

ORDER OF SHEETS

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

TOTAL SHEETS = 282



DESIGN DESIGNATION 4060-05-02

A.A.D.T. (2022)	=	4700
A.A.D.T. (2042)	=	5000
D.H.V.	=	510
D.D.	=	60/40
T.	=	18.9 %
DESIGN SPEED	=	60 MPH
ESALS	=	1,800,000

CONVENTIONAL SYMBOLS

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



STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

HORICON - KEWASKUM

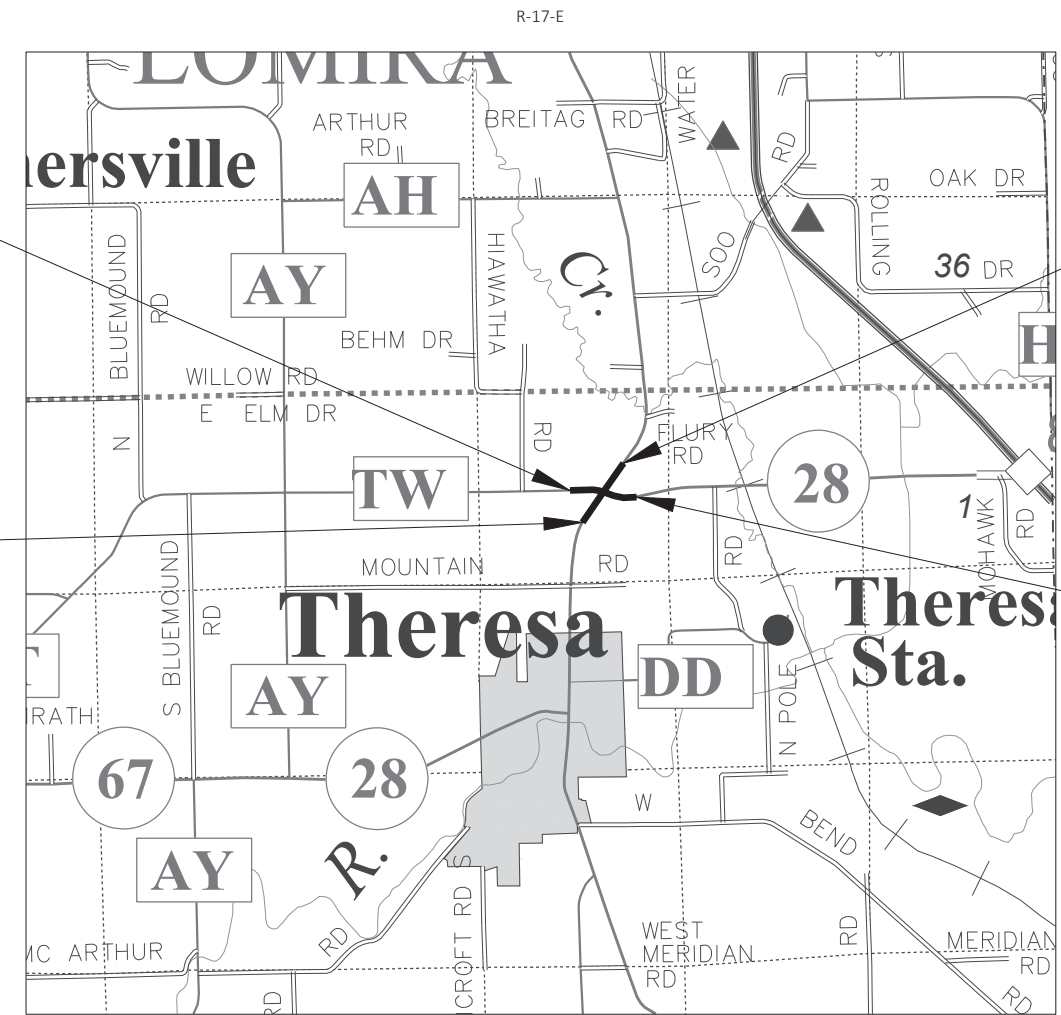
STH 67/175/TW INTERSECTION

STH 28

DODGE COUNTY

STATE PROJECT NUMBER
4060-05-72

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4060-05-72	WISC 2022228	1



BEGIN CONSTRUCTION
STA 102+70 EB

END PROJECT
STA 222+25 NB

BEGIN PROJECT
STA 204+75 NB
Y: 751742.63
X: 950494.40

END CONSTRUCTION
STA 126+35 EB

LAYOUT
SCALE 0 1 MI
TOTAL NET LENGTH OF CENTERLINE = 0.571 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), DODGE COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	BATTEMAN
Designer	RYAN BAILEY
Project Manager	JEREMY HALL
Regional Examiner	SW REGION
Regional Supervisor	JAMES OETTINGER

APPROVED FOR THE DEPARTMENT

DATE:

Digitally signed by Jeremy Hall
DN: C=US,
E=jeremy.hall@dot.wi.gov,
O=WISCONSIN DEPARTMENT OF TRANSPORTATION,
East Unit, CN=Jeremy Hall
Reason: I am approving this document
Date: 2021.10.28 06:48:09-05'00'

GENERAL NOTES

TREES OR SHRUBS THAT ARE NOT MARKED ON THE PLAN TO BE REMOVED SHALL BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER IN THE FIELD.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA.

CONTRACTOR TO VERIFY ELEVATIONS OF THE EXISTING PAVEMENT TO REMAIN IN PLACE, PRIOR TO STAKING.

ALL NEW AND RELAID CONCRETE PIPES SHALL HAVE THE APRON ENDWALL AND FIRST TWO PIPE JOINTS TIED.

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

SAWCUTS, AS SHOWN ON THE PLANS, ARE SUGGETED LOCATIONS AND MAY BE ADJUSTED AT THE DISCRETION OF THE ENGINEER TO BETTER SUIT FIELD CONDITIONS.

EXACT SIGN LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND THE LOCATIONS OF SIGNS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

THE EROSION CONTROL DEVICES AS SHOWN ON THE EROSION CONTROL SHEETS ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.

ALL OPENINGS OF HOLES BELOW SUBGRADE RESULTING FROM REMOVALS OR ABANDONMENTS SHALL BE BACKFILLED WITH GRANULAR MATERIAL AND COMPACTED. GRANULAR MATERIAL IS INCIDENTAL TO THE REMOVAL ITEM.

ALL PROPERTY LINES ON PLANS ARE APPROXIMATE.

ASPHALT PAVING LIMITS AT INTERSECTIONS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER AND SHALL HAVE BUTT JOINTS.

CURB AND GUTTER PLAN GRADES ARE AT THE FLANGE LINE UNLESS OTHERWISE NOTED.

RADIUS DIMENSIONS FOR THE CURB AND GUTTER ARE TO THE FLANGE OF CURB.

EBS IS ESTIMATED AT 5%, EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

UTILITY LINES IN CROSS SECTIONS ARE FOR HORIZONTAL REFERENCE ONLY.

RIGHT OF WAY LINES SHOWN ON THE CROSS SECTIONS ARE APPROXIMATE.

CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY HIS OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DIVEWAYS AT ALL TIMES EXCEPT WHEN PAVING OR PIPE LAYING OPERATIONS REQUIRE THE DRIVEWAY TO BE CLOSED. ACCESS TO DRIVEWAY SHALL BE RE-ESTABLISHED IMMEDIATELY AFTER PAVEMENT OR PIPE IN DRIVEAWY AREA IS INSTALLED. ACCESS SHALL BE PROVIDED DURING ALL NON-WORKING HOURS.

THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTION AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING OR BIKE LANE.

DESIGNER NOTES

DESIGN PLANS, SPECIFICATIONS, AND ESTIMATES FOR LIGHTING PROVIDED BY JT ENGINEERING, INC.

ROUNDAABOUT DESIGN PROVIDED BY RYAN BAILEY (WISDOT) WITH REVIEW BY JT ENGINEERING, INC.

UTILITY CONTACTS

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WE ENERGIES UTILITY COORDINATOR
WE ENERGIES - ELECTRICITY
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PROJECT LEADER (WISDOT)
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WI DNR LIASON
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(608) 275-3301
eric.heggelund@wisconsin.gov

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STANDARD ABBREVIATIONS

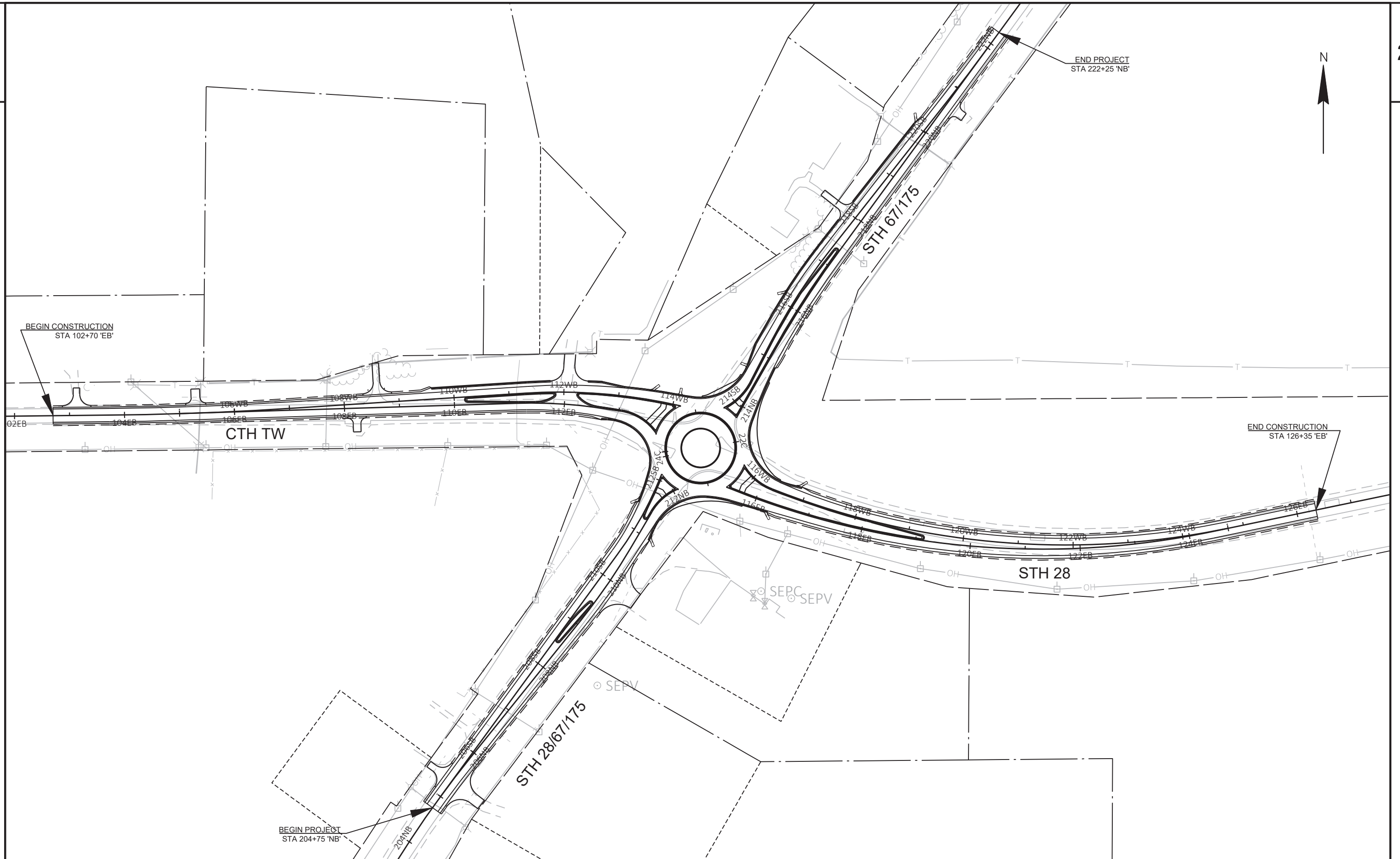
AC.	ACRE	MAX.	MAXIMUM
AGG.	AGGREGATE	MGAL	1000 GALLONS
AH	AHEAD	MIN.	MINIMUM
<	ANGLE	N.C.	NORMAL CROWN OR NO CHANGE
AE, AEW	APRON ENDWALL	N	NORTH
ASPH.	ASPHALTIC	NO.	NUMBER
A.D.T.	AVERAGE DAILY TRAFFIC	P.R.	PROPOSED
B.F.	BACK FACE	P.L.E.	PERMANENT LIMITED EASEMENT
BK.	BACK	P.C.	POINT OF CURVATURE
BEG.	BEGIN	P.I.	POINT OF INTERSECTION
B.M.	BENCH MARK	P.T.	POINT OF TANGENCY
C/L	CENTER LINE	V.P.C.	VERTICAL POINT OF CURVATURE
D	CENTRAL ANGLE OR DELTA	V.P.I.	VERTICAL POINT OF INTERSECTION
C.M.C.P.	CORRUGATED METAL CULVERT PIPE	V.P.T.	VERTICAL POINT OF TANGENCY
C.M.P.	CORRUGATED METAL PIPE	PCC	PORTLAND CEMENT CONCRETE
CO.	COUNTY	P.E.	PRIVATE ENTRANCE
CTH	COUNTY TRUNK HIGHWAY	P.L.	PROPERTY LINE
CR.	CREEK	R	RADIUS OR RANGE
C.A.B.C.	CRUSHED AGGREGATE BASE COURSE	R/L	REFERENCE LINE
C.Y.	CUBIC YARD	R.C.C.P.	REINFORCED CONCRETE CULVERT PIPE
C.P.	CULVERT PIPE	RT	RIGHT
C. & G.	CURB AND GUTTER	REQ'D	REQUIRED
D	DEGREE OF CURVE	R.H.F.	RIGHT HAND FORWARD
D.H.V.	DESIGN HOUR VOLUME	R/W	RIGHT OF WAY
DIA.	DIAMETER	R.	RIVER
DISCH.	DISCHARGE	RD.	ROAD
EA	EACH	SHLD.	SHOULDER(S)
E	EAST	SHR.	SHRINKAGE
ELEC.	ELECTRIC(AL), ELEC. CABLE	S	SOUTH
EL., ELEV.	ELEVATION	S.F.	SQUARE FOOT (FEET)
EXC.	EXCAVATION	SDD	STANDARD DETAIL DRAWING(S)
F.F.	FACE TO FACE	STH	STATE TRUNK HIGHWAY
FERT.	FERTILIZER	STA.	STATION
F.E.	FIELD ENTRANCE	S.E.	SUPERELEVATION
F/L, F.L.	FLOW LINE	S/L	SURVEY LINE
CWT.	HUNDRED WEIGHT	T	TANGENT
INL	INLET	TEL.	TELEPHONE
INTER.	INTERSECTION	TEMP.	TEMPORARY
JT.	JOINT	T.L.E.	TEMPORARY LIMITED EASEMENT
LT	LEFT	T.O.C.	TOP OF CURB
L.H.F.	LEFT HAND FORWARD	T.	(TRUCKS) PERCENT OF
L.	LENGTH OF CURVE	TYP.	TYPICAL
L.F.	LINEAR FOOT(FEET)	UNCL.	UNCLASSIFIED
LC.	LONG CHORD	U.G.	UNDERGROUND (CABLE)
LS	LUMP SUM	V.C.	VERTICAL CURVE
M.P.	MARKER POST	W	WEST

SECTION 2 ORDER OF SHEETS

- GENERAL NOTES
- PROJECT OVERVIEW
- TYPICAL SECTIONS
- CONSTRUCTION DETAILS
- INTERSECTION DETAILS
- PAVING GRADES
- EROSION CONTROL
- STORM SEWER
- PERMANENT SIGNING
- LIGHTING
- PAVEMENT MARKING
- TRAFFIC CONTROL
- DETOURS
- ALIGNMENT LAYOUT

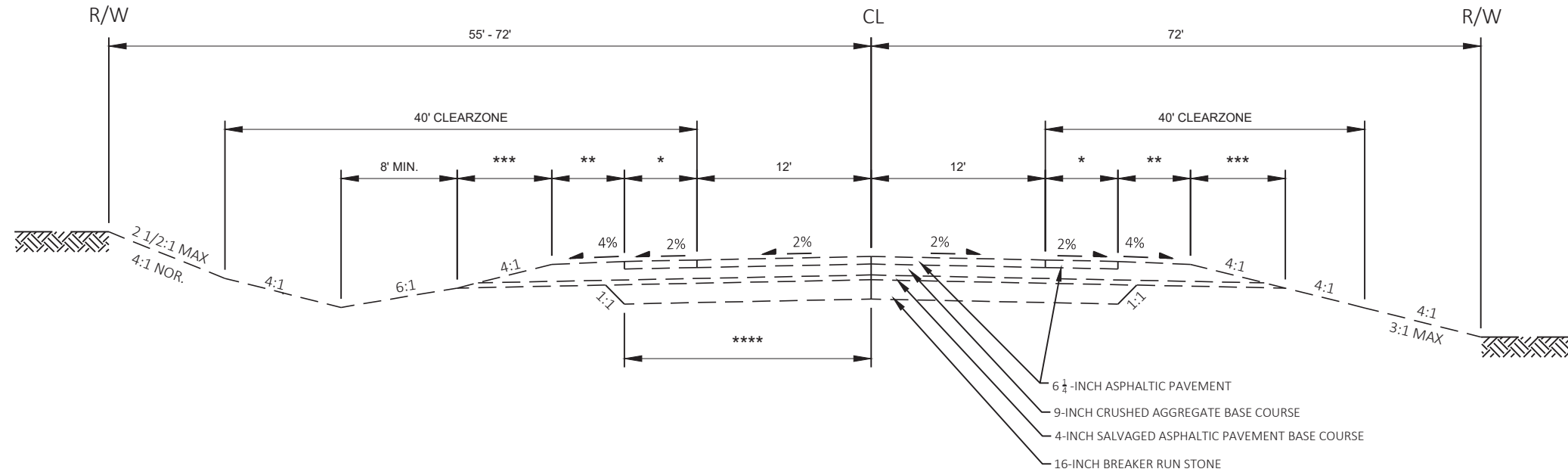
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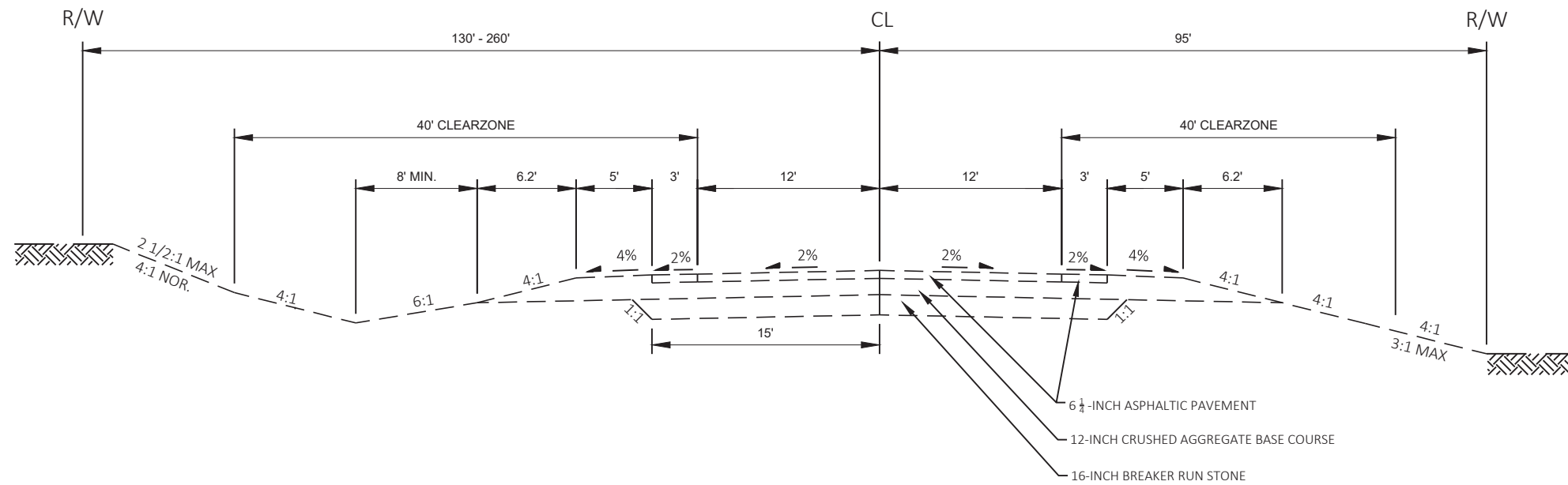
PROJECT NO: 4060-05-72	HWY: STH 28	COUNTY: DODGE	PROJECT OVERVIEW	SHEET 4	E
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LOCATION	*	**	***	****
STA 205+00 'NB' TO 212+09 'NB'	5'	5'	6.54'	17'
STA 213+76 'NB' TO 222+25 'NB'	3'	7'	6.37'	15'



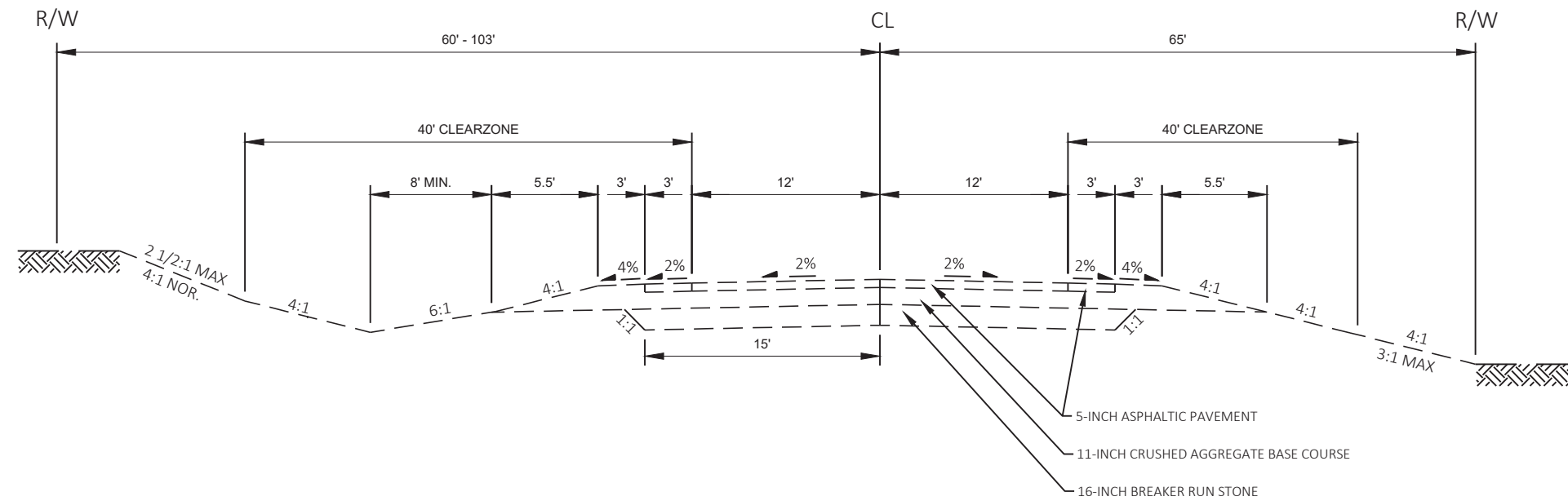
TYPICAL EXISTING SECTION - STH 28/67/175

STA. 204+75 'NB' - 222+25 'NB'



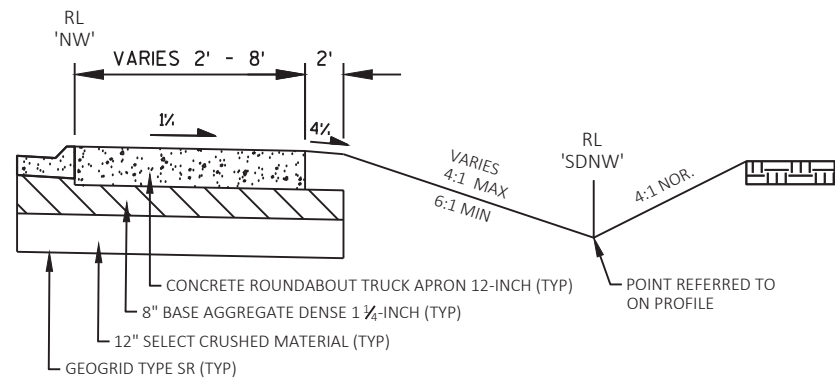
TYPICAL EXISTING SECTION - STH 28

STA. 115+45 'EB' - 126+35 'EB'

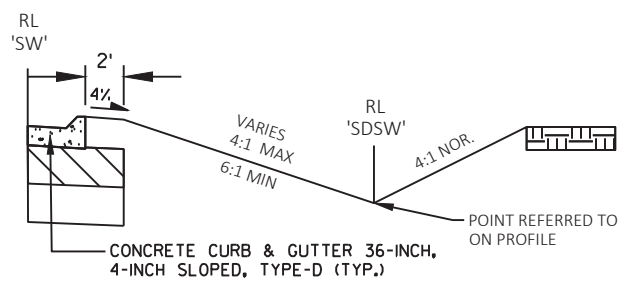


TYPICAL EXISTING SECTION - CTH TW

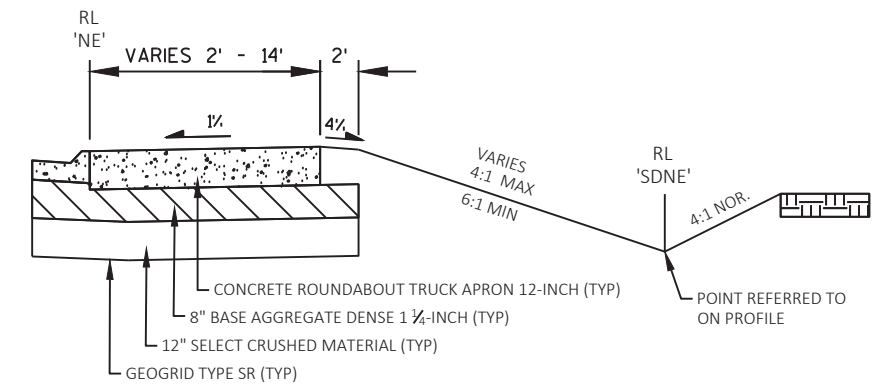
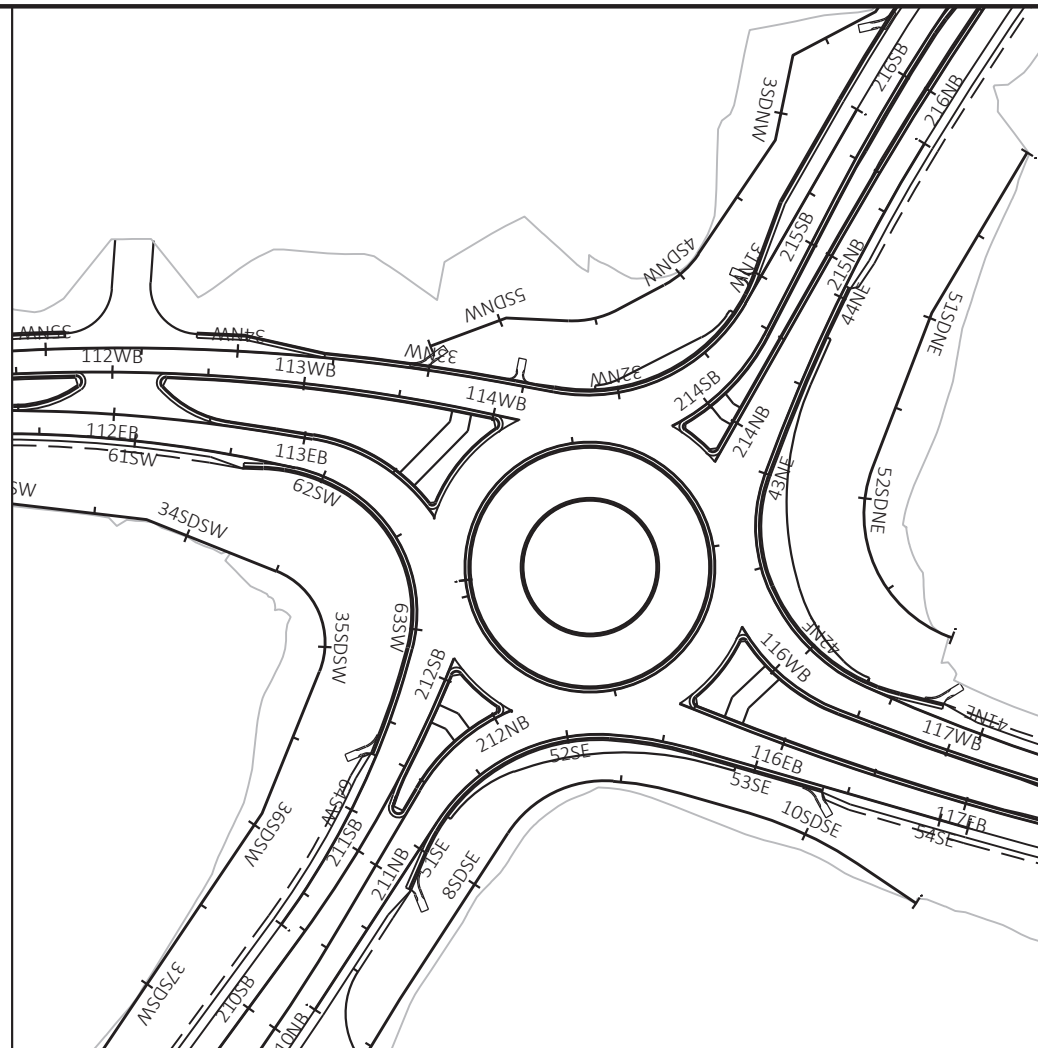
STA. 102+70 'EB' - 113+78 'EB'



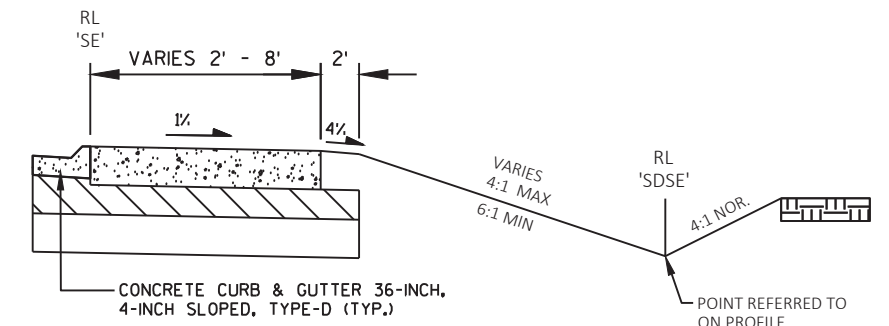
FINISHED TYPICAL SECTION - APRON RADII
 STA. 30+00 'NW' - STA. 35+37 'NW'



FINISHED TYPICAL SECTION - APRON RADII
 STA. 60+00 'SW' - STA. 64+70 'SW'



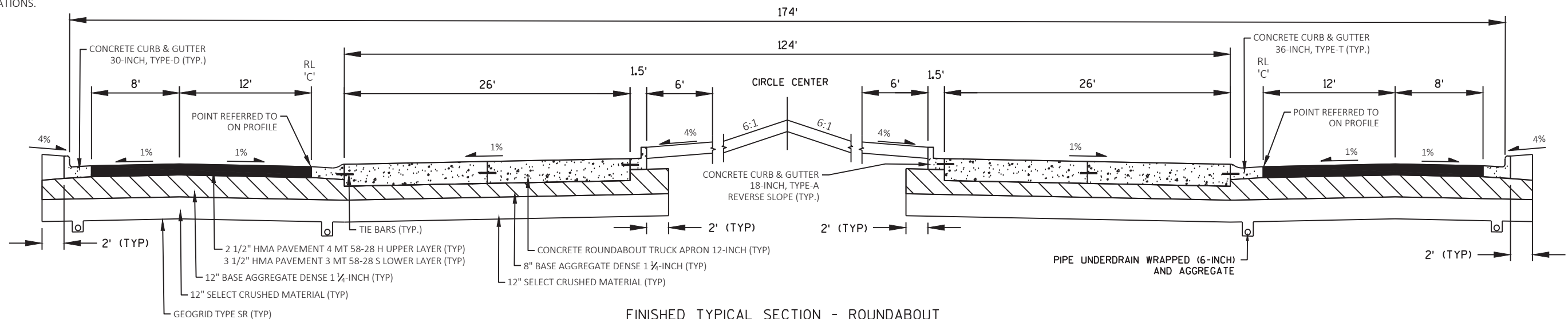
FINISHED TYPICAL SECTION - APRON RADII
 STA. 40+00 'NE' - STA. 44+91 'NE'



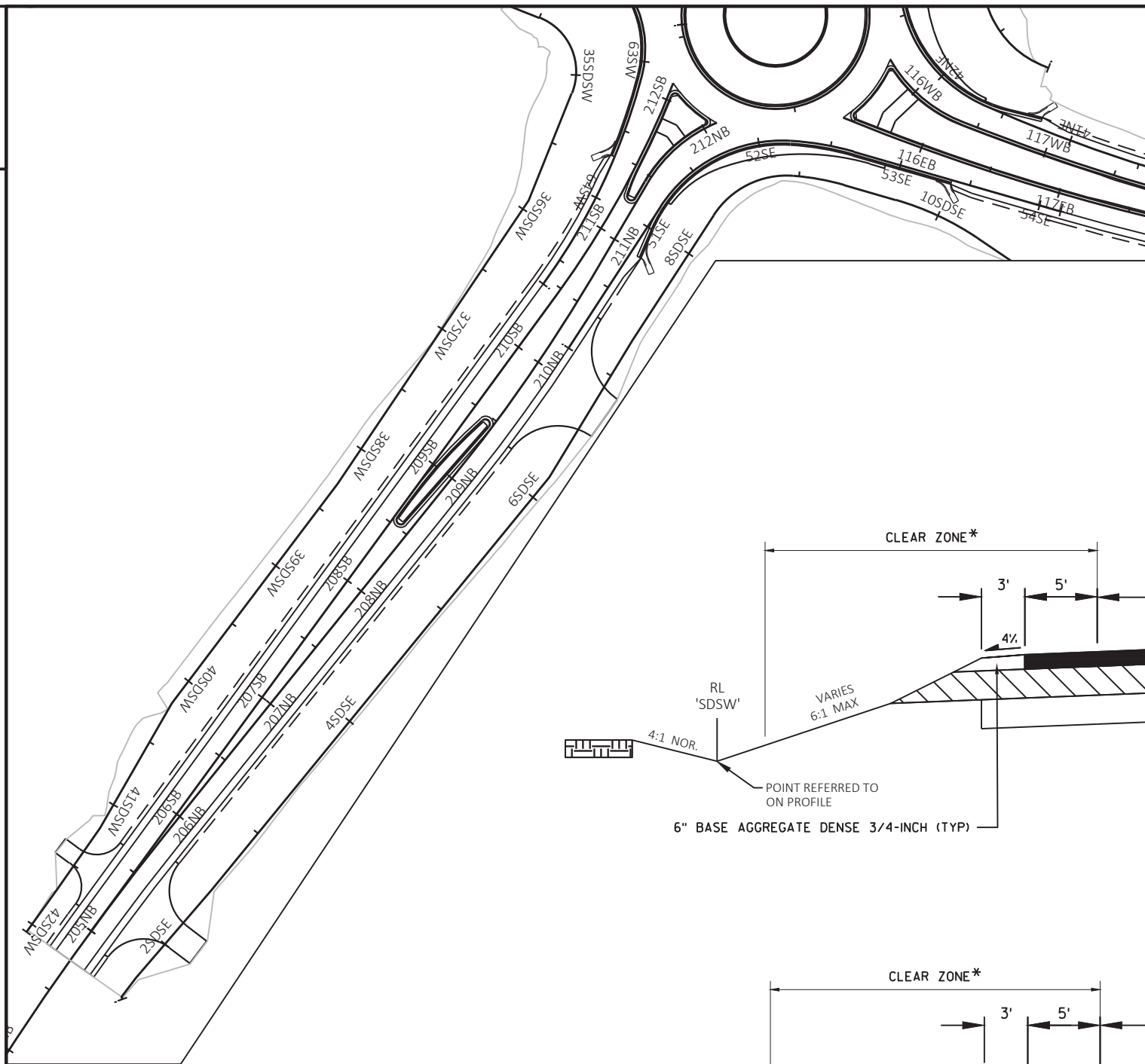
FINISHED TYPICAL SECTION - APRON RADII
 STA. 50+00 'SE' - STA. 54+15 'SE'

NOTES:

1. WHEN DISTANCE 'X' IS LESS THAN 10 FEET, EXTEND BASE AGGREGATE DENSE 1 1/4 -INCH AND SELECT CRUSH MATERIAL THROUGH MEDIAN.
2. FOR FINISHED EARTHEN SLOPES, SEE MISCELLANEOUS QUANTITIES AND EROSION CONTROL PLANS FOR SALVAGE TOPSOIL, SEEDING, FERTILIZER, AND EROSION MAT LOCATIONS.

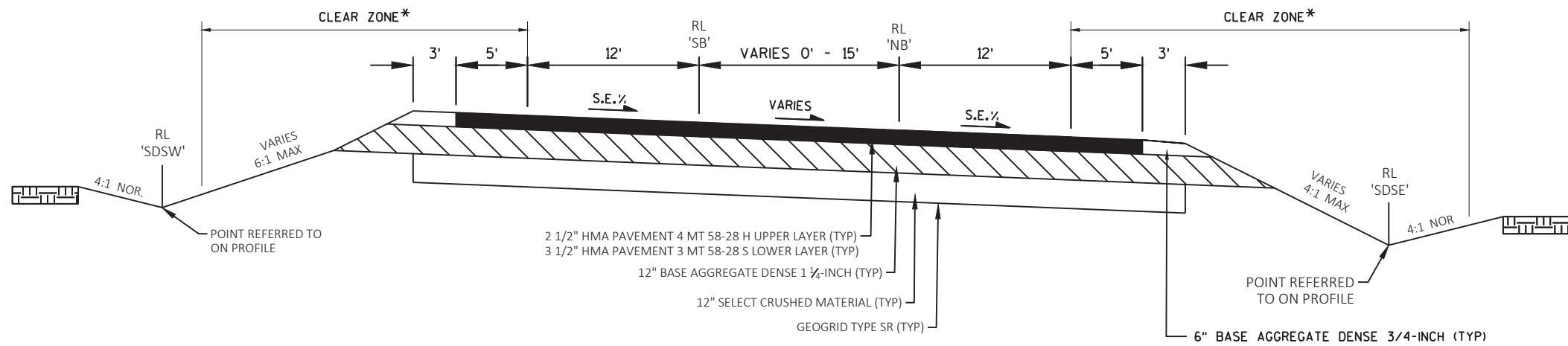
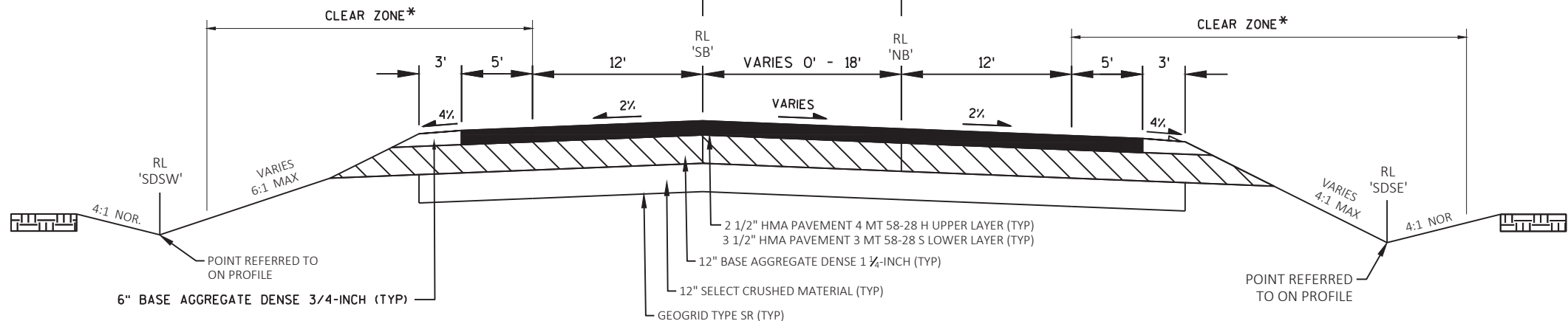
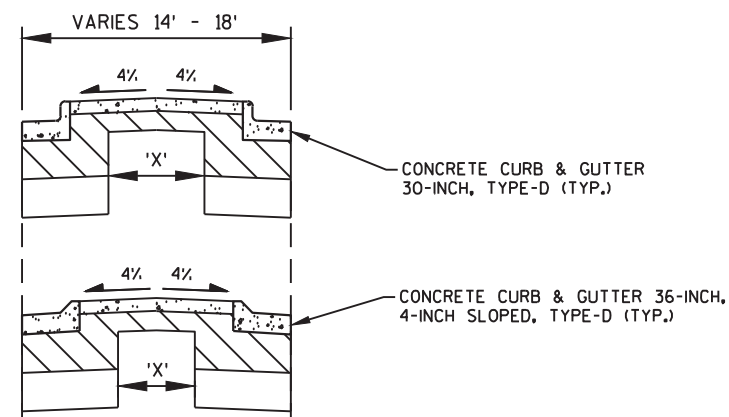


FINISHED TYPICAL SECTION - ROUNDABOUT
 STA. 20+00 'C' - STA. 24+08 'C'

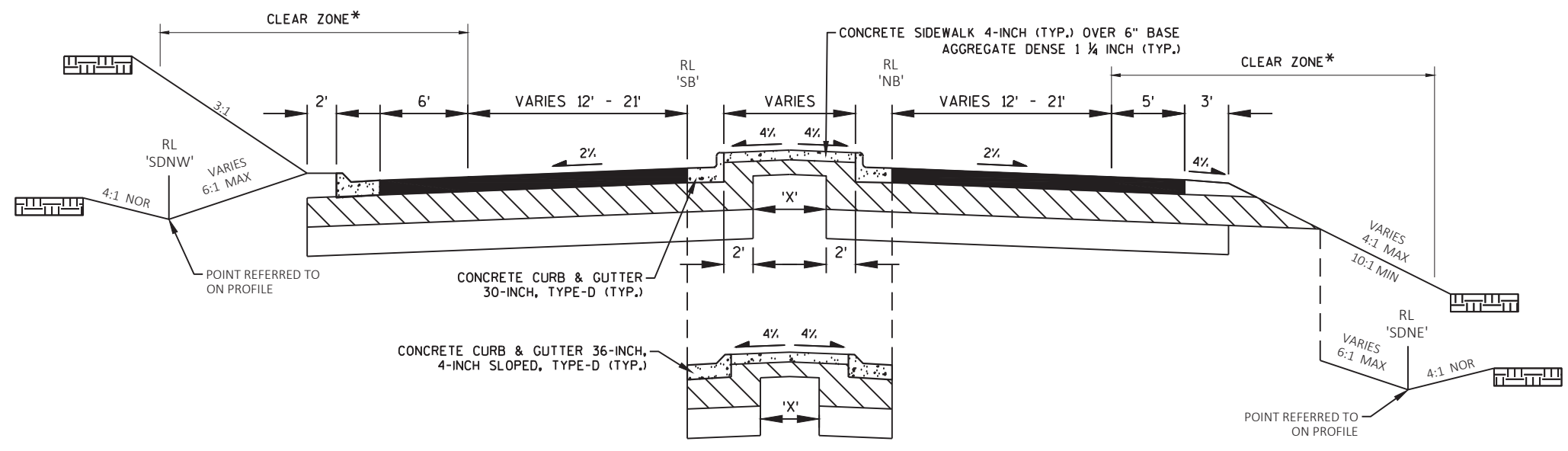
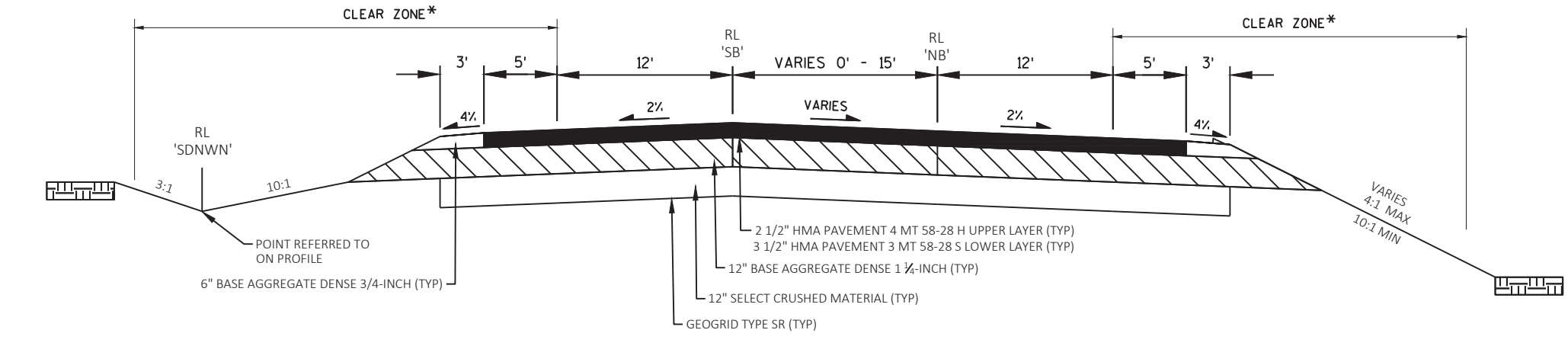


117+50 TO 126+55 EB:SB

- NOTES:
1. WHEN DISTANCE 'X' IS LESS THAN 10 FEET, EXTEND BASE AGGREGATE DENSE 1 1/4" -INCH AND SELECT CRUSH MATERIAL THROUGH MEDIAN.
 2. FOR FINISHED EARTHEN SLOPES, SEE MISCELLANEOUS QUANTITIES AND EROSION CONTROL PLANS FOR SALVAGE TOPSOIL, SEEDING, FERTILIZER, AND EROSION MAT LOCATIONS.

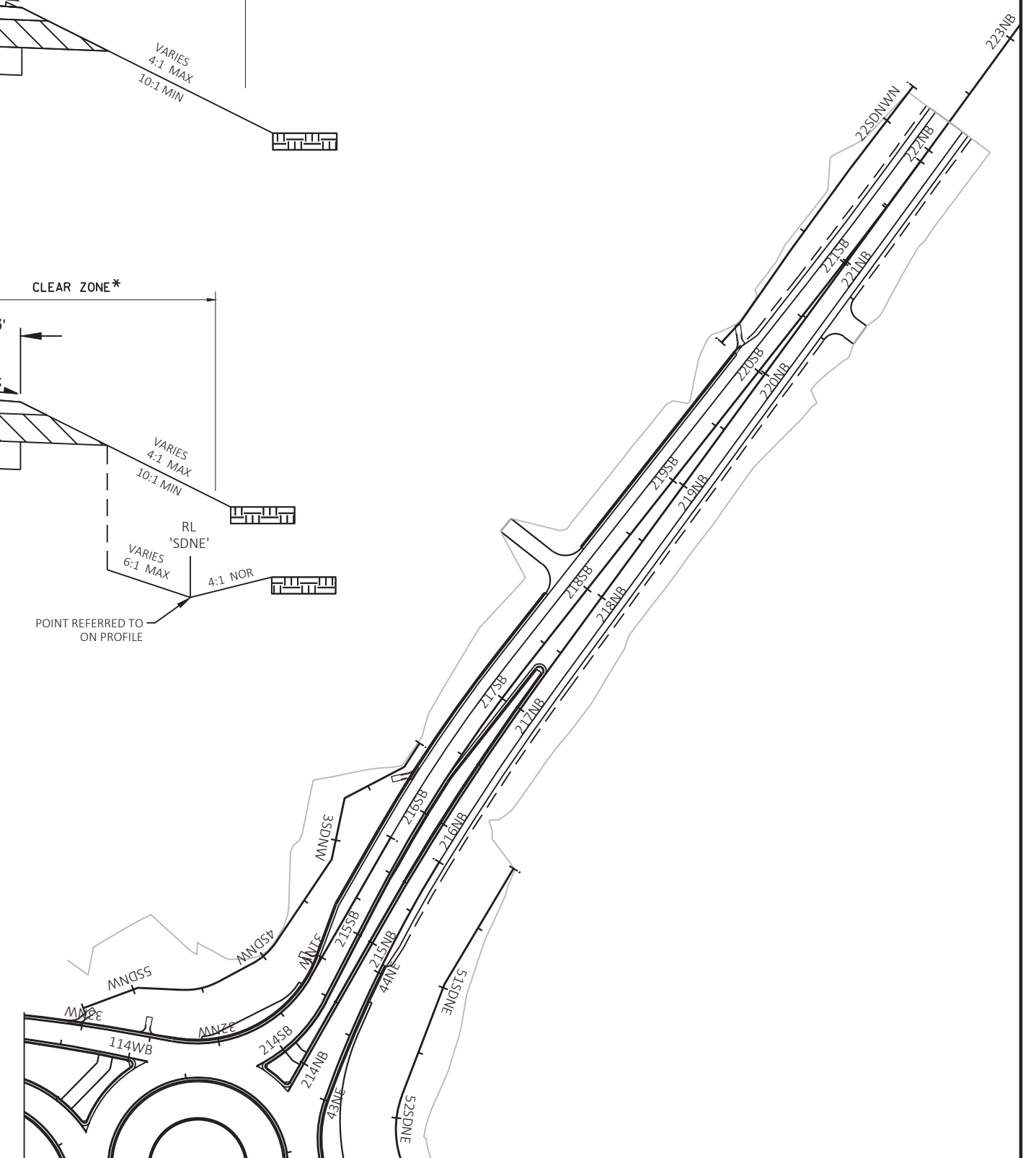


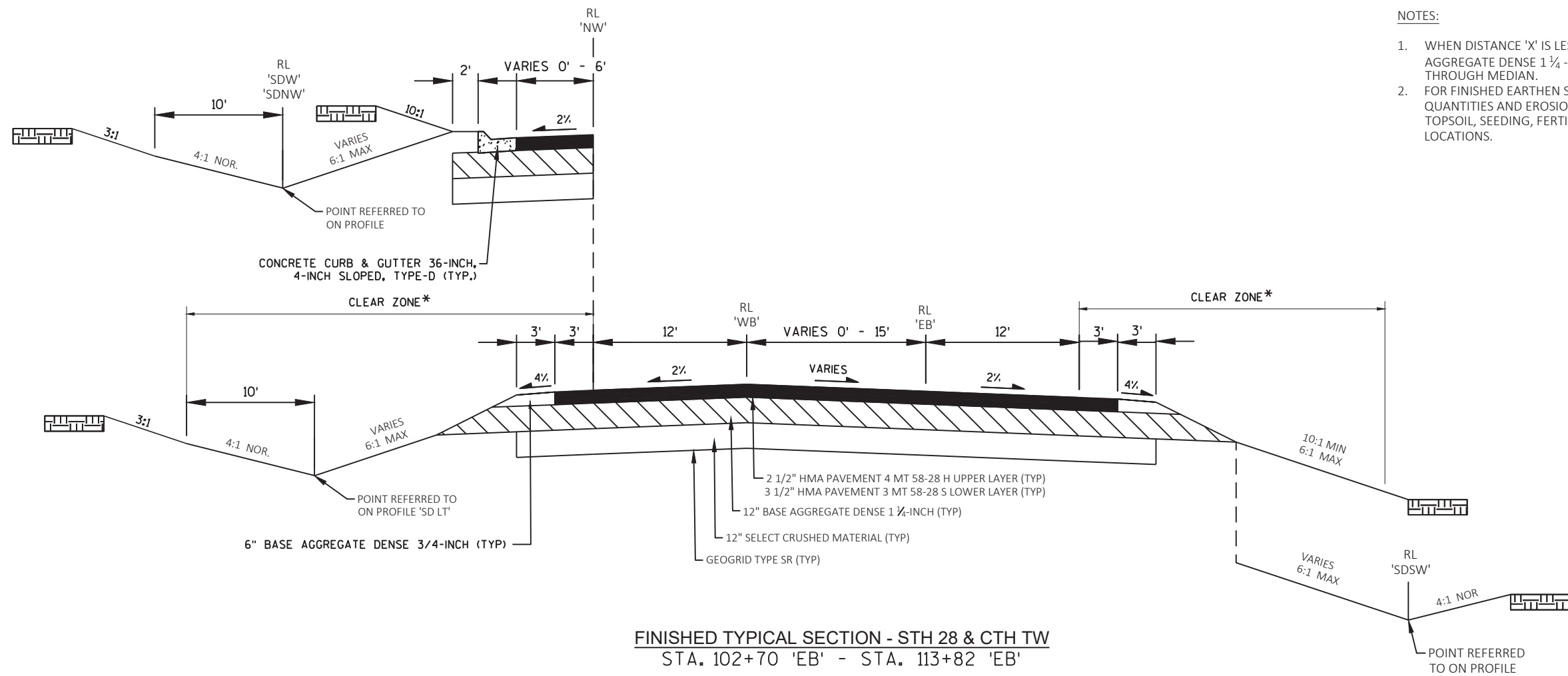
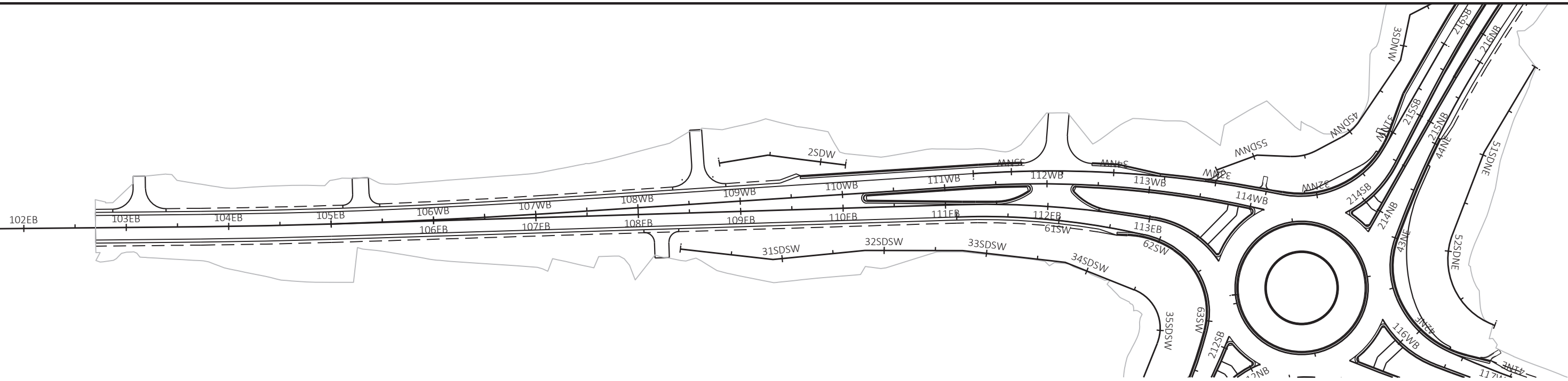
FINISHED TYPICAL SECTION - STH 28, STH 67 & STH 175
STA. 204+75 'NB' - STA. 222+25 'NB'



FINISHED TYPICAL SECTION - STH 28, STH 67 & STH 175
 STA. 204+75 'NB' - STA. 222+25 'NB'

- NOTES:
1. WHEN DISTANCE 'X' IS LESS THAN 10 FEET, EXTEND BASE AGGREGATE DENSE 1 1/4 -INCH AND SELECT CRUSH MATERIAL THROUGH MEDIAN.
 2. FOR FINISHED EARTHEN SLOPES, SEE MISCELLANEOUS QUANTITIES AND EROSION CONTROL PLANS FOR SALVAGE TOPSOIL, SEEDING, FERTILIZER, AND EROSION MAT LOCATIONS.

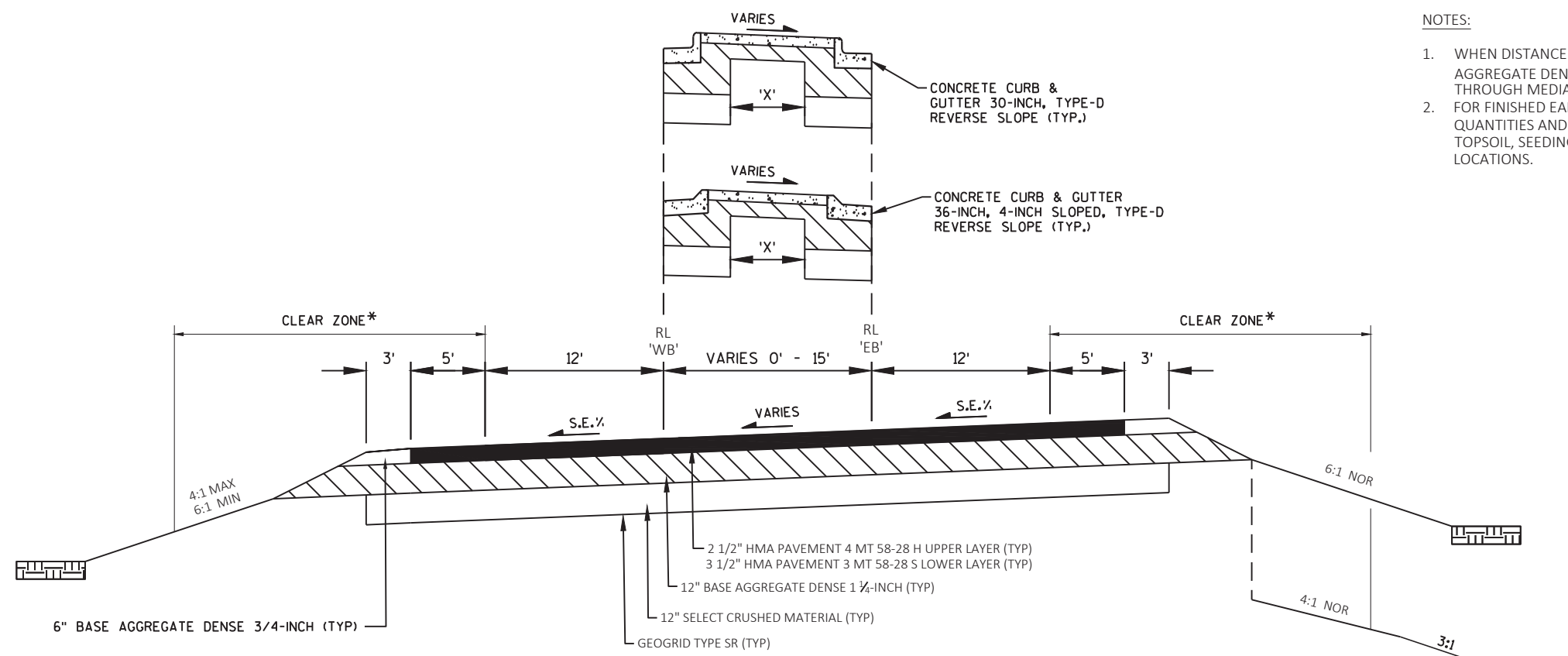
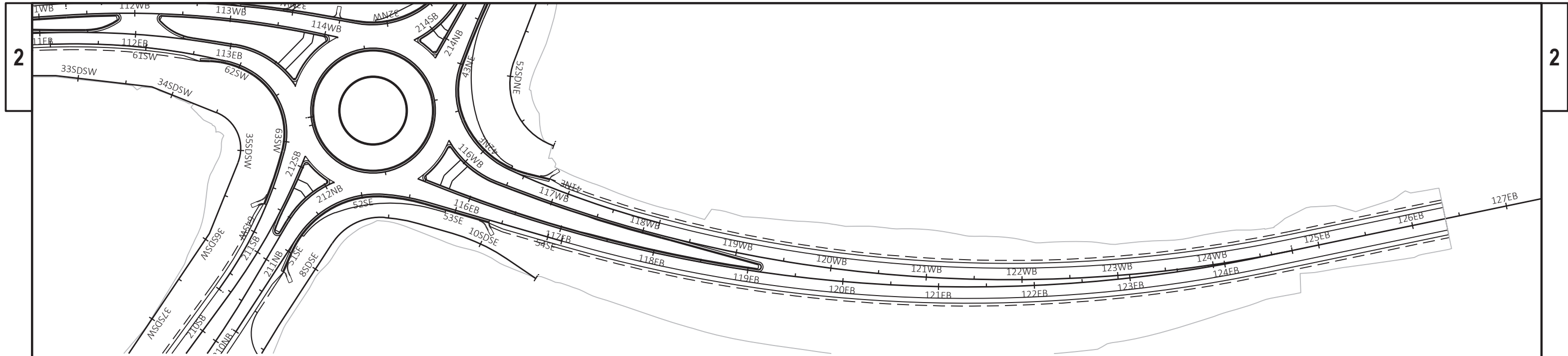




NOTES:

1. WHEN DISTANCE 'X' IS LESS THAN 10 FEET, EXTEND BASE AGGREGATE DENSE 1 1/4 -INCH AND SELECT CRUSH MATERIAL THROUGH MEDIAN.
2. FOR FINISHED EARTHEN SLOPES, SEE MISCELLANEOUS QUANTITIES AND EROSION CONTROL PLANS FOR SALVAGE TOPSOIL, SEEDING, FERTILIZER, AND EROSION MAT LOCATIONS.

FINISHED TYPICAL SECTION - STH 28 & CTH TW
 STA. 102+70 'EB' - STA. 113+82 'EB'



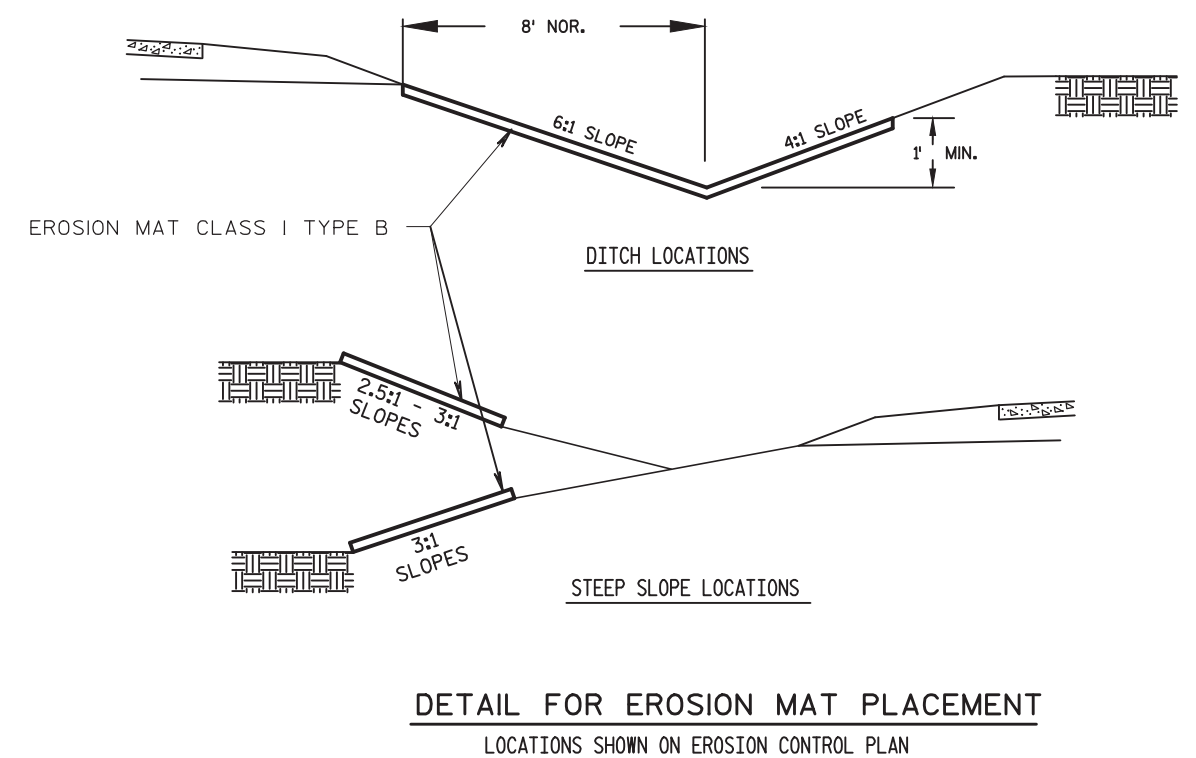
- NOTES:
1. WHEN DISTANCE 'X' IS LESS THAN 10 FEET, EXTEND BASE AGGREGATE DENSE 1 1/2-INCH AND SELECT CRUSH MATERIAL THROUGH MEDIAN.
 2. FOR FINISHED EARTHEN SLOPES, SEE MISCELLANEOUS QUANTITIES AND EROSION CONTROL PLANS FOR SALVAGE TOPSOIL, SEEDING, FERTILIZER, AND EROSION MAT LOCATIONS.

FINISHED TYPICAL SECTION - STH 28 & CTH TW
 STA. 114+42 'EB' - STA. 126+35 'EB'

RUNOFF COEFFICIENT TABLE

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

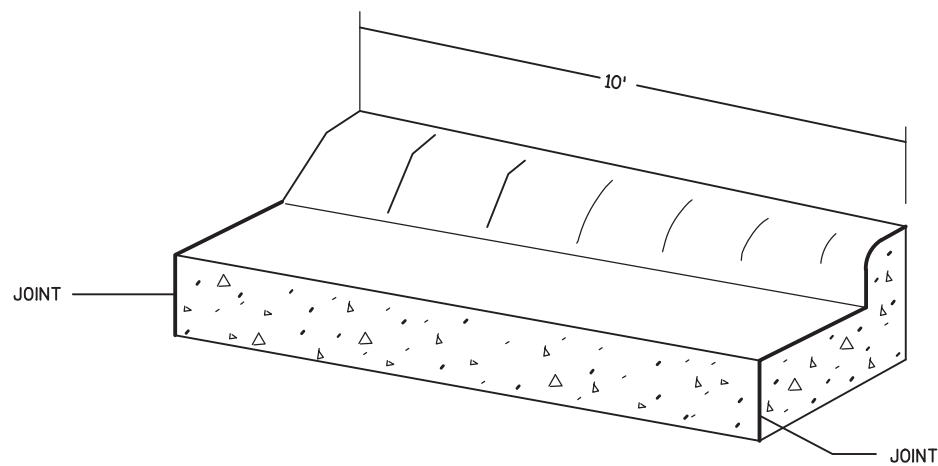
TOTAL PROJECT AREA =32.0 ACRES
 TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES =28.0 ACRES



DETAIL FOR EROSION MAT PLACEMENT

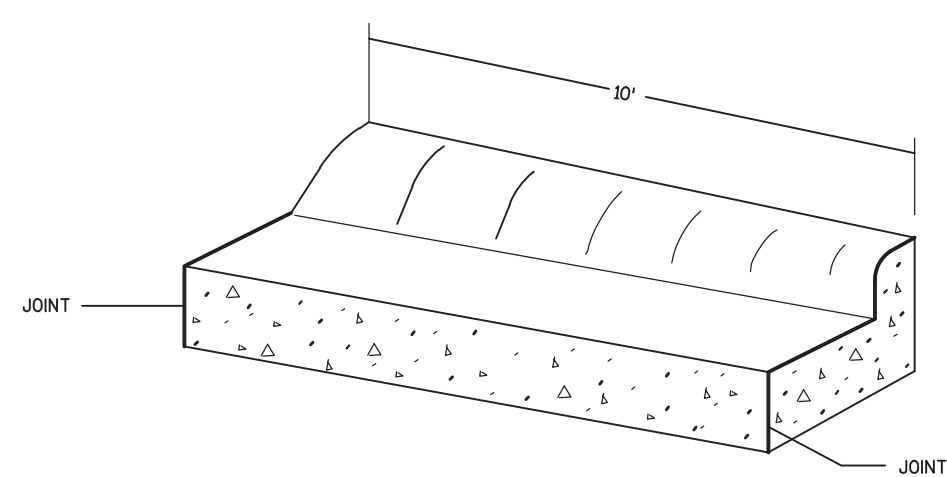
LOCATIONS SHOWN ON EROSION CONTROL PLAN

2

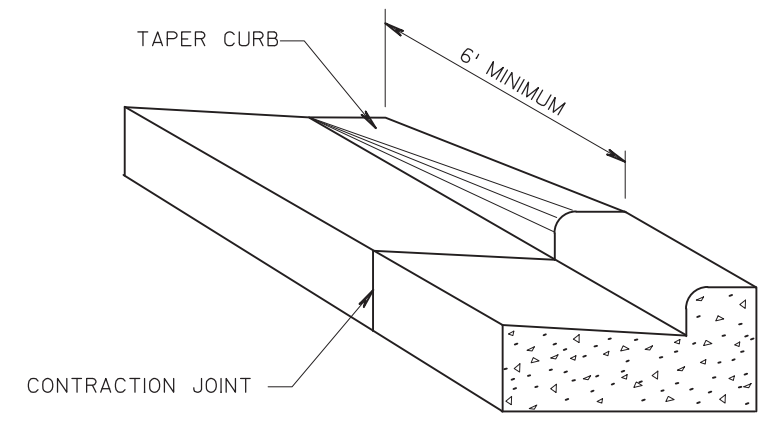


DETAIL FOR TYPE D TRANSITION
 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D TO
 CONCRETE CURB & GUTTER 30-INCH TYPE D (TO BE MEASURED AND PAID
 FOR AS CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D)

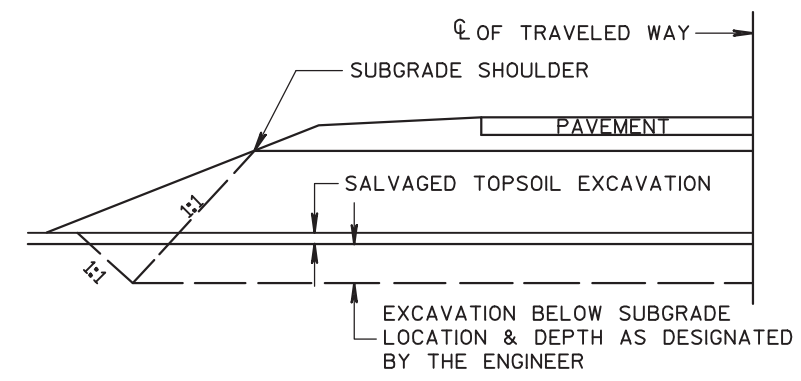
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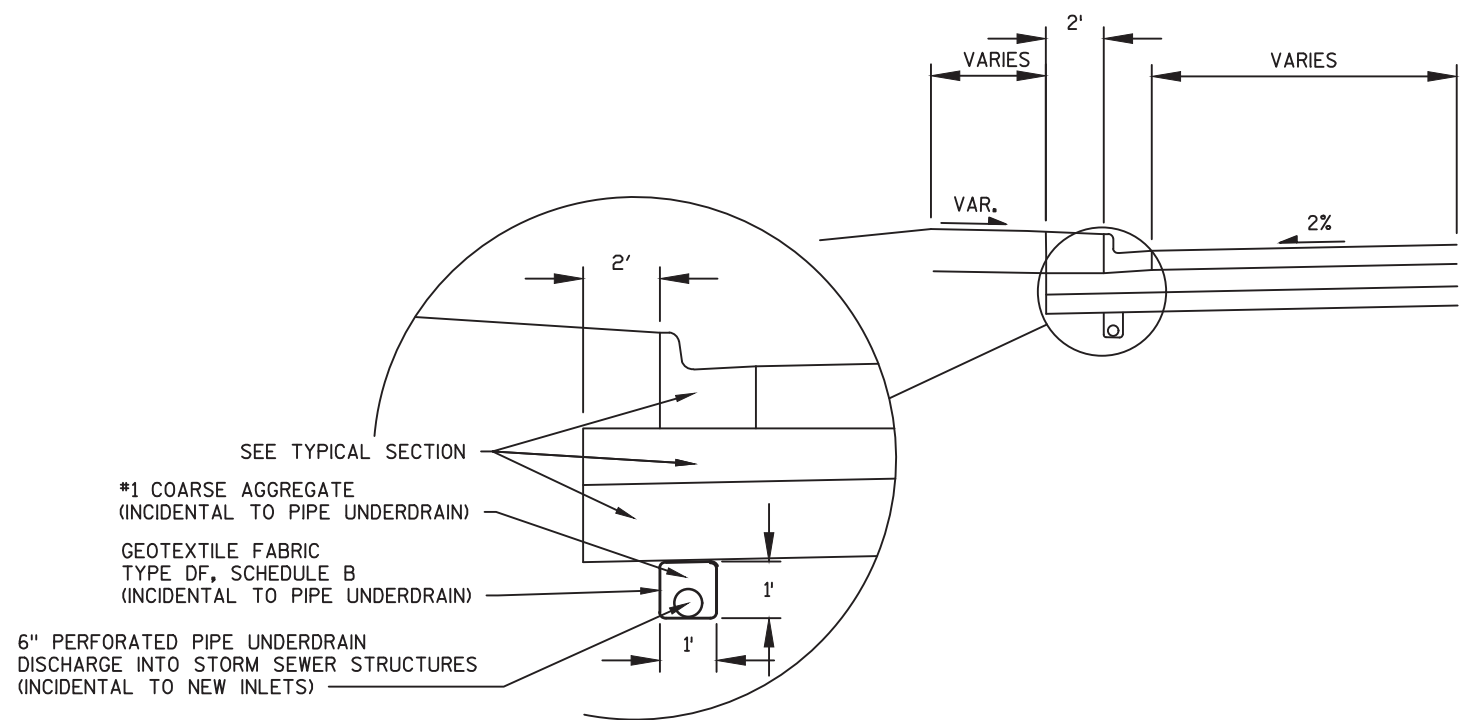
DETAIL FOR TYPE T TRANSITION
 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE T TO
 CONCRETE CURB & GUTTER 30-INCH TYPE D (TO BE MEASURED AND PAID
 FOR AS CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE T)



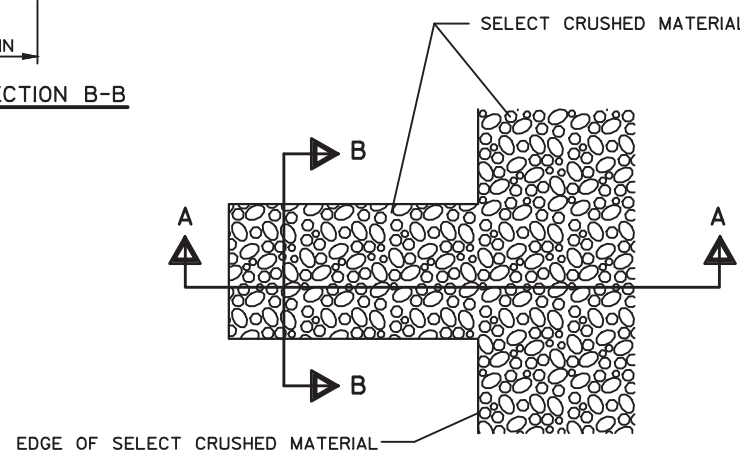
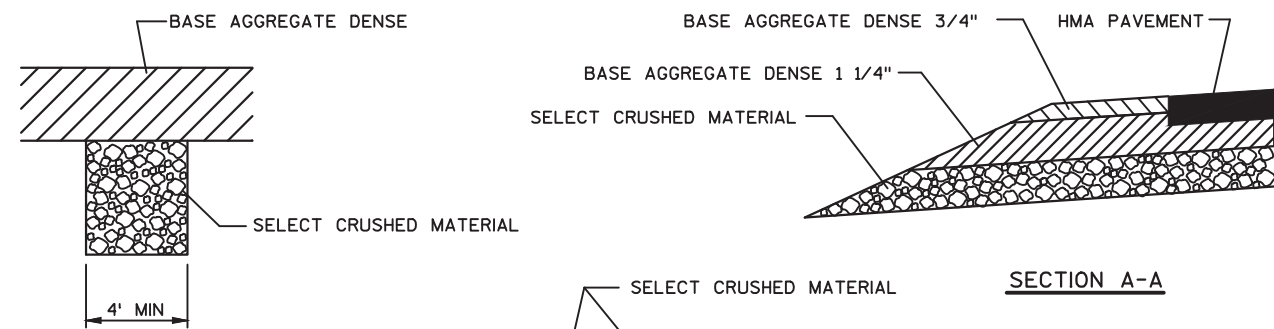
DETAIL FOR CURB & GUTTER TERMINI



DETAIL FOR RURAL EXCAVATION BELOW SUBGRADE



DETAIL FOR 6" PERFORATED PIPE UNDERDRAIN

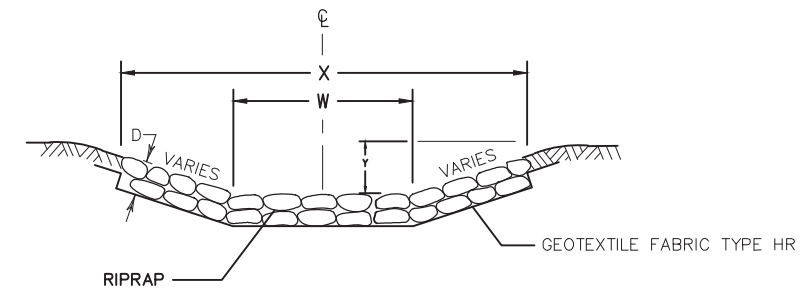
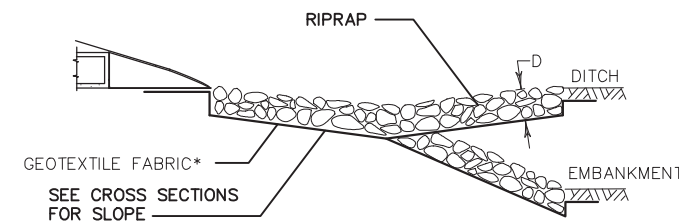
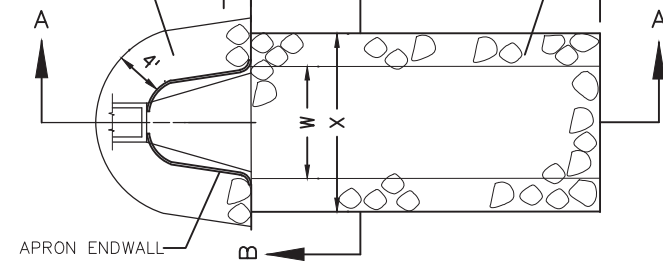


DRAINS ARE TO BE CONSTRUCTED AT LEAST EVERY 250'
AND AT EACH SAG VERTICAL CURVE IN THE PROFILE
OR AS DIRECTED BY THE ENGINEER.

LOCATIONS ARE SHOWN BELOW

EROSION MAT. SEE EROSION CONTROL PLAN FOR EROSION MAT TYPE REQUIRED

PAY AREA FOR RIPRAP. SEE EROSION CONTROL PLANS FOR TYPE OF RIPRAP PROTECTION.



**RIPRAP AND GEOTEXTILE FABRIC DETAIL
AT APRON ENDWALLS**

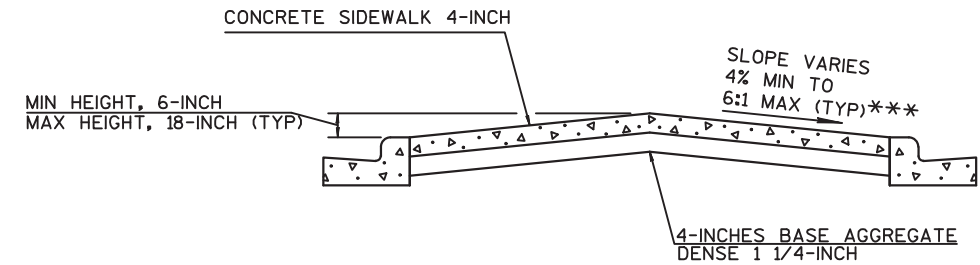
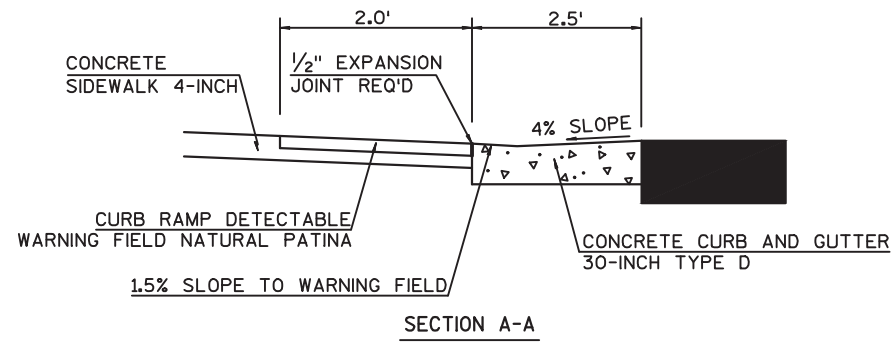
SEE EROSION CONTROL PLAN FOR LOCATIONS

$L = 3 \times W$ (NOR) OR 10' MIN
OR AS INDICATED IN THE PLANS
OR AS DIRECTED BY THE ENGINEER

$D = 18"$ FOR RIPRAP MEDIUM

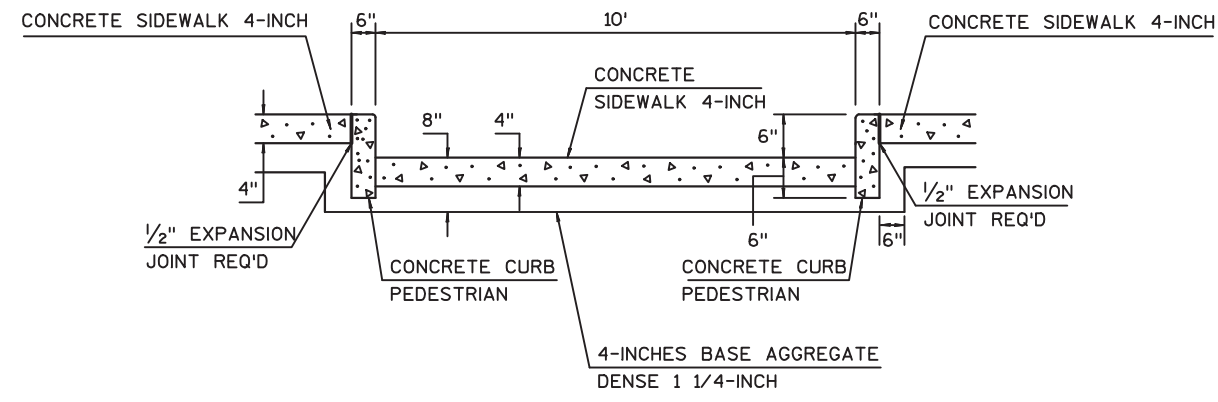
$X = W + 2'$ FOR TYPICAL CULVERT
DISCHARGE INTO DITCH
 $W + 5'$ FOR CULVERT DISCHARGE
DOWN EMBANKMENT SLOPE

$Y = 0'$ FOR TYPICAL CULVERT
DISCHARGE INTO DITCH
 $12"$ FOR CULVERT DISCHARGE
DOWN EMBANKMENT SLOPE

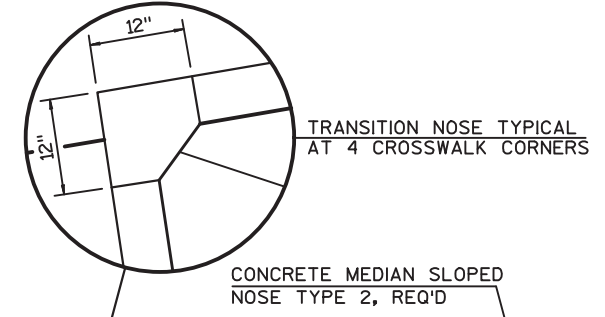


*** SEE CROSS SECTIONS

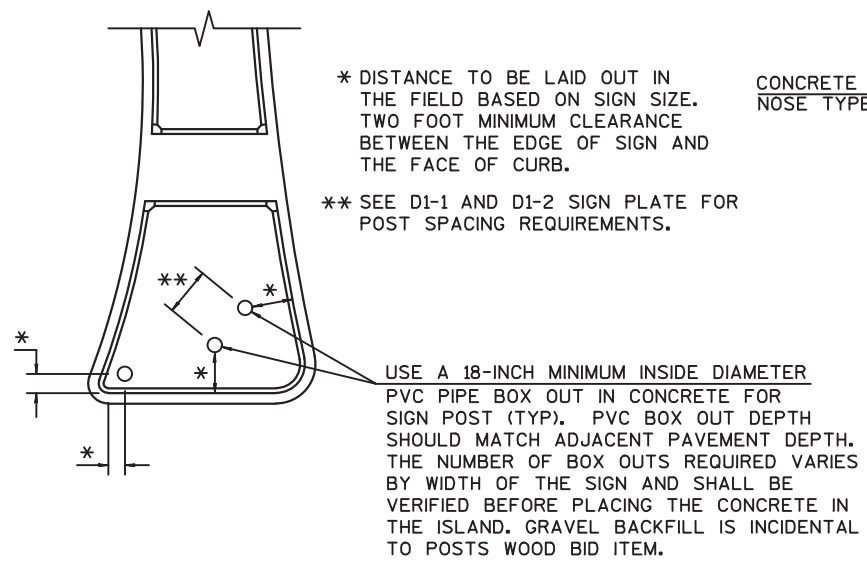
SECTION C-C



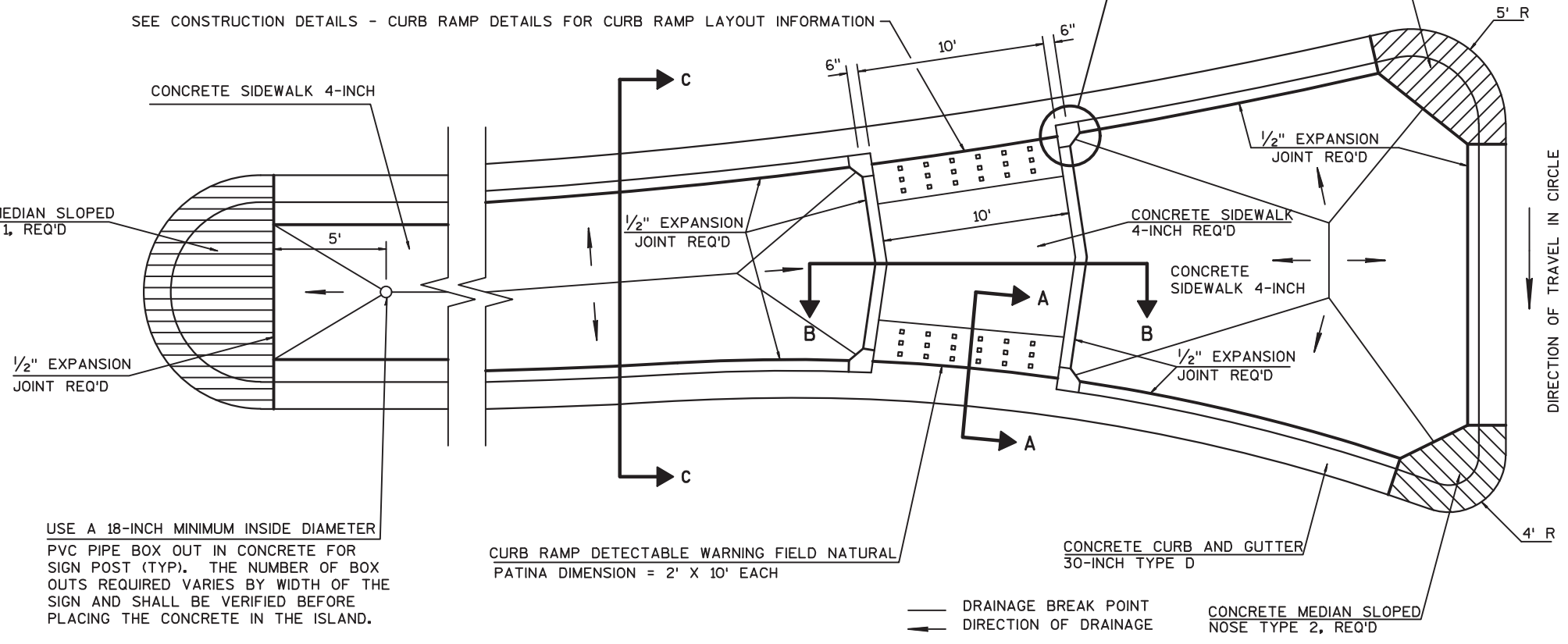
SECTION B-B



SEE CONSTRUCTION DETAILS - CURB RAMP DETAILS FOR CURB RAMP LAYOUT INFORMATION

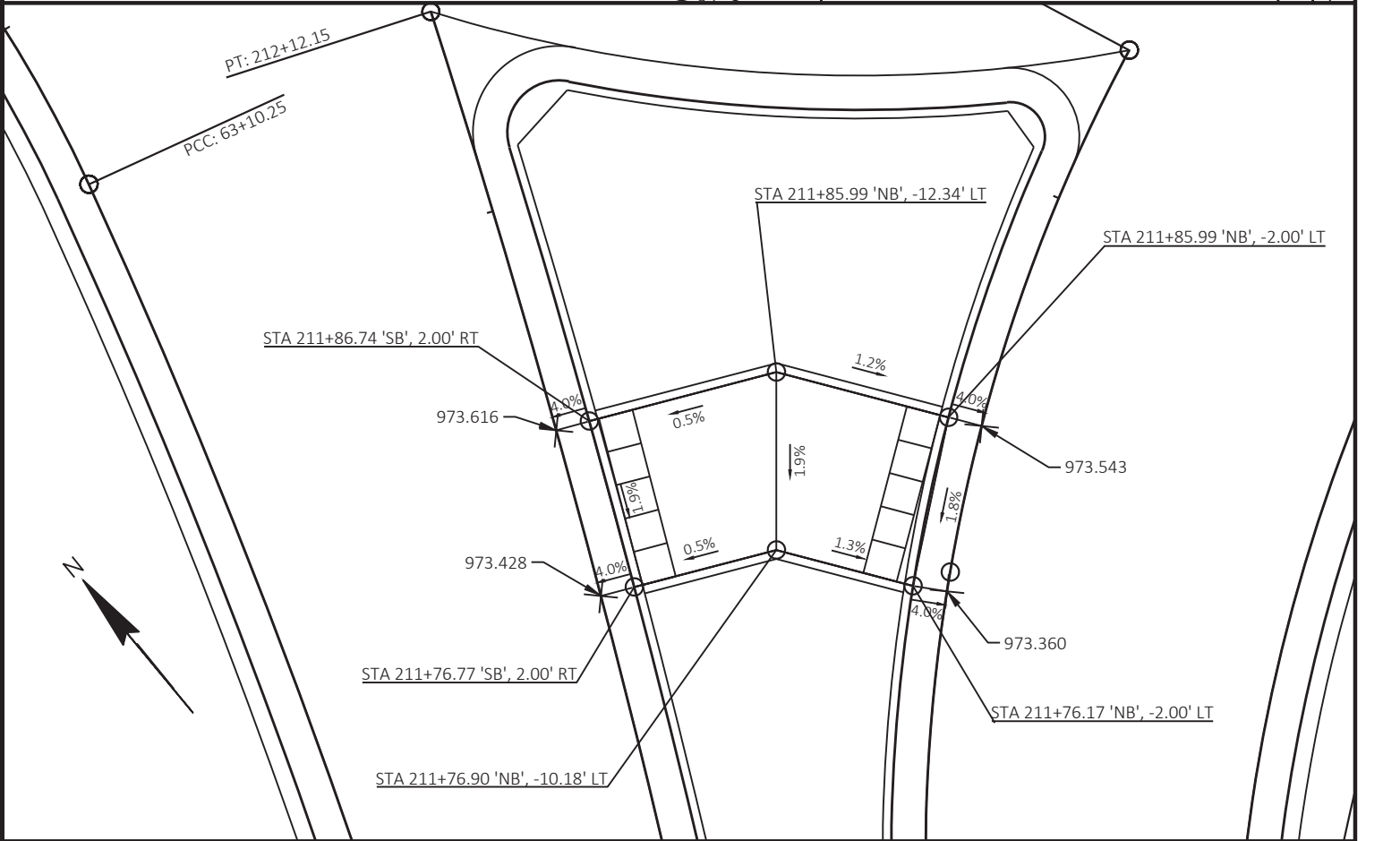
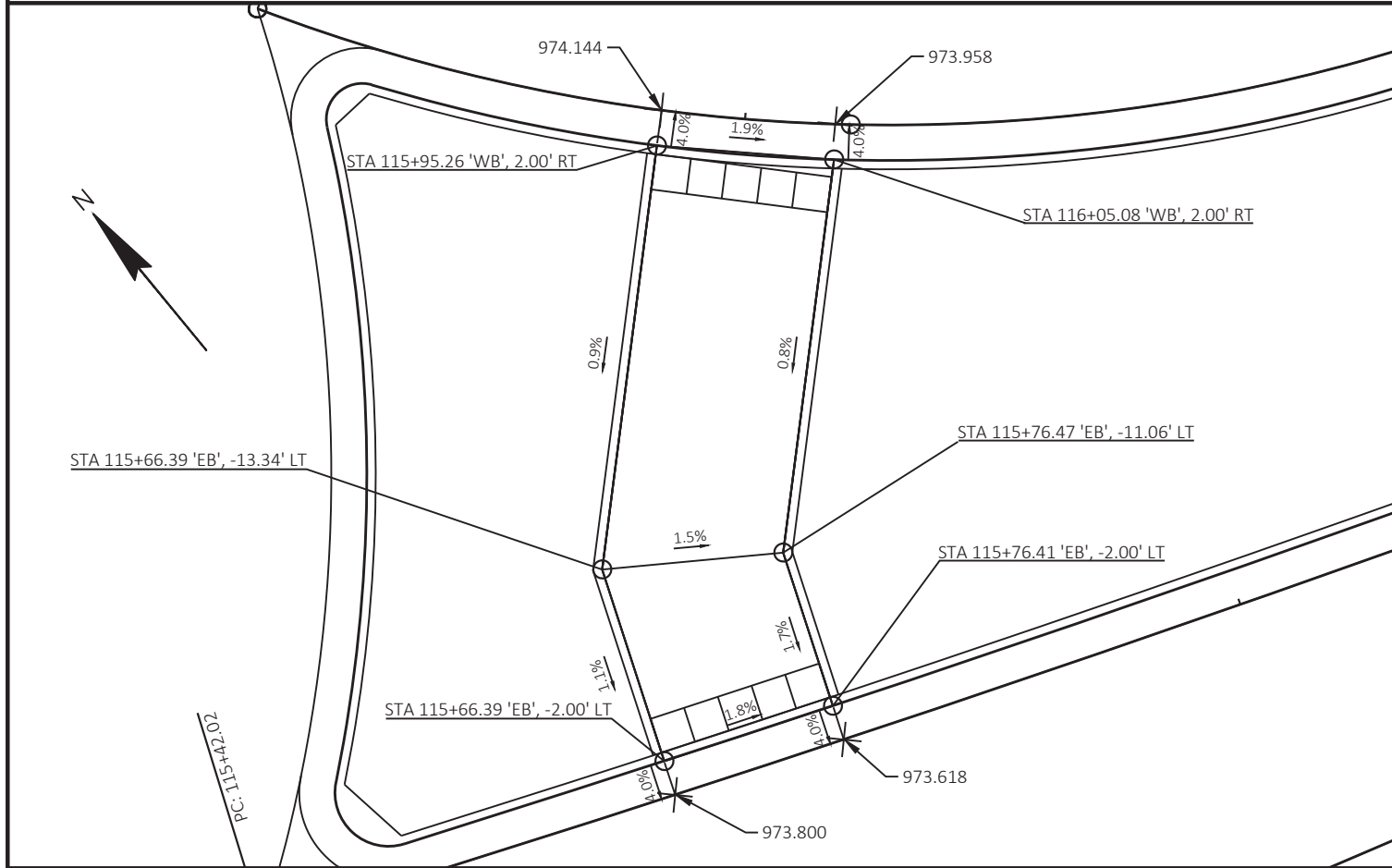
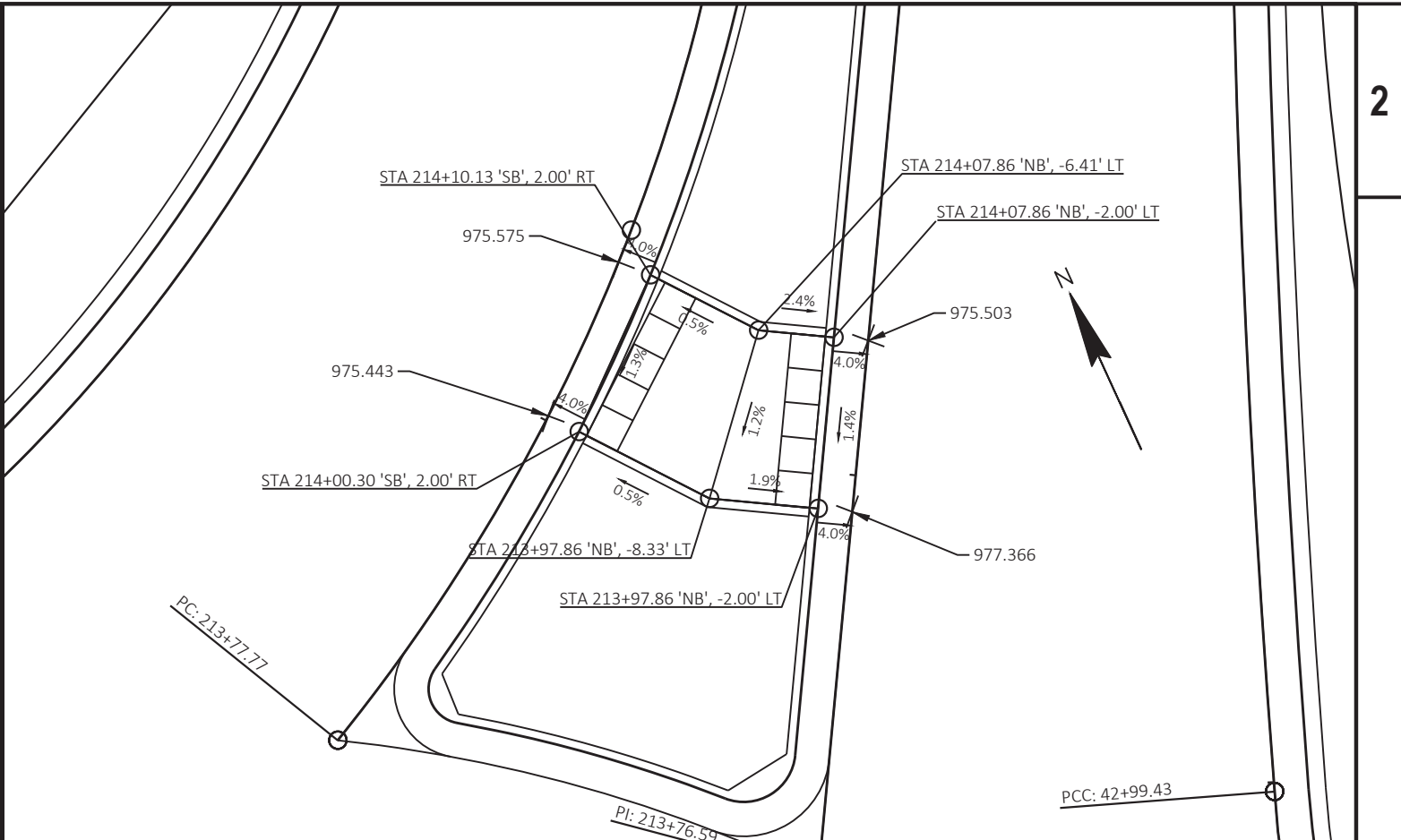
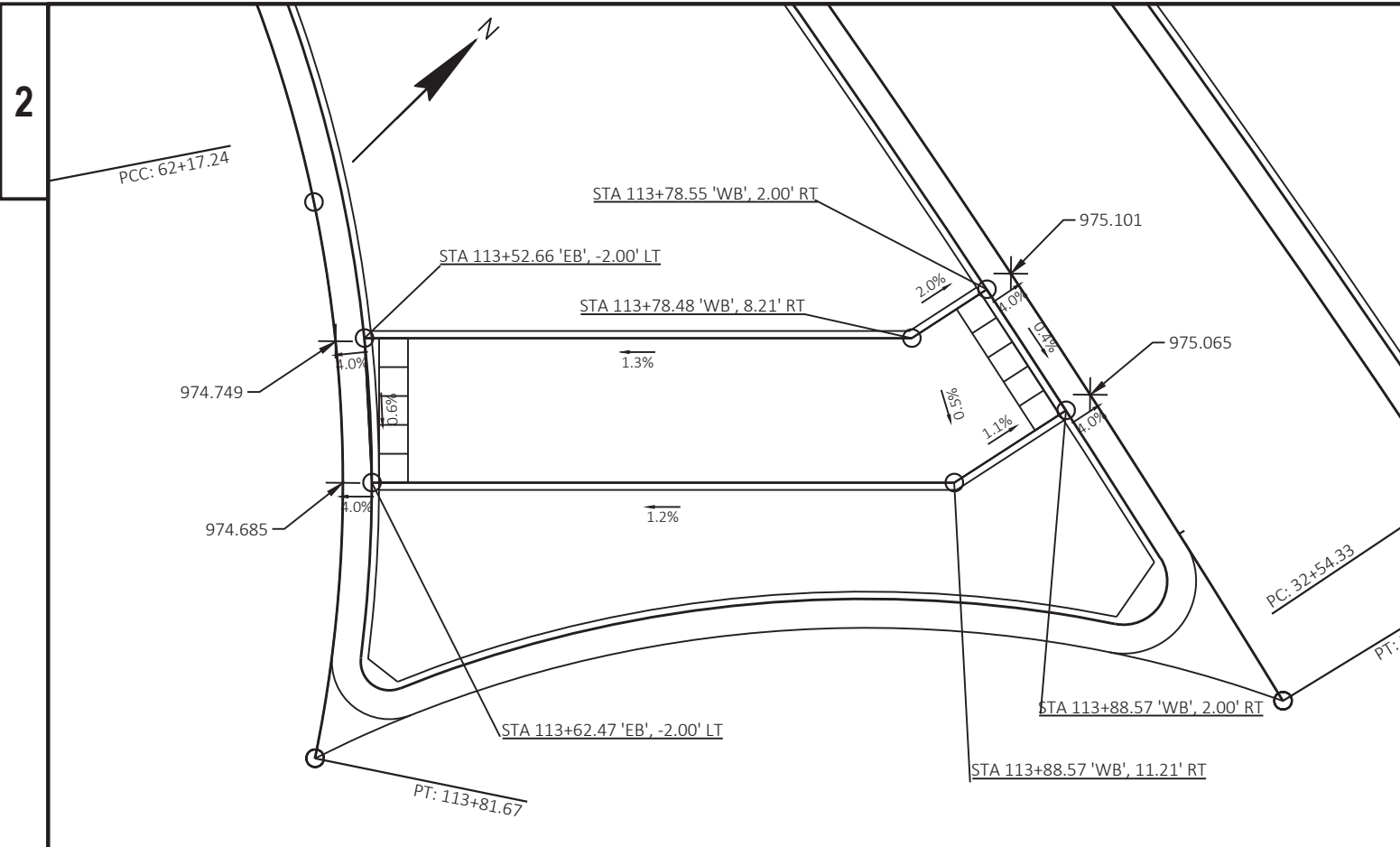


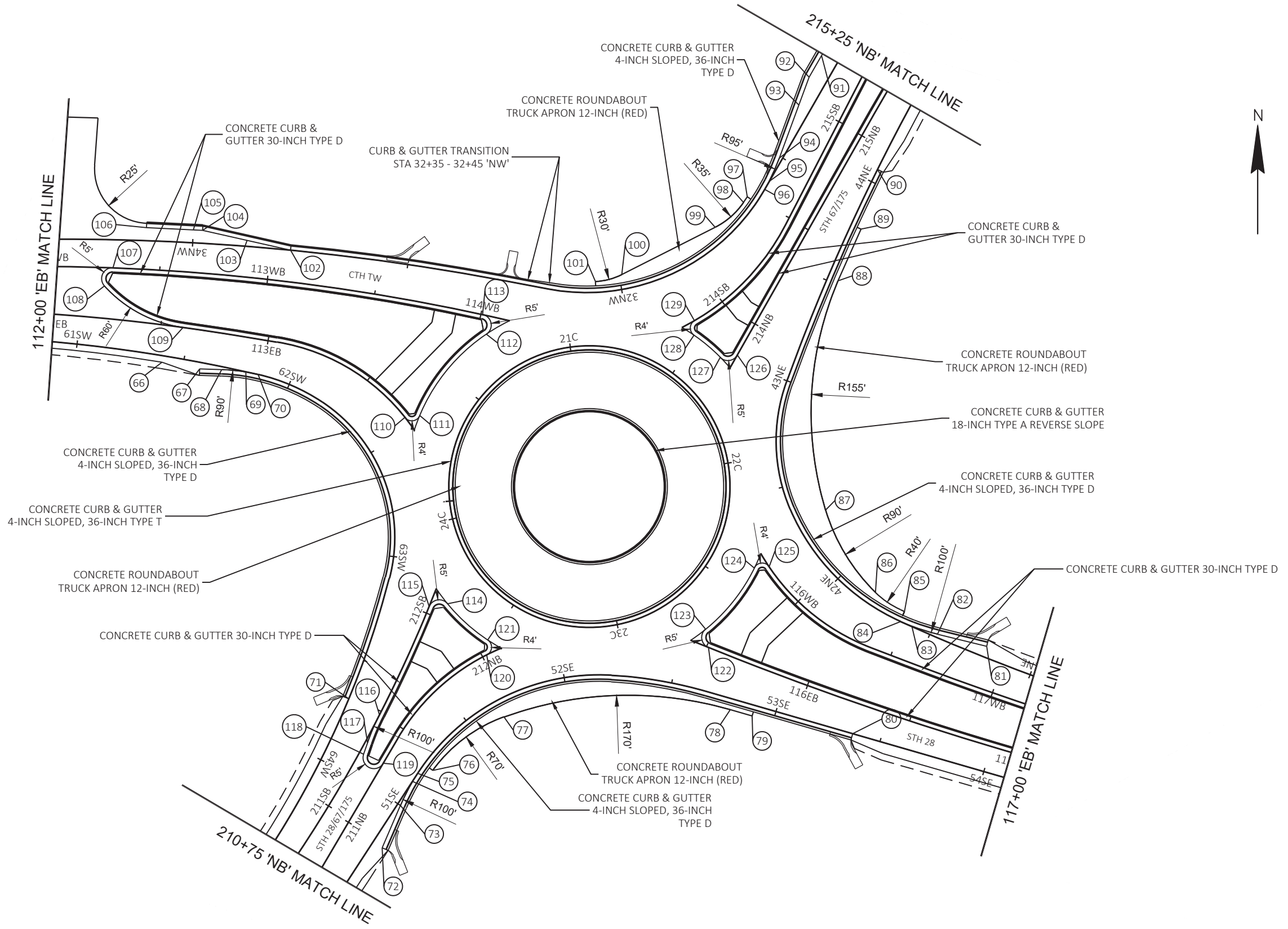
CENTER AND SPLITTER ISLAND SIGN LOCATION DETAIL (TYP)



SPLITTER ISLAND DETAIL

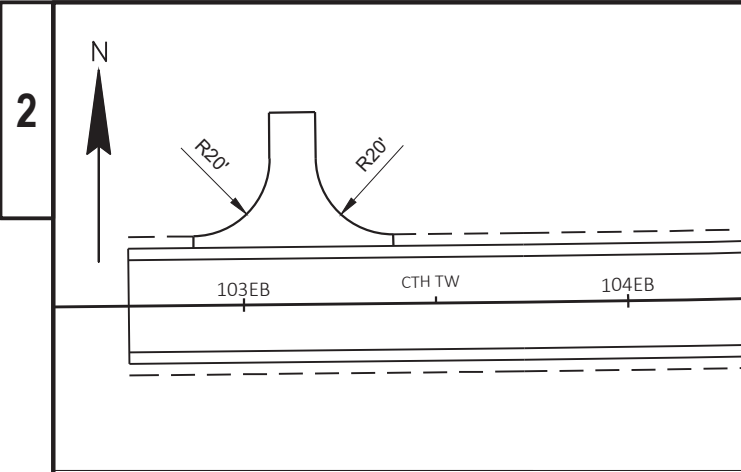
INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.





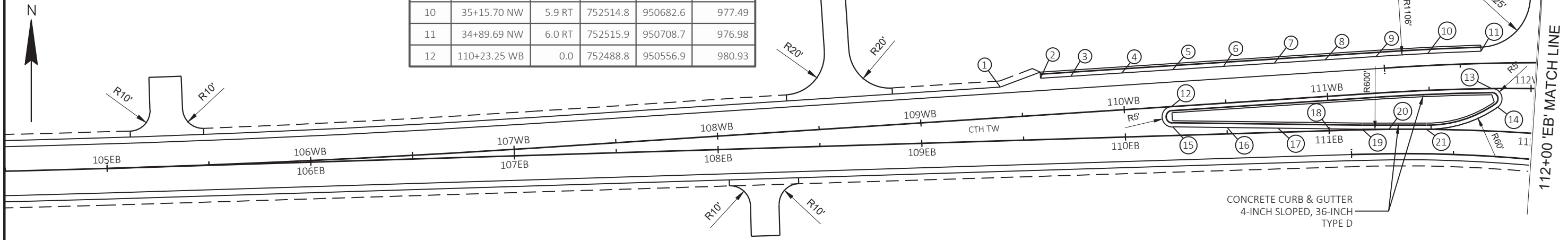
STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y	X	ELEVATION
66	61+40.15 SW	3.0 RT	752453.5	950784.4	975.40
67	61+57.89 SW	3.0 RT	752450.4	950801.8	975.16
68	61+79.13 SW	0.2 RT	752450.0	950812.0	975.07
69	62+17.24 SW	0.0	752448.9	950823.1	974.97
70	63+10.25 SW	0.0	752447.8	950828.8	974.91
71	63+69.14 SW	0.0	752298.0	950870.7	972.62
72	50+79.02 SE	5.0 RT	752229.2	950886.1	971.31
73	50+99.99 SE	1.4 RT	752248.7	950894.6	971.88
74	51+12.35 SE	0.1 RT	752259.8	950900.2	972.18
75	51+16.80 SE	0.0	752263.6	950902.5	972.28
76	51+22.00 SE	5.0 RT	752264.9	950909.5	972.63
77	51+66.30 SE	8.2 RT	752289.6	950942.5	973.55
78	52+79.48 SE	5.0 RT	752293.0	951047.0	973.64
79	52+90.00 SE	5.0 RT	752290.1	951057.1	973.39
80	53+36.91 SE	0.0	752281.9	951103.6	972.29
81	42+99.43 NE	0.0	752322.3	951165.5	971.61
82	44+06.27 NE	0.0	752327.8	951142.8	972.28
83	30+61.53 NW	8.0 RT	752331.5	951130.9	972.62
84	30+75.00 NW	5.3 RT	752333.7	951125.7	972.77
85	31+00.00 NW	1.8 RT	752338.4	951127.5	973.05
86	31+12.49 NW	0.1 RT	752347.1	951114.1	973.49
87	32+34.15 NW	0.0	752385.2	951091.1	974.74
88	33+54.58 NW	0.0	752491.0	951096.8	975.79
89	33+75.00 NW	2.8 RT	752514.9	951107.4	976.17
90	33+95.74 NW	6.0 RT	752542.5	951115.0	976.30
91	30+50.00 NW	8.0 RT	752595.1	951089.2	976.66
92	30+61.53 NW	8.0 RT	752585.1	951083.4	976.51
93	30+75.00 NW	5.7 RT	752572.3	951078.7	976.37
94	31+00.75 NW	1.3 RT	752547.8	951069.7	976.11
95	31+12.49 NW	0.1 RT	752537.0	951064.9	975.98
96	31+16.65 NW	0.0	752533.3	951062.9	975.92
97	31+24.00 NW	5.0 RT	752529.9	951054.9	976.06

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y	X	ELEVATION
98	31+27.35 NW	4.9 RT	752527.3	951053.1	976.01
99	31+45.85 NW	7.0 RT	752515.8	951040.0	975.74
100	31+98.70 NW	6.8 RT	752493.9	950996.8	975.21
101	32+12.00 NW	5.0 RT	752490.7	950984.7	975.18
102	33+54.58 NW	0.0 RT	752505.2	950843.8	975.29
103	33+75.00 NW	2.8 RT	752509.8	950823.7	975.42
104	33+95.74 NW	6.0 RT	752514.4	950803.1	975.57
105	34+00.00 NW	6.0 RT	752514.6	950798.8	975.62
106	34+21.55 NW	6.0 RT	752515.6	950777.2	975.89
107	112+28.33 WB	0.0	752497.0	950761.7	976.48
108	112+24.72 WB	8.5 RT	752488.7	950757.8	976.73
109	112+60.28 EB	0.0	752469.5	950794.1	975.65
110	113+74.37 EB	0.0	752427.9	950896.6	974.61
111	113+77.67 EB	-6.0 LT	752428.9	950903.4	974.62
112	114+04.39 WB	8.4 RT	752466.4	950934.2	974.93
113	114+00.74 WB	0.0	752475.5	950932.5	975.03
114	212+07.62 SB	7.4 RT	752341.9	950916.3	974.06
115	212+03.26 SB	0.0	752340.6	950907.8	973.93
116	211+48.20 SB	0.0	752290.6	950884.9	972.86
117	211+34.25 SB	1.1 RT	752277.7	950879.4	972.58
118	211+28.76 SB	2.1 RT	752272.4	950877.5	972.48
119	211+31.64 NB	0.0	752268.2	950886.6	972.46
120	212+02.11 NB	0.0	752318.3	950934.4	973.84
121	212+05.39 NB	-6.0 LT	752325.2	950934.9	973.99
122	115+50.98 EB	0.0	752321.7	951036.9	974.07
123	115+46.58 EB	-7.4 LT	752330.2	951035.6	974.28
124	115+75.87 WB	6.0 RT	752358.4	951058.1	974.51
125	115+79.14 WB	0.0	752358.9	951065.0	974.43
126	213+83.47 NB	0.0	752456.8	951050.2	975.17
127	213+78.66 NB	-6.4 LT	752455.7	951042.3	975.09
128	213+80.99 SB	5.7 RT	752465.9	951030.2	975.13
129	213+84.43 SB	0.0	752472.7	951030.5	975.23

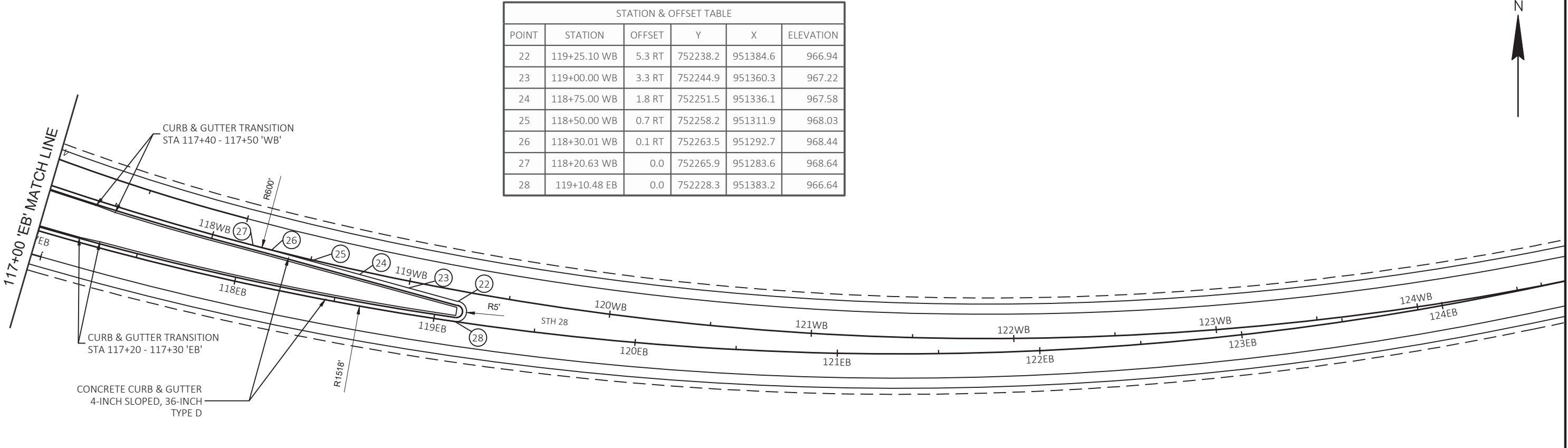


STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y	X	ELEVATION
1	109+40.00 WB	-15.0 LT	752498.4	950472.8	982.97
2	109+60.00 WB	-18.0 LT	752502.7	950492.6	982.36
3	109+75.00 WB	-18.0 LT	752503.7	950507.5	981.94
4	110+00.00 WB	-18.0 LT	752505.3	950532.5	981.24
5	110+25.00 WB	-18.0 LT	752506.9	950557.4	980.52
6	110+50.00 WB	-18.0 LT	752508.5	950582.4	979.82
7	110+75.00 WB	-18.0 LT	752510.1	950607.3	979.17
8	111+00.00 WB	-18.0 LT	752511.8	950632.3	978.56
9	111+25.00 WB	-18.0 LT	752513.4	950657.2	977.99
10	35+15.70 NW	5.9 RT	752514.8	950682.6	977.49
11	34+89.69 NW	6.0 RT	752515.9	950708.7	976.98
12	110+23.25 WB	0.0	752488.8	950556.9	980.93

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y	X	ELEVATION
13	111+80.68 WB	0.0	752497.7	950714.0	977.25
14	111+83.53 WB	9.1 RT	752488.6	950716.9	977.26
15	110+23.37 EB	-4.2 LT	752478.8	950557.5	980.61
16	110+50.00 EB	-3.1 LT	752478.5	950584.2	979.86
17	110+75.00 EB	-2.0 LT	752478.2	950609.2	979.19
18	111+00.00 EB	-0.9 LT	752477.9	950634.2	978.57
19	111+16.18 EB	-0.2 LT	752477.7	950650.4	978.18
20	111+29.39 EB	0.0	752477.7	950663.6	977.89
21	111+47.71 EB	0.0	752477.7	950681.9	977.51



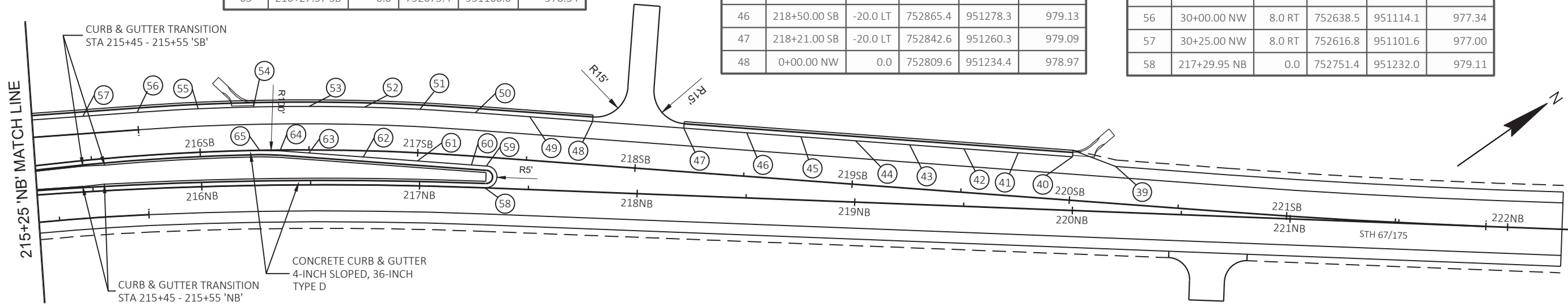
STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y	X	ELEVATION
22	119+25.10 WB	5.3 RT	752238.2	951384.6	966.94
23	119+00.00 WB	3.3 RT	752244.9	951360.3	967.22
24	118+75.00 WB	1.8 RT	752251.5	951336.1	967.58
25	118+50.00 WB	0.7 RT	752258.2	951311.9	968.03
26	118+30.01 WB	0.1 RT	752263.5	951292.7	968.44
27	118+20.63 WB	0.0	752265.9	951283.6	968.64
28	119+10.48 EB	0.0	752228.3	951383.2	966.64



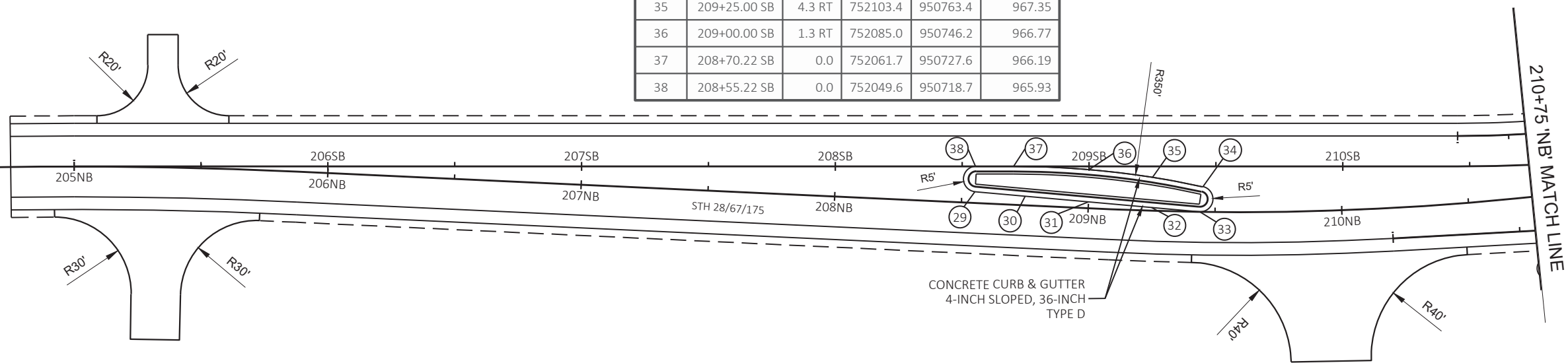
STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y	X	ELEVATION
59	217+31.86 SB	4.1 RT	752757.6	951224.2	979.23
60	217+25.00 SB	4.1 RT	752752.2	951219.9	979.19
61	217+00.00 SB	3.8 RT	752732.7	951204.5	979.03
62	216+75.00 SB	2.9 RT	752713.1	951189.1	978.82
63	216+50.00 SB	1.4 RT	752693.4	951173.7	978.58
64	216+36.73 SB	0.4 RT	752683.0	951165.4	978.44
65	216+27.37 SB	0.0	752675.4	951160.0	978.34

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y	X	ELEVATION
39	220+20.00 SB	-17.0 LT	752997.1	951385.8	978.73
40	220+00.00 SB	-20.0 LT	752983.3	951371.0	978.78
41	219+75.00 SB	-20.0 LT	752963.6	951355.6	978.90
42	219+50.00 SB	-20.0 LT	752944.0	951340.1	979.00
43	219+25.00 SB	-20.0 LT	752924.3	951324.7	979.07
44	219+00.00 SB	-20.0 LT	752904.7	951309.2	979.11
45	218+75.00 SB	-20.0 LT	752885.0	951293.7	979.13
46	218+50.00 SB	-20.0 LT	752865.4	951278.3	979.13
47	218+21.00 SB	-20.0 LT	752842.6	951260.3	979.09
48	0+00.00 NW	0.0	752809.6	951234.4	978.97

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y	X	ELEVATION
49	217+50.00 SB	-20.0 LT	752786.8	951216.4	978.84
50	217+25.00 SB	-20.0 LT	752767.2	951201.0	978.71
51	217+00.00 SB	-20.0 LT	752746.9	951185.5	978.55
52	216+75.00 SB	-20.0 LT	752726.4	951170.4	978.36
53	216+50.00 SB	-20.0 LT	752705.4	951155.9	978.15
54	216+25.00 SB	-20.0 LT	752684.2	951141.9	977.92
55	216+00.00 SB	-20.0 LT	752662.6	951128.4	977.66
56	30+00.00 NW	8.0 RT	752638.5	951114.1	977.34
57	30+25.00 NW	8.0 RT	752616.8	951101.6	977.00
58	217+29.95 NB	0.0	752751.4	951232.0	979.11

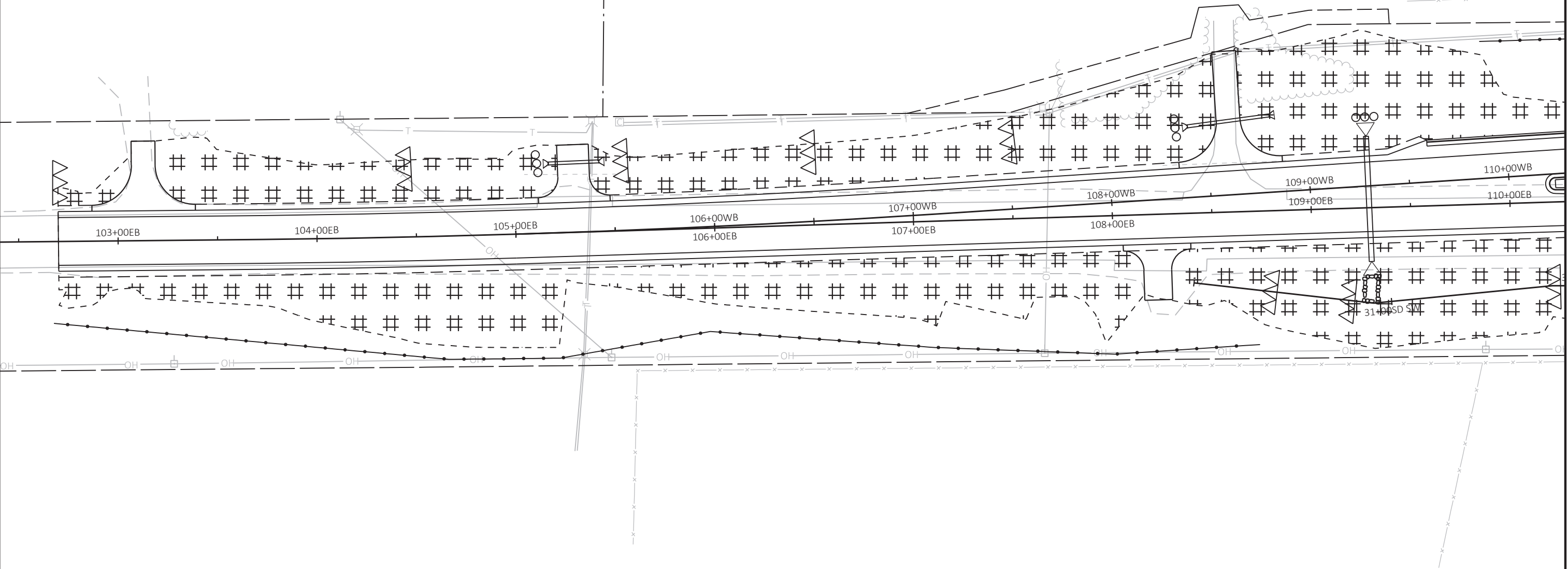


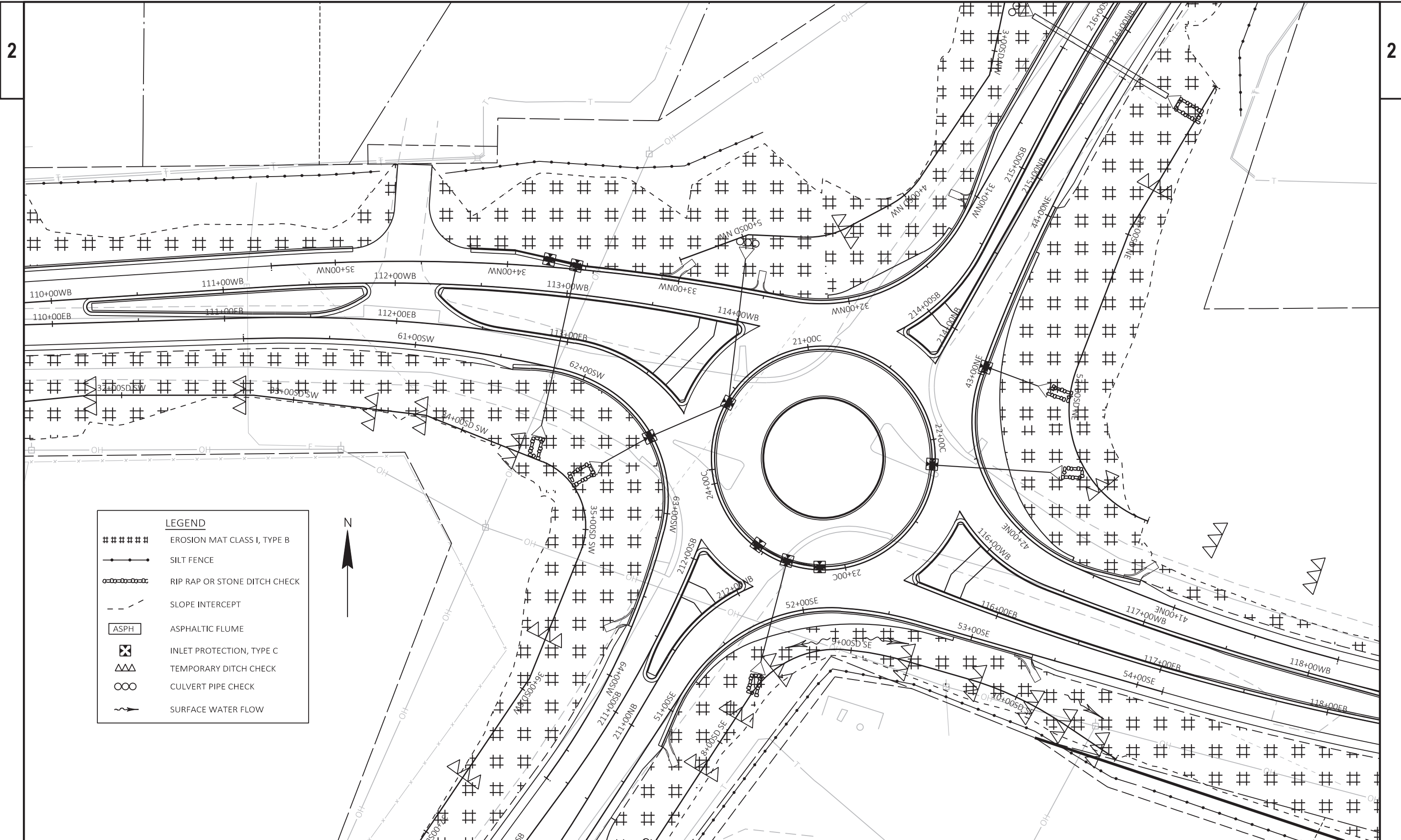
STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y	X	ELEVATION
29	208+55.11 NB	-4.4 LT	752043.6	950726.7	966.02
30	208+75.00 NB	-3.5 LT	752058.5	950739.8	966.34
31	209+00.00 NB	-2.5 LT	752077.3	950756.3	966.79
32	209+25.00 NB	-1.3 LT	752096.1	950772.8	967.29
33	209+44.06 NB	0.0	752110.4	950785.4	967.69
34	209+44.81 SB	8.0 RT	752117.2	950778.1	967.89
35	209+25.00 SB	4.3 RT	752103.4	950763.4	967.35
36	209+00.00 SB	1.3 RT	752085.0	950746.2	966.77
37	208+70.22 SB	0.0	752061.7	950727.6	966.19
38	208+55.22 SB	0.0	752049.6	950718.7	965.93



LEGEND

- ##### EROSION MAT CLASS I, TYPE B
- SILT FENCE
- RIP RAP OR STONE DITCH CHECK
- - - SLOPE INTERCEPT
- ASPH ASPHALTIC FLUME
- ⊗ INLET PROTECTION, TYPE C
- △△△ TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- ~> SURFACE WATER FLOW





LEGEND	
#####	EROSION MAT CLASS I, TYPE B
—●—●—●—●—●—	SILT FENCE
—x—x—x—x—x—x—	RIP RAP OR STONE DITCH CHECK
- - - - -	SLOPE INTERCEPT
ASPH	ASPHALTIC FLUME
⊗	INLET PROTECTION, TYPE C
△△△	TEMPORARY DITCH CHECK
○○○	CULVERT PIPE CHECK
→	SURFACE WATER FLOW



PROJECT NO: 4060-05-72

HWY: STH 28

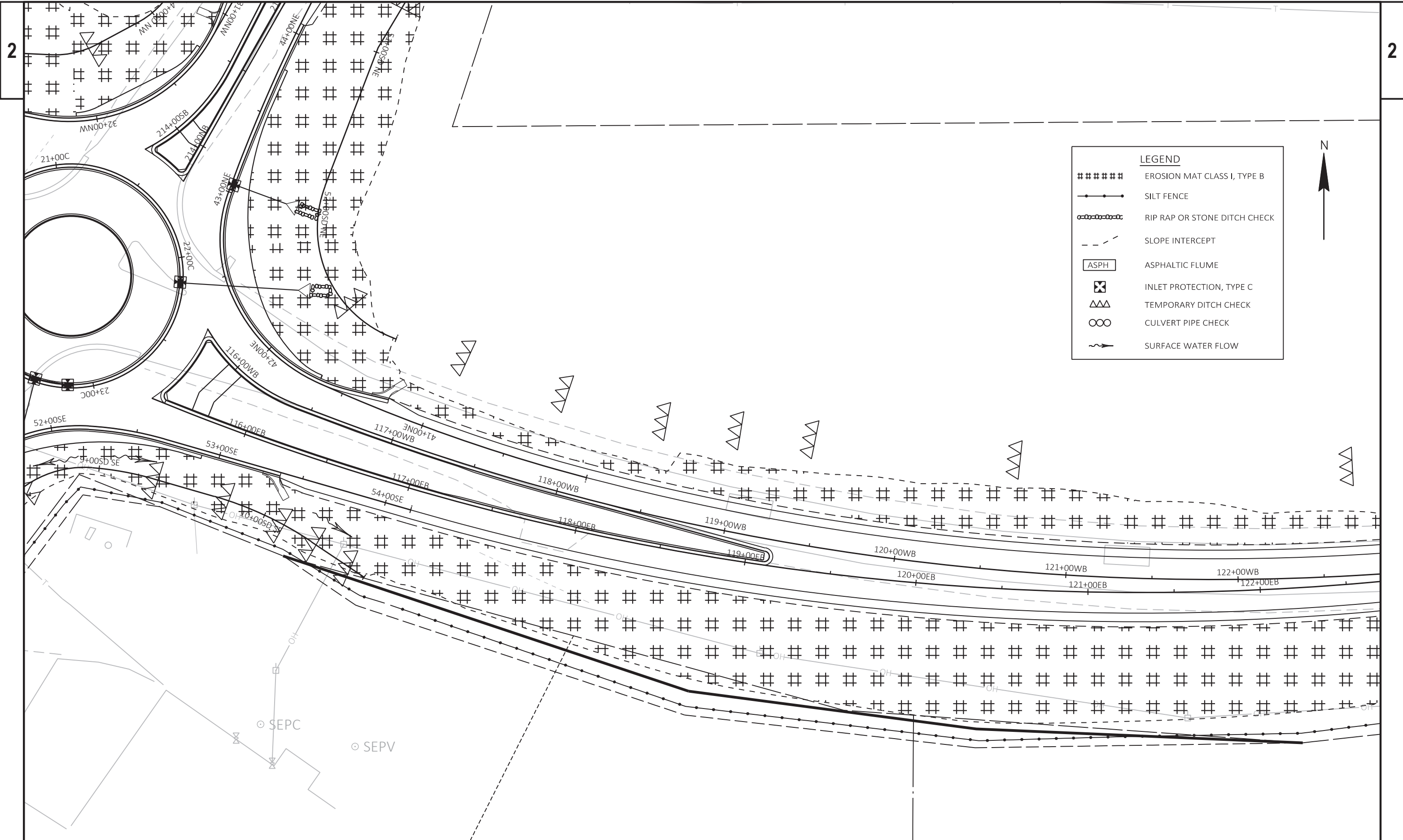
COUNTY: DODGE

EROSION CONTROL

SHEET

22

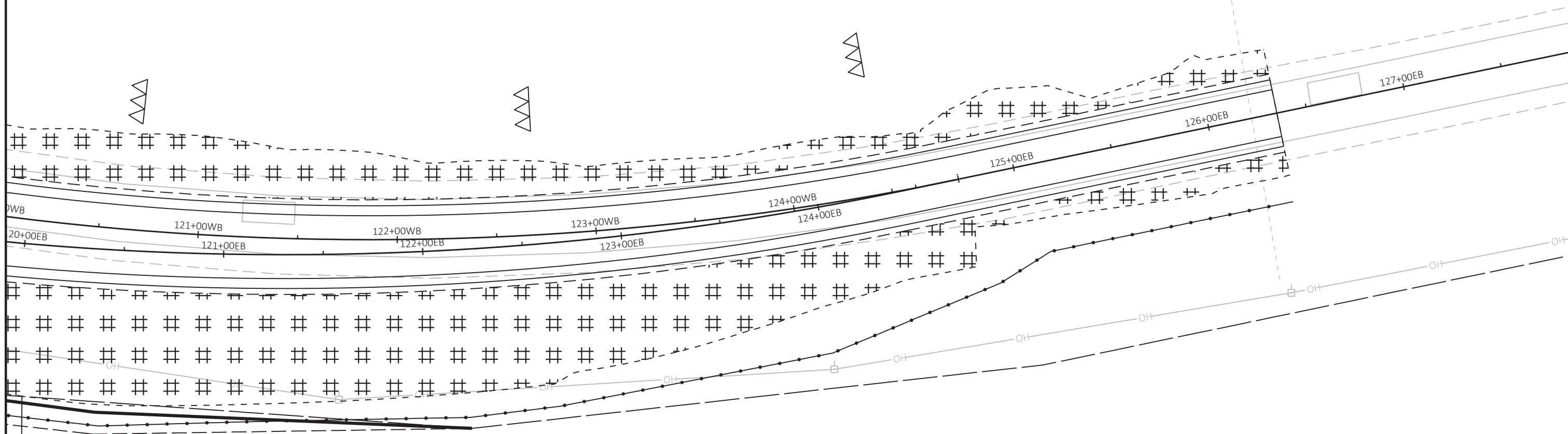
E



LEGEND

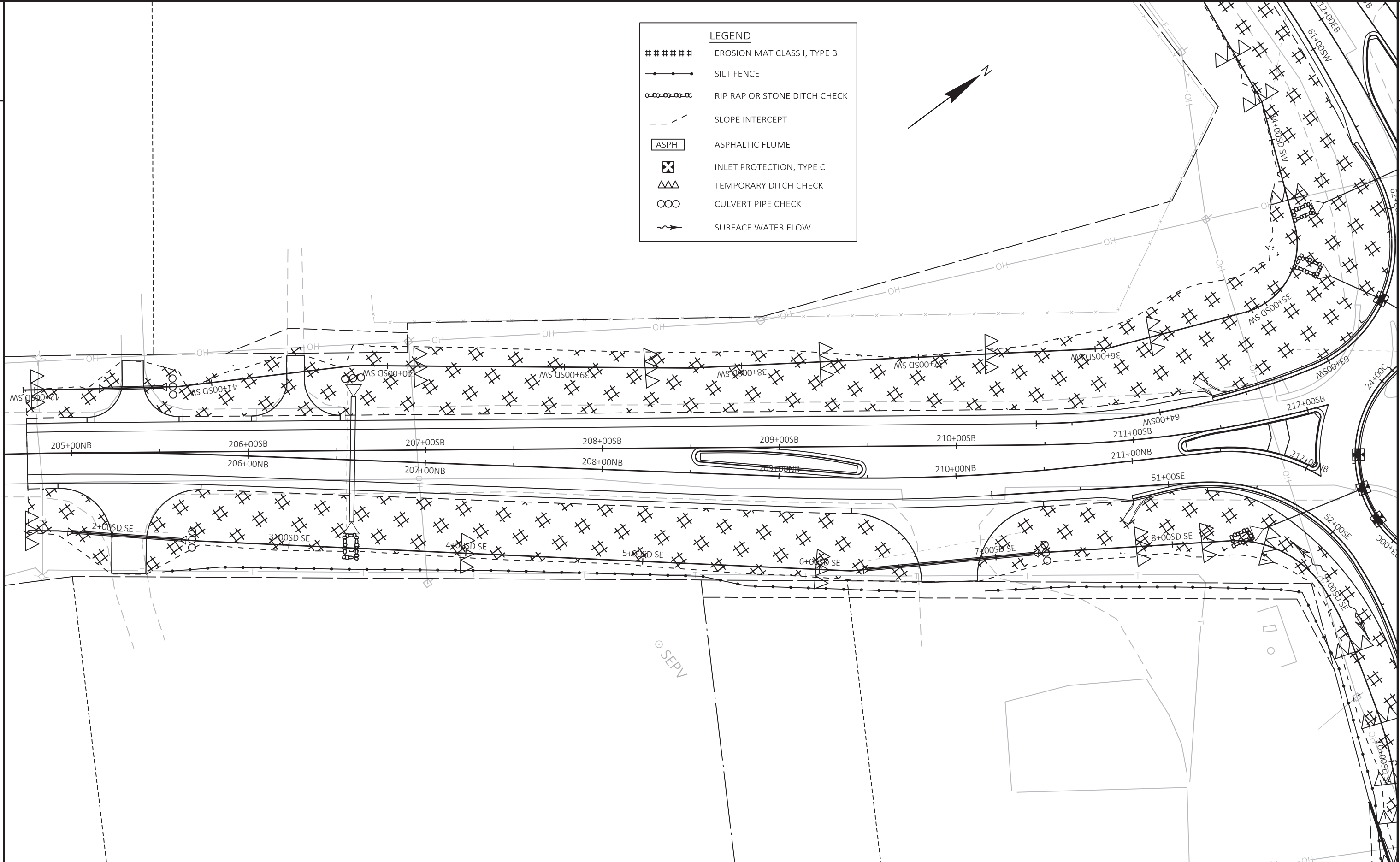
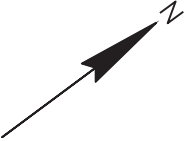
#####	EROSION MAT CLASS I, TYPE B
—●—●—●—	SILT FENCE
—○—○—○—○—	RIP RAP OR STONE DITCH CHECK
- - - - -	SLOPE INTERCEPT
ASPH	ASPHALTIC FLUME
⊗	INLET PROTECTION, TYPE C
△	TEMPORARY DITCH CHECK
○	CULVERT PIPE CHECK
~>	SURFACE WATER FLOW

LEGEND	
#####	EROSION MAT CLASS I, TYPE B
—●—●—●—●—●—	SILT FENCE
—○—○—○—○—○—	RIP RAP OR STONE DITCH CHECK
- - - -	SLOPE INTERCEPT
ASPH	ASPHALTIC FLUME
⊠	INLET PROTECTION, TYPE C
△△	TEMPORARY DITCH CHECK
○	CULVERT PIPE CHECK
↗	SURFACE WATER FLOW

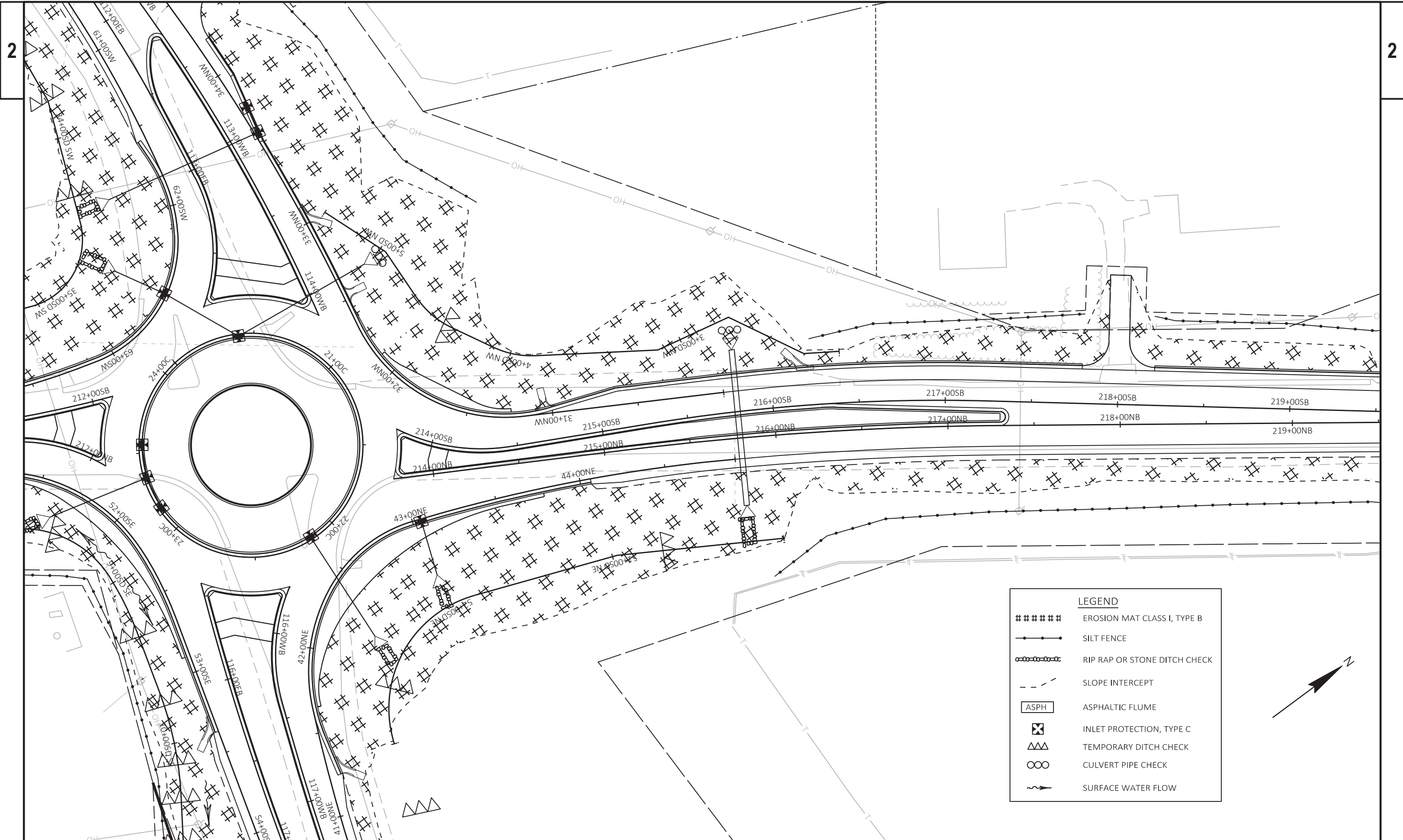


LEGEND

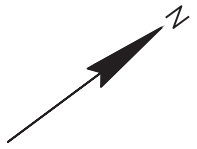
- ##### EROSION MAT CLASS I, TYPE B
- SILT FENCE
- RIP RAP OR STONE DITCH CHECK
- - - SLOPE INTERCEPT
- ASPH ASPHALTIC FLUME
- ⊠ INLET PROTECTION, TYPE C
- △△ TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- ~ SURFACE WATER FLOW



PROJECT NO: 4060-05-72	HWY: STH 28	COUNTY: DODGE	EROSION CONTROL	SHEET 25
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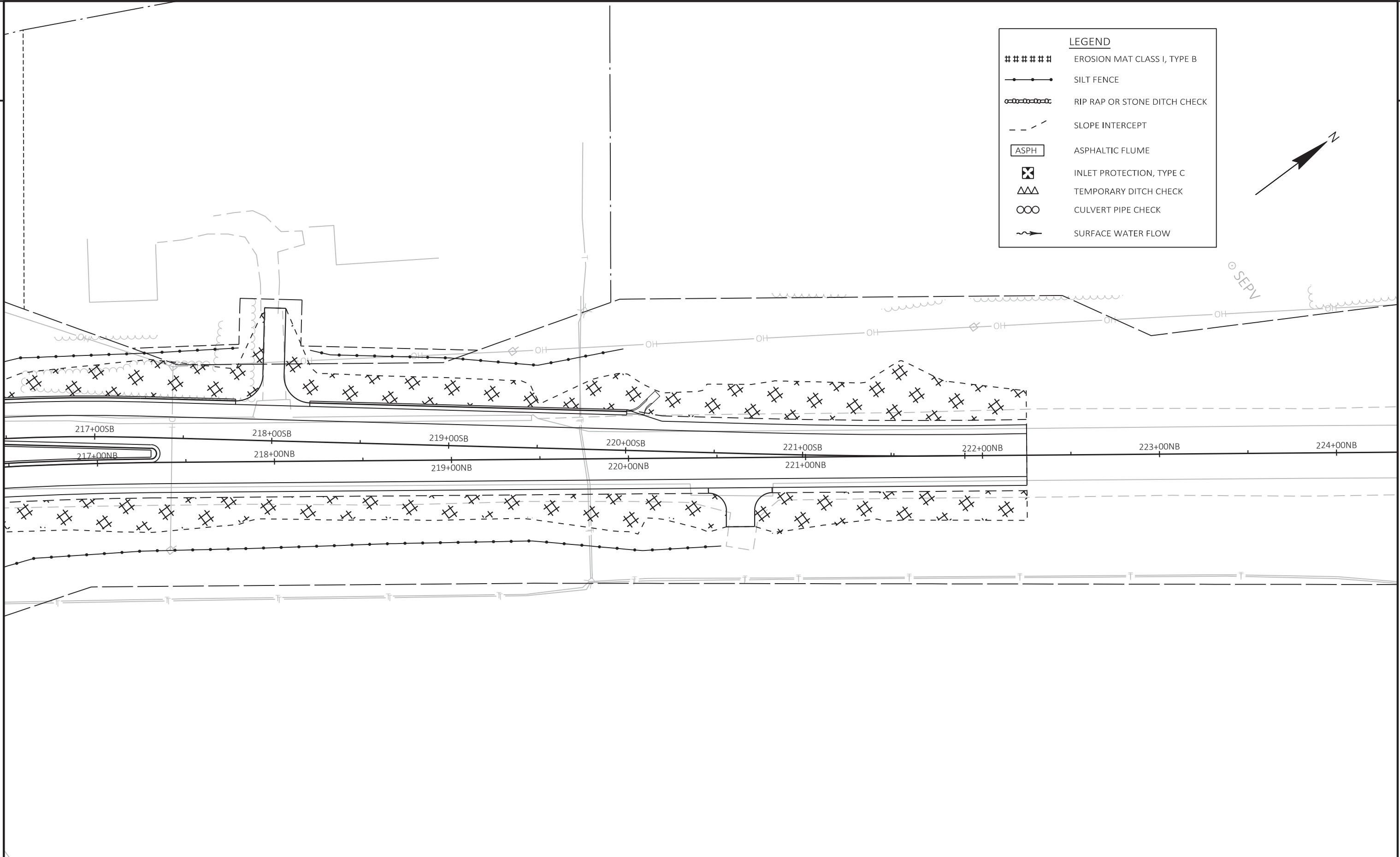
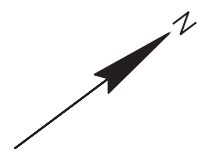


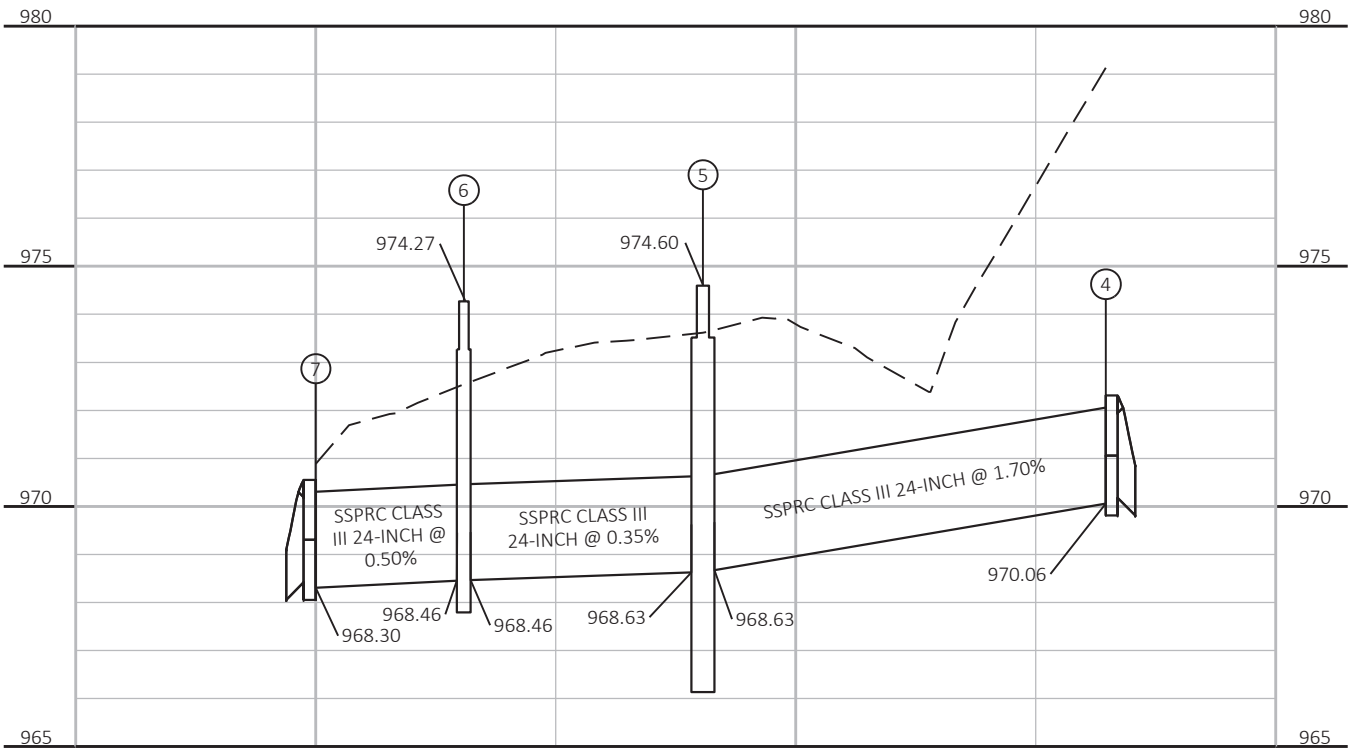
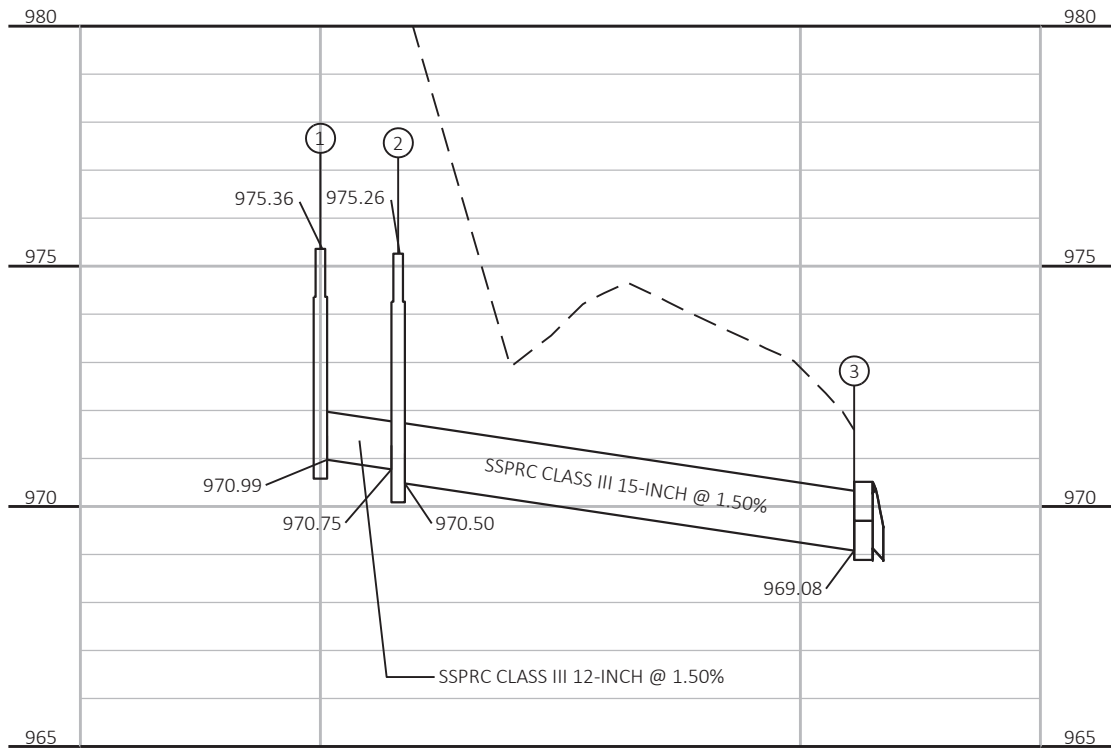
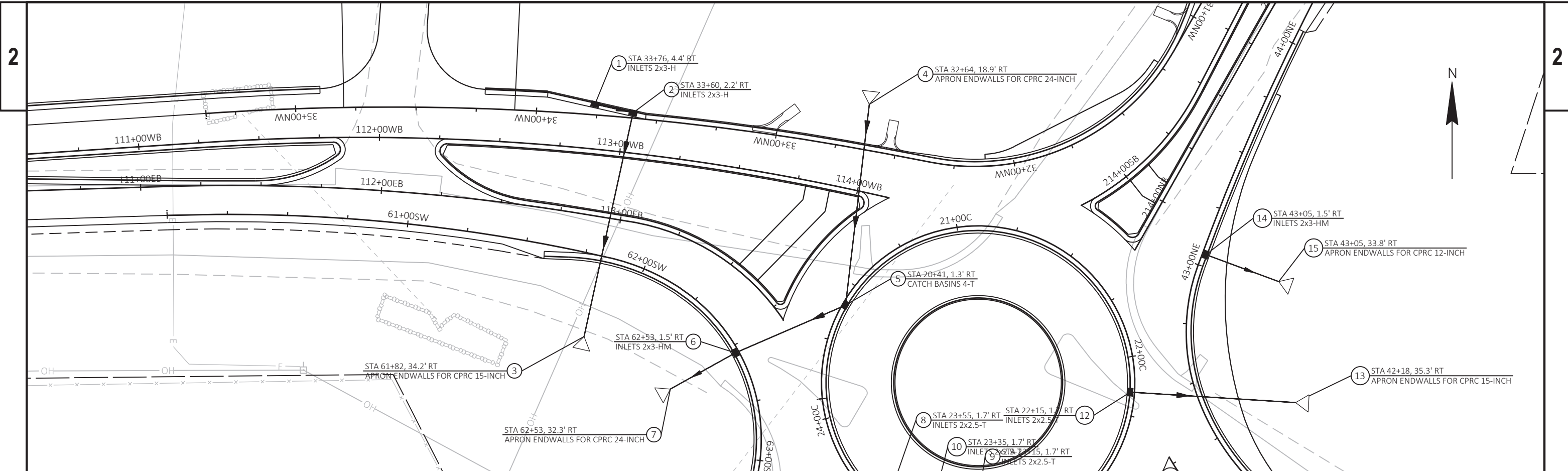
LEGEND	
#####	EROSION MAT CLASS I, TYPE B
—●—●—●—	SILT FENCE
—x—x—x—x—	RIP RAP OR STONE DITCH CHECK
- - - - -	SLOPE INTERCEPT
ASPH	ASPHALTIC FLUME
⊗	INLET PROTECTION, TYPE C
△△	TEMPORARY DITCH CHECK
⊗⊗	CULVERT PIPE CHECK
~>	SURFACE WATER FLOW

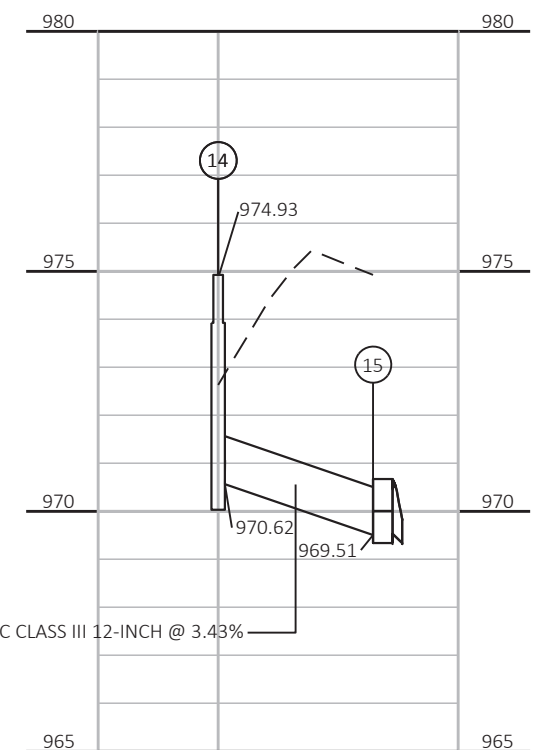
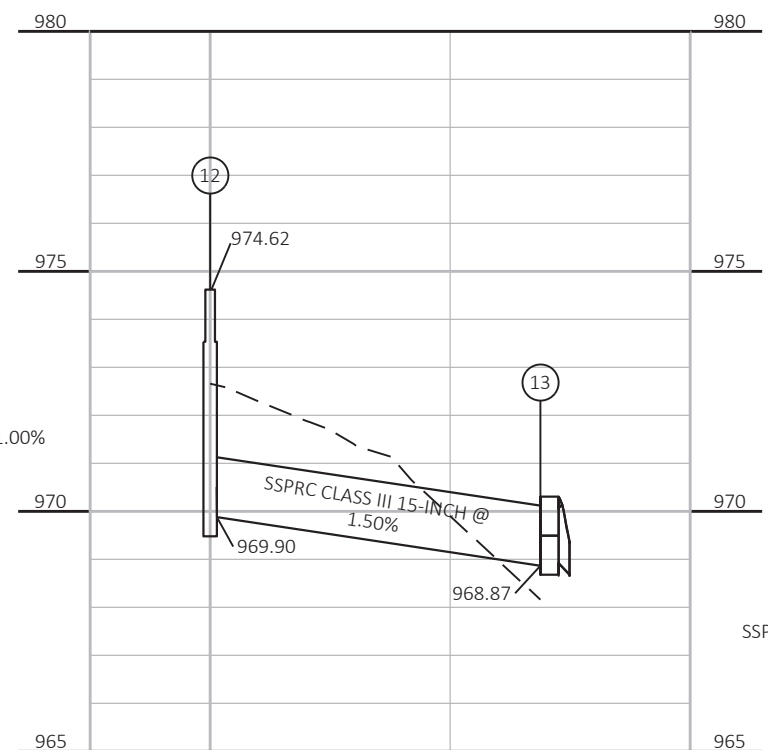
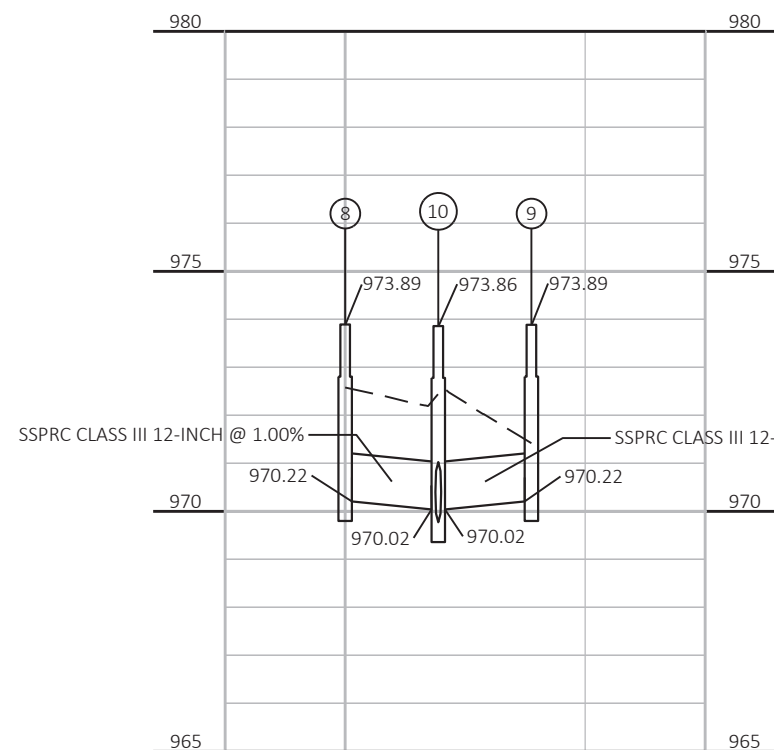
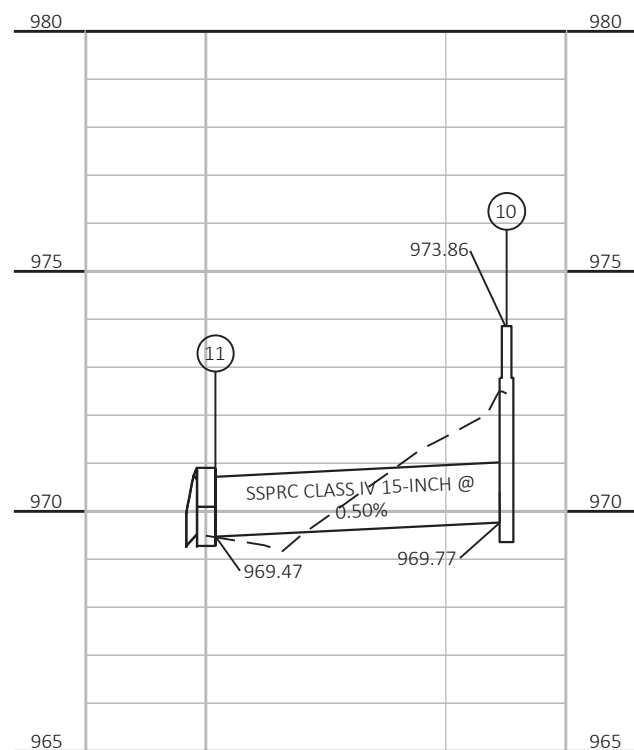
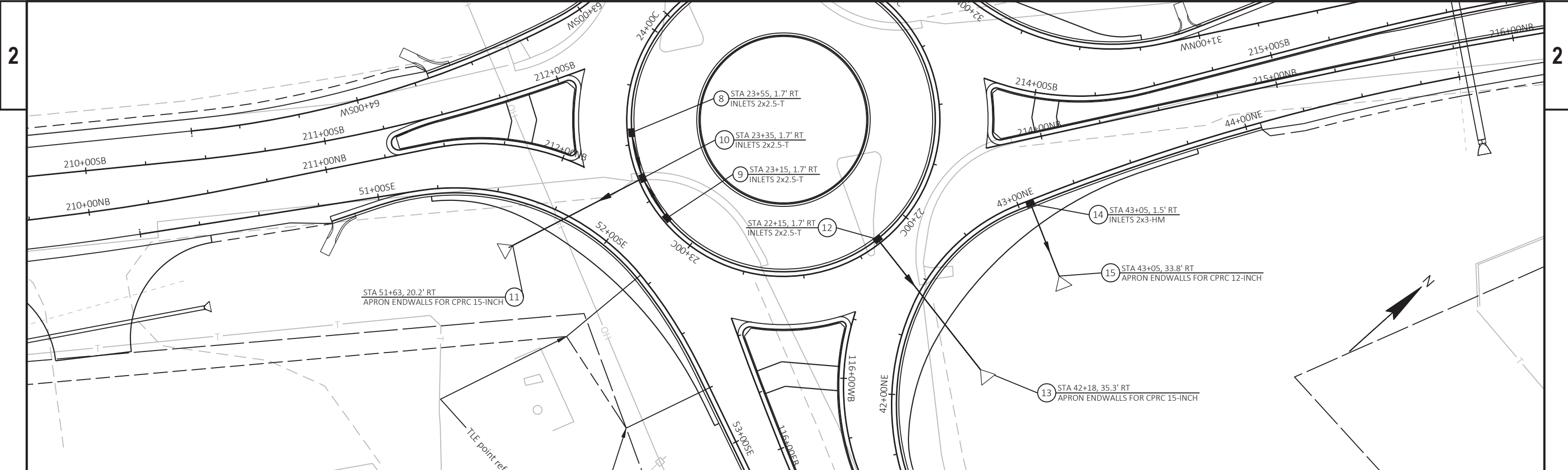


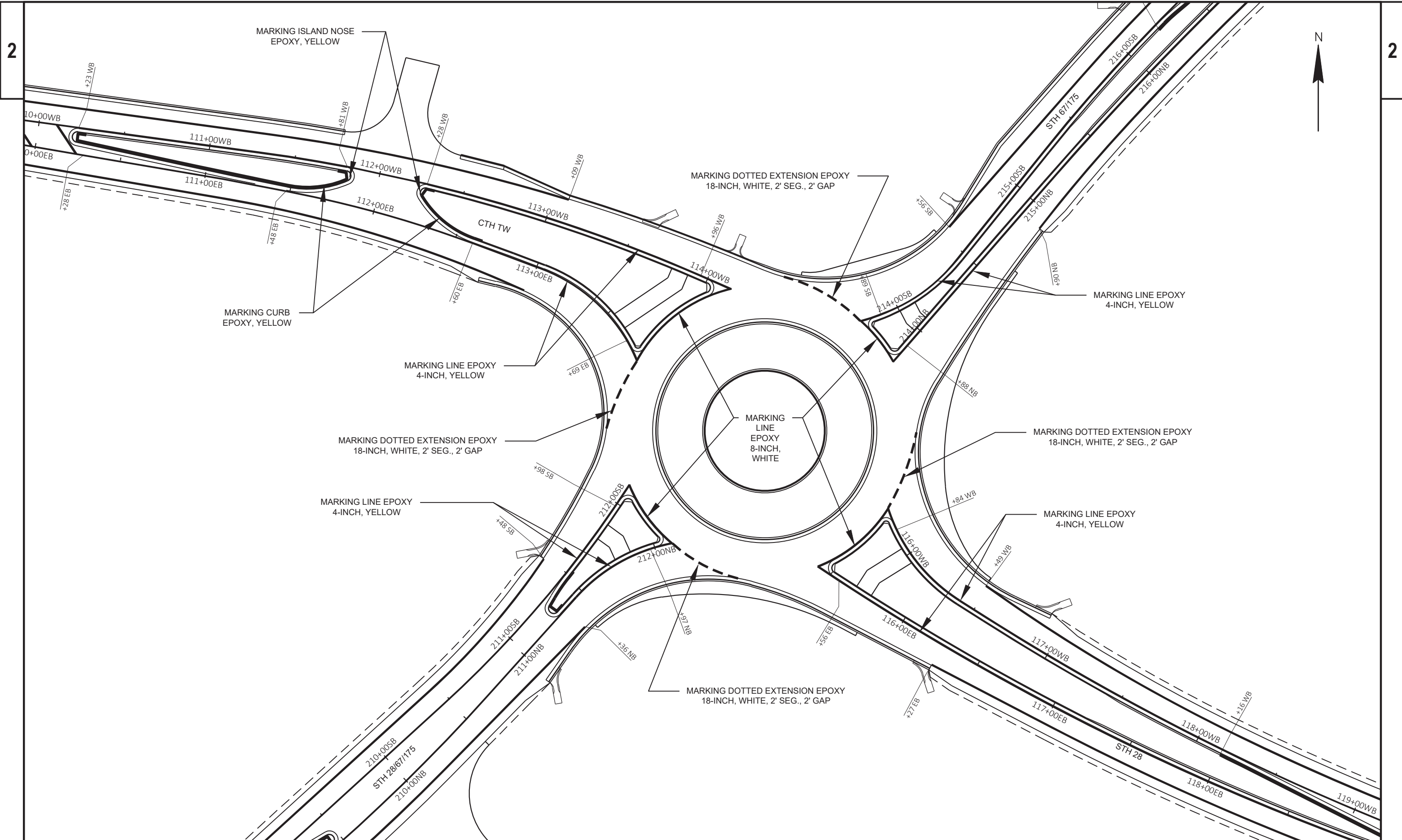
LEGEND

- ##### EROSION MAT CLASS I, TYPE B
- SILT FENCE
- RIP RAP OR STONE DITCH CHECK
- - - SLOPE INTERCEPT
- ASPH ASPHALTIC FLUME
- ⊠ INLET PROTECTION, TYPE C
- △△△ TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- ~> SURFACE WATER FLOW









PROJECT NO: 4060-05-72

HWY: STH 28

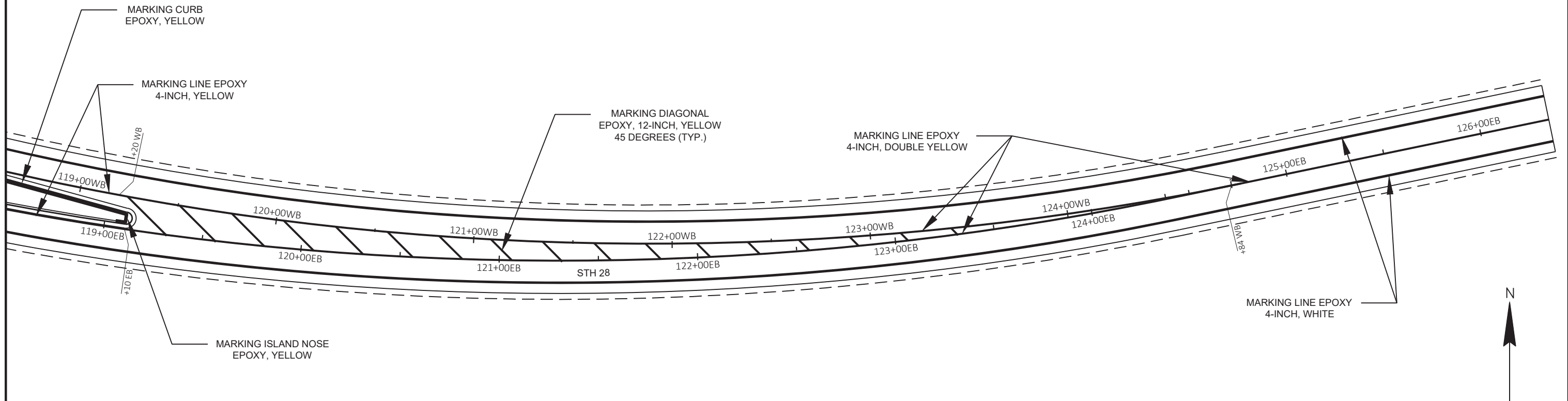
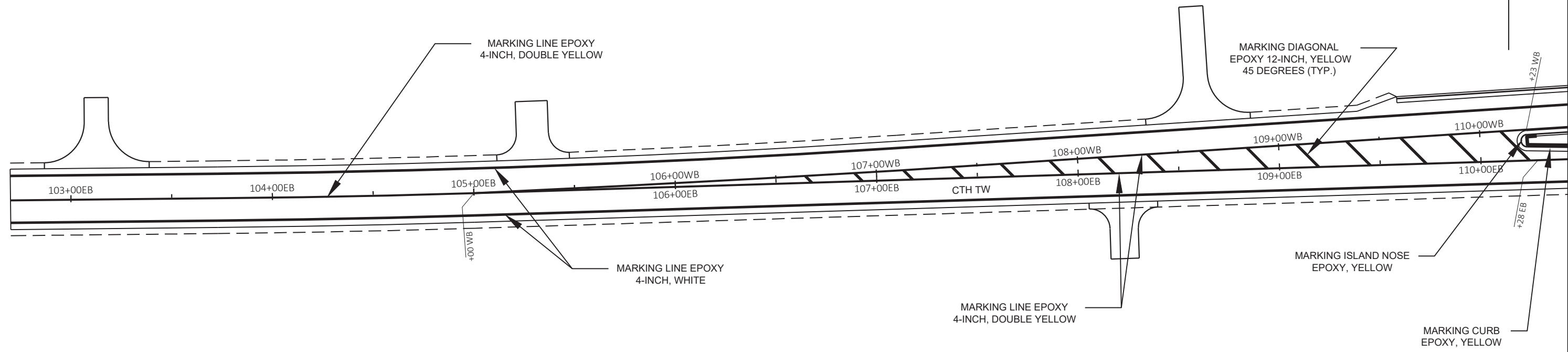
COUNTY: DODGE

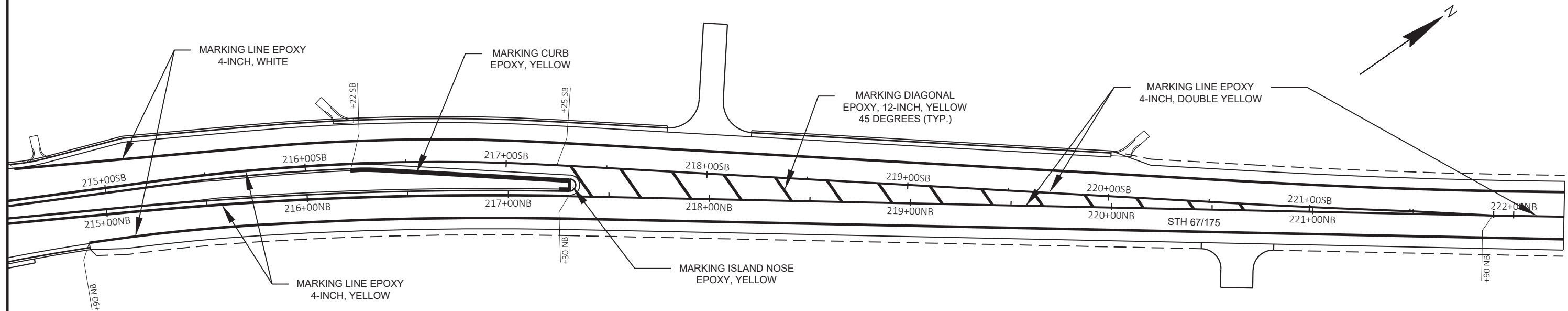
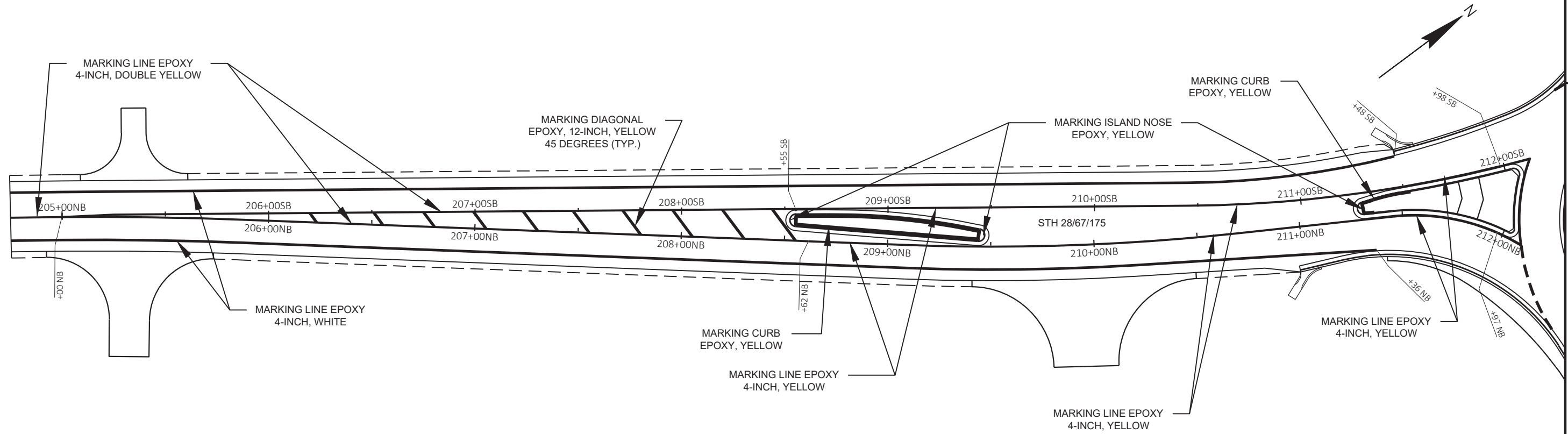
PERMANENT PAVEMENT MARKING

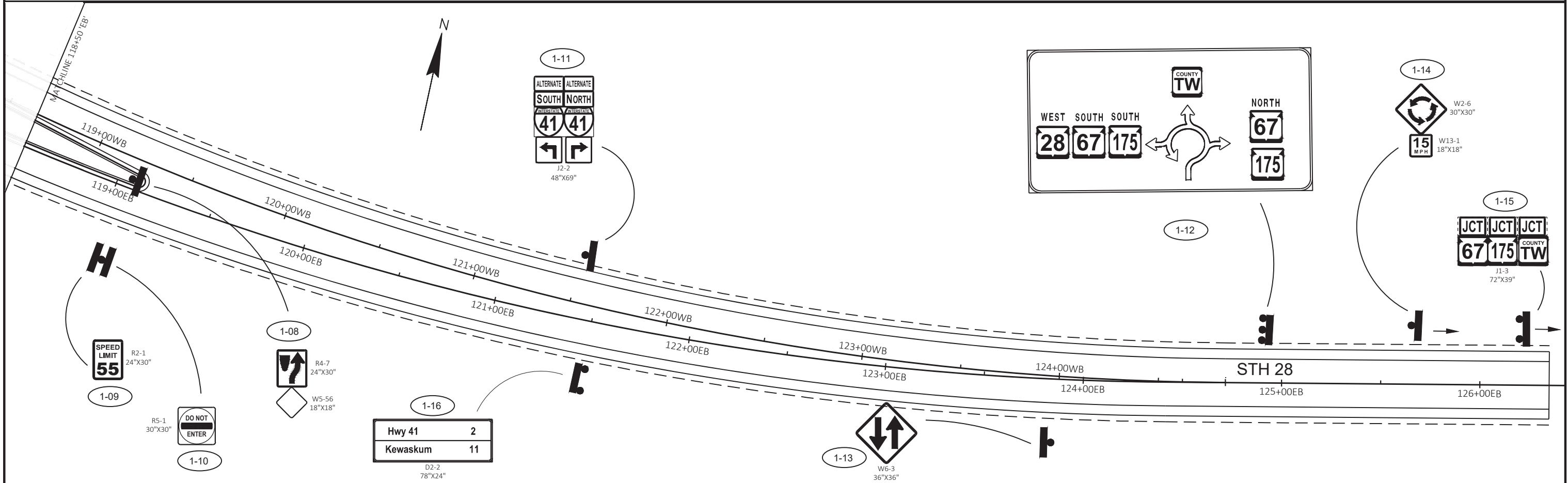
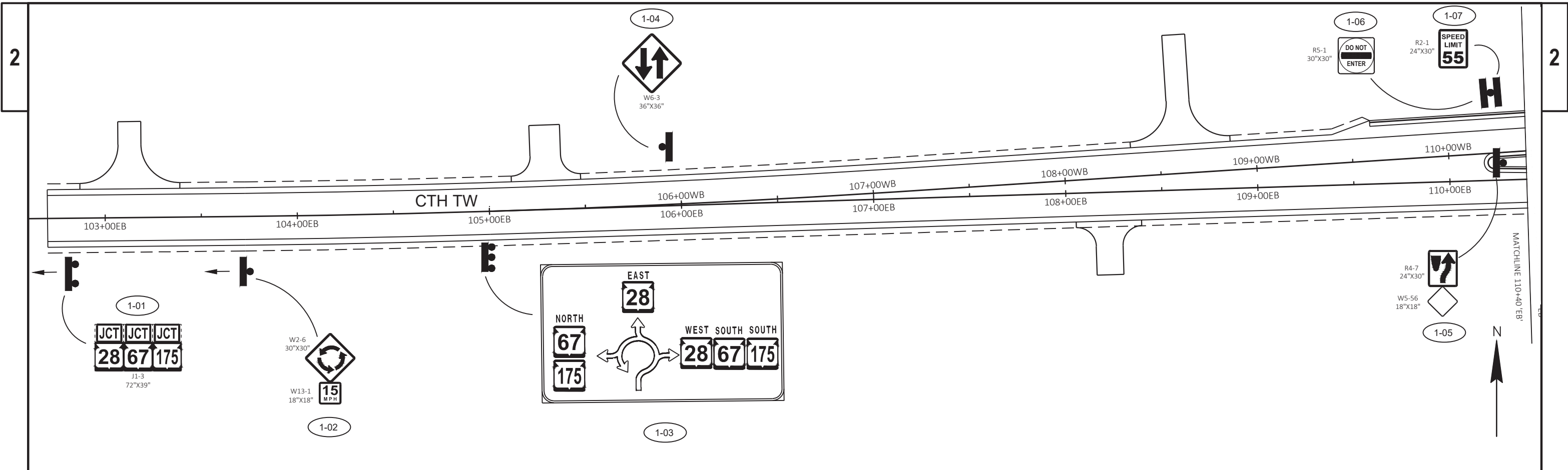
SHEET

