCRETE CURB AND GUTTER 30"

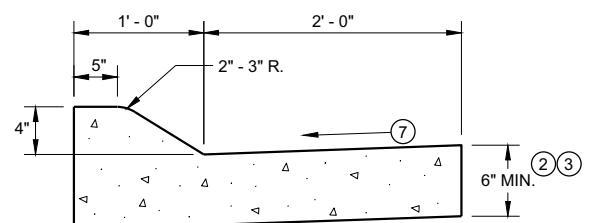


TYPES A^① & D

CONCRETE CURB AND GUTTER 18"

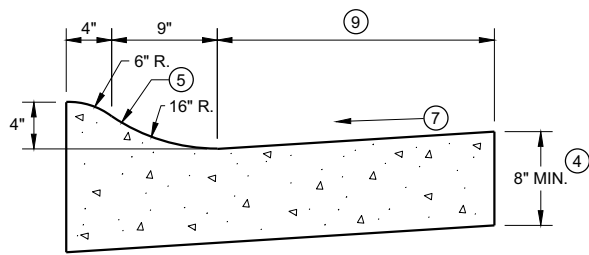


6" SLOPED CURB TYPES A^① & D



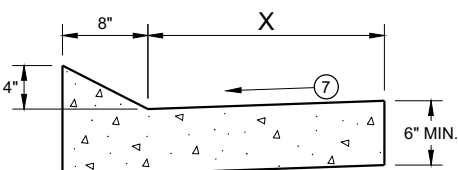
4" SLOPED CURB TYPES A^① & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R^① & T

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

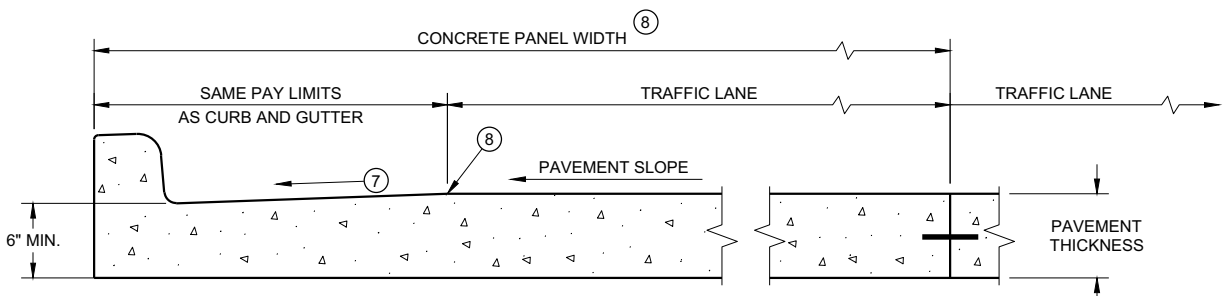


TYPES TBT & TBTT^①

CONCRETE CURB AND GUTTER

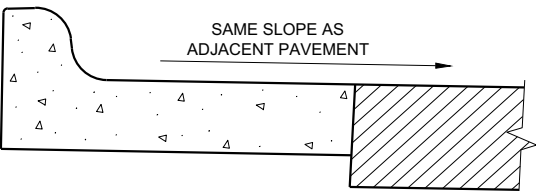
PAVEMENT THICKNESS
AND MAXIMUM CONCRETE
PANEL WIDTH TABLE

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.

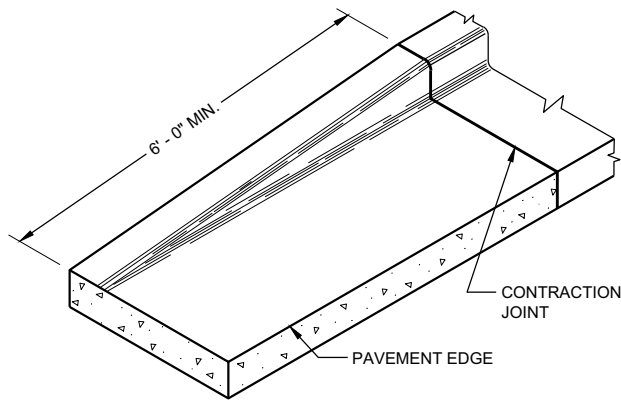
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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

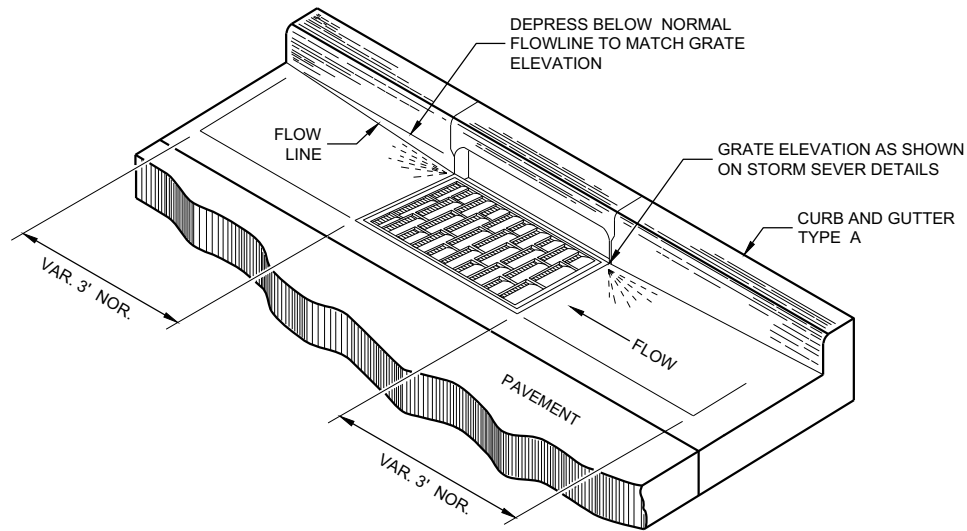
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH 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

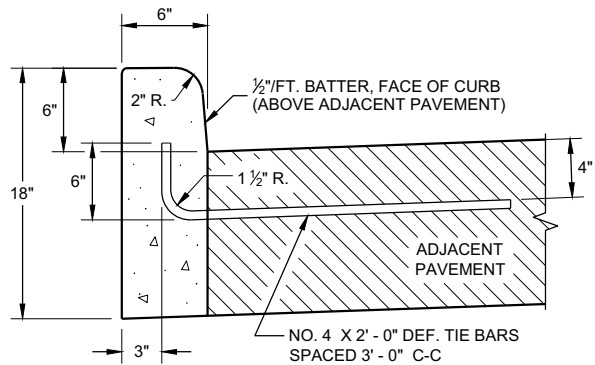
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 76



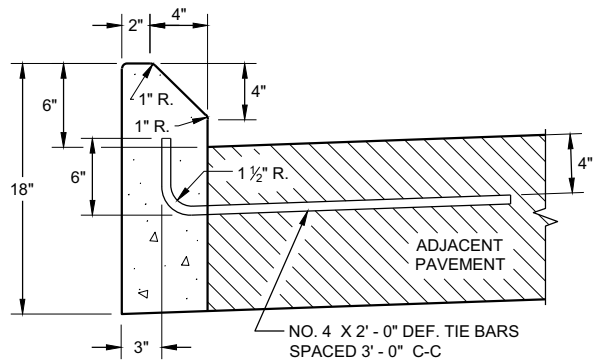
END SECTION CURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS
(TYPICAL H INLET COVER SHOWN)

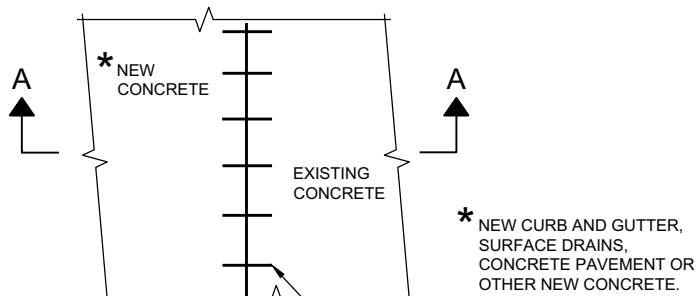


TYPES A^① & D

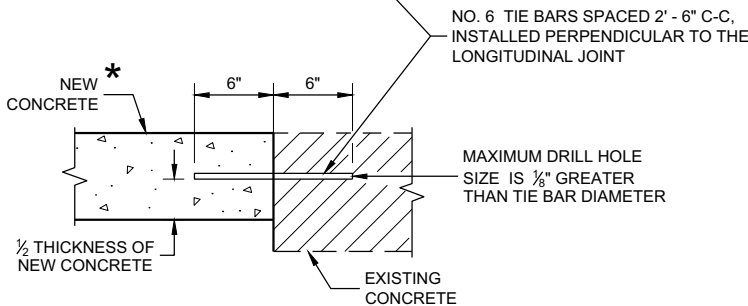


TYPES G^① & J

CONCRETE CURB



PLAN VIEW



SECTION A - A

TIE BARS DRILLED
INTO EXISTING PAVEMENT

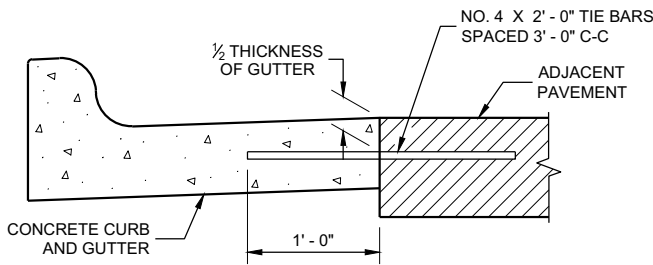
GENERAL NOTES

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

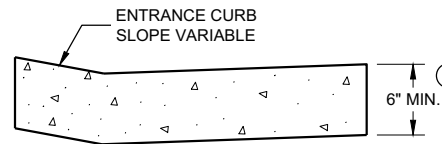
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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.
- ⑨ REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION^①



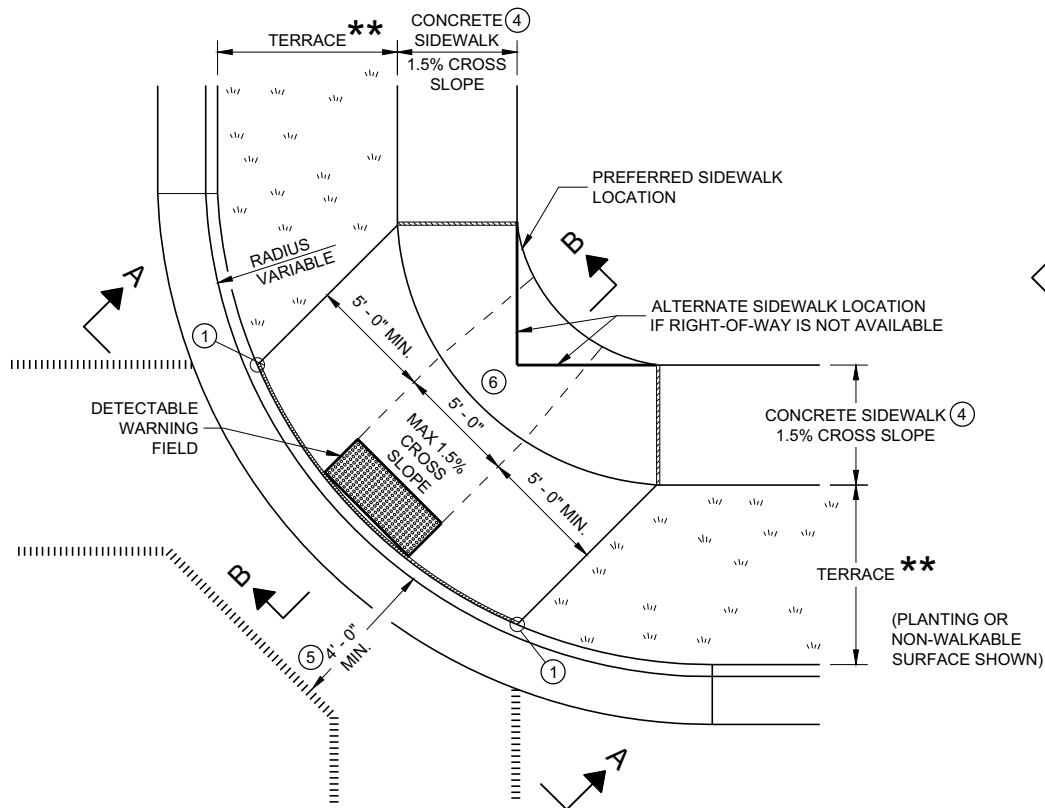
DRIVEWAY ENTRANCE CURB^⑨
(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

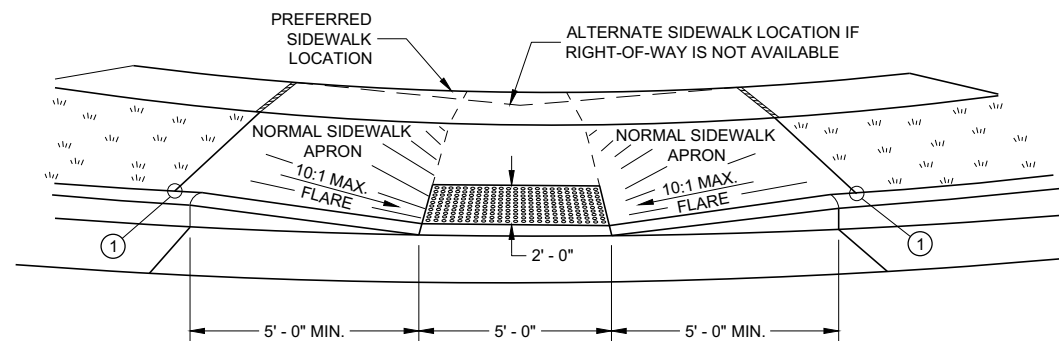
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

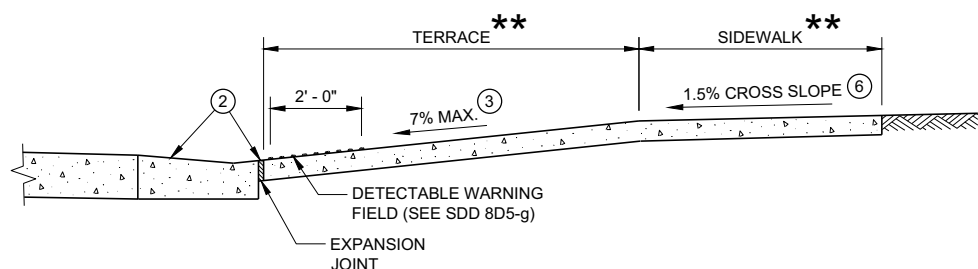


PLAN VIEW
CURB RAMP TYPE 1
(CENTER OF CORNER RADIUS)

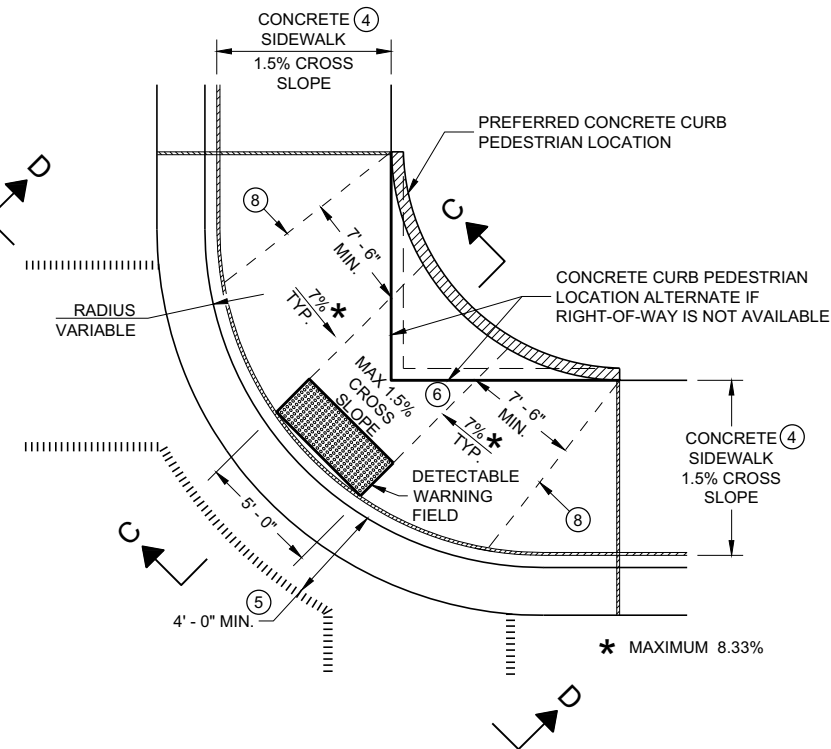


VIEW A - A FOR TYPE 1

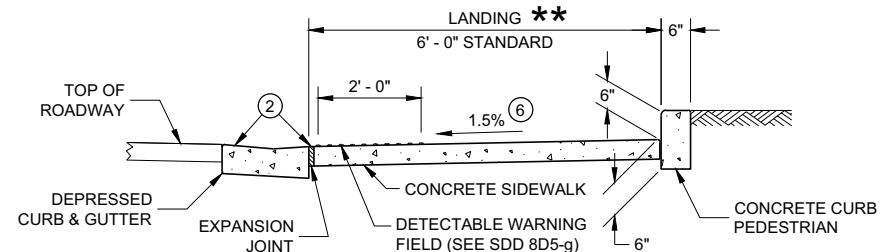
**** WIDTH SHOWN ELSEWHERE
IN THE PLANS**



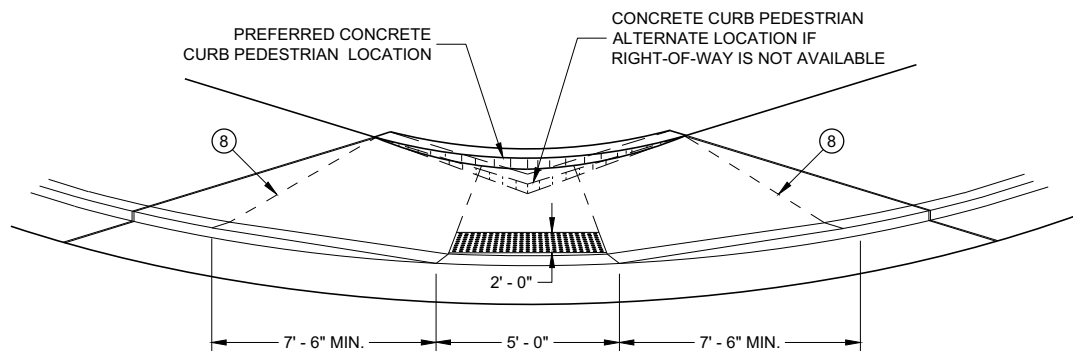
SECTION B - B FOR TYPE 1



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.

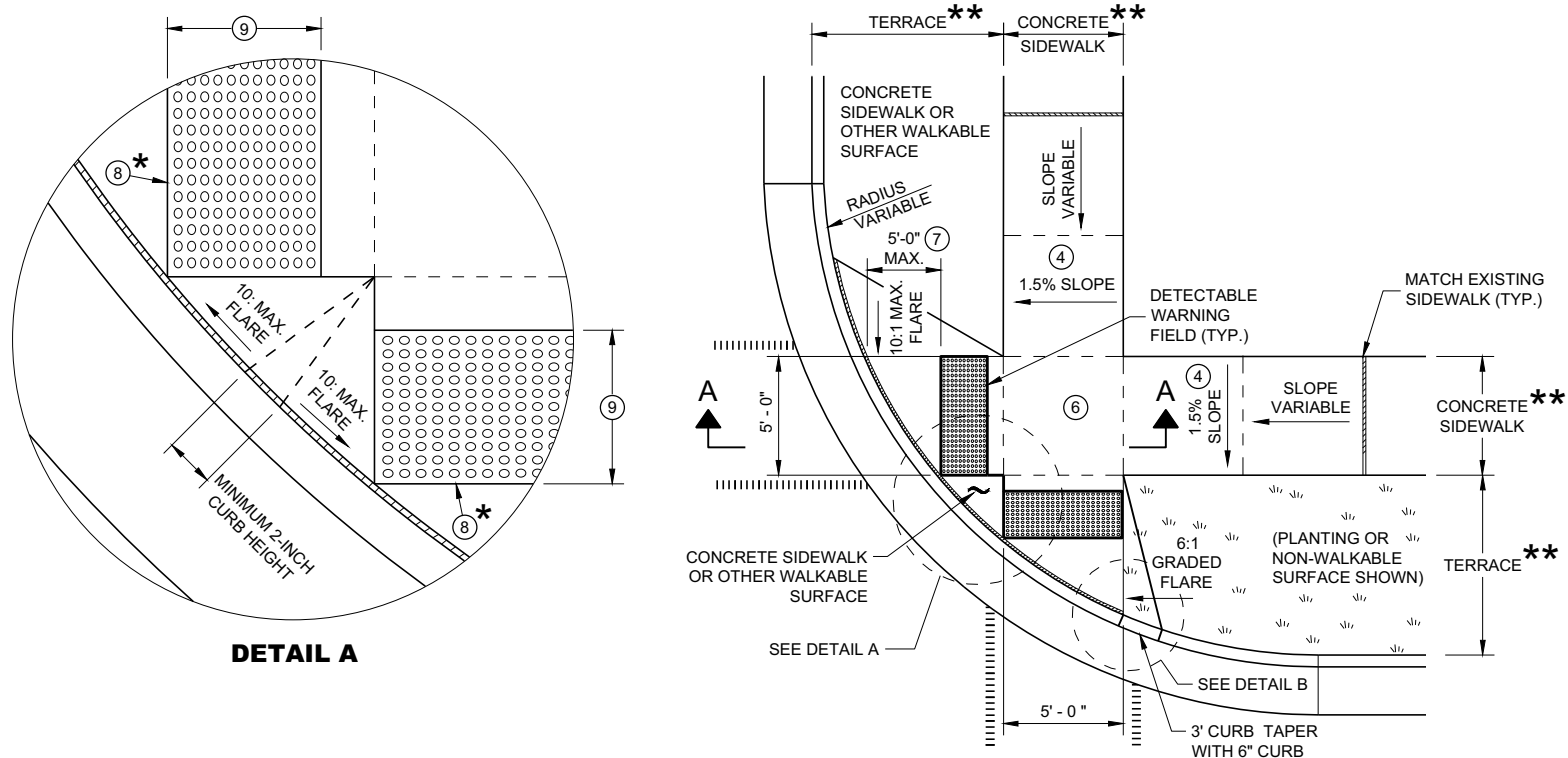
- 1 THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.
- 2 GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. 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.
- 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

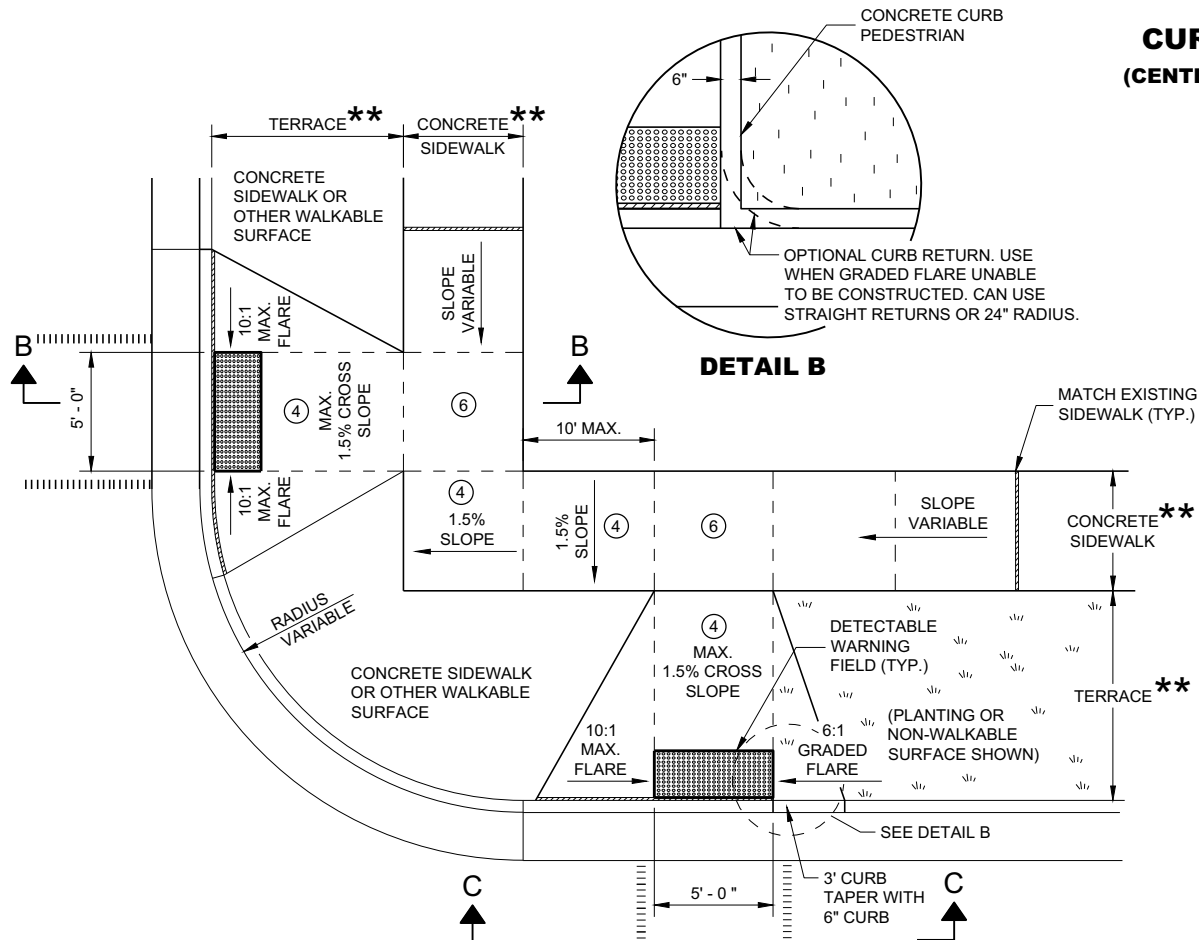
- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



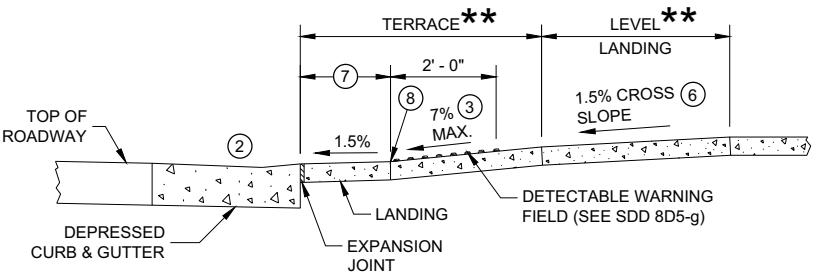
PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)



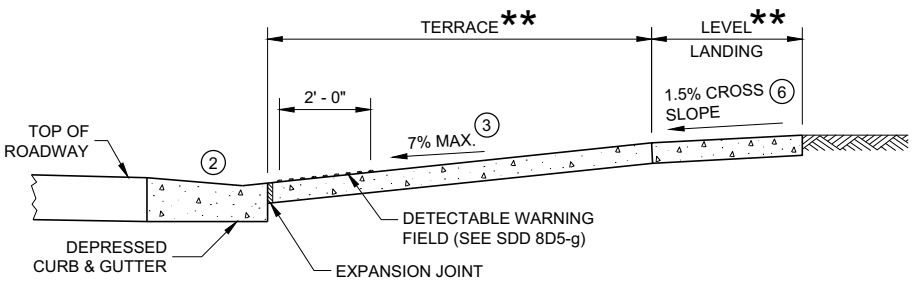
PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)

GENERAL NOTES

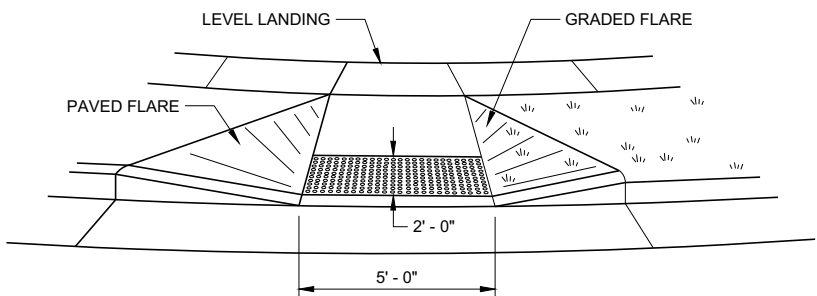
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.
- 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 1/2 - 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 (2.67% OR LESS) 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 X 5 FEET.
 - ⑦ WHEN 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.
 - ⑨ 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



SECTION B - B FOR TYPE 3



VIEW C - C FOR TYPE 3

LEGEND

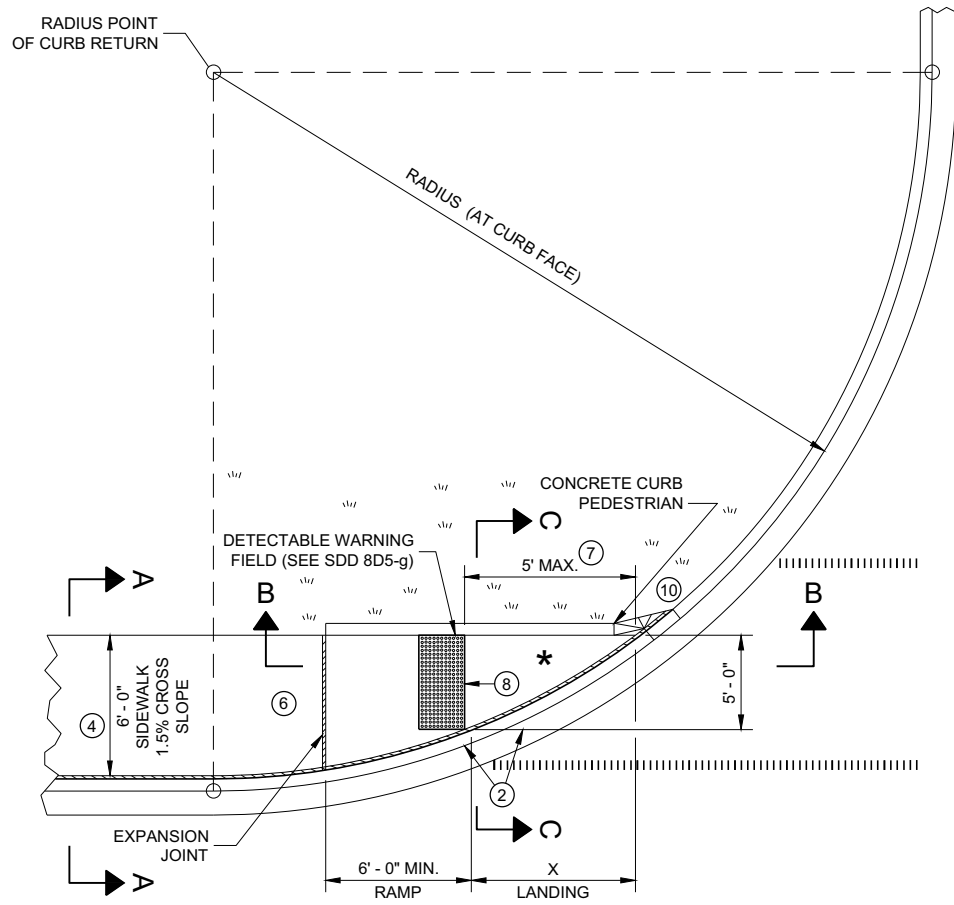
- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

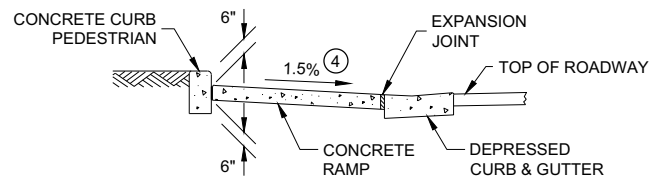
** WIDTH SHOWN ELSEWHERE IN THE PLANS

CURB RAMPS
TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

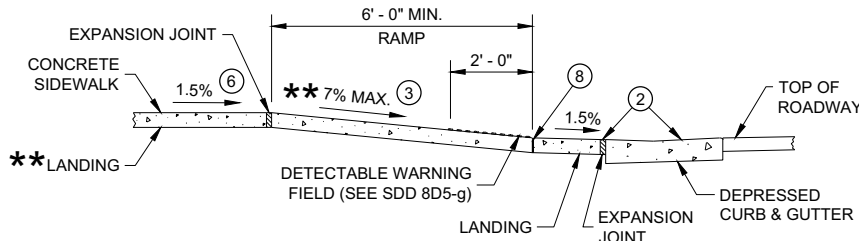


PLAN VIEW
CURB RAMP TYPE 4A



SECTION C - C FOR TYPE 4A

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

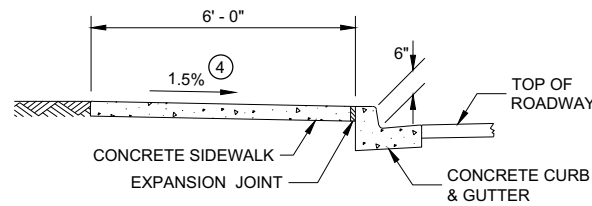


** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

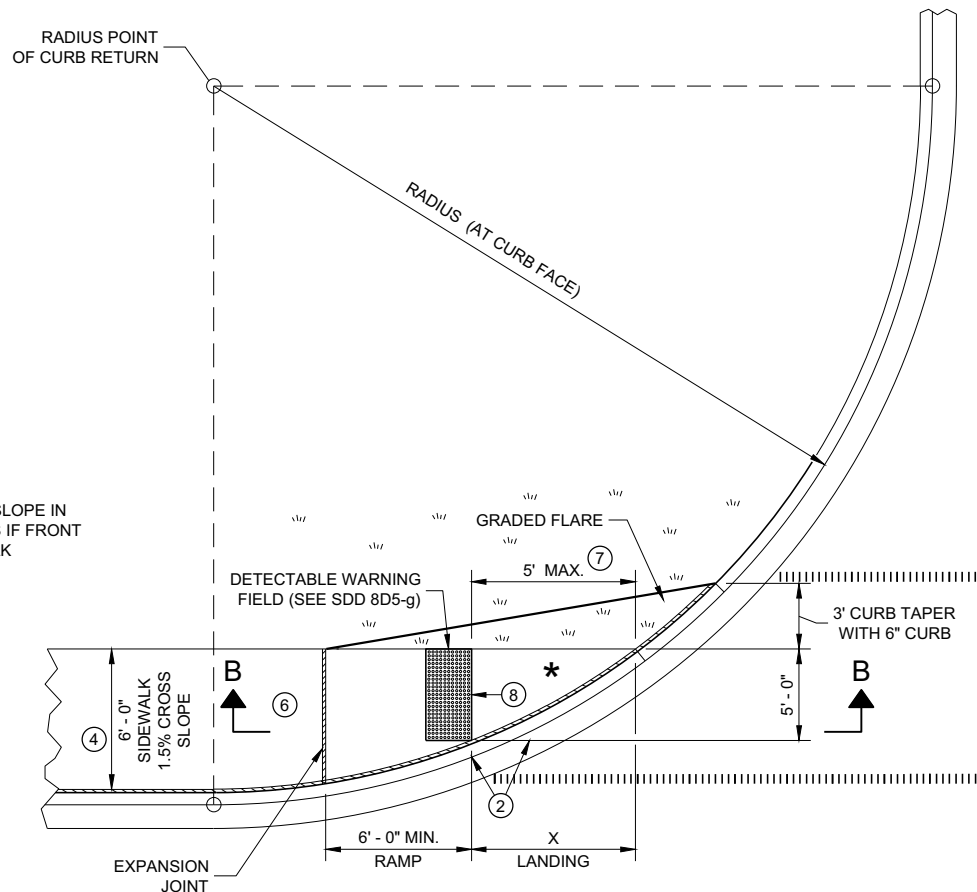
SECTION B - B FOR
TYPE 4A AND TYPE 4A1

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"
15 FEET	6' - 5 1/2"

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.

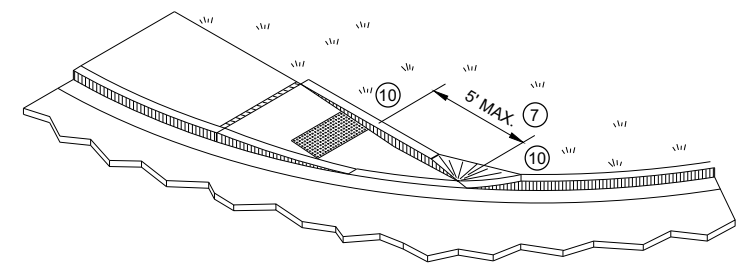
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

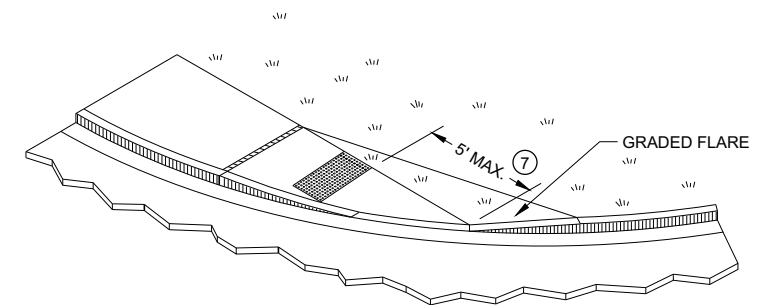
- GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE 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)



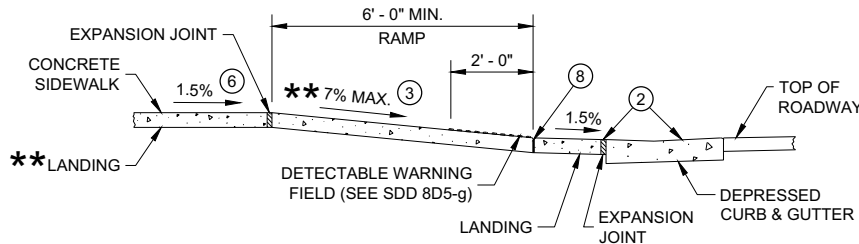
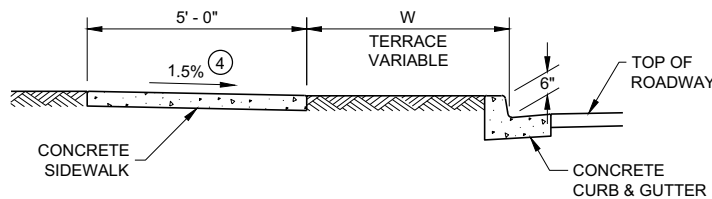
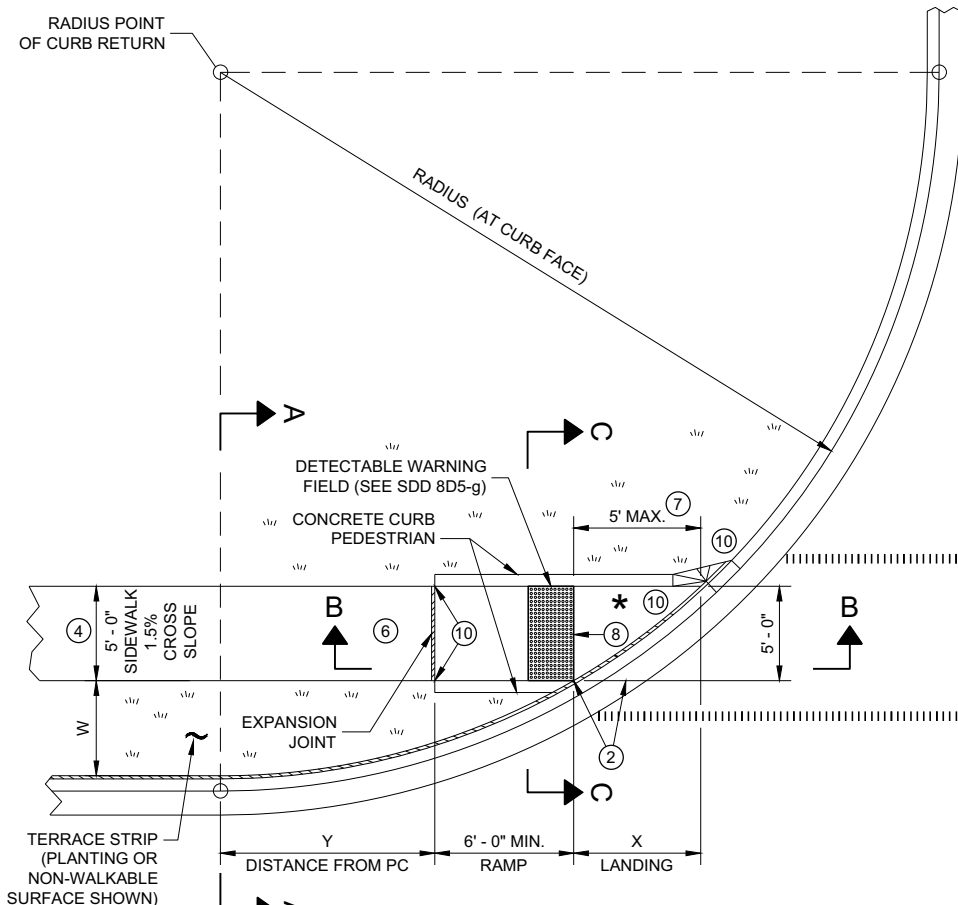
ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

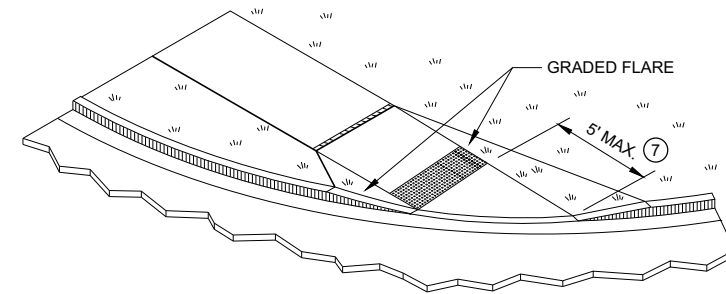
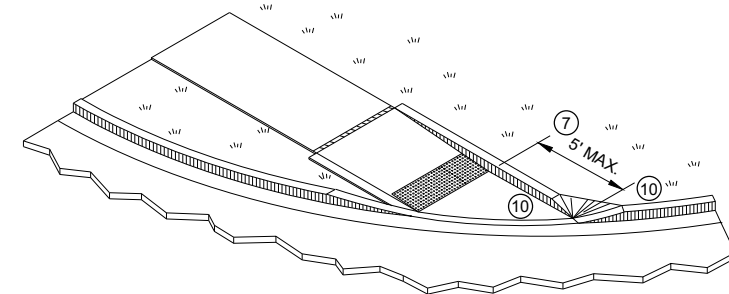
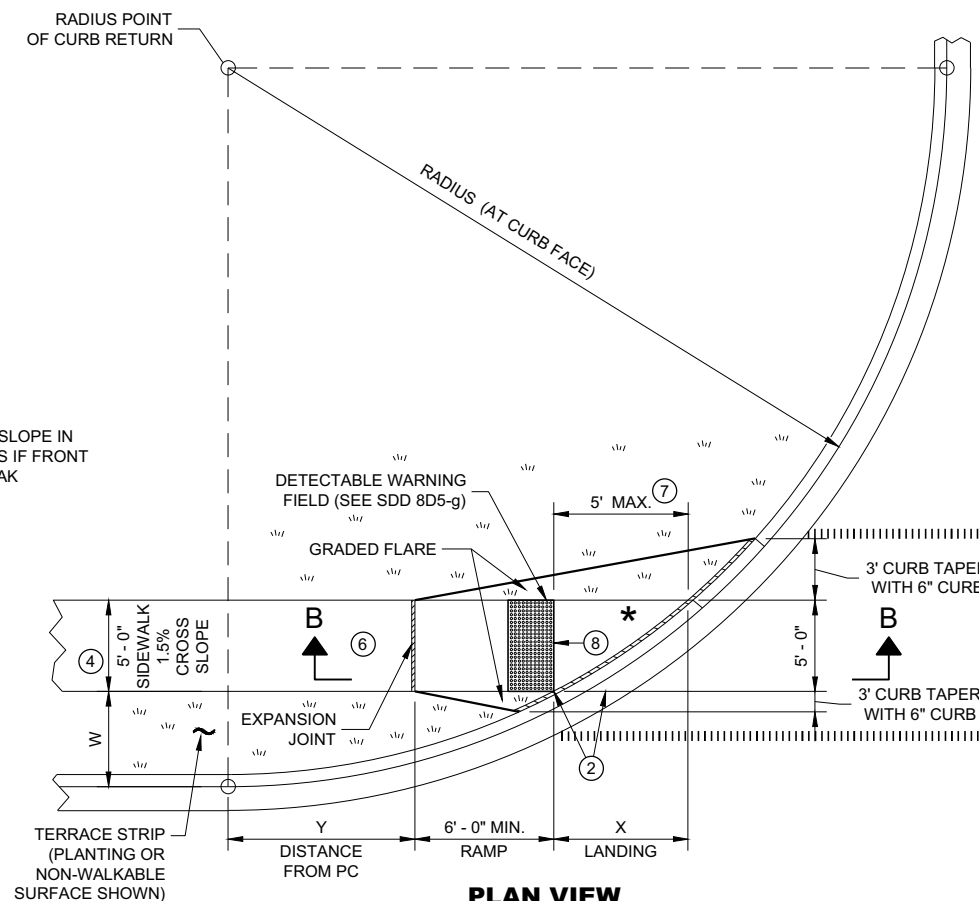
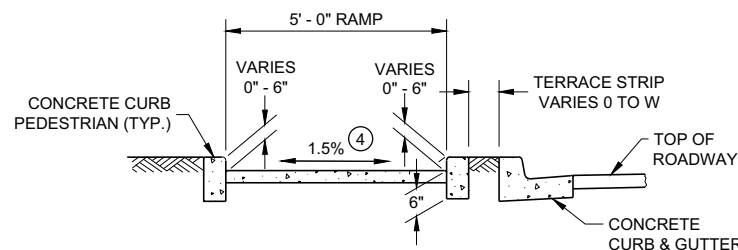


** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 1/4"	0' - 5"	2' - 1"	1' - 4 1/2"	1' - 5"	2' - 1"	0' - 10"	2' - 7 1/2"	0' - 3 3/4"	3' - 0 1/4"						
15 FEET	4' - 6 3/4"	2' - 1 3/4"	3' - 9"	3' - 5 3/4"	3' - 1 1/4"	4' - 6"	2' - 6 3/4"	5' - 4 1/2"	2' - 1"	6' - 1"	1' - 8"	6' - 8 1/2"	1' - 3 1/4"	7' - 2 1/2"	0' - 10 3/4"	7' - 7 1/4"
20 FEET	5' - 9 3/4"	3' - 6 1/2"	4' - 11 1/2"	5' - 1 3/4"	4' - 3 1/4"	6' - 5 1/2"	3' - 8 3/4"	7' - 7"	3' - 3"	8' - 6 1/2"	2' - 10"	9' - 4 1/2"	2' - 5 1/2"	10' - 1 1/4"	2' - 1 1/4"	10' - 9"
30 FEET			6' - 9 1/4"	7' - 11 1/2"	6' - 0 1/4"	9' - 8"	5' - 5"	11' - 1 3/4"	4' - 10 3/4"	12' - 5 3/4"	4' - 5 1/2"	13' - 7 3/4"	4' - 0 3/4"	14' - 8 1/2"	3' - 8 1/2"	15' - 8 1/4"
40 FEET									6' - 1 3/4"	15' - 8 1/2"	5' - 8"	17' - 2"	5' - 3"	18' - 5 3/4"	4' - 10 3/4"	19' - 8 1/4"
50 FEET															5' - 10 1/4"	23' - 2"

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



LEGEND

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

GENERAL NOTES

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

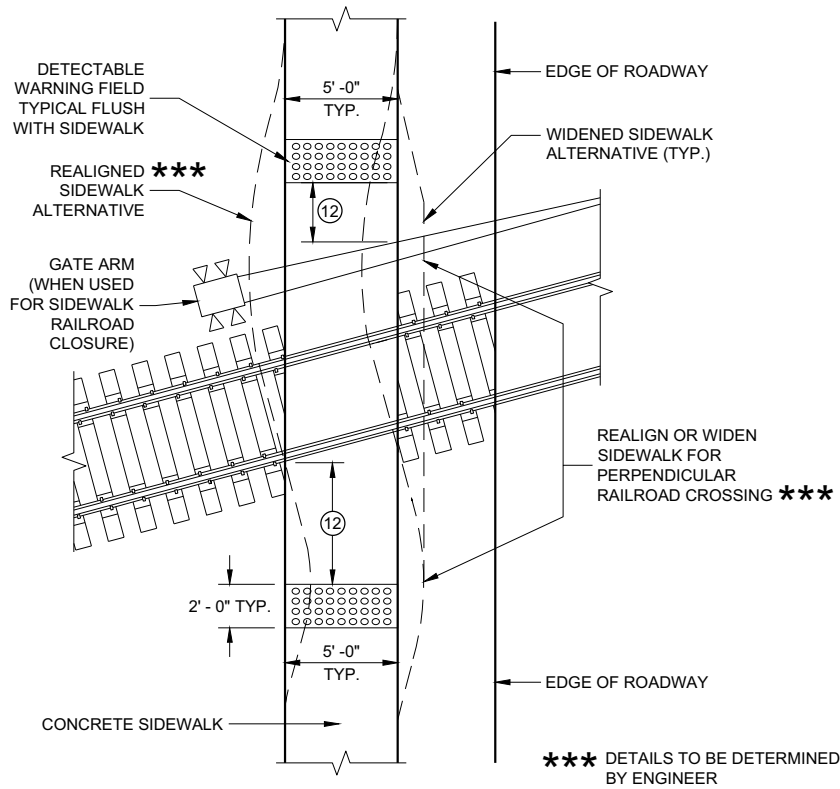
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

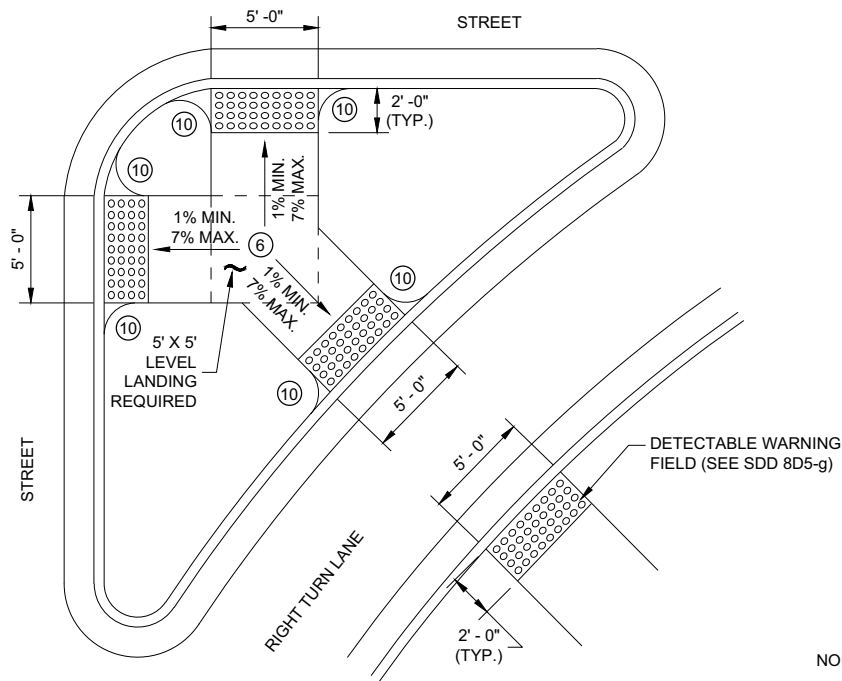
CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP TYPE 8

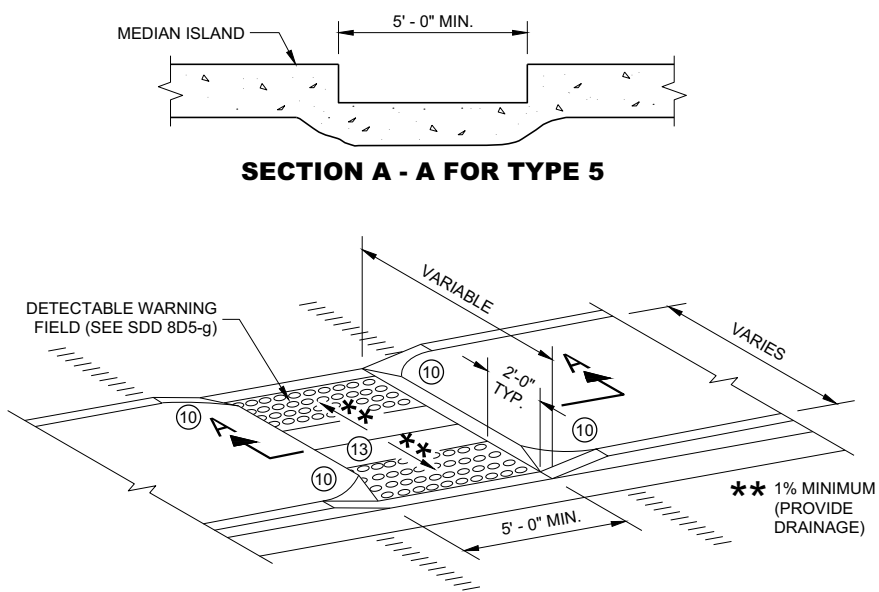
**DETECTABLE WARNINGS
AT RAILROAD CROSSING**



CURB RAMP TYPE 6

DETECTABLE WARNING AT ISLANDS

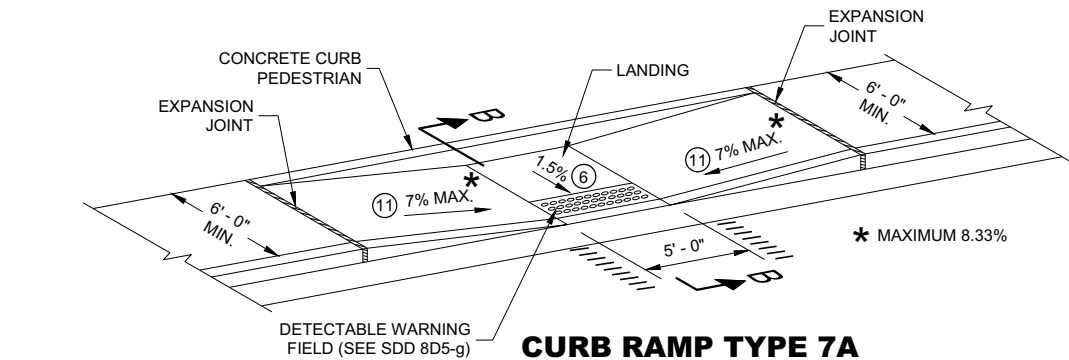
REFER TO GENERAL NOTES (2) AND (3)
FOR ALL ISLAND CURB RAMPS



SECTION A - A FOR TYPE 5

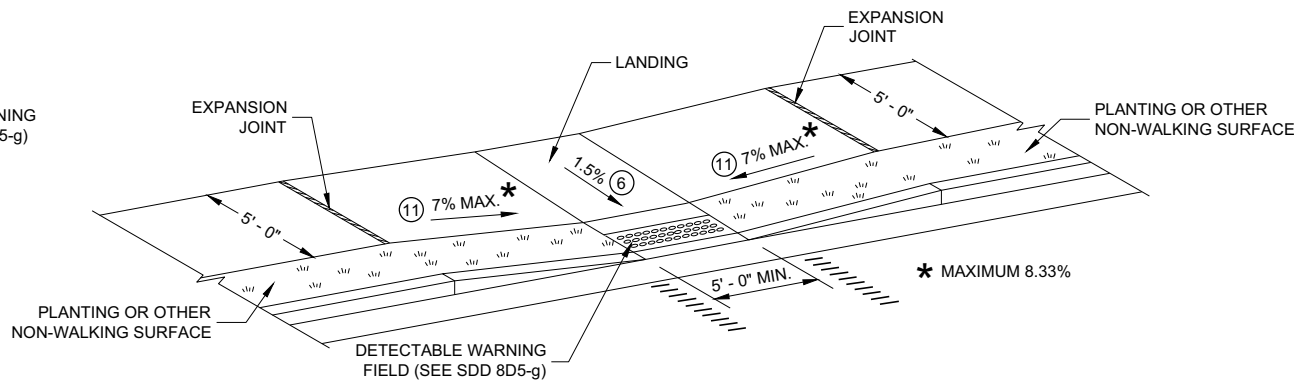
CURB RAMP TYPE 5

**MEDIAN ISLAND
NON-ELEVATED PEDESTRIAN CROSSING**



CURB RAMP TYPE 7A

MID BLOCK CROSSING



CURB RAMP TYPE 7B

MID BLOCK CROSSING

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

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.

