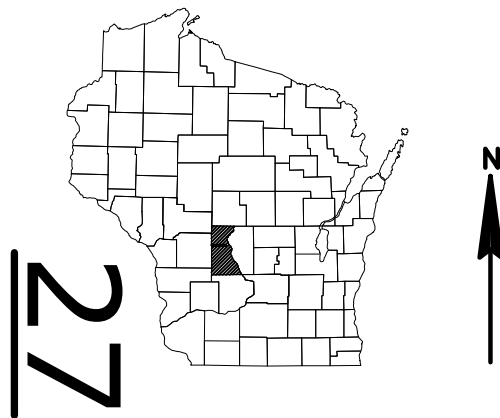
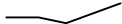
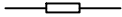
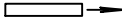


TOTAL SHEETS = 194



A.A.D.T.	2015	=	4200
A.A.D.T.	2035	=	5000
D.H.V.		=	869
D.D.		=	62/38
T.		=	25.8
DESIGN SPEED		=	60 MPH
ESALS		=	3,500,000

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

PROFILE
 GRADE LINE
 ORIGINAL GROUND
 MARSH OR ROCK PROFILE
 (To be noted as such)
 SPECIAL DITCH

 GRADE ELEVATION

 CULVERT (Profile View)
 UTILITIES
 ELECTRIC
 FIBER OPTIC
 GAS
 SANITARY SEWER
 STORM SEWER
 TELEPHONE
 WATER
 UTILITY PEDESTAL
 POWER POLE
 TELEPHONE POLE

PLAN OF PROPOSED IMPROVEMENT

W COUNTY LINE TO SHERIDAN AVENUE

JUNEAU COUNTY

STATE PROJECT NUMBER
7010-01-61



BEGIN PROJECT 7010-01-61
STA 15+97
X = 400404.66
Y = 240425.28

— END PROJECT 7010-01-61
STA 643+00
X = 463062.68
Y = 240001.44

SCALE 0 3 MILE

TOTAL NET LENGTH OF CENTERLINE = 11.876

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, COUNTY COUNTY, NAD83 (YEAR), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7010-01-61	WISC 2016127	1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WISDOT
Designer	TRAVIS MIKSHOWSKY
Project Manager	ANTHONY VANDERWIELEN
Regional Examiner	REGIONAL EXAMINER
Regional Supervisor	JOSEPH GREGAS

APPROVED FOR THE DEPARTMENT

DATE: 10-29-2015 Christina M. Underhill
(Signature)

1

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GENERAL NOTES

- THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLAN. 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. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.
- WHEN PORTIONS OF EXISTING ASPHALTIC SURFACES ARE TO BE REMOVED TO ACCOMMODATE NEW CONSTRUCTION, THE LINE OF SUCH REMOVAL SHALL BE NEATLY DELINEATED WITH A SAW CUT JOINT THROUGH THE ASPHALTIC SURFACE SO THAT REMOVAL OF THE ASPHALT SHALL BE ACCOMPLISHED WITHOUT DAMAGE TO REMAINING PORTIONS. THE LOCATION OF SAW JOINTS AND THE AMOUNT REMOVED AT SIDE ROADS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- THE EXACT LOCATION OF PRIVATE AND FIELD ENTRANCES ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
- THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES EXCEPT WHEN PIPE LAYING OPERATIONS REQUIRE THE DRIVEWAY TO BE CLOSED. ACCESS TO DRIVEWAY SHALL BE RE-ESTABLISHED IMMEDIATELY AFTER PIPE IN DRIVEWAY AREA ISINSTALLED. ACCESS SHALL BE PROVIDED DURING ALL NON-WORKING HOURS.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DRAINAGE DURING CONSTRUCTION.
- THE RATE OF APPLICATION FOR TACK COAT IS COMPUTED AT 0.07 GAL/SY FOR THE TACK ON TOP OF THE MILLED SURFACE AND 0.05 GAL/SY FOR BETWEEN THE LAYERS OF HMA PAVEMENT.
- ASPHALT MATERIAL FOR PLANT MIXES HAS BEEN ESTIMATED AT 5.5% OF THE HMA PAVEMENT.
- HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LBS/SY/IN.
- THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, PASSING, OR PARKING LANE.
- SAW CUTS SHALL BE MARKED OUT BY THE ENGINEER IN THE FIELD
- ALL P.E.'S SHALL BE REPLACED IN KIND. (AGGREGATE OR ASPHALT)
- THE EROSION CONTROL ITEMS SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE ENGINEER SHALL CONFIRM THE LOCATION OF EROSION CONTROL ITEMS. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY. AT THAT TIME, THE CONTRACTOR SHALL REMOVE THE TEMPORARY EROSION CONTROL ITEM INCIDENTAL TO THE COST OF THE RESPECTIVE BID ITEM.

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	PAV'T	PAVEMENT
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

DNR CONTACT

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PHONE: (715) 421-7867
CELL PHONE: (715) 421-1249
E-MAIL: marc.hershfield@wisconsin.gov

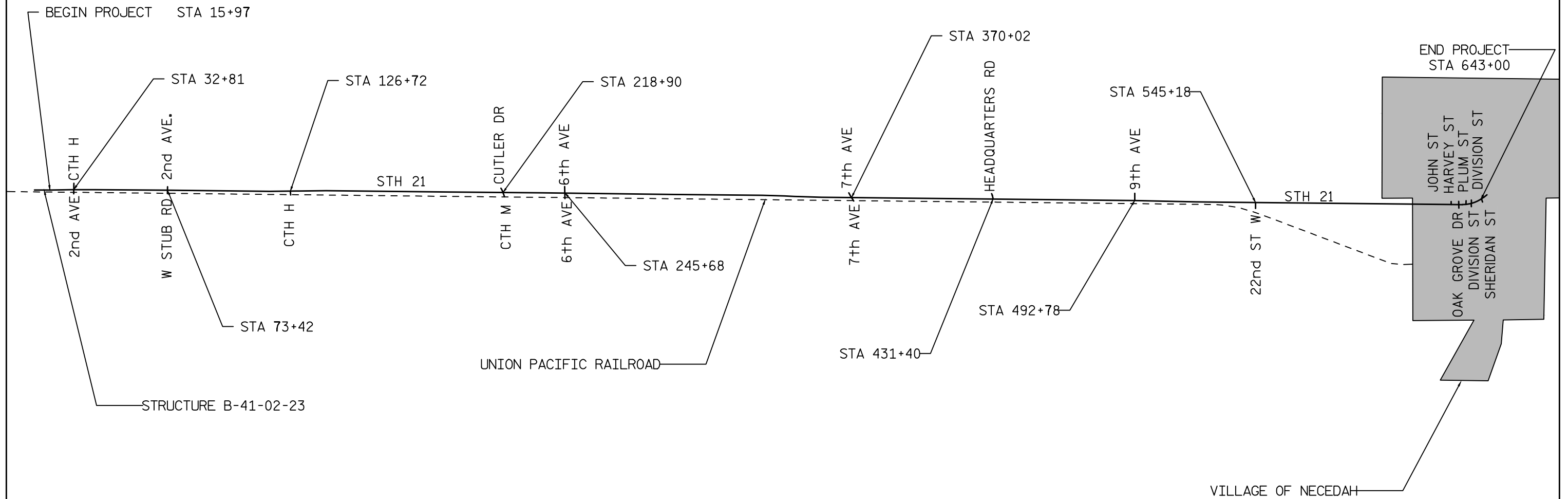
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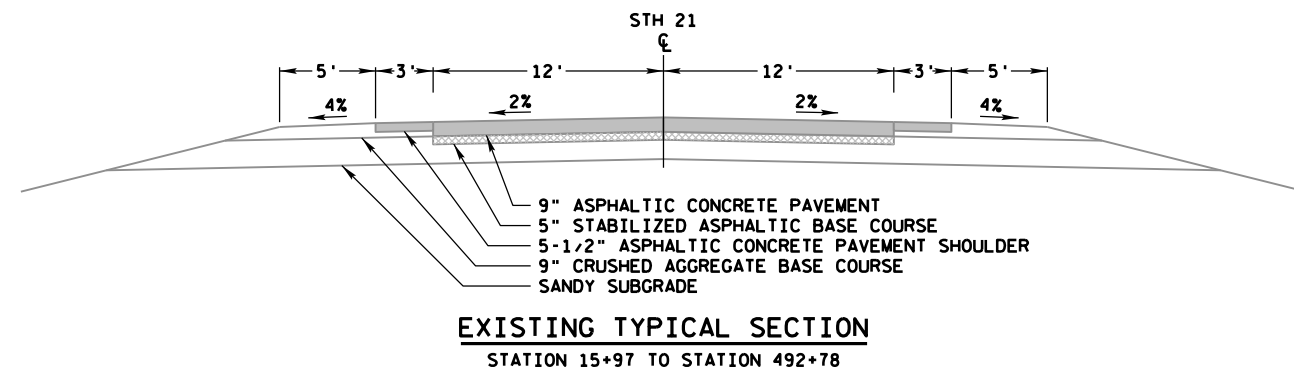
TRAVIS MIKSHOWSKY
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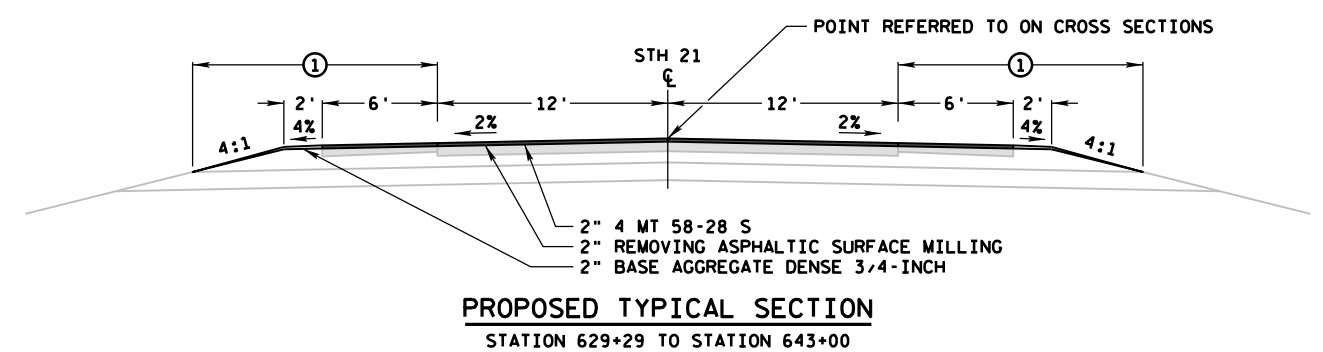
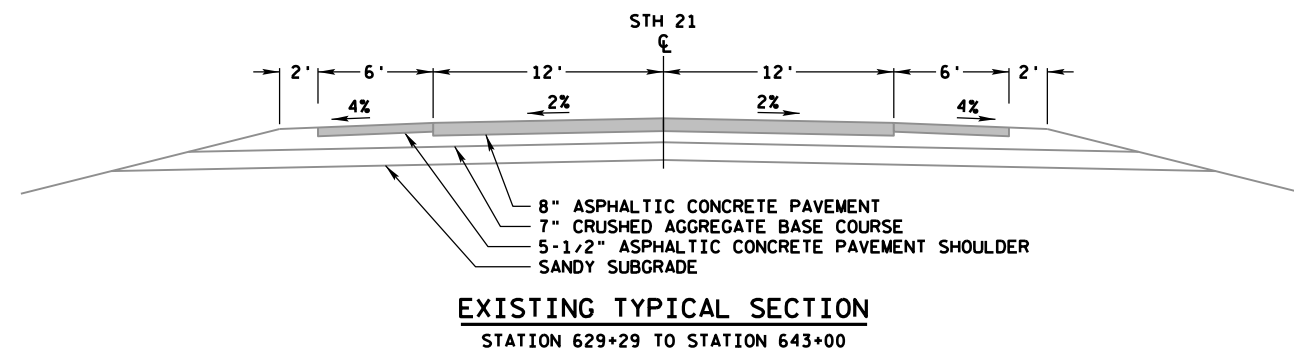
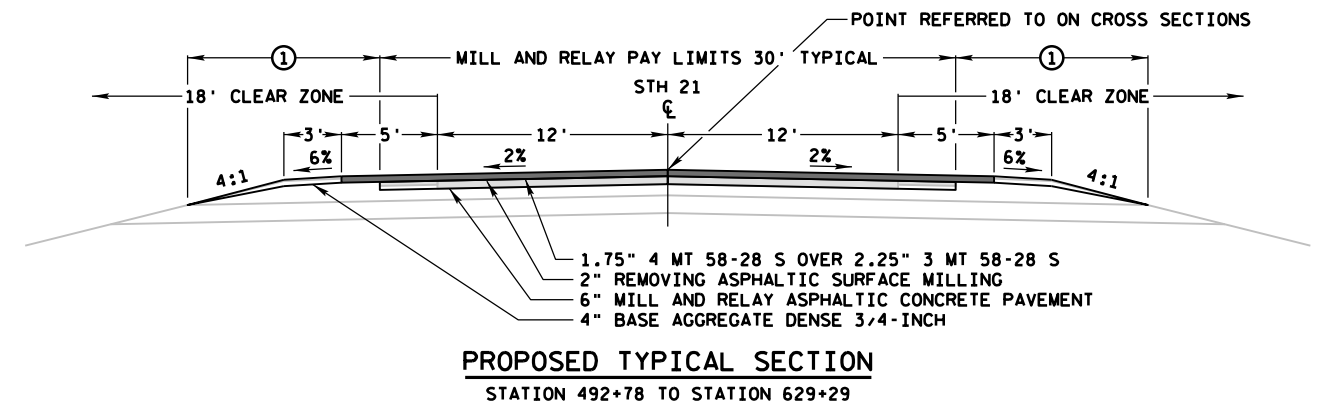
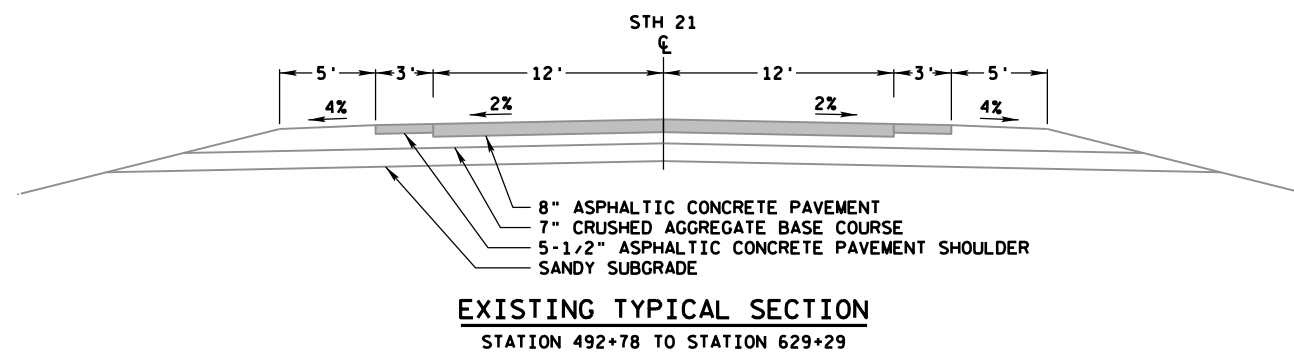
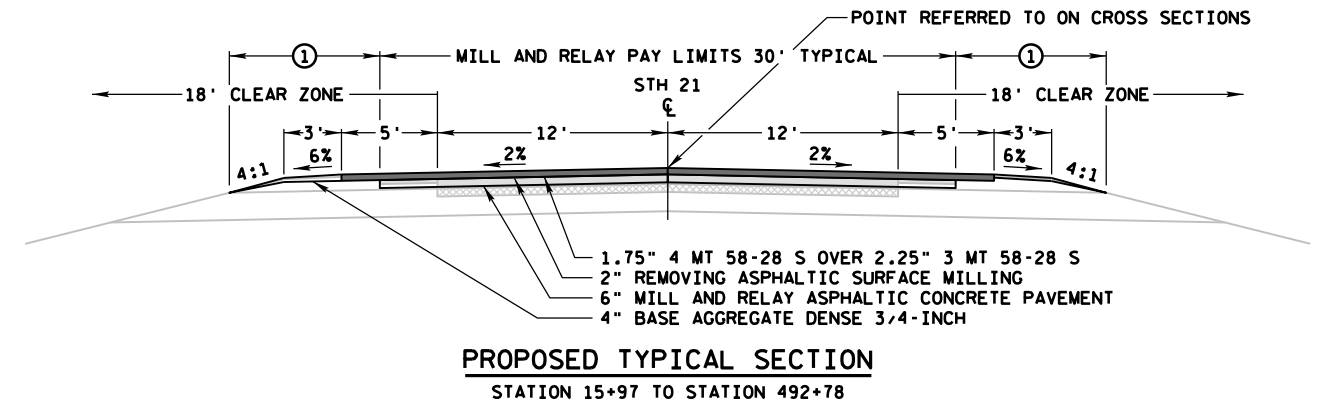
Dial 811 or (800) 242-8511
www.DiggersHotline.com

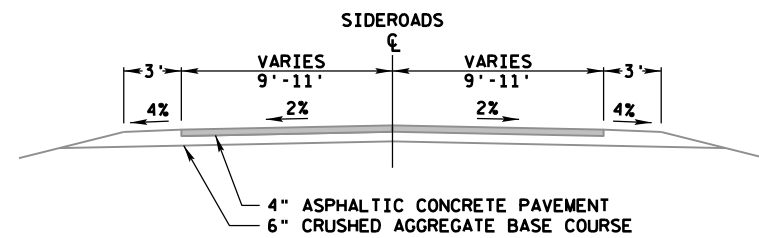


PROJECT NO: 7010-01-61	HWY: STH 21	COUNTY: STH 21	PROJECT OVERVIEW	SHEET	-----	E
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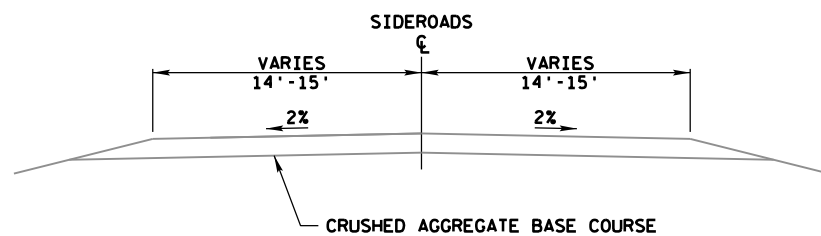
① PREPARATION OF FOUNDATION
FOR ASPHALTIC SHOULDERS





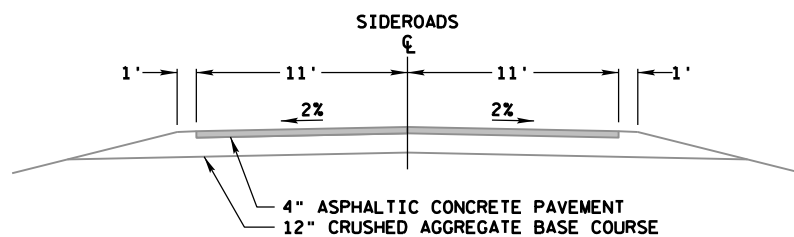
EXISTING TYPICAL SECTION

CTH 'H' (NORTH), 2ND AVENUE (SOUTH), 2ND AVENUE (NORTH), W STUB ROAD
CTH 'H' (SOUTH), CUTLER ROAD, CTH 'M', 6TH AVENUE (SOUTH)
7TH AVENUE (NORTH), 7TH AVENUE (SOUTH), 22ND STREET



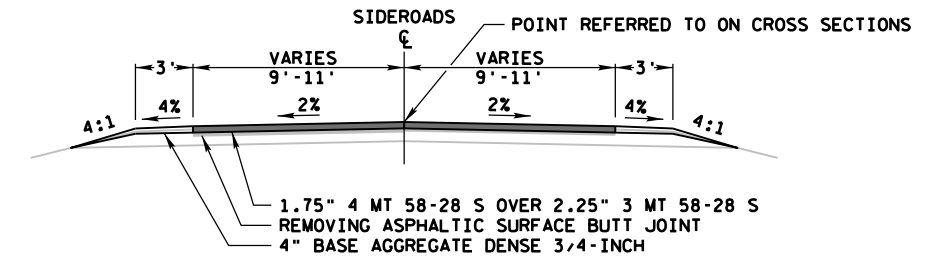
EXISTING TYPICAL SECTION

6TH AVENUE (NORTH), 9TH AVENUE



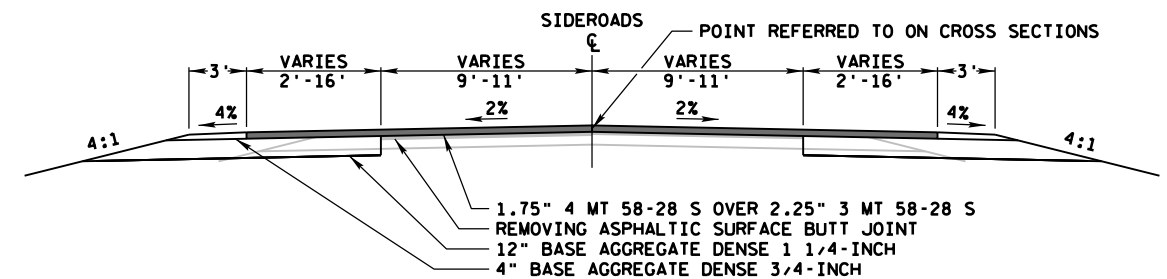
EXISTING TYPICAL SECTION

HEADQUARTERS ROAD



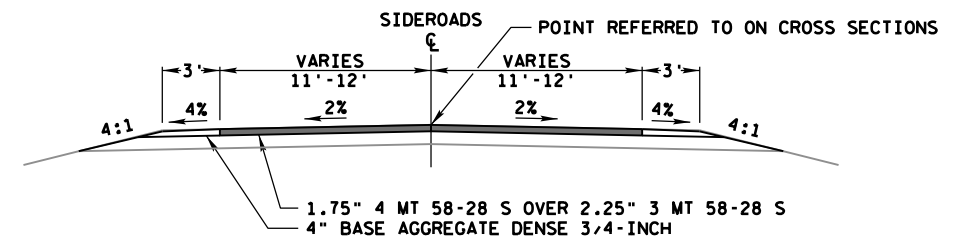
PROPOSED TYPICAL SECTION

CTH 'H' (NORTH), 2ND AVENUE (SOUTH), 2ND AVENUE (NORTH), W STUB ROAD
CTH 'H' (SOUTH), CUTLER ROAD, CTH 'M', 6TH AVENUE (SOUTH)
7TH AVENUE (NORTH), 7TH AVENUE (SOUTH), HEADQUARTERS ROAD, 22ND STREET



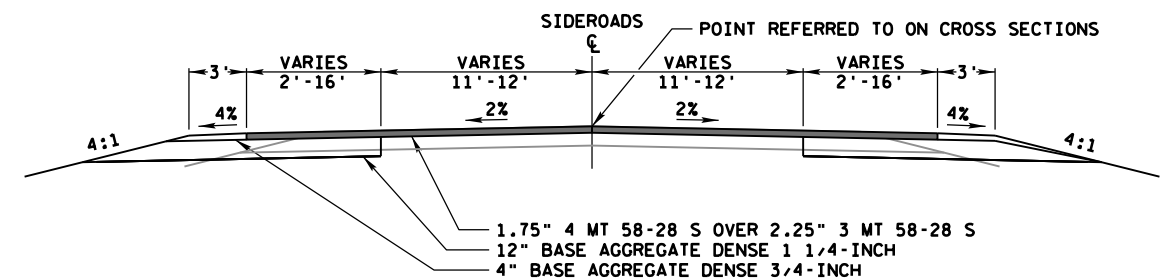
PROPOSED TYPICAL SECTION AT INTERSECTION RADII

CTH 'H' (NORTH), 2ND AVENUE (SOUTH), 2ND AVENUE (NORTH), W STUB ROAD
CTH 'H' (SOUTH), CUTLER ROAD, CTH 'M', 6TH AVENUE (SOUTH)
7TH AVENUE (NORTH), 7TH AVENUE (SOUTH), 22ND STREET



PROPOSED TYPICAL SECTION

6TH AVENUE (NORTH), 9TH AVENUE



PROPOSED TYPICAL SECTION AT INTERSECTION RADII

6TH AVENUE (NORTH), 9TH AVENUE

GENERAL NOTES

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

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

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

ADDITIONAL WORK VEHICLES MAY BE USED BETWEEN V1 AND V2.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE AND OTHER FACTORS.

IF THERE IS A SIDE ROAD INTERSECTION BETWEEN THE FLAGGER STATIONS PROVIDE "ROAD WORK AHEAD" SIGNS ON THE SIDE ROAD AS APPROVED BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, THE "FLAGGER AHEAD", THE "ROAD WORK AHEAD" AND THE "ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

THIS DRAWING SHALL BE USED FOR CENTERLINE AND SHOULDER MILLING OF RUMBLE STRIPS.

- ① MAXIMUM DISTANCE BETWEEN FLAGGER STATIONS SHALL BE TWO MILES.
- ② FOR MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

LEGEND

V1 LEAD VEHICLE

V2 TRAIL VEHICLE WITH TMA

TMA TRUCK-MOUNTED ATTENUATOR

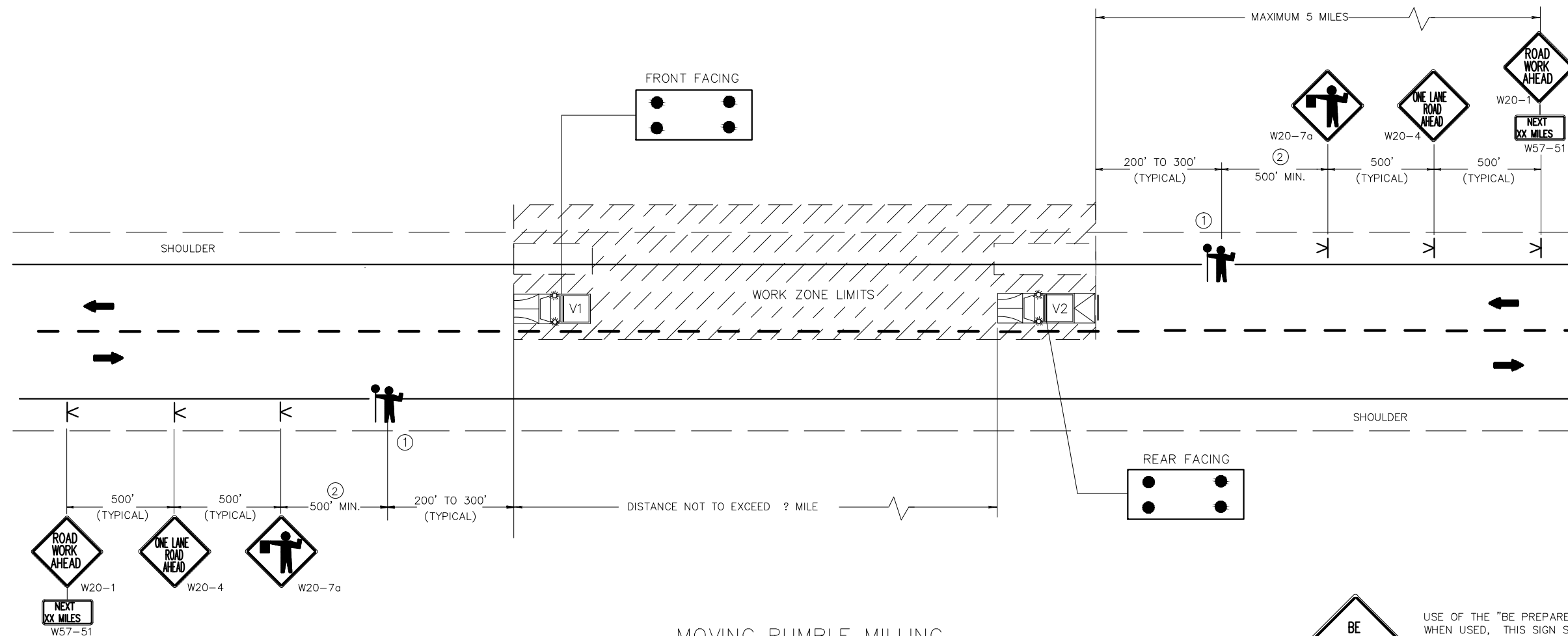
K SIGN ON PORTABLE SUPPORT

→ DIRECTION OF TRAVEL

FLASHING ARROW PANEL (CAUTION)

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

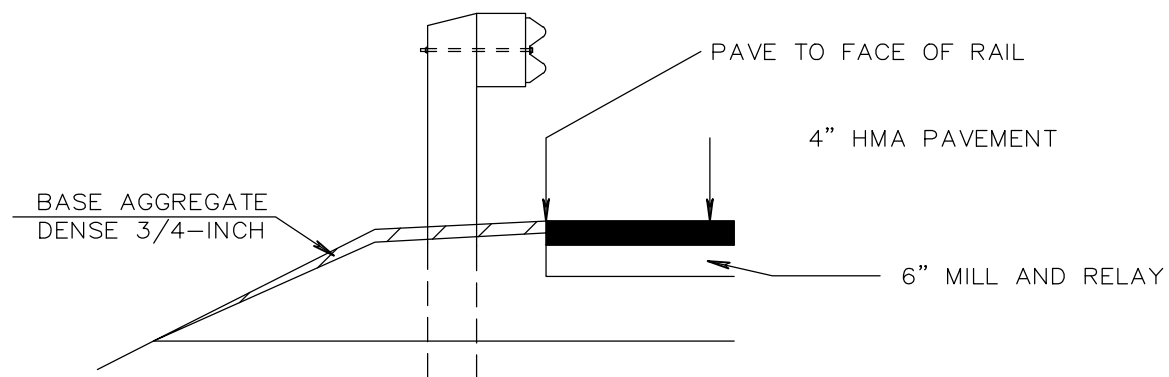
WORK AREA



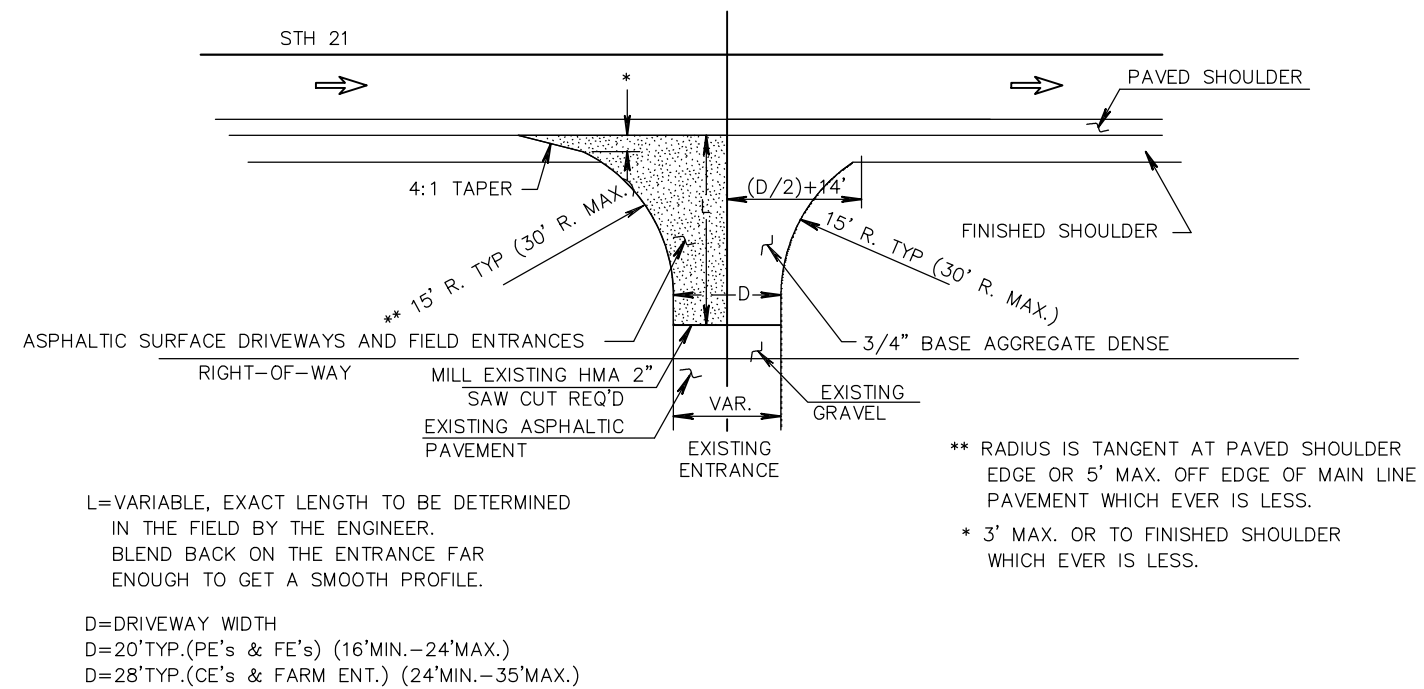
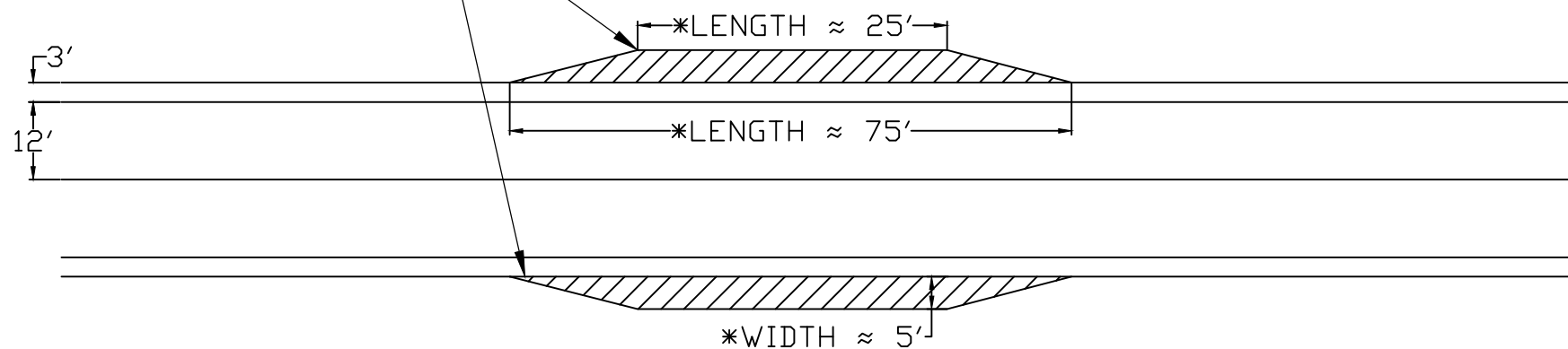
MOVING RUMBLE MILLING
OPERATIONS TWO-LANE TWO-WAY ROADWAY
(REPOSITION VEHICLES TO OUTER EDGE FOR SHOULDER MILLING)



USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



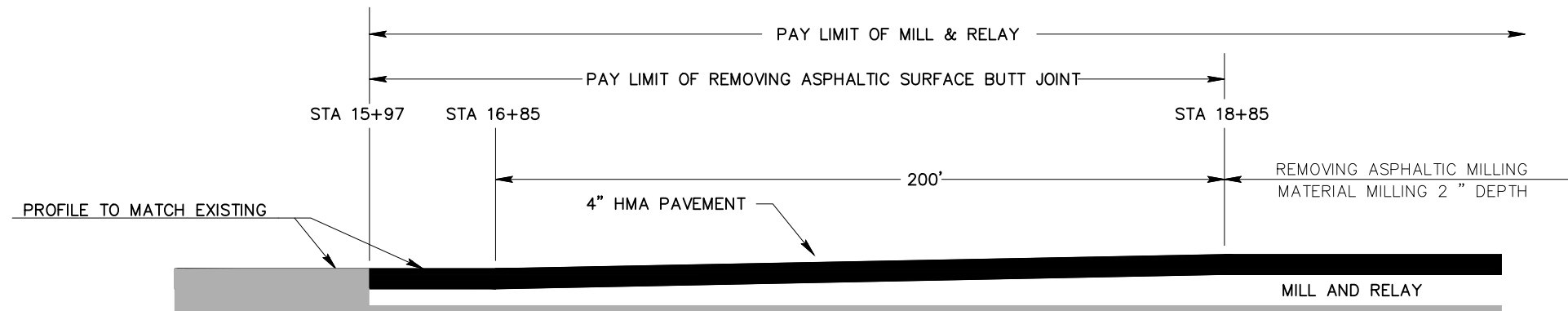
SHOULDER DETAIL AT GUARD RAIL

RURAL DRIVEWAY INTERSECTION DETAIL
(PE's, FE's & CE's)EXTRA WIDTH PAVING OVER MAINLINE PIPES
PAID AS REMOVING ASPHALTIC SURFACE

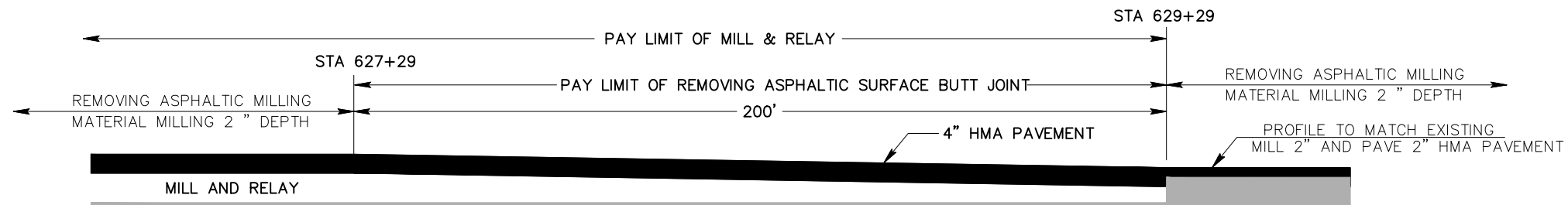
REMOVING ASPHALTIC SURFACE DETAIL

* SEE MISCELLANEOUS
QUANTITIES FOR SIZE AND
LOCATION OF EACH AREA

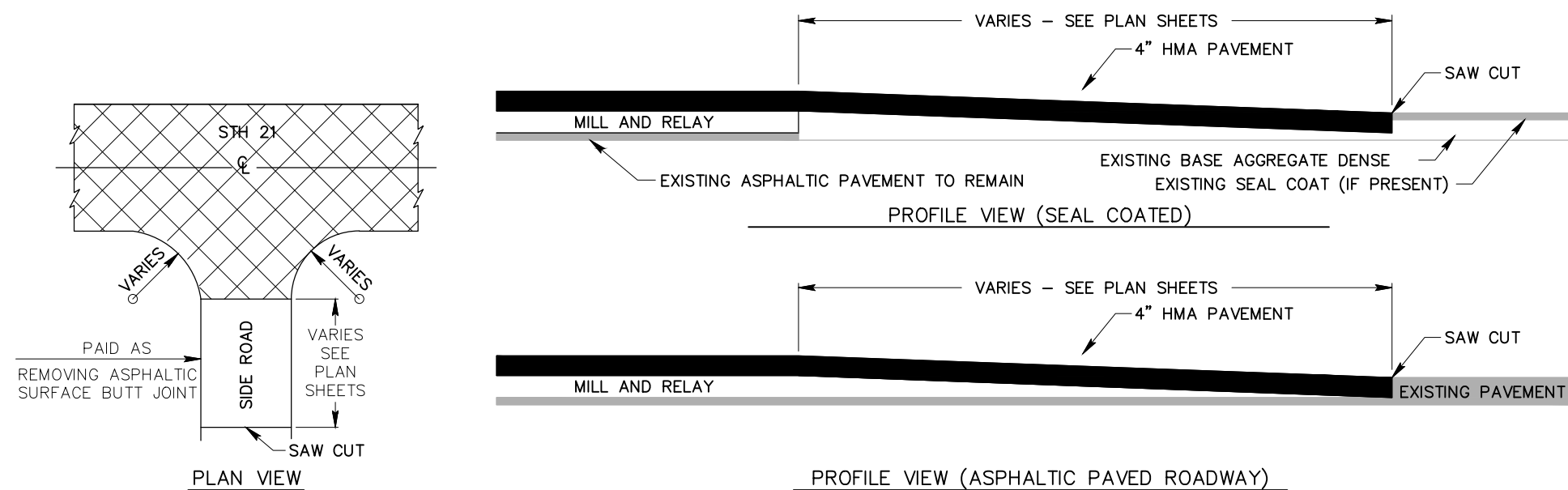
C STH 21



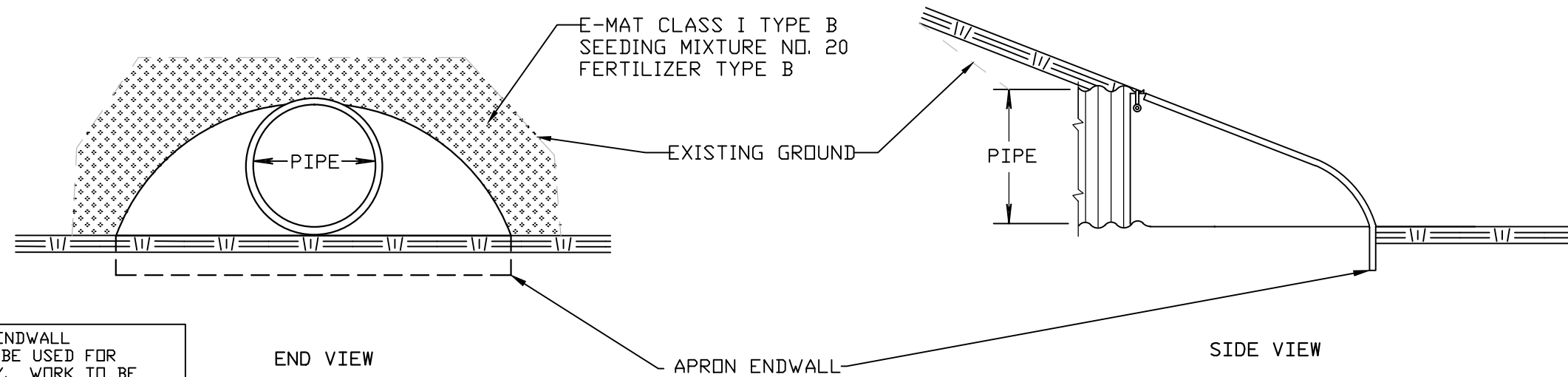
MAINLINE REMOVING ASPHALTIC SURFACE BUTT JOINT
STATION 15+97 TO STATION 18+85



MAINLINE REMOVING ASPHALTIC SURFACE BUTT JOINT
STATION 627+29 TO STATION 629+29



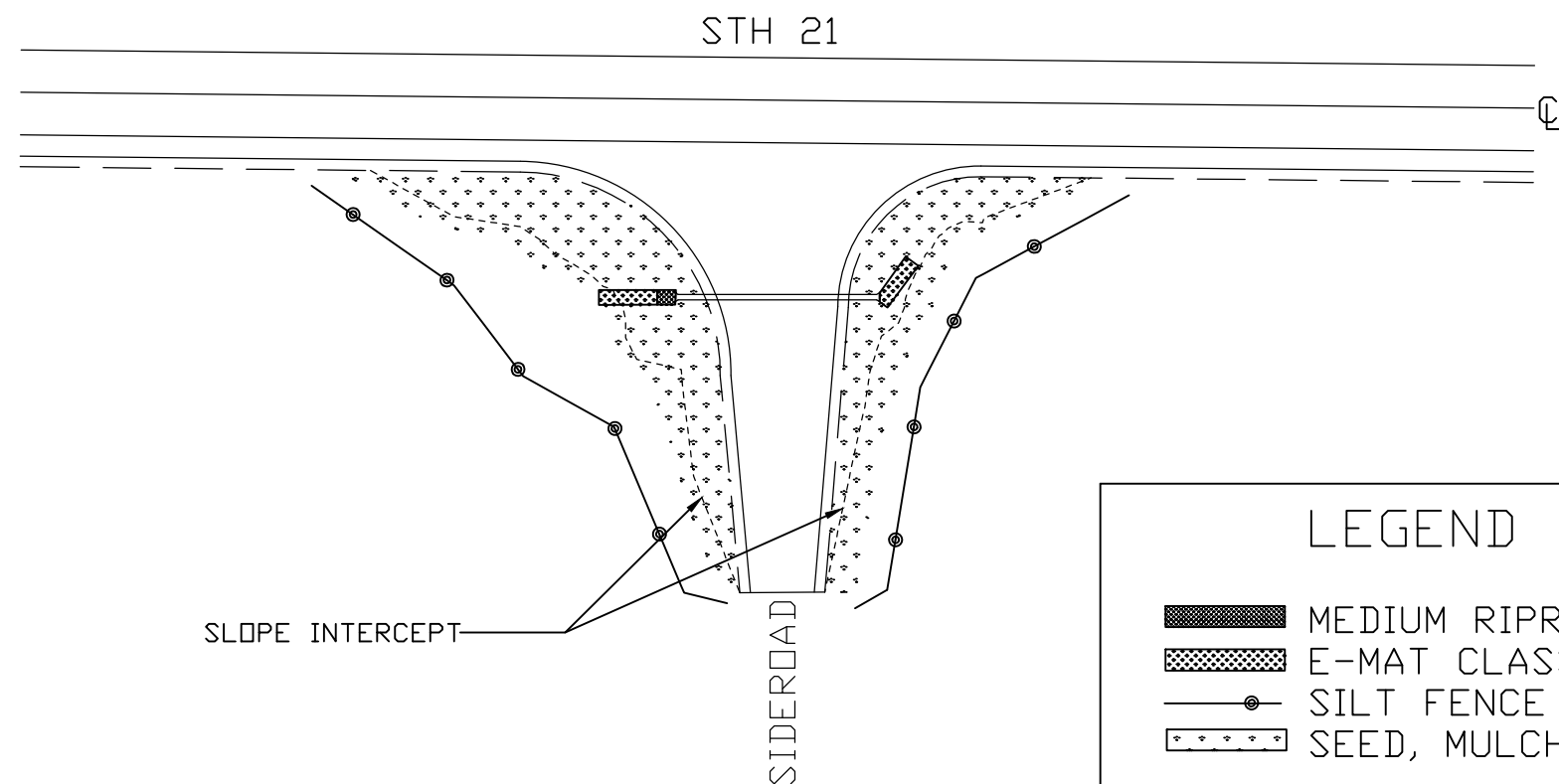
SIDE ROAD REMOVING ASPHALTIC SURFACE BUTT JOINT



GRADING AND SHAPING APRON ENDWALL
 * QUANTITIES LISTED ARE TO BE USED FOR INFORMATIONAL PURPOSES ONLY. WORK TO BE PAID FOR UNDER ITEM SPV.0060.01 GRADING AND SHAPING APRON ENDWALL. SEE SPECIAL PROVISIONS FOR ALL ITEMS COVERED BY THIS BID ITEM.

BORROW = 10 CY
 SALVAGED TOPSOIL = 10 SY
 SEED #20 = 0.5 LB
 FERTILIZER TYPE B = 1 LB

GRADING AND SHAPING APRON ENDWALL



LEGEND

- MEDIUM RIPRAP & GEOTEXTILE FABRIC TYPE HR
- E-MAT CLASS I (IN DITCHLINE)
- SILT FENCE
- SEED, MULCH, & FERTILIZER

TYPICAL EROSION CONTROL ITEMS FOR GRADING SHAPING AND FINISHING INTERSECTION

STA 83+60, LEFT
 GRADING AND SHAPING APRON ENDWALL
 * QUANTITIES LISTED ARE TO BE USED FOR BIDDING PURPOSES ONLY. WORK TO BE PAID FOR UNDER ITEM SPV.0060.01 GRADING AND SHAPING 72-INCH APRON ENDWALL. SEE SPECIAL PROVISIONS FOR ALL ITEMS COVERED BY THIS BID ITEM. SEE CONSTRUCTION DETAILS FOR TYPICAL EROSION CONTROL INSTALLATION.

BORROW = 20 CY
 SALVAGED TOPSOIL = 50 SY
 MULCH = 50 SY
 SEED #20 = 1 LB
 FERTILIZER = 1 LB

RIPRAP HEAVY AND
 GEOTEXTILE FABRIC TYPE HR

REMOVING WINGWALL PAID AS
 ITEM 204.0185, REMOVING MASONRY

SLOPE INTERCEPT

1 - APRON ENDWALLS FOR CULVERT PIPE STEEL 72-INCH

82

83

84

STH 21

SLOPE INTERCEPT

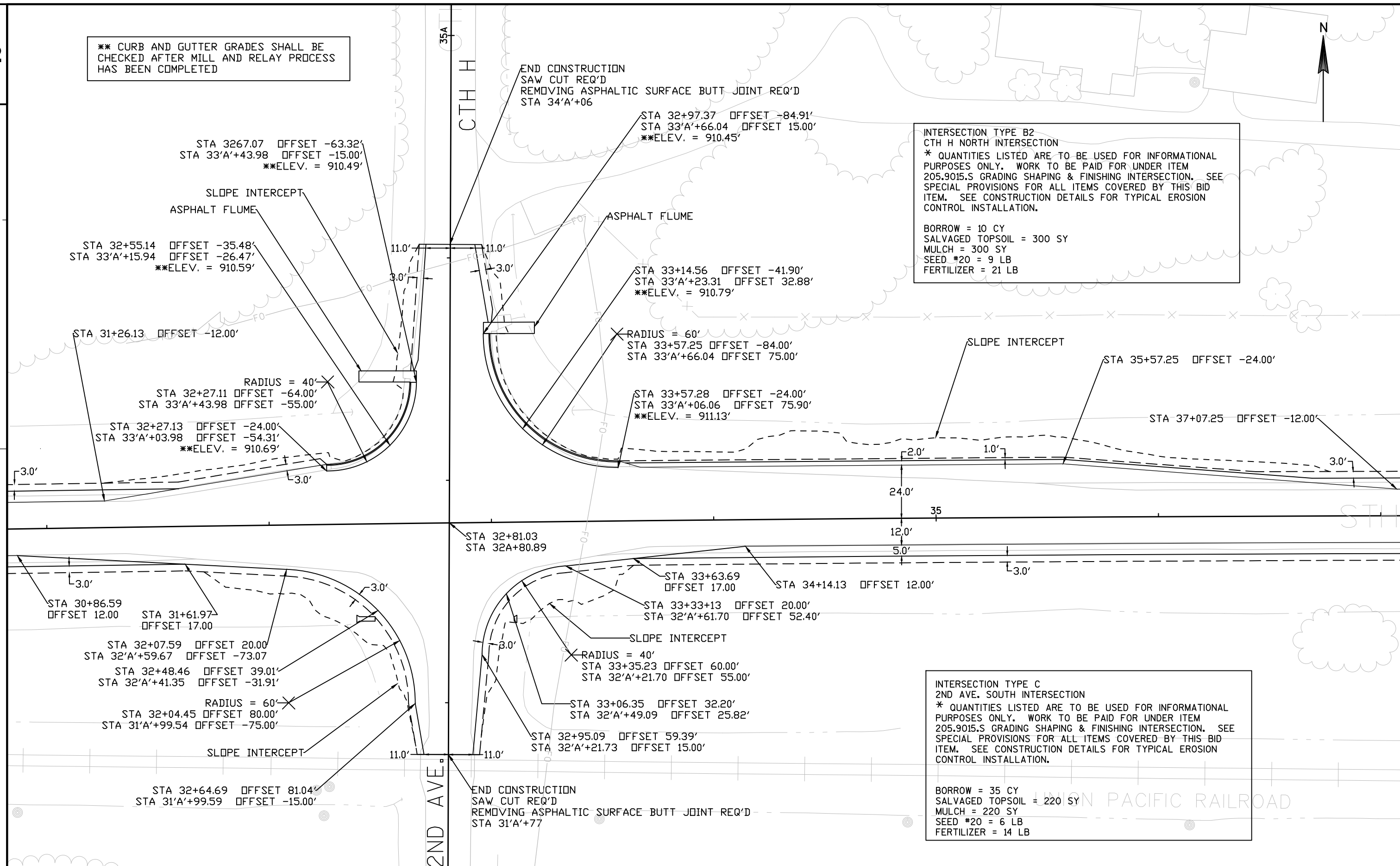
1 - APRON ENDWALLS FOR CULVERT PIPE STEEL 72-INCH

STA 82+50, RIGHT
 GRADING AND SHAPING APRON ENDWALL
 * QUANTITIES LISTED ARE TO BE USED FOR BIDDING PURPOSES ONLY. WORK TO BE PAID FOR UNDER ITEM SPV.0060.01 GRADING AND SHAPING 72-INCH APRON ENDWALL. SEE SPECIAL PROVISIONS FOR ALL ITEMS COVERED BY THIS BID ITEM. SEE CONSTRUCTION DETAILS FOR TYPICAL EROSION CONTROL INSTALLATION.

BORROW = 20 CY
 SALVAGED TOPSOIL = 50 SY
 MULCH = 50 SY
 SEED #20 = 1 LB
 FERTILIZER = 1 LB

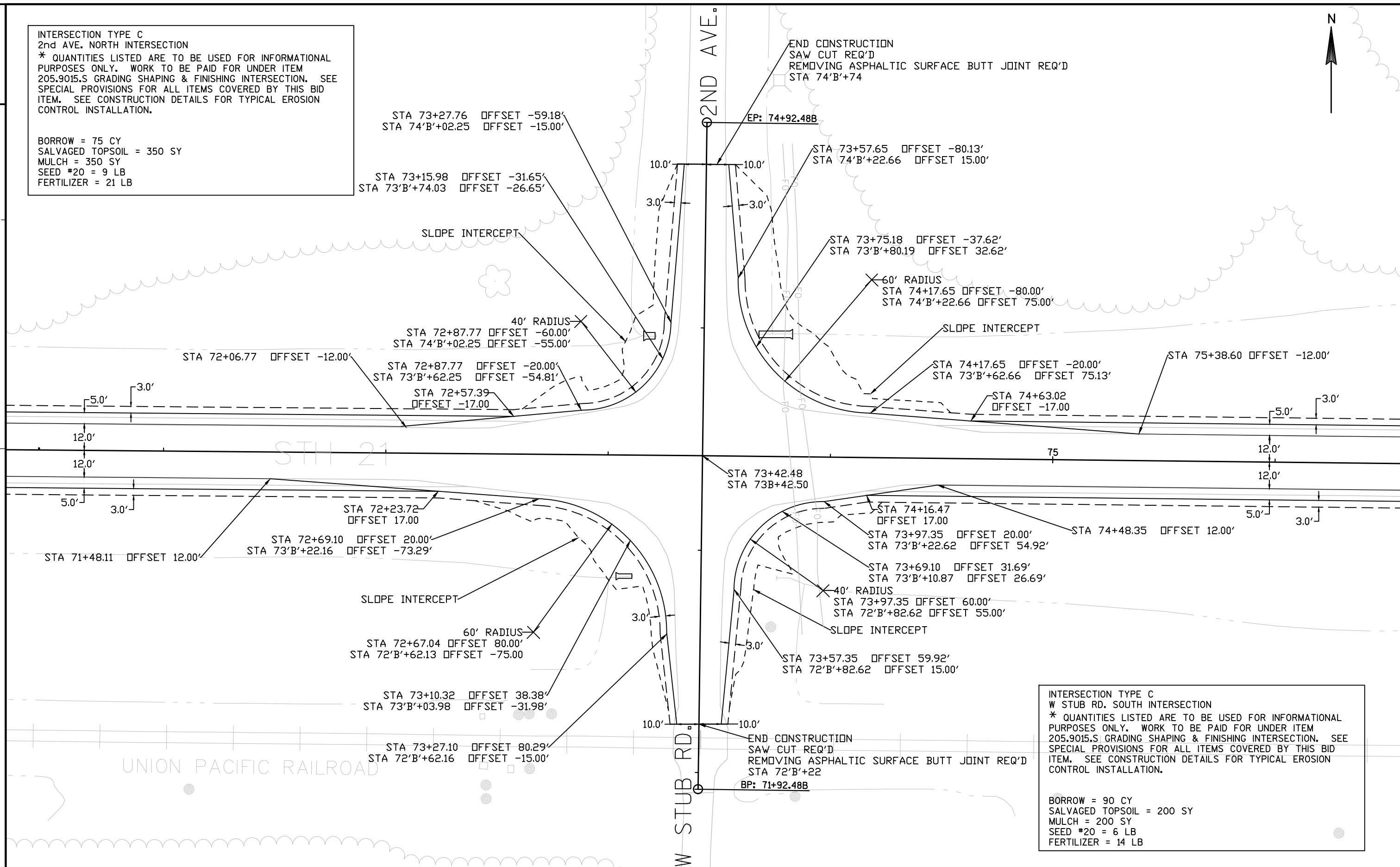
RIPRAP HEAVY AND
 GEOTEXTILE FABRIC TYPE HR

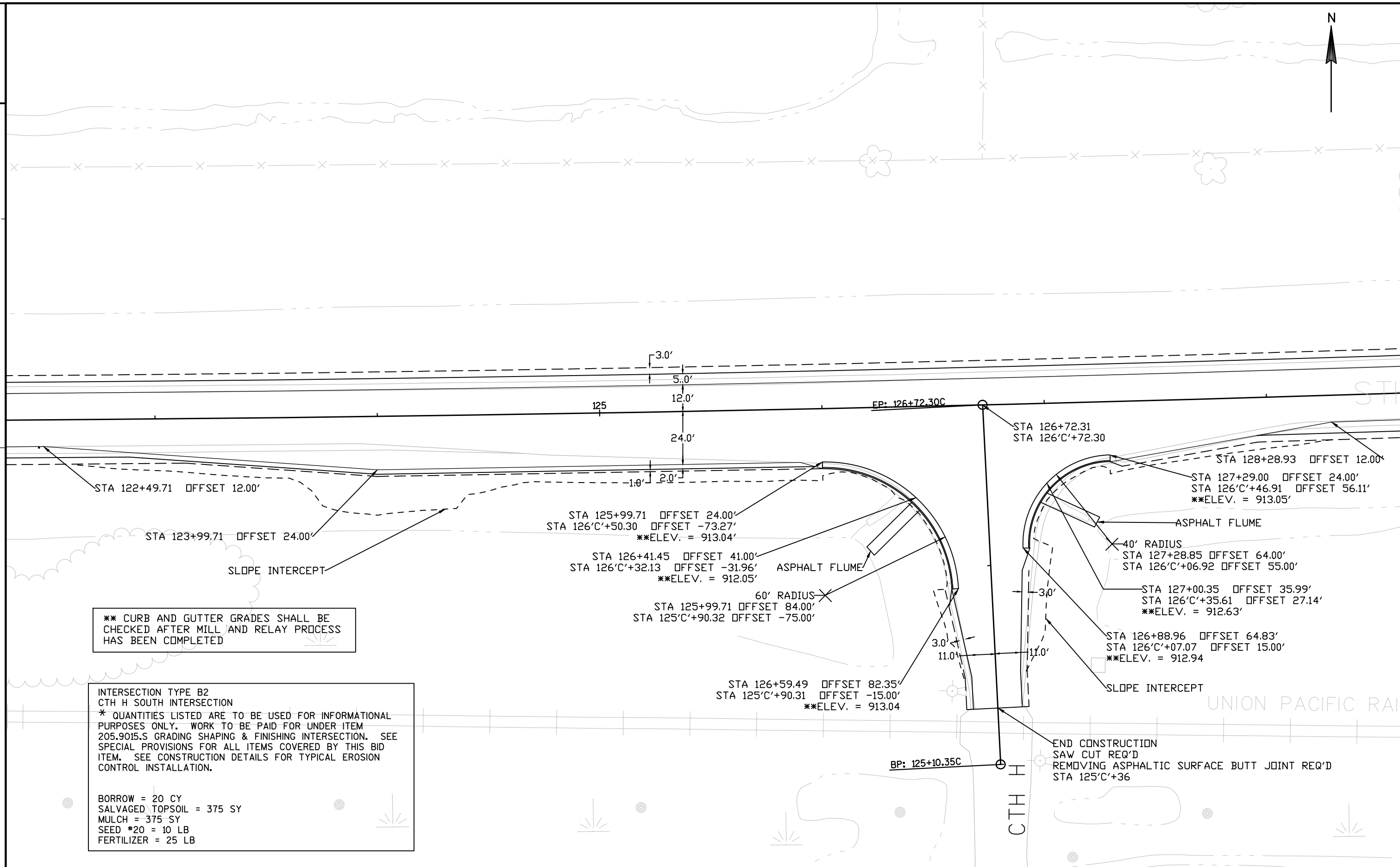
** CURB AND GUTTER GRADES SHALL BE CHECKED AFTER MILL AND RELAY PROCESS HAS BEEN COMPLETED



INTERSECTION TYPE C
2nd AVE. NORTH INTERSECTION
* QUANTITIES LISTED ARE TO BE USED FOR INFORMATIONAL PURPOSES ONLY. WORK TO BE PAID FOR UNDER ITEM 205.9015.S GRADING SHAPING & FINISHING INTERSECTION. SEE SPECIAL PROVISIONS FOR ALL ITEMS COVERED BY THIS BID ITEM. SEE CONSTRUCTION DETAILS FOR TYPICAL EROSION CONTROL INSTALLATION.

BORROW = 75 CY
SALVAGED TOPSOIL = 350 SY
MULCH = 350 SY
SEED #20 = 9 LB
FERTILIZER = 21 LB





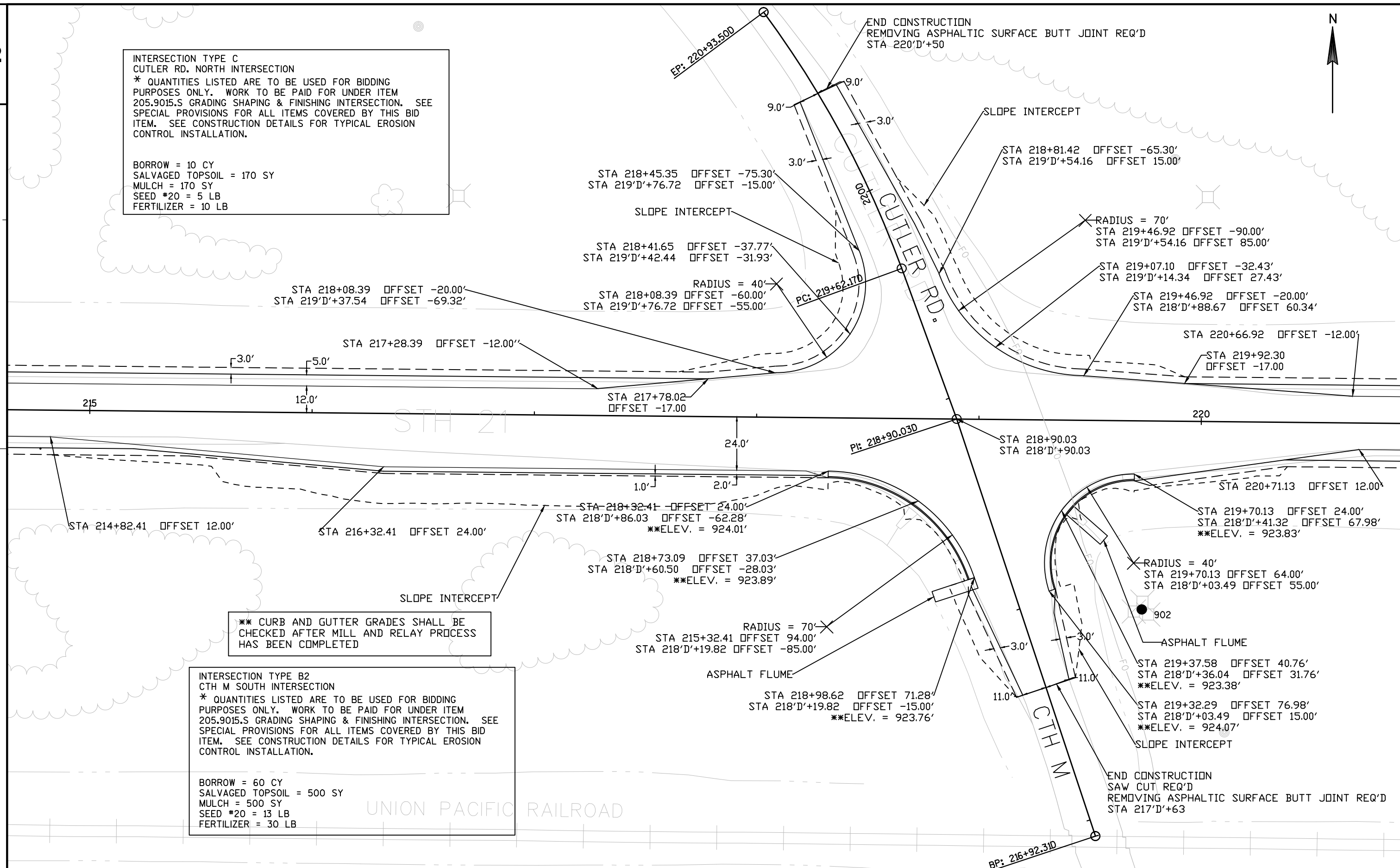
** CURB AND GUTTER GRADES SHALL BE
CHECKED AFTER MILL AND RELAY PROCESS
HAS BEEN COMPLETED

INTERSECTION TYPE B2
CTH H SOUTH INTERSECTION
* QUANTITIES LISTED ARE TO BE USED FOR INFORMATIONAL
PURPOSES ONLY. WORK TO BE PAID FOR UNDER ITEM
205.9015.S GRADING SHAPING & FINISHING INTERSECTION. SEE
SPECIAL PROVISIONS FOR ALL ITEMS COVERED BY THIS BID
ITEM. SEE CONSTRUCTION DETAILS FOR TYPICAL EROSION
CONTROL INSTALLATION.

BORROW = 20 CY
SALVAGED TOPSOIL = 375 SY
MULCH = 375 SY
SEED #20 = 10 LB
FERTILIZER = 25 LB

INTERSECTION TYPE C
CUTLER RD. NORTH INTERSECTION
* QUANTITIES LISTED ARE TO BE USED FOR BIDDING PURPOSES ONLY. WORK TO BE PAID FOR UNDER ITEM 205.9015.S GRADING SHAPING & FINISHING INTERSECTION. SEE SPECIAL PROVISIONS FOR ALL ITEMS COVERED BY THIS BID ITEM. SEE CONSTRUCTION DETAILS FOR TYPICAL EROSION CONTROL INSTALLATION.

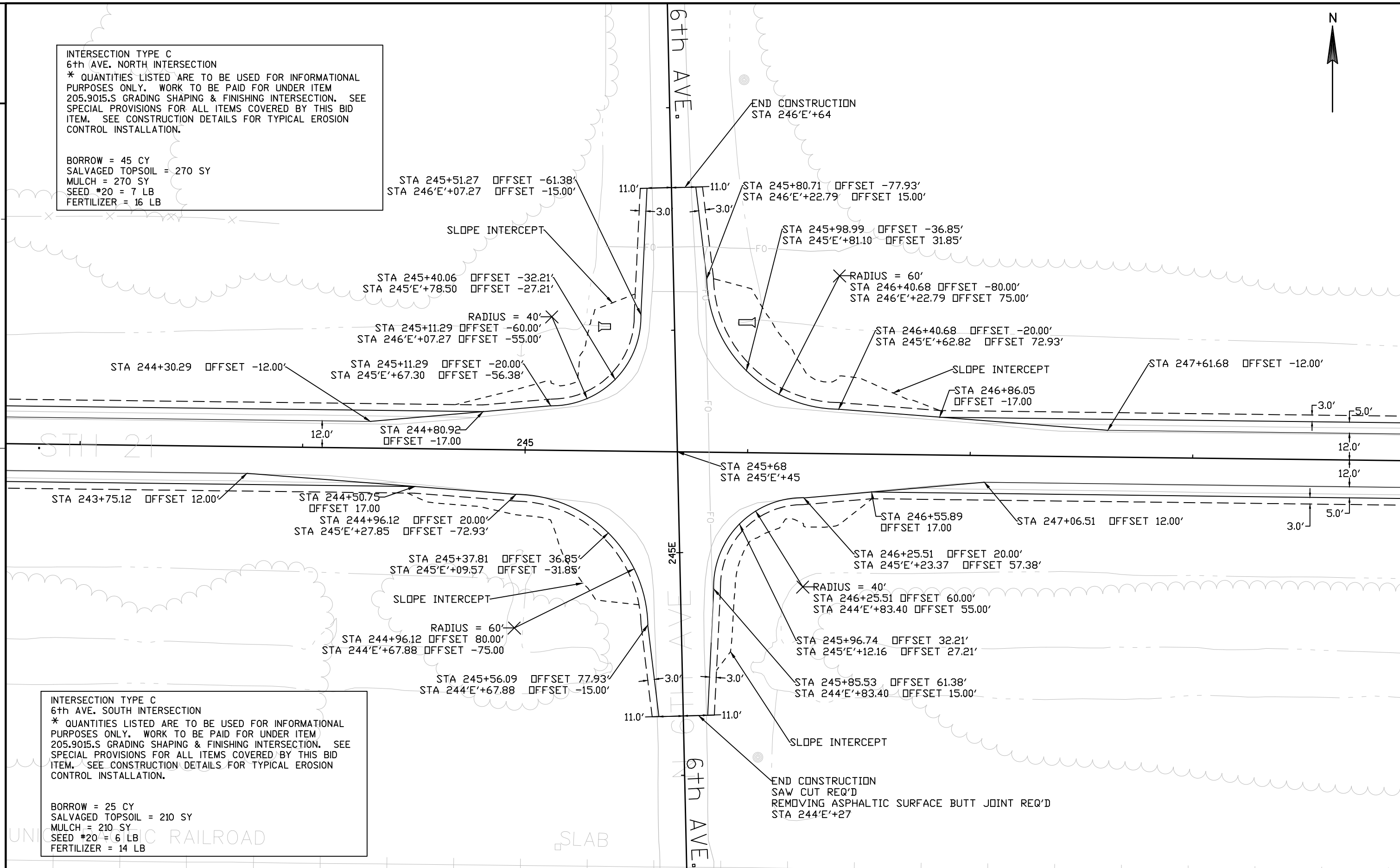
BORROW = 10 CY
SALVAGED TOPSOIL = 170 SY
MULCH = 170 SY
SEED #20 = 5 LB
FERTILIZER = 10 LB



INTERSECTION TYPE C
6th AVE. NORTH INTERSECTION

* QUANTITIES LISTED ARE TO BE USED FOR INFORMATIONAL PURPOSES ONLY. WORK TO BE PAID FOR UNDER ITEM 205.9015.S GRADING SHAPING & FINISHING INTERSECTION. SEE SPECIAL PROVISIONS FOR ALL ITEMS COVERED BY THIS BID ITEM. SEE CONSTRUCTION DETAILS FOR TYPICAL EROSION CONTROL INSTALLATION.

BORROW = 45 CY
SALVAGED TOPSOIL = 270 SY
MULCH = 270 SY
SEED #20 = 7 LB
FERTILIZER = 16 LB



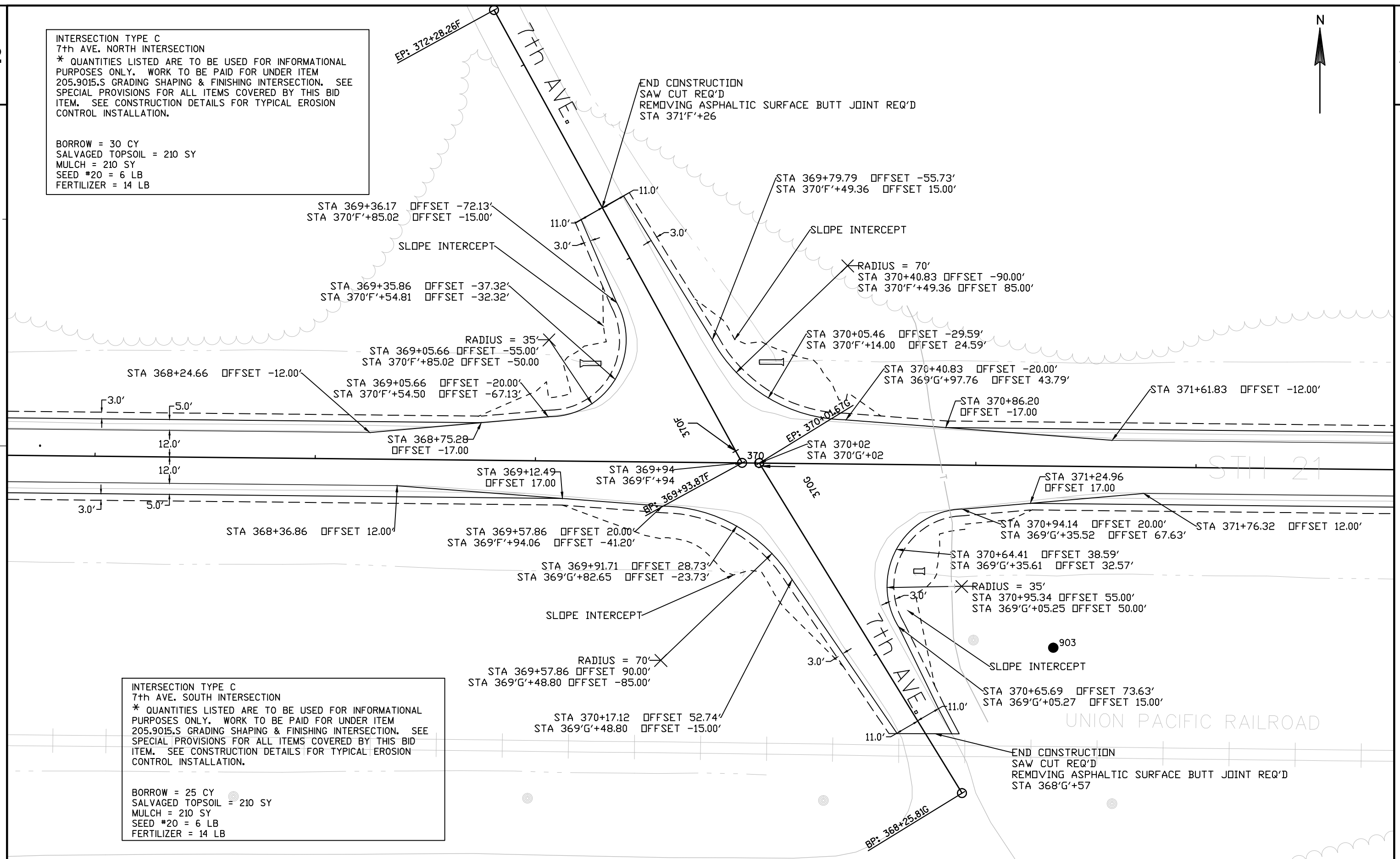
INTERSECTION TYPE C
6th AVE. SOUTH INTERSECTION

* QUANTITIES LISTED ARE TO BE USED FOR INFORMATIONAL PURPOSES ONLY. WORK TO BE PAID FOR UNDER ITEM 205.9015.S GRADING SHAPING & FINISHING INTERSECTION. SEE SPECIAL PROVISIONS FOR ALL ITEMS COVERED BY THIS BID ITEM. SEE CONSTRUCTION DETAILS FOR TYPICAL EROSION CONTROL INSTALLATION.

BORROW = 25 CY
SALVAGED TOPSOIL = 210 SY
MULCH = 210 SY
SEED #20 = 6 LB
FERTILIZER = 14 LB

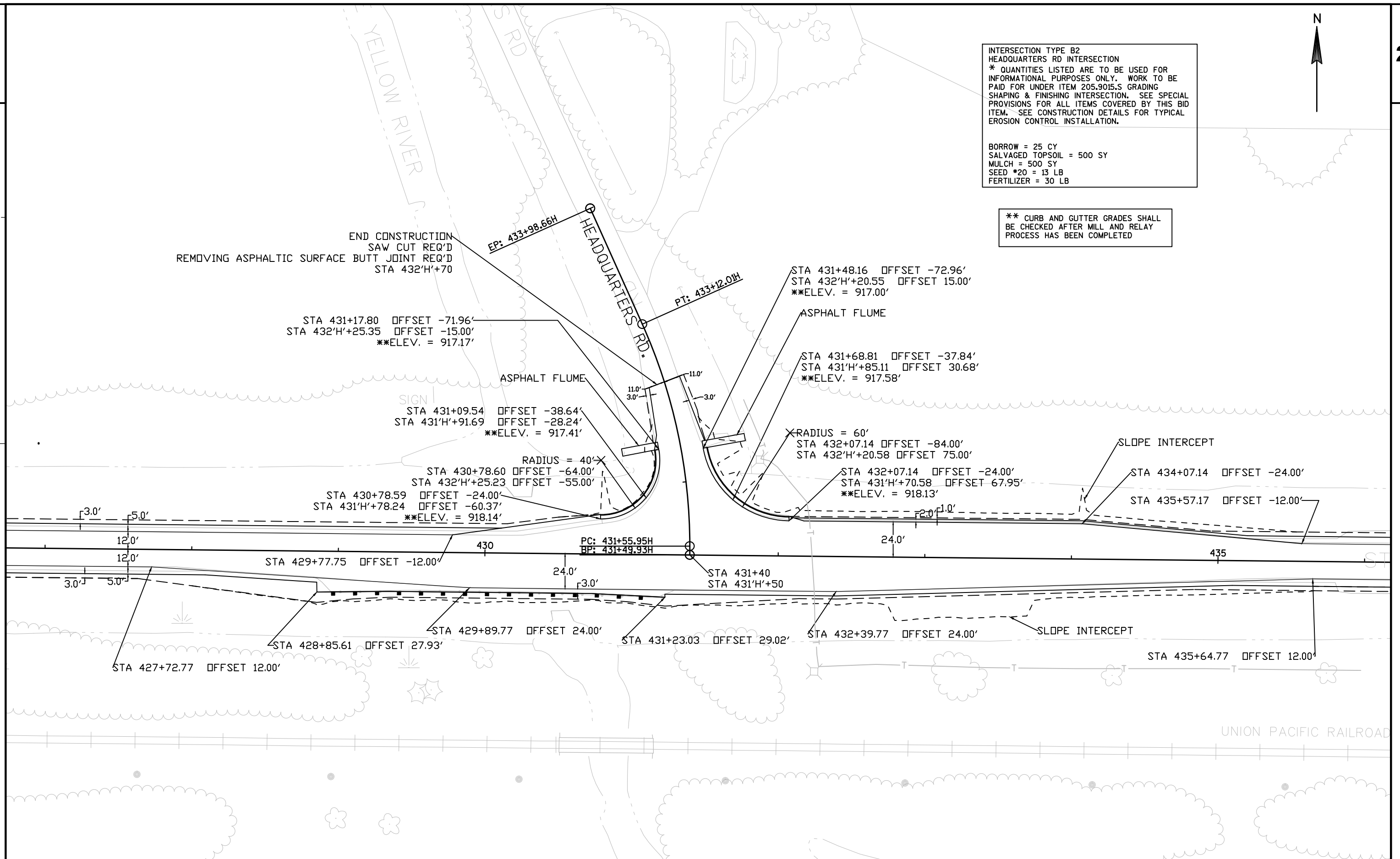
INTERSECTION TYPE C
7th AVE. NORTH INTERSECTION
* QUANTITIES LISTED ARE TO BE USED FOR INFORMATIONAL PURPOSES ONLY. WORK TO BE PAID FOR UNDER ITEM 205.9015.S GRADING SHAPING & FINISHING INTERSECTION. SEE SPECIAL PROVISIONS FOR ALL ITEMS COVERED BY THIS BID ITEM. SEE CONSTRUCTION DETAILS FOR TYPICAL EROSION CONTROL INSTALLATION.

BORROW = 30 CY
SALVAGED TOPSOIL = 210 SY
MULCH = 210 SY
SEED #20 = 6 LB
FERTILIZER = 14 LB



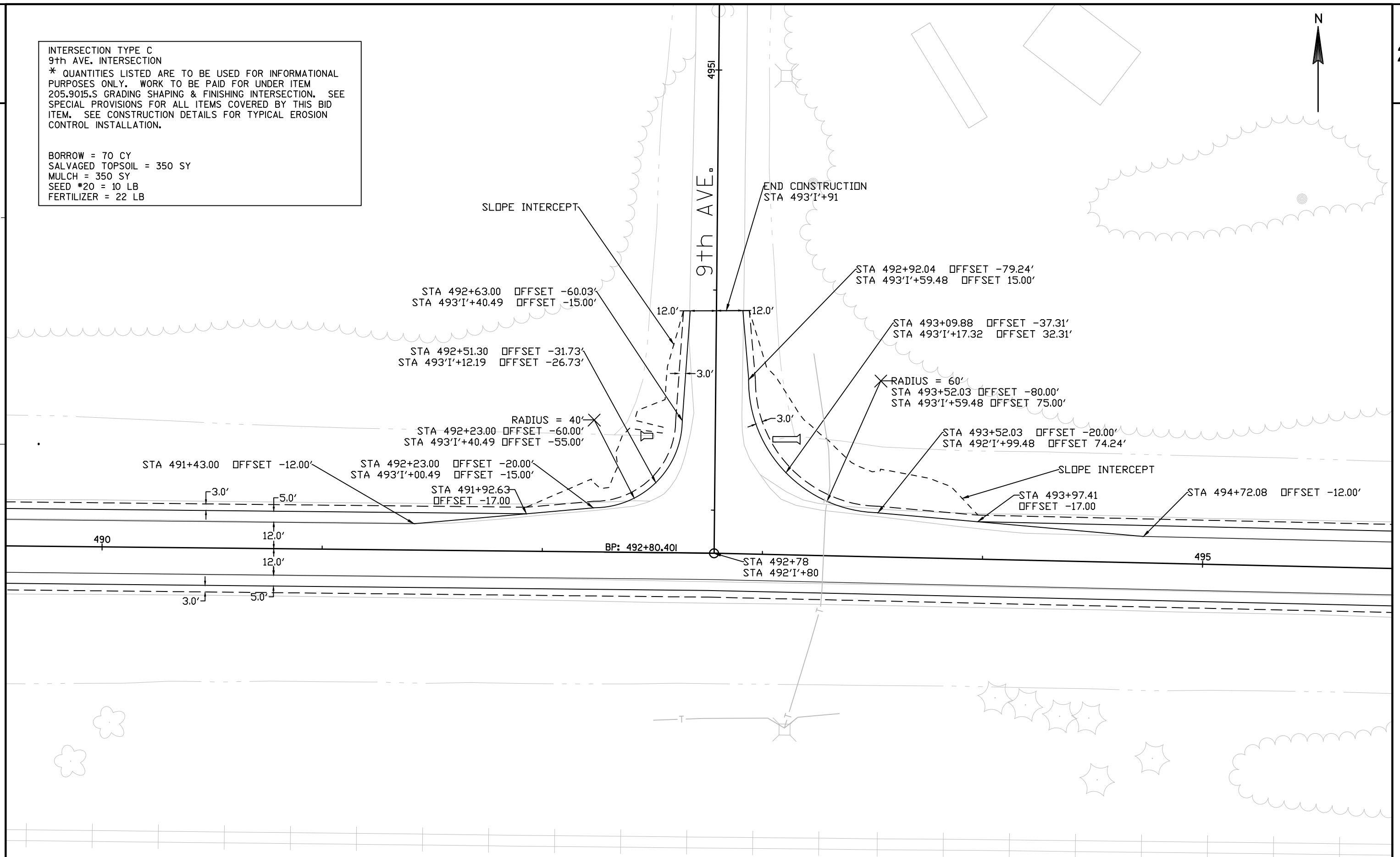
INTERSECTION TYPE C
7th AVE. SOUTH INTERSECTION
* QUANTITIES LISTED ARE TO BE USED FOR INFORMATIONAL PURPOSES ONLY. WORK TO BE PAID FOR UNDER ITEM 205.9015.S GRADING SHAPING & FINISHING INTERSECTION. SEE SPECIAL PROVISIONS FOR ALL ITEMS COVERED BY THIS BID ITEM. SEE CONSTRUCTION DETAILS FOR TYPICAL EROSION CONTROL INSTALLATION.