30

E

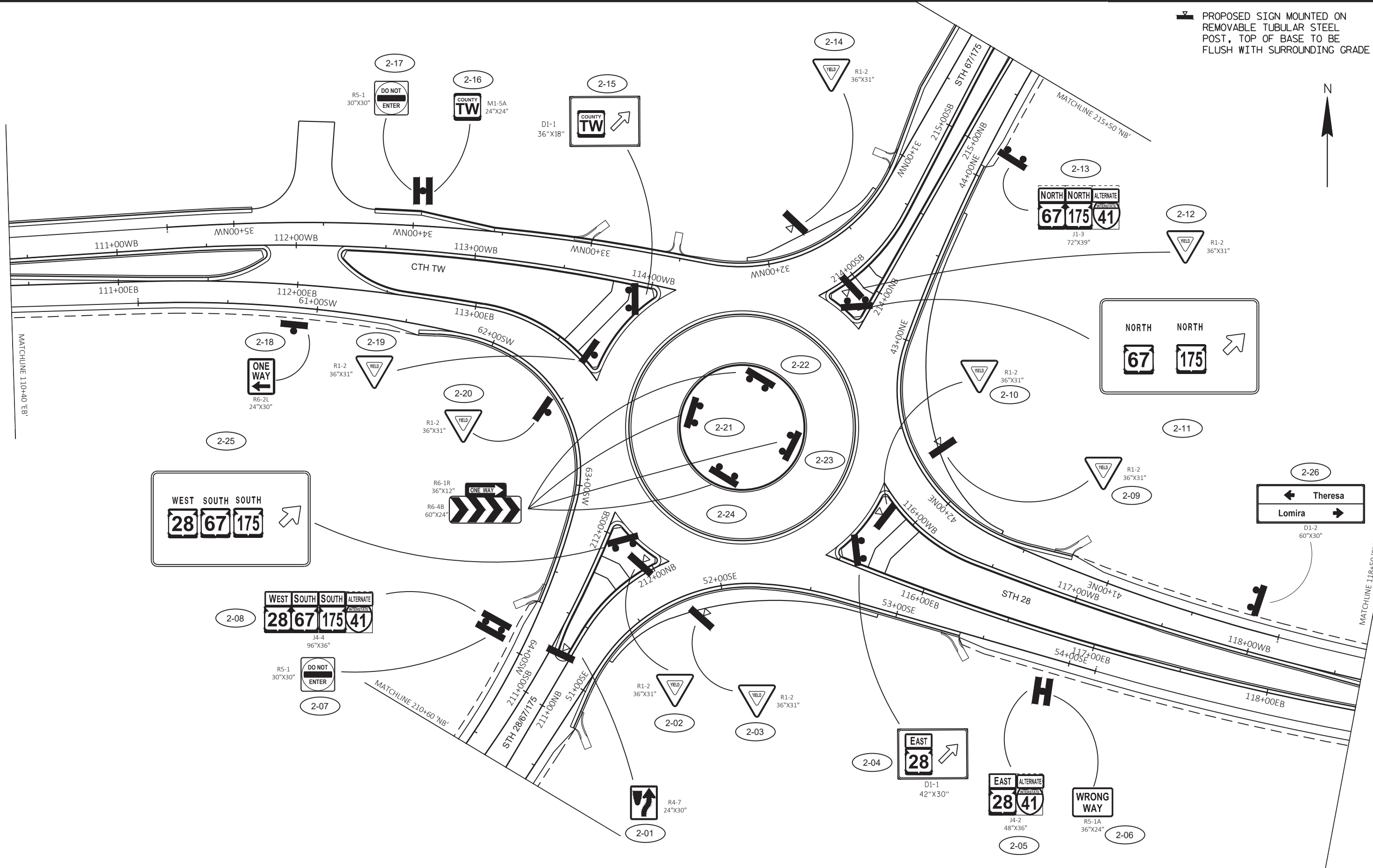


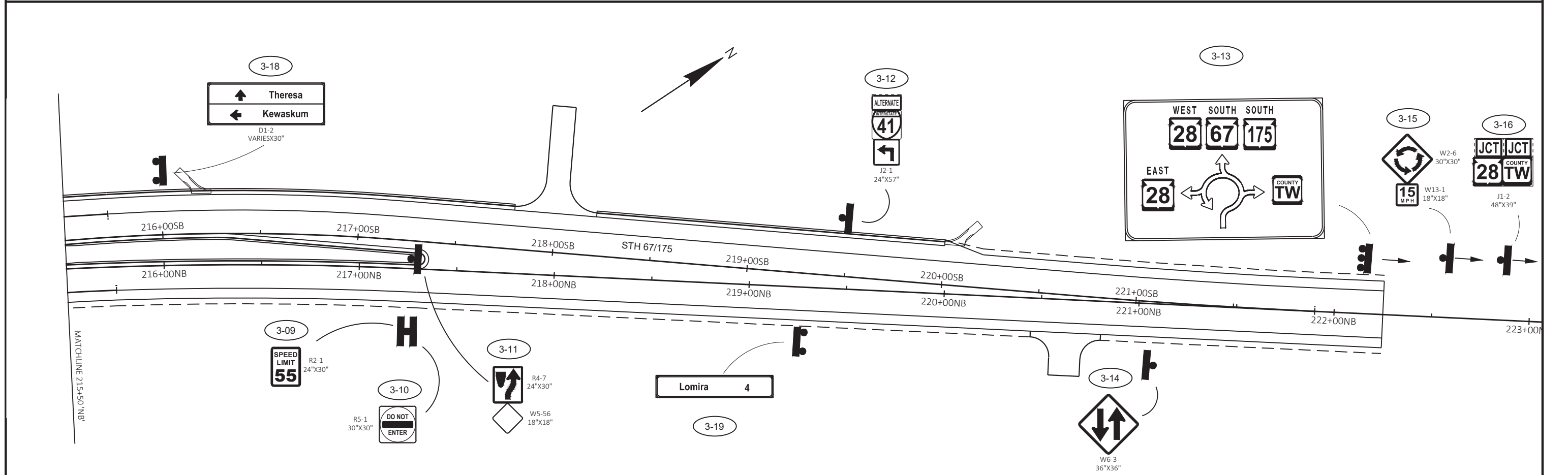
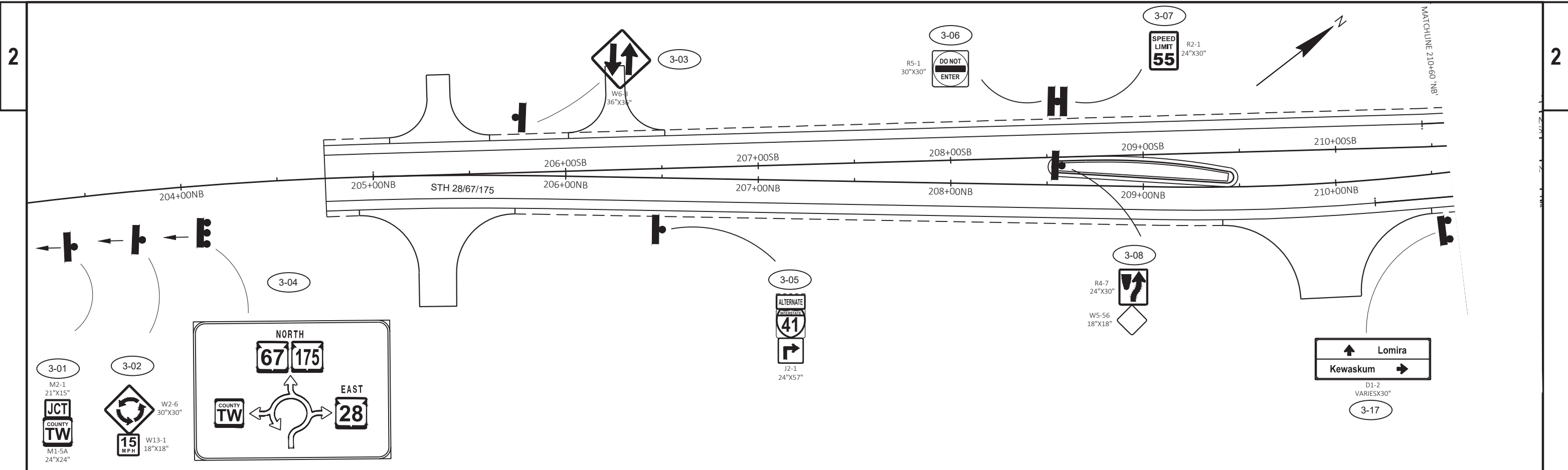




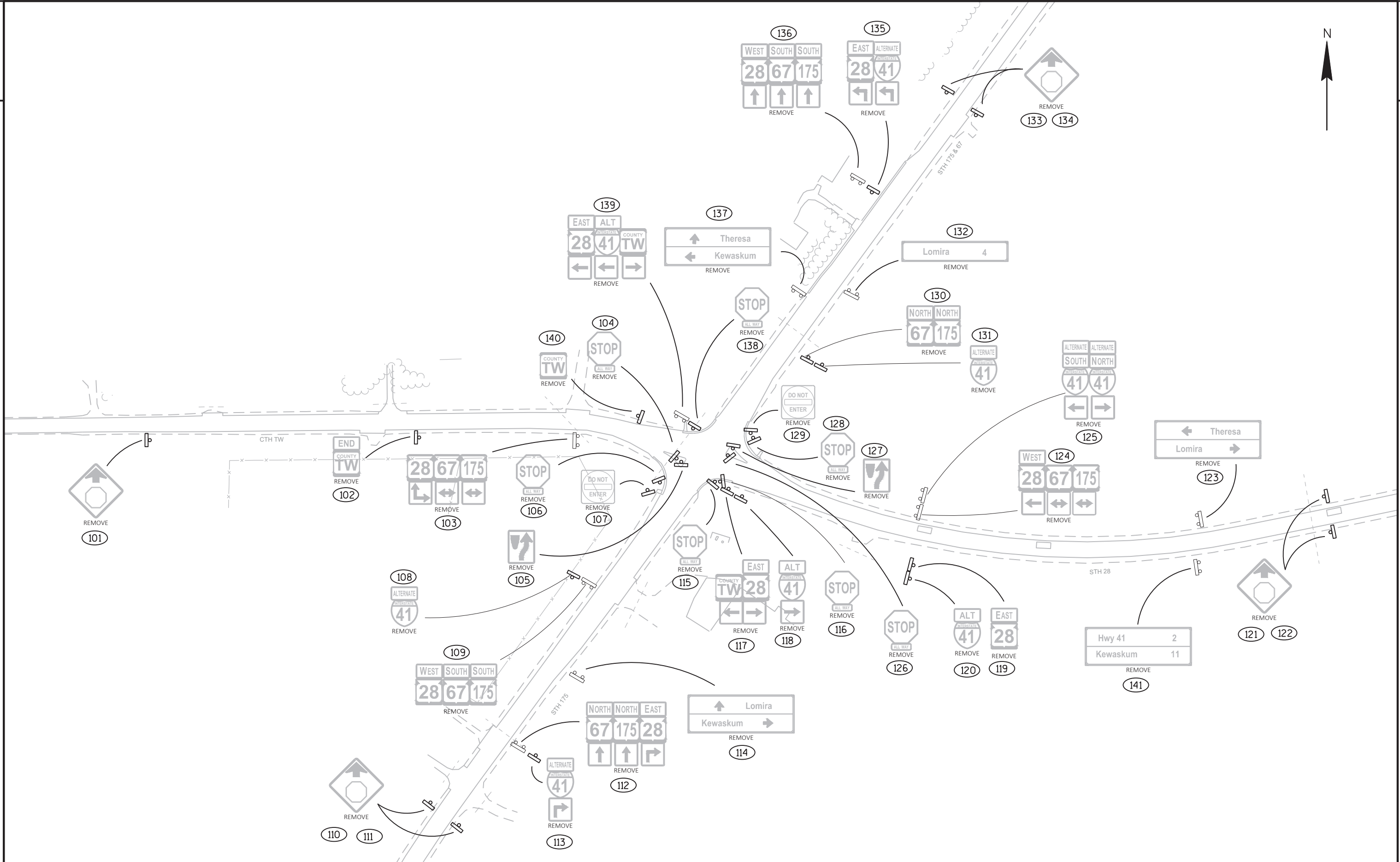
PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE PERMANENT SIGNING SHEET 33

PROPOSED SIGN MOUNTED ON REMOVABLE TUBULAR STEEL POST, TOP OF BASE TO BE FLUSH WITH SURROUNDING GRADE



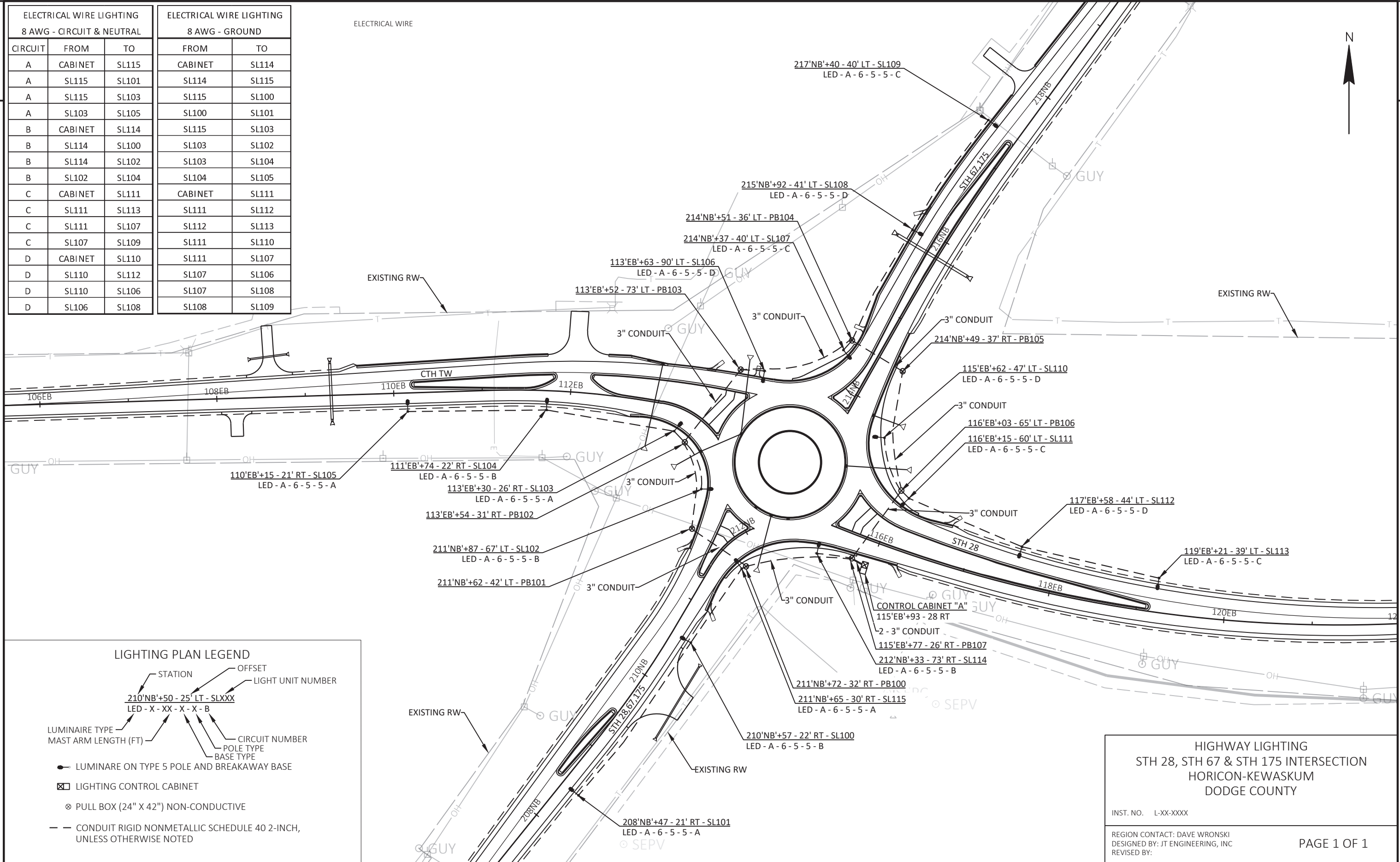


PROJECT NO: 4060-05-72	HWY: STH 28	COUNTY: DODGE	PERMANENT SIGNING	SHEET 35	E
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ELECTRICAL WIRE LIGHTING 8 AWG - CIRCUIT & NEUTRAL			ELECTRICAL WIRE LIGHTING 8 AWG - GROUND	
CIRCUIT	FROM	TO	FROM	TO
A	CABINET	SL115	CABINET	SL114
A	SL115	SL101	SL114	SL115
A	SL115	SL103	SL115	SL100
A	SL103	SL105	SL100	SL101
B	CABINET	SL114	SL115	SL103
B	SL114	SL100	SL103	SL102
B	SL114	SL102	SL103	SL104
B	SL102	SL104	SL104	SL105
C	CABINET	SL111	CABINET	SL111
C	SL111	SL113	SL111	SL112
C	SL111	SL107	SL112	SL113
C	SL107	SL109	SL111	SL110
D	CABINET	SL110	SL111	SL107
D	SL110	SL112	SL107	SL106
D	SL110	SL106	SL107	SL108
D	SL106	SL108	SL108	SL109

ELECTRICAL WIRE



LIGHTING PLAN LEGEND

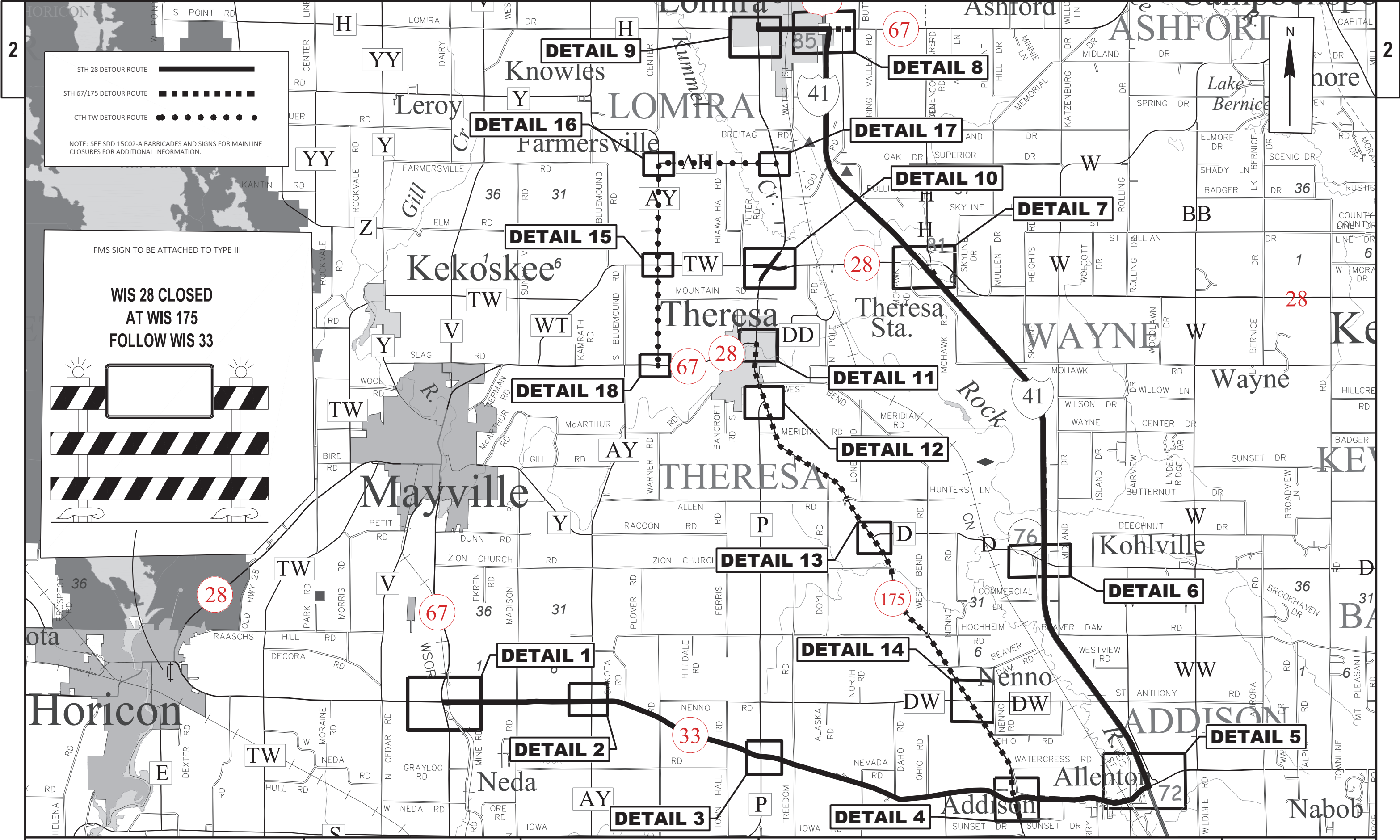
- STATION
- OFFSET
- LIGHT UNIT NUMBER
- LUMINAIRE TYPE
- MAST ARM LENGTH (FT)
- CIRCUIT NUMBER
- POLE TYPE
- BASE TYPE
- LUMINAIRE ON TYPE 5 POLE AND BREAKAWAY BASE
- LIGHTING CONTROL CABINET
- PULL BOX (24" X 42") NON-CONDUCTIVE
- CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH, UNLESS OTHERWISE NOTED

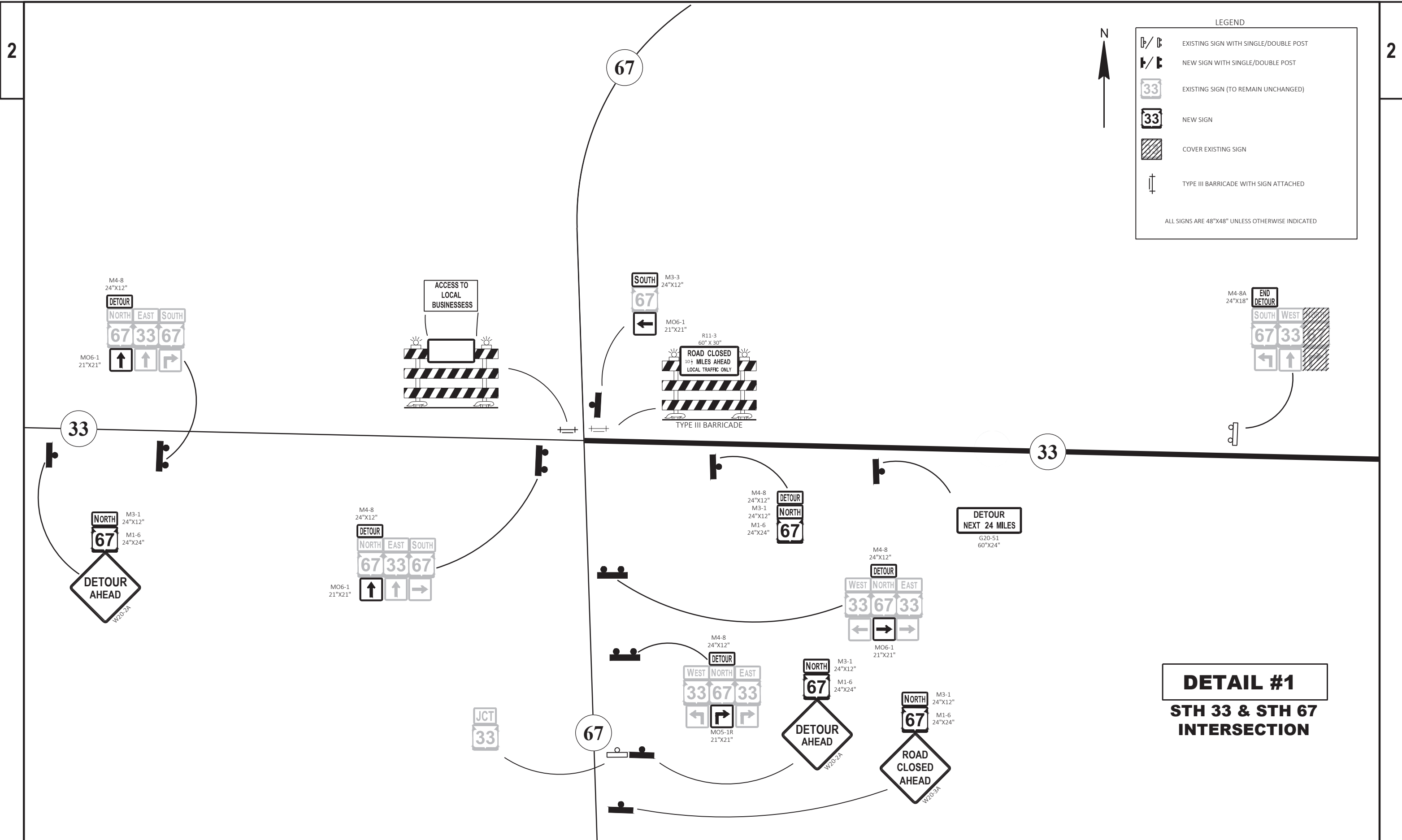
**HIGHWAY LIGHTING
STH 28, STH 67 & STH 175 INTERSECTION
HORICON-KEWASKUM
DODGE COUNTY**

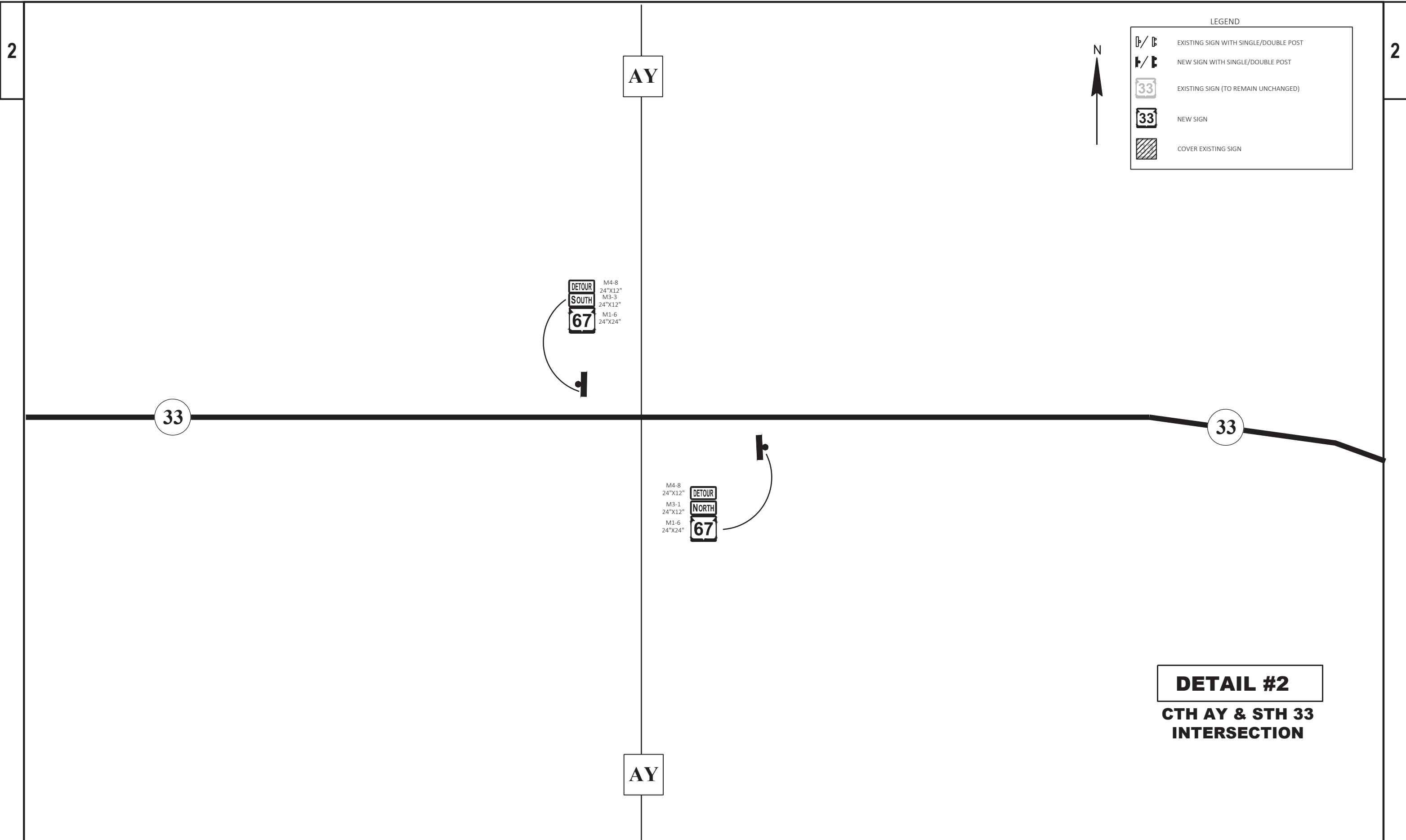
INST. NO. L-XX-XXXX

REGION CONTACT: DAVE WRONSKI
DESIGNED BY: JT ENGINEERING, INC
REVISED BY:

PAGE 1 OF 1



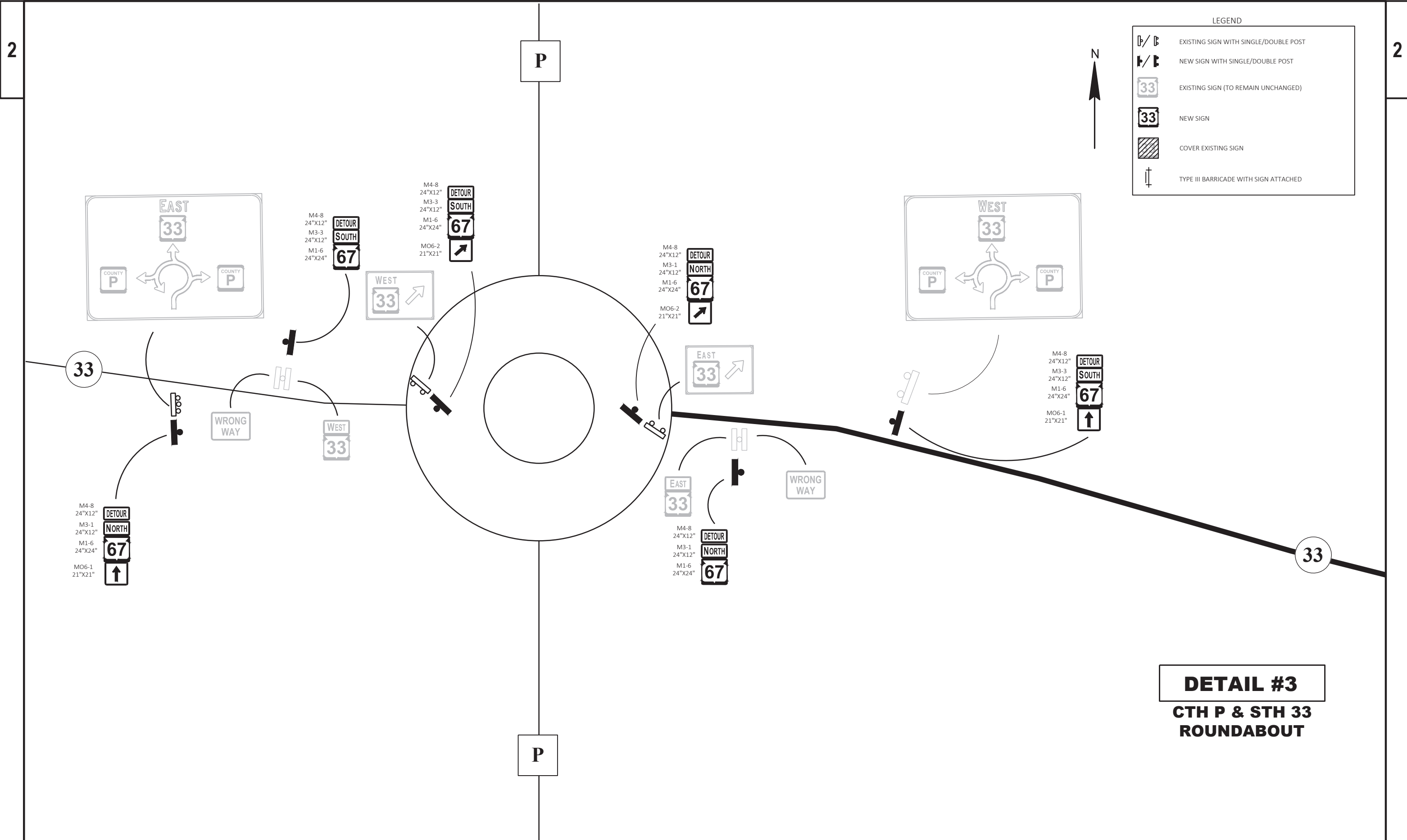




LEGEND

	EXISTING SIGN WITH SINGLE/DOUBLE POST
	NEW SIGN WITH SINGLE/DOUBLE POST
	EXISTING SIGN (TO REMAIN UNCHANGED)
	NEW SIGN
	COVER EXISTING SIGN

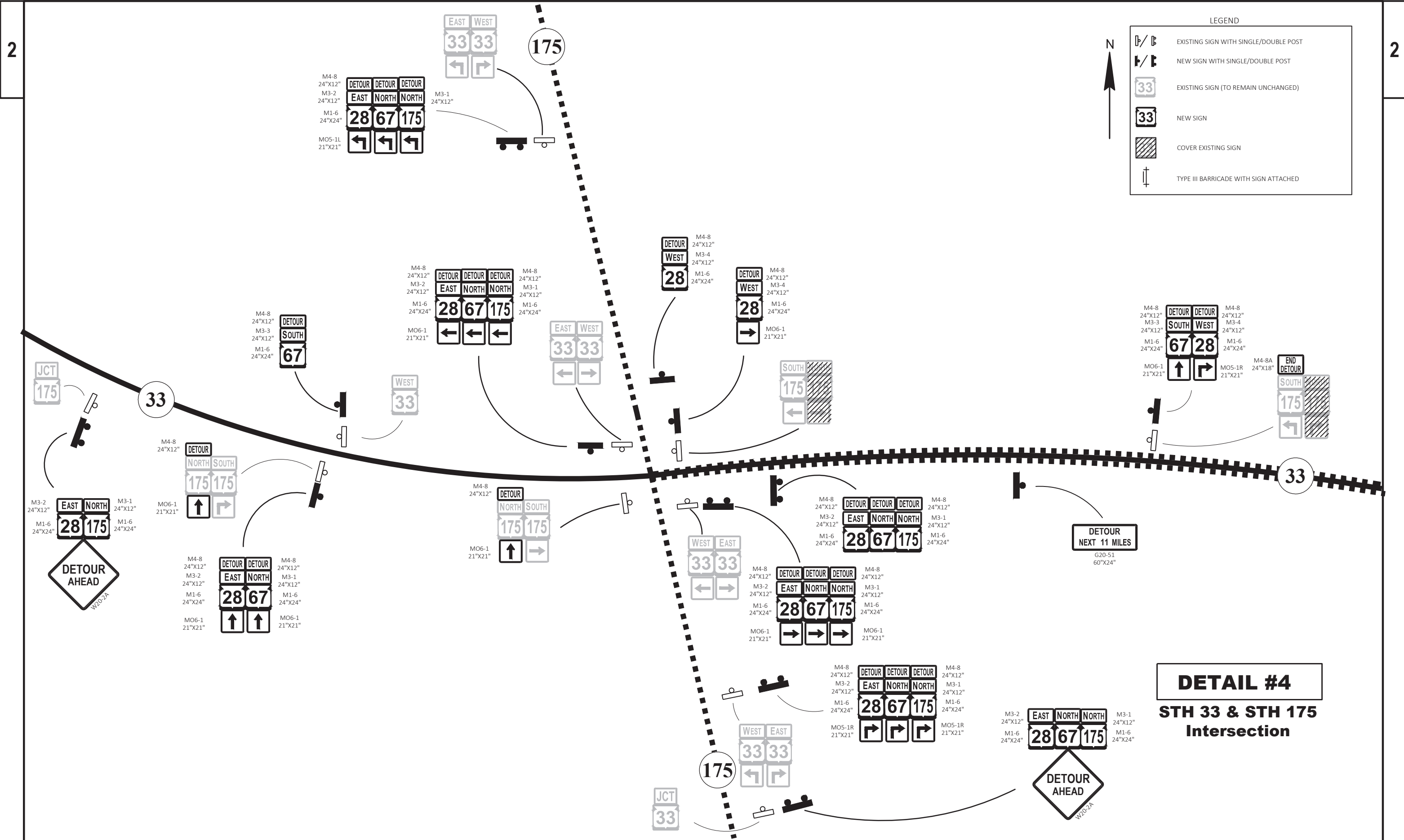
DETAIL #2
CTH AY & STH 33
INTERSECTION

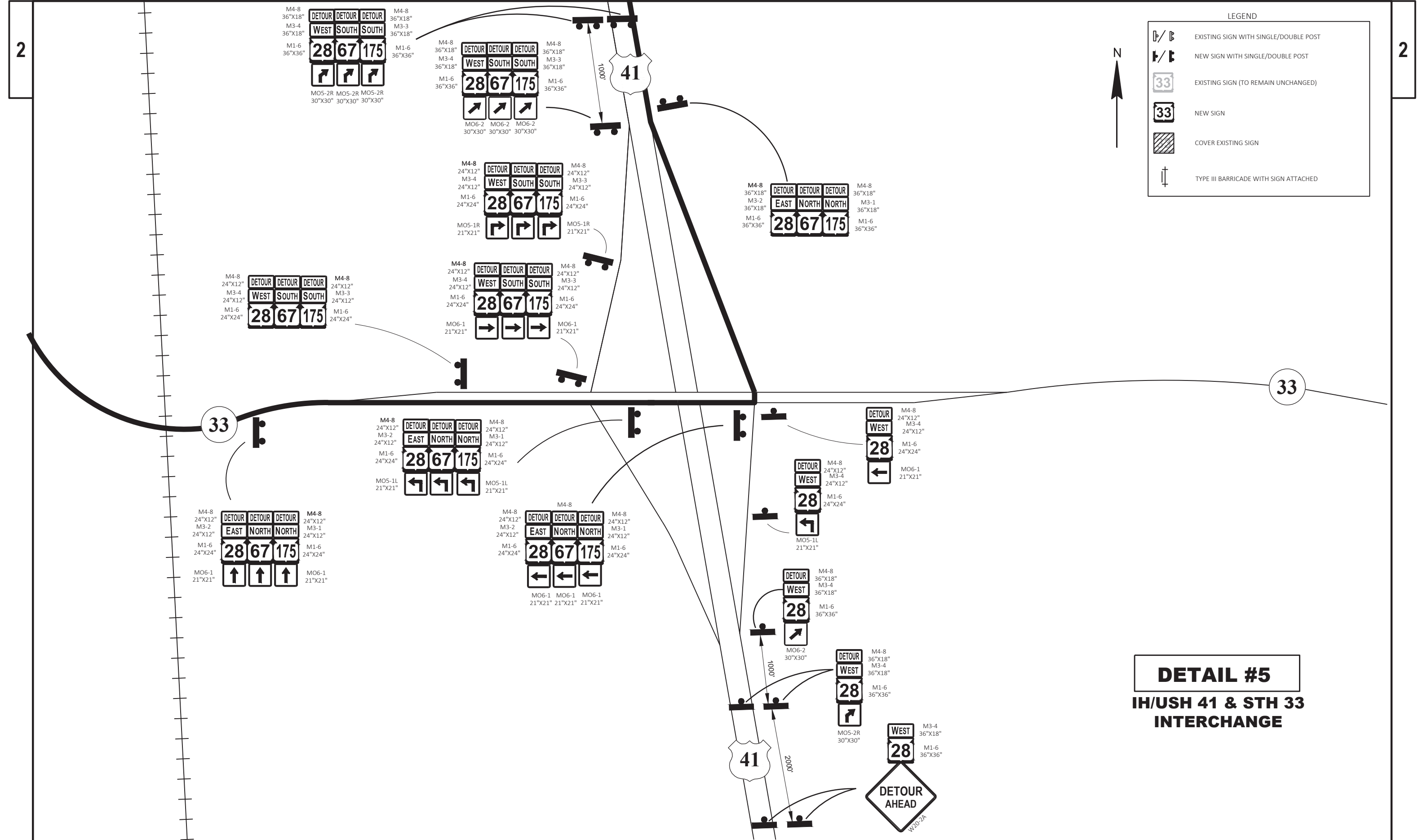


LEGEND

	EXISTING SIGN WITH SINGLE/DOUBLE POST
	NEW SIGN WITH SINGLE/DOUBLE POST
	EXISTING SIGN (TO REMAIN UNCHANGED)
	NEW SIGN
	COVER EXISTING SIGN
	TYPE III BARRICADE WITH SIGN ATTACHED

DETAIL #3
CTH P & STH 33
ROUNDAABOUT





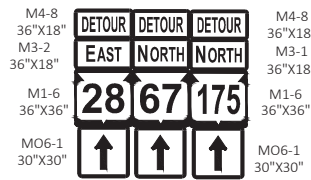
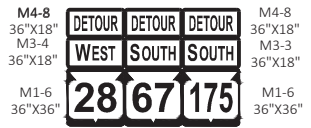
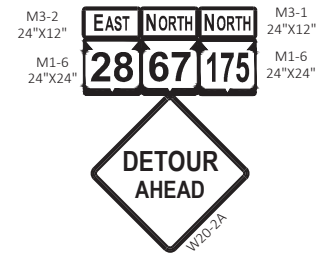
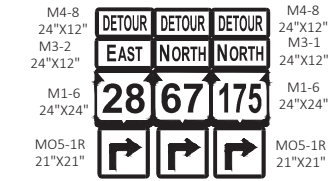
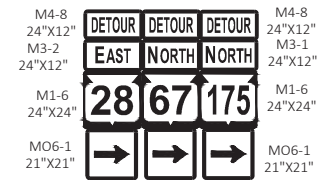
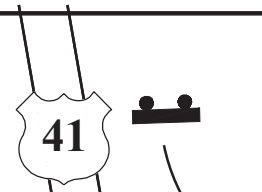
LEGEND

- EXISTING SIGN WITH SINGLE/DOUBLE POST
- NEW SIGN WITH SINGLE/DOUBLE POST
- EXISTING SIGN (TO REMAIN UNCHANGED)
- NEW SIGN
- COVER EXISTING SIGN
- TYPE III BARRICADE WITH SIGN ATTACHED

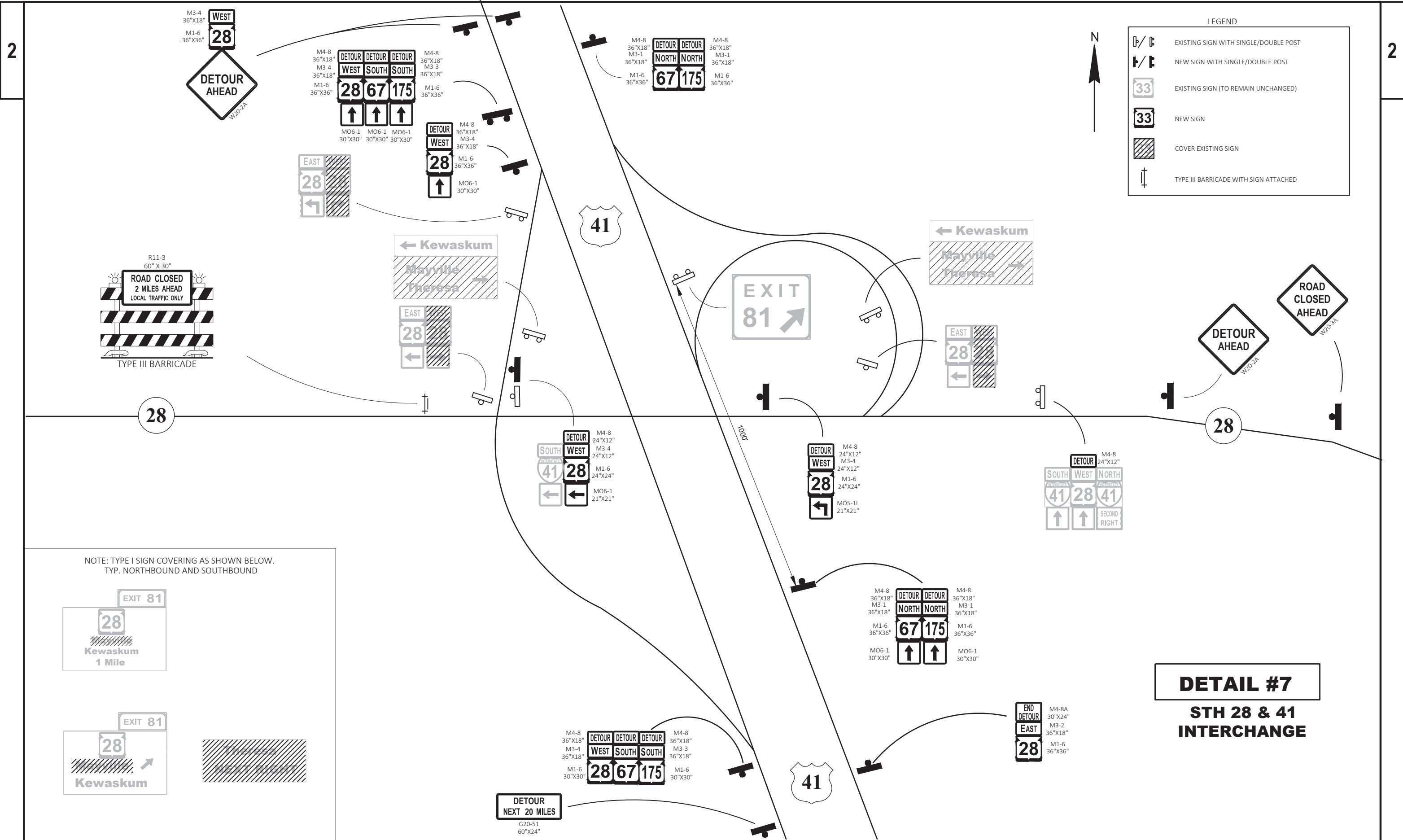
DETAIL #5
IH/USH 41 & STH 33
INTERCHANGE

LEGEND

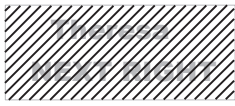
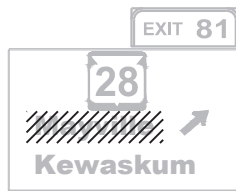
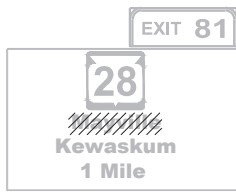
	EXISTING SIGN WITH SINGLE/DOUBLE POST
	NEW SIGN WITH SINGLE/DOUBLE POST
	EXISTING SIGN (TO REMAIN UNCHANGED)
	NEW SIGN
	COVER EXISTING SIGN
	TYPE III BARRICADE WITH SIGN ATTACHED



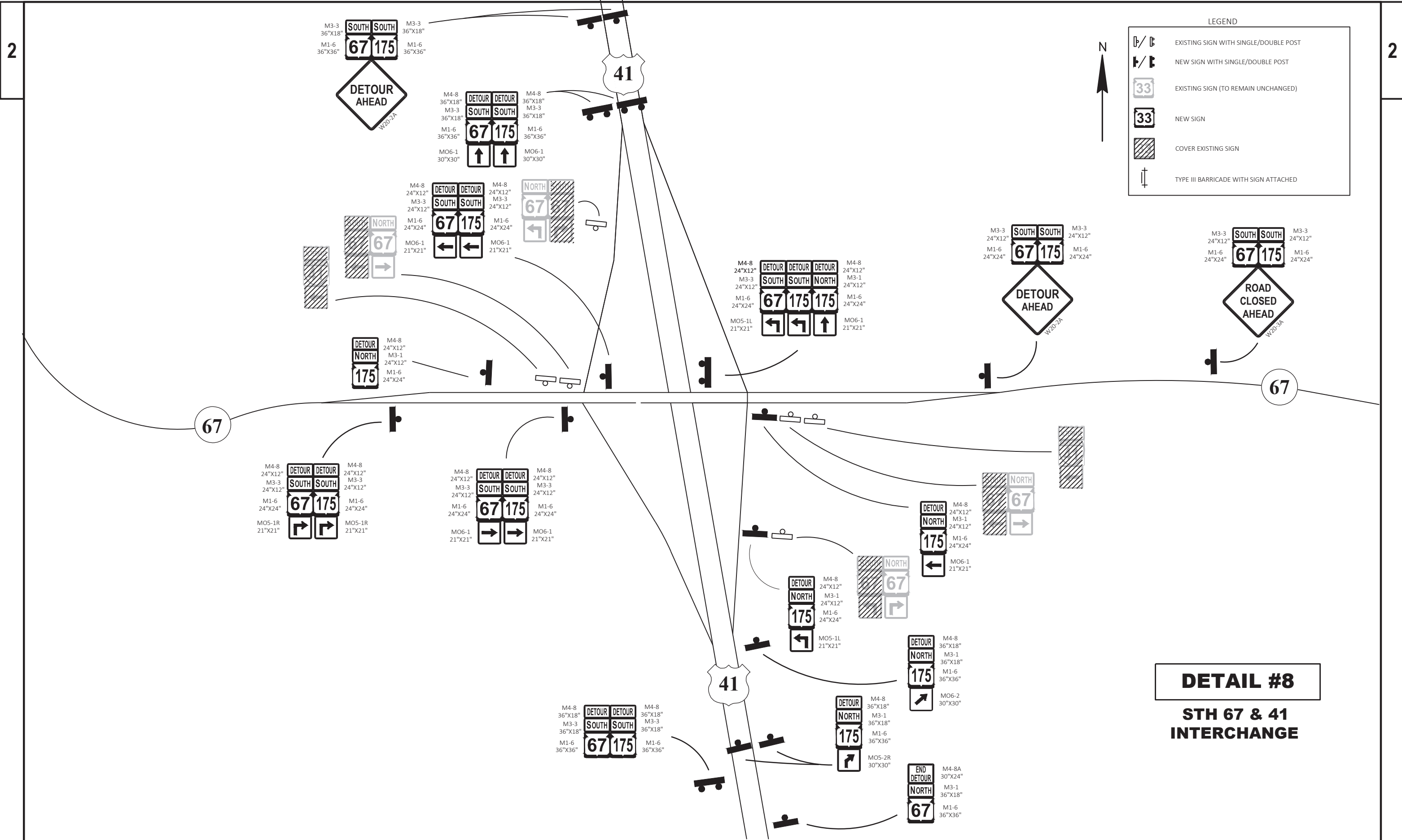
DETAIL #6
CTH D & 41
INTERSTATE



NOTE: TYPE I SIGN COVERING AS SHOWN BELOW.
TYP. NORTHBOUND AND SOUTHBOUND



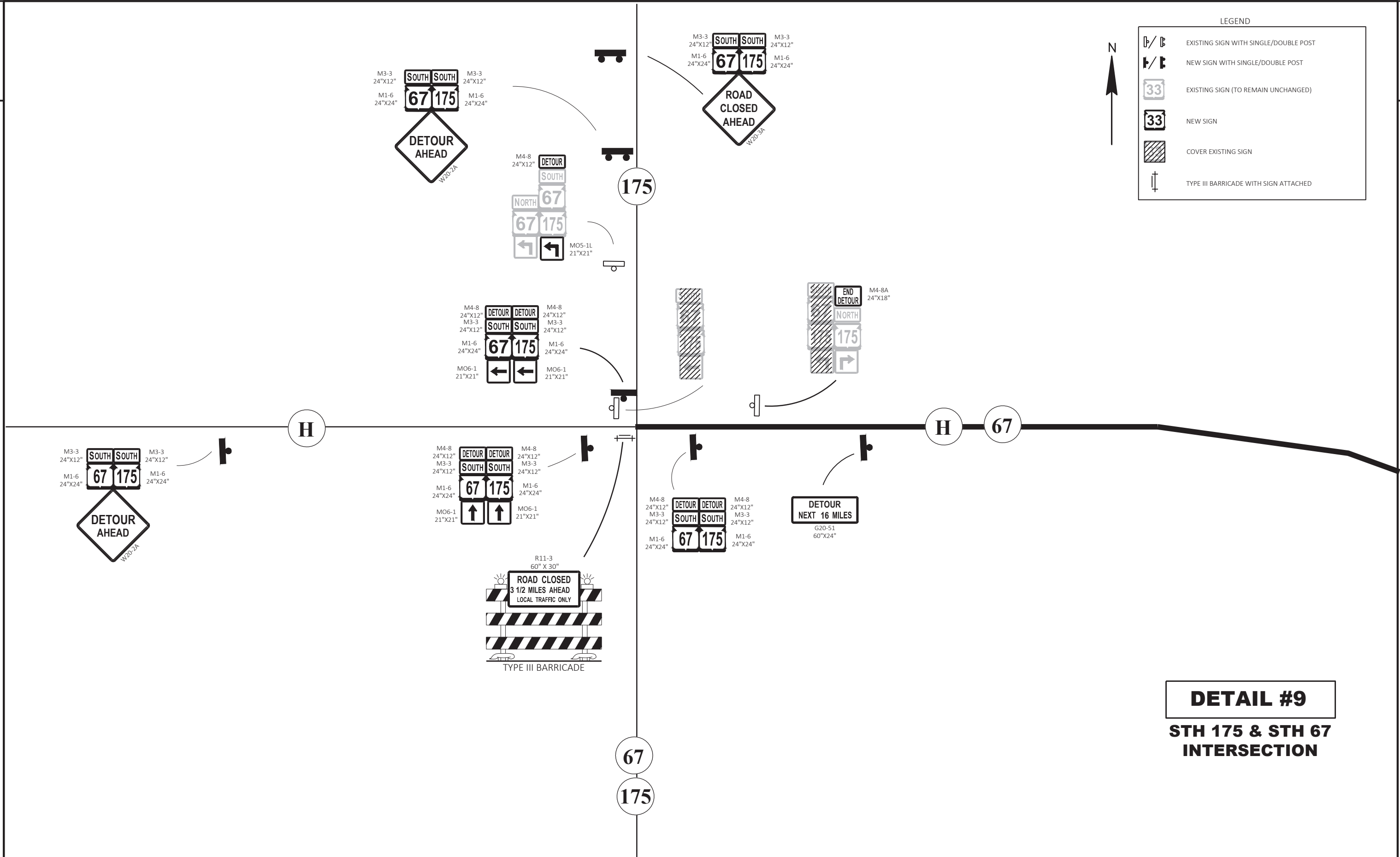
DETAIL #7
STH 28 & 41 INTERCHANGE



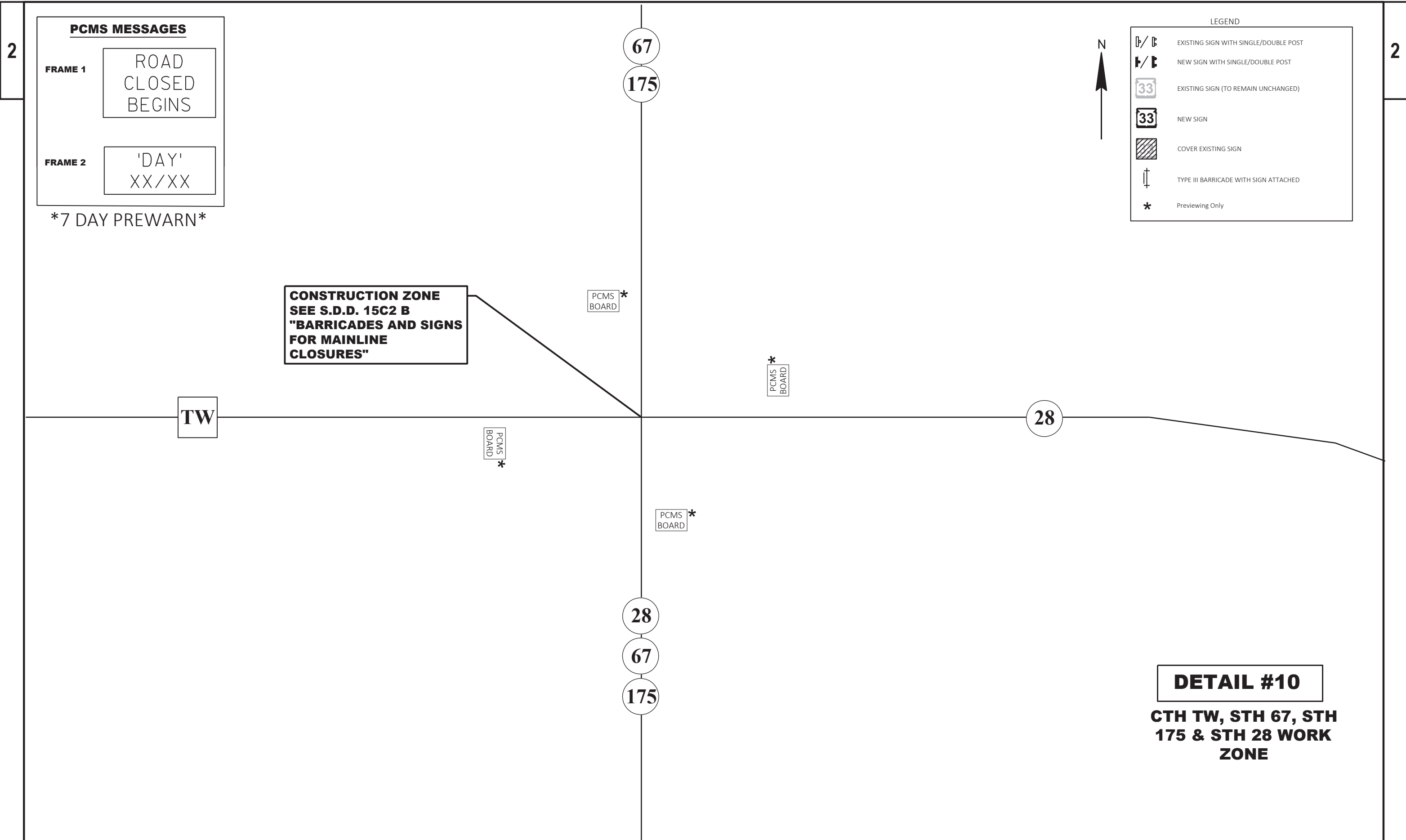
DETAIL #8
STH 67 & 41
INTERCHANGE

LEGEND

- EXISTING SIGN WITH SINGLE/DOUBLE POST
- NEW SIGN WITH SINGLE/DOUBLE POST
- EXISTING SIGN (TO REMAIN UNCHANGED)
- NEW SIGN
- COVER EXISTING SIGN
- TYPE III BARRICADE WITH SIGN ATTACHED

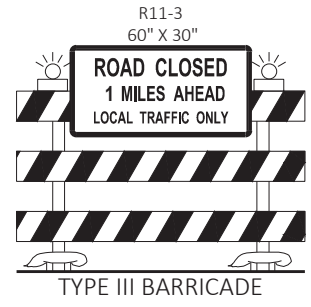
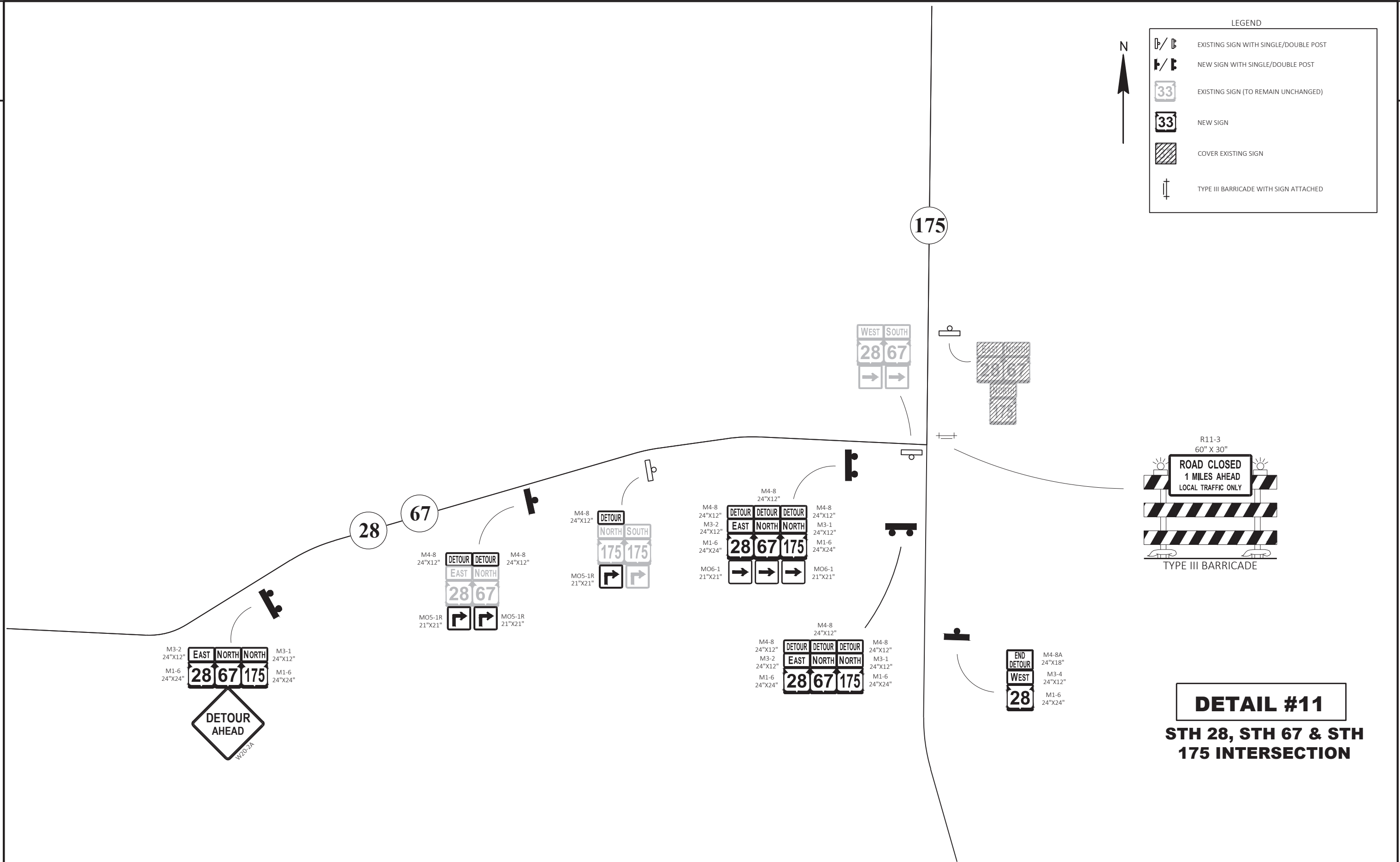


DETAIL #9
STH 175 & STH 67
INTERSECTION



LEGEND

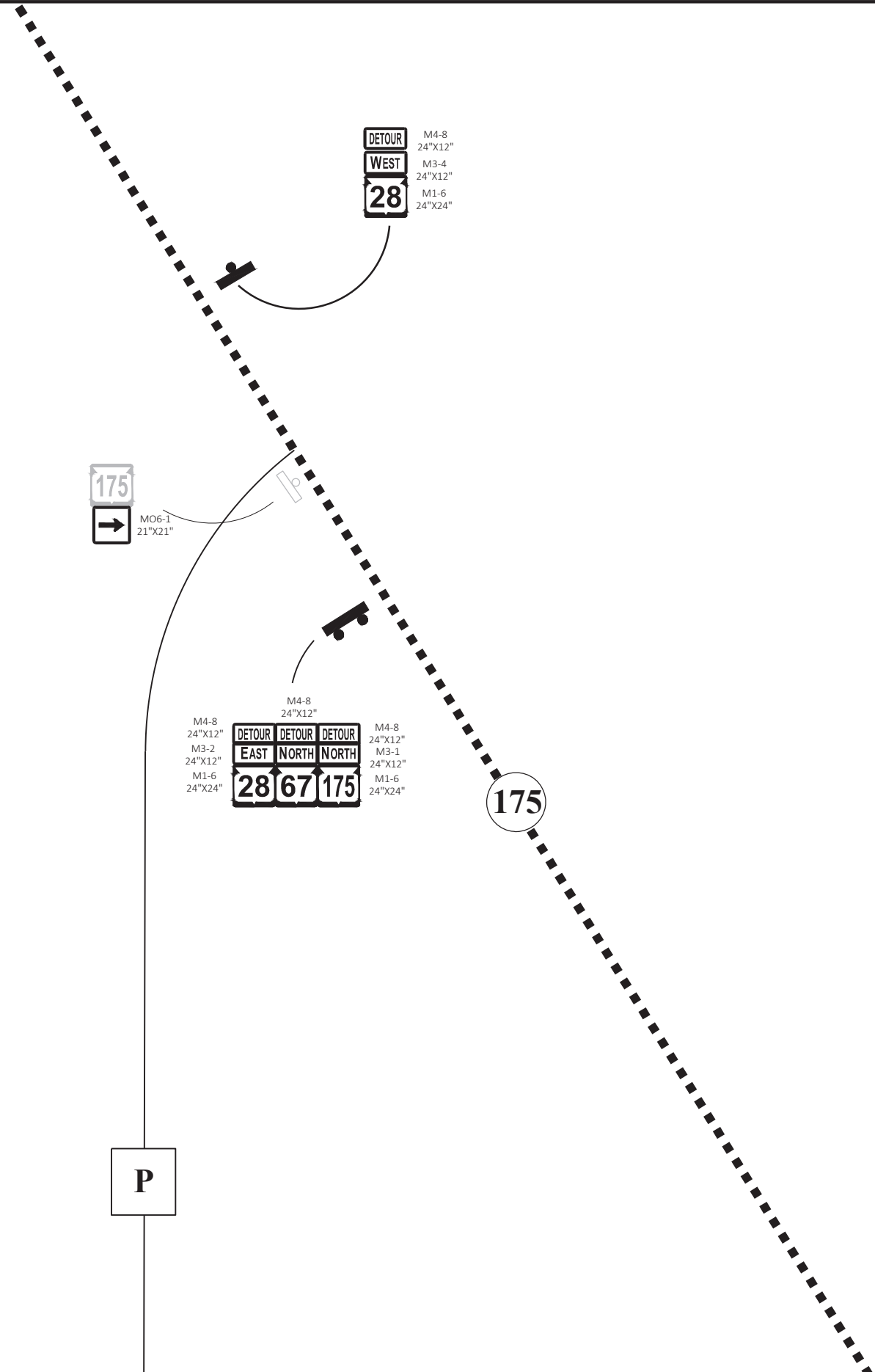
- EXISTING SIGN WITH SINGLE/DOUBLE POST
- NEW SIGN WITH SINGLE/DOUBLE POST
- EXISTING SIGN (TO REMAIN UNCHANGED)
- NEW SIGN
- COVER EXISTING SIGN
- TYPE III BARRICADE WITH SIGN ATTACHED



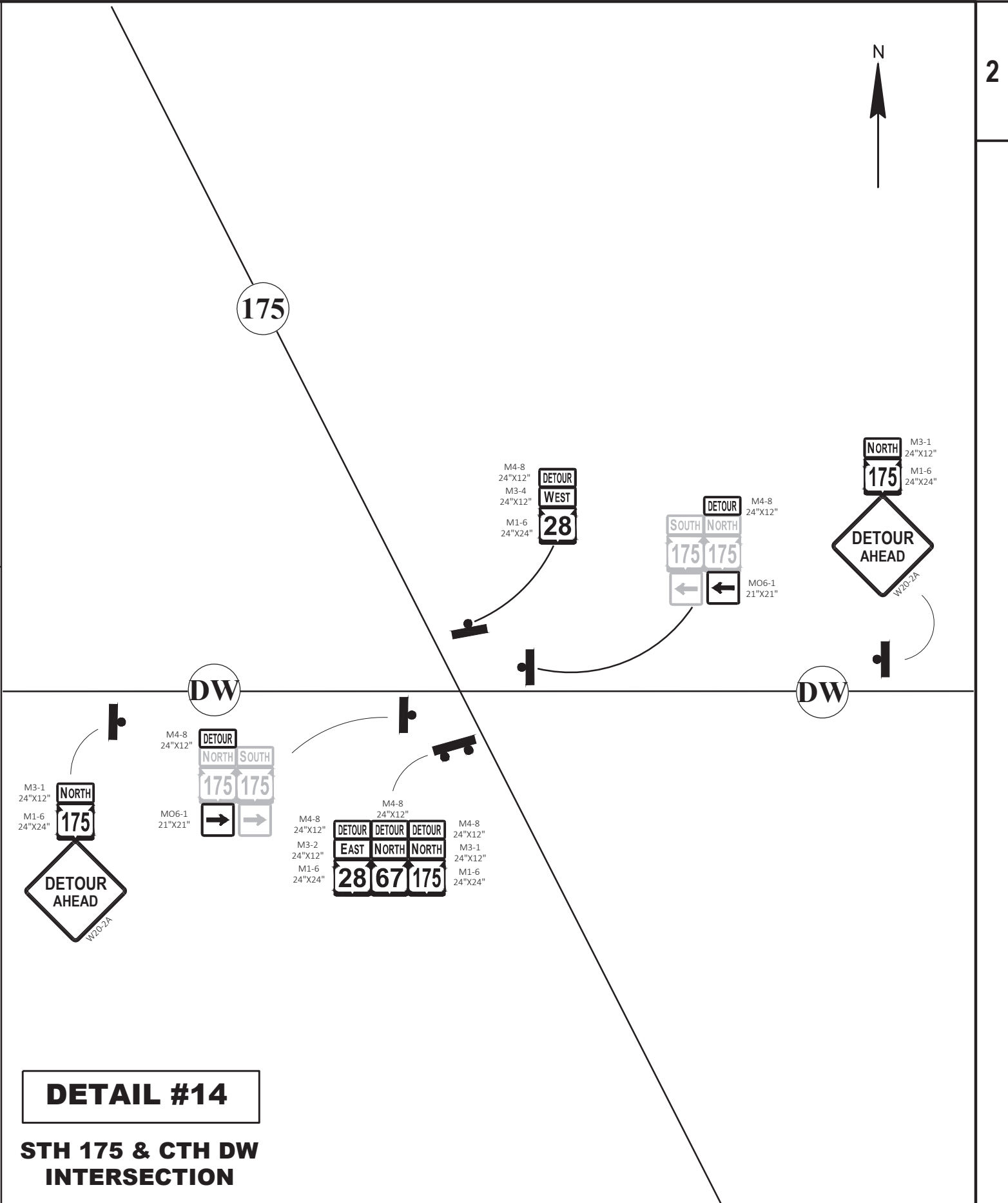
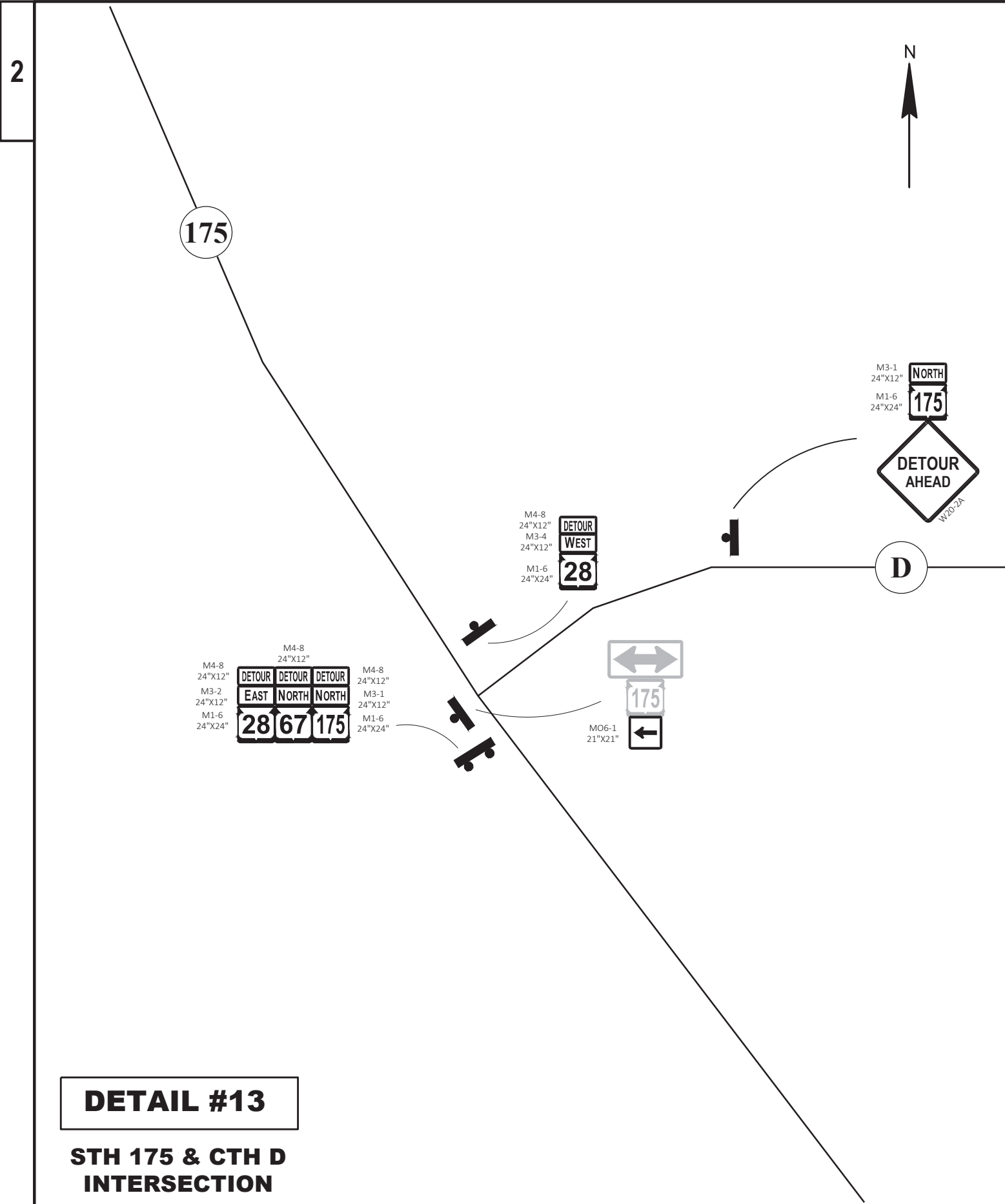
DETAIL #11
STH 28, STH 67 & STH 175 INTERSECTION

LEGEND

	EXISTING SIGN WITH SINGLE/DOUBLE POST
	NEW SIGN WITH SINGLE/DOUBLE POST
	EXISTING SIGN (TO REMAIN UNCHANGED)
	NEW SIGN
	COVER EXISTING SIGN
	TYPE III BARRICADE WITH SIGN ATTACHED



DETAIL #12
CTH P & STH 175
INTERSECTION



PROJECT NO: 4060-05-72

HWY: STH 28

COUNTY: DODGE

DETOUR ROUTE - DETAIL 13 & 14

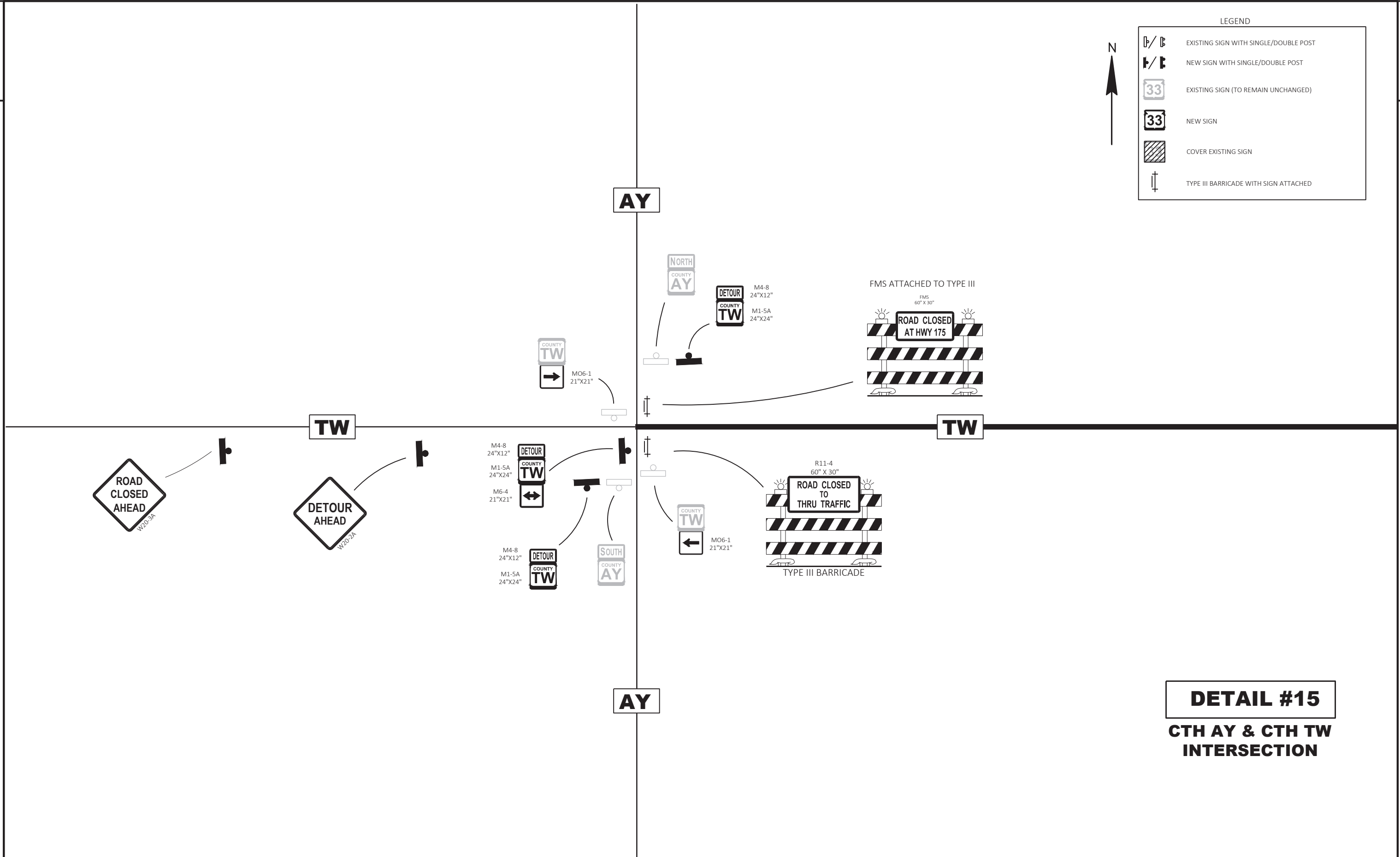
SHEET

51

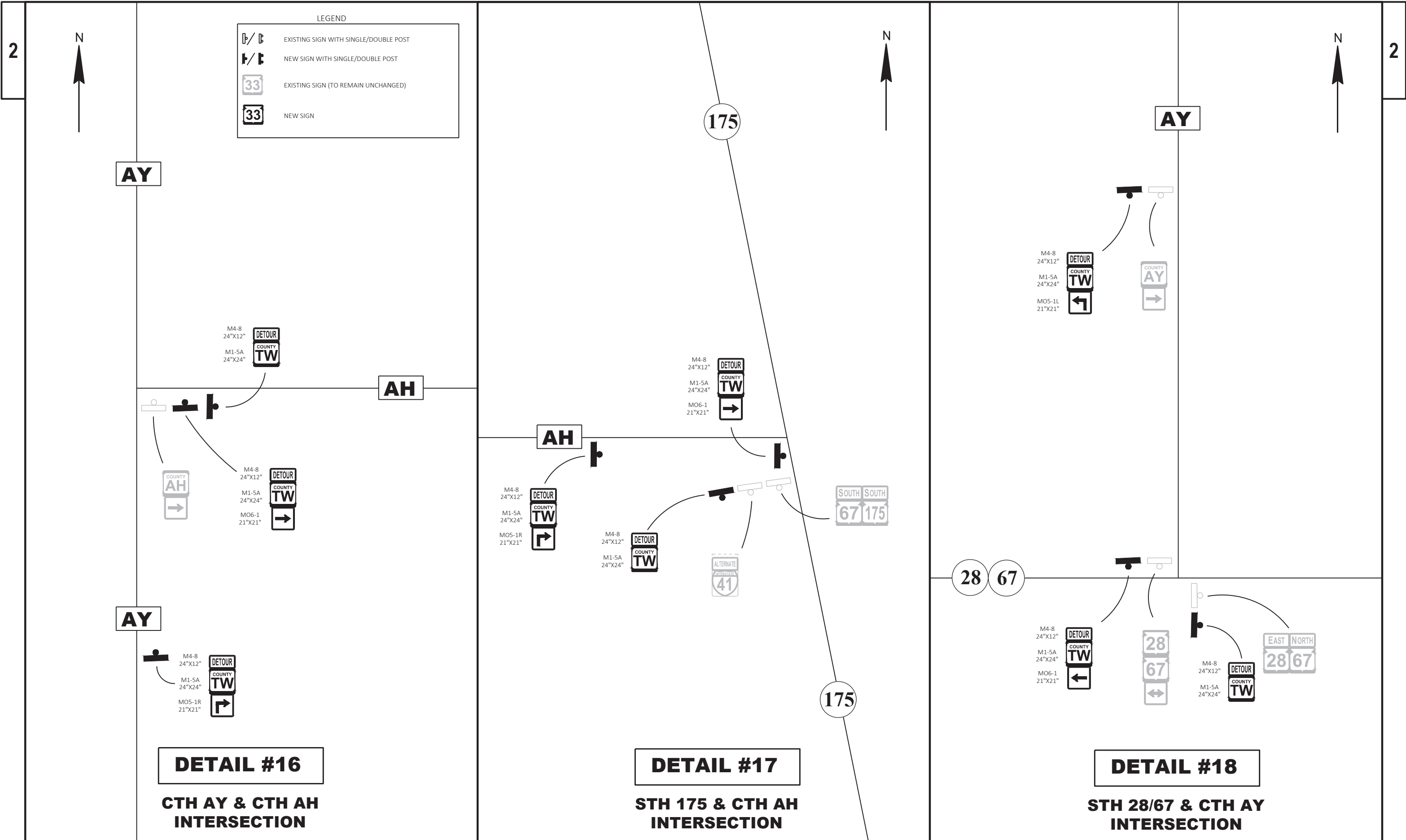
E

LEGEND

	EXISTING SIGN WITH SINGLE/DOUBLE POST
	NEW SIGN WITH SINGLE/DOUBLE POST
	EXISTING SIGN (TO REMAIN UNCHANGED)
	NEW SIGN
	COVER EXISTING SIGN
	TYPE III BARRICADE WITH SIGN ATTACHED



DETAIL #15
CTH AY & CTH TW
INTERSECTION





NW-1	NW-2
PI STA = 33+93.81NW	PI STA = 31+84.24NW
Y = 752517.040	Y = 752474.715
X = 950805.974	X = 951029.253
DELTA = 14°27'10"	DELTA = 70°51'48"
D = 5°12'31"	D = 60°18'41"
T = 139.48'	T = 67.59'
L = 277.47'	L = 117.50'
R = 1100.00'	R = 95.00'
PC STA = 32+54.33NW	PC STA = 31+16.65NW
Y = 752491.063	Y = 752533.328
X = 950943.011	X = 951062.917
PT STA = 35+31.81NW	PT STA = 32+34.15NW
Y = 752507.992	Y = 752487.304
X = 950666.791	X = 950962.844
BK = N79°15'59.0"W	BK = S29°52'12.7"W
AH = S86°16'50.9"W	AH = N79°15'59.0"W

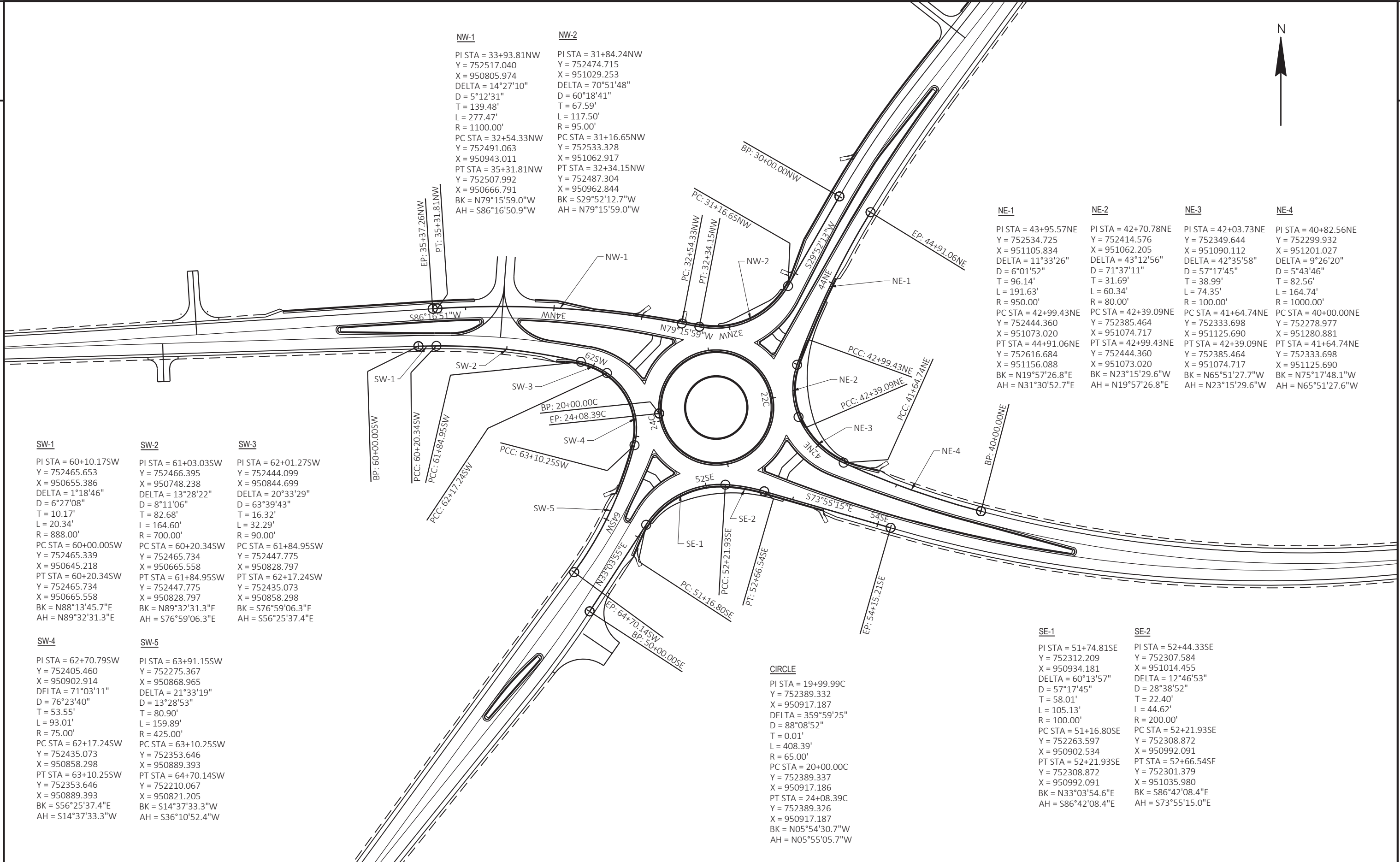
NE-1	NE-2	NE-3	NE-4
PI STA = 43+95.57NE	PI STA = 42+70.78NE	PI STA = 42+03.73NE	PI STA = 40+82.56NE
Y = 752534.725	Y = 752414.576	Y = 752349.644	Y = 752299.932
X = 951105.834	X = 951062.205	X = 951090.112	X = 951201.027
DELTA = 11°33'26"	DELTA = 43°12'56"	DELTA = 42°35'58"	DELTA = 9°26'20"
D = 6°01'52"	D = 71°37'11"	D = 57°17'45"	D = 5°43'46"
T = 96.14'	T = 31.69'	T = 38.99'	T = 82.56'
L = 191.63'	L = 60.34'	L = 74.35'	L = 164.74'
R = 950.00'	R = 80.00'	R = 100.00'	R = 1000.00'
PC STA = 42+99.43NE	PC STA = 42+39.09NE	PC STA = 41+64.74NE	PC STA = 40+00.00NE
Y = 752444.360	Y = 752385.464	Y = 752333.698	Y = 752278.977
X = 951073.020	X = 951074.717	X = 951125.690	X = 951280.881
PT STA = 44+91.06NE	PT STA = 42+99.43NE	PT STA = 42+39.09NE	PT STA = 41+64.74NE
Y = 752616.684	Y = 752444.360	Y = 752385.464	Y = 752333.698
X = 951156.088	X = 951073.020	X = 951074.717	X = 951125.690
BK = N19°57'26.8"E	BK = N23°15'29.6"W	BK = N65°51'27.7"W	BK = N75°17'48.1"W
AH = N31°30'52.7"E	AH = N19°57'26.8"E	AH = N23°15'29.6"W	AH = N65°51'27.6"W

SW-1	SW-2	SW-3
PI STA = 60+10.17SW	PI STA = 61+03.03SW	PI STA = 62+01.27SW
Y = 752465.653	Y = 752466.395	Y = 752444.099
X = 950655.386	X = 950748.238	X = 950844.699
DELTA = 1°18'46"	DELTA = 13°28'22"	DELTA = 20°33'29"
D = 6°27'08"	D = 8°11'06"	D = 63°39'43"
T = 10.17'	T = 82.68'	T = 16.32'
L = 20.34'	L = 164.60'	L = 32.29'
R = 888.00'	R = 700.00'	R = 90.00'
PC STA = 60+00.00SW	PC STA = 60+20.34SW	PC STA = 61+84.95SW
Y = 752465.339	Y = 752465.734	Y = 752447.775
X = 950645.218	X = 950665.558	X = 950828.797
PT STA = 60+20.34SW	PT STA = 61+84.95SW	PT STA = 62+17.24SW
Y = 752465.734	Y = 752447.775	Y = 752435.073
X = 950665.558	X = 950828.797	X = 950858.298
BK = N88°13'45.7"E	BK = N89°32'31.3"E	BK = S76°59'06.3"E
AH = N89°32'31.3"E	AH = S76°59'06.3"E	AH = S56°25'37.4"E

SW-4	SW-5
PI STA = 62+70.79SW	PI STA = 63+91.15SW
Y = 752405.460	Y = 752275.367
X = 950902.914	X = 950868.965
DELTA = 71°03'11"	DELTA = 21°33'19"
D = 76°23'40"	D = 13°28'53"
T = 53.55'	T = 80.90'
L = 93.01'	L = 159.89'
R = 75.00'	R = 425.00'
PC STA = 62+17.24SW	PC STA = 63+10.25SW
Y = 752435.073	Y = 752353.646
X = 950858.298	X = 950889.393
PT STA = 63+10.25SW	PT STA = 64+70.14SW
Y = 752353.646	Y = 752210.067
X = 950889.393	X = 950821.205
BK = S56°25'37.4"E	BK = S14°37'33.3"W
AH = S14°37'33.3"W	AH = S36°10'52.4"W

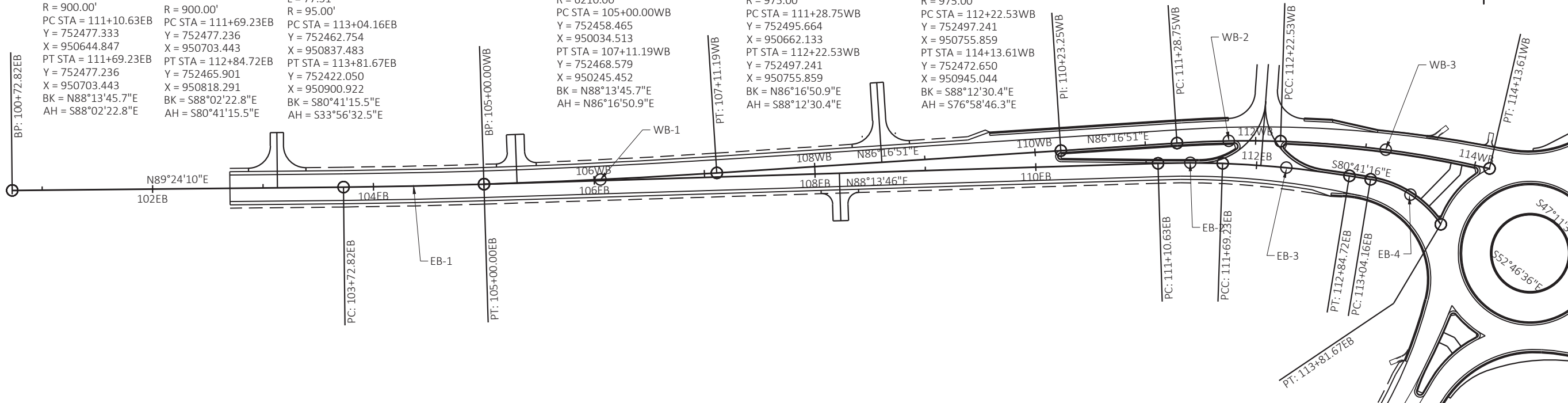
CIRCLE

PI STA = 19+99.99C
Y = 752389.332
X = 950917.187
DELTA = 359°59'25"
D = 88°08'52"
T = 0.01'
L = 408.39'
R = 65.00'
PC STA = 20+00.00C
Y = 752389.337
X = 950917.186
PT STA = 24+08.39C
Y = 752389.326
X = 950917.187
BK = N05°54'30.7"W
AH = N05°55'05.7"W



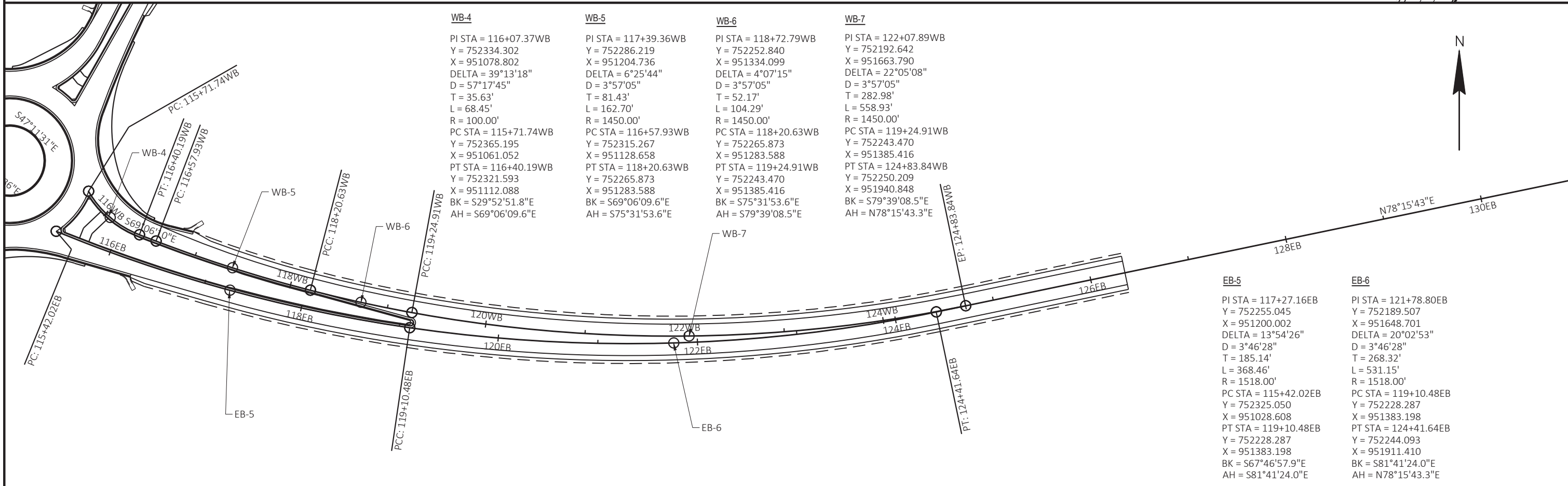
EB-1	EB-2	EB-3	EB-4
PI STA = 104+36.41EB Y = 752456.500 X = 949970.953 DELTA = 1°10'24" D = 0°55'21" T = 63.59' L = 127.17' R = 6210.00' PC STA = 103+72.82EB Y = 752455.838 X = 949907.367 PT STA = 105+00.00EB Y = 752458.465 X = 950034.512 BK = N89°24'09.8"E AH = N88°13'45.7"E	PI STA = 111+39.94EB Y = 752478.239 X = 950674.147 DELTA = 3°43'52" D = 6°21'58" T = 29.31' L = 58.61' R = 900.00' PC STA = 111+10.63EB Y = 752477.333 X = 950644.847 PT STA = 111+69.23EB Y = 752477.236 X = 950703.443 BK = N88°13'45.7"E AH = S88°02'22.8"E	PI STA = 112+27.05EB Y = 752475.258 X = 950761.231 DELTA = 7°21'07" D = 6°21'58" T = 57.82' L = 115.49' R = 900.00' PC STA = 111+69.23EB Y = 752477.236 X = 950703.443 PT STA = 112+84.72EB Y = 752465.901 X = 950818.291 BK = S88°02'22.8"E AH = S80°41'15.5"E	PI STA = 113+45.22EB Y = 752456.111 X = 950877.998 DELTA = 46°44'43" D = 60°18'41" T = 41.06' L = 77.51' R = 95.00' PC STA = 113+04.16EB Y = 752462.754 X = 950837.483 PT STA = 113+81.67EB Y = 752422.050 X = 950900.922 BK = S80°41'15.5"E AH = S33°56'32.5"E

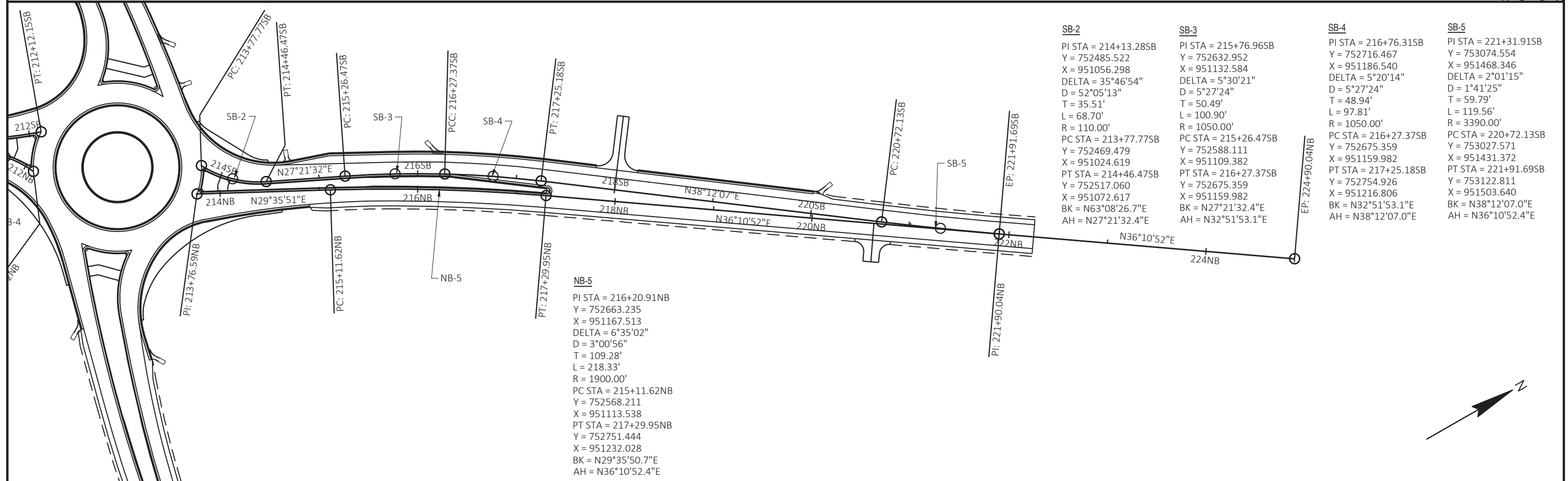
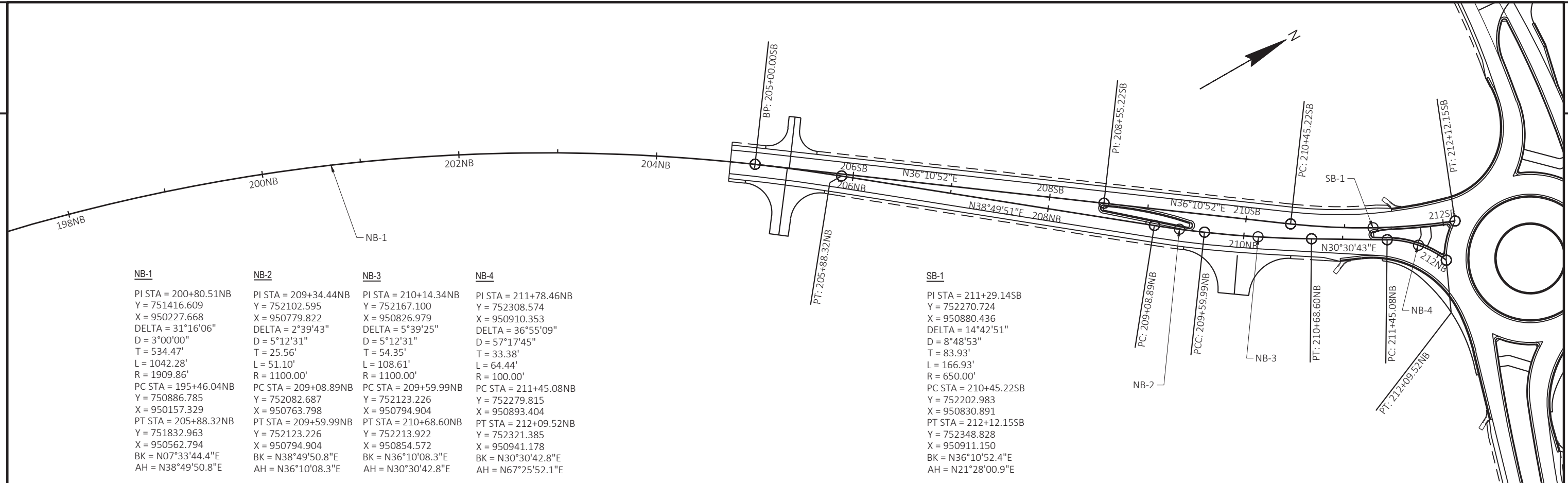
WB-1	WB-2	WB-3
PI STA = 106+05.61WB Y = 752461.728 X = 950140.069 DELTA = 1°56'55" D = 0°55'21" T = 105.61' L = 211.19' R = 6210.00' PC STA = 105+00.00WB Y = 752458.465 X = 950034.513 PT STA = 107+11.19WB Y = 752468.579 X = 950245.452 BK = N88°13'45.7"E AH = N86°16'50.9"E	PI STA = 111+75.68WB Y = 752498.708 X = 950708.958 DELTA = 5°30'39" D = 5°52'35" T = 46.92' L = 93.78' R = 975.00' PC STA = 111+28.75WB Y = 752495.664 X = 950662.133 PT STA = 112+22.53WB Y = 752497.241 X = 950755.859 BK = N86°16'50.9"E AH = S88°12'30.4"E	PI STA = 113+18.38WB Y = 752494.245 X = 950851.660 DELTA = 11°13'44" D = 5°52'35" T = 95.85' L = 191.08' R = 975.00' PC STA = 112+22.53WB Y = 752497.241 X = 950755.859 PT STA = 114+13.61WB Y = 752472.650 X = 950945.044 BK = S88°12'30.4"E AH = S76°58'46.3"E

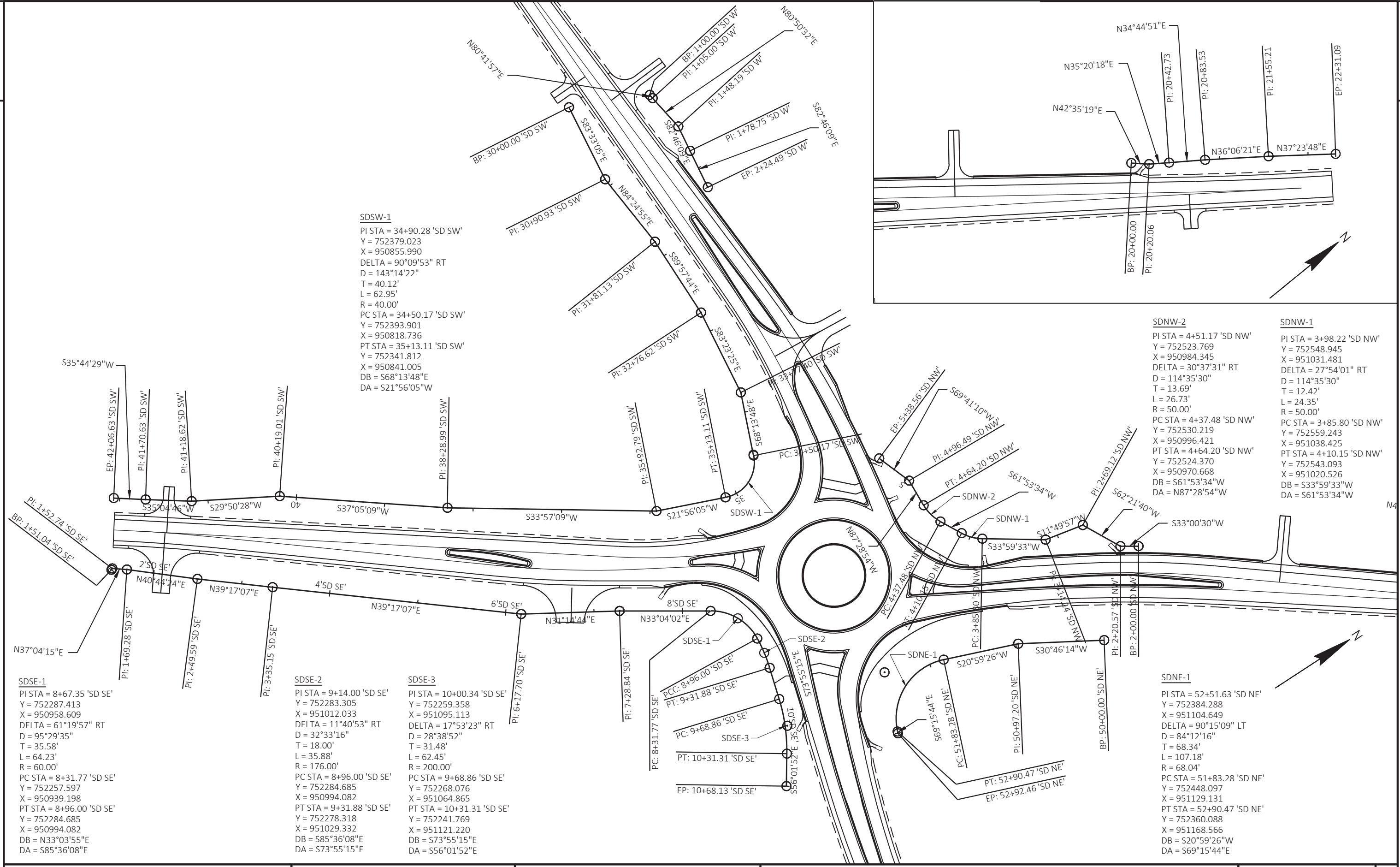


WB-4	WB-5	WB-6	WB-7
PI STA = 116+07.37WB Y = 752334.302 X = 951078.802 DELTA = 39°13'18" D = 57°17'45" T = 35.63' L = 68.45' R = 100.00' PC STA = 115+71.74WB Y = 752365.195 X = 951061.052 PT STA = 116+40.19WB Y = 752321.593 X = 951112.088 BK = S29°52'51.8"E AH = S69°06'09.6"E	PI STA = 117+39.36WB Y = 752286.219 X = 951204.736 DELTA = 6°25'44" D = 3°57'05" T = 81.43' L = 162.70' R = 1450.00' PC STA = 116+57.93WB Y = 752315.267 X = 951128.658 PT STA = 118+20.63WB Y = 752265.873 X = 951283.588 BK = S69°06'09.6"E AH = S75°31'53.6"E	PI STA = 118+72.79WB Y = 752252.840 X = 951334.099 DELTA = 4°07'15" D = 3°57'05" T = 52.17' L = 104.29' R = 1450.00' PC STA = 118+20.63WB Y = 752265.873 X = 951283.588 PT STA = 119+24.91WB Y = 752243.470 X = 951385.416 BK = S75°31'53.6"E AH = S79°39'08.5"E	PI STA = 122+07.89WB Y = 752192.642 X = 951663.790 DELTA = 22°05'08" D = 3°57'05" T = 282.98' L = 558.93' R = 1450.00' PC STA = 119+24.91WB Y = 752243.470 X = 951385.416 PT STA = 124+83.84WB Y = 752250.209 X = 951940.848 BK = S79°39'08.5"E AH = N78°15'43.3"E

EB-5	EB-6
PI STA = 117+27.16EB Y = 752255.045 X = 951200.002 DELTA = 13°54'26" D = 3°46'28" T = 185.14' L = 368.46' R = 1518.00' PC STA = 115+42.02EB Y = 752325.050 X = 951028.608 PT STA = 119+10.48EB Y = 752228.287 X = 951383.198 BK = S67°46'57.9"E AH = S81°41'24.0"E	PI STA = 121+78.80EB Y = 752189.507 X = 951648.701 DELTA = 20°02'53" D = 3°46'28" T = 268.32' L = 531.15' R = 1518.00' PC STA = 119+10.48EB Y = 752228.287 X = 951383.198 PT STA = 124+41.64EB Y = 752244.093 X = 951911.410 BK = S81°41'24.0"E AH = N78°15'43.3"E







SDSW-1
 PI STA = 34+90.28 'SD SW'
 Y = 752379.023
 X = 950855.990
 DELTA = 90°09'53" RT
 D = 143°14'22"
 T = 40.12'
 L = 62.95'
 R = 40.00'
 PC STA = 34+50.17 'SD SW'
 Y = 752393.901
 X = 950818.736
 PT STA = 35+13.11 'SD SW'
 Y = 752341.812
 X = 950841.005
 DB = S68°13'48"E
 DA = S21°56'05"W

SDSE-1
 PI STA = 8+67.35 'SD SE'
 Y = 752287.413
 X = 950958.609
 DELTA = 61°19'57" RT
 D = 95°29'35"
 T = 35.58'
 L = 64.23'
 R = 60.00'
 PC STA = 8+31.77 'SD SE'
 Y = 752257.597
 X = 950939.198
 PT STA = 8+96.00 'SD SE'
 Y = 752284.685
 X = 950994.082
 DB = N33°03'55"E
 DA = S85°36'08"E

SDSE-2
 PI STA = 9+14.00 'SD SE'
 Y = 752283.305
 X = 951012.033
 DELTA = 11°40'53" RT
 D = 32°33'16"
 T = 18.00'
 L = 35.88'
 R = 176.00'
 PC STA = 8+96.00 'SD SE'
 Y = 752284.685
 X = 950994.082
 PT STA = 9+31.88 'SD SE'
 Y = 752278.318
 X = 951029.332
 DB = S85°36'08"E
 DA = S73°55'15"E

SDSE-3
 PI STA = 10+00.34 'SD SE'
 Y = 752259.358
 X = 951095.113
 DELTA = 17°53'23" RT
 D = 28°38'52"
 T = 31.48'
 L = 62.45'
 R = 200.00'
 PC STA = 9+68.86 'SD SE'
 Y = 752268.076
 X = 951064.865
 PT STA = 10+31.31 'SD SE'
 Y = 752241.769
 X = 951121.220
 DB = S73°55'15"E
 DA = S56°01'52"E

SDNE-1
 PI STA = 52+51.63 'SD NE'
 Y = 752384.288
 X = 951104.649
 DELTA = 90°15'09" LT
 D = 84°12'16"
 T = 68.34'
 L = 107.18'
 R = 68.04'
 PC STA = 51+83.28 'SD NE'
 Y = 752448.097
 X = 951129.131
 PT STA = 52+90.47 'SD NE'
 Y = 752360.088
 X = 951168.566
 DB = S20°59'26"W
 DA = S69°15'44"E

SDNW-2
 PI STA = 4+51.17 'SD NW'
 Y = 752523.769
 X = 950984.345
 DELTA = 30°37'31" RT
 D = 114°35'30"
 T = 13.69'
 L = 26.73'
 R = 50.00'
 PC STA = 4+37.48 'SD NW'
 Y = 752530.219
 X = 950996.421
 PT STA = 4+64.20 'SD NW'
 Y = 752524.370
 X = 950970.668
 DB = S61°53'34"W
 DA = N87°28'54"W

SDNW-1
 PI STA = 3+98.22 'SD NW'
 Y = 752548.945
 X = 951031.481
 DELTA = 27°54'01" RT
 D = 114°35'30"
 T = 12.42'
 L = 24.35'
 R = 50.00'
 PC STA = 3+85.80 'SD NW'
 Y = 752559.243
 X = 951038.425
 PT STA = 4+10.15 'SD NW'
 Y = 752543.093
 X = 951020.526
 DB = S33°59'33"W
 DA = S61°53'34"W

Estimate Of Quantities

4060-05-72

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	5.000	5.000
0004	201.0205	Grubbing	STA	5.000	5.000
0006	203.0100	Removing Small Pipe Culverts	EACH	11.000	11.000
0008	204.0150	Removing Curb & Gutter	LF	775.000	775.000
0010	205.0100	Excavation Common	CY	24,705.000	24,705.000
0012	213.0100	Finishing Roadway (project) 01. 4060-05-72	EACH	1.000	1.000
0014	305.0110	Base Aggregate Dense 3/4-Inch	TON	875.000	875.000
0016	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	14,775.000	14,775.000
0018	312.0110	Select Crushed Material	TON	14,550.000	14,550.000
0020	405.0100	Coloring Concrete WisDOT Red	CY	394.000	394.000
0022	416.0512	Concrete Truck Apron 12-Inch	SY	1,176.000	1,176.000
0024	455.0605	Tack Coat	GAL	836.000	836.000
0026	460.2000	Incentive Density HMA Pavement	DOL	3,770.000	3,770.000
0028	460.6223	HMA Pavement 3 MT 58-28 S	TON	3,274.000	3,274.000
0030	460.6424	HMA Pavement 4 MT 58-28 H	TON	2,339.000	2,339.000
0032	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	42.000	42.000
0034	465.0315	Asphaltic Flumes	SY	153.000	153.000
0036	521.1018	Apron Endwalls for Culvert Pipe Steel 18-Inch	EACH	10.000	10.000
0038	521.3118	Culvert Pipe Corrugated Steel 18-Inch	LF	255.000	255.000
0040	522.0424	Culvert Pipe Reinforced Concrete Class IV 24-Inch	LF	134.000	134.000
0042	522.0430	Culvert Pipe Reinforced Concrete Class IV 30-Inch	LF	91.000	91.000
0044	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	1.000	1.000
0046	522.1015	Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	EACH	3.000	3.000
0048	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	6.000	6.000
0050	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	2.000	2.000
0052	601.0405	Concrete Curb & Gutter 18-Inch Type A	LF	220.000	220.000
0054	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	1,498.000	1,498.000
0056	601.0553	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type D	LF	2,711.000	2,711.000
0058	601.0582	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type T	LF	397.000	397.000
0060	601.0600	Concrete Curb Pedestrian	LF	225.000	225.000
0062	602.0405	Concrete Sidewalk 4-Inch	SF	16,180.000	16,180.000
0064	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	160.000	160.000
0066	606.0200	Riprap Medium	CY	36.000	36.000
0068	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	86.000	86.000
0070	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	164.000	164.000
0072	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	165.000	165.000
0074	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	63.000	63.000
0076	611.0624	Inlet Covers Type H	EACH	2.000	2.000
0078	611.0627	Inlet Covers Type HM	EACH	2.000	2.000
0080	611.0652	Inlet Covers Type T	EACH	5.000	5.000
0082	611.1004	Catch Basins 4-FT Diameter	EACH	1.000	1.000
0084	611.3225	Inlets 2x2.5-FT	EACH	4.000	4.000
0086	611.3230	Inlets 2x3-FT	EACH	4.000	4.000
0088	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	964.000	964.000
0090	618.0100	Maintenance And Repair of Haul Roads (project) 01. 4060-05-72	EACH	1.000	1.000
0092	619.1000	Mobilization	EACH	1.000	1.000
0094	620.0300	Concrete Median Sloped Nose	SF	452.000	452.000
0096	624.0100	Water	MGAL	221.000	221.000
0098	625.0500	Salvaged Topsoil	SY	31,356.000	31,356.000

Estimate Of Quantities

4060-05-72

Line	Item	Item Description	Unit	Total	Qty
0100	628.1504	Silt Fence	LF	4,495.000	4,495.000
0102	628.1520	Silt Fence Maintenance	LF	4,495.000	4,495.000
0104	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0106	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0108	628.2004	Erosion Mat Class I Type B	SY	27,595.000	27,595.000
0110	628.7015	Inlet Protection Type C	EACH	9.000	9.000
0112	628.7504	Temporary Ditch Checks	LF	820.000	820.000
0114	628.7555	Culvert Pipe Checks	EACH	37.000	37.000
0116	628.7570	Rock Bags	EACH	35.000	35.000
0118	629.0210	Fertilizer Type B	CWT	20.000	20.000
0120	630.0140	Seeding Mixture No. 40	LB	569.000	569.000
0122	630.0200	Seeding Temporary	LB	286.000	286.000
0124	630.0500	Seed Water	MGAL	681.000	681.000
0126	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	23.000	23.000
0128	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	18.000	18.000
0130	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	14.000	14.000
0132	634.0620	Posts Wood 4x6-Inch X 20-FT	EACH	13.000	13.000
0134	634.0816	Posts Tubular Steel 2x2-Inch X 16-FT	EACH	7.000	7.000
0136	637.2210	Signs Type II Reflective H	SF	660.900	660.900
0138	637.2230	Signs Type II Reflective F	SF	82.300	82.300
0140	638.2602	Removing Signs Type II	EACH	41.000	41.000
0142	638.3000	Removing Small Sign Supports	EACH	53.000	53.000
0144	642.5001	Field Office Type B	EACH	1.000	1.000
0146	643.0300	Traffic Control Drums	DAY	5,140.000	5,140.000
0148	643.0420	Traffic Control Barricades Type III	DAY	2,800.000	2,800.000
0150	643.0705	Traffic Control Warning Lights Type A	DAY	5,600.000	5,600.000
0152	643.0715	Traffic Control Warning Lights Type C	DAY	2,000.000	2,000.000
0154	643.0900	Traffic Control Signs	DAY	67,400.000	67,400.000
0156	643.0910	Traffic Control Covering Signs Type I	EACH	6.000	6.000
0158	643.0920	Traffic Control Covering Signs Type II	EACH	17.000	17.000
0160	643.1000	Traffic Control Signs Fixed Message	SF	37.500	37.500
0162	643.1050	Traffic Control Signs PCMS	DAY	28.000	28.000
0164	643.5000	Traffic Control	EACH	1.000	1.000
0166	645.0120	Geotextile Type HR	SY	68.000	68.000
0168	645.0220	Geogrid Type SR	SY	24,248.000	24,248.000
0170	646.1020	Marking Line Epoxy 4-Inch	LF	18,238.000	18,238.000
0172	646.3020	Marking Line Epoxy 8-Inch	LF	314.000	314.000
0174	646.6320	Marking Dotted Extension Epoxy 18-Inch	LF	94.000	94.000
0176	646.7120	Marking Diagonal Epoxy 12-Inch	LF	717.000	717.000
0178	646.8120	Marking Curb Epoxy	LF	692.000	692.000
0180	646.8220	Marking Island Nose Epoxy	EACH	8.000	8.000
0182	650.4000	Construction Staking Storm Sewer	EACH	15.000	15.000
0184	650.4500	Construction Staking Subgrade	LF	7,520.000	7,520.000
0186	650.5000	Construction Staking Base	LF	7,520.000	7,520.000
0188	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	4,826.000	4,826.000
0190	650.6000	Construction Staking Pipe Culverts	EACH	8.000	8.000
0192	650.8500	Construction Staking Electrical Installations (project) 01. 4060-05-72	LS	1.000	1.000
0194	650.9910	Construction Staking Supplemental Control (project) 01. 4060-05-72	LS	1.000	1.000
0196	650.9920	Construction Staking Slope Stakes	LF	7,799.000	7,799.000

Estimate Of Quantities

4060-05-72

Line	Item	Item Description	Unit	Total	Qty
0198	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	1,535.000	1,535.000
0200	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	895.000	895.000
0202	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	8.000	8.000
0204	654.0105	Concrete Bases Type 5	EACH	16.000	16.000
0206	654.0230	Concrete Control Cabinet Bases Type L30	EACH	1.000	1.000
0208	655.0610	Electrical Wire Lighting 12 AWG	LF	1,920.000	1,920.000
0210	655.0620	Electrical Wire Lighting 8 AWG	LF	12,335.000	12,335.000
0212	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. STH 28	LS	1.000	1.000
0214	657.0322	Poles Type 5-Aluminum	EACH	16.000	16.000
0216	657.0610	Luminaire Arms Single Member 4 1/2-Inch Clamp 6-FT	EACH	16.000	16.000
0218	659.1115	Luminaires Utility LED A	EACH	16.000	16.000
0220	659.2130	Lighting Control Cabinets 120/240 30-Inch	EACH	1.000	1.000
0222	690.0150	Sawing Asphalt	LF	144.000	144.000
0224	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	2,000.000	2,000.000
0226	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	1,320.000	1,320.000

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CLEARING & GRUBBING

STATION TO	STATION	LOCATION	201.0105	201.0205
			CLEARING	GRUBBING
STA	STA	STA	STA	STA
120+00	- 121+00	SE QUADRANT	1	1
216+00	- 218+00	NW QUADRANT	2	2
107+50	- 109+50	NW QUADRANT	2	2
TOTAL 0010			5	5

EXCAVATION COMMON

LOCATION	205.0100	
	CY	REMARKS
PROJECT LIMITS	23,530	
UNDISTRIBUTED	1,175	EBS
TOTAL 0010	24,705	

NOTE: SEE EARTHWORK SUMMARY AND DETAIL SHEETS FOR MORE INFORMATION

EACH ITEMS

LOCATION	213.0100.01	618.0100.01	619.1000	642.5001	643.5000
	FINISHING ROADWAY (01.4060-05-72)	MAINTENANCE AND REPAIR OF HAUL ROADS (01.4060-05-72)	MOBILIZATION	FIELD OFFICE TYPE B	TRAFFIC CONTROL
EACH	EACH	EACH	EACH	EACH	EACH
PROJECT LIMITS	1	1	1	1	1
TOTAL 0010	1	1	1	1	1

REMOVING SMALL PIPE CULVERTS

STATION	LOCATION	203.0100	
		EACH	REMARKS
105+30 WB	LEFT SIDE	1	46' X 18-INCH, STEEL
108+59 WB	LEFT SIDE	1	62' X 18-INCH, STEEL
111+83 EB	MAINLINE	1	114' X 24-INCH, CONCRETE
114+04 EB	MAINLINE	1	150' X 24-INCH, CONCRETE
205+30 NB	RIGHT SIDE	1	48' X 18-INCH, STEEL
205+37 NB	LEFT SIDE	1	50' X 18-INCH, STEEL
206+57 NB	MAINLINE	1	82' X 24 INCH, CONCRETE
209+96 NB	RIGHT SIDE	1	94' X 18 INCH, STEEL
117+82 EB	RIGHT SIDE	1	70' X 18-INCH, STEEL
126+22 EB	MAINLINE	1	158' X 36-INCH, CONCRETE
215+76 NB	MAINLINE	1	90' X 24-INCH, CONCRETE
TOTAL 0010		11	

REMOVING CURB & GUTTER

LOCATION	204.0150	
	LF	
NW CORNER	60	
SW CORNER	68	
NE CORNER	68	
SE CORNER	70	
EAST ISLAND	104	
WEST ISLAND	105	
N LEG, W SIDE	300	
TOTAL 0010	775	

BASE ITEMS

LOCATION	305.0110	305.0120	312.0110	612.0406	624.0100	645.0220
	BASE AGGREGATE DENSE 3/4-INCH	BASE AGGREGATE DENSE 1 1/4-INCH	SELECT CRUSHED MATERIAL	PIPE UNDERDRAIN WRAPPED 6-INCH	WATER	GEOGRID TYPE SR
TON	TON	TON	LF	MGAL	SY	
WEST	152	3,430	3,448	-	121	5,746
EAST	331	3,865	3,753	-	-	6,271
NORTH	185	3,197	3,017	-	-	5,028
SOUTH	207	2,680	2,452	-	-	4,086
CIRCLE	-	1,603	1,870	964	-	3,115
UNDISTRIBUTED					100	
TOTAL 0010	875	14,775	14,550	964	221	24,248

CONCRETE TRUCK APRON ITEMS

LOCATION	405.0100	416.0512
	COLORING CONCRETE WISDOT RED	CONCRETE TRUCK APRON 12-INCH
CY	SY	
NW CORNER	15	44
NE CORNER	54	160
SE CORNER	28	82
CIRCLE	297	890
TOTAL 0010	394	1,176

CULVERT PIPE ITEMS

STATION	LOCATION	521.1018	521.3118	522.0424	522.0430	522.1024	522.1030	650.6000
		APRON ENDWALLS FOR CULVERT PIPE	CORRUGATED STEEL 18-INCH (0.064 THICK)	REINFORCED CONCRETE CLASS IV 24-INCH	REINFORCED CONCRETE CLASS IV 30-INCH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH	CONSTRUCTION STAKING PIPE CULVERTS
EACH		LF	LF	LF	LF	EACH	EACH	EACH
105+17 'WB'	LT DRIVEWAY	2	25					1
108+40 'WB'	LT DRIVEWAY	2	41					1
109+30 'WB'	LT/RT - CTH TW CROSS	-	-	63	-	2	-	1
205+00 'NB'	RT - DRIVEWAY	2	62	-	-	-	-	1
209+50 'NB'	RT - DRIVEWAY	2	94	-	-	-	-	1
205+19 'SB'	LT - DRIVEWAY	2	33	-	-	-	-	1
206+60 'SB'	LT/RT - STH 28 CROSS	-	-	71	-	2	-	1
215+80 'SB'	LT/RT - STH 28 CROSS	-	-	-	91	-	2	1
TOTAL 0010		10	255	134	91	4	2	8

*ADDITIONAL QUANTITIES LISTED IN STORM SEWER STRUCTURE SUMMARY TABLE

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ASPHALTIC ITEMS

LOCATION	GAL	TON	TON	TON	SY
WEST	205	802	573	24	33
EAST	228	894	638	-	33
NORTH	187	732	523	-	41
SOUTH	149	583	417	18	46
CIRCLE	67	263	188	-	-
TOTAL 0010	836	3,274	2,339	42	153

CURB & GUTTER ITEMS

LOCATION	601.0405 CONCRETE CURB & GUTTER 18-INCH TYPE A LF	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0553 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D LF	601.0582 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE T LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF
NORTH SPLITTER ISLAND	-	351	381	-	732
EAST SPLITTER ISLAND	-	380	385	-	765
SOUTH SPLITTER ISLANDS	-	191	197	-	388
WEST SPLITTER ISLANDS	-	397	335	-	732
SE QUADRANT CURB	-	-	256	-	256
SW QUADRANT CURB	-	-	208	-	208
NW QUADRANT CURB	-	-	280	-	280
NE QUADRANT CURB	-	179	669	-	848
CIRCLE	220	-	-	397	617
TOTAL 0010	220	1,498	2,711	397	4,826

SPLITTER ISLAND ITEMS

STATION TO	STATION	LOCATION	602.0405 CONCRETE SIDEWALK 4-INCH SF	620.0300 CONCRETE MEDIAN SLOPED NOSE TYPE 1 SF	TYPE 2 SF
110+22 EB -	111+80 EB	WEST LEG SPLITTER ISLAND	1,435	40	31
112+25 EB -	113+75 EB	WEST LEG SPLITTER ISLAND	4,290	-	71
115+48 EB -	119+10 EB	EAST LEG SPLITTER ISLAND	6,035	40	40
208+55 NB -	209+44 NB	SOUTH LEG SPLITTER ISLAND	515	38	38
211+32 NB -	212+06 NB	SOUTH LEG SPLITTER ISLAND	1,045	37	40
213+78 NB -	217+30 NB	NORTH LEG SPLITTER ISLAND	2,850	40	37
SUBTOTAL 0010			16,180	195	257
TOTAL 0010			16,180	452	

3

CURB RAMP ITEMS

LOCATION	601.0600 CONCRETE CURB PEDESTRIAN LF	602.0515 CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA SF
NORTH SPLITTER ISLAND	26	40
SOUTH SPLITTER ISLAND	39	40
EAST SPLITTER ISLAND	66	40
WEST SPLITTER ISLAND	94	40
TOTAL 0010	225	160

STORM SEWER PIPE SUMMARY

BEGIN STRUCTURE (UP INVERT)	END STRUCTURE (DOWN INVERT)	STORM SEWER PIPE REINFORCED CONCRETE				INLET ELEVATION FT	DISCHARGE ELEVATION FT	SLOPE FT/FT
		608.0312 CLASS III 12-INCH LF	608.0315 CLASS III 15-INCH LF	608.0324 CLASS III 24-INCH LF	608.0415 CLASS IV 15-INCH LF			
1	2	16	--	--	--	970.99	970.75	0.0150
2	3	--	95	--	--	970.50	969.08	0.0149
4	5	--	--	84	--	970.06	968.63	0.0170
5	6	--	--	50	--	968.63	968.46	0.0034
6	7	--	--	31	--	968.46	968.30	0.0052
8	10	19	--	--	--	970.22	970.03	0.0100
9	10	19	--	--	--	970.22	970.03	0.0100
10	11	--	--	--	63	969.77	969.46	0.0049
12	13	--	69	--	--	969.90	968.87	0.0149
14	15	32	--	--	--	970.62	969.51	0.0347
TOTAL 0010		86	164	165	63			

APRON ENDWALL EROSION CONTROL

STATION	LOCATION	606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE TYPE HR SY
206+57.9 SB	40.3' RT	4	8
215+78.5 SB	54.7 RT	6	12
109+28.5 WB	38' RT	4	8
61+82 SW	34.2' RT	3	5
62+53 SW	32.3' RT	4	8
51+63 SE	20.2' RT	3	5
42+18 NE	35.3' RT	3	5
43+05 NE	33.8' RT	3	5
UNDISTRIBUTED		6	12
TOTAL 0010		36	68

3

3

STORM SEWER STRUCTURE SUMMARY

STRUCTURE NO.	STATION	OFFSET FT	APRON			COVERS			CATCH BASINS 4-FT DIAMETER	INLETS 2X2.5-FT	INLETS 2X3-FT	CONSTRUCTION STAKING STORM SEWER	RIM ELEVATION FT	INVERT ² ELEVATION FT	DEPTH ³ FT
			ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH EACH	ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	TYPE H	TYPE HM	TYPE T							
1	33+76 'WB'	4.4' RT	--	--	--	1	--	--	--	--	1	1	975.35	970.99	3.52
2	33+60 'WB'	2.2' RT	--	--	--	1	--	--	--	--	1	1	975.25	970.50	3.94
3	61+82 'SW'	34.2' RT	--	1	--	--	--	--	--	--	--	1	--	969.08	--
4	32+64 'NW'	18.9' RT	--	--	1	--	--	--	--	--	--	1	--	972.31	--
5	20+41 'C'	1.3' RT	--	--	--	--	--	1	1	--	--	1	974.60	966.63	6.88
6	62+53 'SW'	1.5' RT	--	--	--	--	1	--	--	--	1	1	974.27	968.46	5.06
7	62+53 'SW'	32.3' RT	--	--	1	--	--	--	--	--	--	1	--	970.55	--
8	23+55 'C'	1.7' RT	--	--	--	--	--	1	--	1	--	1	973.89	970.22	2.75
9	23+35 'C'	1.7' RT	--	--	--	--	--	1	--	1	--	1	973.89	970.22	2.75
10	23+15 'C'	1.7' RT	--	--	--	--	--	1	--	1	--	1	973.86	969.77	3.19
11	51+61 'SE'	21.6' RT	--	1	--	--	--	--	--	--	--	1	--	970.90	--
12	22+15 'C'	1.7' RT	--	--	--	--	--	1	--	1	--	1	974.62	969.90	3.82
13	42+18 'NE'	35.3' RT	--	1	--	--	--	--	--	--	--	1	--	968.87	--
14	43+05 'NE'	1.5' RT	--	--	--	--	1	--	--	--	1	1	974.93	970.62	3.48
15	43+05 'NE'	33.8' RT	1	--	--	--	--	--	--	--	--	1	--	970.68	--
TOTAL 0010			1	3	2	2	2	5	1	4	4	15			

*ADDITIONAL QUANTITIES LISTED IN CULVERT PIPE ITEMS TABLE
¹ STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE
² FOR STRUCTURES WITH SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE SUMP. FOR STRUCTURES WITHOUT SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE
³ DEPTH = RIM ELEV - TOP OF STRUCTURE BASE ELEV - COVER HEIGHT - 6 -INCH ADJUSTMENT RING HEIGHT

EROSION MAT CLASS I TYPE B

STATION	TO	STATION	LOCATION	SY	REMARKS
204+75 'NB'	-	52+15 'SE'	RT	2,405	SOUTH LEG, EAST SIDE
204+75 'NB'	-	62+70 'SW'	LT	3,000	SOUTH LEG, WEST SIDE
42+65 'NE'	-	222+25 'NB'	RT	2,505	NORTH LEG, EAST SIDE
32+12 'NW'	-	222+25 'NB'	LT	2,250	NORTH LEG, WEST SIDE
102+70 'FB'	-	62+70 'SW'	RT	3,795	WEST LEG, SOUTH SIDE
102+70 'FB'	-	32+12 'NW'	LT	3,995	WEST LEG, NORTH SIDE
52+15 'SE'	-	126+35 'EB'	RT	4,825	EAST LEG, SOUTH SIDE
42+65 'NE'	-	126+35 'EB'	LT	2,310	EAST LEG, NORTH SIDE
UNDISTRIBUTED				2,510	
TOTAL 0010				27,595	

CULVERT PIPE CHECKS

STATION	LOCATION	EACH	REMARKS
205+70 'NB'	RT	2	DRIVEWAY
205+58 'SB'	LT	2	DRIVEWAY
206+60 'SB'	LT	3	CROSS CULVERT
210+46 'NB'	RT	2	DRIVEWAY
105+12 'WB'	LT	2	DRIVEWAY
108+34 'WB'	LT	2	DRIVEWAY
109+30 'WB'	LT	3	CROSS CULVERT
126+25 'EB'	LT	7	EXISTING CULVERT
215+81 'SB'	LT	3	CROSS CULVERT
32+65 'NW'	RT	3	STORM CULVERT
UNDISTRIBUTED		8	
TOTAL 0010		37	

MOBILIZATION ITEMS

LOCATION	EACH	EACH
628.1905 MOBILIZATIONS EROSION CONTROL		628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL
PROJECT 4060-05-72	2	2
TOTAL 0010	2	2

3

SILT FENCE

STATION	TO	STATION	LOCATION	628.1504		REMARKS
				SILT FENCE LF	SILT FENCE MAINTENANCE LF	
205+50 'NB'	-	209+75 'NB'	RT	425	425	SE QUADRANT
50+00 'SE'	-	54+15 'SE'	RT	375	375	SE QUADRANT
117+08 'EB'	-	126+40 'EB'	RI	980	980	SE QUADRANT
215+90 'NB'	-	220+50 'NB'	RI	470	470	NE QUADRANT
109+88 'WB'	-	111+90 'WB'	LT	220	220	NW QUADRANT
33+00 'NW'	-	34+40 'NW'	RT	150	150	NW QUADRANT
216+20 'SB'	-	219+90 'SB'	LT	350	350	NW QUADRANT
102+67 'EB'	-	108+55 'EB'	LT	625	625	SW QUADRANT
UNDISTRIBUTED				900	900	
TOTAL 0010				4,495	4,495	

INLET PROTECTION TYPE C

STATION	LOCATION	628.7015	
		EACH	
33+60 'NW'	RT	1	
33+76 'NW'	RT	1	
62+53 'SW'	RT	1	
20+41 'C'	RT	1	
22+15 'C'	RT	1	
23+15 'C'	RT	1	
23+35 'C'	RT	1	
23+55 'C'	RT	1	
43+05 'NE'	RT	1	
TOTAL 0010		9	

TEMPORARY DITCH CHECKS

STATION	LOCATION	628.7504		REMARKS
		LF		
1+54 'SD SE'	-	15		SE QUADRANT DITCHES
4+00 'SD SE'	-	15		SE QUADRANT DITCHES
6+00 'SD SE'	-	15		SE QUADRANT DITCHES
7+80 'SD SE'	-	18		SE QUADRANT DITCHES
8+20 'SD SE'	-	20		SE QUADRANT DITCHES
8+55 'SD SE'	-	20		SE QUADRANT DITCHES
9+30 'SD SE'	-	18		SE QUADRANT DITCHES
9+75 'SD SE'	-	18		SE QUADRANT DITCHES
10+10 'SD SE'	-	18		SE QUADRANT DITCHES
10+35 'SD SE'	-	18		SE QUADRANT DITCHES
10+55 'SD SE'	-	18		SE QUADRANT DITCHES
124+45 'WB'	LT	23		NW QUADRANT DITCHES
122+70 'WB'	LT	23		NE QUADRANT DITCHES
120+65 'WB'	LT	18		NE QUADRANT DITCHES
119+45 'WB'	LT	15		NE QUADRANT DITCHES
118+51 'WB'	-	15		NE QUADRANT DITCHES
40+27 'NE'	-	15		NE QUADRANT DITCHES
40+92 'NE'	-	23		NE QUADRANT DITCHES
52+58 'SD NE'	-	18		NE QUADRANT DITCHES
50+70 'SD NE'	-	18		NE QUADRANT DITCHES
222+25 'NB'	RI	18		NE QUADRANT DITCHES
222+25 'NB'	LI	23		NW QUADRANT DITCHES
221+00 'SB'	LT	23		NW QUADRANT DITCHES
4+40 'NW'	-	23		NW QUADRANT DITCHES
107+50 'WB'	LT	18		NW QUADRANT DITCHES
106+50 'WB'	LT	18		NW QUADRANT DITCHES
105+50 'WB'	LT	18		NW QUADRANT DITCHES
104+45 'EB'	LT	18		NW QUADRANT DITCHES
102+70 'EB'	LT	18		NW QUADRANT DITCHES
30+40 'SD SW'	-	20		SW QUADRANT DITCHES
30+80 'SD SW'	-	20		SW QUADRANT DITCHES
31+83 'SD SW'	-	23		SW QUADRANT DITCHES
32+70 'SD SW'	-	23		SW QUADRANT DITCHES
33+15 'SD SW'	-	23		SW QUADRANT DITCHES
33+75 'SD SW'	-	23		SW QUADRANT DITCHES
34+35 'SD SW'	-	18		SW QUADRANT DITCHES
35+65 'SD SW'	-	23		SW QUADRANT DITCHES
36+60 'SD SW'	-	25		SW QUADRANT DITCHES
37+52 'SD SW'	-	23		SW QUADRANT DITCHES
38+53 'SD SW'	-	18		SW QUADRANT DITCHES
39+83 'SD SW'	-	20		SW QUADRANT DITCHES
42+00 'SD SW'	-	23		SW QUADRANT DITCHES
TOTAL 0010		820		

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LANDSCAPING ITEMS

STATION	TO	STATION	LOCATION	625.0100		625.0500		629.0210		630.0140		630.0200		630.0500		
				TOPSOIL SY	SALVAGED TOPSOIL SY	FERTILIZER TYPE B CWT	SEEDING MIXTURE NO. 40 LB	SEEDING TEMPORARY LB	SEED WATER MGAL							
204+75 'NB'	-	52+15 'SE'	SOUTH LEG, EAST SIDE	2,405	2,405	1.5	44	22	53							
204+75 'NB'	-	62+70 'SW'	SOUTH LEG, WEST SIDE	3,000	3,000	1.9	54	27	65							
42+65 'NE'	-	222+25 'NB'	NORTH LEG, EAST SIDE	2,505	2,505	1.6	46	23	55							
32+12 'NW'	-	222+25 'NB'	NORTH LEG, WEST SIDE	2,250	2,250	1.4	41	21	49							
102+70 'EB'	-	62+70 'SW'	WEST LEG, SOUTH SIDE	3,795	3,795	2.4	69	35	83							
102+70 'EB'	-	32+12 'NW'	WEST LEG, NORTH SIDE	3,995	3,995	2.5	72	36	86							
52+15 'SE'	-	126+35 'EB'	EAST LEG, SOUTH SIDE	4,825	4,825	3.0	87	44	104							
42+65 'NE'	-	126+35 'EB'	EAST LEG, NORTH SIDE	2,310	2,310	1.5	42	21	50							
UNDISTRIBUTED				6,271	6,271	4.0	114	57	136							
TOTAL 0010				31,356	31,356	20	569	286	581							

ROCK BAGS

STATION	LOCATION	628.7570	
		EACH	
205+33 'NB'	RT	2	
205+95 'NB'	RT	2	
205+35 'SB'	LT	3	
206+60 'SB'	LT	2	
215+80 'SB'	LT	3	
105+30 'WB'	LT	2	
108+61 'WB'	LT	2	
109+30 'WB'	LT	2	
126+25 'EB'	LT	7	
32+65 'NW'	RT	3	
UNDISTRIBUTED		7	
TOTAL 0010		35	

PERMANENT SIGNING

SIGN NO.	LOCATION	SIGN CODE	W IN	X IN	H IN	634.0614	634.0616	634.0618	634.0620	634.0816	637.2210	637.2230	REMARKS
						POSTS WOOD 4X6-INCH X 14-FT EACH	POSTS WOOD 4X6-INCH X 16-FT EACH	POSTS WOOD 4X6-INCH X 18-FT EACH	POSTS WOOD 4X6-INCH X 20-FT EACH	POSTS TUBULAR STEEL 2X2-INCH X 16-FT EACH	SIGNS TYPE II REFLECTIVE H SF	SIGNS TYPE II REFLECTIVE F SF	
1-01	WEST LEG	J1-3	72	X	39	-	1	1	-	-	19.5	-	
1-02	WEST LEG	W2-6	30	X	30	-	-	1	-	-	-	6.3	ON SHARED POST
-	WEST LEG	W13-1	18	X	18	-	-	-	-	-	-	2.3	ON SHARED POST
1-03	WEST LEG	D1-62	144	X	78	-	-	1	2	-	78.0	-	CUSTOM SIGN
1-04	WEST LEG	W5-3	36	X	36	-	-	1	-	-	-	9.0	
1-05	WEST LEG	R4-7	24	X	30	1	-	-	-	-	5.0	-	ON SHARED POST
-	WEST LEG	W5-56	18	X	18	-	-	-	-	-	-	2.3	ON SHARED POST
1-06	WEST LEG	R5-1	30	X	30	-	1	-	-	-	6.3	-	ON SHARED POST
1-07	WEST LEG	R2-1	24	X	30	-	-	-	-	-	5.0	-	ON SHARED POST
1-08	EAST LEG	R4-7	24	X	30	1	-	-	-	-	5.0	-	ON SHARED POST
-	EAST LEG	W5-56	18	X	18	-	-	-	-	-	-	2.3	ON SHARED POST
1-09	EAST LEG	R2-1	24	X	30	-	-	-	-	-	5.0	-	ON SHARED POST
1-10	EAST LEG	R5-1	30	X	30	-	1	-	-	-	6.3	-	ON SHARED POST
1-11	EAST LEG	J2-2	48	X	69	-	-	-	2	-	23.0	-	
1-12	EAST LEG	D1-62	144	X	72	-	-	-	3	-	72.0	-	CUSTOM SIGN
1-13	EAST LEG	W5-3	36	X	36	-	1	-	-	-	-	9.0	
1-14	EAST LEG	W2-6	30	X	30	-	-	1	-	-	-	6.3	ON SHARED POST
-	EAST LEG	W13-1	18	X	18	-	-	-	-	-	-	2.3	ON SHARED POST
1-15	EAST LEG	J1-3	72	X	39	-	-	2	-	-	19.5	-	
-	EAST LEG	W13-1	18	X	18	-	-	-	-	-	-	2.3	ON SHARED POST
1-16	EAST LEG	D1-2	72	X	30	-	-	2	-	-	15.0	-	
2-01	SOUTH LEG	R4-7	24	X	30	-	-	-	-	1	5.0	-	
2-02	SOUTH LEG	R1-2	36	X	31	-	-	-	-	1	3.9	-	
2-03	SOUTH LEG	R1-2	36	X	31	-	-	-	-	1	3.9	-	
2-04	EAST LEG	D1-1	42	X	30	2	-	-	-	-	8.8	-	
2-05	EAST LEG	J4-2	48	X	36	-	1	-	-	-	12.0	-	ON SHARED POST
2-06	EAST LEG	R5-1A	36	X	24	-	-	-	-	-	6.0	-	ON SHARED POST
2-07	SOUTH IFG	R5-1	30	X	30	-	-	-	-	-	6.3	-	ON SHARED POST
2-08	SOUTH IFG	J4-4	96	X	36	-	-	2	-	-	24.0	-	ON SHARED POST
2-09	EAST IFG	R1-2	36	X	31	-	-	-	-	1	3.9	-	
2-10	EAST LEG	R1-2	36	X	31	-	-	-	-	1	3.9	-	
2-11	NORTH LEG	D1-2	72	X	30	2	-	-	-	-	15.0	-	
2-12	NORTH LEG	R1-2	36	X	31	-	-	-	-	1	3.9	-	
2-13	NORTH LEG	J1-3	72	X	39	-	1	1	-	-	19.5	-	
2-14	NORTH LEG	R1-2	36	X	31	-	-	-	-	1	3.9	-	ON SHARED POST
SUB TOTAL 0010						6	6	12	7	7	379.6	42.1	

PERMANENT SIGNING CONTINUED

SIGN NO.	LOCATION	SIGN CODE	W IN	X IN	H IN	G34.0614	G34.0616	G34.0618	G34.0620	G34.0816	G37.2210	G37.2230	REMARKS
						POSTS WOOD 4X5-INCH	POSTS WOOD 4X6-INCH	POSTS WOOD 4X6-INCH	POSTS WOOD 4X6-INCH	POSTS TUBULAR STEEL 2X2-INCH	SIGNS TYPE II REFLECTIVE H	SIGNS TYPE II REFLECTIVE F	
						X 14-FT EACH	X 16-FT EACH	X 18-FT EACH	X 20-FT EACH	X 16-FT EACH	SF	SF	
2-15	WEST LEG	D1-1	42	X	30	2	-	-	-	-	8.8	-	
2-16	WEST LEG	M1-51	24	X	24	1	-	-	-	-	4.0	-	ON SHARED POST
2-17	WEST LEG	R5-1	30	X	30	-	-	-	-	-	6.3	-	ON SHARED POST
2-18	WEST LEG	R6-2L	24	X	30	-	1	-	-	-	5.0	-	
2-19	WEST LEG	R1-2	36	X	31	-	1	-	-	-	3.9	-	ON SHARED POST
2-20	WEST LEG	R1-2	36	X	31	-	1	-	-	-	3.9	-	ON SHARED POST
2-21	INNER CIRCLE	R6-1R	36	X	12	2	-	-	-	-	3.0	-	ON SHARED POST
	INNER CIRCLE	R6-4B	60	X	24	-	-	-	-	-	10.0	-	ON SHARED POST
2-22	INNER CIRCLE	R6-1R	36	X	12	2	-	-	-	-	3.0	-	ON SHARED POST
	INNER CIRCLE	R6-4B	60	X	24	-	-	-	-	-	10.0	-	ON SHARED POST
2-23	INNER CIRCLE	R6-1R	36	X	12	2	-	-	-	-	3.0	-	ON SHARED POST
	INNER CIRCLE	R6-4B	60	X	24	-	-	-	-	-	10.0	-	ON SHARED POST
2-24	INNER CIRCLE	R6-1R	36	X	12	2	-	-	-	-	3.0	-	ON SHARED POST
	INNER CIRCLE	R6-4B	60	X	24	-	-	-	-	-	10.0	-	ON SHARED POST
2-25	SOUTH LEG	D1-3	84	X	30	2	-	-	-	-	17.5	-	CUSTOM SIGN
2-26	EAST LEG	D1-2	72	X	30	-	2	-	-	-	15.0	-	CUSTOM SIGN
3-01	SOUTH LEG	M1-5A	24	X	24	1	-	-	-	-	4.0	-	ON SHARED POST
	SOUTH LEG	M2-1	21	X	15	-	-	-	-	-	2.2	-	ON SHARED POST
3-02	SOUTH LEG	W2-6	30	X	30	-	1	-	-	-	-	6.3	ON SHARED POST
	SOUTH LEG	W1-3-1	18	X	18	-	-	-	-	-	-	2.3	ON SHARED POST
3-03	SOUTH LEG	W6-3	36	X	36	-	1	-	-	-	-	9.0	
3-04	SOUTH LEG	D1-62	96	X	78	-	-	-	3	-	52.0	-	CUSTOM SIGN
3-05	SOUTH LEG	J2-1	24	X	57	-	1	-	-	-	9.5	-	
3-06	SOUTH LEG	R5-1	30	X	30	-	1	-	-	-	6.3	-	
3-07	SOUTH LEG	R2-1	24	X	30	-	1	-	-	-	5.0	-	ON SHARED POST
3-08	SOUTH LEG	R4-7	24	X	30	-	-	-	-	-	5.0	-	ON SHARED POST
	SOUTH LEG	W5-56	18	X	18	1	-	-	-	-	2.3	-	ON SHARED POST
3-09	NORTH LEG	R2-1	24	X	30	-	1	-	-	-	-	5.0	ON SHARED POST
3-10	NORTH LEG	R5-1	30	X	30	-	-	-	-	-	6.3	-	ON SHARED POST
3-11	NORTH LEG	R4-7	24	X	30	1	-	-	-	-	5.0	-	ON SHARED POST
3-12	NORTH LEG	W5-56	18	X	18	1	-	-	-	-	2.3	-	ON SHARED POST
3-13	NORTH LEG	D1-62	96	X	78	-	-	-	3	-	52.0	-	CUSTOM SIGN
3-14	NORTH LEG	W6-3	36	X	36	-	1	-	-	-	-	9.0	
3-15	NORTH LEG	W2-6	30	X	30	-	-	1	-	-	-	6.3	ON SHARED POST
	NORTH LEG	W1-3-1	18	X	18	-	-	-	-	-	-	2.3	ON SHARED POST
3-16	NORTH LEG	J1-2	48	X	39	-	-	1	-	-	13.0	-	ON SHARED POST
3-17	NORTH LEG	D1-2	72	X	30	-	-	-	-	-	-	-	TO BE INSTALLED BY OTHERS
3-18	NORTH LEG	D1-2	72	X	30	-	-	-	-	-	-	-	TO BE INSTALLED BY OTHERS
3-19	SOUTH LEG	D1-2	72	X	30	-	-	-	-	-	-	-	TO BE INSTALLED BY OTHERS
SJB TOTAL 0010						17	12	2	6	0	281.3	40.2	
TOTAL 0010						23	18	14	13	7	660.9	82.3	

REMOVING SIGNS ITEMS

SIGN #	LOCATION	638.2602	638.3000
		REMOVING SIGNS TYPE II FACH	REMOVING SMALL SIGN SUPPORTS FACH
101	SW	1	1
102	SW	1	1
103	SW	1	2
104	SW	1	1
105	SW	1	1
106	SW	1	1
107	SW	1	1
108	SW	1	1
109	SW	1	2
110	SW	1	1
111	SE	1	1
112	SE	1	2
113	SE	1	1
114	SE	1	2
115	SE	1	1
116	SC	1	1
117	SC	1	1
118	SE	1	1
119	SE	1	1
120	SE	1	1
121	SE	1	1
122	NE	1	1
123	NE	1	2
124	NE	1	2
125	NE	1	2
126	NE	1	1
127	NE	1	1
128	NE	1	1
129	NF	1	1
130	NF	1	1
131	NE	1	1
132	NE	1	2
133	NE	1	1
134	NW	1	1
135	NW	1	1
136	NW	1	2
137	NW	1	2
138	NW	1	1
139	NW	1	2
140	NW	1	1
141	SE	1	2
TOTAL 0010		41	53

TRAFFIC CONTROL ITEMS

LOCATION	643.0300		643.0420		643.0705		643.0715		643.0900		643.0910		643.0920		643.1000		643.1050	
	NO.*	DAY	NO.*	DAY	NO.*	DAY	NO.*	DAY	NO.*	DAY	NO.*	DAY	NO.*	DAY	NO.*	DAY	NO.*	DAY
PROJECT OVERVIEW	-	-	1	100	2	200	-	-	-	-	-	-	-	-	-	-	12.5	-
DETAIL 1	-	-	2	200	4	400	-	-	25	2,500	-	-	1	-	-	-	12.5	-
DETAIL 2	-	-	-	-	-	-	-	-	6	600	-	-	-	-	-	-	-	-
DETAIL 3	-	-	-	-	-	-	-	-	22	2,200	-	-	-	-	-	-	-	-
DETAIL 4	-	-	-	-	-	-	-	-	10	10,100	-	-	2	-	-	-	-	-
DETAIL 5	-	-	-	-	-	-	-	-	13	13,100	-	-	-	-	-	-	-	-
DETAIL 6	-	-	-	-	-	-	-	-	61	6,100	-	-	-	-	-	-	-	-
DETAIL 7	-	-	1	100	2	200	-	-	58	5,800	6	-	5	-	-	-	-	-
DETAIL 8	-	-	-	-	-	-	-	-	87	8,700	-	-	6	-	-	-	-	-
DETAIL 9	-	-	1	100	2	200	-	-	42	4,200	-	-	2	-	-	-	-	-
DETAIL 10	20	140	20	2,000	40	4,000	-	-	16	1,600	-	-	-	-	-	-	-	28
DETAIL 11	-	-	1	100	2	200	-	-	38	3,800	-	-	1	-	-	-	-	-
DETAIL 12	-	-	-	-	-	-	-	-	13	1,300	-	-	-	-	-	-	-	-
DETAIL 13	-	-	-	-	-	-	-	-	16	1,600	-	-	-	-	-	-	-	-
DETAIL 14	-	-	-	-	-	-	-	-	22	2,200	-	-	-	-	-	-	-	-
DETAIL 15	-	-	2	200	4	400	-	-	12	1,200	-	-	-	-	-	-	-	12.5
DETAIL 16	-	-	-	-	-	-	-	-	8	800	-	-	-	-	-	-	-	-
DETAIL 17	-	-	-	-	-	-	-	-	8	800	-	-	-	-	-	-	-	-
DETAIL 18	-	-	-	-	-	-	-	-	8	800	-	-	-	-	-	-	-	-
PROJECT LIMITS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UNDISTRIBUTED	50	5,000	-	-	-	-	-	20	2,000	-	-	-	-	-	-	-	-	-
TOTAL 0010	5,140		2,800		5,600		2,000		67,400		6	17	37.5	28				

*INFORMATION ONLY
 **ONE CYCLE FOR ALL TRAFFIC CONTROL COVERING SIGNS TYPE II

PAVEMENT MARKING ITEMS

STATION TO	STATION	LOCATION	646.1020		646.3020	646.6320	646.7120	646.8120	646.8220
			WHITE	YELLOW	MARKING LINE	MARKING DOTTED	MARKING DIAGONAL	MARKING CURB	MARKING ISLAND
213+88 'NB'	222+25 'NB'	NORTH LEG	1,505	2,602	56	26	161	119	1
115+40 'EB'	126+35 'EB'	EAST LEG	2,007	3,278	83	24	245	120	1
204+75 'NB'	212+09 'NB'	SOUTH LEG	1,334	2,162	71	22	126	220	3
102+70 'EB'	113+82 'EB'	WEST LEG	2,067	3,282	104	22	185	233	3
SUBTOTAL 0010			6,914	11,324					
TOTAL 0010			18,238	314	94	717	692	8	

3

CONSTRUCTION STAKING SLOPE STAKES

550.9920					
STATION TO	STATION	LOCATION	LF	REMARKS	
102+70 FB - 111+10 FB	CTH TW - RT	840	WEST LEG		
102+70 FB - 105+00 FB	CTH TW - IT	730	WEST LEG		
105+00 WB - 111+29 WB	CTH TW - IT	629	WEST LEG		
117+05 FB - 126+35 FB	STH 28 - RT	930	FAST LEG		
118+15 WB - 124+84 WB	STH 28 - IT	669	FAST LEG		
124+72 FB - 126+35 FB	STH 28 - IT	163	FAST LEG		
204+75 NB - 210+20 NB	STH 175 - RT	545	SOUTH LEG		
204+75 NB - 205+00 NB	STH 175 - LT	25	SOUTH LEG		
205+00 SB - 210+45 SB	STH 175 - LT	545	SOUTH LEG		
215+75 NB - 222+23 NB	STH 67 - RT	648	NORTH LEG		
215+72 SB - 221+92 SB	STH 67 - LT	620	NORTH LEG		
221+90 NB - 222+23 NB	STH 67 - LT	33	NORTH LEG		
60+00 SW - 64+70 SW	RT	470	INTERSECTION		
50+00 SE - 54+15 SE	RT	415	INTERSECTION		
40+00 NE - 45+00 NE	RT	500	INTERSECTION		
30+00 NW - 35+37 NW	RT	537	INTERSECTION		
TOTAL 0010			7,799		

3

CONSTRUCTION STAKING ITEMS

650.4500 650.5000 650.8500.01 650.9910.01							
CONSTRUCTION CONSTRUCTION CONSTRUCTION CONSTRUCTION							
STAKING STAKING STAKING ELECTRICAL STAKING							
SUBGRADE BASE INSTALLATIONS SUPPLEMENTAL							
(01. 4060-05-72) (01. 4060-05-72)							
STATION TO	STATION	LOCATION	LF	LF	LS	LS	
213+76 - 221+90	NORTH LEG - SB	814	814	-	-		
213+76 - 222+25	NORTH LEG - NB	849	849	-	-		
115+71 - 124+83	EAST LEG - WB	912	912	-	-		
115+42 - 126+40	EAST LEG - EB	1,098	1,098	-	-		
205+00 - 212+10	SOUTH LEG - SB	710	710	-	-		
205+00 - 212+09	SOUTH LEG - NB	709	709	-	-		
102+75 - 113+81	WEST LEG - FB	1,106	1,106	-	-		
105+00 - 114+13	WEST LEG - WB	913	913	-	-		
21+00 - 21+00	CIRCLE	409	409	-	-		
PROJECT LIMITS					1	1	
TOTAL 0010			7,520	7,520	1	1	

PULL BOXES NON-CONDUCTIVE 24X42-INCH

653.0164				
STATION	OFFSET	LOCATION	EACH	
211'NB'+72	32' RT	PB100	1	
211'NB'+62	42' LT	PB101	1	
113'EB'+54	31' RT	PB102	1	
113'EB'+52	73' LT	PB103	1	
214'NB'+51	36' LT	PB104	1	
214'NB'+49	37' RT	PB105	1	
116'EB'+03	65' LT	PB106	1	
115'EB'+77	26' RT	PB107	1	
TOTAL 0010			8	

CABINET

650.8500 654.0230 656.0200.01 659.2130							
CONSTRUCTION CONCRETE ELECTRICAL SERVICE LIGHTING							
STAKING CONTROL METER BREAKER CONTROL							
ELECTRICAL CABINET BASES PEDESTAL CABINETS							
INSTALLATIONS TYPE L30 (01. STH 28) 120/240							
(01. 4060-05-72) 30-INCH							
STATION	OFFSET	LOCATION	LS	EACH	LS	EACH	
211'NB'+72	48' RT	CABINET	1	1	1	1	
TOTAL 0010			1	1	1	1	

LIGHTING CONDUIT ITEMS

LOCATION	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH		652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	
	LF		LF	
CABINET-PB107	--		30	
PB107-PB100	--		125	
PB100-PB101	--		75	
PB101-PB102	--		110	
PB102-PB103	--		105	
PB103-PB104	--		135	
PB104-PB105	--		75	
PB105-PB106	--		140	
PB106-PB107	--		100	
SL114-PB107	40		--	
PB100-SL115	10		--	
SL115-SL100	115		--	
SL100-SL101	220		--	
SL107-PB102	75		--	
PB102-SL103	20		--	
SL103-SL104	155		--	
SL104-SL105	165		--	
PB103-SL106	30		--	
SL107-PB104	15		--	
PB104-SL108	150		--	
SL108-SL109	160		--	
SL110-PB106	65		--	
SL111-PB106	15		--	
SL111-SL112	135		--	
SL112-SL113	165		--	
TOTAL 0010	1,535		895	

ELECTRICAL WIRE LIGHTING 8 AWG

CIRCUIT	FROM	TO	655.0620	
			LF	
A	CABINET	SL115	400	
A	SL115	SL101	690	
A	SL115	SL103	520	
A	SL103	SL105	680	
B	CABINET	SL114	190	
B	SL114	SL100	630	
B	SL114	SL102	970	
B	SL102	SL104	560	
C	CABINET	SL111	360	
C	SL111	SL113	520	
C	SL111	SL107	590	
C	SL107	SL109	710	
D	CABINET	SL110	460	
D	SL110	SL112	520	
D	SL110	SL106	1010	
D	SL106	SL108	670	
GROUND	CABINET	SL114	95	
GROUND	SL114	SL115	215	
GROUND	SL115	SL100	120	
GROUND	SL100	SL101	230	
GROUND	SL115	SL103	260	
GROUND	SL103	SL102	105	
GROUND	SL103	SL104	165	
GROUND	SL104	SL105	175	
GROUND	CABINET	SL111	180	
GROUND	SL111	SL112	155	
GROUND	SL112	SL113	175	
GROUND	SL111	SL110	105	
GROUND	SL111	SL107	295	
GROUND	SL107	SL106	225	
GROUND	SL107	SL108	190	
GROUND	SL108	SL109	165	
TOTAL 0010			12,335	

LIGHTING ITEMS

STATION	OFFSET	LOCATION	654.0105 CONCRETE BASES TYPE 5		655.0610 ELECTRICAL WIRE 12 AWG		657.0322 POLES TYPE 5- ALUMINUM		657.0610 LUMINAIRE ARM'S SINGLE MEMBER 4 1/2-INCH CLAMP 6-F1		659.1115 LUMINAIRES UTILITY LED A	
			EACH	LF	EACH	EACH	EACH	EACH				
210'NB+57	22' RT	SL100	1	120	1		1	1	1			
208'NB+47	21' RT	SL101	1	120	1		1	1	1			
211'NB+87	67' LT	SL102	1	120	1		1	1	1			
113'EB+30	26' RT	SL103	1	120	1		1	1	1			
111'EB+74	22' RT	SL104	1	120	1		1	1	1			
110'EB+15	21' RT	SL105	1	120	1		1	1	1			
113'EB+39	65' LT	SL106	1	120	1		1	1	1			
214'NB+37	40' LT	SL107	1	120	1		1	1	1			
215'NB+92	41' LT	SL108	1	120	1		1	1	1			
217'NB+40	40' LT	SL109	1	120	1		1	1	1			
115'EB+62	47' LT	SL110	1	120	1		1	1	1			
116'EB+15	60' LT	SL111	1	120	1		1	1	1			
117'EB+58	44' LT	SL112	1	120	1		1	1	1			
119'EB+21	39' LT	SL113	1	120	1		1	1	1			
212'NB+33	73' RT	SL114	1	120	1		1	1	1			
211'NB+65	30' RT	SL115	1	120	1		1	1	1			
TOTAL 0010			16	1,920	16		16	16	16			

SAWING ASPHALT

STATION	LOCATION	690.0150 LF
102+70 EB	MAINLINE (W LEG)	30
108+61 EB	DRIVEWAY ((N, W LEG)	12
222+25 SB	MAINLINE (N LEG)	30
126+35 EB	MAINLINE (E LEG)	30
204+75 NB	MAINLINE (S LEG)	30
205+35 SB	DRIVEWAY ((NW, S LEG)	12
TOTAL 0010		144

TRANSPORTATION PROJECT PLAT NO: 4060-05-22 - 4.01

THAT PART OF LOT 1 OF CERTIFIED SURVEY MAP 1384 RECORDED IN VOLUME 9 CSM ON PAGES 299-300 AS DOCUMENT NO. 645091, AND THAT PART OF LOT 2 OF CERTIFIED SURVEY MAP 3366 RECORDED IN VOLUME 20 CSM ON PAGES 78-79 AS DOCUMENT NO. 796598, AND THAT PART OF LOT 3 OF CERTIFIED SURVEY MAP 5603 RECORDED IN VOLUME 37 CSM ON PAGE 54 AS DOCUMENT NO. 1028621, ALL BEING IN THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4; AND ALSO THAT PART OF LOT 1 OF CERTIFIED SURVEY MAP 3451 RECORDED IN VOLUME 20 CSM ON PAGES 262-263 AS DOCUMENT NO. 801596, BEING IN AND INCLUDING A PART OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4; AND ALSO A PART OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4; ALL IN SECTION 3, TOWNSHIP 12 NORTH, RANGE 17 EAST, TOWN OF THERESA, DODGE COUNTY, WISCONSIN.

RELOCATION ORDER STH 28, HORICON - KEWASKUM (STH 67/175/TW INTERSECTION) DODGE COUNTY, WISCONSIN

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION 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 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

- 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.
- THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

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

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 28 ESTABLISHED FROM PREVIOUS PROJECT 3364-00-22, 4060-00-21, AND CSM 3451.

EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 67/STH 175 ESTABLISHED FROM PREVIOUS PROJECT 3364-00-22, CSM 1384, CSM 6023, CSM 3451, AND CSM 6095.

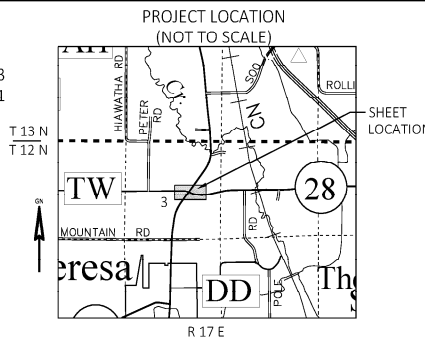
EXISTING HIGHWAY RIGHT-OF-WAY FOR CTH TW ESTABLISHED FROM PREVIOUS PROJECT 3364-00-22, CSM 5603, AND CSM 1384.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON.

FOUND IRON PINS ARE 3/4" REBAR, UNLESS OTHERWISE NOTED.

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.

REFER TO TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF THIS DOCUMENT FOR ADDITIONAL INFORMATION.

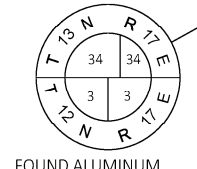


FOR INFORMATION ONLY	CTH TW/STH 28(RLC5)	CTH TW/STH 28(RLC6)	CTH TW/STH 28	CTH TW/STH 28(RLC7)
PI STA = 104+36.41 EB Y = 752456.500 X = 949970.953 DELTA = 1°10'24" LT D = 0°55'21" T = 63.59' L = 127.17' R = 6210.00' PC STA = 103+72.82 EB PT STA = 105+00.00 EB DB = N89°24'10"E DA = N88°13'46"E	PI STA = 111+97.95 EB Y = 752480.031 X = 950732.124 DELTA = 11°04'59" RT D = 6°21'58" T = 87.32' L = 174.09' R = 900.00' PC STA = 111+10.63 EB PT STA = 112+84.72 EB	PI STA = 113+45.22 EB Y = 752456.111 X = 950877.998 DELTA = 46°44'43" RT D = 6°18'41" T = 41.06' L = 77.51' R = 95.00' PC STA = 113+04.16 EB PT STA = 113+81.67 EB DA = S 33°56'32" E	POT STA = 114+92.02 EB Y = 752343.956 X = 950982.320	PI STA = 120+05.47 EB Y = 752149.810 X = 951457.650 DELTA = 33°57'19" LT D = 3°46'28" T = 463.45' L = 899.61' R = 1518.00' PC STA = 115+42.02 EB PT STA = 124+41.63 EB DB = S67°46'58"E

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
200	FRONTIER COMMUNICATIONS (VERIZON)	RELEASE OF RIGHTS

DOCUMENT#: **1295474**
 Recorded: **09-09-2020** at **10:19 AM**
CHRIS PLANASCH, REGISTER OF DEEDS
 DODGE COUNTY, WI
 Fee Amount: \$25.00 Pages: 2
 ***The above recording information verifies this document has been electronically recorded and Returned to: WisDOT - SW Region - Madison PO# 395
 RESERVED FOR REGISTER OF DEEDS
 PROJECT NUMBER 4060-05-22 - 4.01
 SHEET 1 OF 2

COURSE TABLE		
COURSE	BEARING	DISTANCE
COR-100	N 00°29'52" E	42.90'
100-IP180	N 89°24'00" E	204.99'
IP180-IP181	N 73°34'47" E	155.89'
	(N 72°44'30" E)	(155.91')
IP181-101	N 89°24'00" E	359.87'
101-102	N 00°50'33" E	25.98'
102-103	S 89°02'51" E	93.22'
103-IP182	N 56°37'17" E	372.24'
IP182-104	N 36°10'41" E	150.00'
104-IP183	N 16°53'17" E	105.95'
IP183-105	N 36°10'41" E	155.41'
105-106	S 00°19'38" W	273.19'
106-IP184	S 36°10'41" W	233.99'
IP184-107	S 18°06'08" W	148.49'
107-108	S 89°18'08" E	1131.09'
108-IP185	S 00°24'25" E	293.45'
IP185-IP186	S 78°15'33" W	379.89'
	(N 78°15'43" E)	(379.89')
IP186-IP187	S 83°39'45" W	288.54'
	(N 83°39'51" E)	(288.54')
IP187-109	N 87°33'08" W	189.67'
109-110	N 82°32'23" W	168.43'
110-IP188	N 71°33'01" W	248.11'
IP188-IP189	N 68°14'52" W	127.42'
	(NO R/L CORNER)	(NO R/L CORNER)
IP189-IP190	S 36°58'57" W	259.37'
	(N 36°09'31" E)	(259.38')
IP190-111	S 36°58'57" W	251.90'
111-112	N 53°01'03" W	127.70'
112-IP191	N 53°50'10" W	16.61'
IP191-IP192	N 35°40'46" E	200.01'
	(N 34°51'20" E)	(200.01')
IP192-IP193	N 20°54'07" E	240.43'
	(N 20°04'41" E)	(240.43')
IP193-IP194	N 27°06'16" W	59.94'
	(N 27°55'42" W)	(60.00')
IP194-113	S 89°24'00" W	660.99'
113-COR	N 0°09'36" E	82.12'
101-IP195	N 89°24'00" E	57.43'
IP195-103	N 56°37'17" E	43.31'



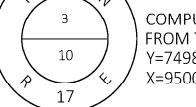
FOUND ALUMINUM MONUMENT CLOSING CORNER
 Y=755177.308
 X=950101.292

STH 28-67-175(RLC1)
 PI STA = 200+80.51 NB
 Y = 751416.609
 X = 950227.668
 DELTA = 31°16'06" RT
 D = 3°00'00"
 T = 534.47'
 L = 1042.28'
 R = 1909.86'
 PC STA = 195+46.04 NB
 PT STA = 205+88.32 NB
 DB = N 07°33'44" E

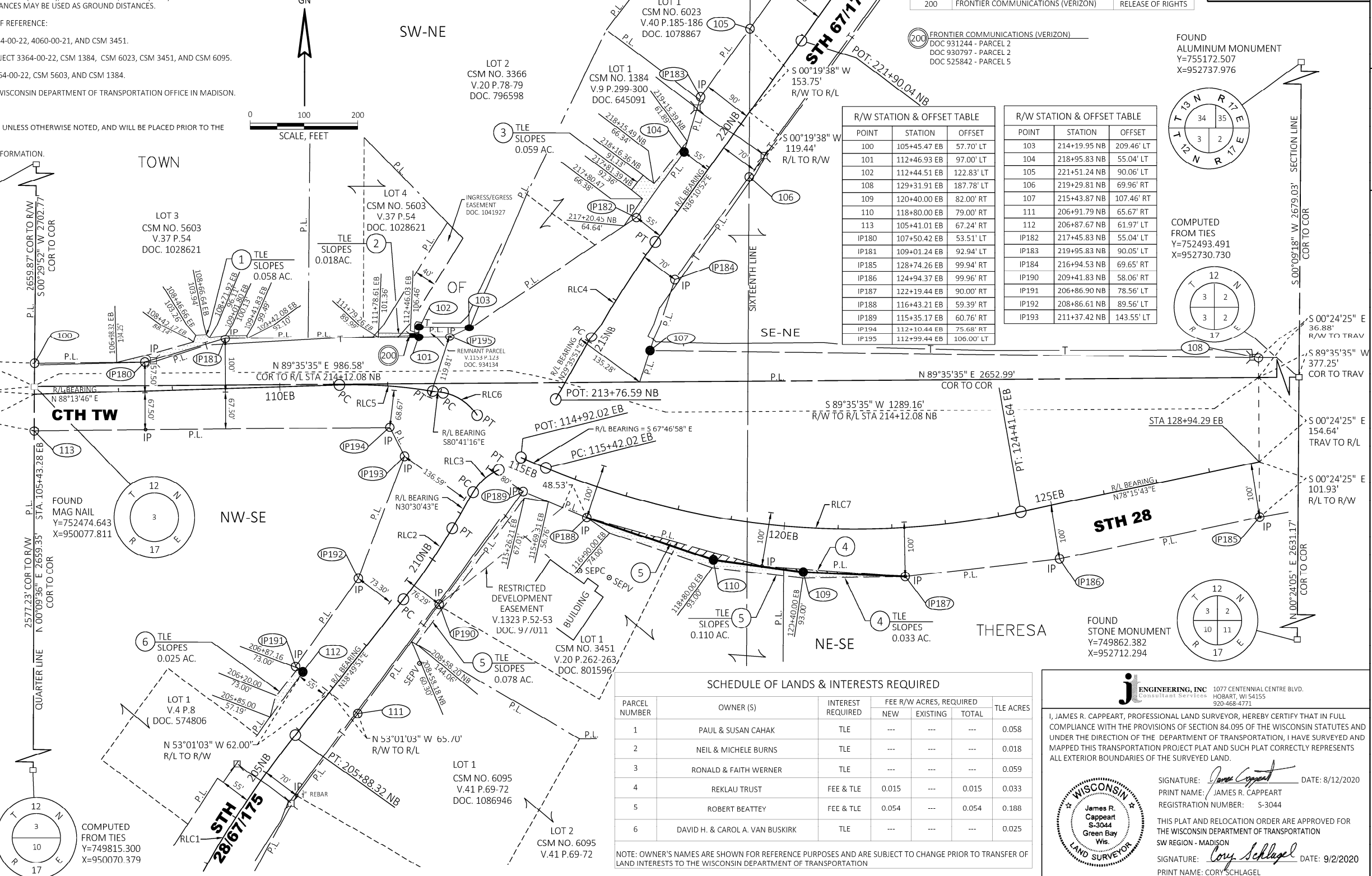
STH 28-67-175(RLC2)
 PI STA = 209+88.89 NB
 Y = 752145.004
 X = 950813.957
 DELTA = 8°19'08" LT
 D = 5°12'31"
 T = 80.00'
 L = 159.71'
 R = 1100.00'
 PC STA = 209+08.89 NB
 PT STA = 210+68.60 NB

STH 28-67-175(RLC3)
 PI STA = 211+78.46 NB
 Y = 752308.574
 X = 950910.353
 DELTA = 36°55'09" RT
 D = 57°17'45"
 T = 33.38'
 L = 64.44'
 R = 100.00'
 PC STA = 211+45.08 NB
 PT STA = 212+09.52 NB
 X = 951503.640
 DA = N 67°25'52" E

STH 28-67-175(RLC4)
 PI STA = 216+20.91 NB
 Y = 752663.235
 X = 951167.513
 DELTA = 6°35'02" RT
 D = 3°00'56"
 T = 109.28'
 L = 218.33'
 R = 1100.00'
 PC STA = 215+11.62 NB
 PT STA = 217+29.95 NB
 X=950070.379



COMPUTED FROM TIES
 Y=752493.491
 X=950070.379



R/W STATION & OFFSET TABLE		
POINT	STATION	OFFSET
100	105+45.47 EB	57.70' LT
101	112+46.93 EB	97.00' LT
102	112+44.51 EB	122.83' LT
108	129+31.91 EB	187.78' LT
109	120+40.00 EB	82.00' RT
110	118+80.00 EB	79.00' RT
113	105+41.01 EB	67.24' RT
IP180	107+50.42 EB	53.51' LT
IP181	109+01.24 EB	92.94' LT
IP185	128+74.26 EB	99.94' RT
IP186	124+94.37 EB	99.96' RT
IP187	122+19.44 EB	90.00' RT
IP188	116+43.21 EB	59.39' RT
IP189	115+35.17 EB	60.76' RT
IP194	112+10.44 EB	75.68' RT
IP195	112+99.44 EB	106.00' LT

R/W STATION & OFFSET TABLE		
POINT	STATION	OFFSET
103	214+19.95 NB	209.46' LT
104	218+95.83 NB	55.04' LT
105	221+51.24 NB	90.06' LT
106	219+29.81 NB	69.96' RT
107	215+43.87 NB	107.46' RT
111	206+91.79 NB	65.67' RT
112	206+87.67 NB	61.97' LT
IP182	217+45.83 NB	55.04' LT
IP183	219+95.83 NB	90.05' LT
IP184	216+94.53 NB	69.65' RT
IP190	209+41.83 NB	58.06' RT
IP191	206+86.90 NB	78.56' RT
IP192	208+86.61 NB	89.56' LT
IP193	211+37.42 NB	143.55' LT

FOUND ALUMINUM MONUMENT
 Y=755172.507
 X=952737.976

COMPUTED FROM TIES
 Y=752493.491
 X=952730.730



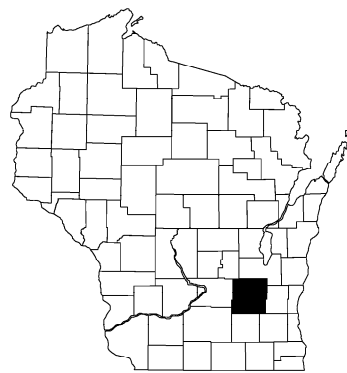
FOUND STONE MONUMENT
 Y=749862.382
 X=952712.294

SCHEDULE OF LANDS & INTERESTS REQUIRED						
PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	FEE R/W ACRES, REQUIRED			TLE ACRES
			NEW	EXISTING	TOTAL	
1	PAUL & SUSAN CAHAK	TLE	---	---	---	0.058
2	NEIL & MICHELE BURNS	TLE	---	---	---	0.018
3	RONALD & FAITH WERNER	TLE	---	---	---	0.059
4	REKLAU TRUST	FEE & TLE	0.015	---	0.015	0.033
5	ROBERT BEATTEY	FEE & TLE	0.054	---	0.054	0.188
6	DAVID H. & CAROL A. VAN BUSKIRK	TLE	---	---	---	0.025

NOTE: OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION

J ENGINEERING, INC 1077 CENTENNIAL CENTRE BLVD.
 CONSULTANT SERVICES HOBART, WI 54155
 920-468-4771
 I, JAMES R. CAPPEART, 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 DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.
 SIGNATURE: *James Cappeart* DATE: 8/12/2020
 PRINT NAME: JAMES R. CAPPEART
 REGISTRATION NUMBER: S-3044
 THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SW REGION - MADISON
 SIGNATURE: *Cory Schlager* DATE: 9/2/2020
 PRINT NAME: CORY SCHLAGEL

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION TRANSPORTATION PROJECT PLAT TITLE SHEET 4060-05-22 HORICON - KEWASKUM STH 67/175/TW INTERSECTION STH 28 DODGE 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 (1-INCH UNLESS NOTED)	IP ●
NEW REFERENCE LINE	---	SIXTEENTH CORNER MONUMENT		FOUND CHISELED X	X
NEW R/W LINE	---	SIGN		OFF-PREMISE SIGN	
EXISTING R/W OR HE LINE	---	COMPENSABLE		NON-COMPENSABLE	
PROPERTY LINE	---	ELECTRIC POLE		TELEPHONE POLE	
LOT, TIE & OTHER MINOR LINES	---	PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		ACCESS RESTRICTED BY ACQUISITION	
SLOPE INTERCEPT	---	NO ACCESS (BY STATUTORY AUTHORITY)		NO ACCESS (BY PREVIOUS PROJECT OR CONTROL)	
CORPORATE LIMITS	---	NO ACCESS (NEW HIGHWAY)		PARCEL NUMBER (25)	
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)	---	UTILITY NUMBER (40)		PARALLEL OFFSETS	
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)	---	TO BE REMOVED		BRIDGE	
TEMPORARY LIMITED EASEMENT AREA	---	BRIDGE			
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)	---				
TRANSMISSION STRUCTURES	---				

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF INTERSECTION	PI
ACRES	AC	PROPERTY LINE	PL
AHEAD	AH	RECORDED AS	(100')
ALUMINUM	ALUM	REEL / IMAGE	R/I
AND OTHERS	ET AL	REFERENCE LINE	R/L
BACK	BK	REMAINING	REM
BLOCK	BLK	RESTRICTIVE DEVELOPMENT	RDE
CENTERLINE	C/L	EASEMENT	
CERTIFIED SURVEY MAP	CSM	RIGHT	RT
CONCRETE	CONC	RIGHT OF WAY	R/W
COUNTY	CO	SECTION	SEC
COUNTY TRUNK HIGHWAY	CTH	SEPTIC VENT	SEPV
DISTANCE	DIST	SQUARE FEET	SF
CORNER	COR	STATE TRUNK HIGHWAY	STH
DOCUMENT NUMBER	DOC	STATION	STA
EASEMENT	EASE	TELEPHONE PEDESTAL	TP
EXISTING	EX	TEMPORARY LIMITED EASEMENT	TLE
GAS VALVE	GV	EASEMENT	
GRID NORTH	GN	TRANSPORTATION PROJECT	TPP
HIGHWAY EASEMENT	HE	PLAT	
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		
POINT OF COMPOUND CURVE	PCC		

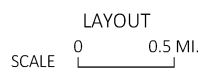
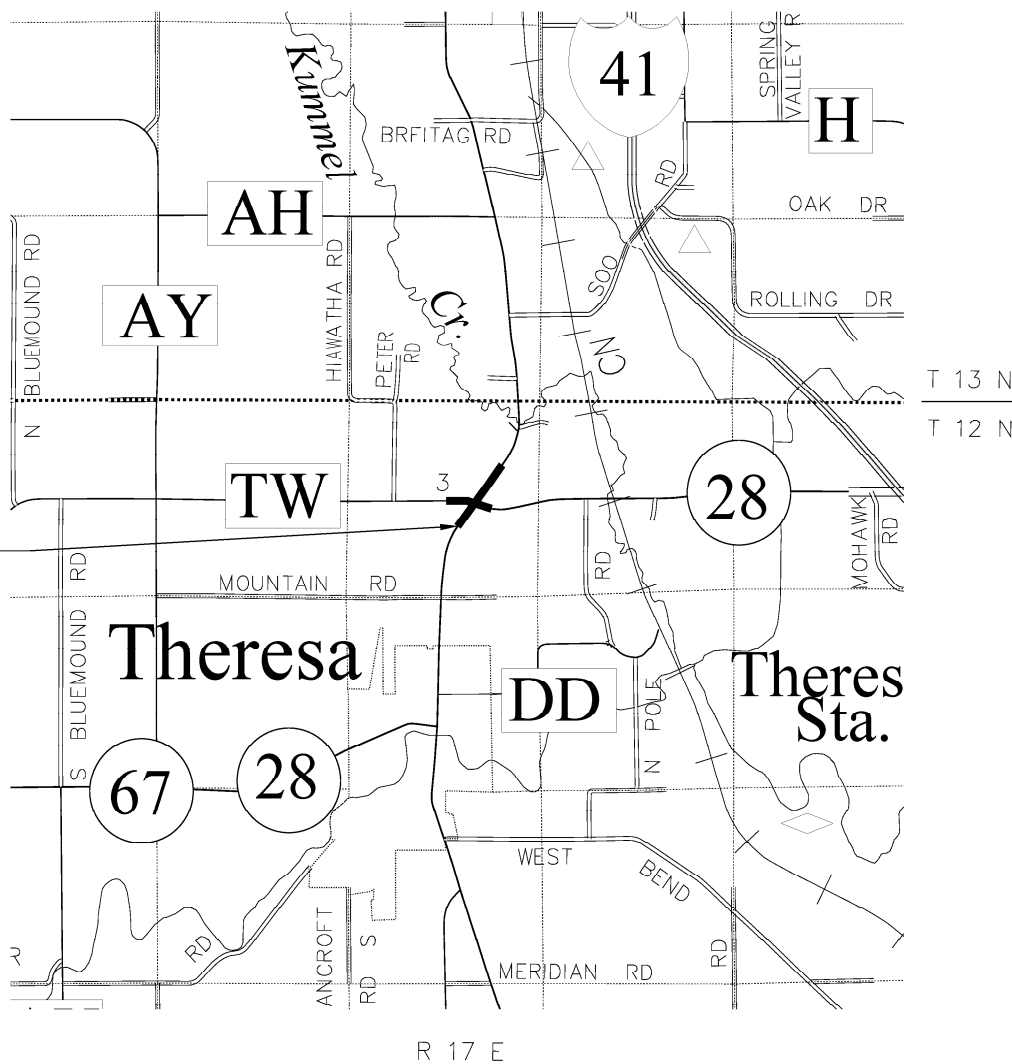
CURVE DATA

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

W	WATER
G	GAS
T	TELEPHONE
OH	OVERHEAD TRANSMISSION LINES
E	ELECTRIC
TV	CABLE TELEVISION
FO	FIBER OPTIC
SAN	SANITARY SEWER
SS	STORM SEWER

PROJECT LOCATION



THE NOTES, CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 4060-05-22

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY REFERENCE SYSTEM COORDINATES (WISCRS), DODGE 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 (TLE)S ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

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

AN EASEMENT FOR HIGHWAY PURPOSES (HE), AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE.