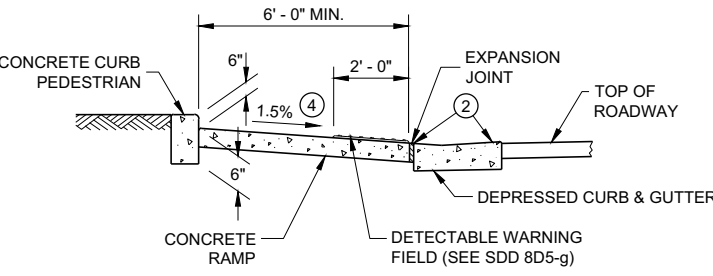
SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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 1/4 - 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) 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. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- (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)

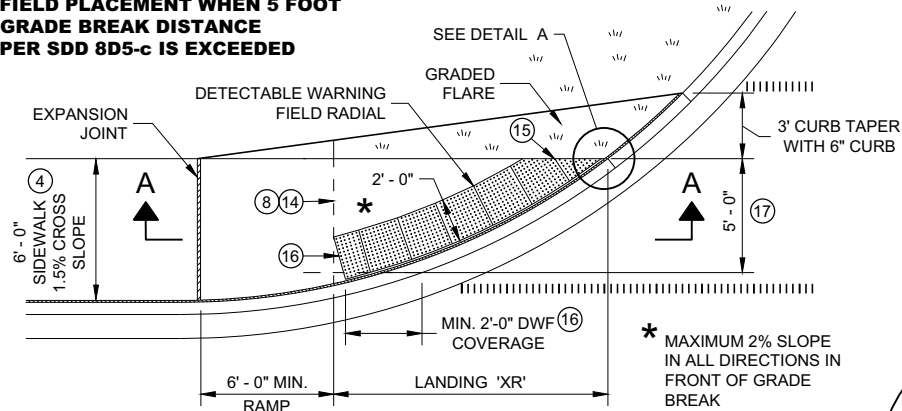


SECTION B - B FOR TYPE 7A

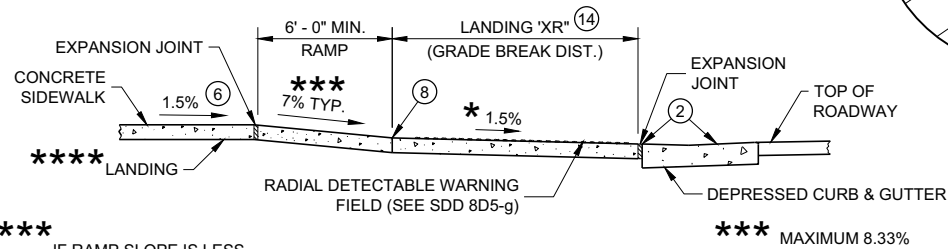
**CURB RAMPS
TYPE 5, 6, 7A, 7B & 8**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

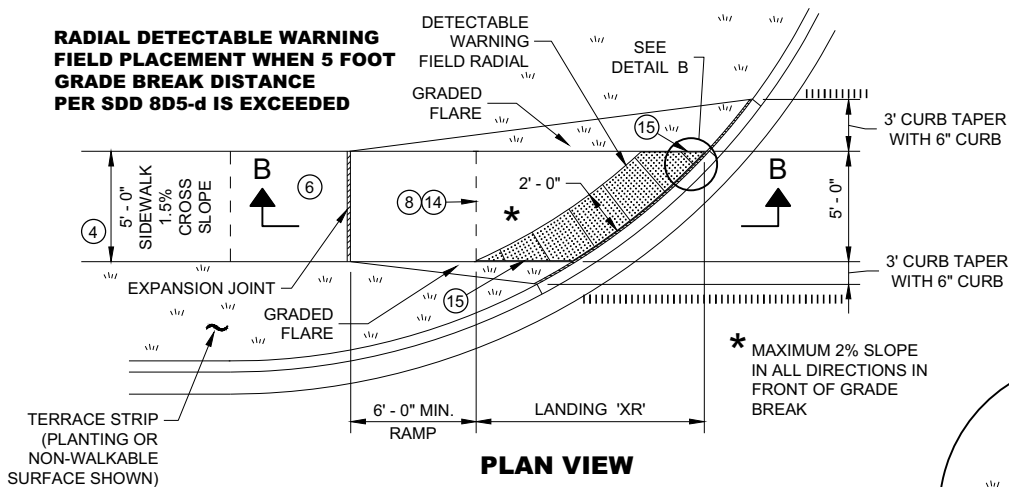


**PLAN VIEW
CURB RAMP TYPE 4A1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**

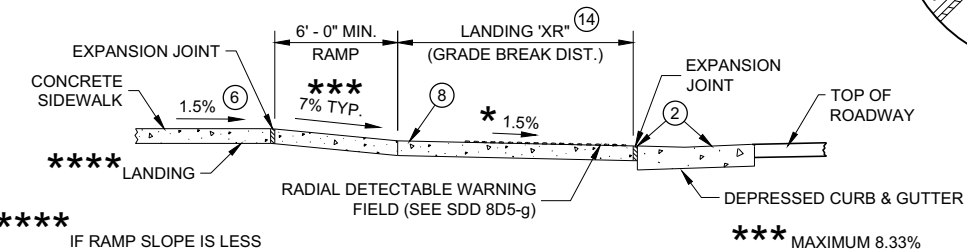


SECTION A - A FOR TYPE 4A1

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



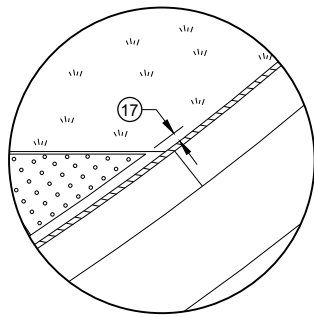
**PLAN VIEW
CURB RAMP TYPE 4B1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**



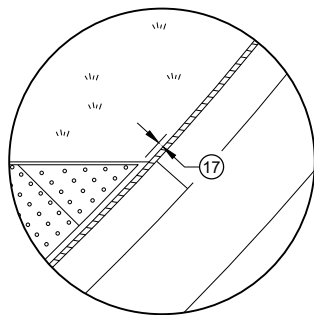
SECTION B - B FOR TYPE 4B1

LEGEND

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



DETAIL A



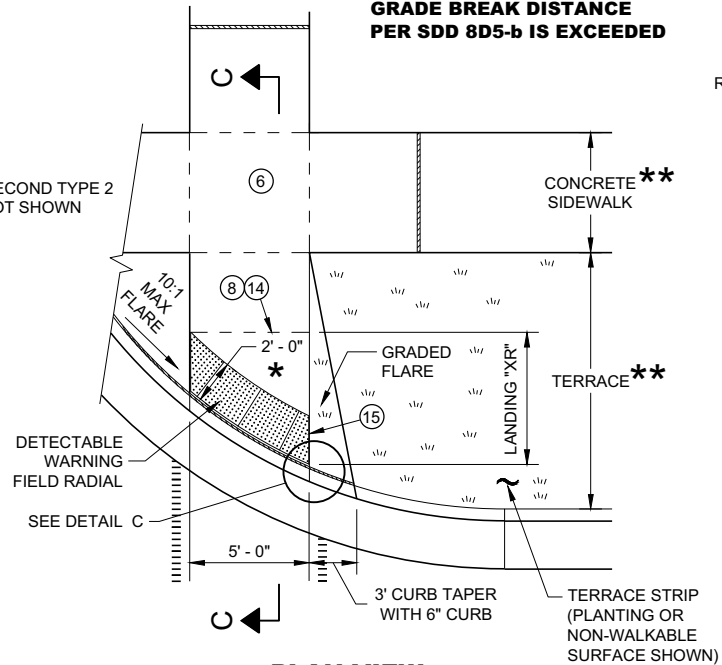
DETAIL B

GENERAL NOTES

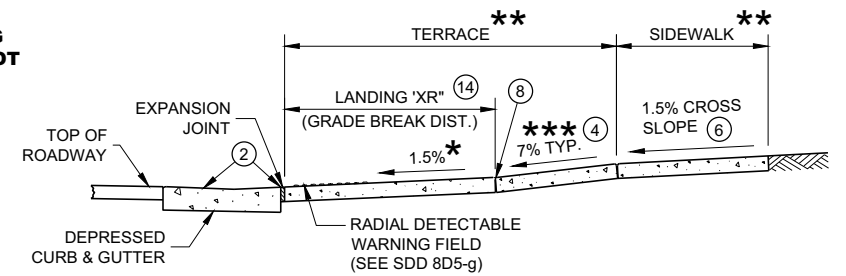
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
- DETECTABLE 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.
- (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) 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 LANDING SIZE IS 5 FEET BY 5 FEET.
 - (8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
 - (14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.
 - (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" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.
 - (16) 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.
 - (17) A MAXIMUM 3 INCH CONCRETE BORDER WITH IS ALLOWABLE IN FROM 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**

NOTE: SECOND TYPE 2
RAMP NOT SHOWN

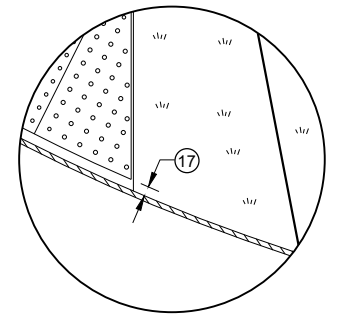


**PLAN VIEW
CURB RAMP TYPE 2
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)**



SECTION C - C FOR TYPE 2

- * MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK
- ** WIDTH SHOWN ELSEWHERE IN THE PLANS
- *** MAXIMUM 8.33%



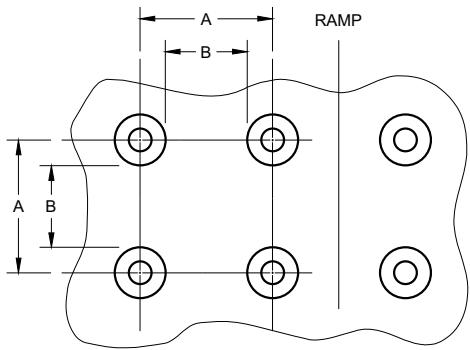
DETAIL C

**CURB RAMPS
RADIAL DETECTABLE WARNING
FIELD APPLICATIONS**

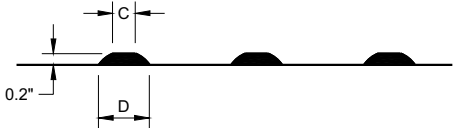
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

	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.

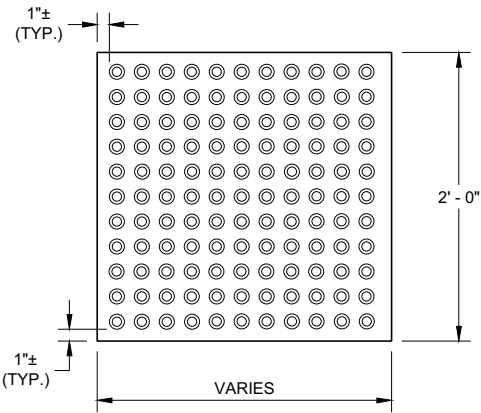


PLAN VIEW

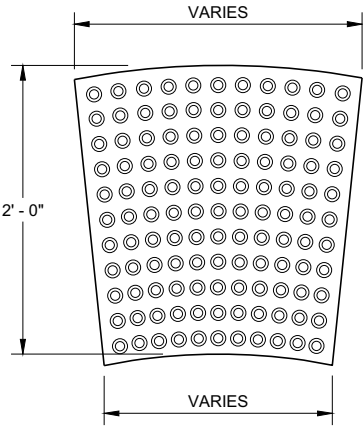


ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



RECTANGULAR
PLATES



RADIAL
PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)

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.

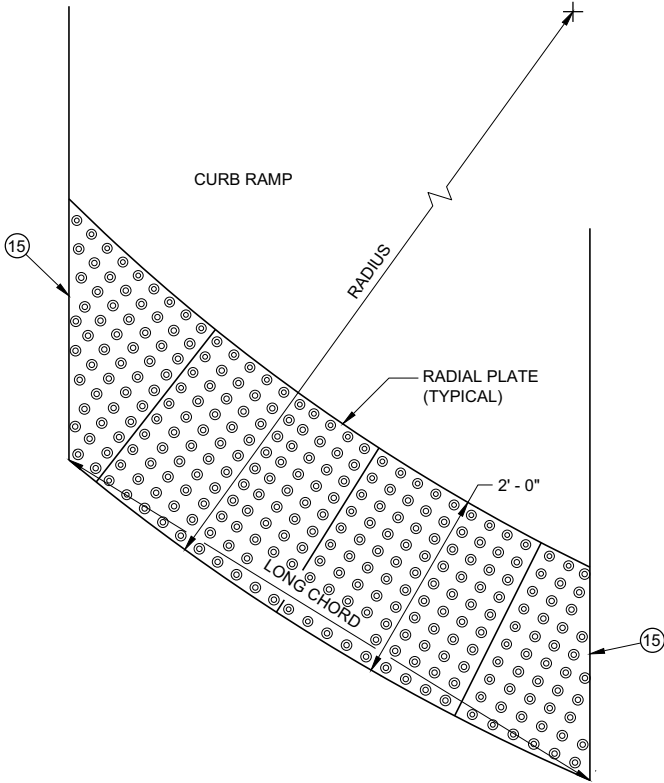
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

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.

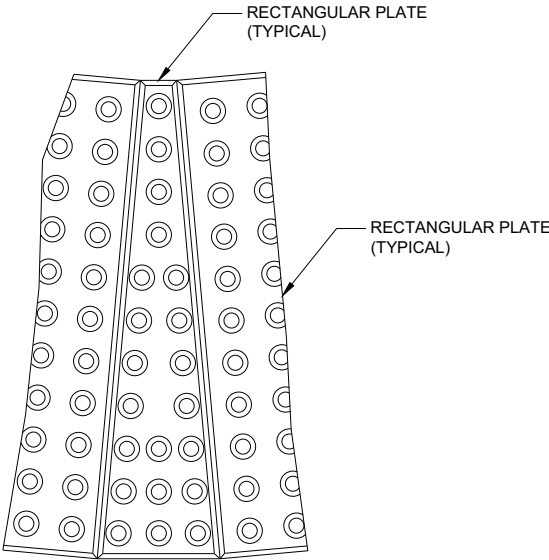
REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

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" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.



PLAN VIEW
RADIAL DETECTABLE
WARNING FIELD ATTRIBUTES

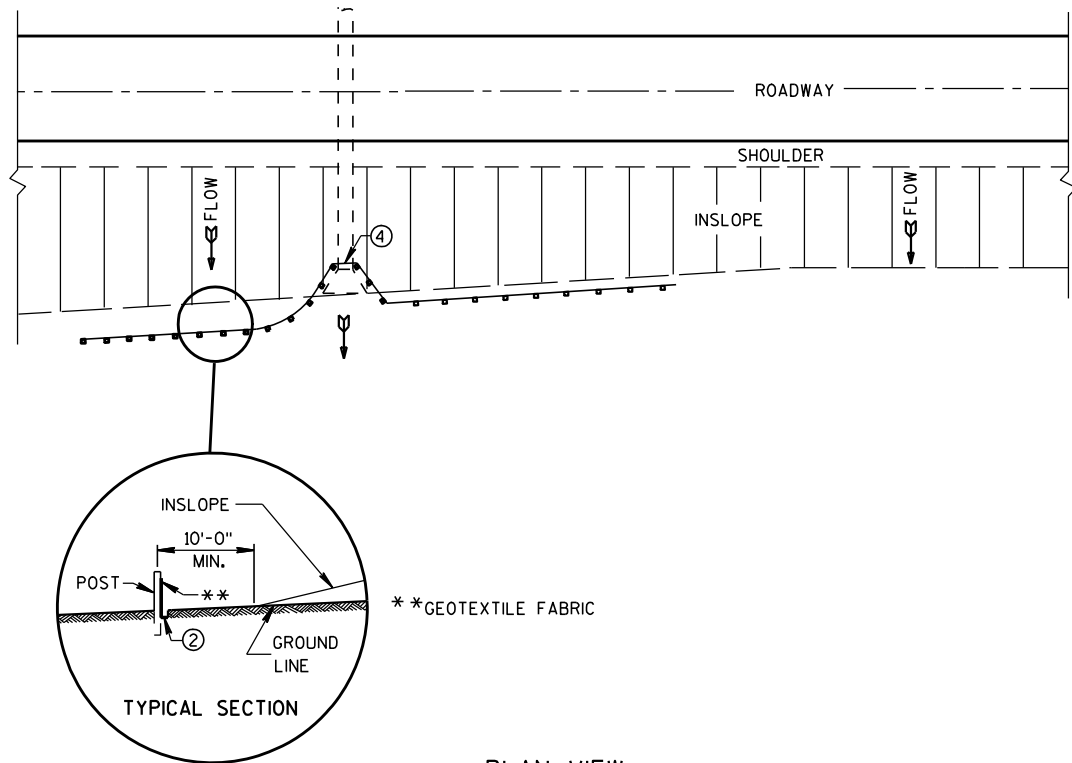


PLAN VIEW
RADIAL WEDGE PLATE
CONNECTION DETAIL

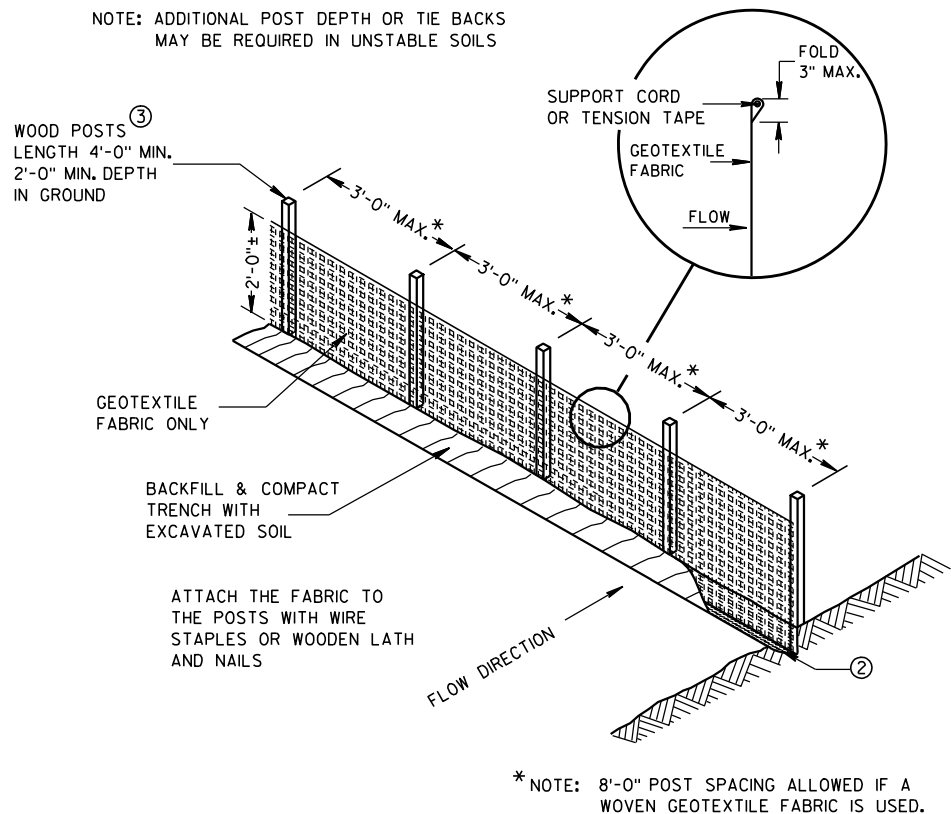
CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

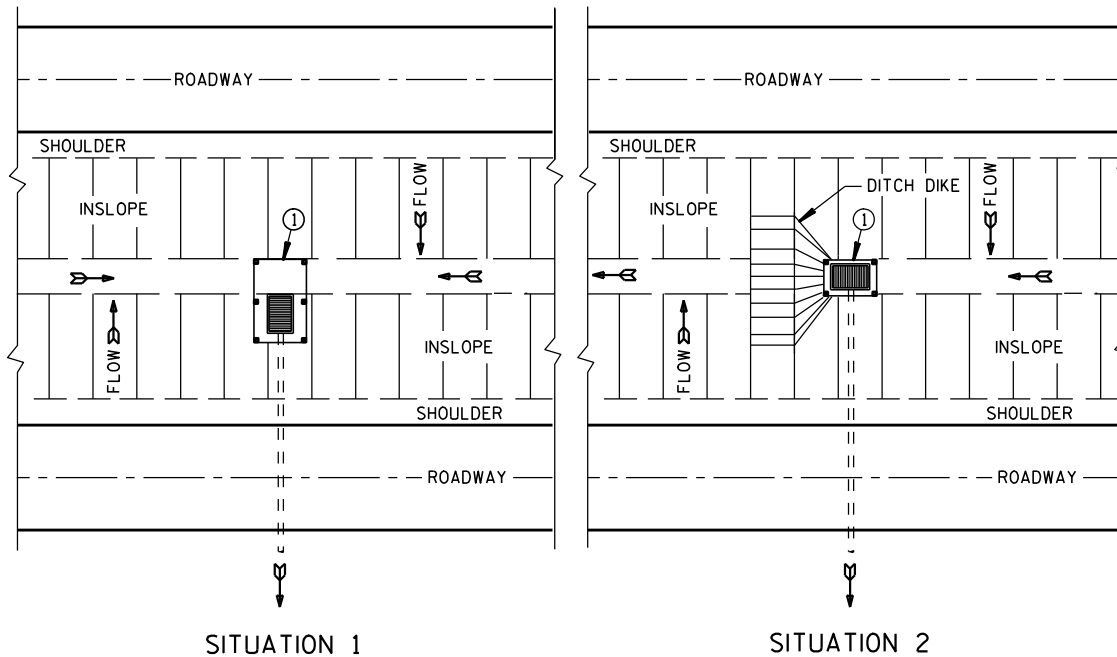
APPROVED
May 2019 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
84
FHWA



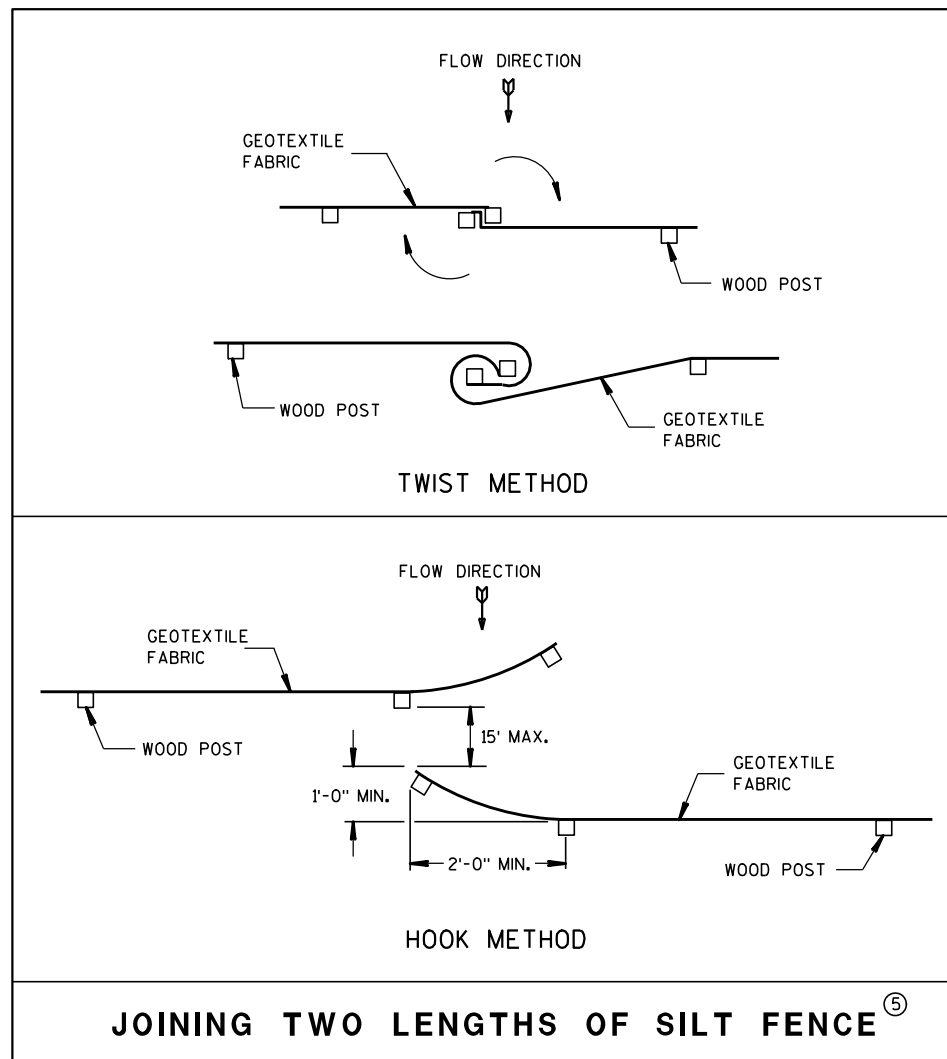
PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE



SILT FENCE



PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

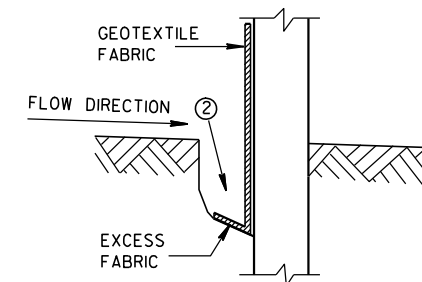


JOINING TWO LENGTHS OF SILT FENCE (5)

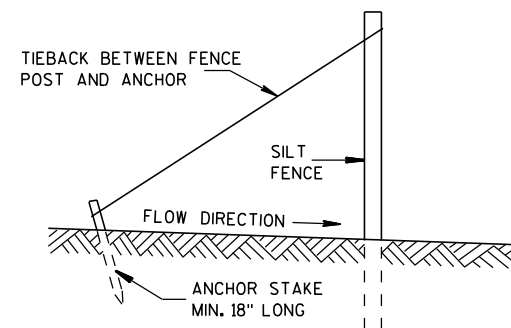
GENERAL NOTES

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

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

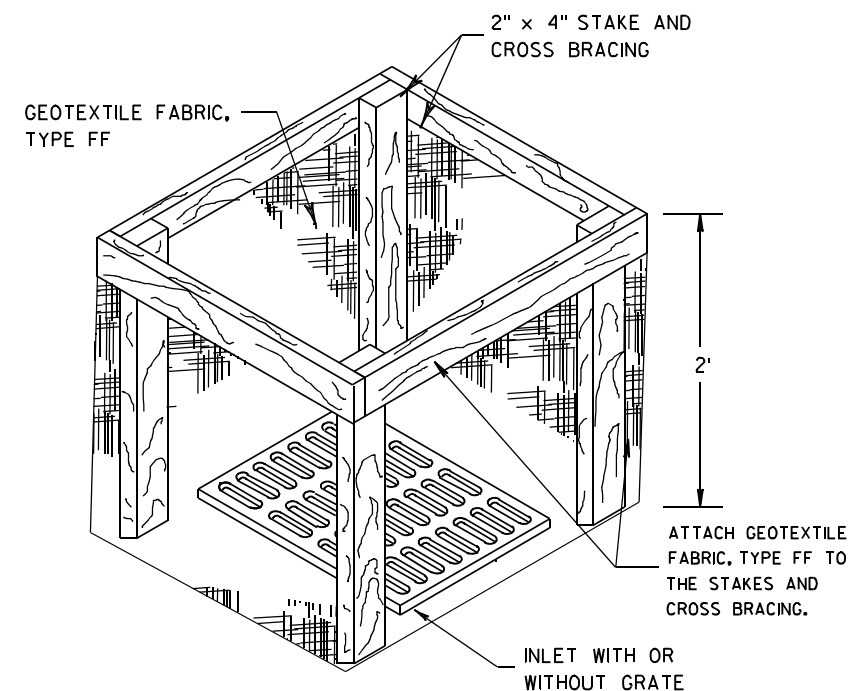
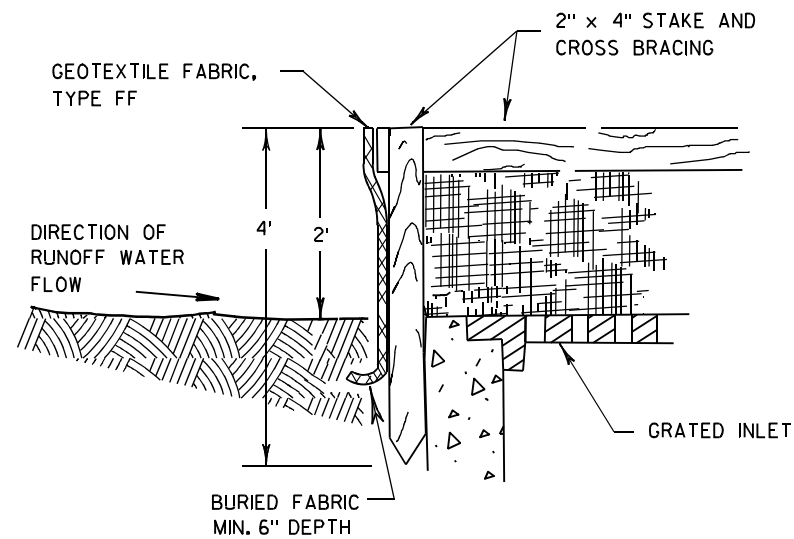


TRENCH DETAIL



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4-29-05 DATE	/S/ Beth Conn CHIEF ROADWAY DEVELOPER 85 ENGINEER
FHWA	



INLET PROTECTION, TYPE A

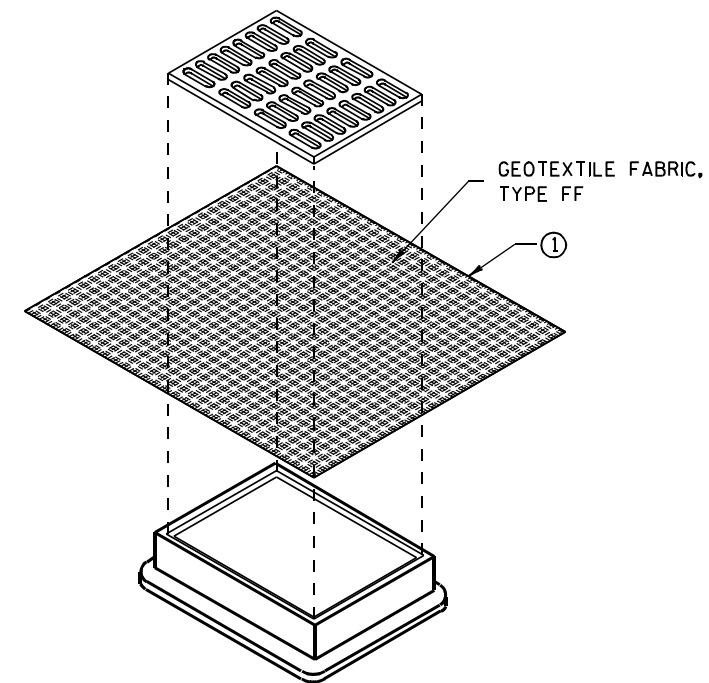
GENERAL NOTES

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.

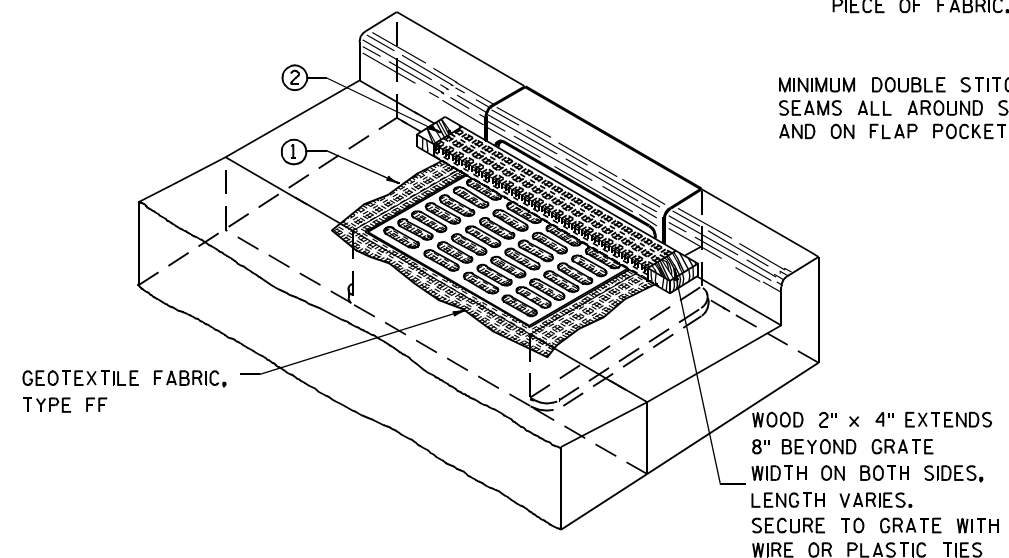
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- 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.

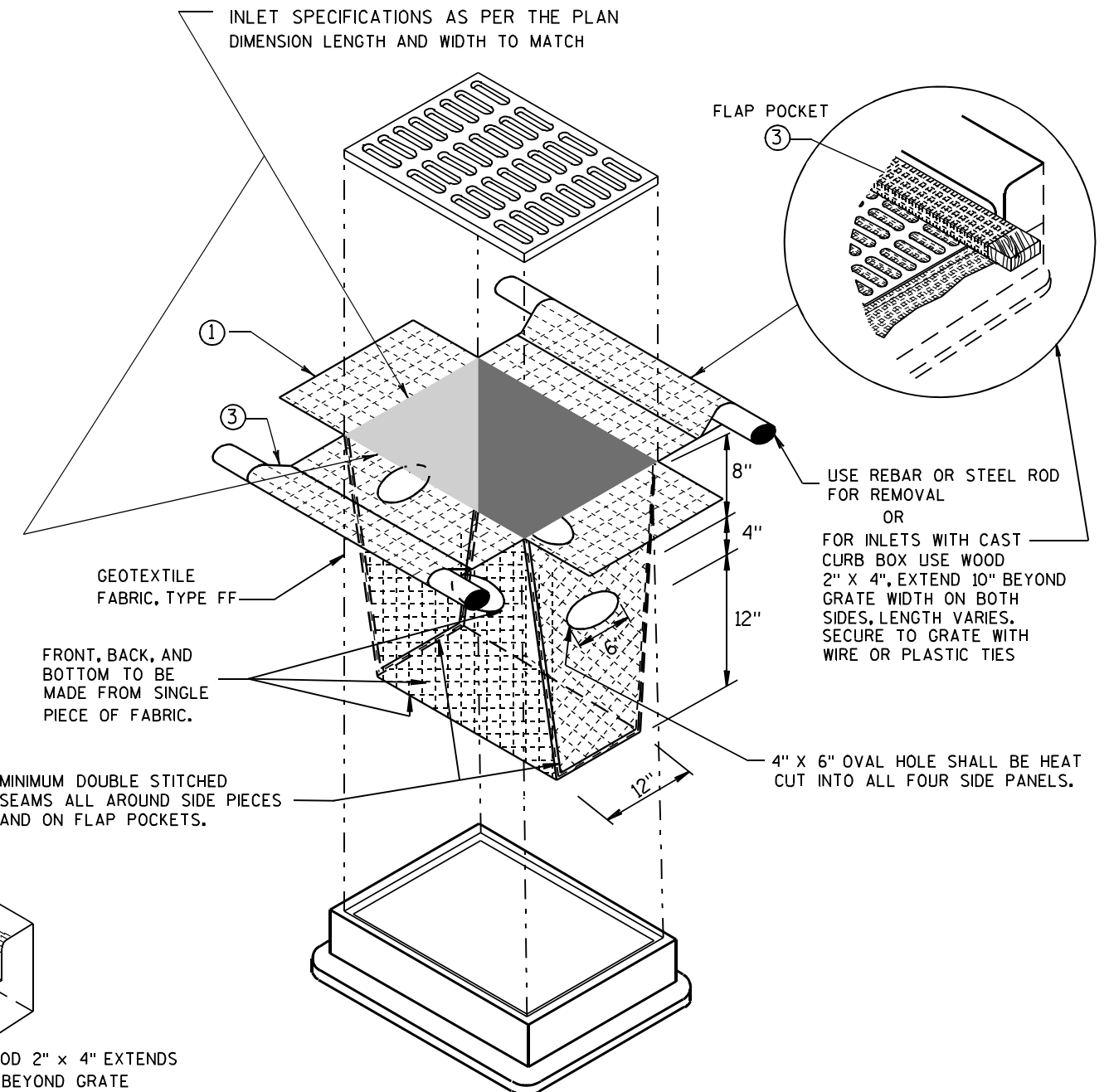
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

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.



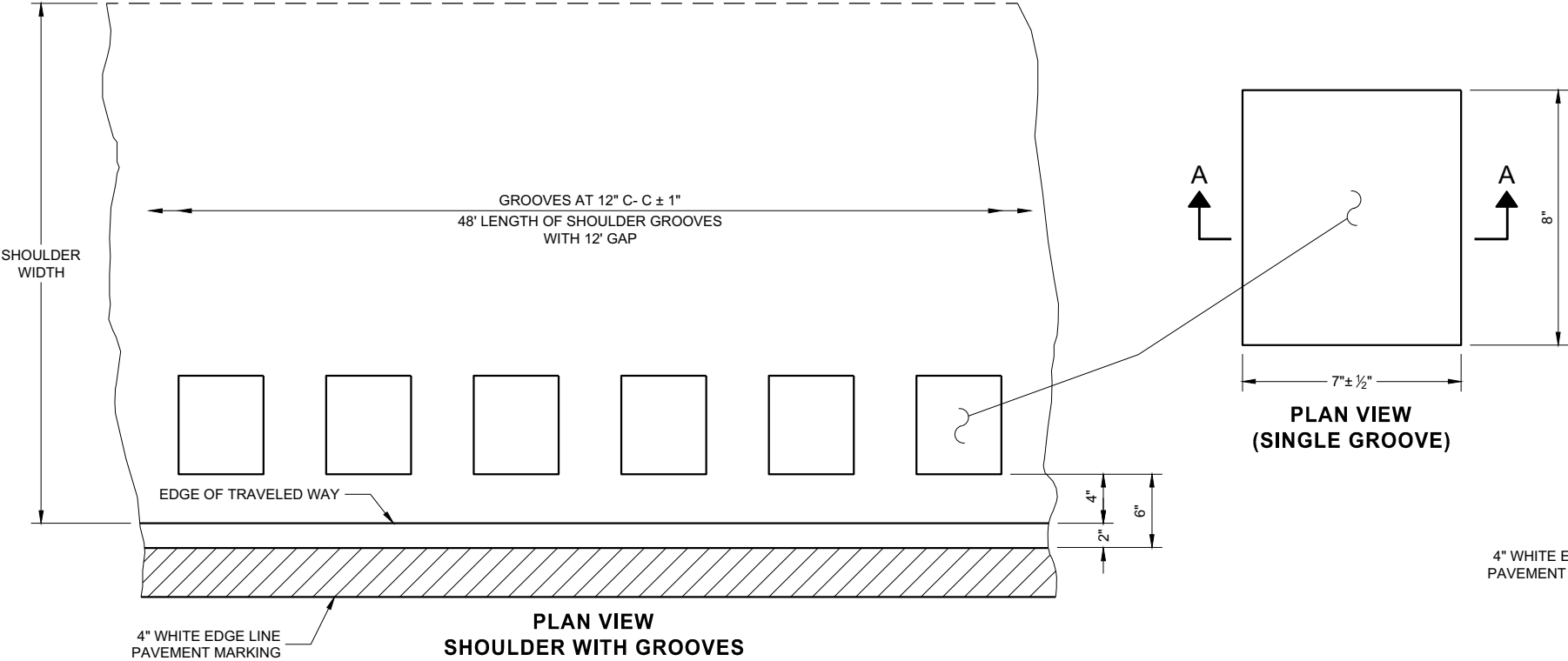
INLET PROTECTION, TYPE D

(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

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10/16/02 /S/ Beth Connolly
DATE
86
FHWA CHIEF ROADWAY DEVELOPMENT ENGINEER



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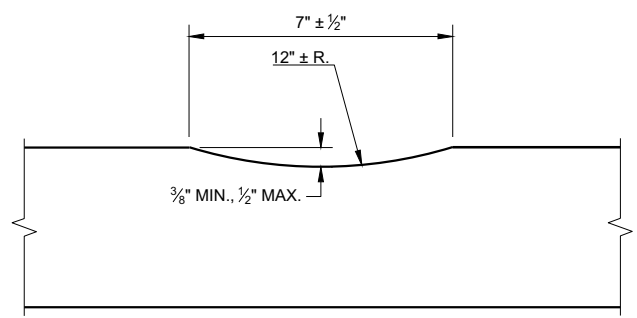
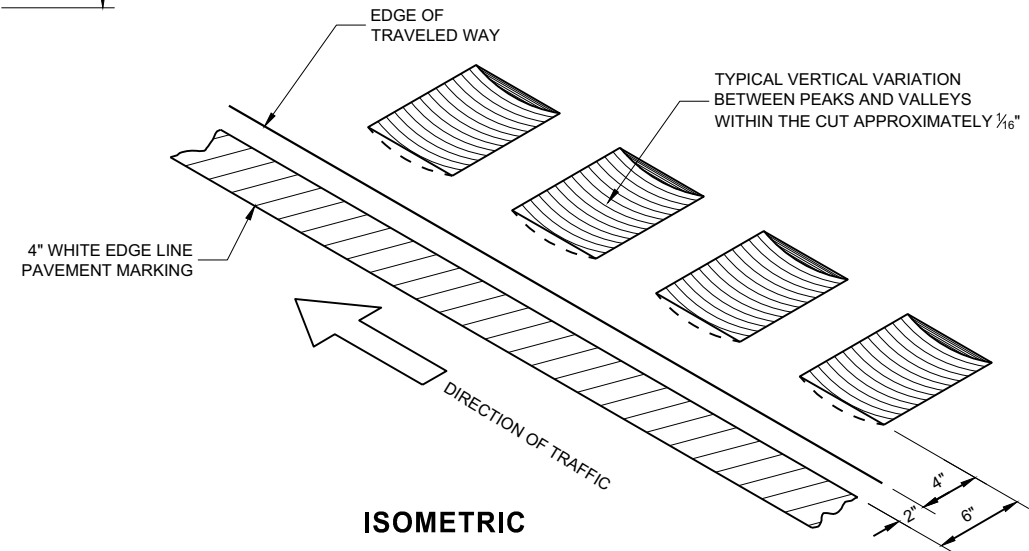
PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

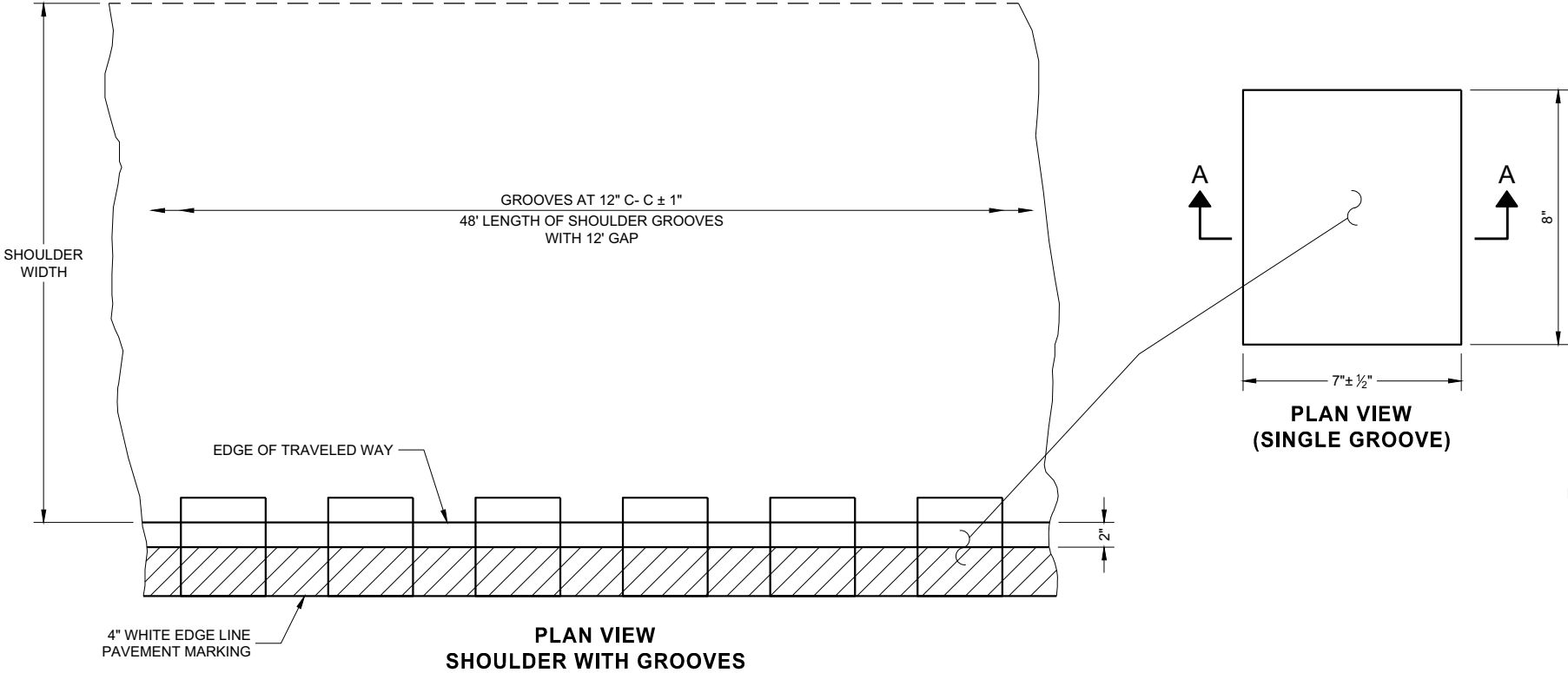
- ① SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



SECTION A - A

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION



6

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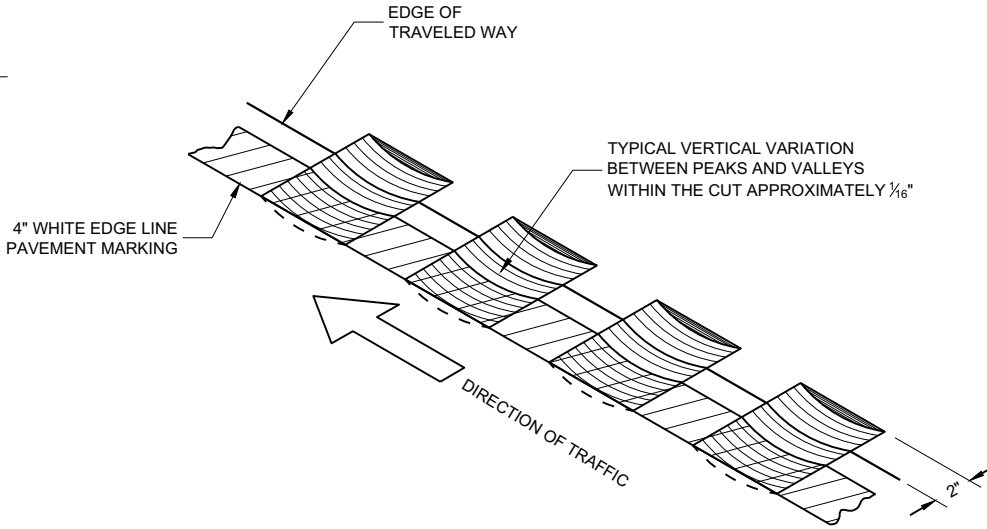
PLACEMENT DETAIL FOR TYPE 2 MILLED RUMBLE STRIP

GENERAL NOTES

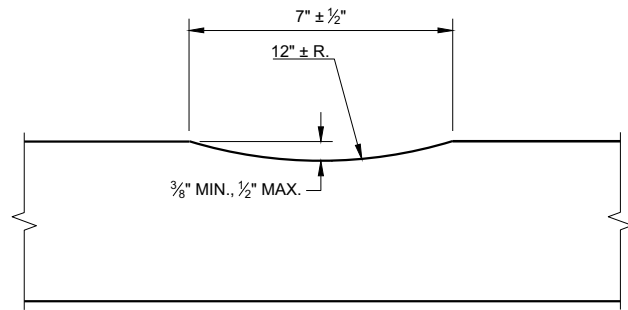
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