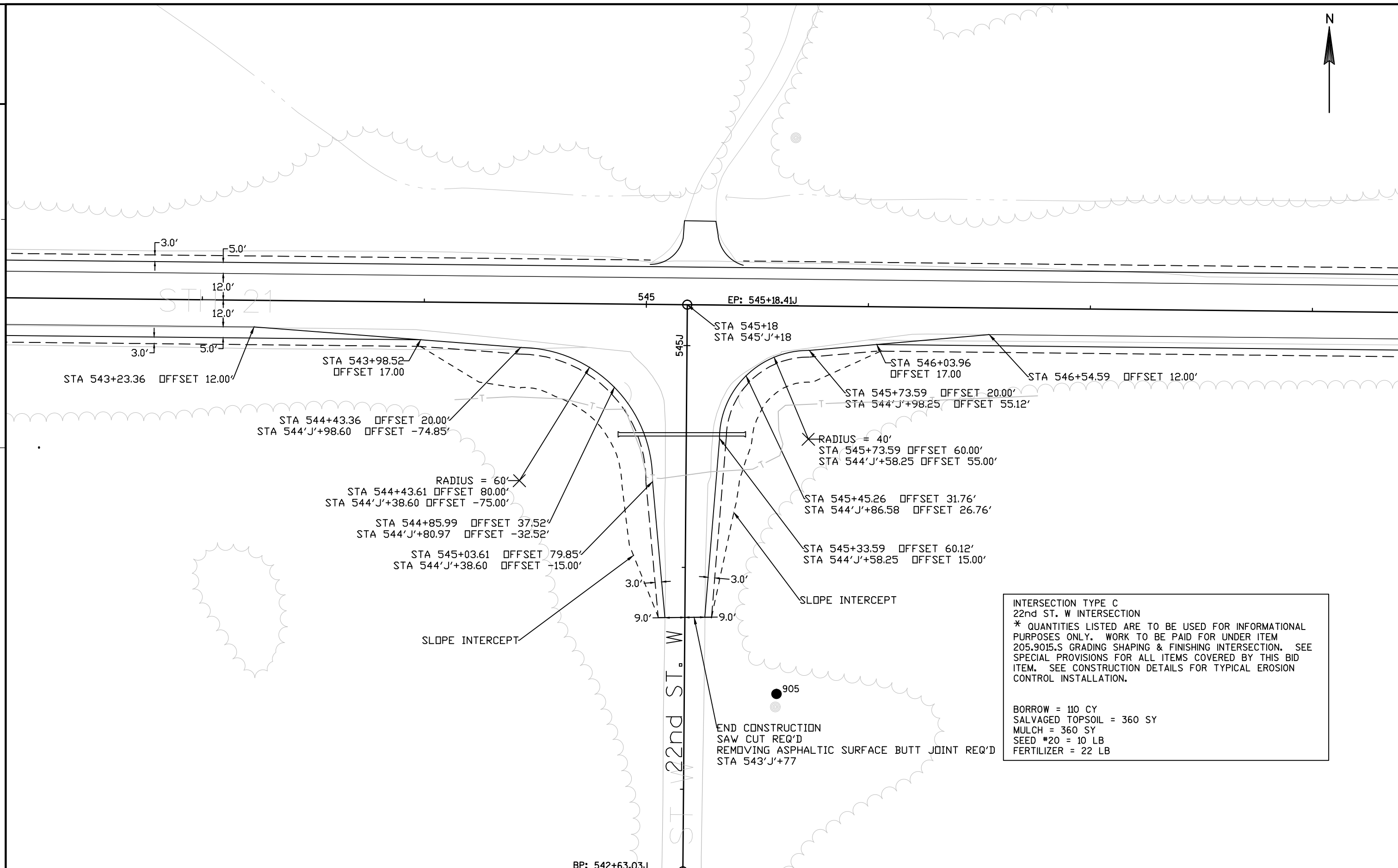
BORROW = 25 CY
SALVAGED TOPSOIL = 210 SY
MULCH = 210 SY
SEED #20 = 6 LB
FERTILIZER = 14 LB

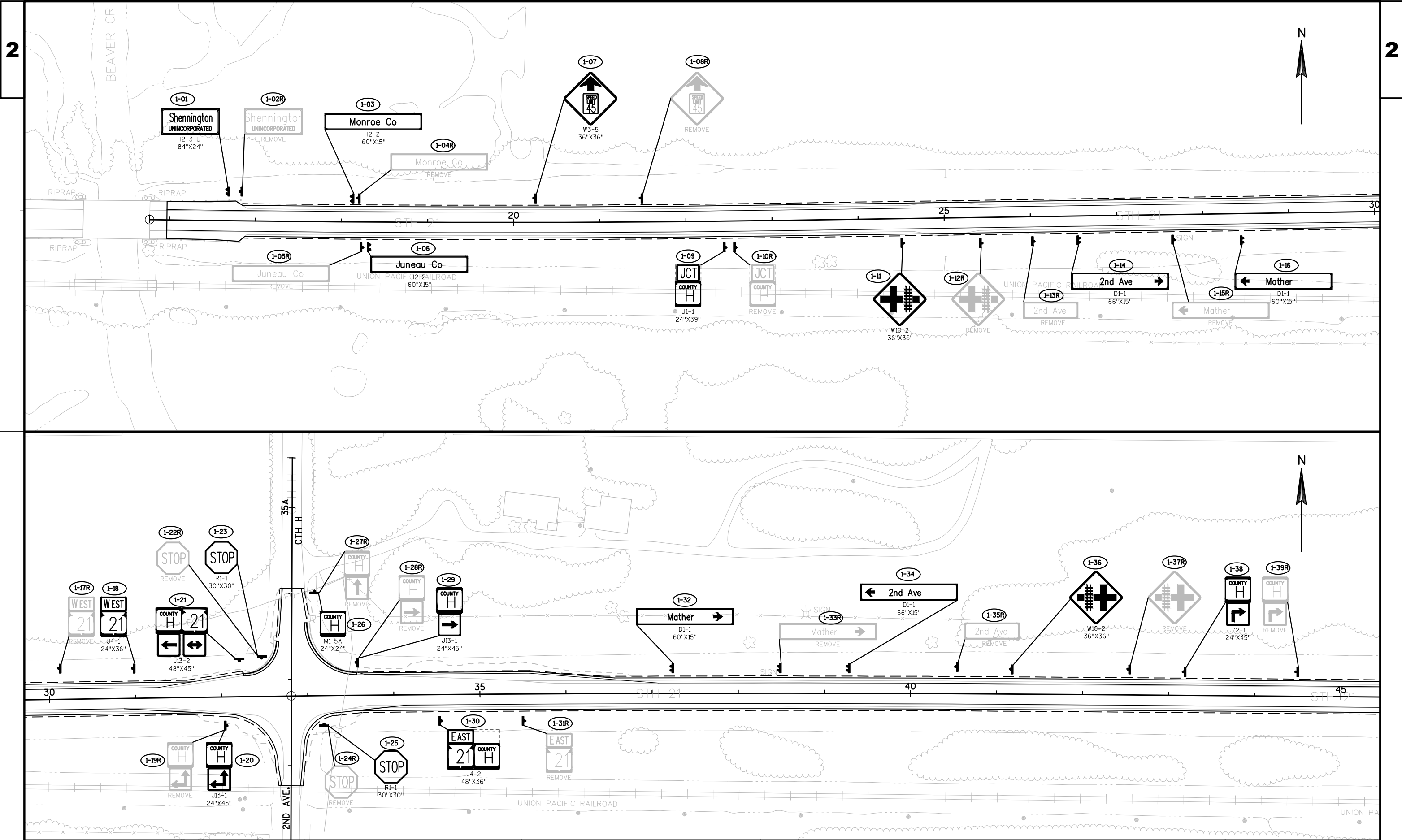


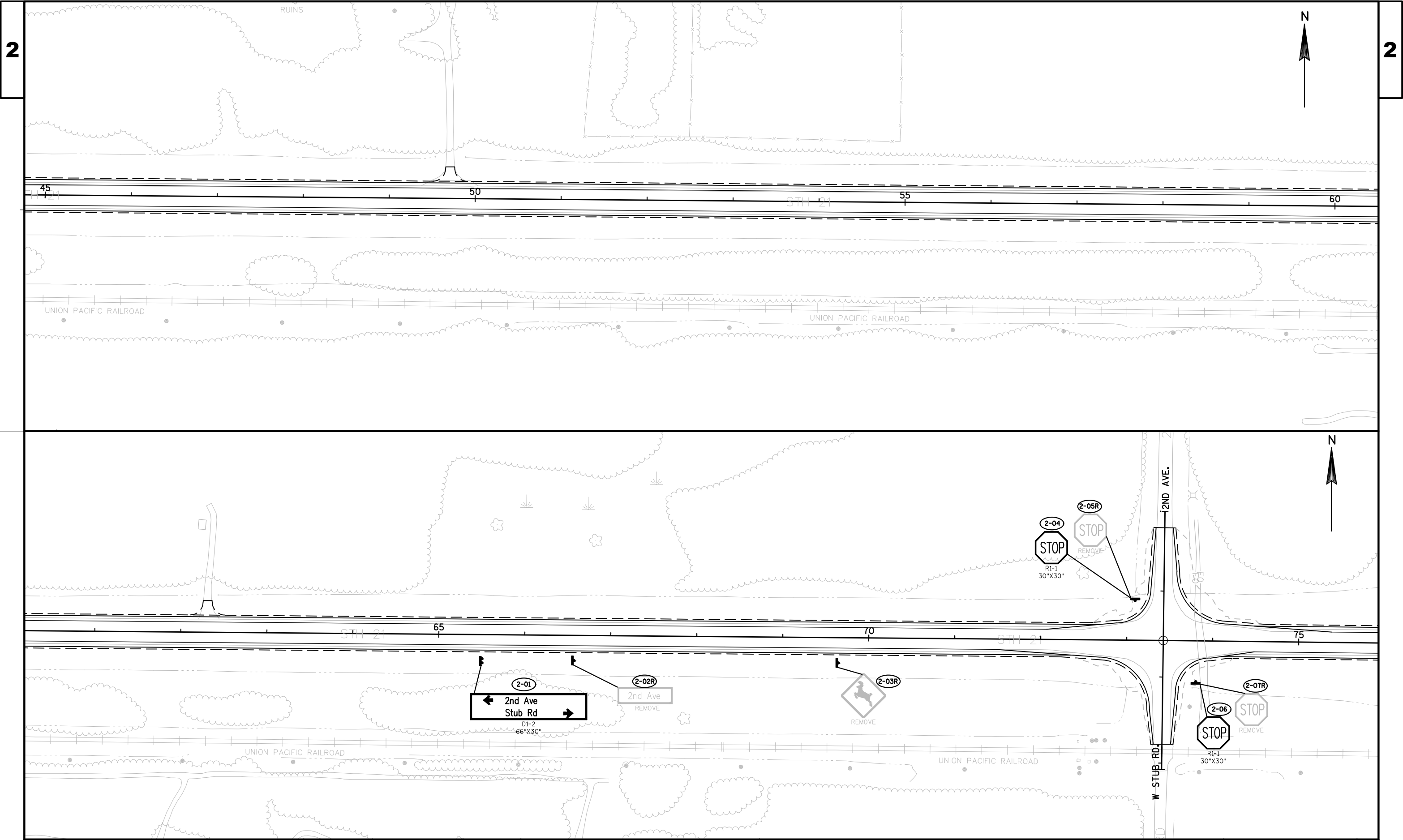
INTERSECTION TYPE C
9th AVE. INTERSECTION
* QUANTITIES LISTED ARE TO BE USED FOR INFORMATIONAL
PURPOSES ONLY. WORK TO BE PAID FOR UNDER ITEM
205.9015.S GRADING SHAPING & FINISHING INTERSECTION. SEE
SPECIAL PROVISIONS FOR ALL ITEMS COVERED BY THIS BID
ITEM. SEE CONSTRUCTION DETAILS FOR TYPICAL EROSION
CONTROL INSTALLATION.

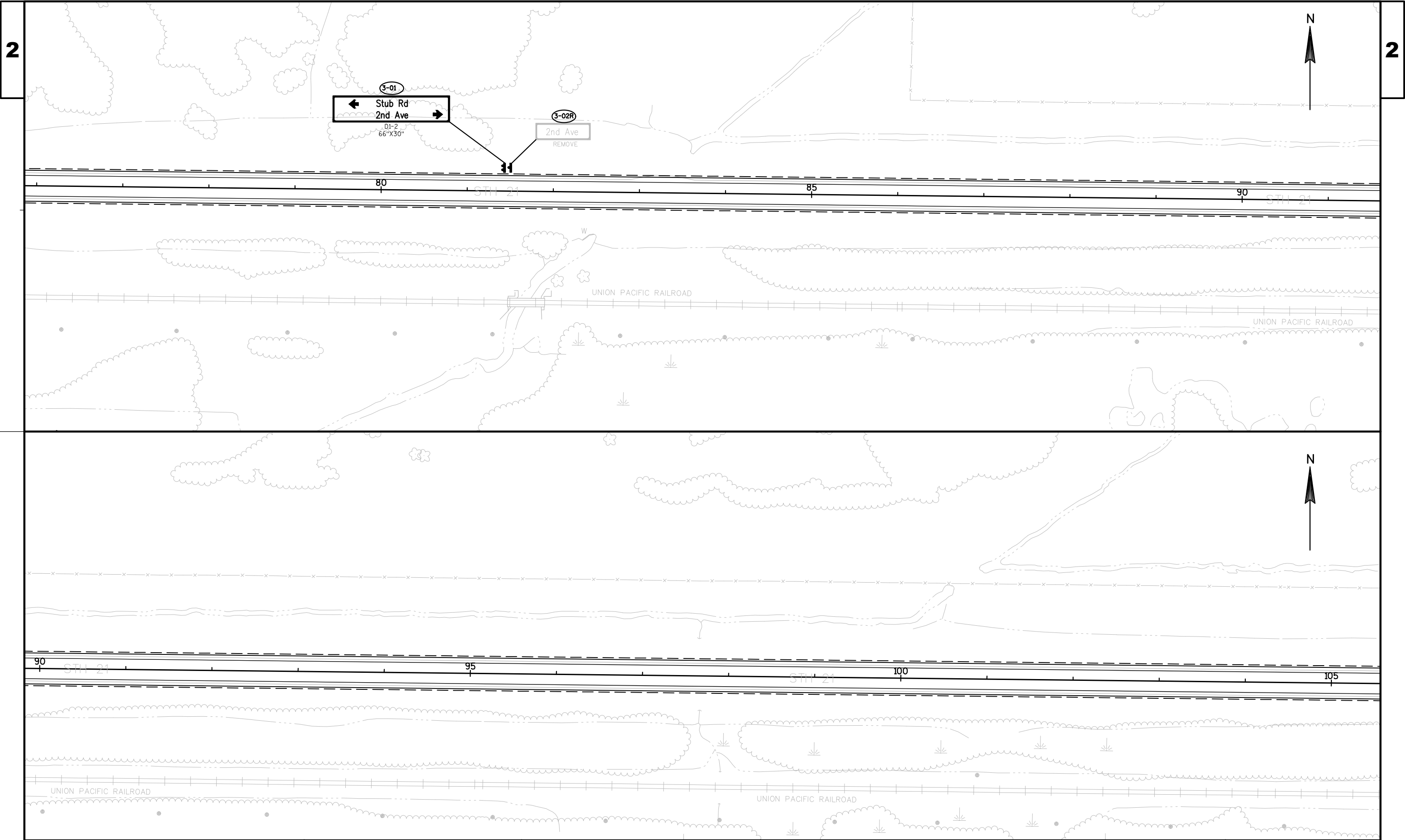
BORROW = 70 CY
SALVAGED TOPSOIL = 350 SY
MULCH = 350 SY
SEED #20 = 10 LB
FERTILIZER = 22 LB



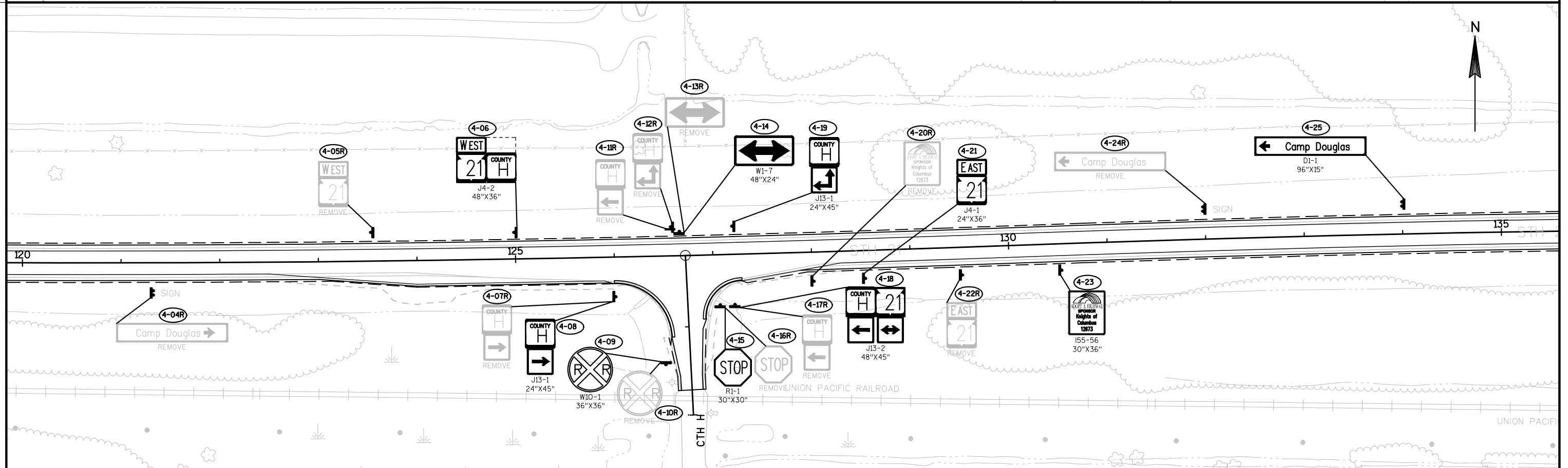
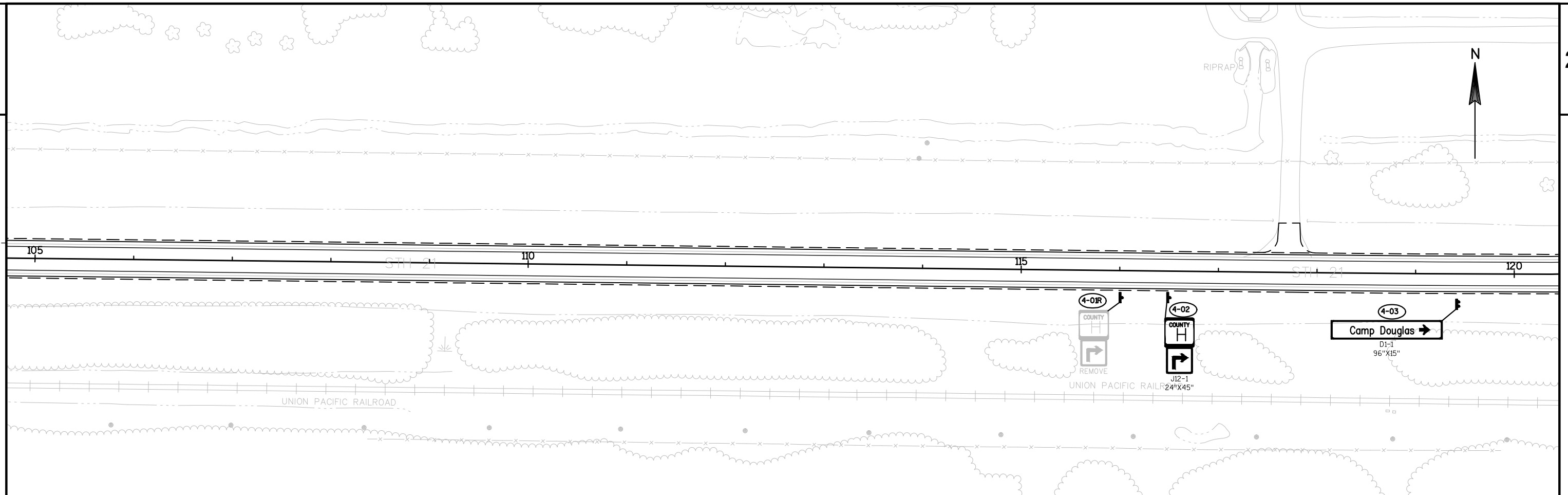








PROJECT NO: 7010-01-61	HWY: STH 21	COUNTY: JUNEAU	PERMANENT SIGNING	SHEET	E
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PROJECT NO: 7010-01-61

HWY: STH 21

COUNTY: JUNEAU

PERMANENT SIGNING

SHEET

E

FILE NAME : N:\PDS\C3D\70100131\SHEETPLAN\023201_PS.DWG
LAYOUT NAME - *****

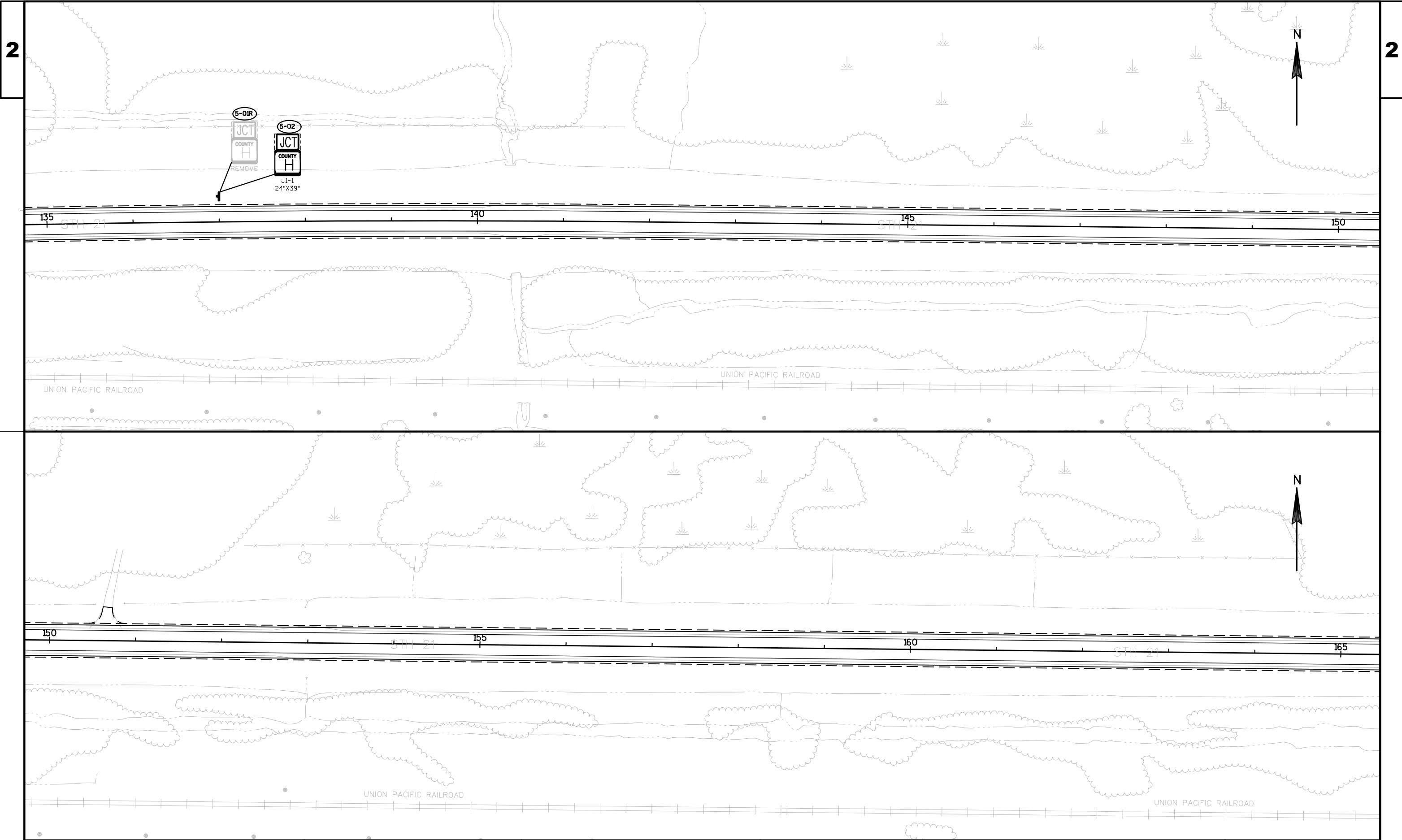
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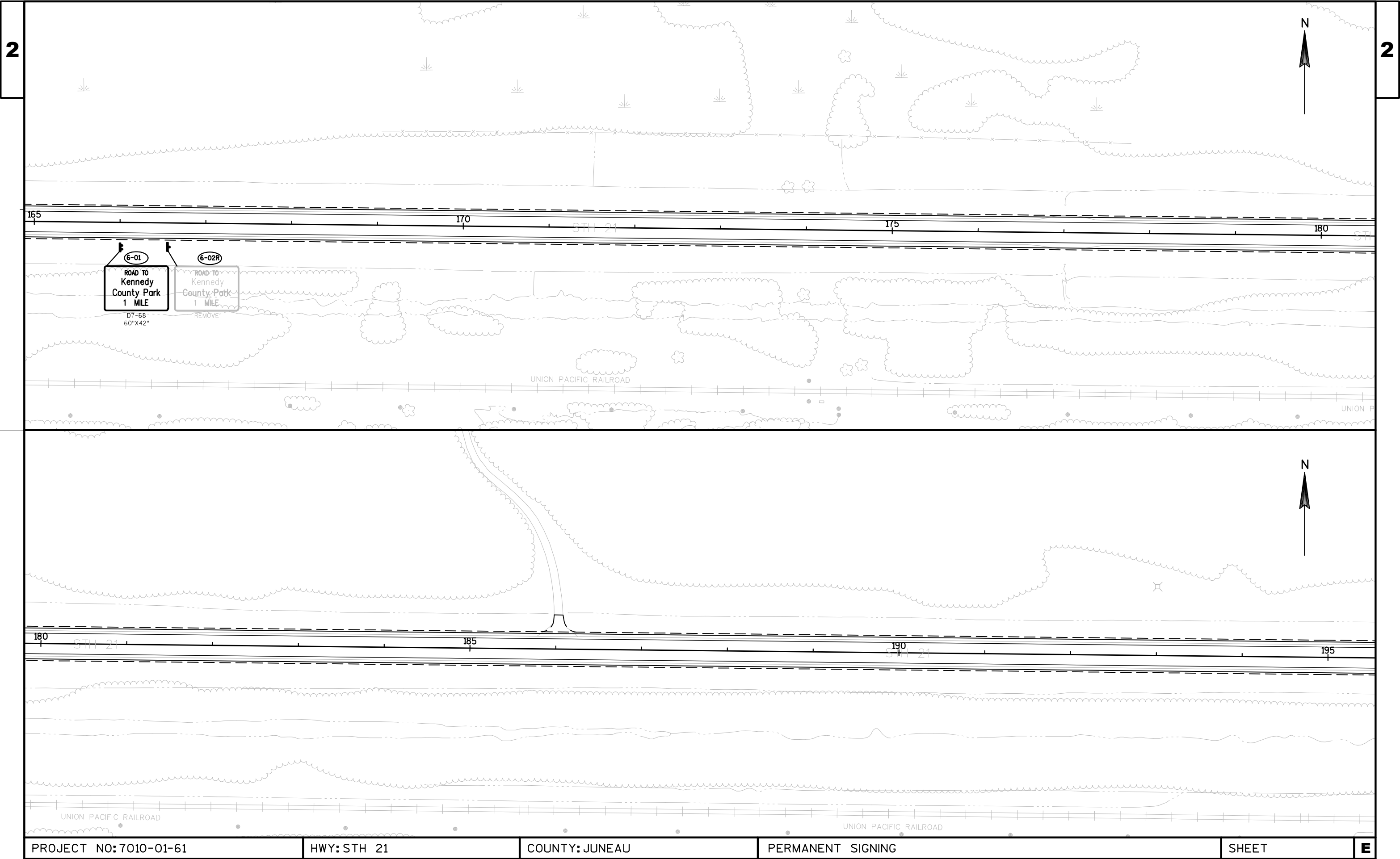
PLOT BY : MIKSHOWSKY, TRAVIS J

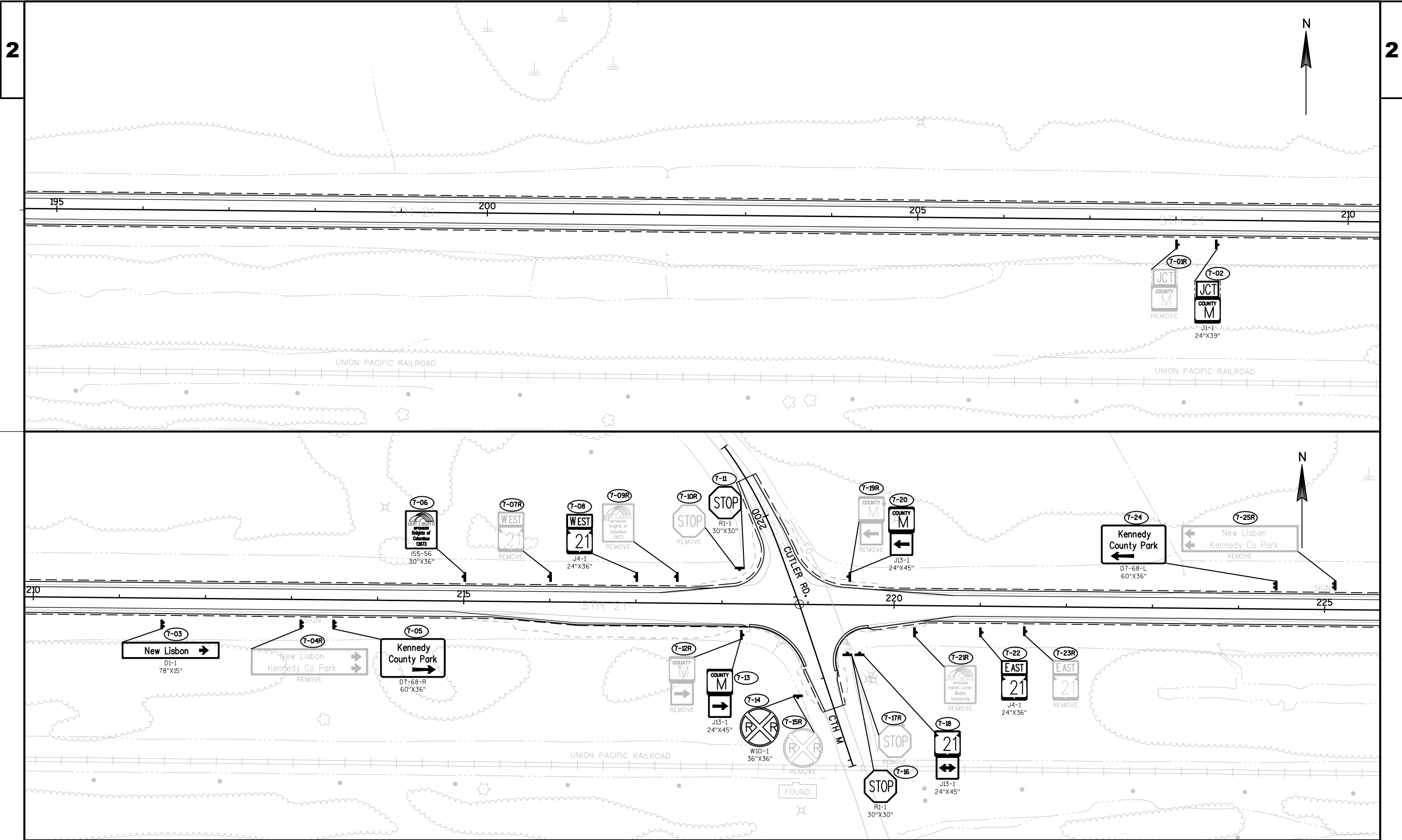
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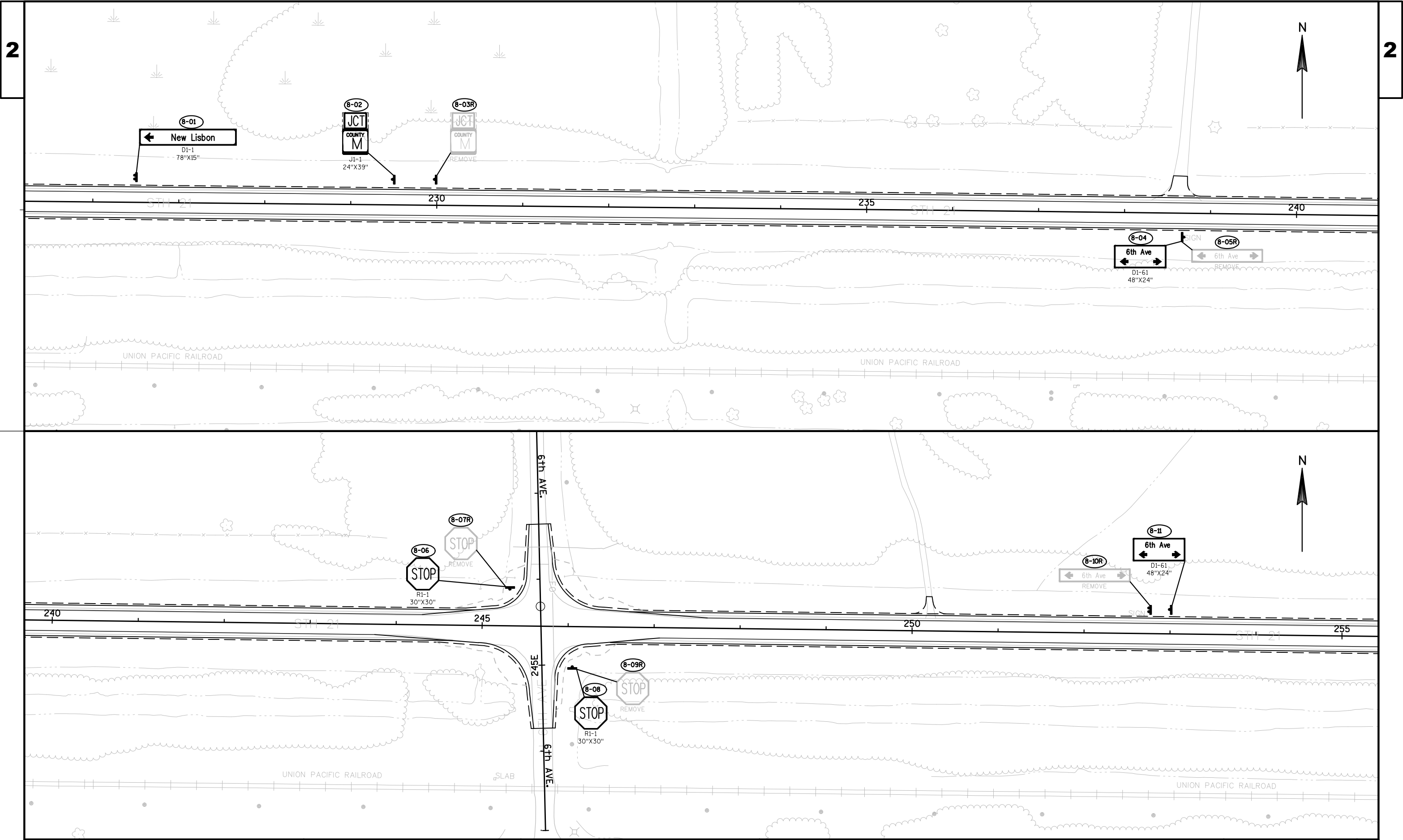
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WISDOT/CADDs SHEET 44









PROJECT NO: 7010-01-61

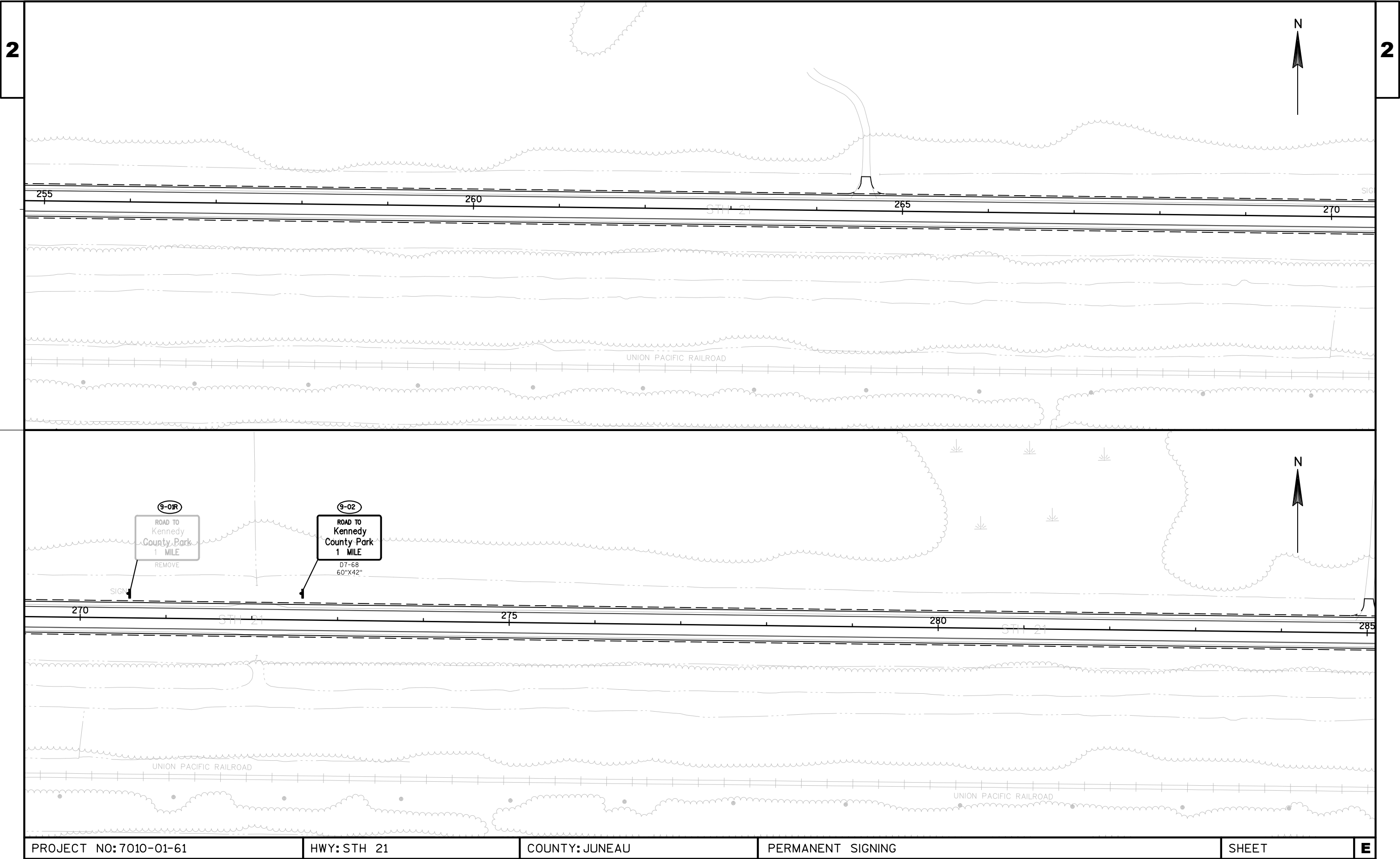
HWY: STH 21

COUNTY: JUNEAU

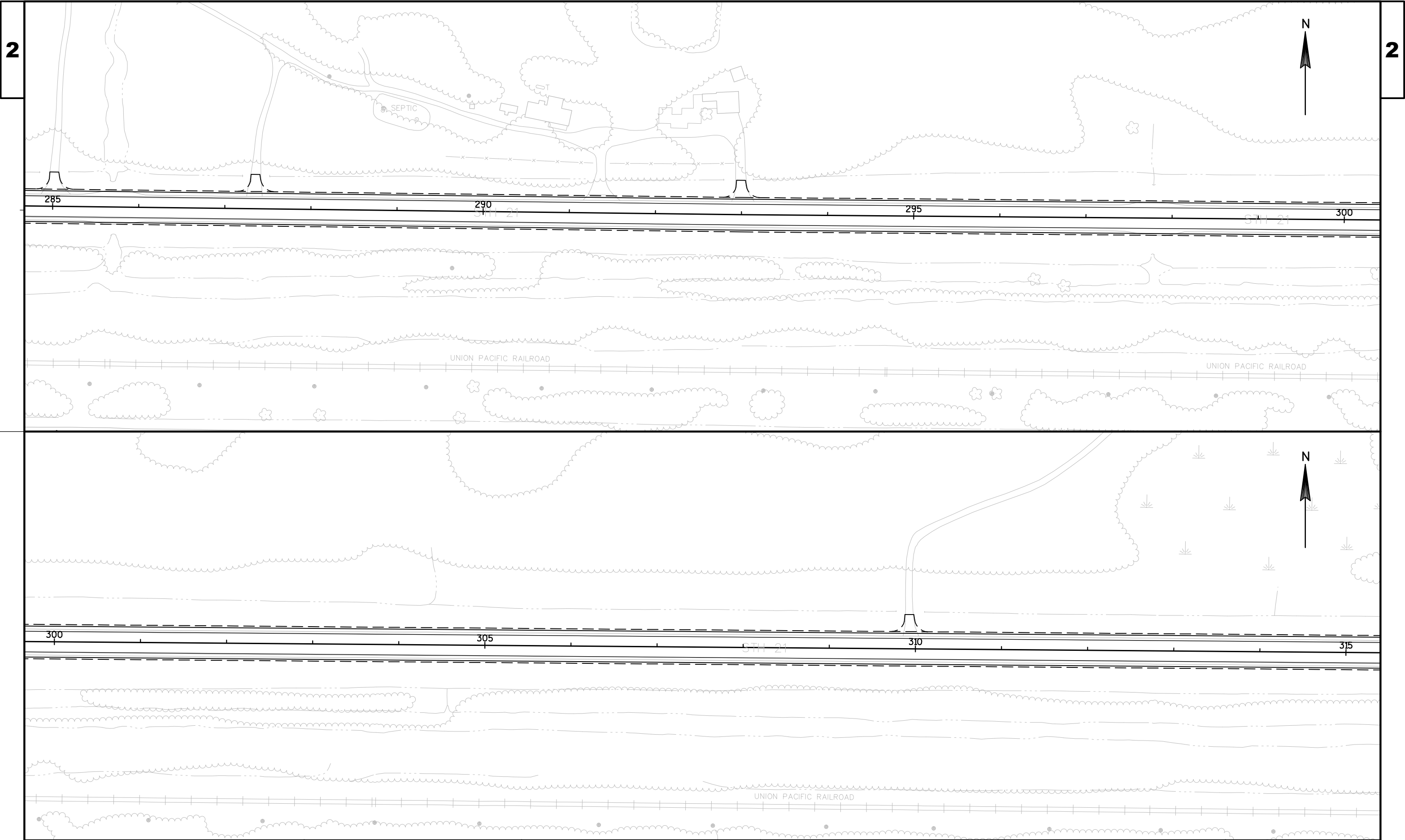
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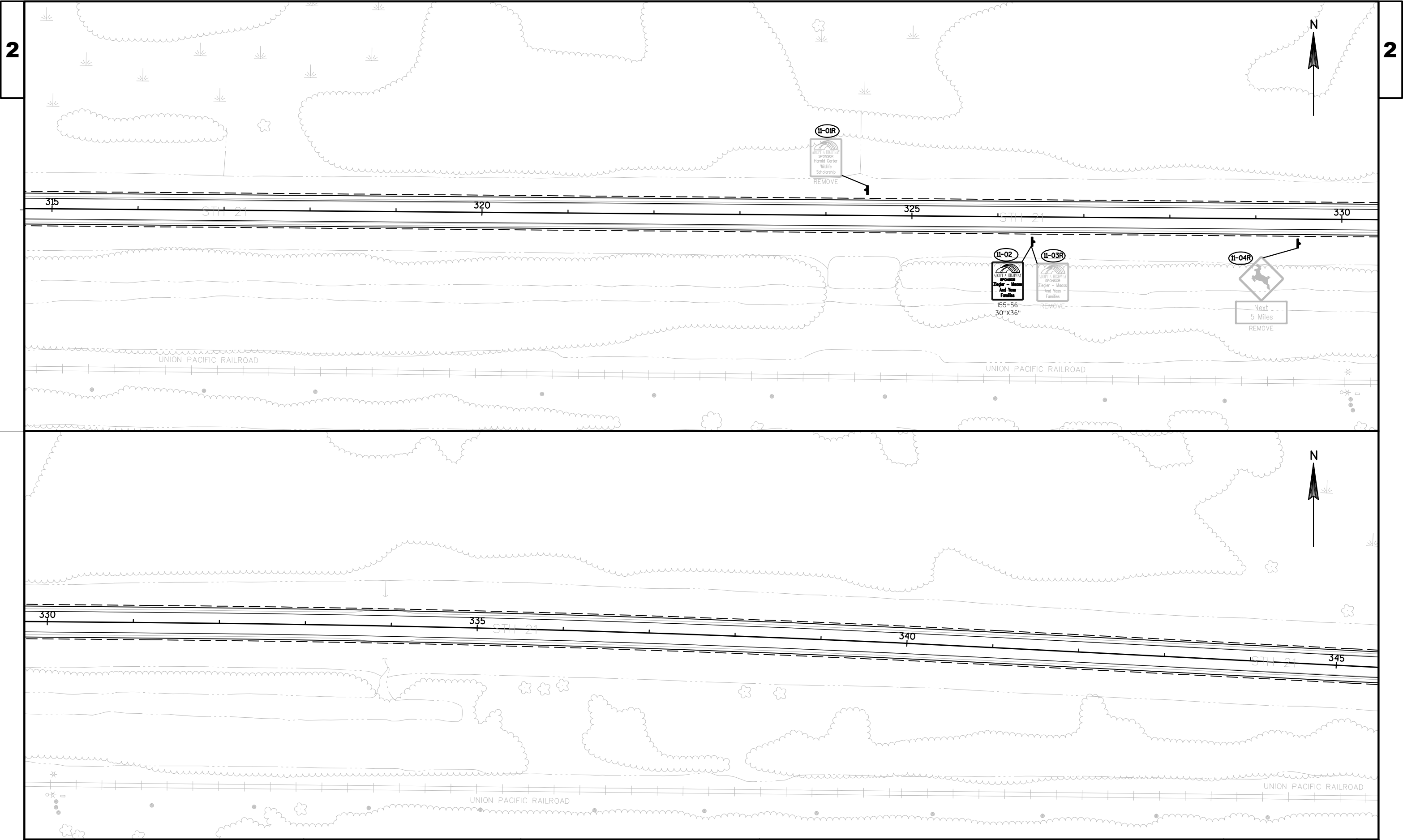
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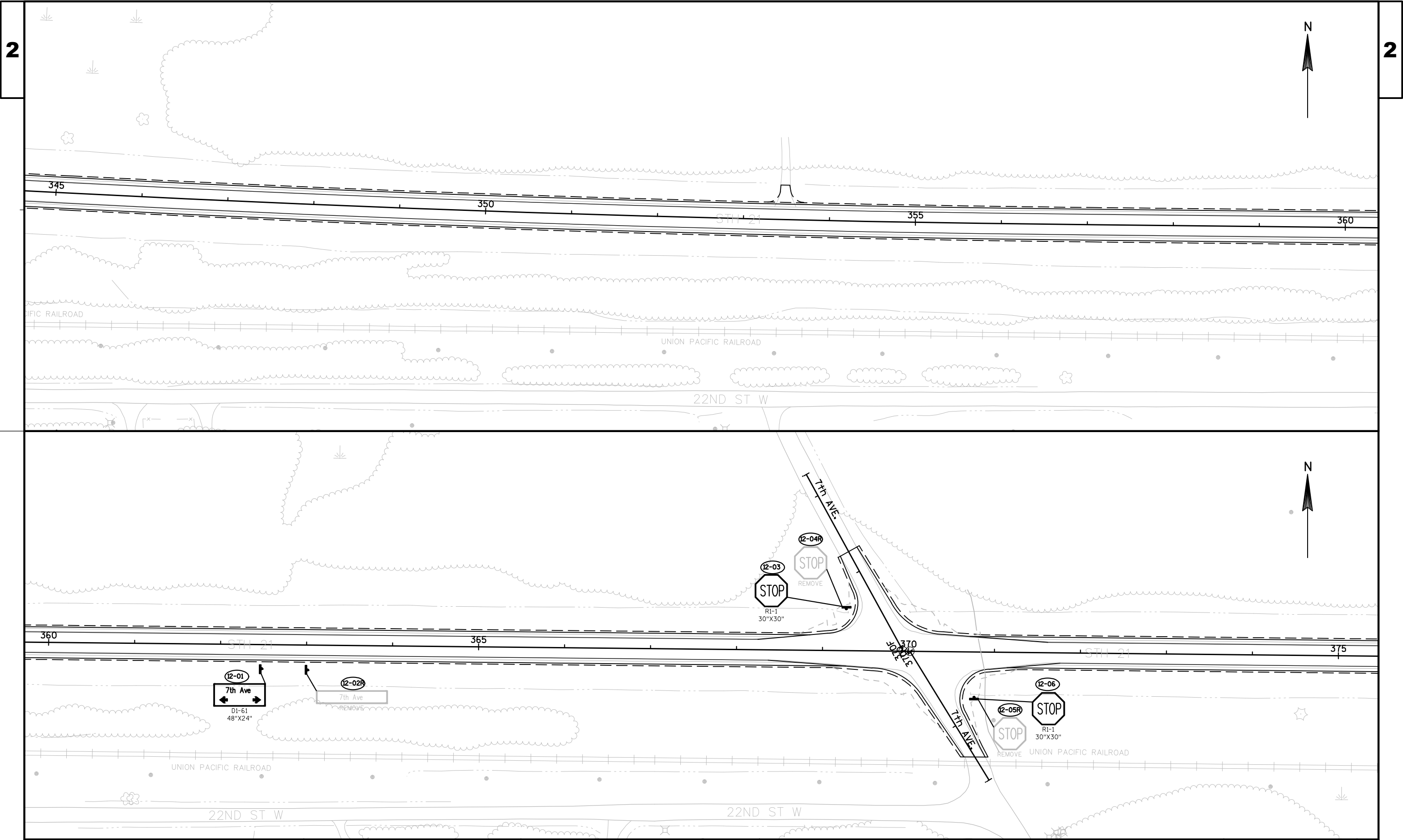
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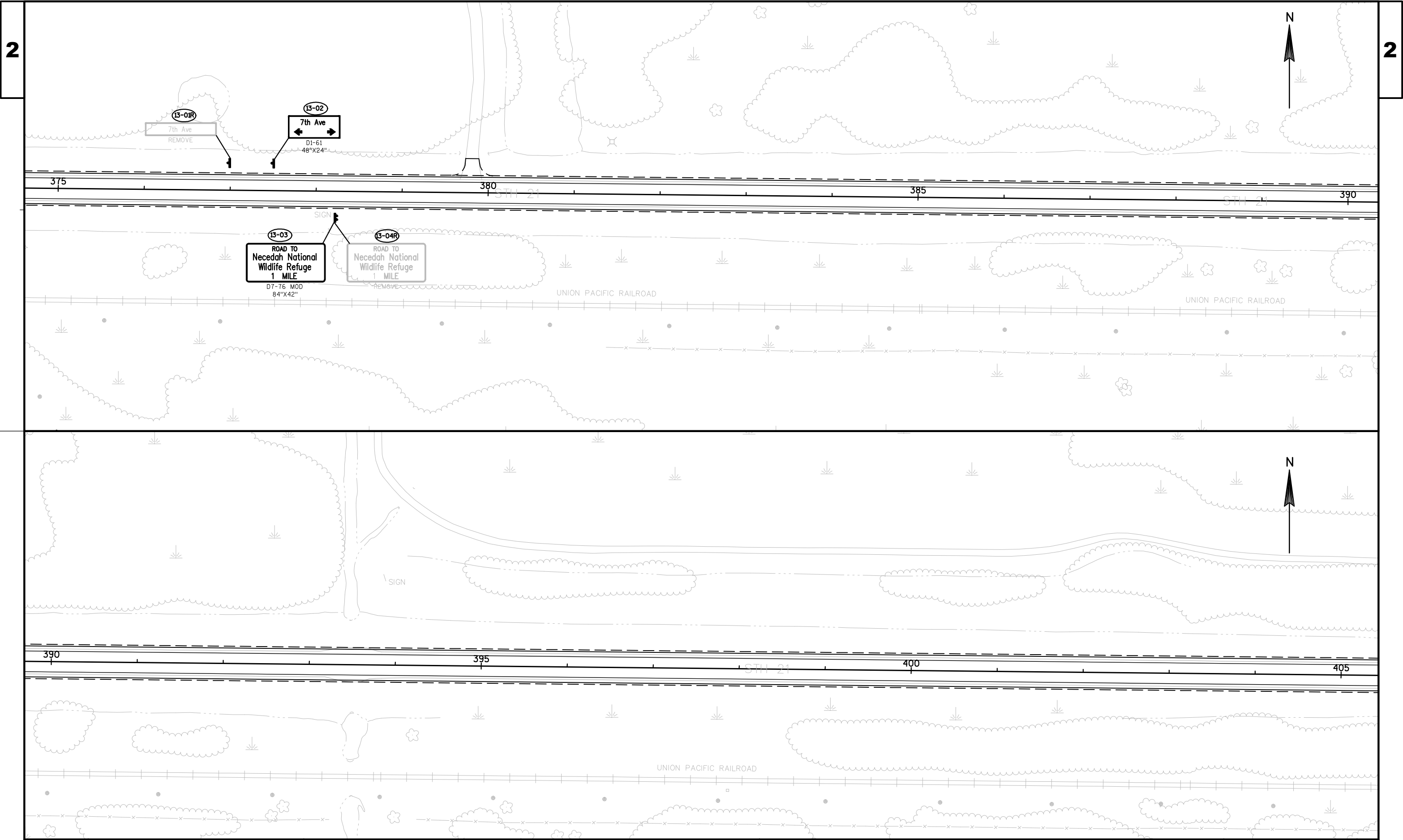


PROJECT NO: 7010-01-61	HWY: STH 21	COUNTY: JUNEAU	PERMANENT SIGNING	SHEET	E
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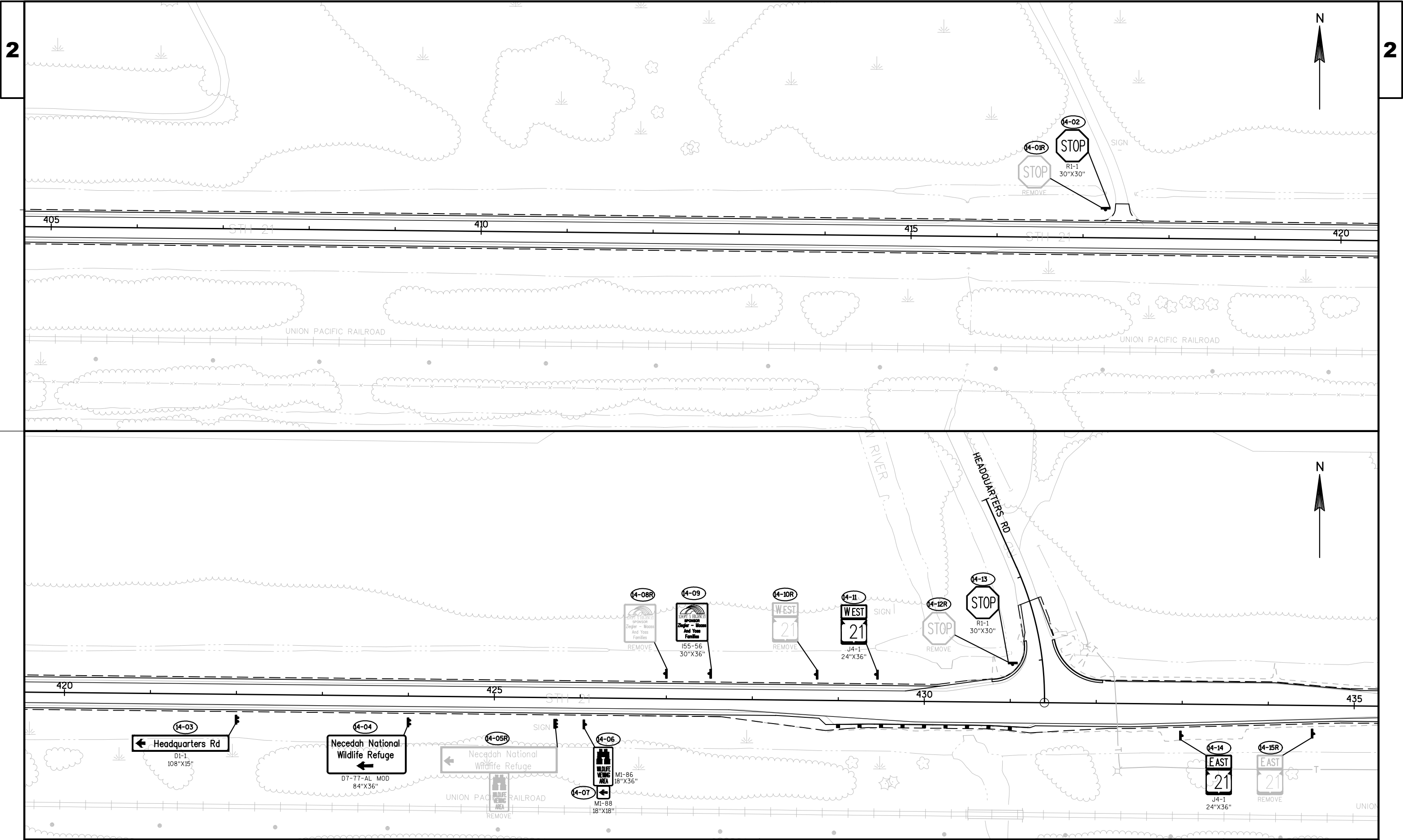


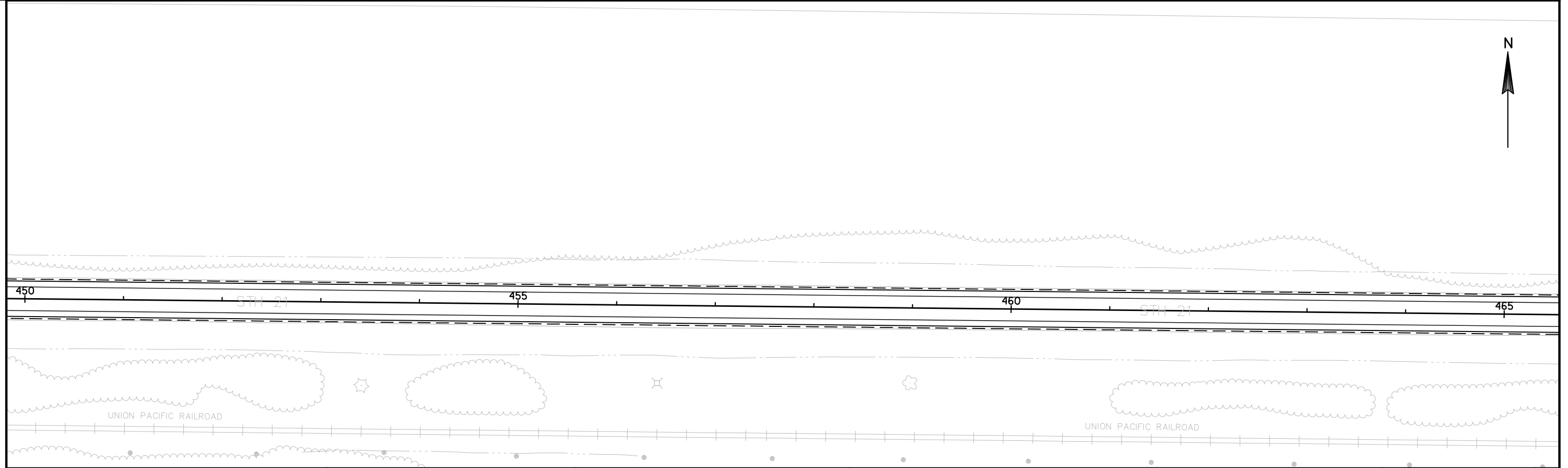
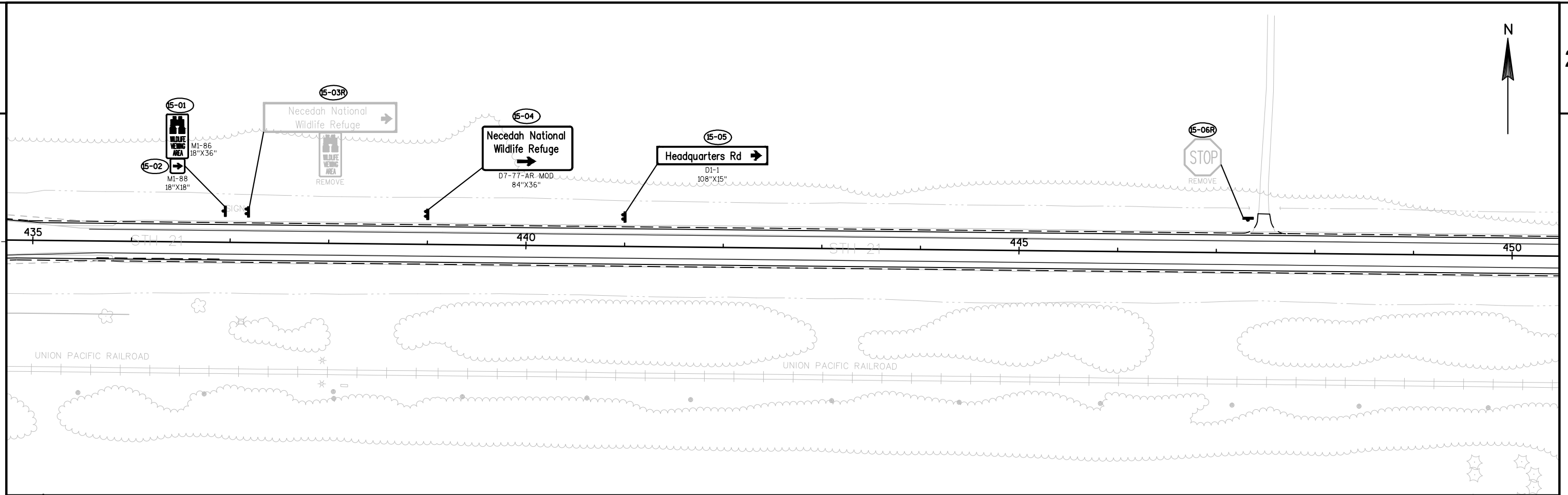




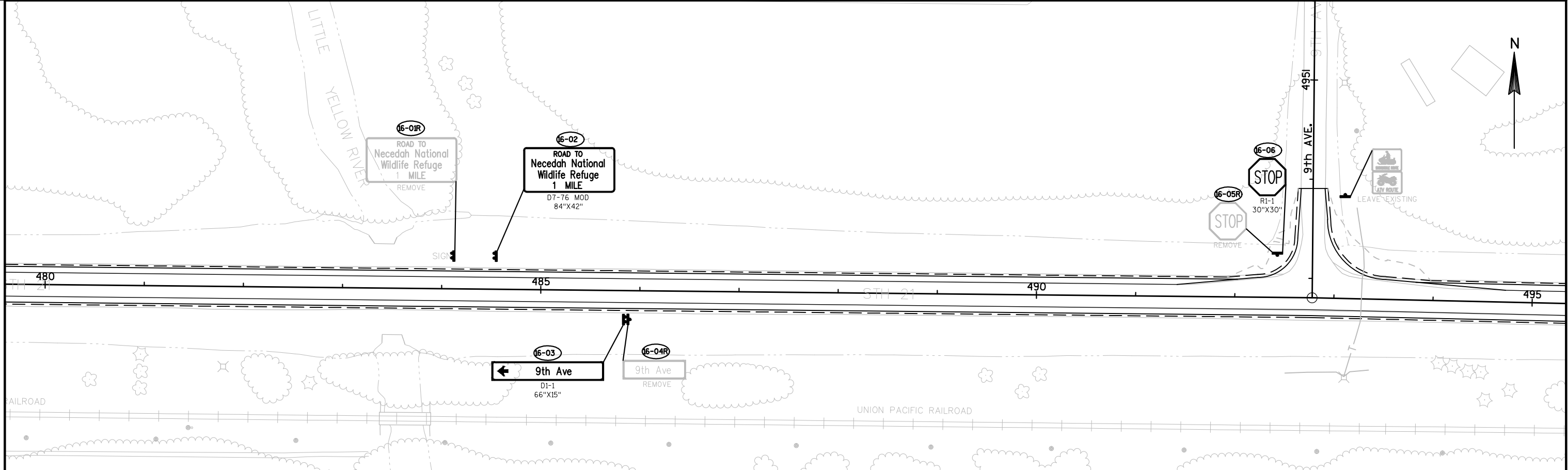
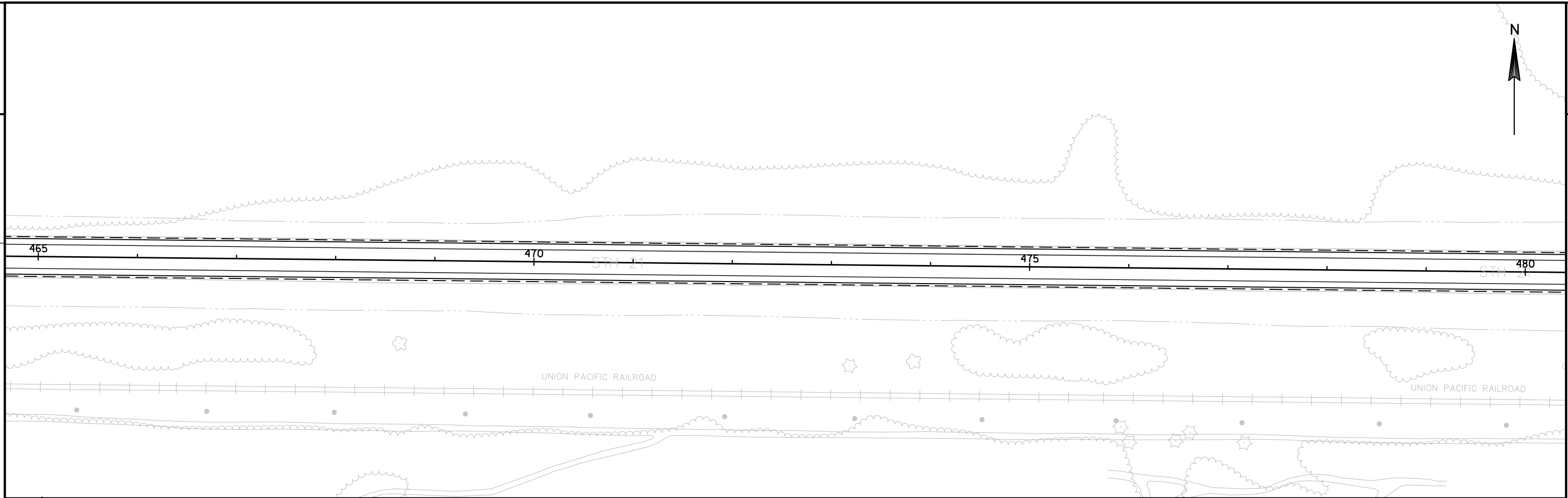


PROJECT NO: 7010-01-61	HWY: STH 21	COUNTY: JUNEAU	PERMANENT SIGNING	SHEET	E
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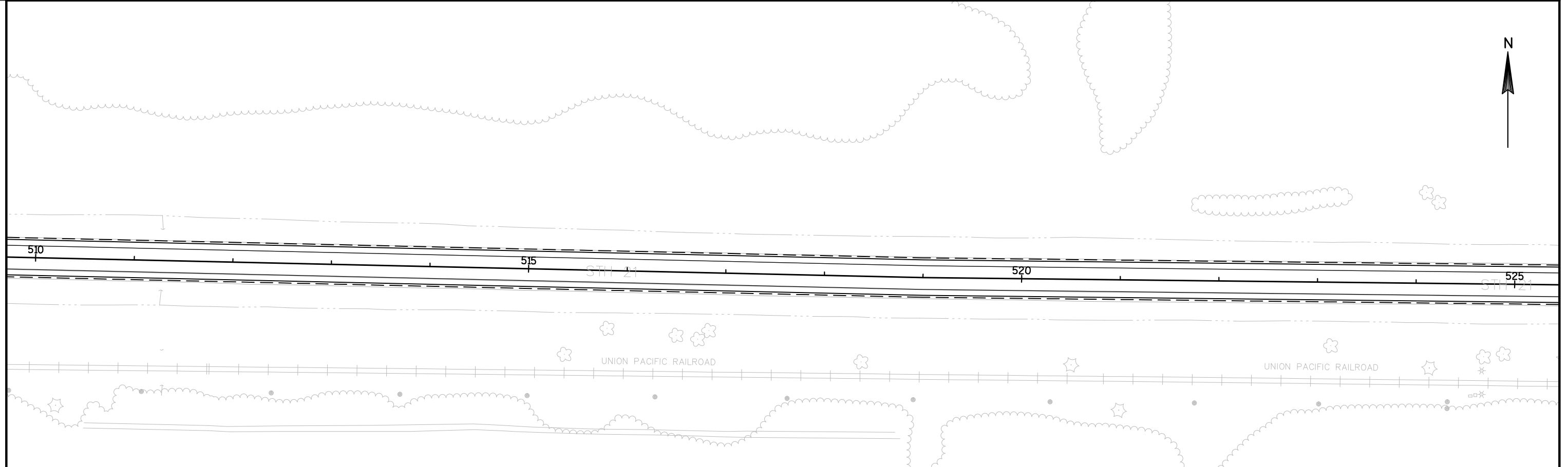
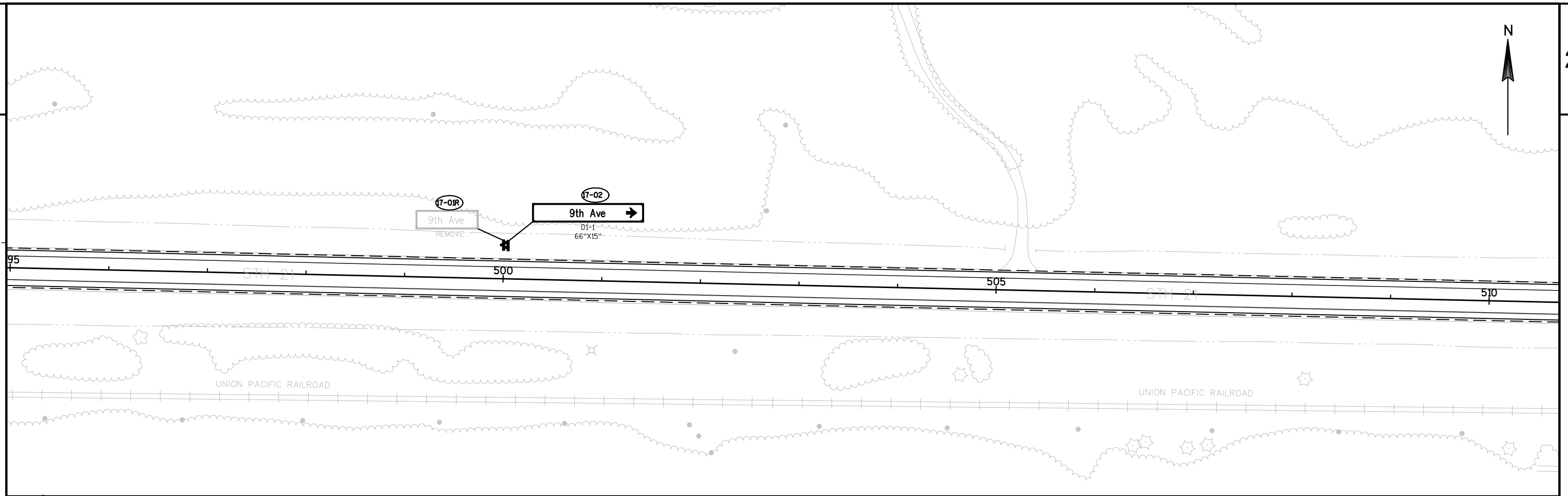
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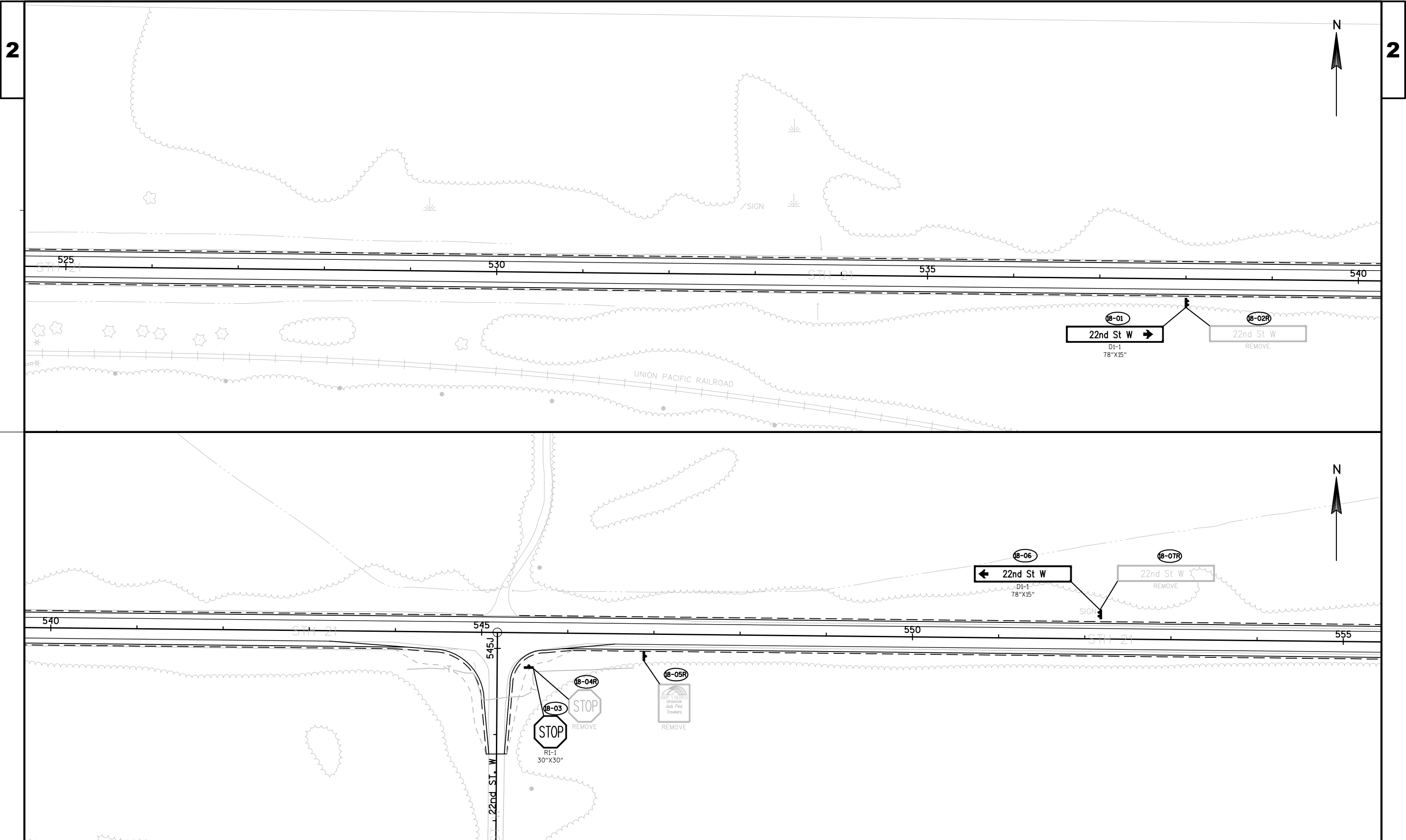
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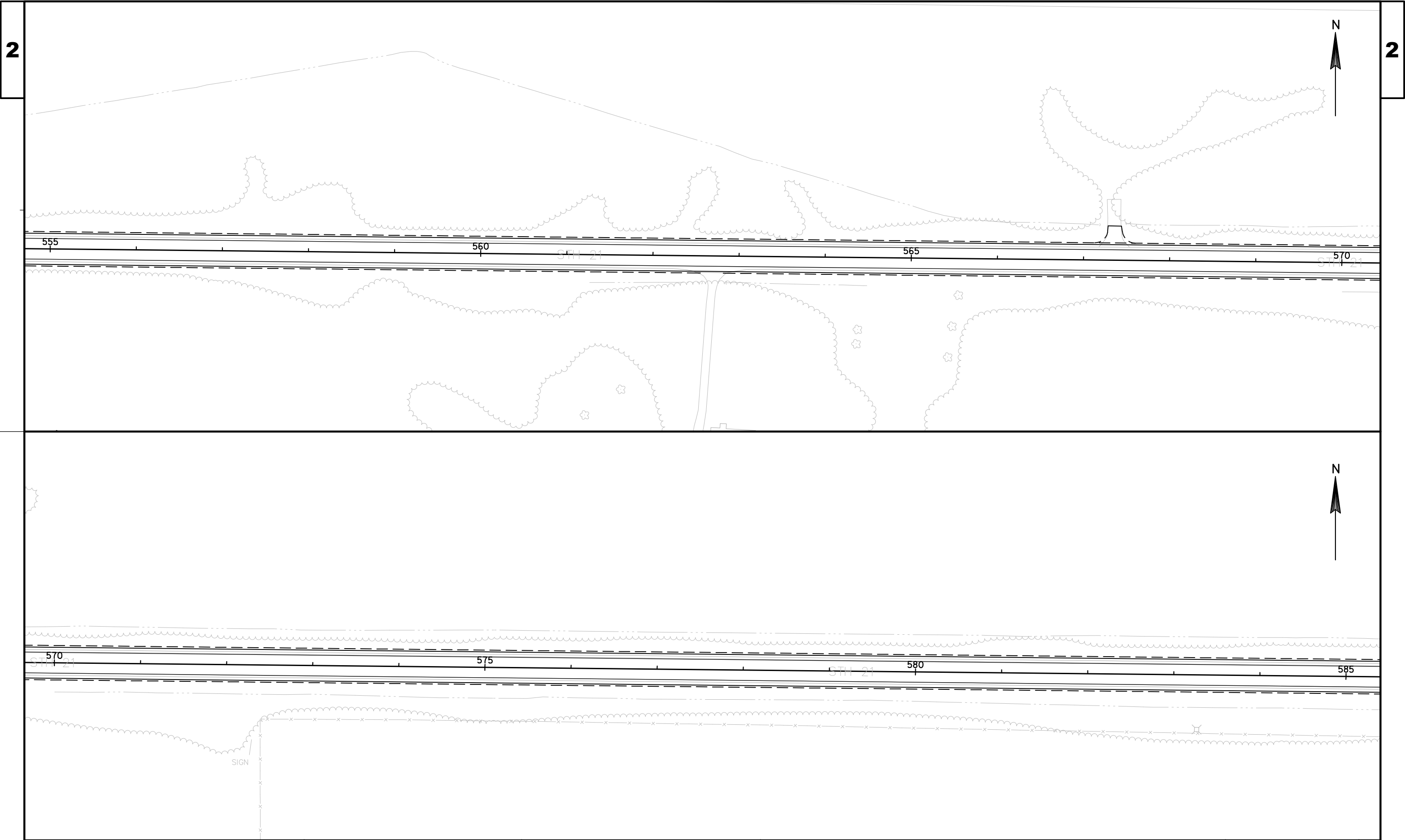
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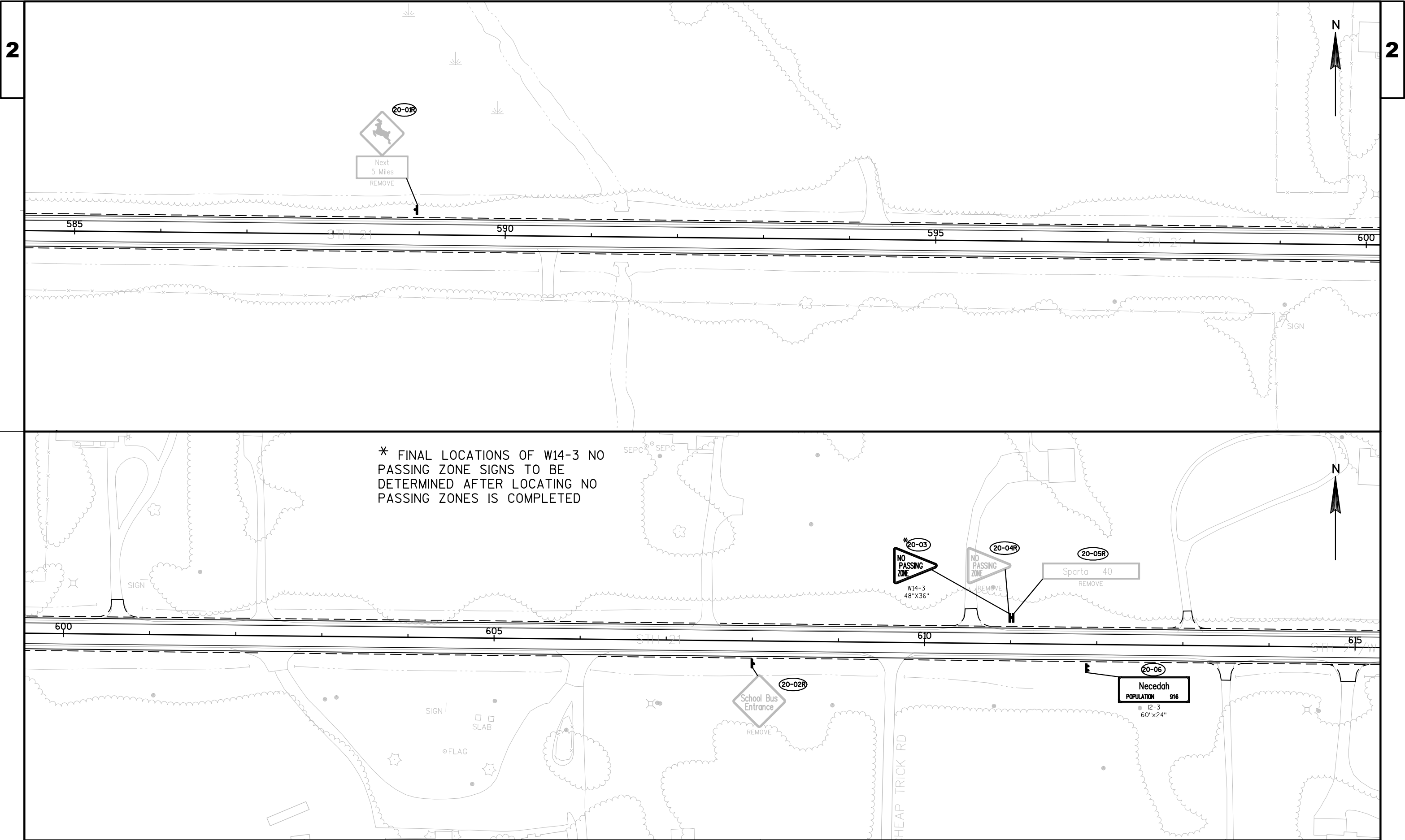
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PROJECT NO: 7010-01-61	HWY: STH 21	COUNTY: JUNEAU	PERMANENT SIGNING	SHEET	E
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PROJECT NO: 7010-01-61

