

ABBREVIATIONS

A.A.D.T.	ANNUAL AVERAGE DAILY TRAFFIC
B.A.D.	BASE AGGREGATE DENSE
C/L	CENTERLINE
C.P.S.	CULVERT PIPE STEEL
C.S.C.P.	CORRUGATED STEEL CULVERT PIPE
CY	CUBIC YARD
D.D.	DAILY DIRECTIONAL SPLIT (TRAFFIC VOLUME)
D.H.V.	DAILY HOURLY TRAFFIC
E.A.T.	ENERGY ABSORBING TERMINAL
EL.	ELEVATION
ESALS	EQUIVALENT SINGLE AXLE LOADS
FE	FIELD ENTRANCE
FO	FIBER OPTIC
INV.	INVERT
LB	POUND
LF	LINEAR FEET
LT.	LEFT
MAX.	MAXIMUM
MGS	MIDWEST GUARDRAIL SYSTEM
MIN.	MINIMUM
NOR.	NORMAL
NPZ	NO PASSING ZONE
OH	OVERHEAD
P.E.	PRIVATE ENTRANCE
P.I.	POINT OF INTERSECTION
PRW	PROPOSED RIGHT OF WAY
R	RADIUS
REQ'D	REQUIRED
R/L	REFERENCE LINE
RT.	RIGHT
RW	RIGHT OF WAY
S.D.D.	STANDARD DETAIL DRAWING
SE	SUPERELEVATION
STA.	STATION
SF	SQUARE FOOT
STH	STATE HIGHWAY
SY	SQUARE YARD
T.	PERCENT OF TRUCK TRAFFIC
TLE	TEMPORARY LIMITED EASEMENT
TYP.	TYPICAL
VAR.	VARIES

UTILITY CONTACTS

ALLIANT ENERGY - ELECTRIC
ADAM KROHN
6462 BLANCHAR'S CROSSING
WINDSOR, WI 53598
(608) 842-1705
CELL: (920) 290-5284
adamkrohn@alliantenergy.com

CHARTER COMMUNICATIONS - COMM
JOHN ARNESON
(608) 225-4206
construction@crosscountrycable.com

EVERSTREAM - COMM
JIM SAGAITIS
324 E. WISCONSIN AVE, SUITE 730
MILWAUKEE, WI 53202
(608) 201-5586
jsagaitis@everstream.net

FRONTIER COMMUNICATIONS - COMM
TIANDRA HAYES
(214) 791-0492
thayes@pearce-services.com

SUN PRAIRIE UTILITIES - ELECTRIC,
SANITARY, WATER
KARL DAHL
125 W. MAIN STREET
SUN PRAIRIE, WI 53590
(608) 837-5500
kdahl@myspu.org

TDS - COMM
MICHAEL SCHNEIDER
525 JUNCTION ROAD
MADISON, WI 53717
(262) 828-9451
michael.schneider@tdstelecom.com

VERIZON - COMM
RANDOLPH J. CICAELLO, JR.
15725 W RYERSON ROAD
NEW BERLIN, WI 53151
(262) 232-1323
randy.cicatello@verizon.com

WE ENERGIES - GAS/PETROLEUM
JASON DODGE
500 S 116th STREET
WEST ALLIS, WI 53214
(414) 944-5507
jason.dodge@we-energies.com

GENERAL NOTES

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

THE LOCATION OF EXISTING UTILITY INSTALLATIONS AS SHOWN IN THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

UTILITY REFERENCE LINES ON THE CROSS SECTIONS ARE FOR APPROXIMATE HORIZONTAL REFERENCE ONLY.

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

EROSION CONTROL FEATURES AS SHOWN IN THE PLANS ARE AT SUGGESTED LOCATIONS. THE ENGINEER MAY MODIFY LOCATIONS AS NEEDED. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

DISTURBED AREAS WITHIN THE RIGHT OF WAY SHALL BE RESTORED AS DIRECTED BY THE ENGINEER.

RADIUS DIMENSIONS FOR CURB AND GUTTER ARE TO THE FLANGE LINE UNLESS OTHERWISE NOTED.

A SAWED JOINT WILL BE REQUIRED WHERE NEW PAVEMENT IS TO MEET AN EXISTING PAVED SURFACE.

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

ALL GRADES PROVIDED ALONG RADII ARE ALONG THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

ORDER OF DETAIL SHEETS

- GENERAL NOTES
- PROJECT OVERVIEW
- TYPICAL SECTIONS
- CONSTRUCTION DETAILS
- REMOVAL PLANS
- PLAN DETAILS
- CURB RAMP DETAILS
- JOINT DETAILS
- EROSION CONTROL PLANS
- STORM SEWER PLANS
- PERMANENT SIGNING/PAVEMENT MARKING PLAN
- TRAFFIC SIGNAL PLANS
- TRAFFIC CONTROL PLANS
- ALIGNMENT DIAGRAM

ALIGNMENT IDENTIFIERS

MW	MAIN STREET AT WALKER WAY
W	WALKER WAY
MB	MAIN STREET AT BIRD STREET
BM	BIRD STREET AT MAIN STREET
BL	BIRD STREET AT LINNERUD DRIVE
L	LINNERUD DRIVE



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RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = 1.4 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.5 ACRES

DESIGN CONTACT

KEVIN WEHNER, P.E.
KL ENGINEERING, INC.
5400 KING JAMES WAY SUITE 200
MADISON, WI 53719
(608) 663-1218
kwehner@klengineering.com

WISDOT

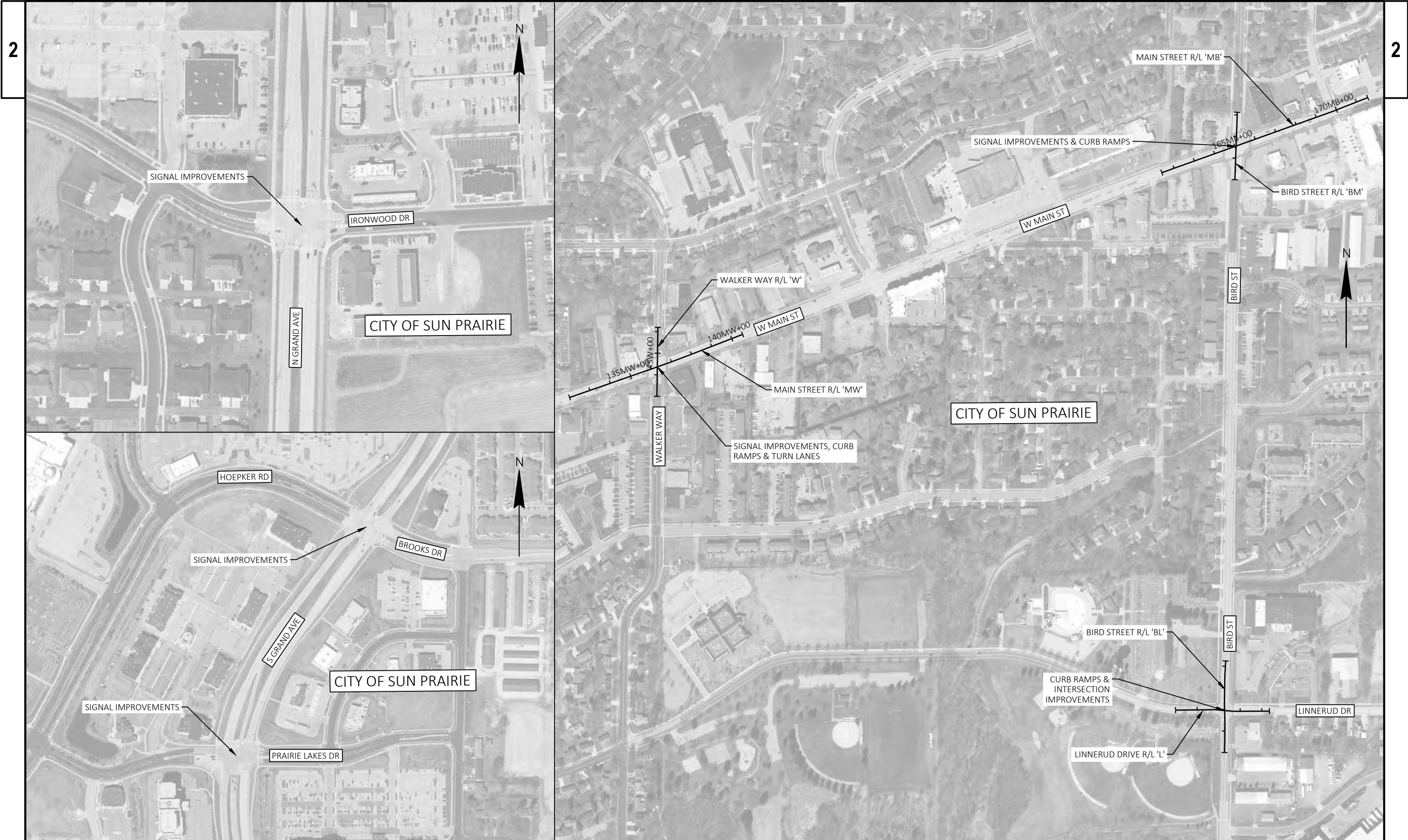
ZACHARY PEARSON, P.E.
WISDOT
2101 WRIGHT ST
MADISON WI 53704
(608) 246-5319
zachary.pearson@dot.wi.gov

DNR LIASON

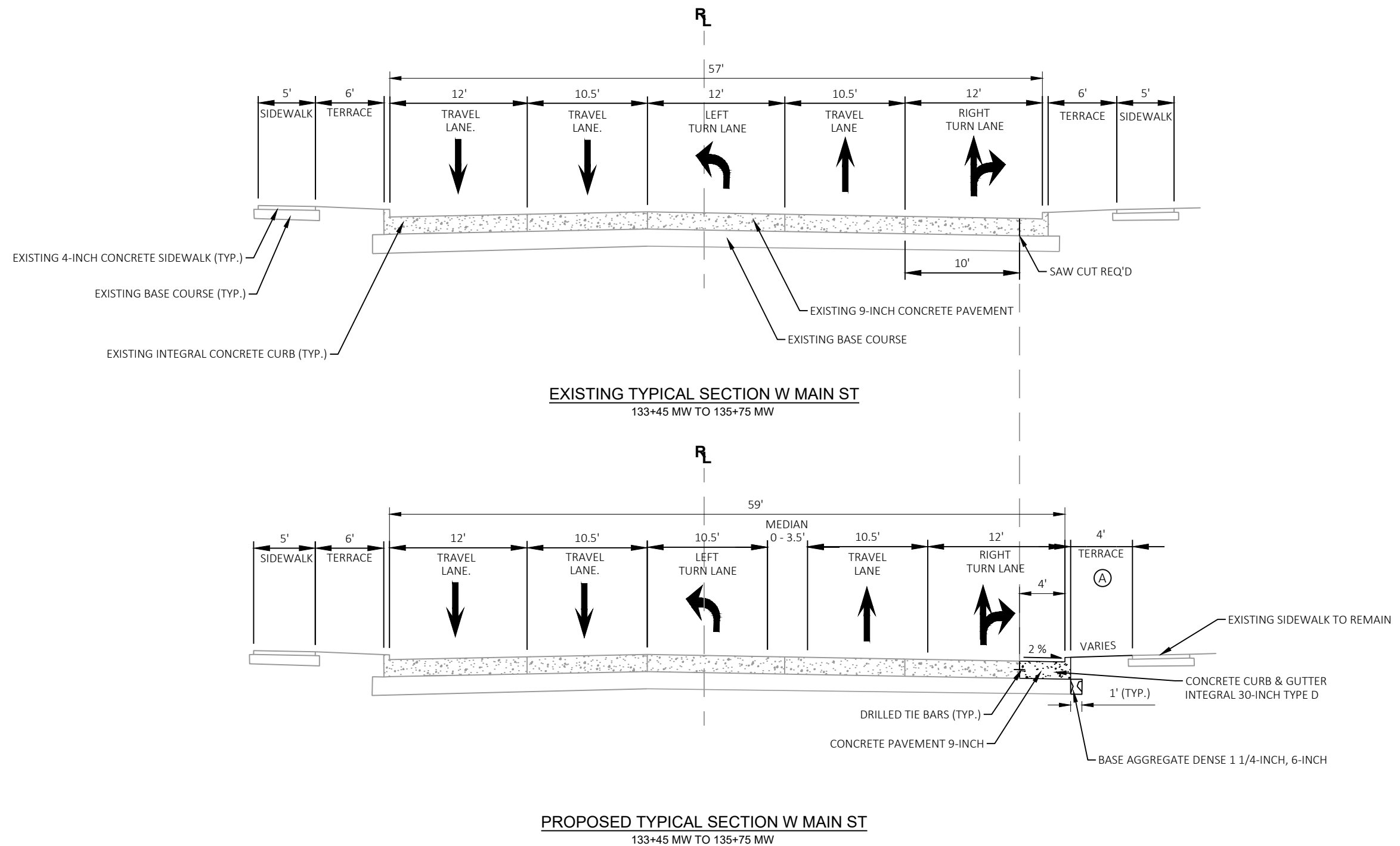
ERIC HEGGELUND
WDNR
3911 FISH HATCHERY ROAD
FITCHBURG WI 53711
(608) 275-3301
eric.heggelund@wisconsin.gov

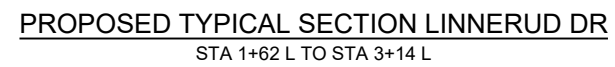
LOCAL CONTACT

ADAM SCHLEICHER
CITY OF SUN PRAIRIE
200 E MAIN STREET
SUN PRAIRIE, WI 53590
(608) 825-1170
aschleicher@cityofsunprairie.com

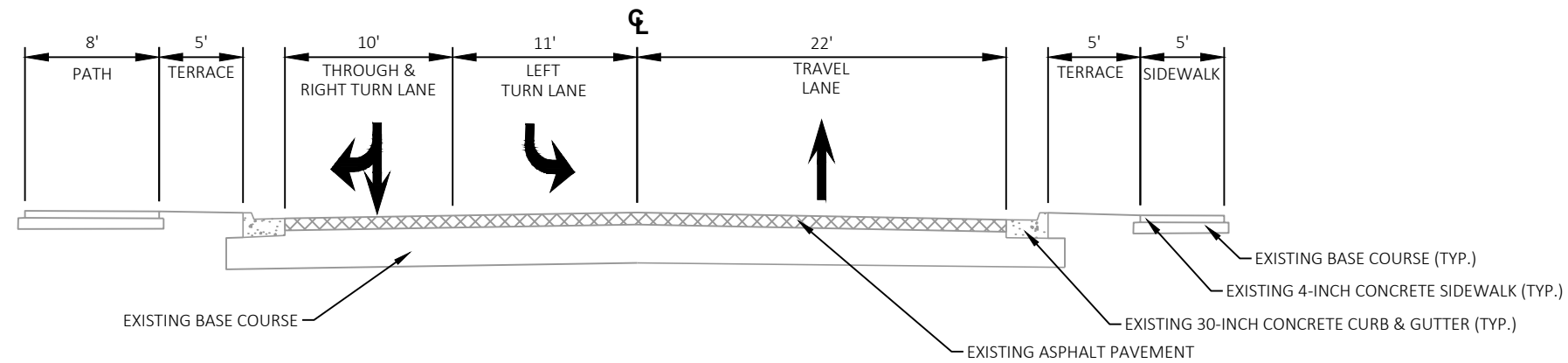


(A) TOPSOIL, EROSION MAT URBAN
CLASS I TYPE A, FERTILIZER TYPE B,
AND SEEDING MIXTURE NO. 40

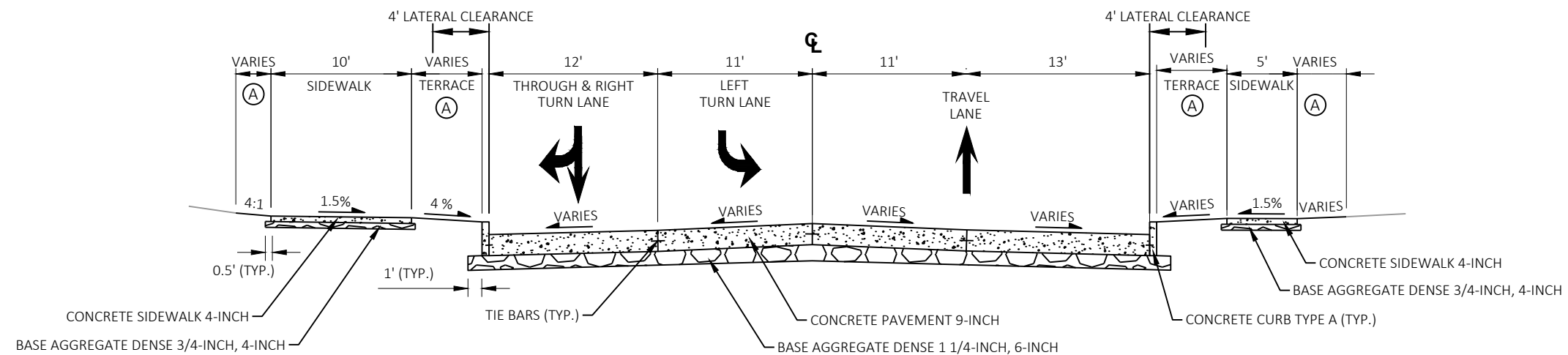




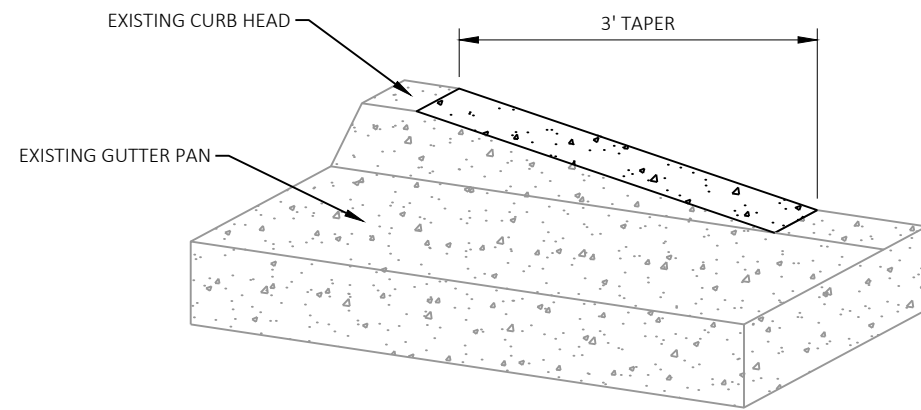
(A) TOPSOIL, EROSION MAT URBAN
CLASS I TYPE A, FERTILIZER TYPE B,
AND SEEDING MIXTURE NO. 40



EXISTING TYPICAL SECTION S BIRD ST
STA 1+35 BL TO STA 2+66 BL

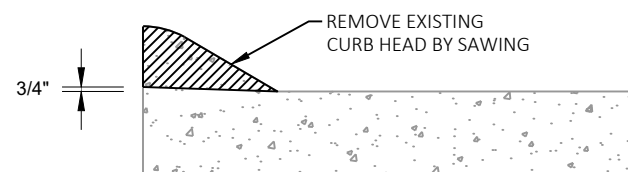


PROPOSED TYPICAL SECTION S BIRD ST
STA 1+35 BL TO STA 2+66 BL

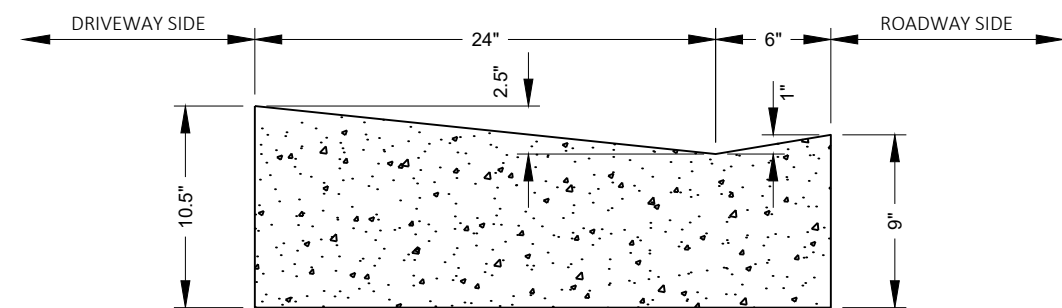


SAWING CURB HEAD TAPER
ISOMETRIC VIEW

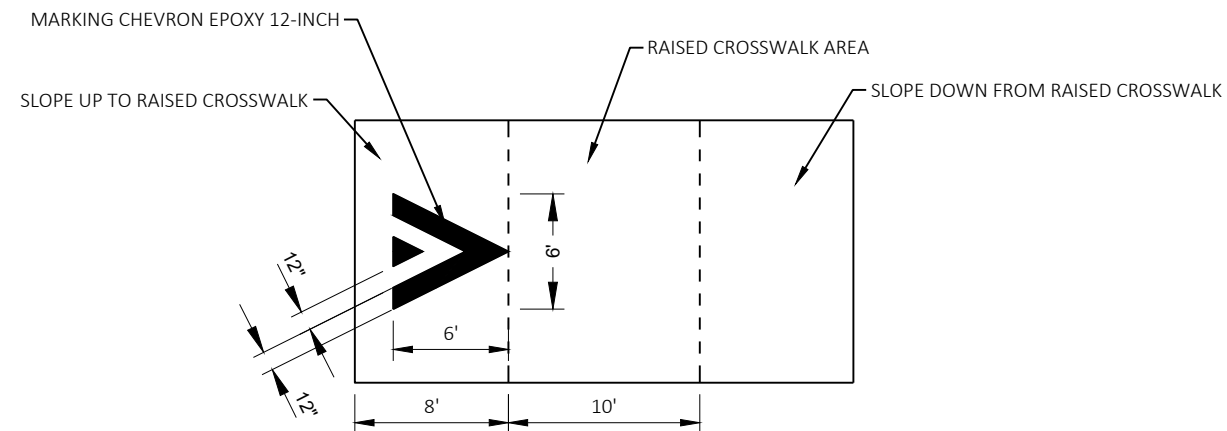
NOTE: PROFILE CUT EXISTING CURB HEAD TO MEET CURB HEAD TAPER SEE CURB RAMP SDD.



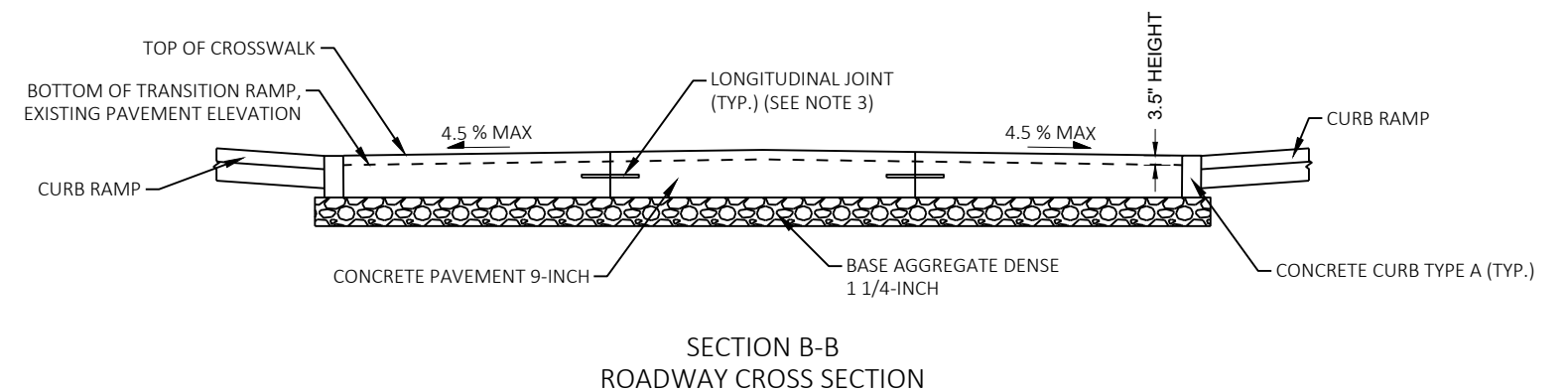
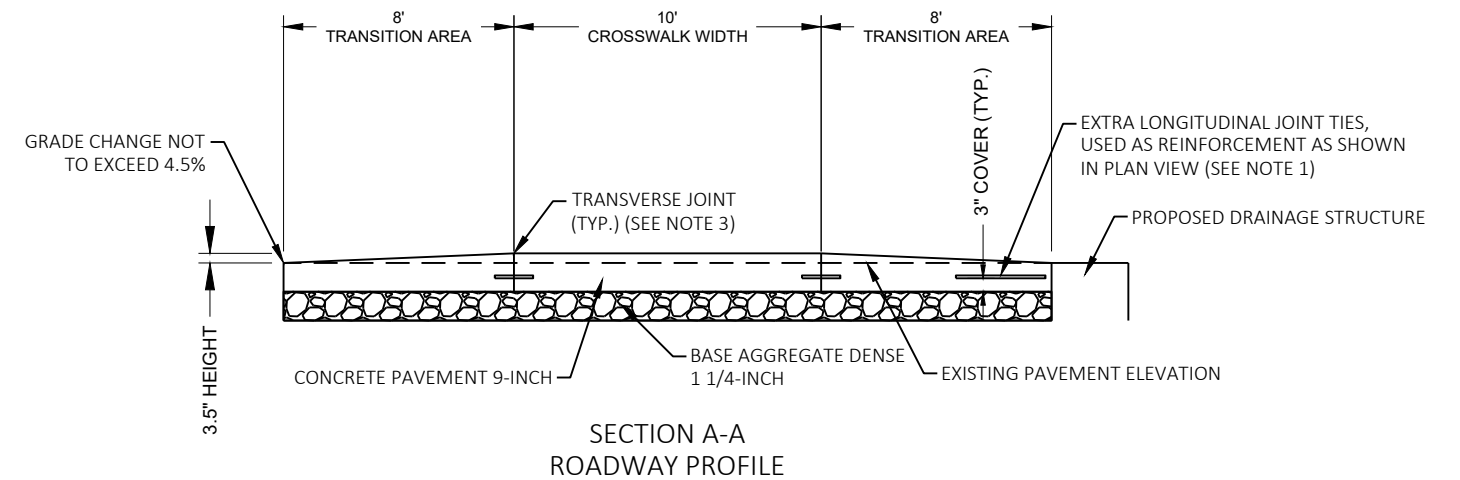
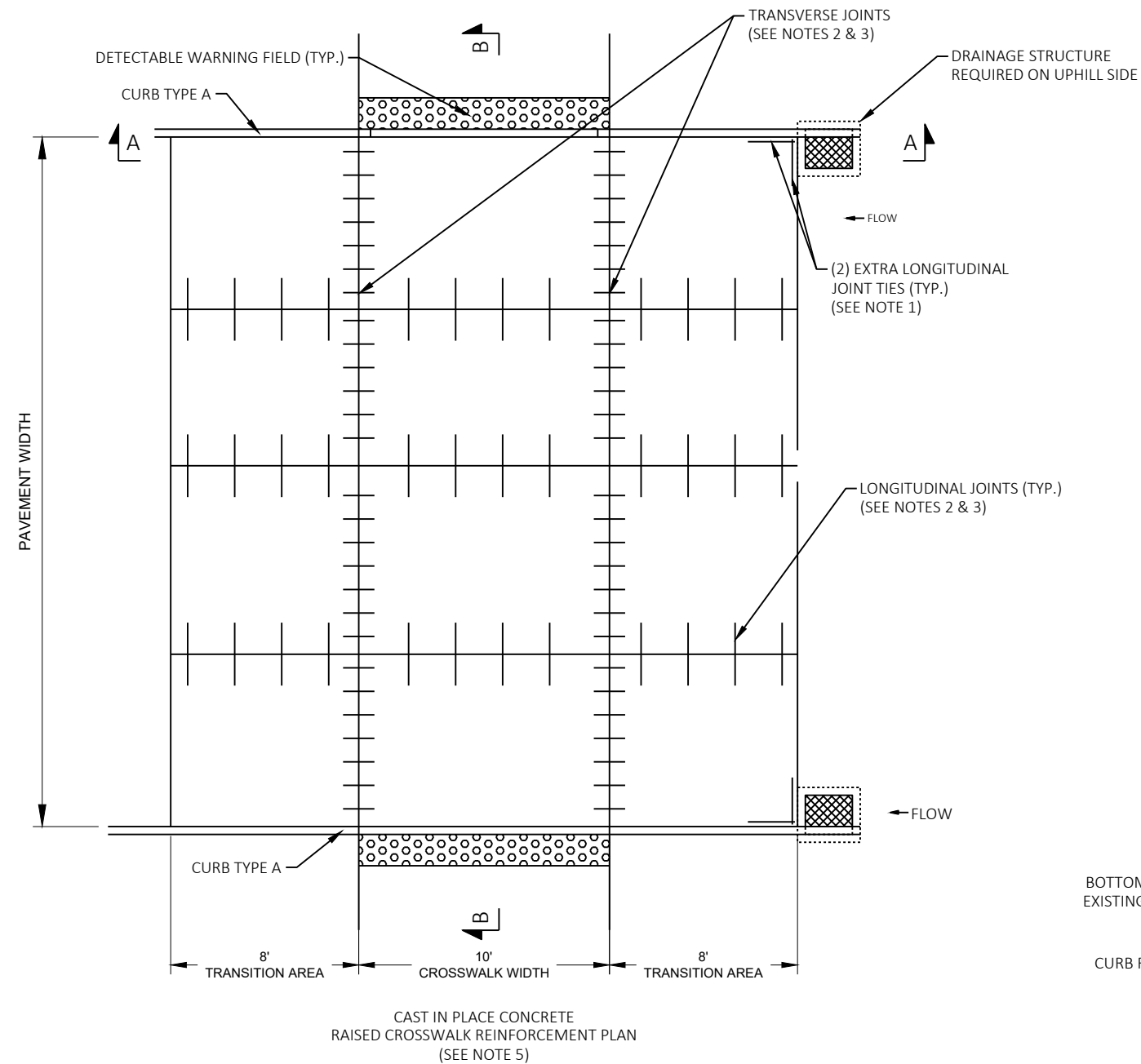
SAWING CURB HEAD



CONCRETE CURB & GUTTER TYPE X
DRIVEWAY WITH INTEGRAL CURB & GUTTER AT STA 133+75 MW



MARKINGS FOR RAISED CROSSWALK



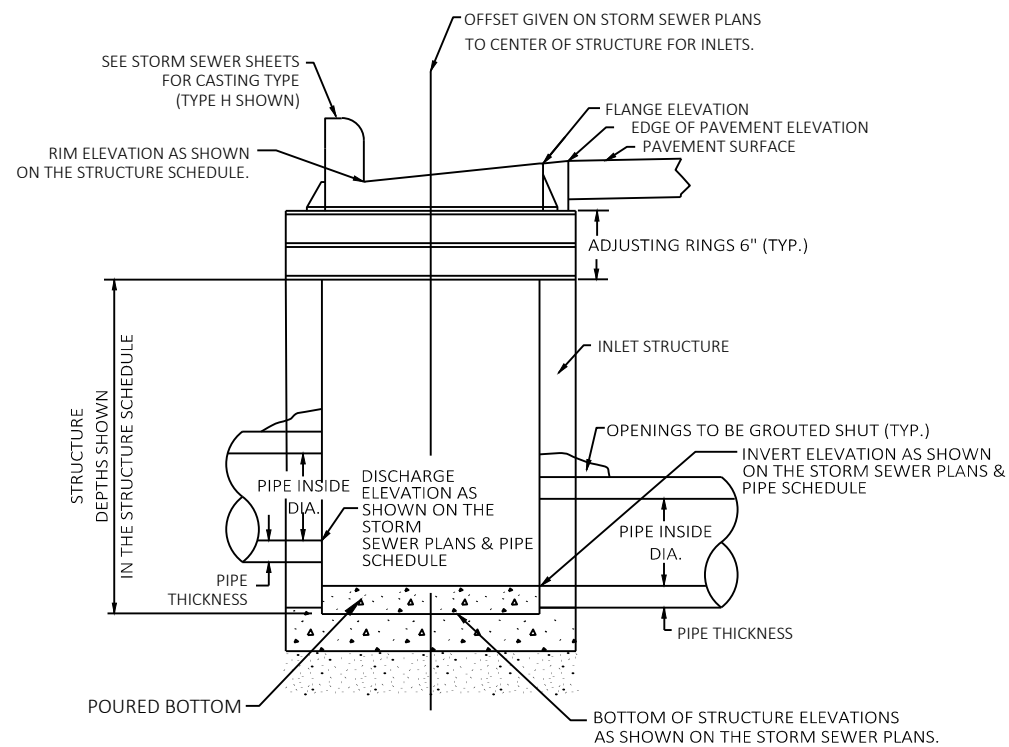
NOTES:

1. EXTRA LONGITUDINAL JOINT TIES, USED AS REINFORCEMENT, ARE NEEDED ONLY WHEN DRAINAGE STRUCTURES ARE PRESENT.
2. SEE SDD FOR PROPER DOWEL BAR/TIE BAR SPACING.
3. SEE SDD FOR LONGITUDINAL AND TRANSVERSE JOINT DETAILS.
4. EXTRA THICKNESS OF CONCRETE REQUIRED FOR RAISED CROSS WALK PAID AS CONCRETE PAVEMENT 9-INCH
5. SEE CURB RAMP DETAIL SHEETS

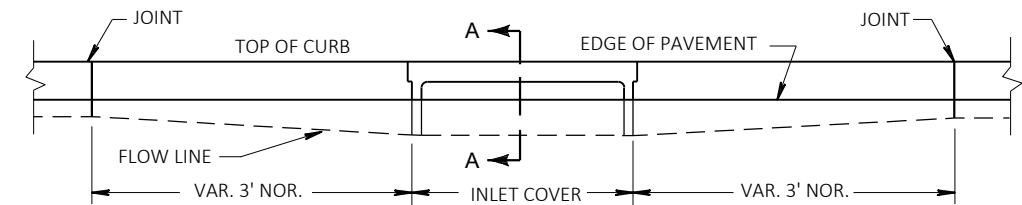
GENERAL NOTES:

GRANULAR BACKFILL REQUIRED AROUND INLET (INCIDENTAL TO CONSTRUCTION OF INLET)

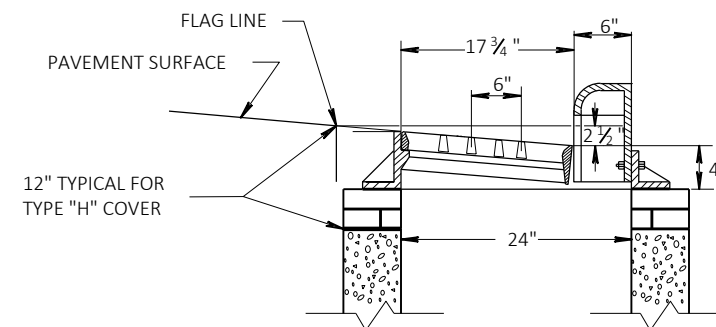
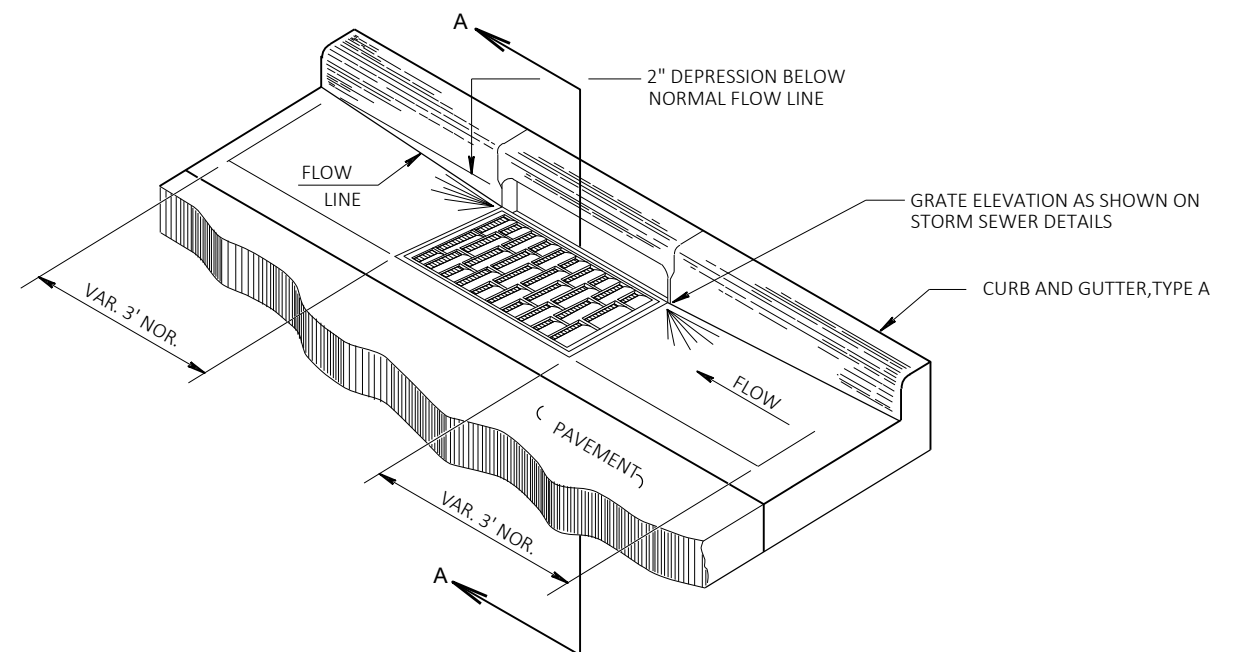
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, APPLICABLE SPECIAL PROVISIONS, AND WISDOT S.D.D. FOR INLETS.



DETAIL OF INLET W/CASTING

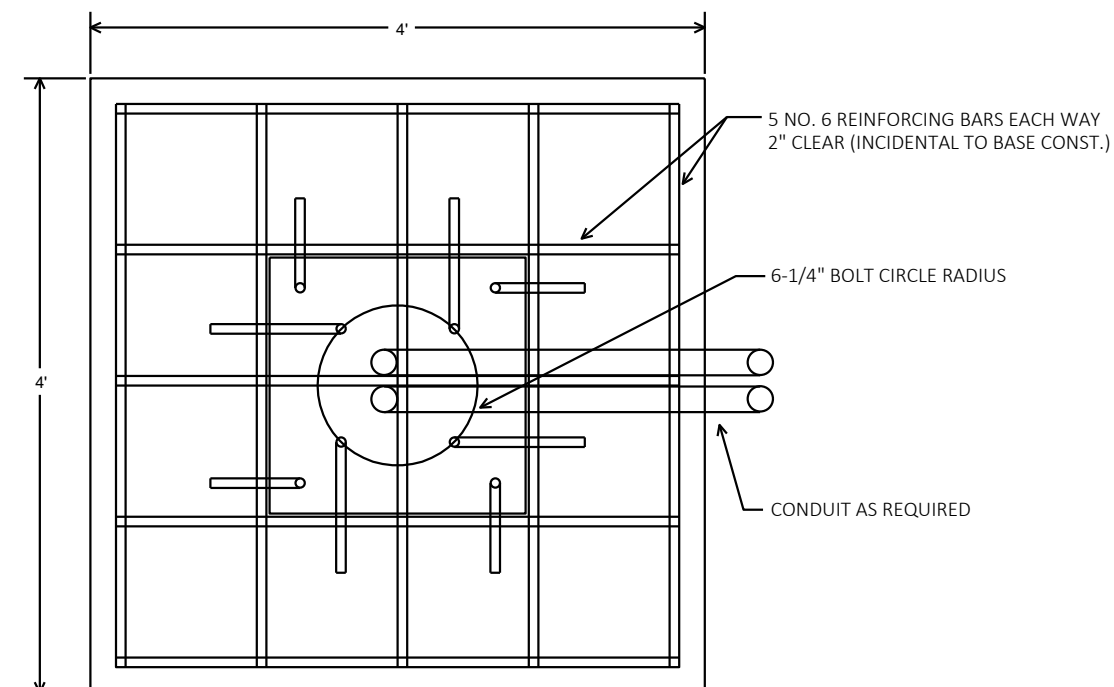
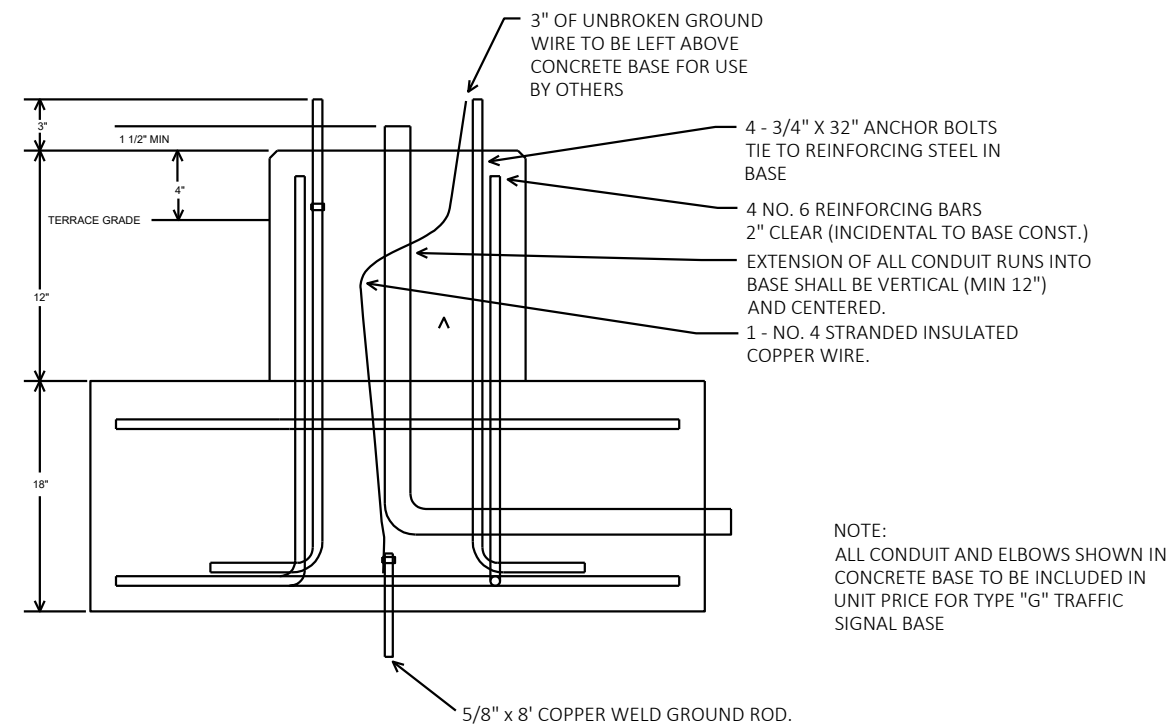


ELEVATION

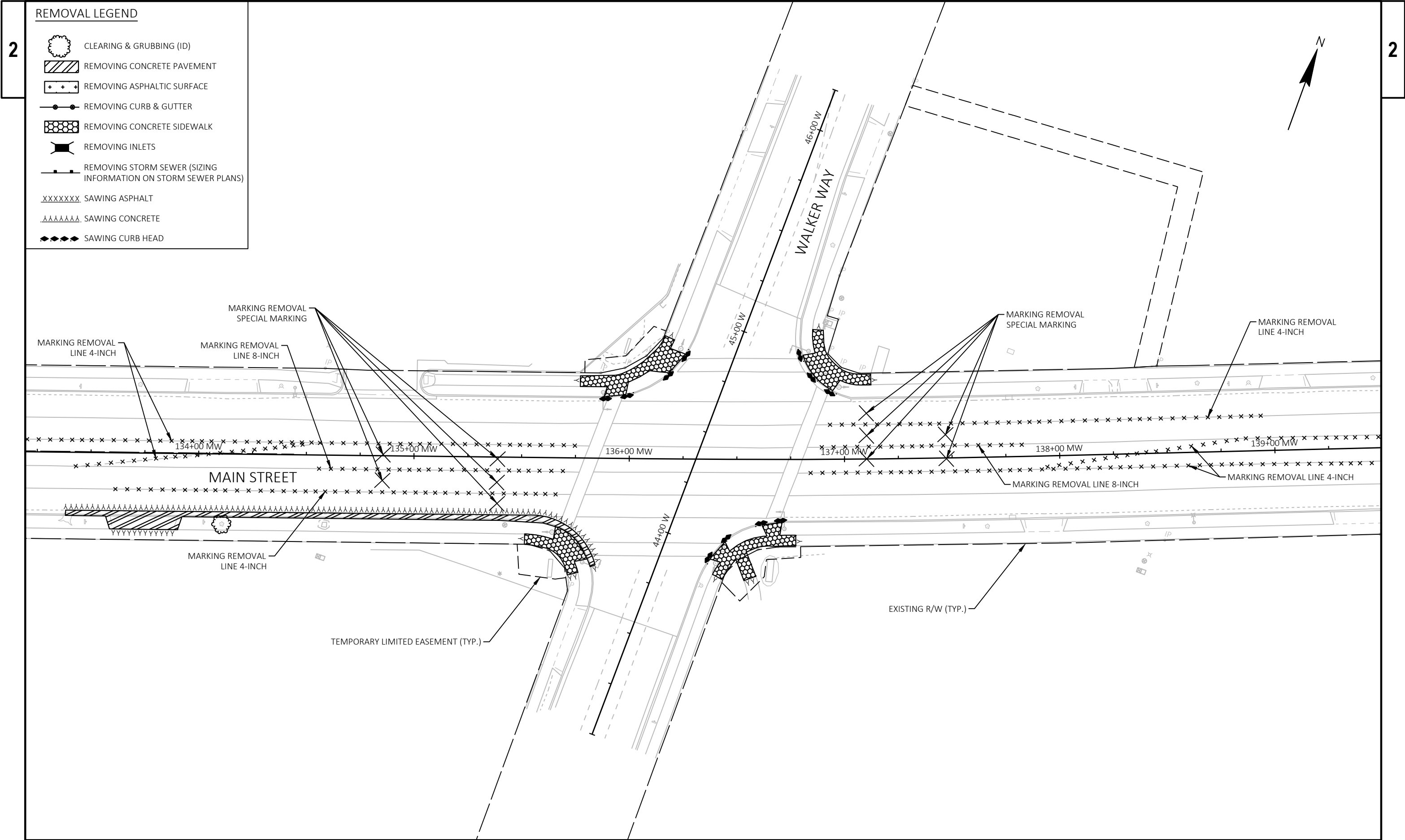


SECTION A-A

DETAIL OF CURB AND GUTTER AT INLETS
(TYPE 3-H INLET SHOWN)



CONCRETE BASES TYPE 1 SPREAD FOOTING DETAIL

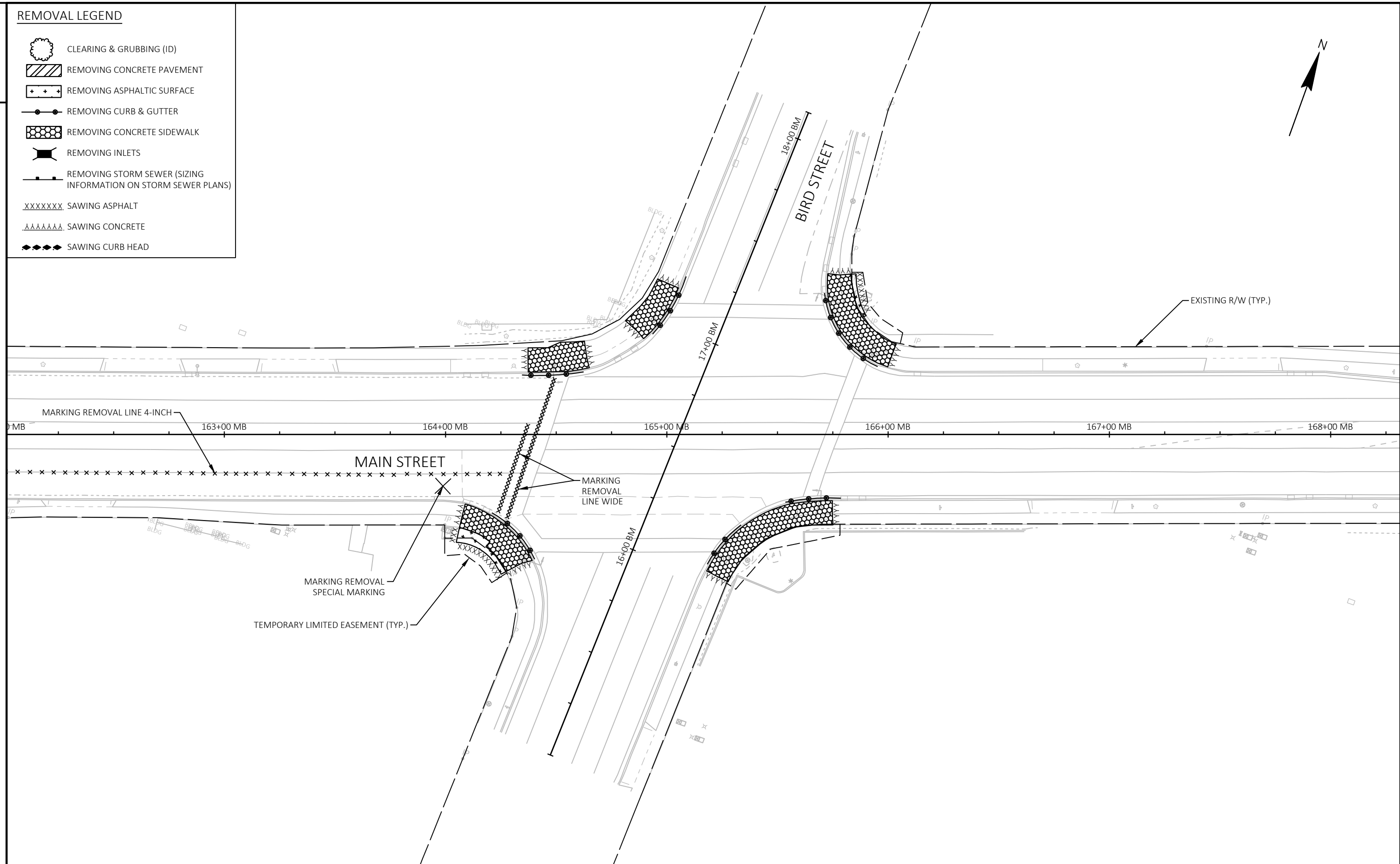


2

REMOVAL LEGEND

- | | |
|---|---|
|  | CLEARING & GRUBBING (ID) |
|  | REMOVING CONCRETE PAVEMENT |
|  | REMOVING ASPHALTIC SURFACE |
|  | REMOVING CURB & GUTTER |
|  | REMOVING CONCRETE SIDEWALK |
|  | REMOVING INLETS |
|  | REMOVING STORM SEWER (SIZING
INFORMATION ON STORM SEWER PLANS) |
| <u>XXXXXXX</u> | SAWING ASPHALT |
| <u>AAAAAAAA</u> | SAWING CONCRETE |
|  | SAWING CURB HEAD |

2



PROJECT NO: 3996-00-10

HWY: LOCAL STREETS

COUNTY: DANE

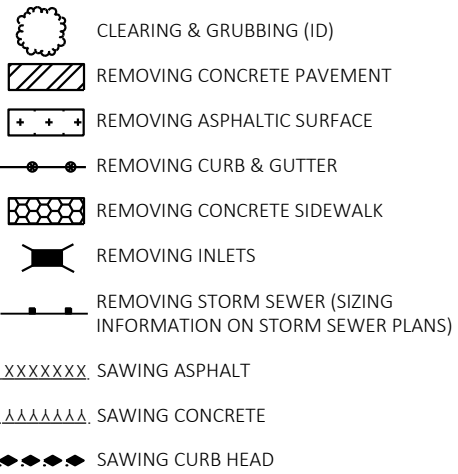
REMOVAL PLAN

SHEET PRE 12

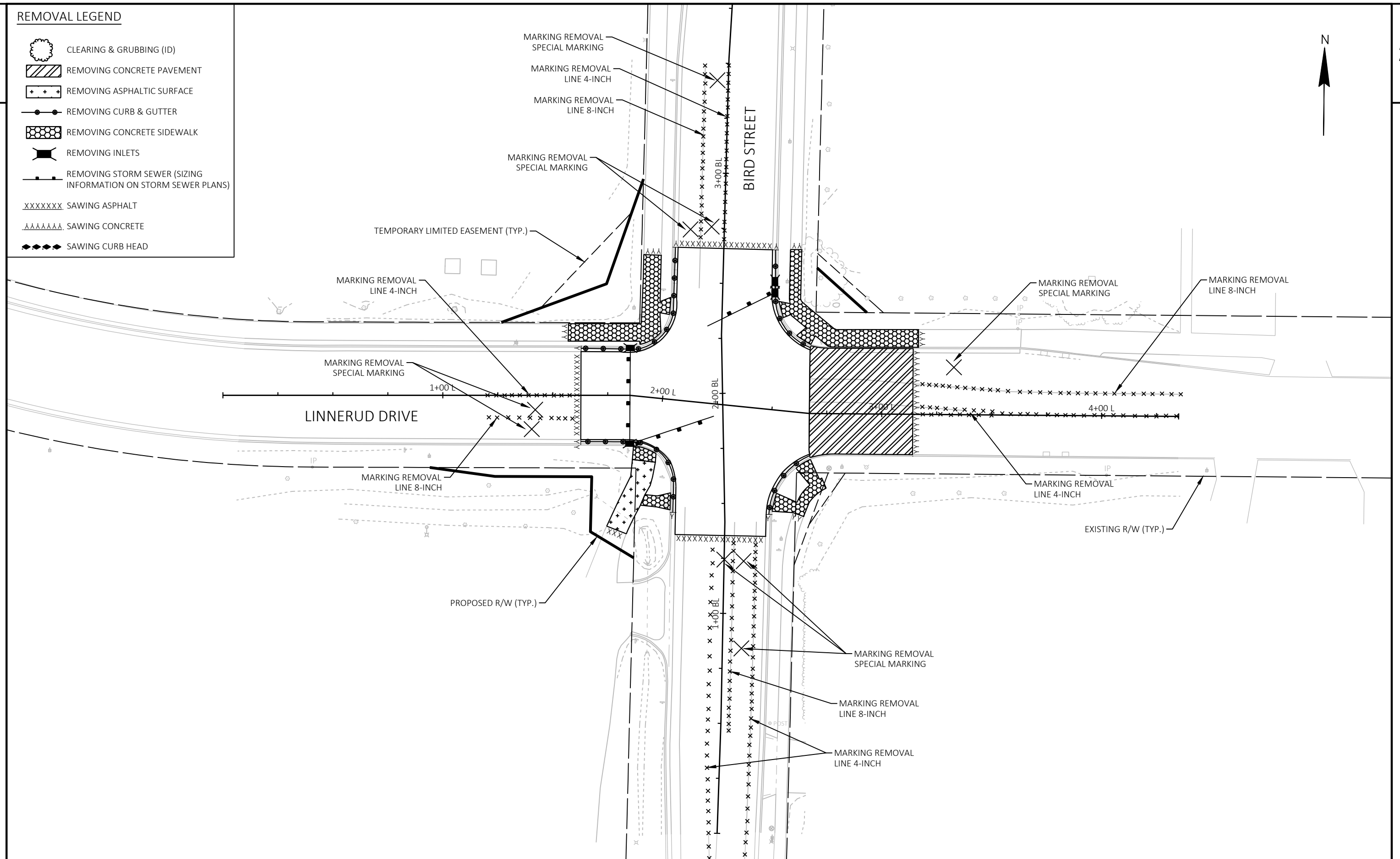
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2

REMOVAL LEGEND



2 |



PROJECT NO:	3996-00-10
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HWY: LOCAL STREETS

COUNTY: DANE

REMOVAL PLAN

SHEET PRE 13

11

FILE NAME : G:\WDOTSW\21083-000 SUN PRAIRIE LOCAL INTERSECTION HSIP\CIVIL 3D\SHEETSPLAN\021101-RM.DWG
LAYOUT NAME - RM-03

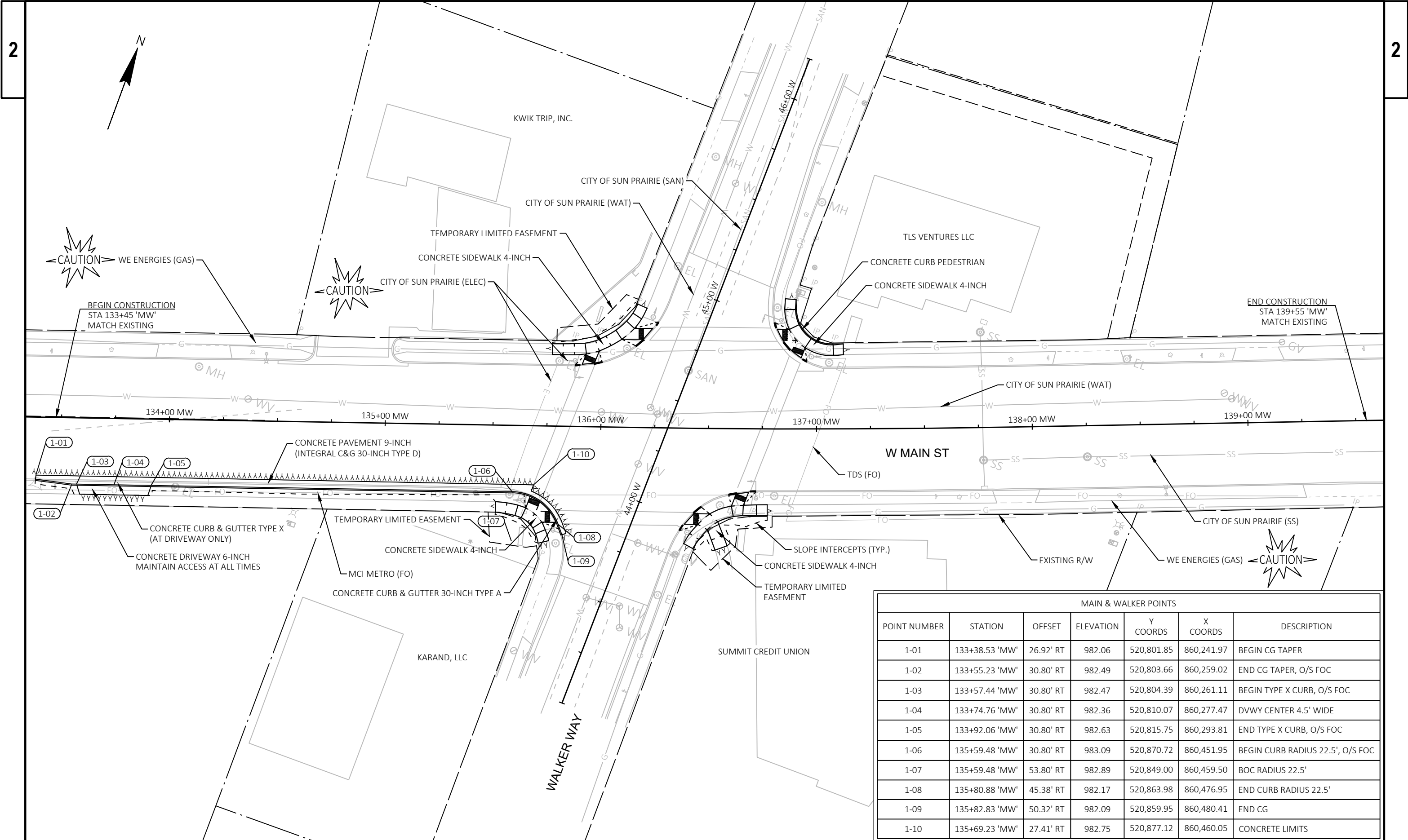
PLOT DATE : 4/28/2025 10:17 AM

PLOT BY : KL ENGINEERING

PLOT NAME :

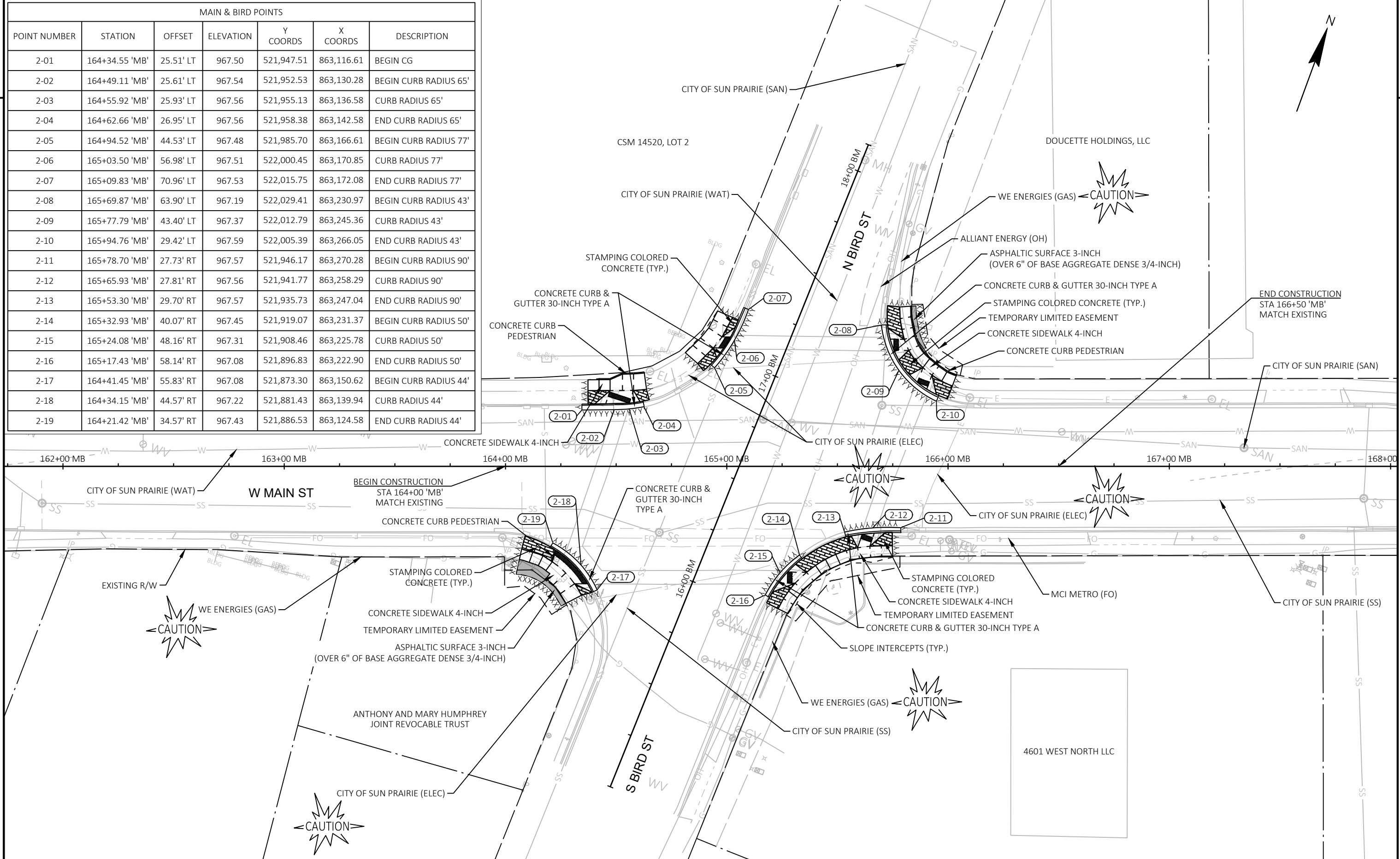
PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42



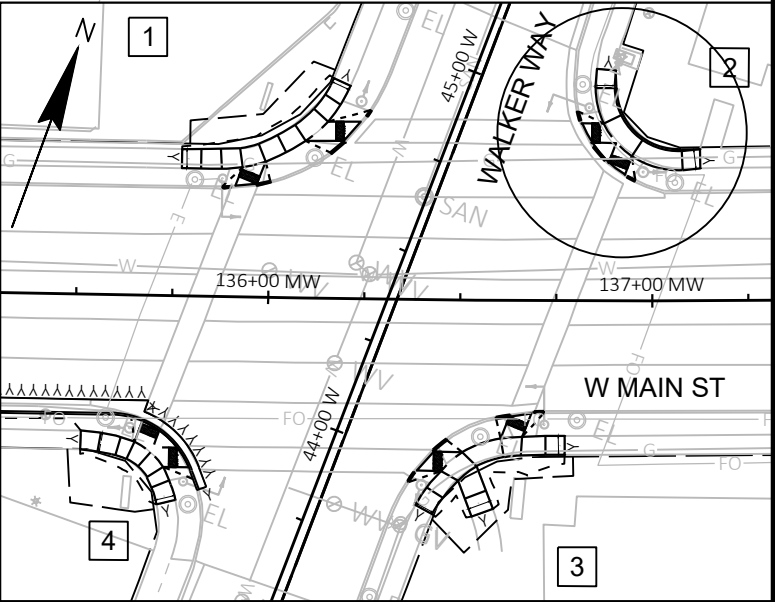
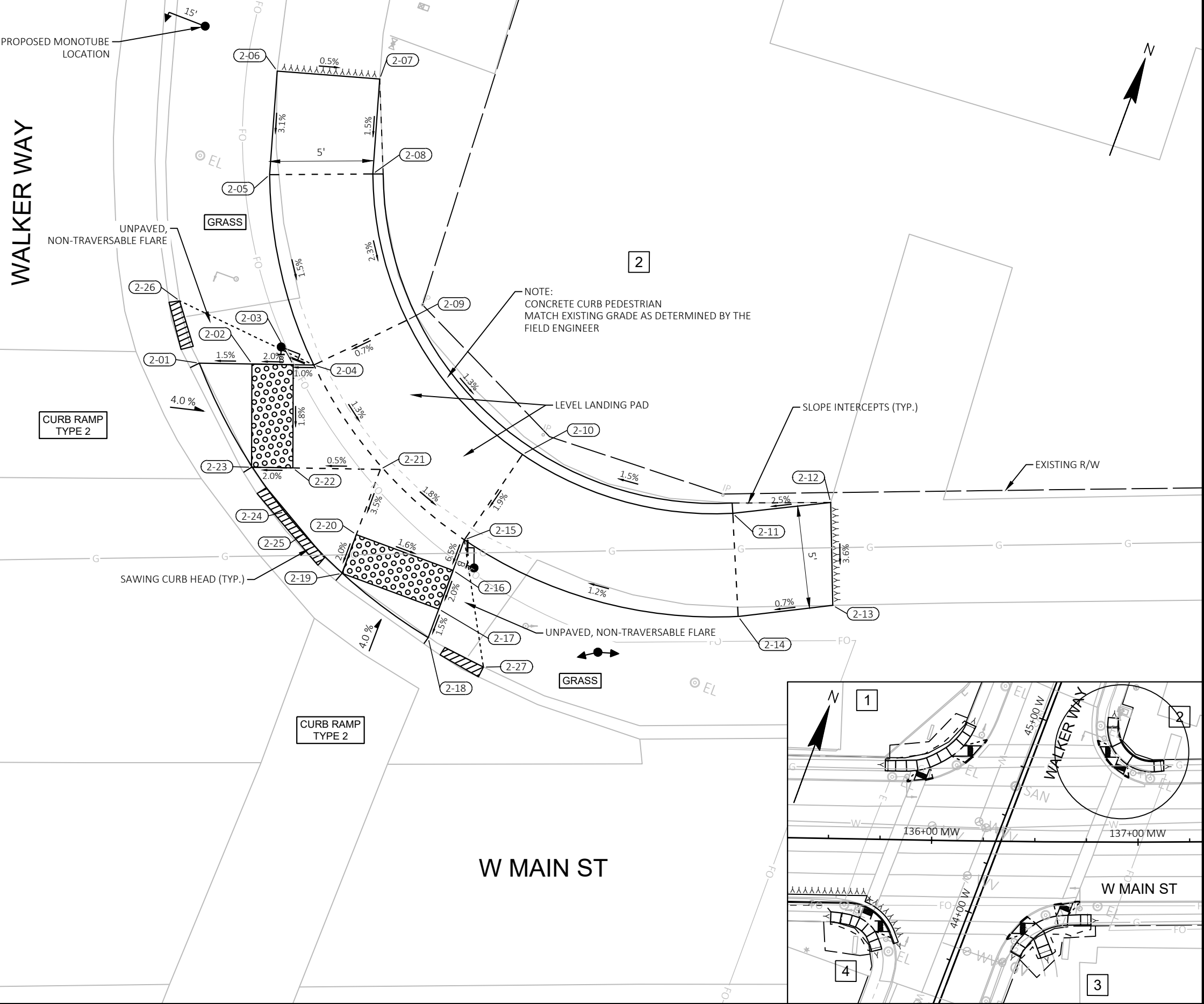
MAIN & WALKER POINTS						
POINT NUMBER	STATION	OFFSET	ELEVATION	Y COORDS	X COORDS	DESCRIPTION
1-01	133+38.53 'MW'	26.92' RT	982.06	520,801.85	860,241.97	BEGIN CG TAPER
1-02	133+55.23 'MW'	30.80' RT	982.49	520,803.66	860,259.02	END CG TAPER, O/S FOC
1-03	133+57.44 'MW'	30.80' RT	982.47	520,804.39	860,261.11	BEGIN TYPE X CURB, O/S FOC
1-04	133+74.76 'MW'	30.80' RT	982.36	520,810.07	860,277.47	DVWY CENTER 4.5' WIDE
1-05	133+92.06 'MW'	30.80' RT	982.63	520,815.75	860,293.81	END TYPE X CURB, O/S FOC
1-06	135+59.48 'MW'	30.80' RT	983.09	520,870.72	860,451.95	BEGIN CURB RADIUS 22.5', O/S FOC
1-07	135+59.48 'MW'	53.80' RT	982.89	520,849.00	860,459.50	BOC RADIUS 22.5'
1-08	135+80.88 'MW'	45.38' RT	982.17	520,863.98	860,476.95	END CURB RADIUS 22.5'
1-09	135+82.83 'MW'	50.32' RT	982.09	520,859.95	860,480.41	END CG
1-10	135+69.23 'MW'	27.41' RT	982.75	520,877.12	860,460.05	CONCRETE LIMITS

MAIN & BIRD POINTS						
POINT NUMBER	STATION	OFFSET	ELEVATION	Y COORDS	X COORDS	DESCRIPTION
2-01	164+34.55 'MB'	25.51' LT	967.50	521,947.51	863,116.61	BEGIN CG
2-02	164+49.11 'MB'	25.61' LT	967.54	521,952.53	863,130.28	BEGIN CURB RADIUS 65'
2-03	164+55.92 'MB'	25.93' LT	967.56	521,955.13	863,136.58	CURB RADIUS 65'
2-04	164+62.66 'MB'	26.95' LT	967.56	521,958.38	863,142.58	END CURB RADIUS 65'
2-05	164+94.52 'MB'	44.53' LT	967.48	521,985.70	863,166.61	BEGIN CURB RADIUS 77'
2-06	165+03.50 'MB'	56.98' LT	967.51	522,000.45	863,170.85	CURB RADIUS 77'
2-07	165+09.83 'MB'	70.96' LT	967.53	522,015.75	863,172.08	END CURB RADIUS 77'
2-08	165+69.87 'MB'	63.90' LT	967.19	522,029.41	863,230.97	BEGIN CURB RADIUS 43'
2-09	165+77.79 'MB'	43.40' LT	967.37	522,012.79	863,245.36	CURB RADIUS 43'
2-10	165+94.76 'MB'	29.42' LT	967.59	522,005.39	863,266.05	END CURB RADIUS 43'
2-11	165+78.70 'MB'	27.73' RT	967.57	521,946.17	863,270.28	BEGIN CURB RADIUS 90'
2-12	165+65.93 'MB'	27.81' RT	967.56	521,941.77	863,258.29	CURB RADIUS 90'
2-13	165+53.30 'MB'	29.70' RT	967.57	521,935.73	863,247.04	END CURB RADIUS 90'
2-14	165+32.93 'MB'	40.07' RT	967.45	521,919.07	863,231.37	BEGIN CURB RADIUS 50'
2-15	165+24.08 'MB'	48.16' RT	967.31	521,908.46	863,225.78	CURB RADIUS 50'
2-16	165+17.43 'MB'	58.14' RT	967.08	521,896.83	863,222.90	END CURB RADIUS 50'
2-17	164+41.45 'MB'	55.83' RT	967.08	521,873.30	863,150.62	BEGIN CURB RADIUS 44'
2-18	164+34.15 'MB'	44.57' RT	967.22	521,881.43	863,139.94	CURB RADIUS 44'
2-19	164+21.42 'MB'	34.57' RT	967.43	521,886.53	863,124.58	END CURB RADIUS 44'

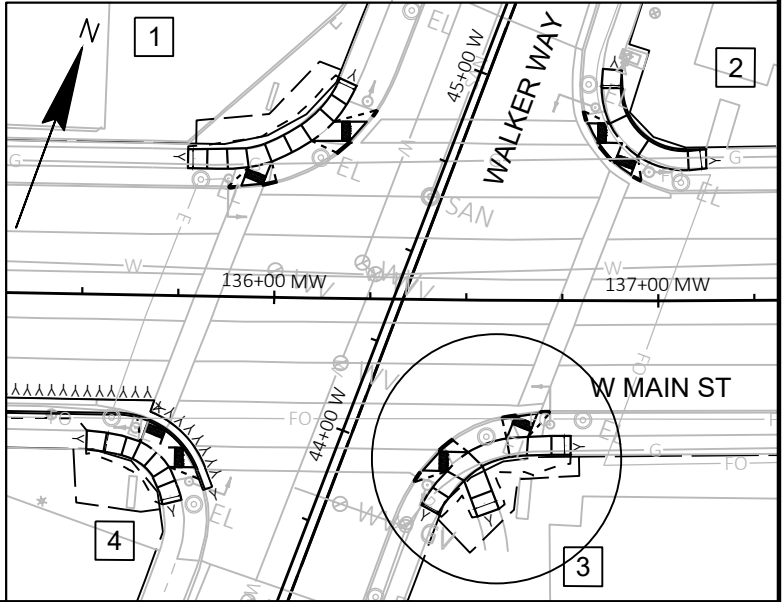
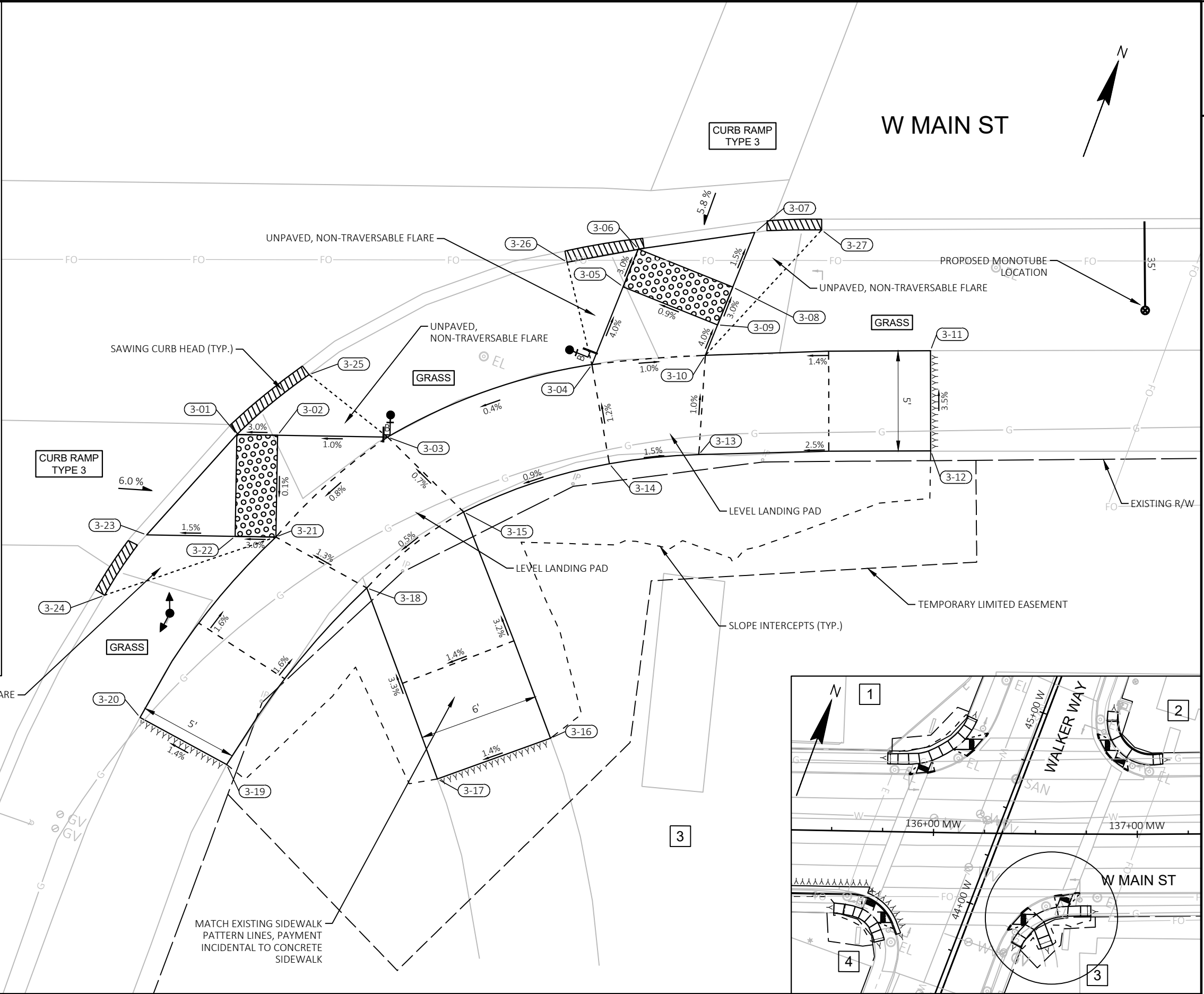


BIRD & LINNERUD POINTS						
POINT NUMBER	STATION	OFFSET	ELEVATION	Y COORDS	X COORDS	DESCRIPTION
3-01	1+62.85 'L'	19.83' LT	944.41	519,353.34	863,074.35	BEGIN CG
3-02	1+70.85 'L'	19.83' LT	944.22	519,353.43	863,082.35	INFLECTION POINT
3-03	2+37.83 'BL'	40.65' LT	0.00	519,373.59	863,097.66	BOC RADIUS 17.5'
3-04	2+50.21 'BL'	20.72' LT	943.59	519,385.65	863,117.78	INFLECTION POINT
3-05	2+65.82 'BL'	20.82' LT	943.98	519,401.25	863,117.94	END CG
3-06	2+65.84 'BL'	22.17' RT	944.07	519,400.59	863,160.92	BEGIN CG
3-07	2+50.81 'BL'	22.18' RT	943.78	519,385.55	863,160.69	INFLECTION POINT
3-08	2+44.99 'BL'	47.18' RT	0.00	519,379.33	863,185.59	BOC RADIUS 22.5'
3-09	2+83.30 'L'	27.94' LT	942.28	519,354.38	863,194.59	BEGIN CG
3-10	3+14.14 'L'	28.00' LT	941.29	519,354.54	863,225.43	END CG
3-11	3+14.09 'L'	16.36' RT	941.33	519,310.18	863,225.54	BEGIN CG
3-12	2+83.48 'L'	16.32' RT	941.82	519,310.11	863,194.92	END CG
3-13	1+66.61 'BL'	29.50' RT	941.97	519,302.62	863,169.38	BEGIN CG
3-14	2+53.66 'L'	35.08' RT	941.82	519,292.66	863,161.96	CG MIDPOINT
3-15	2+52.01 'L'	47.41' RT	941.59	519,280.53	863,159.21	END CG
3-16	1+35.35 'BL'	18.63' RT	941.35	519,270.32	863,159.20	ASPHALT LIMITS
3-17	1+35.37 'BL'	22.55' LT	941.27	519,270.72	863,118.03	ASPHALT LIMITS
3-18	1+46.24 'BL'	22.29' LT	941.52	519,280.72	863,118.21	BEGIN CG
3-19	2+10.16 'L'	38.30' RT	941.95	519,293.35	863,118.34	BEGIN CURB RADIUS 17.5'
3-20	1+90.22 'L'	39.88' RT	0.00	519,293.56	863,098.35	BOC RADIUS 17.5'
3-21	1+98.38 'L'	21.62' RT	942.67	519,311.02	863,108.11	END CG
3-22	1+70.18 'L'	20.13' RT	943.30	519,313.47	863,082.13	BEGIN CG
3-23	1+62.73 'L'	20.09' RT	943.44	519,313.43	863,074.68	END CG

MAIN ST - WALKER WAY NE CURB RAMP					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
2-01	136+81.64	46.20' LT	981.91	520,983.83	860,541.25
2-02	136+84.22	46.17' LT	981.95	520,984.67	860,543.67
2-03	136+86.24	46.14' LT	981.99	520,985.33	860,545.55
2-04	136+87.25	46.12' LT	982.00	520,985.66	860,546.49
2-05	136+85.06	55.34' LT	982.15	520,993.58	860,541.30
2-06	136+85.42	60.36' LT	982.30	520,998.41	860,539.92
2-07	136+90.45	59.99' LT	982.37	520,999.77	860,544.71
2-08	136+90.12	55.38' LT	982.21	520,995.33	860,545.99
2-09	136+91.79	48.30' LT	982.04	520,989.25	860,549.97
2-10	136+97.45	41.80' LT	981.93	520,985.08	860,557.48
2-11	137+07.72	38.94' LT	982.09	520,985.91	860,568.02
2-12	137+12.50	39.45' LT	982.21	520,988.05	860,572.29
2-13	137+12.59	34.47' LT	982.03	520,983.40	860,574.11
2-14	137+07.97	33.94' LT	982.00	520,981.32	860,569.99
2-15	136+94.61	37.66' LT	981.83	520,980.23	860,556.26
2-16	136+94.06	36.19' LT	981.73	520,978.65	860,556.26
2-17	136+93.37	34.31' LT	981.69	520,976.65	860,556.25
2-18	136+92.85	32.92' LT	981.67	520,975.17	860,556.25
2-19	136+88.64	36.04' LT	981.77	520,976.66	860,551.25
2-20	136+89.33	37.91' LT	981.81	520,978.66	860,551.26
2-21	136+90.51	41.07' LT	981.93	520,982.02	860,551.26
2-22	136+86.23	41.14' LT	981.90	520,980.63	860,547.26
2-23	136+84.22	41.17' LT	981.86	520,979.97	860,545.37
2-24	136+85.84	39.01' LT	982.03	520,978.50	860,547.63
2-25	136+86.76	37.93' LT	981.94	520,977.80	860,548.85
2-26	136+80.68	49.22' LT	982.40	520,986.34	860,539.32
2-27	136+95.54	31.50' LT	982.06	520,974.76	860,559.25



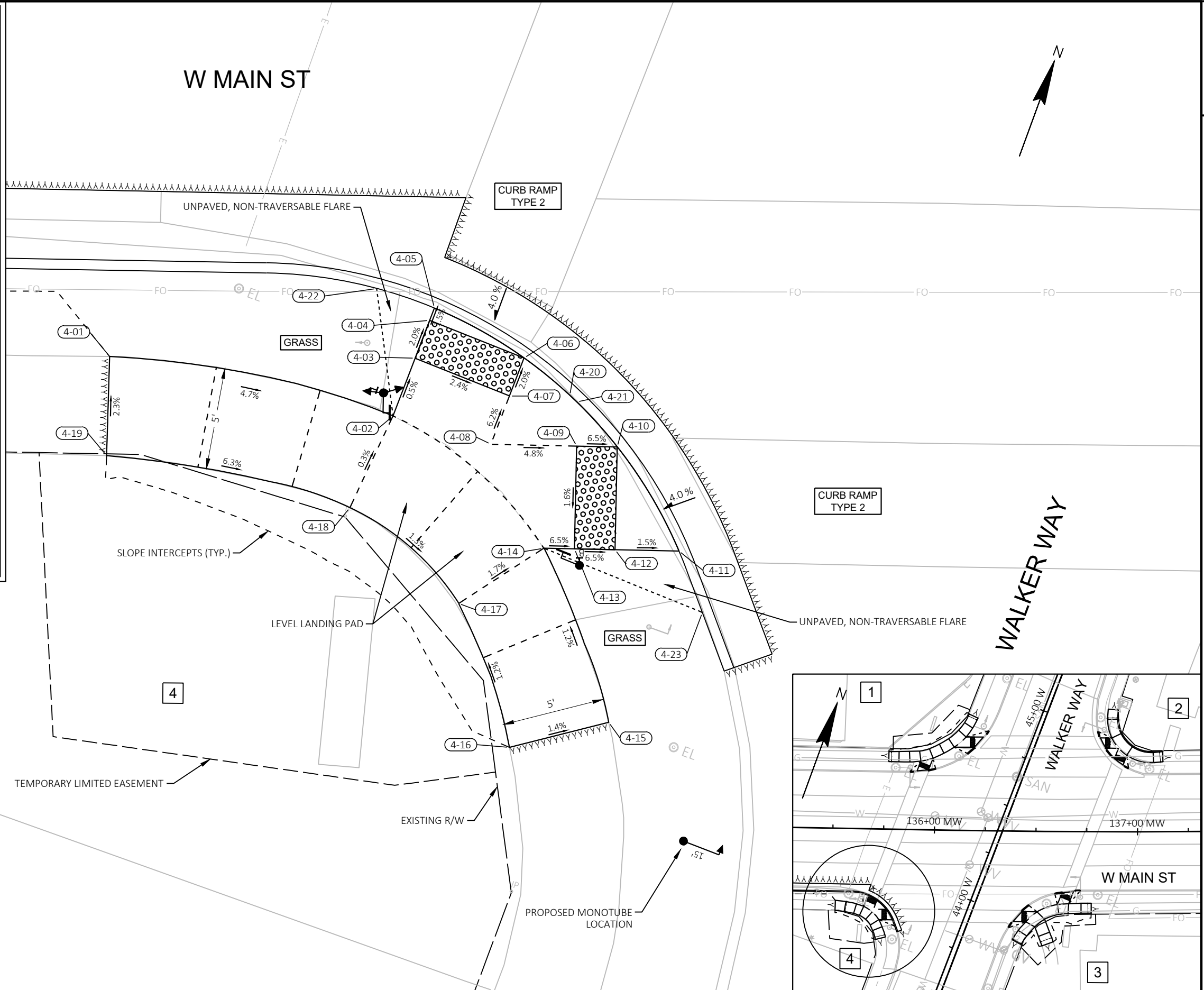
MAIN ST - WALKER WAY SE CURB RAMP					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3-01	136+43.52	39.54' RT	981.92	520,890.25	860,534.41
3-02	136+45.50	39.56' RT	981.98	520,890.91	860,536.30
3-03	136+50.86	39.60' RT	982.03	520,892.69	860,541.40
3-04	136+60.78	35.96' RT	982.08	520,899.48	860,549.58
3-05	136+62.27	32.13' RT	981.91	520,903.59	860,549.71
3-06	136+63.00	30.27' RT	981.85	520,905.59	860,549.77
3-07	136+68.68	29.42' RT	981.85	520,908.33	860,554.85
3-08	136+67.62	32.10' RT	981.90	520,905.44	860,554.76
3-09	136+66.89	33.96' RT	981.96	520,903.44	860,554.70
3-10	136+66.30	35.46' RT	982.02	520,901.83	860,554.66
3-11	136+77.28	35.18' RT	982.18	520,905.85	860,564.95
3-12	136+77.31	40.10' RT	982.36	520,901.24	860,566.65
3-13	136+66.01	40.34' RT	982.07	520,897.15	860,556.03
3-14	136+61.66	40.82' RT	982.14	520,895.21	860,552.07
3-15	136+54.59	43.24' RT	982.07	520,890.52	860,546.17
3-16	136+58.90	54.31' RT	982.45	520,881.57	860,554.00
3-17	136+53.43	56.35' RT	982.37	520,877.78	860,549.48
3-18	136+49.91	47.01' RT	982.04	520,885.38	860,542.99
3-19	136+43.19	55.75' RT	982.22	520,874.87	860,539.53
3-20	136+38.96	53.48' RT	982.15	520,875.58	860,534.74
3-21	136+45.47	44.56' RT	981.97	520,886.19	860,537.95
3-22	136+43.49	44.54' RT	981.91	520,885.53	860,536.06
3-23	136+39.18	44.52' RT	981.85	520,884.10	860,531.95
3-24	136+37.17	47.51' RT	982.15	520,880.61	860,531.04
3-25	136+47.00	36.57' RT	982.08	520,894.23	860,536.72
3-26	136+59.53	30.94' RT	982.17	520,903.78	860,546.71
3-27	136+71.94	29.27' RT	982.19	520,909.58	860,557.89

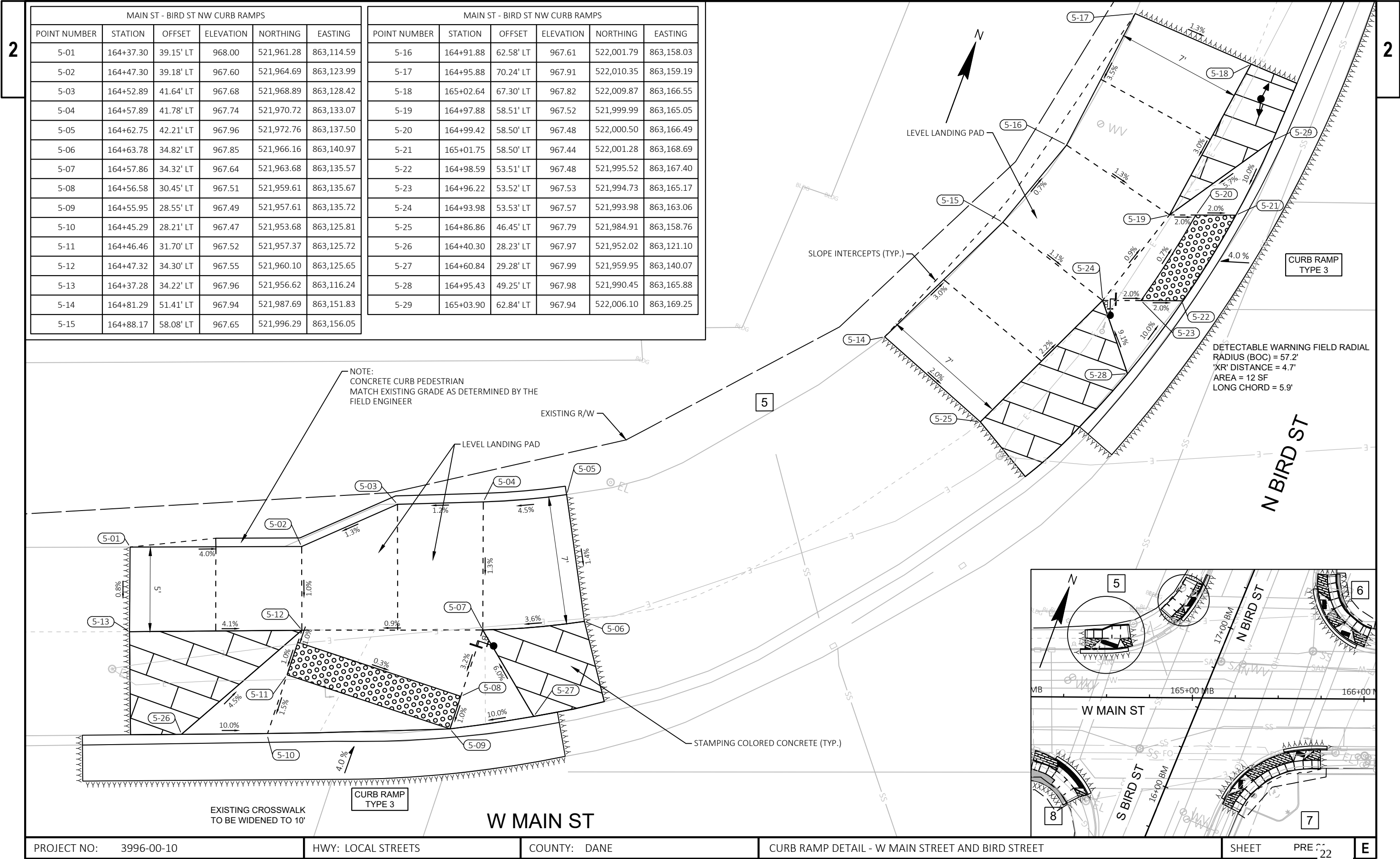


2

MAIN ST - WALKER WAY SW CURB RAMP					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
4-01	135+51.82	35.54' RT	983.28	520,863.73	860,446.27
4-02	135+65.83	38.22' RT	982.61	520,865.80	860,460.38
4-03	135+66.87	35.36' RT	982.59	520,868.83	860,460.43
4-04	135+67.55	33.48' RT	982.55	520,870.83	860,460.45
4-05	135+67.77	32.88' RT	982.54	520,871.48	860,460.46
4-06	135+72.23	35.26' RT	982.43	520,870.69	860,465.45
4-07	135+71.54	37.14' RT	982.47	520,868.69	860,465.42
4-08	135+70.67	39.53' RT	982.63	520,866.15	860,465.39
4-09	135+74.90	39.55' RT	982.43	520,867.52	860,469.38
4-10	135+76.90	39.55' RT	982.30	520,868.17	860,471.27
4-11	135+80.03	44.62' RT	982.17	520,864.41	860,475.89
4-12	135+76.88	44.61' RT	982.21	520,863.38	860,472.92
4-13	135+74.88	44.61' RT	982.34	520,862.73	860,471.03
4-14	135+73.37	44.60' RT	982.44	520,862.24	860,469.60
4-15	135+76.71	53.12' RT	982.55	520,855.30	860,475.55
4-16	135+71.85	54.44' RT	982.62	520,852.45	860,471.39
4-17	135+69.23	47.40' RT	982.53	520,858.24	860,466.60
4-18	135+63.78	42.78' RT	982.62	520,860.82	860,459.94
4-19	135+51.76	40.43' RT	983.39	520,859.09	860,447.82
4-20	135+74.52	37.06' RT	982.60	520,869.74	860,468.21
4-21	135+74.86	37.38' RT	982.58	520,869.56	860,468.64
4-22	135+64.91	31.96' RT	982.99	520,871.40	860,457.46
4-23	135+81.23	47.63' RT	982.57	520,861.97	860,478.02

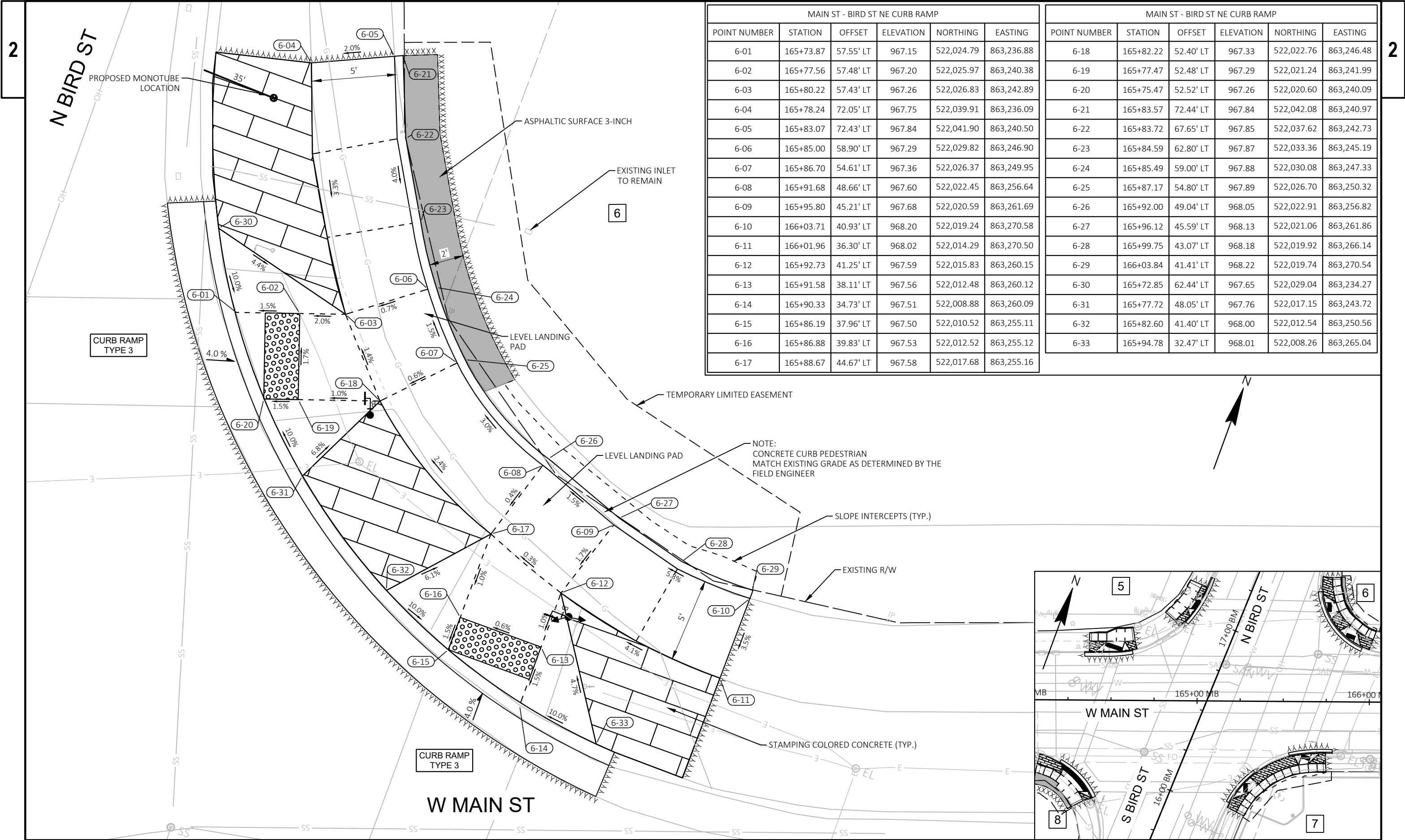
2





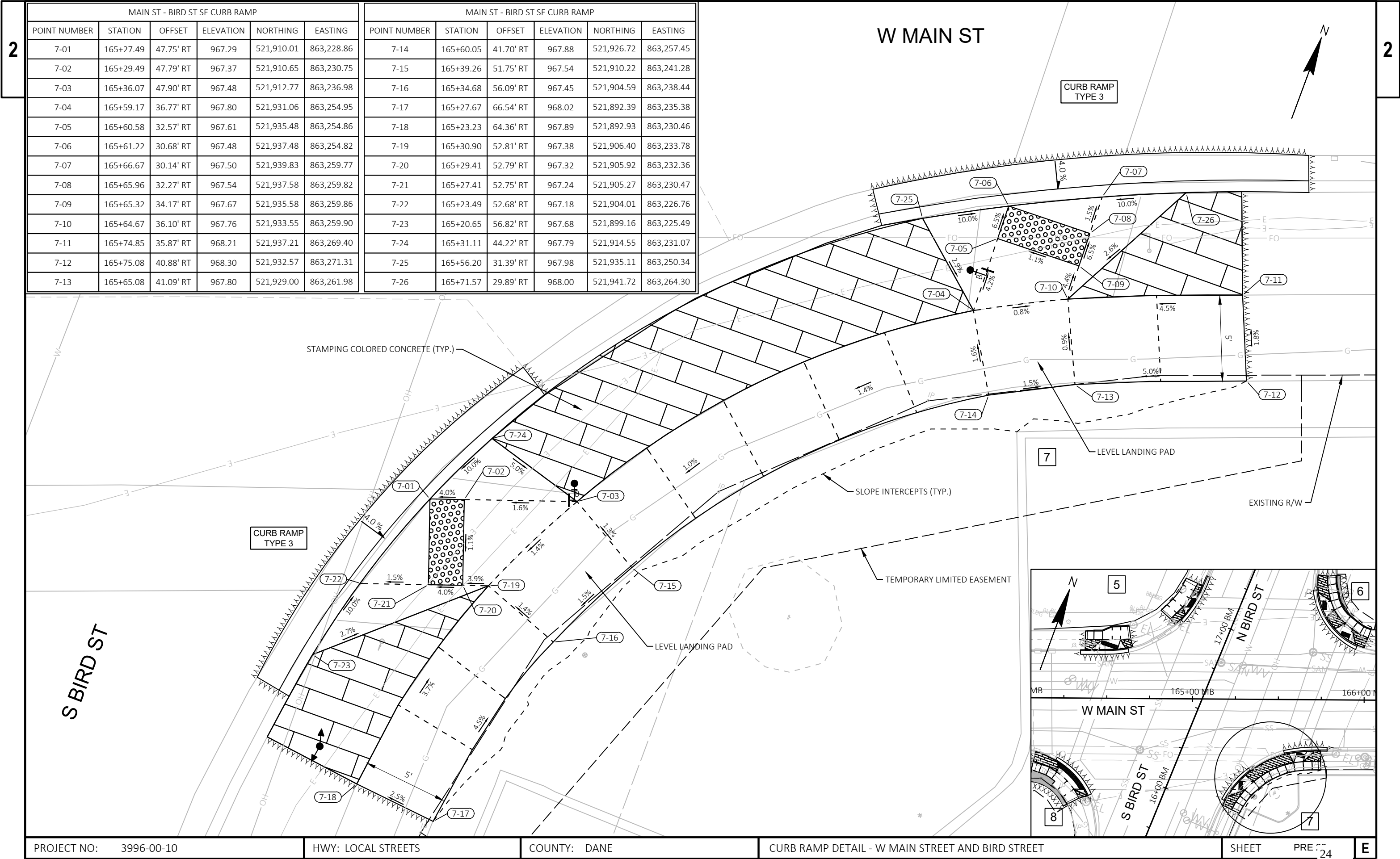
MAIN ST - BIRD ST NW CURB RAMPS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
5-01	164+37.30	39.15' LT	968.00	521,961.28	863,114.59
5-02	164+47.30	39.18' LT	967.60	521,964.69	863,123.99
5-03	164+52.89	41.64' LT	967.68	521,968.89	863,128.42
5-04	164+57.89	41.78' LT	967.74	521,970.72	863,133.07
5-05	164+62.75	42.21' LT	967.96	521,972.76	863,137.50
5-06	164+63.78	34.82' LT	967.85	521,966.16	863,140.97
5-07	164+57.86	34.32' LT	967.64	521,963.68	863,135.57
5-08	164+56.58	30.45' LT	967.51	521,959.61	863,135.67
5-09	164+55.95	28.55' LT	967.49	521,957.61	863,135.72
5-10	164+45.29	28.21' LT	967.47	521,953.68	863,125.81
5-11	164+46.46	31.70' LT	967.52	521,957.37	863,125.72
5-12	164+47.32	34.30' LT	967.55	521,960.10	863,125.65
5-13	164+37.28	34.22' LT	967.96	521,956.62	863,116.24
5-14	164+81.29	51.41' LT	967.94	521,987.69	863,151.83
5-15	164+88.17	58.08' LT	967.65	521,996.29	863,156.05

MAIN ST - BIRD ST NW CURB RAMPS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
5-16	164+91.88	62.58' LT	967.61	522,001.79	863,158.03
5-17	164+95.88	70.24' LT	967.91	522,010.35	863,159.19
5-18	165+02.64	67.30' LT	967.82	522,009.87	863,166.55
5-19	164+97.88	58.51' LT	967.52	521,999.99	863,165.05
5-20	164+99.42	58.50' LT	967.48	522,000.50	863,166.49
5-21	165+01.75	58.50' LT	967.44	522,001.28	863,168.69
5-22	164+98.59	53.51' LT	967.48	521,995.52	863,167.40
5-23	164+96.22	53.52' LT	967.53	521,994.73	863,165.17
5-24	164+93.98	53.53' LT	967.57	521,993.98	863,163.06
5-25	164+86.86	46.45' LT	967.79	521,984.91	863,158.76
5-26	164+40.30	28.23' LT	967.97	521,952.02	863,121.10
5-27	164+60.84	29.28' LT	967.99	521,959.95	863,140.07
5-28	164+95.43	49.25' LT	967.98	521,990.45	863,165.88
5-29	165+03.90	62.84' LT	967.94	522,006.10	863,169.25



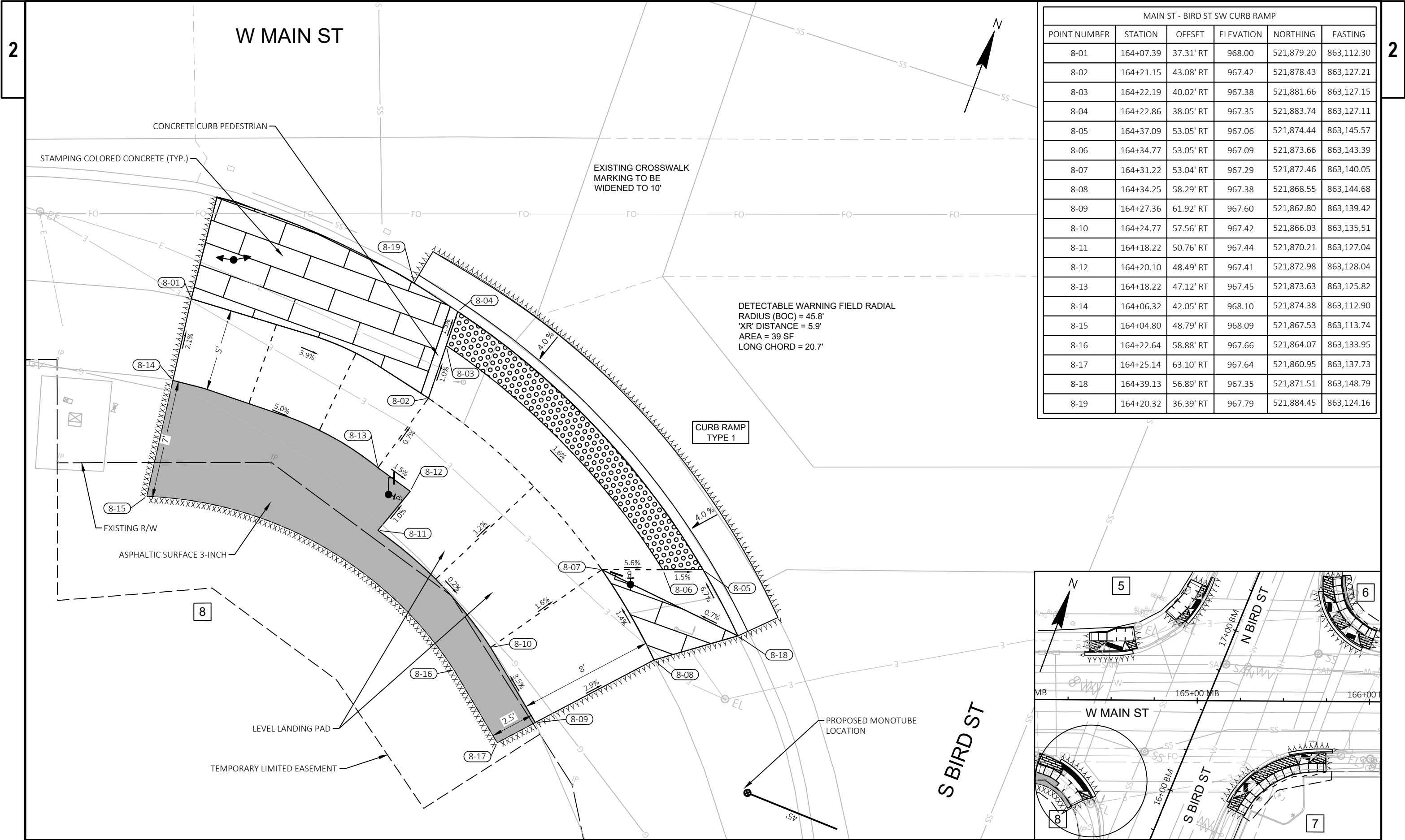
MAIN ST - BIRD ST NE CURB RAMP					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
6-01	165+73.87	57.55' LT	967.15	522,024.79	863,236.88
6-02	165+77.56	57.48' LT	967.20	522,025.97	863,240.38
6-03	165+80.22	57.43' LT	967.26	522,026.83	863,242.89
6-04	165+78.24	72.05' LT	967.75	522,039.91	863,236.09
6-05	165+83.07	72.43' LT	967.84	522,041.90	863,240.50
6-06	165+85.00	58.90' LT	967.29	522,029.82	863,246.90
6-07	165+86.70	54.61' LT	967.36	522,026.37	863,249.95
6-08	165+91.68	48.66' LT	967.60	522,022.45	863,256.64
6-09	165+95.80	45.21' LT	967.68	522,020.59	863,261.69
6-10	166+03.71	40.93' LT	968.20	522,019.24	863,270.58
6-11	166+01.96	36.30' LT	968.02	522,014.29	863,270.50
6-12	165+92.73	41.25' LT	967.59	522,015.83	863,260.15
6-13	165+91.58	38.11' LT	967.56	522,012.48	863,260.12
6-14	165+90.33	34.73' LT	967.51	522,008.88	863,260.09
6-15	165+86.19	37.96' LT	967.50	522,010.52	863,255.11
6-16	165+86.88	39.83' LT	967.53	522,012.52	863,255.12
6-17	165+88.67	44.67' LT	967.58	522,017.68	863,255.16

MAIN ST - BIRD ST NE CURB RAMP					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
6-18	165+82.22	52.40' LT	967.33	522,022.76	863,246.48
6-19	165+77.47	52.48' LT	967.29	522,021.24	863,241.99
6-20	165+75.47	52.52' LT	967.26	522,020.60	863,240.09
6-21	165+83.57	72.44' LT	967.84	522,042.08	863,240.97
6-22	165+83.72	67.65' LT	967.85	522,037.62	863,242.73
6-23	165+84.59	62.80' LT	967.87	522,033.36	863,245.19
6-24	165+85.49	59.00' LT	967.88	522,030.08	863,247.33
6-25	165+87.17	54.80' LT	967.89	522,026.70	863,250.32
6-26	165+92.00	49.04' LT	968.05	522,022.91	863,256.82
6-27	165+96.12	45.59' LT	968.13	522,021.06	863,261.86
6-28	165+99.75	43.07' LT	968.18	522,019.92	863,266.14
6-29	166+03.84	41.41' LT	968.22	522,019.74	863,270.54
6-30	165+72.85	62.44' LT	967.65	522,029.04	863,234.27
6-31	165+77.72	48.05' LT	967.76	522,017.15	863,243.72
6-32	165+82.60	41.40' LT	968.00	522,012.54	863,250.56
6-33	165+94.78	32.47' LT	968.01	522,008.26	863,265.04

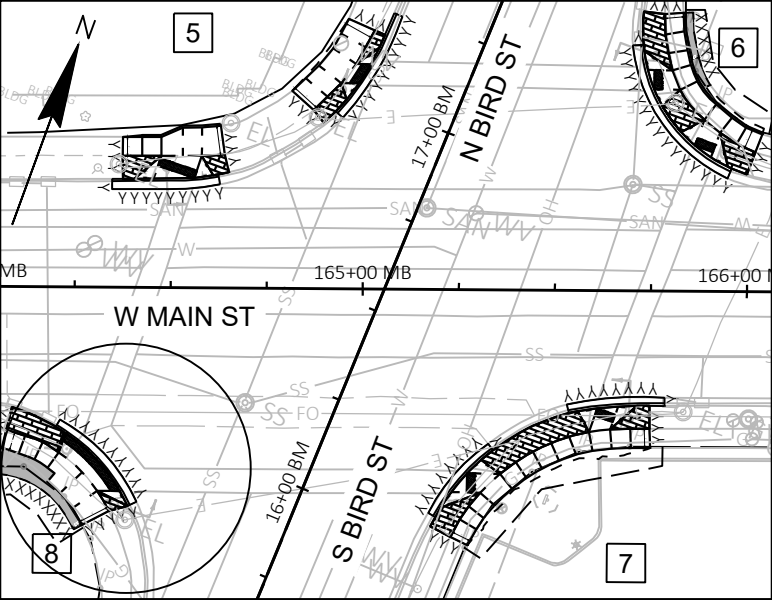


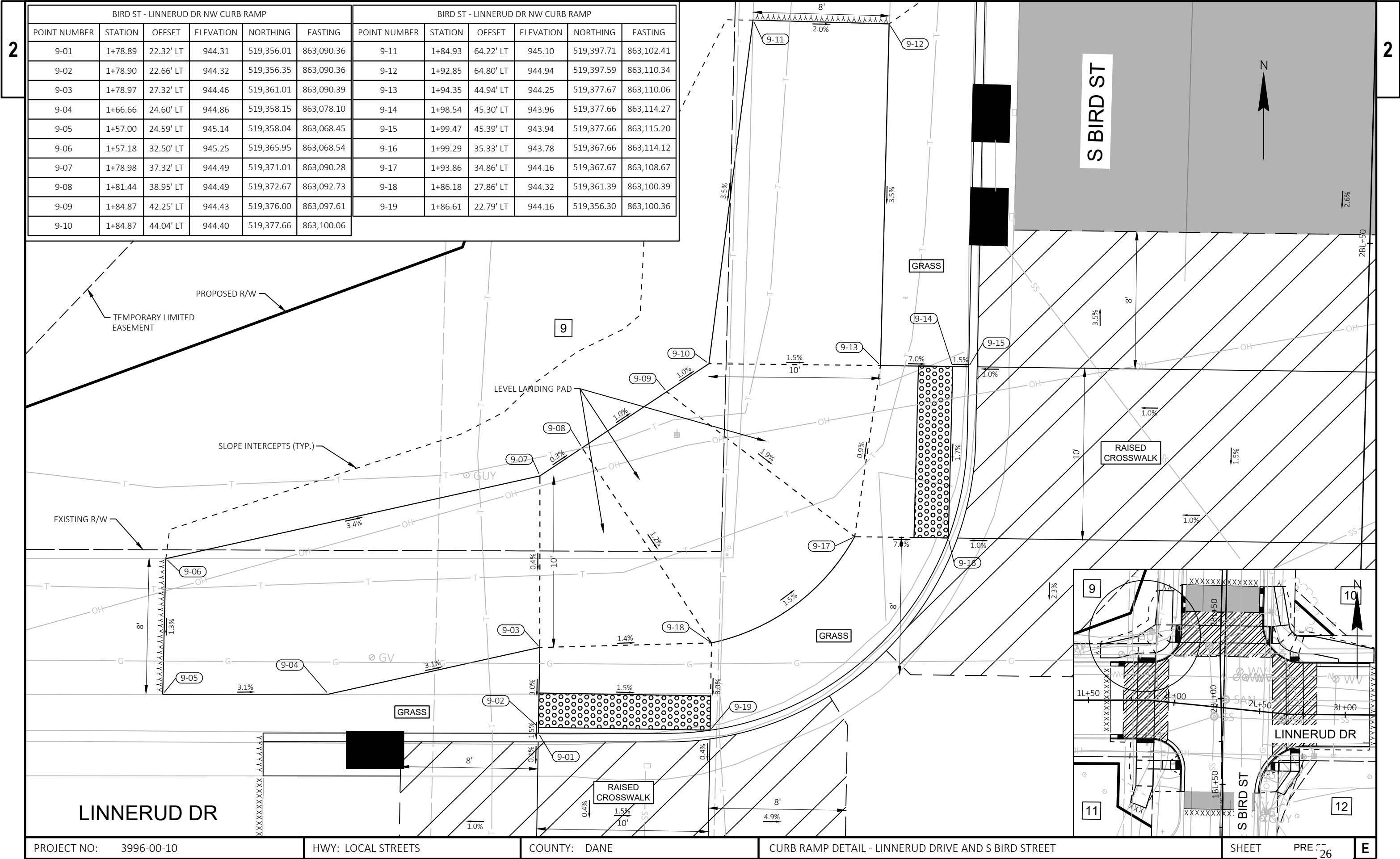
MAIN ST - BIRD ST SE CURB RAMP					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
7-01	165+27.49	47.75' RT	967.29	521,910.01	863,228.86
7-02	165+29.49	47.79' RT	967.37	521,910.65	863,230.75
7-03	165+36.07	47.90' RT	967.48	521,912.77	863,236.98
7-04	165+59.17	36.77' RT	967.80	521,931.06	863,254.95
7-05	165+60.58	32.57' RT	967.61	521,935.48	863,254.86
7-06	165+61.22	30.68' RT	967.48	521,937.48	863,254.82
7-07	165+66.67	30.14' RT	967.50	521,939.83	863,259.77
7-08	165+65.96	32.27' RT	967.54	521,937.58	863,259.82
7-09	165+65.32	34.17' RT	967.67	521,935.58	863,259.86
7-10	165+64.67	36.10' RT	967.76	521,933.55	863,259.90
7-11	165+74.85	35.87' RT	968.21	521,937.21	863,269.40
7-12	165+75.08	40.88' RT	968.30	521,932.57	863,271.31
7-13	165+65.08	41.09' RT	967.80	521,929.00	863,261.98

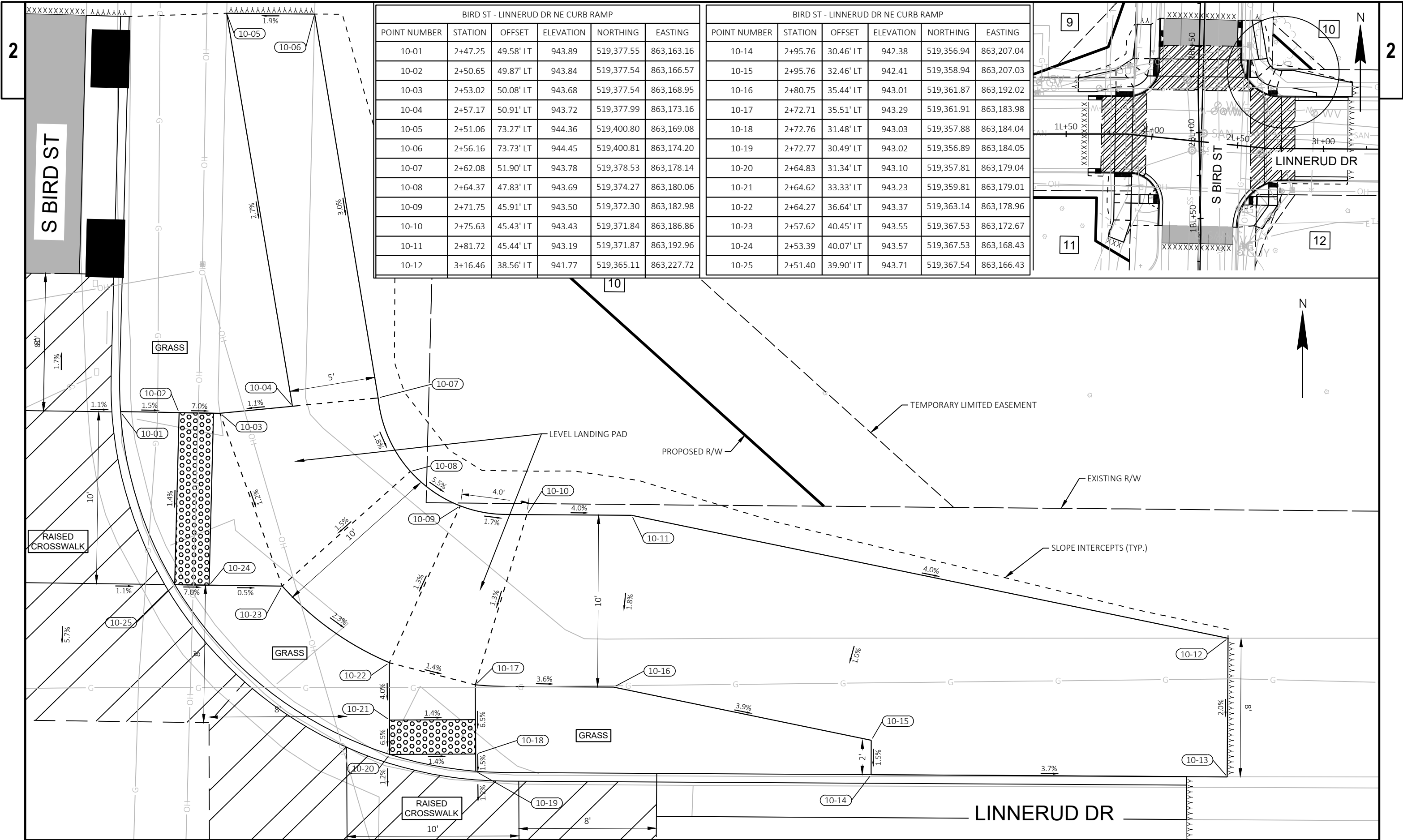
MAIN ST - BIRD ST SE CURB RAMP					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
7-14	165+60.05	41.70' RT	967.88	521,926.72	863,257.45
7-15	165+39.26	51.75' RT	967.54	521,910.22	863,241.28
7-16	165+34.68	56.09' RT	967.45	521,904.59	863,238.44
7-17	165+27.67	66.54' RT	968.02	521,892.39	863,235.38
7-18	165+23.23	64.36' RT	967.89	521,892.93	863,230.46
7-19	165+30.90	52.81' RT	967.38	521,906.40	863,233.78
7-20	165+29.41	52.79' RT	967.32	521,905.92	863,232.36
7-21	165+27.41	52.75' RT	967.24	521,905.27	863,230.47
7-22	165+23.49	52.68' RT	967.18	521,904.01	863,226.76
7-23	165+20.65	56.82' RT	967.68	521,899.16	863,225.49
7-24	165+31.11	44.22' RT	967.79	521,914.55	863,231.07
7-25	165+56.20	31.39' RT	967.98	521,935.11	863,250.34
7-26	165+71.57	29.89' RT	968.00	521,941.72	863,264.30



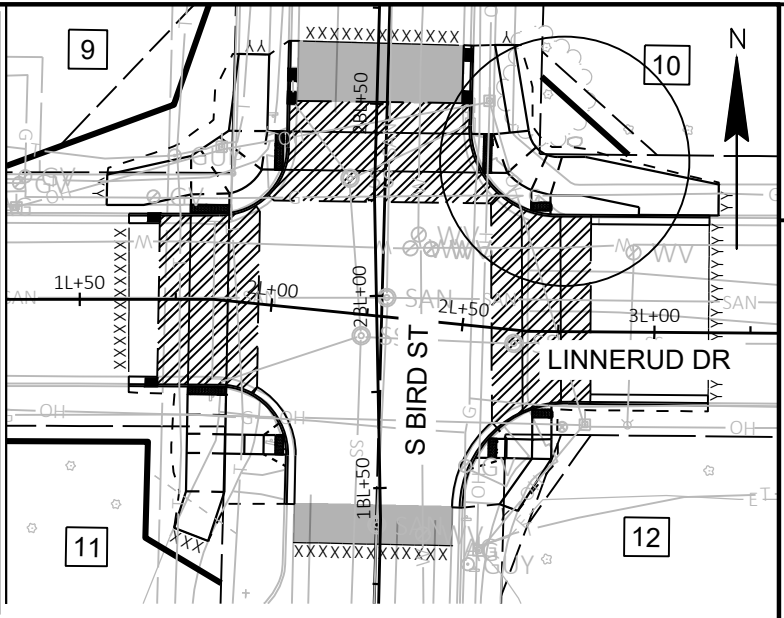
MAIN ST - BIRD ST SW CURB RAMP					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
8-01	164+07.39	37.31' RT	968.00	521,879.20	863,112.30
8-02	164+21.15	43.08' RT	967.42	521,878.43	863,127.21
8-03	164+22.19	40.02' RT	967.38	521,881.66	863,127.15
8-04	164+22.86	38.05' RT	967.35	521,883.74	863,127.11
8-05	164+37.09	53.05' RT	967.06	521,874.44	863,145.57
8-06	164+34.77	53.05' RT	967.09	521,873.66	863,143.39
8-07	164+31.22	53.04' RT	967.29	521,872.46	863,140.05
8-08	164+34.25	58.29' RT	967.38	521,868.55	863,144.68
8-09	164+27.36	61.92' RT	967.60	521,862.80	863,139.42
8-10	164+24.77	57.56' RT	967.42	521,866.03	863,135.51
8-11	164+18.22	50.76' RT	967.44	521,870.21	863,127.04
8-12	164+20.10	48.49' RT	967.41	521,872.98	863,128.04
8-13	164+18.22	47.12' RT	967.45	521,873.63	863,125.82
8-14	164+06.32	42.05' RT	968.10	521,874.38	863,112.90
8-15	164+04.80	48.79' RT	968.09	521,867.53	863,113.74
8-16	164+22.64	58.88' RT	967.66	521,864.07	863,133.95
8-17	164+25.14	63.10' RT	967.64	521,860.95	863,137.73
8-18	164+39.13	56.89' RT	967.35	521,871.51	863,148.79
8-19	164+20.32	36.39' RT	967.79	521,884.45	863,124.16