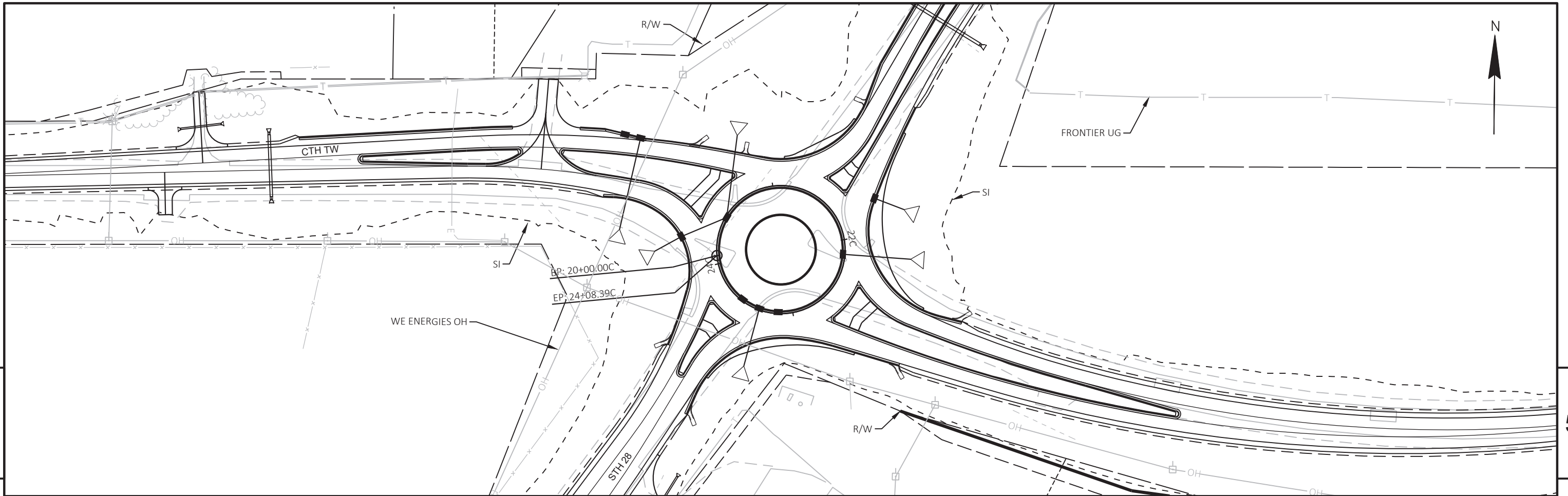
PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON.

PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE SCHEDULE OF LANDS & INTERESTS REQUIRED.

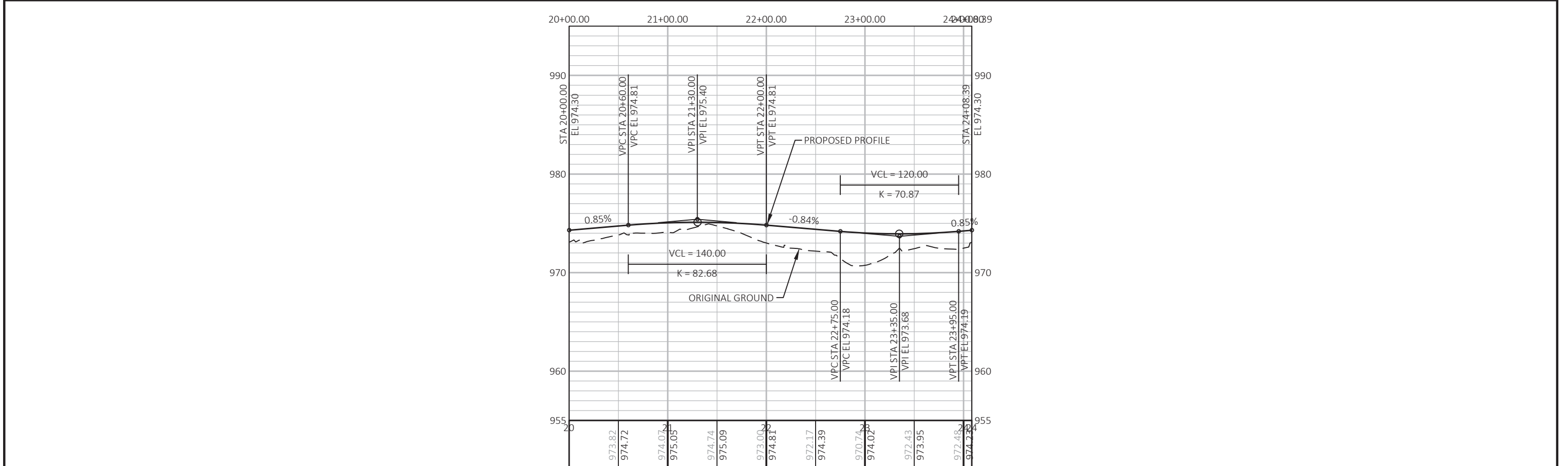
INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE TPP DETAIL PAGE(S).

PROJECT NUMBER 4060-05-22 - 4.01
SHEET 2 OF 2
AMENDMENT NO:

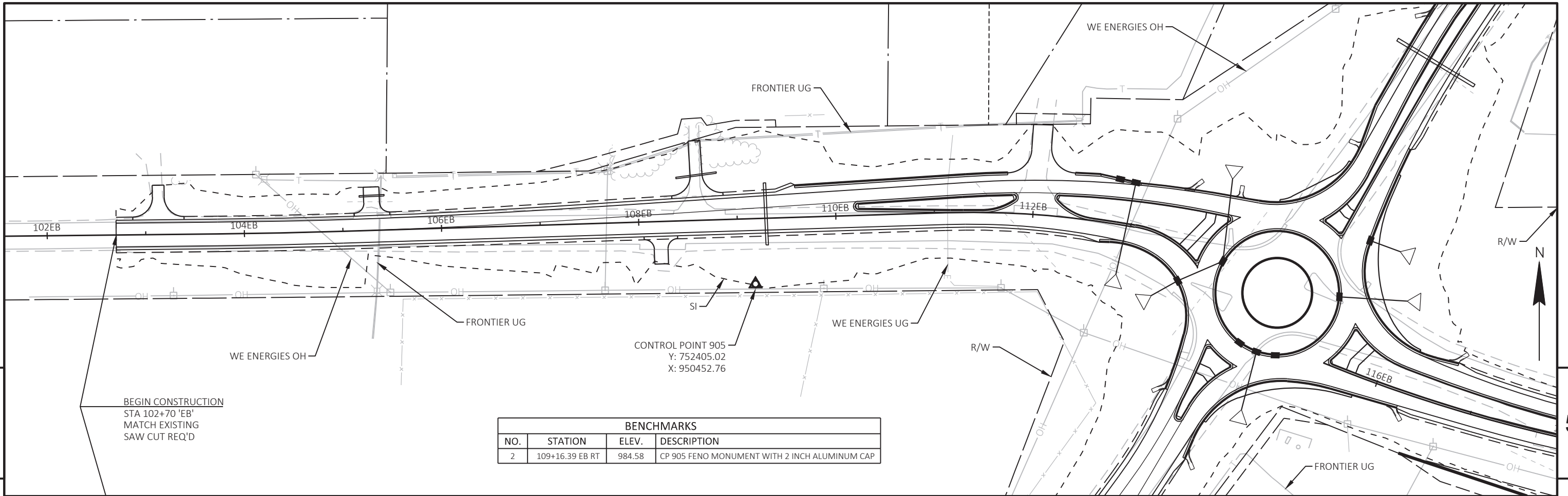


5

5



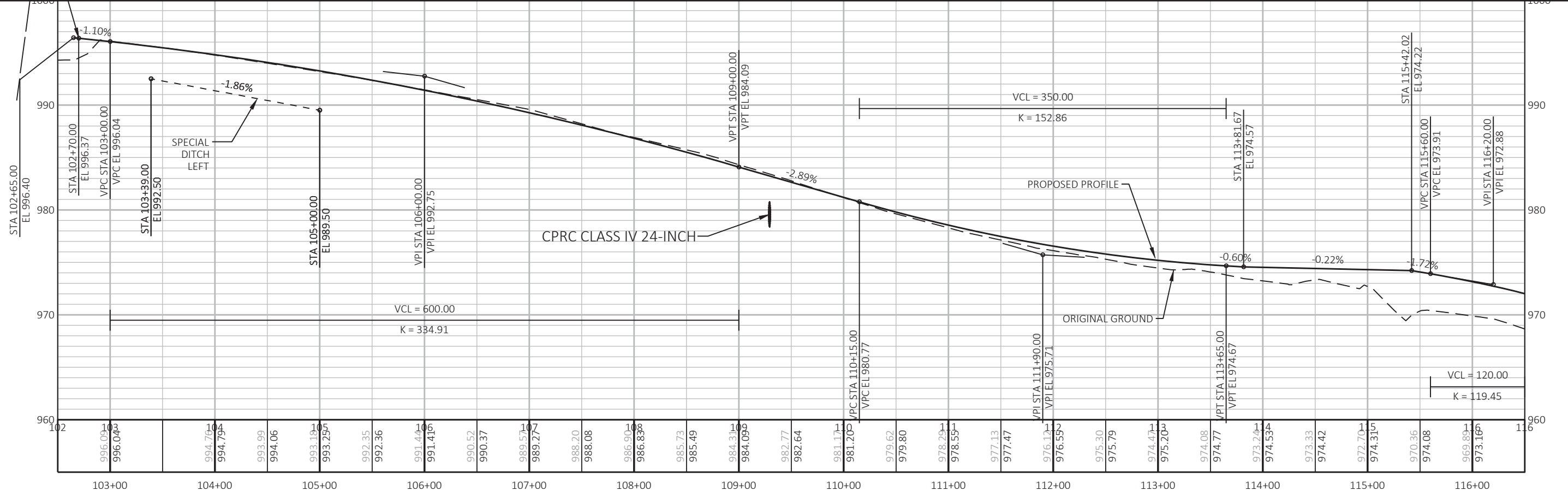
PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE PLAN AND PROFILE: CIRCLE SHEET 72 E



BEGIN CONSTRUCTION
 STA 102+70 'EB'
 MATCH EXISTING
 SAW CUT REQ'D

BENCHMARKS			
NO.	STATION	ELEV.	DESCRIPTION
2	109+16.39 EB RT	984.58	CP 905 FENO MONUMENT WITH 2 INCH ALUMINUM CAP

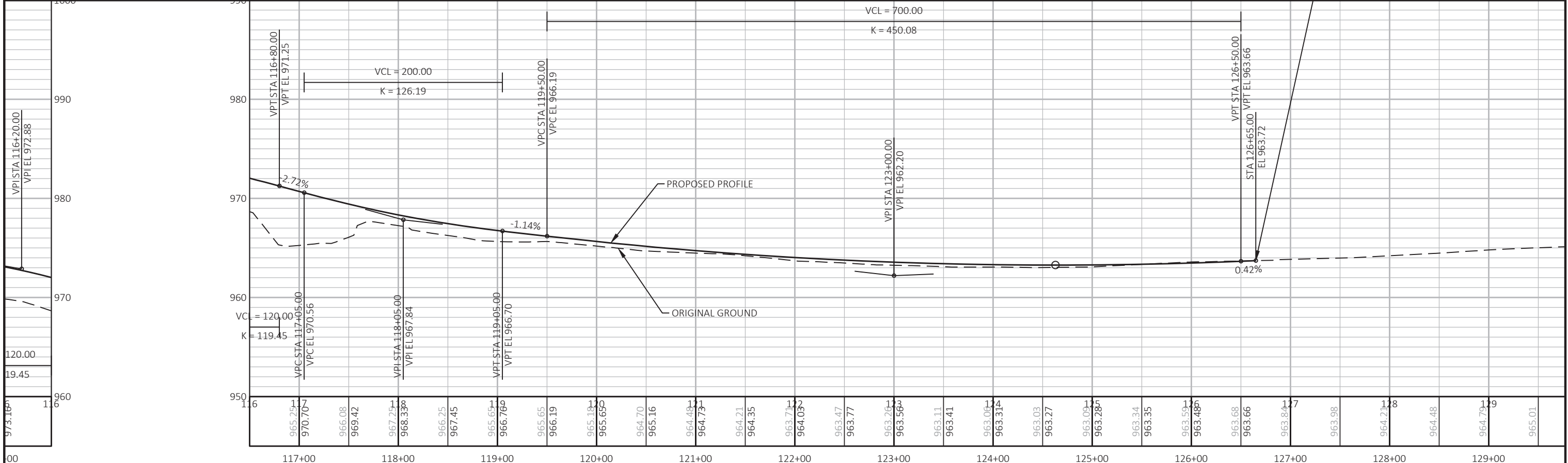
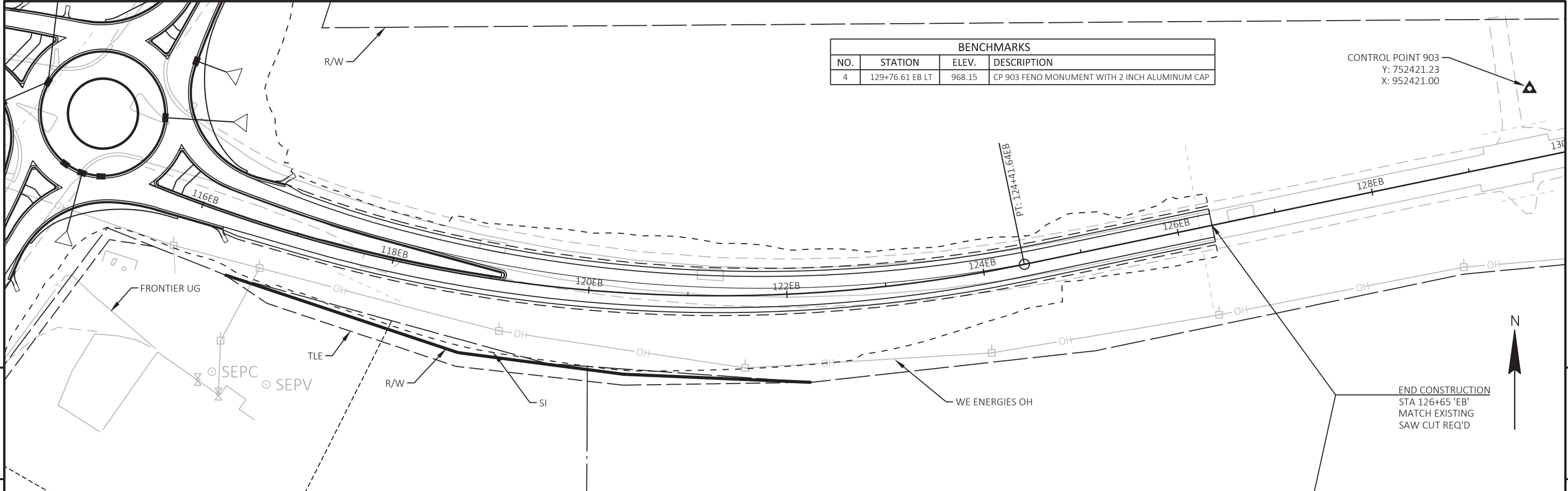
CONTROL POINT 905
 Y: 752405.02
 X: 950452.76



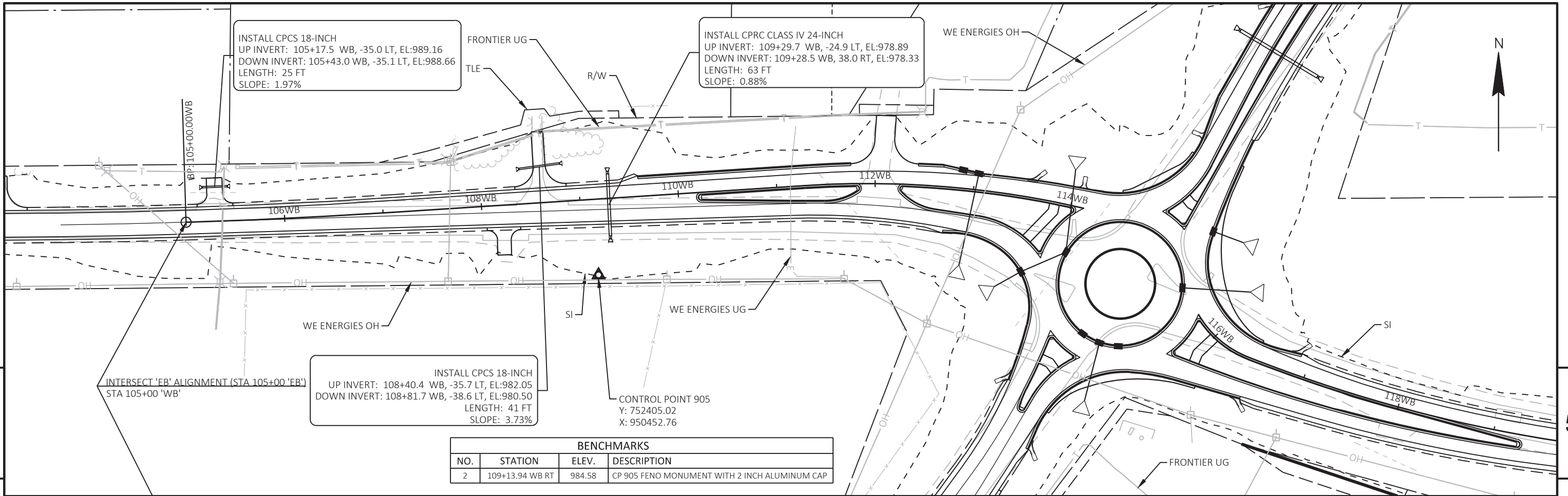
PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE PLAN AND PROFILE: EB SHEET 73

BENCHMARKS			
NO.	STATION	ELEV.	DESCRIPTION
4	129+76.61 EB LT	968.15	CP 903 FENO MONUMENT WITH 2 INCH ALUMINUM CAP

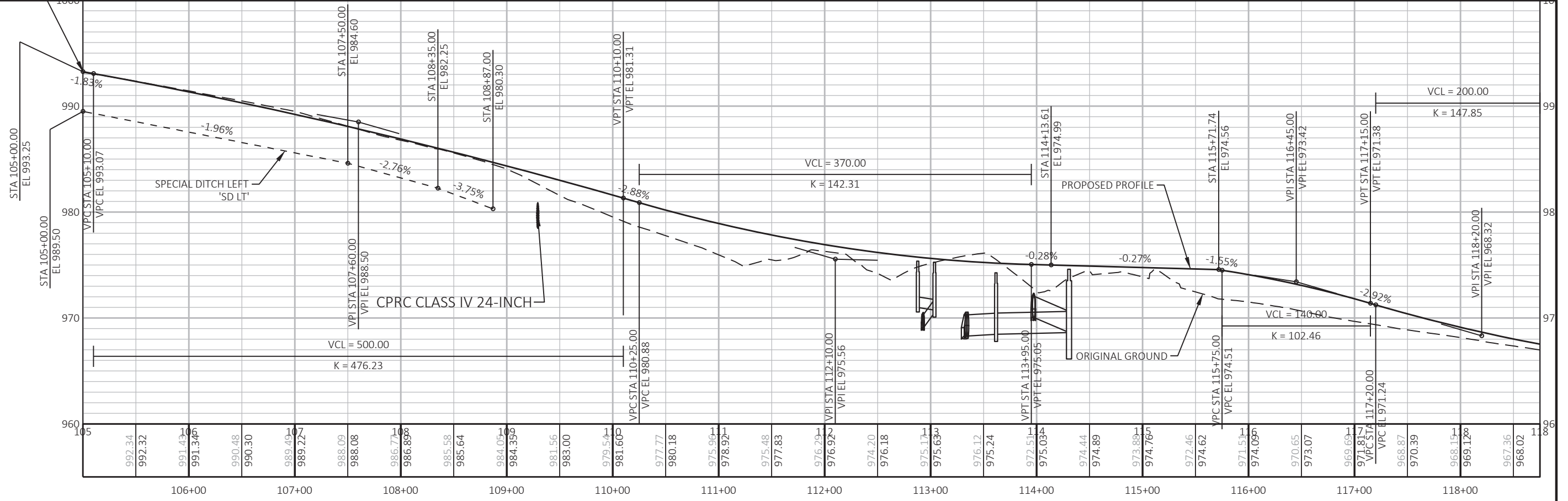
CONTROL POINT 903
Y: 752421.23
X: 952421.00



PROJECT NO: 4060-05-72	HWY: STH 28	COUNTY: DODGE	PLAN AND PROFILE: EB	SHEET 74	E
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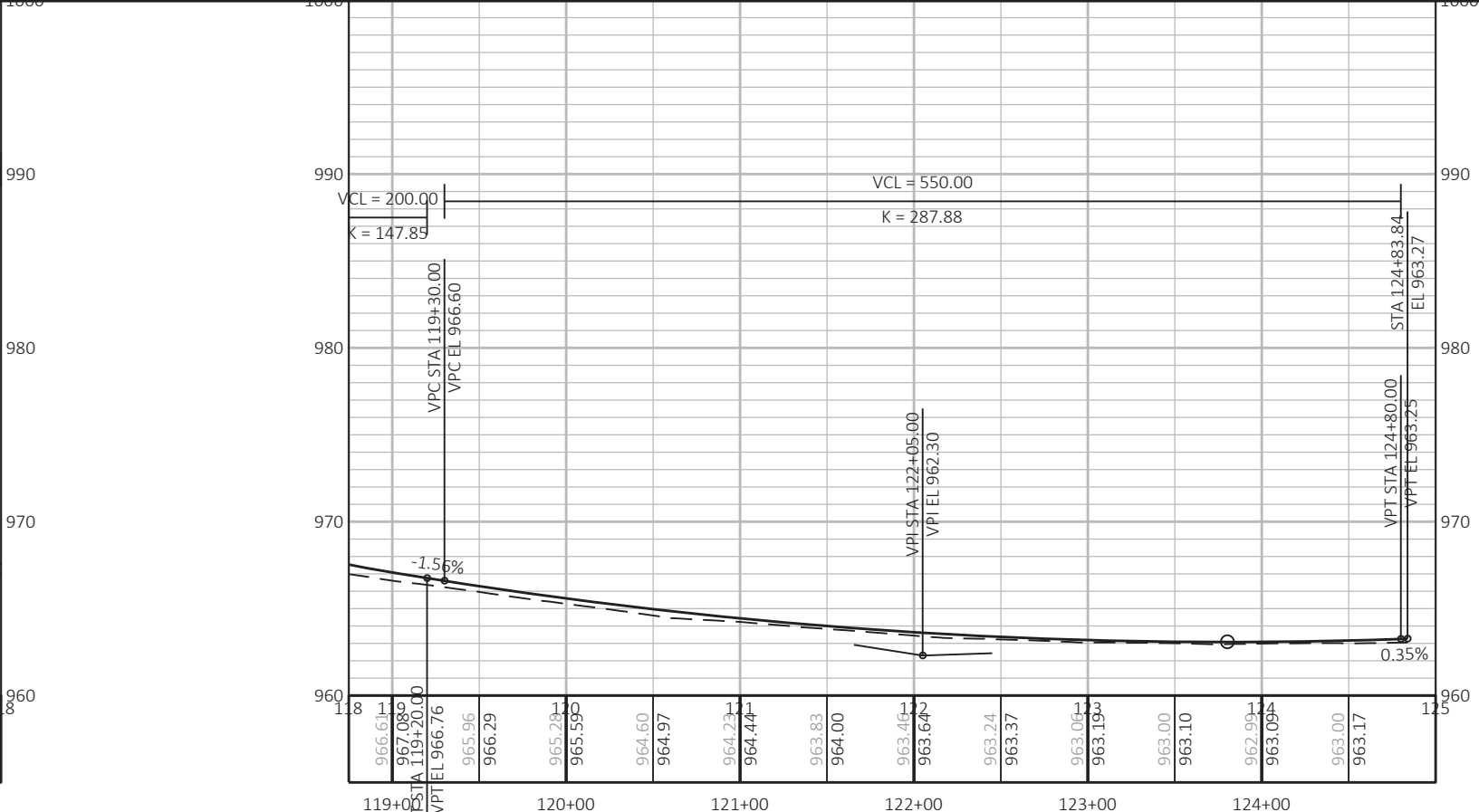
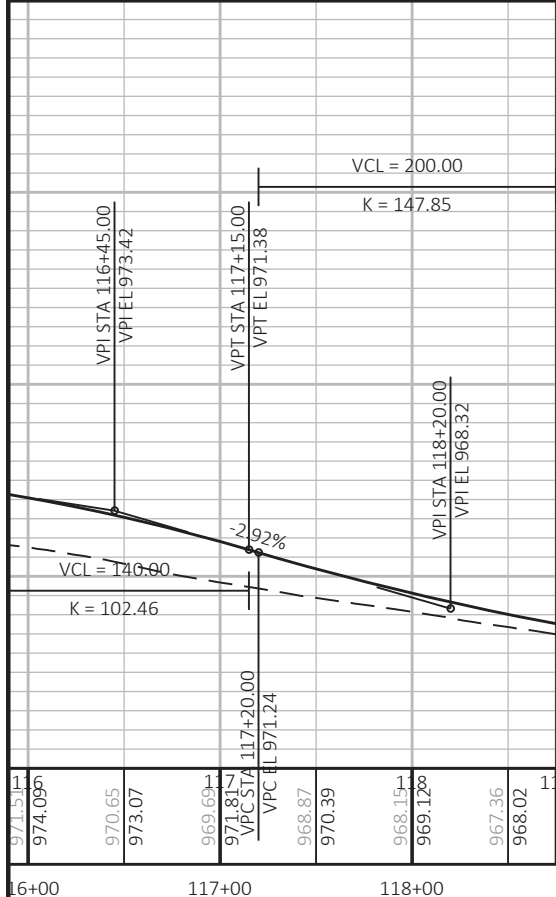
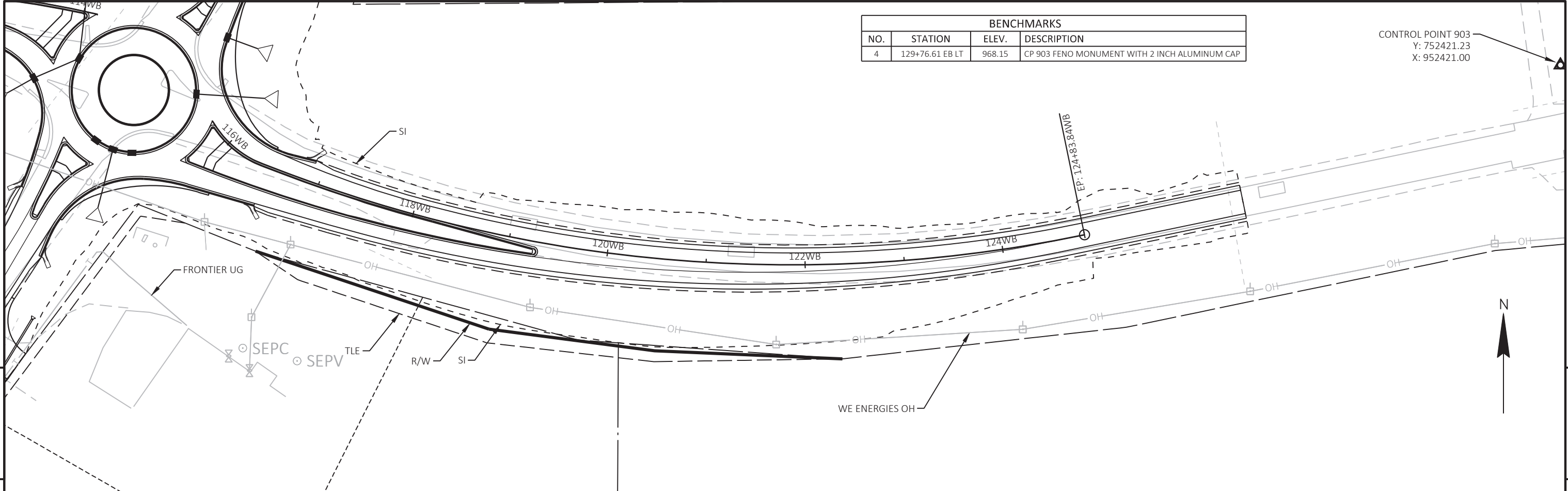


BENCHMARKS			
NO.	STATION	ELEV.	DESCRIPTION
2	109+13.94 WB RT	984.58	CP 905 FENO MONUMENT WITH 2 INCH ALUMINUM CAP



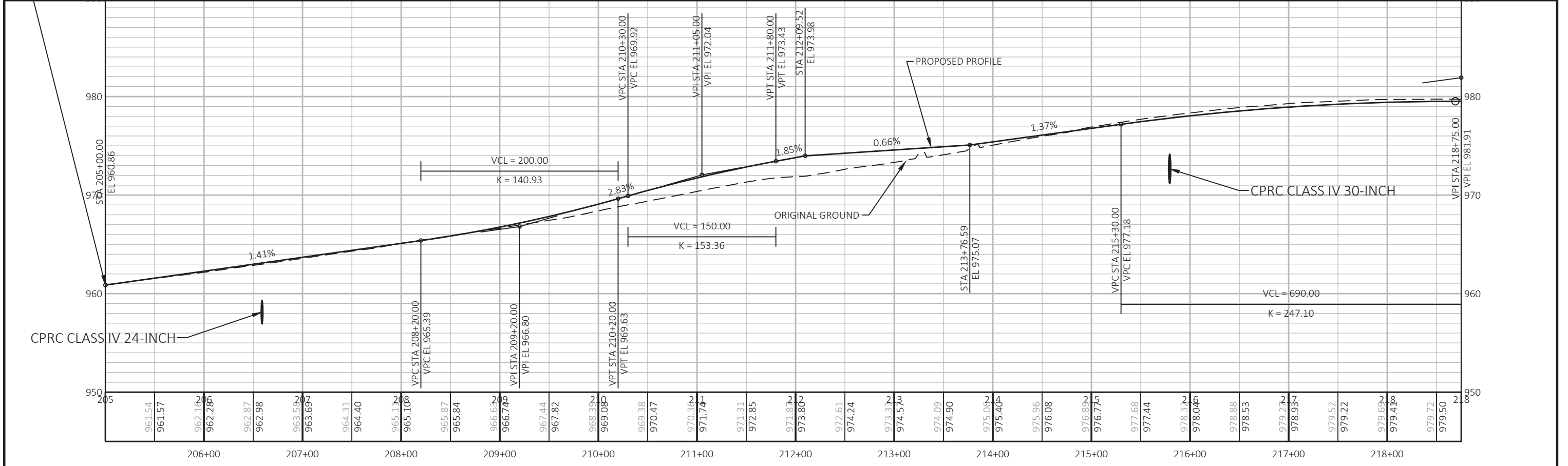
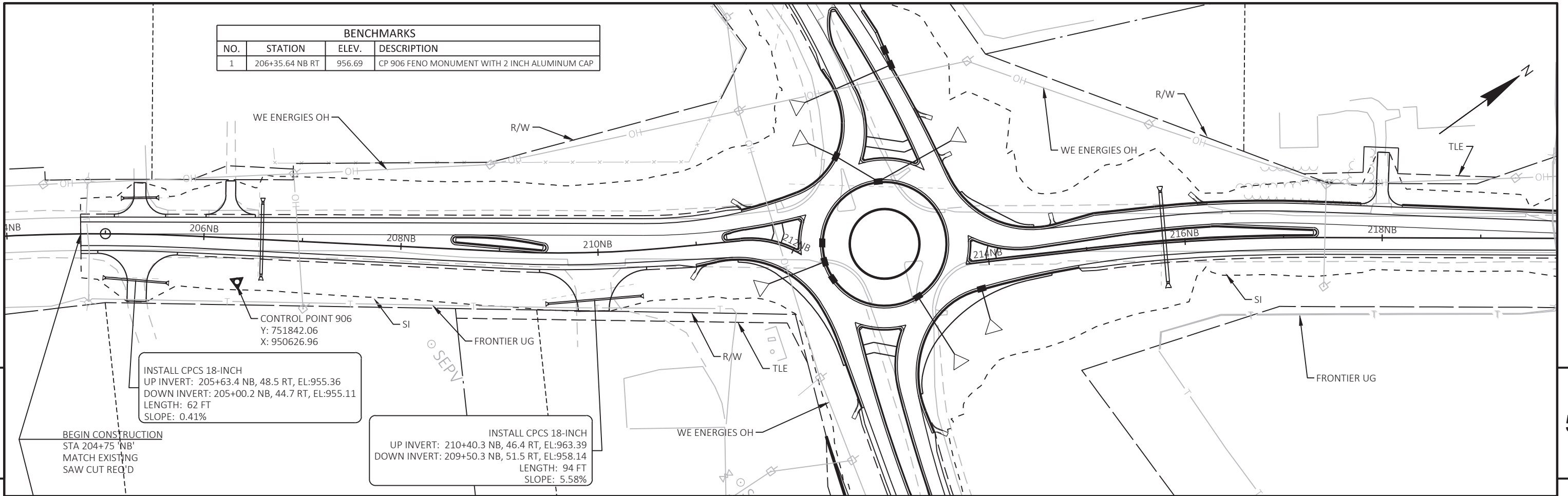
BENCHMARKS			
NO.	STATION	ELEV.	DESCRIPTION
4	129+76.61 EB LT	968.15	CP 903 FENO MONUMENT WITH 2 INCH ALUMINUM CAP

CONTROL POINT 903
Y: 752421.23
X: 952421.00

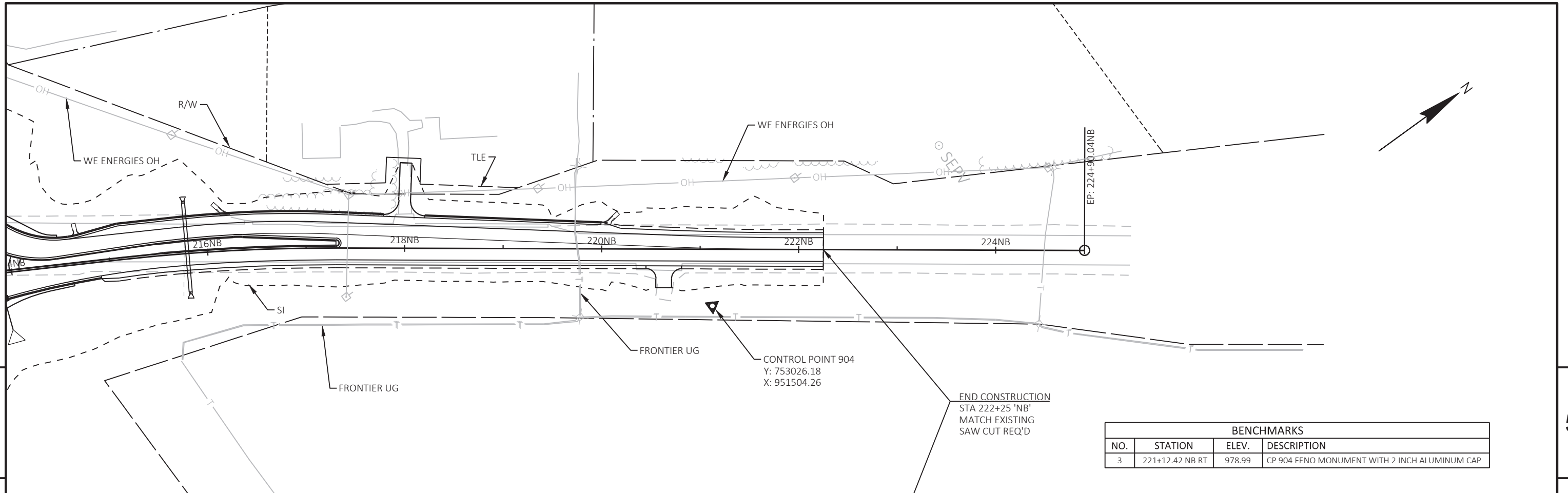


PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE PLAN AND PROFILE: WB SHEET 76 E

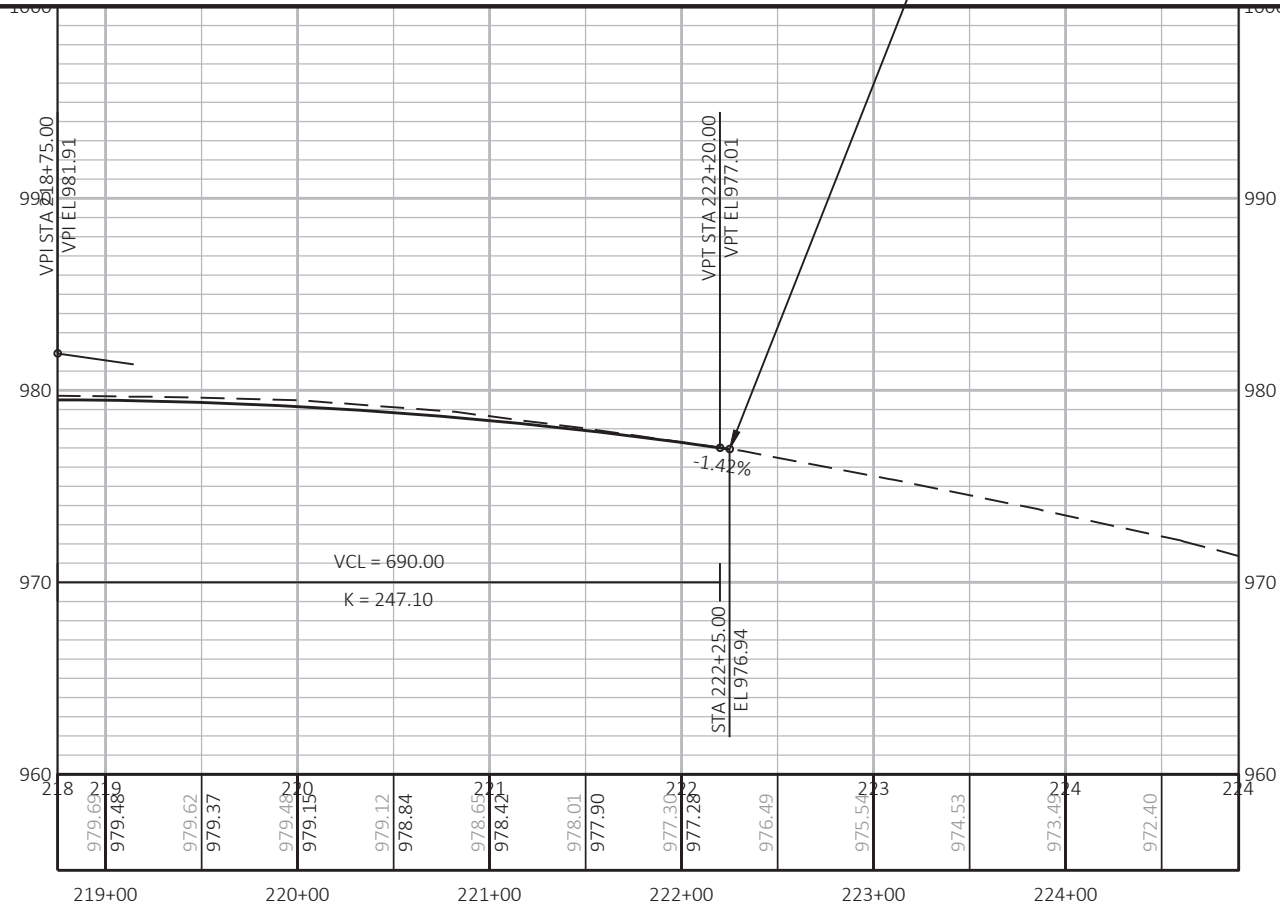
BENCHMARKS			
NO.	STATION	ELEV.	DESCRIPTION
1	206+35.64 NB RT	956.69	CP 906 FENO MONUMENT WITH 2 INCH ALUMINUM CAP

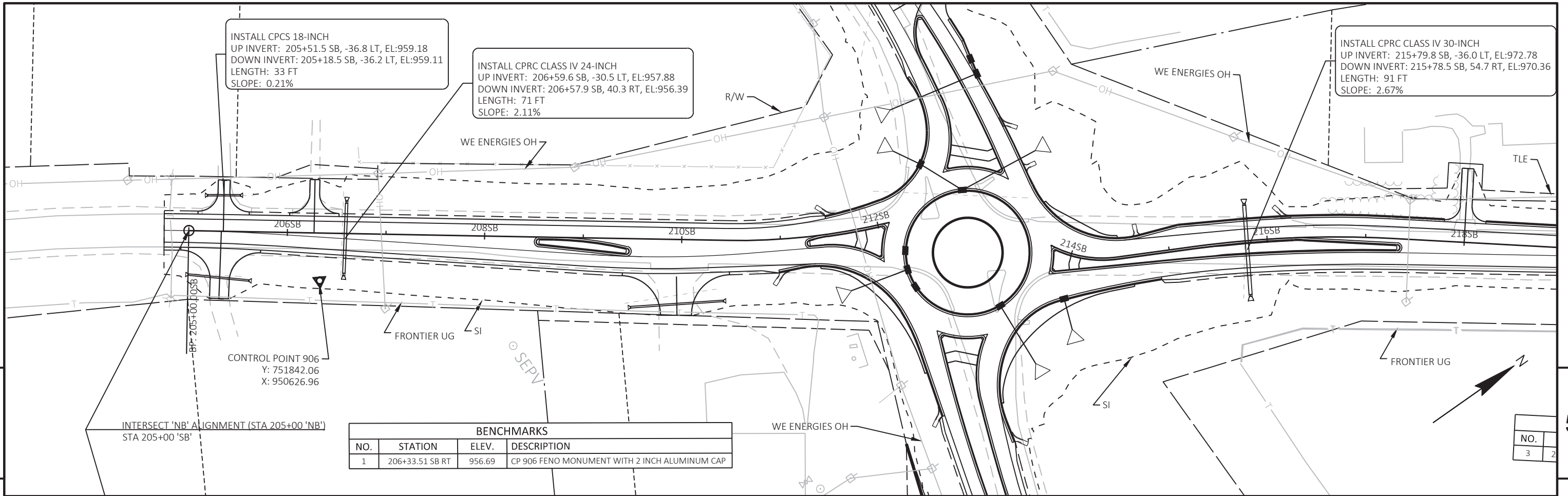


PROJECT NO: 4060-05-72	HWY: STH 28	COUNTY: DODGE	PLAN AND PROFILE: NB	SHEET 77	E
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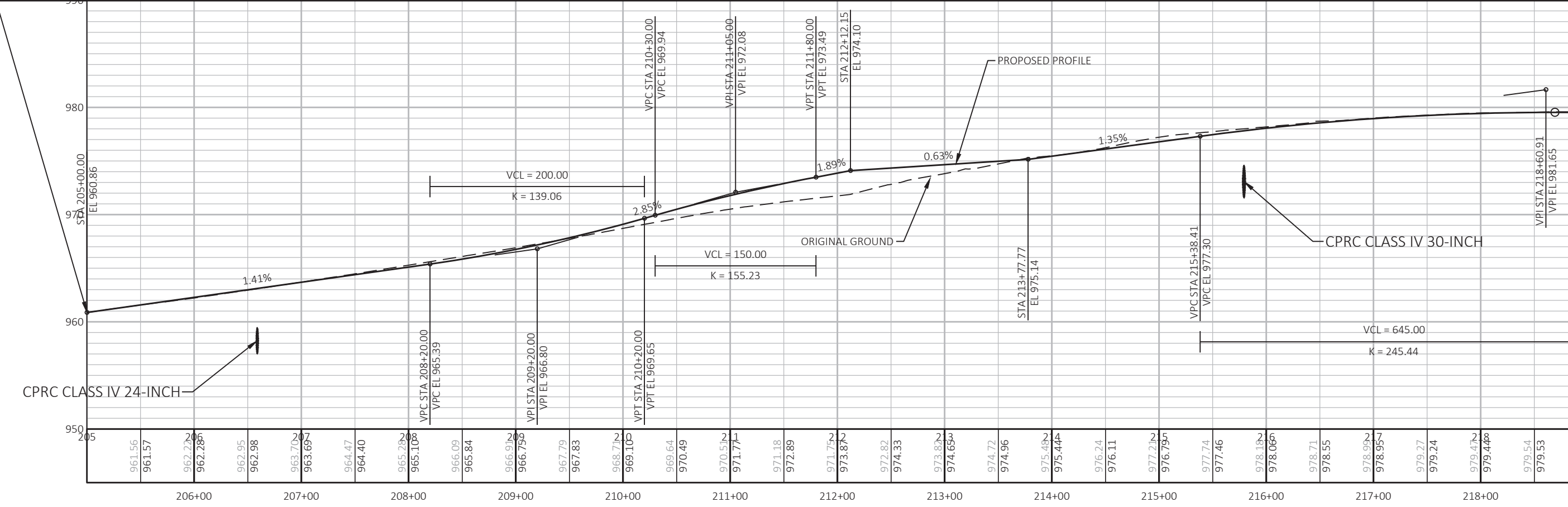


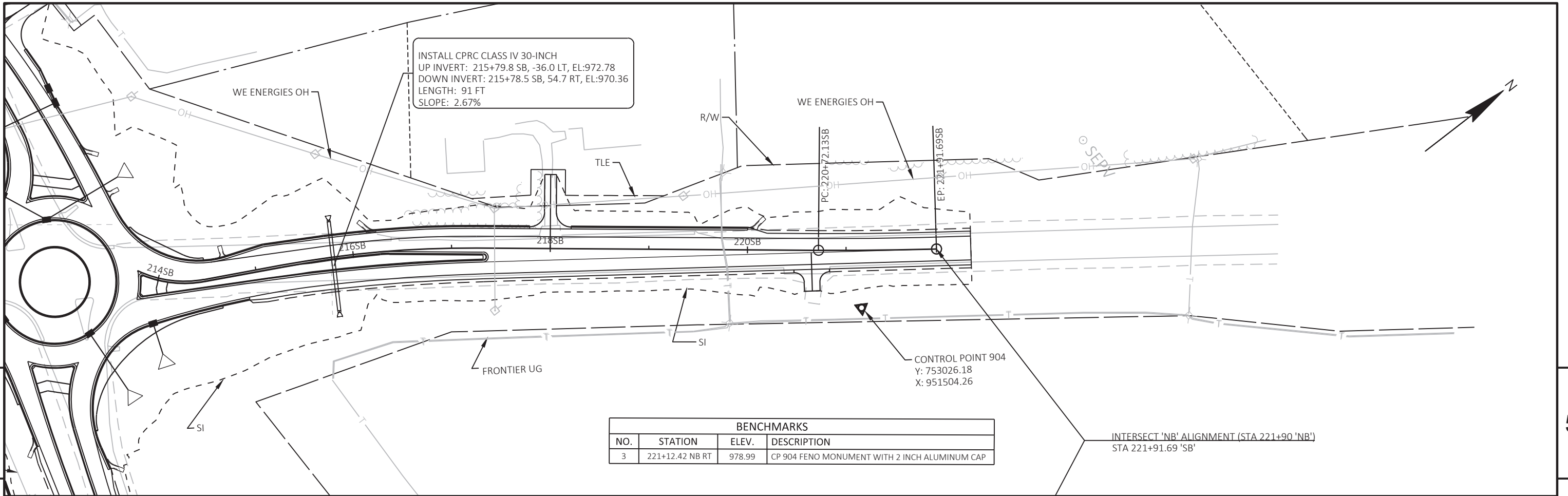
BENCHMARKS			
NO.	STATION	ELEV.	DESCRIPTION
3	221+12.42 NB RT	978.99	CP 904 FENO MONUMENT WITH 2 INCH ALUMINUM CAP





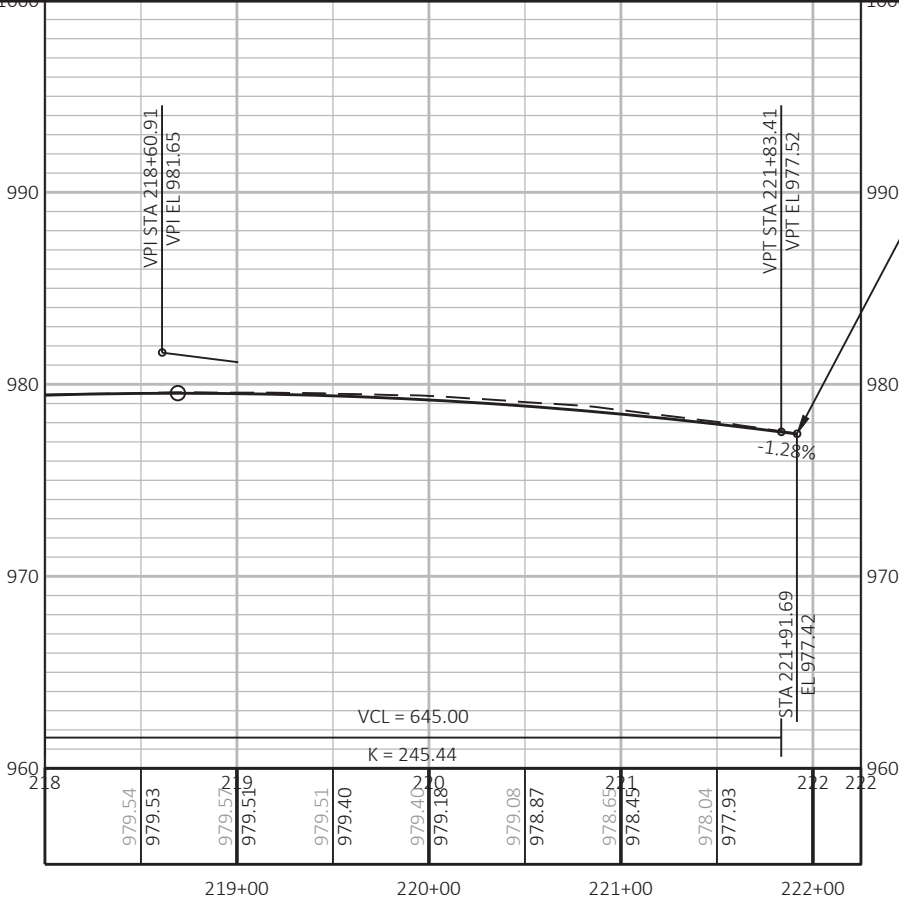
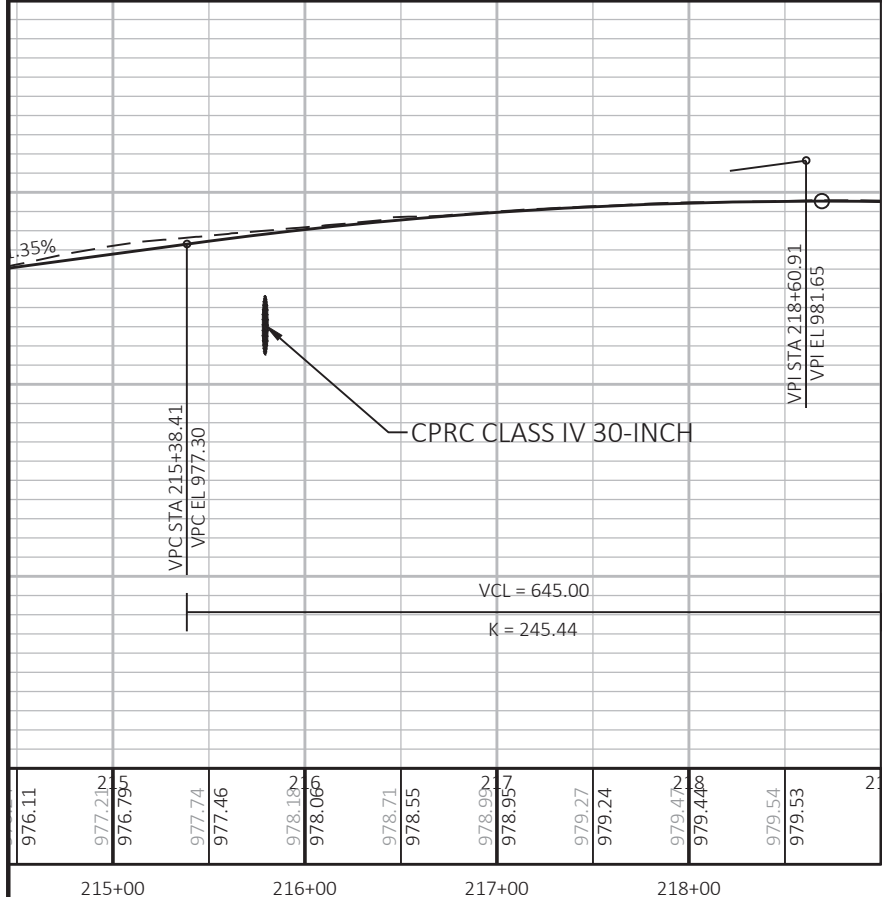
BENCHMARKS			
NO.	STATION	ELEV.	DESCRIPTION
1	206+33.51 SB RT	956.69	CP 906 FENO MONUMENT WITH 2 INCH ALUMINUM CAP

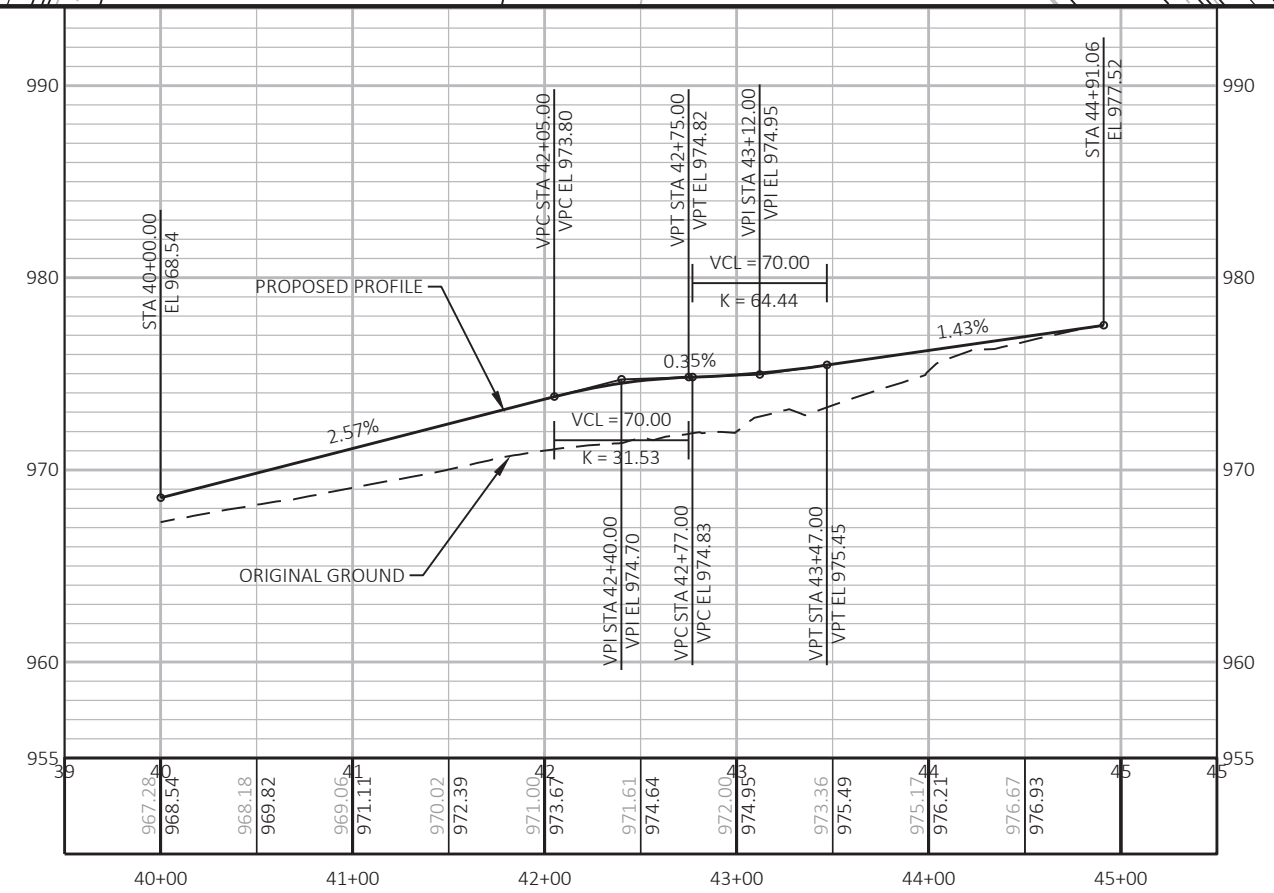
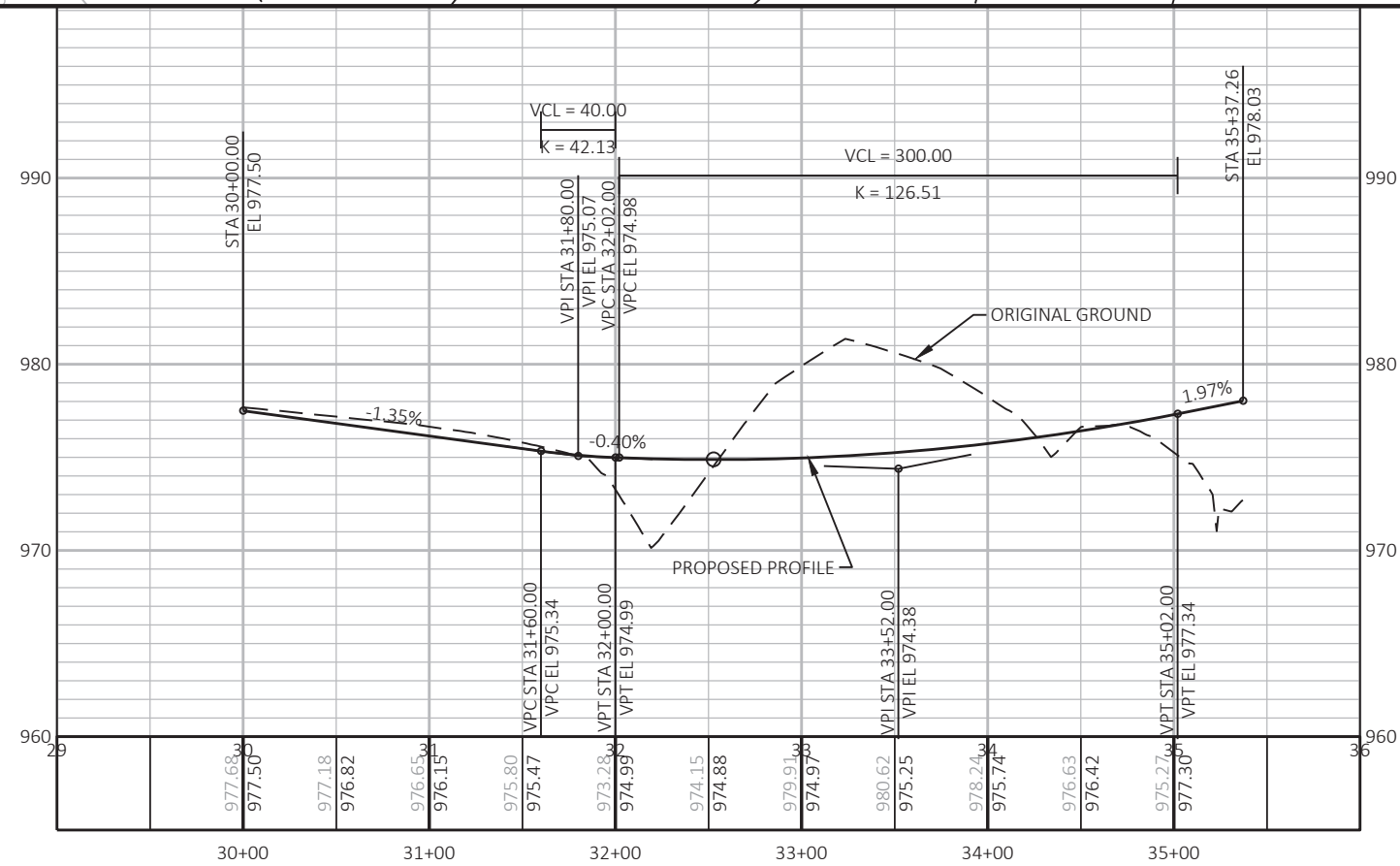
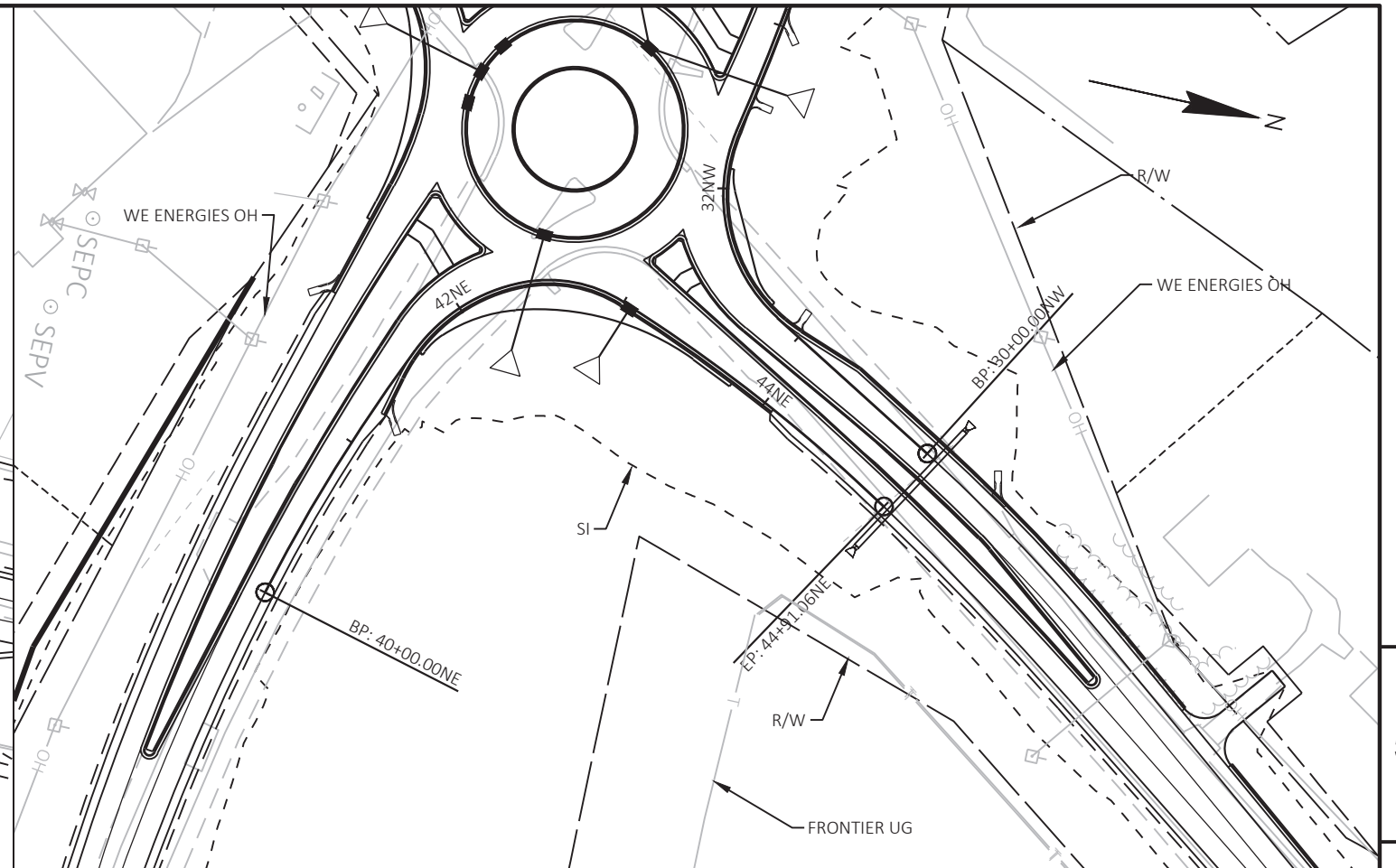
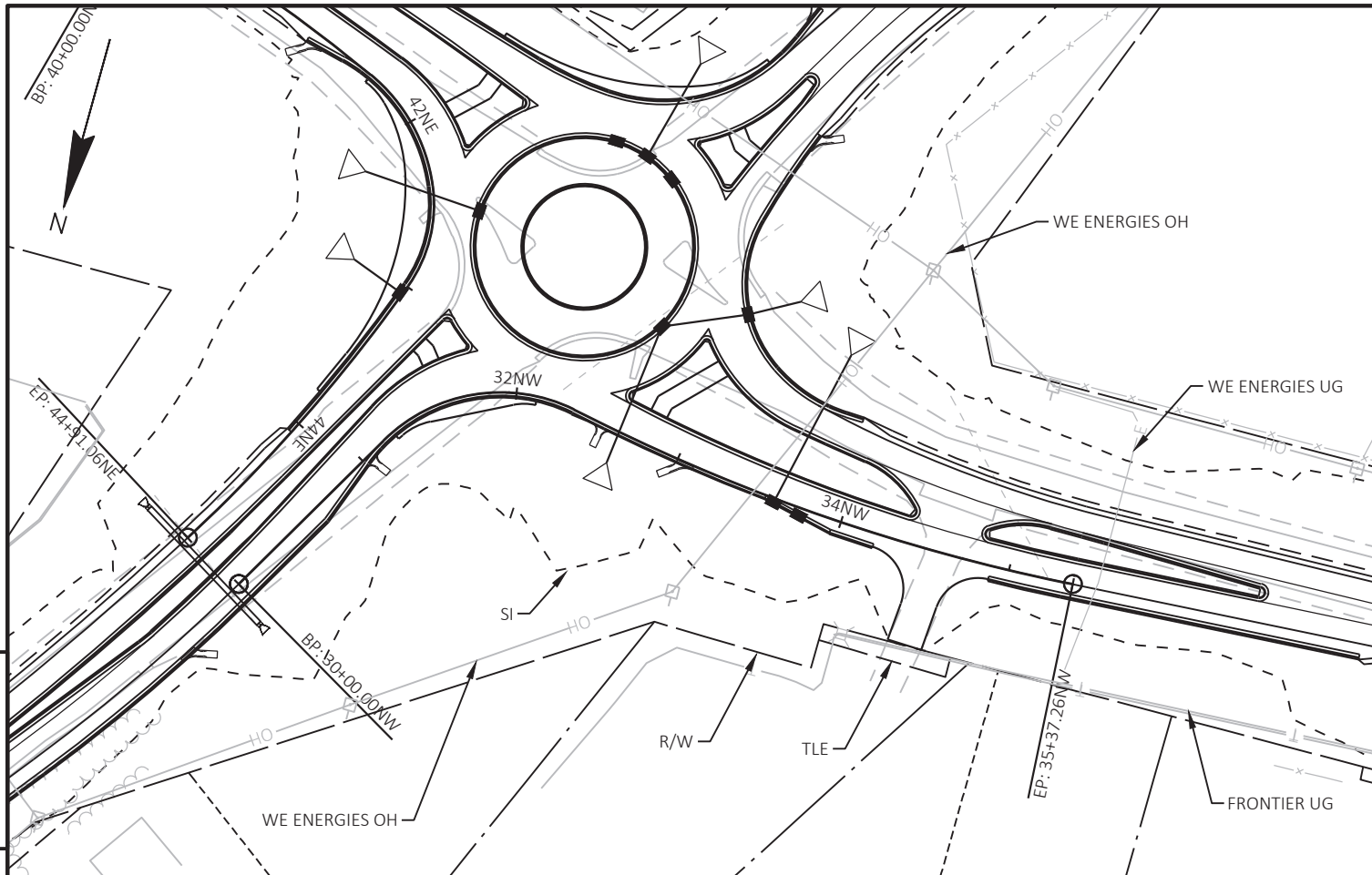




BENCHMARKS			
NO.	STATION	ELEV.	DESCRIPTION
3	221+12.42 NB RT	978.99	CP 904 FENO MONUMENT WITH 2 INCH ALUMINUM CAP

INTERSECT 'NB' ALIGNMENT (STA 221+90 'NB')
STA 221+91.69 'SB'





PROJECT NO: 4060-05-72

HWY: STH 28

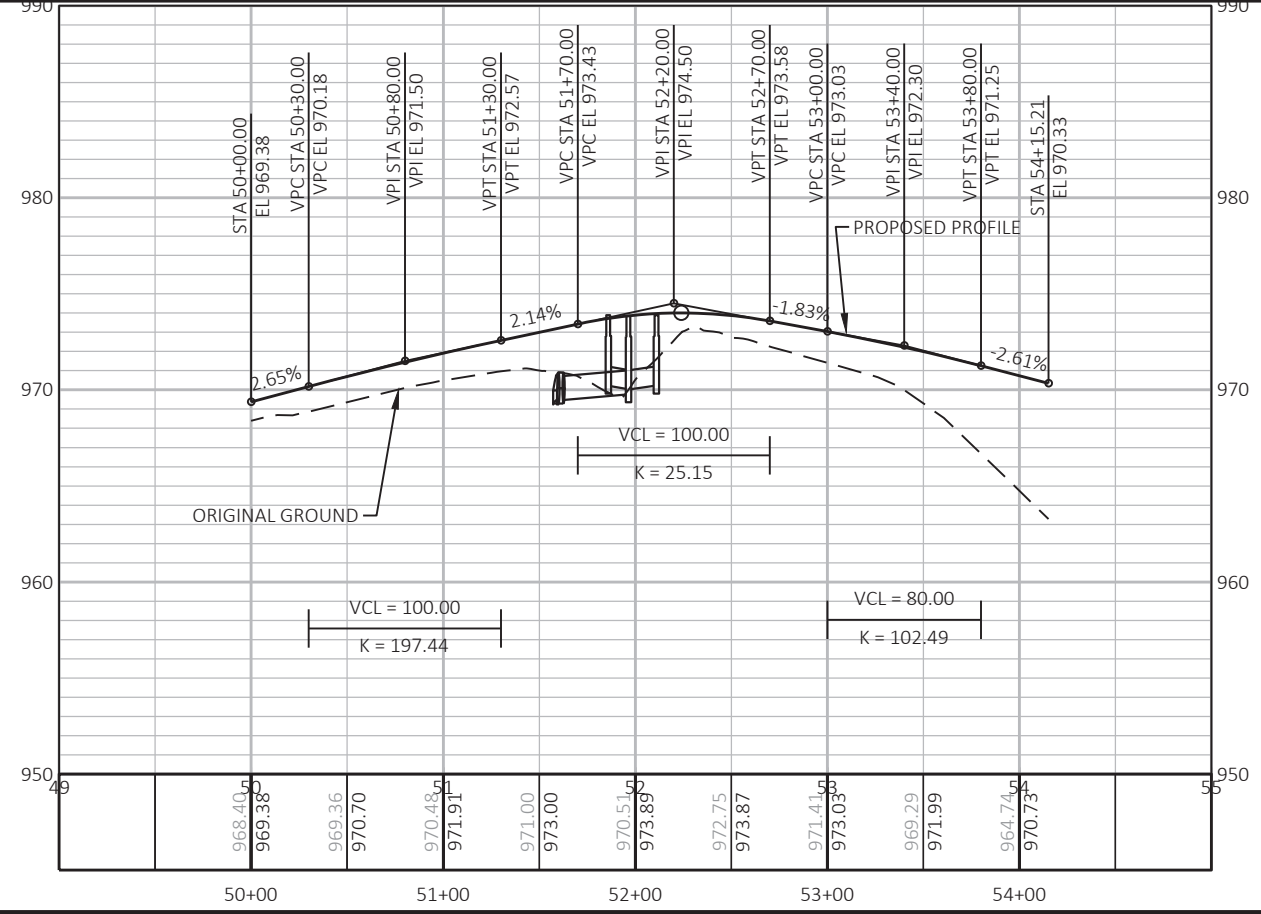
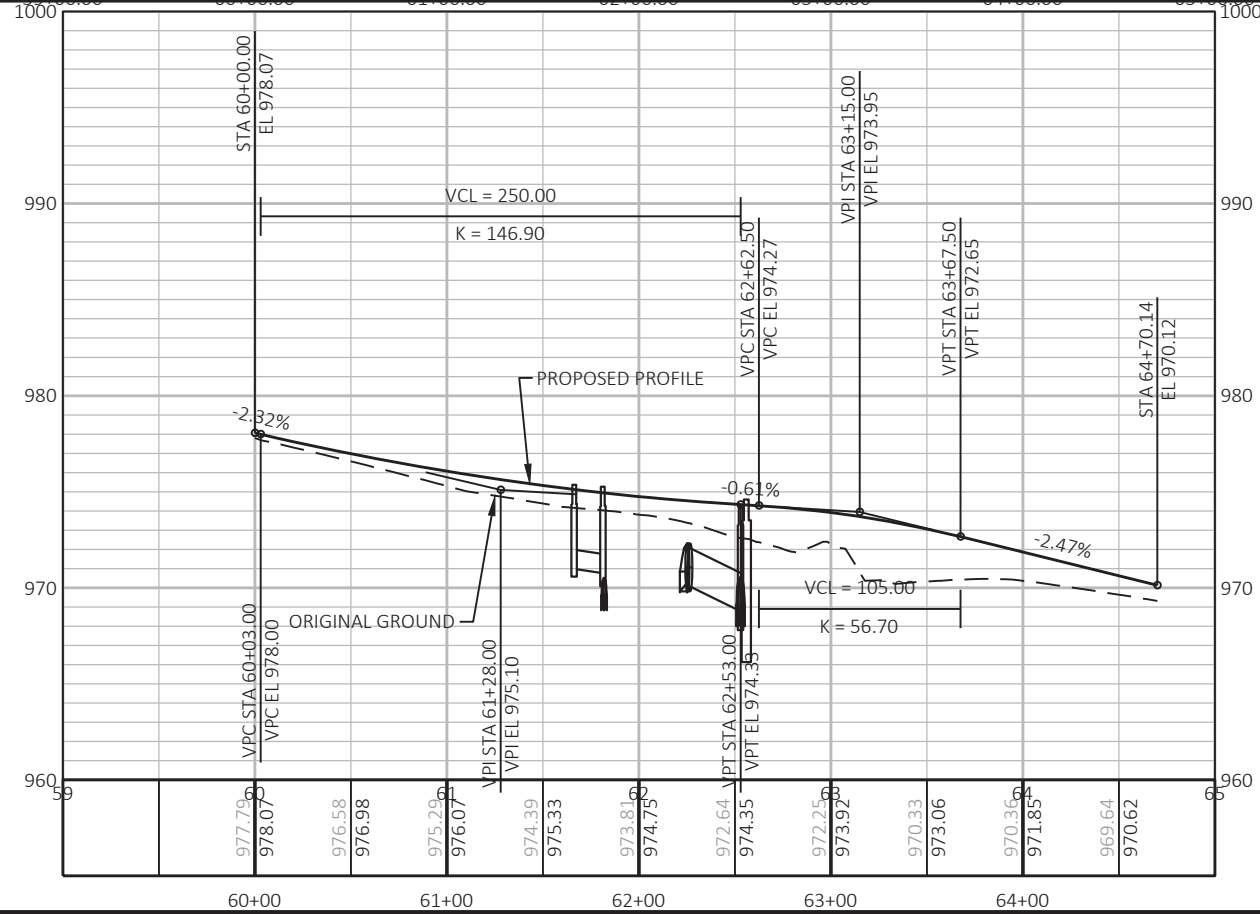
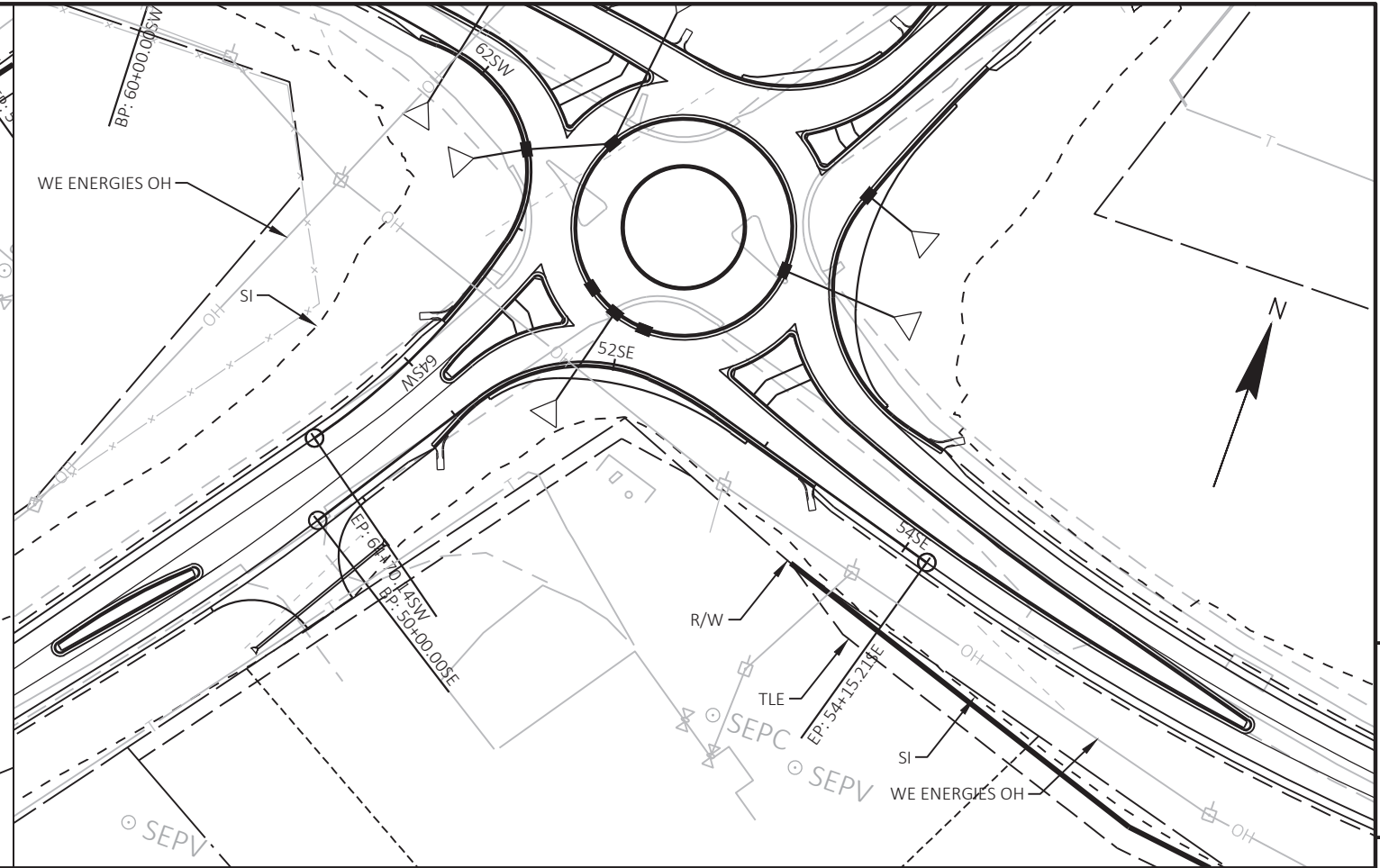
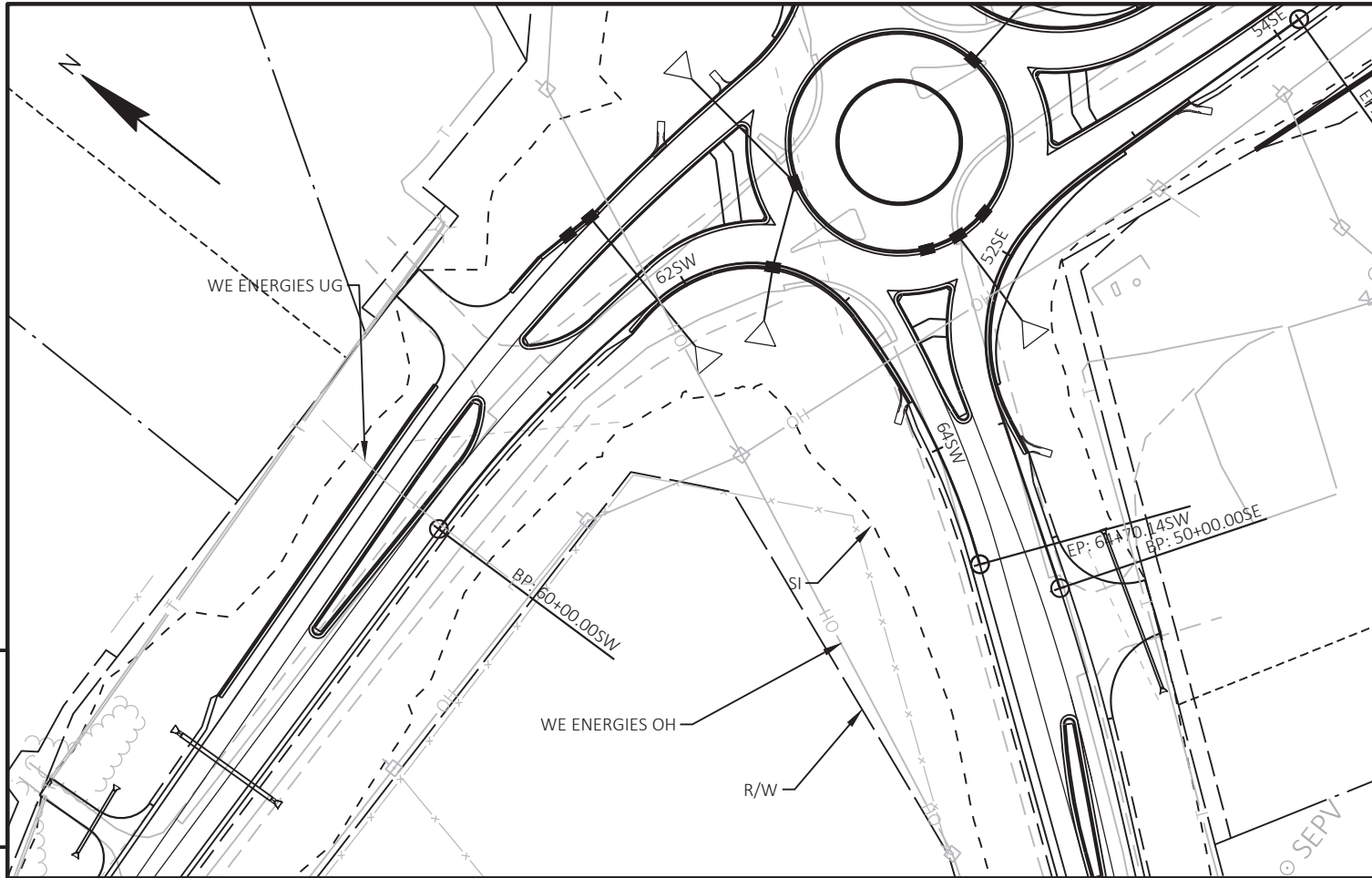
COUNTY: DODGE

PLAN AND PROFILE: NW & NE

SHEET

81

E



PROJECT NO: 4060-05-72

HWY: STH 28

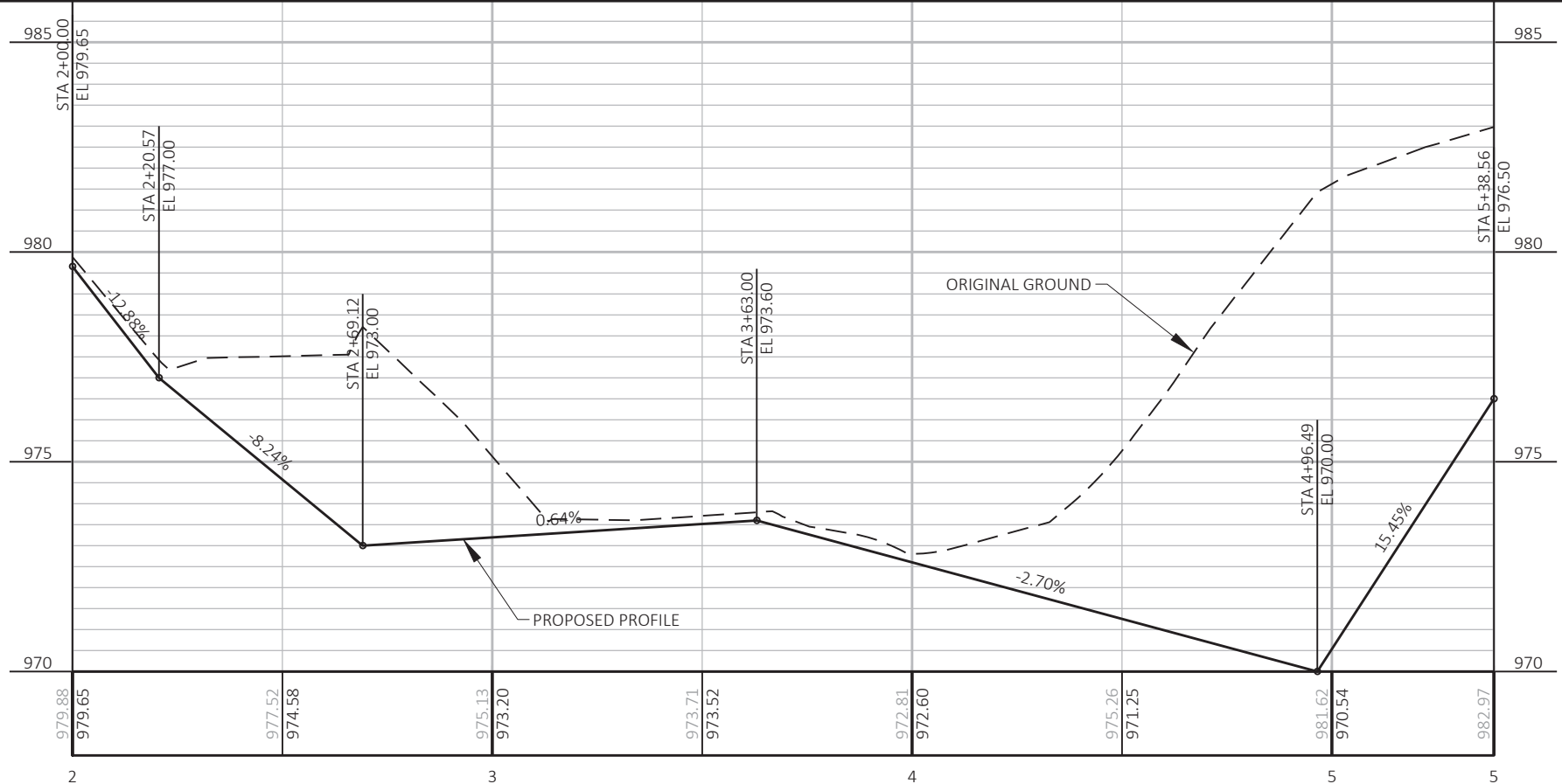
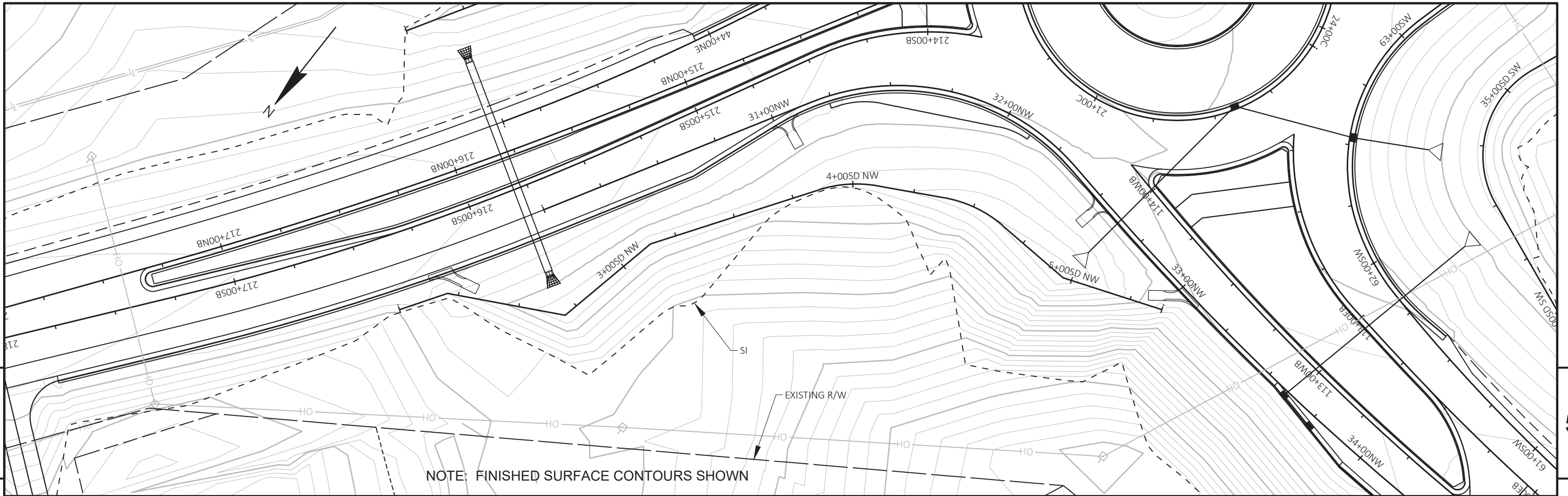
COUNTY: DODGE

PLAN AND PROFILE: SW & SE

SHEET

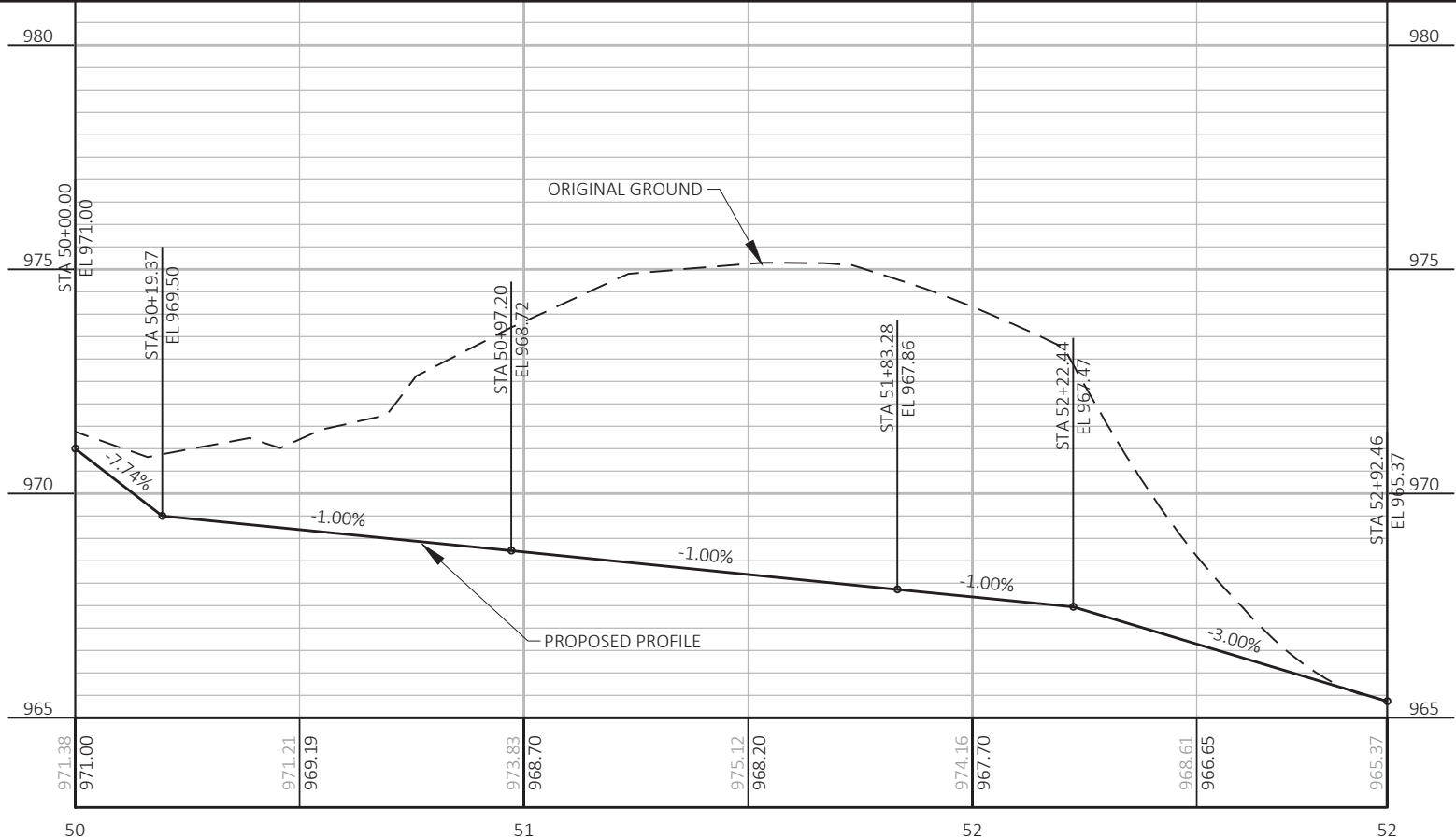
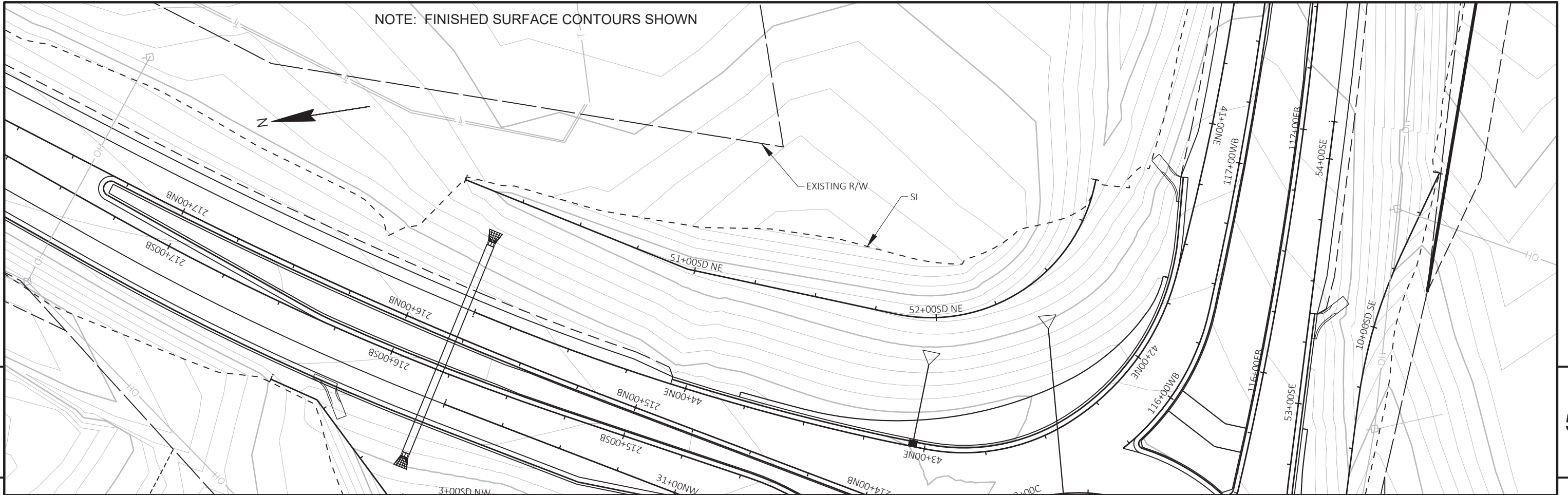
82

E



PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE PLAN AND PROFILE: SPECIAL DITCH NW SHEET 83

NOTE: FINISHED SURFACE CONTOURS SHOWN



PROJECT NO: 4060-05-72

HWY: STH 28

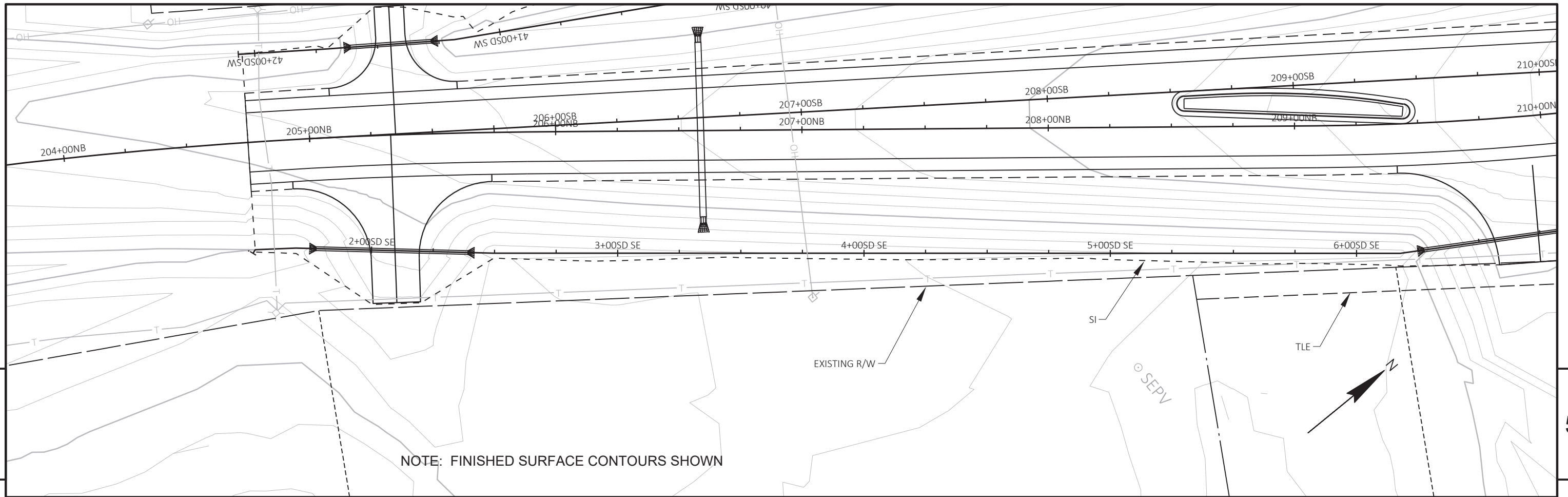
COUNTY: DODGE

PLAN AND PROFILE: SPECIAL DITCH NE

SHEET

84

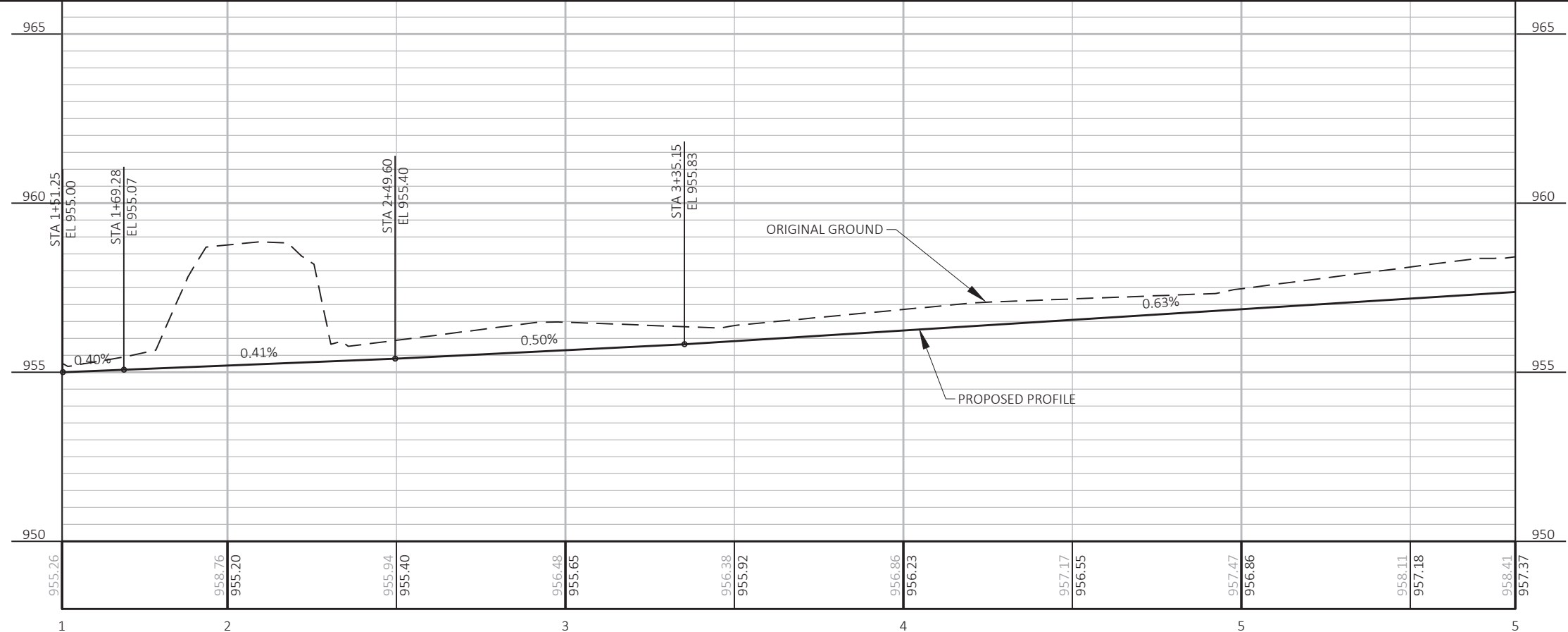
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5

5

NOTE: FINISHED SURFACE CONTOURS SHOWN



PROJECT NO: 4060-05-72

HWY: STH 28

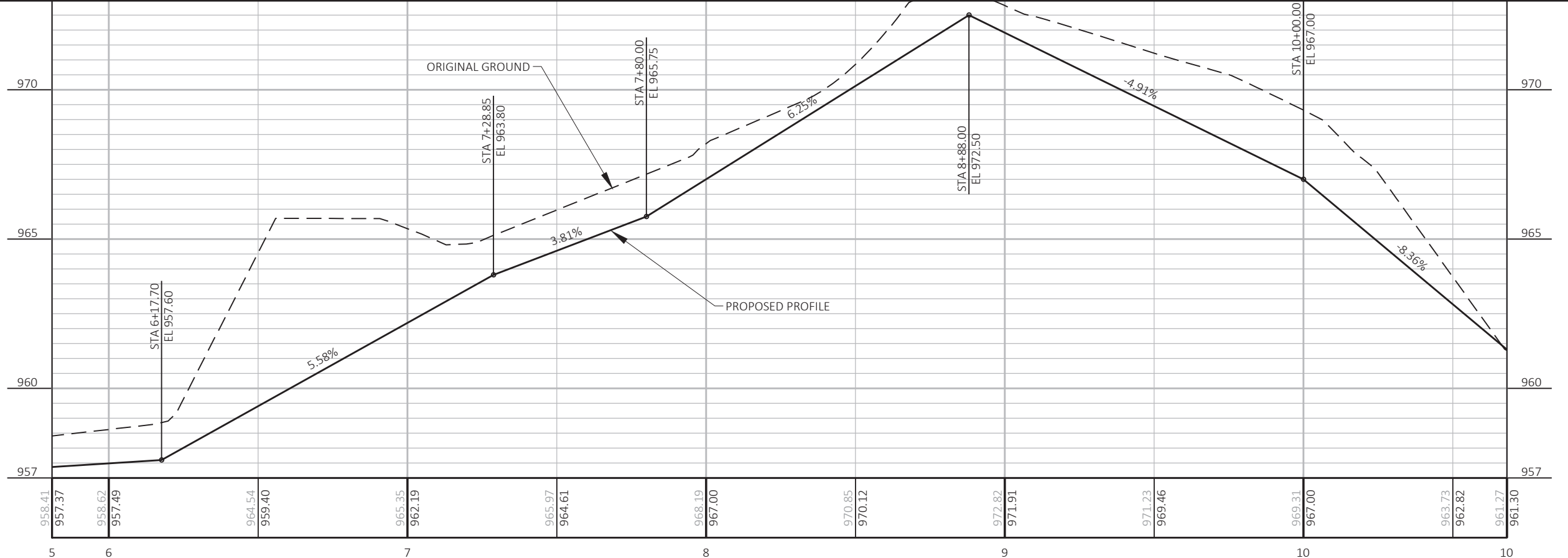
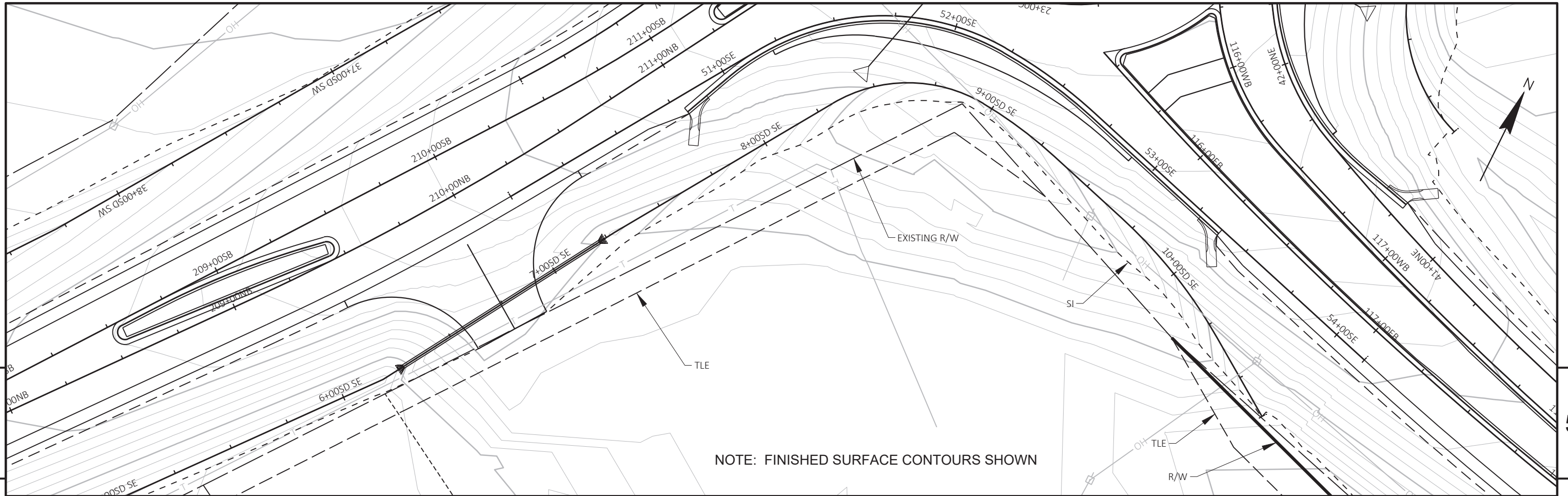
COUNTY: DODGE

PLAN AND PROFILE: SPECIAL DITCH SE

SHEET

85

E



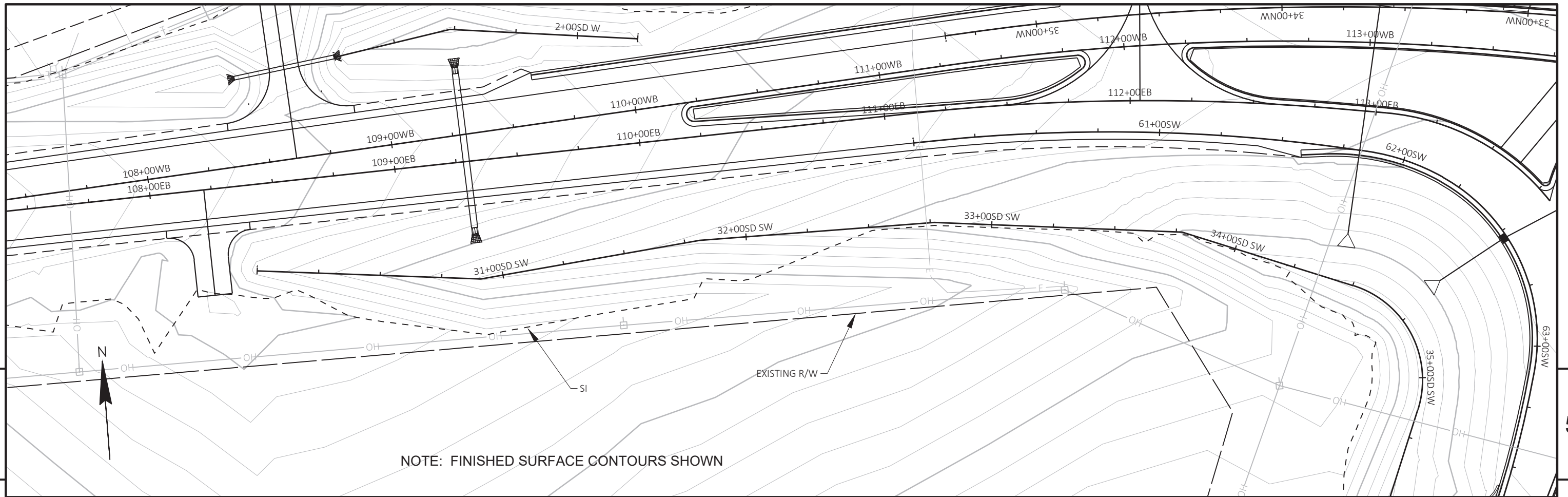
PROJECT NO: 4060-05-72

HWY: STH 28

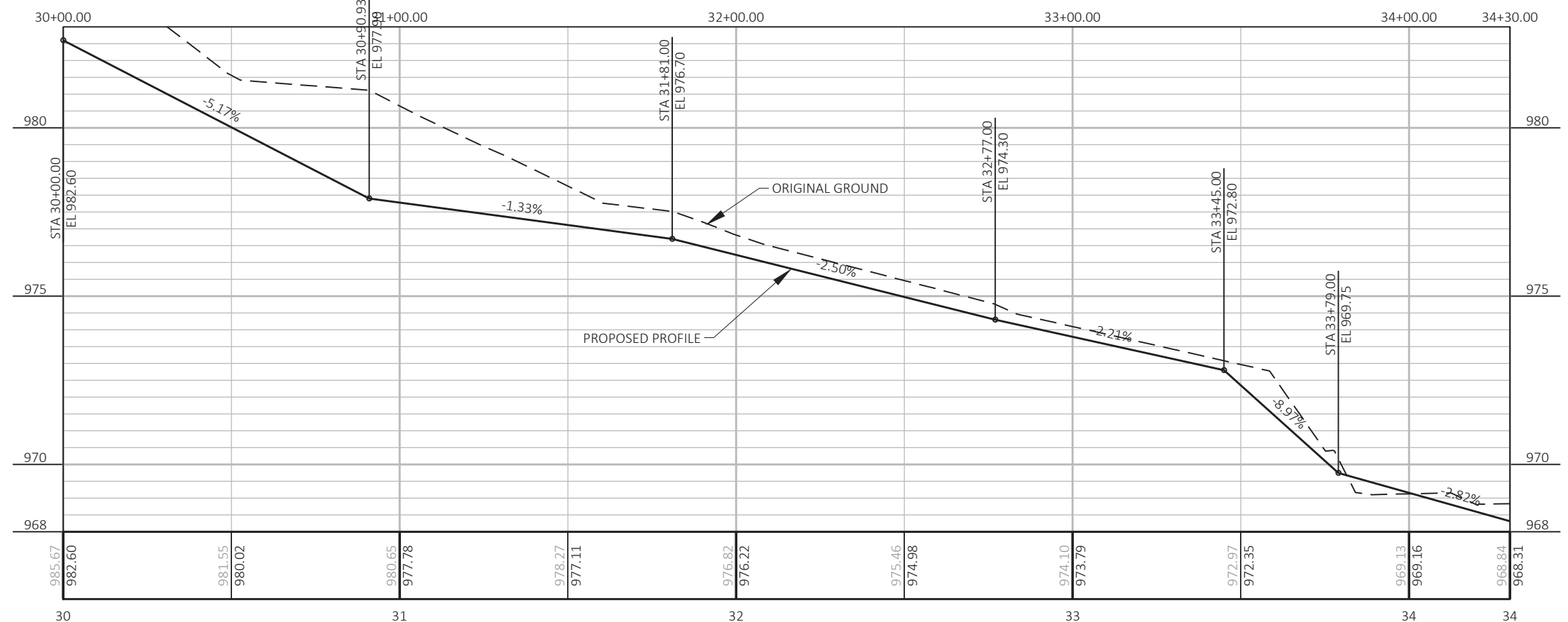
COUNTY: DODGE

PLAN AND PROFILE: SPECIAL DITCH SE

SHEET 86 E



NOTE: FINISHED SURFACE CONTOURS SHOWN



PROJECT NO: 4060-05-72

HWY: STH 28

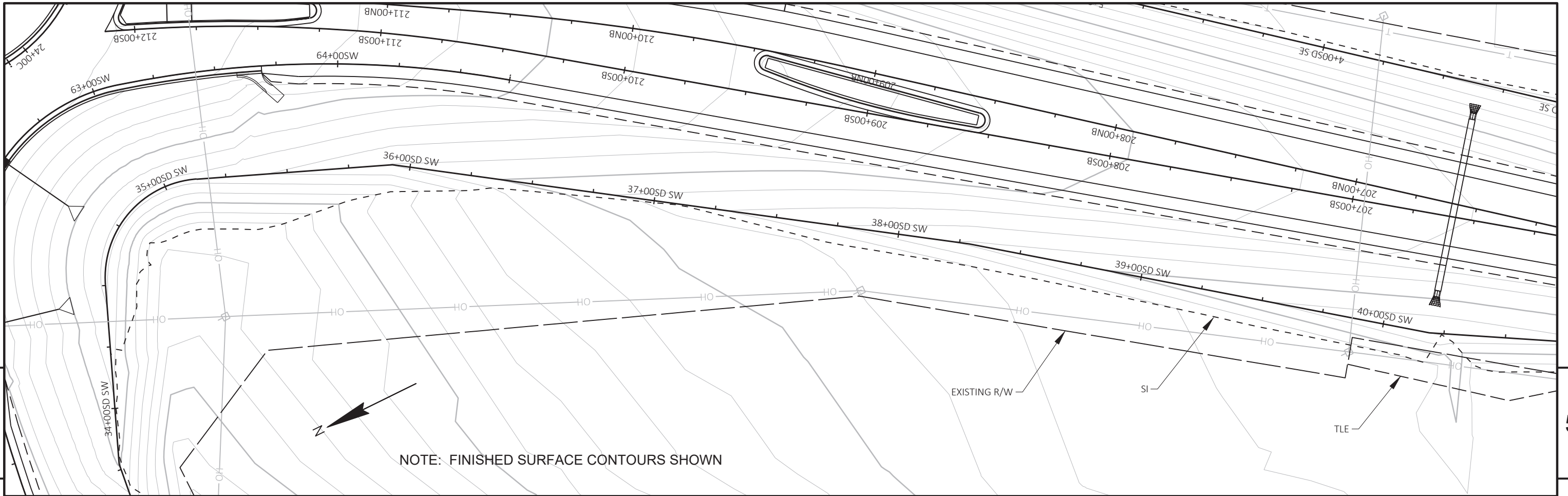
COUNTY: DODGE

PLAN AND PROFILE: SPECIAL DITCH SW

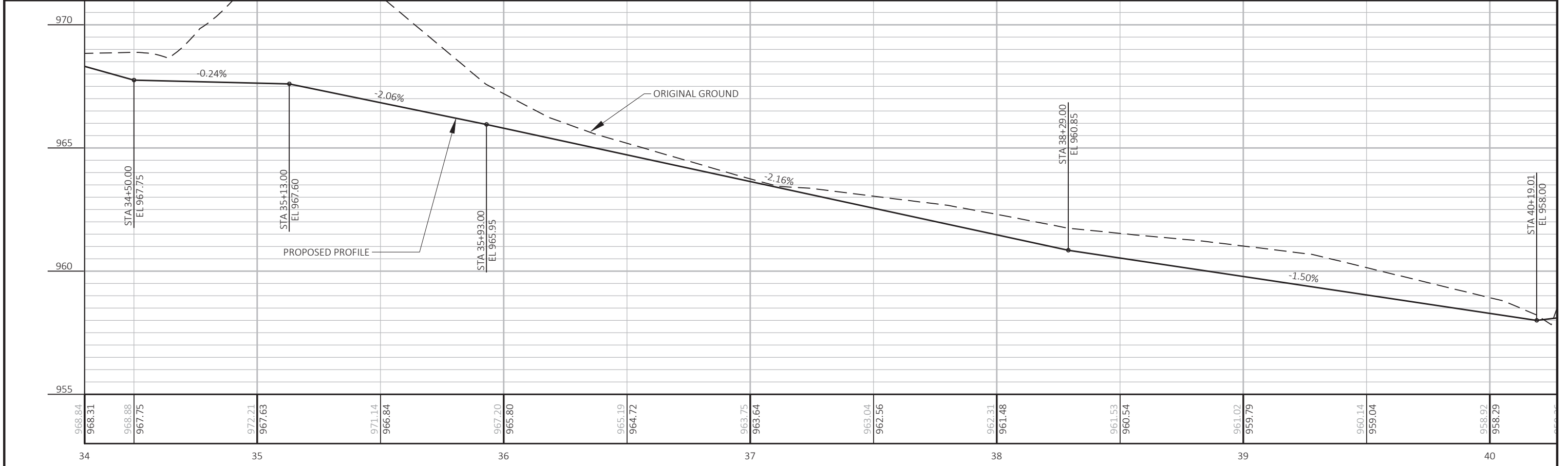
SHEET

87

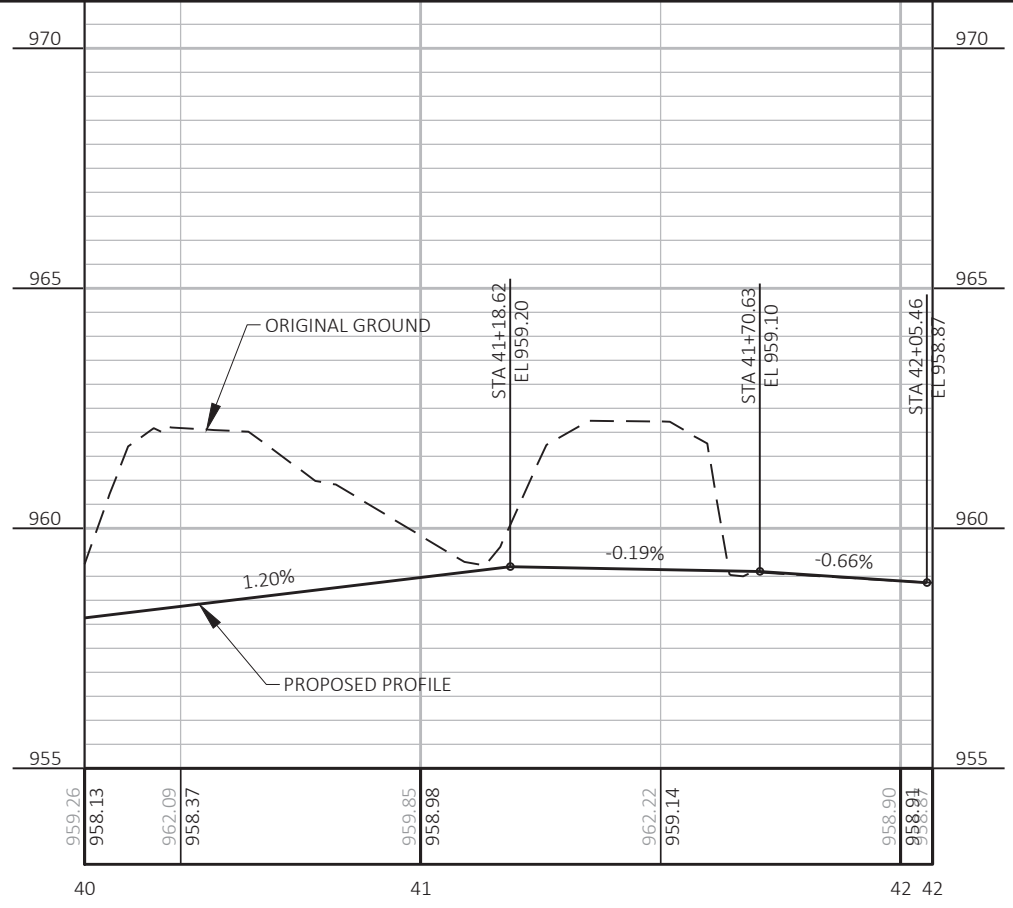
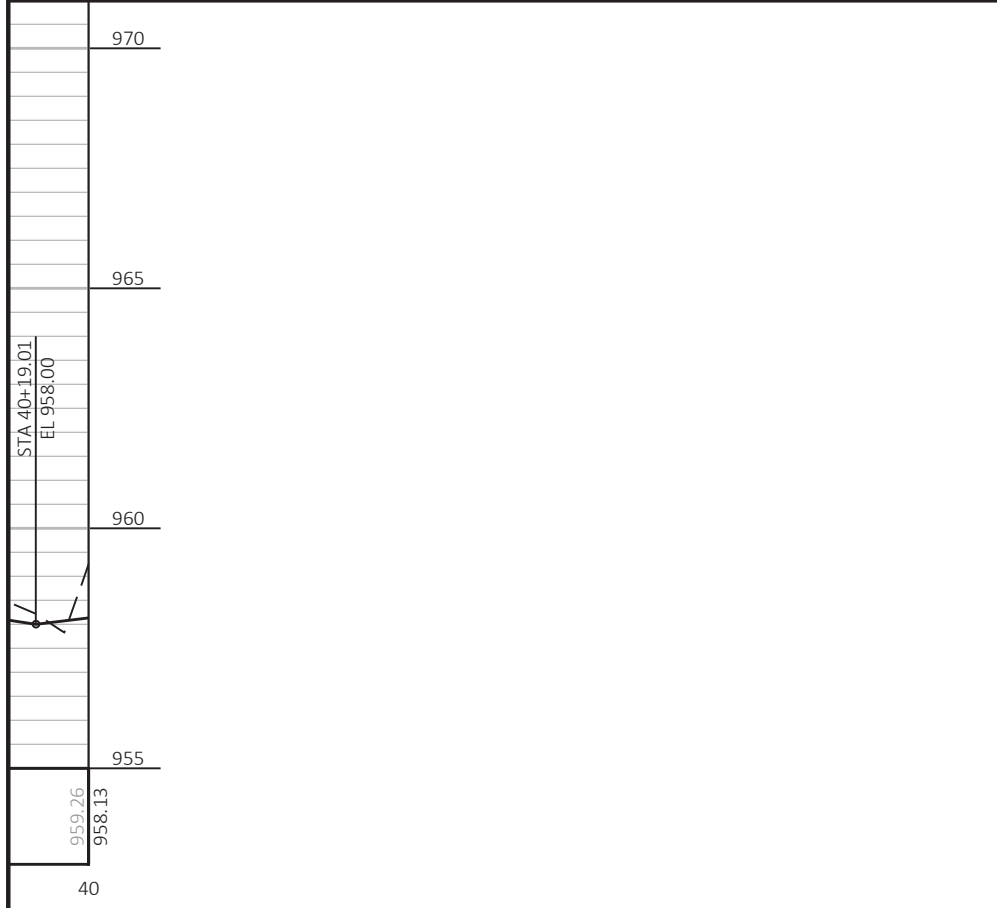
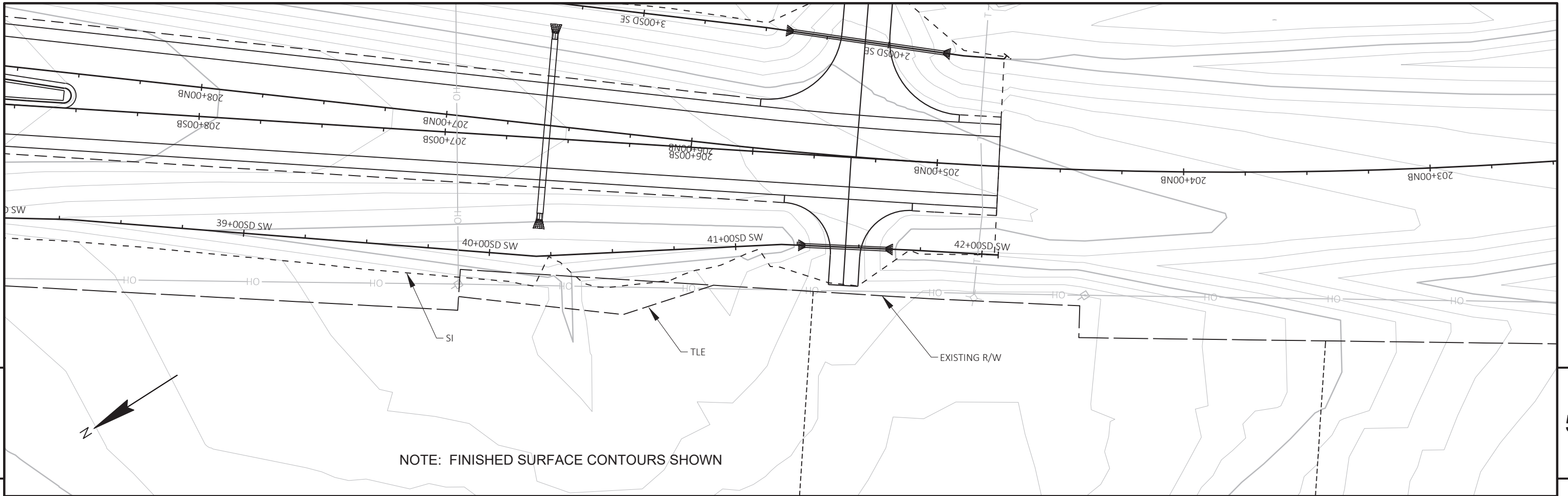
E



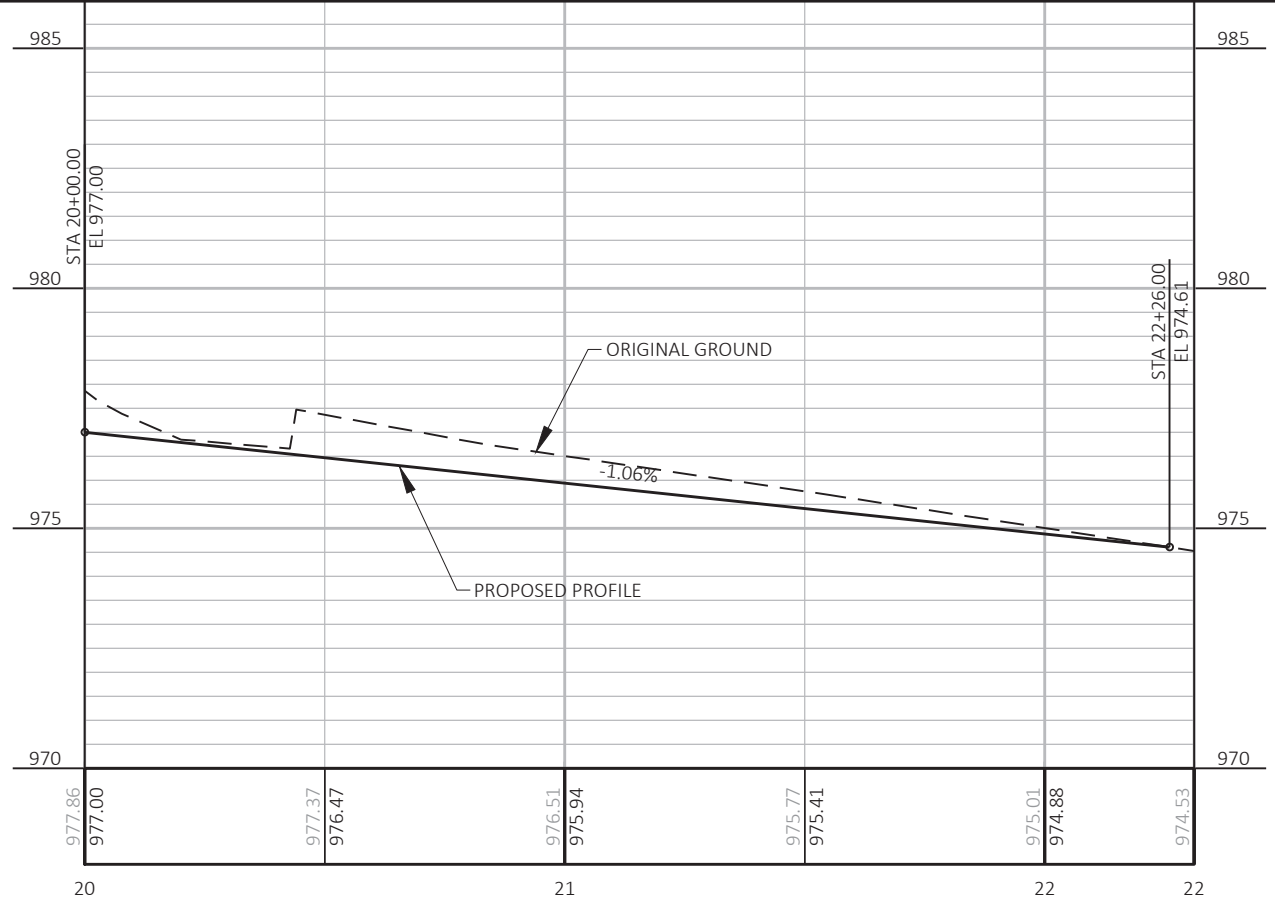
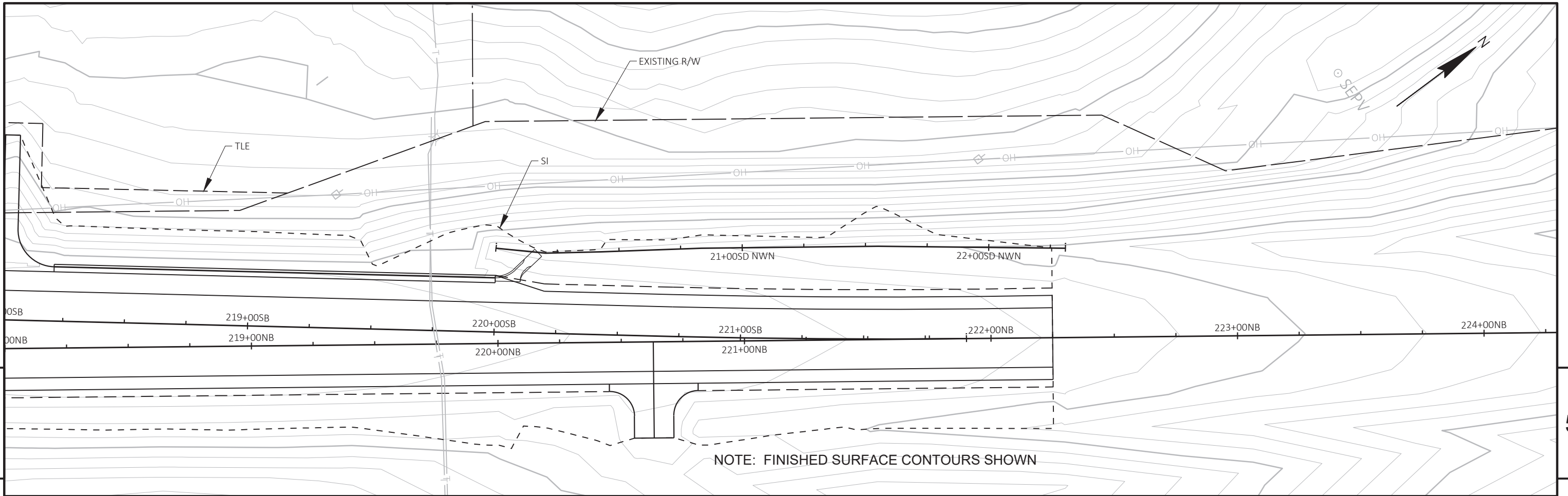
NOTE: FINISHED SURFACE CONTOURS SHOWN



PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE PLAN AND PROFILE: SPECIAL DITCH SW SHEET 88

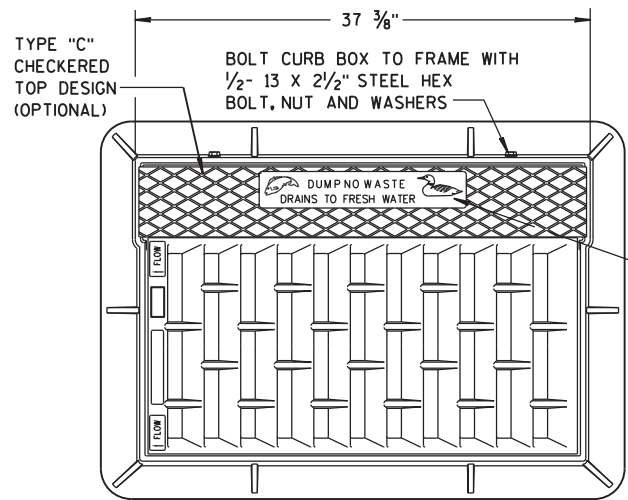


PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE PLAN AND PROFILE: SPECIAL DITCH SW SHEET 89

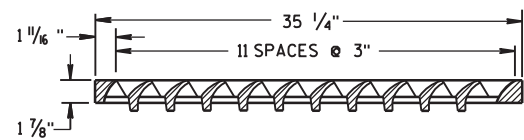
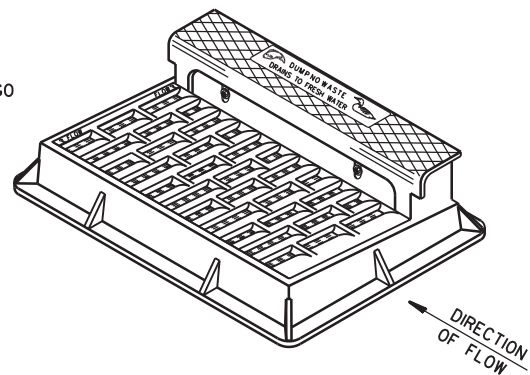


Standard Detail Drawing List

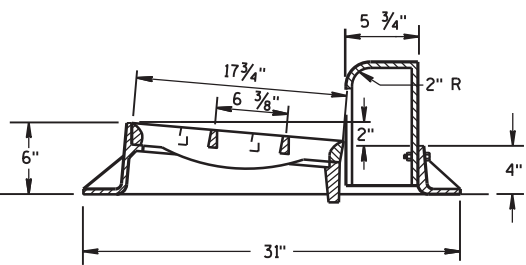
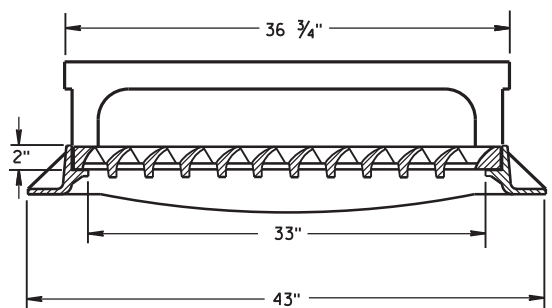
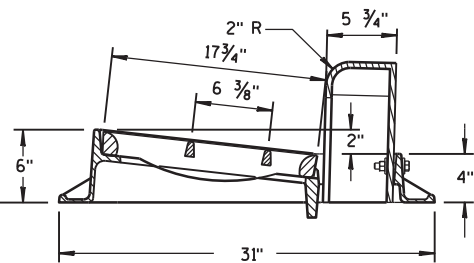
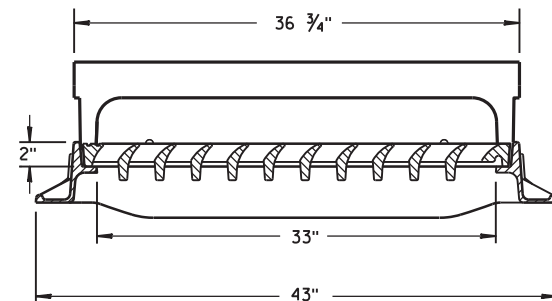
08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-22A	CONCRETE CURB & GUTTER
08D01-22B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-20E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D17-06	MANHOLES, MANHOLE & INLET COVERS
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F06-04	REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN
09B02-10	CONDUIT
09B04-11	PULL BOX
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C05-10	CONCRETE CONTROL CABINET BASES
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D04-03	LIGHTING CONTROL CABINET 120/240 VOLT
09E01-15D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-15G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E02-05	FREEWAY LIGHTING UNIT POLE WIRING
10A18-05A	LUMINAIRE ARMS, SINGLE MEMBER 6-INCH CLAMP
11B02-02	CONCRETE MEDIAN NOSE
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C11-12A	RURAL DOWELED CONCRETE PAVEMENT
13C11-12B	RURAL DOWELED CONCRETE PAVEMENT
13C18-07A	CONCRETE PAVEMENT JOINTING
13C18-07B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-07C	CONCRETE PAVEMENT JOINT TYPES
13C18-07D	CONCRETE PAVEMENT JOINT TYPES AT UTILITY FIXTURES
13C18-07E	CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-08C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C07-15A	PAVEMENT MARKING SYMBOLS
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C07-15D	ROUNDABOUT ARROWS
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C11-09A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C18-05A	MEDIAN ISLAND MARKING PAVEMENT MARKINGS
15C18-05B	MEDIAN ISLAND MARKING MEDIAN ISLAND NOSE
15C18-05C	MEDIAN PAVEMENT MARKINGS DOUBLE ARROW WARNING SIGN PLACEMENT



**NOTE:
GRATE IS REVERSIBLE.**

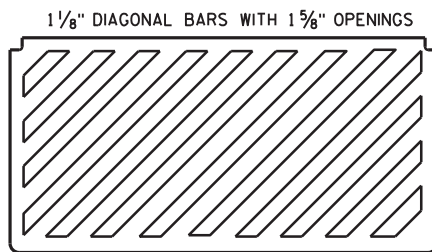


NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

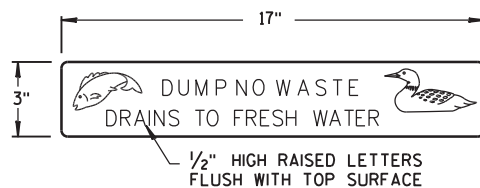


TYPE "H"

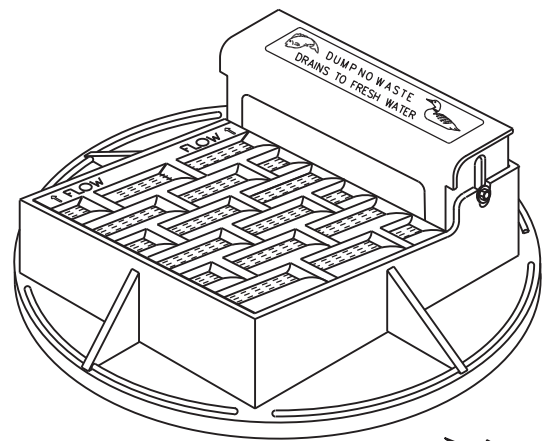
NOTE: EITHER CASTING IS ACCEPTABLE



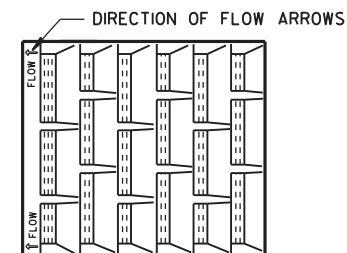
**SPECIAL GRATE FOR
TYPE "H" COVER**
(MEASURES 35 1/4" X 17 3/4" X 2")
(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL

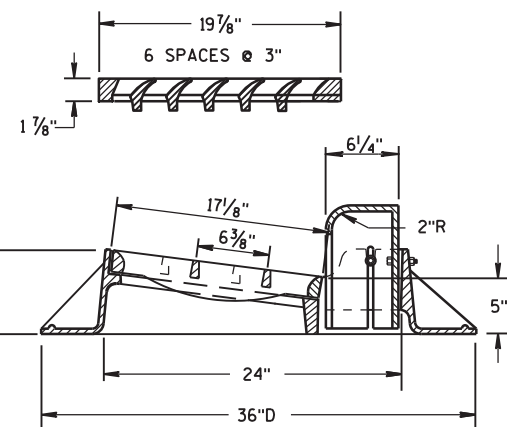
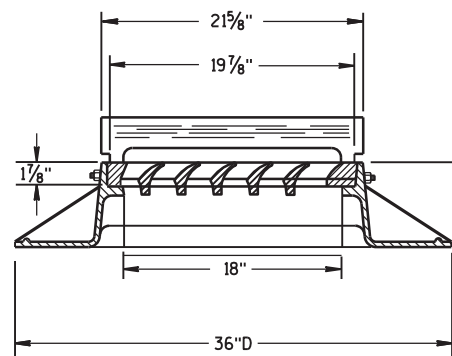


**NOTE:
GRATE IS REVERSIBLE.**

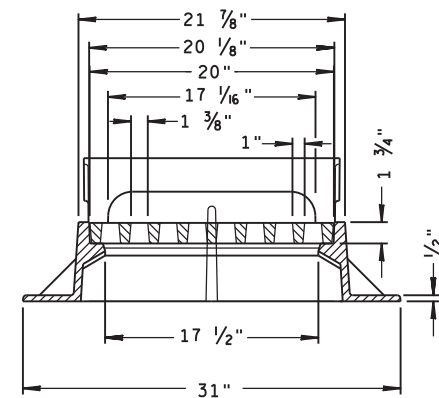
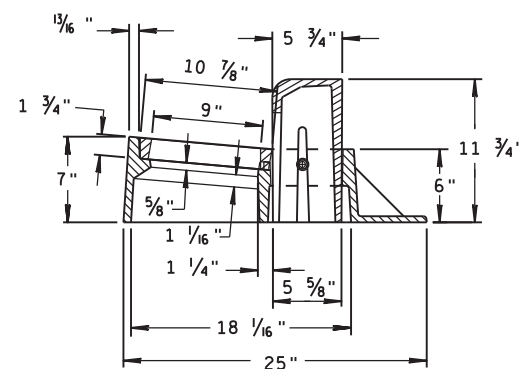


**1" DIAGONAL BARS
WITH 1 1/2" OPENINGS**

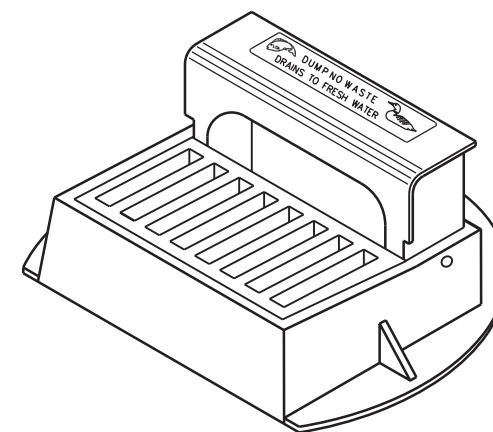
**SPECIAL GRATE FOR
TYPE "A" COVER**
(MEASURES 19 3/4" X 17" X 1 1/8")
(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "A"



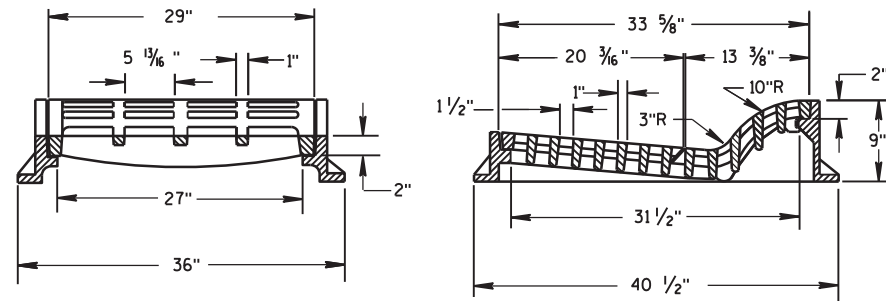
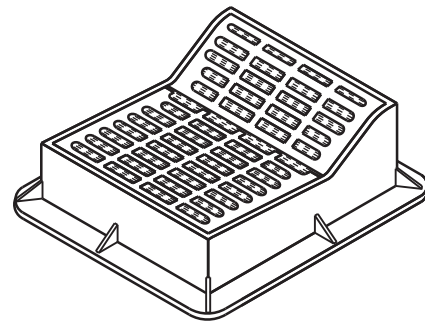
TYPE "Z"



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

**STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION**

APPROVED
DATE: 11-27-13
DATE: 1/5/ Jerry H. Zogg
DATE: ROADWAY STANDARDS 192
DATE: ENGINEER ENT
FHWA



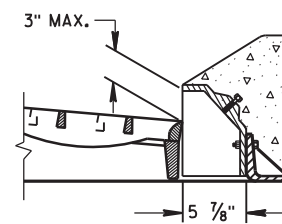
TYPE "F"

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

GENERAL NOTES

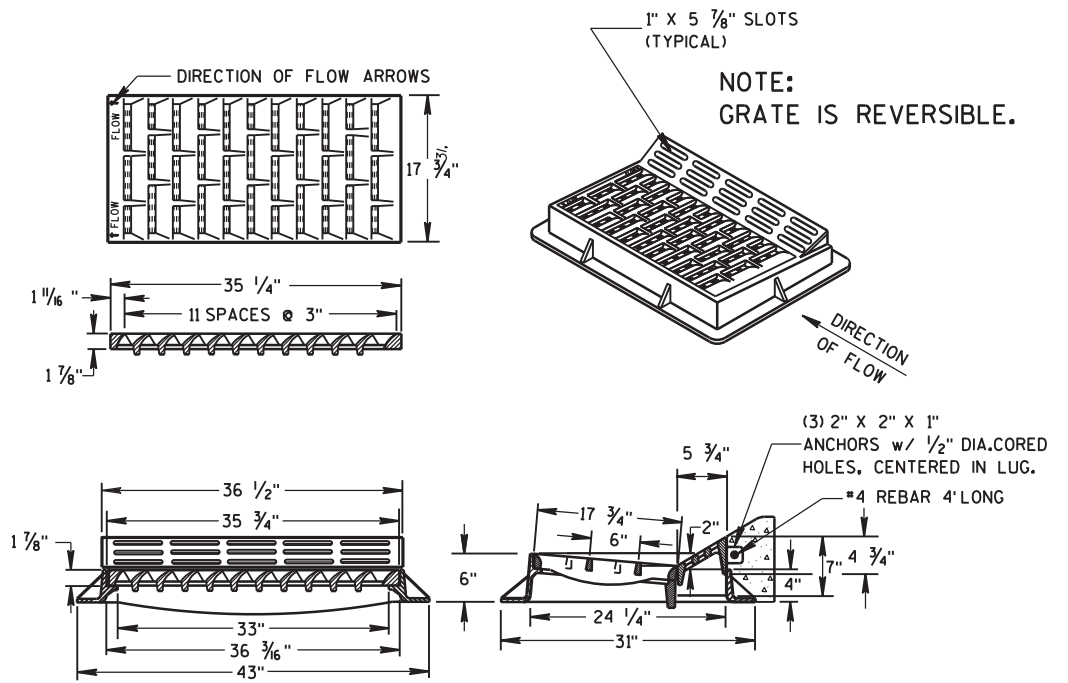
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

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

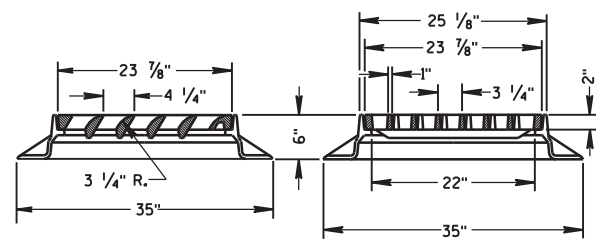
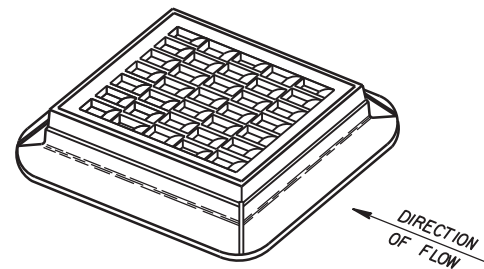


TYPE "HM"

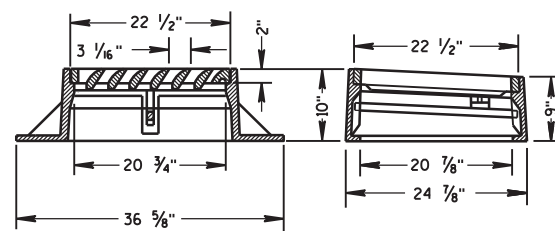
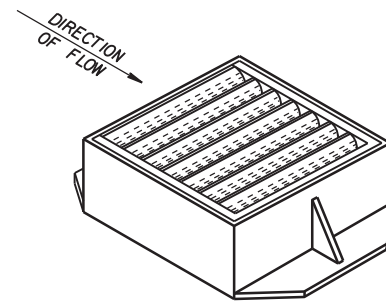
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

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

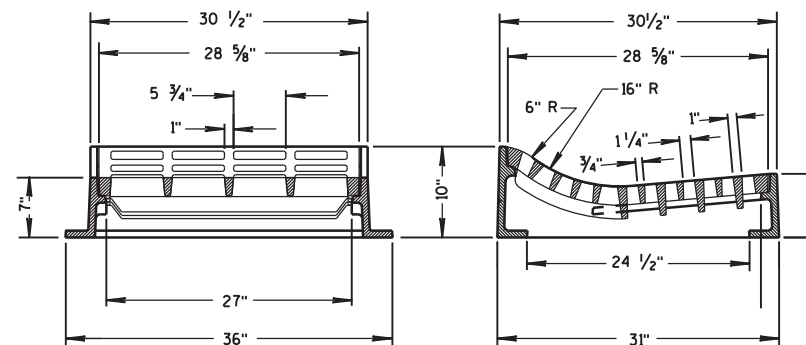
NOTE: SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE



TYPE "S"

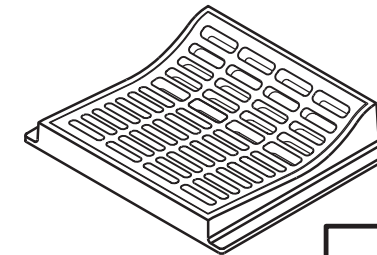


TYPE "V"



TYPE "T"

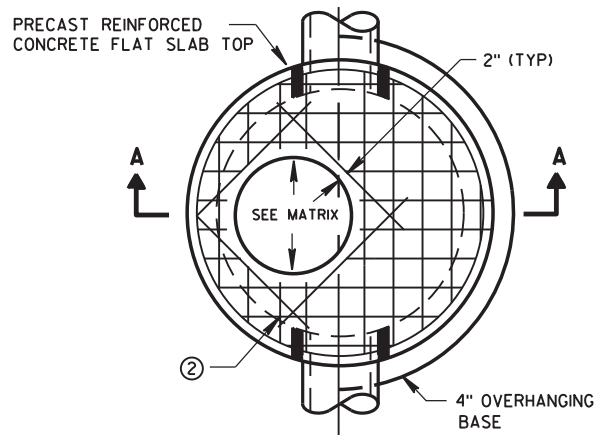
USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.



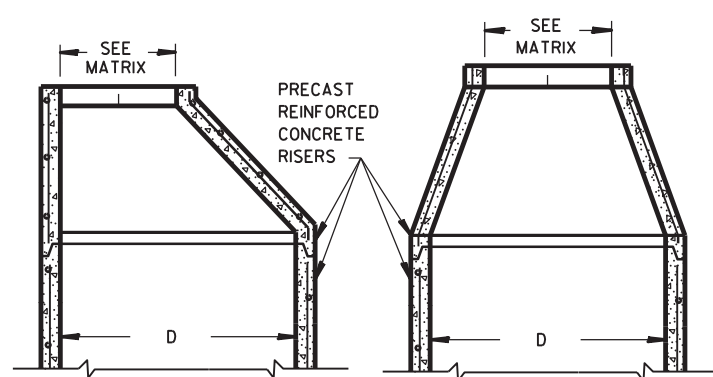
INLET COVERS
TYPE F, HM, HM-S, S, T, V,
HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

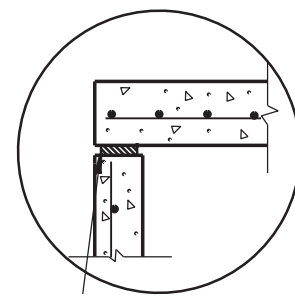


PLAN VIEW CIRCULAR OPENING

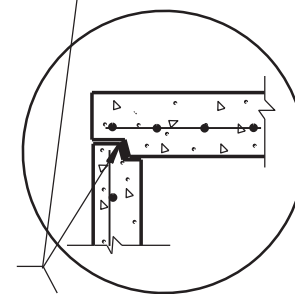


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

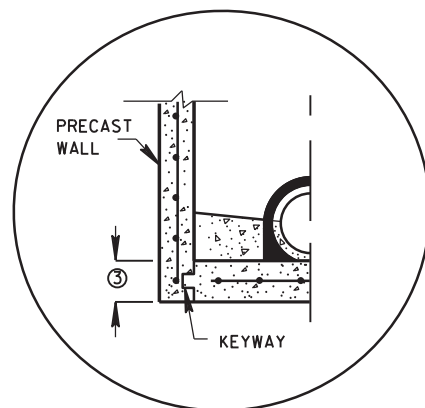
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



TOP WITH PLAIN END JOINT

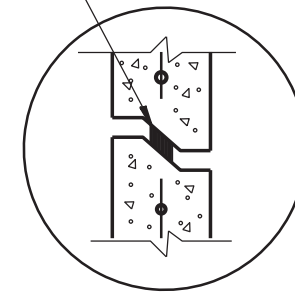


TOP WITH TONGUE AND GROOVE JOINT



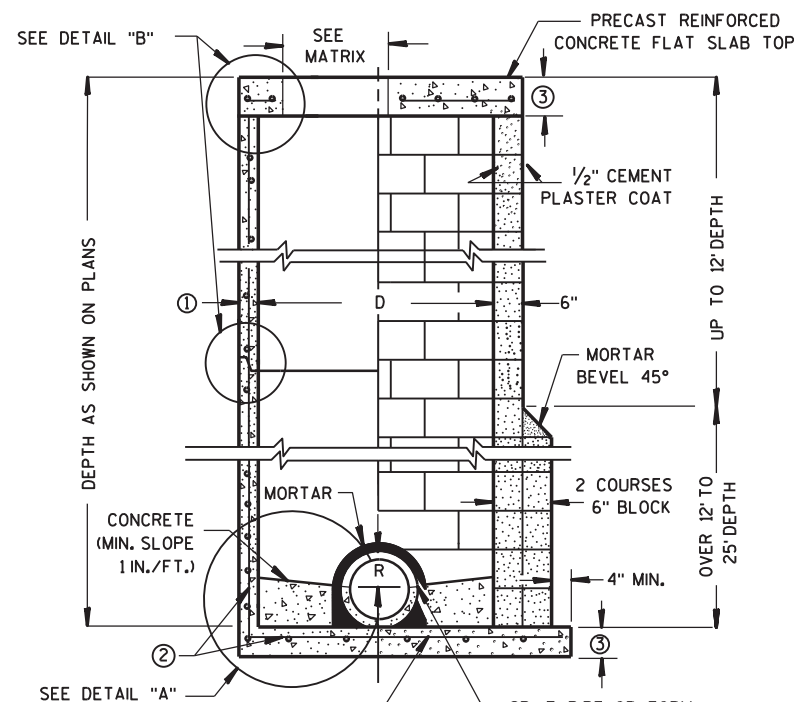
PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

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



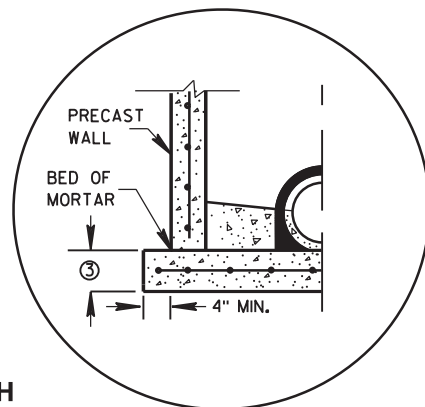
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"



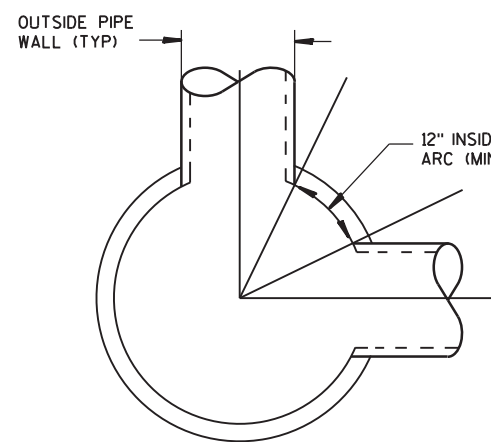
CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES

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



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS. UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

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

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

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

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

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

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

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

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

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED. CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

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

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

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

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

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

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

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

MANHOLE COVER OPENING MATRIX

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

PIPE MATRIX

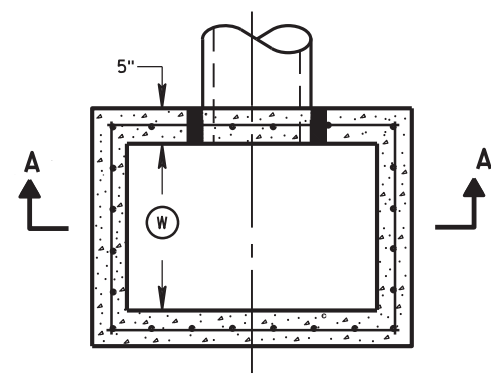
MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

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

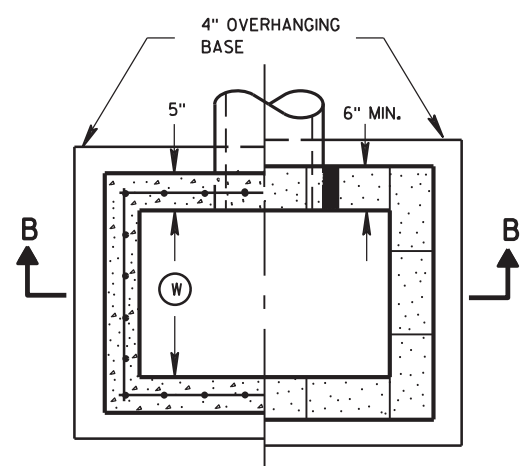
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED
 Sep 1, 2016 /S/ Rodney Taylor
 DATE ROADWAY STANDARDS DEVELOPMENT UNIT SUPERV 94
 FHWA

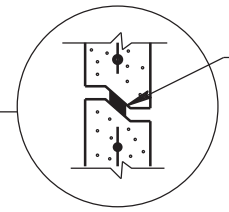
MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER



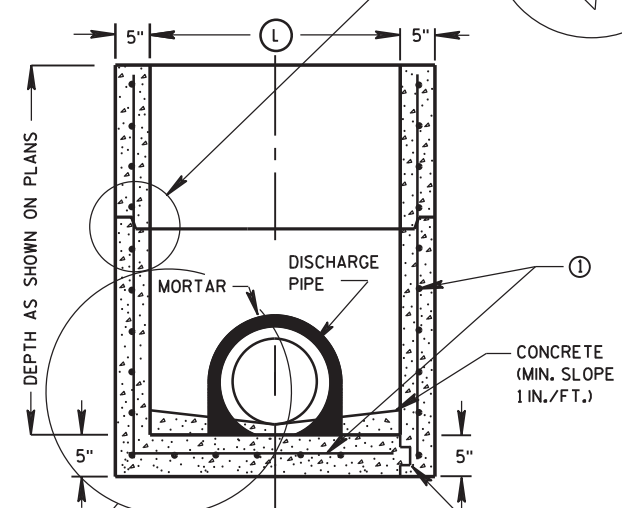
PLAN VIEW



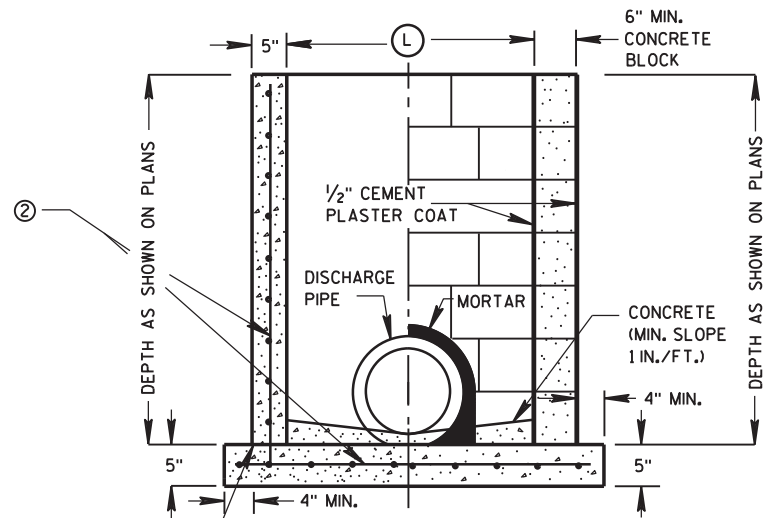
PLAN VIEW



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



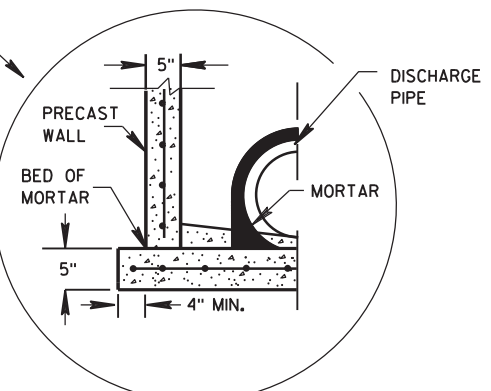
SECTION A-A



SECTION B-B

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE
 PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE
 KEYWAY

CONSTRUCTION JOINT
 CAST-IN-PLACE REINFORCED CONCRETE
 CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ①



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

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

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

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

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

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

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF 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 NOT 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 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

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

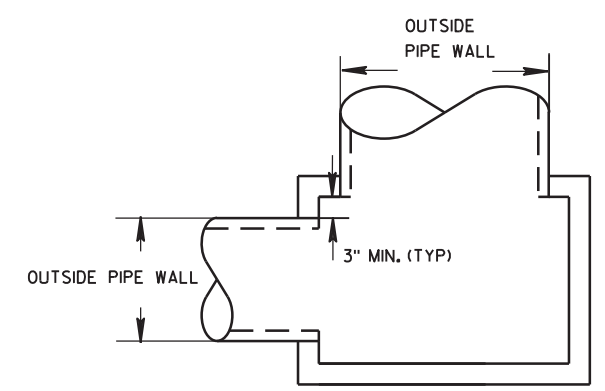
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

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

PIPE MATRIX

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



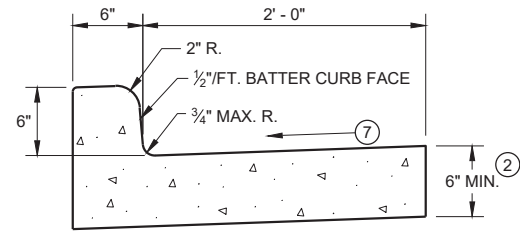
DETAIL "A"

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

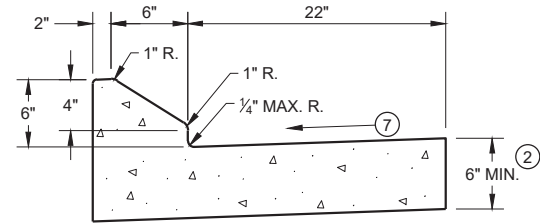
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

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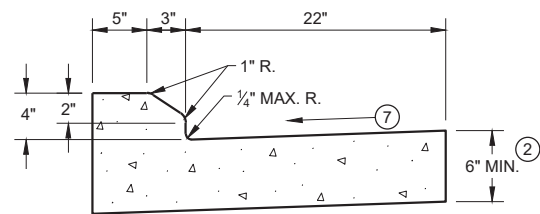
APPROVED
 Sept., 2016 /S/ Rodney Taylor
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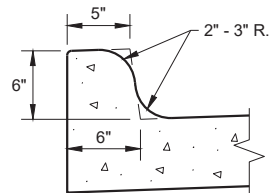
TYPES A¹ & D



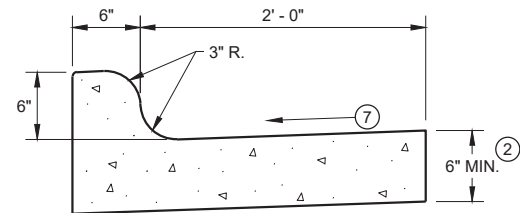
6" SLOPED CURB TYPES G¹ & J



4" SLOPED CURB TYPES G¹ & J

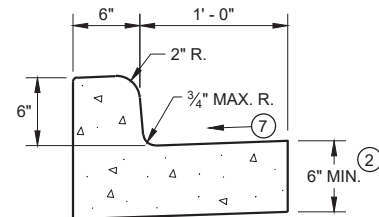


TYPES K¹ & L
(OPTIONAL CURB SHAPE)



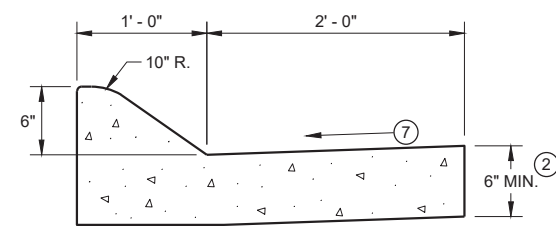
TYPES K¹ & L

CONCRETE CURB AND GUTTER 30"

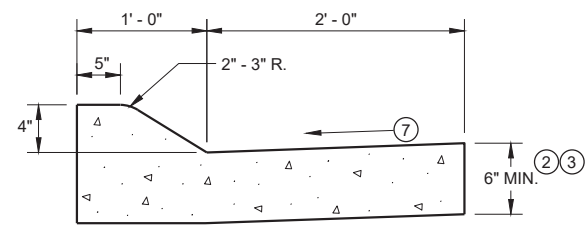


TYPES A¹ & D

CONCRETE CURB AND GUTTER 18"

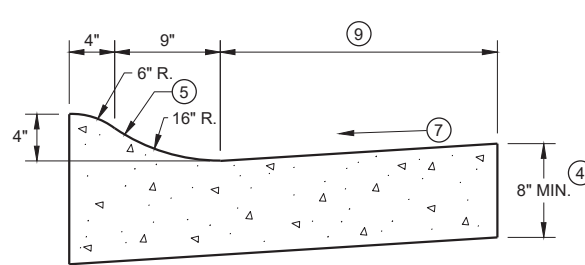


6" SLOPED CURB TYPES A¹ & D



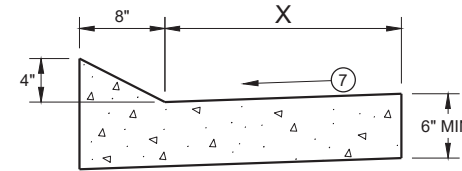
4" SLOPED CURB TYPES A¹ & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R¹ & T

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

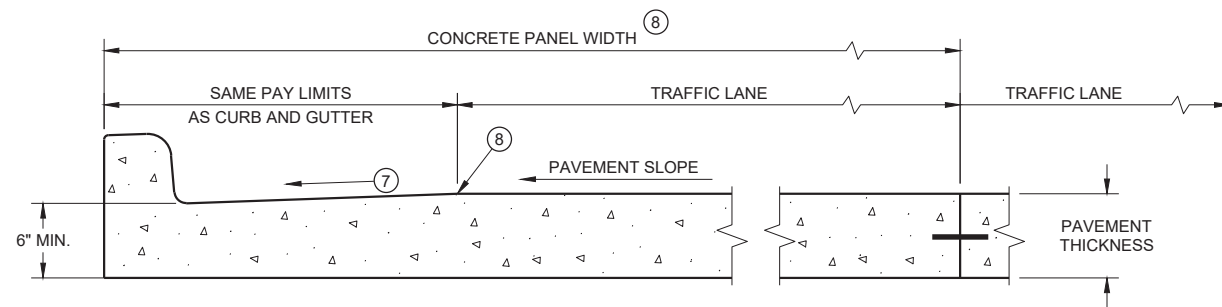


TYPES TBT & TBTT¹

CONCRETE CURB AND GUTTER

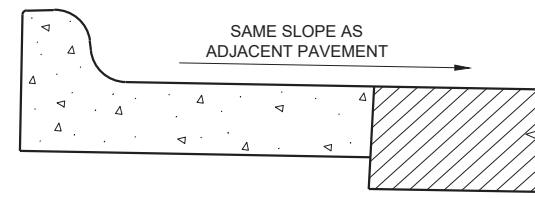
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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 GUTTER⁶
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

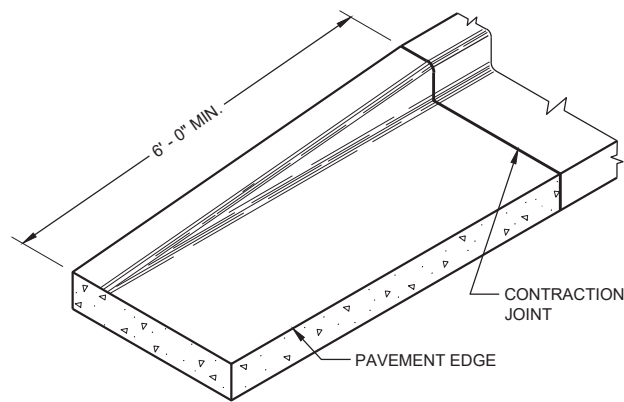
DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

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

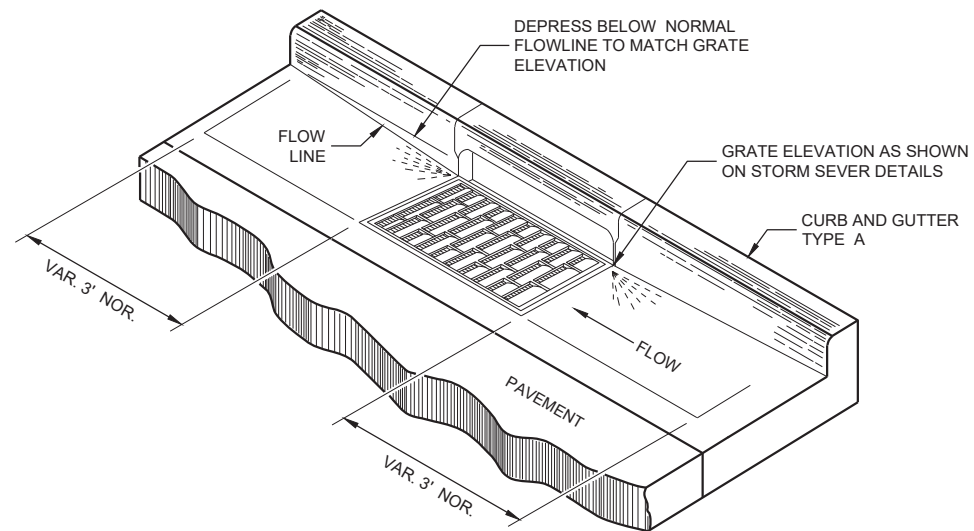
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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



END SECTION CURB AND GUTTER



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

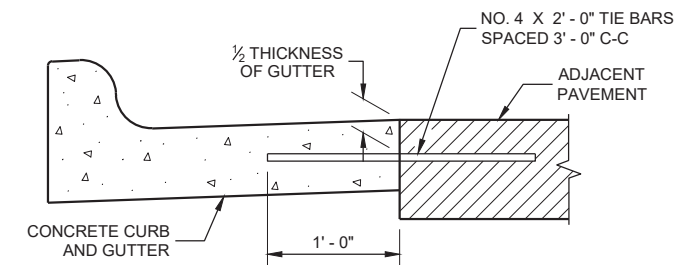
GENERAL NOTES

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

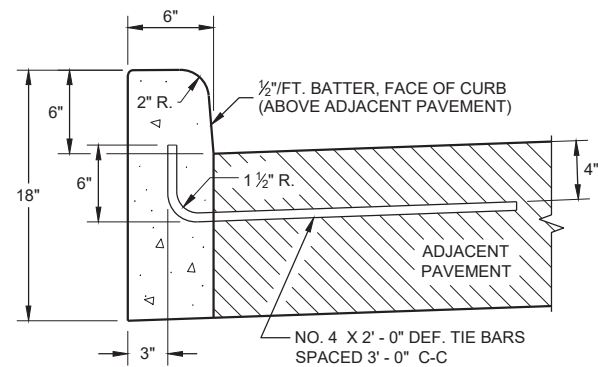
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

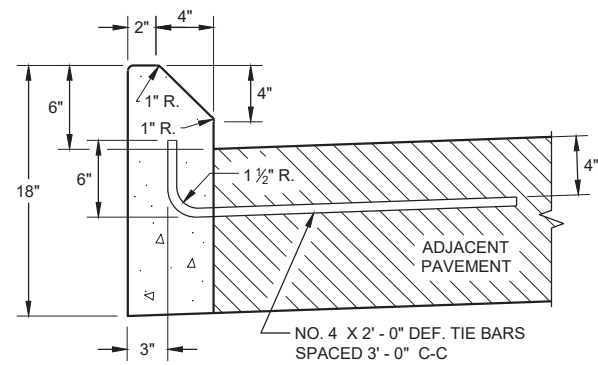
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑨ REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION ①

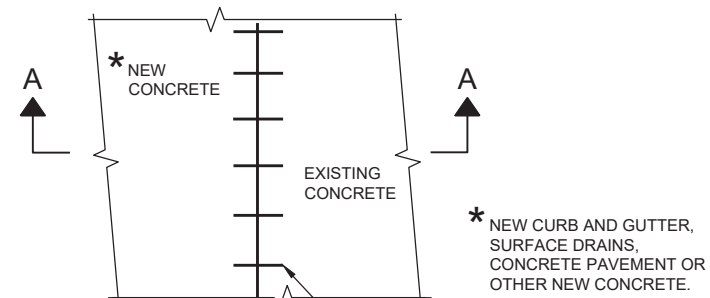


TYPES A ① & D

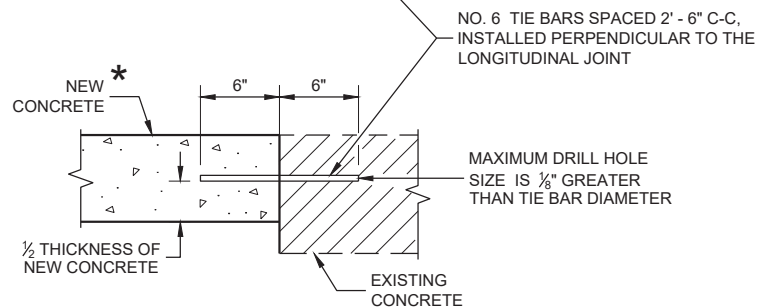


TYPES G ① & J

CONCRETE CURB

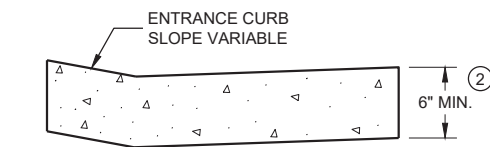


PLAN VIEW



SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB ⑨
(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

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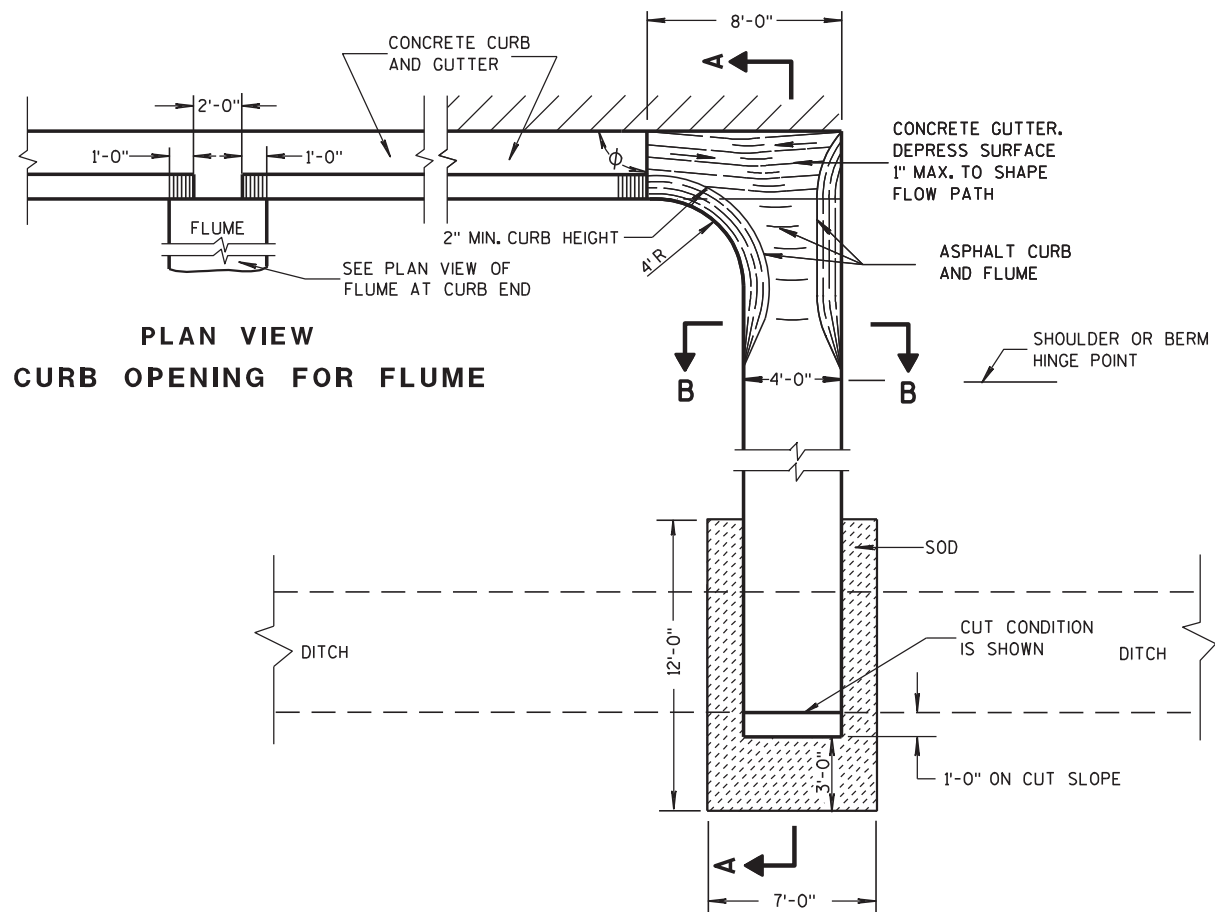
APPROVED
February 2021 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT ENGINEER 97

FHWA

ASPHALTIC FLUME

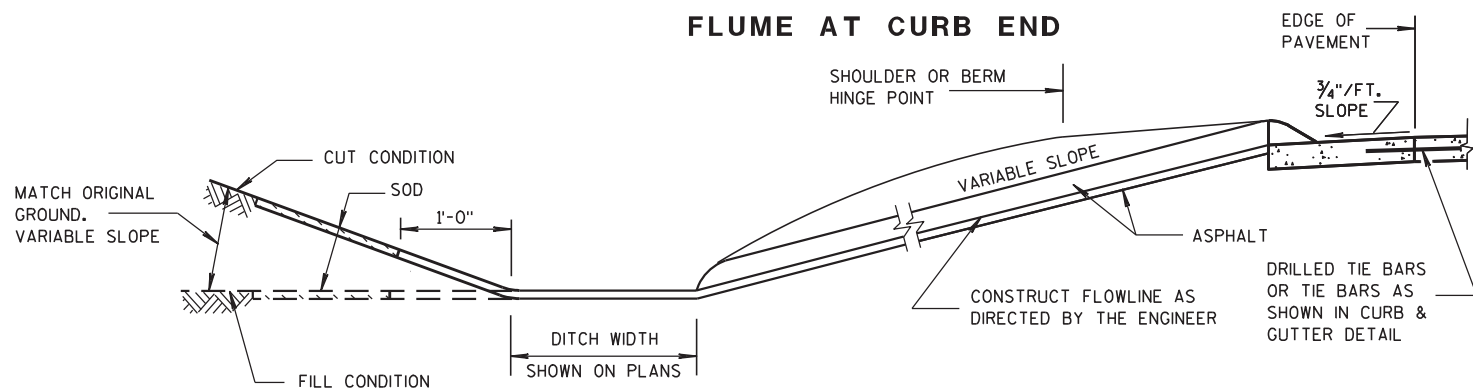
NOTE: TAPER CURB ENDS TO GUTTER IN 1'-0"

INCREASE ϕ FROM RIGHT ANGLE TO BEST FIT FIELD CONDITIONS

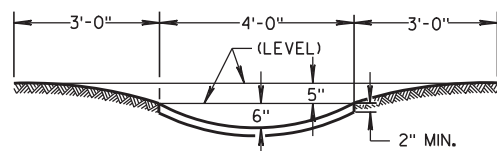


PLAN VIEW CURB OPENING FOR FLUME

PLAN VIEW FLUME AT CURB END



SECTION A-A



SECTION B-B

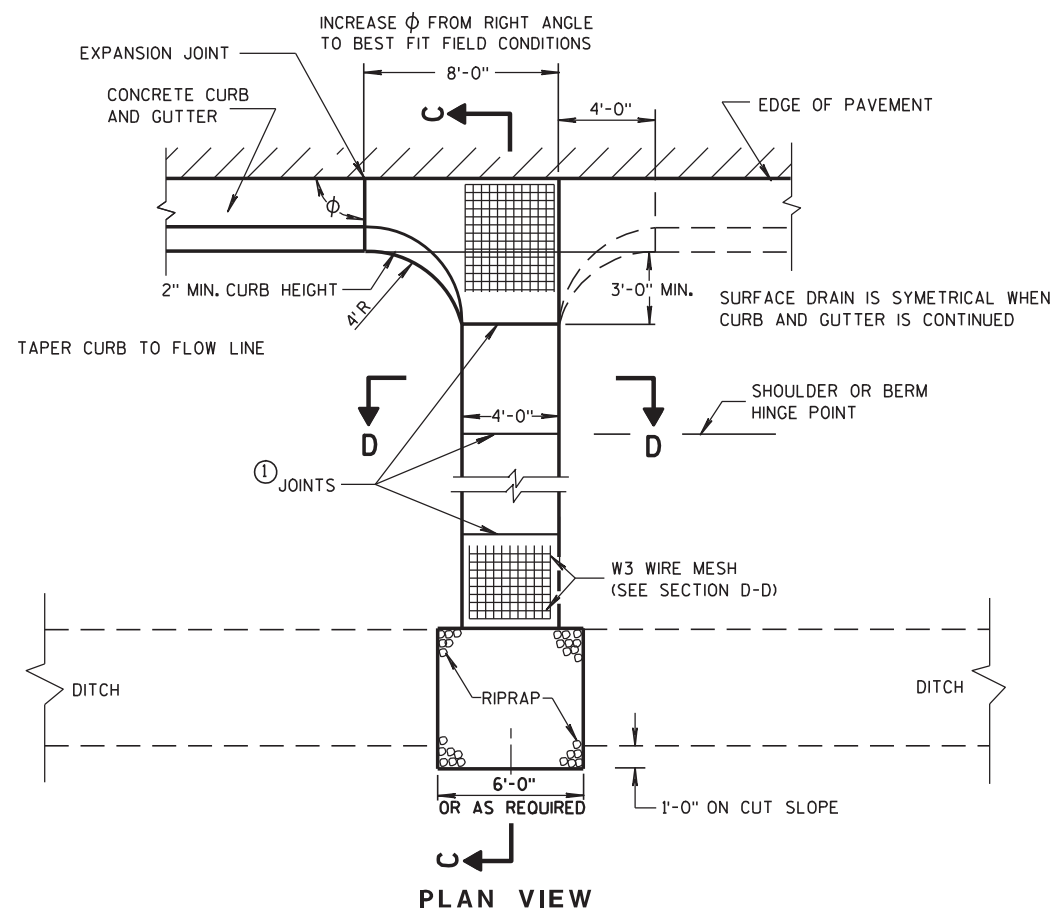
GENERAL NOTES

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

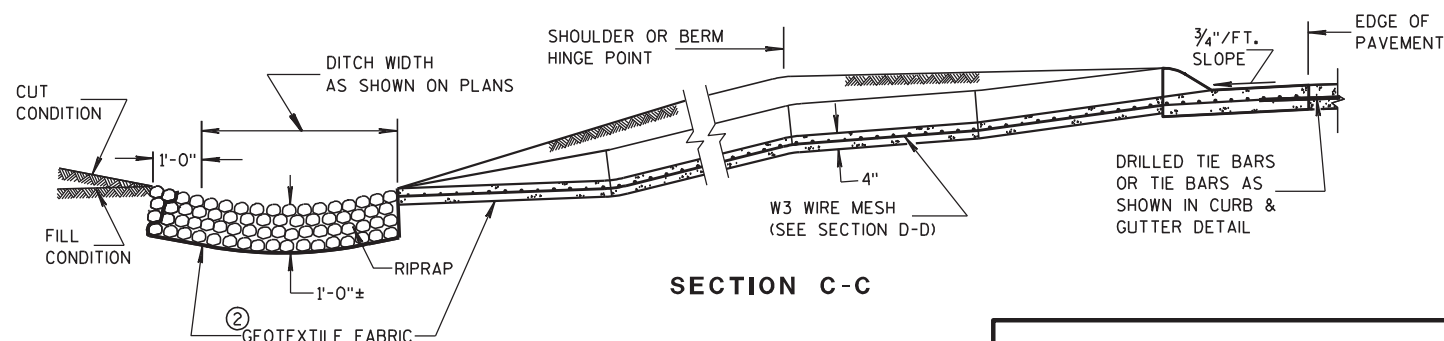
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

- ① JOINTS SHALL BE 1/8 TO 1/4 INCH WIDE BY 1 1/2 INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
- ② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
- ③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

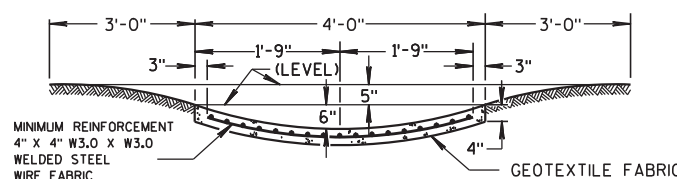
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C

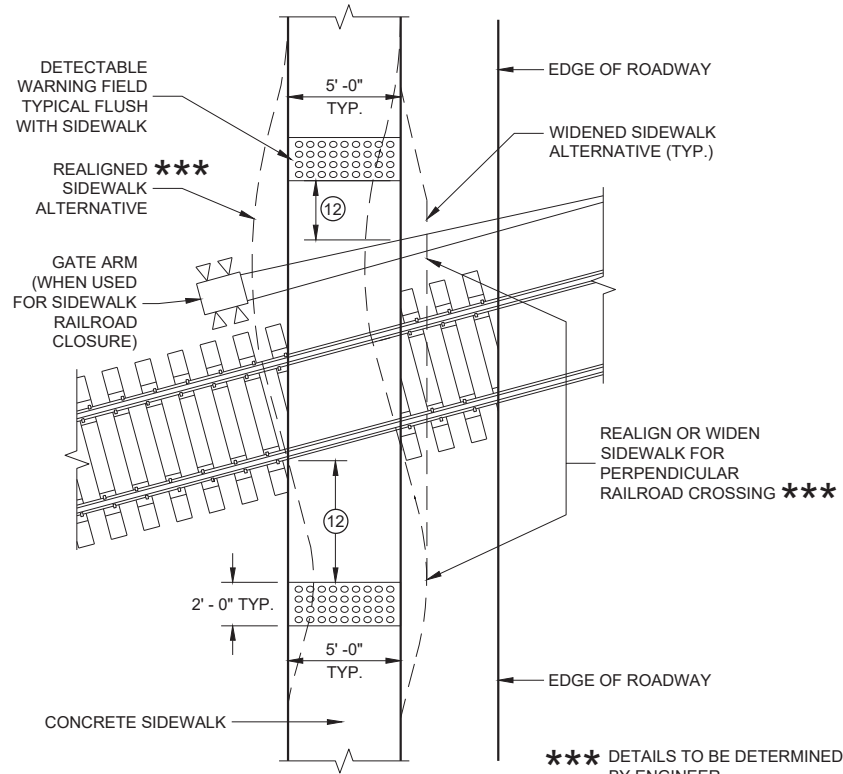


SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

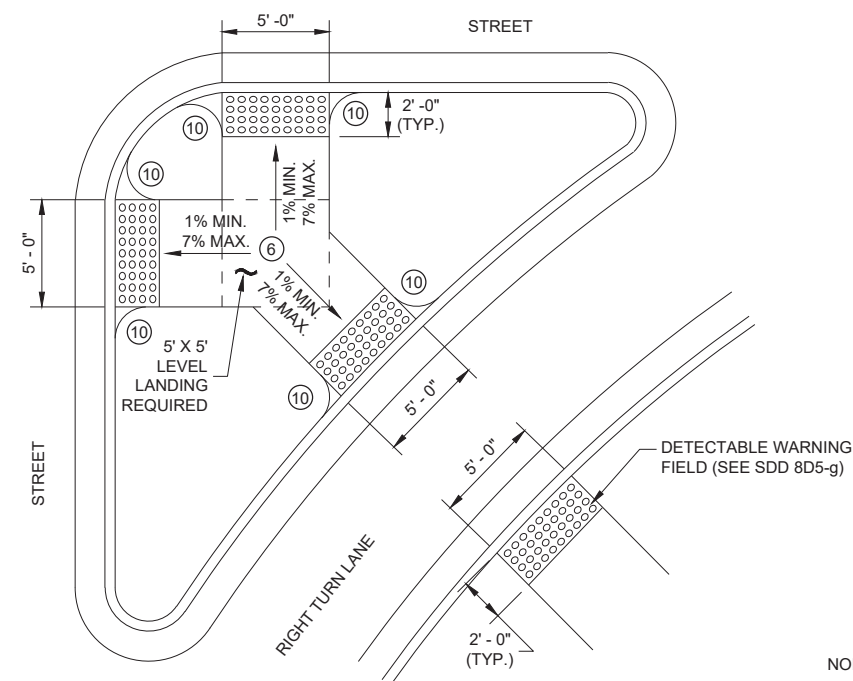
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-4-08 DATE /S/ Jerry H. 7000
ROADWAY STANDARDS 98 MENT
ENGINEER



CURB RAMP TYPE 8

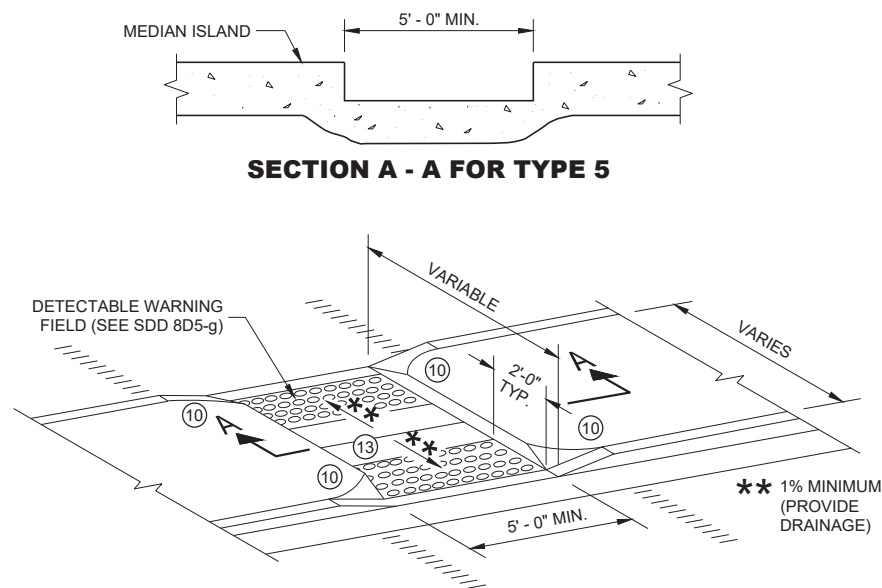
DETECTABLE WARNINGS AT RAILROAD CROSSING



CURB RAMP TYPE 6

DETECTABLE WARNING AT ISLANDS

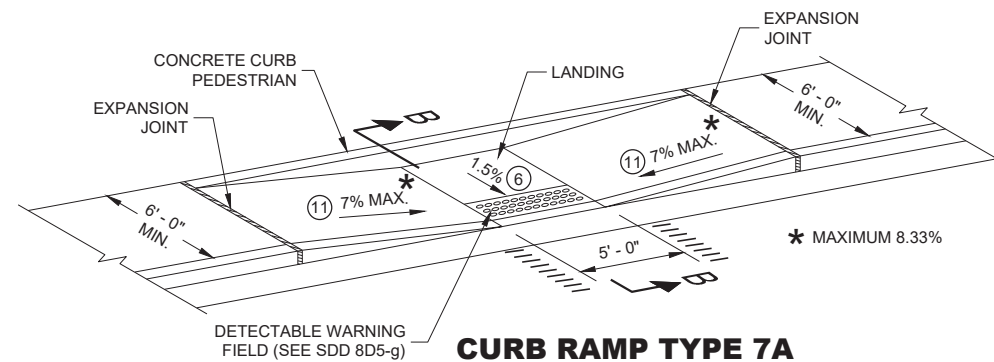
REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



SECTION A - A FOR TYPE 5

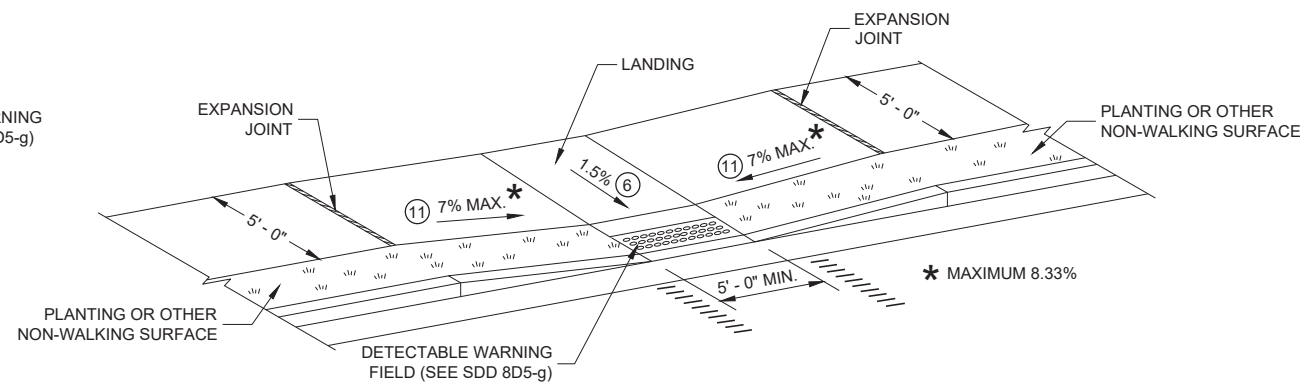
CURB RAMP TYPE 5

**MEDIAN ISLAND
NON-ELEVATED PEDESTRIAN CROSSING**



CURB RAMP TYPE 7A

MID BLOCK CROSSING



CURB RAMP TYPE 7B

MID BLOCK CROSSING

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

GENERAL NOTES

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

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

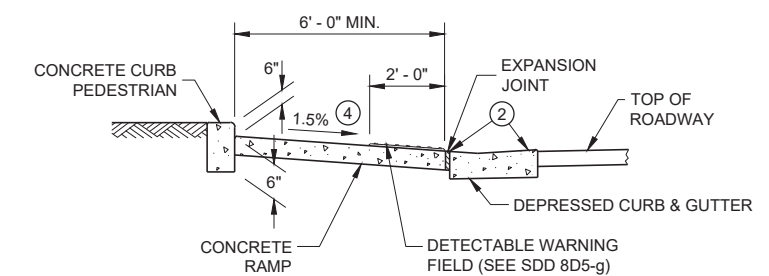
SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

- (2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- (3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- (4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- (6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- (10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.
- (11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- (12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- (13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STREET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

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



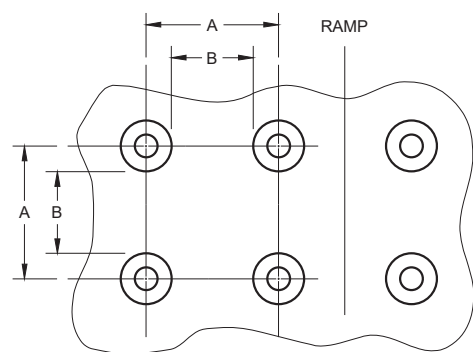
SECTION B - B FOR TYPE 7A

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

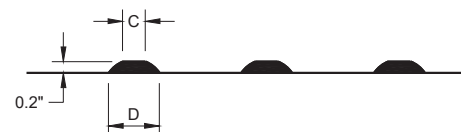
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 99

	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.