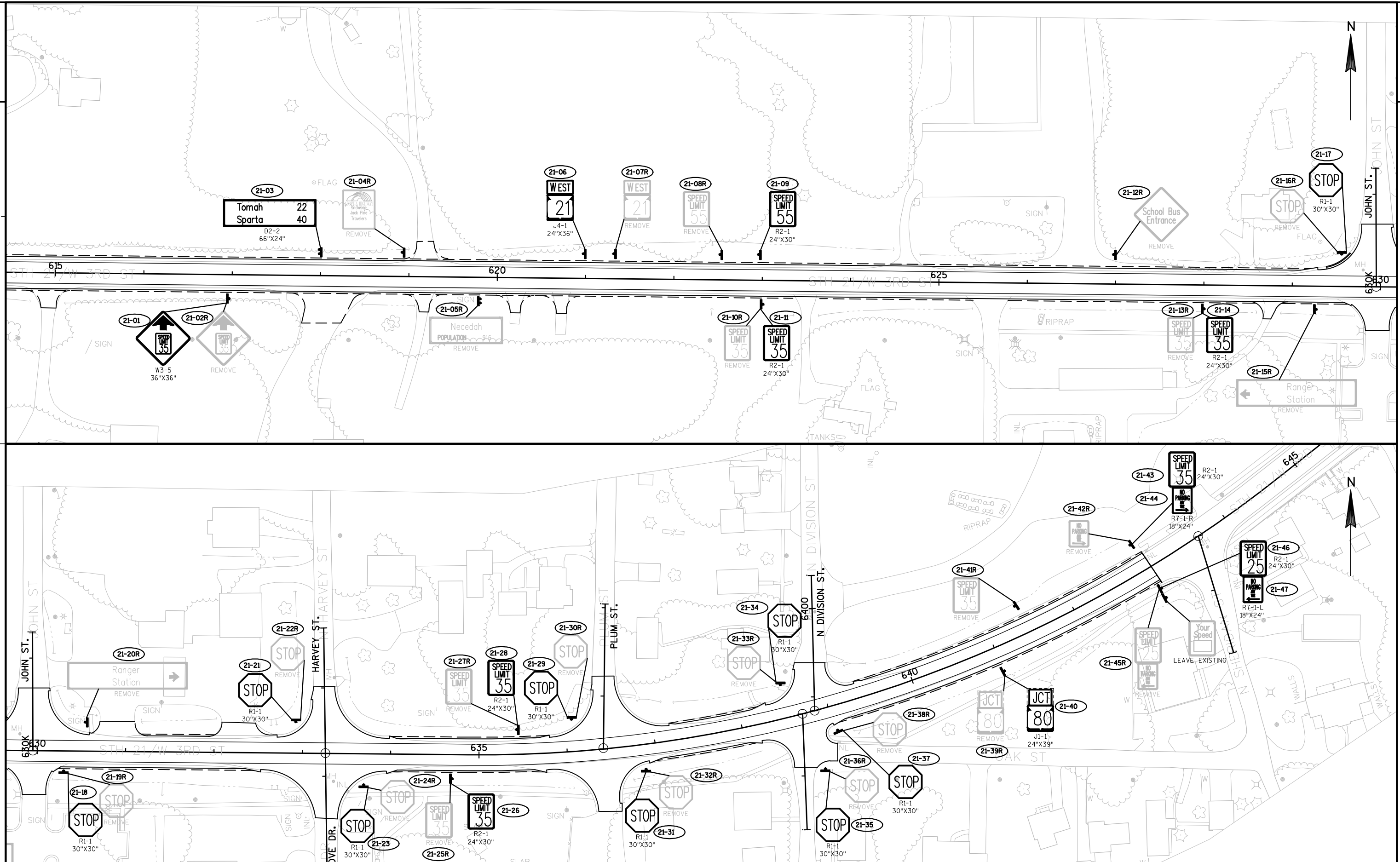
HWY: STH 21

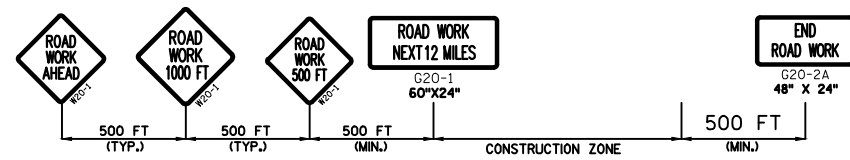
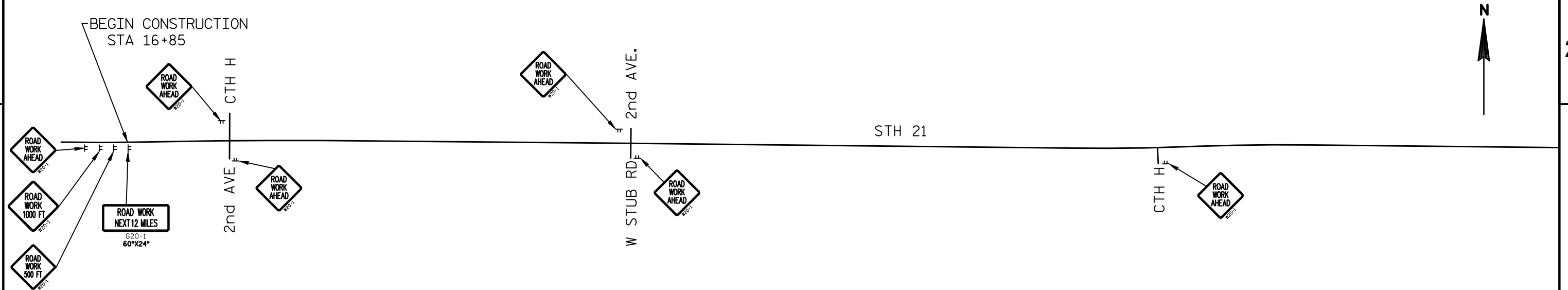
COUNTY: JUNEAU

PERMANENT SIGNING

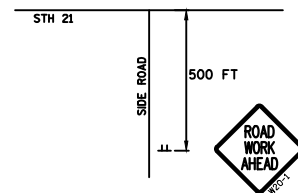
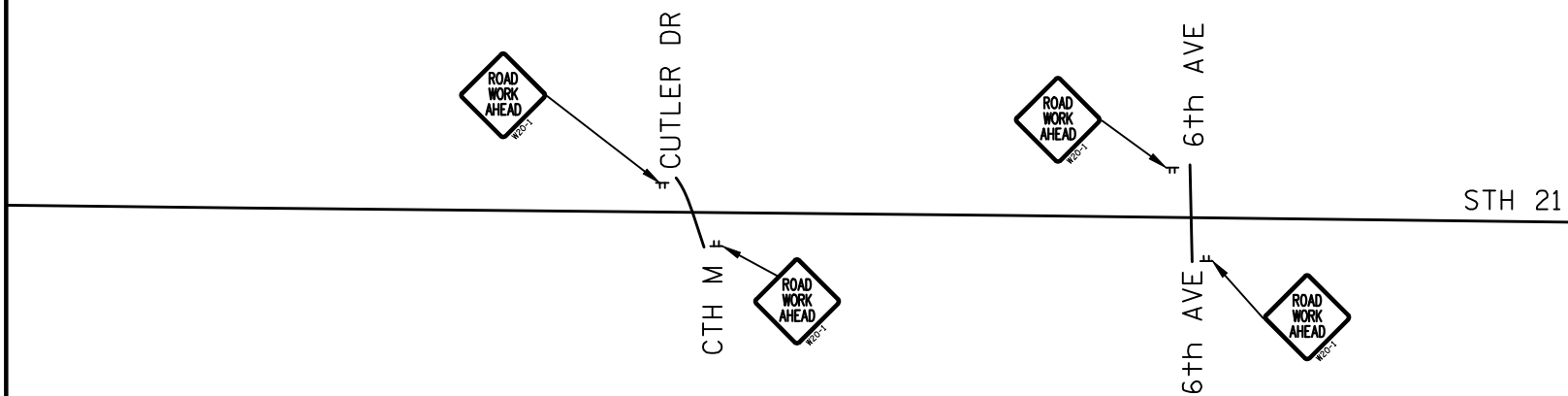
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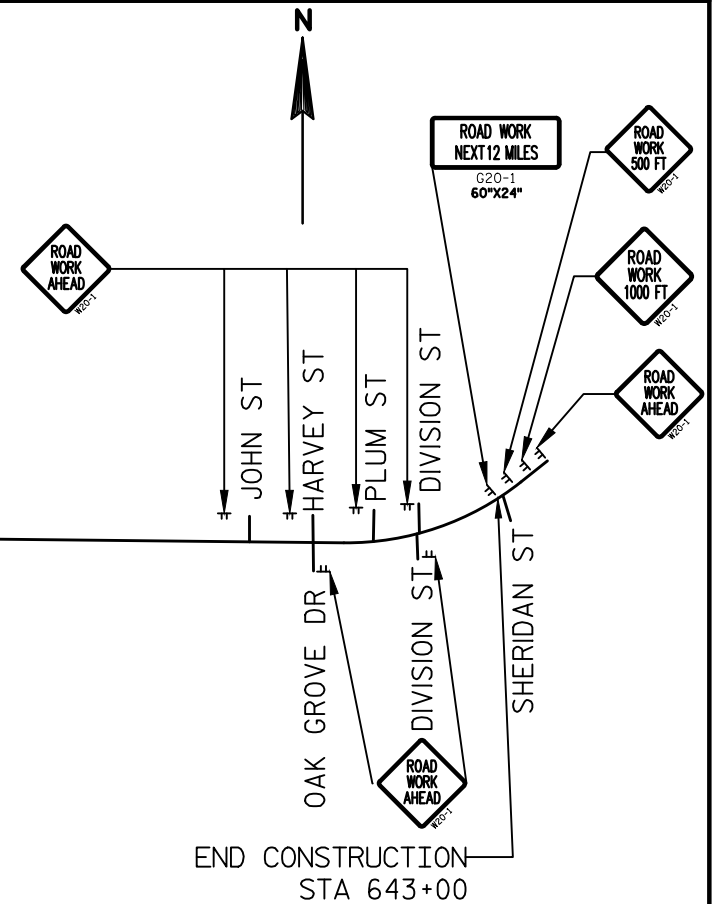
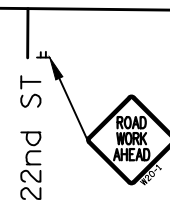
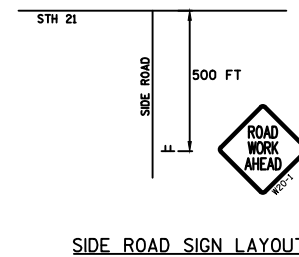
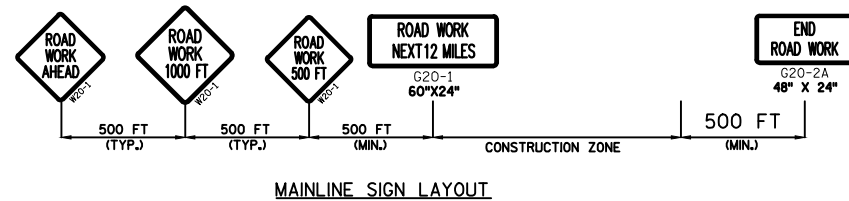
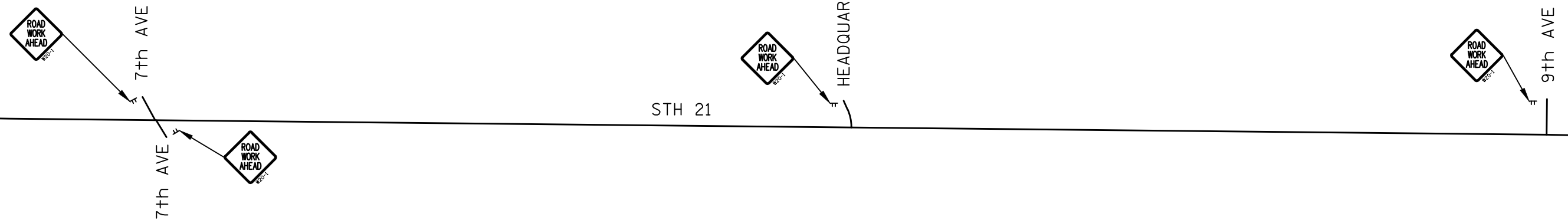
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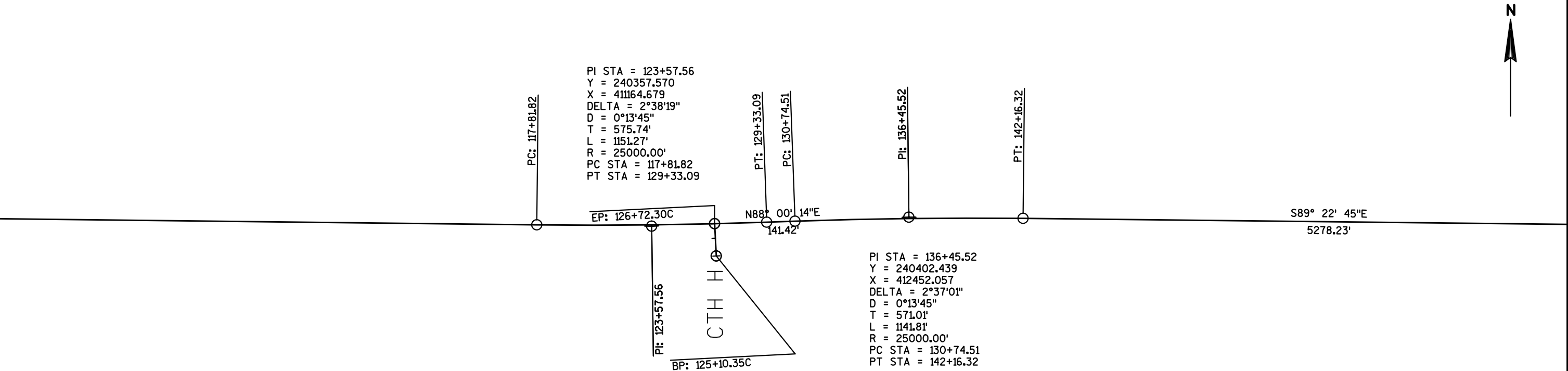
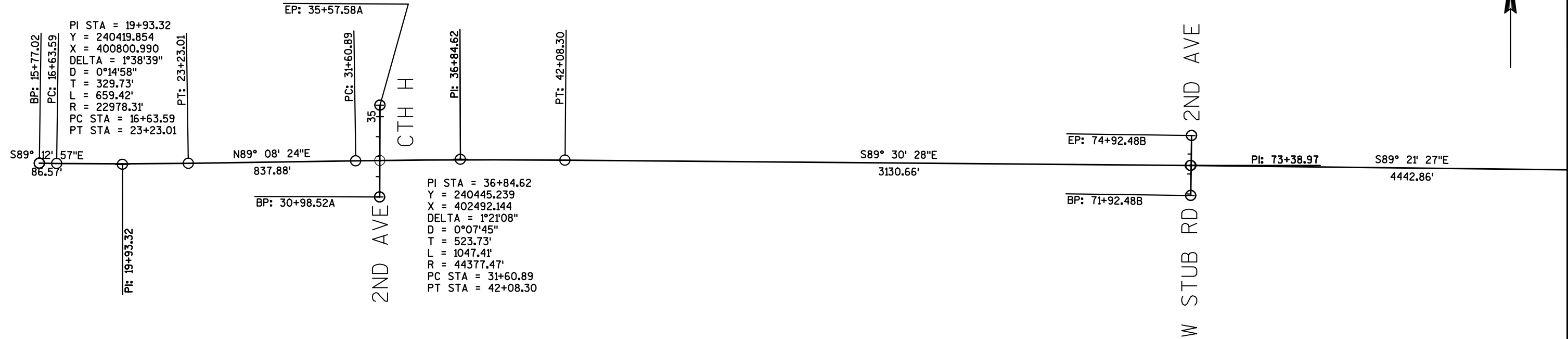


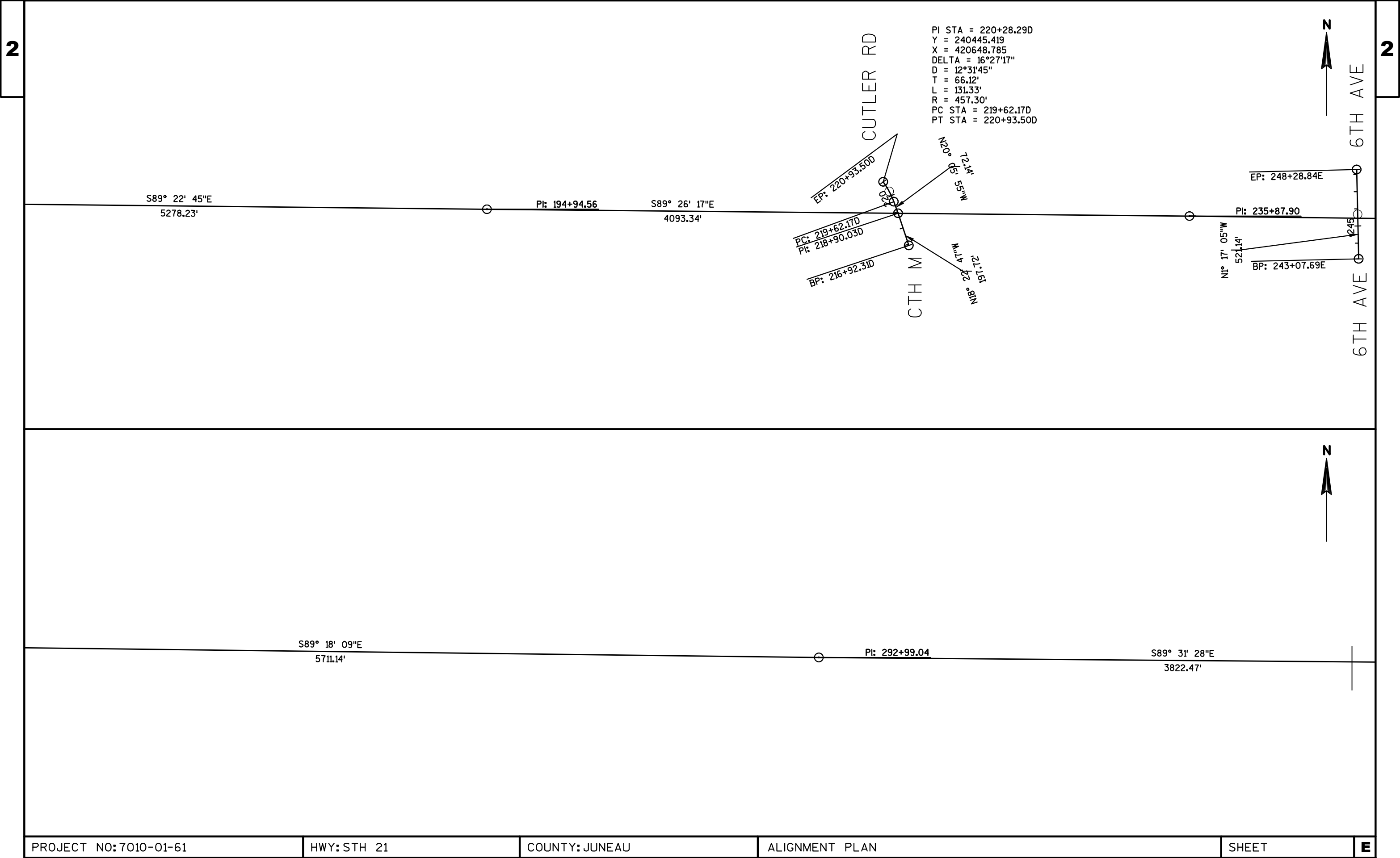


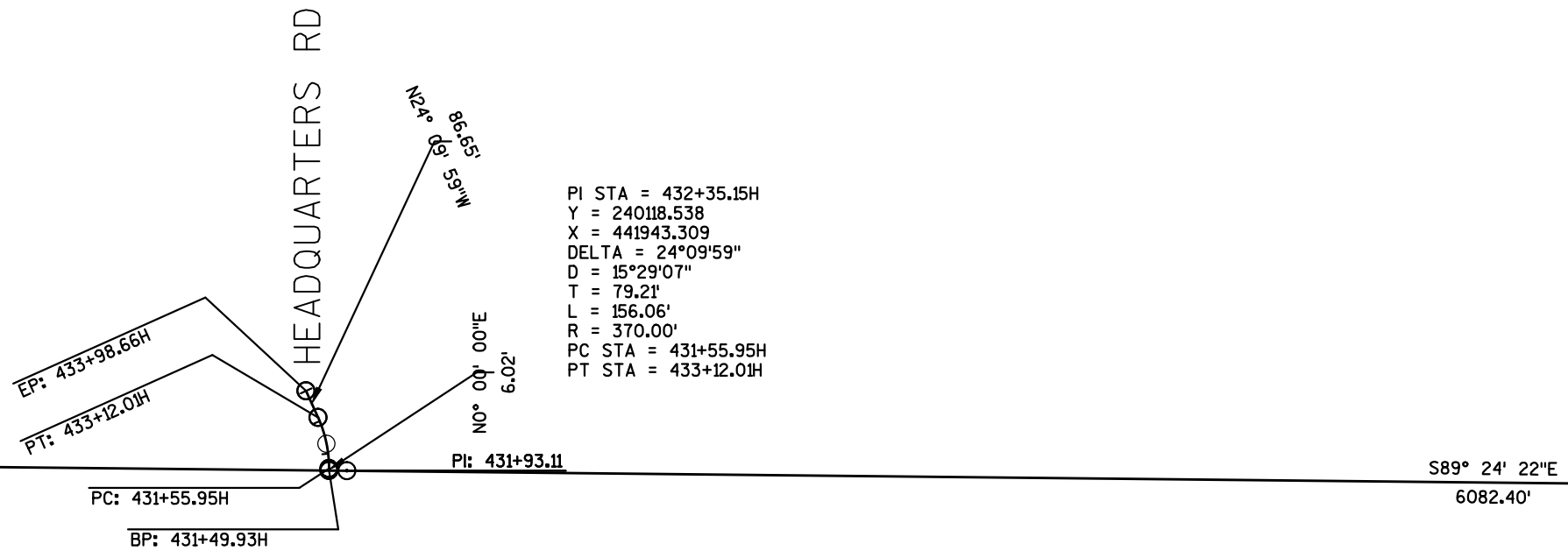
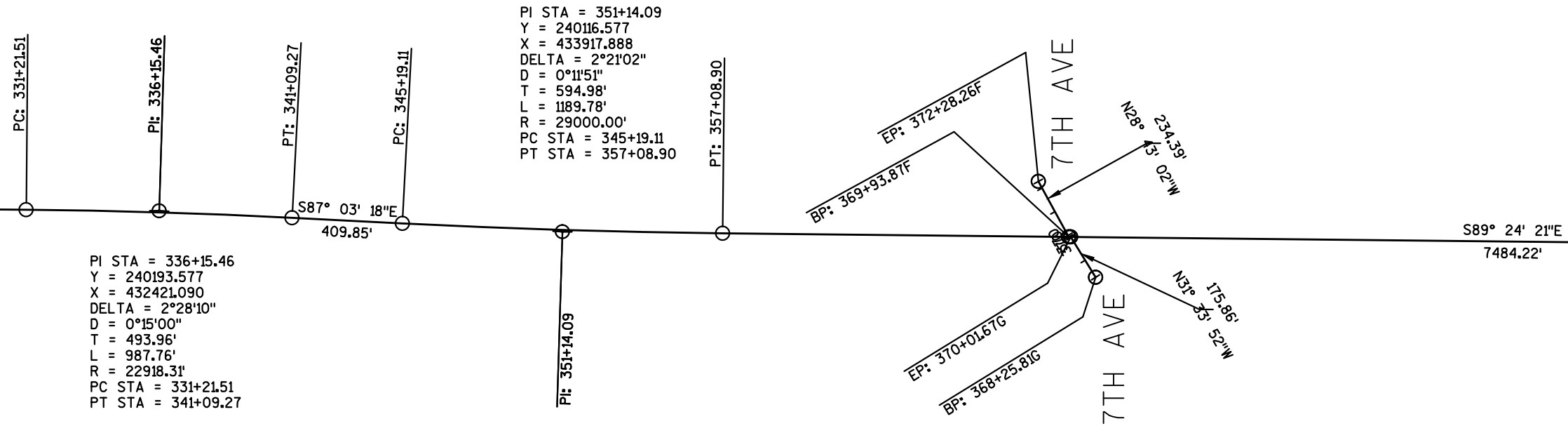
MAINLINE SIGN LAYOUT

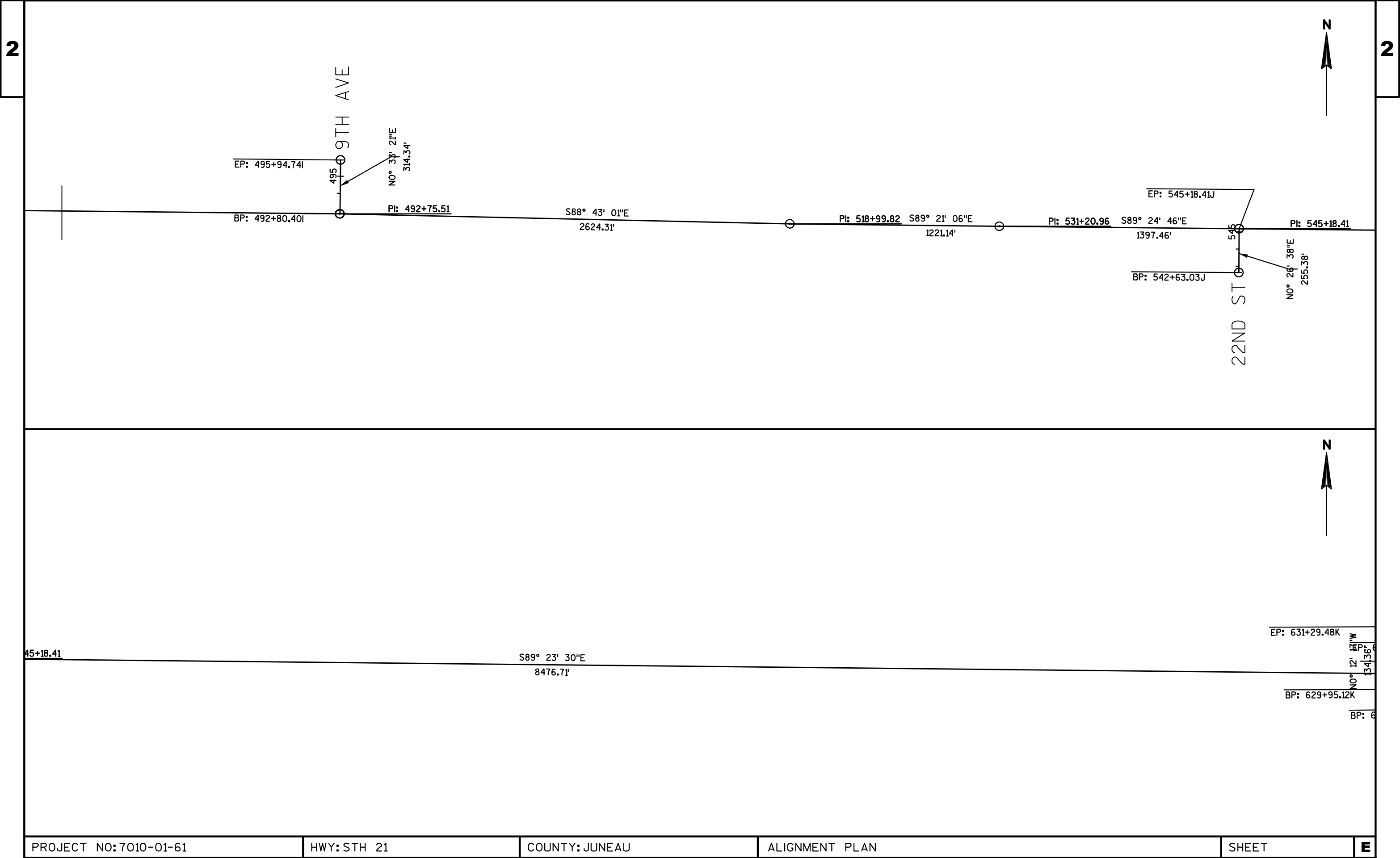
SIDE ROAD SIGN LAYOUT
PLACE SIGNS IN CONJUNCTION WITH EXISTING HIGHWAY SIGNS

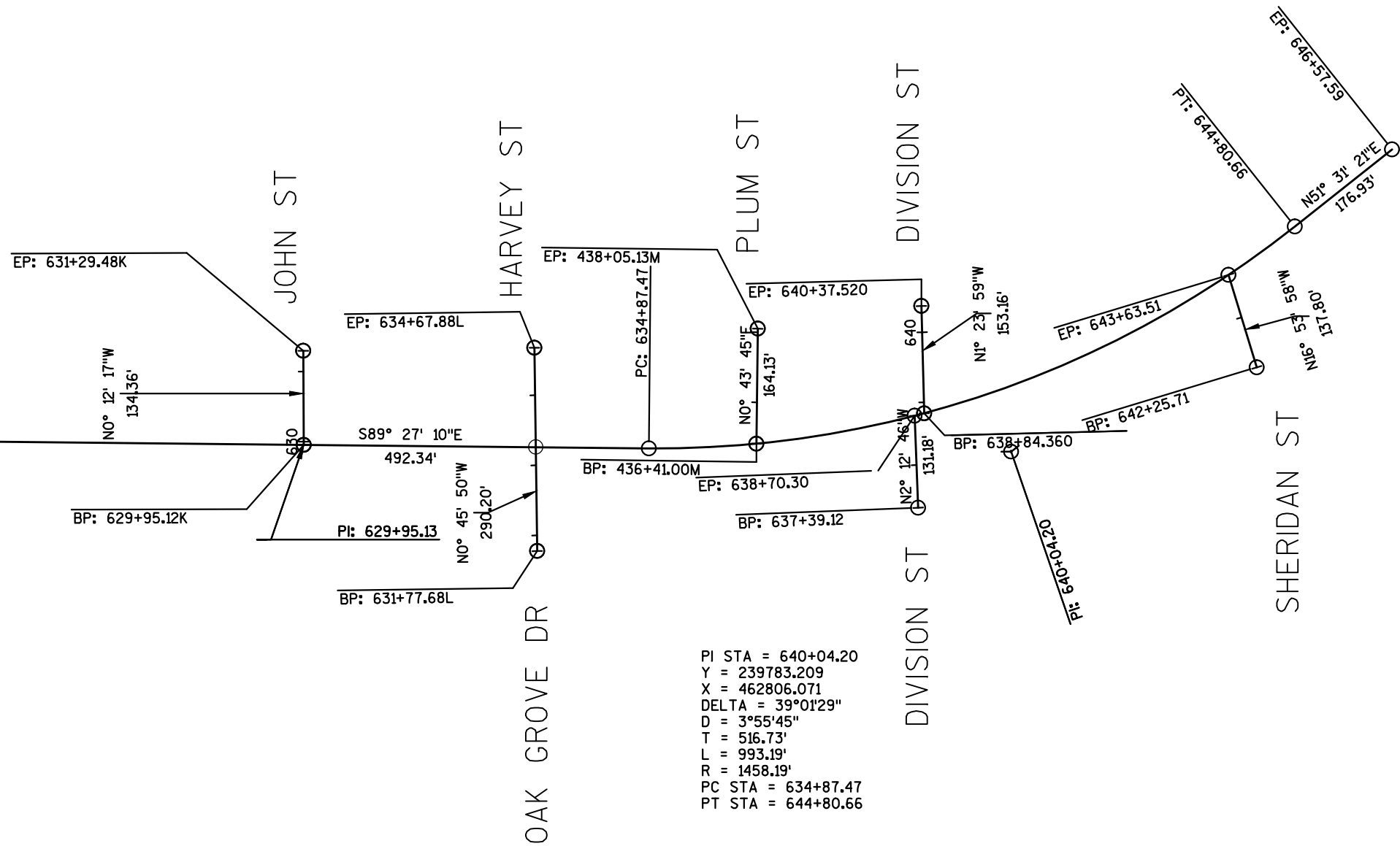


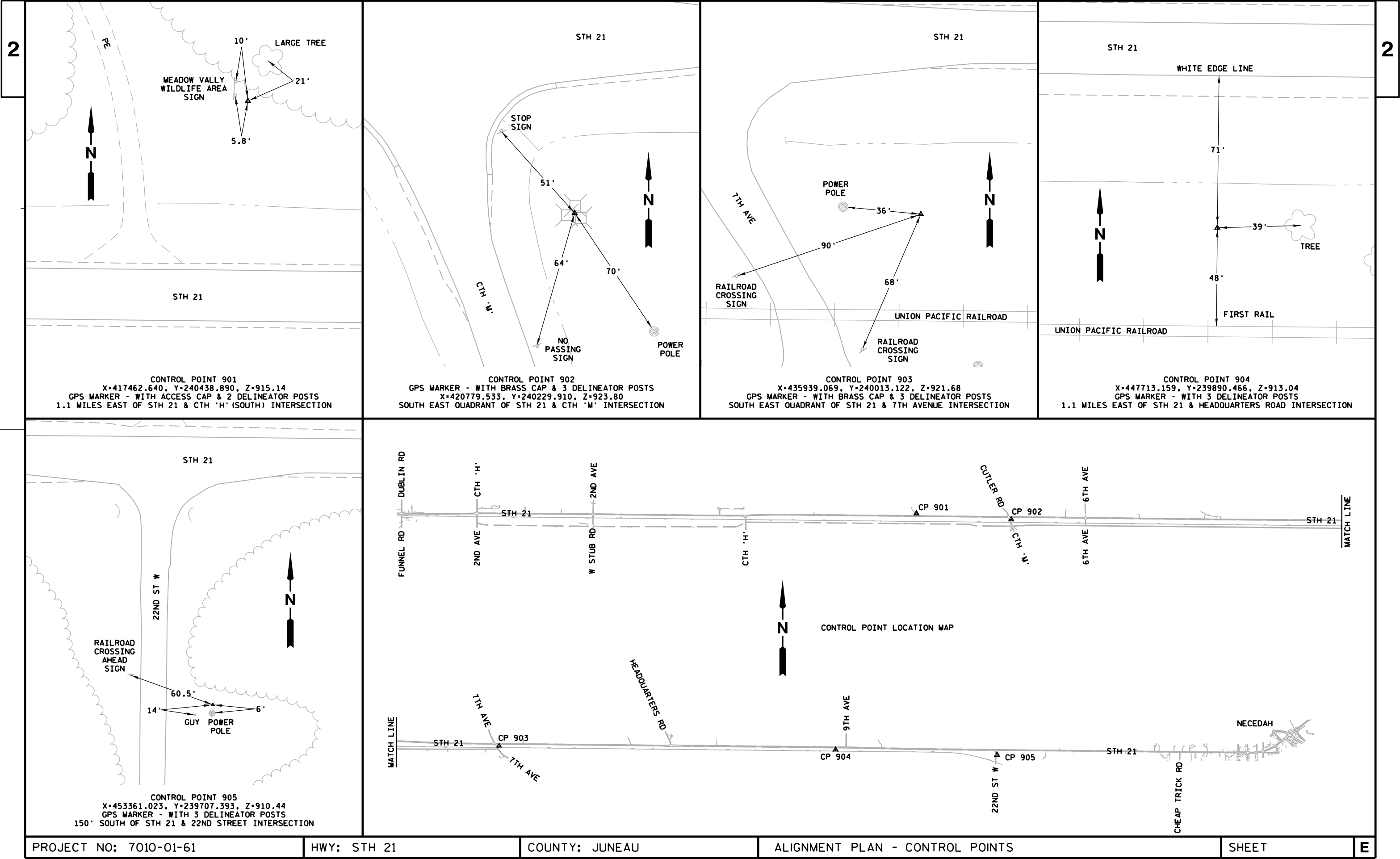












PROJECT NO: 7010-01-61

HWY: STH 21

COUNTY: JUNEAU

ALIGNMENT PLAN - CONTROL POINTS

SHEET

E

DATE 19FEB16		E S T I M A T E O F Q U A N T I T I E S			
LINE		7010-01-61			
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	203.0100	Removing Small Pipe Culverts	EACH	2.000	2.000
0020	204.0110	Removing Asphaltic Surface	SY	675.000	675.000
0030	204.0115	Removing Asphaltic Surface Butt Joints	SY	3,280.000	3,280.000
0040	204.0120	Removing Asphaltic Surface Milling	SY	217,100.000	217,100.000
0050	204.0150	Removing Curb & Gutter	LF	600.000	600.000
0060	204.0155	Removing Concrete Sidewalk	SY	28.000	28.000
0070	204.0165	Removing Guardrail	LF	225.000	225.000
0080	204.0185	Removing Masonry	CY	4.000	4.000
0090	205.9015.S	Grading Shaping and Finishing	LS	1.000	1.000
0100	205.9015.S	Intersection (location) 01. CTH H North	LS	1.000	1.000
		Intersection (location) 02. 2nd Ave. South			
0110	205.9015.S	Grading Shaping and Finishing	LS	1.000	1.000
0120	205.9015.S	Intersection (location) 03. 2nd Ave. North	LS	1.000	1.000
		Intersection (location) 04. W Stub Rd. South			
0130	205.9015.S	Grading Shaping and Finishing	LS	1.000	1.000
0140	205.9015.S	Intersection (location) 05. CTH H South	LS	1.000	1.000
		Intersection (location) 06. Cutler Rd. North			
0150	205.9015.S	Grading Shaping and Finishing	LS	1.000	1.000
0160	205.9015.S	Intersection (location) 07. CTH M South	LS	1.000	1.000
		Intersection (location) 08. 6th Ave. North			
0170	205.9015.S	Grading Shaping and Finishing	LS	1.000	1.000
0180	205.9015.S	Intersection (location) 09. 6th Ave. South	LS	1.000	1.000
		Intersection (location) 10. 7th Ave. North			
0190	205.9015.S	Grading Shaping and Finishing	LS	1.000	1.000
0200	205.9015.S	Intersection (location) 11. 7th Ave. South	LS	1.000	1.000
		Intersection (location) 12. Headquarters Rd.			
0210	205.9015.S	Grading Shaping and Finishing	LS	1.000	1.000
0220	205.9015.S	Intersection (location) 13. 9th Ave. North	LS	1.000	1.000
		Intersection (location) 14. 22nd St. West			
0230	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 7010-01-61	LS	1.000	1.000
0240	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	1,256.000	1,256.000
0250	213.0100	Finishing Roadway (project) 01. 7010-01-61	EACH	1.000	1.000
0260	305.0110	Base Aggregate Dense 3/4-Inch	TON	21,030.000	21,030.000
0270	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	1,095.000	1,095.000
0280	330.0100	Mill and Relay	SY	205,180.000	205,180.000
0290	374.1010.S	QMP Mill and Relay Compaction	SY	205,180.000	205,180.000
0300	440.4410	Incentive IRI Ride	DOL	47,500.000	47,500.000

DATE 19FEB16		E S T I M A T E O F Q U A N T I T I E S			
LINE				7010-01-61	
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0310	455.0605	Tack Coat	GAL	6,730.000	6,730.000
0320	460.2000	Incentive Density HMA Pavement	DOL	34,970.000	34,970.000
0330	460.4110.S	Reheating HMA Pavement Longitudinal Joints	LF	62,703.000	62,703.000
0340	460.6223	HMA Pavement 3 MT 58-28 S	TON	30,290.000	30,290.000
0350	460.6224	HMA Pavement 4 MT 58-28 S	TON	24,375.000	24,375.000
0360	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	85.000	85.000
0370	465.0315	Asphaltic Flumes	SY	110.000	110.000
0380	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	109,729.000	109,729.000
0390	465.0475	Asphalt Center Line Rumble Strips 2-lane Rural	LF	54,695.000	54,695.000
0400	521.1030	Apron Endwalls for Culvert Pipe Steel 30-Inch	EACH	2.000	2.000
0410	525.0118	Culvert Pipe Corrugated Aluminum 18-Inch	LF	56.000	56.000
0420	525.0124	Culvert Pipe Corrugated Aluminum 24-Inch	LF	35.000	35.000
0430	525.0130	Culvert Pipe Corrugated Aluminum 30-Inch	LF	25.000	25.000
0440	525.0136	Culvert Pipe Corrugated Aluminum 36-Inch	LF	23.000	23.000
0450	525.0318	Aluminum Apron Endwalls for Aluminum Culvert Pipe 18-Inch	EACH	2.000	2.000
0460	525.0324	Aluminum Apron Endwalls for Aluminum Culvert Pipe 24-Inch	EACH	8.000	8.000
0470	525.0330	Aluminum Apron Endwalls for Aluminum Culvert Pipe 30-Inch	EACH	6.000	6.000
0480	525.0336	Aluminum Apron Endwalls for Aluminum Culvert Pipe 36-Inch	EACH	12.000	12.000
0490	525.0372	Aluminum Apron Endwalls for Aluminum Culvert Pipe 72-Inch	EACH	2.000	2.000
0500	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	662.000	662.000
0510	602.0405	Concrete Sidewalk 4-Inch	SF	246.000	246.000
0520	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	70.000	70.000
0530	606.0200	Riprap Medium	CY	48.000	48.000
0540	606.0300	Riprap Heavy	CY	50.000	50.000
0550	611.8110	Adjusting Manhole Covers	EACH	3.000	3.000
0560	614.0010	Barrier System Grading Shaping Finishing	EACH	3.000	3.000
0570	614.2300	MGS Guardrail 3	LF	138.000	138.000
0580	614.2610	MGS Guardrail Terminal EAT	EACH	2.000	2.000
0590	618.0100	Maintenance And Repair of Haul Roads (project) 01. 7010-01-61	EACH	1.000	1.000
0600	619.1000	Mobilization	EACH	1.000	1.000
0610	624.0100	Water	MGAL	850.000	850.000
0620	628.1504	Silt Fence	LF	4,680.000	4,680.000
0630	628.1520	Silt Fence Maintenance	LF	4,680.000	4,680.000
0640	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0650	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0660	628.2004	Erosion Mat Class I Type B	SY	610.000	610.000
0670	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	102.000	102.000
0680	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	28.000	28.000
0690	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	4.000	4.000
0700	637.2210	Signs Type II Reflective H	SF	796.680	796.680
0710	637.2230	Signs Type II Reflective F	SF	49.140	49.140
0720	638.2602	Removing Signs Type II	EACH	112.000	112.000
0730	638.3000	Removing Small Sign Supports	EACH	122.000	122.000

DATE 19FEB16		E S T I M A T E O F Q U A N T I T I E S			
LINE					7010-01-61
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0740	642.5201	Field Office Type C	EACH	1.000	1.000
0750	643.0100	Traffic Control (project) 01. 7010-01-61	EACH	1.000	1.000
0760	643.0300	Traffic Control Drums	DAY	510.000	510.000
0770	643.0900	Traffic Control Signs	DAY	2,820.000	2,820.000
0780	645.0120	Geotextile Fabric Type HR	SY	112.000	112.000
0790	646.0106	Pavement Marking Epoxy 4-Inch	LF	137,301.000	137,301.000
0800	646.0126	Pavement Marking Epoxy 8-Inch	LF	800.000	800.000
0810	646.0406	Pavement Marking Same Day Epoxy 4-Inch	LF	3,500.000	3,500.000
0820	647.0556	Pavement Marking Stop Line Epoxy 12-Inch	LF	21.000	21.000
0830	648.0100	Locating No-Passing Zones	MI	11.880	11.880
0840	649.0402	Temporary Pavement Marking Paint 4-Inch	LF	17,235.000	17,235.000
0850	650.8000	Construction Staking Resurfacing Reference	LF	62,703.000	62,703.000
0860	650.9910	Construction Staking Supplemental Control (project) 01. 7010-01-61	LS	1.000	1.000
0870	690.0150	Sawing Asphalt	LF	727.000	727.000
0880	690.0250	Sawing Concrete	LF	35.000	35.000
0890	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	1,200.000	1,200.000
0900	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	1,440.000	1,440.000
0910	SPV.0060	Special 01. Grading and Shaping Apron Endwall	EACH	18.000	18.000
0920	SPV.0060	Special 02. Adjusting Water Valve Boxes	EACH	6.000	6.000
0930	SPV.0090	Special 01. Removing HMA Pavement Notched Wedge Longitudinal Joint Milling	LF	62,703.000	62,703.000

3

REMOVING ASPHALTIC SURFACE BUTT JOINTS

204.0115					
CATEGORY	STATION TO	STATION	LOCATION	SY	REMARKS
	15+97 -	18+85	MAINLINE	1110	STH 21
	627+29 -	629+29	MAINLINE	665	STH 21
0010	31'A'+77 -	32'A'+22	SIDEROAD	105	2ND AVENUE
0010	33'A'+66 -	34'A'+06	SIDEROAD	145	CTH H
0010	72'B'+23 -	72'B'+62	SIDEROAD	90	W STUB ROAD
0010	74'B'+23 -	74'B'+74	SIDEROAD	110	2ND AVENUE
0010	125'C'+36 -	125'C'+90	SIDEROAD	170	CTH H
0010	217'D'+63 -	218'D'+03	SIDEROAD	120	CTH M
0010	219'D'+77 -	220'D'+50	SIDEROAD	155	CUTLER ROAD
0010	244'E'+27 -	244'E'+68	SIDEROAD	100	6TH AVENUE
0010	368'G'+57 -	369'G'+08	SIDEROAD	125	7TH AVENUE
0010	370'F'+85 -	371'F'+26	SIDEROAD	105	7TH AVENUE
0010	432'H'+25 -	432'H'+70	SIDEROAD	150	HEADQUARTERS ROAD
0010	543'J'+77 -	544'J'+39	SIDEROAD	130	22ND STREET WEST
TOTAL 0010				3280	

REMOVING ASPHALTIC SURFACE

204.0110					
CATEGORY	STATION TO	STATION	LOCATION	SY	REMARKS
0010	24+65 -	25+40	STH 21	30	LEFT
0010	24+65 -	25+40	STH 21	25	RIGHT
0010	82+90 -	83+60	STH 21	30	LEFT
0010	140+05 -	140+75	STH 21	25	LEFT
0010	140+05 -	140+75	STH 21	25	RIGHT
0010	152+65 -	153+45	STH 21	25	LEFT
0010	152+65 -	153+45	STH 21	20	RIGHT
0010	176+65 -	177+40	STH 21	25	LEFT
0010	176+65 -	177+40	STH 21	25	RIGHT
0010	201+70 -	202+45	STH 21	25	LEFT
0010	201+70 -	202+45	STH 21	25	RIGHT
0010	223+15 -	223+85	STH 21	30	LEFT
0010	223+15 -	223+85	STH 21	25	RIGHT
0010	232+35 -	233+00	STH 21	25	LEFT
0010	232+35 -	233+00	STH 21	20	RIGHT
0010	271+70 -	272+40	STH 21	30	LEFT
0010	271+70 -	272+40	STH 21	25	RIGHT
0010	285+35 -	286+05	STH 21	25	LEFT
0010	285+35 -	286+05	STH 21	25	RIGHT
0010	297+45 -	298+15	STH 21	20	LEFT
0010	297+45 -	298+15	STH 21	25	RIGHT
0010	333+55 -	334+40	STH 21	25	LEFT
0010	333+55 -	334+40	STH 21	25	RIGHT
0010	393+10 -	393+80	STH 21	25	LEFT
0010	393+10 -	393+80	STH 21	20	RIGHT
0010	415+30 -	416+00	STH 21	25	LEFT
0010	415+30 -	416+00	STH 21	25	RIGHT
TOTAL 0010				675	

REMOVING ASPHALTIC SURFACE MILLING

204.0120					
CATEGORY	STATION TO	STATION	LOCATION	SY	REMARKS
0010	18+85 -	629+29	MAINLINE	203485	30' WIDE @ 2" DEPTH
0010	428+20 -	438+84	BYPASS LANE	505	BYPASS LANE
0010	629+29 -	643+00	MAINLINE	5485	36' WIDE
0010	32'A'+96 -	33'A'+66	SIDEROAD	700	CTH H NORTH
0010	32'A'+22 -	32'A'+66	SIDEROAD	255	2ND AVENUE SOUTH
0010	73'B'+58 -	74'B'+23	SIDEROAD	310	2ND AVENUE NORTH
0010	72'B'+83 -	73'B'+38	SIDEROAD	255	W. STUB ROAD
0010	125'C'+60 -	126'C'+07	SIDEROAD	645	CTH H SOUTH
0010	219'D'+05 -	219'D'+77	SIDEROAD	230	CUTLER ROAD
0010	218'D'+03 -	218'D'+75	SIDEROAD	690	CTH M
0010	245'E'+60 -	246'E'+64	SIDEROAD	310	6TH AVENUE NORTH
0010	244'E'+68 -	245'E'+31	SIDEROAD	340	6TH AVENUE SOUTH
0010	370'F'+09 -	370'F'+85	SIDEROAD	390	7TH AVENUE NORTH
0010	369'G'+49 -	369'G'+87	SIDEROAD	345	7TH AVENUE SOUTH
0010	431'H'+65 -	432'H'+25	SIDEROAD	760	HEADQUARTERS ROAD
0010	492'I'+95 -	493'I'+91	SIDEROAD	410	9TH AVENUE
0010	544'J'+39 -	545'J'+03	SIDEROAD	285	22ND STREET
0010	630'K'+13 -	630'K'+66	SIDEROAD	340	JOHN STREET
0010	633'L'+44 -	634'L'+01	SIDEROAD	290	HARVEY STREET
0010	632'L'+52 -	633'L'+08	SIDEROAD	320	OAK GROVE DRIVE
0010	636'M'+58 -	637'M'+24	SIDEROAD	320	PLUM STREET
0010	639'O'+02 -	639'O'+39	SIDEROAD	170	NORTH DIVISION STREET
0010	638'N'+10 -	638'N'+52	SIDEROAD	260	OAK STREET
TOTAL 0010				217100	

REMOVING CURB & GUTTER

204.0150					
CATEGORY	STATION TO	STATION	LOCATION	LF	REMARKS
0010	33'A'+04 -	33'A'+44	CTH H NORTH	58	NW QUADRANT
0010	33'A'+06 -	33'A'+66	CTH H NORTH	96	NE QUADRANT
0010	125'C'+90 -	126'C'+50	CTH H SOUTH	85	SW QUADRANT
0010	126'C'+07 -	126'C'+47	CTH H SOUTH	55	SE QUADRANT
0010	218'D'+20 -	218'D'+86	CTH M SOUTH	79	SW QUADRANT
0010	218'D'+36 -	218'D'+41	CTH M SOUTH	60	SE QUADRANT
0010	431'H'+78 -	432'H'+25	HEADQUARTERS ROAD	56	NW QUADRANT
0010	431'H'+71 -	432'H'+21	HEADQUARTERS ROAD	80	NE QUADRANT
0010	629+39 -	629+67	JOHN STREET	31	NW QUADRANT
TOTAL 0010				600	

REMOVING CONCRETE SIDEWALK

204.0155					
CATEGORY	STATION TO	STATION	LOCATION	SY	REMARKS
0010	625+69 -	625+76	STH 21	4	RIGHT
0010	632+01 -	632+08	STH 21	4	RIGHT
0010	633+51 -	633+58	STH 21	4	RIGHT
0010	636+20 -	636+27	STH 21	4	RIGHT
0010	636+60 -	636+67	STH 21	4	RIGHT
0010	638+43 -	638+50	STH 21	4	RIGHT
0010	638+97 -	639+04	STH 21	4	RIGHT
TOTAL 0010				28	

STATE PROJECT NO: 7010-01-61

HWY: STH 21

COUNTY: JUNEAU

MISCELLANEOUS QUANTITIES

SHEET NO:

E

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REMOVING GUARDRAIL					
CATEGORY	STATION TO	STATION	LOCATION	204.0165 LF	REMARKS
0010	428+95	- 431+20	STH 21	225	RIGHT
TOTAL 0010				225	

REMOVING SMALL PIPE CULVERTS				
CATEGORY	STATION	LOCATION	203.0100 EACH	REMARKS
0010	117+01	STH 21	1	REMOVE LEFT 5' ONLY
0010	544' J'+60	SIDEROAD	1	22ND ST. W
TOTAL 0010			2	

<u>QMP MILL AND RELAY COMPACTION</u>						
374.1010.S						
CATEGORY	STATION TO	STATION	LOCATION	SY	REMARKS	
0010	15+97 -	629+29	MAINLINE	204440	30' WIDE	
0010	33+57 -	37+07	STH 21	160	RIGHT TURN LANE	
0010	122+50 -	126+00	STH 21	160	RIGHT TURN LANE	
0010	214+82 -	218+32	STH 21	160	RIGHT TURN LANE	
0010	428+20 -	438+84	STH 21	260	BYPASS LANE	
TOTAL 0010				205180		

PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS					
211.0400					
CATEGORY	STATION TO	STATION	LOCATION	STA	REMARKS
0010	15+97 -	643+00	MAINLINE	628	RIGHT
0010	15+97 -	643+00	MAINLINE	628	LEFT
TOTAL 0010				1256	

			204.0185	
CATEGORY	STATION	LOCATION	CY	REMARKS
0010	83+65	STH 21	4	LEFT - 72-INCH WINGWALL
TOTAL 0010			4	

GRADING SHAPING & FINISHING INTERSECTION (LOCATION)															*ITEMS ARE TO BE USED FOR INFORMATIONAL PURPOSES ONLY						
		GRADING SHAPING & FINISHING INTERSECTION (LOCATION)	GRADING SHAPING & FINISHING INTERSECTION (LOCATION)	GRADING SHAPING & FINISHING INTERSECTION (LOCATION)	GRADING SHAPING & FINISHING INTERSECTION (LOCATION)	GRADING SHAPING & FINISHING INTERSECTION (LOCATION)	GRADING SHAPING & FINISHING INTERSECTION (LOCATION)	GRADING SHAPING & FINISHING INTERSECTION (LOCATION)	GRADING SHAPING & FINISHING INTERSECTION (LOCATION)	GRADING SHAPING & FINISHING INTERSECTION (LOCATION)	GRADING SHAPING & FINISHING INTERSECTION (LOCATION)	GRADING SHAPING & FINISHING INTERSECTION (LOCATION)	GRADING SHAPING & FINISHING INTERSECTION (LOCATION)	GRADING SHAPING & FINISHING INTERSECTION (LOCATION)							
		01. CTH H NORTH	02. 2ND AVE. SOUTH	03. 2ND AVE. NORTH	04. W STUB RD. SOUTH	05. CTH H SOUTH	06. CUTLER RD. NORTH	07. CTH M SOUTH	08. 6TH AVE. NORTH	09. 6TH AVE. SOUTH	10. 7TH AVE. NORTH	11. 7TH AVE. SOUTH	12. HEADQUARTERS	13. 9TH AVE. NORTH	14. 22ND ST. WEST	*BORROW	*SALVAGED TOPSOIL	*MULCH	*SEED #20	*FERTILIZER TYPE B	
		205.9015.S.01	205.9015.S.02	205.9015.S.03	205.9015.S.04	205.9015.S.05	205.9015.S.06	205.9015.S.07	205.9015.S.08	205.9015.S.09	205.9015.S.10	205.9015.S.11	205.9015.S.12	205.9015.S.13	205.9015.S.14	CY	SY	SY	LB	LB	REMARKS
CATEGORY	STATION TO STATION	LOCATION	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS						
0010	32'A'+81 - 34'A'+06	SIDEROAD	1	-	-	-	-	-	-	-	-	-	-	-	-	10	300	300	9	21	CTH H NORTH
0010	31'A'+77 - 32'A'+81	SIDEROAD	-	1	-	-	-	-	-	-	-	-	-	-	-	35	220	220	6	14	2ND AVE. SOUTH
0010	73'B'+43 - 74'B'+74	SIDEROAD	-	-	1	-	-	-	-	-	-	-	-	-	-	75	350	350	9	21	2ND AVE. NORTH
0010	72'B'+22 - 73'B'+43	SIDEROAD	-	-	-	1	-	-	-	-	-	-	-	-	-	90	200	200	6	14	W STUB RD. SOUTH
0010	125'C'+36 - 126'C'+72	SIDEROAD	-	-	-	-	1	-	-	-	-	-	-	-	-	20	375	375	10	25	CTH H SOUTH
0010	218'D'+90 - 220'D'+50	SIDEROAD	-	-	-	-	-	1	-	-	-	-	-	-	-	10	170	170	5	10	CUTLER RD. NORTH
0010	217'C'+63 - 218'D'+90	SIDEROAD	-	-	-	-	-	-	1	-	-	-	-	-	-	60	500	500	13	30	CTH M SOUTH
0010	245'E'+45 - 246'E'+64	SIDEROAD	-	-	-	-	-	-	-	1	-	-	-	-	-	45	270	270	7	16	6TH AVE. NORTH
0010	244'E'+27 - 245'E'+45	SIDEROAD	-	-	-	-	-	-	-	-	1	-	-	-	-	25	210	210	6	14	6TH AVE. SOUTH
0010	369'F'+94 - 371'F'+26	SIDEROAD	-	-	-	-	-	-	-	-	-	1	-	-	-	30	210	210	6	14	7TH AVE. NORTH
0010	369'G'+57 - 370'G'+02	SIDEROAD	-	-	-	-	-	-	-	-	-	-	1	-	-	25	210	210	6	14	7TH AVE. SOUTH
0010	431'H'+50 - 432'H'+70	SIDEROAD	-	-	-	-	-	-	-	-	-	-	1	-	-	25	500	500	13	30	HEADQUARTERS RD. NORTH
0010	492'I'+80 - 493'I'+91	SIDEROAD	-	-	-	-	-	-	-	-	-	-	-	1	-	70	350	350	10	22	9TH AVE. NORTH
0010	543'J'+77 - 545'J'+18	SIDEROAD	-	-	-	-	-	-	-	-	-	-	-	-	1	110	360	360	10	22	22ND ST. WEST
TOTAL 0010			1	1	1	1	1	1	1	1	1	1	1	1	1	630	4225	4225	116	267	

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FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ ORG DATE : _____ ORIGINATOR : DIST _ PLOT SCALE : 1:1

BASE AGGREGATE DENSE 3/4-INCH

			305.0110		
CATEGORY	STATION TO	STATION	LOCATION	TON	REMARKS
0010	15+97 -	643+00	MAINLINE	9290	RIGHT
0010	15+97 -	643+00	MAINLINE	9290	LEFT
0010	15+97 -	643+00	SIDERoadS	450	LEFT AND RIGHT
0010	15+97 -	643+00	UNDISTRIBUTED	2000	ESTIMATED 10%
TOTAL 0010				21030	

BASE AGGREGATE DENSE 1 1/4-INCH

			305.0120		
CATEGORY	STATION TO	STATION	LOCATION	TON	REMARKS
0010	32'A'+81 -	34'A'+06	CTH H NORTH	25	SIDEROAD/RIGHT TURN LANE
0010	32'A'+00 -	32'A'+81	2ND AVENUE SOUTH	30	SIDEROAD
0010	73'B'+43 -	74'B'+74	2ND AVENUE NORTH	75	SIDEROAD
0010	72'B'+42 -	73'B'+43	W. STUB ROAD	20	SIDEROAD
0010	125'C'+60 -	126'C'+72	CTH H SOUTH	25	SIDEROAD/RIGHT TURN LANE
0010	218'D'+90	230'D'+50	CUTLER ROAD	25	SIDEROAD
0010	217'D'+63 -	218'D'+90	CTH M	60	SIDEROAD/RIGHT TURN LANE
0010	245'E'+45 -	246'E'+64	6TH AVENUE NORTH	55	SIDEROAD
0010	244'E'+27 -	245'E'+45	6TH AVENUE SOUTH	45	SIDEROAD
0010	369'F'+94	371'F'+26	7TH AVENUE NORTH	25	SIDEROAD
0010	368'G'+85	370'G'+02	7TH AVENUE SOUTH	45	SIDEROAD
0010	431'H'+9+50	432'H'+70	HEADQUARTERS ROAD	15	SIDEROAD/RIGHT TURN LANE
0010	492'I'+80	493'I'+91	9TH AVENUE	65	SIDEROAD
0010	543'J'+77	545'J'+18	22ND AVENUE	185	SIDEROAD
0010	15+97	629+29	UNDISTRIBUTED	400	EBS AREAS
TOTAL 0010				1095	

HMA PAVEMENT 3 MT 58-28 S

			460.6223		
CATEGORY	STATION TO	STATION	LOCATION	TON	REMARKS
0010	15+97 -	629+29	MAINLINE	29195	34' WIDE - 2.25" DEPTH
0010	629+29 -	438+84	BYPASS LANE	70	2.25" DEPTH
0010	32'A'+96 -	34'A'+06	CTH H NORTH	105	2.25" DEPTH
0010	32'A'+00 -	32'A'+66	2ND AVENUE SOUTH	45	2.25" DEPTH
0010	73'B'+58 -	74'B'+74	2ND AVENUE NORTH	65	2.25" DEPTH
0010	72'B'+42 -	73'B'+38	W. STUB ROAD	50	2.25" DEPTH
0010	125'C'+60 -	126'C'+57	CTH H SOUTH	105	2.25" DEPTH
0010	219'D'+05 -	220'D'+50	CUTLER ROAD	75	2.25" DEPTH
0010	218'D'+63 -	218'D'+75	CTH M	110	2.25" DEPTH
0010	245'E'+60 -	246'E'+64	6TH AVENUE NORTH	60	2.25" DEPTH
0010	244'E'+27 -	245'E'+31	6TH AVENUE SOUTH	60	2.25" DEPTH
0010	370'F'+09 -	371'F'+26	7TH AVENUE NORTH	65	2.25" DEPTH
0010	368'G'+85 -	369'G'+87	7TH AVENUE SOUTH	60	2.25" DEPTH
0010	431'H'+65 -	432'H'+70	HEADQUARTERS ROAD	95	2.25" DEPTH
0010	492'I'+95 -	493'I'+91	9TH AVENUE	60	2.25" DEPTH
0010	543'J'+77 -	545'J'+03	22ND STREET	70	2.25" DEPTH
TOTAL 0010				30290	

MILL AND RELAY

			330.0100		
CATEGORY	STATION TO	STATION	LOCATION	SY	REMARKS
0010	15+97 -	629+29	MAINLINE	204440	30' WIDE
0010	33+57 -	37+07	STH 21	160	RIGHT TURN LANE
0010	122+50 -	126+00	STH 21	160	RIGHT TURN LANE
0010	214+82 -	218+32	STH 21	160	RIGHT TURN LANE
0010	428+20 -	438+84	STH 21	260	BYPASS LANE
TOTAL 0010				205180	

TACK COAT

			455.0605		
CATEGORY	STATION TO	STATION	LOCATION	GAL	REMARKS
0010	15+97 -	611+32	MAINLINE	6030	AFTER 1ST LIFT
0010	611+32 -	643+00	MAINLINE	400	MILLED SURFACE
0010	15+97	643+00	SIDERoadS	300	
TOTAL 0010				6730	

REHEATING HMA LONGITUDINAL JOINTS

			460.4110.S		
CATEGORY	STATION TO	STATION	LOCATION	LF	REMARKS
0010	15+97 -	643+00	STH 21	62703	SURFACE LIFT
TOTAL 0010				62703	

HMA PAVEMENT 4 MT 58-28 S

			460.6224		
CATEGORY	STATION TO	STATION	LOCATION	TON	REMARKS
0010	15+97 -	629+29	MAINLINE	22710	34' WIDE - 1.75" DEPTH
0010	629+29 -	438+84	BYPASS LANE	55	1.75" DEPTH
0010	629+29 -	643+00	MAINLINE	615	36' WIDE - 2" DEPTH
0010	32'A'+96 -	34'A'+06	CTH H NORTH	80	1.75" DEPTH
0010	32'A'+00 -	32'A'+66	2ND AVENUE SOUTH	35	1.75" DEPTH
0010	73'B'+58 -	74'B'+74	2ND AVENUE NORTH	50	1.75" DEPTH
0010	72'B'+42 -	73'B'+38	W. STUB ROAD	40	1.75" DEPTH
0010	125'C'+60 -	126'C'+57	CTH H SOUTH	80	1.75" DEPTH
0010	219'D'+05 -	220'D'+50	CUTLER ROAD	60	1.75" DEPTH
0010	218'D'+63 -	218'D'+75	CTH M	85	1.75" DEPTH
0010	245'E'+60 -	246'E'+64	6TH AVENUE NORTH	45	1.75" DEPTH
0010	244'E'+27 -	245'E'+31	6TH AVENUE SOUTH	45	1.75" DEPTH
0010	370'F'+09 -	371'F'+26	7TH AVENUE NORTH	50	1.75" DEPTH
0010	368'G'+85 -	369'G'+87	7TH AVENUE SOUTH	45	1.75" DEPTH
0010	431'H'+65 -	432'H'+70	HEADQUARTERS ROAD	75	1.75" DEPTH
0010	492'I'+95 -	493'I'+91	9TH AVENUE	45	1.75" DEPTH
0010	543'J'+77 -	545'J'+03	22ND STREET	55	1.75" DEPTH
0010	630'K'+13 -	630'K'+66	JOHN STREET	40	2" DEPTH
0010	633'L'+44 -	634'L'+01	HARVEY STREET	35	2" DEPTH
0010	632'L'+52 -	633'L'+08	OAK GROVE DRIVE	35	2" DEPTH
0010	636'M'+58 -	637'M'+24	PLUM STREET	40	2" DEPTH
0010	639'O'+02 -	639'O'+39	NORTH DIVISION STREET	25	2" DEPTH
0010	638'N'+10 -	638'N'+52	OAK STREET	30	2" DEPTH
TOTAL 0010				24375	

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

465.0120				
CATEGORY	STATION	LOCATION	TON	REMARKS
0010	545+25	STH 21	5	LEFT
0010	562+70	STH 21	5	RIGHT
0010	590+50	STH 21	5	RIGHT
0010	594+30	STH 21	5	LEFT
0010	602+30	STH 21	5	LEFT
0010	602+45	STH 21	5	LEFT
0010	606+00	STH 21	5	RIGHT
0010	607+45	STH 21	5	LEFT
0010	609+60	STH 21	5	RIGHT
0010	623+50	STH 21	5	RIGHT
0010	625+60	STH 21	5	RIGHT
0010	628+50	STH 21	5	LEFT
0010	628+75	STH 21	5	RIGHT
0010	630+90	STH 21	10	LEFT
0010	632+30	STH 21	10	LEFT
TOTAL 0010			85	

ASPHALT CENTER LINE RUMBLE STRIP 2-LANE RURAL

465.0475					
CATEGORY	STATION TO	STATION	LOCATION	LF	REMARKS
0010	15+97	- 30+81	MAINLINE	1484	STH 21
0010	34+81	- 71+42	MAINLINE	3661	STH 21
0010	75+42	- 124+72	MAINLINE	4930	STH 21
0010	128+72	- 216+90	MAINLINE	8818	STH 21
0010	220+90	- 243+68	MAINLINE	2278	STH 21
0010	247+68	- 367+94	MAINLINE	12026	STH 21
0010	372+02	- 429+40	MAINLINE	5738	STH 21
0010	433+40	- 490+78	MAINLINE	5738	STH 21
0010	494+78	- 543+18	MAINLINE	4840	STH 21
0010	547+18	- 599+00	MAINLINE	5182	STH 21
TOTAL 0010				<u>54695</u>	

ASPHALTIC FLUMES

465.0315				
CATEGORY	STATION	LOCATION	SY	REMARKS
0010	33 'A'+46	CTH H NORTH	15	NW QUADRANT
0010	33 'A'+68	CTH H NORTH	15	NE QUADRANT
0010	126 'C'+28	CTH H SOUTH	15	SW QUADRANT
0010	126 'C'+28	CTH H SOUTH	15	SE QUADRANT
0010	218 'D'+16	CTH M SOUTH	10	SW QUADRANT
0010	218 'D'+34	CTH M SOUTH	10	SE QUADRANT
0010	432 'H'+27	HEADQUARTERS ROAD	15	NW QUADRANT
0010	432 'H'+24	HEADQUARTERS ROAD	15	NE QUADRANT
TOTAL 0010			110	

ASPHALTIC SHOULDER RUMBLE STRIP 2-LANE RURAL

465.0425					
CATEGORY	STATION TO	STATION	LOCATION	LF	REMARKS
0010	16+22	- 30+37	STH 21, RT	1415	TYPE 1
0010	34+64	- 70+98	STH 21, RT	3634	TYPE 1
0010	74+98	- 122+50	STH 21, RT	4752	TYPE 1
0010	128+79	- 214+82	STH 21, RT	8603	TYPE 1
0010	221+21	- 243+25	STH 21, RT	2204	TYPE 1
0010	247+57	- 367+87	STH 21, RT	12030	TYPE 1
0010	372+26	- 542+73	STH 21, RT	17047	TYPE 1
0010	547+05	- 599+00	STH 21, RT	5195	TYPE 1
0010	16+22	- 30+76	STH 21, LT	1454	TYPE 1
0010	37+07	- 71+57	STH 21, LT	3450	TYPE 1
0010	75+89	- 216+78	STH 21, LT	14089	TYPE 1
0010	221+17	- 243+80	STH 21, LT	2263	TYPE 1
0010	248+12	- 367+75	STH 21, LT	11963	TYPE 1
0010	372+12	- 429+28	STH 21, LT	5716	TYPE 1
0010	435+57	- 490+93	STH 21, LT	5536	TYPE 1
0010	495+22	- 599+00	STH 21, LT	10378	TYPE 1
TOTAL 0010				109729	

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CULVERT SUMMARY

CATEGORY	STATION	LOCATION	APRON	CULVERT	CULVERT	CULVERT	CULVERT	ALUMINUM	ALUMINUM	ALUMINUM	ALUMINUM	ALUMINUM	MINIMUM	REMARKS
			ENDWALLS FOR CULVERT PIPE STEEL 30-INCH 521.1030 EACH	PIPE CORRUGATED ALUMINUM 18- INCH 525.0118 LF	PIPE CORRUGATED ALUMINUM 24- INCH 525.0124 LF	PIPE CORRUGATED ALUMINUM 30- INCH 525.0130 LF	PIPE CORRUGATED ALUMINUM 36- INCH 525.0136 LF	APRON ENDWALLS FOR ALUMINUM CULVERT PIPE 18- INCH 525.0318 EACH	APRON ENDWALLS FOR ALUMINUM CULVERT PIPE 24- INCH 525.0324 EACH	APRON ENDWALLS FOR ALUMINUM CULVERT PIPE 30- INCH 525.0330 EACH	APRON ENDWALLS FOR ALUMINUM CULVERT PIPE 36- INCH 525.0336 EACH	APRON ENDWALLS FOR ALUMINUM CULVERT PIPE 72- INCH 525.0372 EACH		
0010	25+02	STH 21	-	-	-	-	-	-	2	-	-	-	0.075	LEFT AND RIGHT
0010	82+50	STH 21	-	-	-	-	-	-	-	-	-	1	SEE S.D.D	RIGHT
0010	83+60	STH 21	-	-	-	-	-	-	-	-	-	1	SEE S.D.D	LEFT
0010	152+99	STH 21	-	-	-	-	-	-	-	-	2	-	0.105	LEFT AND RIGHT
0010	177+01	STH 21	-	-	-	-	5	-	-	-	1	-	0.105	LEFT
0010	202+09	STH 21	-	-	-	-	-	-	-	-	2	-	0.105	LEFT AND RIGHT
0010	223+37	STH 21	-	-	-	-	-	-	-	1	-	-	0.075	LEFT
0010	223+77	STH 21	-	-	-	-	-	-	-	1	-	-	0.075	RIGHT
0010	244+97	STH 21	-	-	-	-	-	-	-	-	2	-	0.105	LEFT AND RIGHT
0010	272+05	STH 21	2	-	-	-	-	-	-	-	-	-	0.079	LEFT AND RIGHT
0010	297+78	STH 21	-	-	-	-	-	-	-	-	2	-	0.105	LEFT AND RIGHT
0010	511+28	STH 21	-	-	-	-	-	-	-	-	1	-	0.105	RIGHT
0010	32'A'+38	2ND AVENUE	-	-	7	-	-	-	1	-	-	-	0.075	LEFT
0010	32'A'+38	2ND AVENUE	-	-	-	-	-	-	1	-	-	-	0.075	RIGHT
0010	72'B'+88	W STUB ROAD	-	-	6	-	-	-	1	-	-	-	0.075	LEFT
0010	73'B'+96	2ND AVENUE	-	-	-	-	4	-	-	-	1	-	0.105	LEFT
0010	73'B'+96	2ND AVENUE	-	-	-	-	14	-	-	-	1	-	0.105	RIGHT
0010	246'E'+02	6TH AVENEUE	-	-	-	4	-	-	-	1	-	-	0.075	LEFT
0010	246'E'+02	6th AVENEUE	-	-	-	6	-	-	-	1	-	-	0.075	RIGHT
0010	369'G'+24	7TH AVENUE	-	-	4	-	-	-	1	-	-	-	0.075	RIGHT
0010	370'F'+30	7TH AVENUE	-	-	10	-	-	-	1	-	-	-	0.075	RIGHT
0010	370'F'+64	7TH AVENUE	-	-	8	-	-	-	1	-	-	-	0.075	LEFT
0010	493'I'+32	9TH AVENUE	-	-	-	4	-	-	-	1	-	-	0.075	LEFT
0010	493'I'+32	9th AVENUE	-	-	-	11	-	-	-	1	-	-	0.075	RIGHT
0010	544'J'+60	22ND STREET WEST	-	56	-	-	-	2	-	-	-	-	0.060	
TOTAL 0010			2	56	35	25	23	2	8	6	12	2		

CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D

CATEGORY	STATION TO	STATION	LOCATION	601.0557	REMARKS
				LF	
0010	33'A'+04	- 33'A'+44	CTH H NORTH	63	NW QUADRANT
0010	33'A'+06	- 33'A'+06	CTH H NORTH	95	NE QUADRANT
0010	125'C'+90	- 126'C'+48	CTH H SOUTH	93	SW QUADRANT
0010	126'C'+07	- 126'C'+48	CTH H SOUTH	64	SE QUADRANT
0010	218'D'+19	- 218'D'+67	CTH M SOUTH	87	SW QUADRANT
0010	218'D'+05	218'D'+56	CTH M SOUTH	76	SE QUADRANT
0010	431'H'+76	- 432'H'+24	HEADQUARTERS ROAD	70	NW QUADRANT
0010	431'H'+74	- 432'H'+21	HEADQUARTERS ROAD	83	NE QUADRANT
0010	630'K'+17	- 630'K'+32	JOHN STREET	31	NW QUADRANT
TOTAL 0010				662	

CONCRETE SIDEWALK 4-INCH

CATEGORY	STATION TO	STATION	LOCATION	602.0405	REMARKS
				SF	
0010	625+69	- 625+76	STH 21	35	RIGHT
0010	632+01	- 632+08	STH 21	35	RIGHT
0010	633+51	- 633+58	STH 21	35	RIGHT
0010	636+20	- 636+27	STH 21	35	RIGHT
0010	636+60	- 636+67	STH 21	35	RIGHT
0010	638+43	- 638+50	STH 21	35	RIGHT
0010	638+97	- 639+04	STH 21	36	RIGHT
TOTAL 0010				246	

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CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

RIPRAP HEAVY

602.0515				
CATEGORY	STATION	LOCATION	SF	REMARKS
0010	625+70	STH 21	10	RIGHT
0010	633+05	STH 21	10	RIGHT
0010	633+54	STH 21	10	RIGHT
0010	636+24	STH 21	10	RIGHT
0010	636+63	STH 21	10	RIGHT
0010	638+47	STH 21	10	RIGHT
0010	639+03	STH 21	10	RIGHT
TOTAL 0010			70	

ADJUSTING MANHOLE COVERS

611.8110				
CATEGORY	STATION	LOCATION	EACH	REMARKS
0010	629+80	STH 21	1	LEFT
0010	633+35	STH 21	1	RIGHT
0010	636+38	STH 21	1	RIGHT
TOTAL 0010			3	

MGS GUARDRAIL 3

614.2300					
CATEGORY	STATION TO	STATION	LOCATION	LF	REMARKS
0010	429+36	- 430+73	STH 21	138	RIGHT
TOTAL 0010				138	

BARRIER SYSTEM GRADING SHAPING FINISHING

*ITEMS ARE TO BE USED FOR INFORMATIONAL PURPOSES ONLY										
614.0010										
CATEGORY	STATION TO	STATION	LOCATION	EACH	*BORROW	*SALVAGED TOPSOIL	*MULCH	*SEED #20	*FERTILIZER TYPE B	REMARKS
0010	15+97	- 16+83	STH 21	1	30	210	210	6	13	LEFT
0010	15+97	- 16+83	STH 21	1	30	210	210	6	13	RIGHT
0010	428+86	- 431+23	STH 21	1	10	50	50	1	7	RIGHT
TOTAL 0010				3	70	470	470	13	33	

606.0300				
CATEGORY	STATION	LOCATION	CY	REMARKS
0010	82+50	STH 21	25	RIGHT
0010	83+60	STH 21	25	LEFT
TOTAL 0010			50	

RIPRAP MEDIUM

606.0200				
CATEGORY	STATION	LOCATION	CY	REMARKS
0010	32'A'+38	2ND AVENUE	6	LEFT
0010	72'B'+88	W STUB RD	6	RIGHT
0010	73'B'+96	2ND AVENUE	6	RIGHT
0010	246'E'+02	6TH AVENUE	6	LEFT
0010	369'G'+24	7TH AVENUE	6	RIGHT
0010	370'F'+30	7TH AVENUE	6	RIGHT
0010	493'I'+32	9TH AVENUE	6	LEFT
0010	544'J'+60	22ND STREET WEST	6	RIGHT
TOTAL 0010			48	

MGS GUARDRAIL TERMINAL EAT

614.2610					
CATEGORY	STATION TO	STATION	LOCATION	EACH	REMARKS
0010	428+86	- 429+36	STH 21	1	RIGHT
0010	430+73	- 431+23	STH 21	1	RIGHT
TOTAL 0010				2	

STATE PROJECT NO: 7010-01-61

HWY: STH 21

COUNTY: JUNEAU

MISCELLANEOUS QUANTITIES

SHEET NO:

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MOBILIZATIONS EROSION CONTROL

CATEGORY	STATION TO	STATION	LOCATION	628.1905 EACH	REMARKS
0010	15+97 -	643+00	STH 21	1	INTERSECTIONS
0010	15+97 -	643+00	STH 21	1	INTERSECTIONS
0010	15+97 -	643+00	STH 21	1	APRON ENDWALLS
0010	15+97 -	643+00	STH 21	1	APRON ENDWALLS
TOTAL 0010				4	

MOBILIZATIONS EMERGENCY EROSION CONTROL

CATEGORY	STATION TO	STATION	LOCATION	628.1910 EACH	REMARKS
0010	15+97 -	643+00	STH 21	2	MAINLINE
TOTAL 0010				2	

SILT FENCE

			SILT FENCE 628.1504 LF	SILT FENCE MAINTENANCE 628.1520 LF	REMARKS
0010	31'A'+77 -	32'A'+57	120	120	LEFT
0010	31'A'+77 -	32'A'+57	120	120	RIGHT
0010	32'A'+98 -	34'A'+06	120	120	LEFT
0010	32'A'+98 -	34'A'+06	450	450	RIGHT
0010	72'B'+23 -	73'B'+20	120	120	LEFT
0010	72'B'+23 -	73'B'+20	120	120	RIGHT
0010	73'B'+75 -	74'B'+74	120	120	LEFT
0010	73'B'+75 -	74'B'+74	120	120	RIGHT
0010	125'C'+36 -	126'C'+50	450	450	LEFT
0010	125'C'+36 -	126'C'+50	120	120	RIGHT
0010	217'D'+63 -	218'D'+65	450	450	LEFT
0010	217'D'+63 -	218'D'+65	120	120	RIGHT
0010	219'D'+20 -	220'D'+50	120	120	LEFT
0010	219'D'+20 -	220'D'+50	120	120	RIGHT
0010	244'E'+27 -	245'E'+25	120	120	LEFT
0010	244'E'+27 -	245'E'+25	120	120	RIGHT
0010	245'E'+70 -	246'E'+64	120	120	LEFT
0010	245'E'+70 -	246'E'+64	120	120	RIGHT
0010	368'G'+57 -	369'G'+75	120	120	LEFT
0010	368'G'+57 -	369'G'+75	120	120	RIGHT
0010	370'F'+15 -	371'F'+26	120	120	LEFT
0010	370'F'+15 -	371'F'+26	120	120	RIGHT
0010	431'H'+75 -	432'H'+70	120	120	LEFT
0010	431'H'+75 -	432'H'+70	450	450	RIGHT
0010	493'I'+00 -	493'I'+91	120	120	LEFT
0010	493'I'+00 -	493'I'+91	120	120	RIGHT
0010	543'J'+77 -	544'J'+95	120	120	LEFT
0010	543'J'+77 -	544'J'+95	120	120	RIGHT
TOTAL 0010			4680	4680	

WATER

CATEGORY	STATION TO	STATION	LOCATION	624.0100 MGAL	REMARKS
0010	15+97 -	643+00	STH 21, LT	100	BASE AGGREGATE SHOULDER
0010	15+97 -	643+00	STH 21, RT	100	BASE AGGREGATE SHOULDER
0010	15+97 -	629+29	STH 21	310	MILL AND RELAID PAVEMENT
0010	15+97 -	629+29	SIDEROADS	30	SIDEROADS
0010	15+97 -	643+00	STH 21	310	DUST CONTROL
TOTAL 0010				850	

STATE PROJECT NO: 7010-01-61

HWY: STH 21

COUNTY: JUNEAU

MISCELLANEOUS QUANTITIES

SHEET NO:

E

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PERMANENT SIGNING SUMMARY														
CATEGORY	SIGN NUMBER	STATION	LOCATION	SIGN CODE	SIZE	DESCRIPTION	ORDER LINES	634.0614	634.0616	634.0618	637.2210	637.2230	638.2602	638.3000
								WOOD POSTS 14' EACH	WOOD POSTS 16' EACH	WOOD POSTS 18' EACH	SIGNS TYPE II REFLECTIVE H SF	SIGNS TYPE II REFLECTIVE F SF	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH
0010	1-01	16+70	STH 21, LEFT	I2-3-U	84" x 24"	Community Population Sign	Shennington	2	-	-	14.00	-	-	-
0010	1-02R	16+75	STH 21, LEFT	I2-3-U	84" x 24"	Community Population Sign	Unincorporated Shennington Unincorporated	-	-	-	-	-	1	1
0010	1-03	18+15	STH 21, LEFT	I2-2	60" x 15"	County Line Name	Monroe Co	2	-	-	6.25	-	-	-
0010	1-04R	18+15	STH 21, LEFT	I2-2	60" x 15"	County Line Name	Monroe Co	-	-	-	-	-	1	1
0010	1-05R	18+15	STH 21, RIGHT	I2-2	60" x 15"	County Line Name	Juneau Co	-	-	-	-	-	1	1
0010	1-06	18+15	STH 21, RIGHT	I2-2	60" x 15"	County Line Name	Juneau Co	2	-	-	6.25	-	-	-
0010	1-07	20+25	STH 21, LEFT	W3-5	36" x 36"	Speed Limit __ Ahead	45	-	1	-	-	9.00	-	-
0010	1-08R	21+50	STH 21, LEFT	W3-5	36" x 36"	Speed Limit __ Ahead	45	-	-	-	-	-	1	1
0010	1-09	22+45	STH 21, RIGHT	J1-1	24" x 39"	Junction or End Assembly (One Headed)	JCT H	1	-	-	6.50	-	-	-
0010	1-10R	22+50	STH 21, RIGHT	J1-1	24" x 39"	Junction or End Assembly (One Headed)	JCT H	-	-	-	-	-	1	1
0010	1-11	24+50	STH 21, RIGHT	W10-2	36" x 36"	Cross Road With Railroad Tracks		-	1	-	-	9.00	-	-
0010	1-12R	25+50	STH 21, RIGHT	W10-2	36" x 36"	Cross Road With Railroad Tracks		-	-	-	-	-	1	1
0010	1-13R	26+00	STH 21, RIGHT	M1-94	48" x 15"	Advanced Crossroad Name	2nd Ave	-	-	-	-	-	1	1
0010	1-14	26+50	STH 21, RIGHT	D1-1	66" x 15"	Destination Arrow	2nd Ave (Right Arrow)	2	-	-	6.88	-	-	-
0010	1-15R	27+50	STH 21, RIGHT	D1-1	60" x 15"	Destination Arrow	(Left Arrow) Mather	-	-	-	-	-	1	1
0010	1-16	28+40	STH 21, RIGHT	D1-1	60" x 15"	Destination Arrow	(Left Arrow) Mather	2	-	-	6.25	-	-	-
0010	1-17R	30+10	STH 21, LEFT	J4-1	24" x 36"	Reassurance Assembly (One Headed)	West 21	-	-	-	-	-	1	1
0010	1-18	31+00	STH 21, LEFT	J4-1	24" x 36"	Reassurance Assembly (One Headed)	West 21	1	-	-	6.00	-	-	-
0010	1-19R	32+00	STH 21, RIGHT	J13-1	24" x 45"	Directional Assembly Without Cardinals (One Headed)	H	-	-	-	-	-	1	1
0010	1-20	32+00	STH 21, RIGHT	J13-1	24" x 45"	Directional Assembly Without Cardinals (One Headed)	Left and Ahead Combination Arrow H	-	1	-	7.50	-	-	-
0010	1-21	32+15	STH 21, LEFT	J13-2	48" x 45"	Directional Assembly Without Cardinals (Two Heades)	Left and Ahead Combination Arrow H, 21 (Left Arrow) (Double Arrow)	-	1	-	15.00	-	-	-
0010	1-22R	32+50	STH 21, LEFT	R1-1	30" x 30"	Stop		-	-	-	-	-	1	1
0010	1-23	32+50	STH 21, LEFT	R1-1	30" x 30"	Stop		1	-	-	5.18	-	-	-
0010	1-24R	33+10	STH 21, RIGHT	R1-1	30" x 30"	stop		-	-	-	-	-	1	1
0010	1-25	33+10	STH 21, RIGHT	R1-1	30" x 30"	Stop		1	-	-	5.18	-	-	-
0010	1-26	33+10	SIDEROAD	M1-5A	24" x 24"	County Route Marker	H	1	-	-	4.00	-	-	-
0010	1-27R	33+10	SIDEROAD	J13-1	24" x 45"	Directional Assembly Without Cardinals (One Headed)	H (Up Arrow)	-	-	-	-	-	1	1
0010	1-28R	33+50	STH 21, LEFT	J13-1	24" x 45"	Directional Assembly Without Cardinals (One Headed)	H (Right Arrow)	-	-	-	-	-	1	1
0010	1-29	33+50	STH 21, LEFT	J13-1	24" x 45"	Directional Assembly Without Cardinals (One Headed)	H (Right Arrow)	-	1	-	7.50	-	-	-
0010	1-30	34+50	STH 21, RIGHT	J4-2	48" x 36"	Reassurance Assembly (Two Heads)	East, Blank 21, H	1	-	-	12.00	-	-	-
0010	1-31R	35+50	STH 21, RIGHT	J4-1	24" x 36"	Reassurance Assembly (One Headed)	East 21	-	-	-	-	-	1	1
0010	1-32	37+15	STH 21, LEFT	D1-1	60" x 15"	Destination Arrow	Mather (Rigth Arrow)	2	-	-	6.25	-	-	-
0010	1-33R	38+50	STH 21, LEFT	D1-1	60" x 15"	Destination Arrow	Mather (Rigth Arrow)	-	-	-	-	-	1	2
0010	1-34	39+20	STH 21, LEFT	D1-1	66" x 15"	Destination Arrow	(Left Arrow) 2nd Ave	2	-	-	6.88	-	1	2
0010	1-35R	40+50	STH 21, LEFT	M1-94	48" x 15"	Advanced Crossroad Name	2nd Ave	-	-	-	-	-	1	1
0010	1-36	41+10	STH 21, LEFT	W10-2	36" x 36"	Cross Road With Railroad Tracks		-	1	-	-	9.00	-	-
0010	1-37R	42+50	STH 21, LEFT	W10-2	36" x 36"	Cross Road With Railroad Tracks		-	-	-	-	-	1	1
0010	1-38	44+10	STH 21, LEFT	J12-1	24" x 45"	Route Turn Assembly Without Cardinals (One Headed)	H (Right Turn Arrow)	-	1	-	7.50	-	-	-
0010	1-39	44+50	STH 21, LEFT	J12-1	24" x 45"	Route Turn Assembly Without Cardinals (One Headed)	H (Right Turn Arrow)	-	-	-	-	-	1	1
0010	2-01	65+50	STH 21, RIGHT	D1-2	66" x 30"	Destinations Arrows, Two	(Left Arrow) 2nd Ave Stub Rd (Right Arrow)	2	-	-	13.75	-	-	-
0010	2-02R	66+50	STH 21, RIGHT	M1-94	48" x 15"	Advanced Crossroad Name	2nd Ave	-	-	-	-	-	1	1
0010	2-03R	69+50	STH 21, RIGHT	W11-3	30" x 30"	Deer Crossing		-	-	-	-	-	1	1
0010	2-04	73+05	STH 21, LEFT	R1-1	30" x 30"	Stop		1	-	-	5.18	-	-	-
0010	2-05R	73+05	STH 21, RIGHT	R1-1	30" x 30"	Stop		-	-	-	-	-	1	1
0010	2-06	73+75	STH 21, RIGHT	R1-1	30" x 30"	Stop		1	-	-	5.18	-	-	-
0010	2-07R	73+75	STH 21, RIGHT	R1-1	30" x 30"	Stop		-	-	-	-	-	1	1
0010	3-01	81+50	STH 21, LEFT	D1-2	66" x 30"	Destinations Arrows, Two	(Left Arrow) Stub Rd 2nd Ave (Right Arrow)	2	-	-	13.75	-	-	-
0010	3-02R	81+50	STH 21, LEFT	M1-94	48" x 15"	Advanced Crossroad Name	2nd Ave	-	-	-	-	-	1	1
0010	4-01R	116+00	STH 21, RIGHT	J12-1	24" x 45"	Route Turn Assembly Without Cardinals (One Headed)	H (Left Turn Arrow)	-	-	-	-	-	1	1
0010	4-02	116+50	STH 21, RIGHT	J12-1	24" x 45"	Route Turn Assembly Without Cardinals (One Headed)	H (Left Turn Arrow)	-	1	-	7.50	-	-	-
0010	4-03	119+25	STH 21, RIGHT	D1-1	96" x 15"	Destination Arrow	Camp Douglas (Right Arrow)	2	-	-	10.00	-	-	-
0010	4-04R	121+25	STH 21, RIGHT	D1-1	96" x 15"	Destination Arrow	Camp Douglas (Right Arrow)	-	-	-	-	-	1	2
0010	4-05R	123+50	STH 21, LEFT	J4-1	24" x 36"	Reassurance Assembly (One Headed)	West 21	-	-	-	-	-	1	1
0010	4-06	125+00	STH 21, LEFT	J4-2	48" x 36"	Reassurance Assembly (Two Heads)	West, Blank 21, H	1	-	-	12.00	-	-	-
Sheet Totals								29	8	0	196.48	27	28	31

STATE PROJECT NO: 7010-01-61				HWY: STH 21		COUNTY: JUNEAU				MISCELLANEOUS QUANTITIES			SHEET NO:		E
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PERMANENT SIGNING SUMMARY (CONT'D)																
CATEGORY	SIGN NUMBER	STATION	LOCATION	SIGN CODE	SIZE	DESCRIPTION	ORDER LINES	634.0614 WOOD POSTS 14' EACH	634.0616 WOOD POSTS 16' EACH	634.0618 WOOD POSTS 18' EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	NOTES	
0010	4-07R	126+00	STH 21, RIGHT	J13-1	24" x 45"	Directional Assembly Without Cardinals (One Headed)	H	-	-	-	-	-	1	1		
0010	4-08	126+00	STH 21, RIGHT	J13-1	24" x 45"	Directional Assembly Without Cardinals (One Headed)	(Right Arrow) H	-	1	-	7.50	-	-	-		
0010	4-09	126+50	SIDEROAD	W10-1	36" x 36"	Railroad Crossing	(Right Arrow)	1	-	-	-	7.07	-	-		
0010	4-10R	126+50	SIDEROAD	W10-1	36" x 36"	Railroad Crossing	H	-	-	-	-	-	1	1		
0010	4-11R	126+50	STH 21, LEFT	J13-1	24" x 45"	Directional Assembly Without Cardinals (One Headed)	(Left Arrow) H	-	-	-	-	-	1	1		
0010	4-12R	126+50	STH 21, LEFT	J13-1	24" x 45"	Directional Assembly Without Cardinals (One Headed)	H Left and Ahead Combination Arrow	-	-	-	-	-	1	-		
0010	4-13R	126+50	STH 21, LEFT	W1-7	48" x 24"	Double Night Arrow	H	-	-	-	-	-	1	1		
0010	4-14	126+50	STH 21, LEFT	W1-7	48" x 24"	Double Night Arrow	H	1	-	-	-	8.00	-	-		
0010	4-15	127+00	STH 21, RIGHT	R1-1	30" x 30"	Stop	H	1	-	-	5.18	-	-	-		CTH H
0010	4-16R	127+00	STH 21, RIGHT	R1-1	30" x 30"	Stop	H	-	-	-	-	-	1	1		
0010	4-17R	127+10	STH 21, RIGHT	J13-1	24" x 45"	Directional Assembly Without Cardinals (One Headed)	H	-	-	-	-	-	1	1		
0010	4-18	127+10	STH 21, RIGHT	J13-2	48" x 45"	Directional Assembly Without Cardinals (Two Heades)	(Left Arrow) H, 21	-	1	-	15.00	-	-	-		
0010	4-19	127+10	STH 21, LEFT	J13-1	24" x 45"	Directional Assembly Without Cardinals (One Headed)	(Left Arrow) (Double Arrow) H	-	1	-	7.50	-	-	-		
0010	4-20R	128+00	STH 21, RIGHT	I55-56	30" x 36"	Adopt A Highway	Left and Ahead Combination Arrow Knights of Columbus 12673	-	-	-	-	-	1	1		
0010	4-21	128+50	STH 21, RIGHT	J4-1	24" x 36"	Reassurance Assembly (One Headed)	East 21	1	-	-	6.00	-	-	-		
0010	4-22R	129+50	STH 21, RIGHT	J4-1	24" x 36"	Reassurance Assembly (One Headed)	East 21	-	-	-	-	-	1	1		
0010	4-23	130+50	STH 21, RIGHT	I55-56	30" x 36"	Adopt A Highway	Knights of Columbus 12673	1	-	-	7.50	-	-	-		
0010	4-24R	132+00	STH 21, LEFT	D1-1	96" x 15"	Destination Arrow	(Left Arrow) Camp Douglas	-	-	-	-	-	1	2		
0010	4-25	134+00	STH 21, LEFT	D1-1	96" x 15"	Destination Arrow	(Left Arrow) Camp Douglas	2	-	-	10.00	-	-	-		
0010	5-01R	137+00	STH 21, LEFT	J1-1	24" x 39"	Junction or End Assembly (One Headed)	JCT H	-	-	-	-	-	1	1		
0010	5-02	137+00	STH 21, LEFT	J1-1	24" x 39"	Junction or End Assembly (One Headed)	JCT H	-	1	-	6.50	-	-	-		
0010	6-01	166+00	STH 21, RIGHT	D7-68	60" x 42"	Road To County Park, Name	Road To Kennedy County Park 1 Mile	-	2	-	17.50	-	-	-		
0010	6-02R	166+50	STH 21, RIGHT	D7-68	60" x 42"	Road To County Park, Name	Road To Kennedy County Park 1 Mile	-	-	-	-	-	1	1		
0010	7-01R	208+00	STH 21, RIGHT	J1-1	24" x 39"	Junction or End Assembly (One Headed)	JCT M	-	-	-	-	-	1	1		
0010	7-02	208+50	STH 21, RIGHT	J1-1	24" x 39"	Junction or End Assembly (One Headed)	JCT M	-	1	-	6.50	-	-	-		
0010	7-03	211+50	STH 21, RIGHT	D1-1	78" x 15"	Destination Arrow	New Lisbon (Right Arrow)	2	-	-	8.13	-	-	-		
0010	7-04R	213+10	STH 21, RIGHT	D1-2	84" x 24"	Destinations Arrows, Two	New Lisbon (Right Arrow)	-	-	-	-	-	1	2		
0010	7-05	213+50	STH 21, RIGHT	D7-68-R	60" x 36"	County Park, Name, (Right Arrow)	Kennedy Co Park (Right Arrow) Kennedy County Park (Right Arrow)	1	1	-	15.00	-	-	-		
0010	7-06	215+00	STH 21, LEFT	I55-56	30" x 36"	Adopt A Highway	Knights of Columbus 12673	1	-	-	7.50	-	-	-		
0010	7-07R	216+00	STH 21, LEFT	J4-1	24" x 36"	Reassurance Assembly (One Headed)	West 21	-	-	-	-	-	1	1		
0010	7-08	217+00	STH 21, LEFT	J4-1	24" x 36"	Reassurance Assembly (One Headed)	West 21	1	-	-	6.00	-	-	-		
0010	7-09R	217+50	STH 21, LEFT	I55-56	30" x 36"	Adopt A Highway	Knights of Columbus 12673	-	-	-	-	-	1	1		
0010	7-10R	218+10	STH 21, LEFT	R1-1	30" x 30"	Stop	H	-	-	-	-	-	1	1		
0010	7-11	218+10	STH 21, LEFT	R1-1	30" x 30"	Stop	H	1	-	-	5.18	-	-	-		Cutler Rd
0010	7-12R	218+10	STH 21, RIGHT	J13-1	24" x 45"	Directional Assembly Without Cardinals (One Headed)	M (Right Arrow)	-	-	-	-	-	1	1		
0010	7-13	218+10	STH 21, RIGHT	J13-1	24" x 45"	Directional Assembly Without Cardinals (One Headed)	M (Right Arrow)	-	1	-	7.50	-	-	-		
0010	7-14	218+75	SIDEROAD	W10-1	36" x 36"	Railroad Crossing	H	1	-	-	-	7.07	-	-		
0010	7-15R	218+75	SIDEROAD	W10-1	36" x 36"	Railroad Crossing	H	-	-	-	-	-	1	1		
0010	7-16	219+50	STH 21, RIGHT	R1-1	30" x 30"	Stop	H	1	-	-	5.18	-	-	-		CTH M
0010	7-17R	219+50	STH 21, RIGHT	R1-1	30" x 30"	Stop	H	-	-	-	-	-	1	1		
0010	7-18	219+50	STH 21, RIGHT	J13-1	24" x 45"	Directional Assembly Without Cardinals (One Headed)	21	-	1	-	7.50	-	-	-		
0010	7-19R	219+50	STH 21, LEFT	J13-1	24" x 45"	Directional Assembly Without Cardinals (One Headed)	(Double Arrow) M	-	-	-	-	-	1	1		
0010	7-20	219+50	STH 21, LEFT	J13-1	24" x 45"	Directional Assembly Without Cardinals (One Headed)	(Left Arrow) M	-	1	-	7.50	-	-	-		
0010	7-21R	220+10	STH 21, RIGHT	I55-56	30" x 36"	Adopt A Highway	(Left Arrow) Harold Carter Wildlife Scholarship	-	-	-	-	-	1	1		
0010	7-22	221+00	STH 21, RIGHT	J4-1	24" x 36"	Reassurance Assembly (One Headed)	East 21	1	-	-	6.00	-	-	-		
0010	7-23R	221+50	STH 21, RIGHT	J4-1	24" x 36"	Reassurance Assembly (One Headed)	East 21	-	-	-	-	-	1	1		
0010	7-24	224+50	STH 21, LEFT	D7-68-L	60" x 36"	(Left Arrow) County Park, Name	Kennedy County Park (Left Arrow)	1	1	-	15.00	-	-	-		
Sheet Totals								17	12	0	179.67	22.14	23	24		

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STATE PROJECT NO: 7010-01-61

HWY: STH 21

COUNTY: JUNEAU

MISCELLANEOUS QUANTITIES

SHEET NO:

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PERMANENT SIGNING SUMMARY (CONT'D)															
								634.0614 WOOD POSTS 14' EACH	634.0616 WOOD POSTS 16' EACH	634.0618 WOOD POSTS 18' EACH	637.2210 SIGNS TYPE II REFLECTIVE H	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	
CATEGORY	SIGN NUMBER	STATION	LOCATION	SIGN CODE	SIZE	DESCRIPTION	ORDER LINES								NOTES
0010	7-25R	225+10	STH 21, LEFT	D1-2	84" x 24"	Destinations Arrows, Two	(Left Arrow) New Lisbon (Left Arrow) Kennedy Co Park	-	-	-	-	-	1	2	
0010	8-01	226+50	STH 21, LEFT	D1-1	78" x 15"	Destination Arrow	(Left Arrow) New Lisbon	2	-	-	8.13	-	-	-	
0010	8-02	229+50	STH 21, LEFT	J1-1	24" x 39"	Junction or End Assembly (One Headed)	JCT M	-	1	-	6.50	-	-	-	
0010	8-03R	230+00	STH 21, LEFT	J1-1	24" x 39"	Junction or End Assembly (One Headed)	JCT M	-	-	-	-	-	1	1	
0010	8-04	238+60	STH 21, RIGHT	D1-61	48" x 24"	Advanced Crossroad Name with Arrows	6th Ave (Left Arrow) (Right Arrow)	1	-	-	8.00	-	-	-	
0010	8-05R	238+60	STH 21, RIGHT	D1-1	66" x 15"	Destination Arrow	(Left Arrow) 6th Ave (Right Arrow)	-	-	-	-	-	1	2	
0010	8-06	245+25	STH 21, LEFT	R1-1	30" x 30"	Stop		1	-	-	5.18	-	-	-	6th Ave
0010	8-07R	245+25	STH 21, LEFT	R1-1	30" x 30"	Stop		-	-	-	-	-	1	1	
0010	8-08	246+00	STH 21, RIGHT	R1-1	30" x 30"	Stop		1	-	-	5.18	-	-	-	6th Ave
0010	8-09R	246+00	STH 21, RIGHT	R1-1	30" x 30"	Stop		-	-	-	-	-	1	1	
0010	8-10R	252+75	STH 21, LEFT	D1-1	66" x 15"	Destination Arrow	(Left Arrow) 6th Ave (Right Arrow)	-	-	-	-	-	1	-	
0010	8-11	253+00	STH 21, LEFT	D1-61	48" x 24"	Advanced Crossroad Name with Arrows	6th Ave (Left Arrow) (Right Arrow)	1	-	-	8.00	-	-	-	
0010	9-01R	270+50	STH 21, LEFT	D7-68	60" x 42"	Road To County Park, Name	Road To Kennedy County Park	-	-	-	-	-	1	1	
0010	9-02	272+50	STH 21, LEFT	D7-68	60" x 42"	Road To County Park, Name	1 Mile Road To Kennedy County Park	-	2	-	17.50	-	-	-	
0010	11-01R	324+50	STH 21, LEFT	I55-56	30" x 36"	Adopt A Highway	Harold Carter Wildlife Scholarship	-	-	-	-	-	1	1	
0010	11-02	326+25	STH 21, RIGHT	I55-56	30" x 36"	Adopt A Highway	Ziegler - Maass And Yoss Families	1	-	-	7.50	-	-	-	
0010	11-03R	326+25	STH 21, RIGHT	I55-56	30" x 36"	Adopt A Highway	Ziegler - Maass And Yoss Families	-	-	-	-	-	1	1	
0010	11-04R	329+50	STH 21, RIGHT	W11-3	30" x 30"	Deer Crossing Next 5 Miles		-	-	-	-	-	1	1	
0010	12-01	362+50	STH 21, RIGHT	D1-61	48" x 24"	Advanced Crossroad Name with Arrows	7th Ave (Left Arrow) (Right Arrow)	1	-	-	8.00	-	-	-	
0010	12-02R	363+00	STH 21, RIGHT	M1-94	48" x 15"	Advanced Crossroad Name	7th Ave	-	-	-	-	-	1	1	
0010	12-03	369+25	STH 21, LEFT	R1-1	30" x 30"	Stop		1	-	-	5.18	-	-	-	7th Ave
0010	12-04R	369+25	STH 21, LEFT	R1-1	30" x 30"	Stop		-	-	-	-	-	1	1	
0010	12-05R	370+75	STH 21, RIGHT	R1-1	30" x 30"	Stop		-	-	-	-	-	-	-	
0010	12-06	370+75	STH 21, RIGHT	R1-1	30" x 30"	Stop		1	-	-	5.18	-	-	-	7th Ave
0010	13-01R	377+00	STH 21, LEFT	M1-94	48" x 15"	Advanced Crossroad Name	7th Ave	-	-	-	-	-	1	1	
0010	13-02	377+50	STH 21, LEFT	D1-61	48" x 24"	Advanced Crossroad Name with Arrows	7th Ave (Left Arrow) (Right Arrow)	2	-	-	8.00	-	-	-	
0010	13-03	378+25	STH 21, RIGHT	D7-76 MOD	84" x 42"	Road To National Wildlife Refuge	Road To Necedah National Wildlife Refuge	-	1	1	24.50	-	-	-	
0010	13-04R	378+25	STH 21, RIGHT	D7-76 MOD	84" x 42"	Road To National Wildlife Refuge	1 Mile Road To Necedah National Wildlife Refuge	-	-	-	-	-	1	2	
0010	14-01R	417+25	STH 21, LEFT	R1-1	30" x 30"	Stop		-	-	-	-	-	1	1	
0010	14-02	417+25	STH 21, LEFT	R1-1	30" x 30"	Stop		1	-	-	5.18	-	-	-	
0010	14-03	424+00	STH 21, RIGHT	D1-1	108" x 15"	Destination Arrow	(Left Arrow) Headquarters Rd	2	-	-	11.25	-	-	-	
0010	14-04	424+00	STH 21, RIGHT	D7-77-L-MOD	84" x 36"	(Left Arrow) National Wildlife Refuge	Necedah National Wildlife Refuge (Left Arrow)	-	1	1	21.00	-	-	-	
0010	14-05R	425+75	STH 21, RIGHT	D1-2	96" x 24"	Destinations Arrows, Two	(Left Arrow) Necedah National (Left Arrow) Wildlife Refuge	-	-	-	-	-	1	3	ncludes Wildlife Viewing Area Sign
0010	14-06	426+00	STH 21, RIGHT	M1-86	18" x 36"	Wilflife Viewing Area		1	-	-	4.50	-	-	-	
0010	14-07	426+00	STH 21, RIGHT	M1-88	18" x 18"	Directional Arrow for Wildlife Viewing Areas		-	-	-	2.25	-	-	-	
0010	14-08R	427+00	STH 21, LEFT	I55-56	30" x 36"	Adopt A Highway	Ziegler - Maass And Yoss Families	-	-	-	-	-	1	1	
0010	14-09	427+50	STH 21, LEFT	I55-56	30" x 36"	Adopt A Highway	Ziegler - Maass And Yoss Families	1	-	-	7.50	-	-	-	
0010	14-10R	428+75	STH 21, LEFT	J4-1	24" x 36"	Reassurance Assembly (One Headed)	West 21	-	-	-	-	-	1	1	
0010	14-11	429+25	STH 21, LEFT	J4-1	24" x 36"	Reassurance Assembly (One Headed)	West 21	1	-	-	6.00	-	-	-	
0010	14-12R	431+00	STH 21, LEFT	R1-1	30" x 30"	Stop		-	-	-	-	-	1	1	
0010	14-13	431+00	STH 21, LEFT	R1-1	30" x 30"	Stop		1	-	-	5.18	-	-	-	Headquarters Rd
0010	14-14	433+00	STH 21, RIGHT	J4-1	24" x 36"	Reassurance Assembly (One Headed)	East 21	1	-	-	6.00	-	-	-	
Sheet Totals								20	5	2	180.53	0	19	23	

STATE PROJECT NO: 7010-01-61					HWY: STH 21		COUNTY: JUNEAU			MISCELLANEOUS QUANTITIES				SHEET NO:		E
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STATE PROJECT NO: 7010-01-61

HWY: STH 21

COUNTY: JUNEAU

MISCELLANEOUS QUANTITIES

SHEET NO:

E

FILE NAME : _____

PLOT DATE : _____

PLOT BY : _____

PLOT NAME : _____

ORG DATE : _____

ORIGINATOR : DIST _

PLOT SCALE : 1:1

PERMANENT SIGNING SUMMARY (CONT'D)														
								634.0614 WOOD POSTS 14' EACH	634.0616 WOOD POSTS 16' EACH	634.0618 WOOD POSTS 18' EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH
CATEGORY	SIGN NUMBER	STATION	LOCATION	SIGN CODE	SIZE	DESCRIPTION	ORDER LINES							
0010	14-15R	434+50	STH 21, RIGHT	J4-1	24" x 36"	Reassurance Assembly (One Headed)	East 21	-	-	-	-	-	1	1
0010	15-01	437+00	STH 21, LEFT	M1-86	18" x 36"	Wilflife Viewing Area		1	-	-	4.50	-	-	-
0010	15-02	437+00	STH 21, LEFT	M1-88	18" x 18"	Directional Arrow for Wildlife Viewing Areas		-	-	-	2.25	-	-	-
0010	15-03R	437+10	STH 21, LEFT	D1-2	96" x 24"	Destinations Arrows, Two	Necedah National (Right Arrow)	-	-	-	-	-	1	2
							Wildlife Refuge (Right Arrow)							
0010	15-04	439+00	STH 21, LEFT	D7-77-R-MOD	84" x 36"	National Wildlife Refuge (Right Arrow)	Necedah National Wildlife Refuge (Left Arrow)	-	1	1	21.00	-	-	-
0010	15-05	441+00	STH 21, LEFT	D1-1	108" x 15"	Destination Arrow	Headquarters Rd (Right Arrow)	2	-	-	11.25	-	-	-
0010	15-06R	447+25	STH 21, LEFT	R1-1	30" x 30"	Stop		-	-	-	-	-	1	1
0010	16-01R	484+10	STH 21, LEFT	D7-76 MOD	84" x 42"	Road To National Wildlife Refuge	Road To Necedah National Wildlife Refuge 1 Mile	-	-	-	-	-	1	2
0010	16-02	484+50	STH 21, LEFT	D7-76 MOD	84" x 42"	Road To National Wildlife Refuge	Road To Necedah National Wildlife Refuge 1 Mile	-	1	1	24.50	-	-	-
0010	16-03	485+75	STH 21, RIGHT	D1-1	66" x 15"	Destination Arrow	(Left Arrow) 9th Ave	2	-	-	6.88	-	-	-
0010	16-04R	485+75	STH 21, RIGHT	D1-1	48" x 15"	Destination Arrow	9th Ave	-	-	-	-	-	1	1
0010	16-05R	490+50	STH 21, LEFT	R1-1	30" x 30"	Stop		-	-	-	-	-	1	1
0010	16-06	490+50	STH 21, LEFT	R1-1	30" x 30"	Stop		1	-	-	5.18	-	-	-
0010	17-01R	500+00	STH 21, LEFT	D1-1	48" x 15"	Destination Arrow	9th Ave	-	-	-	-	-	1	1
0010	17-02	500+00	STH 21, LEFT	D1-1	66" x 15"	Destination Arrow	9th Ave (Right Arrow)	2	-	-	6.88	-	-	-
0010	18-01	538+00	STH 21, RIGHT	D1-1	78" x 15"	Destination Arrow	22nd St W (Right Arrow)	2	-	-	8.13	-	-	-
0010	18-02R	538+00	STH 21, RIGHT	D1-1	66" x 15"	Destination Arrow	22nd St W	-	-	-	-	-	1	2
0010	18-03	545+50	STH 21, RIGHT	R1-1	30" x 30"	Stop		1	-	-	5.18	-	-	-
0010	18-04R	545+50	STH 21, RIGHT	R1-1	30" x 30"	Stop		-	-	-	-	-	1	1
0010	18-05R	546+90	STH 21, RIGHT	I55-56	30" x 36"	Adopt A Highway	Jack Pine	-	-	-	-	-	1	1
							Traders							
0010	18-06	552+25	STH 21, LEFT	D1-1	78" x 15"	Destination Arrow	(Left Arrow) 22nd St W	2	-	-	8.13	-	-	-
0010	18-07R	552+25	STH 21, LEFT	D1-1	66" x 15"	Destination Arrow	22nd St W	-	-	-	-	-	1	2
0010	20-01R	589+00	STH 21, LEFT	W11-3	30" x 30"	Deer Crossing Next 5 Miles		-	-	-	-	-	2	1
0010	20-02R	608+00	STH 21, RIGHT	SP	36" x 36"	School Bus Entrance		-	-	-	-	-	1	1
0010	20-03	611-00	STH 21, LEFT	W14-3	48" x 36"	No Passing Zone Pennant		1	-	-	6.00	-	-	-
0010	20-04R	611+00	STH 21, LEFT	W14-3	48" x 36"	No Passing Zone Pennant		-	-	-	-	-	1	1
0010	20-05R	611+00	STH 21, LEFT	D2-1	60" x 15"	Destination Distance	Sparta 40	-	-	-	-	-	1	-
0010	20-06	611+80	STH 21, RIGHT	I2-3	60" x 24"	Community Population Sign	Necedah Population 916	2	-	-	10.00	-	-	-
0010	21-01	617+00	STH 21, RIGHT	W3-5	36" x 36"	Speed Limit __ Ahead	35	1	-	-	9.00	-	-	-
0010	21-02R	617+00	STH 21, RIGHT	W3-5	36" x 36"	Speed Limit __ Ahead	35	-	-	-	-	-	1	1
0010	21-03	618+00	STH 21, LEFT	D2-2	66" x 24"	Destinations Distances	Tomah 22 Sparta 40 Jack Pine	2	-	-	11.00	-	-	-
0010	21-04R	619+00	STH 21, LEFT	I55-56	30" x 36"	Adopt A Highway	Jack Pine	-	-	-	-	-	1	1
							Traders							
0010	21-05R	619+75	STH 21, RIGHT	I2-3	66" x 24"	Community Population Sign	Necedah Population 916	-	-	-	-	-	1	2
0010	21-06	621+00	STH 21, LEFT	J4-1	24" x 36"	Reassurance Assembly (One Headed)	West 21	-	1	-	6.00	-	-	-
0010	21-07R	621+25	STH 21, LEFT	J4-1	24" x 36"	Reassurance Assembly (One Headed)	West 21	-	-	-	-	-	1	1
0010	21-08R	622+50	STH 21, LEFT	R2-1	24" x 30"	Speed Limit __	55	-	-	-	-	-	1	1
0010	21-09	623+00	STH 21, LEFT	R2-1	24" x 30"	Speed Limit __	55	1	-	-	5.00	-	-	-
0010	21-10R	623+00	STH 21, RIGHT	R2-1	24" x 30"	Speed Limit __	35	-	-	-	-	-	1	1
0010	21-11	623+00	STH 21, RIGHT	R2-1	24" x 30"	Speed Limit __	35	1	-	-	5.00	-	-	-
0010	21-12R	627+00	STH 21, LEFT	SP	36" x 36"	School Bus Entrance		-	-	-	-	-	1	1
0010	21-13R	628+00	STH 21, RIGHT	R2-1	24" x 30"	Speed Limit __	35	-	-	-	-	-	1	1
0010	21-14	628+00	STH 21, RIGHT	R2-1	24" x 30"	Speed Limit __	35	1	-	-	5.00	-	-	-
0010	21-15R	629+25	STH 21, RIGHT	D1-2	48" x 24"	Destinations Arrows	(Left Arrow) Ranger (Left Arrow) Station	-	-	-	-	-	1	1
0010	21-16R	629+50	STH 21, LEFT	R1-1	30" x 30"	Stop		-	-	-	-	-	1	1
0010	21-17	629+50	STH 21, LEFT	R1-1	30" x 30"	Stop		1	-	-	5.18	-	-	-
0010	21-18	630+25	STH 21, RIGHT	R1-1	30" x 30"	Stop		1	-	-	5.18	-	-	-
0010	21-19R	630+25	STH 21, RIGHT	R1-1	30" x 30"	Stop		-	-	-	-	-	1	1
0010	21-20R	630+50	STH 21, LEFT	D1-2	48" x 24"	Destinations Arrows	Ranger (Right Arrow) Station (Right Arrow)	-	-	-	-	-	1	1
0010	21-21	633+00	STH 21, LEFT	R1-1	30" x 30"	Stop		1	-	-	5.18	-	-	-
0010	21-22R	633+00	STH 21, LEFT	R1-1	30" x 30"	Stop		-	-	-	-	-	1	1
0010	21-23	633+75	STH 21, RIGHT	R1-1	30" x 30"	Stop		1	-	-	5.18	-	-	-
0010	21-24R	633+75	STH 21, RIGHT	R1-1	30" x 30"	Stop		-	-	-	-	-	1	1
0010	21-25R	634+50	STH 21, RIGHT	R2-1	24" x 30"	Speed Limit __	35	-	-	-	-	-	1	1
0010	21-26	634+50	STH 21, RIGHT	R2-1	24" x 30"	Speed Limit __	35	1	-	-	5.00	-	-	-
0010	21-27R	635+50	STH 21, LEFT	R2-1	24" x 30"	Speed Limit __	35	-	-	-	-	-	1	1
0010	21-28	635+50	STH 21, LEFT	R2-1	24" x 30"	Speed Limit __	35	1	-	-	5.00	-	-	-
0010	21-29	636+00	STH 21, LEFT	R1-1	30" x 30"	Stop		1	-	-	5.18	-	-	-
Sheet Totals								29	3	2	196.78	0	32	35

STATE PROJECT NO: 7010-01-61					HWY: STH 21		COUNTY: JUNEAU		MISCELLANEOUS QUANTITIES			SHEET NO:		E
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STATE PROJECT NO: 7010-01-61

HWY: STH 21

COUNTY: JUNEAU

MISCELLANEOUS QUANTITIES

SHEET NO:

E

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PERMANENT SIGNING SUMMARY (CONT'D)

CATEGORY	SIGN NUMBER	STATION	LOCATION	SIGN CODE	SIZE	DESCRIPTION	ORDER LINES	634.0614	634.0616	634.0618	637.2210	637.2230	638.2602	638.3000
								WOOD POSTS 14' EACH	WOOD POSTS 16' EACH	WOOD POSTS 18' EACH	SIGNS TYPE II REFLECTIVE H SF	SIGNS TYPE II REFLECTIVE F SF	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH
0010	21-30R	636+00	STH 21, LEFT	R1-1	30" x 30"	Stop		-	-	-	-	-	1	1
0010	21-31	636+80	STH 21, RIGHT	R1-1	30" x 30"	Stop		1	-	-	5.18	-	-	-
0010	21-32R	636+80	STH 21, RIGHT	R1-1	30" x 30"	Stop		-	-	-	-	-	1	1
0010	21-33R	638+50	STH 21, LEFT	R1-1	30" x 30"	Stop		-	-	-	-	-	1	1
0010	21-34	638+50	STH 21, LEFT	R1-1	30" x 30"	Stop		1	-	-	5.18	-	-	-
0010	21-35	638+75	STH 21, RIGHT	R1-1	30" x 30"	Stop		1	-	-	5.18	-	-	-
0010	21-36R	638+75	STH 21, RIGHT	R1-1	30" x 30"	Stop		-	-	-	-	-	1	1
0010	21-37	639+00	STH 21, RIGHT	R1-1	30" x 30"	Stop		1	-	-	5.18	-	-	-
0010	21-38R	639+00	STH 21, RIGHT	R1-1	30" x 30"	Stop		-	-	-	-	-	1	1
0010	21-39R	641+00	STH 21, RIGHT	J1-1	24" x 39"	Junction or End Assembly (One Headed)	JCT	-	-	-	-	-	1	1
								80						
0010	21-40	641+00	STH 21, RIGHT	J1-1	24" x 39"	Junction or End Assembly (One Headed)	JCT	1	-	-	6.50	-		
								80						
0010	21-41R	641+50	STH 21, LEFT	R2-1	24" x 30"	Speed Limit __	35	-	-	-	-	-	1	1
0010	21-42R	643+00	STH 21, LEFT	R7-1-R	18" x 24"	No Parking Any Time (Right Arrow)		-	-	-	-	-	1	1
0010	21-43	643+00	STH 21, LEFT	R2-1	24" x 30"	Speed Limit __	35	1	-	-	5.00	-	-	-
0010	21-44	643+00	STH 21, LEFT	R7-1-R	18" x 24"	No Parking Any Time (Right Arrow)		-	-	-	3.00	-	-	-
0010	21-45R	643+00	STH 21, RIGHT	R2-1	24" x 30"	Speed Limit __	25	-	-	-	-	-	2	1
0010	21-46	643+00	STH 21, RIGHT	R2-1	24" x 30"	Speed Limit __	25	1	-	-	5.00	-	-	-
0010	21-47	643+00	STH 21, RIGHT	R7-1-L	18" x 24"	No Parking Any Time (Left Arrow)		-	-	-	3.00	-	-	-
Sheet Totals								7	0	0	43.22	0	10	9
Signing Totals								102	28	4	796.68	49.14	112	122

EROSION MAT CLASS I TYPE B

628.2004

CATEGORY	STATION	LOCATION	SY	REMARKS
0010	25+02	STH 21	10	LEFT - 24" APRON ENDWALL
0010	25+02	STH 21	10	RIGHT - 24" APRON ENDWALL
0010	82+50	STH 21	50	RIGHT - 72" APRON ENDWALL
0010	83+60	STH 21	50	LEFT - 72" APRON ENDWALL
0010	152+99	STH 21	10	LEFT - 36" APRON ENDWALL
0010	152+99	STH 21	10	RIGHT - 36" APRON ENDWALL
0010	177+01	STH 21	10	LEFT - 36" APRON ENDWALL
0010	202+09	STH 21	10	LEFT - 36" APRON ENDWALL
0010	202+09	STH 21	10	RIGHT - 36" APRON ENDWALL
0010	223+37	STH 21	10	LEFT - 30" APRON ENDWALL
0010	223+77	STH 21	10	RIGHT - 30" APRON ENDWALL
0010	244+97	STH 21	10	LEFT - 36" APRON ENDWALL
0010	244+97	STH 21	10	RIGHT - 36" APRON ENDWALL
0010	272+05	STH 21	10	LEFT - 30" APRON ENDWALL
0010	272+05	STH 21	10	RIGHT - 30" APRON ENDWALL
0010	297+78	STH 21	10	LEFT - 36" APRON ENDWALL
0010	297+78	STH 21	10	RIGHT - 36" APRON ENDWALL
0010	511+28	STH 21	10	RIGHT - 36" APRON ENDWALL
0010	32' A' +38	2ND AVENUE	15	LEFT - DITCHLINE
0010	32' A' +38	2ND AVENUE	15	RIGHT - DITCHLINE
0010	72' B' +88	W STUB RD	10	RIGHT - DITCHLINE
0010	73' B' +96	2ND AVENUE	80	RIGHT - DITCHLINE
0010	73' B' +96	2ND AVENUE	25	LEFT - DITCHLINE
0010	246' E' +02	6TH AVENUE	30	RIGHT - DITCHLINE
0010	246' E' +02	6TH AVENUE	10	LEFT - DITCHLINE
0010	369' G' +24	7TH AVENUE	10	RIGHT - DITCHLINE
0010	370' F' +30	7TH AVENUE	35	RIGHT - DITCHLINE
0010	370' F' +64	7TH AVENUE	10	LEFT - DITCHLINE
0010	493' I' +32	9TH AVENUE	45	RIGHT - DITCHLINE
0010	493' I' +32	9TH AVENUE	10	LEFT - DITCHLINE
0010	15+97 - 643+00	UNDISTRIBUTED	55	ESTIMATED 10% - LEFT AND RIGHT
TOTAL 0010			610	

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TRAFFIC CONTROL DRUMS

CONSTRUCTION STAKING RESURFACING REFERENCE					
CATEGORY	STATION TO	STATION	LOCATION	650.8000 LF	REMARKS
0010	15+97	- 643+00	STH 21	62703	MAINLINE
TOTAL 0010				62703	

CATEGORY	STATION TO	STATION	LOCATION	643.0300 DAY	REMARKS
0010	30+87	- 34+14	STH 21	20	2ND AVENUE SOUTH
0010	31+26	- 37+07	STH 21	20	CTH H NORTH
0010	71+48	- 74+48	STH 21	20	W STUB RD.
0010	72+07	- 75+39	STH 21	20	2ND AVENUE NORTH
0010	122+50	- 128+29	STH 21	20	CTH H SOUTH
0010	214+82	- 220+71	STH 21	20	CTH M SOUTH
0010	217+28	- 220+67	STH 21	20	CUTLER RD.
0010	243+75	- 247+07	STH 21	20	6TH AVENUE SOUTH
0010	244+60	- 247+62	STH 21	20	6TH AVENUE NORTH
0010	368+25	- 371+62	STH 21	20	7TH AVENUE NORTH
0010	368+37	- 371+77	STH 21	20	7TH AVENUE SOUTH
0010	429+78	- 435+57	STH 21	20	HEADQUARTERS RD.
0010	491+43	- 494+72	STH 21	20	9TH AVENUE
0010	543+23	- 546+55	STH 21	20	22ND STREET W
0010	428+86	- 431+23	STH 21	50	BEAMGUARD
0010	15+97	- 643+00	STH 21	180	SHOULDER CLOSURE FOR ENDWALL REPLACEMENT
TOTAL 0010				510	

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 7010-01-61

CATEGORY	STATION TO	STATION	LOCATION	650.9910 LS	REMARKS
0010	15+97	- 643+00	STH 21	1	MAINLINE
TOTAL 0010				1	

GEOTEXTILE FABRIC TYPE HR

CATEGORY	STATION	LOCATION	645.0120 SY	REMARKS
0010	82+50	STH 21	40	RIGHT
0010	83+60	STH 21	40	LEFT
0010	32 'A' +38	2ND AVENUE	4	LEFT
0010	72 'B' +88	W STUB RD	4	RIGHT
0010	73 'B' +96	2ND AVENUE	4	RIGHT
0010	246 'E' +02	6TH AVENUE	4	LEFT
0010	369 'G' +24	7TH AVENUE	4	RIGHT
0010	370 'F' +30	7TH AVENUE	4	RIGHT
0010	493 'I' +32	9TH AVENUE	4	LEFT
0010	544 'J' +60	22ND STREET WEST	4	RIGHT
TOTAL 0010			112	

TRAFFIC CONTROL SIGNS

CATEGORY	STATION TO	STATION	SERVICE DAYS	QUANTITY	LOCATION	643.0900 DAY	REMARKS
0010	15+97	- 643+00	70	30	STH 21	2100	ADVANCED WARNING
0010	15+97	- 643+00	24	10	STH 21	240	NO CENTER STRIPE
0010	15+97	- 643+00	24	20	STH 21	480	LOOSE GRAVEL
TOTAL 0010						2820	

PAVEMENT MARKING EPOXY

CATEGORY	STATION	TO	STATION	LOCATION	PAVEMENT	PAVEMENT	PAVEMENT MARKING	PAVEMENT MARKING	REMARKS
					MARKING EPOXY	MARKING EPOXY	SAME DAY EPOXY 4-	STOP LINE EPOXY	
					4-INCH	8-INCH	INCH	12-INCH	
					646.0106	646.0126	646.0406	647.0556	
LF	LF	LF	LF						
0010	15+97	-	599+00	STH 21	14575	-	-	-	DASHED YELLOW CENTERLINE
0010	599+00	-	643+00	STH 21	-	-	3500	-	SURFACE LIFT - YELLOW CENTERLINE
0010	15+97	-	32+10	STH 21, RT	1613	-	-	-	WHITE EDGELINE
0010	15+97	-	32+25	STH 21, LT	1628	-	-	-	WHITE EDGELINE
0010	33+35	-	72+70	STH 21, RT	3935	-	-	-	WHITE EDGELINE
0010	33+60	-	72+90	STH 21, LT	3930	-	-	-	WHITE EDGELINE
0010	74+00	-	126+00	STH 21, RT	5200	-	-	-	WHITE EDGELINE
0010	74+20	-	218+10	STH 21, LT	14390	-	-	-	WHITE EDGELINE
0010	127+30	-	218+30	STH 21, RT	9100	-	-	-	WHITE EDGELINE
0010	219+50	-	245+10	STH 21, LT	2560	-	-	-	WHITE EDGELINE
0010	219+70	-	245+00	STH 21, RT	2530	-	-	-	WHITE EDGELINE
0010	246+25	-	369+60	STH 21, RT	12335	-	-	-	WHITE EDGELINE
0010	246+40	-	369+10	STH 21, LT	12270	-	-	-	WHITE EDGELINE
0010	370+40	-	430+80	STH 21, LT	6040	-	-	-	WHITE EDGELINE
0010	370+90	-	544+45	STH 21, RT	17355	-	-	-	WHITE EDGELINE
0010	432+10	-	492+20	STH 21, LT	6010	-	-	-	WHITE EDGELINE
0010	493+50	-	629+30	STH 21, LT	13580	-	-	-	WHITE EDGELINE
0010	545+75	-	632+50	STH 21, RT	8675	-	-	-	WHITE EDGELINE
0010	630+60	-	632+70	STH 21, LT	210	-	-	-	WHITE EDGELINE
0010	633+95	-	635+80	STH 21, RT	185	-	-	-	WHITE EDGELINE
0010	634+00	-	635+80	STH 21, LT	180	-	-	-	WHITE EDGELINE
0010	636+95	-	638+20	STH 21, RT	125	-	-	-	WHITE EDGELINE
0010	637+20	-	638+30	STH 21, LT	110	-	-	-	WHITE EDGELINE
0010	639+00	-	643+00	STH 21, RT	400	-	-	-	WHITE EDGELINE
0010	639+35	-	643+00	STH 21, LT	365	-	-	-	WHITE EDGELINE
0010	33+57		35+57	STH 21, LT	-	200	-	-	8" CHANNELIZING
0010	124+00		126+00	STH 21, RT	-	200	-	-	8" CHANNELIZING
0010	216+32		218+32	STH 21, RT	-	200	-	-	8" CHANNELIZING
0010	432+07		434+07	STH 21, LT	-	200	-	-	8" CHANNELIZING
0010	72' B' +35			W STUB RD.	-	-	-	10	12" STOP BAR
0010	125' C' +50			CTH H	-	-	-	11	12" STOP BAR
TOTAL 0010					137301	800	3500	21	

TEMPORARY PAVEMENT MARKING PAINT 4-INCH

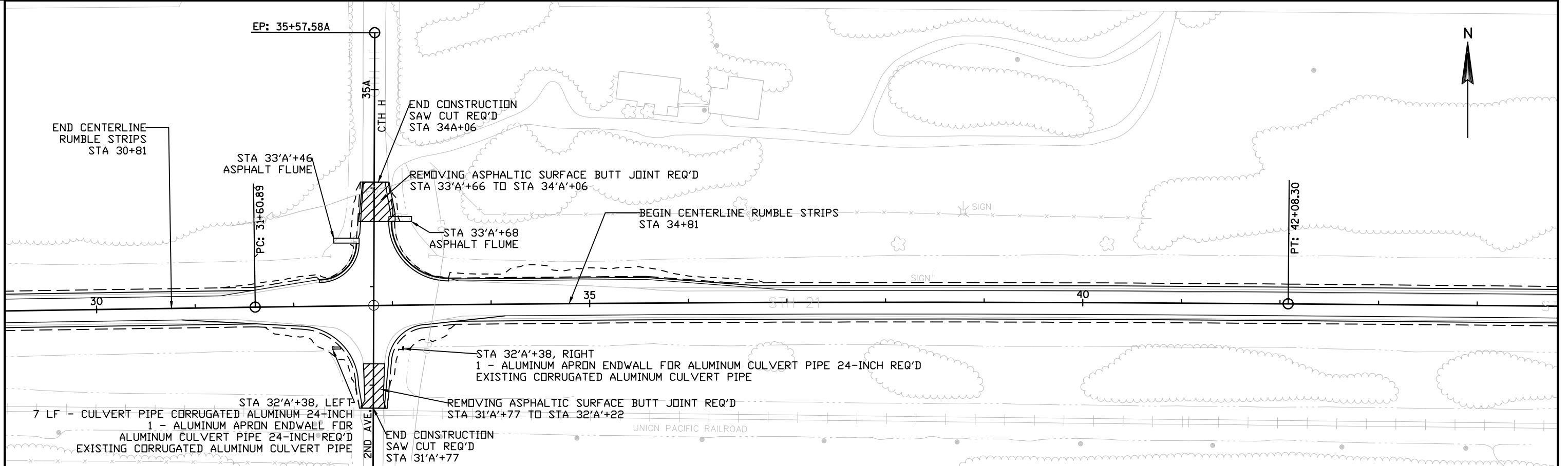
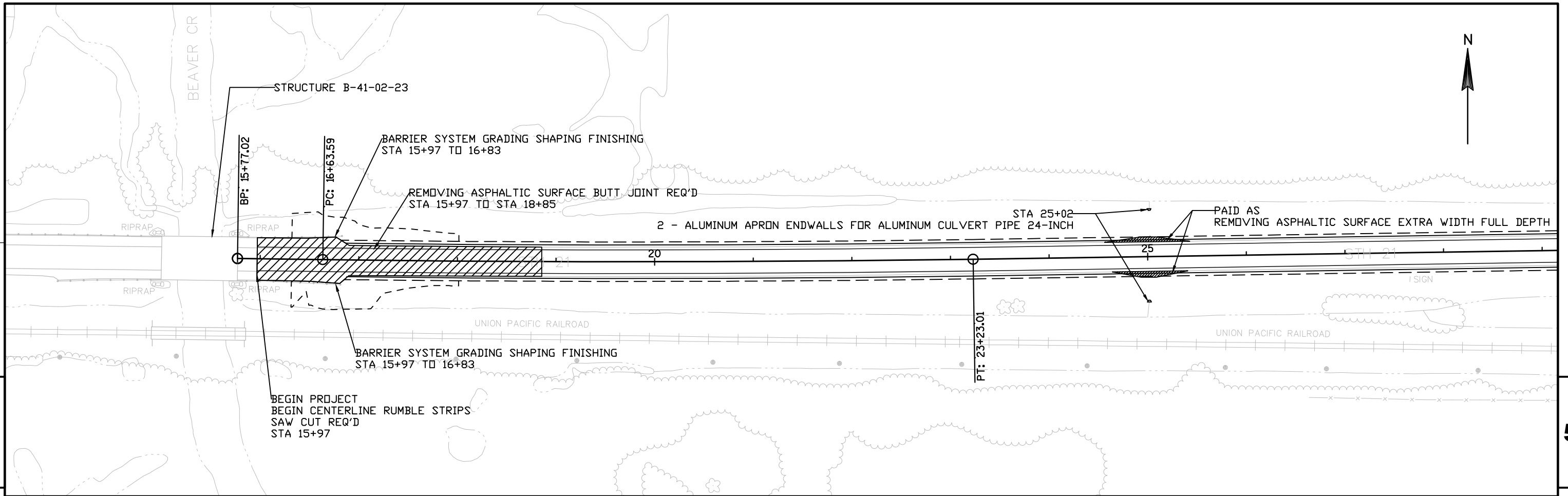
SAWING CONCRETE

CATEGORY	STATION	LOCATION	LF	REMARKS					REMARKS
					CATEGORY	STATION TO	STATION	LOCATION	
0010	625+76	STH 21	5	RIGHT	0010	15+97 -	629+29	STH 21	MILLED SURFACE
0010	632+01	STH 21	5	RIGHT	0010	15+97 -	629+29	STH 21	1ST HMA LIFT
0010	633+57	STH 21	5	RIGHT	0010	15+97 -	599+00	STH 21	2ND HMA LIFT
0010	636+20	STH 21	5	RIGHT	0010	629+29 -	643+00	STH 21	MILLED SURFACE
0010	636+67	STH 21	5	RIGHT	TOTAL 0010				17235
0010	638+43	STH 21	5	RIGHT	LOCATING NO-PASSING ZONES				
0010	639+04	STH 21	5	RIGHT					
TOTAL 0010				35					
					CATEGORY	STATION TO	STATION	LOCATION	REMARKS
					0010	15+97 -	643+00	STH 21	MAINLINE
					TOTAL 0010				11.88

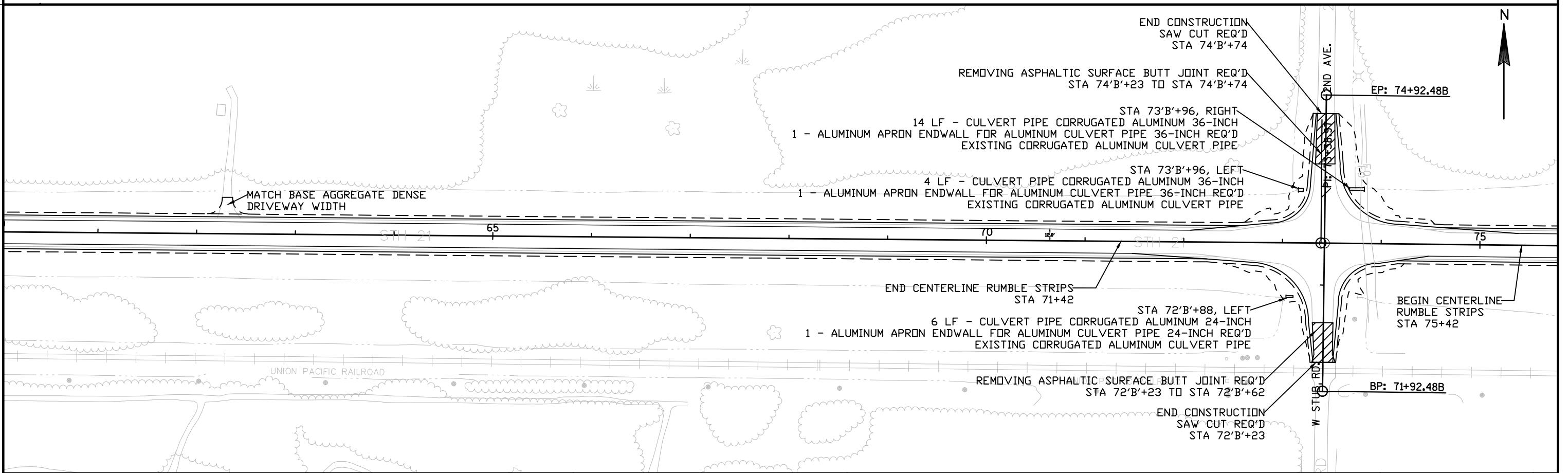
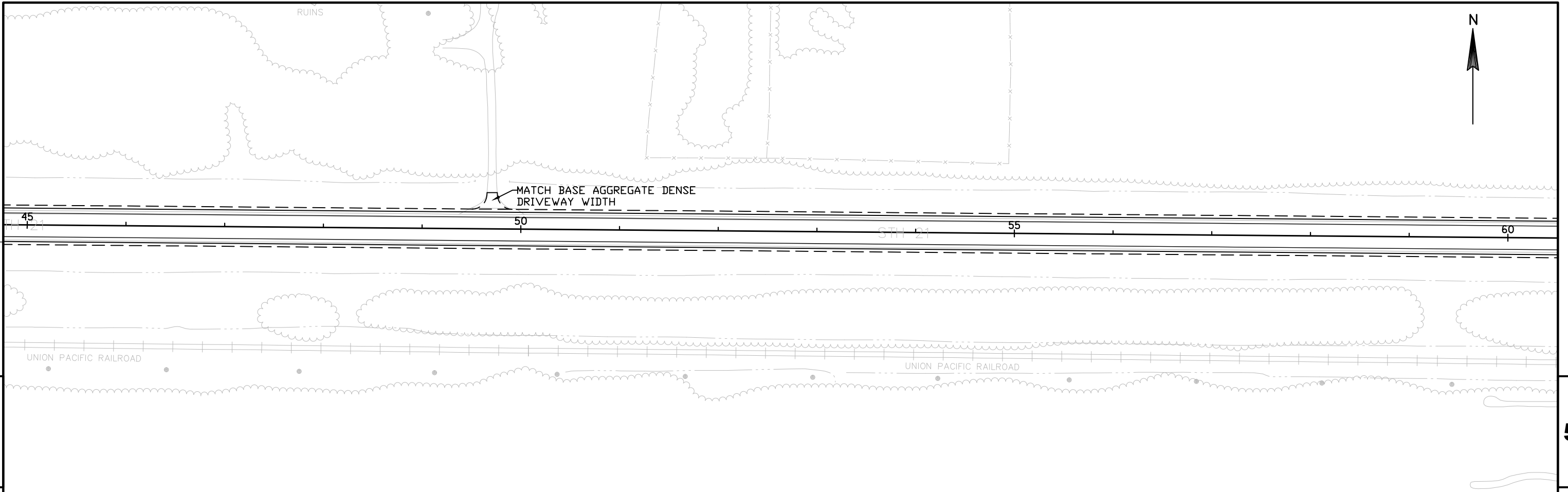
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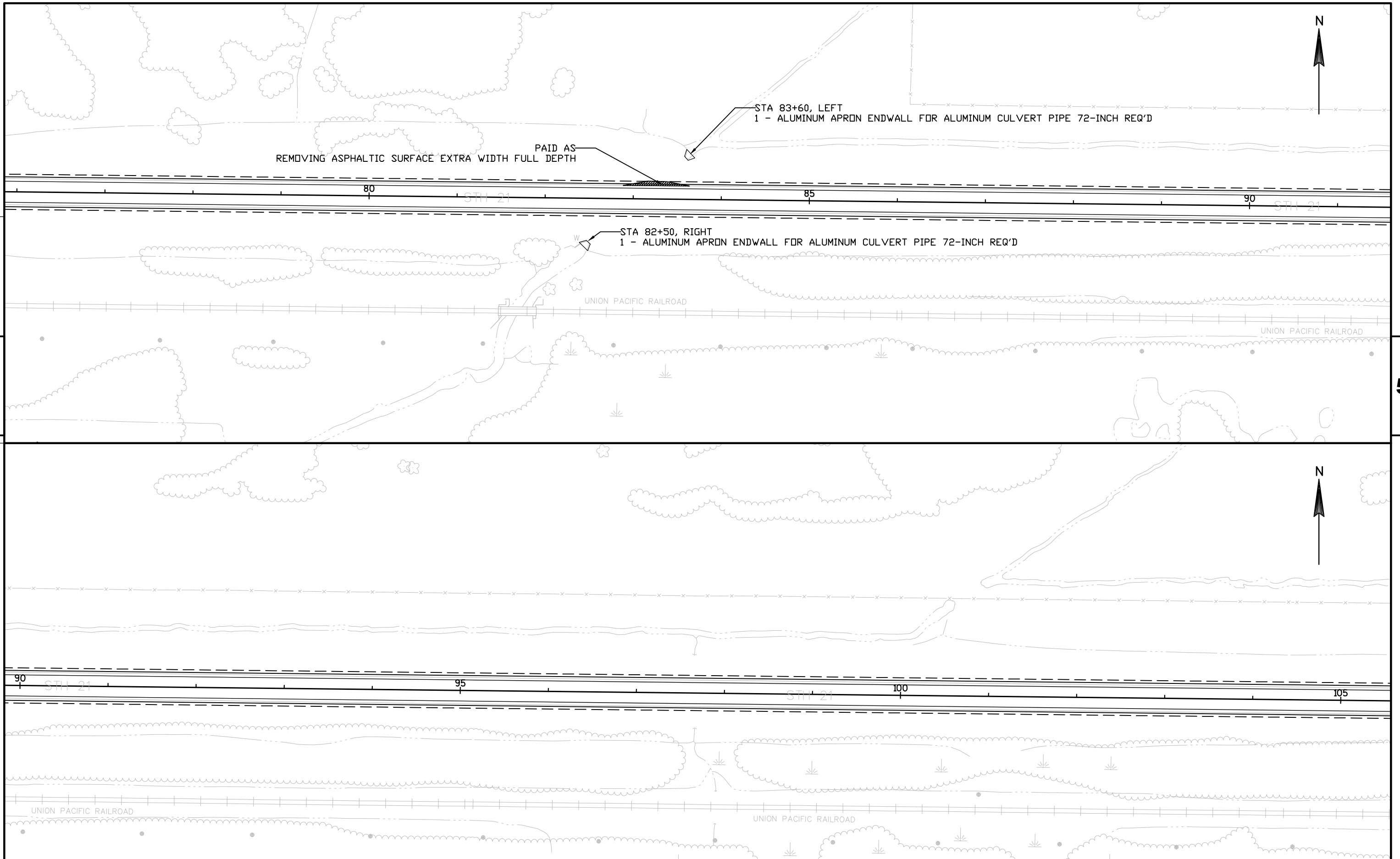
SAWING ASPHALT					SPECIAL 02. ADJUSTING WATER VALVE BOXES					
690.0150					SPV.0060.02					
CATEGORY	STATION	LOCATION	LF	REMARKS	CATEGORY	STATION	LOCATION	EACH	REMARKS	
0010	15+97	MAINLINE	40	STH 21	0010	629+65	STH 21	1	LEFT	
0010	32'A'+00	SIDEROAD	22	2ND AVENUE	0010	630+05	STH 21	2	RIGHT	
0010	34'A'+06	SIDEROAD	22	CTH H	0010	630+22	STH 21	1	LEFT	
0010	72'B'+42	SIDEROAD	20	W STUB ROAD	0010	633+13	STH 21	1	RIGHT	
0010	74'B'+74	SIDEROAD	20	2ND AVENUE	0010	636+28	STH 21	1	RIGHT	
0010	125'C'+60	SIDEROAD	22	CTH H	TOTAL 0010				6	
0010	217'D'+63	SIDEROAD	22	CTH M						
0010	244'E'+27	SIDEROAD	22	6TH AVENUE	SPECIAL 01. GRADING AND SHAPING APRON ENDWALL					
0010	368'G'+85	SIDEROAD	22	7TH AVENUE						
0010	371'F'+26	SIDEROAD	22	7TH AVENUE						
0010	432'H'+70	SIDEROAD	22	HEADQUARTERS ROAD						
0010	543'J'+77	SIDEROAD	18	22ND STREET W						
0010	630'K'+66	SIDEROAD	36	JOHN STREET						
0010	634'L'+01	SIDEROAD	24	HARVEY STREET						
0010	632'L'+52	SIDEROAD	25	OAK GROVE DRIVE						
0010	637'M'+24	SIDEROAD	25	PLUM STREET						
0010	639'O'+39	SIDEROAD	34	N DIVISION STREET						
0010	638'N'+10	SIDEROAD	26	N DIVISION STREET						
0010	638'N'+25	SIDEROAD	20	OAK STREET						
0010	643+00	MAINLINE	38	STH 21						
0010	545+25	LEFT	15	PRIVATE DRIVE						
0010	562+70	RIGHT	15	PRIVATE DRIVE						
0010	590+50	RIGHT	15	PRIVATE DRIVE						
0010	594+30	LEFT	15	PRIVATE DRIVE						
0010	602+30	LEFT	15	PRIVATE DRIVE						
0010	602+45	LEFT	15	PRIVATE DRIVE						
0010	606+00	RIGHT	15	PRIVATE DRIVE						
0010	607+45	LEFT	15	PRIVATE DRIVE						
0010	609+60	RIGHT	15	PRIVATE DRIVE						
0010	623+50	RIGHT	15	PRIVATE DRIVE						
0010	625+60	RIGHT	15	PRIVATE DRIVE						
0010	628+50	LEFT	15	PRIVATE DRIVE						
0010	628+75	RIGHT	15	PRIVATE DRIVE						
0010	630+90	LEFT	15	PRIVATE DRIVE						
0010	632+30	LEFT	15	PRIVATE DRIVE						
TOTAL 0010			727							
SPECIAL 01. REMOVING HMA PAVEMENT NOTCHED WEDGE LONGITUDINAL JOINT MILLING										
SPV.0090.01										
CATEGORY	STATION TO	STATION	LOCATION	LF	REMARKS					
0010	15+97	- 643+00	STH 21	62703	SURFACE LIFT					
TOTAL 0010				62703						
STATE PROJECT NO: 7010-01-61		HWY: STH 21		COUNTY: JUNEAU		MISCELLANEOUS QUANTITIES		SHEET NO:		E



PROJECT NO: 7010-01-61	HWY: STH 21	COUNTY: JUNEAU	SPLIT PLAN SHEETS	SHEET	E
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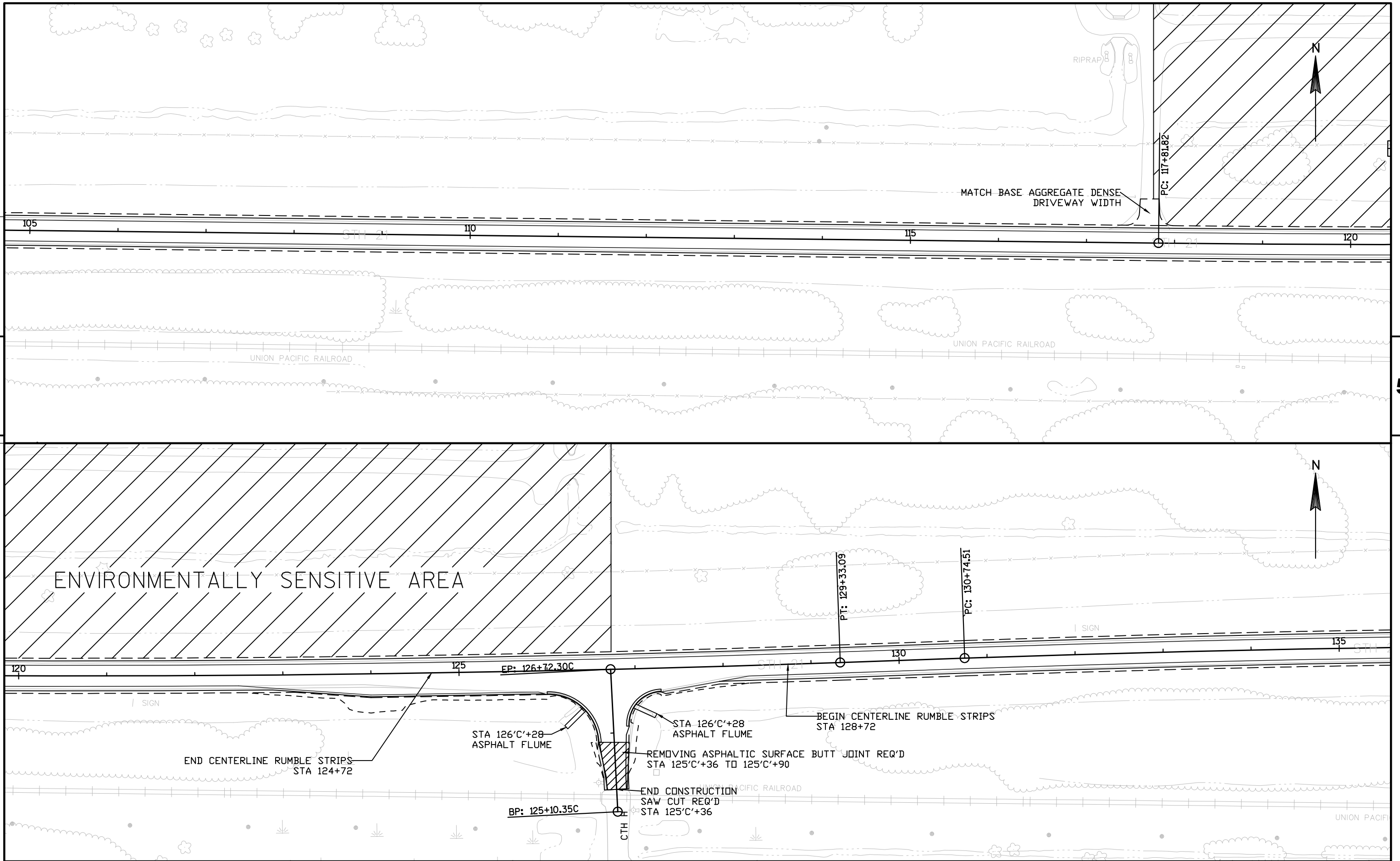
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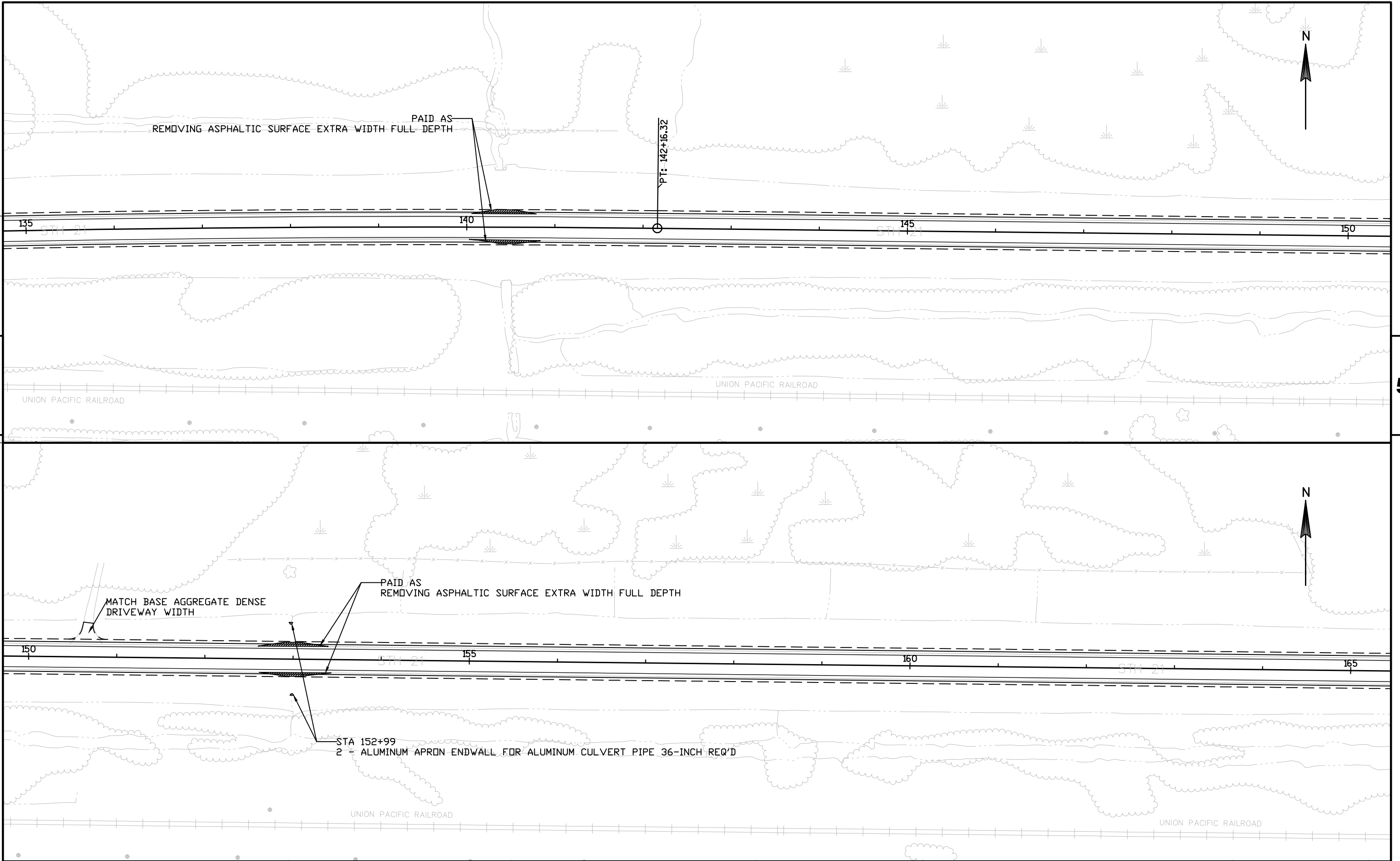
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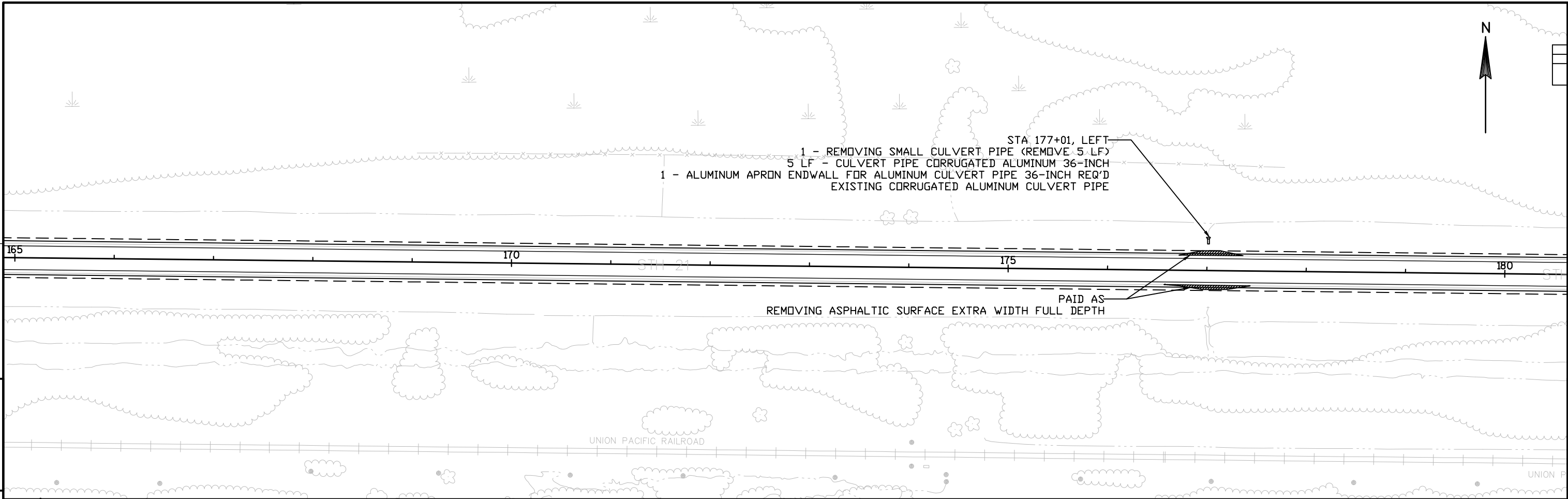
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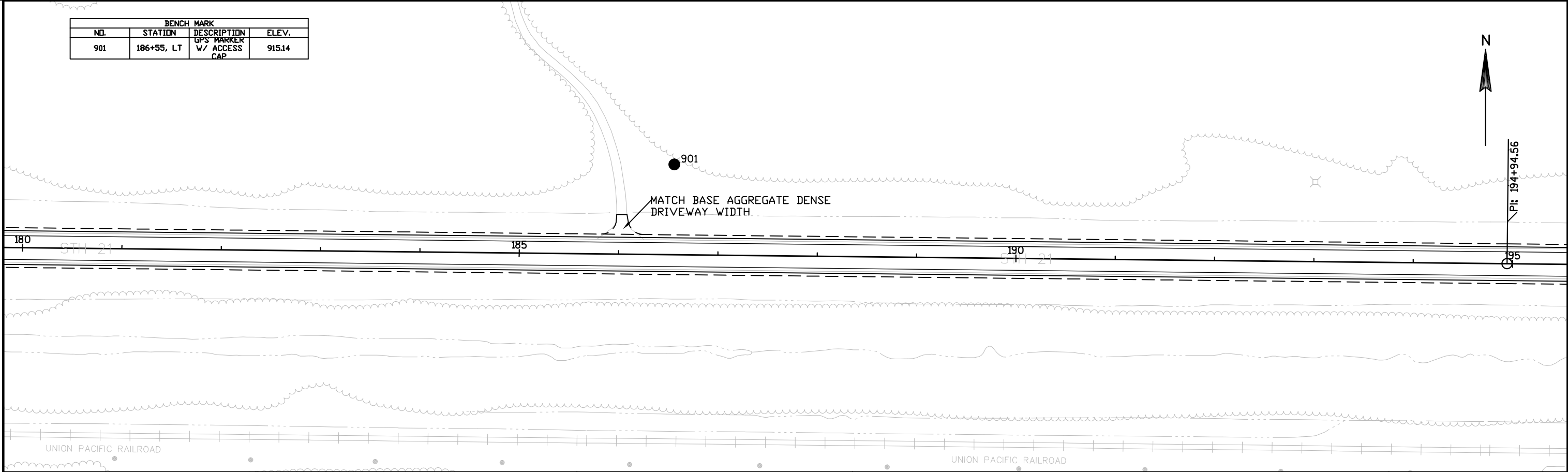
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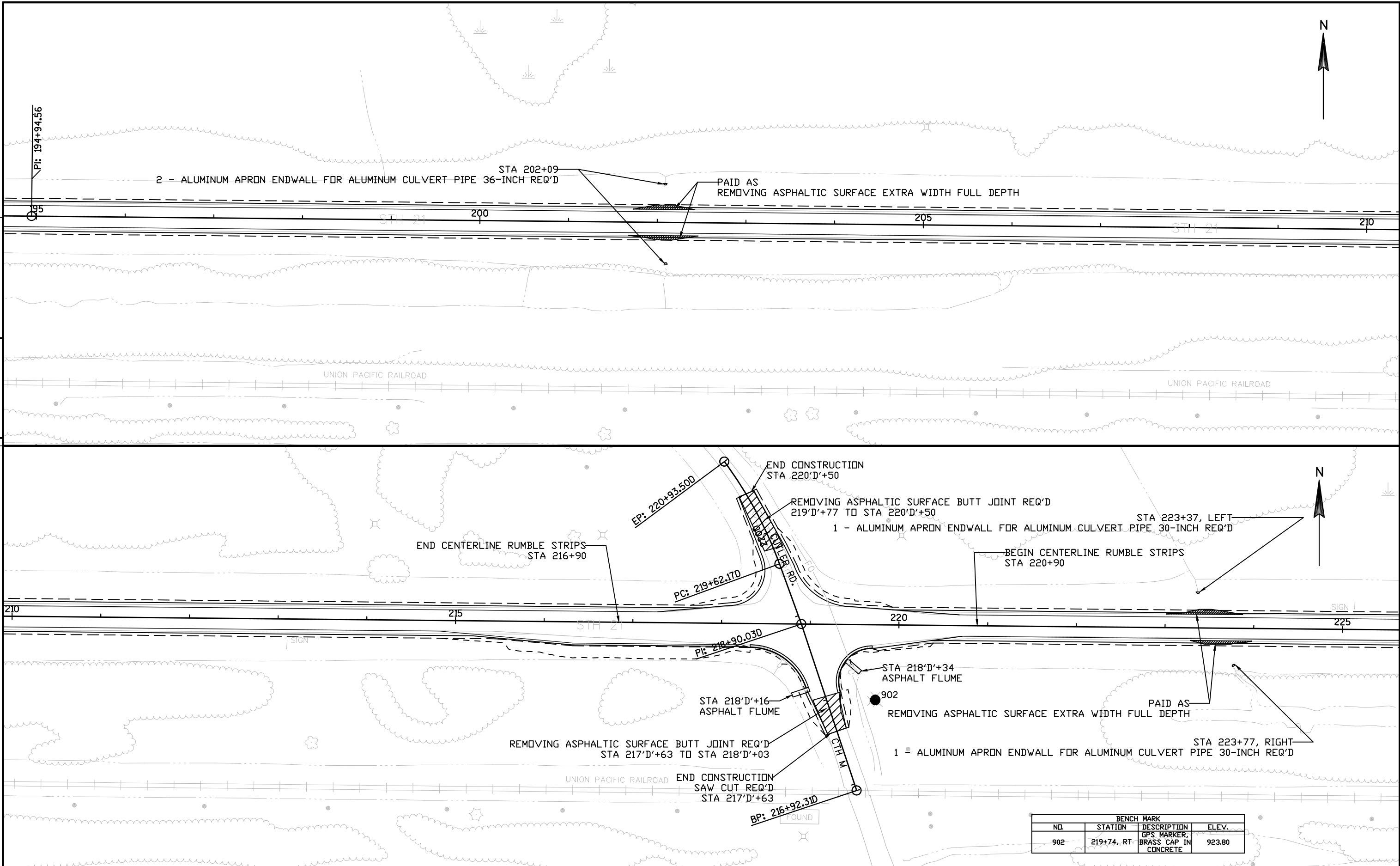