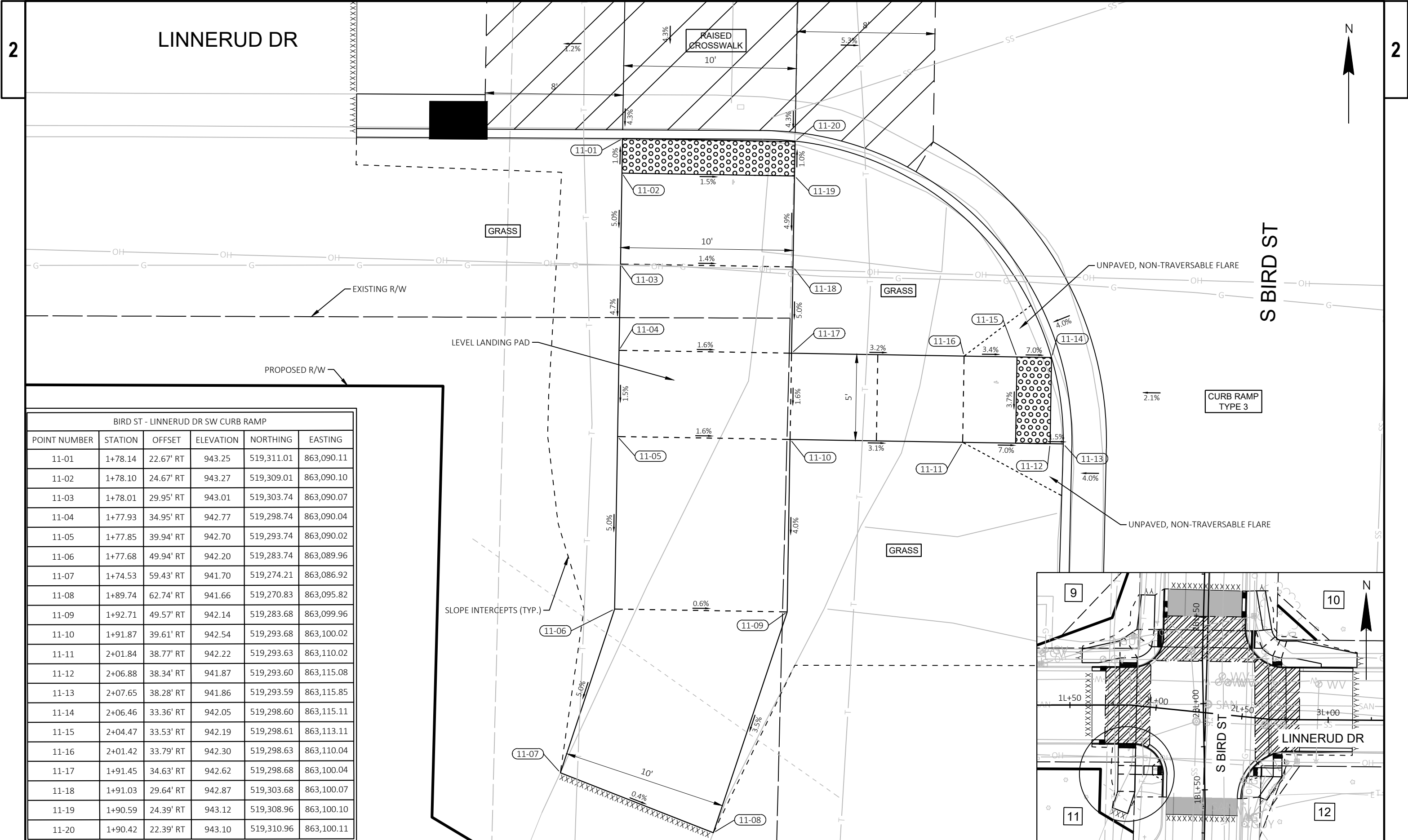




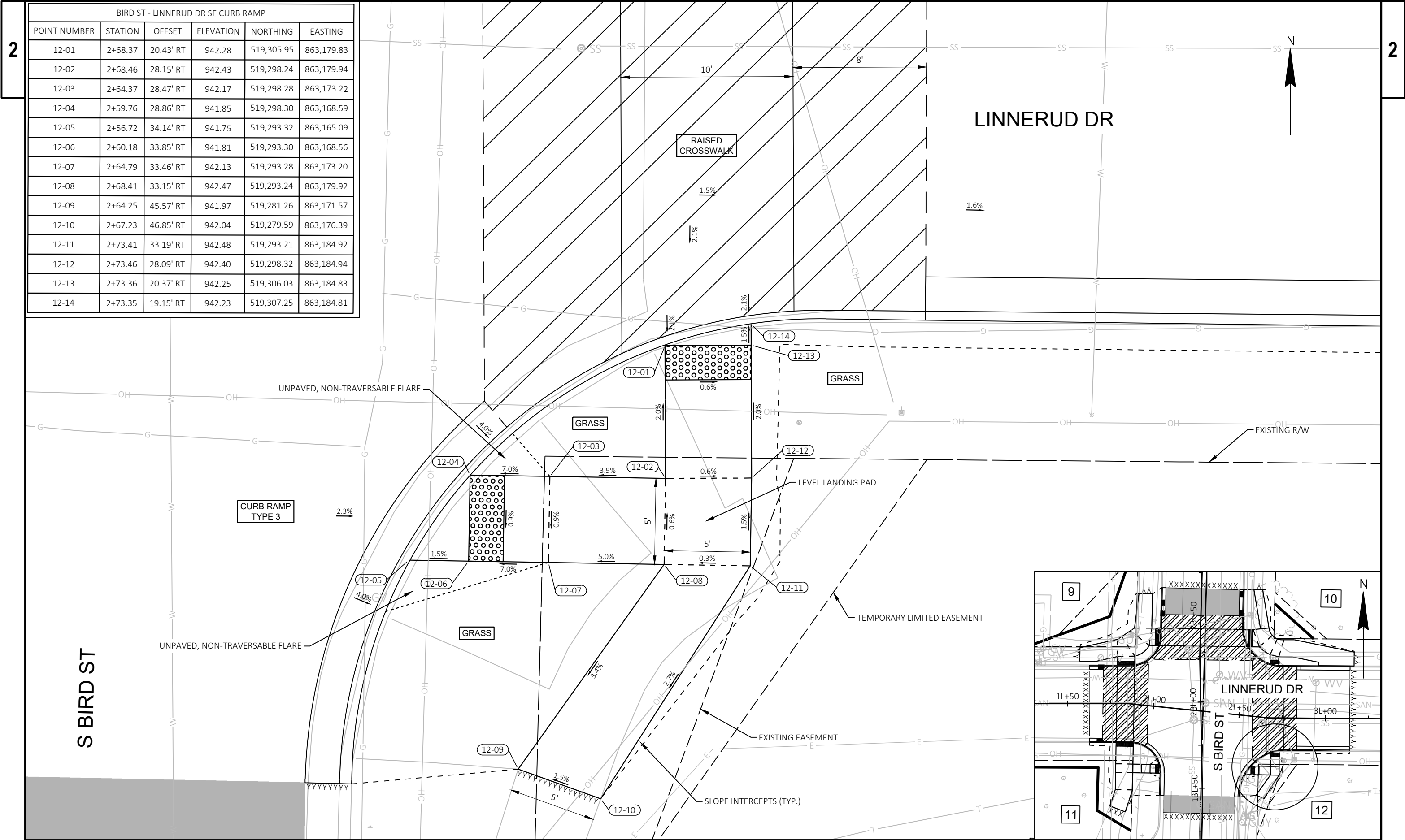


BIRD ST - LINNERUD DR NE CURB RAMP						BIRD ST - LINNERUD DR NE CURB RAMP					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
10-01	2+47.25	49.58' LT	943.89	519,377.55	863,163.16	10-14	2+95.76	30.46' LT	942.38	519,356.94	863,207.04
10-02	2+50.65	49.87' LT	943.84	519,377.54	863,166.57	10-15	2+95.76	32.46' LT	942.41	519,358.94	863,207.03
10-03	2+53.02	50.08' LT	943.68	519,377.54	863,168.95	10-16	2+80.75	35.44' LT	943.01	519,361.87	863,192.02
10-04	2+57.17	50.91' LT	943.72	519,377.99	863,173.16	10-17	2+72.71	35.51' LT	943.29	519,361.91	863,183.98
10-05	2+51.06	73.27' LT	944.36	519,400.80	863,169.08	10-18	2+72.76	31.48' LT	943.03	519,357.88	863,184.04
10-06	2+56.16	73.73' LT	944.45	519,400.81	863,174.20	10-19	2+72.77	30.49' LT	943.02	519,356.89	863,184.05
10-07	2+62.08	51.90' LT	943.78	519,378.53	863,178.14	10-20	2+64.83	31.34' LT	943.10	519,357.81	863,179.04
10-08	2+64.37	47.83' LT	943.69	519,374.27	863,180.06	10-21	2+64.62	33.33' LT	943.23	519,359.81	863,179.01
10-09	2+71.75	45.91' LT	943.50	519,372.30	863,182.98	10-22	2+64.27	36.64' LT	943.37	519,363.14	863,178.96
10-10	2+75.63	45.43' LT	943.43	519,371.84	863,186.86	10-23	2+57.62	40.45' LT	943.55	519,367.53	863,172.67
10-11	2+81.72	45.44' LT	943.19	519,371.87	863,192.96	10-24	2+53.39	40.07' LT	943.57	519,367.53	863,168.43
10-12	3+16.46	38.56' LT	941.77	519,365.11	863,227.72	10-25	2+51.40	39.90' LT	943.71	519,367.54	863,166.43

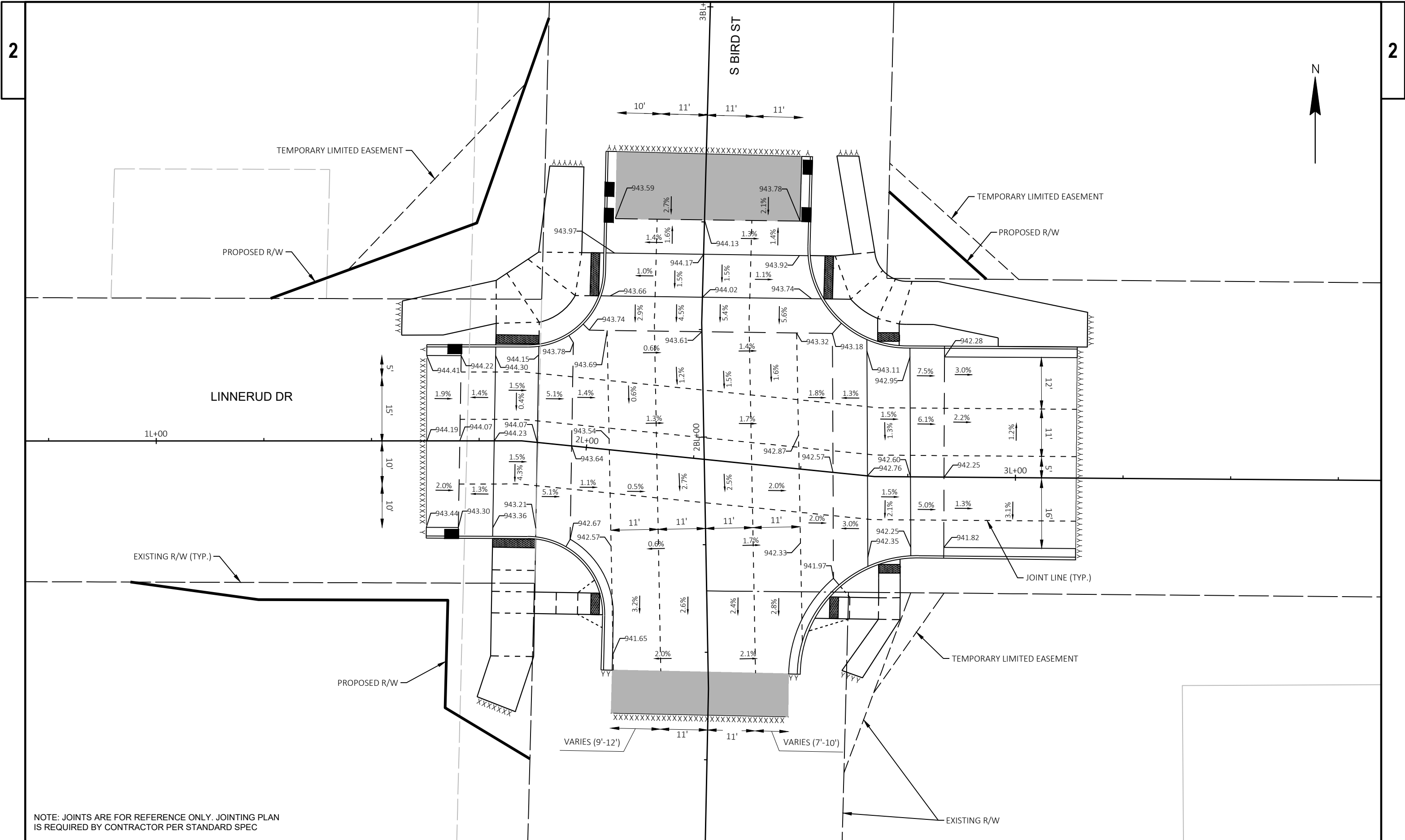


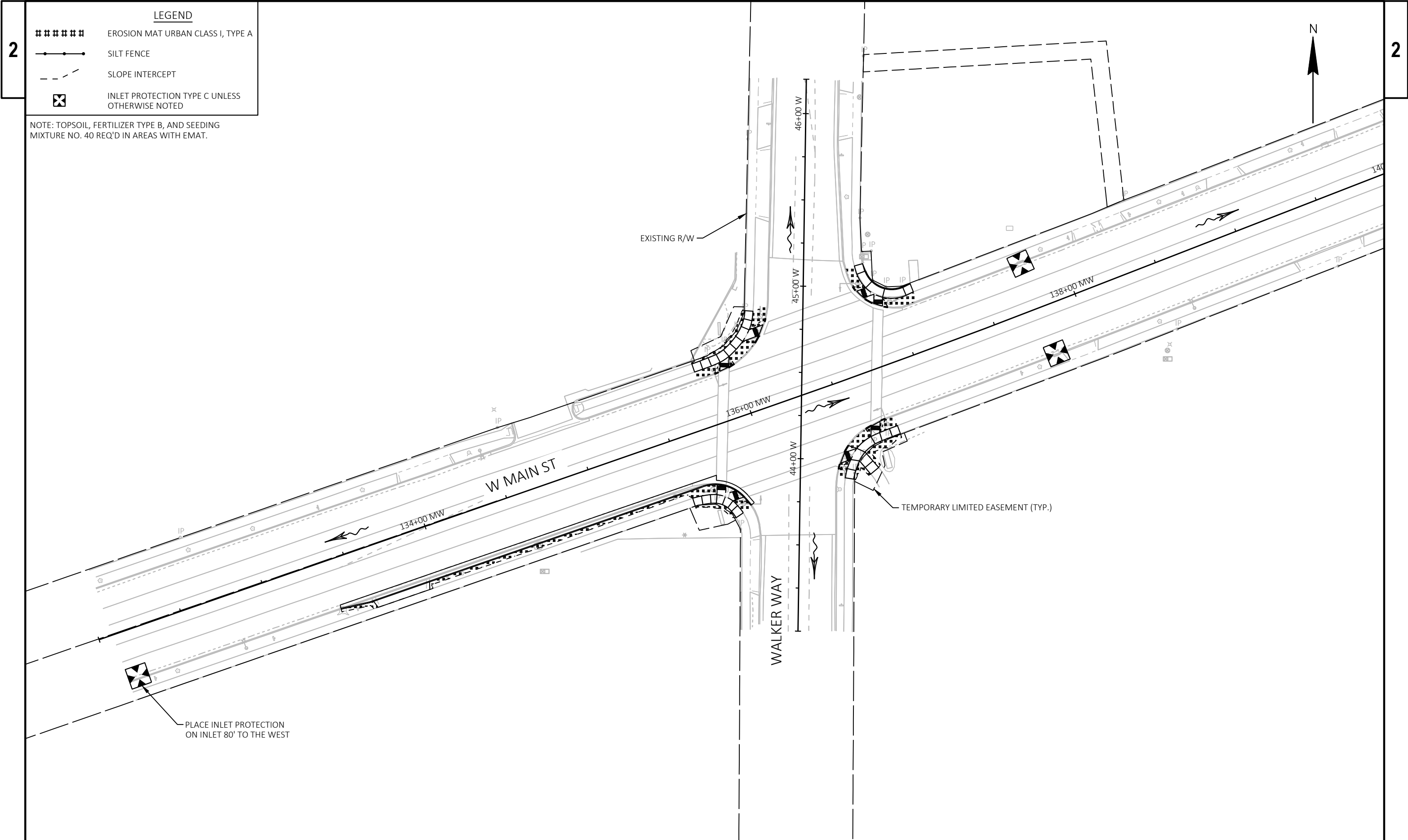


BIRD ST - LINNERUD DR SW CURB RAMP					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
11-01	1+78.14	22.67' RT	943.25	519,311.01	863,090.11
11-02	1+78.10	24.67' RT	943.27	519,309.01	863,090.10
11-03	1+78.01	29.95' RT	943.01	519,303.74	863,090.07
11-04	1+77.93	34.95' RT	942.77	519,298.74	863,090.04
11-05	1+77.85	39.94' RT	942.70	519,293.74	863,090.02
11-06	1+77.68	49.94' RT	942.20	519,283.74	863,089.96
11-07	1+74.53	59.43' RT	941.70	519,274.21	863,086.92
11-08	1+89.74	62.74' RT	941.66	519,270.83	863,095.82
11-09	1+92.71	49.57' RT	942.14	519,283.68	863,099.96
11-10	1+91.87	39.61' RT	942.54	519,293.68	863,100.02
11-11	2+01.84	38.77' RT	942.22	519,293.63	863,110.02
11-12	2+06.88	38.34' RT	941.87	519,293.60	863,115.08
11-13	2+07.65	38.28' RT	941.86	519,293.59	863,115.85
11-14	2+06.46	33.36' RT	942.05	519,298.60	863,115.11
11-15	2+04.47	33.53' RT	942.19	519,298.61	863,113.11
11-16	2+01.42	33.79' RT	942.30	519,298.63	863,110.04
11-17	1+91.45	34.63' RT	942.62	519,298.68	863,100.04
11-18	1+91.03	29.64' RT	942.87	519,303.68	863,100.07
11-19	1+90.59	24.39' RT	943.12	519,308.96	863,100.10
11-20	1+90.42	22.39' RT	943.10	519,310.96	863,100.11



BIRD ST - LINNERUD DR SE CURB RAMP					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
12-01	2+68.37	20.43' RT	942.28	519,305.95	863,179.83
12-02	2+68.46	28.15' RT	942.43	519,298.24	863,179.94
12-03	2+64.37	28.47' RT	942.17	519,298.28	863,173.22
12-04	2+59.76	28.86' RT	941.85	519,298.30	863,168.59
12-05	2+56.72	34.14' RT	941.75	519,293.32	863,165.09
12-06	2+60.18	33.85' RT	941.81	519,293.30	863,168.56
12-07	2+64.79	33.46' RT	942.13	519,293.28	863,173.20
12-08	2+68.41	33.15' RT	942.47	519,293.24	863,179.92
12-09	2+64.25	45.57' RT	941.97	519,281.26	863,171.57
12-10	2+67.23	46.85' RT	942.04	519,279.59	863,176.39
12-11	2+73.41	33.19' RT	942.48	519,293.21	863,184.92
12-12	2+73.46	28.09' RT	942.40	519,298.32	863,184.94
12-13	2+73.36	20.37' RT	942.25	519,306.03	863,184.83
12-14	2+73.35	19.15' RT	942.23	519,307.25	863,184.81

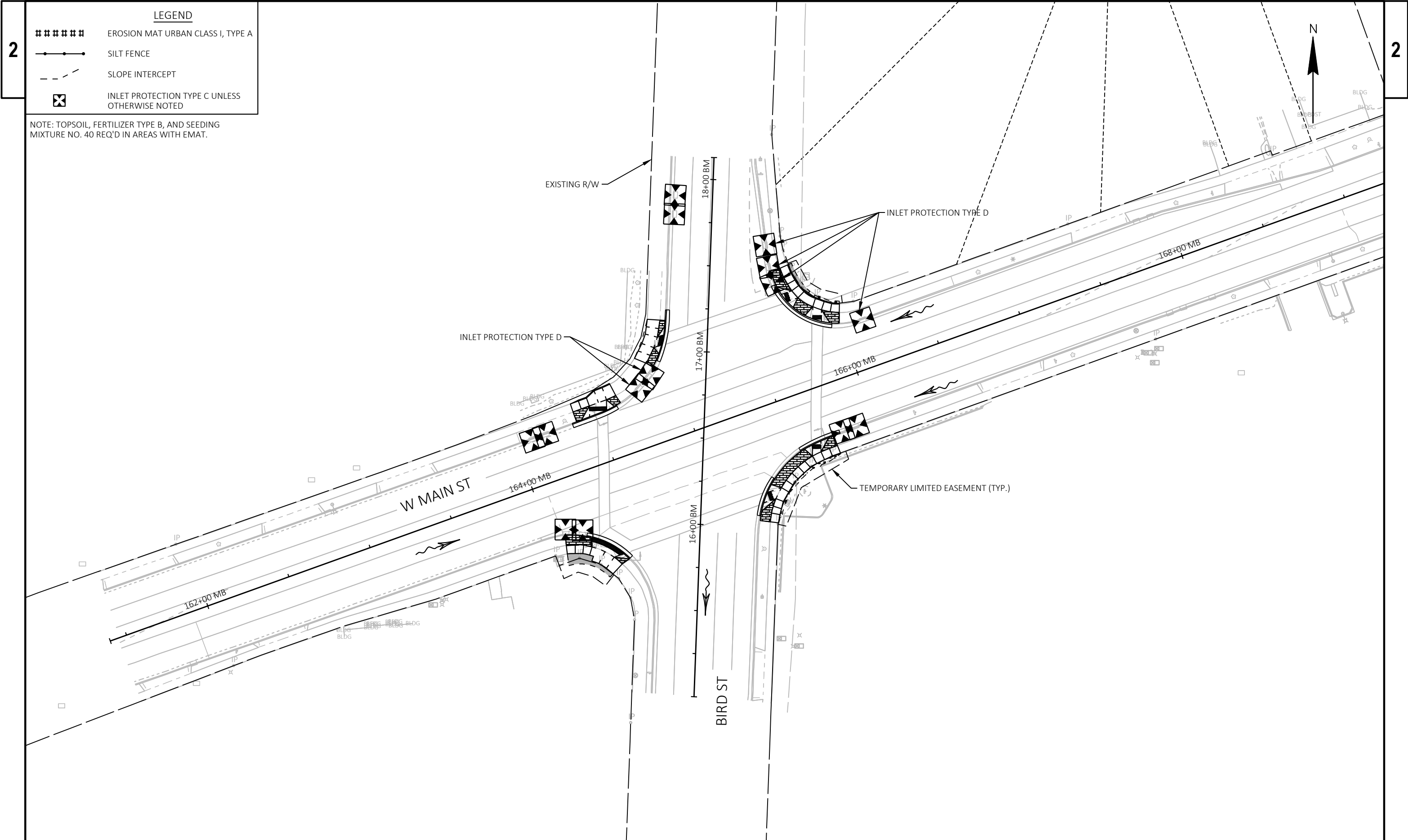




LEGEND

- ##### EROSION MAT URBAN CLASS I, TYPE A
- SILT FENCE
- - - SLOPE INTERCEPT
- ⊗ INLET PROTECTION TYPE C UNLESS OTHERWISE NOTED

NOTE: TOPSOIL, FERTILIZER TYPE B, AND SEEDING MIXTURE NO. 40 REQ'D IN AREAS WITH EMAT.



2

#####

EROSION MAT URBAN CLASS I, TYPE A

—●—●—

SILT FENCE

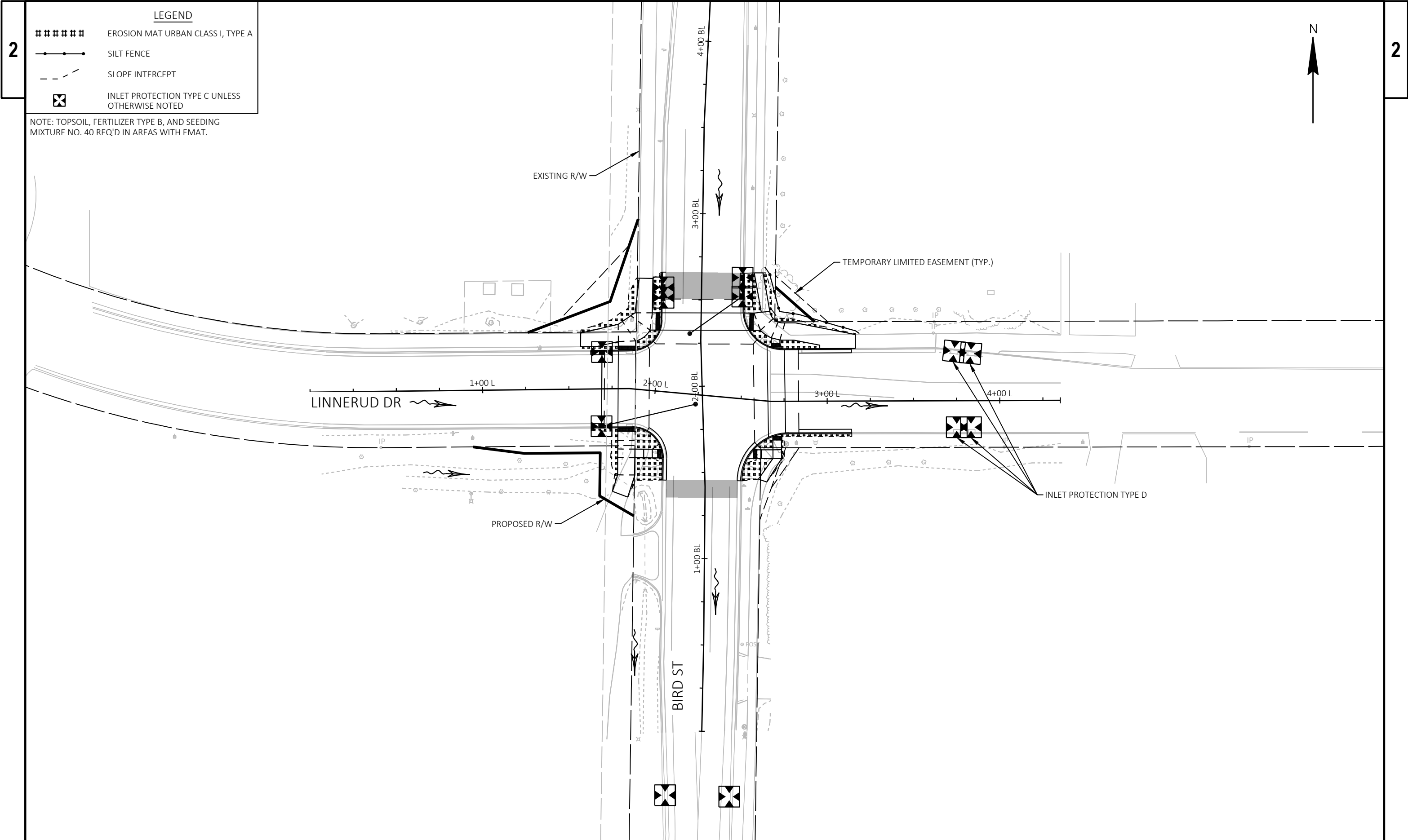
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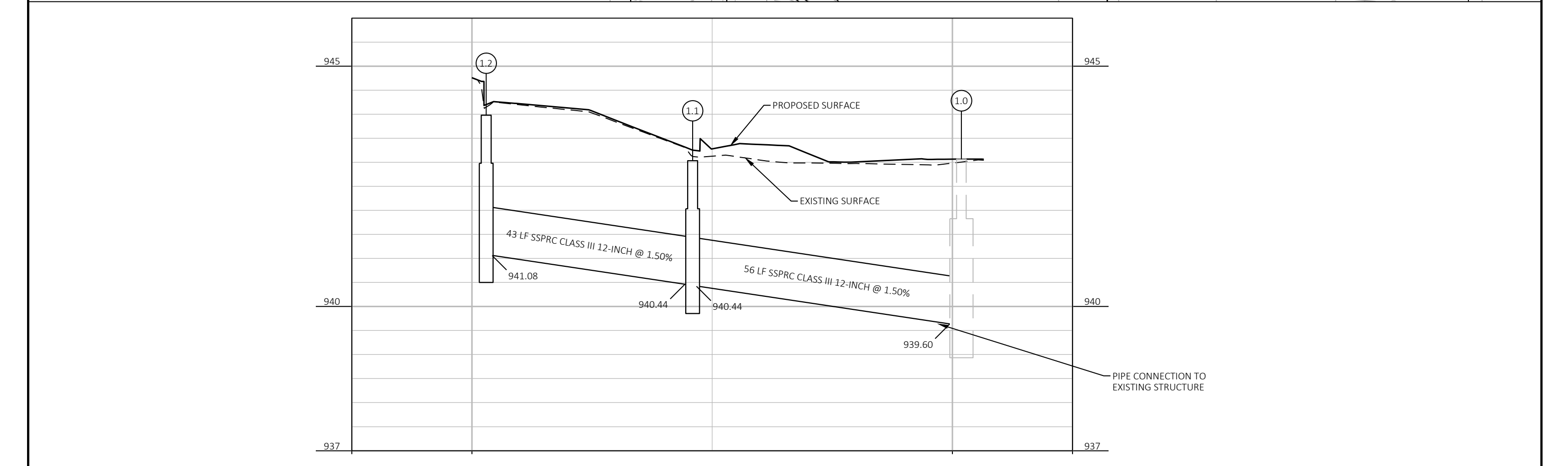
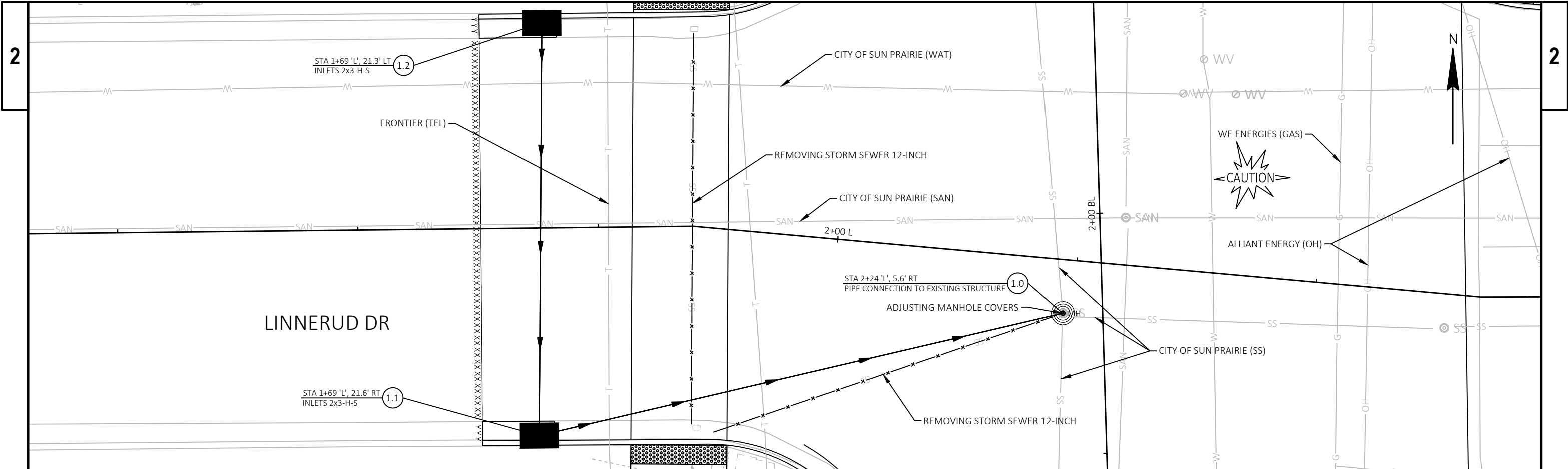
SLOPE INTERCEPT

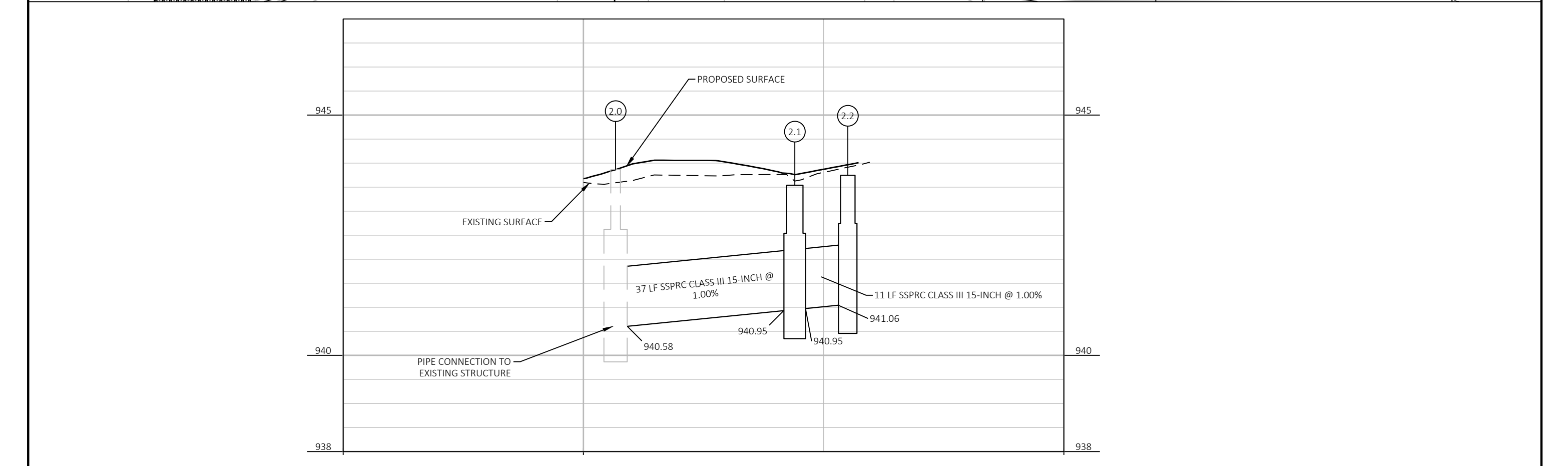
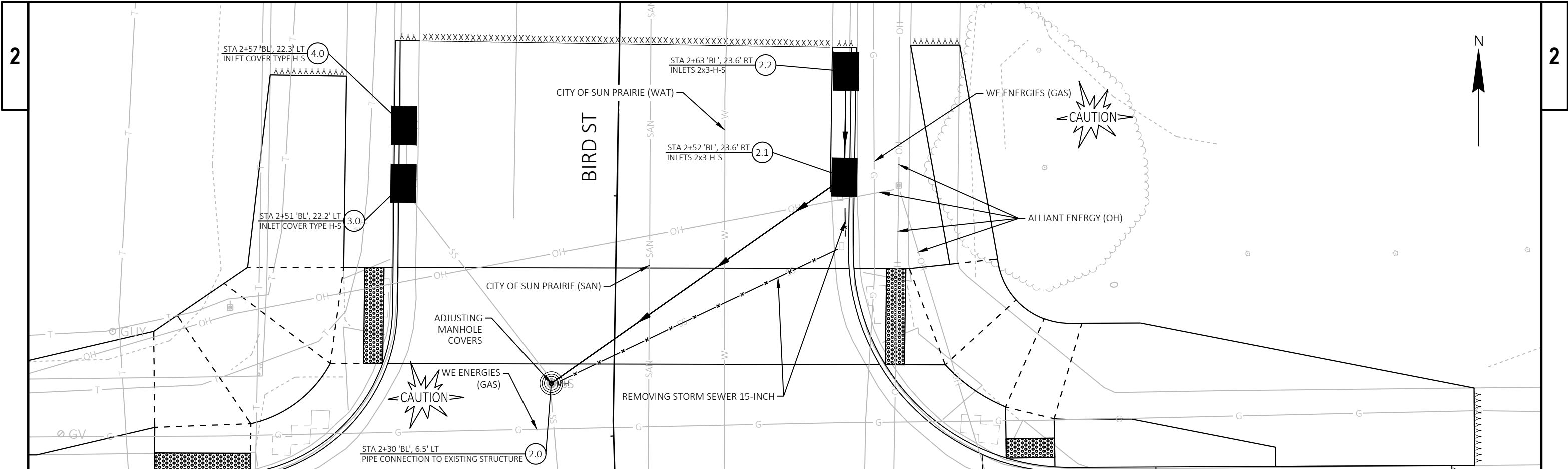
⊗

INLET PROTECTION TYPE C UNLESS OTHERWISE NOTED

NOTE: TOPSOIL, FERTILIZER TYPE B, AND SEEDING MIXTURE NO. 40 REQ'D IN AREAS WITH EMAT.

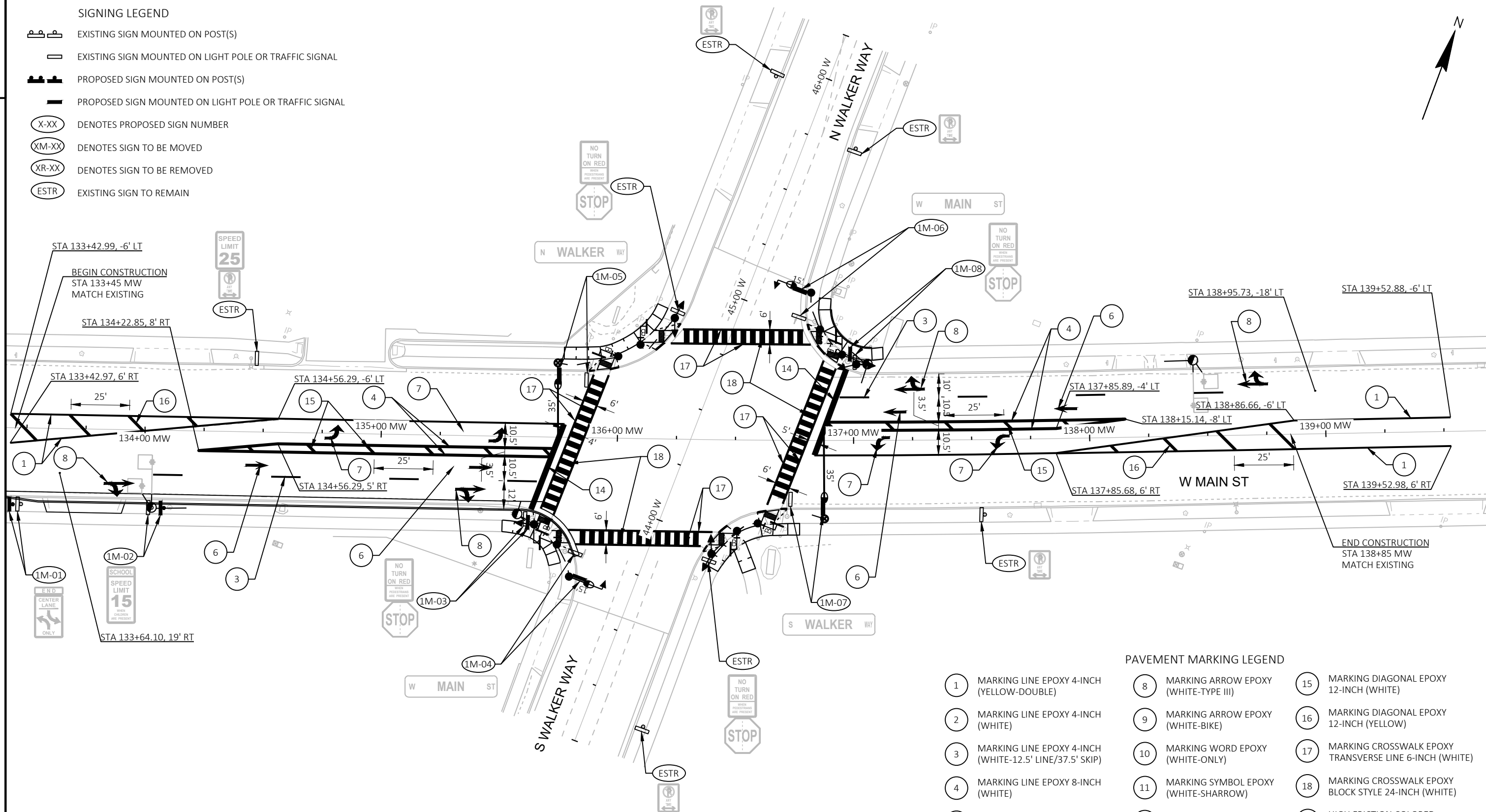






SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
 EXISTING SIGN MOUNTED ON LIGHT POLE OR TRAFFIC SIGNAL
 PROPOSED SIGN MOUNTED ON POST(S)
 PROPOSED SIGN MOUNTED ON LIGHT POLE OR TRAFFIC SIGNAL
 DENOTES PROPOSED SIGN NUMBER
 DENOTES SIGN TO BE MOVED
 DENOTES SIGN TO BE REMOVED
 EXISTING SIGN TO REMAIN



PAVEMENT MARKING LEGEND

- | | | |
|---|--|---|
| 1 MARKING LINE EPOXY 4-INCH (YELLOW-DOUBLE) | 8 MARKING ARROW EPOXY (WHITE-TYPE III) | 15 MARKING DIAGONAL EPOXY 12-INCH (WHITE) |
| 2 MARKING LINE EPOXY 4-INCH (WHITE) | 9 MARKING ARROW EPOXY (WHITE-BIKE) | 16 MARKING DIAGONAL EPOXY 12-INCH (YELLOW) |
| 3 MARKING LINE EPOXY 4-INCH (WHITE-12.5' LINE/37.5' SKIP) | 10 MARKING WORD EPOXY (WHITE-ONLY) | 17 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE) |
| 4 MARKING LINE EPOXY 8-INCH (WHITE) | 11 MARKING SYMBOL EPOXY (WHITE-SHARROW) | 18 MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH (WHITE) |
| 5 MARKING LINE EPOXY 8-INCH (WHITE-3' LINE/9' SKIP) | 12 MARKING SYMBOL EPOXY (WHITE-BIKE) | 19 HIGH FRICTION COLORED SURFACE (BIKE LANE GREEN) |
| 6 MARKING ARROW EPOXY (WHITE-TYPE I) | 13 MARKING CHEVRON EPOXY 12-INCH (WHITE) | 20 MARKING LINE EPOXY 4-INCH (WHITE-3' LINE/9' SKIP) |
| 7 MARKING ARROW EPOXY (WHITE-TYPE II) | 14 MARKING STOP LINE EPOXY 18-INCH (WHITE) | |

PROJECT NO: 3996-00-10

HWY: LOCAL STREETS

COUNTY: DANE

PERMANENT SIGNING & PAVEMENT MARKING - W MAIN ST AND WALKER WAY

SHEET

PRE 36

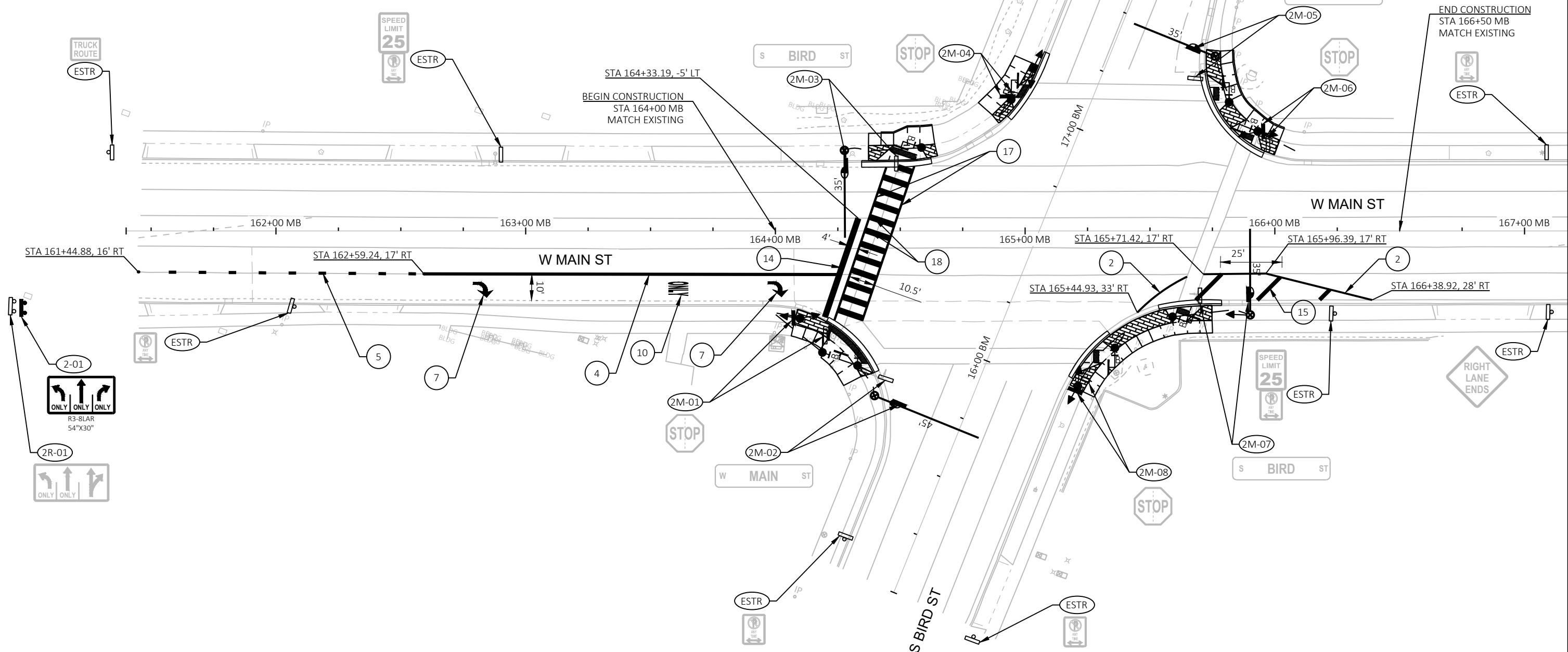
E

SIGNING LEGEND

-  EXISTING SIGN MOUNTED ON POST(S)
-  EXISTING SIGN MOUNTED ON LIGHT POLE OR TRAFFIC SIGNAL
-  PROPOSED SIGN MOUNTED ON POST(S)
-  PROPOSED SIGN MOUNTED ON LIGHT POLE OR TRAFFIC SIGNAL
-  DENOTES PROPOSED SIGN NUMBER
-  DENOTES SIGN TO BE MOVED
-  DENOTES SIGN TO BE REMOVED
-  EXISTING SIGN TO REMAIN

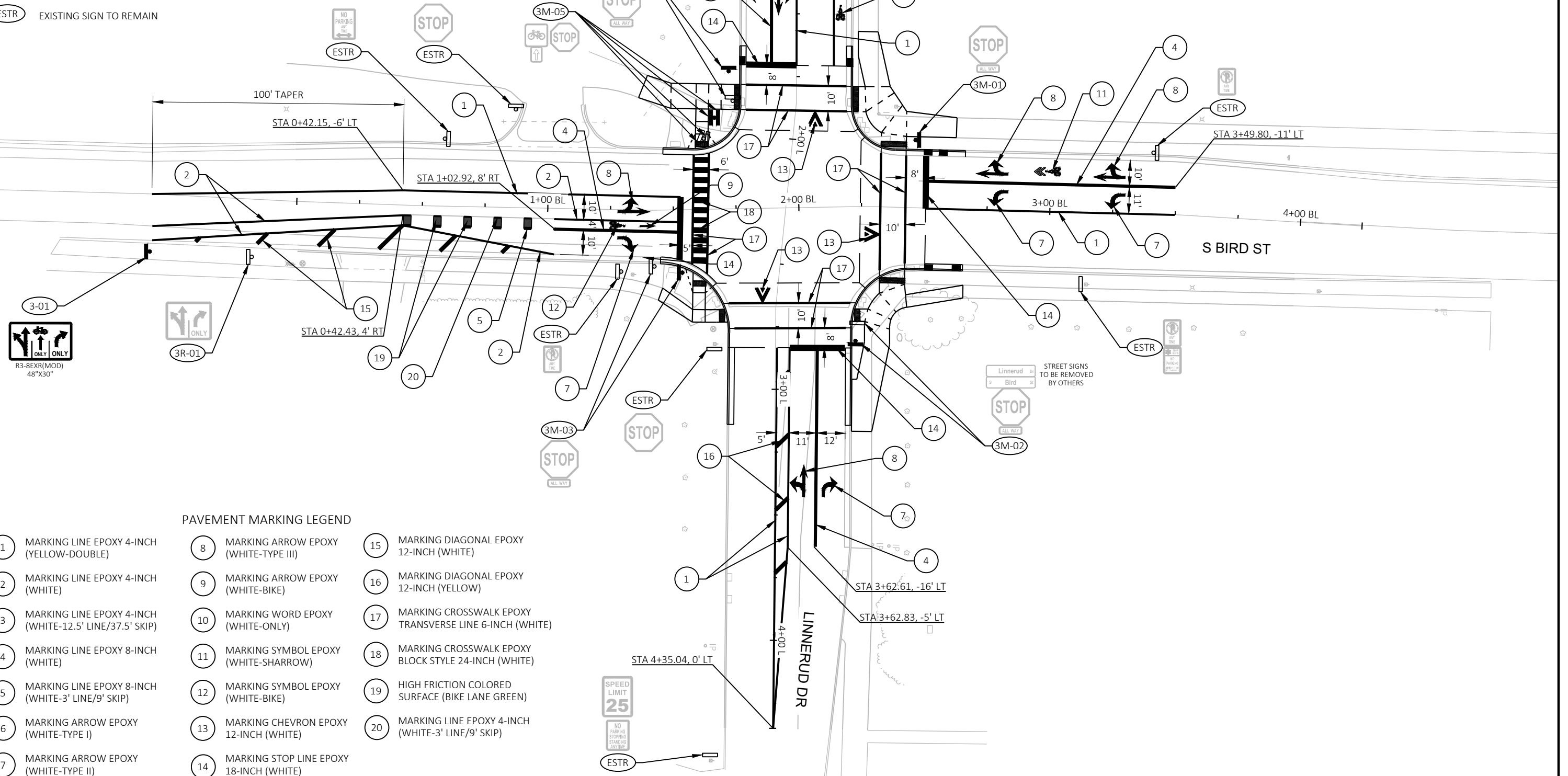
PAVEMENT MARKING LEGEND

- | | | |
|---|--|---|
| 1 MARKING LINE EPOXY 4-INCH (YELLOW-DOUBLE) | 8 MARKING ARROW EPOXY (WHITE-TYPE III) | 15 MARKING DIAGONAL EPOXY 12-INCH (WHITE) |
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| 4 MARKING LINE EPOXY 8-INCH (WHITE) | 11 MARKING SYMBOL EPOXY (WHITE-SHARROW) | 18 MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH (WHITE) |
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| 6 MARKING ARROW EPOXY (WHITE-TYPE I) | 13 MARKING CHEVRON EPOXY 12-INCH (WHITE) | 20 MARKING LINE EPOXY 4-INCH (WHITE-3' LINE/9' SKIP) |
| 7 MARKING ARROW EPOXY (WHITE-TYPE II) | 14 MARKING STOP LINE EPOXY 18-INCH (WHITE) | |



SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLE OR TRAFFIC SIGNAL
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON LIGHT POLE OR TRAFFIC SIGNAL
- DENOTES PROPOSED SIGN NUMBER
- DENOTES SIGN TO BE MOVED
- DENOTES SIGN TO BE REMOVED
- EXISTING SIGN TO REMAIN



PAVEMENT MARKING LEGEND

- | | | |
|---|--|---|
| 1 MARKING LINE EPOXY 4-INCH (YELLOW-DOUBLE) | 8 MARKING ARROW EPOXY (WHITE-TYPE III) | 15 MARKING DIAGONAL EPOXY 12-INCH (WHITE) |
| 2 MARKING LINE EPOXY 4-INCH (WHITE) | 9 MARKING ARROW EPOXY (WHITE-BIKE) | 16 MARKING DIAGONAL EPOXY 12-INCH (YELLOW) |
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PROJECT NO: 3996-00-10

HWY: LOCAL STREETS

COUNTY: DANE

PERMANENT SIGNING & PAVEMENT MARKING - LINNERUD DR AND S BIRD ST

SHEET

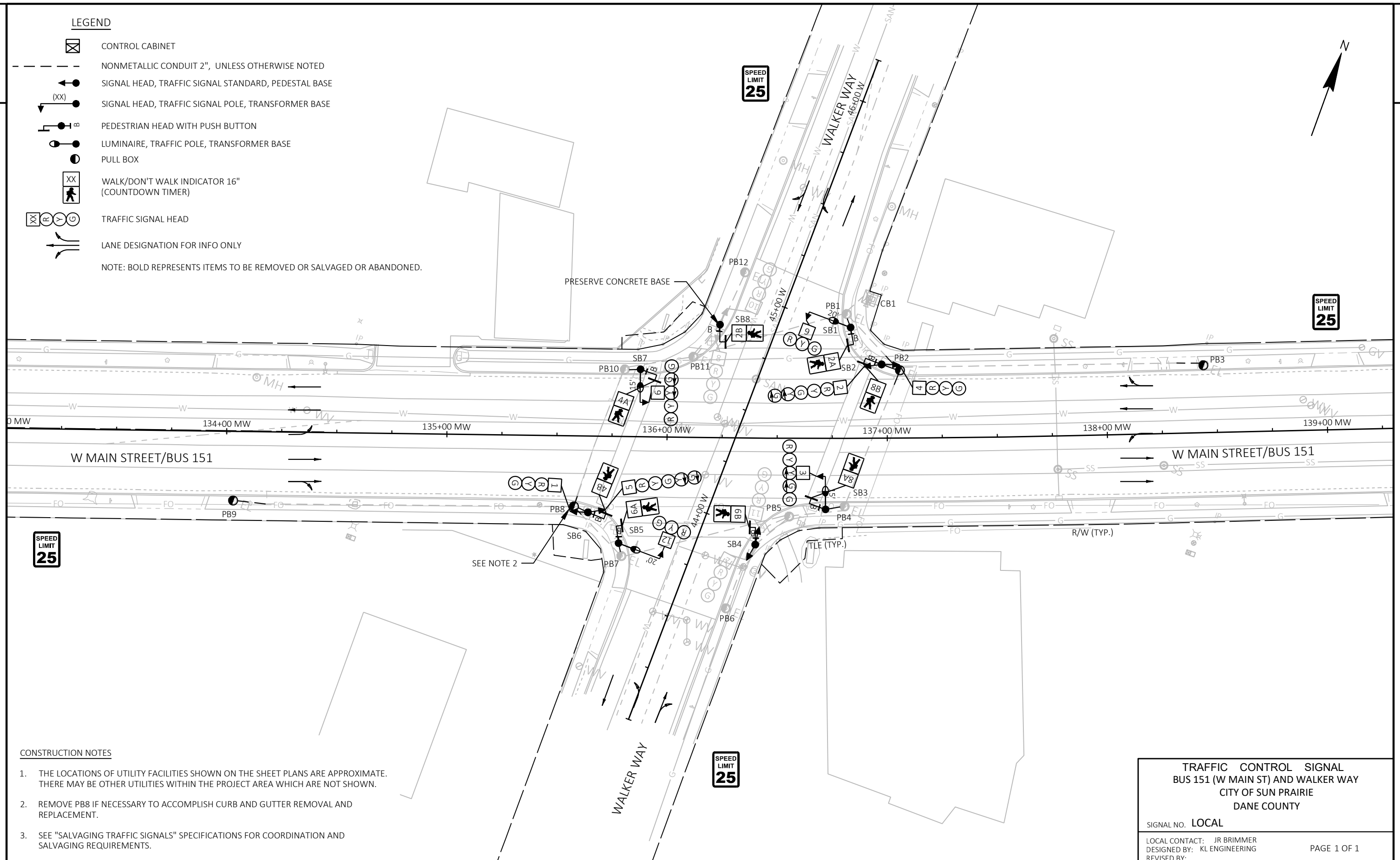
PRE 38

E

LEGEND

- | | |
|---|---|
|  | CONTROL CABINET |
|  | NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED |
|  | SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE |
|  | SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE |
|  | PEDESTRIAN HEAD WITH PUSH BUTTON |
|  | LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE |
|  | PULL BOX |
|  | WALK/DON'T WALK INDICATOR 16"
(COUNTDOWN TIMER) |
|  | TRAFFIC SIGNAL HEAD |
|  | LANE DESIGNATION FOR INFO ONLY |

NOTE: BOLD REPRESENTS ITEMS TO BE REMOVED OR SALVAGED OR ABANDONED.



CONSTRUCTION NOTES

1. THE LOCATIONS OF UTILITY FACILITIES SHOWN ON THE SHEET PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
2. REMOVE PB8 IF NECESSARY TO ACCOMPLISH CURB AND GUTTER REMOVAL AND REPLACEMENT.
3. SEE "SALVAGING TRAFFIC SIGNALS" SPECIFICATIONS FOR COORDINATION AND SALVAGING REQUIREMENTS.

TRAFFIC CONTROL SIGNAL
BUS 151 (W MAIN ST) AND WALKER WAY
CITY OF SUN PRAIRIE
DANE COUNTY

SIGNAL NO. LOCAL

LOCAL CONTACT: JR BRIMMER
DESIGNED BY: KL ENGINEERING
REVISED BY:

PAGE 1 OF 1

PROJECT NO:	3996-00-10
-------------	------------

HWY: LOCAL STREETS

COUNTY: DANE

TRAFFIC SIGNAL REMOVAL PLAN

SHEET PRE 30

FILE NAME : G:\WDOTSW\21083-000 SUN PRAIRIE LOCAL INTERSECTION HSIP\CIVIL 3D\SHEETS\PLAN\024001-SR-WALKER.DWG
LAYOUT NAME - INT

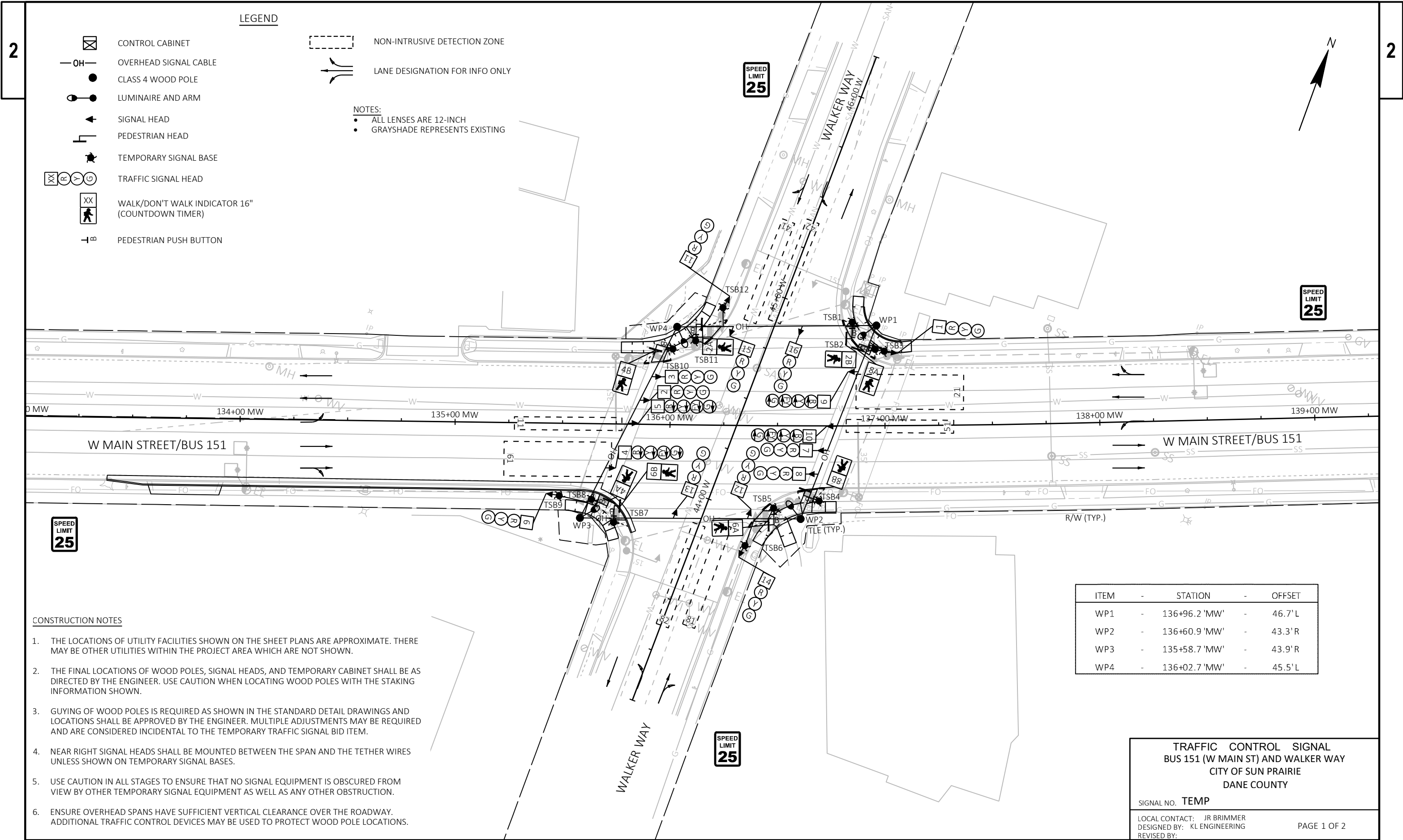
PLOT DATE : 5/1/2025 11:51 AM

PLOT BY : KL ENGINEERING

PLOT NAME :

PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42



LEGEND

- CONTROL CABINET
- OVERHEAD SIGNAL CABLE
- CLASS 4 WOOD POLE
- LUMINAIRE AND ARM
- SIGNAL HEAD
- PEDESTRIAN HEAD
- TEMPORARY SIGNAL BASE
- TRAFFIC SIGNAL HEAD
- WALK/DON'T WALK INDICATOR 16"
(COUNTDOWN TIMER)
- PEDESTRIAN PUSH BUTTON
- NON-INTRUSIVE DETECTION ZONE
- LANE DESIGNATION FOR INFO ONLY

NOTES:

- ALL LENSES ARE 12-INCH
- GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES

- THE LOCATIONS OF UTILITY FACILITIES SHOWN ON THE SHEET PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
- THE FINAL LOCATIONS OF WOOD POLES, SIGNAL HEADS, AND TEMPORARY CABINET SHALL BE AS DIRECTED BY THE ENGINEER. USE CAUTION WHEN LOCATING WOOD POLES WITH THE STAKING INFORMATION SHOWN.
- GUYING OF WOOD POLES IS REQUIRED AS SHOWN IN THE STANDARD DETAIL DRAWINGS AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER. MULTIPLE ADJUSTMENTS MAY BE REQUIRED AND ARE CONSIDERED INCIDENTAL TO THE TEMPORARY TRAFFIC SIGNAL BID ITEM.
- NEAR RIGHT SIGNAL HEADS SHALL BE MOUNTED BETWEEN THE SPAN AND THE TETHER WIRES UNLESS SHOWN ON TEMPORARY SIGNAL BASES.
- USE CAUTION IN ALL STAGES TO ENSURE THAT NO SIGNAL EQUIPMENT IS OBSCURED FROM VIEW BY OTHER TEMPORARY SIGNAL EQUIPMENT AS WELL AS ANY OTHER OBSTRUCTION.
- ENSURE OVERHEAD SPANS HAVE SUFFICIENT VERTICAL CLEARANCE OVER THE ROADWAY. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE USED TO PROTECT WOOD POLE LOCATIONS.

ITEM	-	STATION	-	OFFSET
WP1	-	136+96.2 'MW'	-	46.7' L
WP2	-	136+60.9 'MW'	-	43.3' R
WP3	-	135+58.7 'MW'	-	43.9' R
WP4	-	136+02.7 'MW'	-	45.5' L

TRAFFIC CONTROL SIGNAL
BUS 151 (W MAIN ST) AND WALKER WAY
CITY OF SUN PRAIRIE
DANE COUNTY

SIGNAL NO. TEMP

LOCAL CONTACT: JR BRIMMER
DESIGNED BY: KL ENGINEERING
REVISED BY:

PAGE 1 OF 2

PROJECT NO: 3996-00-10

HWY: LOCAL STREETS

COUNTY: DANE

TEMPORARY TRAFFIC SIGNAL PLAN

SHEET

PRE 40

E

FILE NAME : G:\WDOTSW\21083-000 SUN PRAIRIE LOCAL INTERSECTION HSIP\CIVIL 3D\SHEETSP\PLAN\024101-ST-WALKER.DWG
LAYOUT NAME - INT Walker

PLOT DATE : 5/1/2025 11:52 AM

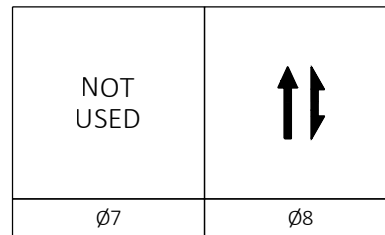
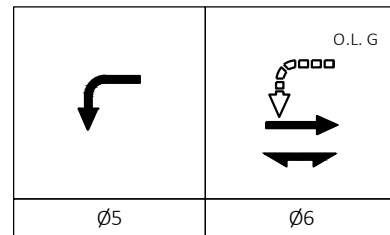
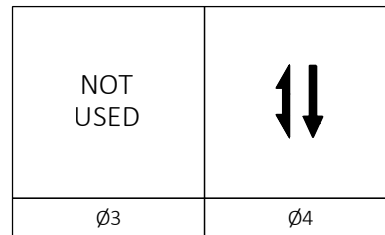
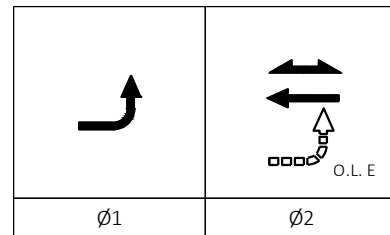
PLOT BY : KL ENGINEERING

PLOT NAME :

PLOT SCALE : 1 IN=40 FT

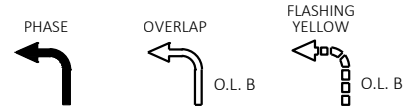
WISDOT/CADDs SHEET 42

	HEAD NUMBERS	FLASH	
Ø1	9-10	R ←	
Ø2	1-3	R	
Ø3			
Ø4	11-13	R	
Ø5	4-5	R ←	
Ø6	6-8	R	
Ø7			
Ø8	14-16	R	
Ø2 PED	2A,2B	-	
Ø4 PED	4A,4B	-	
Ø6 PED	6A,6B	-	
Ø8 PED	8A,8B	-	O.L. ASSIGNMENTS
O.L.A			
O.L.B			
O.L.C			
O.L.D			
O.L.E	9-10	-	Ø1,Ø2
O.L.F			
O.L.G	4-5	-	Ø5, Ø6
O.L.H			



BARRIER

LEGEND



PREEMPTION ASSIGNMENTS				
PREEMPTION DESIGNATION	PREEMPTION TYPE	EVP CHANNEL	DIRECTION OF TRAVEL	PHASE(S) CALLED
1	RESERVED	-	-	-
2	RESERVED	-	-	-
3	RESERVED	-	-	-
4	RESERVED	-	-	-
5	RESERVED	-	-	-
6	RESERVED	-	-	-
7	NOT USED	-	-	-
8	NOT USED	-	-	-
9	NOT USED	-	-	-
10	NOT USED	-	-	-

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

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWARE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

CENTRAL SYSTEM	
LOCATION OF MASTER	
CONTROLLER NO.:	N/A
SIGNAL SYSTEM #:	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE LIGHTING CABINET	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
DETECTOR #(S)	11	21	41	42	51	61	81	82
PHASE CALLED	1	2	4	4	5	6	8	8
PHASE EXTENDED	1	2	4	4	5	6	8	8
DISCONNECT TIME								
CALLING DELAY								
EXTENSION STRETCH								
LOOP FUNCTION								

DETECTOR INPUT	4	2	8	6	12	10	16	14
DETECTOR #(S)								
PHASE CALLED								
PHASE EXTENDED								
DISCONNECT TIME								
CALLING DELAY								
EXTENSION STRETCH								
LOOP FUNCTION								

[illegible][illegible]

DETECTOR INPUT
DETECTOR #(S)
PHASE CALLED
PHASE EXTENDED
DISCONNECT TIME
CALLING DELAY
EXTENSION STRETCH
LOOP FUNCTION

TYPE OF INTERCONNECT	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR	
CLOSED LOOP FIBER OPTIC	
RADIO	

TYPE OF REMOTE COMMUNICATION	
NONE	X
FIBER	
CELL MODEM	
PHONE	

TRAFFIC CONTROL SIGNAL
BUS 151 (W MAIN ST) AND WALKER WAY
CITY OF SUN PRAIRIE
DANE COUNTY

SIGNAL NO.	TEMP
1	100
2	100
3	100
4	100
5	100
6	100
7	100
8	100
9	100
10	100
11	100
12	100
13	100
14	100
15	100
16	100
17	100
18	100
19	100
20	100
21	100
22	100
23	100
24	100
25	100
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89	100
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96	100
97	100
98	100
99	100
100	100

LOCAL CONTACT: JR BRIMMER
DESIGNED BY: KL ENGINEERING
REVISED BY:

PAGE 2 OF 2

PROJECT NO:	3996-00-10
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HWY: LOCAL STREETS

COUNTY: DANE

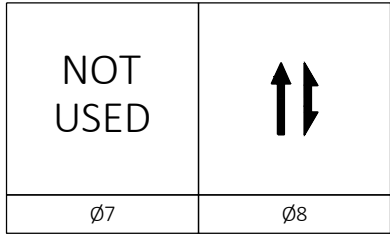
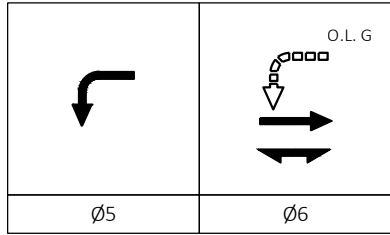
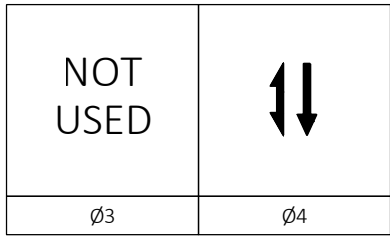
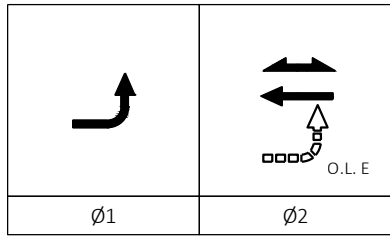
TEMPORARY TRAFFIC SIGNAL PLAN

SHEET

PRE 41

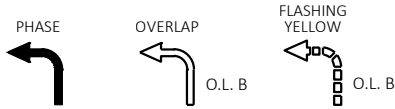
E

	HEAD NUMBERS	FLASH	
Ø1	4,5	R	
Ø2	6-8	R	
Ø3			
Ø4	14-16	R	
Ø5	9,10	R	
Ø6	1-3	R	
Ø7			
Ø8	11-13	R	
Ø2 PED	2A,2B		
Ø4 PED	4A,4B		
Ø6 PED	6A,6B		
Ø8 PED	8A,8B		O.L. ASSIGNMENTS
O.L.A			
O.L.B			
O.L.C			
O.L.D			
O.L.E	4,5	-	Ø1, Ø2
O.L.F			
O.L.G	9,10	-	Ø5, Ø6
O.L.H			



BARRIER

LEGEND



PREEMPTION ASSIGNMENTS				
PREEMPTION DESIGNATION	PREEMPTION TYPE	EVP CHANNEL	DIRECTION OF TRAVEL	PHASE(S) CALLED
1	RESERVED	-	-	-
2	RESERVED	-	-	-
3	EVP	A	WEST	2+5
4	EVP	B	EAST	1+6
5	EVP	C	SOUTH	4
6	EVP	D	NORTH	8
7	NOT USED	-	-	-
8	NOT USED	-	-	-
9	NOT USED	-	-	-
10	NOT USED	-	-	-

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

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	
TOMAR	X
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

CENTRAL SYSTEM	
LOCATION OF MASTER	
CONTROLLER NO.:	N/A
SIGNAL SYSTEM #:	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE LIGHTING CABINET	

DETECTOR INPUT	3	1	7	5	11	9	15	13
DETECTOR #(S)	11	21	22	41	42	51	61	62
PHASE CALLED	1	2	2	4	4	5	6	6
PHASE EXTENDED	1,2	2	2	4	4	5,6	6	6
DISCONNECT TIME								
CALLING DELAY								
EXTENSION STRETCH								
LOOP FUNCTION								

DETECTOR INPUT	4	2	8	6	12	10	16	14
DETECTOR #(S)								
PHASE CALLED								
PHASE EXTENDED								
DISCONNECT TIME								
CALLING DELAY								
EXTENSION STRETCH								
LOOP FUNCTION								

DETECTOR INPUT	19	17	23	21	27	25	31	29
DETECTOR #(S)	81	82						
PHASE CALLED	8	8						
PHASE EXTENDED	8	8						
DISCONNECT TIME								
CALLING DELAY								
EXTENSION STRETCH								
LOOP FUNCTION								

DETECTOR INPUT
DETECTOR #(S)
PHASE CALLED
PHASE EXTENDED
DISCONNECT TIME
CALLING DELAY
EXTENSION STRETCH
LOOP FUNCTION

DETECTOR INPUT	20	18	24	22	28	26	32	30
DETECTOR #(S)								
PHASE CALLED								
PHASE EXTENDED								
DISCONNECT TIME								
CALLING DELAY								
EXTENSION STRETCH								
LOOP FUNCTION								

DETECTOR INPUT
DETECTOR #(S)
PHASE CALLED
PHASE EXTENDED
DISCONNECT TIME
CALLING DELAY
EXTENSION STRETCH
LOOP FUNCTION

TYPE OF INTERCONNECT	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR	
CLOSED LOOP FIBER OPTIC	
RADIO	

TYPE OF REMOTE COMMUNICATION	
NONE	X
FIBER	
CELL MODEM	
PHONE	

TRAFFIC CONTROL SIGNAL
BUS 151 (W MAIN ST) AND WALKER WAY
CITY OF SUN PRAIRIE
DANE COUNTY
CABINET TYPE: TS2
CONTROLLER TYPE: EX2
SIGNAL NO. LOCAL

LOCAL CONTACT: JR BRIMMER
DESIGNED BY: KL ENGINEERING
REVISED BY:

PAGE 2 OF 3

INTERSECTION: W MAIN STREET & WALKER WAY

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

DATE: FEB-24

CB1 TO	AWG 14 # OF COND.	HEAD NO.	PHASE	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
				RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YEL>	<GREEN>	DWALK	WALK		
SB1	12	2A	2								BLK	BLU		
		BUTTON	2										*	
SB2	12	8B	8								BLK	BLU		
		BUTTON	8										*	
SB3	12	6	2	RED	ORG	GRN								
		4	1, O.L.E				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
SB4	12	2	6	RED	ORG	GRN								
		3	6	RED	ORG	GRN								
		5	1, O.L.E				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
SB5	12	8A	8								BLK	BLU		
		BUTTON	8										*	
SB6	12	6B	6								BLK	BLU		
		BUTTON	6										*	
SB7	12	15	4	RED	ORG	GRN								
		11	8	RED/BLK	ORG/BLK	BLK/WHT								
SB8	12	16	4	RED	ORG	GRN								
SB9	12	6A	6								BLK	BLU		
		BUTTON	6										*	
SB10	12	1	6	RED	ORG	GRN								
		9	5, O.L.G				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
		4B	4								BLK	BLU		
		BUTTON	4										*	
SB11	12	7	2	RED	ORG	GRN								
		8	2	RED	ORG	GRN								
		10	5, O.L.G				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
SB12	12	4A	4								BLK	BLU		
		BUTTON	4										*	
SB13	12	2B	2								BLK	BLU		
		BUTTON	2										*	
SB14	12	14	4	RED	ORG	GRN								
		12	8	RED/BLK	ORG/BLK	BLK/WHT								
SB15	12	13	8	RED	ORG	GRN								

*LOOP DETECTOR LEAD IN CABLE USED FOR PEDESTIAN PUSH BUTTONS

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	SB11
SB11	SB12
SB12	SB13
SB13	SB14
SB14	SB15
SB15	CB1

PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
PB1	SB15
PB2	SB3
PB4	SB4
PB5	SB5
PB7	SB8
PB8	SB10
PB10	SB11
PB11	SB13

LIGHTING UF 12 AWG W/ GROUND	
FROM	TO
CB1	SB4
SB4	SB8
CB1	SB15
SB15	SB11

LOOP DETECTOR LEAD-IN CABLE		
FROM	TO BUTTON ON	PHASE
CB1	SB1	2
CB1	SB2	2
CB1	SB5	8
CB1	SB6	8
CB1	SB9	6
CB1	SB10	6
CB1	SB12	4
CB1	SB13	4

NOTE: ALL RUNS SHALL BE COMPLETED WITH ONE CONTINUOUS CABLE FROM CABINET TO BUTTON. NO CABLE TO CABLE SPLICING IS PERMITTED.

TRAFFIC CONTROL SIGNAL
BUS 151 (W MAIN ST) AND WALKER WAY
CITY OF SUN PRAIRIE
DANE COUNTY
CABINET TYPE: TS2
CONTROLLER TYPE:EX2
SIGNAL NO. LOCAL

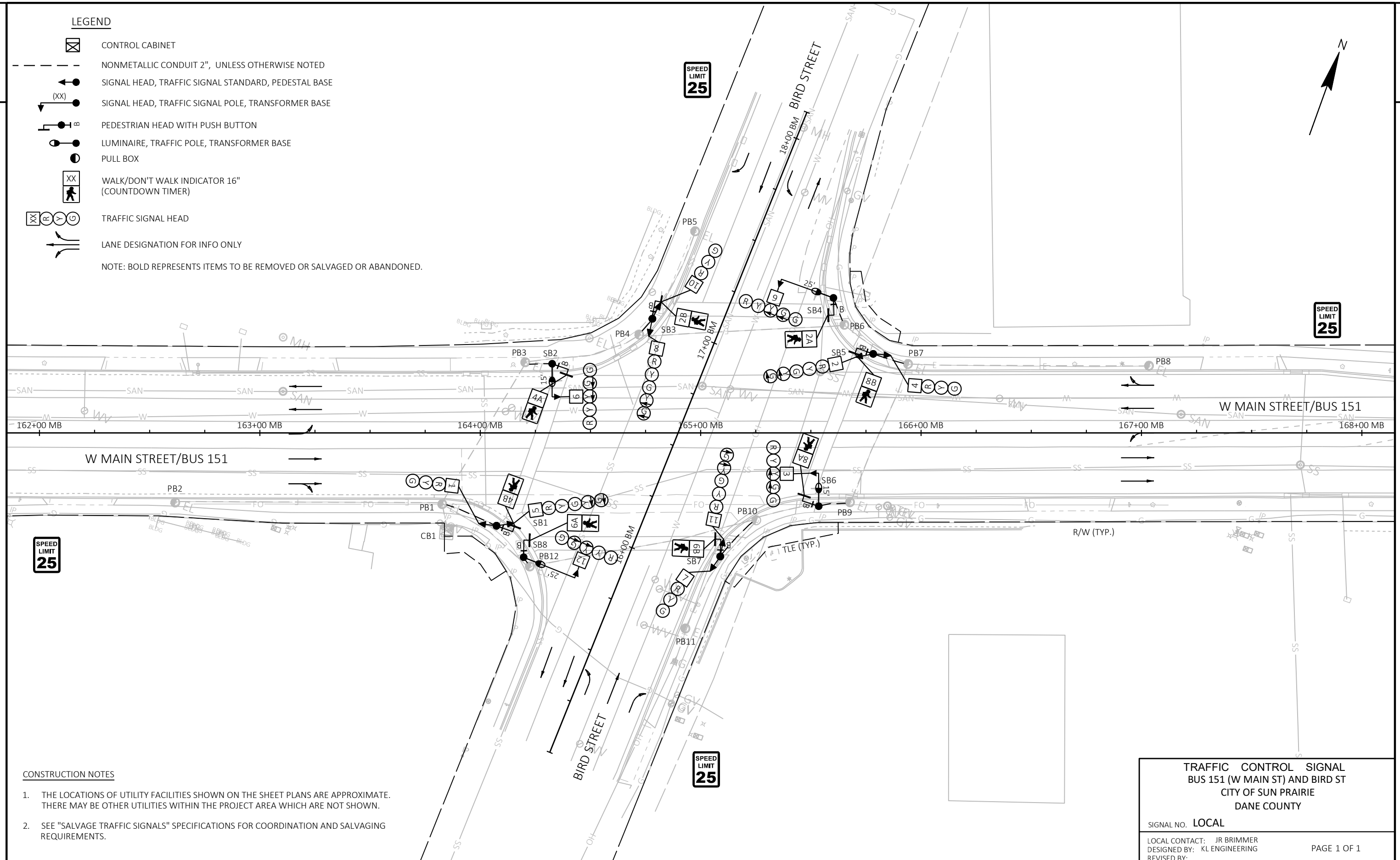
LOCAL CONTACT: JR BRIMMER
DESIGNED BY: KL ENGINEERING
REVISED BY:
PAGE 3 OF 3

2

LEGEND

- | | |
|---|---|
|  | CONTROL CABINET |
|  | NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED |
|  | SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE |
|  | SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE |
|  | PEDESTRIAN HEAD WITH PUSH BUTTON |
|  | LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE |
|  | PULL BOX |
|  | WALK/DON'T WALK INDICATOR 16"
(COUNTDOWN TIMER) |
|  | TRAFFIC SIGNAL HEAD |
|  | LANE DESIGNATION FOR INFO ONLY |

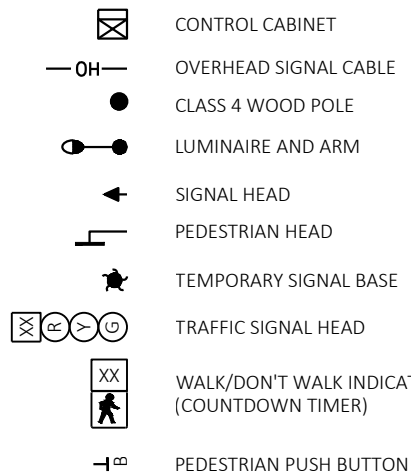
NOTE: BOLD REPRESENTS ITEMS TO BE REMOVED OR SALVAGED OR ABANDONED.



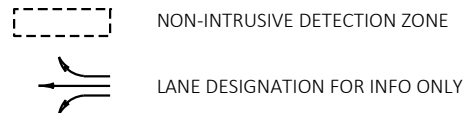
CONSTRUCTION NOTES

1. THE LOCATIONS OF UTILITY FACILITIES SHOWN ON THE SHEET PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
2. SEE "SALVAGE TRAFFIC SIGNALS" SPECIFICATIONS FOR COORDINATION AND SALVAGING REQUIREMENTS.

SHEET PRE 45



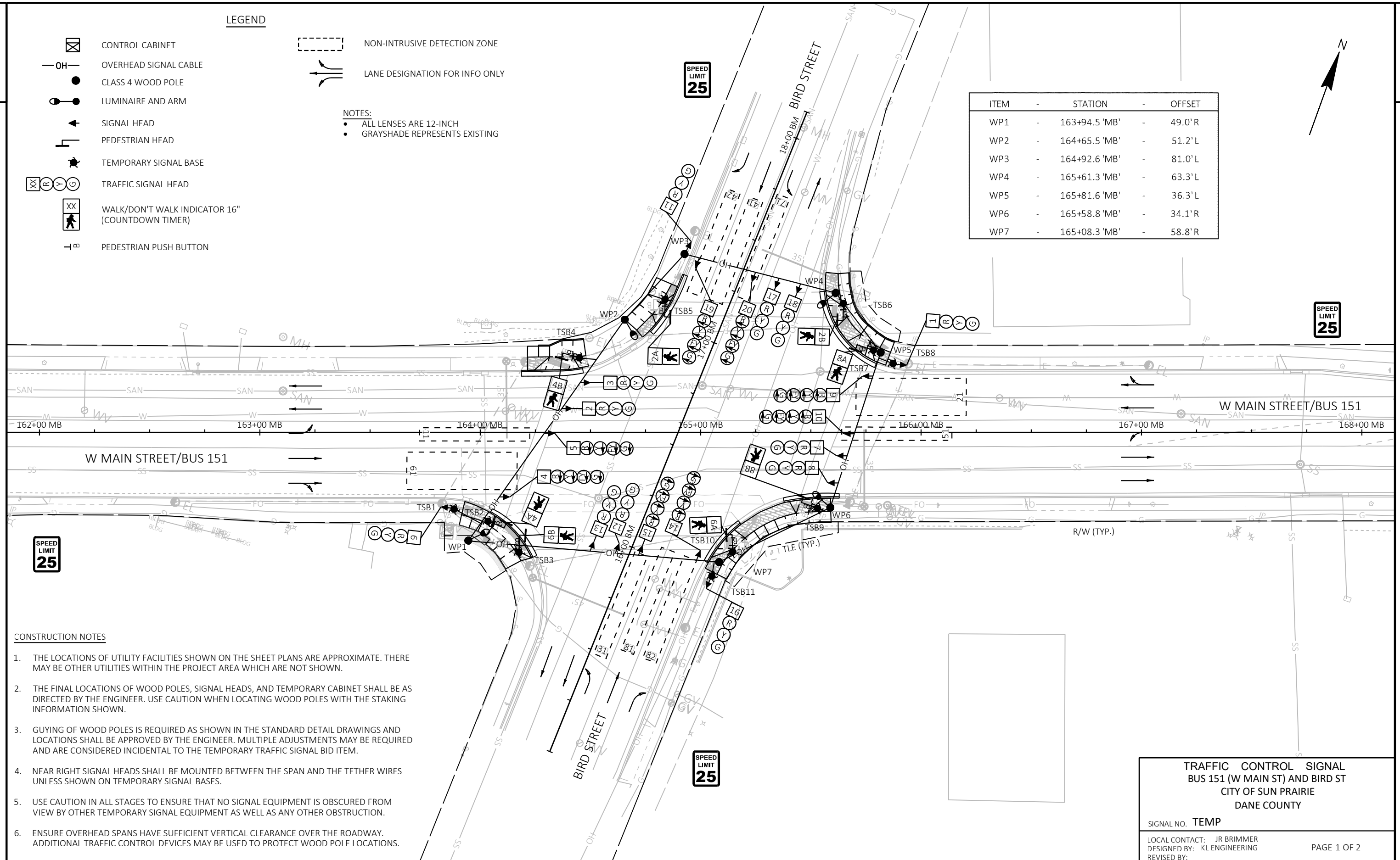
LEGEND



NOTES:

- ALL LENSES ARE 12-INCH
- GRAYSHADE REPRESENTS EXISTING

ITEM	-	STATION	-	OFFSET
WP1	-	163+94.5 'MB'	-	49.0' R
WP2	-	164+65.5 'MB'	-	51.2' L
WP3	-	164+92.6 'MB'	-	81.0' L
WP4	-	165+61.3 'MB'	-	63.3' L
WP5	-	165+81.6 'MB'	-	36.3' L
WP6	-	165+58.8 'MB'	-	34.1' R
WP7	-	165+08.3 'MB'	-	58.8' R



CONSTRUCTION NOTES

1. THE LOCATIONS OF UTILITY FACILITIES SHOWN ON THE SHEET PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
2. THE FINAL LOCATIONS OF WOOD POLES, SIGNAL HEADS, AND TEMPORARY CABINET SHALL BE AS DIRECTED BY THE ENGINEER. USE CAUTION WHEN LOCATING WOOD POLES WITH THE STAKING INFORMATION SHOWN.
3. GUYING OF WOOD POLES IS REQUIRED AS SHOWN IN THE STANDARD DETAIL DRAWINGS AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER. MULTIPLE ADJUSTMENTS MAY BE REQUIRED AND ARE CONSIDERED INCIDENTAL TO THE TEMPORARY TRAFFIC SIGNAL BID ITEM.
4. NEAR RIGHT SIGNAL HEADS SHALL BE MOUNTED BETWEEN THE SPAN AND THE TETHER WIRES UNLESS SHOWN ON TEMPORARY SIGNAL BASES.
5. USE CAUTION IN ALL STAGES TO ENSURE THAT NO SIGNAL EQUIPMENT IS OBSCURED FROM VIEW BY OTHER TEMPORARY SIGNAL EQUIPMENT AS WELL AS ANY OTHER OBSTRUCTION.
6. ENSURE OVERHEAD SPANS HAVE SUFFICIENT VERTICAL CLEARANCE OVER THE ROADWAY. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE USED TO PROTECT WOOD POLE LOCATIONS.

TRAFFIC CONTROL SIGNAL
BUS 151 (W MAIN ST) AND BIRD ST
CITY OF SUN PRAIRIE
DANE COUNTY

SIGNAL NO. TEMP

LOCAL CONTACT: JR BRIMMER
DESIGNED BY: KL ENGINEERING
REVISED BY:

PAGE 1 OF 2

PROJECT NO: 3996-00-10

HWY: LOCAL STREETS

COUNTY: DANE

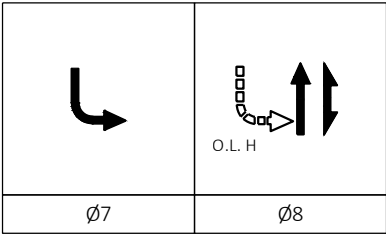
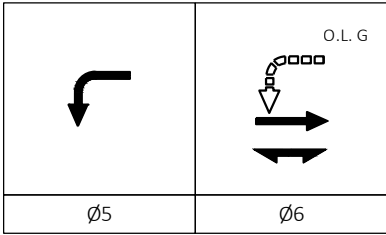
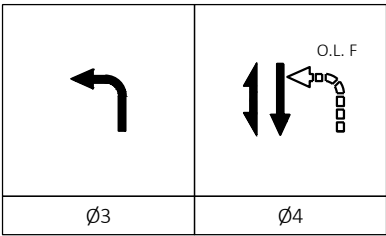
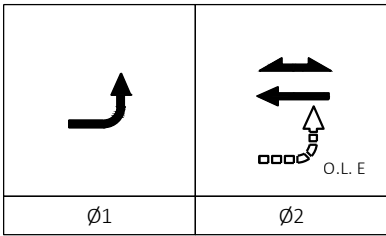
TEMPORARY TRAFFIC SIGNAL PLAN

SHEET

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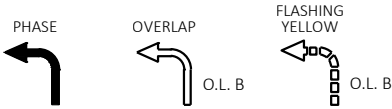
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	HEAD NUMBERS	FLASH	
Ø1	9-10	R	
Ø2	1-3	R	
Ø3	19-20	R	
Ø4	11-13	R	
Ø5	4-5	R	
Ø6	6-8	R	
Ø7	14-15	R	
Ø8	16-18	R	
Ø2 PED	2A,2B	-	
Ø4 PED	4A,4B	-	
Ø6 PED	6A,6B	-	
Ø8 PED	8A,8B	-	
O.L.A			O.L. ASSIGNMENTS
O.L.B			
O.L.C			
O.L.D			
O.L.E	9-10	-	Ø1, Ø2
O.L.F	19-20	-	Ø3, Ø4
O.L.G	4-5	-	Ø5, Ø6
O.L.H	14-15	-	Ø7, Ø8



BARRIER

LEGEND



PREEMPTION ASSIGNMENTS				
PREEMPTION DESIGNATION	PREEMPTION TYPE	EVP CHANNEL	DIRECTION OF TRAVEL	PHASE(S) CALLED
1	RESERVED	-	-	-
2	RESERVED	-	-	-
3	RESERVED	-	-	-
4	RESERVED	-	-	-
5	RESERVED	-	-	-
6	RESERVED	-	-	-
7	NOT USED	-	-	-
8	NOT USED	-	-	-
9	NOT USED	-	-	-
10	NOT USED	-	-	-

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

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

CENTRAL SYSTEM	
LOCATION OF MASTER	
CONTROLLER NO.:	N/A
SIGNAL SYSTEM #:	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE LIGHTING CABINET	

DETECTOR INPUT	3	1	7	5	11	9	15	13
DETECTOR #(S)	11	21	31	41	42	51	61	71
PHASE CALLED	1	2	3	4	4	5	6	7
PHASE EXTENDED	1,2	2	3	4	4	5,6	6	7
DISCONNECT TIME								
CALLING DELAY					10			
EXTENSION STRETCH								
LOOP FUNCTION								

DETECTOR INPUT	4	2	8	6	12	10	16	14
DETECTOR #(S)								
PHASE CALLED								
PHASE EXTENDED								
DISCONNECT TIME								
CALLING DELAY								
EXTENSION STRETCH								
LOOP FUNCTION								

DETECTOR INPUT	19	17	23	21	27	25	31	29
DETECTOR #(S)	81	82						
PHASE CALLED	8	8						
PHASE EXTENDED	8	8						
DISCONNECT TIME								
CALLING DELAY		10						
EXTENSION STRETCH								
LOOP FUNCTION								

DETECTOR INPUT
DETECTOR #(S)
PHASE CALLED
PHASE EXTENDED
DISCONNECT TIME
CALLING DELAY
EXTENSION STRETCH
LOOP FUNCTION

DETECTOR INPUT	20	18	24	22	28	26	32	30
DETECTOR #(S)								
PHASE CALLED								
PHASE EXTENDED								
DISCONNECT TIME								
CALLING DELAY								
EXTENSION STRETCH								
LOOP FUNCTION								

DETECTOR INPUT
DETECTOR #(S)
PHASE CALLED
PHASE EXTENDED
DISCONNECT TIME
CALLING DELAY
EXTENSION STRETCH
LOOP FUNCTION

TYPE OF INTERCONNECT	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR	
CLOSED LOOP FIBER OPTIC	
RADIO	

TYPE OF REMOTE COMMUNICATION	
NONE	X
FIBER	
CELL MODEM	
PHONE	

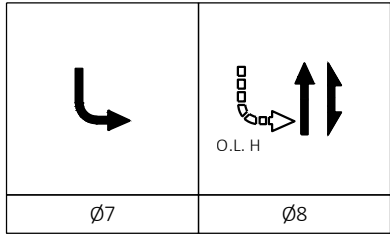
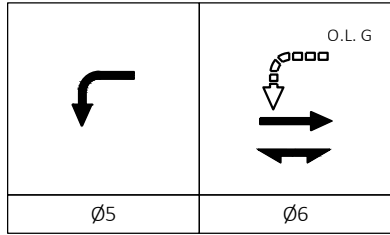
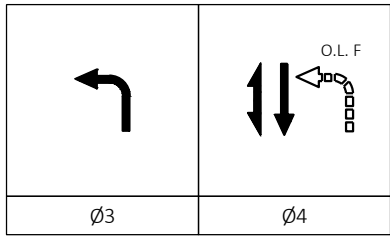
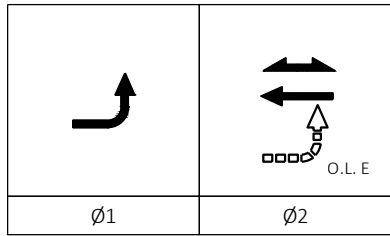
TRAFFIC CONTROL SIGNAL
BUS 151 (W MAIN ST) AND BIRD ST
CITY OF SUN PRAIRIE
DANE COUNTY

SIGNAL NO. TEMP

LOCAL CONTACT: JR BRIMMER
DESIGNED BY: KL ENGINEERING
REVISED BY:

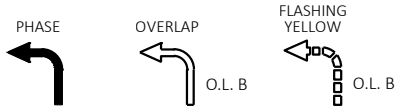
PAGE 2 OF 2

	HEAD NUMBERS	FLASH	
Ø1	4,5	R	
Ø2	6-8	R	
Ø3	12,13	R	
Ø4	15,18	R	
Ø5	9,10	R	
Ø6	1-3	R	
Ø7	16,17	R	
Ø8	11,14	R	
Ø2 PED	2A,2B		
Ø4 PED	4A,4B		
Ø6 PED	6A,6B		
Ø8 PED	8A,8B		
O.L.A			O.L. ASSIGNMENTS
O.L.B			
O.L.C			
O.L.D			
O.L.E	4,5	R	Ø1, Ø2
O.L.F	12,13	R	Ø3, Ø4
O.L.G	9,10	R	Ø5, Ø6
O.L.H	16,17	R	Ø7, Ø8



BARRIER

LEGEND



PREEMPTION ASSIGNMENTS				
PREEMPTION DESIGNATION	PREEMPTION TYPE	EVP CHANNEL	DIRECTION OF TRAVEL	PHASE(S) CALLED
1	RESERVED	-	-	-
2	RESERVED	-	-	-
3	EVP	A	WEST	2
4	EVP	B	EAST	6
5	EVP	C	SOUTH	4
6	EVP	D	NORTH	8
7	NOT USED	-	-	-
8	NOT USED	-	-	-
9	NOT USED	-	-	-
10	NOT USED	-	-	-

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

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	
TOMAR	X
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

CENTRAL SYSTEM	
LOCATION OF MASTER	
CONTROLLER NO.:	N/A
SIGNAL SYSTEM #:	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE LIGHTING CABINET	

DETECTOR INPUT	3	1	7	5	11	9	15	13
DETECTOR #(S)	11	31	41	42	51	71	81	82
PHASE CALLED	1	3	4	4	5	7	8	8
PHASE EXTENDED	1,2	3,4	4	4	5,6	7,8	8	8
DISCONNECT TIME								
CALLING DELAY	3			10				10
EXTENSION STRETCH								
LOOP FUNCTION								

DETECTOR INPUT	4	2	8	6	12	10	16	14
DETECTOR #(S)								
PHASE CALLED								
PHASE EXTENDED								
DISCONNECT TIME								
CALLING DELAY								
EXTENSION STRETCH								
LOOP FUNCTION								

19	17	23	21	27	25	31	29

DETECTOR INPUT
DETECTOR #(S)
PHASE CALLED
PHASE EXTENDED
DISCONNECT TIME
CALLING DELAY
EXTENSION STRETCH
LOOP FUNCTION

20	18	24	22	28	26	32	30

DETECTOR INPUT
DETECTOR #(S)
PHASE CALLED
PHASE EXTENDED
DISCONNECT TIME
CALLING DELAY
EXTENSION STRETCH
LOOP FUNCTION

TYPE OF INTERCONNECT	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR	
CLOSED LOOP FIBER OPTIC	
RADIO	

TYPE OF REMOTE COMMUNICATION	
NONE	X
FIBER	
CELL MODEM	
PHONE	

TRAFFIC CONTROL SIGNAL
BUS 151 (W MAIN ST) & BIRD ST
CITY OF SUN PRAIRIE
DANE COUNTY
CABINET TYPE: TS2
CONTROLLER TYPE: EX2
SIGNAL NO. LOCAL

LOCAL CONTACT: JR BRIMMER
DESIGNED BY: KL ENGINEERING
REVISED BY:

PAGE 2 OF 3

INTERSECTION: W MAIN STREET & BIRD STREET

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

DATE: Feb-24

CB1 TO	AWG 14 # OF COND.	HEAD NO.	PHASE	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
				RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YEL>	<GREEN>	DWALK	WALK		
SB1	12	6A	6								BLK	BLU		
		BUTTON	4										*	
SB2	12	1	6	RED	ORG	GRN								
		9	5, O.L.G				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
SB3	12	7	2	RED	ORG	GRN								
		8	2	RED	ORG	GRN								
		10	5, O.L.G				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
SB4	12	4A	4								BLK	BLU		
		BUTTON	4										*	
SB5	12	2B	2								BLK	BLU		
		BUTTON	2										*	
SB6	12	16	4	RED	ORG	GRN								
		14	3, O.L.F				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
SB7	12	12	8	RED	ORG	GRN								
		13	8	RED	ORG	GRN								
		15	3, O.L.F				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
SB8	12	2A	2								BLK	BLU		
		BUTTON	2										*	
SB9	12	6	2	RED	ORG	GRN								
		4	1, O.L.E				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
		8B	8								BLK	BLU		
		BUTTON	8										*	
SB10	12	2	6	RED	ORG	GRN								
		3	6	RED	ORG	GRN								
		5	1, O.L.E				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
SB11	12	8A	8								BLK	BLU		
		BUTTON	8										*	
SB12	12	6B	6								BLK	BLU		
		BUTTON	6										*	
SB13	12	11	8	RED	ORG	GRN								
		19	8, O.L.H				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
SB14	12	17	4	RED	ORG	GRN								
		18	4	RED	ORG	GRN								
		20	8, O.L.H				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
SB15	12	4B	4								BLK	BLU		
		BUTTON	6										*	

*LOOP DETECTOR LEAD IN CABLE USED FOR PEDESTRIAN PUSH BUTTONS

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	SB11
SB11	SB12
SB12	SB13
SB13	SB14
SB14	SB15
SB15	CB1

PULLBOX BONDING JUMPER 10 AWG GRN XLP	
PB1	SB2
PB3	SB3
PB4	SB5
PB6	SB8
PB7	SB9
PB9	SB10
PB10	SB12
PB12	SB14

LIGHTING UF 12 AWG W/ GROUND	
FROM	TO
CB1	SB3
SB3	SB8
CB1	SB14
SB14	SB10

LOOP DETECTOR LEAD-IN CABLE		
FROM	TO BUTTON ON	PHASE
CB1	SB1	4
CB1	SB4	4
CB1	SB5	2
CB1	SB7	2
CB1	SB9	8
CB1	SB11	8
CB1	SB12	6
CB1	SB15	6

NOTE: ALL RUNS SHALL BE COMPLETED WITH ONE CONTINUOUS CABLE FROM CABINET TO BUTTON. NO CABLE TO CABLE SPLICING IS PERMITTED.

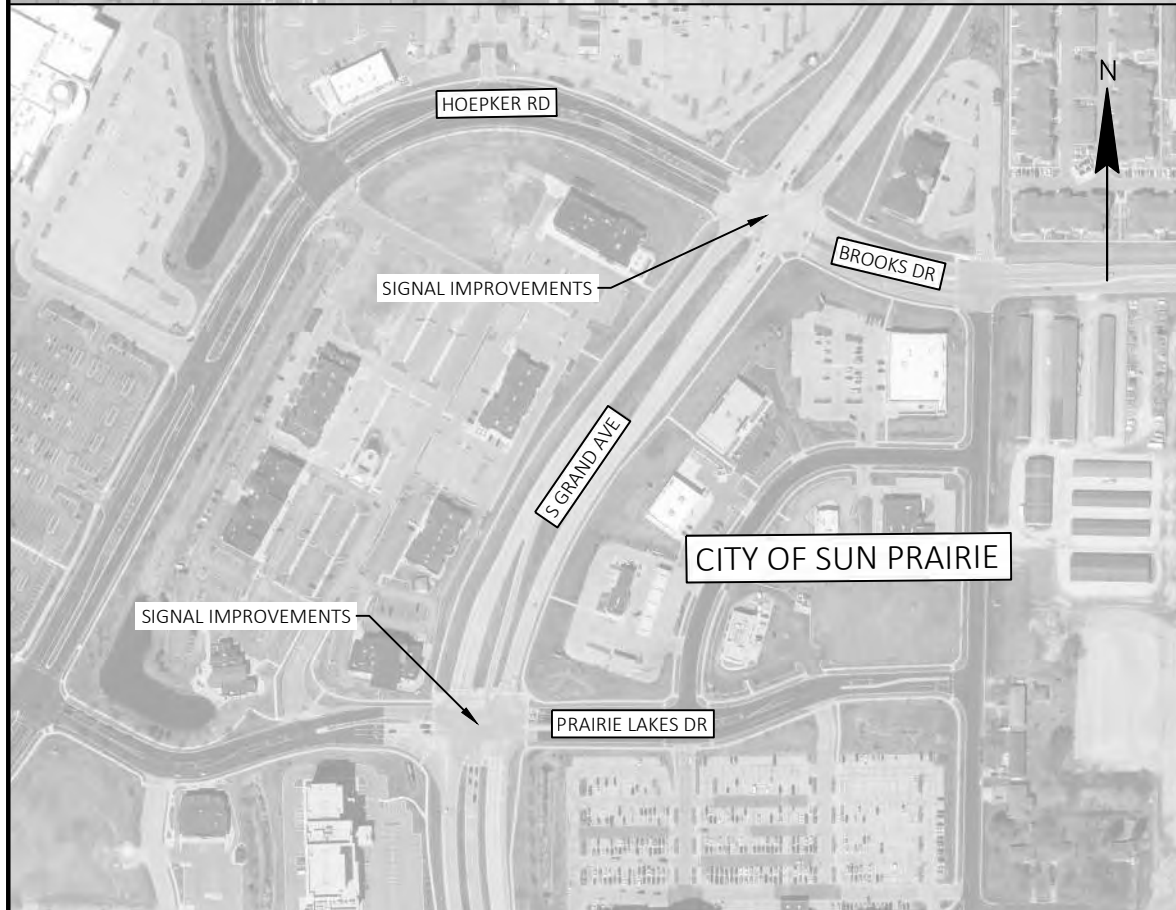


TRAFFIC CONTROL SIGNAL
BUS 151 (W MAIN ST) AND BIRD ST
CITY OF SUN PRAIRIE
DANE COUNTY
CABINET TYPE: TS2
CONTROLLER TYPE: EX2

SIGNAL NO. LOCAL

LOCAL CONTACT: JR BRIMMER
DESIGNED BY: KL ENGINEERING
REVISED BY:

PAGE 3 OF 3

CONSTRUCTION NOTES:

1. REPLACE EXISTING TRAFFIC SIGNAL BACKPLATES WITH RETROREFLECTIVE BACKPLATES USING TEMPORARY TRAFFIC CONTROL.
2. QUANTITIES OF BACKPLATES REQUIRED AT THE INTERSECTION OF GRAND AVENUE & PRAIRIE LAKES DRIVE:
 1. RETROREFLECTIVE BACKPLATES 3S - 23
 2. RETROREFLECTIVE BACKPLATES 4S - 4
3. QUANTITIES OF BACKPLATES REQUIRED AT THE INTERSECTION OF GRAND AVENUE & HOECKER ROAD:
 1. RETROREFLECTIVE BACKPLATES 3S - 18
 2. RETROREFLECTIVE BACKPLATES 5S - 4
4. QUANTITIES OF BACKPLATES REQUIRED AT THE INTERSECTION OF GRAND AVENUE & IRONWOOD DRIVE:
 1. RETROREFLECTIVE BACKPLATES 3S - 19
 2. RETROREFLECTIVE BACKPLATES 4S - 3
5. INSTALLATION SHALL BE COMPLETED DURING OFF-PEAK HOURS AS APPROVED BY THE ENGINEER.

PROJECT NO: 3996-00-10

HWY: LOCAL STREETS

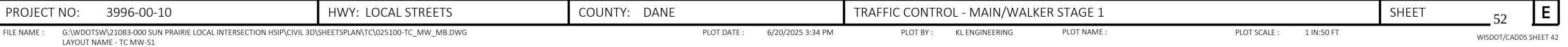
COUNTY: DANE

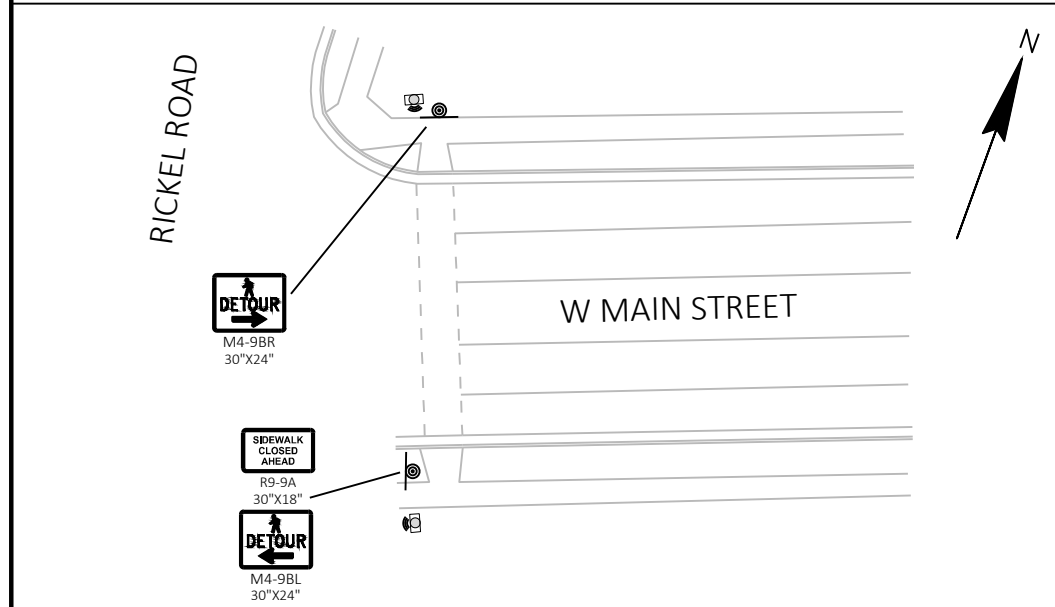
TRAFFIC SIGNAL PLAN - GRAND AVENUE INTERSECTIONS

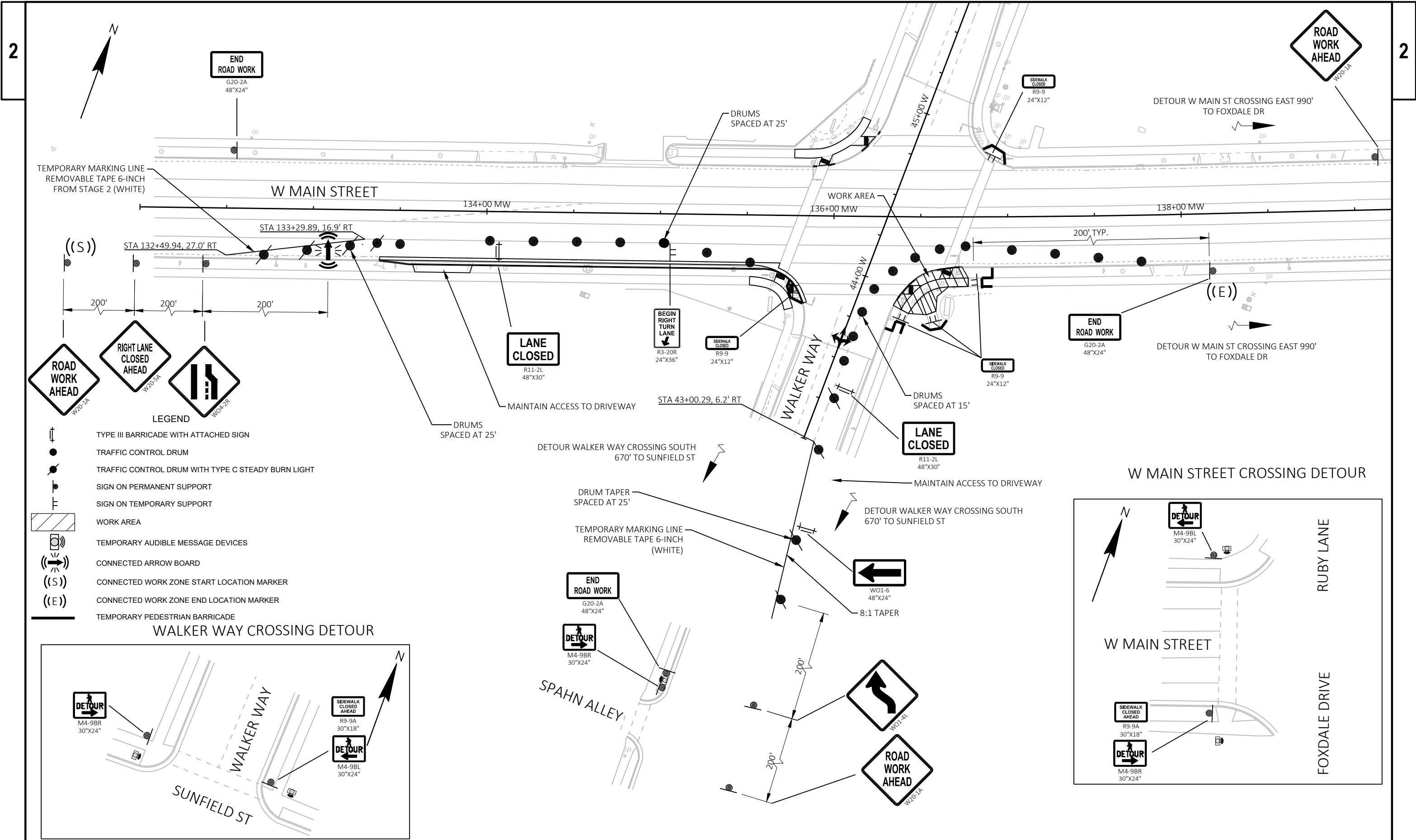
SHEET

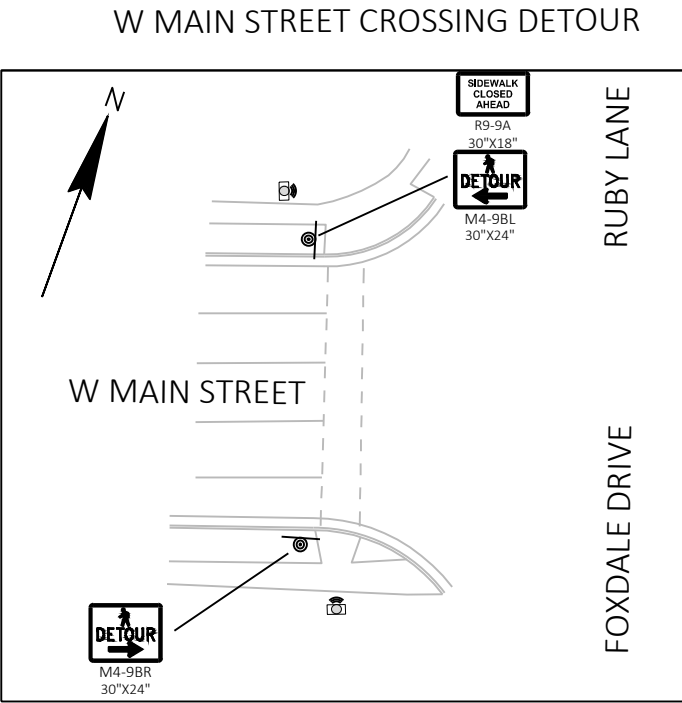
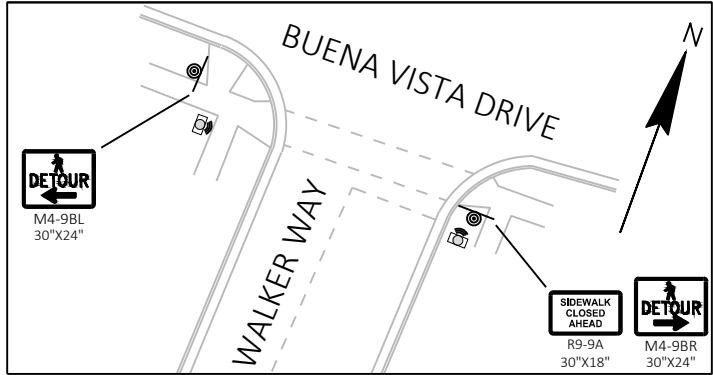
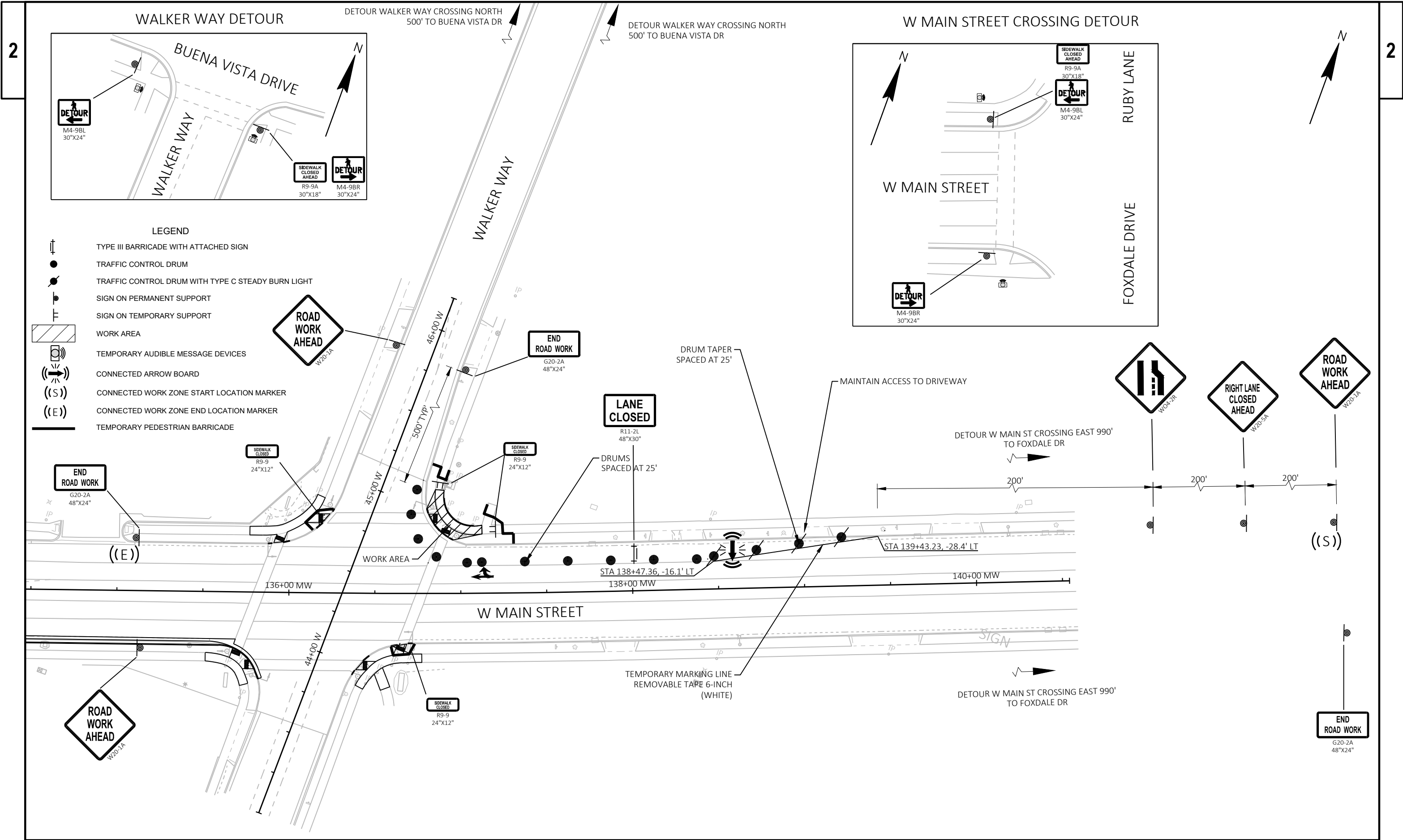
PRE 51

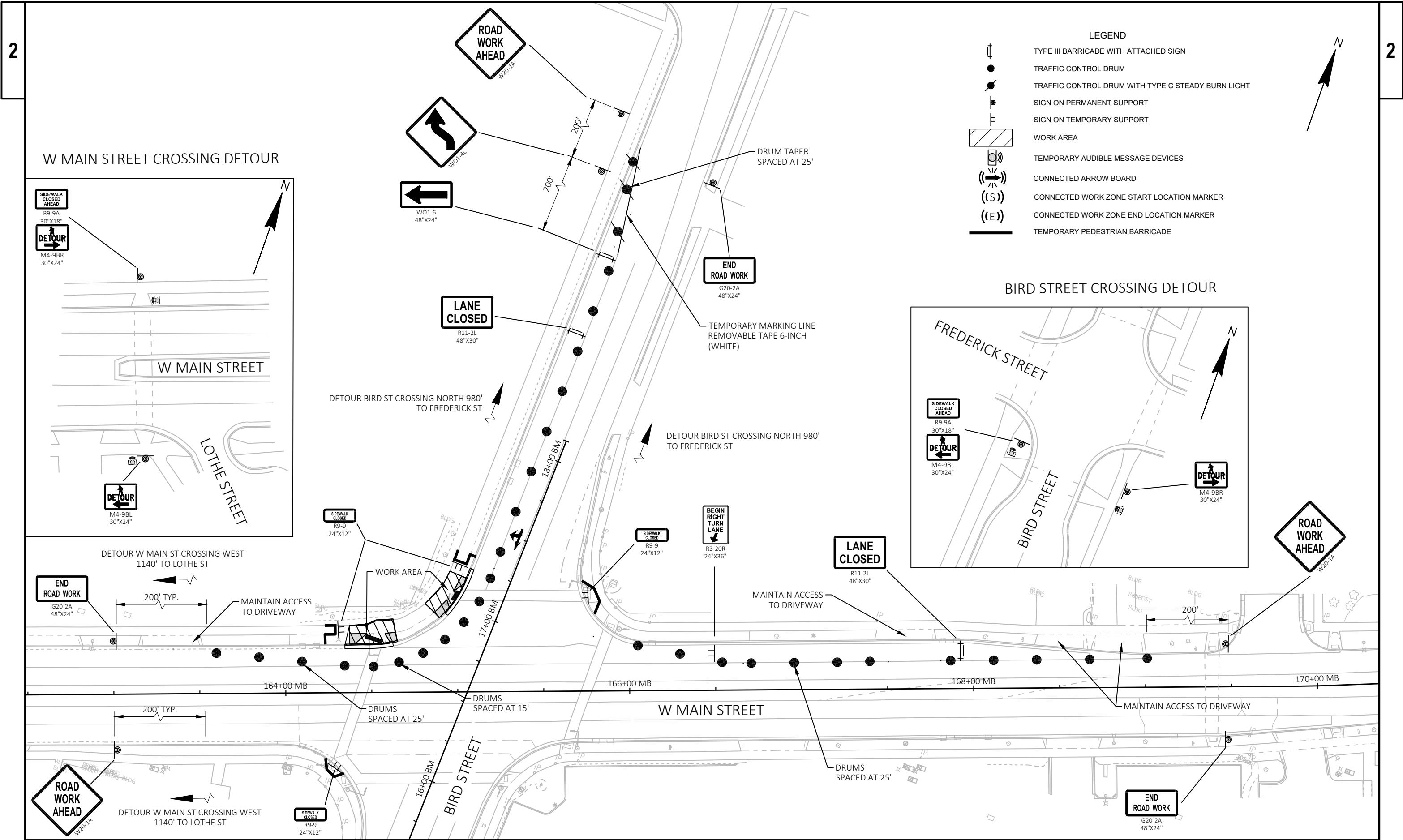
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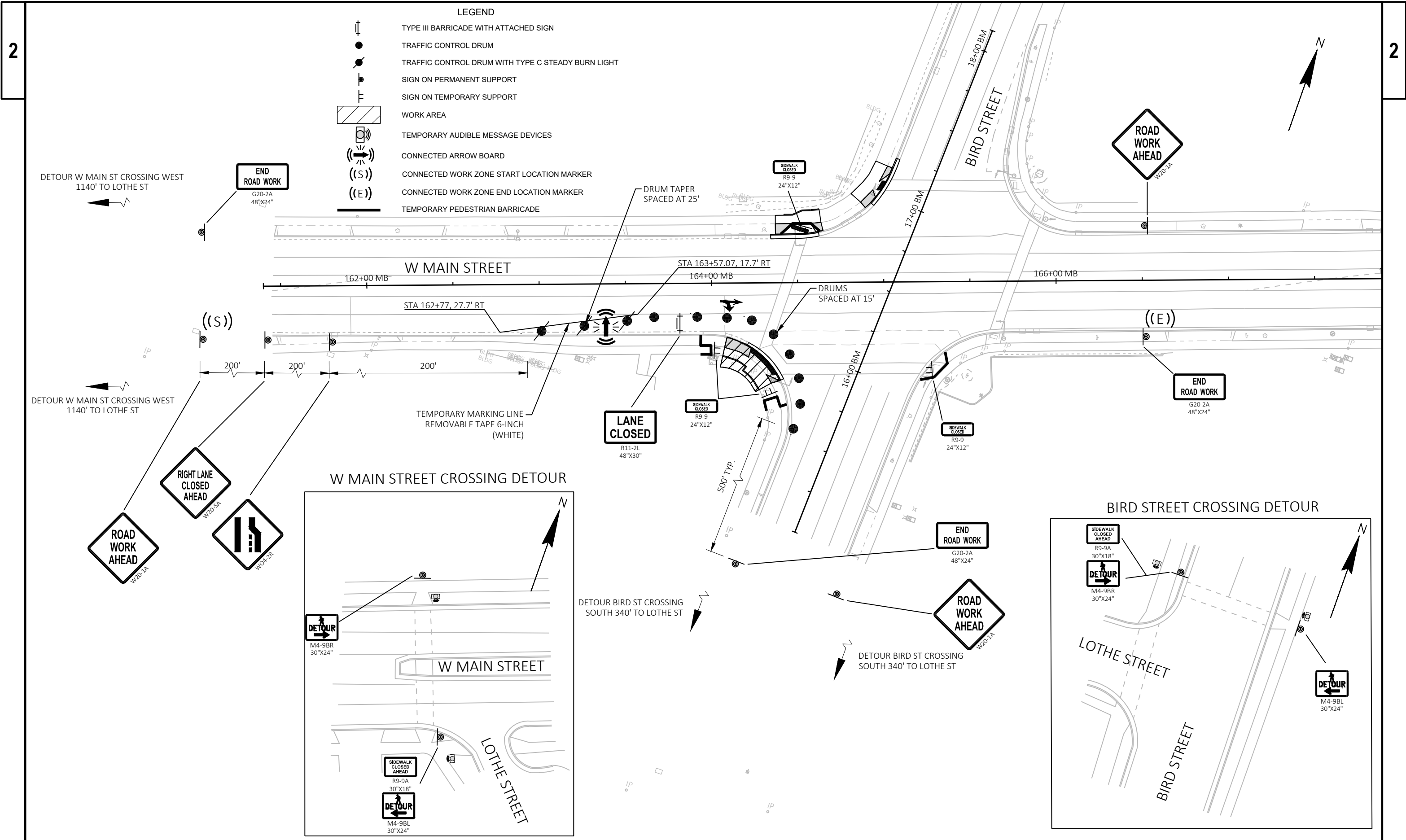