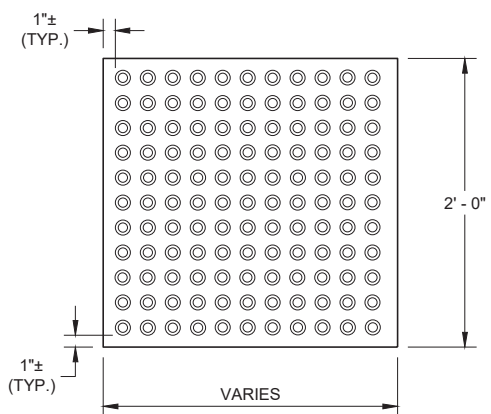


PLAN VIEW

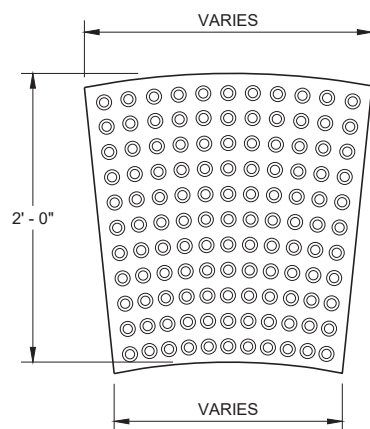


ELEVATION VIEW

**TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL**

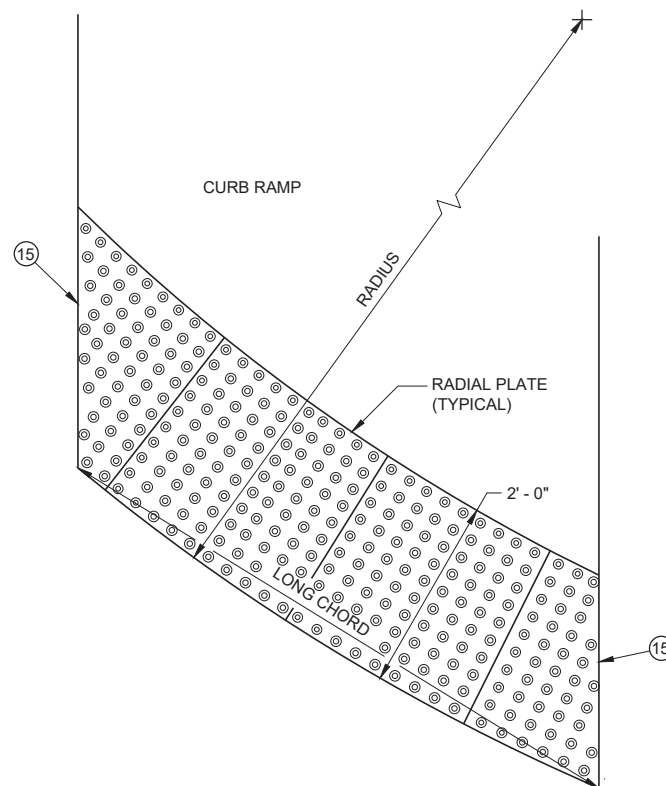


**RECTANGULAR
PLATES**

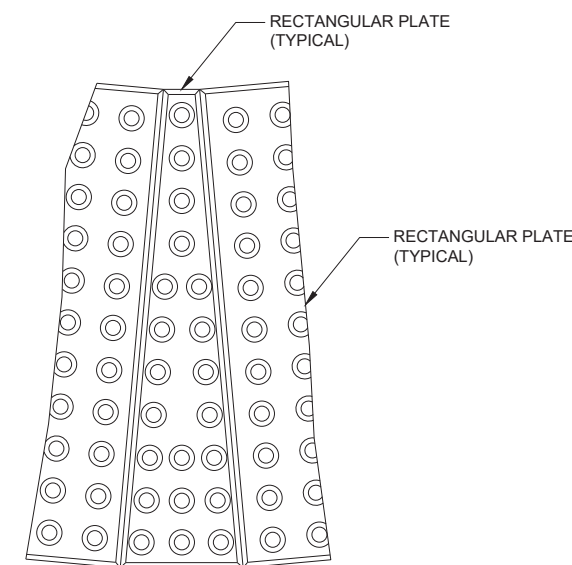


**RADIAL
PLATES**

**PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)**



**PLAN VIEW
RADIAL DETECTABLE
WARNING FIELD ATTRIBUTES**



**PLAN VIEW
RADIAL WEDGE PLATE
CONNECTION DETAIL**

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 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.

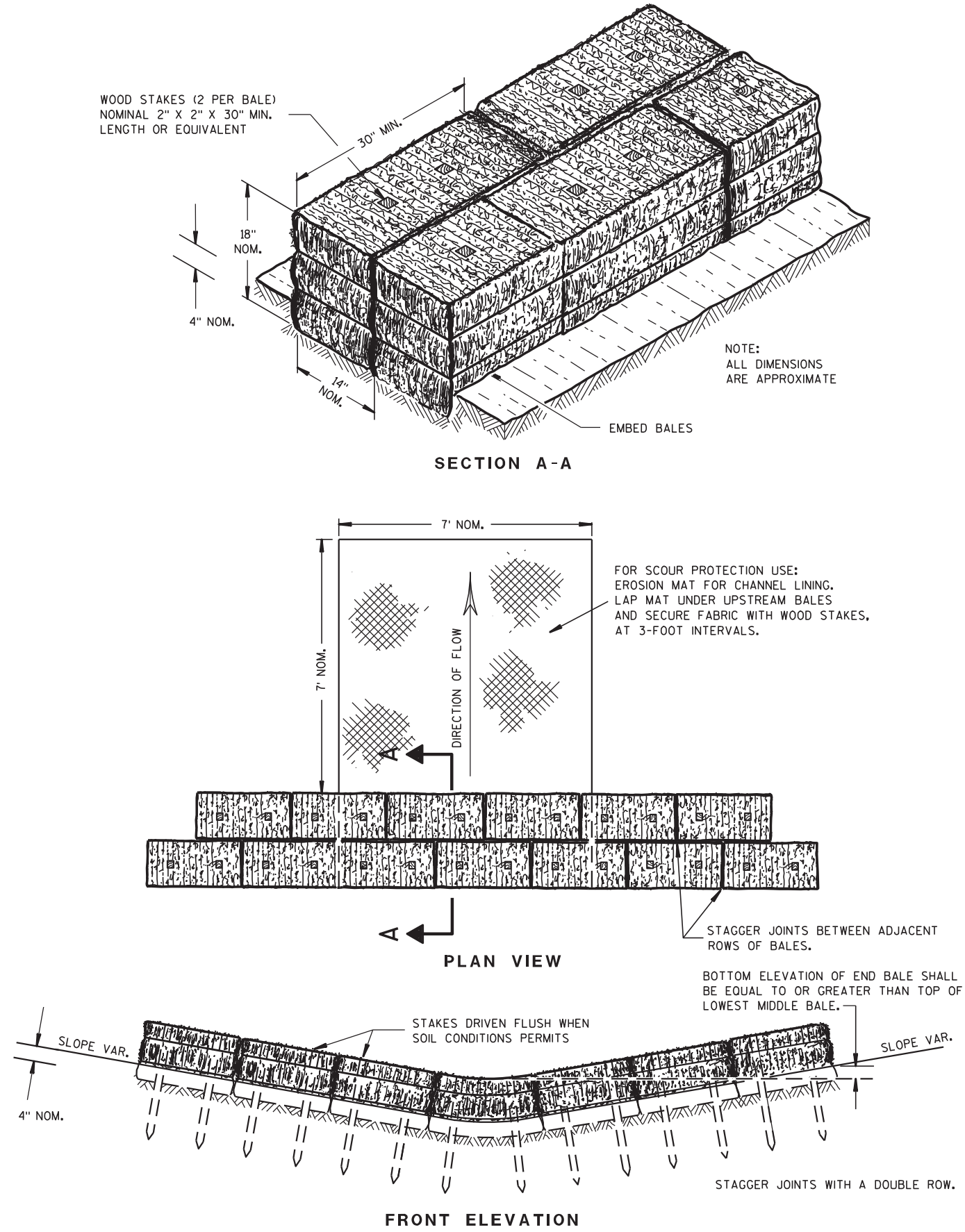
FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE.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

CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2019 DATE	/S/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA	100

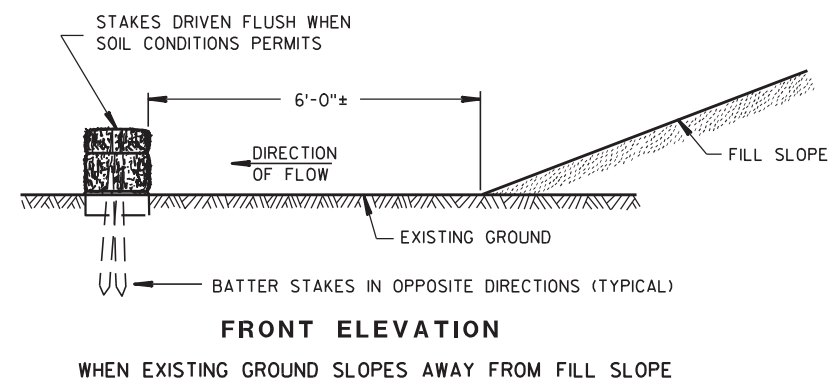
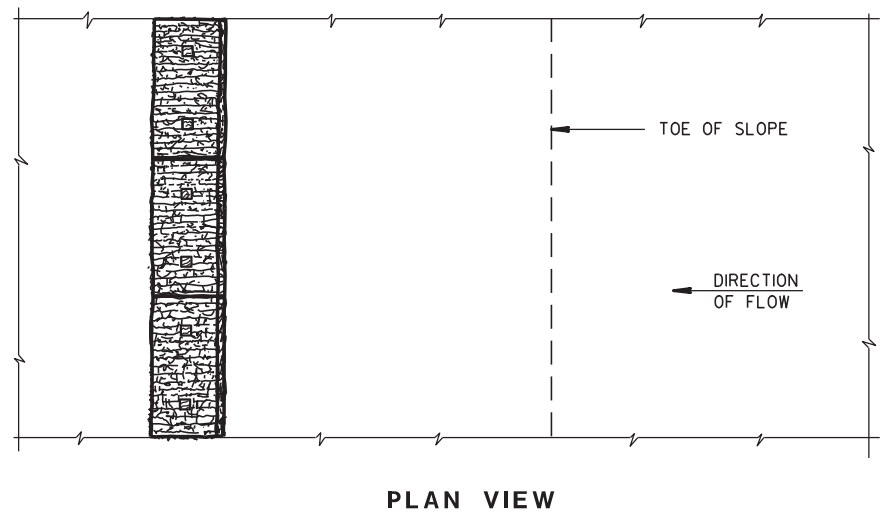
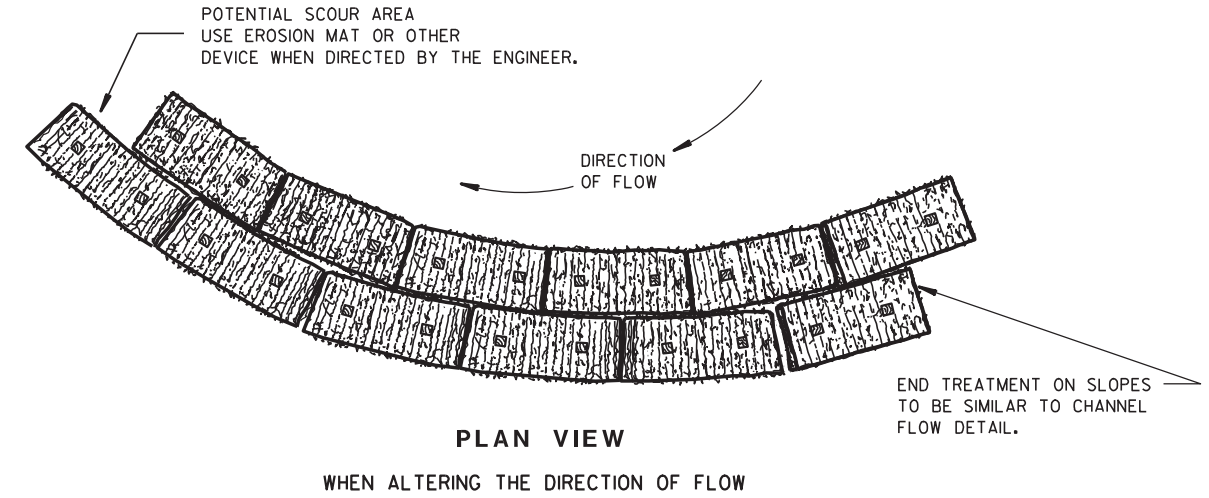


TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

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

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



EROSION BALES FOR SHEET FLOW

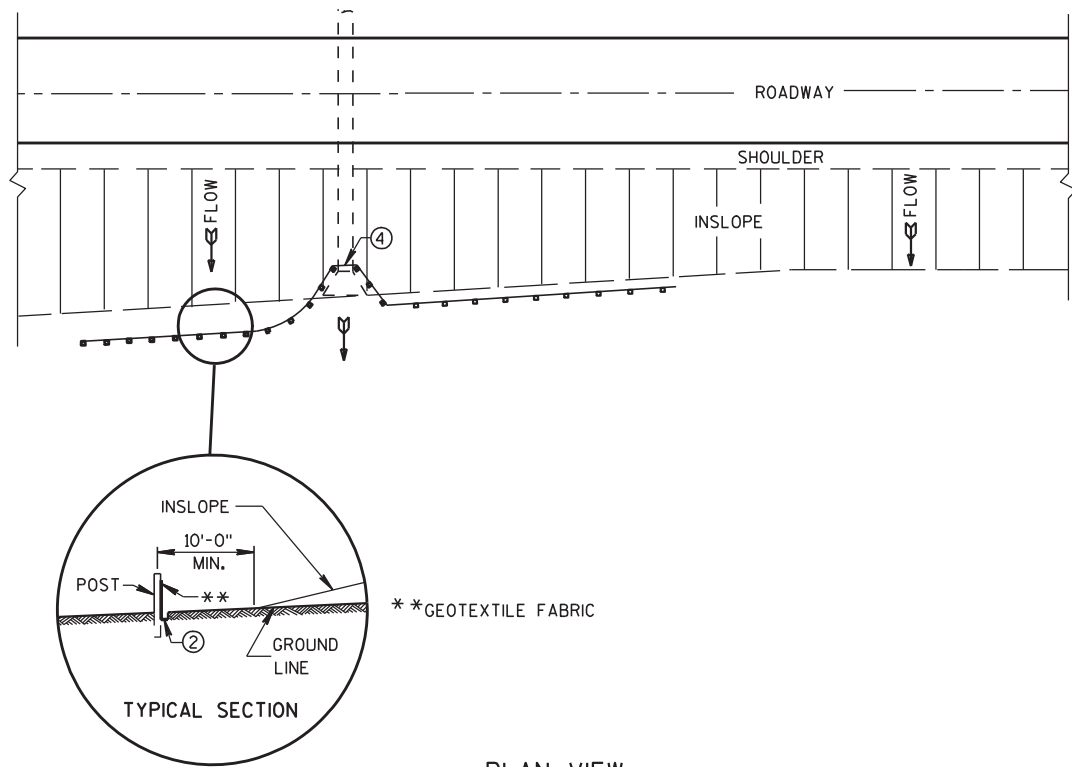
TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

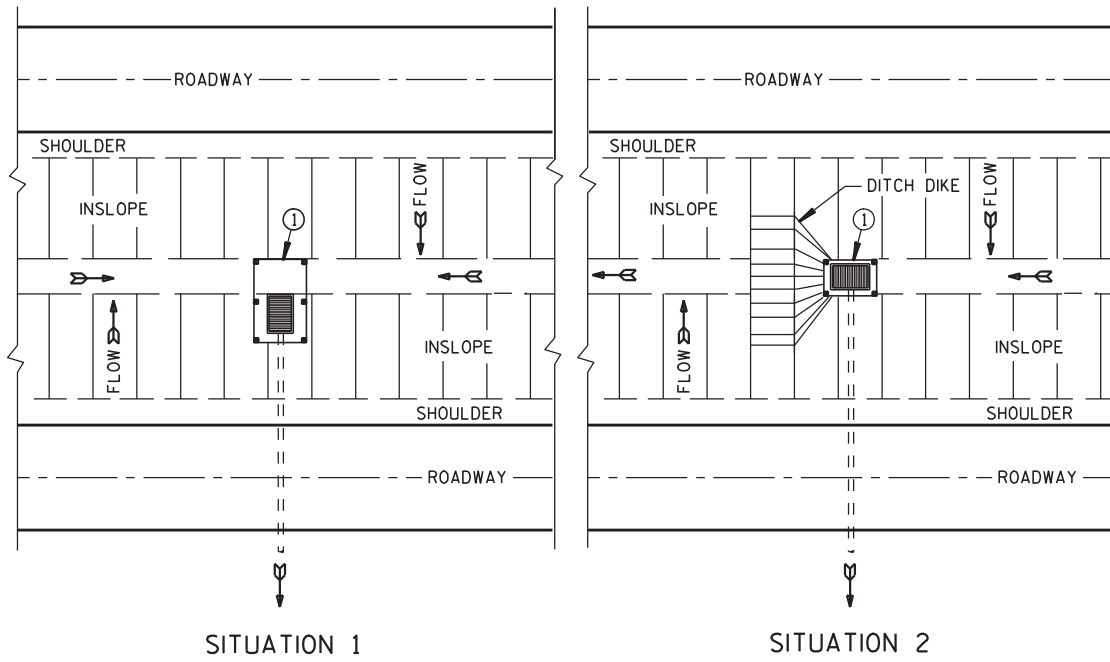
APPROVED

6/04/02 /S/ Beth Cann
DATE CHIEF ROADWAY DEVELOPER 102 ENGINEER

FHWA



PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE

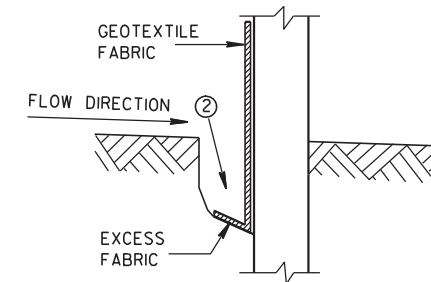


SITUATION 1 SITUATION 2
PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

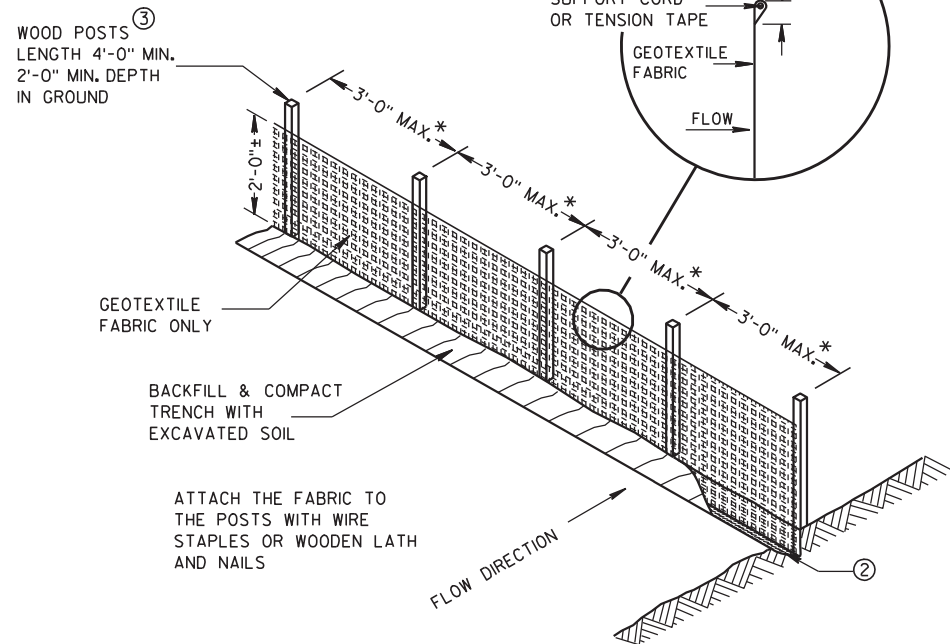
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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



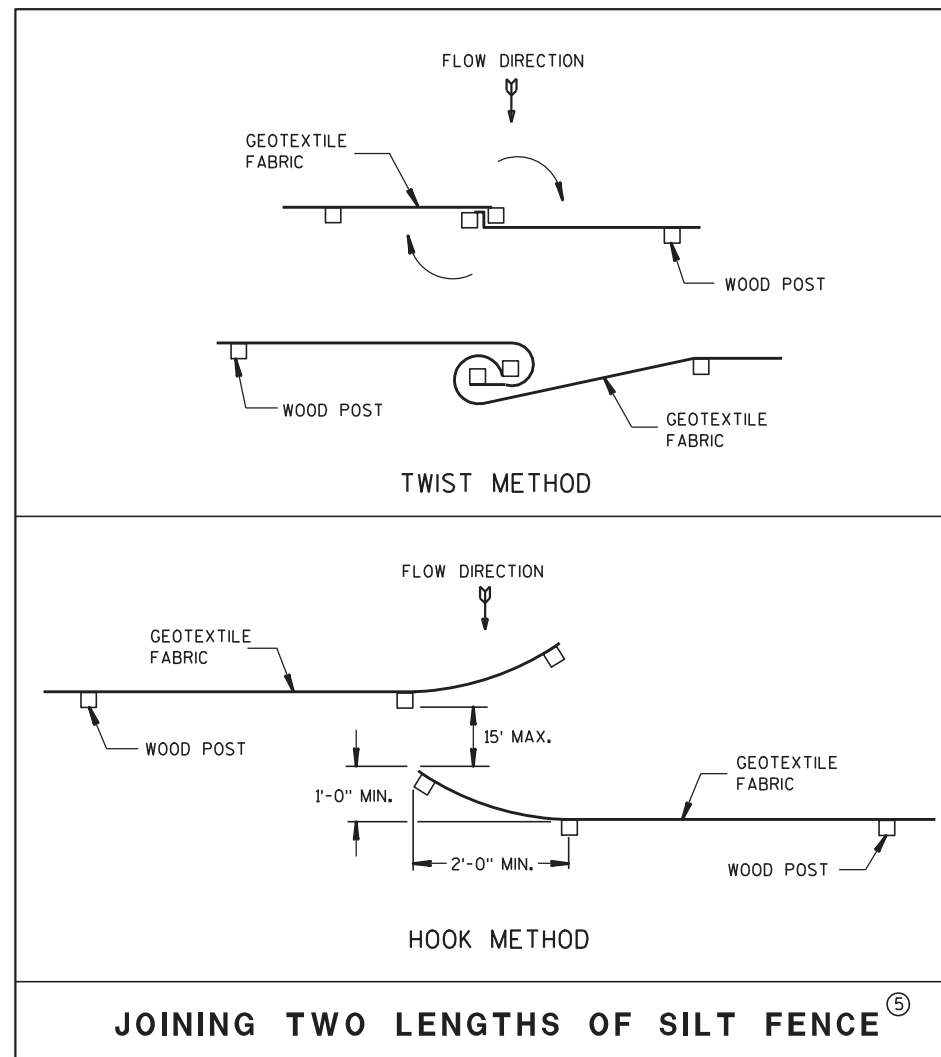
TRENCH DETAIL

NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

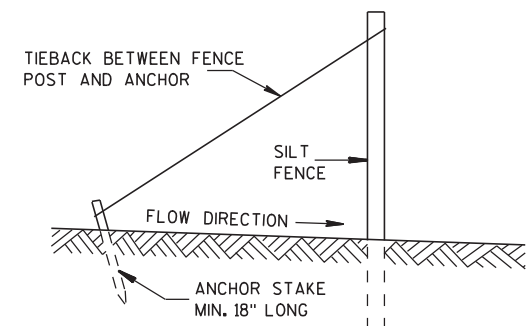


SILT FENCE

* NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.



JOINING TWO LENGTHS OF SILT FENCE ⑤

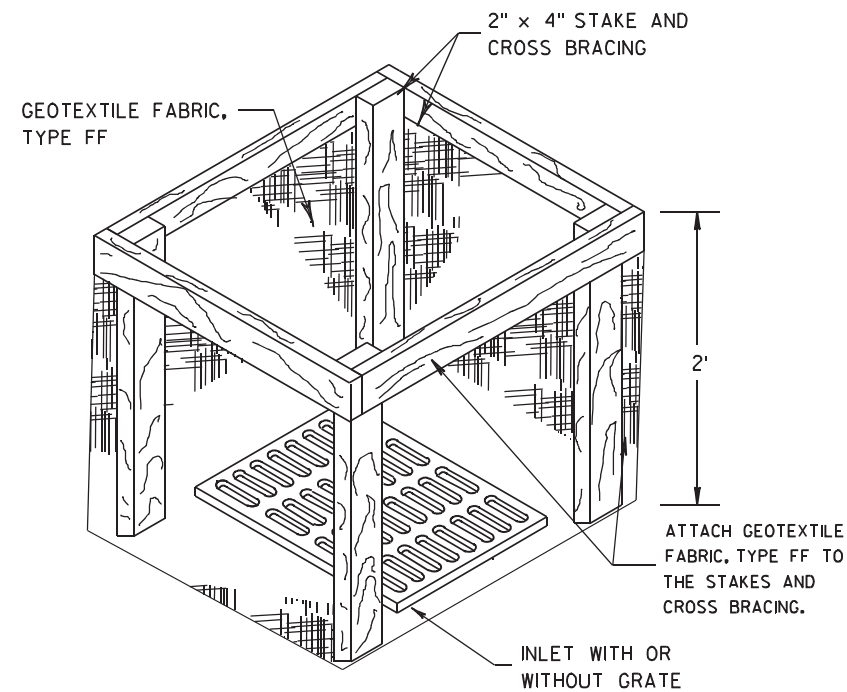
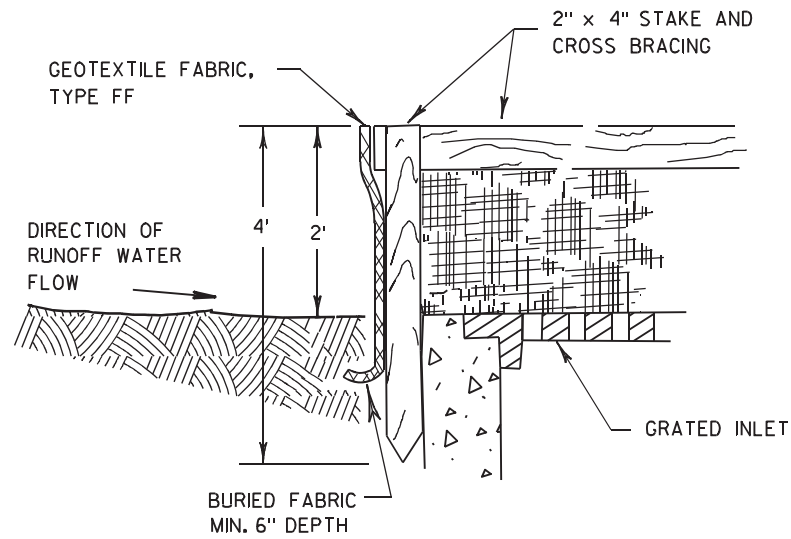


SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05 /S/ Beth Cann
DATE CHIEF ROADWAY DEVELOP 103 INEER
FHWA



INLET PROTECTION, TYPE A

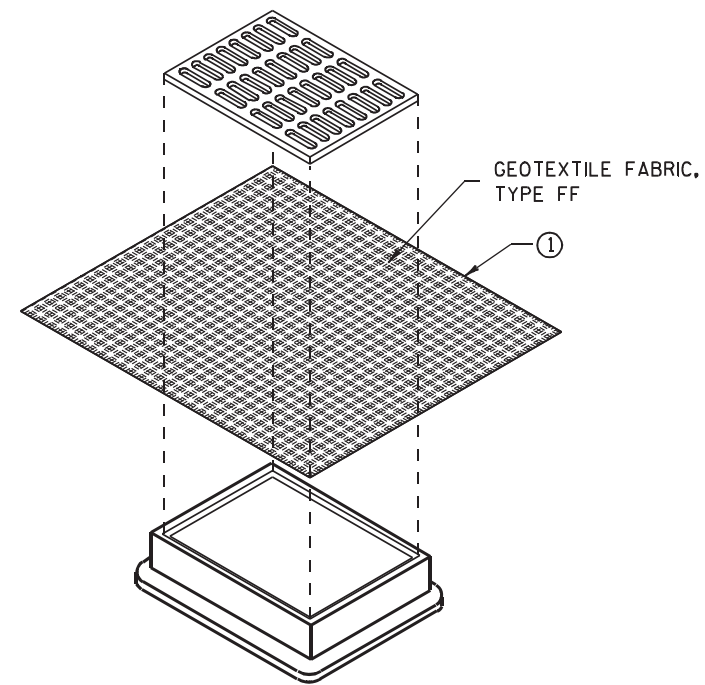
GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

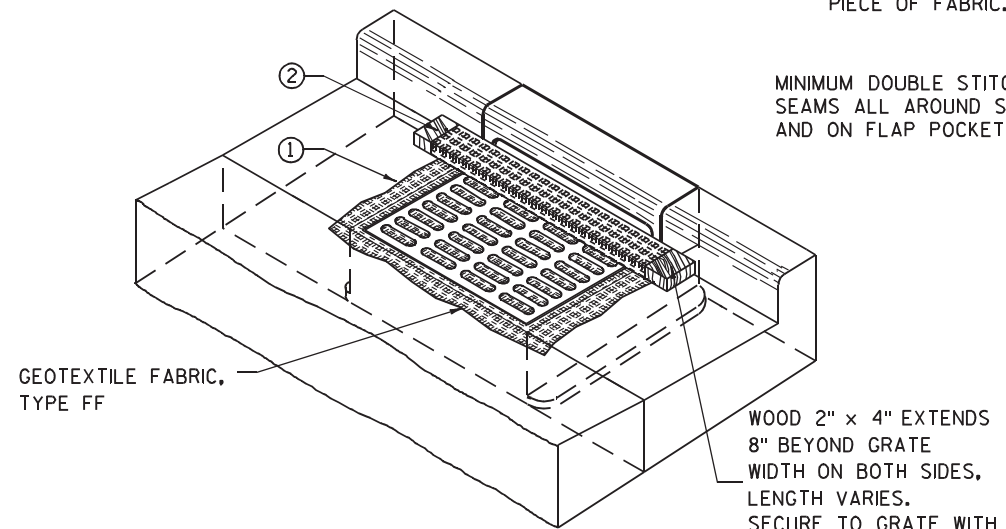
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

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



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

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

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

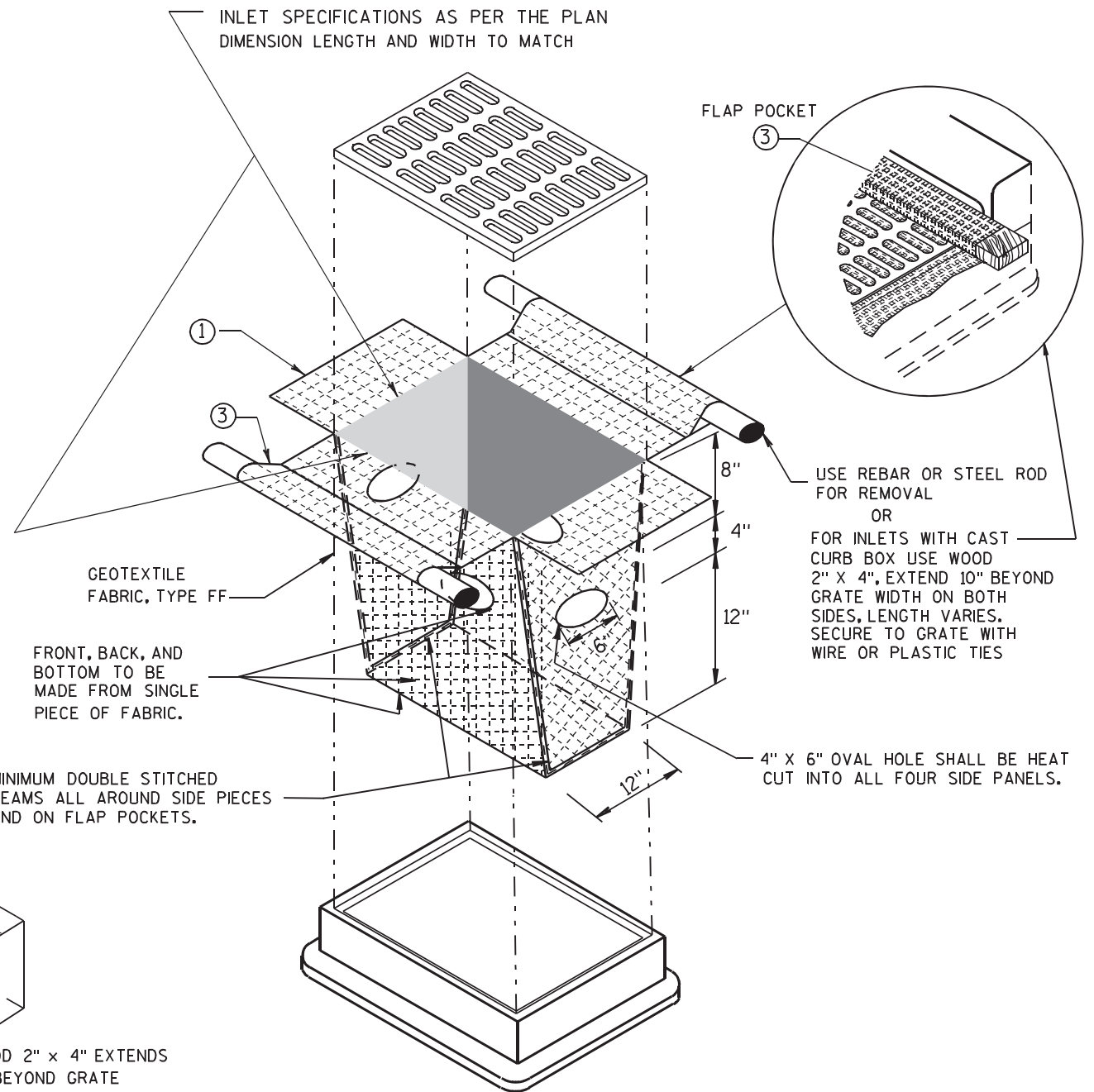
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

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

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



INLET PROTECTION, TYPE D

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

**INLET PROTECTION
TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

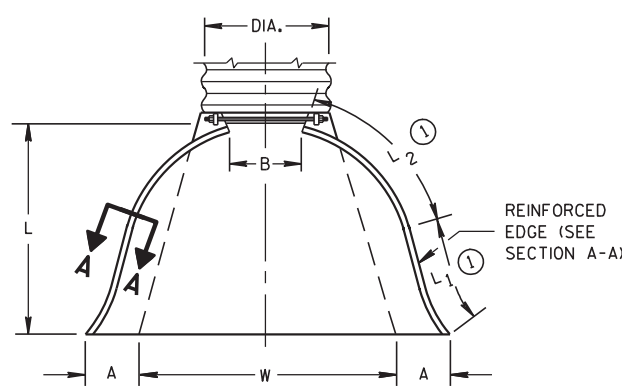
APPROVED
10/16/02 /S/ Beth Connors
DATE 104
FHWA CHIEF ROADWAY DEVELOPMENT ENGINEER

METAL APRON ENDWALLS											
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1	L2	W (±2")		
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109x	.105x	18	33	12	87	—	114	120	2 to 1	3 Pc.
66	.109x	.105x	18	36	12	87	—	120	120	2 to 1	3 Pc.
72	.109x	.105x	18	39	12	87	—	126	120	2 to 1	3 Pc.
78	.109x	.105x	18	42	12	87	—	132	112 to 1	3 Pc.	
84	.109x	.105x	18	45	12	87	—	138	112 to 1	3 Pc.	
90	.109x	.105x	18	37	12	87	—	144	112 to 1	3 Pc.	
96	.109x	.105x	18	35	12	87	—	150	112 to 1	3 Pc.	

* EXCEPT CENTER PANEL SEE GENERAL NOTES

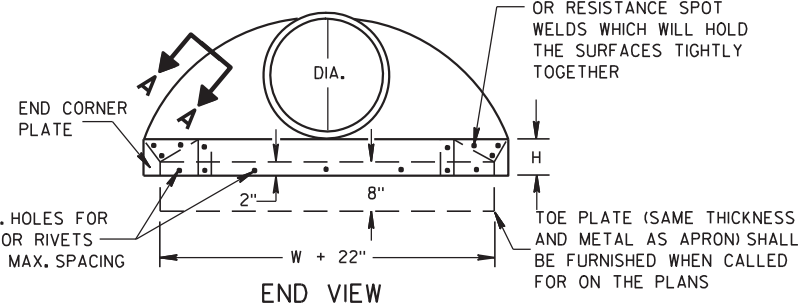
REINFORCED CONCRETE APRON ENDWALLS									
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE	
	T	A	B	C	D	E	G		
12	2	4	24	48 1/8	72 1/8	24	2	3 to 1	
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1	
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1	
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1	
24	3	9 1/2	43 1/2	30	73 1/2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

* MINIMUM
** MAXIMUM



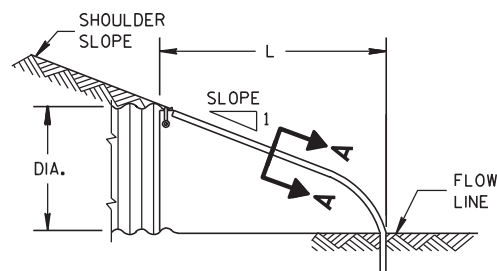
PLAN VIEW

REINFORCED EDGE (SEE SECTION A-A)
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER

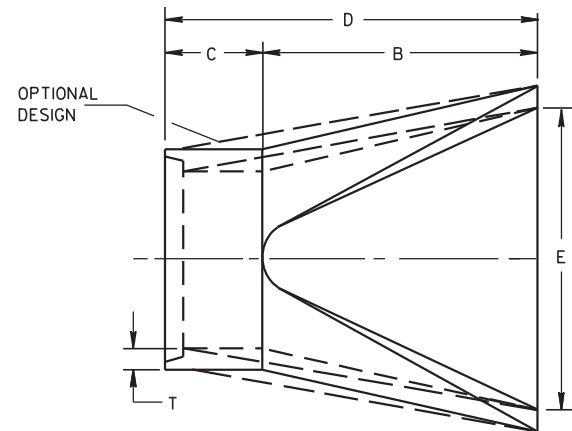


END VIEW

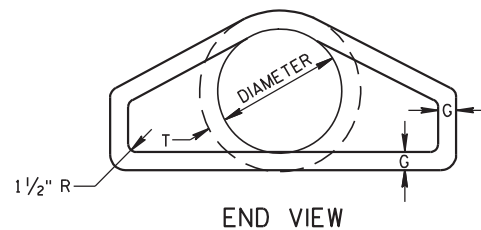
TOE PLATE (SAME THICKNESS AND METAL AS APRON) SHALL BE FURNISHED WHEN CALLED FOR ON THE PLANS



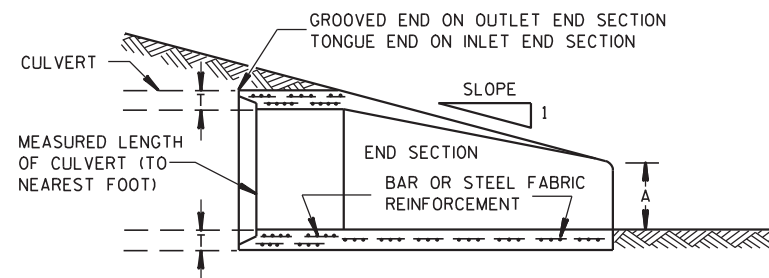
SIDE ELEVATION
METAL ENDWALLS



PLAN

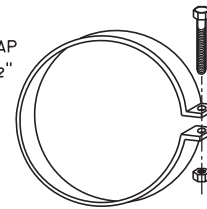


END VIEW



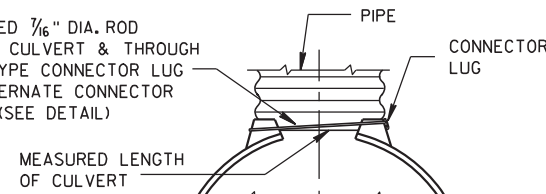
LONGITUDINAL SECTION
CONCRETE ENDWALLS

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



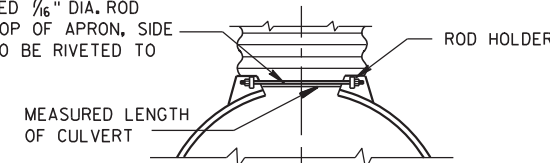
ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP

THREADED 3/16" DIA. ROD AROUND CULVERT & THROUGH TANK TYPE CONNECTOR LUG OR ALTERNATE CONNECTOR STRAP (SEE DETAIL)



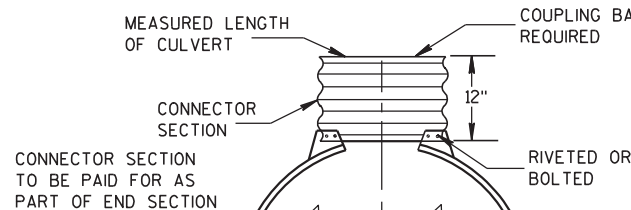
TYPE 1
FOR 12" THRU 24" CORR. PIPE

THREADED 3/16" DIA. ROD OVER TOP OF APRON, SIDE LUGS TO BE RIVETED TO APRON



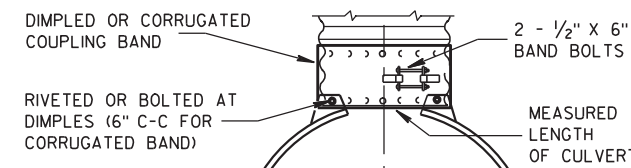
TYPE 2
FOR 30" THRU 96" CORR. PIPE

MEASURED LENGTH OF CULVERT
CONNECTOR SECTION TO BE PAID FOR AS PART OF END SECTION



TYPE 3
FOR 42" THRU 96" CORR. PIPE

DIMPLED OR CORRUGATED COUPLING BAND
RIVETED OR BOLTED AT DIMPLES (6" C-C FOR CORRUGATED BAND)



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

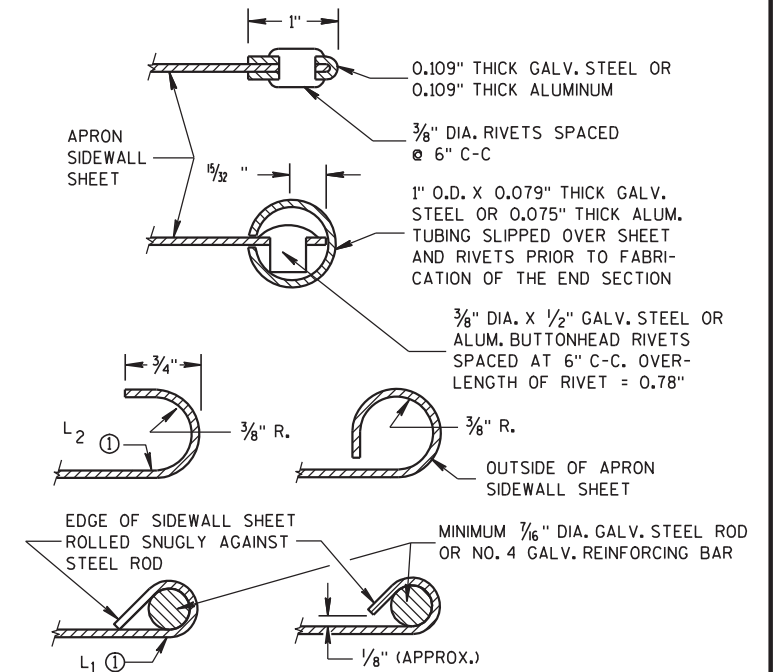
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

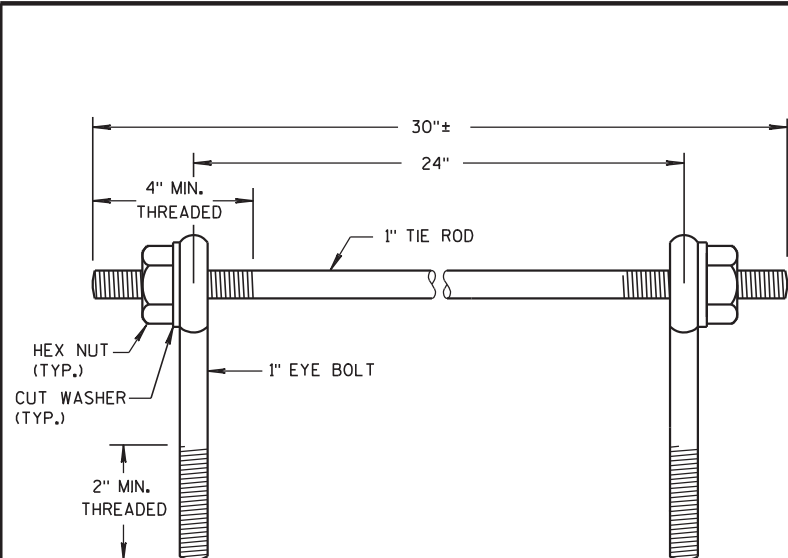
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

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

APRON ENDWALLS FOR
CULVERT PIPE

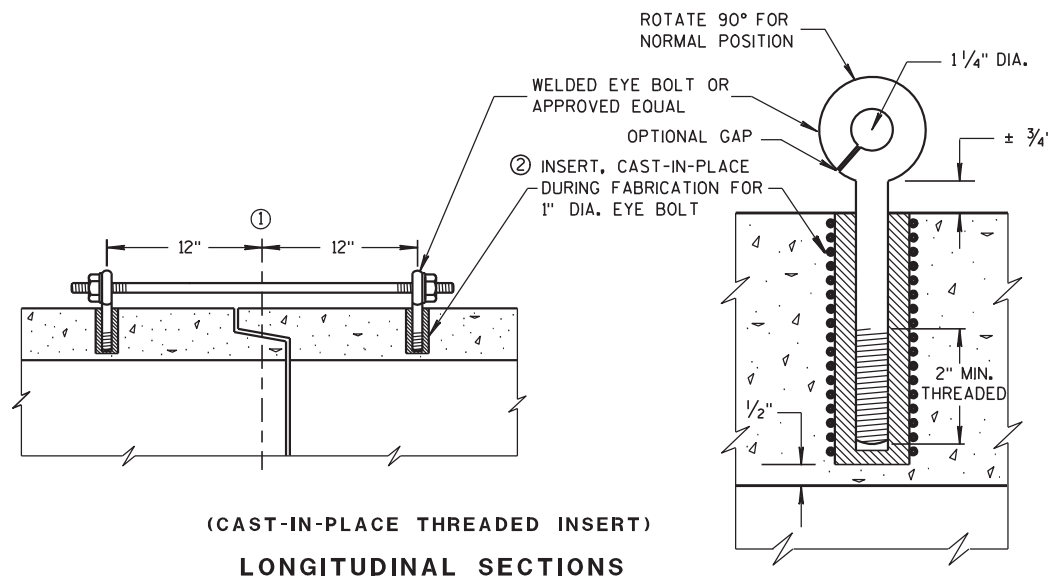
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE /S/ Rory L. Rhinehart
CHIEF ROADWAY DEVELOPER
NEER
FHWA



EYE BOLTS AND TIE ROD

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)



(CAST-IN-PLACE THREADED INSERT) LONGITUDINAL SECTIONS

GENERAL NOTES

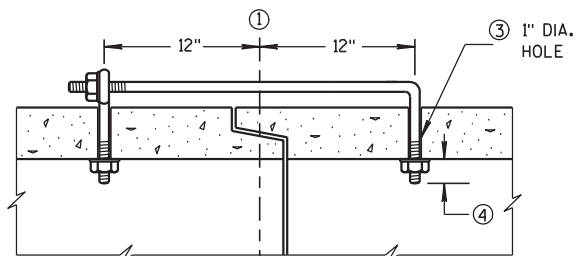
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

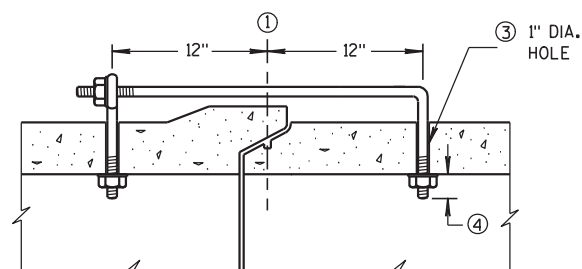
DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

- ① ϕ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.
- ② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.
- ③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ϕ OF TONGUE AND GROOVE.
- ④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.
- ⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.
- ⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



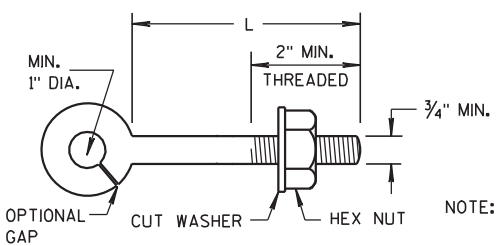
(TONGUE & GROOVE PIPE)



(MODIFIED BELL PIPE) LONGITUDINAL SECTION

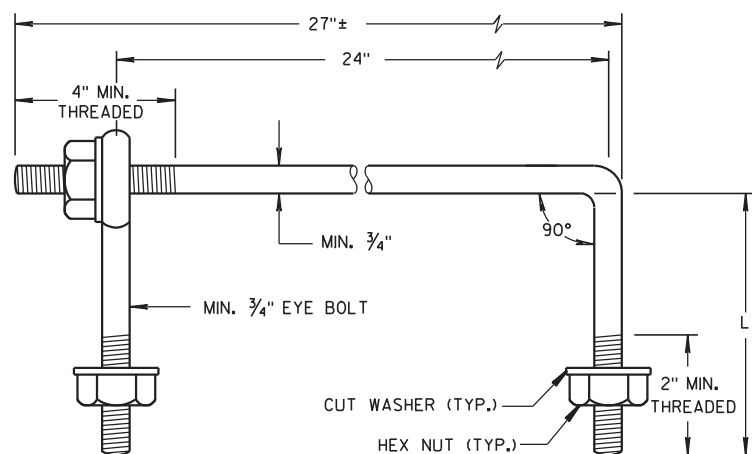
EYE BOLT DIMENSION TABLE

PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

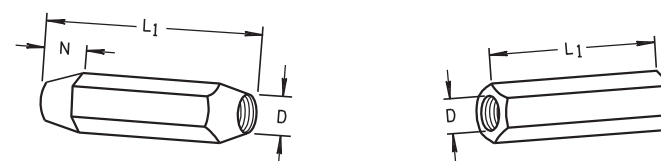
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/6

DIMENSIONS SHOWN ARE IN INCHES

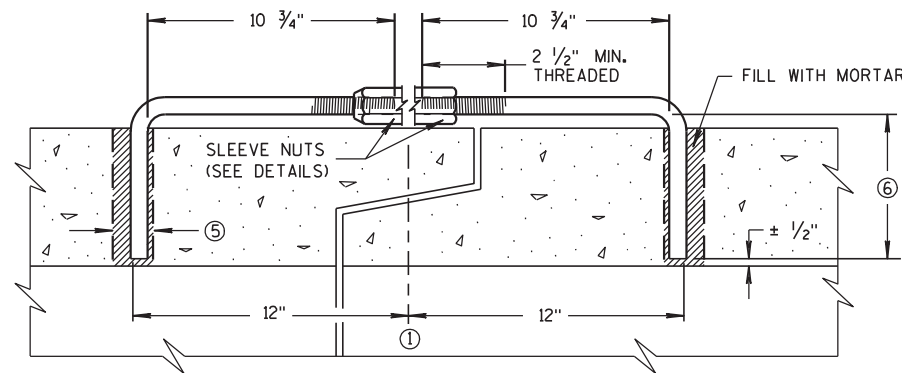


TAPERED

PLAIN

RIGHT AND LEFT THREADS

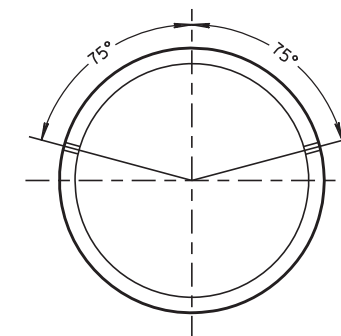
SLEEVE NUTS



LONGITUDINAL SECTION

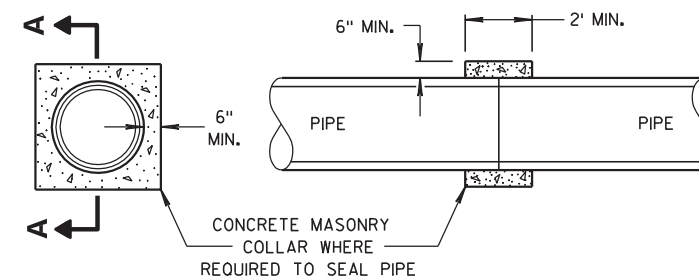
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

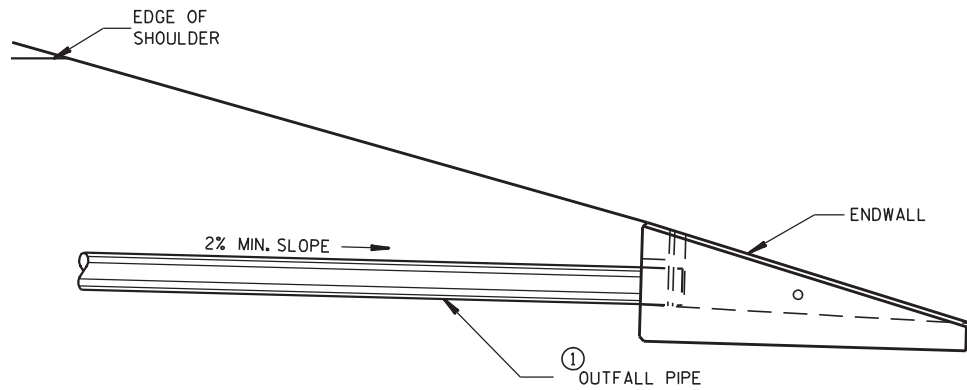
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED 6/5/2012 DATE /S/ Jerry H. Zogg ROADWAY STANDARDS 106 ENGINEER FHW

DIMENSIONS IN INCHES											
PIPE DIA.	A	B	C	D	E	F	G	H	J	L	Z
**4	6	12	5 1/4	9	8	32	36	11	2 3/8	6 1/2	4
6	8	14	7 1/4	11	10	42	44	13	3 5/8	8 1/2	6

** APRON ENDWALL FOR 6 INCH DIAMETER PIPE MAY BE SUBSTITUTED FOR THIS SIZE PROVIDED THE HOLE IN THE HEADWALL IS SIZED AND LOCATED TO CONFORM TO THE 4 INCH DIAMETER PIPE DIMENSIONS (C & J)



INSTALLATION 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.

ALTERNATIVE DESIGNS WHICH PROVIDE EQUIVALENT CAPACITY AND STRENGTH MAY BE USED WHEN APPROVED BY THE ENGINEER. ENDWALL MAY BE EITHER PRECAST OR CAST-IN-PLACE CONCRETE.

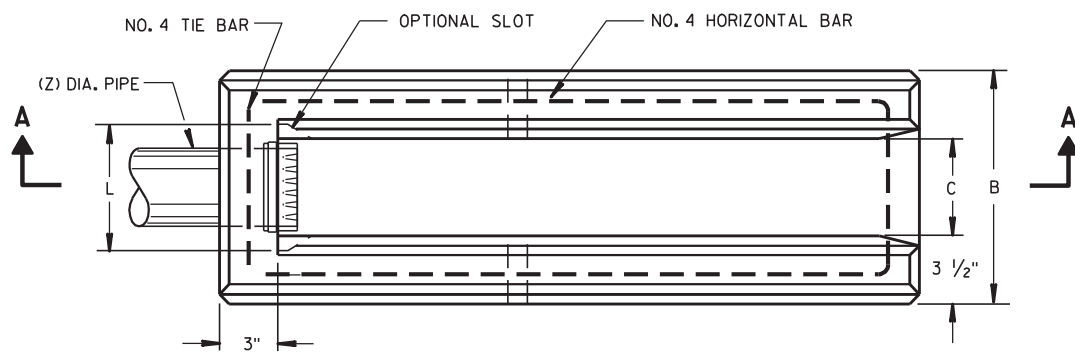
THE UNDERDRAIN PIPE SHALL BE FULLY INSERTED AND SEALED INTO THE ENDWALL WITH CEMENT MORTAR PRIOR TO BACKFILLING AROUND THE STRUCTURE.

THE UPPERMOST POINT OF THE ENDWALL SHALL BE PLACED FLUSH WITH THE ROADWAY SLOPE. ADJACENT EMBANKMENT SLOPES SHALL BE SHAPED TO FIT THE SIDES AND TOE OF THE ENDWALL. EXACT PLACEMENT OF THE OUTFALL PIPE AND ENDWALL SHALL BE DETERMINED BY THE ENGINEER TO MATCH THE ELEVATIONS AND FLOW DIRECTION OF THE ROADSIDE DITCH.

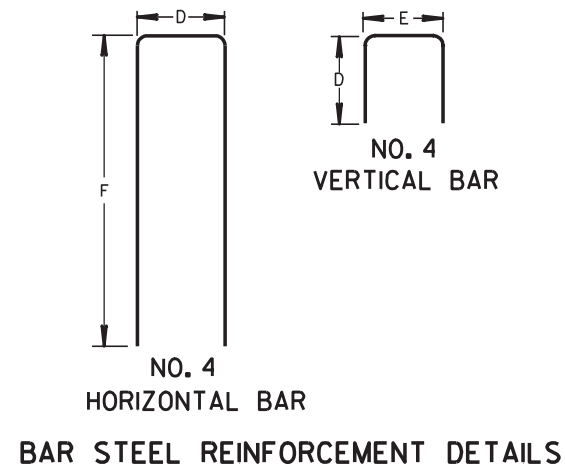
① THE OUTFALL PIPE UNDERDRAIN AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATION FOR POLY (VINYL CHORIDE) (PVC) PLASTIC DRAIN, WASTE AND VENT PIPE AND FITTINGS, ASTM DESIGNATION: D 2665, SCHEDULE 40 PVC OR THE STANDARD SPECIFICATION FOR TYPE PSM POLY (VINYL CHORIDE) (PVC) SEWER PIPE AND FITTINGS, ASTM DESIGNATION: D 3034, TYPE PSM SDR 23.5 PVC SEWER PIPE, ALL JOINTS SHALL BE SOLVENT WELDED.

THE OUTFALL PIPE INCLUDING ALL FITTINGS AND THE RODENT SHIELD SHALL BE MEASURED AND PAID FOR AS PIPE UNDERDRAIN UNPERFORATED.

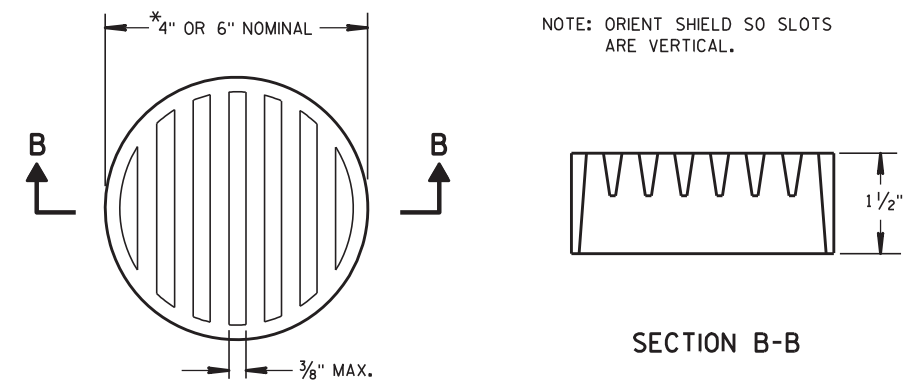
② THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



PLAN VIEW

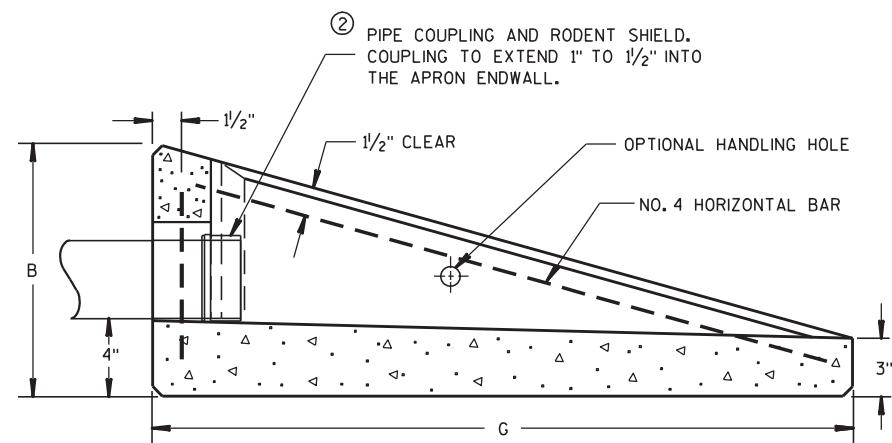


BAR STEEL REINFORCEMENT DETAILS



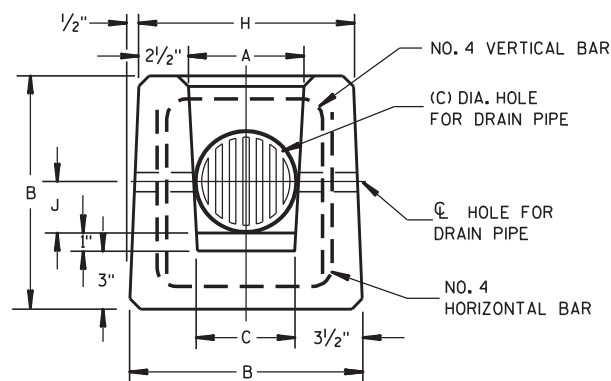
② RODENT SHIELD

*NOTE: DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.



SECTION A-A

CONCRETE APRON ENDWALL FOR UNDERDRAIN

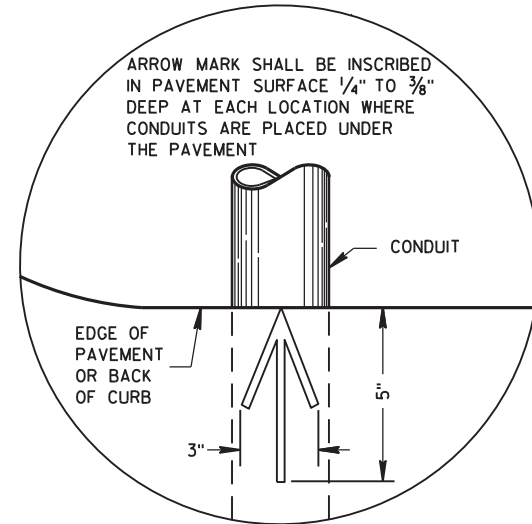


END VIEW

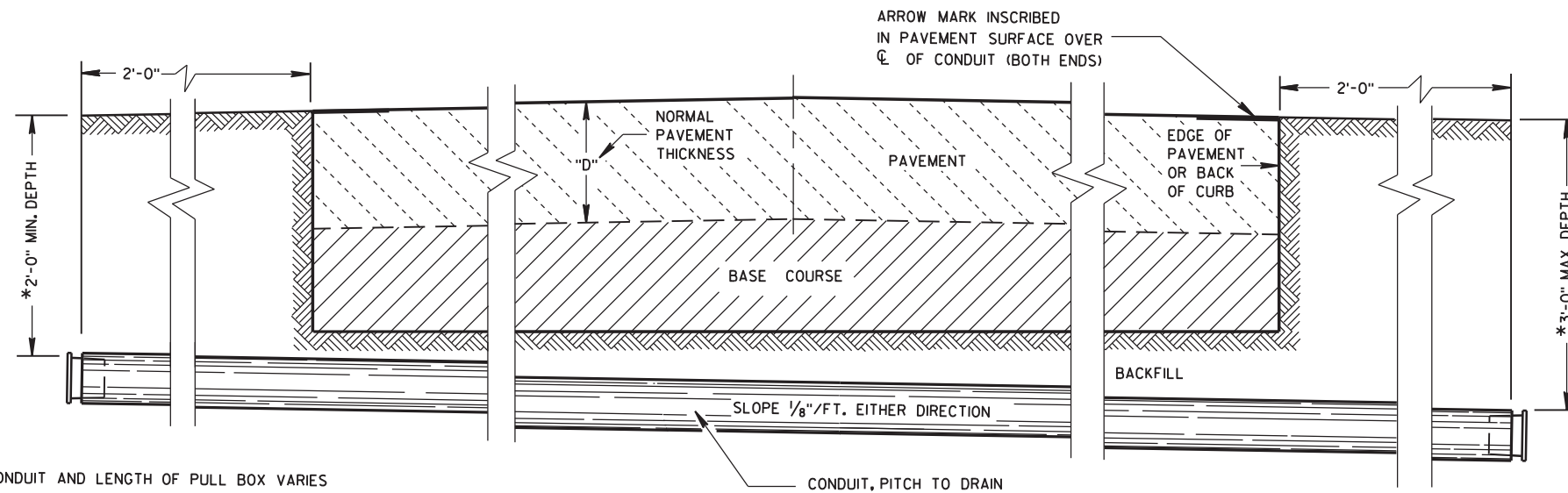
**REINFORCED
CONCRETE APRON ENDWALL
FOR PIPE UNDERDRAIN**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/10/98 /S/ Rory L. Rhin...
DATE CHIEF ROADWAY DEVELOPER INEER
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 EMERSON 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.

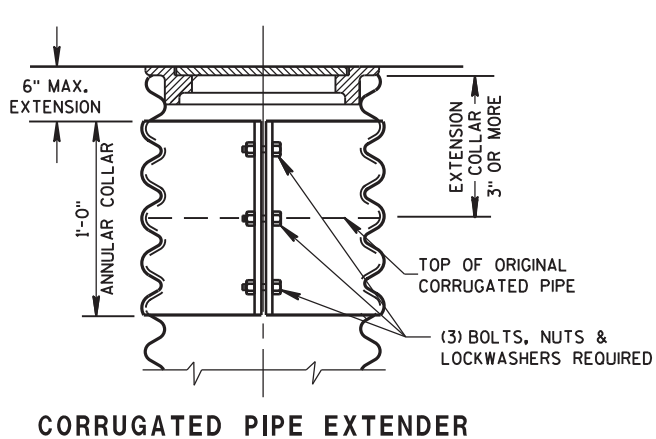
CONDUIT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED March, 2017 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL 108
FHWA	

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

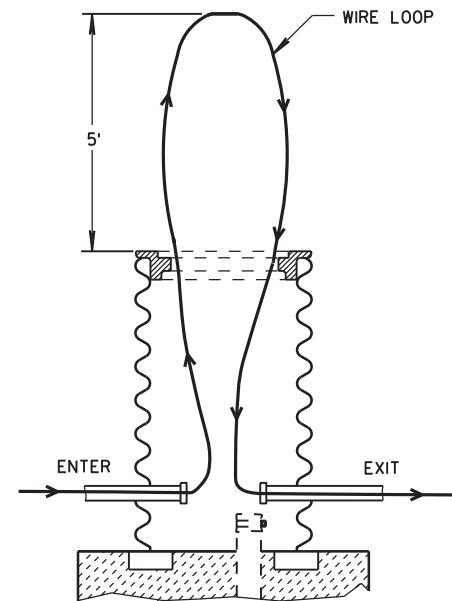
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2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

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

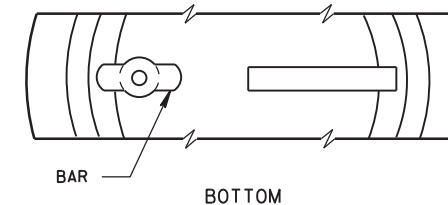
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



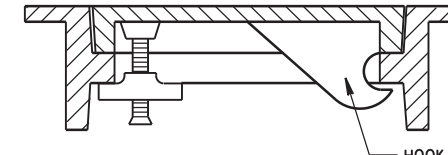
CORRUGATED PIPE EXTENDER



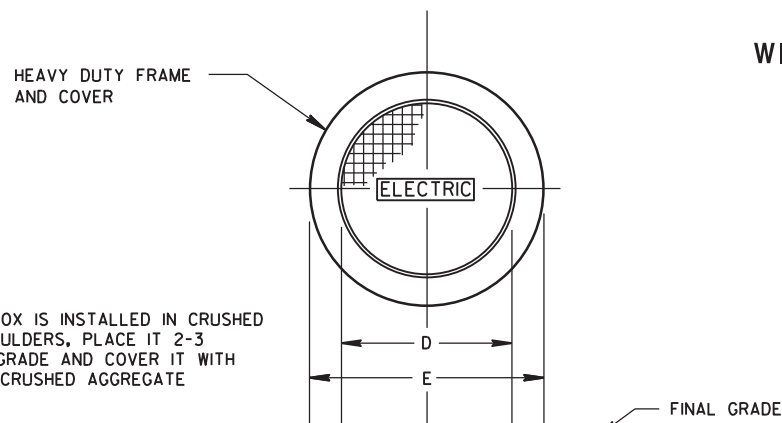
MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



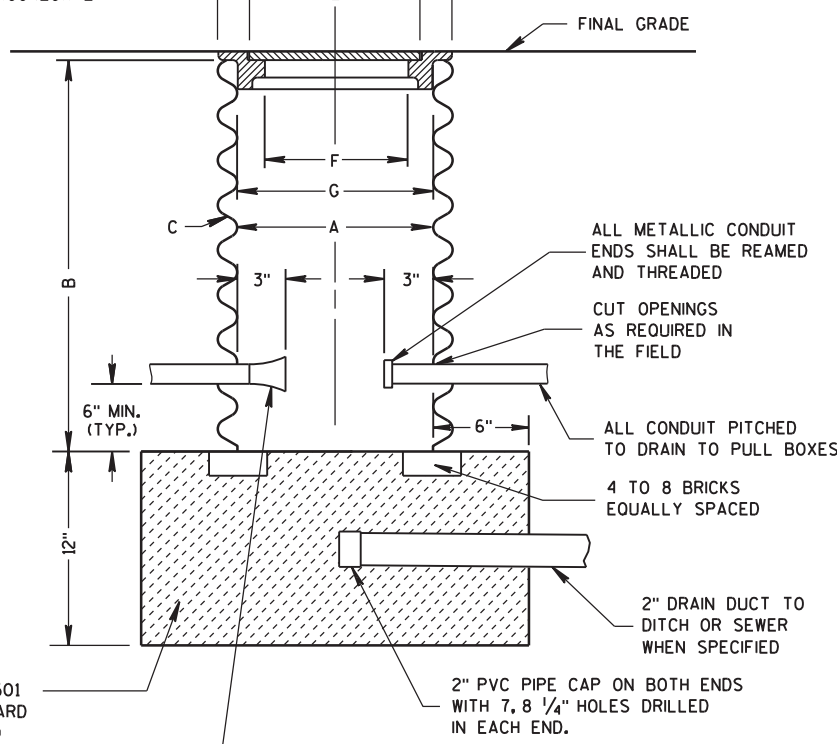
ALTERNATE COVER (LOCKING)



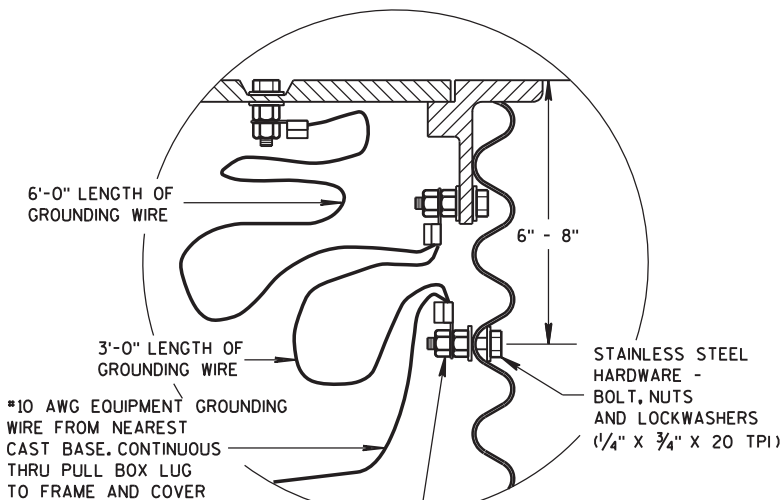
TIGHTENING BAR TYPE



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

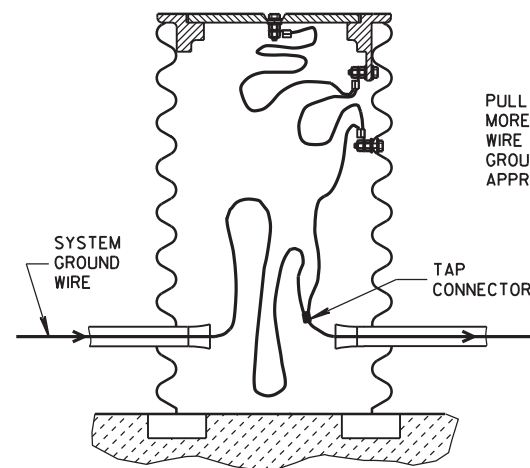


PULL BOX



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

PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

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.

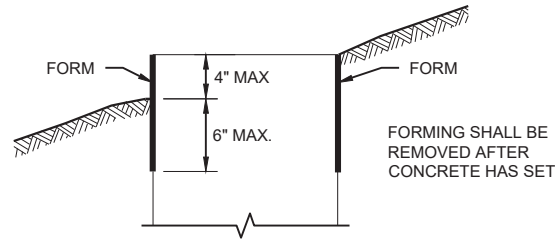
WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.

NO. 2 COARSE AGGREGATE (SEE SECTION 501 OF THE STANDARD SPECIFICATIONS)

INSTALL END BELLS (U.L. LISTED FOR ELECTRICAL USE) ON ALL NONMETALLIC CONDUIT BEFORE INSTALLATION OF WIRE AND/OR CABLE.

PULL BOX	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE	/S/ Ahmet Demirelek STATE ELECTRICAL 109
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

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

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

CONDUIT SIZES AND LOCATIONS SHALL BE 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.

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.

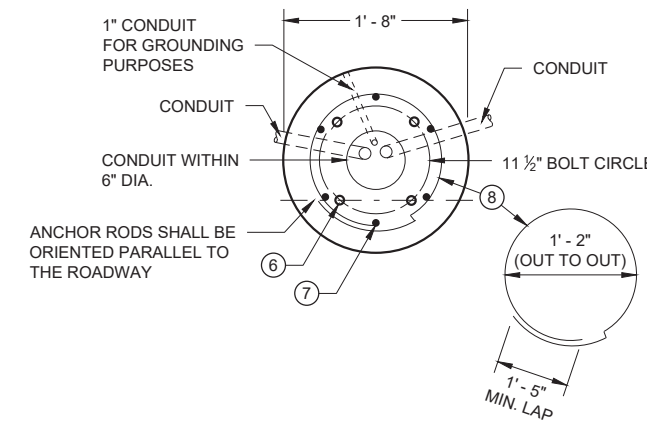
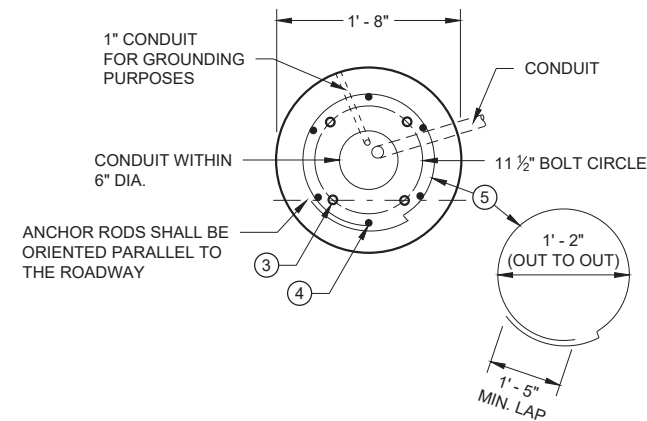
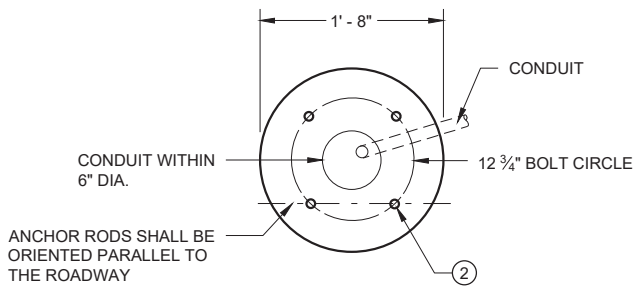
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

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

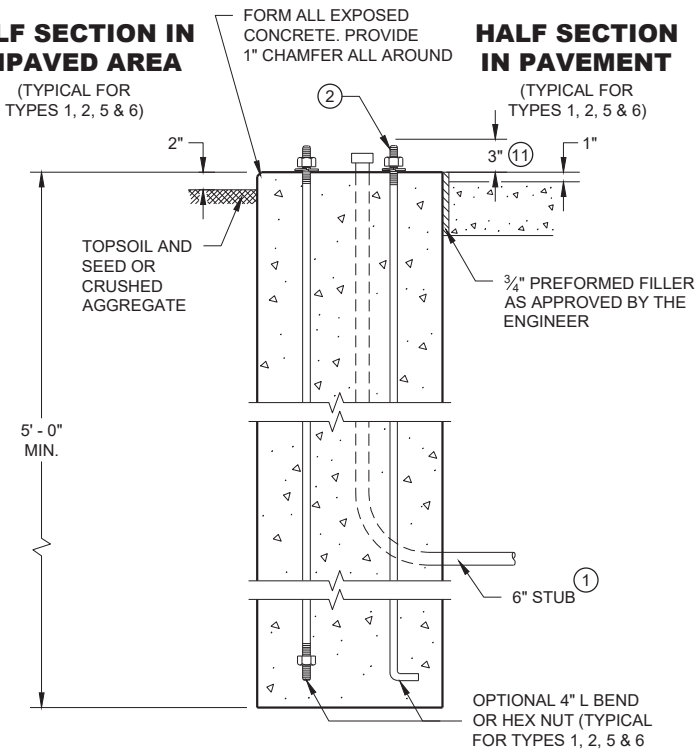
WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

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 1/4" 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.

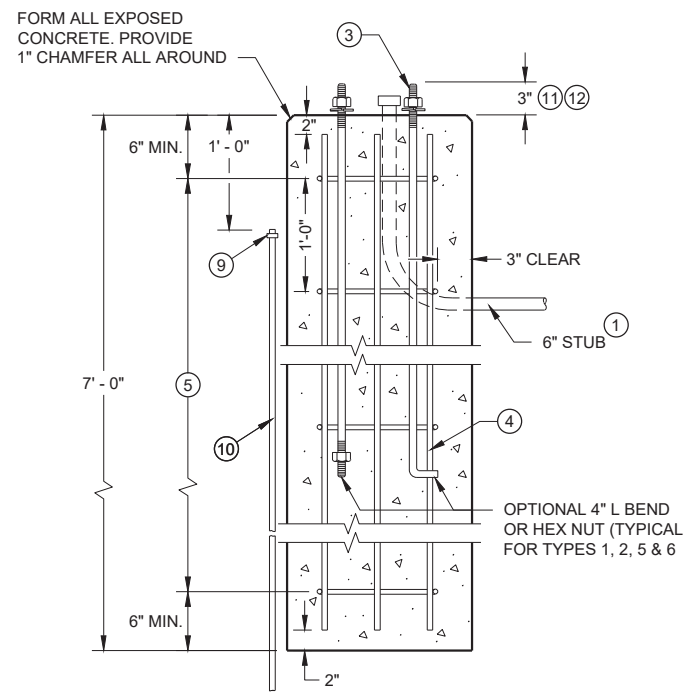


HALF SECTION IN UNPAVED AREA



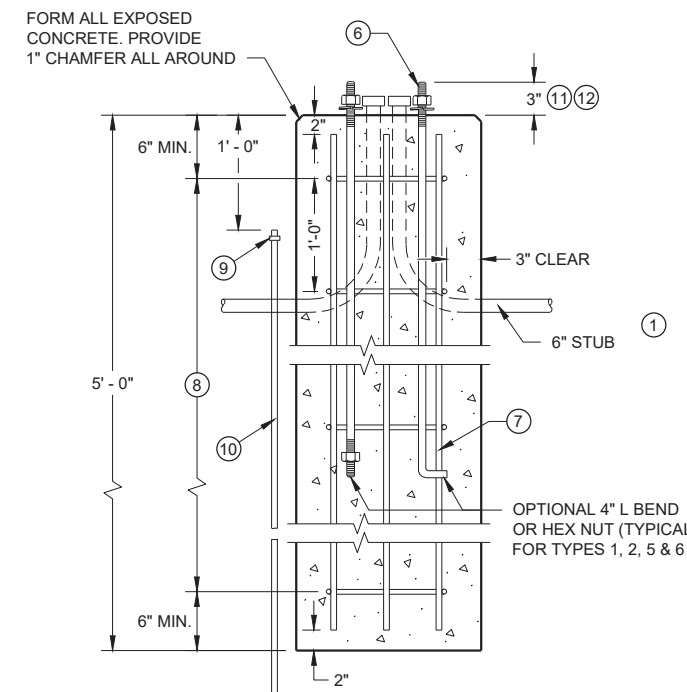
TYPE 1

HALF SECTION IN PAVEMENT



TYPE 2

CONCRETE BASES



TYPE 5 & 6

**CONCRETE BASES
TYPES 1, 2, 5, & 6**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 /S/ Ahmet Demirelek
DATE STATE ELECTRICAL ENGI 110

FHWA

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.

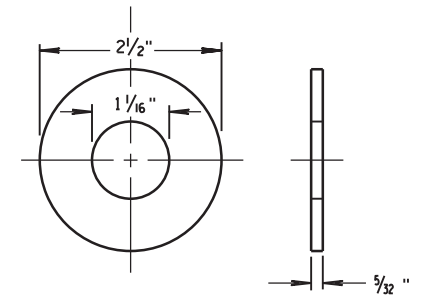
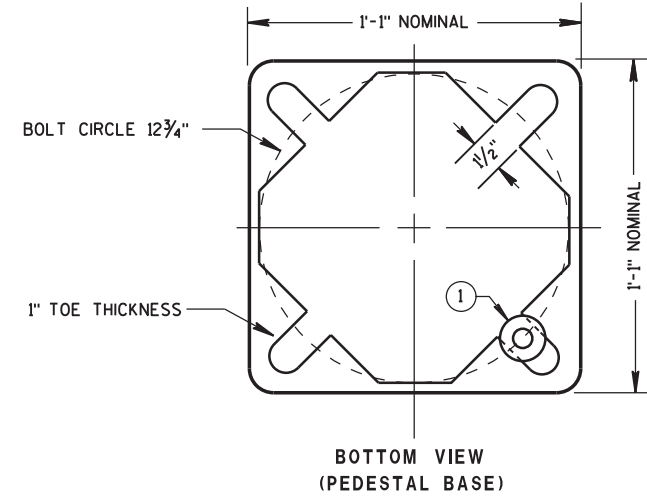
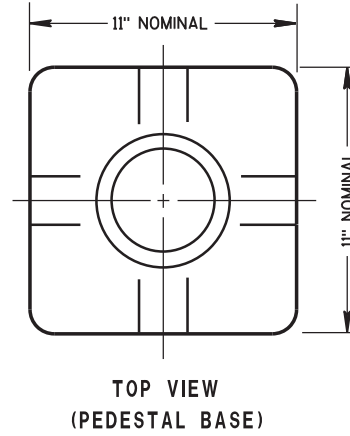
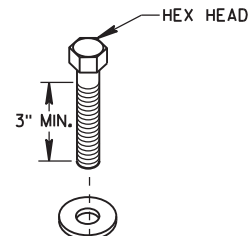
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

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.

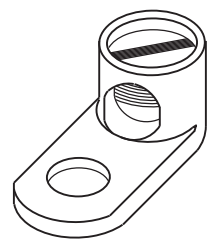
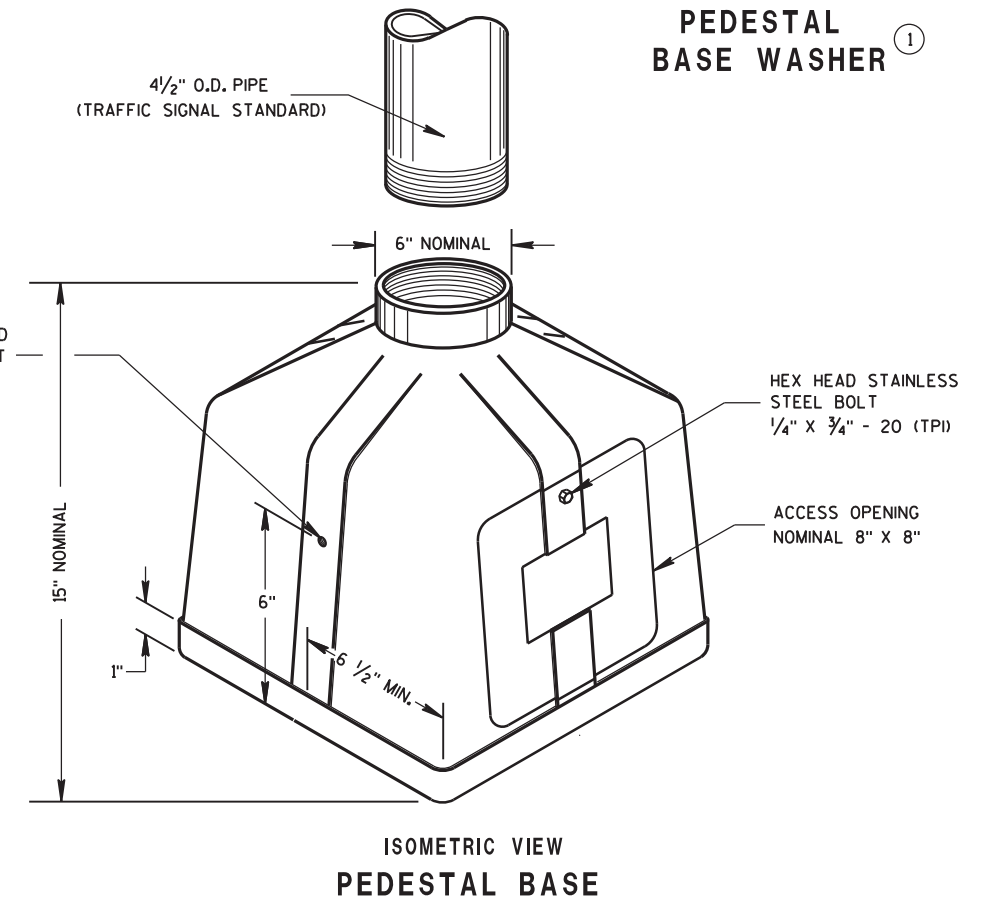
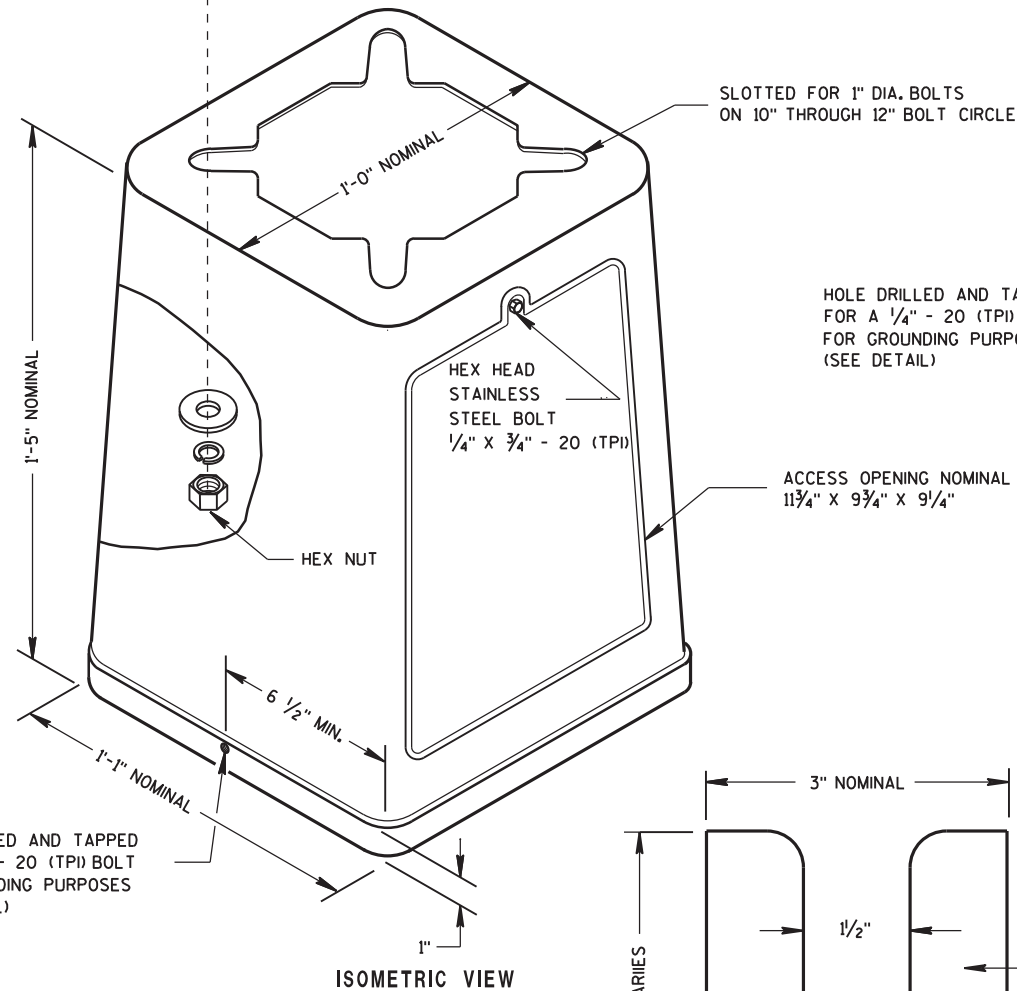
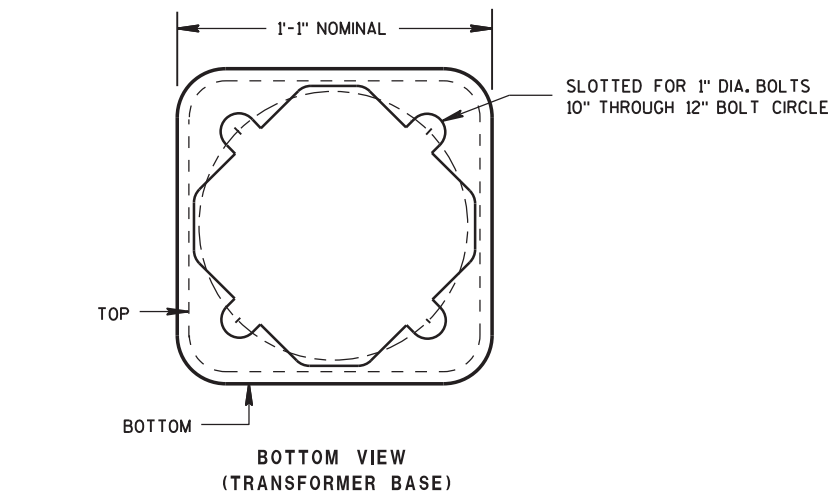
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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



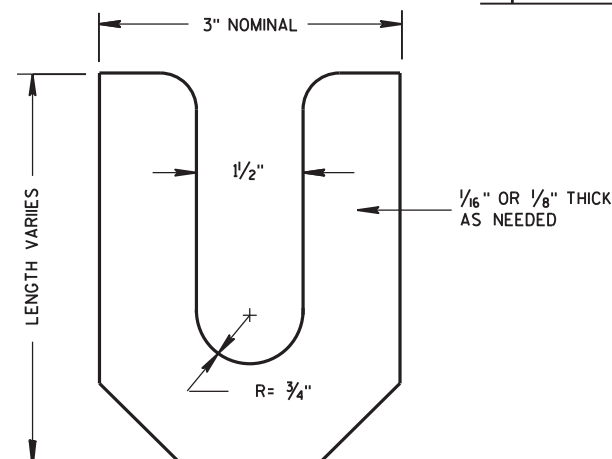
ZINC COATED STEEL WASHER TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER ①



TYPICAL MECHANICAL CONNECTOR LUG
TO BE FURNISHED WITH EACH BASE

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



LEVELING SHIM

6

6

S.D.D. 9 C 3-4

S.D.D. 9 C 3-4

TRANSFORMER/PEDESTAL BASES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED Sept. 2014 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL 111
FHWA	

CONTROL CABINET BASE TYPE	DIMENSIONS				C.Y. CONCRETE (APPROX.)
	H	I	J	K	
TYPE 6 - 30" CABINET	34"	60"	10"	17"	.64
TYPE 7 - 38" CABINET	42"	60"	10"	21"	.93
TYPE 8 - 38" CABINET	42"	72"	12"	21"	1.29
TYPE 9 - VARIABLE	54"	72"	14"	27"	1.56
TYPE 10 - POST MOUNT	AS SHOWN				.65 *

* INCLUDES MAINTENANCE PLATFORM.

TYPICAL 3'-0" X 3'-0" X 4" THICK MAINTENANCE PLATFORM. LOCATION TO BE DETERMINED IN THE FIELD. COST TO BE INCLUDED UNDER CONCRETE CONTROL CABINET TYPE 10.

EXIT LOCATION OF 1/4" CONDUIT FROM CABINET BASE DEPENDENT UPON LOCATION OF ELECTRIC SERVICE.

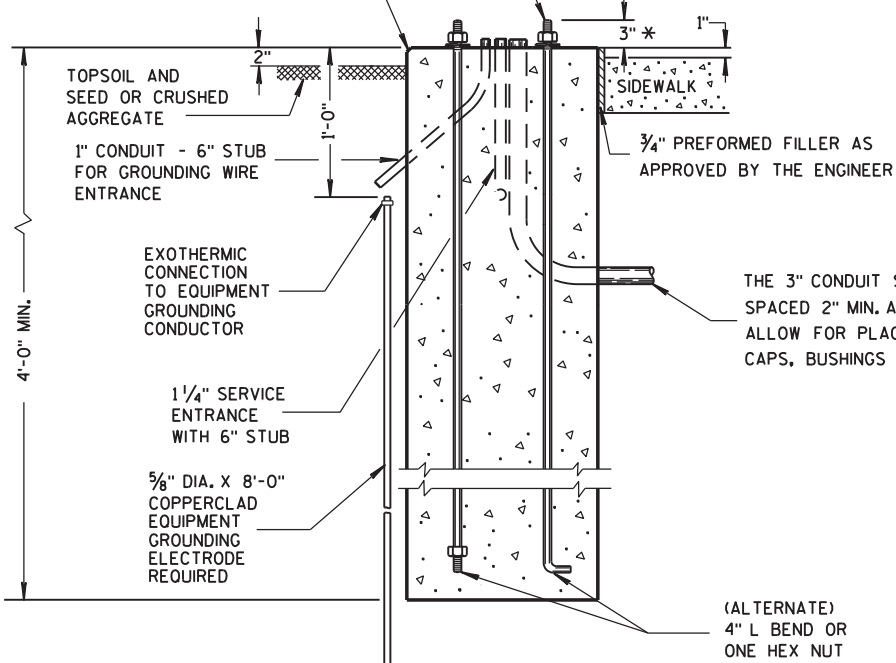
THE 3" CONDUIT SHALL BE INSTALLED FROM THE CABINET BASE TO THE FIRST (NEAREST) PULL BOX LOCATED AS SHOWN ON THE PLAN

ALL CONDUITS WITHIN 6" DIA. CIRCLE

12 3/4" BOLT CIRCLE

HALF SECTION IN UNPAVED AREA

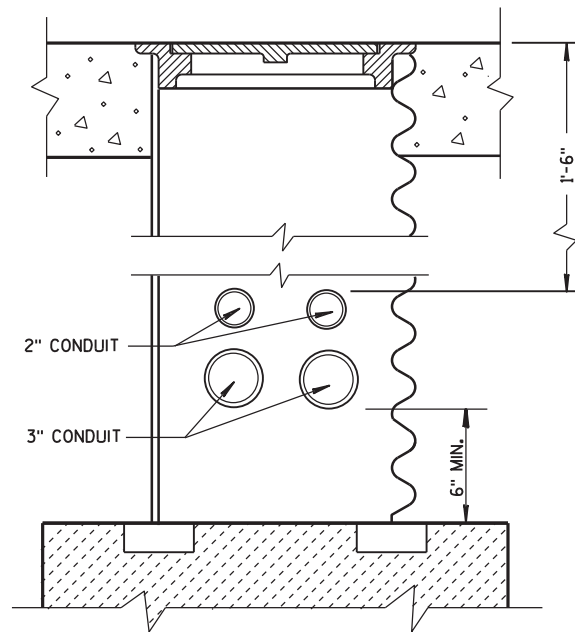
HALF SECTION IN PAVED AREA



TYPE 10

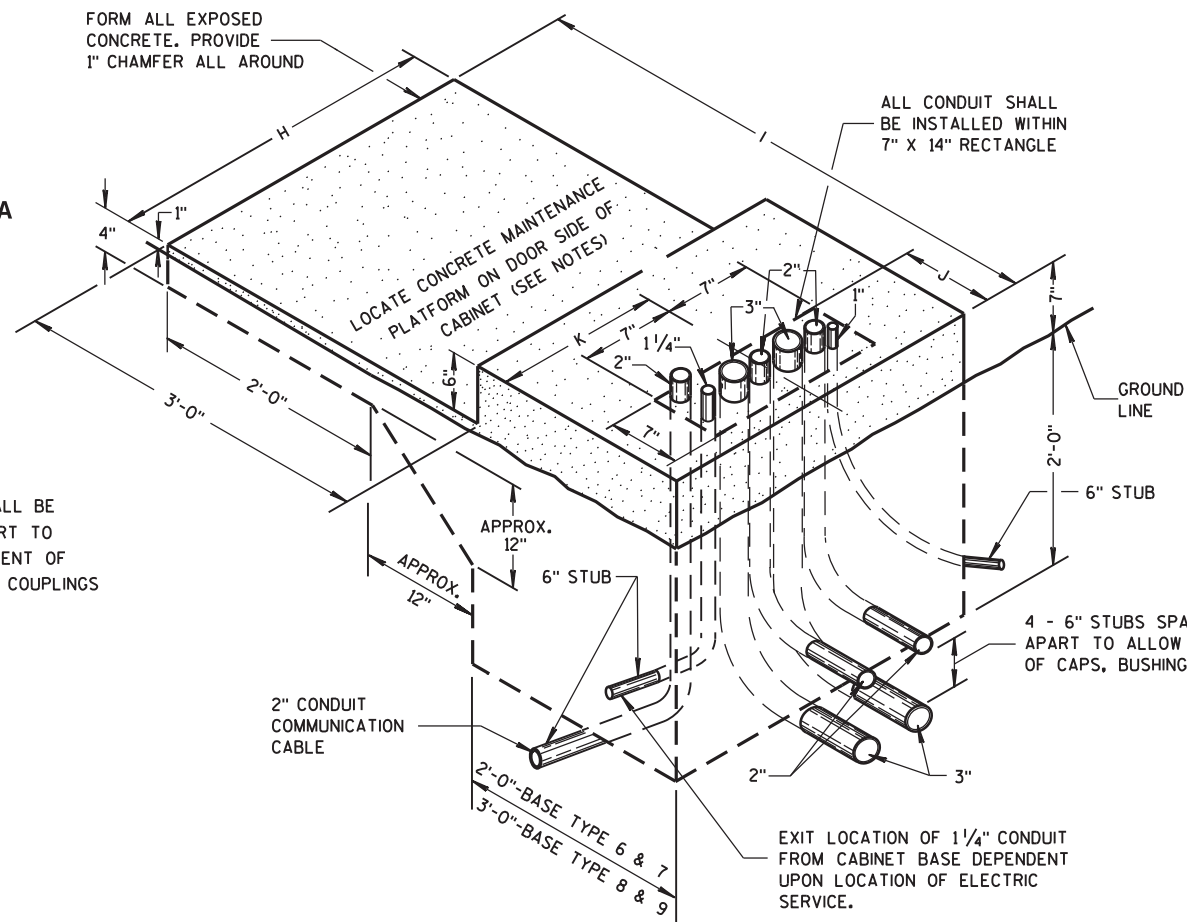
* ANY ANCHOR ROD PROJECTION SHORTER THAN 2 3/4" OR LONGER THAN 3 1/4" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

**CONDUIT LOCATIONS IN 24" X 36" PULL BOX
(LEADING TO CONTROLLER CABINET BASE TYPE 6, 7, 8 AND 9)**



FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND

ALL CONDUIT SHALL BE INSTALLED WITHIN 7" X 14" RECTANGLE



**TYPE 6, 7, 8 AND 9
(ISOMETRIC VIEW)**

GENERAL NOTES

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

INSTALL FOUR 1/2 INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

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

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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

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

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

CONTROL CABINET BASE TOP SURFACES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

WHEN A TYPE 10 CONTROL CABINET BASE IS USED TO POST MOUNT A CONTROL CABINET, A 36" SQUARE 4" THICK CONCRETE MAINTENANCE PLATFORM SHALL BE REQUIRED ON THE DOOR SIDE OF THE CABINET. THE TOP 1 INCH SHALL BE ABOVE FINISHED GRADE AND BE BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

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

ALL FOUR (TWO INCH AND THREE INCH) CONDUIT SHALL BE INSTALLED FROM THE CABINET BASE TO THE FIRST (NEAREST) PULL BOX LOCATED AS SHOWN ON THE PLANS.

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

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

WHEN ANCHOR RODS USING THE ALTERNATE L BEND ARE FURNISHED FOR THE TYPE 10 BASE, THE 4" L BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH.

THE "L" BEND SHALL NOT BE THREADED.

STRAIGHT ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD.

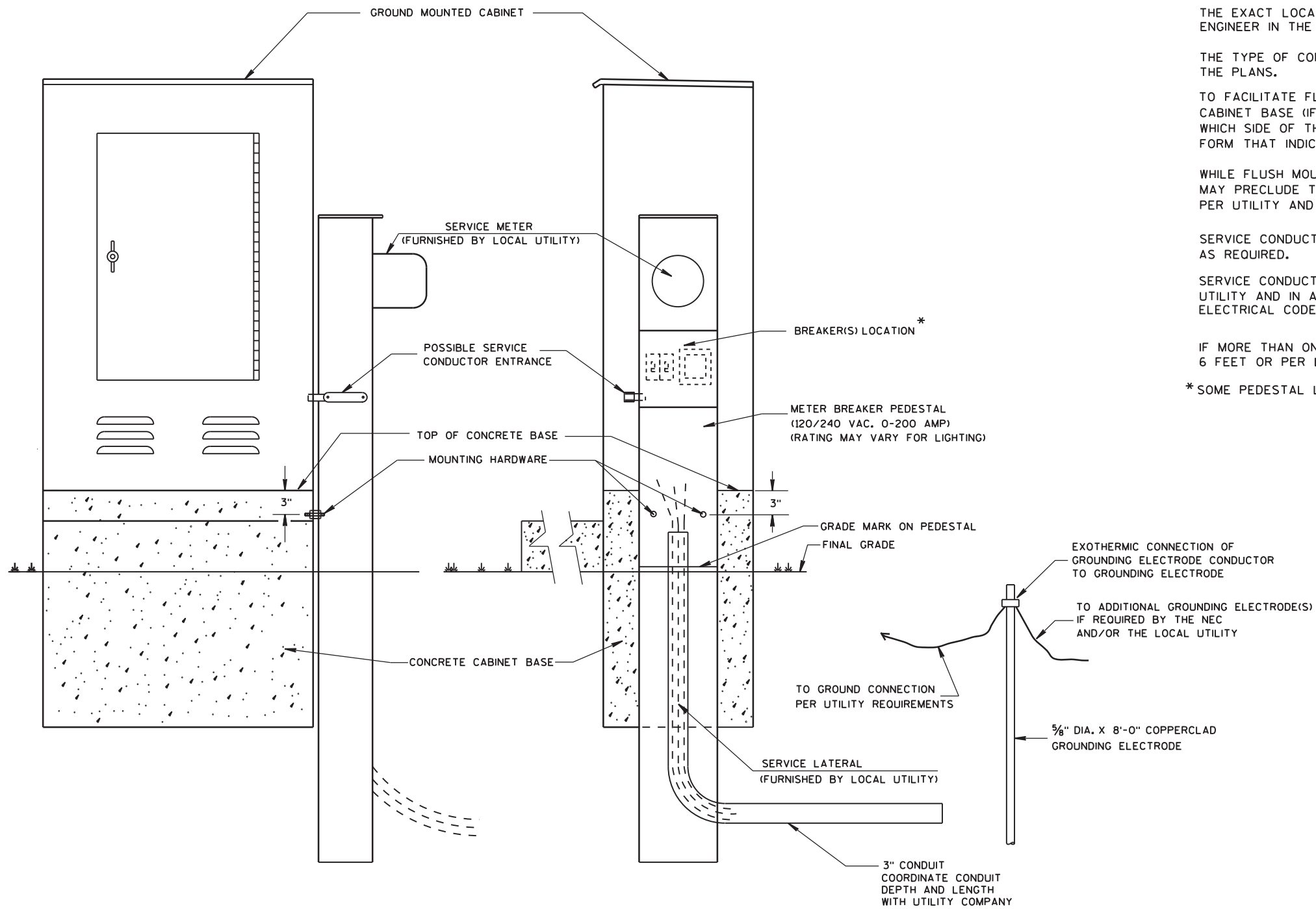
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

① FOUR (4) ANCHOR RODS, 1" DIA. X 3'-6". ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

CONCRETE CONTROL CABINET BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE: Sept. 2016 /S/ Ahmet Demirbilek
STATE ELECTRICAL 112
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.

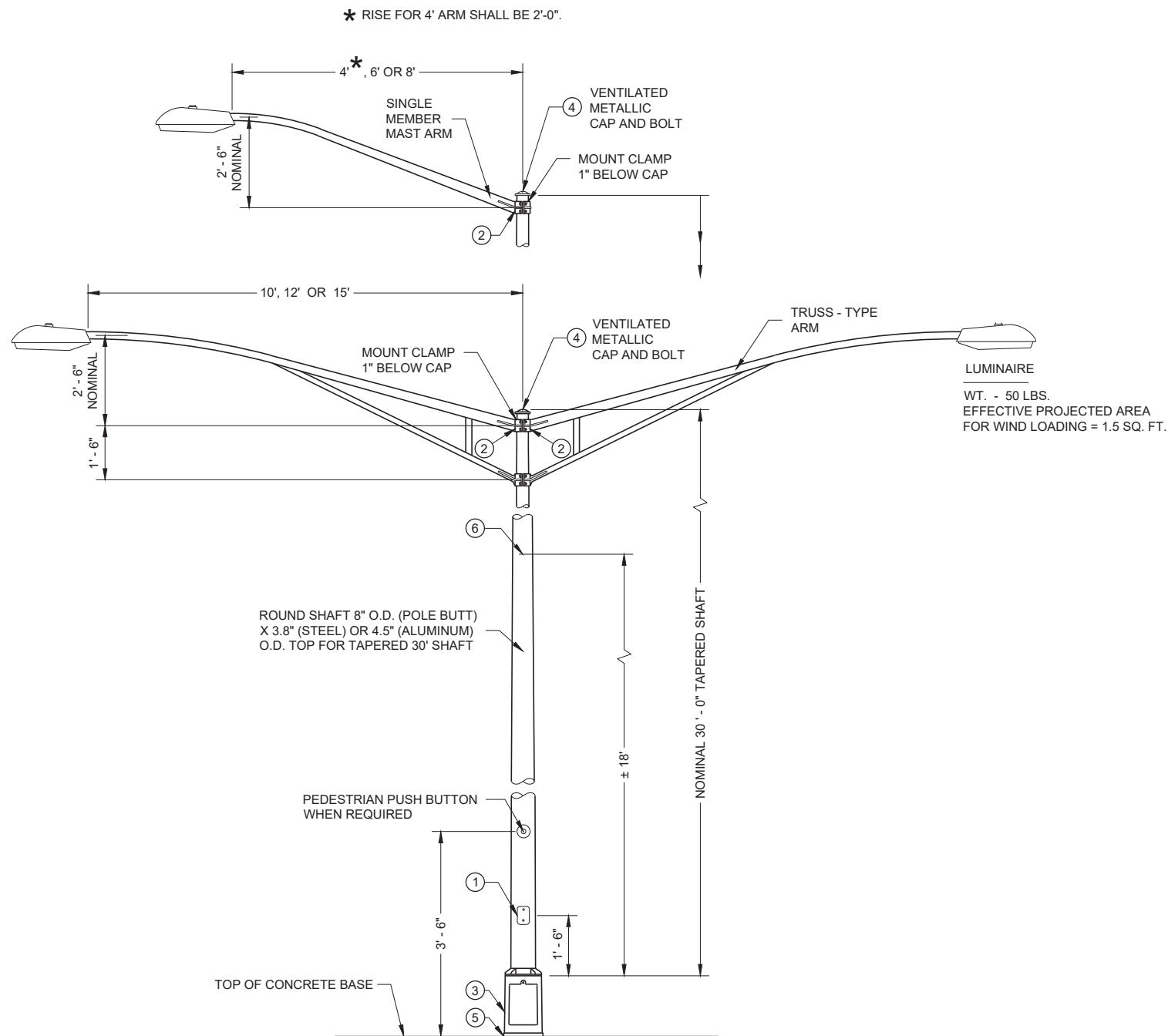
SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

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 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL 113
FHWA	



**TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY**

GENERAL NOTES

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

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

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

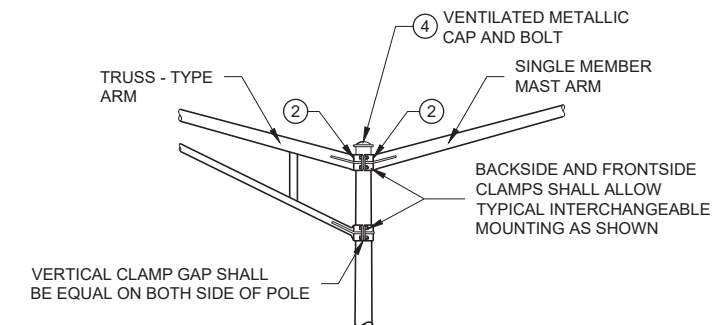
TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.1888".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 3/8 INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

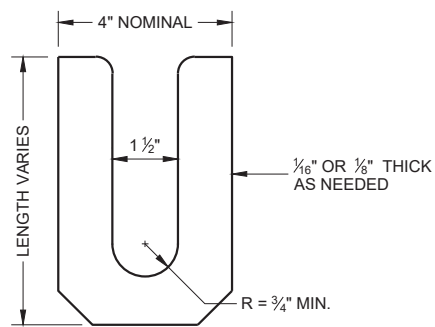
- ① 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) 1/4" X 3/4" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.
- ② GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 3/8" HOLE IN POLE SHAFT FOR WIRING.
- ③ CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.
- ④ FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
- ⑤ SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.
- ⑥ INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.



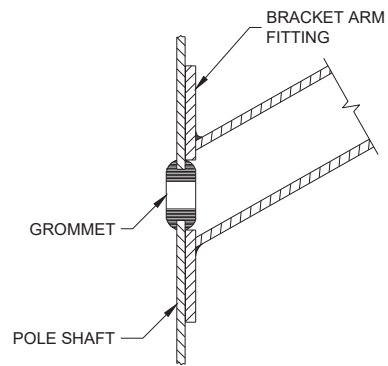
INTERCHANGEABLE MOUNTING DETAIL

**POLE MOUNTINGS FOR
LIGHTING UNITS, TYPE 5
(30 FEET)**

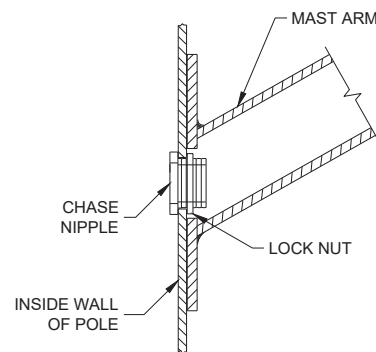
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 115



LEVELING SHIM
SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



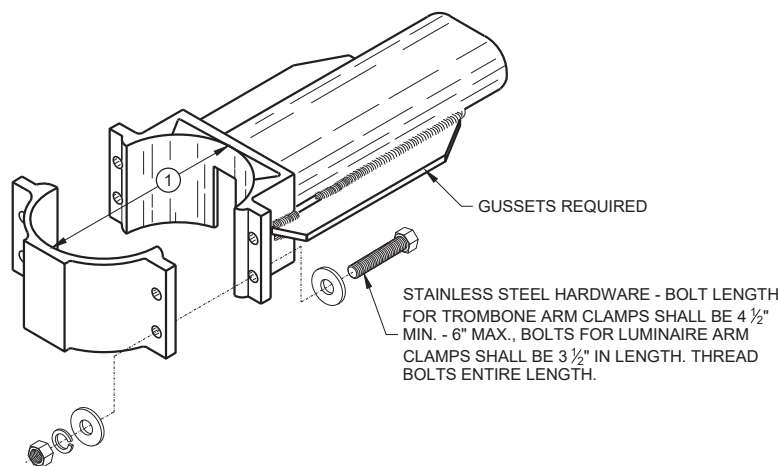
TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

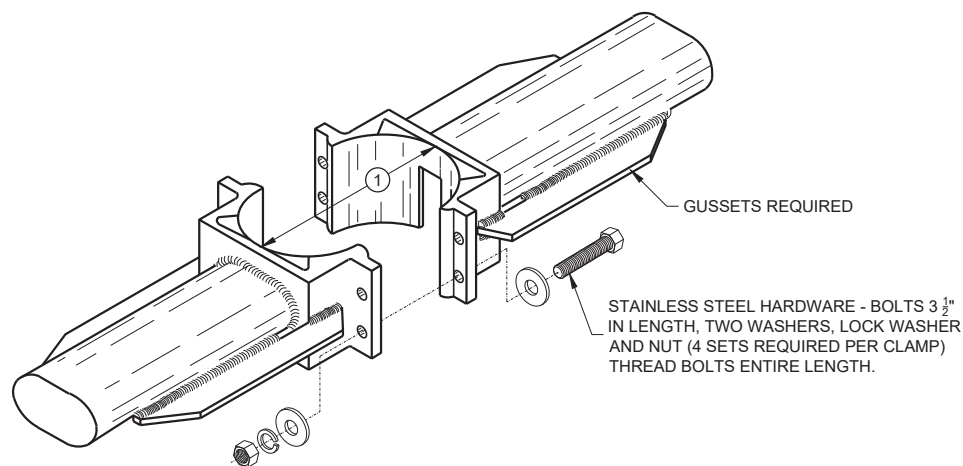
CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

- 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.

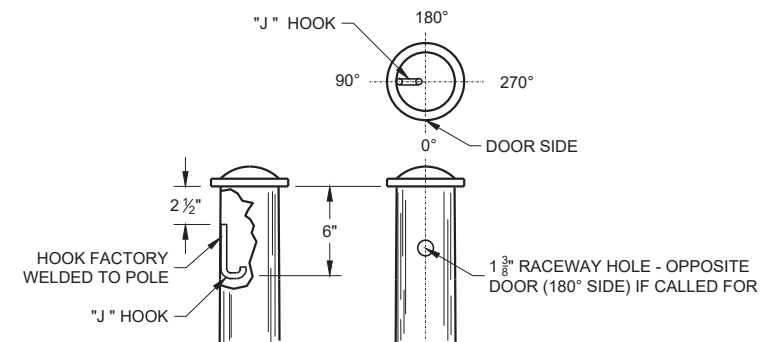
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



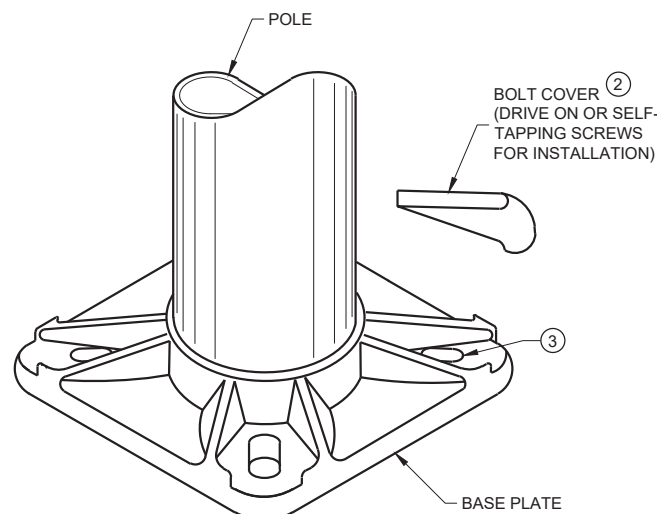
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



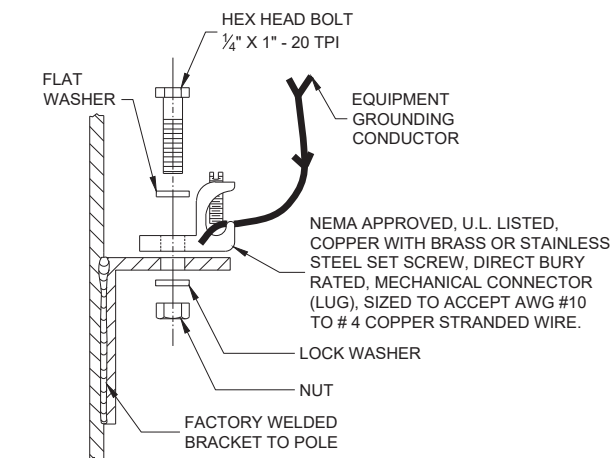
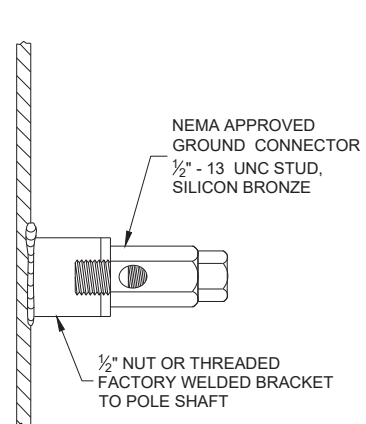
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS



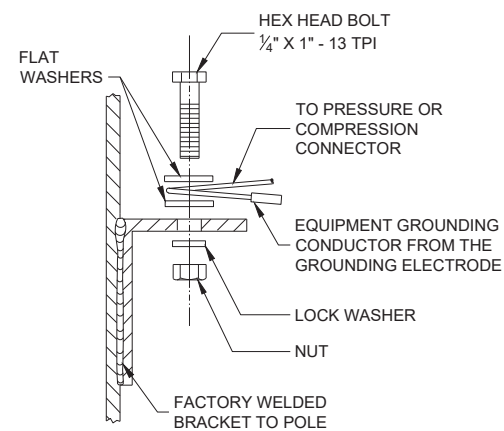
TYPICAL "J" HOOK LOCATION



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 116

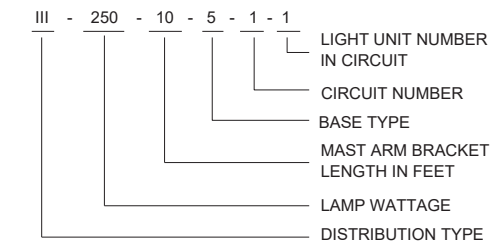
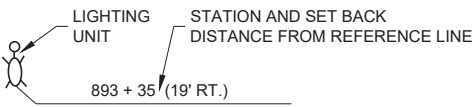
FHWA

GENERAL NOTES

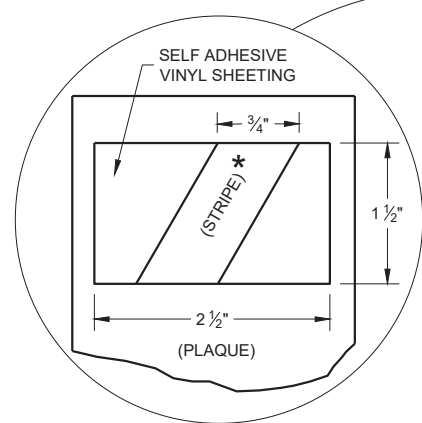
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUND CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.



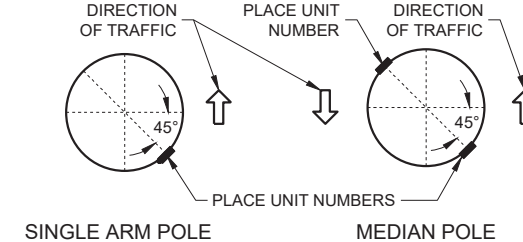
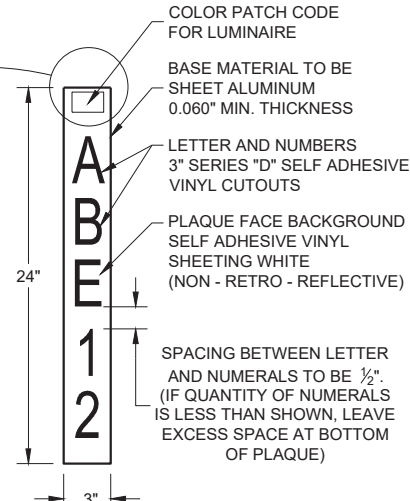
LIGHTING UNIT CODE (TYPICAL)



COLOR PATCH CODE FOR LUMINAIRES

(HIGH PRESSURE SODIUM)	(MERCURY VAPOR)
1000 WATT - NO PATCH	400 WATT - NO PATCH
400 WATT - ORANGE	250 WATT - YELLOW
310 WATT - BLUE	
250 WATT - ORANGE W / WHITE STRIPE *	
200 WATT - RED	
150 WATT - GREEN	
100 WATT - BROWN	

IDENTIFICATION PLAQUE

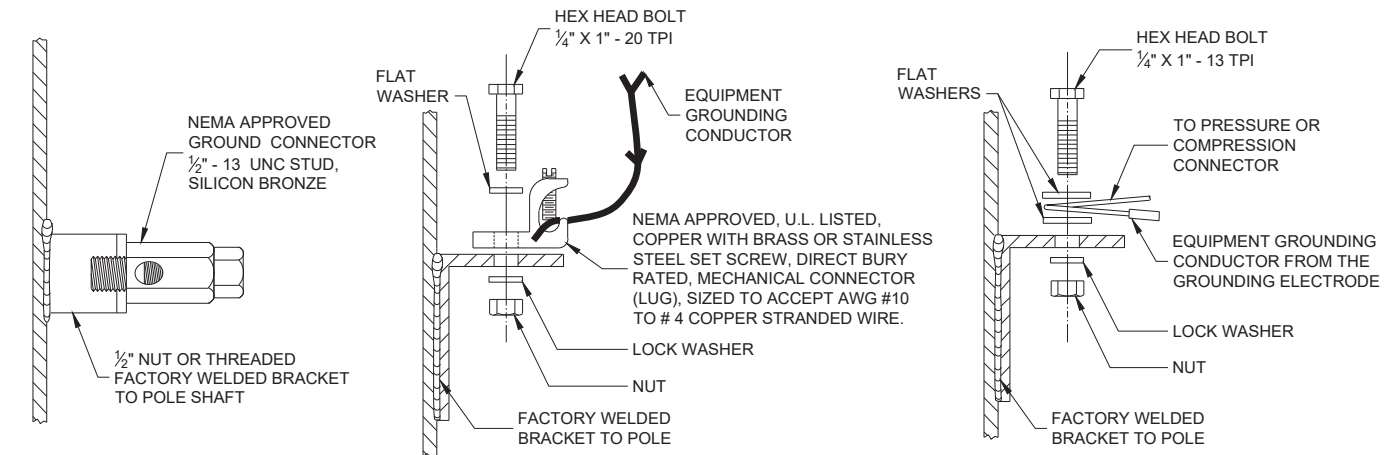


LIGHTING UNIT IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENT (TYPICAL, ALL LIGHTING UNITS)

FURNISH PLAQUE WHEN CALLED FOR BY SPECIAL PROVISIONS

NOTES

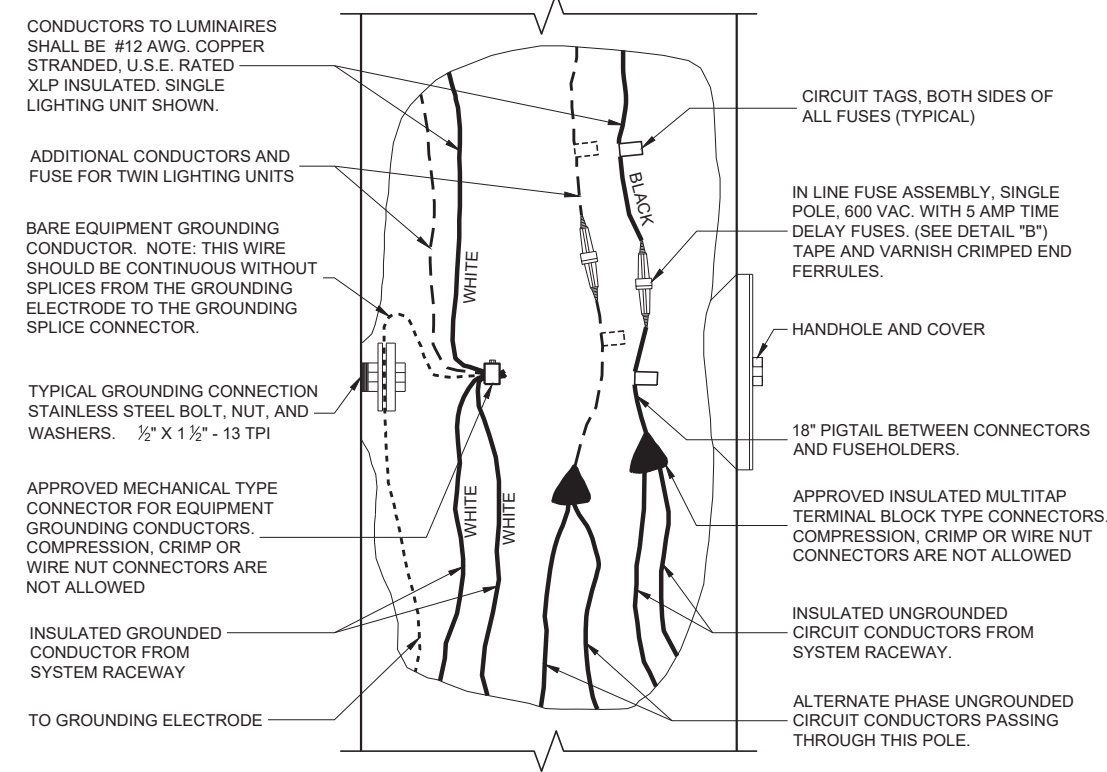
- 1) PLACE BOTTOM OF UNIT NUMBER PLAQUE 5'-0" ABOVE ELEVATION OF ADJACENT CURB OR SHOULDER.
 - 2) UNIT NUMBER: ONE REQUIRED FOR SINGLE ARM POLES. TWO REQUIRED FOR MEDIAN MOUNT POLES.
- FASTEN TOP, CENTER AND BOTTOM OF PLAQUE WITH 3 ALUMINUM POP RIVETS (ALUMINUM POLES) OR STAINLESS STEEL POP RIVETS (STEEL POLES).



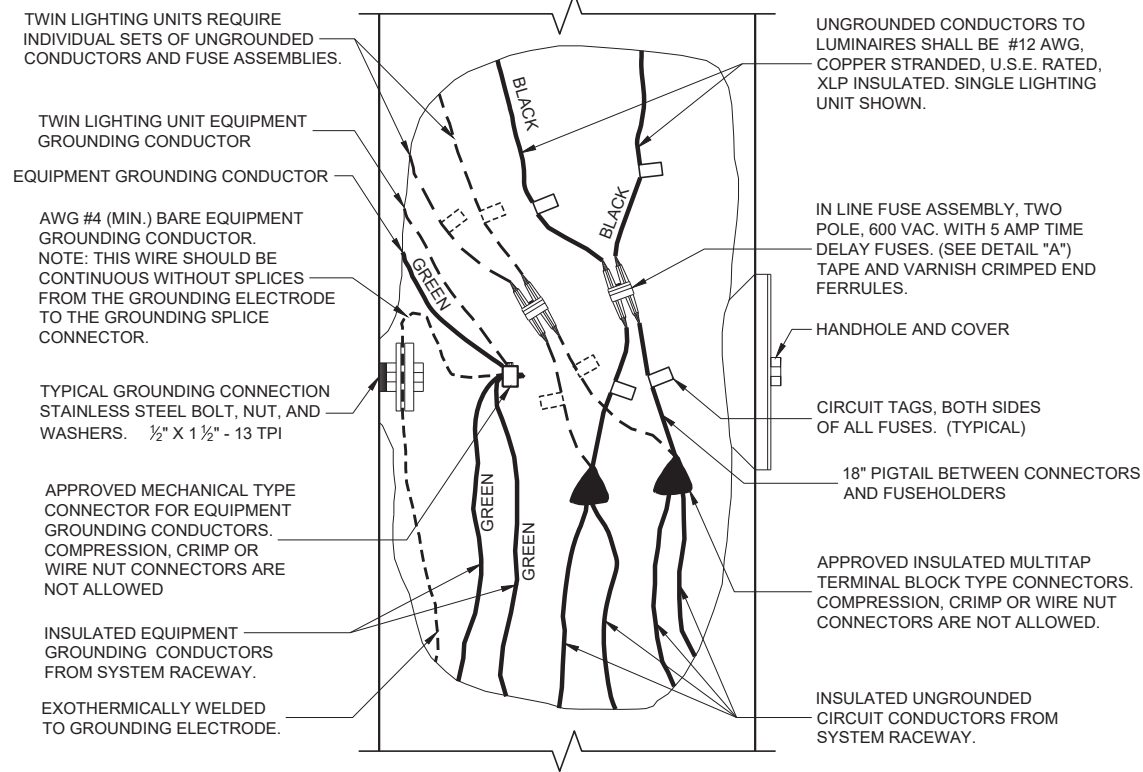
TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

6

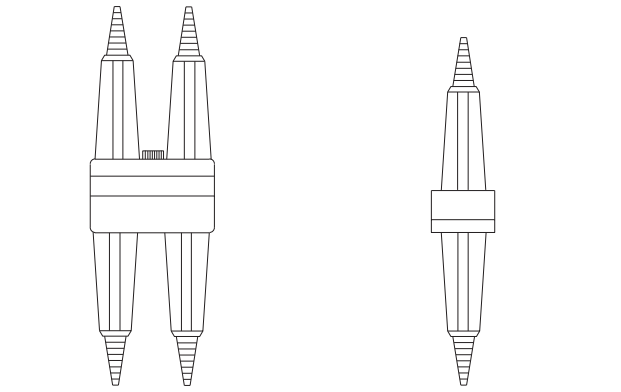
OLD EXISTING FREEWAY WIRING (SOME AREAS)



2 WIRE - 120, 240, OR 480 VAC TO GROUND



2 WIRE - 240 OR 480 VAC (UNGROUNDING CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR



DETAIL "A" BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT
DETAIL "B" BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT

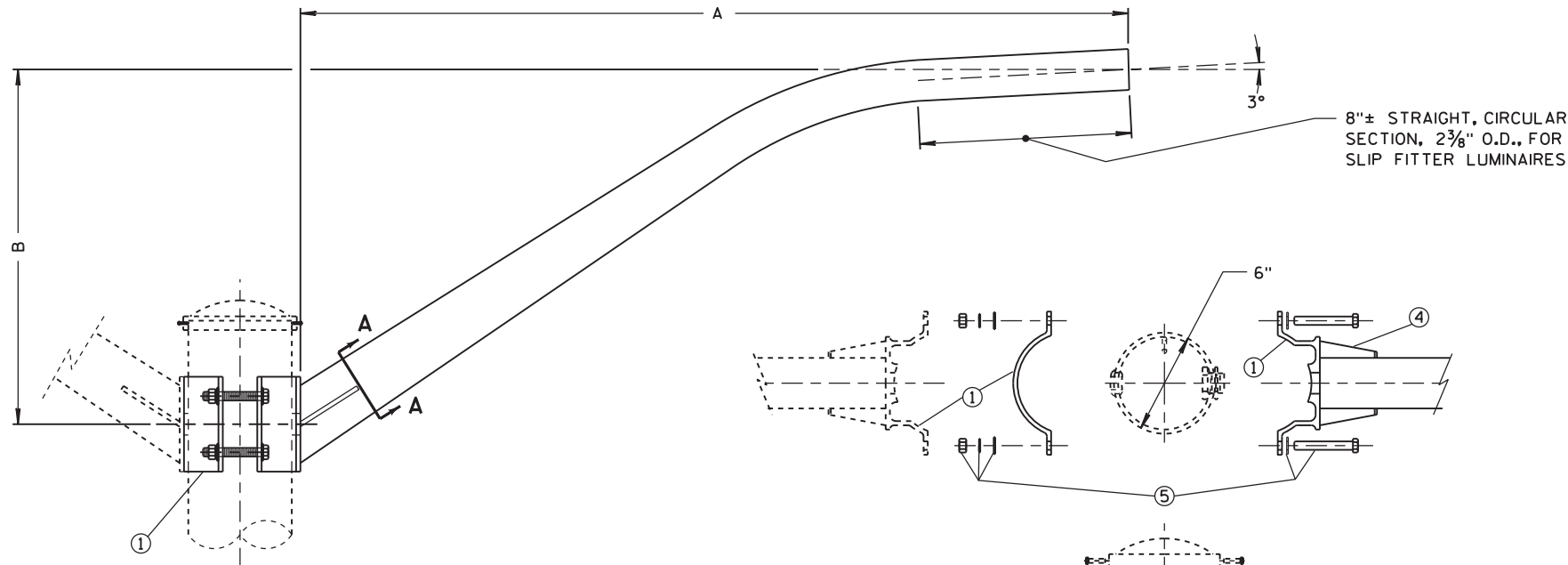
FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018 /S/ Ahmet Demirelek
DATE STATE ELECTRICAL ENGI 117
FHWA

SDD 09E02 - 05

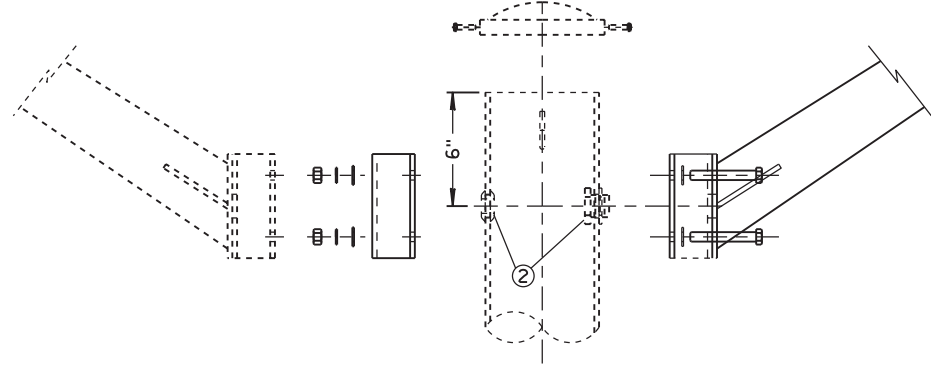
SDD 09E02 - 05



GENERAL NOTES

- 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 3/8" FIELD DRILLED HOLE WITH 1" CHASE NIPPLE AND NUT (OR NEOPRENE GROMMET) PER EACH REQUIRED LUMINAIRE ARM. PROVIDE 1/2" HOLE IN CLAMP EXTRUSION TO CONTINUE RACEWAY.
 - ③ STIFFENER
 - ④ GUSSETS REQUIRED.
 - ⑤ CLAMP BOLT ASSEMBLY (BOLT - 1/2"-13 UNC, 2 EACH - FLAT WASHER, LOCK WASHER, NUT) - 4 EACH PER CLAMP.

**LUMINAIRE ARMS,
SINGLE MEMBER, 6-INCH
CLAMP - FOR POLES, TYPE 7, A OR E**
VARIOUS LENGTHS (SEE TABLE)



CLAMP ASSEMBLY
SINGLE MEMBER CLAMP SHOWN

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

**LUMINAIRE ARMS, SINGLE MEMBER
6-INCH CLAMP**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE: Sept. 2014 /S/ Ahmet Demirbilek
STATE ELECTRICAL 118

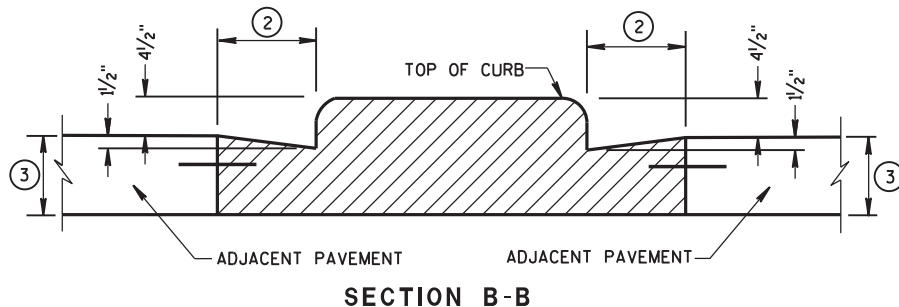
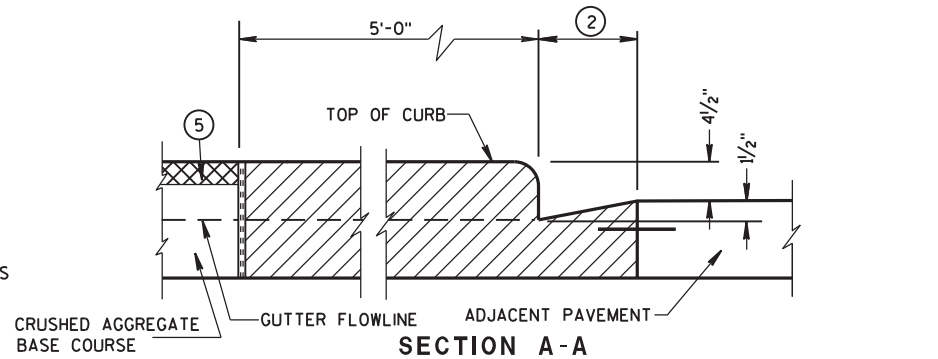
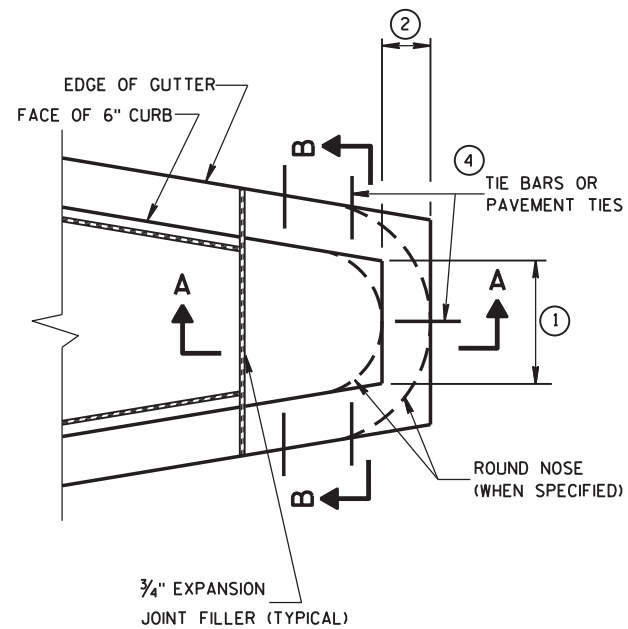
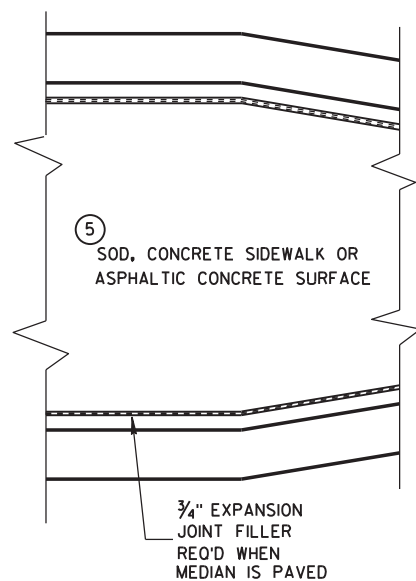
FHWA

6

6

S.D.D. 10 A 18-5a

S.D.D. 10 A 18-5a

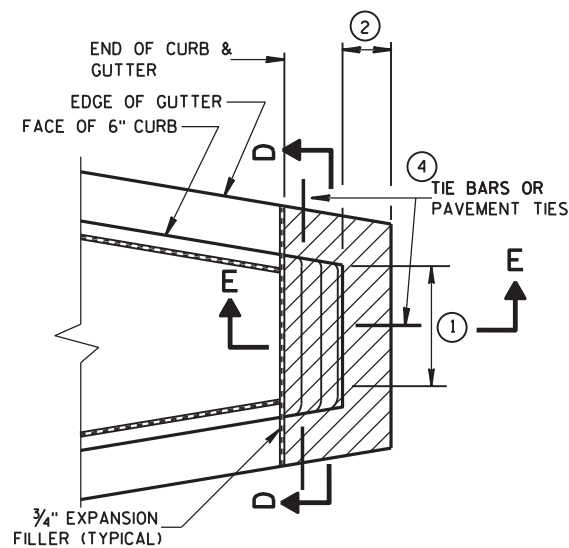


CONCRETE MEDIAN BLUNT NOSE DETAIL

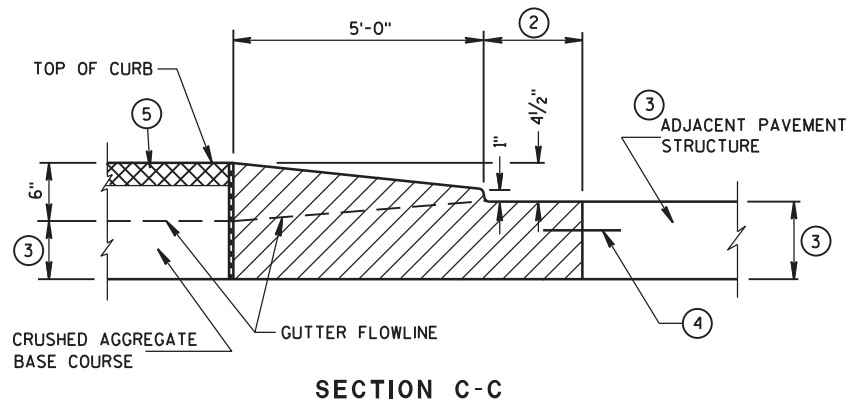
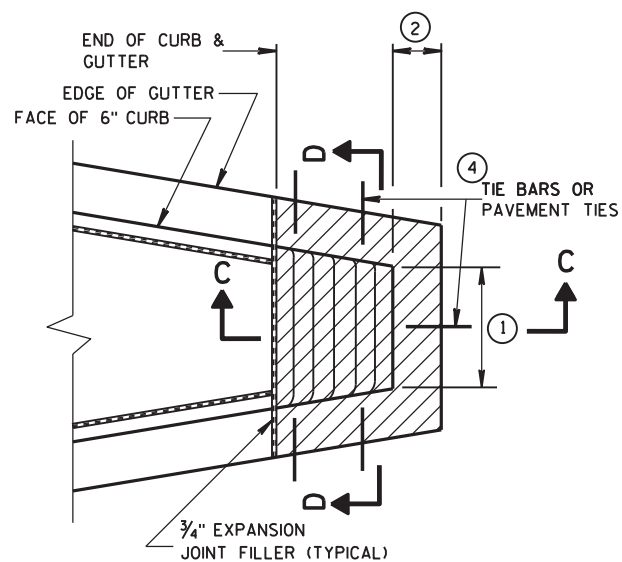
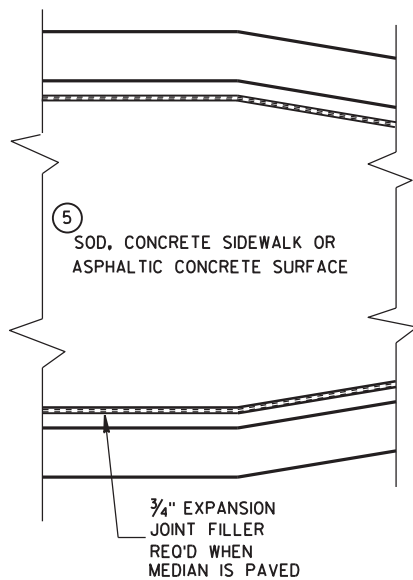
GENERAL NOTES

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.

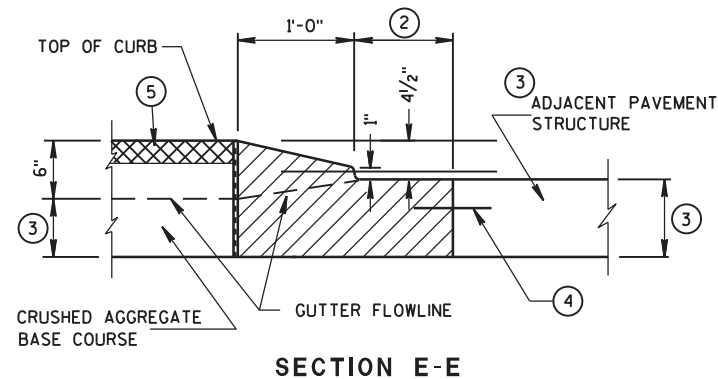
- ① SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).
- ② WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.
- ③ DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:
 - (1) NEW OR EXISTING CONCRETE PAVEMENT.
 - (2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.
 - (3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.
- ④ TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.
- PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.
- ⑤ SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



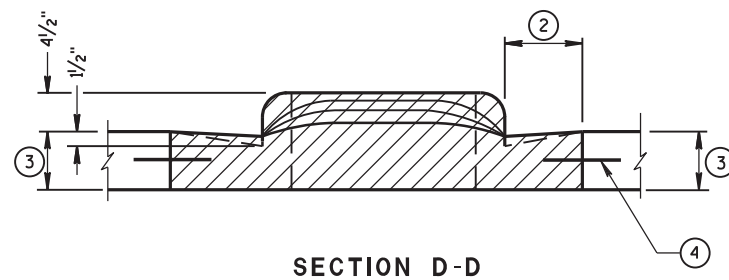
6



CONCRETE MEDIAN SLOPED NOSE TYPE 1



CONCRETE MEDIAN SLOPED NOSE TYPE 2



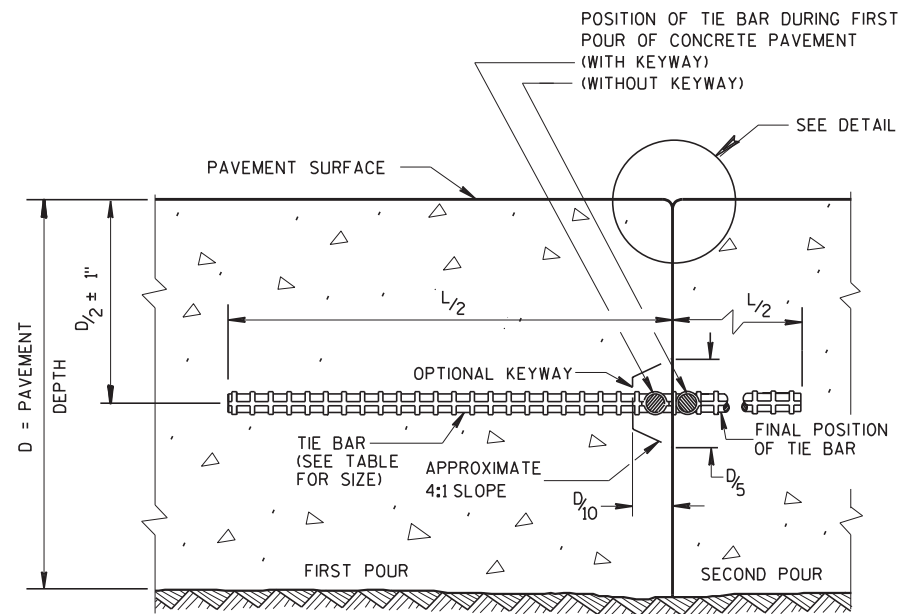
CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

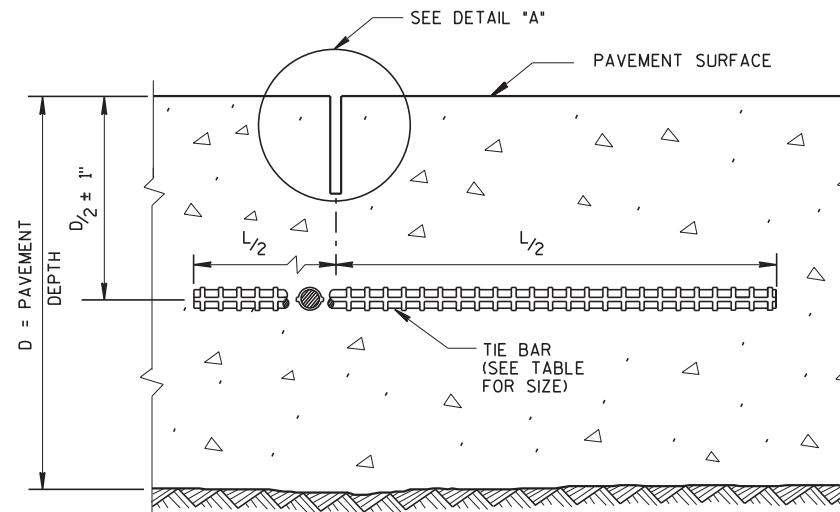
APPROVED
6/8/2006 /S/ Jerry H. Zoog
DATE ROADWAY STANDARDS 119 ENGINEER
FHWA

S.D.D. 11 B 2-2

S.D.D. 11 B 2-2



CONSTRUCTION JOINT



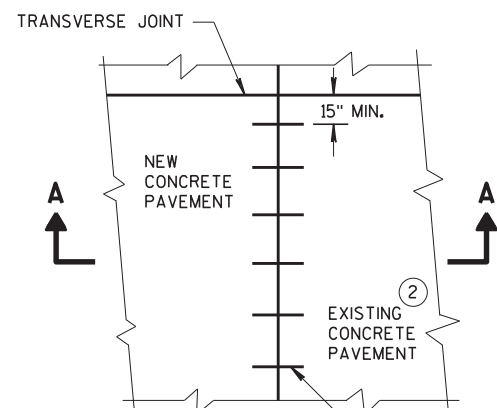
SAWED JOINT

GENERAL NOTES

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

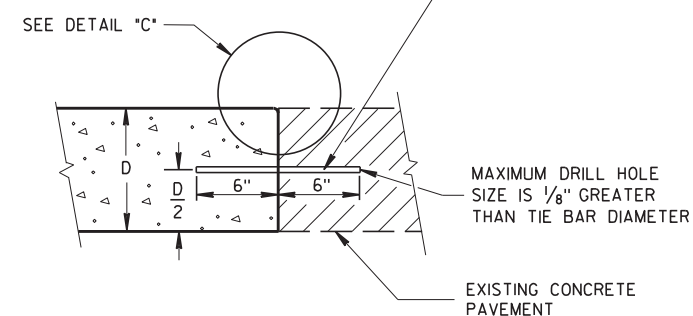
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

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

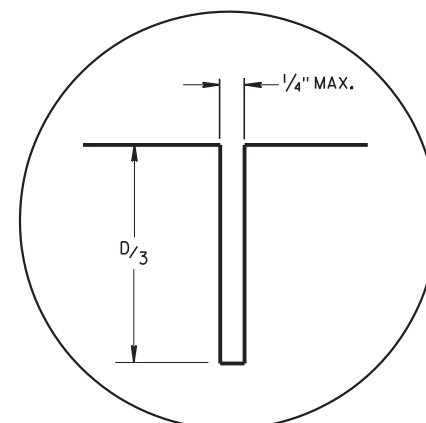


PLAN VIEW

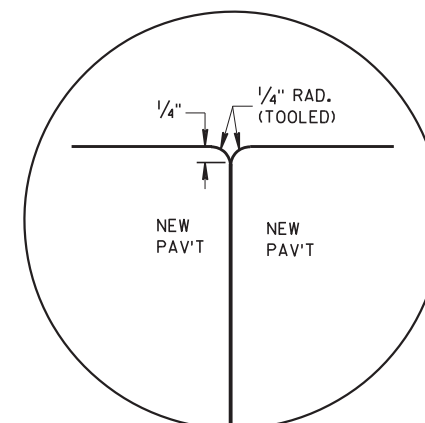
NO. 6 TIE BARS SPACED 30" C-C, INSTALLED PERPENDICULAR TO THE LONGITUDINAL JOINT. ①



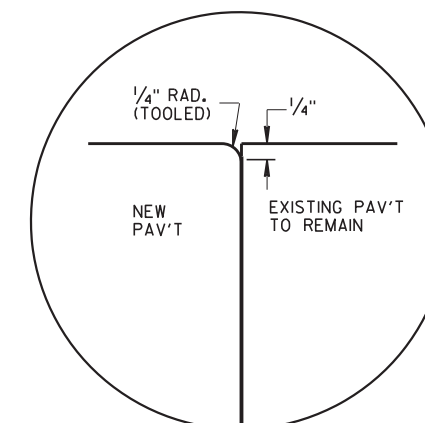
**SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT
TIE BARS ANCHORED
INTO EXISTING PAVEMENT**



DETAIL "A"



DETAIL "B"



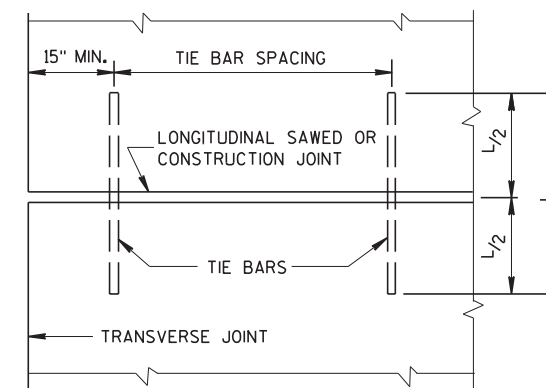
DETAIL "C"

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 120
FHWA

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.

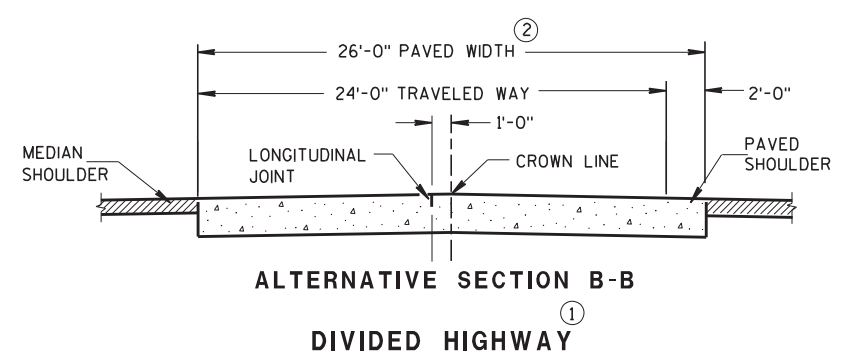
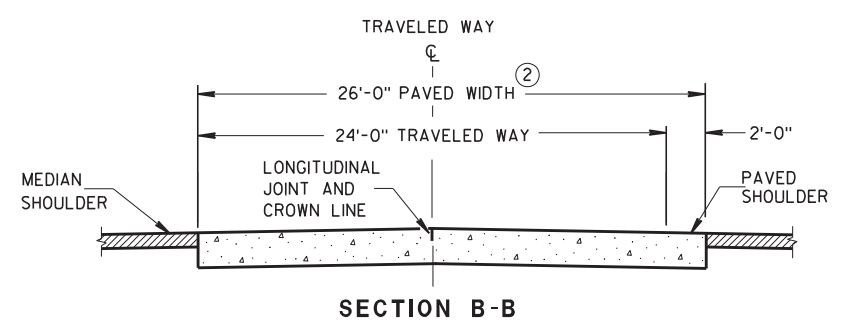
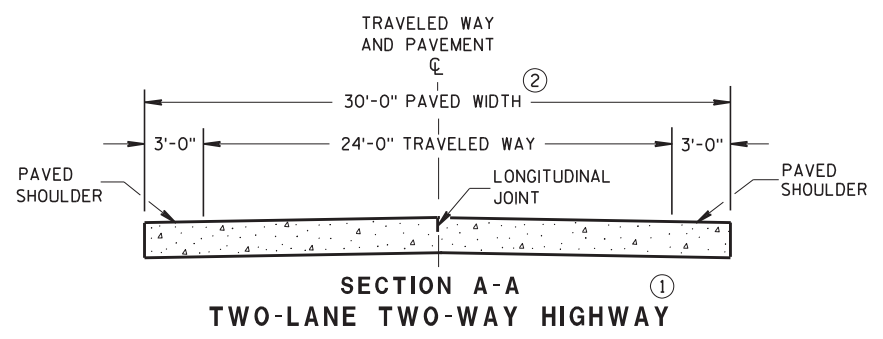
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

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 AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

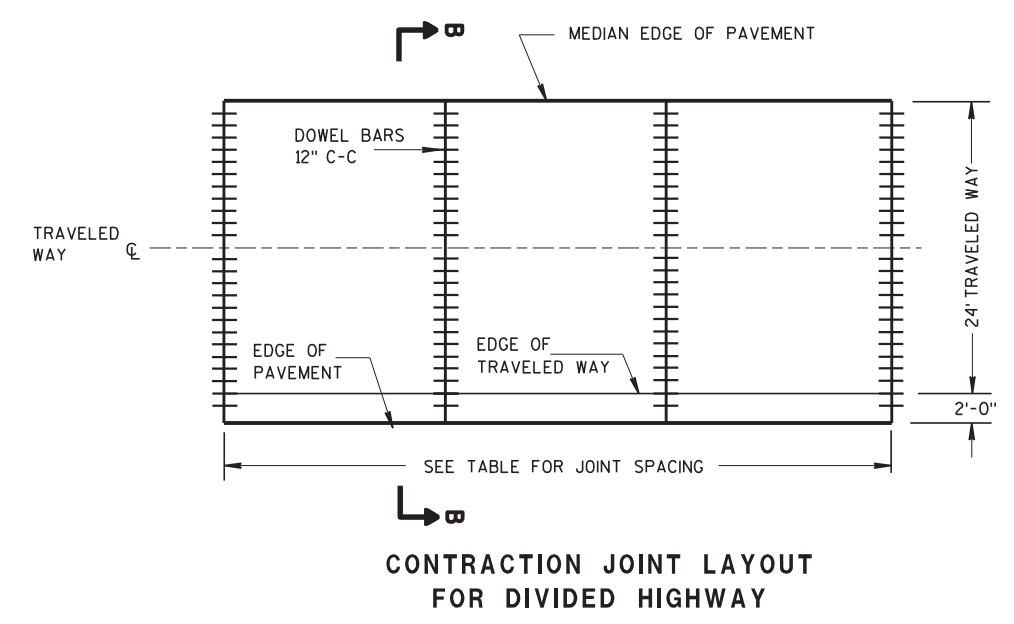
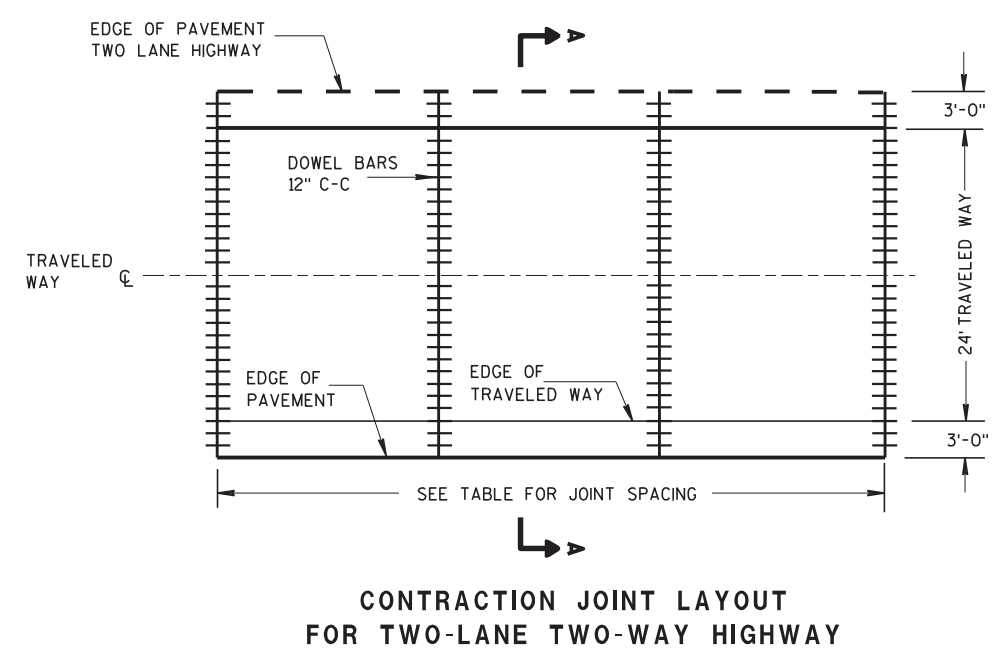
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

- ① REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.
- ② MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER AS CONCRETE PAVEMENT.