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



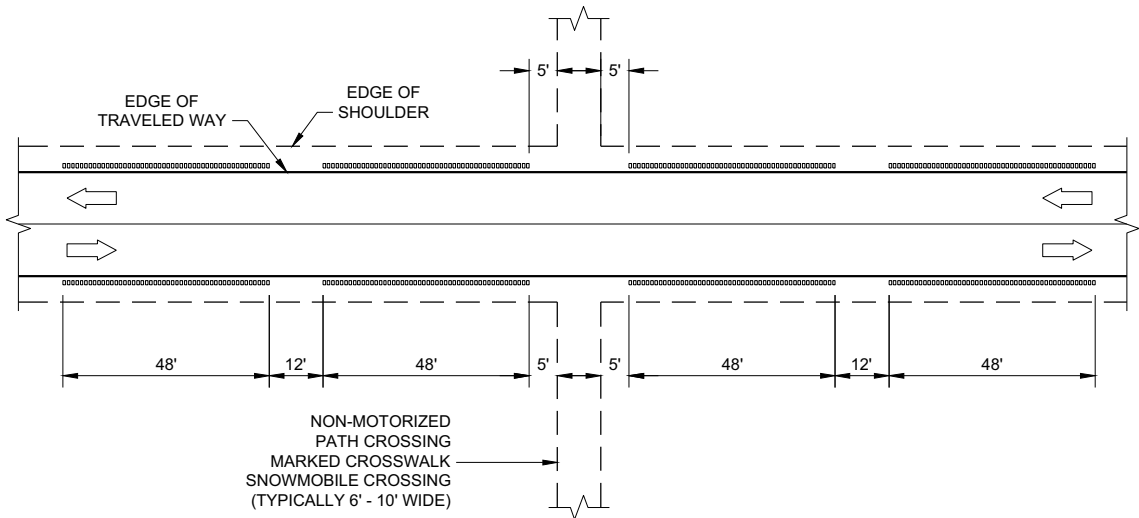
ISOMETRIC



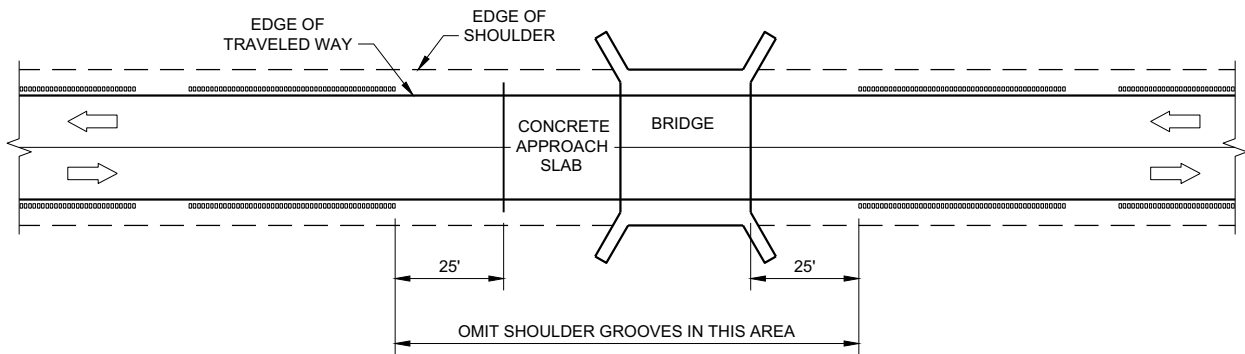
SECTION A - A

**2-LANE RURAL SHOULDER
RUMBLE STRIP, MILLING**

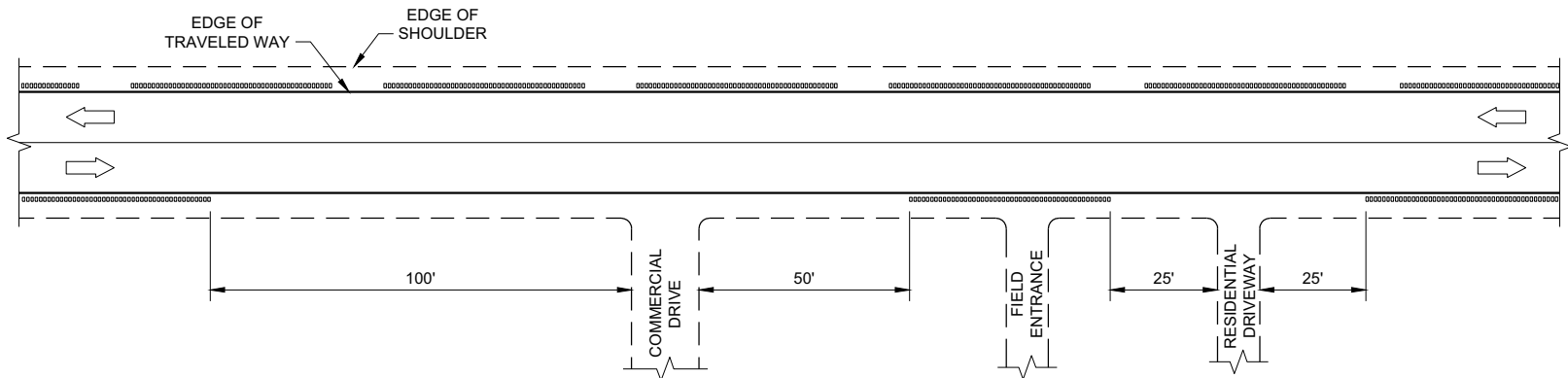
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



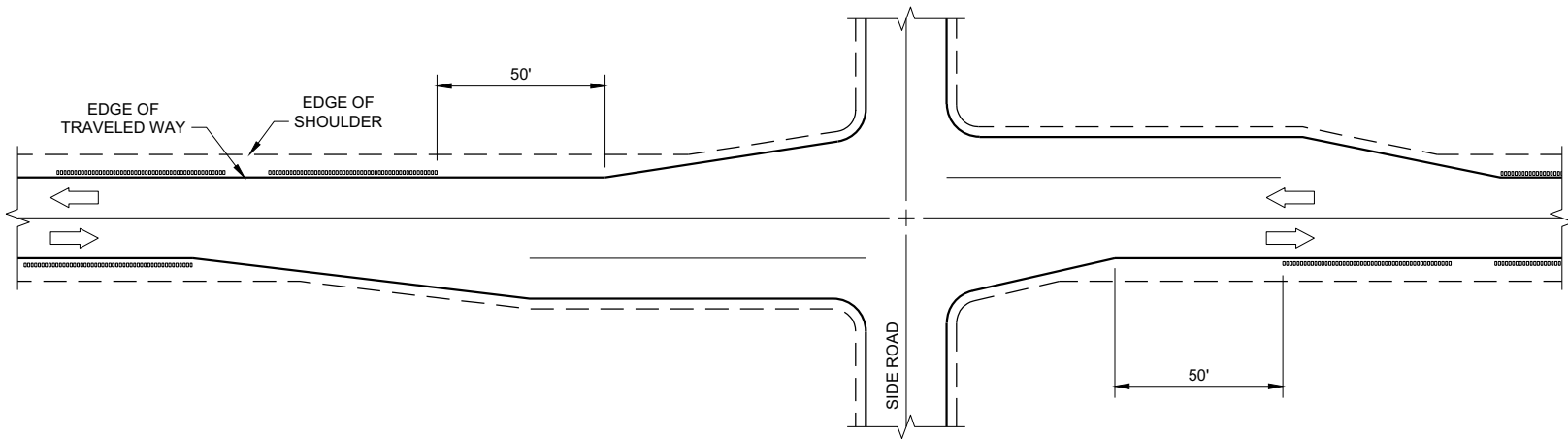
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



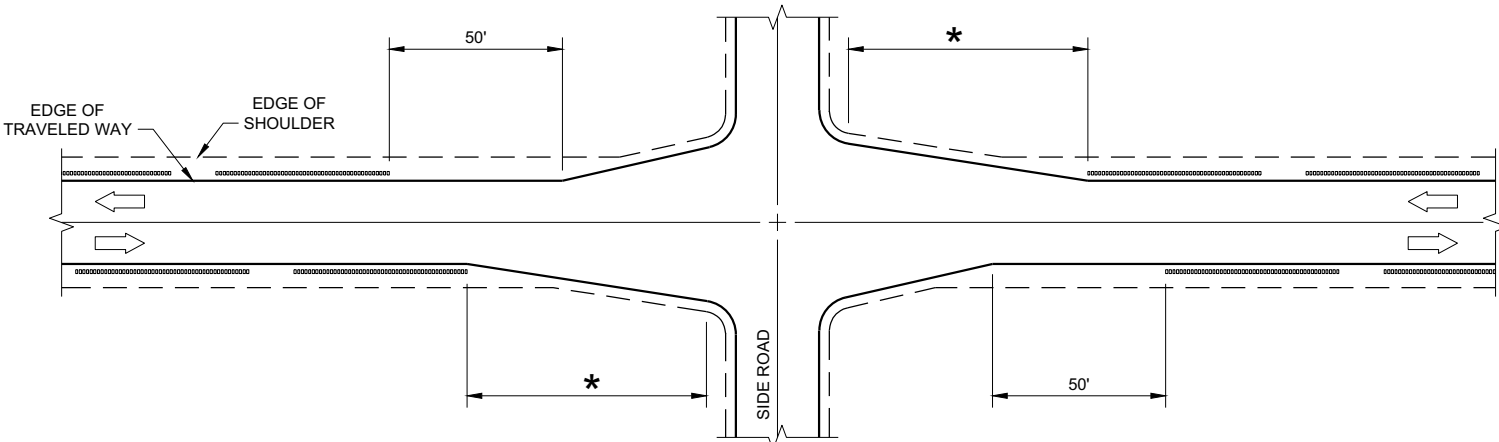
SHOULDER GROOVES AT BRIDGES



SHOULDER GROOVES AT DRIVEWAYS^①



SHOULDER GROOVES AT RIGHT TURN LANE



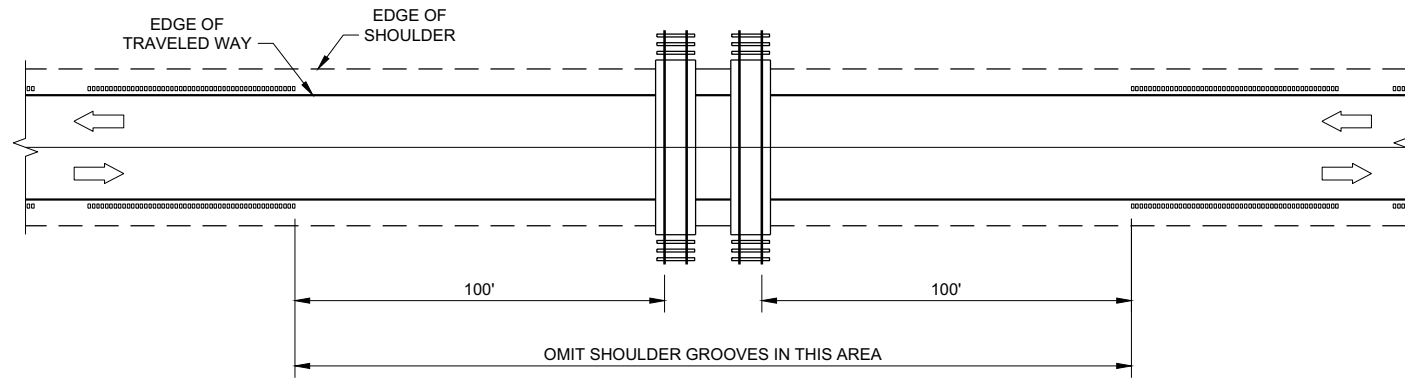
SHOULDER GROOVES AT INTERSECTIONS WITH APPROACH TAPER

GENERAL NOTES

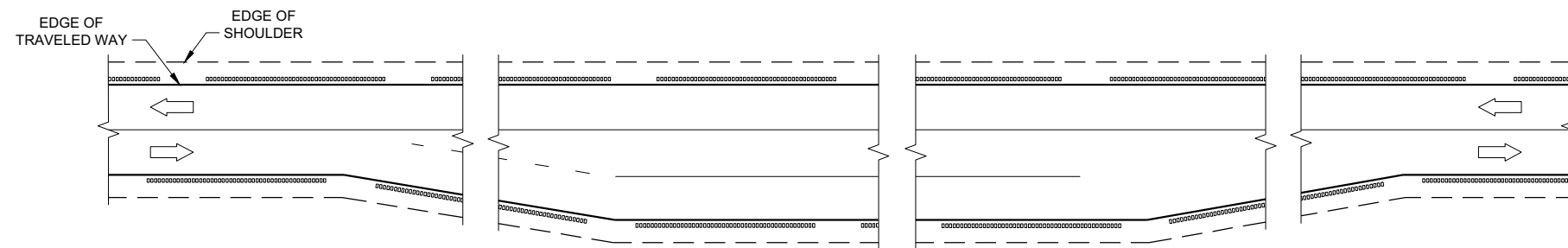
- ① SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

2-LANE RURAL SHOULDER
RUMBLE STRIP, MILLING

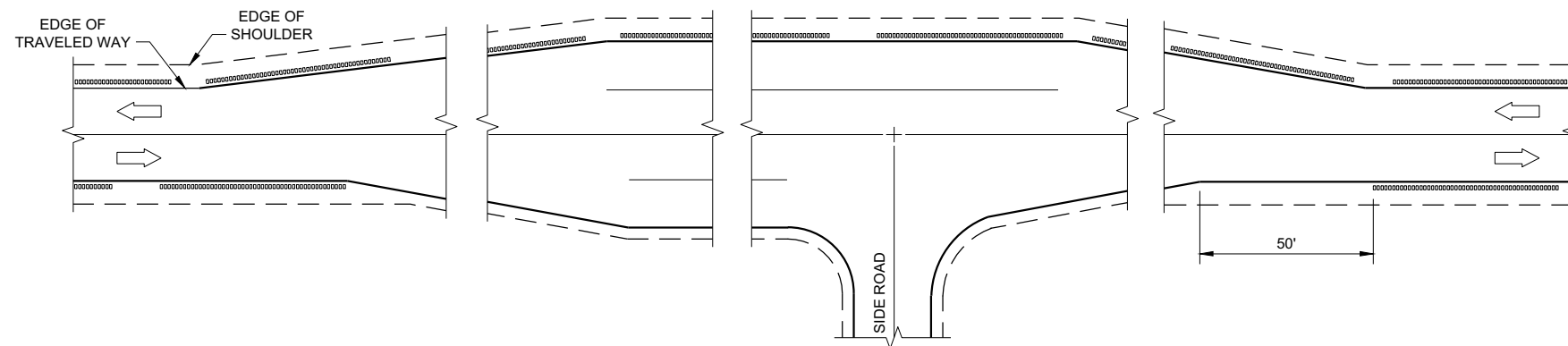
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



SHOULDER GROOVES AT RAILROADS



SHOULDER GROOVES AT PASSING AND CLIMBING LANES



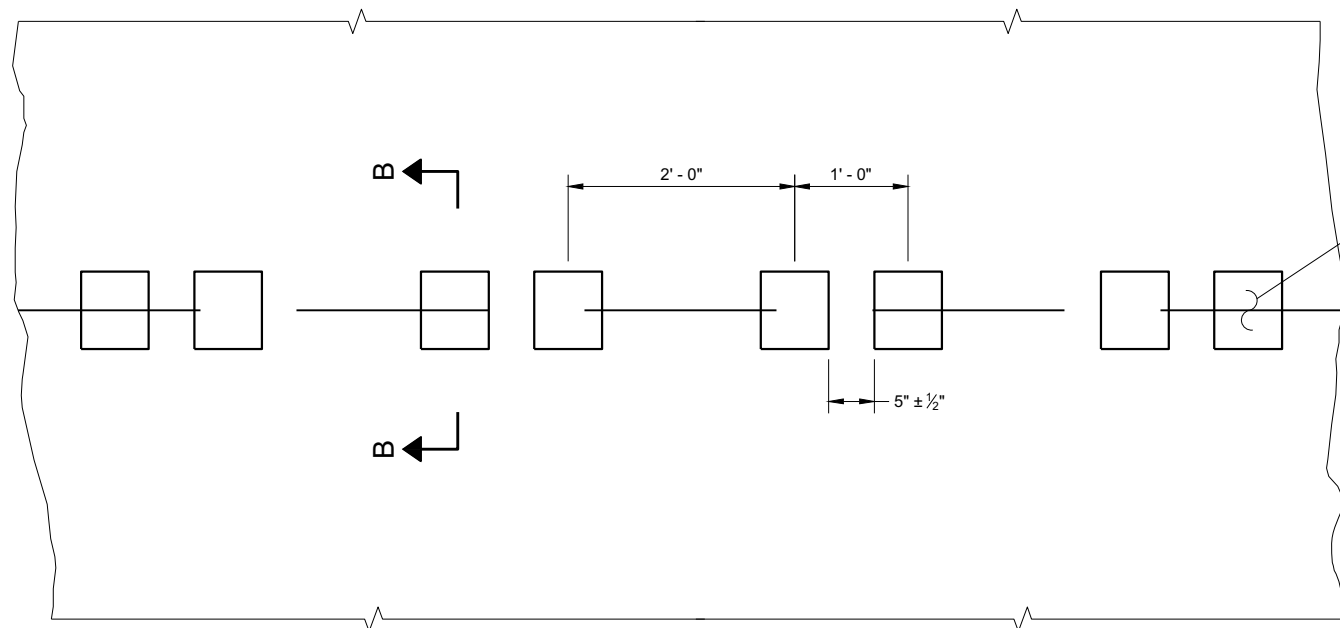
SHOULDER GROOVES AT BYPASS LANES

**2-LANE RURAL SHOULDER
RUMBLE STRIP, MILLING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

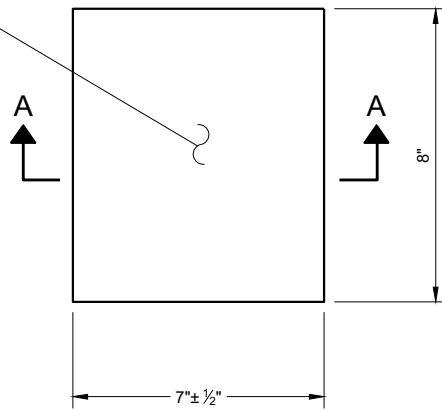
APPROVED
7/2018 DATE /S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT ENGINEER

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PLAN VIEW
SHOULDER WITH GROOVES

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP



PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

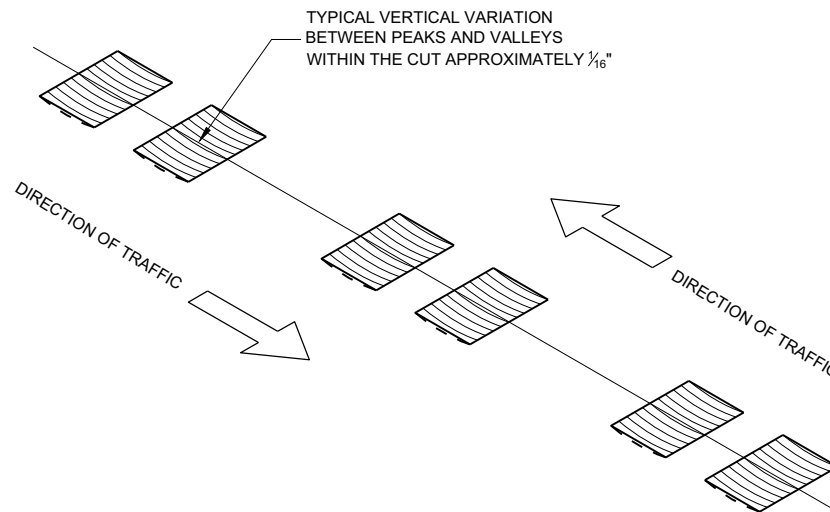
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTERLINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

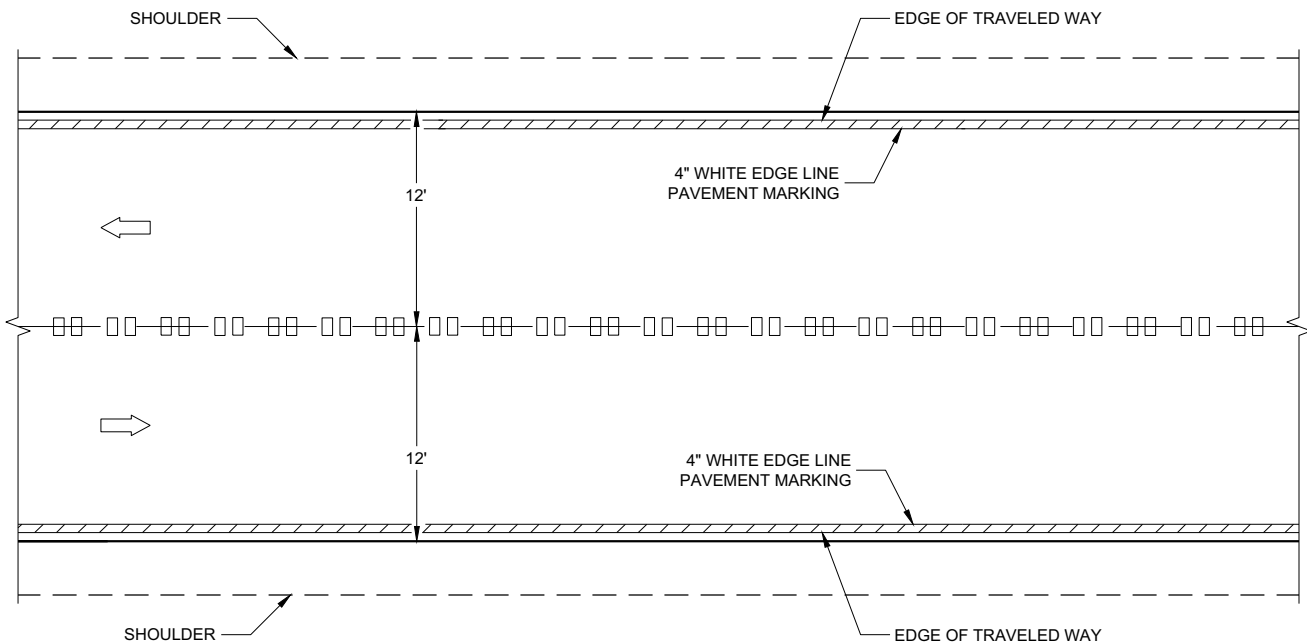
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

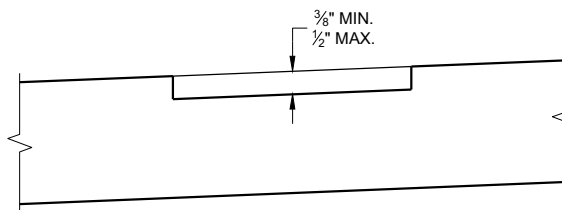
- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



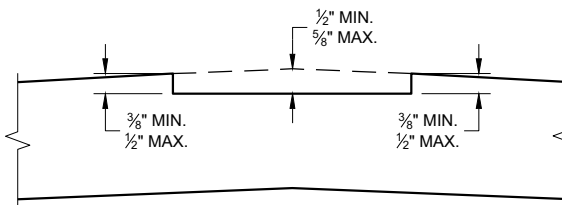
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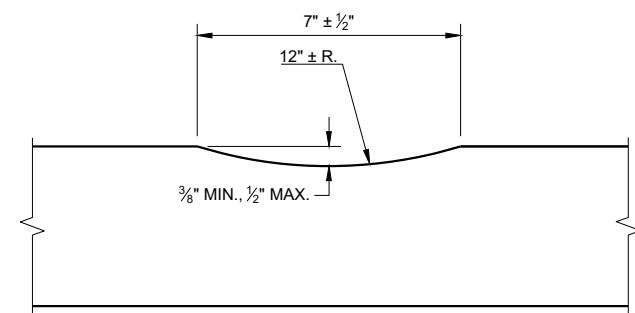
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



SECTION B - B
SUPERELEVATED ROADWAY



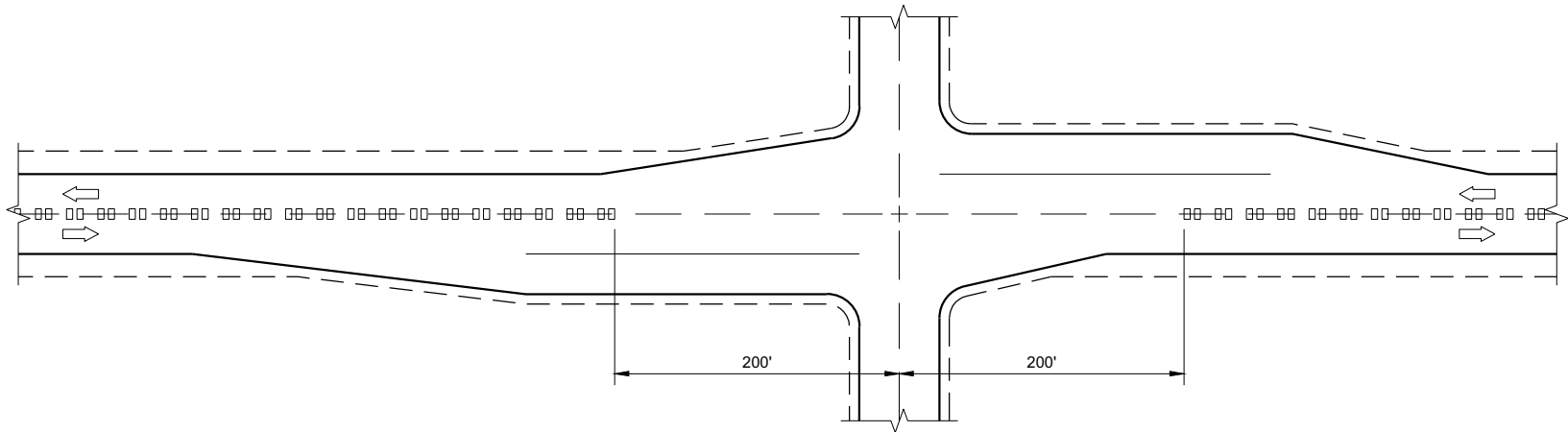
SECTION B - B
CROWNED ROADWAY



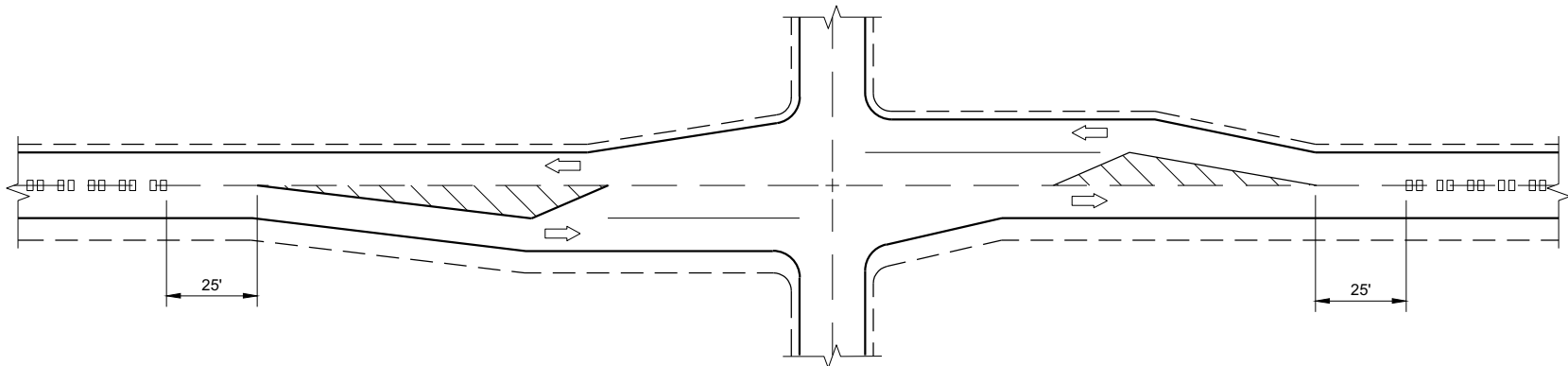
SECTION A - A

**2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING**

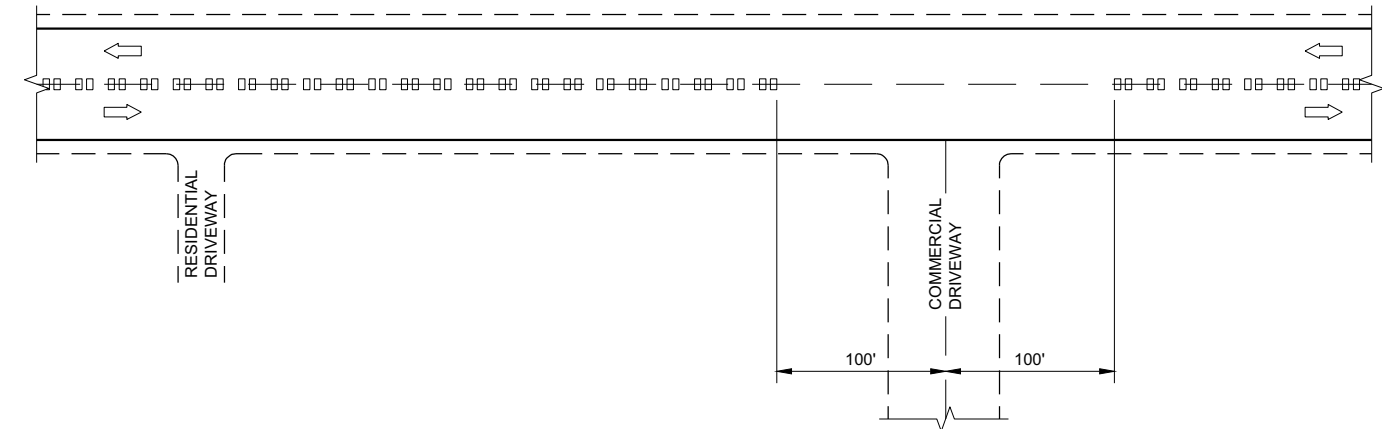
STATE OF WISCONSIN
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CENTERLINE GROOVES AT INTERSECTIONS



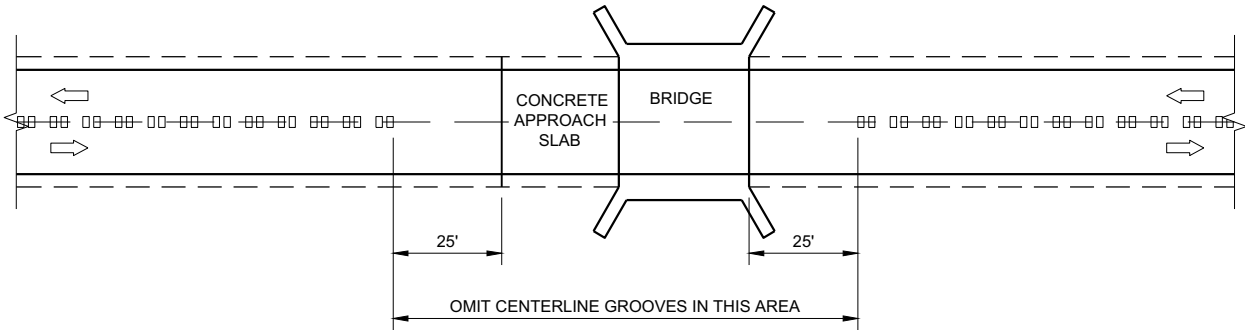
CENTERLINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)



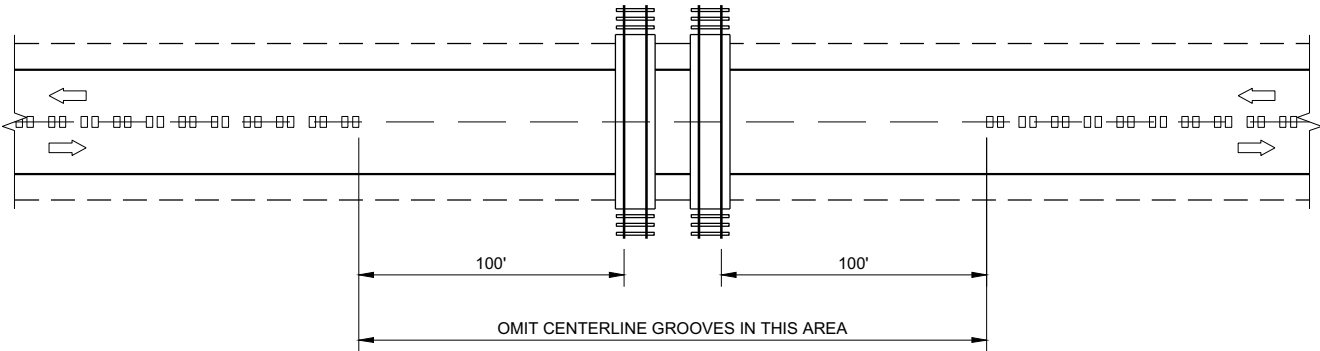
CENTERLINE GROOVES AT DRIVEWAYS^①

GENERAL NOTES

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



CENTERLINE GROOVES AT BRIDGES



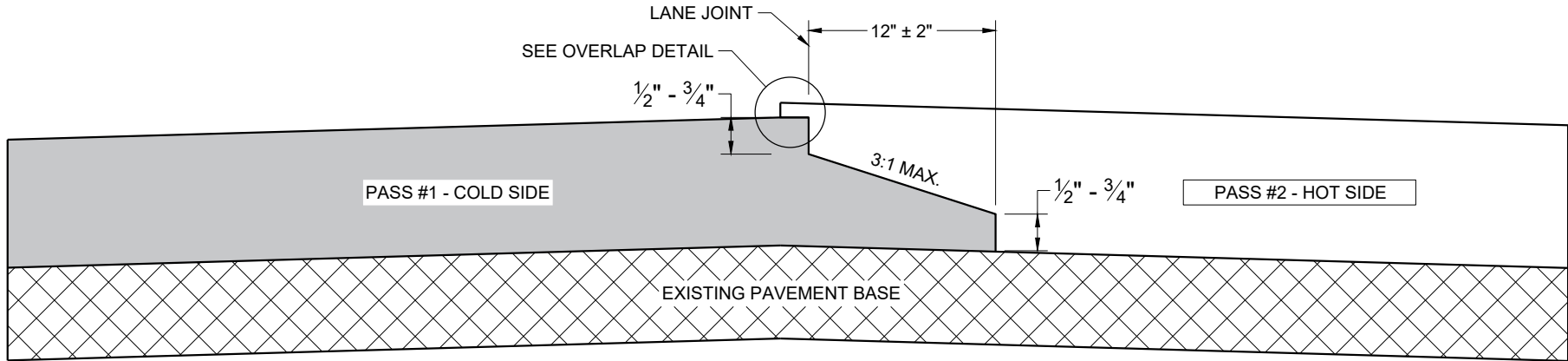
CENTERLINE GROOVES AT RAILROADS

2-LANE RURAL
CENTERLINE RUMBLE STRIP,
MILLING

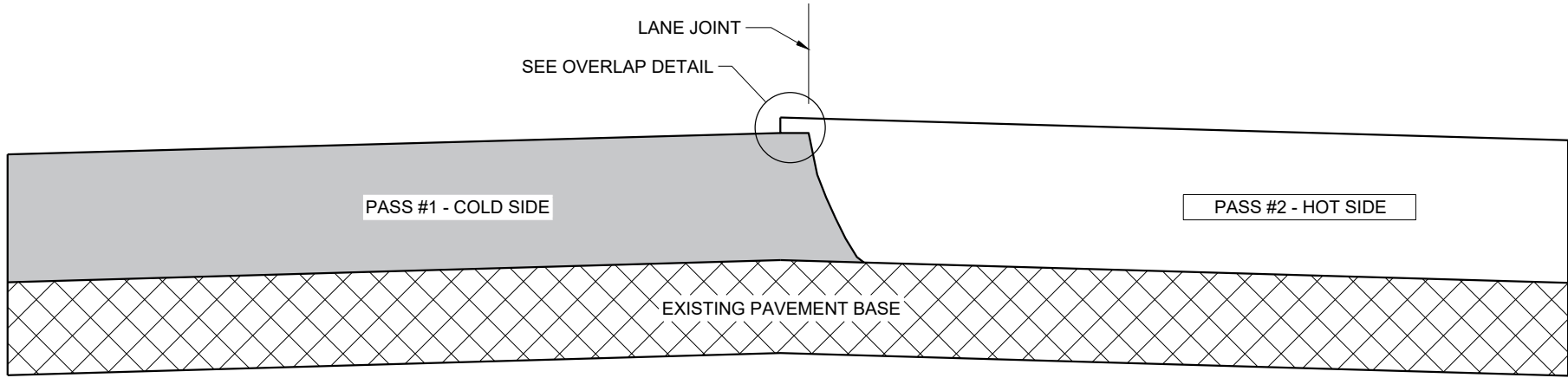
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT ENGINEER
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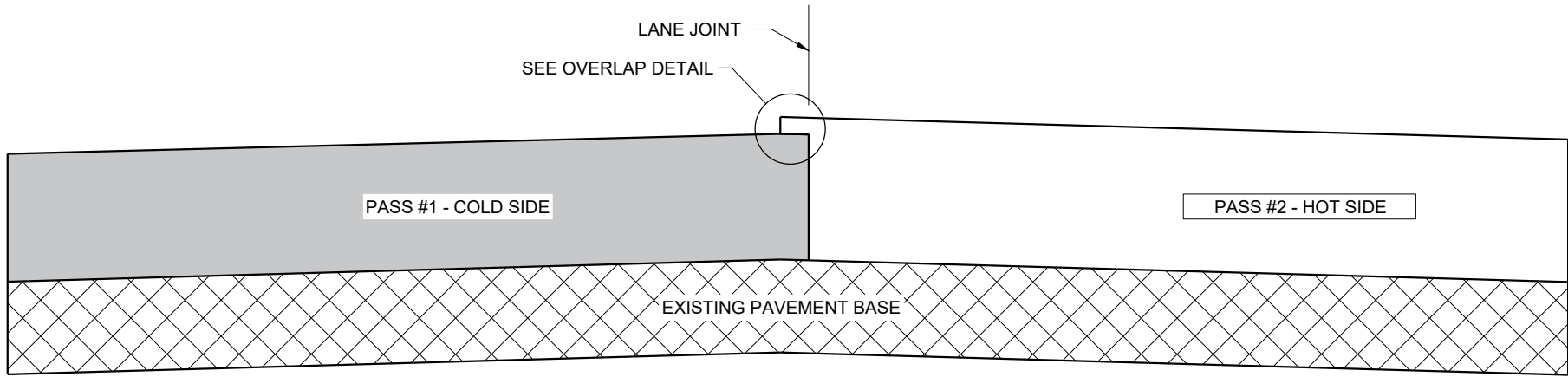
FHWA



**TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT**



**TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT**



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

GENERAL NOTES

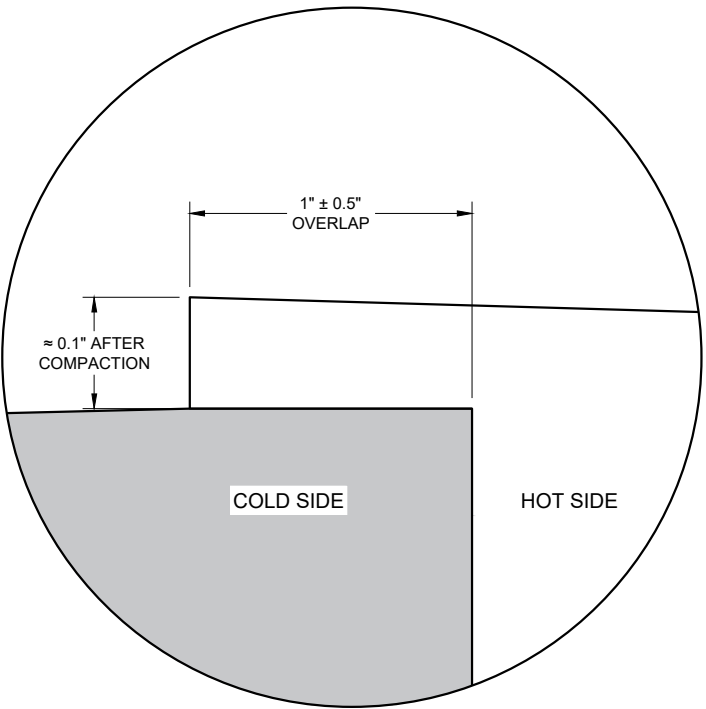
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 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.



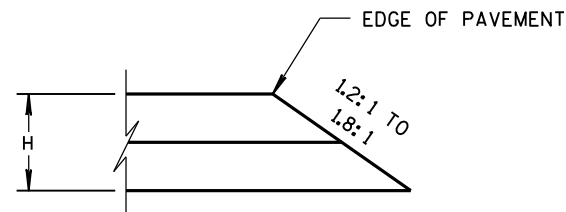
OVERLAP DETAIL (TYPICAL)

HMA LONGITUDINAL JOINTS

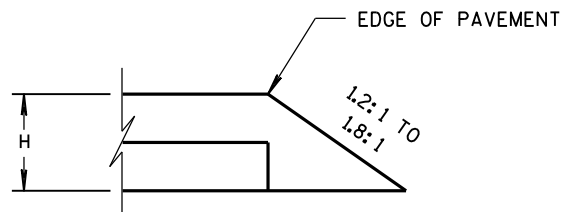
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020 /S/ Steven Hefel
DATE HMA PAVEMENT ENGIN 93

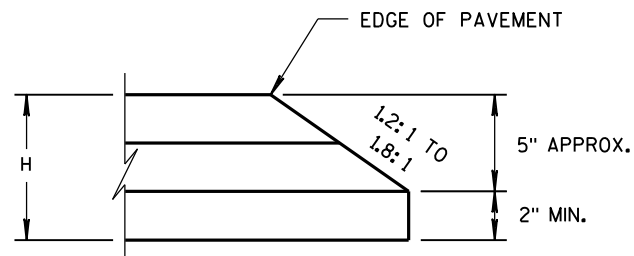
FHWA



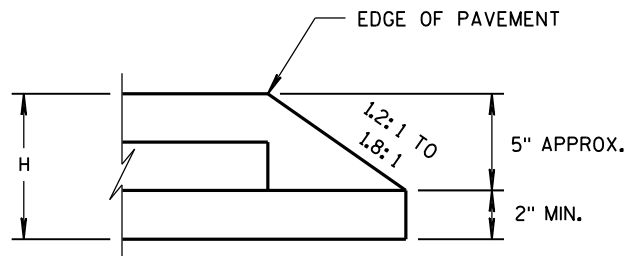
CONSTRUCTED WITH FINAL TWO LAYERS
FOR H 5" OR LESS



CONSTRUCTED WITH FINAL LAYER
FOR H 5" OR LESS

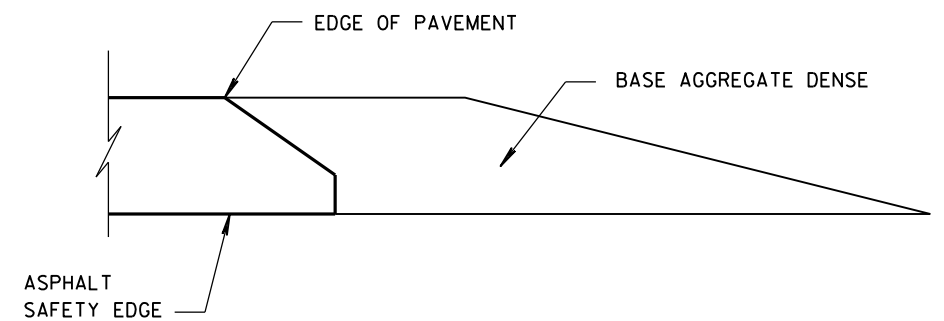


CONSTRUCTED WITH FINAL TWO LAYERS
FOR H GREATER THAN 5"



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

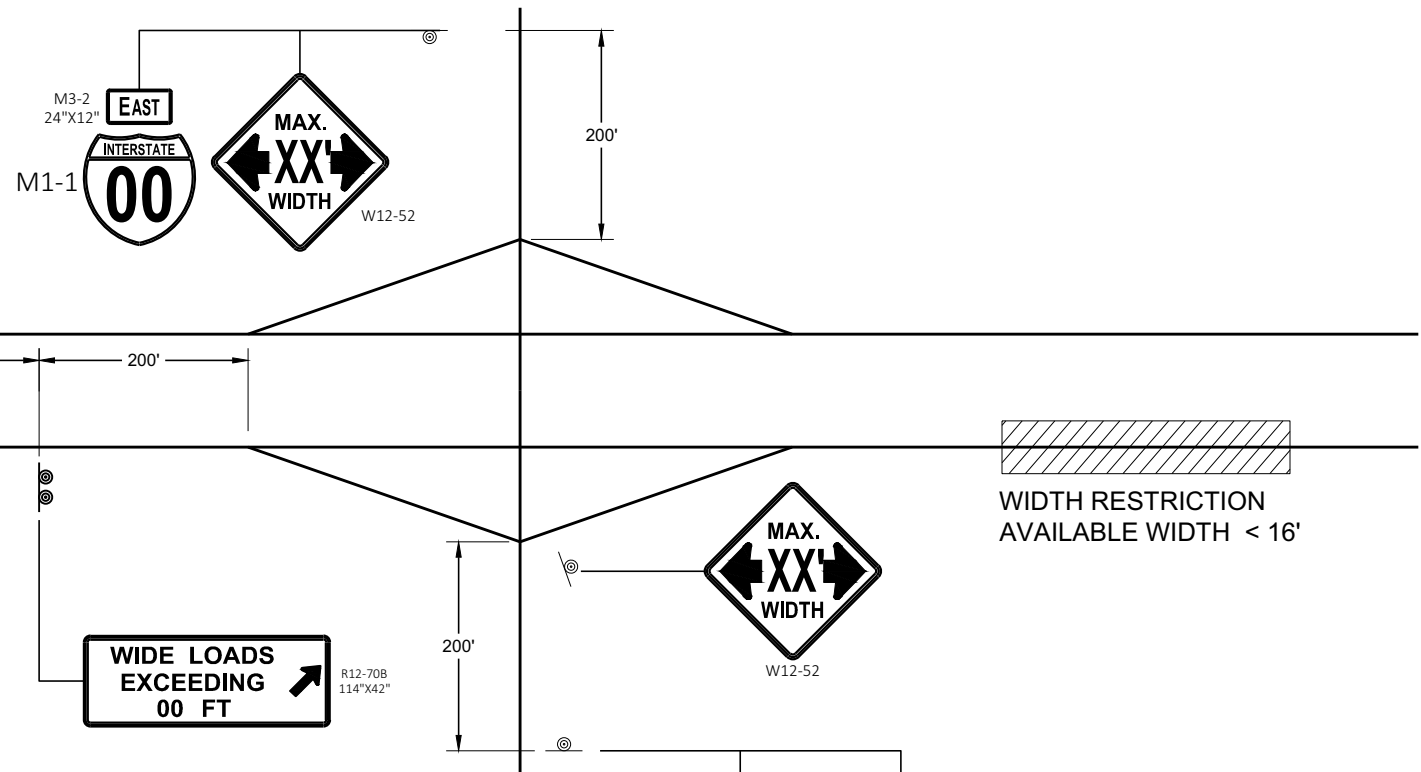
APPROVED

11/30/2012
DATE

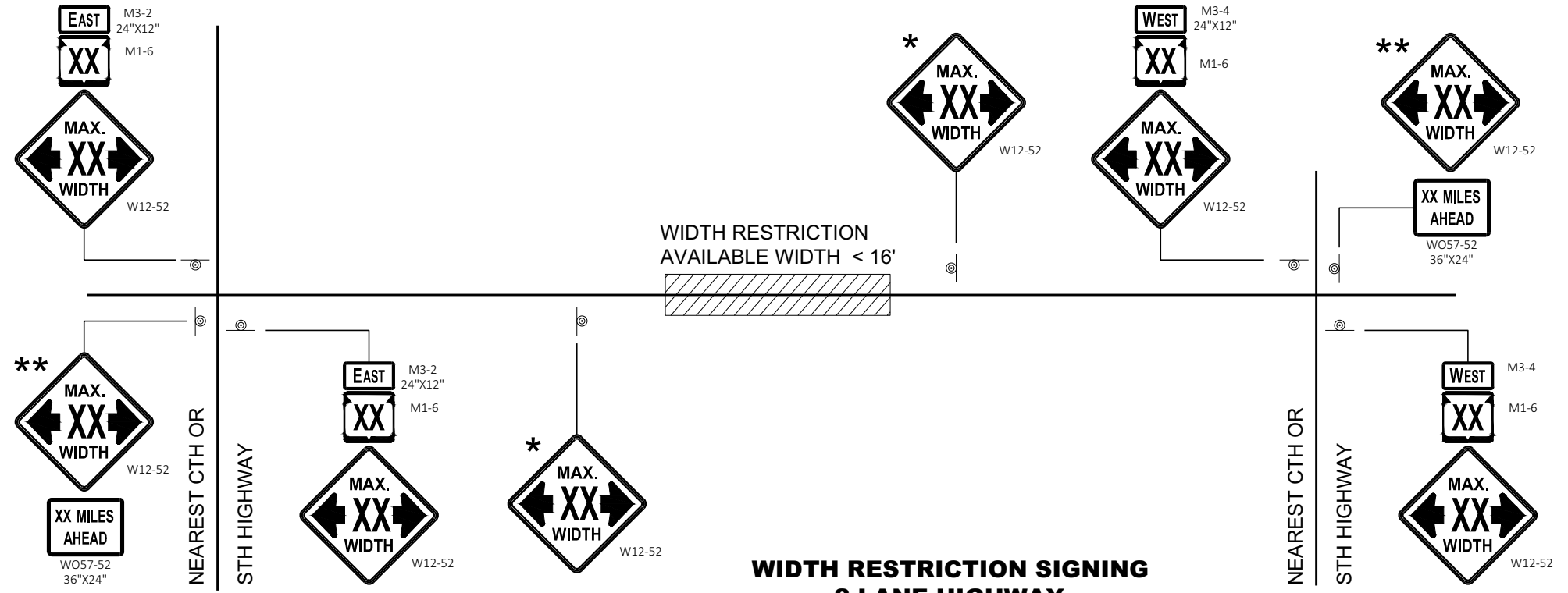
FHWA

/s/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
1994

ENT



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.



ADVANCED WIDTH RESTRICTION SIGNING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED February 2020 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER 95
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.

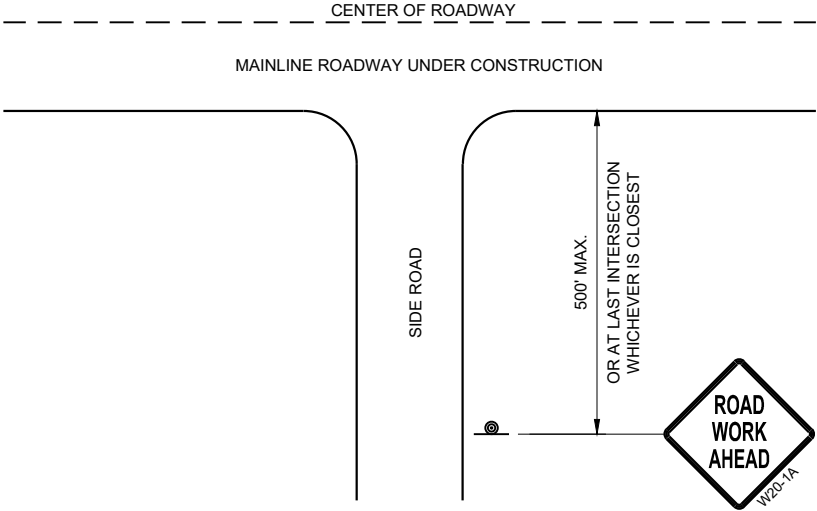
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

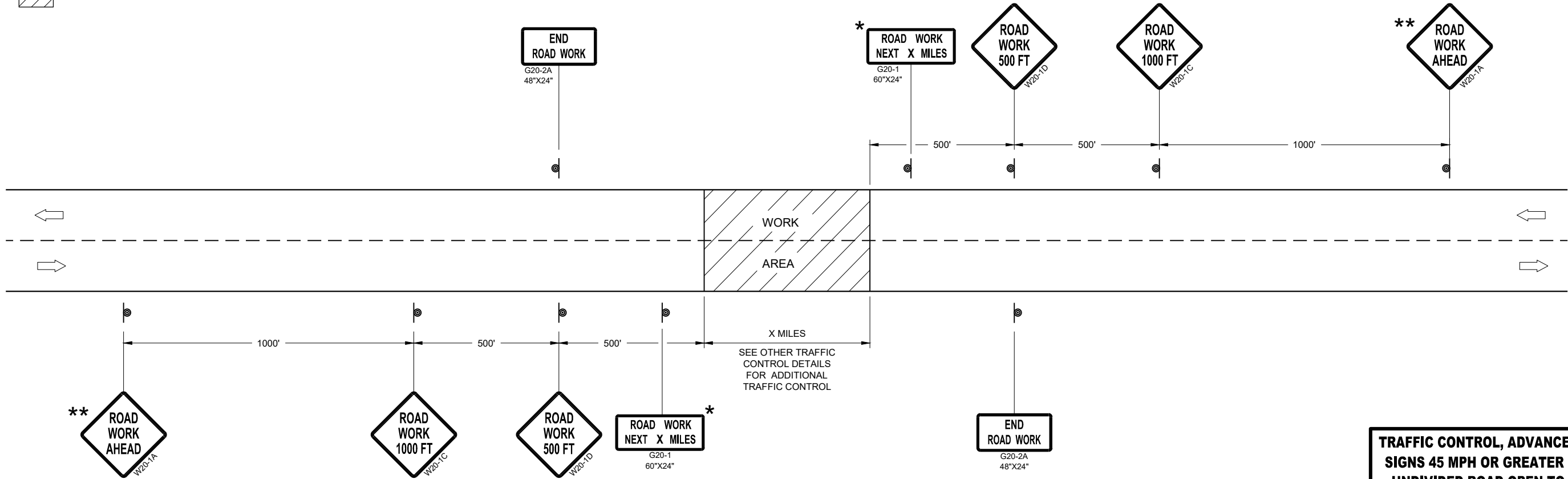
- * OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS
- ** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.