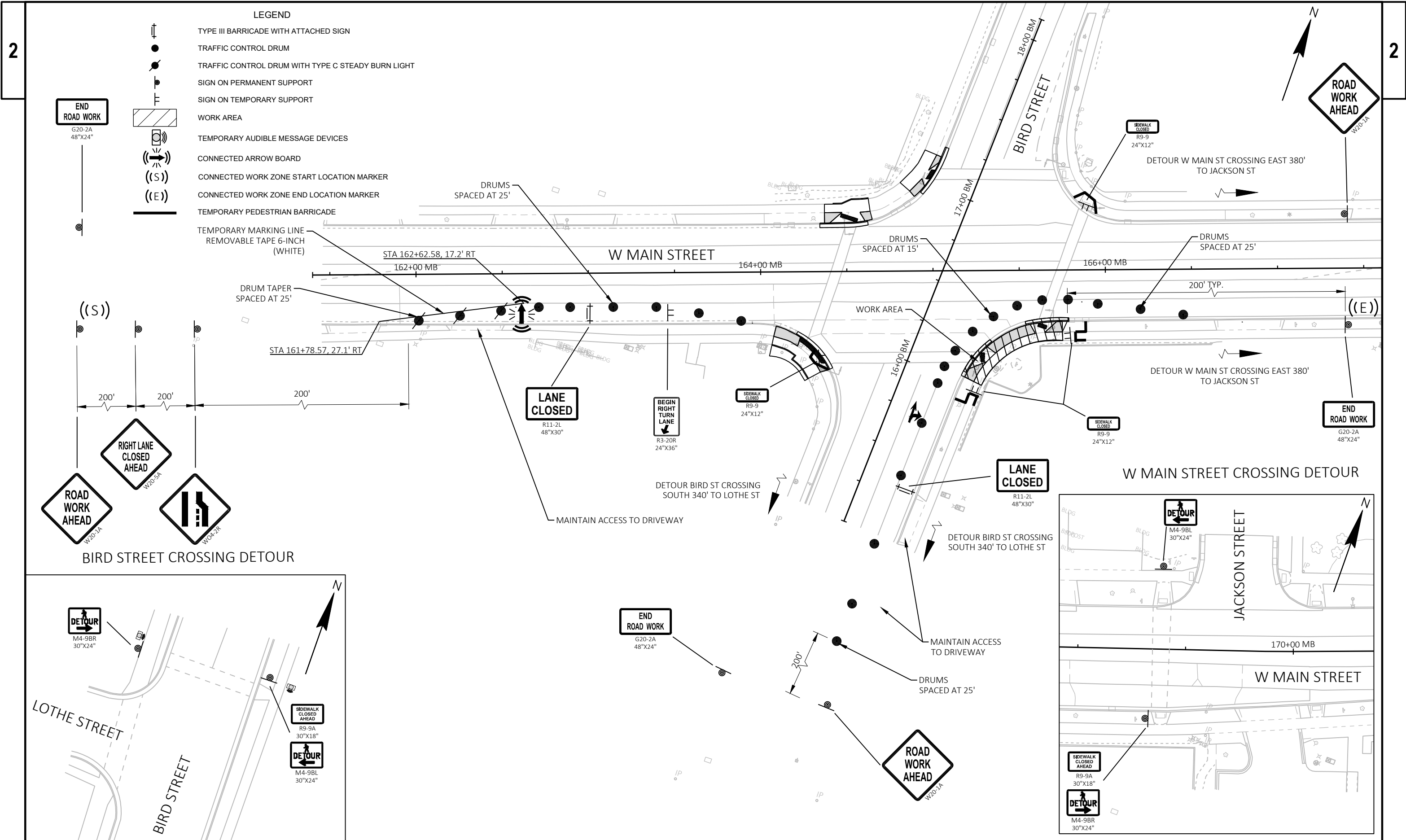


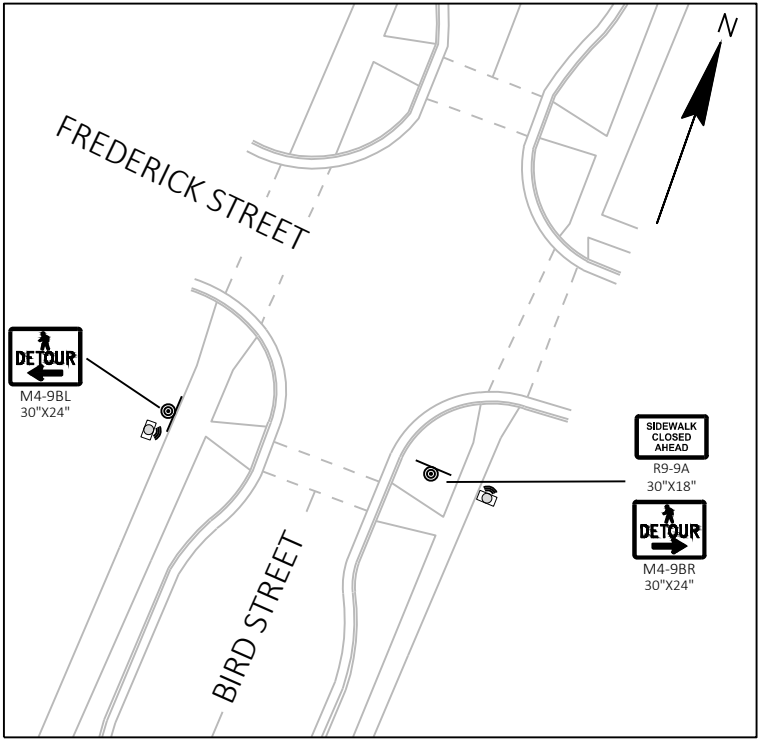
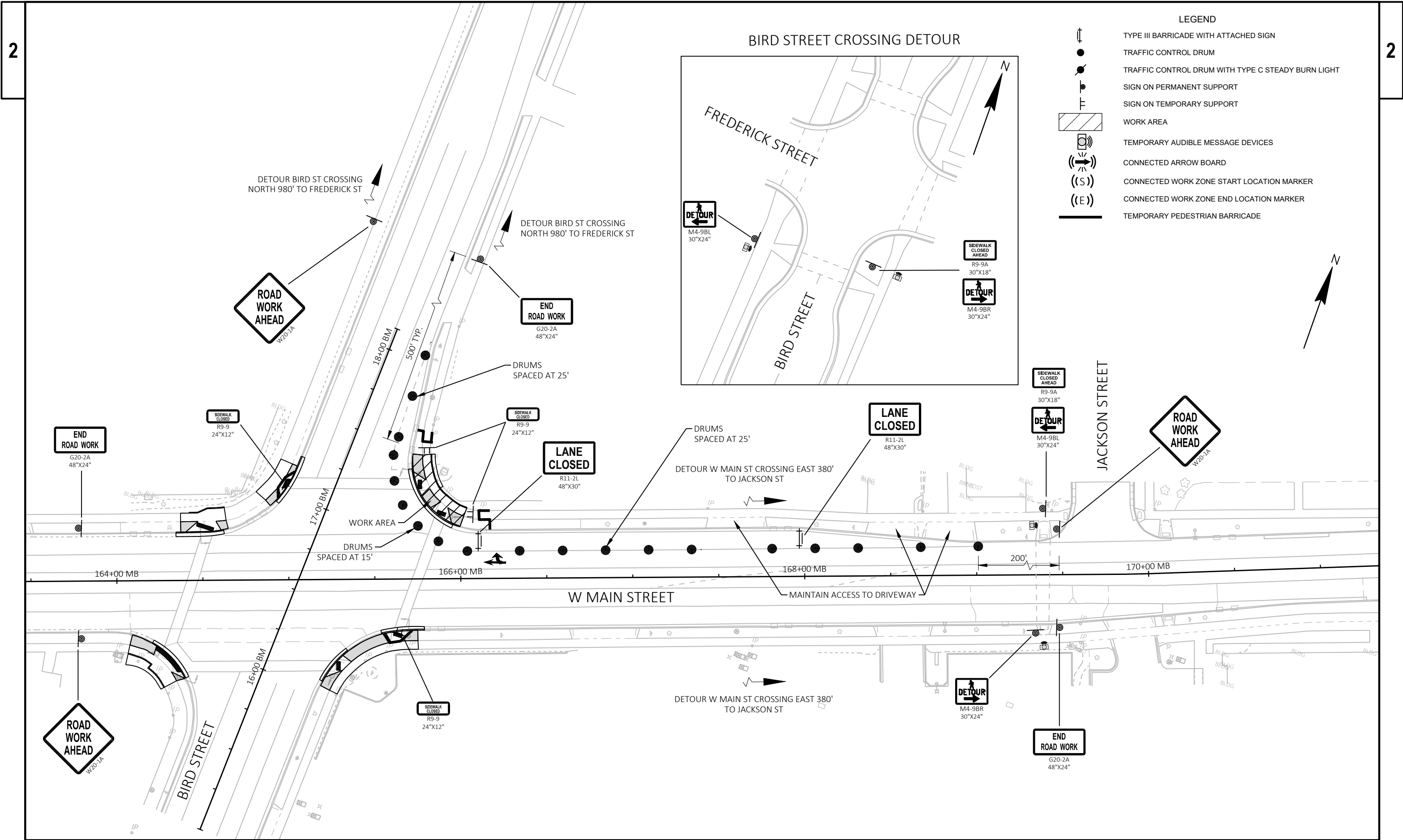




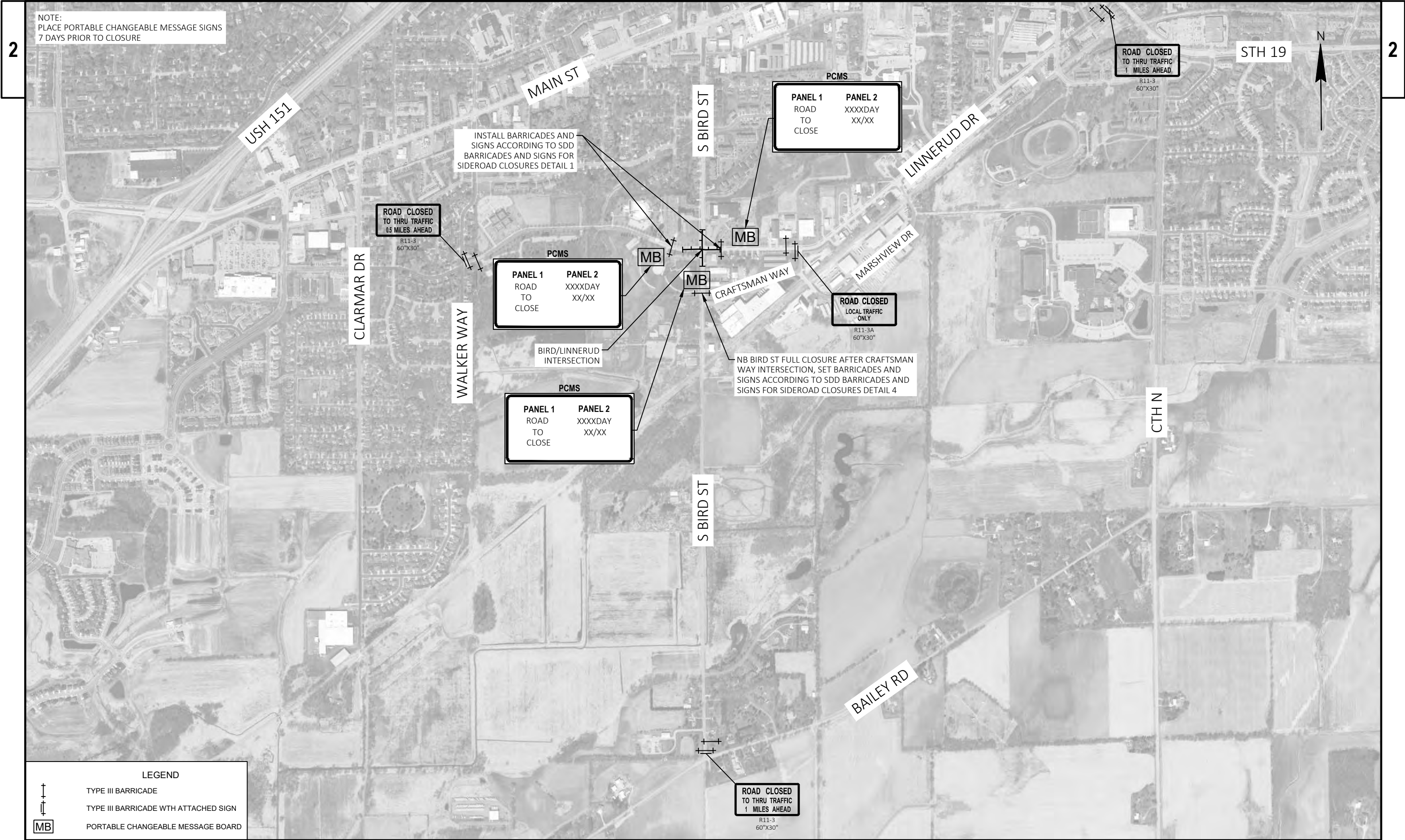


- LEGEND
- TYPE III BARRICADE WITH ATTACHED SIGN
 - TRAFFIC CONTROL DRUM
 - TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
 - SIGN ON PERMANENT SUPPORT
 - SIGN ON TEMPORARY SUPPORT
 - WORK AREA
 - TEMPORARY AUDIBLE MESSAGE DEVICES
 - CONNECTED ARROW BOARD
 - CONNECTED WORK ZONE START LOCATION MARKER
 - CONNECTED WORK ZONE END LOCATION MARKER
 - TEMPORARY PEDESTRIAN BARRICADE





- LEGEND
- TYPE III BARRICADE WITH ATTACHED SIGN
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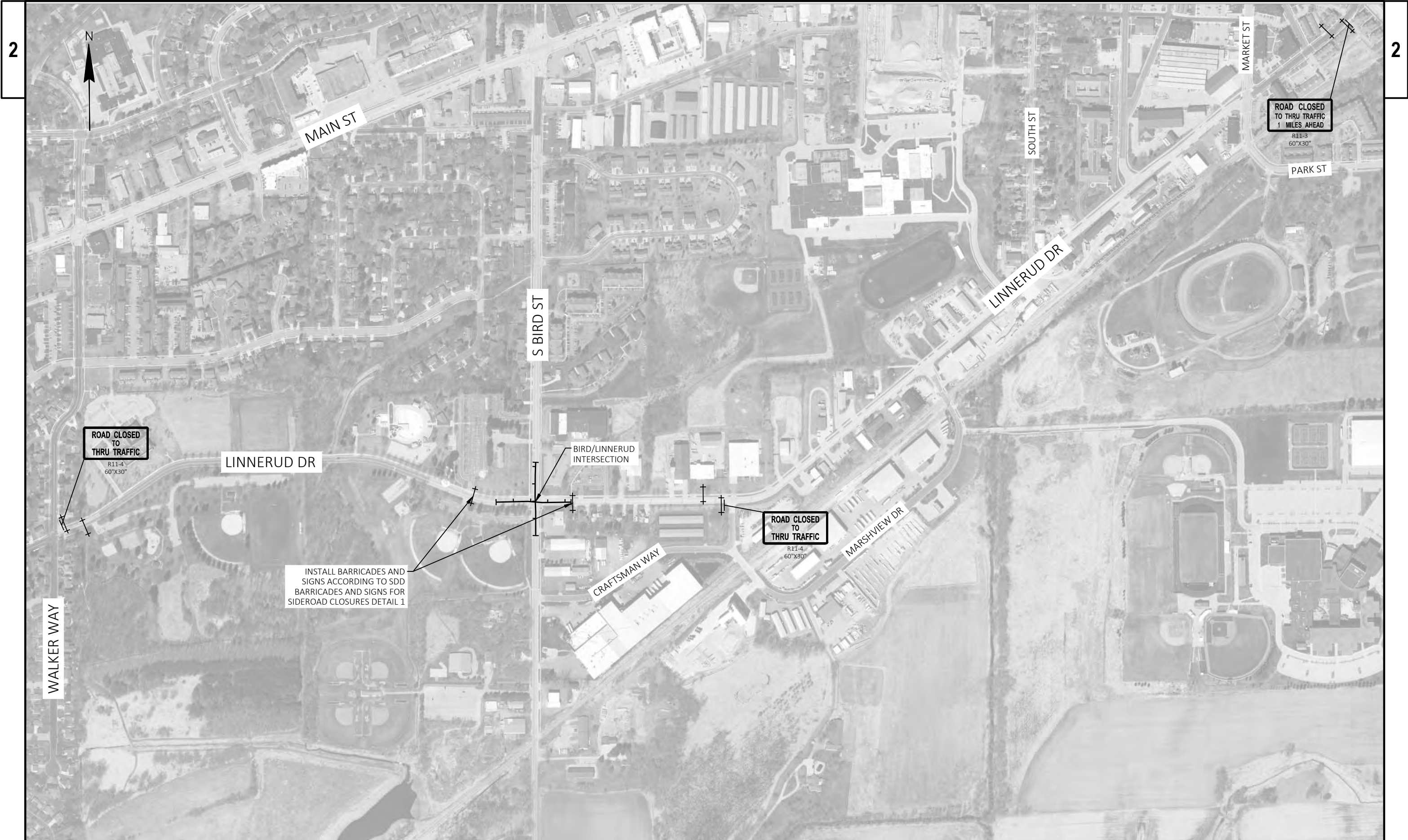
NOTE:
PLACE PORTABLE CHANGEABLE MESSAGE SIGNS
7 DAYS PRIOR TO CLOSURE

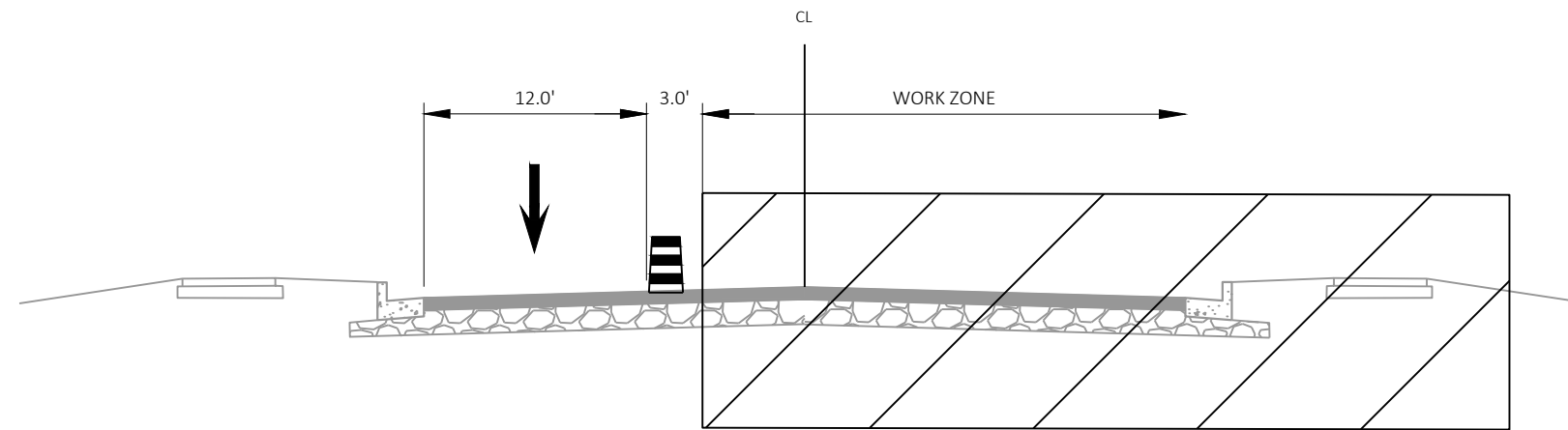
LEGEND

TYPE III BARRICADE

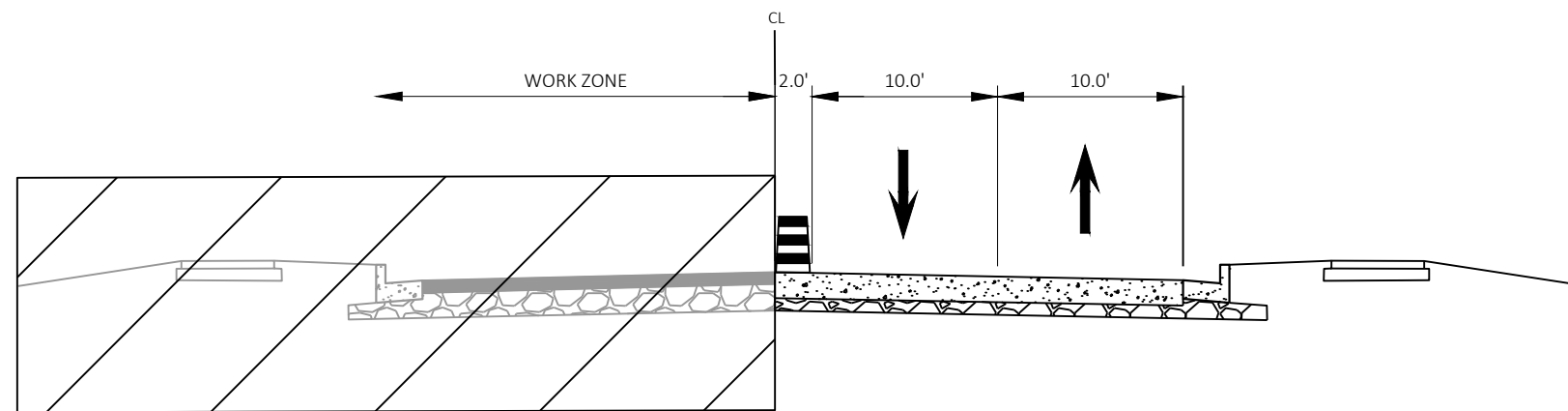
TYPE III BARRICADE WITH ATTACHED SIGN

PORTABLE CHANGEABLE MESSAGE BOARD



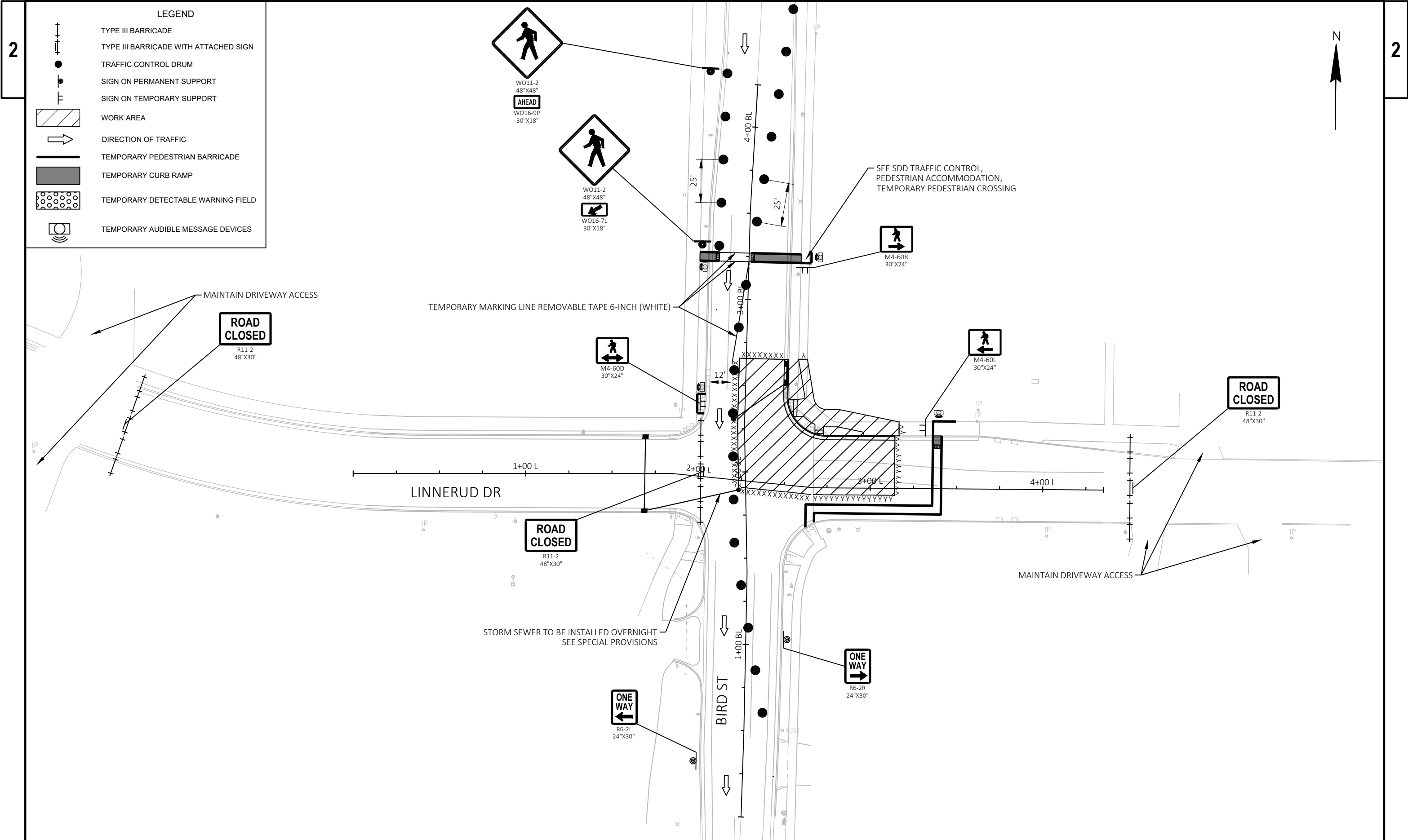


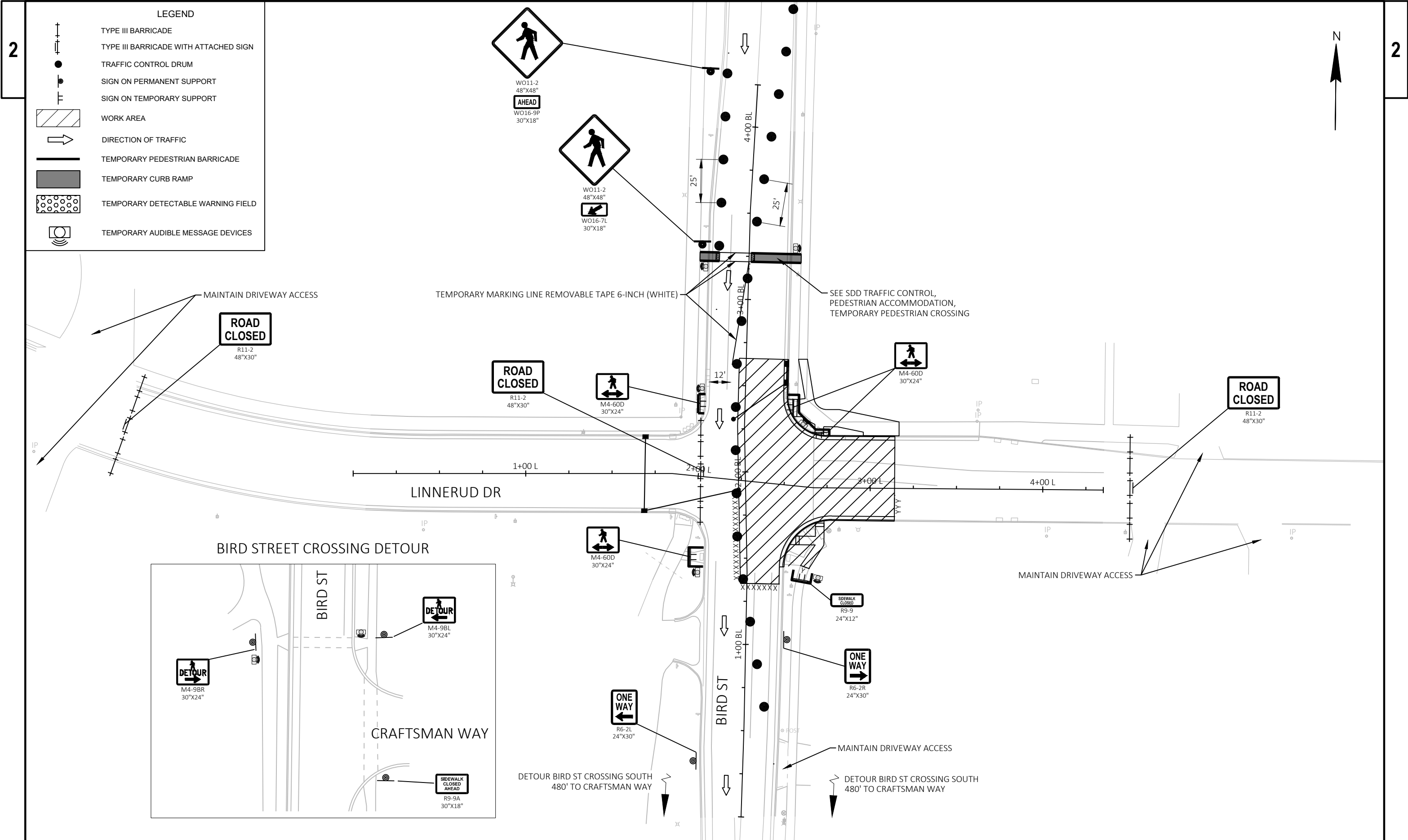
STAGE 1A & 1B

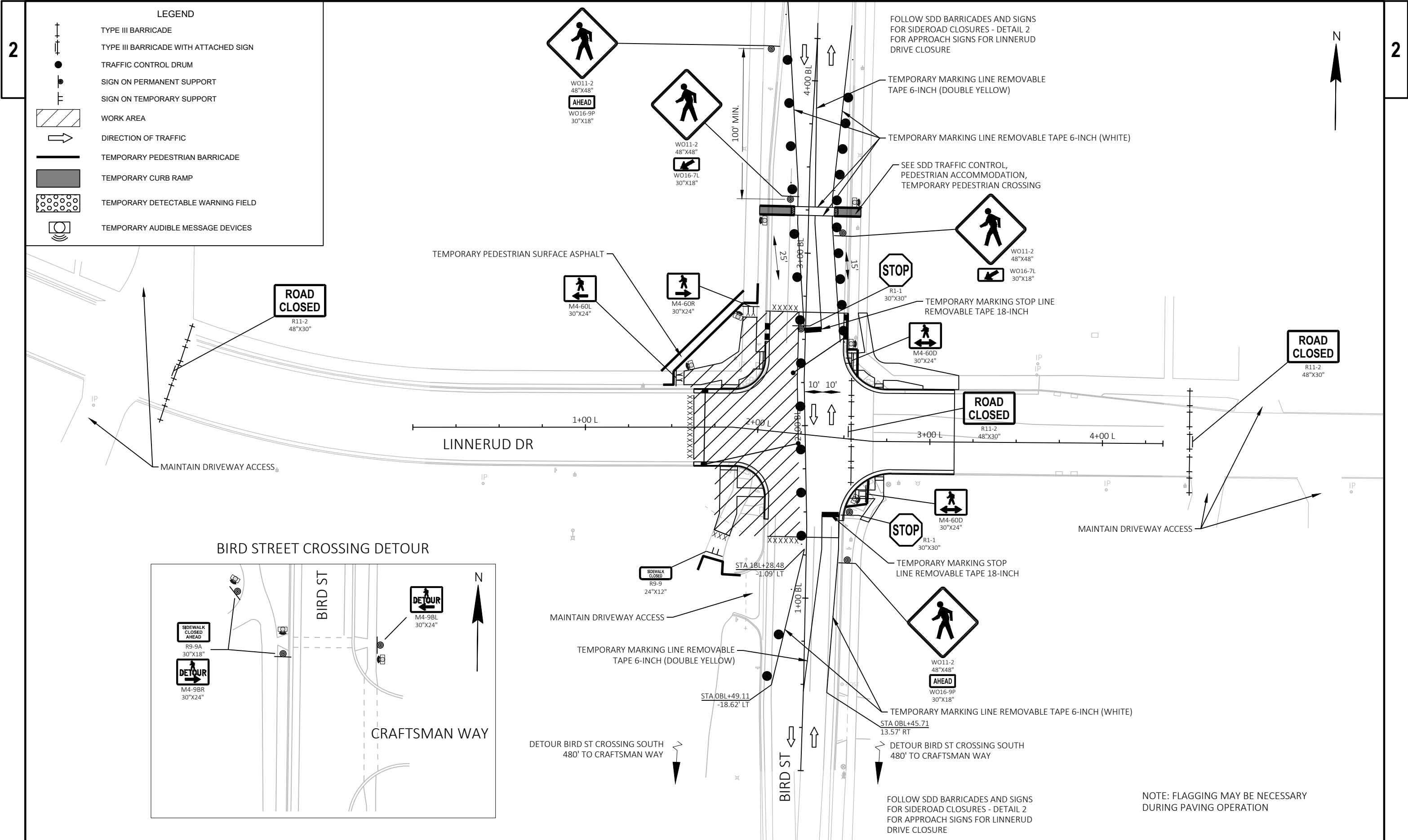


STAGE 2

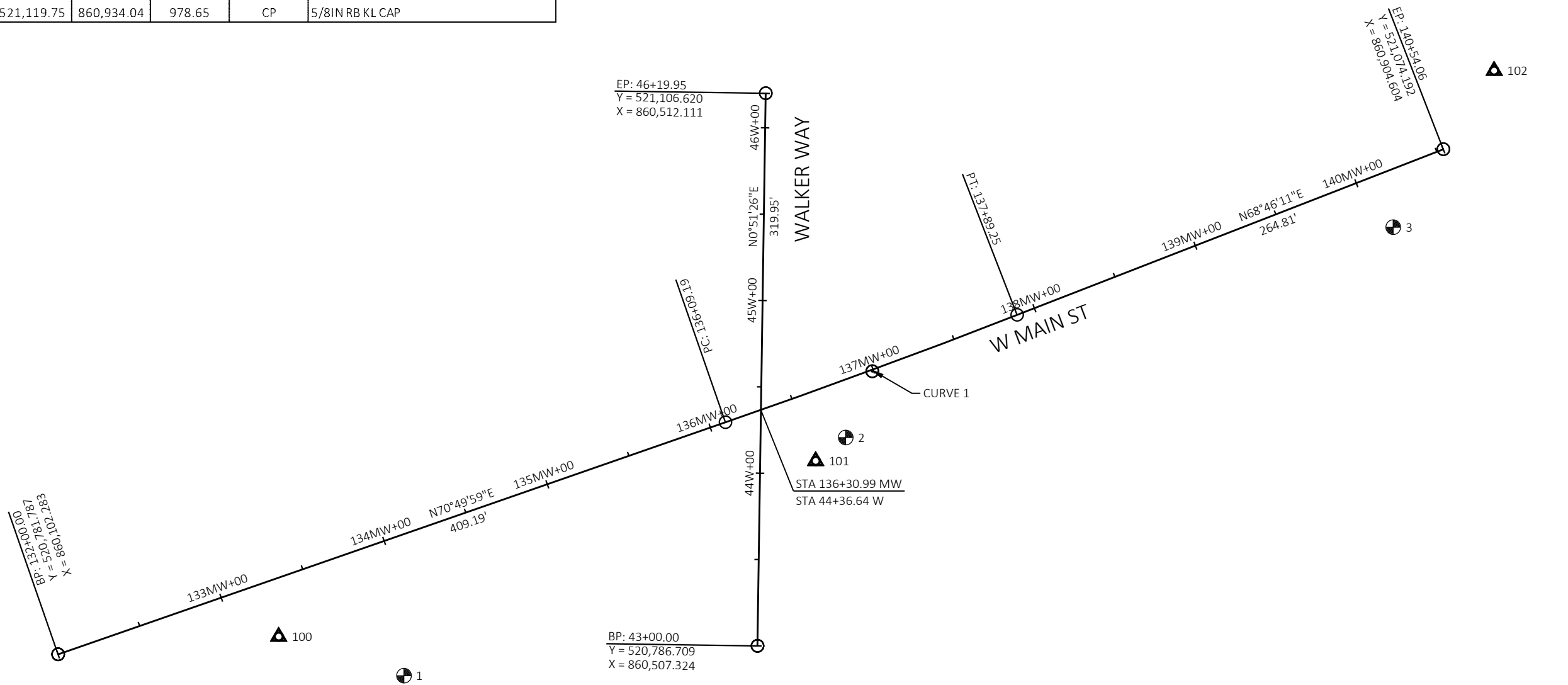
NOTE: FLAGGING MAY BE NECESSARY
DURING PAVING OPERATION





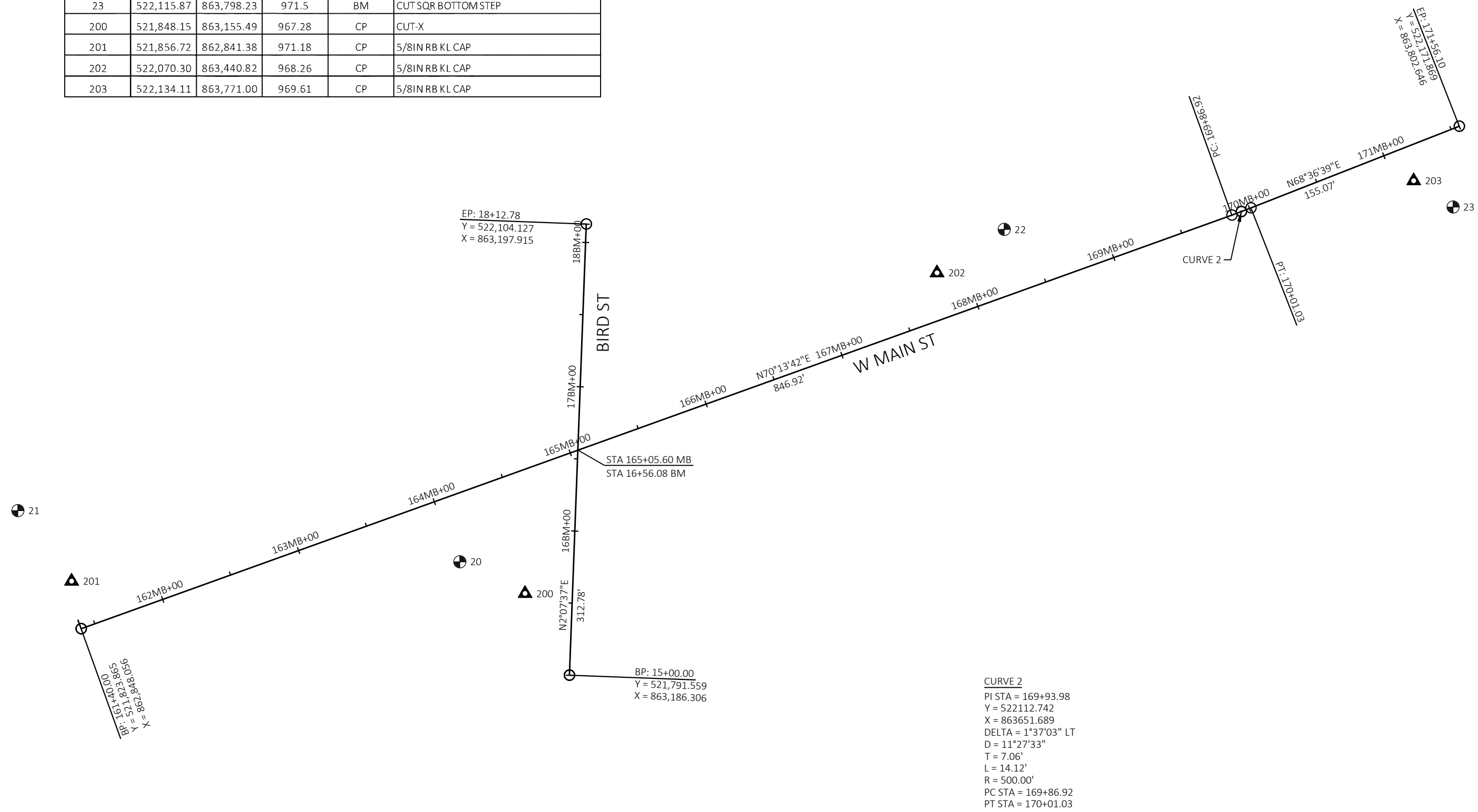


POINT NAME	Y	X	ELEV.	TYPE	DESCRIPTION
1	520,769.44	860,302.58	984.2	BM	CUT SQR LPOL BASE SUBWAY LOT
2	520,907.32	860,558.45	982.5	BM	CUT SQR CONC TFS BASE
3	521,029.11	860,875.60	978.98	BM	CUT SQR CONC BASE OH SPEED RADAR SGN
100	520,792.06	860,230.01	982.41	CP	5/8IN RB KL CAP
101	520,893.74	860,541.02	982.33	CP	5/8IN RB KL CAP
102	521,119.75	860,934.04	978.65	CP	5/8IN RB KL CAP

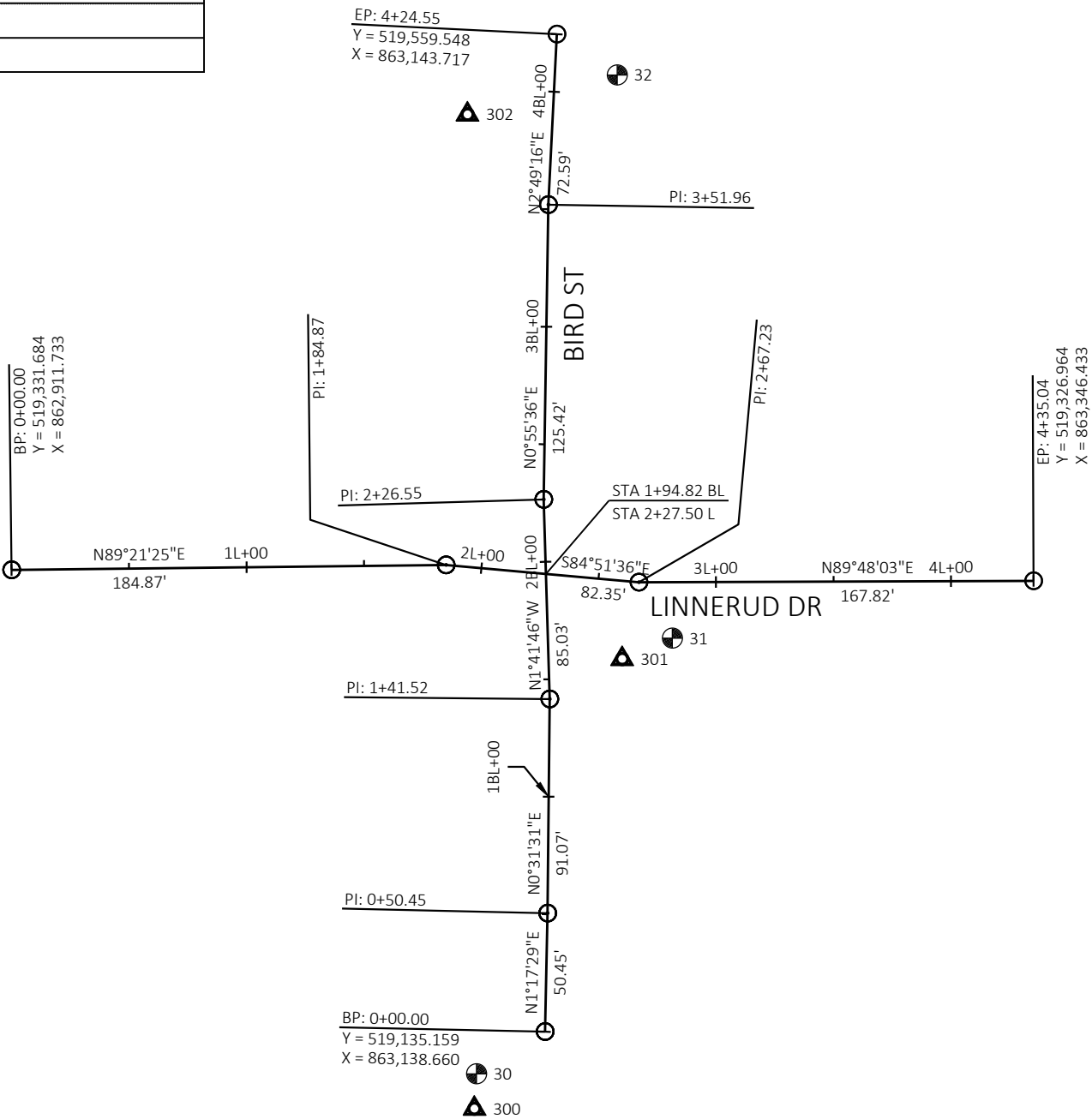


CURVE 1
PI STA = 136+99.23
Y = 520945.694
X = 860573.836
DELTA = 2°03'48" LT
D = 1°08'45"
T = 90.04'
L = 180.07'
R = 5000.00'
PC STA = 136+09.19
PT STA = 137+89.25

POINT NAME	Y	X	ELEV.	TYPE	DESCRIPTION
20	521,870.07	863,110.27	968.2	BM	CUT SQR CONC BASE WISDOT TFSB
21	521,905.62	862,804.14	974.48	BM	CUT SQR LPOL BASE ROCK BAR & GRILL
22	522,100.38	863,487.37	969.26	BM	CUT SQR SIR HOBO SIGN
23	522,115.87	863,798.23	971.5	BM	CUT SQR BOTTOM STEP
200	521,848.15	863,155.49	967.28	CP	CUT-X
201	521,856.72	862,841.38	971.18	CP	5/8IN RB KL CAP
202	522,070.30	863,440.82	968.26	CP	5/8IN RB KL CAP
203	522,134.11	863,771.00	969.61	CP	5/8IN RB KL CAP



POINT NAME	Y	X	ELEV.	TYPE	DESCRIPTION
30	519,117.30	863,109.52	936.69	BM	CUT SQR TOP 12IN RCCP
31	519,302.62	863,192.86	942.23	BM	RR SPIKE PPOL
32	519,542.13	863,169.33	949.32	BM	RR SPIKE PPOL
300	519,102.41	863,108.62	937.54	CP	5/8IN RB KL CAP
301	519,293.79	863,171.47	942.18	CP	5/8IN RB KL CAP
302	519,525.45	863,105.63	949.7	CP	CUT-X



Estimate Of Quantities

3996-00-10

Line	Item	Item Description	Unit	Total	Qty
0002	201.0120	Clearing	ID	11.000	11.000
0004	201.0220	Grubbing	ID	11.000	11.000
0006	204.0100	Removing Concrete Pavement	SY	350.000	350.000
0008	204.0110	Removing Asphaltic Surface	SY	55.000	55.000
0010	204.0150	Removing Curb & Gutter	LF	411.000	411.000
0012	204.0155	Removing Concrete Sidewalk	SY	578.000	578.000
0014	204.0195	Removing Concrete Bases	EACH	16.000	16.000
0016	204.0220	Removing Inlets	EACH	4.000	4.000
0018	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	85.000	85.000
0020	204.0245	Removing Storm Sewer (size) 02. 15-Inch	LF	40.000	40.000
0022	205.0100	Excavation Common	CY	542.000	542.000
0024	213.0100	Finishing Roadway (project) 01. 3996-00-10	EACH	1.000	1.000
0026	305.0110	Base Aggregate Dense 3/4-Inch	TON	161.000	161.000
0028	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	472.000	472.000
0030	405.0100	Coloring Concrete WisDOT Red	CY	9.000	9.000
0032	405.1000	Stamping Colored Concrete	CY	9.000	9.000
0034	415.0090	Concrete Pavement 9-Inch	SY	1,202.000	1,202.000
0036	416.0610	Drilled Tie Bars	EACH	70.000	70.000
0038	416.0620	Drilled Dowel Bars	EACH	32.000	32.000
0040	455.0605	Tack Coat	GAL	9.000	9.000
0042	465.0105	Asphaltic Surface	TON	37.000	37.000
0044	601.0105	Concrete Curb Type A	LF	160.000	160.000
0046	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	346.000	346.000
0048	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	31.000	31.000
0050	601.0452	Concrete Curb & Gutter Integral 30-Inch Type D	LF	230.000	230.000
0052	601.0600	Concrete Curb Pedestrian	LF	95.000	95.000
0054	602.0405	Concrete Sidewalk 4-Inch	SF	5,752.000	5,752.000
0056	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	260.000	260.000
0058	602.0615	Curb Ramp Detectable Warning Field Radial Natural Patina	SF	51.000	51.000
0060	602.0810	Concrete Driveway 6-Inch	SY	8.000	8.000
0062	602.0860	Concrete Driveway HES 6-Inch	SY	8.000	8.000
0064	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	99.000	99.000
0066	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	48.000	48.000
0068	611.0639	Inlet Covers Type H-S	EACH	6.000	6.000
0070	611.3230	Inlets 2x3-FT	EACH	4.000	4.000
0072	611.8110	Adjusting Manhole Covers	EACH	2.000	2.000
0074	619.1000	Mobilization	EACH	1.000	1.000
0076	624.0100	Water	MGAL	10.000	10.000
0078	625.0100	Topsoil	SY	435.000	435.000
0080	628.1504	Silt Fence	LF	95.000	95.000
0082	628.1520	Silt Fence Maintenance	LF	95.000	95.000
0084	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0086	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0088	628.2006	Erosion Mat Urban Class I Type A	SY	435.000	435.000
0090	628.7015	Inlet Protection Type C	EACH	21.000	21.000
0092	628.7020	Inlet Protection Type D	EACH	11.000	11.000
0094	629.0210	Fertilizer Type B	CWT	0.500	0.500
0096	630.0140	Seeding Mixture No. 40	LB	10.000	10.000
0098	630.0500	Seed Water	MGAL	13.000	13.000

Estimate Of Quantities

3996-00-10

Line	Item	Item Description	Unit	Total	Qty
0100	634.0811	Posts Tubular Steel 2x2-Inch X 11-FT	EACH	10.000	10.000
0102	637.2210	Signs Type II Reflective H	SF	21.250	21.250
0104	638.2102	Moving Signs Type II	EACH	23.000	23.000
0106	638.2602	Removing Signs Type II	EACH	2.000	2.000
0108	638.3000	Removing Small Sign Supports	EACH	5.000	5.000
0110	638.4000	Moving Small Sign Supports	EACH	1.000	1.000
0112	642.5001	Field Office Type B	EACH	1.000	1.000
0114	643.0300	Traffic Control Drums	DAY	6,638.000	6,638.000
0116	643.0420	Traffic Control Barricades Type III	DAY	3,835.000	3,835.000
0118	643.0705	Traffic Control Warning Lights Type A	DAY	5,599.000	5,599.000
0120	643.0715	Traffic Control Warning Lights Type C	DAY	1,118.000	1,118.000
0122	643.0810.S	Connected Arrow Board	DAY	127.000	127.000
0124	643.0900	Traffic Control Signs	DAY	6,304.000	6,304.000
0126	643.1050	Traffic Control Signs PCMS	DAY	21.000	21.000
0128	643.1220.S	Connected Work Zone Start and End Location Markers	DAY	254.000	254.000
0130	643.3180	Temporary Marking Line Removable Tape 6-Inch	LF	2,304.000	2,304.000
0132	643.3850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	23.000	23.000
0134	643.5000	Traffic Control	EACH	1.000	1.000
0136	644.1410	Temporary Pedestrian Surface Asphalt	SF	357.000	357.000
0138	644.1601	Temporary Pedestrian Curb Ramp	DAY	225.000	225.000
0140	644.1605	Temporary Pedestrian Detectable Warning Field	SF	81.000	81.000
0142	644.1810	Temporary Pedestrian Barricade	LF	1,837.000	1,837.000
0144	644.1900.S	Temporary Audible Message Devices	DAY	1,529.000	1,529.000
0146	646.1020	Marking Line Epoxy 4-Inch	LF	3,421.000	3,421.000
0148	646.3020	Marking Line Epoxy 8-Inch	LF	1,045.000	1,045.000
0150	646.5020	Marking Arrow Epoxy	EACH	26.000	26.000
0152	646.5120	Marking Word Epoxy	EACH	1.000	1.000
0154	646.5220	Marking Symbol Epoxy	EACH	3.000	3.000
0156	646.6120	Marking Stop Line Epoxy 18-Inch	LF	208.000	208.000
0158	646.7120	Marking Diagonal Epoxy 12-Inch	LF	243.000	243.000
0160	646.7320	Marking Chevron Epoxy 12-Inch	LF	45.000	45.000
0162	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	960.000	960.000
0164	646.7520	Marking Crosswalk Epoxy Block Style 24-Inch	LF	522.000	522.000
0166	646.9000	Marking Removal Line 4-Inch	LF	2,230.000	2,230.000
0168	646.9100	Marking Removal Line 8-Inch	LF	550.000	550.000
0170	646.9200	Marking Removal Line Wide	LF	110.000	110.000
0172	646.9300	Marking Removal Special Marking	EACH	20.000	20.000
0174	650.4000	Construction Staking Storm Sewer	EACH	4.000	4.000
0176	650.4500	Construction Staking Subgrade	LF	512.000	512.000
0178	650.5000	Construction Staking Base	LF	512.000	512.000
0180	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	802.000	802.000
0182	650.8501	Construction Staking Electrical Installations (project) 01. 3996-00-10	EACH	1.000	1.000
0184	650.9000	Construction Staking Curb Ramps	EACH	12.000	12.000
0186	650.9500	Construction Staking Sidewalk (project) 01. 3996-00-10	EACH	1.000	1.000
0188	650.9911	Construction Staking Supplemental Control (project) 01. 3996-00-10	EACH	1.000	1.000
0190	650.9920	Construction Staking Slope Stakes	LF	610.000	610.000
0192	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	317.000	317.000
0194	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	102.000	102.000
0196	652.0700.S	Install Conduit into Existing Item	EACH	30.000	30.000

Estimate Of Quantities

3996-00-10

Line	Item	Item Description	Unit	Total	Qty
0198	652.0800	Conduit Loop Detector	LF	26.000	26.000
0200	653.0135	Pull Boxes Steel 24x36-Inch	EACH	4.000	4.000
0202	653.0905	Removing Pull Boxes	EACH	4.000	4.000
0204	654.0101	Concrete Bases Type 1	EACH	22.000	22.000
0206	654.0102	Concrete Bases Type 2	EACH	2.000	2.000
0208	654.0120	Concrete Bases Type 10-Special	EACH	6.000	6.000
0210	655.0230	Cable Traffic Signal 5-14 AWG	LF	2,000.000	2,000.000
0212	655.0260	Cable Traffic Signal 12-14 AWG	LF	6,122.000	6,122.000
0214	655.0305	Cable Type UF 2-12 AWG Grounded	LF	1,315.000	1,315.000
0216	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	3,475.000	3,475.000
0218	655.0610	Electrical Wire Lighting 12 AWG	LF	976.000	976.000
0220	655.0700	Loop Detector Lead In Cable	LF	4,652.000	4,652.000
0222	655.0900	Traffic Signal EVP Detector Cable	LF	2,140.000	2,140.000
0224	656.0201	Electrical Service Meter Breaker Pedestal (location) 01. BUS 151 (W Main St) & Walker Way	EACH	1.000	1.000
0226	656.0201	Electrical Service Meter Breaker Pedestal (location) 02. BUS 151 (W Main St) & Bird Street	EACH	1.000	1.000
0228	657.0100	Pedestal Bases	EACH	22.000	22.000
0230	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	2.000	2.000
0232	657.0310	Poles Type 3	EACH	2.000	2.000
0234	657.0352	Poles Type 10-Special	EACH	6.000	6.000
0236	657.0420	Traffic Signal Standards Aluminum 13-FT	EACH	2.000	2.000
0238	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	6.000	6.000
0240	657.0430	Traffic Signal Standards Aluminum 10-FT	EACH	14.000	14.000
0242	657.0536	Monotube Arms 35-FT-Special	EACH	5.000	5.000
0244	657.0546	Monotube Arms 45-FT-Special	EACH	1.000	1.000
0246	657.0585	Trombone Arms 15-FT	EACH	2.000	2.000
0248	657.0609	Luminaire Arms Single Member 4-Inch Clamp 6-FT	EACH	2.000	2.000
0250	657.0806	Luminaire Arms Steel 6-FT	EACH	6.000	6.000
0252	658.0173	Traffic Signal Face 3S 12-Inch	EACH	24.000	24.000
0254	658.0174	Traffic Signal Face 4S 12-Inch	EACH	12.000	12.000
0256	658.0416	Pedestrian Signal Face 16-Inch	EACH	16.000	16.000
0258	658.5070	Signal Mounting Hardware (location) 01. BUS 151 (W Main St) & Walker Way	EACH	1.000	1.000
0260	658.5070	Signal Mounting Hardware (location) 02. BUS 151 (W Main St) & Bird Street	EACH	1.000	1.000
0262	659.1115	Luminaires Utility LED A	EACH	8.000	8.000
0264	661.0201	Temporary Traffic Signals for Intersections (location) 01. BUS 151 (W Main St) & Walker Way	EACH	1.000	1.000
0266	661.0201	Temporary Traffic Signals for Intersections (location) 02. BUS 151 (W Main St) & Bird Street	EACH	1.000	1.000
0268	690.0150	Sawing Asphalt	LF	192.000	192.000
0270	690.0250	Sawing Concrete	LF	748.000	748.000
0272	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	500.000	500.000
0274	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	1,200.000	1,200.000
0276	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	600.000	600.000
0278	SPV.0060	Special 01. Utility Line Opening (ULO)	EACH	5.000	5.000
0280	SPV.0060	Special 02. Pipe Connection to Existing Structure	EACH	2.000	2.000
0282	SPV.0060	Special 10. Furnish and Install EVP System (BUS 151 (W Main St) & Walker Way)	EACH	1.000	1.000
0284	SPV.0060	Special 11. Furnish and Install EVP System (BUS 151 (W Main St) & Bird Street)	EACH	1.000	1.000
0286	SPV.0060	Special 12. Furnish and Install APS System (BUS 151 (W Main St) & Walker Way)	EACH	1.000	1.000
0288	SPV.0060	Special 13. Furnish and Install APS System (BUS 151 (W Main St) & Bird Street)	EACH	1.000	1.000

Estimate Of Quantities

3996-00-10

Line	Item	Item Description	Unit	Total	Qty
0290	SPV.0060	Special 14. Retroreflective Backplates 3S	EACH	60.000	60.000
0292	SPV.0060	Special 15. Retroreflective Backplates 4S	EACH	7.000	7.000
0294	SPV.0060	Special 16. Retroreflective Backplates 5S	EACH	4.000	4.000
0296	SPV.0060	Special 17. Non-Intrusive Detection System (BUS 151 (W Main St) & Walker Way)	EACH	1.000	1.000
0298	SPV.0060	Special 18. Non-Intrusive Detection System (BUS 151 (W Main St) & Bird Street)	EACH	1.000	1.000
0300	SPV.0060	Special 19. Salvage Traffic Signals (BUS 151 (W Main St) & Walker Way)	EACH	1.000	1.000
0302	SPV.0060	Special 20. Salvage Traffic Signals (BUS 151 (W Main St) & Bird Street)	EACH	1.000	1.000
0304	SPV.0060	Special 21. Traffic Signal Cabinet and Controller Black (W Main St & Walker Way)	EACH	1.000	1.000
0306	SPV.0060	Special 22. Traffic Signal Cabinet and Controller Black (W Main St & Bird Street)	EACH	1.000	1.000
0308	SPV.0060	Special 23. Concrete Bases Type 1 Spread Footing	EACH	2.000	2.000
0310	SPV.0090	Special 01. Sawing Curb Head	LF	38.000	38.000
0312	SPV.0090	Special 02. Concrete Curb & Gutter 30-Inch Type X	LF	35.000	35.000
0314	SPV.0165	Special 01. High Friction Colored Surface, Green	SF	60.000	60.000

CLEARING & GRUBBING

CATEGORY	STATION	TO	STATION	LOCATION	201.0120 CLEARING ID	201.0220 GRUBBING ID	REMARKS
0010	133+45 'MW'	-	138+85 'MW'	MAIN ST - WALKER WAY	11	11	
PROJECT TOTAL					11	11	

REMOVALS

CATEGORY	STATION	TO	STATION	LOCATION	204.0100 REMOVING CONCRETE PAVEMENT SY	204.0110 REMOVING ASPHALTIC SURFACE SY	204.0150 REMOVING CURB & GUTTER LF	204.0155 REMOVING CONCRETE SIDEWALK SY	204.0220 REMOVING INLETS EACH	204.0245.01 REMOVING STORM SEWER (SIZE) (01. 12-INCH) LF	204.0245.02 REMOVING STORM SEWER (SIZE) (02. 15-INCH) LF	REMARKS
0010	133+45 'MW'	-	138+85 'MW'	MAIN ST - WALKER WAY	97	--	--	146	--	--	--	
0010	164+00 'MB'	-	166+50 'MB'	MAIN ST - BIRD ST	--	18	179	249	--	--	--	
0010	1+63 'L'	-	3+14 'L'	BIRD ST - LINNERUD DR	253	37	232	183	4	85	40	
PROJECT TOTAL					350	55	411	578	4	85	40	

BASE AGGREGATE DENSE

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	624.0100 WATER MGAL	REMARKS
0010	133+45 'MW'	-	138+85 'MW'	MAIN ST - WALKER WAY	34	10	1	
0010	164+00 'MB'	-	166+50 'MB'	MAIN ST - BIRD ST	61	--	1	
0010	1+63 'L'	-	3+14 'L'	BIRD ST - LINNERUD DR	66	462	8	
PROJECT TOTAL					161	472	10	

ASPHALTIC ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	455.0605 TACK COAT GAL	465.0105 ASPHALTIC SURFACE TON	REMARKS
0010	164+00 'MB'	-	166+50 'MB'	MAIN ST - BIRD ST	--	3	
0010	1+63 'L'	-	3+14 'L'	BIRD ST - LINNERUD DR	9	34	
PROJECT TOTAL					9	37	

DIVISION	FROM/TO STATION	LOCATION	COMMON EXCAVATION (1)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (3)	AVAILABLE MATERIAL (4)	UNEXPANDED FILL	EXPANDED FILL (5)	MASS ORDINATE +/- (6)	WASTE	COMMENT
			CUT (2)				FACTOR 1.25			
DIVISION 1										
MAIN ST AT WALKER WAY	133+39.84/135+62.33	MAIN/WALKER	36	29	7	0	0	7	7	
DIVISION 1 SUBTOTAL			36	29	7	0	0	7	7	
DIVISION 1.5										
MAIN ST AT BIRD ST	164+00.00/166+50.00	MAIN/BIRD	55	55	0	0	0	0	0	
DIVISION 1.5 SUBTOTAL			55	55	0	0	0	0	0	
DIVISION 2										
S BIRD ST	1+47.50/2+65.00	BIRD/LINNERUD	115	40	75	0	0	75	75	
LINNERUD DR	1+65.25/3+11.69	BIRD/LINNERUD	336	88	248	0	0	248	248	
DIVISION 2 SUBTOTAL			451	128	323	0	0	323	323	
GRAND TOTAL			542	212	330	0	0	330	330	
TOTAL COMMON EXC			542							

NOTES:

(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100

(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.

(3) SALVAGED/UNUSABLE PAVEMENT MATERIAL

(4) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL

(5) EXPANDED FILL FACTOR = 1.25

EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR

(6) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

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CURB & GUTTER												
					416.0610	416.0620	601.0105	601.0409	601.0411	601.0452	601.0600	SPV.0090.02 SPECIAL (02. CONCRETE CURB & GUTTER 30-INCH TYPE X)
					DRILLED TIE BARS EACH	DRILLED DOWEL BARS EACH	CONCRETE CURB TYPE A LF	CONCRETE CURB & GUTTER 30-INCH TYPE A LF	CONCRETE CURB & GUTTER 30-INCH TYPE D LF	CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE D LF	CONCRETE CURB PEDESTRIAN LF	CONCRETE CURB & GUTTER 30-INCH TYPE X) LF
CATEGORY	STATION	TO	STATION	LOCATION								REMARKS
0010	133+45 'MW'	-	138+85 'MW'	MAIN ST - WALKER WAY	9	--	--	26	--	230	27	35
0010	164+00 'MB'	-	166+50 'MB'	MAIN ST - BIRD ST	61	--	--	183	--	--	68	--
0010	1+63 'L'	-	3+14 'L'	BIRD ST - LINNERUD DR	--	32	160	137	31	--	--	--
PROJECT TOTAL					70	32	160	346	31	230	95	35

CONCRETE ITEMS												
					405.0100	405.1000	415.0090	602.0405	602.0515 CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA	602.0615 CURB RAMP DETECTABLE WARNING FIELD RADIAL NATURAL PATINA	602.0810	602.0860
					COLORING CONCRETE WISDOT RED CY	STAMPING COLORED CONCRETE CY	CONCRETE PAVEMENT 9-INCH SY	CONCRETE SIDEWALK 4-INCH SF			CONCRETE DRIVEWAY 6-INCH SY	CONCRETE DRIVEWAY HES 6-INCH SY
CATEGORY	STATION	TO	STATION	LOCATION								REMARKS
0010	133+45 'MW'	-	138+85 'MW'	MAIN ST - WALKER WAY	--	--	105	1,168	80	--	8	8
0010	164+00 'MB'	-	166+50 'MB'	MAIN ST - BIRD ST	9	9	--	2,227	60	51	--	--
0010	1+63 'L'	-	3+14 'L'	BIRD ST - LINNERUD DR	--	--	1,097	2,357	120	--	--	--
PROJECT TOTAL					9	9	1,202	5,752	260	51	8	8

STORM SEWER PIPE									
				608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE FT/FT	REMARKS
CATEGORY	FROM	TO	LOCATION	LF	LF				
0010	1.2	1.1	LINNERUD W LEG	43	--	941.08	940.44	0.015	
0010	1.1	1.0	BIRD/LINNERUD SW	56	--	940.44	939.60	0.015	
0010	2.2	2.1	BIRD/LINNERUD NE	--	11	941.06	940.95	0.010	
0010	2.1	2.0	BIRD/LINNERUD NE	--	37	940.95	940.58	0.010	
PROJECT TOTAL				99	48				

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STORM SEWER STRUCTURES													
		611.0639		611.3230		611.8110		650.4000		SPV.0060.02 SPECIAL (02. PIPE CONNECTION TO EXISTING STRUCTURE)			
		INLET COVERS TYPE H-S EACH		INLETS 2X3-FT EACH		ADJUSTING MANHOLE COVERS EACH		CONSTRUCTION STAKING STORM SEWER EACH					
CATEGORY	STRUCTURE	STATION	OFFSET	LOCATION							RIM** ELEVATION	INVERT*** ELEVATION	DEPTH**** FT
0010	1.0	2+24 'L'	5.6' RT	LINNERUD DR	--	--	1	--	1				
0010	1.1	1+69 'L'	21.6' RT	BIRD/LINNERUD SW	1	1	--	1	--	943.03	940.44	1.93	
0010	1.2	1+69 'L'	21.3' LT	BIRD/LINNERUD NW	1	1	--	1	--	943.98	941.08	2.23	
0010	2.0	2+30 'BL'	6.5' LT	BIRD ST	--	--	1	--	1				
0010	2.1	2+52 'BL'	23.6' RT	BIRD/LINNERUD NE	1	1	--	1	--	943.54	940.95	1.94	
0010	2.2	2+63 'BL'	23.6' RT	BIRD/LINNERUD NE	1	1	--	1	--	943.75	941.06	2.04	
0010	3.0	2+51 'BL'	22.2' LT	BIRD/LINNERUD NW	1	--	--	--	--				REPLACE INLET COVER
0010	4.0	2+57 'BL'	22.3' LT	BIRD/LINNERUD NW	1	--	--	--	--				REPLACE INLET COVER
PROJECT TOTAL					6	4	2	4	2				

REMARKS:
**RIM ELEV IS AT THE INLET COVER FLOW LINE LOCATION
***THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE
****DEPTH = RIM ELEV - SUMP ELEVATION - COVER HEIGHT - 6-INCH ADJUSTMENT RING HEIGHT

EROSION CONTROL											
		628.1504		628.1520		628.1905		628.1910 MOBILIZATIONS		628.2006	
		SILT FENCE LF		SILT FENCE MAINTENANCE LF		MOBILIZATIONS EROSION CONTROL EACH		EMERGENCY EROSION CONTROL EACH		EROSION MAT URBAN CLASS I TYPE A SY	
CATEGORY	STATION	TO	STATION	LOCATION						INLET PROTECTION TYPE C EACH	INLET PROTECTION TYPE D EACH
0010	133+45 'MW'	-	138+85 'MW'	MAIN ST - WALKER WAY	--	--	1	1	154	3	--
0010	164+00 'MB'	-	166+50 'MB'	MAIN ST - BIRD ST	--	--	1	1	11	8	6
0010	1+63 'L'	-	3+14 'L'	BIRD ST - LINNERUD DR	76	76	1	1	183	8	4
0010				UNDISTRIBUTED	19	19	1	1	87	2	1
PROJECT TOTAL					95	95	4	4	435	21	11

LANDSCAPING									
		625.0100		629.0210		630.0140 SEEDING MIXTURE NO. 40 LB		630.0500	
		TOPSOIL SY		FERTILIZER TYPE B CWT				SEED WATER MGAL	
CATEGORY	STATION	TO	STATION	LOCATION					REMARKS
0010	133+45 'MW'	-	138+85 'MW'	MAIN ST - WALKER WAY	154	0.1	3	4	
0010	164+00 'MB'	-	166+50 'MB'	MAIN ST - BIRD ST	11	0.1	1	1	
0010	1+63 'L'	-	3+14 'L'	BIRD ST - LINNERUD DR	183	0.2	4	5	
0010				UNDISTRIBUTED	87	0.1	2	3	
PROJECT TOTAL					435	0.5	10	13	

PERMANENT SIGNING										
				634.0811 POSTS TUBULAR STEEL 2X2-INCH X 11-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	
CATEGORY	SIGN #	SIGN CODE	SIGN SIZE WxH (IN)							REMARKS
0010	1M-01	--	--	1	--	1	--	1	--	END CENTER LANE LEFT-RIGHT ONLY
0010	1M-02	--	--	1	--	1	--	1	--	SCHOOL SPEED LIMIT 15
0010	1M-03	--	--	--	--	2	--	--	--	NO TURN ON RED & STOP SIGN (FOLDING)
0010	1M-04	--	--	--	--	1	--	--	--	STREET SIGN (W MAIN ST)
0010	1M-05	--	--	--	--	1	--	--	--	STREET SIGN (N WALKER WAY)
0010	1M-06	--	--	--	--	1	--	--	--	STREET SIGN (W MAIN ST)
0010	1M-07	--	--	--	--	1	--	--	--	STREET SIGN (S WALKER WAY)
0010	1M-08	--	--	--	--	2	--	--	--	NO TURN ON RED & STOP SIGN (FOLDING)
0010	2-01	R3-8LAR	54X30	2	11.25	--	--	--	--	LEFT, THROUGH, RIGHT
0010	2R-01	R3-8LAF	--	--	--	--	1	2	--	LEFT, THROUGH, THROUGH-RIGHT
0010	2M-01	--	--	--	--	1	--	--	--	STOP SIGN (FOLDING)
0010	2M-02	--	--	--	--	1	--	--	--	STREET SIGN (W MAIN ST)
0010	2M-03	--	--	--	--	1	--	--	--	STREET SIGN (S BIRD ST)
0010	2M-04	--	--	--	--	1	--	--	--	STOP SIGN (FOLDING)
0010	2M-05	--	--	--	--	1	--	--	--	STREET SIGN (W MAIN ST)
0010	2M-06	--	--	--	--	1	--	--	--	STOP SIGN (FOLDING)
0010	2M-07	--	--	--	--	1	--	--	--	STREET SIGN (S BIRD ST)
0010	2M-08	--	--	--	--	1	--	--	--	STOP SIGN (FOLDING)
0010	3-01	R3-8EXR	48X30	2	10.00	--	--	--	--	THROUGH-LEFT, BIKE ONLY, RIGHT
0010	3R-01	R3-8ER	--	--	--	--	1	1	--	THROUGH-LEFT, RIGHT
0010	3M-01	--	--	1	--	1	--	--	--	STOP SIGN & ALL WAY
0010	3M-02	--	--	1	--	1	--	--	--	STOP SIGN & ALL WAY
0010	3M-03	--	--	1	--	1	--	--	--	STOP SIGN & ALL WAY
0010	3M-04	--	--	1	--	1	--	--	--	STOP SIGN & ALL WAY
0010	3M-05	--	--	--	--	1	--	--	1	STOP SIGN & BIKE THROUGH
PROJECT TOTAL				10	21.25	23	2	5	1	

TRAFFIC CONTROL																		
					643.0300	643.0420	643.0705	643.0715	643.0900	643.1050	643.3180		643.3850	644.1410	644.1601	644.1605	644.1810	644.1900.S
					TRAFFIC CONTROL DRUMS	TRAFFIC CONTROL BARRICADES TYPE III	TRAFFIC CONTROL WARNING LIGHTS TYPE A	TRAFFIC CONTROL WARNING LIGHTS TYPE C	TRAFFIC CONTROL SIGNS	TRAFFIC CONTROL SIGNS PCMS	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH		TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH	TEMPORARY PEDESTRIAN SURFACE ASPHALT	TEMPORARY PEDESTRIAN CURB RAMP	TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD	TEMPORARY PEDESTRIAN BARRICADE	TEMPORARY AUDIBLE MESSAGE DEVICES
CATEGORY	INTERSECTION	STAGE	**ESTIMATED CALENDAR DAYS	LOCATION	DAY	DAY	DAY	DAY	DAY	DAY	WHITE LF	YELLOW LF	LF	SF	DAY	SF	LF	DAY
0010	MAIN ST - WALKER WAY	1	21	NW CURB RAMP	588	84	168	189	504	--	194	--	--	--	--	--	100	84
0010		2	22	SW CURB RAMP	440	44	88	132	440	--	80	--	--	--	--	--	100	110
0010		3	21	SE CURB RAMP	567	84	168	168	567	--	105	--	--	--	--	--	100	105
0010		4	21	NE CURB RAMP	357	42	84	84	378	--	80	--	--	--	--	--	100	84
0010	MAIN ST - BIRD ST	1	21	NW CURB RAMP	630	63	126	126	441	--	80	--	--	--	--	--	100	84
0010	BIRD ST - LINNERUD DR	2	21	SW CURB RAMP	294	42	84	105	378	--	80	--	--	--	--	--	100	84
0010		3	21	SE CURB RAMP	567	63	126	105	462	--	85	--	--	--	--	--	100	84
0010		4	21	NE CURB RAMP	399	42	84	63	336	--	--	--	--	--	--	--	100	84
0010		1A	25	EAST SIDE	550	950	1300	--	475	21	96	--	--	--	75	30	386	100
0010		1B	30	EAST SIDE	660	1140	1560	--	720	--	96	--	--	--	60	20	96	240
0010		2	30	WEST SIDE	720	780	1080	--	780	--	555	552	20	310	60	20	315	270
0010				UNDISTRIBUTED	866	501	731	146	823	--	218	83	3	47	30	11	240	200
				PROJECT TOTAL	6,638	3,835	5,599	1,118	6,304	21	2,304		23	357	225	81	1,837	1,529
**FOR INFORMATION ONLY																		

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CONNECTED WORK ZONE									
CATEGORY	INTERSECTION	STAGE	**ESTIMATED CALENDAR DAYS	LOCATION	643.0810.S		643.1220.S		REMARKS
					CONNECTED ARROW BOARDS EACH	CONNECTED ARROW BOARD DAY	CONNECTED WORK ZONE START AND END LOCATION MARKERS EACH	CONNECTED WORK ZONE START AND END LOCATION MARKERS DAY	
0010	MAIN ST - WALKER WAY	1	21	NW CURB RAMP	1	21	2	42	
0010		2	22	SW CURB RAMP	1	22	2	44	
0010		3	21	SE CURB RAMP	1	21	2	42	
0010		4	21	NE CURB RAMP	1	21	2	42	
0010	MAIN ST - BIRD ST	2	21	SW CURB RAMP	1	21	2	42	
0010		3	21	SE CURB RAMP	1	21	2	42	
**FOR INFORMATION ONLY					PROJECT TOTAL		127		254

MARKING LINE REMOVALS									
CATEGORY	STATION	TO	STATION	LOCATION	646.9000	646.9100	646.9200	646.9300	REMARKS
					MARKING REMOVAL LINE 4-INCH LF	MARKING REMOVAL LINE 8-INCH LF	MARKING REMOVAL LINE WIDE LF	MARKING REMOVAL SPECIAL MARKING EACH	
0010	133+45 'MW'	-	138+85 'MW'	MAIN ST - WALKER WAY	1,280	210	--	10	
0010	164+00 'MB'	-	166+50 'MB'	MAIN ST - BIRD ST	282	--	110	1	
0010	1+63 'L'	-	3+14 'L'	BIRD ST - LINNERUD DR	668	340	--	9	
PROJECT TOTAL					2,230	550	110	20	

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PAVEMENT MARKING																		
CATEGORY	STATION	TO	STATION	LOCATION	646.1020		646.3020	646.5020	646.5120	646.5220	646.6120	646.7120		646.7320	646.7420	646.7520	SPV.0165.01	REMARKS
					MARKING LINE EPOXY 4-INCH		MARKING LINE EPOXY 8-INCH	MARKING ARROW EPOXY EACH	MARKING WORD EPOXY EACH	MARKING SYMBOL EPOXY EACH	MARKING STOP LINE EPOXY 18-INCH	MARKING DIAGONAL EPOXY 12-INCH		MARKING CHEVRON EPOXY 12-INCH	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH	MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH	SPECIAL (01. HIGH FRICTION COLORED SURFACE, GREEN)	
					WHITE LF	YELLOW LF						WHITE LF	YELLOW LF					
0010	133+45 'MW'	-	138+85 'MW'	MAIN ST - WALKER WAY	102	1,570	555	12	--	--	78	52	81	--	476	336	--	
0010	164+00 'MB'	-	166+50 'MB'	MAIN ST - BIRD ST	94	--	195	2	1	--	42	34	--	--	130	120	--	
0010	1+63 'L'	-	3+14 'L'	BIRD ST - LINNERUD DR	327	1,328	295	12	--	3	88	44	32	45	354	66	60	
PROJECT TOTAL					3,421		1,045	26	1	3	208		243	45	960	522	60	

STAKING ITEMS												
CATEGORY	STATION	TO	STATION	LOCATION	650.4500	650.5000	650.5500	650.9000	650.9500.01	650.9911.01	650.9920	REMARKS
					CONSTRUCTION STAKING SUBGRADE LF	CONSTRUCTION STAKING BASE LF	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	CONSTRUCTION STAKING CURB RAMP EACH	CONSTRUCTION STAKING SIDEWALK (PROJECT) (01. 3996-00-10) EACH	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) (01. 3996-00-10) EACH	CONSTRUCTION STAKING SLOPE STAKES LF	
0010	133+45 'MW'	-	138+85 'MW'	MAIN ST - WALKER WAY	230	230	291	4	--	--	230	
0010	164+00 'MB'	-	166+50 'MB'	MAIN ST - BIRD ST	--	--	183	4	--	--	80	
0010	1+63 'L'	-	3+14 'L'	BIRD ST - LINNERUD DR	282	282	328	4	--	--	300	
0010				UNDISTRIBUTED	--	--	--	--	1	1	--	
PROJECT TOTAL					512	512	802	12	1	1	610	

SAWING ITEMS							
CATEGORY	STATION	TO	STATION	LOCATION	690.0150	690.0250	SPV.0090.01
					SAWING ASPHALT LF	SAWING CONCRETE LF	SPECIAL (01. SAWING CURB HEAD) LF
0010	133+45 'MW'	-	138+85 'MW'	MAIN ST - WALKER WAY	--	343	38
0010	164+00 'MB'	-	166+50 'MB'	MAIN ST - BIRD ST	58	326	--
0010	1+63 'L'	-	3+14 'L'	BIRD ST - LINNERUD DR	134	79	--
PROJECT TOTAL					192	748	38

UTILITY LINE OPENING						
CATEGORY	STATION	TO	STATION	LOCATION	SPV.0060.01	REMARKS
					SPECIAL (01. UTILITY LINE OPENING (ULO)) EACH	
0010		-		UNDISTRIBUTED	5	
PROJECT TOTAL					5	

3

TRAFFIC SIGNAL CONDUIT						
			652.0225	652.0235	652.0700.5	
			CONDUIT RIGID NONMETALLIC			
			SCHEDULE 40		INSTALL CONDUIT INTO	
			2-INCH	3-INCH	EXISTING ITEM	
LOCATION	FROM	-	TO	LF	LF	EACH
CATEGORY 0010						
MAIN ST & WALKER WAY						
	PB1	-	SB1	10	--	1
	PB1	-	SB1S	7	--	1
	PB1	-	PB2	--	9	1
	PB2	-	SB2	11	--	--
	PB2	-	SB3	5	--	--
	PB2	-	PB3	--	13	--
	PB2	-	PB4	9	--	--
	PB4	-	SB4	--	8	1
	PB5	-	SB5	5	--	1
	PB5	-	SB6	6	--	1
	PB7	-	SB8	5	--	1
	PB7	-	SB9	10	--	1
	PB7	-	PB8	5	--	1
	PB8	-	SB10	8	--	1
	PB8	-	PB9	--	15	--
	PB8	-	PB10	--	6	1
	PB10	-	SB11	--	7	1
	PB10	-	SB12	20	--	1
	PB11	-	SB13	5	--	1
	PB11	-	SB14	19	--	1
MAIN ST & WALKER WAY TOTAL				125	58	15
CONTINUED						

3

TRAFFIC SIGNAL CONDUIT (CONTINUED)						
			652.0225	652.0235	652.0700.5	
			CONDUIT RIGID NONMETALLIC			
			SCHEDULE 40		INSTALL CONDUIT INTO	
			2-INCH	3-INCH	EXISTING ITEM	
LOCATION	FROM	-	TO	LF	LF	EACH
CATEGORY 0010						
MAIN ST & BIRD ST						
	PB1	-	SB1	26	--	1
	PB1	-	SB2	12	--	1
	PB3	-	SB3	--	9	1
	PB3	-	SB4	23	--	1
	PB4	-	SB5	11	--	1
	PB4	-	SB6	26	--	1
	PB6	-	SB7	--	22	1
	PB6	-	SB8	2	--	1
	PB7	-	SB9	19	--	1
	PB9	-	SB10	--	7	1
	PB9	-	SB11	25	--	1
	PB10	-	SB12	9	--	1
	PB10	-	SB13	30	--	1
	PB12	-	SB14	--	6	1
	PB12	-	SB15	9	--	1
MAIN ST & BIRD ST TOTAL				192	44	15
CATEGORY 0010 TOTAL				317	102	30

TRAFFIC SIGNAL CONTROL			
SPV.0060.21		SPV.0060.22	
TRAFFIC SIGNAL		TRAFFIC SIGNAL	
CABINET AND CONTROLLER BLACK		CABINET AND CONTROLLER BLACK	
(W MAIN ST & WALKER WAY)		(W MAIN ST & BIRD STREET)	
LOCATION	EACH	EACH	EACH
CATEGORY 0010			
BUS 151 (W MAIN ST) & WALKER WAY	1	--	1
BUS 151 (W MAIN ST) & BIRD STREET	--	1	--
CATEGORY 0010 TOTAL	1	1	1

6S6.0201.01		6S6.0201.02	
ELECTRICAL SERVICE		ELECTRICAL SERVICE	
METER BREAKER PEDESTAL		METER BREAKER PEDESTAL	
(BUS 151 (W MAIN ST) & WALKER WAY)		(BUS 151 (W MAIN ST) & BIRD STREET)	
LOCATION	EACH	EACH	EACH
CATEGORY 0010			
BUS 151 (W MAIN ST) & WALKER WAY	1	--	1
BUS 151 (W MAIN ST) & BIRD STREET	--	1	--
CATEGORY 0010 TOTAL	1	1	1

3

TRAFFIC SIGNAL PULL BOXES				
				653.0135
				PULL BOXES STEEL
LOCATION / PULL				24X36-INCH
BOX NUMBER	STATION	OFFSET	L/R	EACH
CATEGORY 0010				
MAIN ST & WALKER WAY				
PB2	137+05.9 'MW'	32.3	L	1
PB3	138+44.3 'MW'	32.2	L	1
PB8	135+58.1 'MW'	32.8	R	1
PB9	134+03.3 'MW'	32.8	R	1
MAIN ST & WALKER WAY TOTAL				4
CATEGORY 0010 TOTAL				4

CONSTRUCTION STAKING	
650.8501	
CONSTRUCTION STAKING	
ELECTRICAL INSTALLATIONS	
(3996-00-10)	
LOCATION	EACH
CATEGORY 0010	
3996-00-10	1
CATEGORY 0010 TOTAL	1

TRAFFIC SIGNAL LOOP DETECTORS			
		652.0800	655.0700*
		CONDUIT	LOOP DETECTOR
		LOOP DETECTOR	LEAD IN CABLE
LOCATION / LOOP NO.	INSTALLATION METHOD	LF	LF
CATEGORY 0010			
MAIN ST & WALKER WAY			
21	EXISTING	6	192
22	EXISTING	7	192
61	EXISTING	6	347
62	EXISTING	7	347
MAIN ST & WALKER WAY TOTAL		26	1,078
CATEGORY 0010 TOTAL		26	1,078
*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.			

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TRAFFIC SIGNAL MOUNTING HARDWARE		
658.5070.01		658.5070.02
SIGNAL MOUNTING		SIGNAL MOUNTING
HARDWARE		HARDWARE
(BUS 151 (W MAIN ST) & WALKER WAY)		(BUS 151 (W MAIN ST) & BIRD STREET)
LOCATION	EACH	EACH
CATEGORY 0010		
BUS 151 (W MAIN ST) & WALKER WAY	1	--
BUS 151 (W MAIN ST) & BIRD STREET	--	1
CATEGORY 0010 TOTAL	1	1

TRAFFIC SIGNAL SYSTEMS				
SPV.0060.10		SPV.0060.11	SPV.0060.12	SPV.0060.13
FURNISH AND INSTALL		FURNISH AND INSTALL	FURNISH & INSTALL	FURNISH & INSTALL
EVP SYSTEM		EVP SYSTEM	APS SYSTEM	APS SYSTEM
(BUS 151 (W MAIN ST) & WALKER WAY)		(BUS 151 (W MAIN ST) & BIRD STREET)	(BUS 151 (W MAIN ST) & WALKER WAY)	(BUS 151 (W MAIN ST) & BIRD STREET)
LOCATION	EACH	EACH	EACH	EACH
CATEGORY 0010				
BUS 151 (W MAIN ST) & WALKER WAY	1	--	1	--
BU5 151 (W MAIN ST) & BIRD STREET	--	1	--	1
CATEGORY 0010 TOTAL	1	1	1	1

3

TRAFFIC SIGNAL REMOVALS		
	204.0195	653.0905
	REMOVING	REMOVING
	CONCRETE	PULL
	BASES	BOXES
LOCATION / ITEM NUMBER	EACH	EACH
CATEGORY 0010		
MAIN ST & WALKER WAY		
PB2	--	1
PB3	--	1
PB8	--	1
PB9	--	1
SB1	1	--
SB2	1	--
SB3	1	--
SB4	1	--
SB5	1	--
SB6	1	--
SB7	1	--
SB8	1	--
MAIN ST & WALKER WAY TOTAL	8	4
MAIN ST & BIRD ST		
SB1	1	--
SB2	1	--
SB3	1	--
SB4	1	--
SB5	1	--
SB6	1	--
SB7	1	--
SB8	1	--
MAIN ST & BIRD ST TOTAL	8	0
CATEGORY 0010 TOTAL	16	4

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NON-INTRUSIVE DETECTION SYSTEM		
	SPV.0060.17	SPV.0060.18
	NON-INTRUSIVE	NON-INTRUSIVE
	DETECTION SYSTEM	DETECTION SYSTEM
	(BUS S1 (W MAIN ST) & WALKER WAY)	(BUS 51 (W MAIN ST) & BIRD STREET)
LOCATION	EACH	EACH
CATEGORY 0010		
BUS 151 (W MAIN ST) & WALKER WAY	1	--
BUS 151 (W MAIN ST) & BIRD STREET	--	1
CATEGORY 0010 TOTAL	1	1

SALVAGE TRAFFIC SIGNALS		
	SPV.0060.19	SPV.0060.20
	SALVAGE	SALVAGE
	TRAFFIC SIGNALS	TRAFFIC SIGNALS
	(BUS 151 (W MAIN ST) & WALKER WAY)	(BUS 151 (W MAIN ST) & BIRD STREET)
LOCATION	EACH	EACH
CATEGORY 0010		
BUS 151 (W MAIN ST) & WALKER WAY	1	--
BUS 151 (W MAIN ST) & BIRD STREET	--	1
CATEGORY 0010 TOTAL	1	1

TEMPORARY TRAFFIC SIGNALS		
	661.0201.01	661.0201.02
	TEMPORARY TRAFFIC SIGNALS	TEMPORARY TRAFFIC SIGNALS
	FOR INTERSECTIONS	FOR INTERSECTIONS
	(BUS 1S1 (W MAIN ST) & WALKER WAY)	(BUS 1S1 (W MAIN ST) & BIRD STREET)
LOCATION	EACH	EACH
CATEGORY 0010		
BUS 1S1 (W MAIN ST) & WALKER WAY	1	--
BUS 1S1 (W MAIN ST) & BIRD STREET	--	1
CATEGORY 0010 TOTAL	1	1

PROJECT NO: 3996-00-10

HWY: LOCAL STREETS

COUNTY: DANE

MISCELLANEOUS QUANTITIES

SHEET

PRE 81

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<u>RETROREFLECTIVE BACKPLATES</u>			
	SPV.0060.14	SPV.0060.1S	SPV.0060.16
	RETROREFLECTIVE BACKPLATE 3S	RETROREFLECTIVE BACKPLATE 4S	RETROREFLECTIVE BACKPLATE 5S
LOCATION	EACH	EACH	EACH
CATEGORY 0010			
GRAND AVE & PRAIRIE LAKES DRIVE	23	4	--
GRAND AVE & HOEPKER ROAD	18	--	4
GRAND AVE & IRONWOOD DRIVE	19	3	--
CATEGORY 0010 TOTAL	60	7	4

TRAFFIC SIGNAL STRUCTURES									
				654.0120	657.0352	657.0536	657.0546	657.0806	659.1115*
				CONCRETE BASES	POLES	MONOTUBE ARMS		LUMINAIRE ARMS	LUMINAIRES
LOCATION / BASE				TYPE 10-SPECIAL	TYPE 10-SPECIAL	35-FT-SPECIAL	45-FT-SPECIAL	STEEL 6-FT	UTILITY
NUMBER	STATION	OFFSET	L/R	EACH	EACH	EACH	EACH	EACH	LED A EACH
CATEGORY 0010									
MAIN ST & WALKER WAY									
SB4	136+87.7 'MW'	33.2	R	1	1	1	--	1	1
SB11	13S+74.3 'MW'	31.5	L	1	1	1	--	1	1
MAIN ST & WALKER WAY TOTAL				2	2	2	0	2	2
MAIN ST & BIRD ST									
SB3	164+11.8 'MB'	32.3	L	1	1	1	--	1	1
SB7	165+60.2 'MB'	70.0	L	1	1	1	--	1	1
SB10	165+74.2 'MB'	33.7	R	1	1	1	--	1	1
SB14	164+23.8 'MB'	66.0	R	1	1	--	1	1	1
MAIN ST & BIRD ST TOTAL				4	4	3	1	4	4
CATEGORY 0010 TOTAL				6	6	5	1	6	6

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

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TRAFFIC SIGNAL STRUCTURES																
				654.0101	654.0102	5PV.0060.23	657.0100	657.0255	657.0310	657.0430	657.0420	657.0425	657.0585	657.0609	659.1115*	
				CONCRETE BASE5			PEDESTAL	TRANSFORMER BASE5	POLE5		TRAFFIC SIGNAL STANDARD5			LUMINAIRE ARM5	LUMINAIRE5	
				TYPE 1	TYPE 2	TYPE 1 SPREAD FOOTING	BASE5	BREAKAWAY 11 1/2-INCH	TYPE 3	10-FT	ALUMINUM	15-FT	TROMBONE ARM5	SINGLE MEMBER	UTILITY	
LOCATION / BASE				TYPE 1	TYPE 2	TYPE 1 SPREAD FOOTING	BASE5	BOLT CIRCLE	TYPE 3	10-FT	13-FT	15-FT	15-FT	4-INCH CLAMP 6-FT	LED A	
NUMBER	STATION	OFFSET	L/R	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
CATEGORY 0010																
MAIN ST & WALKER WAY																
5B1	136+85.6 'MW'	47.0	L	1	--	--	1	--	--	1	--	--	--	--	--	--
5B2	136+95.1 'MW'	36.3	L	1	--	--	1	--	--	1	--	--	--	--	--	--
5B3	137+01.1 'MW'	32.2	L	1	--	--	1	--	--	--	--	1	--	--	--	--
5B5	136+59.7 'MW'	35.2	R	1	--	--	1	--	--	1	--	--	--	--	--	--
5B6	136+51.0 'MW'	38.5	R	1	--	--	1	--	--	1	--	--	--	--	--	--
5B7	136+40.4 'MW'	48.4	R	1	--		1	--	--	--	1	--	--	--	--	--
5B8	135+80.5 'MW'	59.0	R	--	1	--	--	1	1	--	--	--	1	1	1	1
5B9	135+75.1 'MW'	45.4	R	1	--	--	1	--	--	1	--	--	--	--	--	--
5B10	135+65.3 'MW'	37.1	R	1	--	--	1	--	--	--	--	1	--	--	--	--
5B12	135+99.7 'MW'	34.8	L	1	--	--	1	--	--	1	--	--	--	--	--	--
5B13	136+09.1 'MW'	39.8	L	1	--	--	1	--	--	1	--	--	--	--	--	--
5B14	136+23.5 'MW'	51.3	L	1	--		1	--	--	--	1	--	--	--	--	--
5B15	136+81.9 'MW'	62.6	L	--	1	--	--	1	1	--	--	--	1	1	1	1
UNDISTRIBUTED				--	--	1	--	--	--	--	--	--	--	--	--	--
MAIN ST & WALKER WAY TOTAL				11	2	1	11	2	2	7	2	2	2	2	2	2
MAIN ST & BIRD ST																
5B1	164+03.0 'MB'	48.7	R	1	--	--	1	--	--	1	--	--	--	--	--	--
5B2	163+94.0 'MB'	35.1	R	1	--	--	1	--	--	--	--	1	--	--	--	--
5B4	164+42.6 'MB'	33.4	L	1	--	--	1	--	--	1	--	--	--	--	--	--
5B5	164+78.5 'MB'	52.7	L	1	--	--	1	--	--	1	--	--	--	--	--	--
5B6	164+87.3 'MB'	65.3	L	1	--	--	1	--	--	--	--	1	--	--	--	--
5B8	165+65.8 'MB'	51.6	L	1	--	--	1	--	--	1	--	--	--	--	--	--
5B9	165+77.3 'MB'	39.9	L	1	--	--	1	--	--	--	--	1	--	--	--	--
5B11	165+43.1 'MB'	34.4	R	1	--	--	1	--	--	1	--	--	--	--	--	--
5B12	165+20.0 'MB'	46.8	R	1	--	--	1	--	--	1	--	--	--	--	--	--
5B13	165+05.2 'MB'	62.2	R	1	--	--	1	--	--	--	--	1	--	--	--	--
5B15	164+17.0 'MB'	53.9	R	1	--	--	1	--	--	1	--	--	--	--	--	--
UNDISTRIBUTED				--	--	1	--	--	--	--	--	--	--	--	--	--
MAIN ST & BIRD ST TOTAL				11	0	1	11	0	0	7	0	4	0	0	0	0
CATEGORY 0010 TOTAL				22	2	2	22	2	2	14	2	6	2	2	2	2

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

TRAFFIC SIGNAL HEADS					
			658.0173	658.0174	658.0416
			TRAFFIC SIGNAL FACE		PEDESTRIAN
			3S	4S	SIGNAL FACE
SIGNAL			12-INCH	12-INCH	16-INCH
LOCATION	BASE NO.	HEAD NO.	EACH	EACH	EACH
CATEGORY 0010					
MAIN ST & WALKER WAY					
	SB1	8B	--	--	1
	SB2	2A	--	--	1
	SB3	4	--	1	--
		6	1	--	--
	SB4	2	1	--	--
		3	1	--	--
		5	--	1	--
	SBS	8A	--	--	1
	SB6	6B	--	--	1
	SB7	11	1	--	--
		15	1	--	--
	SB8	16	1	--	--
	SB9	4B	--	--	1
	SB10	1	1	--	--
		9	--	1	--
		6A	--	--	1
	SB11	7	1	--	--
		8	1	--	--
		10	--	1	--
	SB12	4A	--	--	1
	SB13	2B	--	--	1
	SB14	12	1	--	--
		14	1	--	--
	SB15	13	1	--	--
MAIN ST & WALKER WAY TOTAL			12	4	8
CONTINUED					

TRAFFIC SIGNAL HEADS (CONTINUED)					
LOCATION	SIGNAL BASE NO.	HEAD NO.	658.0173	658.0174	658.0416
			TRAFFIC SIGNAL FACE		PEDESTRIAN
			3S	4S	SIGNAL FACE
			12-INCH EACH	12-INCH EACH	16-INCH EACH
CATEGORY 0010					
MAIN ST & BIRD ST					
	SB1	6A	--	--	1
	SB2	1	1	--	--
		9	--	1	--
	SB3	7	1	--	--
		8	1	--	--
		10	--	1	--
	SB4	4A	--	--	1
	SB5	2B	--	--	1
	SB6	14	--	1	--
		16	1	--	--
	SB7	12	1	--	--
		13	1	--	--
		15	--	1	--
	SB8	2A	--	--	1
	SB9	4	--	1	--
		6	1	--	--
		8B	--	--	1
	SB10	2	1	--	--
		3	1	--	--
		5	--	1	--
	SB11	8A	--	--	1
	SB12	6B	--	--	1
	SB13	11	1	--	--
		19	--	1	--
	SB14	17	1	--	--
		18	1	--	--
		20	--	1	--
	SB15	4B	--	--	1
MAIN ST & BIRD ST TOTAL			12	8	8
CATEGORY 0010 TOTAL			24	12	16

TRAFFIC SIGNAL CABLE AND WIRE - BELOW GROUND								
			6SS.0260	6SS.0700*	6SS.030S	6SS.0S1S	6SS.0900*	
			CABLE	LOOP DETECTOR	CABLE TYPE	ELECTRICAL WIRE		
			TRAFFIC SIGNAL	LEAD IN	UF 2-12 AWG	TRAFFIC SIGNALS	TRAFFIC SIGNAL EVP	
			12-14 AWG	CABLE	GROUND	10 AWG	DETECTOR CABLE	
LOCATION	FROM	-	TO	LF	LF	LF	LF	LF
CATEGORY 0010								
MAIN ST & WALKER WAY								
	CB1	-	SB1	60	60	--	60	--
	CB1	-	SB2	110	110	--	--	--
	CB1	-	SB3	104	--	--	--	--
	CB1	-	SB4	190	--	190	--	190
	CB1	-	SBS	228	228	--	--	--
	CB1	-	SB6	229	229	--	--	--
	CB1	-	SB7	243	--	--	--	--
	CB1	-	SB8	316	--	--	--	316
	CB1	-	SB9	323	323	--	--	--
	CB1	-	SB10	274	274	--	--	--
	CB1	-	SB11	191	--	--	--	191
	CB1	-	SB12	204	204	--	--	--
	CB1	-	SB13	142	142	--	--	--
	CB1	-	SB14	157	--	--	--	--
	CB1	-	SB1S	S7	--	S7	S7	S7
	SB1	-	SB2	--	--	--	101	--
	SB2	-	SB3	--	--	--	47	--
	SB3	-	SB4	--	--	--	126	--
	SB4	-	SBS	--	--	--	84	--
	SBS	-	SB6	--	--	--	41	--
	SB6	-	SB7	--	--	--	S6	--
	SB7	-	SB8	--	--	--	149	--
	SB8	-	SB9	--	--	--	46	--
	SB9	-	SB10	--	--	--	94	--
	SB10	-	SB11	--	--	--	127	--
	SB11	-	SB12	--	--	--	S7	--
	SB12	-	SB13	--	--	--	102	--
	SB13	-	SB14	--	--	--	S4	--
	SB14	-	SB1S	--	--	--	144	--
	SB4	-	SB8	--	--	178	--	--
	SB1S	-	SB11	--	--	178	--	--
	PB1	-	SB1S	--	--	--	30	--
	PB2	-	SB3	--	--	--	28	--
	PB4	-	SB4	--	--	--	31	--
	PB5	-	SB5	--	--	--	28	--
MAIN ST & WALKER WAY SUBTOTAL				2,828	1,570	603	1,462	754
*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.				CONTINUED				

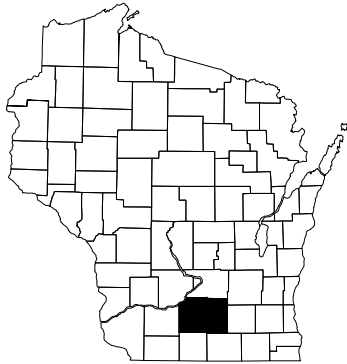
TRAFFIC SIGNAL CABLE AND WIRE - BELOW GROUND (CONTINUED)								
			6SS.0260	6SS.0700*	6SS.030S	6SS.0S1S	6SS.0900*	
			CABLE	LOOP DETECTOR	CABLE TYPE	ELECTRICAL WIRE		
			TRAFFIC SIGNAL	LEAD IN	UF 2-12 AWG	TRAFFIC SIGNALS	TRAFFIC SIGNAL EVP	
			12-14 AWG	CABLE	GROUND	10 AWG	DETECTOR CABLE	
LOCATION	FROM	-	TO	LF	LF	LF	LF	LF
CATEGORY 0010								
MAIN ST & WALKER WAY								
	PB7	-	SB8	--	--	--	28	--
	PB8	-	SB10	--	--	--	31	--
	PB10	-	SB11	--	--	--	29	--
	PB11	-	SB13	--	--	--	27	--
MAIN ST & WALKER WAY SUBTOTAL				0	0	0	115	0
MAIN ST & WALKER WAY TOTAL				2,828	1,570	603	1,577	754
MAIN ST & BIRD ST								
	CB1	-	SB1	76	76	--	76	--
	CB1	-	SB2	62	--	--	--	--
	CB1	-	SB3	148	--	148	--	148
	CB1	-	SB4	163	163	--	--	--
	CB1	-	SBS	219	219	--	--	--
	CB1	-	SB6	234	--	--	--	--
	CB1	-	SB7	338	--	--	--	338
	CB1	-	SB8	318	318	--	--	--
	CB1	-	SB9	384	384	--	--	--
	CB1	-	SB10	300	--	--	--	300
	CB1	-	SB11	302	302	--	--	--
	CB1	-	SB12	243	243	--	--	--
	CB1	-	SB13	264	--	--	--	--
	CB1	-	SB14	120	--	120	--	120
	CB1	-	SB1S	123	123	--	123	--
	SB1	-	SB2	--	--	--	69	--
	SB2	-	SB3	--	--	--	141	--
	SB3	-	SB4	--	--	--	62	--
	SB4	-	SBS	--	--	--	132	--
	SB5	-	SB6	--	--	--	68	--
MAIN ST & BIRD ST SUBTOTAL				3,294	1,828	268	671	906
*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.				CONTINUED				

TRAFFIC SIGNAL CABLE AND WIRE - BELOW GROUND (CONTINUED)								
				655.0260	655.0700*	655.0305	655.0515	655.0900*
				CABLE	LOOP DETECTOR	CABLE TYPE	ELECTRICAL WIRE	
				TRAFFIC SIGNAL	LEAD IN	UF 2-12 AWG	TRAFFIC SIGNALS	TRAFFIC SIGNAL EVP
				12-14 AWG	CABLE	GROUNDED	10 AWG	DETECTOR CABLE
LOCATION	FROM	-	TO	LF	LF	LF	LF	LF
CATEGORY 0010								
MAIN ST & BIRD ST								
	SB6	-	SB7	--	--	--	187	--
	SB7	-	SB8	--	--	--	55	--
	SB8	-	SB9	--	--	--	101	--
	SB9	-	SB10	--	--	--	139	--
	SB10	-	SB11	--	--	--	60	--
	SB11	-	SB12	--	--	--	121	--
	SB12	-	SB13	--	--	--	70	--
	SB13	-	SB14	--	--	--	187	--
	SB14	-	SB15	--	--	--	46	--
	SB3	-	SB8	--	--	221	--	--
	SB14	-	SB10	--	--	223	--	--
	PB1	-	SB2	--	--	--	35	--
	PB3	-	SB3	--	--	--	32	--
	PB4	-	SB5	--	--	--	34	--
	PB6	-	SB8	--	--	--	26	--
	PB7	-	SB9	--	--	--	43	--
	PB9	-	SB10	--	--	--	30	--
	PB10	-	SB12	--	--	--	32	--
	PB12	-	SB14	--	--	--	29	--
MAIN ST & BIRD ST SUBTOTAL				0	0	444	1,227	0
MAIN ST & BIRD ST TOTAL				3,294	1,828	712	1,898	906
CATEGORY 0010 TOTAL				6,122	3,398	1,315	3,475	1,660
CATEGORY 0200 TOTAL								
CATEGORY 0300 TOTAL								
*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.								

TRAFFIC SIGNAL CABLE AND WIRE - ABOVE GROUND							
			655.0230	655.0610	655.0700*	655.0900*	
			CABLE TRAFFIC	ELECTRICAL WIRE	LOOP DETECTOR	TRAFFIC SIGNAL EVP	
			SIGNAL 5-14 AWG	LIGHTING 12 AWG	LEAD IN CABLE	DETECTOR CABLE	
LOCATION	FROM SIGNAL BASE	- TO SIGNAL HEAD	LF	LF	LF	LF	
CATEGORY 0010							
MAIN ST & WALKER WAY							
	5B1	- 2A	20	--	--	--	
		- BUTTON	--	--	11	--	
	5B2	- 8B	20	--	--	--	
		- BUTTON	--	--	11	--	
	5B3	- 4	27	--	--	--	
		- 6	27	--	--	--	
	5B4	- 2	65	--	--	--	
		- 3	65	--	--	--	
		- 5	65	--	--	--	
		- LUMINAIRE	--	122	--	--	
		- EVP B	--	--	--	65	
	5B5	- 8A	20	--	--	--	
		- BUTTON	--	--	11	--	
	5B6	- 6B	20	--	--	--	
		- BUTTON	--	--	11	--	
	5B7	- 11	24	--	--	--	
		- 15	24	--	--	--	
	5B8	- 16	45	--	--	--	
		- LUMINAIRE	--	122	--	--	
		- EVP C	--	--	--	45	
	5B9	- 6A	20	--	--	--	
		- BUTTON	--	--	11	--	
	5B10	- 1	27	--	--	--	
		- 9	27	--	--	--	
		- 4B	20	--	--	--	
		- BUTTON	--	--	11	--	
	5B11	- 7	65	--	--	--	
		- 8	65	--	--	--	
		- 10	65	--	--	--	
		- LUMINAIRE	--	122	--	--	
MAIN ST & WALKER WAY SUBTOTAL			711	366	66	110	
*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.						CONTINUED	

TRAFFIC SIGNAL CABLE AND WIRE - ABOVE GROUND (CONTINUED)							
		655.0230		655.0610	655.0700*	655.0900*	
		CABLE TRAFFIC		ELECTRICAL WIRE	LOOP DETECTOR	TRAFFIC SIGNAL EVP	
		SIGNAL 5-14 AWG		LIGHTING 12 AWG	LEAD IN CABLE	DETECTOR CABLE	
LOCATION	FROM SIGNAL BASE	-	TO SIGNAL HEAD	LF	LF	LF	LF
CATEGORY 0010							
MAIN ST & WALKER WAY							
		-	EVP A	--	--	--	65
	SB12	-	4A	20	--	--	--
		-	BUTTON	--	--	11	--
	SB13	-	2B	20	--	--	--
		-	BUTTON	--	--	11	--
	SB14	-	12	24	--	--	--
		-	14	24	--	--	--
	SB15	-	13	45	--	--	--
		-	LUMINAIRE	--	122	--	--
		-	EVP D	--	--	--	45
MAIN ST & WALKER WAY SUBTOTAL				133	122	22	110
MAIN ST & WALKER WAY TOTAL				844	488	88	220
MAIN ST & BIRD ST							
	SB1	-	6A	20	--	--	--
		-	BUTTON	--	--	11	--
	SB2	-	1	27	--	--	--
		-	9	27	--	--	--
	SB3	-	7	65	--	--	--
		-	8	65	--	--	--
		-	10	65	--	--	--
		-	LUMINAIRE	--	122	--	--
		-	EVP A	--	--	--	65
	SB4	-	4A	20	--	--	--
		-	BUTTON	--	--	11	--
	SB5	-	2B	20	--	--	--
		-	BUTTON	--	--	11	--
	SB6	-	14	27	--	--	--
		-	16	27	--	--	--
MAIN ST & BIRD ST SUBTOTAL				363	122	33	65
*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.							
CONTINUED							

TRAFFIC SIGNAL CABLE AND WIRE - ABOVE GROUND (CONTINUED)							
		655.0230		655.0610	655.0700*	655.0900*	
		CABLE TRAFFIC		ELECTRICAL WIRE	LOOP DETECTOR	TRAFFIC SIGNAL EVP	
		SIGNAL 5-14 AWG		LIGHTING 12 AWG	LEAD IN CABLE	DETECTOR CABLE	
LOCATION	FROM SIGNAL BASE	-	TO SIGNAL HEAD	LF	LF	LF	LF
CATEGORY 0010							
MAIN ST & BIRD ST							
	SB7	-	12	65	--	--	--
		-	13	65	--	--	--
		-	15	65	--	--	--
		-	LUMINAIRE	--	122	--	--
		-	EVP D	--	--	--	65
	SB8	-	2A	20	--	--	--
		-	BUTTON	--	--	11	--
	SB9	-	4	27	--	--	--
		-	6	27	--	--	--
		-	8B	20	--	--	--
		-	BUTTON	--	--	11	--
	SB10	-	2	65	--	--	--
		-	3	65	--	--	--
		-	5	65	--	--	--
		-	LUMINAIRE	--	122	--	--
		-	EVP B	--	--	--	65
	SB11	-	8A	20	--	--	--
		-	BUTTON	--	--	11	--
	SB12	-	6B	20	--	--	--
		-	BUTTON	--	--	11	--
	SB13	-	11	27	--	--	--
		-	19	27	--	--	--
	SB14	-	17	65	--	--	--
		-	18	65	--	--	--
		-	20	65	--	--	--
		-	LUMINAIRE	--	122	--	--
		-	EVP C	--	--	--	65
	SB15	-	4B	20	--	--	--
		-	BUTTON	--	--	11	--
MAIN ST & BIRD ST SUBTOTAL				793	366	55	195
MAIN ST & BIRD ST TOTAL				1,156	488	88	260
CATEGORY 0010 TOTAL				2,000	976	176	480



TRANSPORTATION PROJECT PLAT TITLE SHEET

3996-00-09

C SUN PRARIE INTERSECTION IMPROVEMENTS

BIRD/LINNERUD

LOC STR
DANE COUNTY

CONVENTIONAL SYMBOLS

SECTION LINE	---	SECTION CORNER SYMBOL		R/W MONUMENT (TO BE SET)	•
QUARTER LINE	---	SECTION CORNER MONUMENT		NON-MONUMENTED R/W POINT	○
SIXTEENTH LINE	---	GEODETIC SURVEY MONUMENT		FOUND IRON PIN (3/4" REBAR UNLESS NOTED)	IP
NEW REFERENCE LINE	---	SIXTEENTH CORNER MONUMENT		OFF-PREMISE SIGN	
NEW R/W LINE	---	SIGN			
EXISTING R/W OR HE LINE	---				
PROPERTY LINE	---				
LOT, TIE & OTHER MINOR LINES	---				
SLOPE INTERCEPT	---				
CORPORATE LIMITS	---				
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)	---				
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)	---				
TEMPORARY LIMITED EASEMENT AREA	---				
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)	---				
TRANSMISSION STRUCTURES	---				
BUILDING	---				
BRIDGE	---				
TO BE REMOVED	---				
CULVERT	---				

CONVENTIONAL ABBREVIATIONS

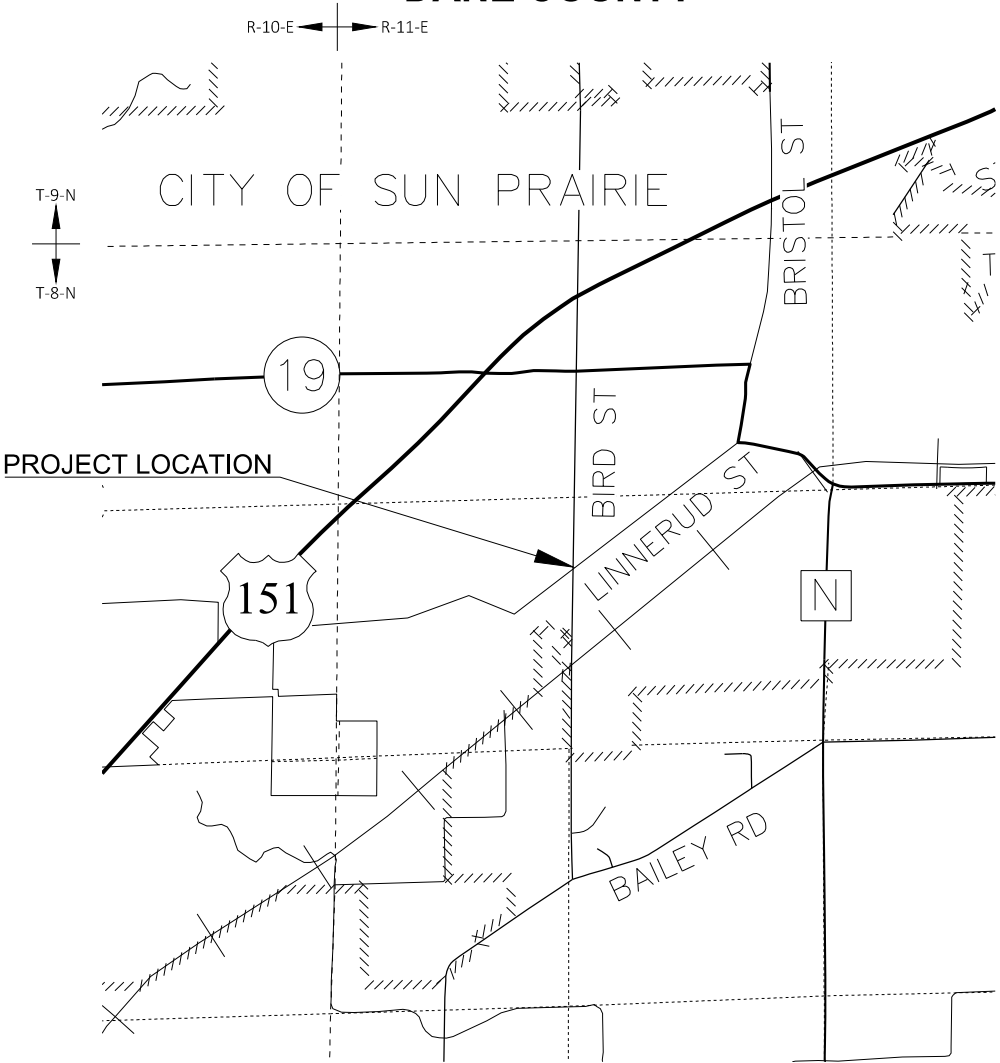
ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
AHEAD	AH	PROPERTY LINE	PL
ALUMINUM	ALUM	RECORDED AS	(100')
AND OTHERS	ET AL	REEL / IMAGE	R/I
BACK	BK	REFERENCE LINE	R/L
BLOCK	BLK	REMAINING	REM
CENTERLINE	C/L	RESTRICTIVE DEVELOPMENT	RDE
CERTIFIED SURVEY MAP	CSM	EASEMENT	
CONCRETE	CONC	RIGHT	RT
COUNTY	CO	RIGHT OF WAY	R/W
COUNTY TRUNK HIGHWAY	CTH	SECTION	SEC
DISTANCE	DIST	SEPTIC VENT	SEPV
CORNER	COR	SQUARE FEET	SF
DOCUMENT NUMBER	DOC	STATE TRUNK HIGHWAY	STH
EASEMENT	EASE	STATION	STA
EXISTING	EX	TELEPHONE PEDESTAL	TP
GAS VALVE	GV	TEMPORARY LIMITED	TLE
GRID NORTH	GN	EASEMENT	
HIGHWAY EASEMENT	HE	TRANSPORTATION PROJECT PLAT	TPP
IDENTIFICATION	ID	UNITED STATES HIGHWAY	USH
LAND CONTRACT	LC	VOLUME	V
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		

CURVE DATA ABBREVIATIONS

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

CONVENTIONAL UTILITY SYMBOLS

WATER	---
GAS	---
TELEPHONE	---
OVERHEAD TRANSMISSION LINES	---
ELECTRIC	---
CABLE TELEVISION	---
FIBER OPTIC	---
SANITARY SEWER	---
STORM SEWER	---
ELECTRIC TOWER	---



LAYOUT
SCALE 0 0.25 MI.

THE NOTES, CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 3996-00-09.

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DANE COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

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

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

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

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

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE CITY OF SUN PRAIRIE.

PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE TPP DETAIL PAGES.

INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE TPP DETAIL PAGES.

PROJECT NUMBER 3996-00-09 -4. 01
SHEET 2 OF 2
AMENDMENT NO: PRE 88

TRANSPORTATION PROJECT PLAT NO: 3996-00-09 - 4.01, AMENDMENT NO. 1

AMENDS PARCEL 2 AND PARCEL 3 OF TRANSPORTATION PROJECT PLAT 3996-00-09 - 4.01, RECORDED AS DOCUMENT NUMBER 5918296, AND FILED IN VOLUME 61-092B OF TRANSPORTATION PROJECT PLATS, ON PAGES 547 AND 548.

THAT PART OF LOT 1 OF CSM 6875(RECORDED IN V. 34, P. 170 AS DOC. 2394068), AND PART OF OUTLOT 1 OF CSM 6108 (RECORDED IN V. 29, P. 162, AS DOC. 2200551), LOCATED IN THE SE 1/4 OF THE NE 1/4 OF SECTION 7, AND PART OF LOT 1 OF CSM 14672 (RECORDED IN V. 102, P. 48 AS DOC. 5376563) AND PART OF LOT 1 OF CSM 2108 (RECORDED IN V. 8, P. 314 AS DOC. 1479863), LOCATED IN THE SW 1/4 OF THE NW 1/4 OF SECTION 8, ALL IN T8N, R11E, DANE COUNTY, WISCONSIN.

RELOCATION ORDER LOC STR, C SUN PRAIRIE INTERSECTION IMPROVEMENTS, (BIRD/LINNERUD), DANE COUNTY.

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

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

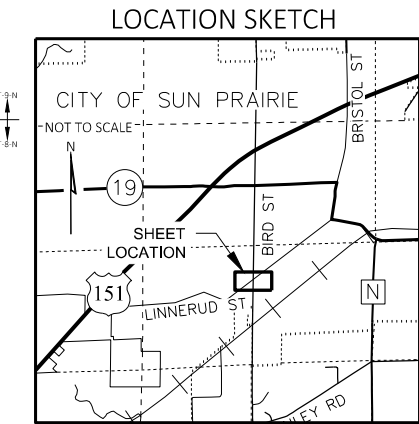
NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DANE COUNTY, NAD 83(2011) IN U.S.SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4" X 24" REBARS) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE CITY OF SUN PRAIRIE.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF DANE COUNTY REGISTER OF DEEDS AS SHEET 2 OF 2 OF DOCUMENT NUMBER 5918296 AND FILED IN VOLUME 61-092B, PAGES 547 AND 548.



UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
100	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS
101	WISCONSIN GAS LLC, dba WE ENERGIES	RELEASE OF RIGHTS
102	VERIZON COMMUNICATIONS	RELEASE OF RIGHTS

EASEMENT TABLE			
UTILITY NUMBER	OWNER	RECORDING INFORMATION	LOCATED IN R/W PARCEL NO.
100	FRONTIER COMMUNICATIONS	NO RECORD OF EASEMENT FOUND	1
101	WISCONSIN GAS LLC, dba WE ENERGIES	50' X 30' EASEMENT DOC. 4483559	1
102	VERIZON COMMUNICATIONS	16.5' WIDE EASEMENT DOC. 1343456	1

SCHEDULE OF LANDS & INTERESTS REQUIRED					OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE CITY OF SUN PRAIRIE.	
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES OR S.F. REQUIRED	TLE ACRES OR S.F.	NEW	EXISTING
1	CITY OF SUN PRAIRIE	FEE/TLE	2000	2000	424	---
2	SUN PRAIRIE AREA SCHOOL DISTRICT	FEE/TLE	234	234	178	---
3	SKY HIGH PROPERTIES, LLC	FEE/TLE	1467	5445	6912	455

TLE Station & Offset Table		
Point No.	Station	Offset
T150	1+44.47 L	39.68' LT
T151	2+82.88 BL	44.96' LT
T152	2+66.51 BL	40.00' RT
T154	2+91.74 L	51.65' RT
T155	1+29.38 BL	46.60' RT
T156	1+10.71 BL	40.00' RT
T157	0+44.91 BL	40.00' RT
T158	0+06.14 BL	34.71' RT
T159	0+06.14 BL	33.00' RT
T160	0+44.91 BL	43.00' RT
T161	0+19.91 BL	43.00' RT
T162	0+19.91 BL	36.59' RT

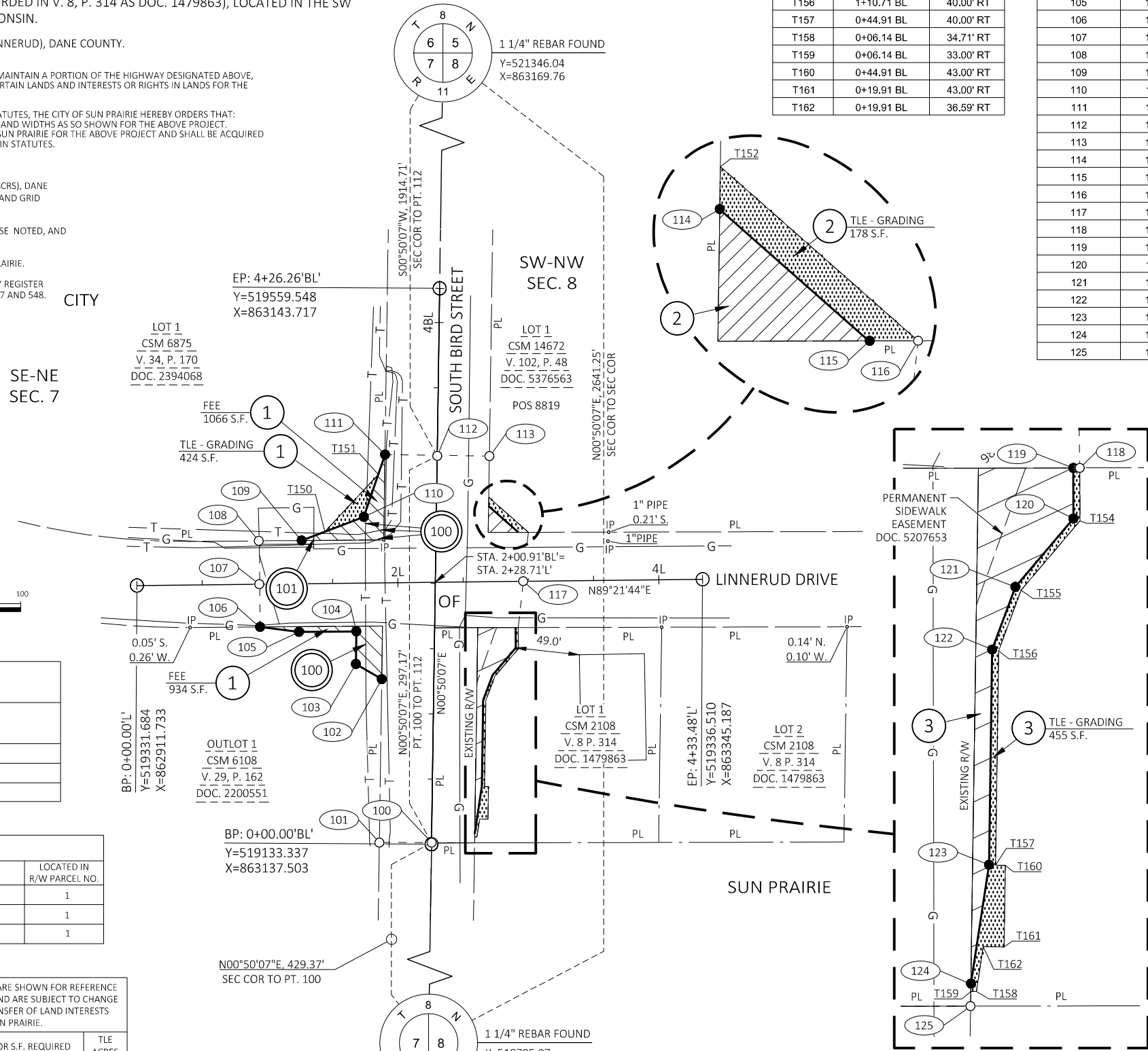
R/W COURSE TABLE			
FROM POINT	TO POINT	BEARING	DISTANCE
100	101	N89° 09' 53"W	40.00'
101	102	N00° 50' 07"E	124.94'
102	103	N59° 34' 23"W	23.00'
103	104	N00° 50' 07"E	25.00'
104	105	S89° 32' 24"W	44.00'
105	106	N82° 47' 52"W	30.00'
106	107	N00° 38' 16"W	32.78'
107	108	N00° 38' 16"W	33.23'
108	109	N89° 32' 24"E	32.55'
109	110	N69° 14' 23"E	51.00'
110	111	N18° 45' 09"E	50.50'
111	112	S89° 09' 53"E	40.00'
112	113	S89° 09' 53"E	40.00'
113	114	S00° 50' 07"W	38.29'
114	115	S48° 36' 23"E	30.45'
115	116	N89° 52' 27"E	7.54'
116	117	S06° 00' 32"W	37.76'
117	118	S06° 00' 32"W	35.66'
118	119	S89° 52' 27"W	2.00'
119	120	S00° 07' 33"E	15.50'
120	121	S40° 19' 01"W	27.50'
121	122	S20° 18' 10"W	20.50'
122	123	S00° 50' 07"W	66.00'
123	124	S08° 36' 06"W	37.00'
124	125	S00° 50' 07"W	6.78'
125	100	S89° 52' 27"W	33.00'

Office of Register of Deeds
Dane County, Wisconsin

Received for Record _____
20____ at _____ o'clock _____ M
and recorded in vol. _____
of _____ on page _____

Register

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 3996-00-09 - 4.01
SHEET 1 OF 2
AMENDMENT NO. 1



R/W Station & Offset Table				
Point No.	Station	Offset	Y	X
100	0+01.06 'BL'	0.00'	519134.396	863137.519
101	0+01.06 'BL'	40.00' LT	519134.979	863097.523
102	1+26.00 'BL'	40.00' LT	519259.904	863099.344
103	1+37.36 'BL'	60.00' LT	519271.552	863079.512
104	1+67.74 'L'	37.00' RT	519296.550	863079.876
105	1+23.74 'L'	36.87' RT	519296.197	863035.878
106	0+94.02 'L'	32.78' RT	519299.958	863006.114
107	0+94.02 'L'	0.00'	519332.731	863005.749
108	0+94.02 'L'	33.23' LT	519365.954	863005.380
109	1+26.57 'L'	33.12' LT	519366.215	863037.931
110	2+50.17 'BL'	55.54' LT	519384.293	863085.620
111	2+98.22 'BL'	40.00' LT	519432.112	863101.855
112	2+98.22 'BL'	0.00'	519431.529	863141.850
113	2+98.22 'BL'	40.00' RT	519430.946	863181.846
114	2+59.93 'BL'	40.00' RT	519392.656	863181.288
115	2+92.84 'L'	37.58' LT	519372.520	863204.133
116	3+00.38 'L'	37.51' LT	519372.537	863211.676
117	2+96.01 'L'	0.00'	519334.979	863207.723
118	2+91.88 'L'	35.42' RT	519299.520	863203.990
119	2+89.88 'L'	35.40' RT	519299.515	863201.990
120	2+89.74 'L'	50.90' RT	519284.015	863202.024
121	1+30.38 'BL'	44.83' RT	519263.047	863184.231
122	1+11.05 'BL'	38.00' RT	519243.821	863177.118
123	0+45.05 'BL'	38.00' RT	519177.828	863176.156
124	0+08.39 'BL'	33.00' RT	519141.244	863170.622
125	0+01.61 'BL'	33.00' RT	519134.469	863170.523

KL Engineering
[A] Better Experience

I, TIMOTHY M. HELD, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY OF SUN PRAIRIE, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

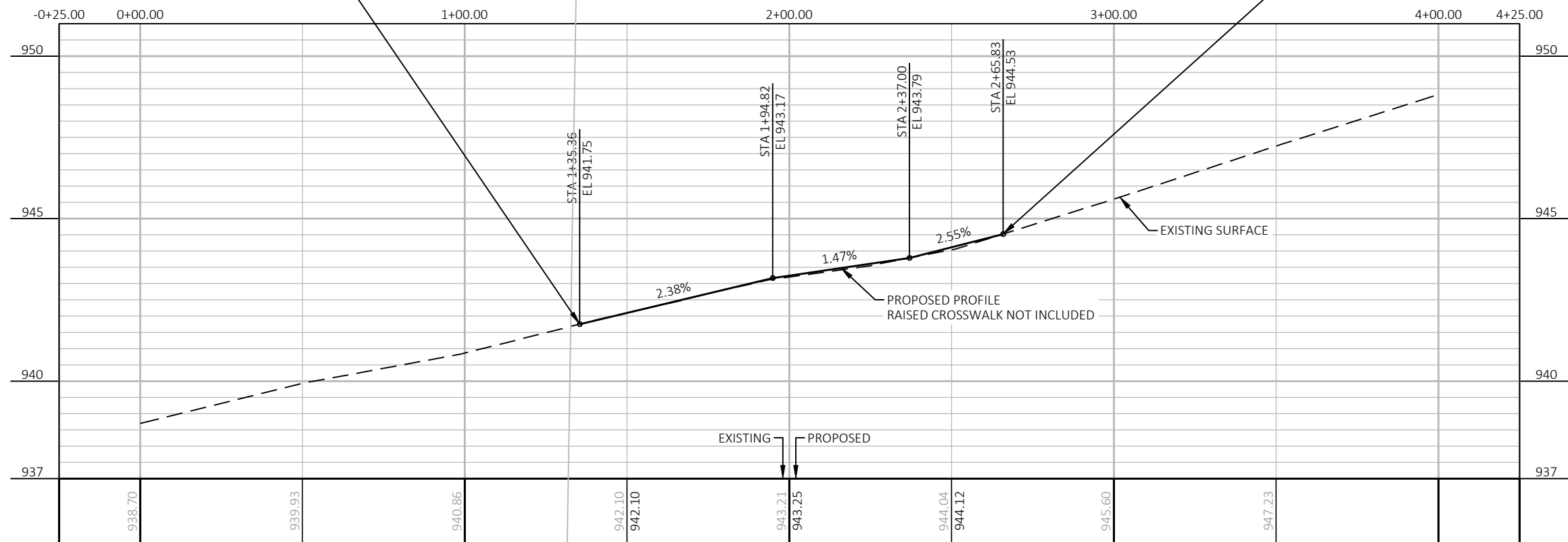
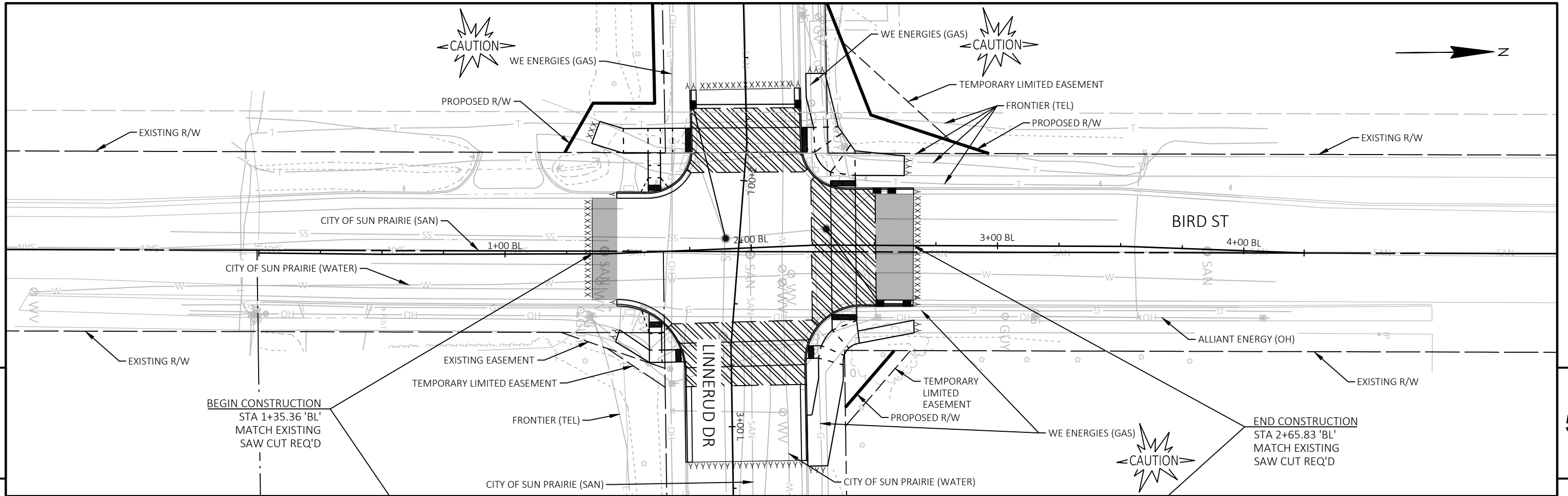
SIGNATURE: Timothy M. Held DATE: 12/18/2023
PRINT NAME: TIMOTHY M. HELD
REGISTRATION NUMBER: S-2591

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

SIGNATURE: _____ DATE: _____
PRINT NAME: ADAM SCHLEICHER, DIR. OF _____

WISCONSIN LAND SURVEYOR
TIMOTHY M. HELD
S-2591
MADISON, WI

HIGHWAY	BASIS OF EXISTING R/W
SOUTH BIRD STREET	CSM 2108, CSM 6108, CSM 6875, CSM 14672, POS 8819.
LINNERUD STREET	CSM 2108, CSM 6108, CSM 6875, CSM 14672, POS 8819.