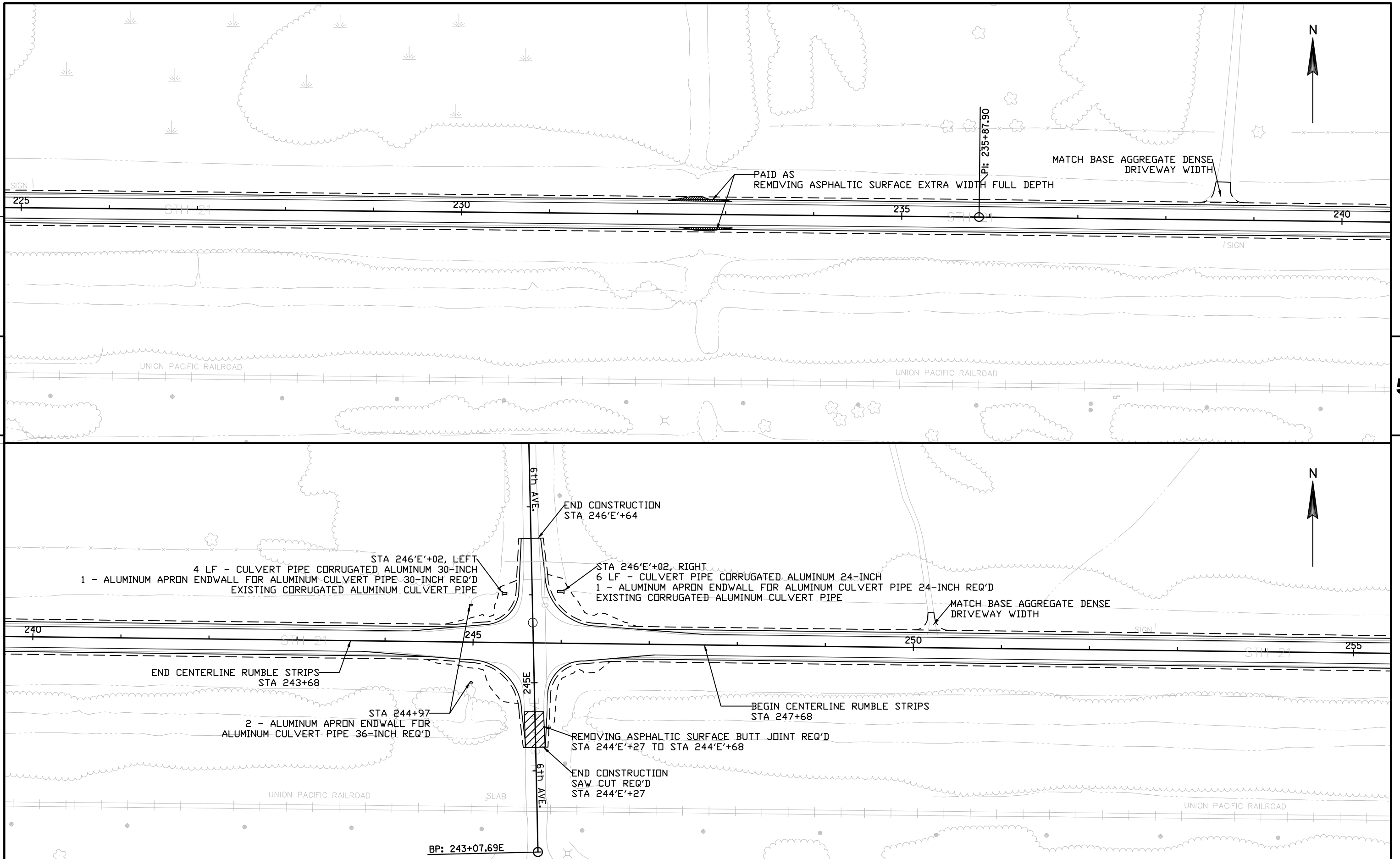
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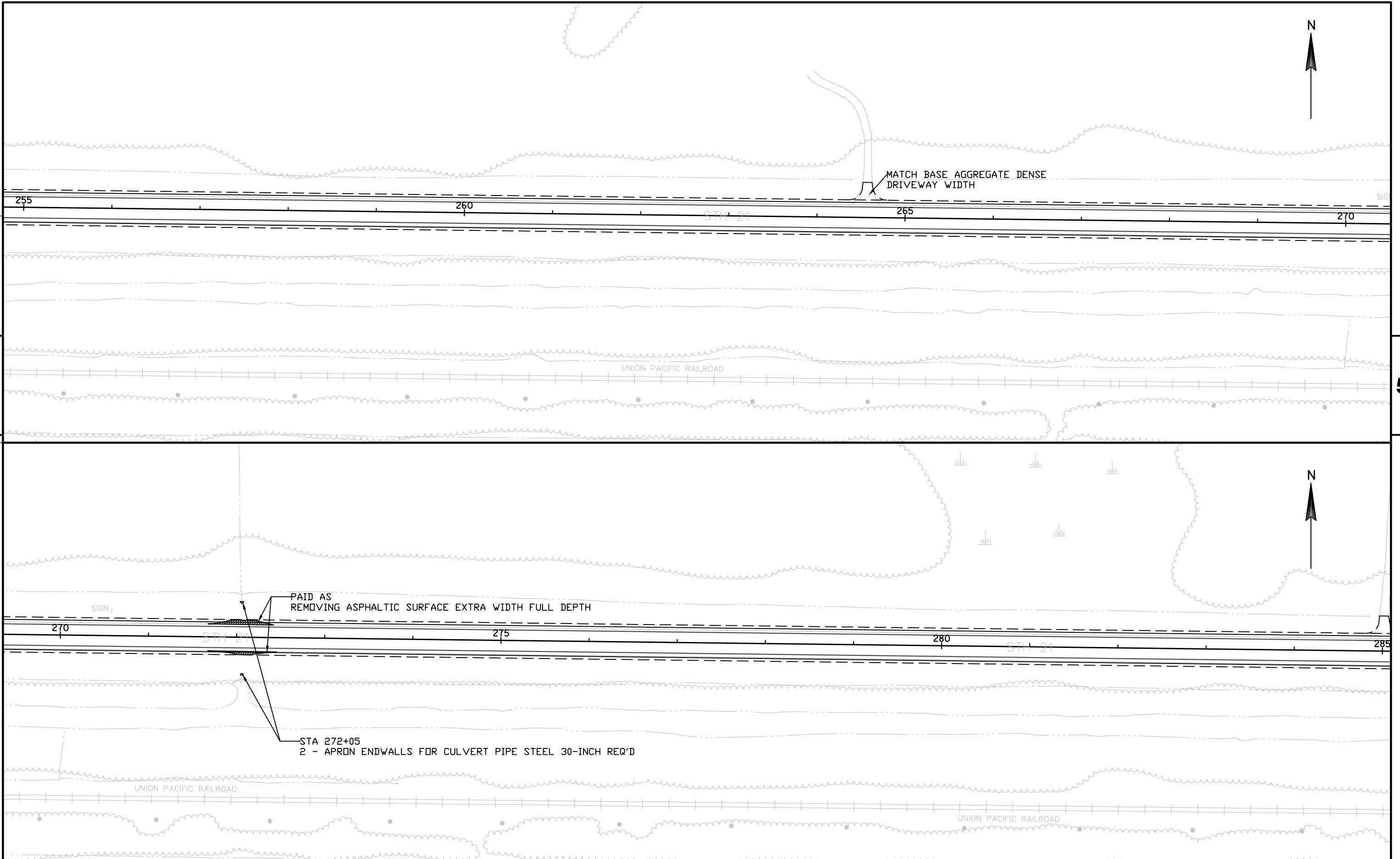
BENCH MARK			
NO.	STATION	DESCRIPTION	ELEV.
901	186+55, LT	GPS MARKER W/ ACCESS CAP	915.14



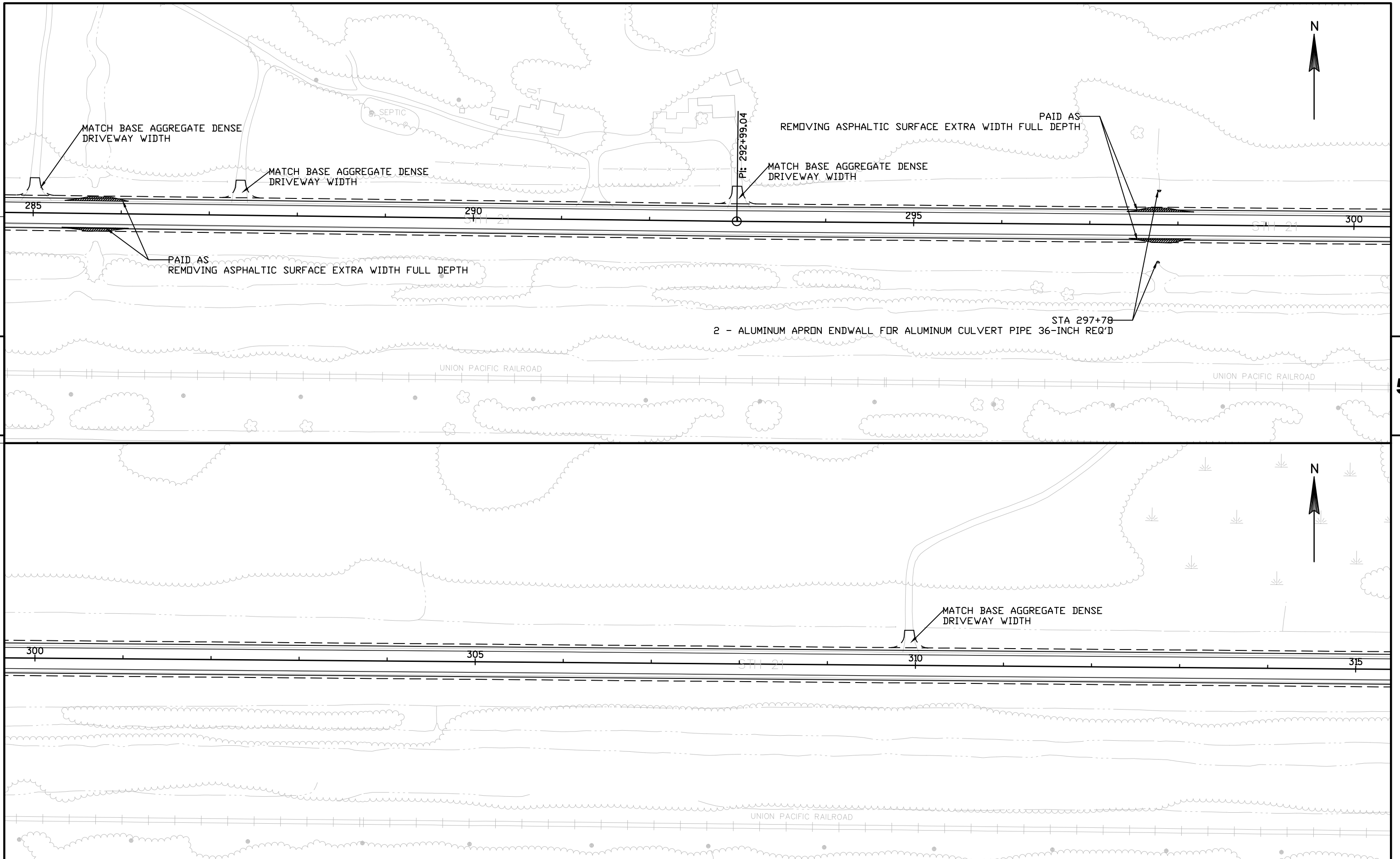




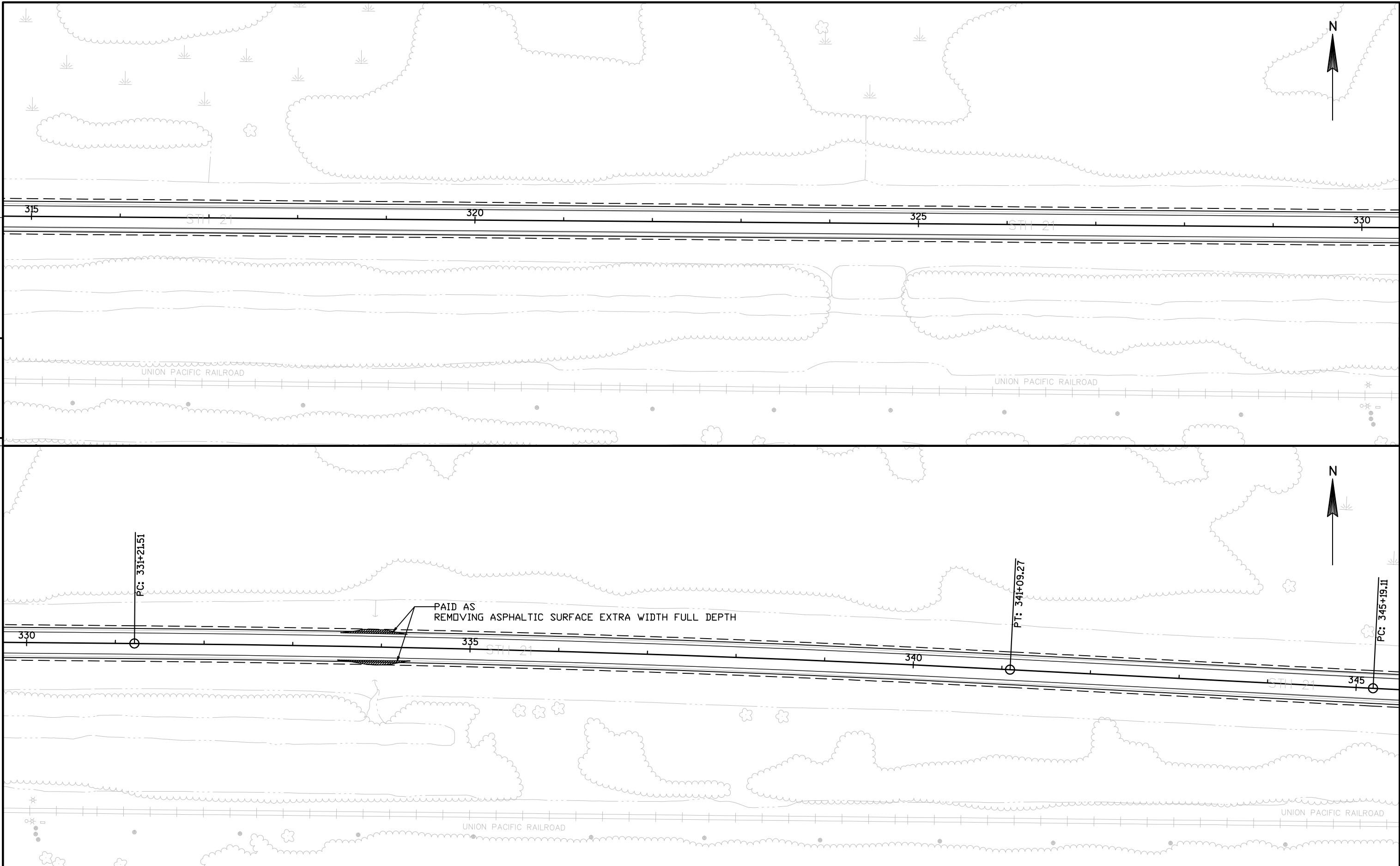
PROJECT NO: 7010-01-61	HWY: STH 21	COUNTY: JUNEAU	SPLIT PLAN SHEETS	SHEET	E
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PROJECT NO: 7010-01-61	HWY: STH 21	COUNTY: JUNEAU	SPLIT PLAN SHEETS	SHEET	E
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PROJECT NO: 7010-01-61	HWY: STH 21	COUNTY: JUNEAU	SPLIT PLAN SHEETS	SHEET	E
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PROJECT NO: 7010-01-61

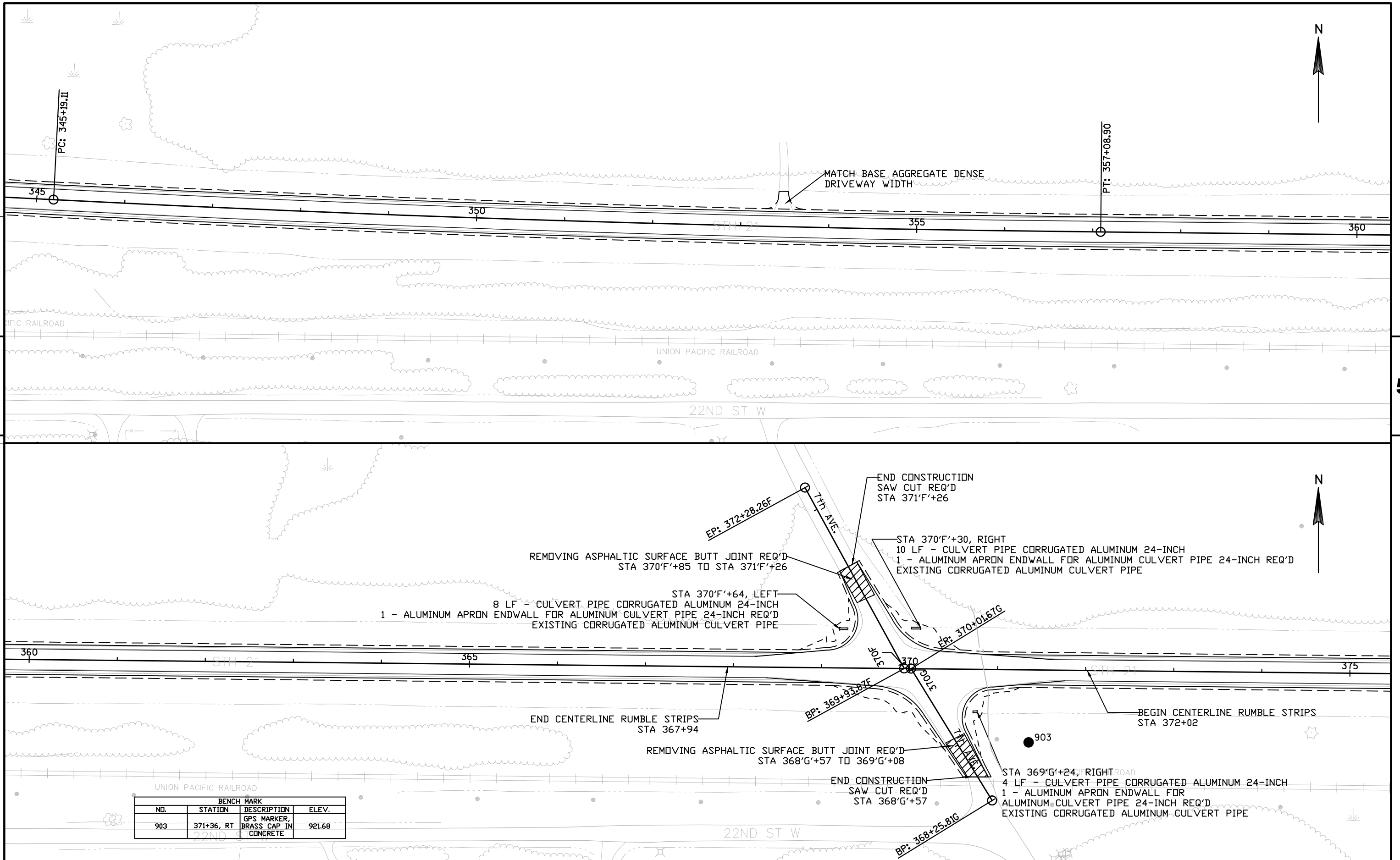
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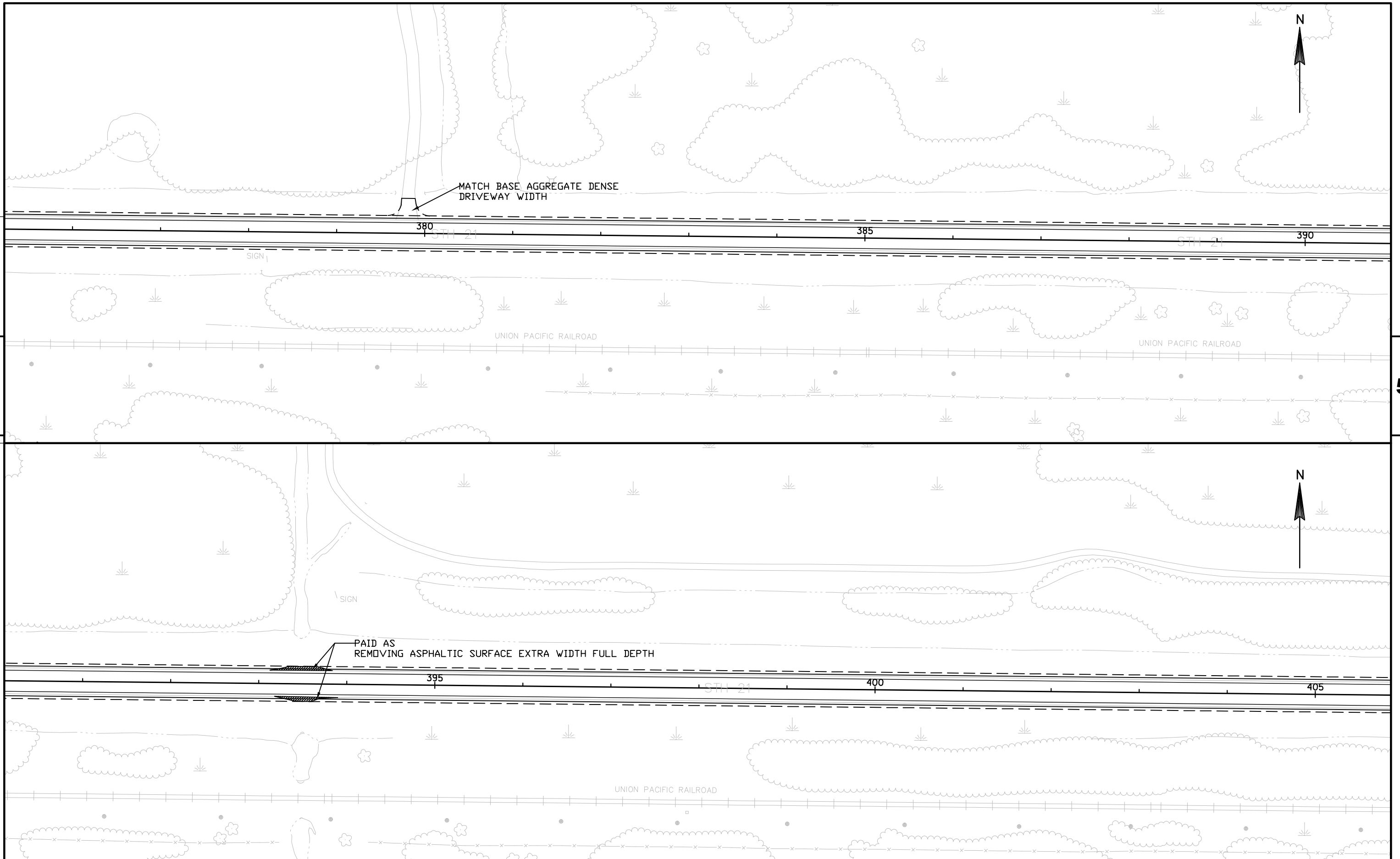
COUNTY: JUNEAU

SPLIT PLAN SHEETS

SHEET

E

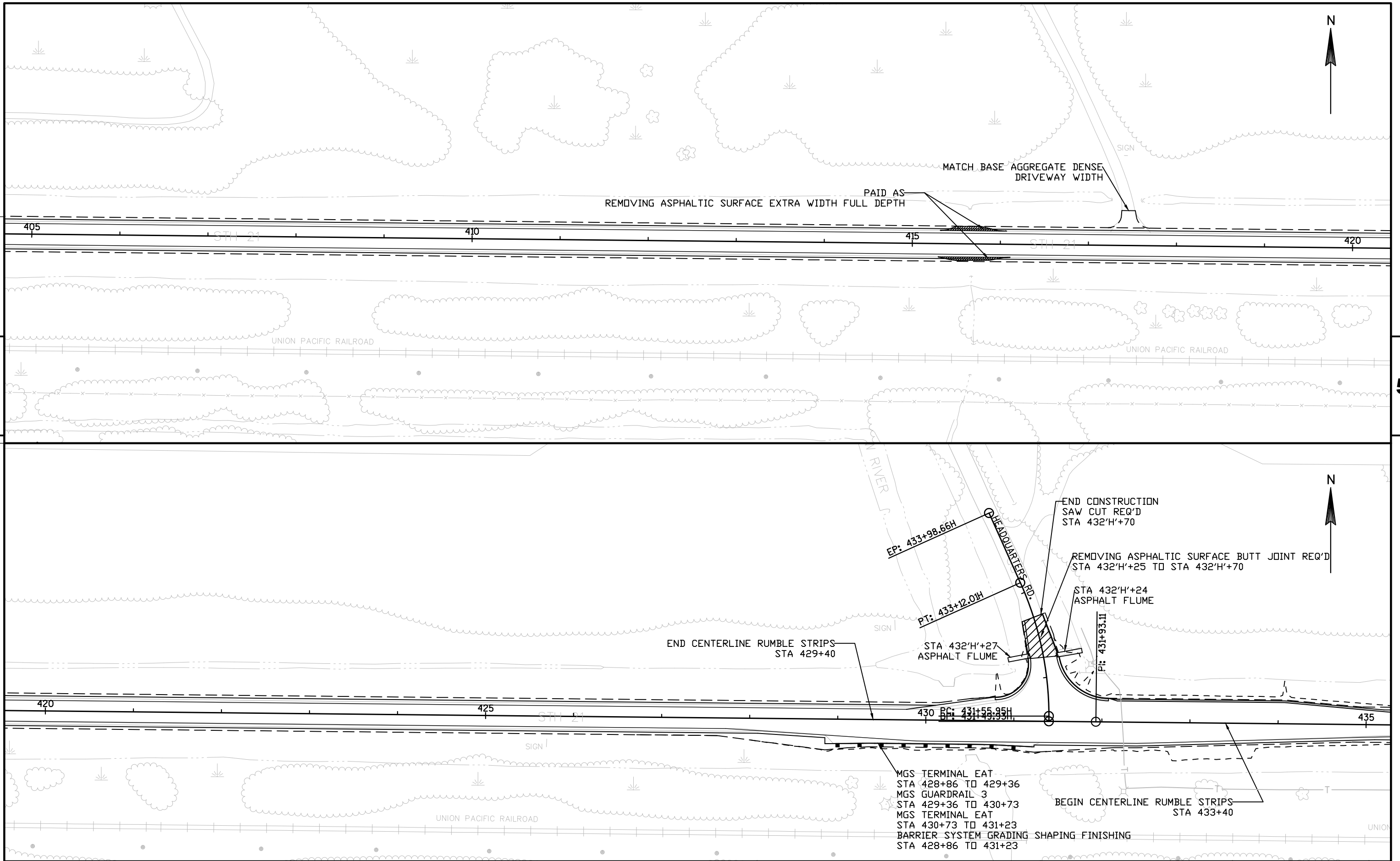




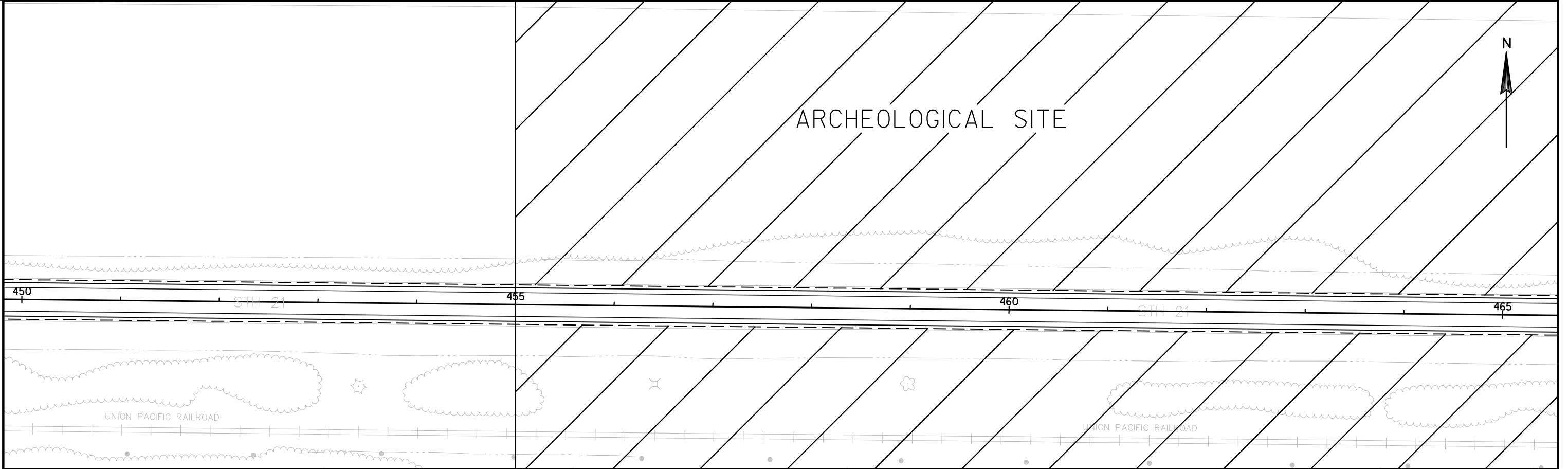
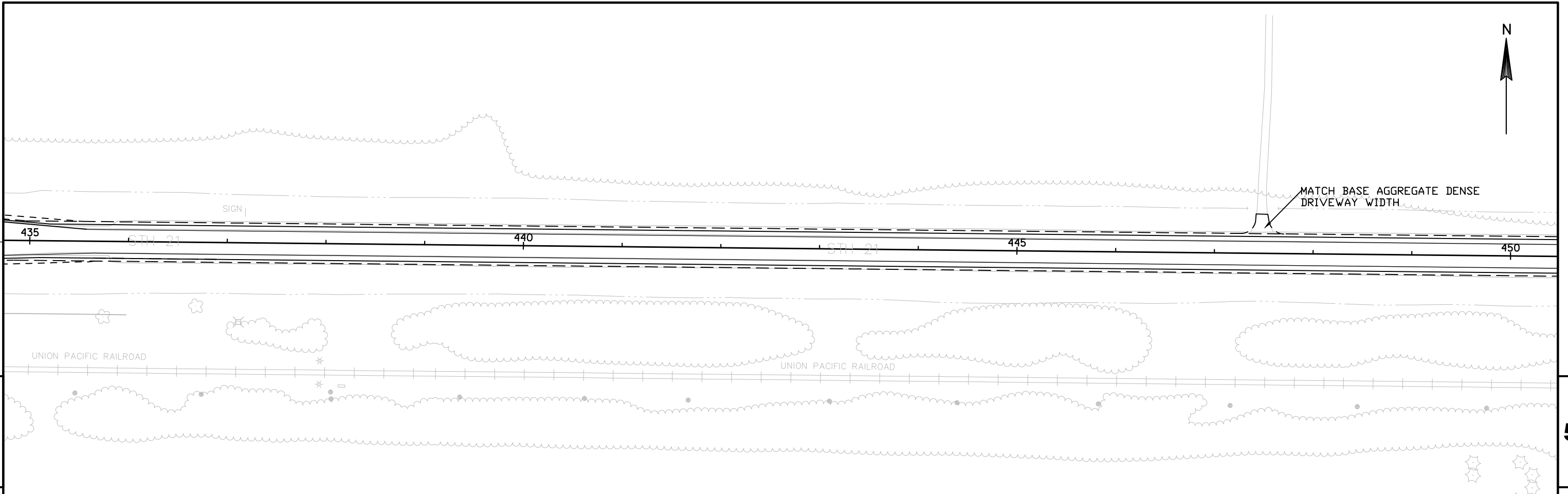
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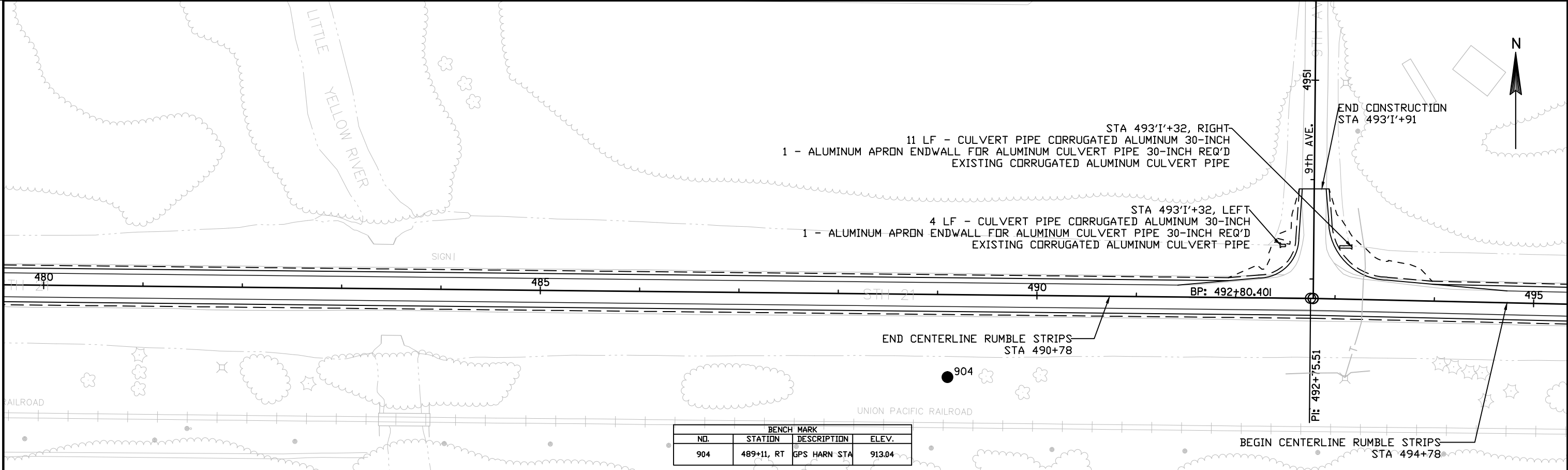
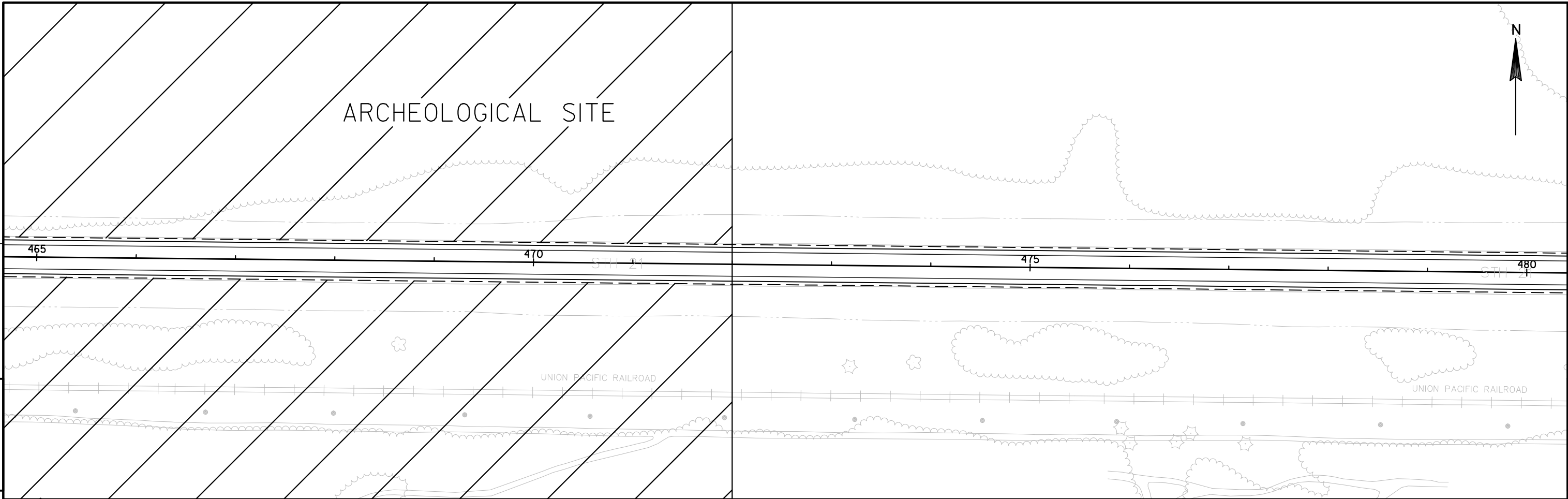
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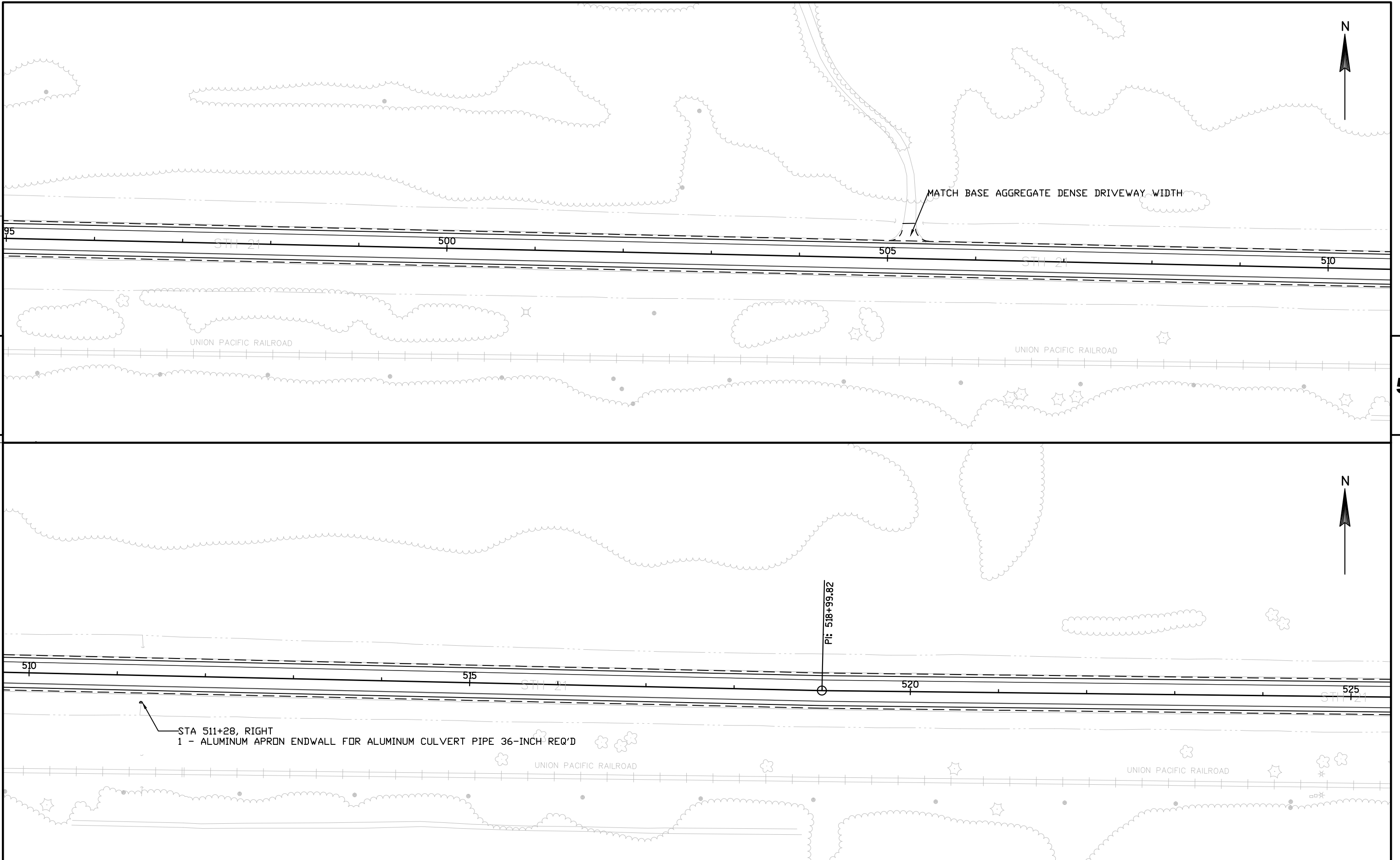
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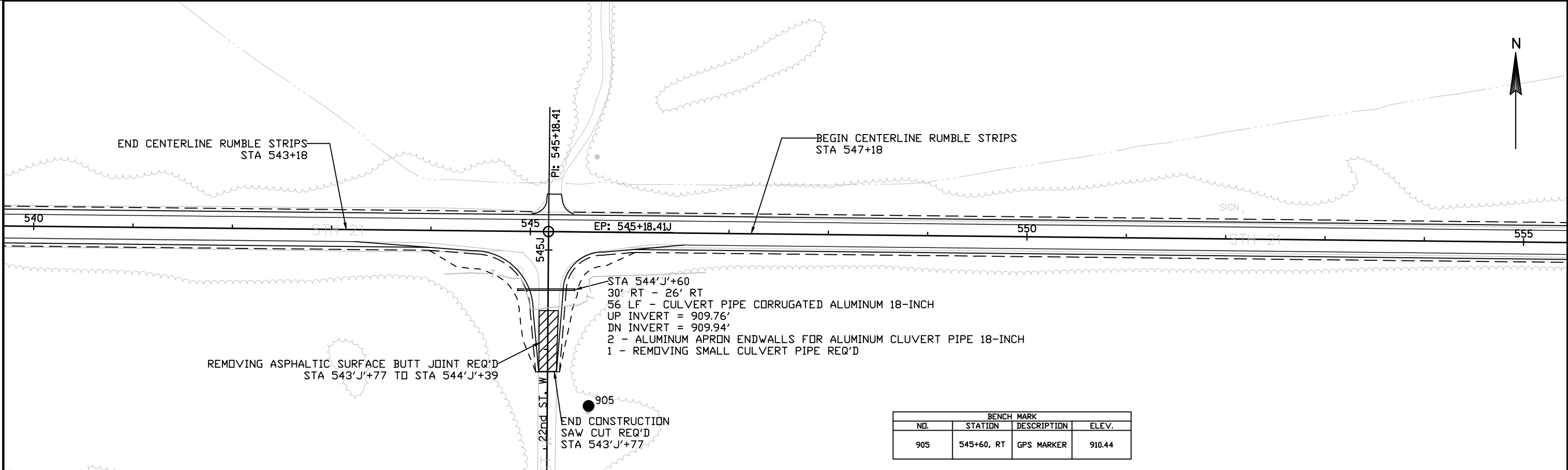
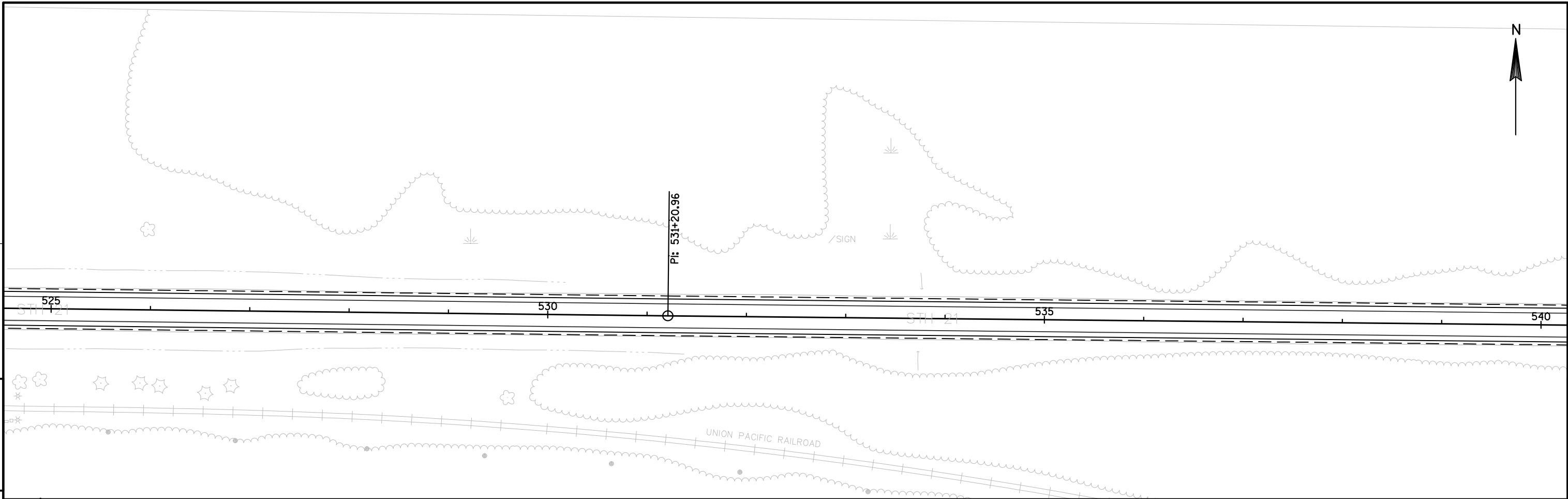
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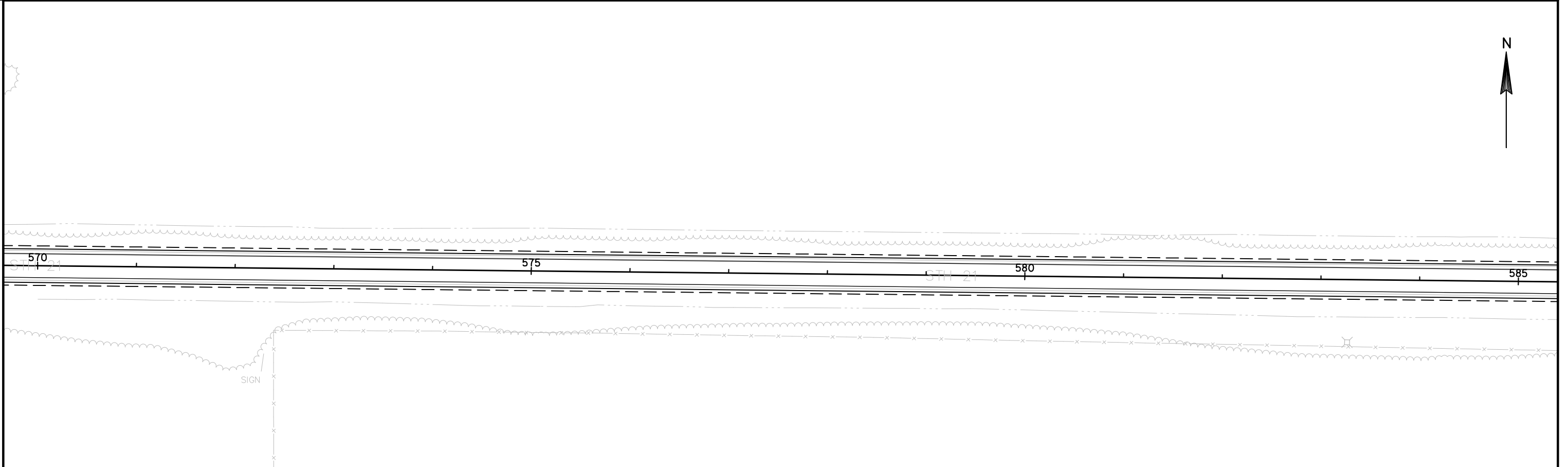
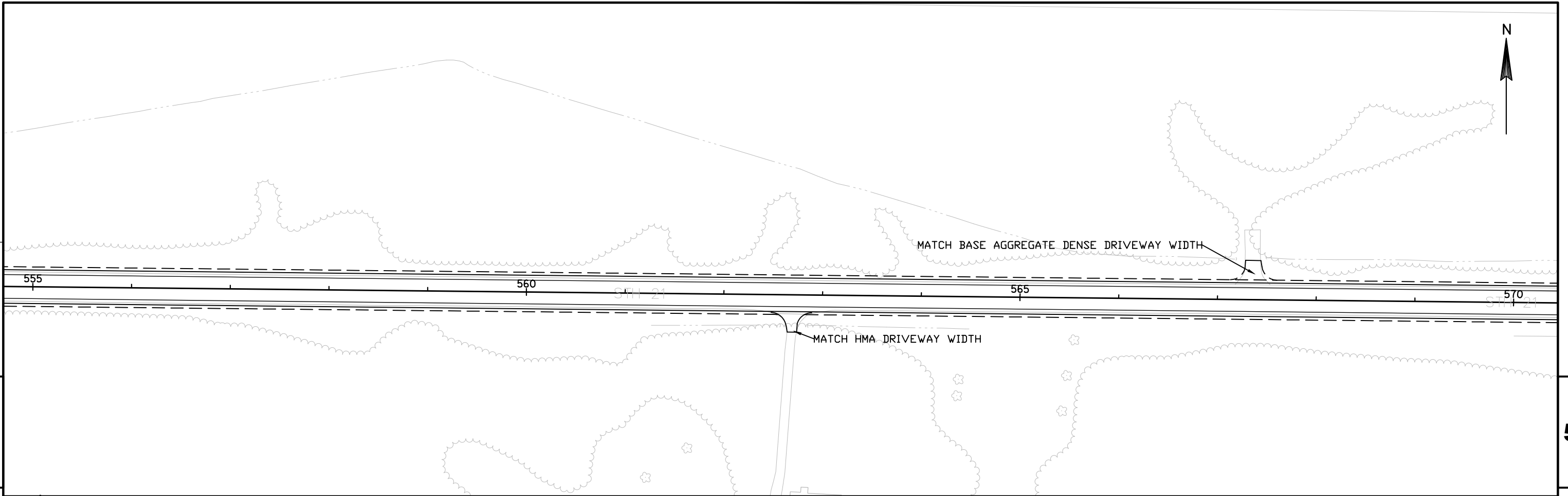


BENCH MARK			
NO.	STATION	DESCRIPTION	ELEV.
904	489+11, RT	GPS HARN STA	913.04

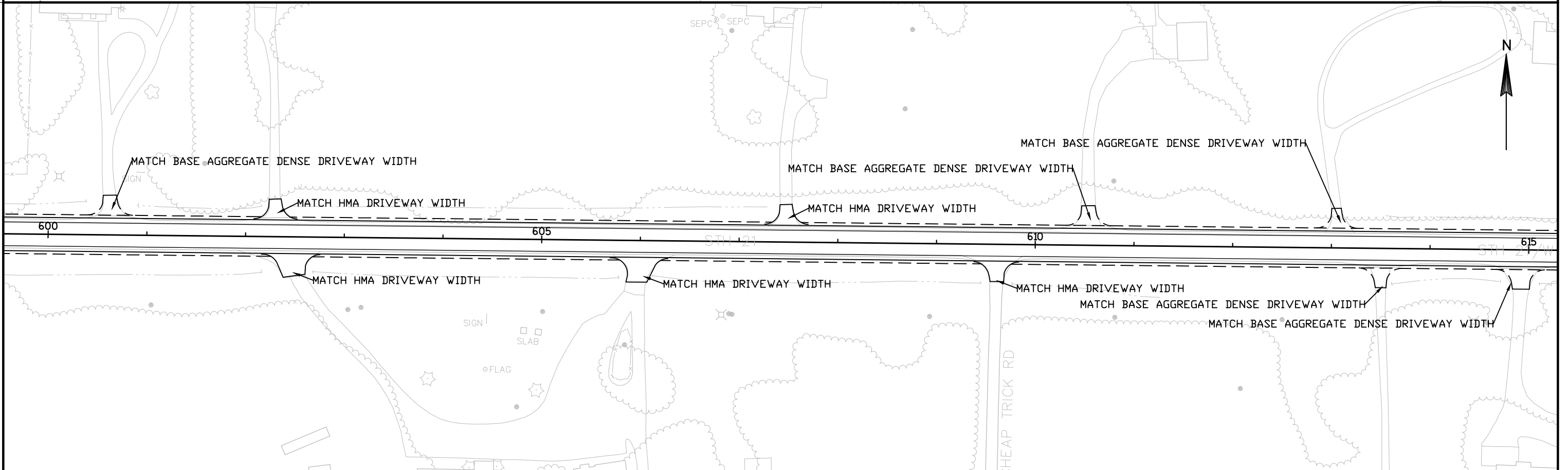
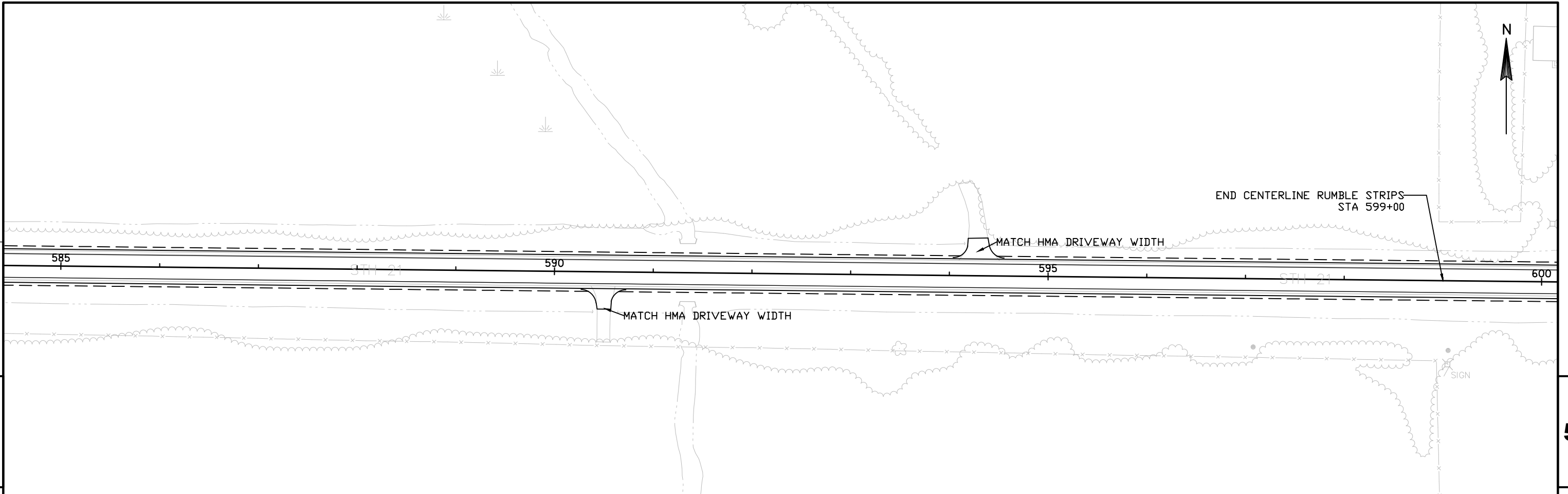


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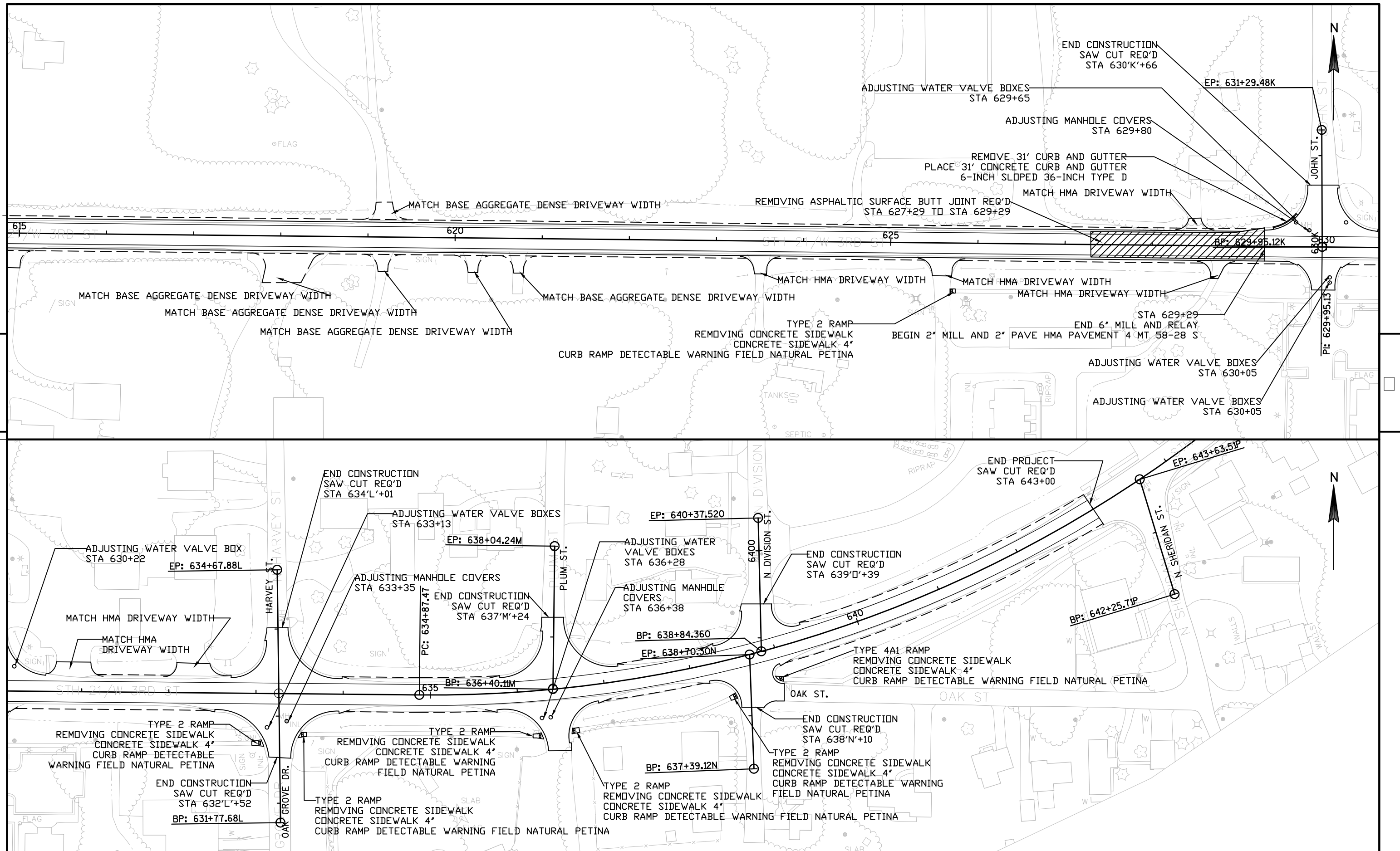




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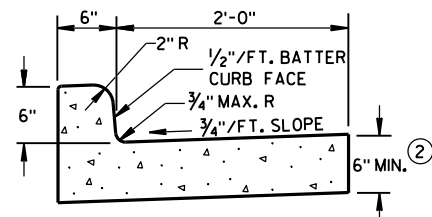
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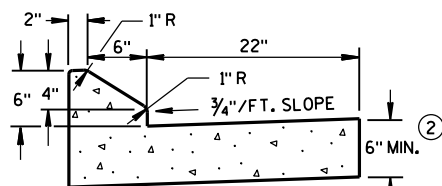
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Standard Detail Drawing List

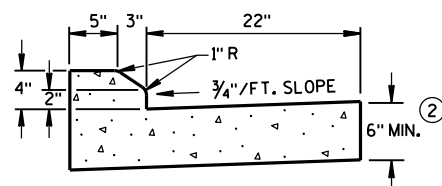
08D01-18	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-16A	CURB RAMPS TYPES 1 AND 1-A
08D05-16B	CURB RAMPS TYPES 2 AND 3
08D05-16C	CURB RAMPS TYPES 4A AND 4A1
08D05-16D	CURB RAMPS TYPE 4B AND 4B1
08D05-16E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E09-06	SILT FENCE
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
13A10-01A	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01B	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01C	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01D	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A11-02A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-02B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
14B42-03A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-03B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-03C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-02A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C08-16C	PAVEMENT MARKING (CLIMBING LANE & PASSING LANE)
15C08-16D	PAVEMENT MARKING (CLIMBING LANE & PASSING LANE)
15C09-09A	SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C19-03A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY



TYPES A & D ①

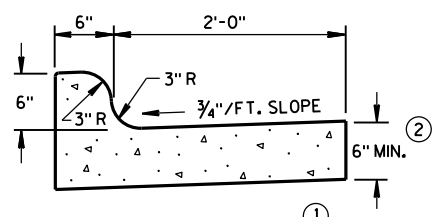


6" SLOPED CURB TYPES G & J ①



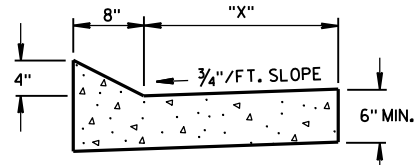
4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"



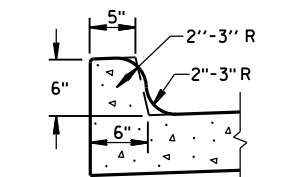
TYPES K & L ①

CONCRETE CURB & GUTTER 30"

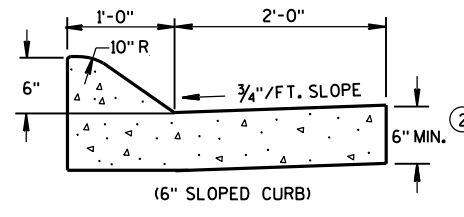


TYPES TBT & TBT ①
CONCRETE CURB & GUTTER

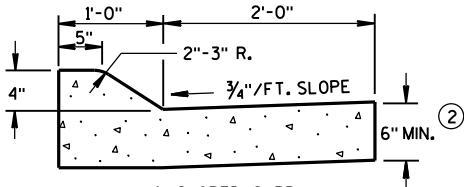
TBT & TBT	"X"
30"	22"
36"	28"



OPTIONAL CURB SHAPE
FOR TYPES K & L ①

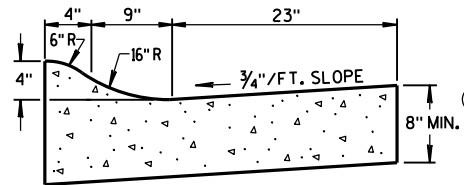


(6" SLOPED CURB)



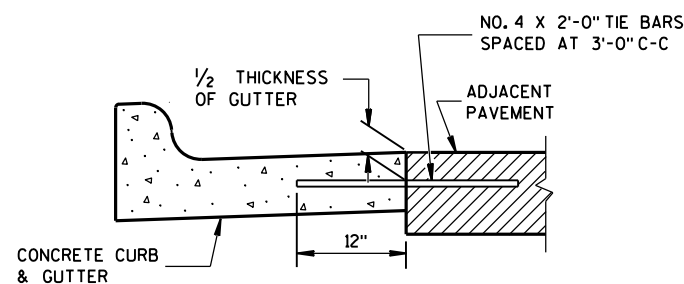
(4" SLOPED CURB)

TYPES A & D ①

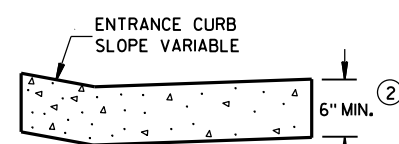


4" SLOPED CURB TYPES R & T ① ④

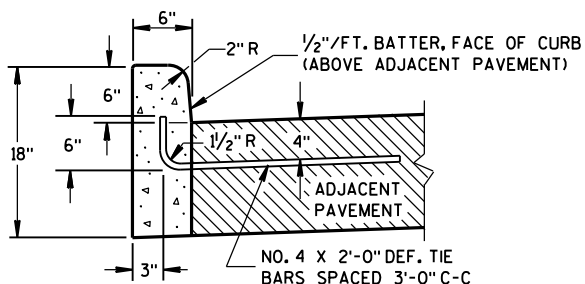
CONCRETE CURB & GUTTER 36"



TYPICAL TIE BAR LOCATION ①

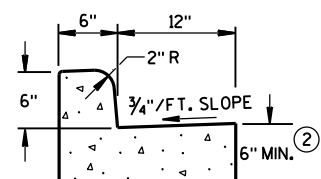


DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

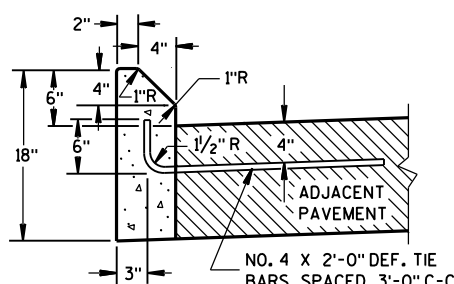


TYPES A & D ①

CONCRETE CURB



TYPES A & D
CONCRETE CURB & GUTTER 18"



TYPES G & J ①

GENERAL NOTES

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

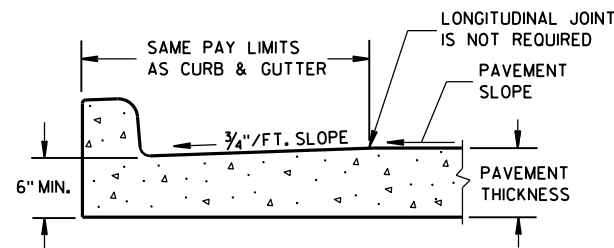
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

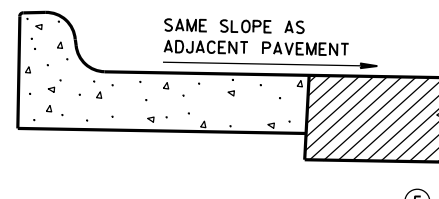
WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

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

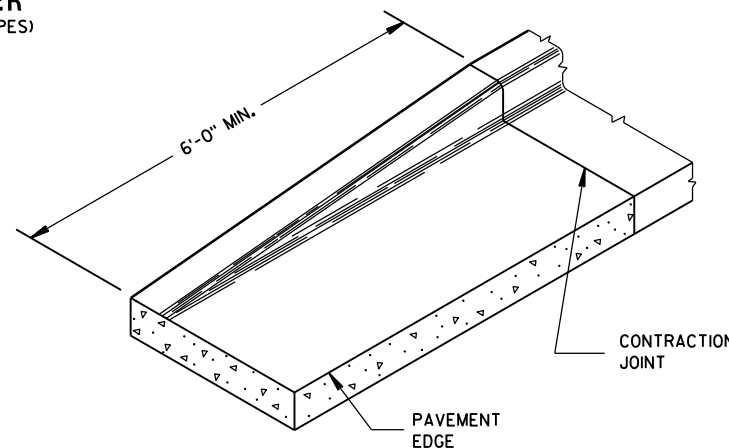
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



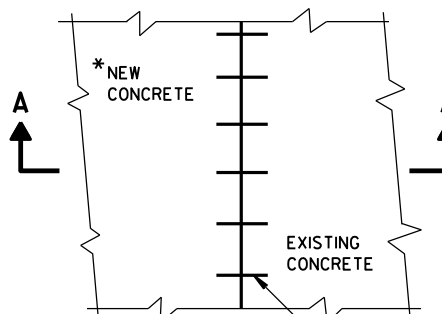
PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



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



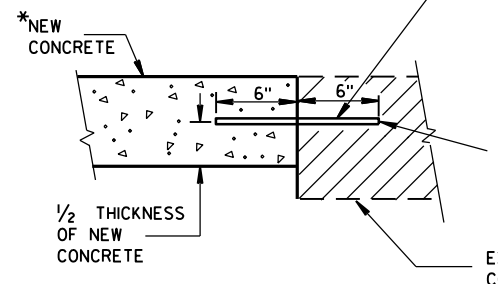
END SECTION CURB & GUTTER



PLAN VIEW

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

NO. 6 TIE BARS SPACED 2'-6" C-C,
INSTALLED PERPENDICULAR
TO THE LONGITUDINAL JOINT.



SECTION A-A
TIE BARS DRILLED
INTO EXISTING PAVEMENT

MAXIMUM DRILL HOLE
SIZE IS 1/8" GREATER
THAN TIE BAR DIAMETER

EXISTING
CONCRETE

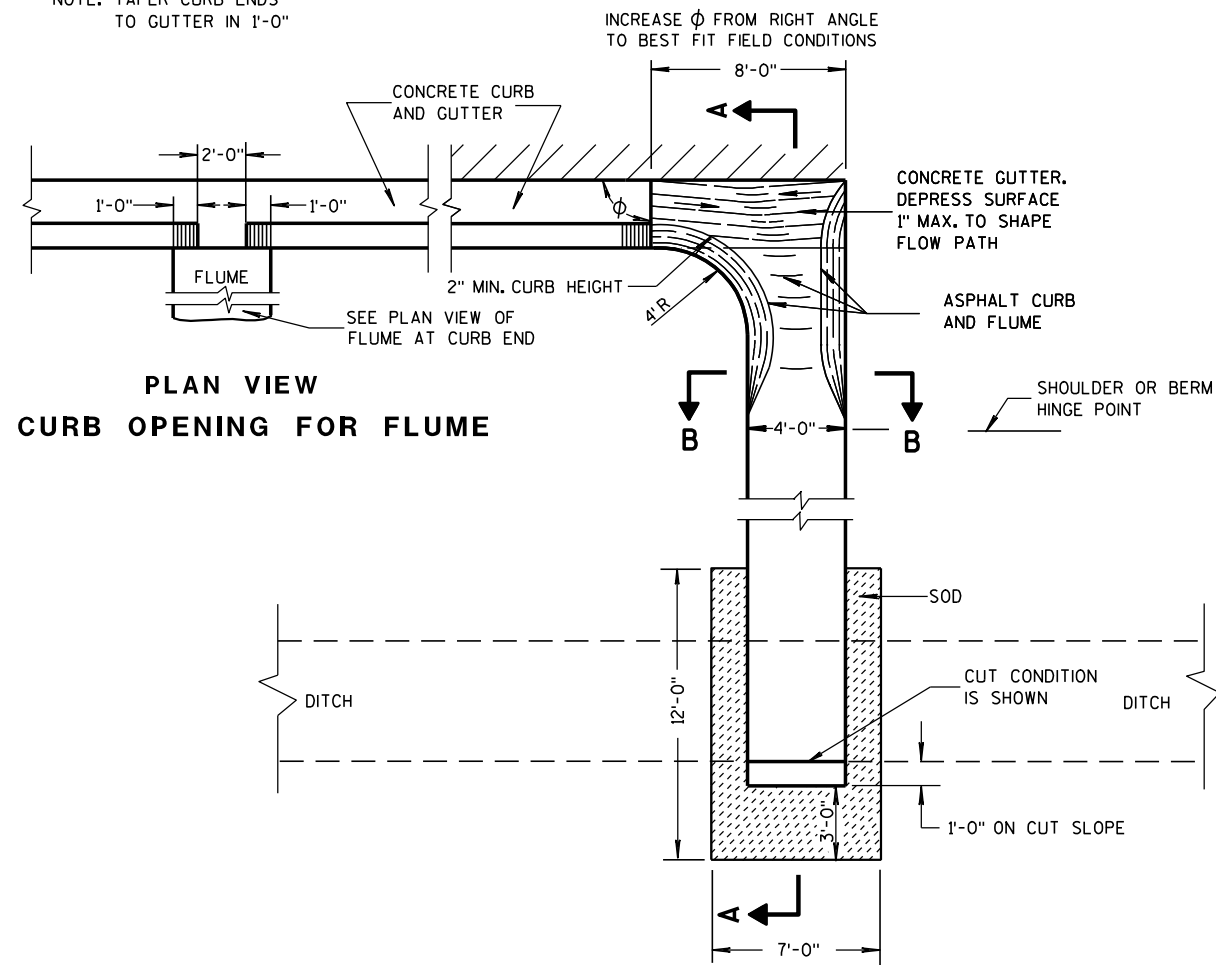
CONCRETE CURB, CONCRETE
CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA

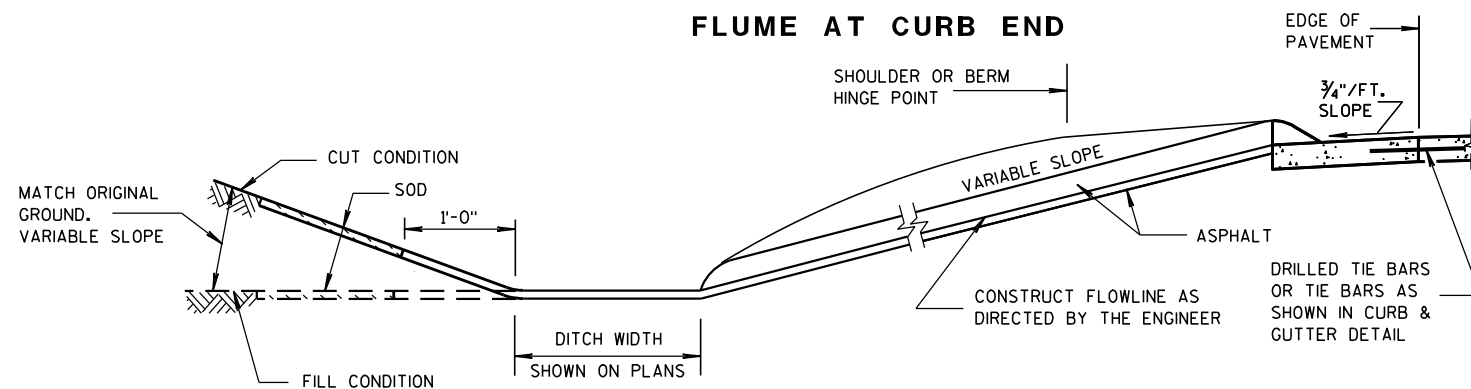
ASPHALTIC FLUME

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

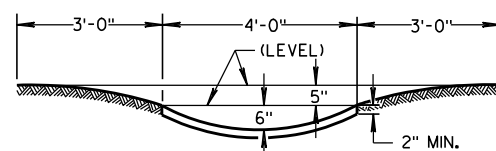


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

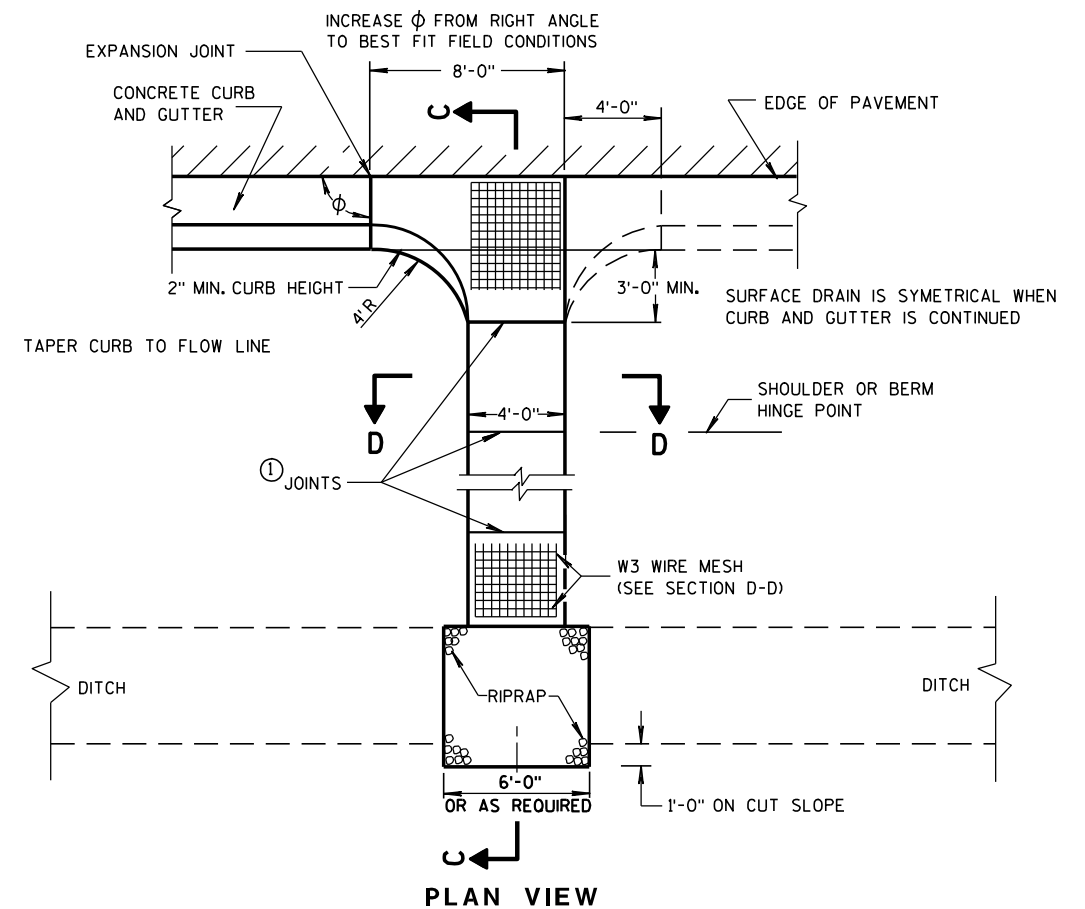
GENERAL NOTES

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

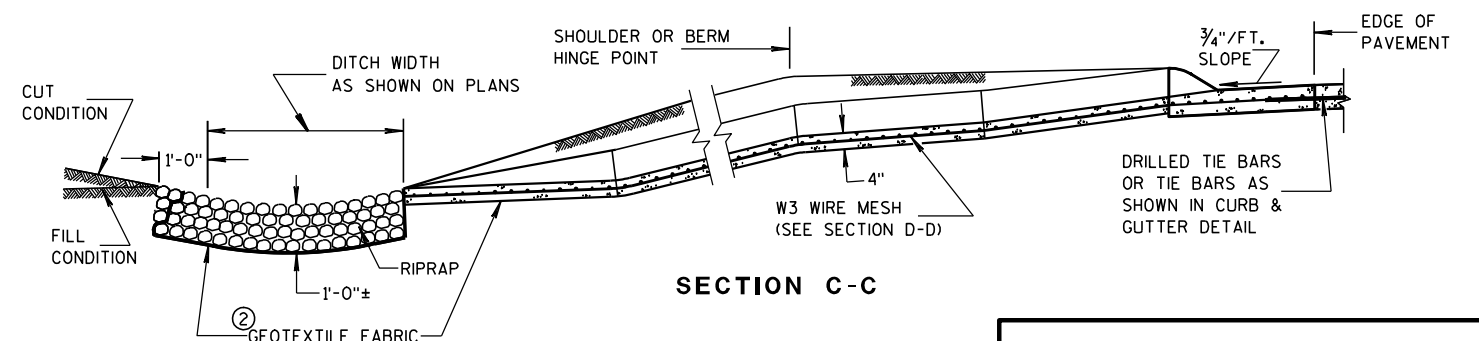
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

- 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

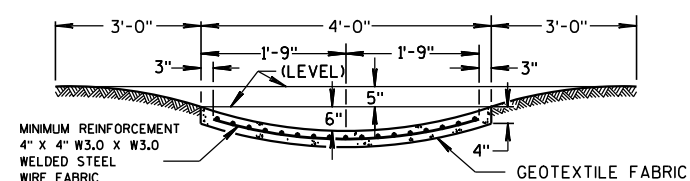
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

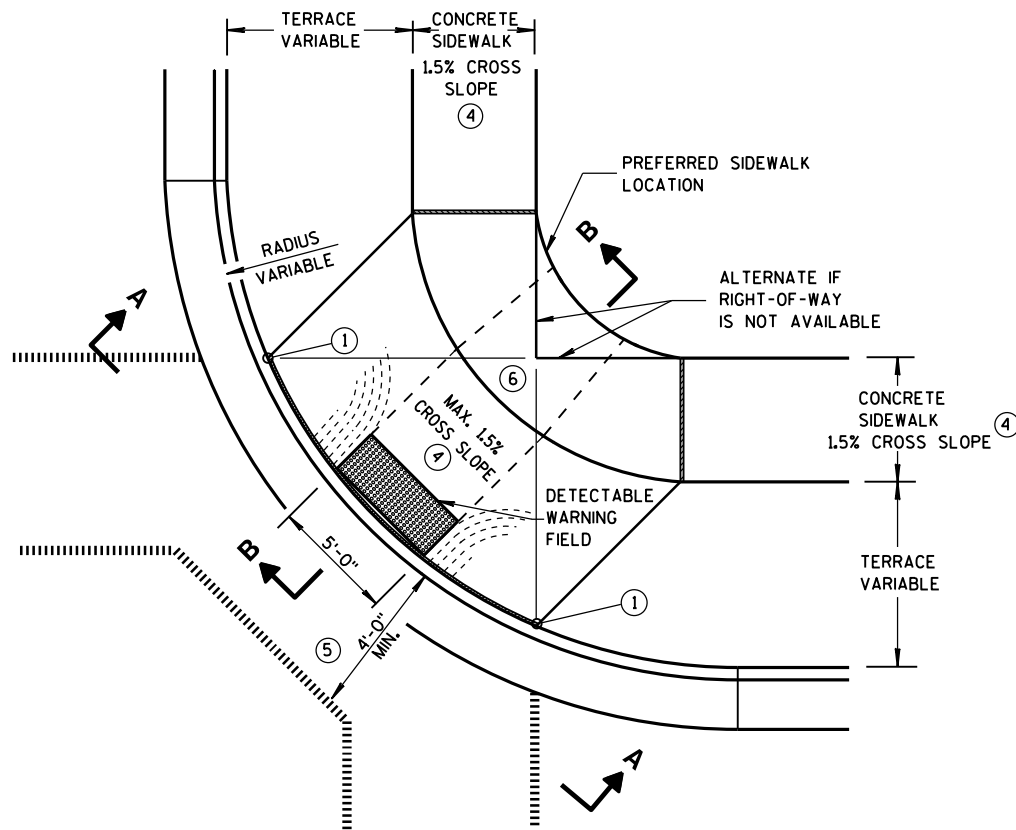
APPROVED

9-4-08

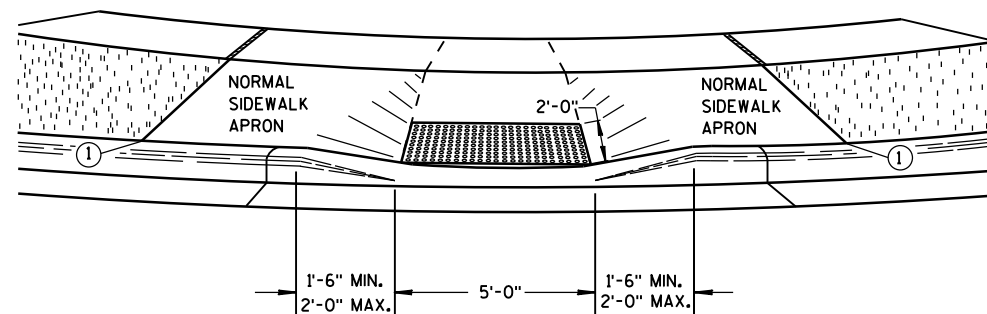
DATE

FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

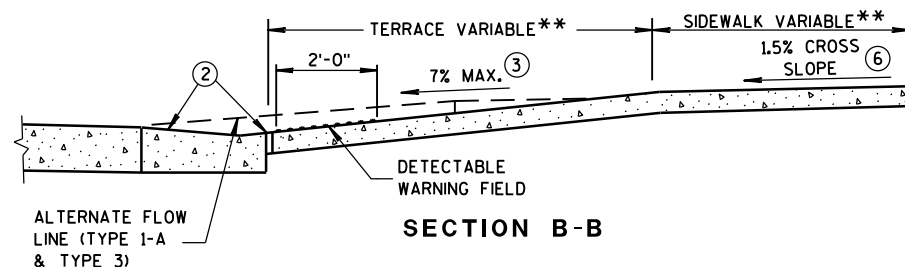


**PLAN VIEW
TYPE 1 RAMP**
(CENTER OF CORNER RADIUS)

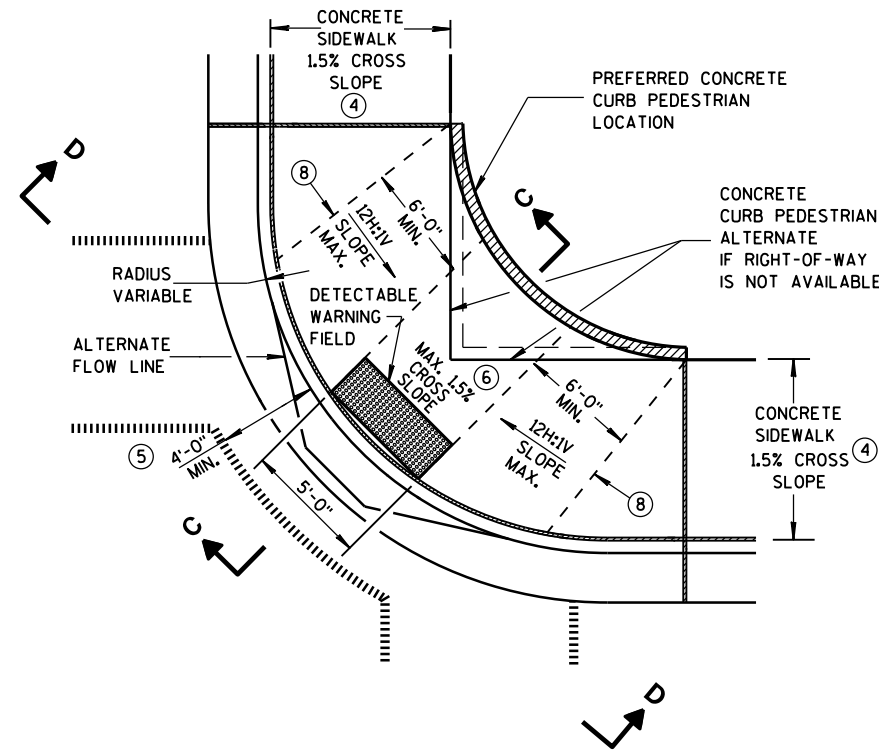


VIEW A-A

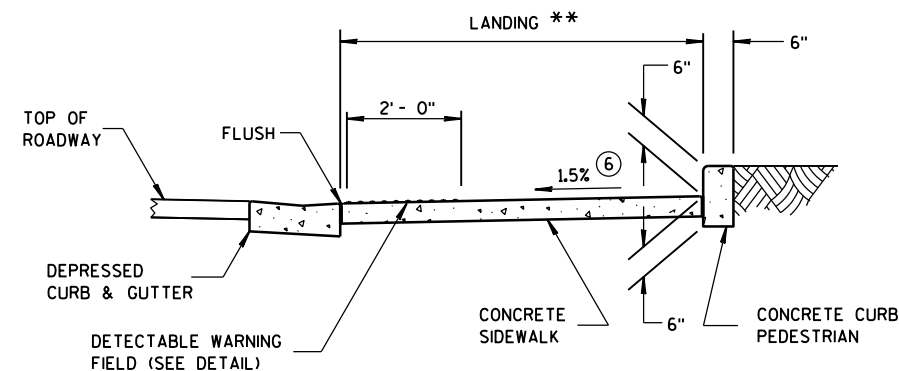
** WIDTH SHOWN ELSEWHERE
IN THE PLANS



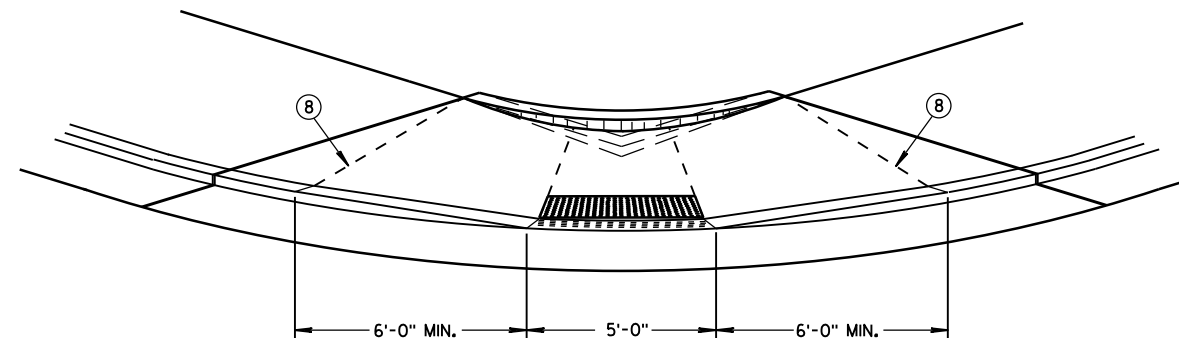
SECTION B-B



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



SECTION C-C



VIEW D-D

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.