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 96

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. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

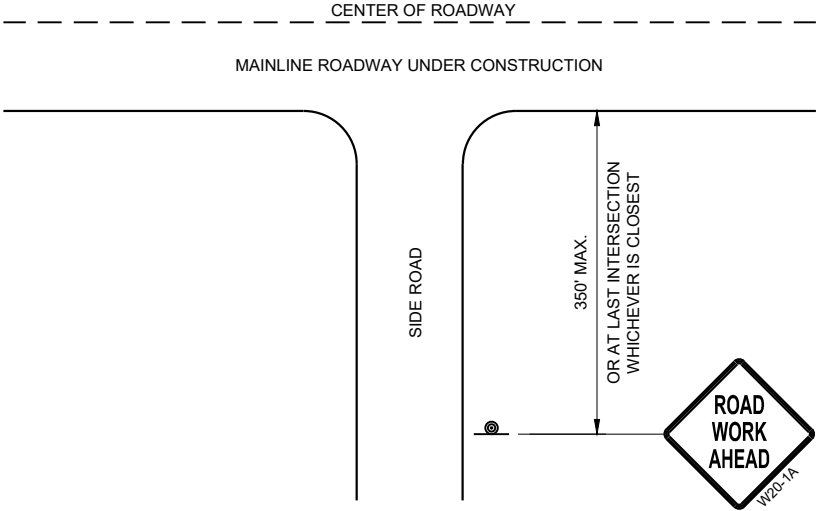
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

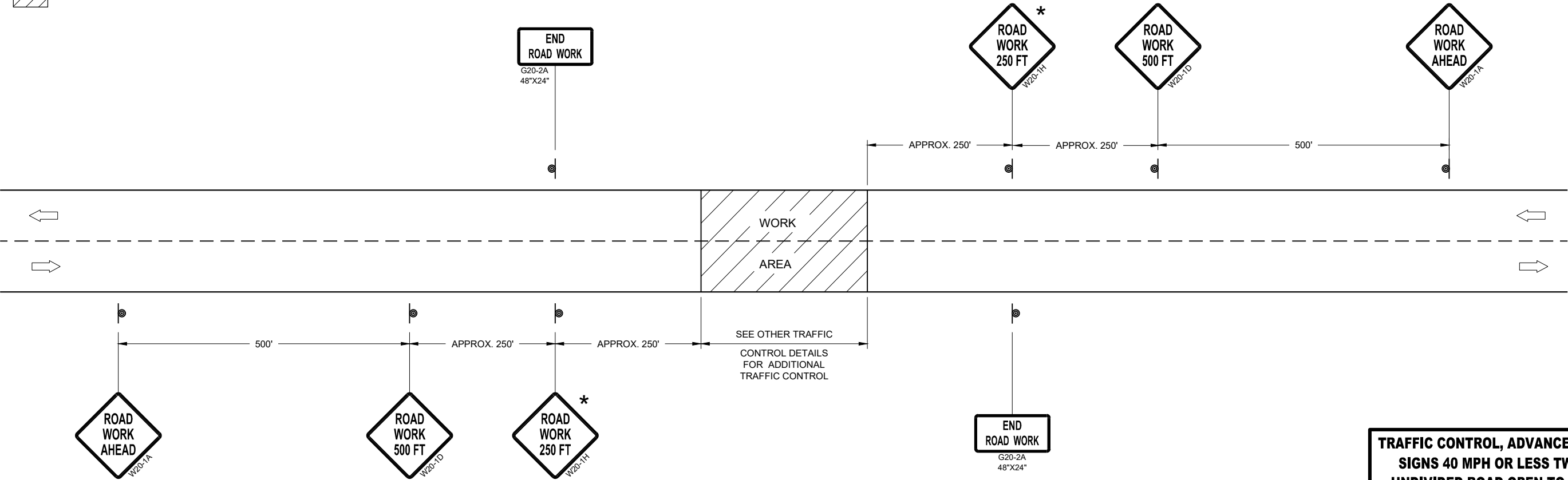
* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.

LEGEND

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



TYPICAL SIDE ROAD APPROACH
WARNING SIGN DETAIL

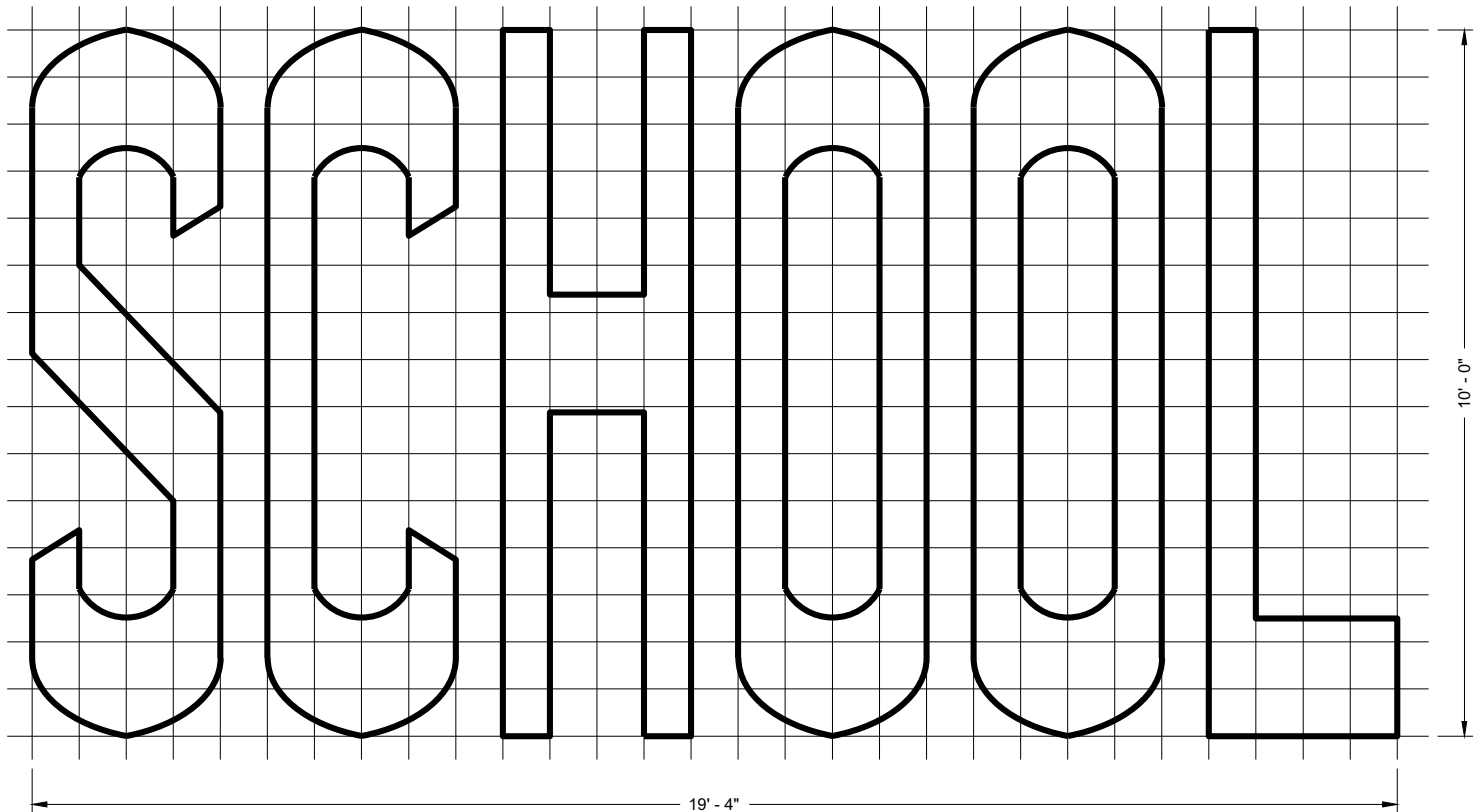
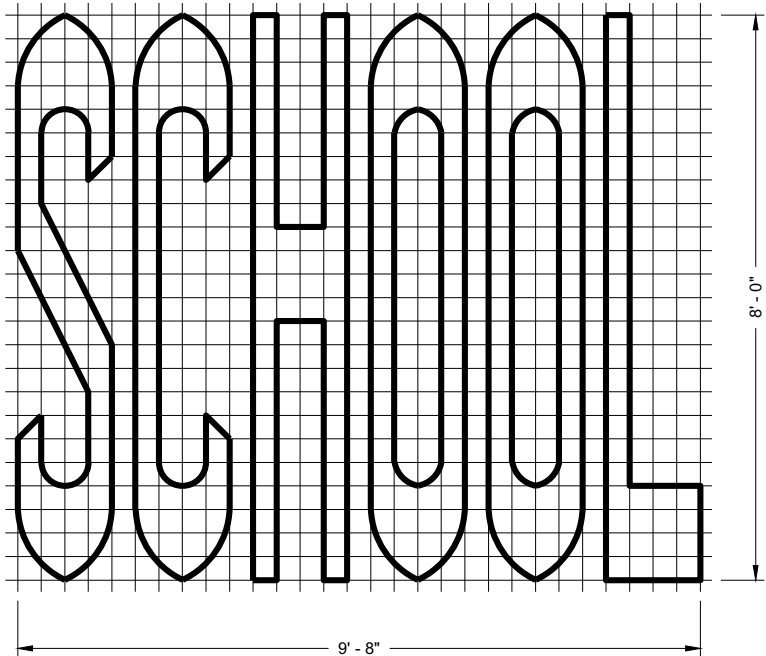
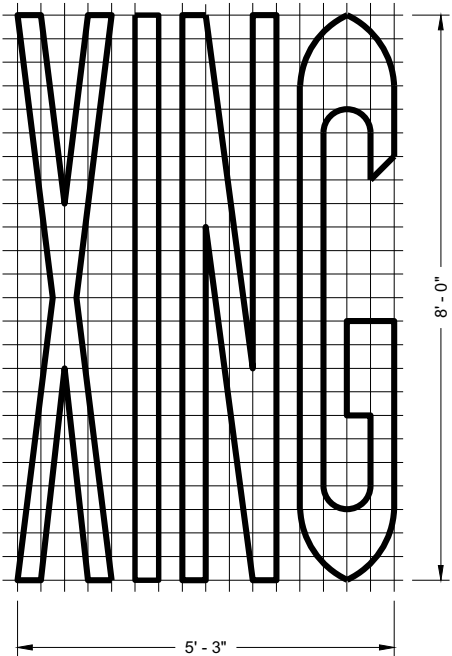
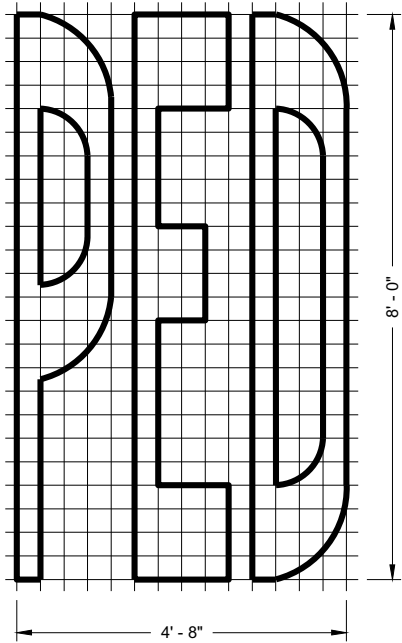
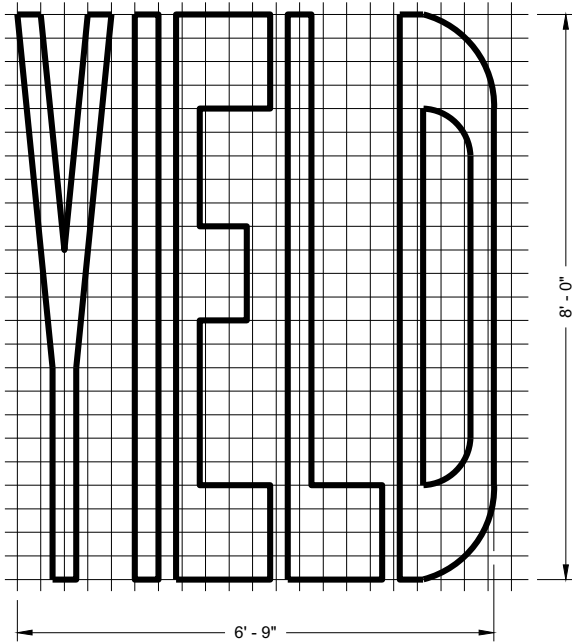
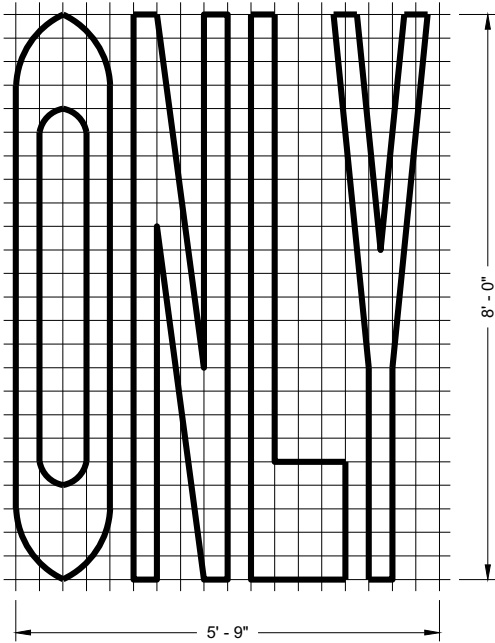
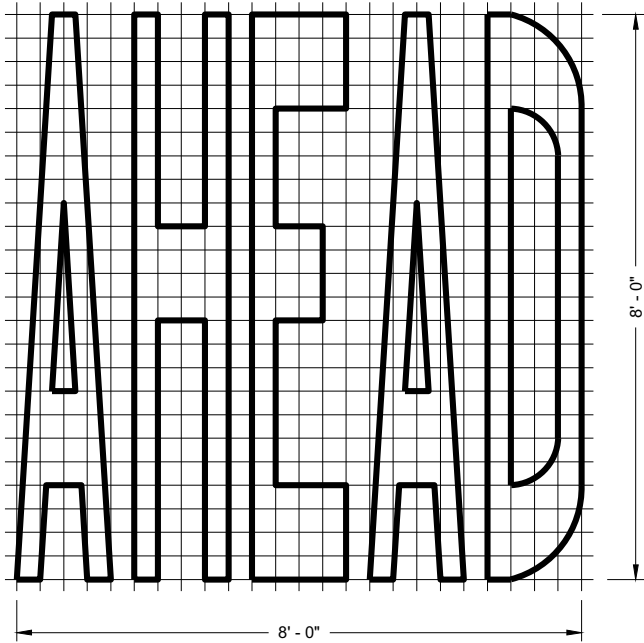
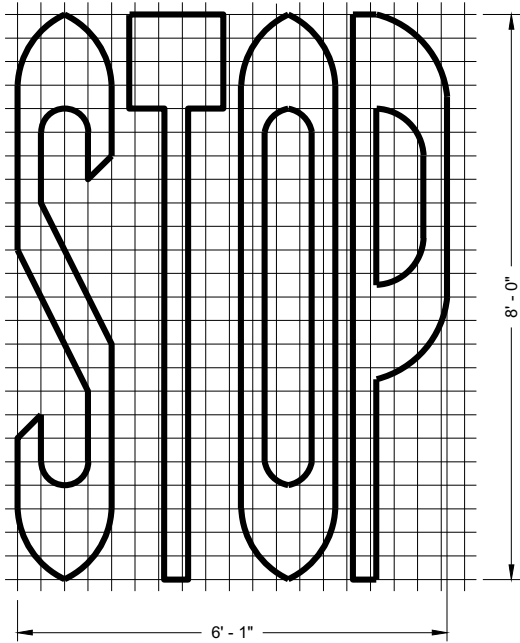


TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

TRAFFIC CONTROL, ADVANCE WARNING
SIGNS 40 MPH OR LESS TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 97
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SINGLE LANE

TWO - LANE

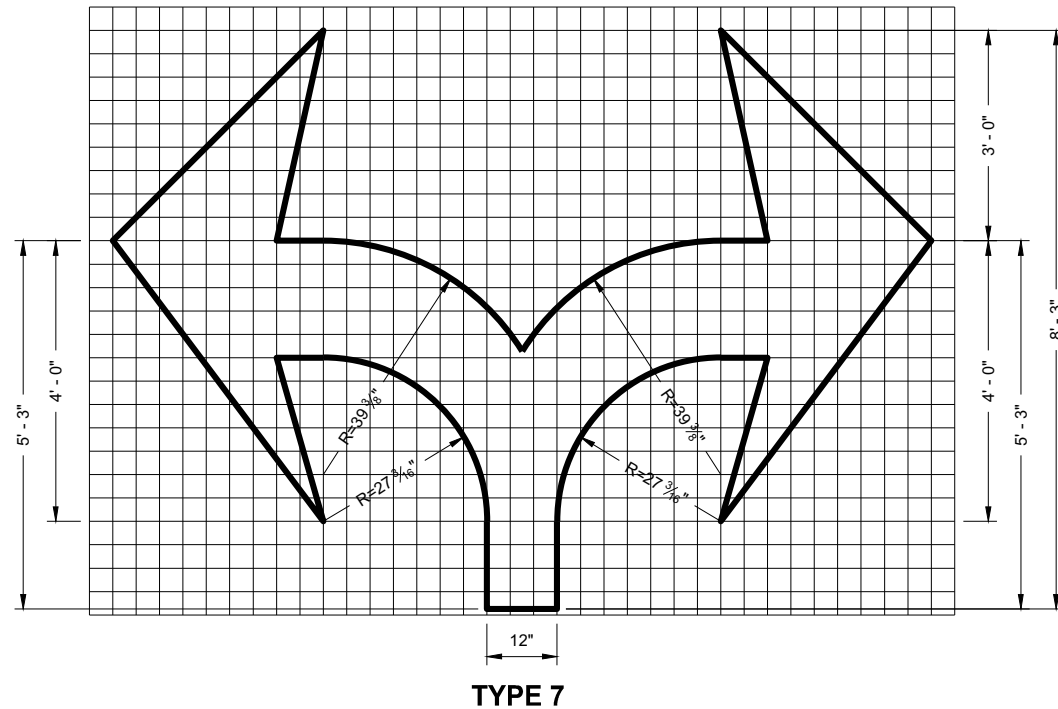
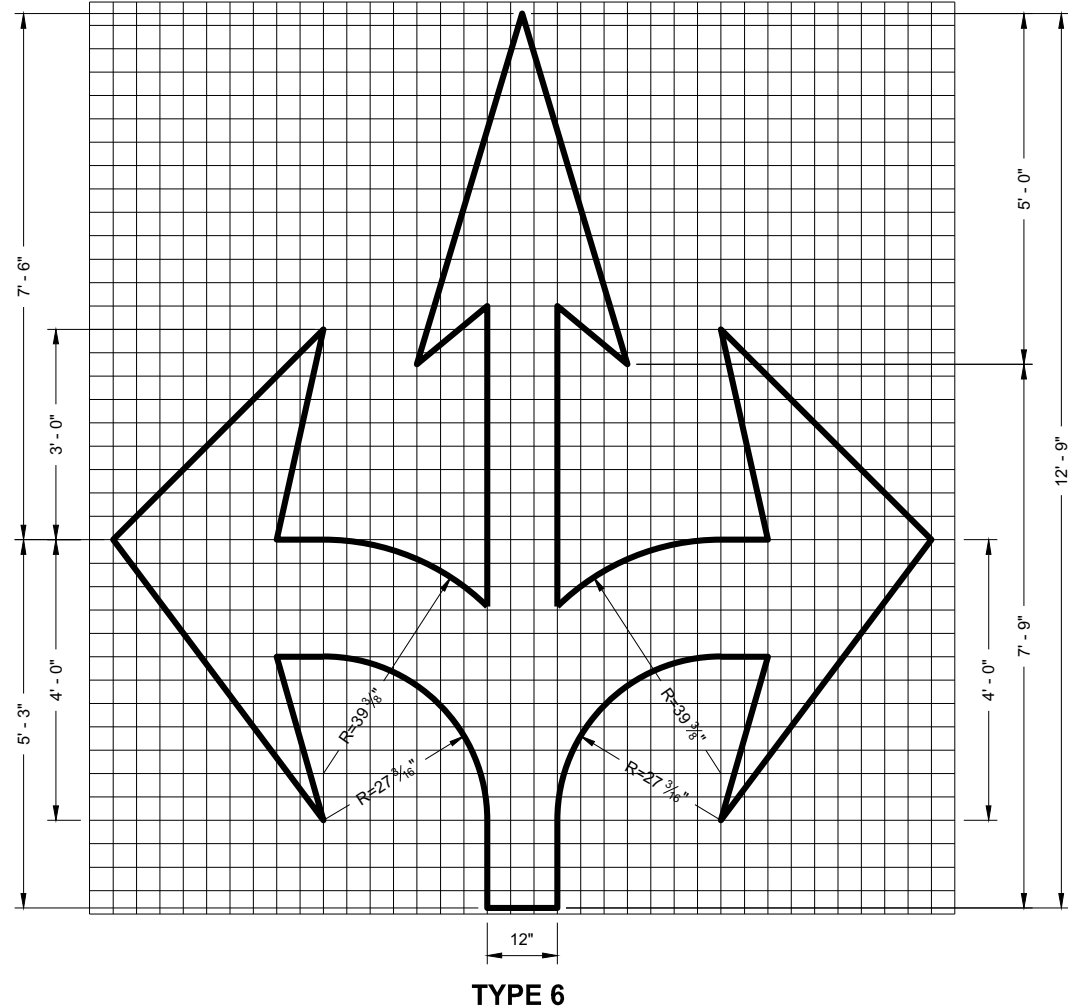
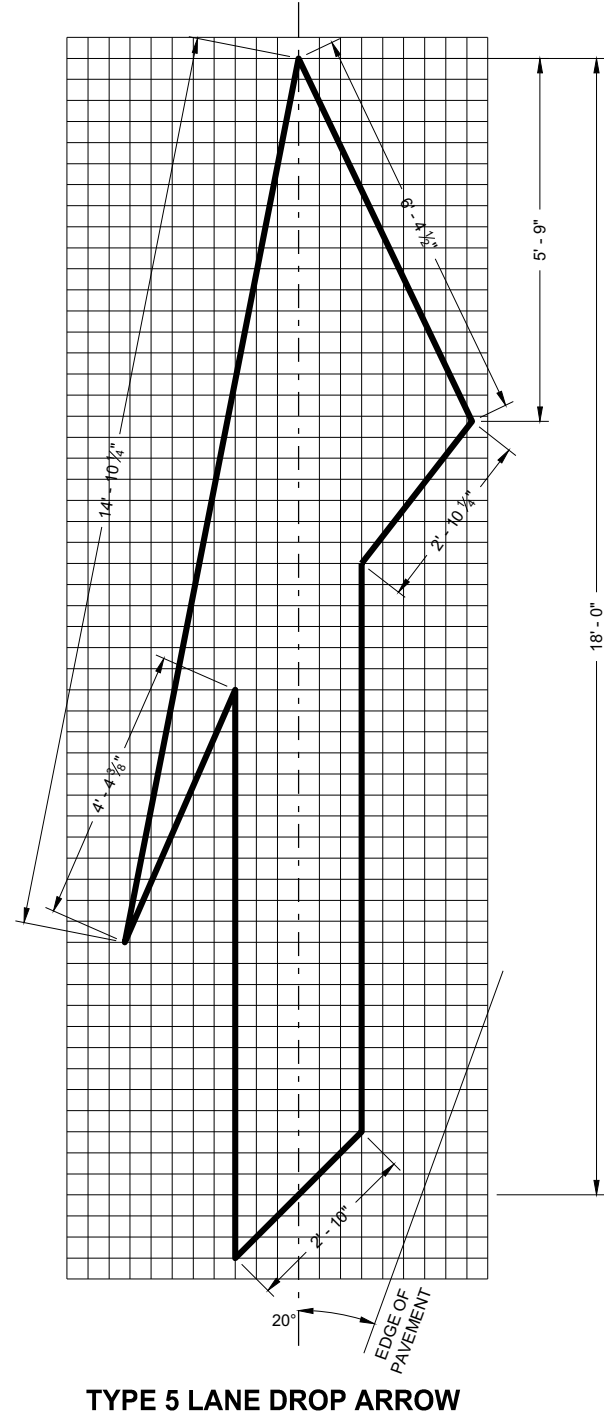
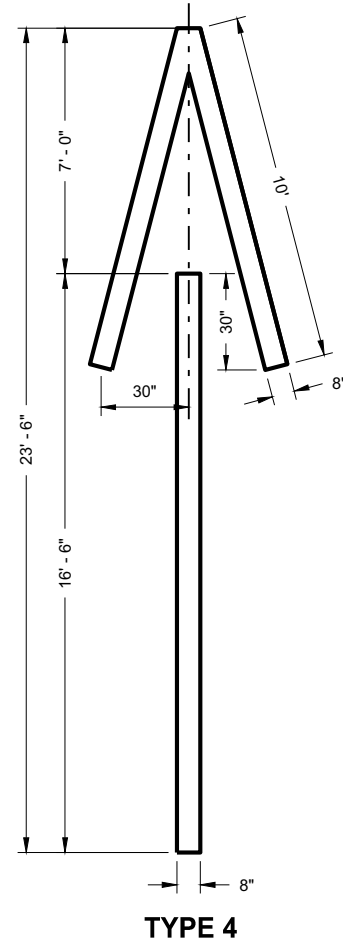
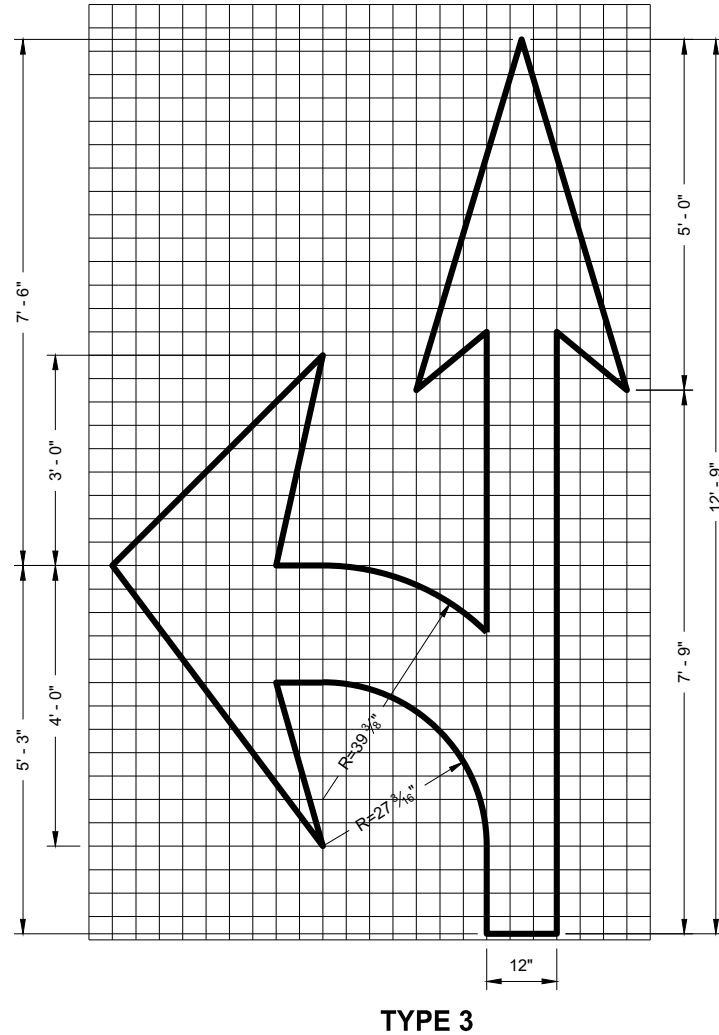
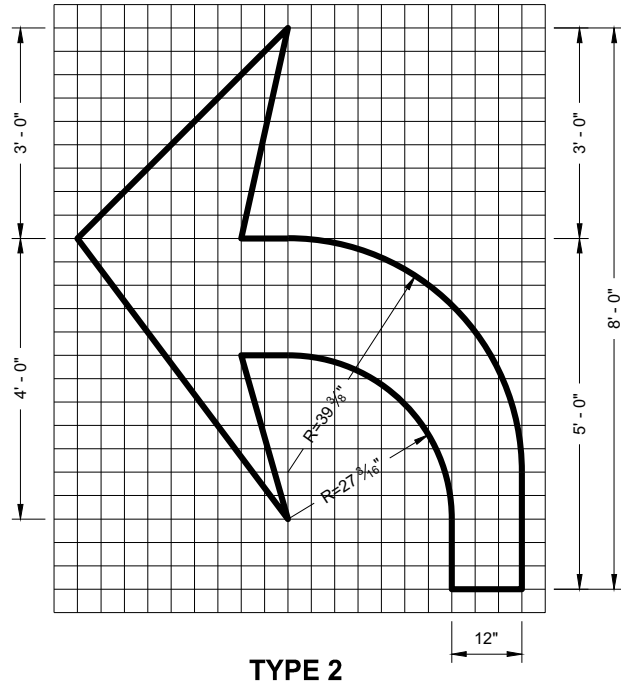
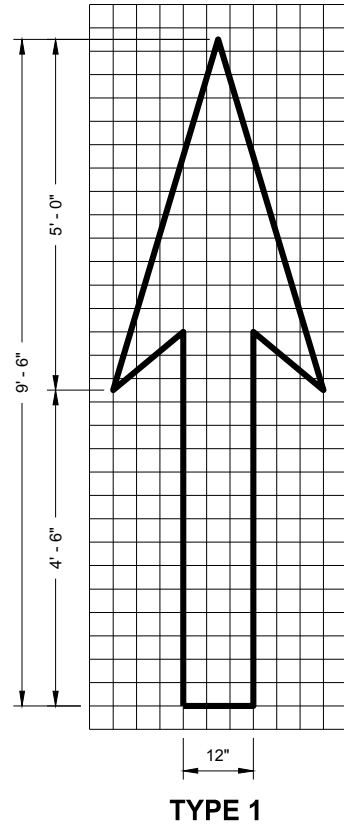
GENERAL NOTES

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 2019 /S/ Matthew Rauch
DATE STATE SIGNING AND MAP 98
ENGINEER
FHWA



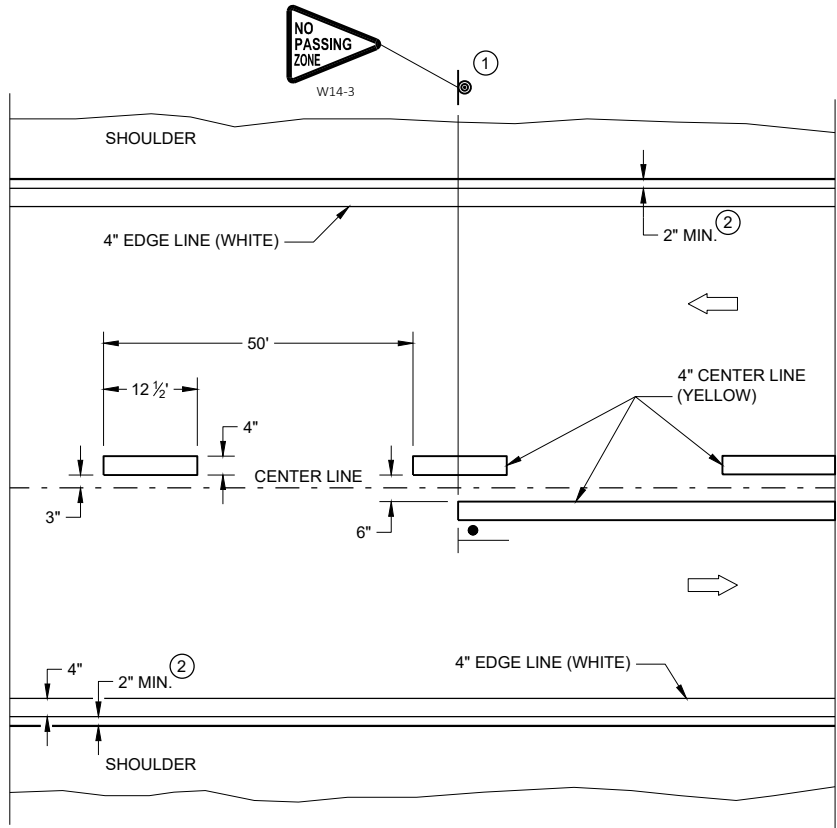
GENERAL NOTES

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.

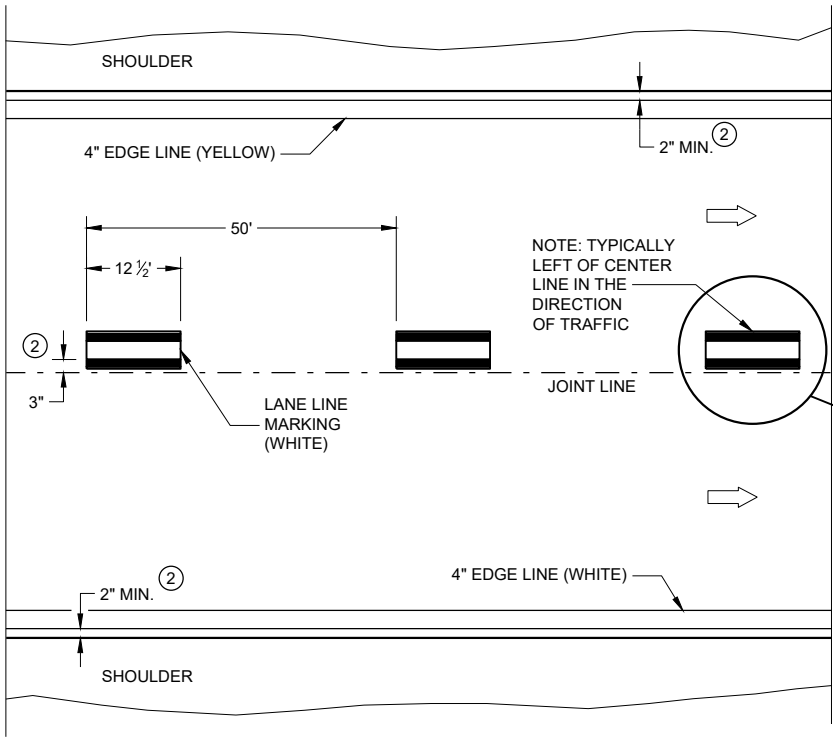
PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE
/S/ Matthew Rauch
STATE SIGNING AND MAP ENGINEER 99
FHWA



TWO WAY TRAFFIC



ONE WAY TRAFFIC

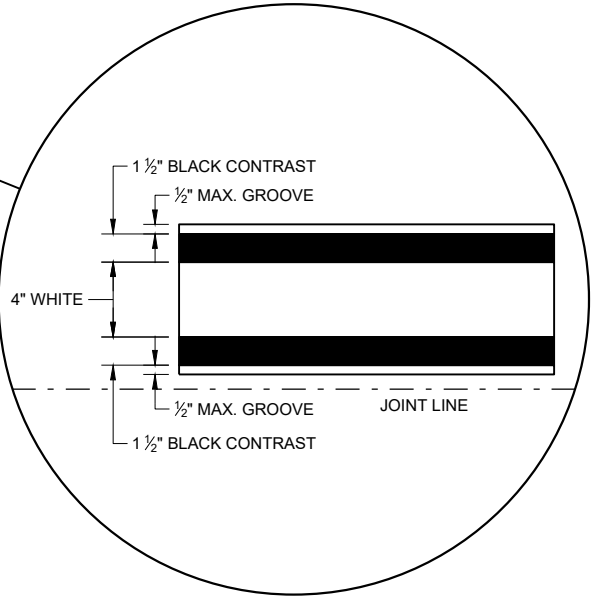
GENERAL NOTES

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

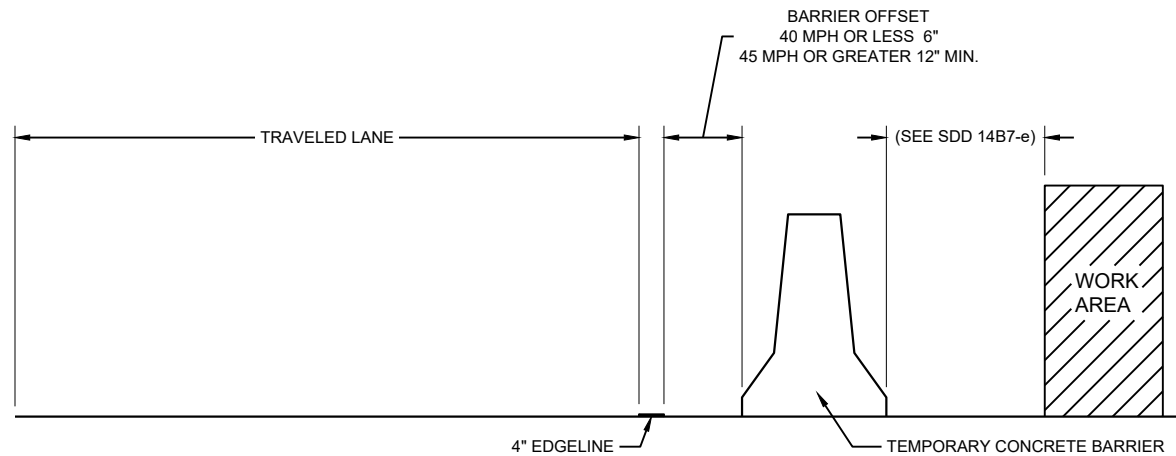


PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE
/S/ Jeannie Silver
STATEWIDE SIGNING AND N
ENGINEER 100

FHWA



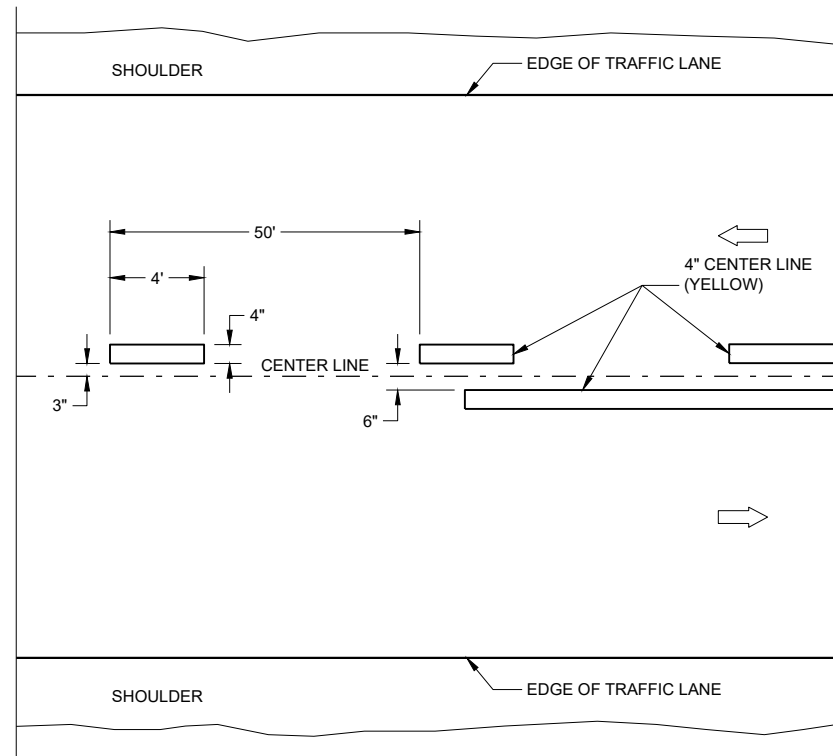
TEMPORARY BARRIER OFFSET FROM EDGELINE

GENERAL NOTES

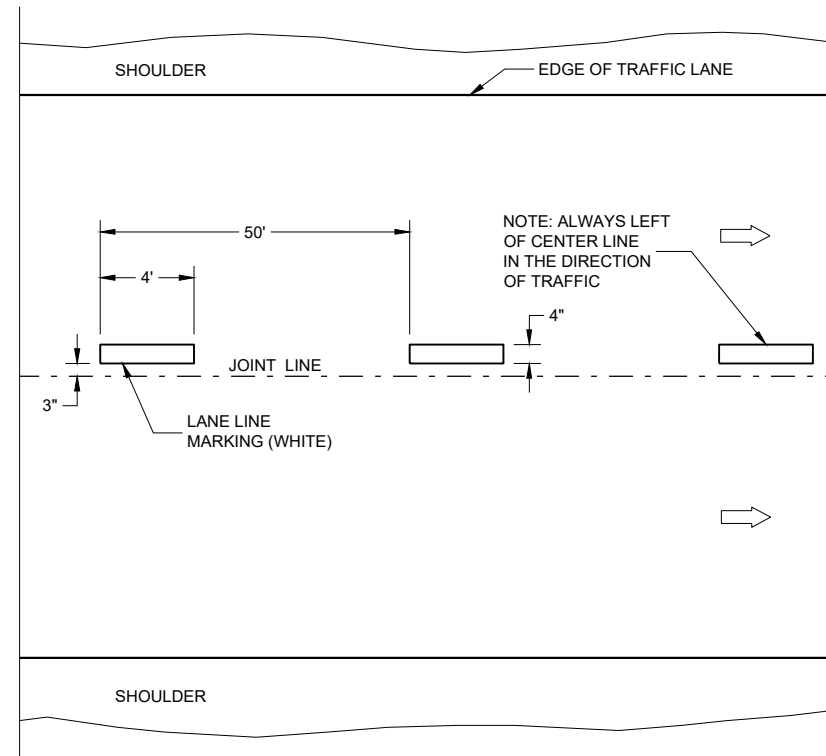
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

LEGEND

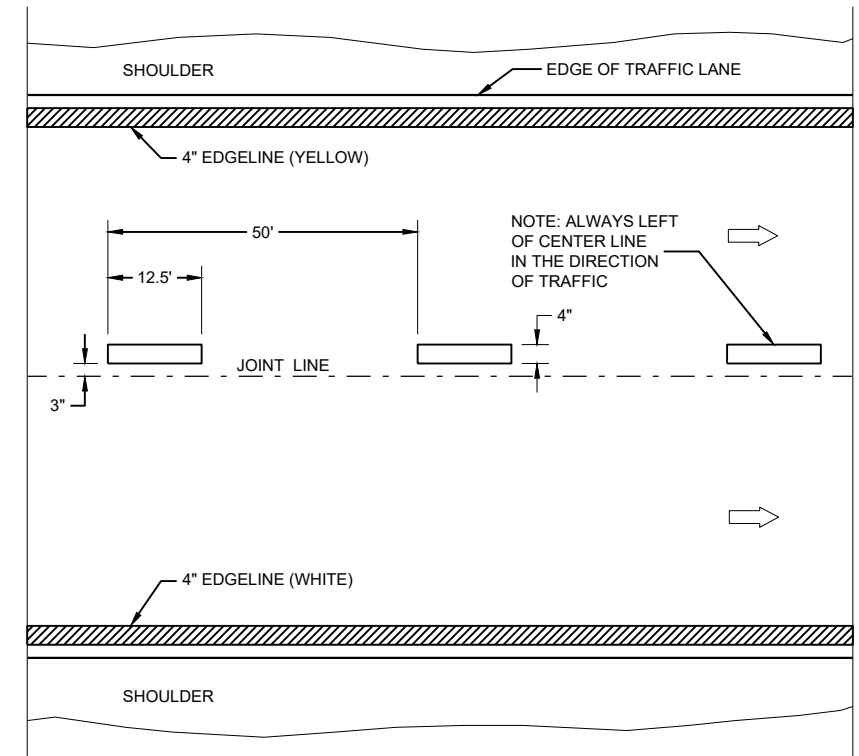
➡ DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

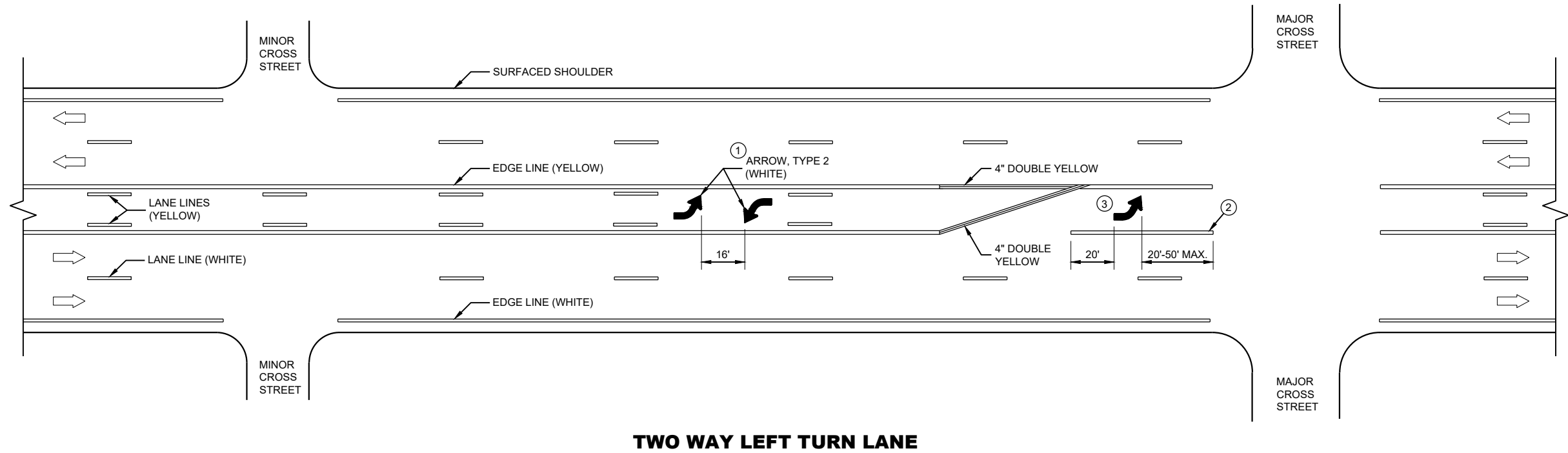
TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE
/S/ Jeannie Silver
STATEWIDE SIGNING AND MARKING ENGINEER

101



GENERAL NOTES

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

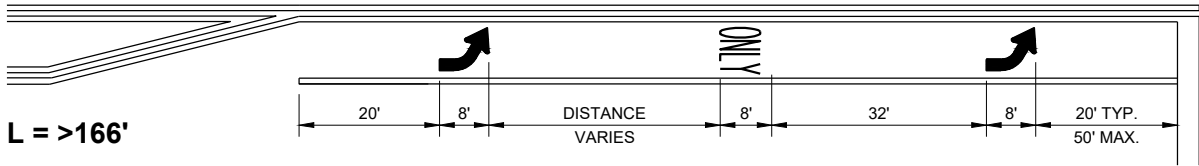
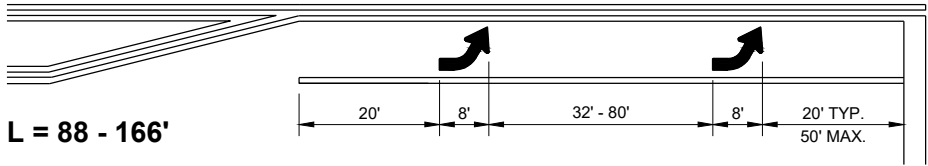
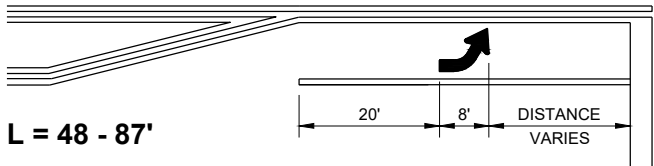
➡ DIRECTION OF TRAFFIC

**PAVEMENT MARKING
(TURN LANES)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 102

TURN LANE OPTIONS

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



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

GENERAL NOTES

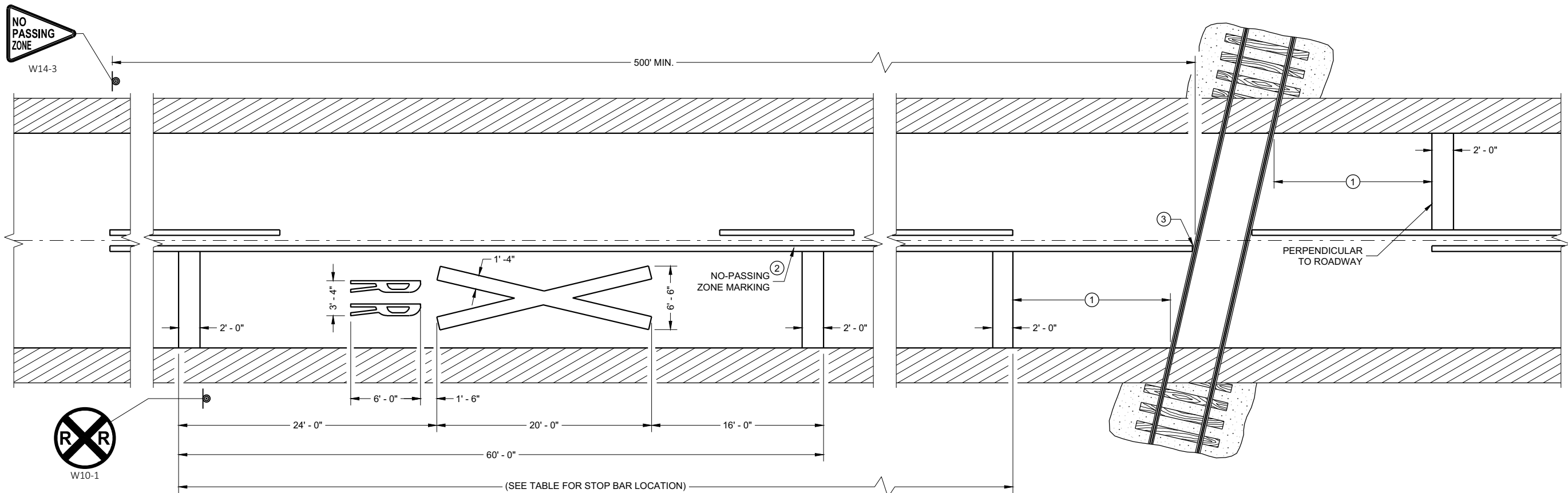
- ① 8" WHITE
- ② QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

➡ DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

PAVEMENT MARKING
(TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 103



PAVEMENT MARKING

LEGEND

 SIGN ON PERMANENT SUPPORT

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.

ON MULTI-LANE ROADS THE TRANSVERSE BANDS SHOULD EXTEND ACROSS ALL APPROACH LANES, AND INDIVIDUAL R X R SYMBOLS SHOULD BE USED IN EACH APPROACH LANE.

CENTER OR LANE LINES AND NO-PASSING ZONE MARKINGS SHOWN ON THIS DRAWING ARE REQUIRED AND PAID FOR UNDER OTHER ITEMS IN THE CONTRACT.

TRACE EXISTING SYMBOL WHERE EXISTING SYMBOLS ARE PLACED.

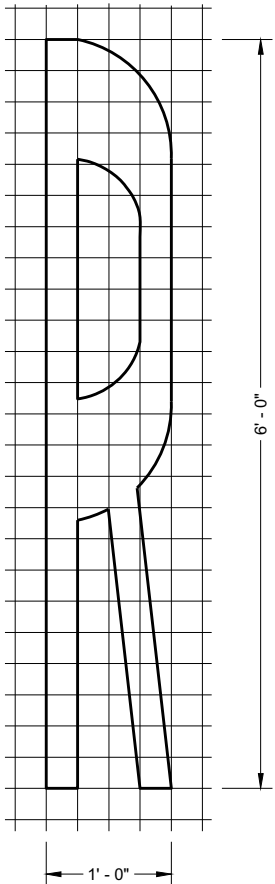
- ① MINIMUM 8' FROM ANY RAILROAD WARNING DEVICES (SIGNAL , GATES, ETC.) OR 25' FROM THE NEAREST RAIL, WHICHEVER DISTANCE IS GREATER.
- ② 500' MINIMUM. MARKING LIMITS MAY BE EXTENDED AS DIRECTED BY THE ENGINEER TO MEET ADJACENT NO-PASSING ZONE MARKINGS.
- ③ FOR MULTIPLE TRACK CROSSINGS, THE BARRIER LINE SHALL EXTEND TO THE NEAR RAIL OF THE FURTHEST TRACK IN THE DIRECTION OF HIGHWAY TRAVEL.

DISTANCE TABLE

TABLE BASED UPON 2C-4 WISCONSIN SUPPLEMENT OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

POSTED SPEED (M.P.H.)	DIMENSION RANGE (FEET)
25	150* - 250'
30	200* - 300'
35	250* - 450'
40	300* - 500'
45	400* - 650'
50	550* - 800'
55	750* - 1000'
60	1000* - 1250'
65	1000* - 1250'

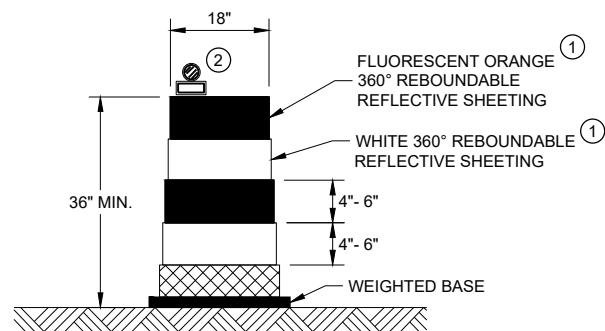
* THE MINIMUM DISTANCES IN THE TABLE ARE DESIRABLE AND SHOULD BE USED. THE DISTANCES MAY BE INCREASED UP TO THE MAXIMUM TO ALLOW FOR FIELD CONDITIONS SUCH AS THE CLOSED PROXIMITY OF DRIVEWAYS, BRIDGES, SIDE ROADS OR OTHER FEATURES THAT WOULD PROHIBIT THE MINIMUM DISTANCES FROM BEING USED.



SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD - HIGHWAY GRADE CROSSINGS

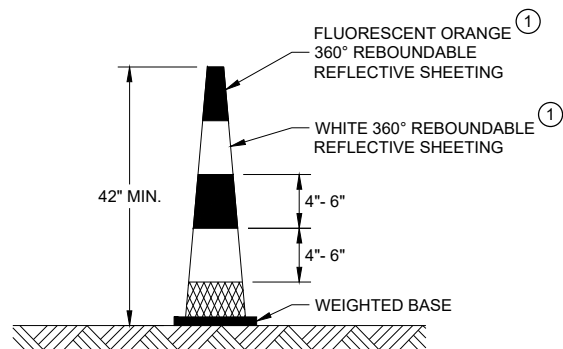
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE
/S/ Matthew R. Rauch
STATE SIGNING AND MAF
ENGINEER 104
FHWA



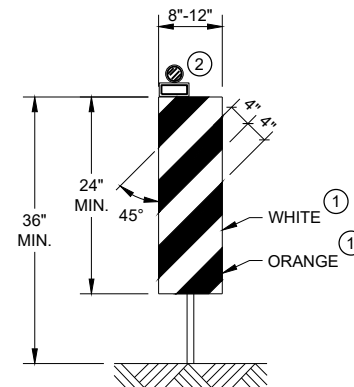
DRUM

BALLAST WIDTHS
RANGE FROM 24"-36"



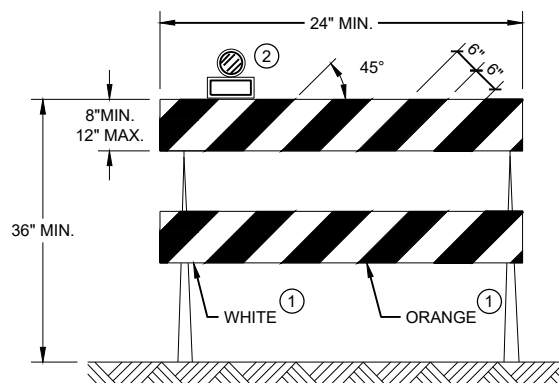
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS
BALLAST WIDTHS
RANGE FROM 14"-20"



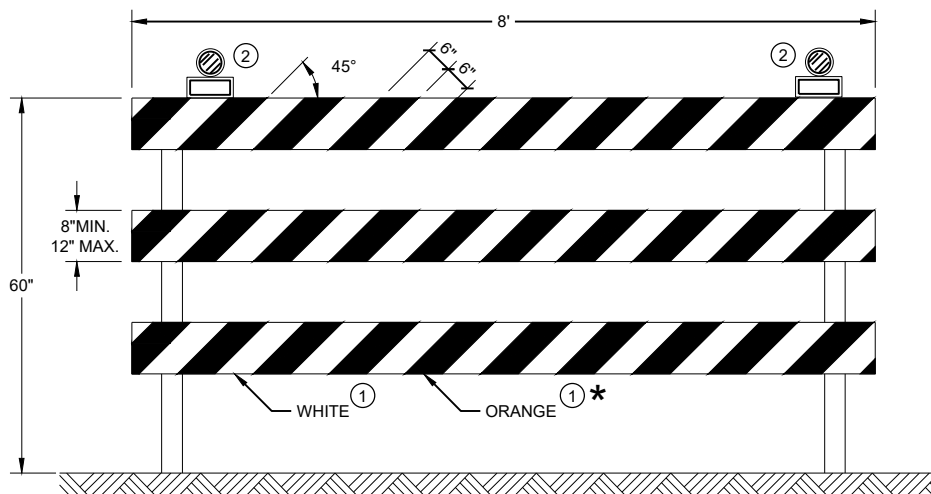
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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 105
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

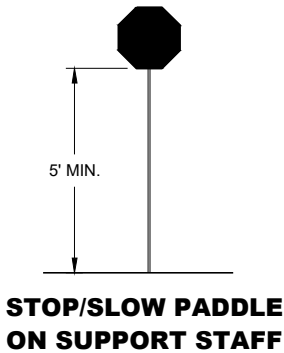
FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

- 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.

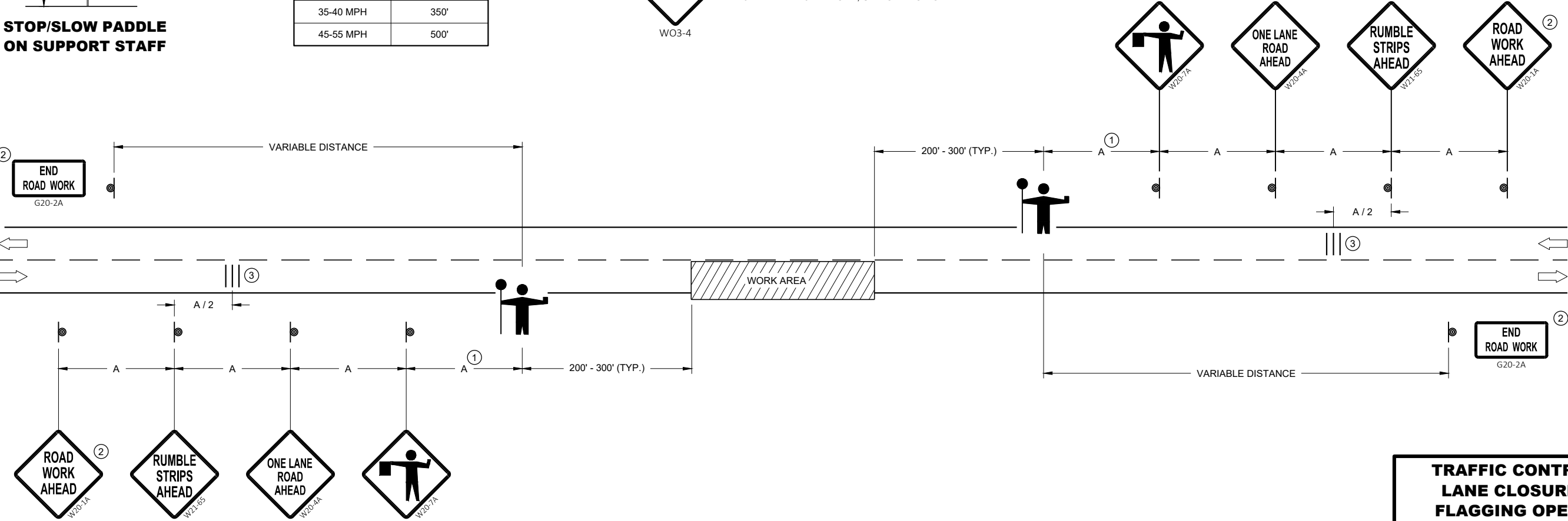


SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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".



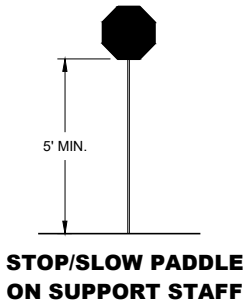
**TRAFFIC CONTROL FOR
LANE CLOSURE WITH
FLAGGING OPERATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 106

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.

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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

- 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.

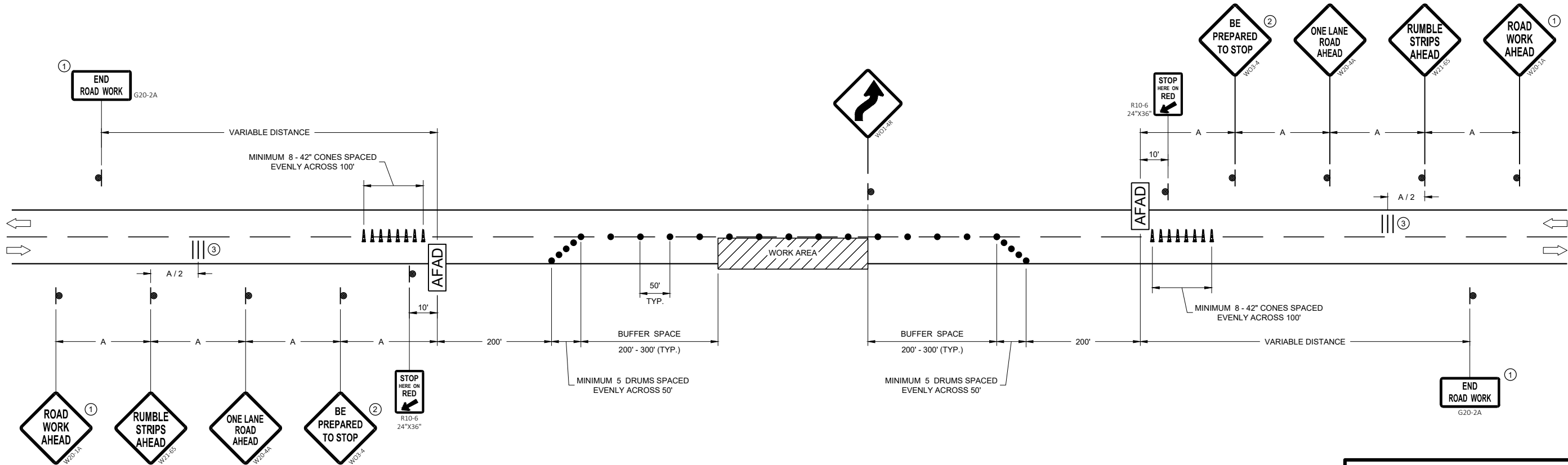
② IF FLAGGERS ARE PHYSICALLY NEEDED TO FLAG, REPLACE WO3-4 SIGNS WITH W20-7A SIGNS.
- TEMPORARY PORTABLE RUMBLE STRIPS**
UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

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.

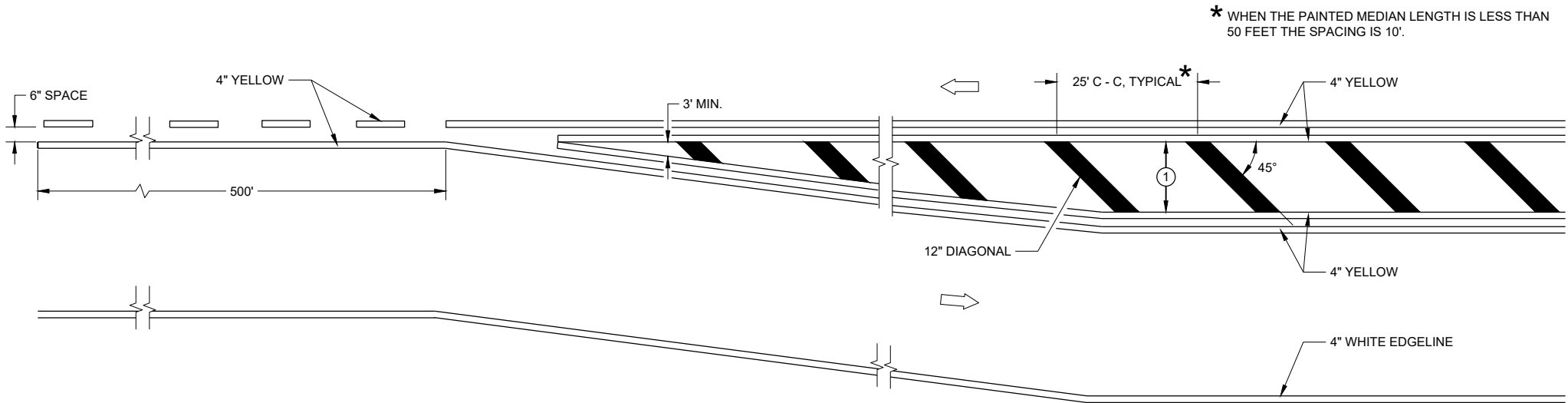
③ EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSELY AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER.



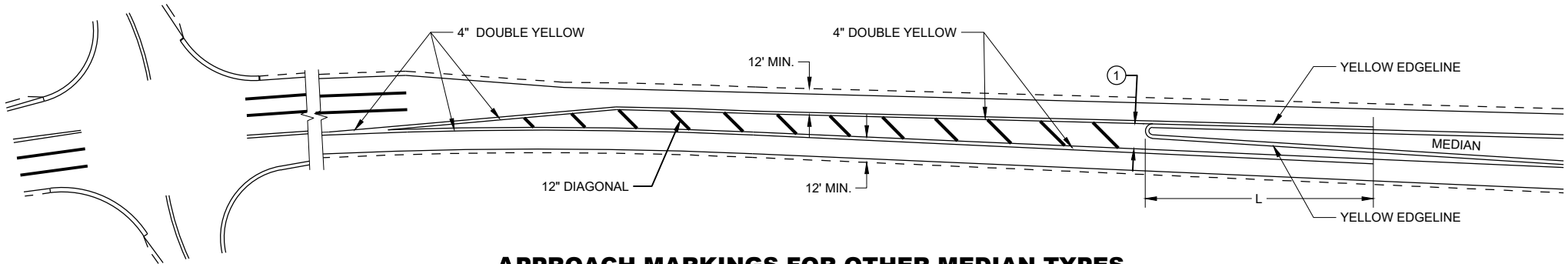
**TRAFFIC CONTROL, LANE
CLOSURE WITH AUTOMATED
FLAGGER ASSISTANCE DEVICE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

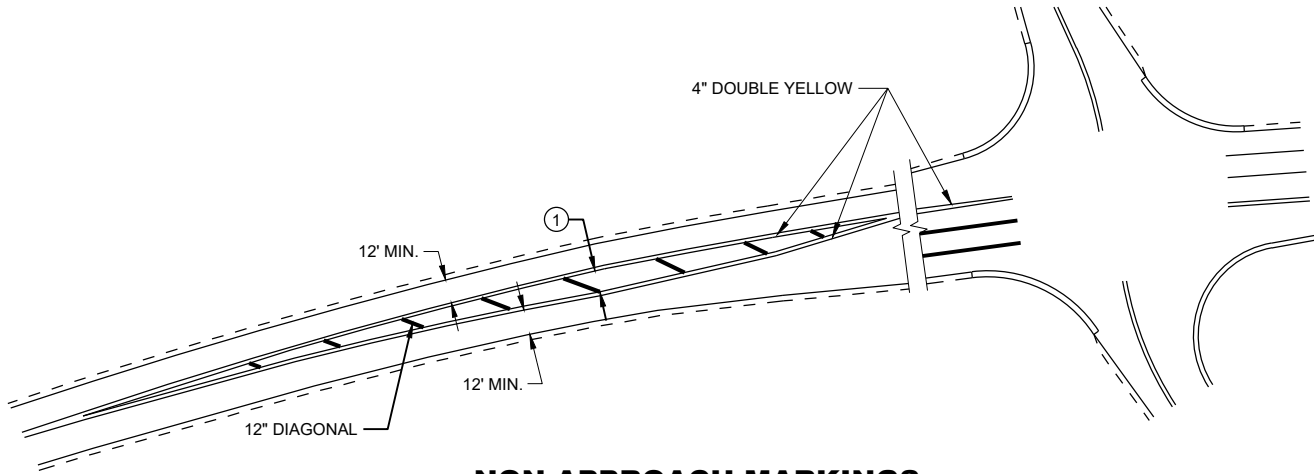
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DATE WORK ZONE ENGINEER 107
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MEDIAN ISLAND DETAIL



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

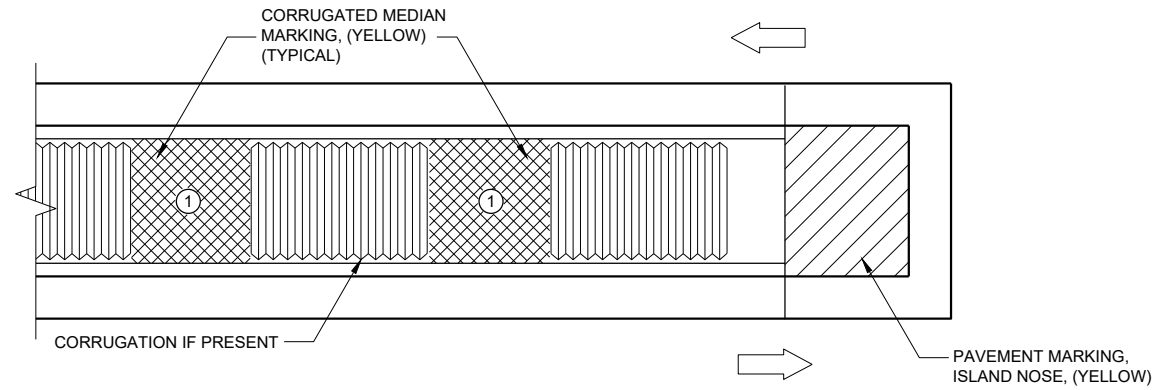
SPEED LIMIT	L
<35 MPH	5'
35> MPH	50'

MEDIAN ISLAND
PAVEMENT MARKINGS

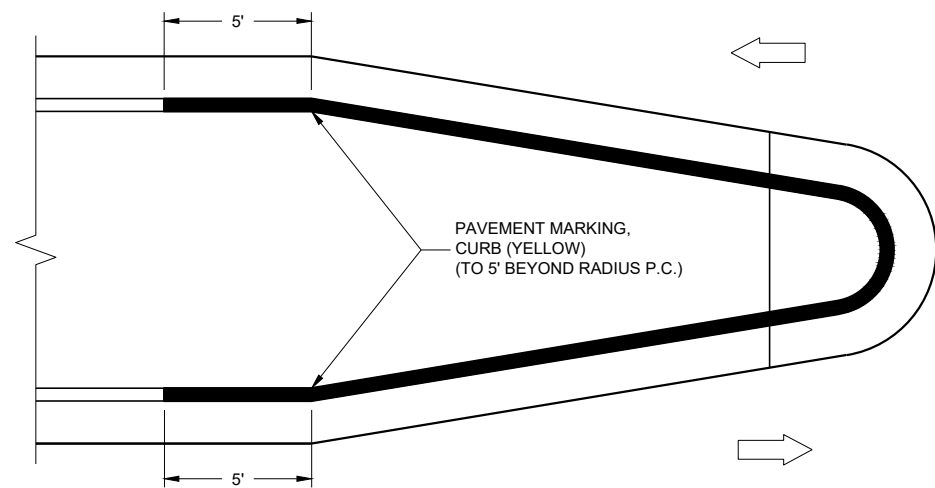
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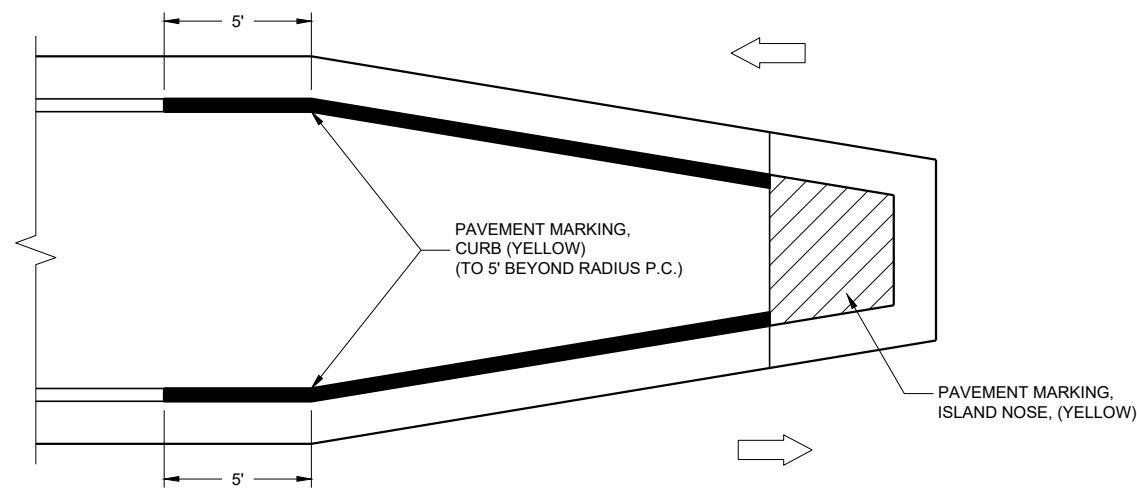
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MEDIAN ISLAND WITH SQUARE BLUNT NOSE



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.

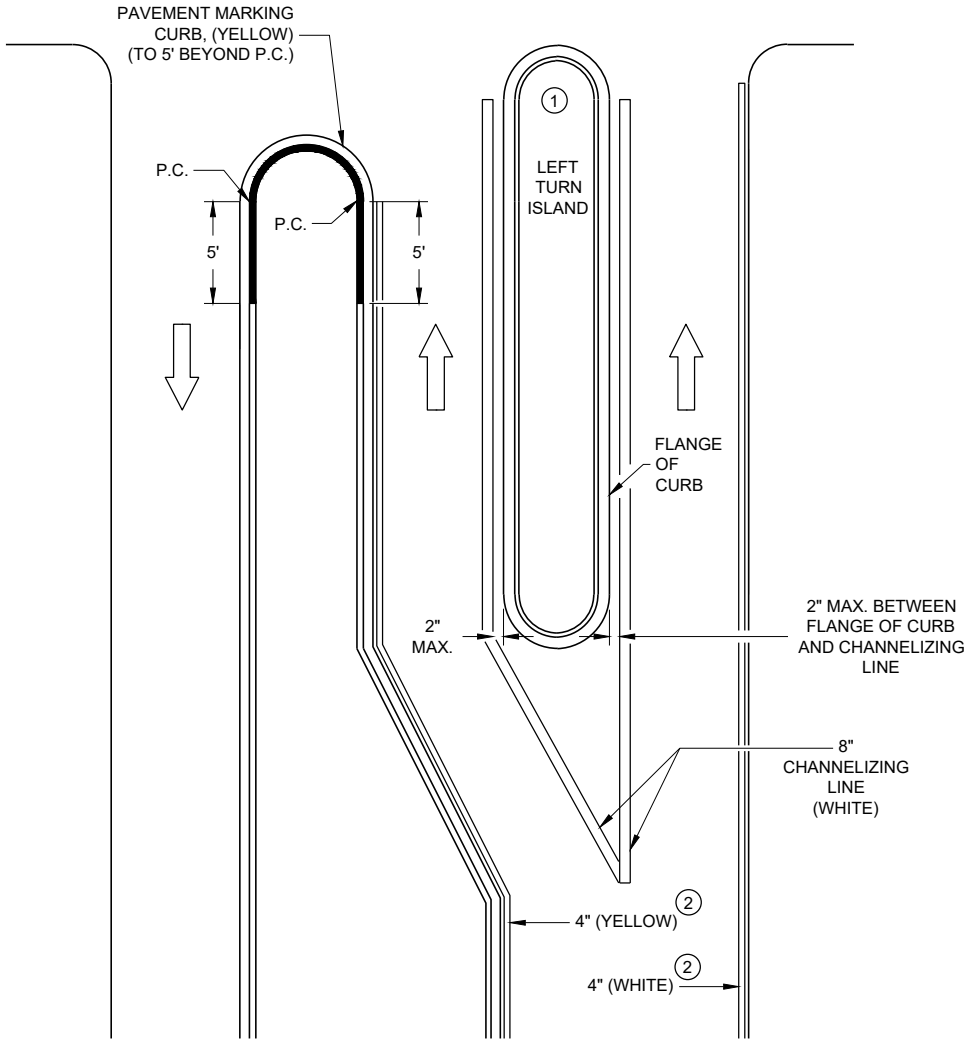
- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

PAVEMENT MARKINGS,
MEDIAN ISLAND NOSE

STATE OF WISCONSIN
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REQUIREMENTS FOR EDGE LINES		
POSTED SPEED	IS THERE CONTINUOUS LIGHTING?	
	YES	NO
≤ 30 MPH	NO	OPTIONAL
35 OR 40 MPH	OPTIONAL	RECOMMENDED
≥ 45 MPH	RECOMMENDED	REQUIRED



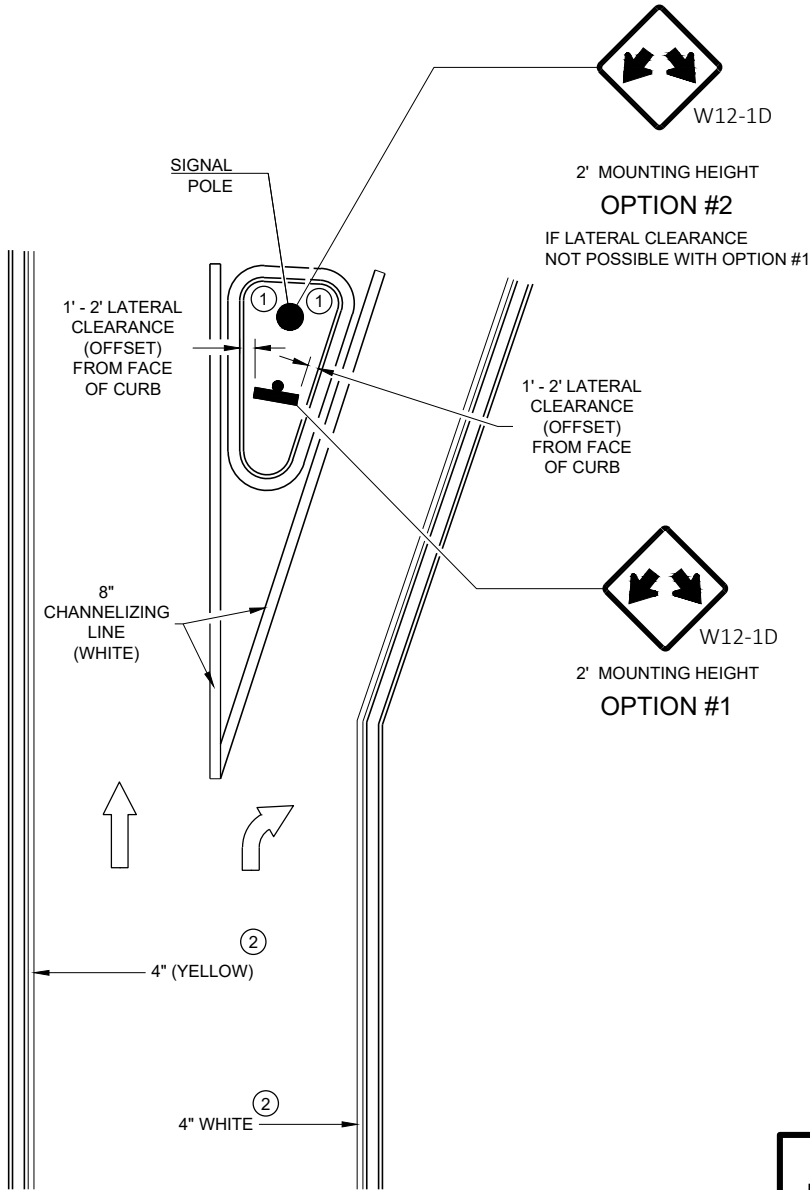
LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.
SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

- ① MARK CURB NOSES YELLOW.
- ② MARK ACCORDING TO TABLE.

DIRECTION OF TRAVEL



RIGHT TURN ISLAND

MEDIAN PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Jeannie Silver
STATE SIGNING AND MAP ENGINEER

110

LEGEND

- V1 LEAD VEHICLE
- V2 MARKING VEHICLE
- V3 SHADOW VEHICLE
-  TRUCK MOUNTED ATTENUATOR (TMA)
-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC
-  FLASHING ARROW PANEL (CAUTION)

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.

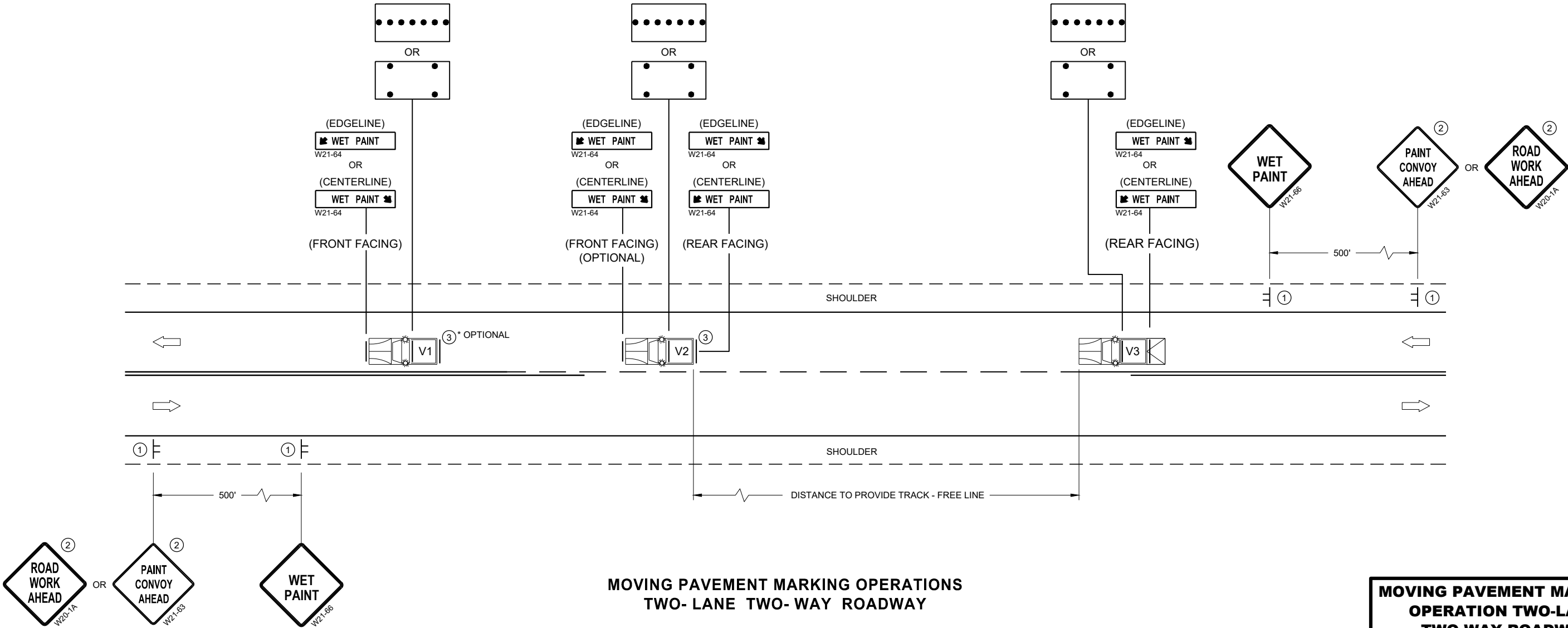
THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

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.
- 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
February 2023 /S/ Andrew J. ...
DATE WORK ZONE EN 111
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)
-  FLASHING ARROW PANEL (CAUTION)

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.

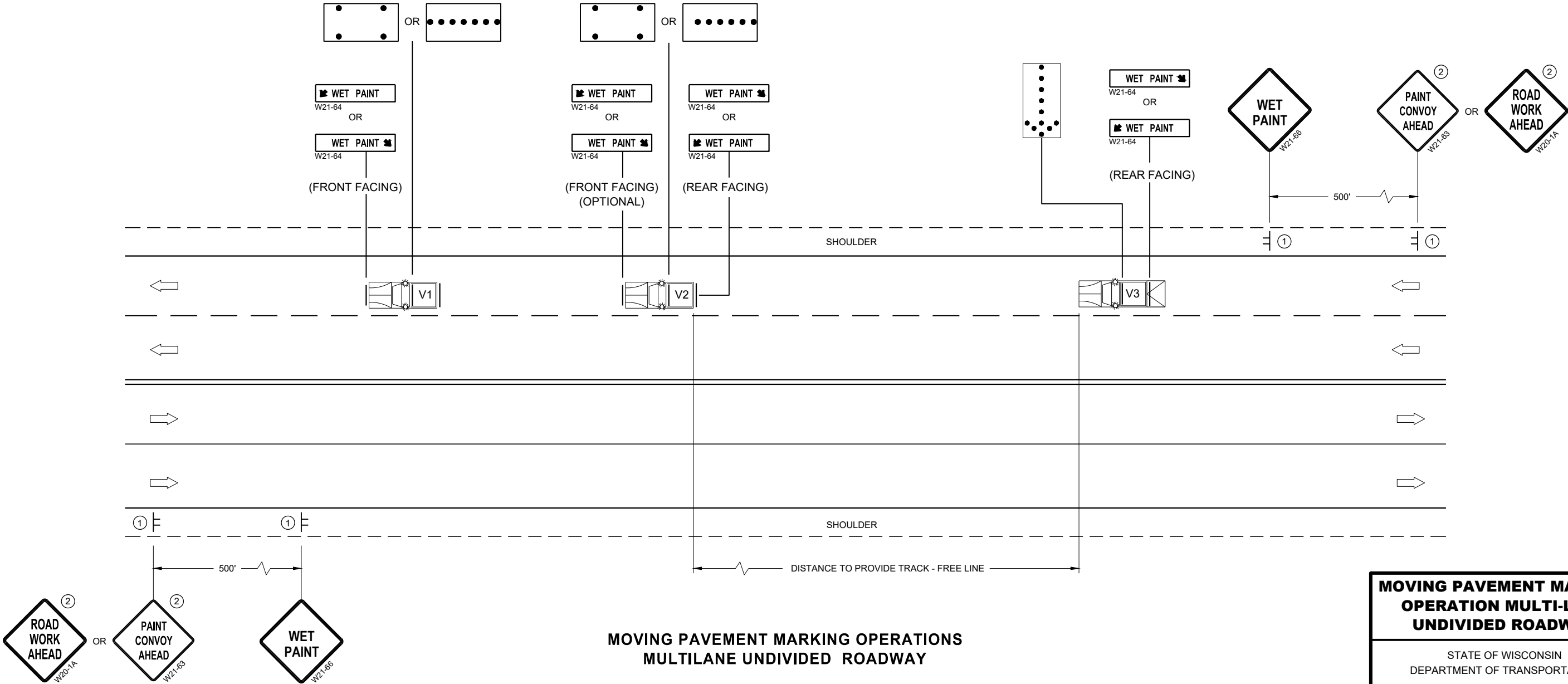
WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

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.
- ② IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



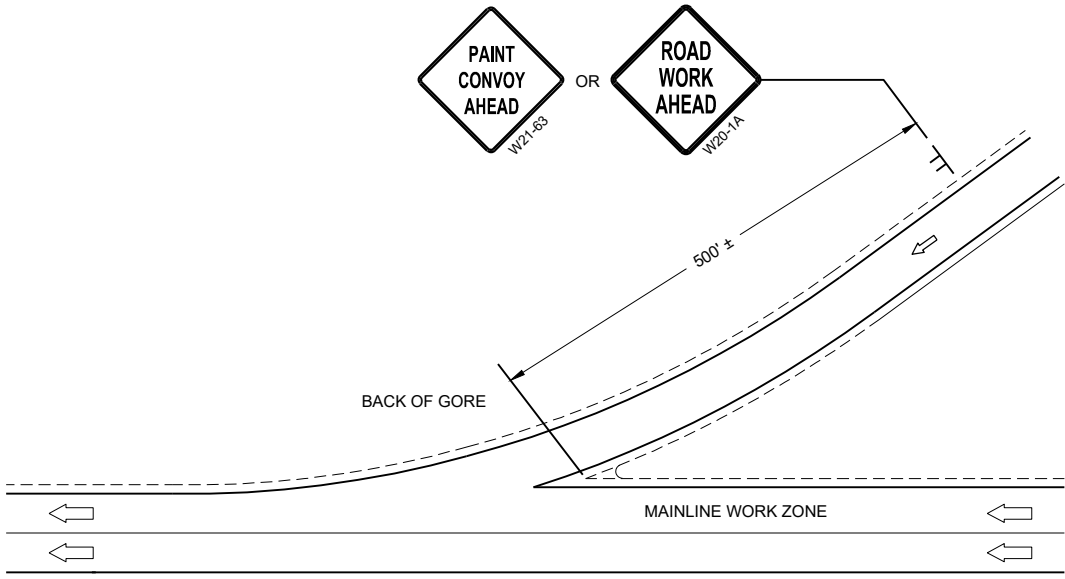
MOVING PAVEMENT MARKING
OPERATION MULTI-LANE
UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023 /S/ Andrew J. ...
DATE WORK ZONE EN 112
FHWA

LEGEND

- V1 MARKING VEHICLE
- V2 SHADOW VEHICLE
- V3 TRAIL VEHICLE
- TRUCK MOUNTED ATTENUATOR (TMA)
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW PANEL (MERGE)
- FLASHING ARROW PANEL (CAUTION)



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.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

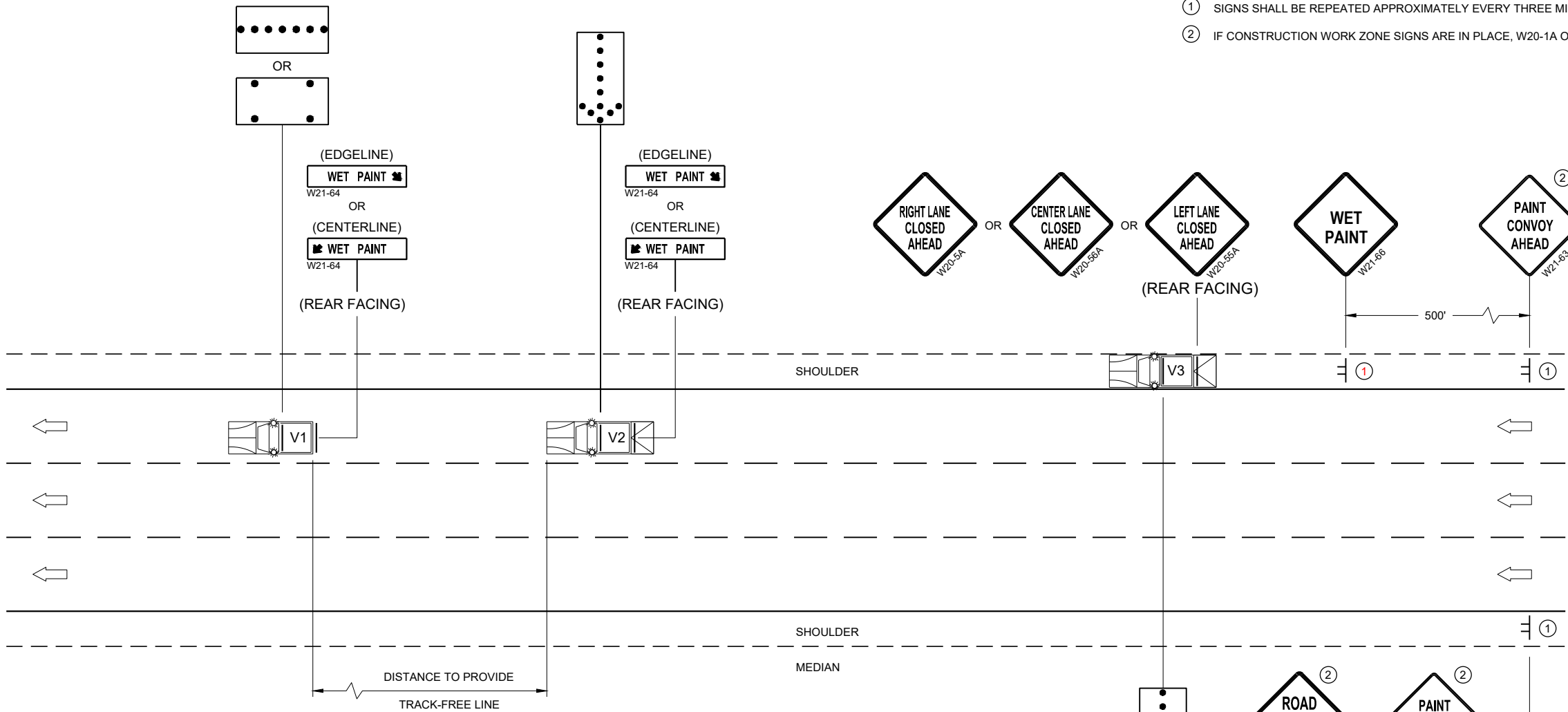
IF THE SHOULDER IS TOO NARROW TO ACCOMMODATE THE LAST TRAILING VEHICLE, THE VEHICLE SHOULD STRADDLE THE EDGE LINE.

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 HEIGHT OF 28" FOR WET PAVEMENT MARKINGS

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

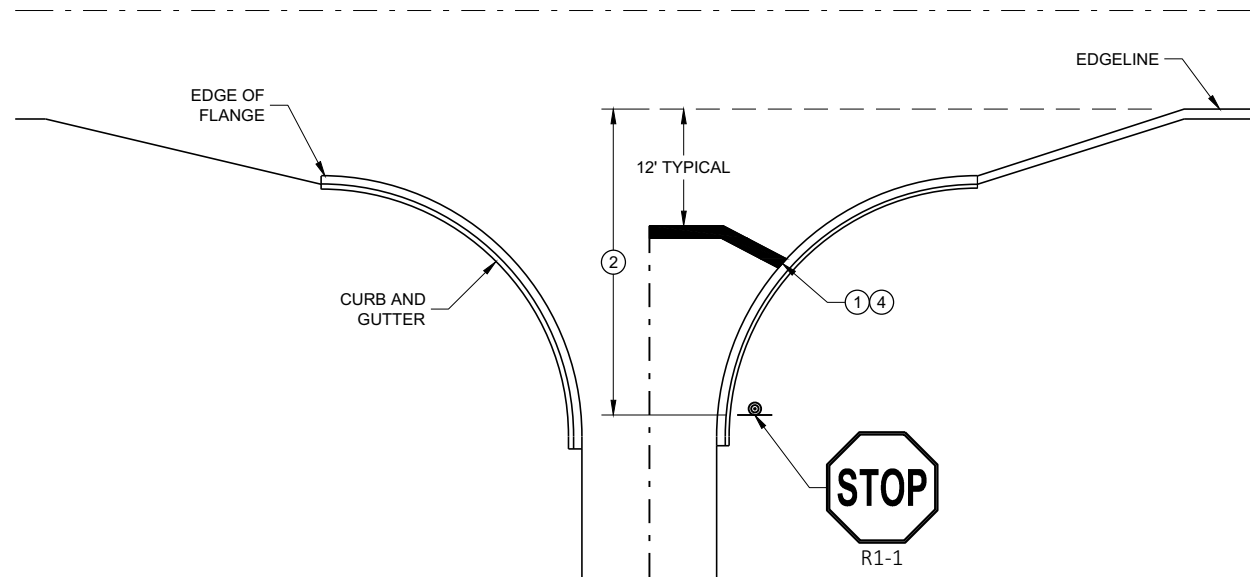


MOVING PAVEMENT MARKING OPERATIONS
MULTILANE DIVIDED ROADWAY

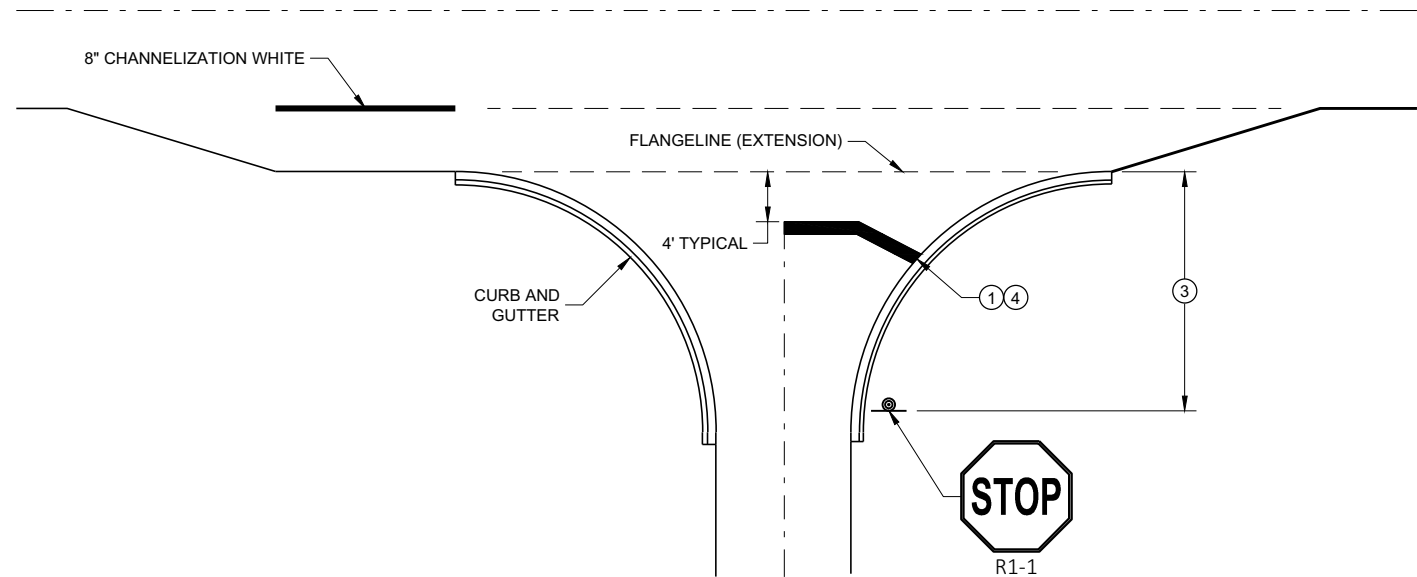
MOVING PAVEMENT MARKING
OPERATION MULTI-LANE
DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

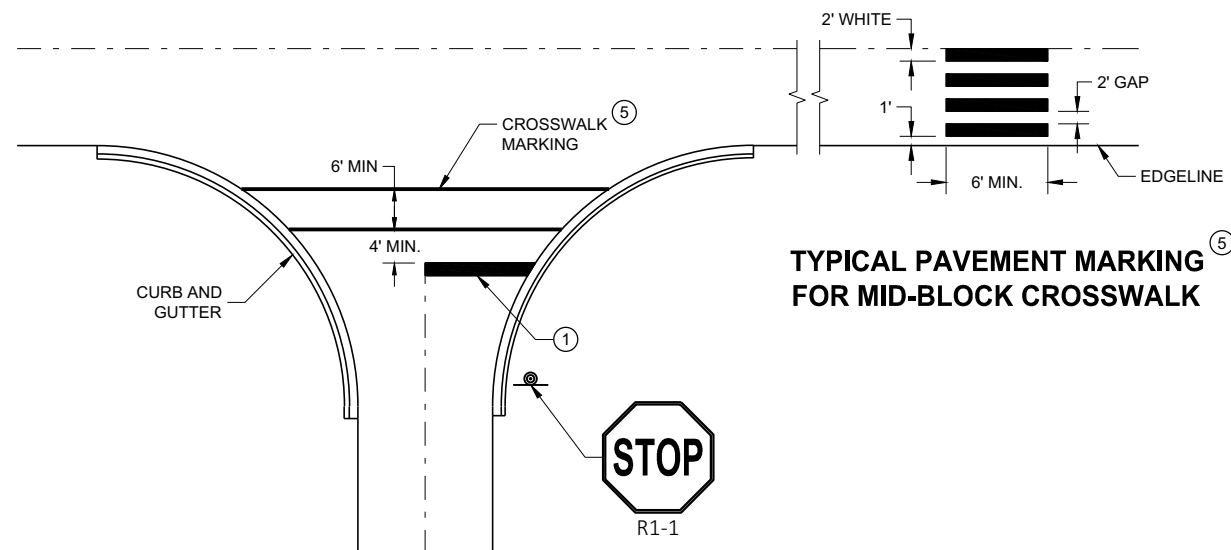
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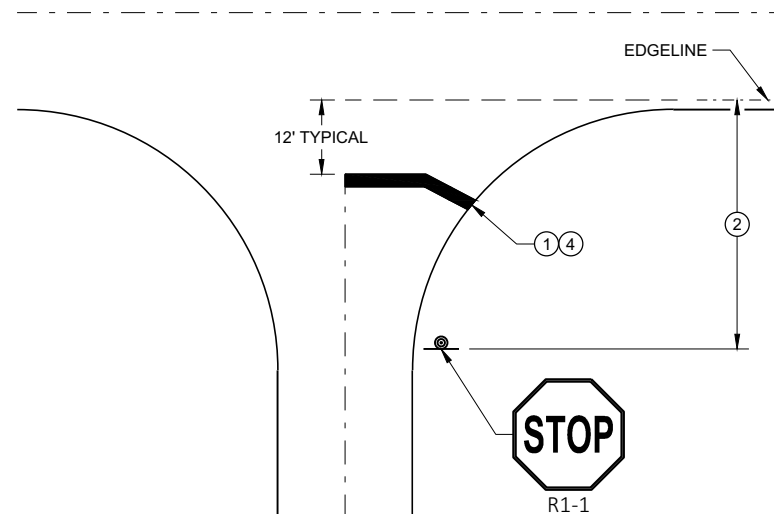
TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR
SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING
WITHOUT CURB AND GUTTER

GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGE LINE 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 EDGE LINE.
- ③ NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE 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 INSTEAD.

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 /S/ Matthew Rauch
DATE STATE SIGNING AND MAP ENGINEER 114
FHWA

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) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48" x 48" 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 OR AS APPROVED BY THE ENGINEER.

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

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

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

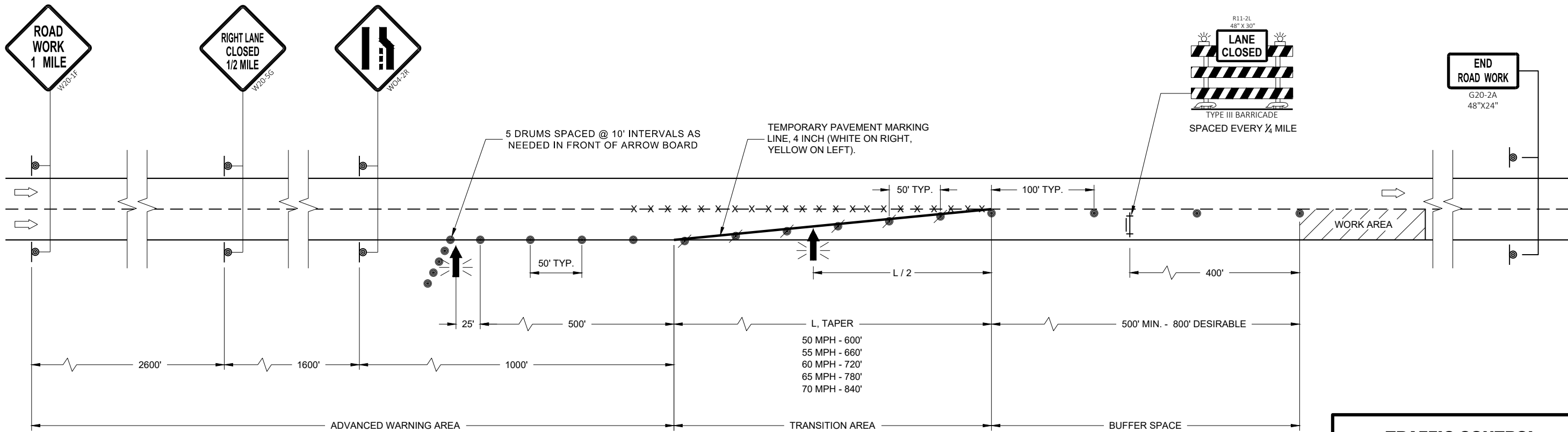
ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS

NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE 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 ONE HALF 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.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

LEGEND

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



TRAFFIC CONTROL LANE CLOSURE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED February 2022 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER 115

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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 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. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

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 TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

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

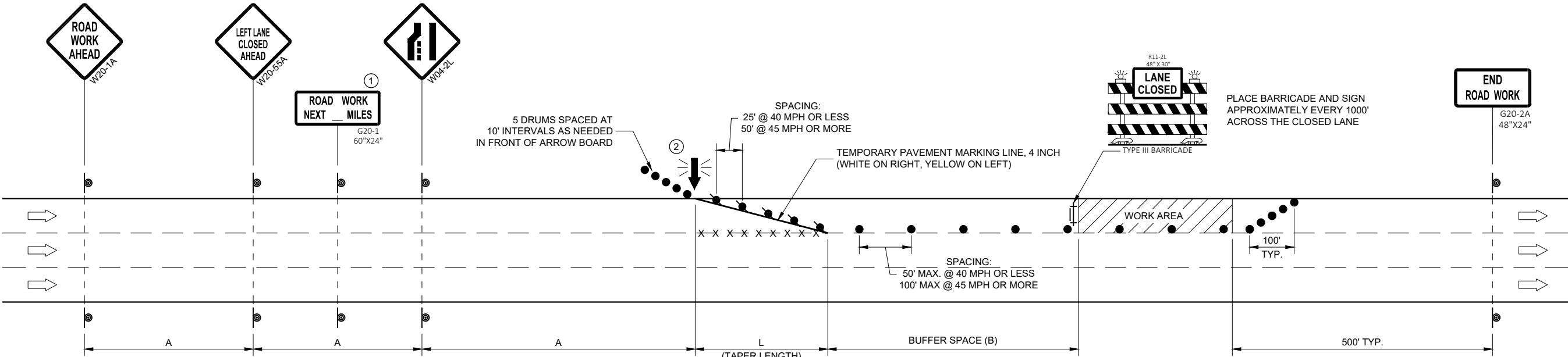
CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

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

- ① OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.
- ② WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'

TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 116

FHWA

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  TRAFFIC CONTROL DRUM
-  TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
-  TYPE III BARRICADE WITH ATTACHED SIGN
-  TYPE "A" WARNING LIGHT (FLASHING)
-  FLASHING ARROW BOARD
-  DIRECTION OF TRAFFIC
-  REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
-  WORK AREA

GENERAL NOTES

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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 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. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

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

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

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

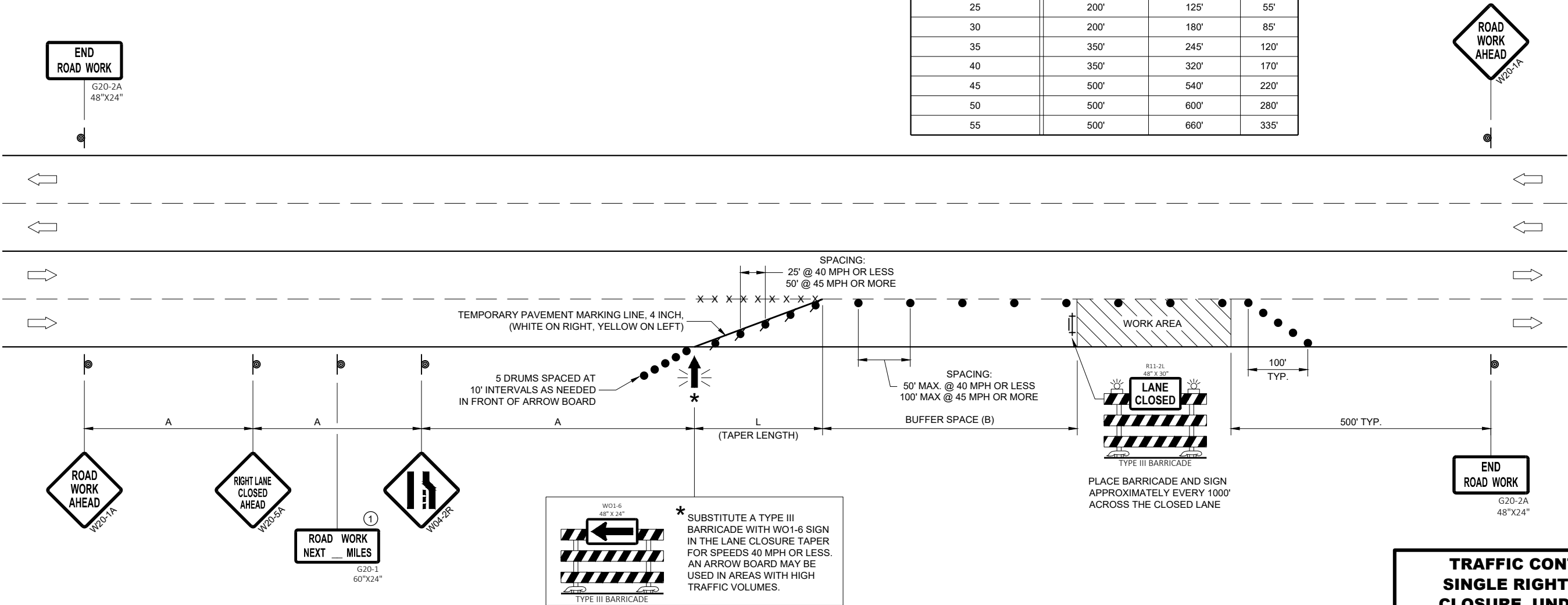
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CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'
50	500'	600'	280'
55	500'	660'	335'

① OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.