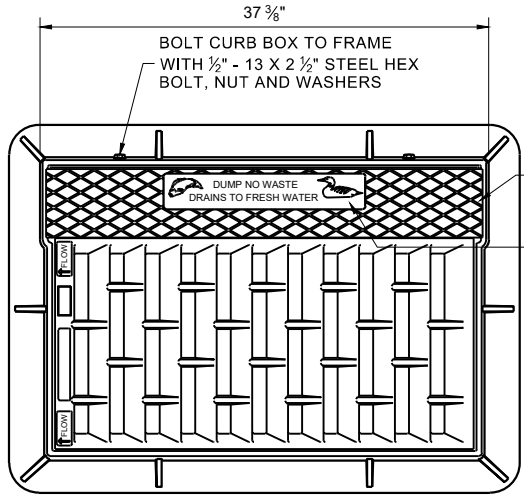


Standard Detail Drawing List

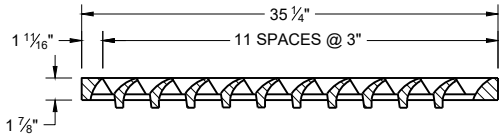
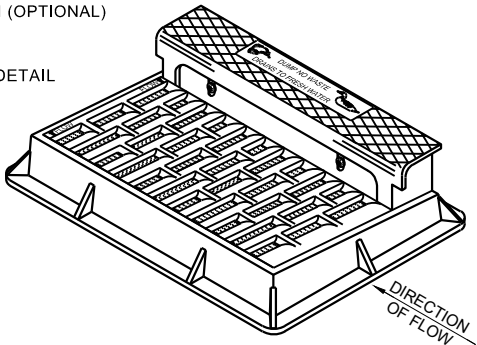
08A05-21A	INLET COVERS TYPE A, H, A-S, H-S & Z
08C07-03	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT, 2.5X3-FT & 2X3.5-FT
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-21A	CURB RAMPS TYPES 1 AND 1-A
08D05-21B	CURB RAMPS TYPES 2 AND 3
08D05-21F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-21G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D18-04	DRIVEWAY AND SIDEWALK RAMPS TYPES X & Y
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
09B02-10	CONDUIT
09B04-13	PULL BOX
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C15-02	CONCRETE BASE TYPE 10 SPECIAL
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-03	SIGNAL CONTROL CABINET
09E01-15B	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)
09E01-15G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E07-06	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
09E08-09F	TYPE 10 SPECIAL POLE 35' MONOTUBE ARM
09E08-09H	TYPE 10 SPECIAL POLE 45' MONOTUBE ARM
09E08-09K	GENERAL NOTES,HARDWARE DETAILS FOR TYPE 9/10,9/10 SPECIAL,12 & 13 POLES W/MONOTUBE ARMS
09G01-04A	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04B	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04C	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04D	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04E	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04F	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04G	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
10A18-05A	LUMINAIRE ARMS, SINGLE MEMBER 6-INCH CLAMP
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-11	URBAN DOWELED CONCRETE PAVEMENT
13C18-08A	CONCRETE PAVEMENT JOINTING
13C18-08B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-08C	CONCRETE PAVEMENT JOINT TYPES
13C18-08D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
13C18-08F	CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-16A	PAVEMENT MARKING SYMBOLS
15C07-16B	PAVEMENT MARKING WORDS
15C07-16C	PAVEMENT MARKING ARROWS
15C07-16E	PAVEMENT MARKING FOR BIKE LANES
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23D	PAVEMENT MARKING (TURN LANES)
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C29-08A	BICYCLE LANE MARKING
15C29-08B	PAVEMENT MARKING FOR SHARED LANE 35 MPH OR LESS
15C33-05	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15D20-09A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
15D20-09B	TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY
15D20-09C	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
15D30-10A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10D	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10E	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

Standard Detail Drawing List

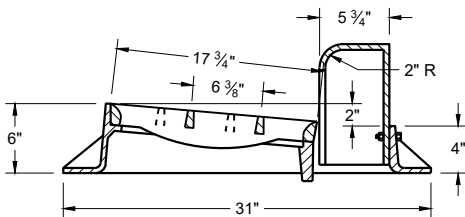
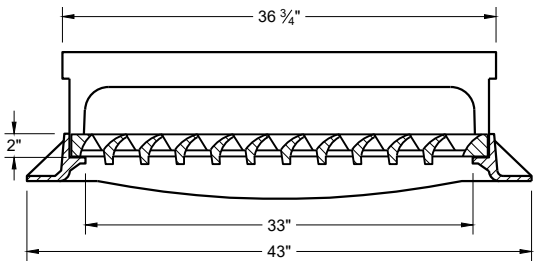
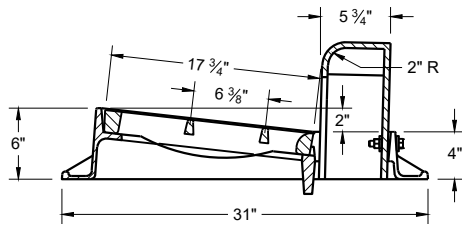
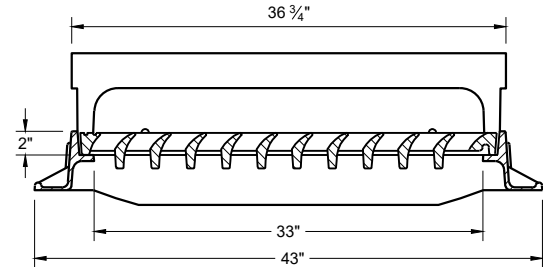
15D30-10G	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10H	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10I	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10J	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10K	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10L	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D40-05C	TRAFFIC CONTROL, PARTIAL LANE SHIFT NON-FREEWAY/EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER
15D43-02	TRAFFIC CONTROL, SHORT DURATION MOBILE OPERATIONS
15D45-03	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH LOOSE GRAVEL
15D46-01	TRAFFIC CONTROL, ONE - WAY SIGNING
15D50-03A	TRAFFIC CONTROL, ADDED LANE CLOSURE WITHOUT LANE SHIFT
15D50-03B	TRAFFIC CONTROL, ADDED LANE CLOSURE WITH LANE SHIFT



NOTE: EITHER CASTING IS ACCEPTABLE

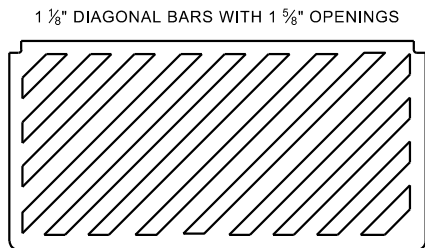


NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"



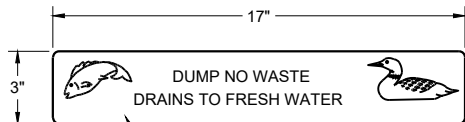
TYPE "H"

NOTE: EITHER CASTING IS ACCEPTABLE



SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35" X 17 3/4" X 2")
(NOTED AS TYPE H-S ON DRAINAGE TABLE)



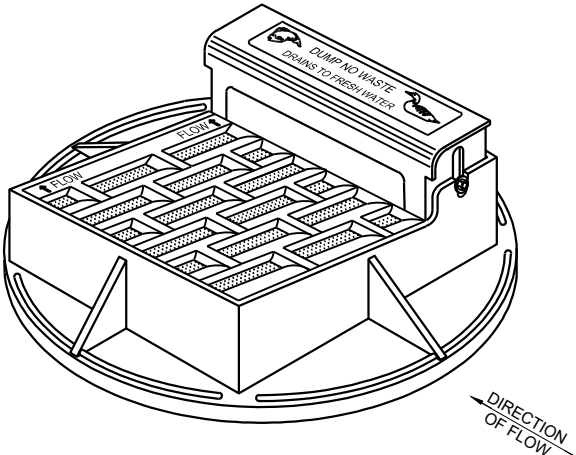
LOGO DETAIL

GENERAL NOTES

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

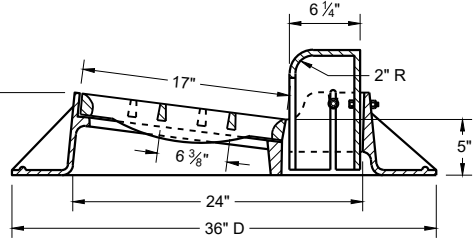
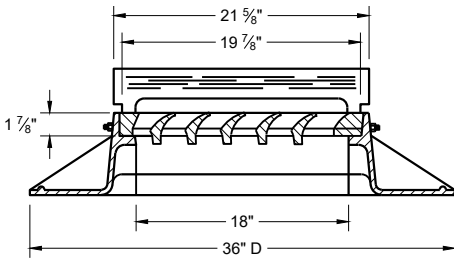
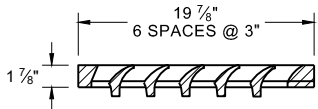
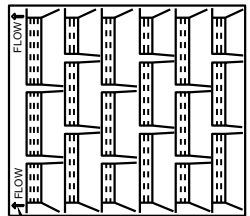
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

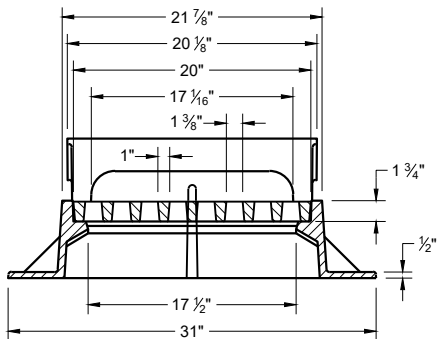
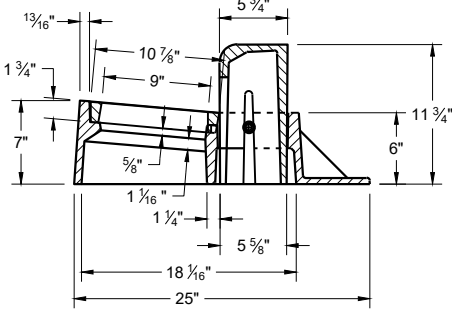


NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

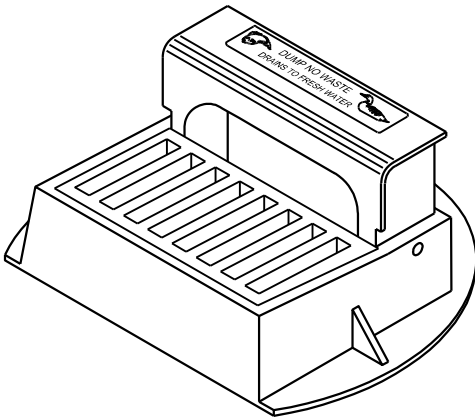
NOTE: EITHER CASTING IS ACCEPTABLE



TYPE "A"



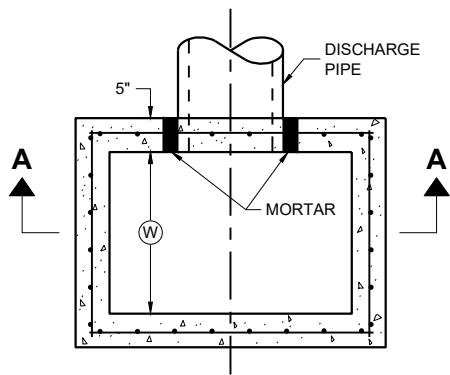
TYPE "Z"



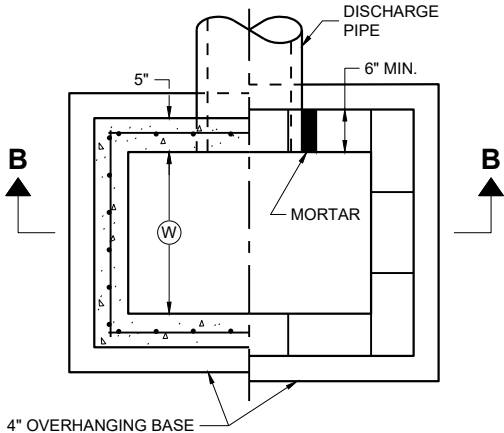
INLET COVERS
TYPES A, H, A-S, H-S AND Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

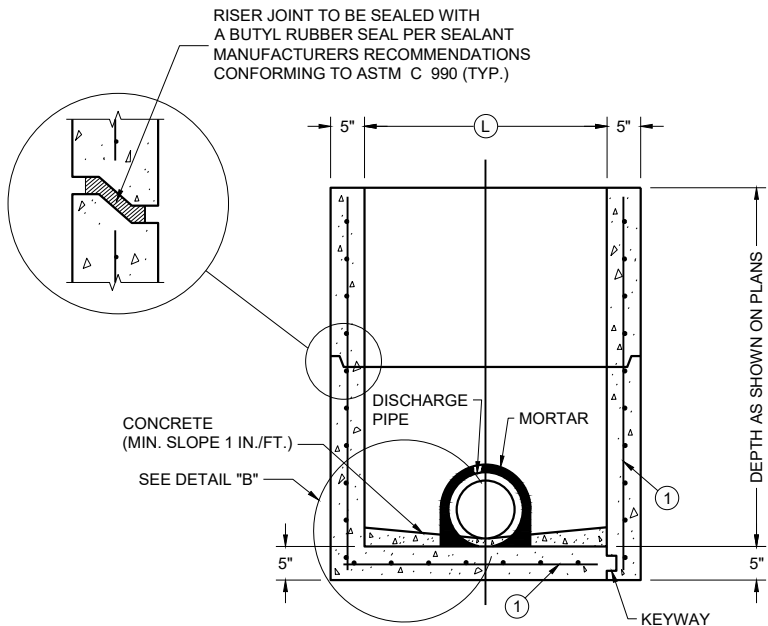
APPROVED
December 2023
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR
FHWA



PLAN VIEW



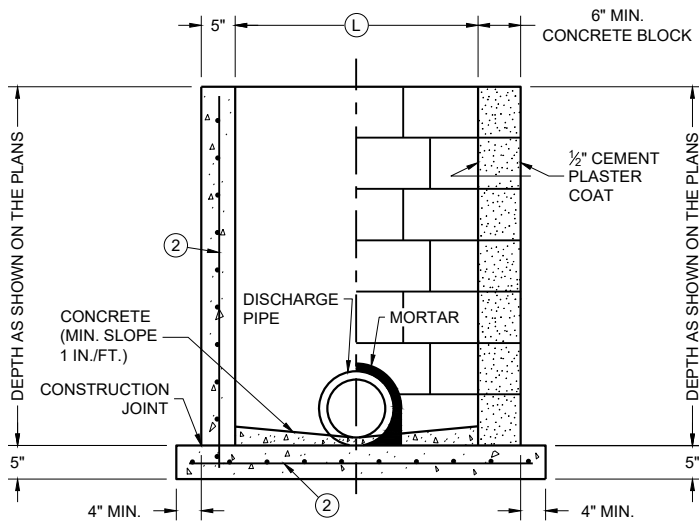
PLAN VIEW



PRECAST REINFORCED
CONCRETE WITH
MONOLITHIC BASE

PRECAST REINFORCED
CONCRETE WITH
INTEGRAL BASE

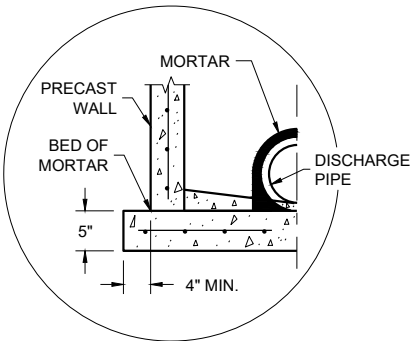
SECTION A - A



CAST IN PLACE
REINFORCED
CONCRETE

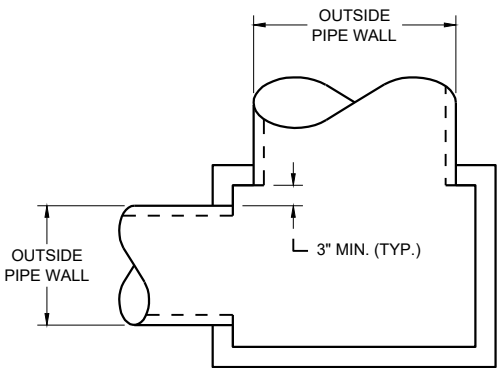
CONCRETE BLOCK WITH
CAST IN PLACE OR
PRECAST REINFORCED
CONCRETE BASE ①

SECTION B - B



SEPARATE PRECAST REINFORCED
CONCRETE BASE OPTION

DETAIL "B"



DETAIL "A"

INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2X3.5-FT

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

- ① FOR PRECAST INLETS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913
- ② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

CATCH BASIN COVER MATRIX

INLET SIZE	WIDTH (W) (FT.)	LENGTH (L) (FT.)	INLET COVER TYPE									
			ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM	V V-B
2 X 2-FT	2	2	X	X				X				
2 X 2.5-FT	2	2.5			X			X	X	X	X	
2 X 3-FT	2	3					X					
2.5 X 3-FT	2.5	3				X						
2 X 3.5-FT	2	3.5										X

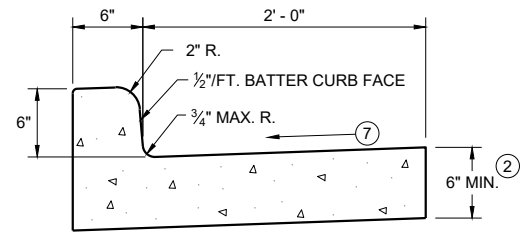
PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2 X 2-FT	12	12
2 X 2.5-FT	12	18
2 X 3-FT	12	24
2.5 X 3-FT	18	24
2 X 3.5-FT	12	30

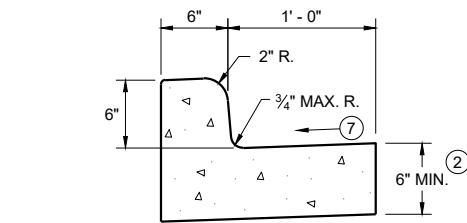
INLETS 2 X 2-FT, 2 X 2.5-FT,
2 X 3-FT, 2.5 X 3-FT
AND 2 X 3.5-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

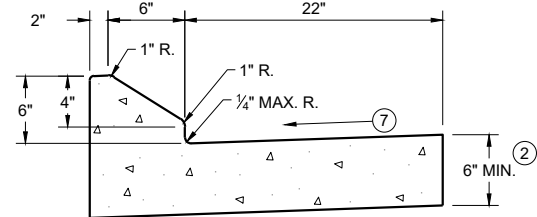


TYPES A^① & D

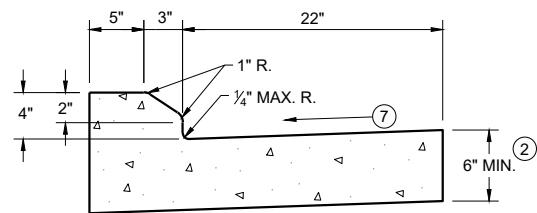


TYPES A^① & D

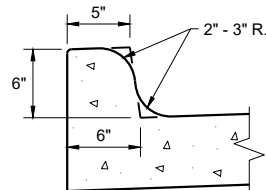
CONCRETE CURB AND GUTTER 18"



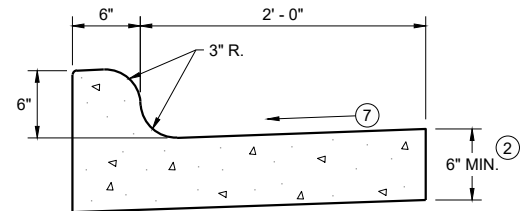
6" SLOPED CURB TYPES G^① & J



4" SLOPED CURB TYPES G^① & J

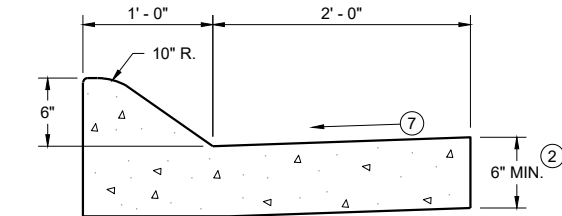


TYPES K^① & L
(OPTIONAL CURB SHAPE)

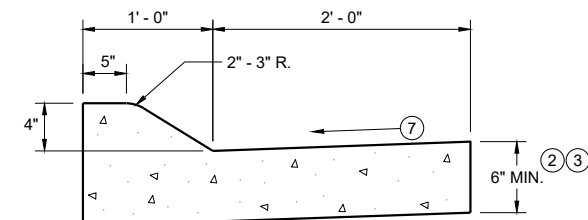


TYPES K^① & L

CONCRETE CURB AND GUTTER 30"

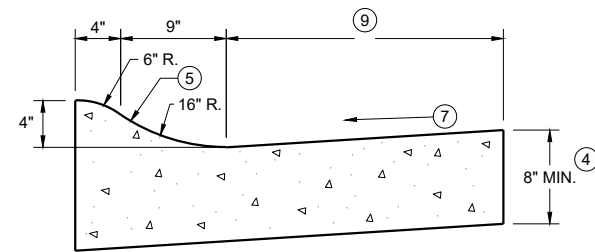


6" SLOPED CURB TYPES A^① & D



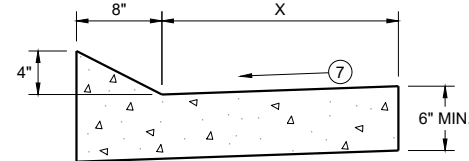
4" SLOPED CURB TYPES A^① & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R^① & T

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

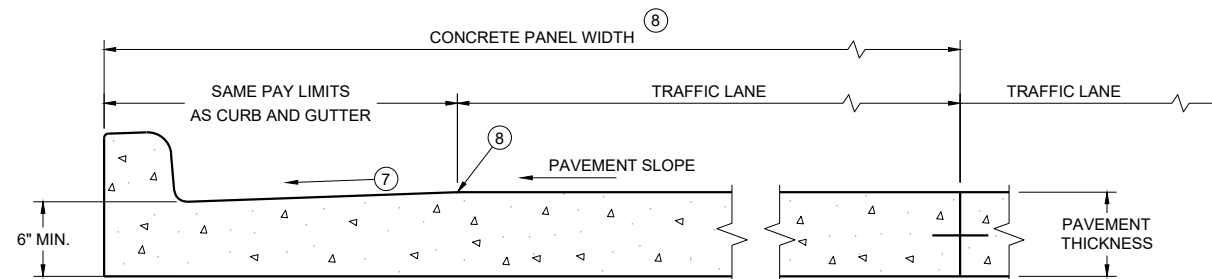


TYPES TBT & TBTT^①

CONCRETE CURB AND GUTTER

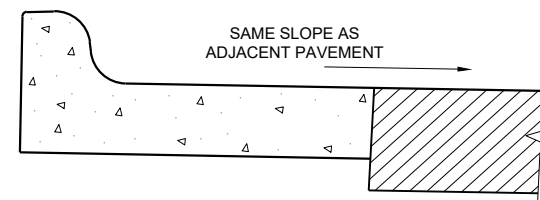
PAVEMENT THICKNESS
AND MAXIMUM CONCRETE
PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



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

GENERAL NOTES

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

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

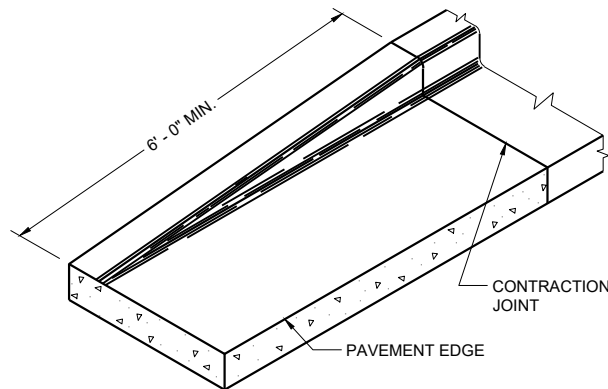
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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

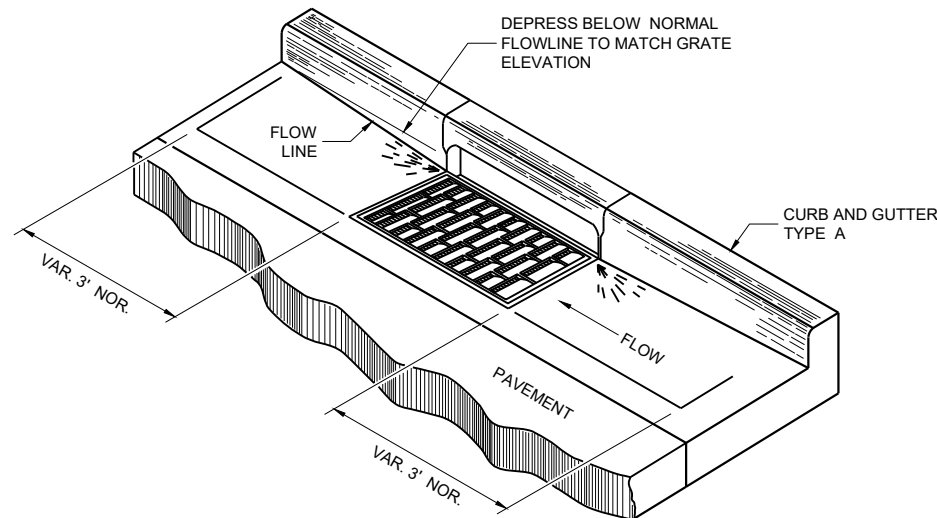
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH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

CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

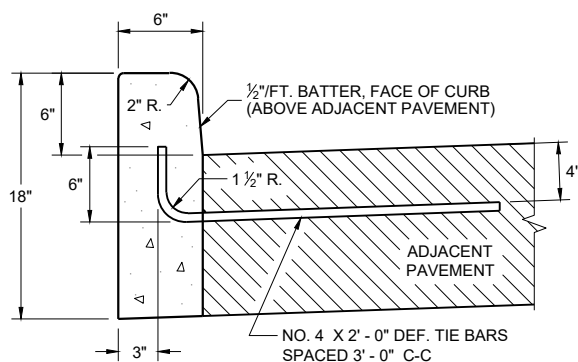


END SECTION CURB AND GUTTER

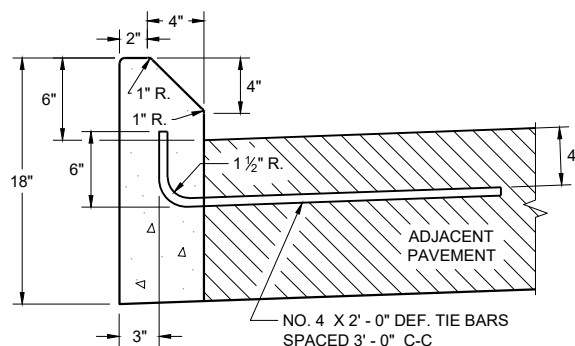


DETAIL OF CURB AND GUTTER AT INLETS

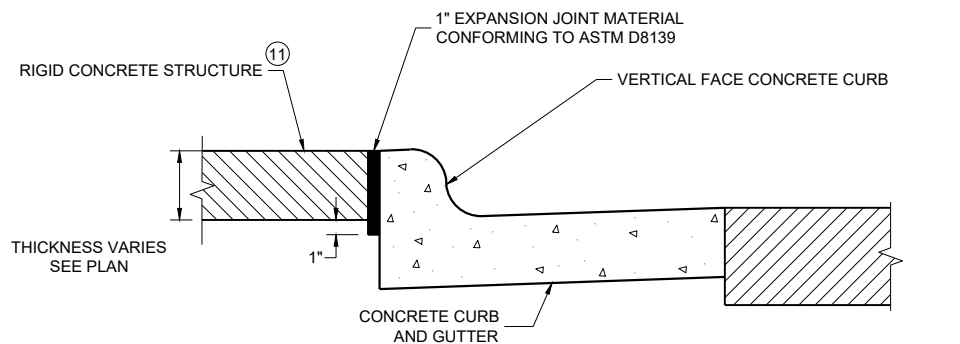
(TYPICAL H INLET COVER SHOWN)



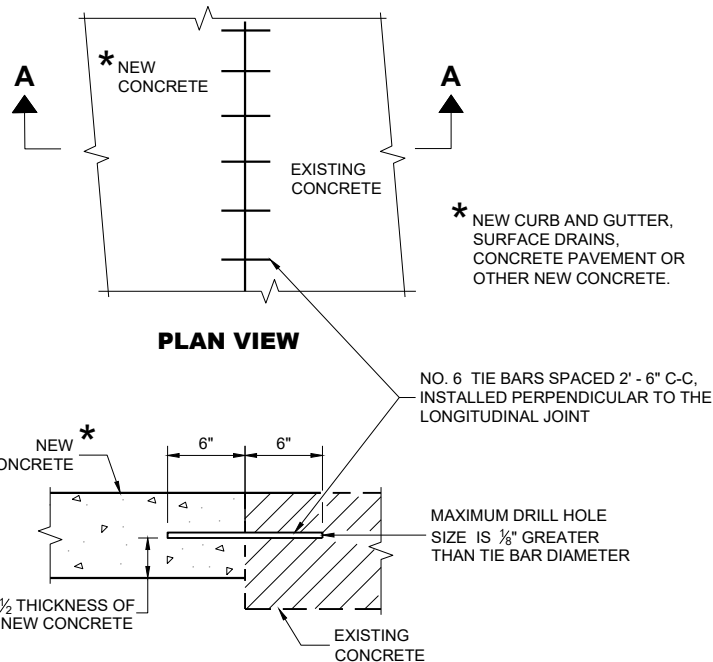
TYPES A^① & D



**TYPES G^① & J
CONCRETE CURB**



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



**SECTION A - A
TIE BARS DRILLED INTO EXISTING PAVEMENT**

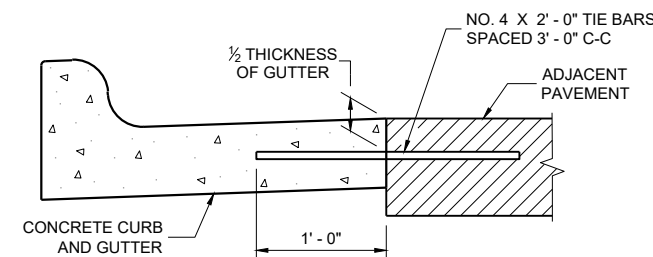
GENERAL NOTES

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

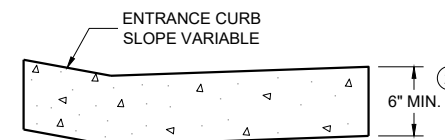
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

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



TYPICAL TIE BAR LOCATION^①

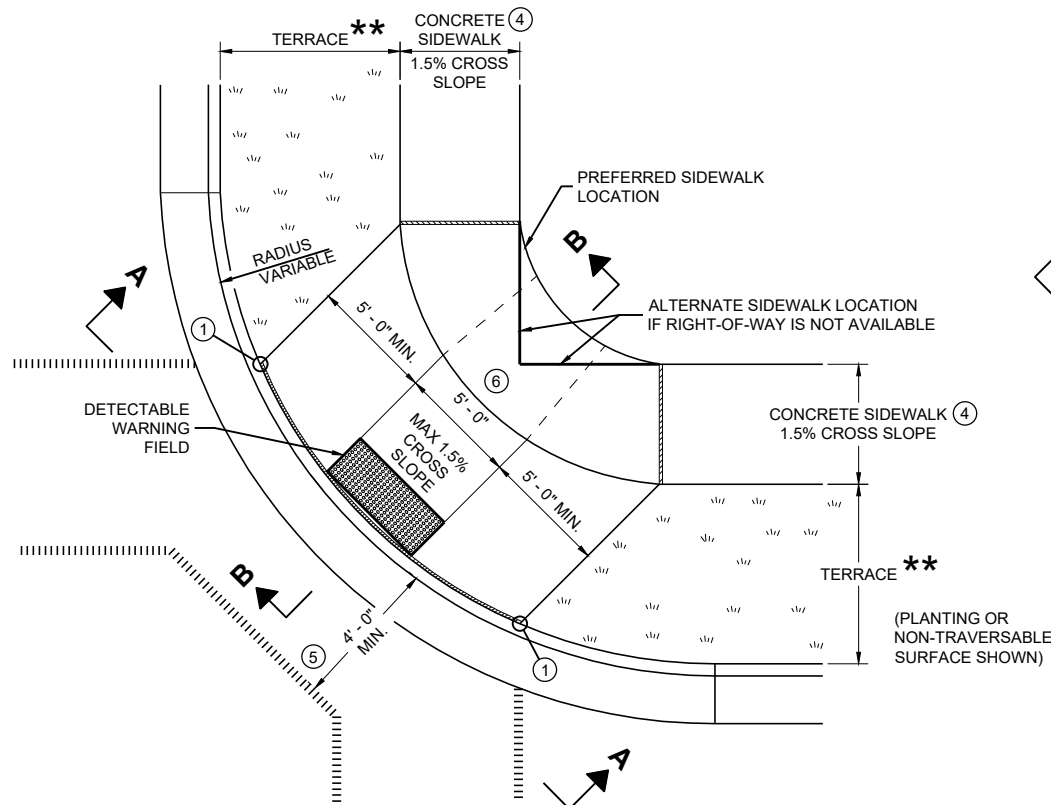


**DRIVEWAY ENTRANCE CURB^⑩
(WHEN DIRECTED BY THE ENGINEER)**

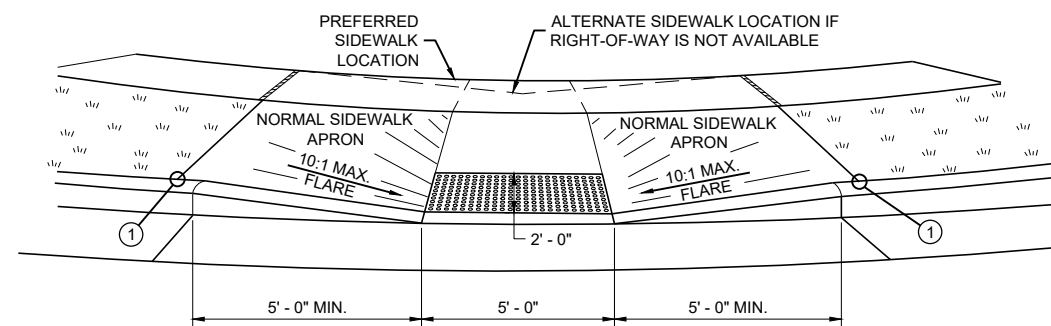
**CONCRETE CURB, TIES
AND CURB AND GUTTER
APPLICATIONS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

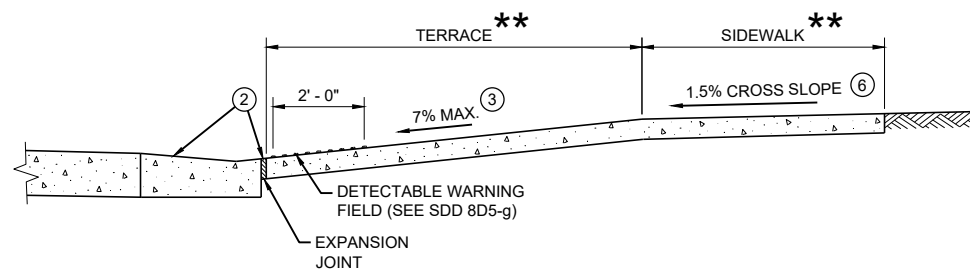


PLAN VIEW
CURB RAMP TYPE 1
(CENTER OF CORNER RADIUS)

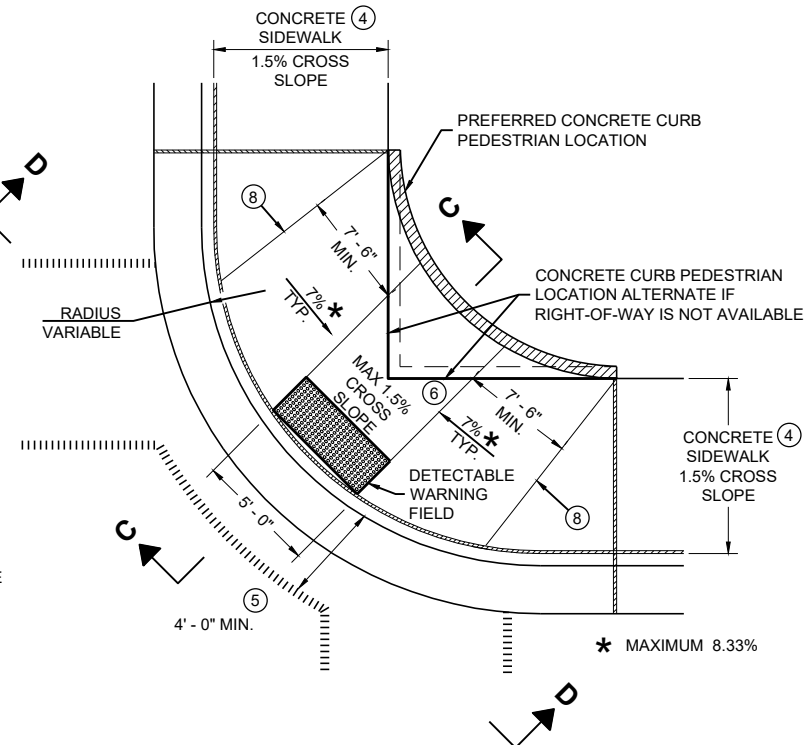


VIEW A - A FOR TYPE 1

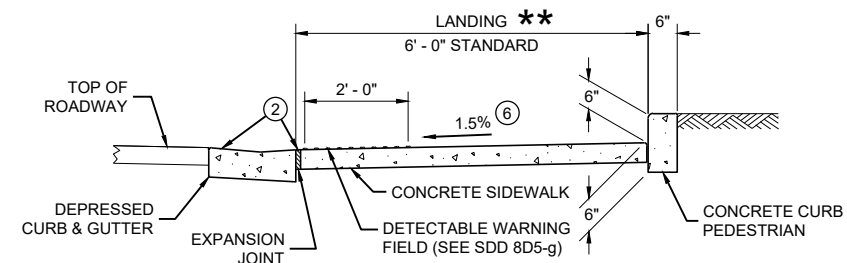
** WIDTH SHOWN ELSEWHERE
IN THE PLANS



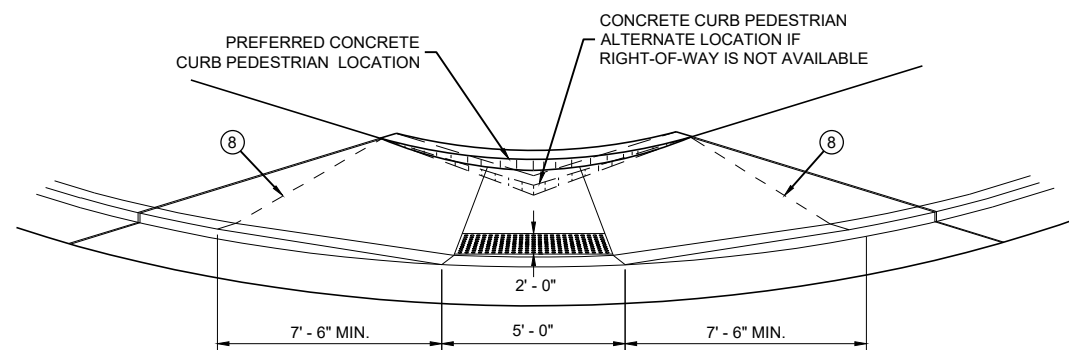
SECTION B - B FOR TYPE 1



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



SECTION C - C FOR TYPE 1 - A



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

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

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

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

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

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

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

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

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

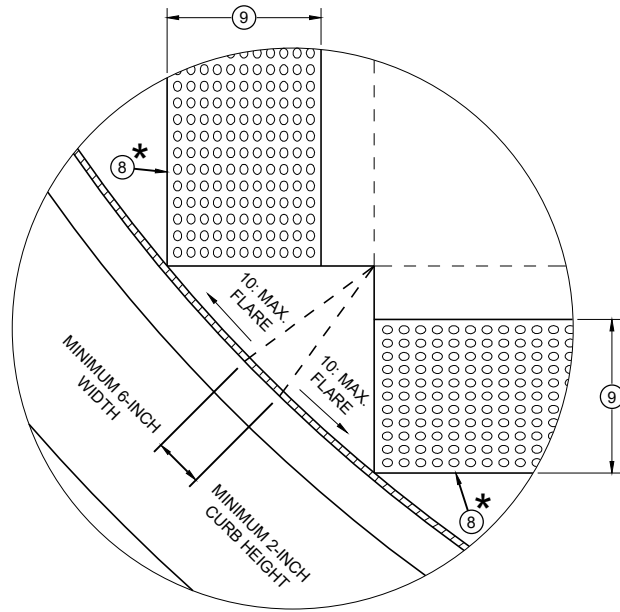
- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%.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

LEGEND

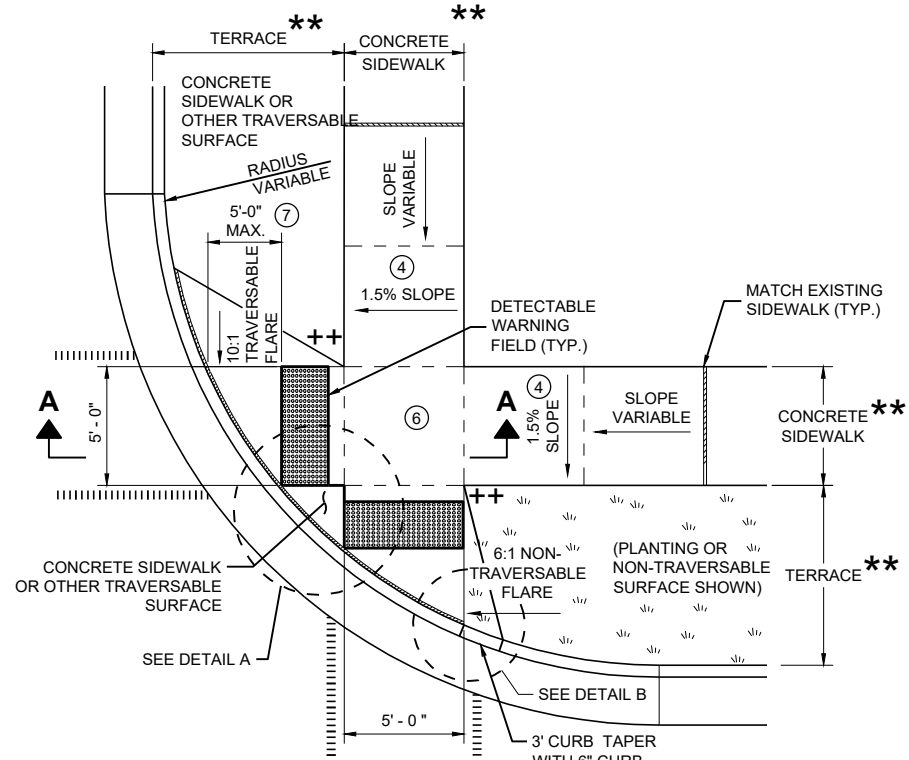
- ===== 1/2" EXPANSION JOINT SIDEWALK
- - - - - CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 1 AND 1-A

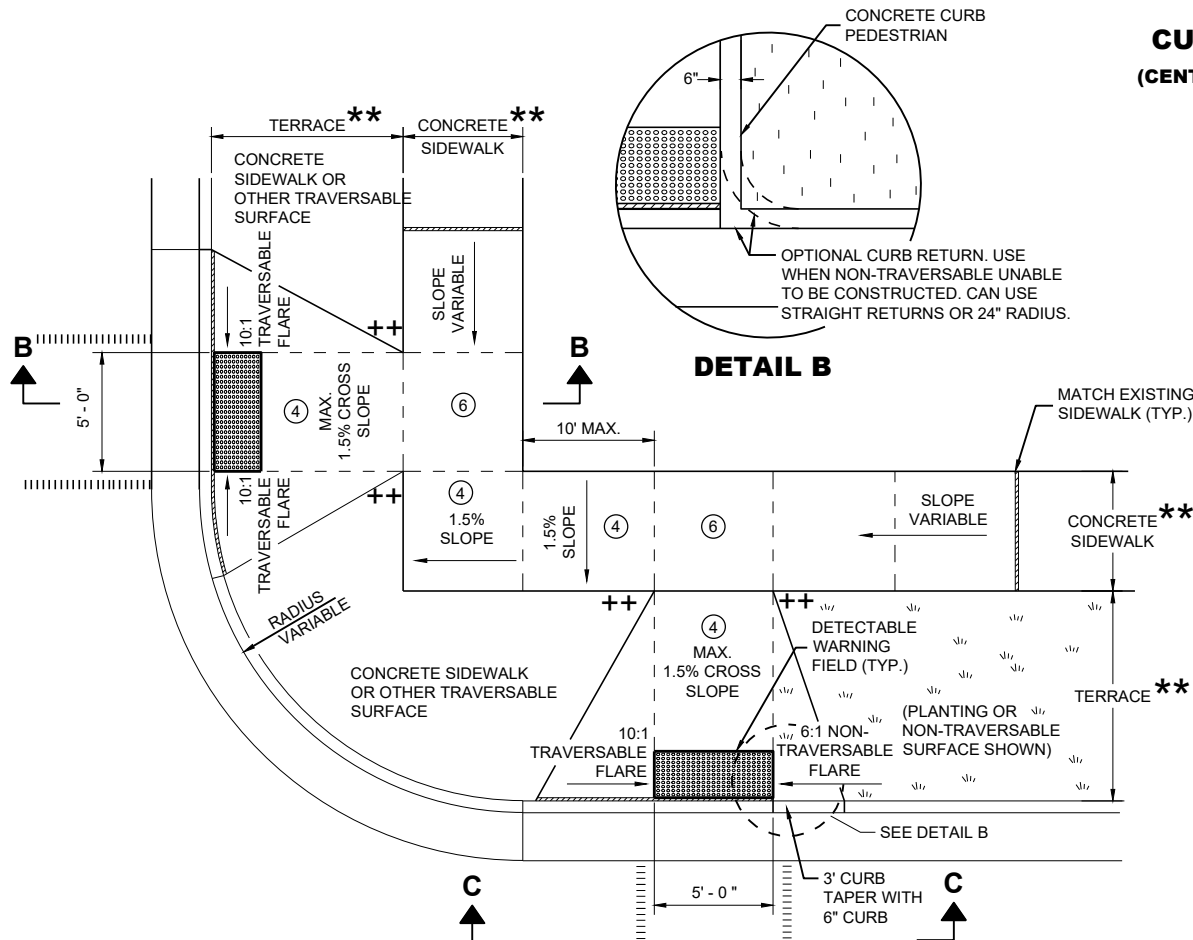
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



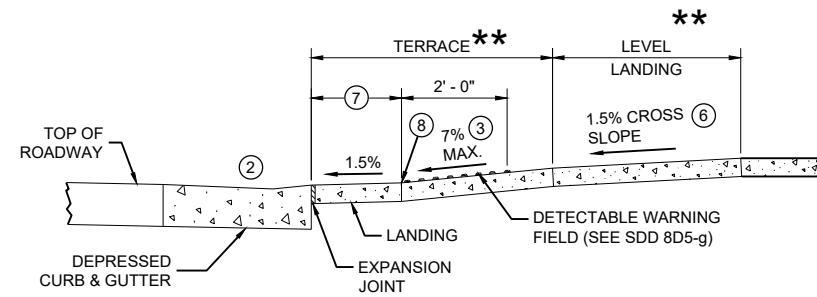
DETAIL A



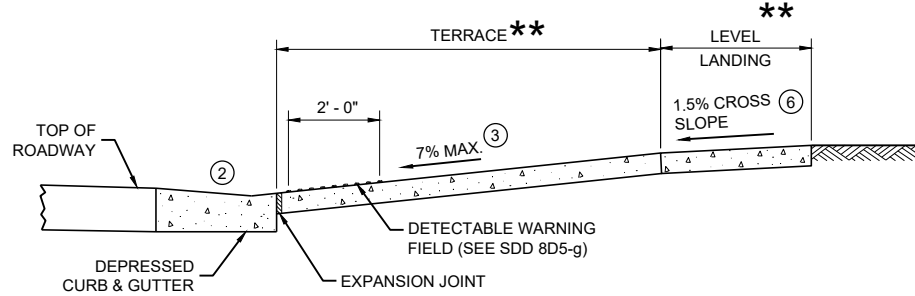
PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)



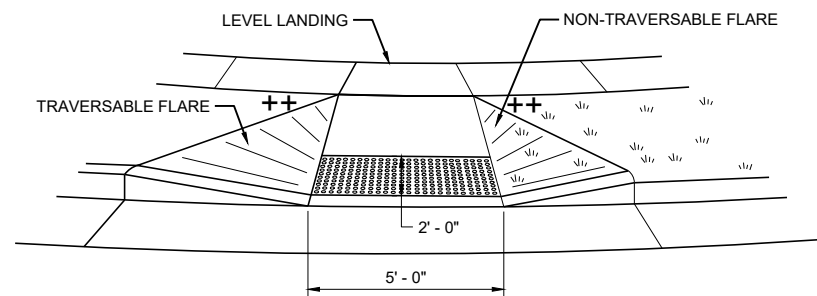
PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)



SECTION A - A FOR TYPE 2



SECTION B - B FOR TYPE 3



VIEW C - C FOR TYPE 3

GENERAL NOTES

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

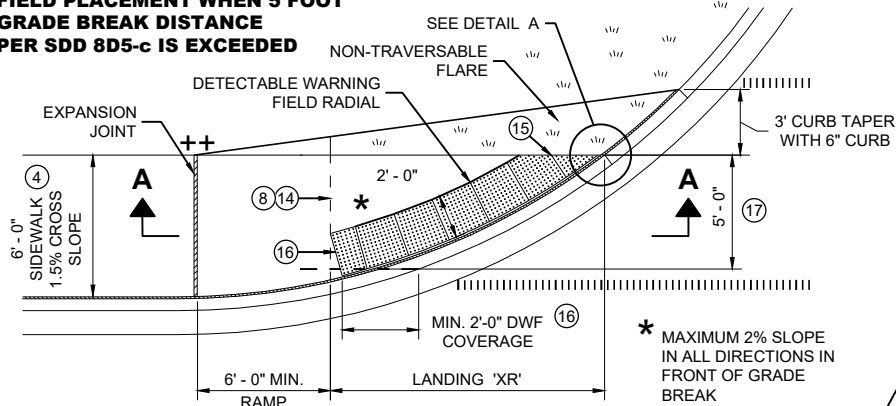
- ★ MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK
- ★★ WIDTH SHOWN ELSEWHERE IN THE PLANS
- ++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

LEGEND

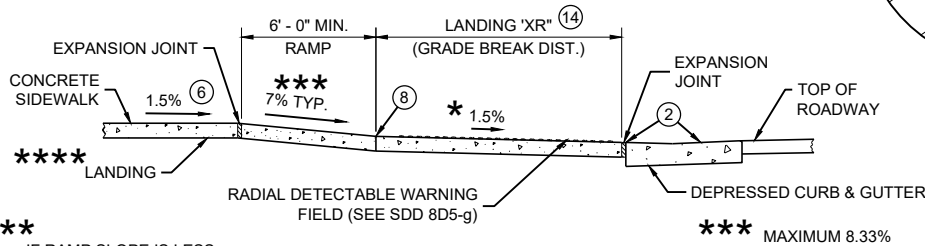
- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 2 AND 3

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



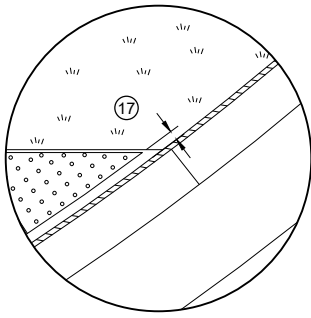
**PLAN VIEW
CURB RAMP TYPE 4A1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**



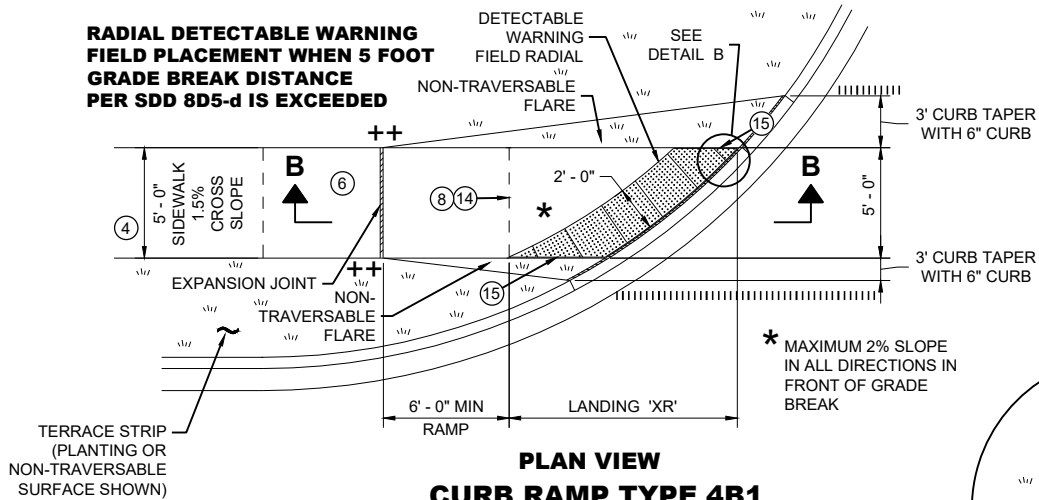
SECTION A - A FOR TYPE 4A1

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

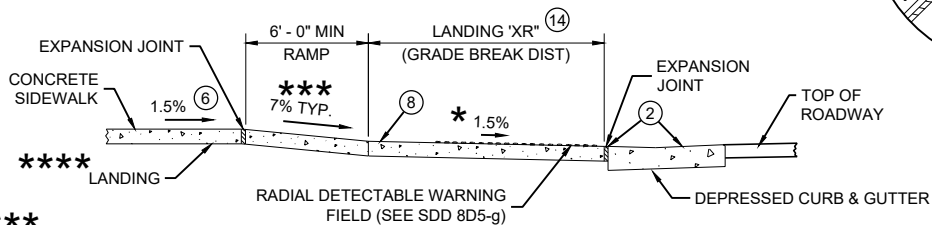
DETAIL A



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



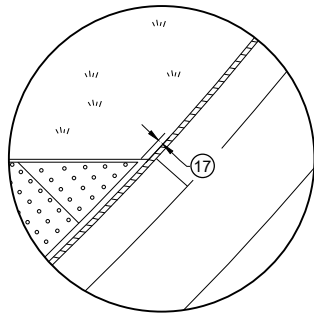
**PLAN VIEW
CURB RAMP TYPE 4B1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**



SECTION B - B FOR TYPE 4B1

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

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.

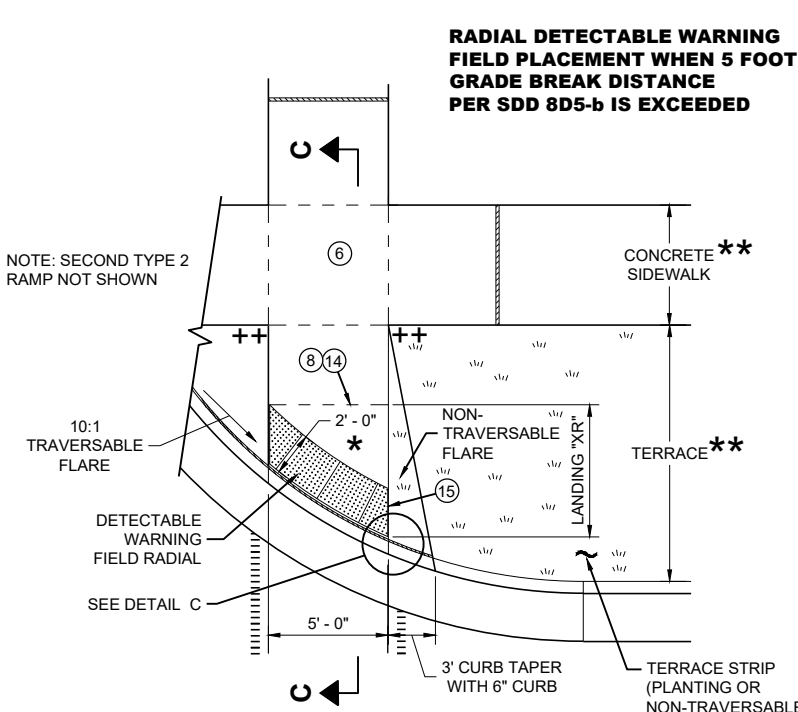
REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

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

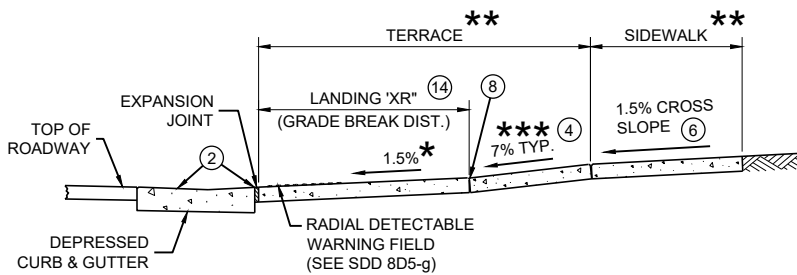
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

- (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 1/2" 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 WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

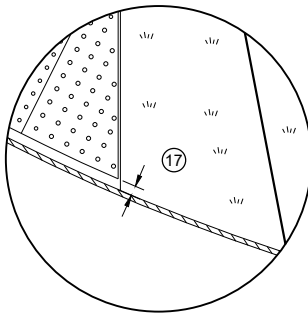
**RADIAL DETECTABLE WARNING
FIELD PLACEMENT WHEN 5 FOOT
GRADE BREAK DISTANCE
PER SDD 8D5-b IS EXCEEDED**



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



SECTION C - C FOR TYPE 2



DETAIL C

*** MAXIMUM 2% SLOPE
IN ALL DIRECTIONS IN
FRONT OF GRADE
BREAK

** WIDTH SHOWN ELSEWHERE
IN THE PLANS

*** MAXIMUM 8.33%

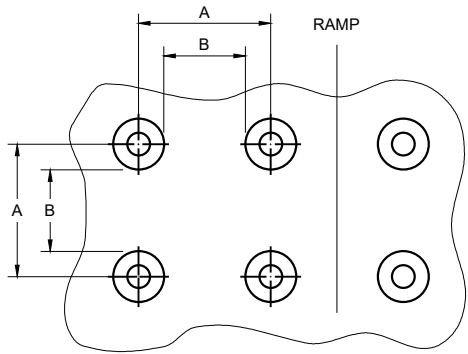
++ CONSTRUCT 6" WEDGE TO
AVOID CONCRETE BREAKAGE

**CURB RAMPS
RADIAL DETECTABLE WARNING**

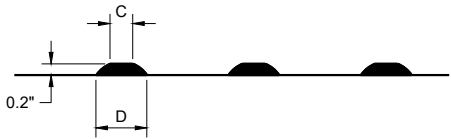
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

	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.

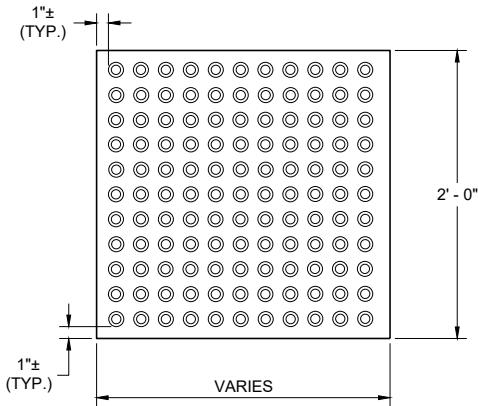


PLAN VIEW

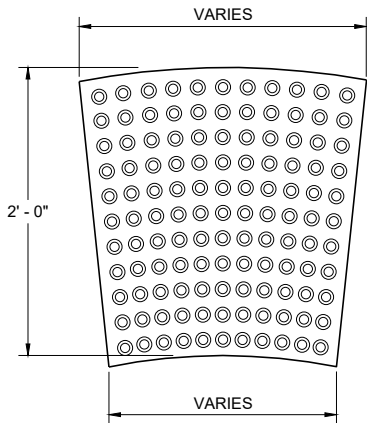


ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

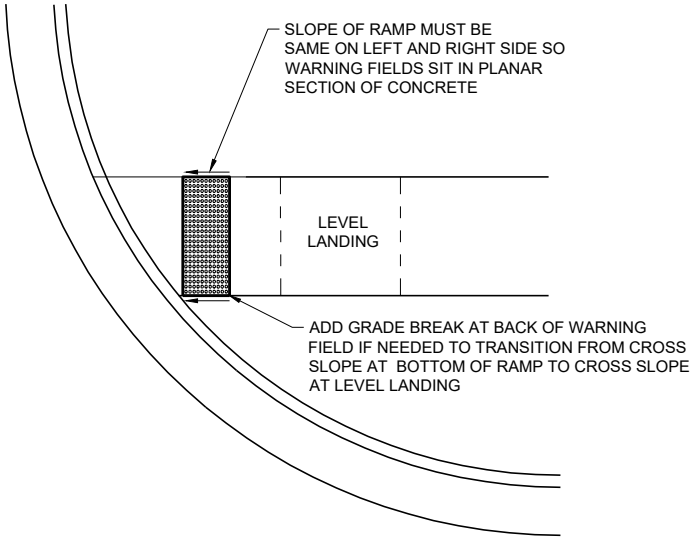


RECTANGULAR
PLATES

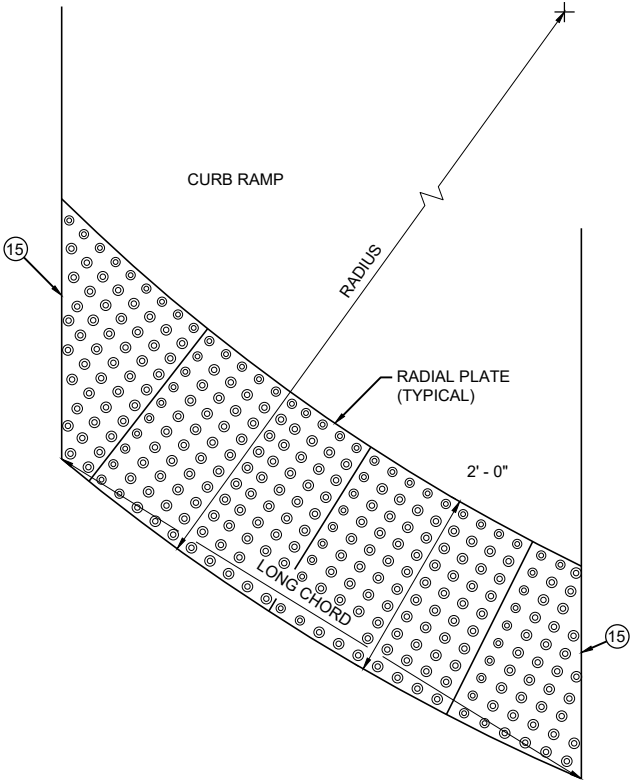


RADIAL
PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



DETECTABLE WARNING FIELD
PLANAR INSTALLATION



PLAN VIEW
RADIAL DETECTABLE
WARNING FIELD ATTRIBUTES

GENERAL NOTES

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

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

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

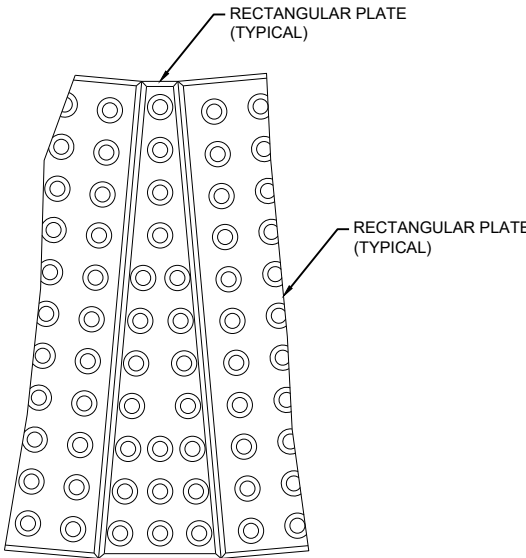
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

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

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

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

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

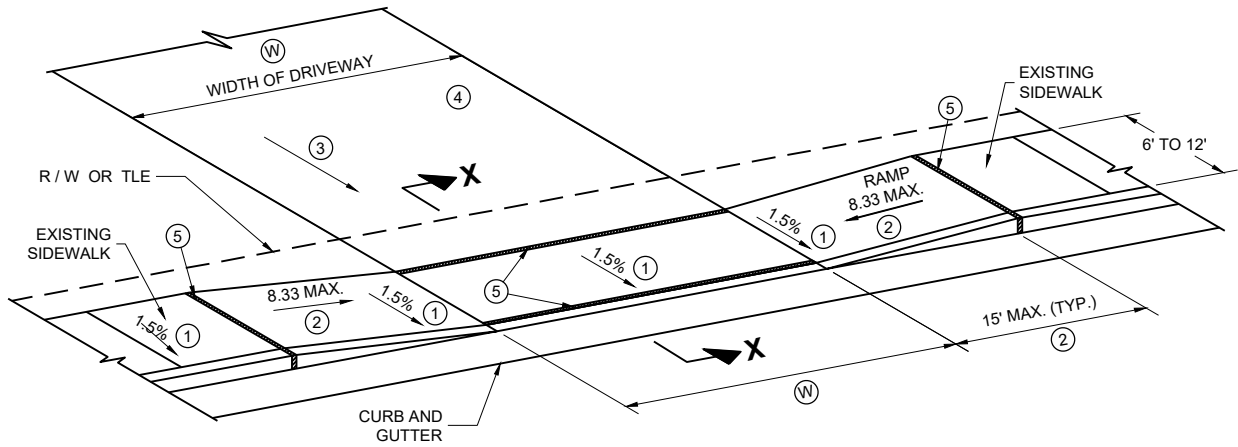


PLAN VIEW
RADIAL WEDGE PLATE
CONNECTION DETAIL

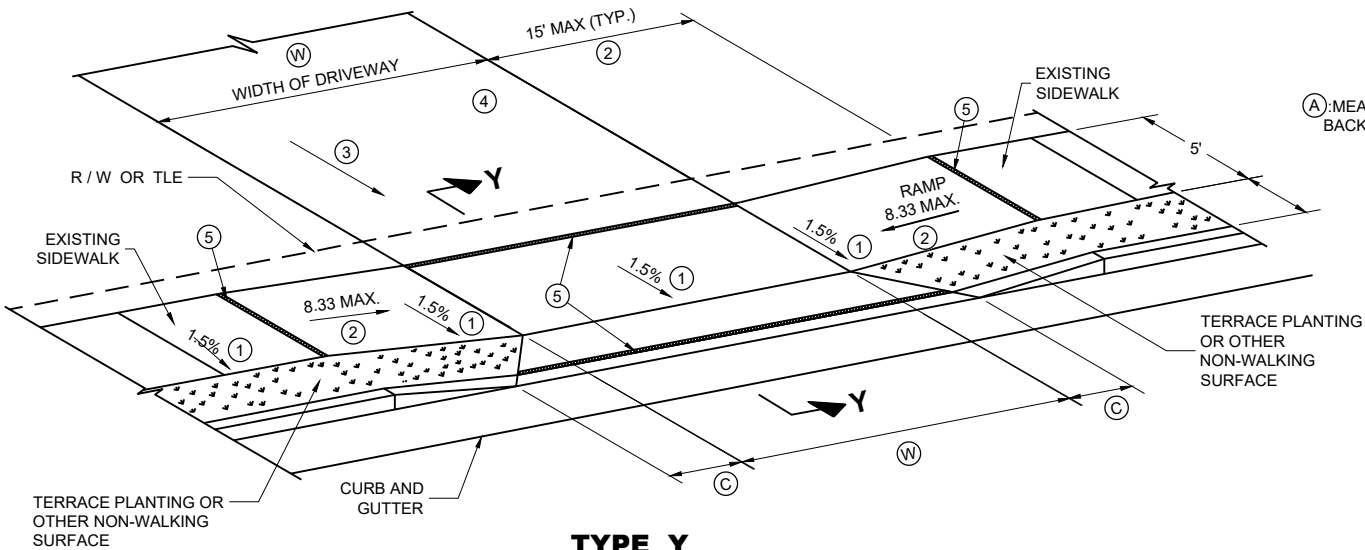
CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



TYPE X
SIDEWALK ABUTS CURB AND GUTTER
TERRACE VARIES 0 TO 3 FEET



TYPE Y
SIDEWALK WITH NARROWER TERRACE
TERRACE VARIES 4 TO 6 FEET

GENERAL NOTES

PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

(W) IS SHOWN ON PLAN AND PROFILE SHEETS.

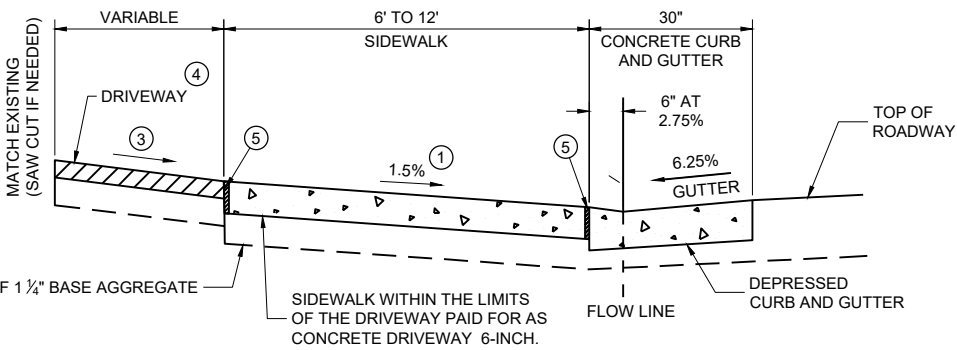
OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

- ① CONSTRUCTION TOLERANCE OF 0.5%± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.
- ② THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY. SLOPE SIDEWALK RAMP TOWARD APRON AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

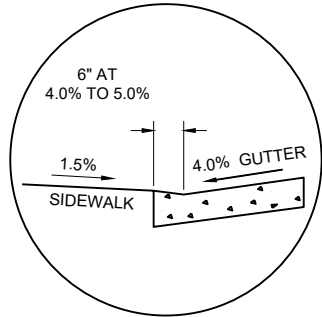
③ DRIVEWAY SLOPES: DESIRABLE MAXIMUM
10.5% UP AWAY FROM SIDEWALK (SAG)
8.5% DOWN AWAY FROM SIDEWALK (CREST)
ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

④ DRIVEWAY TYPES
· 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
· 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
· 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES.)

⑤ ½" EXPANSION JOINT FILLER



SECTION X - X



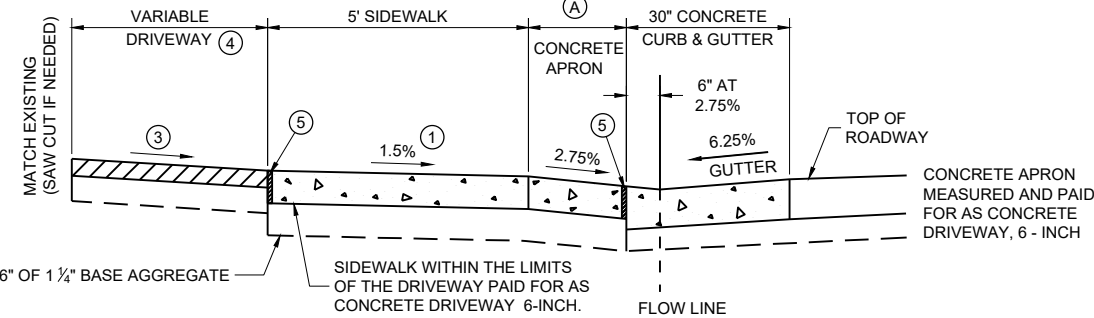
SECTION X - X
4% GUTTER SLOPE

(W): 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)
16' MIN. - 35' MAX. COMMERCIAL (CE)

TABLE Y

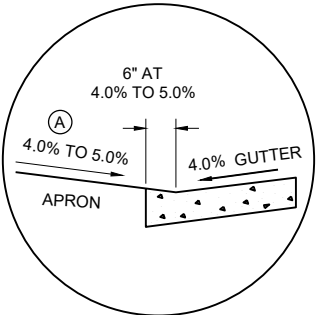
(A) FEET	(C) FEET
3.5'	2.0'
4.5'	3.0'
5.5'	3.5'

(A): MEASURE FROM BACK OF CURB



NOTE: SIDEWALK MAY BE DEPRESSED IN DRIVEWAY AREAS

SECTION Y - Y
DRIVEWAY DETAIL WITH CONCRETE CURB AND GUTTER
(URBAN AND SUBURBAN)



SECTION Y - Y
4% GUTTER SLOPE

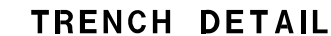
DRIVEWAY AND SIDEWALK RAMPS
TYPES X AND Y

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



- 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 1½" X 1½" 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.

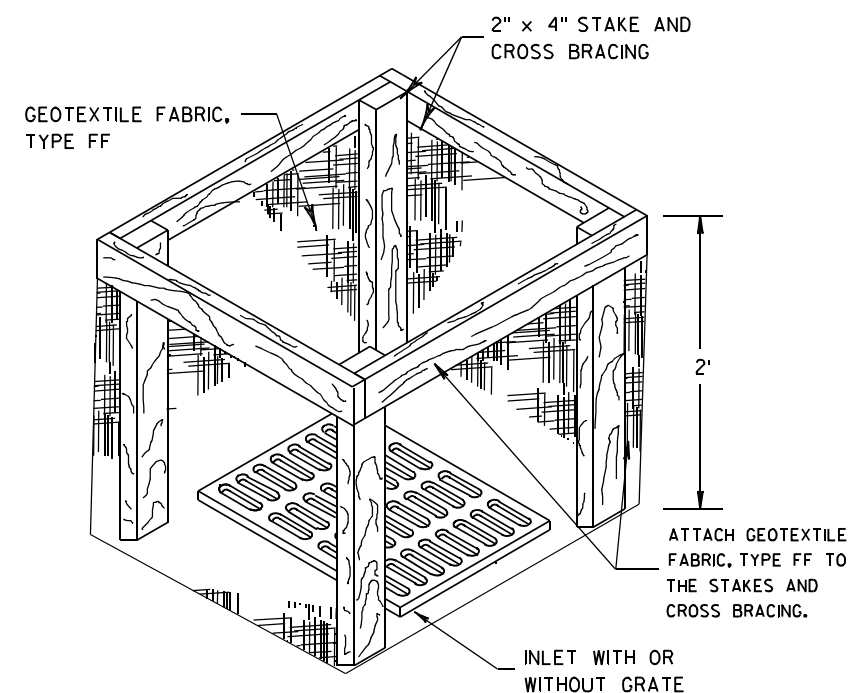


SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05
DATE /S/ Beth Cannata
CHIEF ROADWAY DEVELOPMENT **102** ENGINEER

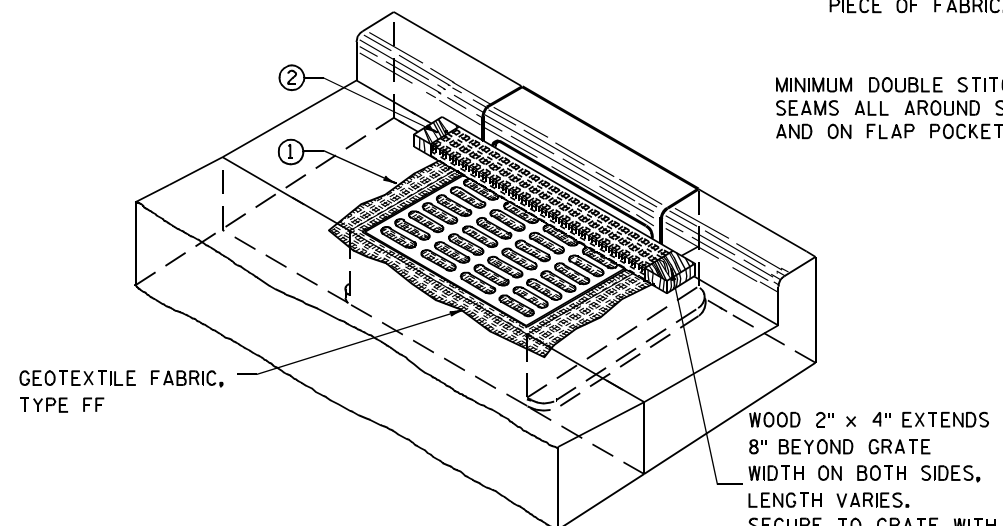
FHWA



GENERAL NOTES

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.

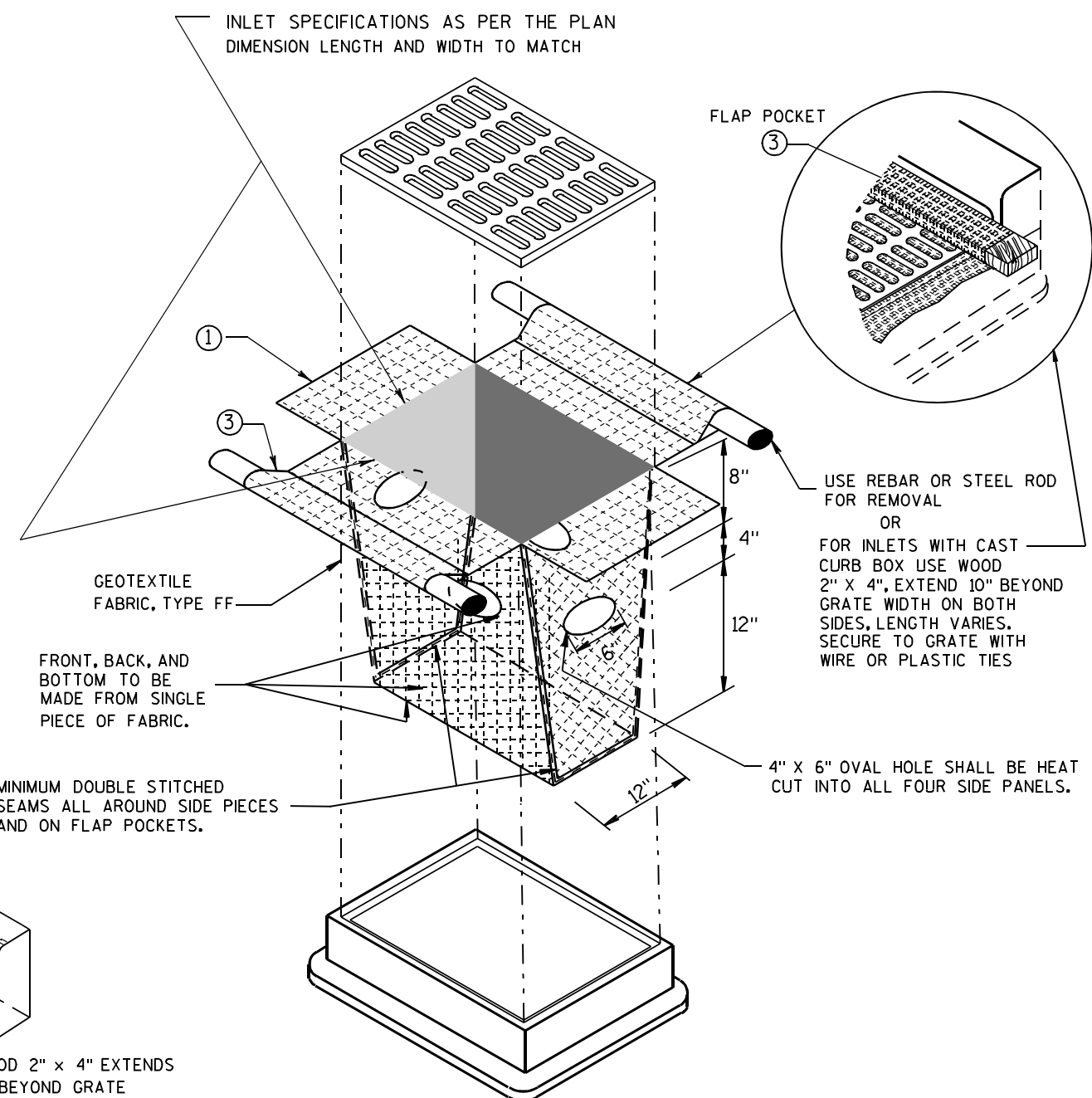
- ① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- ② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- ③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.



INLET PROTECTION, TYPE C (WITH CURB BOX)

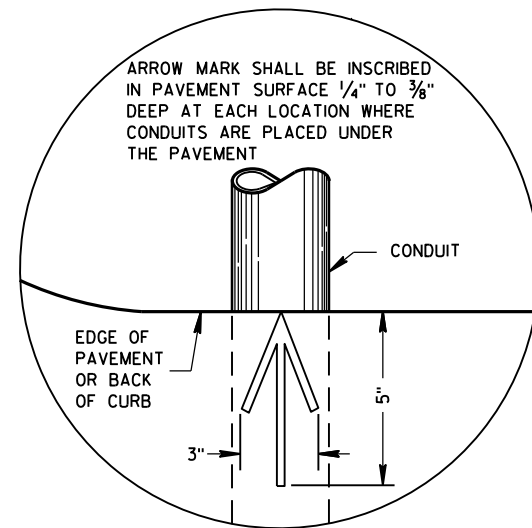
INSTALLATION NOTES

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.

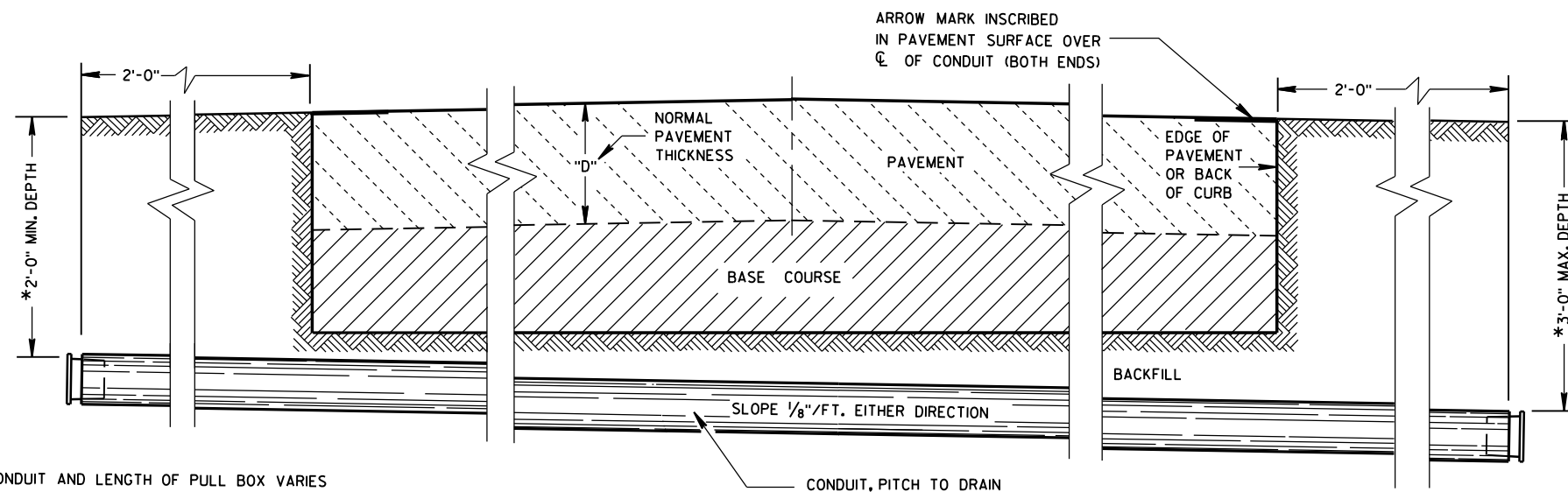


(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE (2))

APPROVED
10/16/02 /S/ Beth Cunningham
DATE
103
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



PLAN VIEW
ARROW MARK



SIDE ELEVATION
DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES
WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

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

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

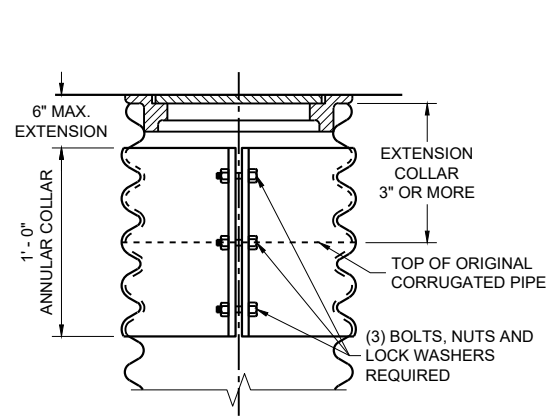
TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

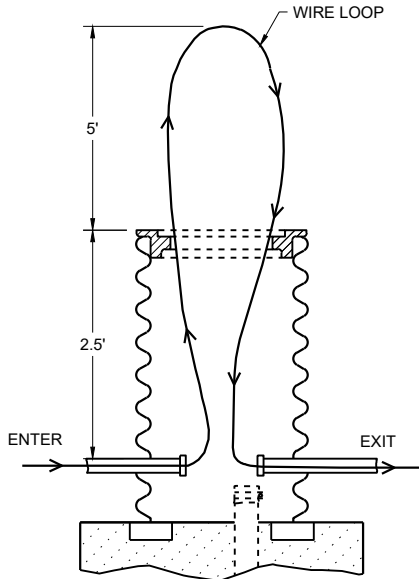
CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

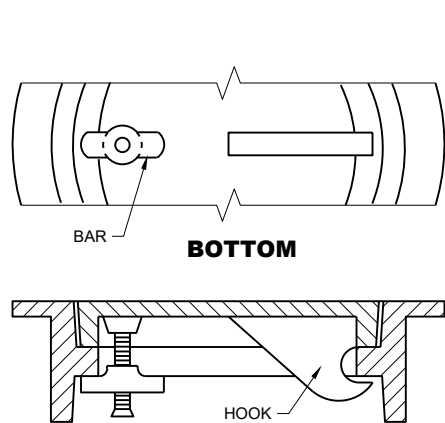
APPROVED
March, 2017 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL 104
FHWA



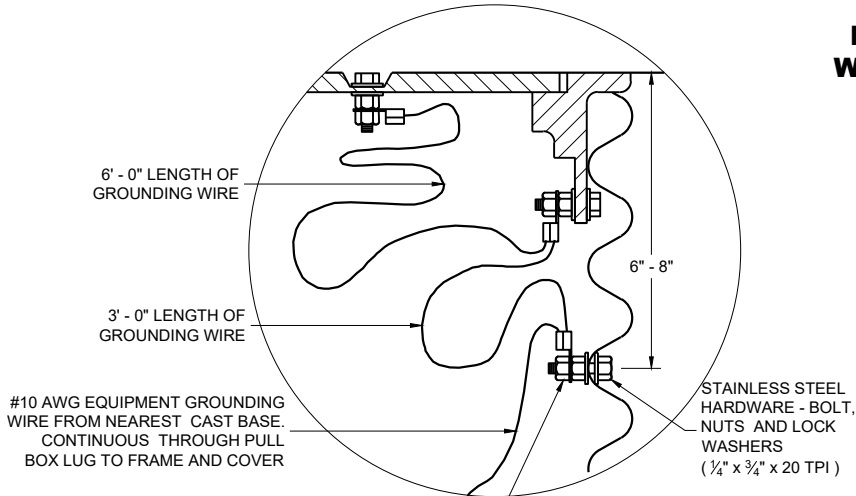
CORRUGATED PIPE EXTENDER



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

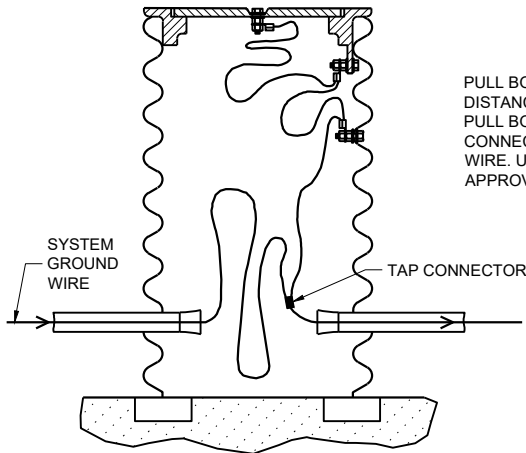


ALTERNATE COVER (LOCKING)
TIGHTENING BAR TYPE



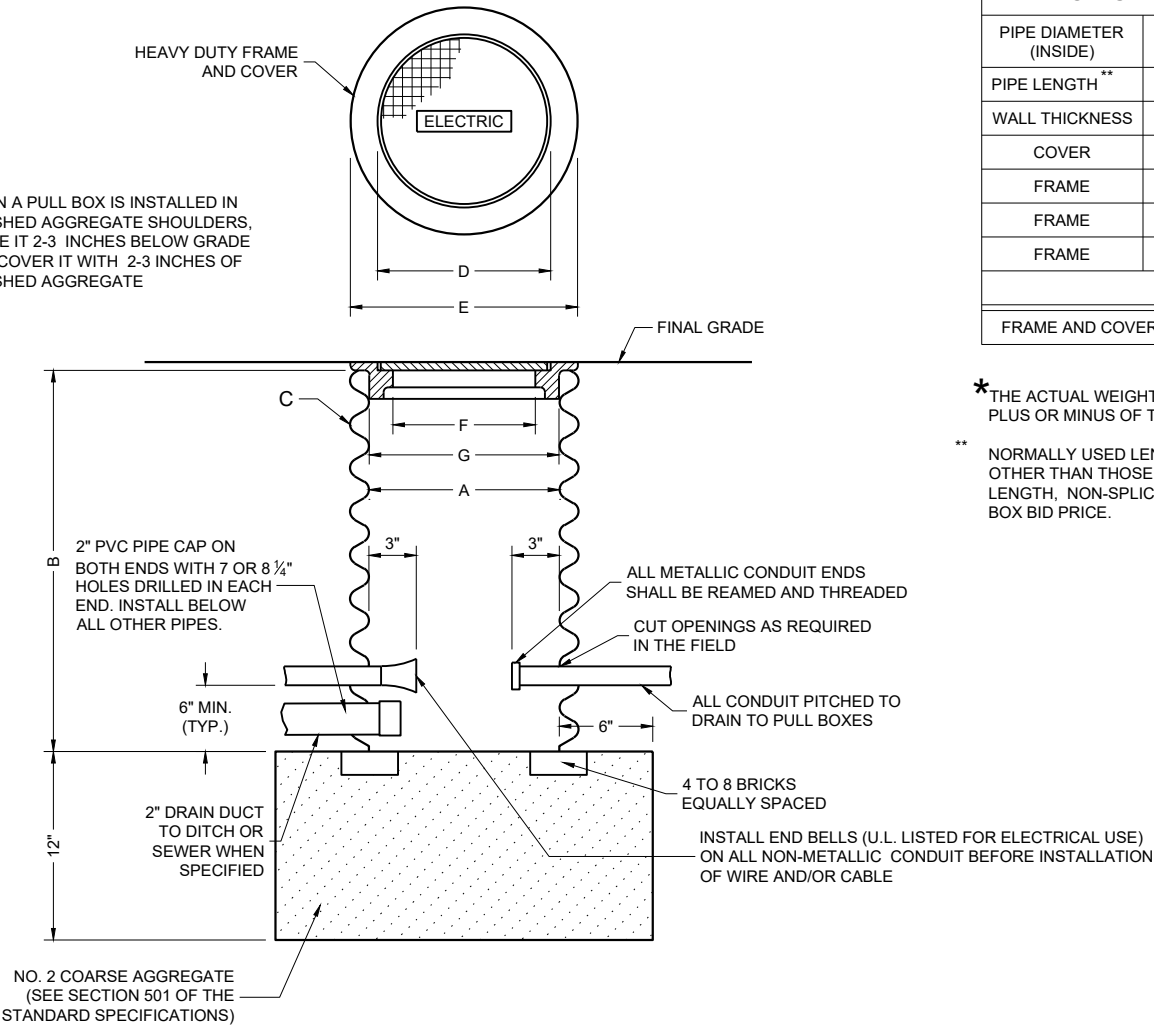
NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE



PULL BOX

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
		PIPE DIAMETER (INSIDE)	12	12	12	18	18	18	24	24
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS*										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

*THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.

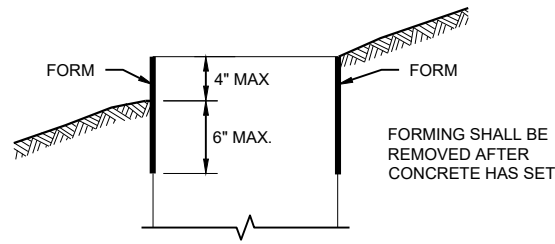
PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL ENGINEER

FHWA

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION.

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2, TYPE 5 AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER ALL BASE TYPES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

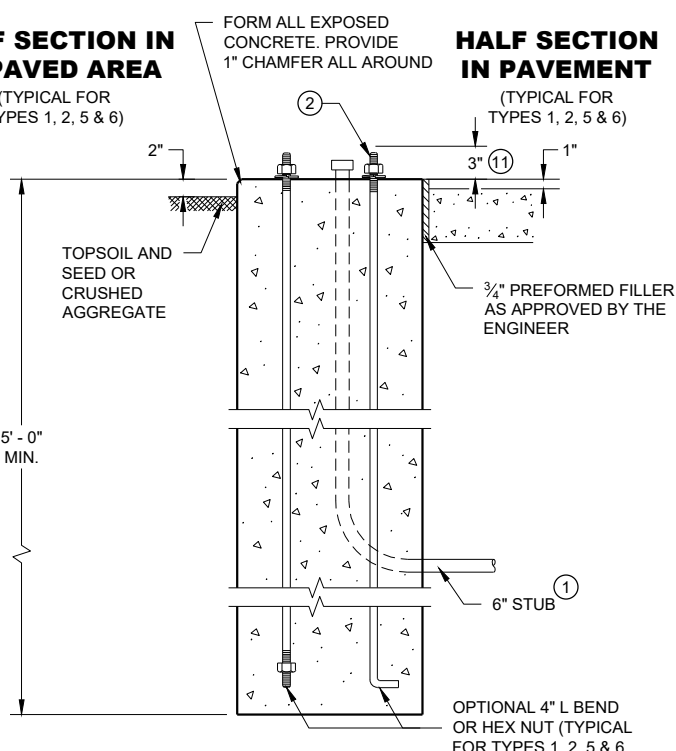
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

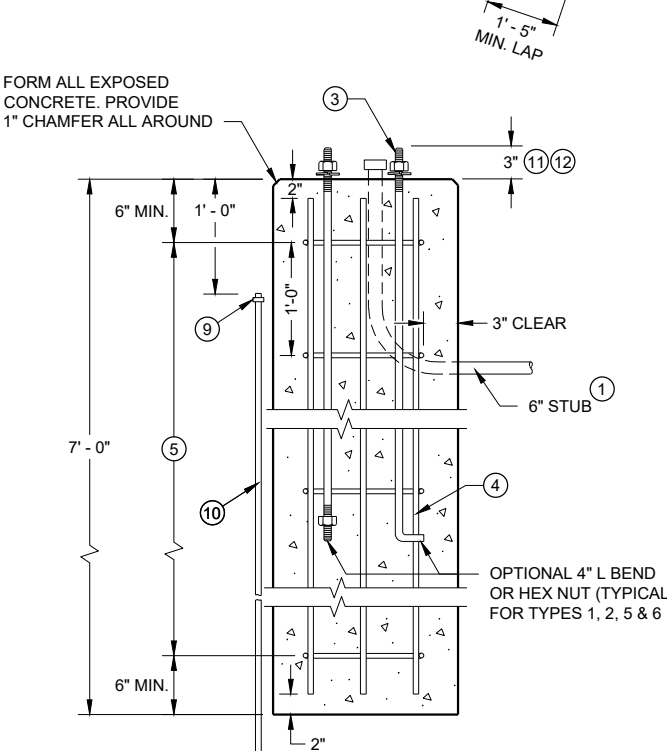
- 1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.
- 2 (4) 1" DIA. X 3' - 6" ANCHOR RODS.
- 3 (4) 1" DIA. X 5' - 0" ANCHOR RODS.
- 4 (6) NO. 6 X 6' - 8" BAR STEEL REINFORCEMENT.
- 5 (7) NO. 4 X 5' - 1" BAR STEEL REINFORCEMENT @ 1' - 0" C - C.
- 6 (4) 1" DIA. X 3' - 6" ANCHOR RODS.
- 7 (6) NO. 4 X 4' - 8" BAR STEEL REINFORCEMENT.
- 8 (5) NO. 4 X 5' - 1" BAR STEEL REINFORCEMENT @ 1' - 0" C - C.
- 9 EXOTHERMIC CONNECTION TO EQUIPMENT GROUNDING CONDUCTOR
- 10 5/8" DIA. X 8' - 0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED
- 11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 3/4" OR LONGER THAN 3 1/2" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
- 12 FOR NON - BREAKAWAY INSTALLATIONS, 4 1/2" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

HALF SECTION IN UNPAVED AREA



TYPE 1

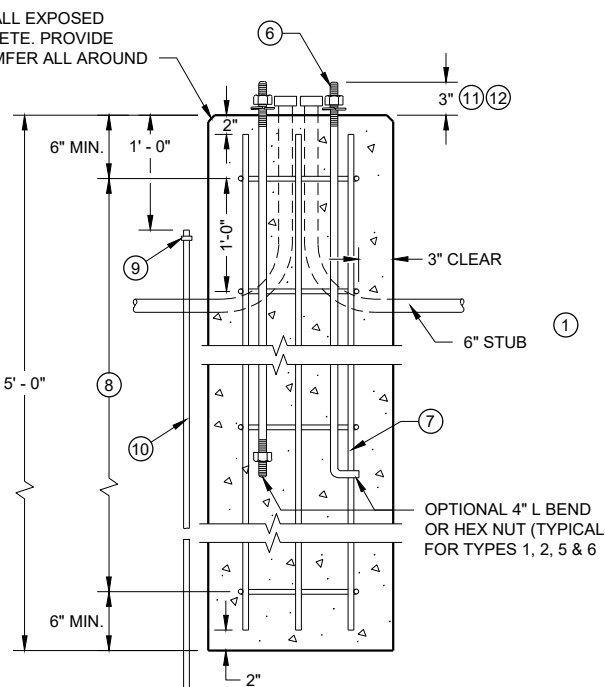
HALF SECTION IN PAVEMENT



TYPE 2

CONCRETE BASES

FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND



TYPE 5 & 6

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

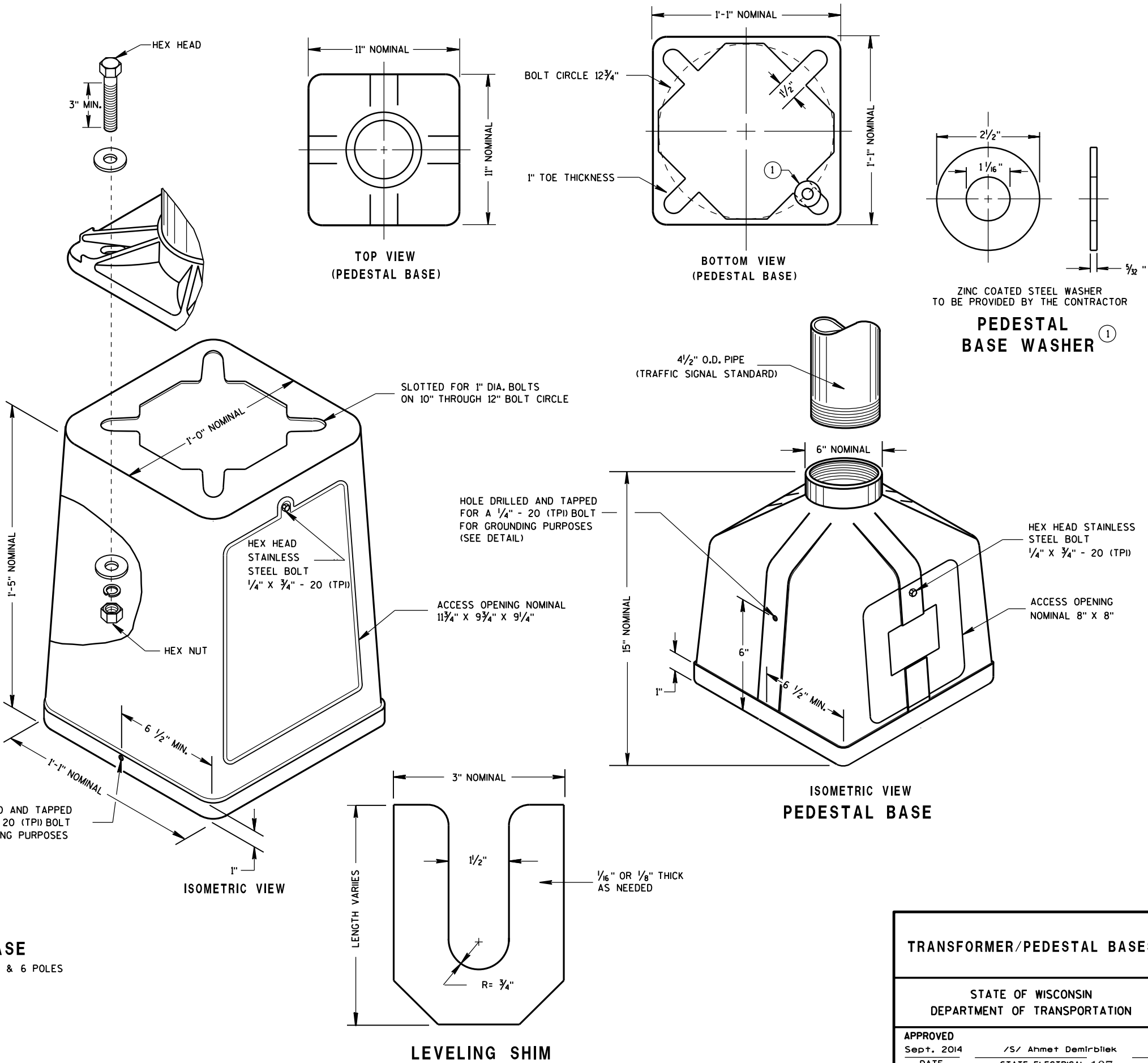
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.



TYPICAL MECHANICAL
CONNECTOR LUG
TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE
INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES

ISOMETRIC VIEW
PEDESTAL BASE

LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL 107
FHWA

GENERAL NOTES

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

THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING. A STEEL CASING OR CORRUGATED METAL PIPE IS ALLOWED TO REMAIN. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BASE IN LAYERS OF ONE FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

ANY DAMAGE TO THE CONCRETE BASE AND ANCHOR RODS DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE ENGINEER'S DIRECTION, AT THE EXPENSE OF THE CONTRACTOR.

THE REINFORCEMENT AND ANCHOR RODS SHALL BE ADEQUATELY SUPPORTED IN THE PROPER POSITIONS SO NO MOVEMENT OCCURS DURING CONCRETE PLACEMENT.

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR RODS STICK OUT ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

WELDING OF ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

FORM ALL EXPOSED CONCRETE CORNERS WITH 1" CHAMFER ALL AROUND. TOP OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 TIMES THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4 1/2" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NON-METALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

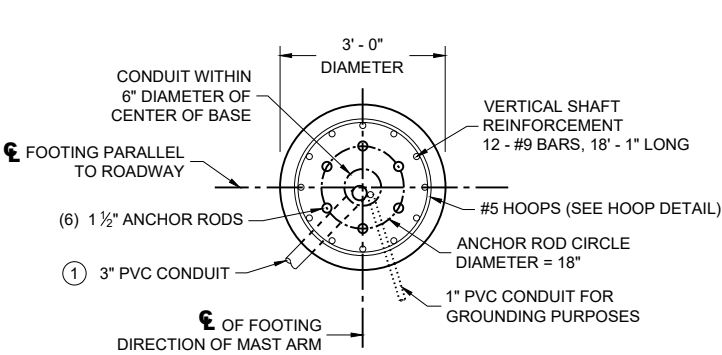
A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

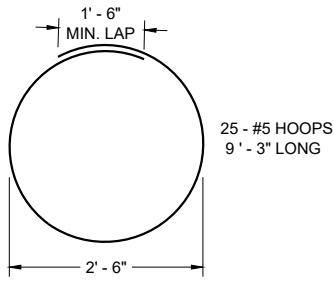
THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER RUN) EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

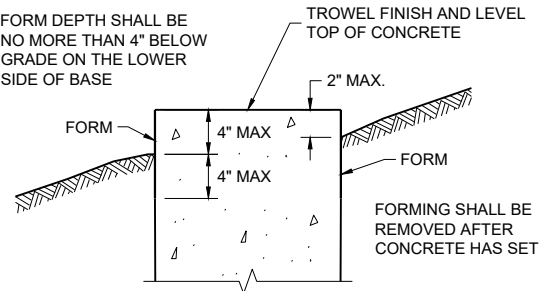
CONCRETE MASONRY.....fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55.....fy = 55,000 p.s.i.
(IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION)
TEMPLATES, ASTM A709, GRADE 36.....fy = 36,000 p.s.i.



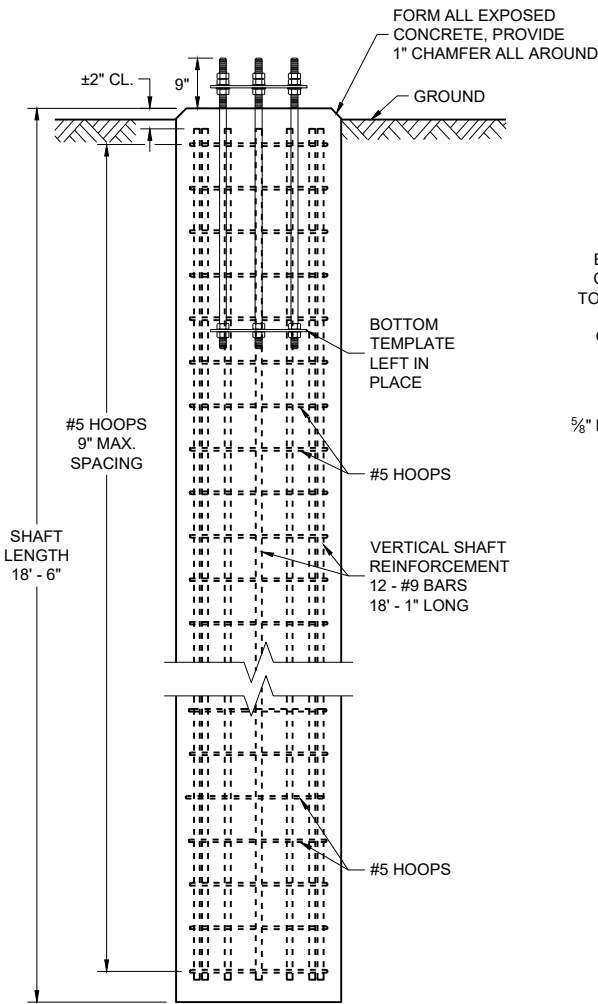
PLAN VIEW



HOOP DETAIL

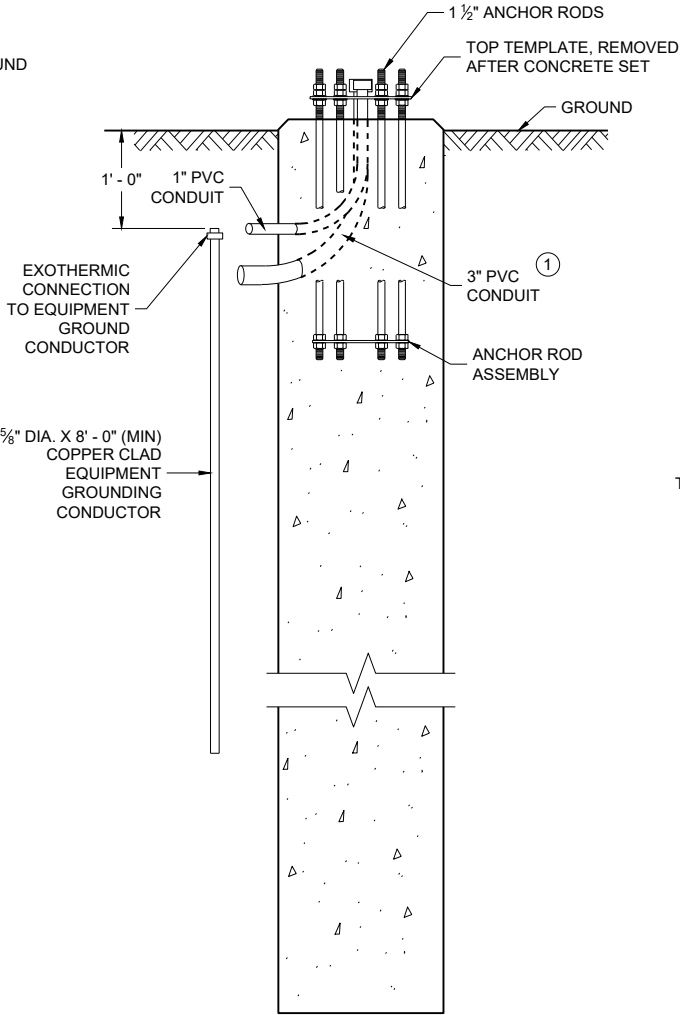


FORMING DETAIL



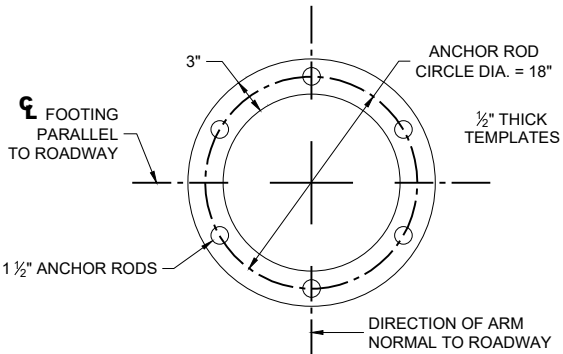
ELEVATION VIEW

(CONDUITS NOT SHOWN ON THIS VIEW FOR CLARITY)

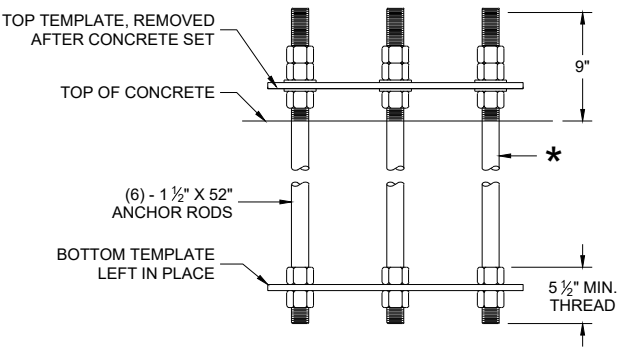


SIDE VIEW

(HOOPS AND VERTICAL SHAFT REINFORCEMENT NOT SHOWN ON THIS VIEW FOR CLARITY)



TOP AND BOTTOM TEMPLATE



ANCHOR ROD ASSEMBLY DETAILS

* THREAD TOP 10" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 5 1/2" FOR 2 NUTS PER ANCHOR ROD. HOT DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR ROD (ASTM A123) AND HOT DIP NUTS AND WASHERS (ASTM A153. USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

CONCRETE BASE, TYPE 10 SPECIAL
(FOR TYPE 9 SPECIAL AND TYPE 10 SPECIAL POLES AND OVER HEIGHT (OH) POLES)

CONCRETE = 4.8 CUBIC YARD
H.S. REINFORCEMENT = 979 LBS.

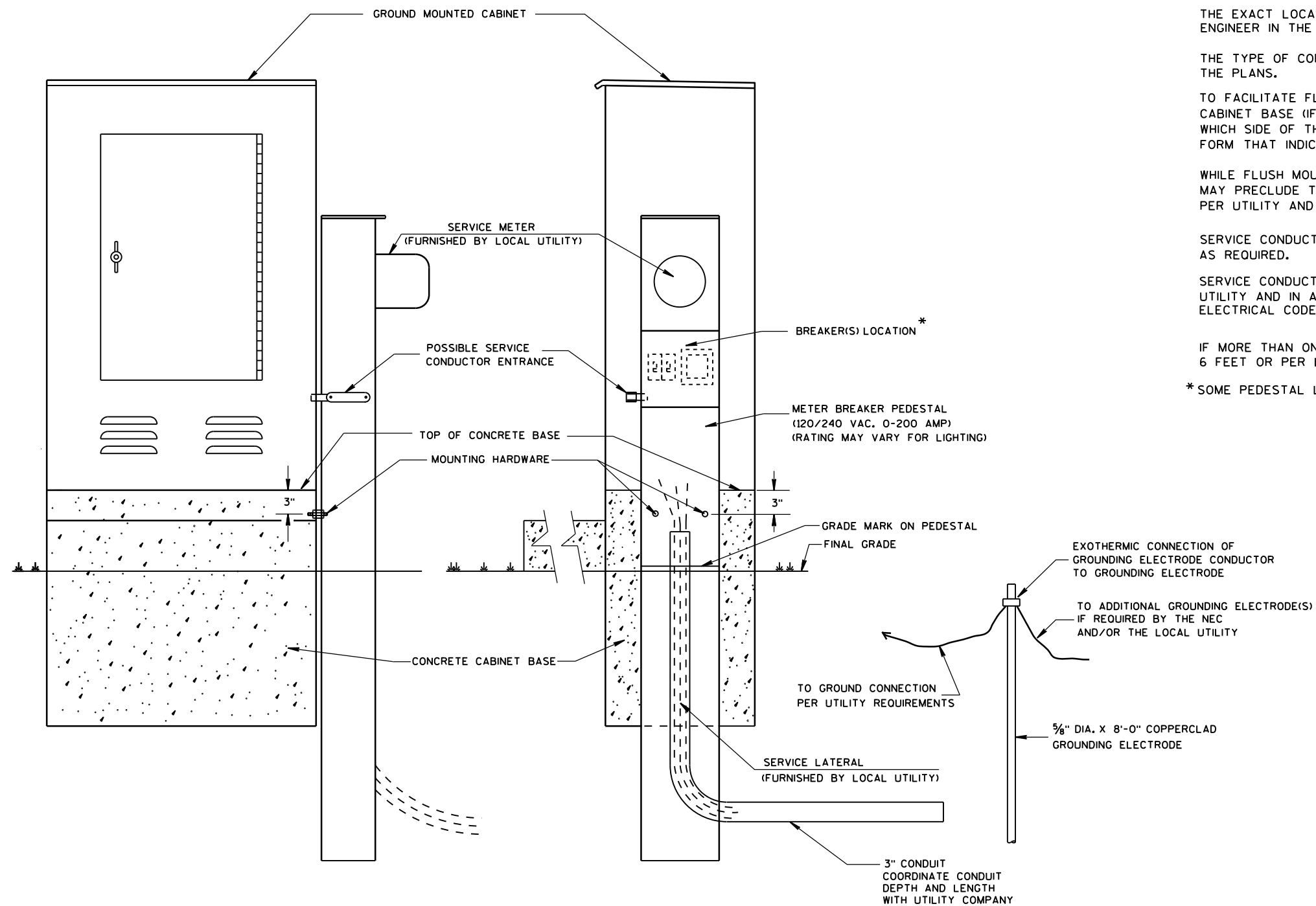
FOR USE WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.

CONCRETE BASE
TYPE 10 SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2024 /S/ Alex Crabtree
DATE WIND LOADED STRUCTURES PROGRAM LEADER

FHWA



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE, CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH, THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

CABINET SERVICE INSTALLATION
(METER BREAKER PEDESTAL)

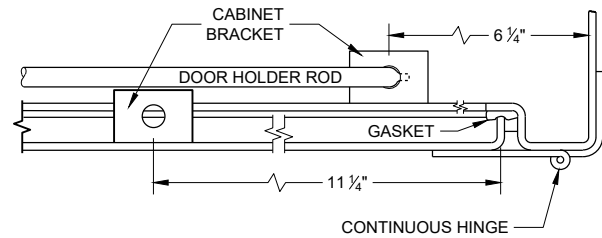
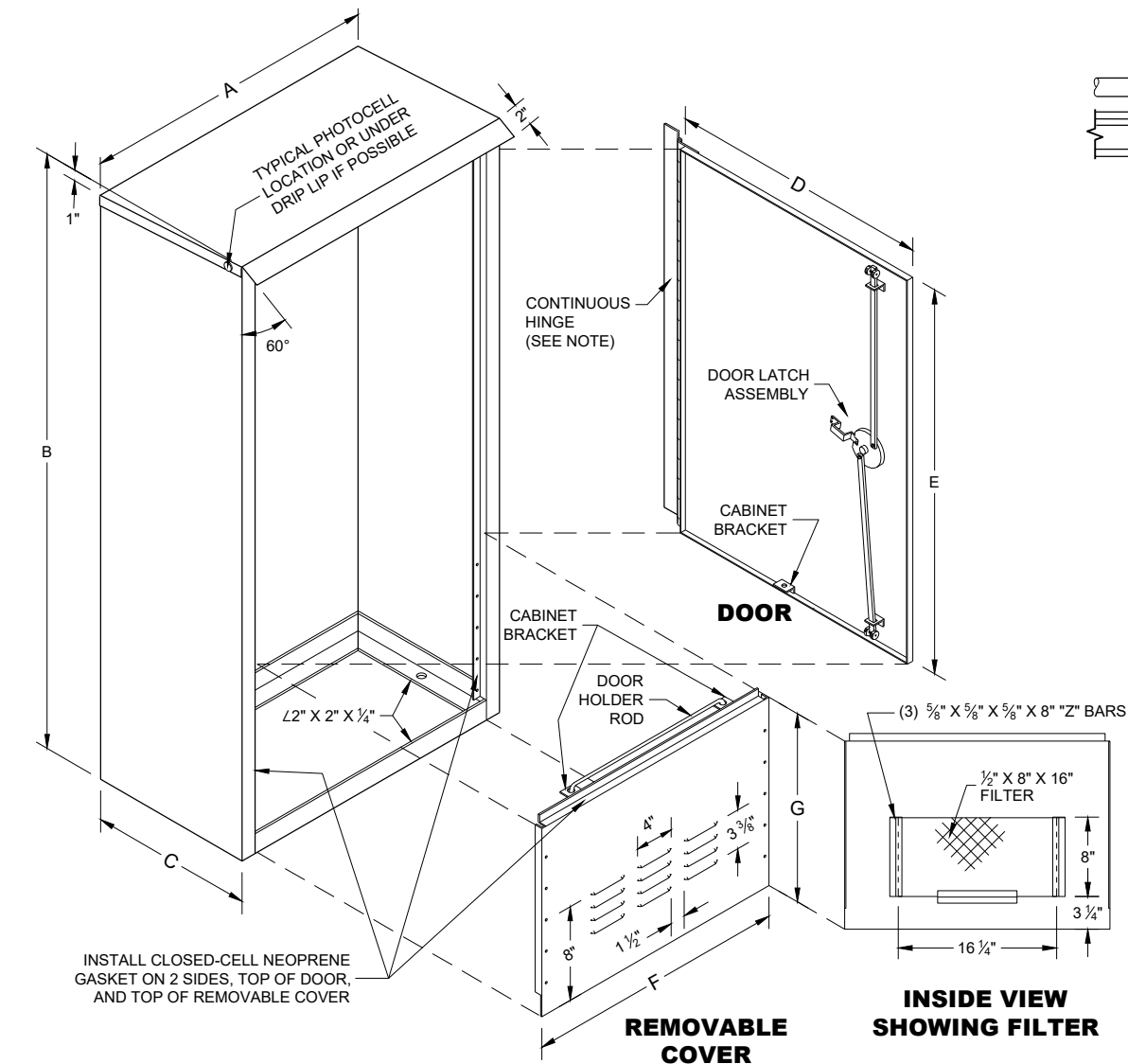
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

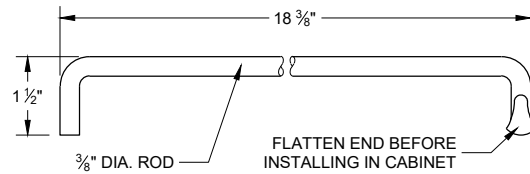
Sept. 2014
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL 109

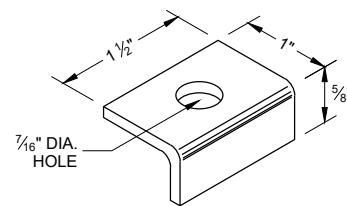
FHWA



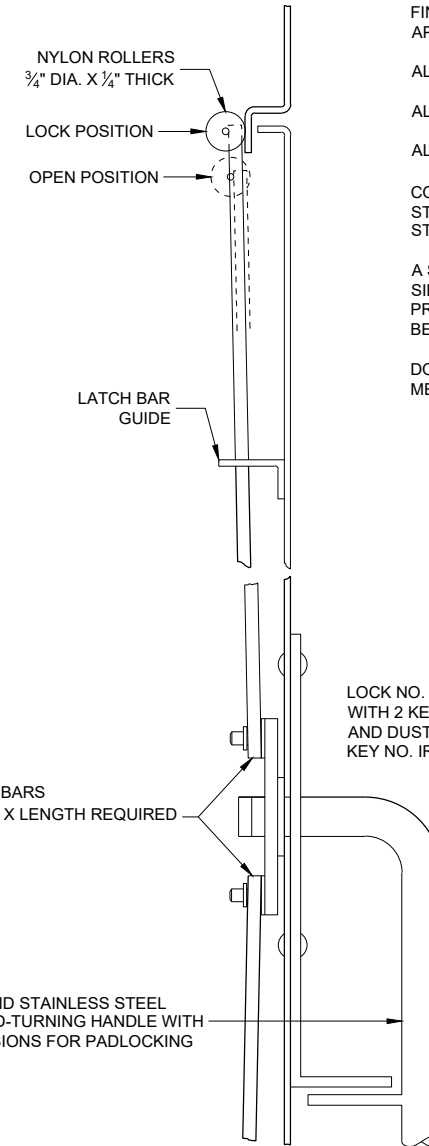
HINGE AND DOOR HOLDER



HOLDER ROD

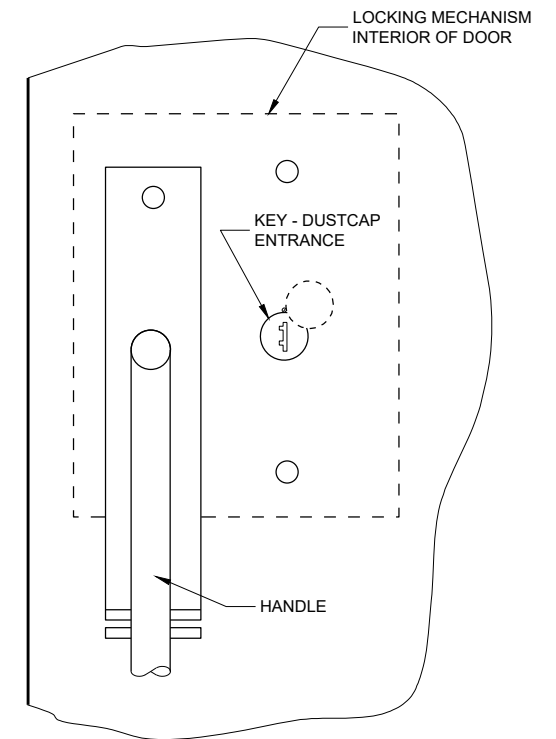


CABINET BRACKET



SIDE VIEW

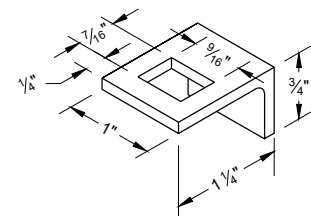
LATCH ASSEMBLY



FRONT VIEW

TABLE OF DIMENSIONS (INCHES)

MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 1/2	16 1/2	24
D	26 1/2	34 3/4	33 3/4
E	38 3/4	38 3/4	38 3/4
F	26 1/2	34 3/4	33 3/4
G	19	19	25
H	16 1/2	16 1/2	24
H/2	8 3/4	8 3/4	12
J	30	38	38
J/2	15	19	19
K	13 3/4	13 3/4	21 1/4
L	27 1/2	35 1/2	35 1/2



LATCH BAR GUIDE

GENERAL NOTES

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

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH 1/2" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH 1/4" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

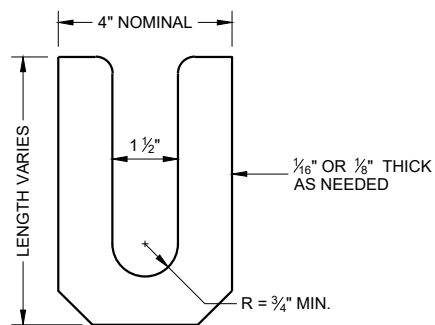
A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH - NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST.

DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.

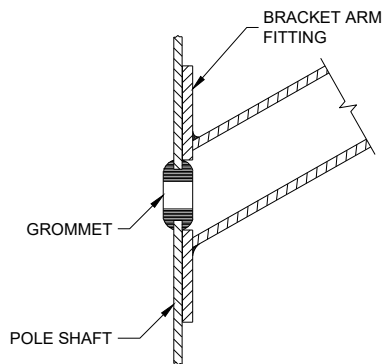
SIGNAL CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

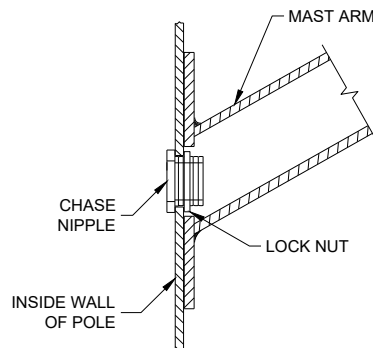
APPROVED
September 2014 /S/ Ahmet Demerbilek
DATE STATE ELECTRICAL ENGI 110
FHWA



LEVELING SHIM
SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



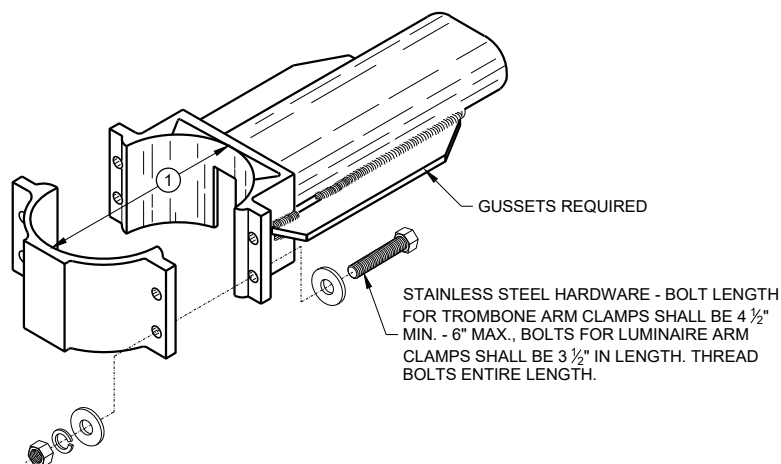
TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

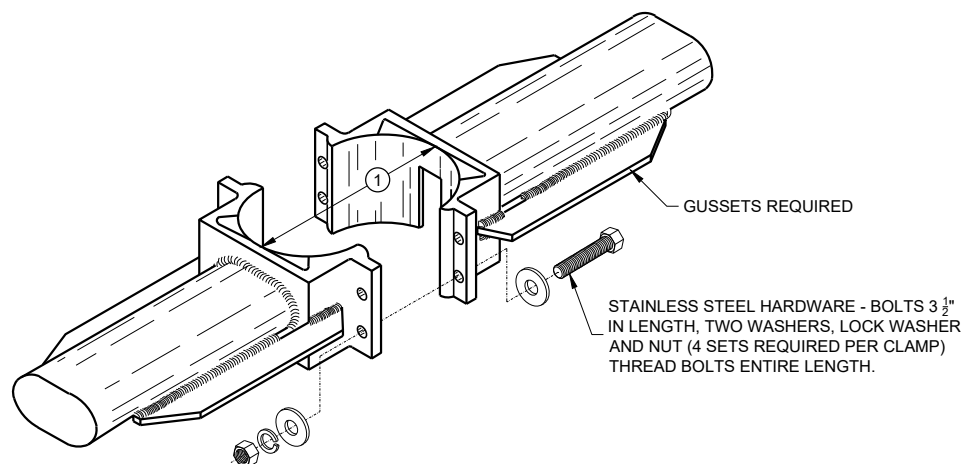
CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

- ① 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.
- ② INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)
- ③ BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.
- ④ LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

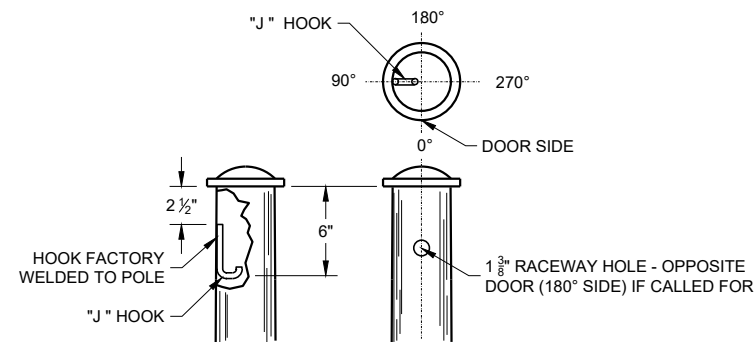
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



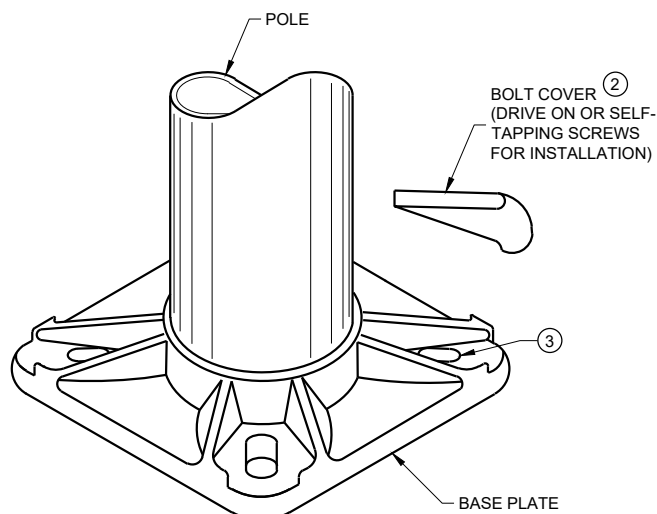
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



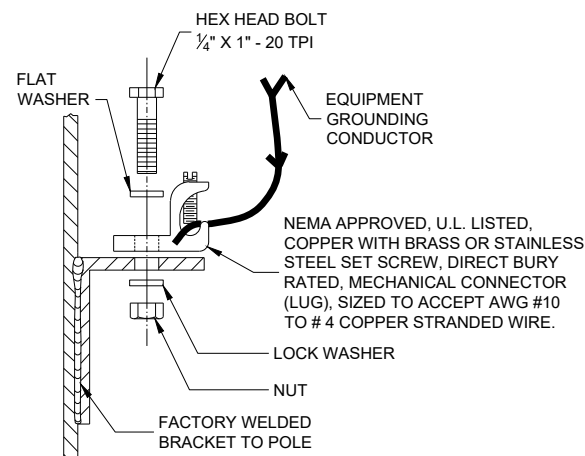
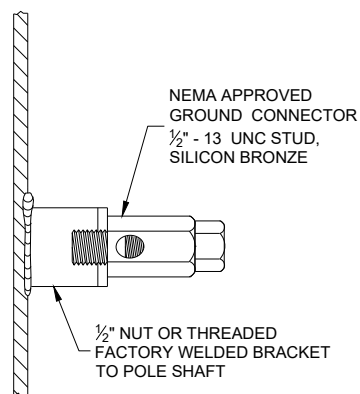
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS



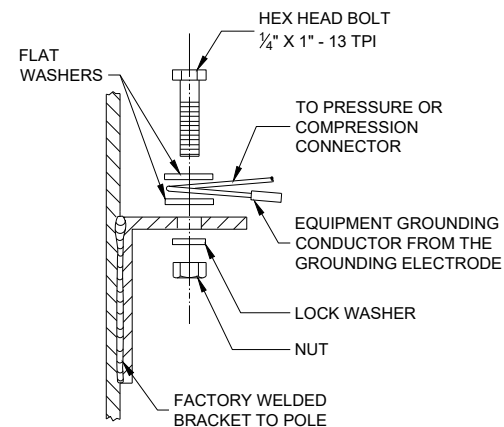
TYPICAL "J" HOOK LOCATION



BASE PLATE



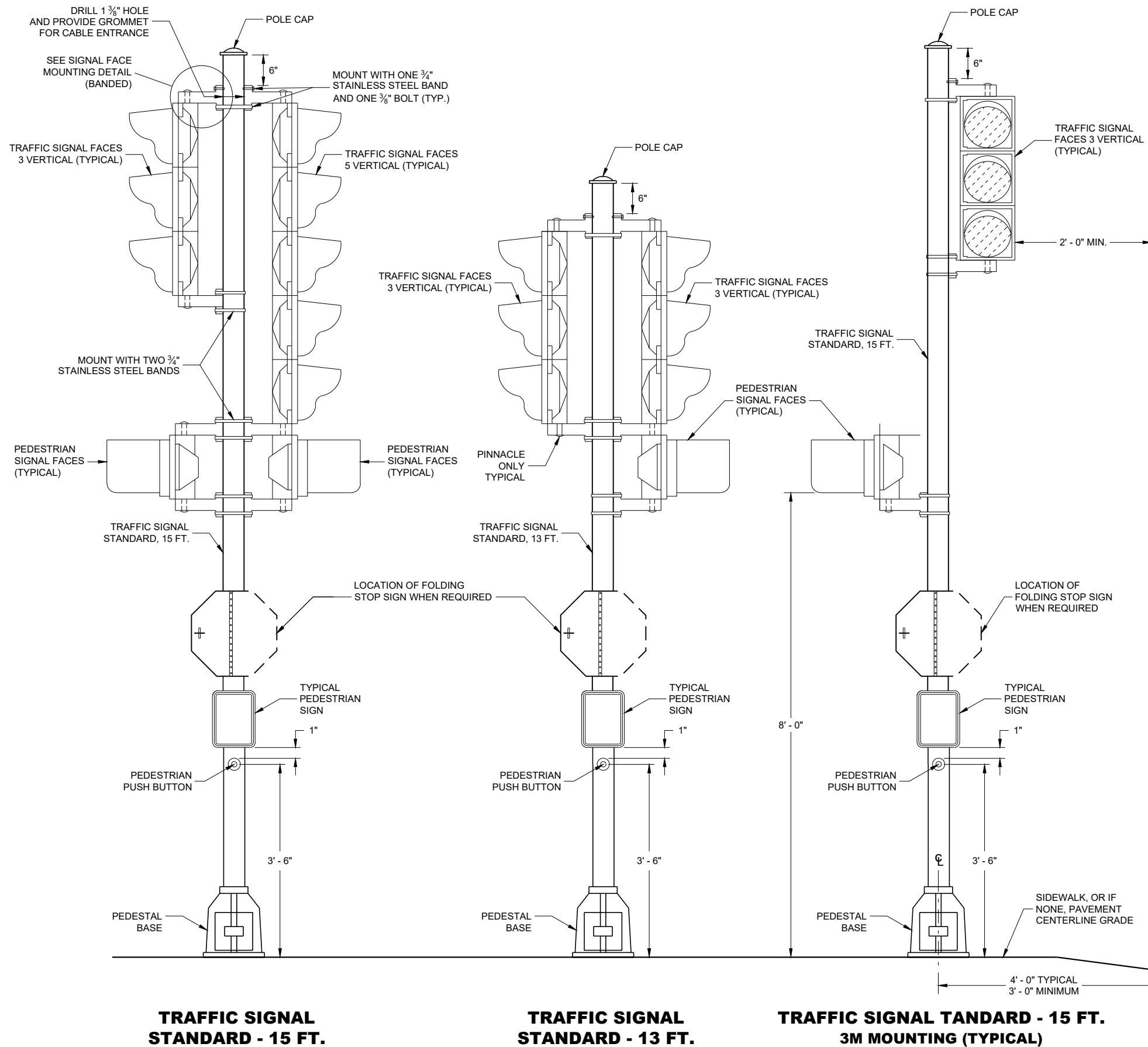
TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



HARDWARE DETAILS FOR POLE MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL ENGI 112
FHWA



GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

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

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

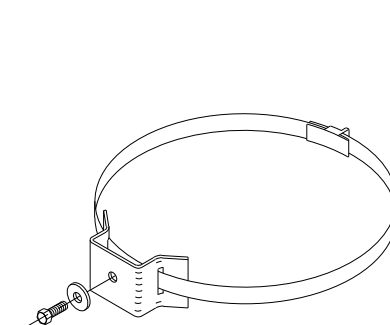
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

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

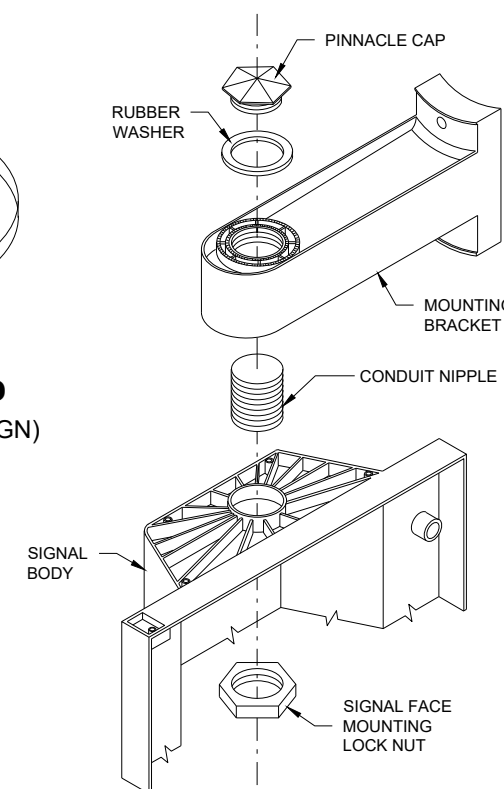
FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

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



TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



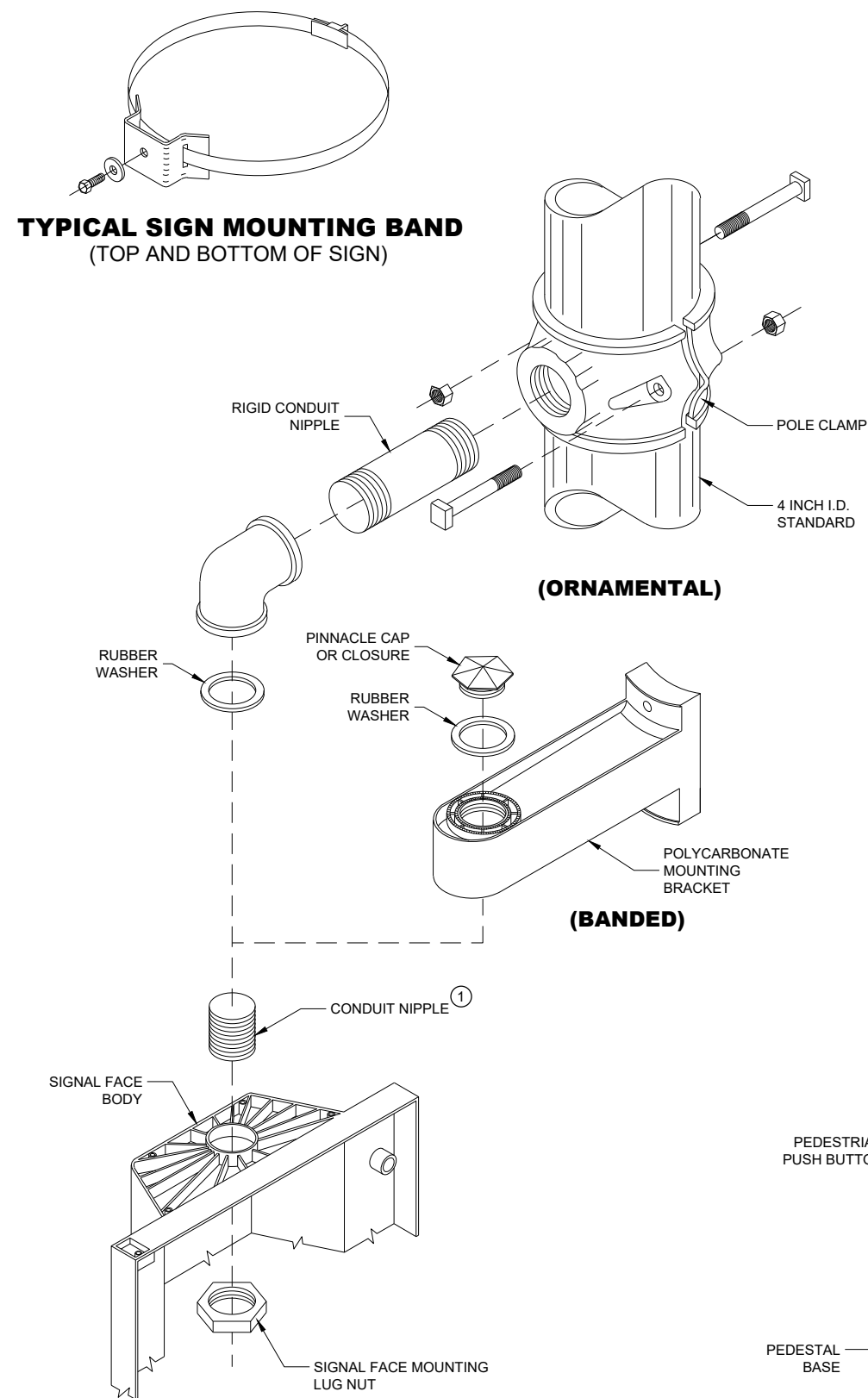
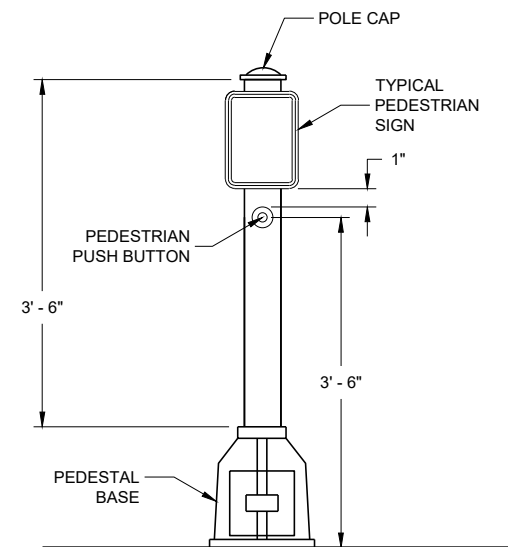
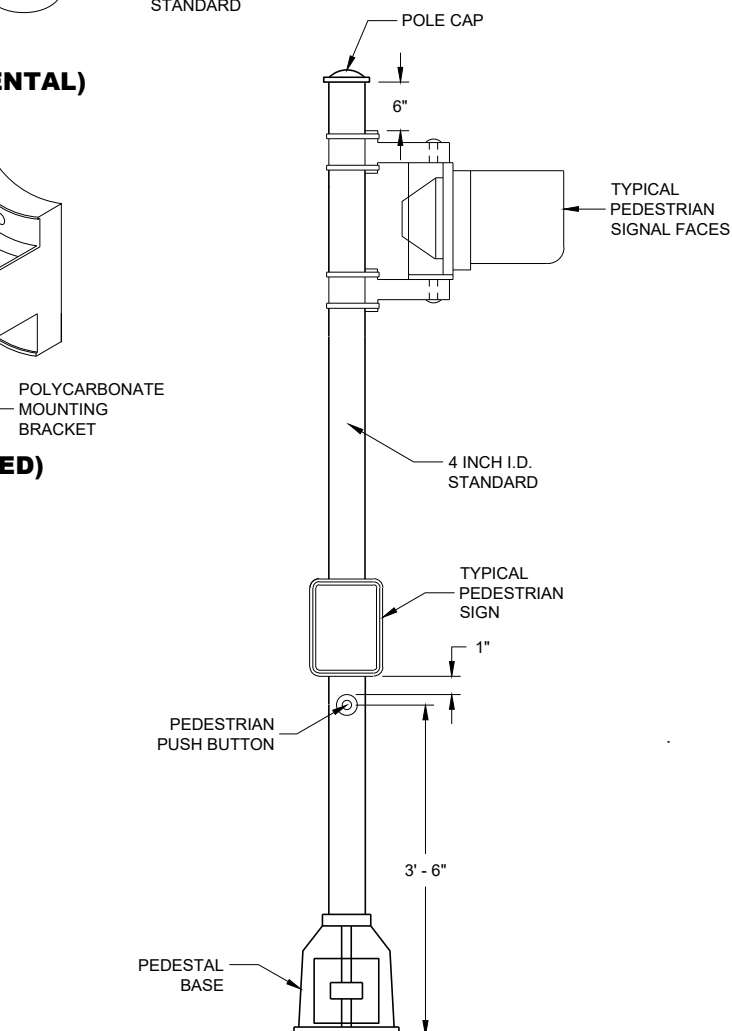
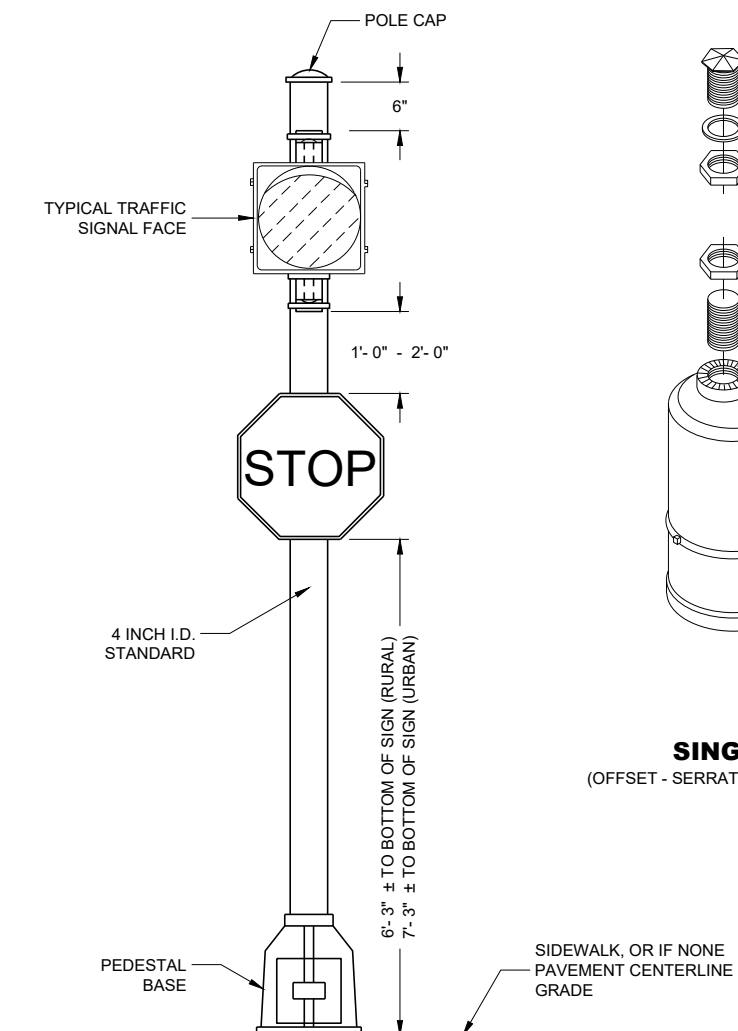
SIGNAL FACE MOUNTING DETAIL (BANDED)

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/28/2013 DATE /S/ Ahmet Demirelek
STATE ELECTRICAL ENGINEER 113

FHWA

**SIGNAL FACE MOUNTING DETAILS****PEDESTRIAN PUSH BUTTON
TYPICAL MOUNTING****PEDESTRIAN FACE STANDARD - 10 FT.**
(WALK - DON'T WALK)**STANDARD FLASHER**
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED**GENERAL NOTES**

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

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

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

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

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

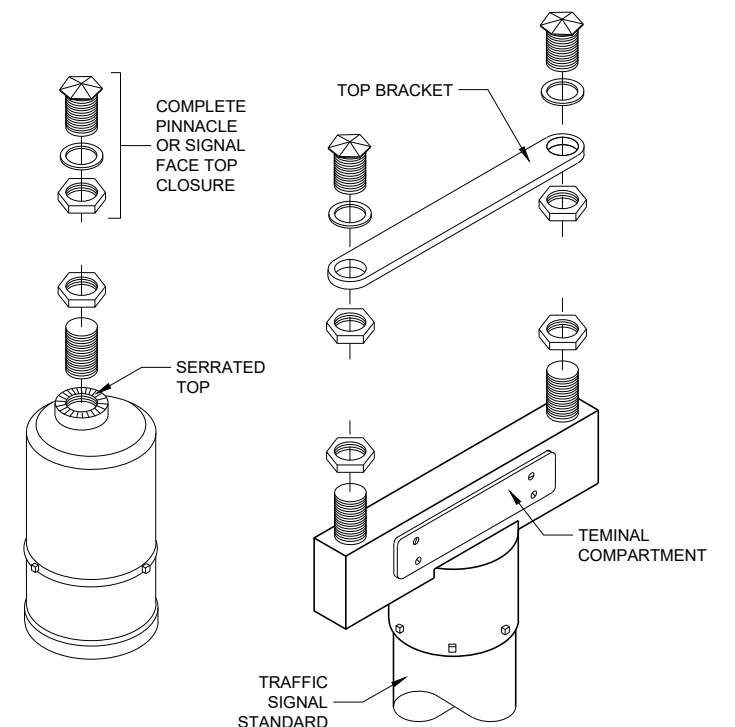
LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

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

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

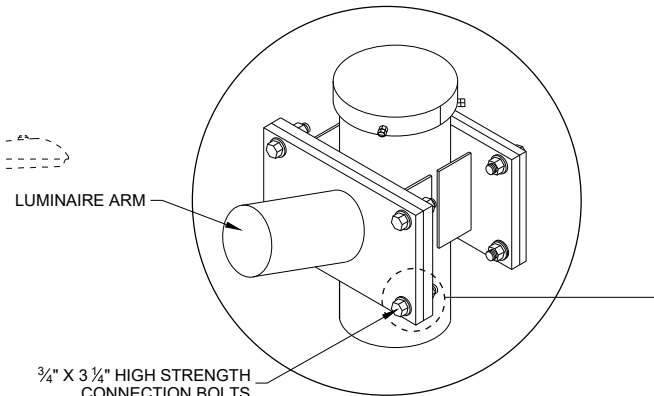
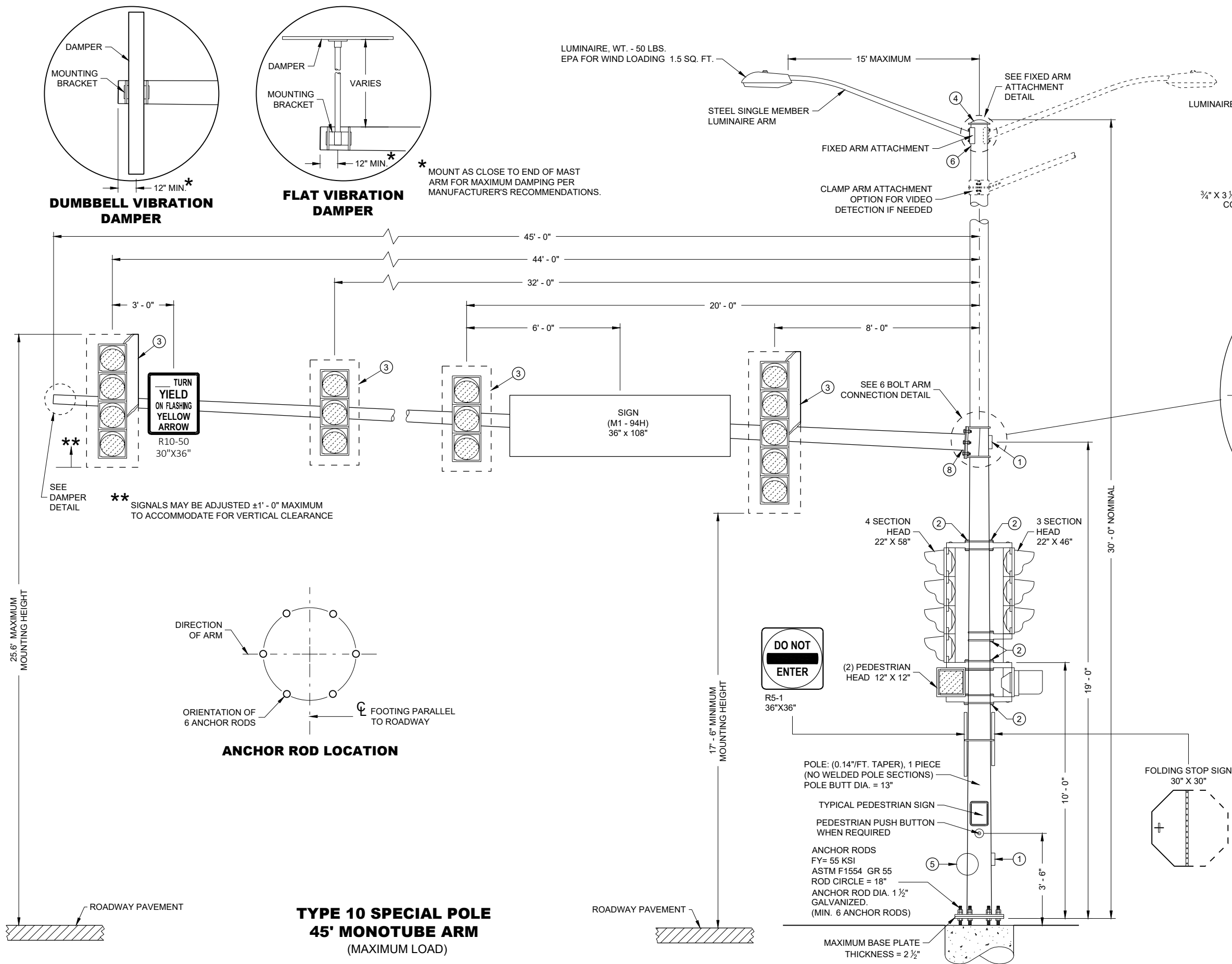
FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/2" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

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

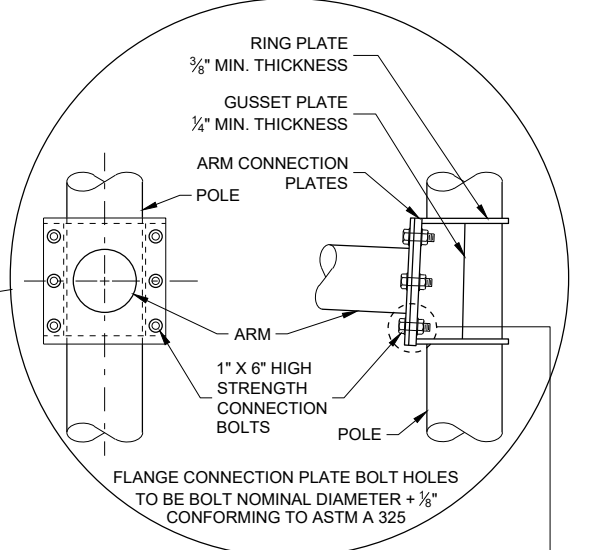
**SINGLE**
(OFFSET - SERRATED MOUNTING)**DOUBLE**
(SERRATED MOUNTING)
SLIPFITTERS**TRAFFIC SIGNAL STANDARD
PEDESTRIAN AND FLASHER
TYPICAL MOUNTING DETAILS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

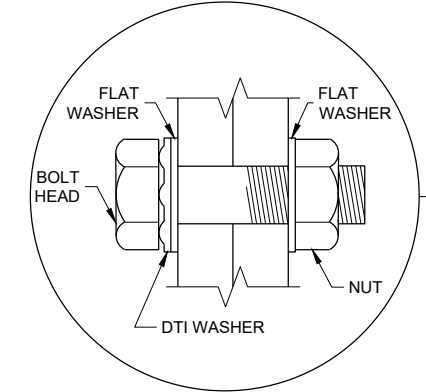
APPROVED
November 2018 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL ENGI 114
FHWA



FIXED ARM ATTACHMENT DETAIL



6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 10 SPECIAL POLE 45' MONTUBE ARM	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED August 2020 DATE	/S/ Ahmet Demirelek STATE ELECTRICAL ENGI 116
FHWA	

GENERAL NOTES

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

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15 FOOT TO 30 FOOT.

POLE TYPES 9 SPECIAL AND 10 SPECIAL ARE FOR ARM LENGTHS 35 FOOT, 40 FOOT, AND 45 FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35 FOOT TO 55 FOOT.

MONOTUBE POLES AND ARMS SHALL BE GALVANIZED STEEL.

RING STIFFENED BUILT UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3% ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATION SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNAL 2015 1ST EDITION (INCLUDING INTERIM REVISIONS)" AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR THE LIGHTING STRUCTURES AS FOLLOWS:

CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.

CATEGORY II FATIGUE LOADS OF TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 SPECIAL AND TYPE 10 SPECIAL STRUCTURES. IN LIEU OF DESIGNING FOR GALLOPING, A VIBRATION DAMPER MITIGATION DEVICE IS REQUIRED TO BE SUPPLIED AND INSTALLED AT THE END OF THE MAST ARM.

CATEGORY II FATIGUE FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE12 AND TYPE 13 STRUCTURES.

115 MPH (700 YEAR MRI BASIC WIND SPEED).

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" STAINLESS STEEL BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR A S DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEAD AT SAME ELEVATION.

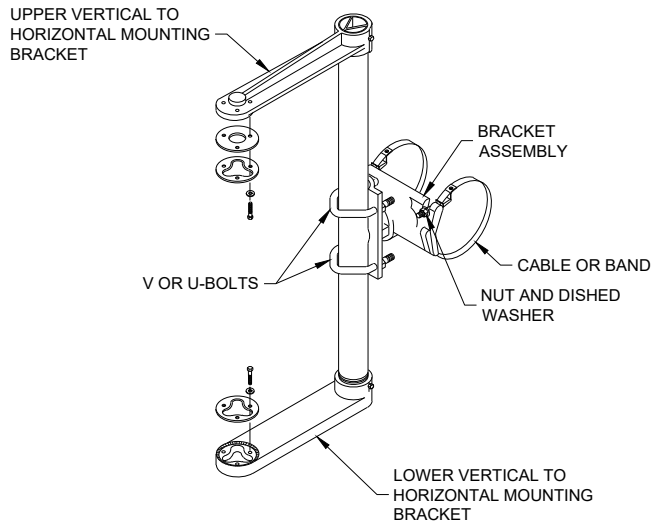
SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

- ① DESIGN FOR MAXIMUM ALLOWABLE HAND HOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.
- ② SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING (SEE SPECIFICATION SECTION 658).
- ③ SECURELY MOUNT BACK PLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.
- ④ THE TOP OF THE POLE SHAFT AND THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.
- ⑤ FACTORY WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HAND HOLD, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.
- ⑥ FACTORY WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.
- ⑦ INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

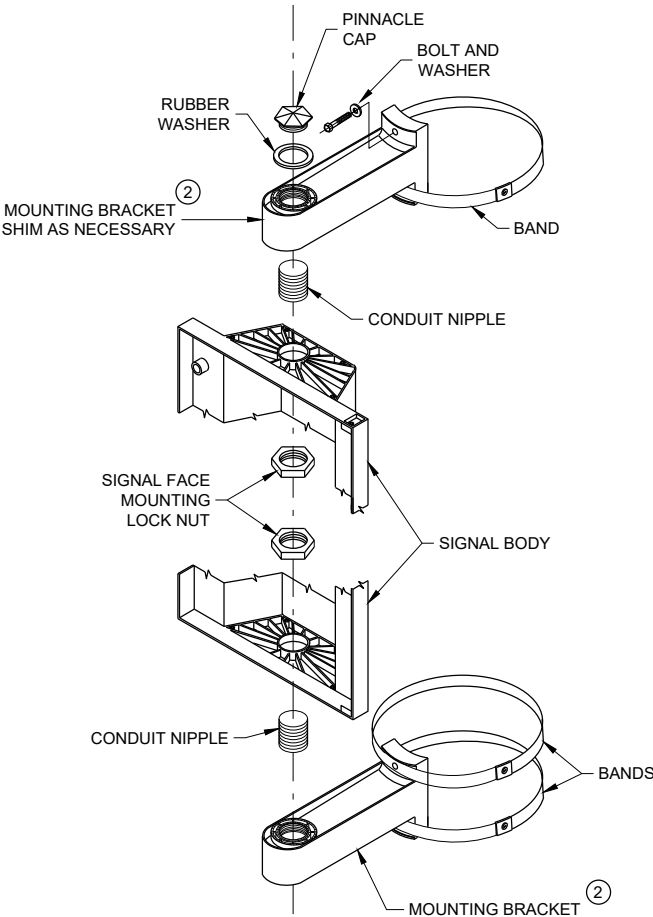
STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

MOUNTING HEIGHT SHALL BE 6' - 0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

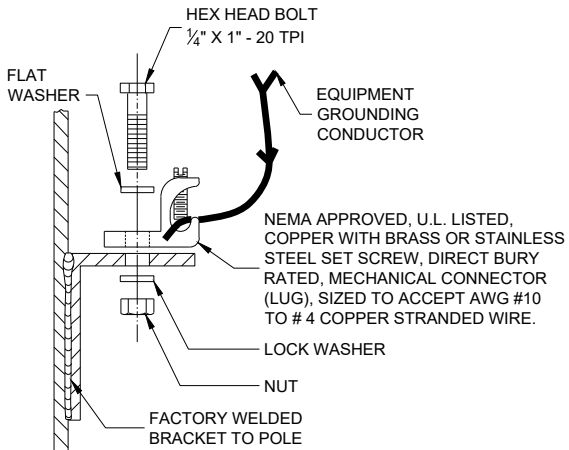
- ⑧ FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.



SIGNAL FACE MOUNTING BRACKET
DETAIL FOR MONOTUBE ARM
(MOUNT PER MANUFACTURER'S RECOMMENDATION)

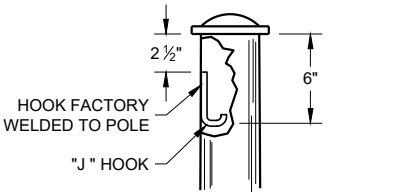


SIGNAL FACE VERTICAL
MOUNTING DETAIL

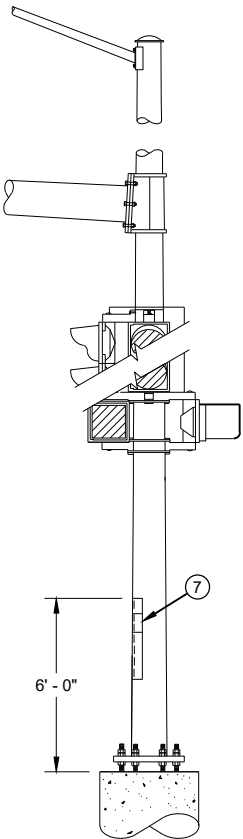


TYPICAL GROUNDING
CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



TYPICAL "J" HOOK
WIRE SUPPORT



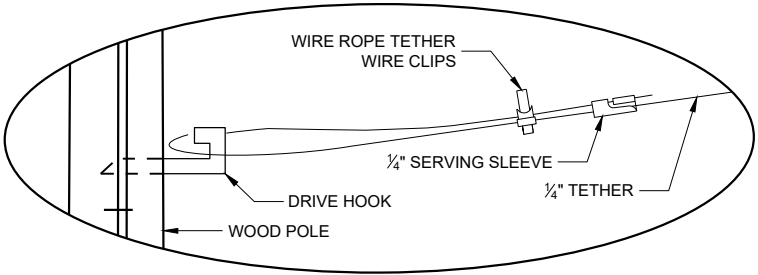
STRUCTURAL IDENTIFICATION
PLAQUE PLACEMENT

GENERAL NOTES AND
HARDWARE FOR TYPES 9,10,
9/10 SPECIAL, 12 AND 13
POLES WITH MONOTUBE ARMS

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August 2020 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL ENGINEER 117
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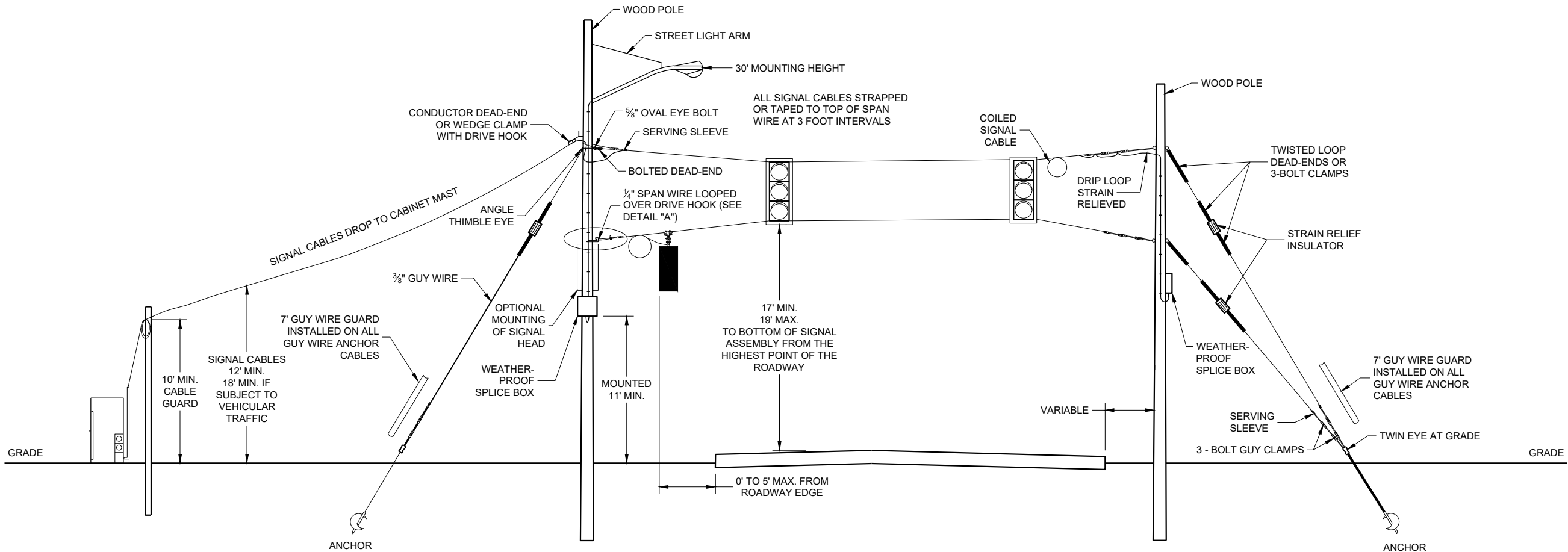
MINIMUM POLE LENGTHS	POLE BURIAL DEPTHS
25'	5'
30'	6'
35'	7'
40'	8'
45'	9'



DETAIL "A"

GENERAL NOTES

- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.
- WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.
 - SIGNAL FACES:
 - ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
 - EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
 - EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
 - NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
 - SPAN WIRE:
 - EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED
 - SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
 - THE SIGNAL ASSEMBLY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.



SPAN WIRE
TEMPORARY SIGNALS

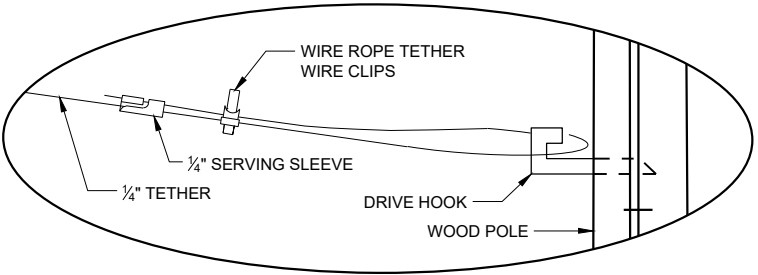
SPAN WIRE TEMPORARY
TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
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DATE STATE ELECTRICAL ENGI 118

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MINIMUM POLE LENGTHS	CLASS	POLE BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

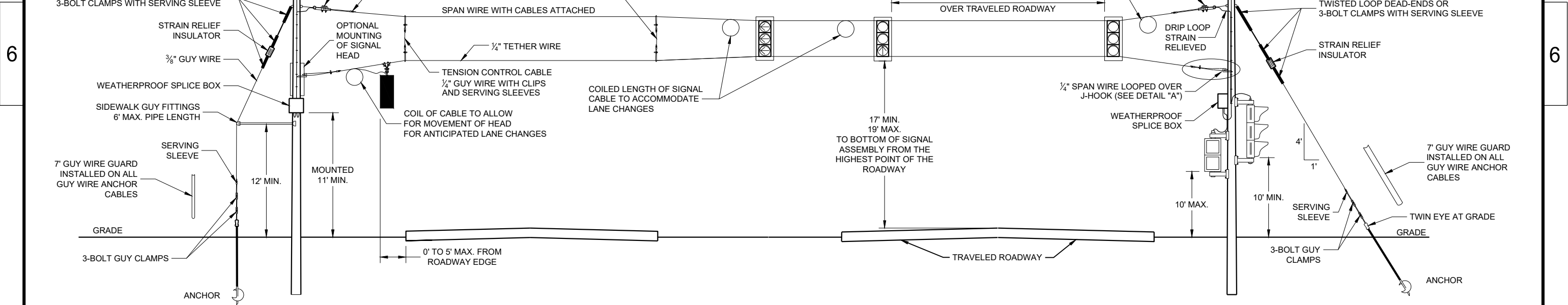


DETAIL "A"

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 - FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.
- SPAN WIRE:
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 - THE SIGNAL ASSEMBLY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.



SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

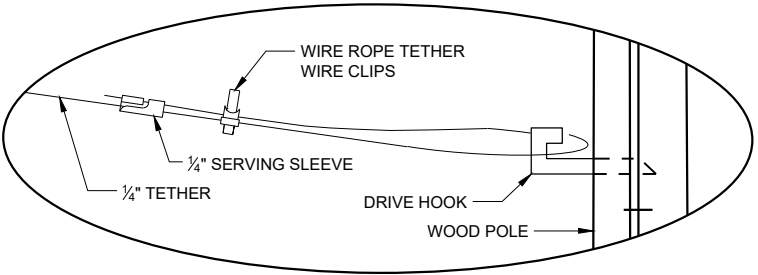
SPAN WIRE TEMPORARY
TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015 /S/ Ahmet Demerbilek
DATE STATE ELECTRICAL ENGI 119

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MINIMUM POLE LENGTHS	CLASS	POLE BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

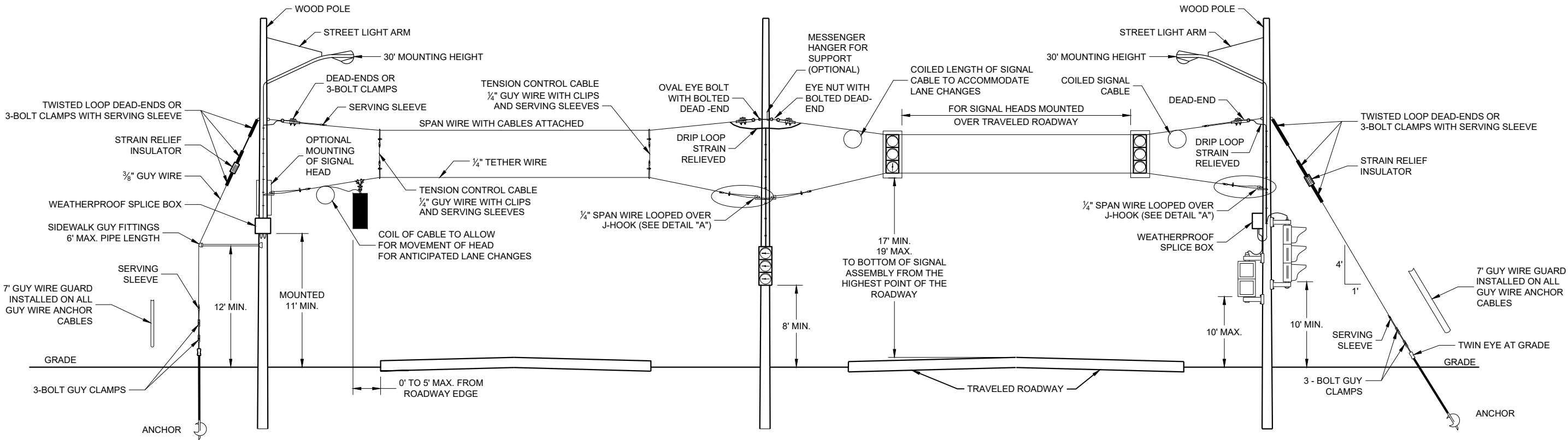


DETAIL "A"

GENERAL NOTES

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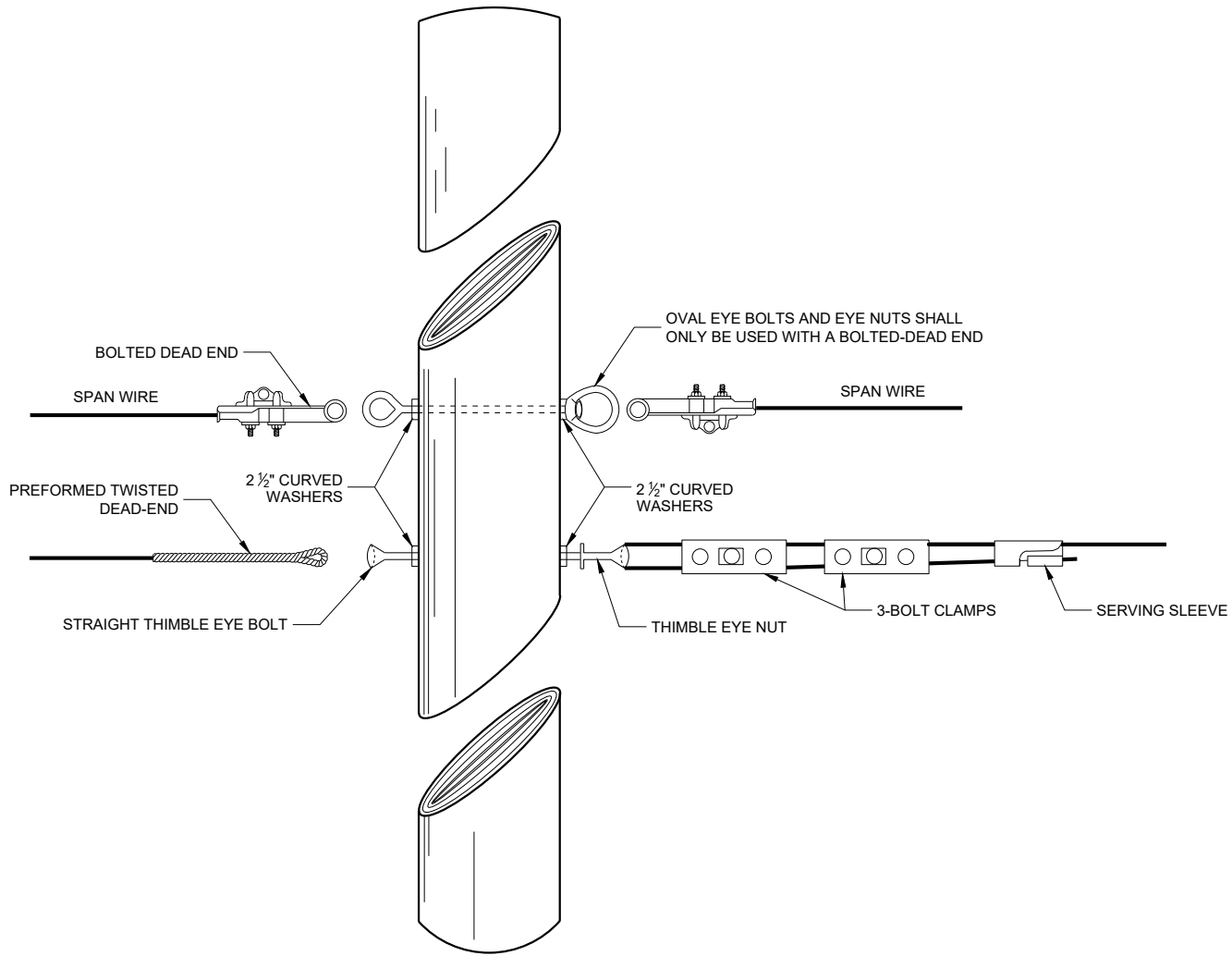
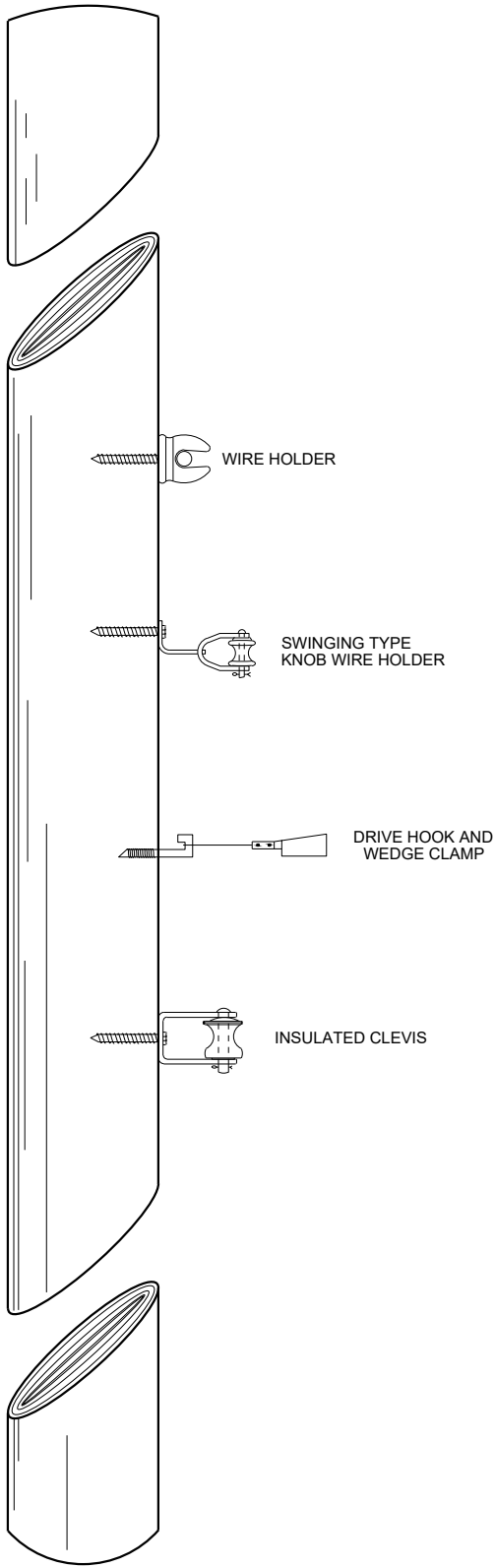
SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

SPAN WIRE TEMPORARY
TRAFFIC SIGNAL

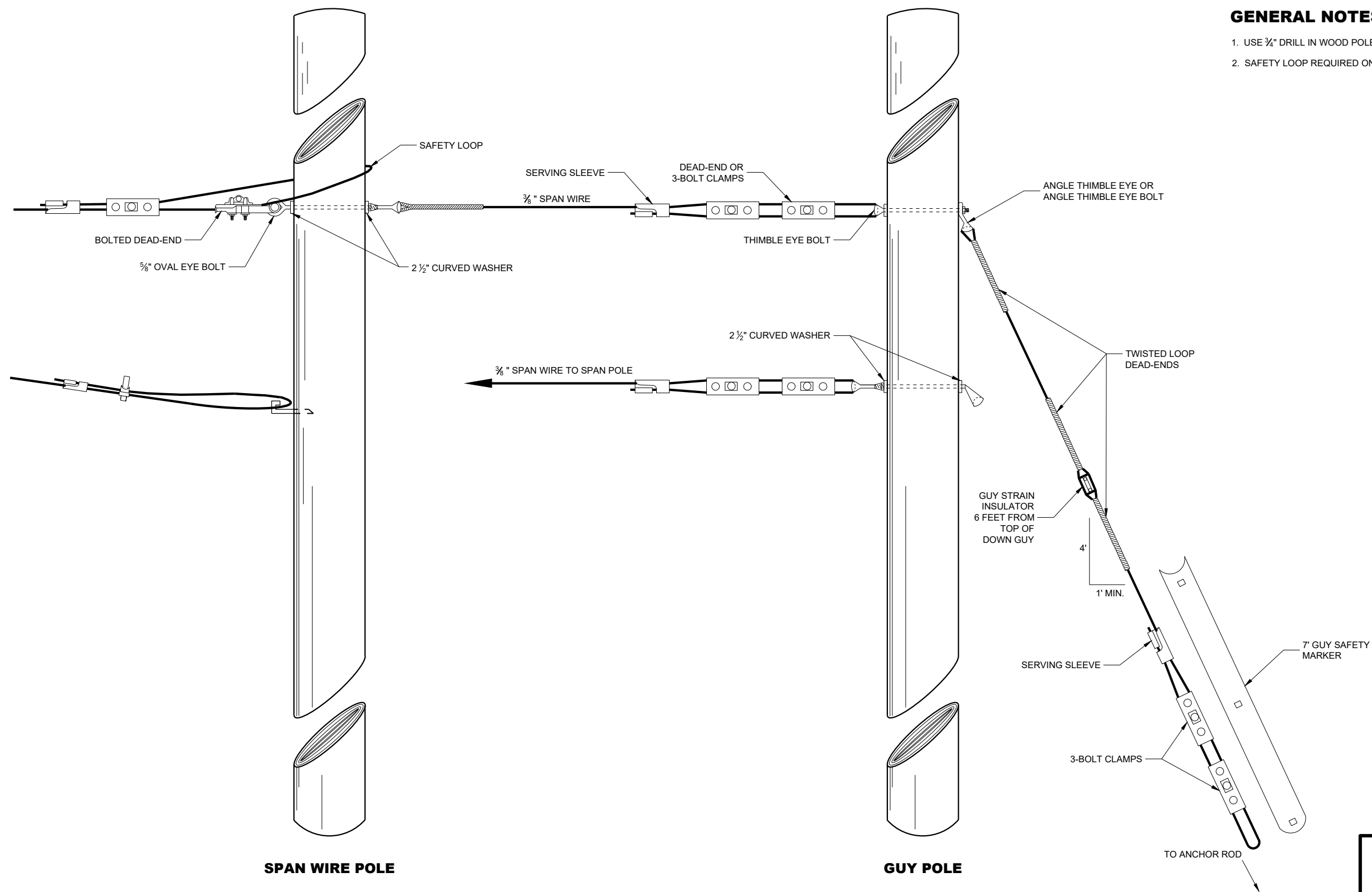
STATE OF WISCONSIN
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June 2015 /S/ Ahmet Demerbilek
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SPAN WIRE TEMPORARY TRAFFIC SIGNAL		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
APPROVED June 2015 DATE	/S/ Ahmet Demerbilek ROADWAY STANDARDS DEVELOPMENT ENGINEER	121
FHWA		

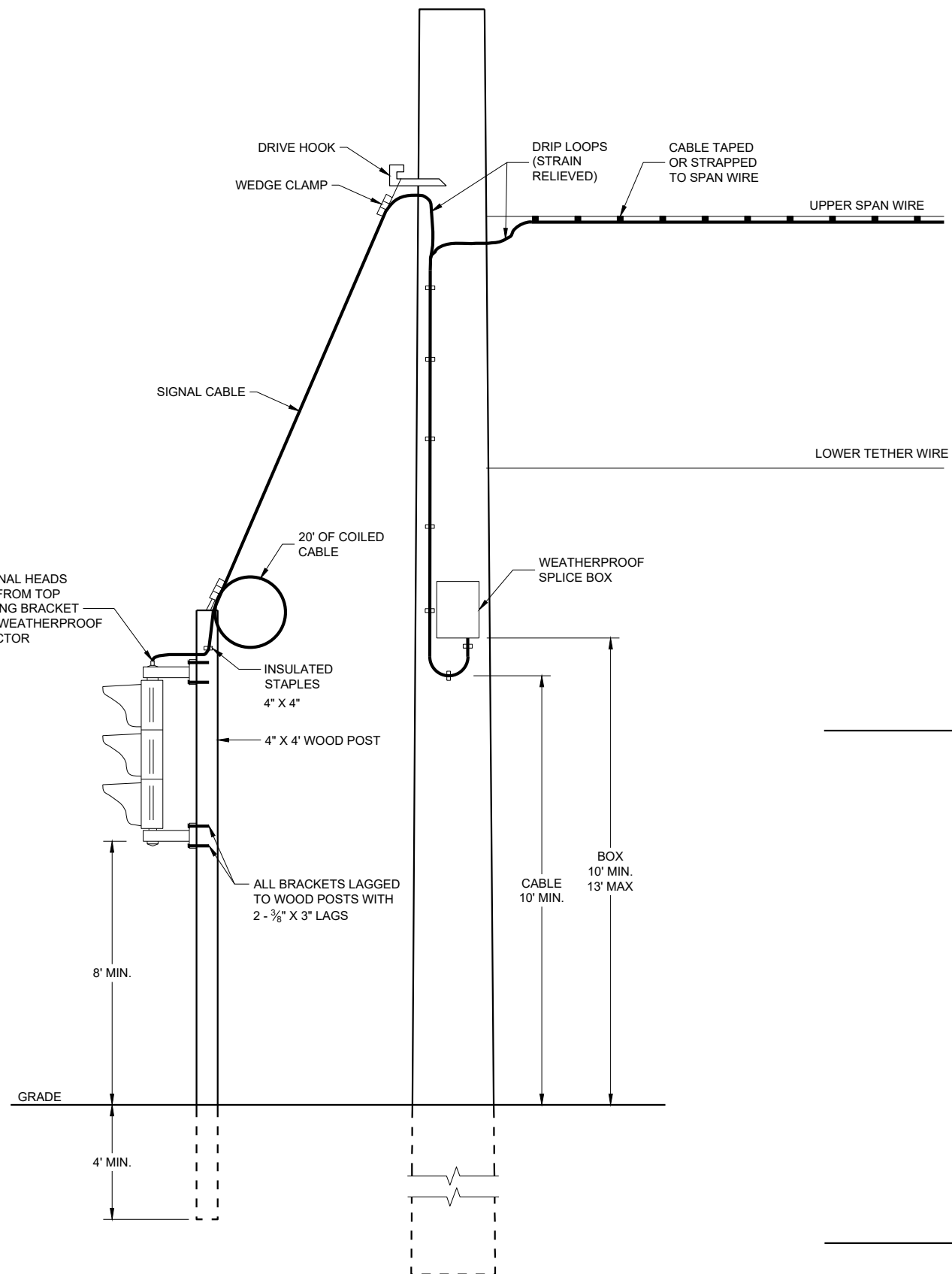


TYPICAL DEAD-ENDINGS OR GUYING

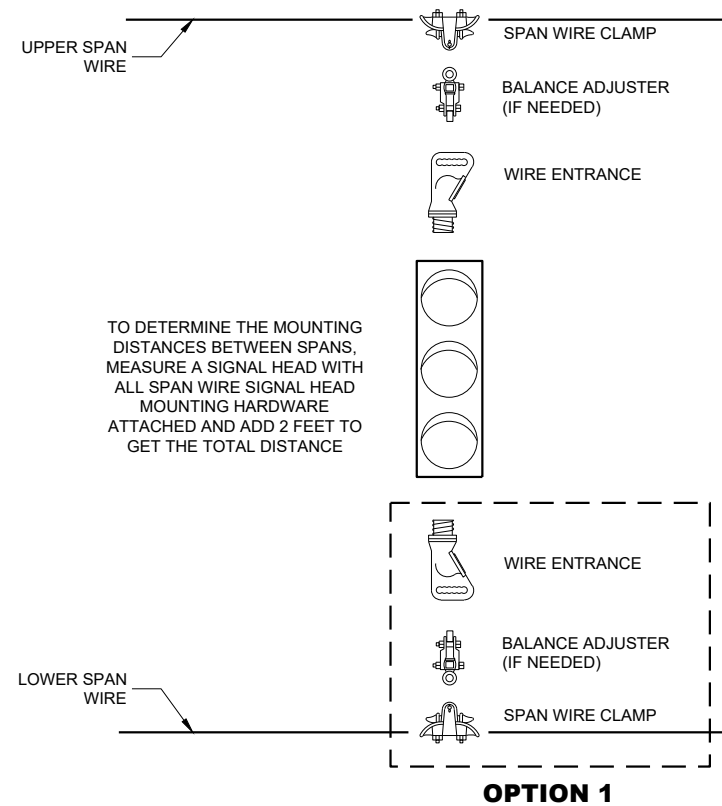
GENERAL NOTES

1. USE 3/4" DRILL IN WOOD POLE TO PROVIDE FOR 5/8" BOLTS.
2. SAFETY LOOP REQUIRED ON EACH END OF ALL SPAN WIRES.

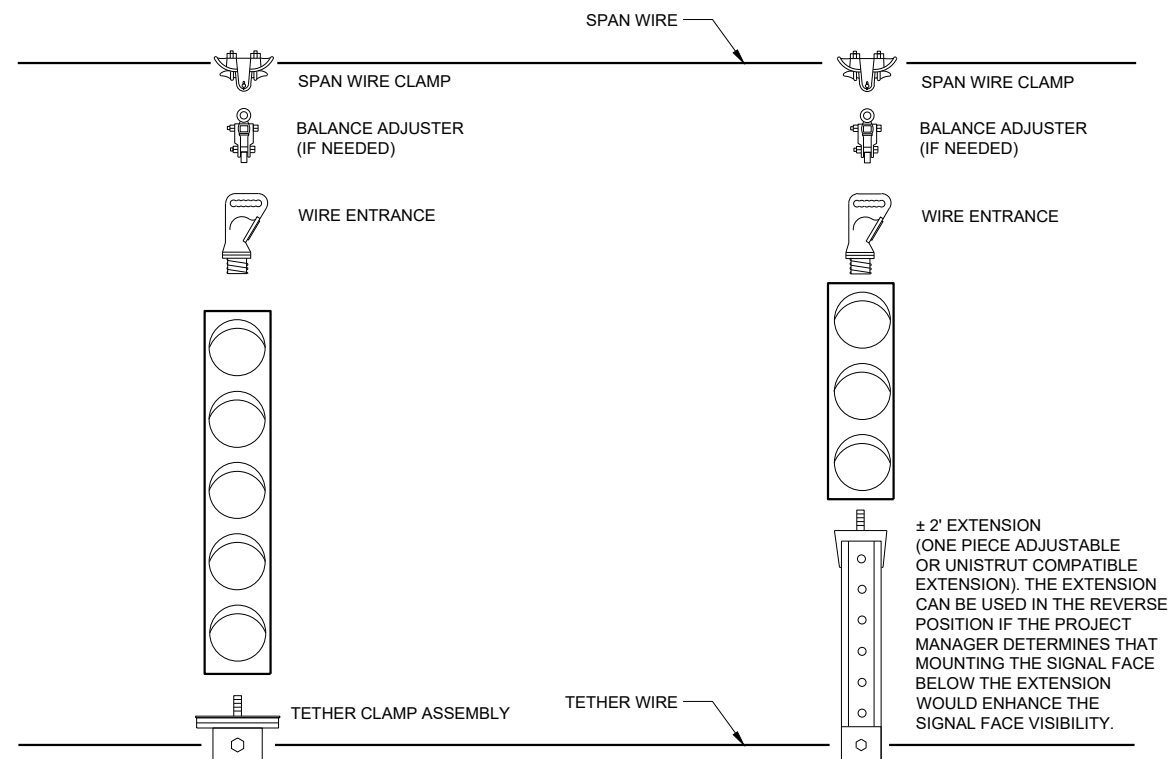
SPAN WIRE TEMPORARY TRAFFIC SIGNAL	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2015 DATE	/S/ Ahmet Demerbilek ROADWAY STANDARDS DEVELOPMENT ENGINEER 122
FHWA	



TYPICAL DROP TO TEMPORARY MOVEABLE SIGNAL



TYPICAL SPAN WIRE MOUNTING HARDWARE

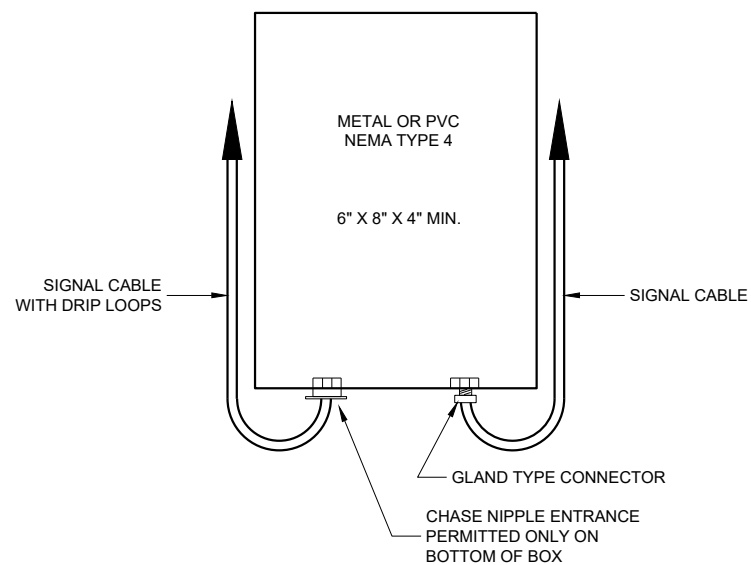
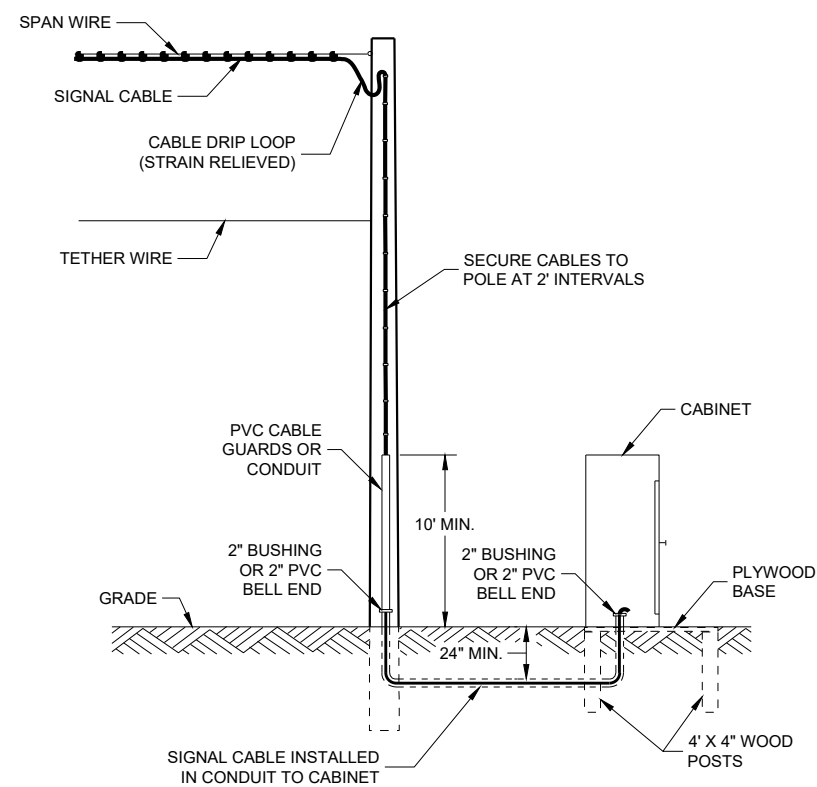
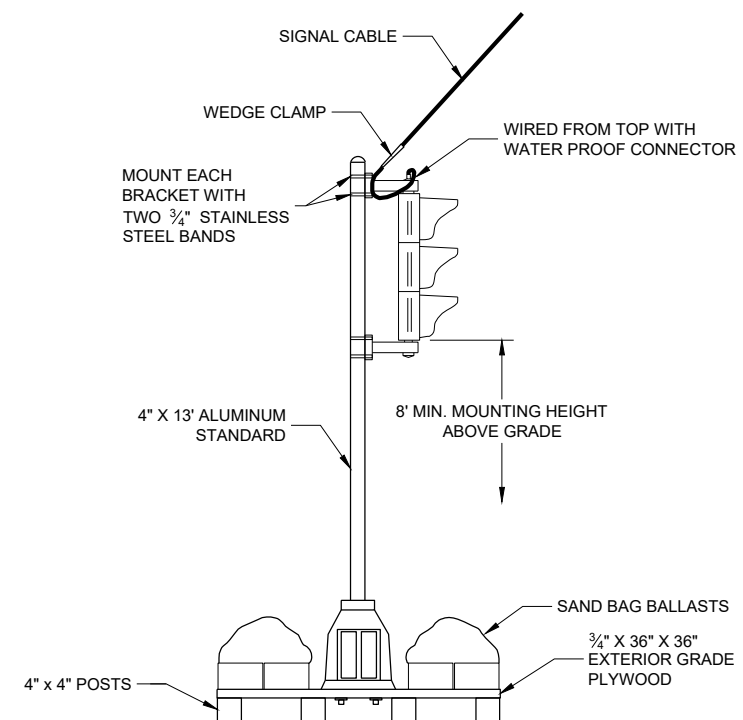
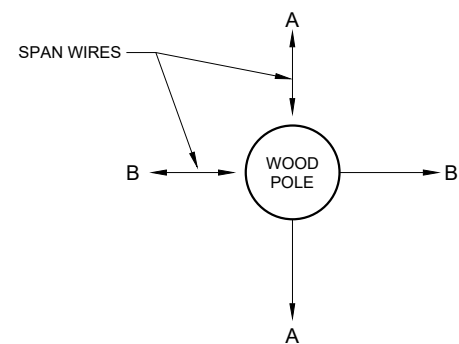


5 SECTION VERTICAL WITH 3 SECTION VERTICAL ON ONE SPAN WIRE

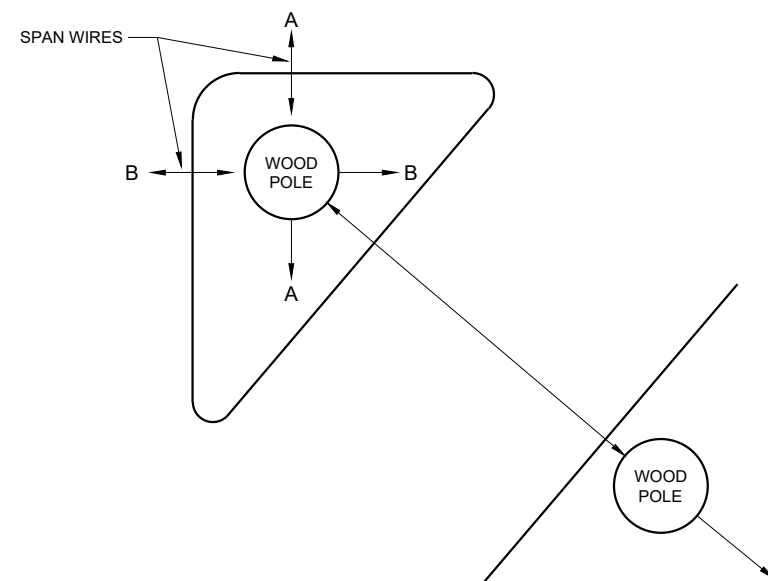
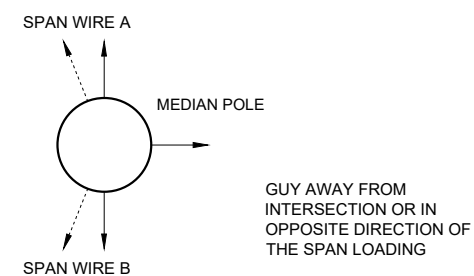
SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATIONAPPROVED
June 2015 /S/ Ahmet Demerbilek
DATE ROADWAY STANDARDS DEVELOPMENT ENGINEER 123

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**SPLICE BOX****TYPICAL SKID TYPE TEMPORARY**

ALL DOWN OR SIDEWALK GUYS SHALL BE INSTALLED IN THE OPPOSITE DIRECTION OF THE STRAIN OF THE SPAN WIRE

CORNER POLES**ISLAND POLES****MEDIAN POLES**

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

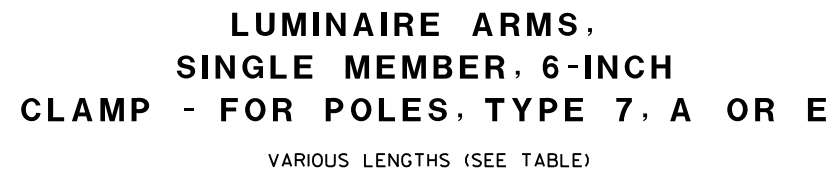
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015
DATE

/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVELOPMENT ENGINEER

124

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SINGLE MEMBER CLAMP SHOWN

TYPE	DIM. A	DIM. B
	NOMINAL ARM LENGTH (F T)	APPROX. RISE (F T)
SINGLE MEMBER	4.0	2.0
SINGLE MEMBER	8.0	3.0
SINGLE MEMBER	10.0	3.0
SINGLE MEMBER	15.0	3.0

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

ARMS AND CLAMP EXTRUSIONS SHALL BE CONSTRUCTED OF NATURAL FINISH 6063-T6 ALUMINUM.

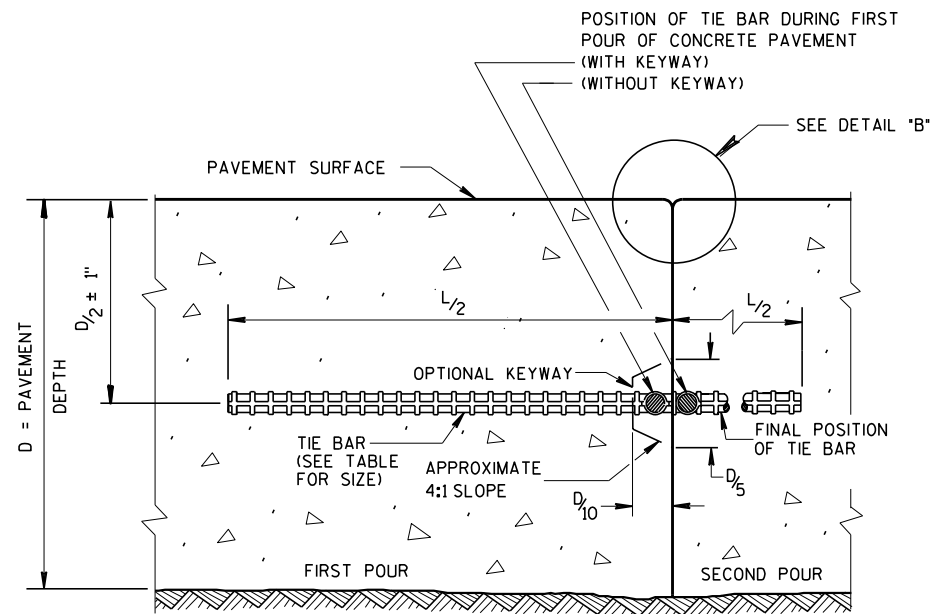
HEAT TREATMENT OF WELDS IN STRUCTURAL AREAS IS REQUIRED.

ALL THREADED FASTENER COMPONENTS SHALL BE STAINLESS STEEL. NUTS SHALL BE HEX NUTS. BOLTS SHALL BE HEX HEAD. ALL THREADED SURFACES SHALL BE COATED WITH ANTI-SEIZE COMPOUND PRIOR TO INSTALLATION.

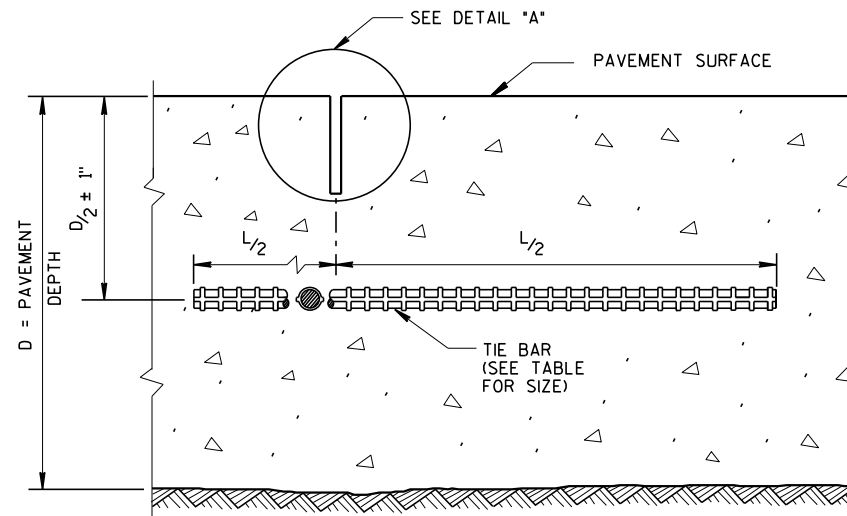
LUMINAIRE LOADING FOR DESIGN CALCULATION SHALL BE 50 LBS. IN WEIGHT AND 1.5 SQ. FT. FOR E.P.A..

- ① CLAMPS SHALL BE EXTRUDED ALUMINUM.
- ② RACE WAY: $1\frac{3}{8}$ " FIELD DRILLED HOLE WITH 1" CHASE NIPPLE AND NUT (OR NEOPRENE GROMMET) PER EACH REQUIRED LUMINAIRE ARM. PROVIDE $1\frac{1}{2}$ " HOLE IN CLAMP EXTRUSION TO CONTINUE RACEWAY.
- ③ STIFFENER
- ④ GUSSETS REQUIRED.
- ⑤ CLAMP BOLT ASSEMBLY (BOLT - $\frac{1}{2}$ "-13 UNC, 2 EACH - FLAT WASHER, LOCK WASHER, NUT) - 4 EACH PER CLAMP.

LUMINAIRE ARMS, SINGLE MEMBER 6-INCH CLAMP	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED <u>Sept. 2014</u> DATE	<u>/S/ Ahmet Demirbilek</u> STATE ELECTRICAL 125
FHWA	



CONSTRUCTION JOINT



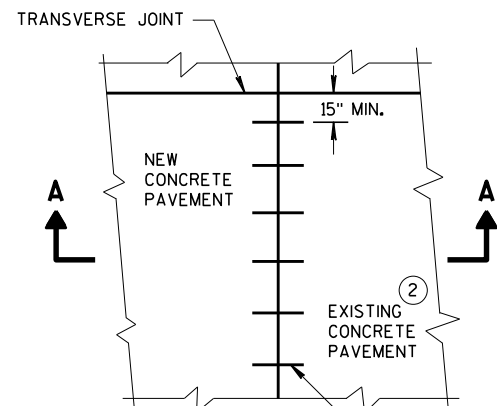
SAWED JOINT

GENERAL NOTES

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

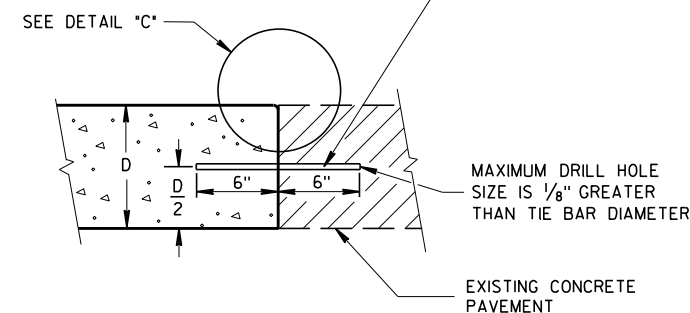
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

- ① ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.
- ② PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

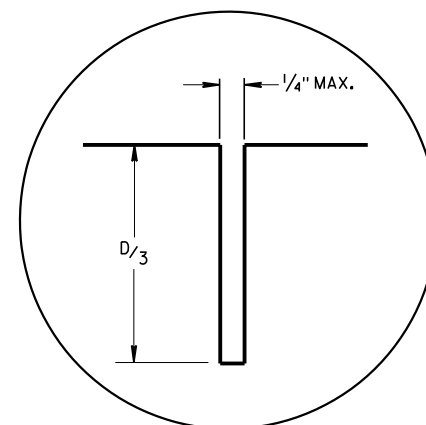


PLAN VIEW

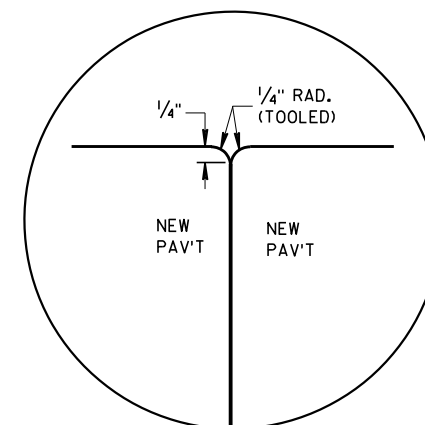
NO. 6 TIE BARS SPACED 30" C-C, INSTALLED PERPENDICULAR TO THE LONGITUDINAL JOINT. ①



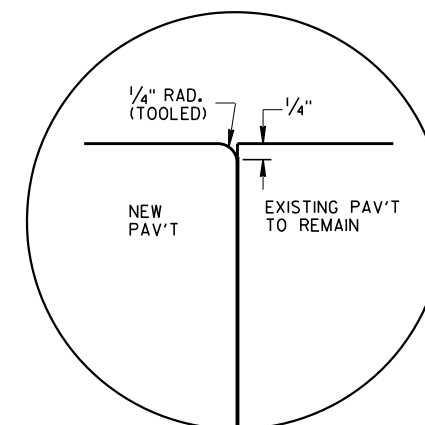
SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT
TIE BARS ANCHORED
INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



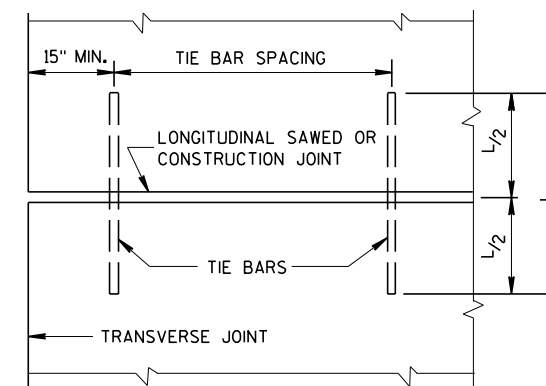
DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

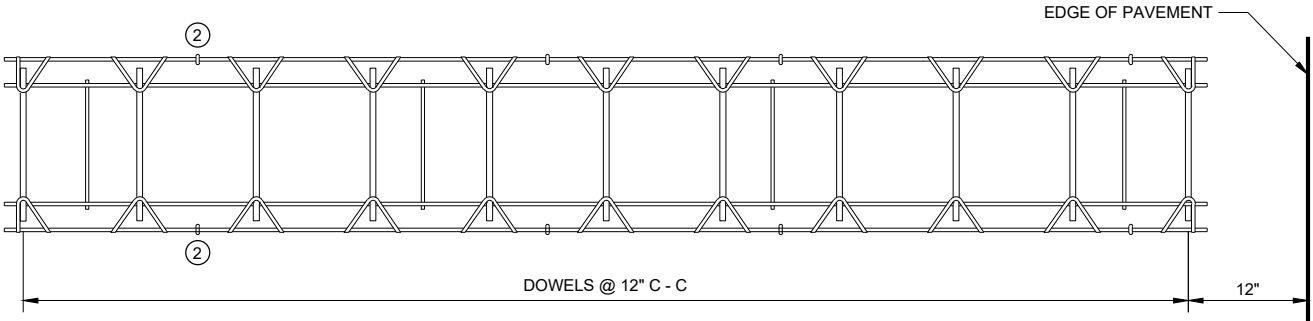


PLAN VIEW
SHOWING LOCATION OF TIE BARS

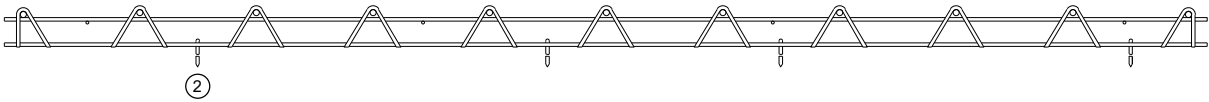
CONCRETE PAVEMENT
LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 /S/ Peter Kern
DATE PAVEMENT SUPE 126
FHWA

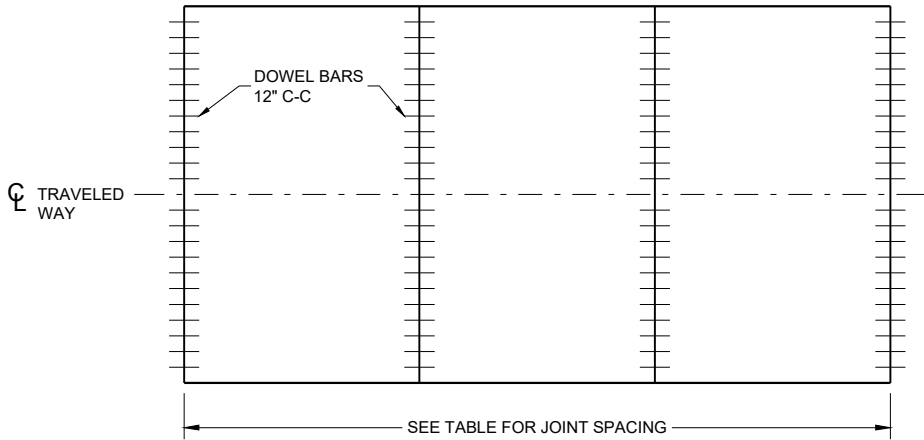


PLAN VIEW

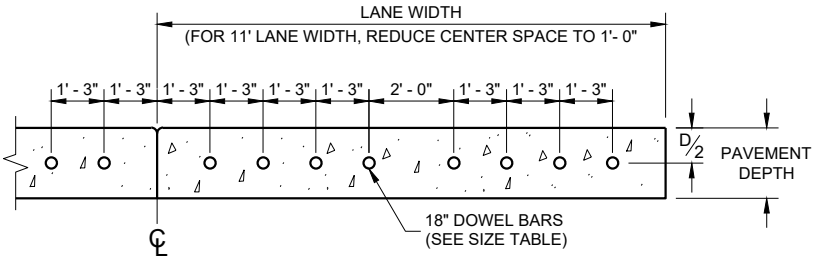


SIDE VIEW

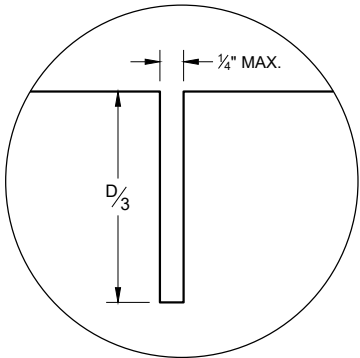
CONTRACTION JOINT DOWEL ASSEMBLY 1



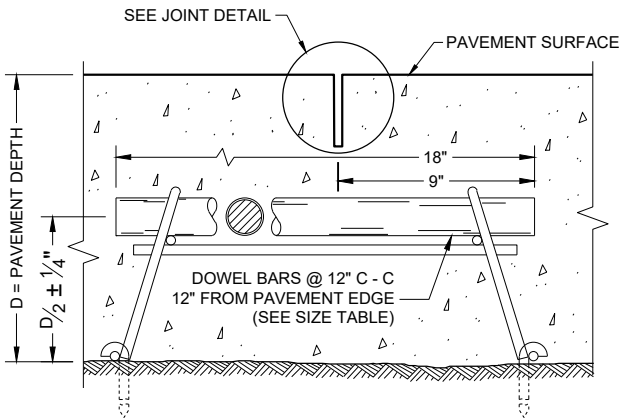
CONTRACTION JOINT LOCATIONS



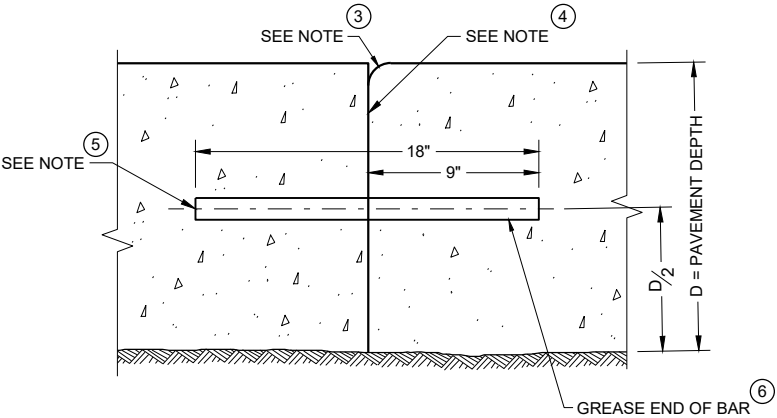
DRILLED DOWEL BAR CONSTRUCTION JOINT 7



JOINT DETAIL



DOWELED CONTRACTION JOINT



TRANSVERSE CONSTRUCTION JOINT

GENERAL NOTES

CONTRACTION JOINTS

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

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

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

CONSTRUCTION JOINTS

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

- 1 OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTION CONTRACTION JOINTS.
- 2 SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.
- 3 FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4" RADIUS AT FORMED JOINTS.
- 4 PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.
- 5 INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO THE "DRILLED DOWEL BAR CONSTRUCTION JOINT" DETAIL.
- 6 APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.
- 7 ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8" GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.

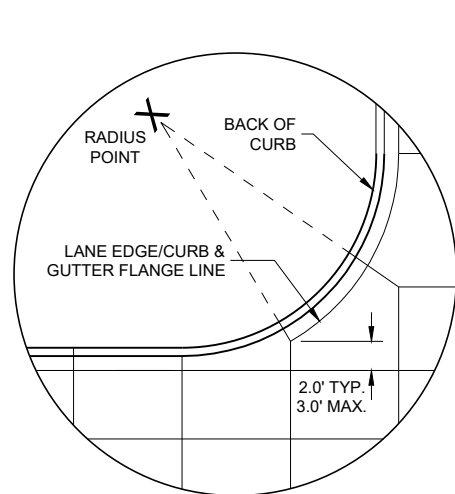
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
6", 6 1/2"	NONE	12'
7", 7 1/2"	1"	14'
8" & ABOVE	1 1/4"	15'

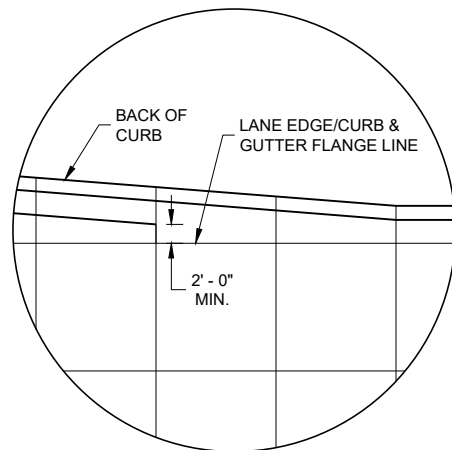
URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
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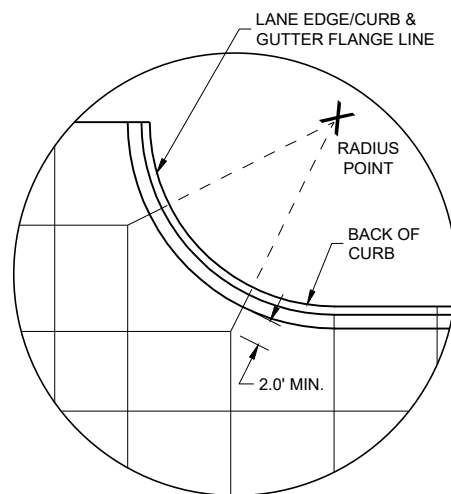
APPROVED
November 2022 /S/ Peter Kemp P.E.
DATE PAVEMENT SUPERVISOR 127
FHWA



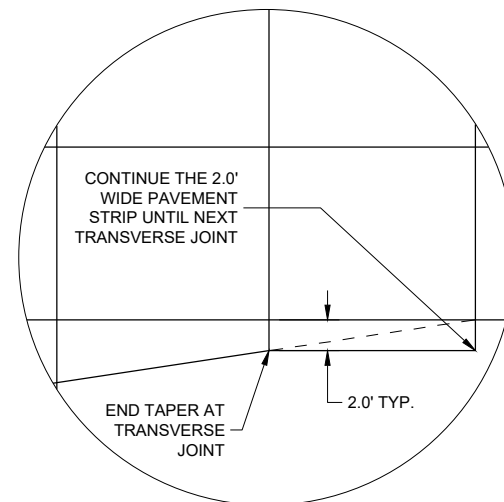
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

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

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

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

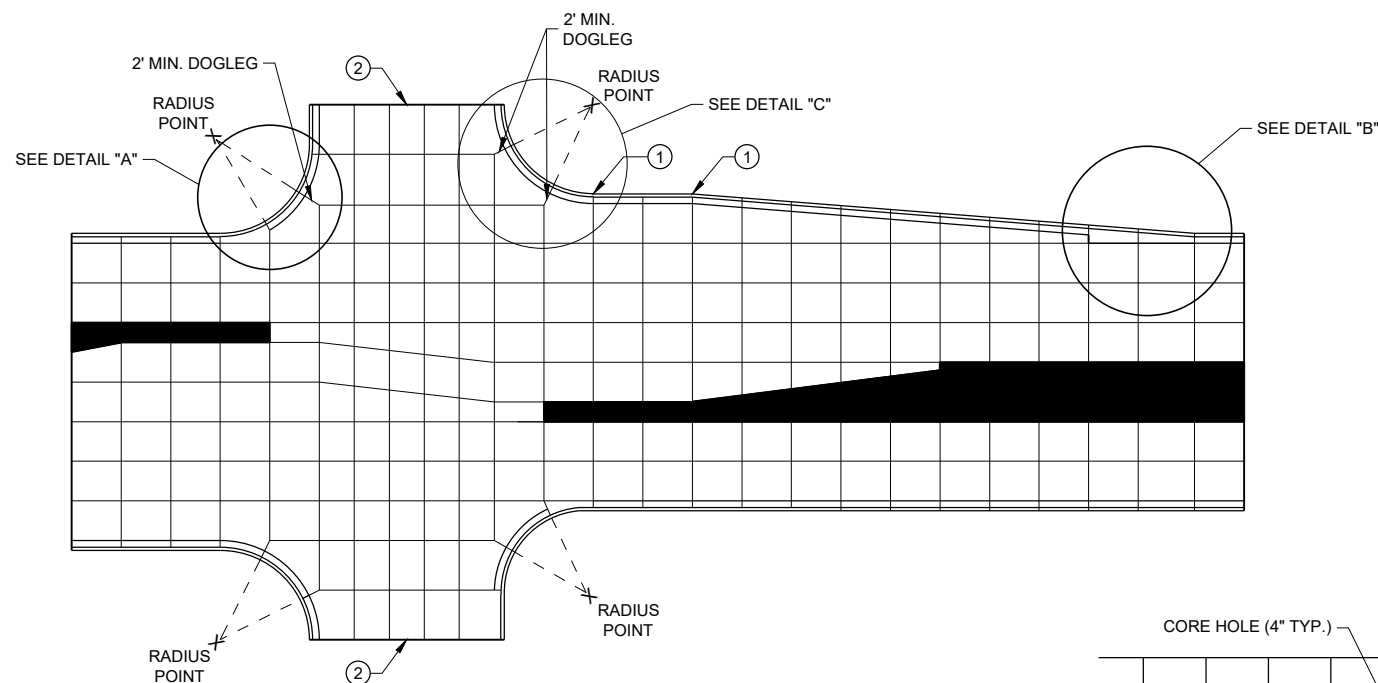
AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

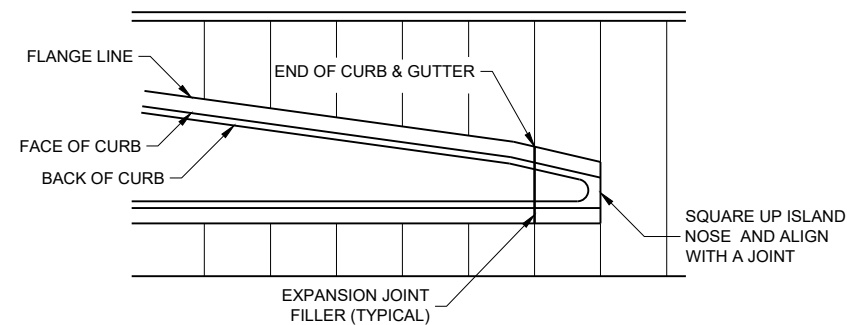
- ① PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
- ② CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
- ③ THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM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

PAVEMENT DEPTH AND JOINT SPACING TABLE

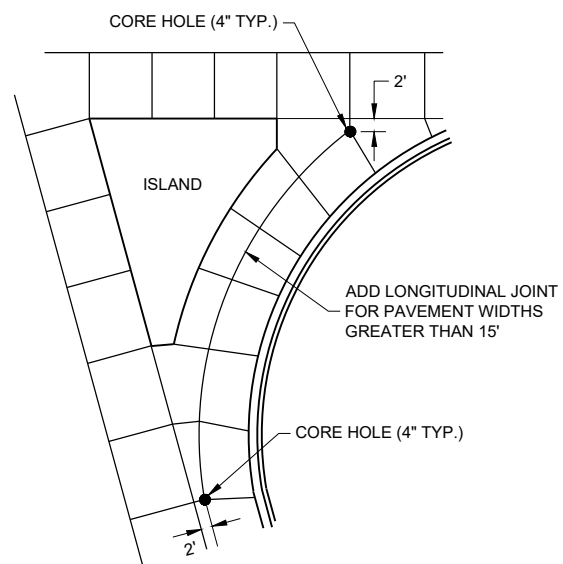
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



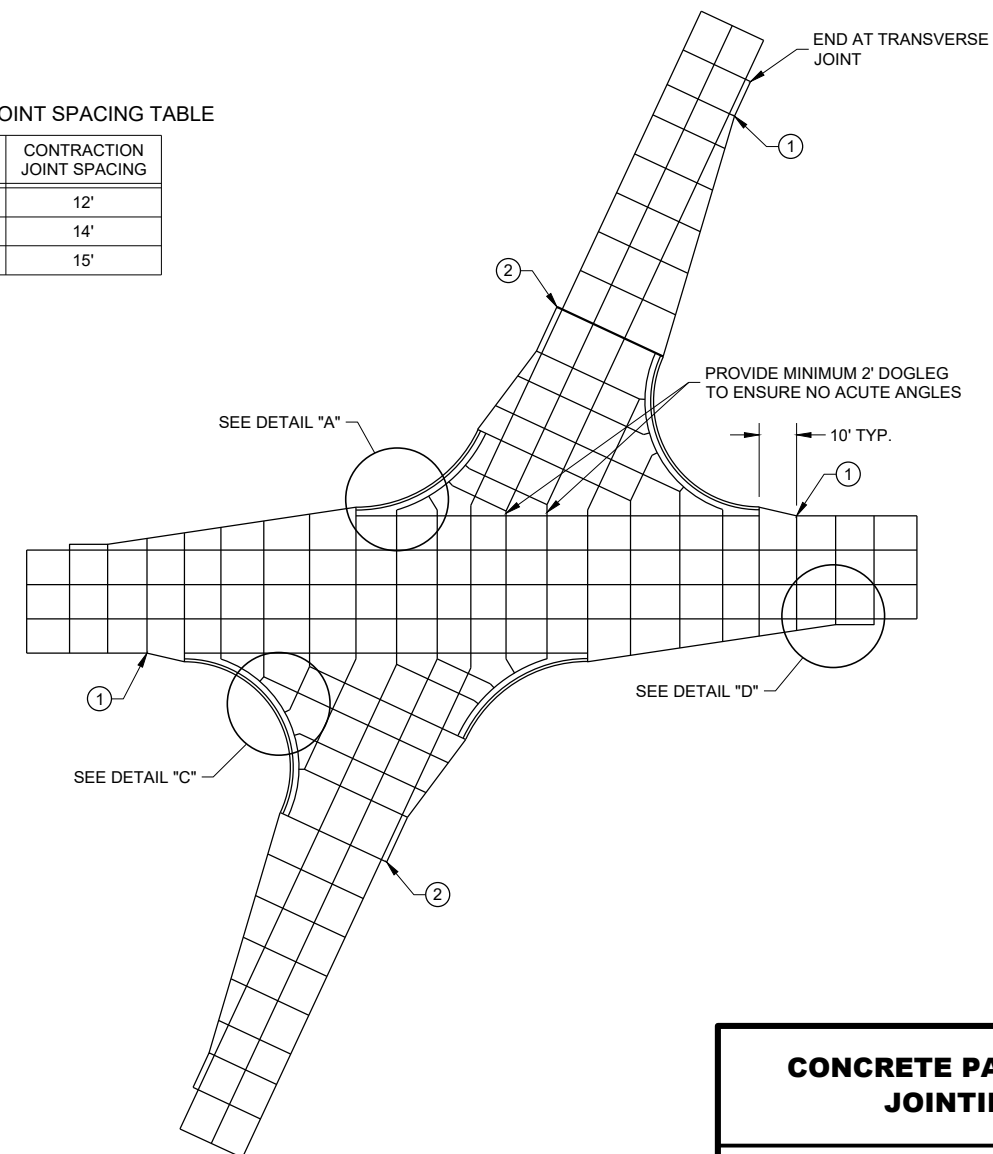
STANDARD INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN



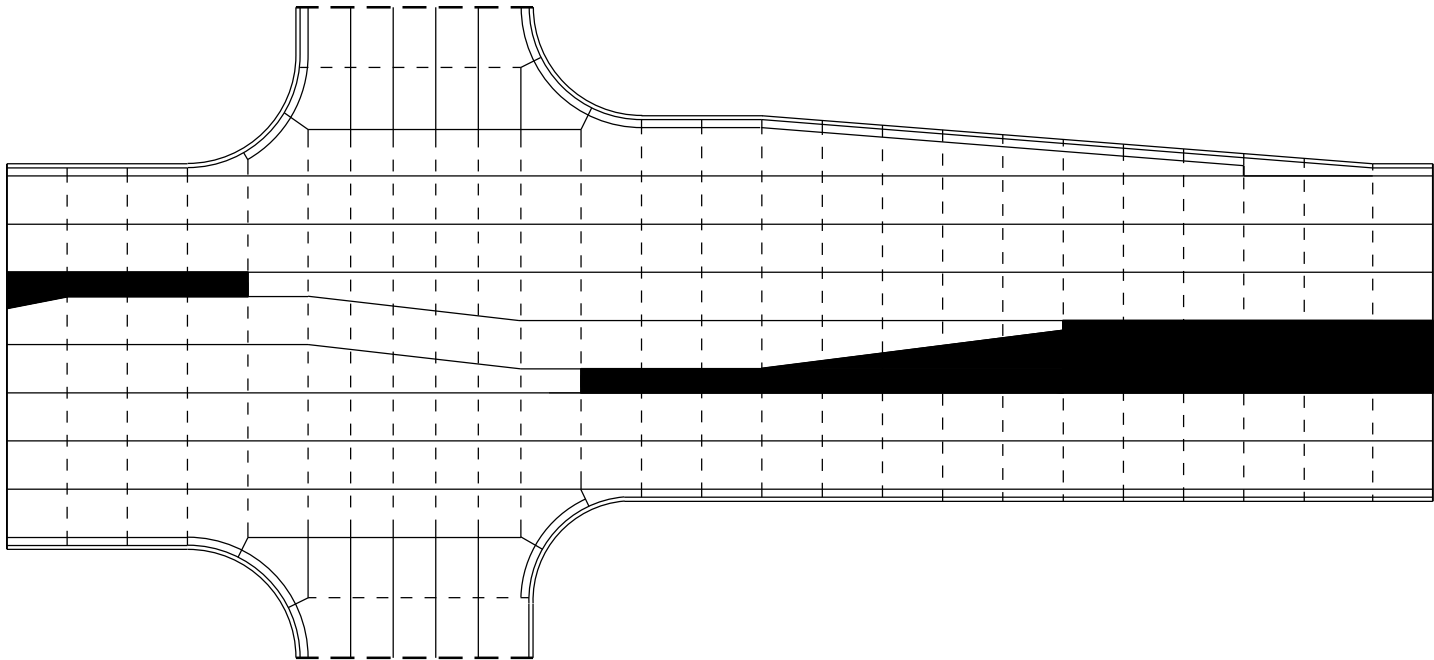
SKEWED INTERSECTION

CONCRETE PAVEMENT JOINTING

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LEGEND

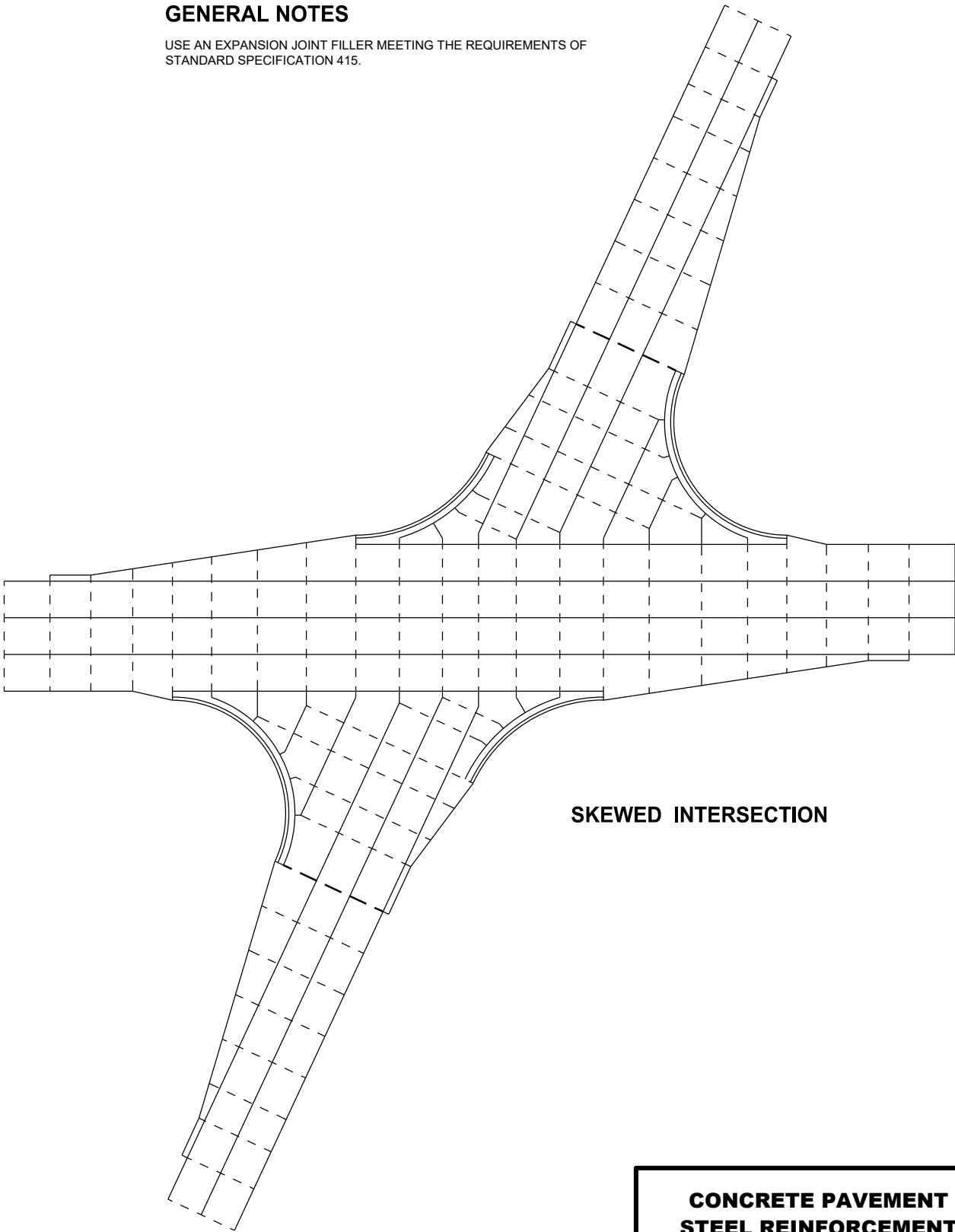
- POTENTIAL DOWELED EXPANSION JOINT
- DOWELED JOINT
- TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

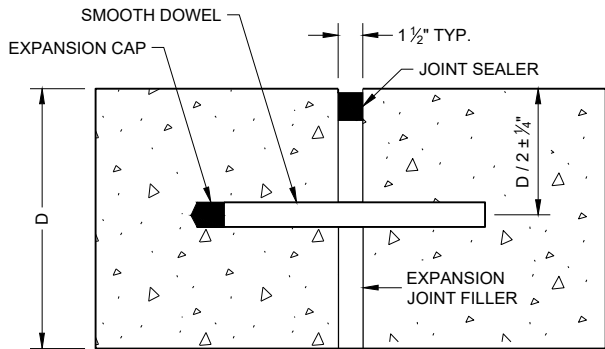
USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



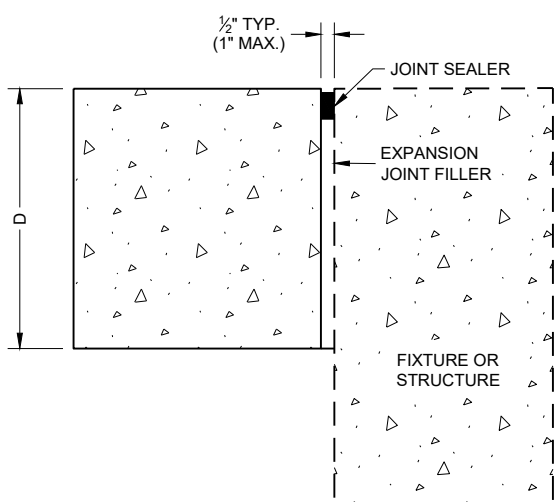
SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

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DEPARTMENT OF TRANSPORTATION 129

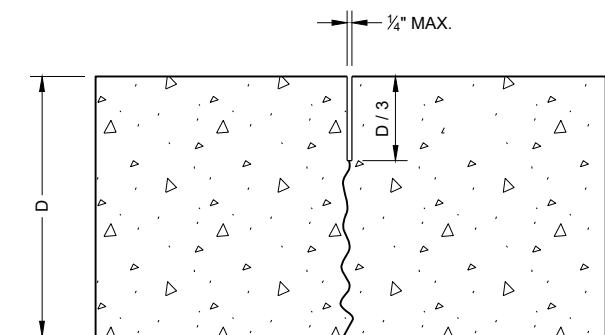


DOWELED TRANSVERSE ①

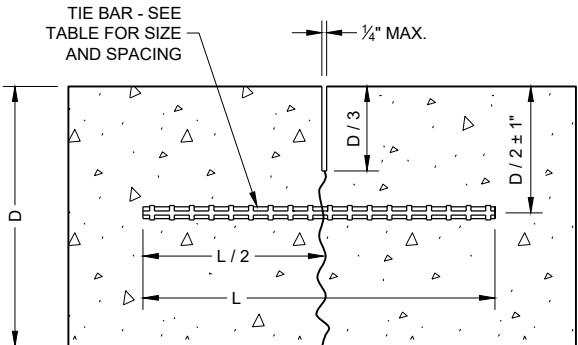


UNTIED - LONGITUDINAL

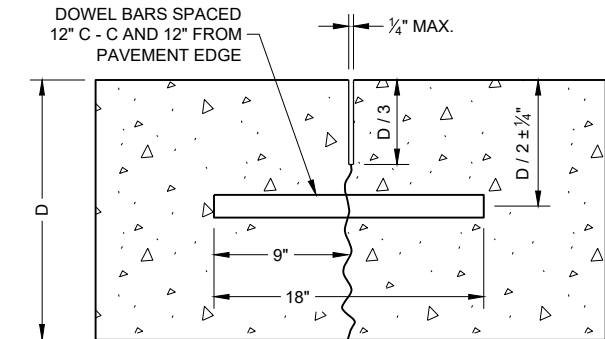
EXPANSION JOINTS



UNDOWELED TRANSVERSE



TIED LONGITUDINAL



DOWELED TRANSVERSE

CONTRACTION JOINTS ②

TIE BAR TABLE

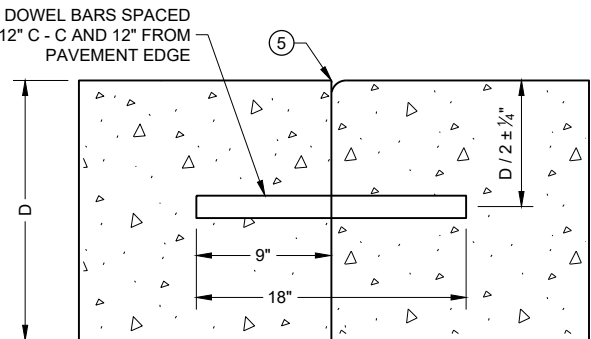
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

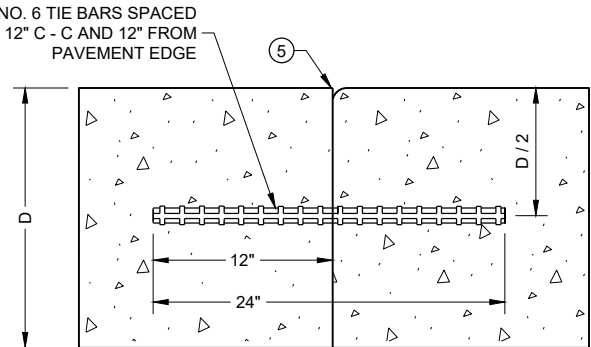
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

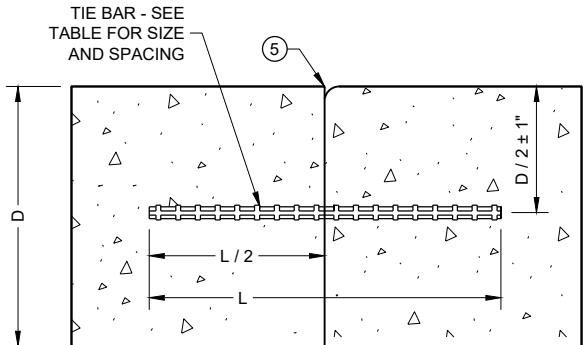
- ① USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
- ② SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
- ③ LOCATE CONSTRUCTION JOINTS A MINIMUM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



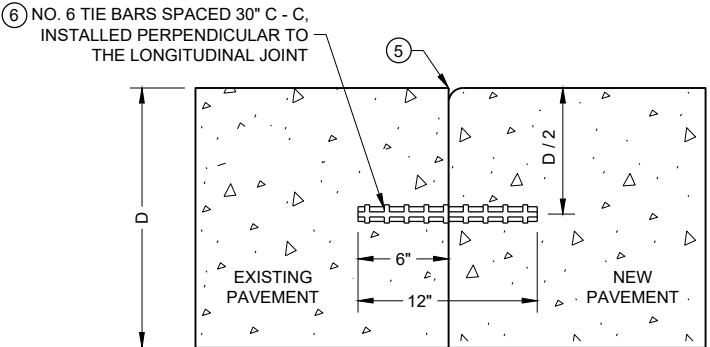
DOWELED TRANSVERSE ③



TIED TRANSVERSE ③
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL

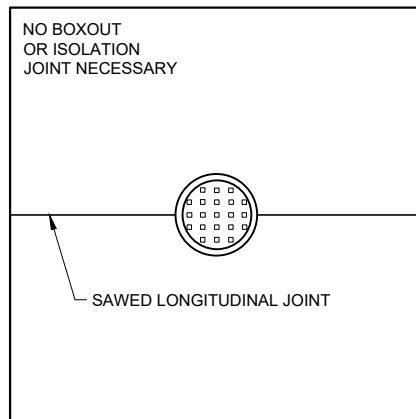


TIED LONGITUDINAL TO EXISTING

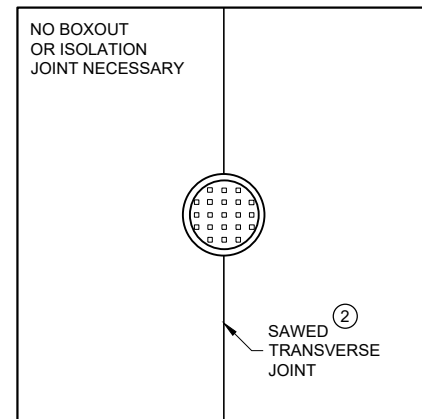
CONSTRUCTION JOINTS ④

**CONCRETE PAVEMENT
JOINT TYPES**

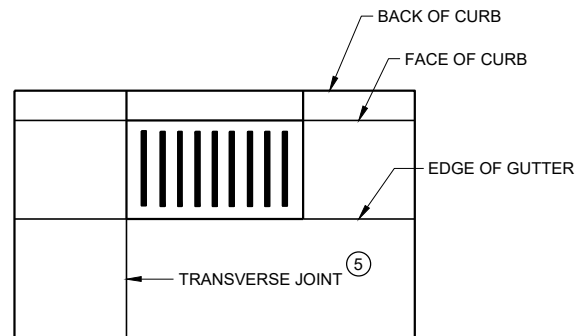
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**MANHOLE WITH
LONGITUDINAL JOINT**



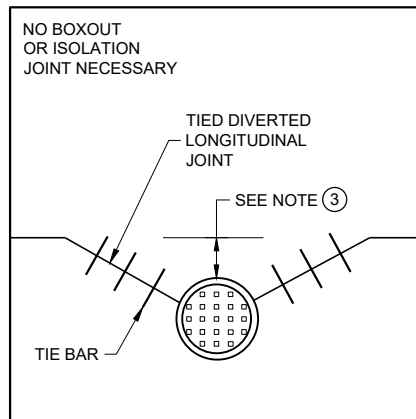
**MANHOLE WITH
TRANSVERSE JOINT**



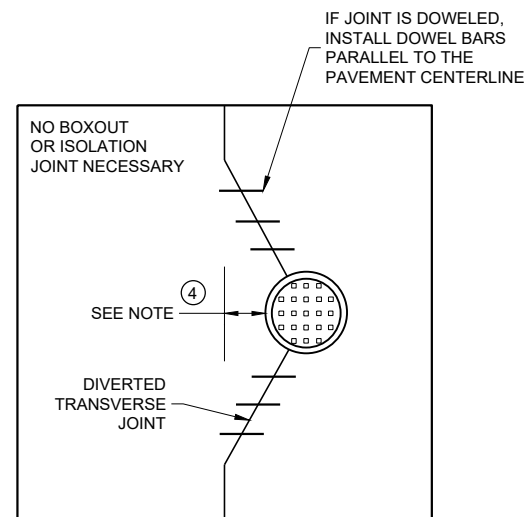
**INLET WITH
TRANSVERSE JOINT**

GENERAL NOTES

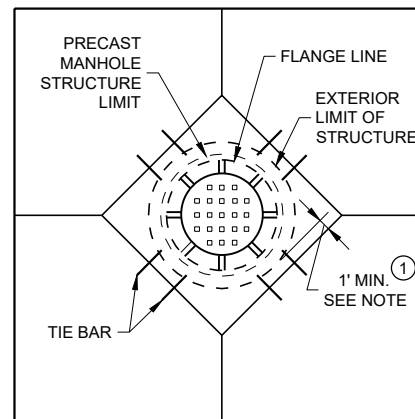
- ① USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
- ② ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
- ③ IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
- ④ IF THE DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS LESS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
- ⑤ ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.



**MANHOLE WITH DIVERTED
LONGITUDINAL CONTRACTION JOINT**



**MANHOLE WITH DIVERTED
TRANSVERSE CONTRACTION JOINT**



**DIAGONAL MANHOLE BOXOUT
FOR CONSTRUCTION JOINTS**

**CONCRETE PAVEMENT
JOINTING AT UTILITY
FIXTURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVISOR 131

FHWA

LEGEND

DOWELED JOINT

————

TIED JOINT

=====

EXPANSION JOINT

— — — — —

POTENTIAL DOWELED EXPANSION JOINT

←

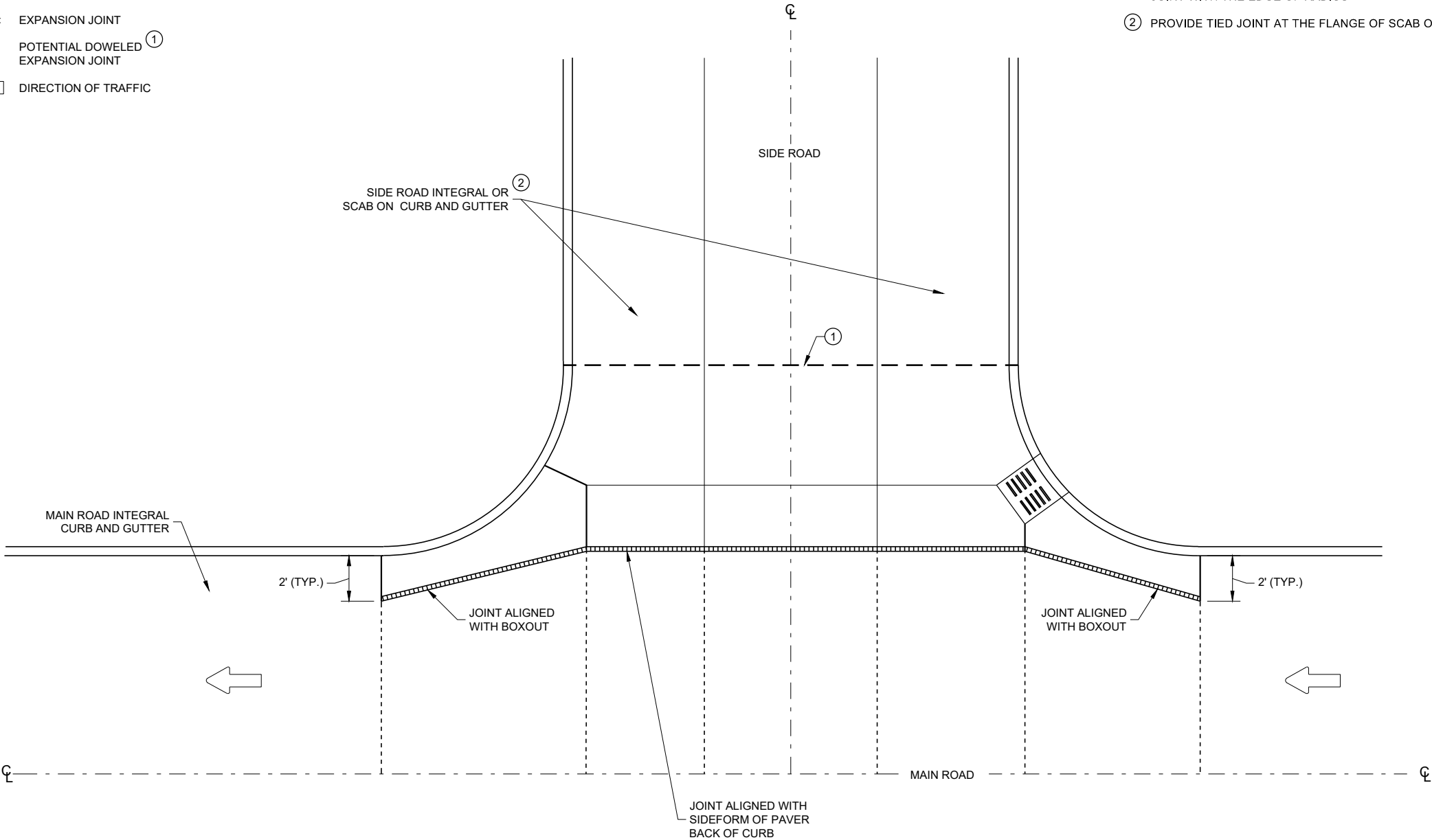
DIRECTION OF TRAFFIC

GENERAL NOTES

- ①

CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH THE EDGE OF RADIUS.
- ②

PROVIDE TIED JOINT AT THE FLANGE OF SCAB ON CURB IF SCAB ON CURB AND GUTTER IS USE.



INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

CONCRETE PAVEMENT
INTERSECTION BOXOUT FOR
INTEGRAL CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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May 2023

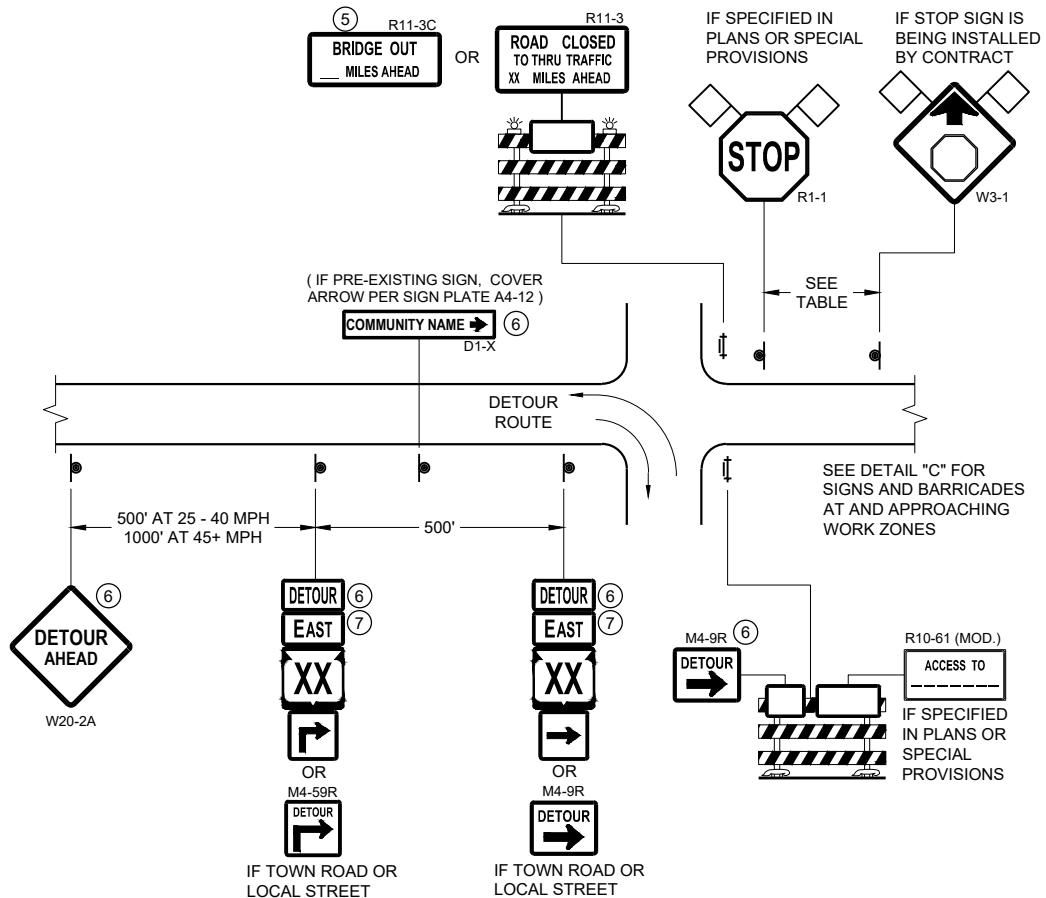
DATE

/S/ Peter Kemp P.E.

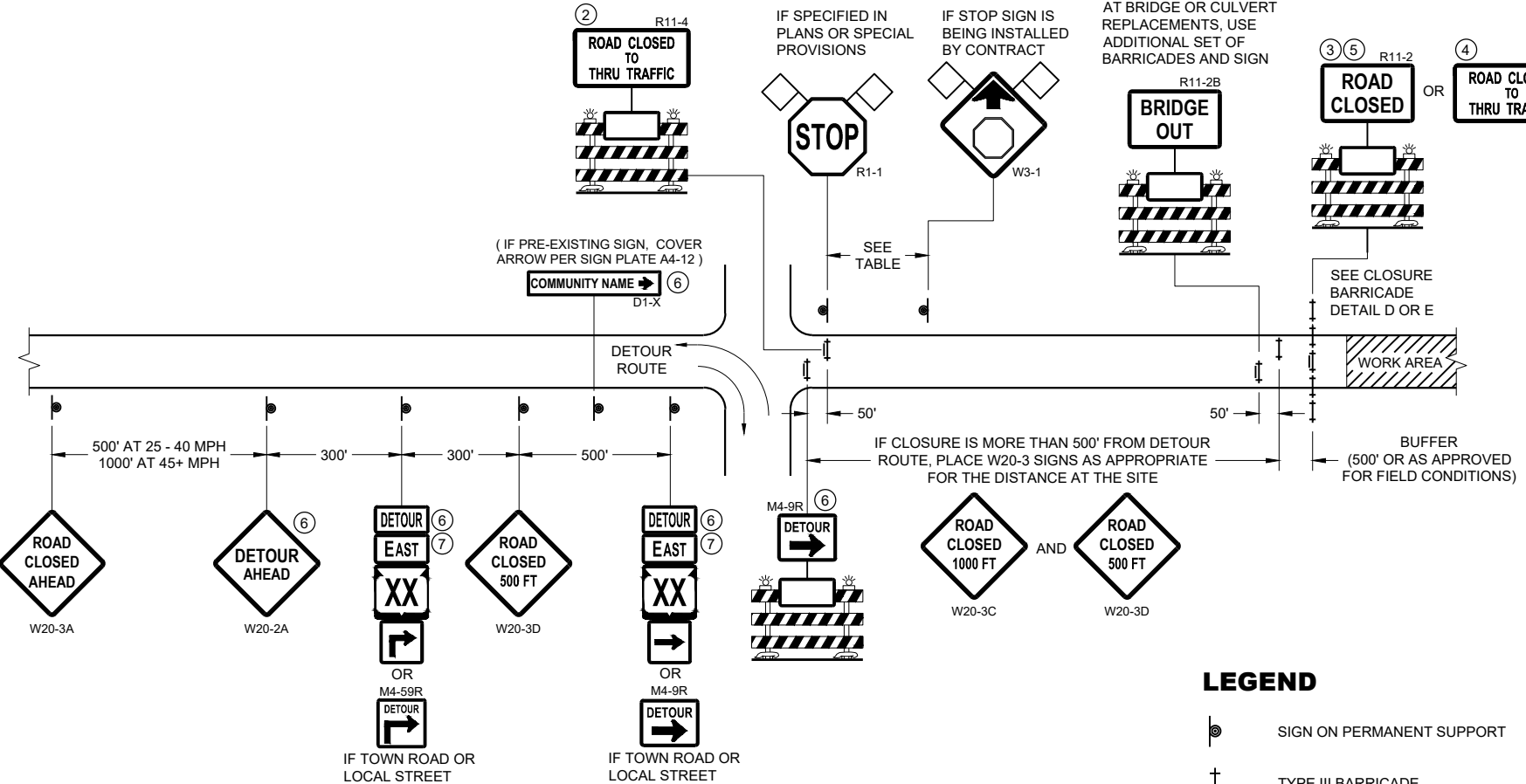
PAVEMENT SUPERVISOR

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DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)



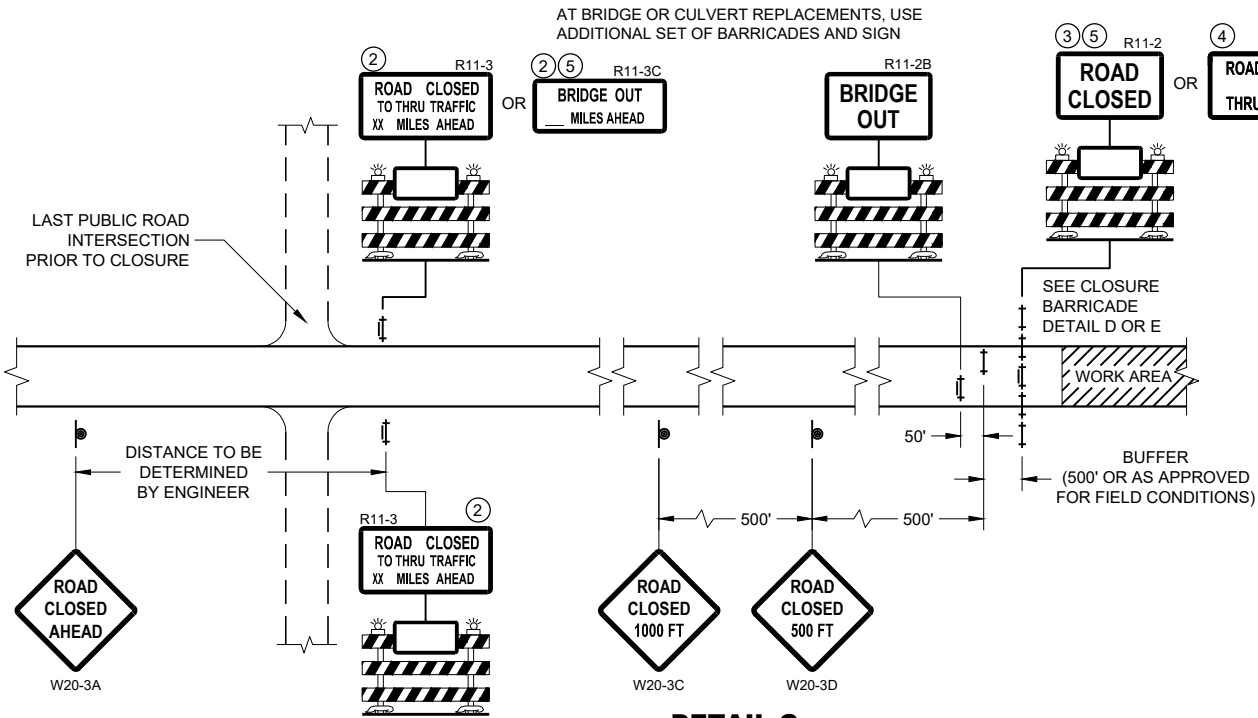
DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE LESS THAN ½ MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)

- LEGEND**
- SIGN ON PERMANENT SUPPORT
 - TYPE III BARRICADE
 - TYPE III BARRICADE WITH ATTACHED SIGN
 - TYPE "A" WARNING LIGHT (FLASHING)
 - WORK AREA
 - FLAGS, 16" X 16" MIN. (ORANGE)

- DETOUR M4 - 8
- EAST M3 - X
- XX M1 - 4 OR XX M1 - 6 OR COUNTY M1 - 5A
- OR M05 - 1 OR M06 - 1

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

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



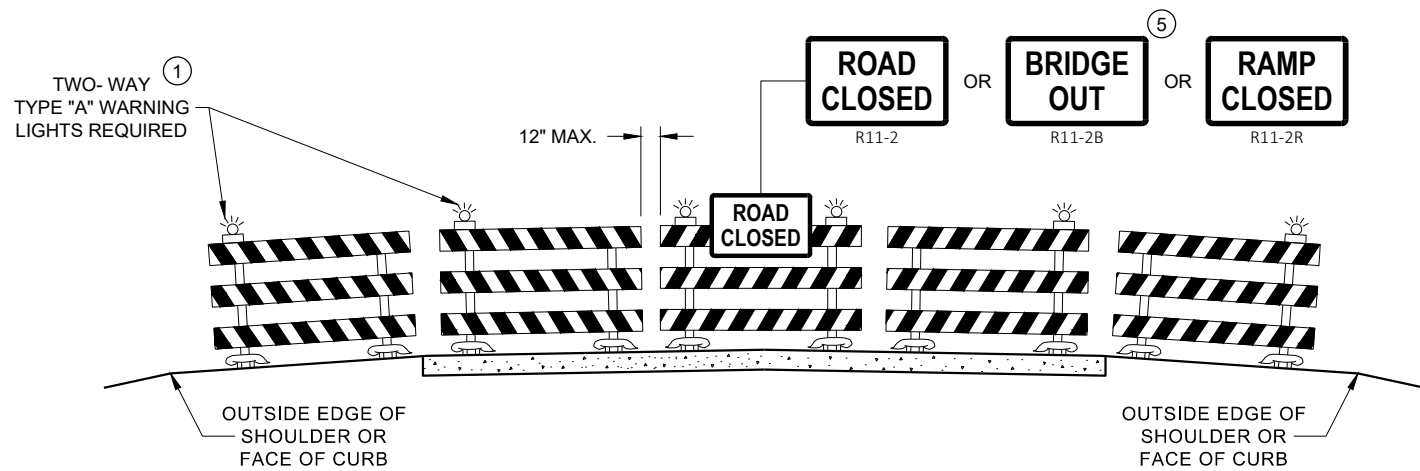
DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

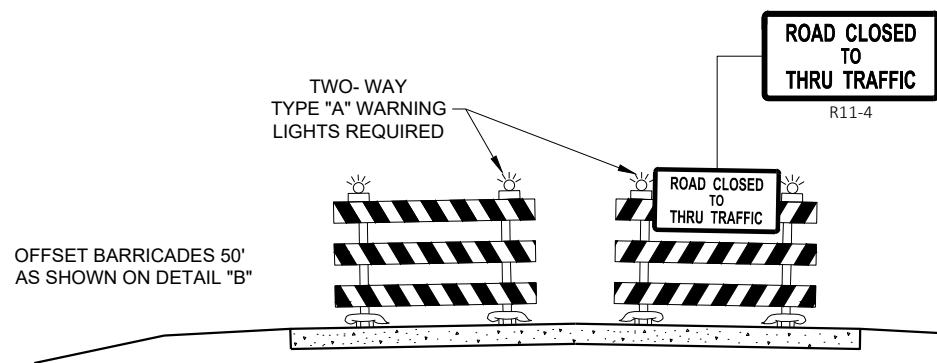
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DATE WORK ZONE ENGINEER 133

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**DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW**



**DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW**

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

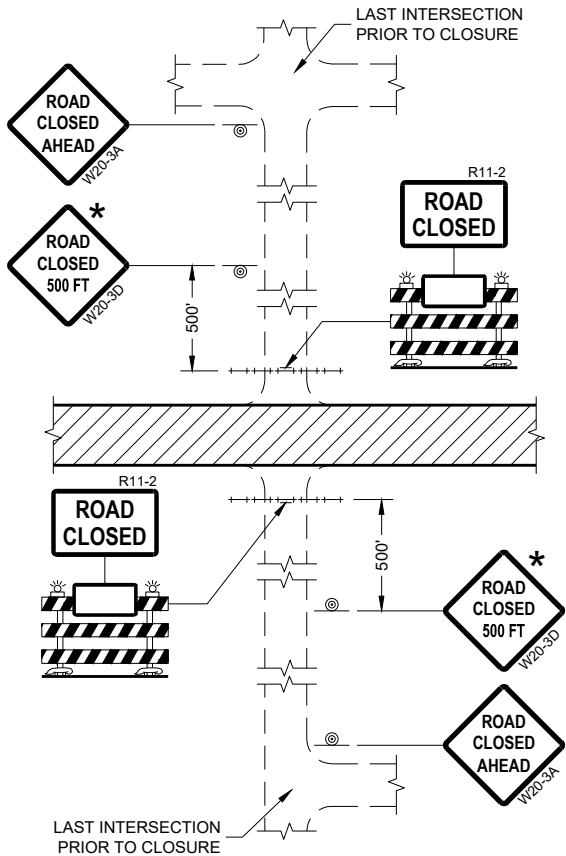
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

- 1 TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING).
- 2 THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.
- 3 FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".
- 4 FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".
- 5 FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.
- 6 INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- 7 "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

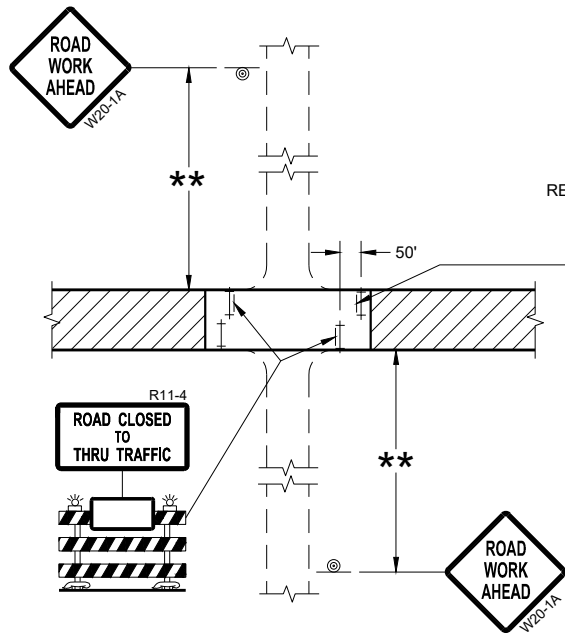
BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
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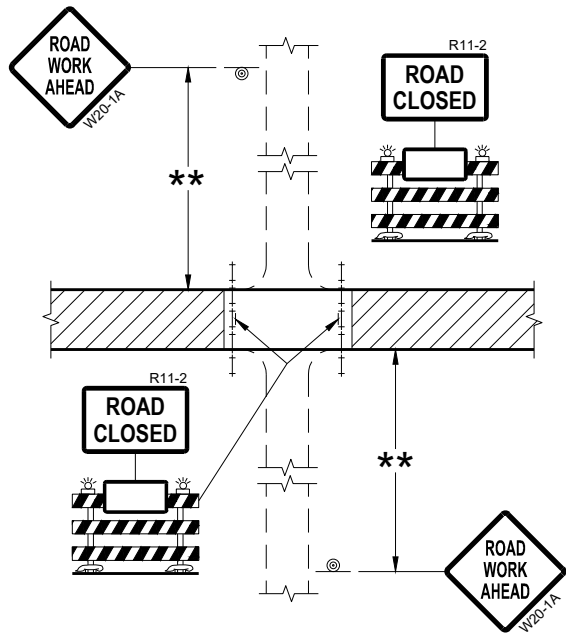
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May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 134
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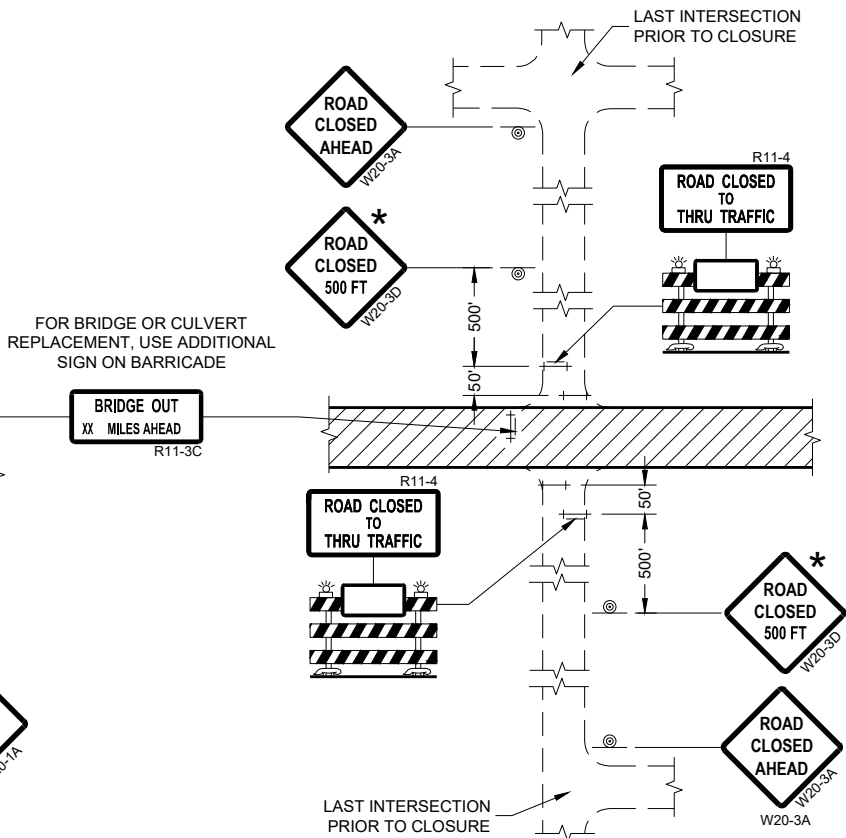
DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

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

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

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

BARRICADES 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.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

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

- * OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.
- ** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 135

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.

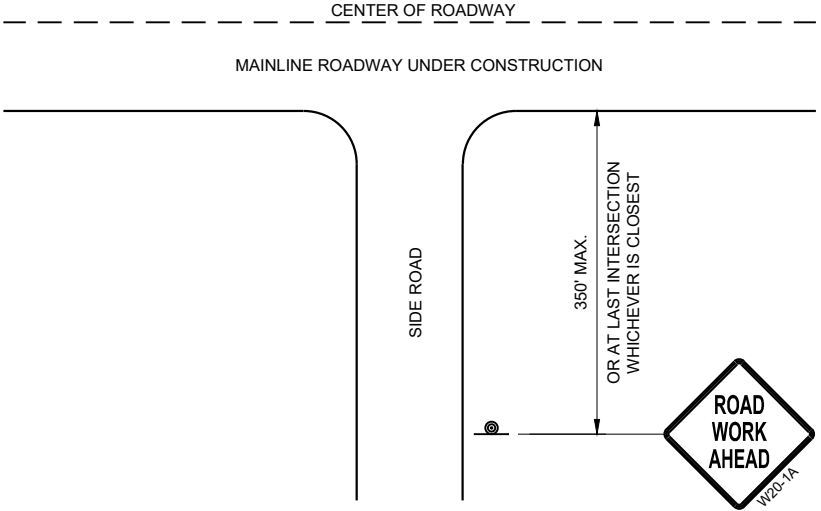
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

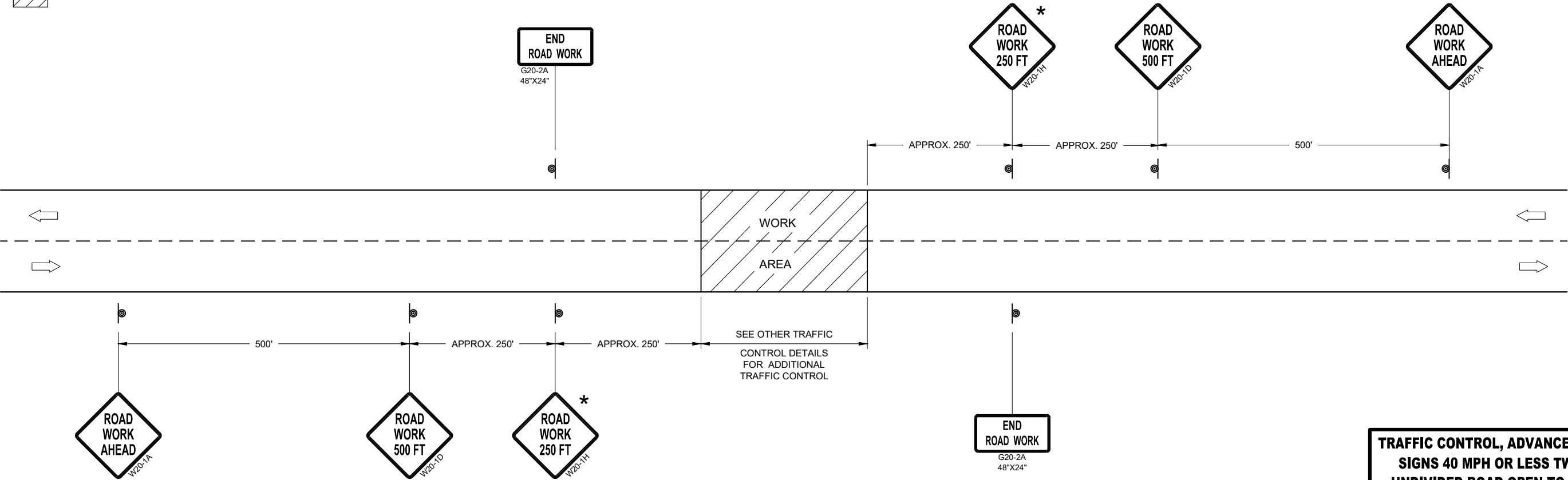
* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.

LEGEND

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



TYPICAL SIDE ROAD APPROACH
WARNING SIGN DETAIL



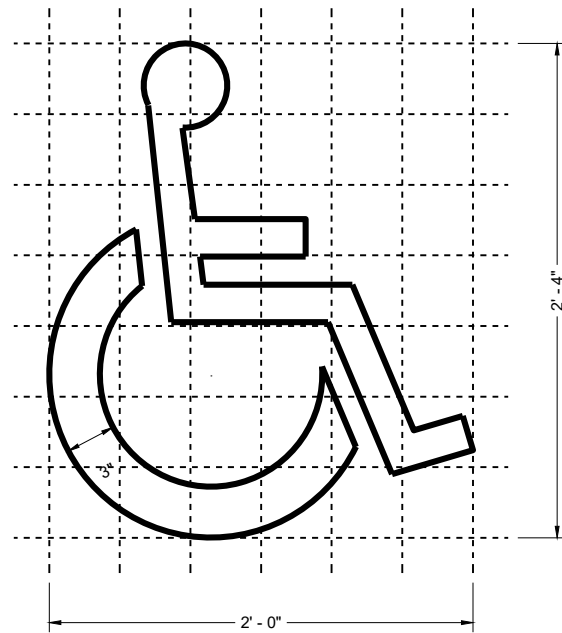
TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

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

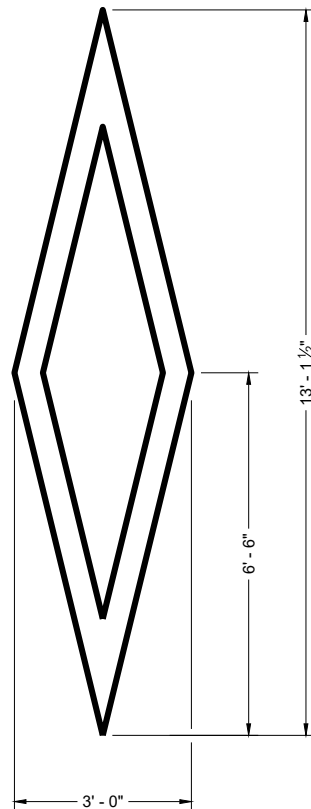
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018 /S/ Andrew Heidtke
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HANDICAP SYMBOL



PREFERENTIAL
LANE SYMBOL

GENERAL NOTES

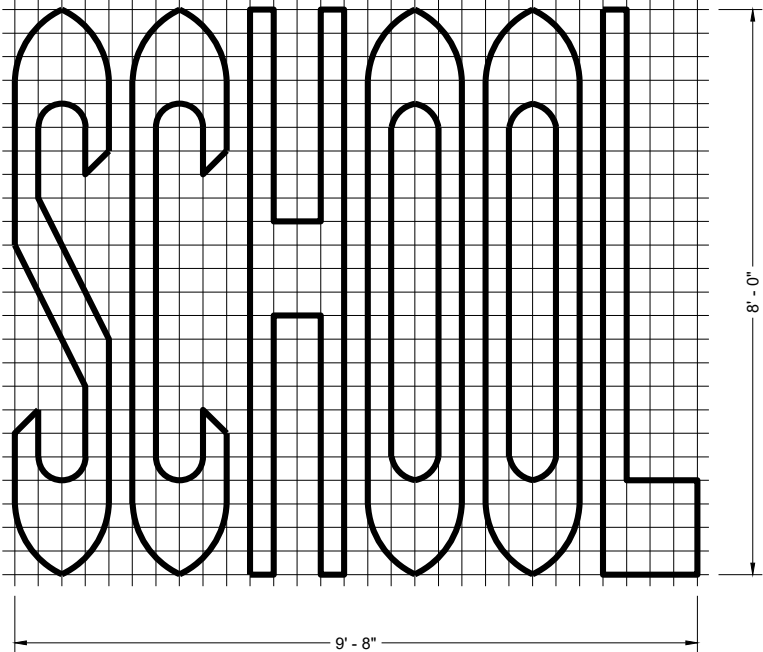
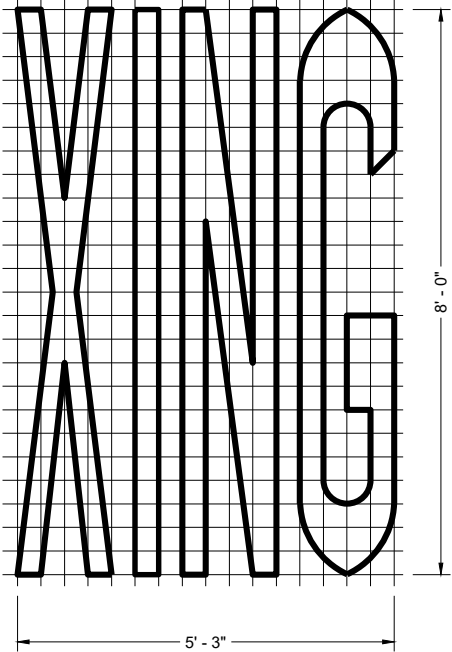
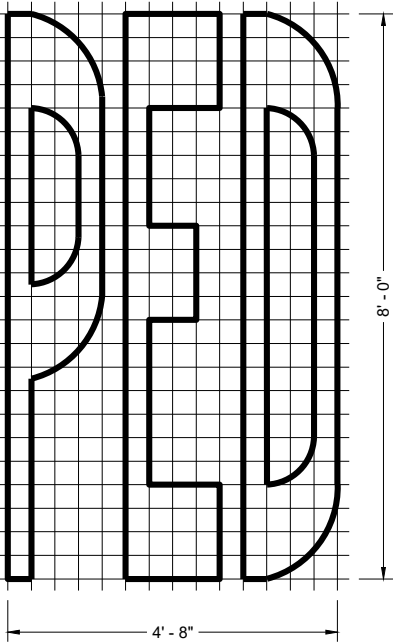
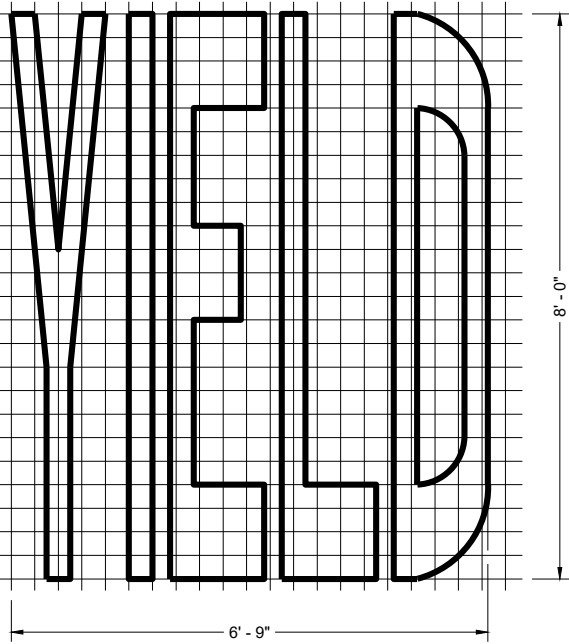
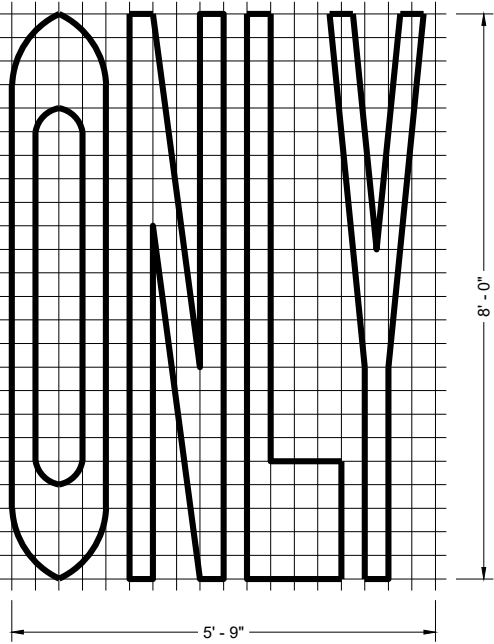
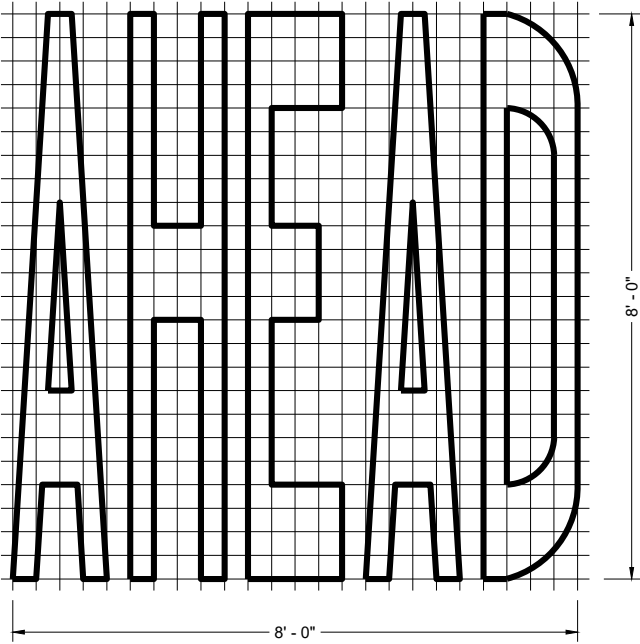
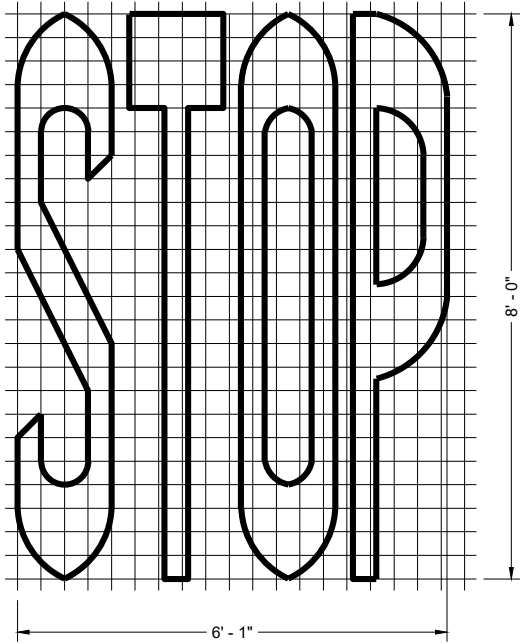
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

PAVEMENT MARKING SYMBOLS

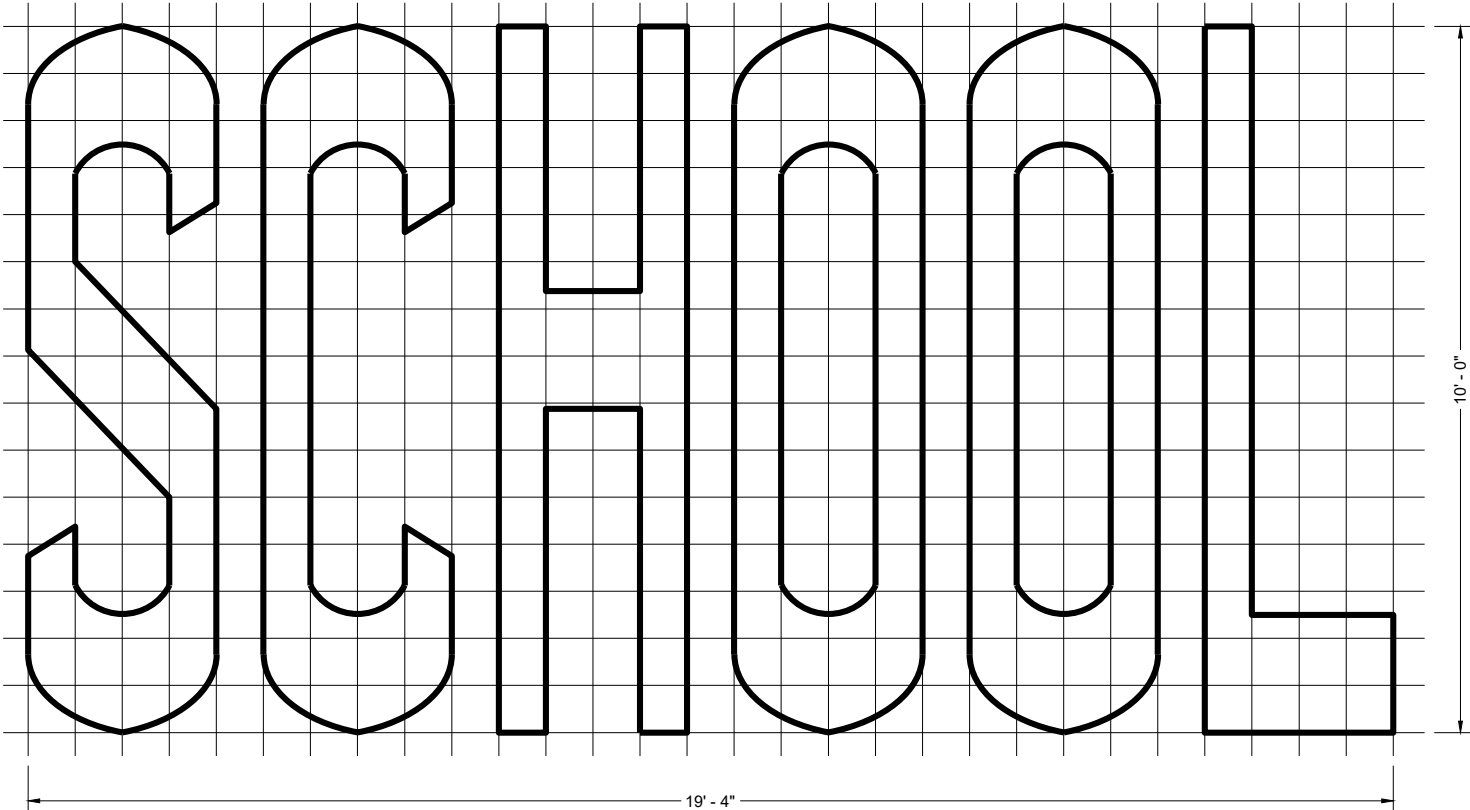
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA



SINGLE LANE

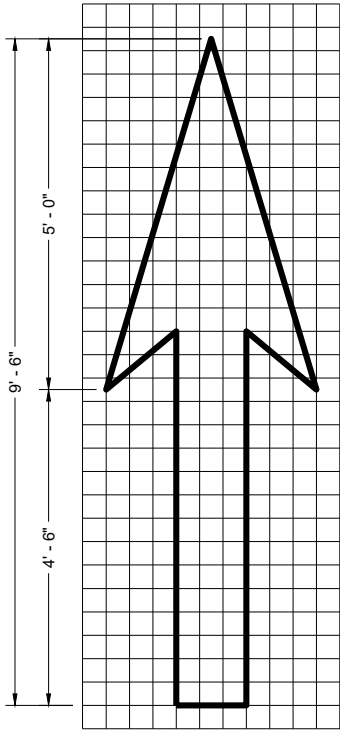


TWO - LANE

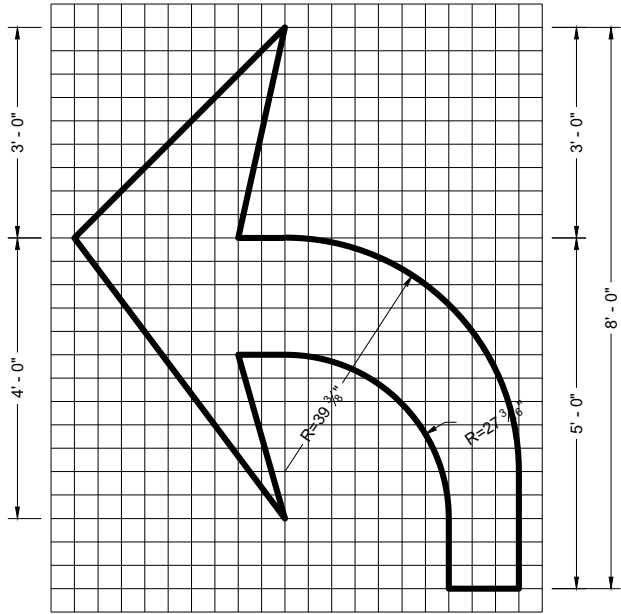
GENERAL NOTES

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

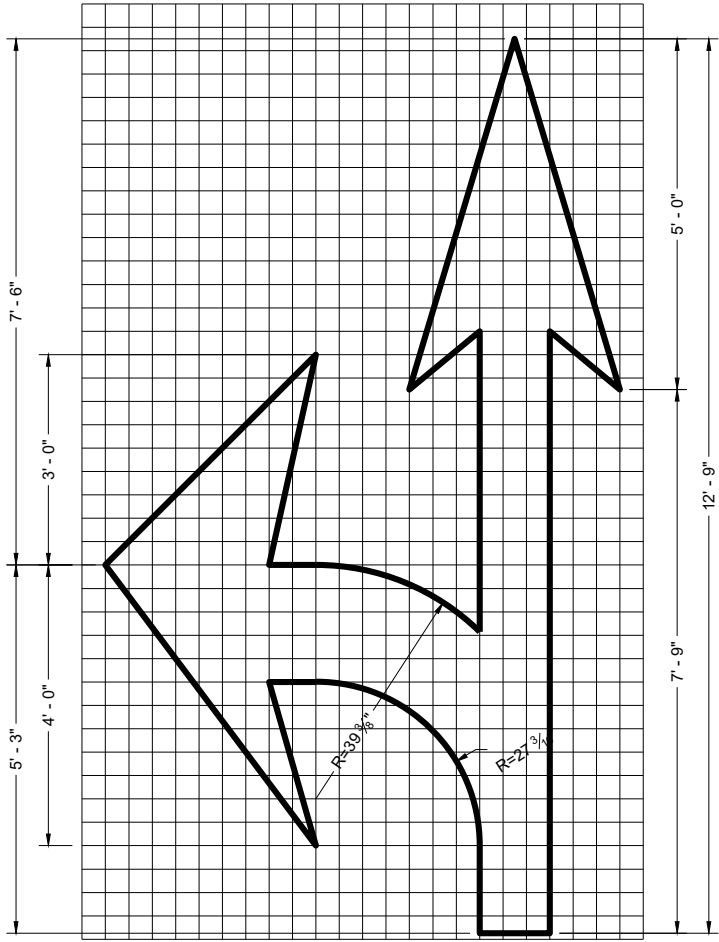
PAVEMENT MARKING WORDS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2024 DATE	/S/ Matthew Rauch STATE SIGNING AND MARKING ENGINEER
FHWA	138



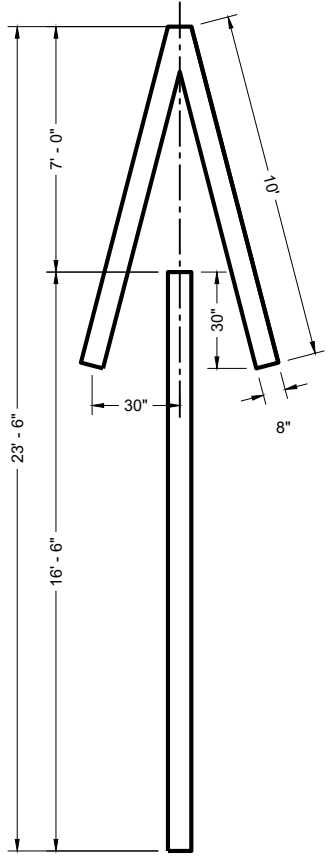
TYPE 1



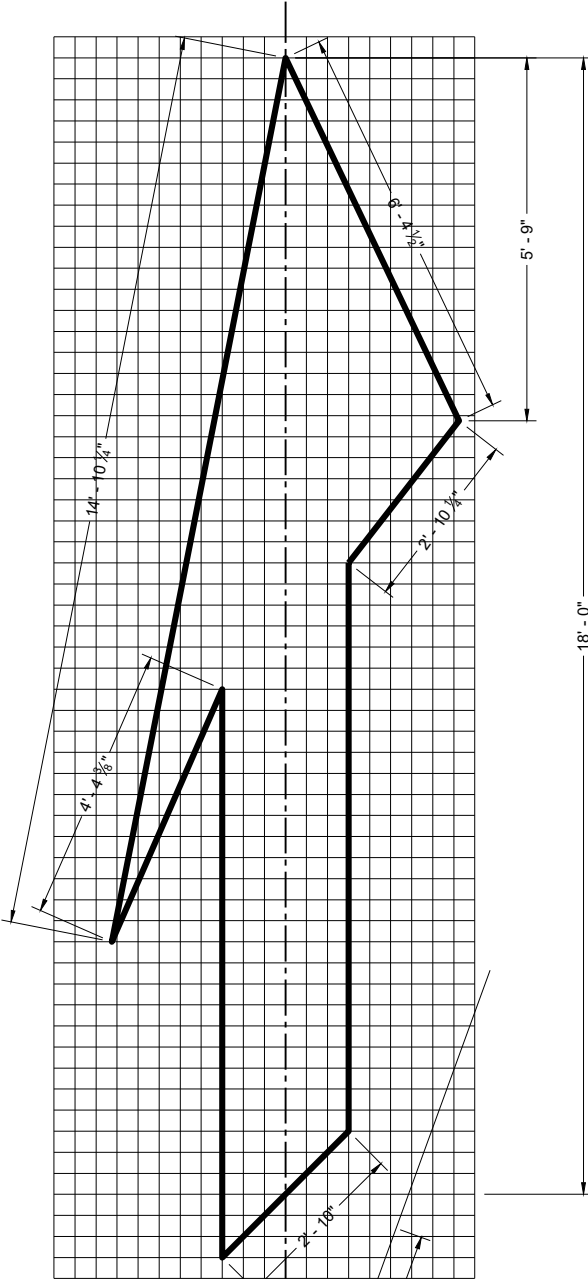
TYPE 2



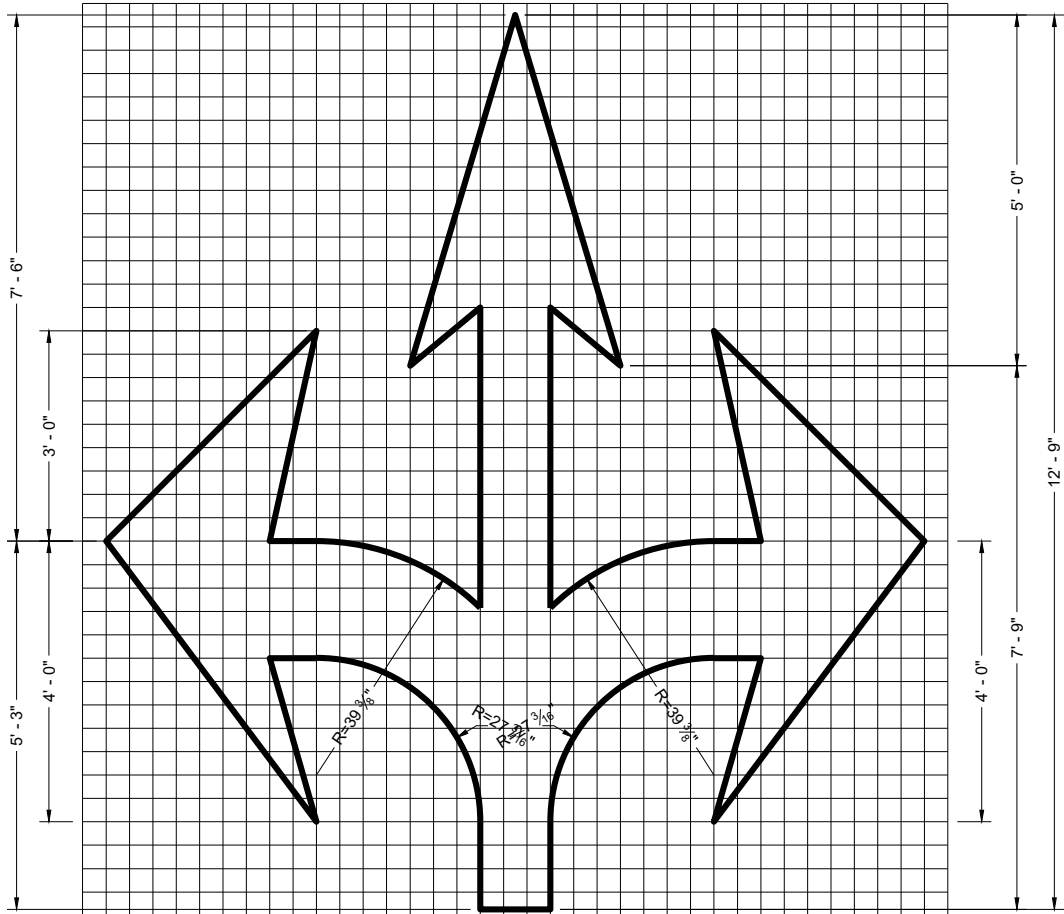
TYPE 3



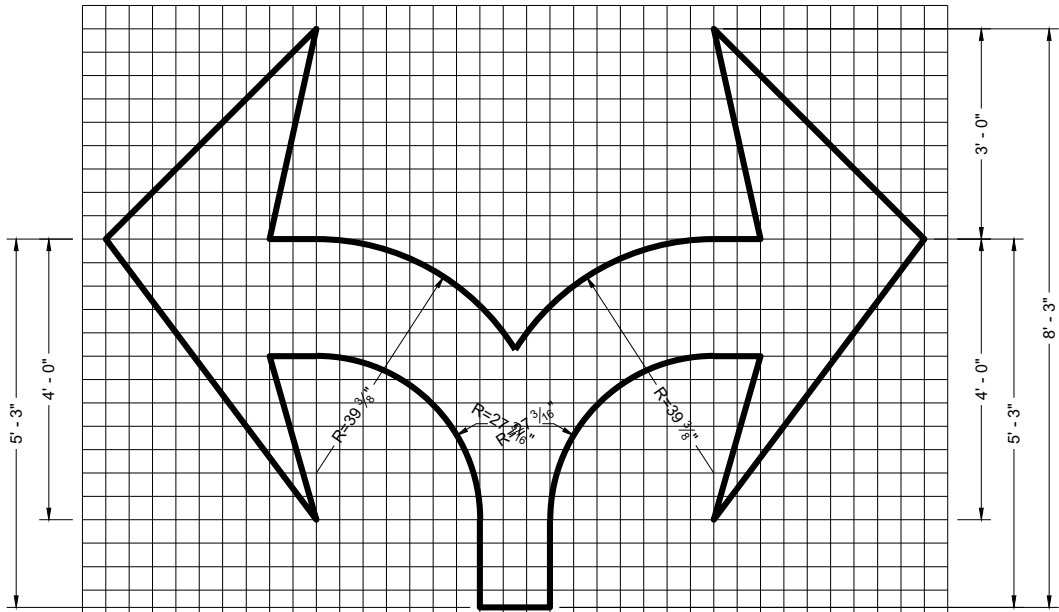
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

GENERAL NOTES

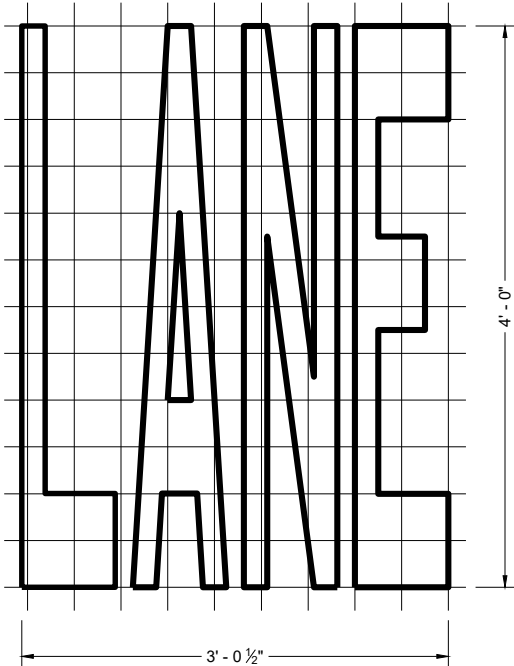
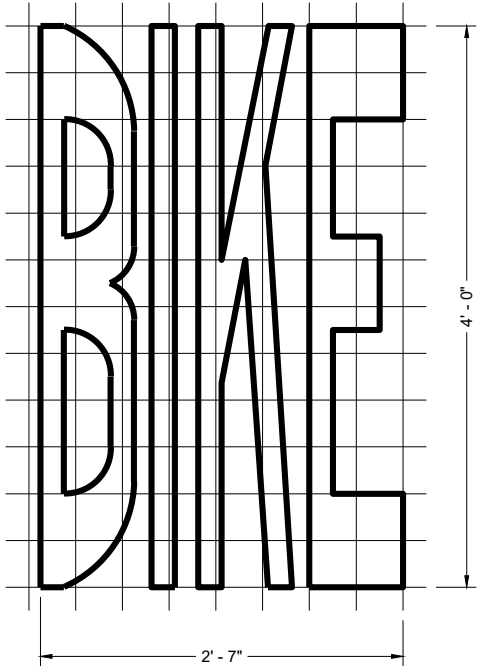
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

PAVEMENT MARKING ARROWS

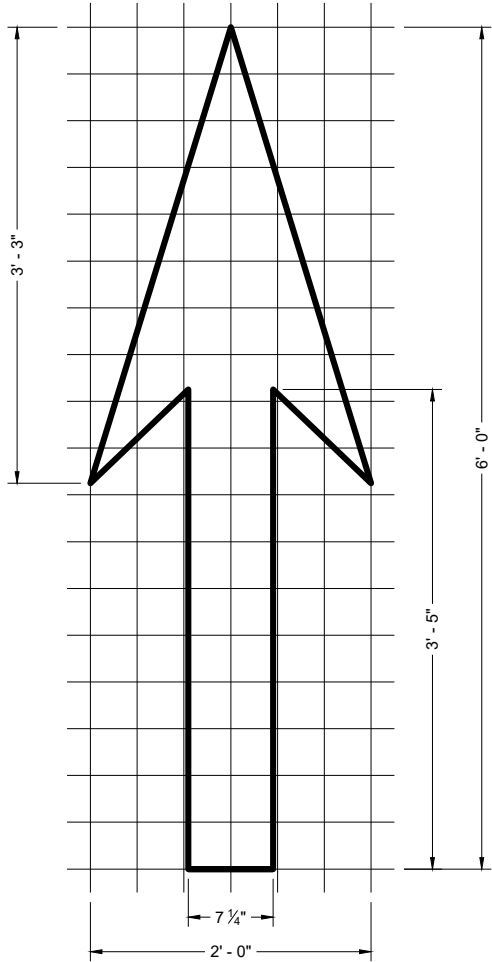
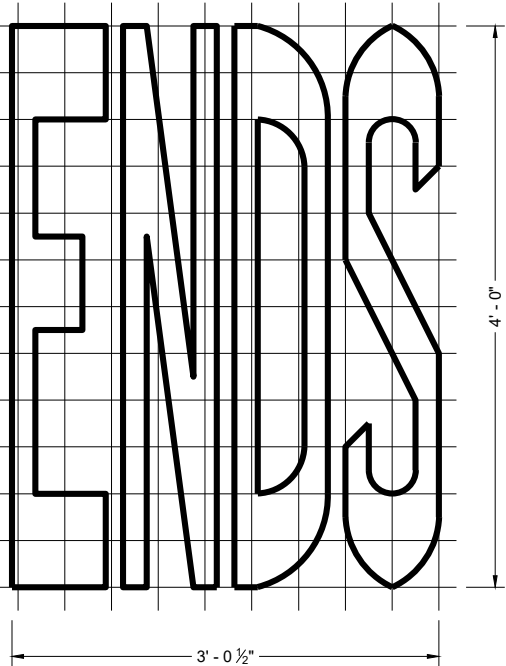
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

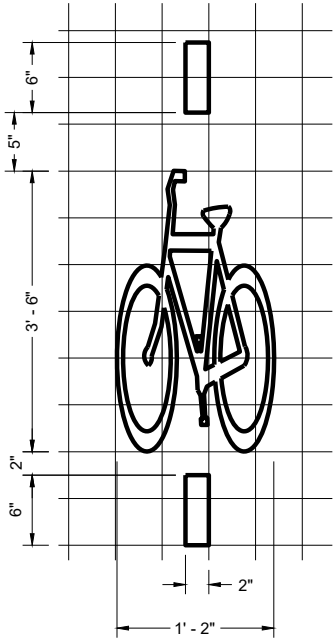
FHWA



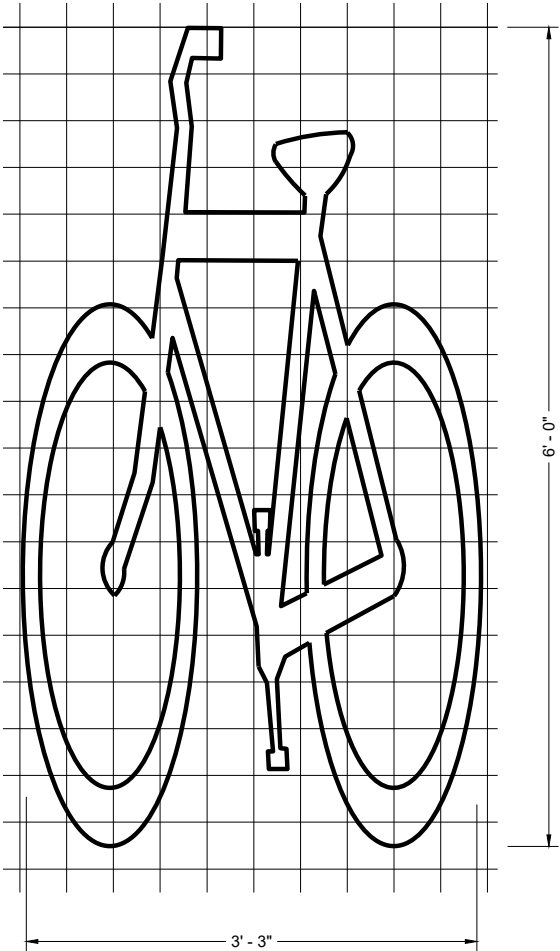
BIKE LANE WORDS



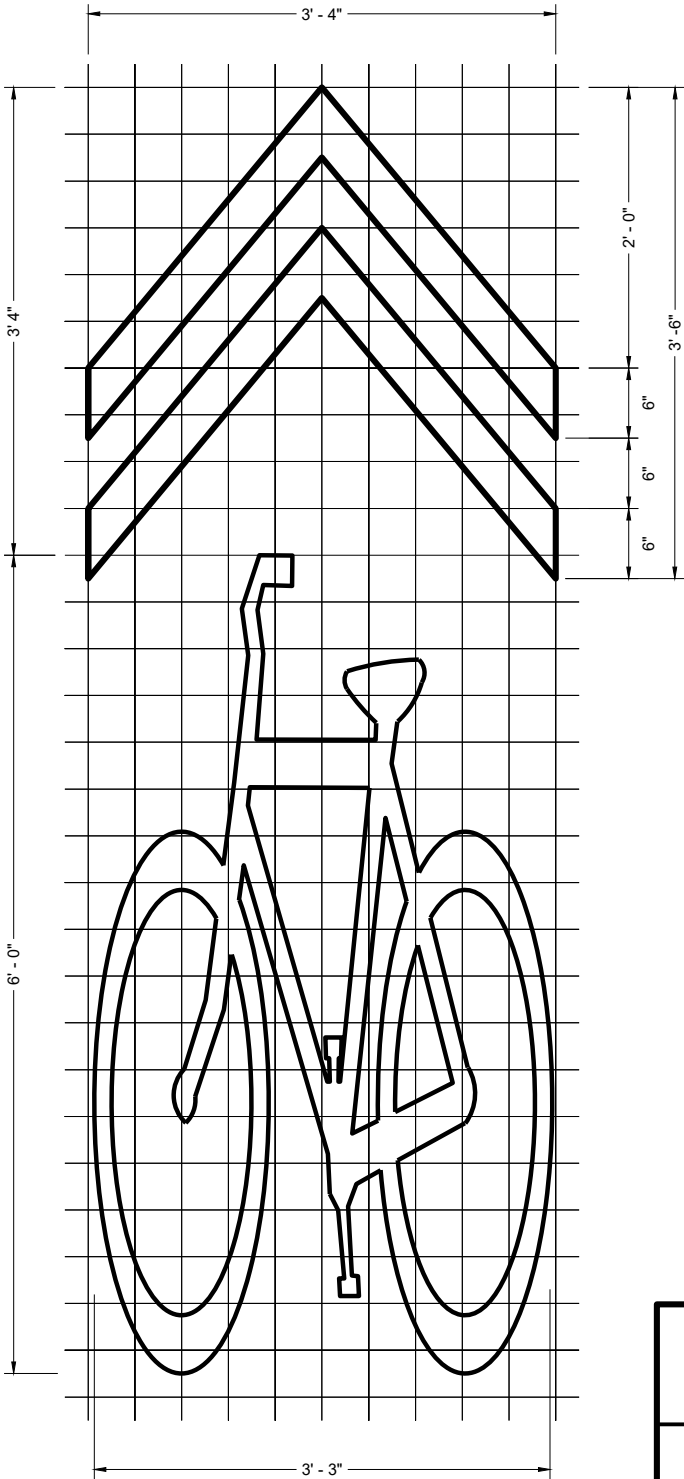
BIKE LANE ARROW



BICYCLE DETECTOR PAVEMENT MARKING



BIKE LANE SYMBOL

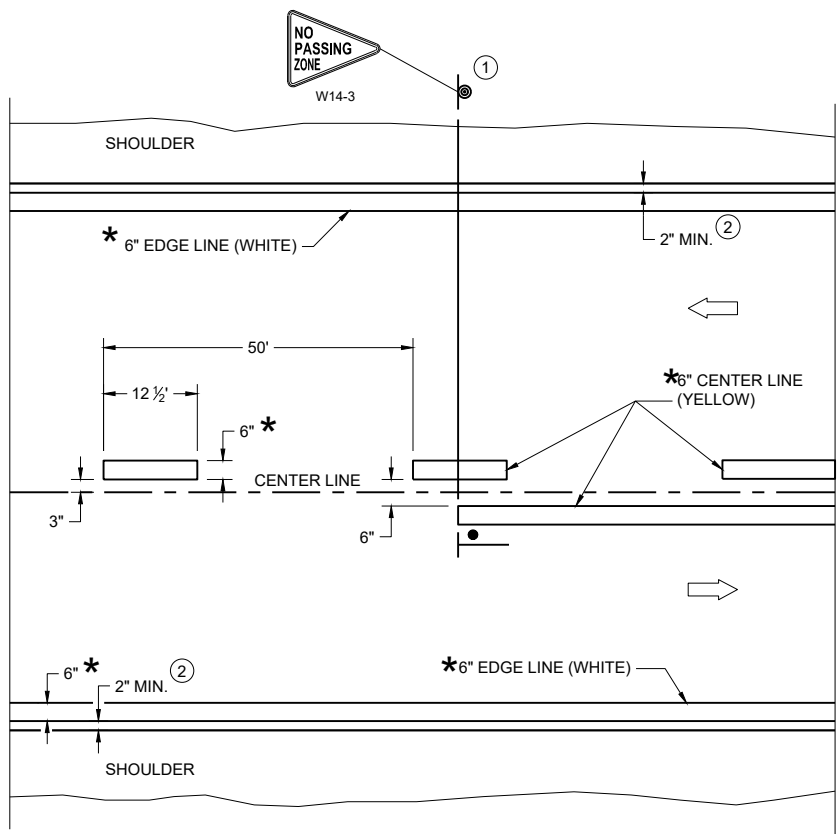


BIKE LANE SYMBOL FOR SHARED LANE

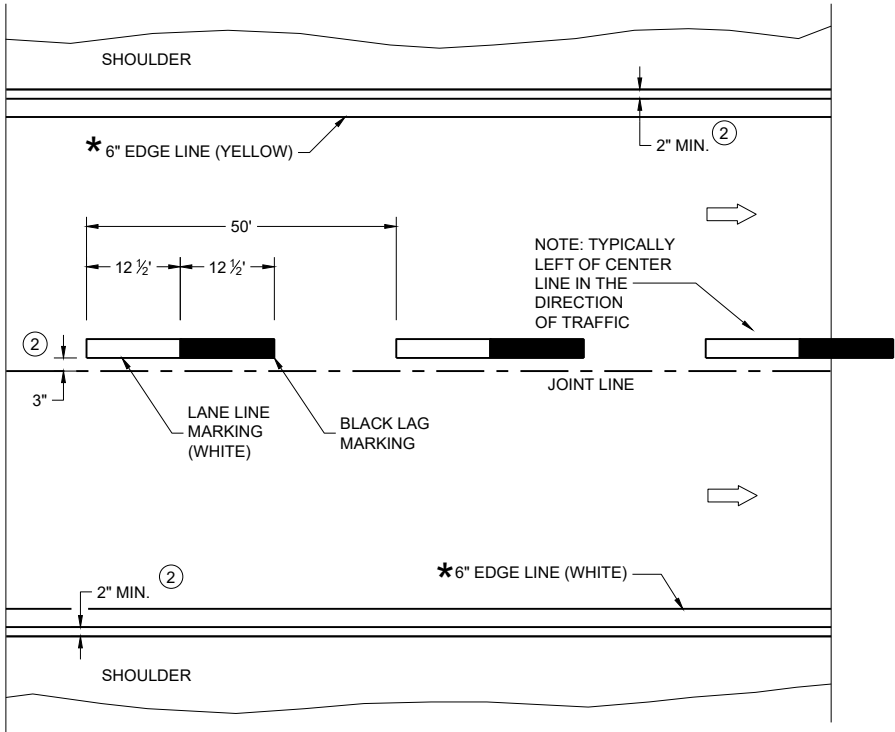
GENERAL NOTES

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 FOR BIKE LANES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2024 DATE	/S/ Matthew Rauch STATE SIGNING AND MARKING ENGINEER
FHWA 140	



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

GENERAL NOTES

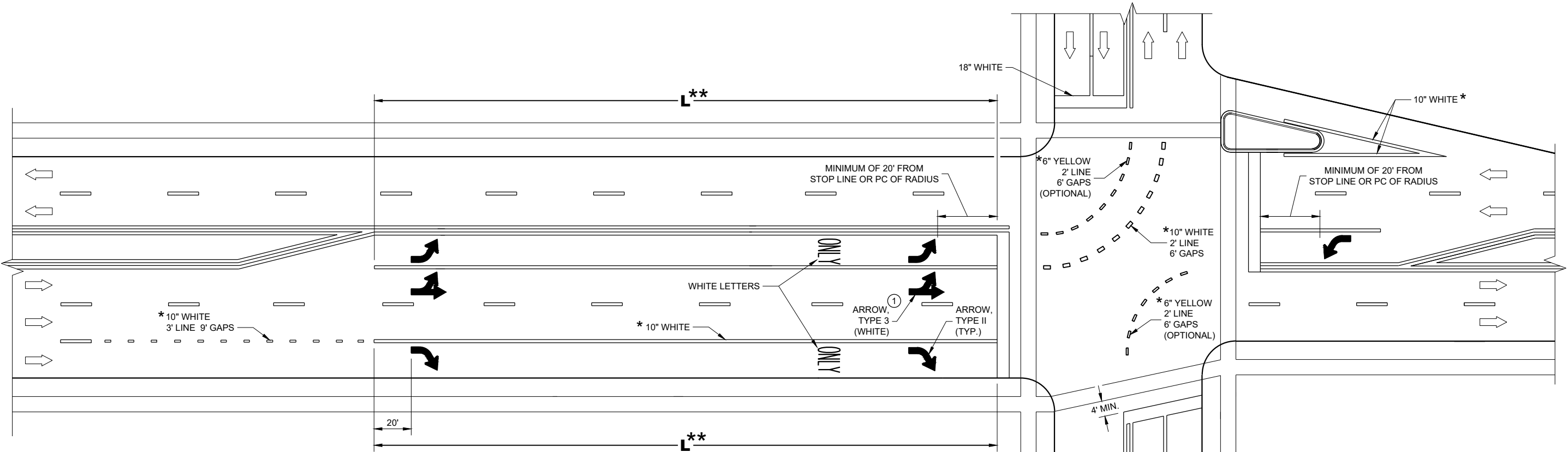
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

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

LEGEND

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

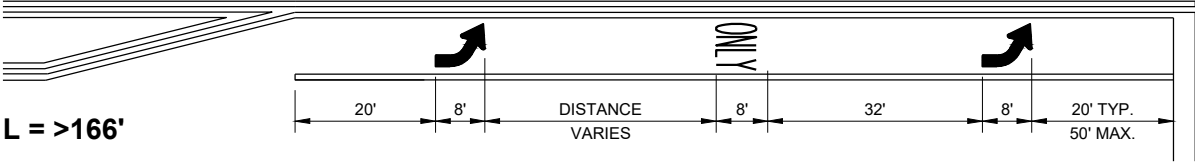
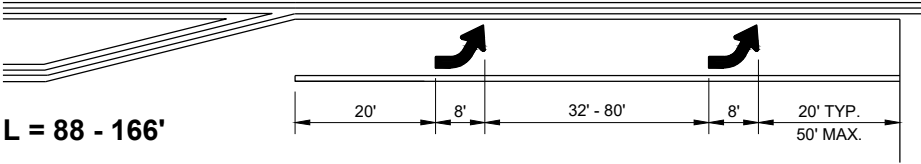
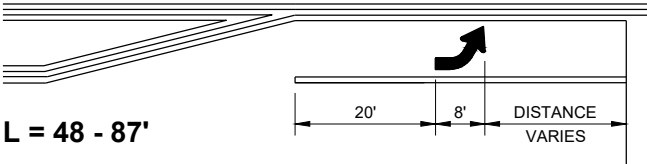
PERMANENT LONGITUDINAL PAVEMENT MARKINGS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2023 DATE	/S/ Jeannie Silver Statewide Pavement Marking Engineer



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

TURN LANE OPTIONS

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



GENERAL NOTES

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

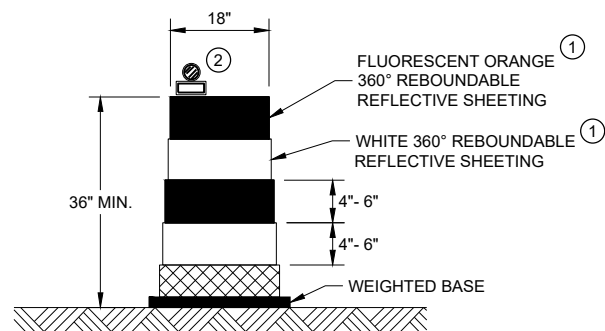
→ DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

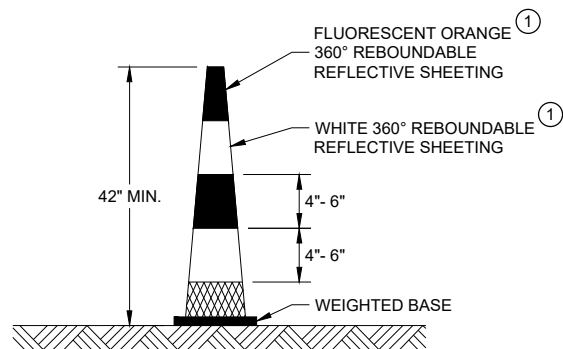
PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION 142



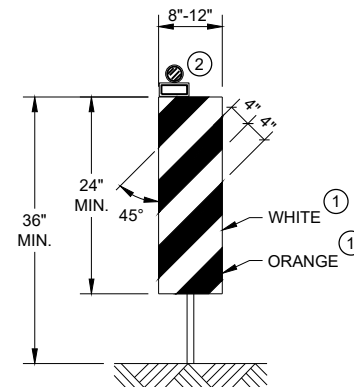
DRUM

BALLAST WIDTHS
RANGE FROM 24"-36"



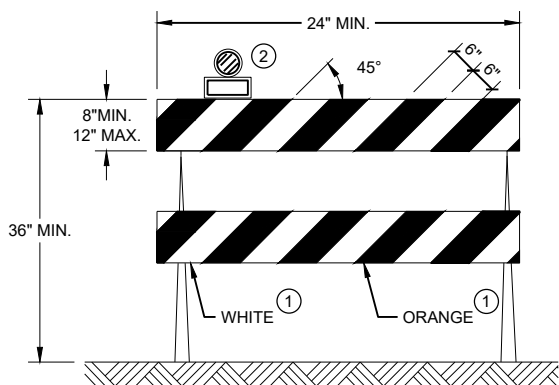
42" CONE

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



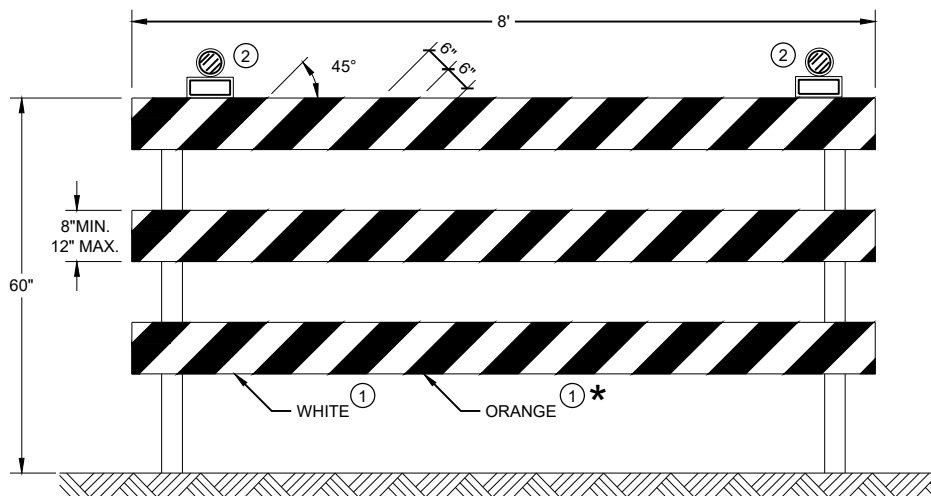
VERTICAL PANEL

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 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER 143
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

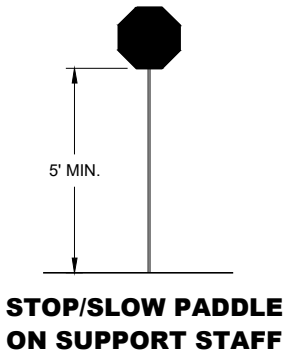
FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

- 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.

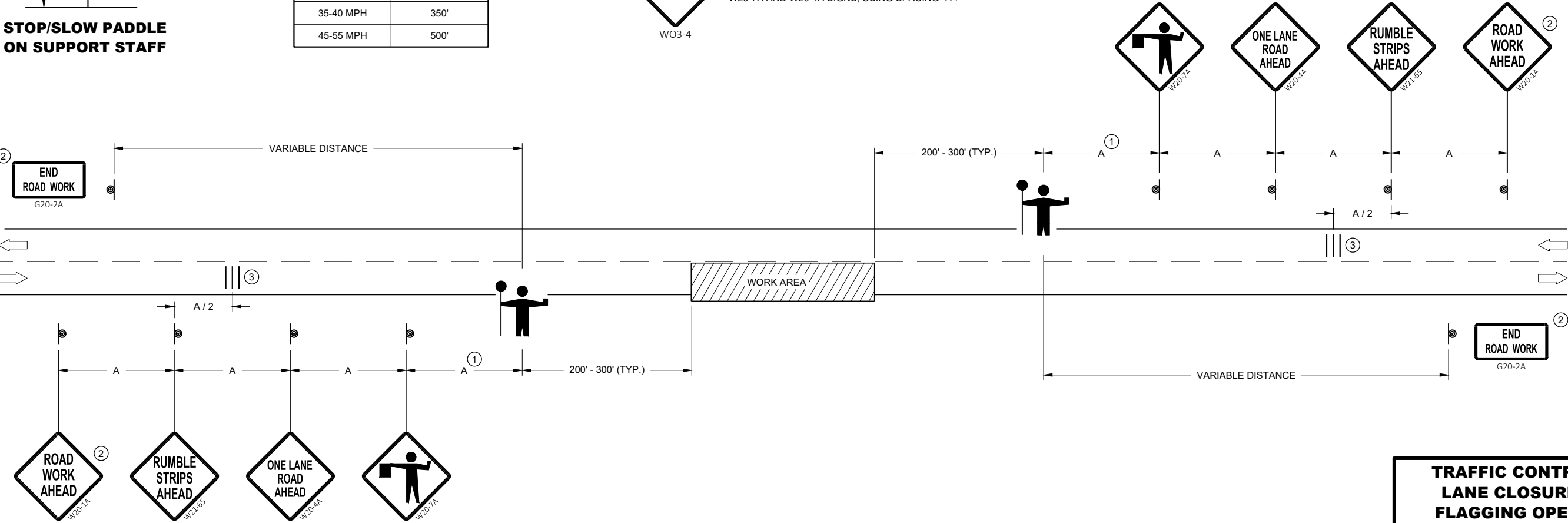


SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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".

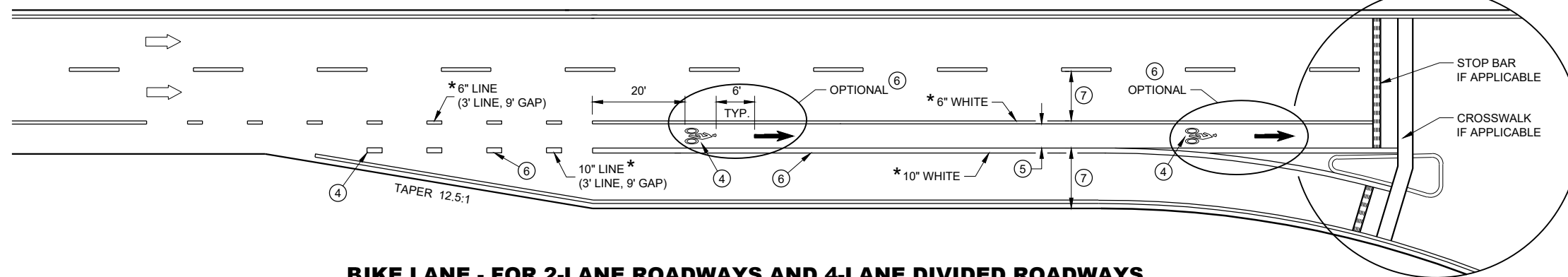
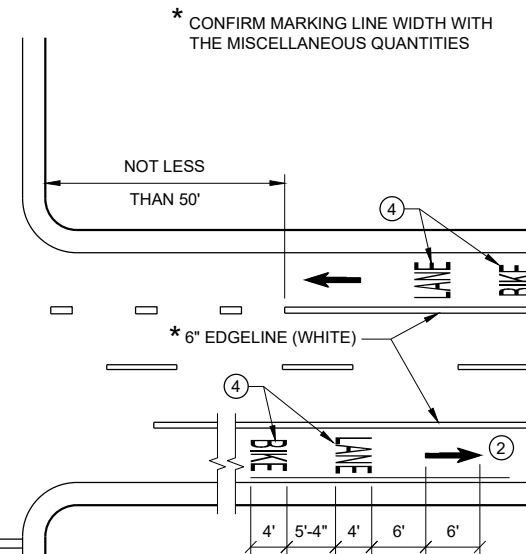
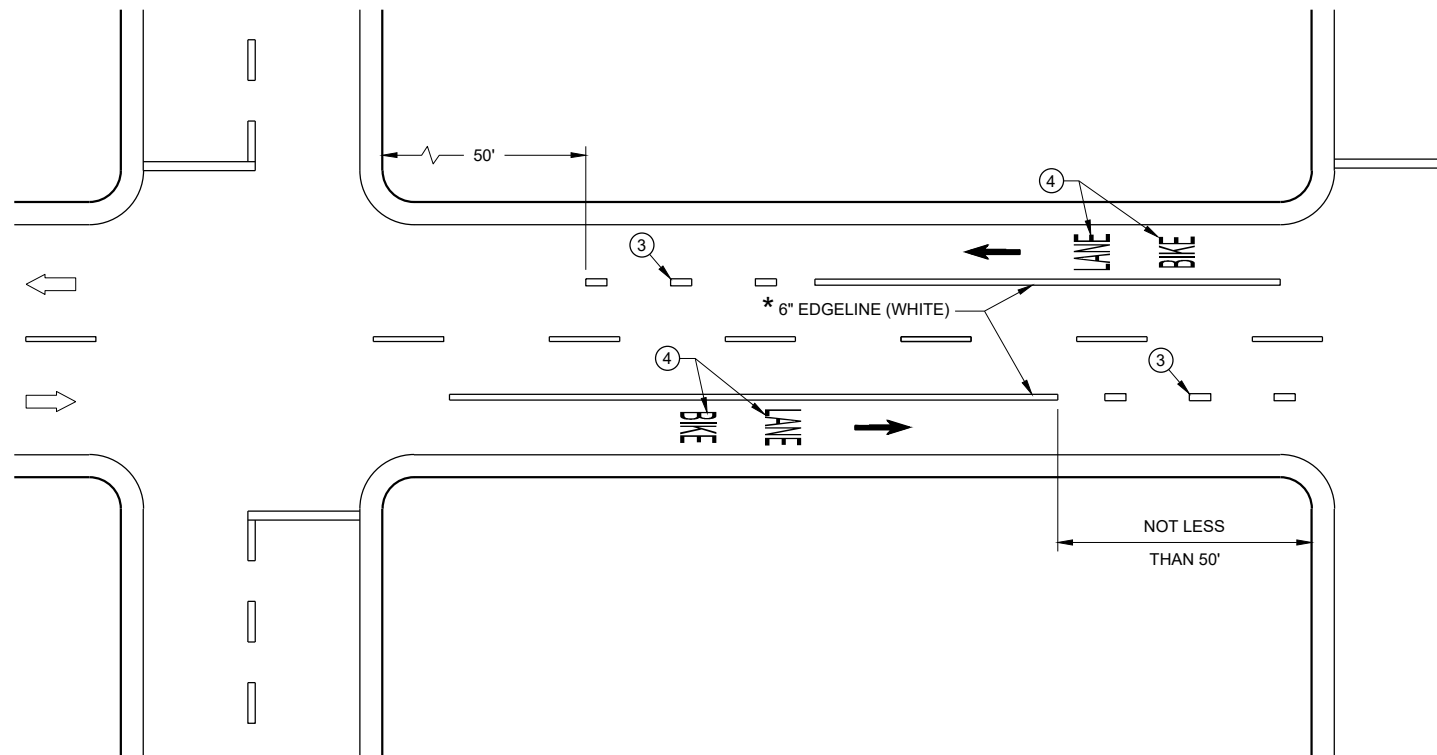


**TRAFFIC CONTROL FOR
LANE CLOSURE WITH
FLAGGING OPERATION**

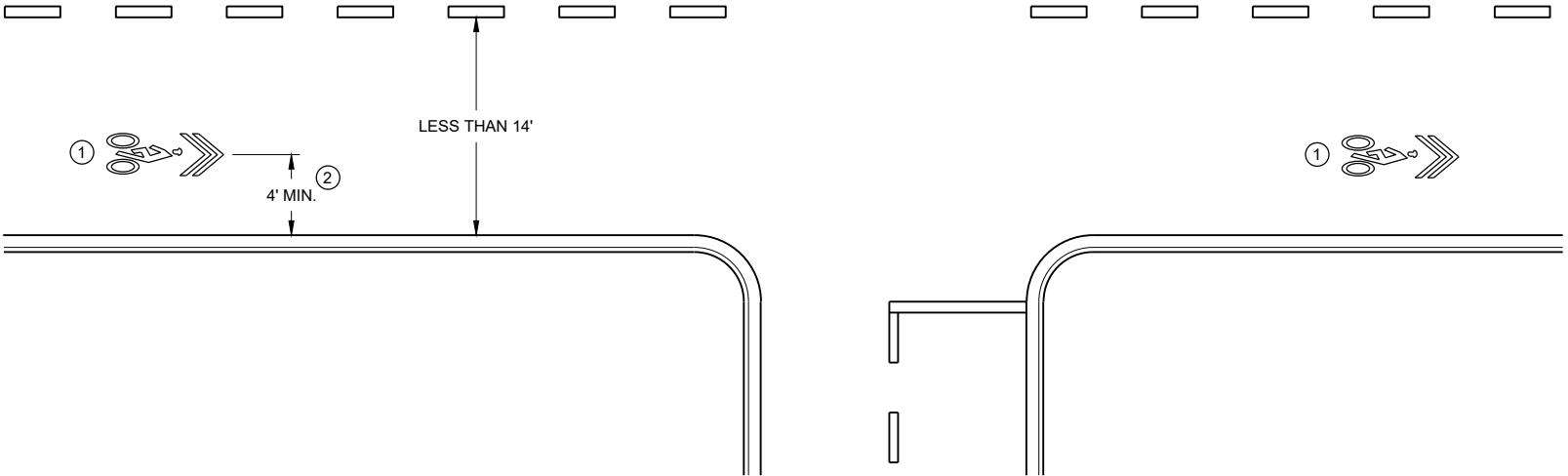
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 144

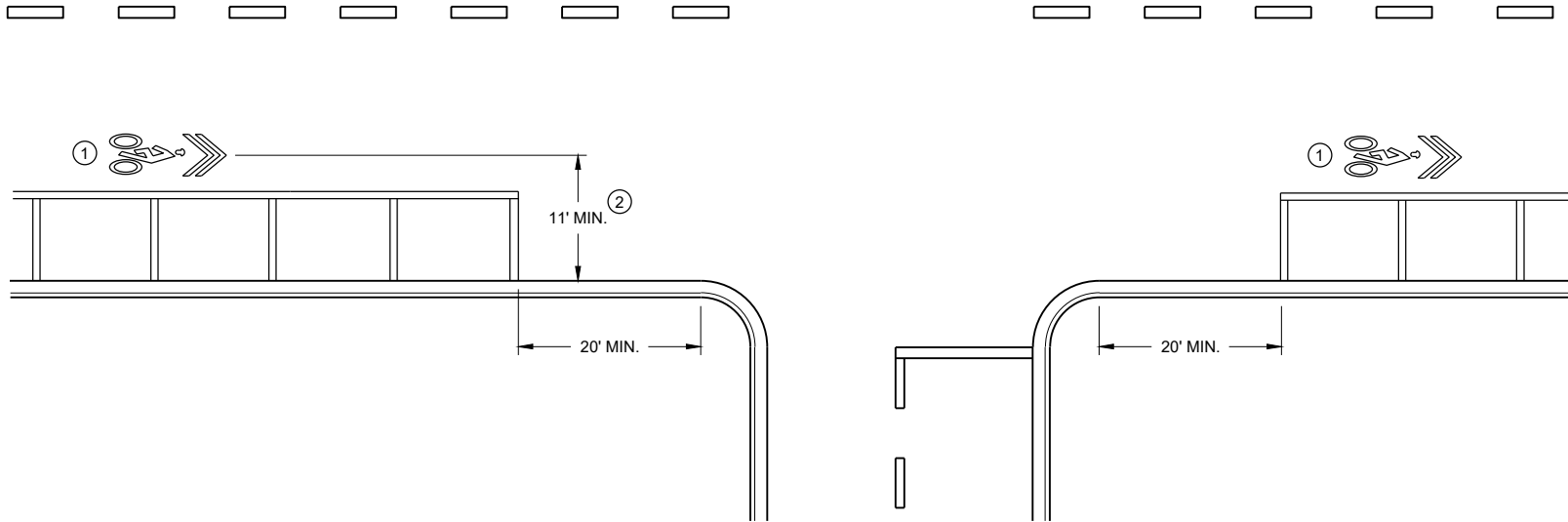
FHWA



- ## GENERAL NOTES



WITHOUT PARKING

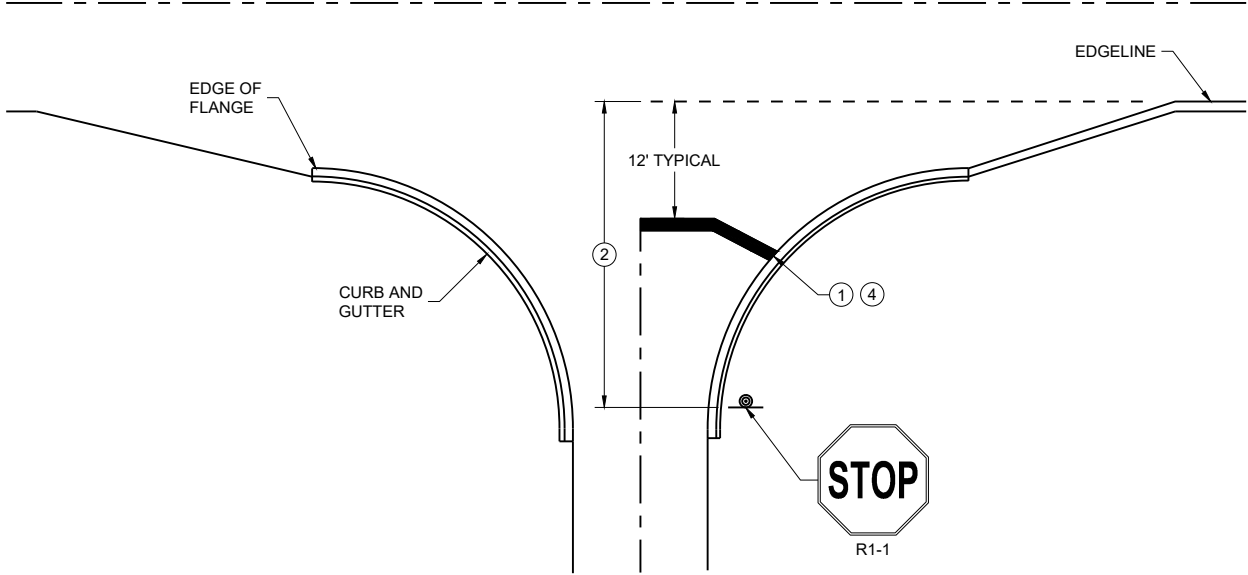


WITH PARKING

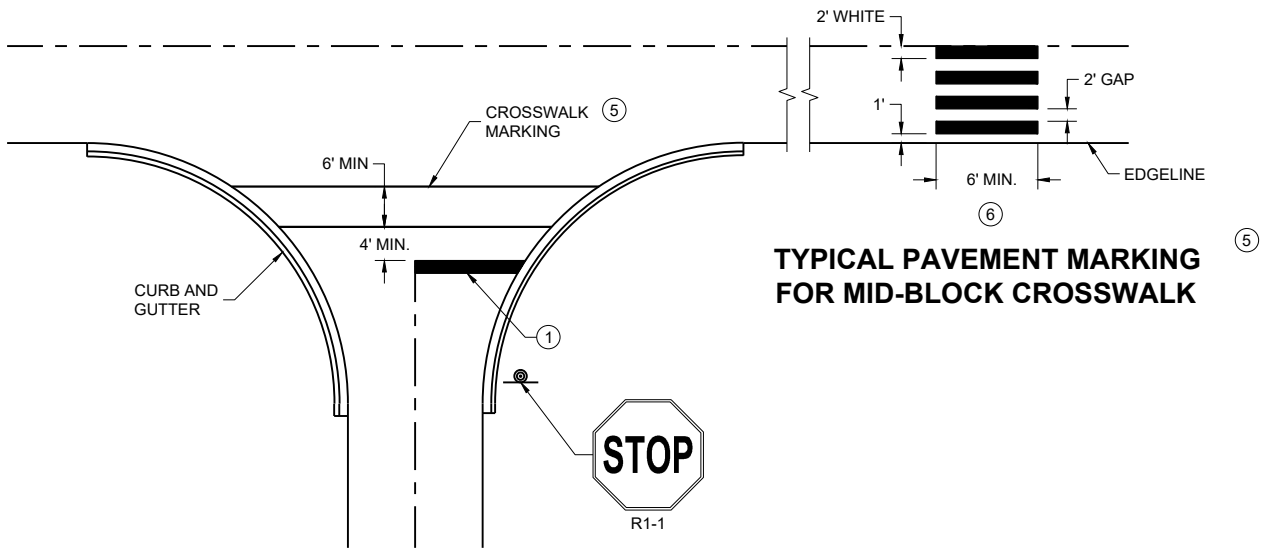
GENERAL NOTES

- ① MINIMUM OF ONE PER BLOCK, MAXIMUM OF 250 FEET.
- ② OR TO EDGE OF PAVEMENT WITHOUT CURB.

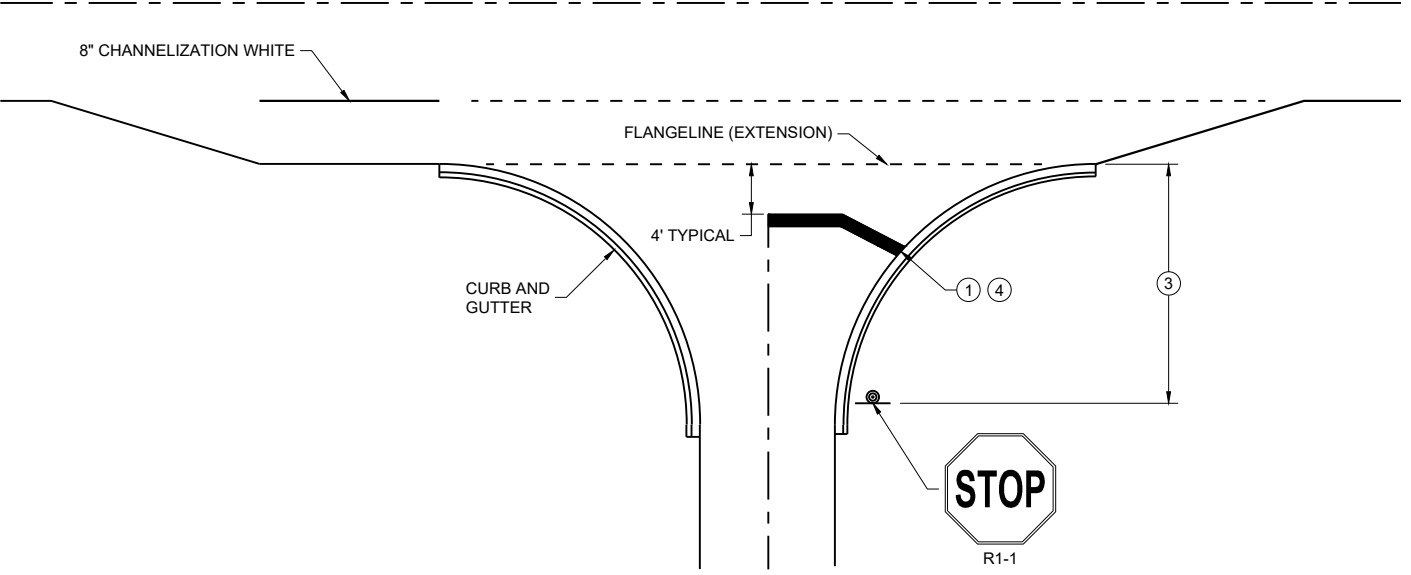
PAVEMENT MARKING FOR SHARED LANE 35 MPH OR LESS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2023 DATE	/S/ Matthew Rauch STATE SIGNING AND MAP ENGINEER 146
FHWA	



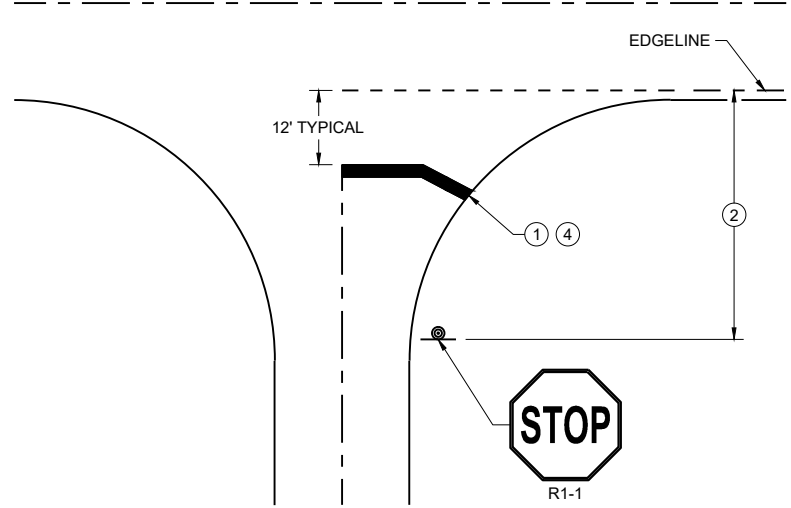
TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR
SIDE ROADS WITH CROSSWALK MARKING



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



TYPICAL STOP LINE PAVEMENT MARKING
WITHOUT CURB AND GUTTER

GENERAL NOTES

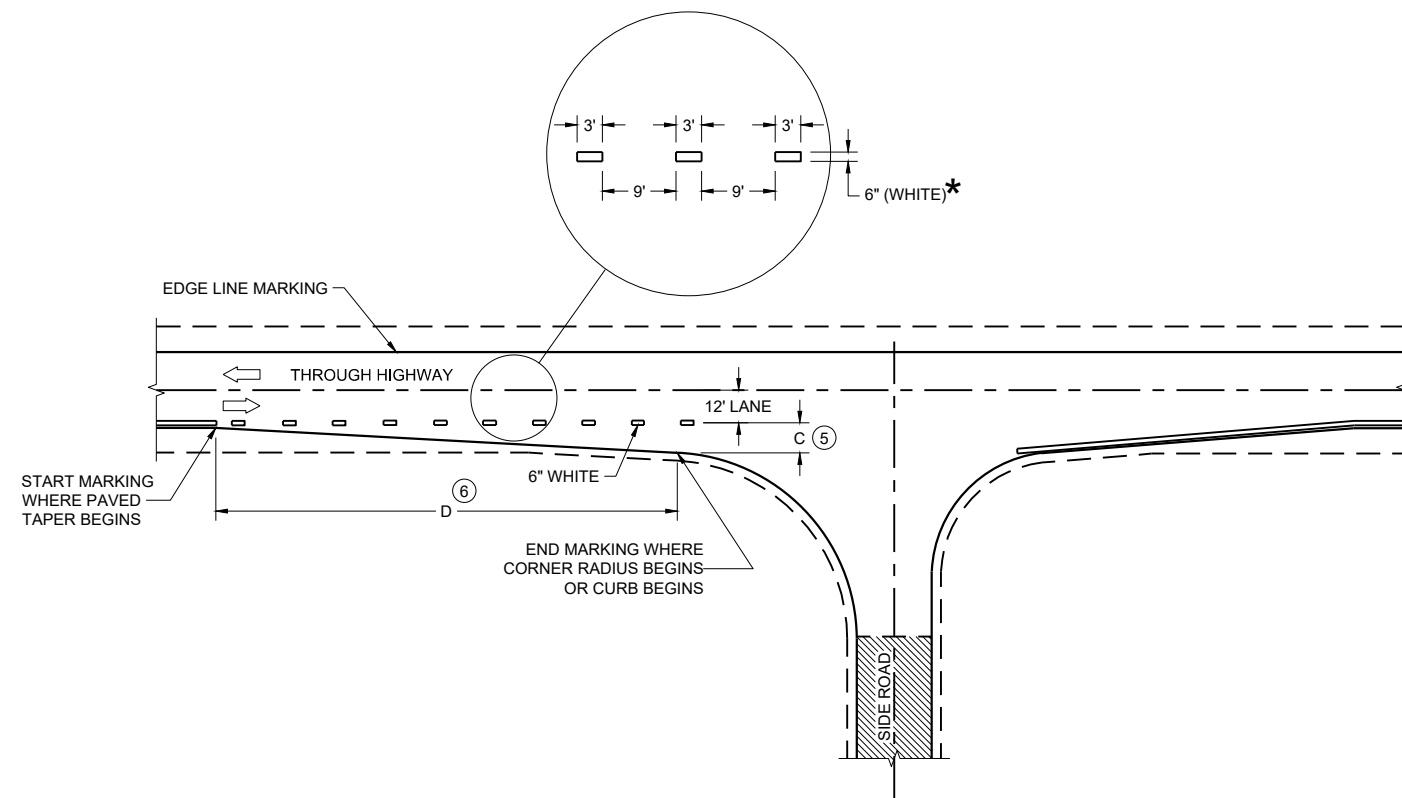
STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

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

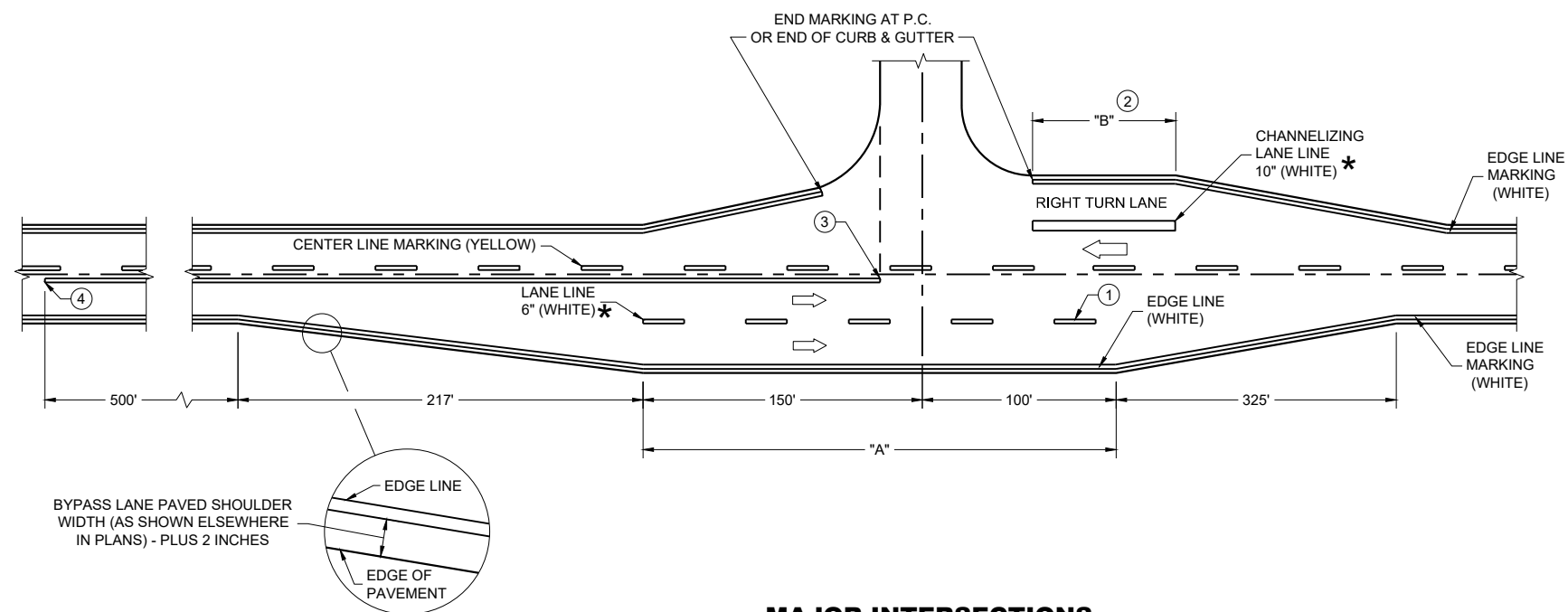
STOP LINE AND CROSSWALK
PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

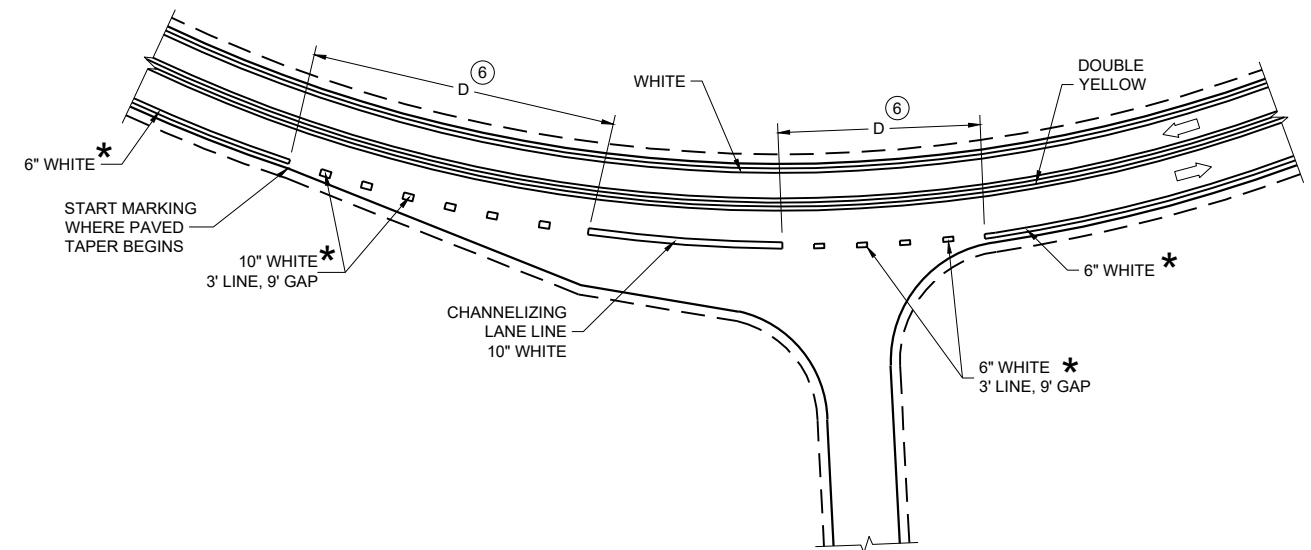
GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
- ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
- ③ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
- ④ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
- ⑤ WHEN DISTANCE "C" IS LESS THAN 4 FEET, OMIT DOTTED EXTENSION.
- ⑥ WHEN DISTANCE "D" IS LESS THAN 50 FEET, OMIT DOTTED EXTENSION.

LEGEND

➡ DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

	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
	CONNECTED ARROW BOARD
	WZ START LOCATION MARKER
	WZ END LOCATION MARKER

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.

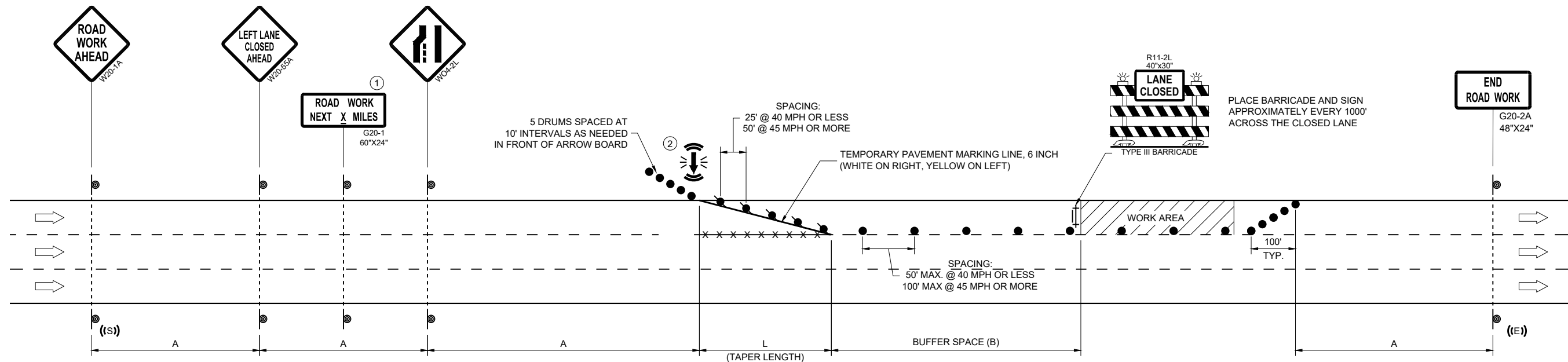
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

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

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'

APPROVED
November 2024
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

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
- CONNECTED ARROW BOARD
- WZ START LOCATION MARKER
- WZ END LOCATION MARKER

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.

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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.

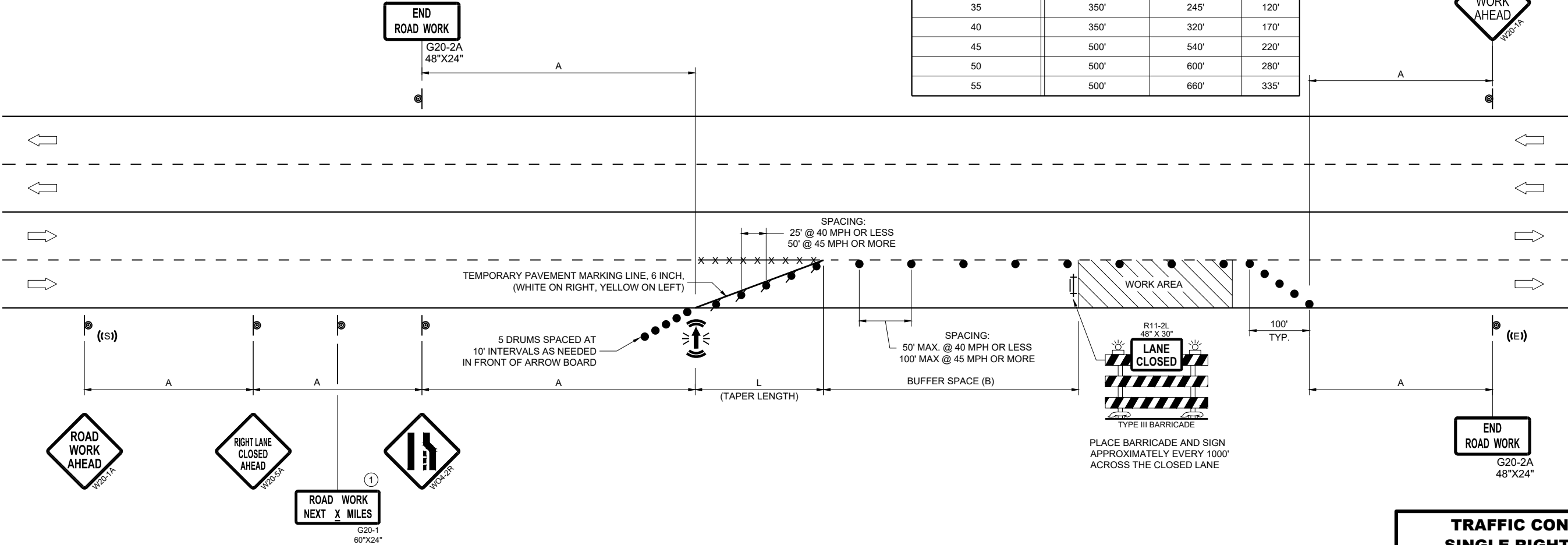
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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.

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
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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
November 2024 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA 150

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
- CONNECTED ARROW BOARD
- WZ START LOCATION MARKER
- WZ END LOCATION MARKER

GENERAL NOTES

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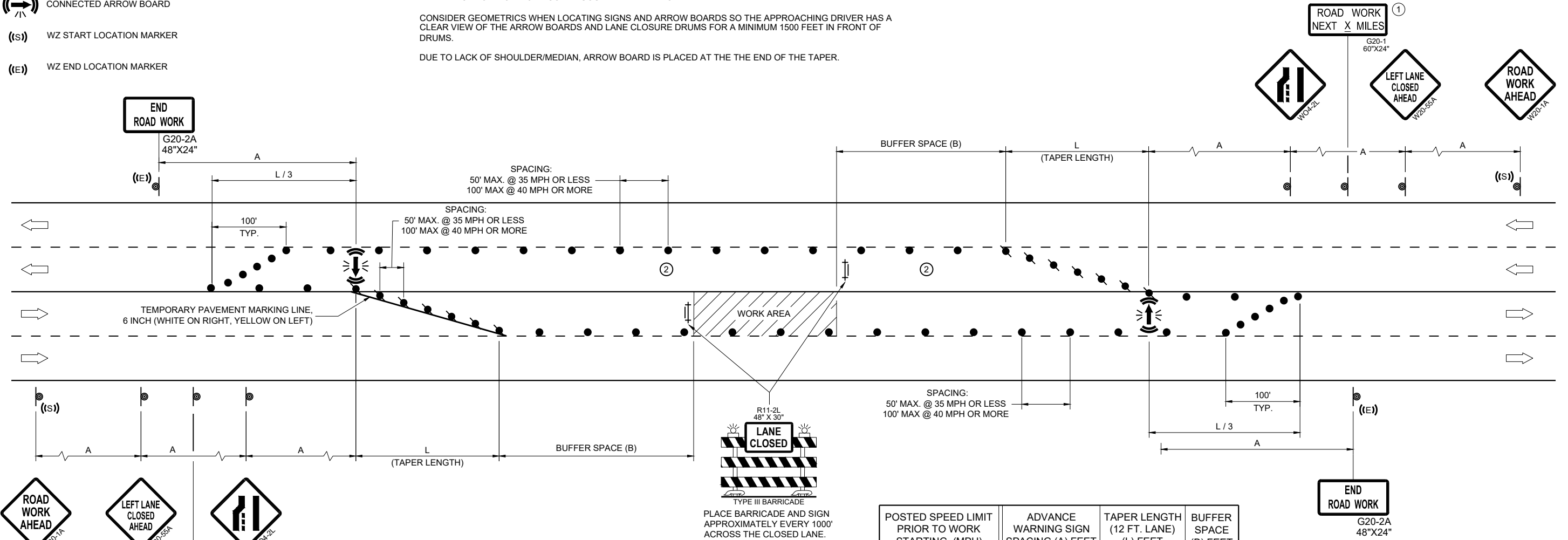
DUE TO LACK OF SHOULDER/MEDIAN, ARROW BOARD IS PLACED AT THE THE END OF THE TAPER.

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.



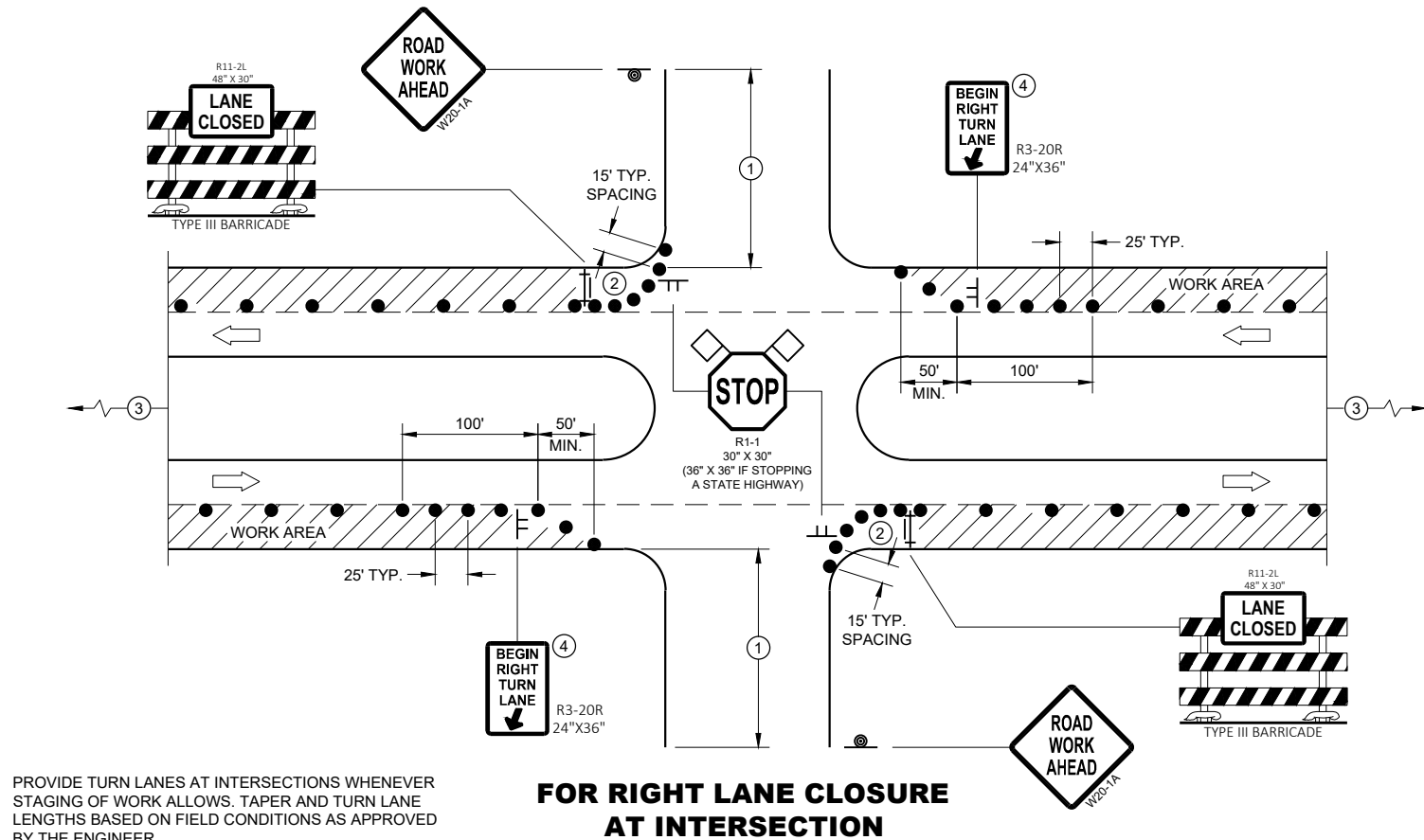
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**TRAFFIC CONTROL,
SINGLE LEFT LANE
CLOSURE, UNDIVIDED
NON-FREEWAY/EXPRESSWAY**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

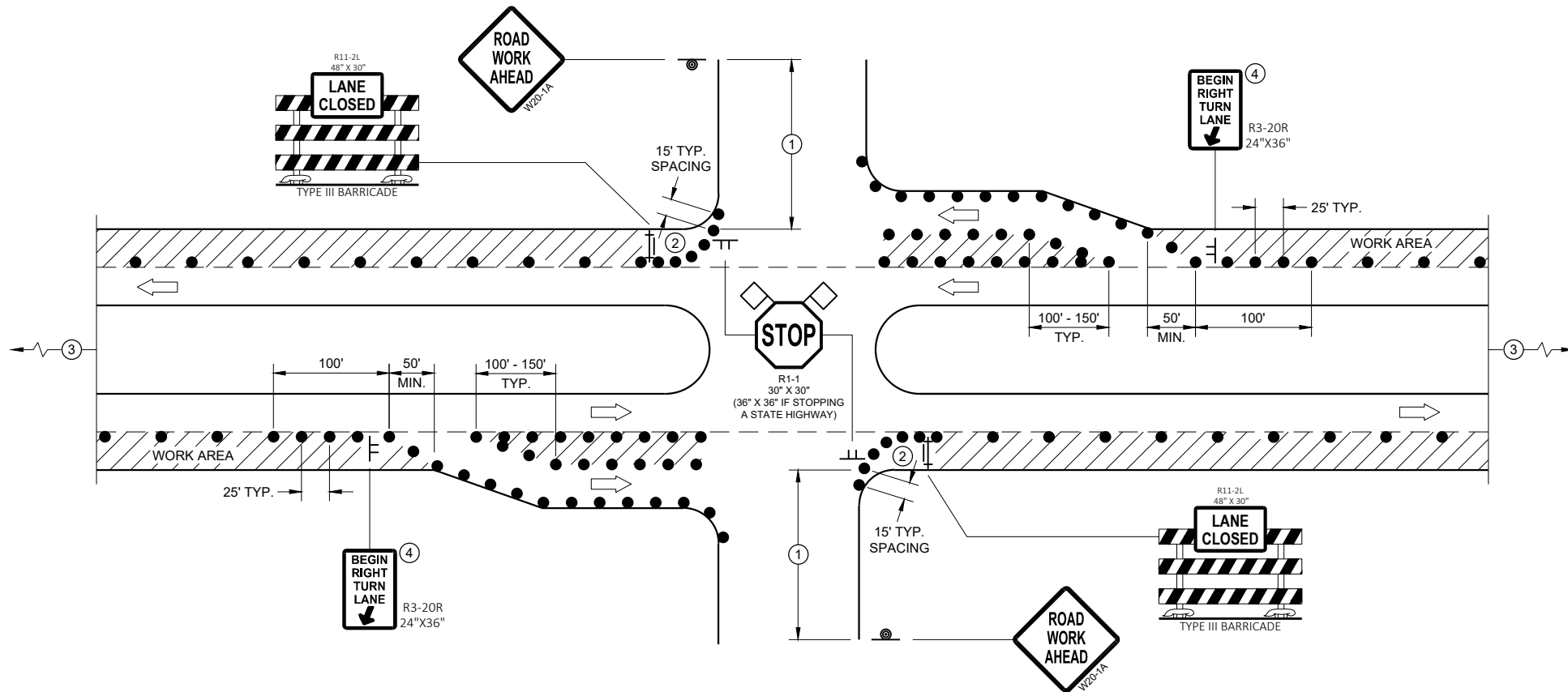
APPROVED
November 2024 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR RIGHT LANE CLOSURE AT INTERSECTION



FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

GENERAL NOTES

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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.

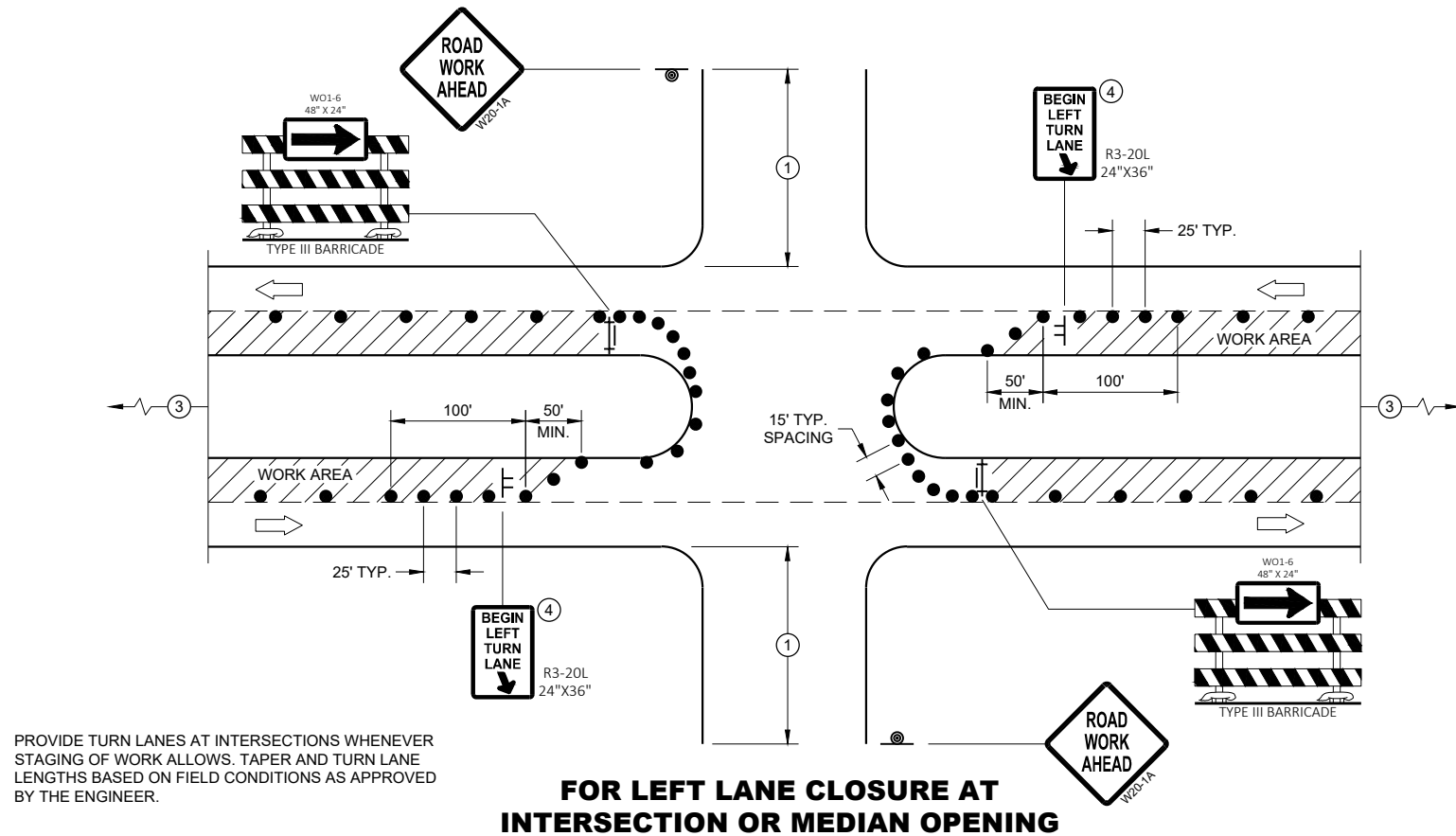
- ① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.
- ② ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS
- ③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.
- ④ MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE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

**TRAFFIC CONTROL,
INTERSECTION WITHIN SINGLE
RIGHT LANE CLOSURE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 152

**GENERAL NOTES**

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- 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

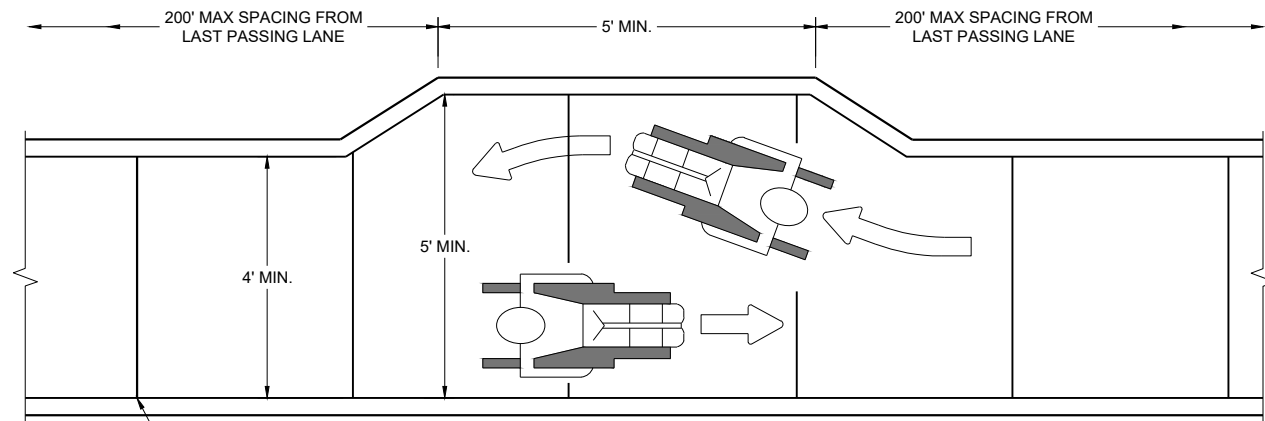
- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

**FOR LEFT LANE CLOSURE AT INTERSECTION
OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)**

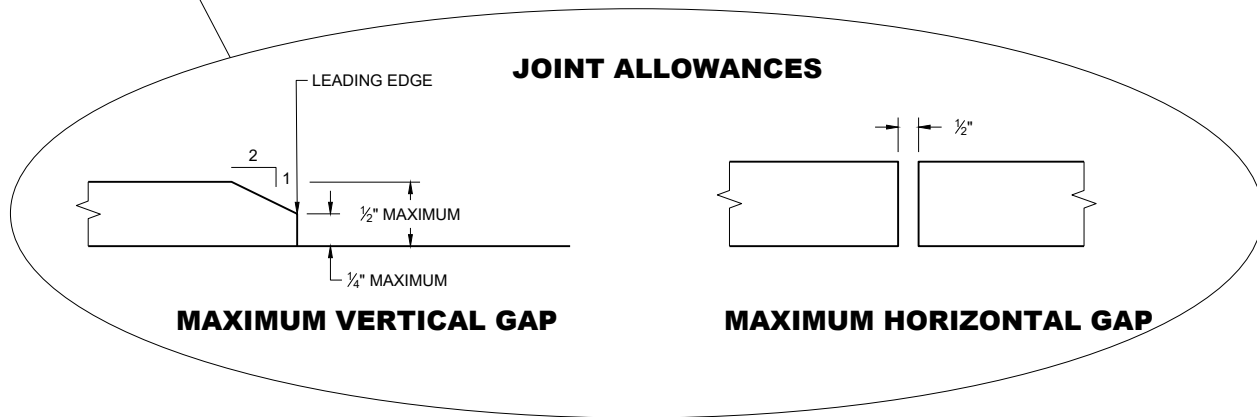
**TRAFFIC CONTROL,
INTERSECTION WITHIN SINGLE
LEFT LANE CLOSURE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 153
FHWA

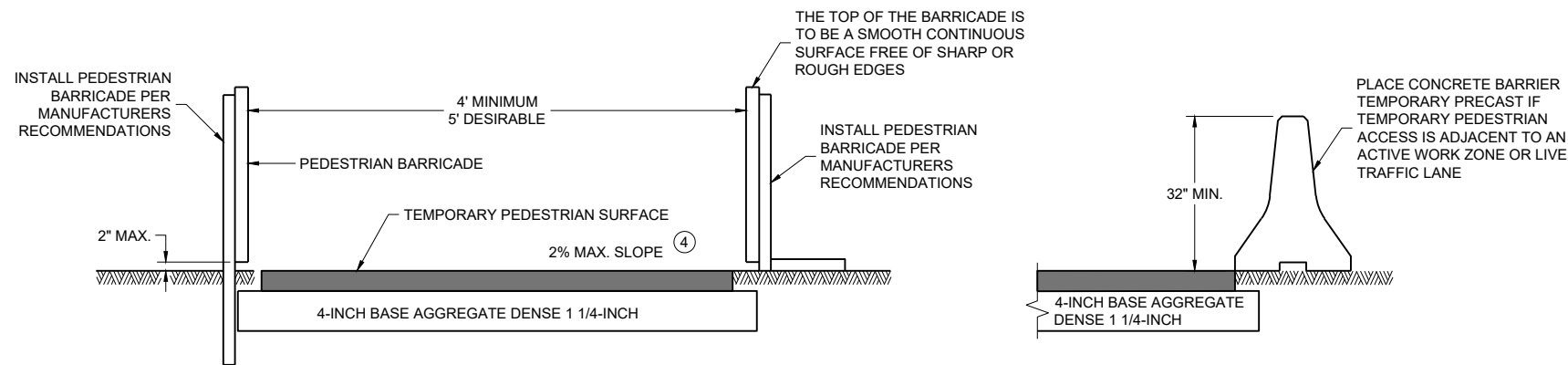


NARROW SIDEWALK PASSING DETAIL



MAXIMUM VERTICAL GAP

MAXIMUM HORIZONTAL GAP



TEMPORARY PEDESTRIAN ACCESS

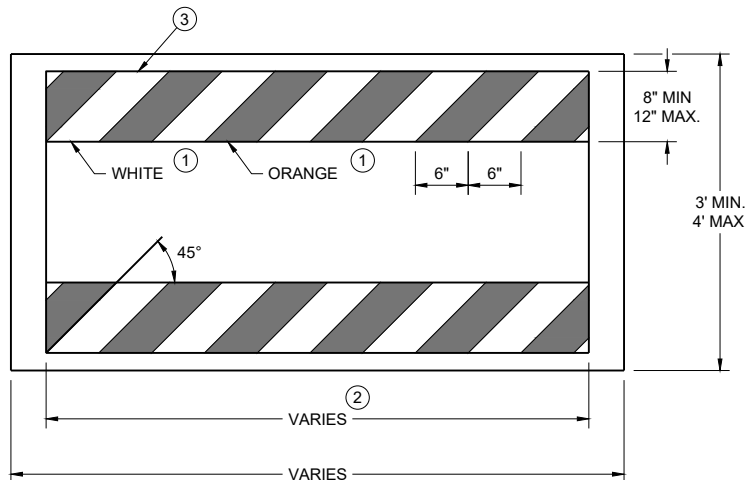
GENERAL NOTES

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.