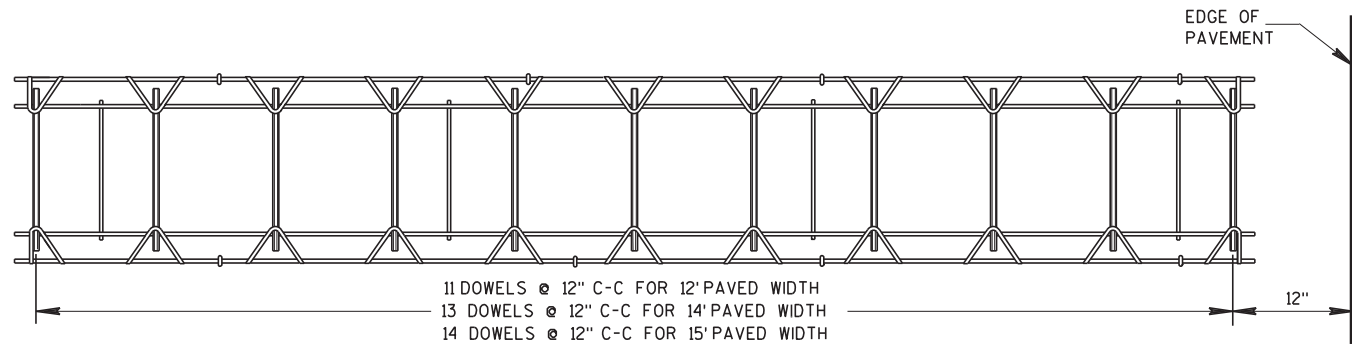
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 1/2", 6", 6 1/2"	NONE	12'
7", 7 1/2"	1"	14'
8", 8 1/2"	1 1/4"	15'
9", 9 1/2"	1 1/4"	15'
10" & ABOVE	1 1/2"	15'



**RURAL DOWELED
CONCRETE PAVEMENT**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



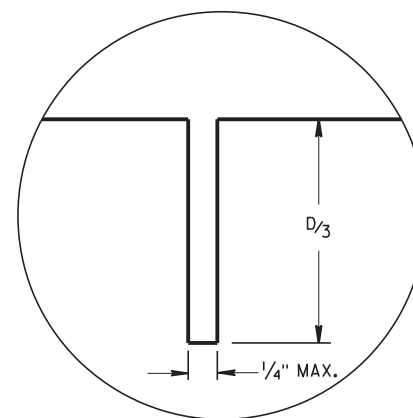
PLAN VIEW



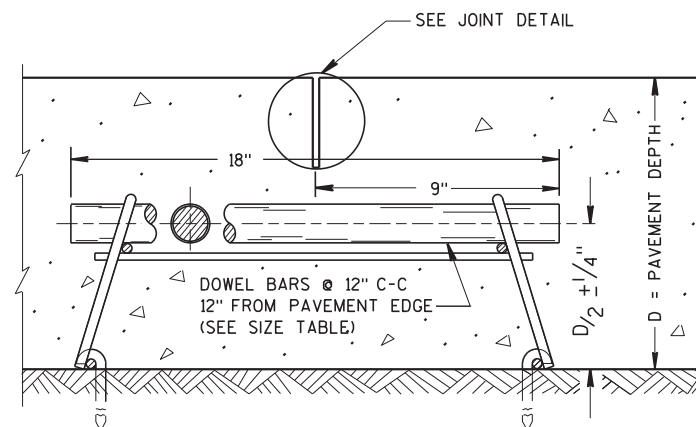
SIDE VIEW

(NORMAL TO CENTERLINE)

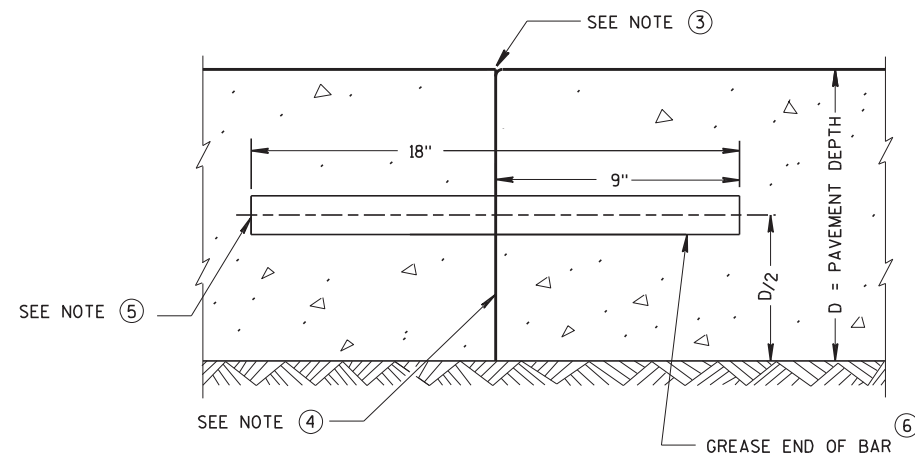
CONTRACTION JOINT DOWEL ASSEMBLY ①



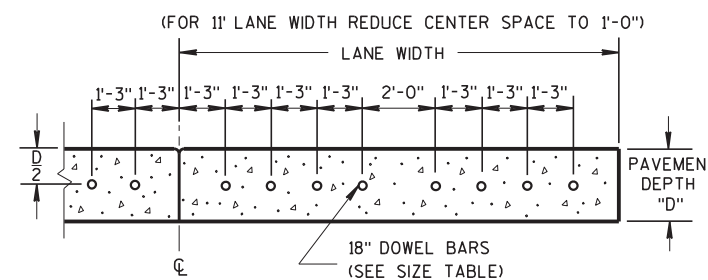
JOINT DETAIL



DOWELED CONTRACTION JOINT



TRANSVERSE CONSTRUCTION JOINT



DRILLED DOWEL BAR CONSTRUCTION JOINT

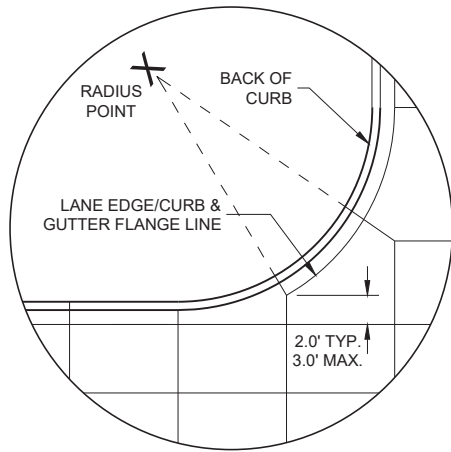
GENERAL NOTES

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

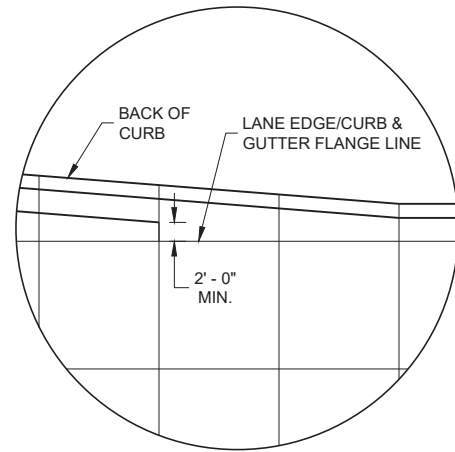
RURAL DOWELED
 CONCRETE PAVEMENT

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

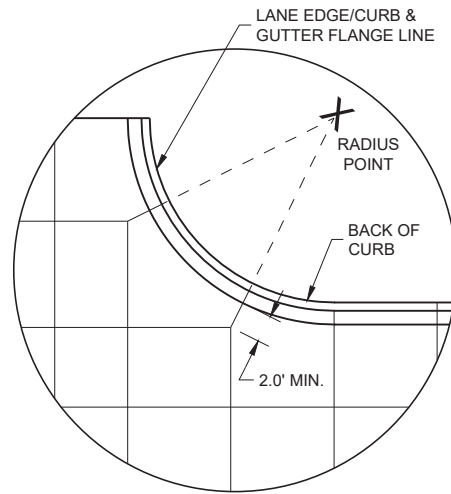
APPROVED
 March 2018 /s/ Peter Kemp
 DATE PAVEMENT SUP 122
 FHWA



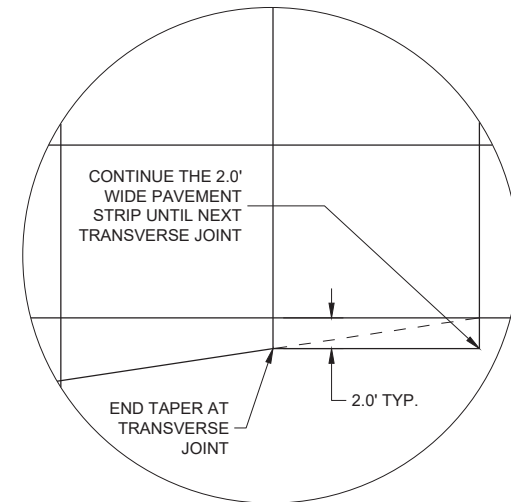
DETAIL "A"



DETAIL "B"



DETAIL "C"

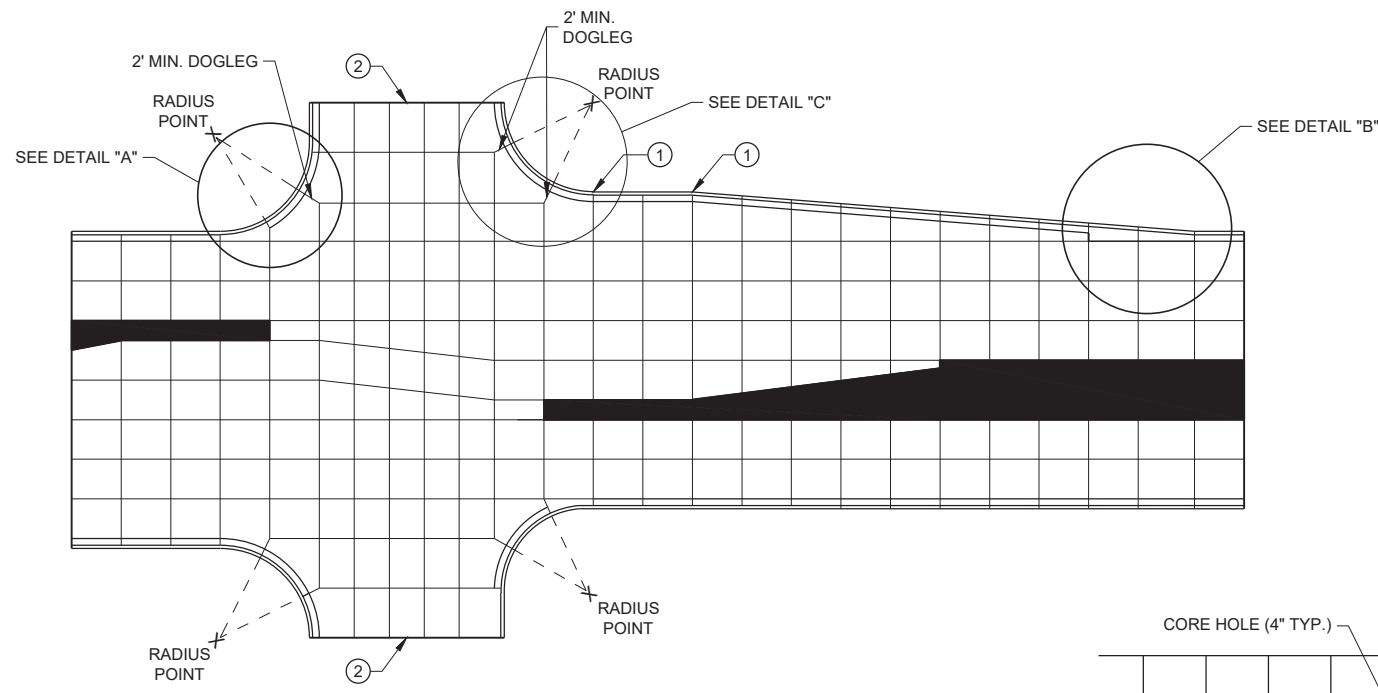


DETAIL "D"

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.

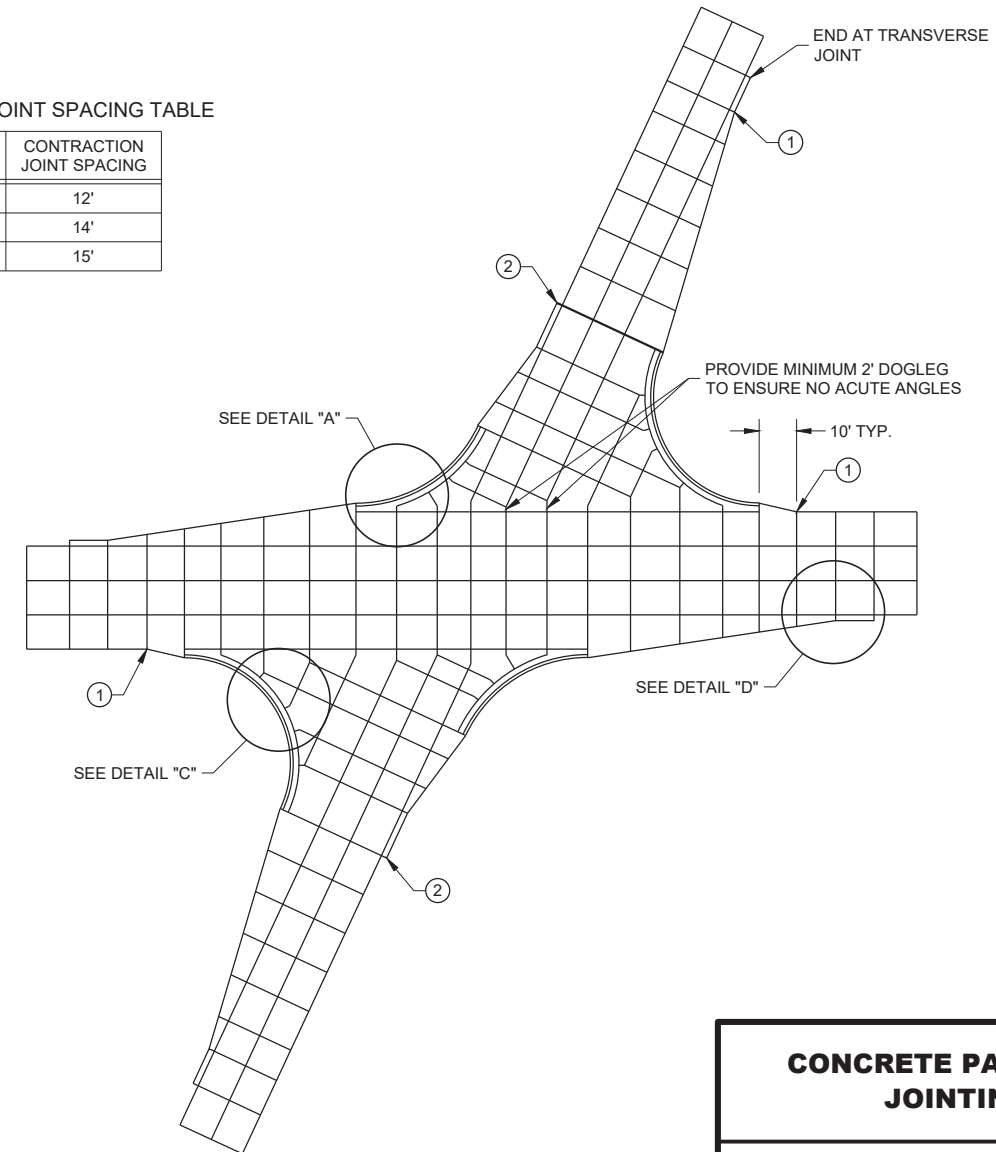
- ① PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
- ② CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
- ③ THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM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



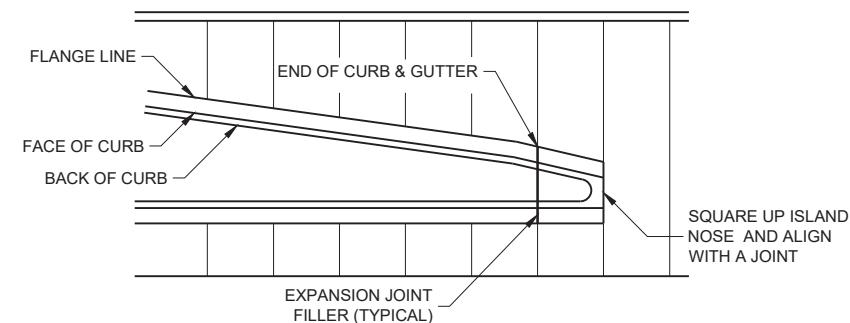
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

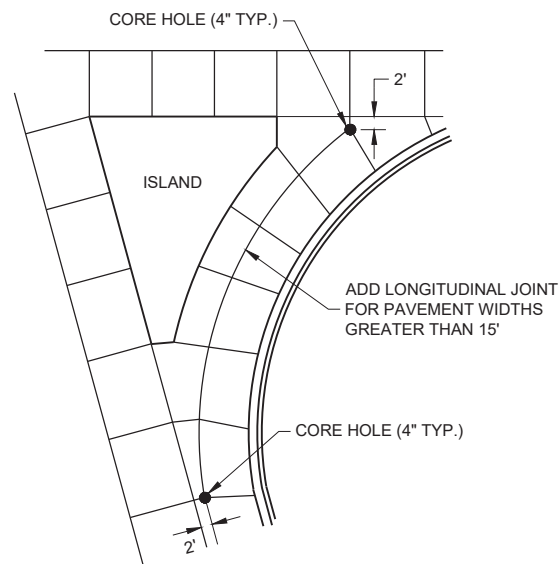
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 1/2"	12'
7", 7 1/2"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 123

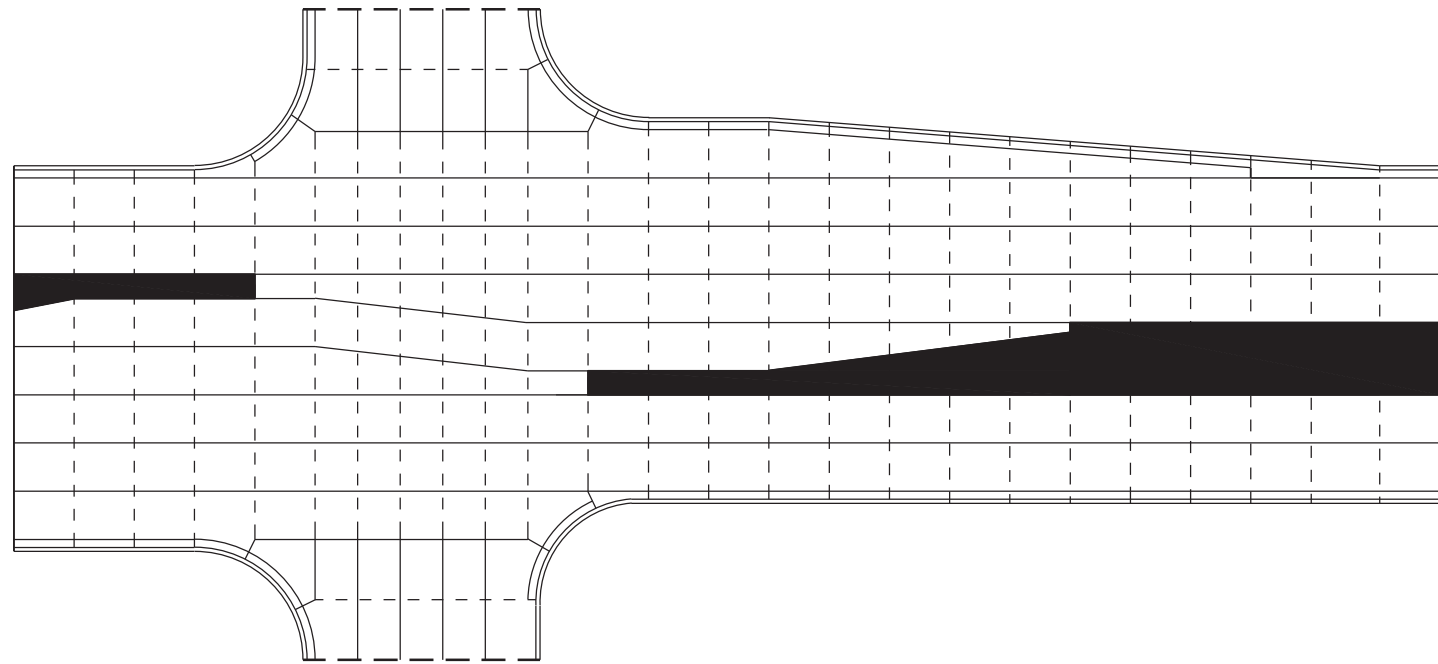
LEGEND

- - - - - POTENTIAL DOWELED EXPANSION JOINT
- - - - - DOWELED JOINT
- TIED JOINT

GENERAL NOTES

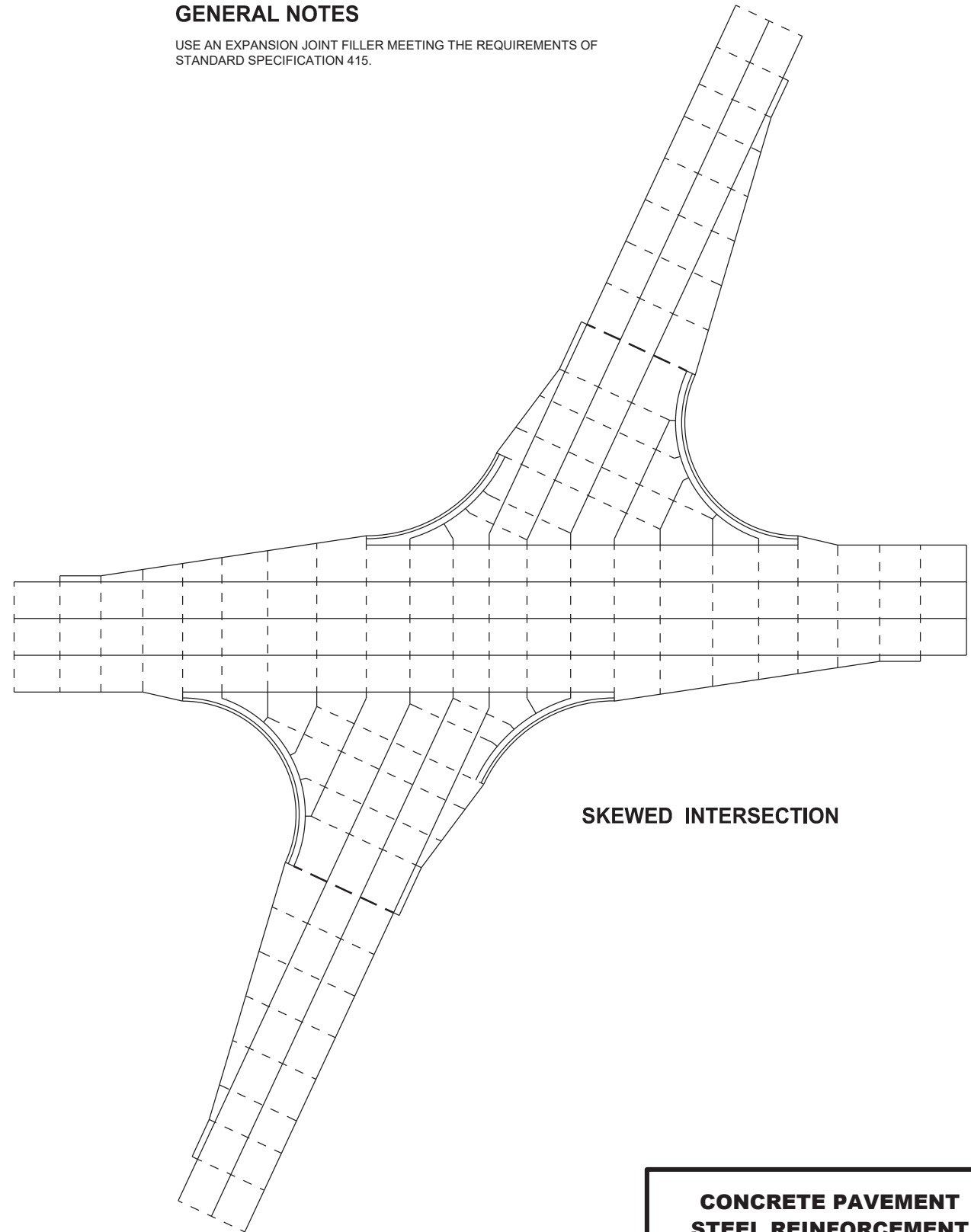
USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.

6



STANDARD INTERSECTION

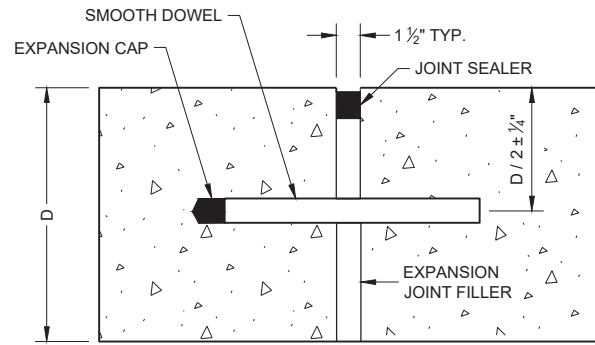
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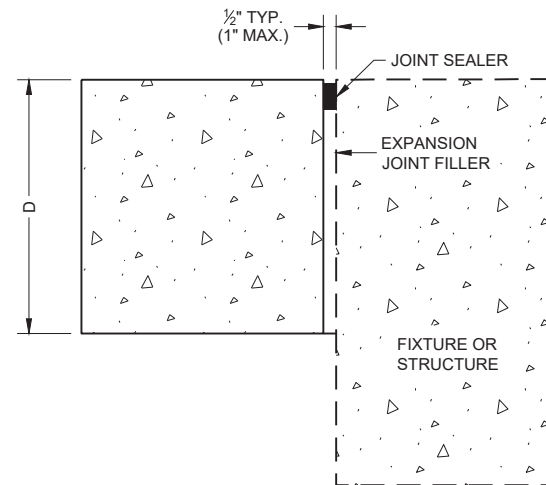
SKewed INTERSECTION

**CONCRETE PAVEMENT
STEEL REINFORCEMENT**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 124



DOWELED TRANSVERSE ①



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

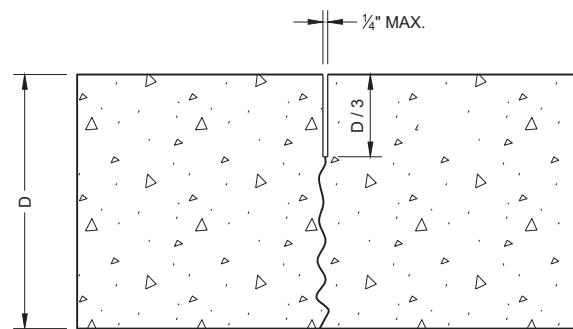
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4*	30"	24"**

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

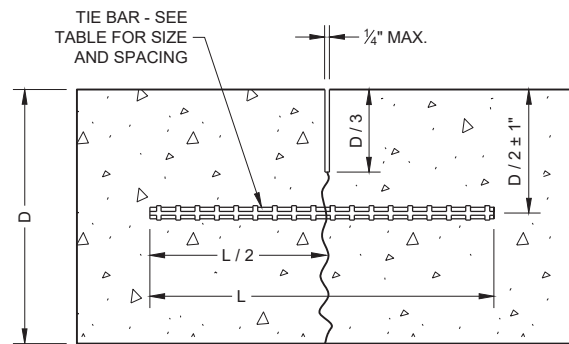
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

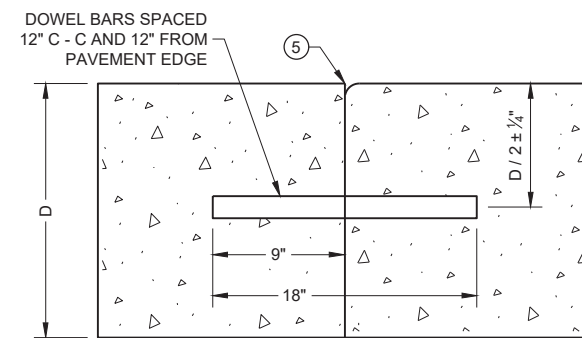
- ① USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
- ② SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
- ③ LOCATE CONSTRUCTION JOINTS A MINIMUM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



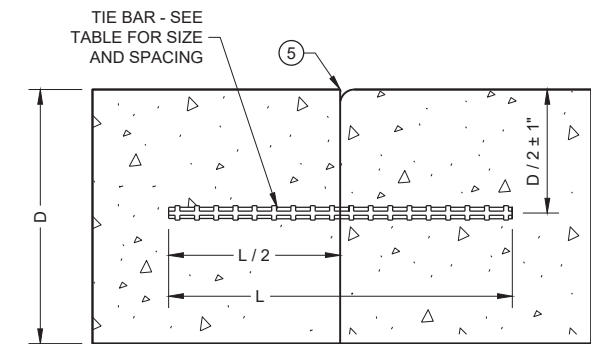
UNDOWELED TRANSVERSE



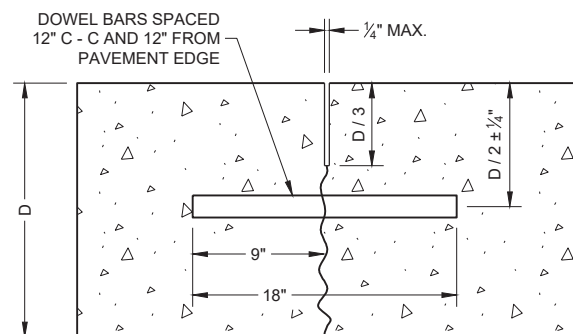
TIED LONGITUDINAL



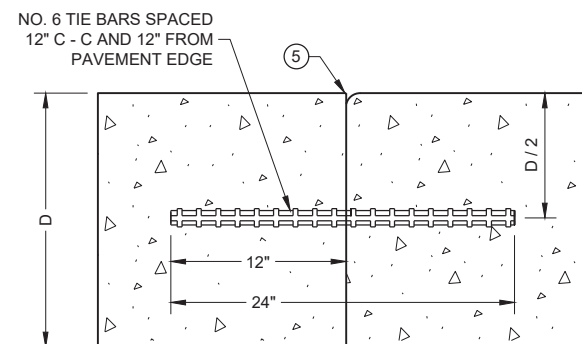
DOWELED TRANSVERSE ③



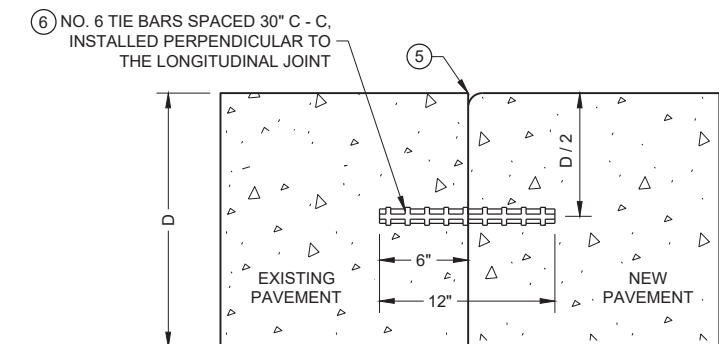
TIED LONGITUDINAL



DOWELED TRANSVERSE



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



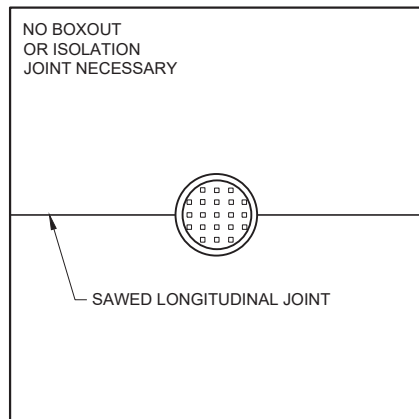
TIED LONGITUDINAL TO EXISTING

CONTRACTION JOINTS ②

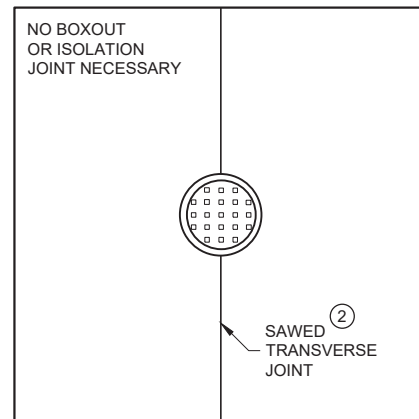
CONSTRUCTION JOINTS ④

CONCRETE PAVEMENT JOINT TYPES

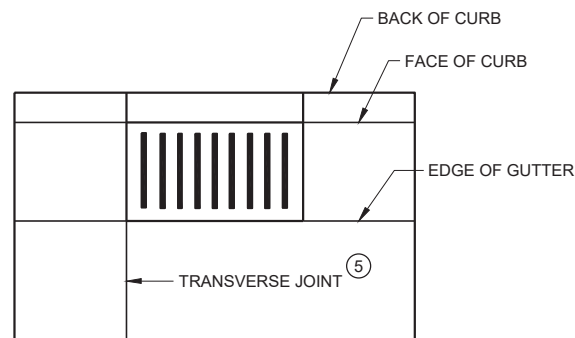
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 125



MANHOLE WITH LONGITUDINAL JOINT



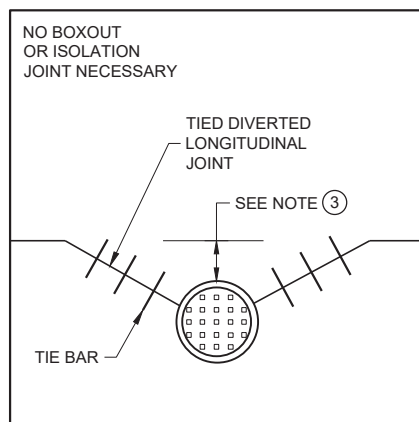
MANHOLE WITH TRANSVERSE JOINT



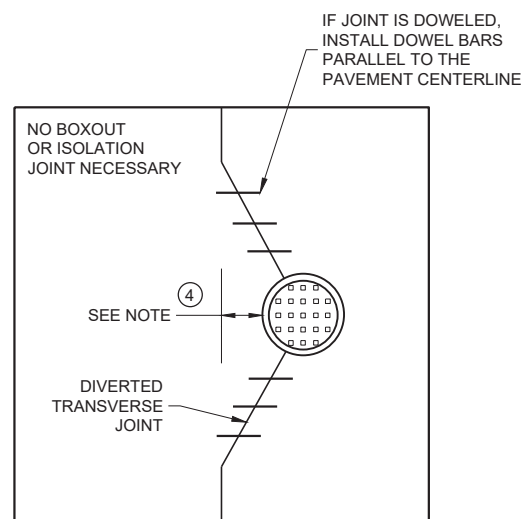
INLET WITH TRANSVERSE JOINT

GENERAL NOTES

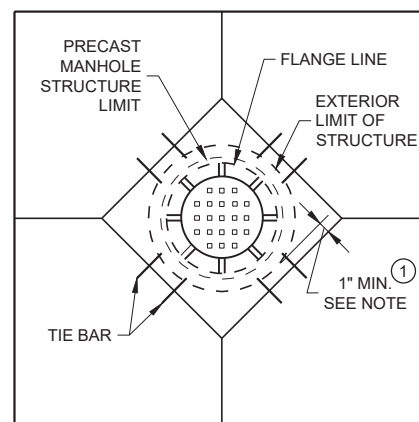
- ① USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
- ② ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
- ③ IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE 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



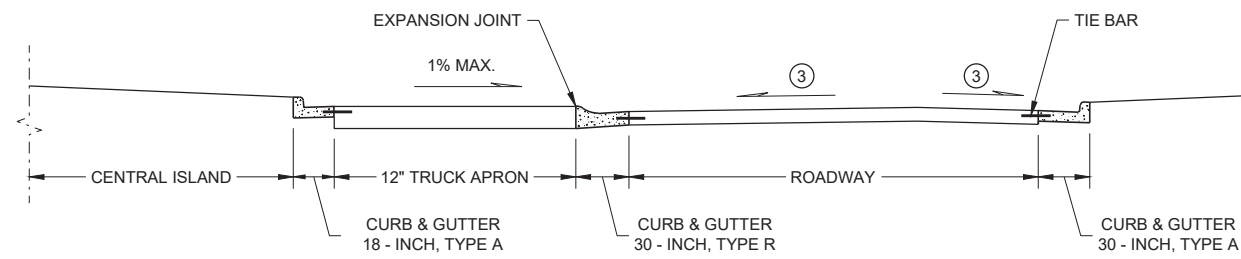
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

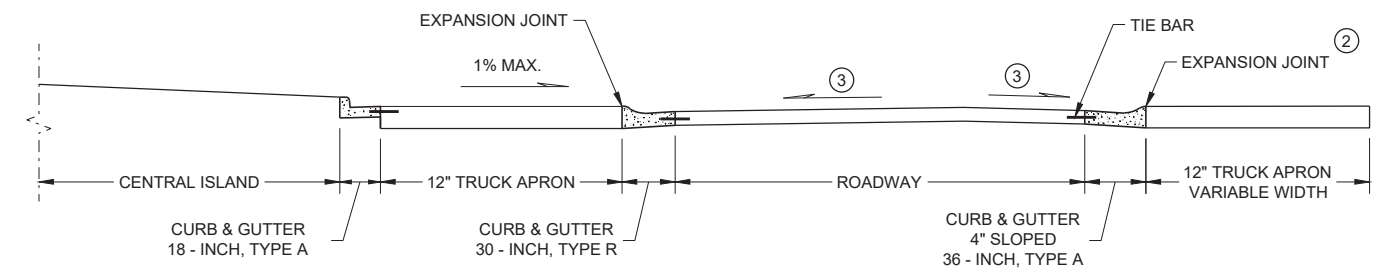
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018 /S/ Peter Kemp P.E.
DATE PAVEMENT SUPERVISOR 126

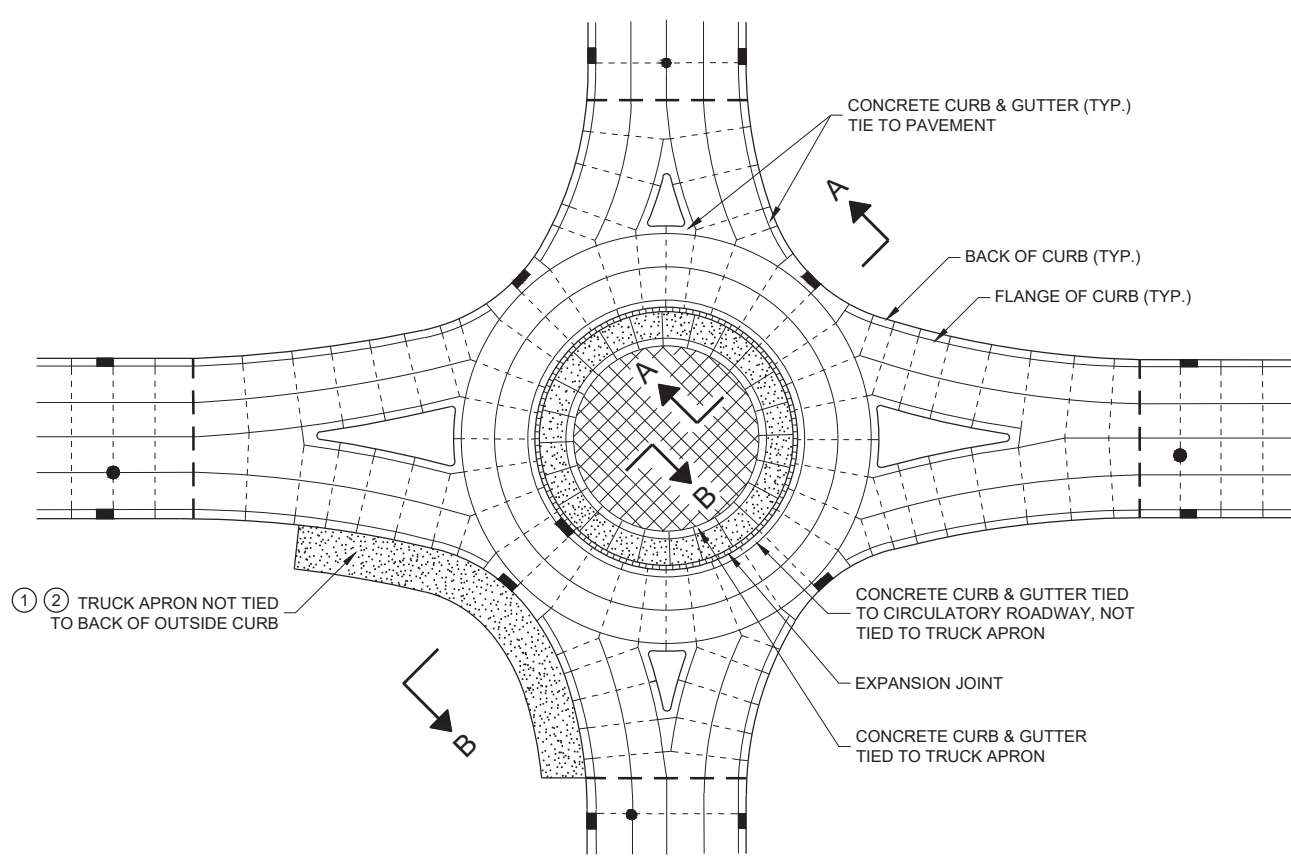
FHWA



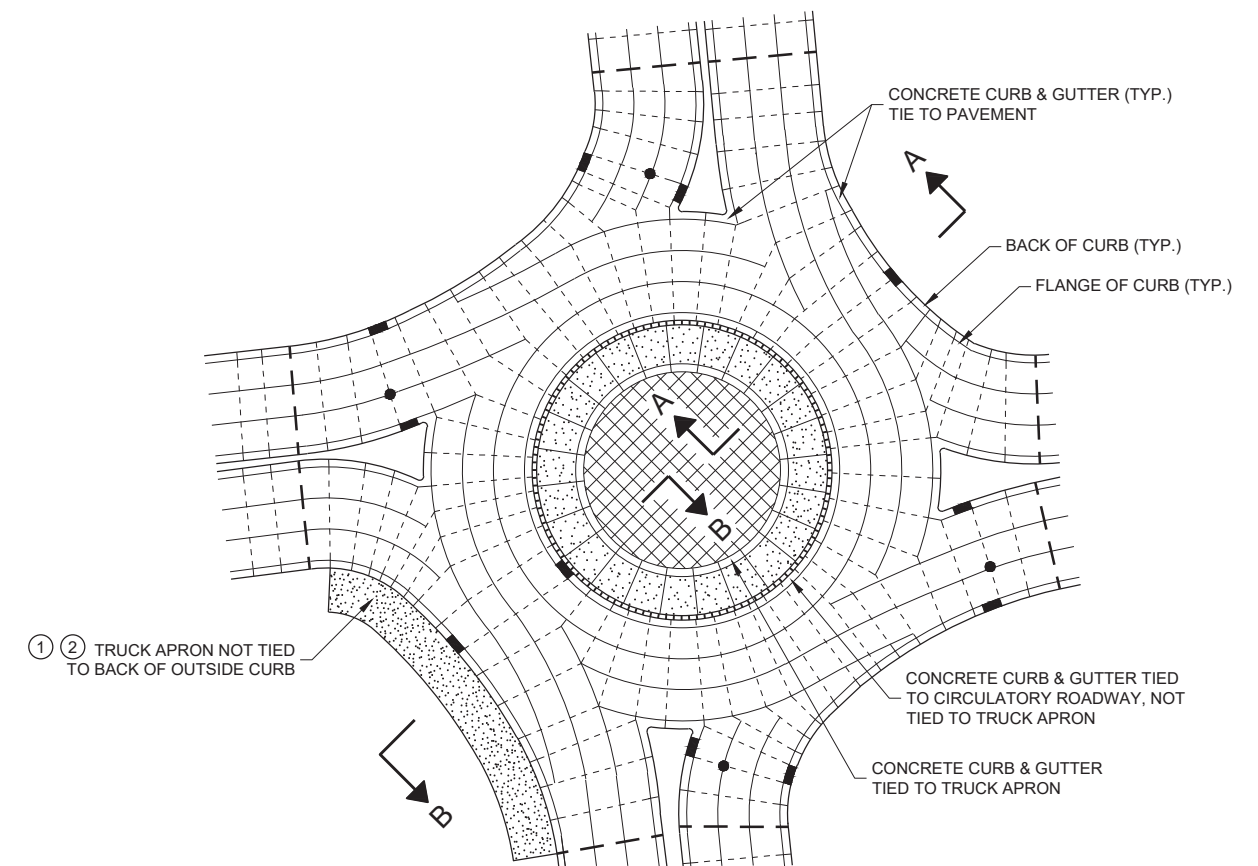
SECTION A - A



SECTION B - B



ISOLATED CIRCLE JOINT LAYOUT FOR ROUNDABOUTS



PINWHEEL JOINT LAYOUT FOR ROUNDABOUTS

GENERAL NOTES

MAXIMUM JOINT SPACING IS IN ACCORDANCE WITH THE TABLE SHOWN ON SDD 13C18 - SHEET "a"
 USE EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.
 DO NOT DOWEL OR TIE THE TRUCK APRON TRANSVERSE JOINTS.

- ① DESIGNER DETERMINES SIZE AND LOCATION(S) OF TRUCK APRON TO ACCOMODATE TRACKING OF OVERSIZE / OVERWEIGHT VEHICLES.
- ② TIE THE OUTSIDE TRUCK APRON TO THE BACK SIDE OF CURB ONLY WHEN ENTIRE TRUCK APRON IS LESS THAN 3 FEET.
- ③ CONFORM TO PLAN CONSTRUCTION DETAILS FOR CIRCULATORY ROADWAY CROSS SLOPE.

LEGEND

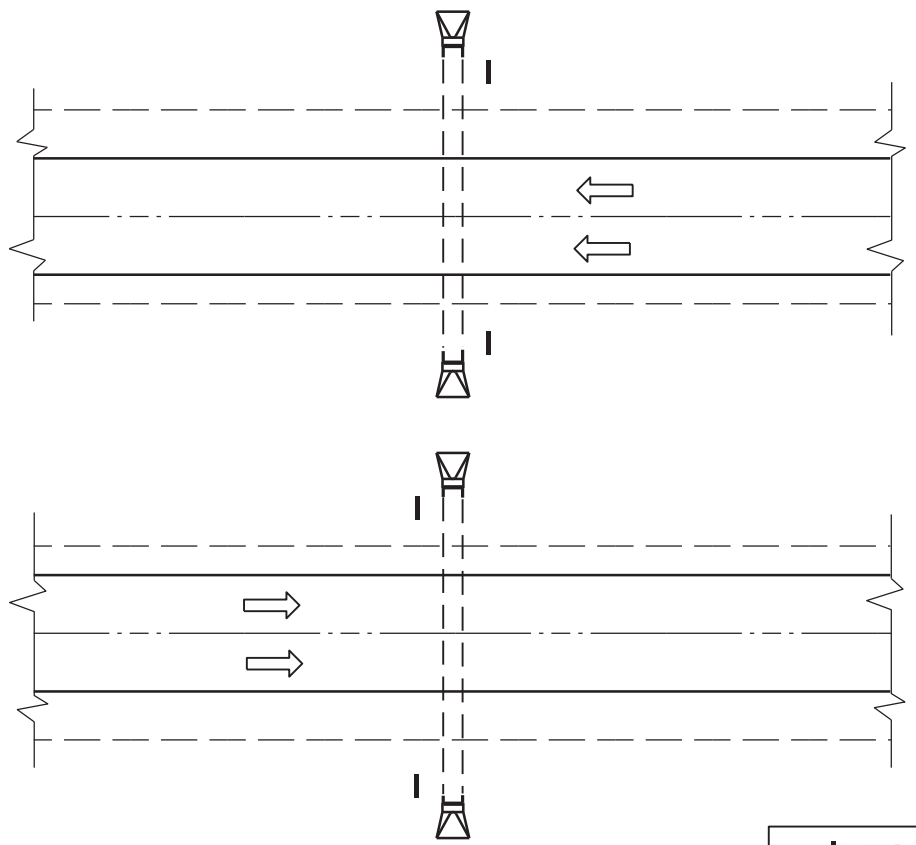
- DOWELED JOINT
- TIED JOINT
- ===== EXPANSION JOINT
- - - - - POTENTIAL DOWELED EXPANSION JOINT
- [Stippled Box] TRUCK APRON
- [Cross-hatched Box] CENTRAL ISLAND
- [Square with Dot] UTILITY STRUCTURES

**CONCRETE PAVEMENT JOINTING
AND STEEL REINFORCEMENT
IN ROUNDABOUTS**

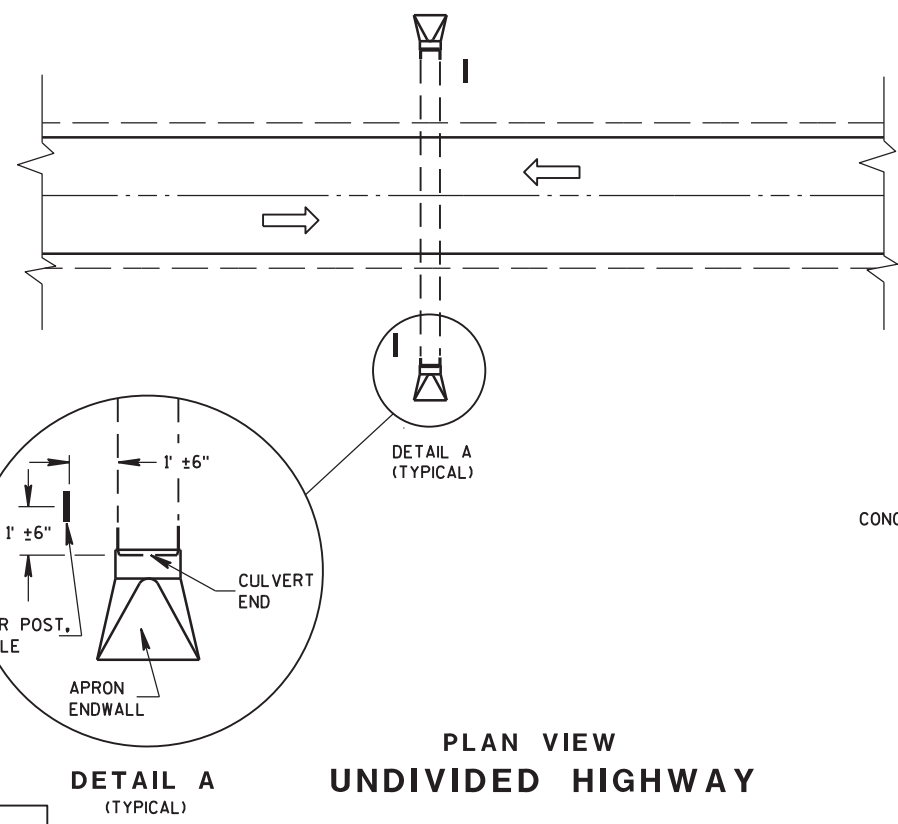
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
 November 2018 /S/ Peter Kemp P.E.
 DATE DATE PAVEMENT SUPERVISOR 127

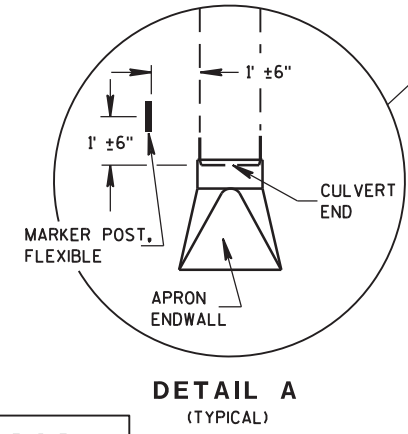
FHWA



PLAN VIEW
DIVIDED HIGHWAY



PLAN VIEW
UNDIVIDED HIGHWAY

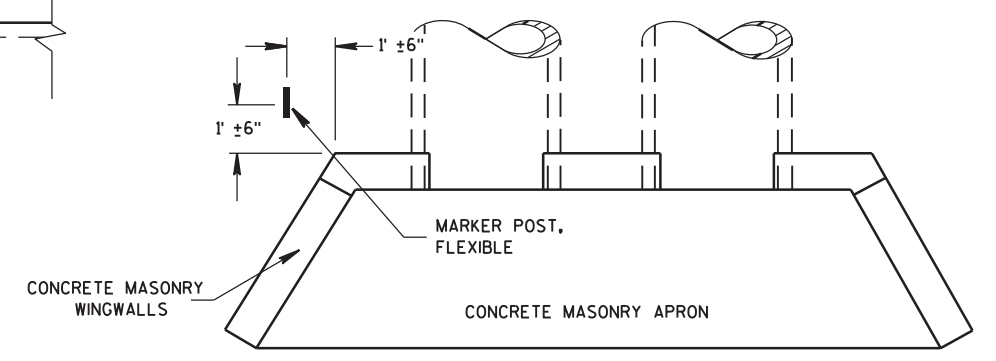


MARKER POST, FLEXIBLE
DIRECTION OF TRAFFIC FLOW

FLEXIBLE MARKER POST LOCATION

GENERAL NOTES

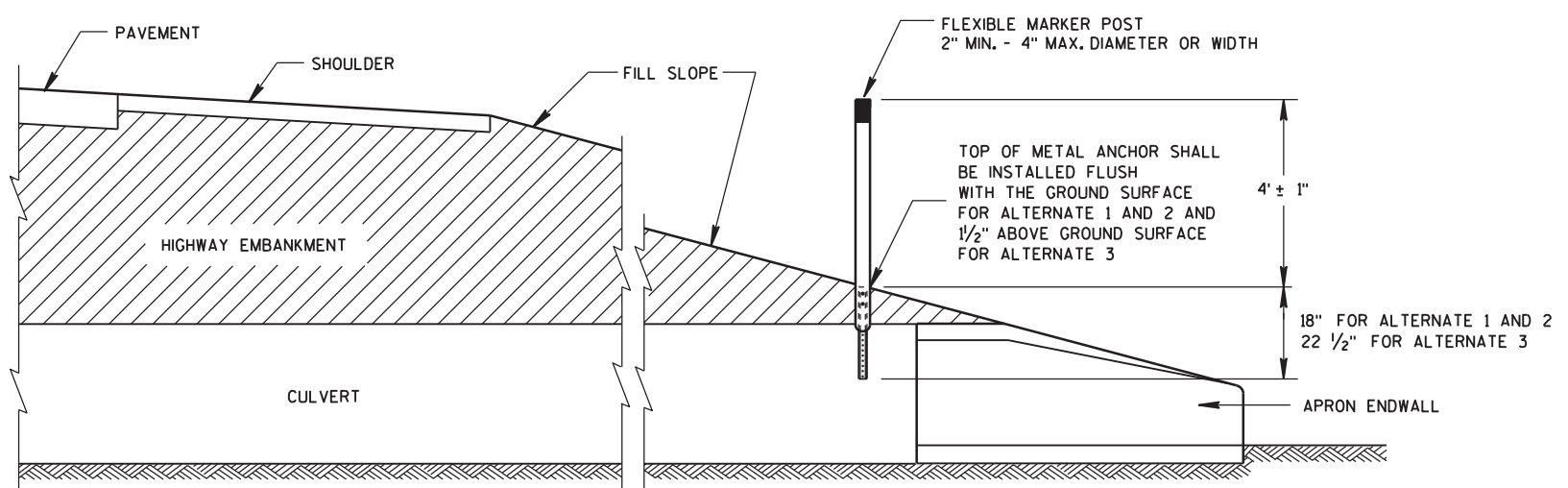
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH

6

6

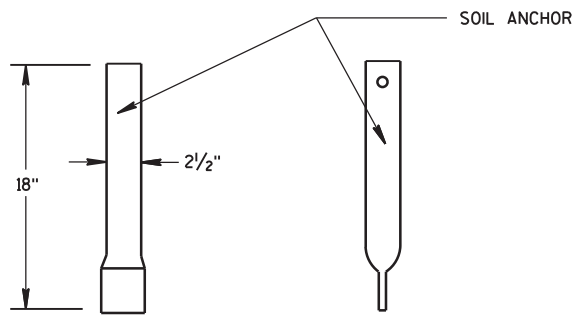
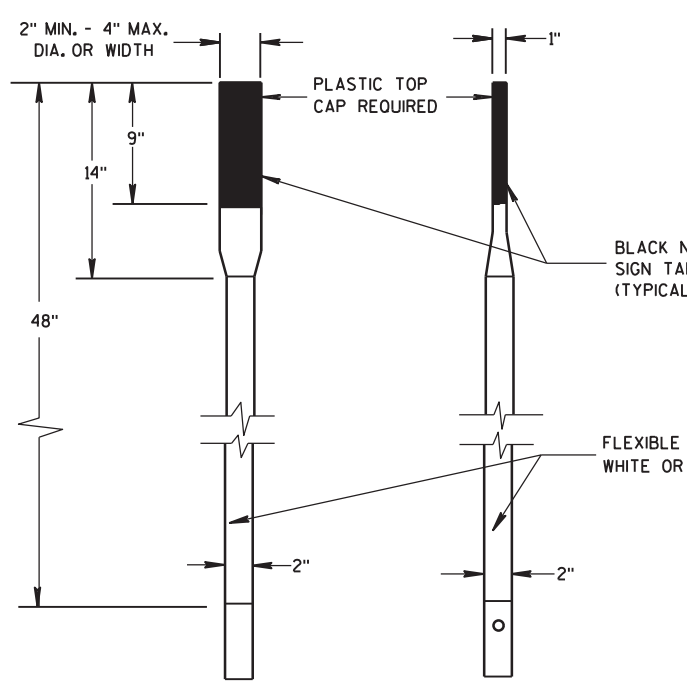


CROSS SECTION
FLEXIBLE MARKER POST

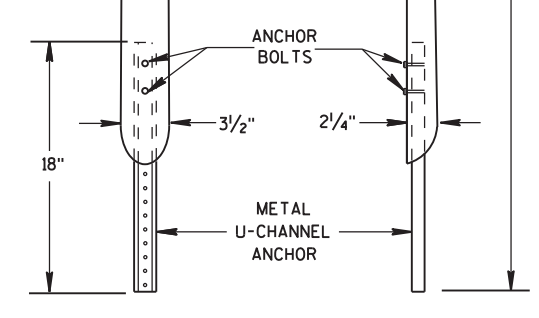
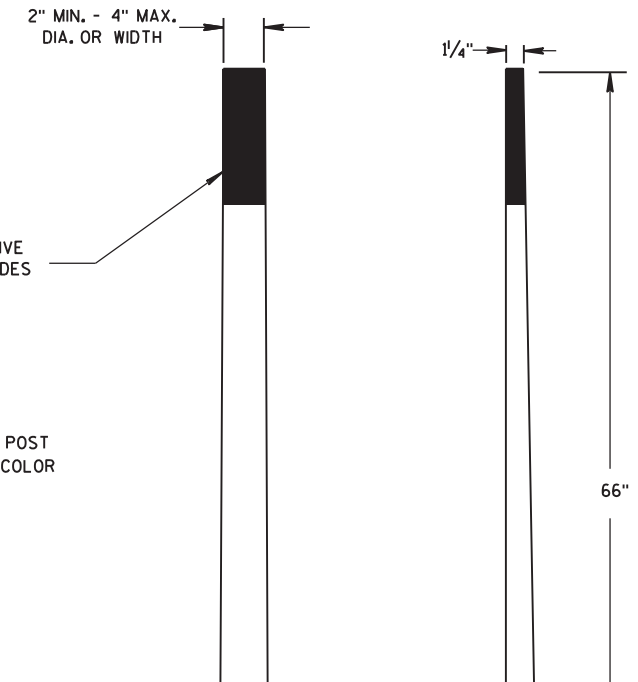
FLEXIBLE MARKER POST
FOR CULVERT END
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 128

S.D.D. 15 A 3-2a

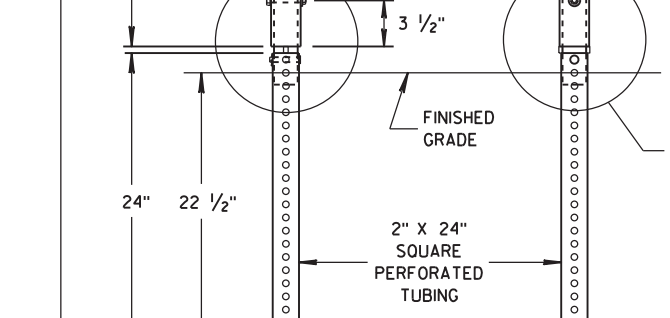
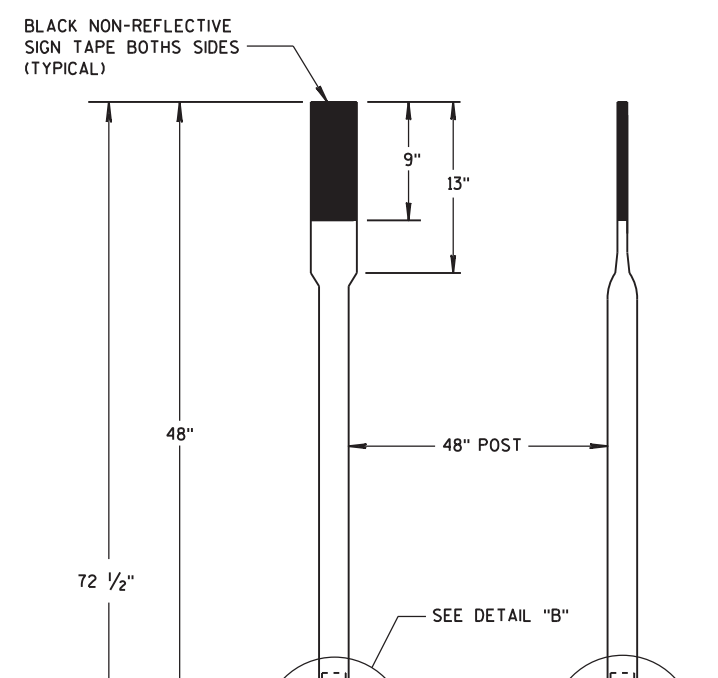
S.D.D. 15 A 3-2a



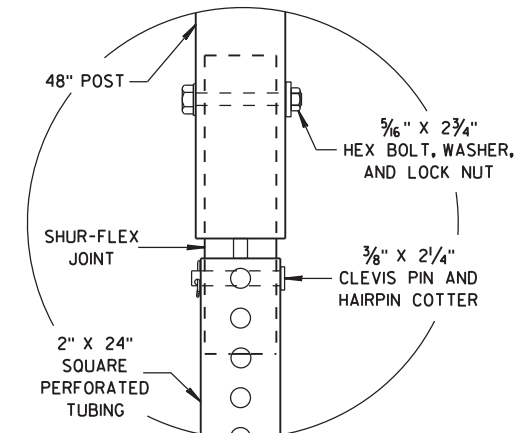
FRONT VIEW SIDE VIEW
ALTERNATE 1



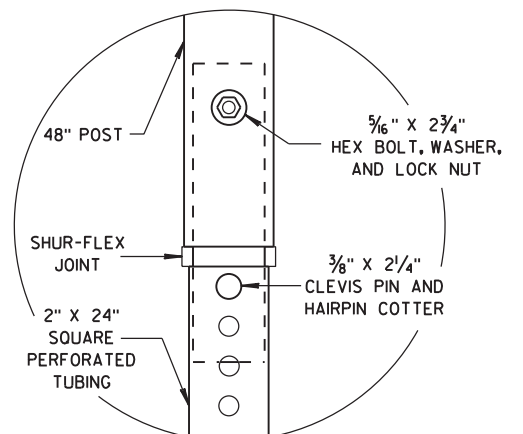
FRONT VIEW SIDE VIEW
ALTERNATE 2



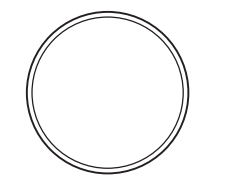
FRONT VIEW SIDE VIEW
ALTERNATE 3



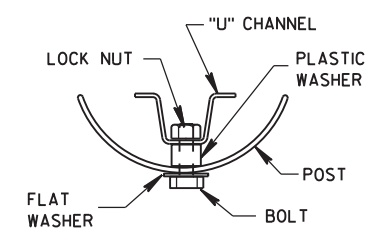
DETAIL B



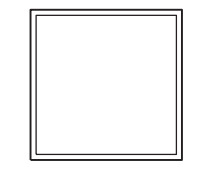
DETAIL C



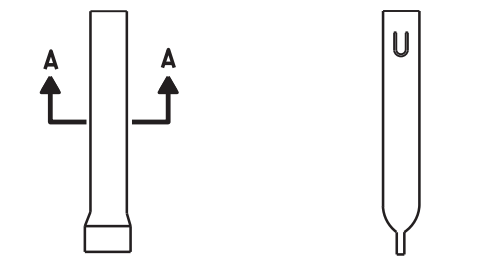
SECTION A-A



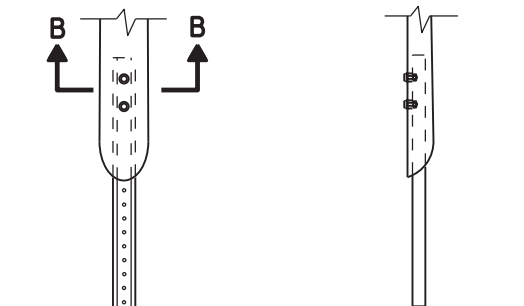
SECTION B-B



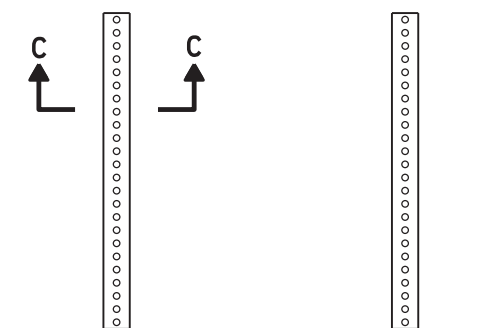
SECTION C-C



FRONT VIEW SIDE VIEW
ALTERNATE 1



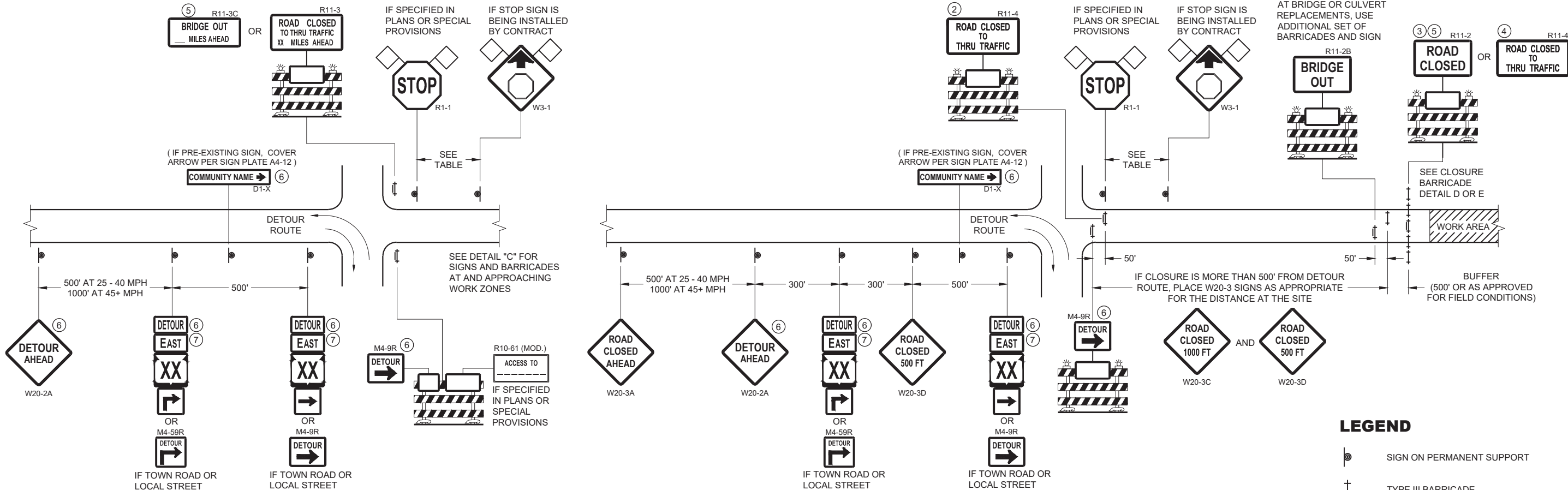
FRONT VIEW SIDE VIEW
ALTERNATE 2



FRONT VIEW SIDE VIEW
ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS

FLEXIBLE MARKER POST FOR CULVERT END		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
APPROVED		
10/1/2012	/S/ Travis Feltes	
DATE	STATE TRAFFIC ENGINEER	129 IGN
FHWA		



**DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR**

WORK ZONE GREATER THAN OR EQUAL TO 1/2 MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)

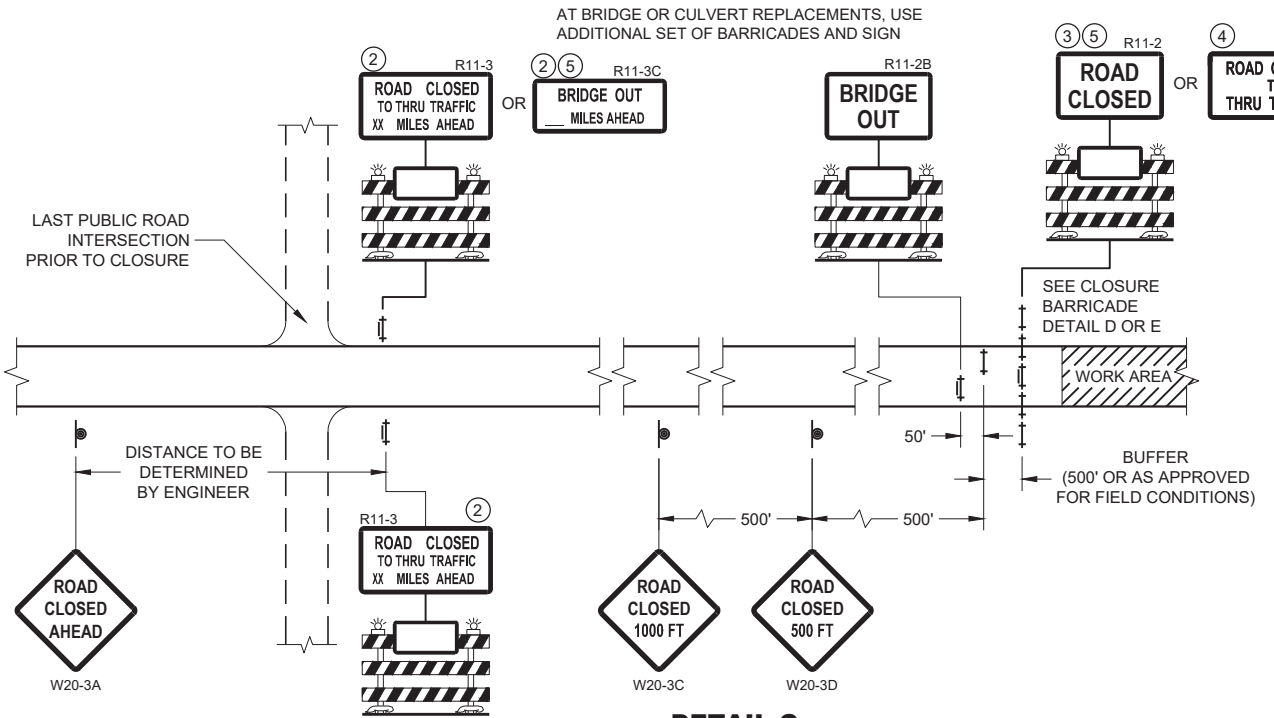
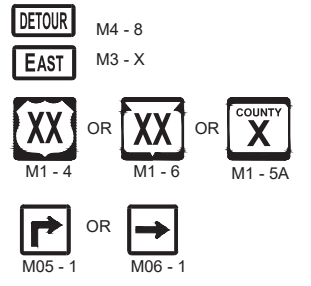
**DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR**

WORK ZONE LESS THAN 1/2 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)

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



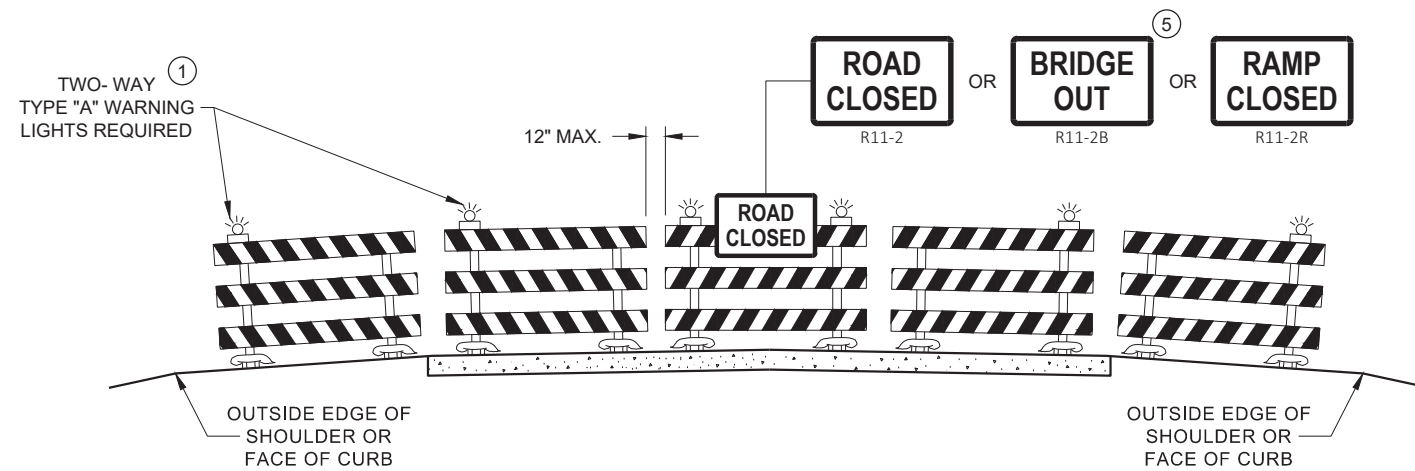
**DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR**

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

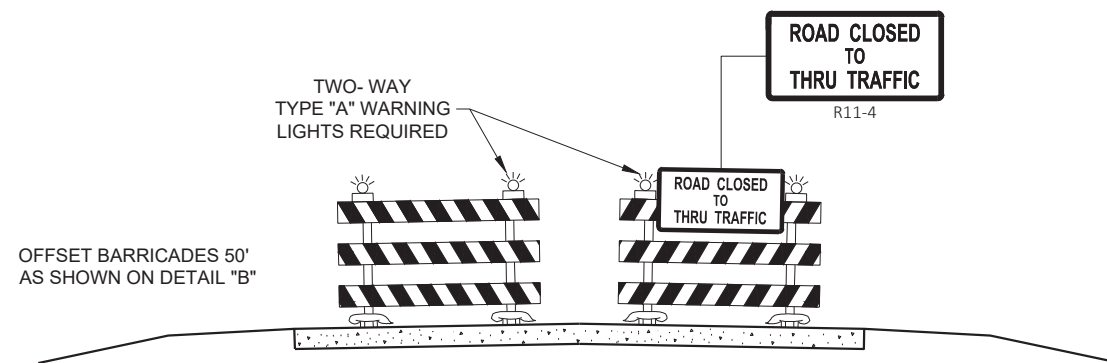
**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 130
FHWA



**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:

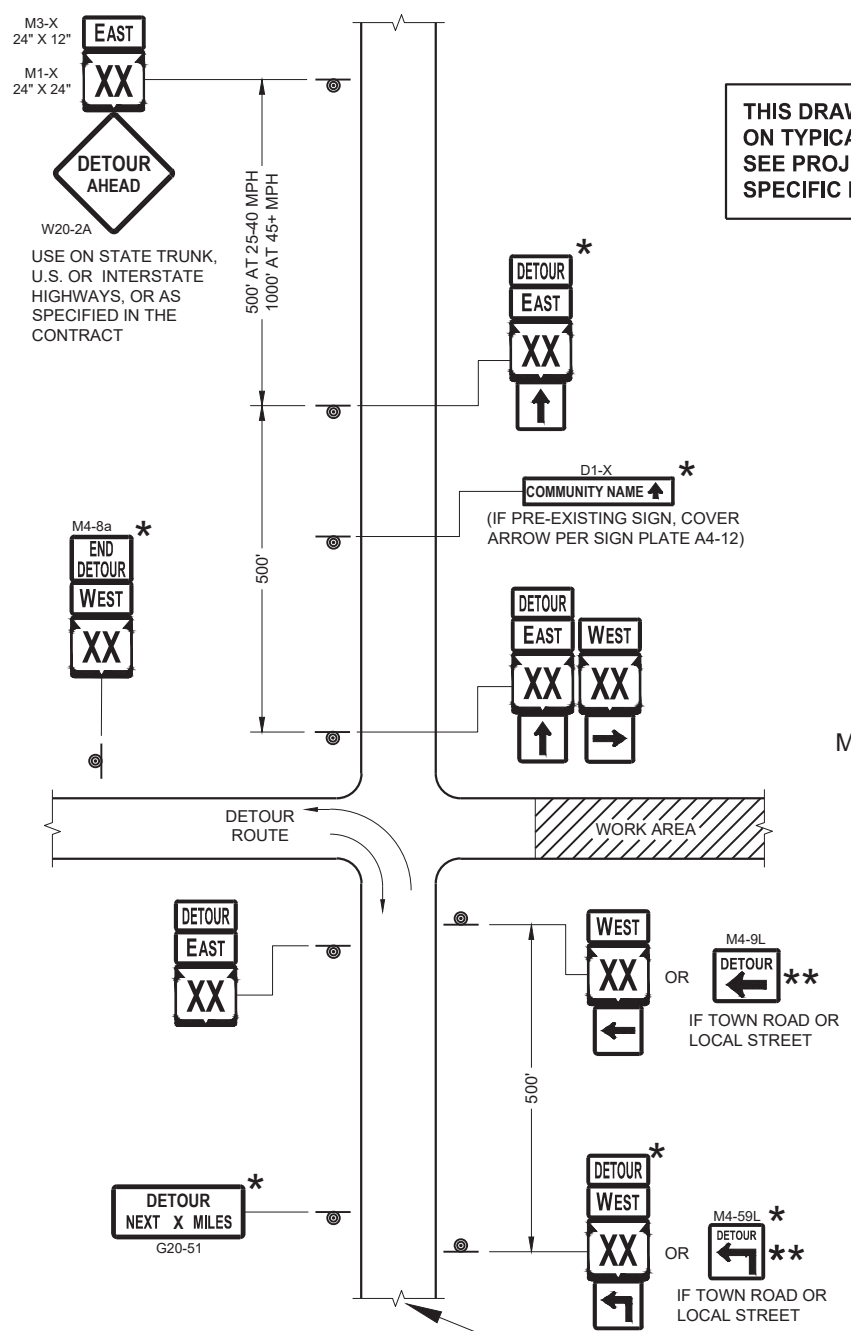
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60" X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" 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
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 131
FHWA



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

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- M4 - 8
- M3 - X
- M1 - 4
- M1 - 6
- M1 - 5A
- M05 - 1
- M06 - 1
- M06 - 1

GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

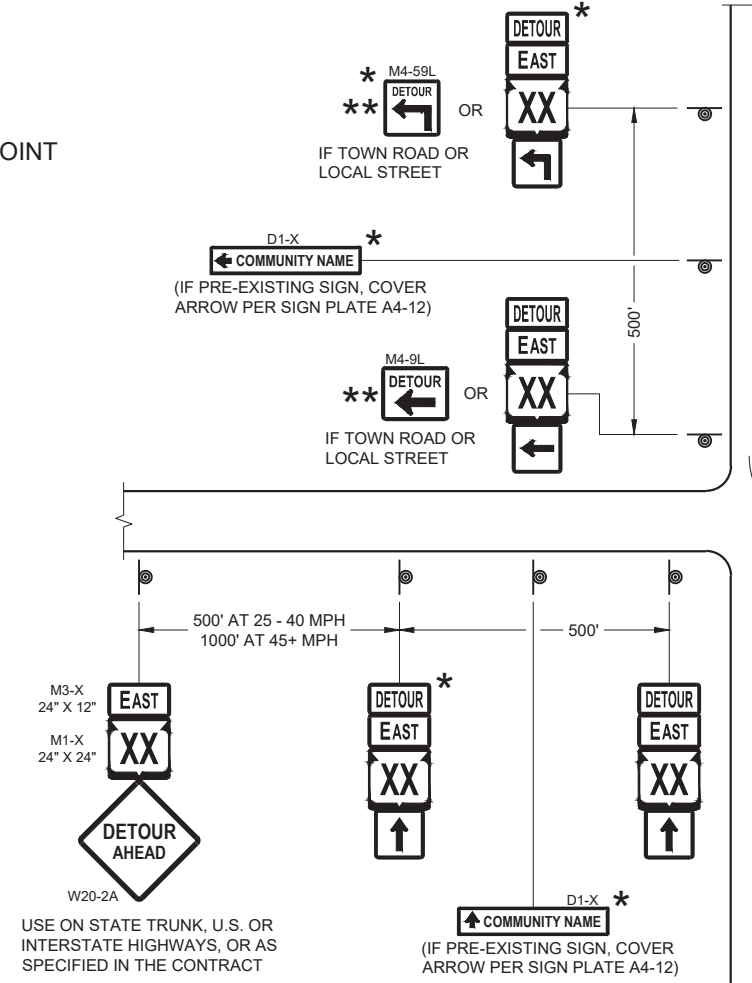
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

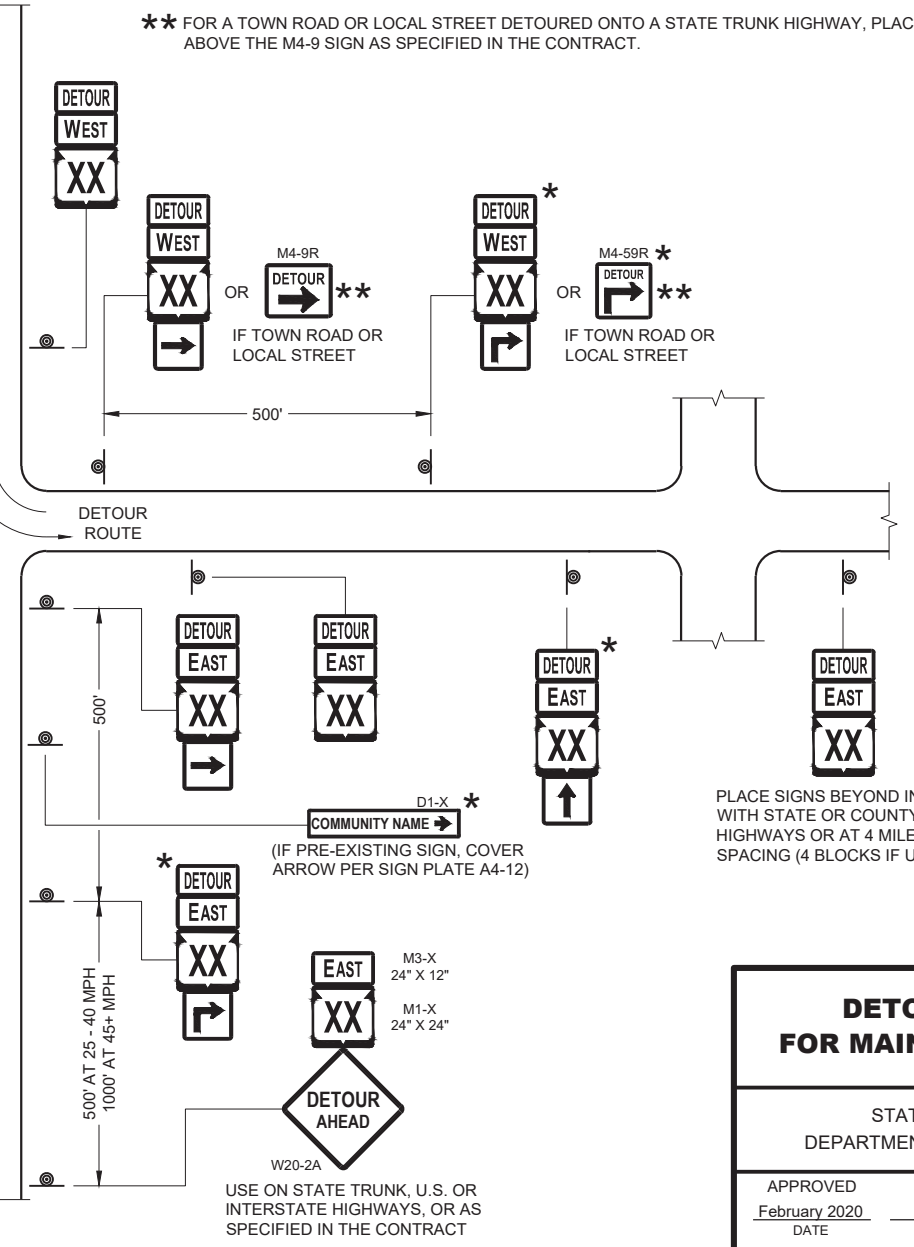
- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

- * OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.
- ** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.

MATCH POINT



**DETAIL F
DETOUR SIGNING**



**DETOUR SIGNING
FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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DATE WORK ZONE ENGINEER 132

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SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

PLACE SIGNS BEYOND INTERSECTIONS WITH STATE OR COUNTY TRUNK HIGHWAYS OR AT 4 MILE MAXIMUM SPACING (4 BLOCKS IF URBAN AREA)

GENERAL NOTES

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

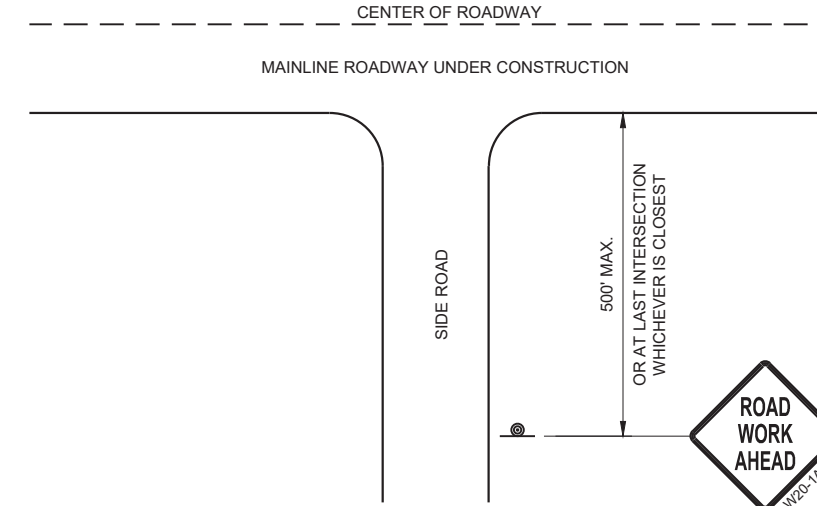
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

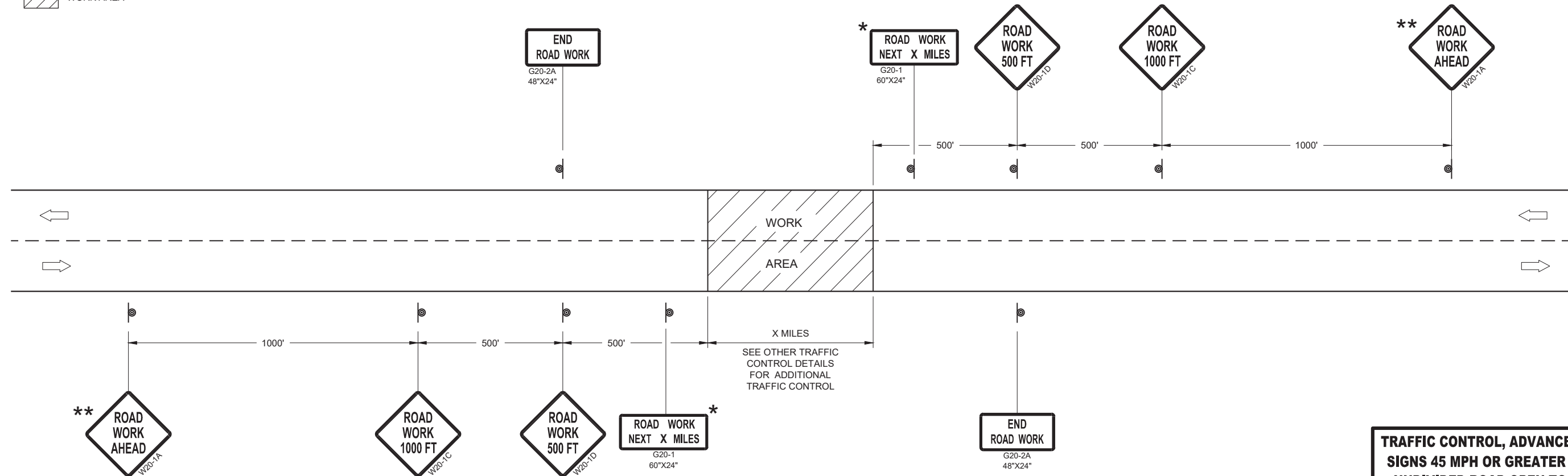
- * OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS
- ** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



**TYPICAL SIDE ROAD APPROACH
WARNING SIGN DETAIL**

LEGEND

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



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

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

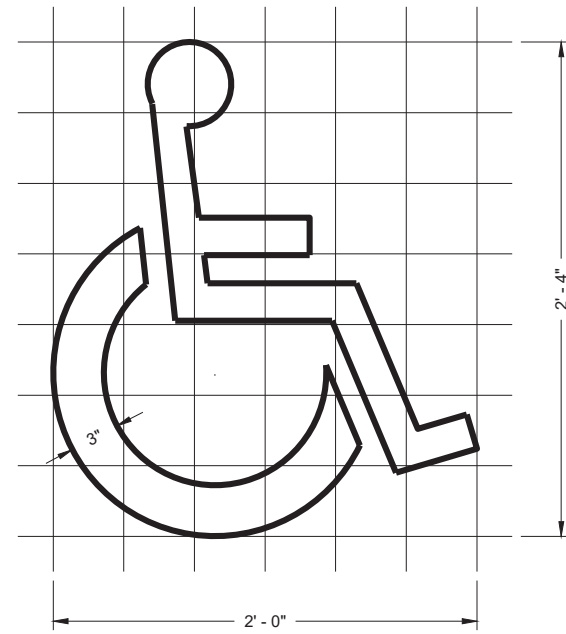
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED _____ /S/ Andrew Heidtke
DATE July 2018 WORK ZONE ENGINEER 133

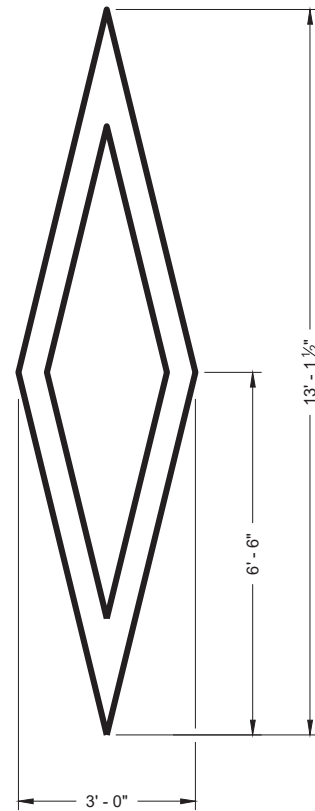
FHWA

GENERAL NOTES

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



HANDICAP SYMBOL



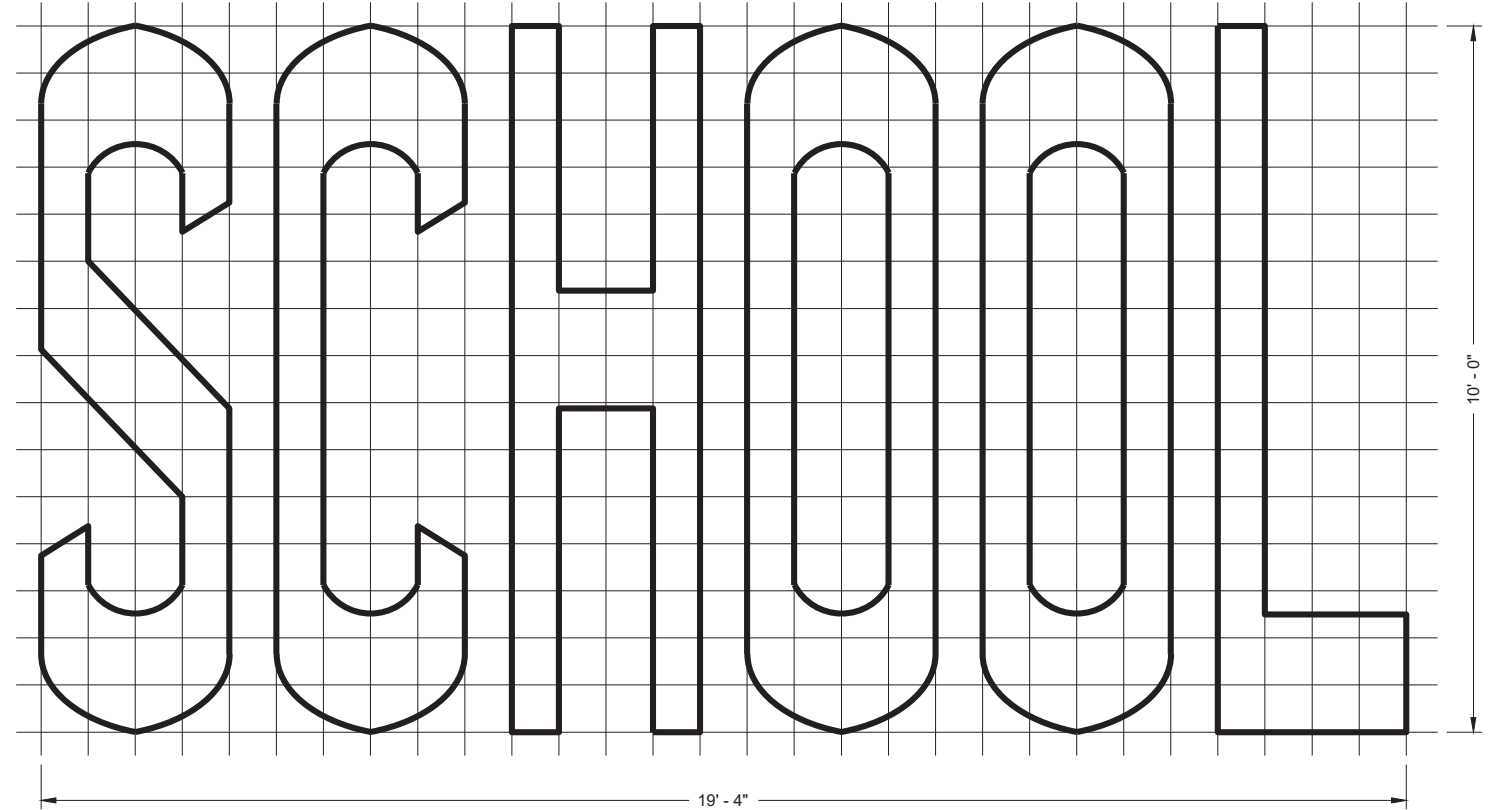
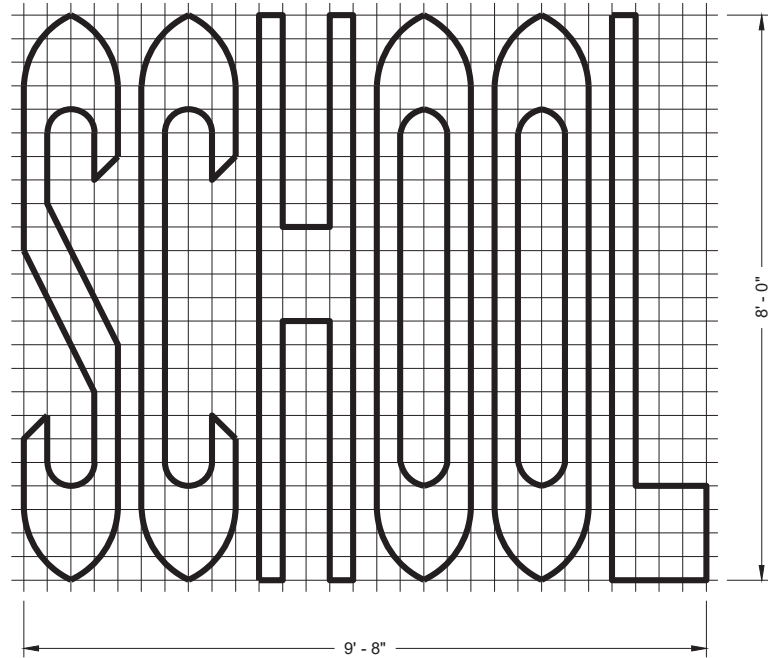
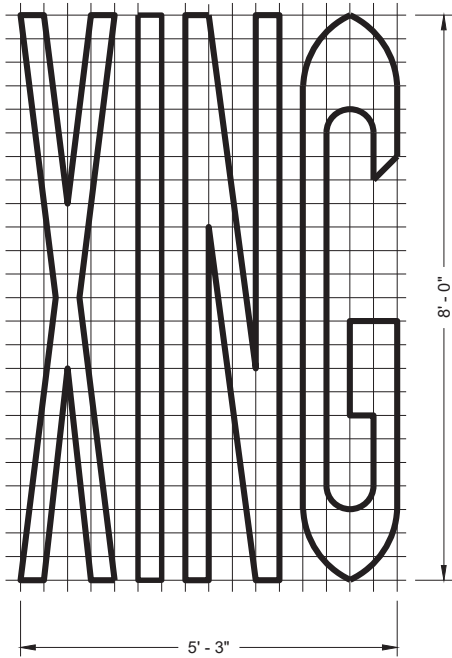
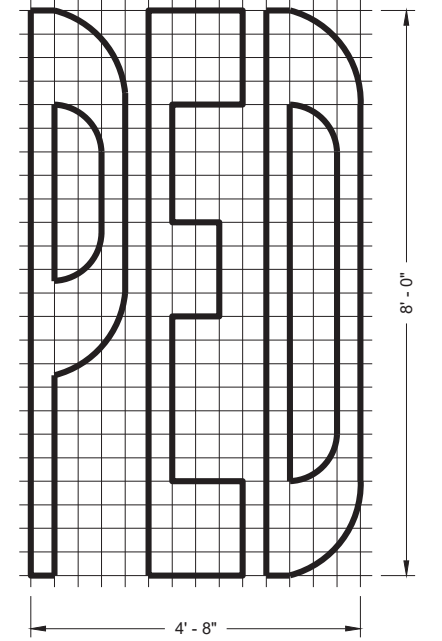
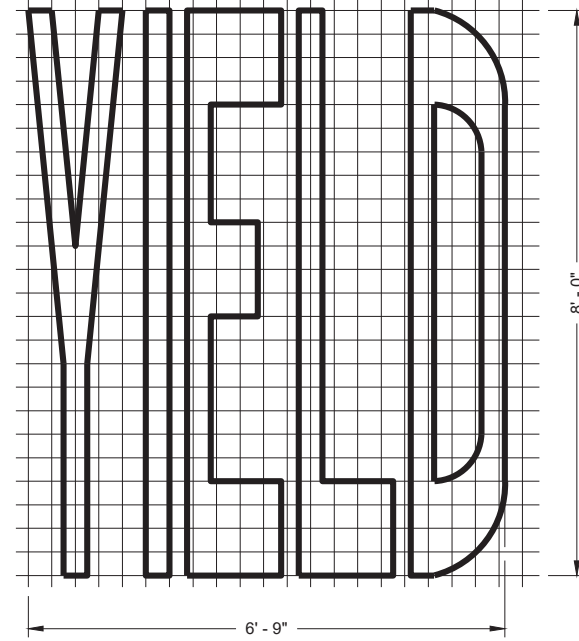
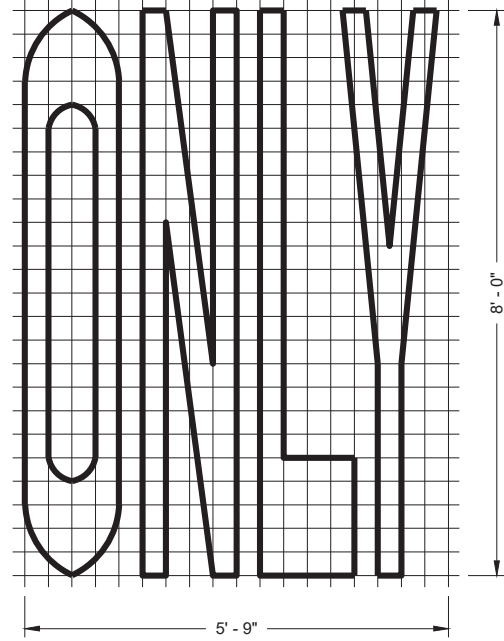
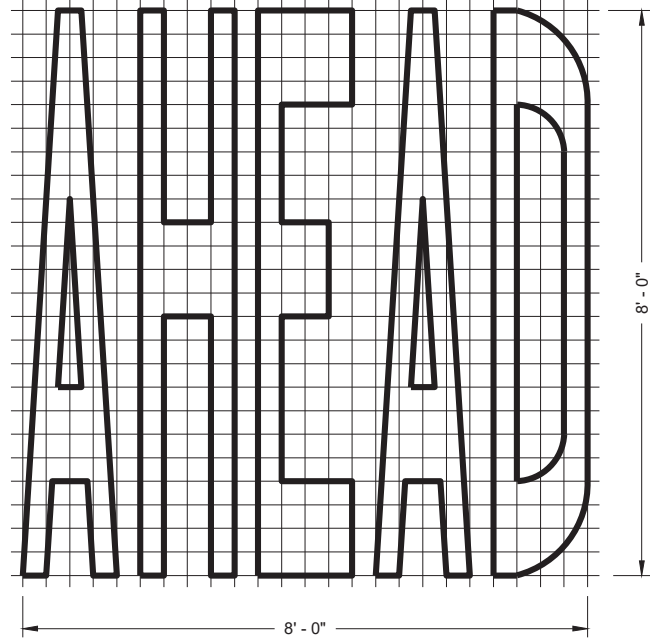
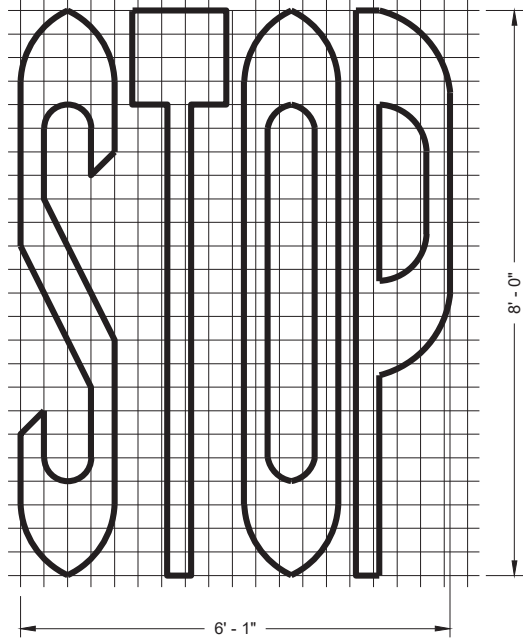
**PREFERENTIAL
LANE SYMBOL**

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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DATE STATE SIGNING AND MAP ENGINEER 134

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SINGLE LANE

TWO - LANE

GENERAL NOTES

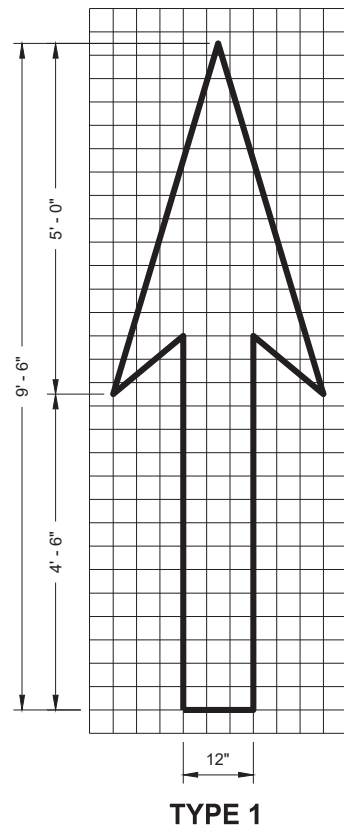
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

PAVEMENT MARKING WORDS

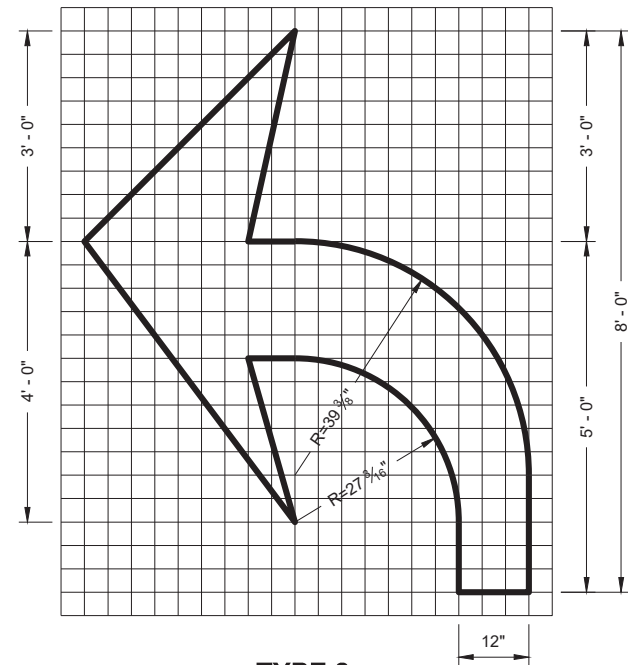
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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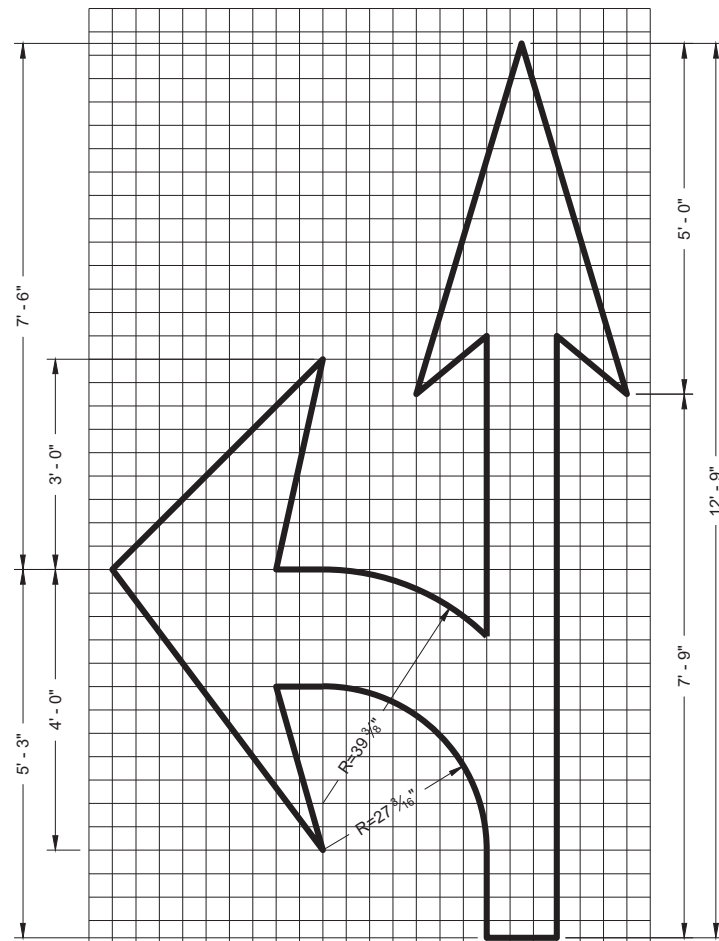
FHWA



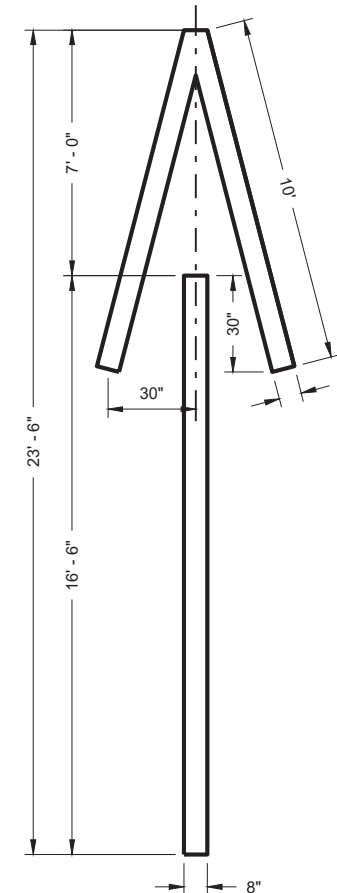
TYPE 1



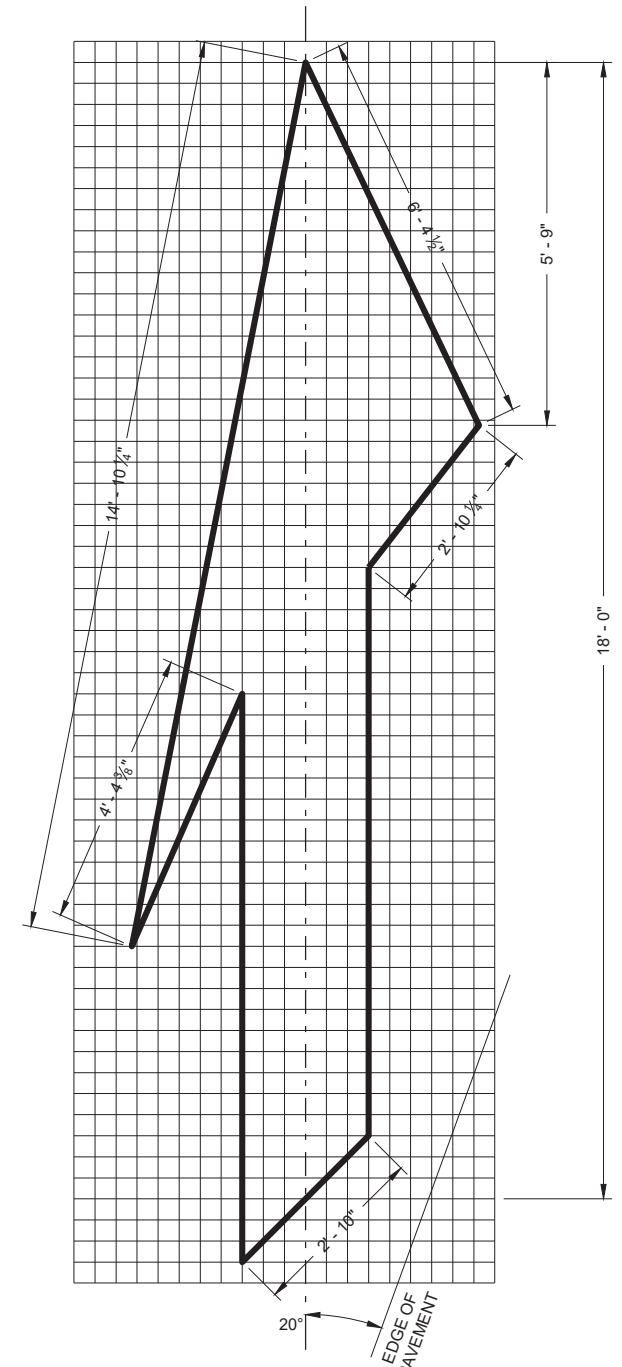
TYPE 2



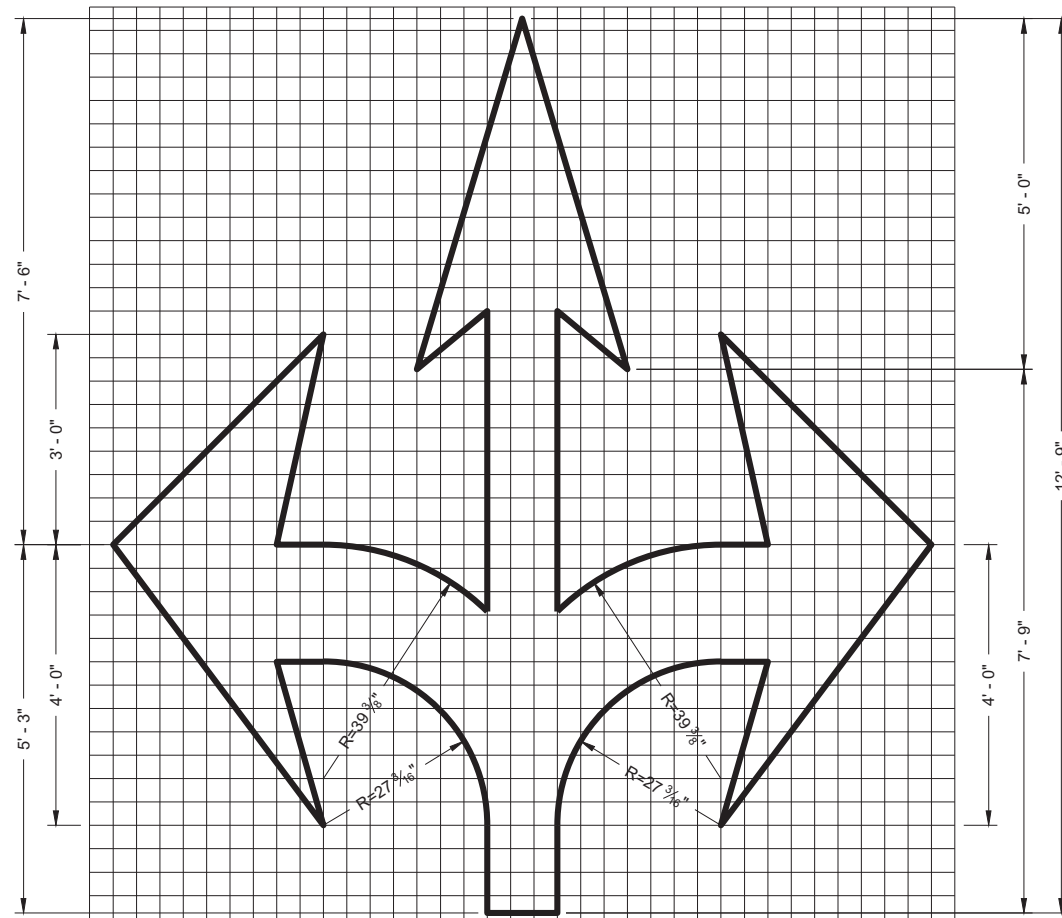
TYPE 3



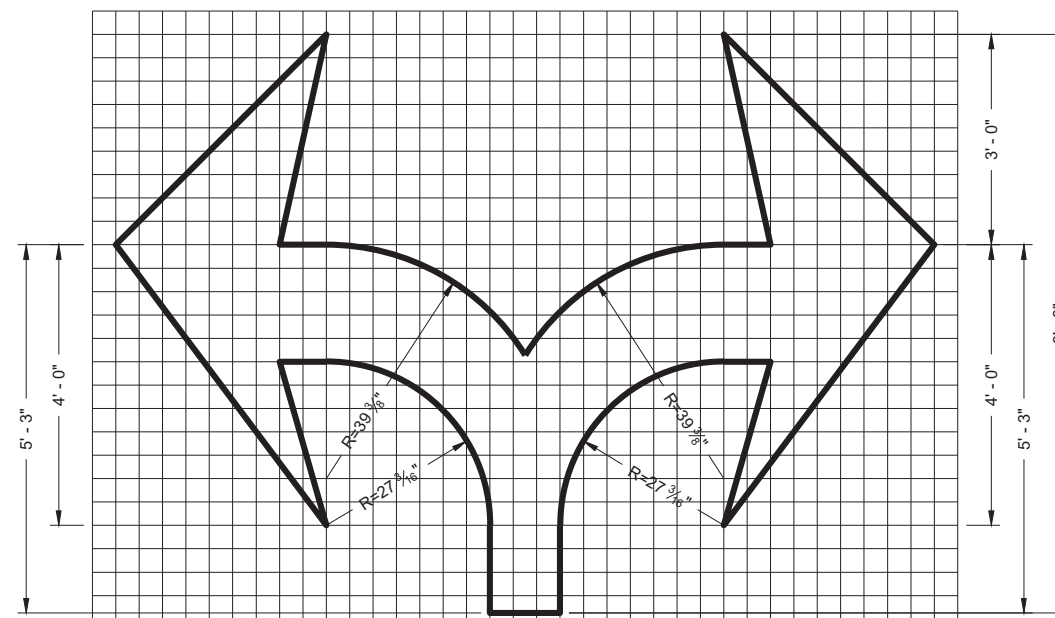
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

GENERAL NOTES

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

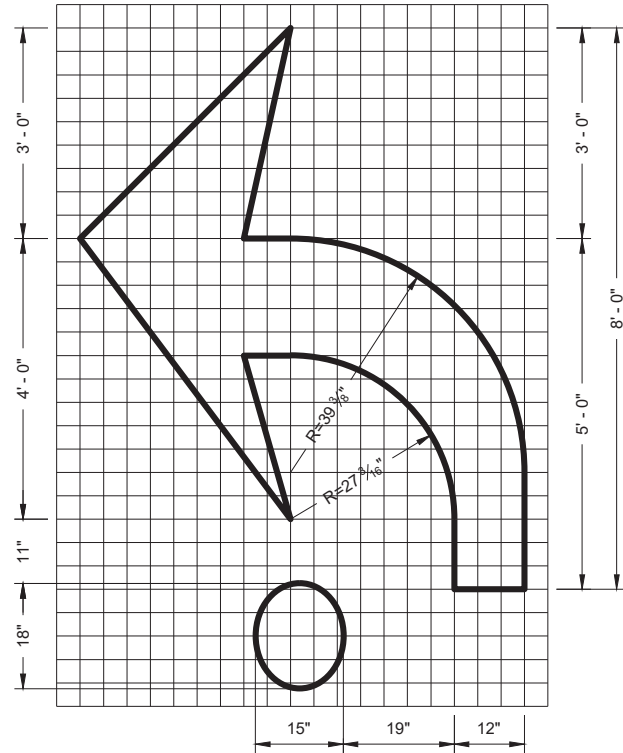
PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

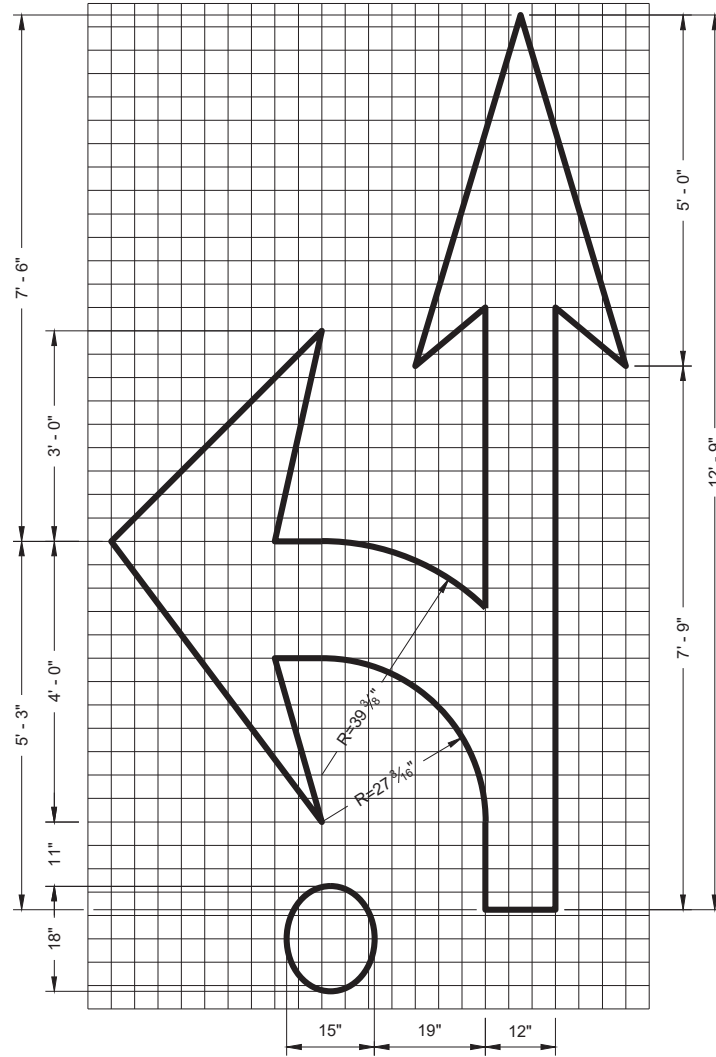
APPROVED
November 2019 /S/ Matthew Rauch
DATE STATE SIGNING AND MAP ENGINEER 136
FHWA

GENERAL NOTES

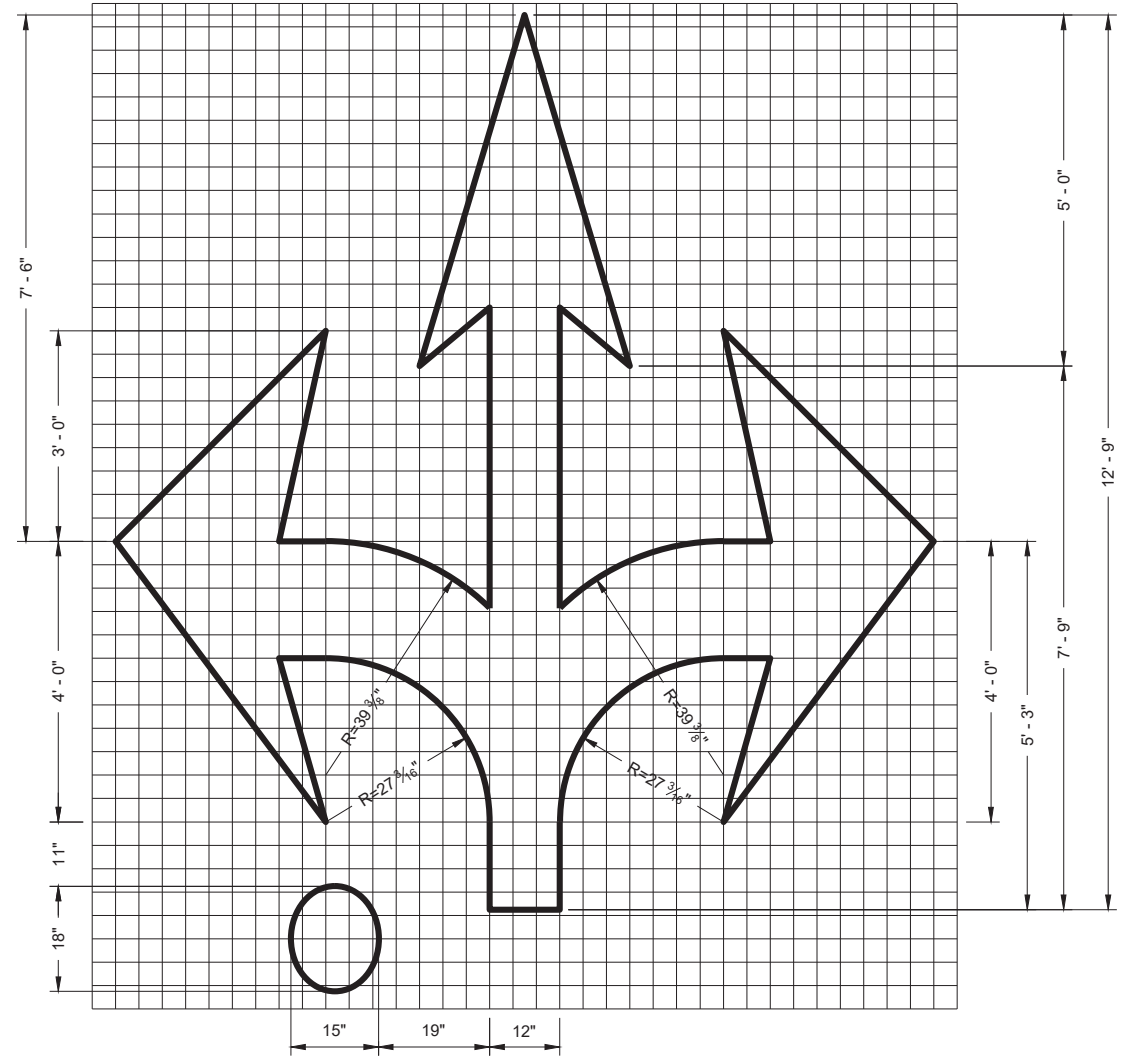
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



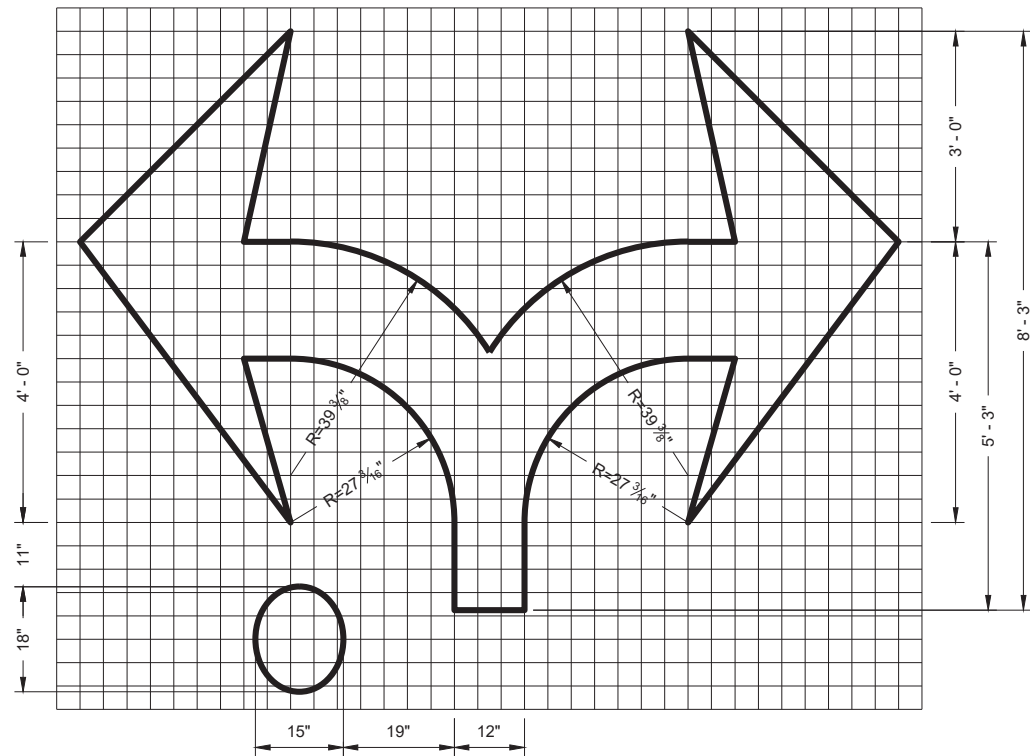
TYPE 2R



TYPE 3R

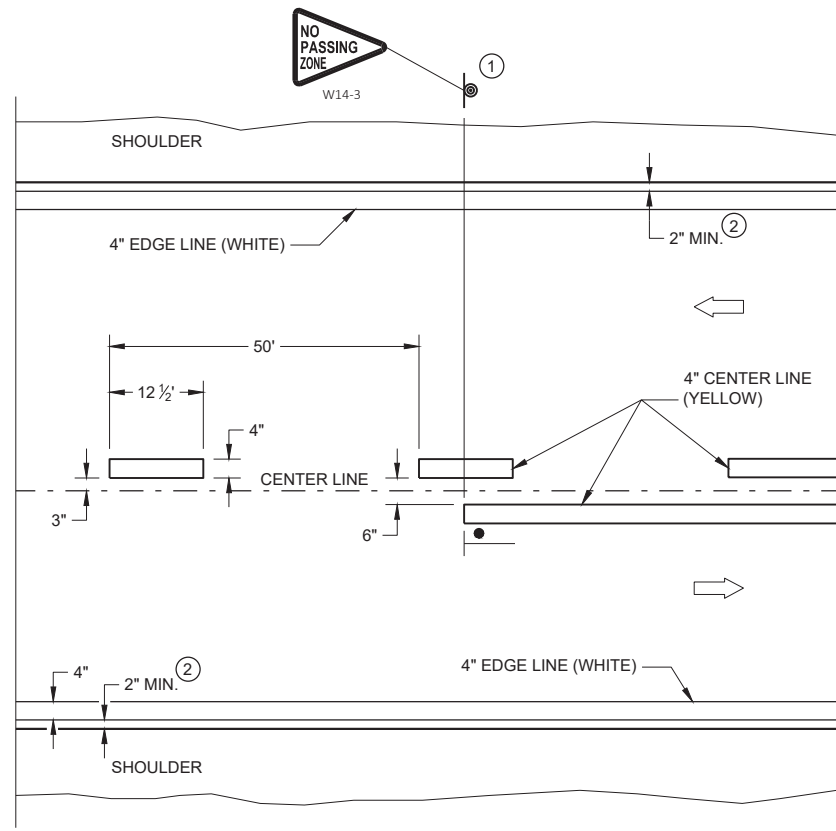


TYPE 6R

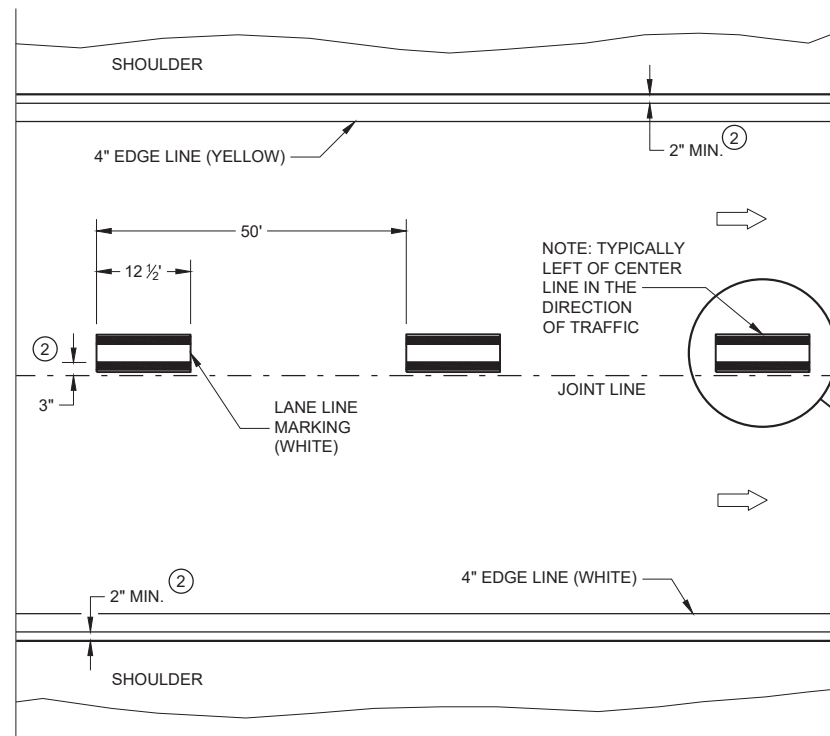


TYPE 7R

ROUNDBOUT MARKING ARROWS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2019 DATE	/s/ Matthew Rauch STATE SIGNING AND MAP ENGINEER 137
FHWA	

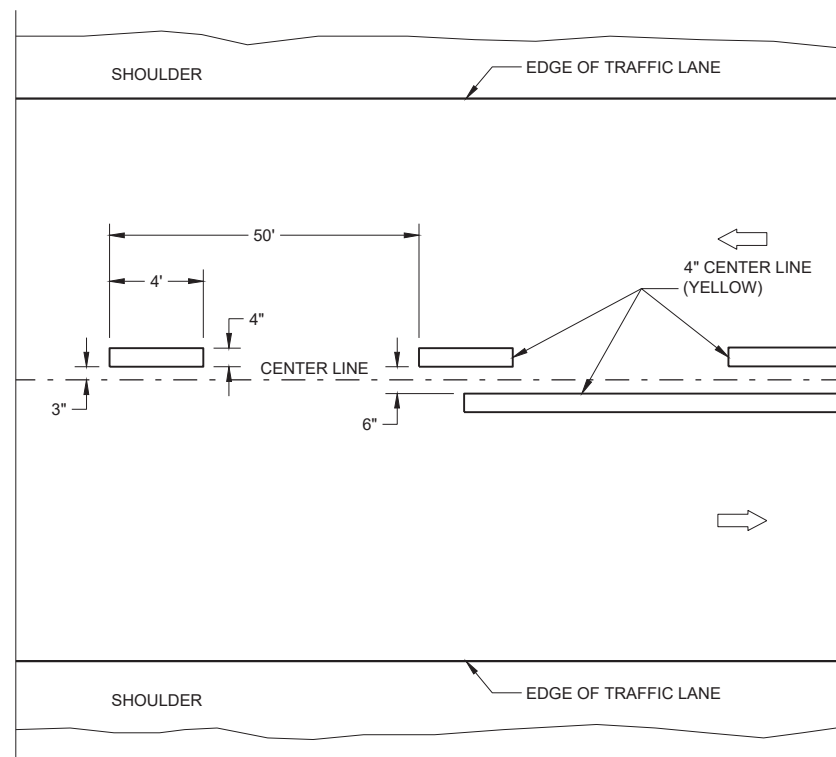


TWO WAY TRAFFIC

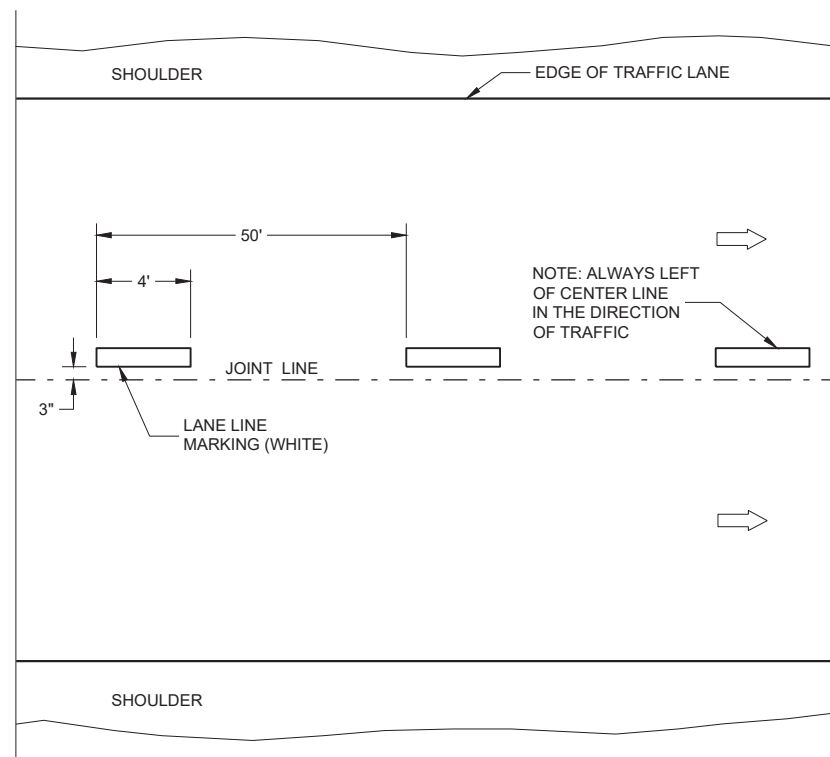


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

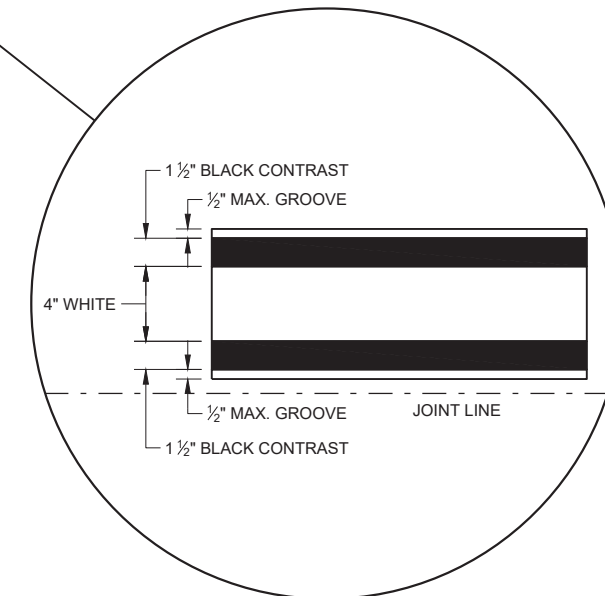
GENERAL NOTES

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

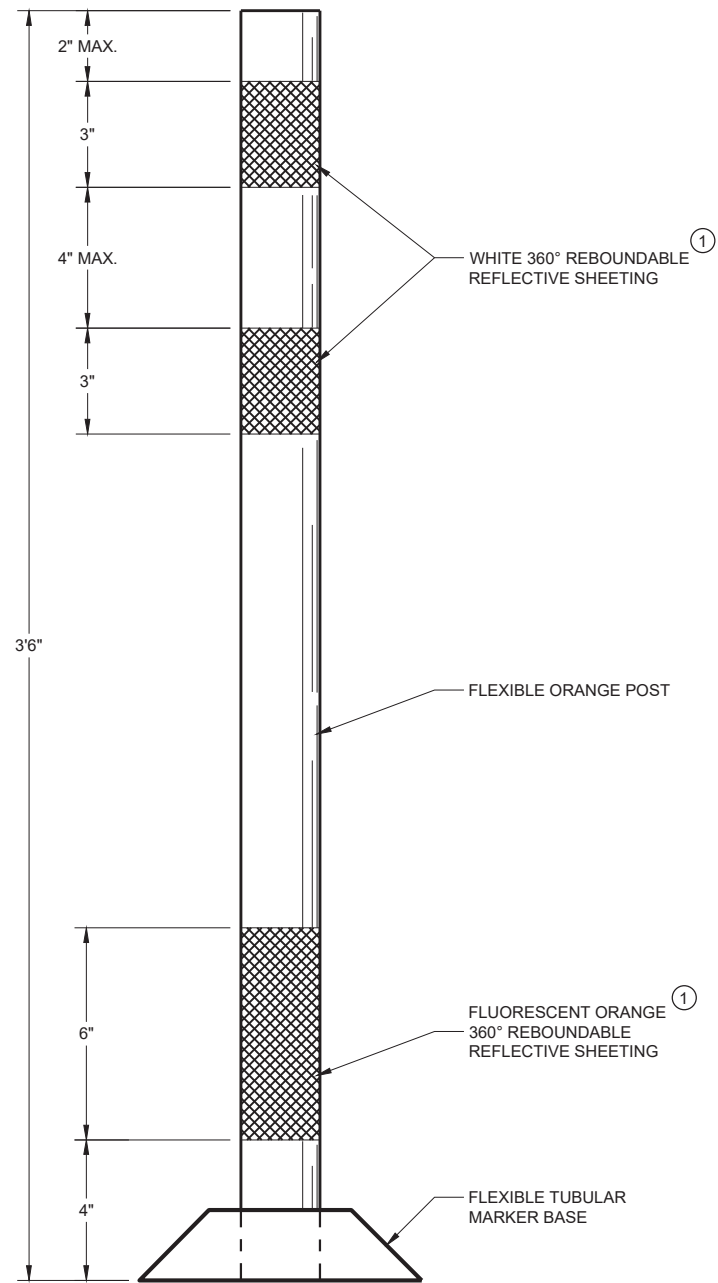
- "T" MARKING
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 /S/ Matthew Rauch
DATE STATEWIDE SIGNING AND MARKING ENGINEER 138
FHWA



FLEXIBLE TUBULAR MARKER POST WORK ZONE

GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

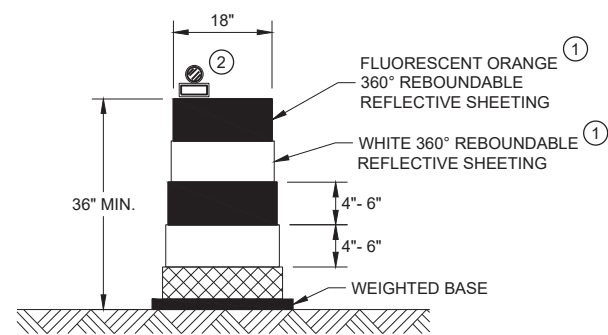
① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

**CHANNELIZING DEVICES
FLEXIBLE TUBULAR
MARKER POST**

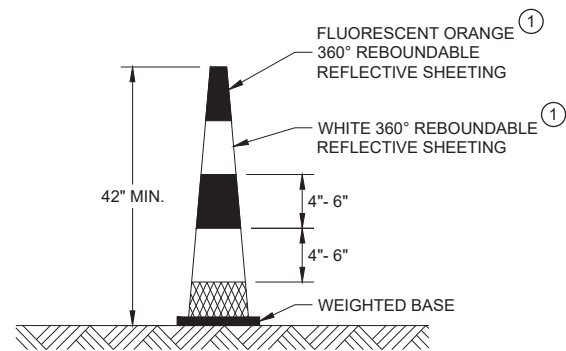
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 139

FHWA



DRUM

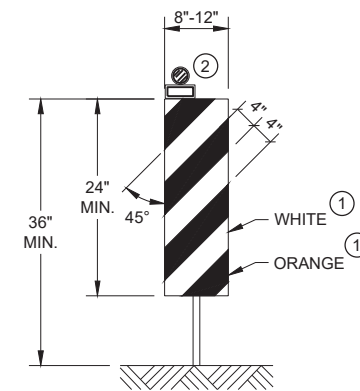


42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS

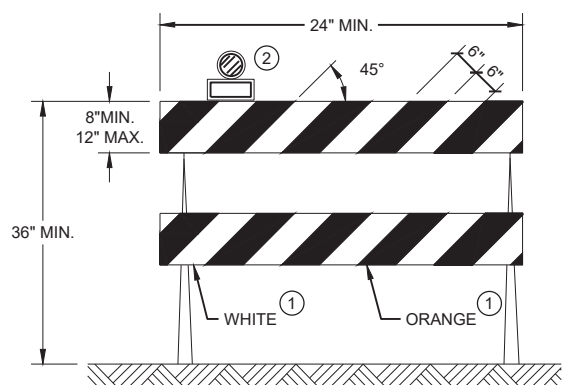
GENERAL NOTES

- 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.



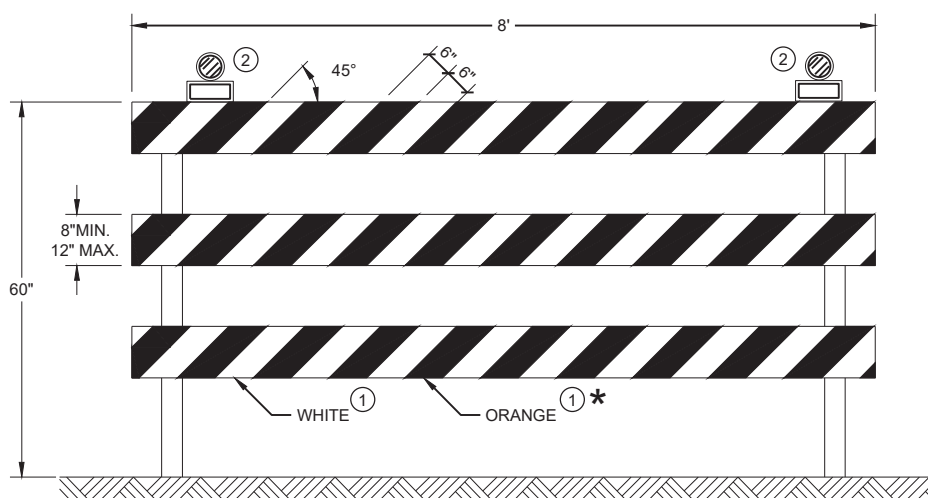
VERTICAL PANEL

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.

**CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

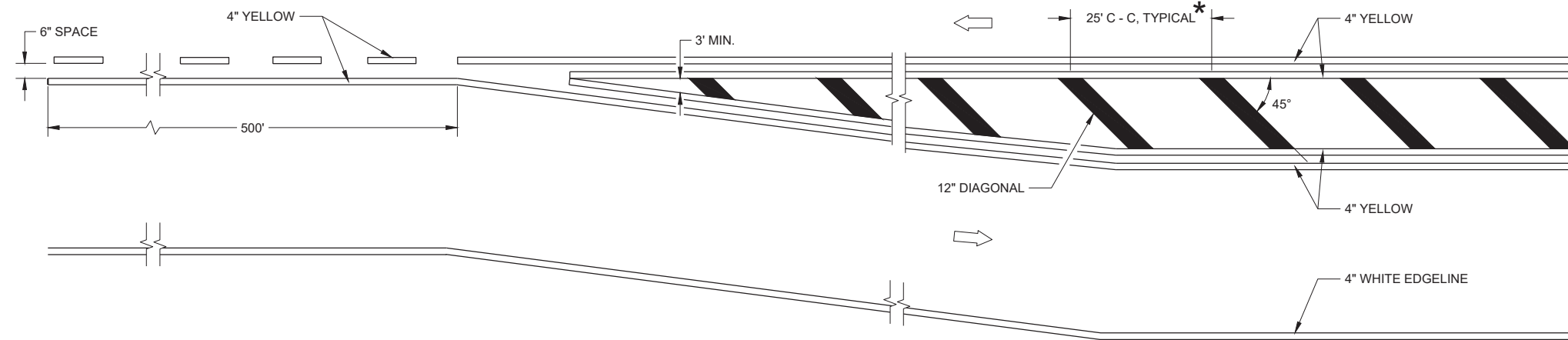
APPROVED
DATE: May 2021 /S/ Andrew Heidtke
WORK ZONE ENGINEER 140

GENERAL NOTES

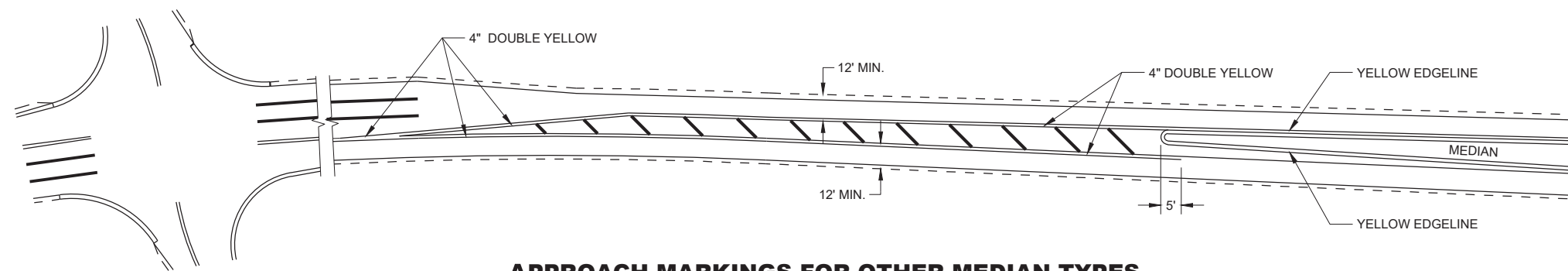
DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.

➡ DIRECTION OF TRAVEL

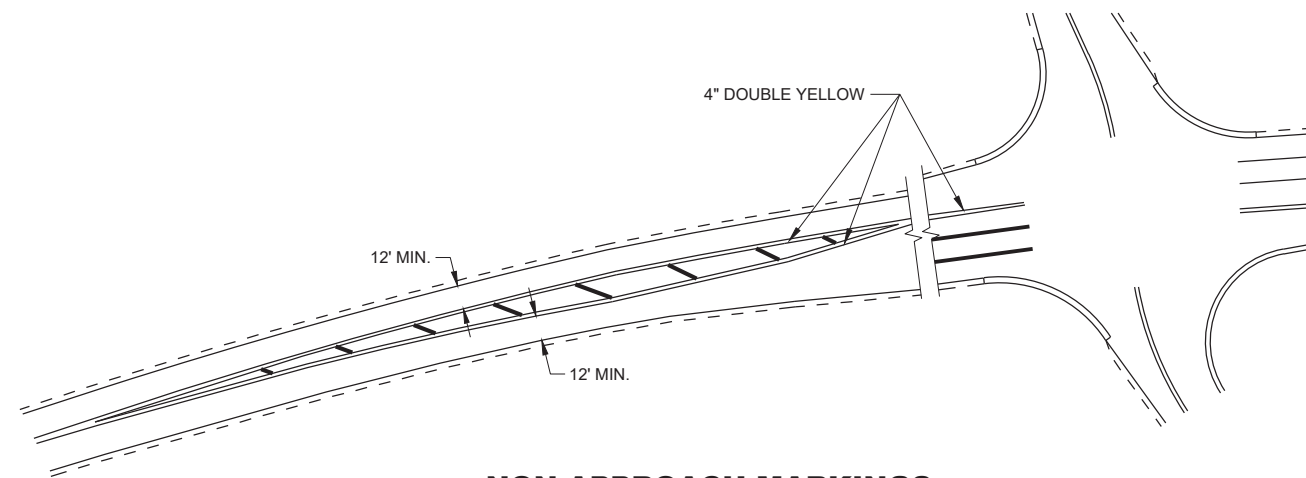
* WHEN THE PAINTED MEDIAN LENGTH IS LESS THAN 50 FEET THE SPACING IS 10'.



MEDIAN ISLAND DETAIL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON-APPROACH MARKINGS

6

6

SDD 15C18 - 05a

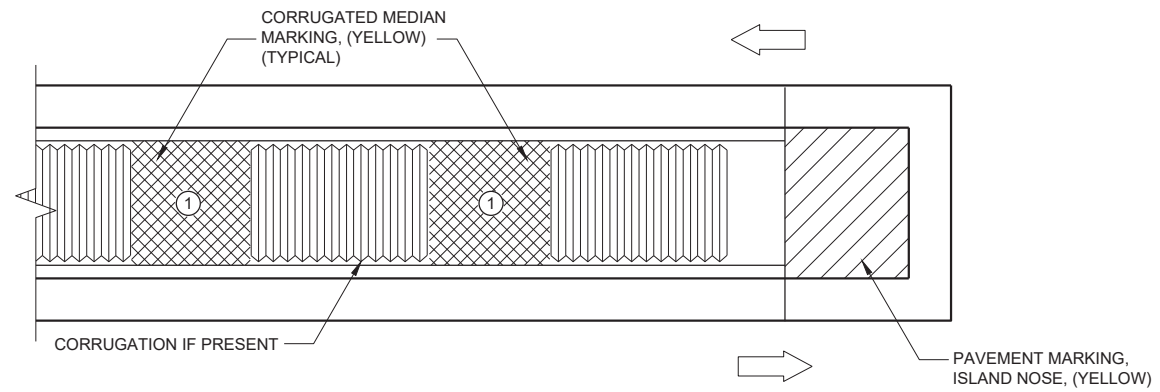
SDD 15C18 - 05a

**MEDIAN ISLAND
PAVEMENT MARKINGS**

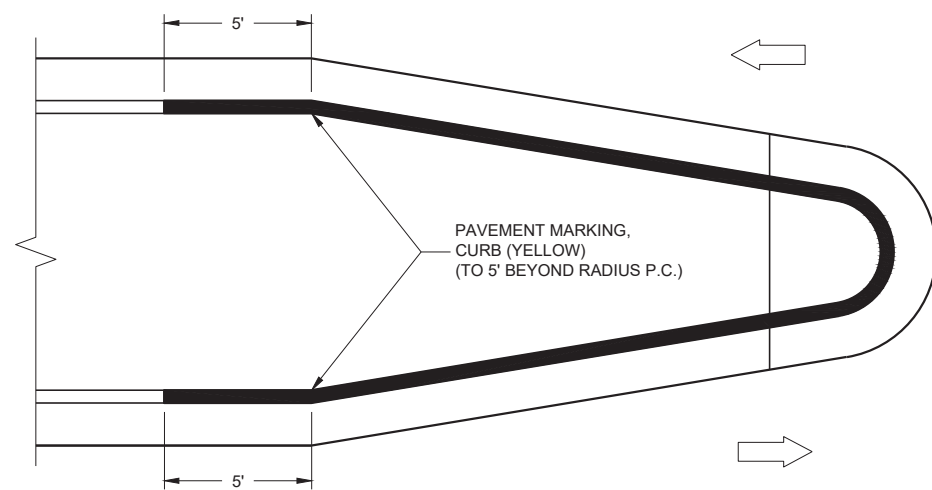
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 /S/ Matthew R. Rauch
DATE STATE SIGNING AND MAP ENGINEER 141

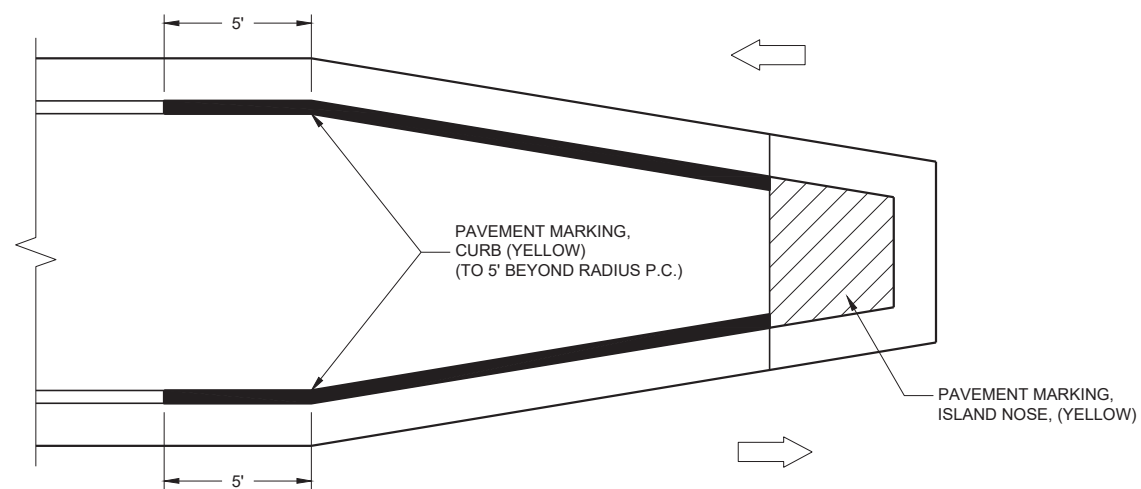
FHWA



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE







MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

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

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

6

6

SDD 15C18 - 05b

SDD 15C18 - 05b

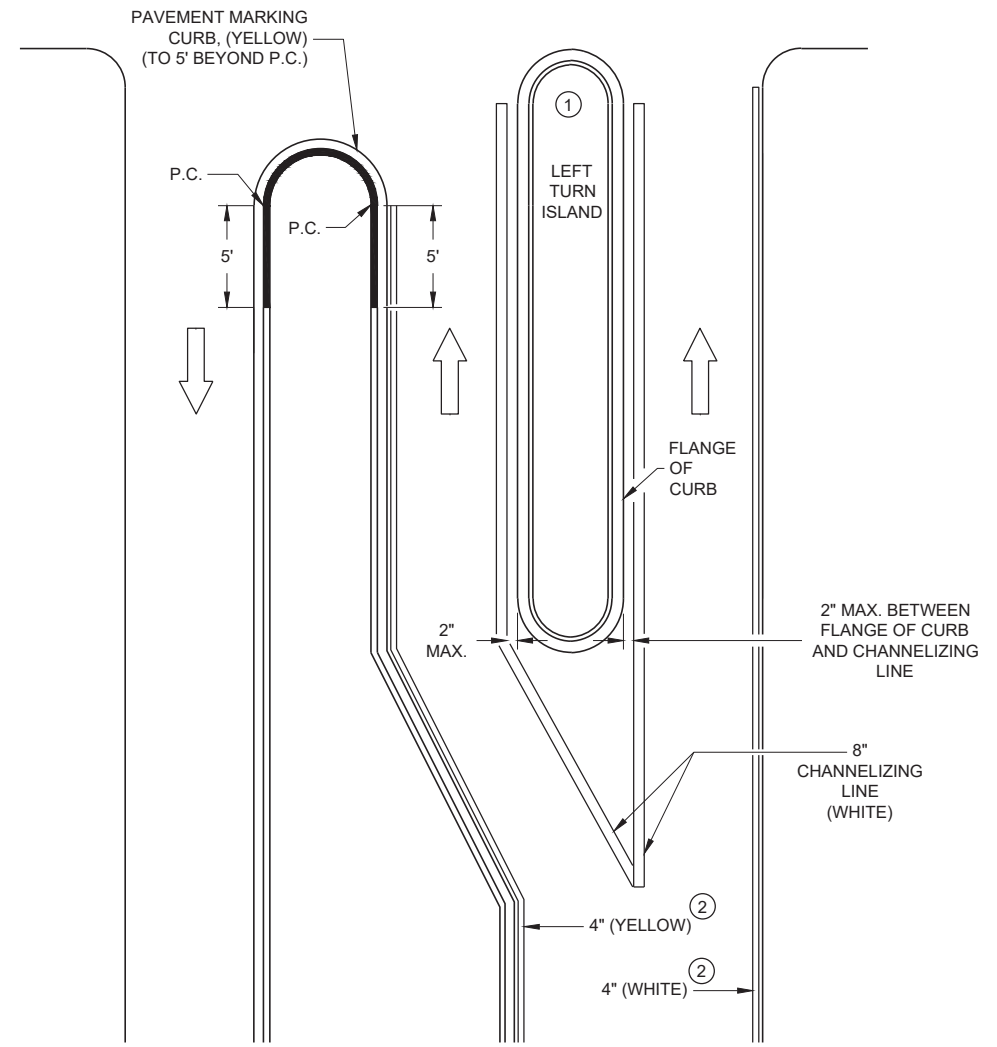
PAVEMENT MARKINGS, MEDIAN ISLAND NOSE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED February 2021 DATE	/S/ Matthew R. Rauch STATE SIGNING AND MAP 142 ENGINEER
<small>FHWA</small>	

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

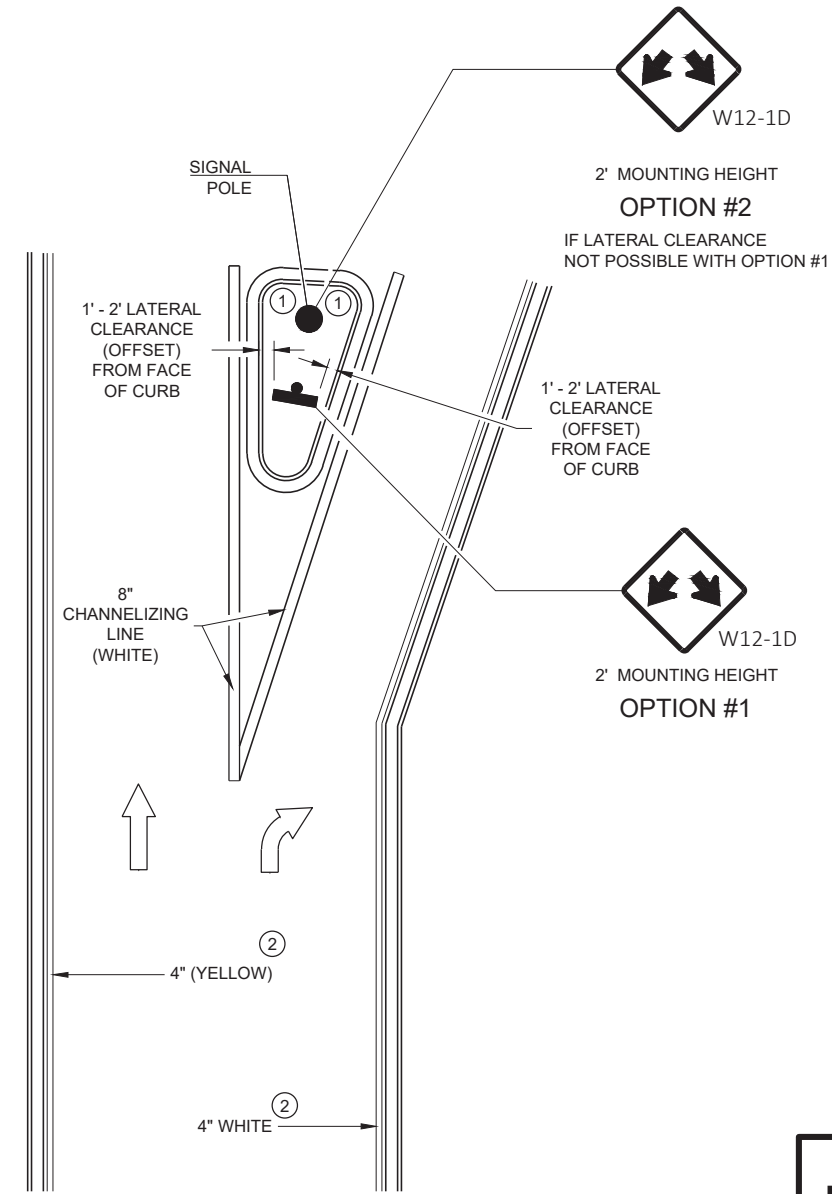
GENERAL NOTES

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

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



LEFT TURN & MEDIAN ISLAND



RIGHT TURN ISLAND

6

6

SDD 15C18 - 05C

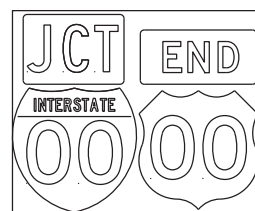
SDD 15C18 - 05C

MEDIAN PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED February 2021 DATE	/S/ Matthew R. Rauch STATE SIGNING AND MAF 143 ENGINEER
FHWA	

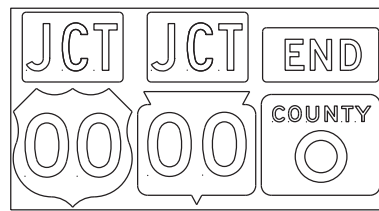
TYPICAL ASSEMBLIES



J1-1



J1-2



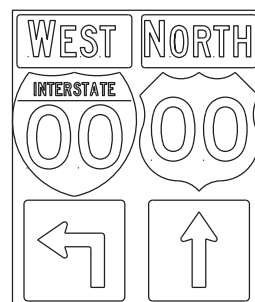
J1-3



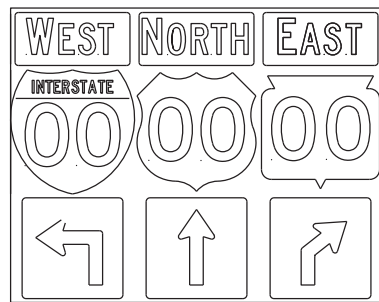
JR1-1



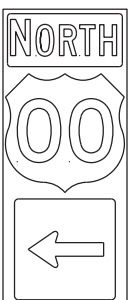
J2-1



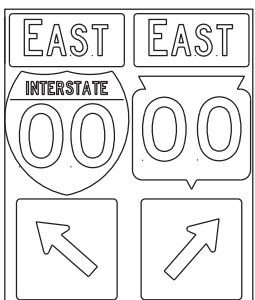
J2-2



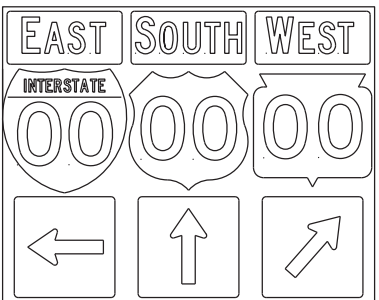
J2-3



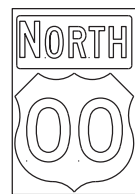
J3-1



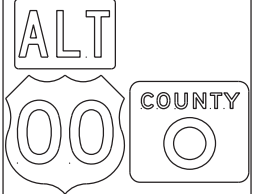
J3-2



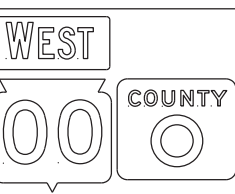
J3-3



J4-1



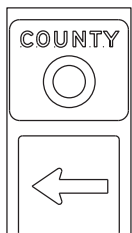
J4-2



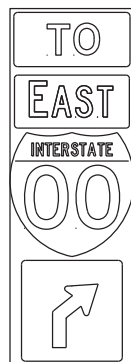
J4-2



J12-1



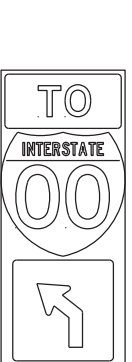
J13-1



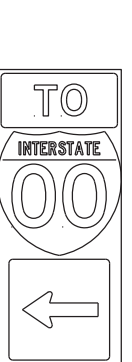
J32-1



J33-1



J22-1



J23-1



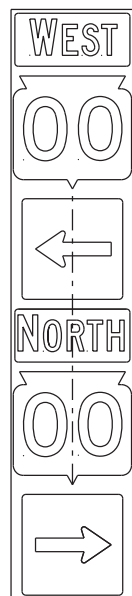
JR13-1



JR23-1

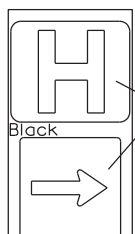


JR99-1



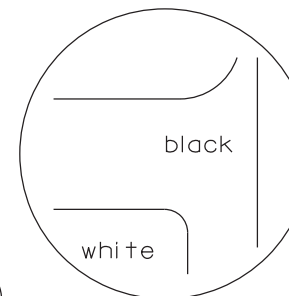
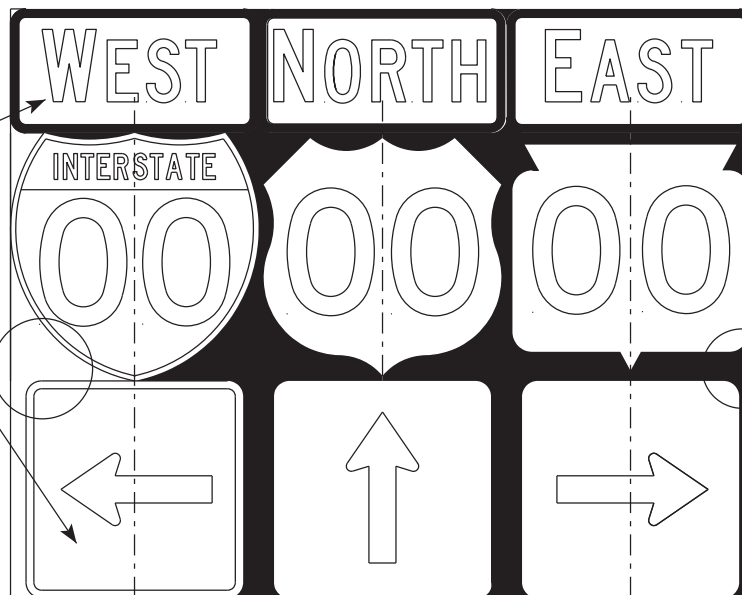
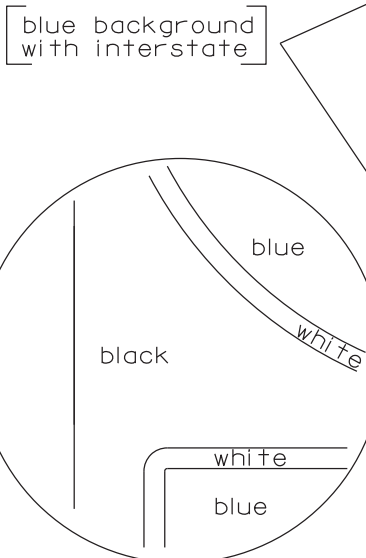
JV

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



JH-1

Blue Background



black background

NOTES

- Signs are Type II - Type H Reflective
- Color:
 - Background - Black Non-reflective
 - Message - see Note 5
- Message Series - See Note 5
- Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
- The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
- Certain marker heads require the component pieces to be the same color. As an example, all the components used with an MI-1 Interstate marker shall be blue.
- Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
- Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
- Route assemblies that have 36 inch shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
- All Vertical J Assemblies are given a Sign Code of JV
- For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

7

7

PROJECT NO:

FILE NAME : C:\CAEfiles\Projects\tr_stdp1ate_A21S.dgn

PLOT DATE : 18-MAR 2021 1:37

PLOT BY : mscj9h

PLOT NAME :

SHEET NO: 144

E

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

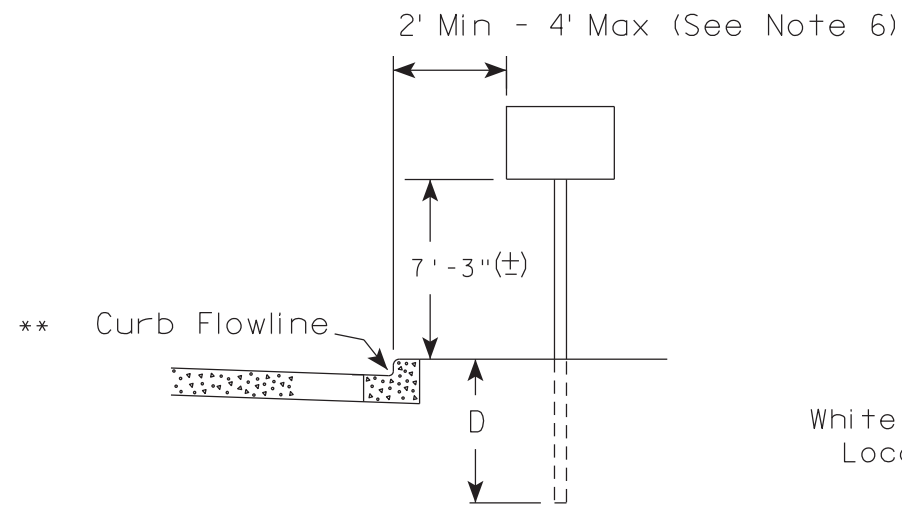
Matthew R. Rauch
for State Traffic Engineer

DATE 3/18/21

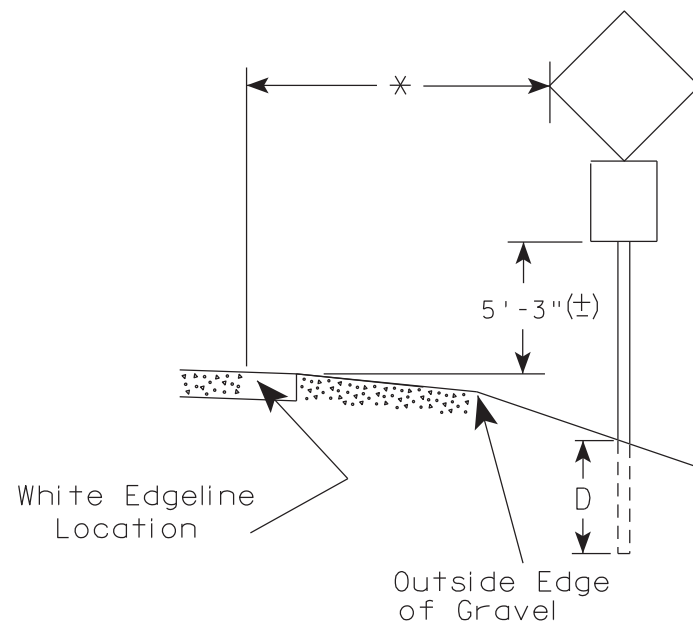
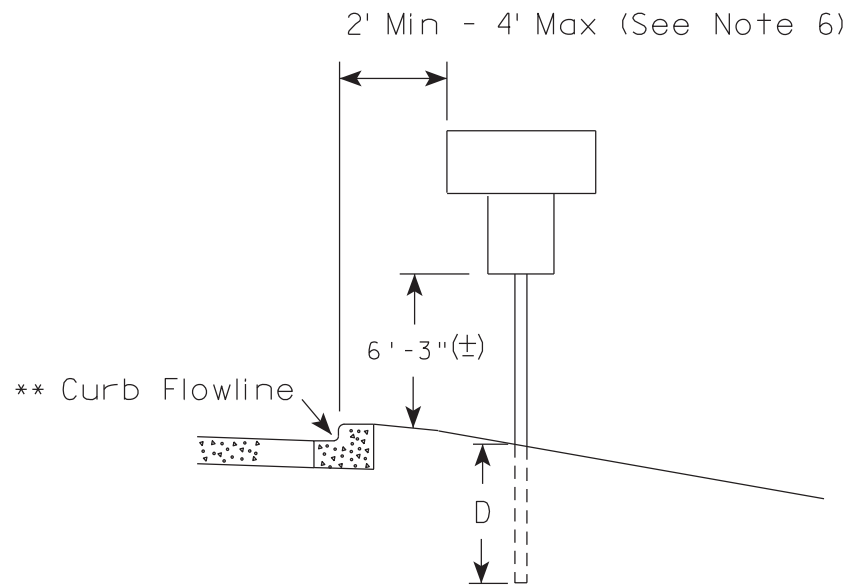
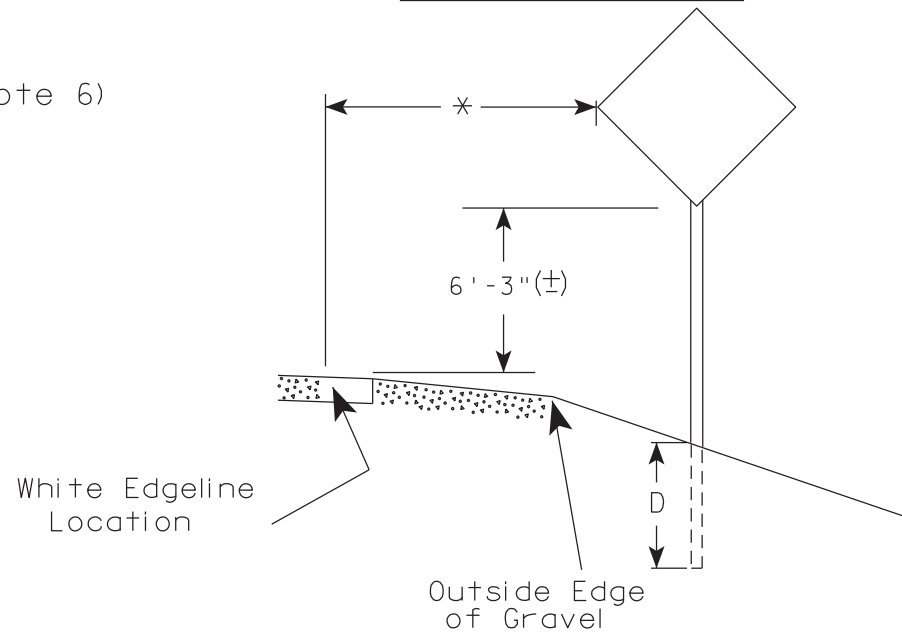
PLATE NO. A2-1S.9

WISDOT/CADDs SHEET 42

URBAN AREA



RURAL AREA (See Note 2)



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

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

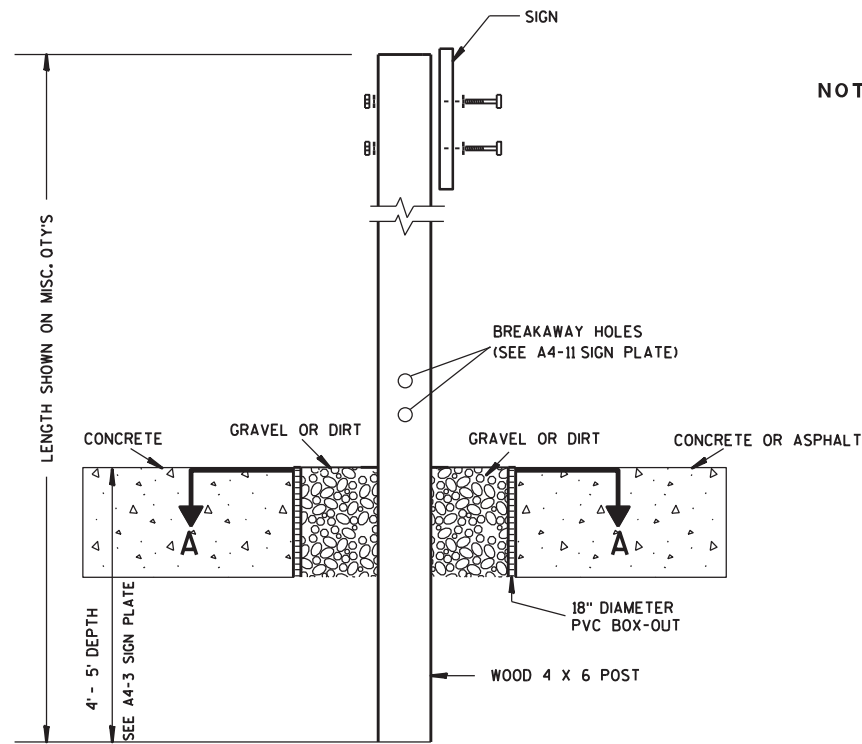
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

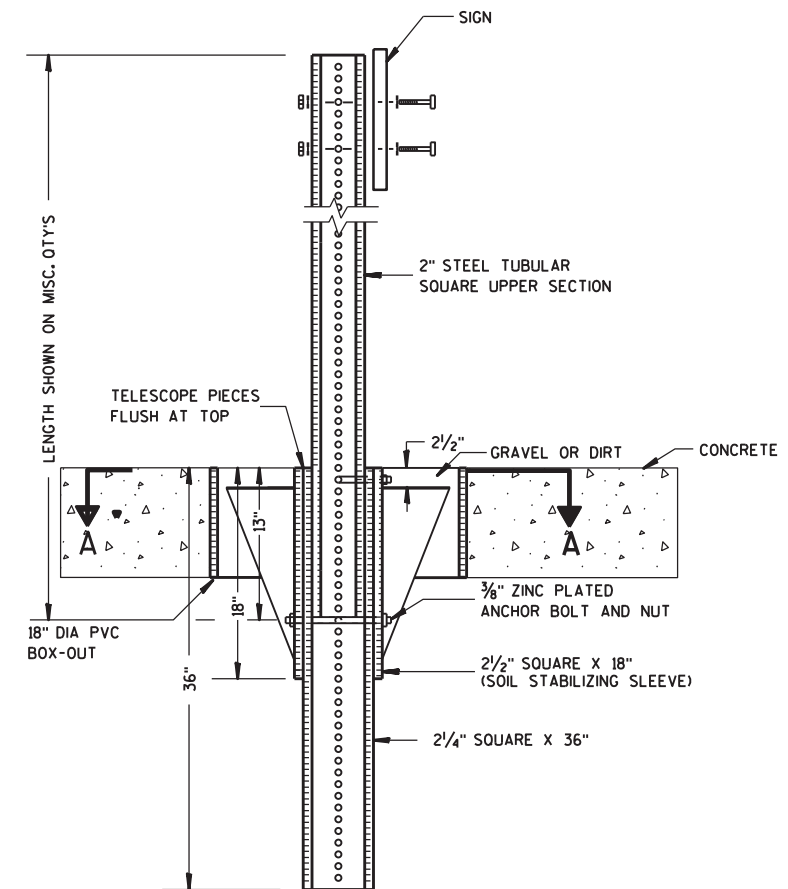
DATE 5/13/2020 PLATE NO. A4-3.22



ELEVATION VIEW

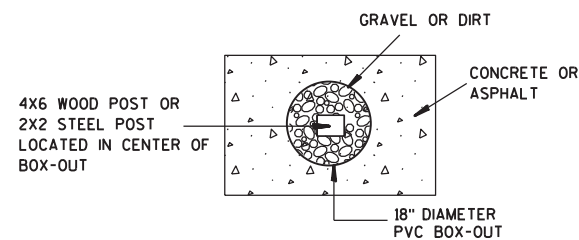
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

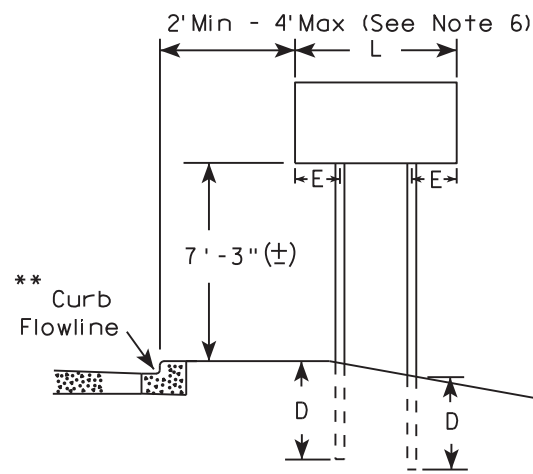
FOR NEW CONCRETE/ ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED <i>Matthew R. Rauch</i> for State Traffic Engineer	
DATE 1/27/14	PLAT 146 A4-3B.1

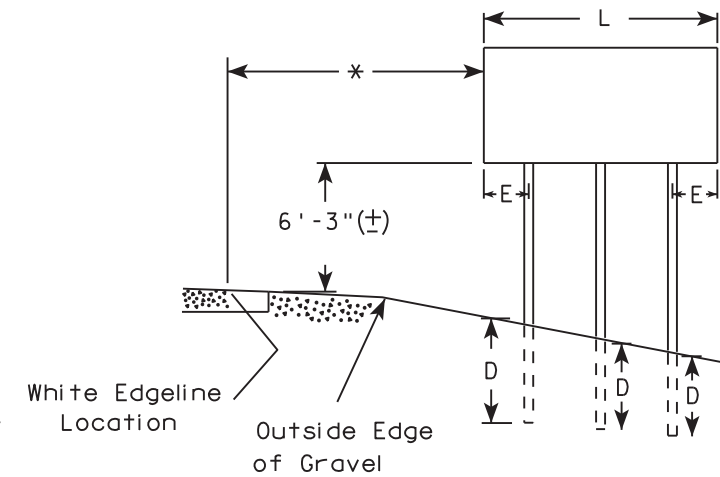
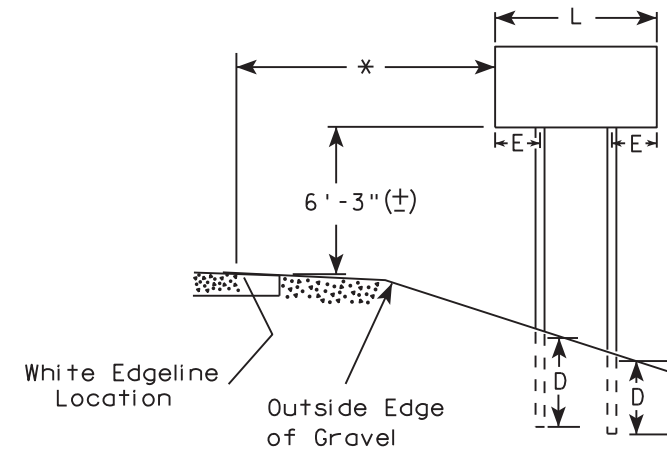
GENERAL NOTES

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

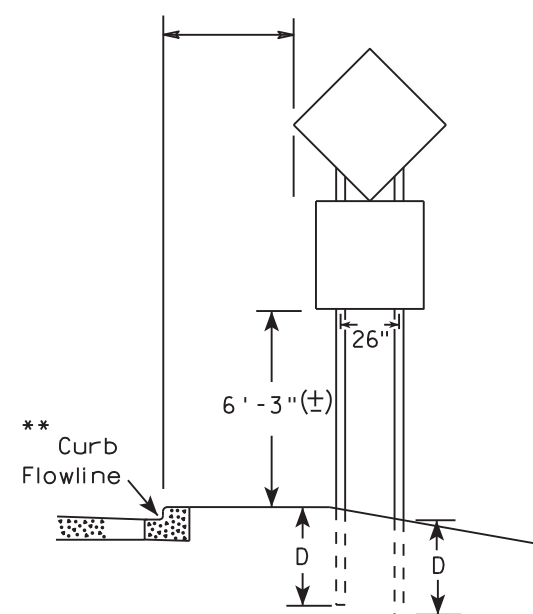
URBAN AREA



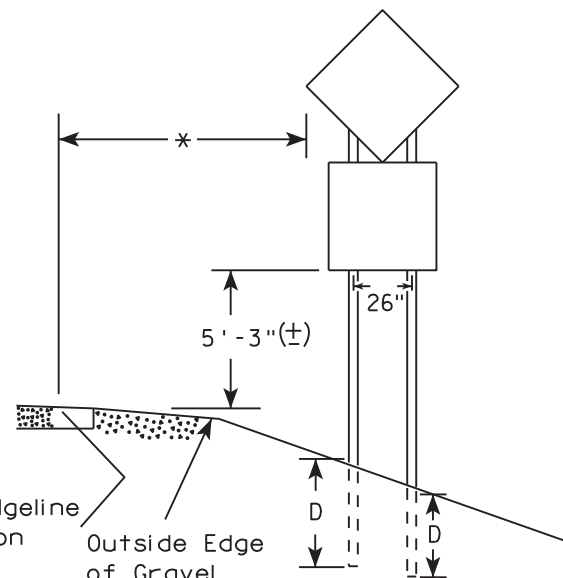
RURAL AREA (See Note 3)



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



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

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

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

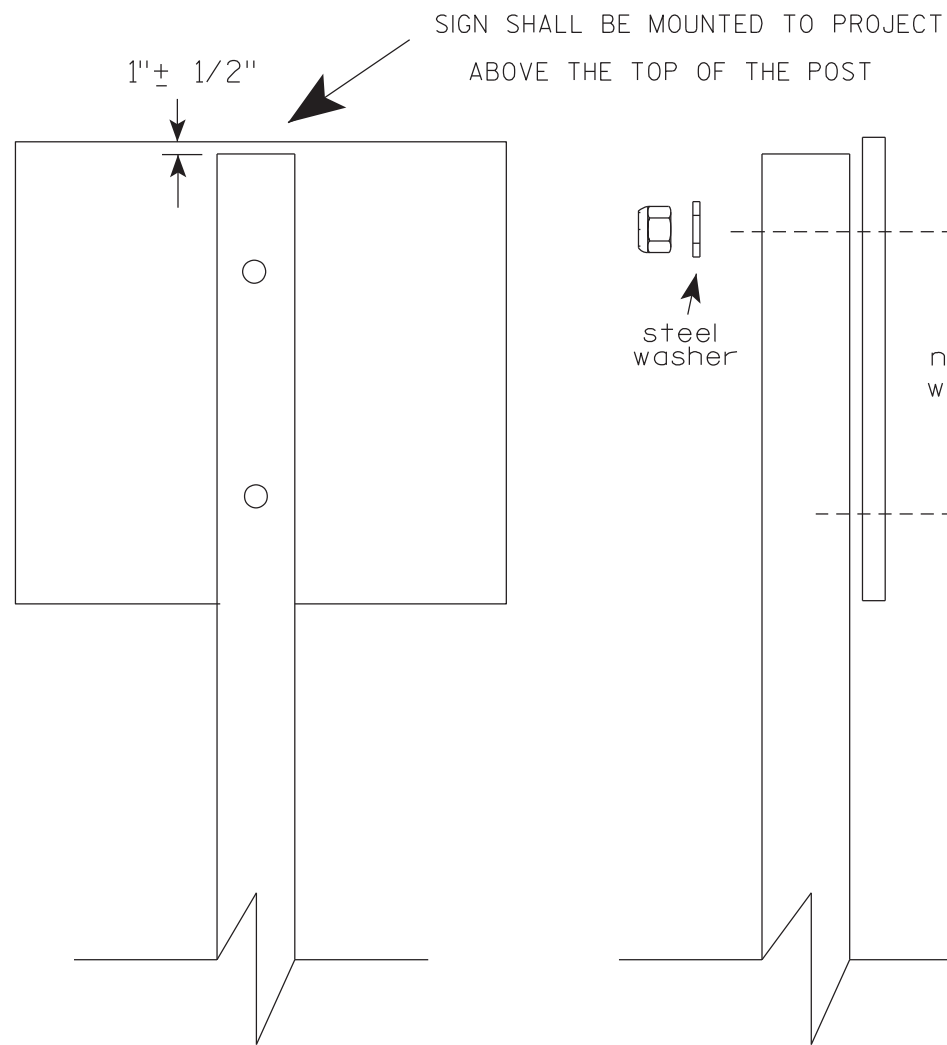
SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION
 APPROVED *Matthew R. Rauch*
 For State Traffic Engineer
 DATE 8/21/17 PLATE NO. A4-4.15



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

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

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

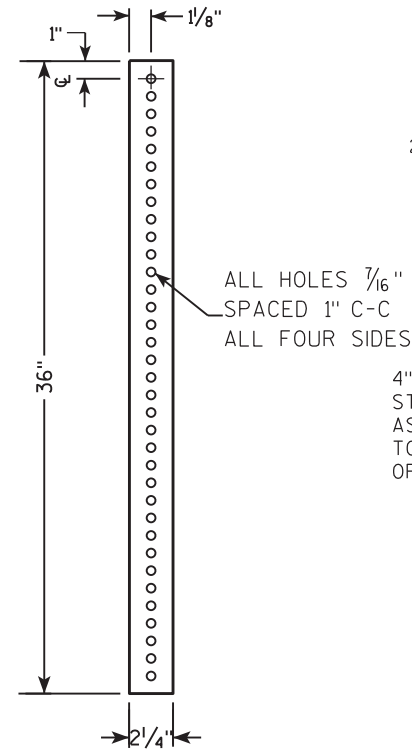
- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 6")
- LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
 - 3/8" X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - 3/8" X 3-1/4" Length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