**TRAFFIC CONTROL,
SINGLE RIGHT LANE
CLOSURE, UNDIVIDED
NON-FREEWAY/EXPRESSWAY**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 117

FHWA

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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 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. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

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 TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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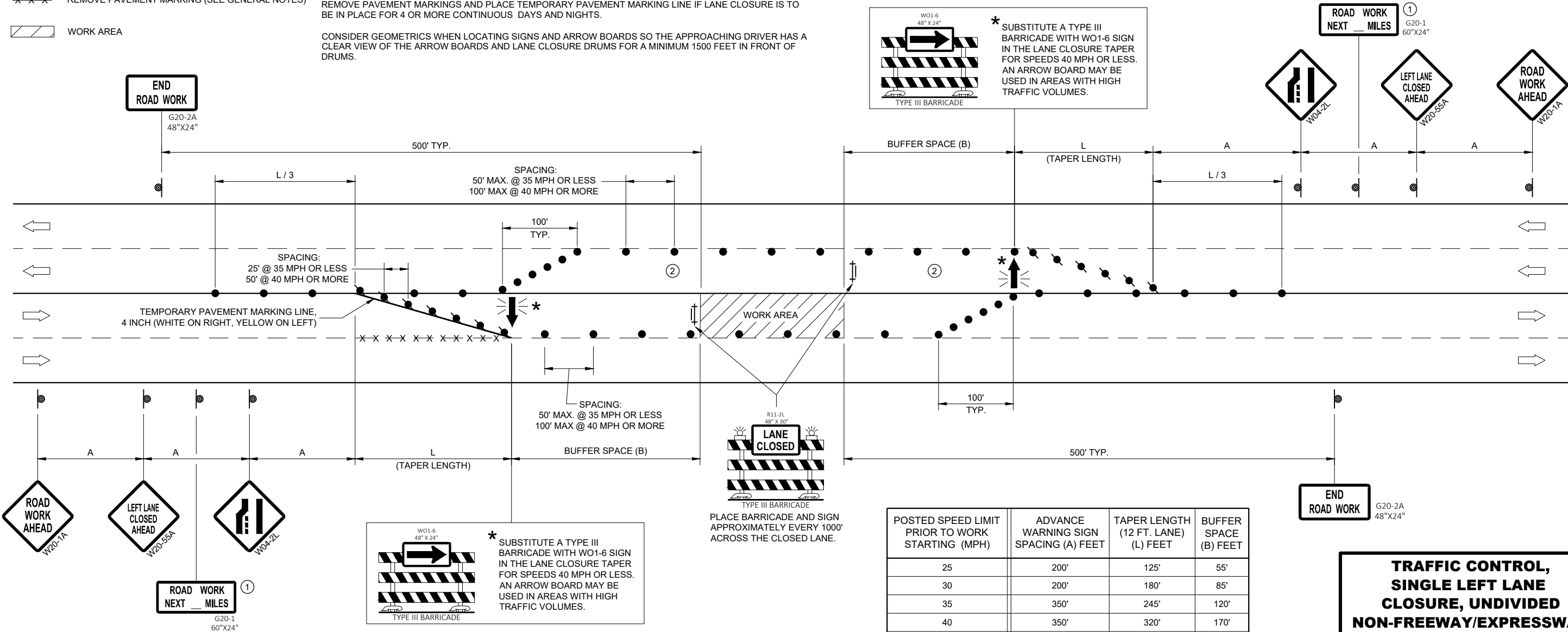
DUE TO LACK OF SHOULDER/MEDIAN, ARROW BOARD IS PLACED AT THE THE END OF THE TAPER.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

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

- ① OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.
- ② LANE MAY BE OPENED WHEN WORKERS ARE NOT PRESENT IN THE WORK AREA.



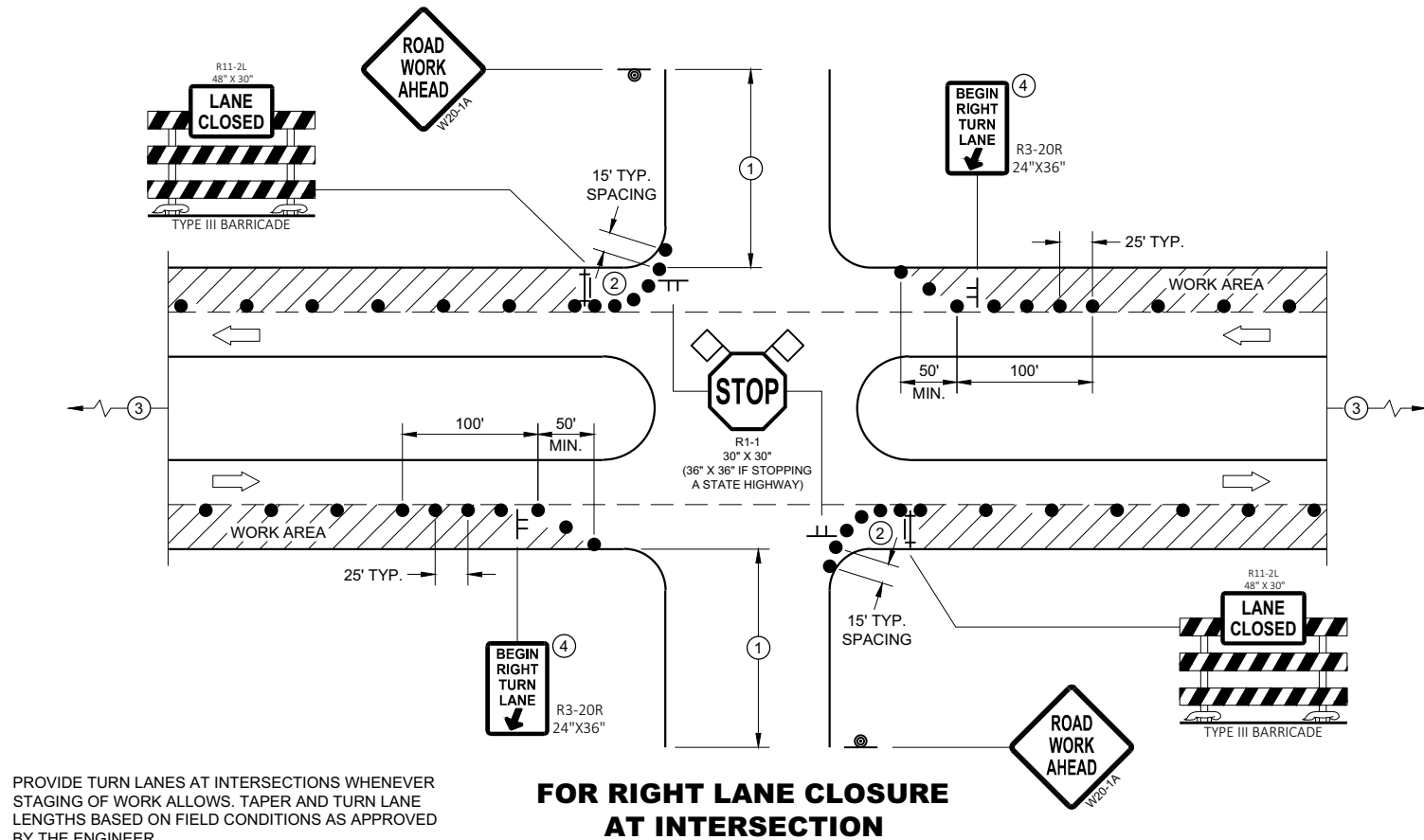
POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
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40	350'	320'	170'
45	500'	540'	220'
50	500'	600'	280'
55	500'	660'	335'

**TRAFFIC CONTROL,
SINGLE LEFT LANE
CLOSURE, UNDIVIDED
NON-FREEWAY/EXPRESSWAY**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 118

FHWA



GENERAL NOTES

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

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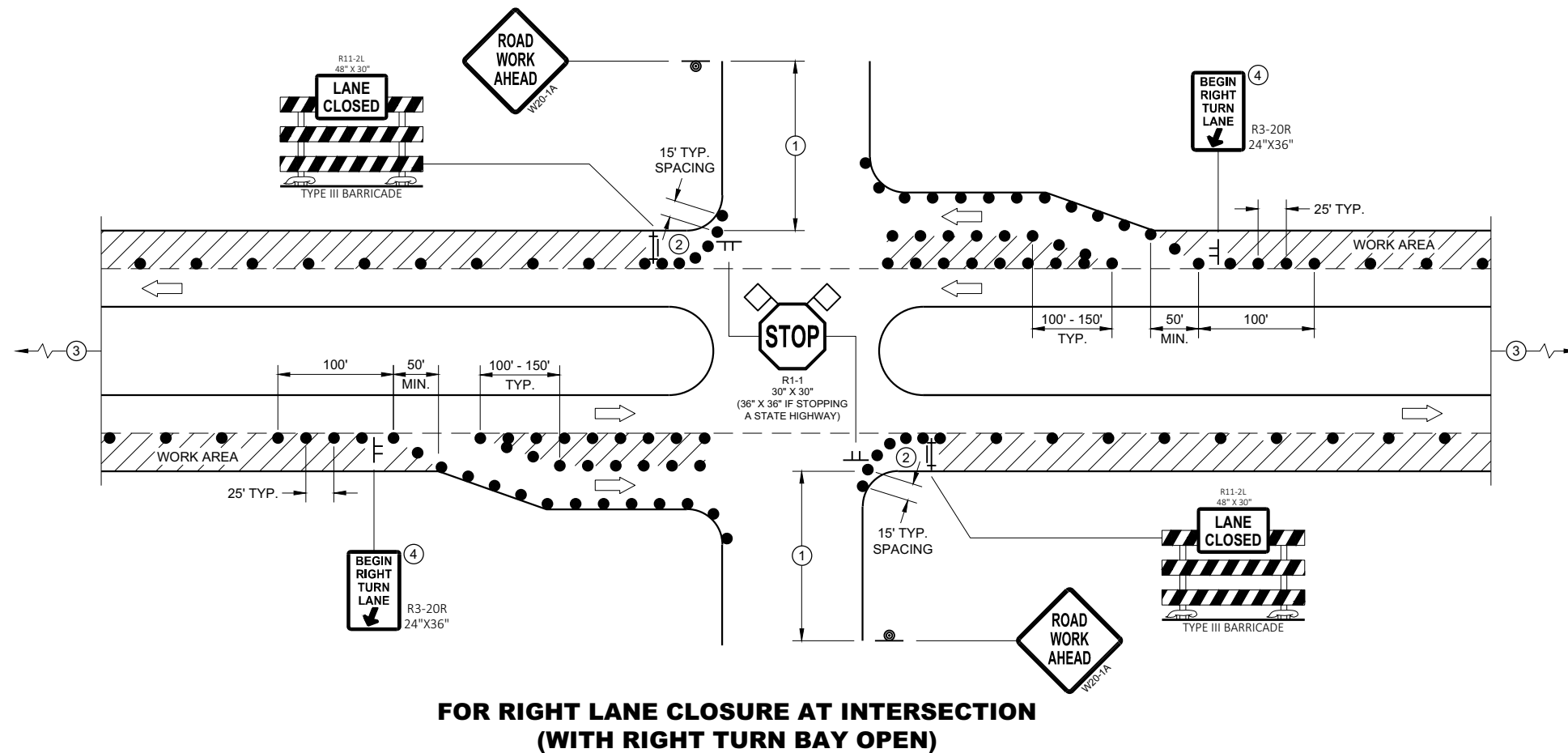
SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

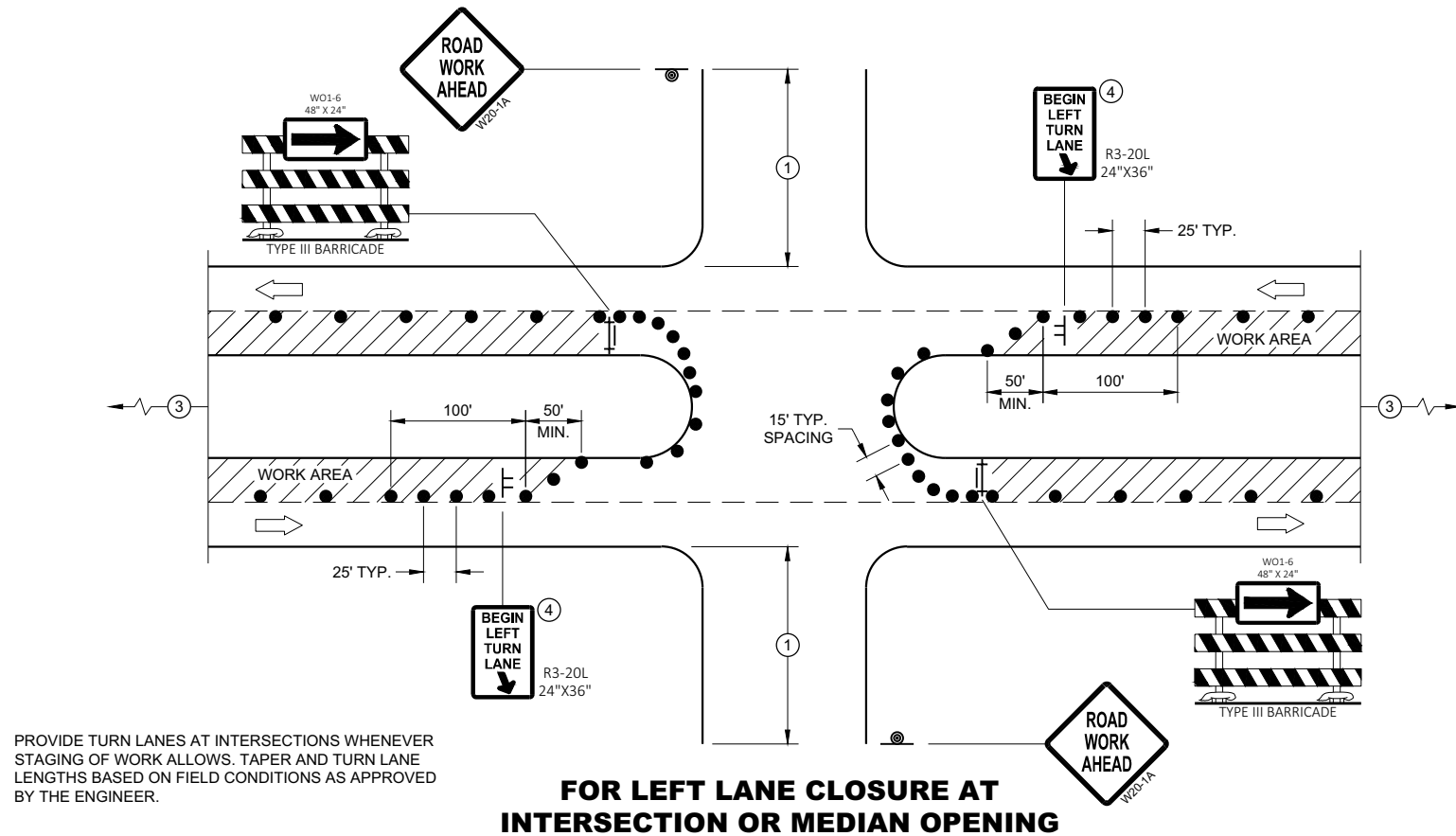
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

- ① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.
- ② ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS
- ③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.
- ④ MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

**GENERAL NOTES**

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

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

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

- 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.
- ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS
- SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.
- MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

**FOR LEFT LANE CLOSURE AT INTERSECTION
OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)****TRAFFIC CONTROL,
INTERSECTION WITHIN SINGLE
LEFT LANE CLOSURE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 120
FHWA

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.

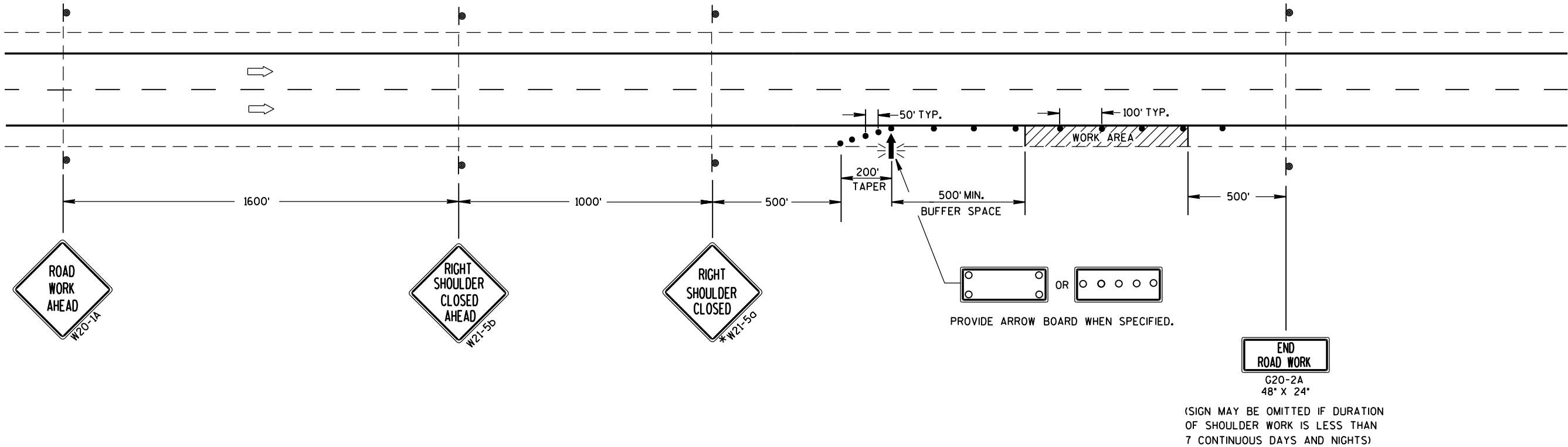
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ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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 SAFETY ENGINEER
FHWA 121

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.

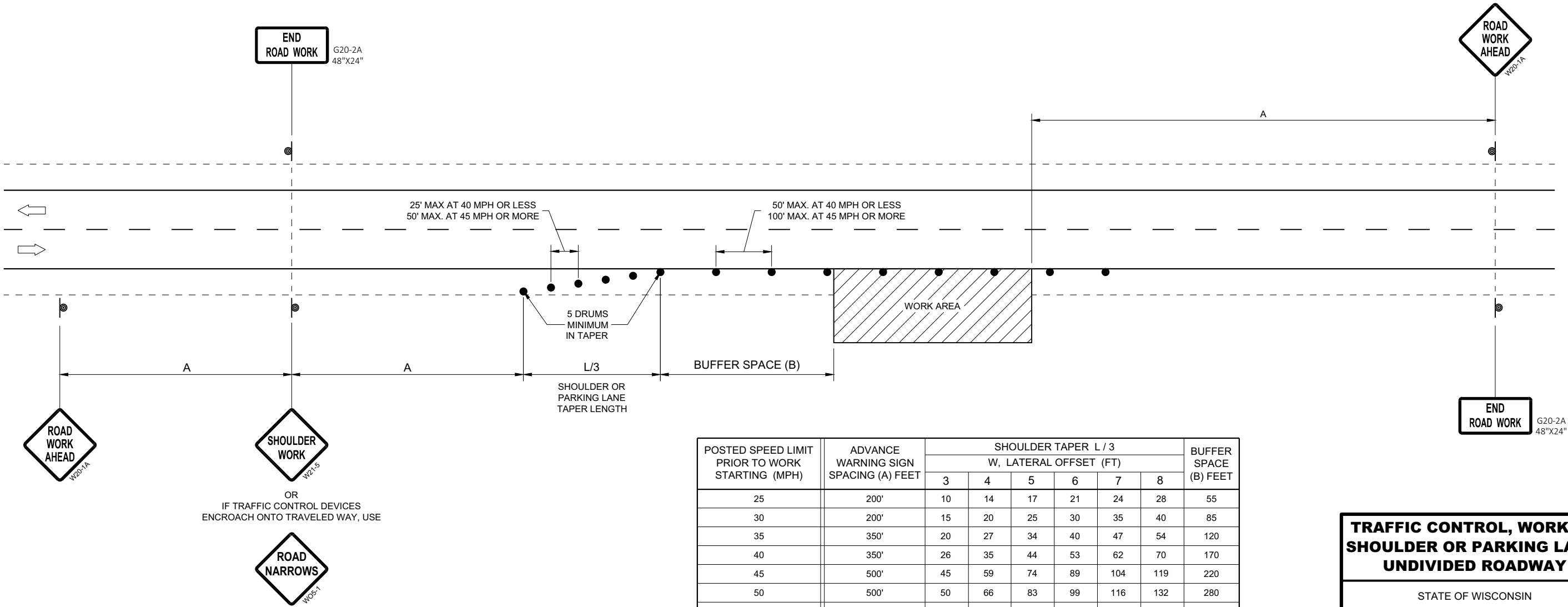
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SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

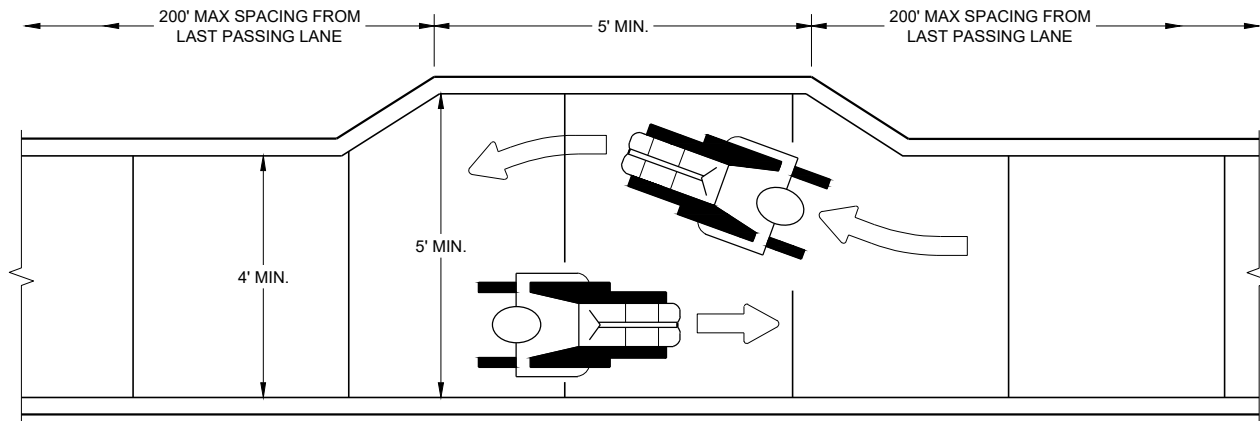


POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45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

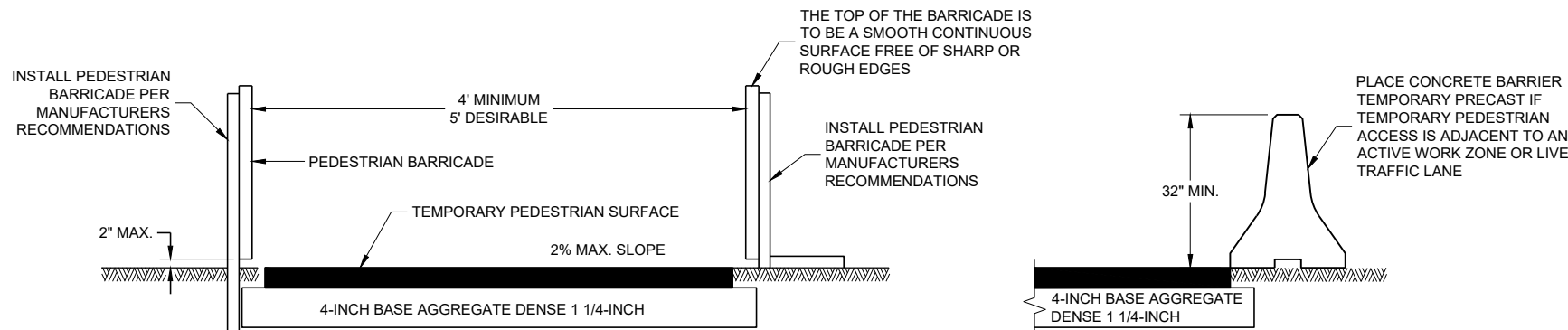
TRAFFIC CONTROL, WORK ON
SHOULDER OR PARKING LANE,
UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020 /S/ Andrew Heidtke
DATE STATEWIDE WORK ZONE T SAFETY ENGINEER 122
FHWA



NARROW SIDEWALK PASSING DETAIL



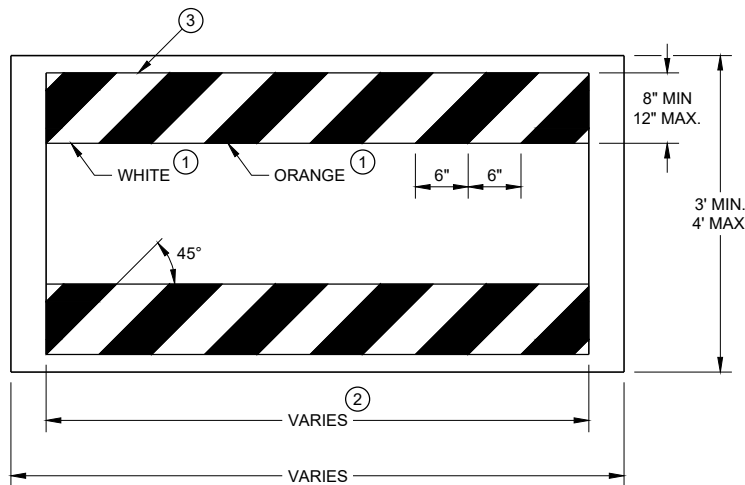
TEMPORARY PEDESTRIAN ACCESS

GENERAL NOTES

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.

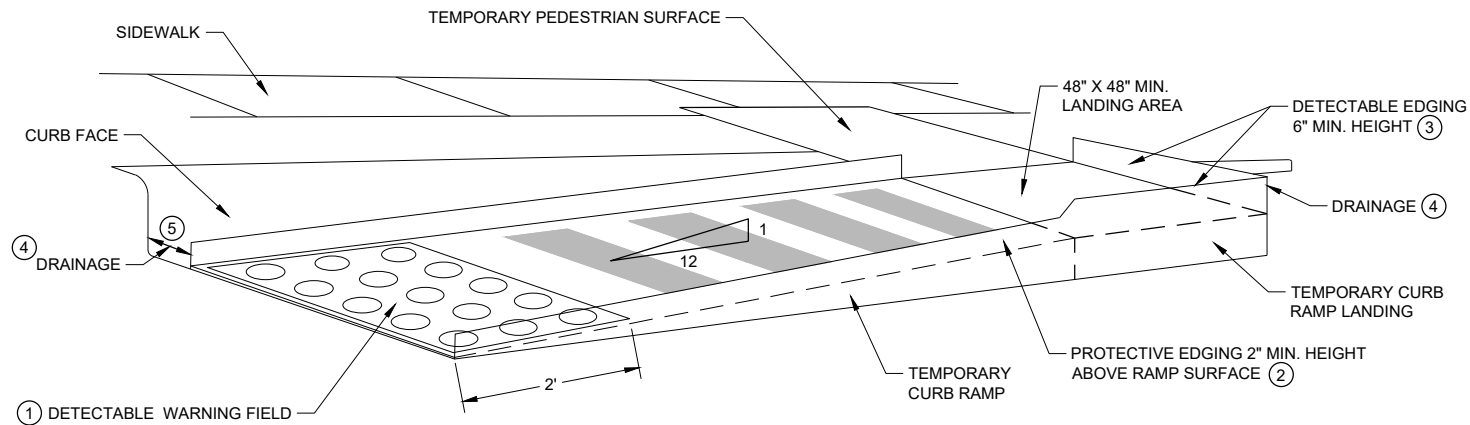


TEMPORARY PEDESTRIAN BARRICADE*

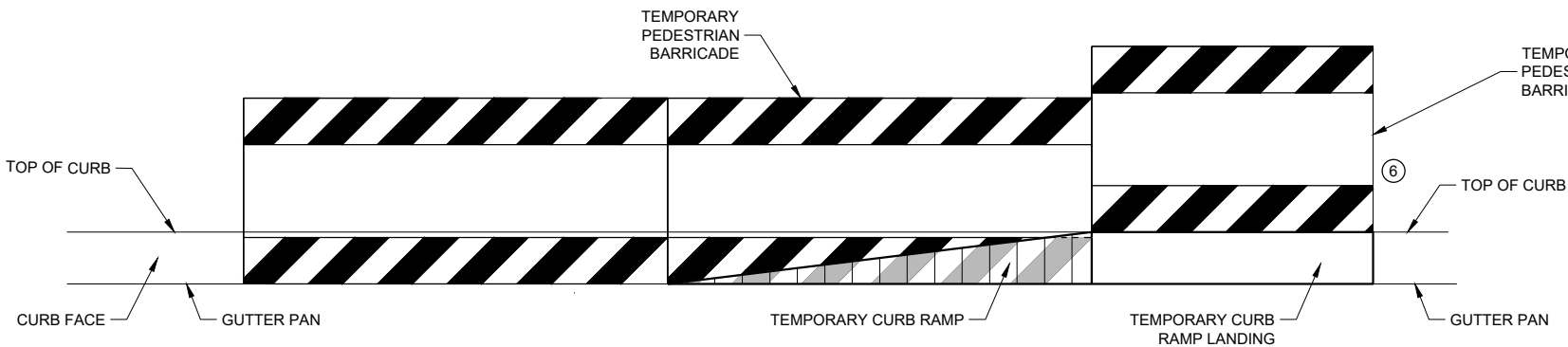
GENERAL NOTES

- 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 1/2". LATERAL EDGES MAY BE VERTICAL UP TO 1/4" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".

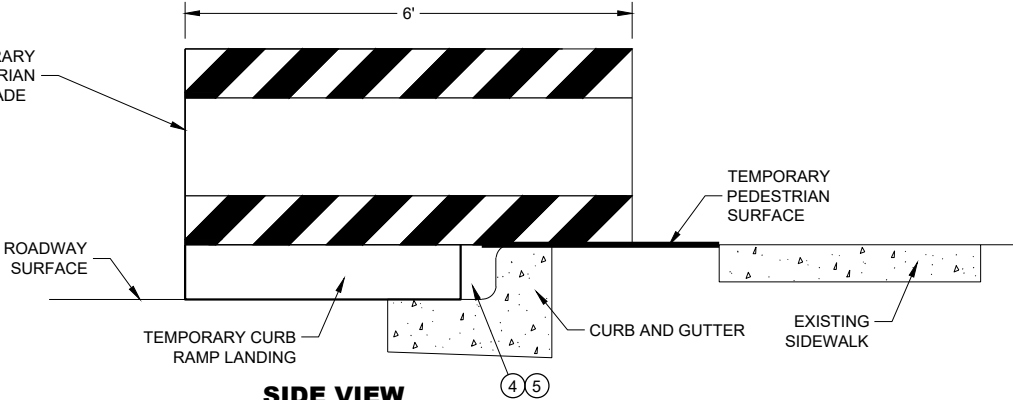
- ① INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.
- ② PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). 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.



PERSPECTIVE VIEW

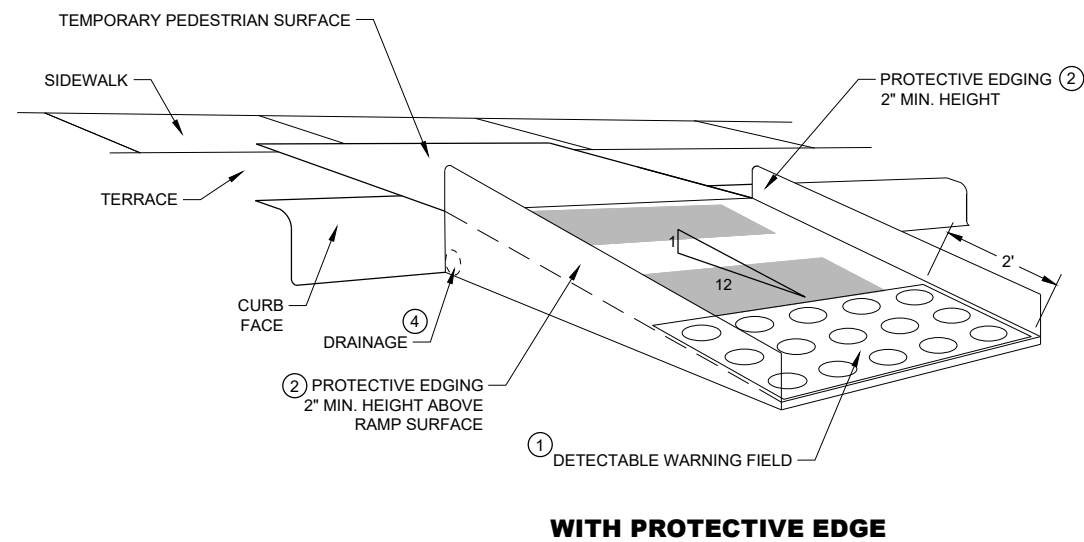
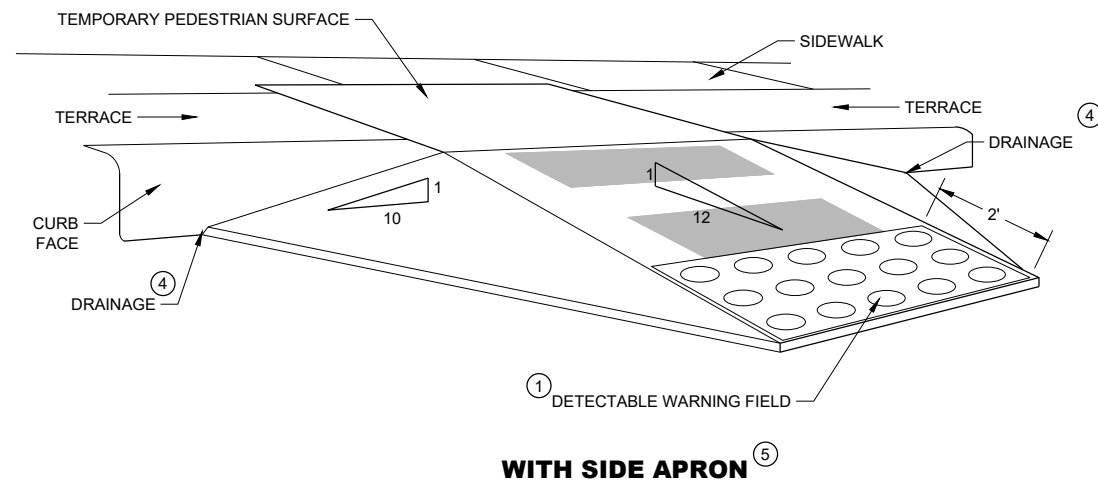


FRONT VIEW



SIDE VIEW

TEMPORARY CURB RAMP PARALLEL TO CURB



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.

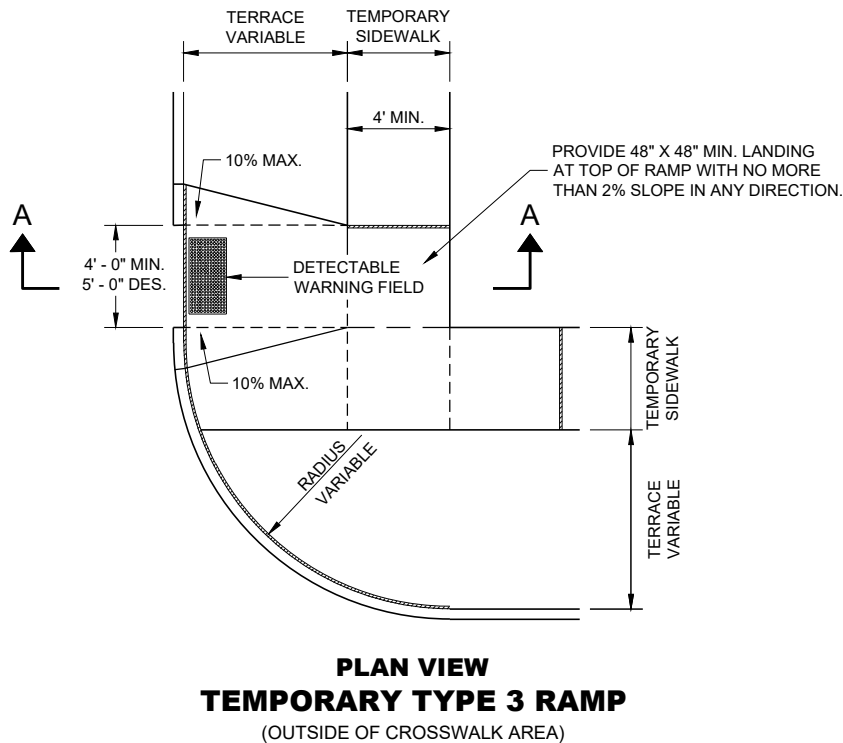
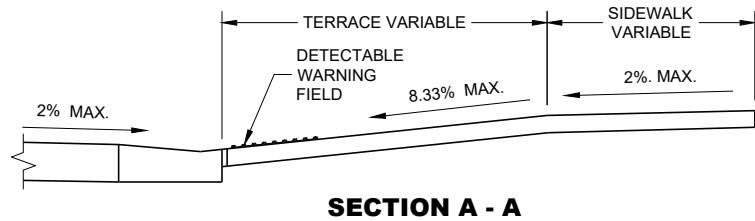
LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

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 125



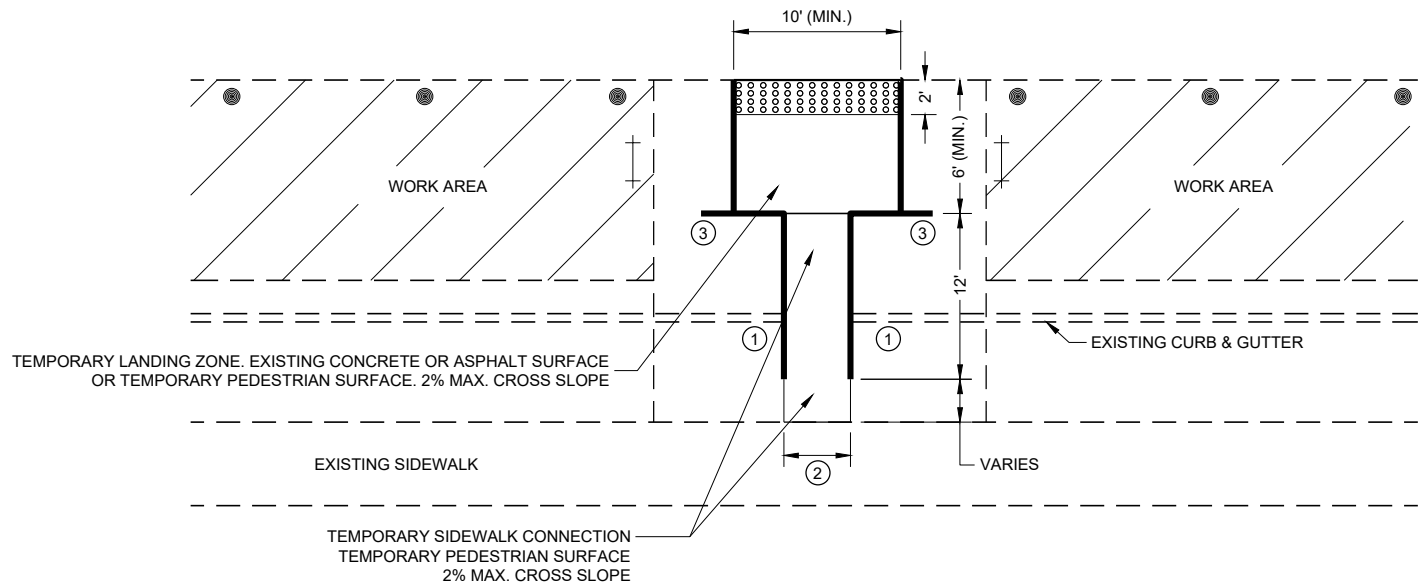
GENERAL NOTES

- 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.

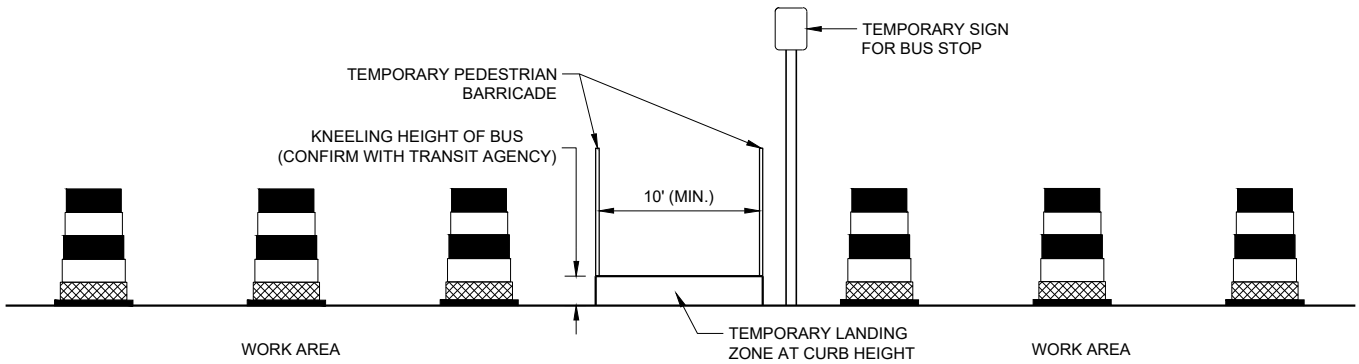
TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 126
FHWA



PLAN VIEW



PROFILE VIEW

TEMPORARY BUS STOP PAD

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

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 RAMP OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

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

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

- ① DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
- ② 5' WIDE MIN. WITH TEMPORARY PEDESTRIAN BARRICADE, 10' WIDE MIN. WITHOUT TEMPORARY PEDESTRIAN BARRICADE.
- ③ PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE INTO THIS SPACE.

LEGEND

- TRAFFIC CONTROL DRUM
- ⊥ TYPE III BARRICADE
- TEMPORARY PEDESTRIAN BARRICADE
- ⊞ TEMPORARY DETECTABLE WARNING FIELD
- ▨ WORK AREA

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

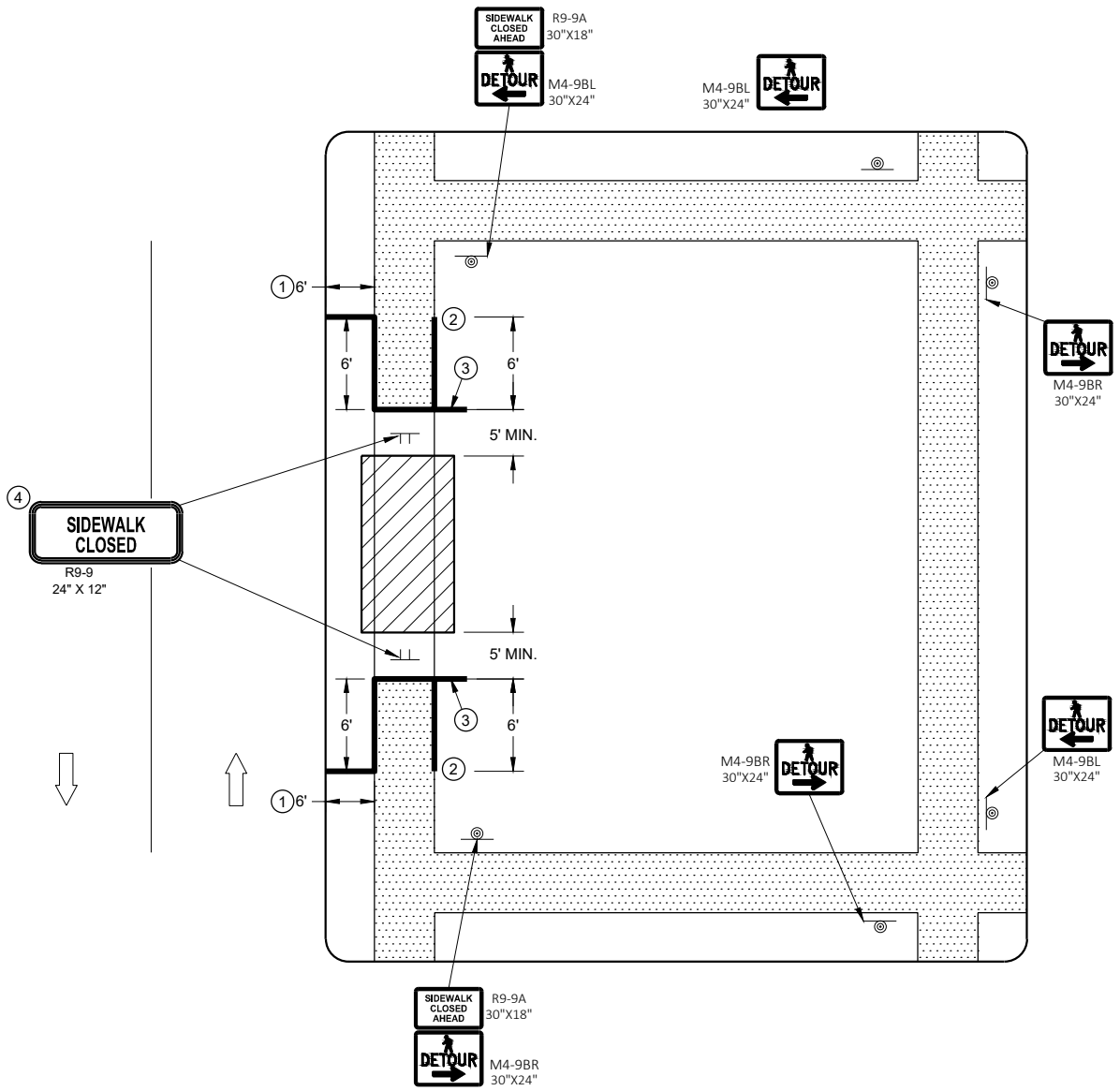
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 127

LEGEND

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

GENERAL NOTES

- SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.
- 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 CONFLICTS 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.



SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE

LEGEND

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

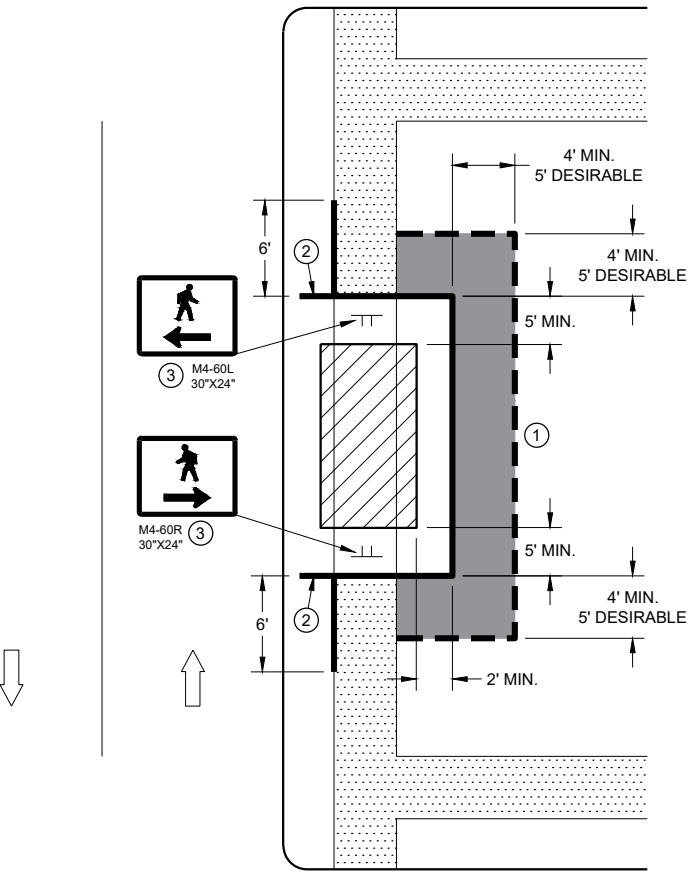
GENERAL NOTES

- TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.
- SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.
- 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.