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

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

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

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

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

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

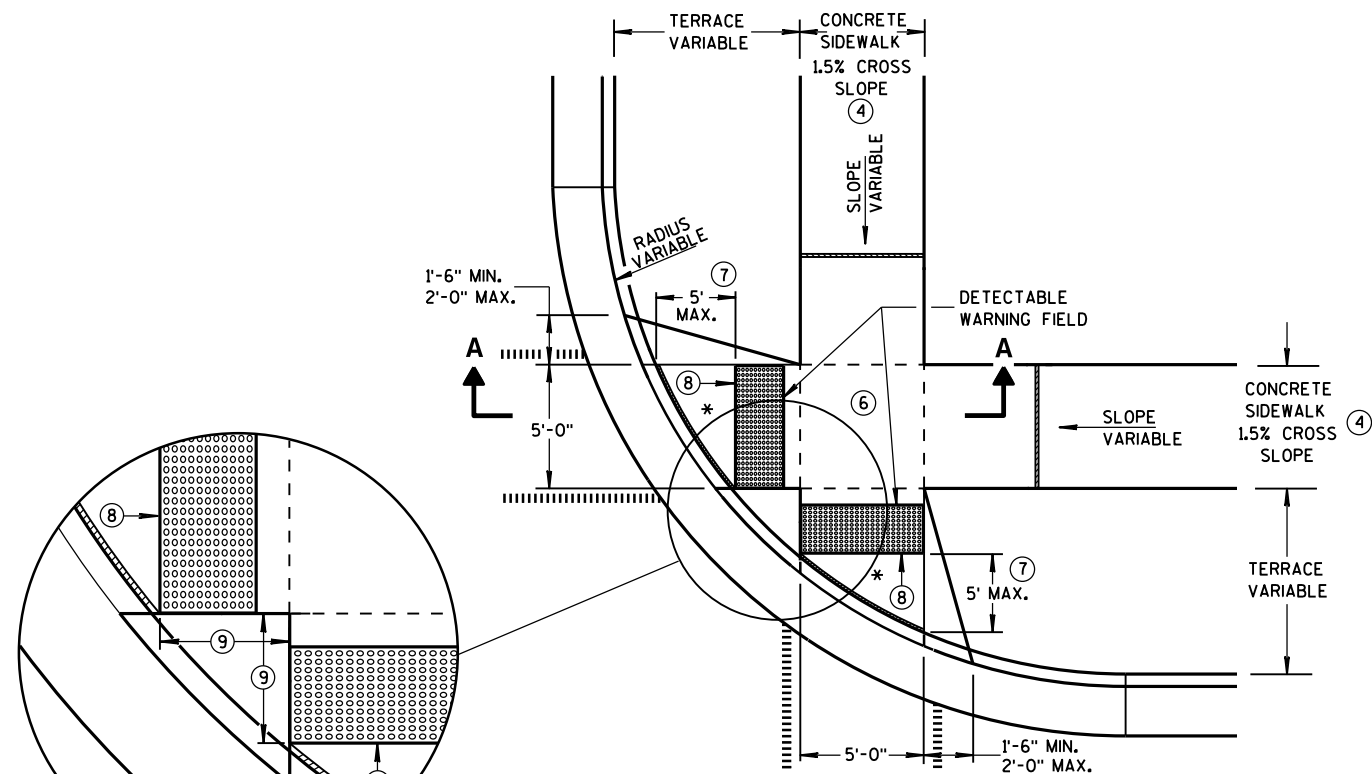
- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.
- ③ ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑤ PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA. (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

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

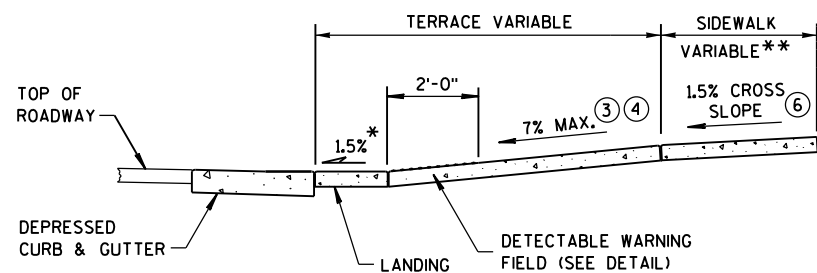
**CURB RAMPS
TYPES 1 AND 1-A**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



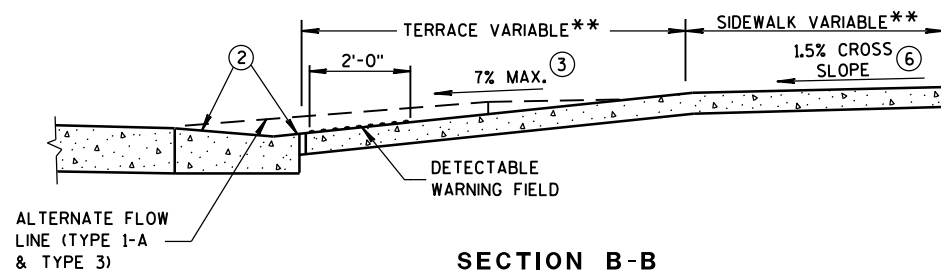
**PLAN VIEW
TYPE 2 RAMP**
(ON LINE WITH SIDEWALK)

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



SECTION A-A

** WIDTH SHOWN ELSEWHERE
IN THE PLANS



SECTION B-B

GENERAL NOTES

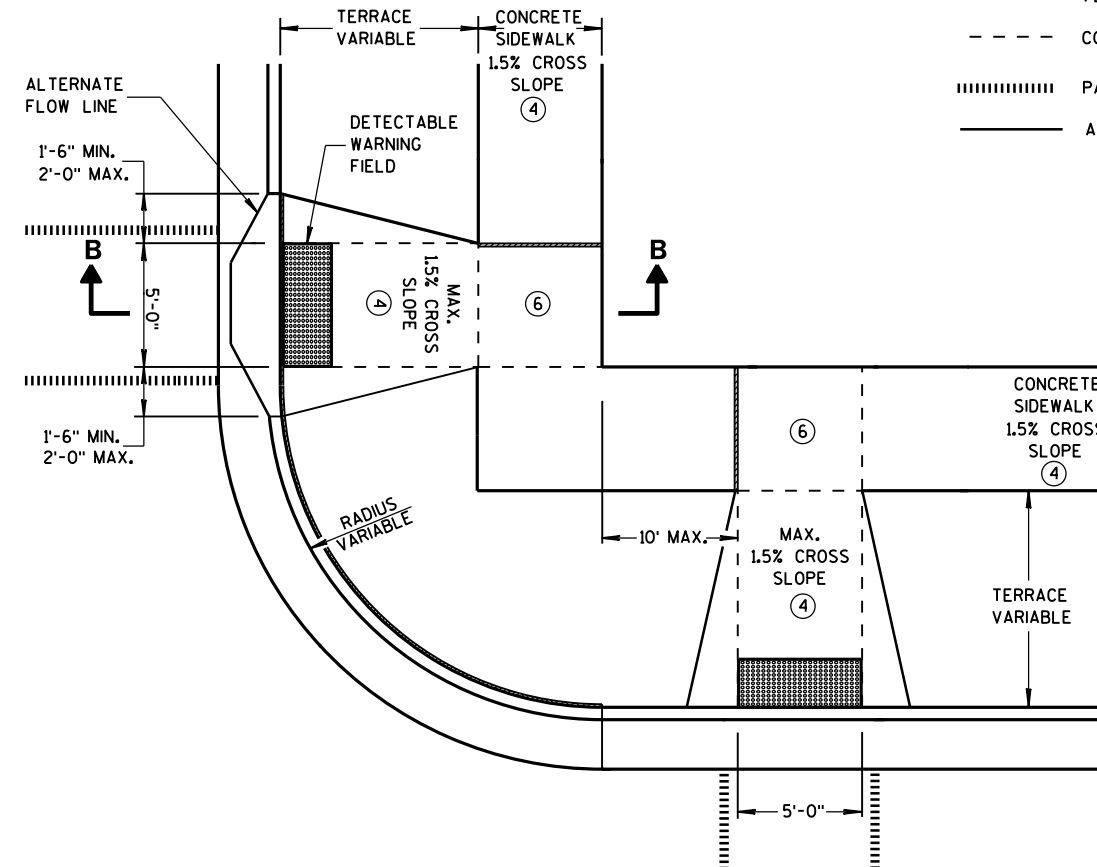
USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

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 DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.
- ③ ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).
- ⑦ WHEN THIS DISTANCE EXCEEDS 5 FEET, USE MULTIPLE DETECTABLE WARNING PANELS ACROSS THE RAMP AND STAGGER ADDITIONAL DETECTABLE WARNING PANEL(S) FORWARD TO REDUCE THIS DISTANCE.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- ⑨ WHEN THIS DISTANCE IS LESS THAN 6'-0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. 2" MINIMUM CURB HEIGHT.

LEGEND

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



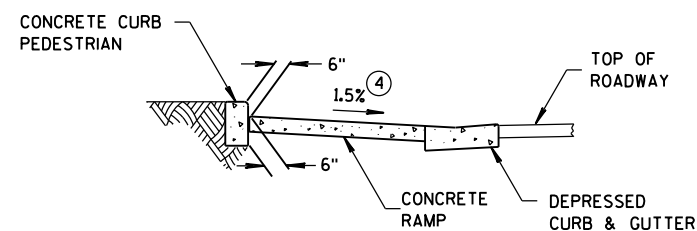
**PLAN VIEW
TYPE 3 RAMP**
(OUTSIDE OF CROSSWALK AREA)

**CURB RAMPS
TYPES 2 AND 3**

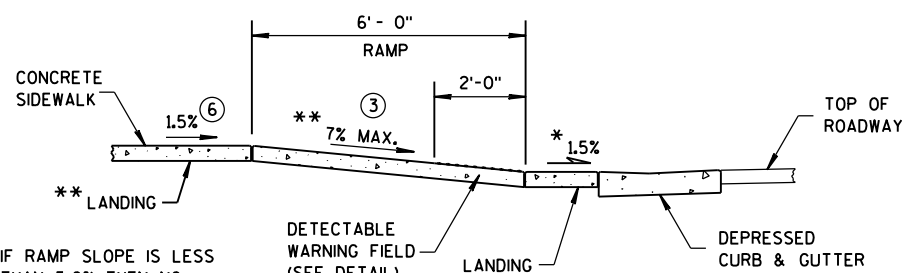
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP TYPE 4A
PLAN VIEW



SECTION C-C FOR TYPE 4A

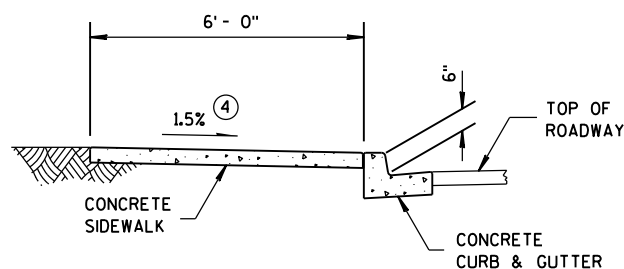


IF RAMP SLOPE IS LESS
THAN 5.0%, THEN NO
ADJACENT UPHILL LANDING
IS REQUIRED

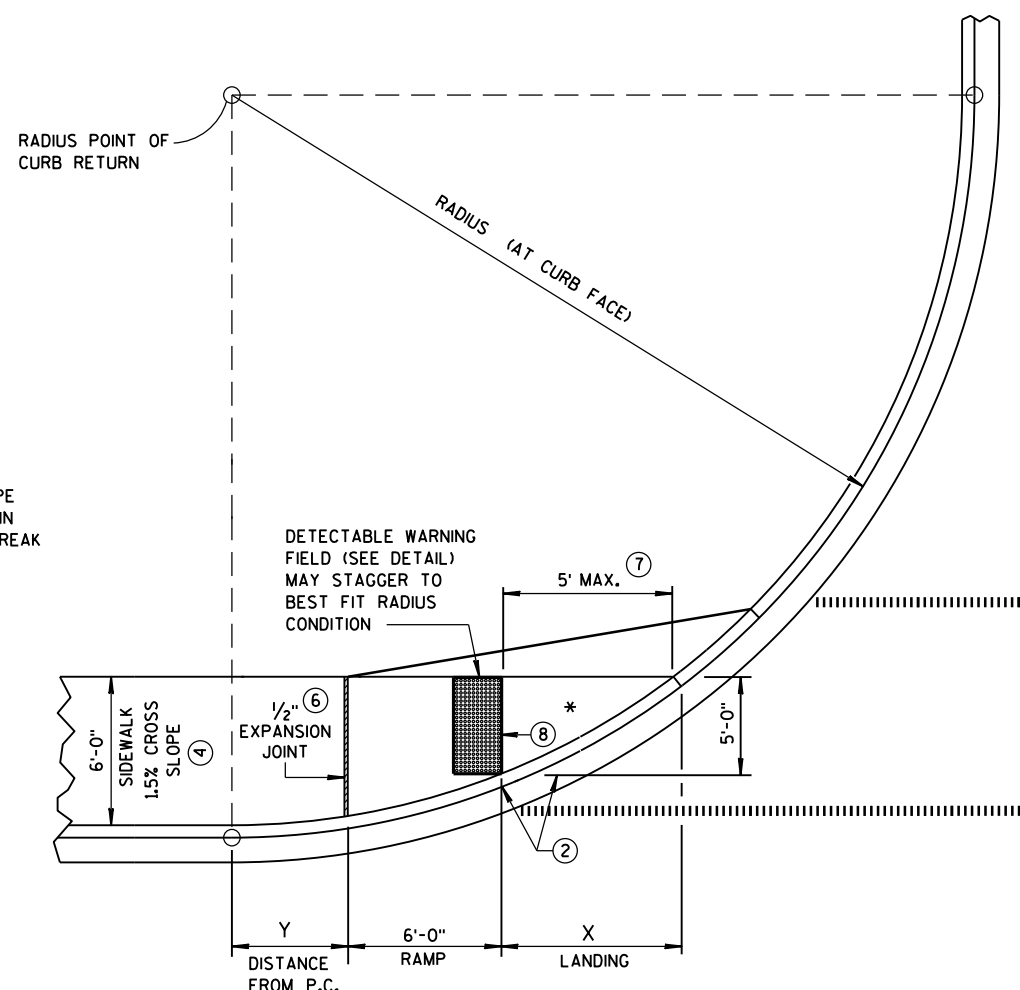
SECTION B-B FOR TYPE 4A

RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-1 $\frac{3}{4}$ "	2'-7 $\frac{1}{4}$ "
30 FEET	7'-11 $\frac{3}{4}$ "	4'-8 $\frac{1}{4}$ "
40 FEET	9'-5 $\frac{1}{4}$ "	6'-5"
50 FEET	10'-8 $\frac{3}{4}$ "	7'-11 $\frac{1}{4}$ "
60 FEET	11'-10 $\frac{1}{4}$ "	9'-3 $\frac{1}{2}$ "

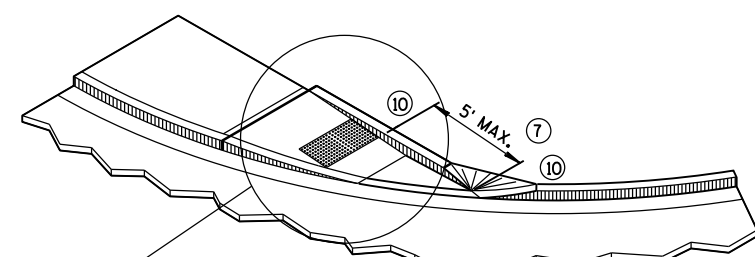
INTERMEDIATE RADII CAN BE INTERPOLATED



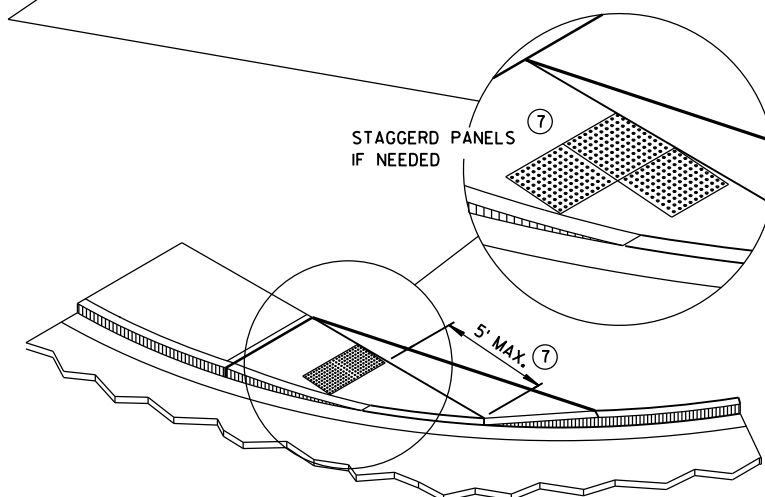
SECTION A-A FOR TYPE 4A



CURB RAMP TYPE 4A1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4A



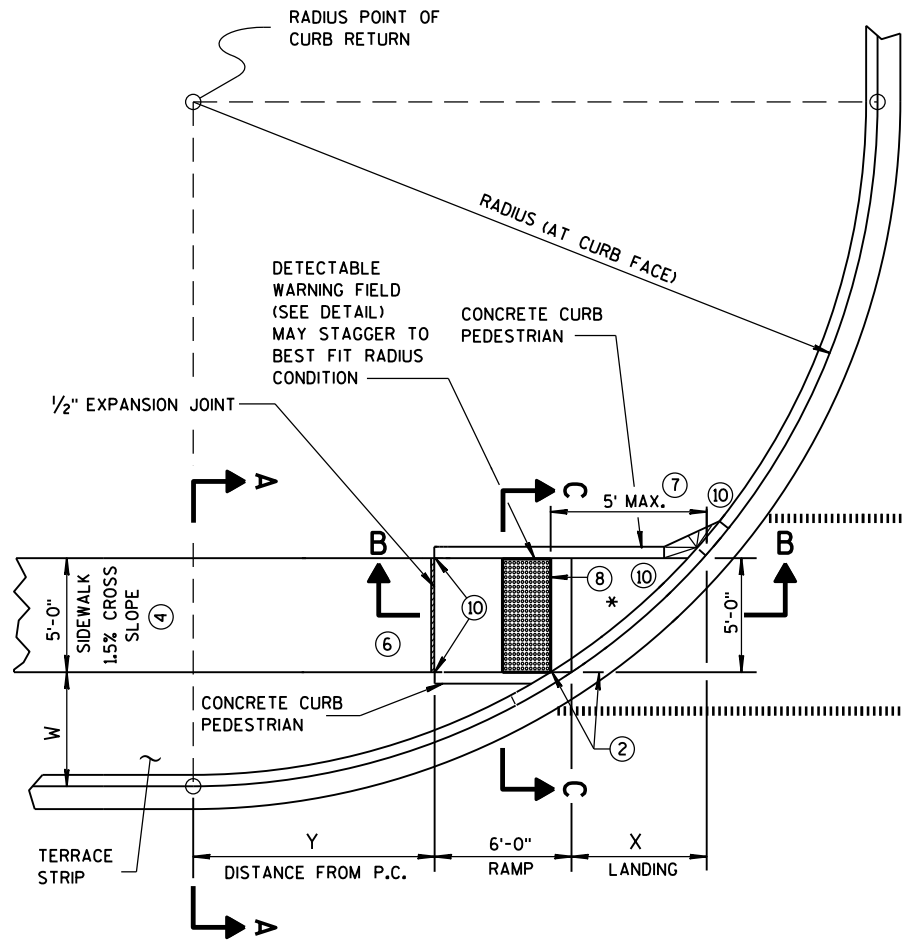
ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

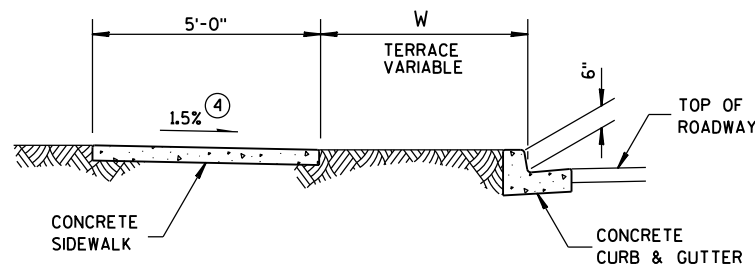
- ===== 1/2" EXPANSION JOINT-SIDEWALK
- - - - - CONTRACTION JOINT FIELD LOCATED
||||||| PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPES 4A AND 4A1

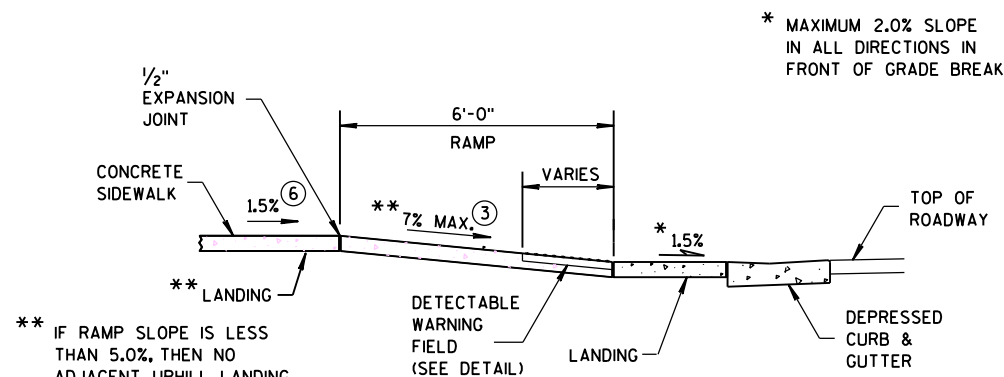
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP TYPE 4B
PLAN VIEW

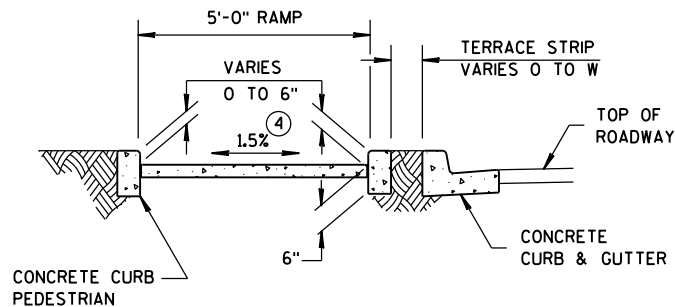


SECTION A-A FOR TYPE 4B

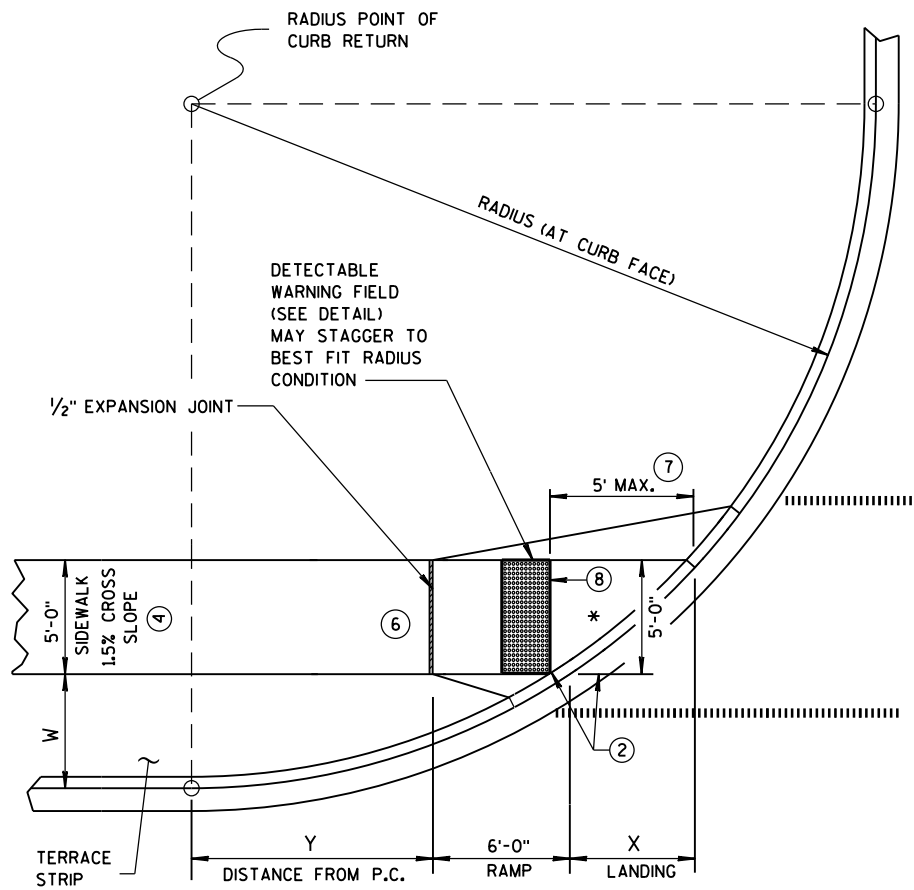


SECTION B-B FOR TYPE 4B

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



SECTION C-C FOR TYPE 4B

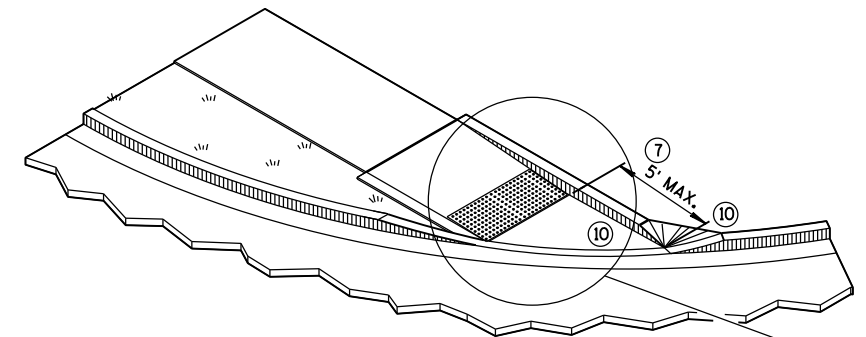


CURB RAMP TYPE 4B1
PLAN VIEW

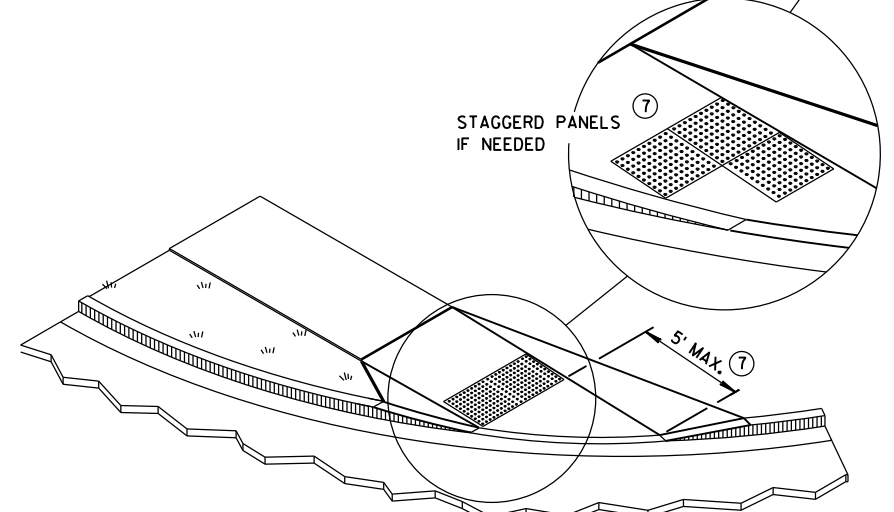
RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-5 1/2"	4'-6 1/2"	4'-8 1/2"	6'-0"	4'-1"	7'-2 3/4"	3'-7"	8'-3 1/2"	3'-1 1/2"	9'-2 1/2"
30 FEET	7'-3 3/4"	7'-1"	6'-5 1/2"	8'-11 1/2"	5'-9 1/4"	10'-7"	5'-2 1/2"	12'-0"	4'-8 3/4"	13'-3 1/4"
40 FEET	8'-9 1/2"	9'-2 1/2"	7'-10"	11'-5 1/4"	7'-1"	13'-4 1/2"	6'-5 3/4"	15'-3/4"	5'-11 1/2"	16'-7 1/4"
50 FEET	10'-3/4"	11'-3/4"	9'-1/4"	13'-7 1/4"	8'-2 1/2"	15'-9 1/2"	7'-6 1/2"	17'-9"	6'-11 3/4"	19'-6 1/4"
60 FEET	11'-2 1/2"	12'-8 3/4"	10'-3/4"	15'-6 1/2"	9'-2 1/4"	17'-11 3/4"	8'-5 3/4"	20'-1 3/4"	7'-10 1/2"	22'-1 1/2"

GENERAL NOTES

- INTERMEDIATE RADII CAN BE INTERPOLATED
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS. 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 DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.
 - 3 ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
 - 4 ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
 - 6 PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).
 - 7 WHEN THIS DISTANCE EXCEEDS 5 FEET, USE MULTIPLE DETECTABLE WARNING PANELS ACROSS THE RAMP AND STAGGER ADDITIONAL DETECTABLE WARNING PANEL(S) FORWARD TO REDUCE THIS DISTANCE.
 - 8 PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
 - 10 INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



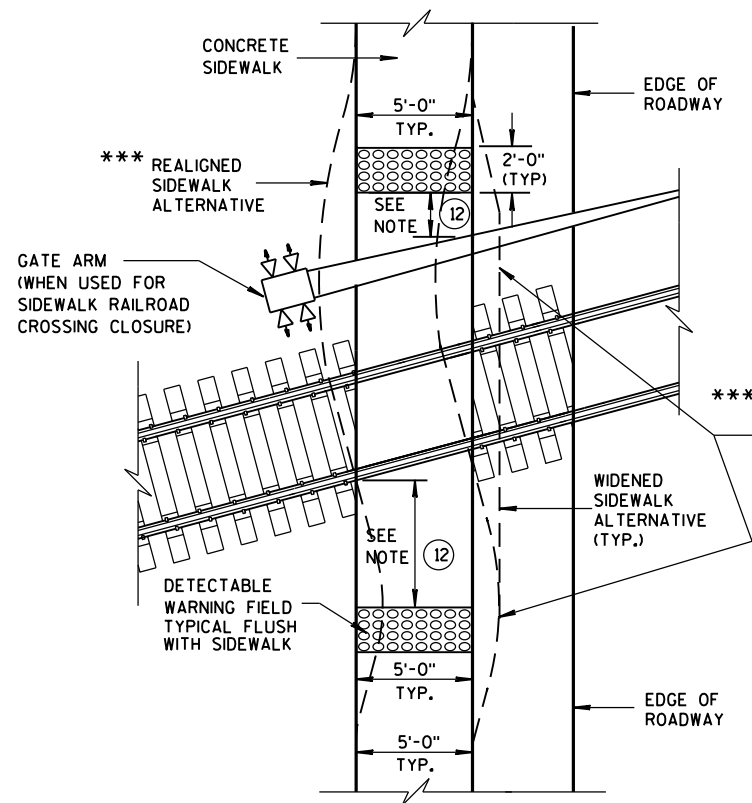
ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

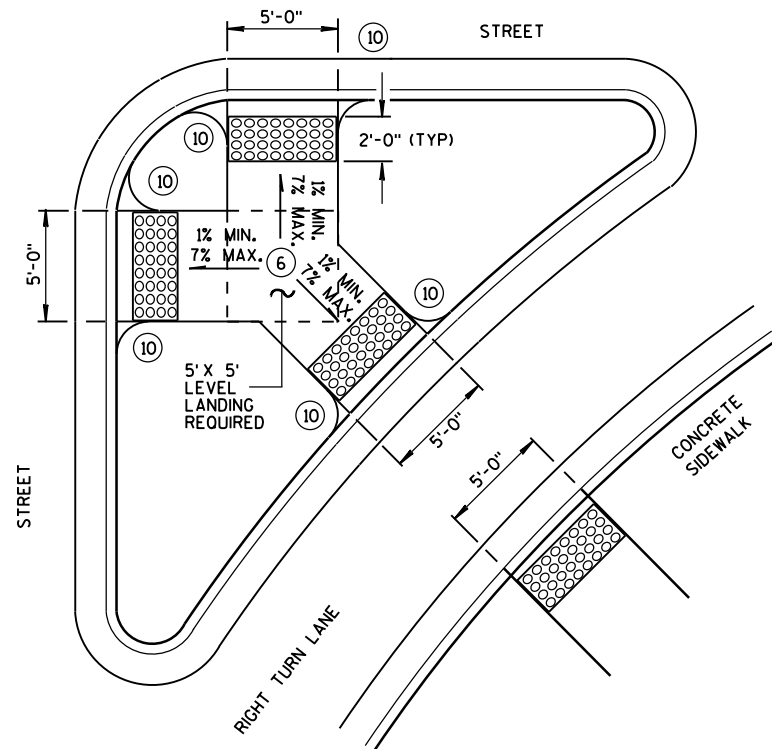
CURB RAMPS
TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

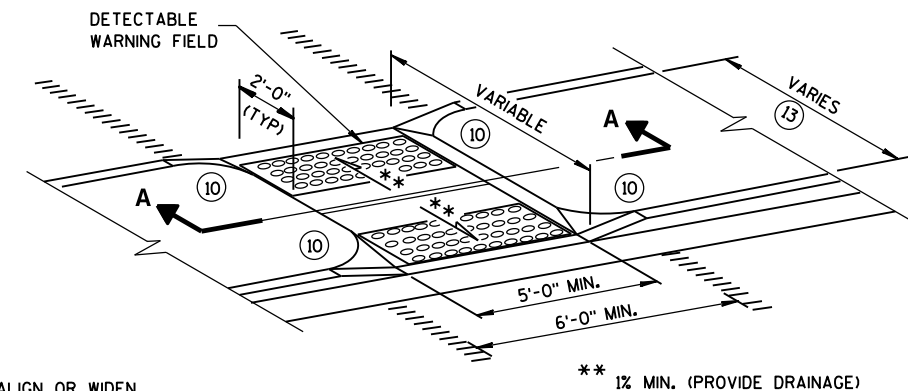


TYPE 8
DETECTABLE WARNINGS
AT RAILROAD CROSSING

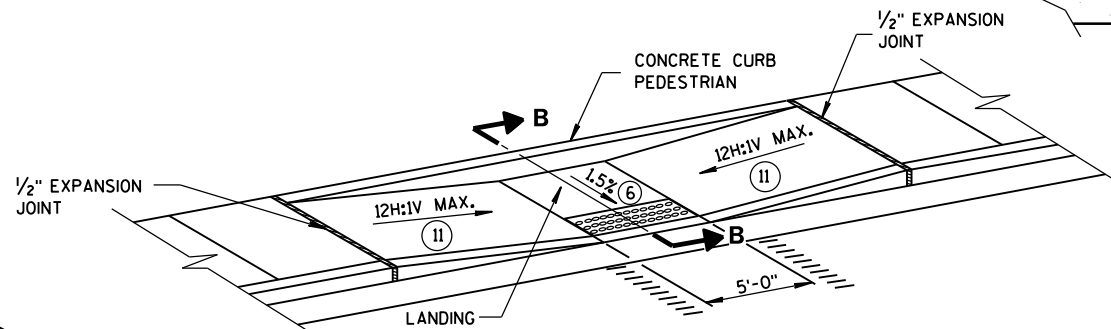
REFER TO GENERAL NOTES ② AND ③
FOR ALL ISLAND CURB RAMPS



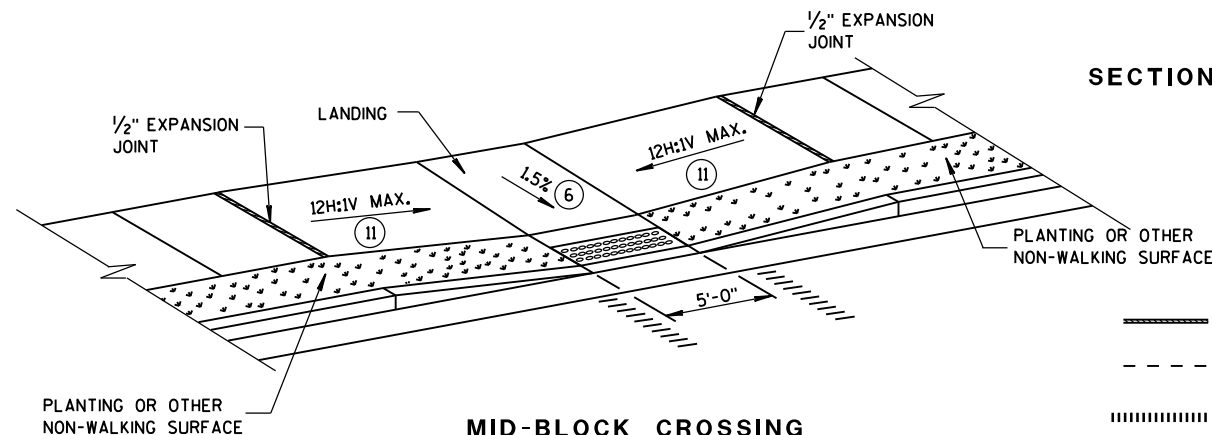
TYPE 6
DETECTABLE WARNING AT ISLANDS



MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5



MID-BLOCK CROSSING
TYPE 7A

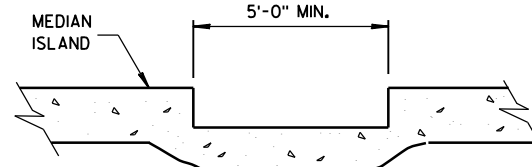


MID-BLOCK CROSSING
TYPE 7B

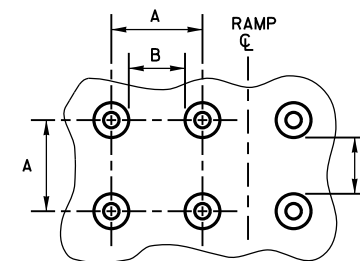
NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS
MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

GENERAL NOTES

- SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.
- 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 DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.
- ③ ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 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 IF MEDIAN WIDTH BETWEEN BACK OF CURBS IS LESS THAN 6 FEET.



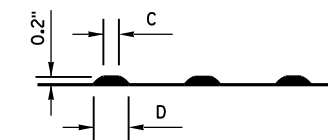
SECTION A-A



PLAN VIEW

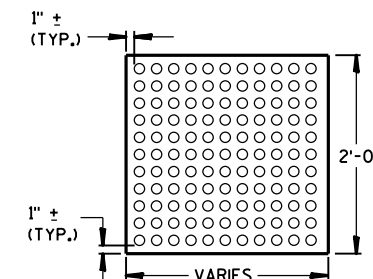
	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

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



ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



PLAN VIEW
DETECTABLE WARNING
FIELD (TYPICAL)

SECTION B-B

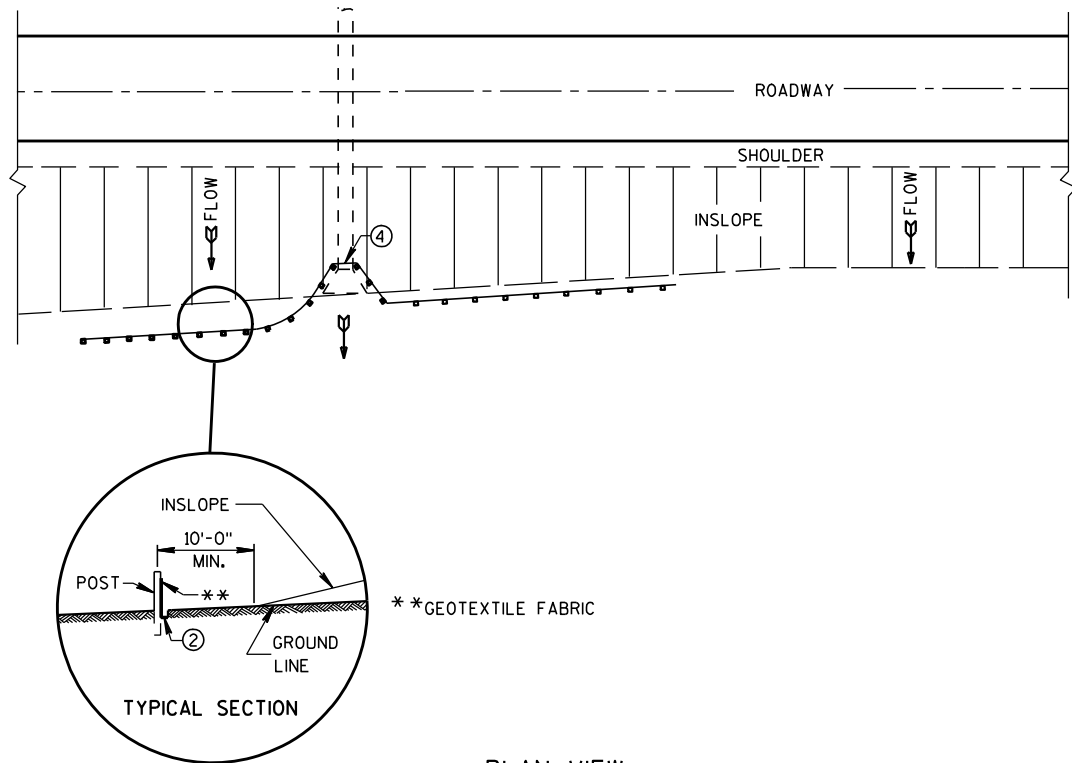
LEGEND

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

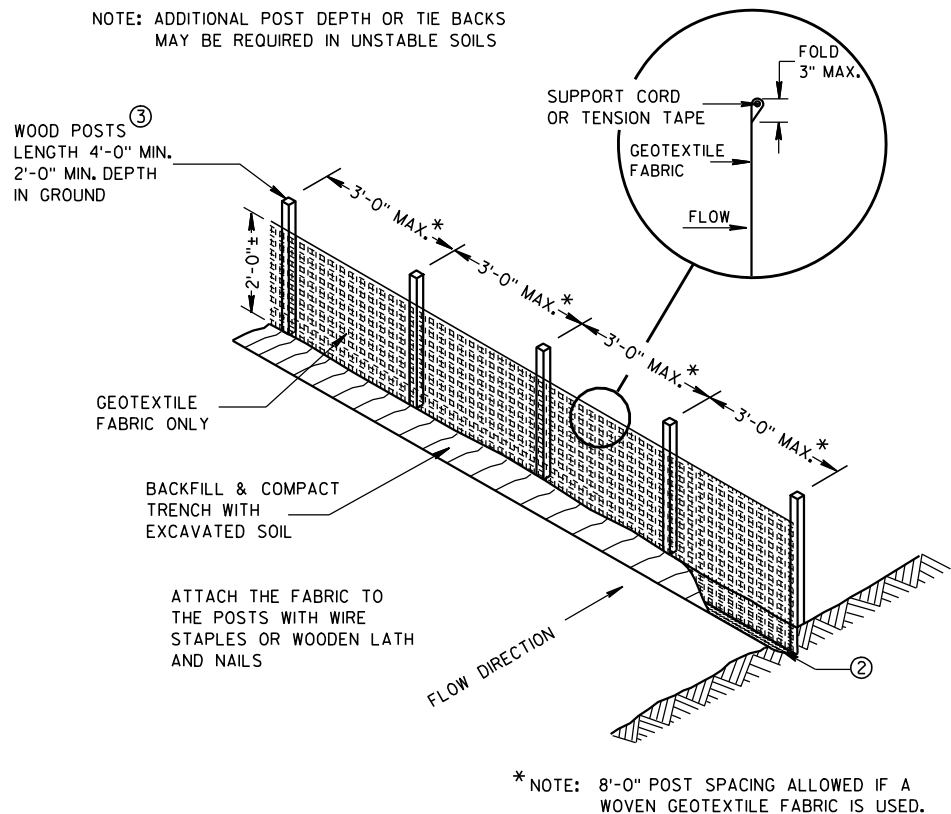
CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

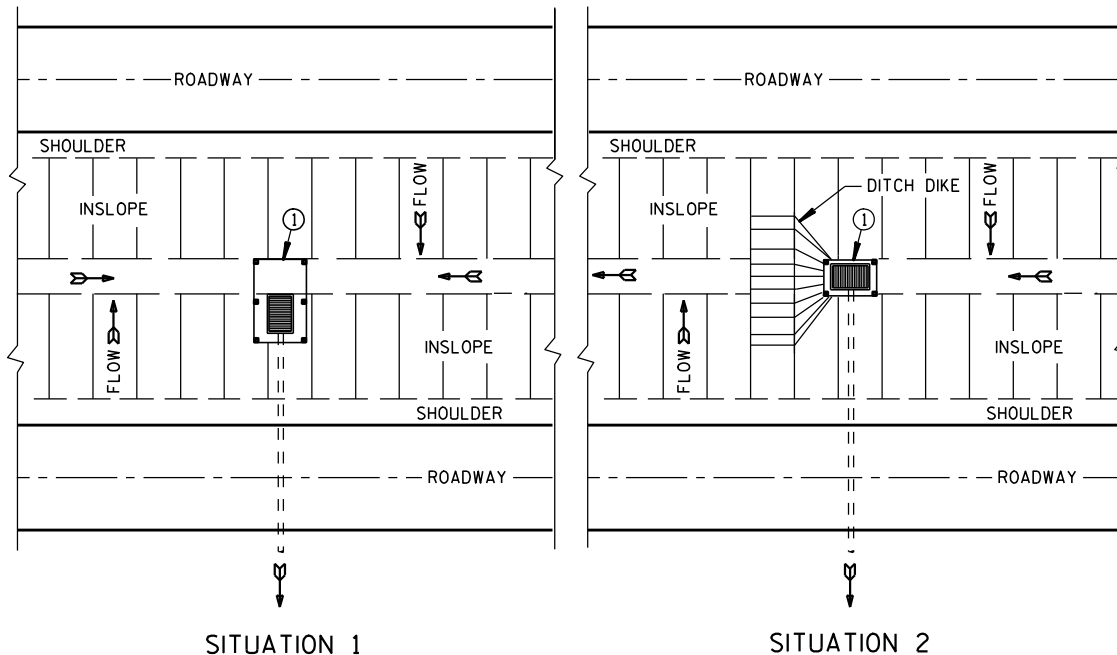
APPROVED
June, 2015 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA



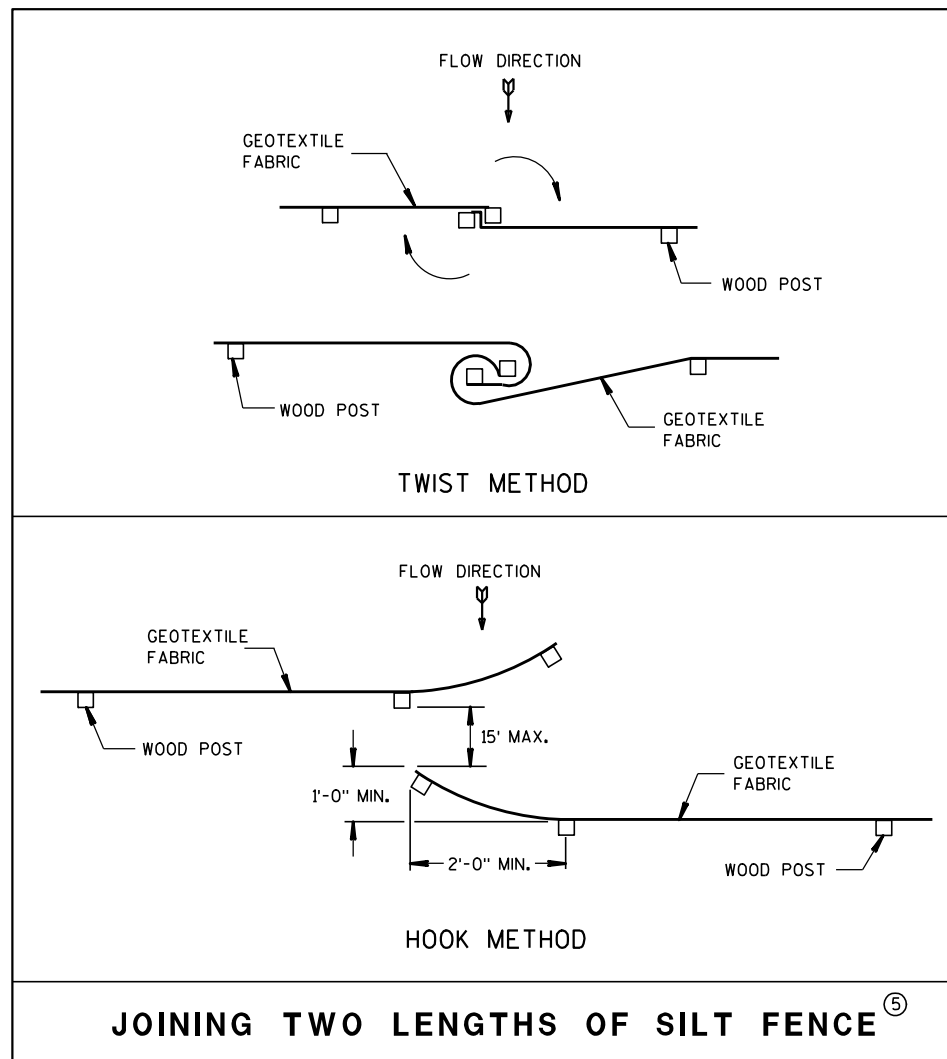
PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE



SILT FENCE



PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

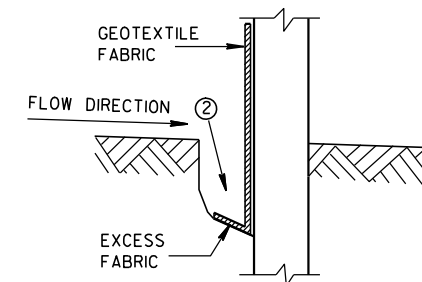


JOINING TWO LENGTHS OF SILT FENCE^⑤

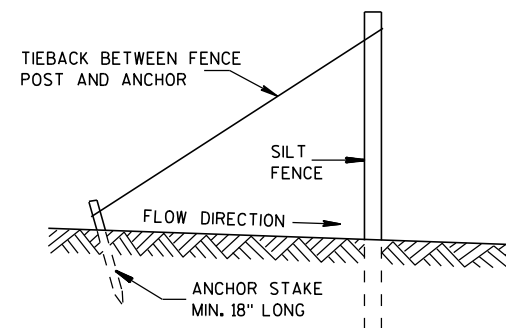
GENERAL NOTES

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

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



TRENCH DETAIL

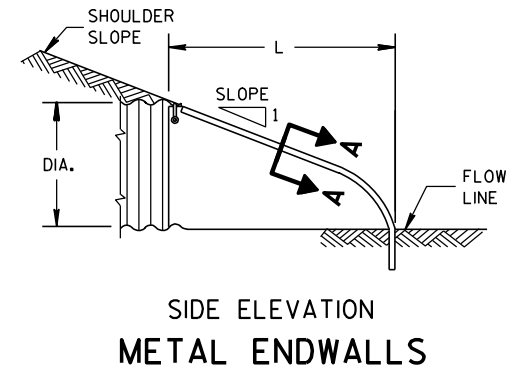
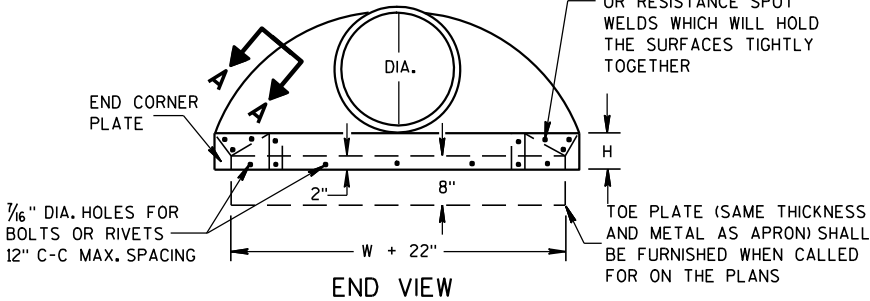
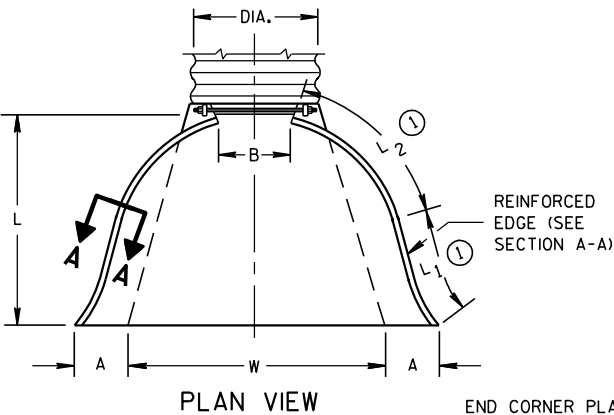


SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

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

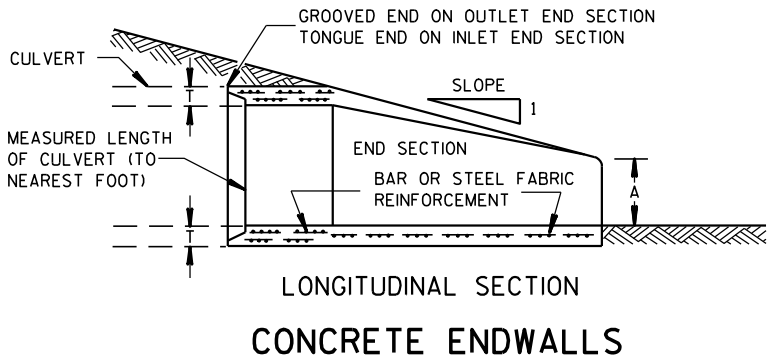
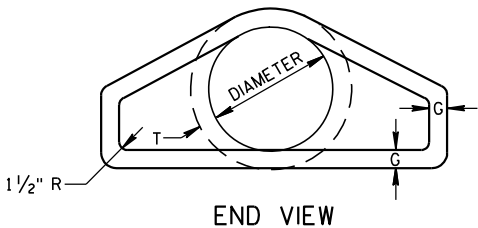
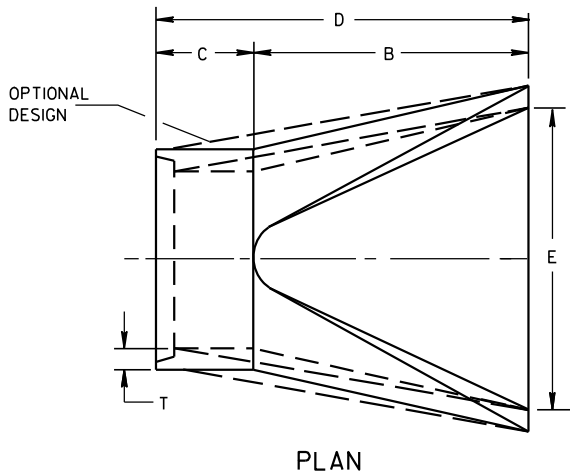
METAL APRON ENDWALLS												
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE		BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")			
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1		1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1		1 Pc.
18	.064	.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	2 to 1		3 Pc.
66	.109x	.105x	18	36	12	87	—	—	120	2 to 1		3 Pc.
72	.109x	.105x	18	39	12	87	—	—	126	2 to 1		3 Pc.
78	.109x	.105x	18	42	12	87	—	—	132	1 1/2 to 1		3 Pc.
84	.109x	.105x	18	45	12	87	—	—	138	1 1/2 to 1		3 Pc.
90	.109x	.105x	18	37	12	87	—	—	144	1 1/2 to 1		3 Pc.
96	.109x	.105x	18	35	12	87	—	—	150	1 1/2 to 1		3 Pc.

* EXCEPT CENTER PANEL
SEE GENERAL NOTES

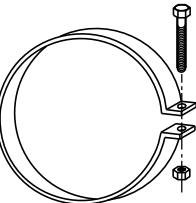


REINFORCED CONCRETE APRON ENDWALLS												
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE				
	T	A	B	C	D	E	G					
12	2	4	24	48 1/8	72 1/8	24	2	3 to 1				
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1				
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1				
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1				
24	3	9 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				

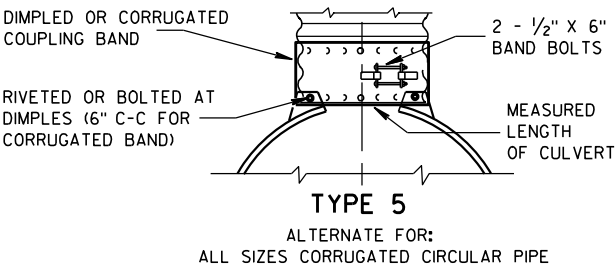
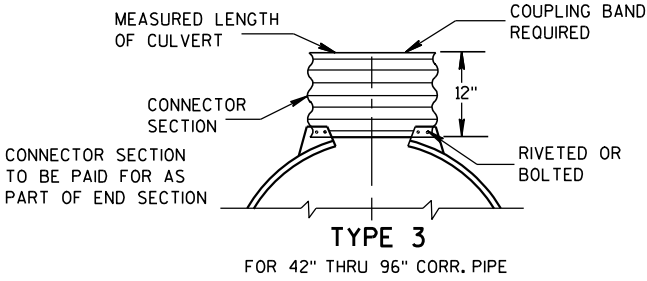
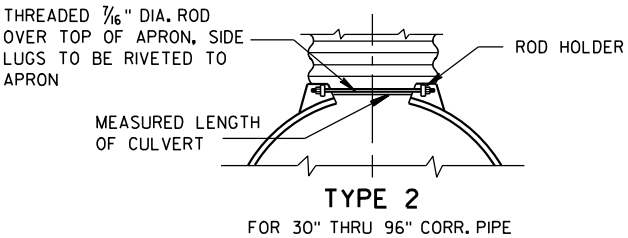
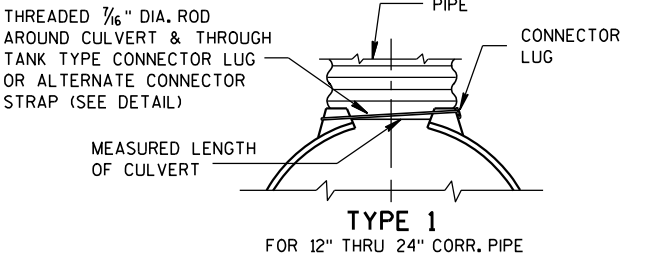
* MINIMUM
** MAXIMUM



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



ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



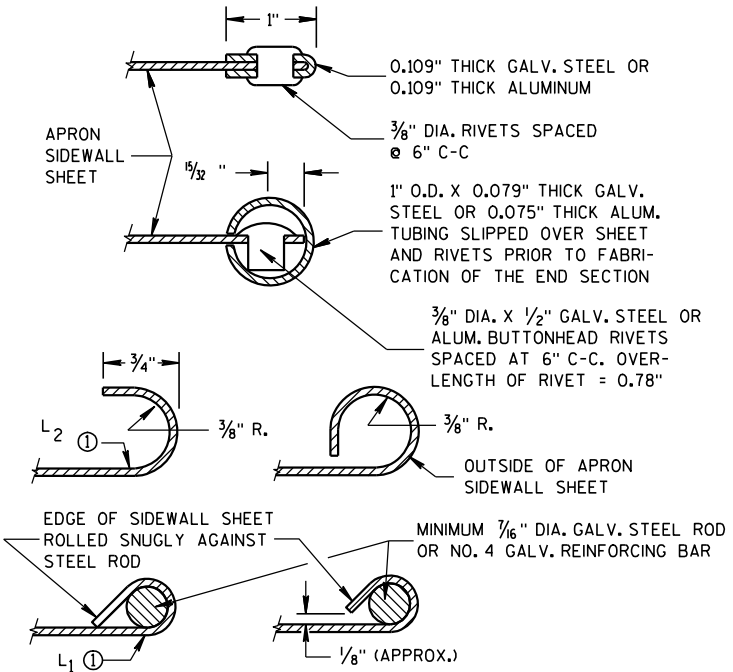
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



GENERAL NOTES

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

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

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

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

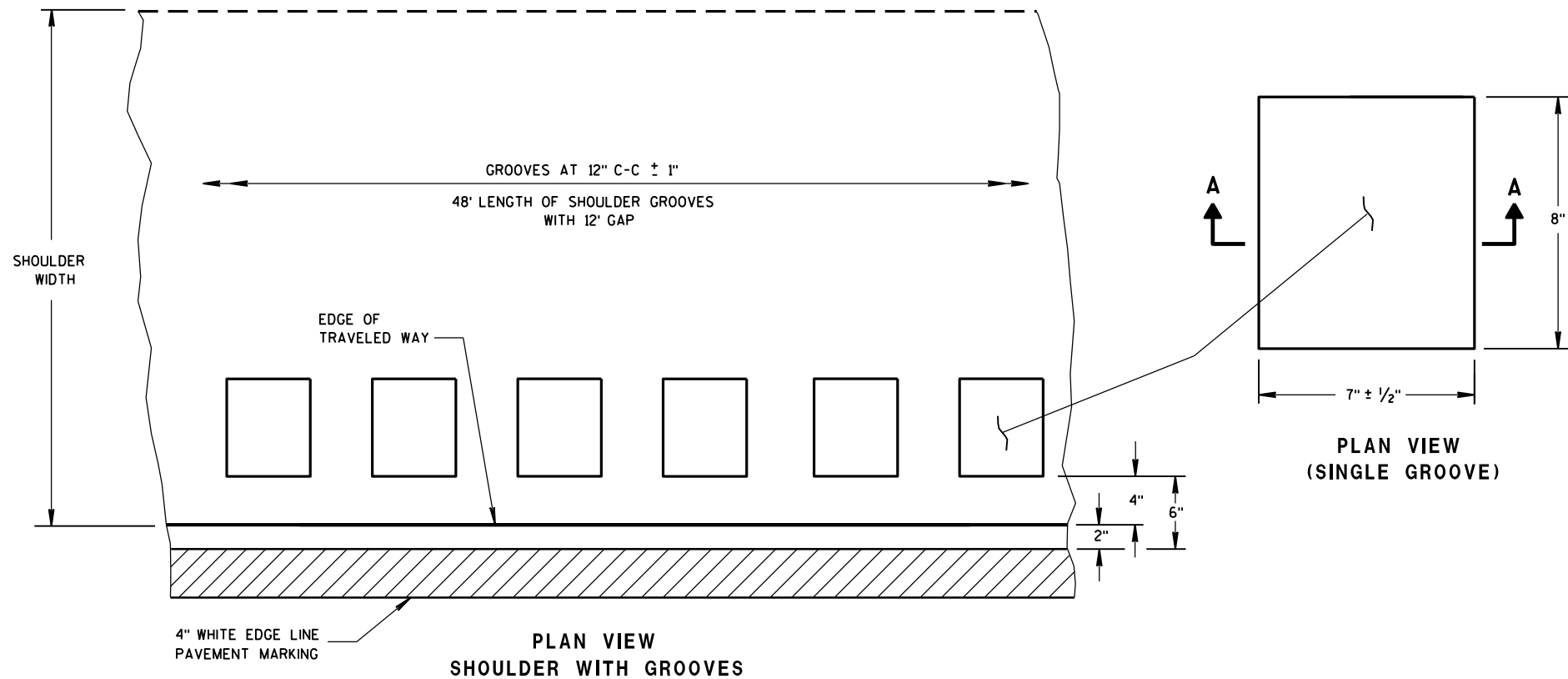
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

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

APRON ENDWALLS FOR
CULVERT PIPE

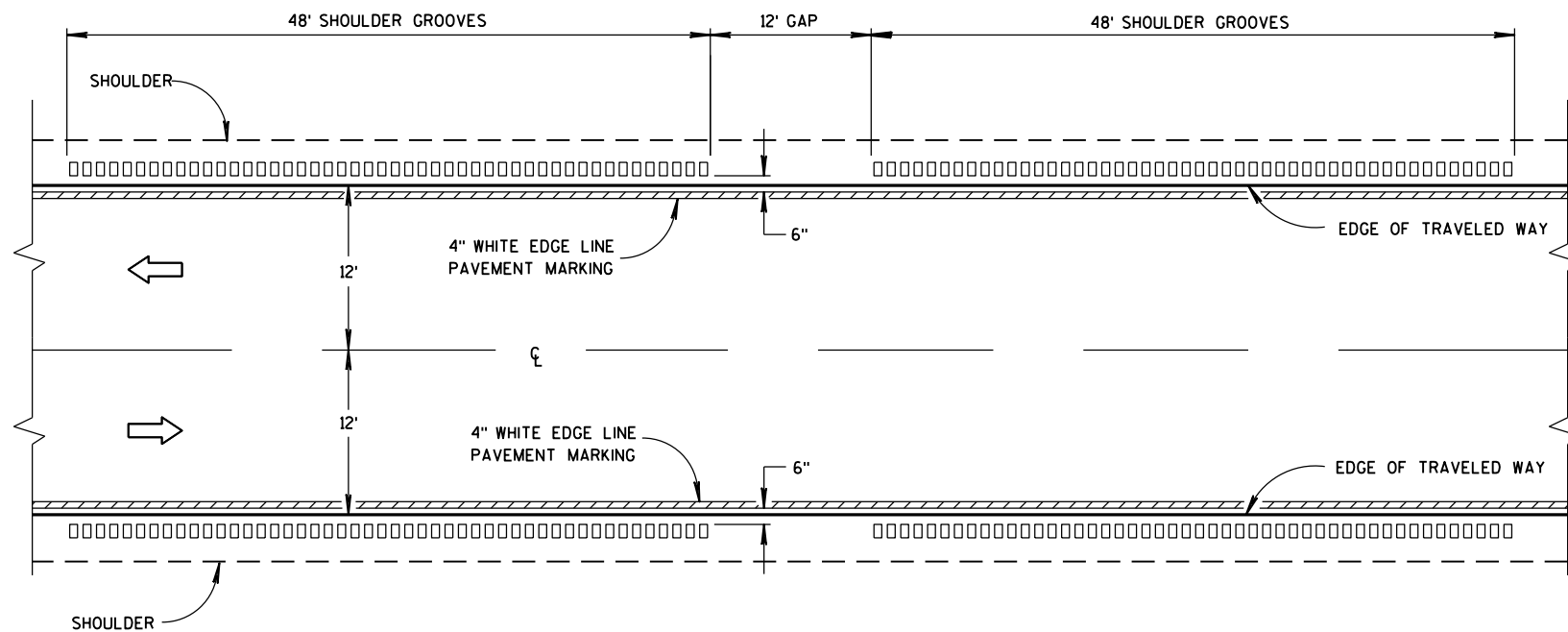
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



6

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP



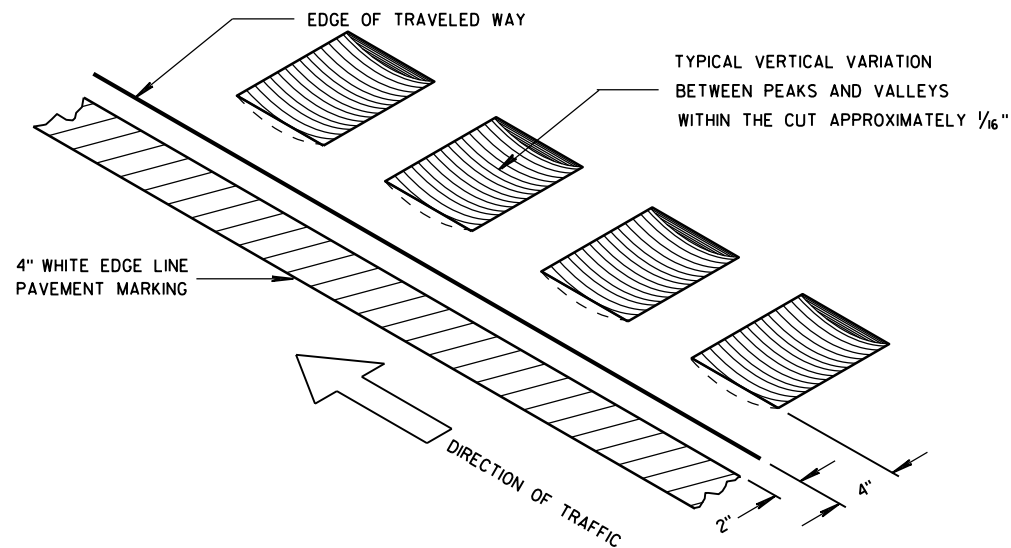
TYPE 1
2-LANE SHOULDER RUMBLE STRIP

GENERAL NOTES

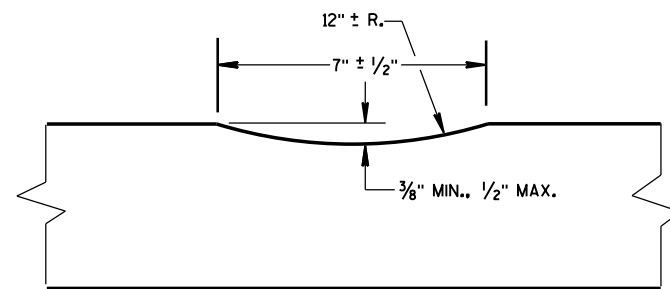
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

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



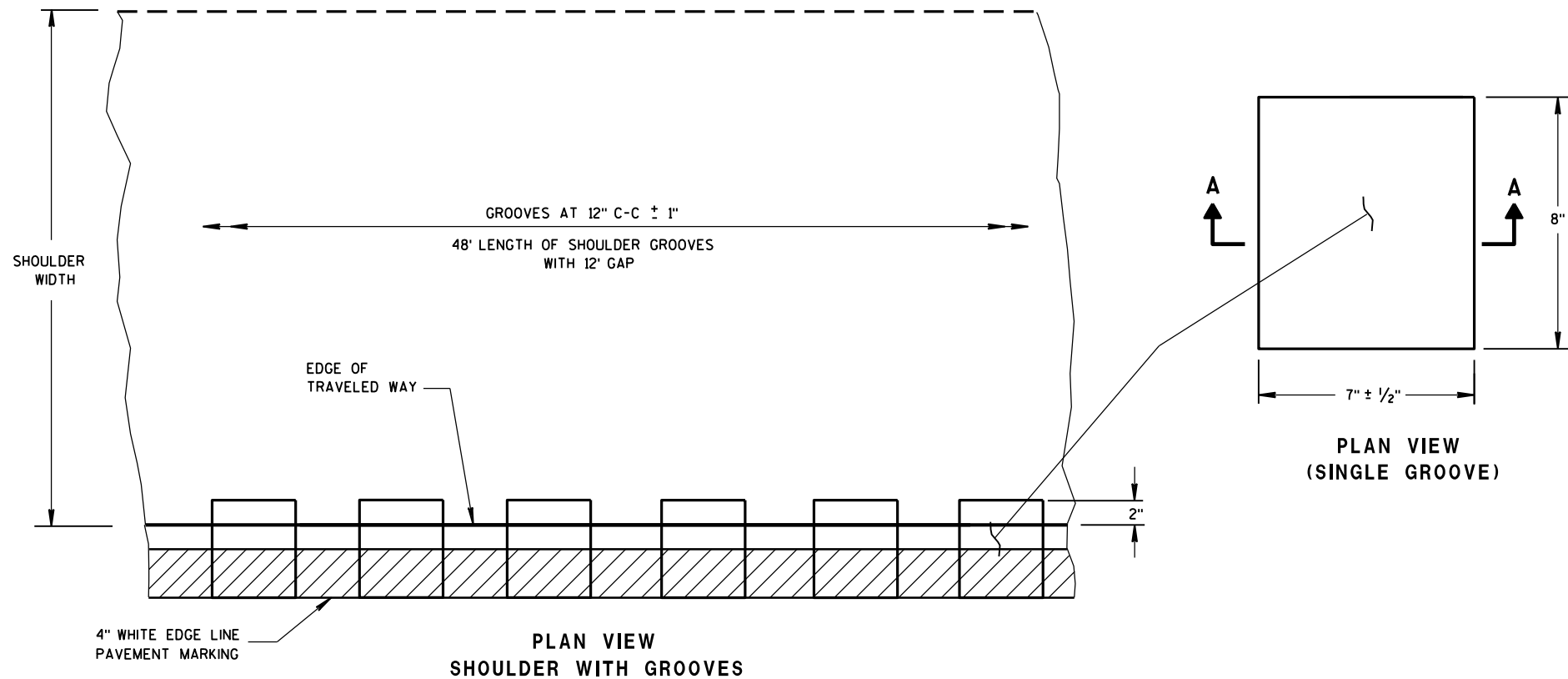
ISOMETRIC



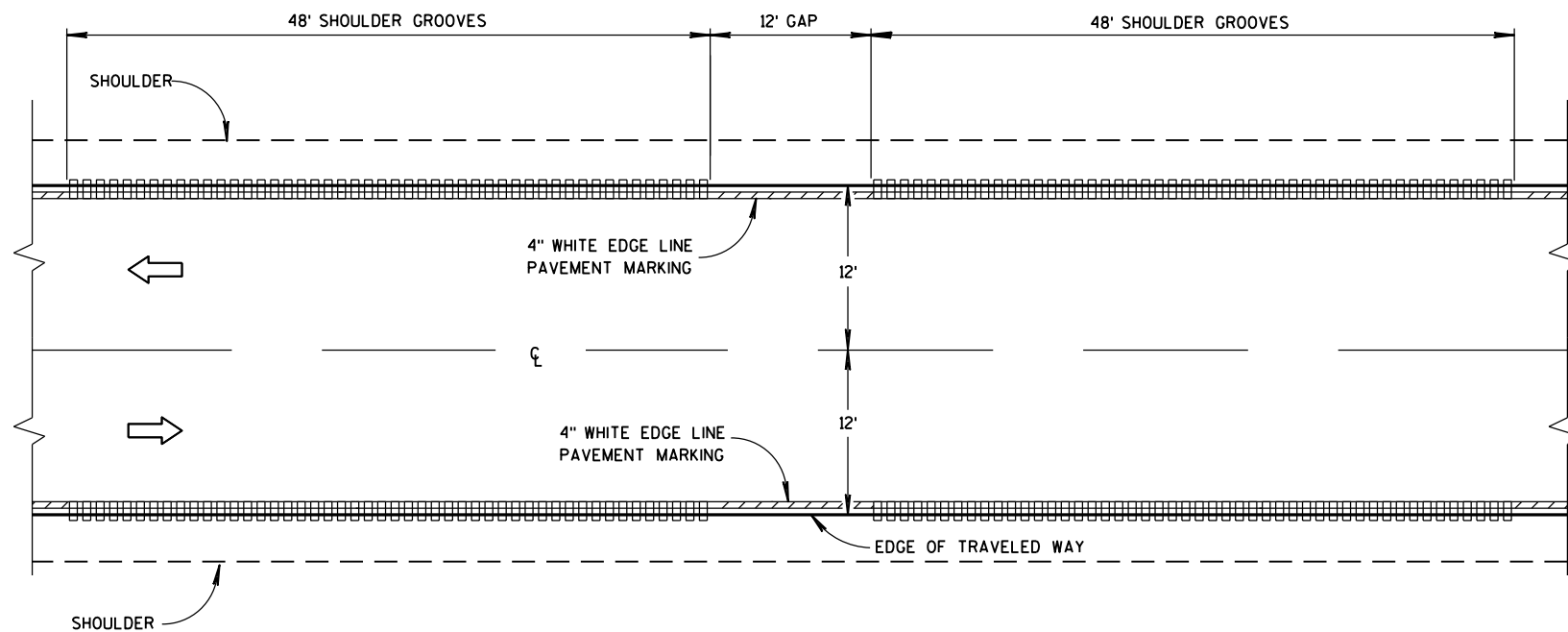
SECTION A-A

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



6
PLACEMENT DETAIL FOR TYPE 2 MILLED RUMBLE STRIP

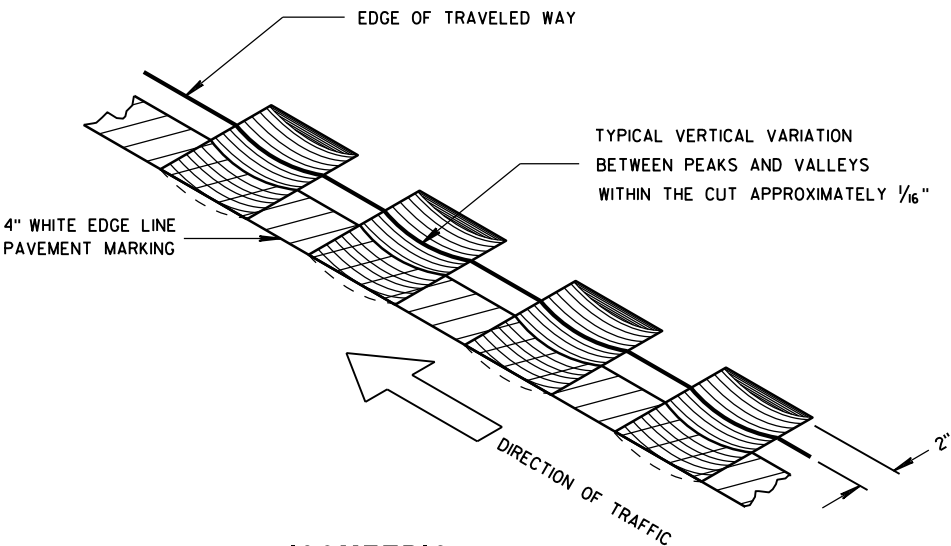


TYPE 2
2-LANE SHOULDER RUMBLE STRIP

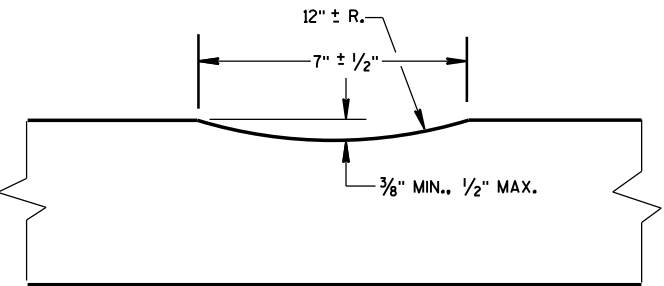
GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.
DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