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

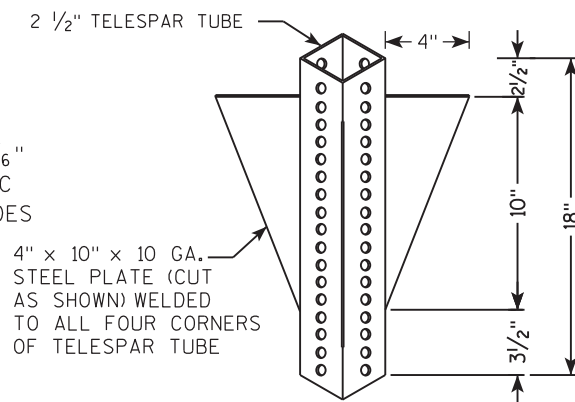
ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R Rauch</i> For State Traffic Engineer
DATE 4/1/2020	PLATE NO. A4-8.9

**TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM**

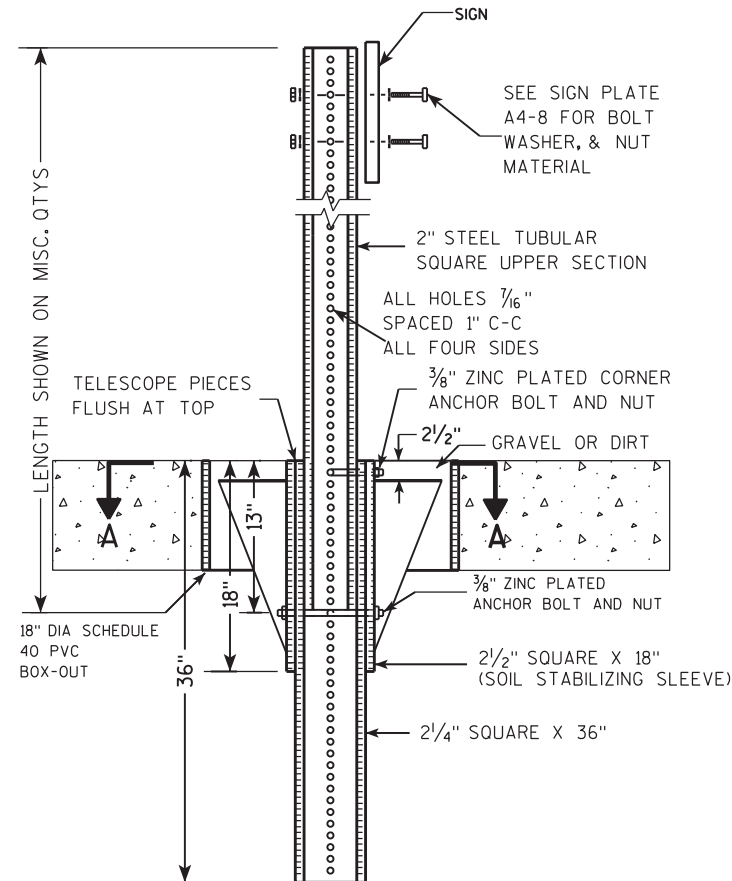
2 1/4" SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



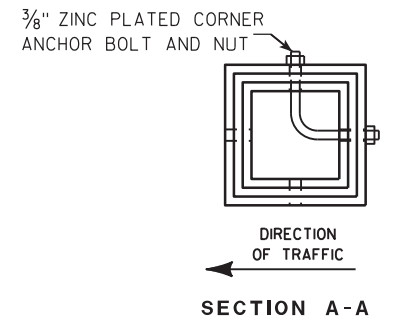
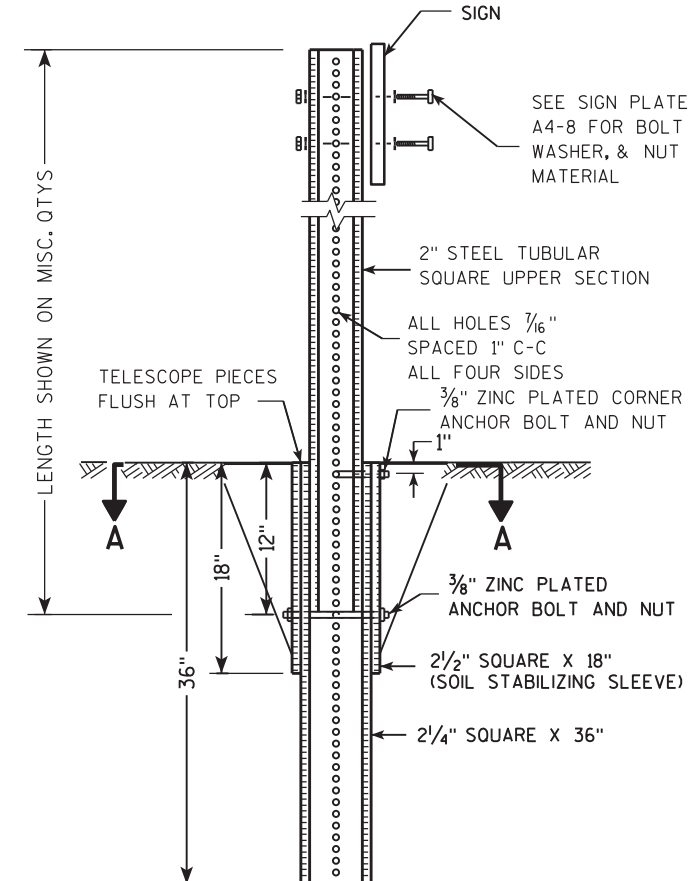
2 1/2" SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH



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



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

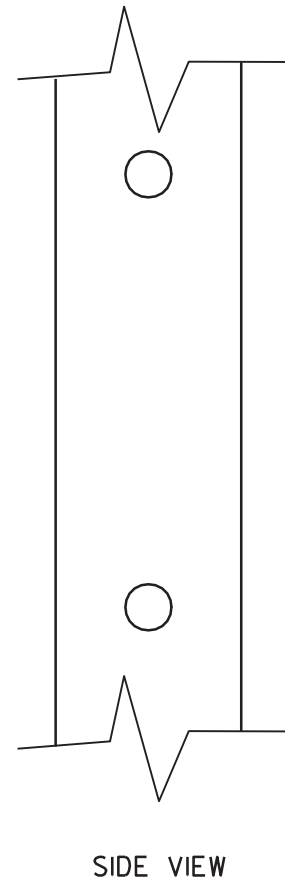
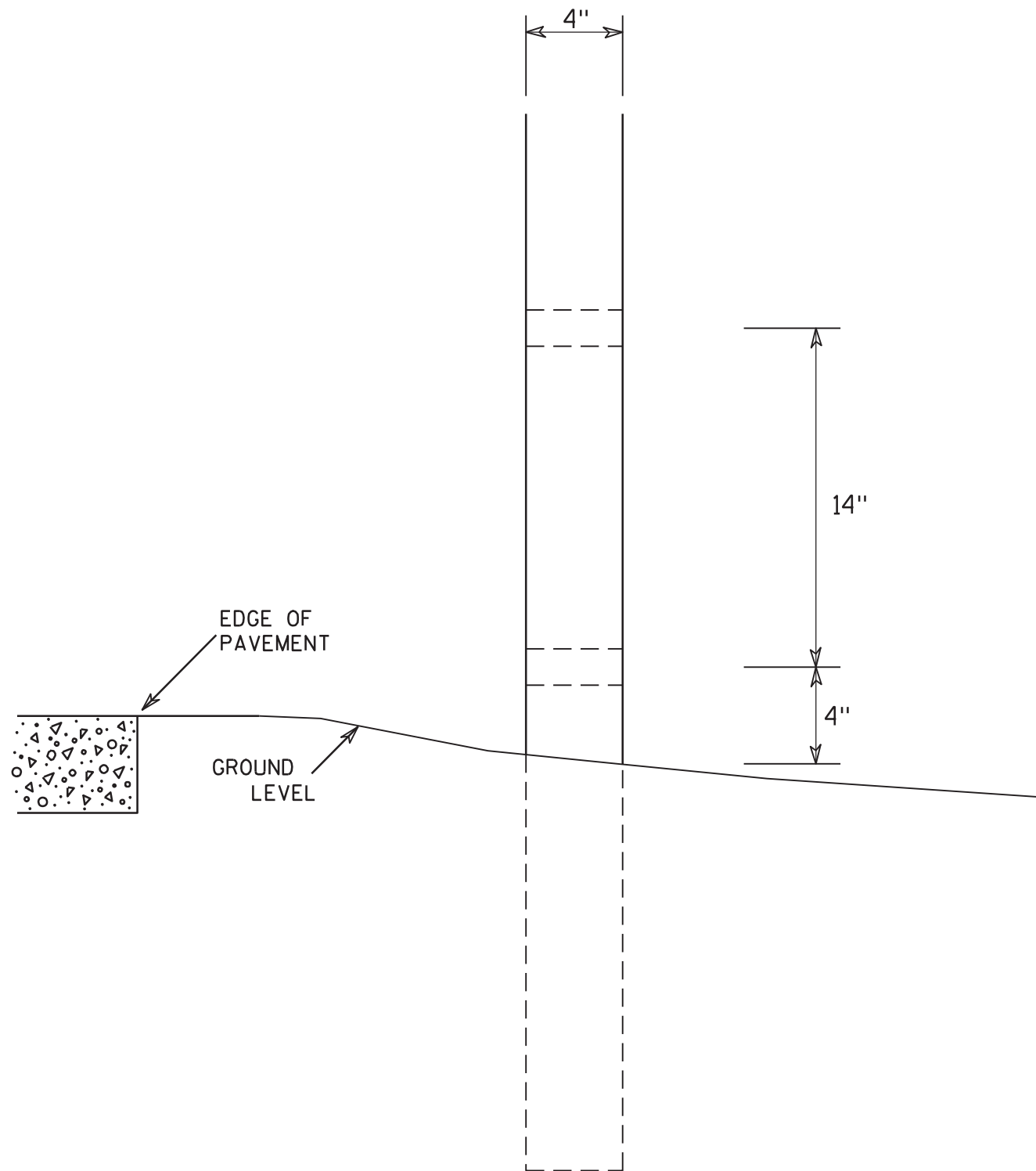
Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

**TUBULAR STEEL
SIGN POST
A4-9**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/05/15 PLAT 149 14-9.9



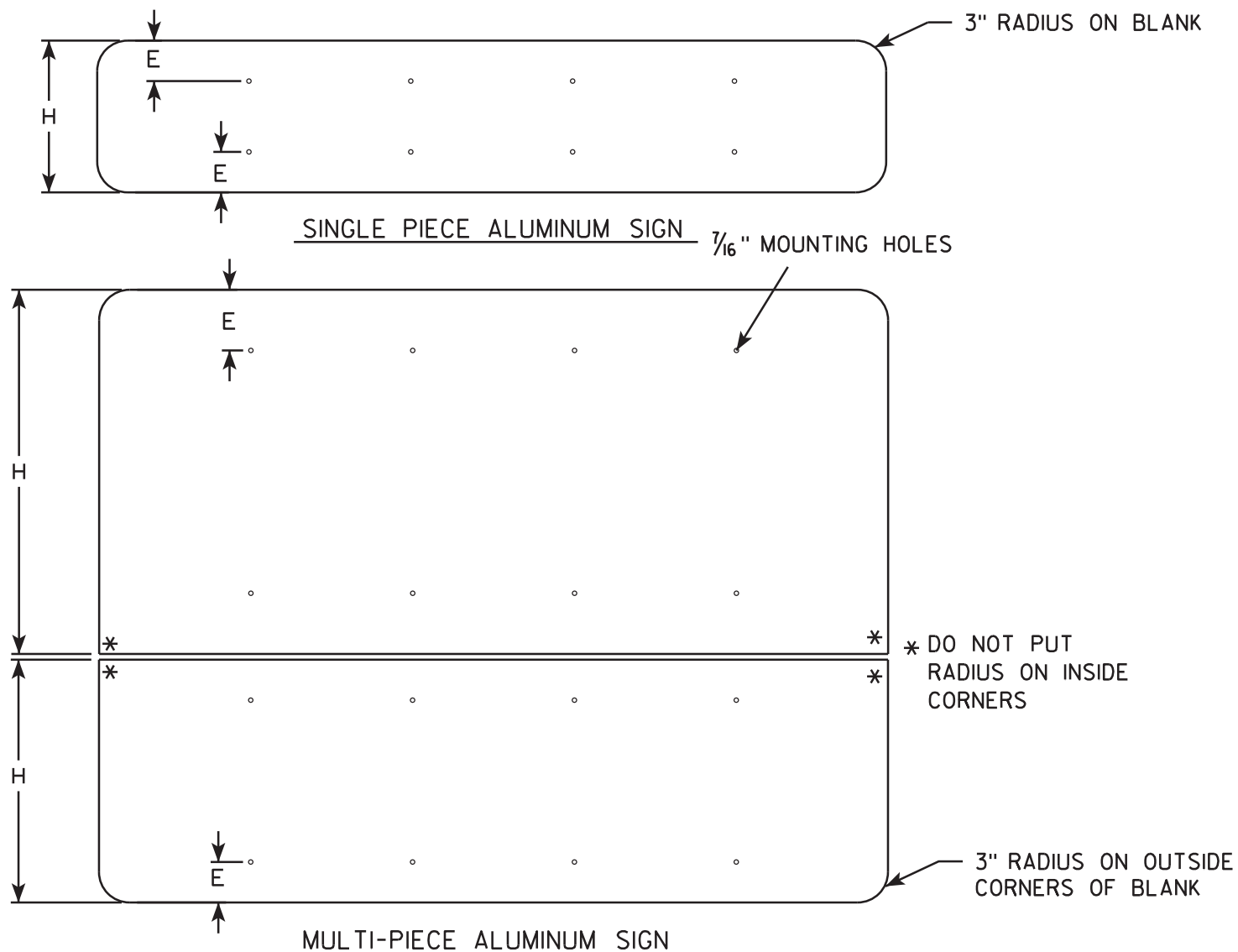
GENERAL NOTES

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

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4 X 6 WOOD POST MODIFICATIONS	
<i>WISCONSIN DEPT OF TRANSPORTATION</i>	
APPROVED	<i>Chester J Spang</i> for State Traffic Engineer
DATE 3/27/97	PLATE NO. A4-11.2



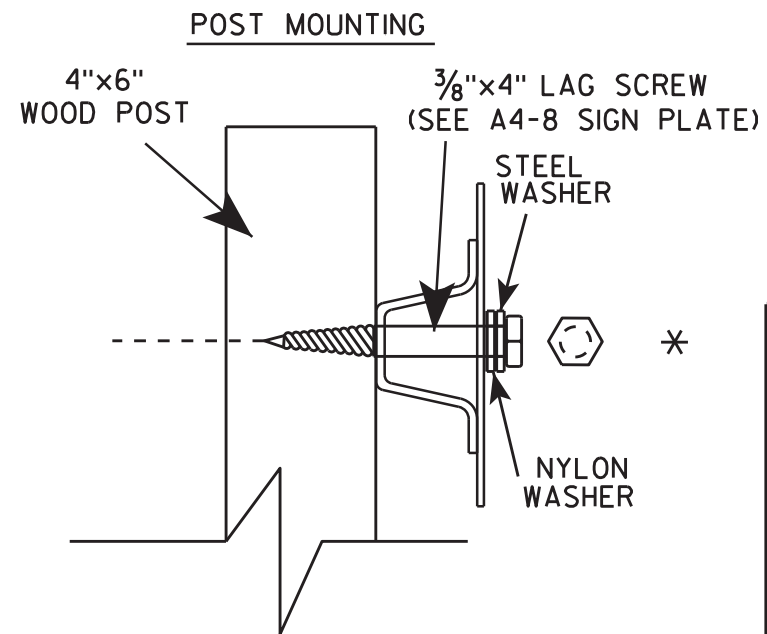
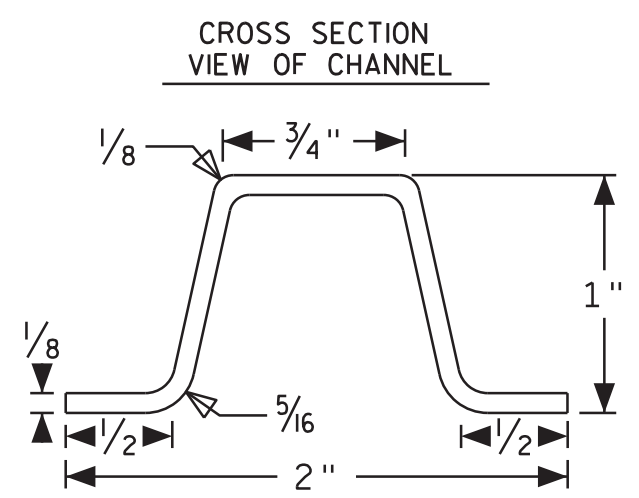
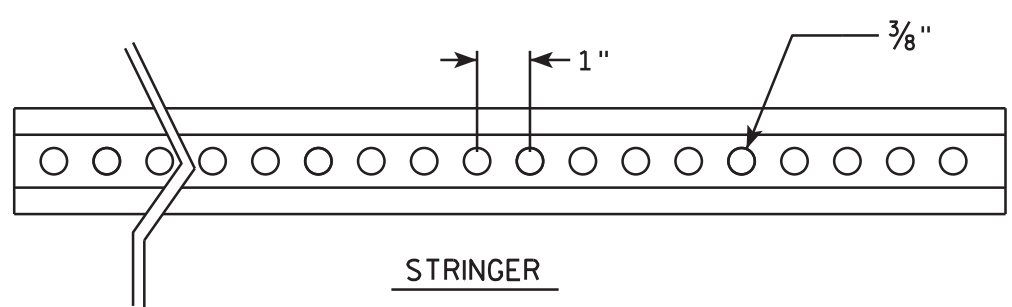
GENERAL NOTES

- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE $\frac{7}{16}$ " DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES
78"	72"	2	16"	15" 31" 47" 63"
84"	72"	2	17"	16 $\frac{1}{2}$ " 33 $\frac{1}{2}$ " 50 $\frac{1}{2}$ " 67 $\frac{1}{2}$ "
90"	72"	2	18"	18" 36" 54" 72"
96"	90"	2	19"	19 $\frac{1}{2}$ " 38 $\frac{1}{2}$ " 57 $\frac{1}{2}$ " 76 $\frac{1}{2}$ "
102"	90"	2	20"	21" 41" 61" 81"
108"	90"	2	21"	22 $\frac{1}{2}$ " 43 $\frac{1}{2}$ " 64 $\frac{1}{2}$ " 85 $\frac{1}{2}$ "
114"	108"	3	15"	12" 27" 42" 57" 72" 87" 102"
120"	108"	3	16"	12" 28" 44" 60" 76" 92" 108"
126"	108"	3	17"	12" 29" 46" 63" 80" 97" 114"
132"	126"	3	18"	12" 30" 48" 66" 84" 102" 120"
138"	126"	3	19"	12" 31" 50" 69" 88" 107" 126"
144"	126"	3	20"	12" 32" 52" 72" 92" 112" 132"

* DO NOT PUT RADIUS ON INSIDE CORNERS

7



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SIGN STRINGER MOUNTING REQUIREMENTS

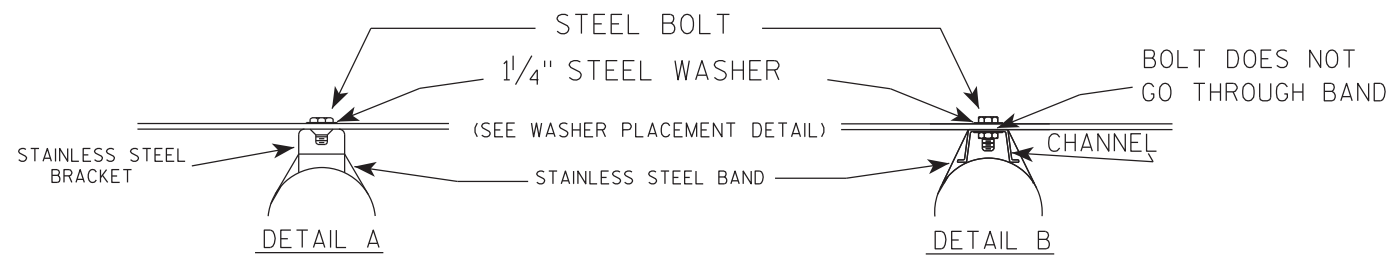
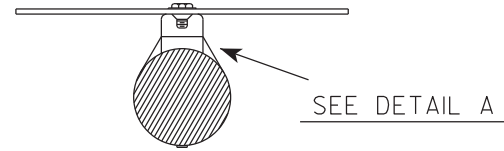
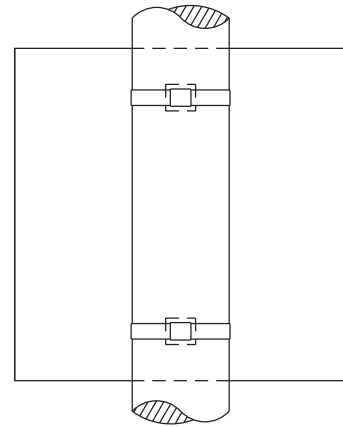
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

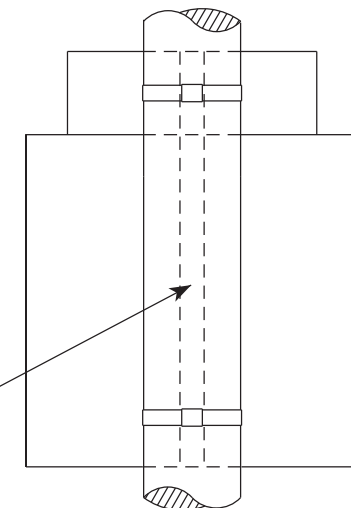
DATE 4/26/16 PLATE No A4-18.1
151

BANDING

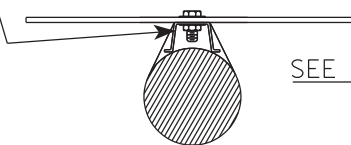
SINGLE SIGN



"J" ASSEMBLY

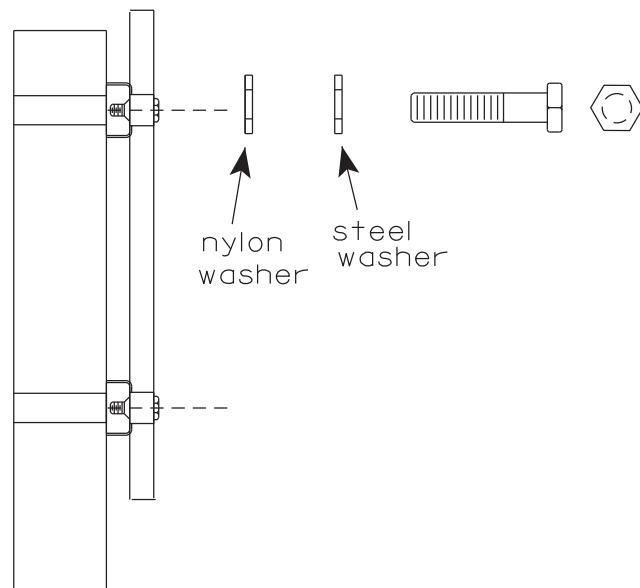


CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



- 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 $\frac{3}{4}$ " 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

WASHER PLACEMENT



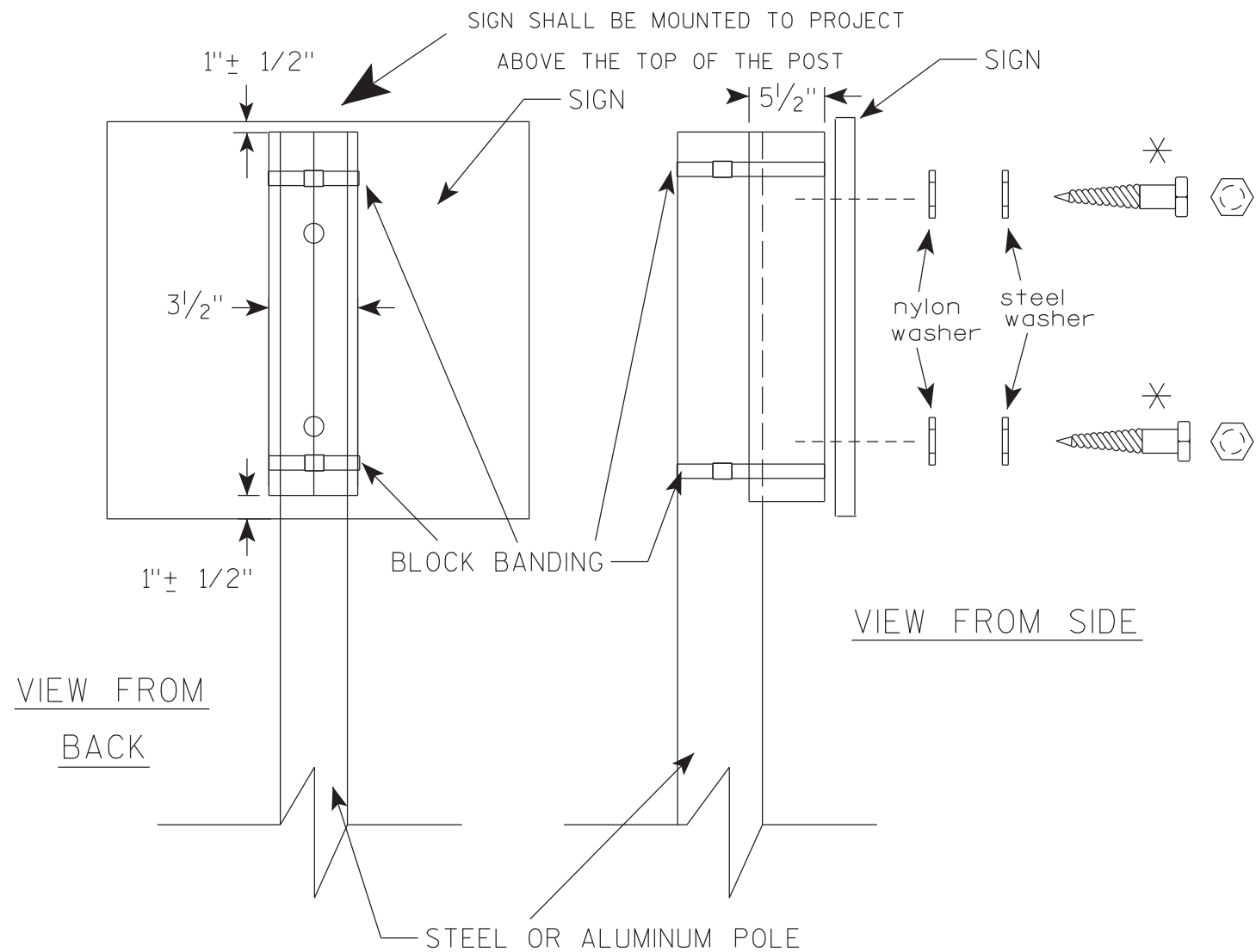
WASHERS (ALL POSTS) -
 1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
 1-1/4" O.D. X 3/8" I.D. X .080 NYLON
 FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

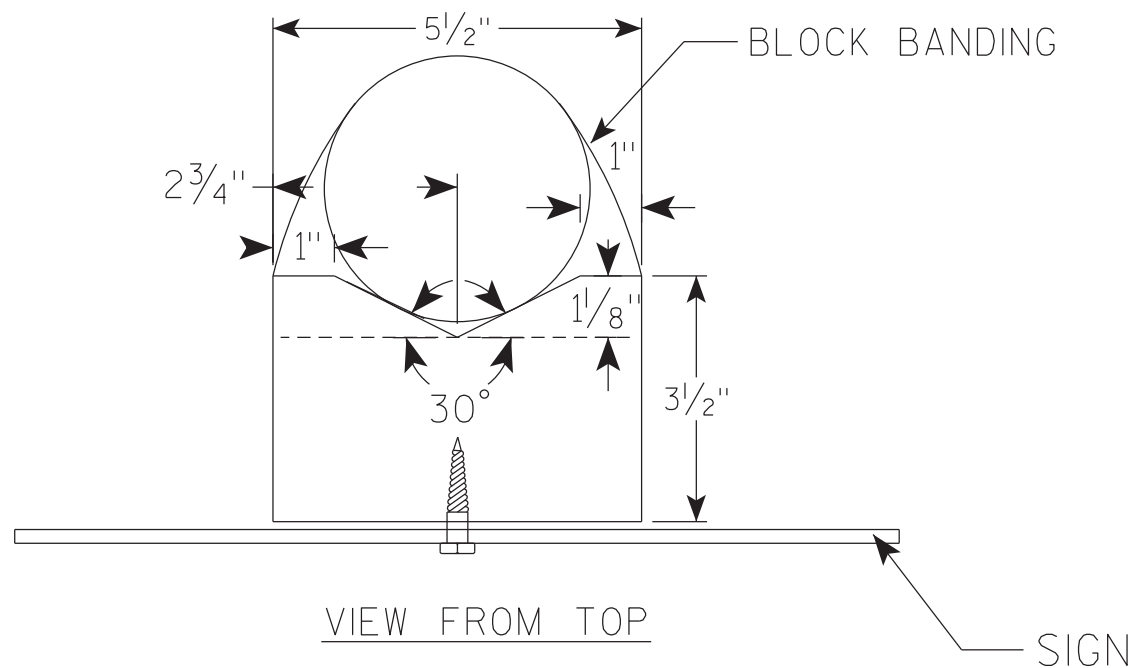
DATE 6/10/19 PLATE NO. A5-9.4



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, 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 1/4" O.D. X 3/8" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1/4" O.D. X 3/8" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

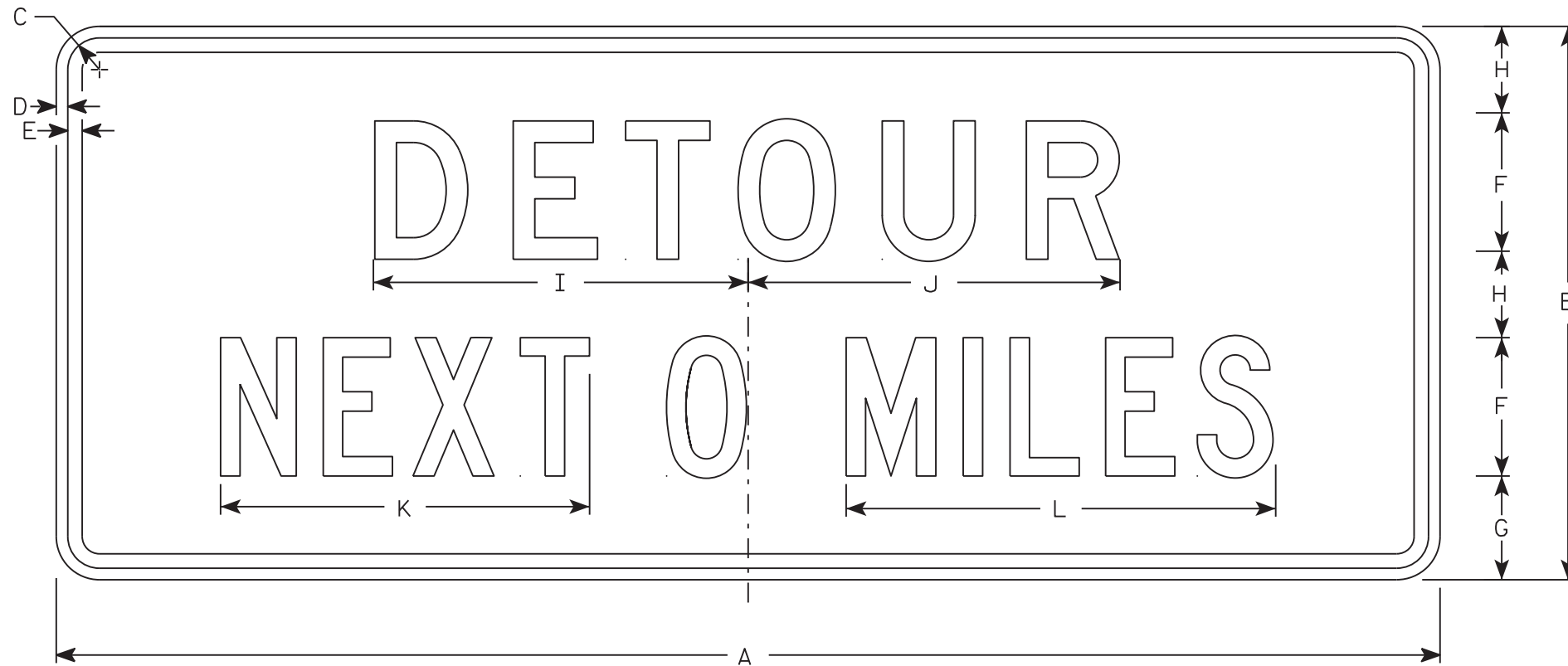
* LAG BOLTS SHALL BE 3/8" X 2 1/2"



BLOCK BANDING DETAIL (V-BLOCK OPTION)	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R Rauch</i> For State Traffic Engineer
DATE 6/10/19	PLATE NO. A5-10.2

NOTES

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



G20-51

7

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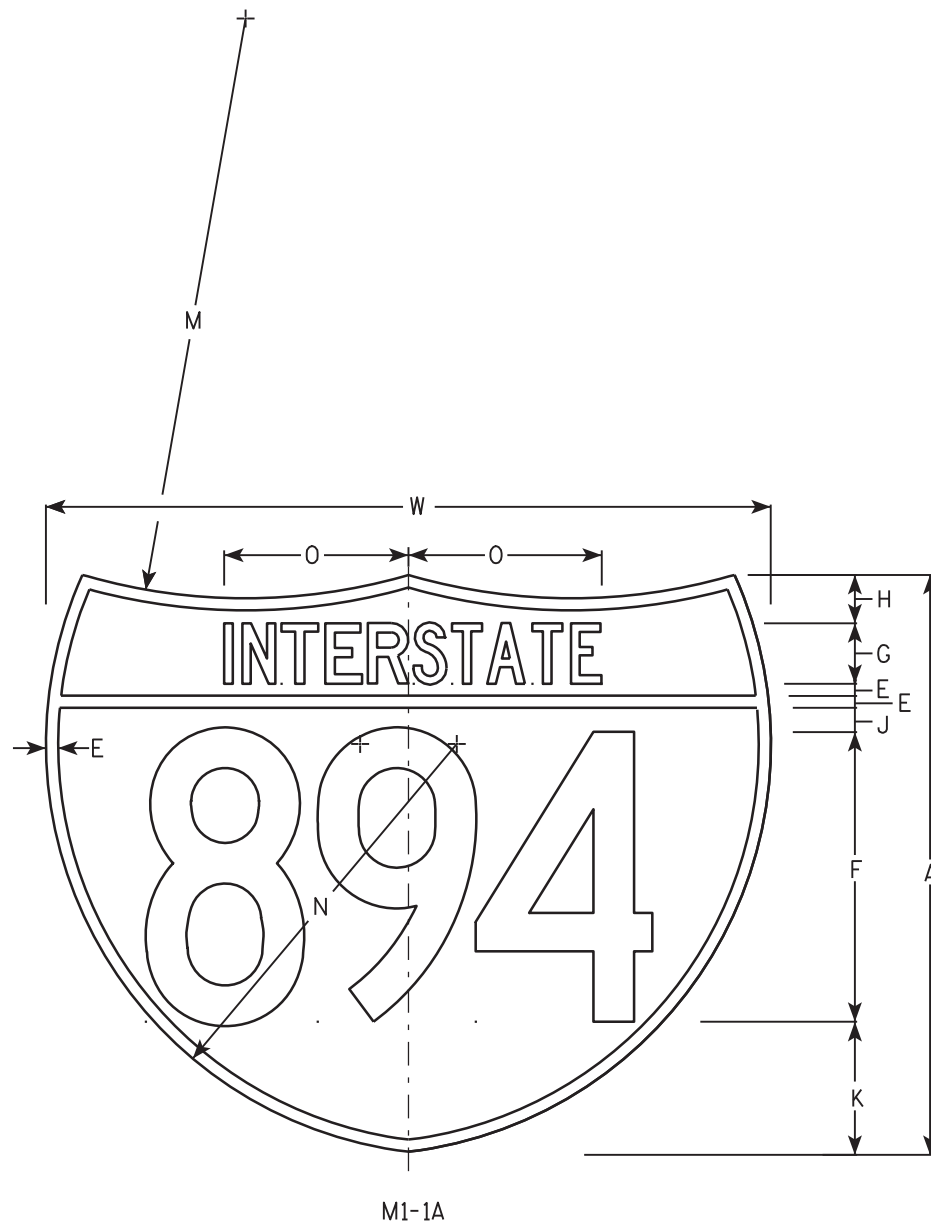
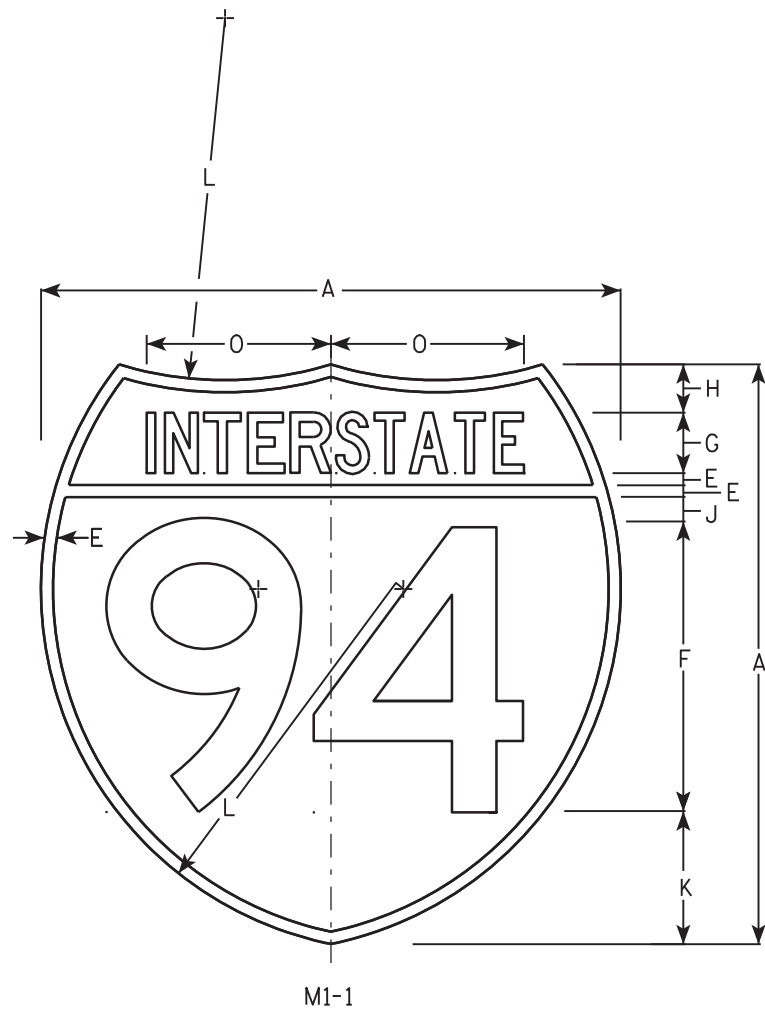
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	60	24	1 3/8	1/2	5/8	6	4 1/2	3 3/4	16 1/4	16 1/8	16	18 5/8															10
3																											
4	60	24	1 3/8	1/2	5/8	6	4 1/2	3 3/4	16 1/4	16 1/8	16	18 5/8															10
5																											

STANDARD SIGN
G20-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R Rauch*
for State Traffic Engineer

DATE 3/14/17 PLATE NO. G20-51.2



NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Top Red - Bottom Blue (See Note 6)
Message - White - See Note 6
3. Message Series - See note 5
4. Substitute appropriate numerals & adjust spacing as per plate A10-1.
5. M1-1 - Numerals - D
Interstate - C
M1-1A - All copy - C
6. Permanent Signs
Message - Type H Reflective
Detour or other temporary signs
Background - Reflective
Message - Reflective

7

Metric equivalent for these signs are:

SIZE	M1-1	SIZE	M1-1A
1			
2	600 mm X 600 mm	2	600 mm X 750 mm
3	900 mm X 900 mm	3	900 mm X 1125 mm
4	900 mm X 900 mm	4	900 mm X 1125 mm
5	900 mm X 900 mm	5	900 mm X 1125 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	M1-1 Area sq. ft.	M1-1A Area sq. ft.	M1-1 Area m ²	M1-1A Area m ²
1																													
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8									30		3.13	3.91	.36	.46
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4									45		7.03	8.79	.81	1.05
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4									45		7.03	8.79	.81	1.05
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4									45		7.03	8.79	.81	1.05

INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

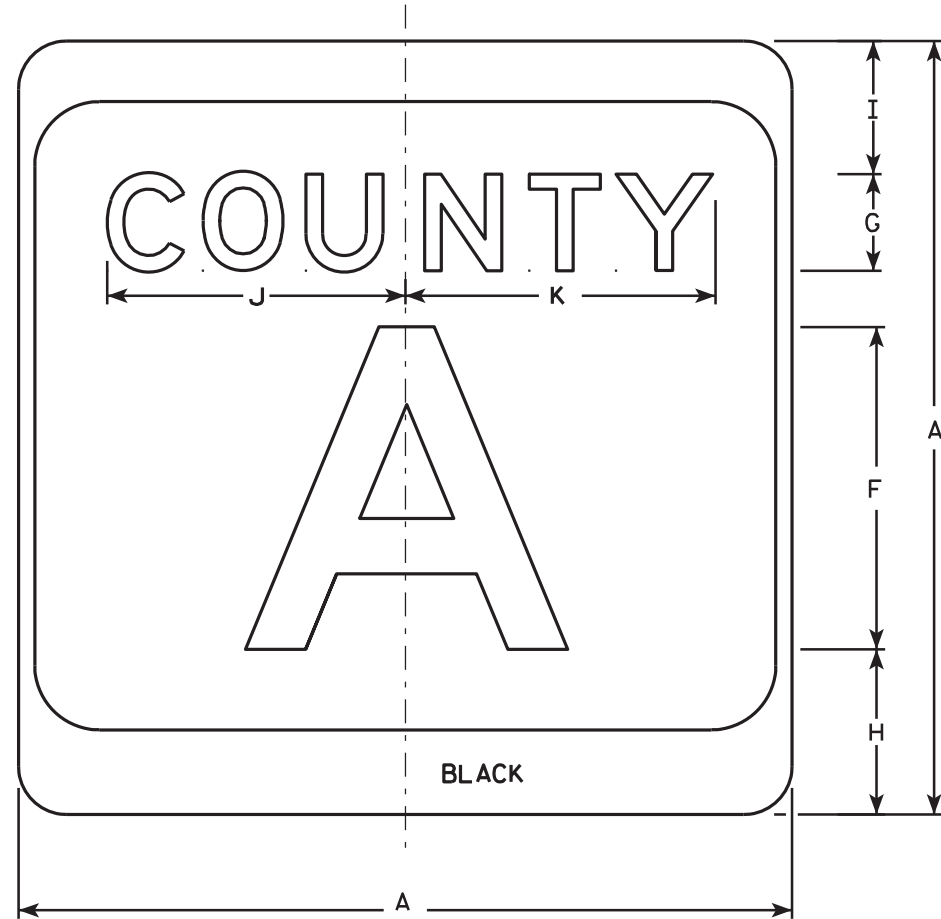
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R Rauch*
for State Traffic Engineer

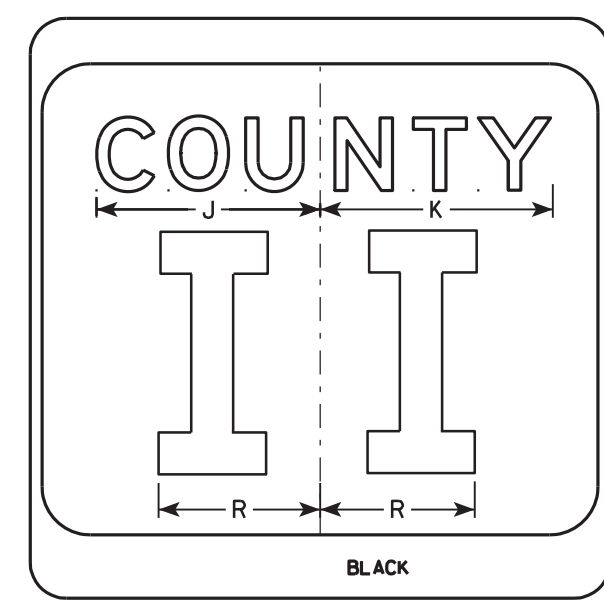
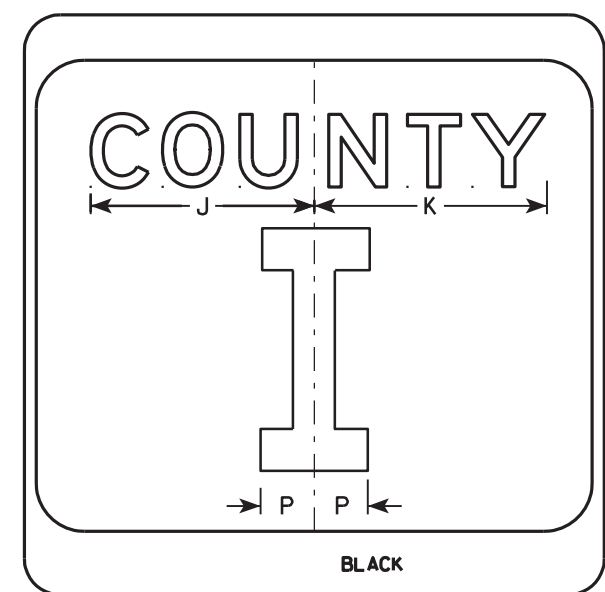
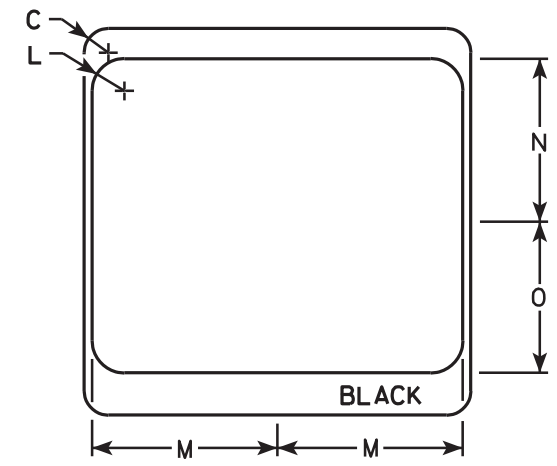
DATE 08/23/05 PLATE NO. M1-1.8

NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White & Black - See Note 7
Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
Message Series D for 2 letters unless message is too big then Series C.
Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective



M1-5A



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																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

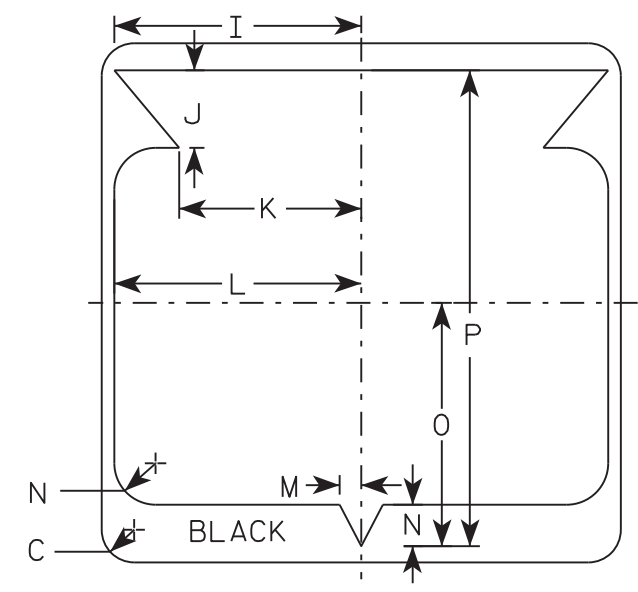
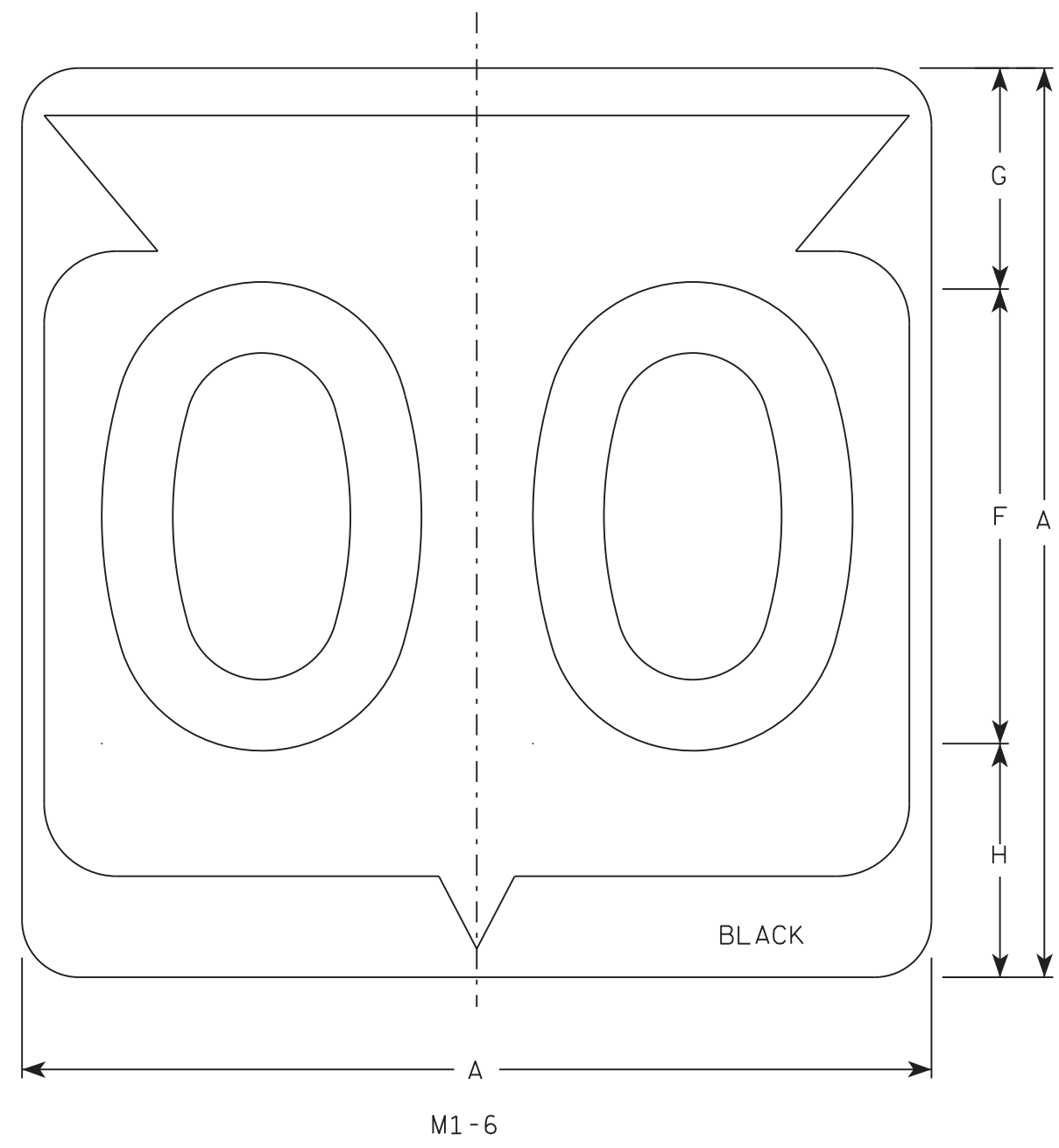
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

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

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: 156 **E**

NOTES

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



7

7

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

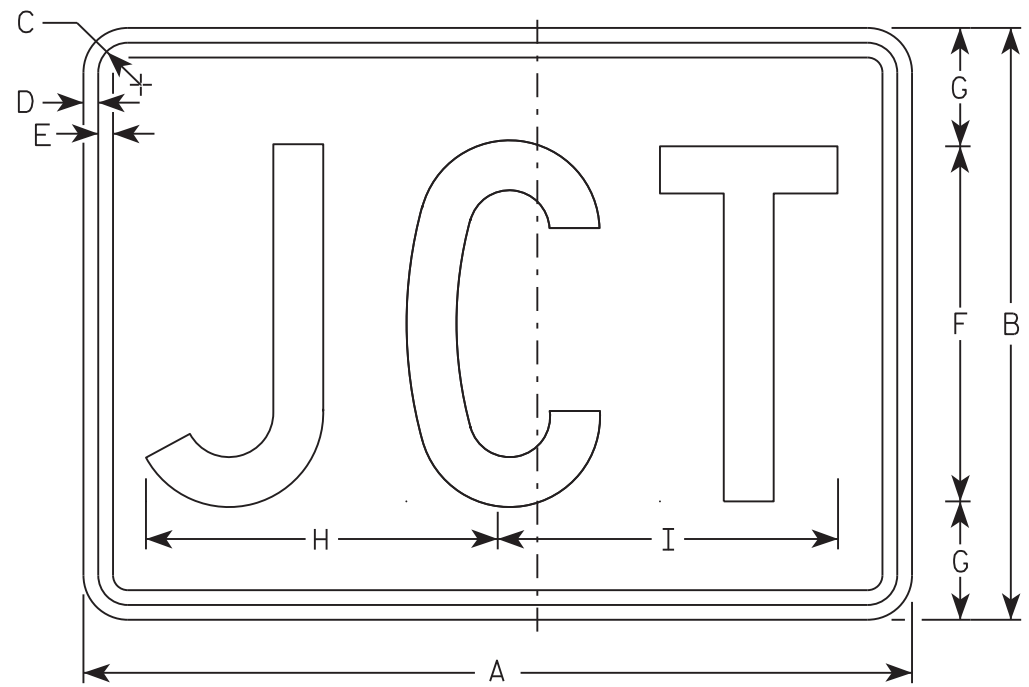
STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

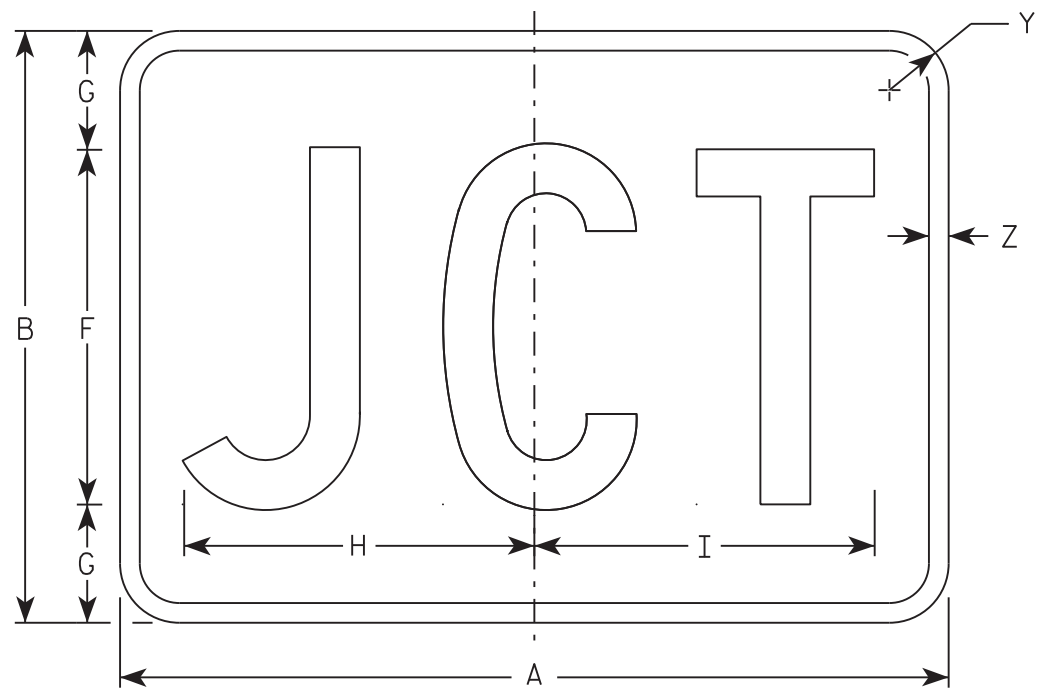
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: 157 **E**



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H
2. Color:
Background - See note 5
Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
Message - Black
MB2-1 Background - Blue
Message - White
MK2-1 Background - Green
Message - White
MM2-1 Background - White
Message - Green
MN2-1 Background - Brown
Message - White
MP2-1 Background - White
Message - Blue
MR2-1 Background - Brown
Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

STANDARD SIGN
M2-1

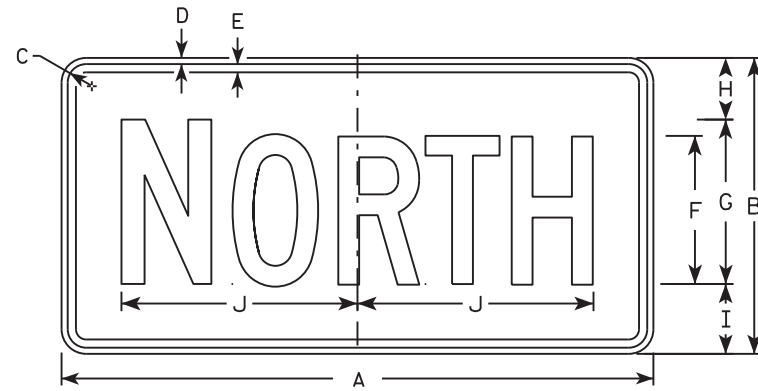
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

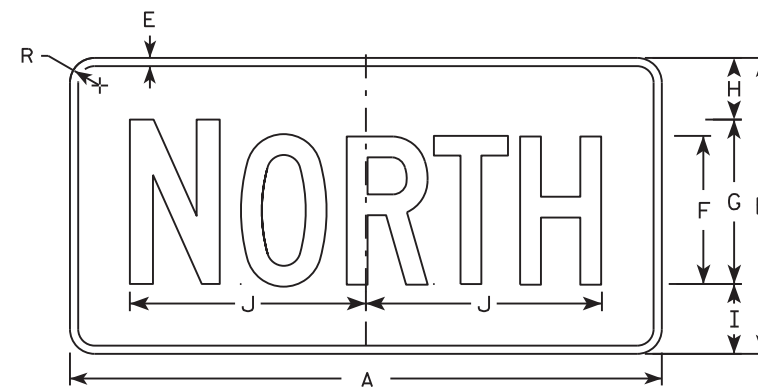
DATE 10/15/15 PLATE 158 '2-1.12

NOTES

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



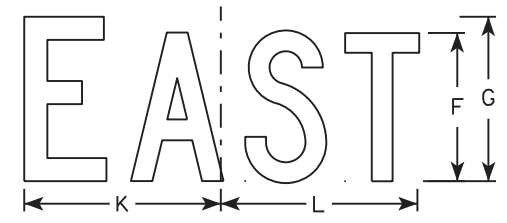
M3-1
MM3-1
MP3-1



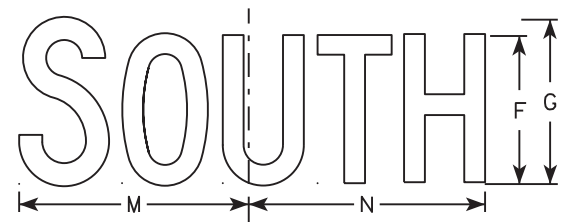
MB3-1
MK3-1
MN3-1



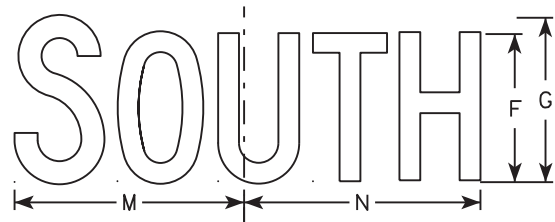
M3-2
MM3-2
MP3-2



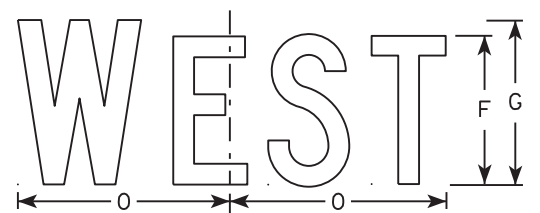
MB3-2
MK3-2
MN3-2



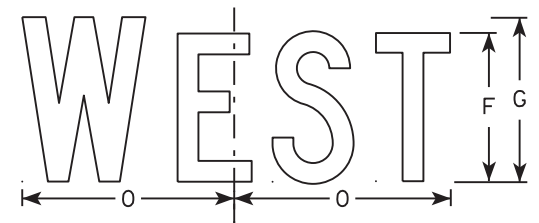
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

7

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

STANDARD SIGNS
M3-1 thru M3-4
SERIES

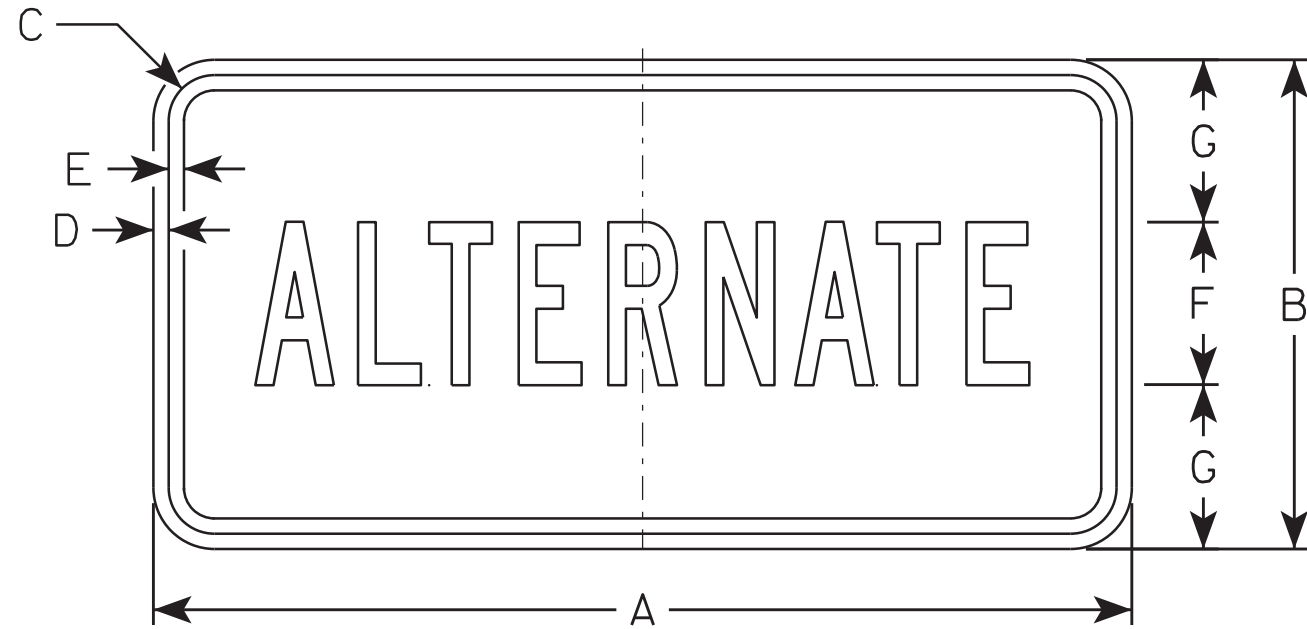
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 10/15/15 PLAT NO. 159 M3-1.14

NOTES

1. Sign is Type II - Type H except as Shown
2. Color:
 - Background - See Note 5
 - Message - See note 5
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-1 Background - White
Message - Black
- MB4-1 Background - Blue
Message - White
- M04-1 Background - Orange - Type F
Message - Black



M4 - 1
M04 - 1



MB4 - 1

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	4	4	9 3/4	9 1/2	1 1/2																	2.00
3	36	18	1 1/8	3/8	1/2	7	5 1/2	16 3/8	16 1/2	1 1/2																	4.5
4	36	18	1 1/8	3/8	1/2	7	5 1/2	16 3/8	16 1/2	1 1/2																	4.5
5	36	18	1 1/8	3/8	1/2	7	5 1/2	16 3/8	16 1/2	1 1/2																	4.5

STANDARD SIGN
M4 - 1

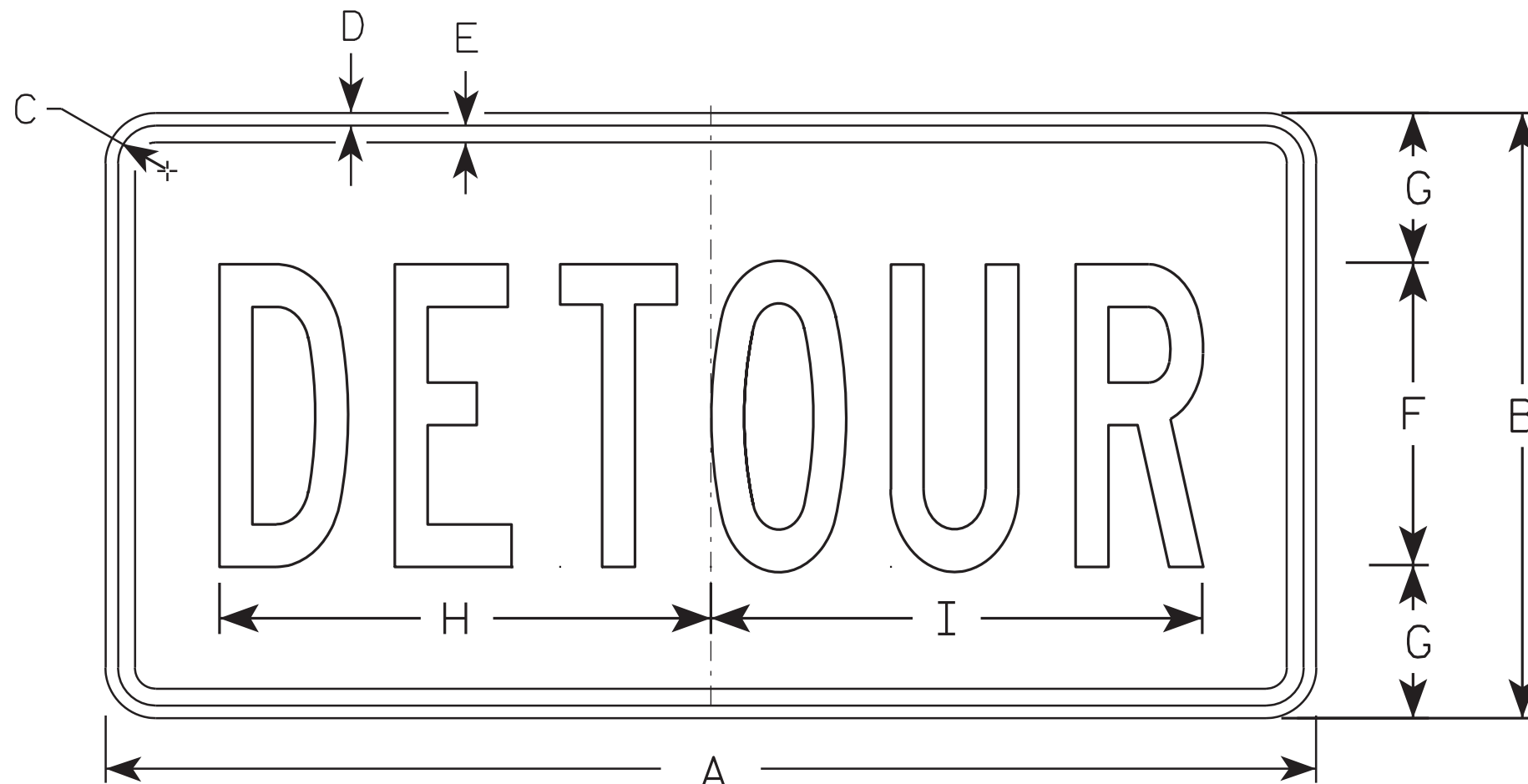
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Raub*
For State Traffic Engineer

DATE 6/30/14 PLATE 160 '14-1.8

NOTES

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



M4-8

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																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

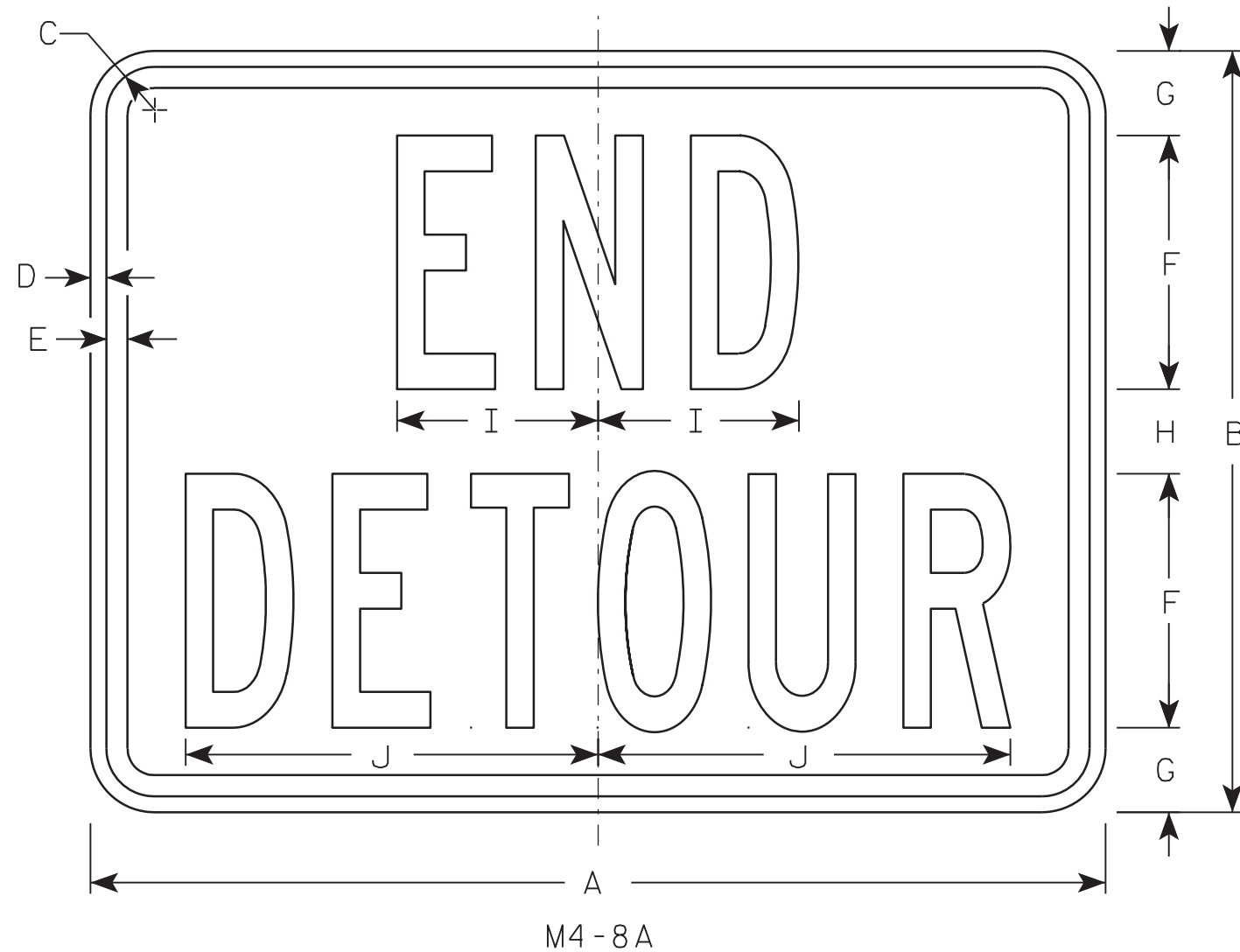
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: 161 **E**

NOTES

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



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																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

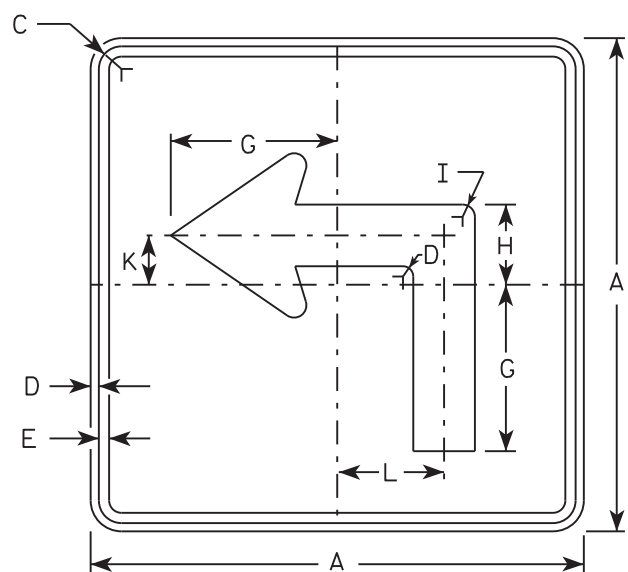
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

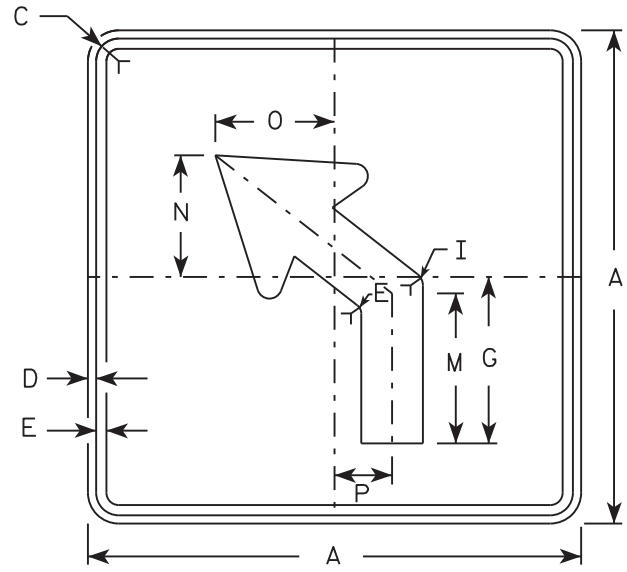
APPROVED *Matthew R Rauch*
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

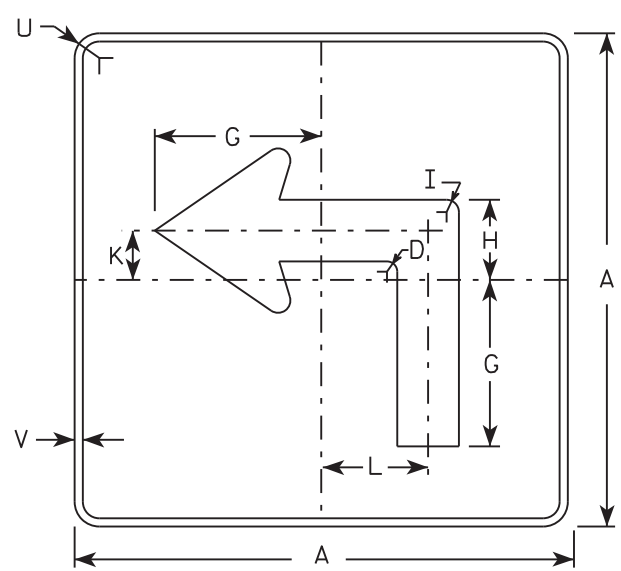
PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: 162 **E**



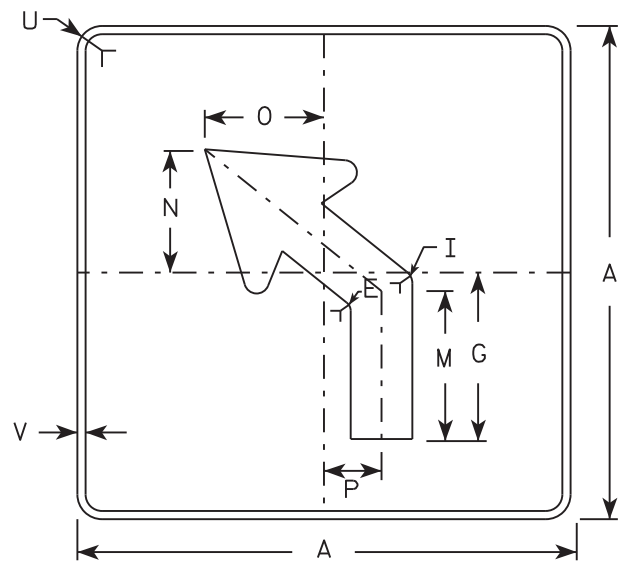
M5-1L
MM5-1L
M05-1L
MP5-1L



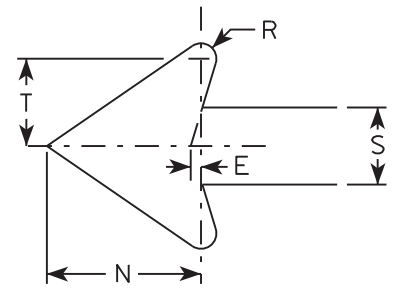
M5-2L
MM5-2L
M05-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

- Signs are Type II - Type H reflective except as shown
- Color:
 - Background - See note 4
 - Message - See note 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.
- | | |
|-----------------|---|
| M5-1 and M5-2 | Background - White |
| | Message - Black |
| MB5-1 and MB5-2 | Background - Blue |
| | Message - White |
| MK5-1 and MK5-2 | Background - Green |
| | Message - White |
| MM5-1 and MM5-2 | Background - White |
| | Message - Green |
| MN5-1 and MN5-2 | Background - Brown |
| | Message - White |
| M05-1 and M05-2 | Background - Orange - Type F Reflective |
| | Message - Black |
| MP5-1 and MP5-2 | Background - White - Type H Reflective |
| | Message - Blue |
| MR5-1 and MR5-2 | Background - Brown |
| | Message - Yellow |
- M5-1R same as M5-1L except arrow points right.
- M5-2R same as M5-2L except arrow tilts right.

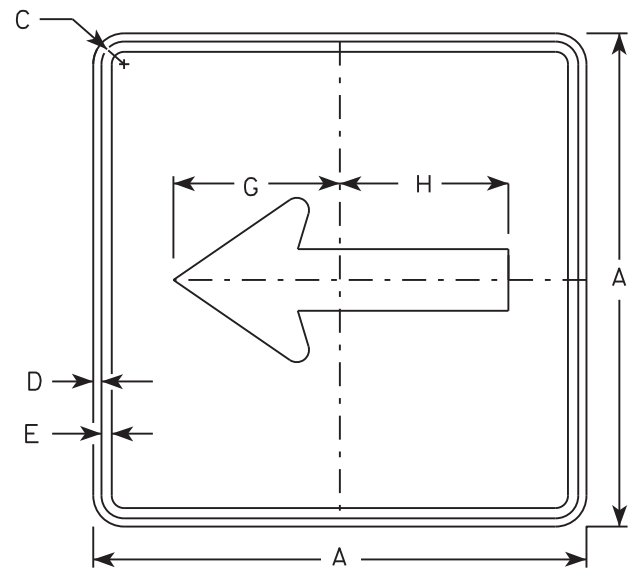
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

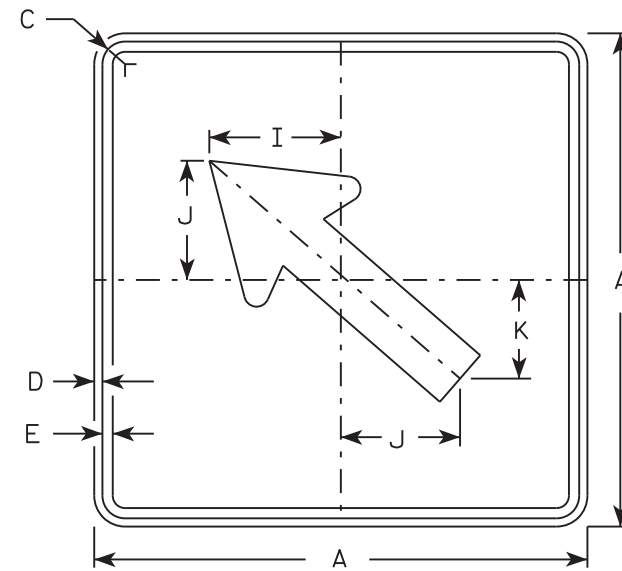
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

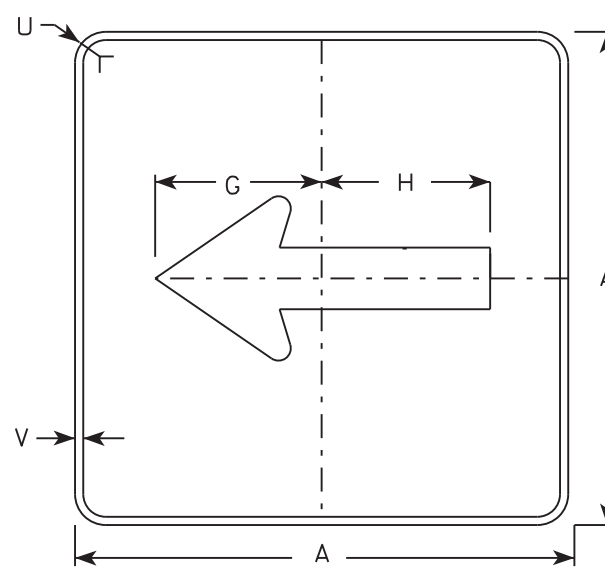
DATE 10/15/15 PLATE NO. M5-1.13
163



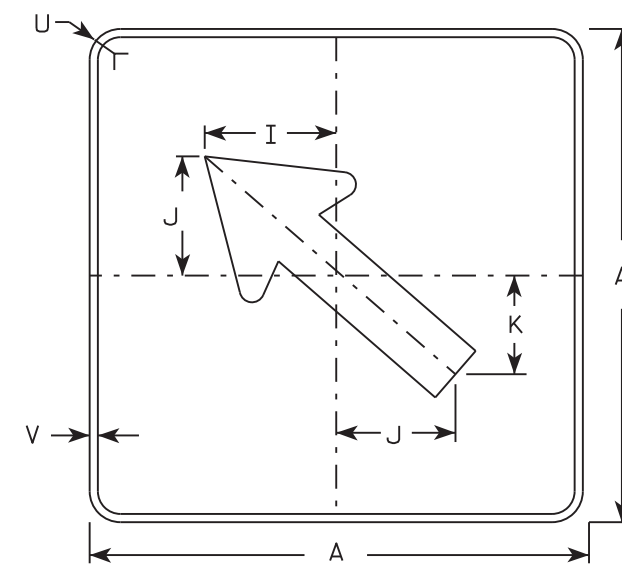
M6-1
MM6-1
M06-1
MP6-1



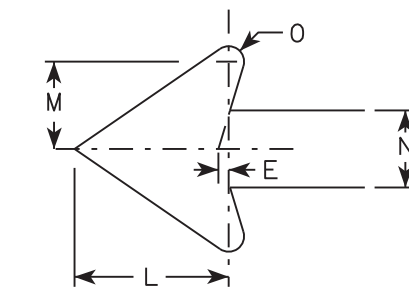
M6-2
MM6-2
M06-2
MP6-2



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



NOTES

- Signs are Type II - Type H except as Shown
- Color:
Background - See note 4
Message - See note 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.
- M6-1 and M6-2 Background - White
Message - Black
MB6-1 and MB6-2 Background - Blue
Message - White
MK6-1 and MK6-2 Background - Green
Message - White
MM6-1 and MM6-2 Background - White
Message - Green
MN6-1 and MN6-2 Background - Brown
Message - White
M06-1 and M06-2 Background - Orange - Type F Reflective
Message - Black
MP6-1 and MP6-2 Background - White
Message - Blue
MR6-1 and MR6-2 Background - Brown
Message - Yellow

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

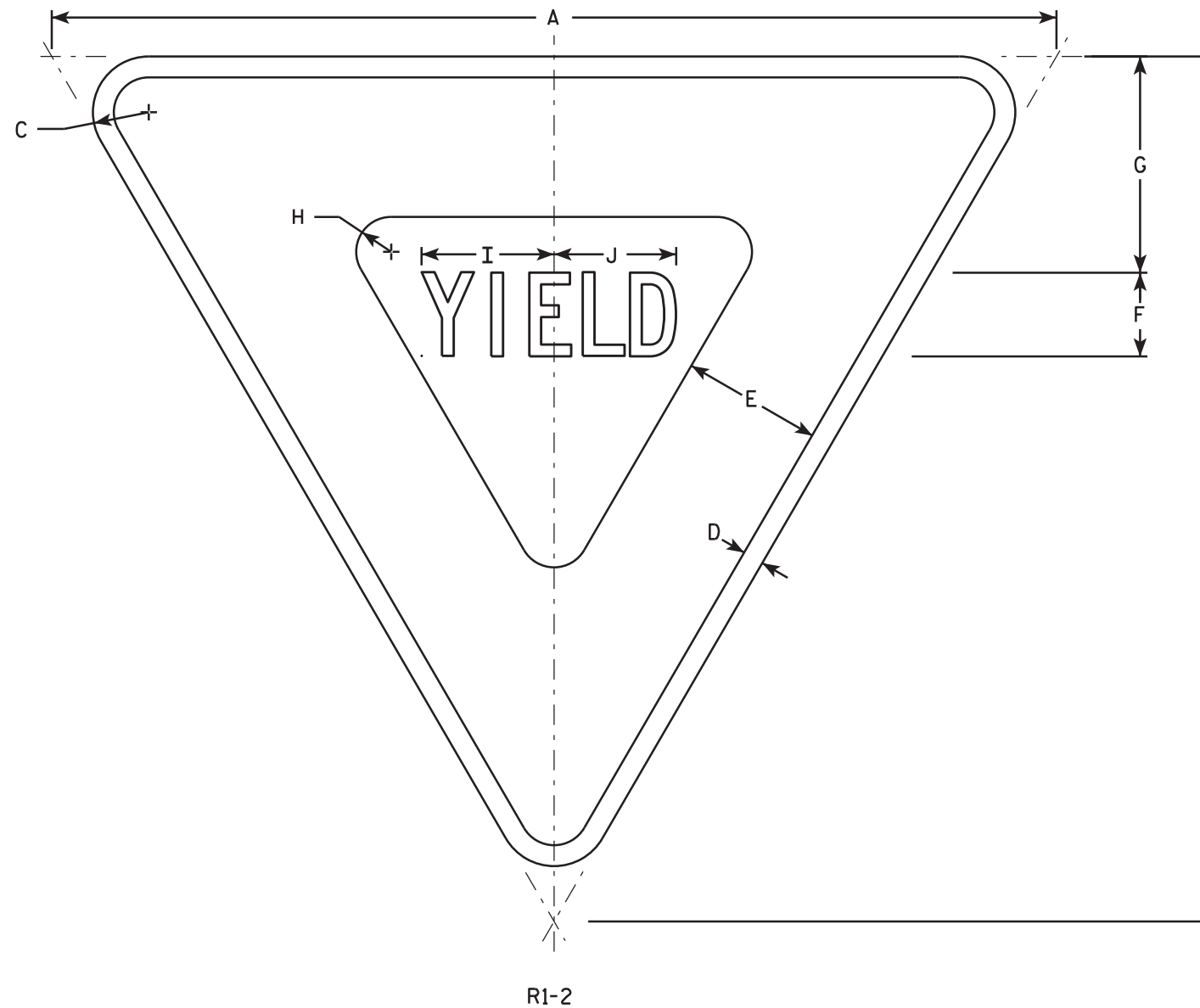
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 10/15/15 PLAT 164 M6-1.15

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The border strip and word message are reflectorized red.



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	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

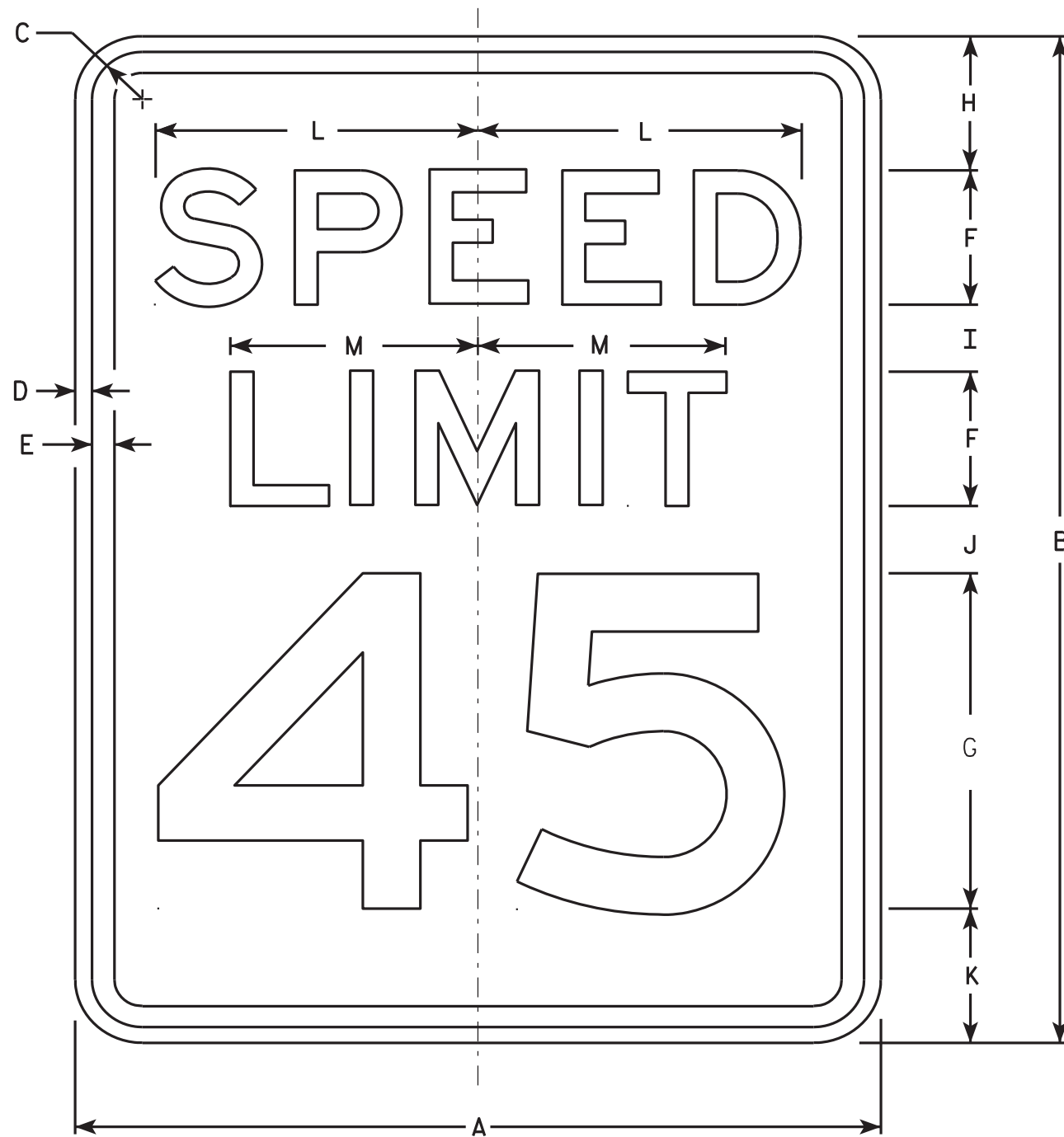
STANDARD SIGN
R1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 10/13/14 PLATE 165 P1-2.12

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ E



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

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	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

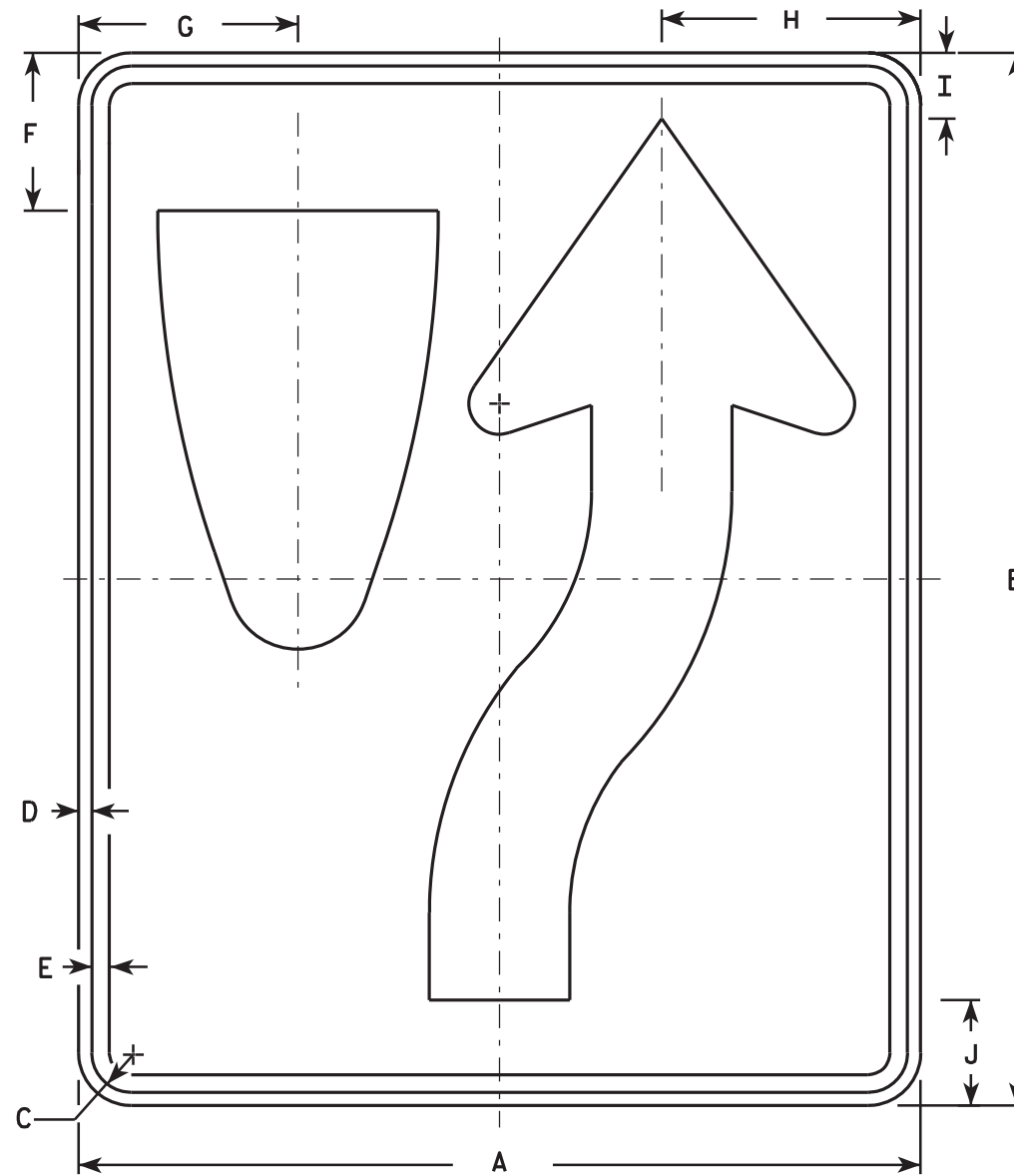
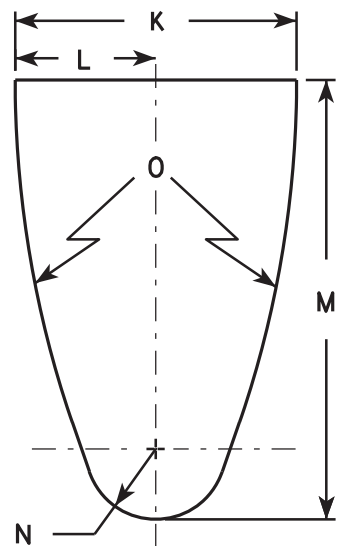
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

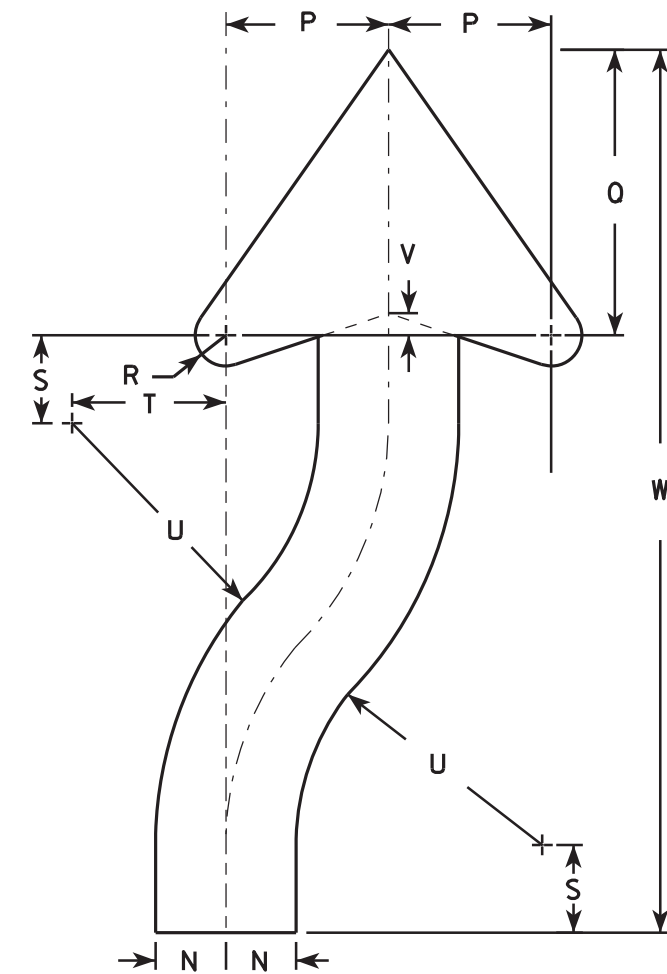
PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: 166 **E**

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
Background - White
Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



R4-7



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	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

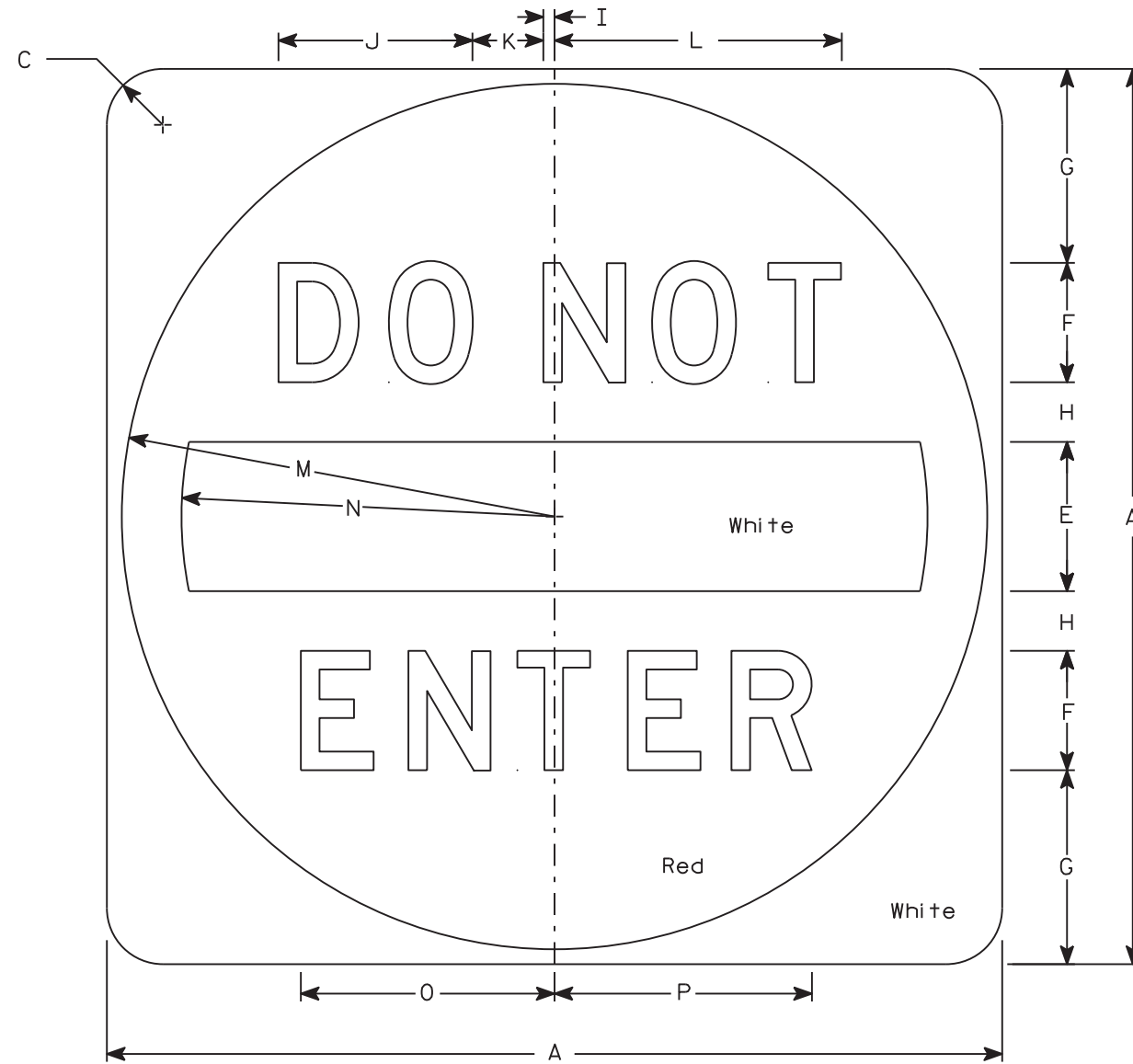
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: 167 **E**

NOTES

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



R5-1

7

7

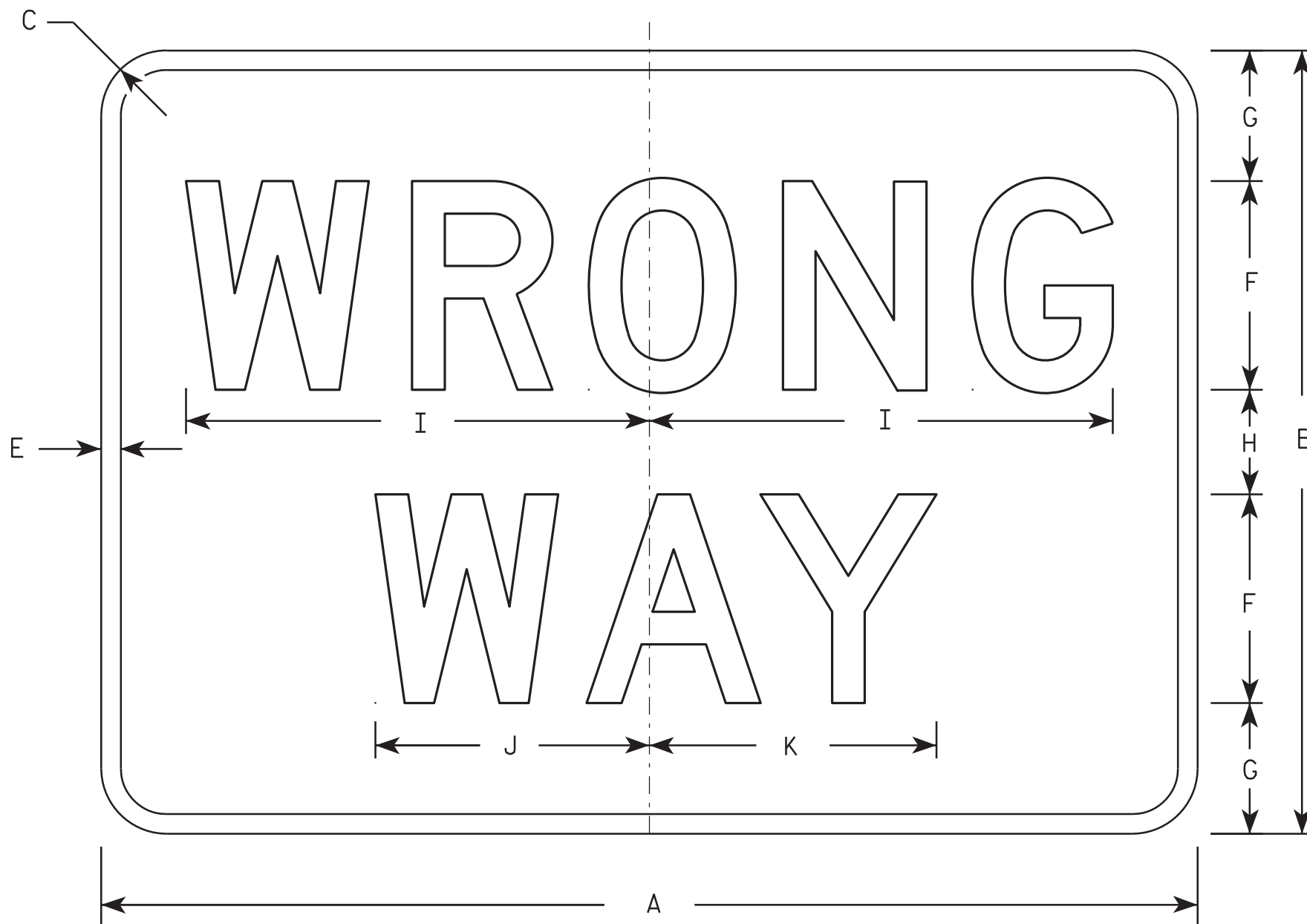
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.25
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/15/18 PLATE NO. R5-1.16



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 - 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.

7

7

R5-1A

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		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75

STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

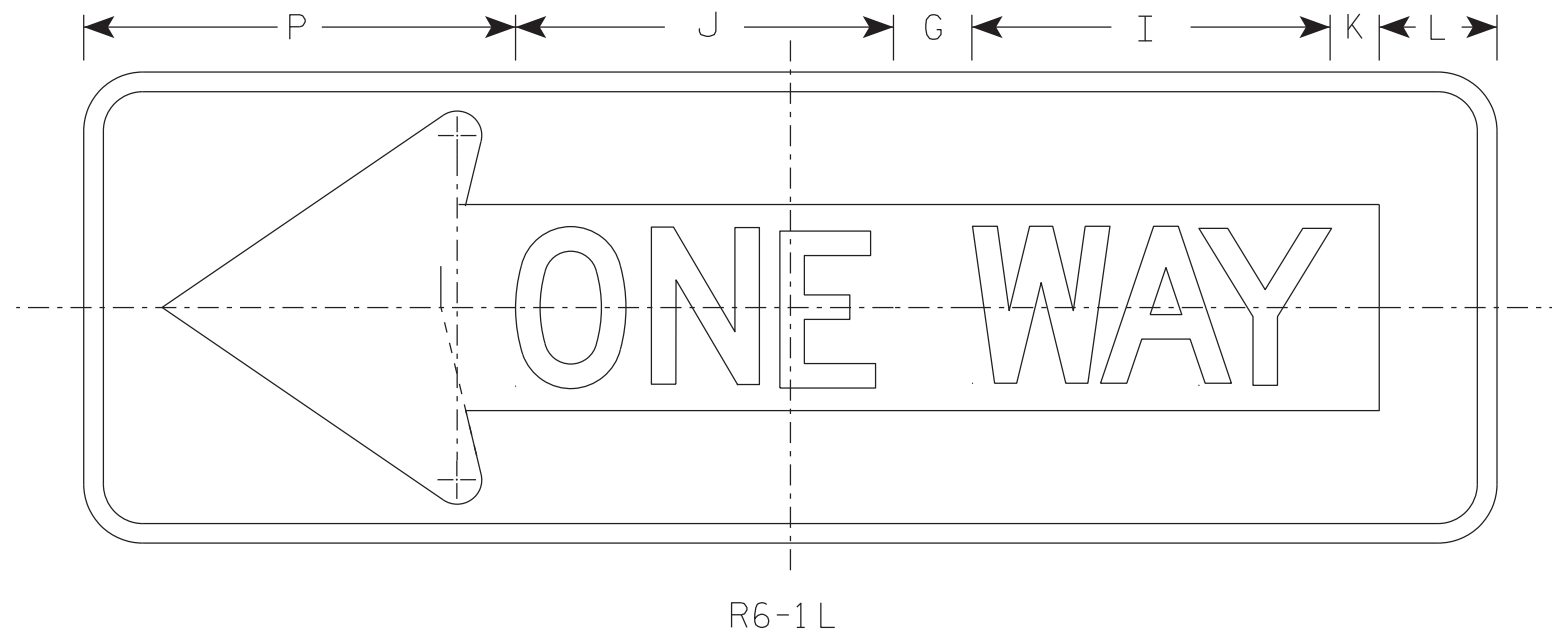
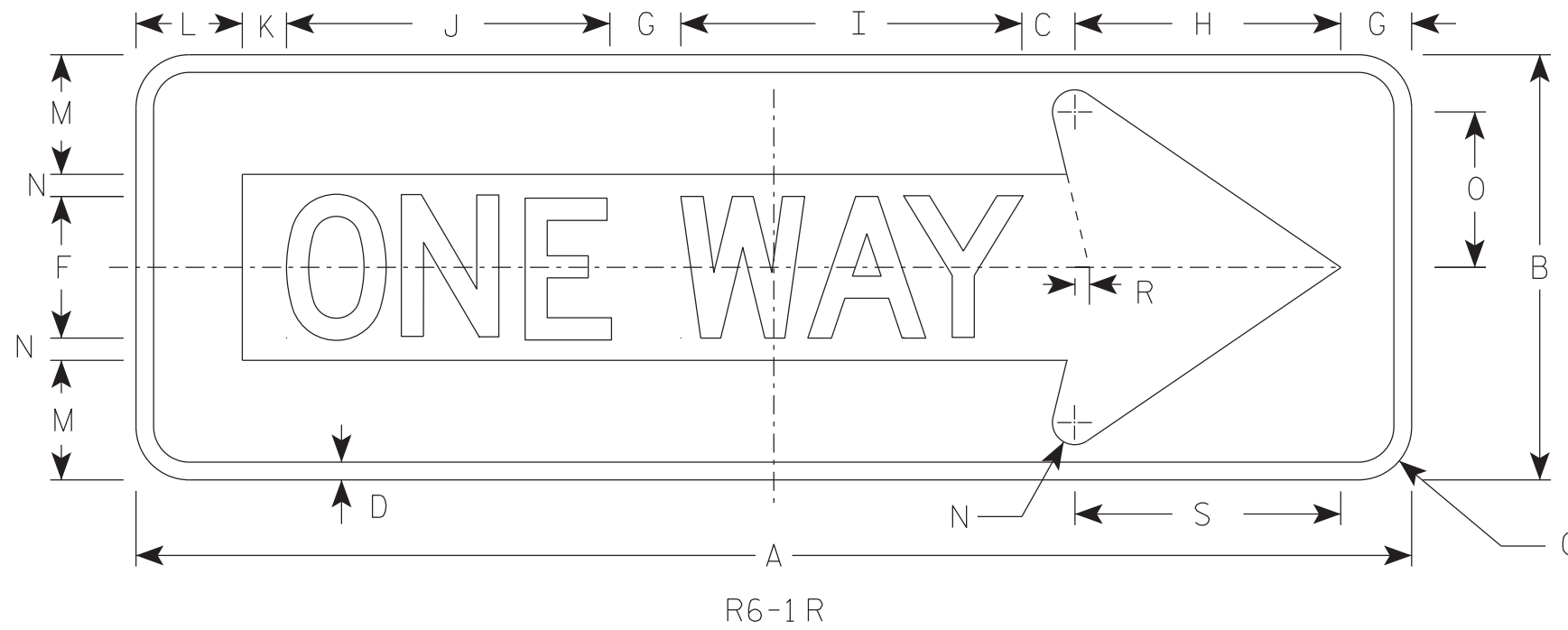
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: 169 **E**

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
Background - BLACK
Message - BLACK LEGEND & WHITE ARROW & BORDER
3. Message Series - D



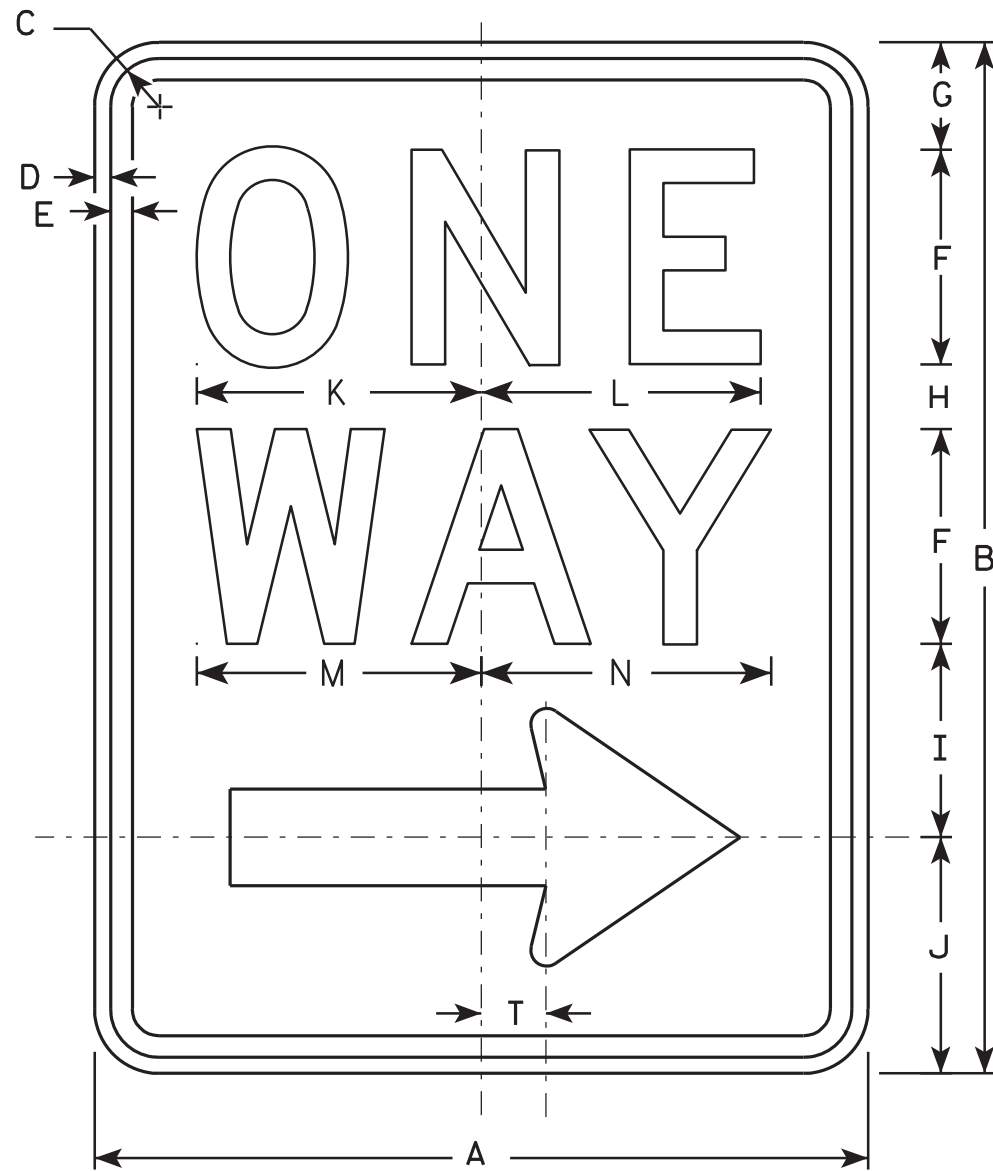
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36	12	1 1/2	1/2		4	2	7 1/2	9 5/8	9 1/8	1 1/4	3	3 3/8	5/8	4 3/8	11		3/8	7 1/2								3.0
2M	54	18	2 1/4	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
3	54	18	2 1/4	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
4	54	18	2 1/4	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
5																											

STANDARD SIGN
R6-1 L & R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

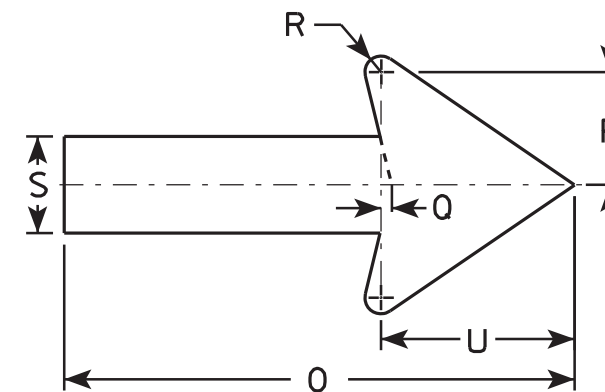
DATE 07/11/18 PLATE NO. R6-1.3



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R6-2L same as R6-2R except arrow points to the left.



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
1	18	24	1 1/8	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	30	1 1/8	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 3/8	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																										

STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

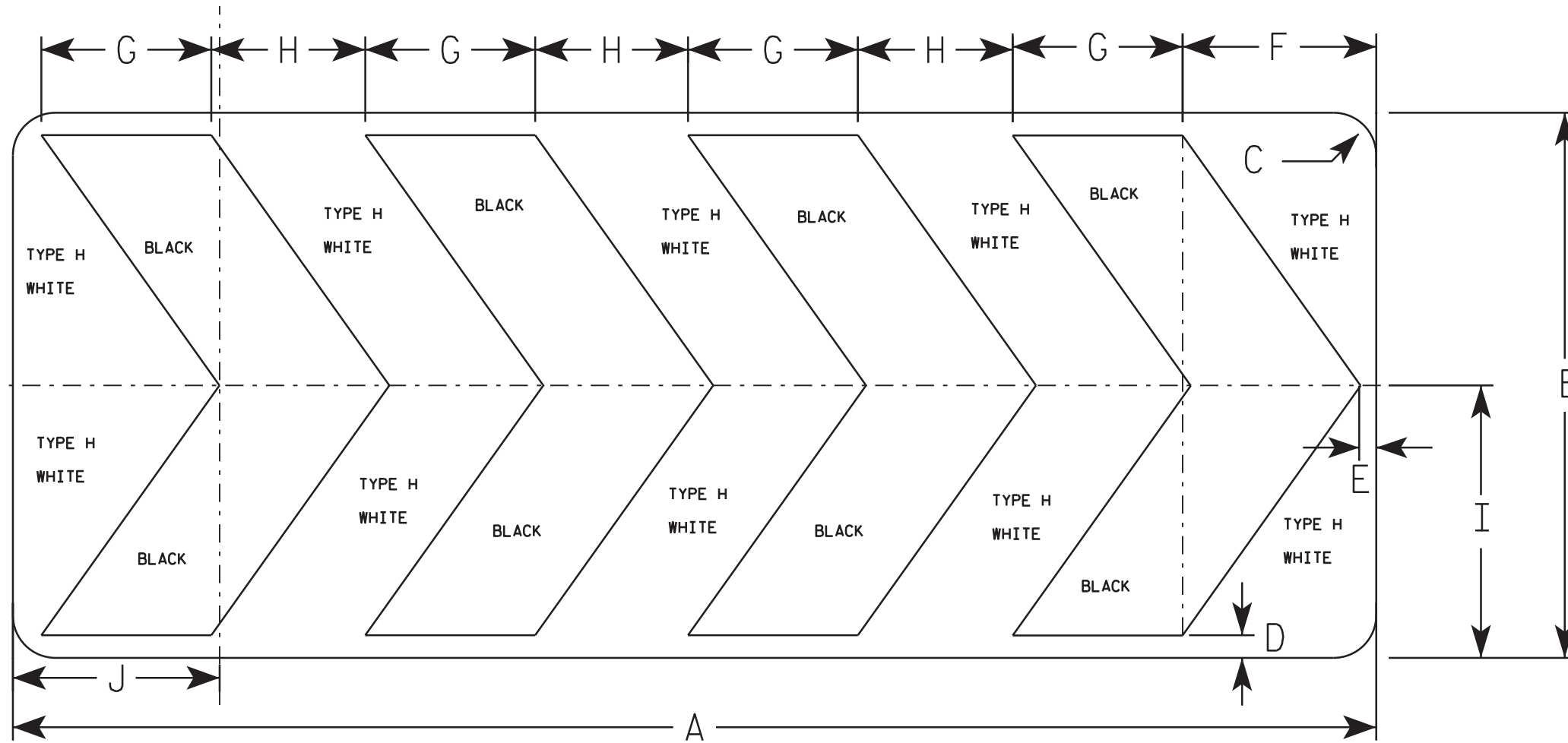
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: 171 **E**

NOTES

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



R6-4B

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	24	1 7/8	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
2M	60	24	1 7/8	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
3																											
4																											
5																											

STANDARD SIGN
R6-4B

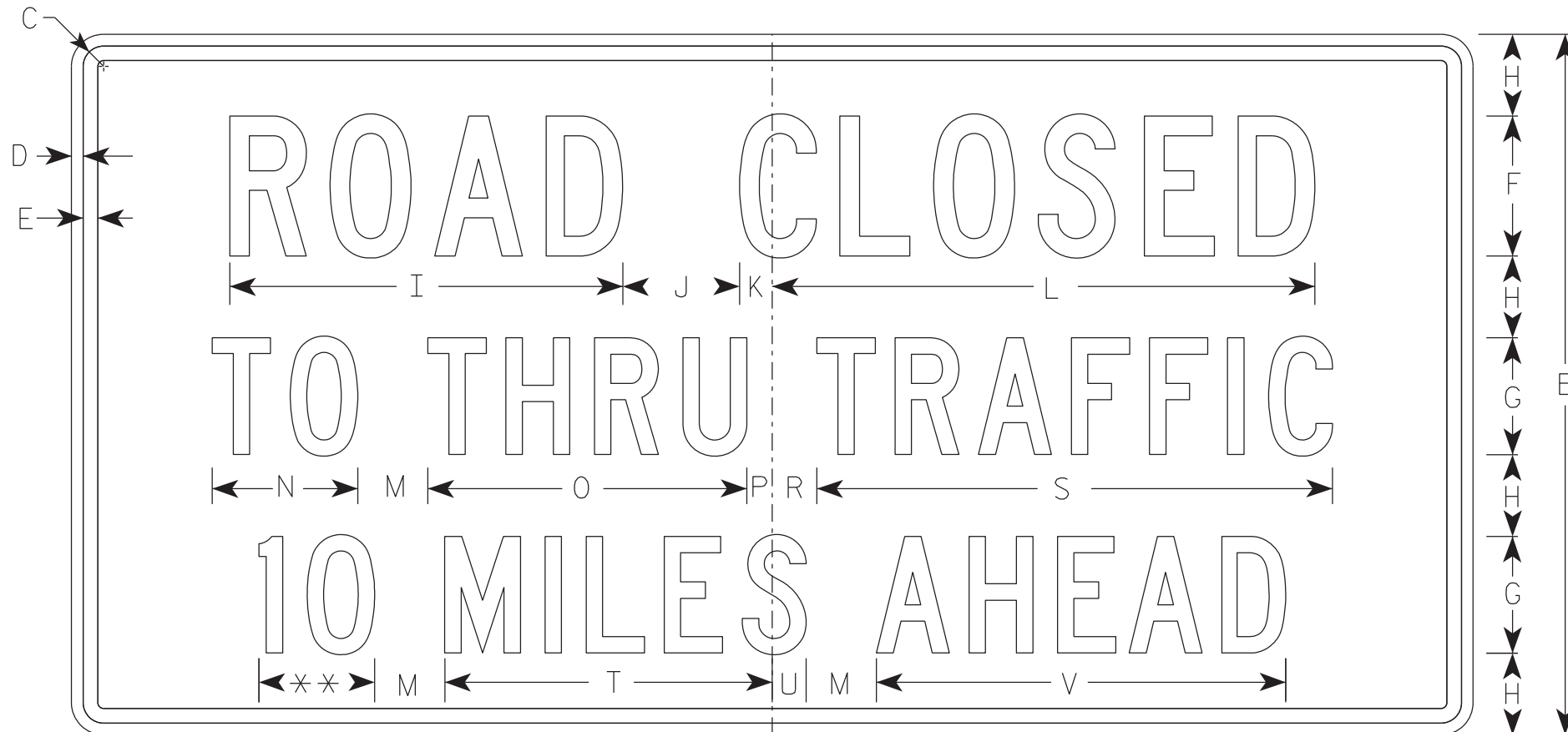
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 8/21/14 PLATE 172 P6-4.3

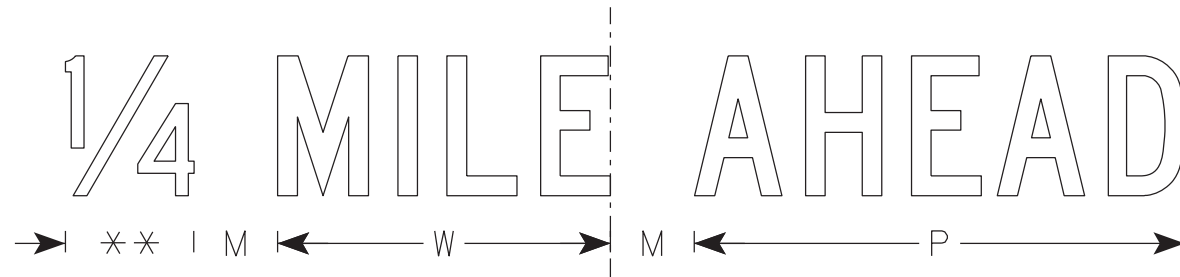
NOTES

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.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



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 1/4	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 3/8	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 3/8	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																												

STANDARD SIGN
R11-3

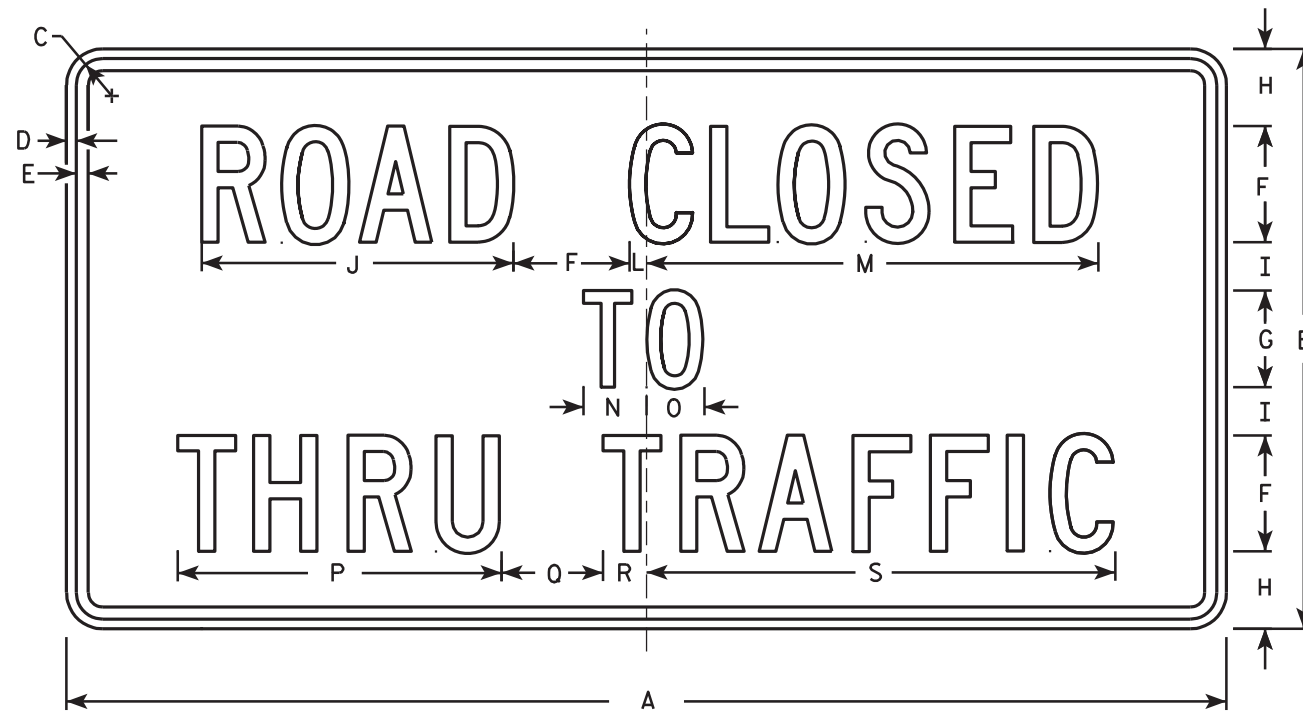
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/14/2021 PLATE NO. R11-3.9

NOTES

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



R11-4

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

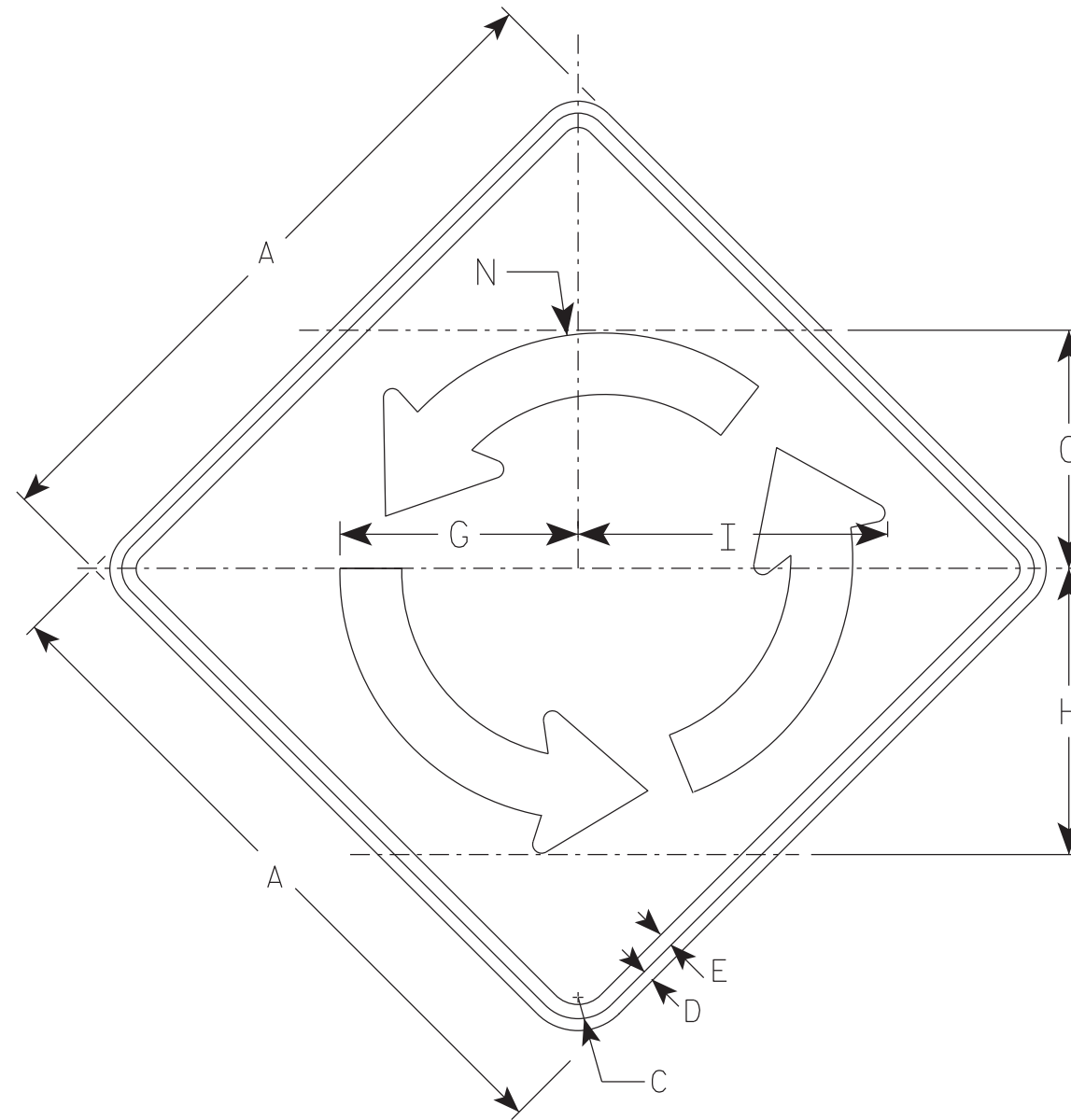
APPROVED *Matthew R. Raush*
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: 174 **E**

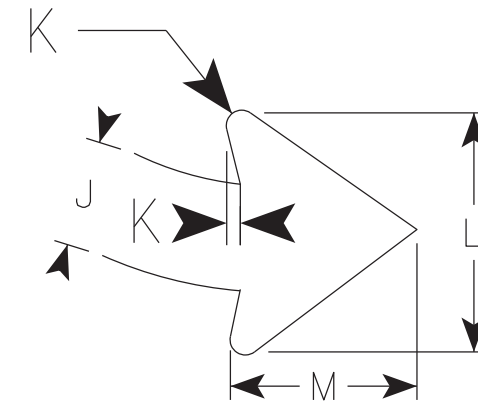
NOTES

1. Sign is Type II - Type F Reflective
2. Color:
Background - Yellow
Message - Black



W2-6

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	Area sq. ft.
1																									
2S	30		1 3/8	1/2	5/8		10 3/8	12 1/2	13 1/2	2 3/4	3/8	6	4 3/4	11 1/8											6.25
2M	30		1 3/8	1/2	5/8		10 3/8	12 1/2	13 1/2	2 3/4	3/8	6	4 3/4	11 1/8											6.25
3	36		1 5/8	5/8	3/4		12 1/2	15	16 1/4	3 1/4	1/2	7 3/8	5 3/4	13 3/8											9.00
4	48		2 1/4	3/4	1		16 5/8	20	16 1/4	4 3/8	5/8	9 3/4	7 5/8	17 7/8											16.0
5																									

STANDARD SIGN
W2-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/24/21 PLATE NO. W2-6.7

PROJECT NO:

SHEET NO: 175

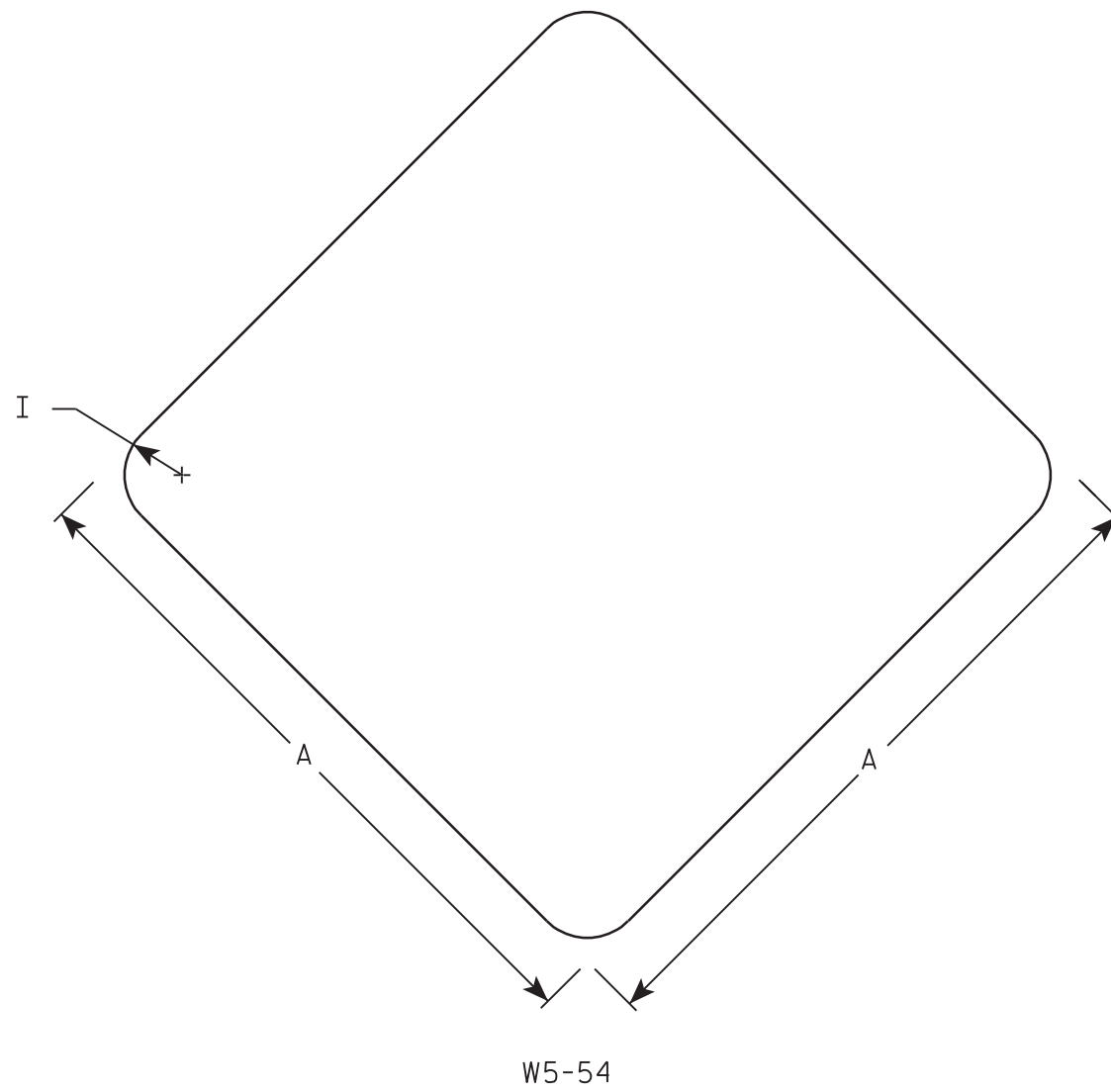
E

7

7

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
3. Corners may be square or rounded when base material is plywood. When base material is metal the corners shall be rounded.



7

7

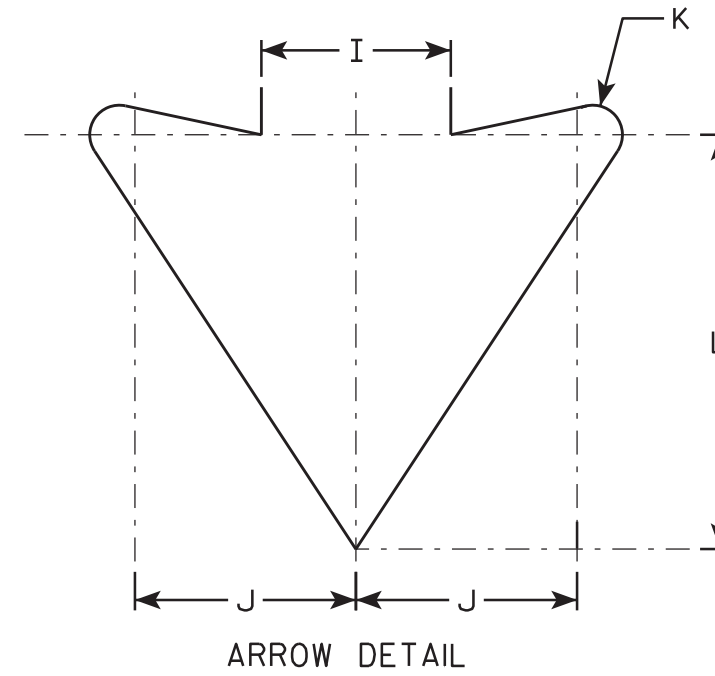
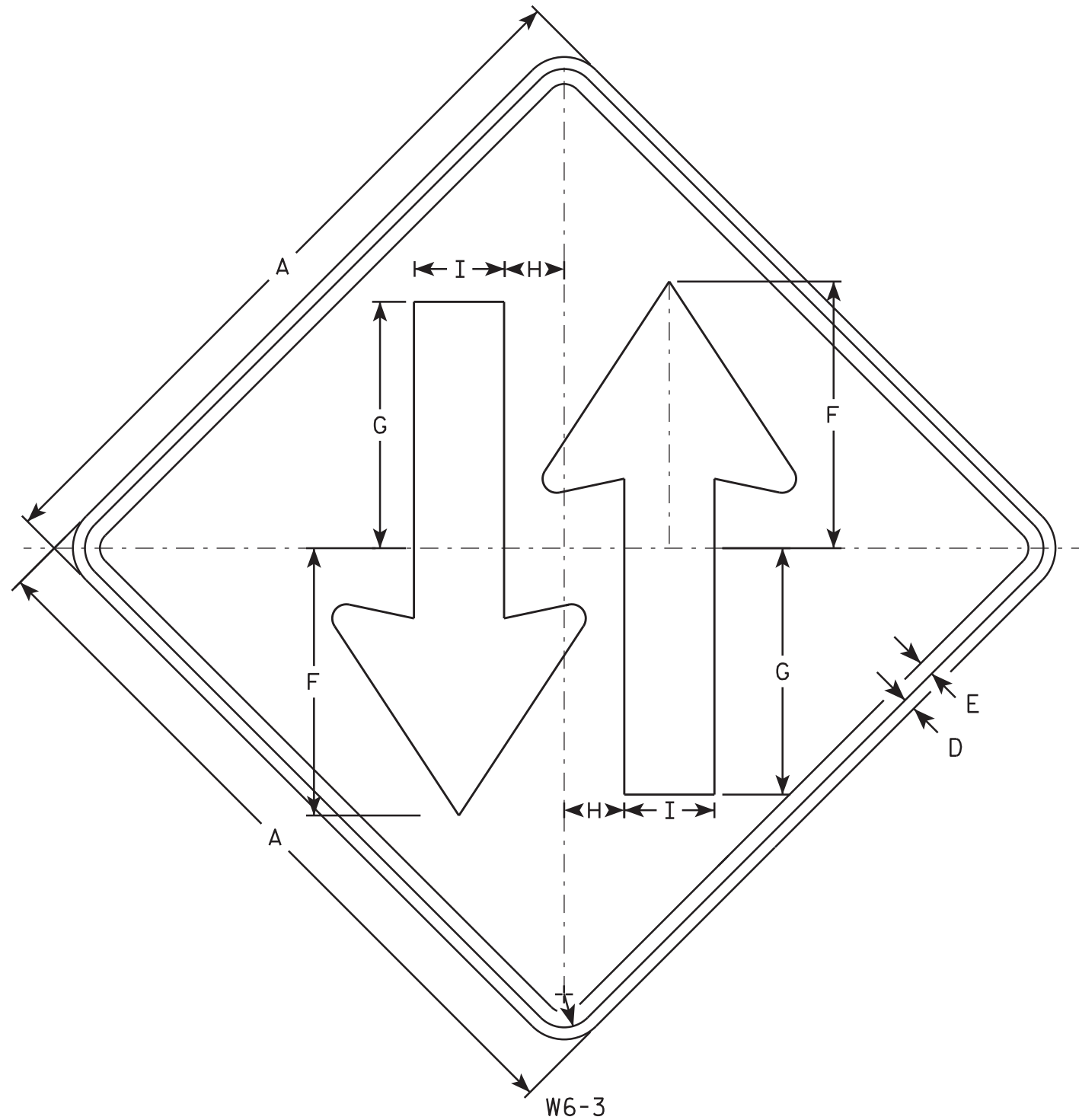
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12								1																		1.0
2S	18								1 1/2																		2.25
2M	18								1 1/2																		2.25
3																											
4																											
5																											

STANDARD SIGN W5-54	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R Rauch</i> For State Traffic Engineer
DATE <u>11/3/10</u>	PLATE NO. <u>W5-54.8</u>

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 176	E
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NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



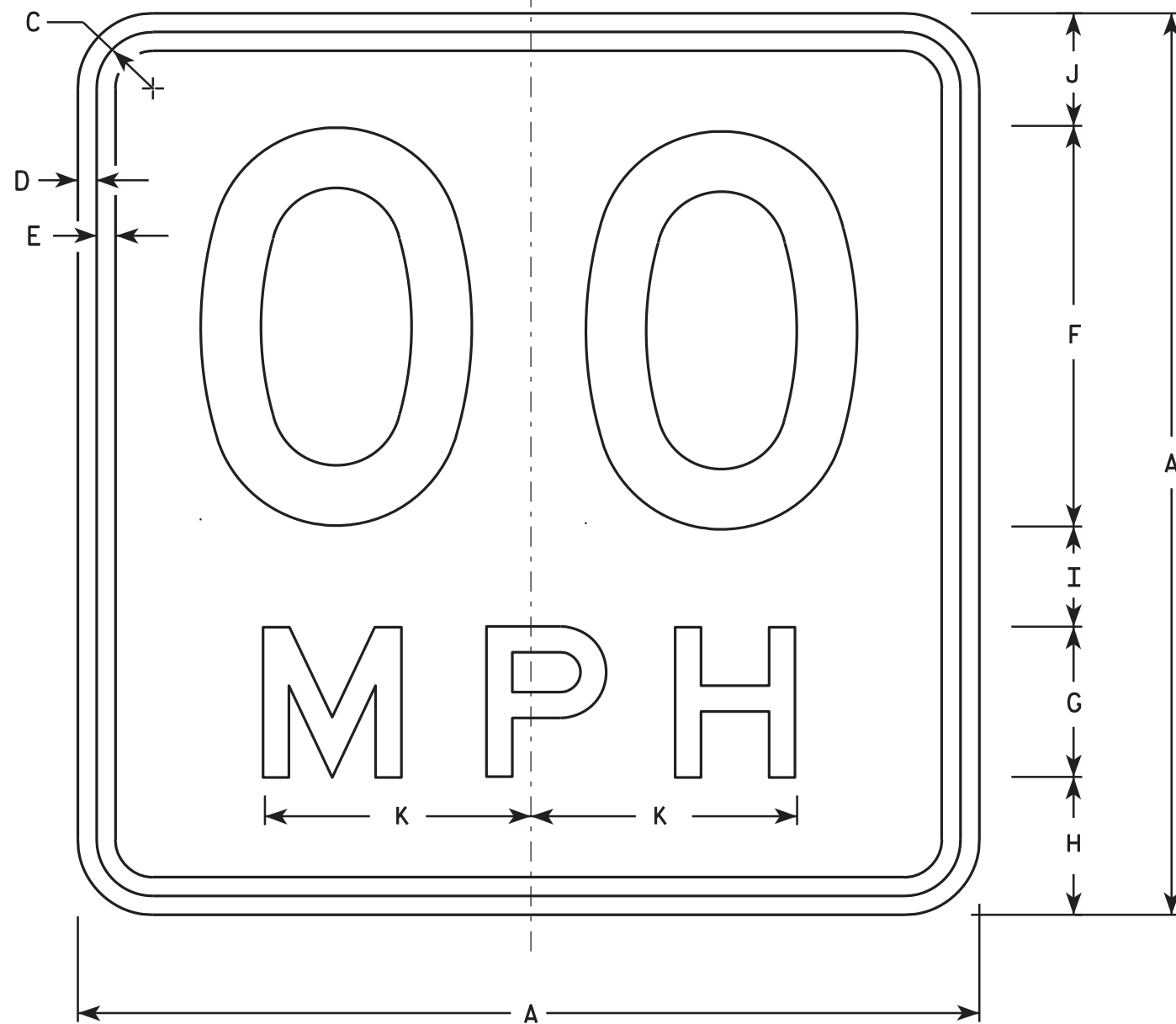
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	11 1/8	10 1/4	2 1/2	3 3/4	4 3/8	5/8	8 1/4															6.25
2S	36		1 5/8	5/8	3/4	13 3/8	12 1/4	3	4 1/2	5 1/4	3/4	9 7/8															9.0
2M	36		1 5/8	5/8	3/4	13 3/8	12 1/4	3	4 1/2	5 1/4	3/4	9 7/8															9.0
3																											
4	48		2 1/4	3/4	1	17 3/4	16 3/8	4	6	7	1	13 1/8															16.0
5	48		2 1/4	3/4	1	17 3/4	16 3/8	4	6	7	1	13 1/8															16.0

STANDARD SIGN
W6-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/10/16 PLAT 177 W6-3.11



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
Line 2 is Series E

W13-1

* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN

W13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

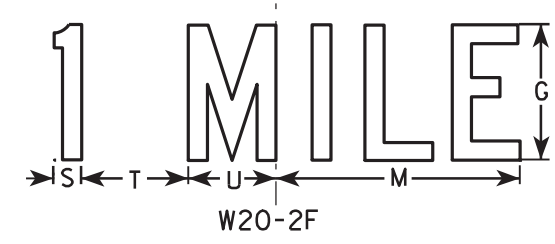
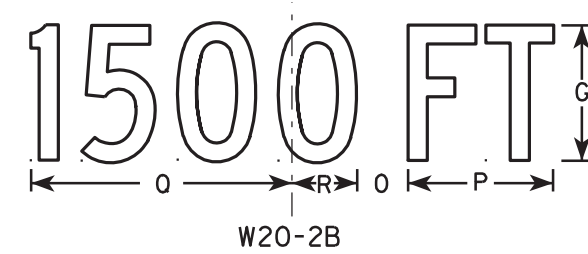
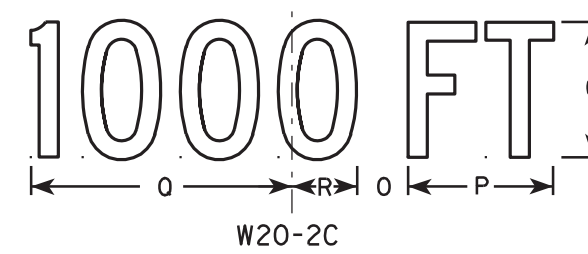
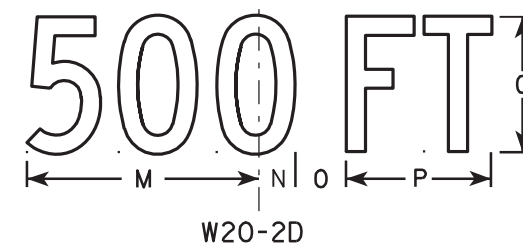
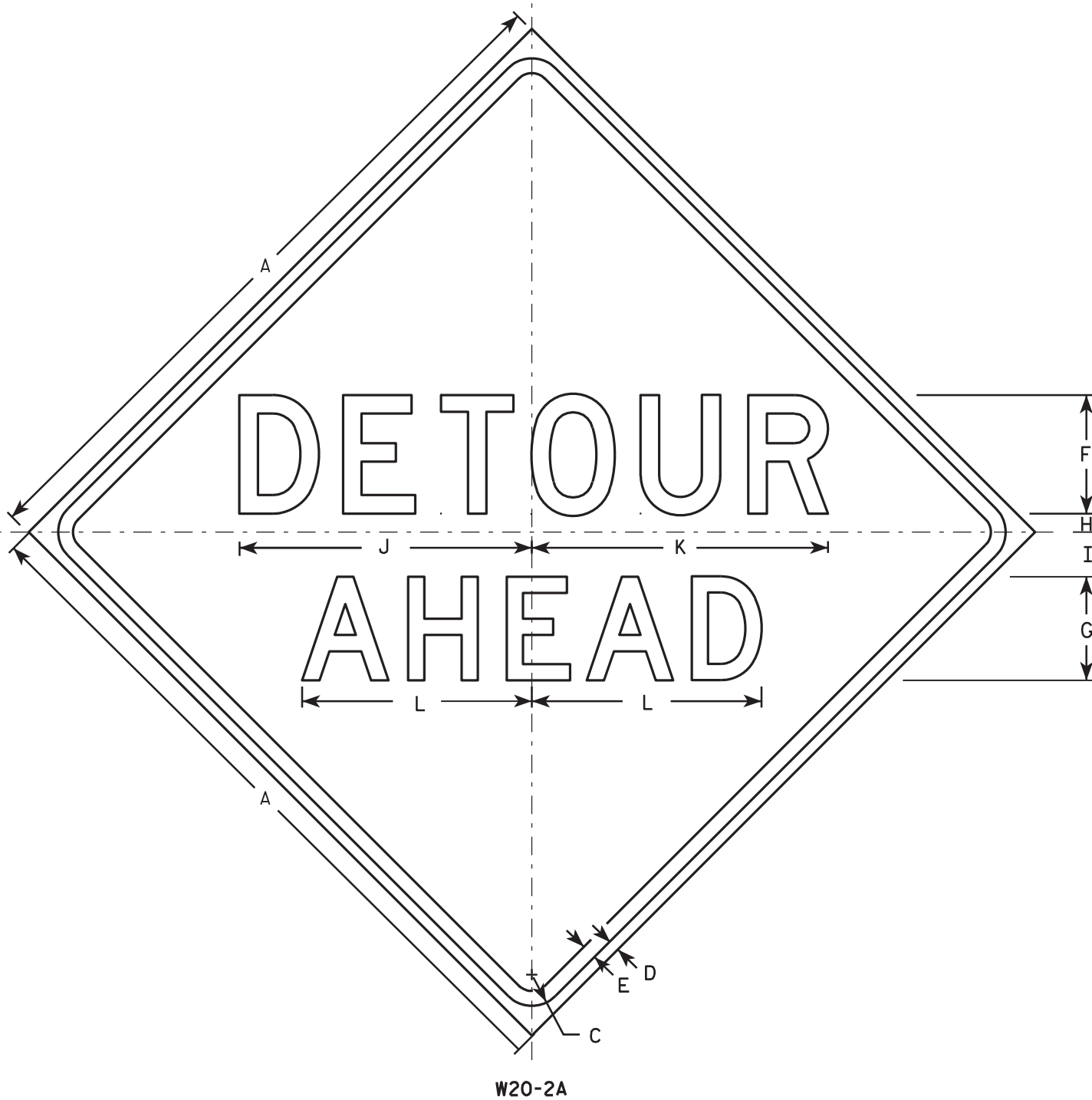
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 178

E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
Line 2 is Series D for AHEAD and Series C for all other distances.

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		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

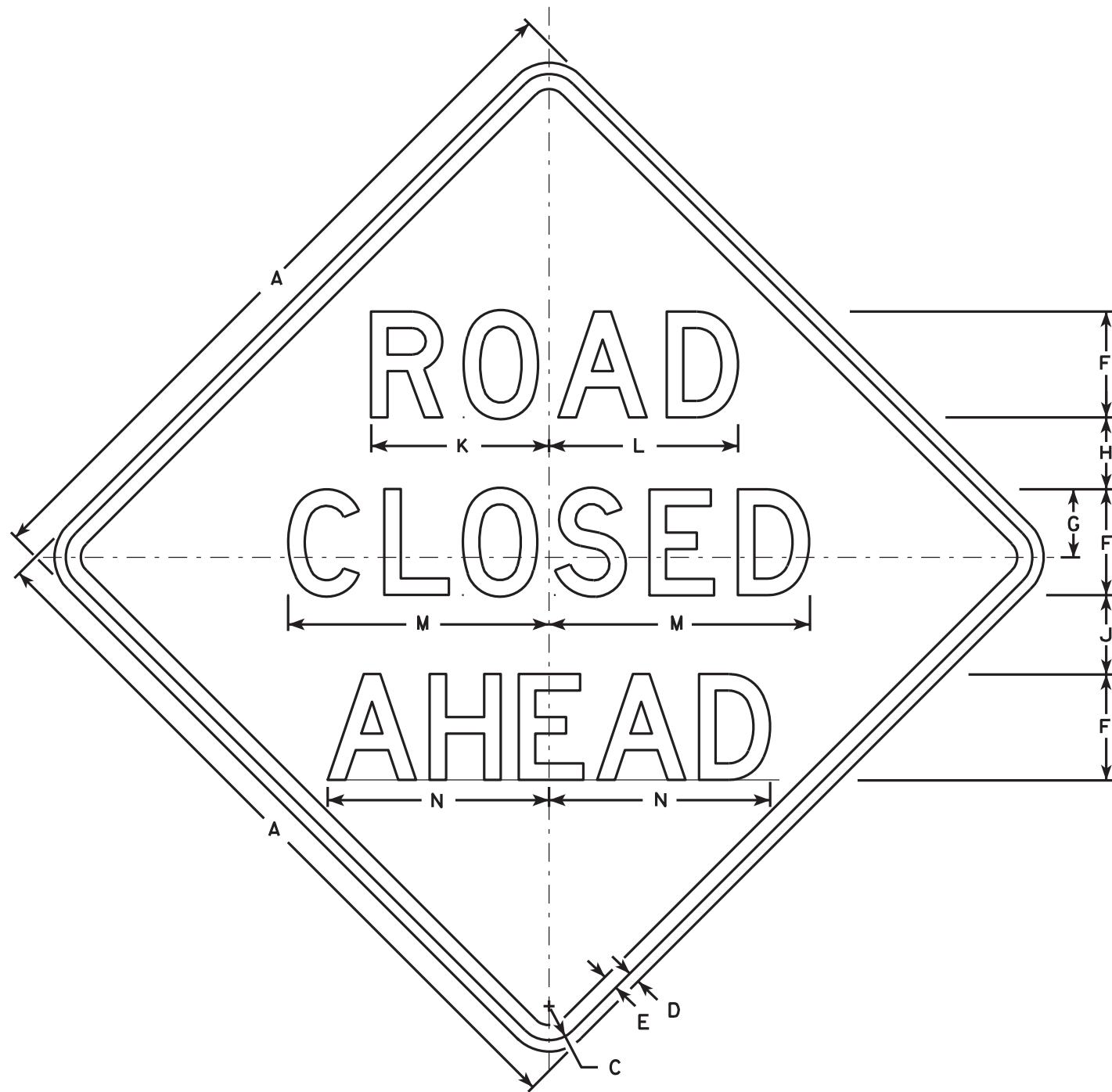
STANDARD SIGN
W20-2A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

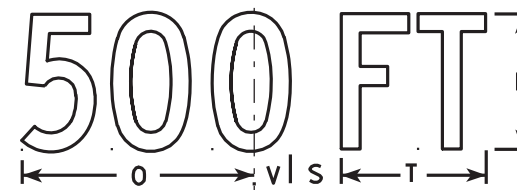
APPROVED *Matthew R. Raub*
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

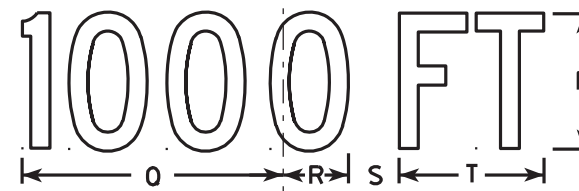
PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: 179 **E**



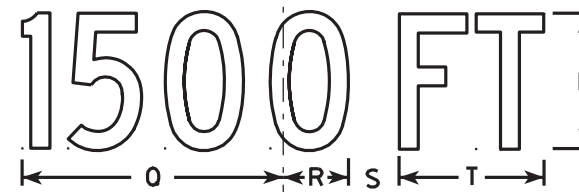
W20-3A



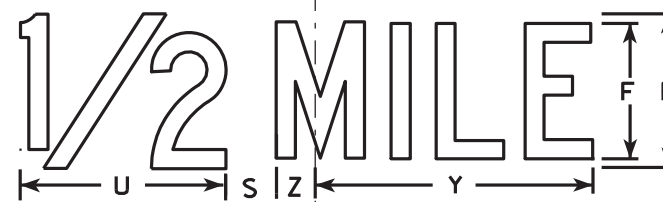
W20-3D



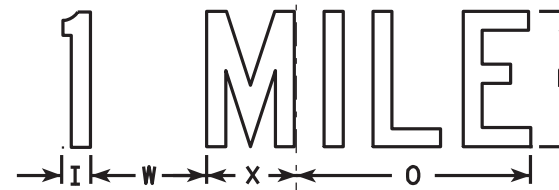
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
Line 3 is Series D for AHEAD and Series C for all other distances.

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		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

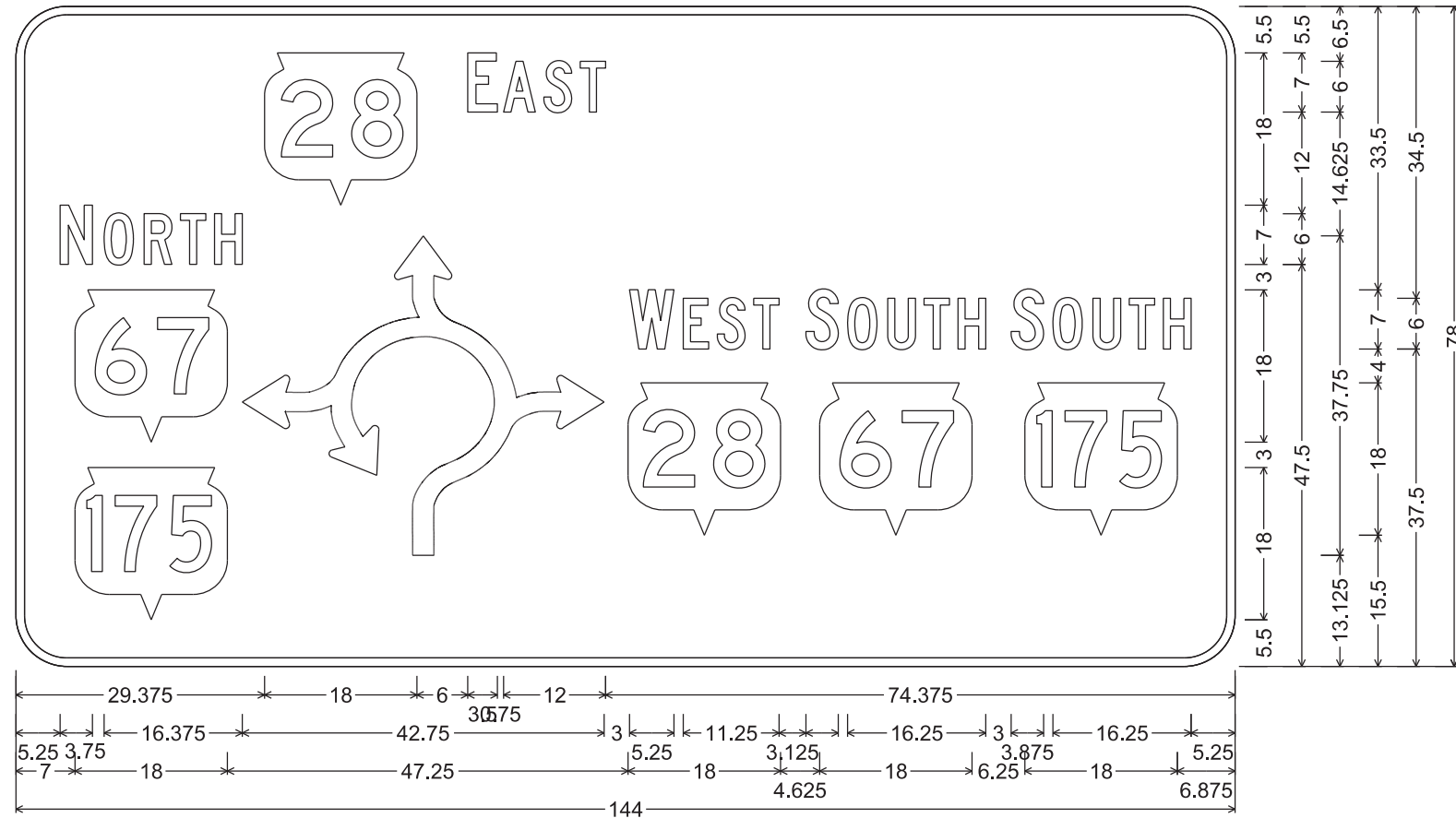
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-3.7

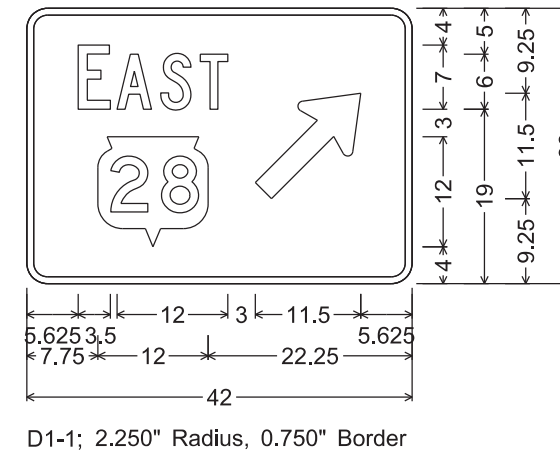
PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: 180 **E**

NOTES

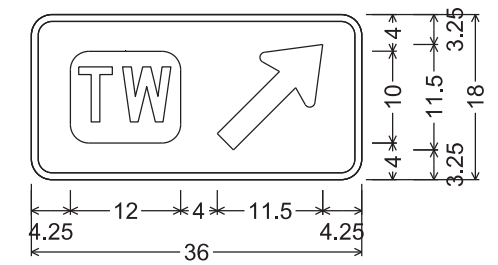
1. Signs are Type II - Type H Reflective
2. Color:
Background - Green
Message - White
3. Message Series - C



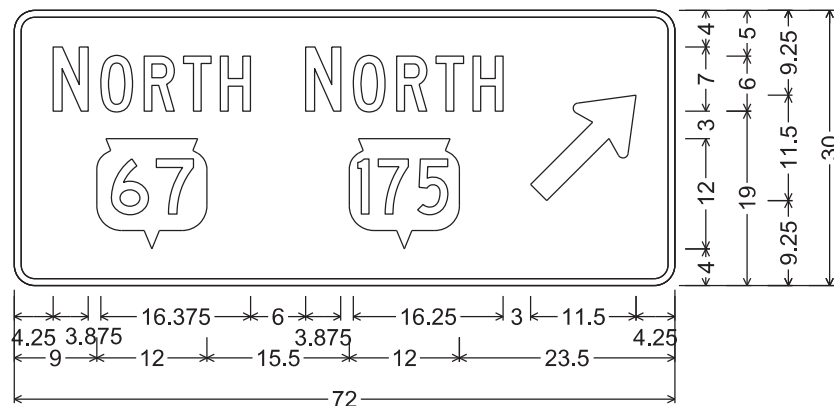
D1-62; 6.000" Radius, 1.000" Border



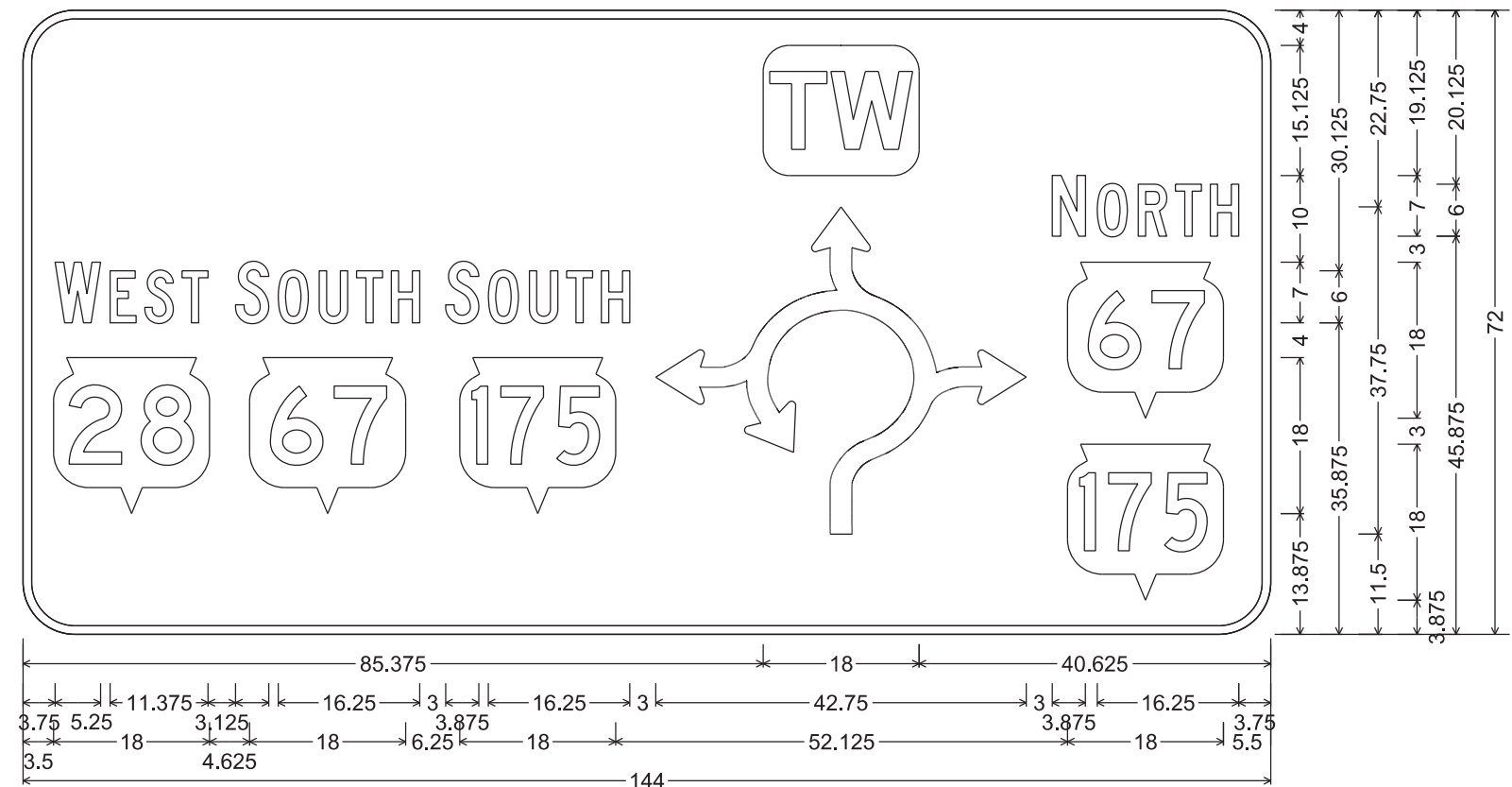
D1-1; 2.250" Radius, 0.750" Border



D1-1; 2.250" Radius, 0.750" Border



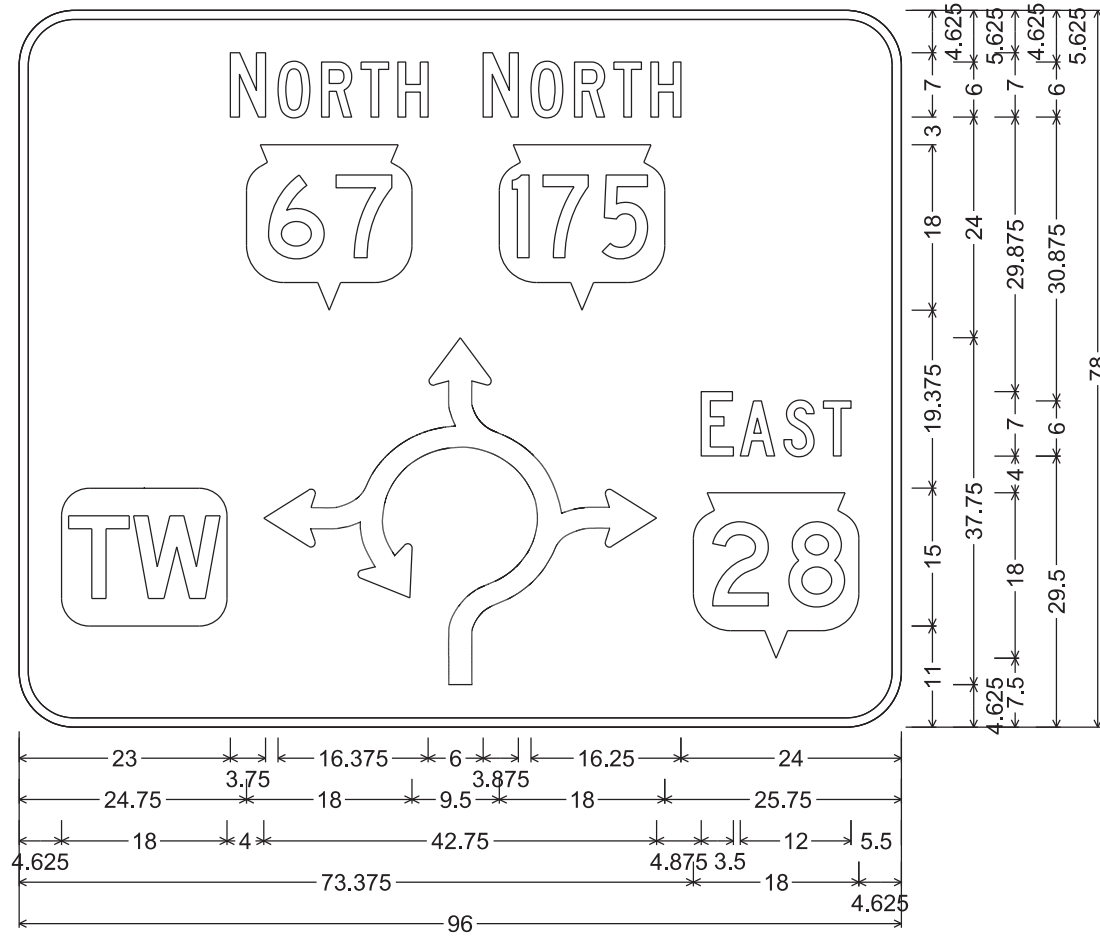
D1-2; 2.250" Radius, 0.750" Border



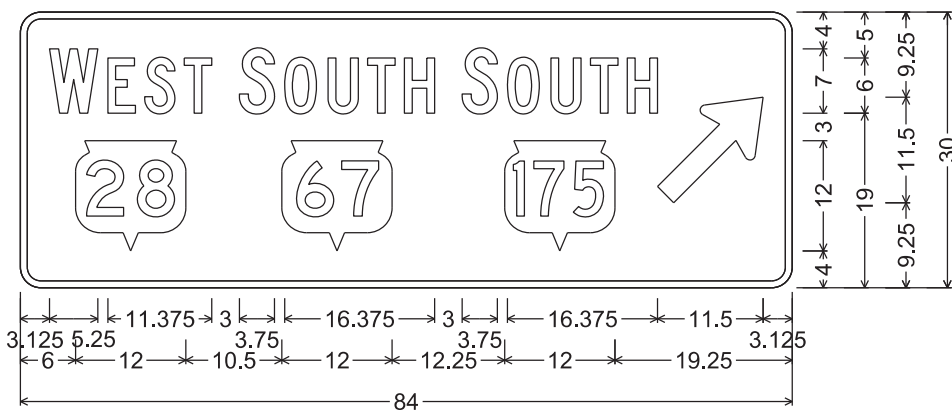
D1-62; 6.000" Radius, 1.000" Border

NOTES

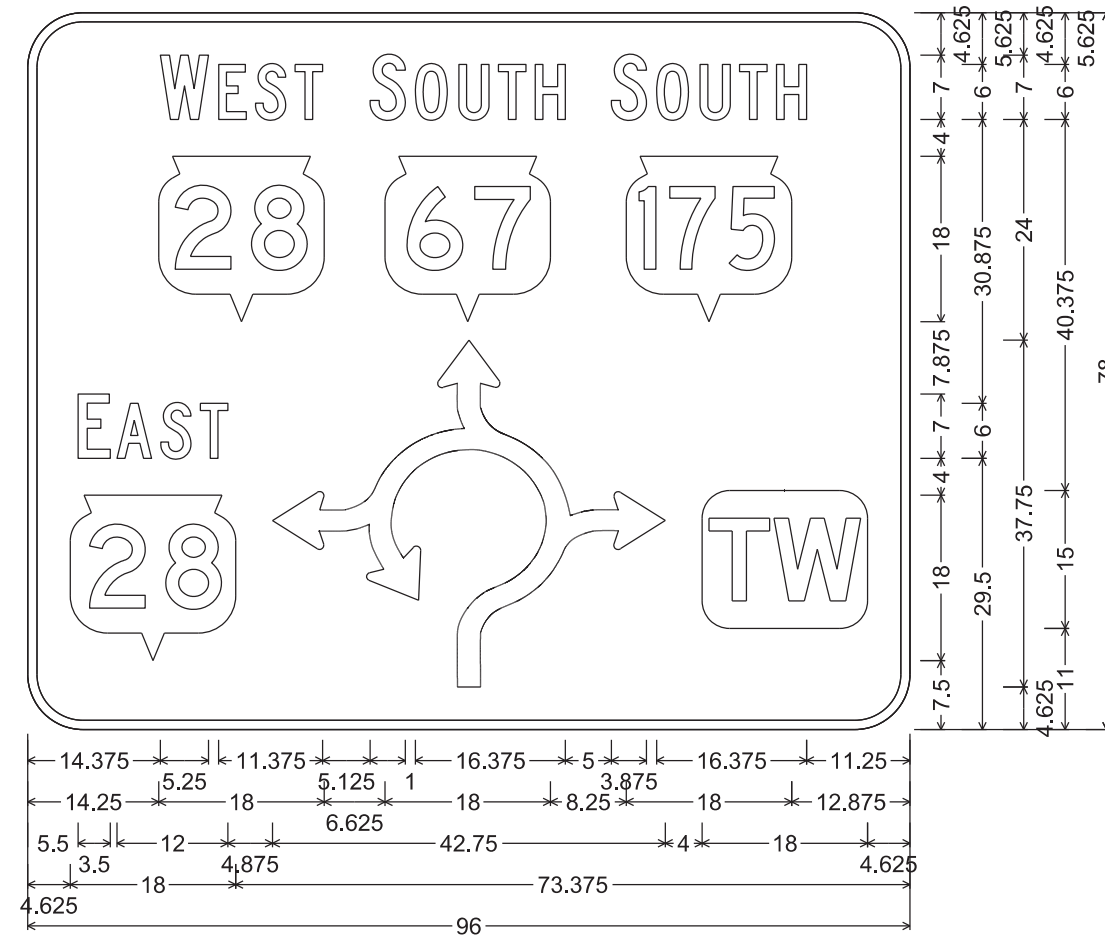
1. Signs are Type II - Type H Reflective
2. Color:
Background - Green
Message - White
3. Message Series - C



D1-62; 6.000" Radius, 1.000" Border



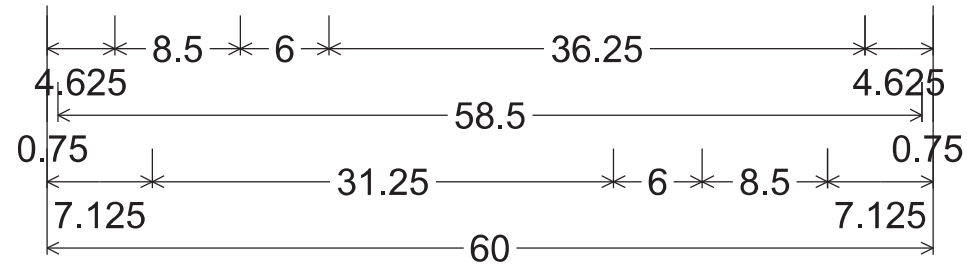
D1-3; 2.250" Radius, 0.750" Border



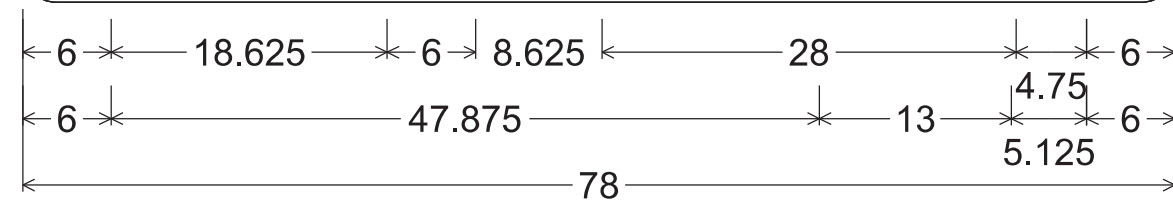
D1-62; 6.000" Radius, 1.000" Border

NOTES

1. All Signs Type II - Type H Reflective
2. Color:
Background - Green
Message - White
3. Message Series - E



D1-2; 2.250" Radius, 0.750" Border



D2-2; 2.250" Radius, 0.750" Border

7

7

DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1)		SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (13)	MASS ORDINATE +/- (14)	WASTE	COMMENT
			CUT (2)	EBS EXCAVATION (3)				FACTOR (15) 1.40			
DIVISION 1											
STH-28_CI	20+00/24+08.394		751	0	570	181	195	273	-92	-92	
STH-28_EB - EAST LEG	117+05/126+35		1,678	0	148	1,530	4,960	6,944	5,414	5,414	
STH-28_FB - WEST LEG	107+70/111+10		3,183	0	294	2,889	171	239	2,650	2,650	
STH-28_NB - NORTH LEG	215+75.145/222+25		2,230	0	299	1,931	32	45	1,886	1,886	
STH-28_NB - SOUTH LEG	204+75/210+19.58		1,522	0	213	1,309	324	454	855	855	
STH-28_NE - QUADRANT	40+00/44+91.058		2,083	0	201	1,882	501	701	1,181	1,181	
STH-28_NW - QUADRANT	30+00/35+37.256		3,621	0	98	3,523	190	266	3,257	3,257	
STH-28_SB - NORTH LEG	215+75/221+91		2,071	0	142	1,929	44	62	1,867	1,867	
STH-28_SB - SOUTH LEG	205+00/210+45.219		1,422	0	211	1,211	37	52	1,159	1,159	
STH-28_SE - QUADRANT	50+00/54+15		500	0	121	379	757	1,060	-681	-681	
STH-28_SW - QUADRANT	60+00/64+70.137		1,369	0	241	1,128	399	559	569	569	
STH-28_WB - EAST LEG	118+15/124+83.839		1,338	0	277	1,061	1	1	1,060	1,060	
STH-28_WB - WEST LEG	105+00/111+28		1,762	0	73	1,689	371	519	1,170	1,170	
UNDISTRIBUTED	-		-	1,175							
DIVISION 1 SUBTOTAL			23,530	1,175	2,888	20,642	7,982	11,175	9,467	9,467	
GRAND TOTAL			23,530	1,175	2,888	20,642	7,982	11,175	9,467	9,467	
TOTAL COMMON EXC			24,705								

NOTES:

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

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

(3) EBS EXCAVATION TO BE BACKFILLED WITH SELECT BORROW MATERIAL. NOTE: THIS IS DESIGNERS CHOICE, CAN BE BACKFILLED WITH BORROW, OR CUT AS WELL.

(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL

(5) AVAILABLE MATERIAL - CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL

(13) EXPANDED FILL FACTOR = X.6X

DEPENDENT ON SELECTIONS: EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED MARSH - REDUCED EBS) * FILL FACTOR

OR EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED EBS) * FILL FACTOR

OR EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED MARSH) * FILL FACTOR

OR EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK) * FILL FACTOR

(14) 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.