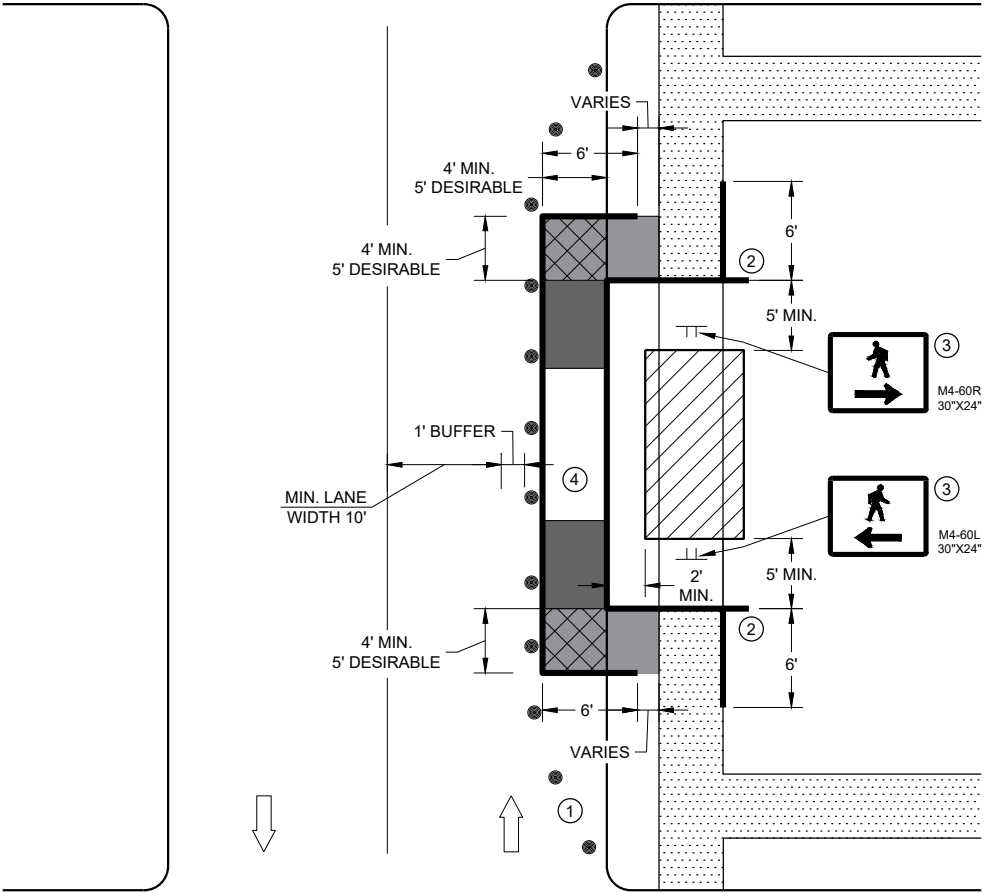
SIDEWALK DIVERSION
SINGLE SIDE

LEGEND

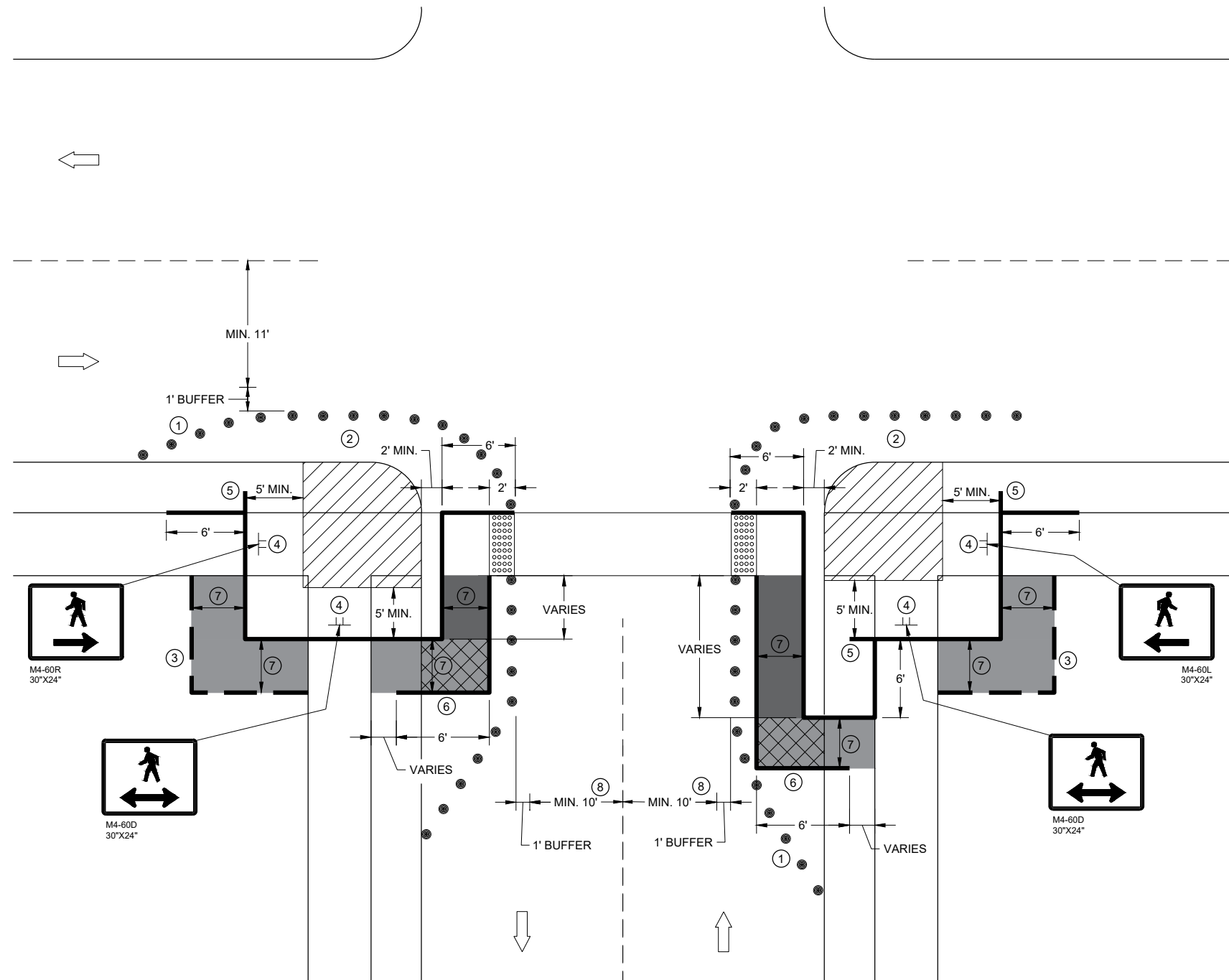
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

GENERAL NOTES

- TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.
- SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.
- 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 SURACE HAS BEEN REMOVED, USE A TEMPORARY PEDESTRIAN SURFACE.



SIDEWALK DIVERSION, SINGLE SIDE



**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.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

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.

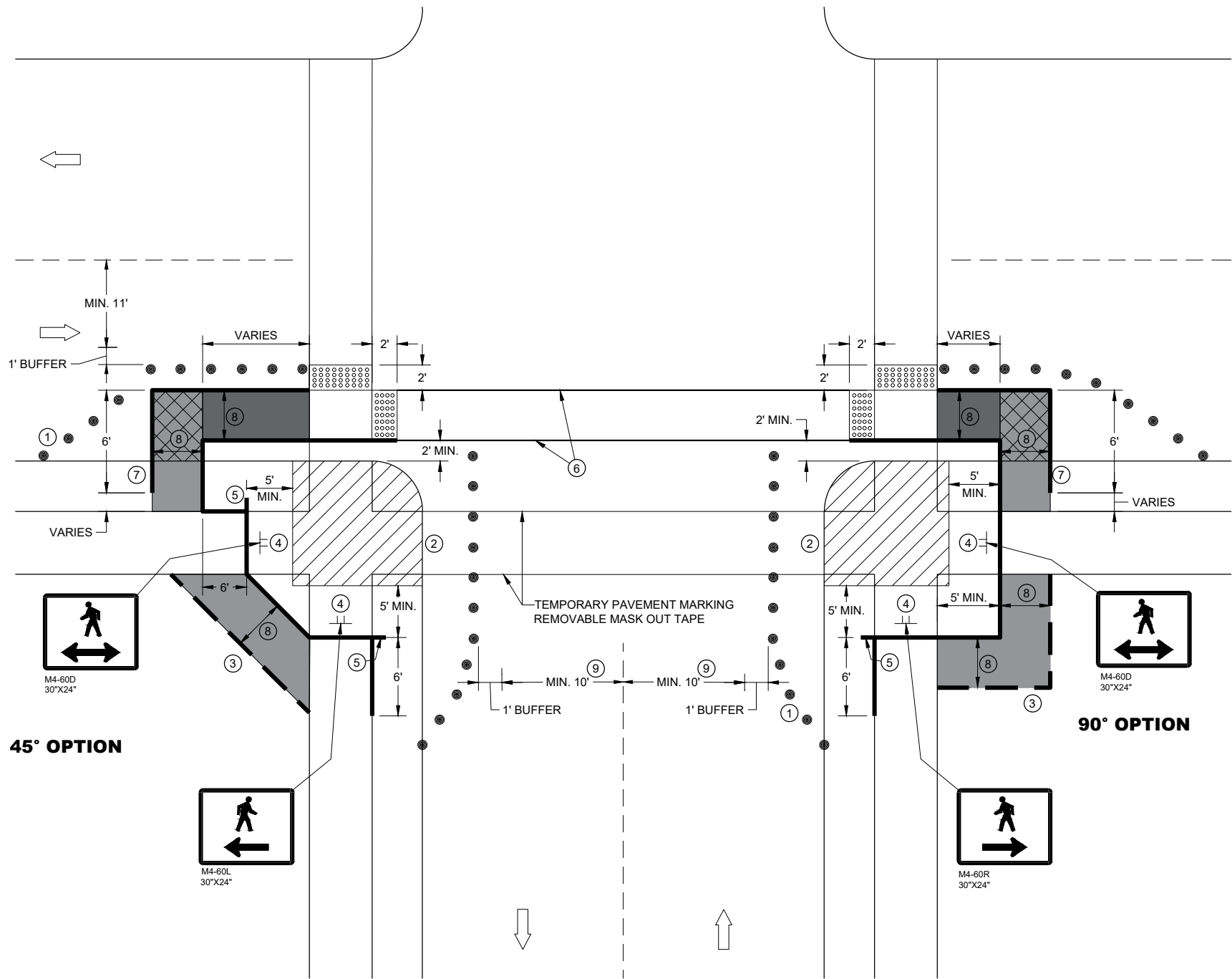
- ① SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
- ② PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
- ③ USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
- ④ MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE 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

**TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
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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.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

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.

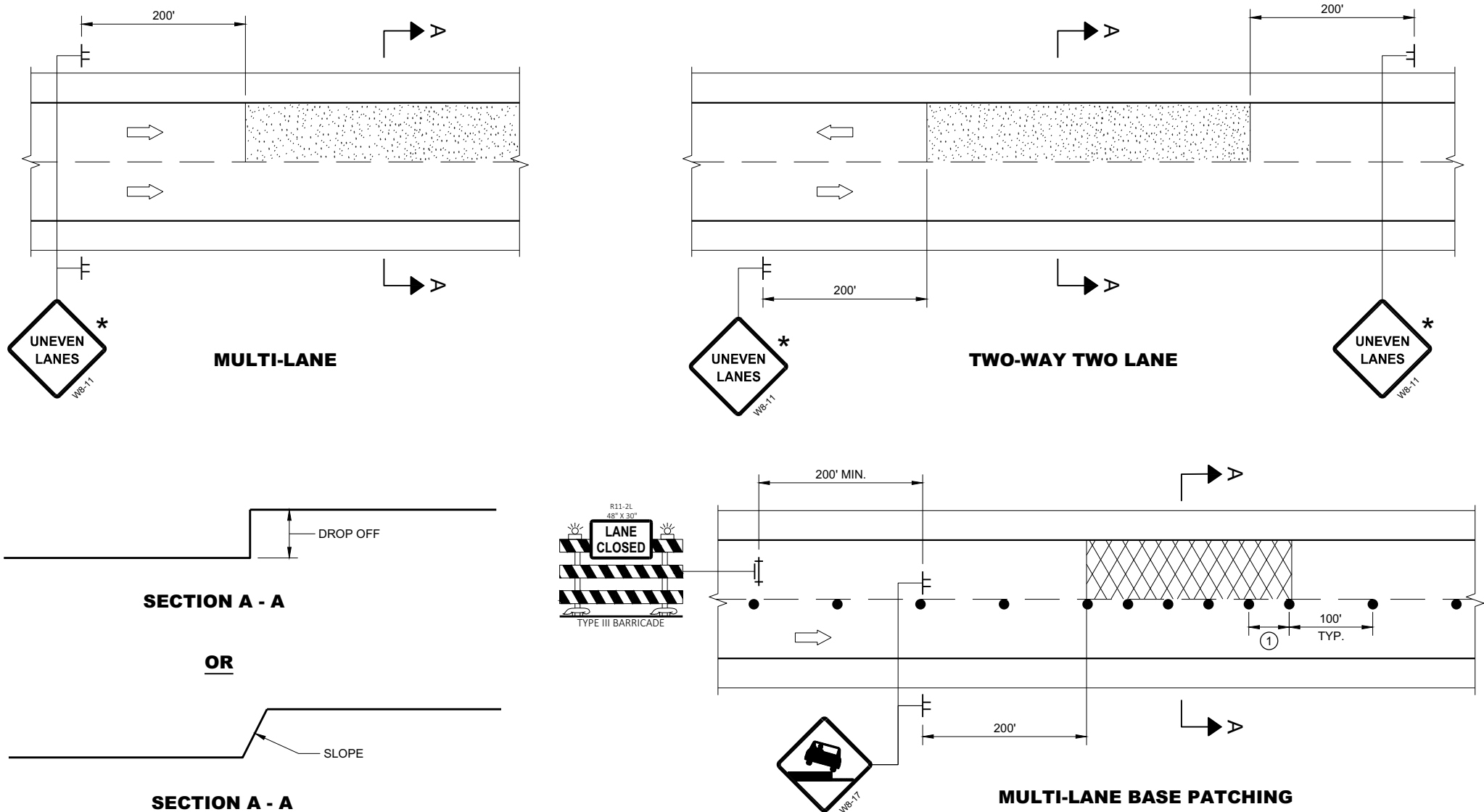
- ① SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
- ② PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
- ③ USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
- ④ MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE 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

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 132



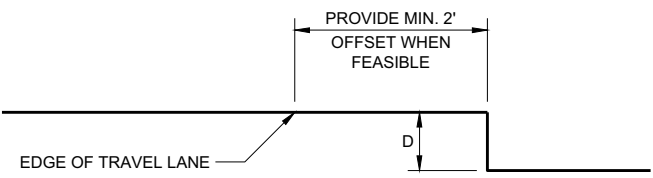
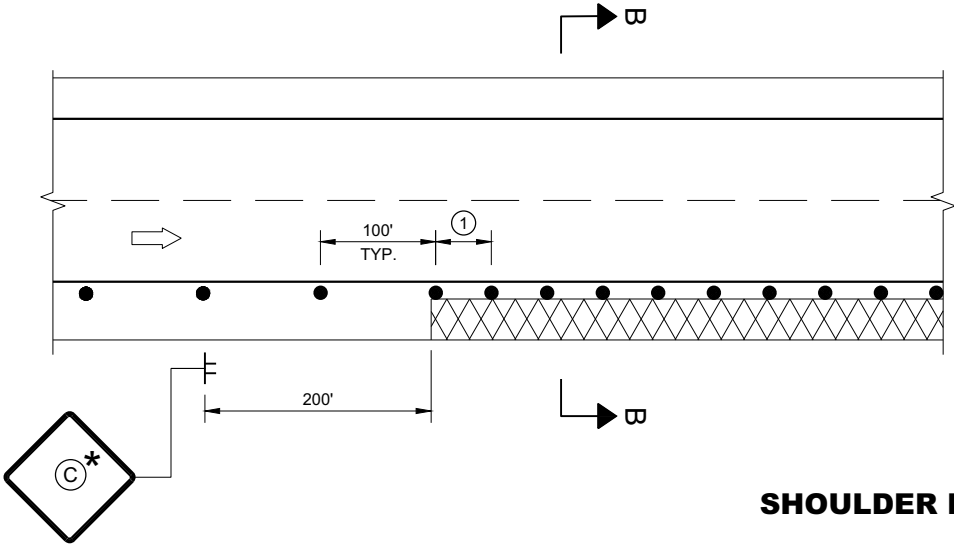
ADJACENT LANE DROP-OFFS

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



SECTION B - B

SHOULDER DROP-OFFS

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

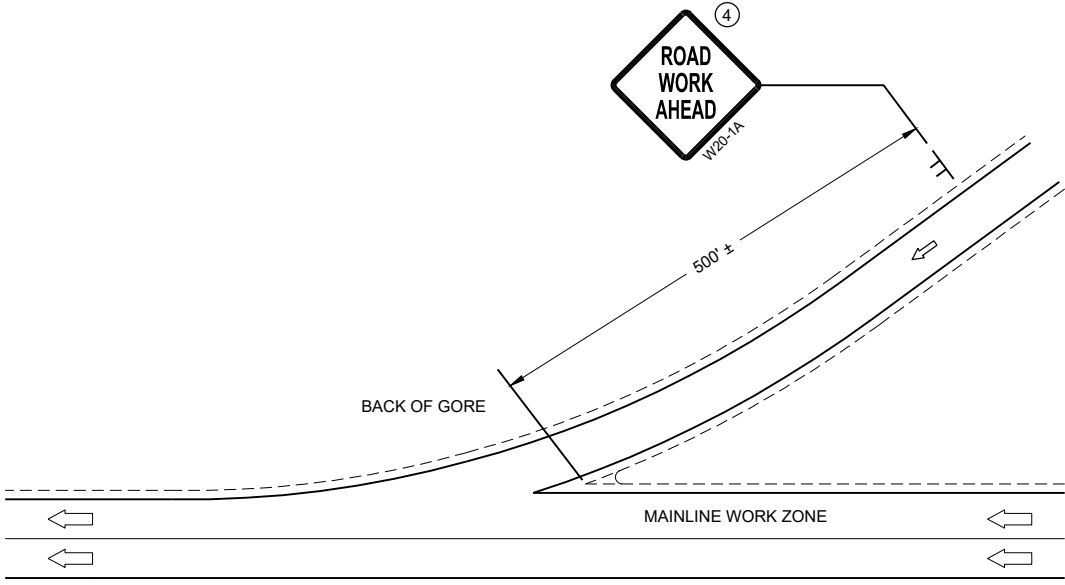
TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 133
FHWA

LEGEND

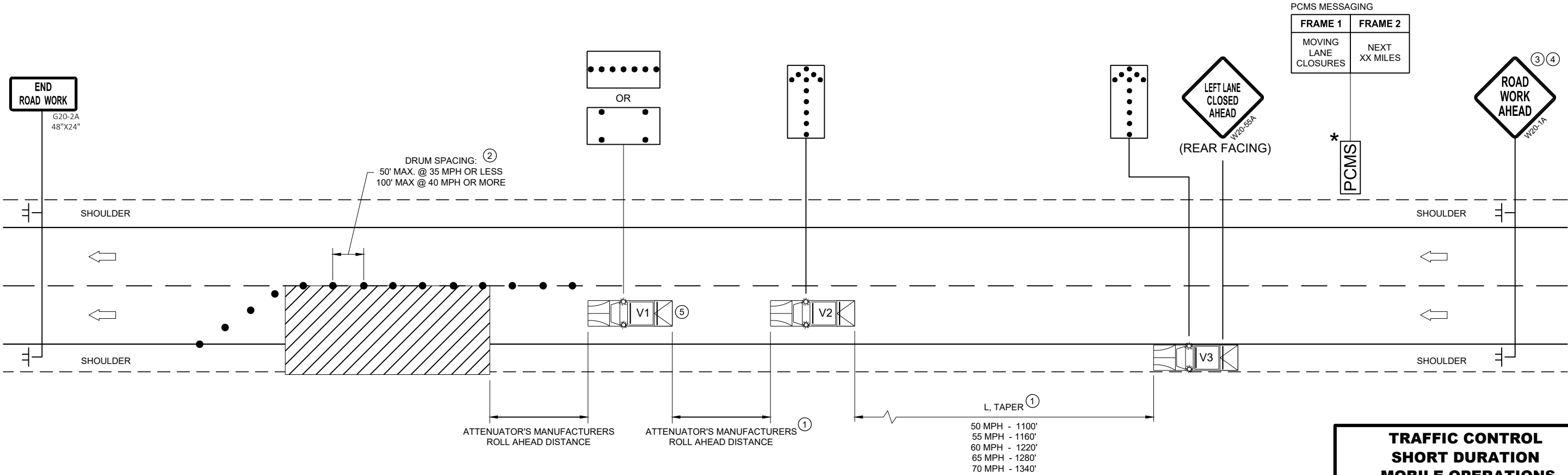
- V1 SHADOW VEHICLE 1
- V2 SHADOW VEHICLE 2
- V3 ADVANCE WARNING TRUCK
- TRAFFIC CONTROL DRUM
- ☐ TRUCK MOUNTED ATTENUATOR (TMA)
- ⊥ SIGN ON TEMPORARY SUPPORT
- ➡ DIRECTION OF TRAFFIC
- FLASHING ARROW PANEL (MERGE)
- FLASHING ARROW PANEL (CAUTION)
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- ▨ WORK AREA



GENERAL NOTES

- SHORT DURATION IS WORK THAT OCCUPIES A LOCATION UP TO 1 HOUR.
- MOBILE IS WORK THAT MOVES INTERMITTENTLY OR CONTINUOUSLY.
- 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.
- WHEN WORK ACTIVITY BLOCKS THE RIGHT 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.
- USE DOUBLE ARROWS WHEN CONVOY IS IN CENTER LANE ONLY.
- 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
- ① DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE 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.
 - ② DRUMS ARE TO BE USED FOR BRIDGE DECK SEALING AND OTHER PROJECTS THAT REQUIRE DELINEATION.
 - ③ WITHIN 5 MILES, RELOCATE SIGNS AS WORK PROGRESSES AND NECESSARY OR AS DIRECTED BY THE ENGINEER.
 - ④ SIGN NOT REQUIRED IF MOVING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.
 - ⑤ SHADOW VEHICLE 1 (V1) IS OPTIONAL

* PCMS OPTIONAL



**TRAFFIC CONTROL
SHORT DURATION
MOBILE OPERATIONS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2021 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 134

FHWA

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.

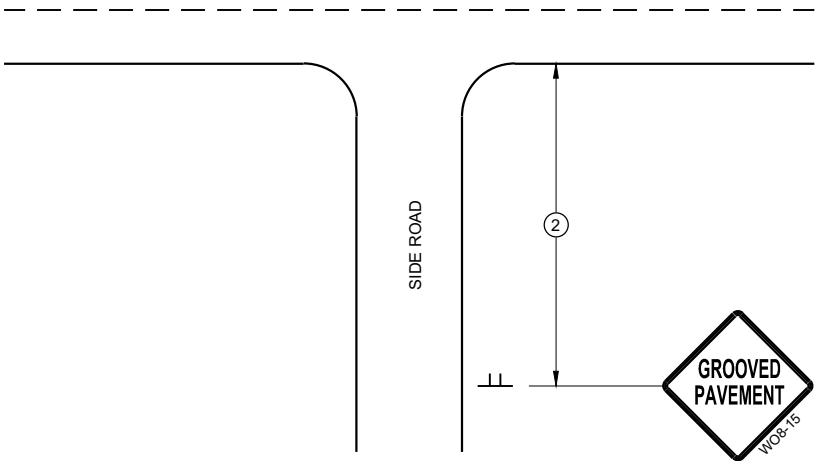
ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

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.

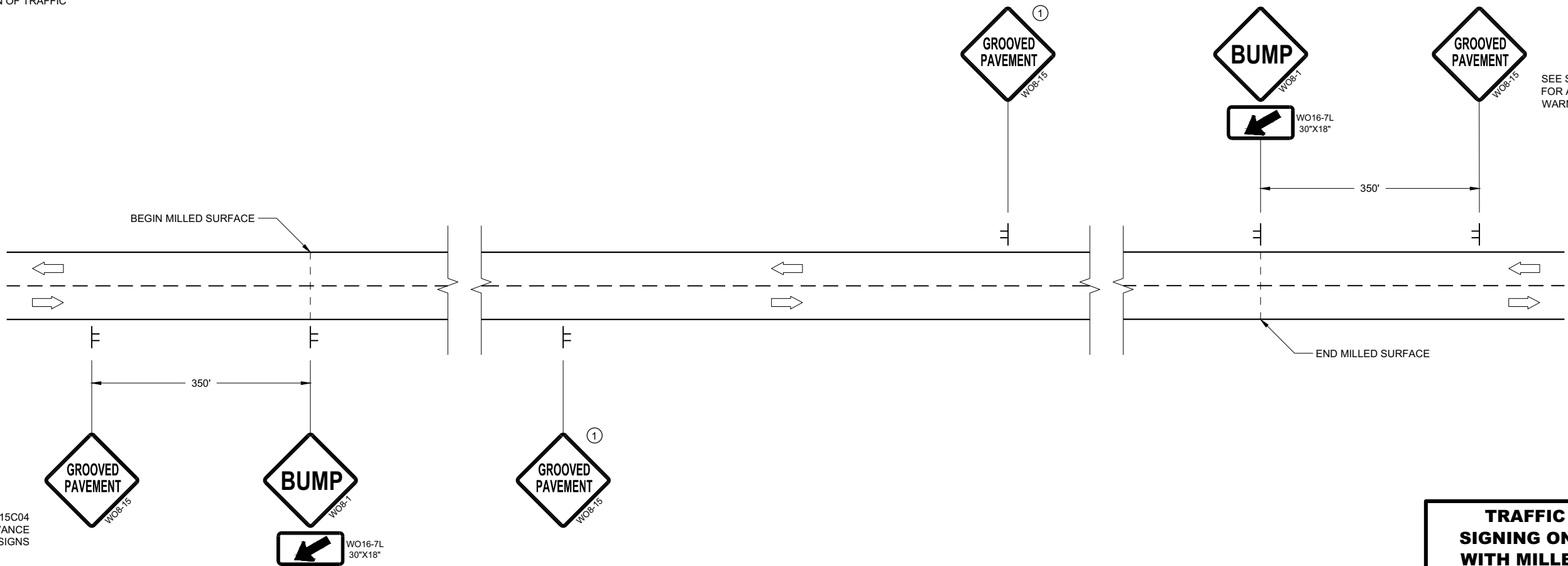
- ① PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.
- ② PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

LEGEND

-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH
SIGN DETAIL



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 135

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 $\frac{L}{2}$ 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.

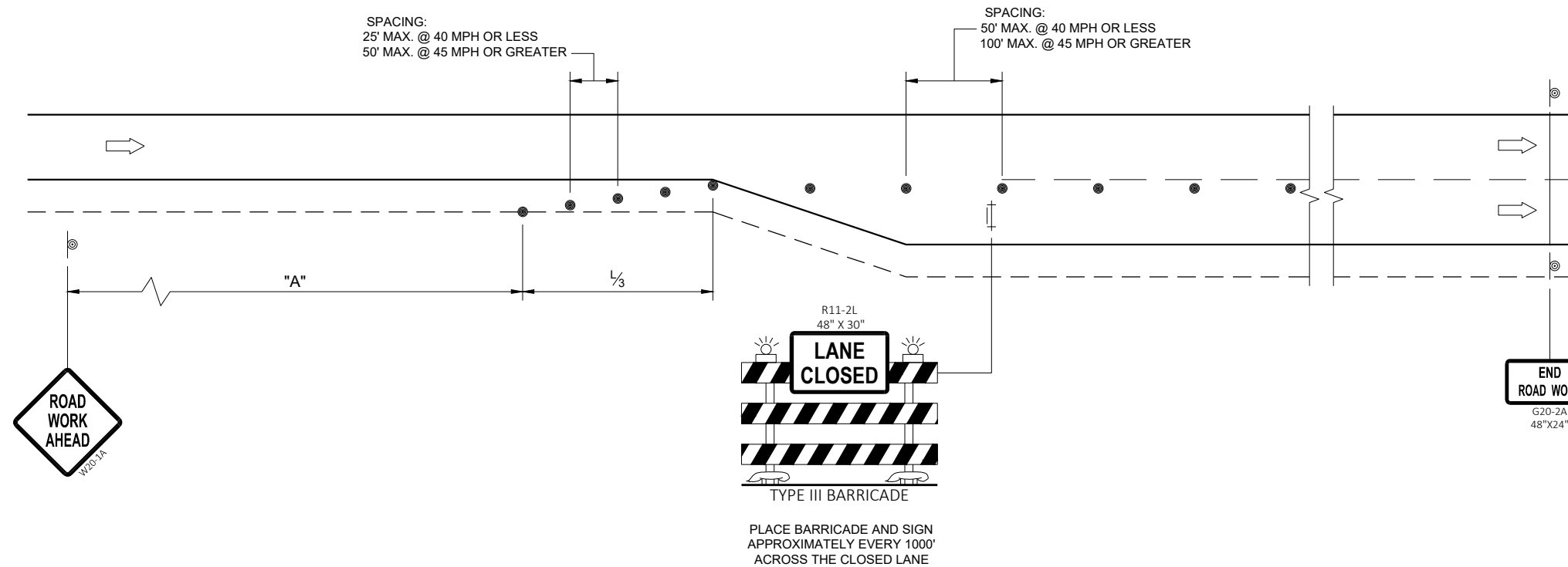
"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

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.



6

6

SDD 15D50 - 02a

SDD15D50 - 02a

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE

/s/ Andrew Heidtke
WORK ZONE ENGINEER

136

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.

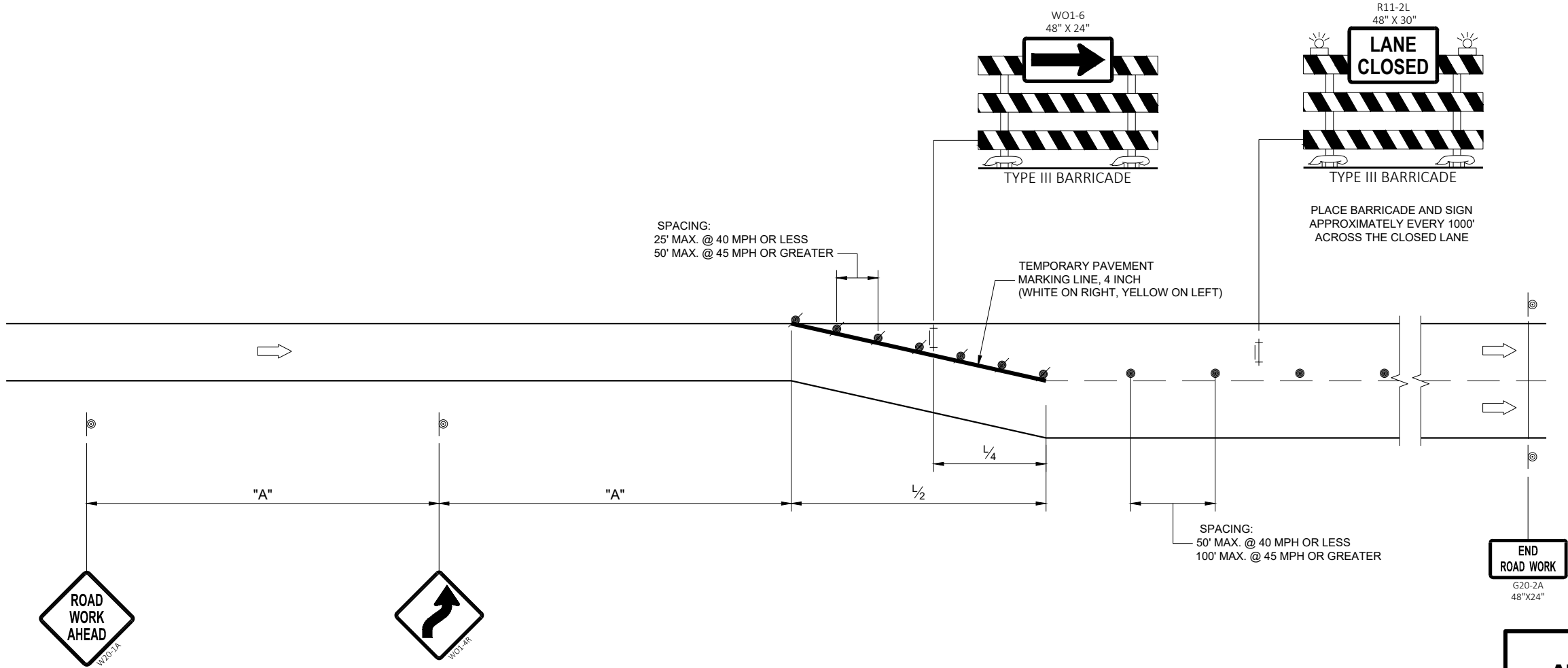
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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
February 2022 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 137

FHWA

LEGEND

- V1

WORK VEHICLE
- V2

SHADOW VEHICLE
- 

TRUCK MOUNTED ATTENUATOR (TMA)
- 

FLASHING ARROW PANEL (CAUTION)
- 

WORK AREA
- 

DIRECTION OF TRAFFIC

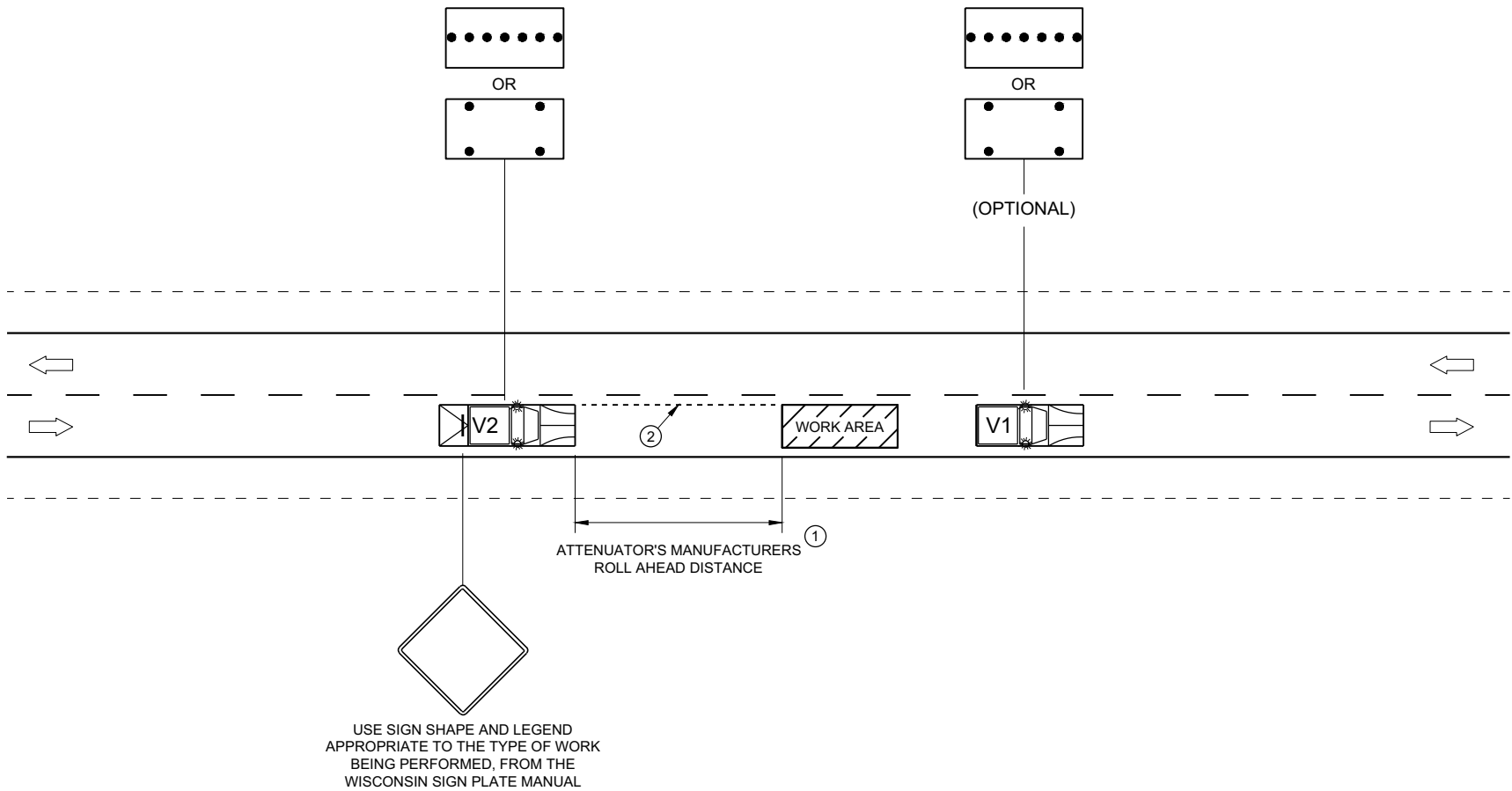
POSTED SPEED PRIOR TO WORK STARTING (MPH)	DECISION SIGHT DISTANCE (D)
0 - 25	550'
30	550'
35	700'
40	700'
45	900'
50	900'
55	1200'

GENERAL NOTES

- ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.
- MOBILE IS WORK THAT MOVES CONTINUOUSLY OR MOVES AT LEAST THE DECISION SIGHT DISTANCE EVERY 15 MINUTES.
- ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.
- ALL ARROW PANELS SHALL BE REAR FACING, TYPE "B" OR "C", AND DISPLAYING THE FLASHING CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.
- USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.
- ①

DISTANCE BETWEEN VEHICLES MAY INCREASE FROM THE ATTENUATOR'S ROLL AHEAD BASED ON TERRAIN, SIGHT DISTANCE, 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 OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.
- ②

ALIGN LEFT SIDE OF SHADOW VEHICLE WITH EDGE OF WORK AREA.



TRAFFIC CONTROL,
MOBILE OPERATIONS ON
AN UNDIVIDED ROADWAY

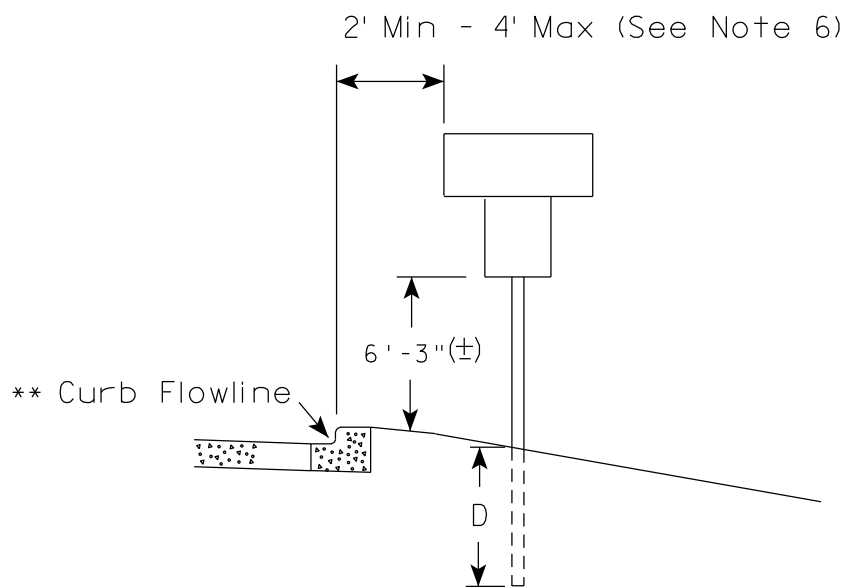
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T
SAFETY ENGINEER

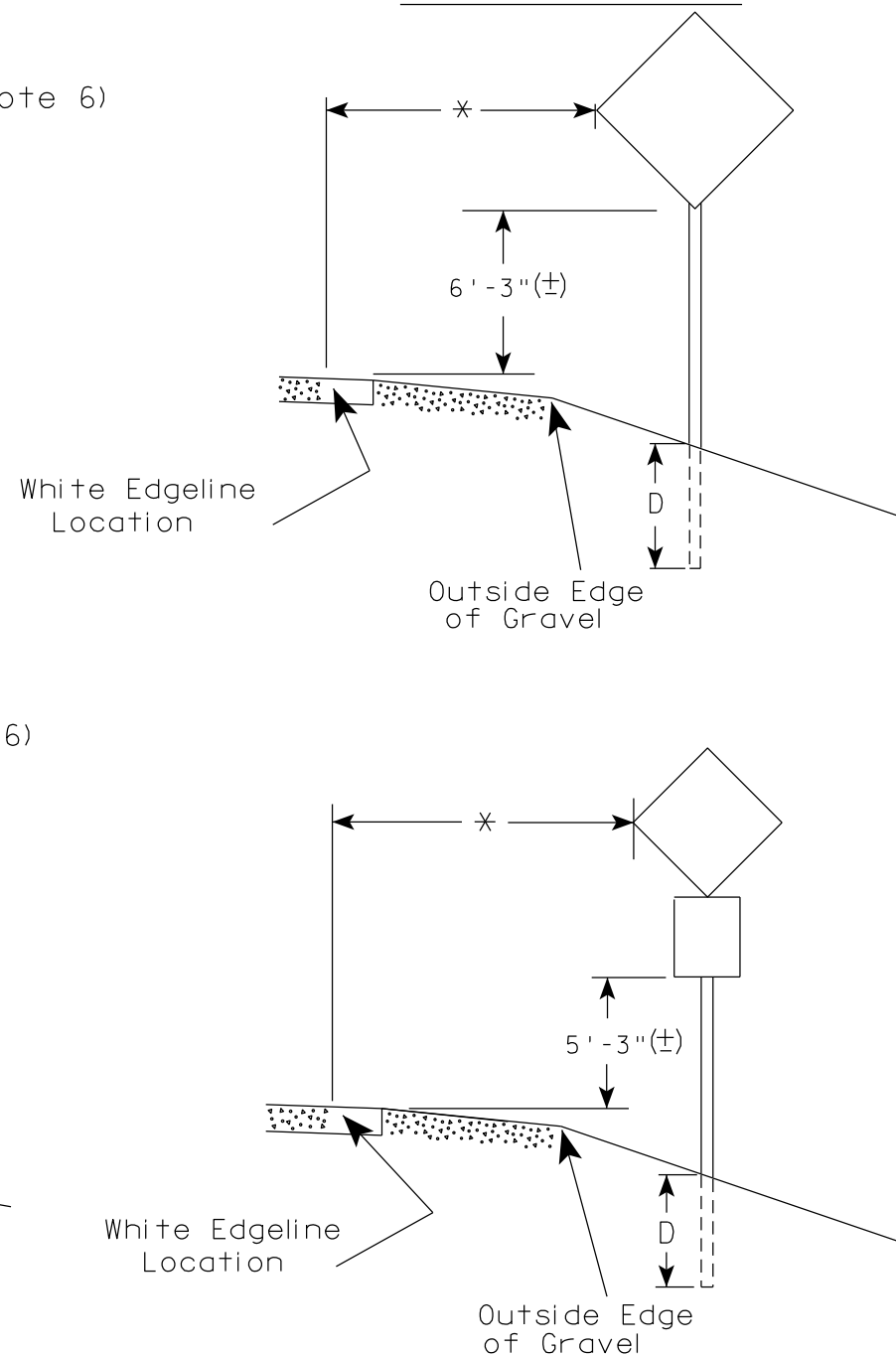
FHWA 138

7



* * 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.

7



* 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.

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.

The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" ($\pm$). 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" ($\pm$).

3. For expressways and freeways, mounting height is 7'- 3" ($\pm$) or 6'-3" ($\pm$) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" ($\pm$).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The ($\pm$) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" ($\pm$) or as directed by the Engineer.

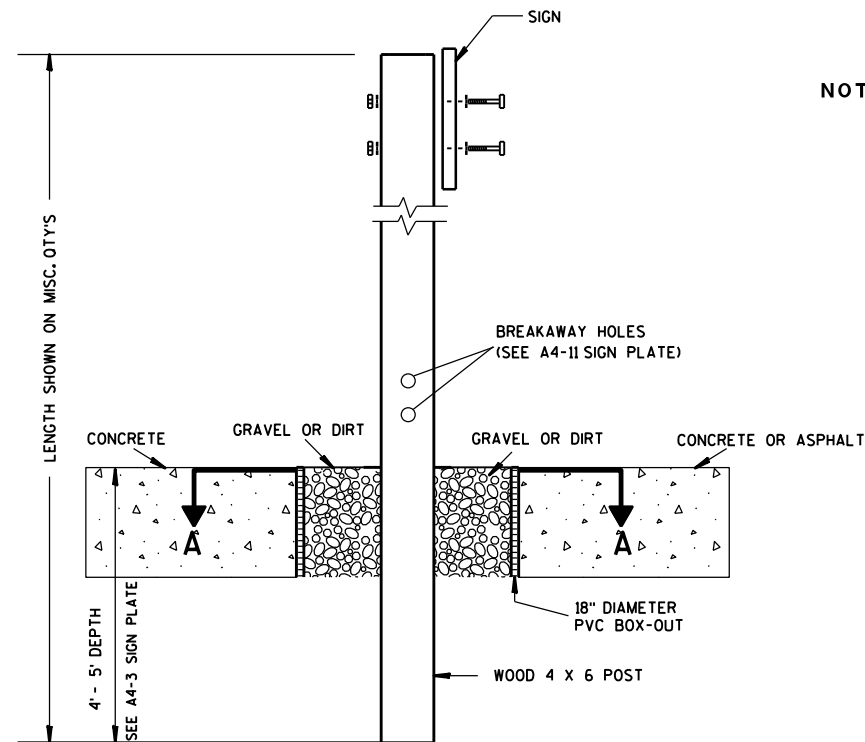
POST EMBEDMENT DEPTH	
Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4"
Greater than 20	5'

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

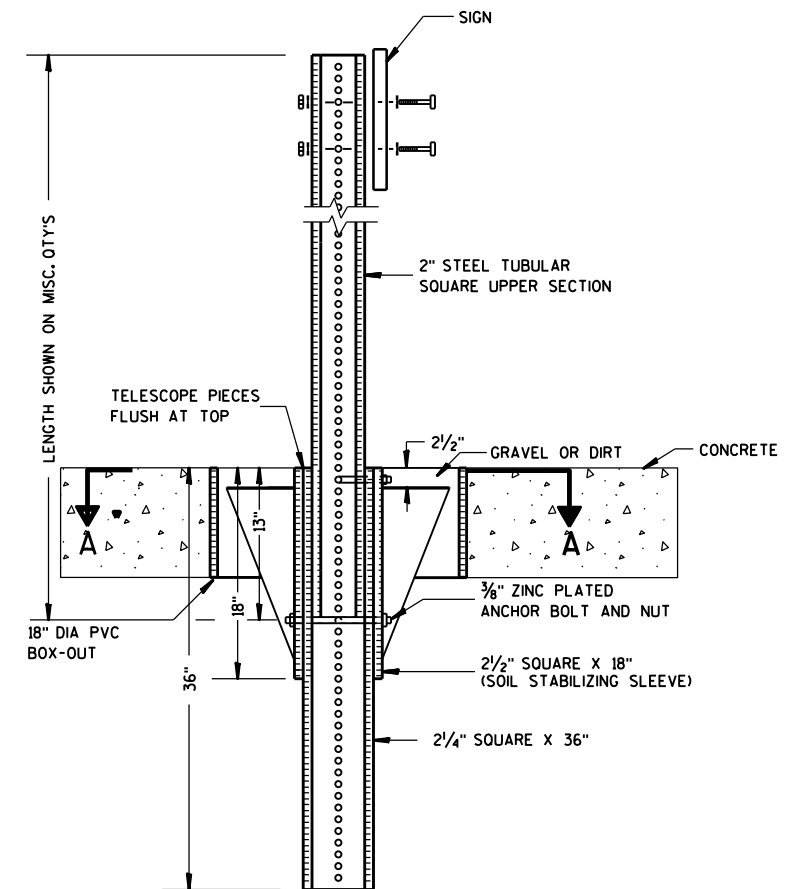
DATE 5/13/2020 PLATE NO. A4-3.22



ELEVATION VIEW

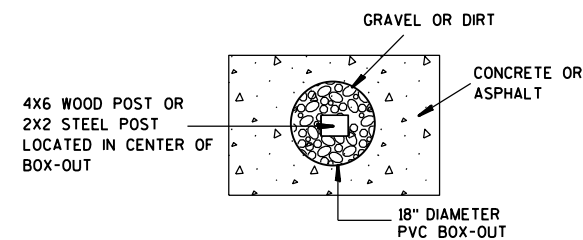
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- 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

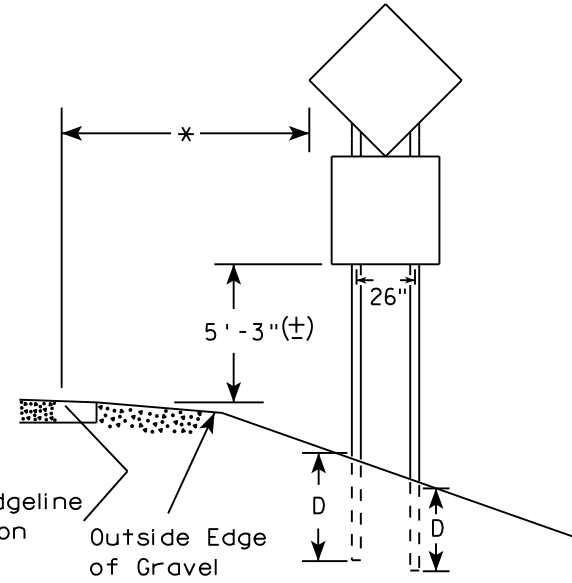
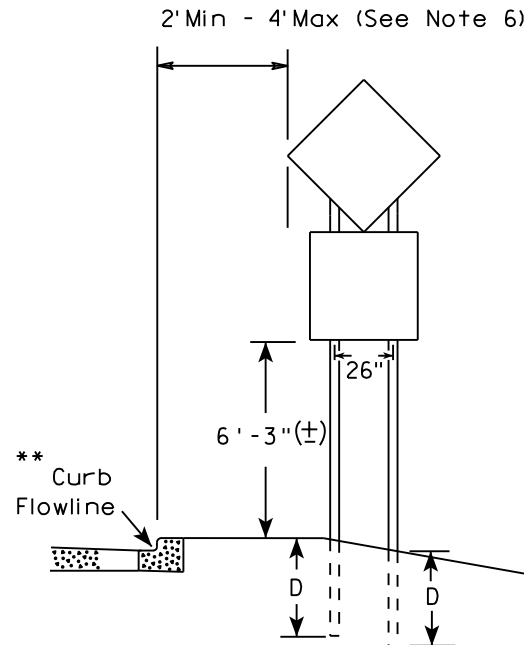
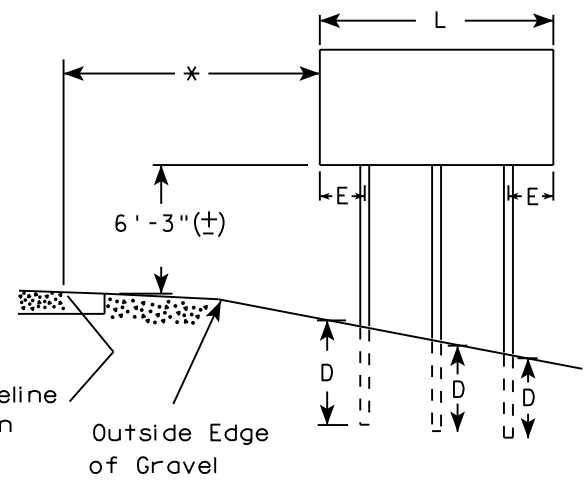
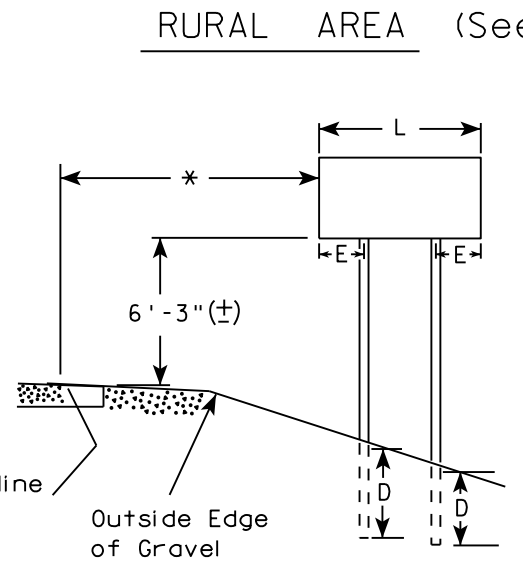
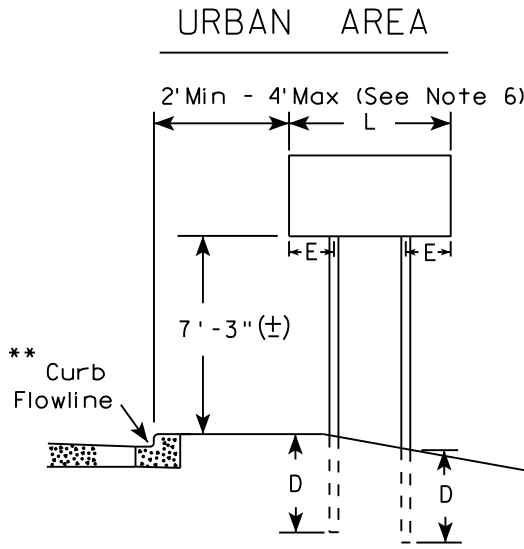
SIGN POST
BOX-OUTS
A4-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/27/14 PLAT 140 A4-3B.1

PROJECT NO: HWY: COUNTY: SHEET NO: E



48" DIAMOND WARNING SIGN

48" DIAMOND WARNING SIGN

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

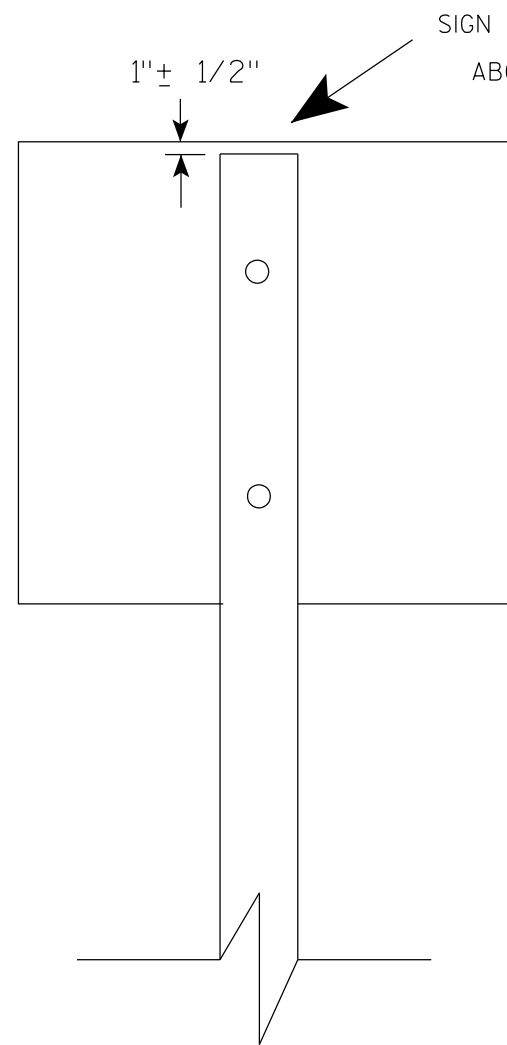
SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

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

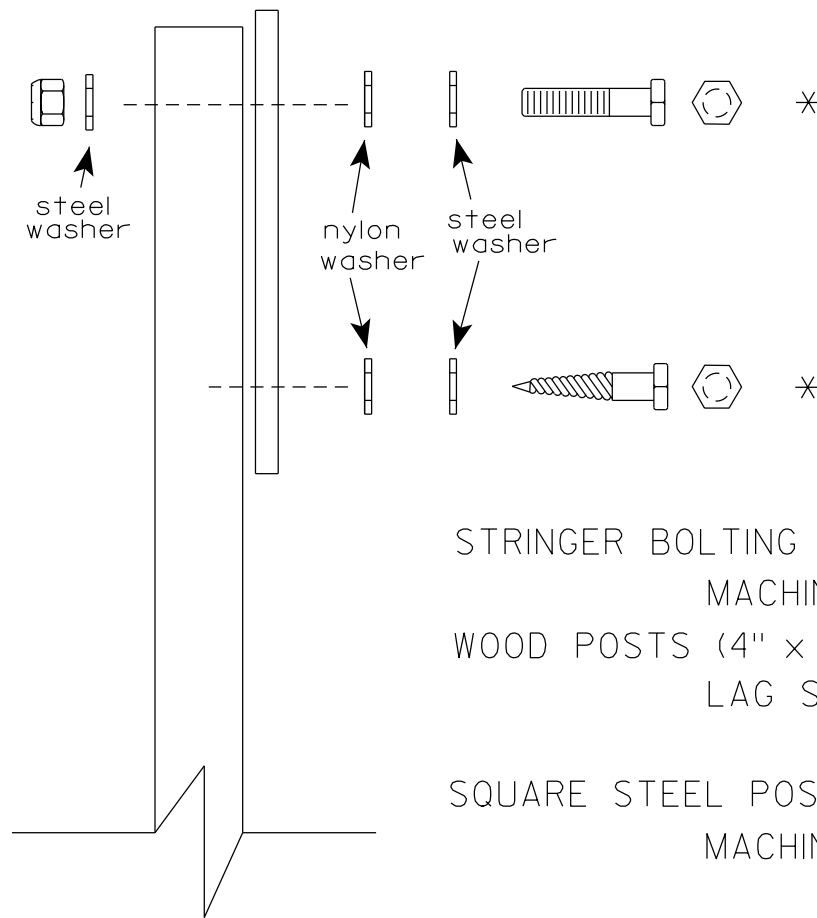
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 8/21/17	PLATE NO. A4-4.15

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

- * 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.
- ** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.
- *** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.