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



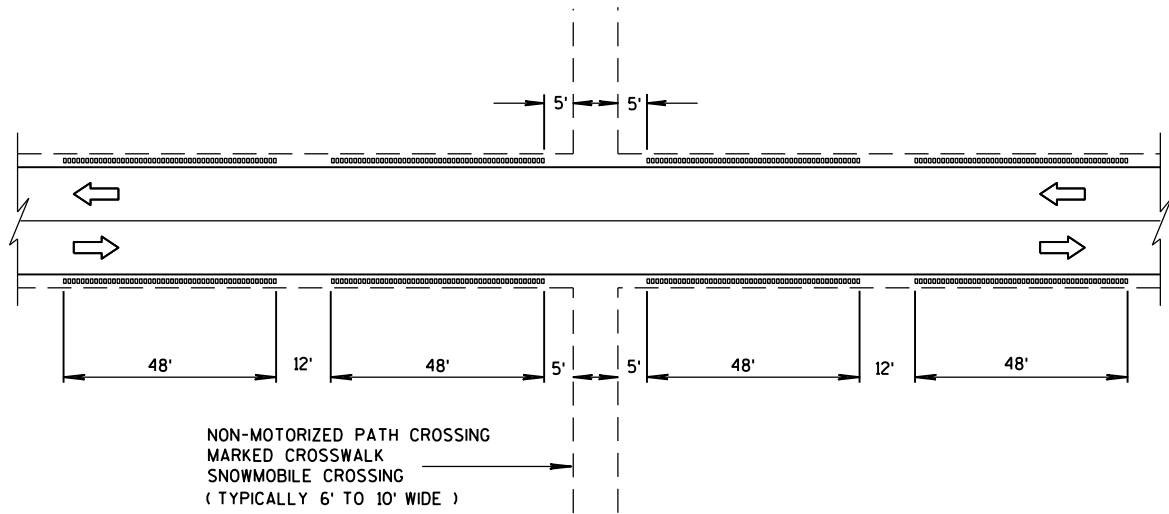
ISOMETRIC



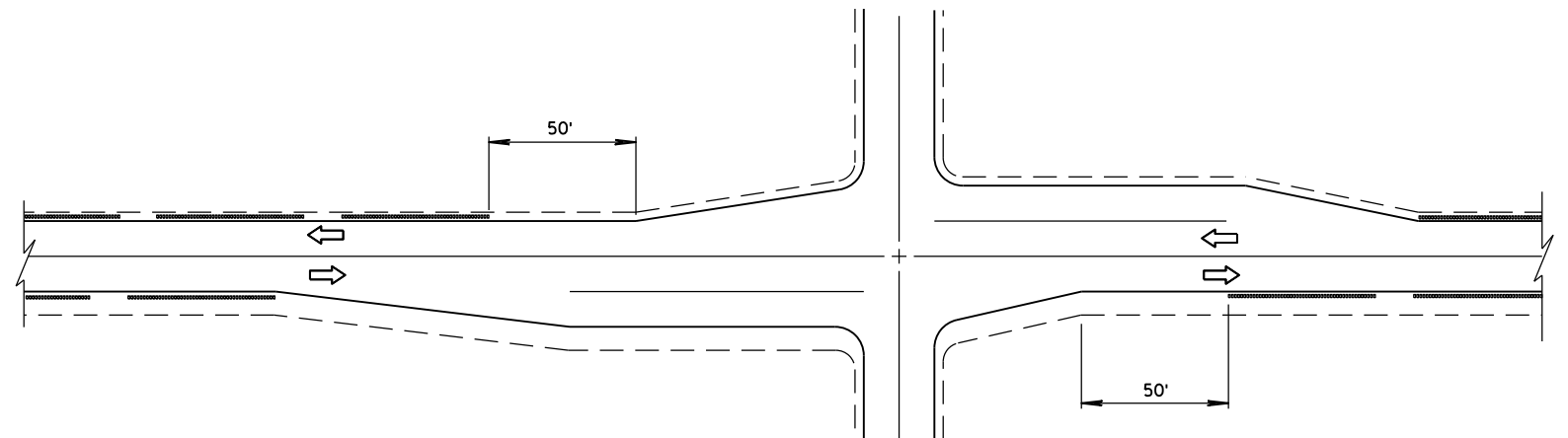
SECTION A-A

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

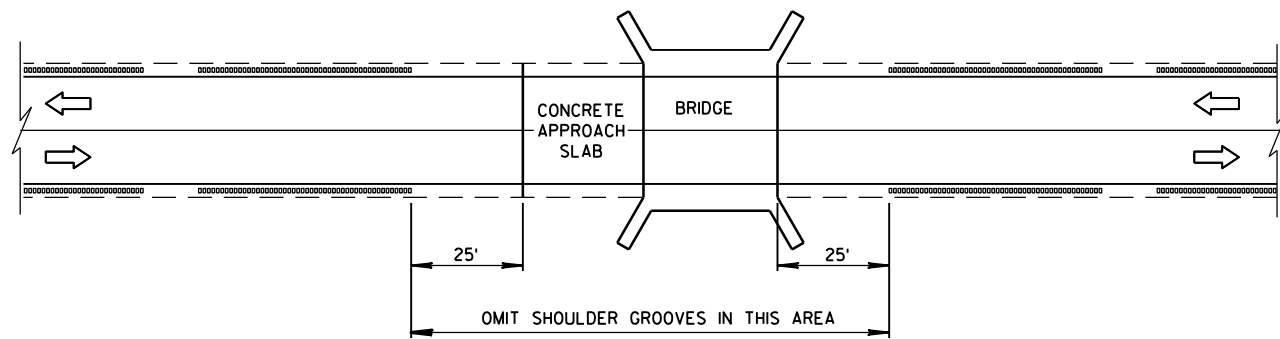
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



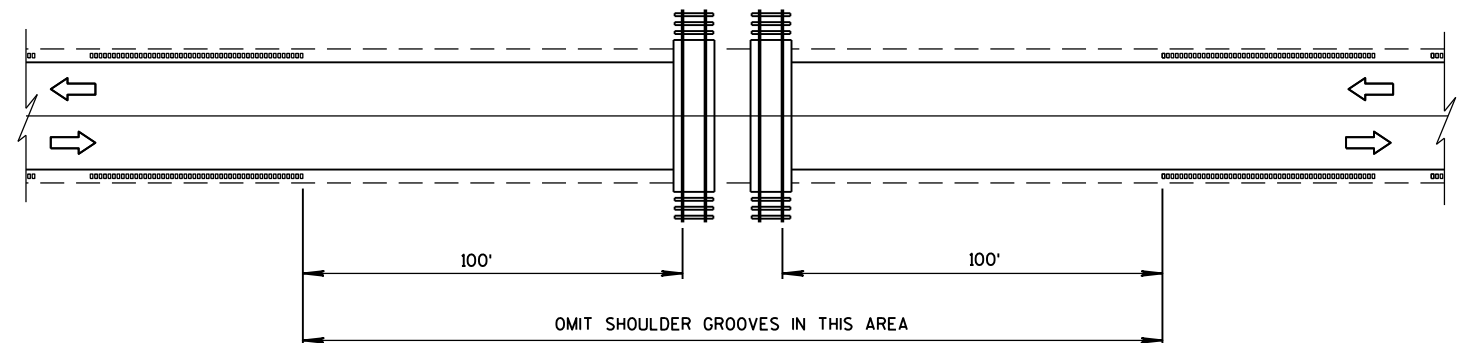
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



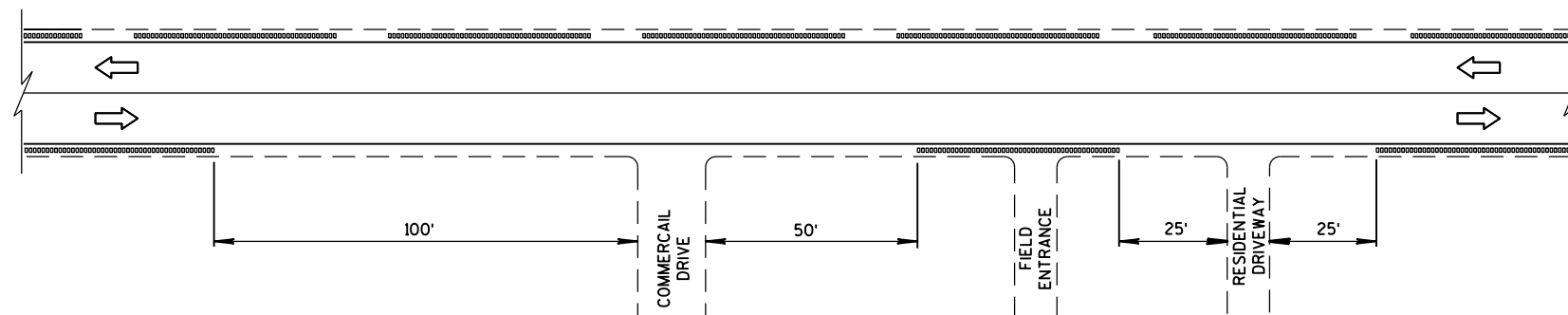
SHOULDER GROOVES AT INTERSECTIONS



SHOULDER GROOVES AT BRIDGES



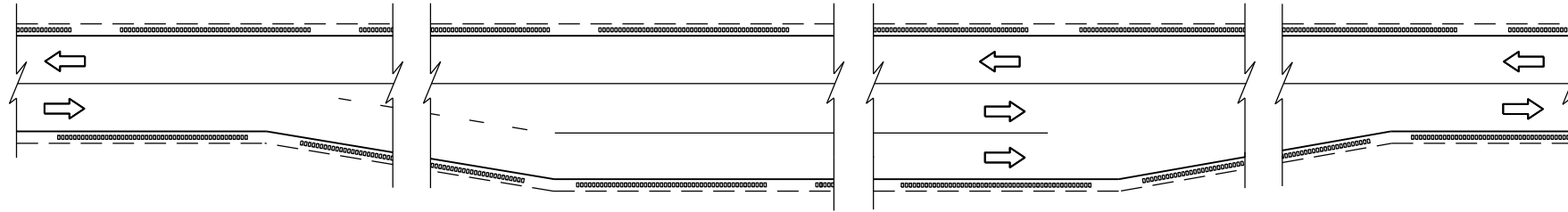
SHOULDER GROOVES AT RAILROADS



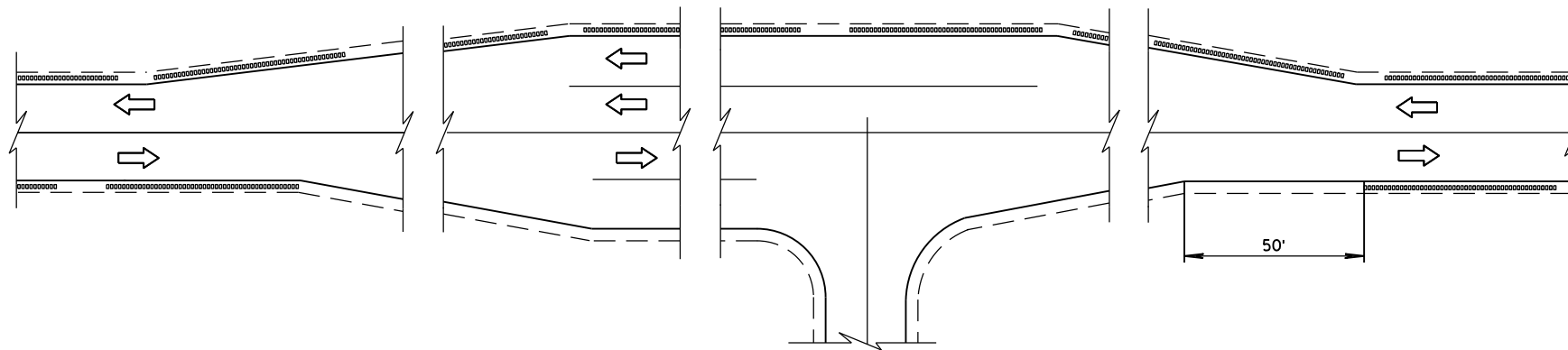
SHOULDER GROOVES AT DRIVEWAYS^①

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



SHOULDER GROOVES AT PASSING AND CLIMBING LANES



SHOULDER GROOVES AT BYPASS LANES

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/17/2012
DATE
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

GENERAL NOTES

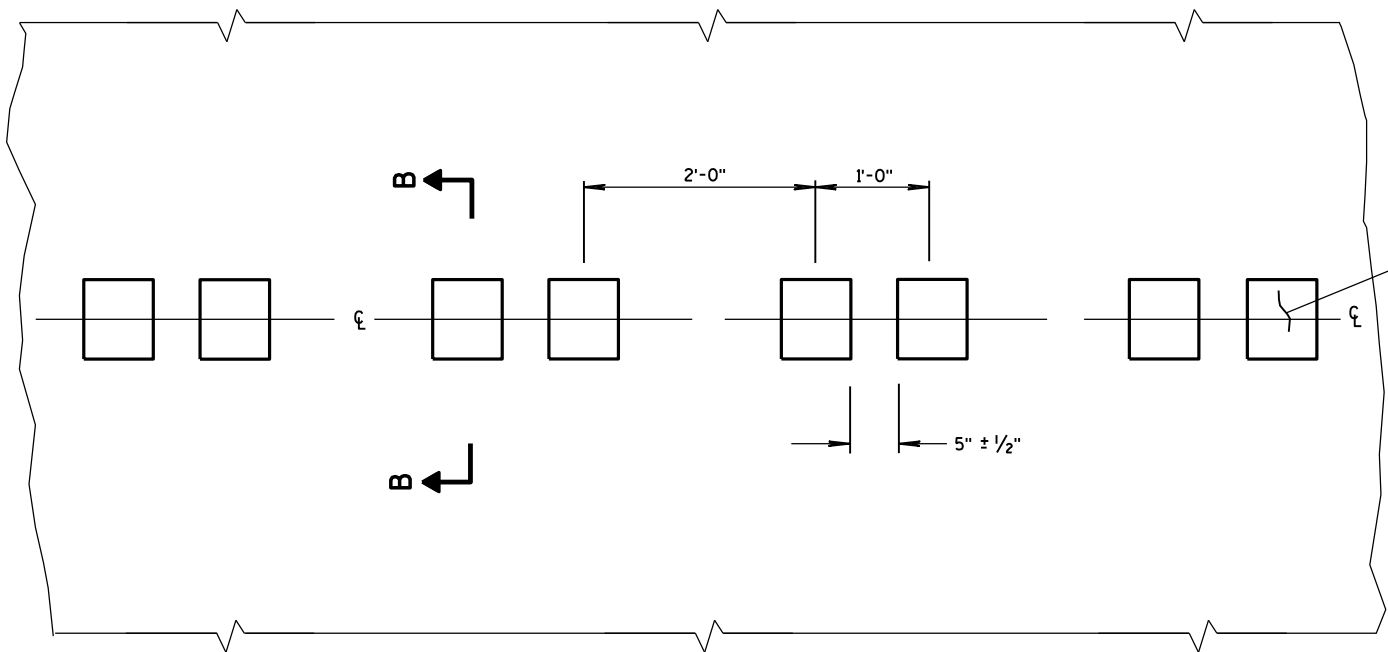
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

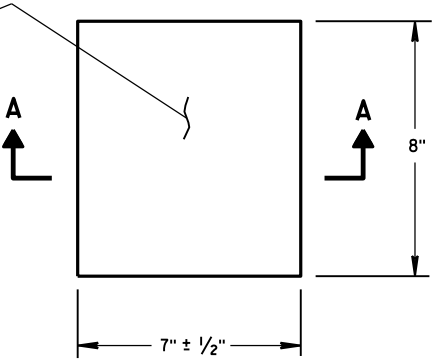
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

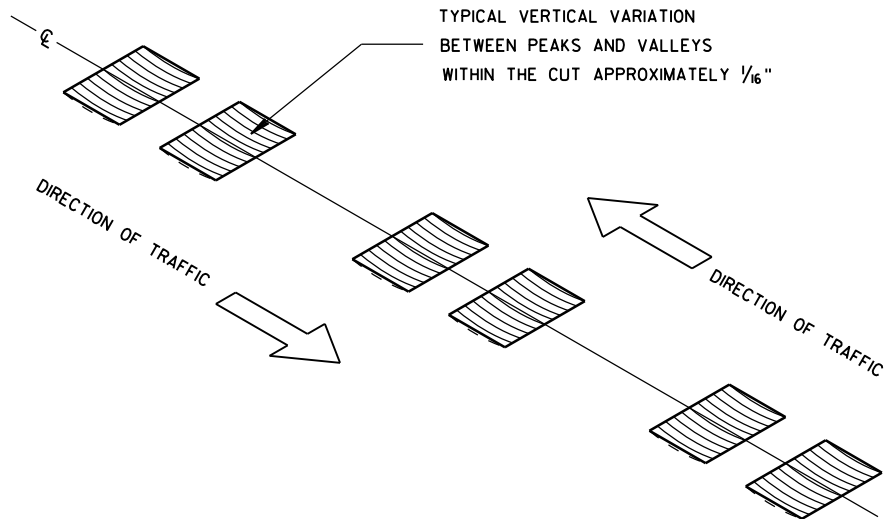
- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



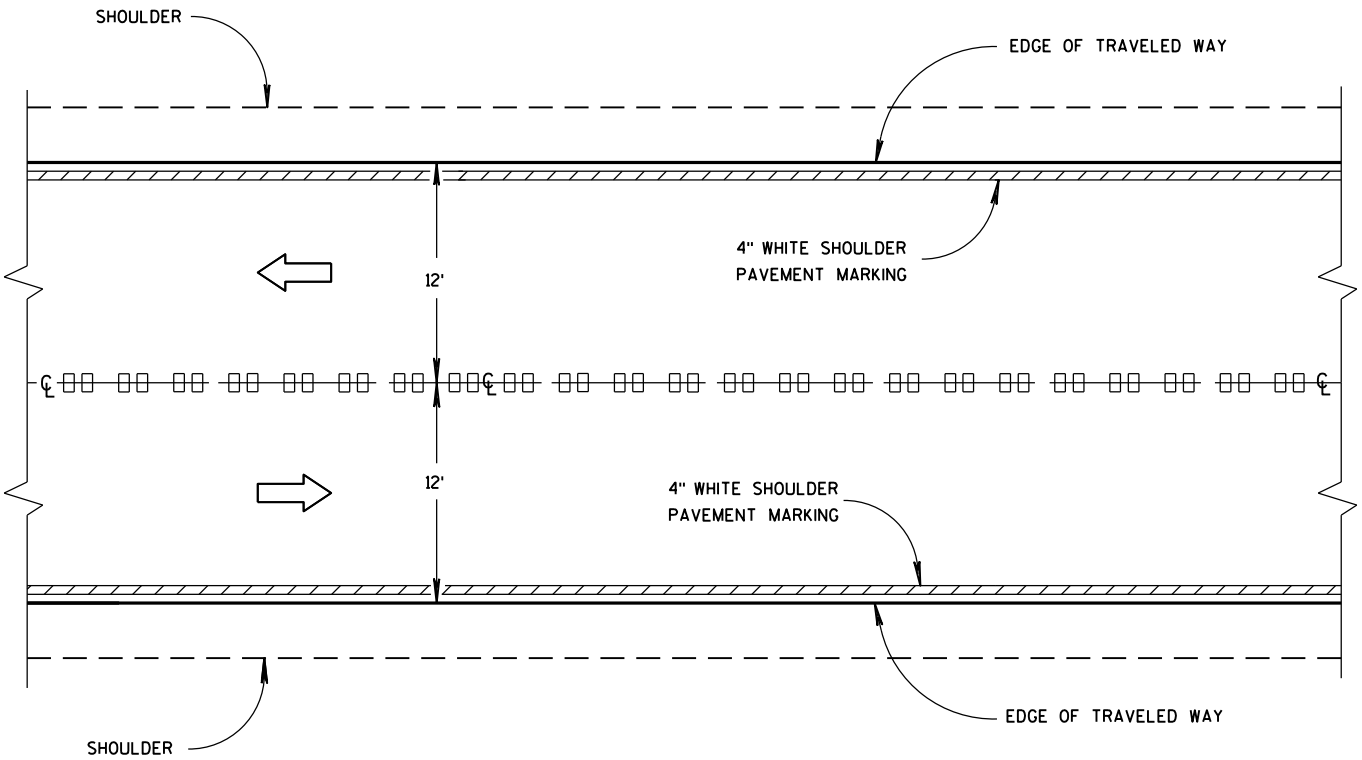
PLAN VIEW
CENTER LINE WITH GROOVES



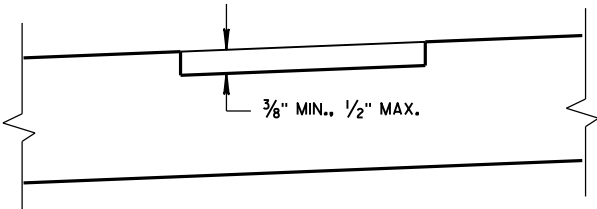
PLAN VIEW
(SINGLE GROOVE)



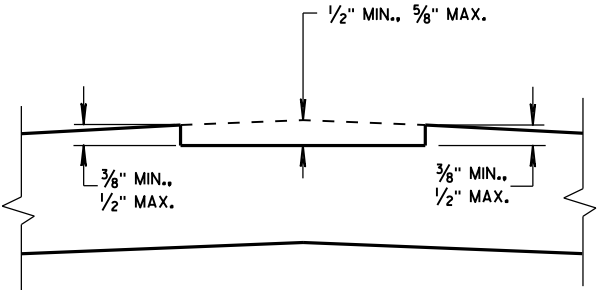
ISOMETRIC



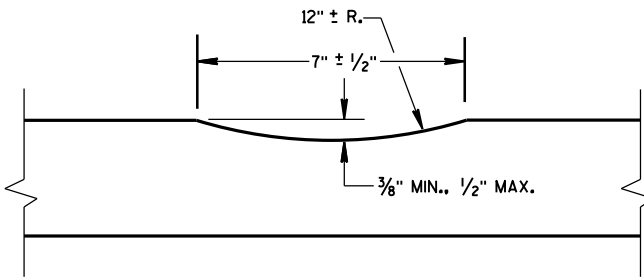
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



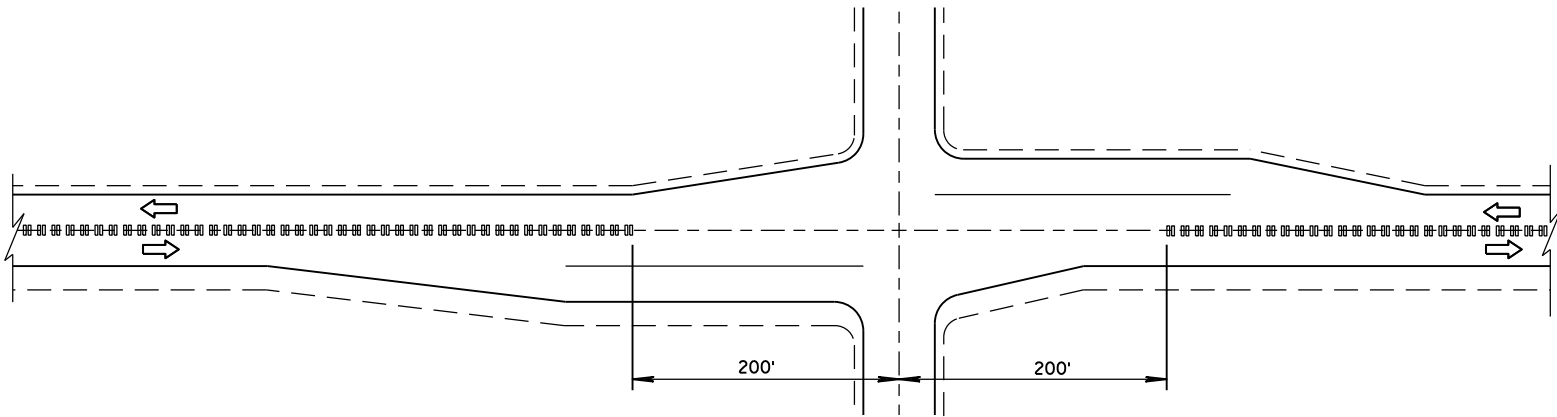
SECTION B-B
CROWNED ROADWAY



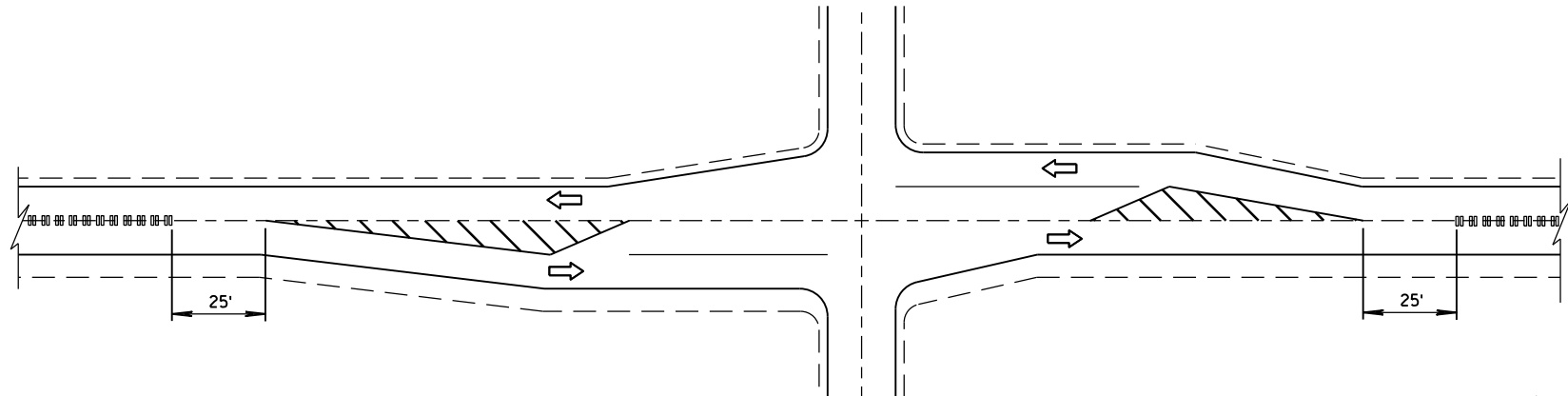
SECTION A-A

2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING

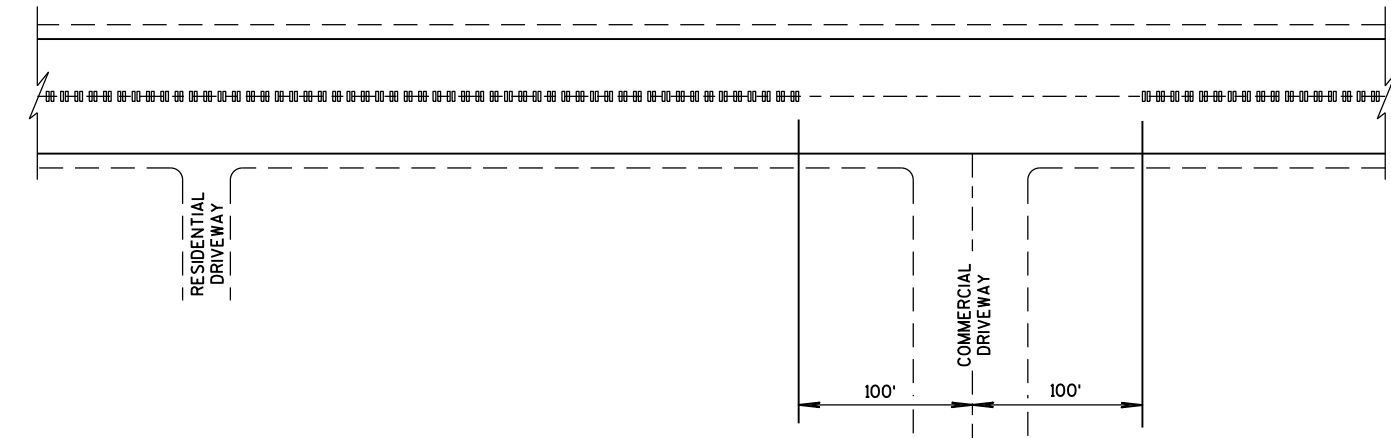
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CENTER LINE GROOVES AT INTERSECTIONS

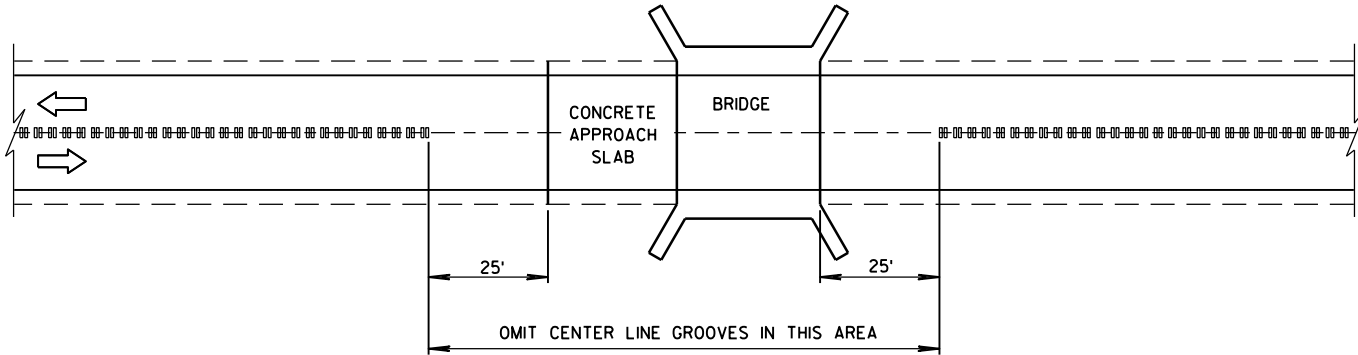


CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

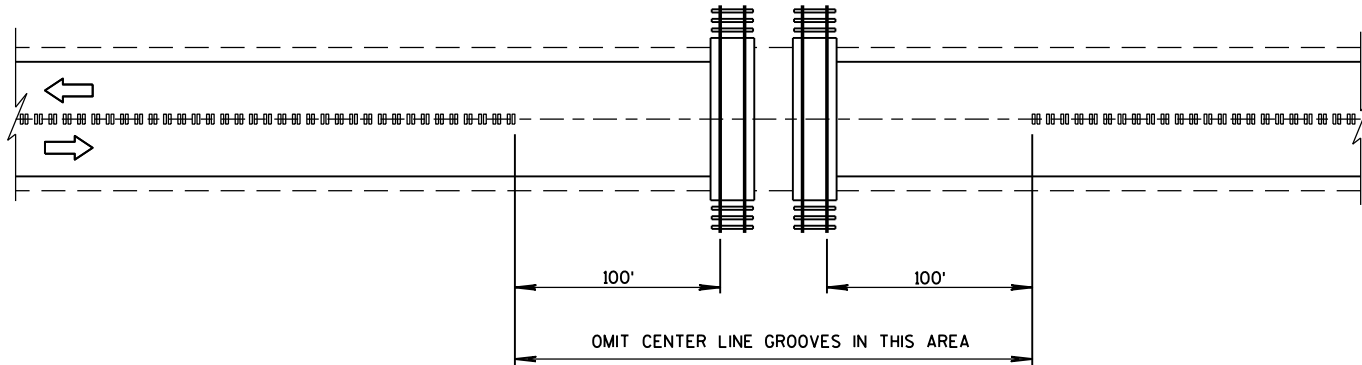


CENTER LINE GROOVES AT DRIVEWAYS^①

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



CENTER LINE GROOVES AT BRIDGES



CENTER LINE GROOVES AT RAILROADS

2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/15/2013 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	

6

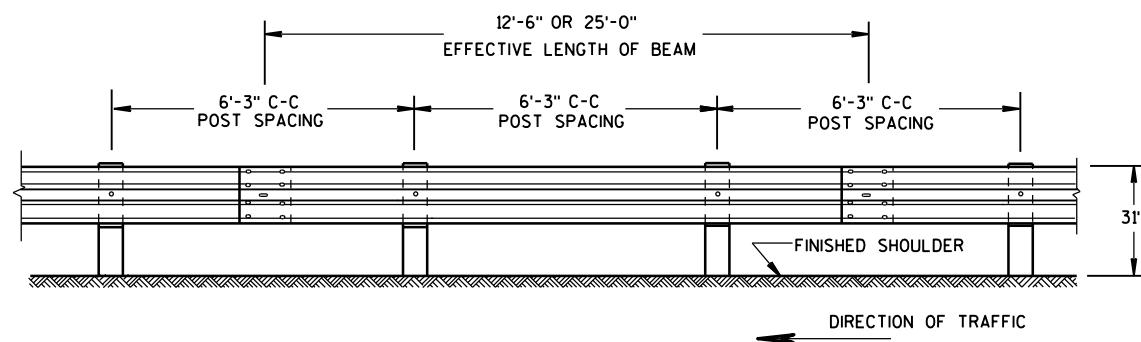
- S.D.D. 14 B 42-3a**



S.D.D. 14 B 42-3a

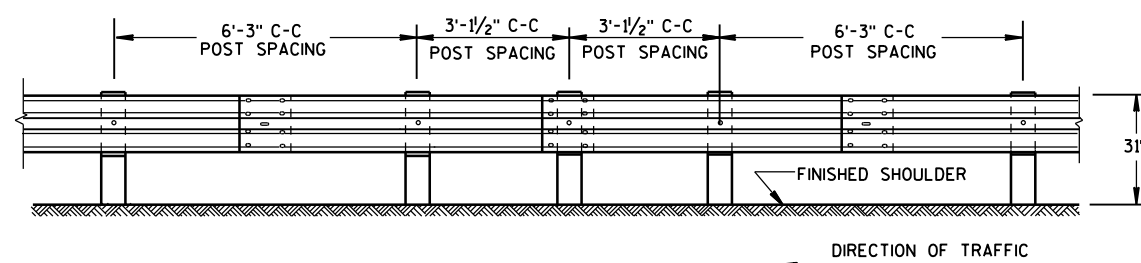


S.D.D. 14 B 42-3a



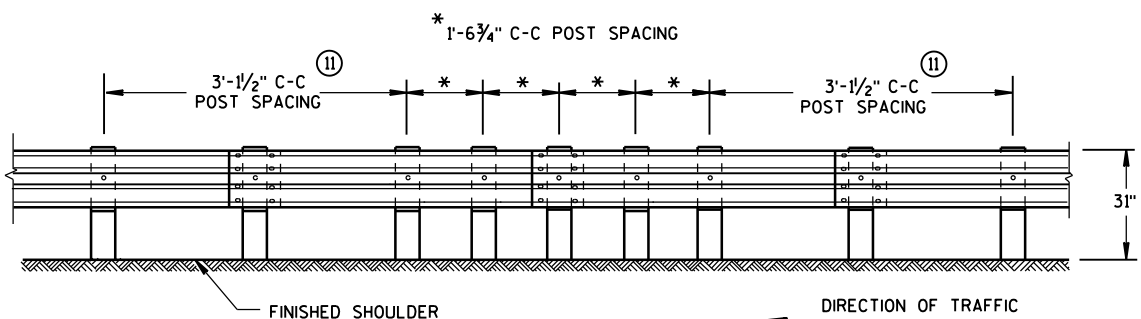
FRONT VIEW

POST SPACING STANDARD INSTALLATION



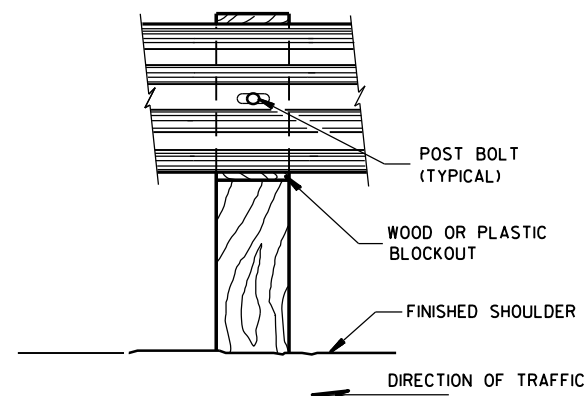
FRONT VIEW

HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)

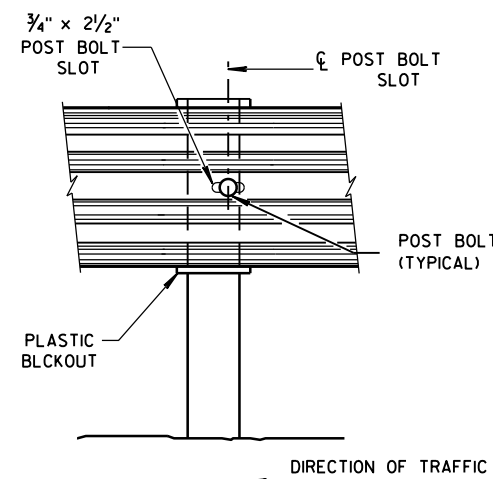


FRONT VIEW

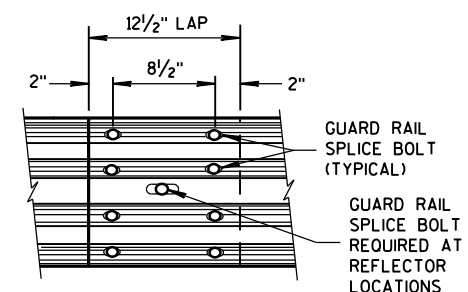
QUARTER POST SPACING (QS)



FRONT VIEW AT WOOD POST

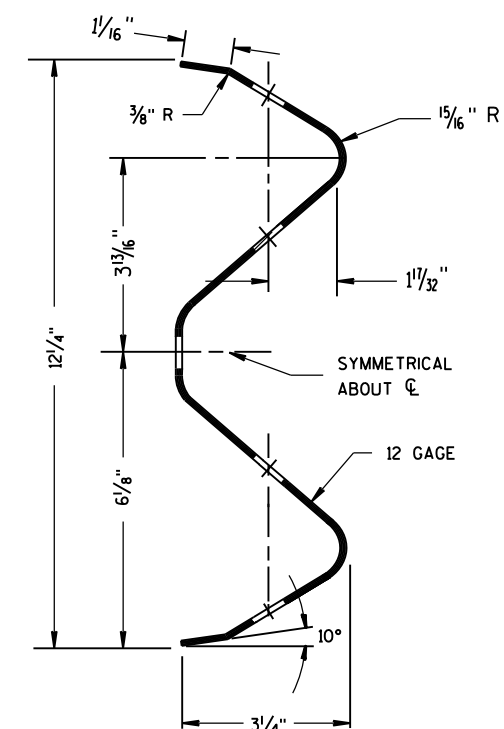


FRONT VIEW AT STEEL POST



FRONT VIEW

MID-SPAN BEAM SPLICE



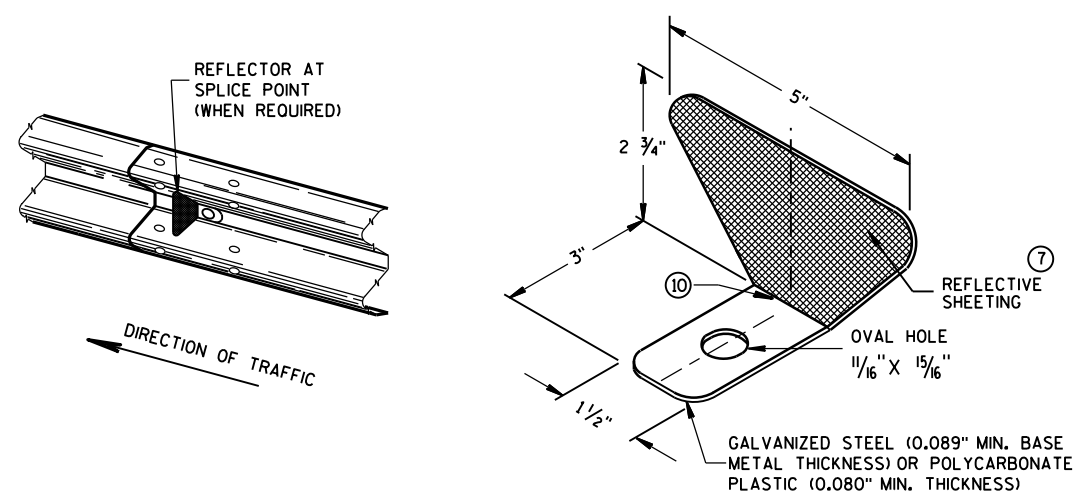
SECTION THRU W-BEAM RAIL

REFLECTOR SPACING^⑧

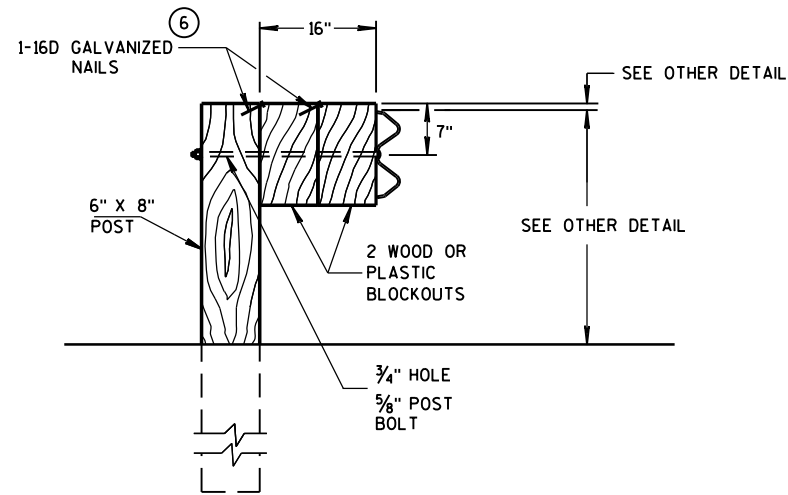
	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTOR
ONE WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	1 1	3
TWO WAY TRAFFIC	< 200' > 200'	25' C-C 50' C-C	1 ⑨	6
TWO WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	2 ⑩	3

**MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

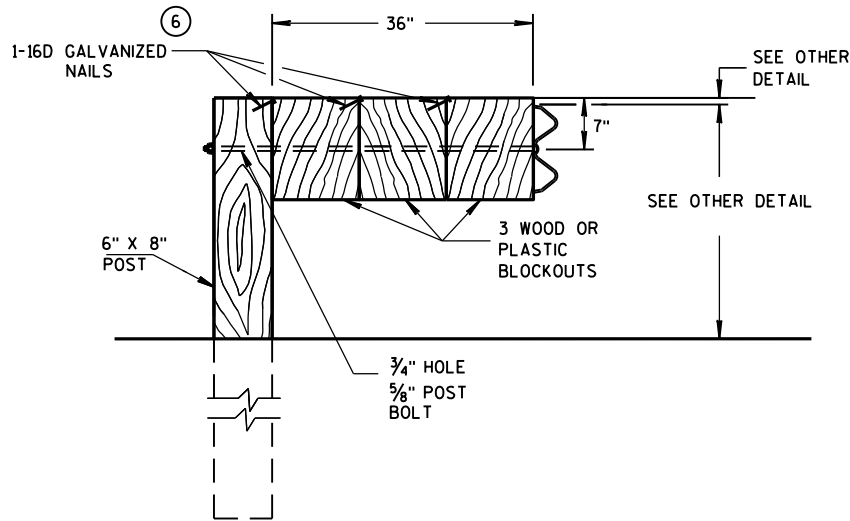


ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION



DETAIL FOR 16" BLOCKOUT DEPTH

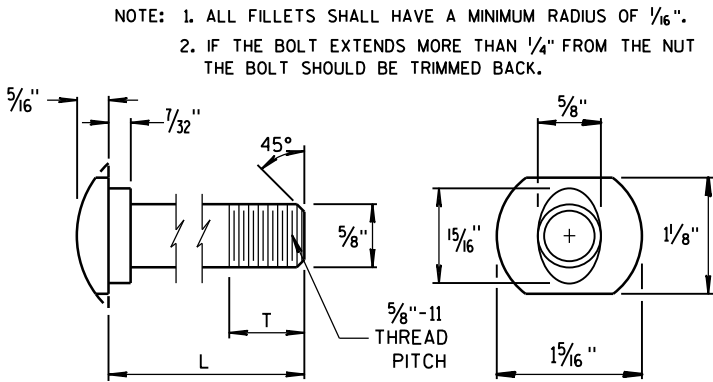
IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.



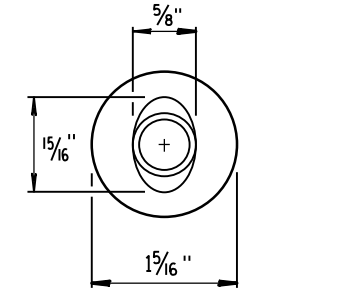
DETAIL FOR 36" BLOCKOUT DEPTH

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

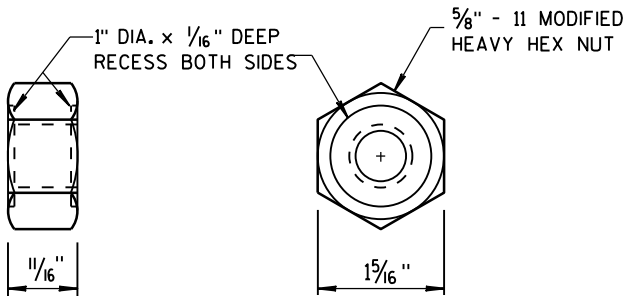
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.



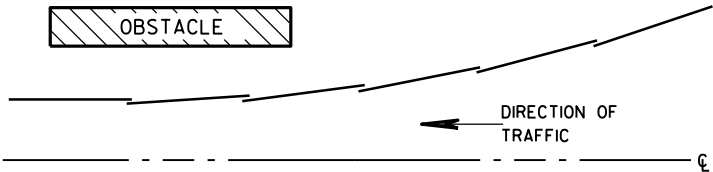
POST BOLT TABLE



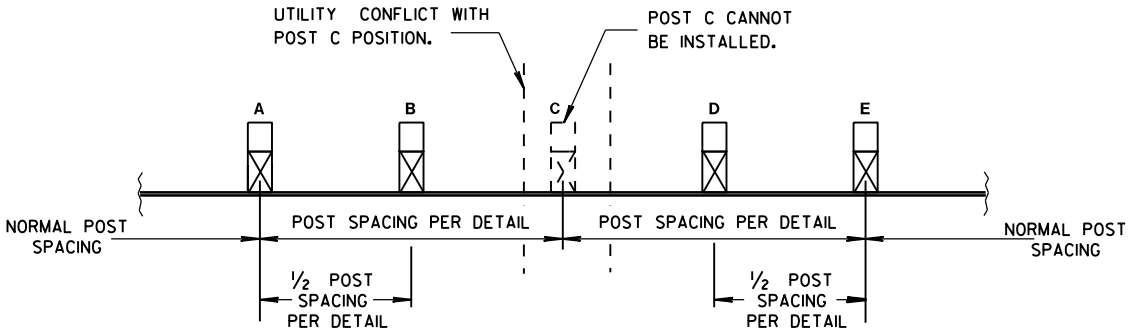
ALTERNATE BOLT HEAD



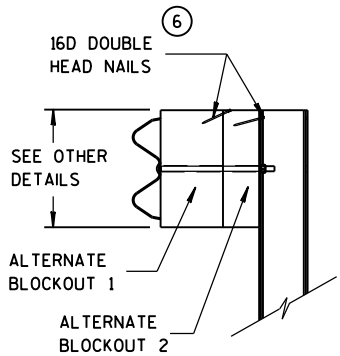
POST BOLT
AND RECESS NUT



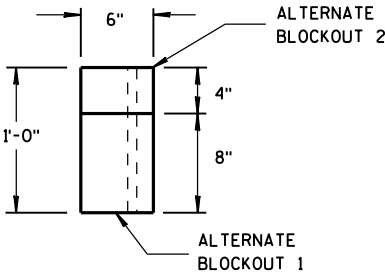
PLAN VIEW
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS
UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

GENERAL NOTES

- (A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.
- (B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.
- (C) DIFFERENT MANUFACTURES REQUIRE DIFFERENT PERFORATED W-BEAM RAIL END PANELS. SEE MANUFACTURES INFORMATION.
- (D) THE TOP OF THE STEEL TUBE ON POST 1 AND POST 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.
- (E) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS, ONE SCREW PER CORNER.
- (G) 1/2" DIAMETER X 3" LONG LAG BOLT AND WASHER.
- (H) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.
- (I) DIMENSIONS MAY VARY. SEE MANUFACTURE'S INFORMATION.

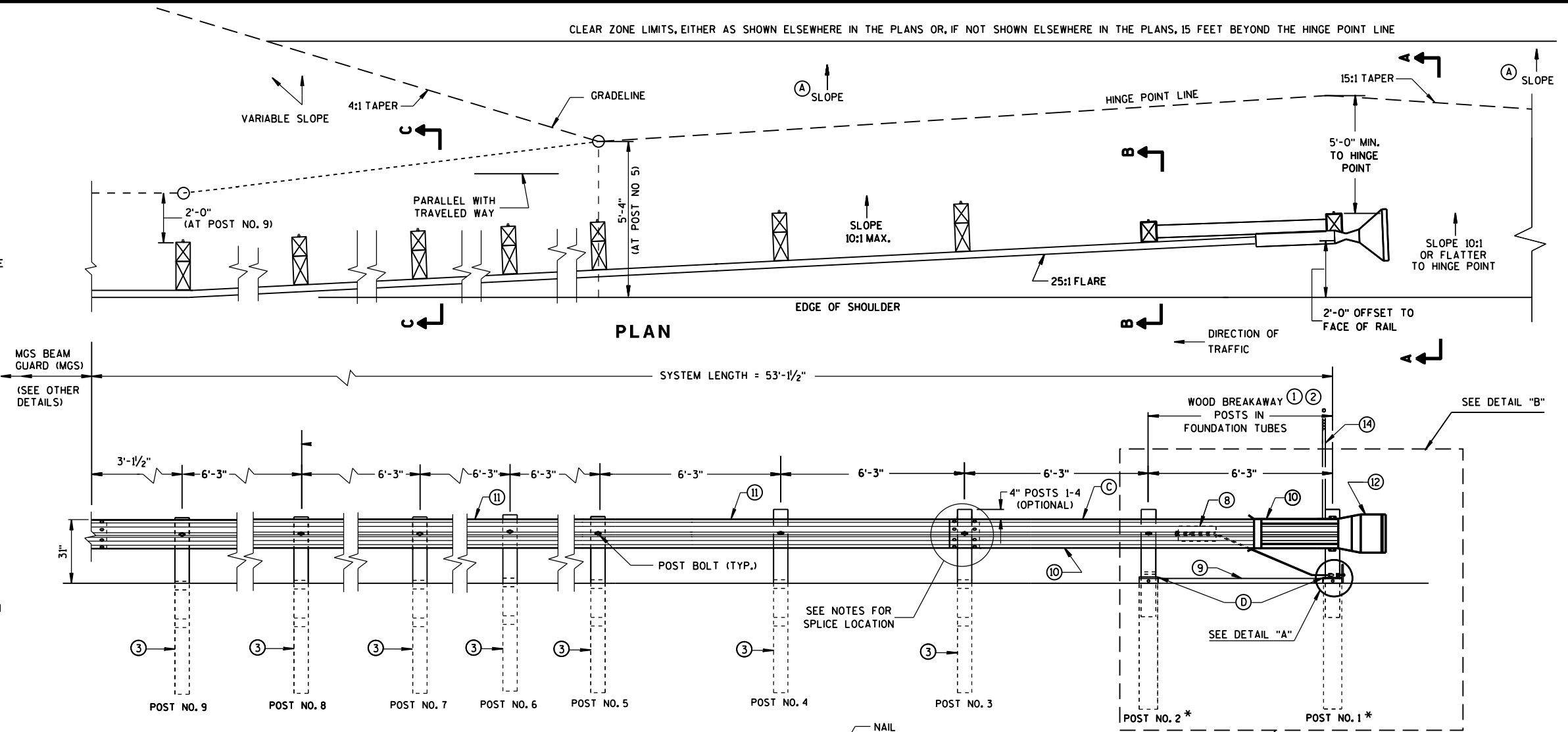
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

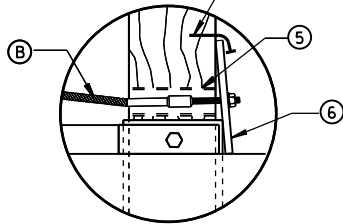
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

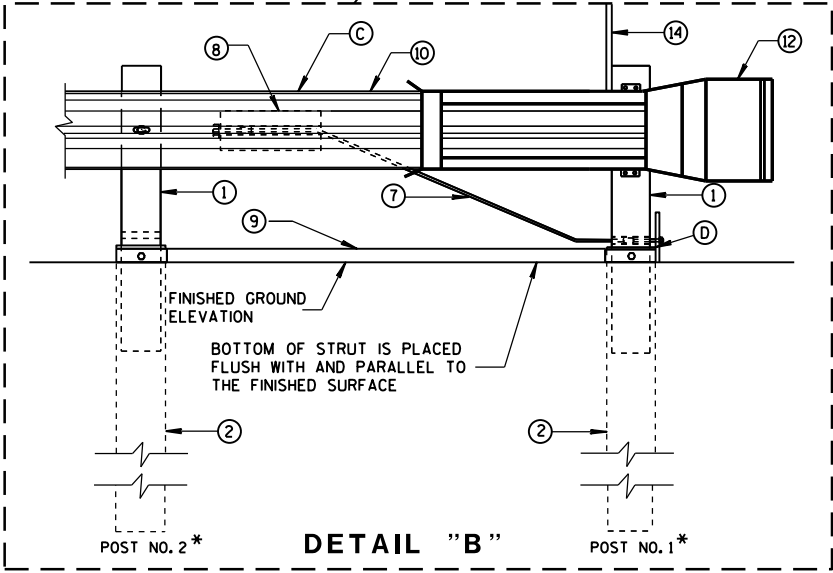
THE CENTER OF THE UPPER 3/2" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE.



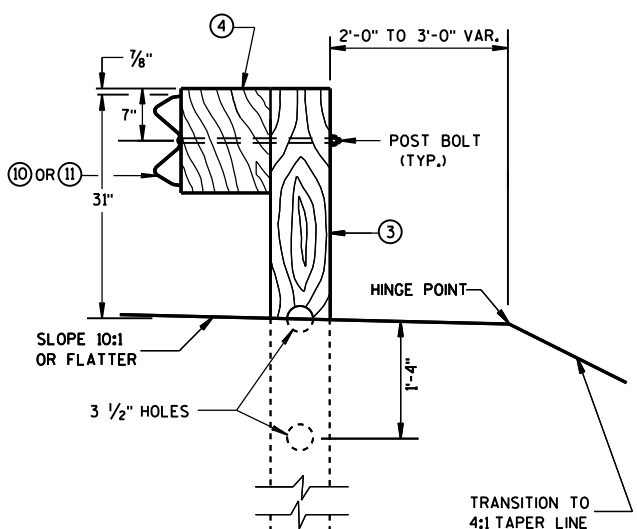
ELEVATION



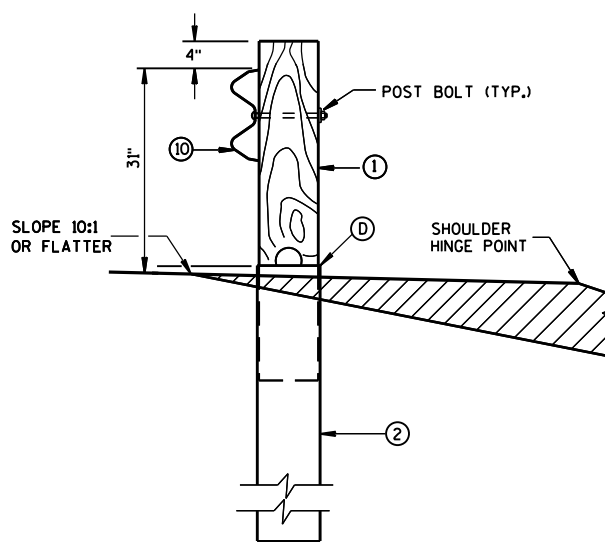
DETAIL "A"



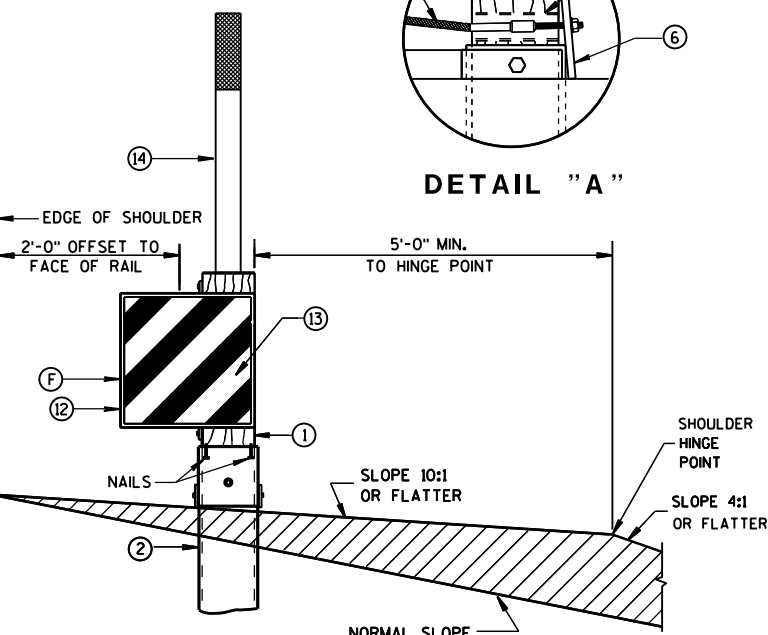
DETAIL "B"



SECTION C-C
TYPICAL AT POST NOS. 3-9



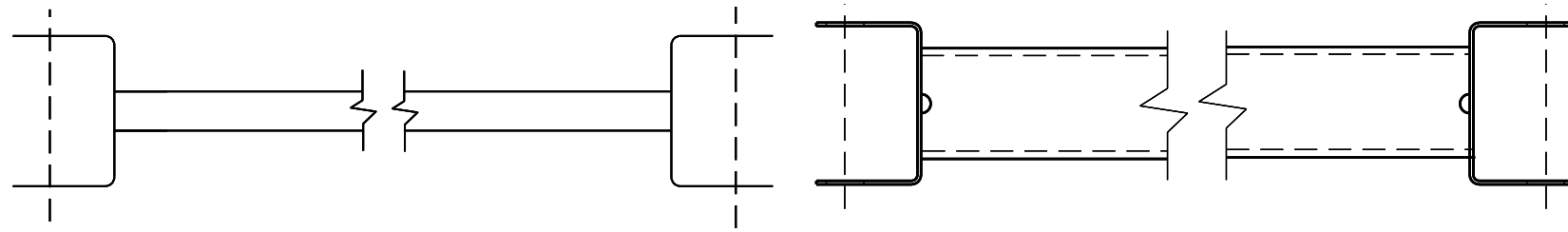
SECTION B-B
TYPICAL AT POST NO. 2*



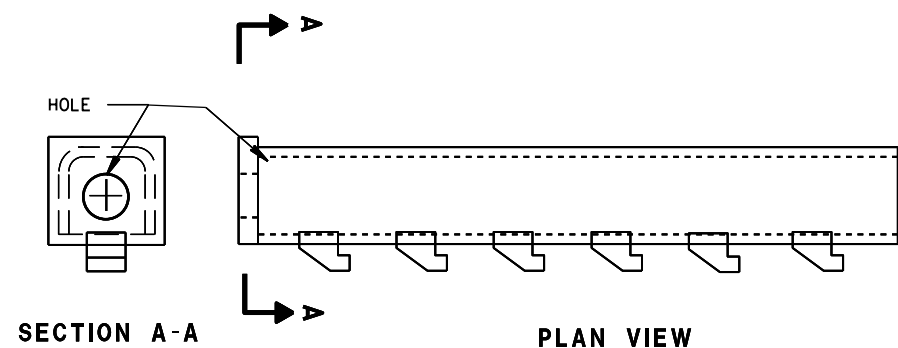
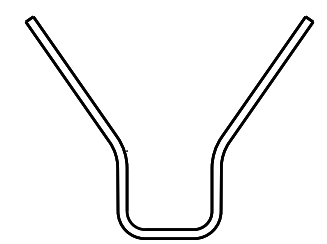
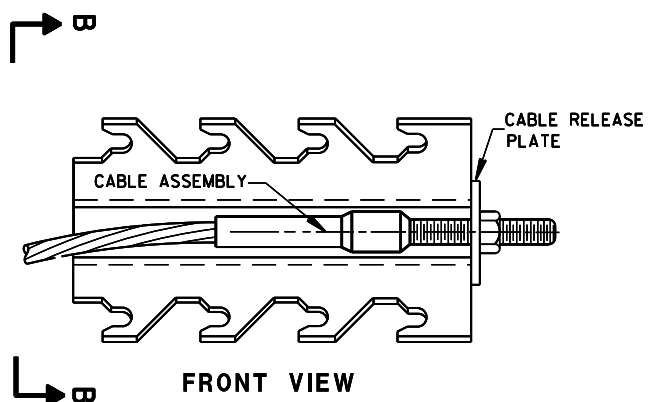
SECTION A-A
TYPICAL AT POST NO. 1*

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



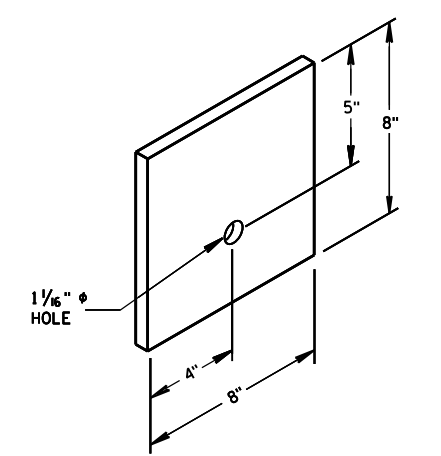
9 H
GENERIC GROUND STRUT



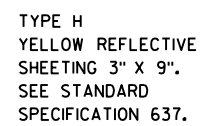
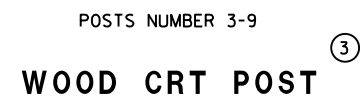
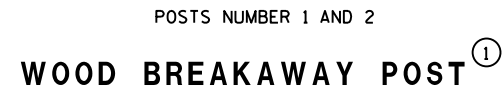
8 H
GENERIC ANCHOR CABLE BOX

BILL OF MATERIALS

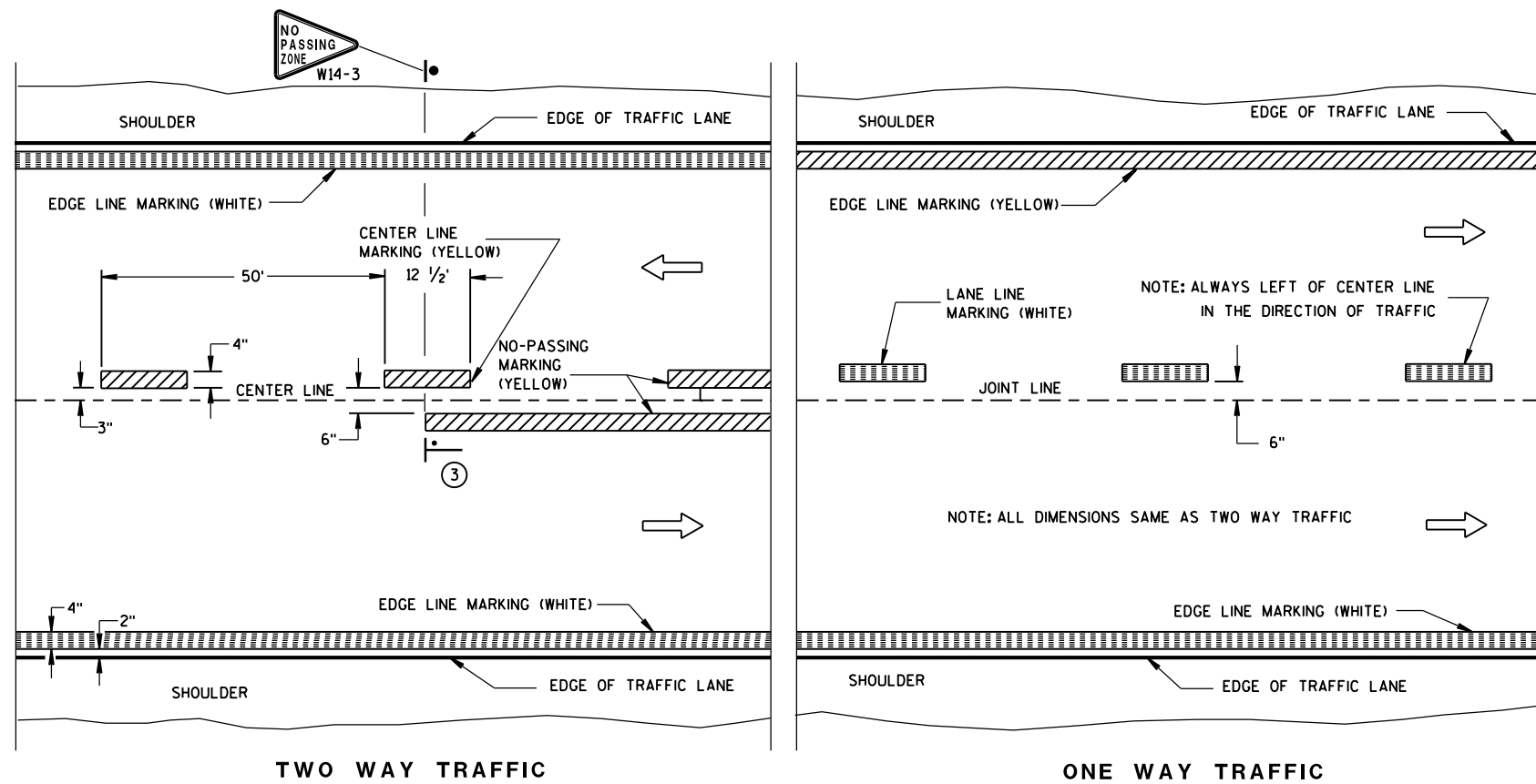
PART NO.	DESCRIPTION
MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.	
①	WOOD BREAKAWAY POST
②	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND STRUT
⑩	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
⑪	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
⑫	END SECTION EAT
⑬	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS
⑭	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)



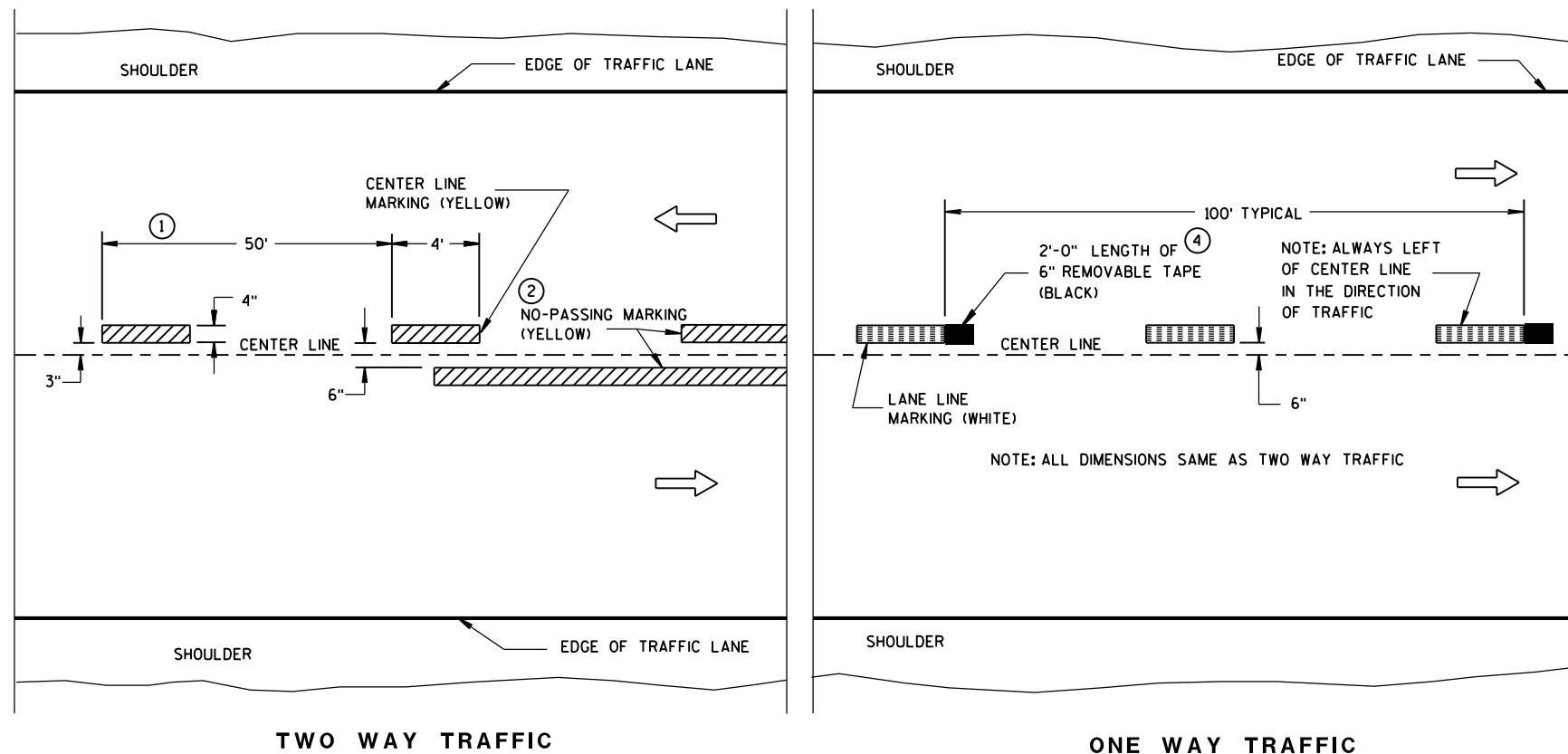
6
BEARING PLATE



MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2014	<i>/s/ Jerry H. Zogg</i>
DATE	ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	



PERMANENT PAVEMENT MARKING



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

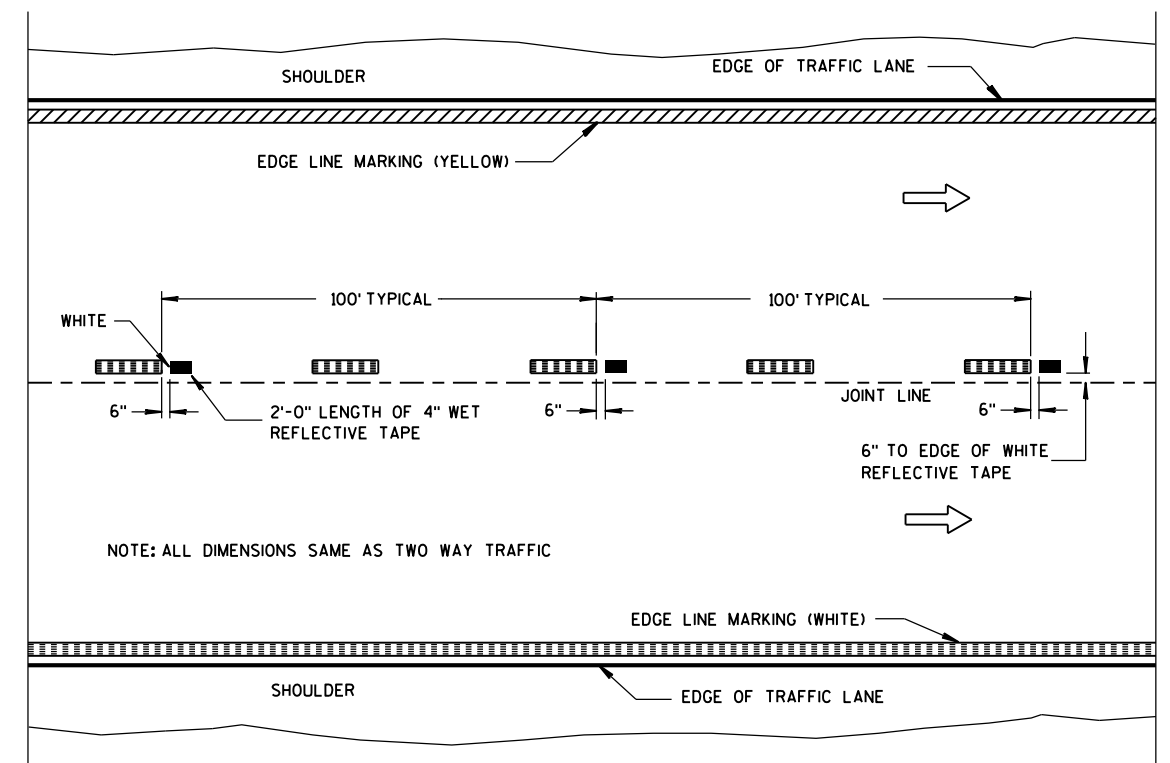
GENERAL NOTES

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

- ① HALF CYCLE LENGTHS (25'±) WITH 2" MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
- ② NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
- ③ NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
- ④ CONCRETE ONLY.

NOTE

ARROW SYMBOL () SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

 "T" MARKING

● POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

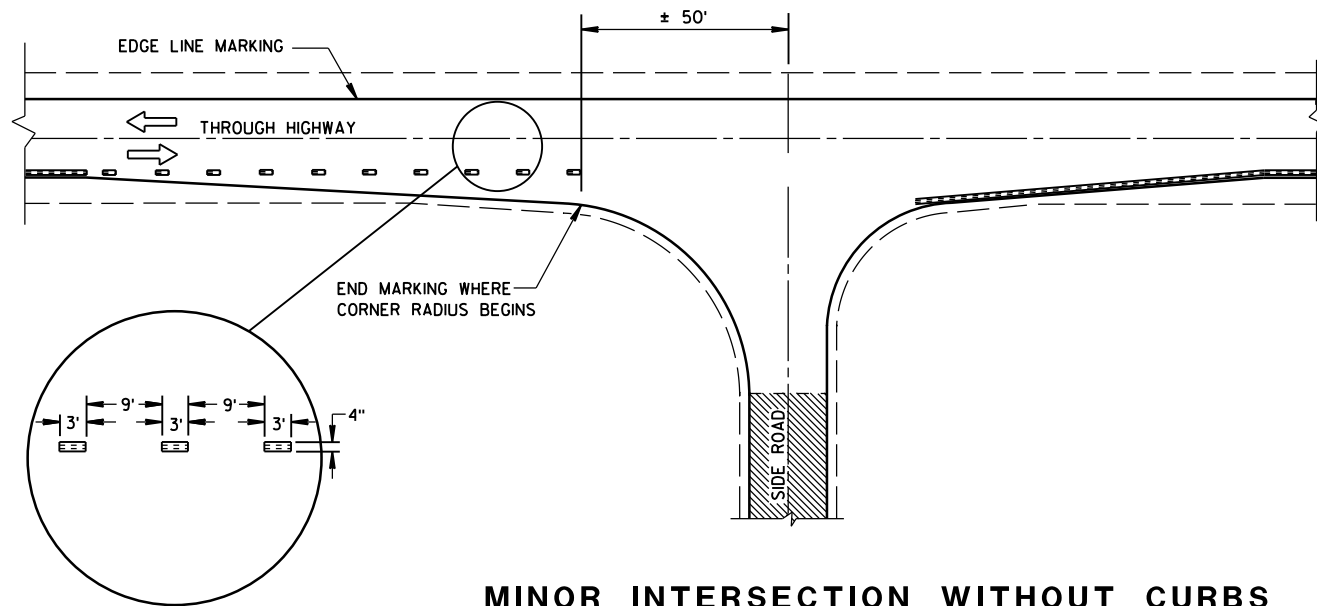
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-13-2013
DATE

FHWA

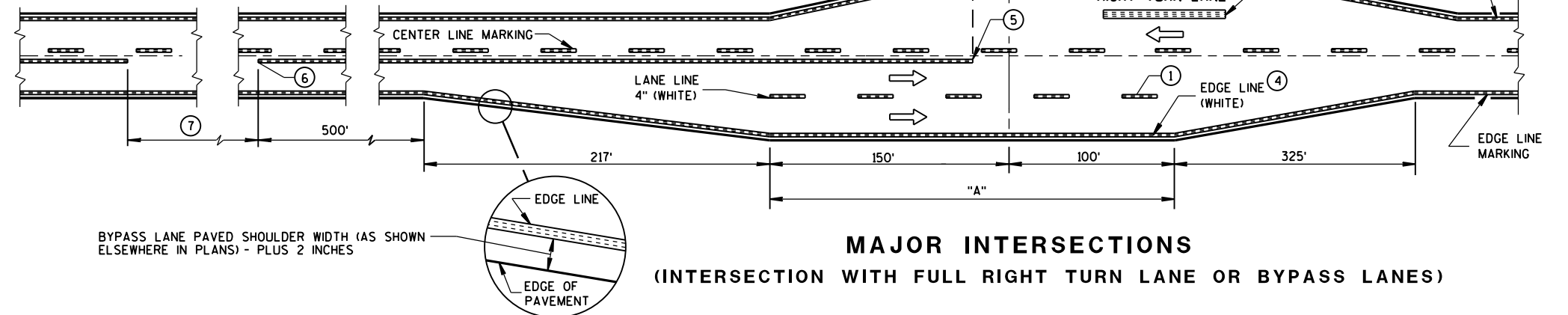
/S/ Travis Feltes
STATE TRAFFIC ENGINEER



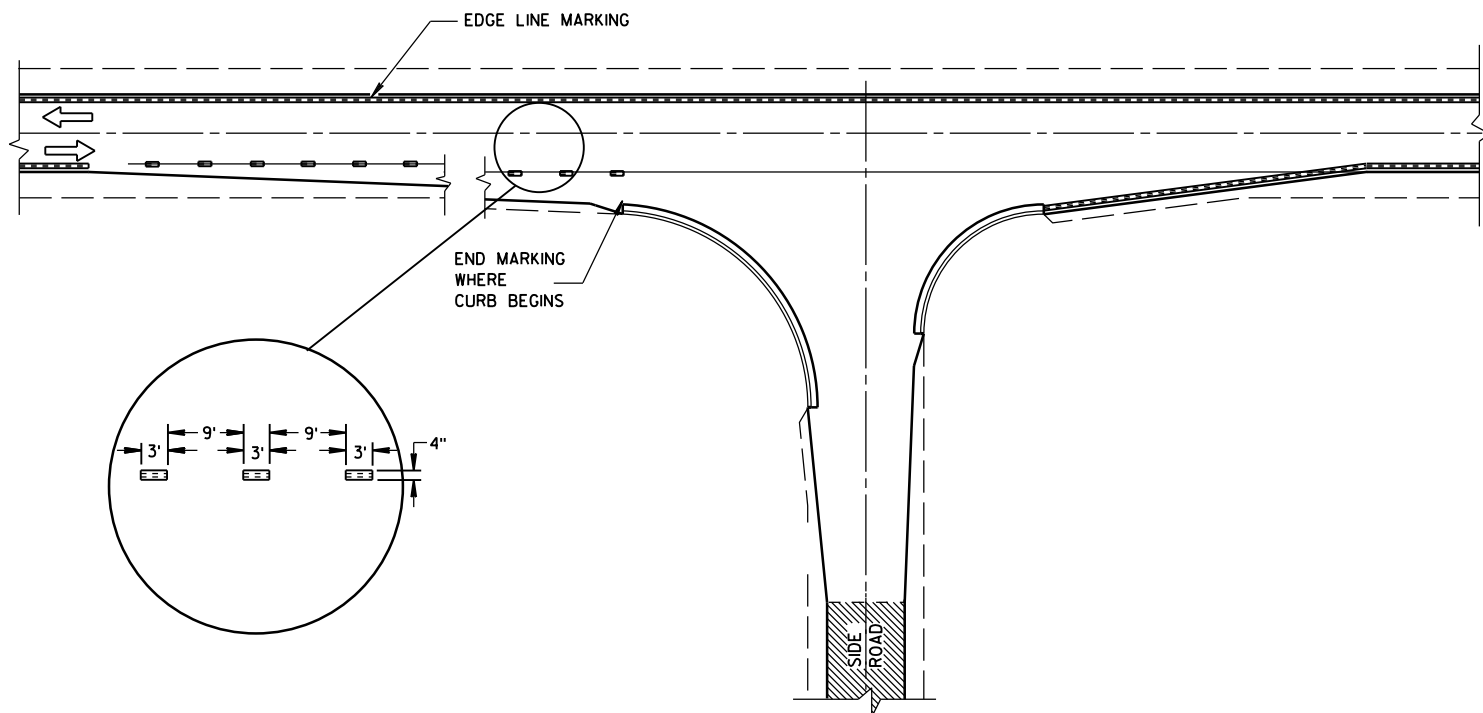
MINOR INTERSECTION WITHOUT CURBS

⑦

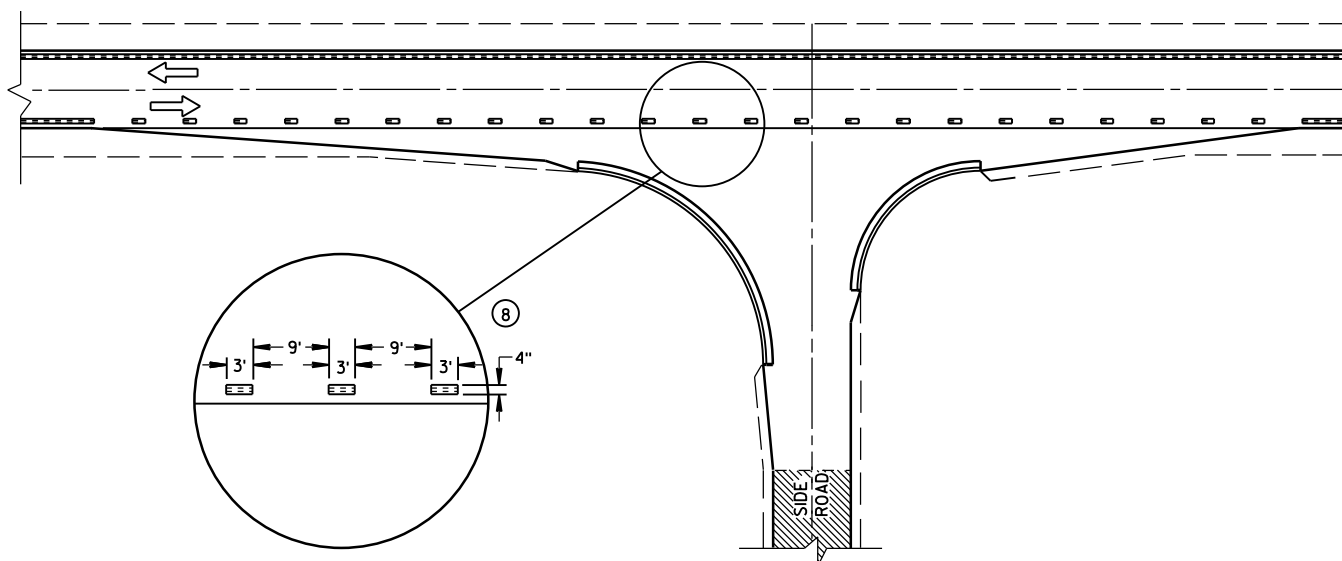
POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



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



MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)



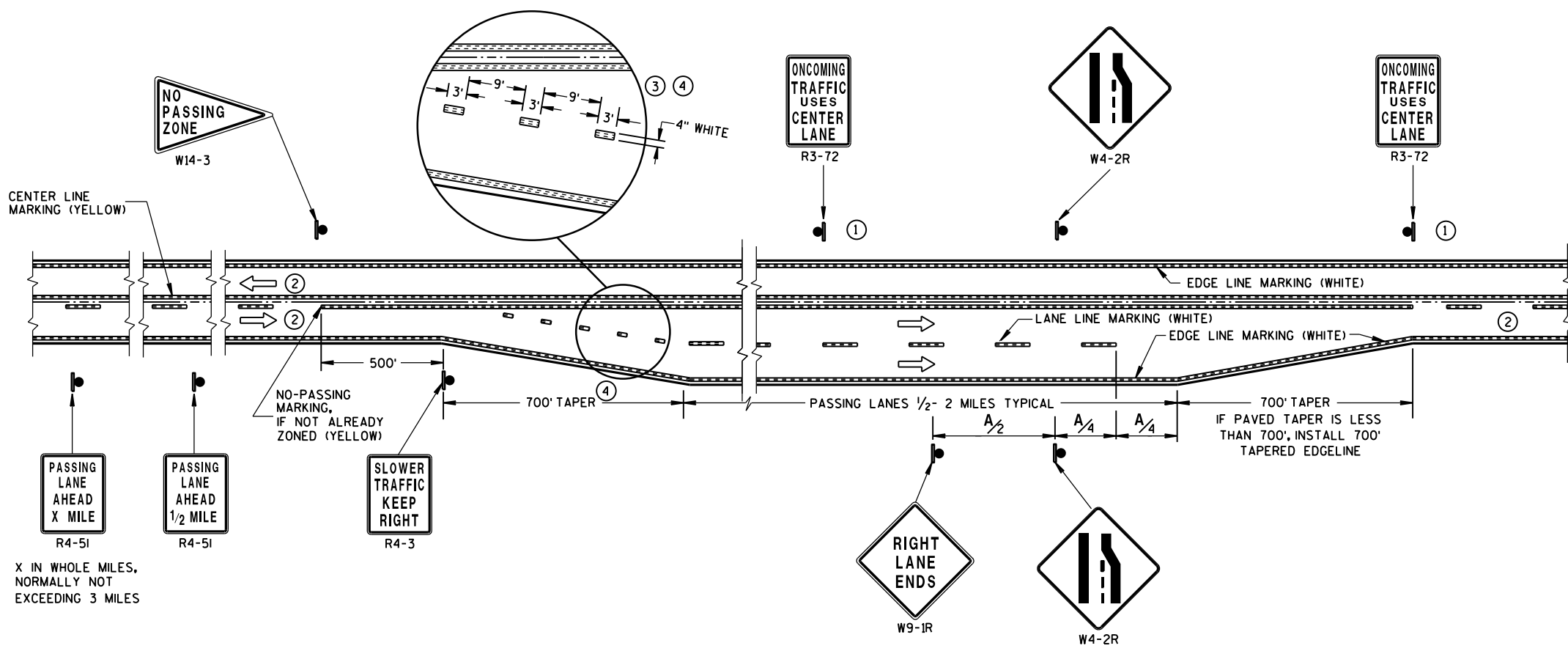
MINOR INTERSECTION WITH CURBS
③ (FOR SPECIAL CONDITIONS AS SPECIFIED)

GENERAL NOTES

- EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
 - ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
 - ③ ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.
 - ④ THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.
 - ⑤ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.
 - ⑥ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
 - ⑦ IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.
 - ⑧ 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



**SOLID DOUBLE-YELLOW LINE
(THROUGHOUT ENTIRE PASSING/CLIMBING LANE)**

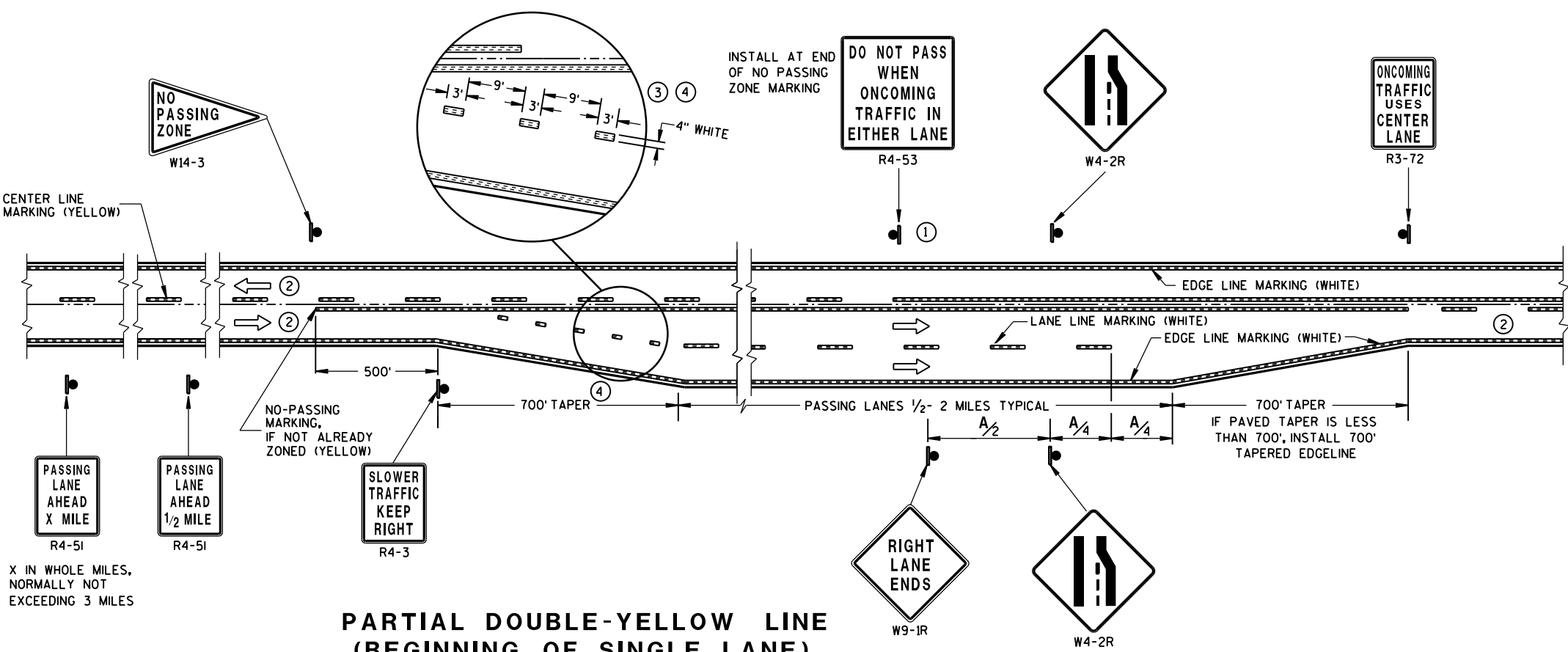
GENERAL NOTES

- ① SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
- ② THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
- ③ THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE-GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- ④ WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING/CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.