(15) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

DIVISION 2 - CIRCLE

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 FILL	MASS ORDINATE
20+00	2000.00	0.00	48.86	44.01	1.91	0	0	0	0	0	0
20+41	2041.00	41.00	66.63	44.01	2.30	88	67	3	88	3	18
20+50	2050.00	9.00	72.47	41.93	2.49	23	14	1	111	4	26
21+00	2100.00	50.00	54.13	26.51	24.69	117	63	25	228	29	55
21+50	2150.00	50.00	99.38	44.01	7.46	142	65	30	370	59	102
22+00	2200.00	50.00	47.52	37.14	15.88	136	75	22	506	81	141
22+15	2215.00	15.00	26.92	44.01	19.22	21	23	10	527	91	129
22+50	2250.00	35.00	14.51	44.01	14.39	27	57	22	554	113	77
23+00	2300.00	50.00	21.17	20.99	29.16	33	60	40	587	153	10
23+15	2315.00	15.00	24.62	21.41	30.04	13	12	16	600	169	-5
23+35	2335.00	20.00	35.27	29.53	7.50	22	19	14	622	183	-16
23+50	2350.00	15.00	50.14	44.01	6.04	24	20	4	646	187	-16
23+54.991	2354.99	4.99	55.57	44.01	5.72	10	8	1	656	188	-15
24+00	2400.00	45.01	41.63	44.01	1.97	81	73	6	737	194	-13
24+08.394	2408.39	8.39	48.84	44.01	1.91	14	14	1	751	195	-14

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
4 - EXPANDED MARSH BACKFILL	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
5 - EXPANDED EBS	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
6 - REDUCED MARSH IN FILL	REDUCED MARSH EXCAVATION THAT CAN BE USED IN FILL
7 - REDUCED EBS IN FILL	REDUCED EBS EXCAVATION THAT CAN BE USED IN FILL
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: $[(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]$
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: $[CUT - SALVAGED PAVT - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]$
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: $[(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]$
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: $[CUT - SALVAGED PAVT - ((FILL - EXPANDED ROCK) * FILL FACTOR)]$

DIVISION 1 - CTH TW & STH 28 - FB

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 FILL	MASS ORDNATE
117+05	11705.00	0.00	4.52	0.00	238.74	0	0	0	0	0	0
117+26.254	11726.25	21.25	8.14	0.00	250.74	5	0	192	5	192	-1.87
117+50	11750.00	23.75	15.68	0.26	231.76	10	0	212	15	404	-3.89
118+00	11800.00	50.00	43.61	1.04	157.89	55	1	361	70	765	-6.96
118+50	11850.00	50.00	37.14	1.35	271.05	75	2	397	145	1,162	-1,020
119+00	11900.00	50.00	35.83	1.77	318.40	68	3	546	213	1,708	-1,501
119+10.484	11910.48	10.48	36.01	1.77	315.85	14	1	123	227	1,831	-1,611
119+50	11950.00	39.52	37.34	2.24	296.72	54	3	448	281	2,279	-2,008
120+00	12000.00	50.00	37.40	2.71	299.67	69	5	552	350	2,831	-2,496
120+50	12050.00	50.00	37.08	3.33	276.84	69	6	534	419	3,365	-2,967
121+00	12100.00	50.00	40.16	3.65	221.16	72	6	461	491	3,826	-3,362
121+50	12150.00	50.00	41.57	4.06	176.85	76	7	369	567	4,195	-3,662
121+76.06	12176.06	26.06	41.34	4.38	157.70	40	4	161	607	4,356	-3,787
122+00	12200.00	23.94	41.08	4.79	136.15	37	4	130	644	4,486	-3,884
122+50	12250.00	50.00	43.44	5.00	74.99	78	9	195	722	4,681	-4,010
123+00	12300.00	50.00	42.35	5.52	60.31	79	10	125	801	4,806	-4,066
123+50	12350.00	50.00	43.06	6.09	34.94	79	11	88	880	4,894	-4,086
124+00	12400.00	50.00	42.67	6.35	16.28	79	12	47	959	4,941	-4,066
124+18.37	12418.37	18.37	42.58	6.67	10.93	29	4	9	988	4,950	-4,050
124+41.637	12441.64	23.27	43.76	6.93	2.75	37	6	6	1,025	4,956	-4,025
124+50	12450.00	8.36	44.97	6.93	1.84	14	2	1	1,039	4,957	-4,014
124+71.704	12471.70	21.70	48.74	7.08	0.12	38	6	1	1,077	4,958	3,983
125+00	12500.00	28.30	92.84	7.29	1.59	74	8	1	1,151	4,959	-3,918
125+25.37	12525.37	25.37	95.12	7.40	0.90	88	7	1	1,239	4,960	-3,838
125+50	12550.00	24.63	101.01	7.45	0.00	89	7	0	1,328	4,960	-3,756
125+78.37	12578.37	28.37	109.02	7.50	0.00	110	8	0	1,438	4,960	3,654
126+00	12600.00	21.63	116.67	7.55	0.00	90	6	0	1,528	4,960	-3,570
126+35	12635.00	35.00	114.97	7.68	0.00	150	10	0	1,678	4,960	-3,430

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PROJECT NO: 4060-05-72

HWY: STH 28

COUNTY: DODGE

EARTHWORK DATA

SHEET

186

E

DIVISION 1 - C.H.TW & STH 28 - FB

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 FILL	MASS ORDINATE
102+70	10270.00	0.00	97.36	5.42	1.59	0	0	0	0	0	0
103+00	10300.00	30.00	109.23	5.42	0.00	115	6	1	115	1	108
103+13	10313.00	13.00	117.46	5.42	0.19	55	3	0	170	1	160
103+50	10350.00	37.00	103.95	5.42	4.38	152	7	3	322	4	302
103+72.824	10372.82	22.82	93.58	5.42	8.57	83	5	5	405	9	375
104+00	10400.00	27.18	89.32	5.63	21.26	92	6	15	497	24	446
104+36.411	10436.41	36.41	88.70	5.83	31.16	120	8	35	617	59	523
104+50	10450.00	13.59	88.59	6.04	34.07	45	3	16	662	75	549
105+00	10500.00	50.00	91.36	6.46	32.94	167	12	62	829	137	642
105+20	10520.00	20.00	42.56	6.67	23.66	50	5	21	879	158	666
105+50	10550.00	30.00	48.52	7.08	0.00	51	8	13	930	171	696
106+00	10600.00	50.00	64.50	7.71	0.00	105	14	0	1,035	171	787
106+50	10650.00	50.00	77.66	8.54	0.00	132	15	0	1,167	171	904
107+00	10700.00	50.00	95.90	9.58	0.00	161	17	0	1,328	171	1,048
107+50	10750.00	50.00	96.98	10.83	0.00	179	19	0	1,507	171	1,208
108+00	10800.00	50.00	101.57	12.08	0.00	184	21	0	1,691	171	1,371
108+22	10822.00	22.00	104.74	14.83	0.00	84	11	0	1,775	171	1,444
108+50	10850.00	28.00	127.65	13.13	0.00	120	14	0	1,895	171	1,550
109+00	10900.00	50.00	154.05	12.29	0.00	261	24	0	2,156	171	1,787
109+30	10930.00	30.00	190.97	11.88	0.00	192	13	0	2,348	171	1,966
109+50	10950.00	20.00	173.34	12.17	0.00	135	9	0	2,483	171	2,097
110+00	11000.00	50.00	128.19	12.17	0.00	279	23	0	2,762	171	2,348
110+50	11050.00	50.00	101.49	12.17	0.00	213	23	0	2,975	171	2,538
111+00	11100.00	50.00	88.25	12.17	0.51	176	23	0	3,151	171	2,691
111+10	11110.00	10.00	84.53	12.17	0.99	37	5	0	3,183	171	2,718

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PROJECT NO: 4060-05-72

HWY: STH 28

COUNTY: DODGE

EARTHWORK DATA

SHEET

187

E

DIVISION 1 - STH 28-67-175 - NB

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 FILL	MASS ORDNATE
215+75.145	21575.15	0.00	103.94	12.24	35.06	0	0	0	0	0	0
216+00	21600.00	24.85	101.02	13.44	11.51	94	12	21	94	21	61
216+50	21650.00	50.00	109.71	14.22	0.00	195	26	11	289	32	219
217+00	21700.00	50.00	112.63	14.95	0.00	206	27	0	495	32	398
217+50	21750.00	50.00	107.56	15.16	0.00	204	28	0	699	32	574
218+00	21800.00	50.00	95.17	14.38	0.00	188	27	0	887	32	735
218+50	21850.00	50.00	91.37	13.44	0.00	173	26	0	1,060	32	882
219+00	21900.00	50.00	86.05	12.50	0.00	164	24	0	1,224	32	1,022
219+50	21950.00	50.00	83.16	12.08	0.00	157	23	0	1,381	32	1,156
220+00	22000.00	50.00	83.77	10.78	0.00	155	21	0	1,536	32	1,290
220+50	22050.00	50.00	86.95	10.00	0.00	158	19	0	1,694	32	1,429
220+63	22063.00	13.00	87.02	12.55	0.00	42	5	0	1,736	32	1,466
221+00	22100.00	37.00	82.01	12.40	0.00	116	17	0	1,852	32	1,565
221+50	22150.00	50.00	61.93	8.28	0.00	133	19	0	1,985	32	1,679
221+90	22190.00	40.00	58.68	7.66	0.00	89	12	0	2,074	32	1,756
221+91	22191.00	1.00	123.88	7.50	0.00	3	0	0	2,077	32	1,759
222+00	22200.00	9.00	123.00	7.50	0.00	41	3	0	2,118	32	1,797
222+25	22225.00	25.00	119.67	15.10	0.00	112	10	0	2,230	32	1,899

DIVISION 1 - CTH TW & STH 28 - WB

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 FILL	MASS ORDNATE
105+00	10500.00	0.00	52.18	5.46	2.58	0	0	0	0	0	0
105+30	10530.00	30.00	68.79	7.46	0.00	67	7	1	67	1	59
105+50	10550.00	20.00	53.18	5.13	2.30	45	5	1	112	2	98
106+00	10600.00	50.00	48.66	4.46	2.90	94	9	5	206	7	178
106+05.596	10605.60	5.60	48.86	4.38	2.54	10	1	1	216	8	186
106+50	10650.00	44.40	50.35	3.67	2.83	82	7	4	298	12	257
106+88.86	10688.86	38.86	50.94	2.88	4.01	73	5	5	371	17	320
107+00	10700.00	11.14	51.00	2.63	4.30	21	1	2	392	19	338
107+11.191	10711.19	11.19	52.64	2.38	4.35	21	1	2	413	21	356
107+50	10750.00	38.81	65.20	1.50	3.95	85	3	6	498	27	432
107+55.86	10755.86	5.86	68.50	1.38	3.76	15	0	1	513	28	446
108+00	10800.00	44.14	107.48	0.42	3.75	144	1	6	657	34	583
108+09.86	10809.86	9.86	119.17	0.17	5.01	41	0	2	698	36	622
108+50	10850.00	40.14	161.75	6.50	0.00	209	5	4	907	40	822
108+61	10861.00	11.00	166.92	29.50	0.00	67	7	0	974	40	882
109+00	10900.00	39.00	202.53	0.00	16.18	267	21	12	1,241	52	1,116
109+30	10930.00	30.00	229.89	0.00	20.39	240	0	20	1,481	72	1,336
109+50	10950.00	20.00	149.33	0.00	19.00	140	0	15	1,621	87	1,461
110+00	11000.00	50.00	1.88	0.00	27.54	140	0	43	1,761	130	1,558
110+23.25	11023.25	23.25	0.30	0.00	39.13	1	0	29	1,762	159	1,530
110+50	11050.00	26.75	0.44	0.00	35.92	0	0	37	1,762	196	1,493
111+00	11100.00	50.00	0.00	0.00	69.60	0	0	98	1,762	294	1,395
111+28	11128.00	28.00	0.00	0.00	78.61	0	0	77	1,762	371	1,318

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PROJECT NO: 4060-05-72

HWY: STH 28

COUNTY: DODGE

EARTHWORK DATA

SHEET

188

E

DIVISION 1 - STH 28-67-175 - NB

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 FILL	MASS ORDINATE
204+75	20475.00	0.00	121.88	17.40	0.00	0	0	0	0	0	0
204+99	20499.00	24.00	137.13	17.45	1.49	115	15	1	115	1	99
205+00	20500.00	1.00	83.15	8.65	1.60	4	0	0	119	1	103
205+33	20533.00	33.00	99.49	8.54	0.00	112	11	1	231	2	203
205+50	20550.00	17.00	75.06	8.54	5.06	55	5	2	286	4	251
206+00	20600.00	50.00	59.02	8.54	4.02	124	16	8	410	12	351
206+50	20650.00	50.00	59.02	8.54	21.81	109	16	24	519	36	420
206+60	20660.00	10.00	59.19	8.54	23.95	22	3	8	541	44	431
207+00	20700.00	40.00	62.05	8.54	16.67	90	13	30	631	74	478
207+50	20750.00	50.00	66.46	8.54	20.44	119	16	34	750	108	547
208+00	20800.00	50.00	72.39	9.22	25.52	129	16	43	879	151	617
208+50	20850.00	50.00	80.81	11.30	29.74	142	19	51	1,021	202	689
209+00	20900.00	50.00	80.01	12.24	35.78	149	22	61	1,170	263	755
209+50	20950.00	50.00	79.75	12.50	12.32	148	23	45	1,318	308	835
210+00	21000.00	50.00	79.34	15.99	4.13	147	26	15	1,465	323	941
210+19.58	21019.58	19.58	77.89	15.94	0.00	57	12	1	1,522	324	985

DIVISION 1 - NF CURB

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 FILL	MASS ORDINATE
40+00	4000.00	0.00	26.24	14.27	1.37	0	0	0	0	0	0
40+50	4050.00	50.00	18.53	15.00	3.82	41	27	5	41	5	9
41+00	4100.00	50.00	10.39	15.42	6.66	27	28	10	68	15	-2
41+50	4150.00	50.00	2.95	16.35	37.61	12	29	41	80	56	-60
42+00	4200.00	50.00	49.96	19.69	73.38	49	33	103	129	159	-147
42+18	4218.00	18.00	71.41	18.18	91.47	40	13	55	169	214	-175
42+50	4250.00	32.00	107.01	0.00	89.90	106	11	107	275	321	-187
43+00	4300.00	50.00	245.22	2.60	4.52	326	2	87	601	408	50
43+05	4305.00	5.00	296.74	10.42	2.01	50	1	1	651	409	98
43+07	4307.00	2.00	313.37	13.02	1.57	23	1	0	674	409	120
43+50	4350.00	43.00	283.43	5.42	4.54	475	15	5	1,149	414	575
44+00	4400.00	50.00	219.73	5.57	17.02	466	10	20	1,615	434	1,011
44+50	4450.00	50.00	112.86	9.53	14.60	308	14	29	1,923	463	1,276
44+91.058	4491.06	41.06	97.76	12.24	35.01	160	17	38	2,083	501	1,381

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PROJECT NO: 4060-05-72

HWY: STH 28

COUNTY: DODGE

EARTHWORK DATA

SHEET

189

E

DIVISION 1 - NW CURB

STATION	REAL STATION	DISTANCE	AREA (SF)			TOTAL VOL (CY) (UN)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDNATE	
											NOTE 1
30+00	3000.00	0.00	191.42	8.02	30.77	0	0	0	0	0	
30+50	3050.00	50.00	89.90	11.56	0.58	260	29	260	29	213	
31+00	3100.00	50.00	80.79	15.73	0.00	158	1	418	30	345	
31+50	3150.00	50.00	93.88	18.42	3.68	162	3	580	33	472	
31+80	3180.00	30.00	115.15	14.69	29.39	116	18	696	51	552	
32+00	3200.00	20.00	78.76	0.00	41.74	77	26	768	77	593	
32+50	3250.00	50.00	367.04	0.00	1.93	413	40	1,181	117	966	
32+65	3265.00	15.00	534.28	0.00	0.00	250	1	1,431	118	1,215	
33+00	3300.00	35.00	275.05	0.00	0.00	525	0	1,956	118	1,740	
33+50	3350.00	50.00	392.02	0.00	0.00	618	0	2,574	118	2,358	
33+60	3360.00	10.00	379.48	0.00	0.00	143	0	2,717	118	2,501	
33+76	3376.00	16.00	349.56	0.00	0.00	216	0	2,933	118	2,717	
34+00	3400.00	24.00	233.73	0.00	0.00	259	0	3,192	118	2,976	
34+50	3450.00	50.00	103.25	0.00	0.00	312	0	3,504	118	3,288	
35+00	3500.00	50.00	13.46	0.00	10.76	108	10	3,612	128	3,386	
35+37	3537.00	37.00	0.00	0.00	77.87	9	61	3,621	189	3,334	
35+37.256	3537.26	0.26	0.00	0.00	77.88	0	1	3,621	190	3,333	

DIVISION 1 - STH 28-67-175 -SB

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 FILL	MASS ORDNATE
215+75	21575.00	0.00	159.39	7.81	35.82	0	0	0	0	0	0
215+80	21580.00	5.00	153.79	7.55	44.24	29	1	7	29	7	21
216+00	21600.00	20.00	88.61	6.61	20.82	90	5	24	119	31	82
216+27.367	21627.37	27.37	67.01	5.63	0.00	79	6	11	198	42	144
216+50	21650.00	22.63	91.83	5.05	0.00	67	4	0	265	42	207
216+76.272	21676.27	26.27	112.23	4.74	0.00	99	5	0	364	42	301
217+00	21700.00	23.73	129.41	4.17	0.00	106	4	0	470	42	403
217+25.177	21725.18	25.18	135.60	4.01	0.00	124	4	0	594	42	523
217+50	21750.00	24.82	117.41	4.43	0.00	116	4	0	710	42	635
218+00	21800.00	50.00	147.60	5.31	0.00	245	9	0	955	42	871
218+50	21850.00	50.00	85.40	6.25	0.00	216	11	0	1,171	42	1,076
219+00	21900.00	50.00	83.89	7.19	0.00	157	12	0	1,328	42	1,221
219+50	21950.00	50.00	65.82	8.65	0.00	139	15	0	1,467	42	1,345
220+00	22000.00	50.00	68.37	5.47	1.26	124	13	1	1,591	43	1,455
220+50	22050.00	50.00	66.30	6.30	0.00	125	11	1	1,716	44	1,568
220+72.126	22072.13	22.13	67.41	6.72	0.00	55	5	0	1,771	44	1,618
221+00	22100.00	27.87	69.40	7.19	0.00	71	7	0	1,842	44	1,682
221+31.907	22131.91	31.91	68.42	7.55	0.00	81	9	0	1,923	44	1,754
221+50	22150.00	18.09	69.02	7.71	0.00	46	5	0	1,969	44	1,795
221+91	22191.00	41.00	65.35	7.81	0.00	102	12	0	2,071	44	1,885

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DIVISION 1 - STH 28-67-175 - SB

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
205+00	20500.00	0.00	56.17	0.06	0	0	0	0	0	0
205+35	20535.00	35.00	86.70	0.00	93	23	0	93	0	70
205+50	20550.00	15.00	86.35	0.00	48	12	0	141	0	106
206+00	20600.00	50.00	76.48	0.00	151	23	0	292	0	234
206+27	20627.00	27.00	99.81	0.00	88	11	0	380	0	311
206+50	20650.00	23.00	78.34	0.01	76	11	0	456	0	376
206+60	20660.00	10.00	66.76	5.29	27	4	1	483	1	398
207+00	20700.00	40.00	68.43	0.17	100	13	4	583	5	481
207+50	20750.00	50.00	74.68	0.01	133	16	0	716	5	598
208+00	20800.00	50.00	74.15	0.18	138	16	0	854	5	720
208+50	20850.00	50.00	77.15	0.00	140	16	0	994	5	844
208+55.219	20855.22	5.22	11.00	0.00	15	2	0	1,009	5	857
209+00	20900.00	44.78	71.30	0.32	123	15	0	1,132	5	965
209+50	20950.00	50.00	58.94	3.74	121	17	4	1,253	9	1,065
210+00	21000.00	50.00	47.78	7.01	99	17	10	1,352	19	1,137
210+45.219	21045.22	45.22	36.02	14.07	70	15	18	1,422	37	1,174

DIVISION 1 - SECURB

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
50+00	5000.00	0.00	77.89	8.70	0.00	0	0	0	0	0
50+50	5050.00	50.00	45.72	12.66	34.94	20	32	114	32	62
51+00	5100.00	50.00	37.29	14.58	44.79	25	74	191	106	40
51+16.8	5116.80	16.80	35.30	15.73	48.68	9	29	214	135	25
51+50	5150.00	33.20	32.78	20.73	48.87	22	60	256	195	-15
51+61	5161.00	11.00	32.95	23.96	46.74	9	19	269	214	-30
52+00	5200.00	39.00	19.46	0.00	9.54	17	41	307	255	-50
52+50	5250.00	50.00	33.66	0.00	7.23	0	16	356	271	-17
52+74	5274.00	24.00	33.92	13.65	43.27	6	22	386	293	-15
53+00	5300.00	26.00	34.89	4.38	41.50	9	41	419	334	-32
53+50	5350.00	50.00	23.98	0.00	42.92	4	78	474	412	-59
54+00	5400.00	50.00	2.42	0.00	197.86	0	223	498	635	-258
54+15	5415.00	15.00	4.43	0.00	241.02	0	122	500	757	-378

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DIVISION 1 - SW CURB

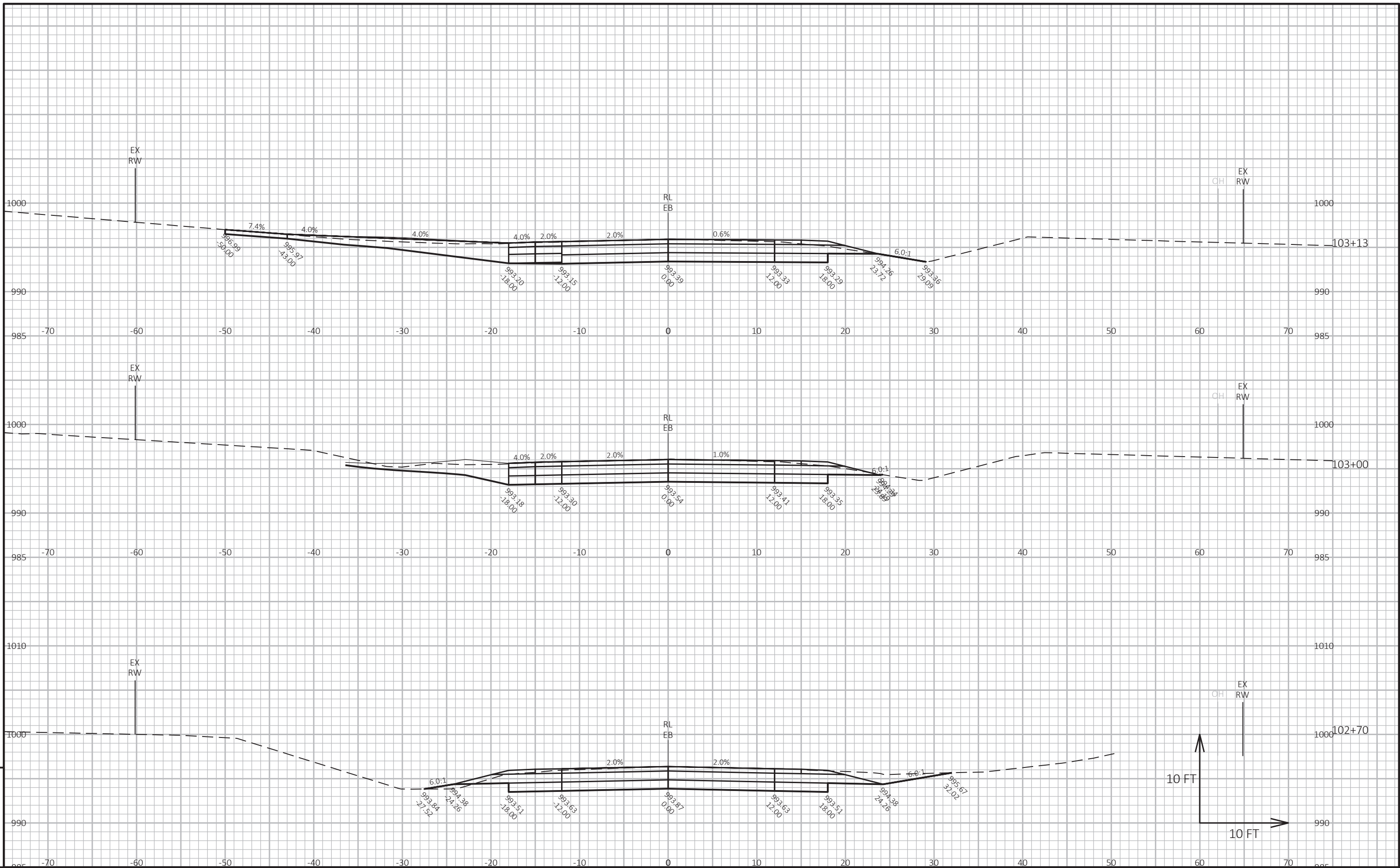
STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDNATE
60+00	6000.00	0.00	83.24	15.26	1.03	0	0	0	0	0	0
60+50	6050.00	50.00	84.21	15.94	0.09	155	29	1	155	1	125
61+00	6100.00	50.00	95.80	19.06	0.00	167	32	0	322	1	260
61+50	6150.00	50.00	78.91	15.94	2.27	162	32	2	484	3	388
61+81.889	6181.89	31.89	91.23	18.02	8.71	100	20	6	584	9	462
62+00	6200.00	18.11	106.30	19.79	9.16	66	13	6	650	15	509
62+40	6240.00	40.00	136.54	33.23	17.85	180	39	20	830	35	630
62+50	6250.00	10.00	50.30	21.25	21.77	35	10	7	865	42	648
62+53	6253.00	3.00	44.60	18.65	22.27	5	2	2	870	44	649
63+00	6300.00	47.00	48.88	2.50	56.12	81	18	68	951	112	644
63+10	6310.00	10.00	57.47	5.89	78.22	20	2	25	971	137	637
63+50	6350.00	40.00	110.28	6.77	63.64	124	9	105	1,095	242	647
64+00	6400.00	50.00	60.39	7.40	36.13	158	13	92	1,253	334	700
64+50	6450.00	50.00	35.41	8.75	20.29	89	15	52	1,342	386	722
64+70.137	6470.14	20.14	36.02	8.85	14.07	27	7	13	1,369	399	729

DIVISION 1 - CTH TW & STH 28 - WB

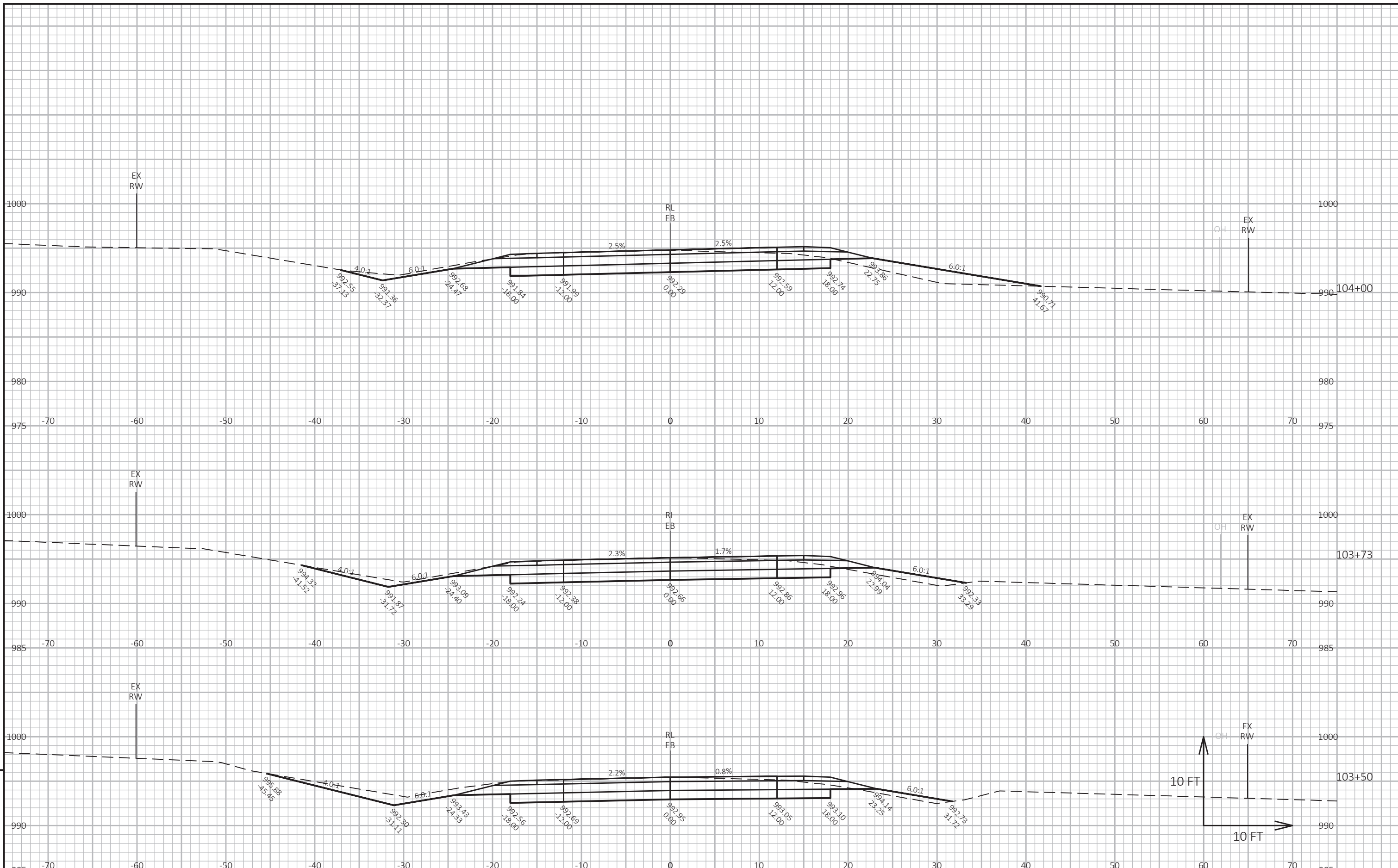
STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDNATE
118+15	11815.00	0.00	26.26	14.32	1.37	0	0	0	0	0	0
118+50	11850.00	35.00	29.65	13.96	0.41	36	18	1	36	1	17
118+72.769	11872.77	22.77	37.23	13.85	0.00	28	12	0	64	1	33
119+00	11900.00	27.23	43.67	13.44	0.00	41	14	0	105	1	60
119+24.912	11924.91	24.91	52.99	13.44	0.00	45	12	0	150	1	93
119+50	11950.00	25.09	61.43	13.18	0.00	53	12	0	203	1	134
120+00	12000.00	50.00	61.34	12.55	0.00	114	24	0	317	1	224
120+50	12050.00	50.00	59.88	11.98	0.00	112	23	0	429	1	313
121+00	12100.00	50.00	64.00	11.72	0.00	115	22	0	544	1	406
121+50	12150.00	50.00	60.46	11.09	0.00	115	21	0	659	1	500
122+00	12200.00	50.00	58.47	10.57	0.00	110	20	0	769	1	590
122+04.375	12204.38	4.38	57.64	10.57	0.00	9	2	0	778	1	597
122+50	12250.00	45.62	58.13	10.31	0.00	98	18	0	876	1	677
123+00	12300.00	50.00	54.66	9.64	0.00	104	18	0	980	1	763
123+50	12350.00	50.00	54.53	9.27	0.00	101	18	0	1,081	1	846
124+00	12400.00	50.00	54.29	8.85	0.00	101	17	0	1,182	1	930
124+50	12450.00	50.00	49.97	8.33	0.00	97	16	0	1,279	1	1,011
124+83	12483.00	33.00	45.61	8.18	0.41	58	10	0	1,337	1	1,059
124+83.839	12483.84	0.84	45.49	8.18	0.46	1	0	0	1,338	1	1,060

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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: EB - WEST LEG SHEET 193



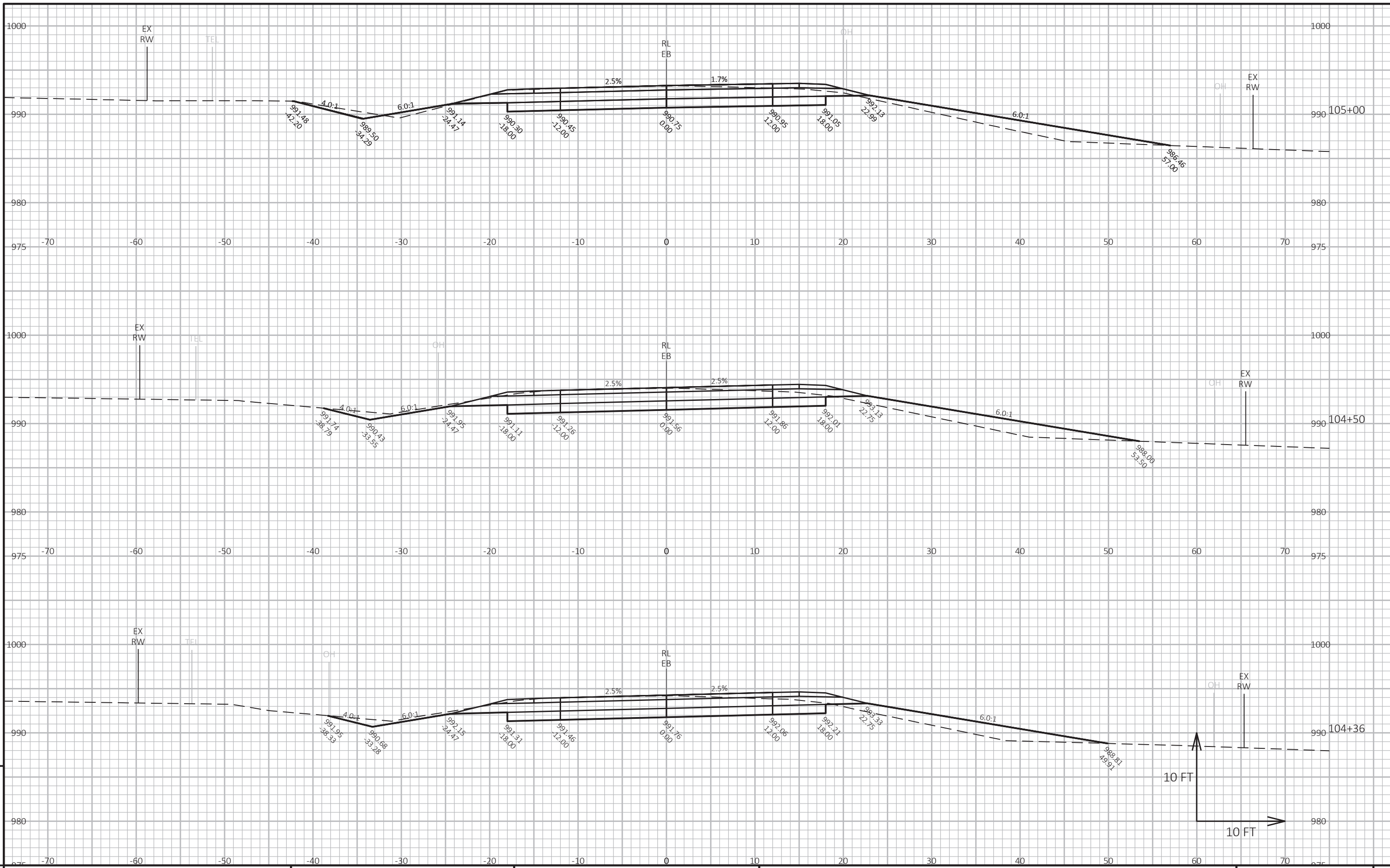
PROJECT NO: 4060-05-72

HWY: STH 28

COUNTY: DODGE

CROSS SECTIONS: EB - WEST LEG

SHEET 194



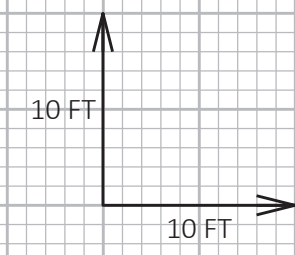
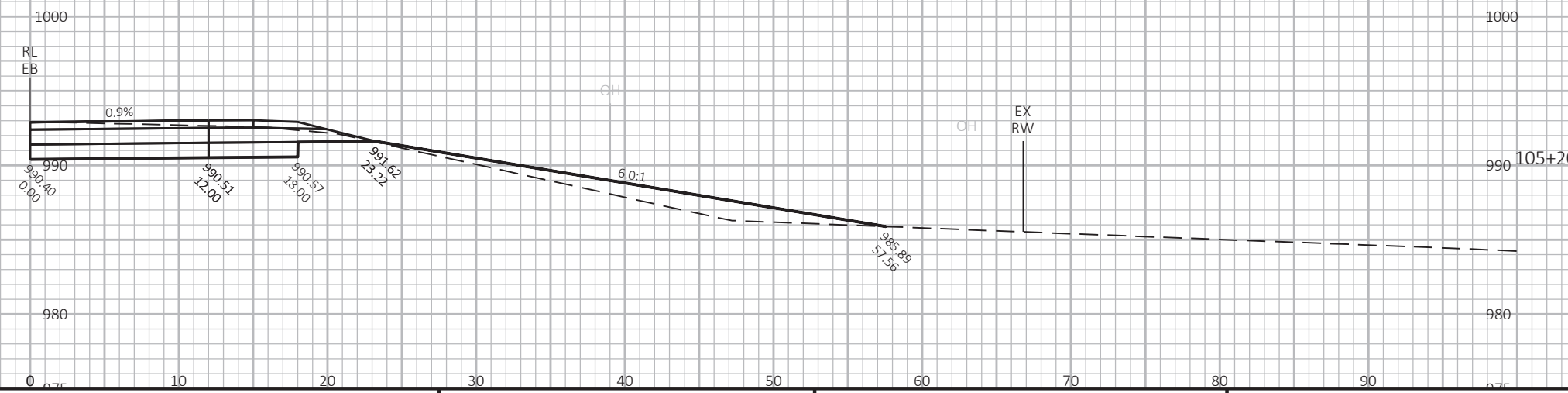
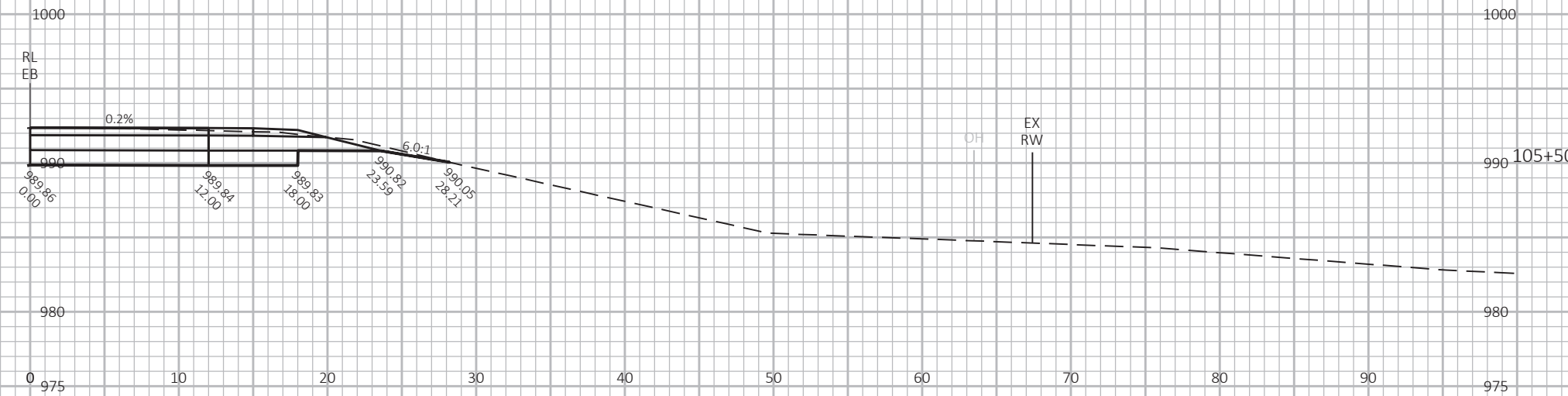
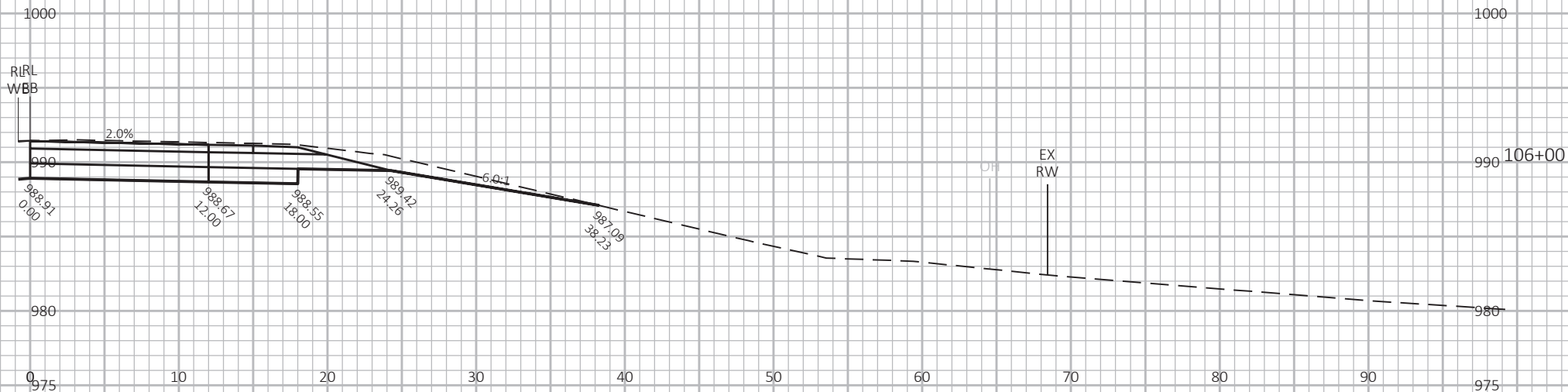
PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: EB - WEST LEG SHEET 195

FILE NAME: N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_EB.DWG PLOT DATE: 8/13/2021 9:55 AM PLOT BY: BAILEY, RYAN R PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

9

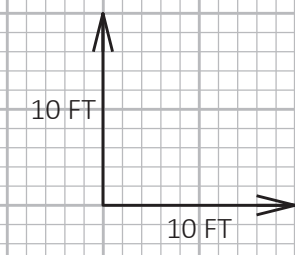
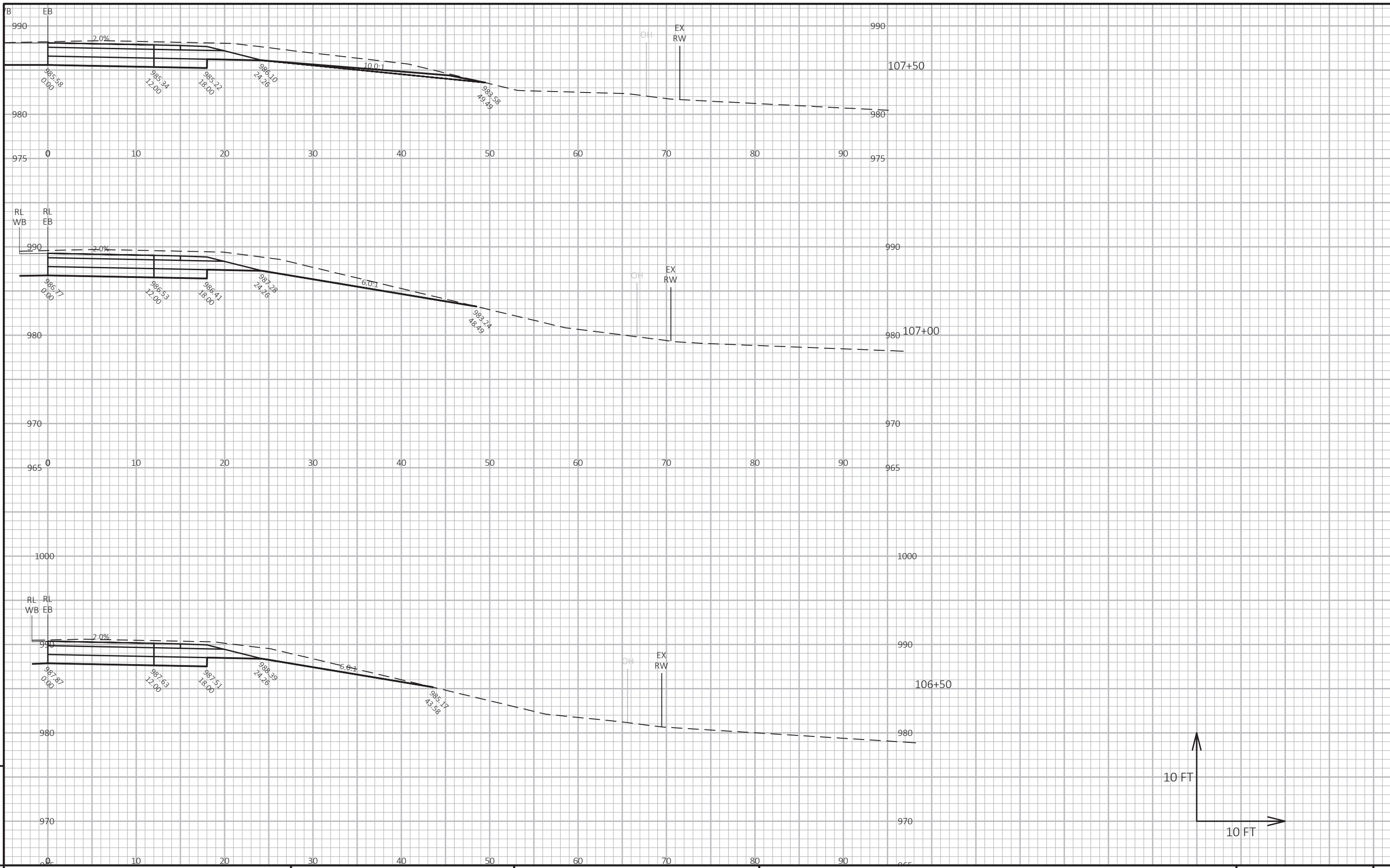
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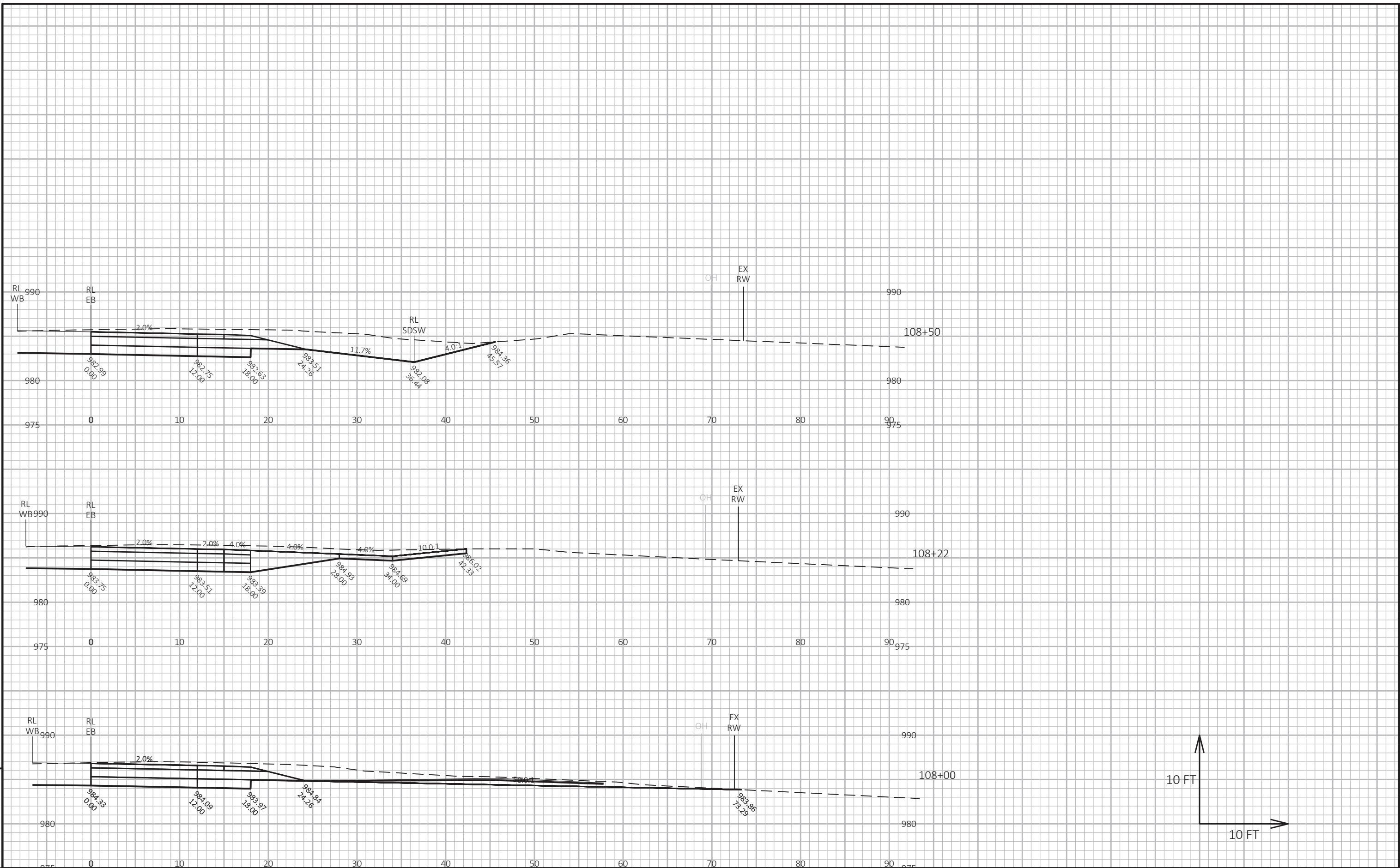
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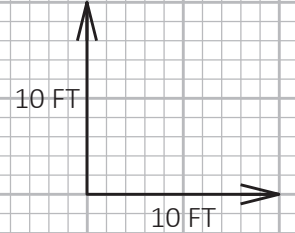
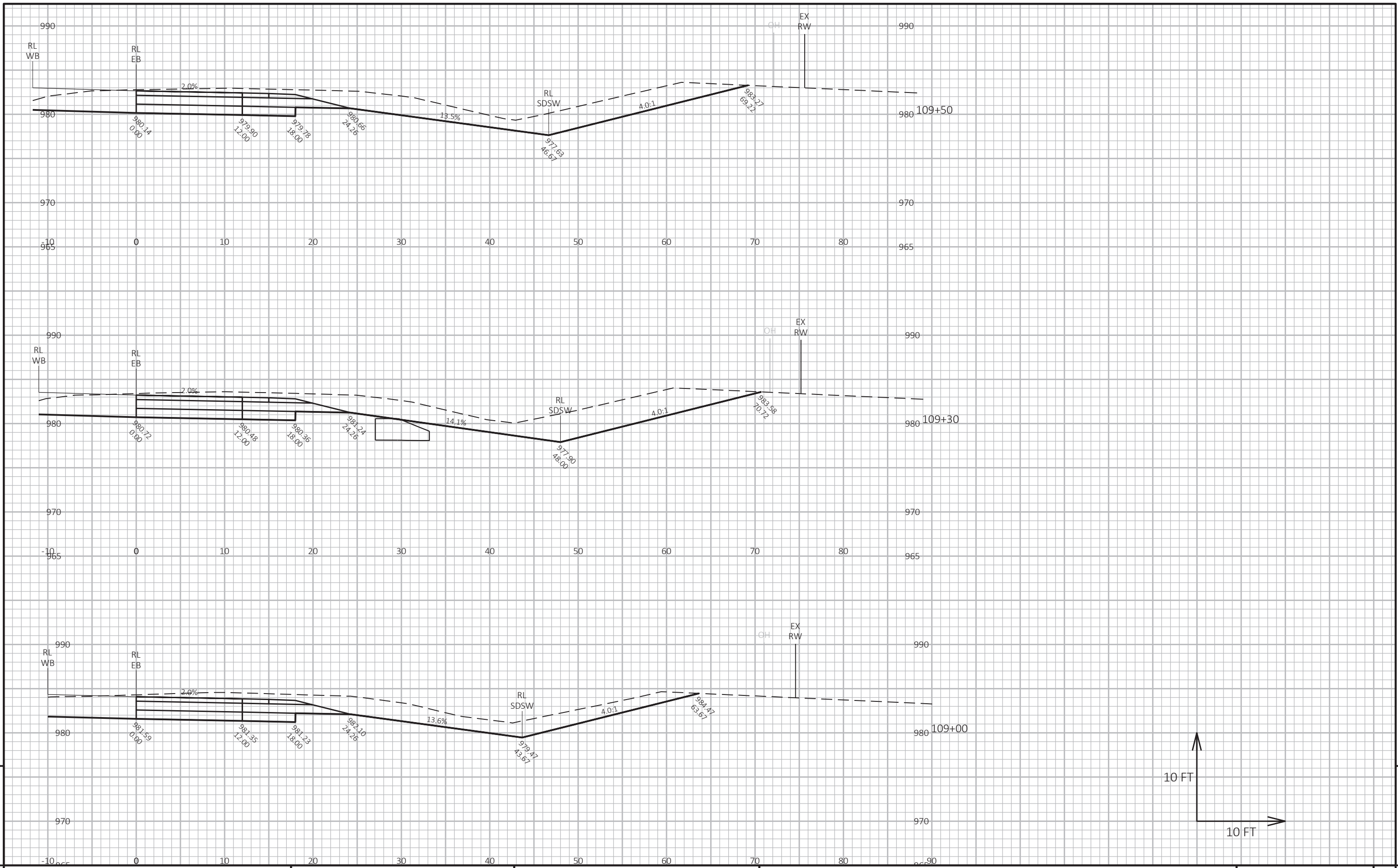
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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: EB - WEST LEG SHEET 197 E

FILE NAME: N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_EB.DWG PLOT DATE: 8/13/2021 9:55 AM PLOT BY: BAILEY, RYAN R PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49



PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: EB - WEST LEG SHEET 198



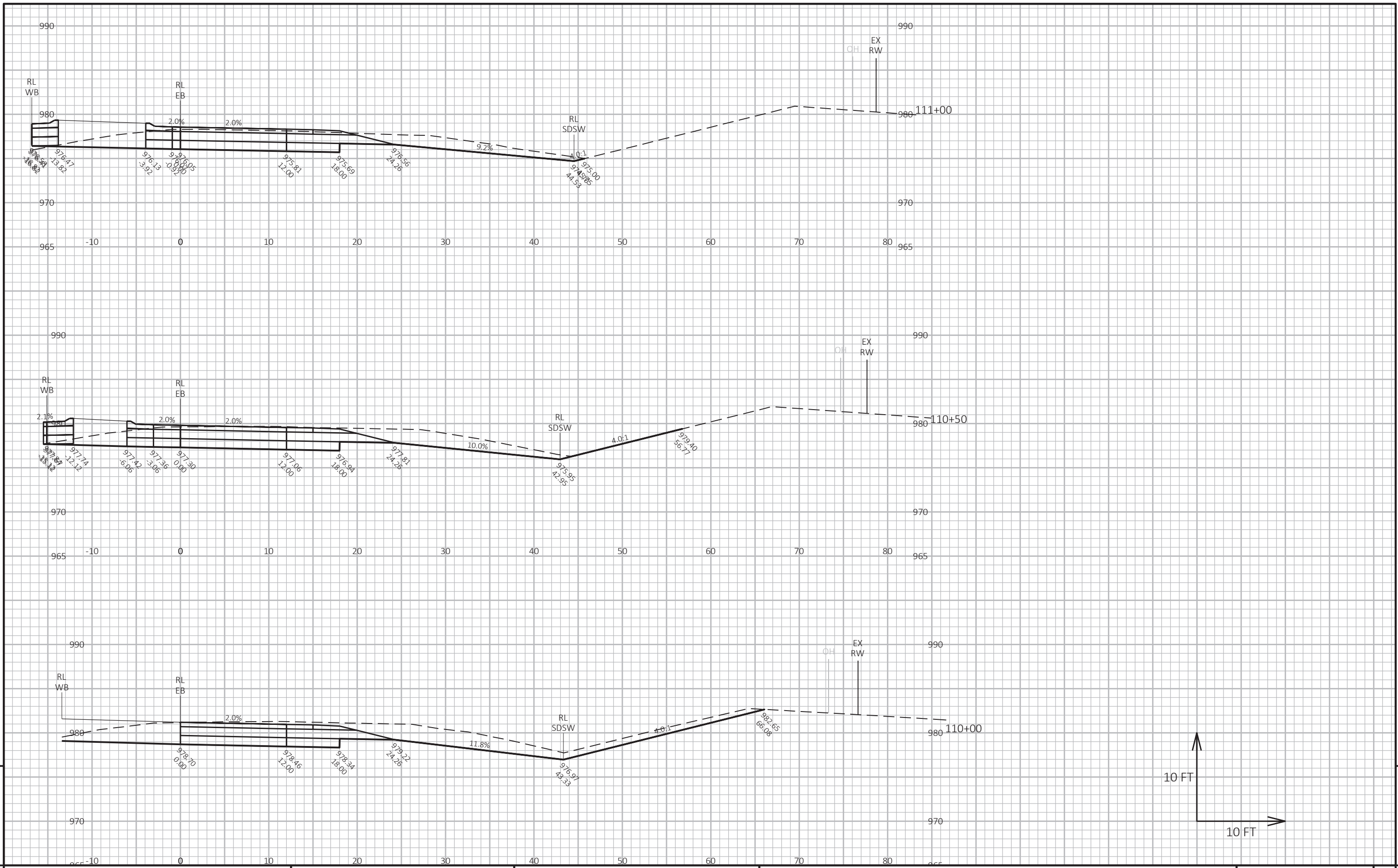
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FILE NAME: N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_EB.DWG PLOT DATE: 8/13/2021 9:55 AM PLOT BY: BAILEY, RYAN R PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

9

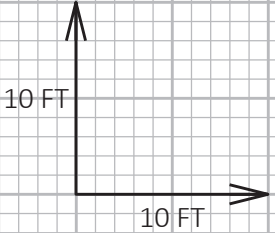
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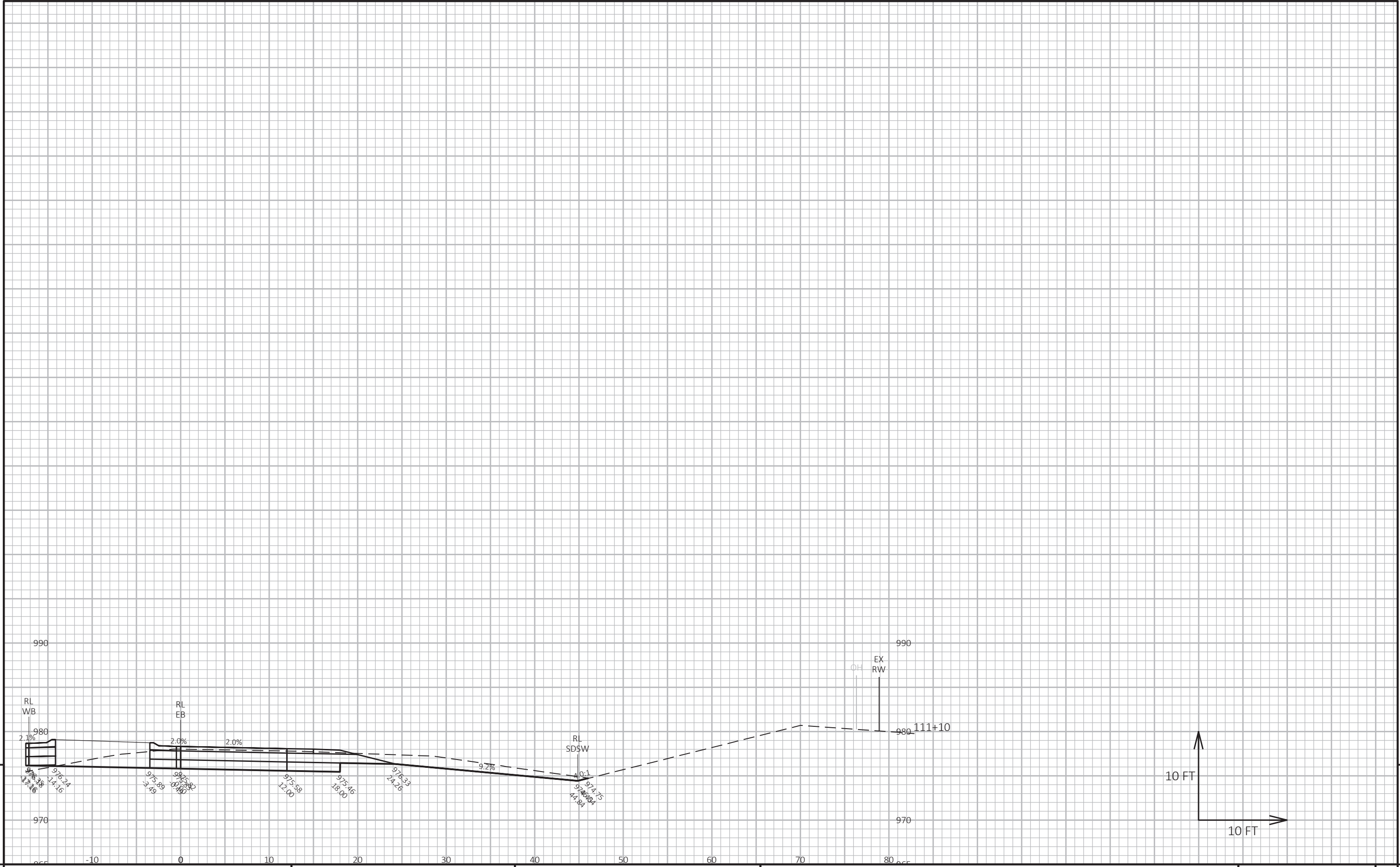
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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: EB - WEST LEG SHEET 200 E

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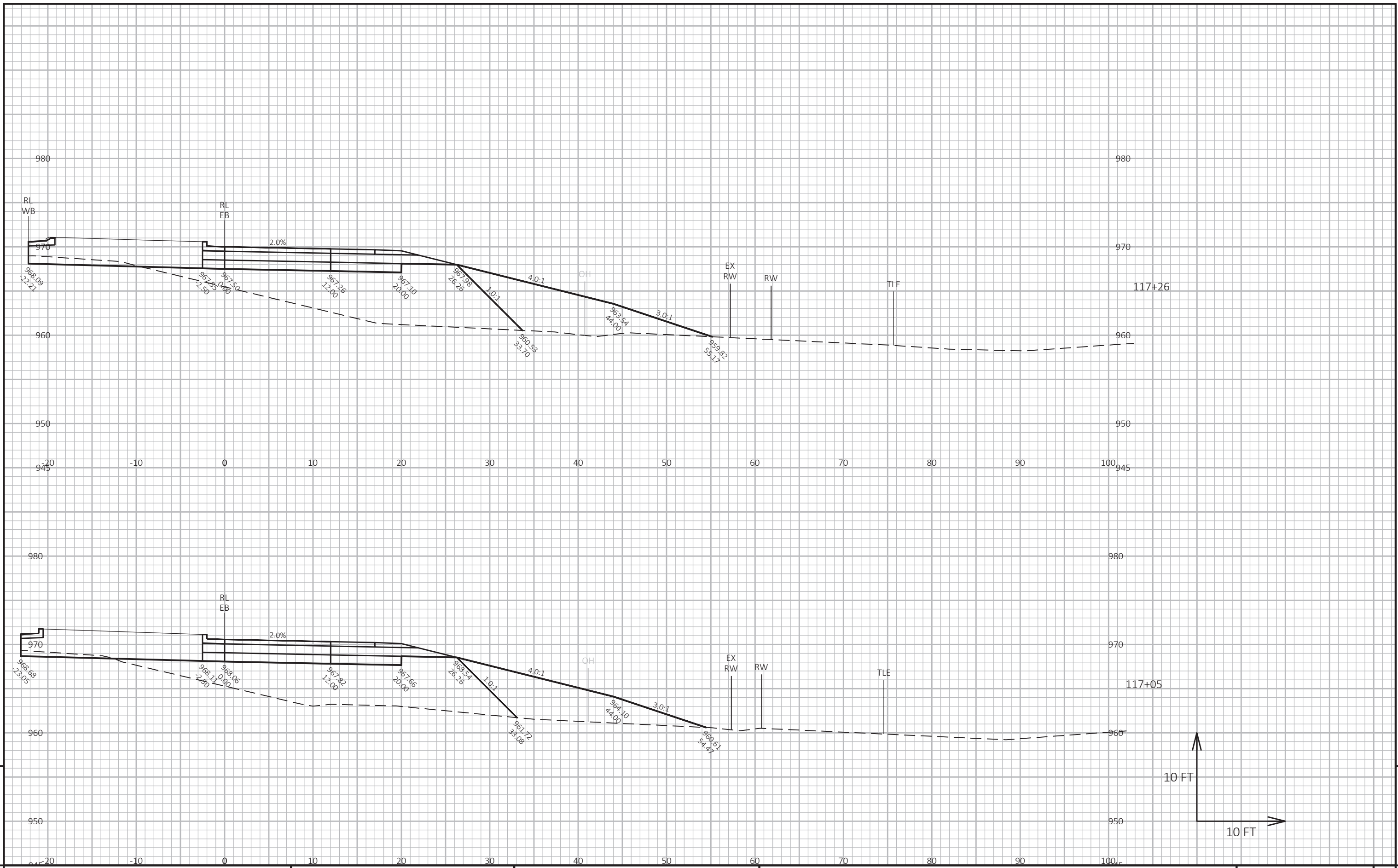


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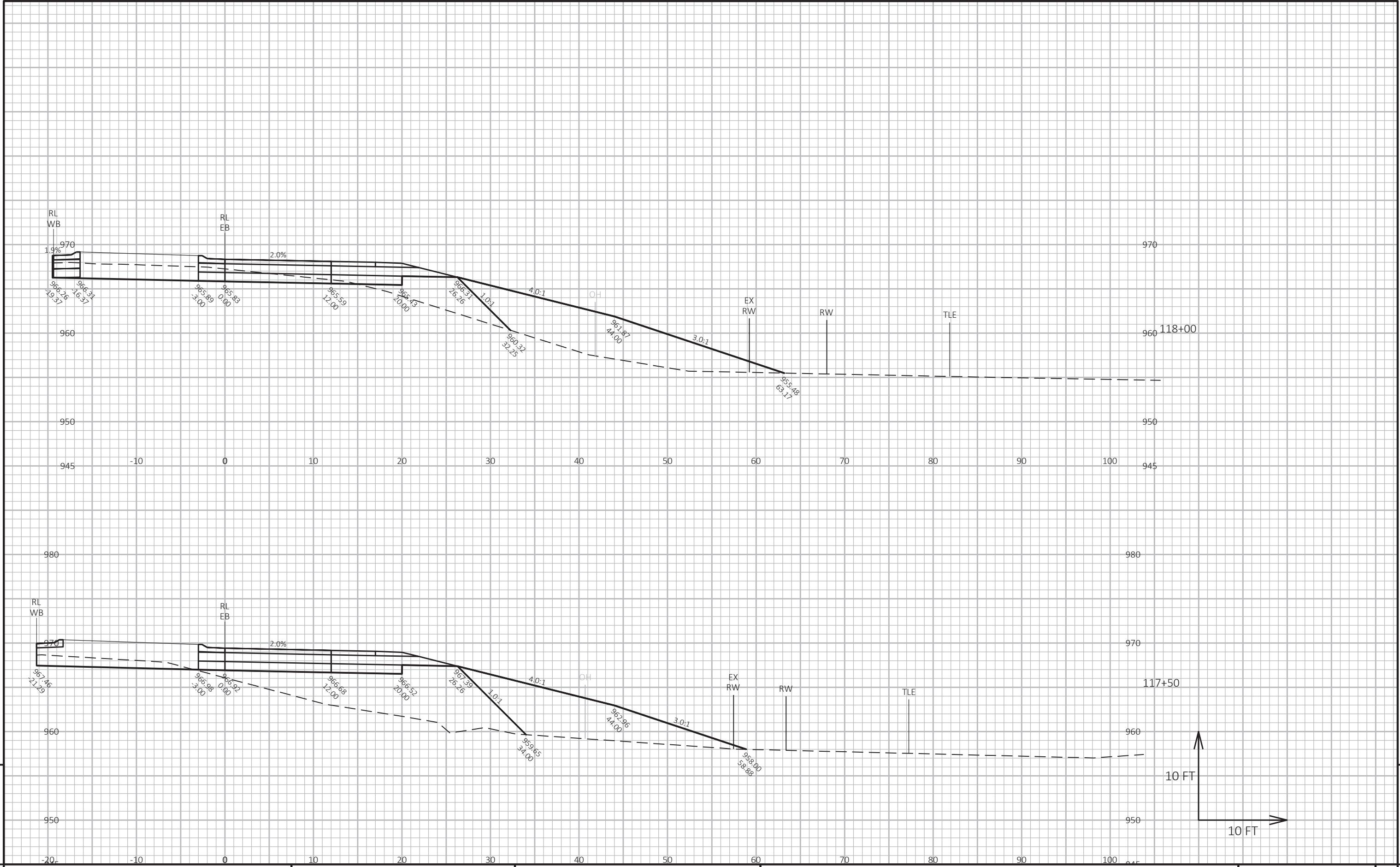
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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: EB - WEST LEG SHEET 201 E

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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: EB - EAST LEG SHEET 202



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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: EB - EAST LEG SHEET 203 E

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LAYOUT NAME - 090201_EB11

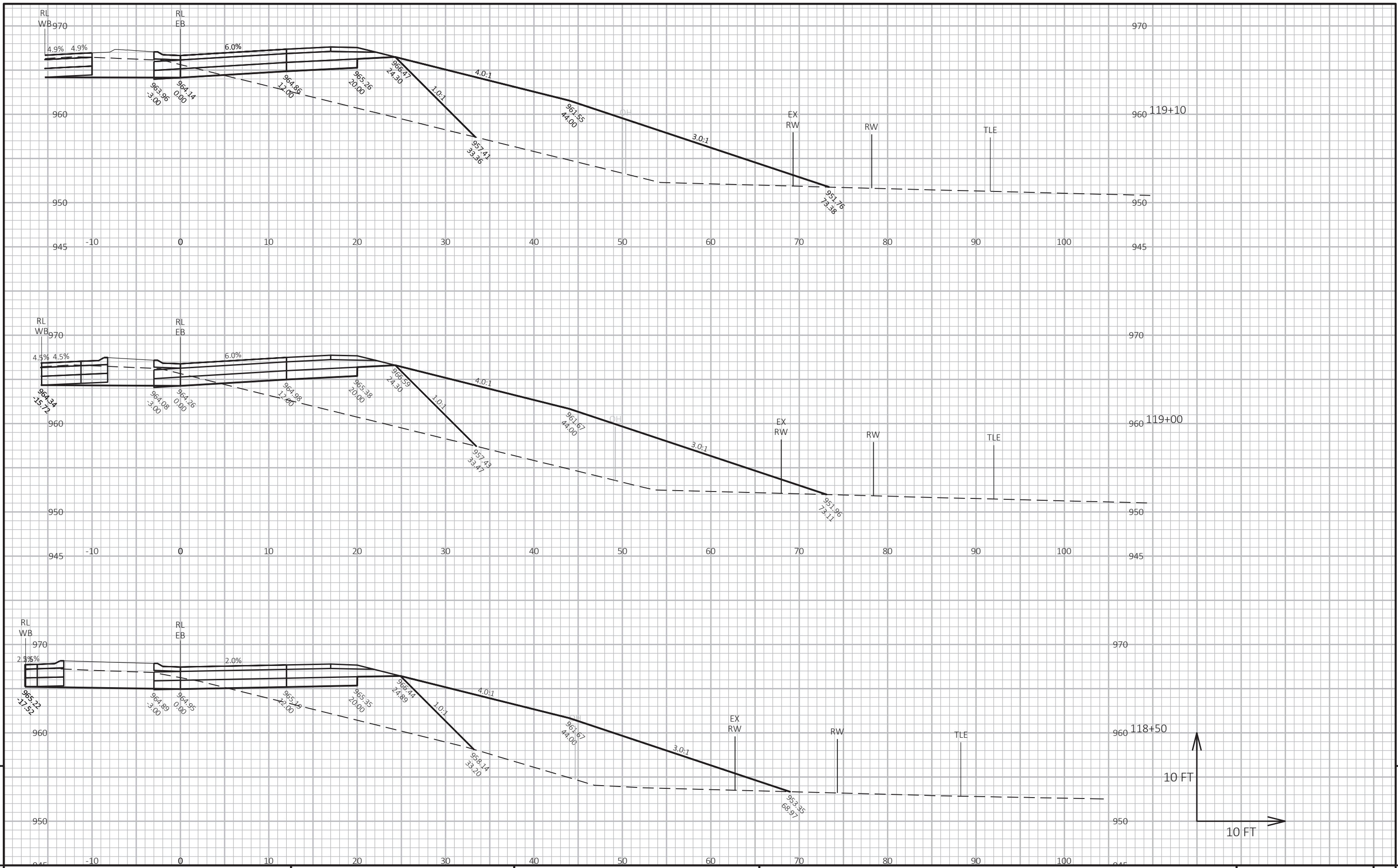
PLOT DATE: 8/13/2021 9:55 AM

PLOT BY: BAILEY, RYAN R

PLOT NAME:

PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADD SHEET 49



PROJECT NO: 4060-05-72

HWY: STH 28

COUNTY: DODGE

CROSS SECTIONS: EB - EAST LEG

SHEET

204

E



PROJECT NO: 4060-05-72

HWY: STH 28

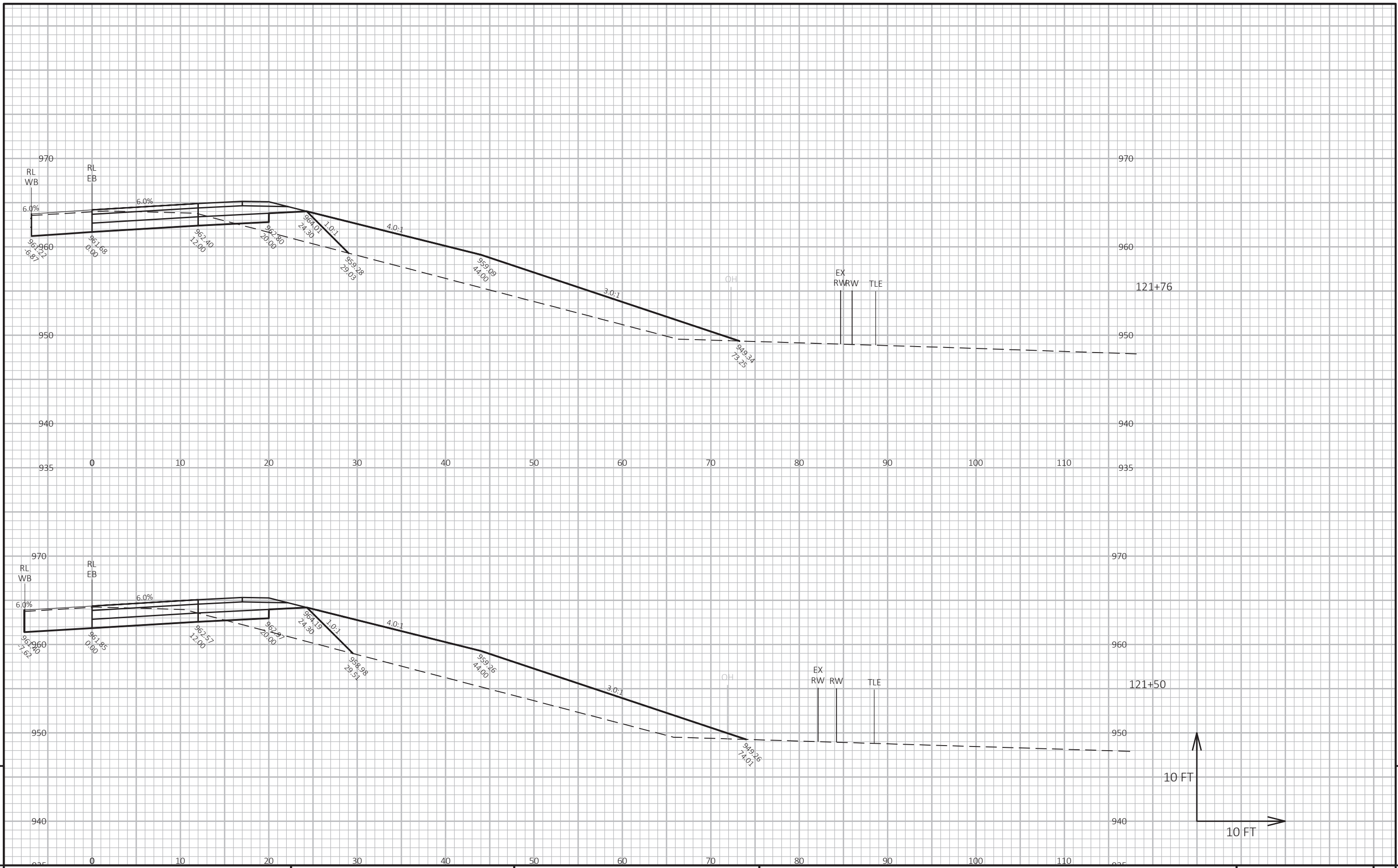
COUNTY: DODGE

CROSS SECTIONS: EB - EAST LEG

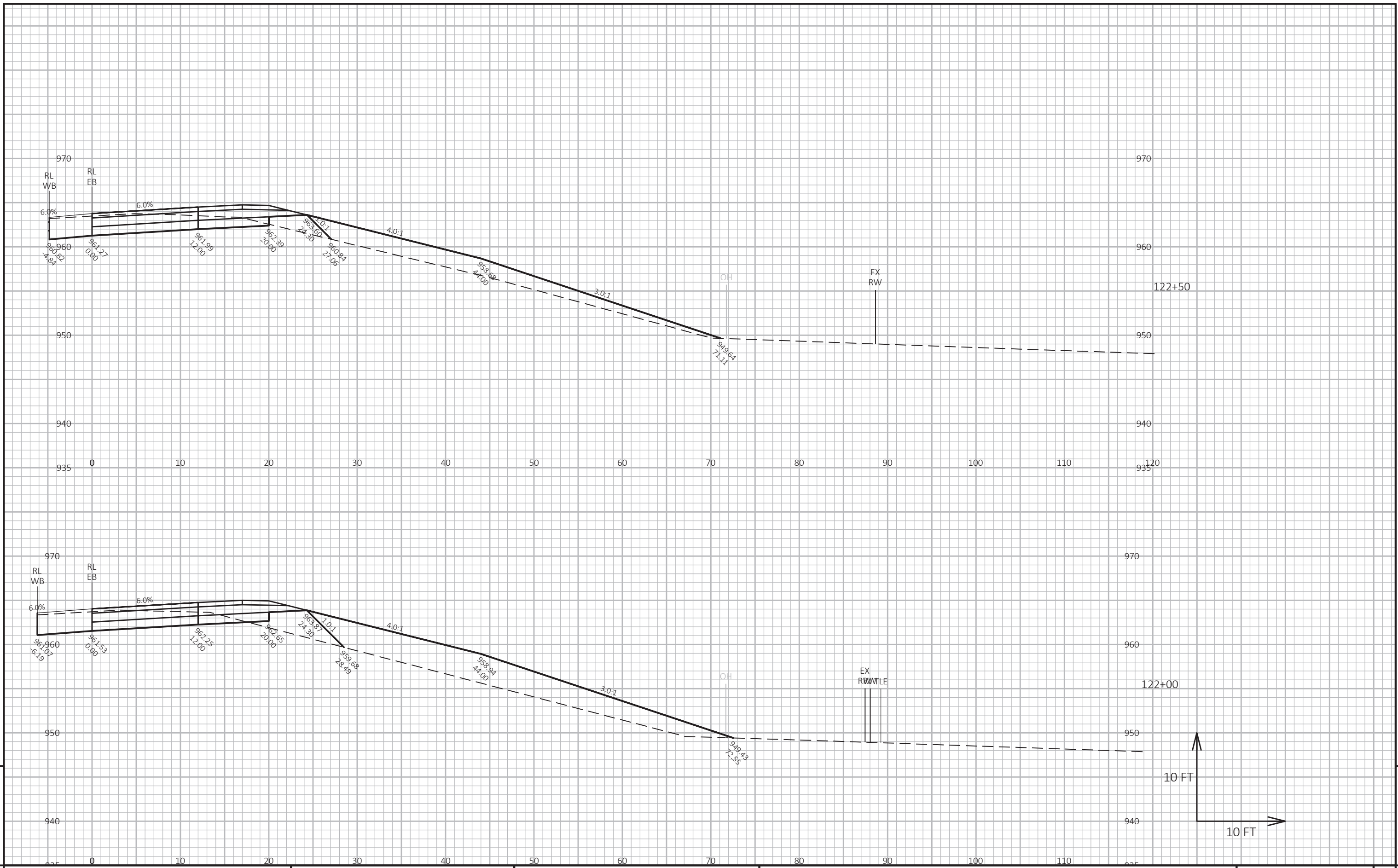
SHEET

206

E



PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: EB - EAST LEG SHEET 207

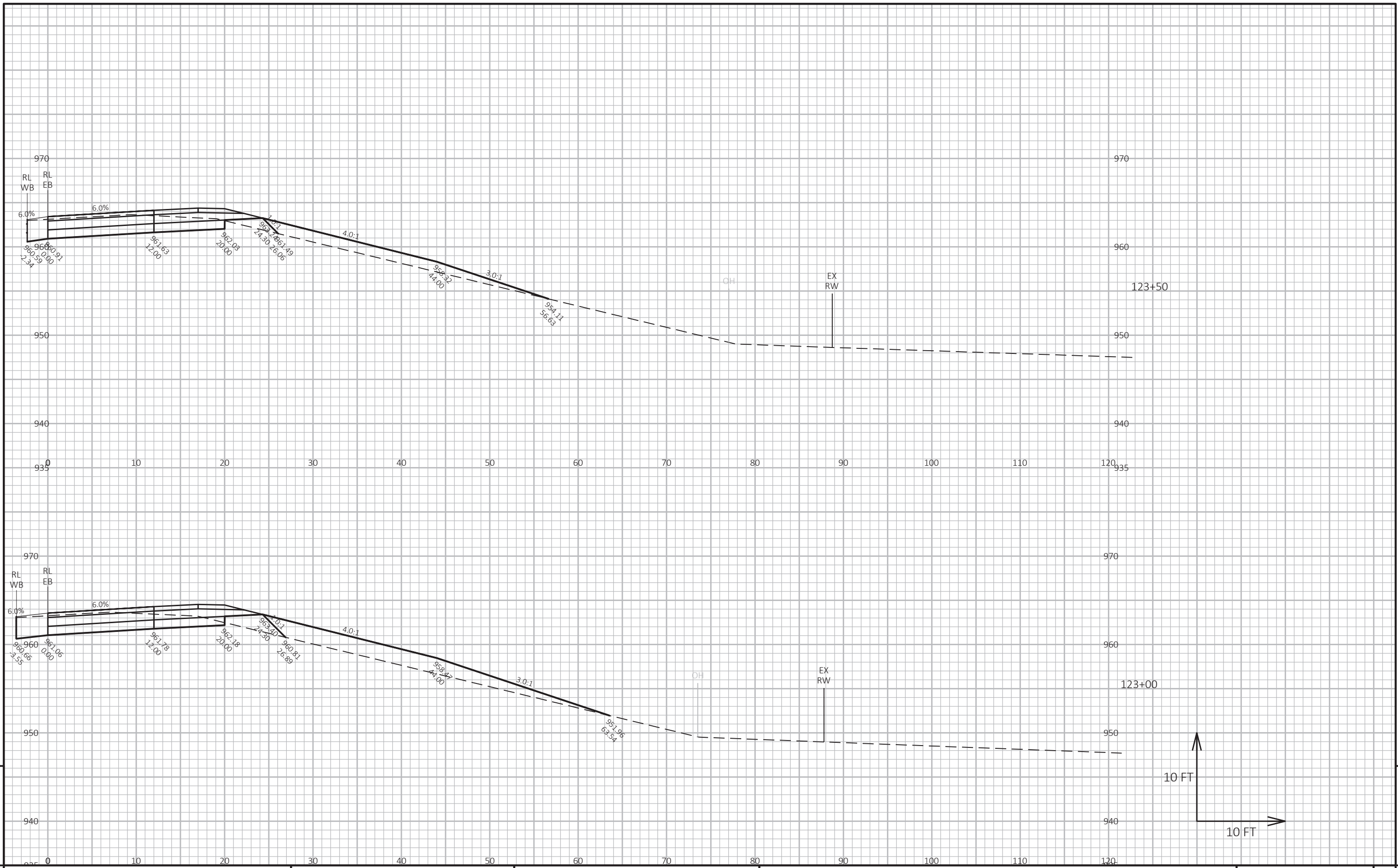


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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: EB - EAST LEG SHEET 208 E

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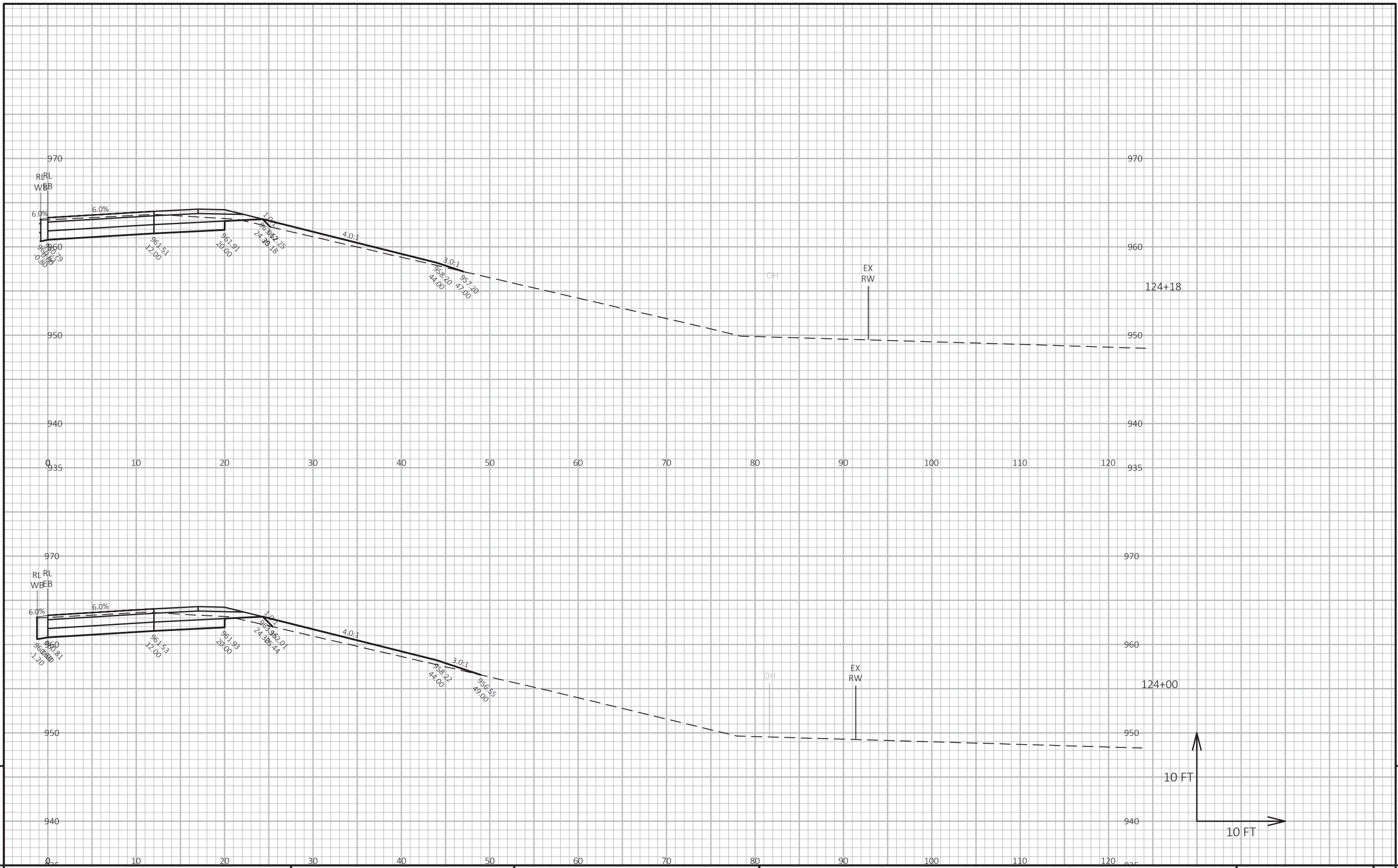


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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: EB - EAST LEG SHEET 209 E

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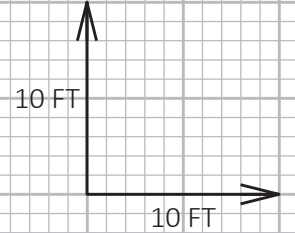


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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: EB - EAST LEG SHEET 210 E

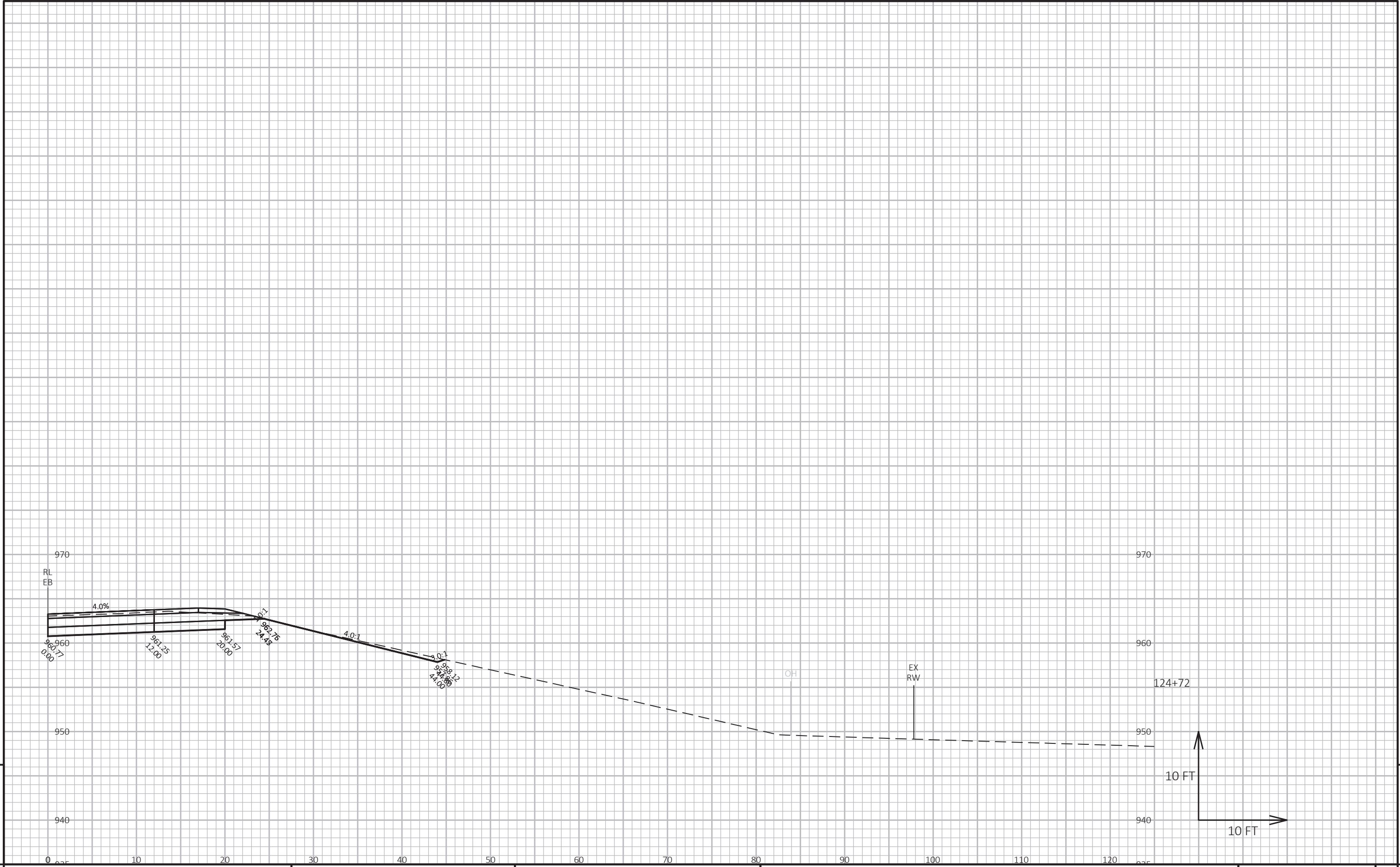
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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: EB - EAST LEG SHEET 211 E

FILE NAME: N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_EB.DWG PLOT DATE: 8/13/2021 9:55 AM PLOT BY: BAILEY, RYAN R PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49



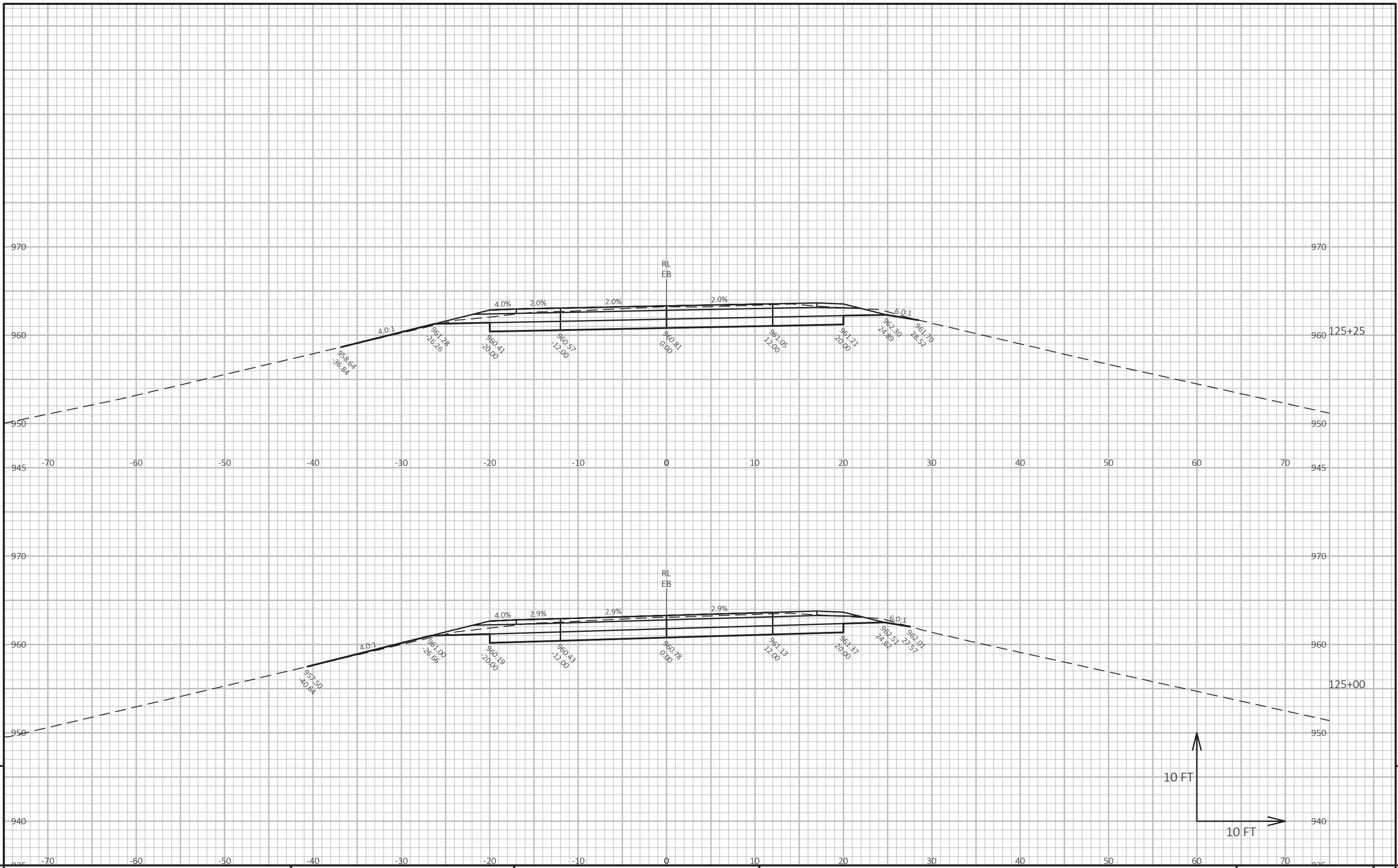
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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: EB - EAST LEG SHEET 212 E

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LAYOUT NAME - 090201_EB20

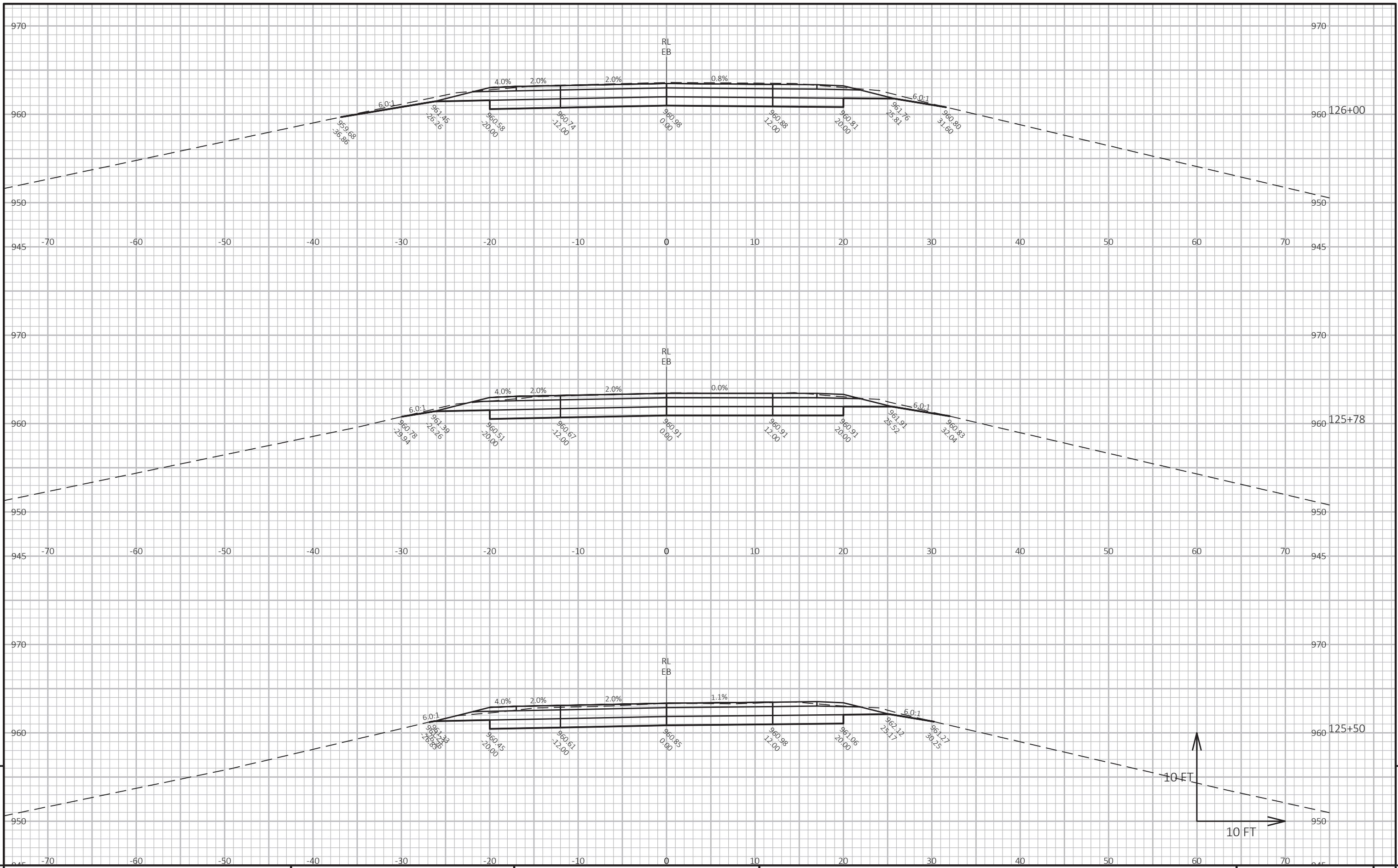


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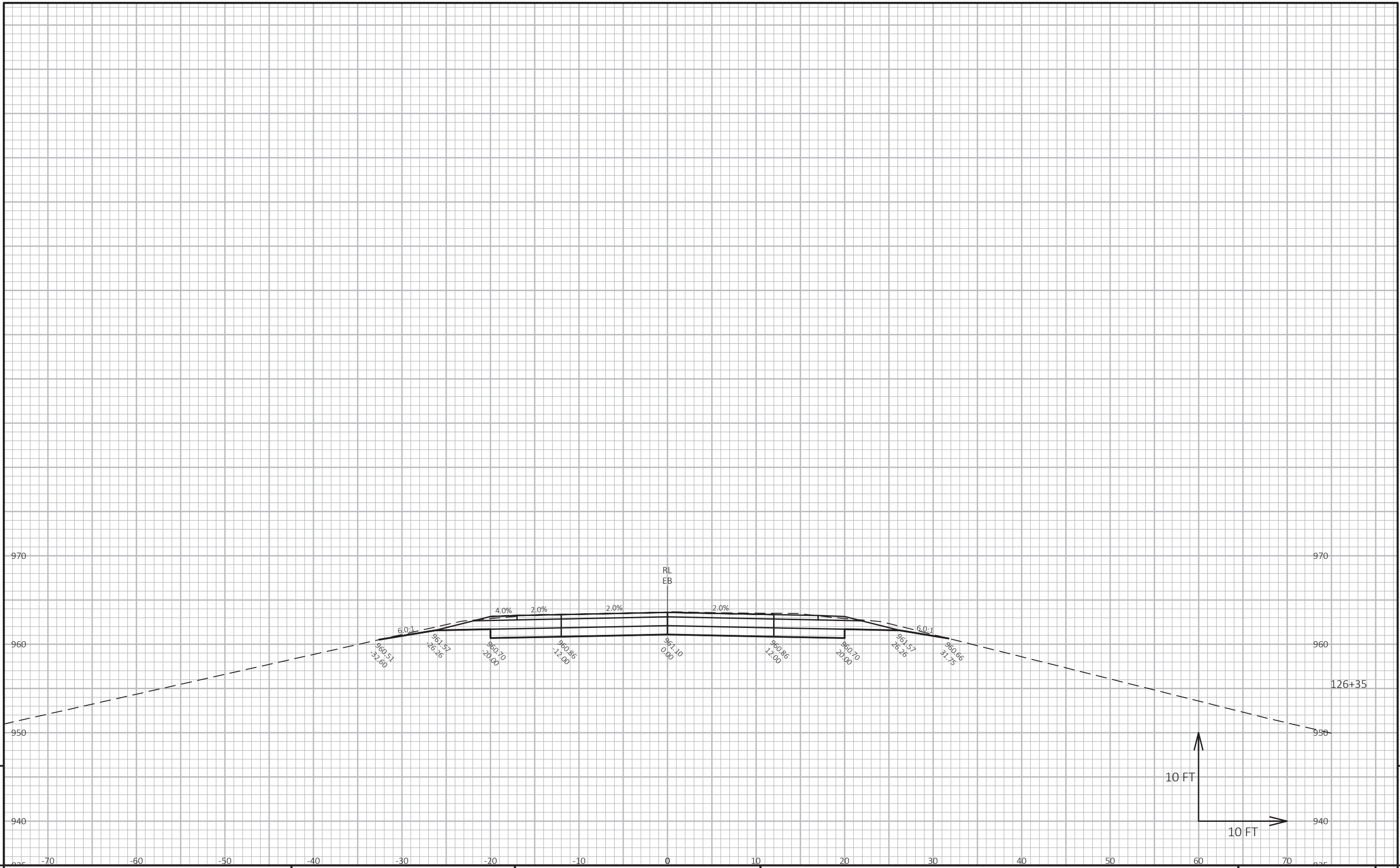
PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: EB - EAST LEG SHEET 213 E

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9 9

10 FT 10 FT

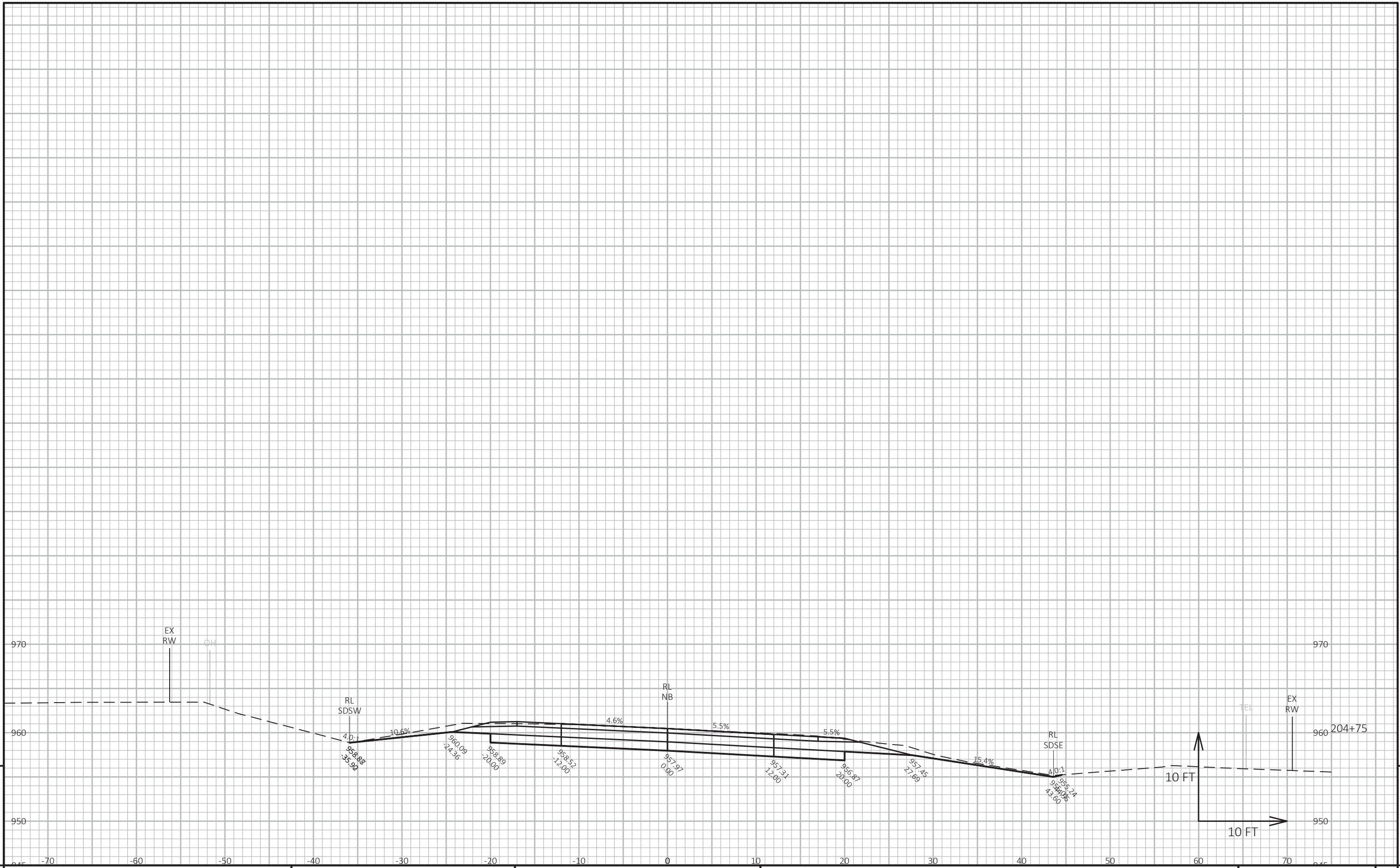


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PROJECT NO: 4060-05-72	HWY: STH 28	COUNTY: DODGE	CROSS SECTIONS: EB - EAST LEG	SHEET 215	E
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FILE NAME : N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_EB.DWG PLOT DATE : 8/13/2021 9:55 AM PLOT BY : BAILEY, RYAN R PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

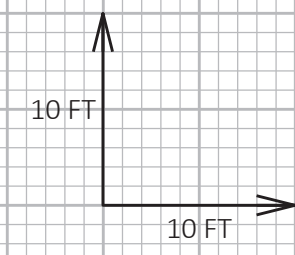
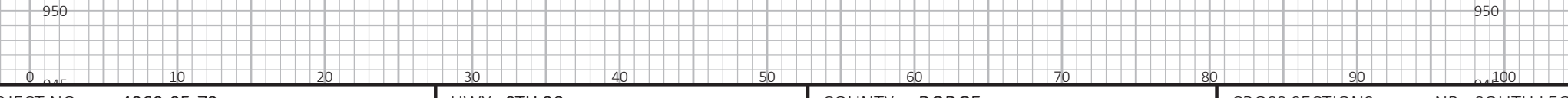
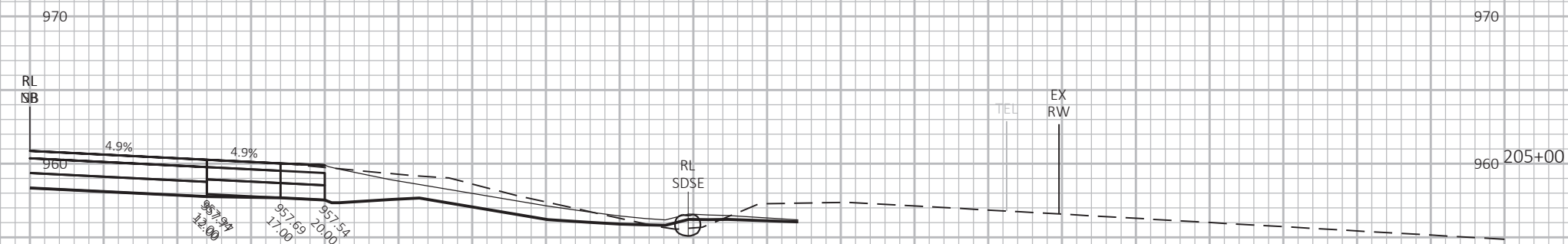
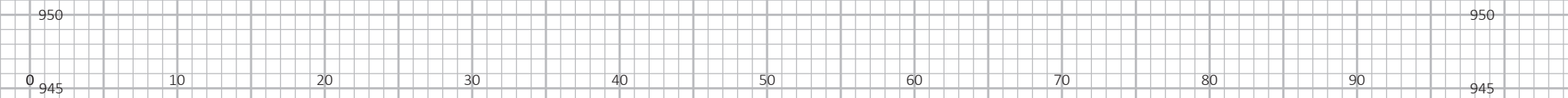
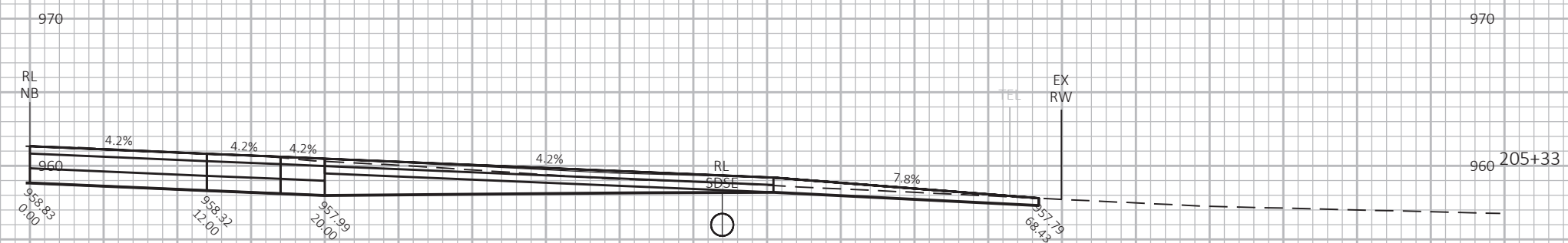
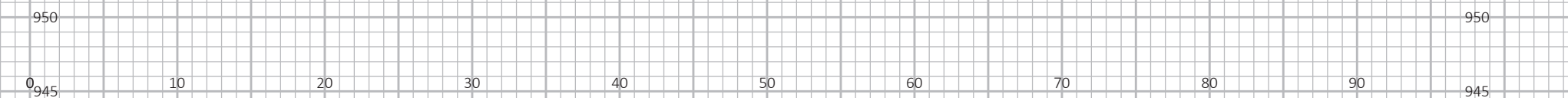
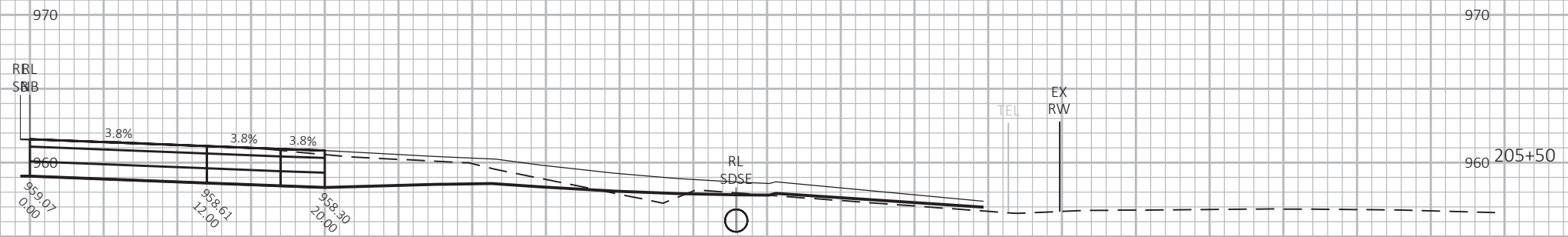


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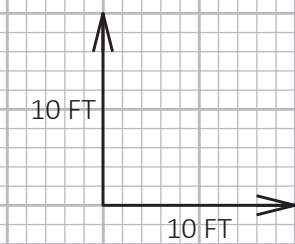
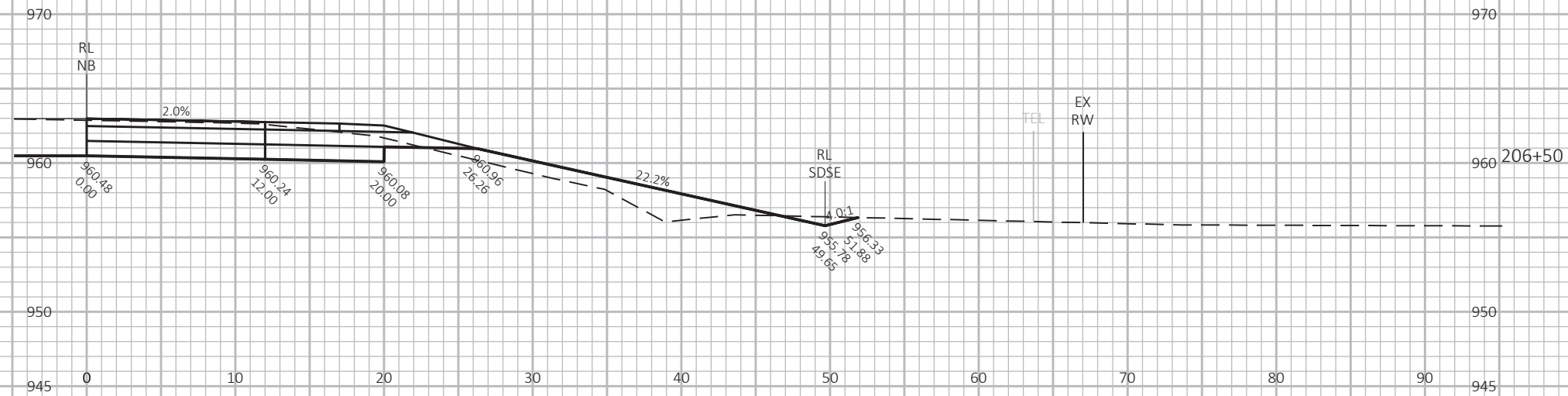
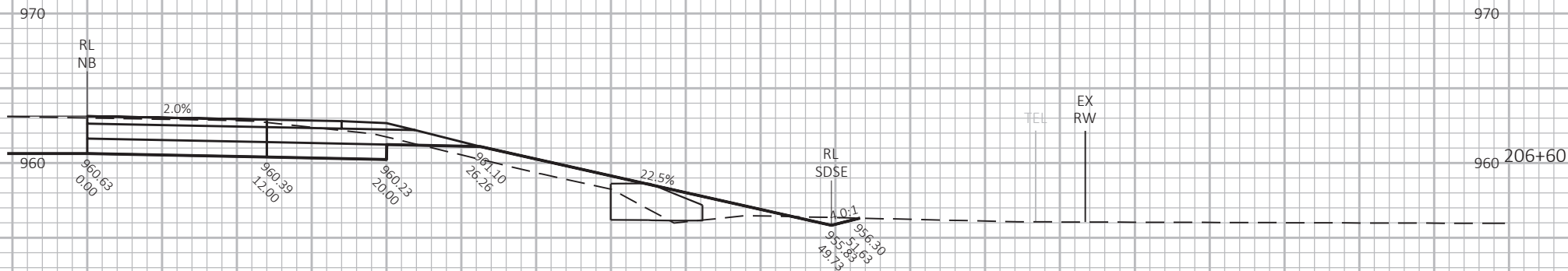
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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: NB - SOUTH LEG SHEET 216 E

FILE NAME: N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X_SEC_NB.DWG PLOT DATE: 8/13/2021 9:58 AM PLOT BY: BAILEY, RYAN R PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49



PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: NB - SOUTH LEG SHEET 217 E



PROJECT NO: 4060-05-72

HWY: STH 28

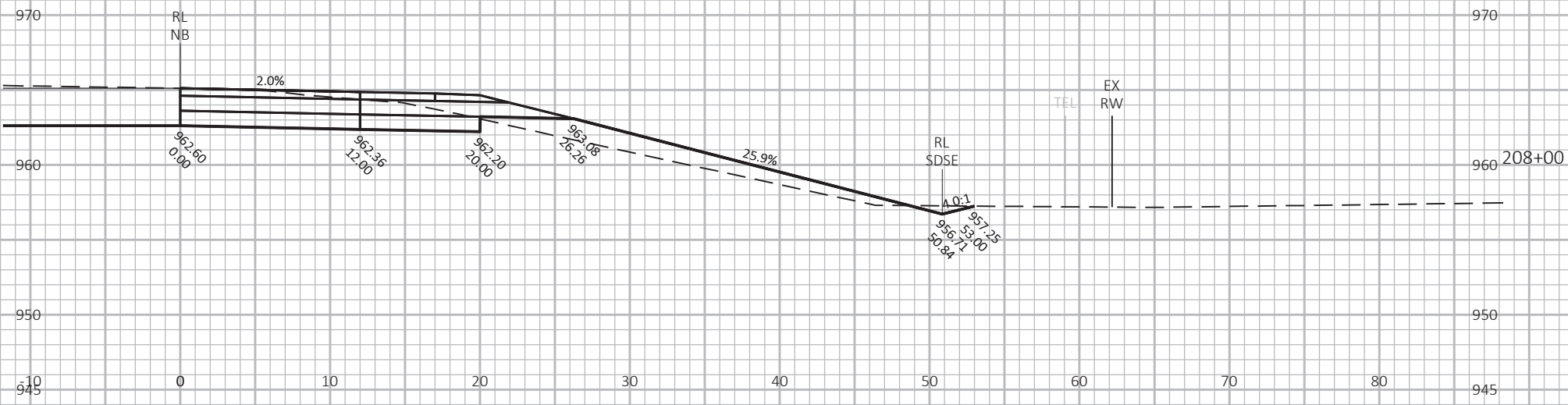
COUNTY: DODGE

CROSS SECTIONS: NB - SOUTH LEG

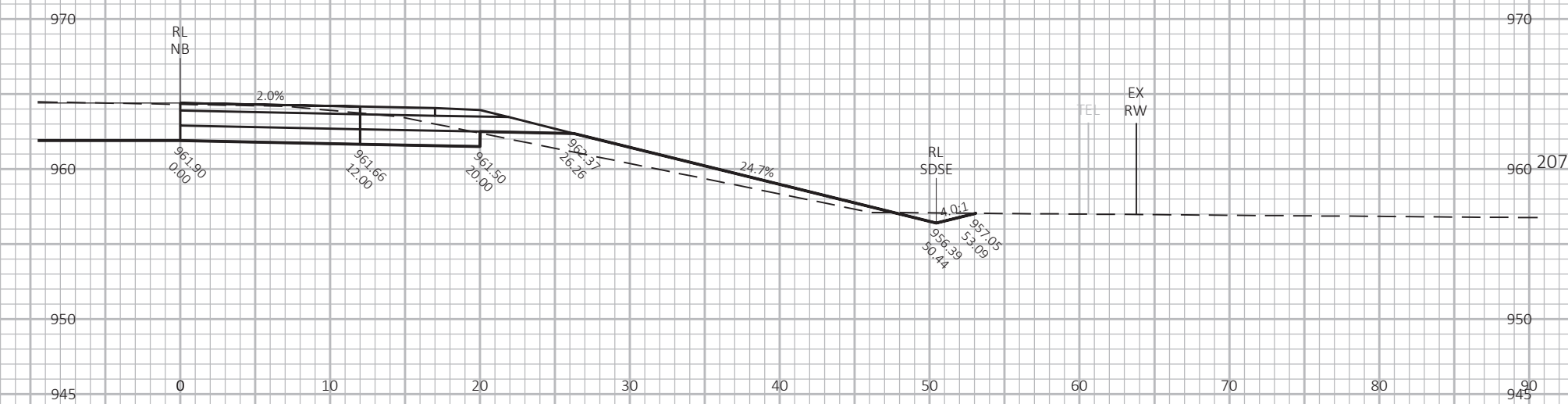
SHEET

218

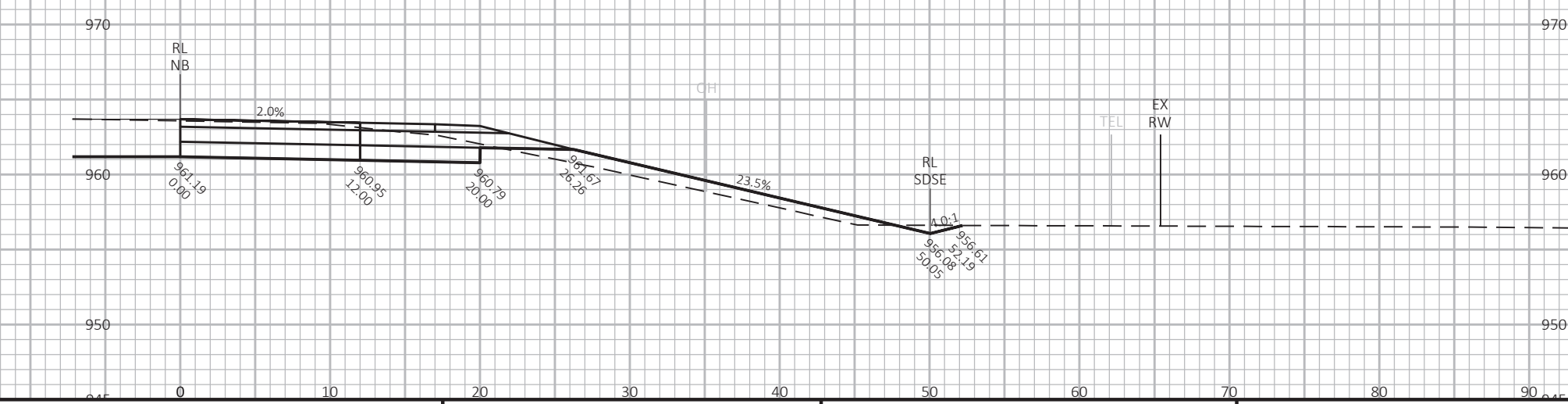
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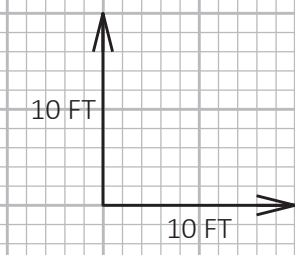
208+00



207+50

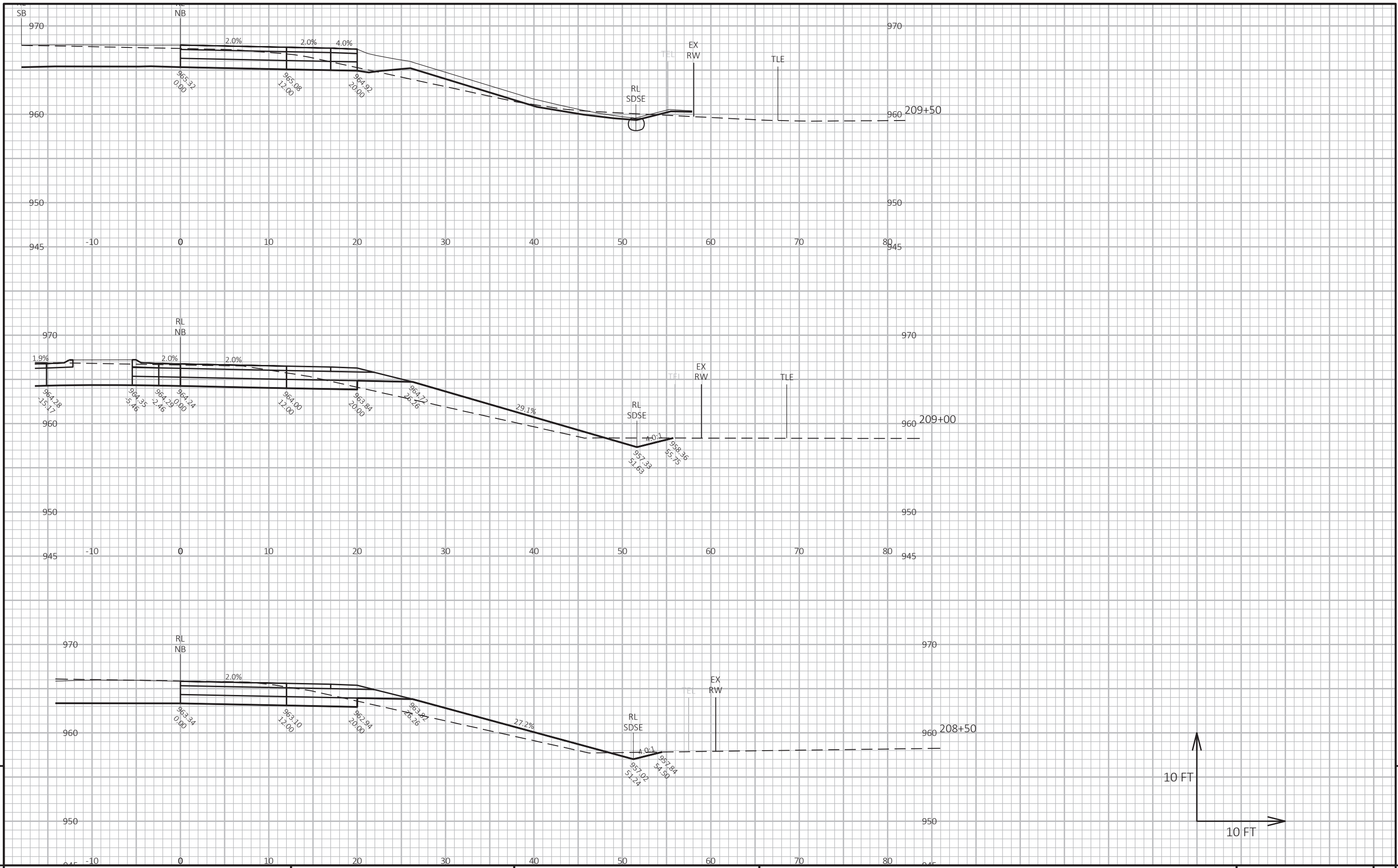


207+00



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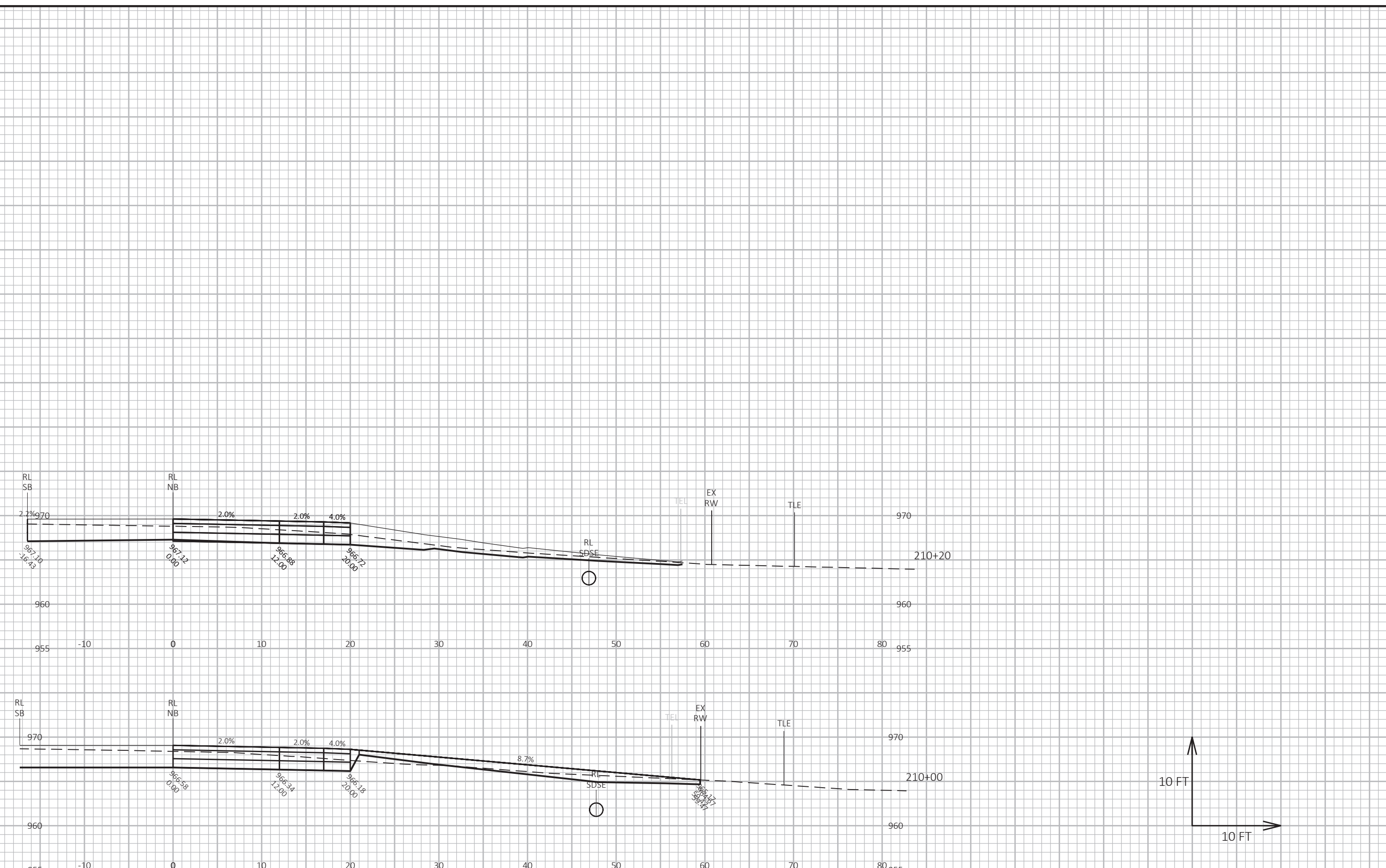


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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: NB - SOUTH LEG SHEET 220 E

FILE NAME: N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X_SEC_NB.DWG PLOT DATE: 8/13/2021 9:58 AM PLOT BY: BAILEY, RYAN R PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49



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PROJECT NO: 4060-05-72	HWY: STH 28	COUNTY: DODGE	CROSS SECTIONS: NB - SOUTH LEG	SHEET 221	E
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FILE NAME : N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X_SEC_NB.DWG
LAYOUT NAME - 090201_NB6

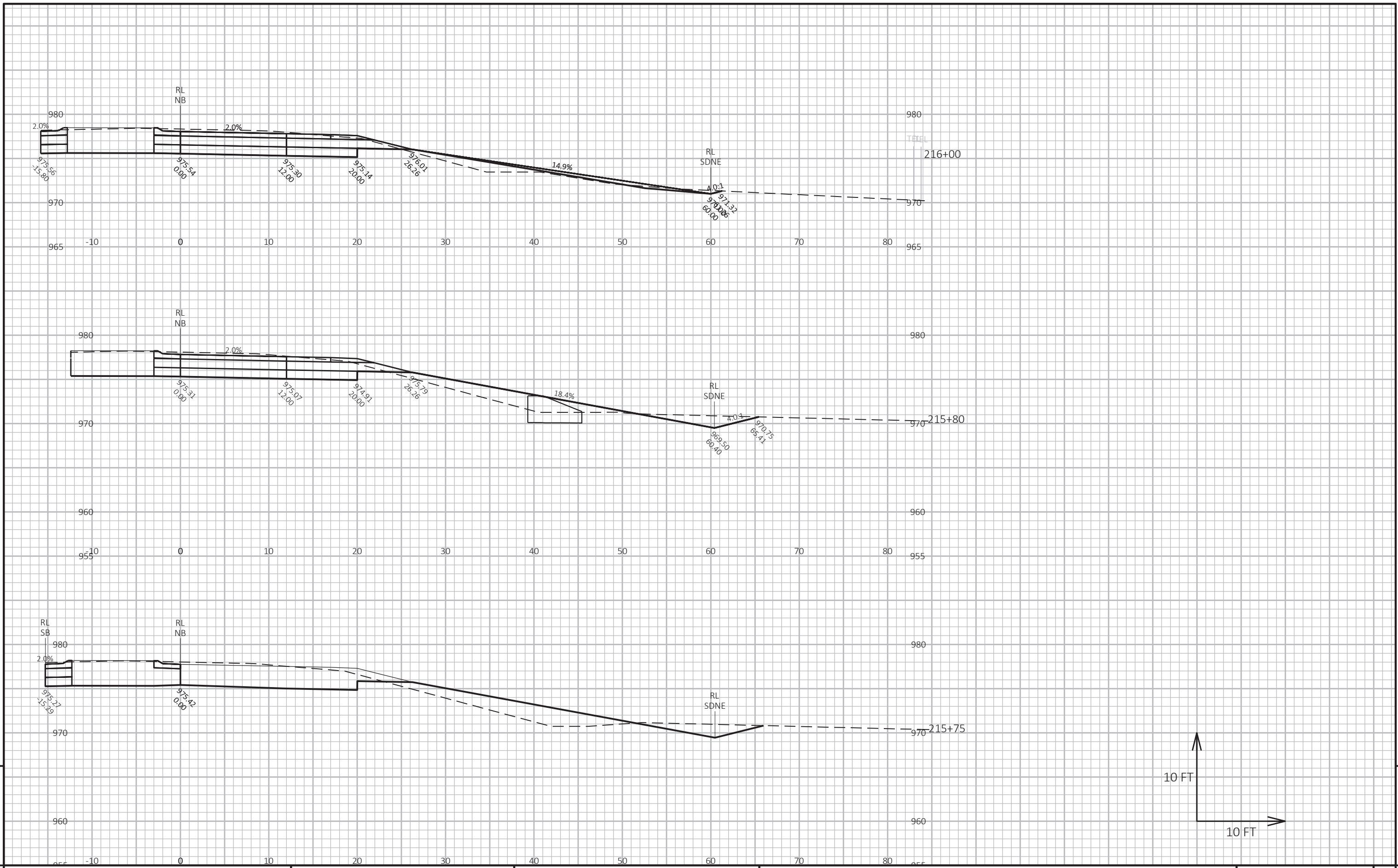
PLOT DATE : 8/13/2021 9:58 AM

PLOT BY : BAILEY, RYAN R

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADD SHEET 49



PROJECT NO: 4060-05-72

HWY: STH 28

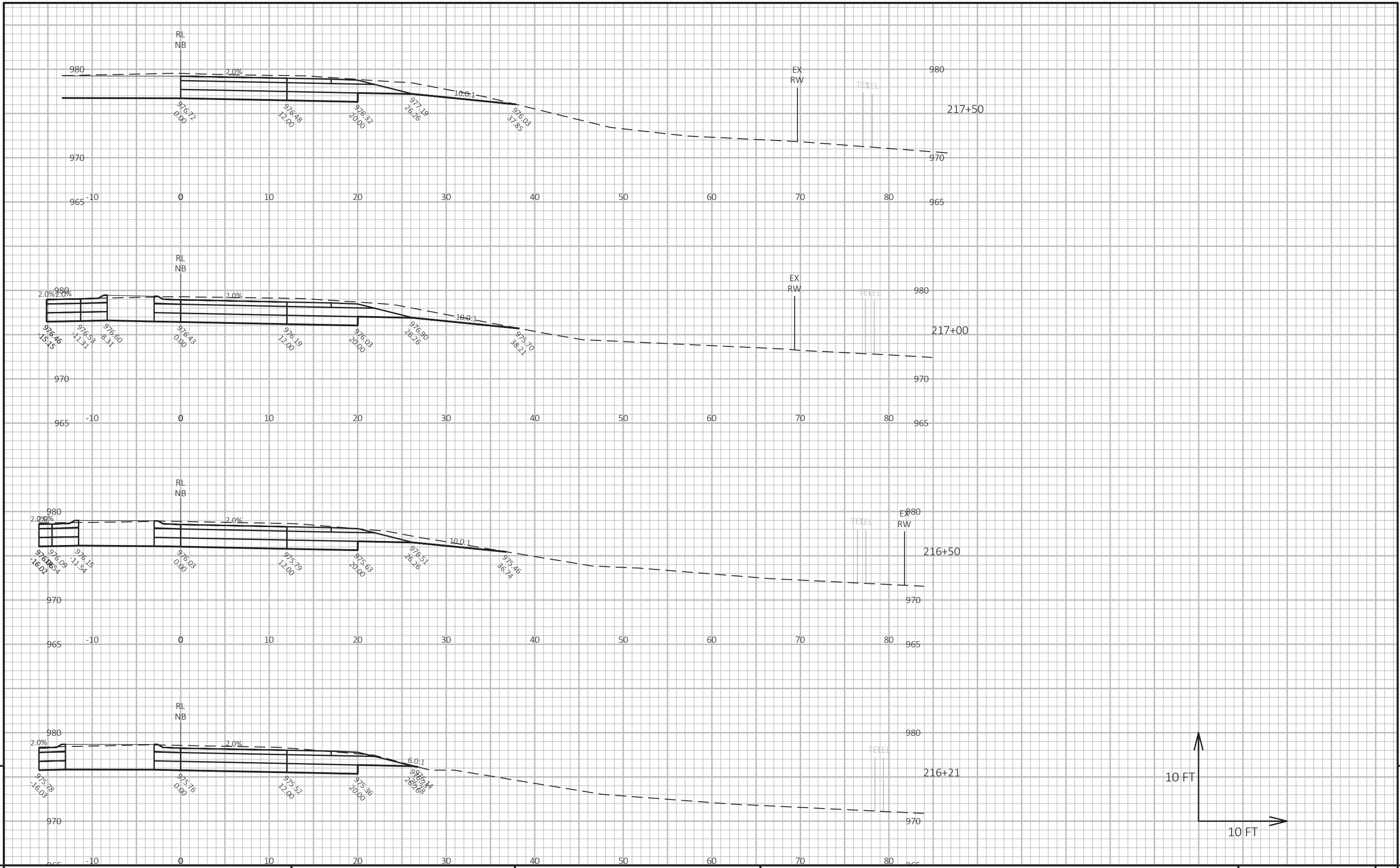
COUNTY: DODGE

CROSS SECTIONS: NB - NORTH LEG

SHEET

222

E

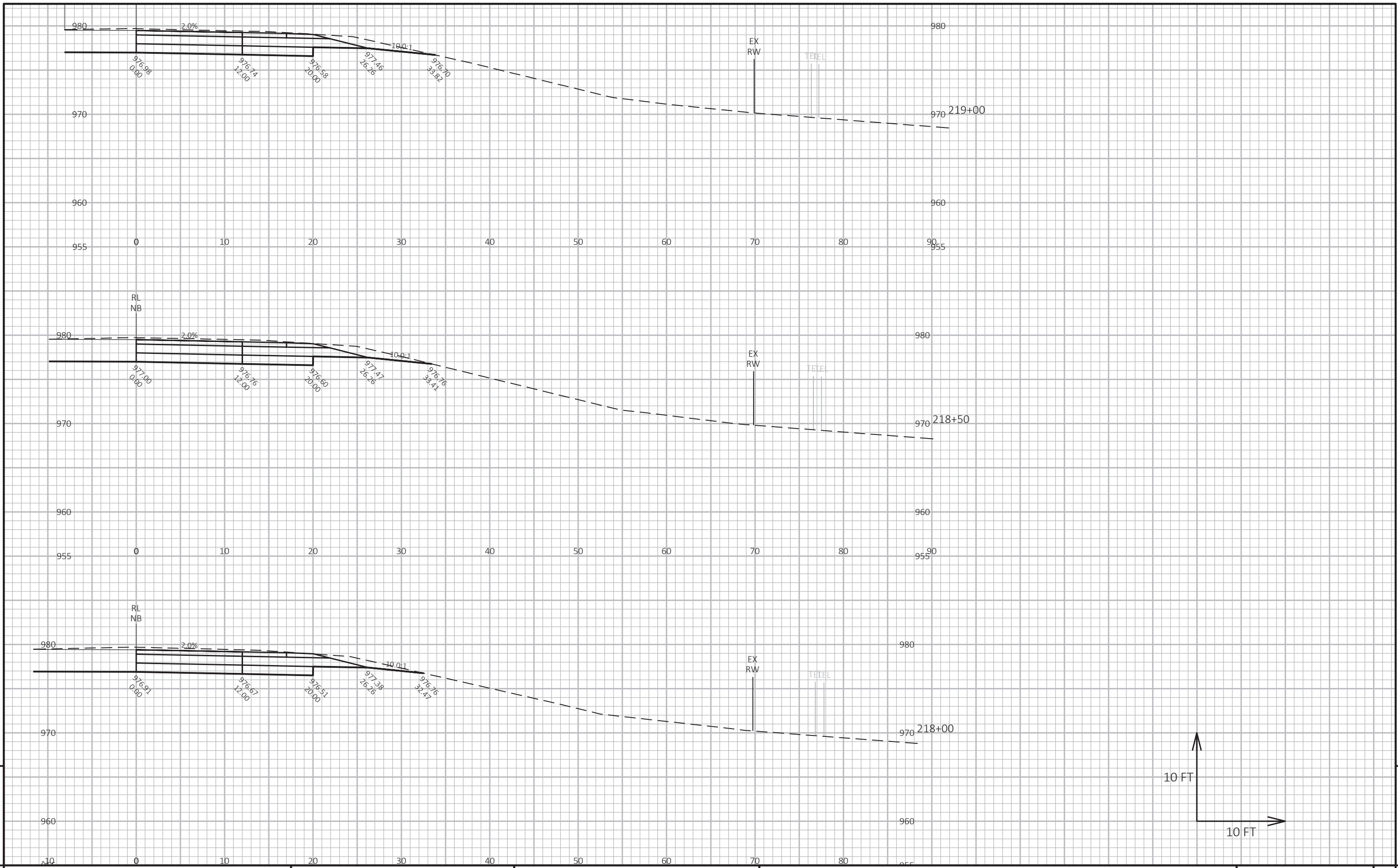


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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: NB - NORTH LEG SHEET 223 E

FILE NAME: N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X_SEC_NB.DWG PLOT DATE: 8/13/2021 9:58 AM PLOT BY: BAILEY, RYAN R PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

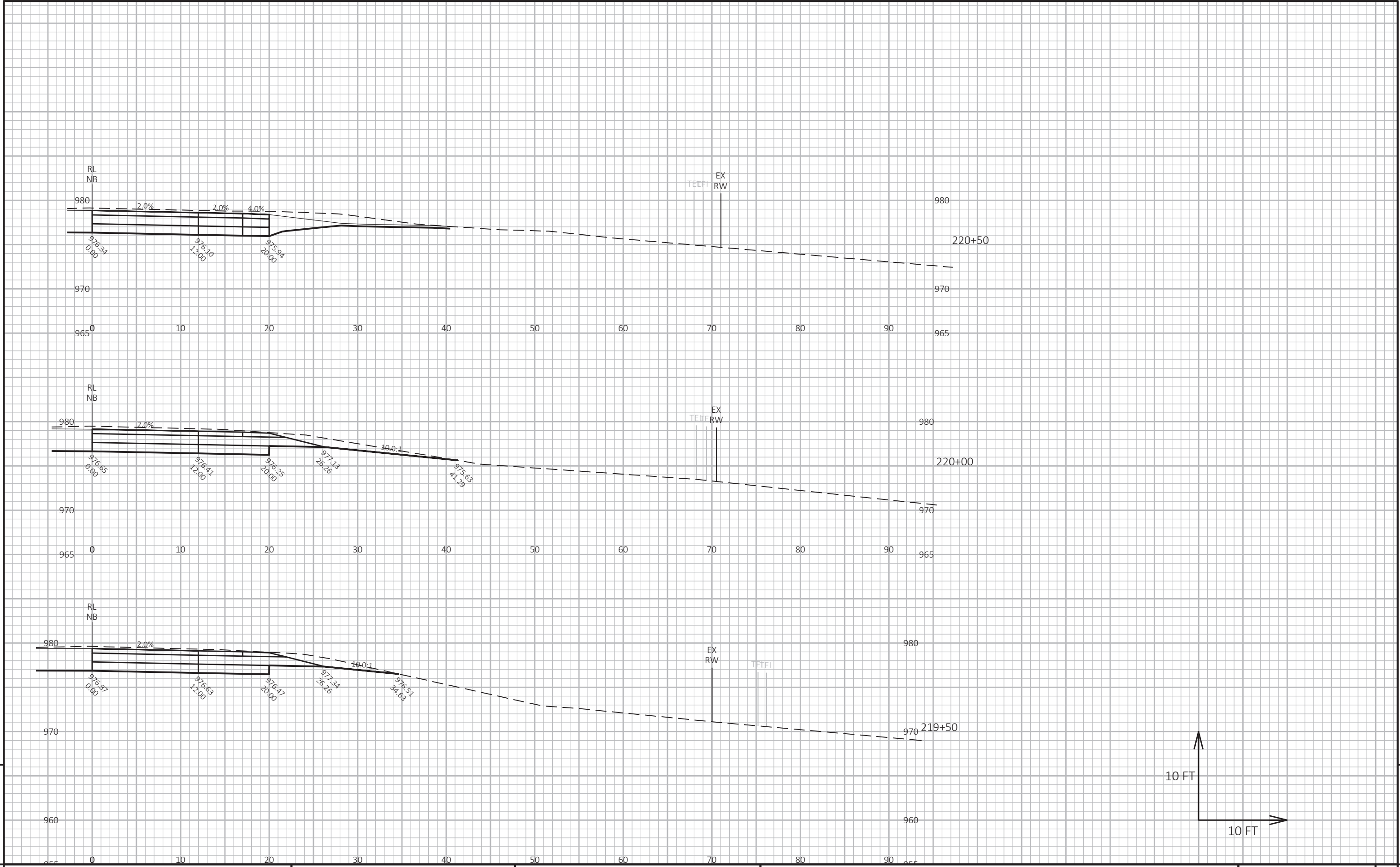


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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: NB - NORTH LEG SHEET 224 E

FILE NAME: N:\PDS\C3D\40600502\SHEETS\PLAN\090201 - CROSS SECTIONS\X_SEC_NB.DWG PLOT DATE: 8/13/2021 9:58 AM PLOT BY: BAILEY, RYAN R PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49



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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: NB - NORTH LEG SHEET 225 E

FILE NAME : N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X_SEC_NB.DWG
LAYOUT NAME - 090201_NB10

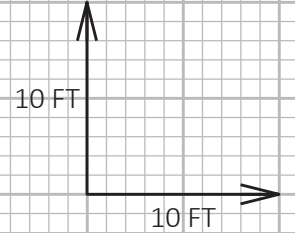
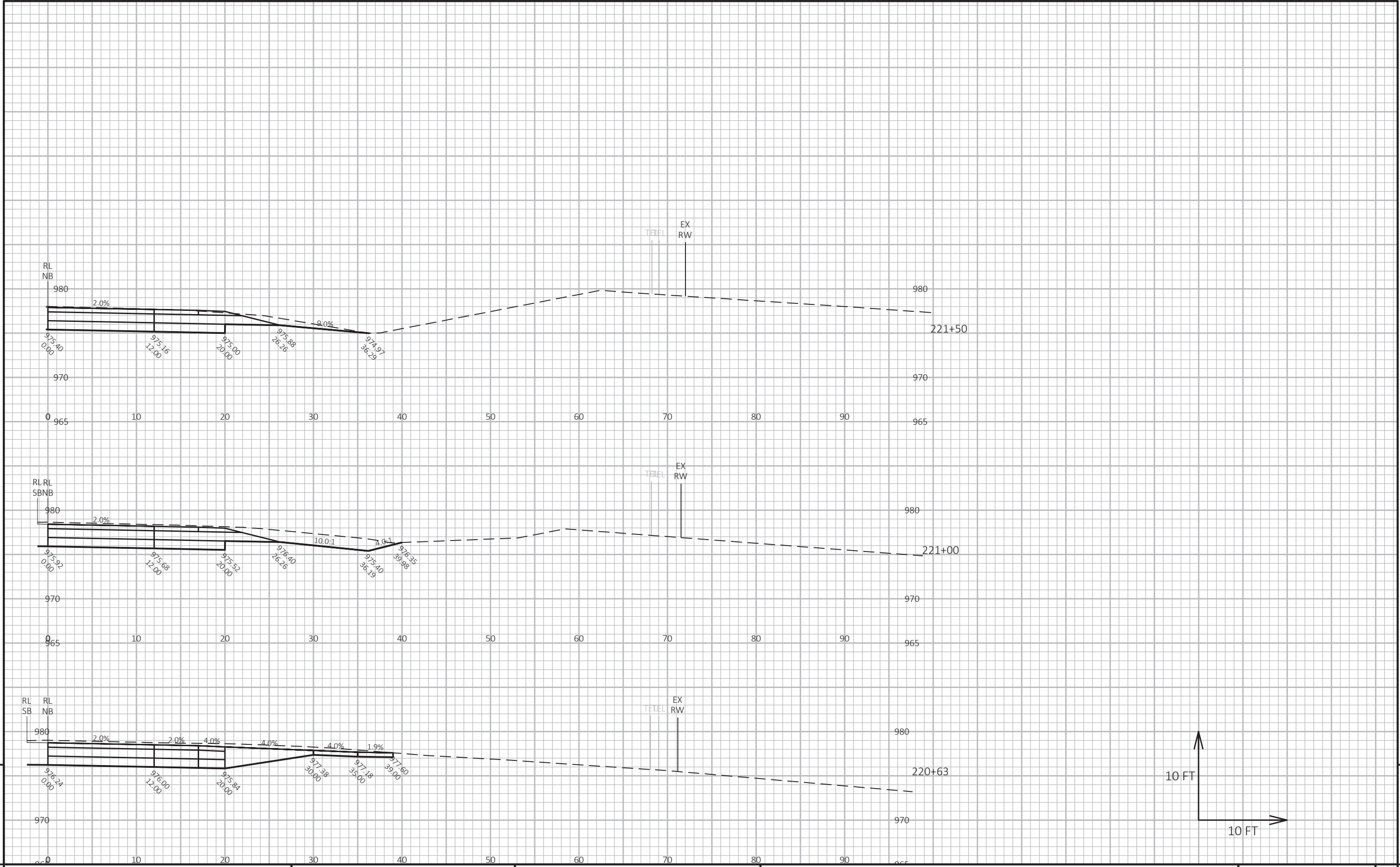
PLOT DATE : 8/13/2021 9:58 AM

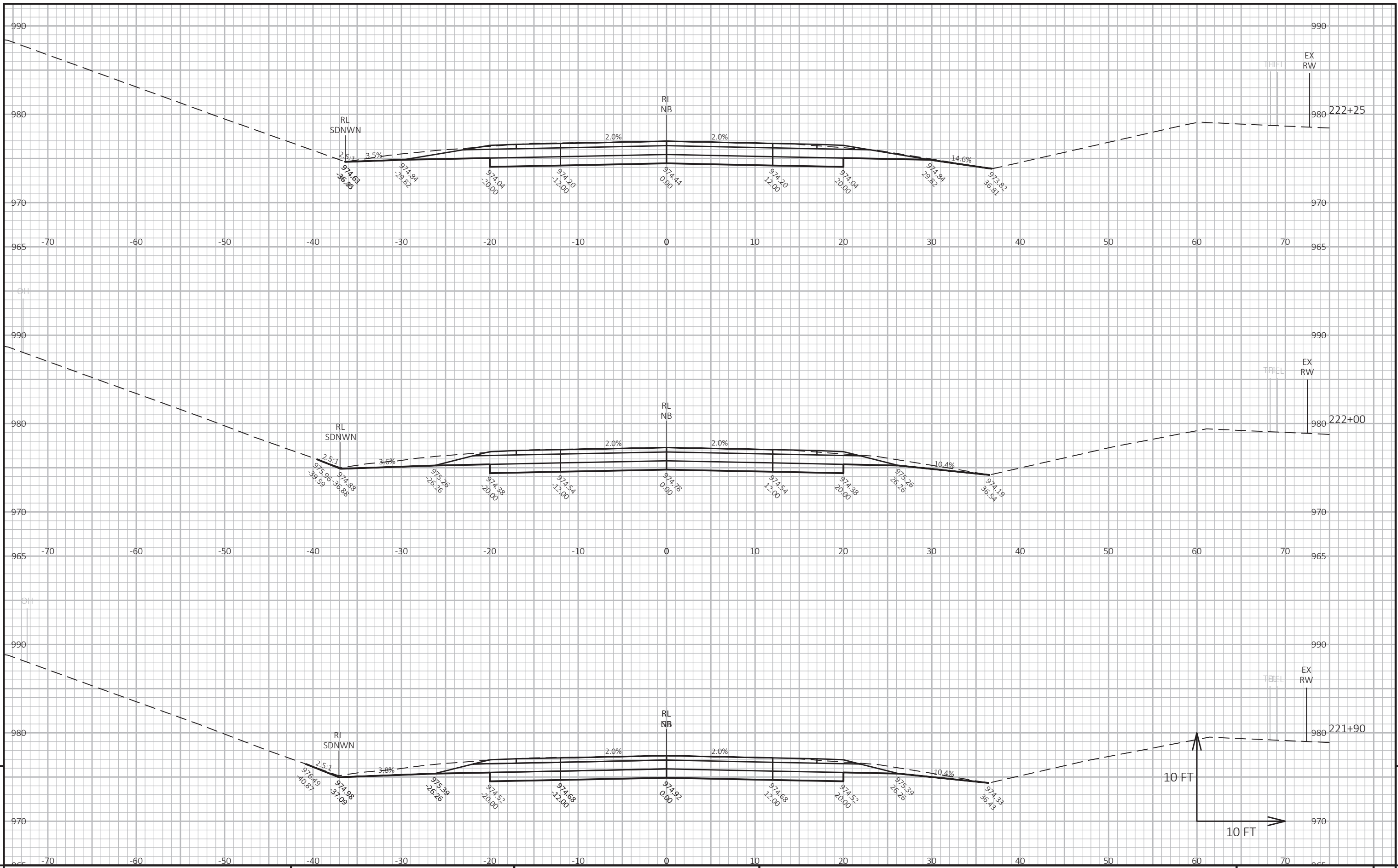
PLOT BY : BAILEY, RYAN R

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADD SHEET 49





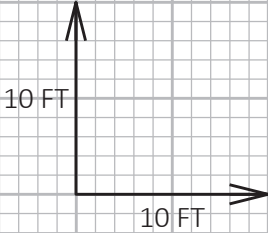
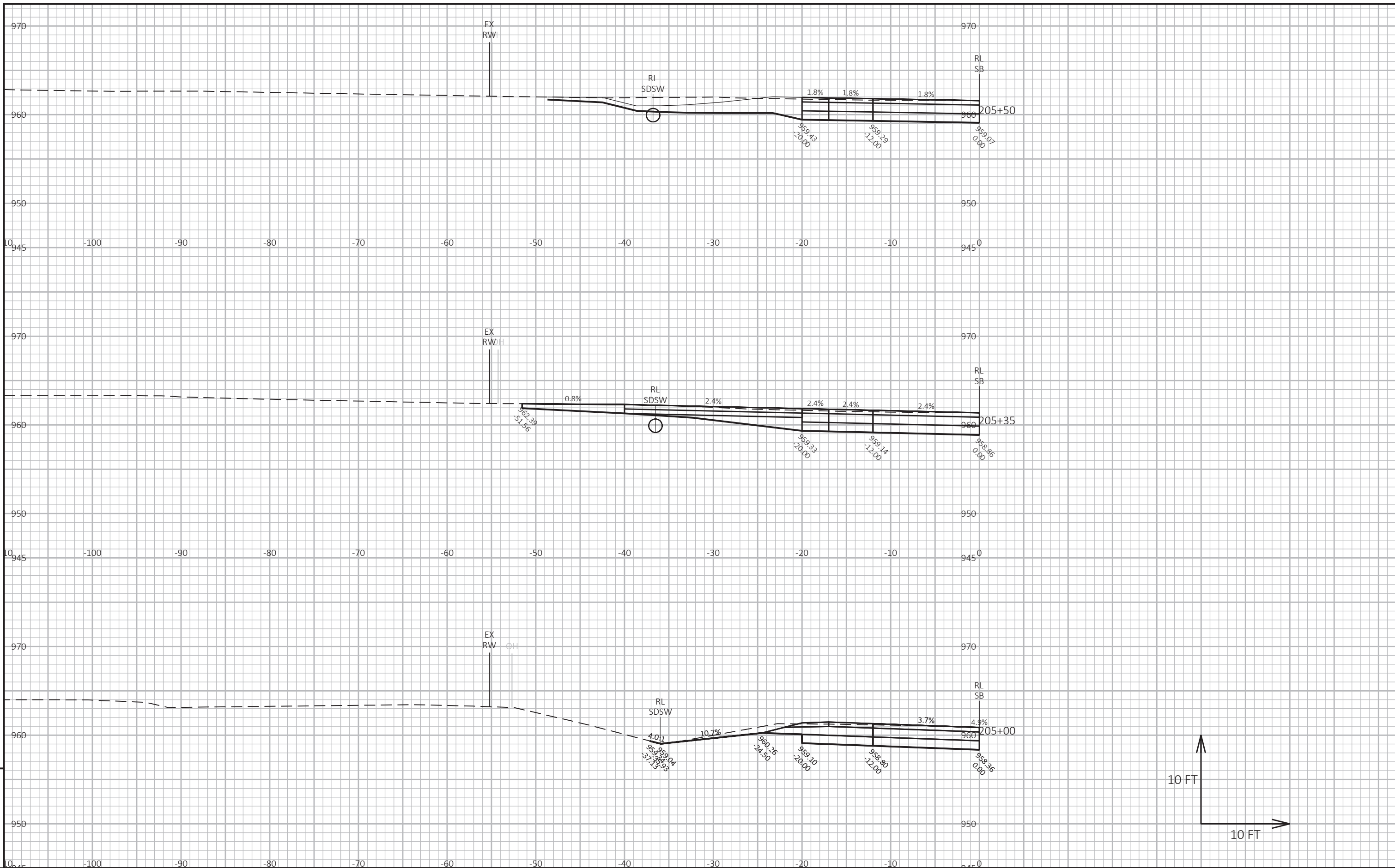
PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: NB - NORTH LEG SHEET 227

FILE NAME: N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X_SEC_NB.DWG PLOT DATE: 8/13/2021 9:58 AM PLOT BY: BAILEY, RYAN R PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

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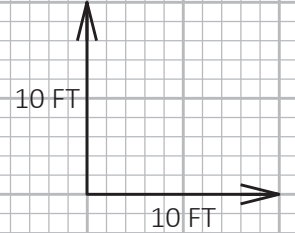
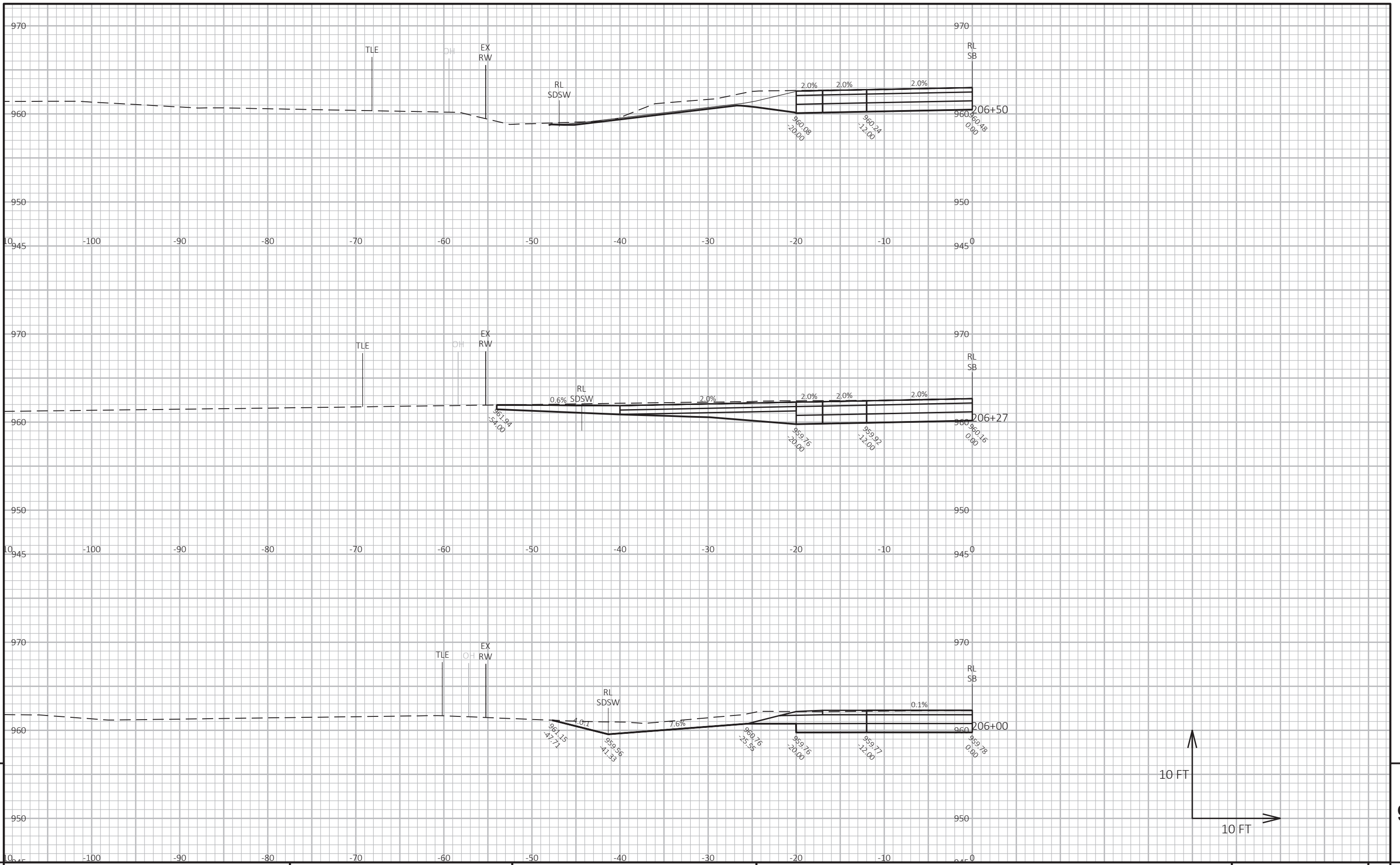
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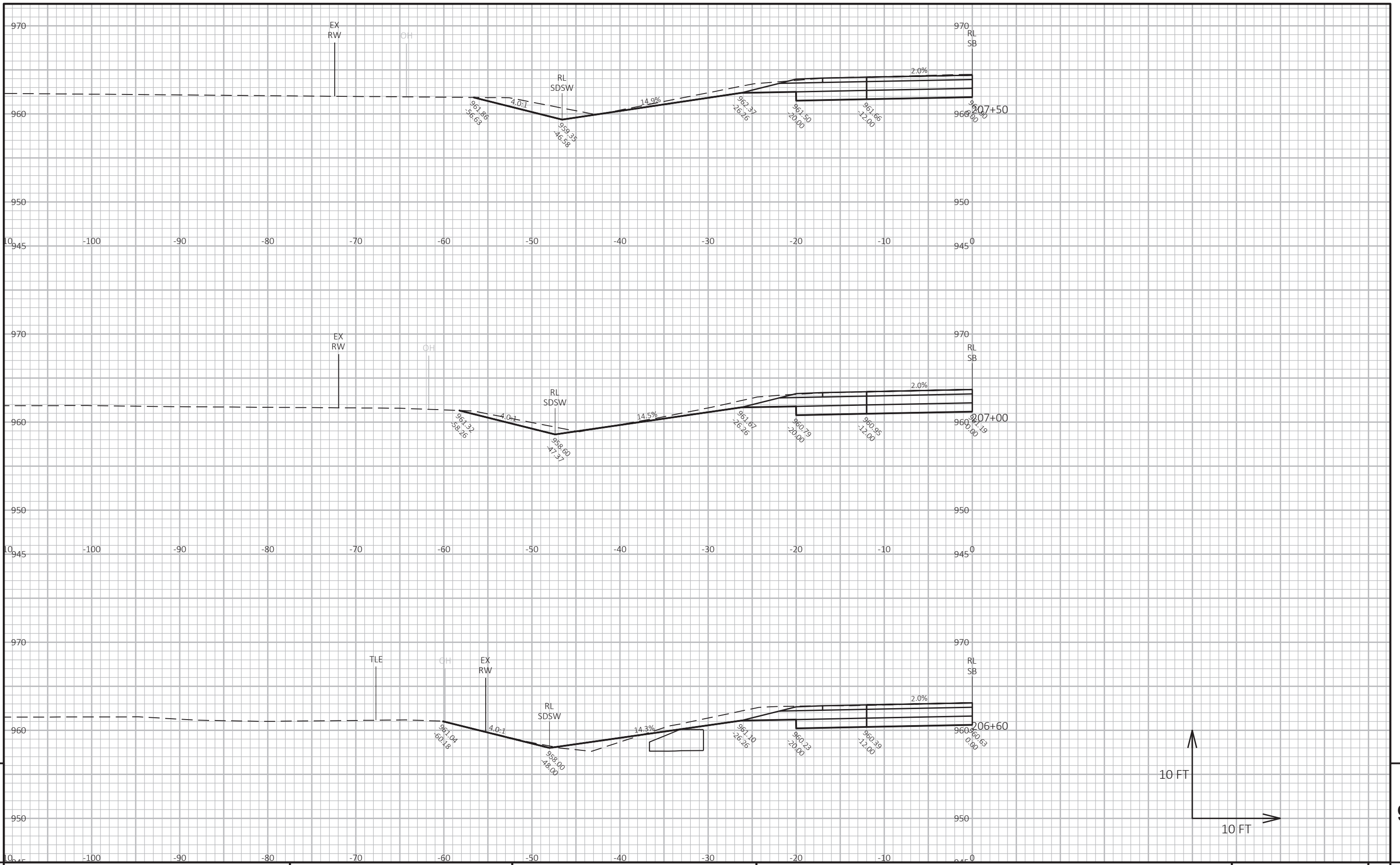


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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: SB - SOUTH LEG SHEET 229 E

FILE NAME : N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_SB.DWG PLOT DATE : 9/4/2021 4:10 PM PLOT BY : BAILEY, RYAN R PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

LAYOUT NAME - 090201_SB2

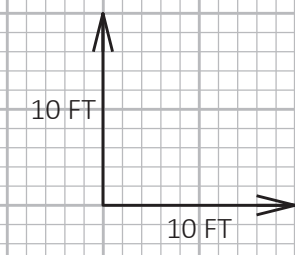
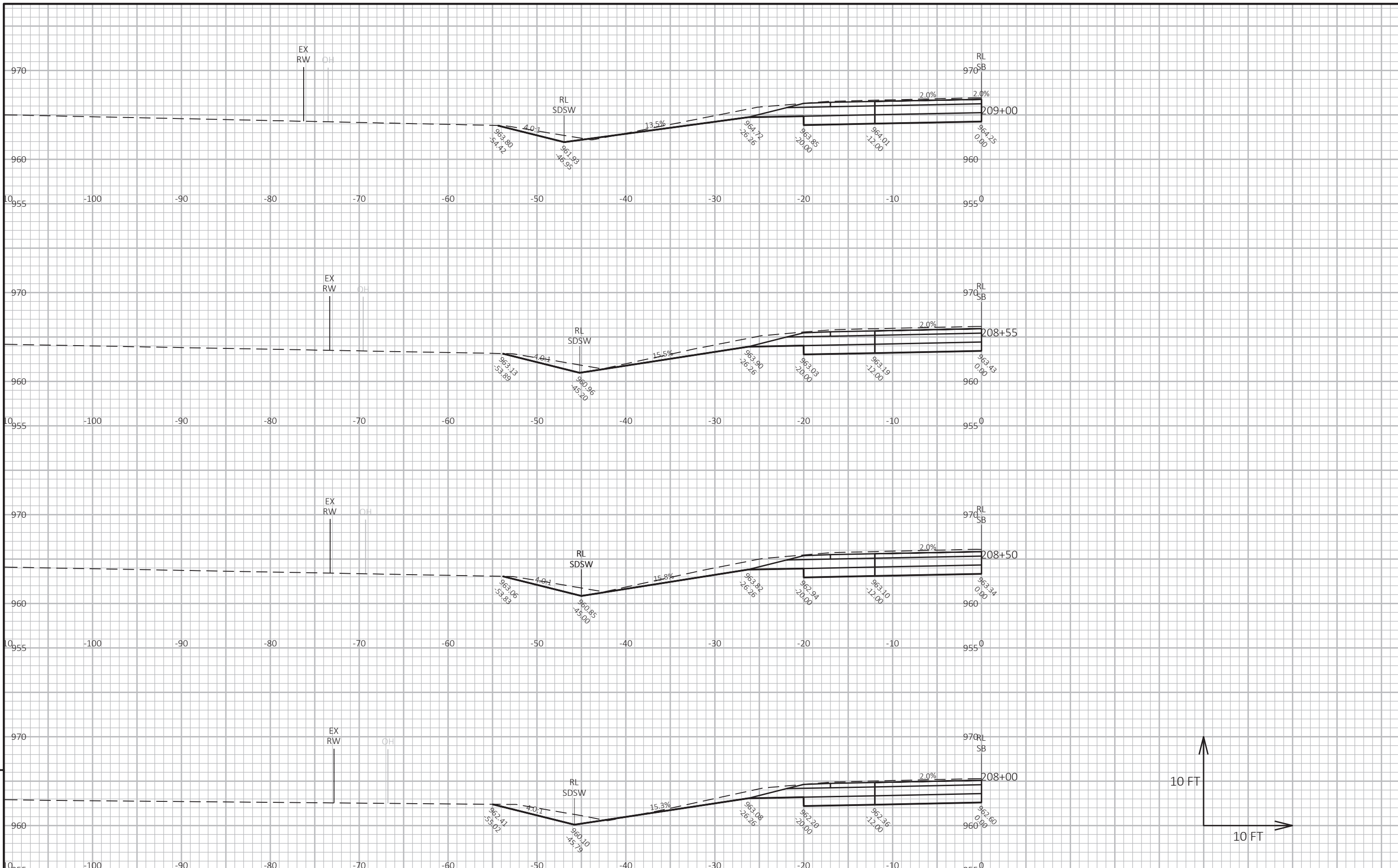


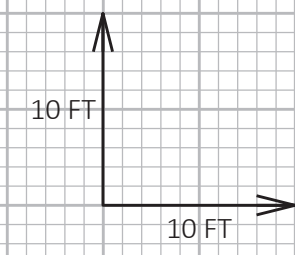
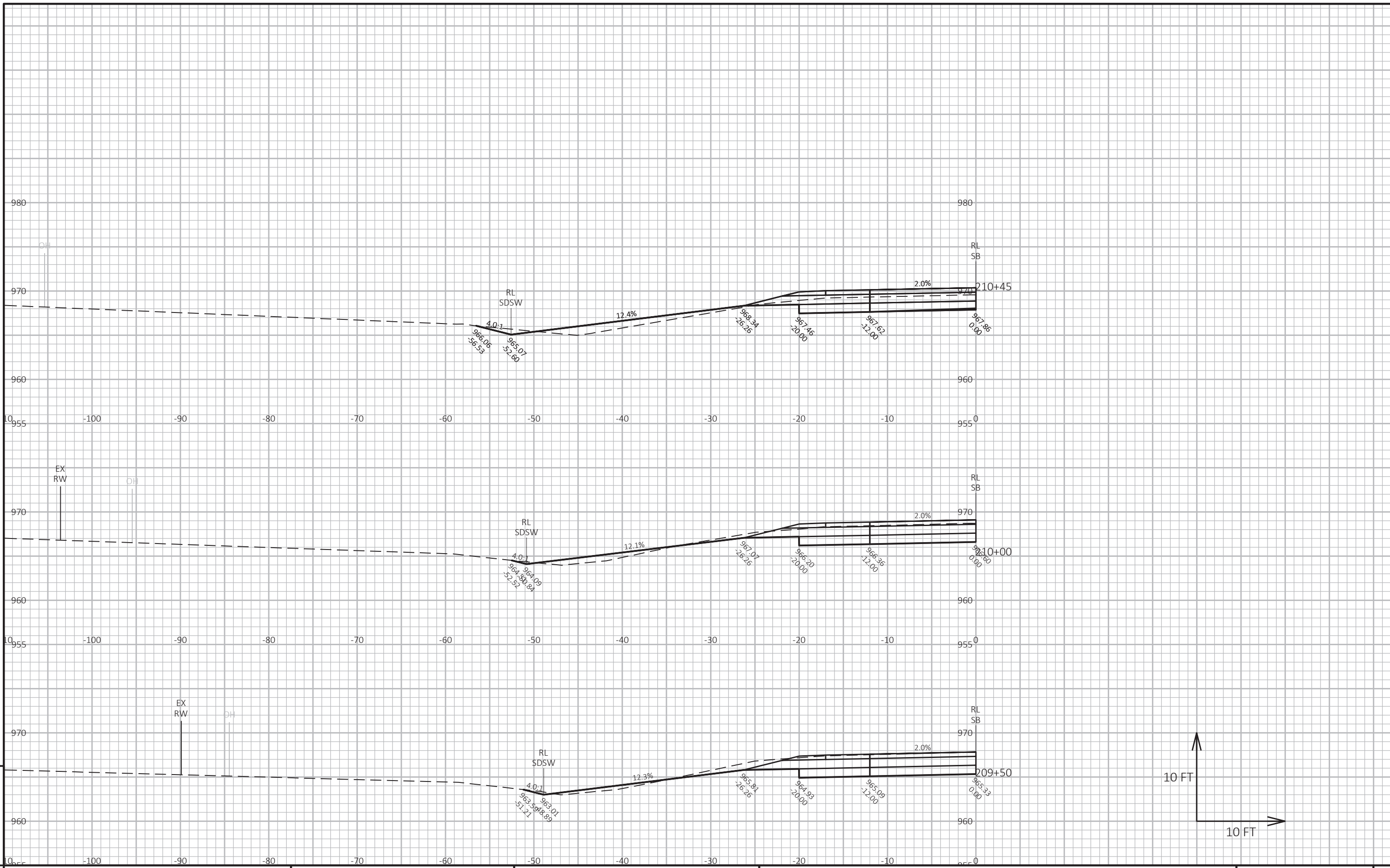
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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: SB - SOUTH LEG SHEET 230 E

FILE NAME : N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_SB.DWG PLOT DATE : 9/4/2021 4:10 PM PLOT BY : BAILEY, RYAN R PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49



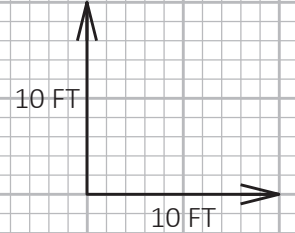
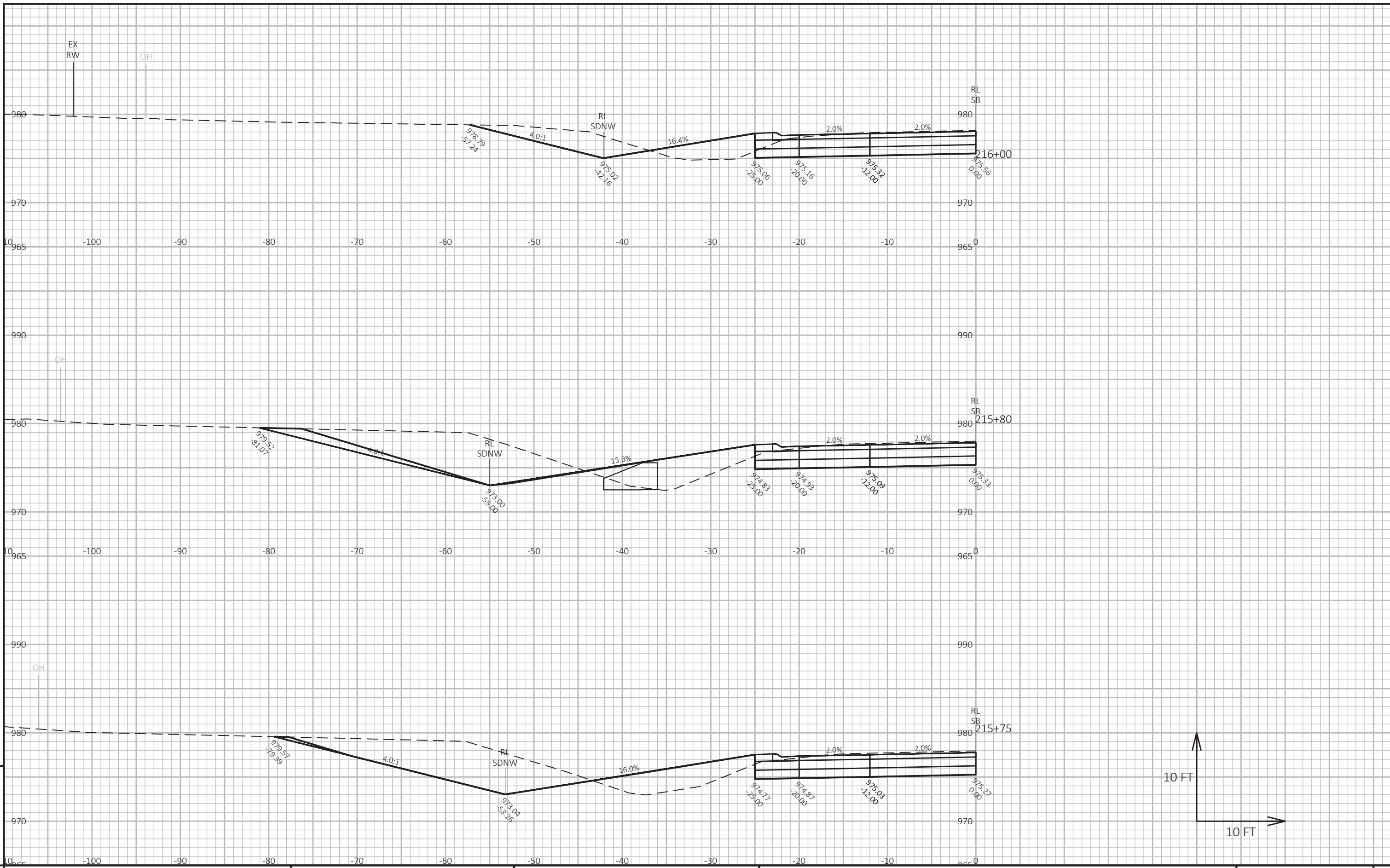


PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: SB - SOUTH LEG SHEET 232 E

FILE NAME: N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_SB.DWG PLOT DATE: 9/4/2021 4:10 PM PLOT BY: BAILEY, RYAN R PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

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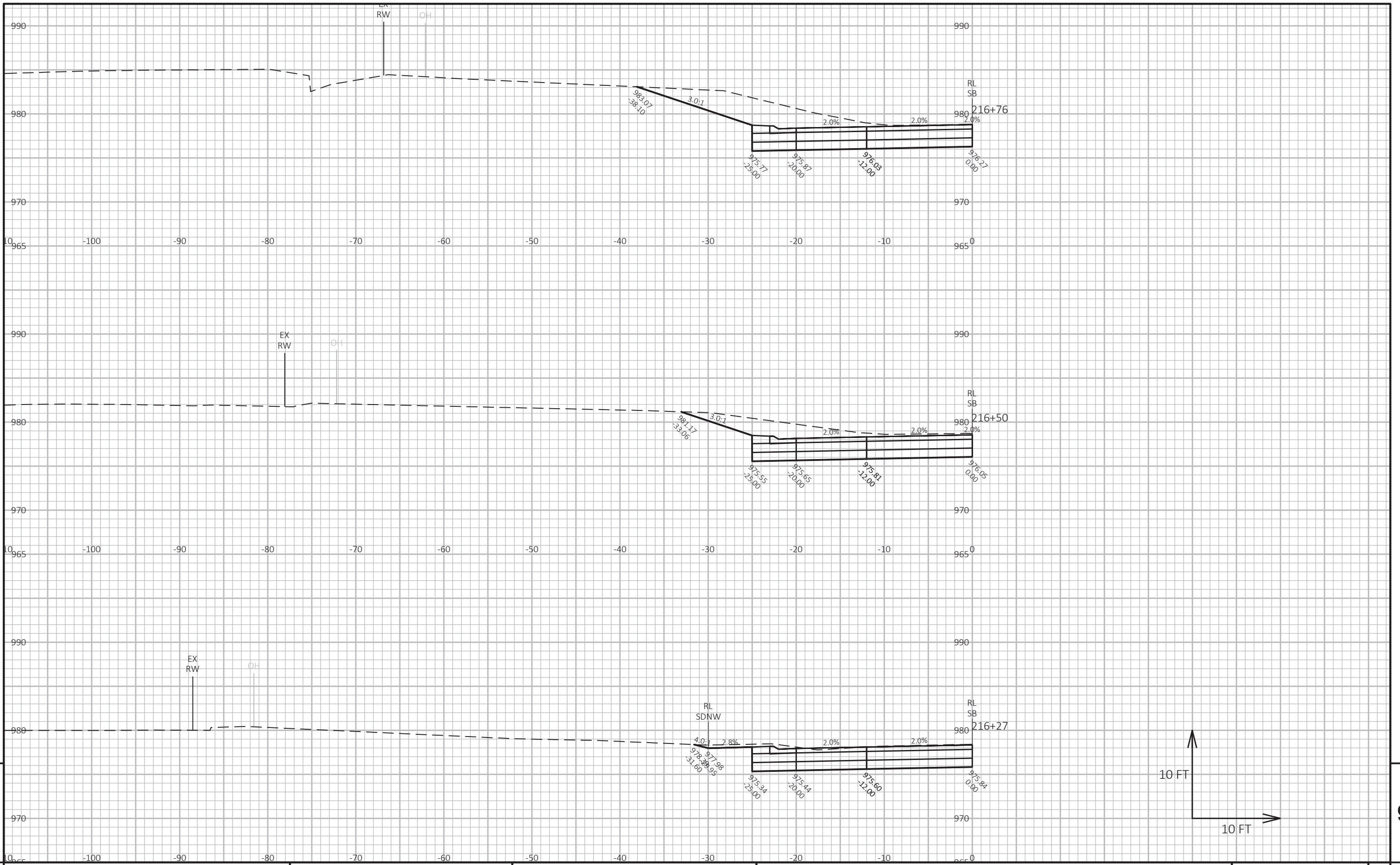
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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: SB - NORTH LEG SHEET 233 E

FILE NAME: N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_SB.DWG PLOT DATE: 8/13/2021 9:58 AM PLOT BY: BAILEY, RYAN R PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