SIGN SHALL BE MOUNTED TO PROJECT
ABOVE THE TOP OF THE POST



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 - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON

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

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R. Rauch
For State Traffic Engineer

DATE 4/1/2020 PLATE NO. A4-8.9

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

1"

$\frac{1}{8}"$

ALL HOLES $\frac{7}{16}"$
SPACED 1" C-C
ALL FOUR SIDES

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 structure with a top section and a main body section.

Dimensions:

- Top section height: 2 1/2"
- Main body section height: 10"
- Base section height: 3 1/2"
- Total height: 16"
- Top section width: 4"

Components:

- 2 1/2" TELESPAR TUBE (indicated by an arrow pointing to the top section)
- 4" x 10" x 10 GA. STEEL PLATE (CUT AS SHOWN) WELDED TO ALL FOUR CORNERS OF TELESPAR TUBE (indicated by an arrow pointing to the main body section)

LENGTH SHOWN ON MISC. QTY'S
 18" DIA SCHEDULE 40 PVC BOX-OUT
 TELESCOPE PIECES FLUSH AT TOP
 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
 3/8" ZINC PLATED CORNER ANCHOR BOLT AND NUT
 ALL HOLES 7/16" SPACED 1" C-C ALL FOUR SIDES
 2" STEEL TUBULAR SQUARE UPPER SECTION
 SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL
 SIGN

LENGTH SHOWN ON MISC. QTY'S

TELESCOPE PIECES FLUSH AT TOP

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

1"

$\frac{3}{8}$ " ZINC PLATED ANCHOR BOLT AND NUT

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

2 1/4" SQUARE X 36"

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

SIGN

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

TUBULAR STEEL
SIGN POST
A4-9

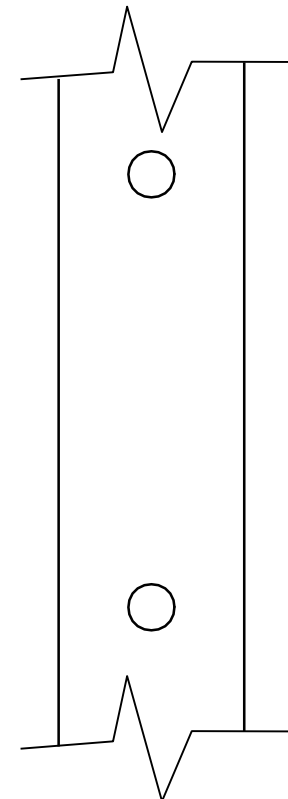
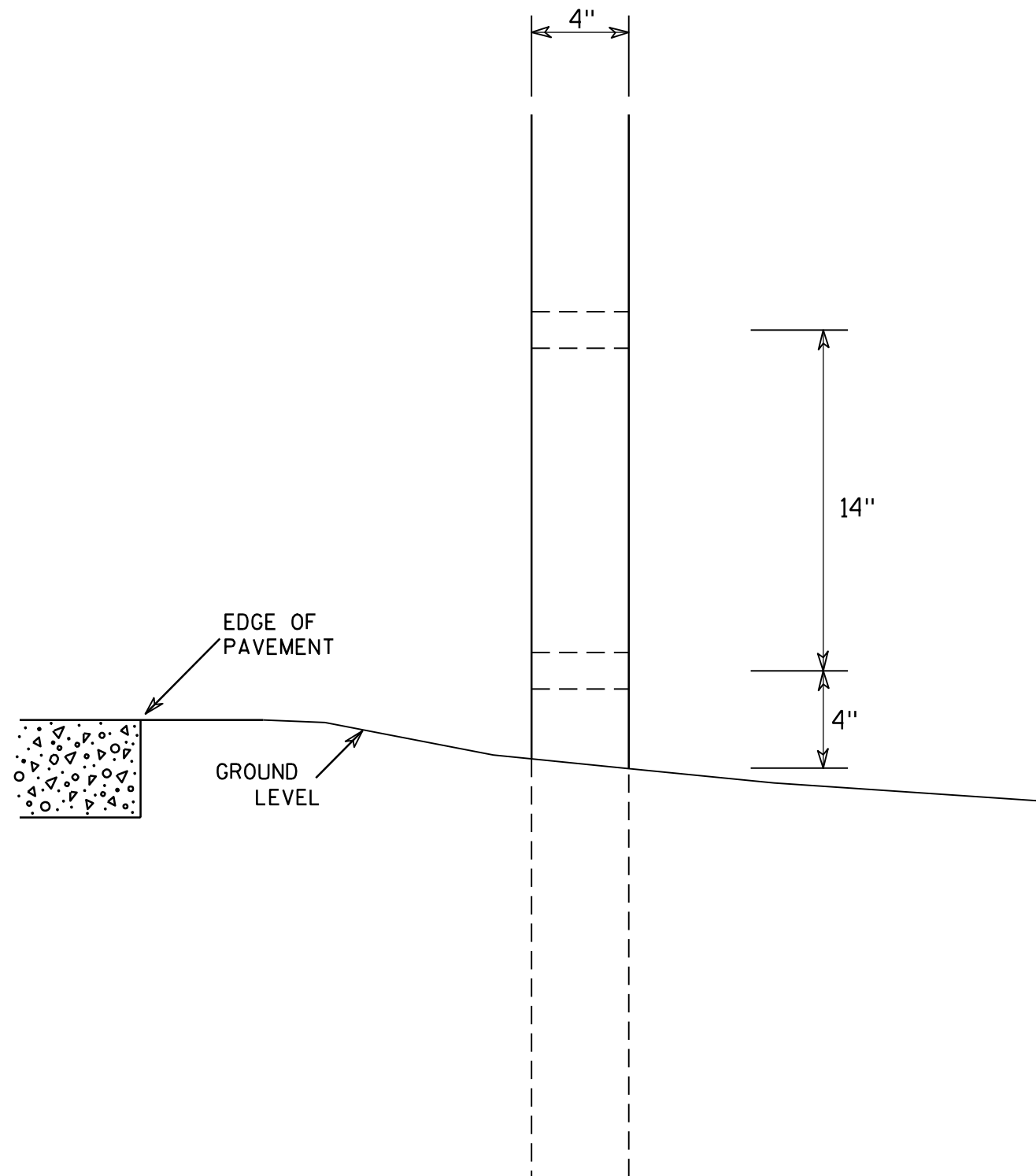
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R. Rauch

for State Traffic Engineer

DATE 2/05/15 PLATI 143 14-9.9

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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SIDE VIEW

GENERAL NOTES

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

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 144

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																											

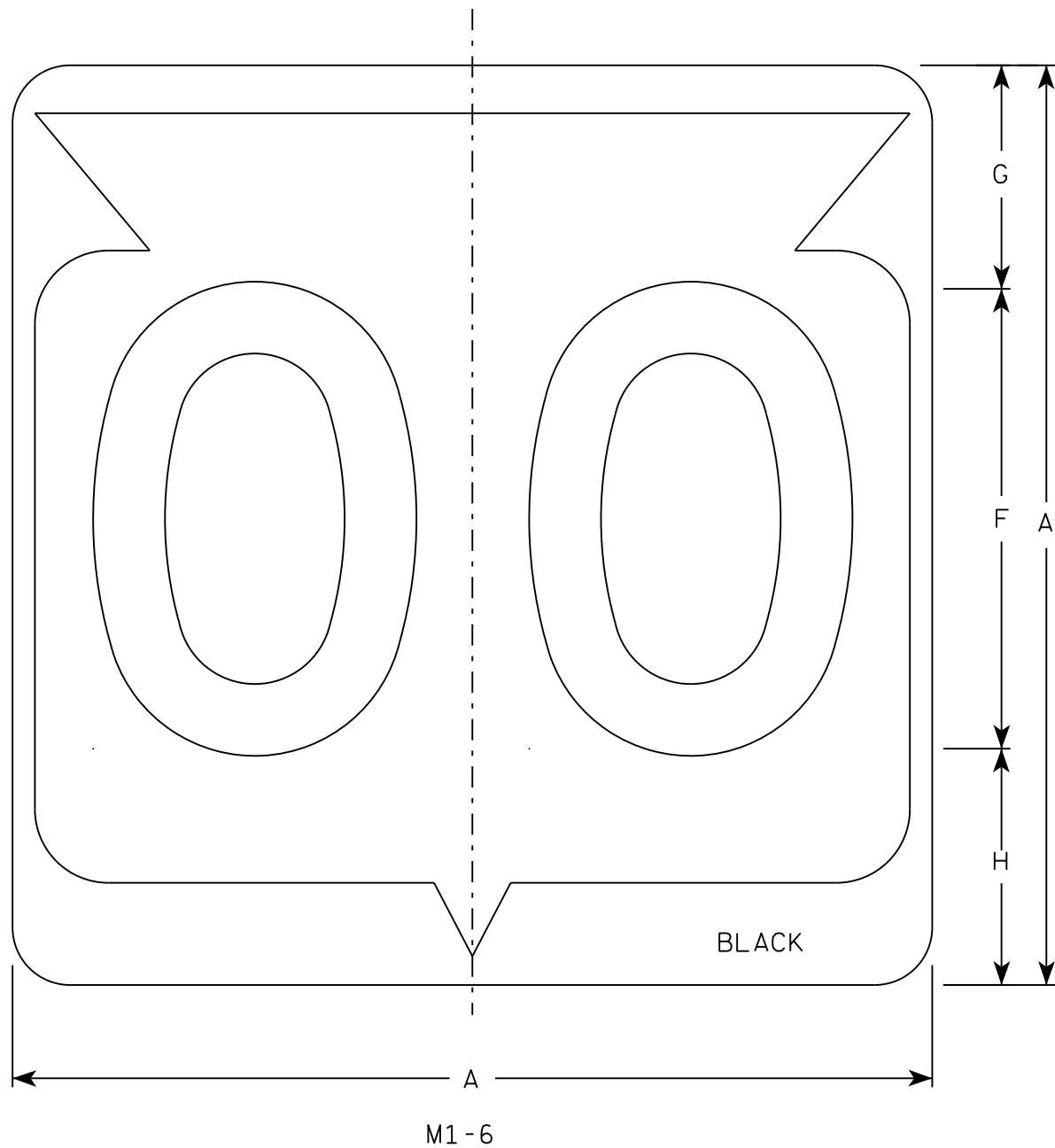
STANDARD SIGN
G20-57

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

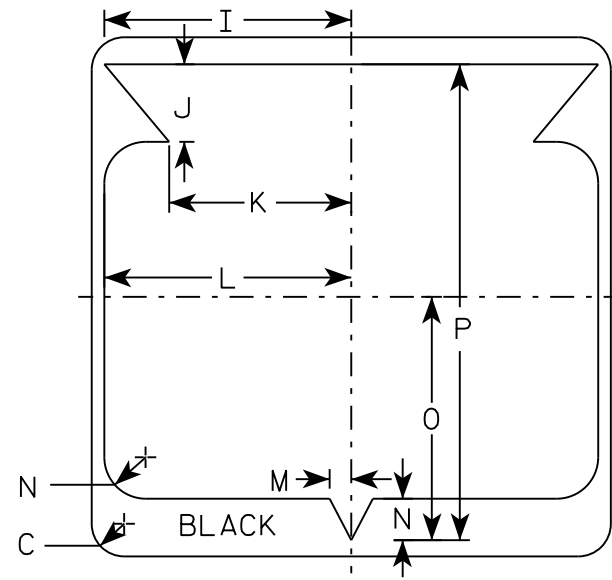
DATE 1/22/19 PLATE NO. G20-57.3

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
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.



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
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

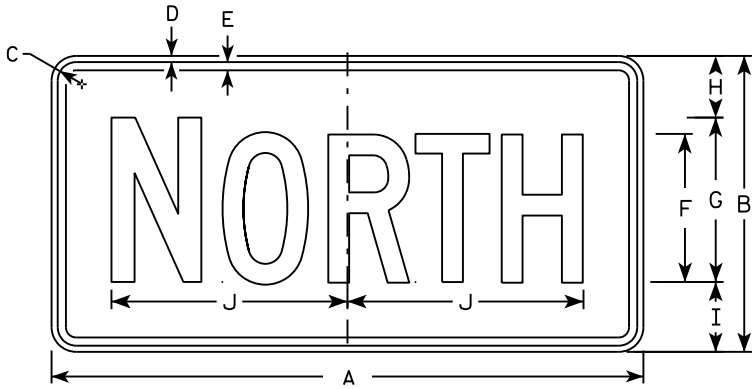
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 146	E
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STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

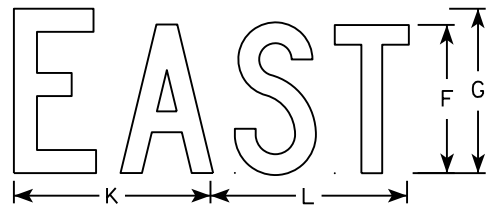
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

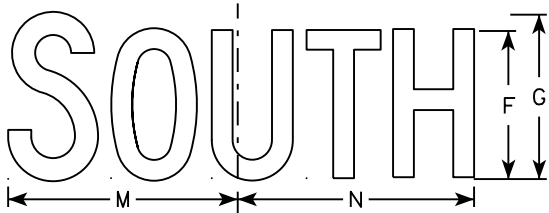
DATE 3/16/18 PLATE NO. M1-6.10



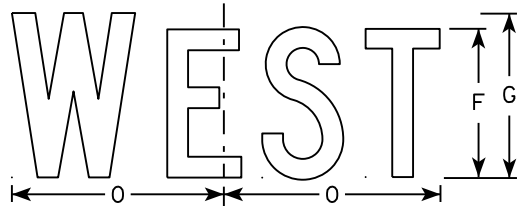
M3-1
MM3-1
MP3-1



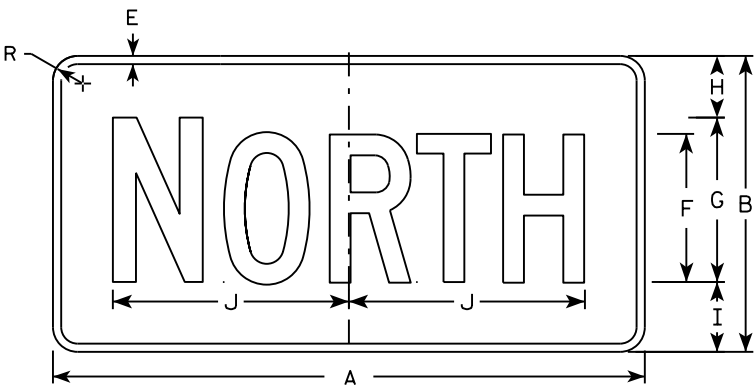
M3-2
MM3-2
MP3-2



M3-3
MM3-3
MP3-3



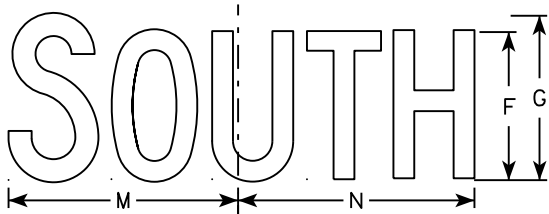
M3-4
MM3-4
MP3-4



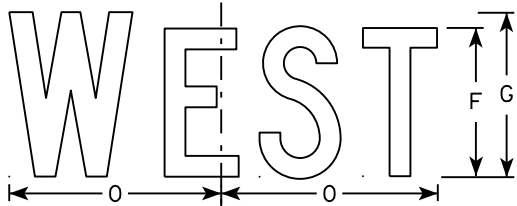
MB3-1
MK3-1
MN3-1



MB3-2
MK3-2
MN3-2



MB3-3
MK3-3
MN3-3



MB3-4
MK3-4
MN3-4

NOTES

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

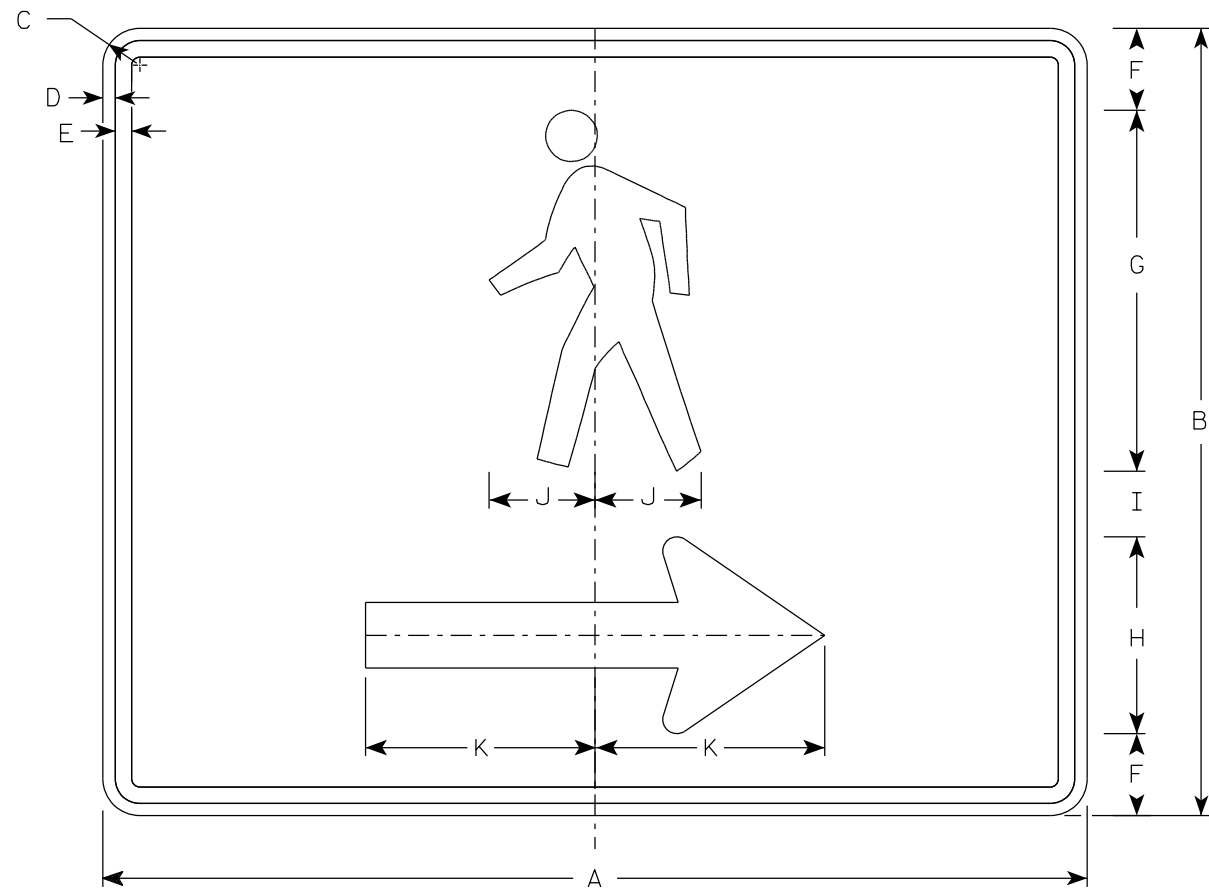
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8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

STANDARD SIGNS
M3-1 thru M3-4
SERIES

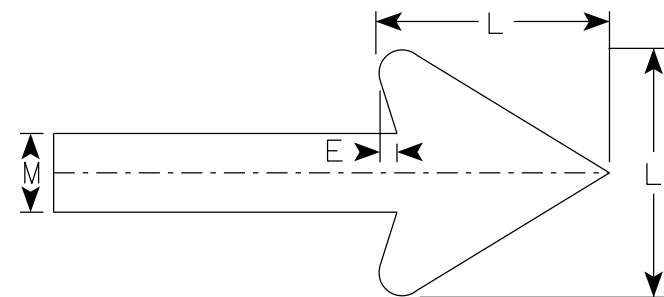
WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. 147 M3-1.14



M4-60R



Arrow Detail

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.

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

PROJECT NO:

HWY:

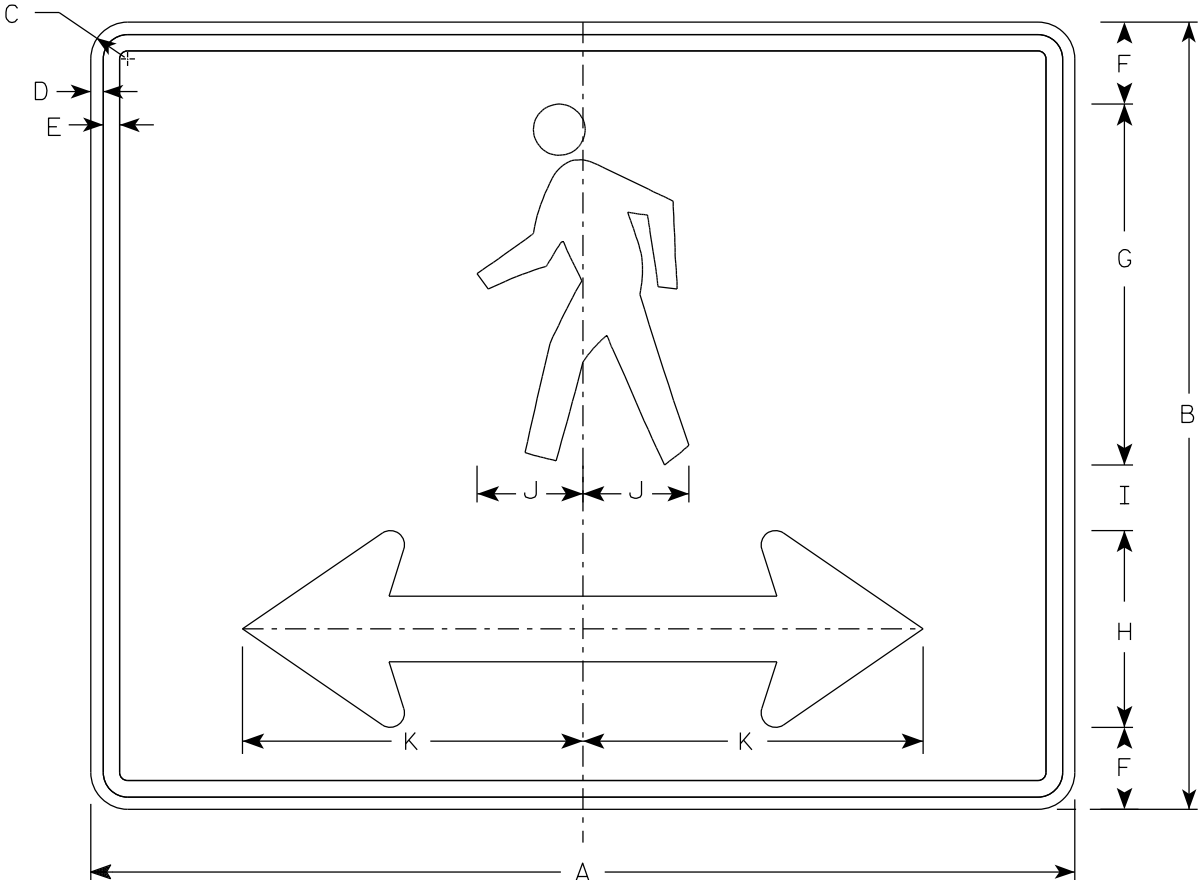
COUNTY:

SHEET NO: 148

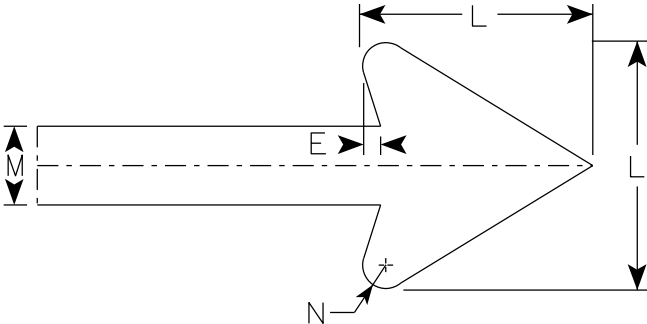
E

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.



M4 - 601



Arrow Data

[illegible]

STANDARD SIGN
M4-60D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/2021 PLATE NO. M4-60D.1

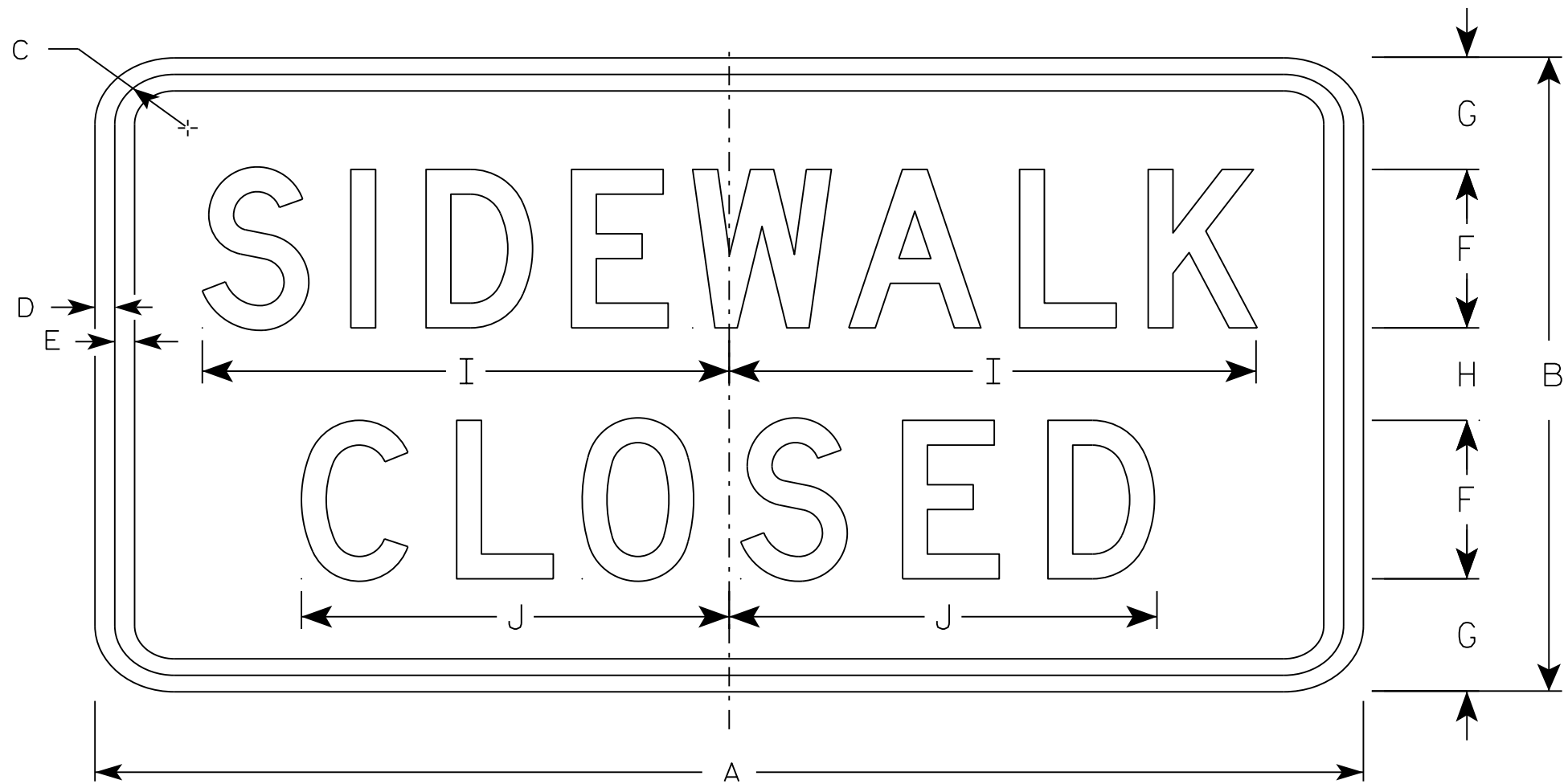
PROJECT NO:

HWY

COUNTY

SHEET NO: 149

E



R9-9

NOTES

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

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 ¾	½	½	3	2 ⅛	1 ¾	10	8 ⅛																	2.0
2M	24	12	1 ¾	½	½	3	2 ⅛	1 ¾	10	8 ⅛																	2.0
3	30	18	1 ¾	½	½	4	3 ½	3	12 ½	10 ¼																	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 8/11/16 PLATE 150 R9-9.6

- NOTES
1. Sign is Type II - Type H Reflective

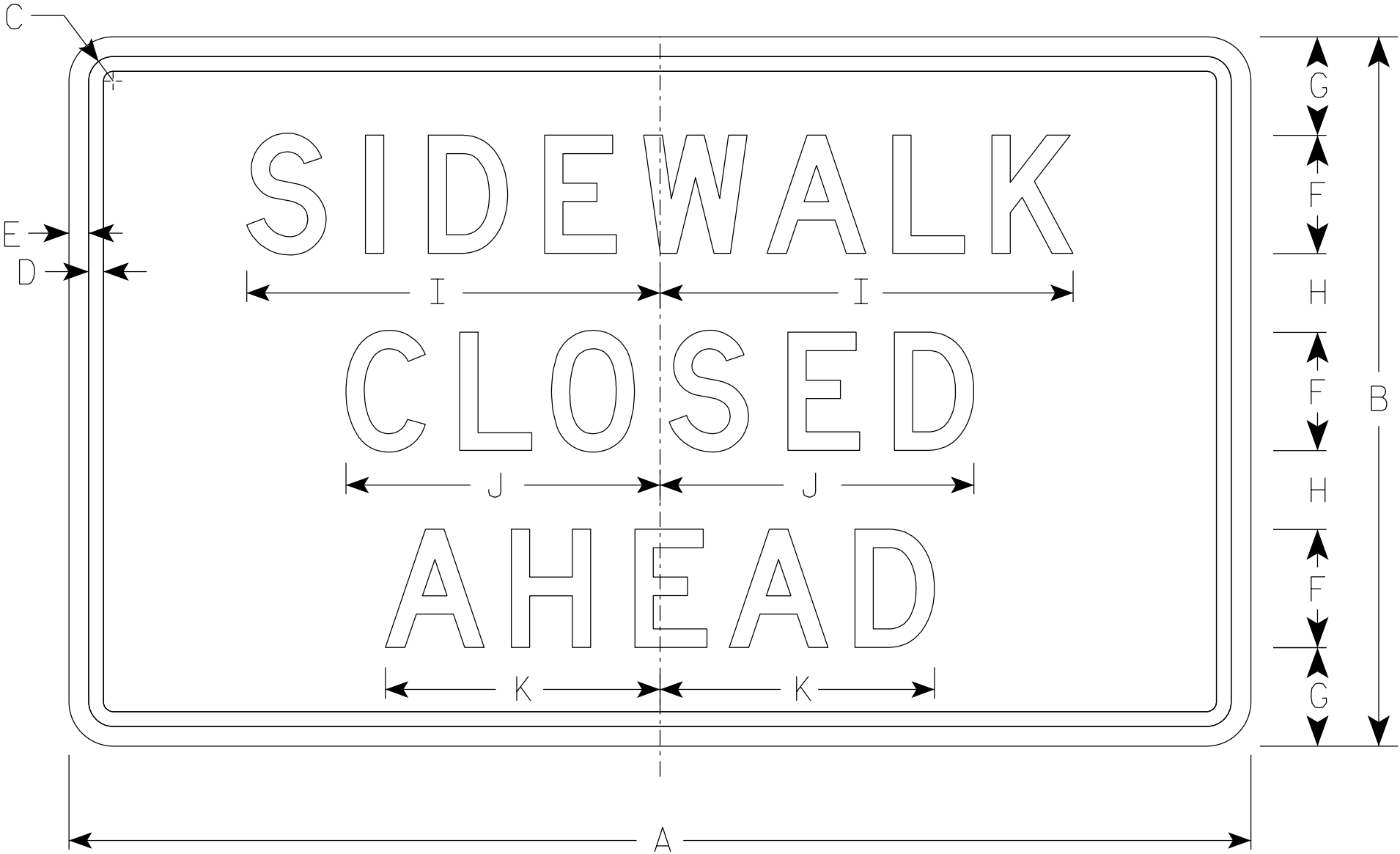
2. Color:

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.



R9-9A

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 1/8	3/8	1/2	3	2 1/2	2	10 1/2	8	7																3.75
2M	30	18	1 1/8	3/8	1/2	3	2 1/2	2	10 1/2	8	7																3.75
3																											
4																											
5																											

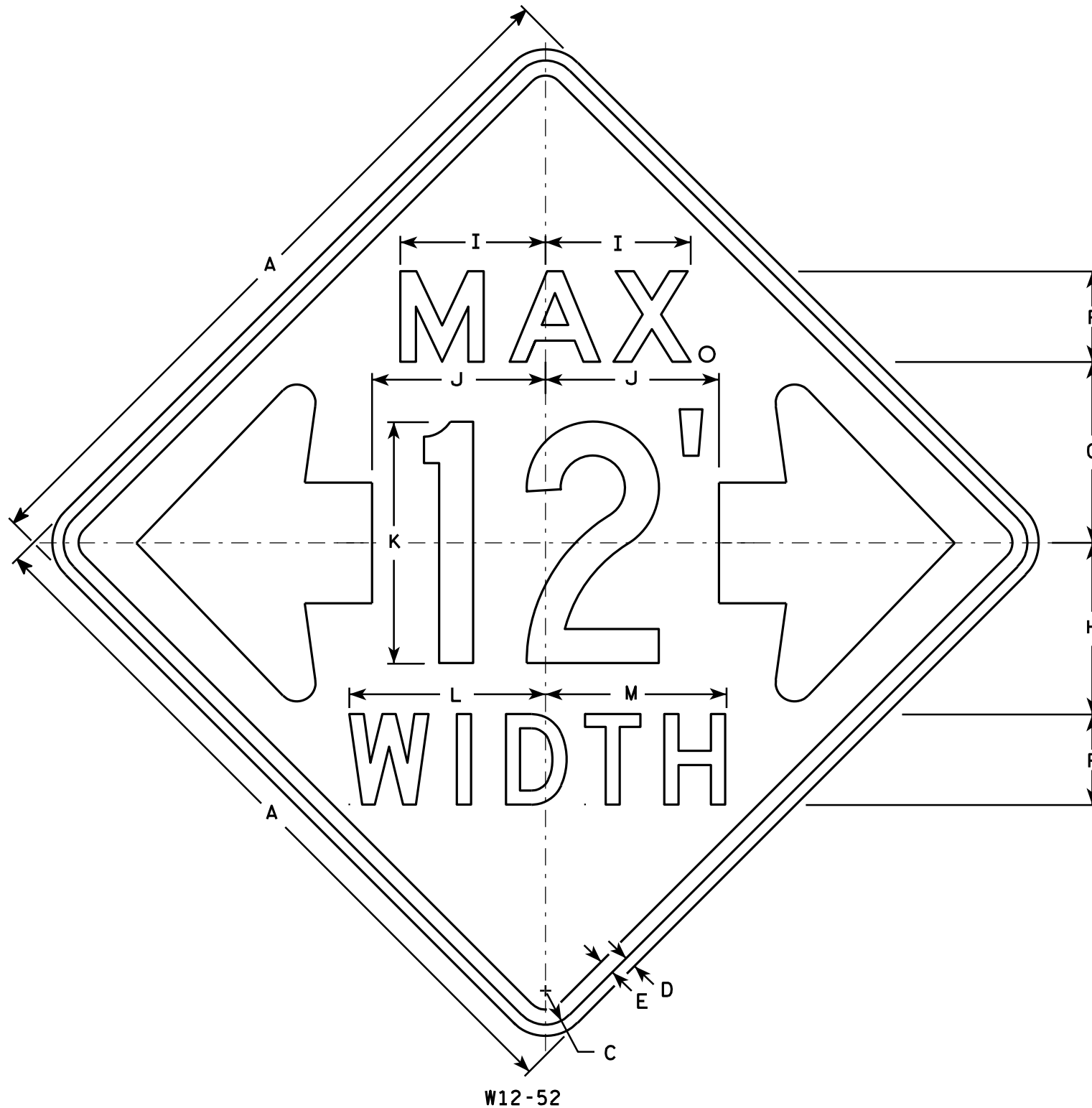
PROJECT NO:

HWY:

COUNTY:

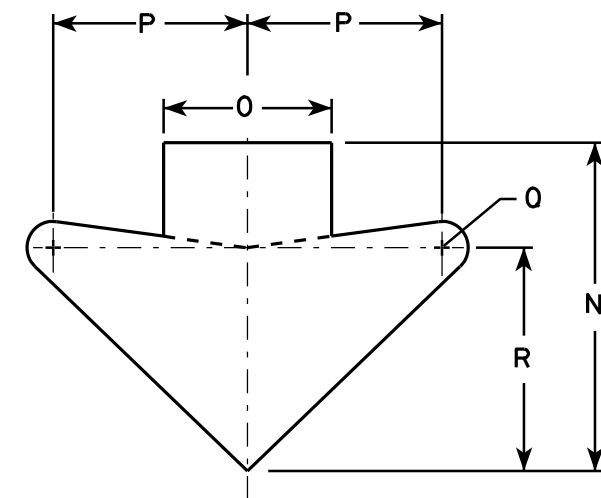
SHEET NO: 151

E



NOTES

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Orange
Message - Black
- Message Series - See note 5
- 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.
- The top line is series E, the numerals are series C, and the bottom line is series D.
- 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		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
2M	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
3																											
4																											
5																											

STANDARD SIGN W12-52

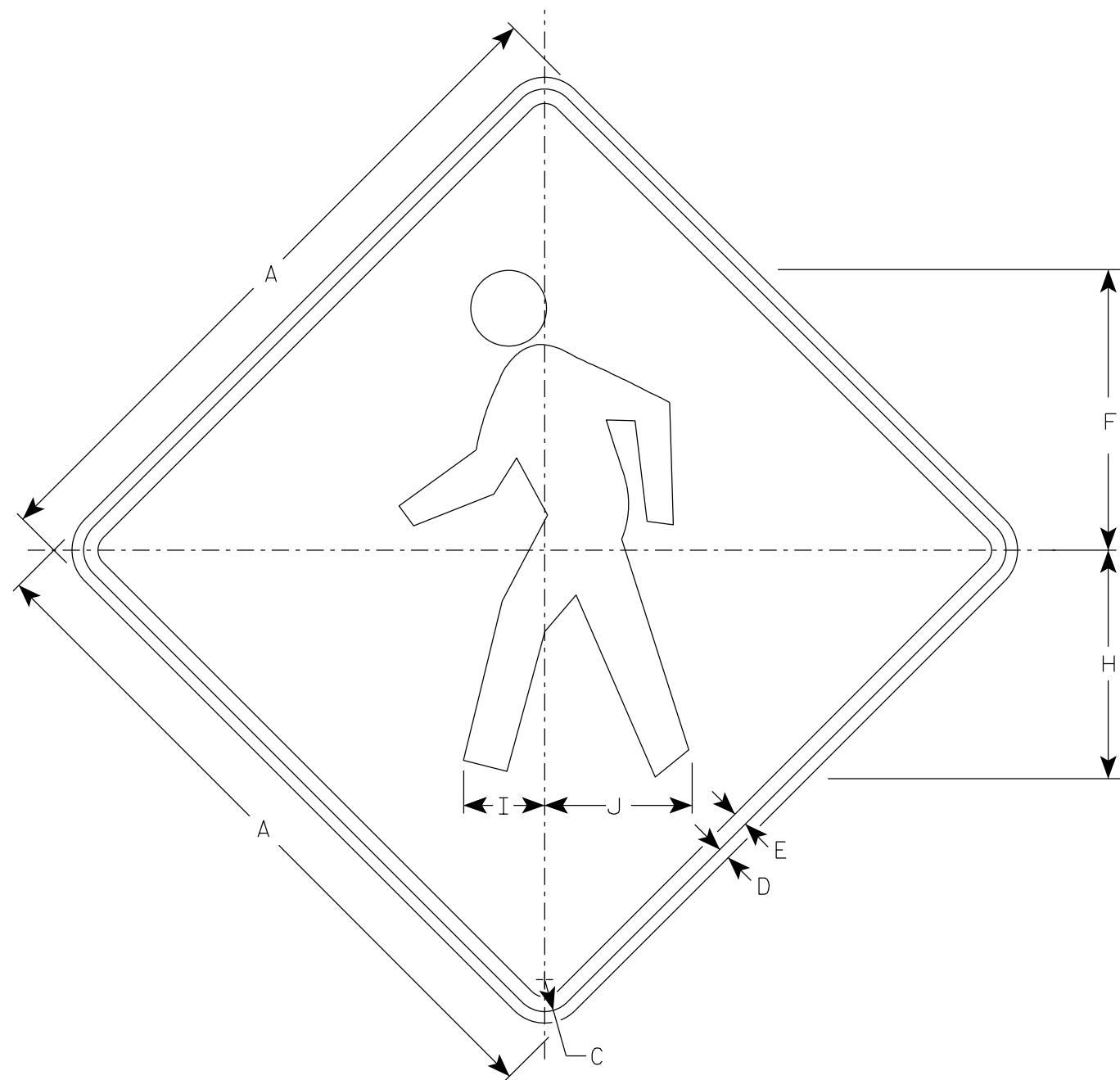
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/16/11 PLATE NO. W12-52.7

PROJECT NO: HWY: COUNTY: SHEET NO: 152 E

7



W011-2

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	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
2S	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
2M	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
3	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
4	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

STANDARD SIGN
W011-2

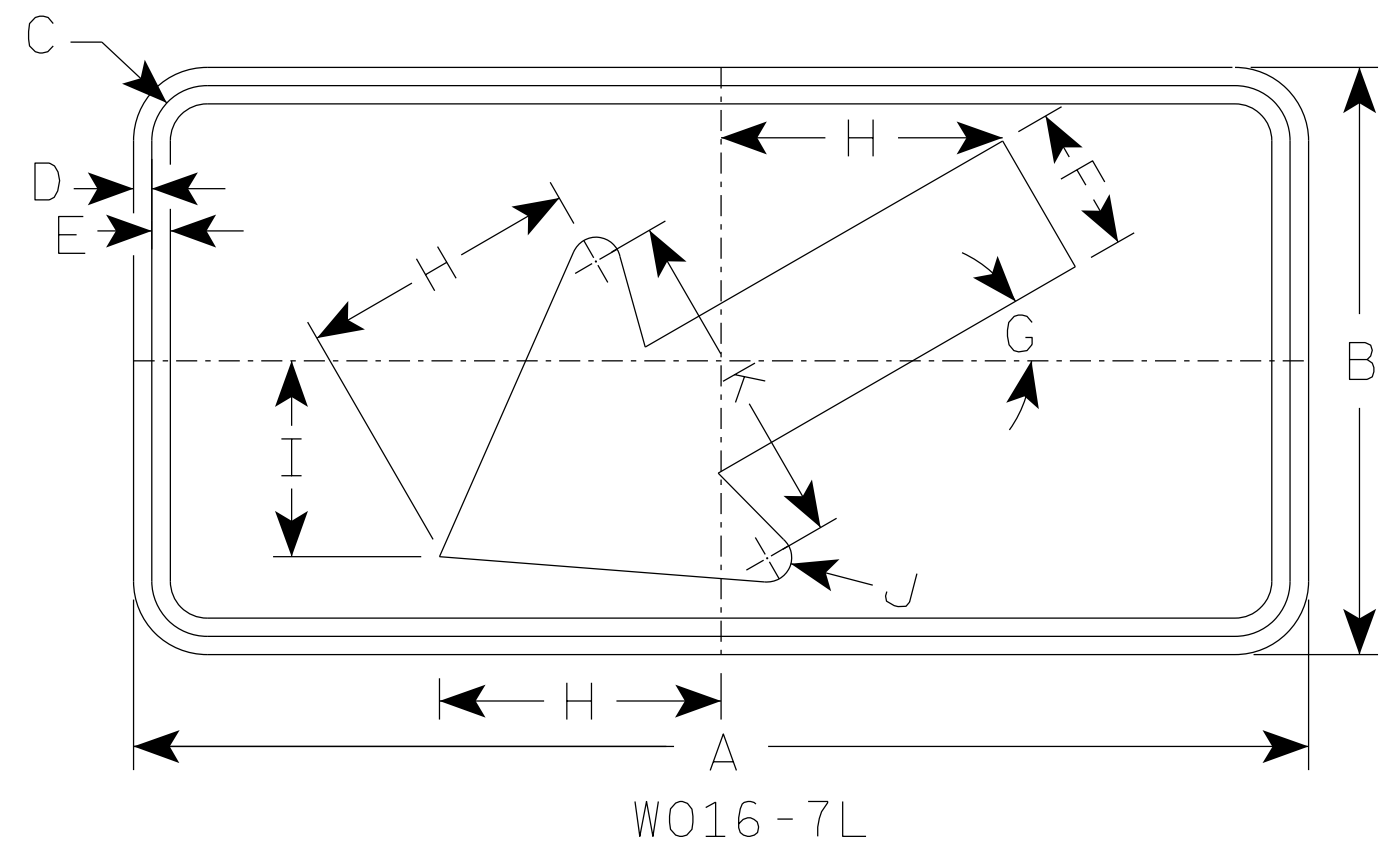
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/8/2020 PLATE NO. W011-2.1

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 153												E
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7



NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Orange
Message - Black
- 3. Corners may be square or rounded but corners shall be rounded when base material is metal.
- 4. W016-7R is the same as W016-L except the arrow is reversed along the vertical centerline.

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	30	18	1 1/8	3/8	1/2	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2S	48	24	1 3/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
2M	48	24	1 3/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
3	48	24	1 3/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
4	48	24	1 3/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
5	48	24	1 3/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 154

E

STANDARD SIGN
W016-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/16/2021 PLATE NO. W016-7.2

7



W016-9P

NOTES

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

7

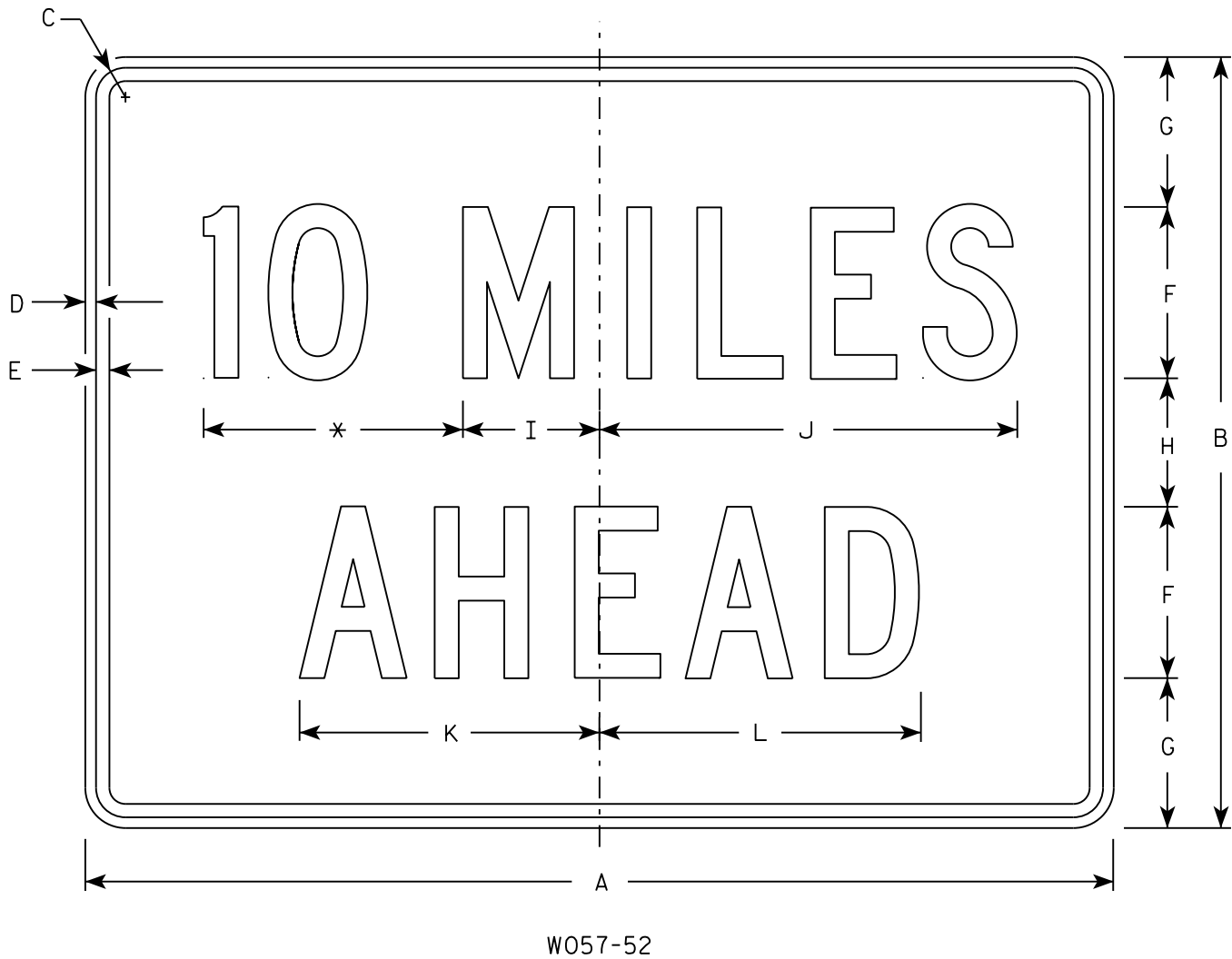
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
2S	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
2M	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
3	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4		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

STANDARD SIGN
W016-9P

WISCONSIN DEPT OF TRANSPORTATION

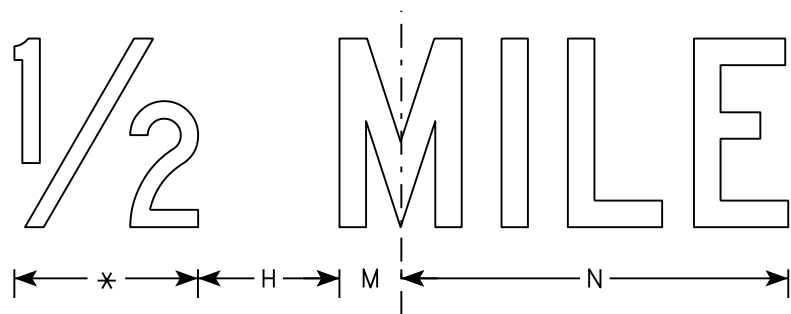
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/1/19 PLATE NO. W016-9P.7



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.



* See note 5

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 1/8	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	1 3/8	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	1 3/8	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	1 3/8	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	1 3/8	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	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0

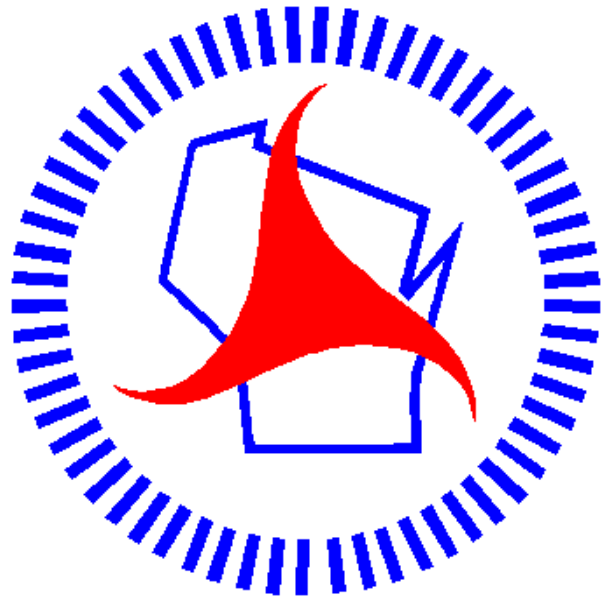
STANDARD SIGN
W057-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W057-52.2

Notes



Wisconsin Department of Transportation

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