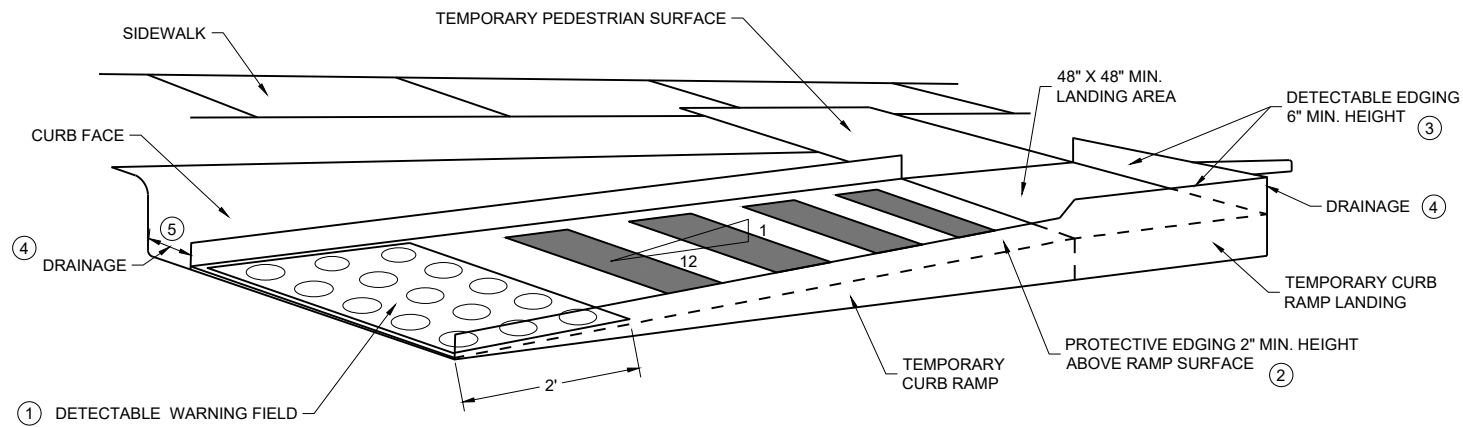
- ④ WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.



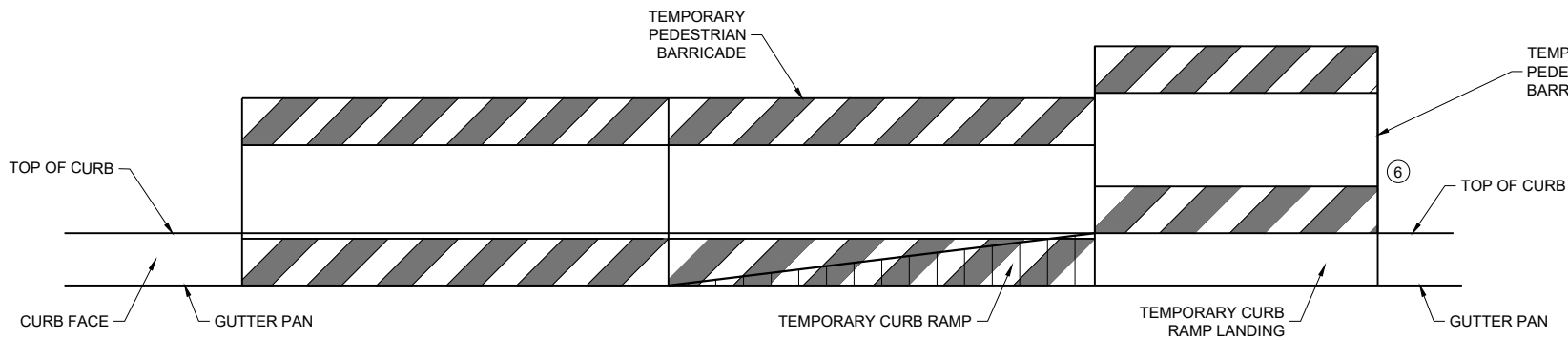
TEMPORARY PEDESTRIAN BARRICADE *

TRAFFIC CONTROL,
PEDESTRIAN
ACCOMMODATION

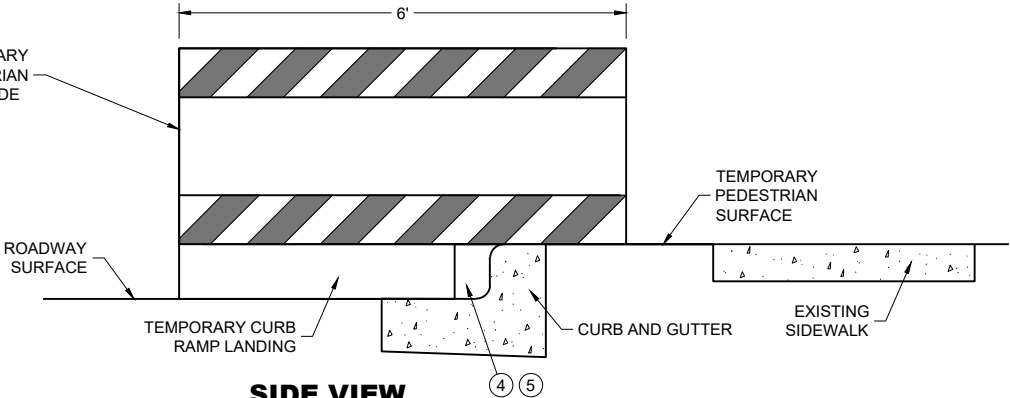
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PERSPECTIVE VIEW



FRONT VIEW



SIDE VIEW

TEMPORARY CURB RAMP PARALLEL TO CURB

GENERAL NOTES

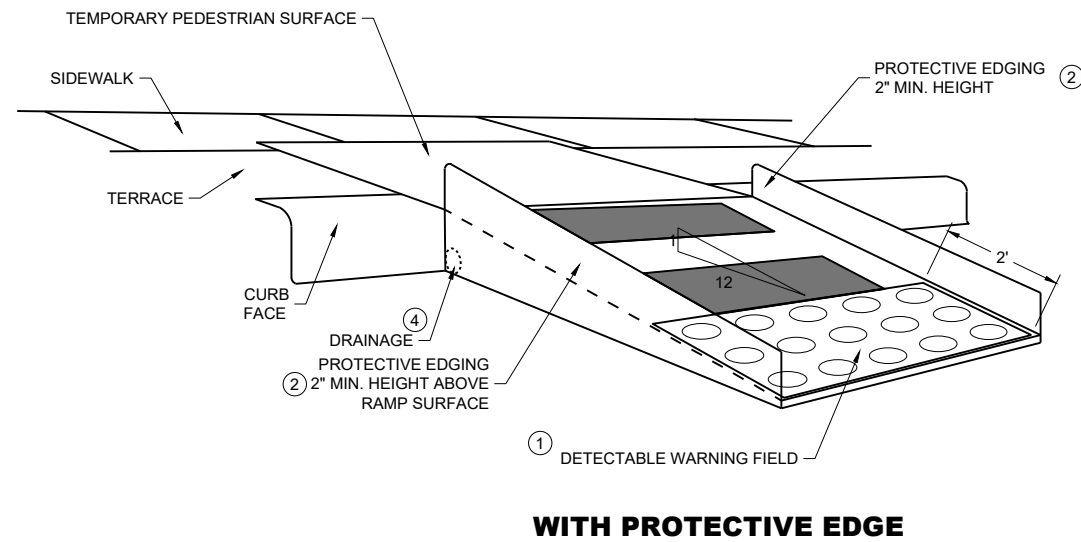
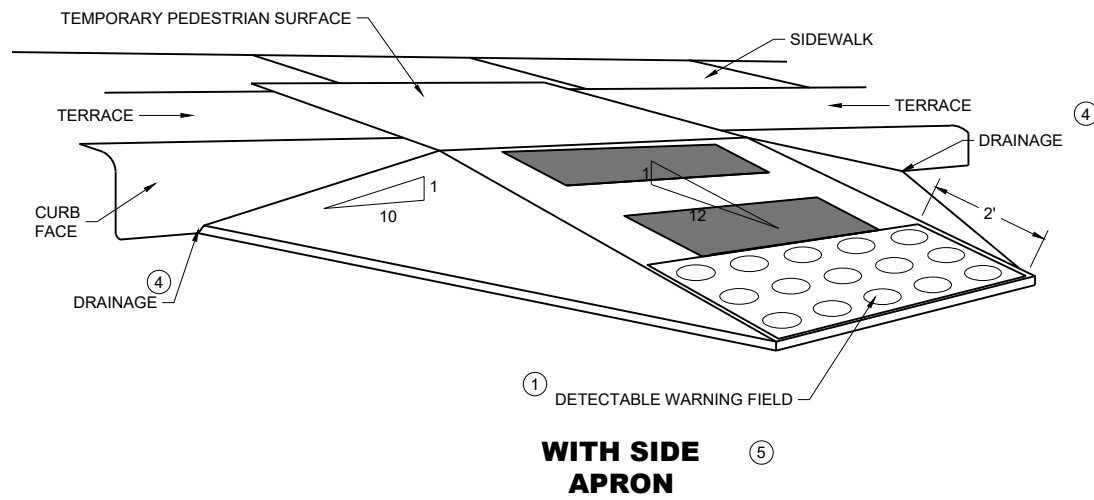
CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

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.



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.

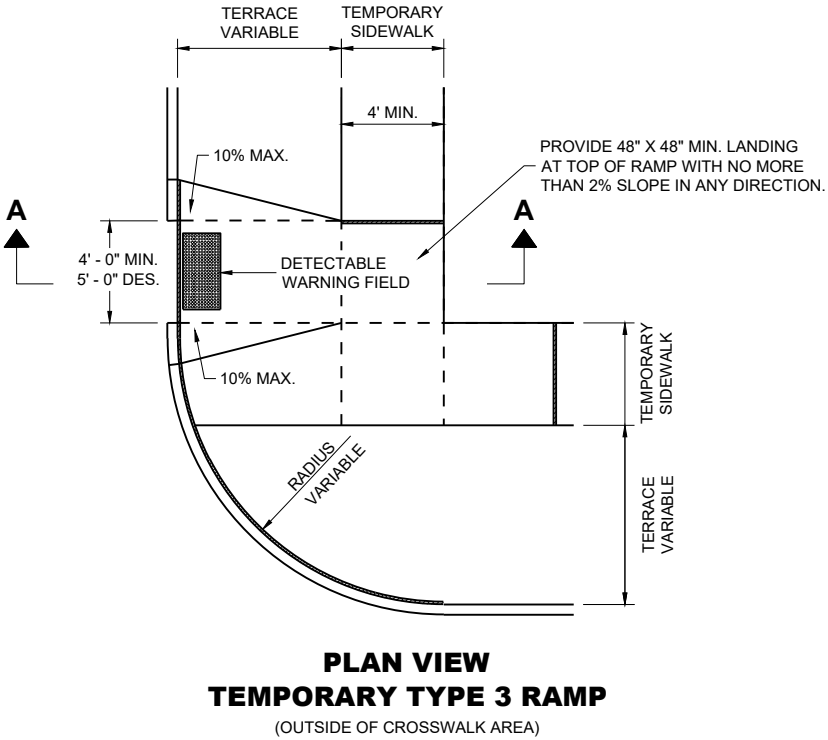
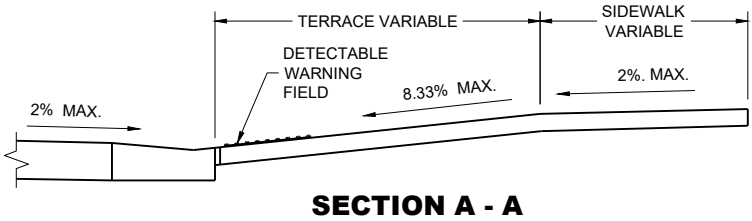
CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

- 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.

6

SDD 15D30-10d

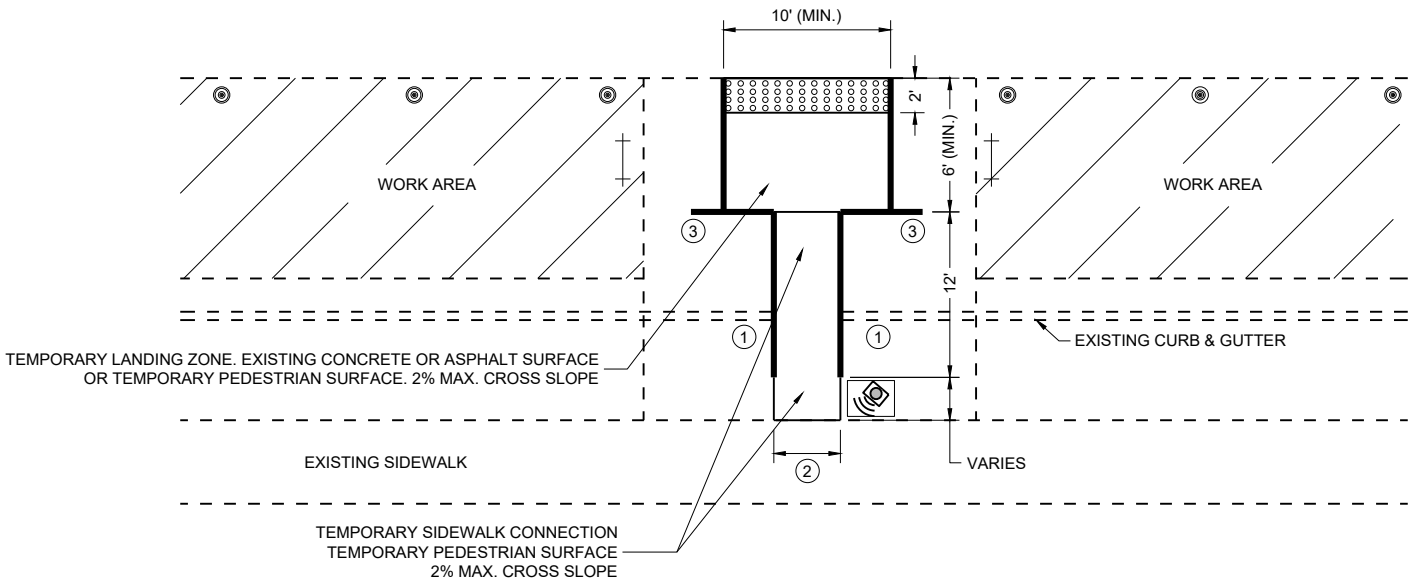
GENERAL NOTES



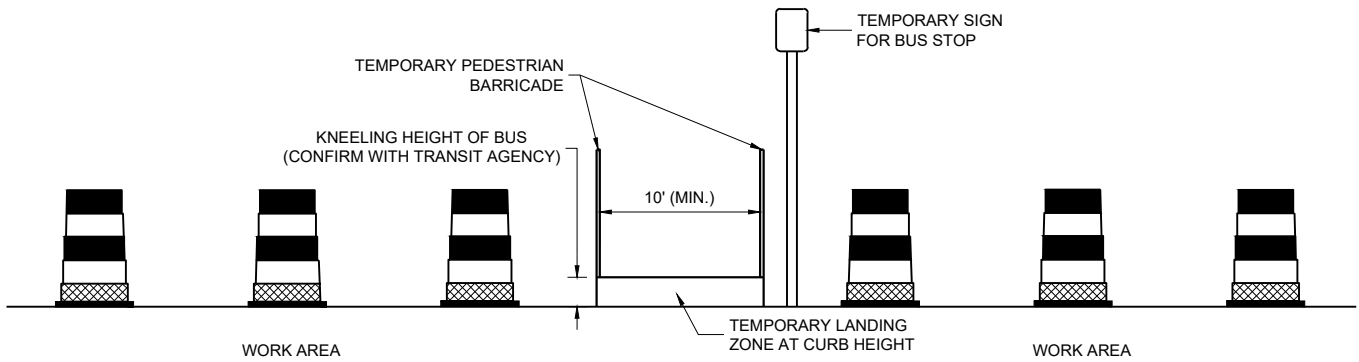
6

SDD 15D30-10d

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2023 DATE	/S/ Andrew Heidtke <position>
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 RAMPS 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 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".
- CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

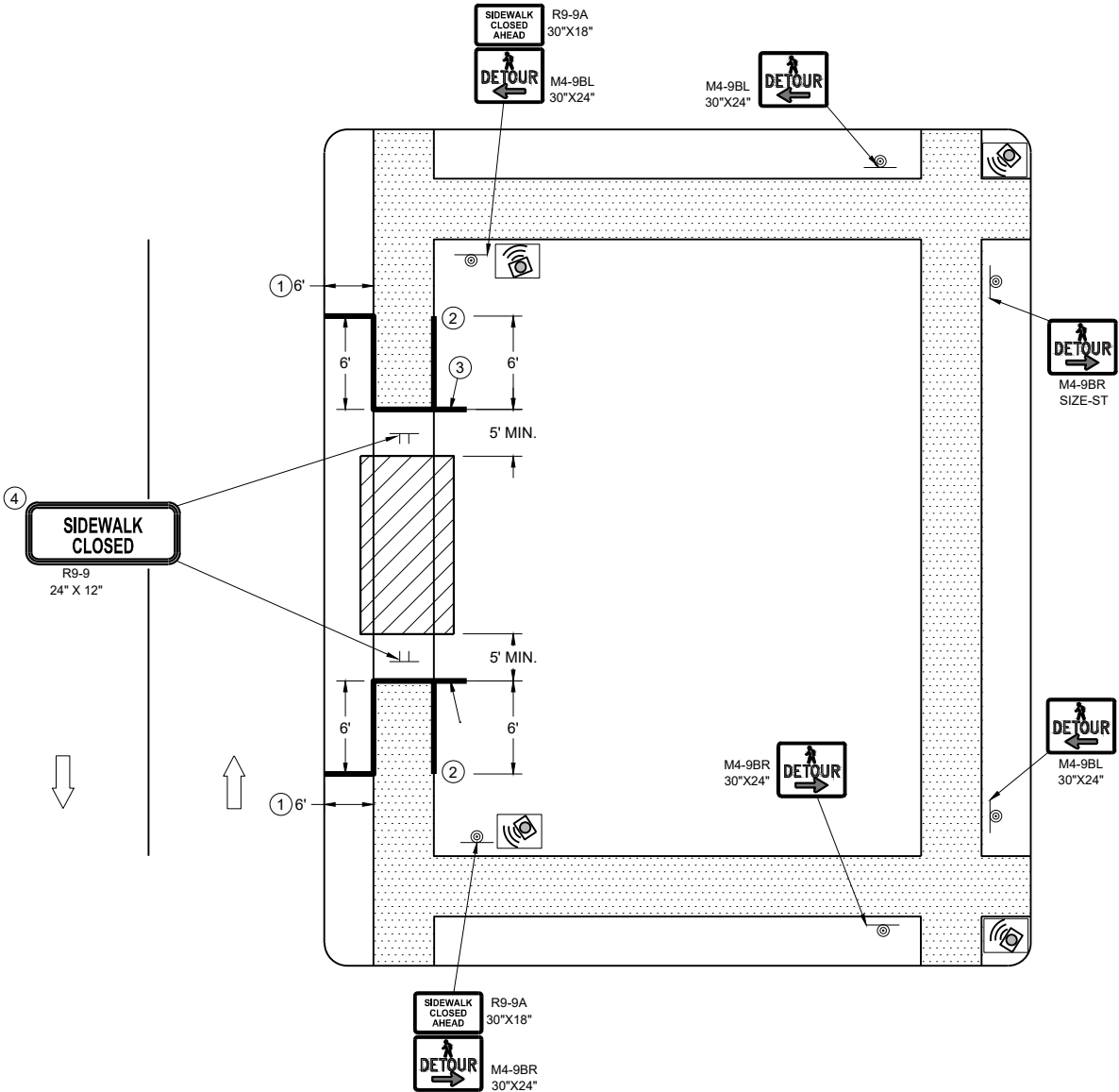
- ① DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
- ② 5' WIDE MIN. WITH TEMPORARY PEDESTRIAN BARRICADE, 10' WIDE MIN. WITHOUT TEMPORARY PEDESTRIAN BARRICADE.
- ③ PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE INTO THIS SPACE.

LEGEND

- ⊙ TRAFFIC CONTROL DRUM
- ⊢ TYPE III BARRICADE
- TEMPORARY PEDESTRIAN BARRICADE
- ⊞ TEMPORARY DETECTABLE WARNING FIELD
- ▨ WORK AREA
- 🔊 TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

LEGEND

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



SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE

GENERAL NOTES

- WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.
- SIGNS THAT REMAIN IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.
- PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING 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.

LEGEND

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

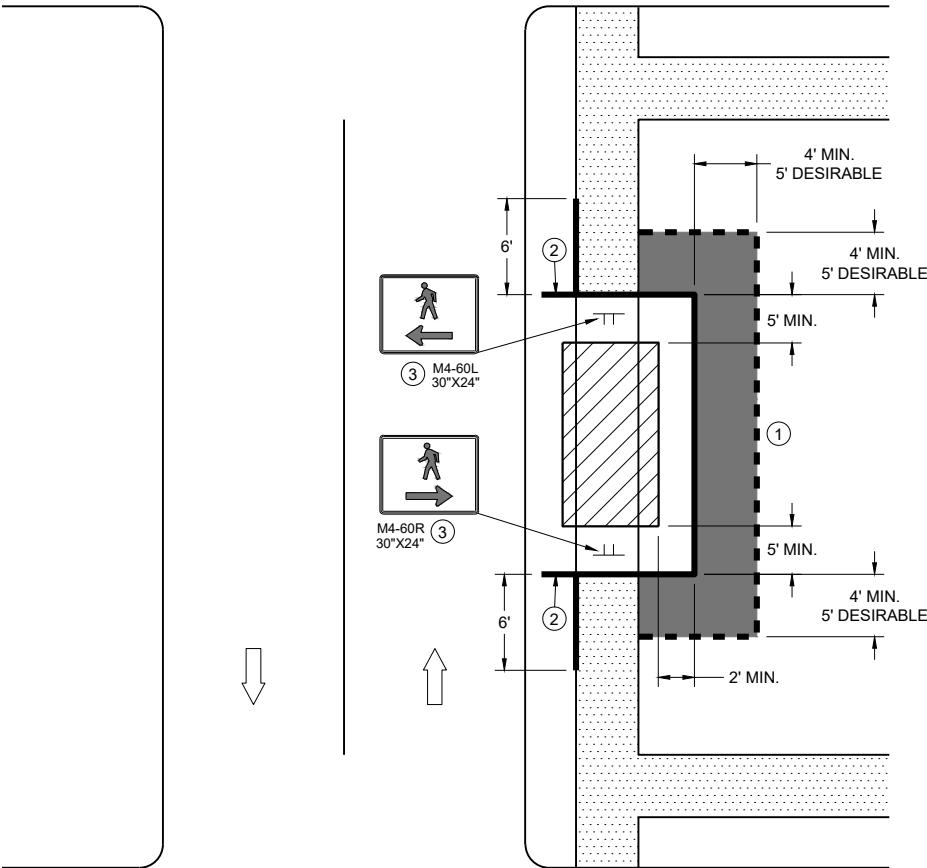
GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

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

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

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



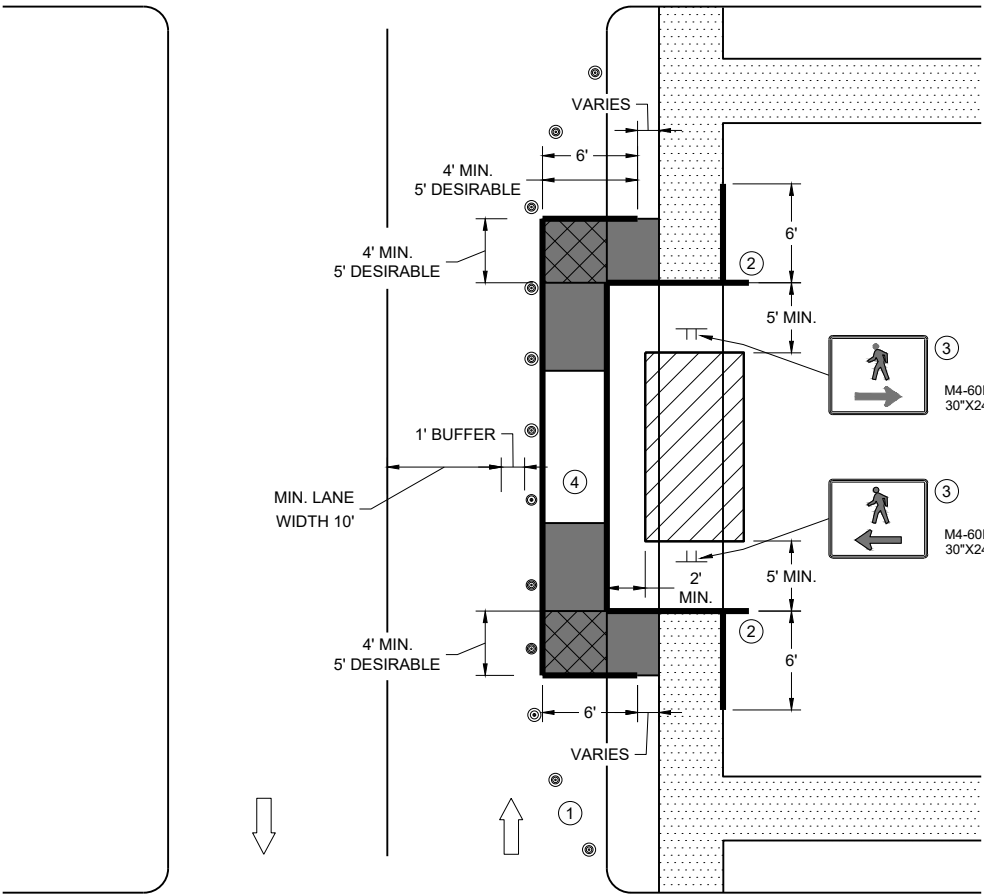
SIDEWALK BYPASS
SINGLE SIDE

LEGEND

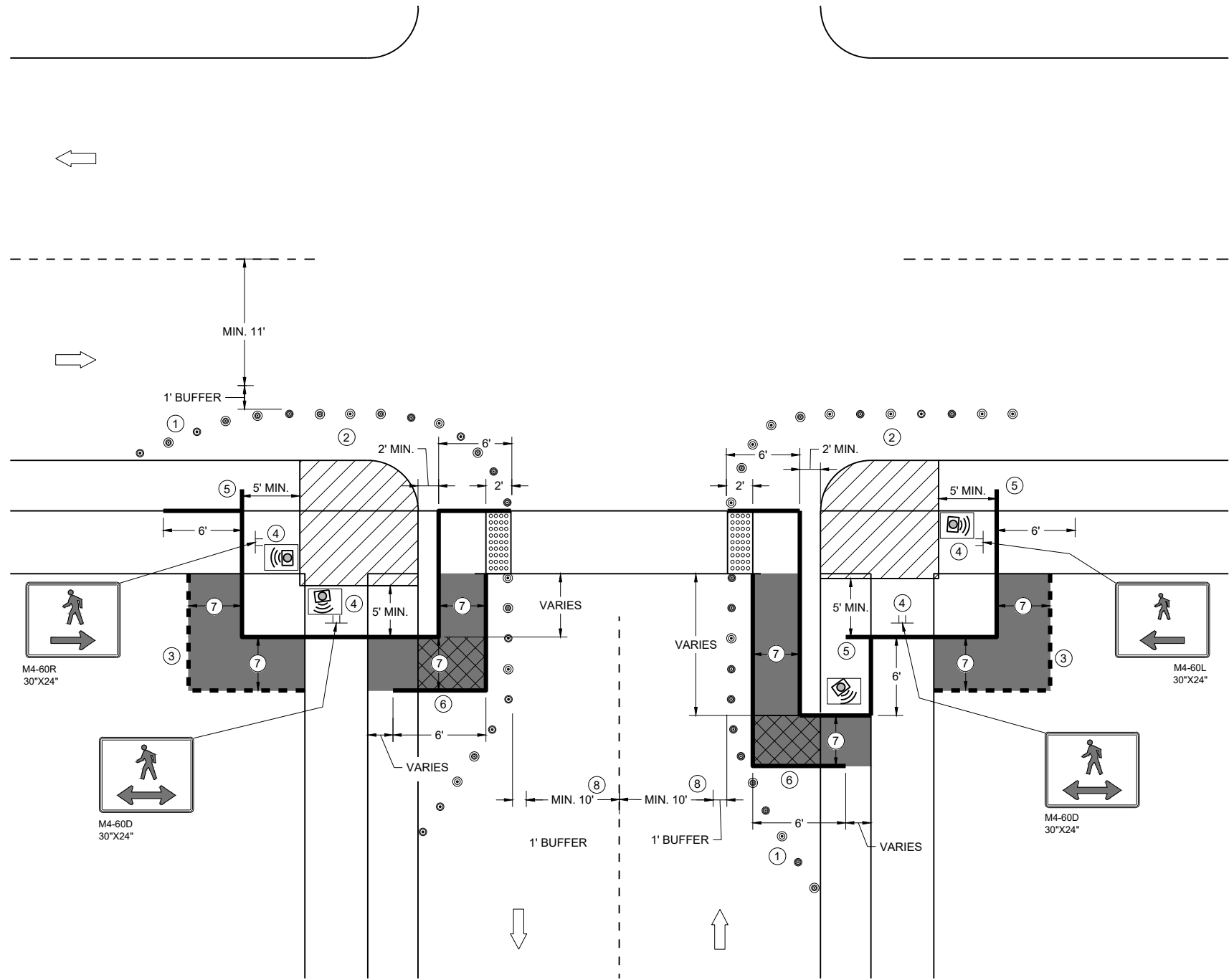
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

GENERAL NOTES

- TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.
- WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.
- SHOULDER OR LANE CLOSURE ADVANCE WARNING AND BUFFER SPACE REQUIRED.
 - PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL PAST THE SIDEWALK ON THE SIDE AWAY FROM THE ROAD.
 - MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.
 - USE EXISTING PAVEMENT SURFACE. IF EXISTING PAVEMENT SURFACE HAS BEEN REMOVED, USE A TEMPORARY PEDESTRIAN SURFACE. WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.



SIDEWALK BYPASS, SINGLE SIDE



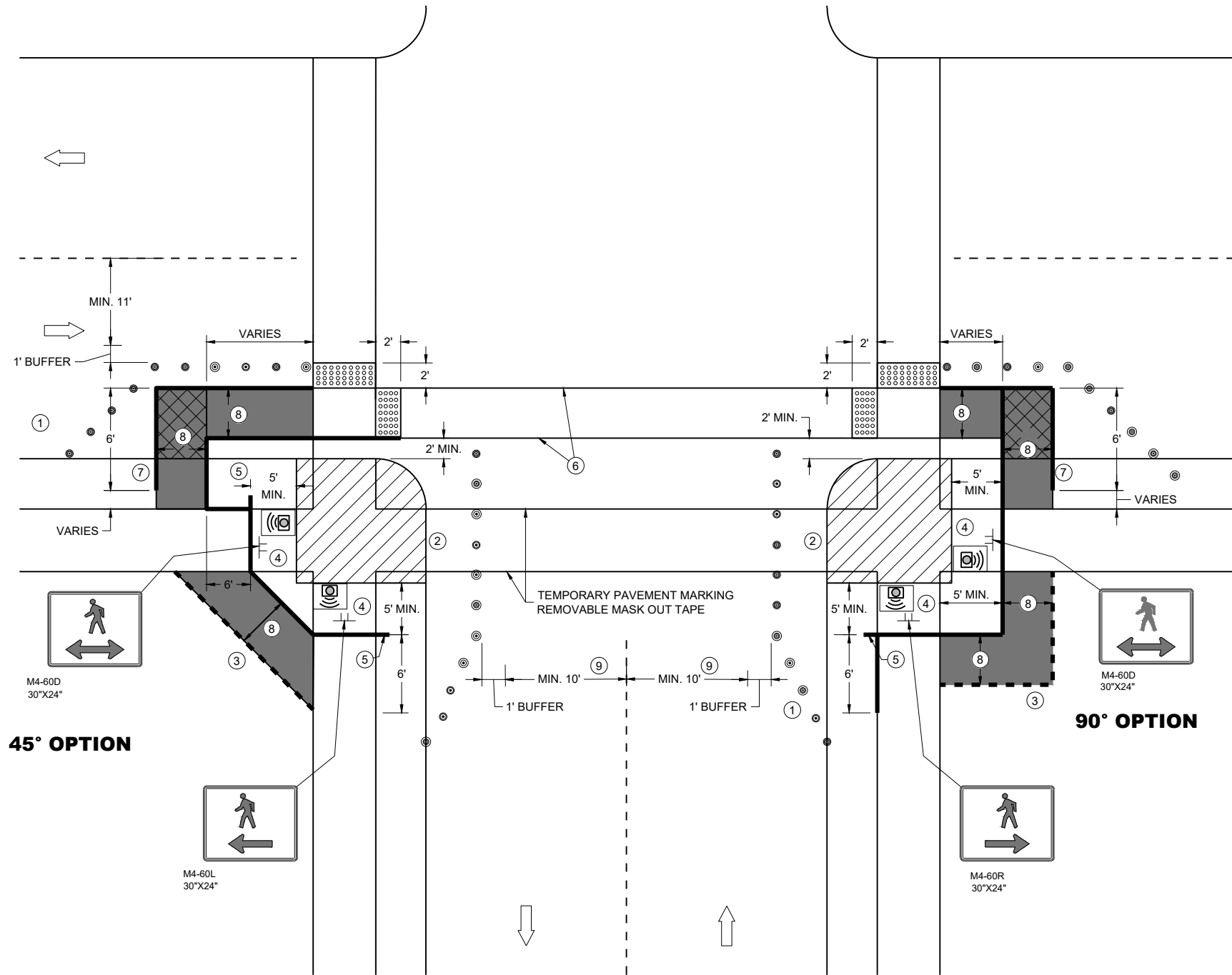
**CURB RAMP PEDESTRIAN TRAFFIC CONTROL
SIDEWALK ON SINGLE SIDE**

GENERAL NOTES

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

LEGEND

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



GENERAL NOTES

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

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

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

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

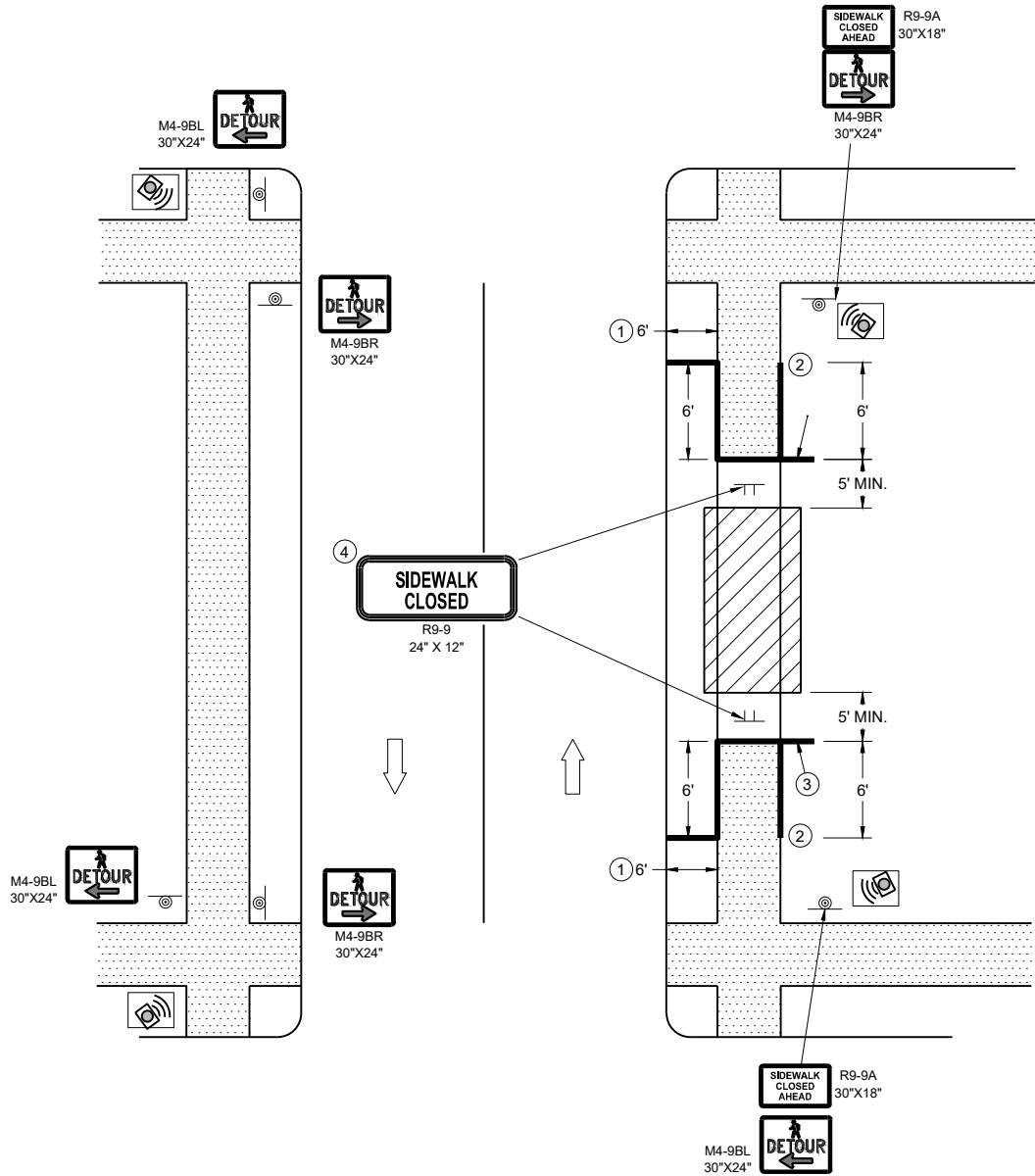
- ① SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
- ② PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
- ③ USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
- ④ MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE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

LEGEND

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

LEGEND

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



SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES

GENERAL NOTES

- WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.
- SIGNS THAT REMAIN IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.
- PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICT WITH DRIVEWAYS AND OTHER EXISTING FEATURES.
- IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
 - 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.
 - IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
 - MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.
SEE OTHER PEDESTRIAN ACCOMMODATION DETAILS FOR SIGNING AND DEVICES FOR DIFFERENT
PEDESTRIAN FACILITIES CLOSURES.

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

- ## LEGEND

- TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

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

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON ANY "COVERED" OR "DOWNED" SIGNS.

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

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

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

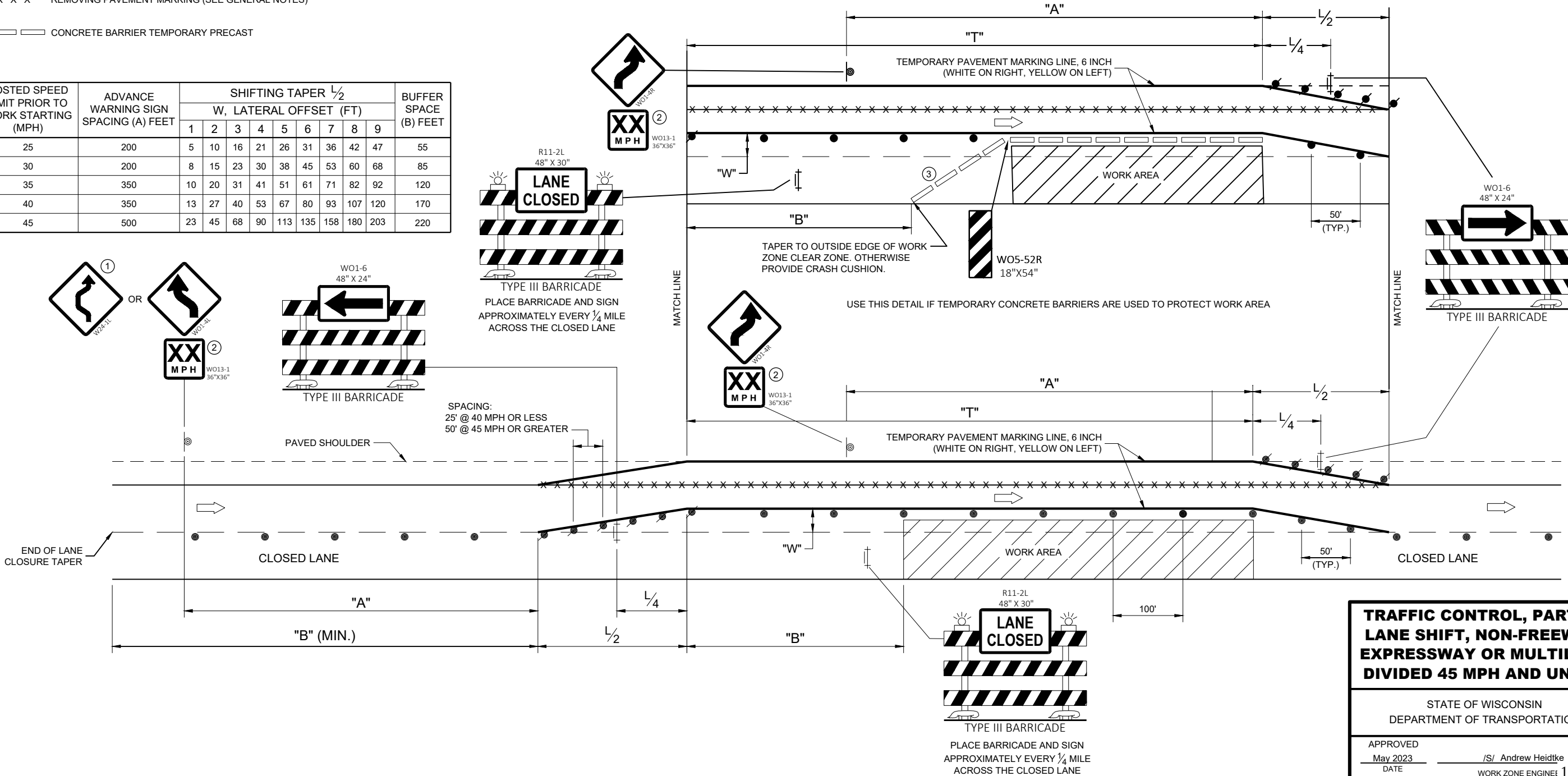
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

- ① USE ONLY WHEN T<600', OMIT WO1-4R.
- ② IF NEEDED, USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.
- ③ BARRIER FLARE RATE: 6:1 @ 40 MPH OR LESS
8:1 @ 45 MPH OR GREATER

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER $\frac{L}{2}$ W, LATERAL OFFSET (FT)									BUFFER SPACE (B) FEET
		1	2	3	4	5	6	7	8	9	
25	200	5	10	16	21	26	31	36	42	47	55
30	200	8	15	23	30	38	45	53	60	68	85
35	350	10	20	31	41	51	61	71	82	92	120
40	350	13	27	40	53	67	80	93	107	120	170
45	500	23	45	68	90	113	135	158	180	203	220



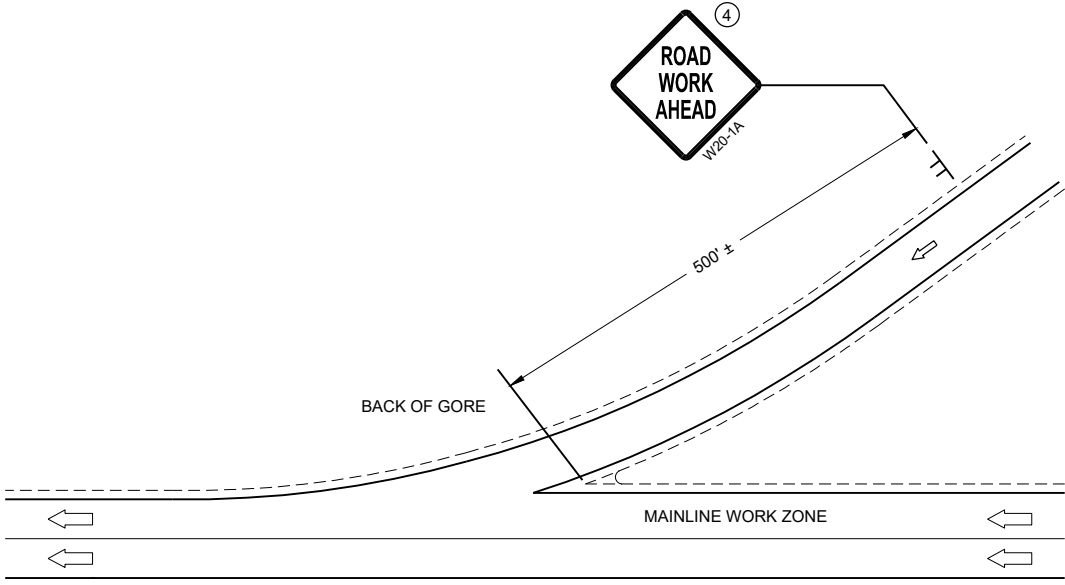
TRAFFIC CONTROL, PARTIAL
LANE SHIFT, NON-FREEWAY/
EXPRESSWAY OR MULTILANE
DIVIDED 45 MPH AND UNDER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 166
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)
-  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

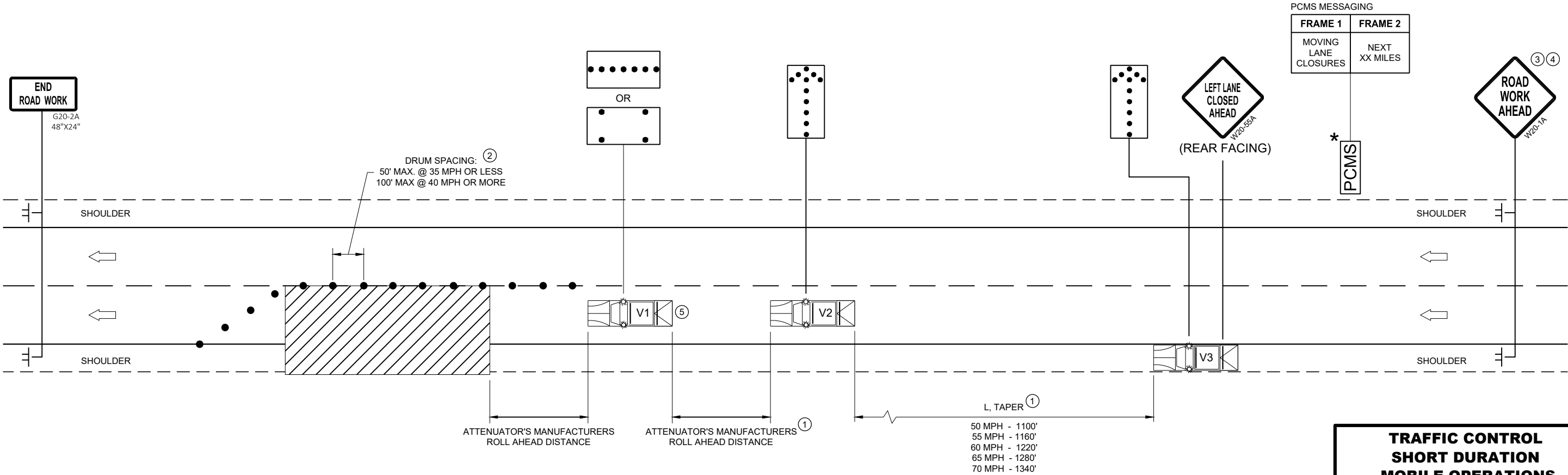
DRUMS ARE TO BE USED FOR BRIDGE DECK SEALING AND OTHER PROJECTS THAT REQUIRE DELINEATION.
- 3

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 167

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.

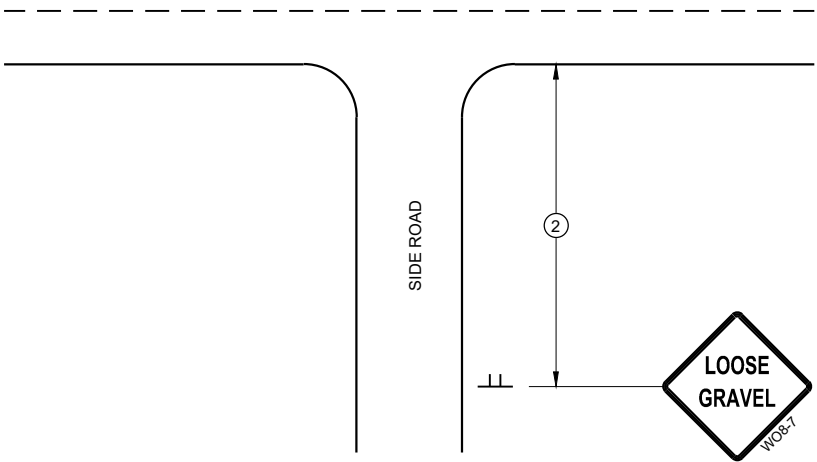
ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

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.

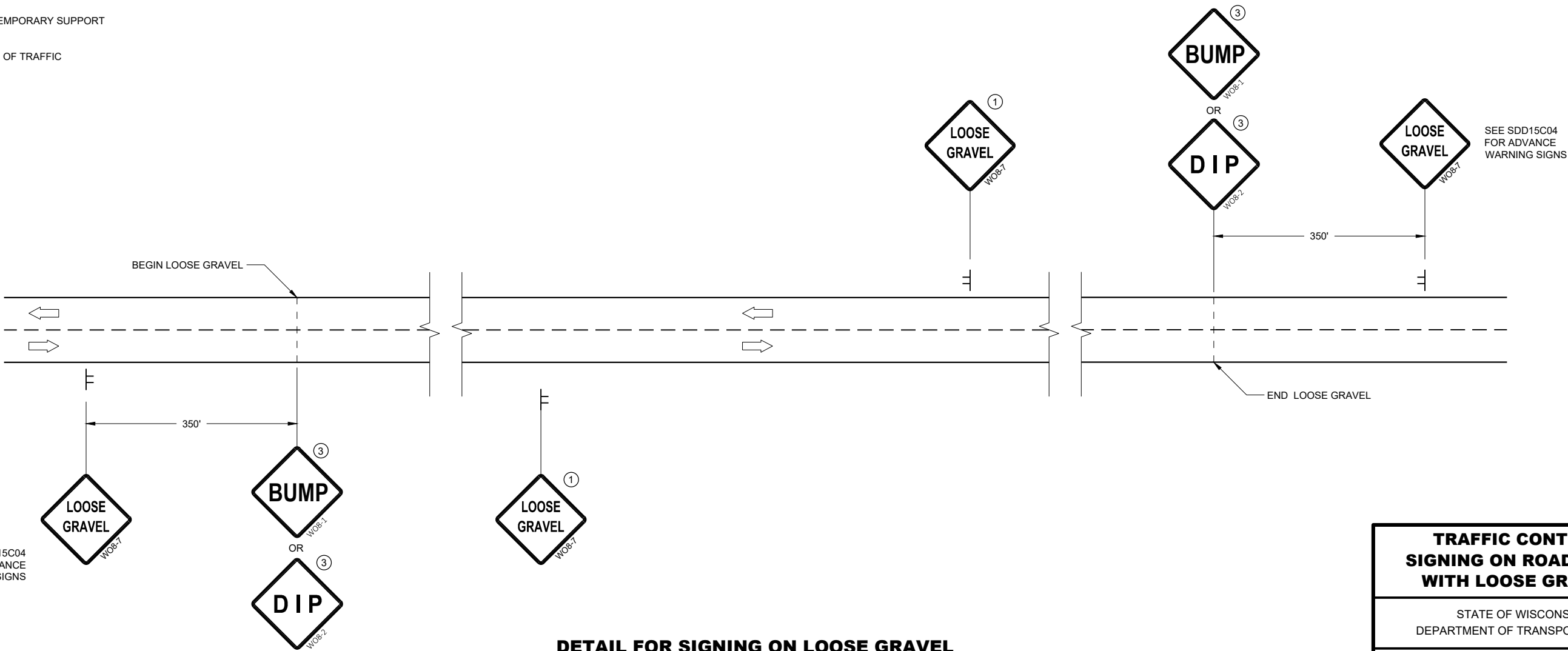
- 1 PLACE SIGNS 350' IN ADVANCE OF CHIP SEALED OR LOOSE GRAVEL SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.
- 2 PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.
- 3 ADD WO8-1 OR WO8-2 SIGN WHEN THE CONDITION IS PRESENT.

LEGEND

-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH
SIGN DETAIL



DETAIL FOR SIGNING ON LOOSE GRAVEL
OR CHIP SEALED SURFACES

TRAFFIC CONTROL
SIGNING ON ROADWAYS
WITH LOOSE GRAVEL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 168

FHWA

LEGEND

- EXISTING SIGN ON PERMANENT SUPPORT
- NEW SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK ZONE

GENERAL NOTES

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 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.

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.

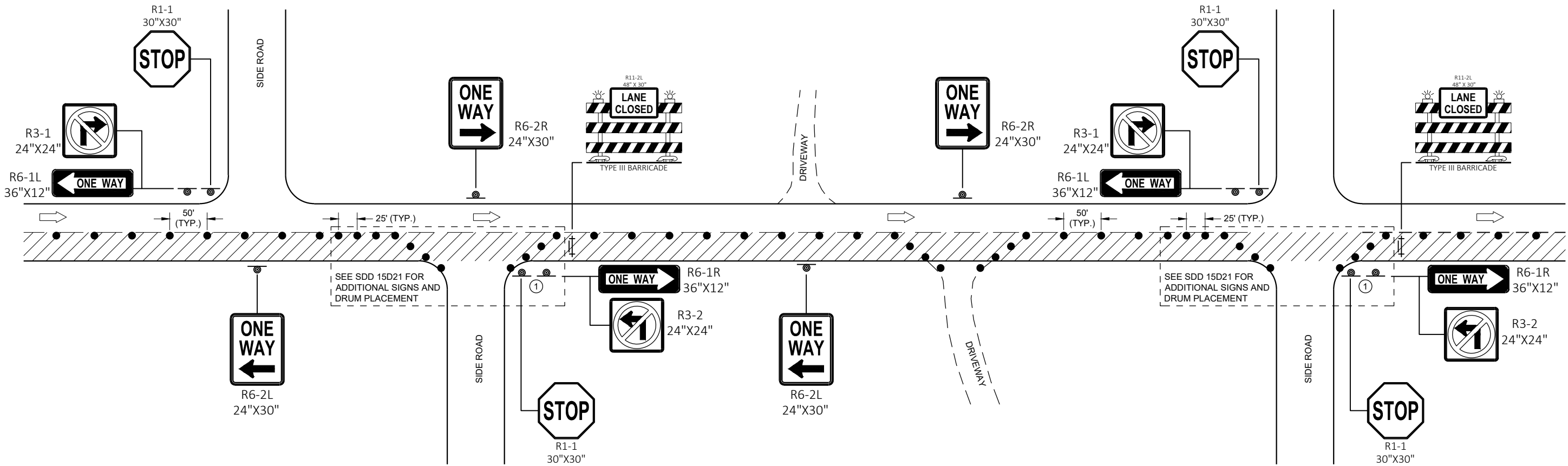
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

① IF WORK OPERATIONS ALLOWS, MOVE R1-1, R6-1R, AND R3-2 CLOSER TO INTERSECTION.

6

SDD 15D46 - 01



6

SDD 15D46 - 01

TRAFFIC CONTROL
ONE - WAY SIGNING

TRAFFIC CONTROL
ONE-WAY SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 169

FHWA

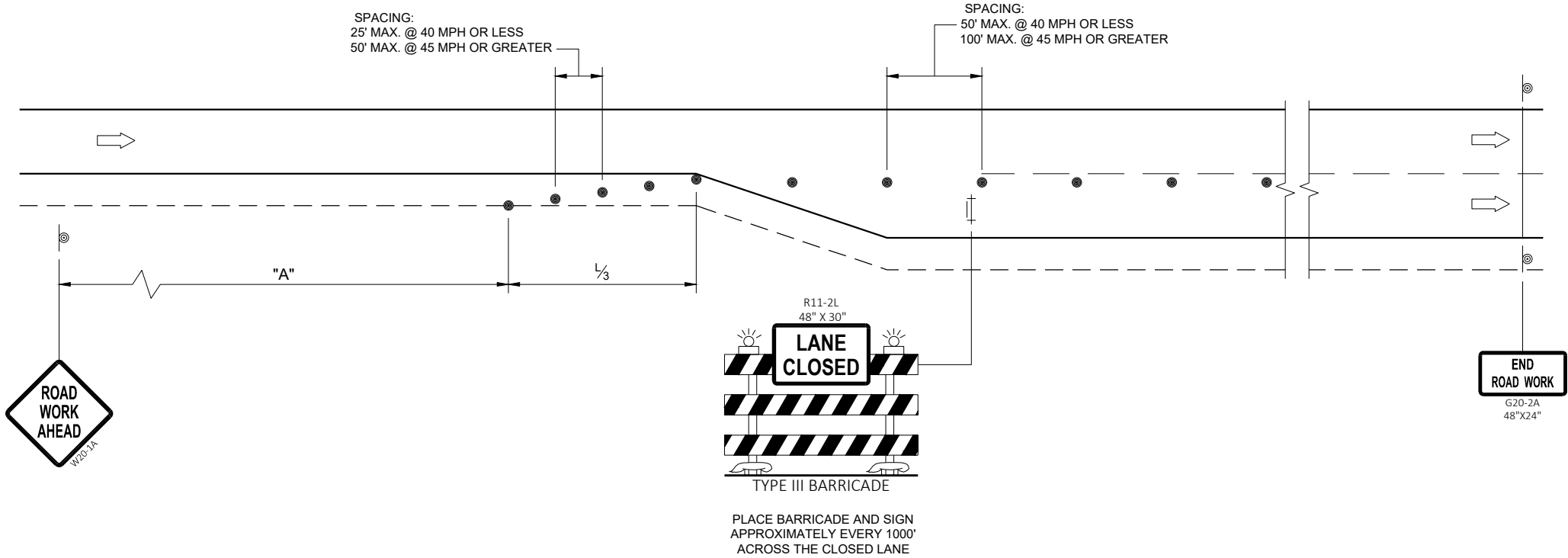
LEGEND

- 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 $L/2$					
		W, LATERAL OFFSET (FT)					
3	4	5	6	7	8		
25	200	10	14	17	21	24	28
30	200	15	20	25	30	35	40
35	350	20	27	34	40	47	54
40	350	26	35	44	53	62	70
45	500	45	59	74	89	104	119
50	500	50	66	83	99	116	132
55	500	54	73	91	109	127	145

GENERAL NOTES

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



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 170

FHWA

LEGEND

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

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

GENERAL NOTES

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

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

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

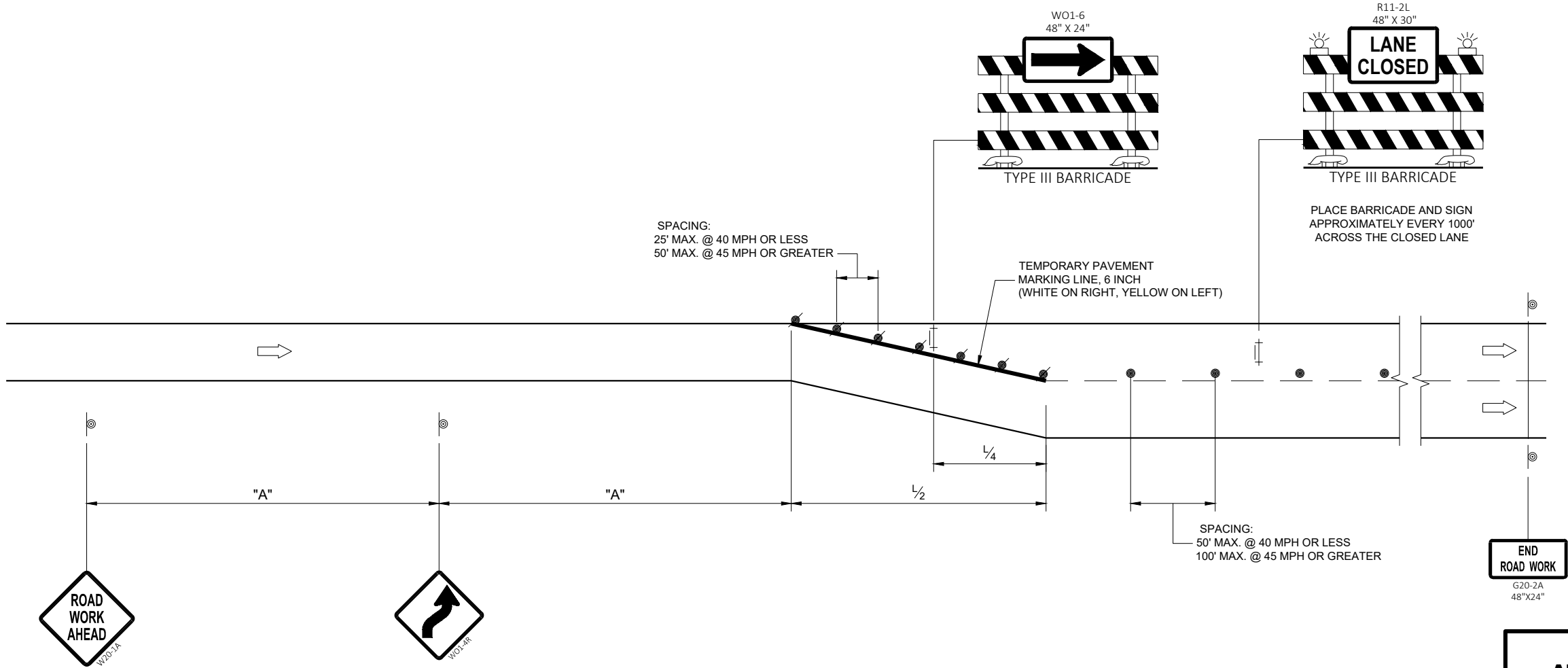
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

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

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

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



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

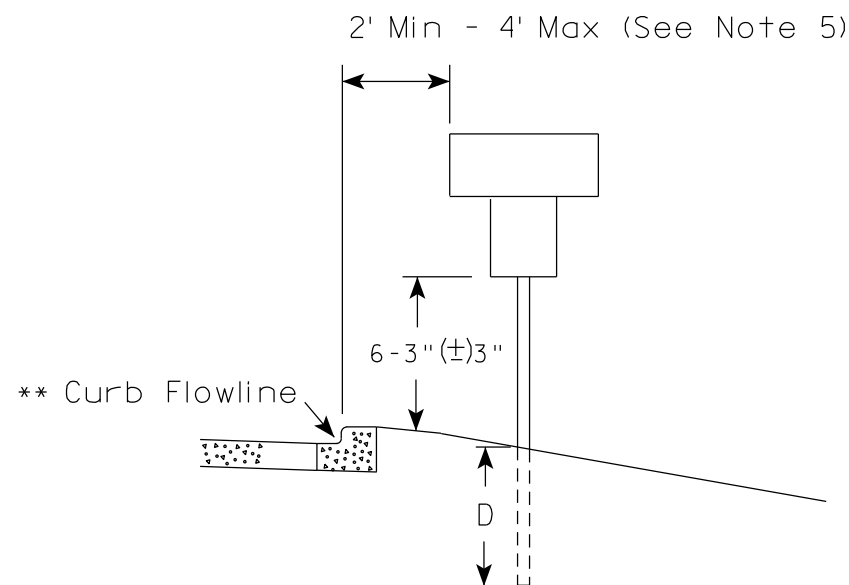
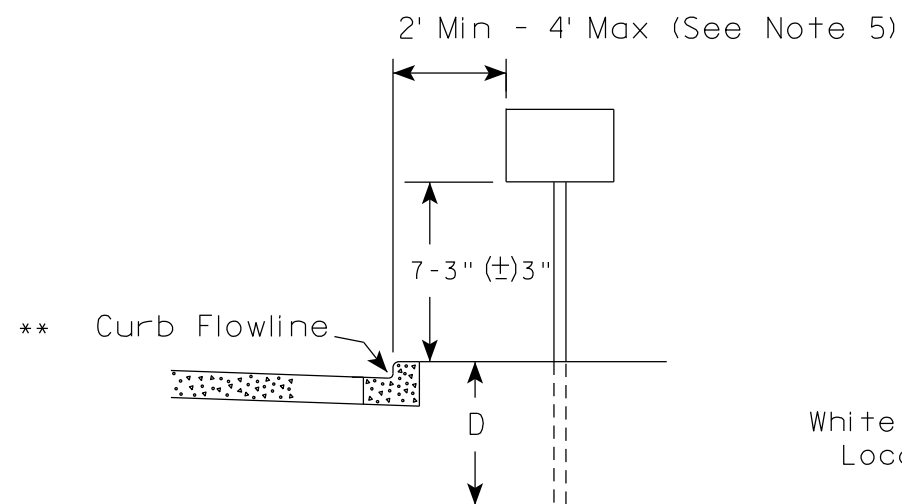
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

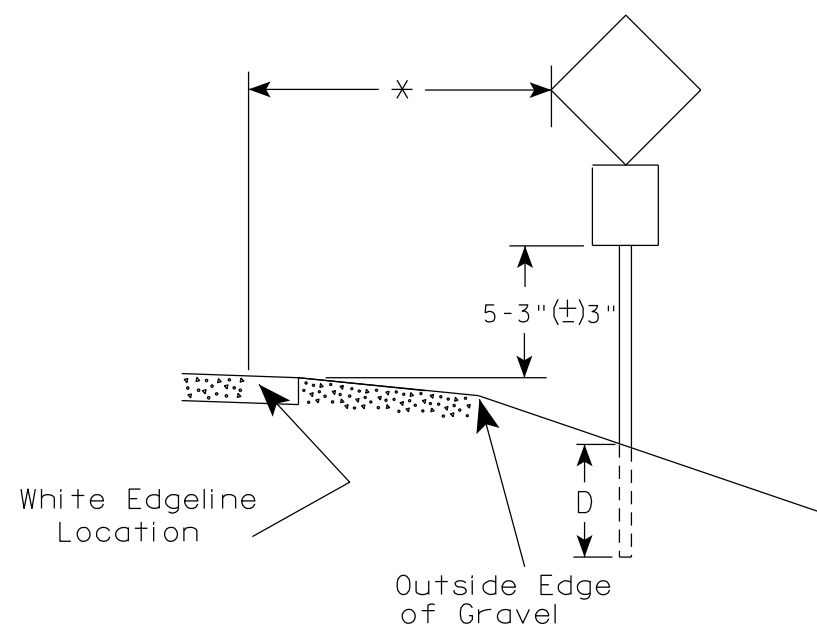
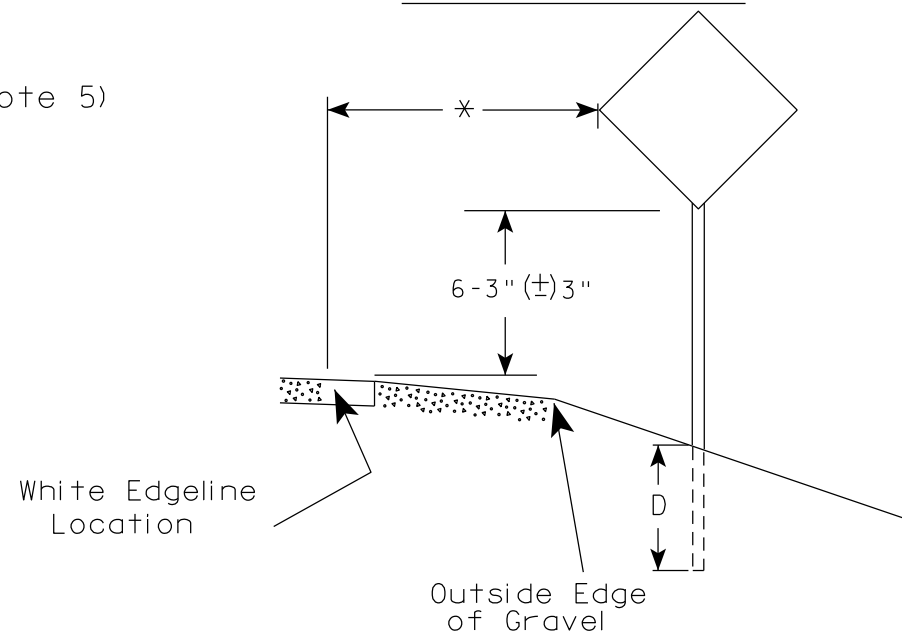
FHWA 171

URBAN AREA



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

RURAL AREA (See Note 2)



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

GENERAL NOTES

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" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" 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 12/6/23

PLATE NO. A4-3.23

PROJECT NO:

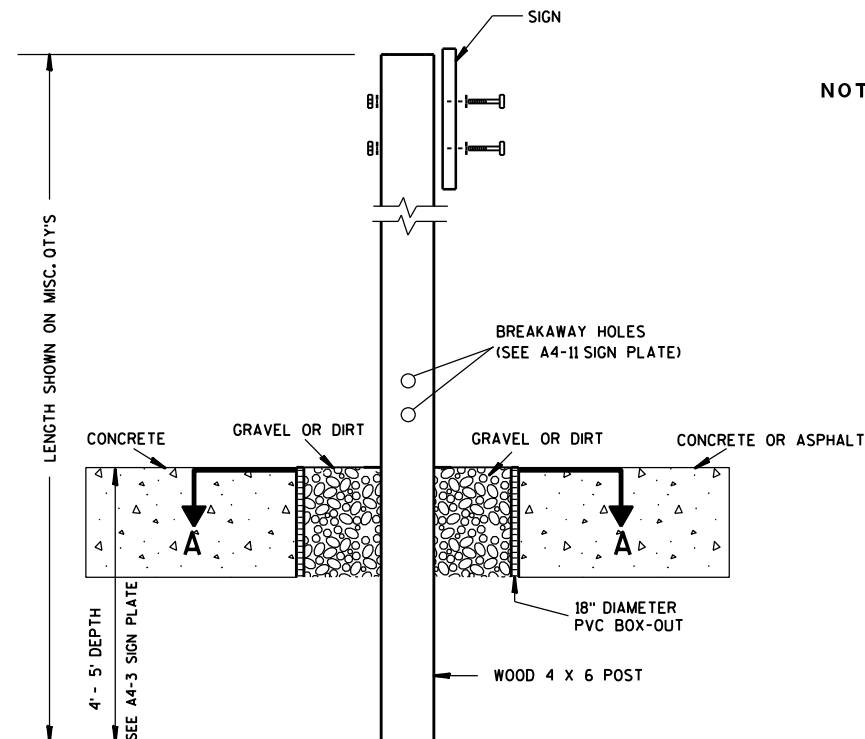
HWY:

COUNTY:

SHEET NO:

172

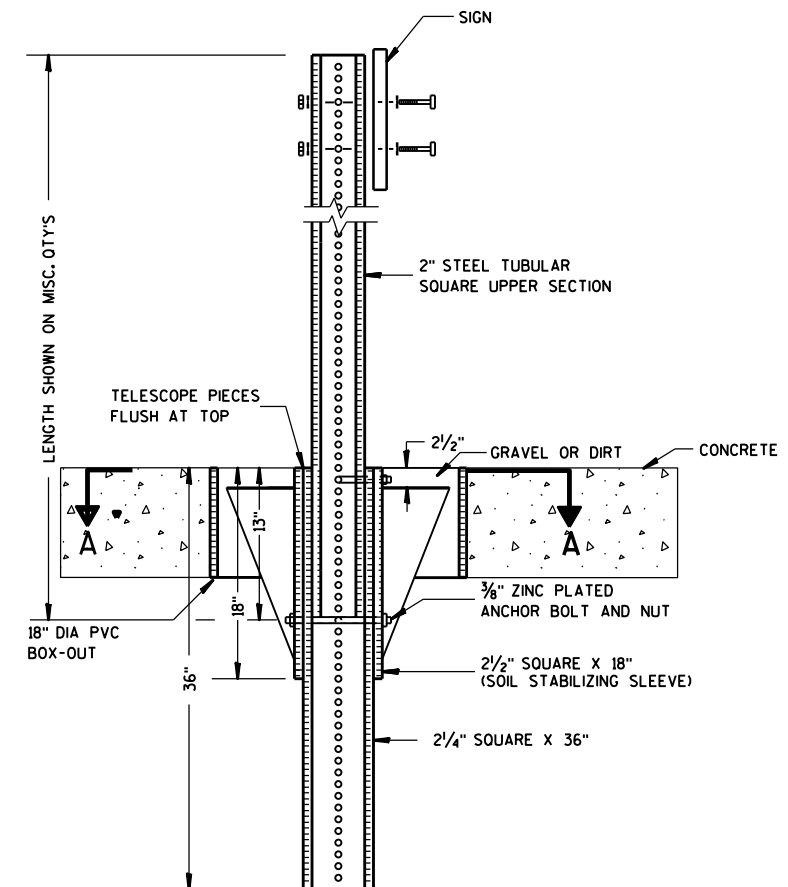
E



ELEVATION VIEW

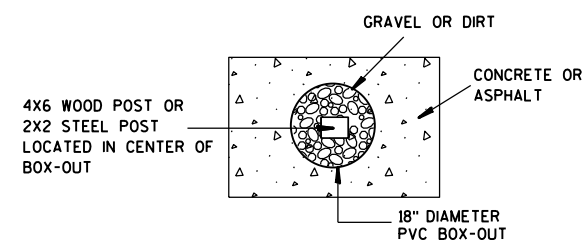
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

**SIGN POST
BOX-OUTS
A4-3B**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/27/14 PLAT 173 A4-3B.1

PROJECT NO:

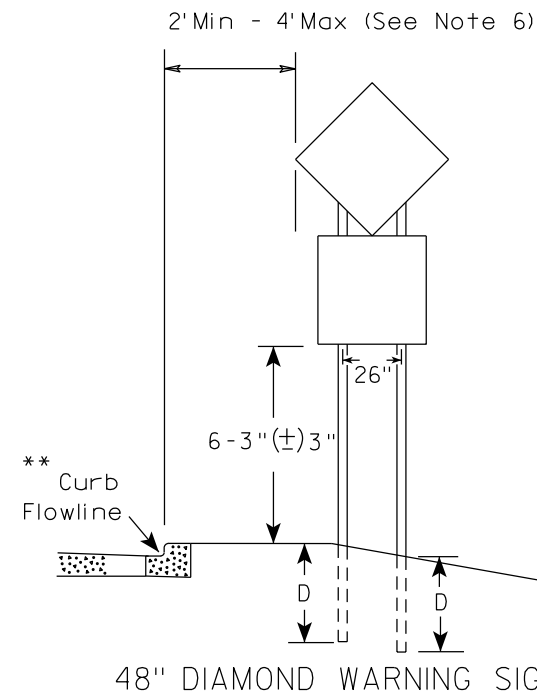
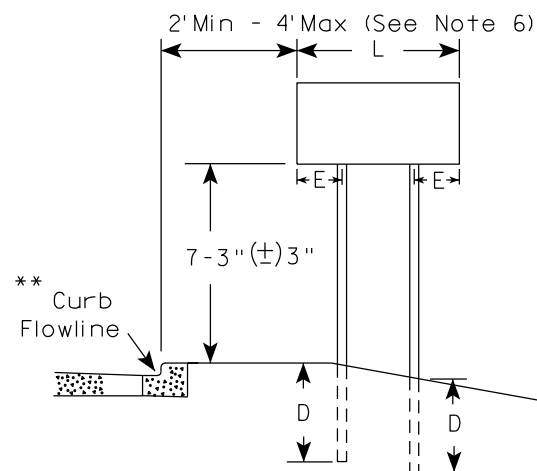
HWY:

COUNTY:

SHEET NO:

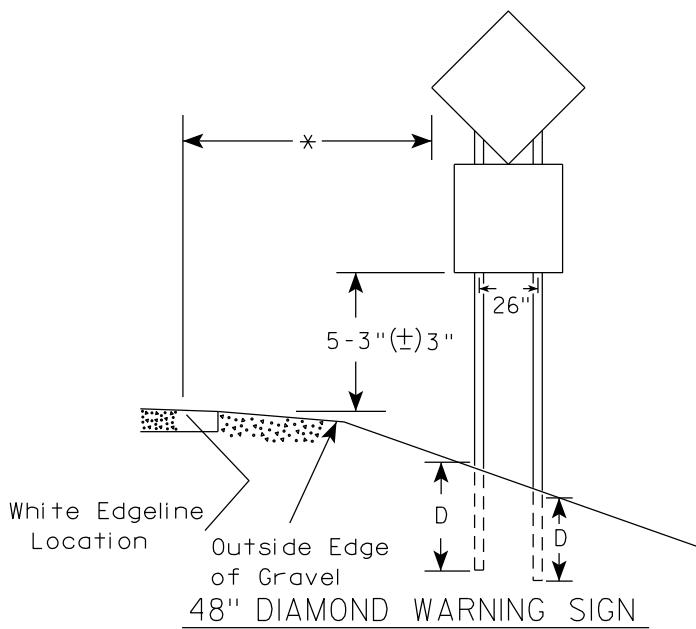
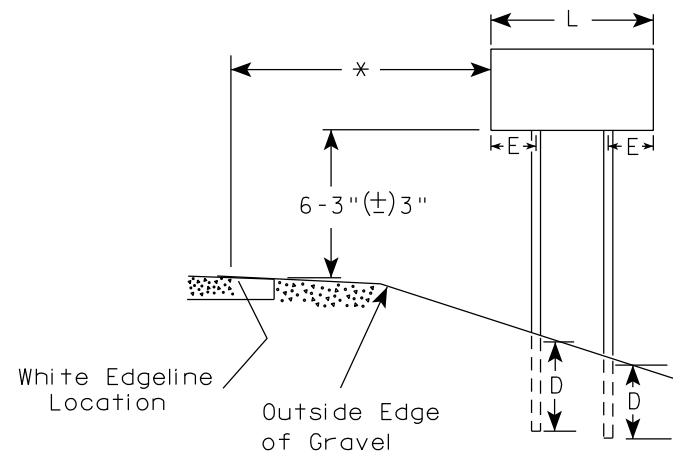
E

URBAN AREA

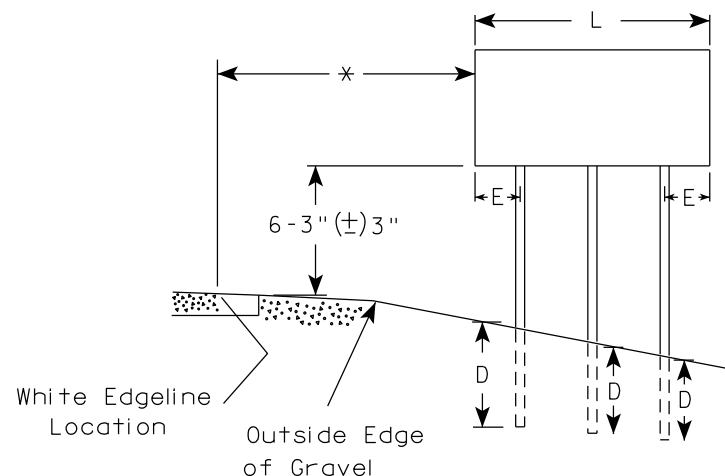


SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 108"	L/5

RURAL AREA (See Note 3)



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



* 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.

POST EMBEDMENT DEPTH

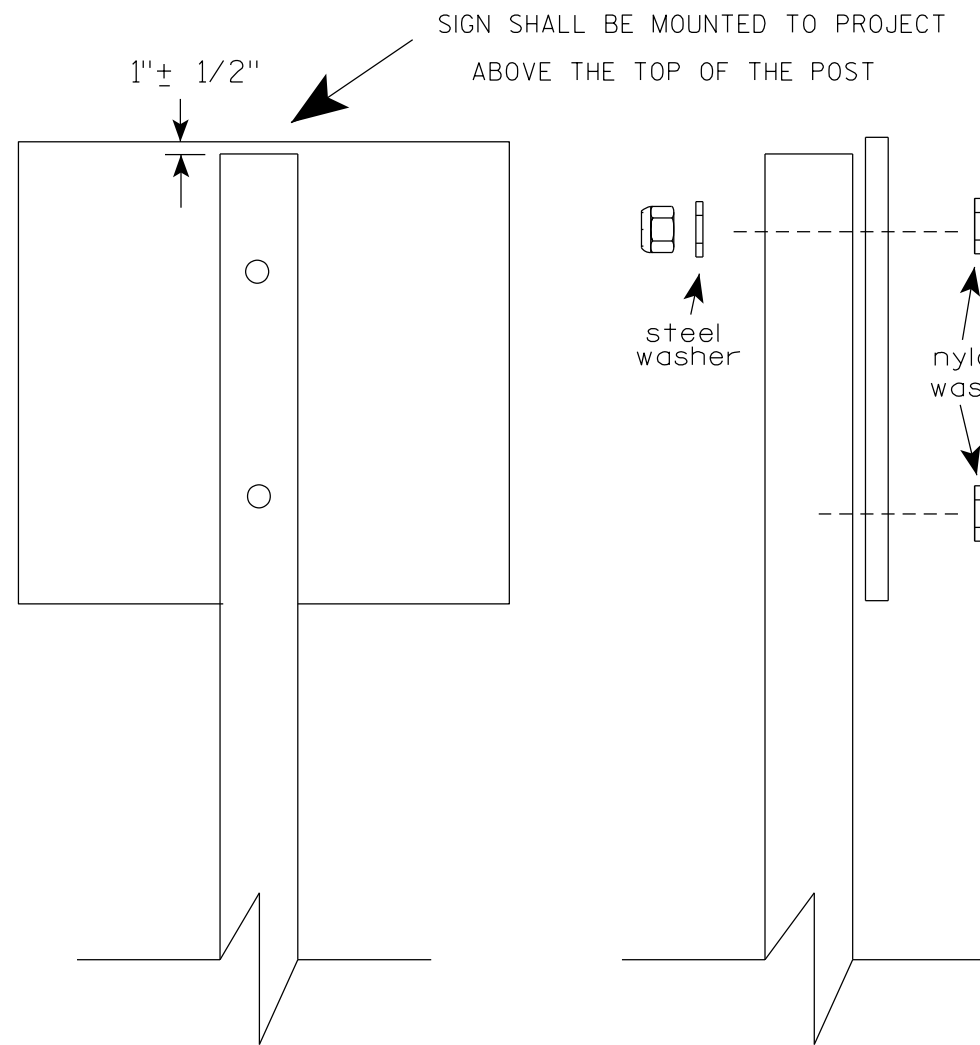
Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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



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

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

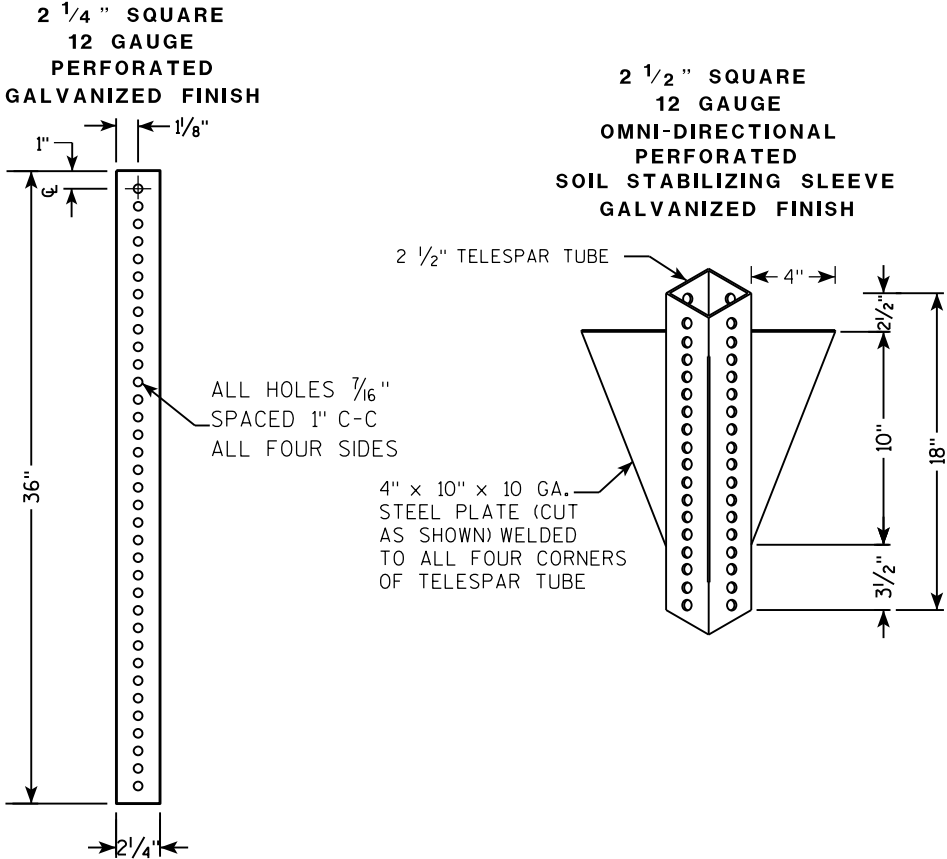
Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

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

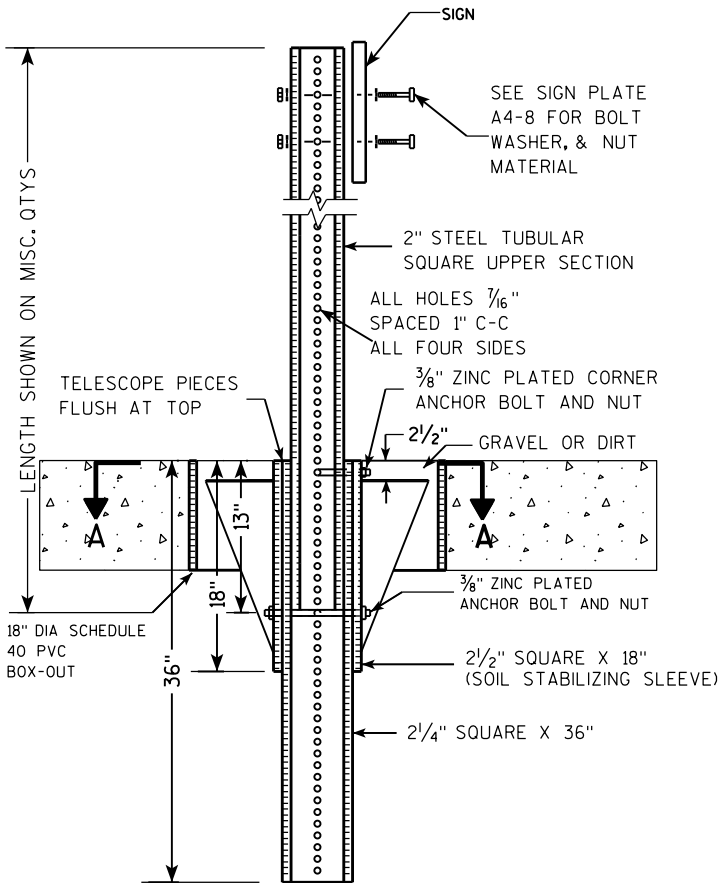
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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

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

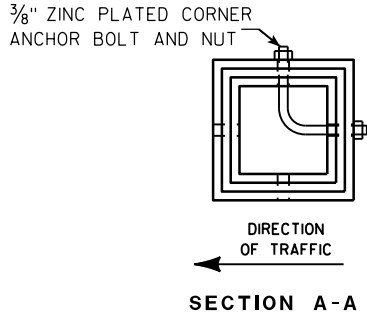
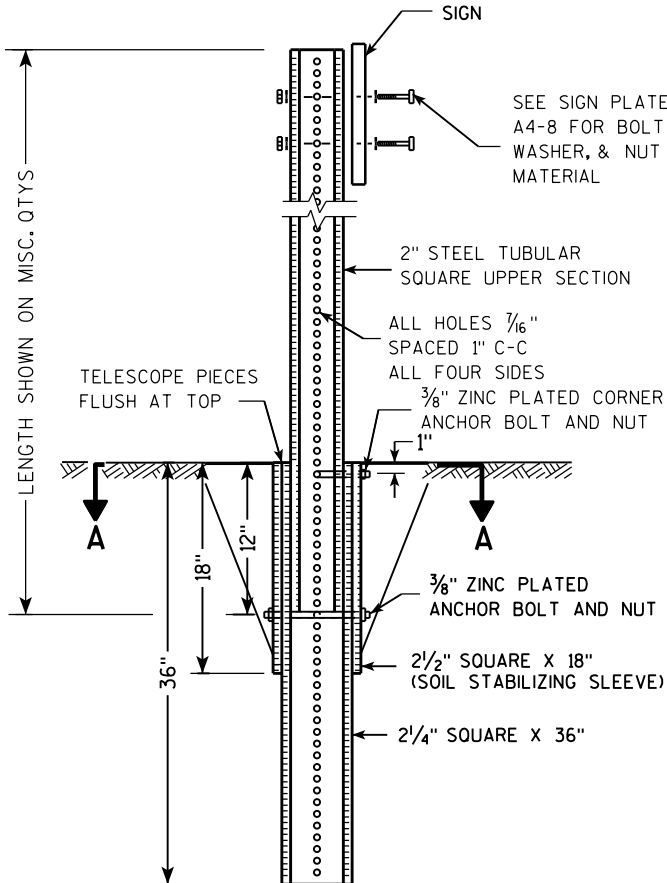
TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM



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



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



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

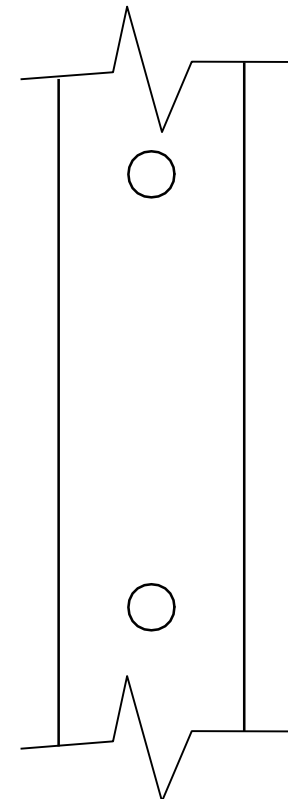
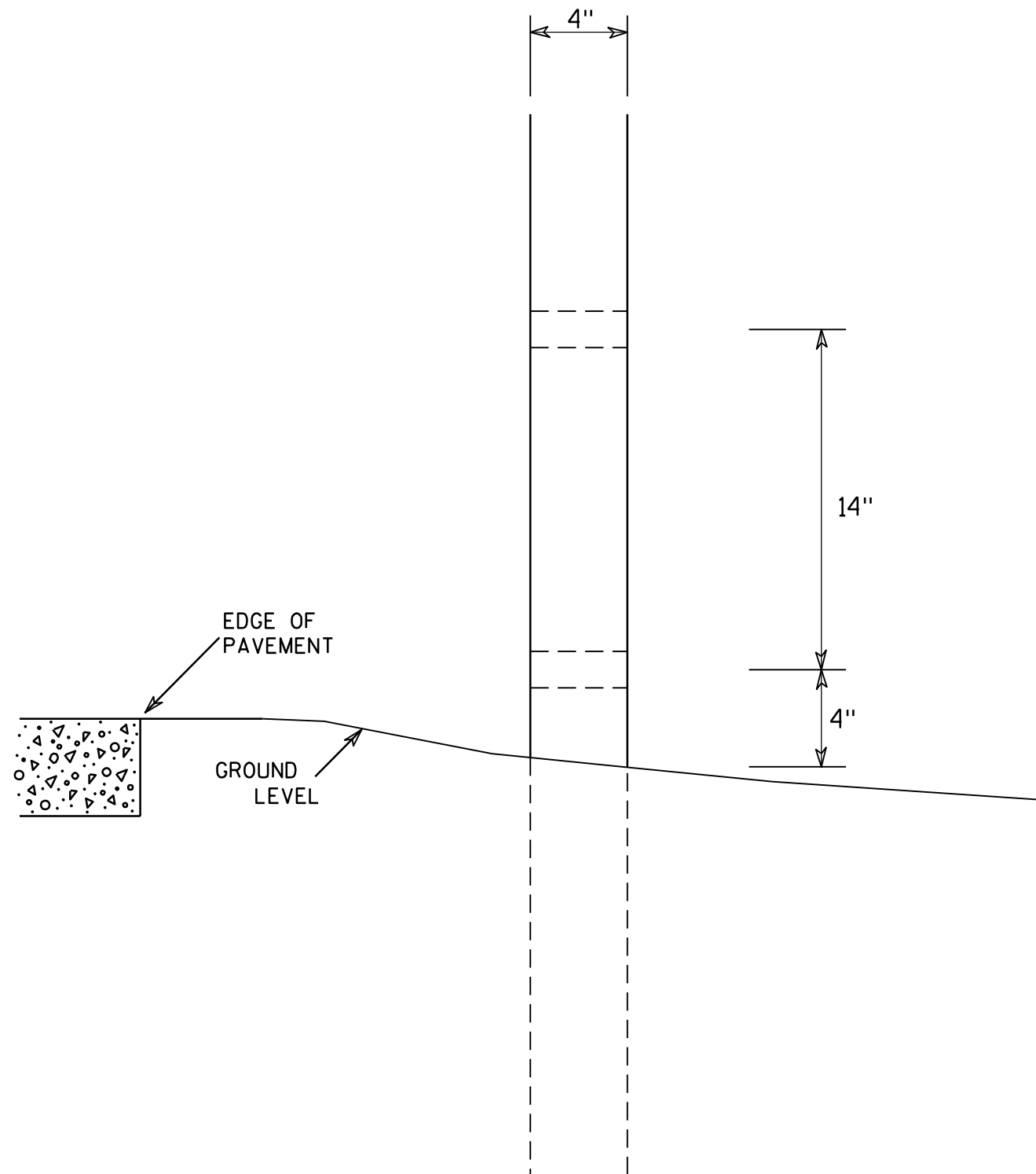
Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/05/15 PLAT 176 14-9.9



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:

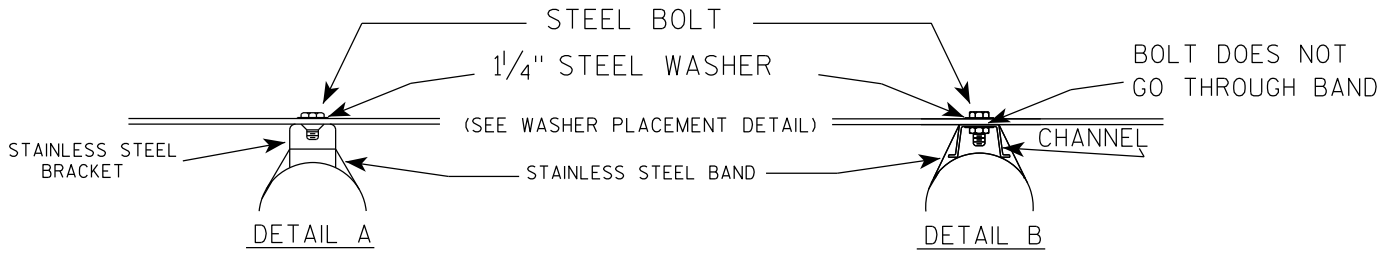
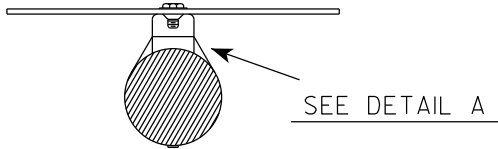
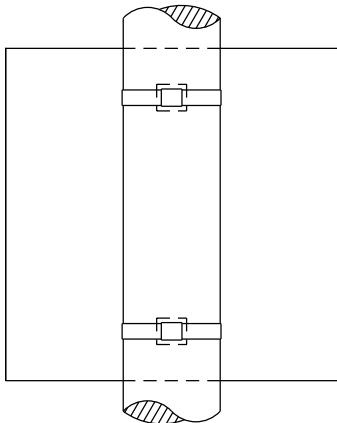
COUNTY:

SHEET NO: 177

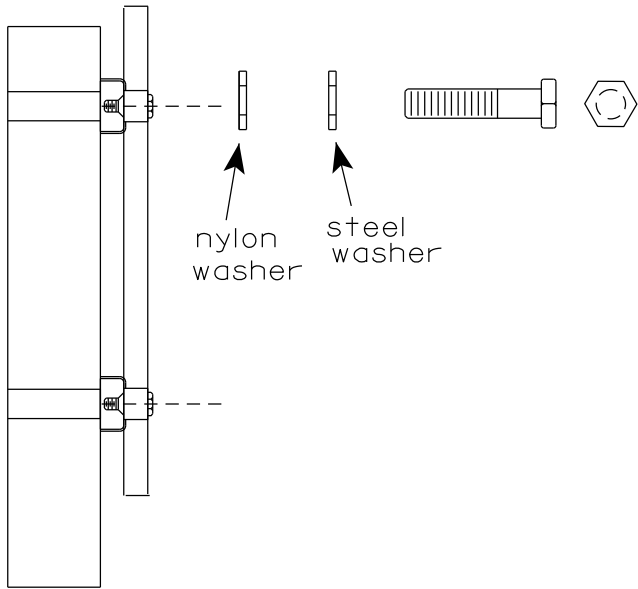
E

BANDING

SINGLE SIGN



WASHER PLACEMENT

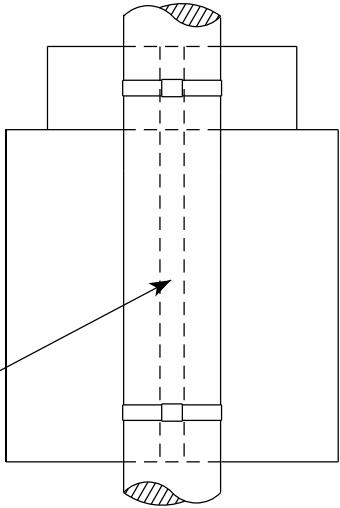


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

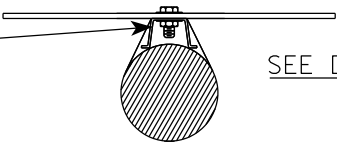
GENERAL NOTES

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

"J" ASSEMBLY



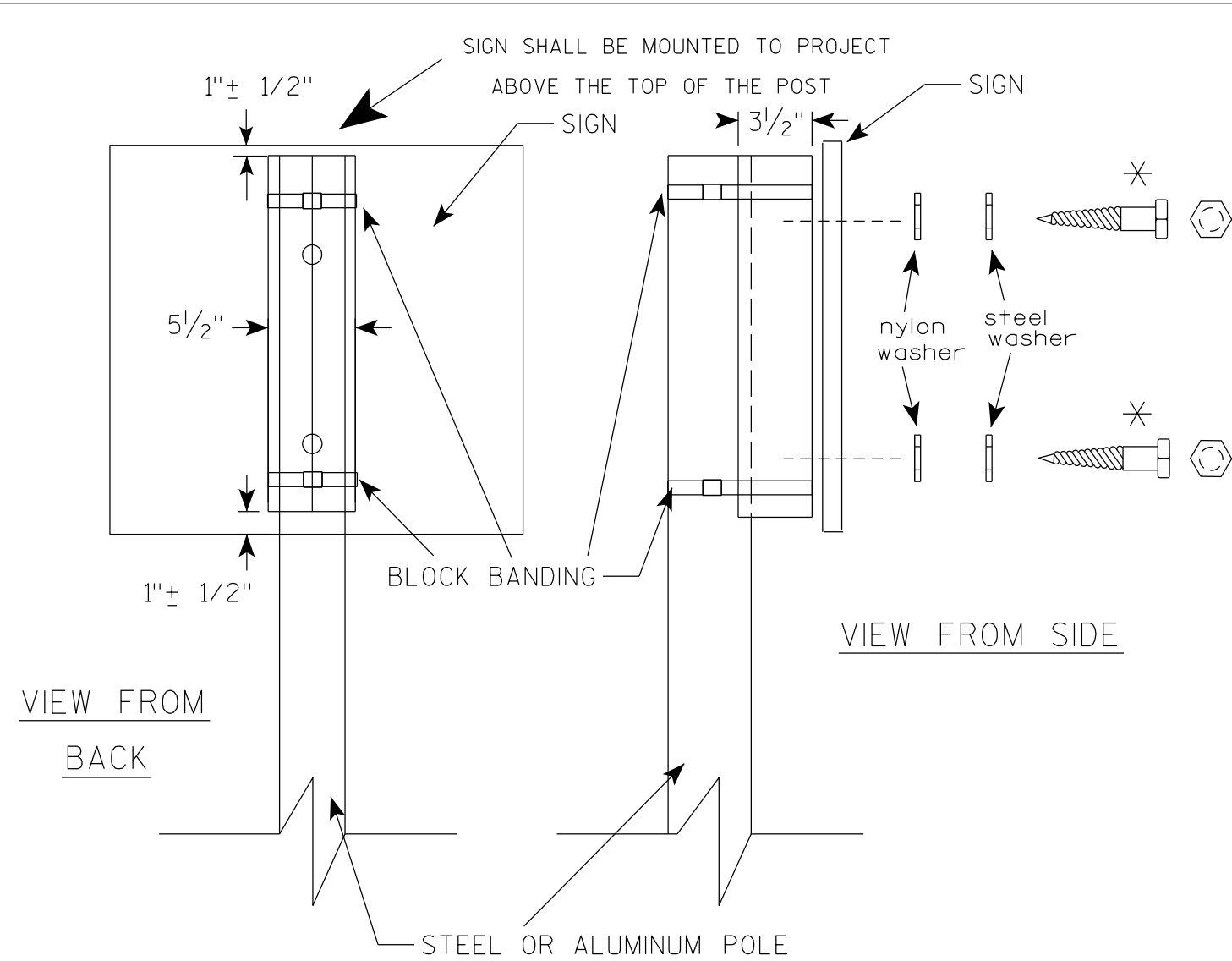
CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



STANDARD SIGN
SIGN BANDING DETAILS

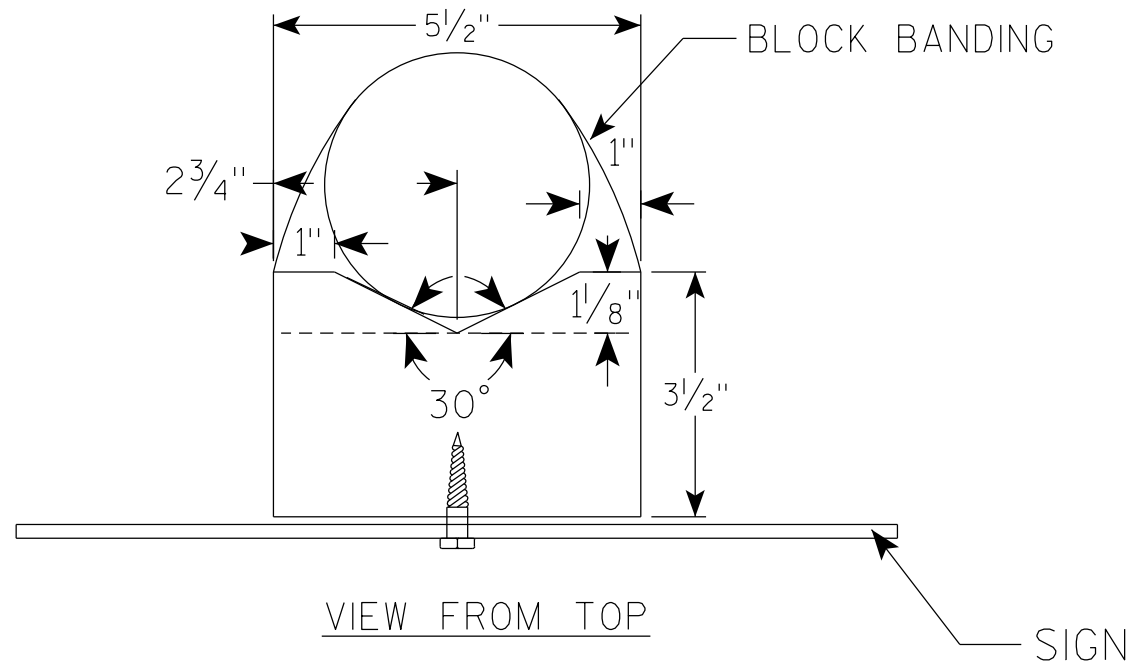
WISCONSIN DEPT OF TRANSPORTATION

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



VIEW FROM
BACK

VIEW FROM SIDE



VIEW FROM TOP

GENERAL NOTES

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

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

BLOCK BANDING DETAIL
(V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

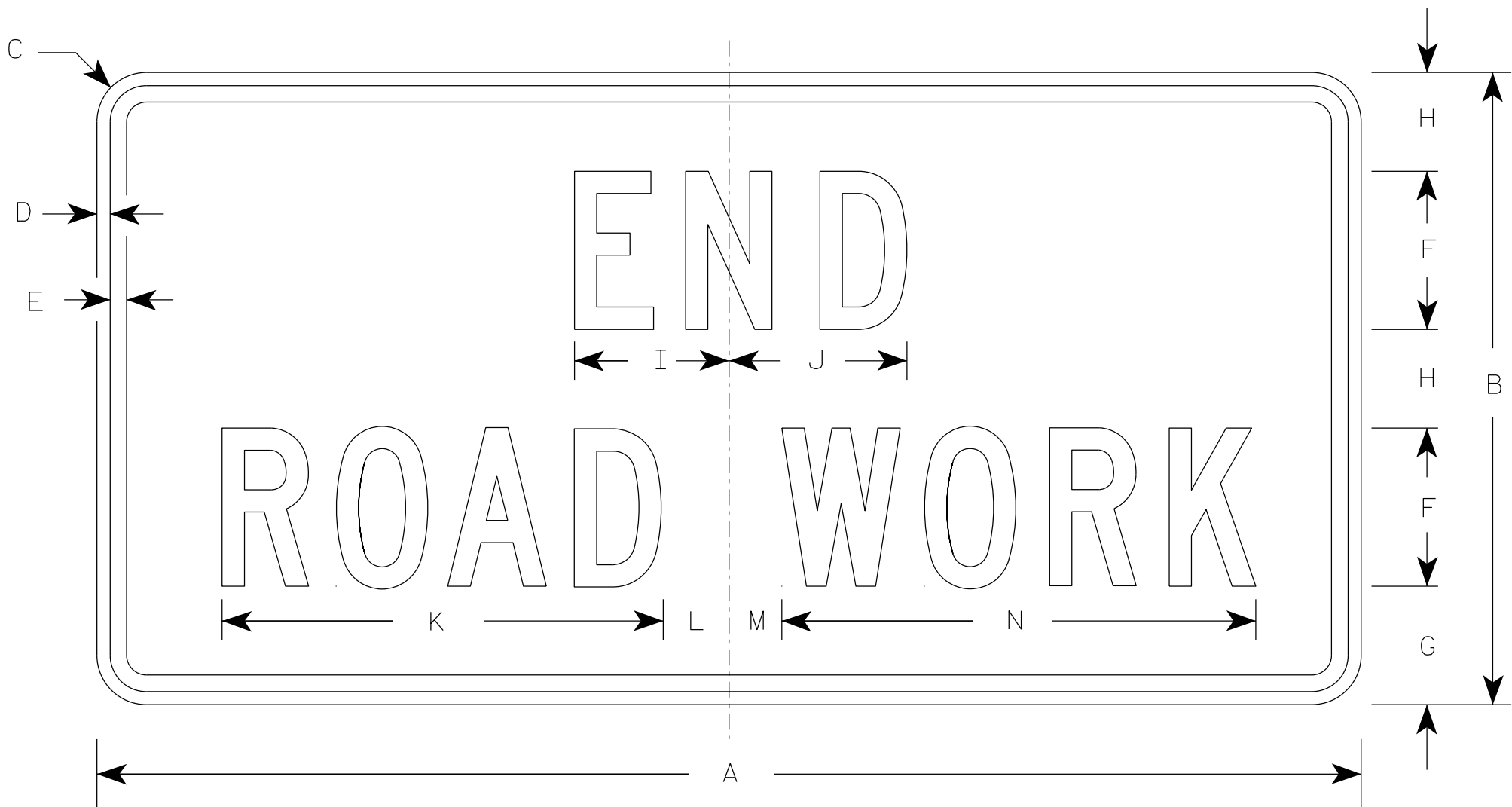
PROJECT NO:

SHEET NO: 179

E

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.



G20-2A

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/2	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5
2	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
2M	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
3	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
4	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
5	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0

STANDARD SIGN

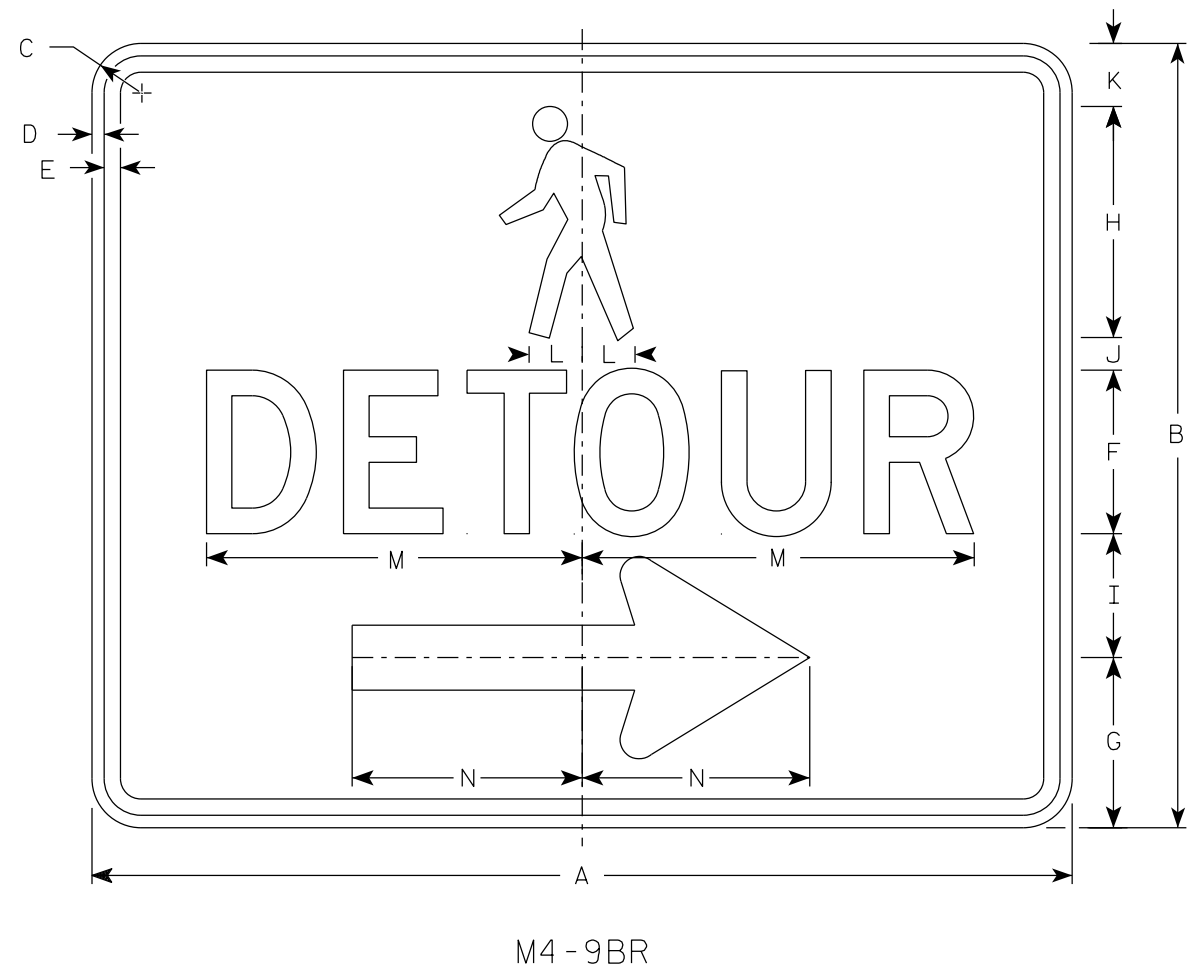
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

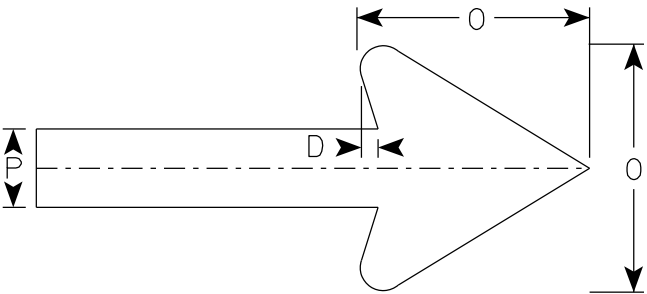
DATE 1/26/2023 PLATE NO. G20-2A.10

7



NOTES

1. Sign is Type II-Type F Reflective
2. Color:
Background - Orange
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-9BL is the same as M4-9BR except the arrow is reversed.



Arrow Detail

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	3/8	1/2	5	5 1/4	7 1/8	3 3/4	1	1 1/8	1 5/8	11 3/4	7	6	2											5.0
2M	30	24	1 1/2	3/8	1/2	5	5 1/4	7 1/8	3 3/4	1	1 1/8	1 5/8	11 3/4	7	6	2											5.0
3																											
4																											
5																											

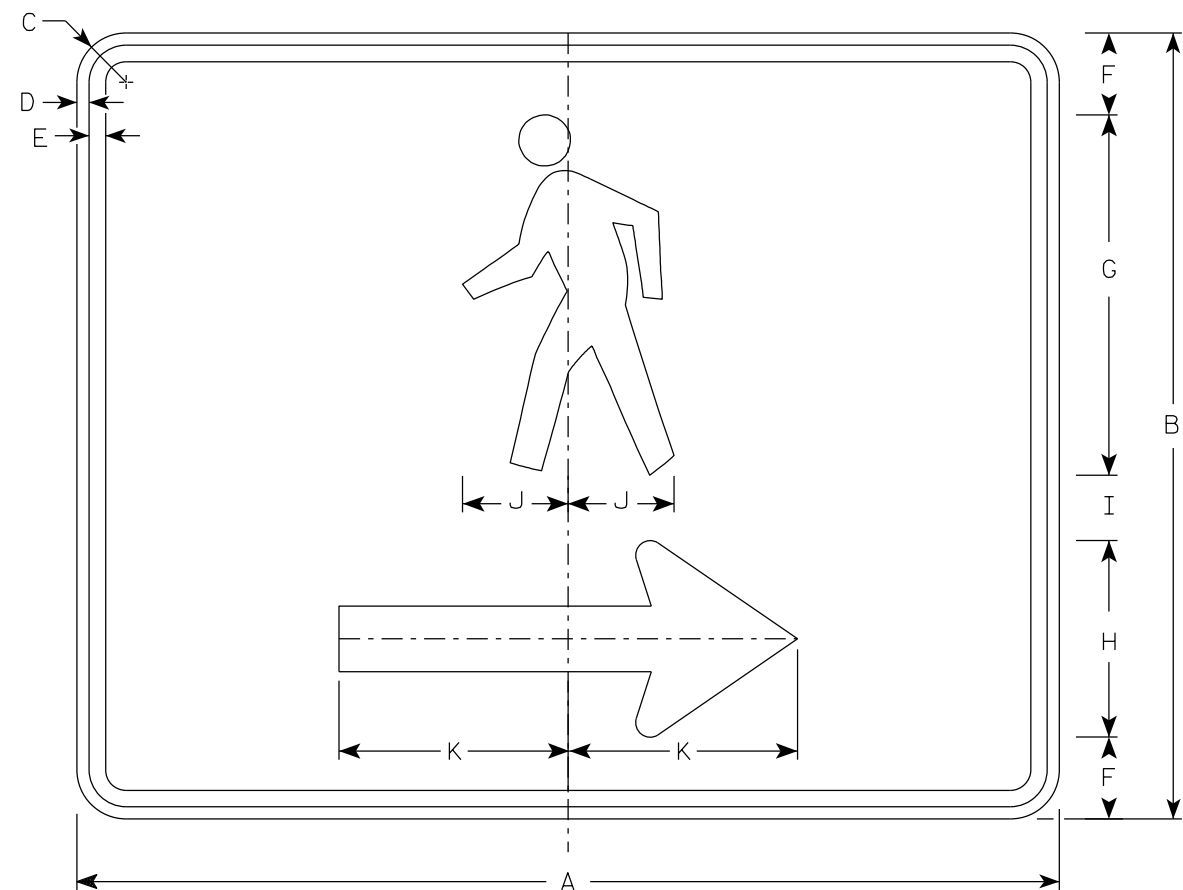
STANDARD SIGN
M4-9B L&R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-9B.4

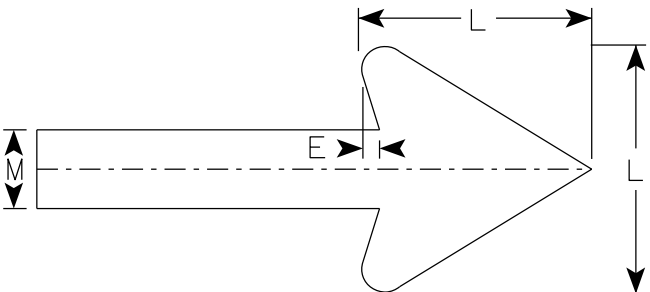
7



M4-60R

NOTES

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

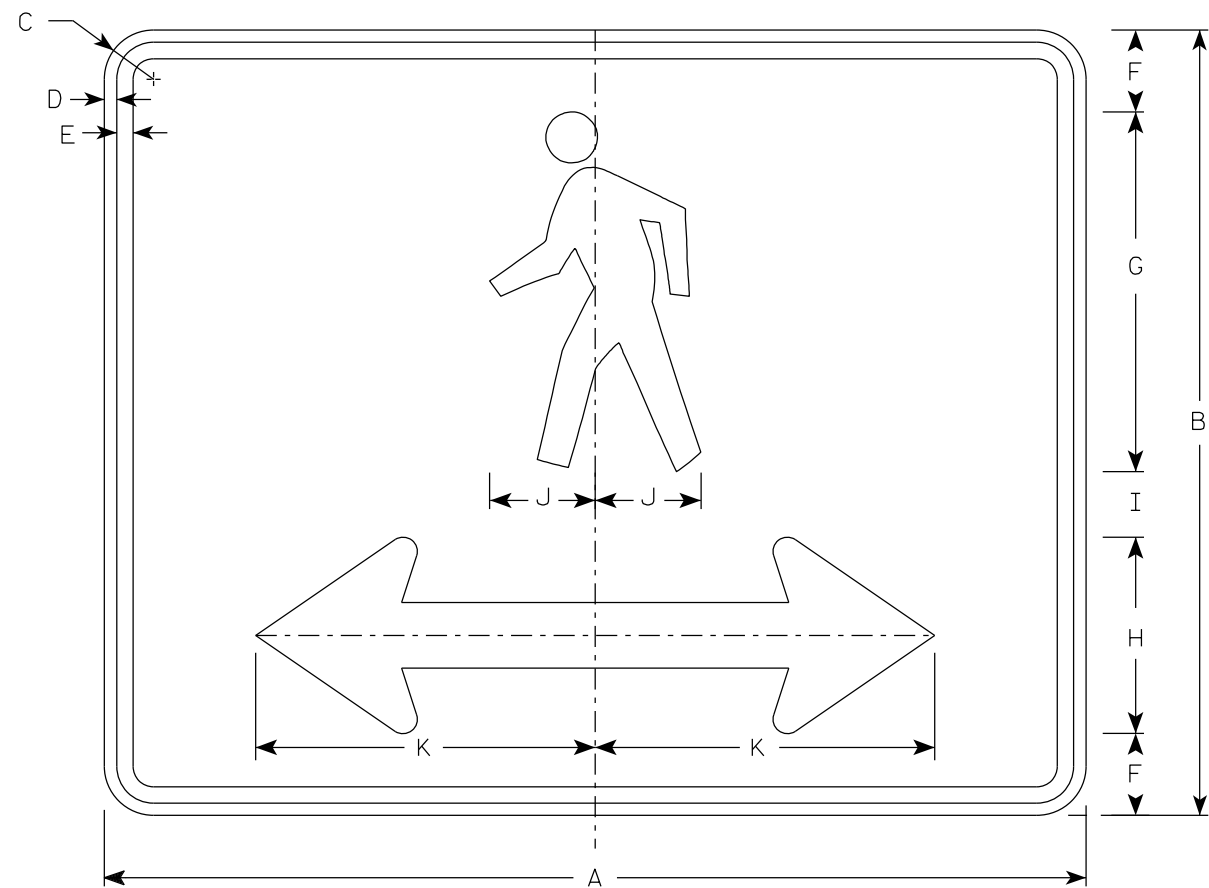


Arrow Detail

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

7

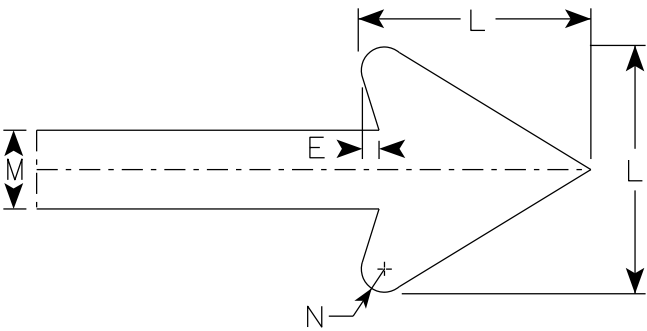
7



M4-60D

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.