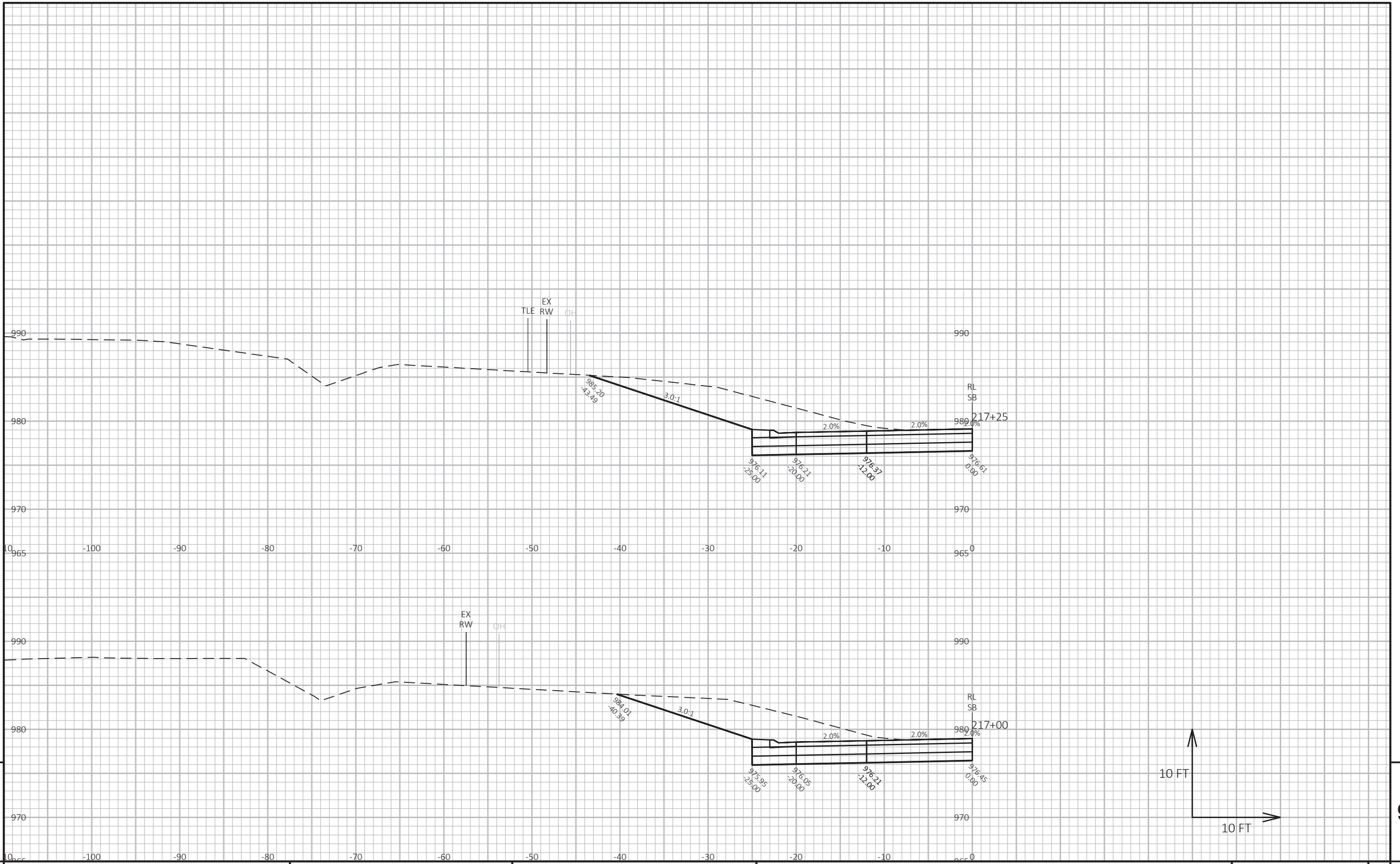


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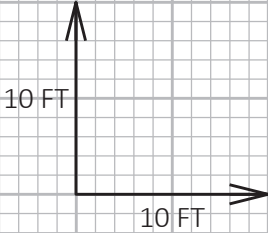
PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: SB - NORTH LEG SHEET 234 E

FILE NAME: N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_SB.DWG PLOT DATE: 8/13/2021 9:58 AM PLOT BY: BAILEY, RYAN R PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49



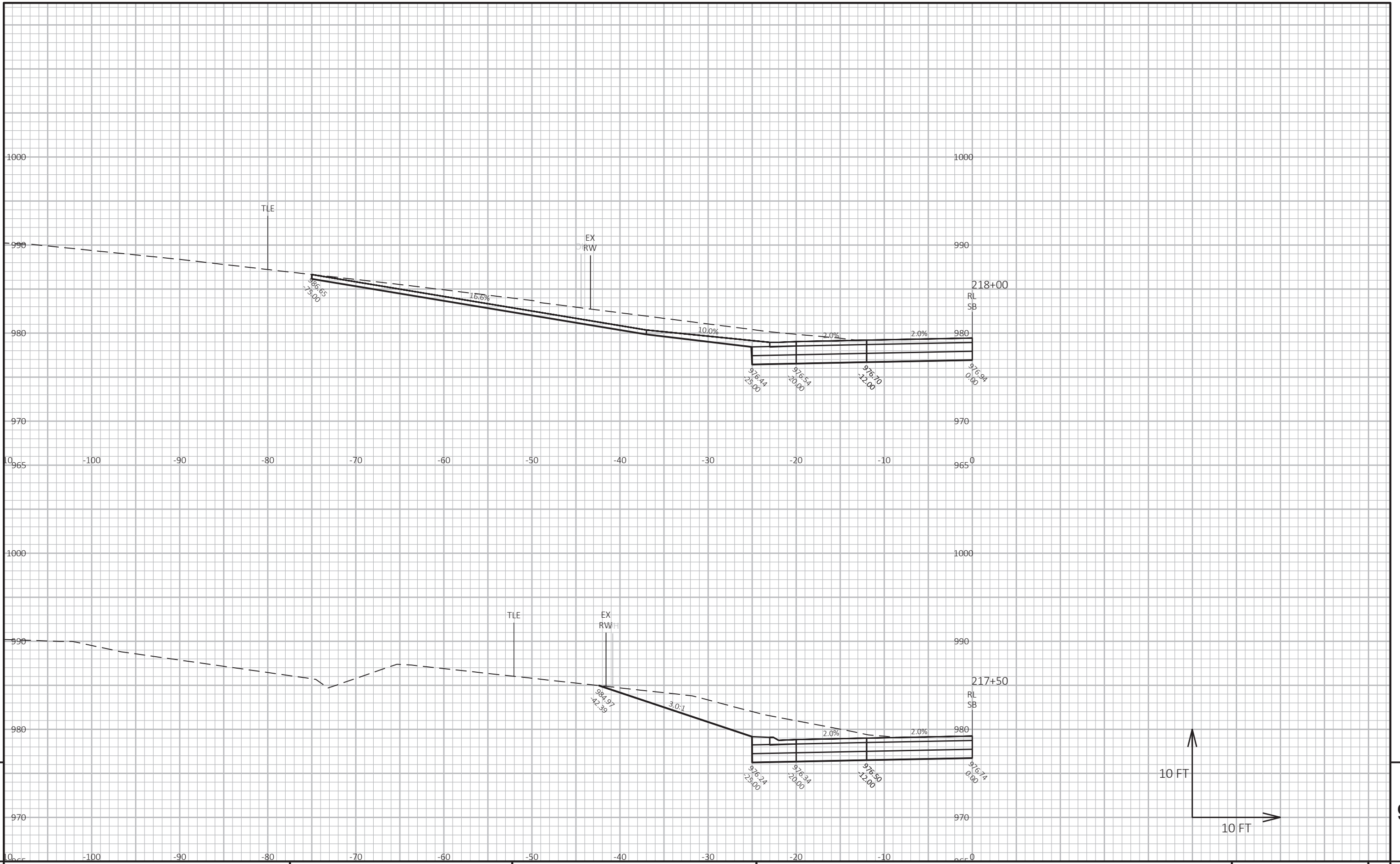
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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: SB - NORTH LEG SHEET 235 E

FILE NAME: N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_SB.DWG PLOT DATE: 8/13/2021 9:58 AM PLOT BY: BAILEY, RYAN R PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49



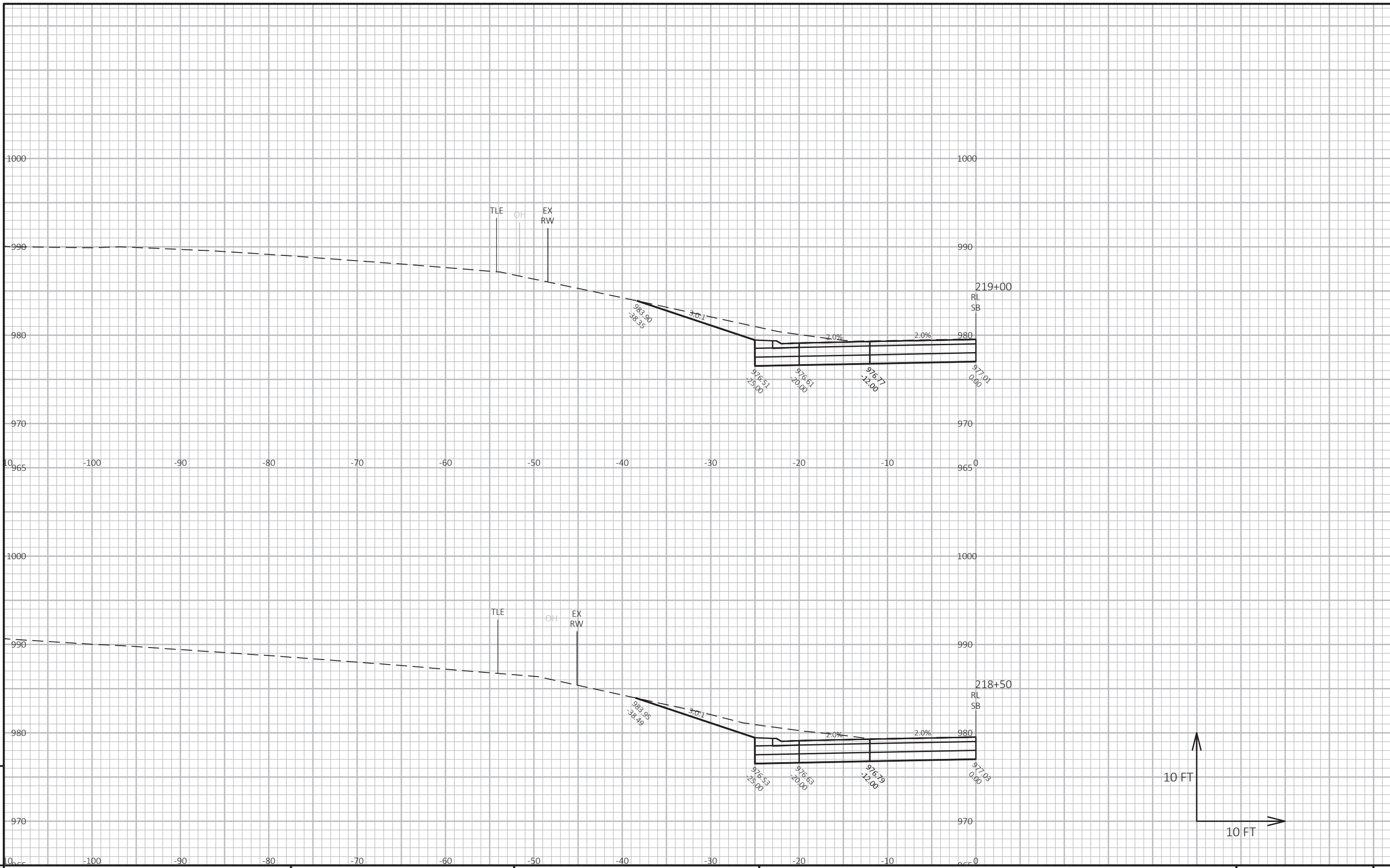
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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: SB - NORTH LEG SHEET 236 E

FILE NAME: N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_SB.DWG PLOT DATE: 8/13/2021 9:59 AM PLOT BY: BAILEY, RYAN R PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

LAYOUT NAME - 090201_SB9

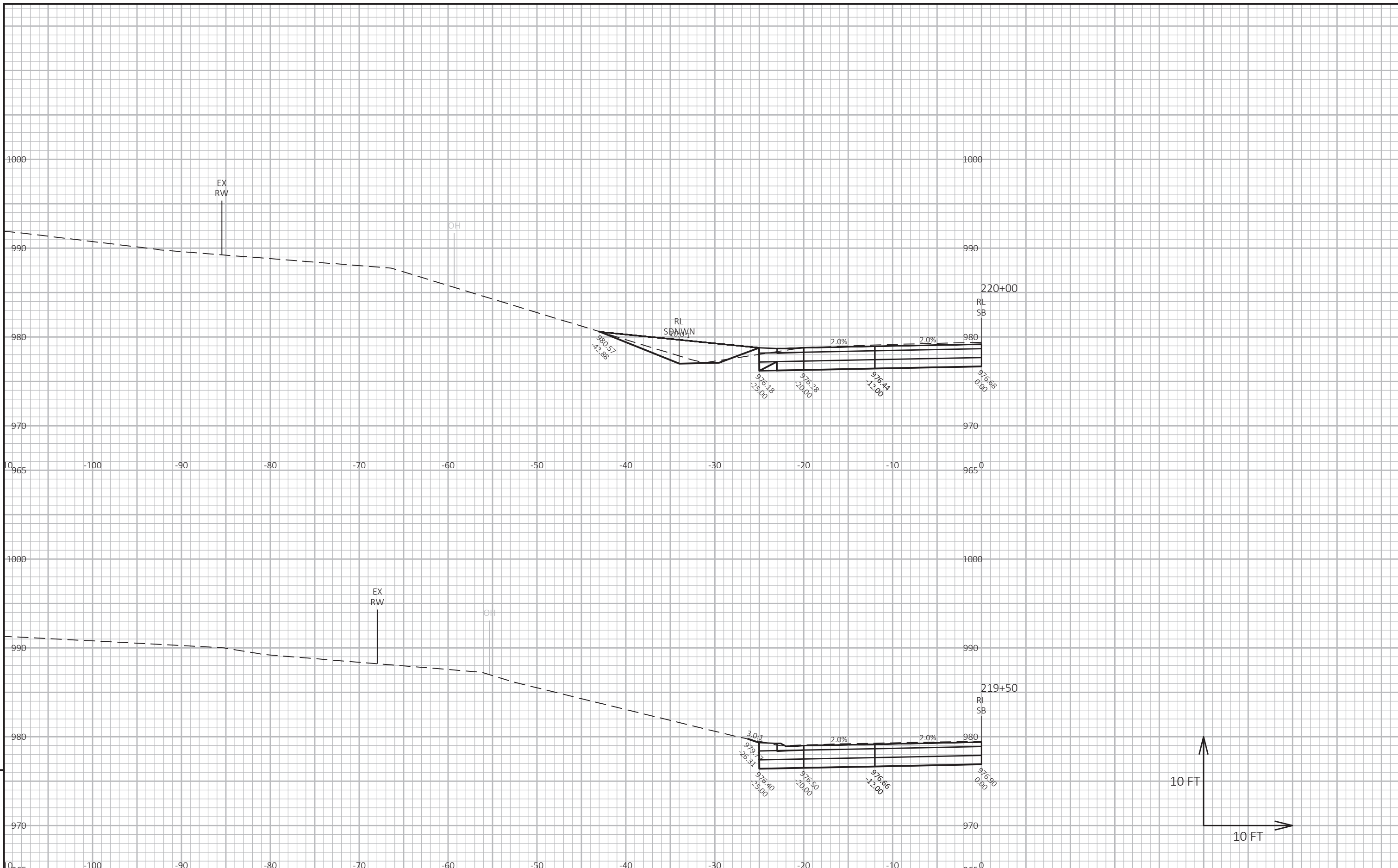


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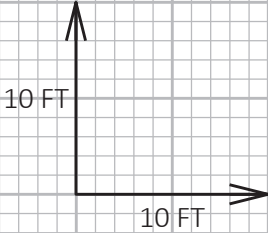
PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: SB - NORTH LEG SHEET 237 E

FILE NAME: N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_SB.DWG PLOT DATE: 8/13/2021 9:59 AM PLOT BY: BAILEY, RYAN R PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49



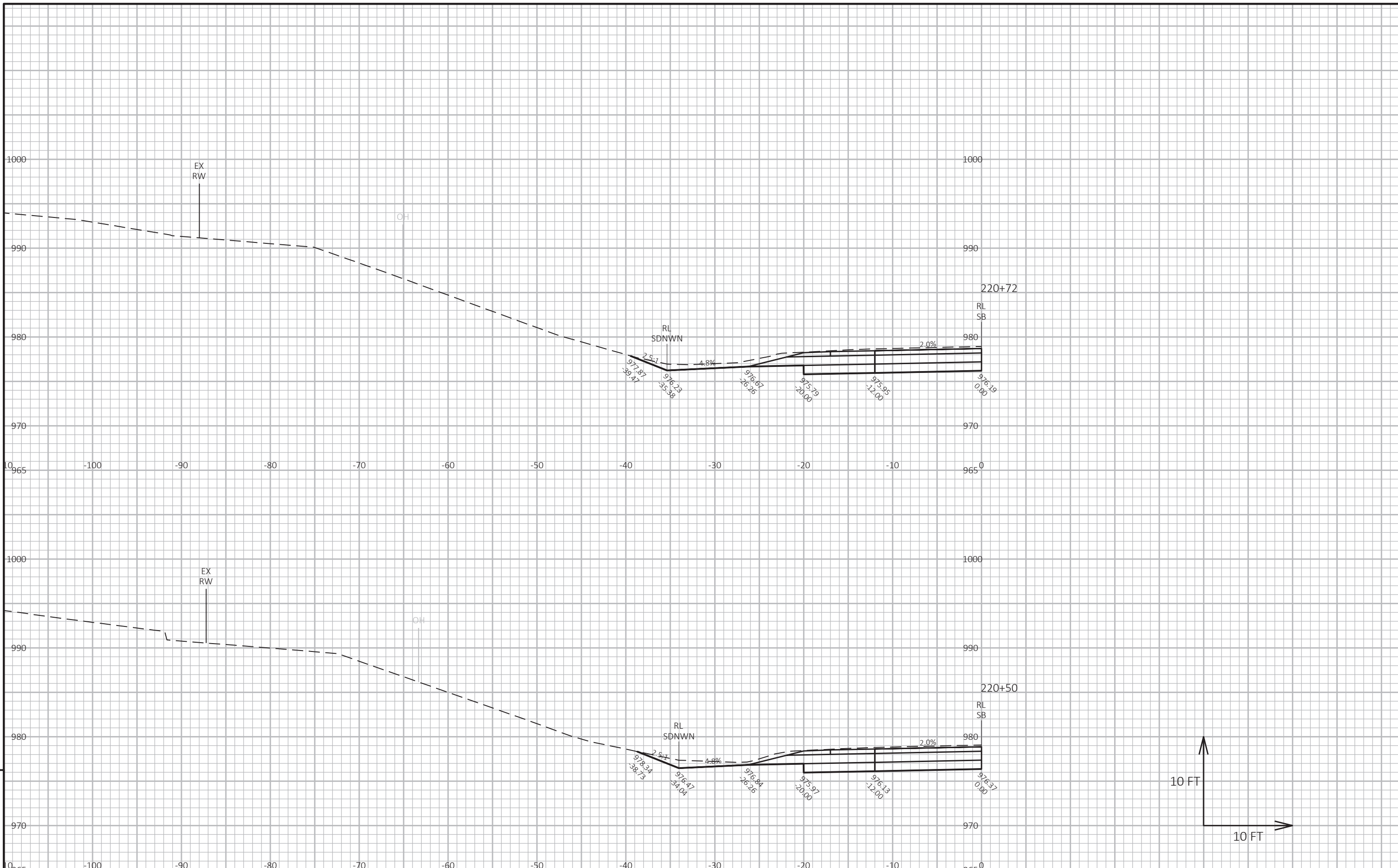
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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: SB - NORTH LEG SHEET 238 E

FILE NAME : N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_SB.DWG PLOT DATE : 8/13/2021 9:59 AM PLOT BY : BAILEY, RYAN R PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49



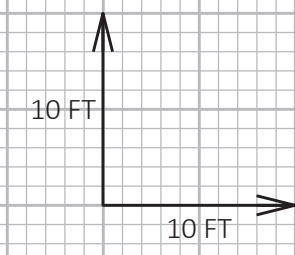
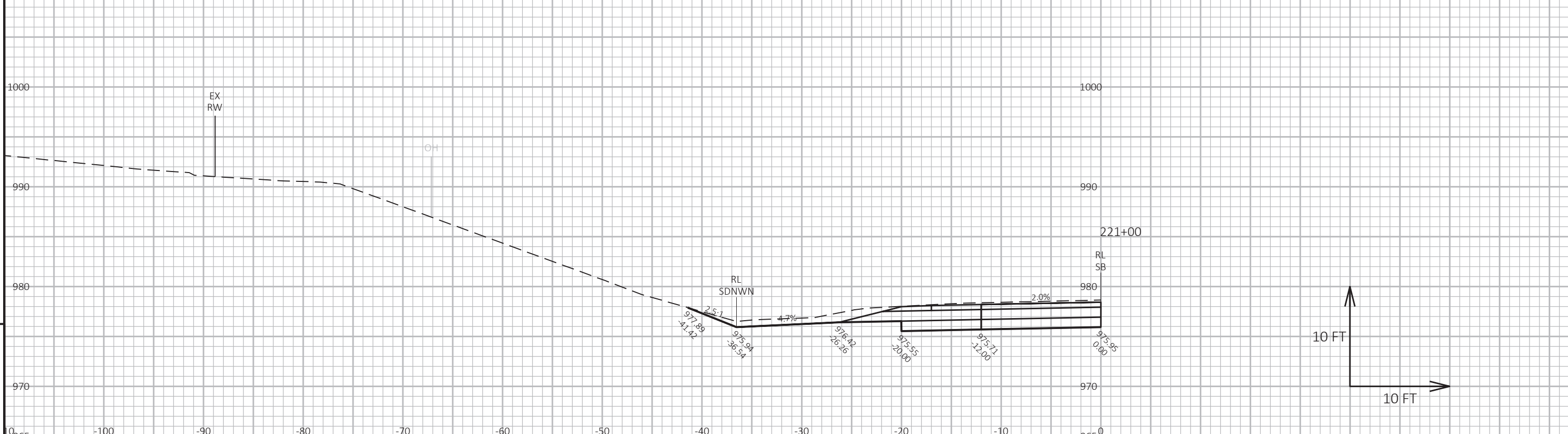
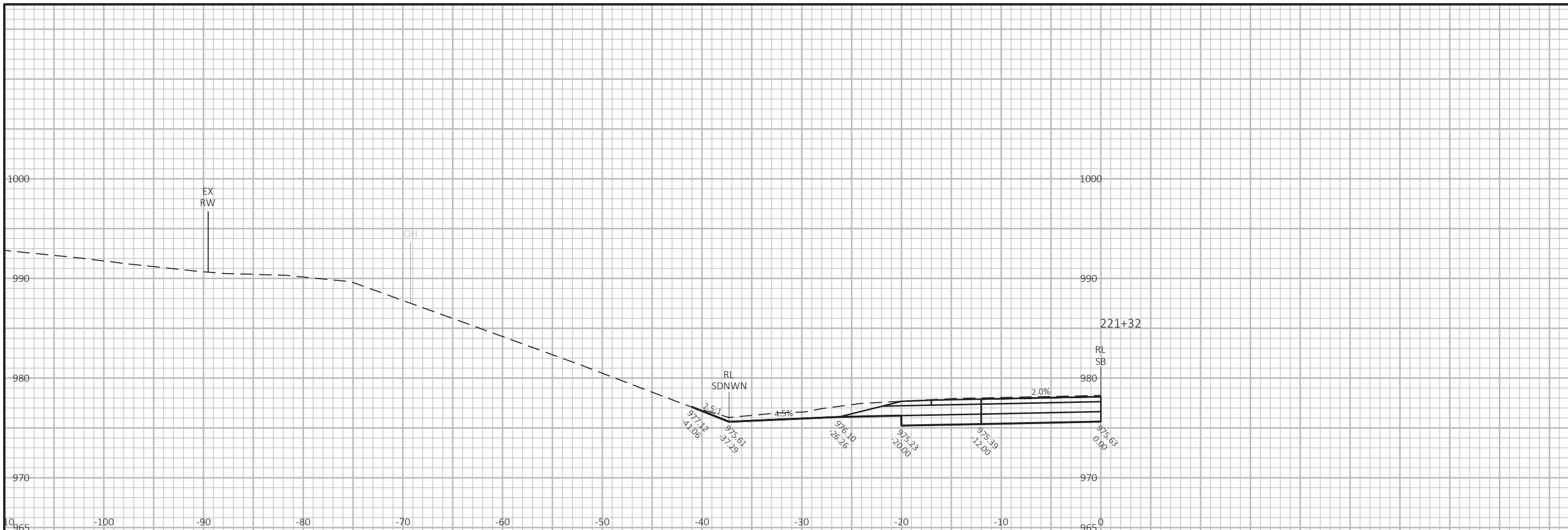
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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: SB - NORTH LEG SHEET 239 E

FILE NAME : N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_SB.DWG PLOT DATE : 8/13/2021 9:59 AM PLOT BY : BAILEY, RYAN R PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

LAYOUT NAME - 090201_SB12

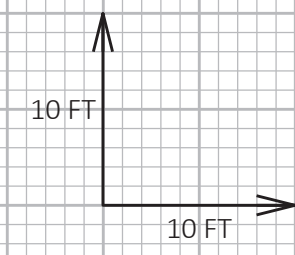
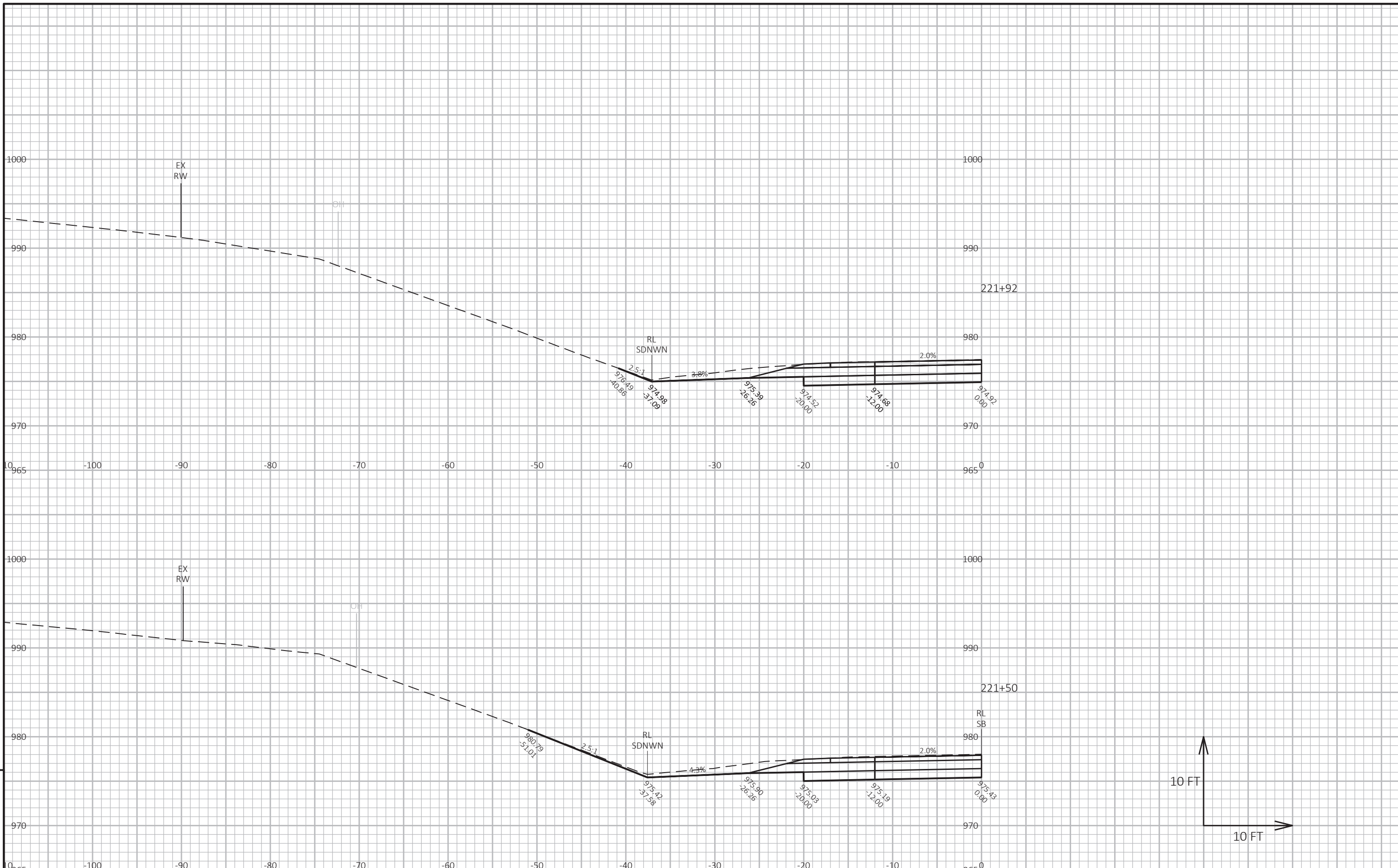


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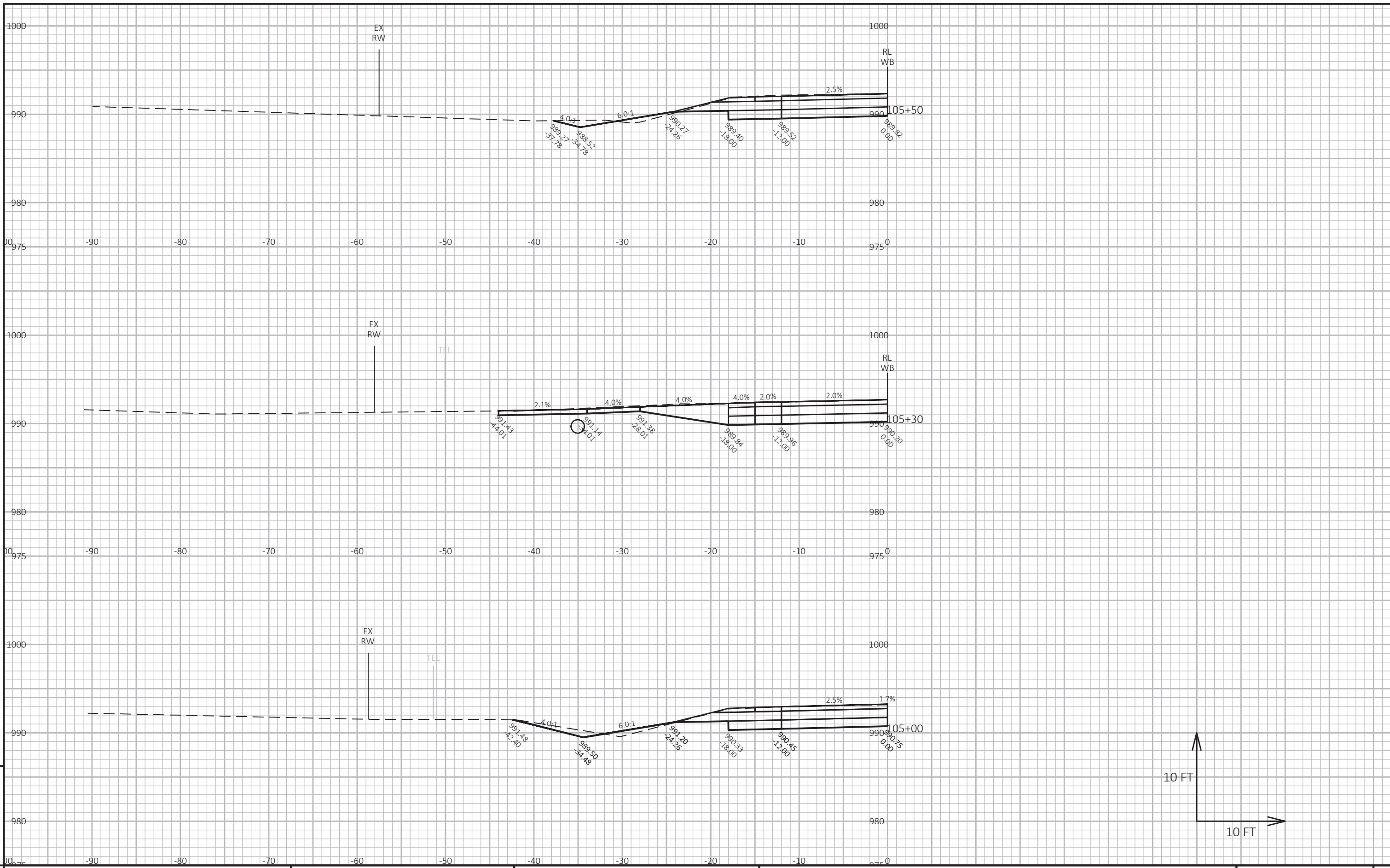
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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: SB - NORTH LEG SHEET 240 E

FILE NAME : N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_SB.DWG PLOT DATE : 8/13/2021 9:59 AM PLOT BY : BAILEY, RYAN R PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

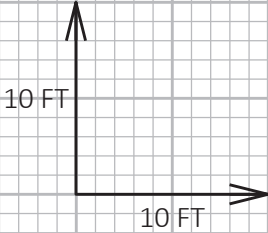


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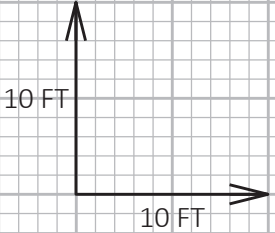
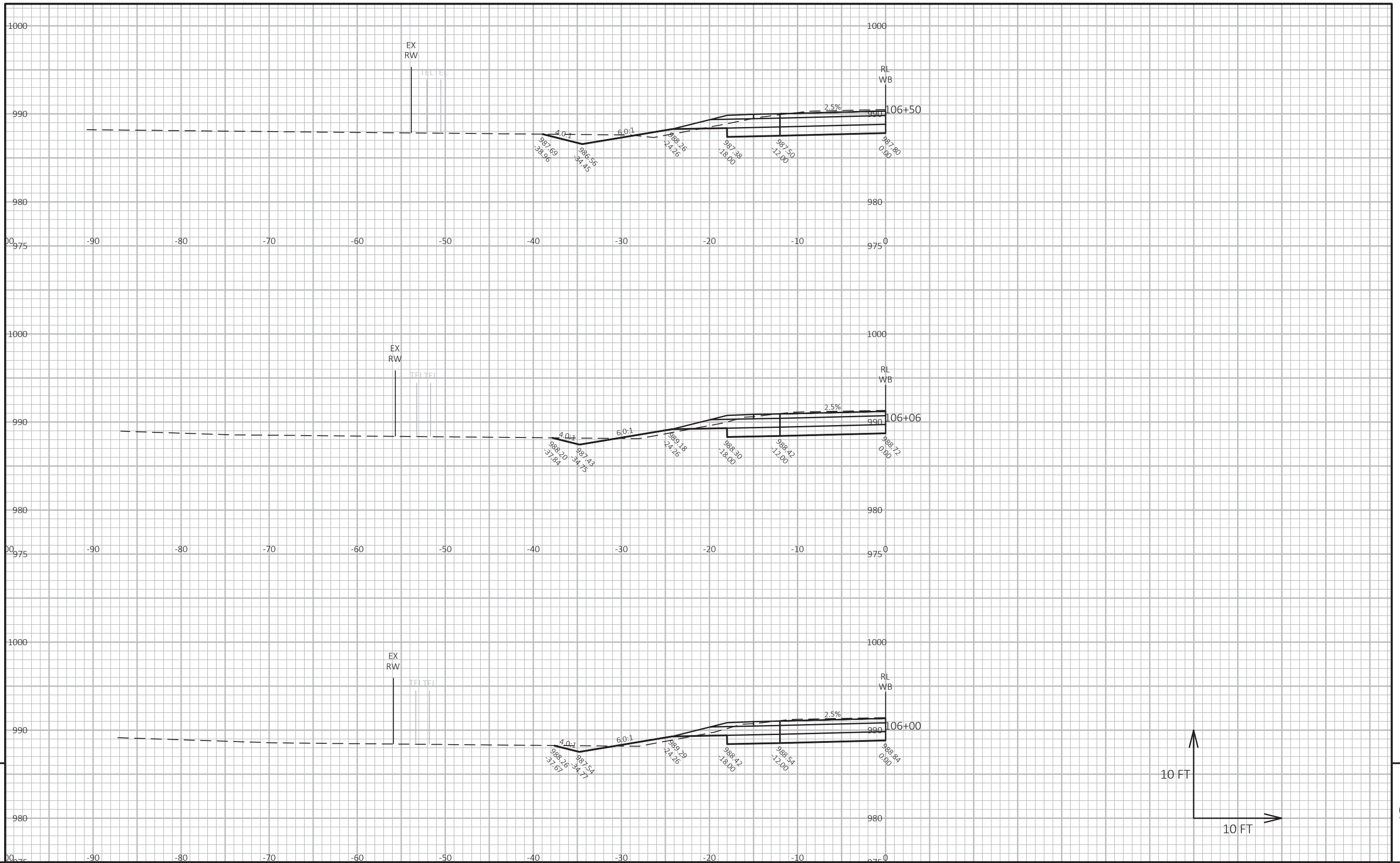
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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: WB - WEST LEG SHEET 242 E

FILE NAME : N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_WB.DWG PLOT DATE : 8/13/2021 10:01 AM PLOT BY : BAILEY, RYAN R PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49



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PROJECT NO: 4060-05-72

HWY: STH 28

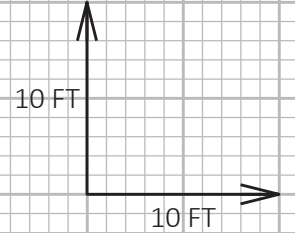
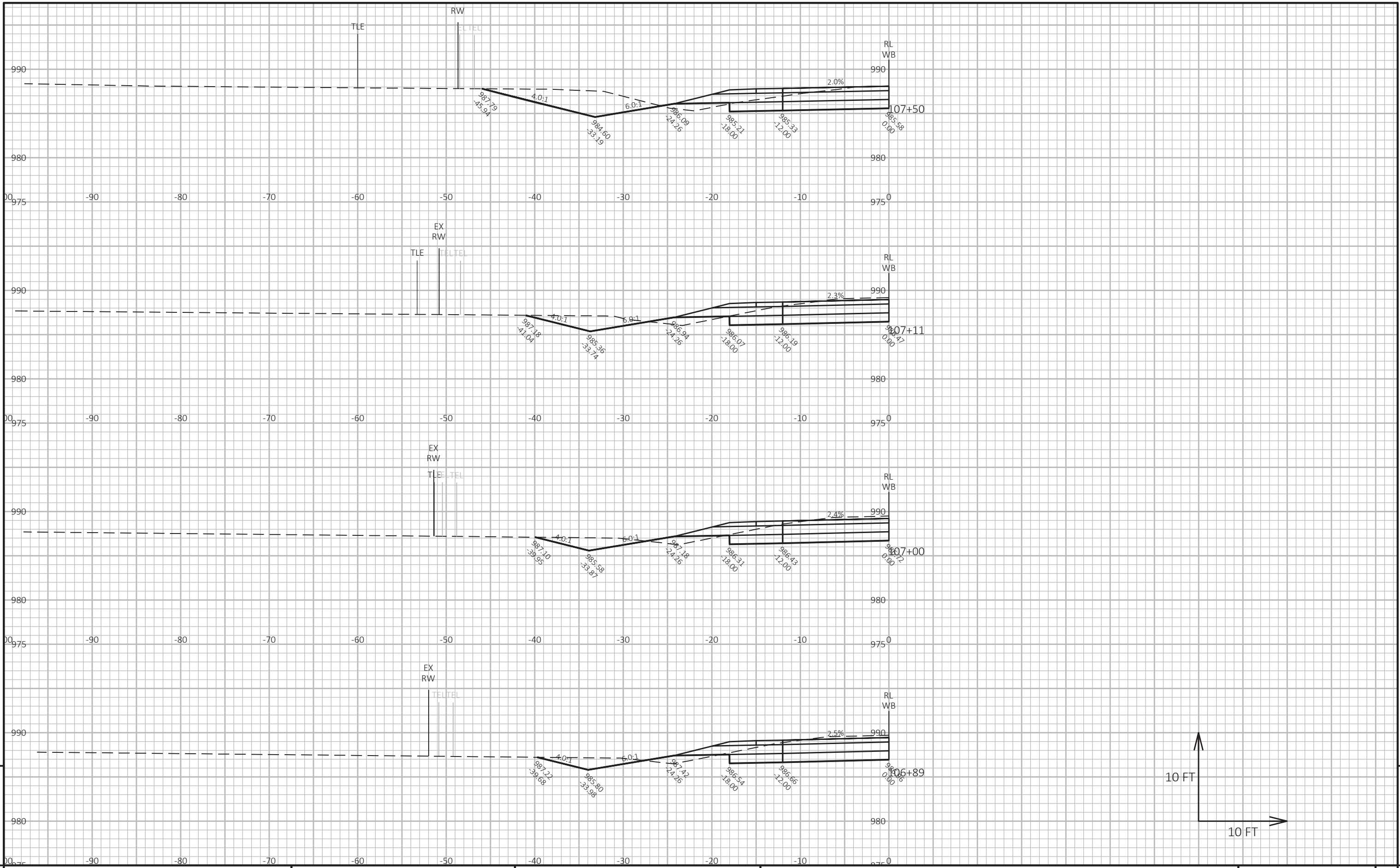
COUNTY: DODGE

CROSS SECTIONS: WB - WEST LEG

SHEET

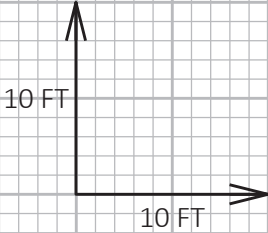
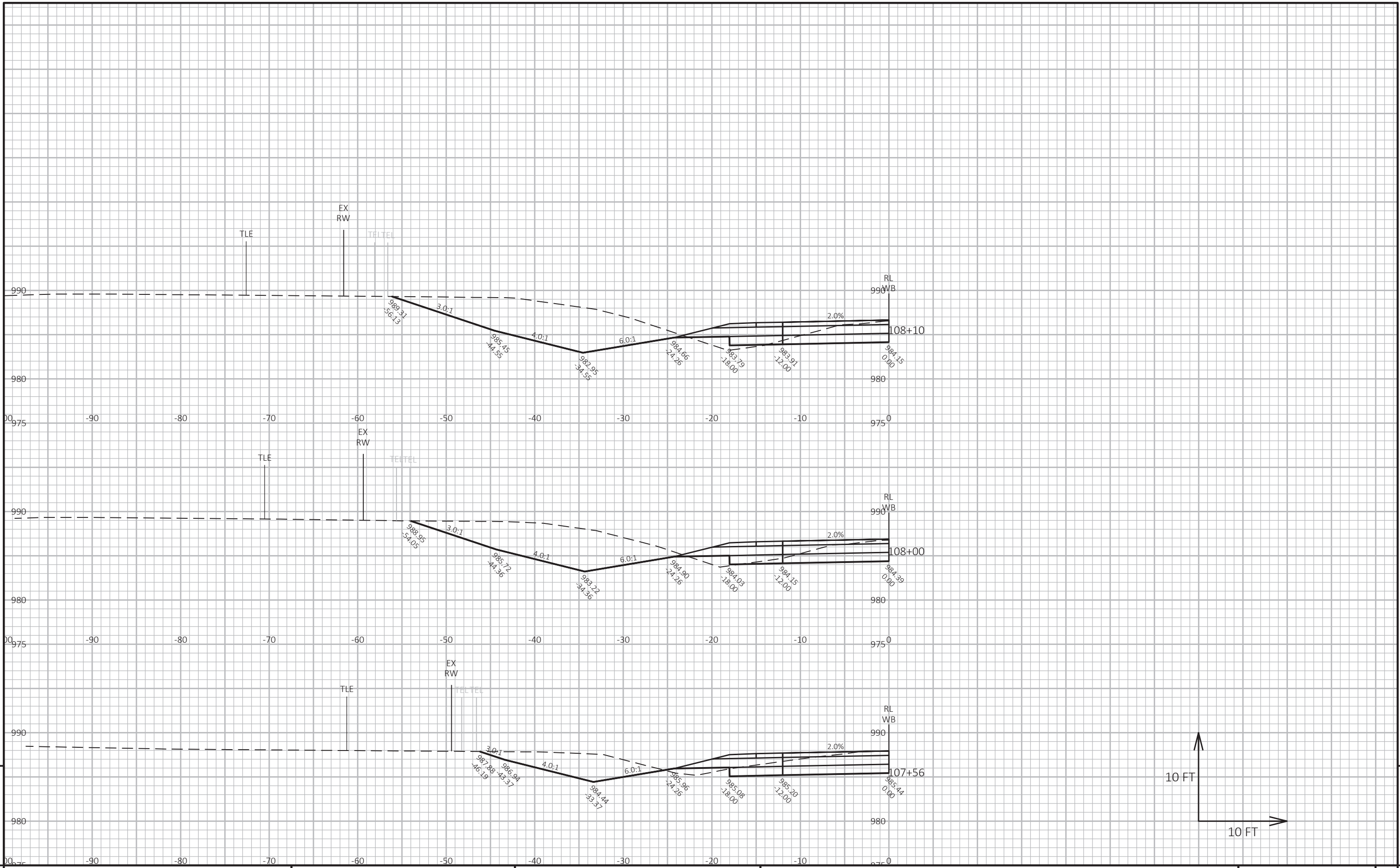
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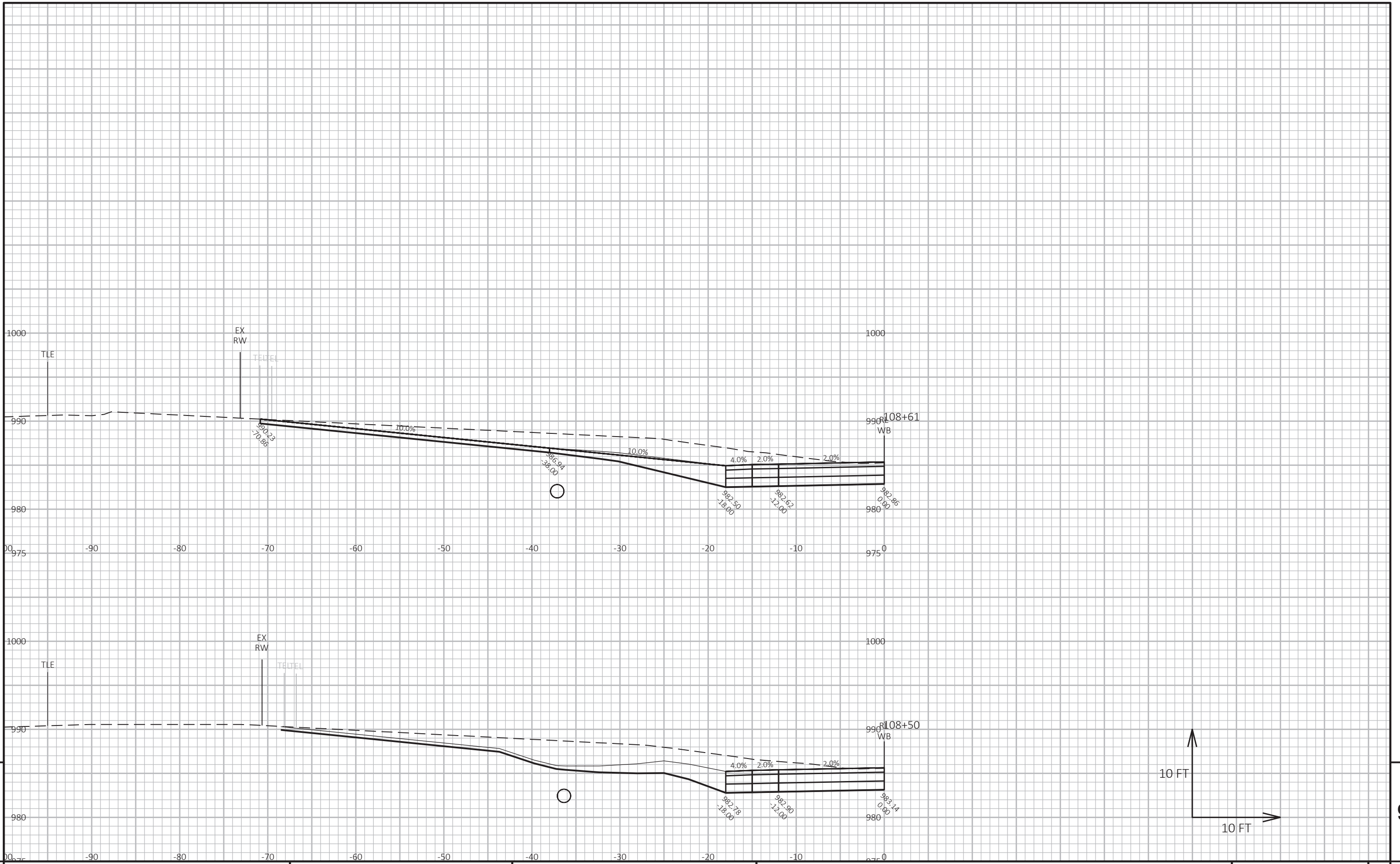
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PROJECT NO: 4060-05-72

HWY: STH 28

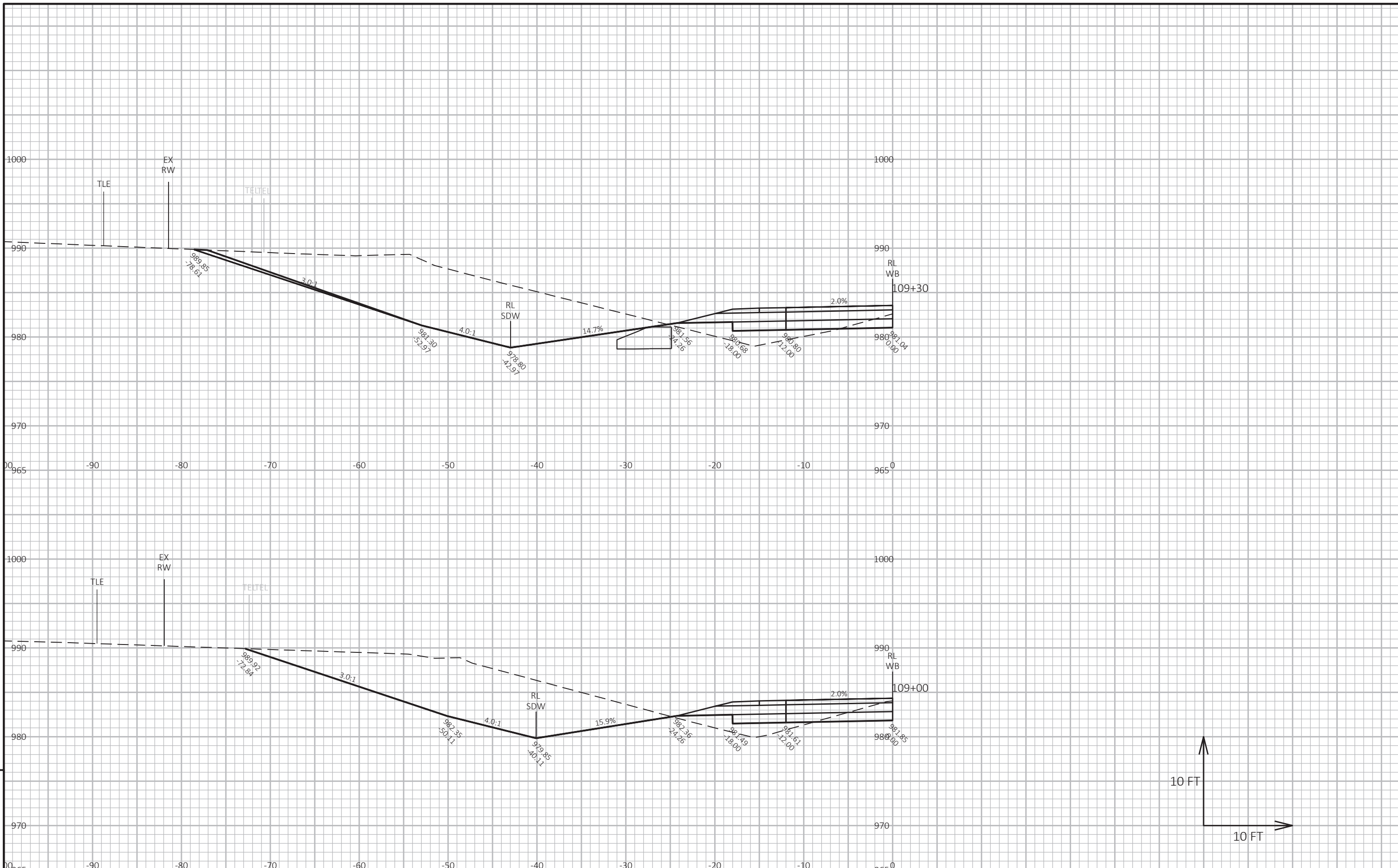
COUNTY: DODGE

CROSS SECTIONS: WB - WEST LEG

SHEET

246

E



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PROJECT NO: 4060-05-72

HWY: STH 28

COUNTY: DODGE

CROSS SECTIONS: WB - WEST LEG

SHEET

247

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FILE NAME : N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_WB.DWG
LAYOUT NAME - 090201_WB6

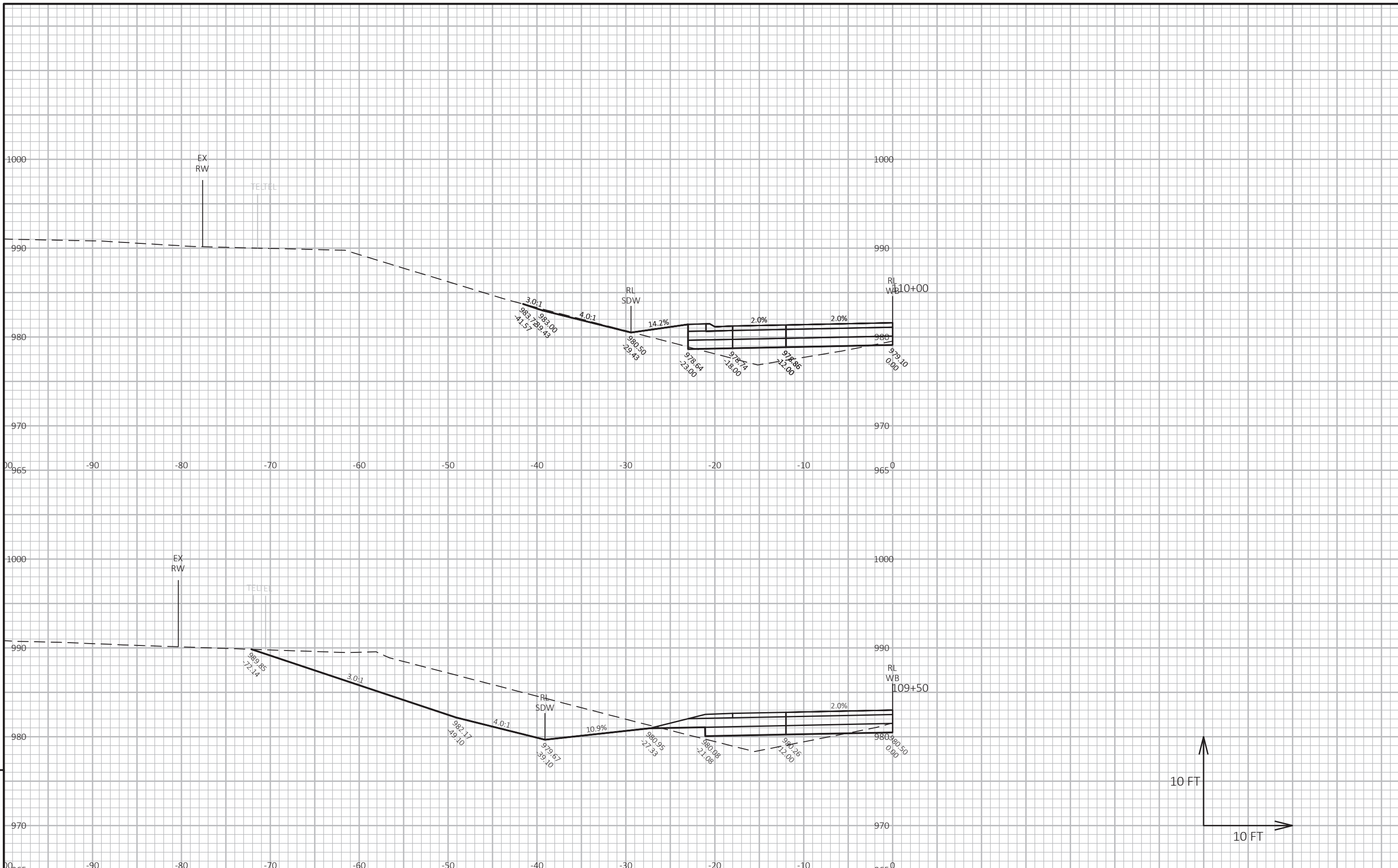
PLOT DATE : 8/13/2021 10:01 AM

PLOT BY : BAILEY, RYAN R

PLOT NAME :

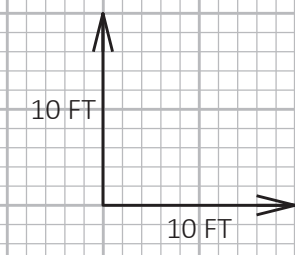
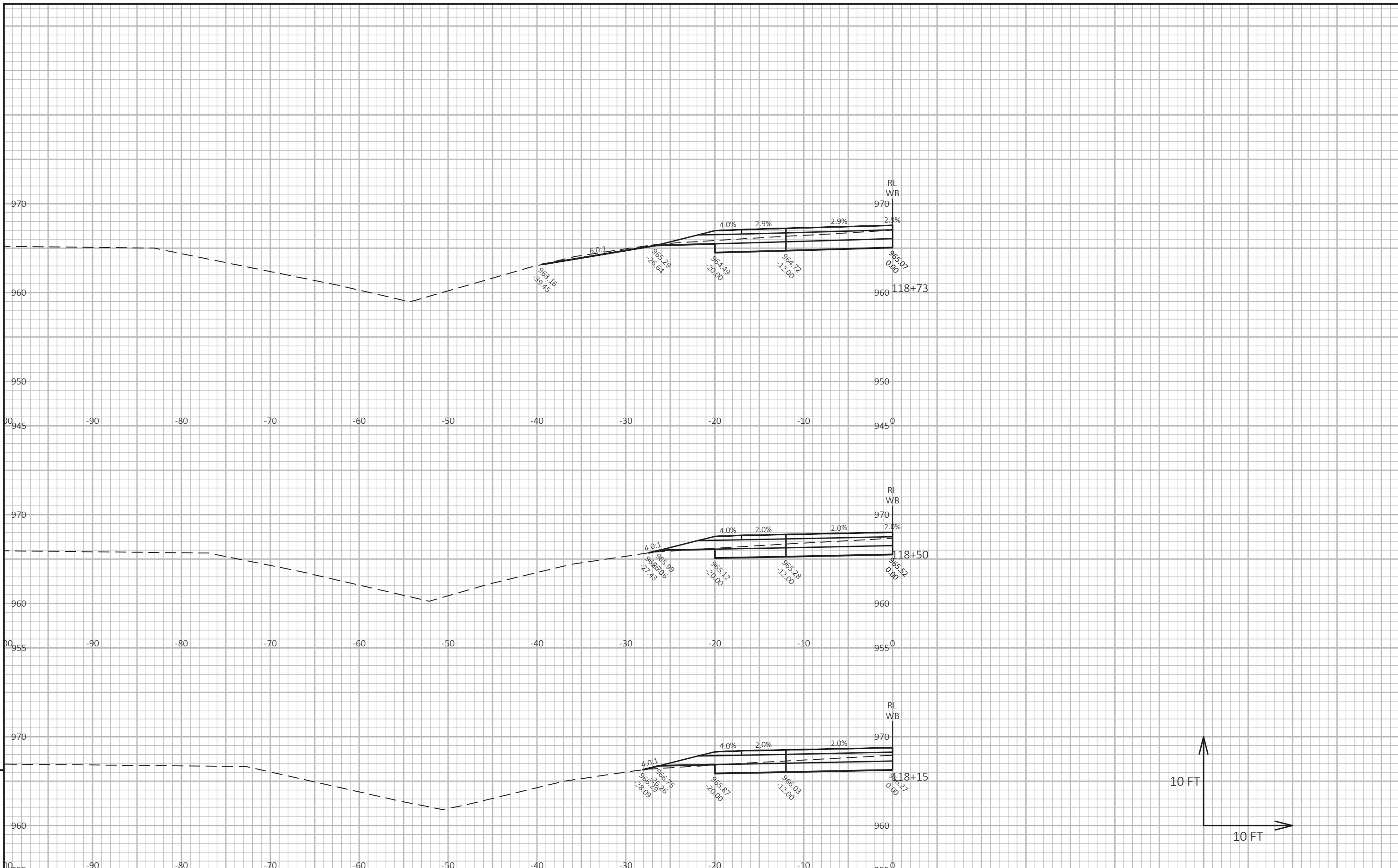
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADD SHEET 49



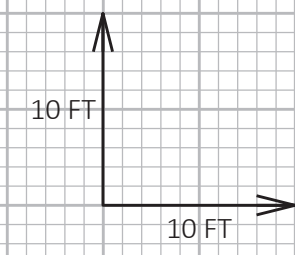
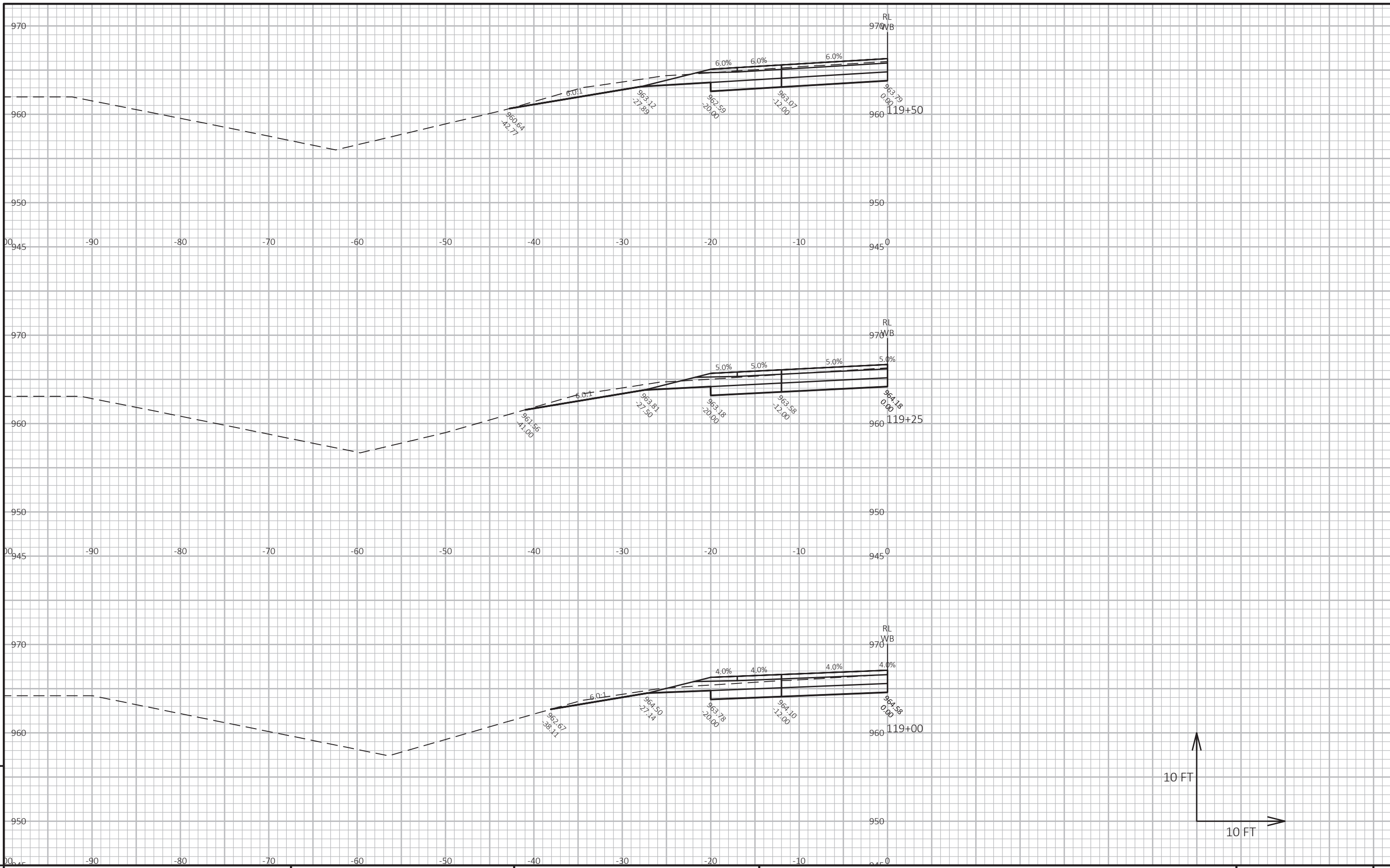
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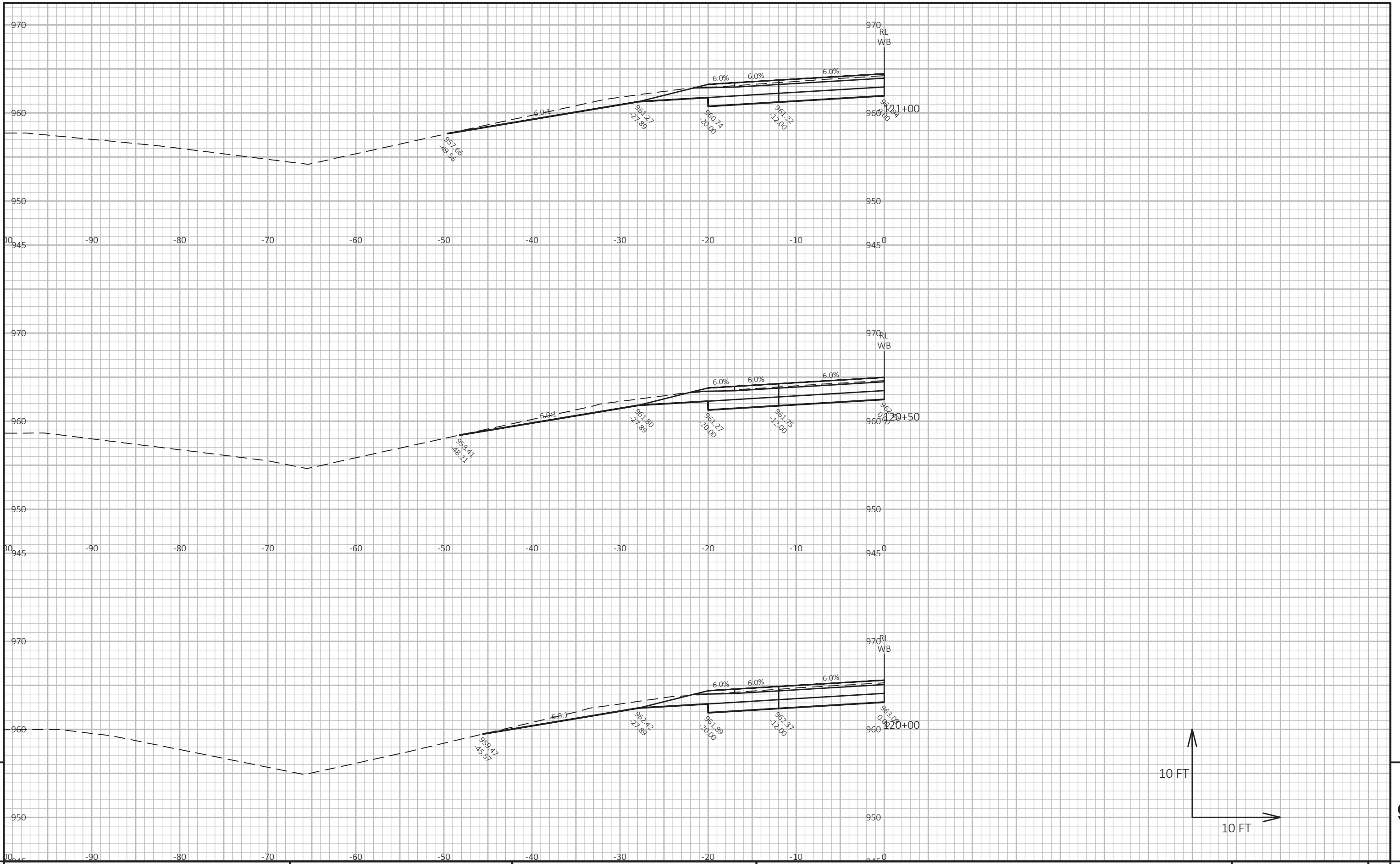
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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: WB - EAST LEG SHEET 250 E

FILE NAME : N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_WB.DWG PLOT DATE : 8/13/2021 10:01 AM PLOT BY : BAILEY, RYAN R PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

LAYOUT NAME - 090201_WB9

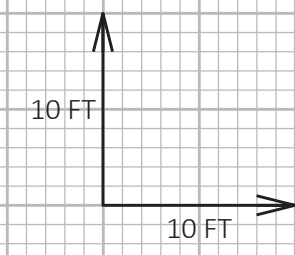
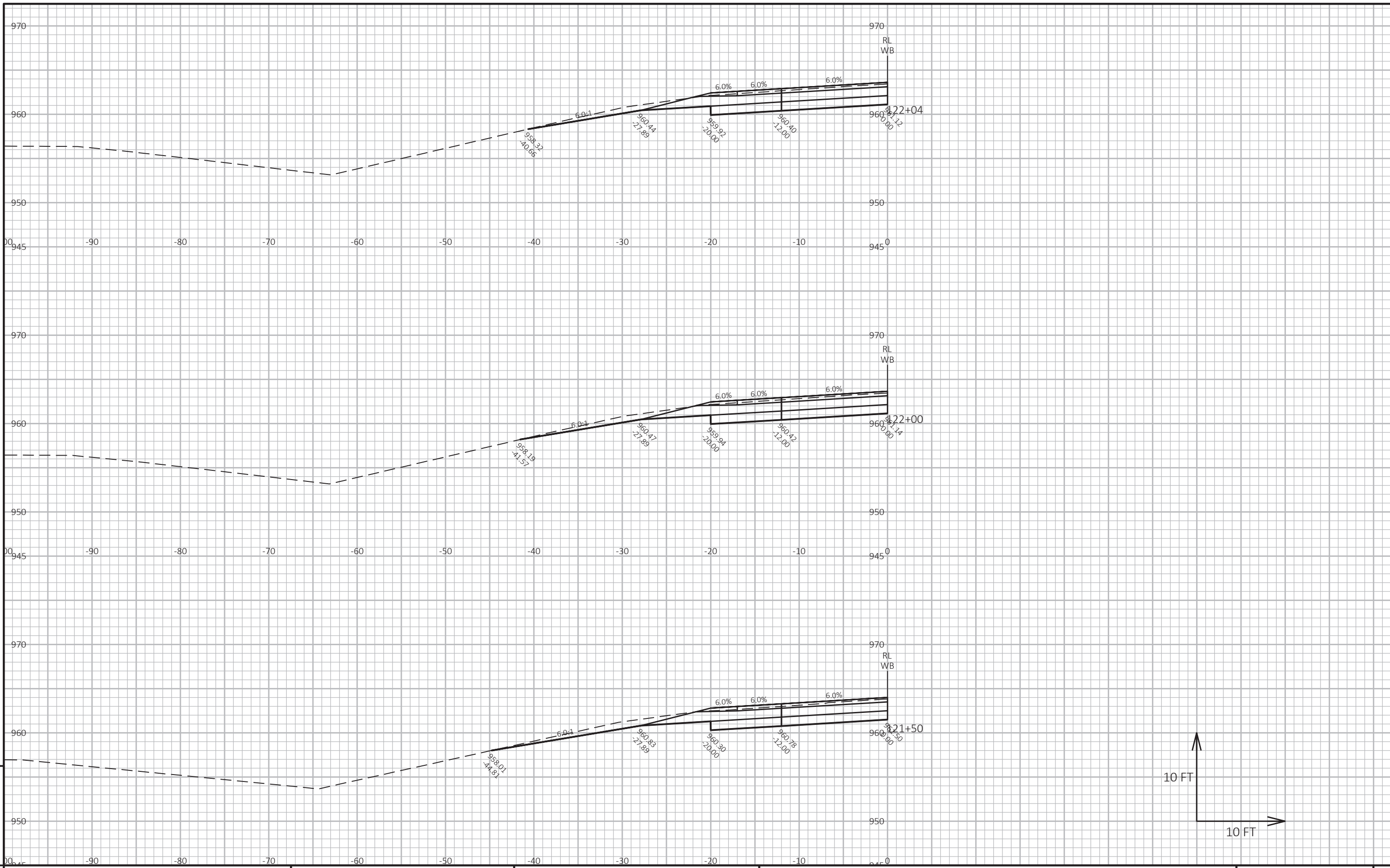


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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: WB - EAST LEG SHEET 251 E

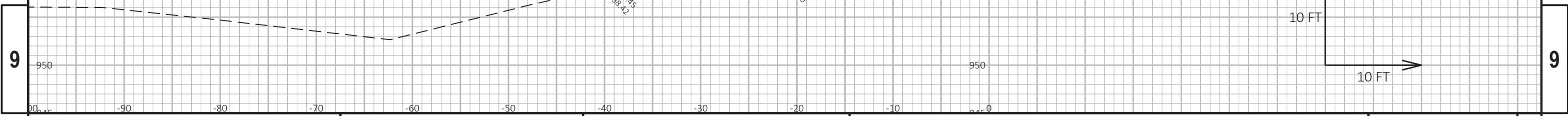
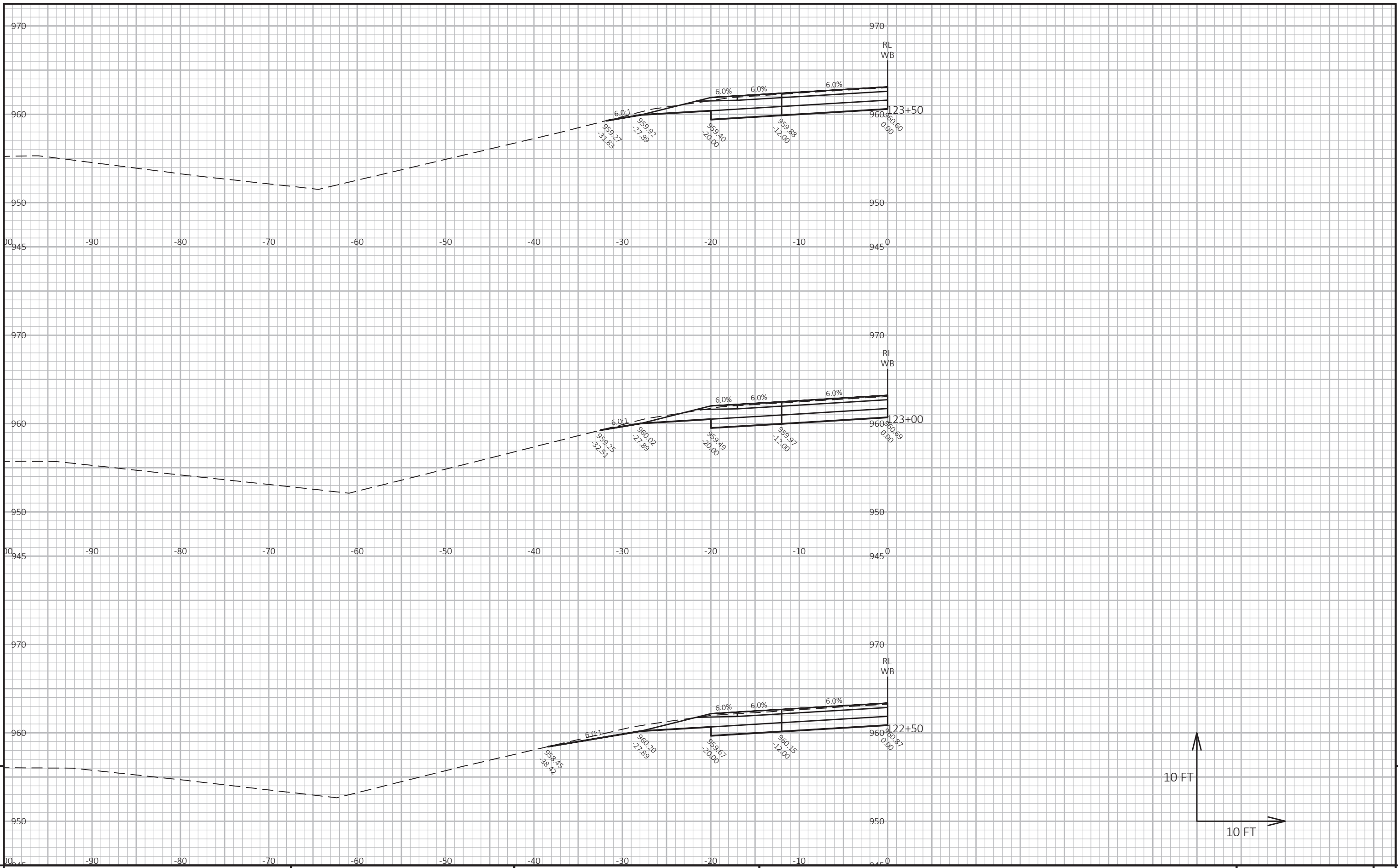
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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: WB - EAST LEG SHEET 252 E

FILE NAME : N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_WB.DWG PLOT DATE : 8/13/2021 10:01 AM PLOT BY : BAILEY, RYAN R PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49



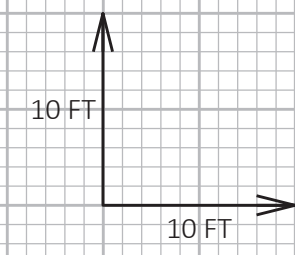
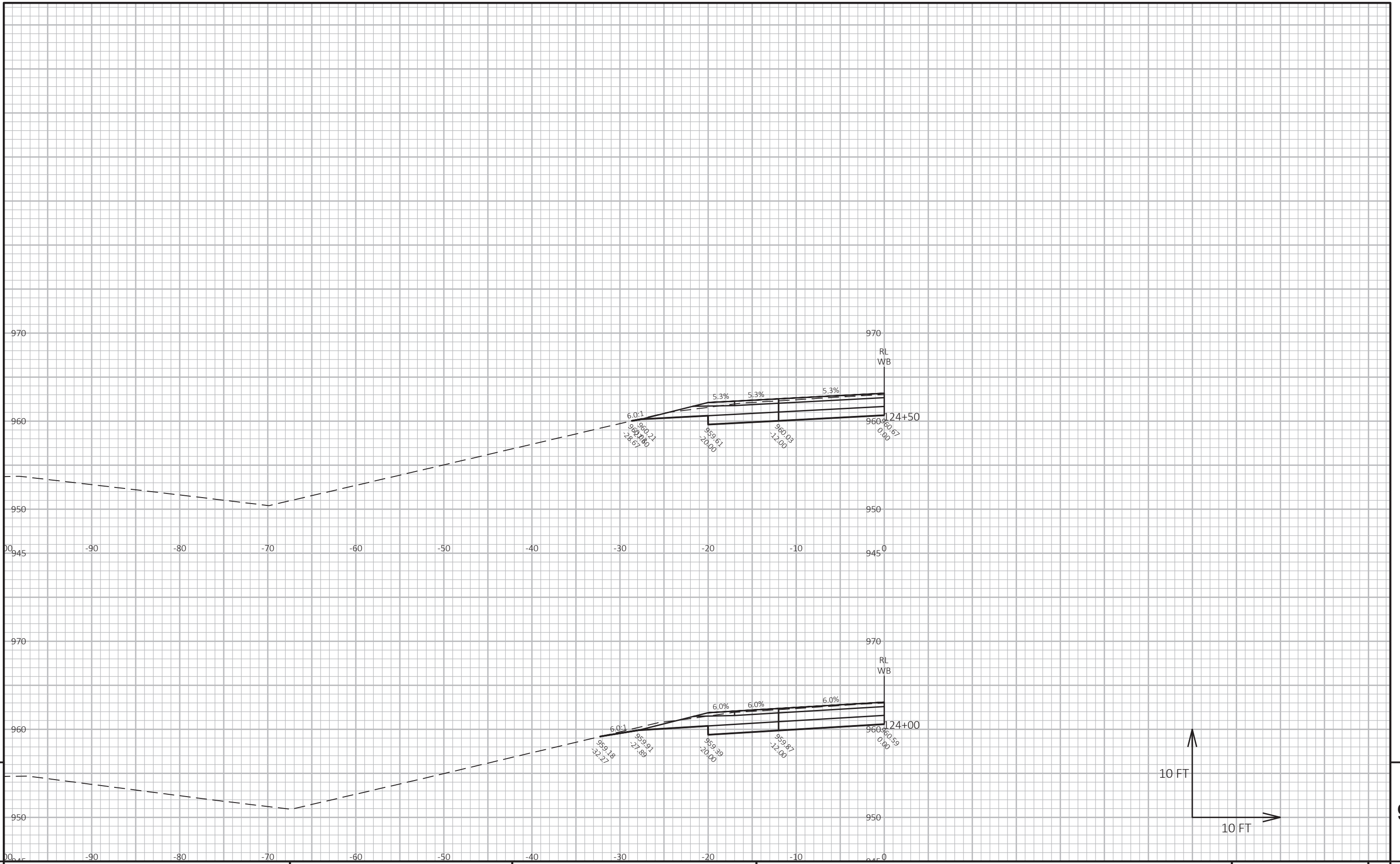
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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: WB - EAST LEG SHEET 253 E

FILE NAME : N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_WB.DWG PLOT DATE : 8/13/2021 10:01 AM PLOT BY : BAILEY, RYAN R PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

LAYOUT NAME - 090201_WB12

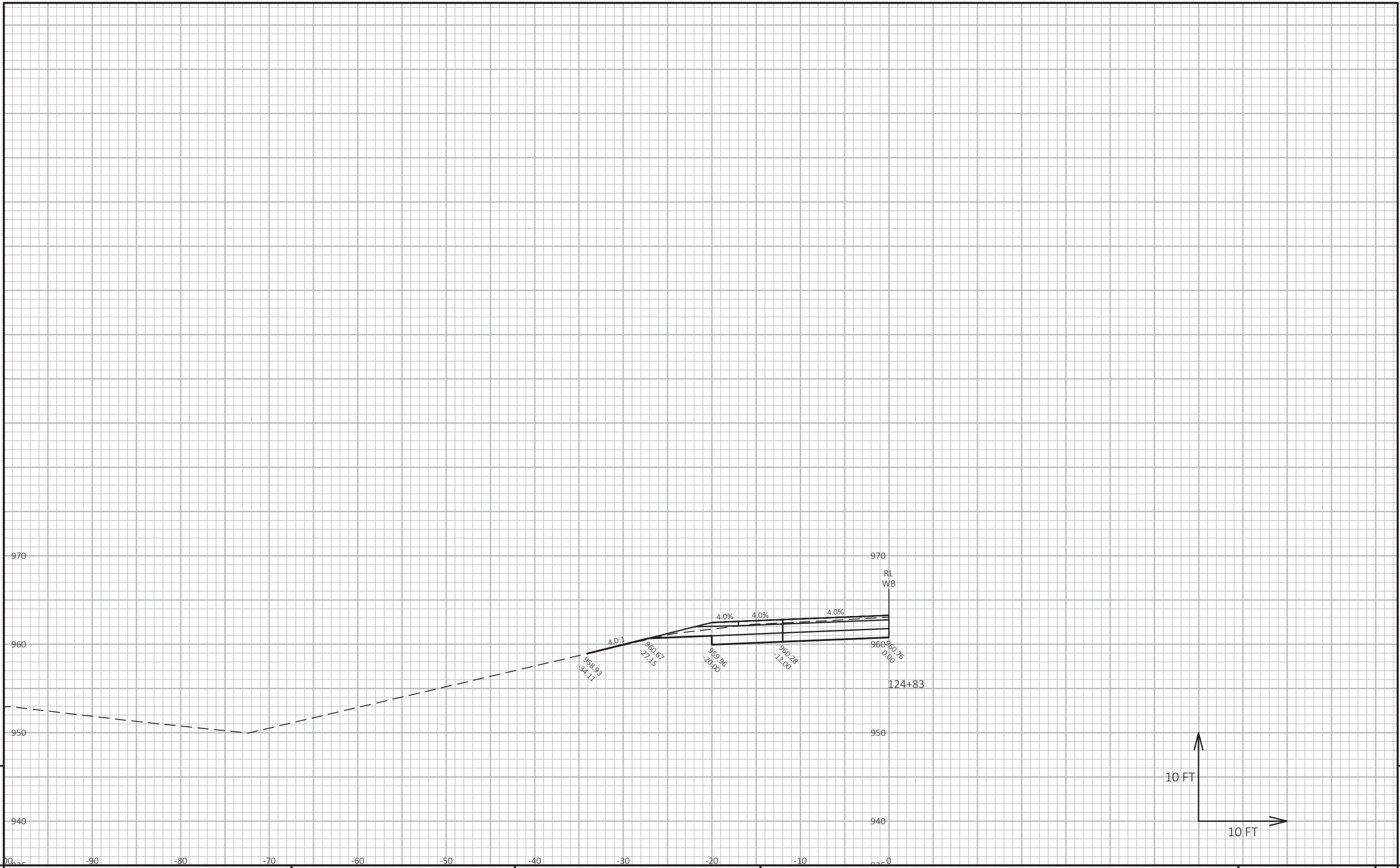


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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: WB - EAST LEG SHEET 254 E

FILE NAME : N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_WB.DWG PLOT DATE : 8/13/2021 10:01 AM PLOT BY : BAILEY, RYAN R PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

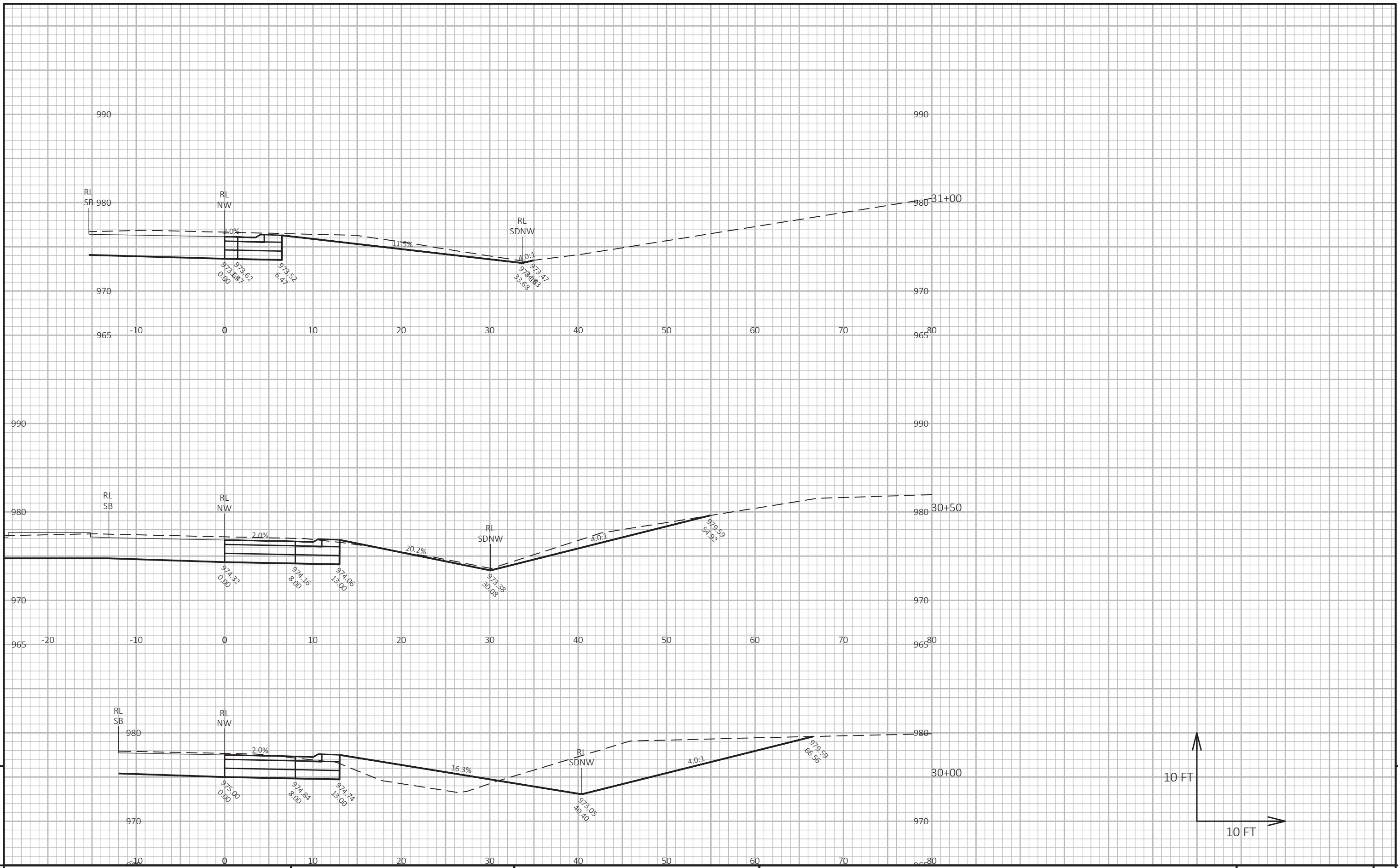


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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: WB - EAST LEG SHEET 255 E

FILE NAME: N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_WB.DWG PLOT DATE: 8/13/2021 10:01 AM PLOT BY: BAILEY, RYAN R PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49



PROJECT NO: 4060-05-72

HWY: STH 28

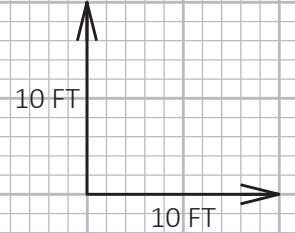
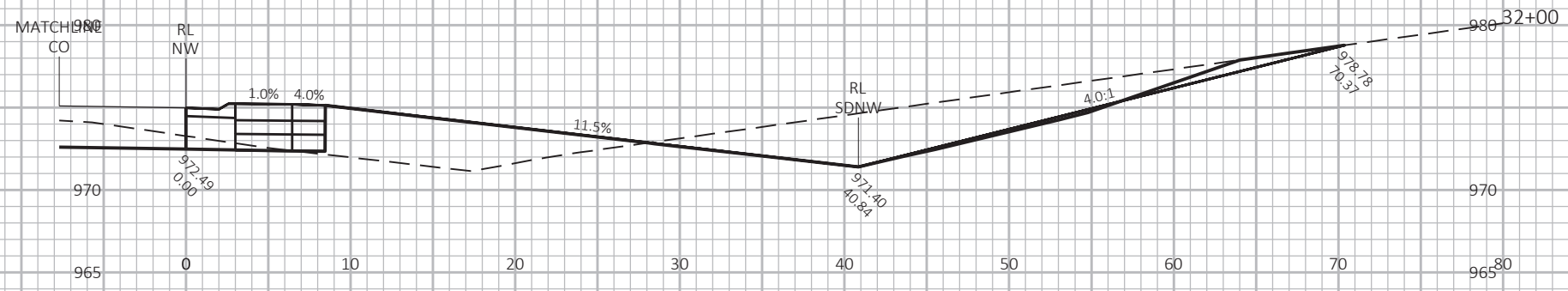
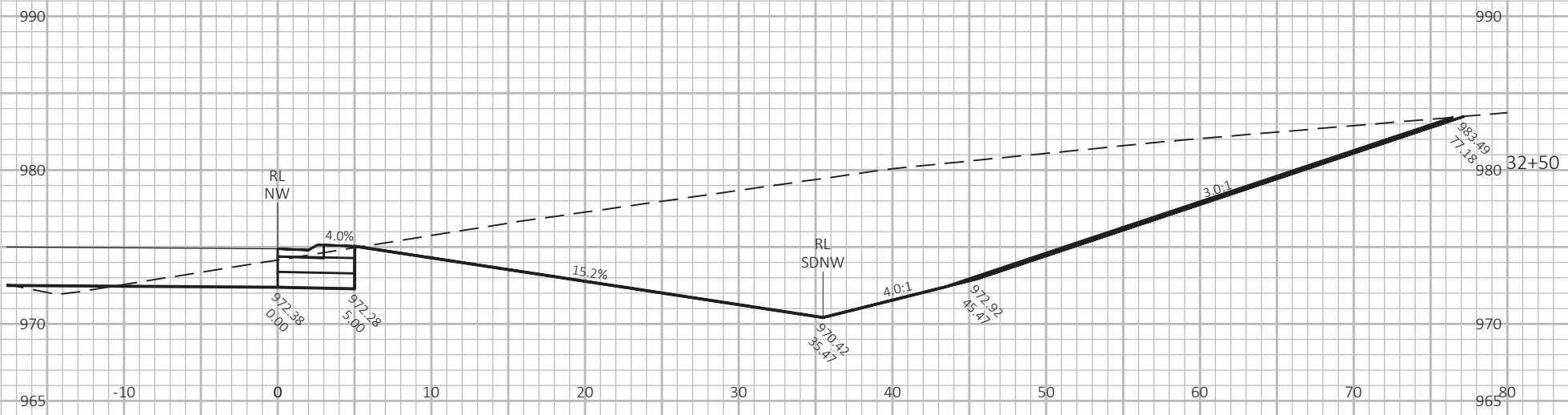
COUNTY: DODGE

CROSS SECTIONS: NW

SHEET

256

E



PROJECT NO: 4060-05-72

HWY: STH 28

COUNTY: DODGE

CROSS SECTIONS: NW

SHEET 257

FILE NAME: N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_CURBS.DWG

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PLOT BY: BAILEY, RYAN R

PLOT NAME:

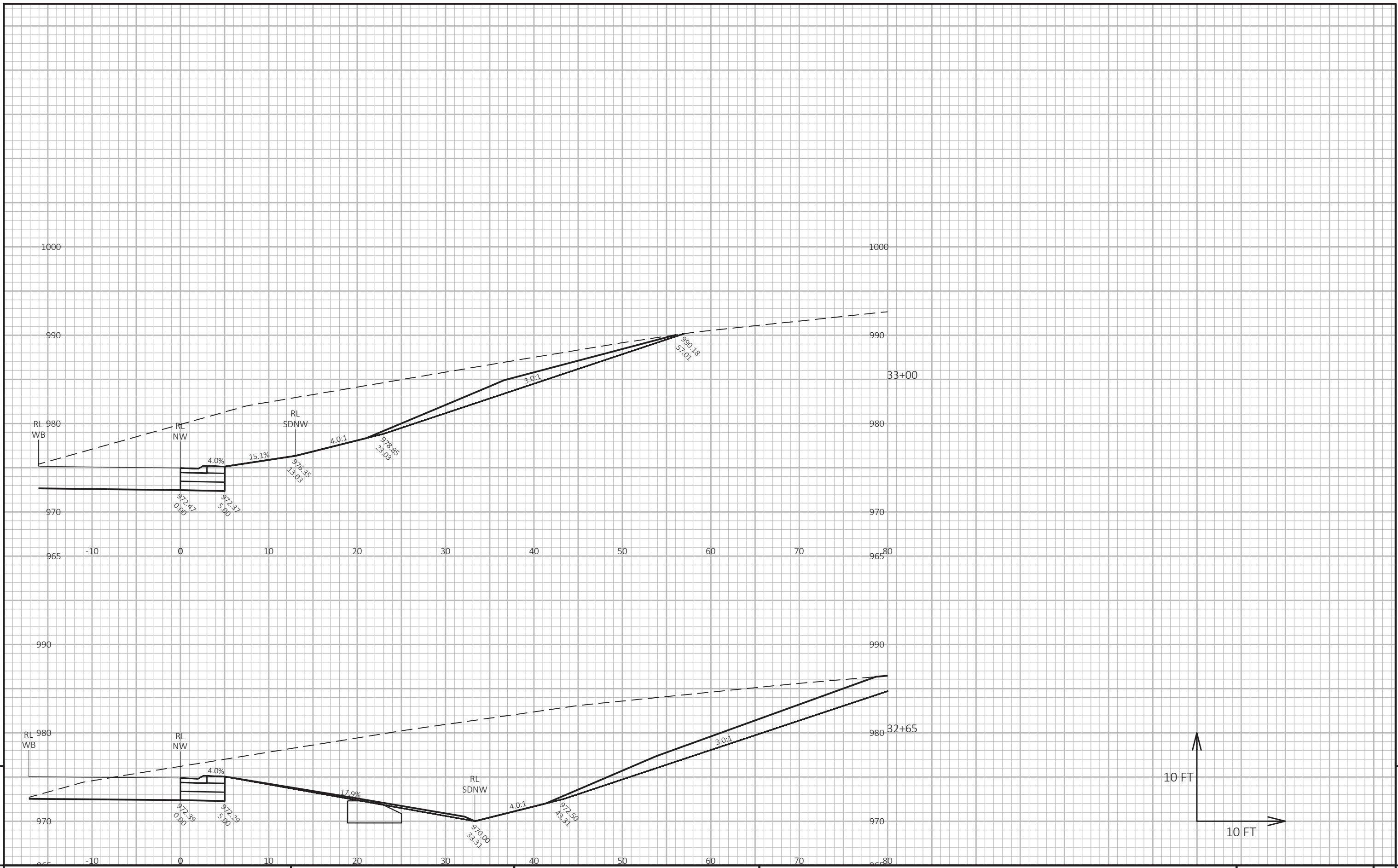
PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADD SHEET 49

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E

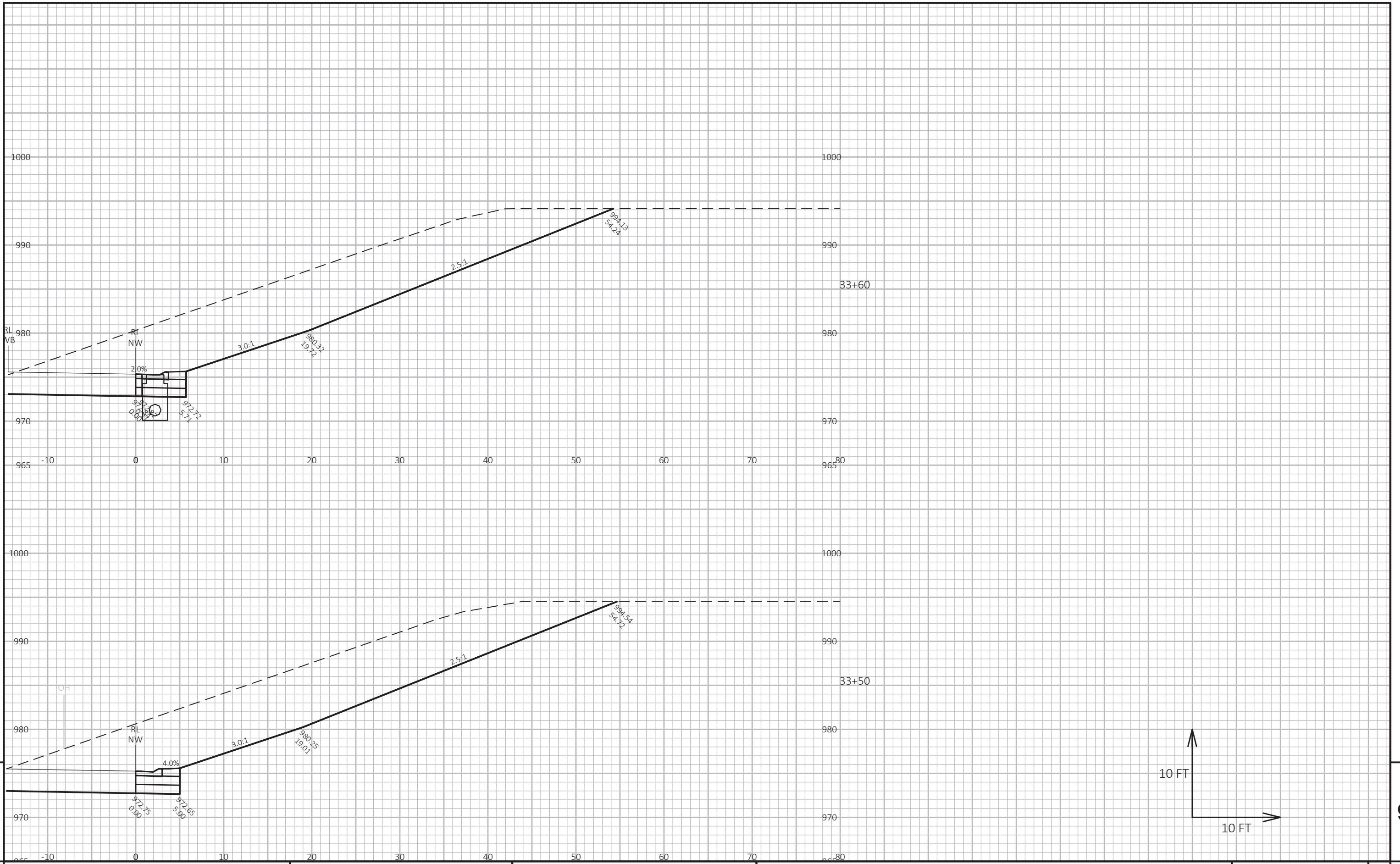


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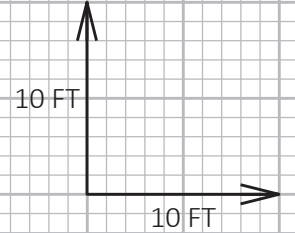
PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: NW SHEET 258 E

FILE NAME : N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_CURBS.DWG PLOT DATE : 8/13/2021 10:04 AM PLOT BY : BAILEY, RYAN R PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49



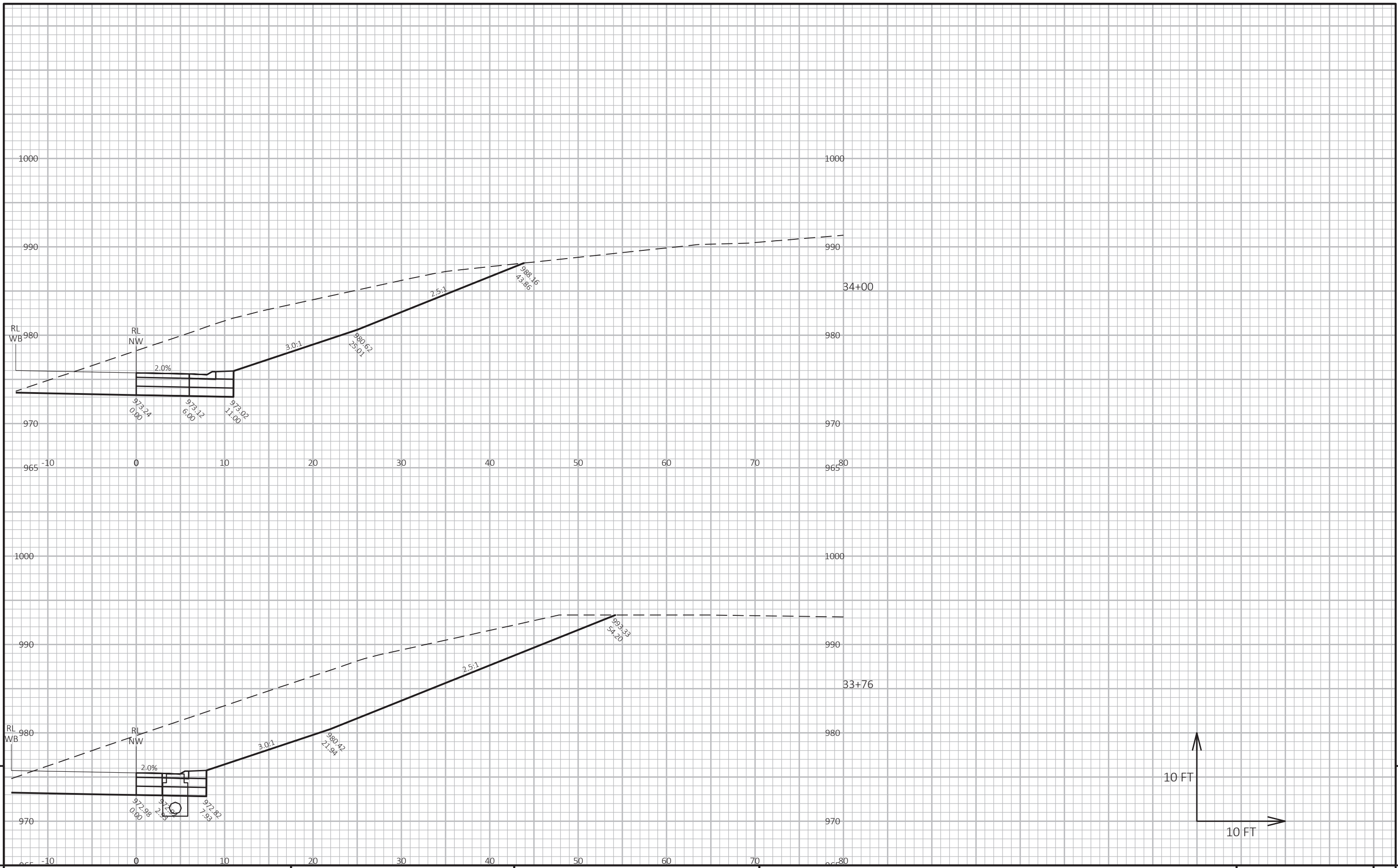
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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: NW SHEET 259 E

FILE NAME : N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_CURBS.DWG PLOT DATE : 8/13/2021 10:04 AM PLOT BY : BAILEY, RYAN R PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49



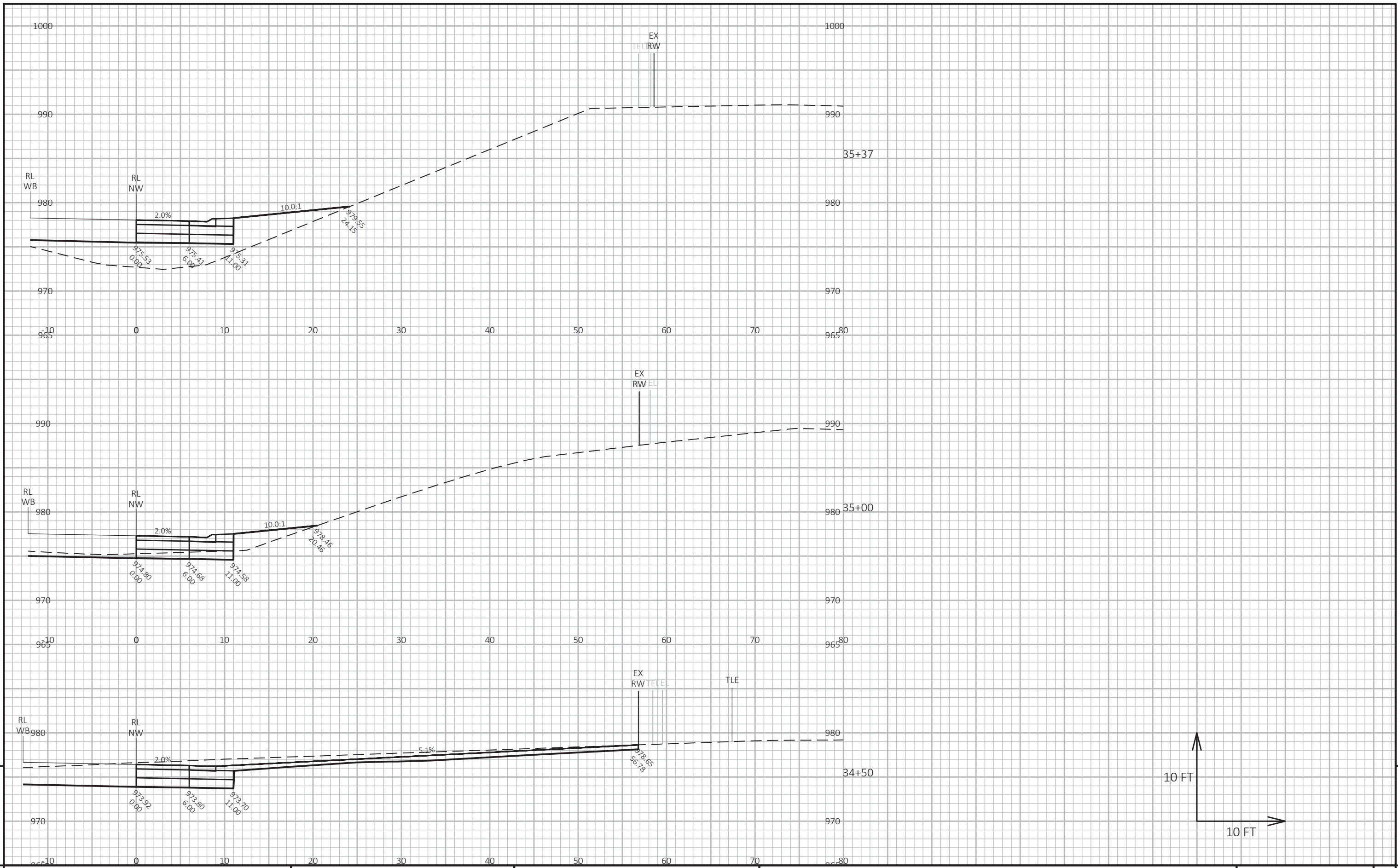
PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: NW SHEET 260

FILE NAME: N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_CURBS.DWG PLOT DATE: 8/13/2021 10:04 AM PLOT BY: BAILEY, RYAN R PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

9

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E



PROJECT NO: 4060-05-72

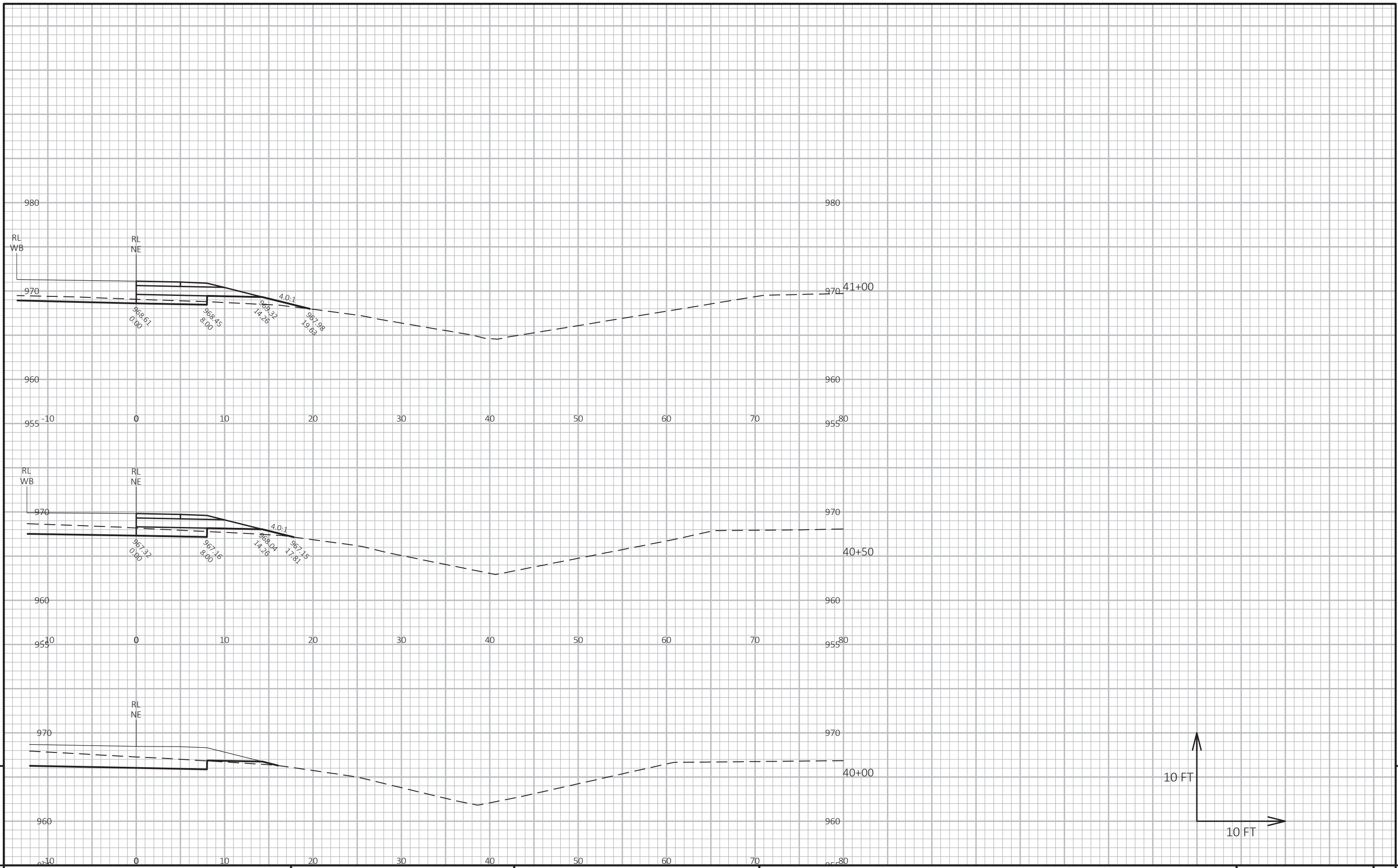
HWY: STH 28

COUNTY: DODGE

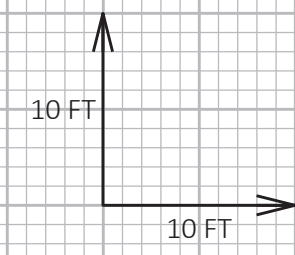
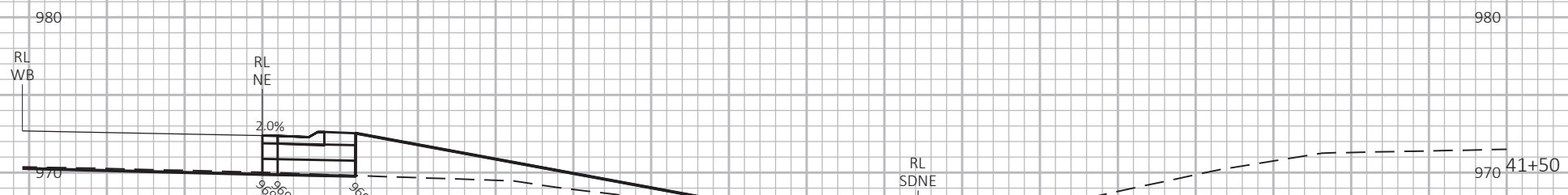
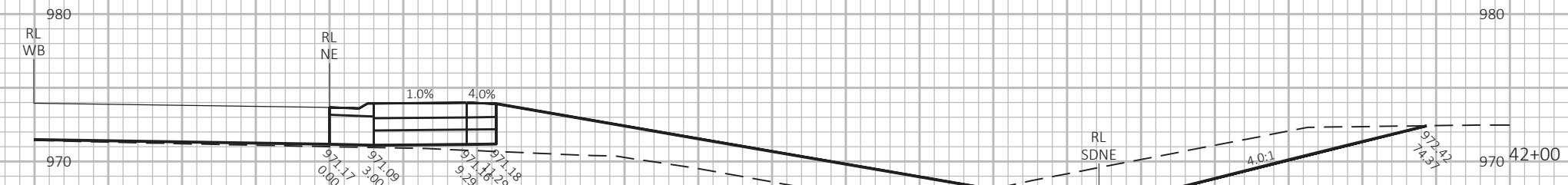
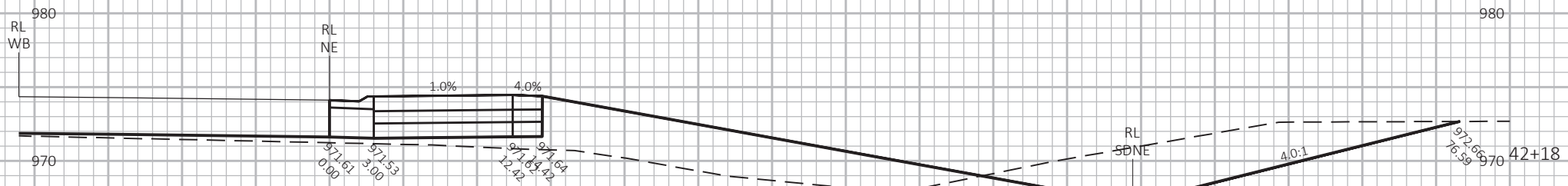
CROSS SECTIONS: NW

SHEET 261

E



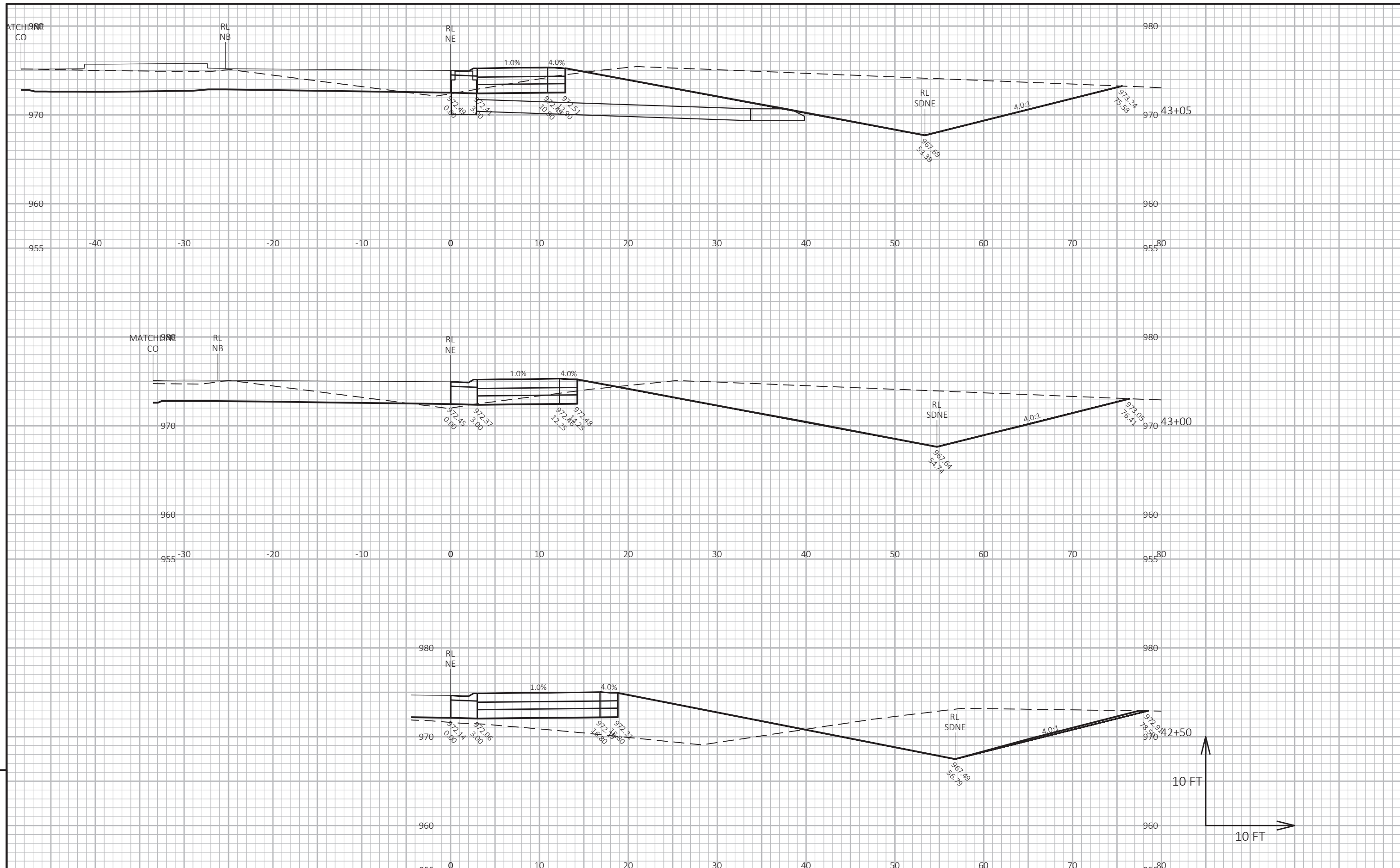
PROJECT NO: 4060-05-72	HWY: STH 28	COUNTY: DODGE	CROSS SECTIONS: NE	SHEET 262
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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: NE SHEET 263 E

FILE NAME : N:\PDS\C3D\40600502\090201 - CROSS SECTIONS\X-SEC_CURBS.DWG PLOT DATE : 8/13/2021 10:04 AM PLOT BY : BAILEY, RYAN R PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49



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PROJECT NO: 4060-05-72

HWY: STH 28

COUNTY: DODGE

CROSS SECTIONS: NE

SHEET

264

E

FILE NAME : N:\PDS\C3D\40600502\SHEETS\PLAN\090201 - CROSS SECTIONS\X-SEC_CURBS.DWG
LAYOUT NAME - 090201_NE3

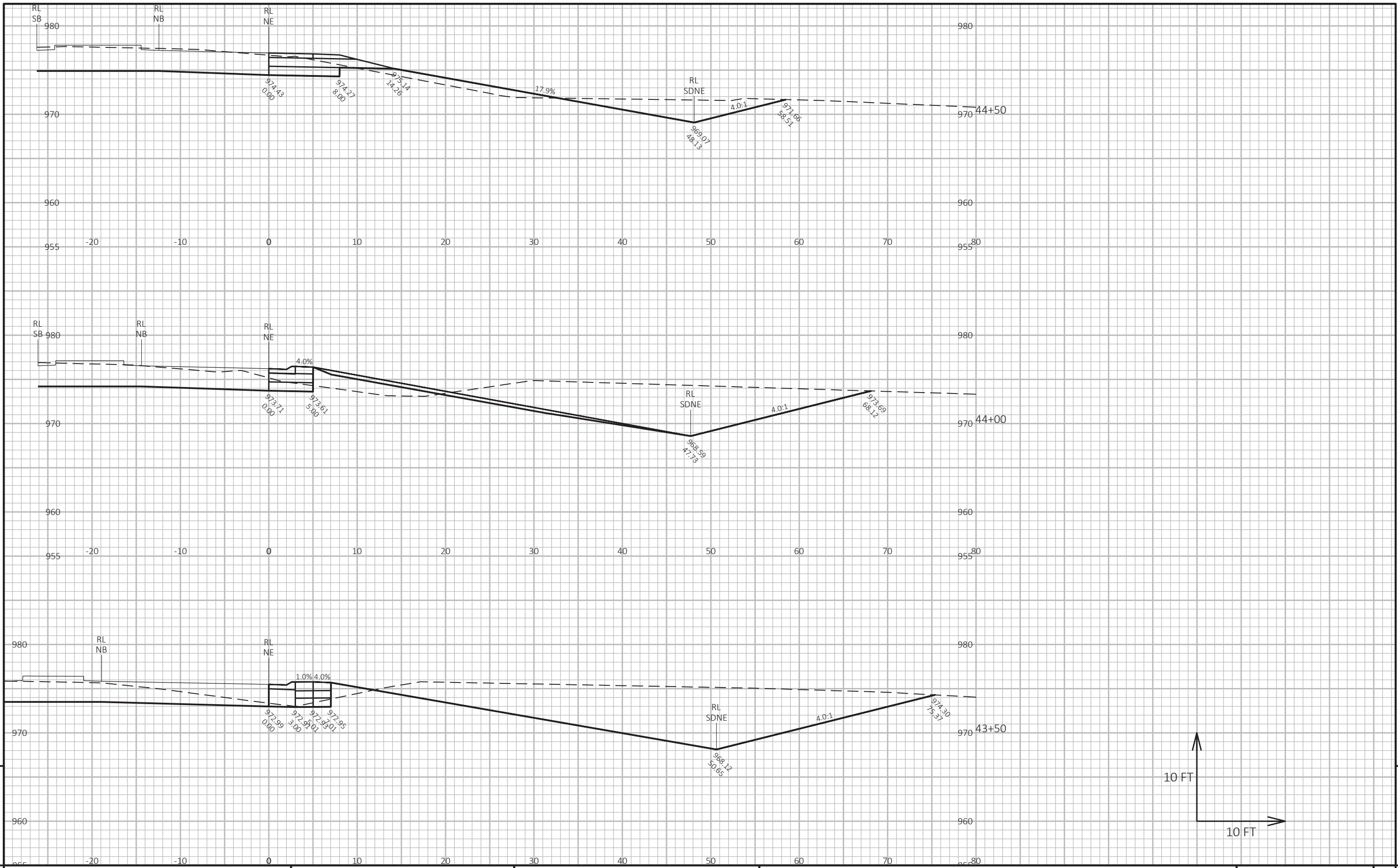
PLOT DATE : 8/13/2021 10:04 AM

PLOT BY : BAILEY, RYAN R

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADD SHEET 49

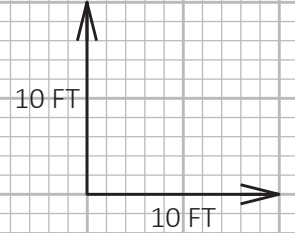
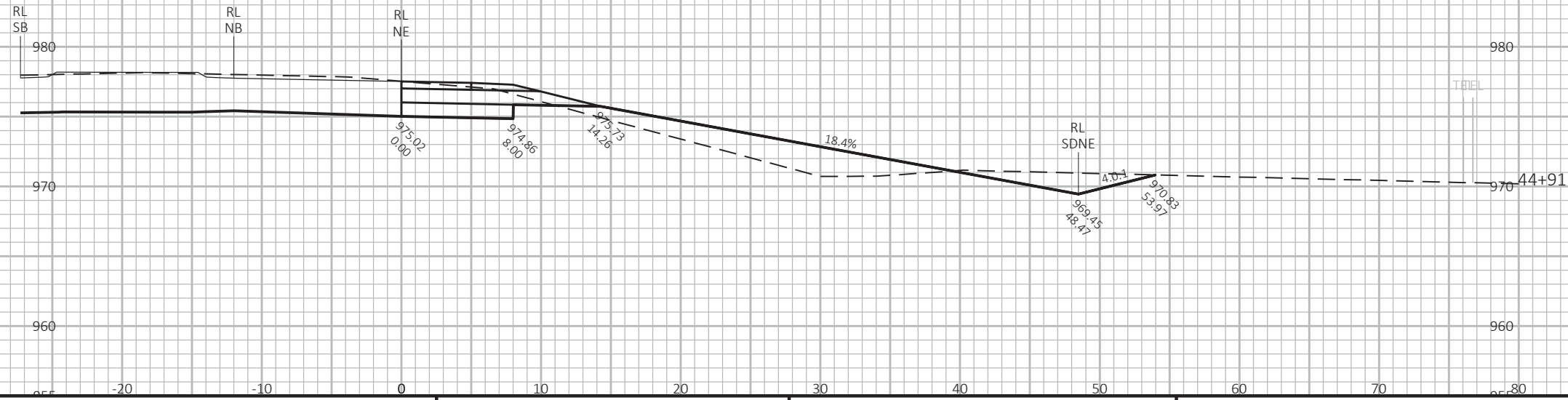


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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: NE SHEET 265 E

FILE NAME: N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_CURBS.DWG PLOT DATE: 8/13/2021 10:04 AM PLOT BY: BAILEY, RYAN R PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49



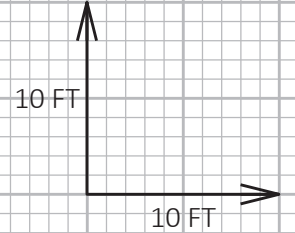
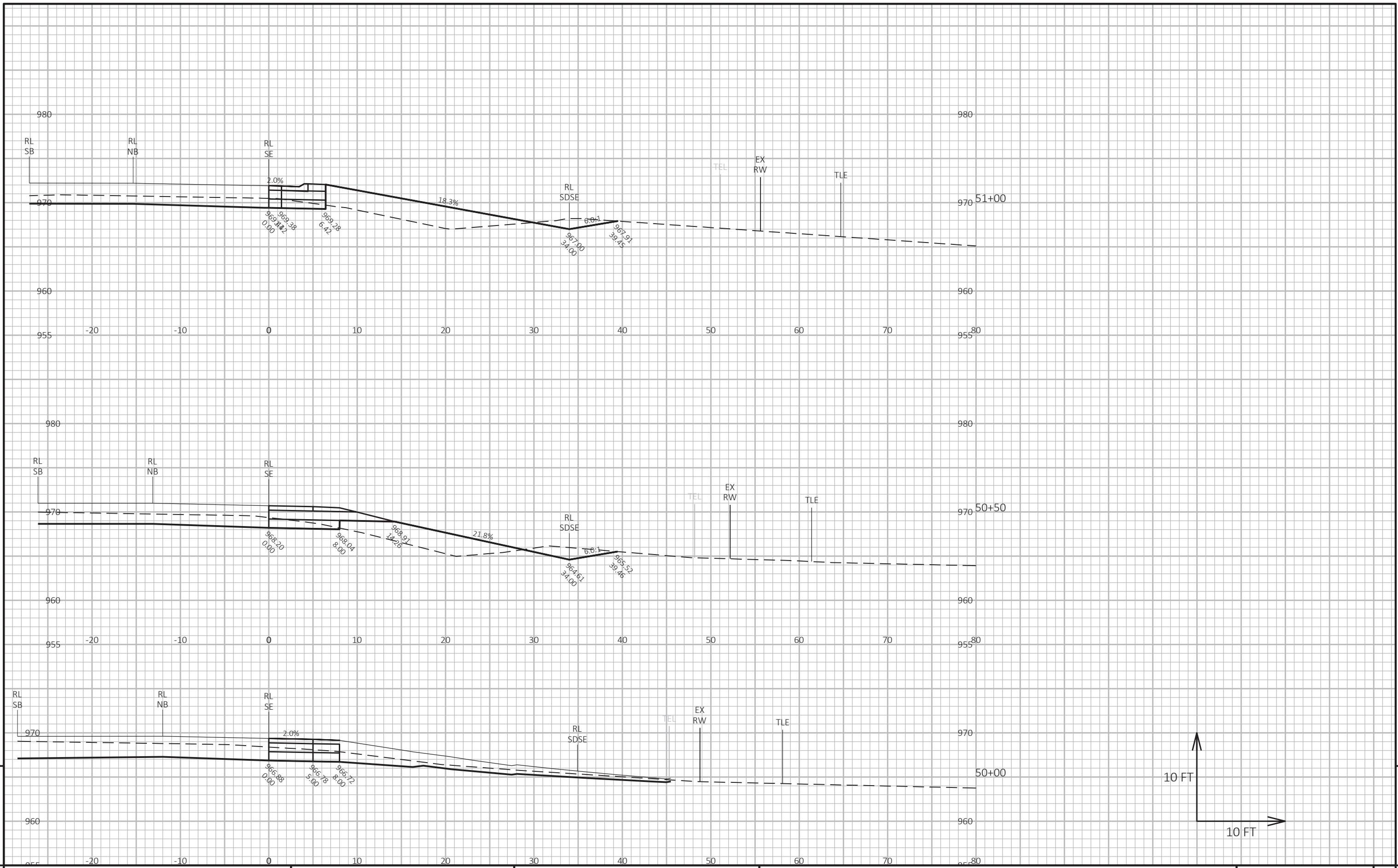
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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: NE SHEET 266 E

FILE NAME: N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_CURBS.DWG PLOT DATE: 8/13/2021 10:04 AM PLOT BY: BAILEY, RYAN R PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

LAYOUT NAME - 090201_NE5

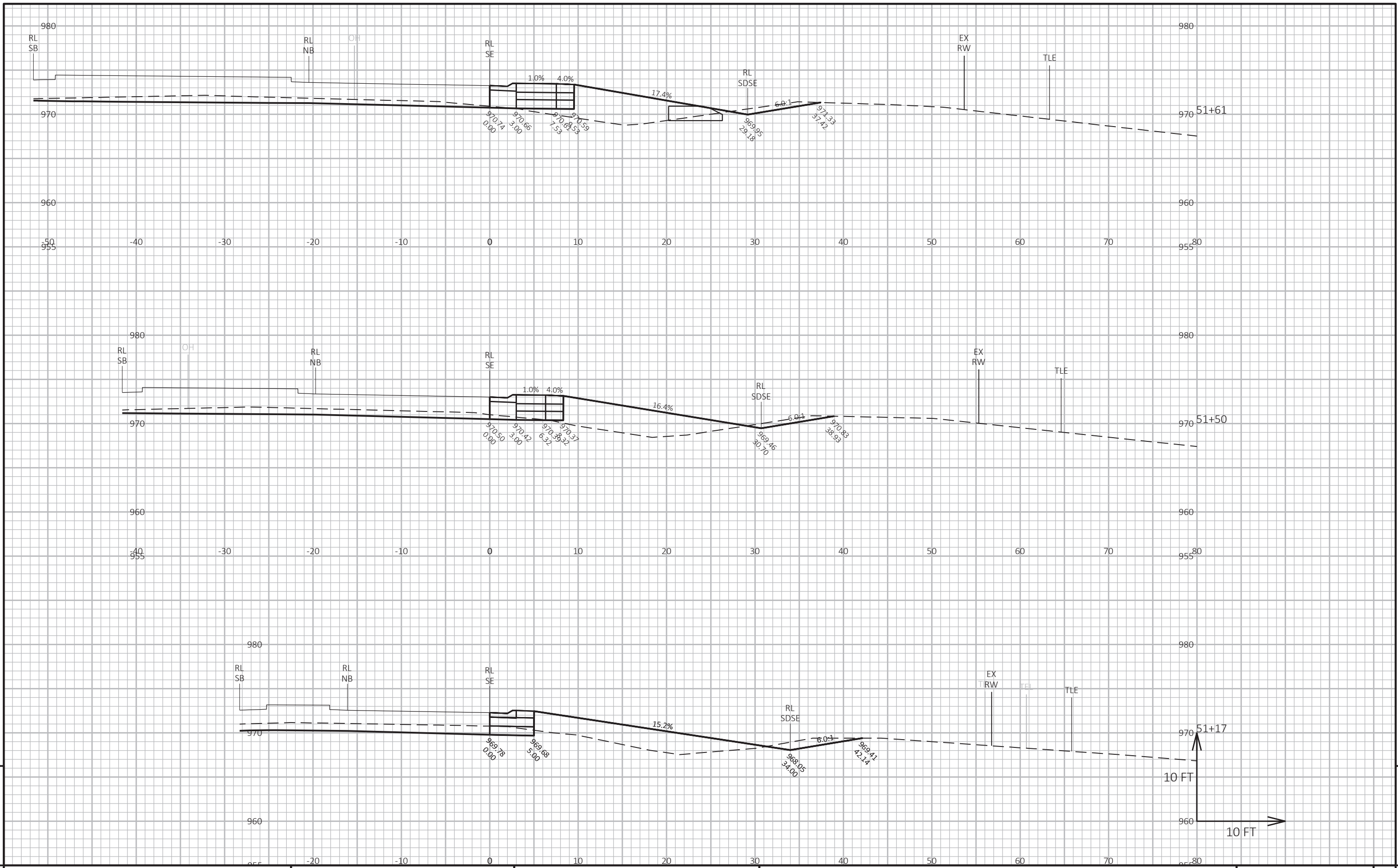


PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: SE SHEET 267 E

FILE NAME: N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_CURBS.DWG PLOT DATE: 8/13/2021 10:04 AM PLOT BY: BAILEY, RYAN R PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

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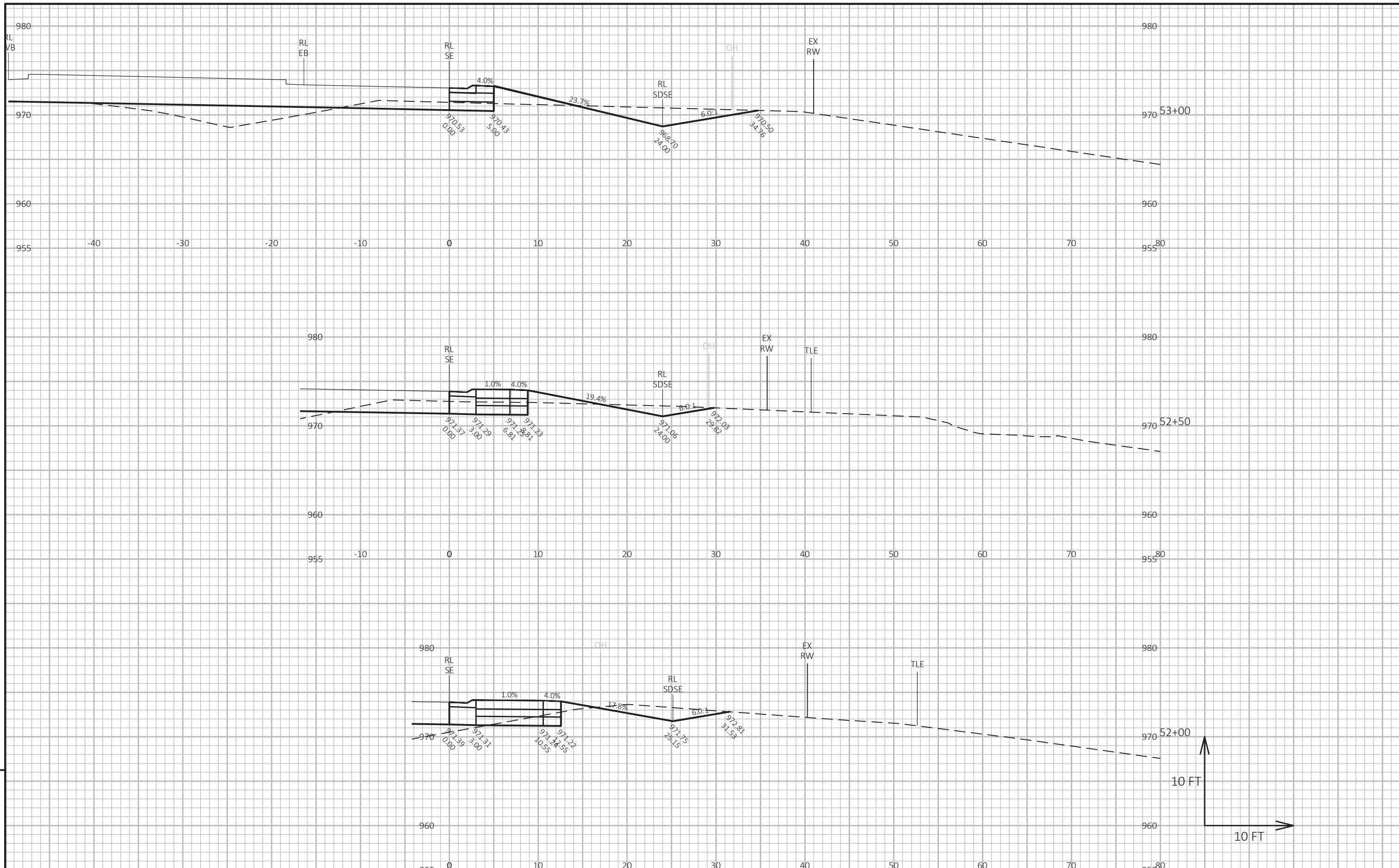


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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: SE SHEET 268 E

FILE NAME: N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_CURBS.DWG PLOT DATE: 8/13/2021 10:04 AM PLOT BY: BAILEY, RYAN R PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49



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PROJECT NO: 4060-05-72

HWY: STH 28

COUNTY: DODGE

CROSS SECTIONS: SE

SHEET 269

E

FILE NAME : N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_CURBS.DWG
LAYOUT NAME - 090201_SE3

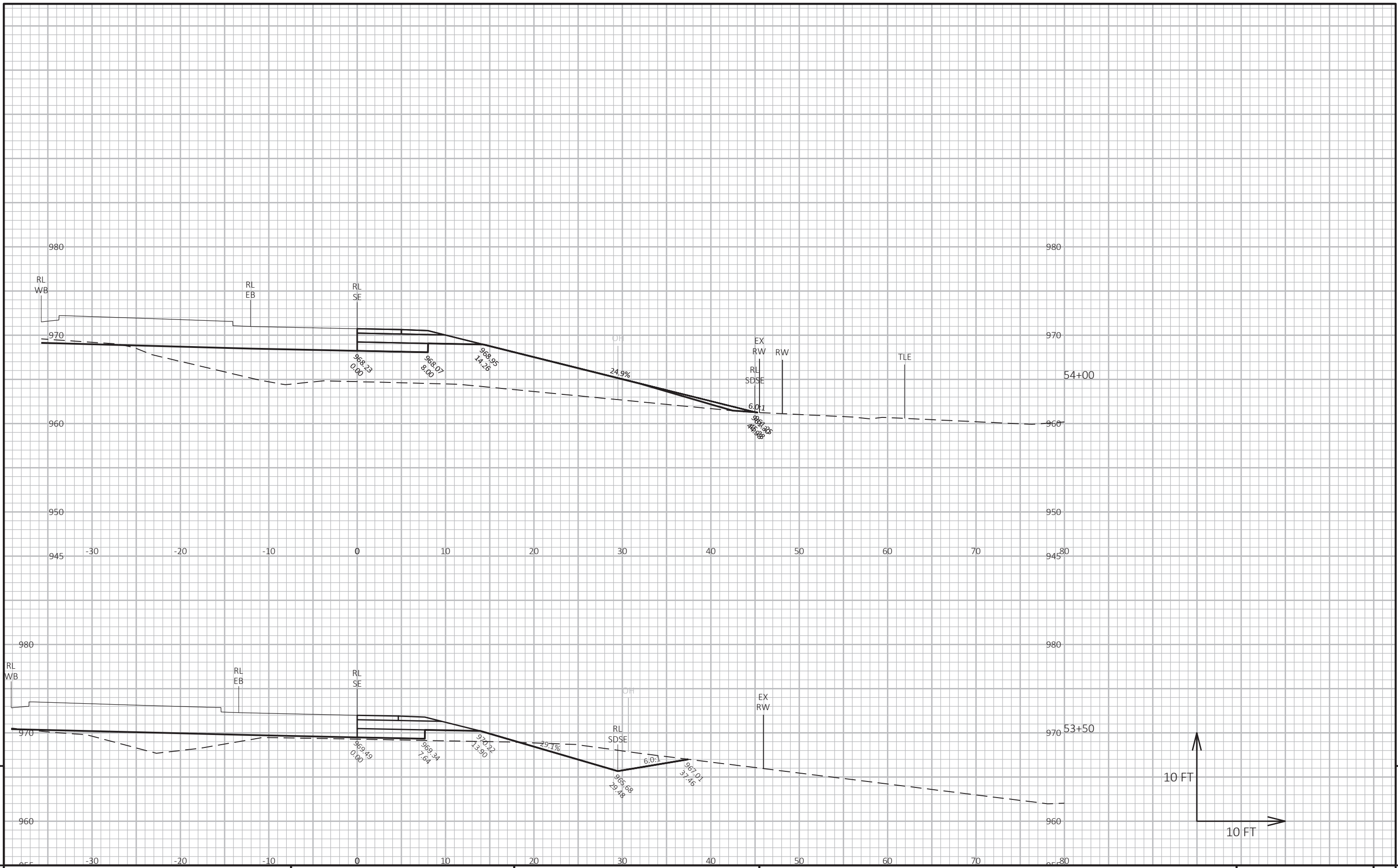
PLOT DATE : 8/13/2021 10:04 AM

PLOT BY : BAILEY, RYAN R

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADD SHEET 49



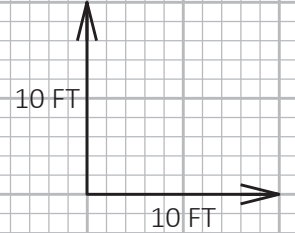
PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: SE SHEET 270

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E



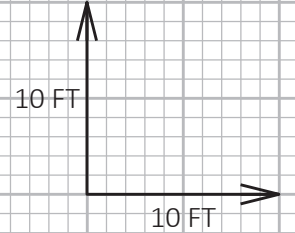
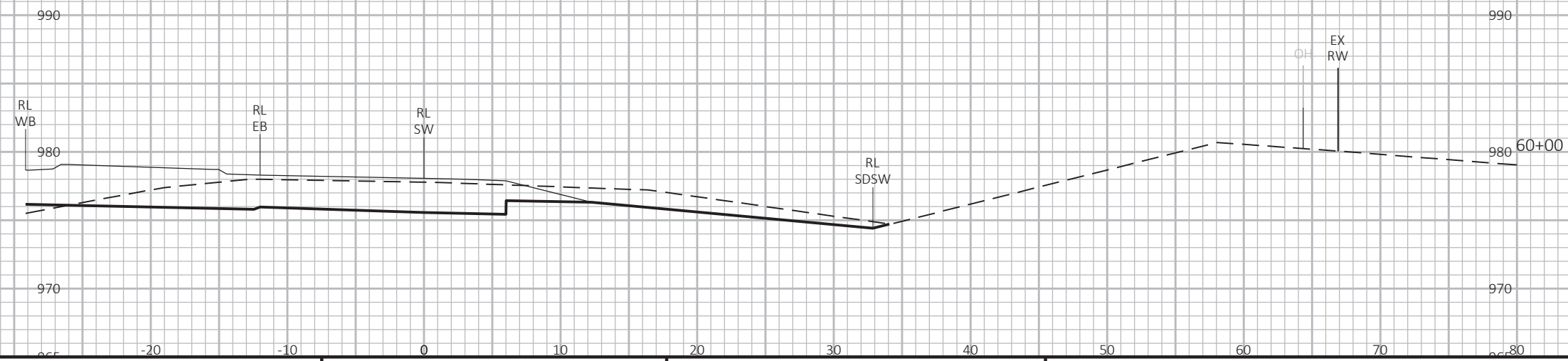
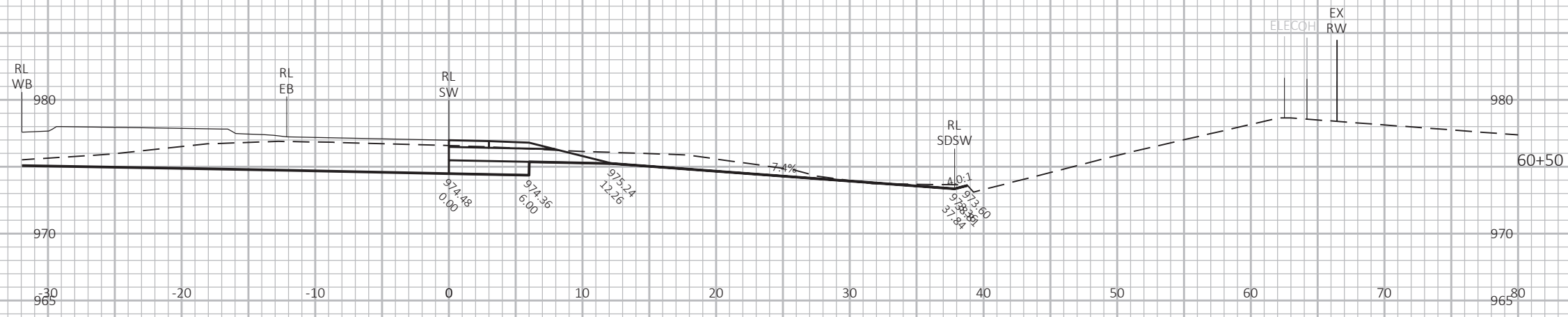
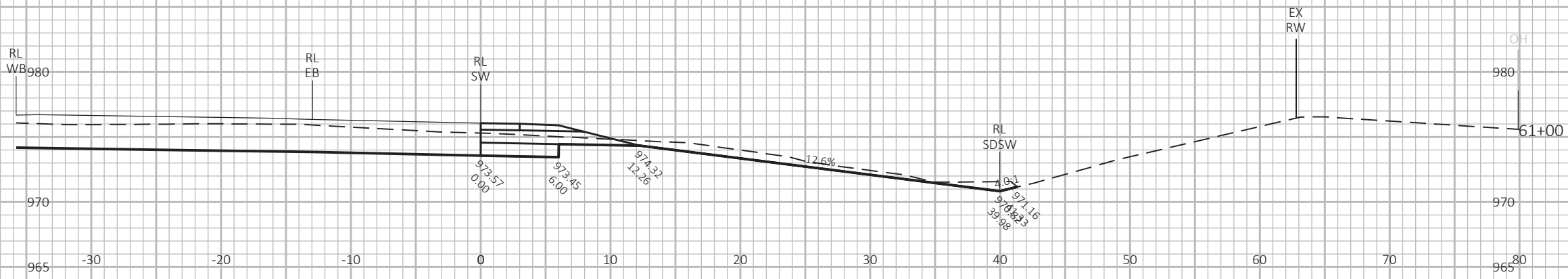
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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: SE SHEET 271 E

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LAYOUT NAME - 090201_SE5



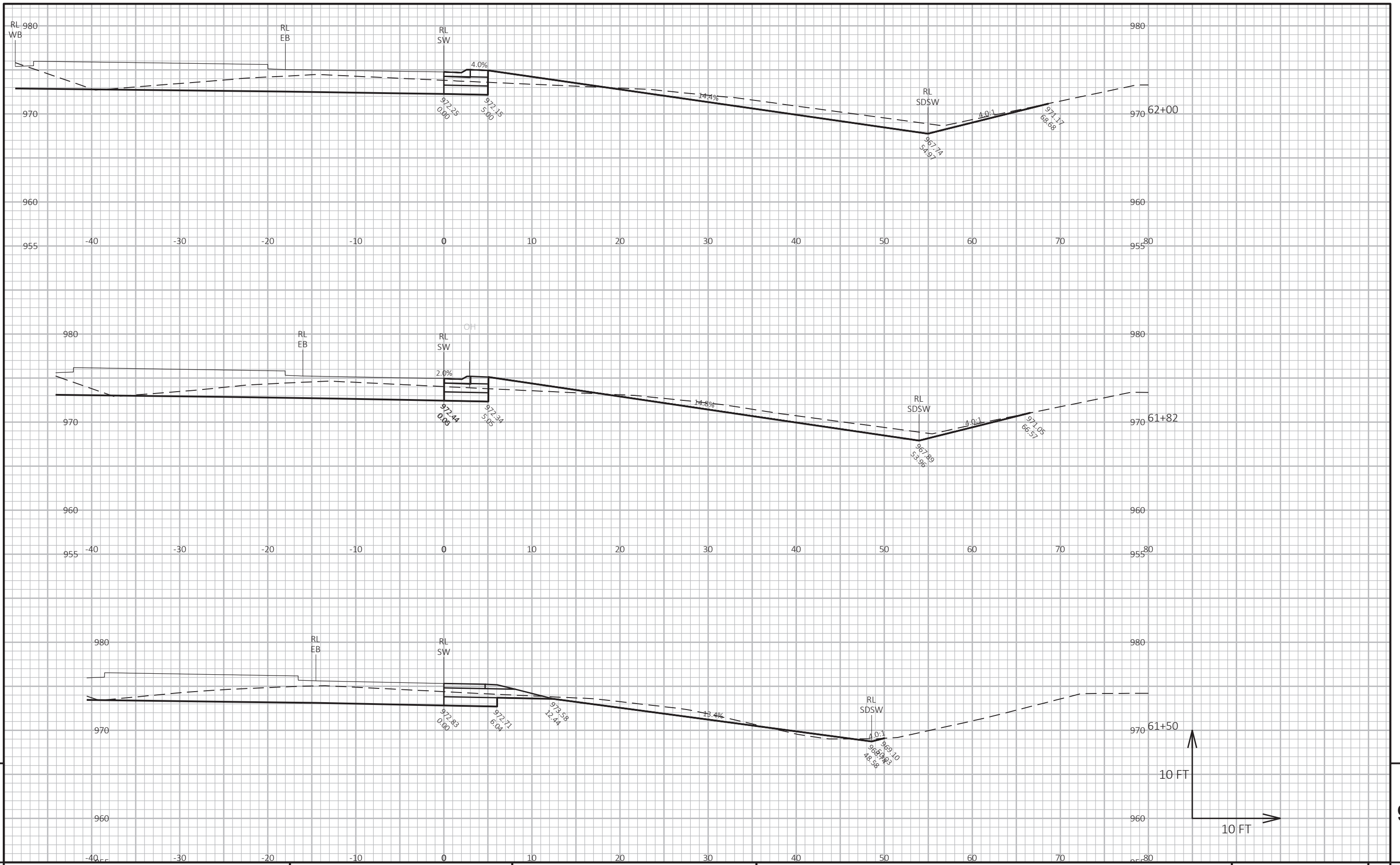
PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: SW SHEET 272

FILE NAME: N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_CURBS.DWG PLOT DATE: 8/13/2021 10:04 AM PLOT BY: BAILEY, RYAN R PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

9

9

E

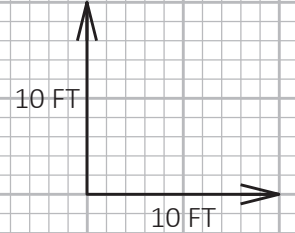
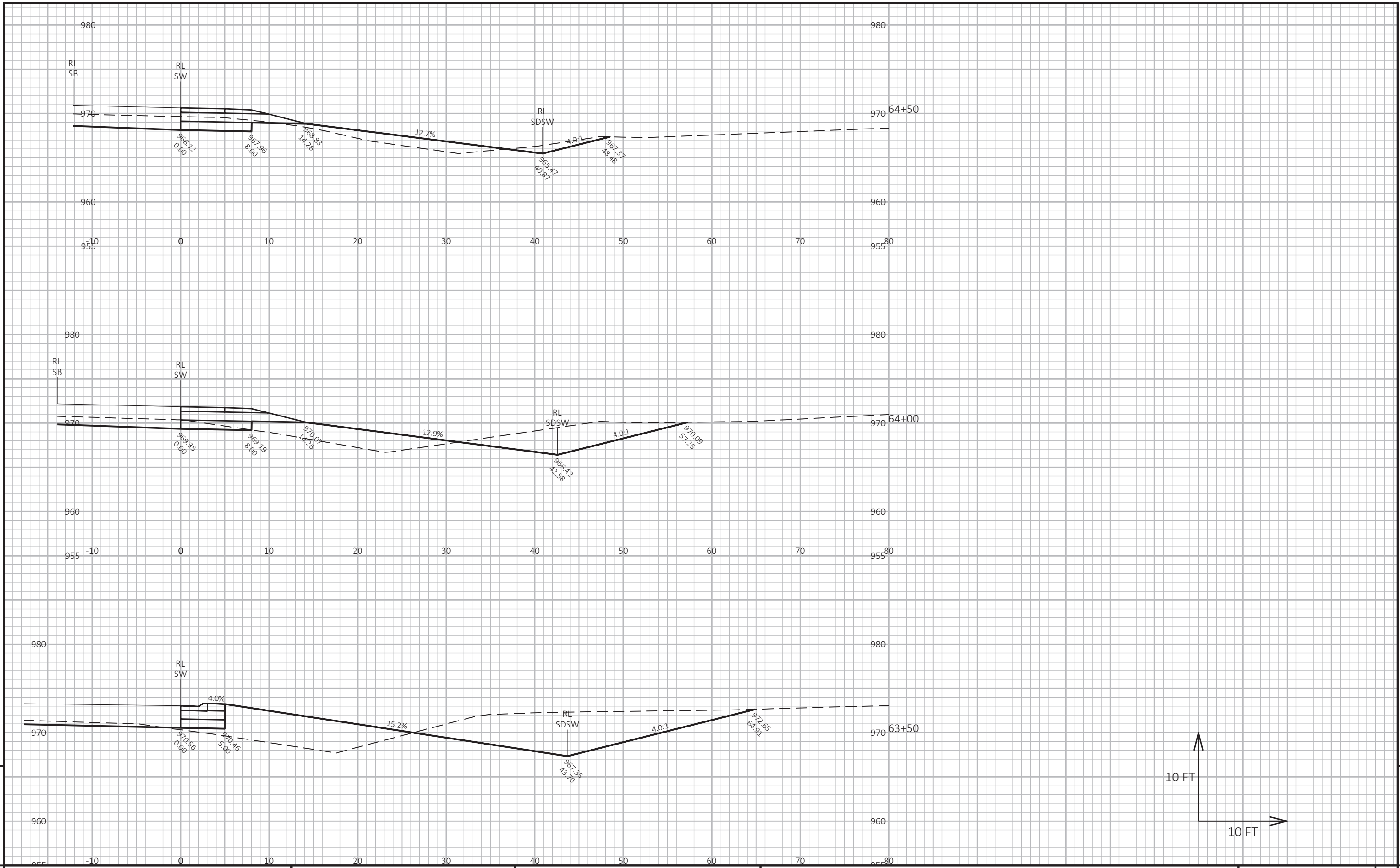


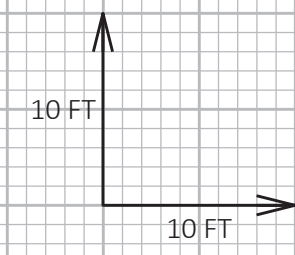
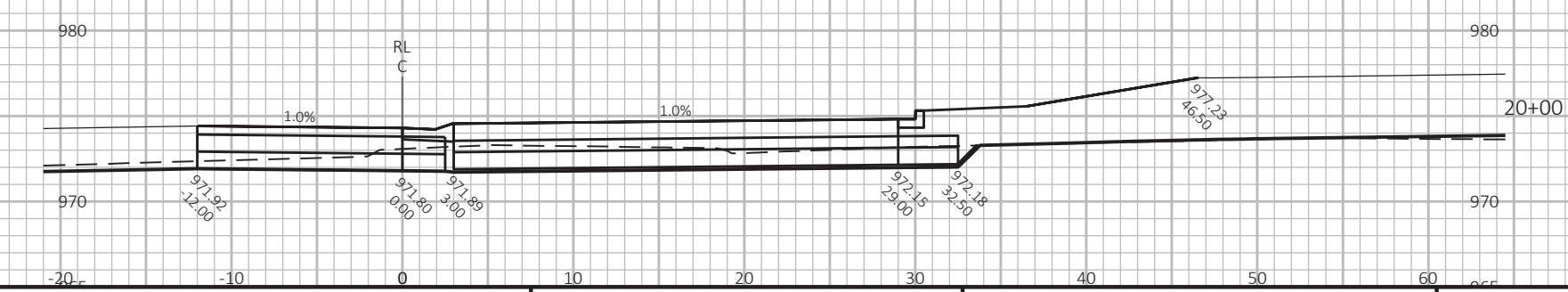
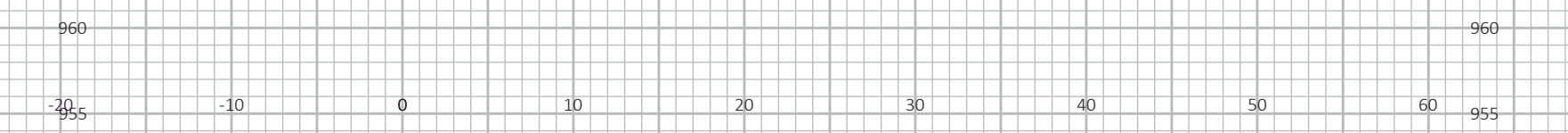
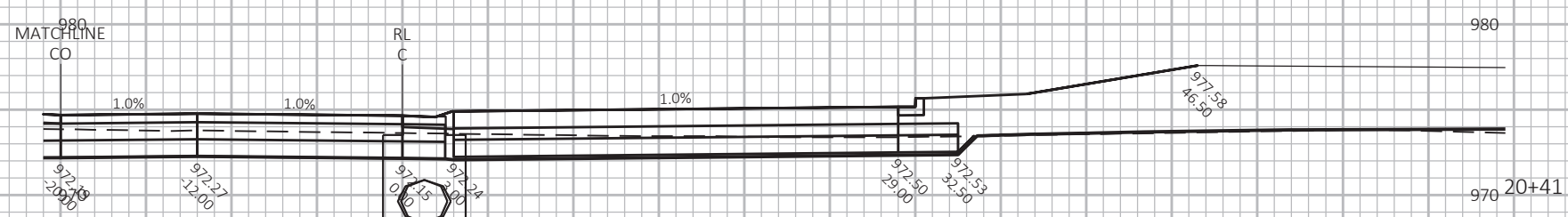
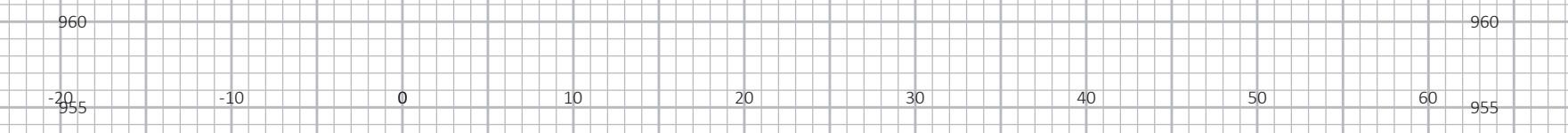
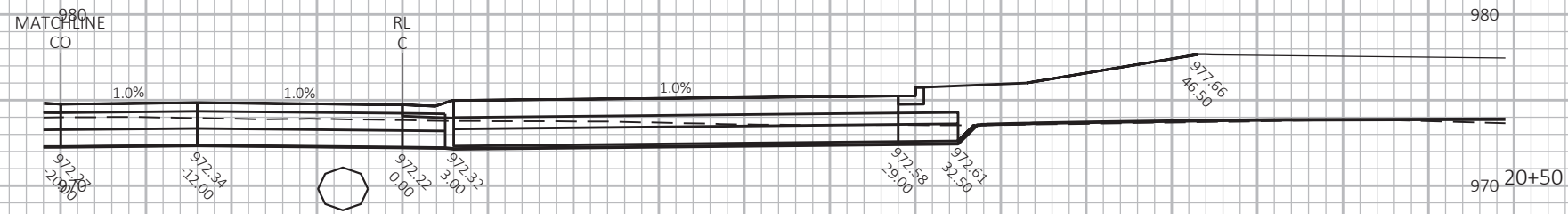
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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: SW SHEET 273 E

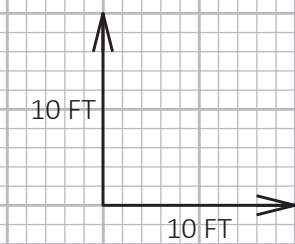
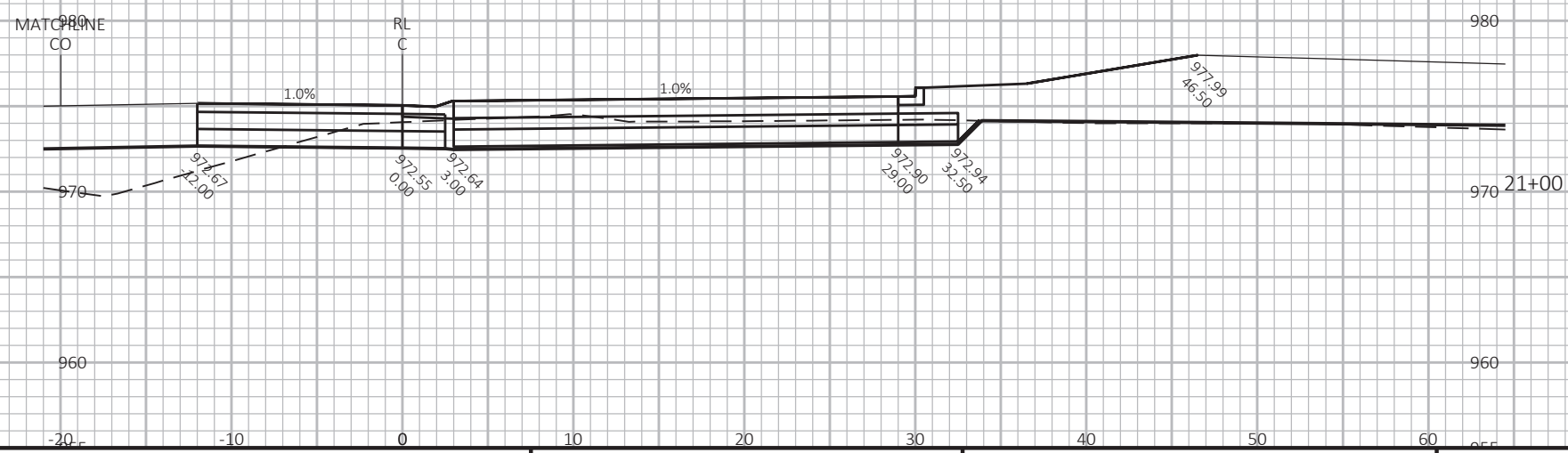
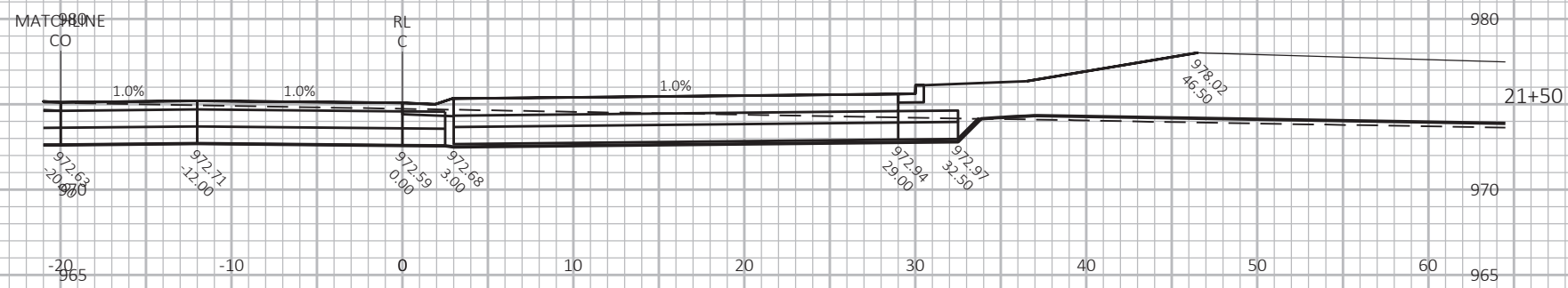
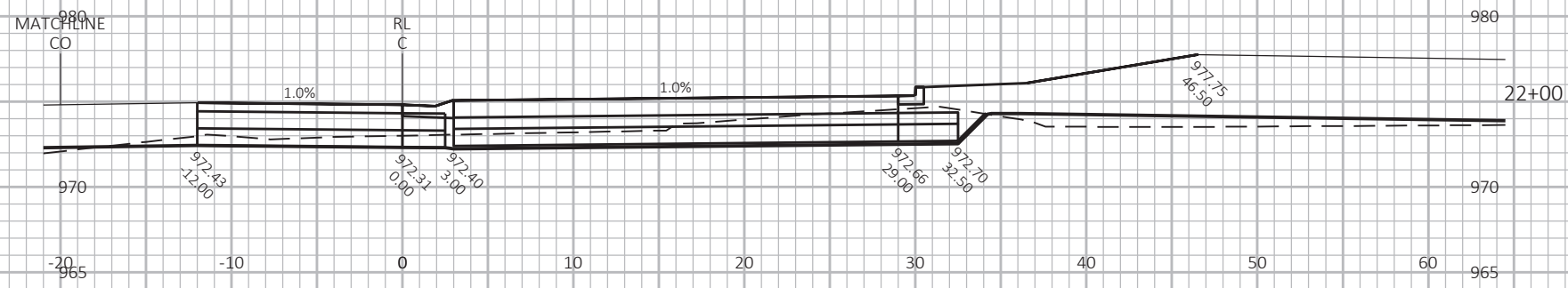
FILE NAME : N:\PDS\C3D\40600502\SHEETS\PLAN\090201 - CROSS SECTIONS\X-SEC_CURBS.DWG PLOT DATE : 8/13/2021 10:04 AM PLOT BY : BAILEY, RYAN R PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49





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PROJECT NO: 4060-05-72

HWY: STH 28

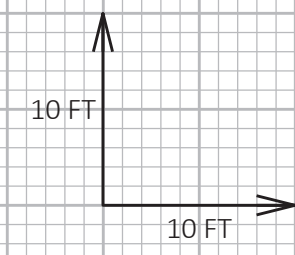
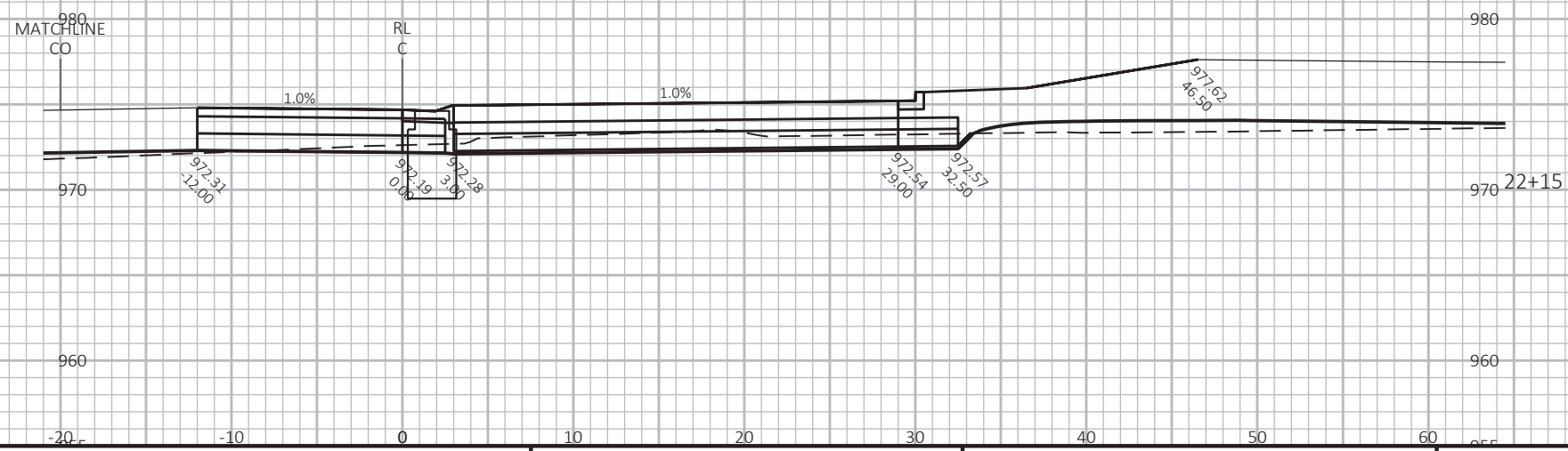
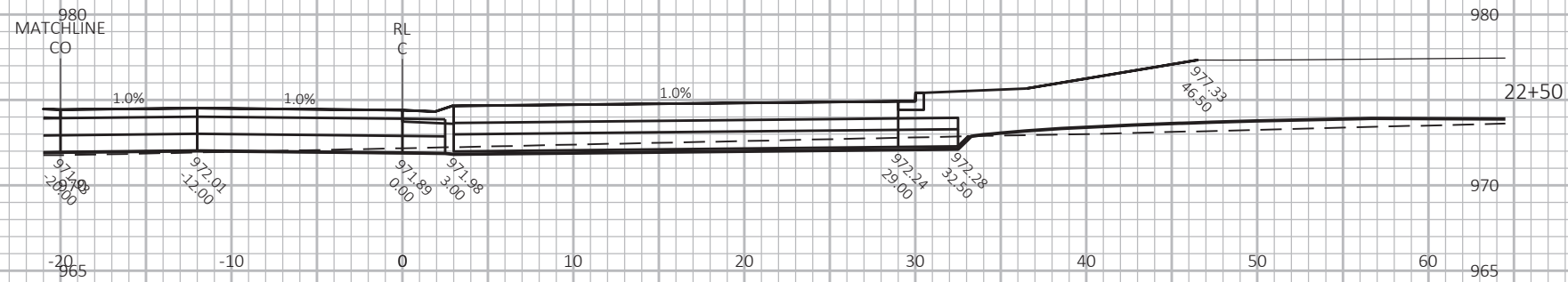
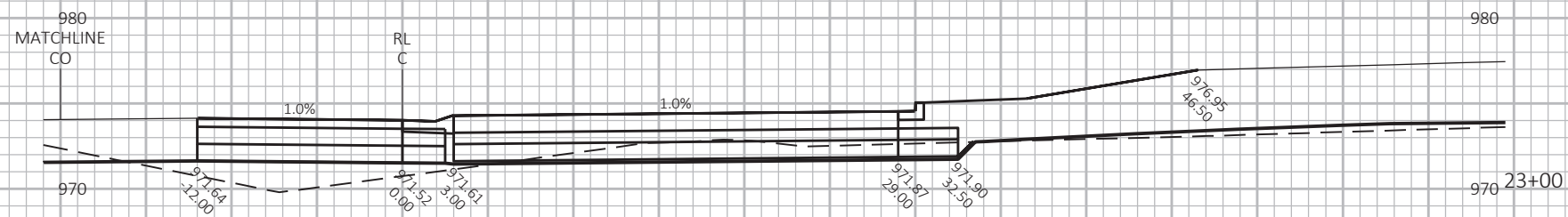
COUNTY: DODGE

CROSS SECTIONS: CIRCLE

SHEET

278

E

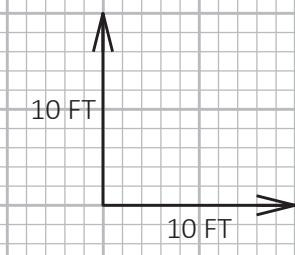
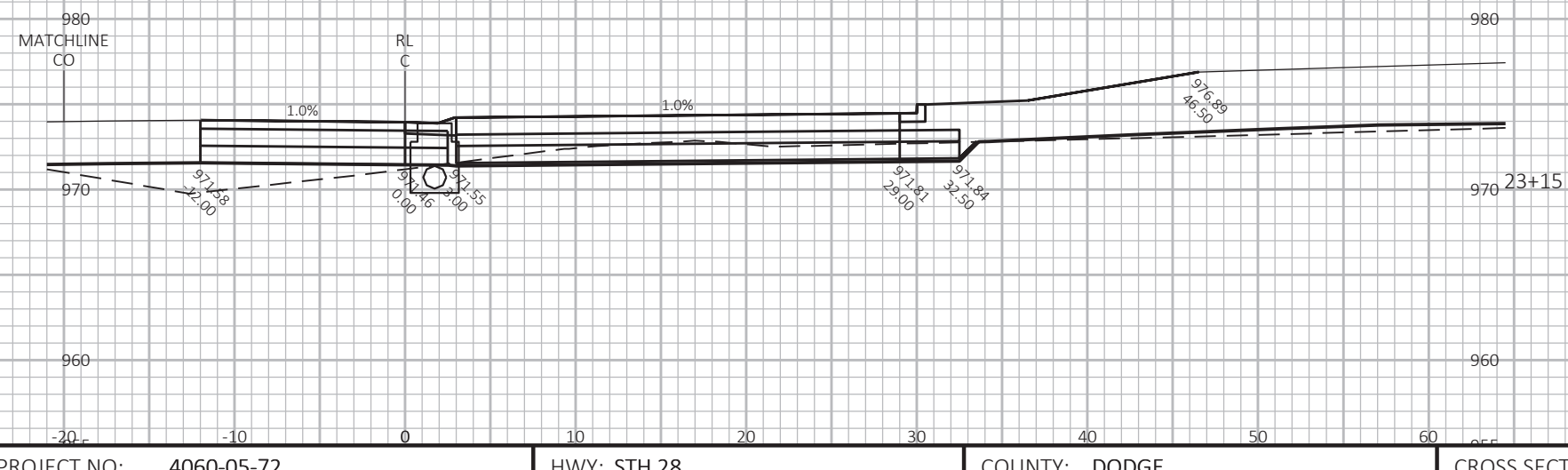
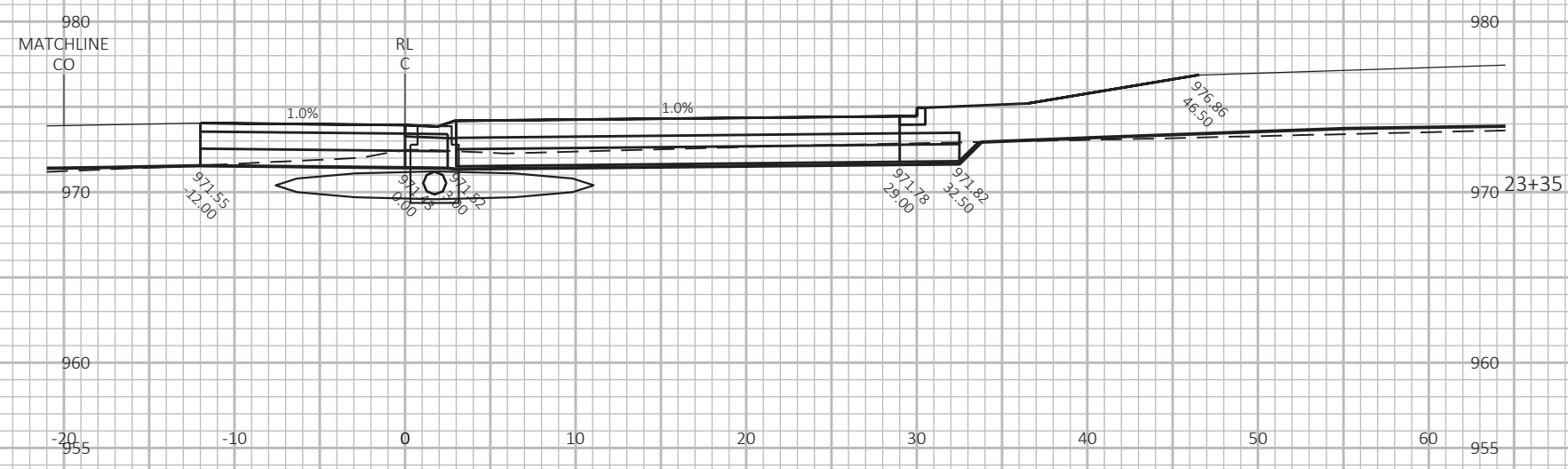
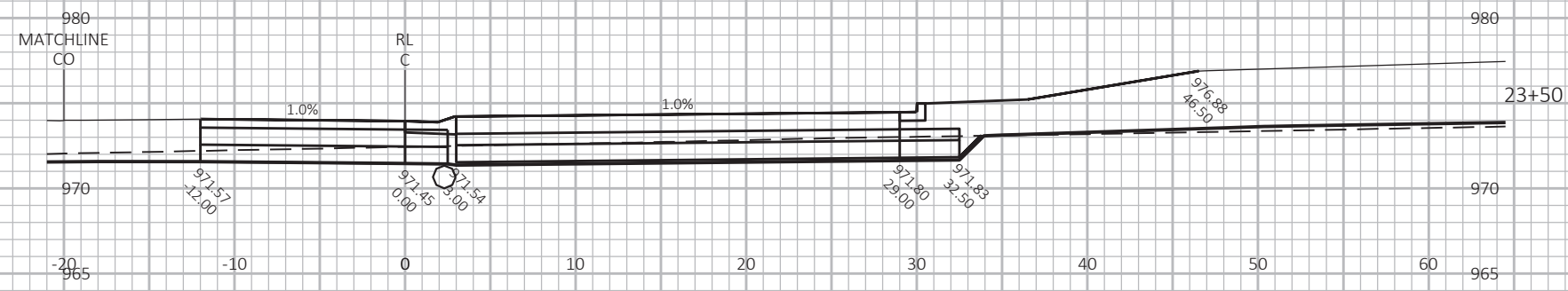


PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: CIRCLE SHEET 279 E

FILE NAME: N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_CIRCLE.DWG PLOT DATE: 8/13/2021 10:06 AM PLOT BY: BAILEY, RYAN R PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

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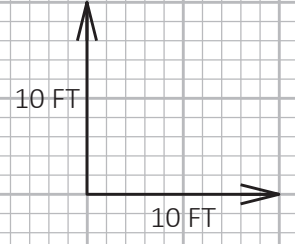
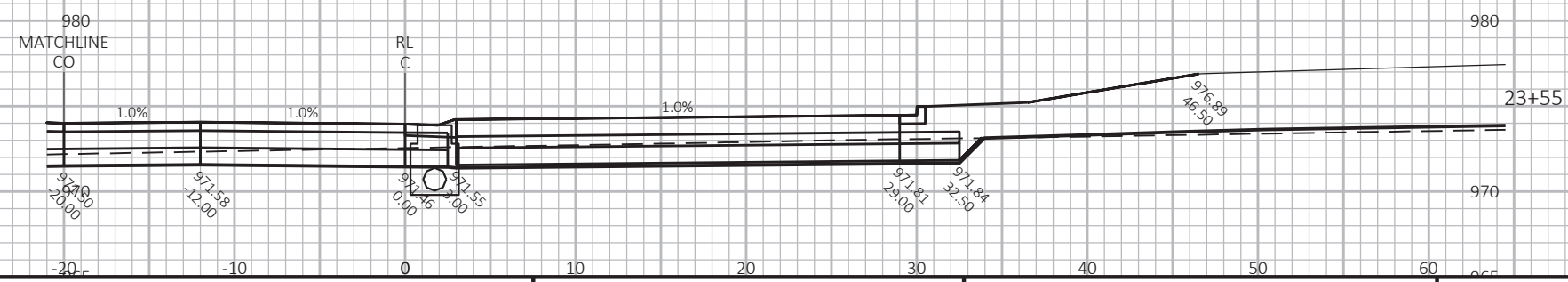
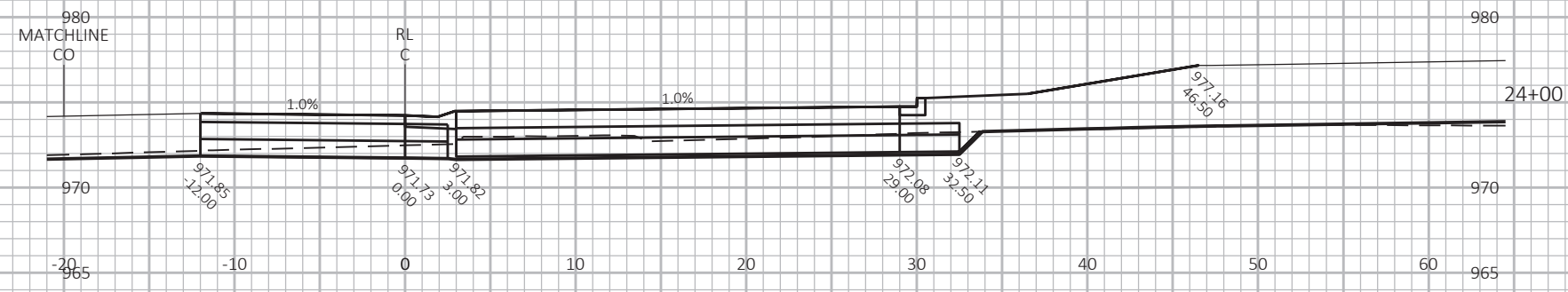


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PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: CIRCLE SHEET 280 E

FILE NAME: N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_CIRCLE.DWG PLOT DATE: 8/13/2021 10:06 AM PLOT BY: BAILEY, RYAN R PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49



PROJECT NO: 4060-05-72 HWY: STH 28 COUNTY: DODGE CROSS SECTIONS: CIRCLE SHEET 281 E

FILE NAME: N:\PDS\C3D\40600502\SHEETSPLAN\090201 - CROSS SECTIONS\X-SEC_CIRCLE.DWG PLOT DATE: 8/13/2021 10:06 AM PLOT BY: BAILEY, RYAN R PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

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Wisconsin Department of Transportation

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