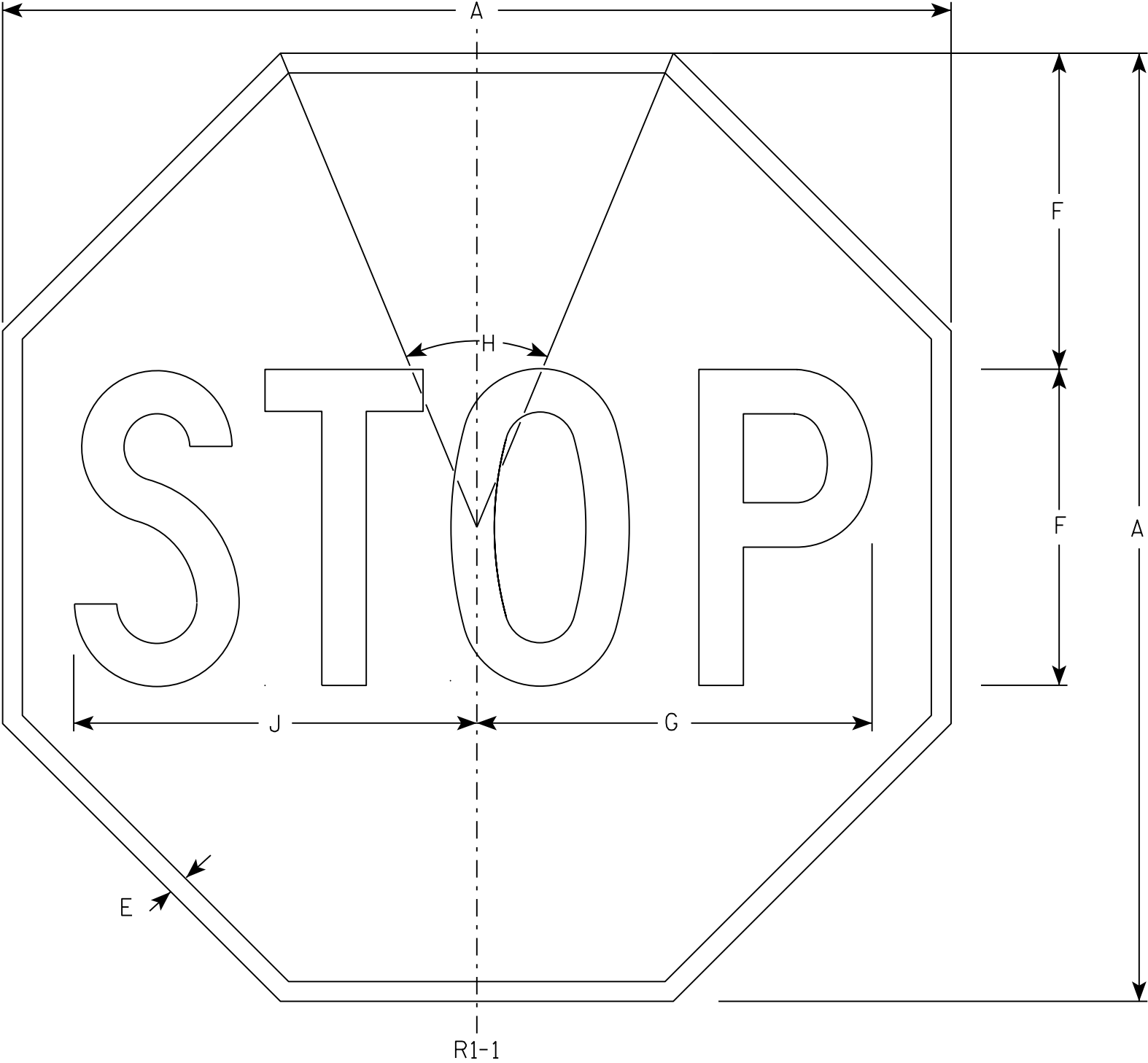


Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	3/8	1/2	2 1/2	11	6	2	3 1/4	10 3/8	6	2	3/8													5.00
2M	30	24	1 1/2	3/8	1/2	2 1/2	11	6	2	3 1/4	10 3/8	6	2	3/8													5.00
3																											
4																											
5																											

7

7



NOTES

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

7

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

STANDARD SIGN

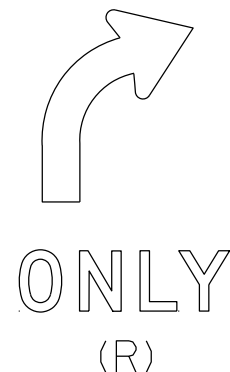
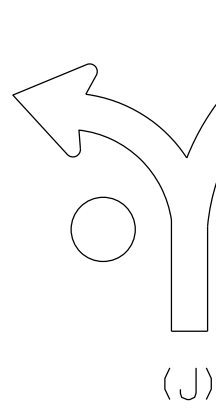
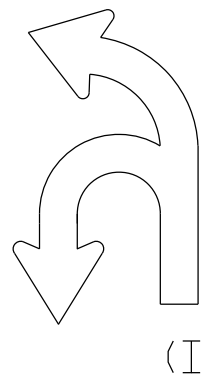
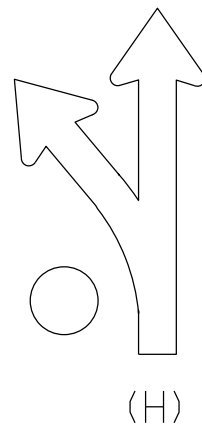
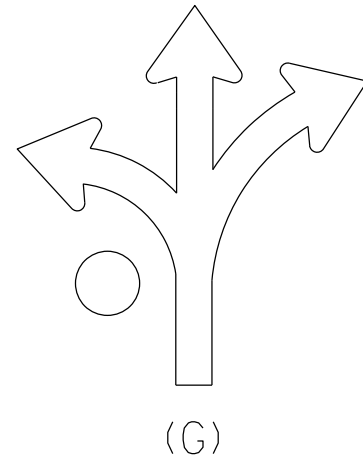
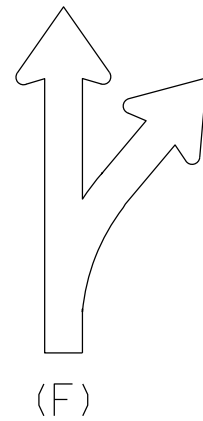
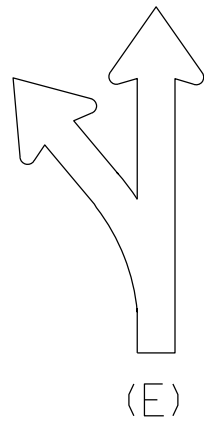
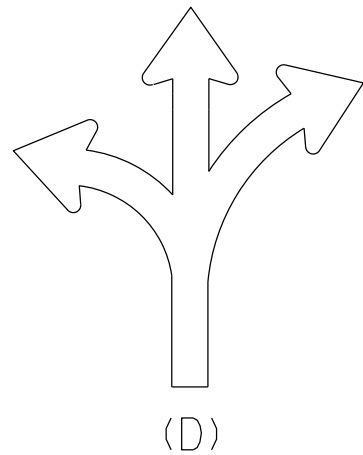
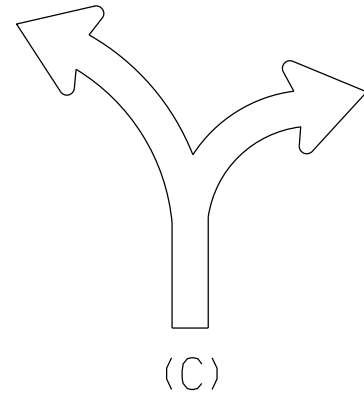
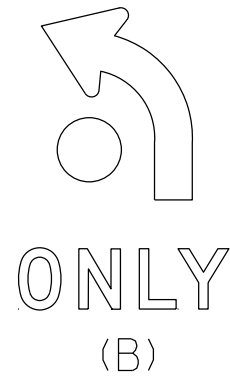
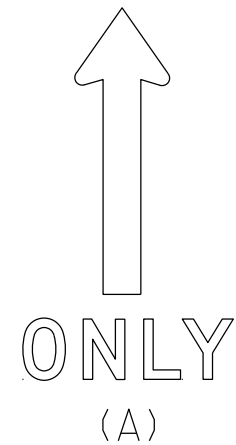
R1 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/12/15

PLATE NO. R1-1.13



NOTES

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

1 Letter = 3.75 sq ft for Size 2

6.0 sq ft for Size 3

10.0 sq ft for Size 4 or 5

2 Letters = 7.5 sq ft for Size 2

12.0 sq ft for Size 3

20.0 sq ft for Size 4 or 5

3 Letters = 11.25 sq ft for Size 2

18.0 sq ft for Size 3

30.0 sq ft for Size 4 or 5

4 Letters = 15.0 sq ft for Size 2

24.0 sq ft for Size 3

40.0 sq ft for Size 4 or 5

5 Letters = 18.75 sq ft for Size 2

30.0 sq ft for Size 3

50.0 sq ft for Size 4 or 5

6 Letters = 22.5 sq ft for Size 2

36.0 sq ft for Size 3

60.0 sq ft for Size 4 or 5

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

Add the amounts when these letters are used:

1.25 sq ft for Size 2

1.5 sq ft for Size 3

2.0 sq ft for Size 4 or 5

STANDARD SIGN
R3-8 Series

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

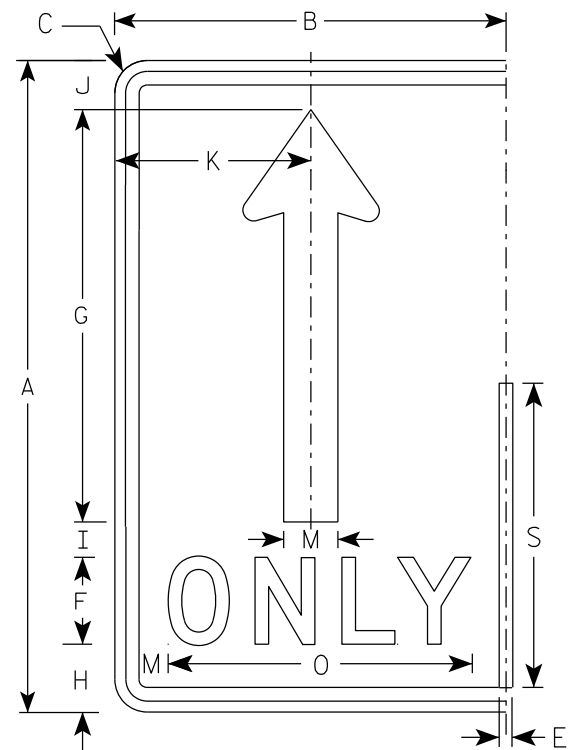
PROJECT NO:

SHEET NO: 185

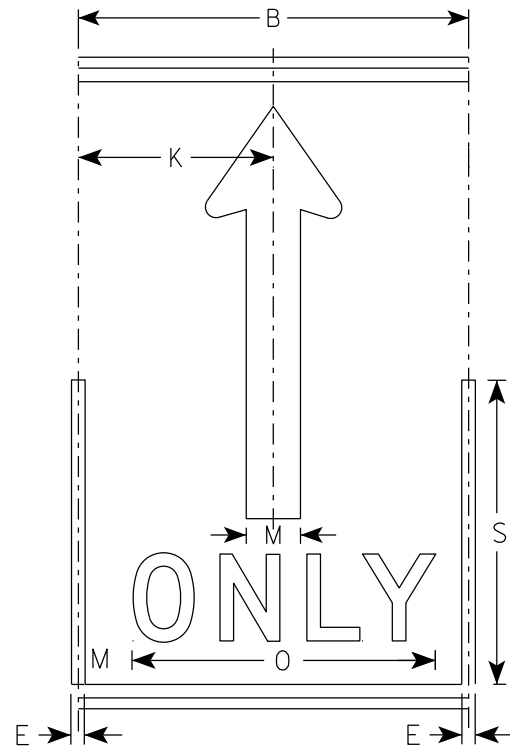
E

NOTES

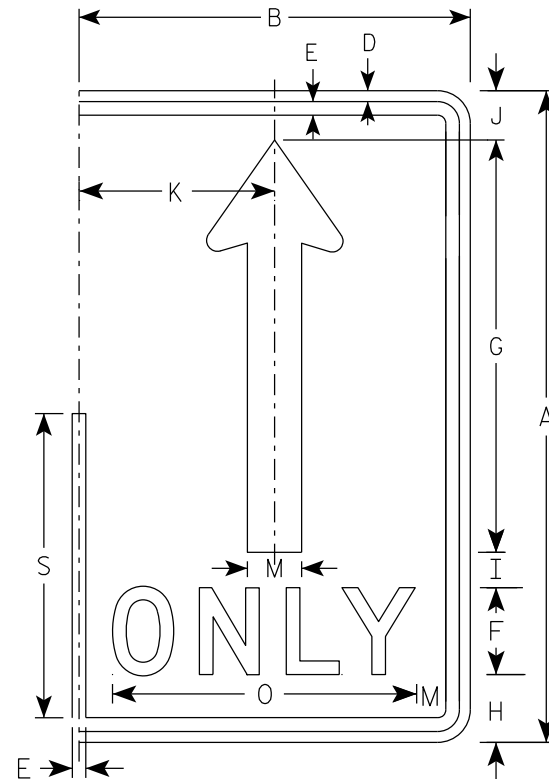
- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - Black
- 3. Message Series - D



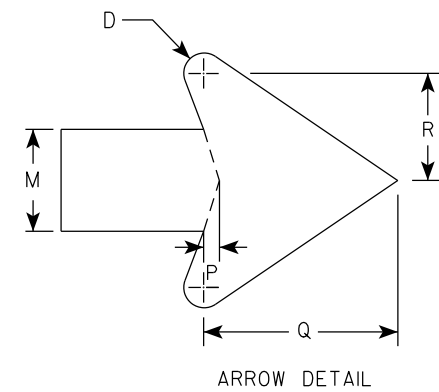
(A)



(A)



(A)



ARROW DETAIL

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

STANDARD SIGN
R3-8 (A) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

7

7

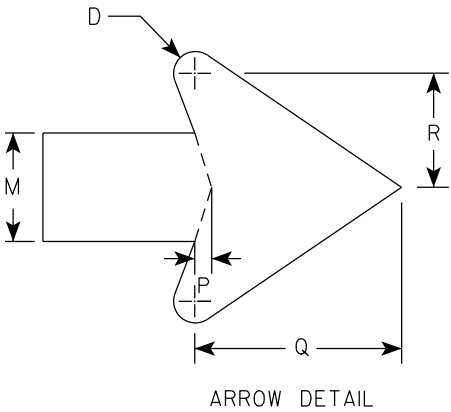
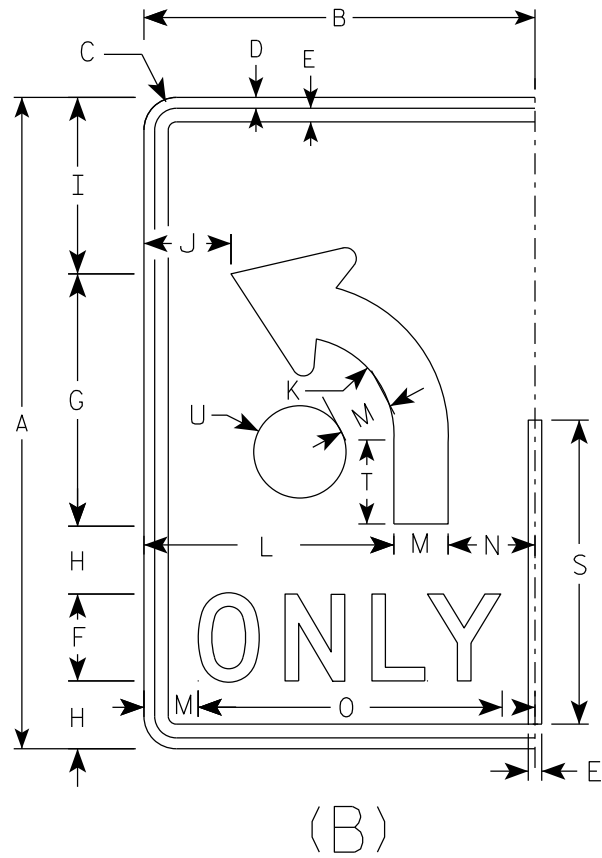
NOTES

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

Background - White

Message - Black

Message Series - D



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

STANDARD SIGN

R3-8 (B) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*

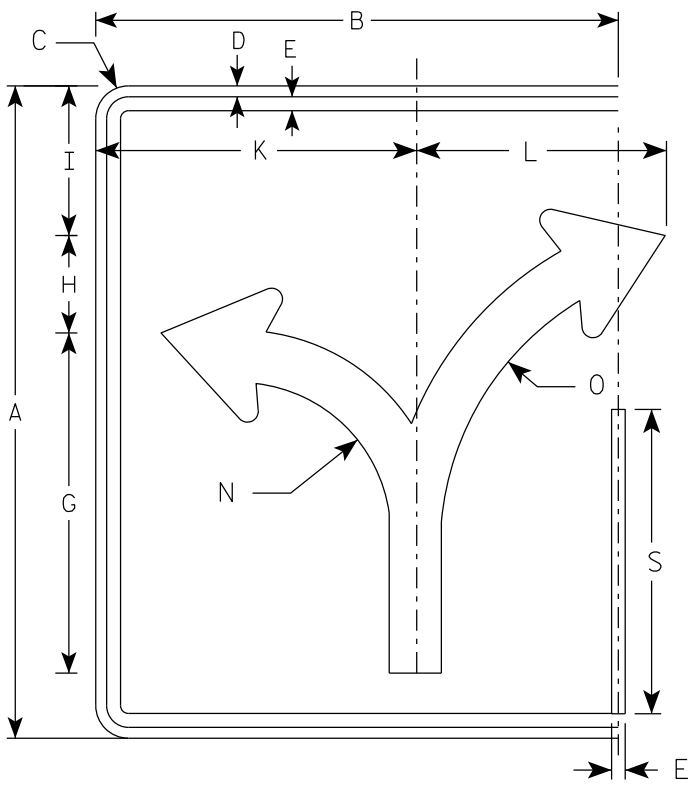
for State Traffic Engineer

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

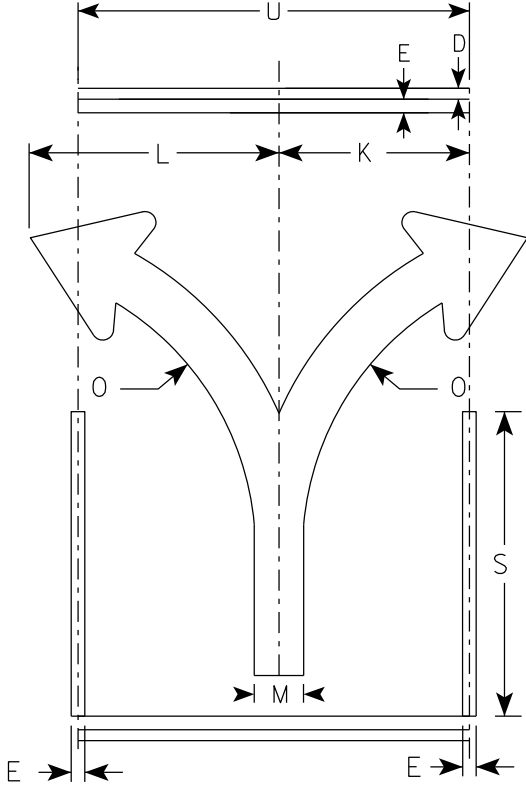
7

NOTES

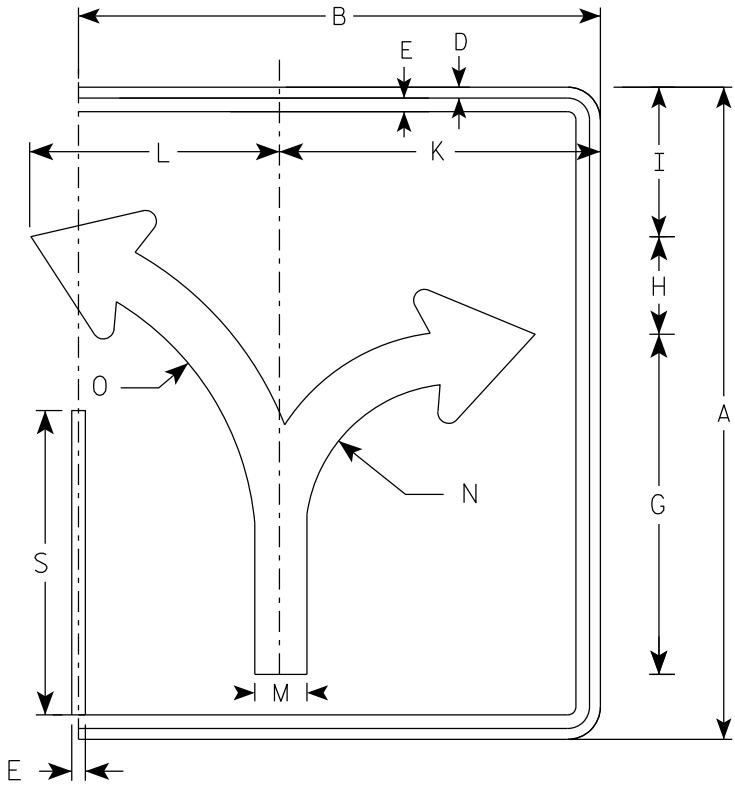
- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - Black
- 3. Message Series - None



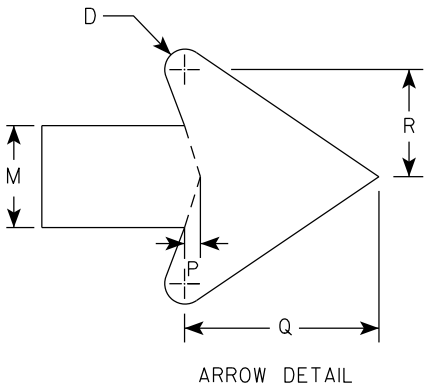
(C)



(C)



(C)



7

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

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 188

E

STANDARD SIGN
R3-8 (C) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

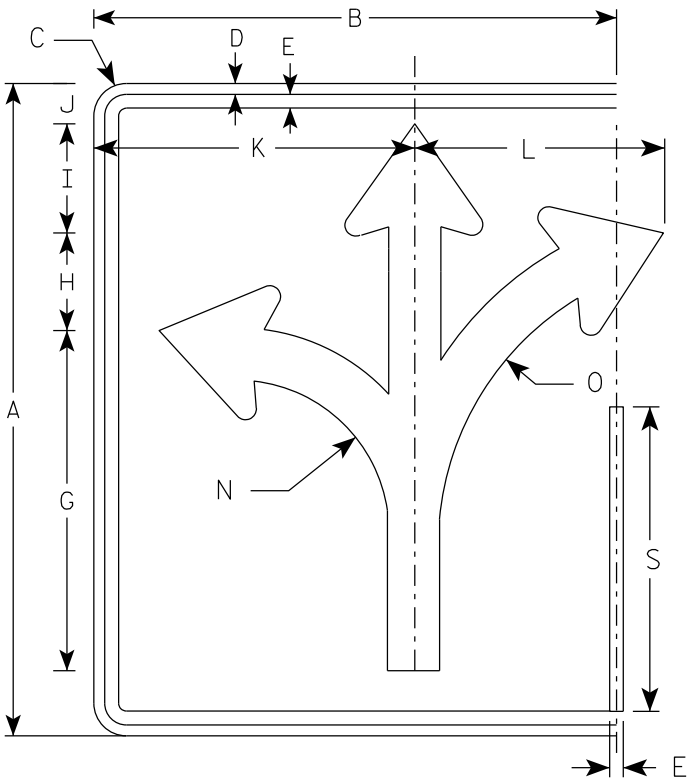
DATE 2/14/23 PLATE NO. R3-8.2

NOTES

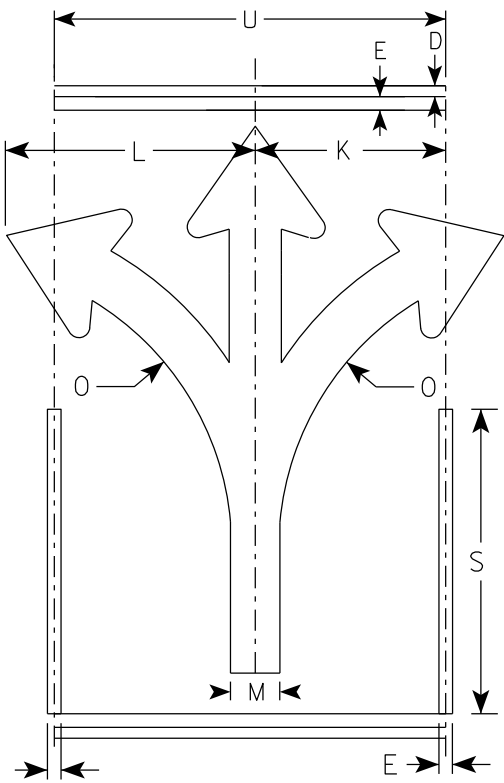
1. Sign is Type II - Type H Reflective
2. Color:

Background - White

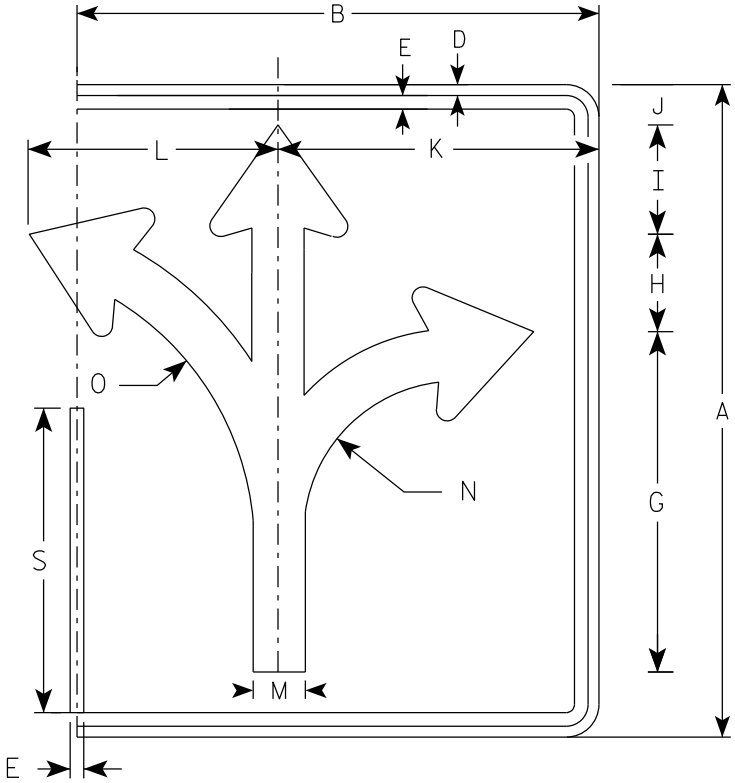
Message - Black
3. Message Series - None



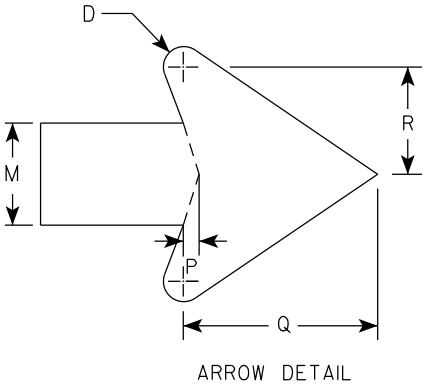
(D)



(D)



(D)



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

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 189

E

STANDARD SIGN

R3-8 (D) Arrow

WISCONSIN DEPT OF TRANSPORTATION

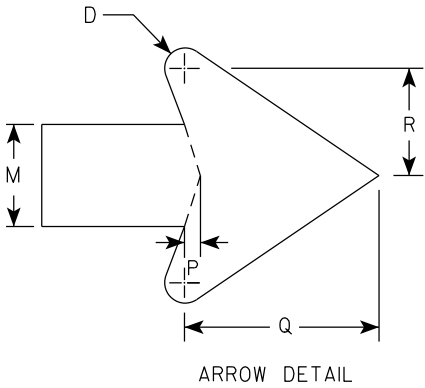
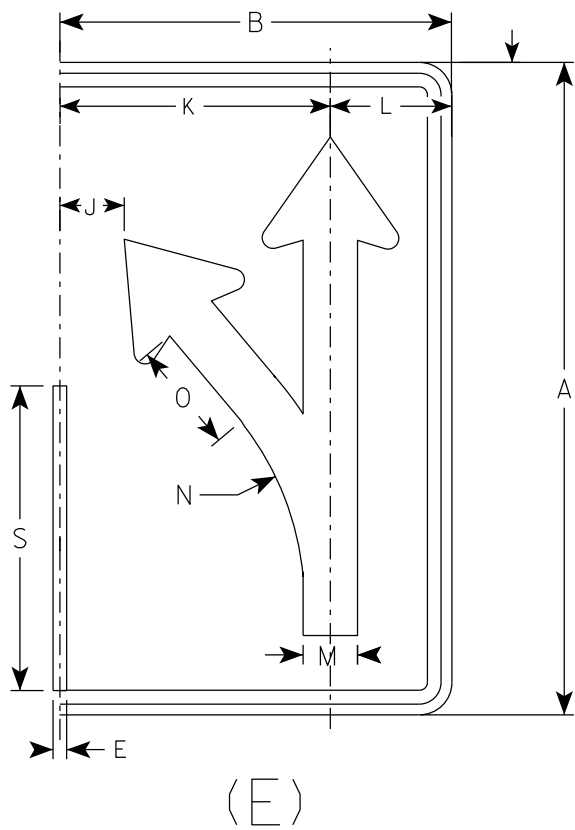
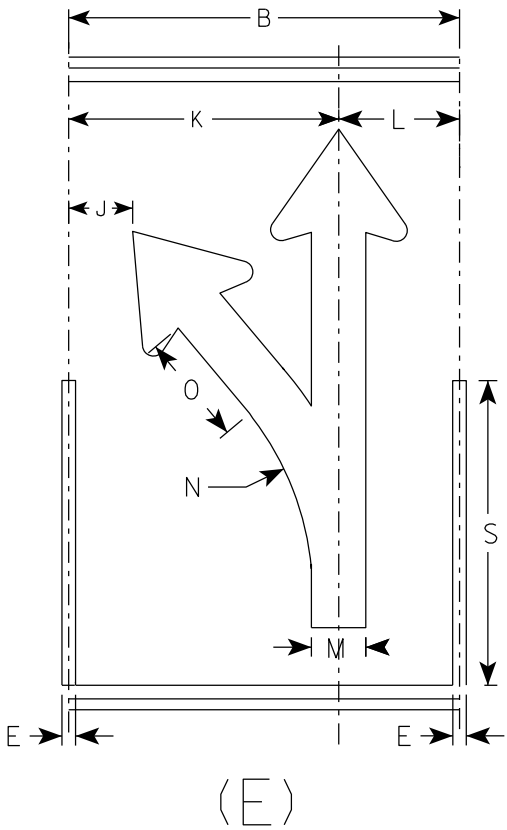
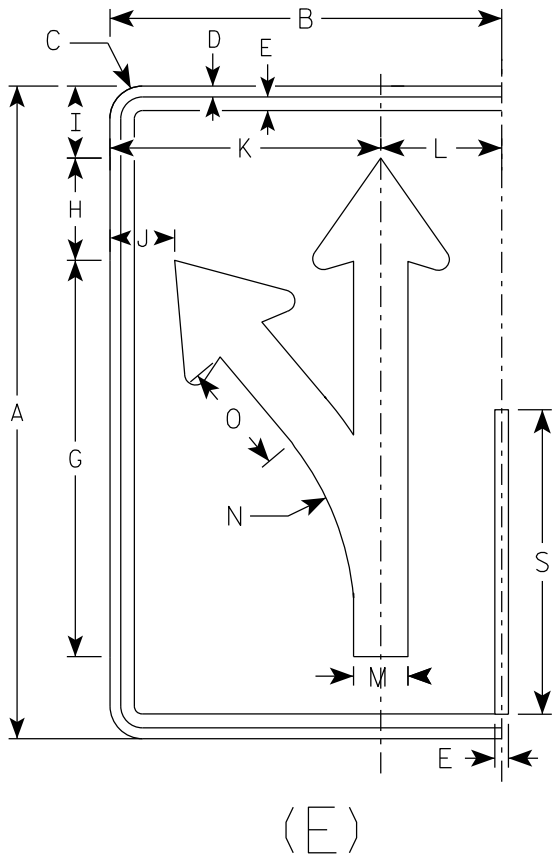
APPROVED *Matthew R. Rauch*

for State Traffic Engineer

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

NOTES

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



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

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 190

E

STANDARD SIGN
R3-8 (E) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

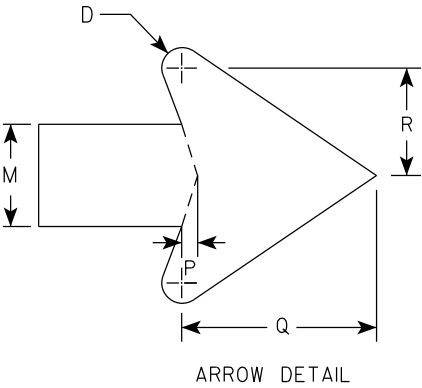
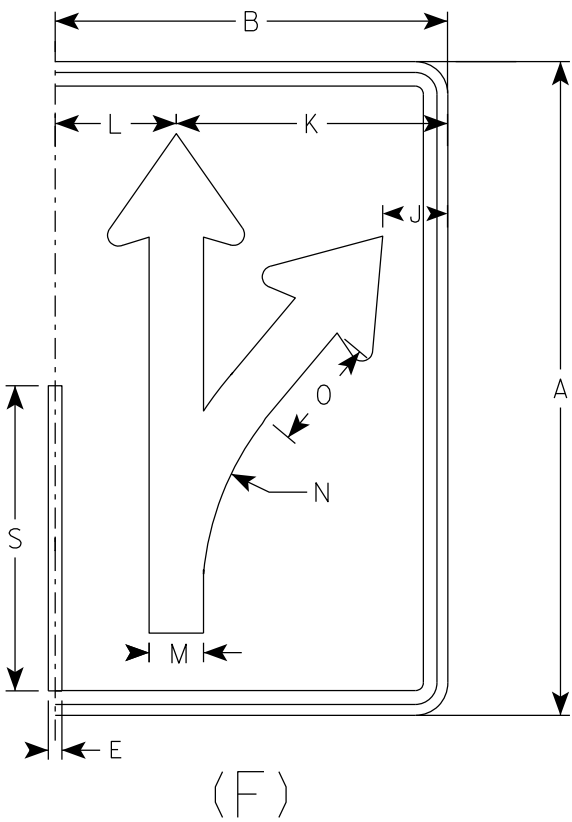
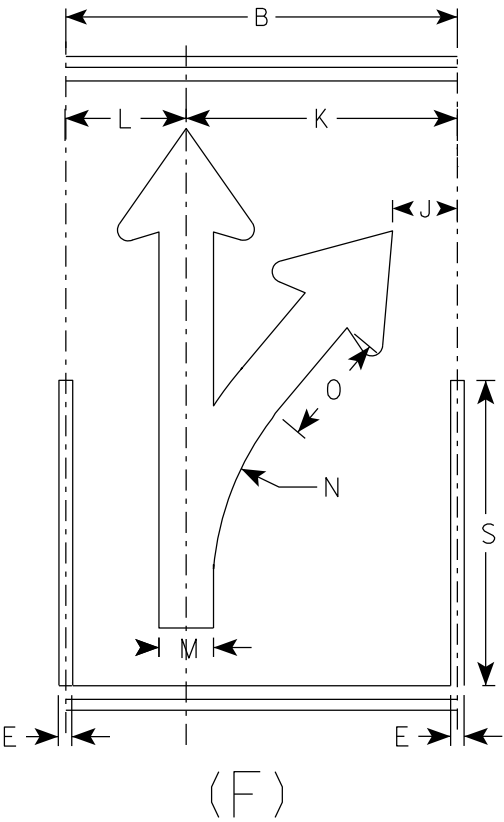
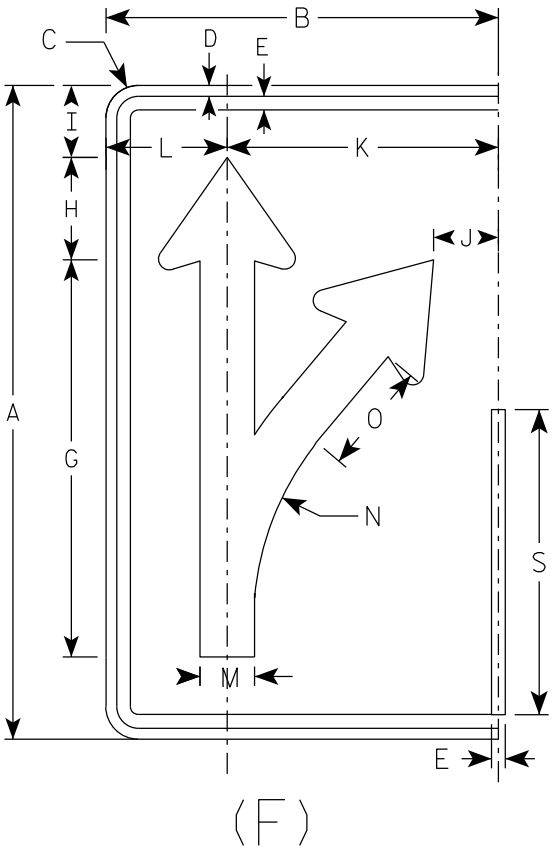
DATE 2/14/23 PLATE NO. R3-8.2

NOTES

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

Background - White

Message - Black
3. Message Series - None



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

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 191

E

STANDARD SIGN
R3-8 (F) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

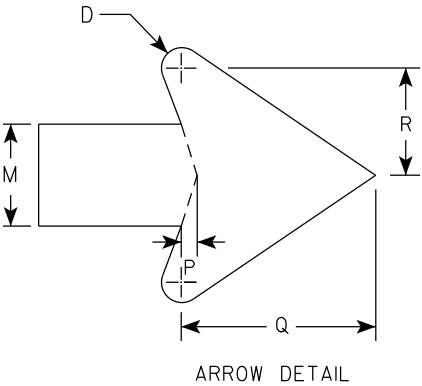
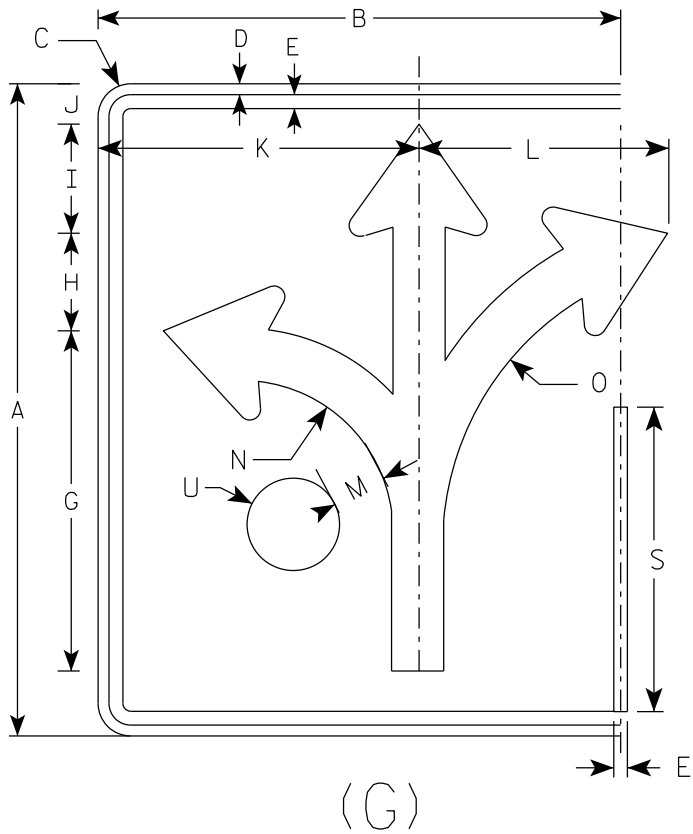
DATE 2/14/23 PLATE NO. R3-8.2

NOTES

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

Background - White

Message - Black
3. Message Series - None



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

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 192

E

STANDARD SIGN

R3-8 (G) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

7

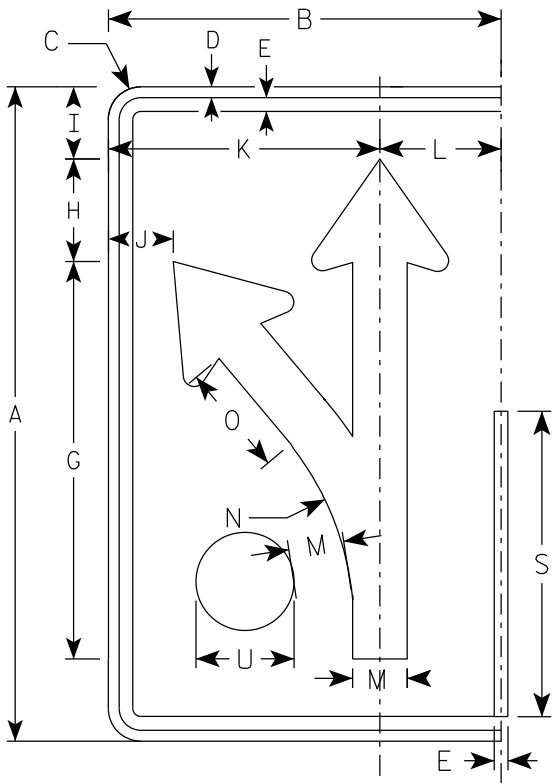
7

NOTES

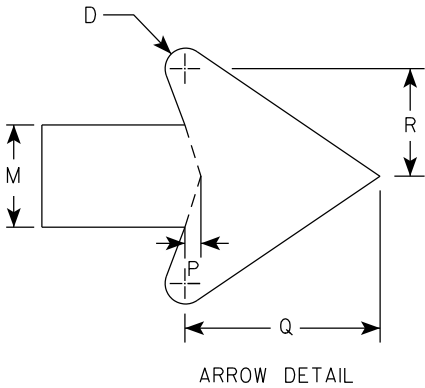
1. Sign is Type II - Type H Reflective
2. Color:

Background - White

Message - Black
3. Message Series - None



(H)



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

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 193

E

STANDARD SIGN

R3-8 (H) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

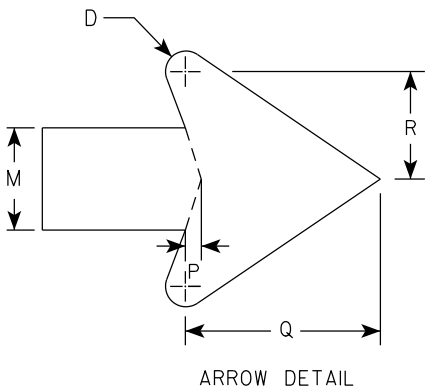
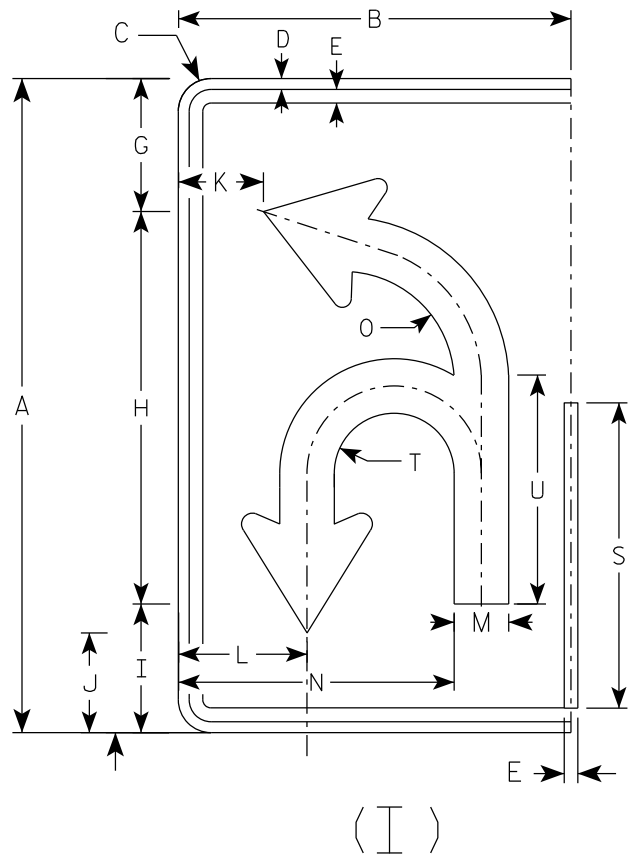
7

NOTES

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

Background - White

Message - Black
3. Message Series - None



7

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

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 194

E

STANDARD SIGN

R3-8 (I) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

7

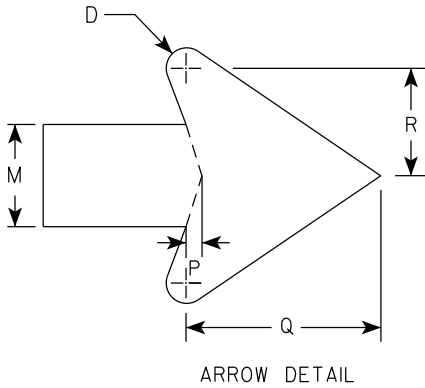
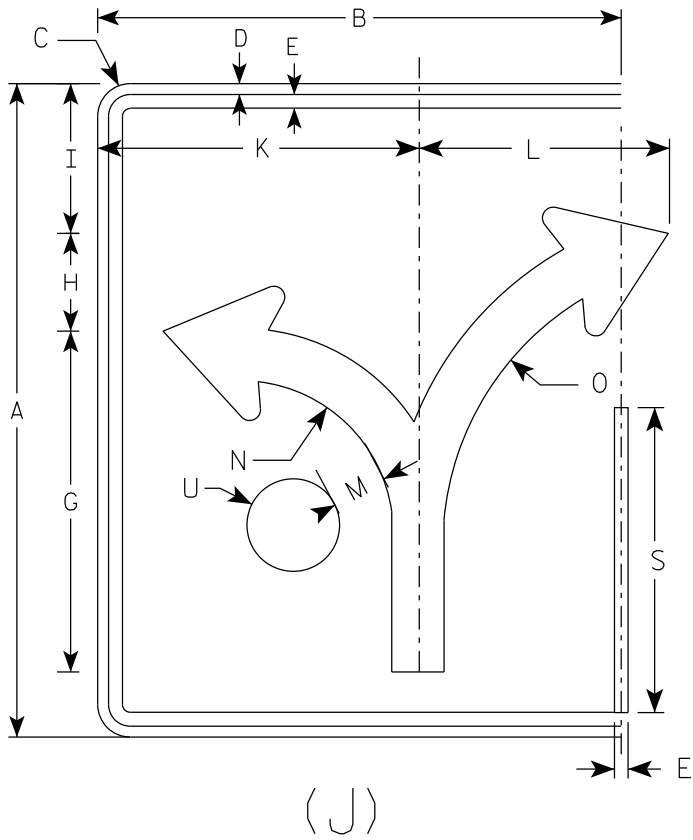
7

NOTES

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

Background - White

Message - Black
3. Message Series - None



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

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 195

E

STANDARD SIGN

R3-8 (J) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*

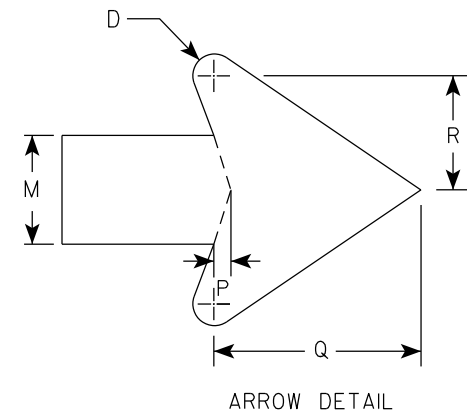
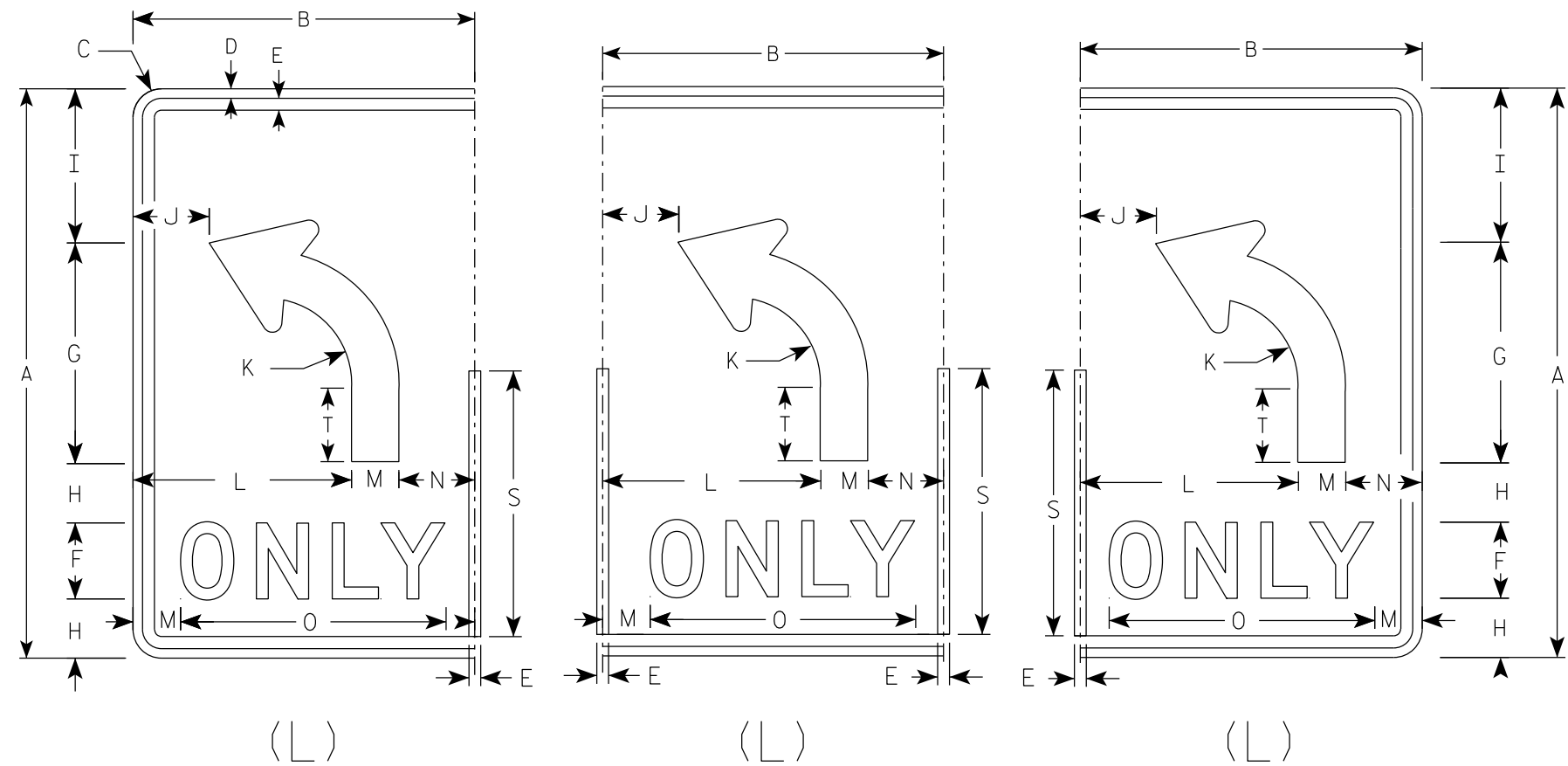
for State Traffic Engineer

DATE 2/14/23

PLATE NO. R3-8.2

NOTES

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



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

STANDARD SIGN

R3-8 (L) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*

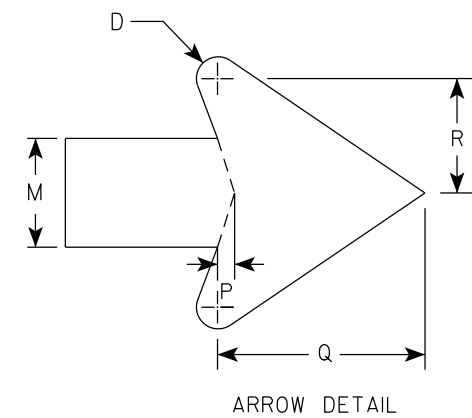
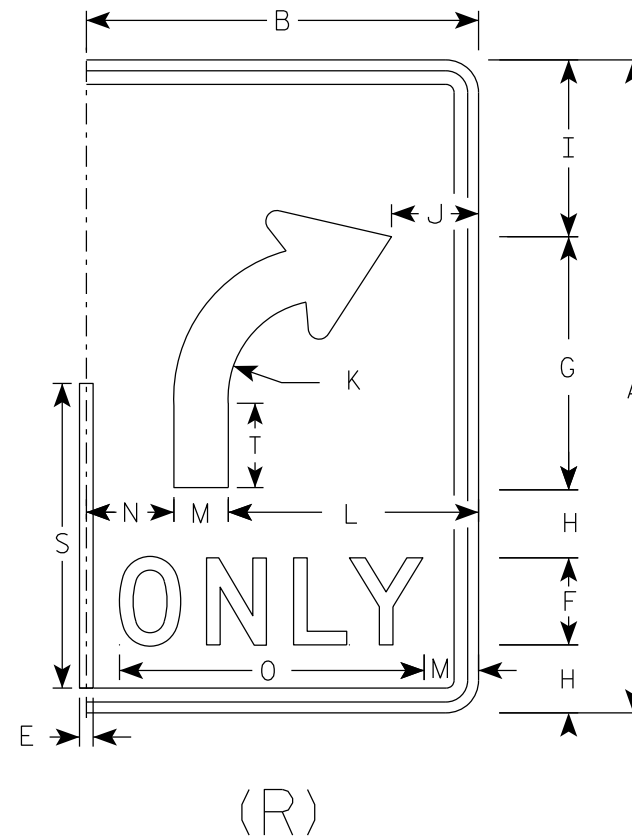
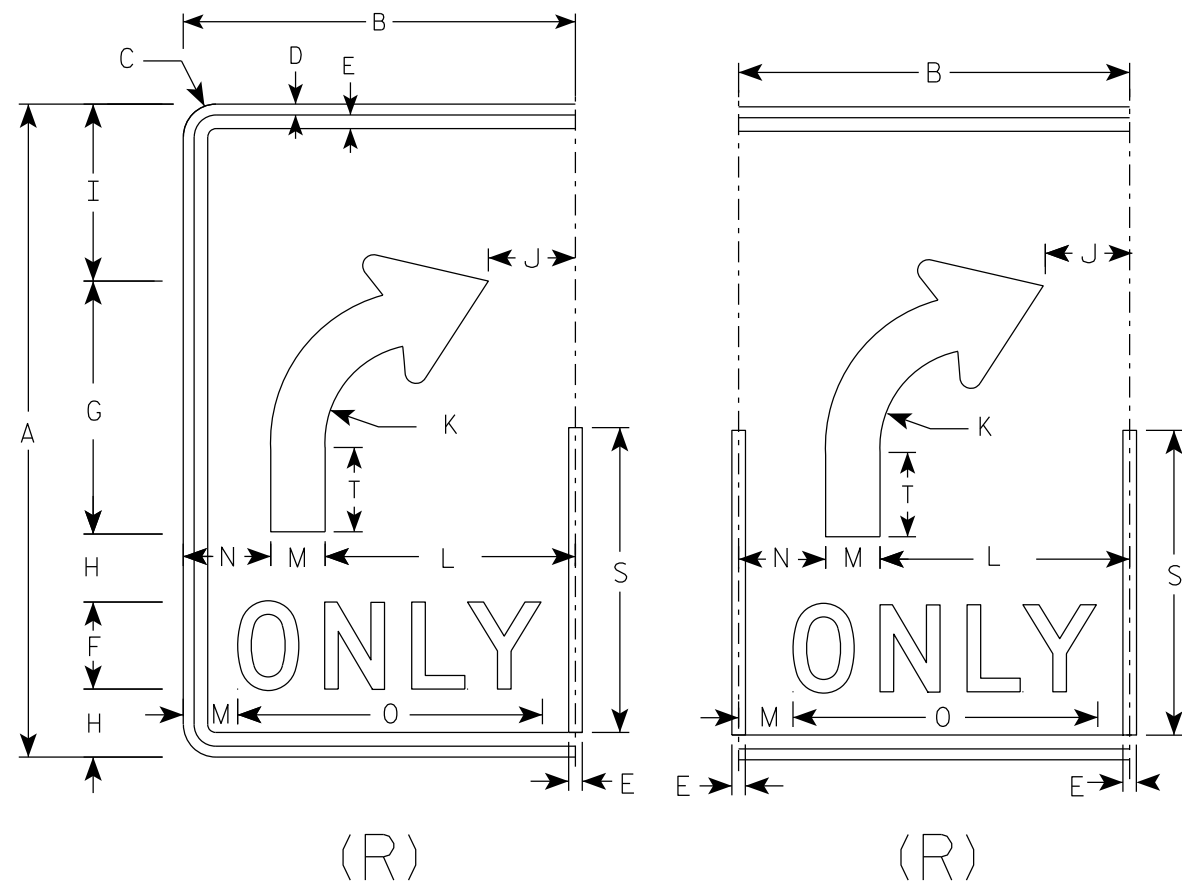
for State Traffic Engineer

DATE 2/14/23

PLATE NO. R3-8.2

NOTES

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



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

STANDARD SIGN

R3-8 (R) Arrow

WISCONSIN DEPT OF TRANSPORTATION

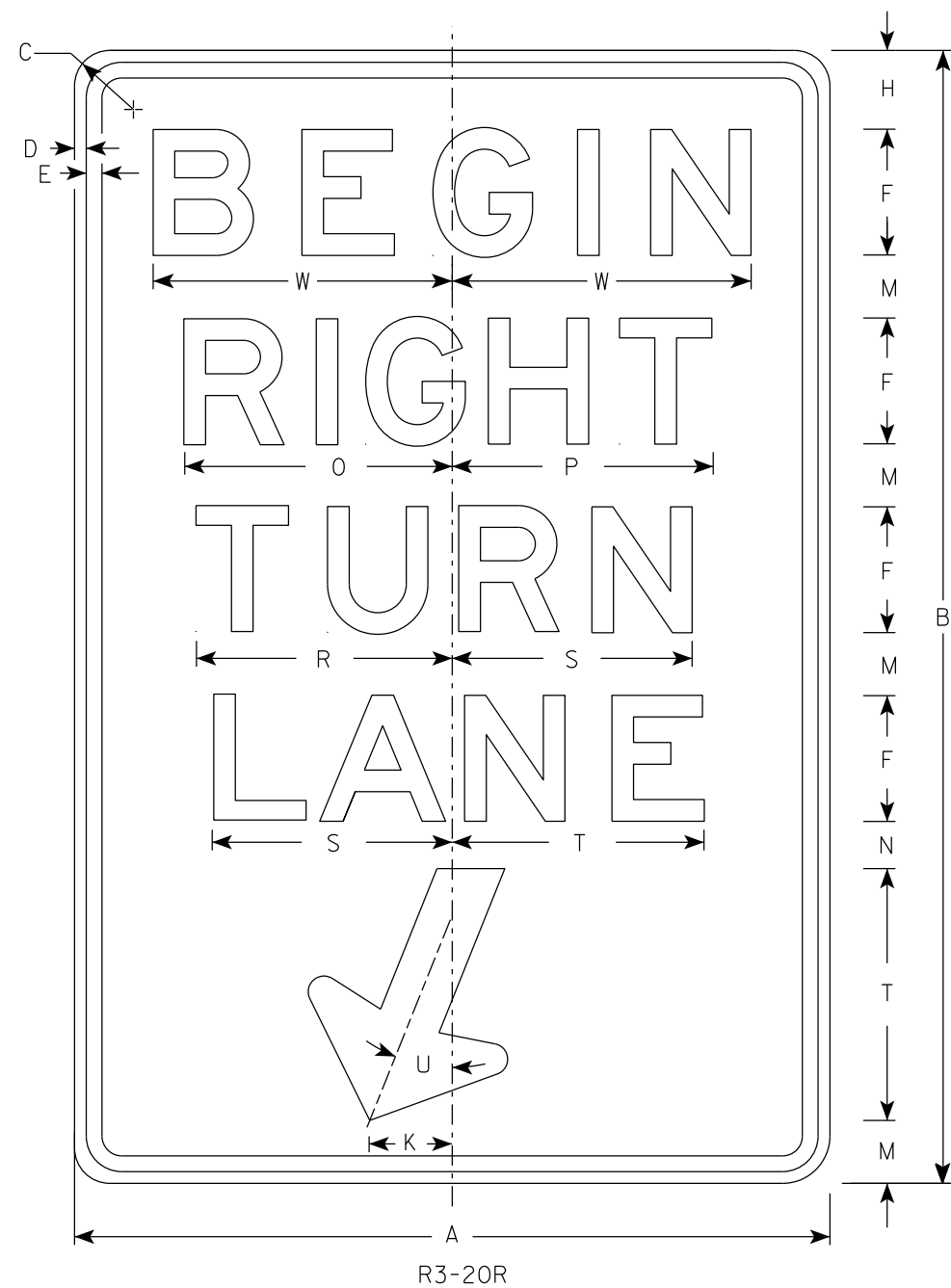
APPROVED *Matthew R. Rauch*

for State Traffic Engineer

DATE 2/14/23

PLATE NO. R3-8.2

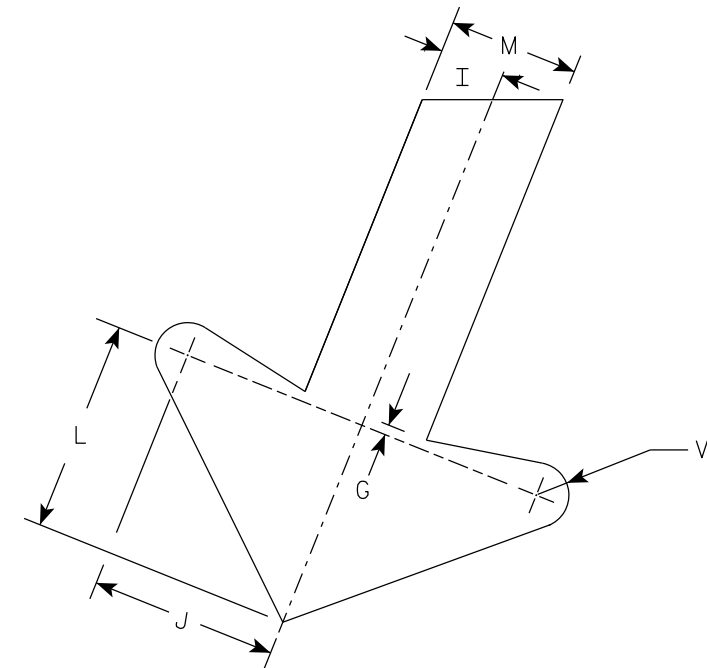
7



R3-20R

NOTES

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



ARROW DETAIL

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/2	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/2	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 7/8	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

PROJECT NO:

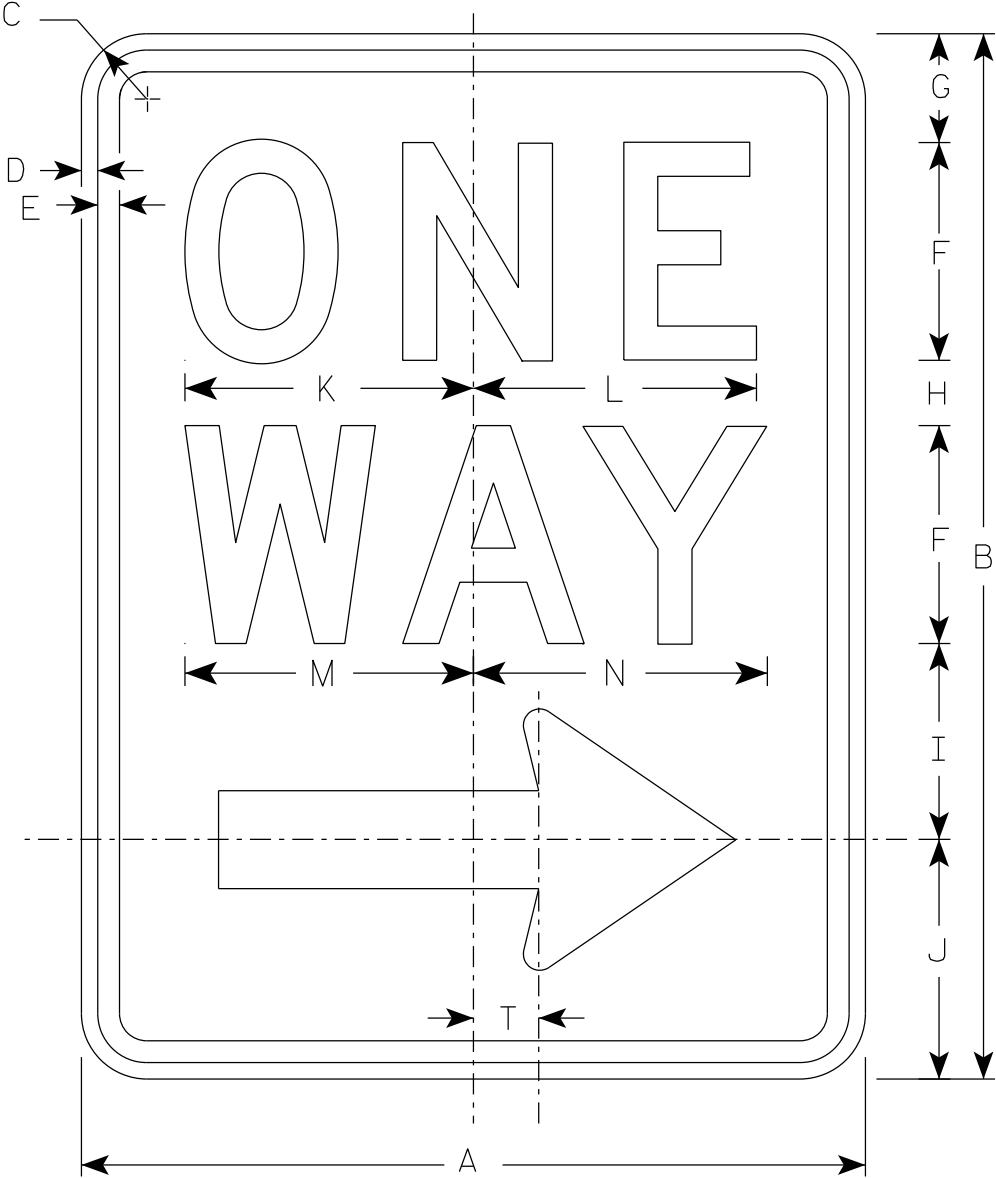
HWY:

COUNTY:

SHEET NO: 198

E

7

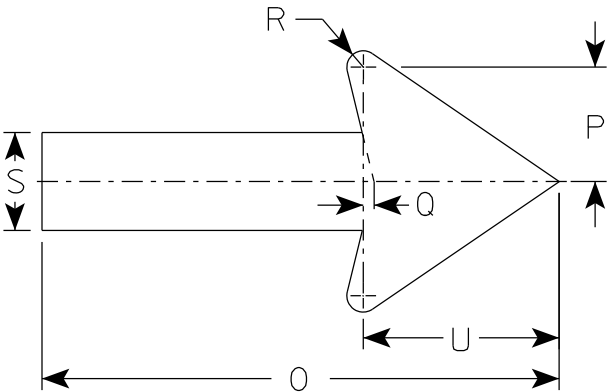


R6 - 2R

NOTES

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

Arrow Detail



7

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

PROJECT NO:

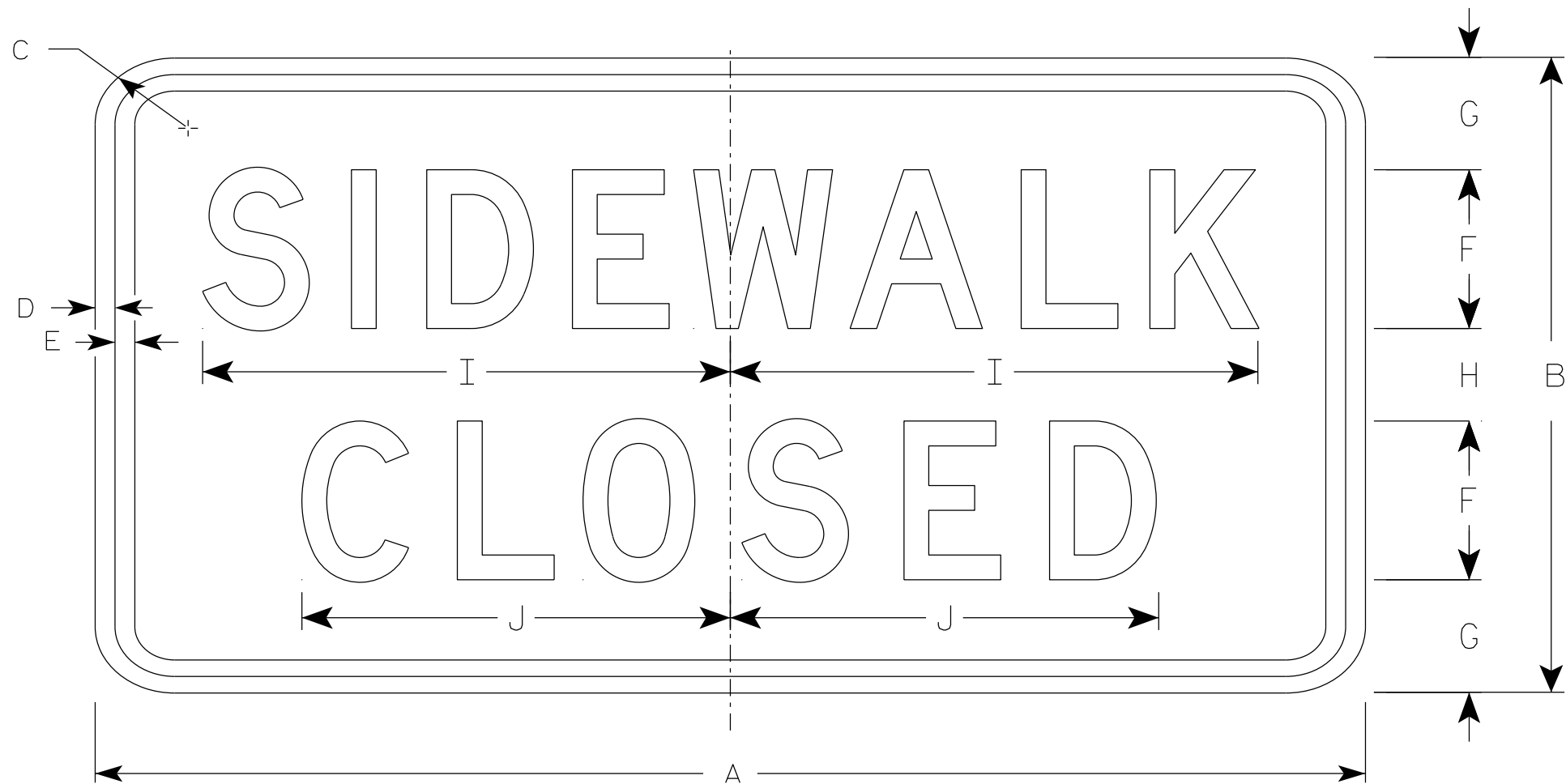
HWY:

COUNTY:

SHEET NO: 199

E

7



R9-9

NOTES

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

7

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

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 200

E

STANDARD SIGN

R9-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*

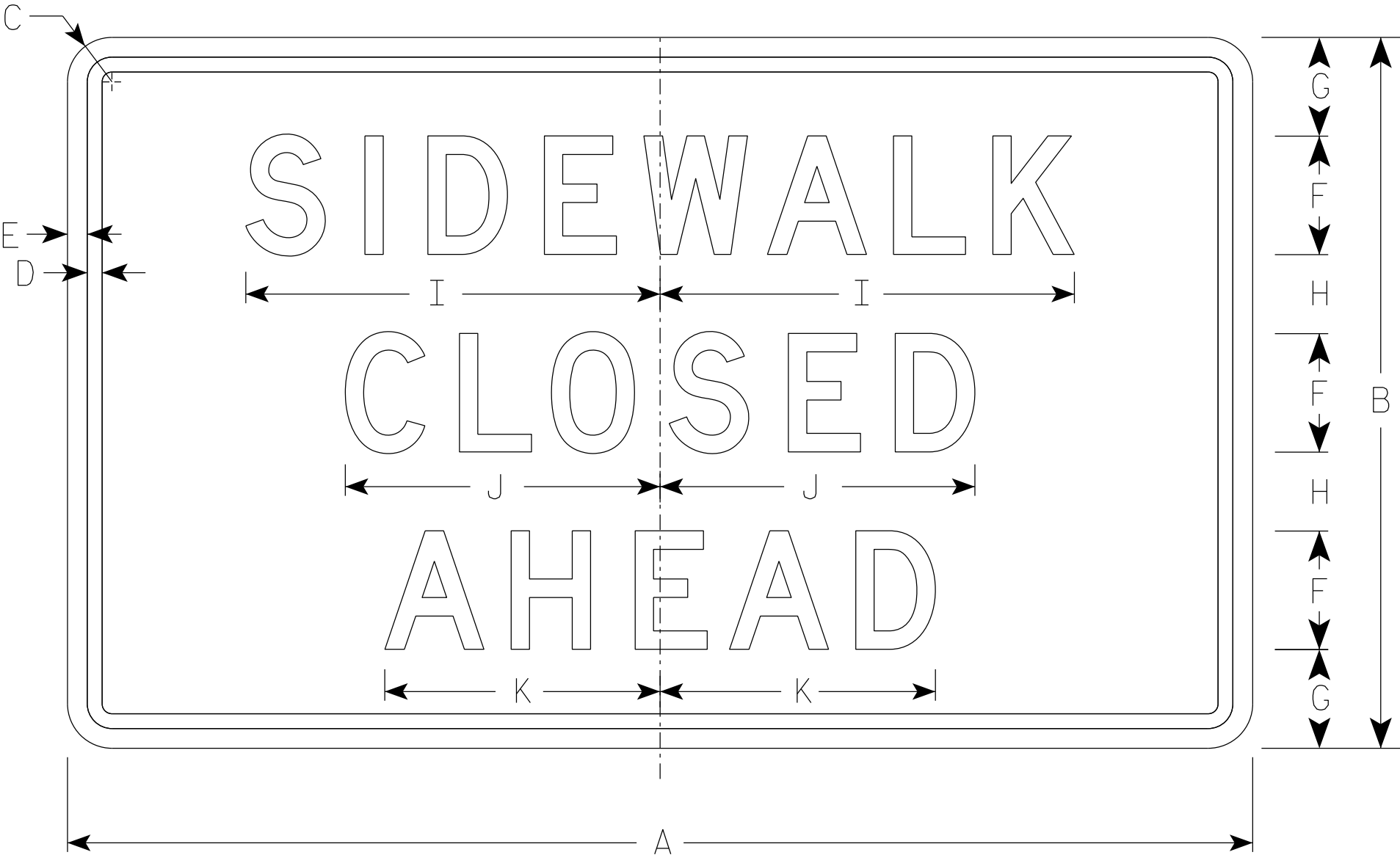
For State Traffic Engineer

DATE 1/24/24

PLATE NO. R9-9.7

NOTES

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



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

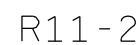
PROJECT NO:

HWY:

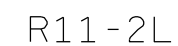
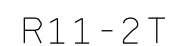
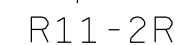
COUNTY:

SHEET NO: 201

E

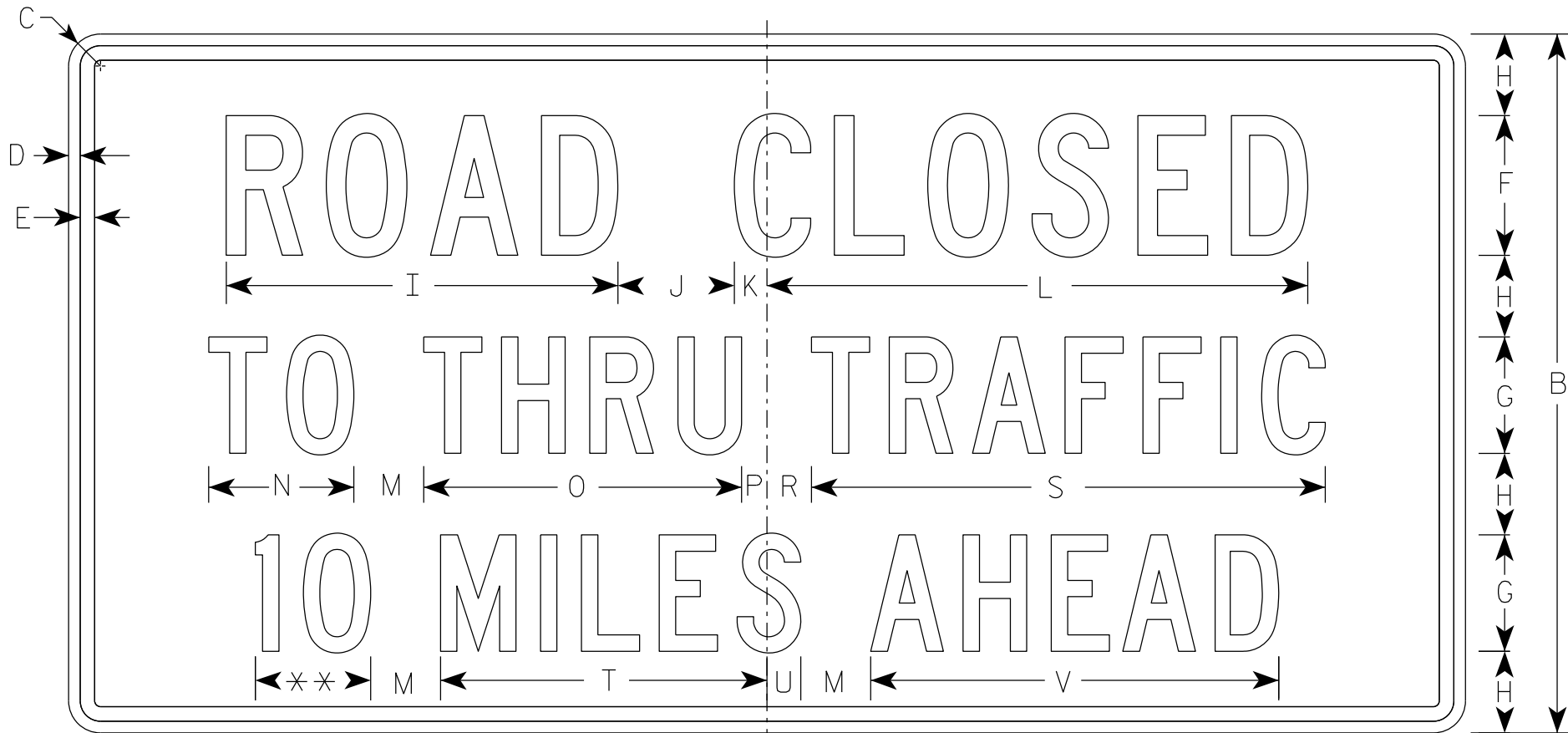


1. Sign is Type II - Type H Reflective
2. Color:
 - Background - White
 - Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the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



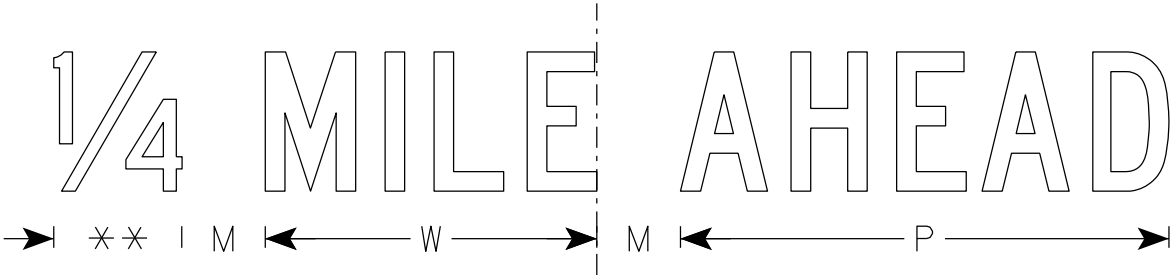
STANDARD SIGN	
R11-2	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<u>Matthew R Rauch</u> for State Traffic Engineer
DATE <u>2/5/24</u>	PLATE NO. <u>R11-2.12</u>

7



R11-3

** 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	18	1 1/2	3/8	3/8	4	3	2	11 1/4	3	1 1/8	15 3/8	2	3 3/4	8 1/4	5/8		1 3/8	13 1/4	8 3/8	7/8	10 1/2	7 1/8				4.5
2S	60	30	1 7/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
2M	60	30	1 7/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
3																											
4																											
5																											

PROJECT NO:

HWY:

COUNTY:

PLOT DATE : 5-FEB 2024 2:30

PLOT BY : mscj9h

PLOT NAME :

PLOT SCALE : \$\$.....plotscale.....\$\$

WISDOT/CADDs SHEET 42

SHEET NO: 203

E

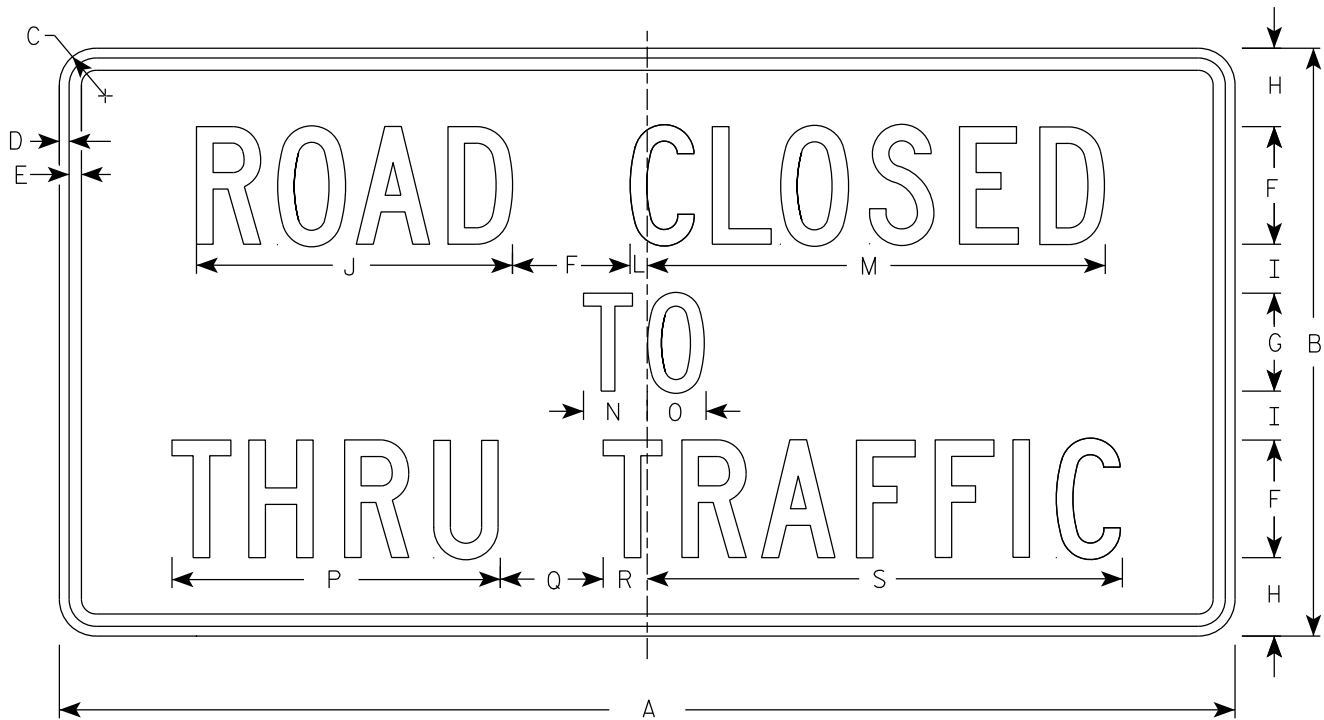
NOTES

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

7

NOTES

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



R11-4

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	30	1 7⁄8	1⁄2	5⁄8	6	5	4	2 1⁄2	16 1⁄8		7⁄8	23 3⁄8	3 1⁄4	3	16 3⁄4	5 1⁄4	2 1⁄4	24 1⁄4								12.5
2M	60	30	1 7⁄8	1⁄2	5⁄8	6	5	4	2 1⁄2	16 1⁄8		7⁄8	23 3⁄8	3 1⁄4	3	16 3⁄4	5 1⁄4	2 1⁄4	24 1⁄4								12.5
3																											
4																											
5																											

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 204

E

STANDARD SIGN

R11 - 4

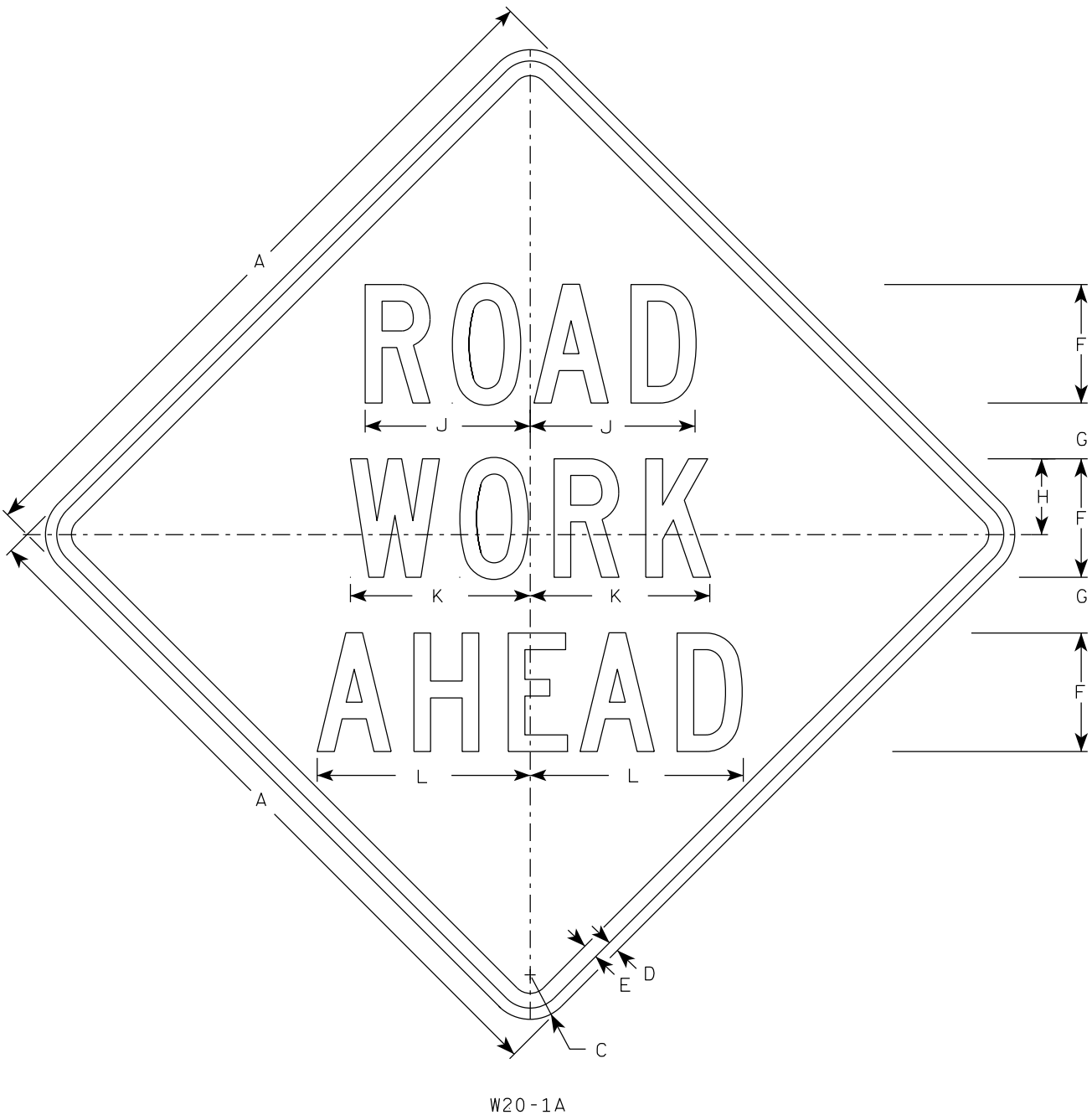
WISCONSIN DEPT OF TRANSPORTATION

APPROVED

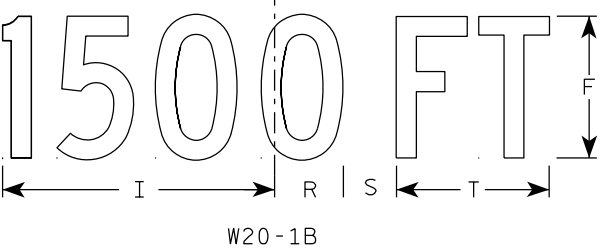
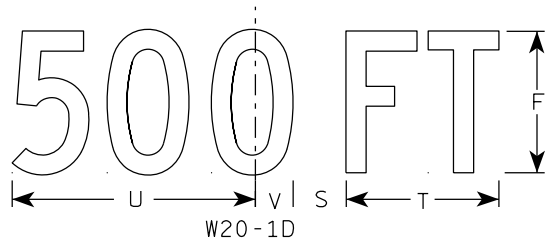
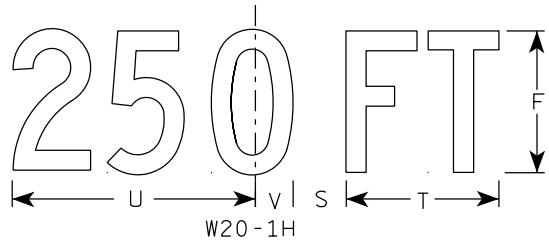
Matthew R. Rauch
for State Traffic Engineer

DATE 2/5/24

PLATE NO. R11-4.4

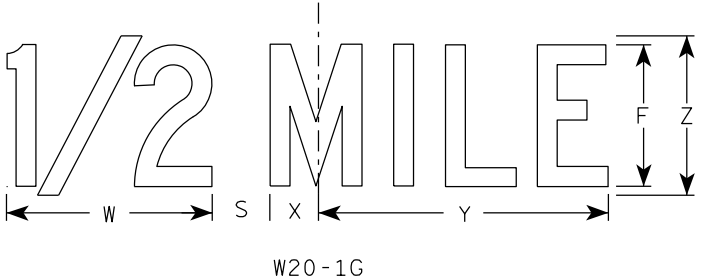


W20-1A

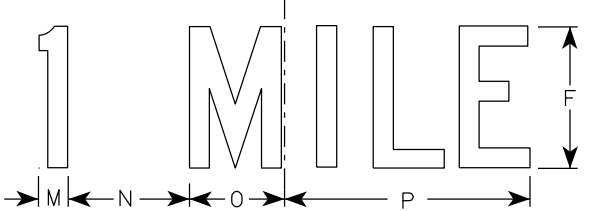


W20-1B

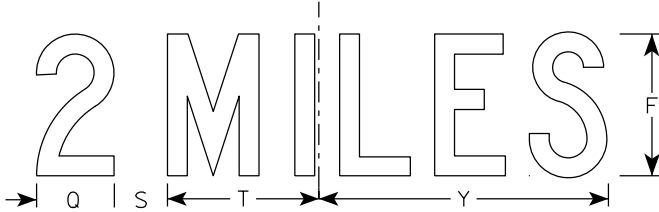
- NOTES
1. Sign is Type II - Type F Reflective
 2. Color:
Background - Orange
Message - Black
 3. Message Series - C
 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1G

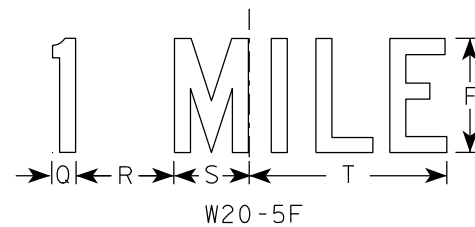
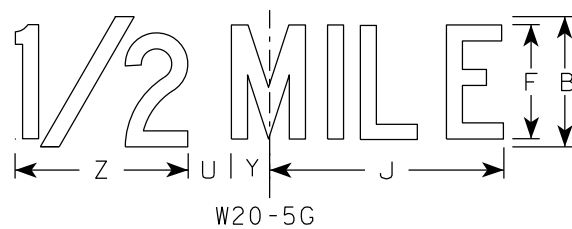
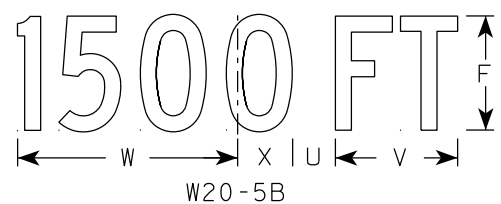
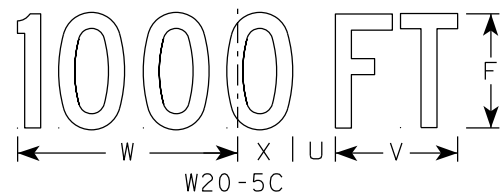
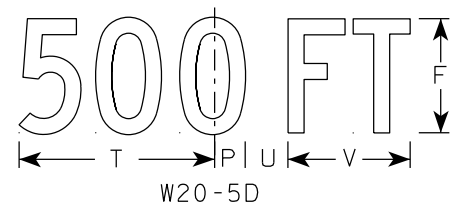
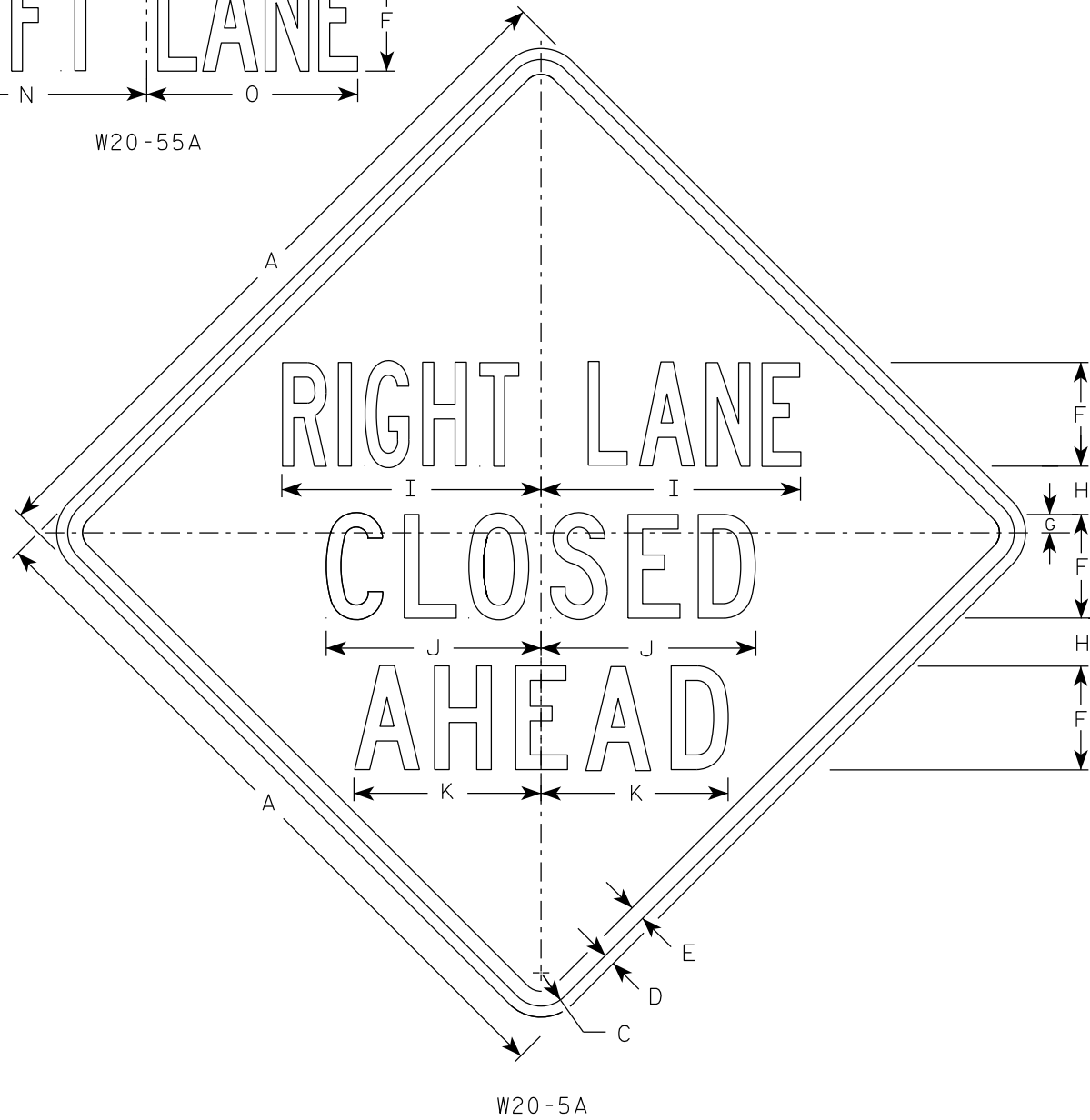
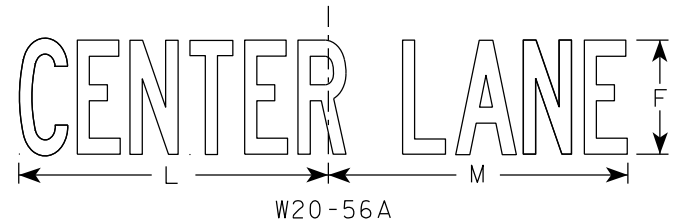


W20-1F



W20-1E

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



NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
 - Background - Orange
 - Message - Black
- 3. Message Series - See Note 5
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. " _____ LANE" is Series B. All other copy is Series C.

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	v	W	X	Y	Z	Area sq. ft.
1	36	6	2 1/4	5/8	3/4	5	7/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 7/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

STANDARD SIGN
W20-5A, B, C, D, F & G

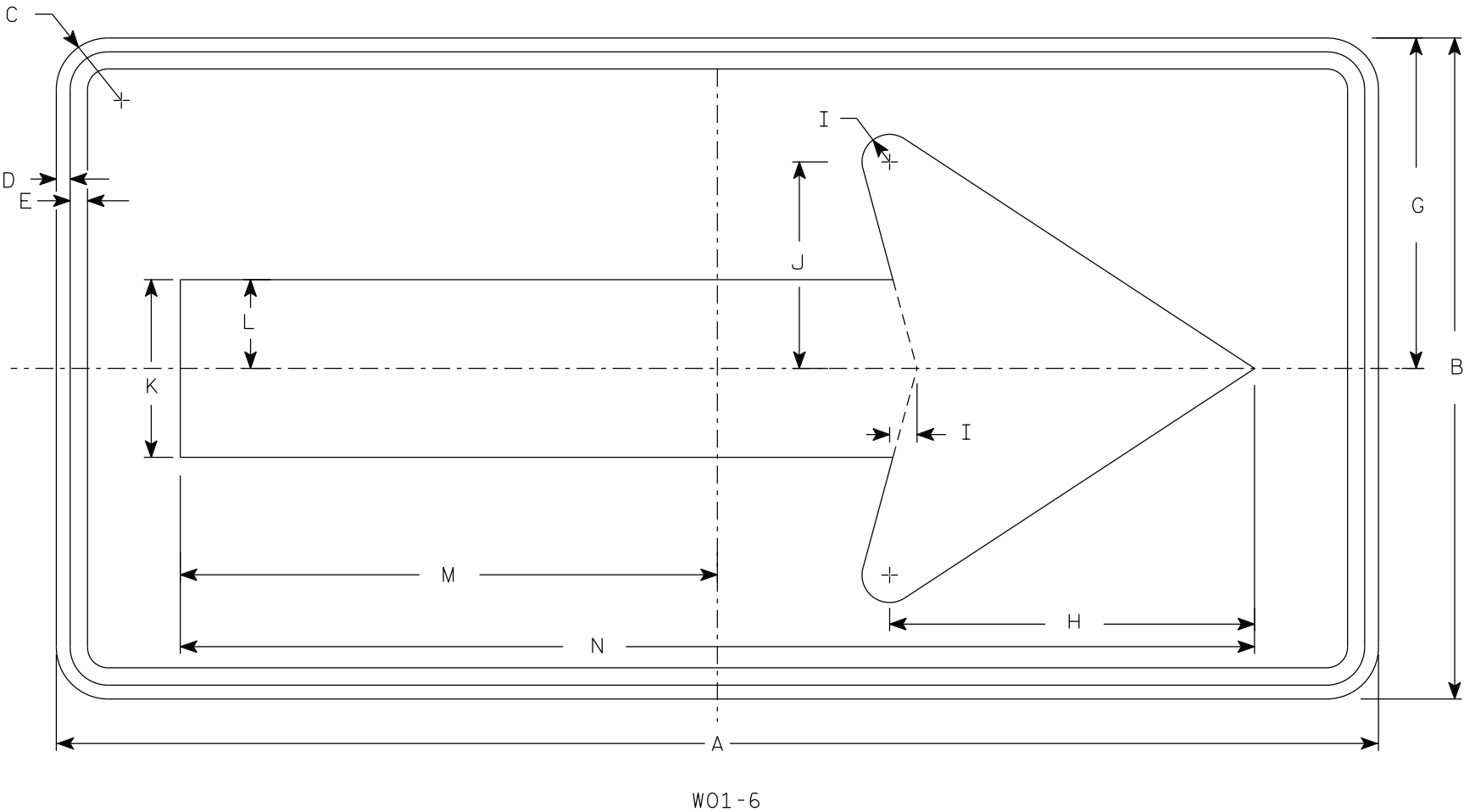
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/27/24 PLATE NO. W20-5.12

7

7



NOTES

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

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

STANDARD SIGN

W01-6

WISCONSIN DEPT OF TRANSPORTATION

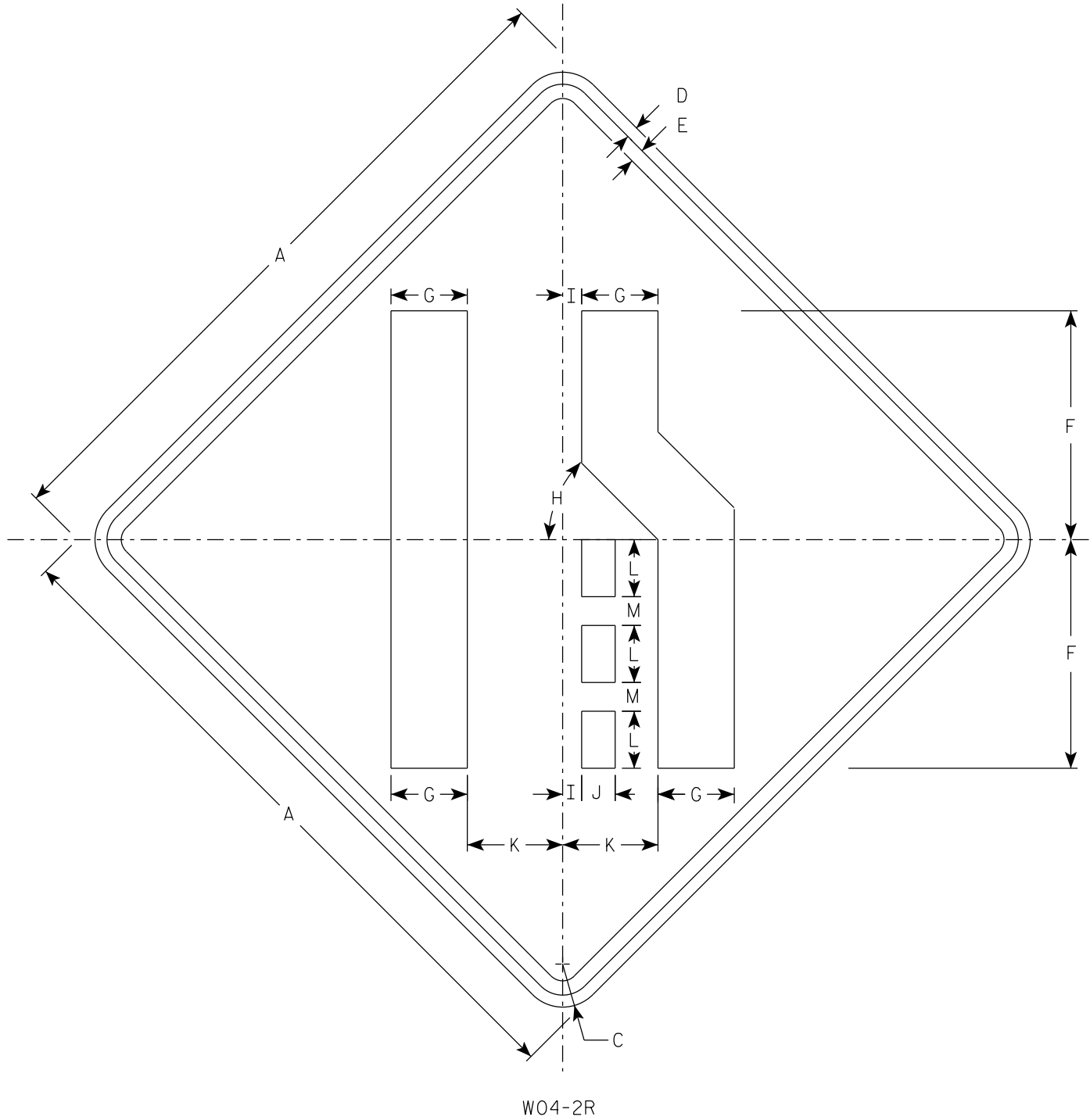
APPROVED

Matthew R. Rauch

for State Traffic Engineer

DATE 1/24/2024

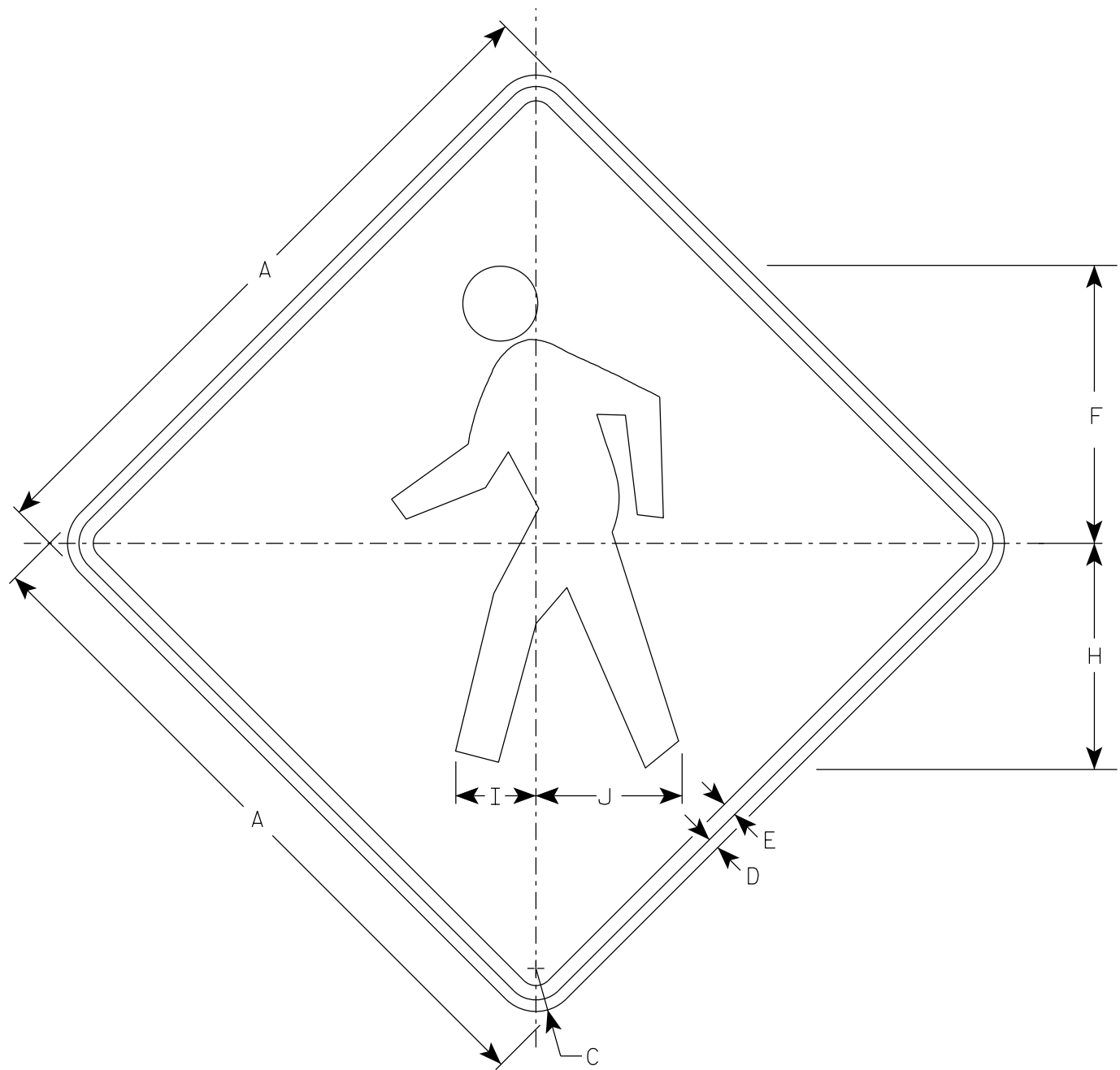
PLATE NO. W01-6.2



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. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0



NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
2S	48		3	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
2M	48		3	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
3	48		3	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
4	48		3	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

STANDARD SIGN
W011-2

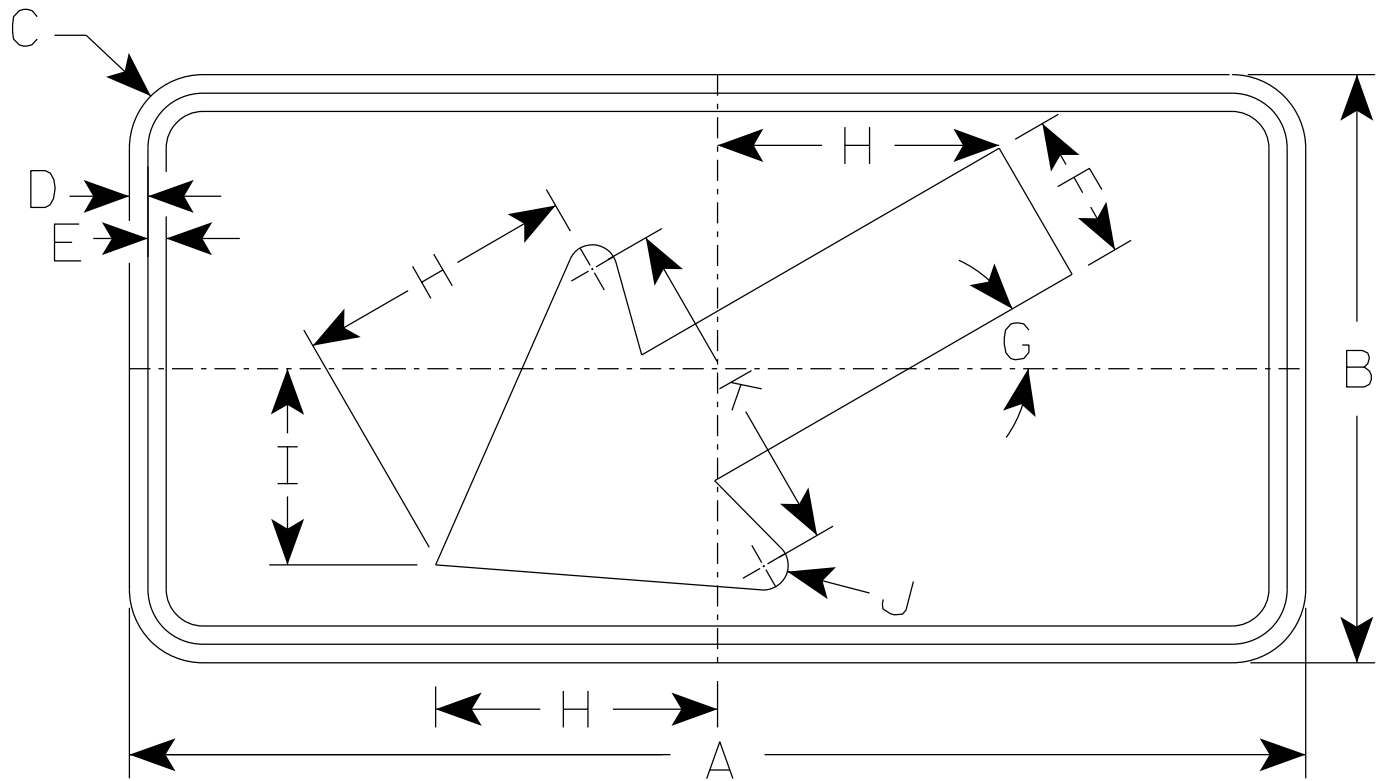
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/1/2024 PLATE NO. W011-2.2

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.



W016 - 7L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/2	3/8	1/2	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2S	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
2M	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
3	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
4	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
5	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 210

E

STANDARD SIGN
W016 - 7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/1/2024 PLATE NO. W016-7.3

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.



W016-9P

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/2	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
2S	48	24	1 7/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
2M	48	24	1 7/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
3	48	24	1 7/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
4	48	24	1 7/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5	48	24	1 7/8	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 2/1/2024 PLATE NO. W016-9P.8

PROJECT NO: HWY: COUNTY: SHEET NO: 211 E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W0169P.dgn PLOT DATE : 1-FEB 2024 10:20 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : \$\$.....plotscale.....\$\$ WISDOT/CADDs SHEET 42

DIVISION 1 - MAIN ST AT WALKER WAY

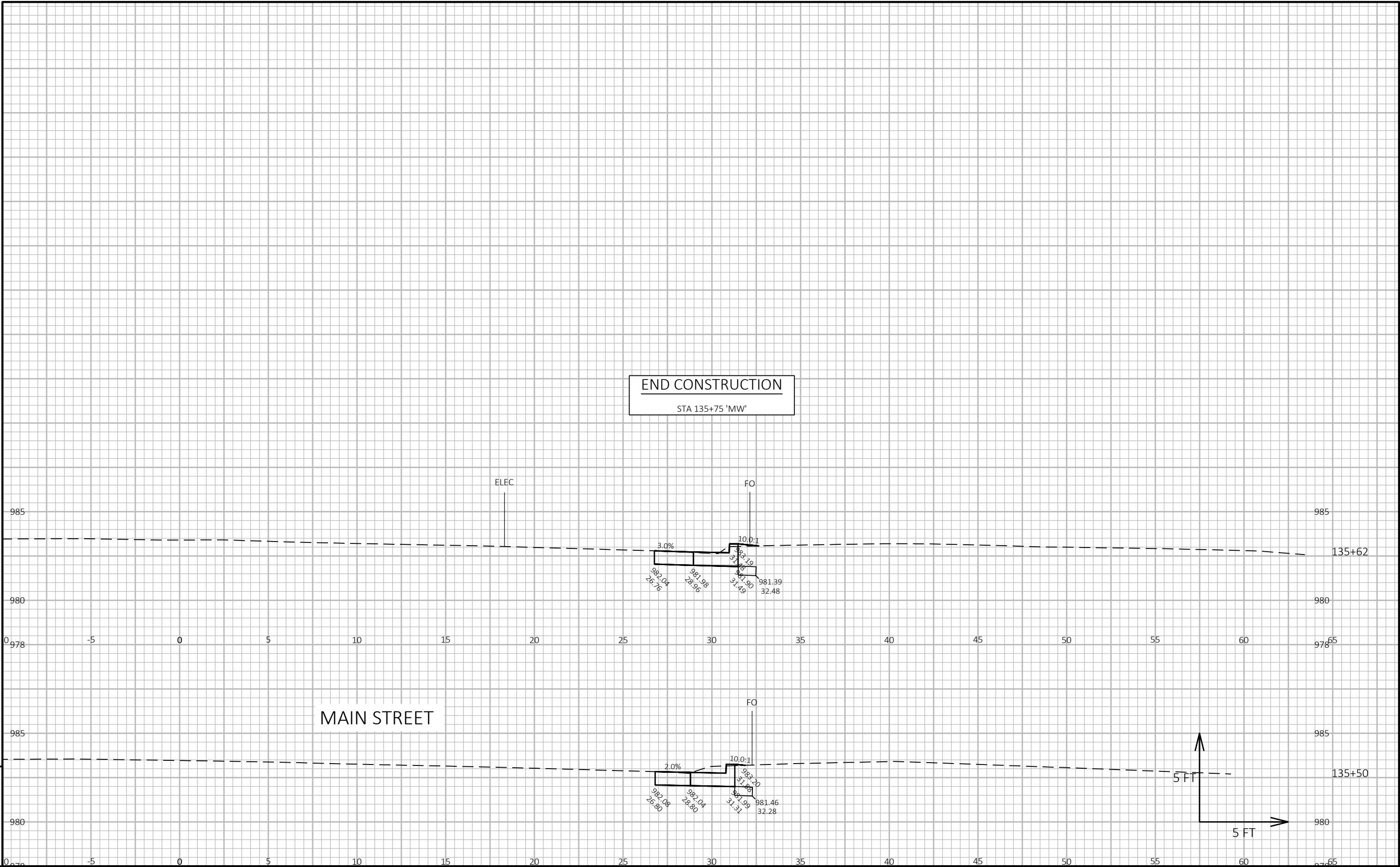
STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED EILL	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1	1.25	NOTE 8
133+39.84	13339.84	0.00	2.04	1.88	0.07	0	0	0	0	0	0
133+75.00	13375.00	35.16	7.78	5.35	0.00	6	5	0	6	0	1
134+00.00	13400.00	25.00	3.94	3.30	0.04	5	4	0	11	0	2
134+50.00	13450.00	50.00	4.11	3.30	0.03	7	6	0	18	0	3
135+00.00	13500.00	50.00	4.13	3.30	0.02	8	6	0	26	0	5
135+50.00	13550.00	50.00	4.07	3.30	0.02	8	6	0	34	0	7
135+62.33	13562.33	12.33	3.77	3.30	0.08	2	2	0	36	0	7

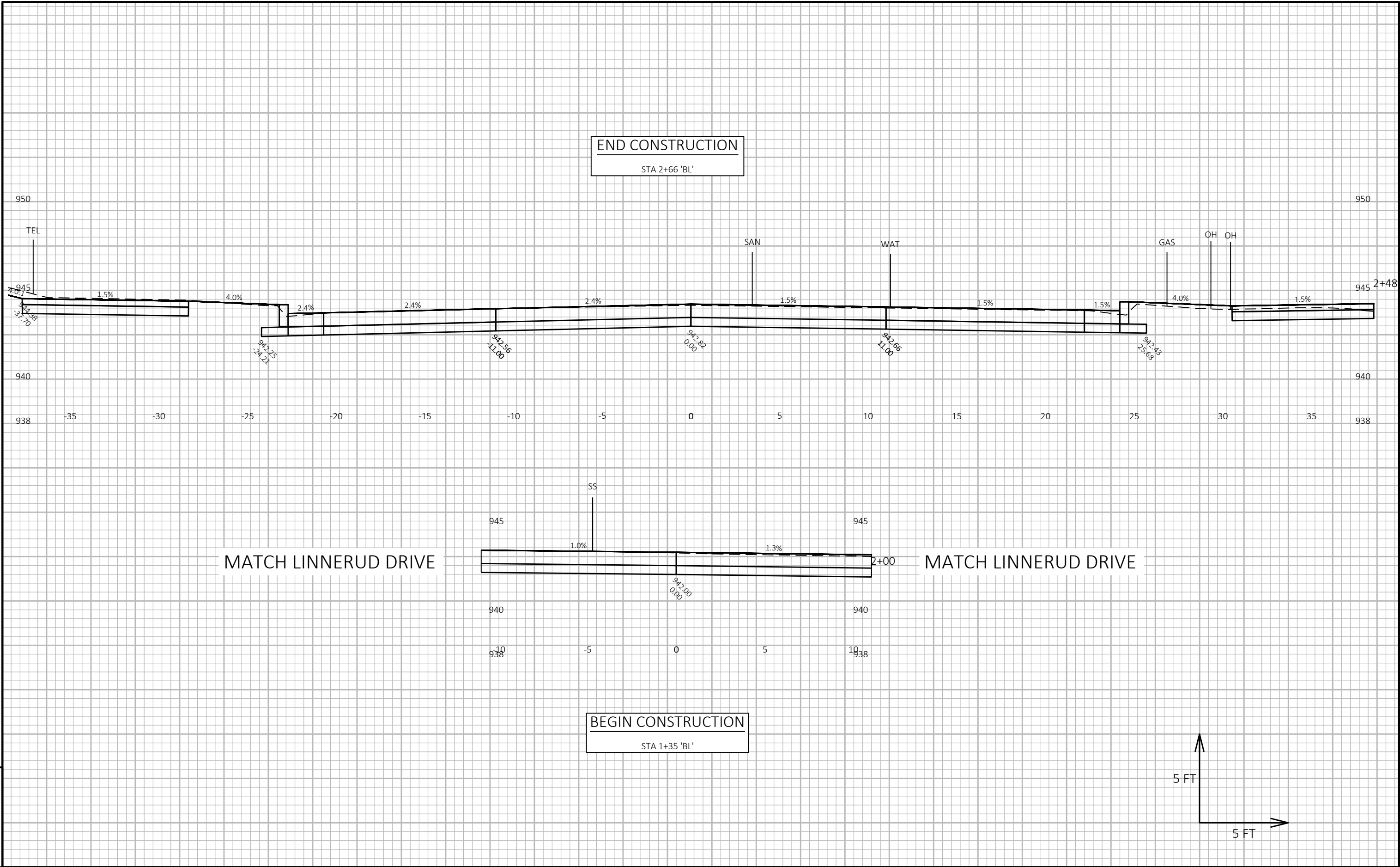
DIVISION 2 - BIRD ST AT LINNERUD DR

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED EILL	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1	1.25	NOTE 8
1+47.50	147.50	0.00	27.31	9.17	0.00	0	0	0	0	0	0
2+00.00	200.00	52.50	26.60	9.17	0.00	52	18	0	52	0	34
2+25.00	225.00	25.00	25.76	9.17	0.00	24	8	0	76	0	50
2+48.00	248.00	23.00	26.48	9.17	0.00	22	8	0	98	0	64
2+65.00	265.00	17.00	27.27	9.17	0.00	17	6	0	115	0	75

DIVISION 2 - LINNERUD DR AT BIRD ST

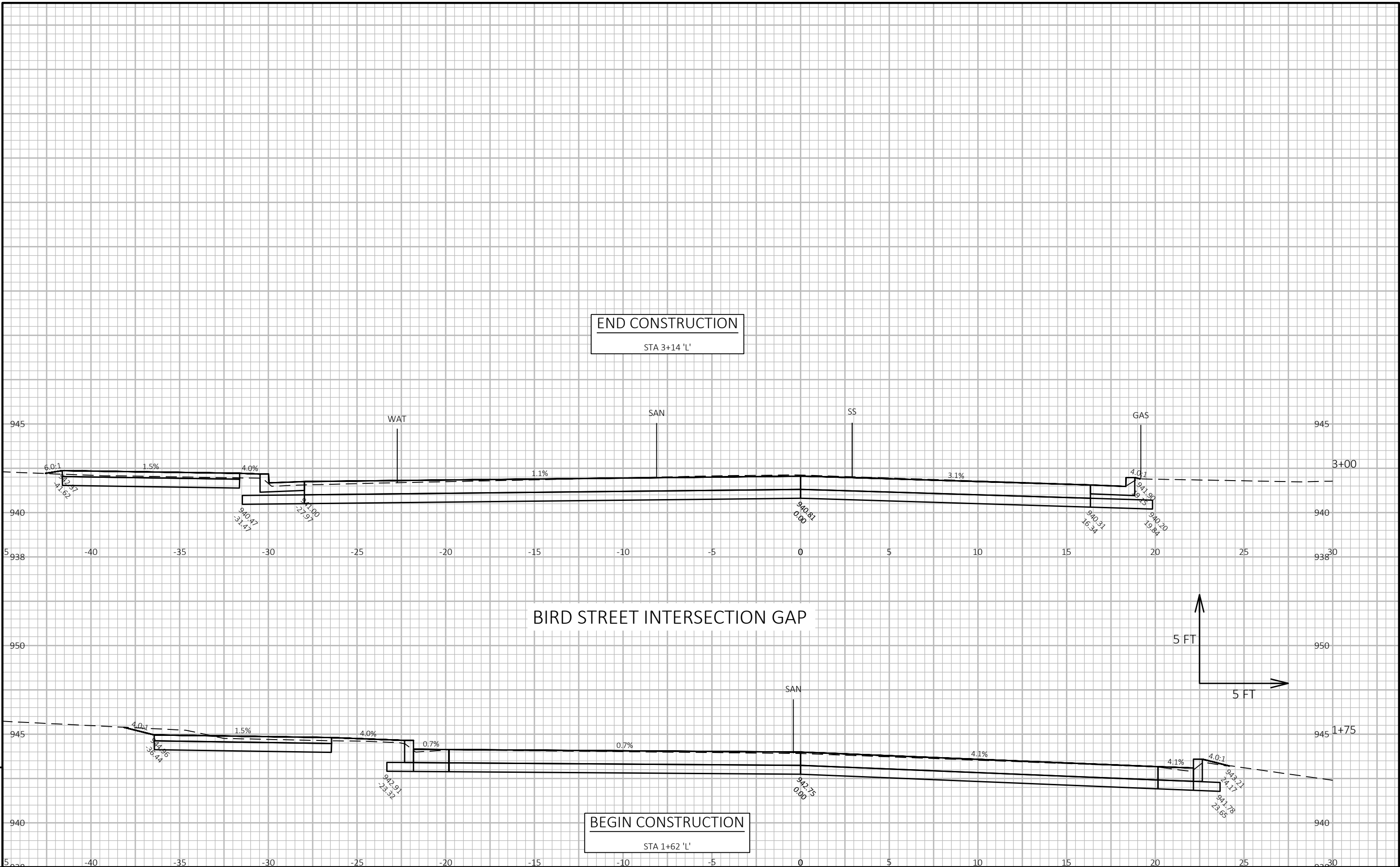
STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED EILL	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1	1.25	NOTE 8
1+65.25	165.25	0.00	71.47	16.67	0.00	0	0	0	0	0	0
1+75.00	175.00	9.75	70.13	16.67	0.00	26	6	0	26	0	20
1+89.14	189.14	14.14	78.23	16.67	0.00	39	9	0	65	0	50
2+08.47	208.47	19.33	149.14	42.08	0.00	81	21	0	146	0	110
2+45.82	245.82	0.00	137.70	39.58	0.00	0	0	0	146	0	110
2+64.80	264.80	18.98	64.18	18.33	0.00	71	20	0	217	0	161
3+00.00	300.00	35.20	70.10	18.33	0.00	88	24	0	305	0	225
3+11.69	311.69	11.69	72.94	18.33	0.00	31	8	0	336	0	248



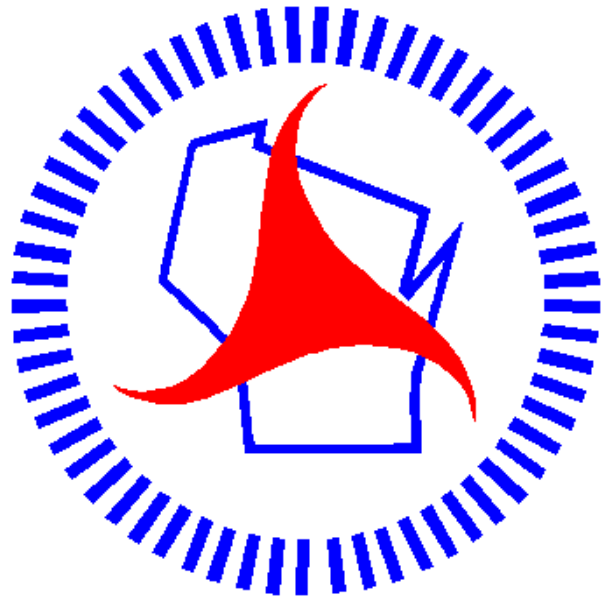


9

9



Notes



Wisconsin Department of Transportation

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