ARROW SYMBOL (➡) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

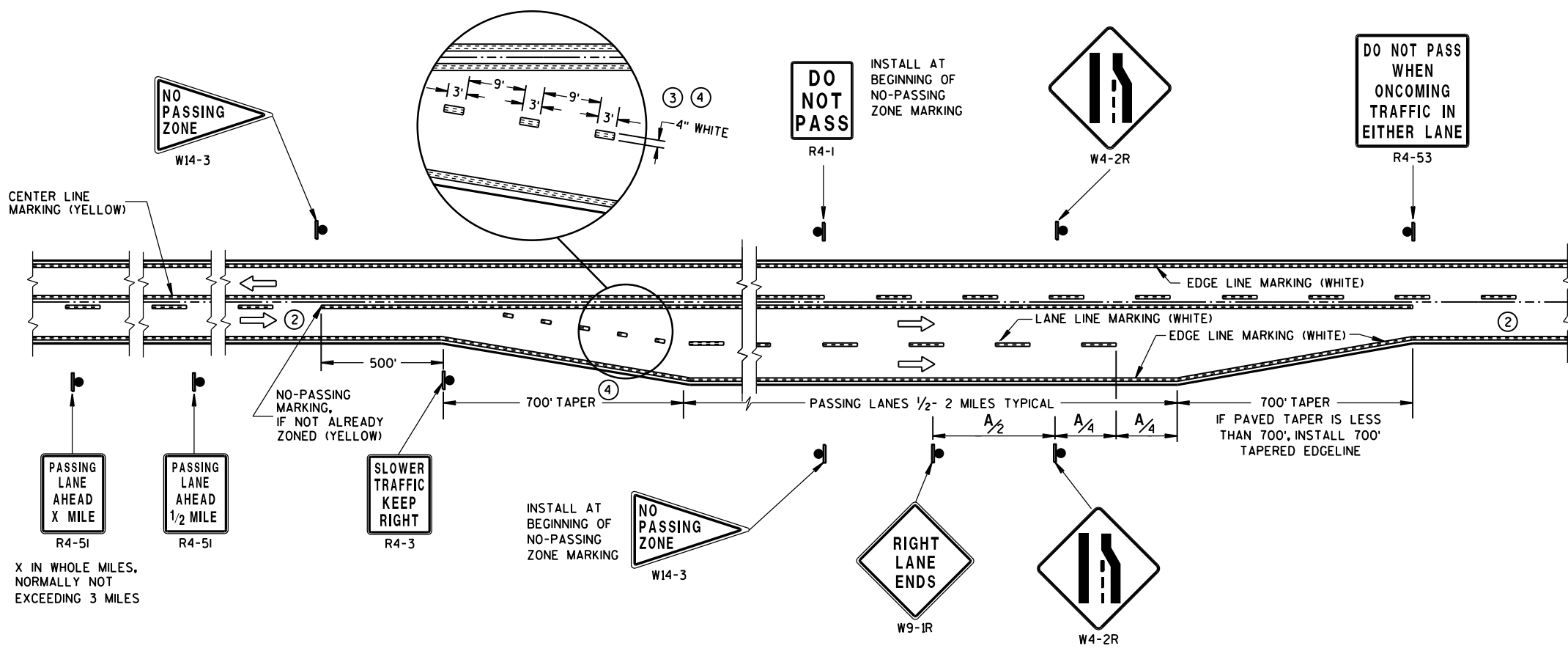
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	750
50	850
55	950



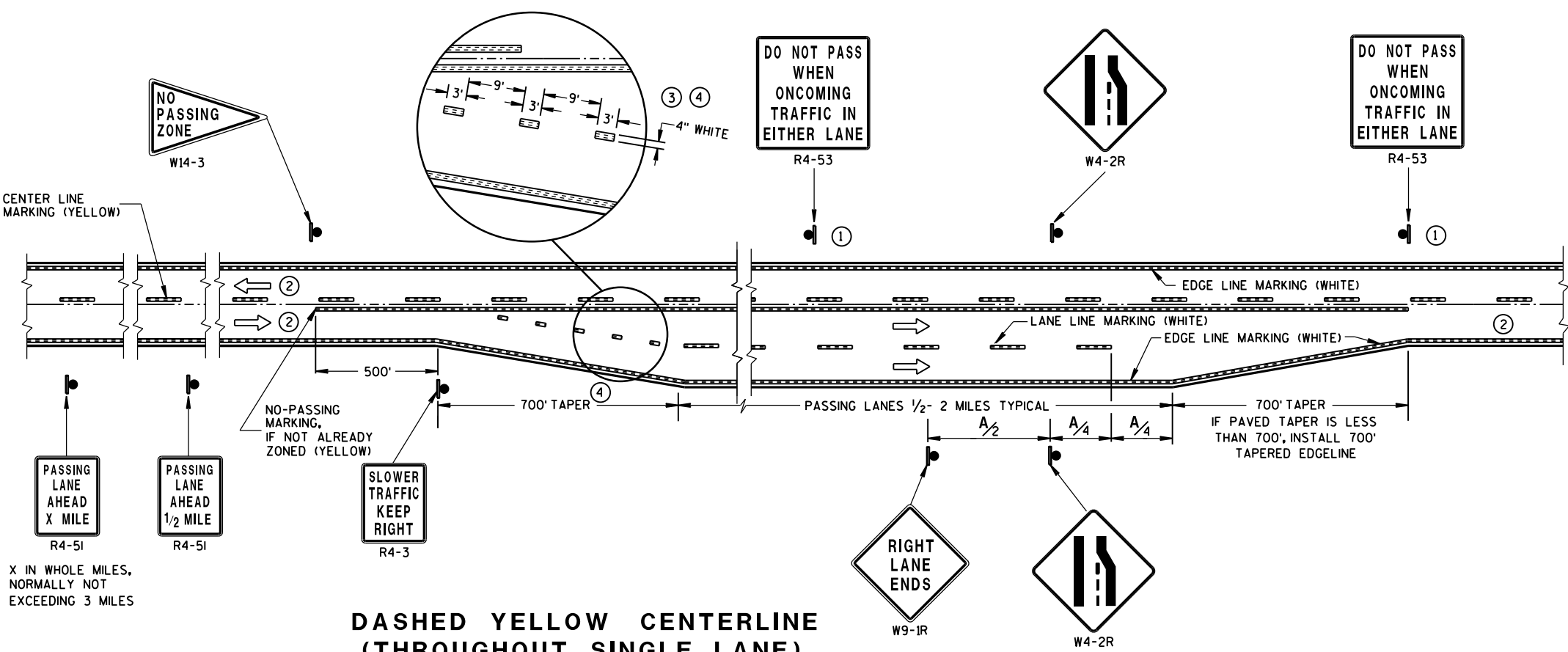
**PARTIAL DOUBLE-YELLOW LINE
(BEGINNING OF SINGLE LANE)**

**PAVEMENT MARKING & SIGNING
(CLIMBING LANE & PASSING LANE)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



**SOLID DOUBLE-YELLOW LINE
(END OF SINGLE LANE)**



**DASHED YELLOW CENTERLINE
(THROUGHOUT SINGLE LANE)**

GENERAL NOTES

- ① SIGN SHALL BE REPEATED AT 1/2 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
- ② THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
- ③ THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE-GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- ④ WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING/CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.

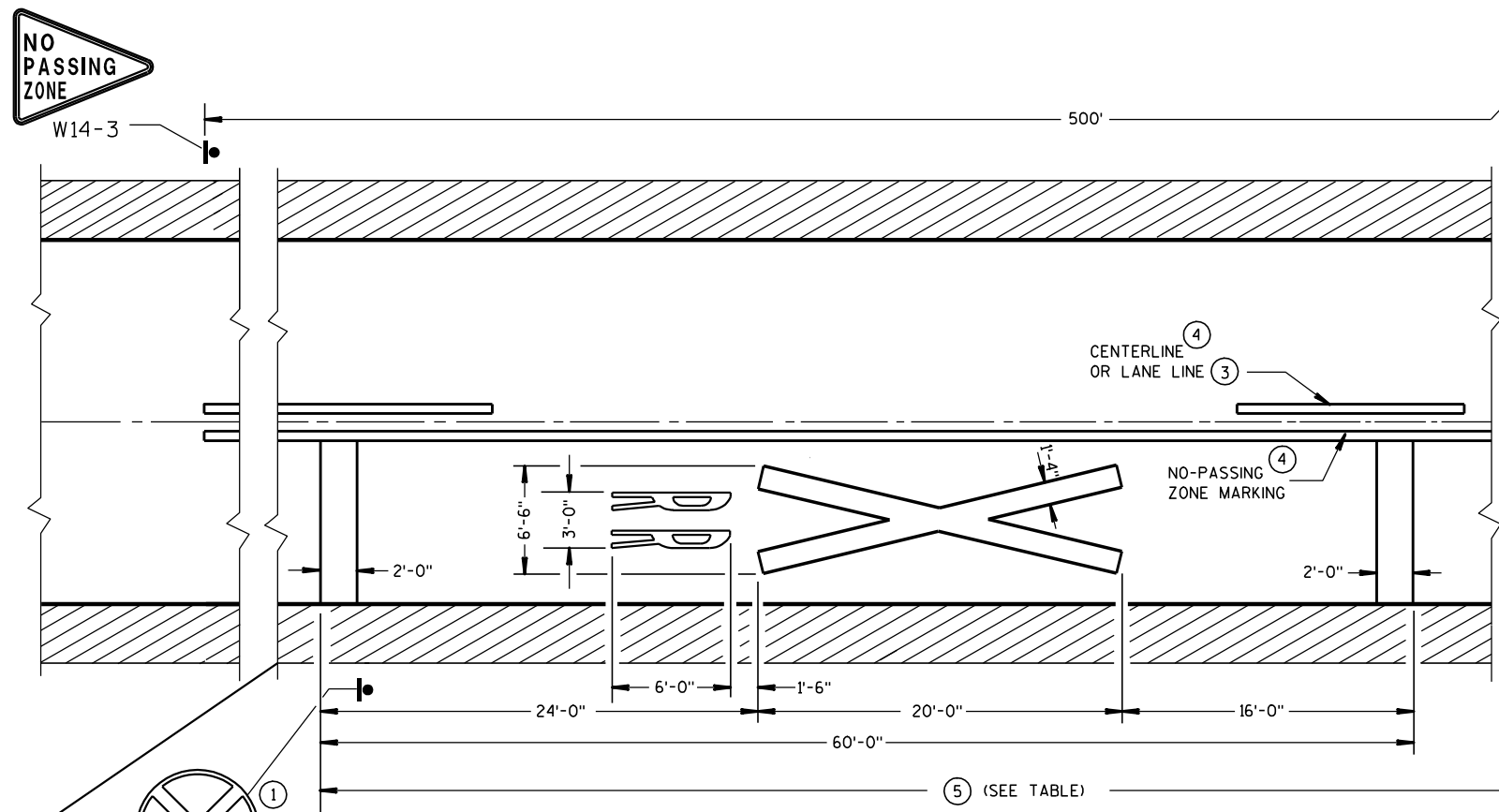
ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

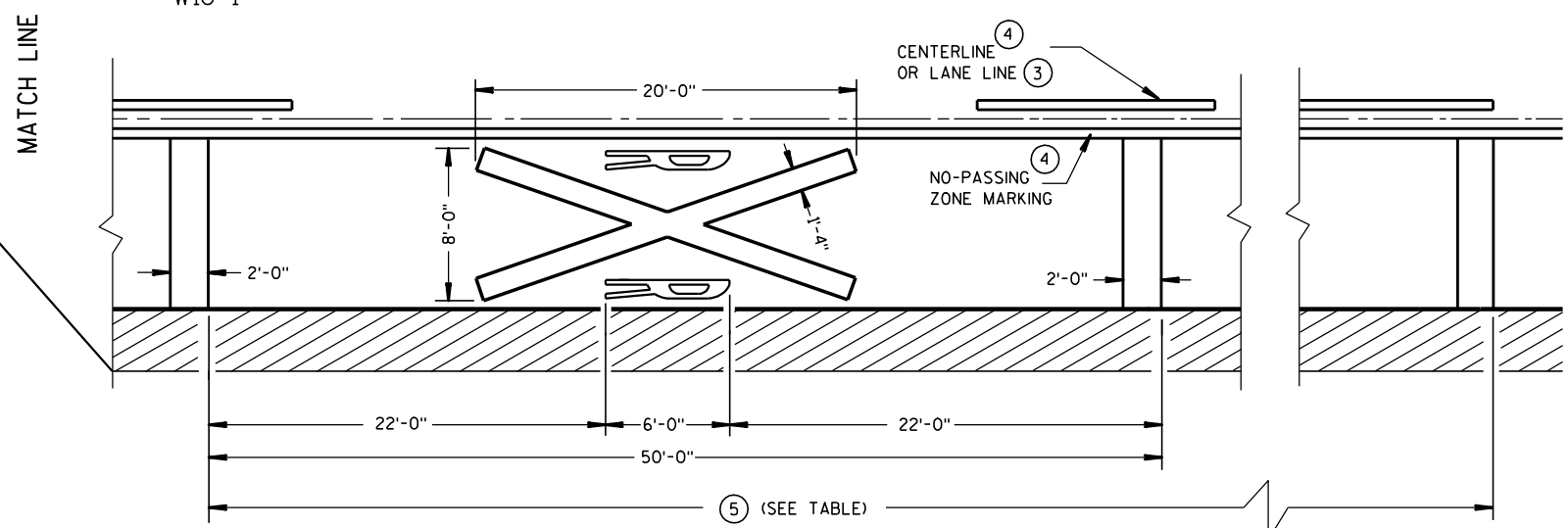
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	750
50	850
55	950

**PAVEMENT MARKING & SIGNING
(CLIMBING LANE &
PASSING LANE)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



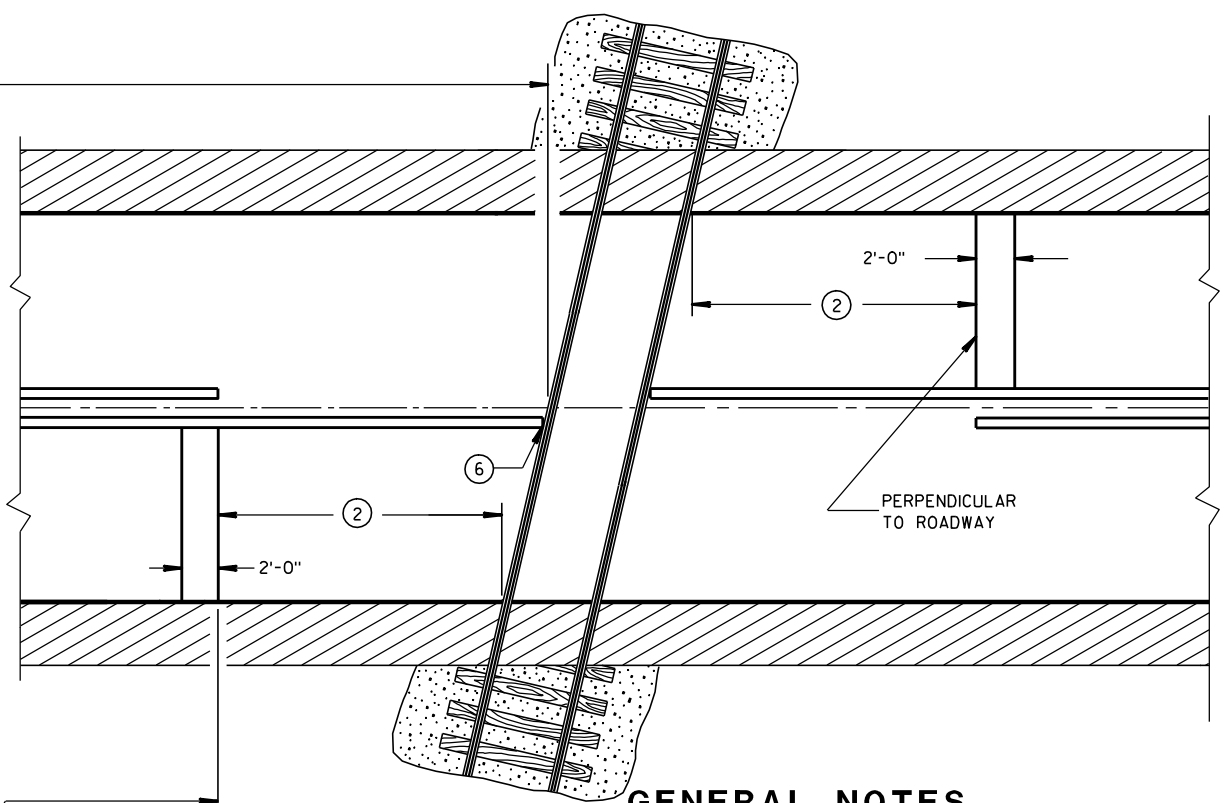
PREFERRED PAVEMENT MARKING



ALTERNATE PAVEMENT MARKING

Posted Speed (M.P.H.)	Dimension Range (Feet)
25	150*- 250
30	200*- 300
35	250*- 450
40	300*- 500
45	400*- 650
50	550*- 800
55	750*- 1000
60	1000*- 1250
65	1000*- 1250

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



GENERAL NOTES

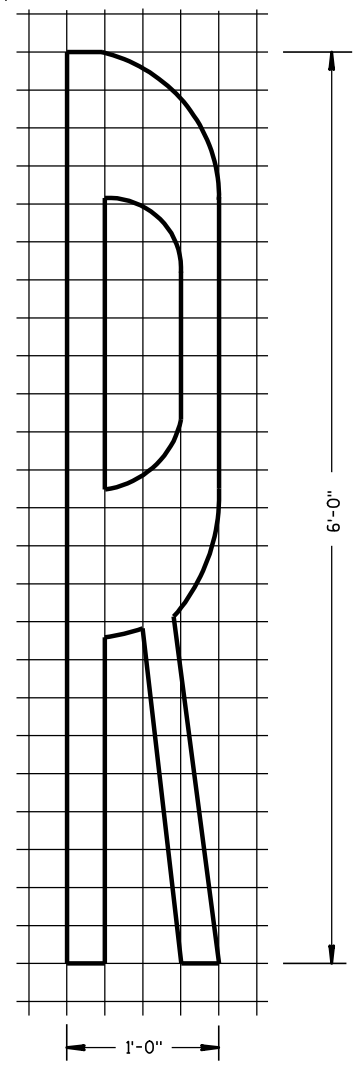
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

A THREE-LANE ROADWAY SHOULD BE MARKED WITH A CENTERLINE FOR TWO-LANE APPROACH OPERATION ON THE APPROACH TO A CROSSING.

ON MULTI-LANE ROADS THE TRANSVERSE BANDS SHOULD EXTEND ACROSS ALL APPROACH LANES, AND INDIVIDUAL R X R SYMBOLS SHOULD BE USED IN EACH APPROACH LANE. ALL LETTERS AND SYMBOLS SHALL BE IN CONFORMANCE WITH THE "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" (ADOPTED BY THE FEDERAL HIGHWAY ADMINISTRATION).

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

- 1 A PORTION OF THE PAVEMENT MARKING SYMBOL SHOULD BE DIRECTLY OPPOSITE THE ADVANCE WARNING SIGN (W10-1).
- 2 MINIMUM 8' FROM ANY RAILROAD WARNING DEVICES (SIGNALS, GATES, ETC.) OR 25' FROM THE NEAREST RAIL, WHICHEVER DISTANCE IS GREATER.
- 3 REFLECTIVE WHITE.
- 4 REFLECTIVE YELLOW 500' MINIMUM. MARKING LIMITS MAY BE EXTENDED AS DIRECTED BY THE ENGINEER TO MEET ADJACENT NO-PASSING ZONE MARKINGS.
- 5 TABLE BASED UPON 2C-4 WISCONSIN SUPPLEMENT OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- 6 FOR MULTIPLE TRACK CROSSINGS, THE BARRIER LINE SHALL EXTEND TO THE NEAR RAIL OF THE FURTHEST TRACK IN THE DIRECTION OF HIGHWAY TRAVEL.



SIGNING AND PAVEMENT MARKING
DETAILS FOR RAILROAD-HIGHWAY
GRADE CROSSINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
1-9-2012 /S/ Thomas N. Notbohm
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA

LEGEND

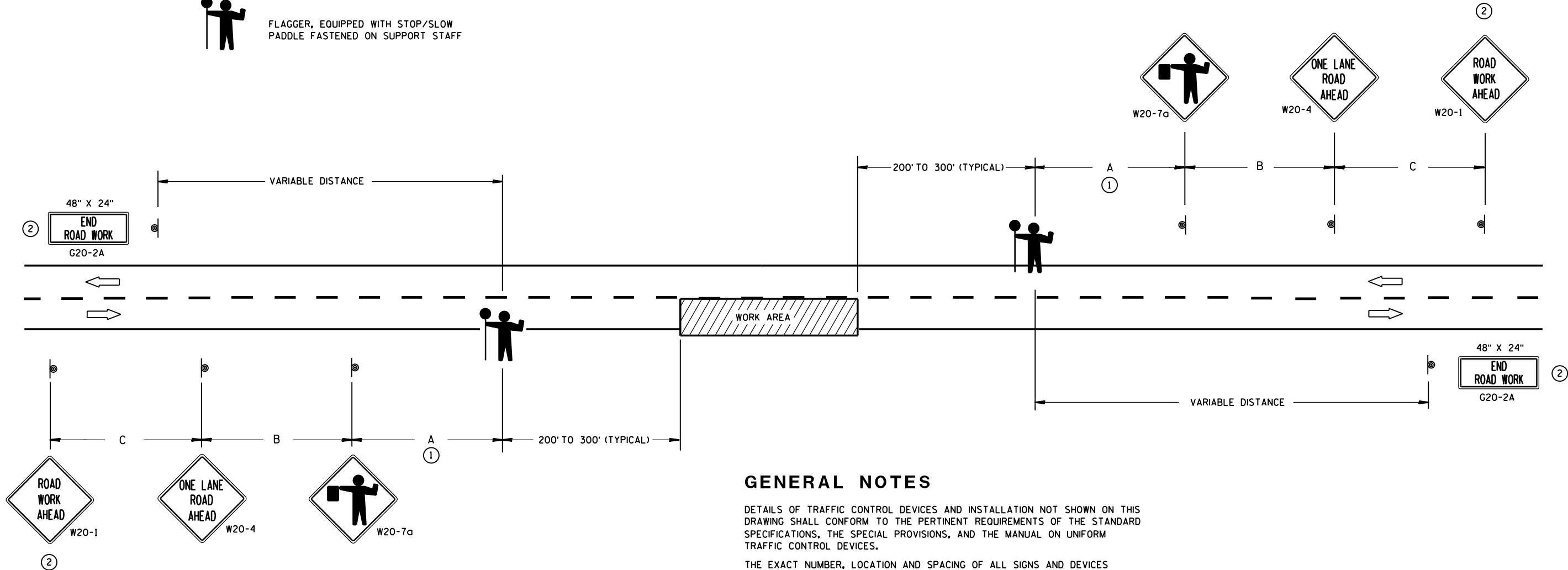
-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN SPACING TABLE

SPEED LIMIT	SIGN SPACING A,B,C
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



- ① FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
- ② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

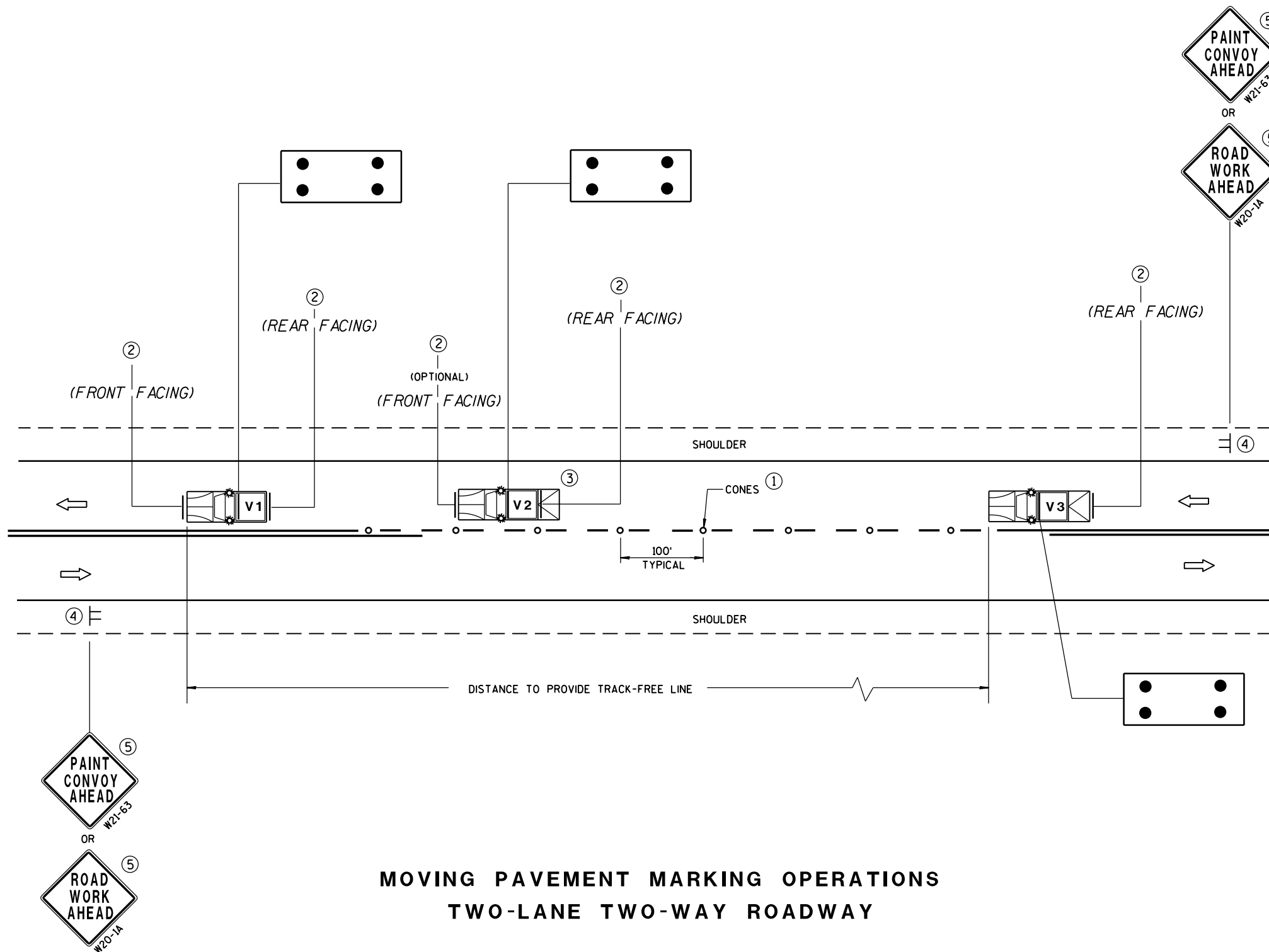
FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.

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

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



MOVING PAVEMENT MARKING OPERATIONS TWO-LANE TWO-WAY ROADWAY

GENERAL NOTES

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

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

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

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

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

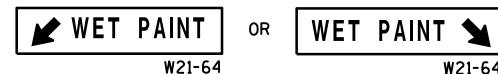
THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

① CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.



③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.

④ SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

⑤ IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

V1 LEAD VEHICLE

V2 SHADOW VEHICLE

V3 TRAIL VEHICLE WITH TMA

TMA TRUCK-MOUNTED ATTENUATOR

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

CONES

FLASHING ARROW PANEL (CAUTION)

MOVING PAVEMENT MARKING
OPERATION
TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

DATE /S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC
SAFETY ENGINEER

FHWA

GENERAL NOTES

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

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

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

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

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

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

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

TABLE A

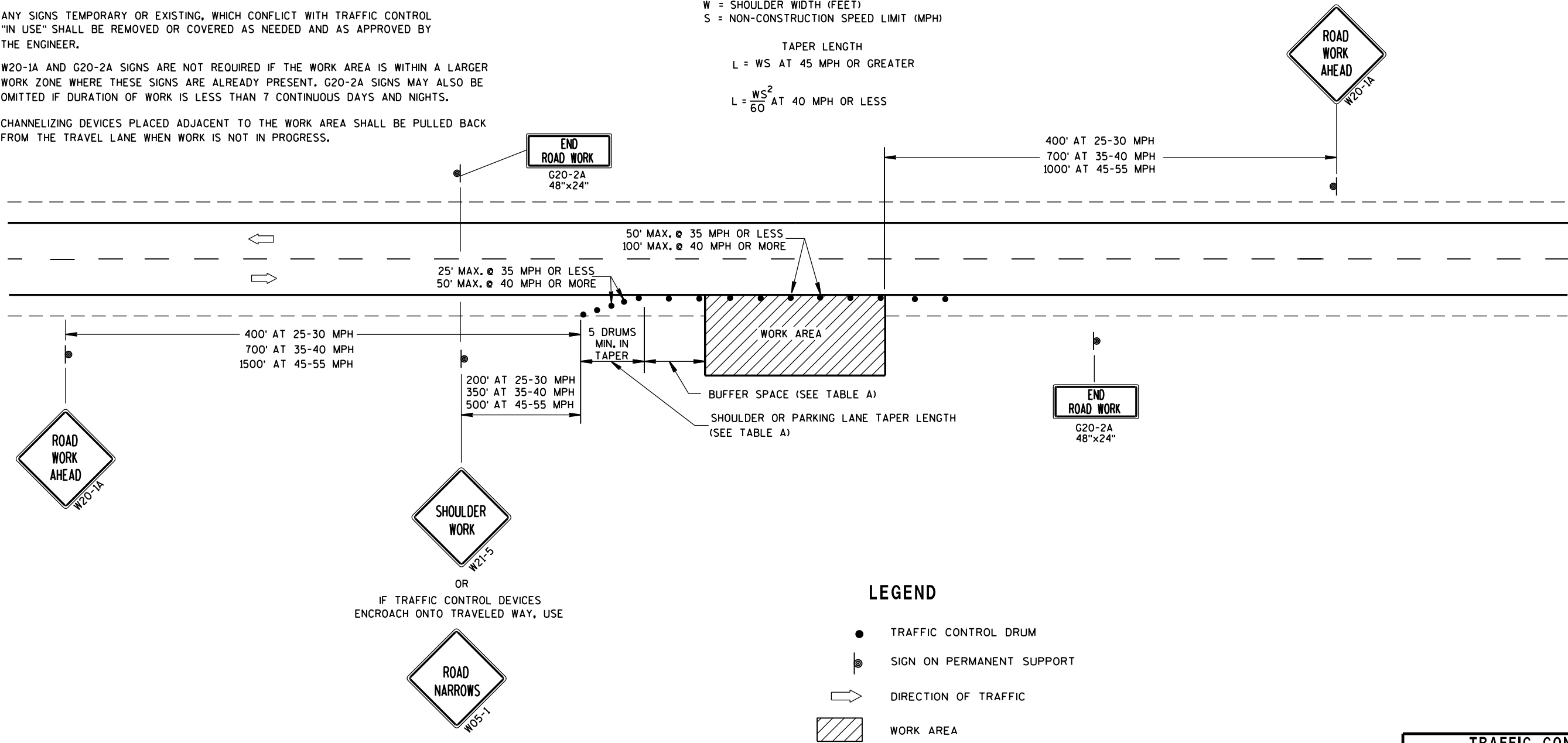
SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S	W	4	6	8	
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

TAPER LENGTH
L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

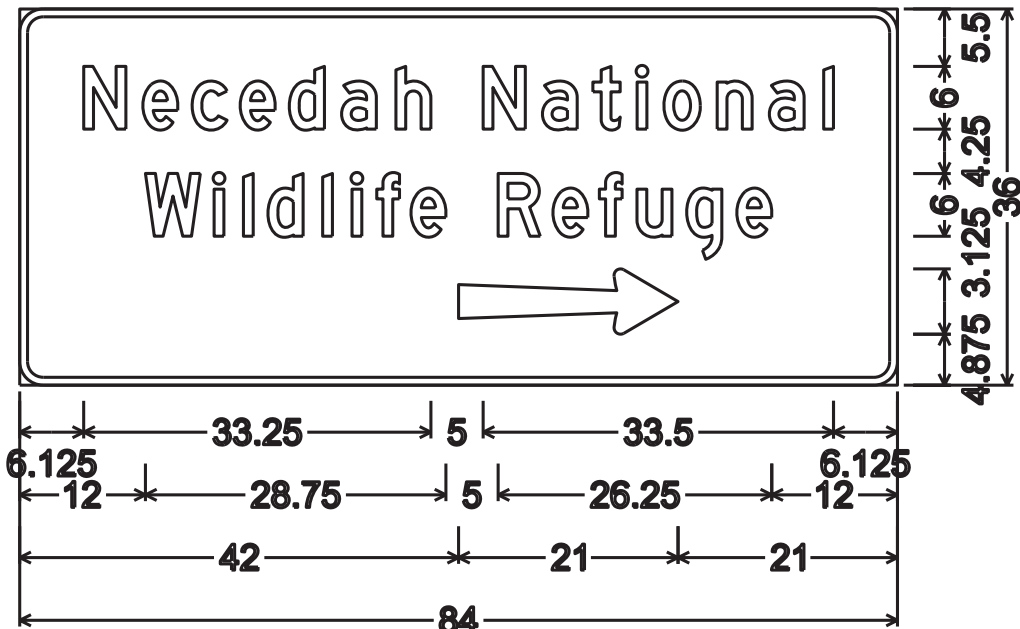
SHOULDER TAPER LENGTH = $\frac{1}{3}L$



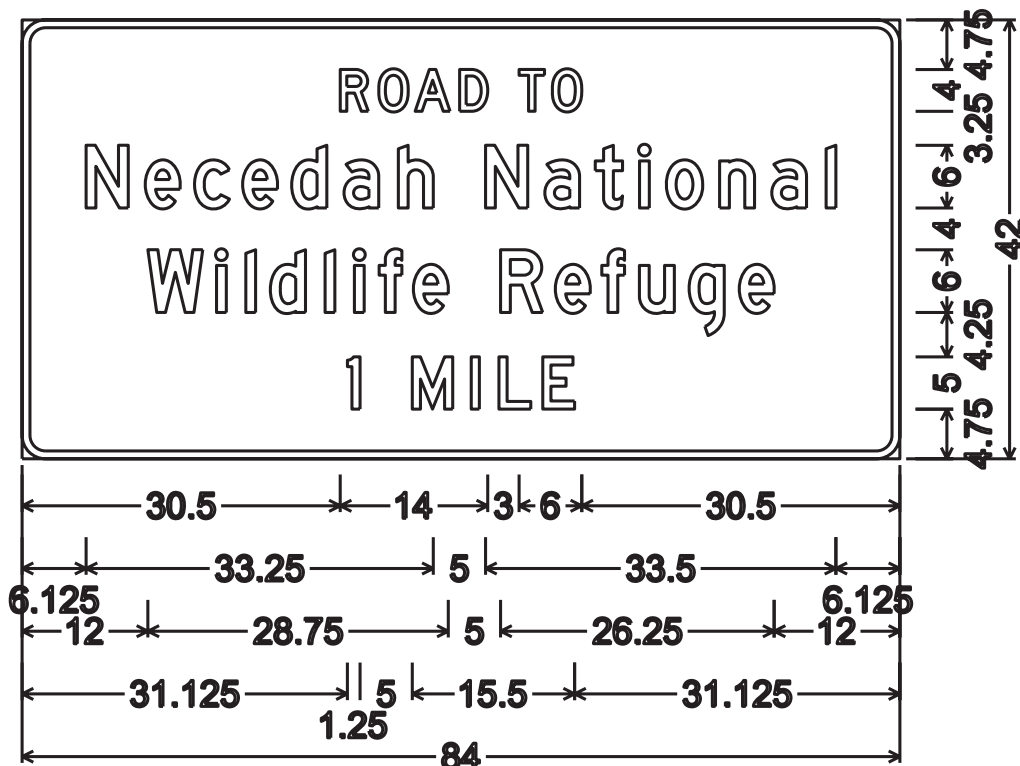
LEGEND

- TRAFFIC CONTROL DRUM
- ⦿ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ▨ WORK AREA

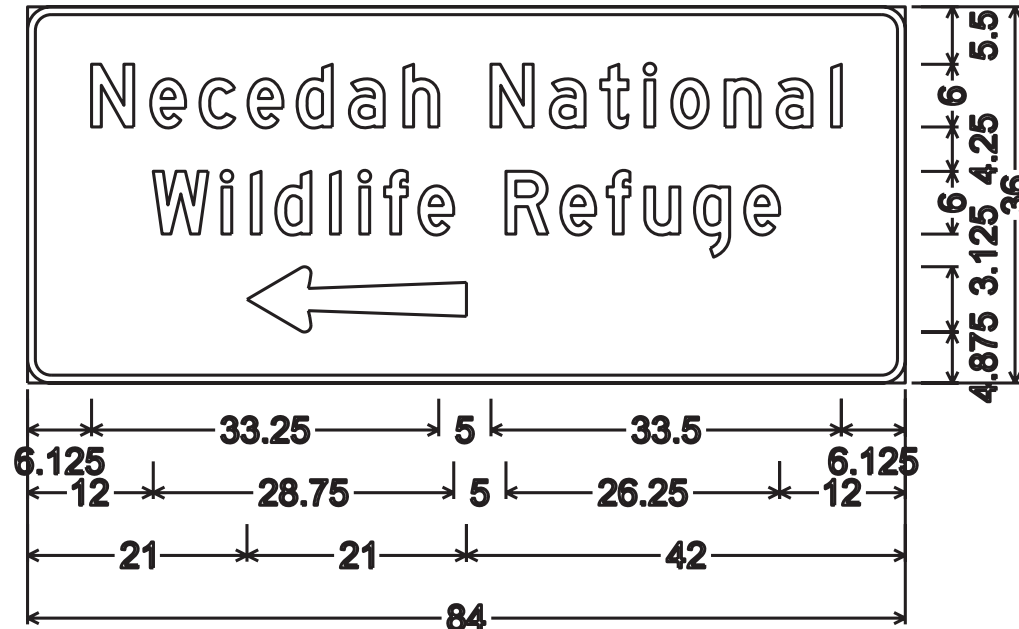
TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED July 14, 2015 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	



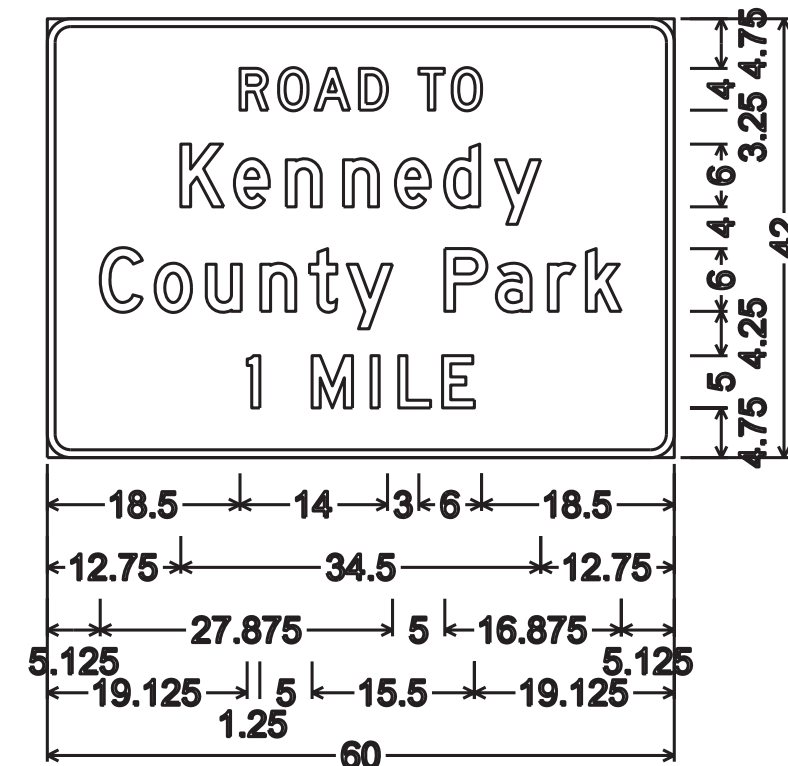
2.250" Radius, 0.750" Border, White on Brown;
"Necedah" D; "National" D;
"Wildlife" D 88% spacing; "Refuge" D 88% spacing;
Standard Arrow Custom 21.000" X 6.250" 0° White;



2.250" Radius, 0.750" Border, White on Brown;
"ROAD" D; "TO" D; "Necedah" D; "National" D;
"Wildlife" D; "Refuge" D; "1" D; "MILE" D

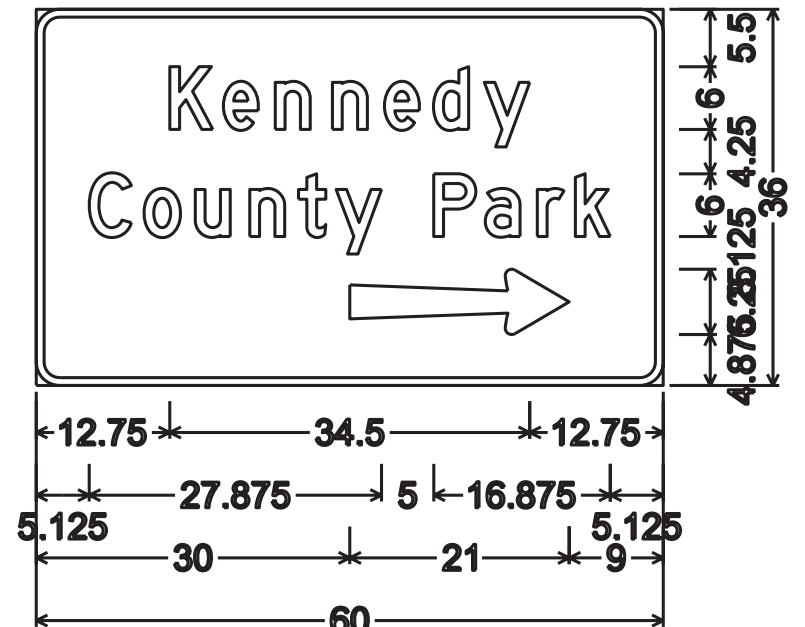


2.250" Radius, 0.750" Border, White on Brown;
"Necedah" D; "National" D;
"Wildlife" D 88% spacing; "Refuge" D 88% spacing;
Standard Arrow Custom 21.000" X 6.250" 0° White;

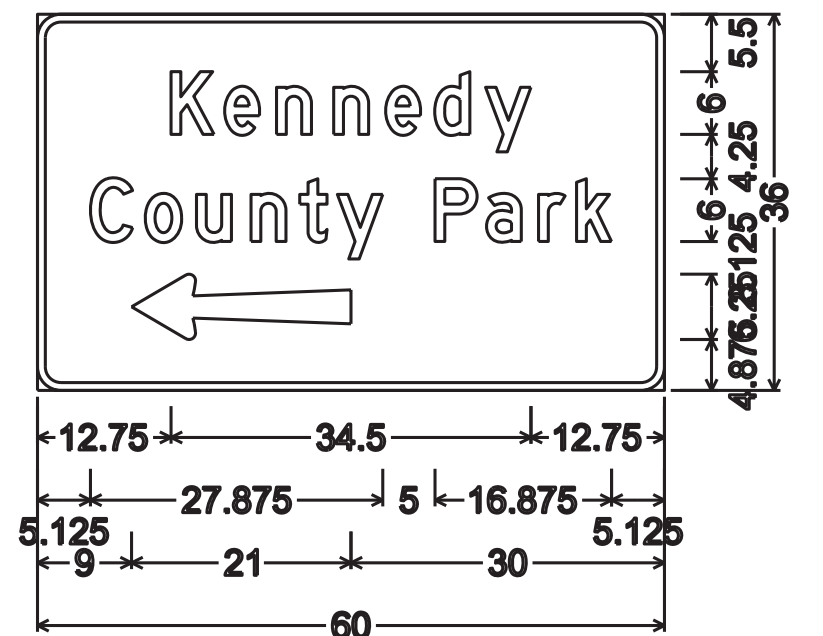


D7-68;
2.250" Radius, 0.750" Border, White on Brown;
"ROAD" D; "TO" D; "Kennedy" D; "County" D
"Park" D; "1" D; "MILE" D

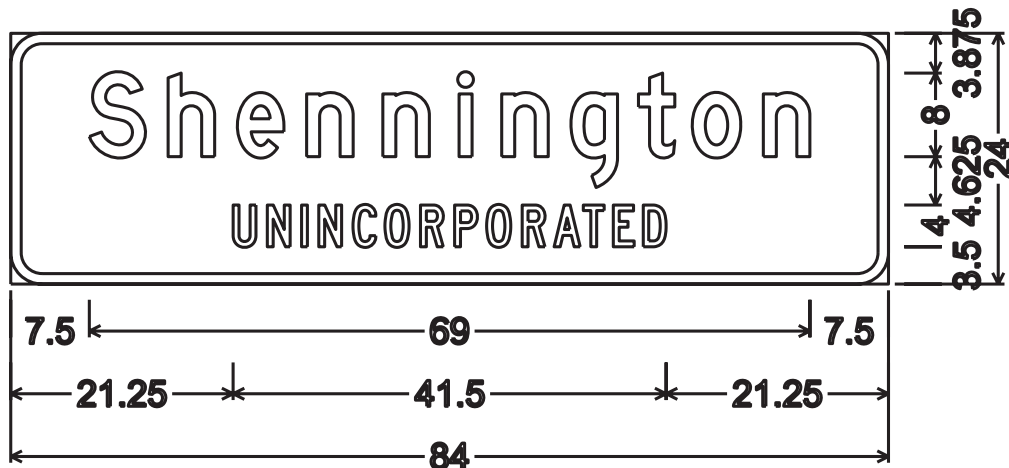
- NOTES
1. Signs are Type II - Type H Reflective
 2. Color:
Background - Brown
Message - WHITE
 3. Message Series - D



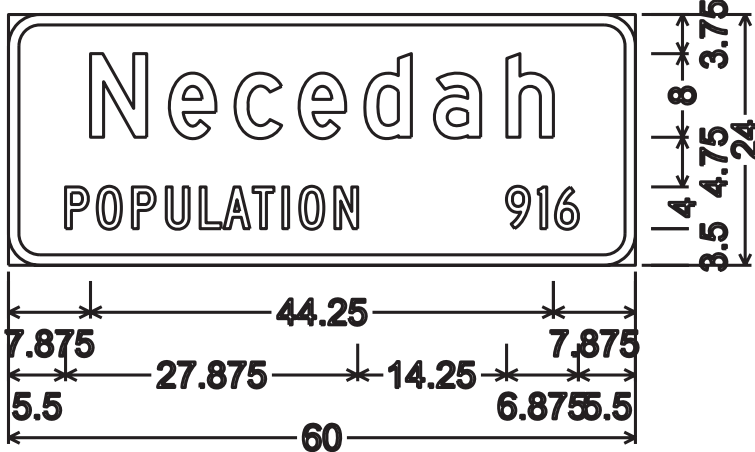
D7-68R;
2.250" Radius, 0.750" Border, White on Brown;
"Kennedy" D; "County" D; "Park" D



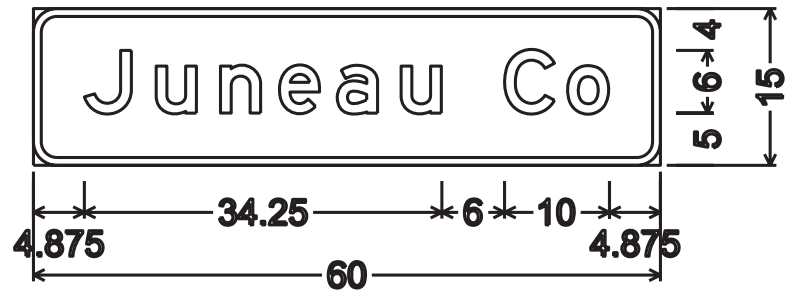
D7-68L;
2.250" Radius, 0.750" Border, White on Brown;
"Kennedy" D; "County" D; "Park" D



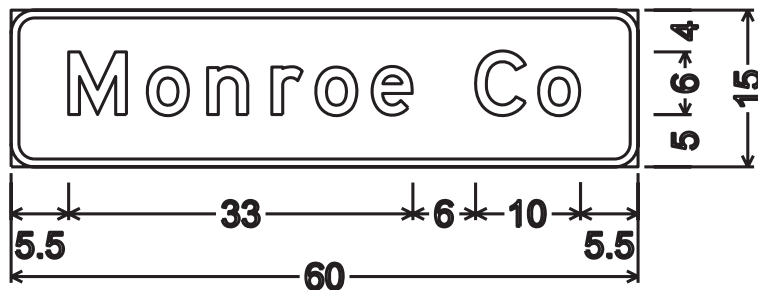
I2-3;
3.000" Radius, 1.000" Border
"Shennington" D; "UNINCORPORATED" C



I2-3;
3.000" Radius, 1.000" Border
"Necedah" D; "POPULATION" C; "916" C



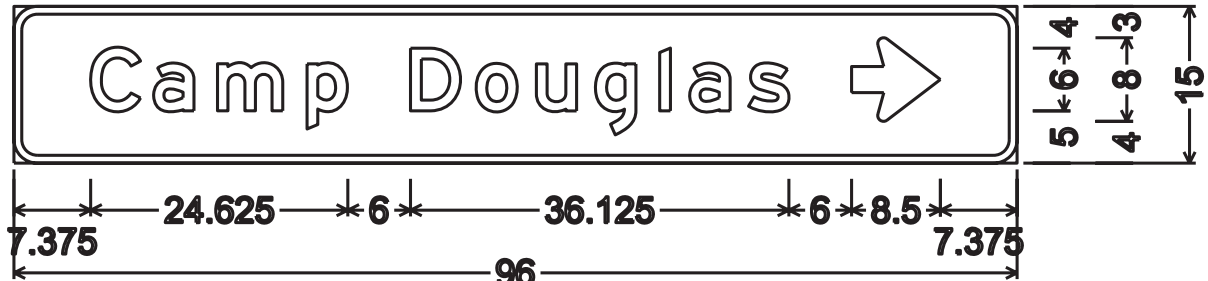
I2-2;
2.250" Radius, 0.750" Border



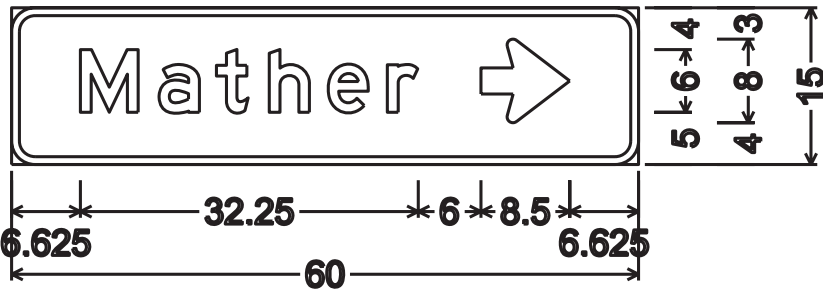
I2-2;
2.250" Radius, 0.750" Border



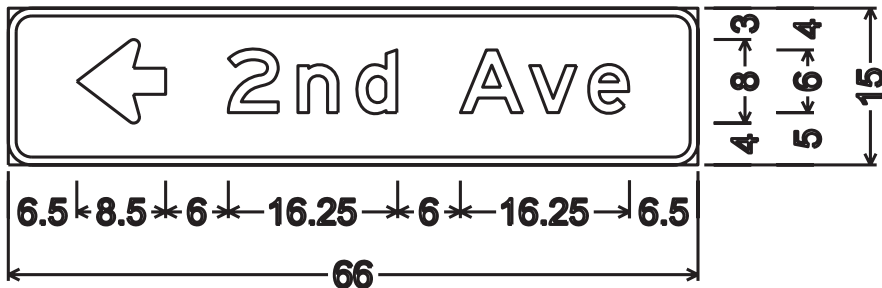
D1-1;
2.250" Radius, 0.750" Border



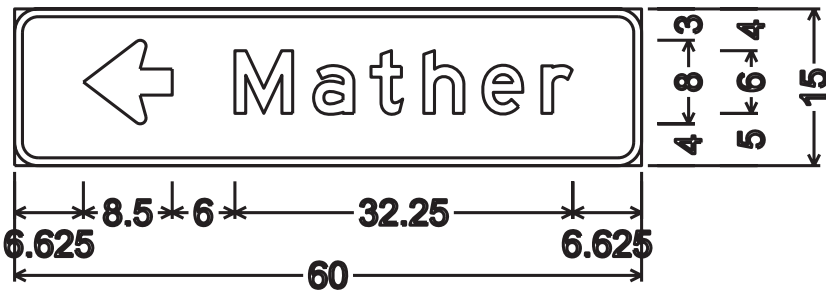
D1-1; 2.250" Radius, 0.750" Border



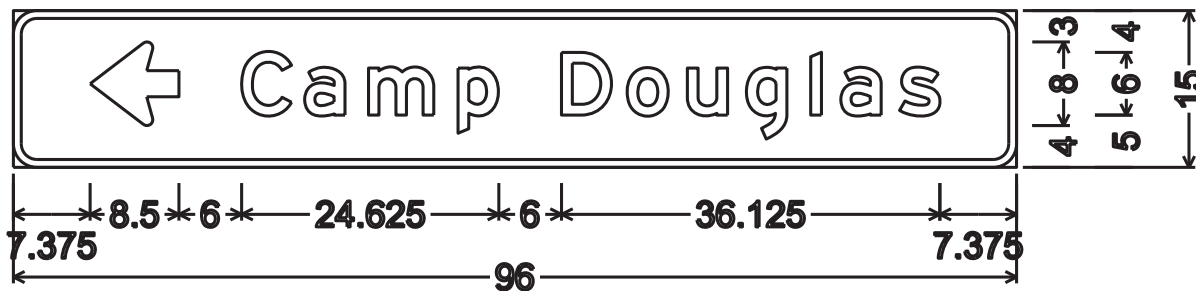
D1-1;
2.250" Radius, 0.750" Border



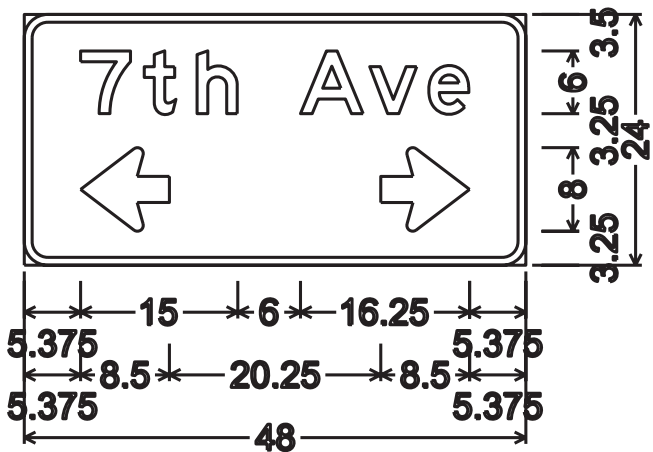
D1-1;
2.250" Radius, 0.750" Border



D1-1;
2.250" Radius, 0.750" Border



D1-1; 2.250" Radius, 0.750" Border



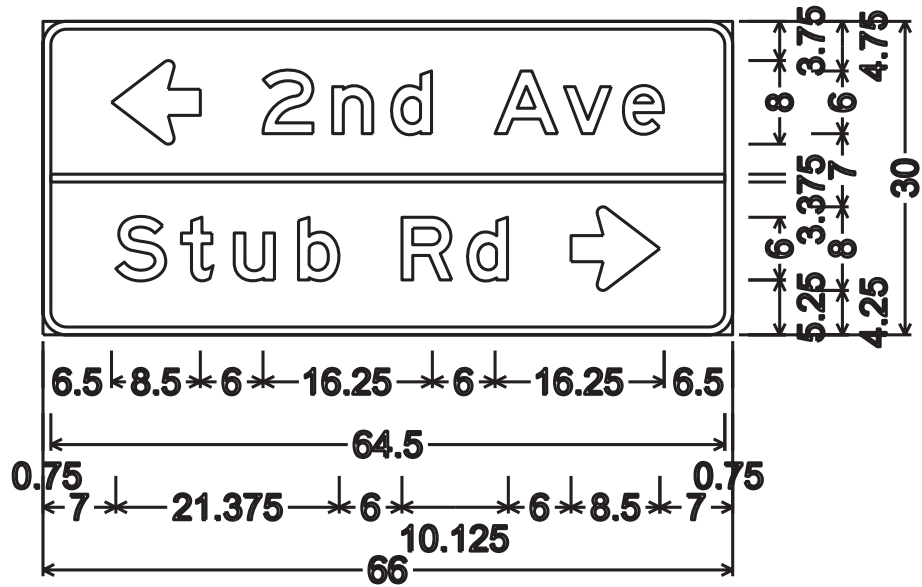
D1-61;
2.250" Radius, 0.750" Border

NOTES

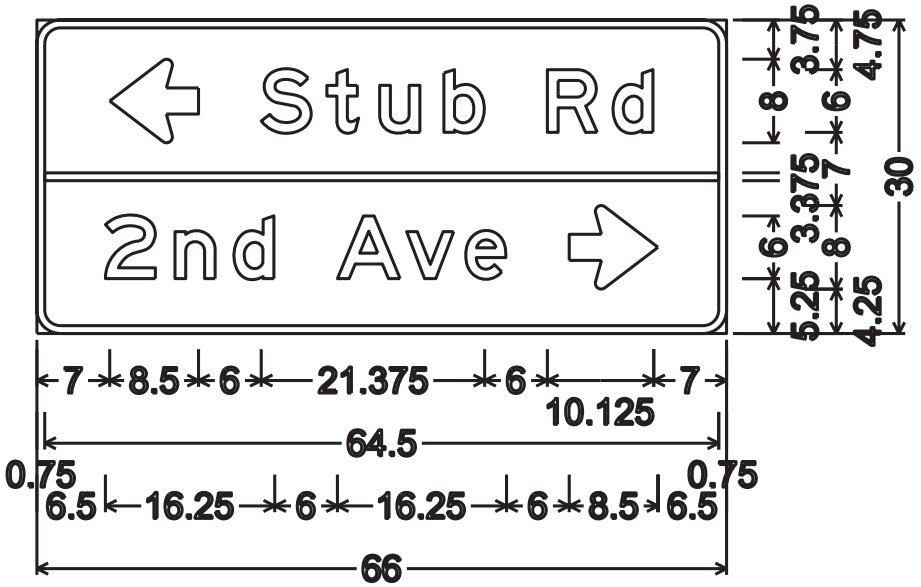
1. Signs are Type II - Type H Reflective
2. Color:
Background - GREEN
Message - WHITE
3. Message Series - E except as noted

NOTES

- 1. Signs are Type II - Type H Reflective
- 2. Color:
Background - GREEN
Message - WHITE
- 3. Message Series - E except as noted



D1-2;
2.250" Radius, 0.750" Border



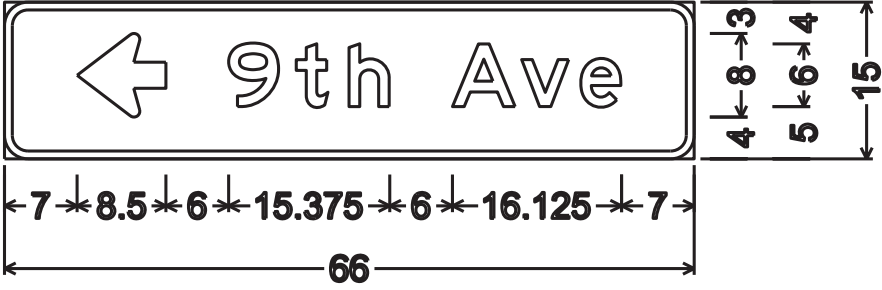
D1-2;
2.250" Radius, 0.750" Border



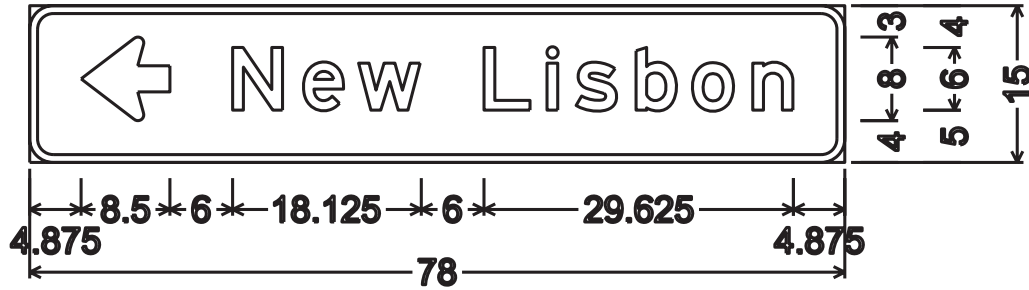
D1-1;
2.250" Radius, 0.750" Border



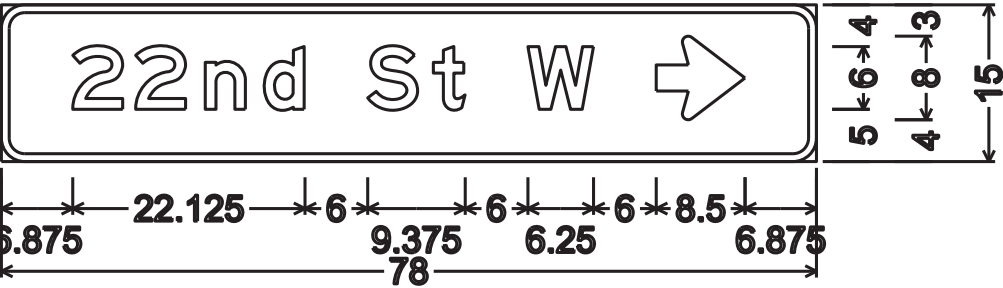
D1-1;
2.250" Radius, 0.750" Border



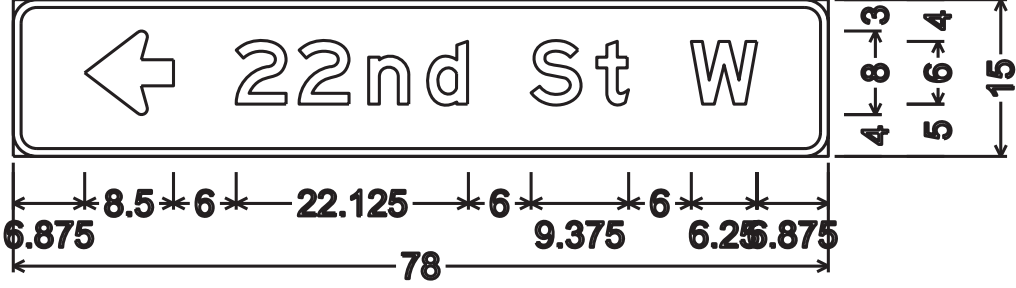
D1-1;
2.250" Radius, 0.750" Border



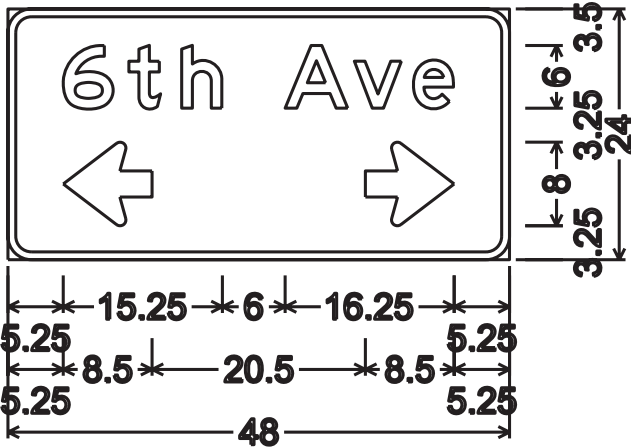
D1-1;
2.250" Radius, 0.750" Border



D1-1;
2.250" Radius, 0.750" Border



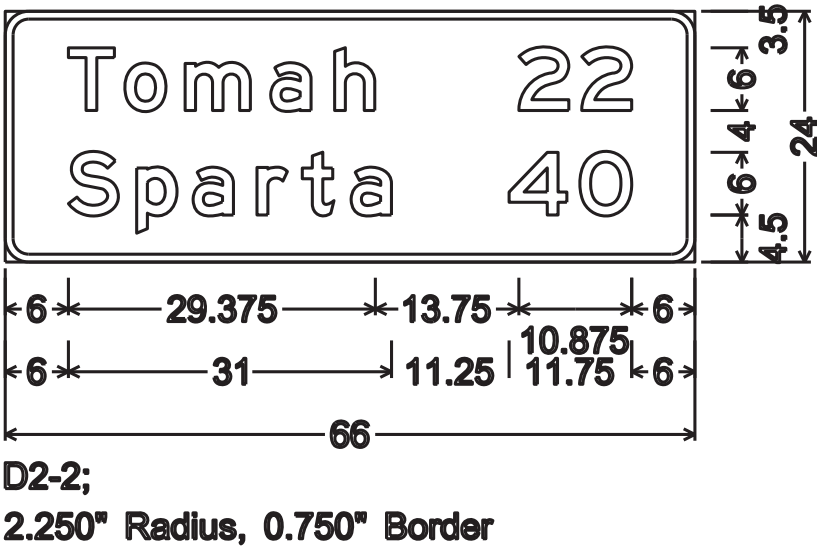
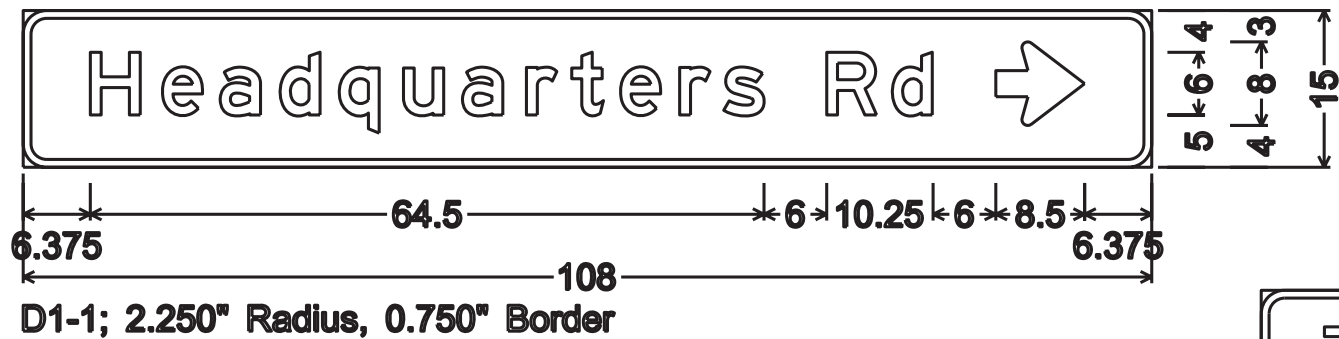
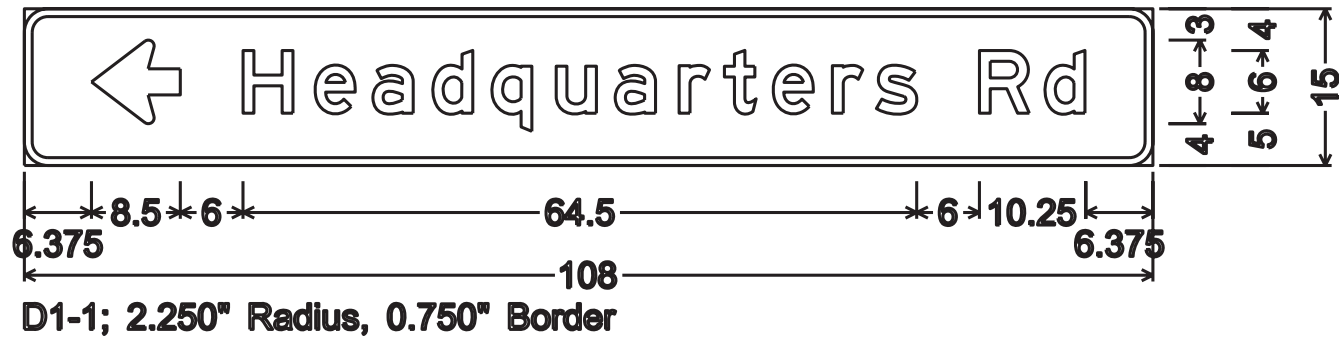
D1-1;
2.250" Radius, 0.750" Border



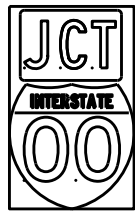
D1-61;
2.250" Radius, 0.750" Border

NOTES

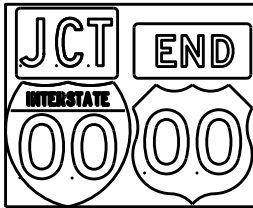
- 1. Signs are Type II - Type H Reflective
- 2. Color:
Background - GREEN
Message - WHITE
- 3. Message Series - E except as noted



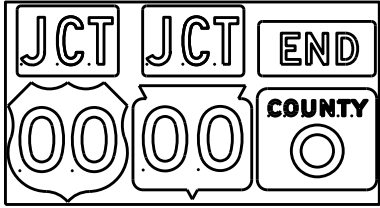
TYPICAL ASSEMBLIES



J1-1



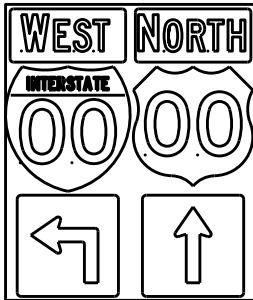
J1-2



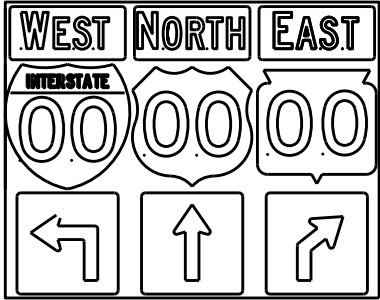
J1-3



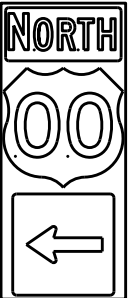
J2-1



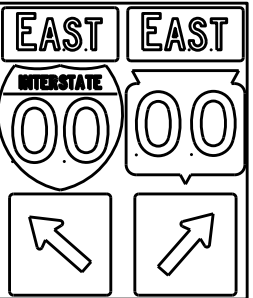
J2-2



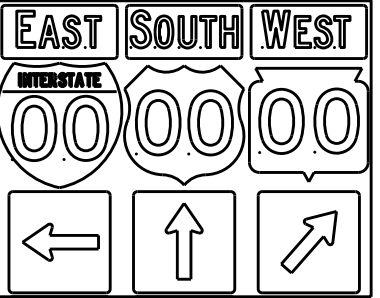
J2-3



J3-1



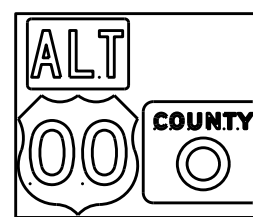
J3-2



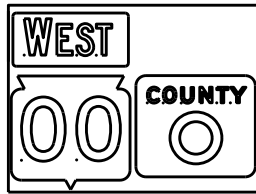
J3-3



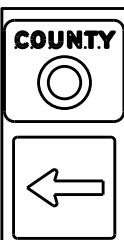
J4-1



J4-2



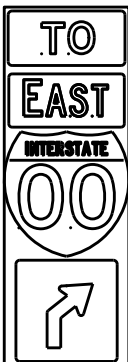
J4-2



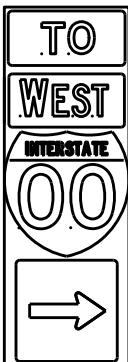
J13-1



J12-1



J32-1



J33-1



J23-1

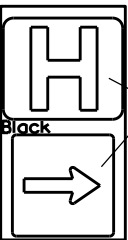


J22-1



JV

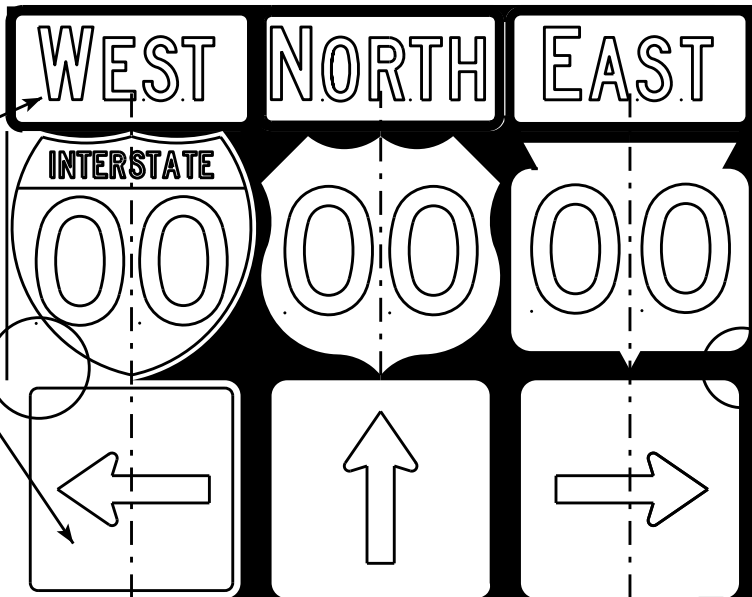
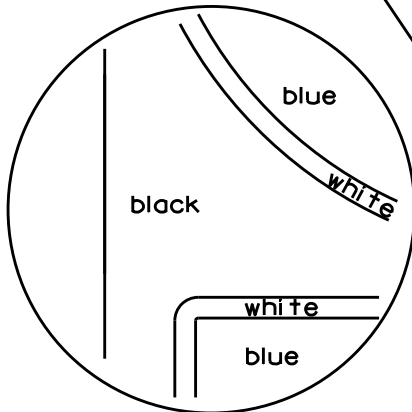
(Typical Vertical J-Assembly
See Note 10 and 11)



JH-1

Blue Background

[blue background
with interstate]



[black background]

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

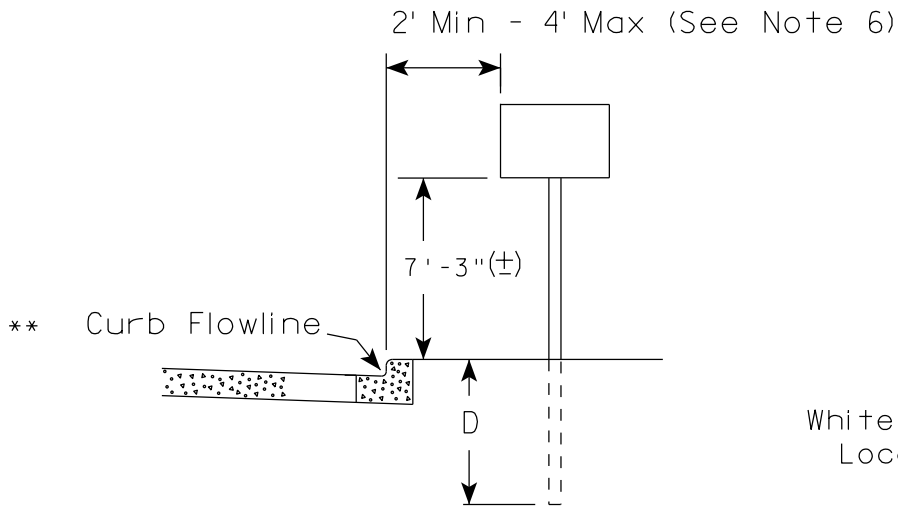
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 2/06/14 PLATE NO. A2-1S.8

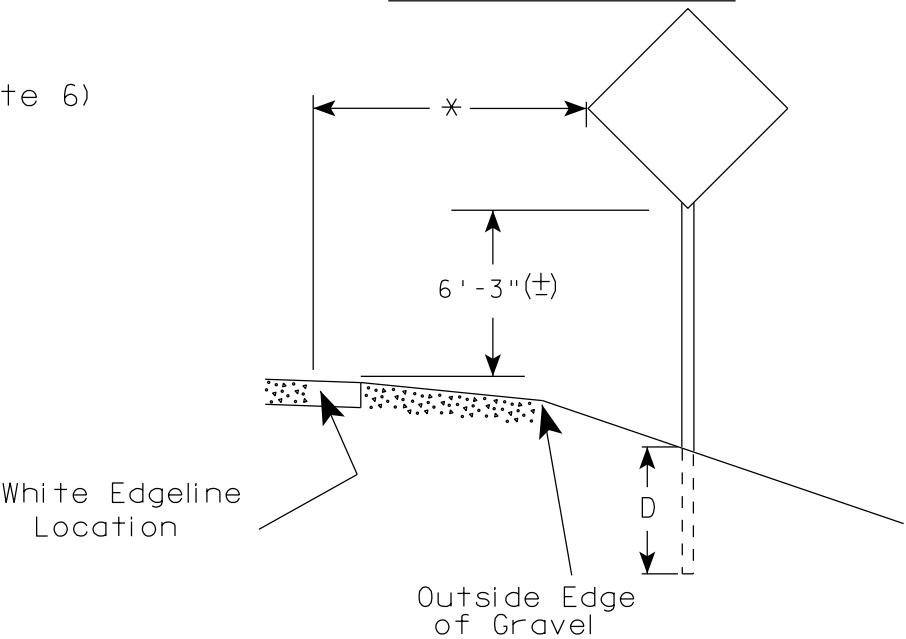
NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Black Non-reflective
Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. 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.
8. 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.
9. 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.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

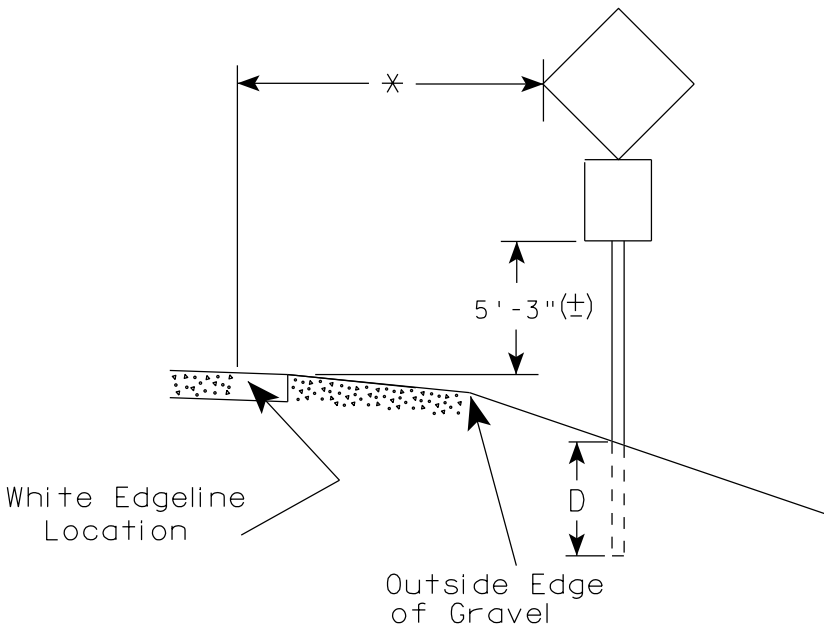
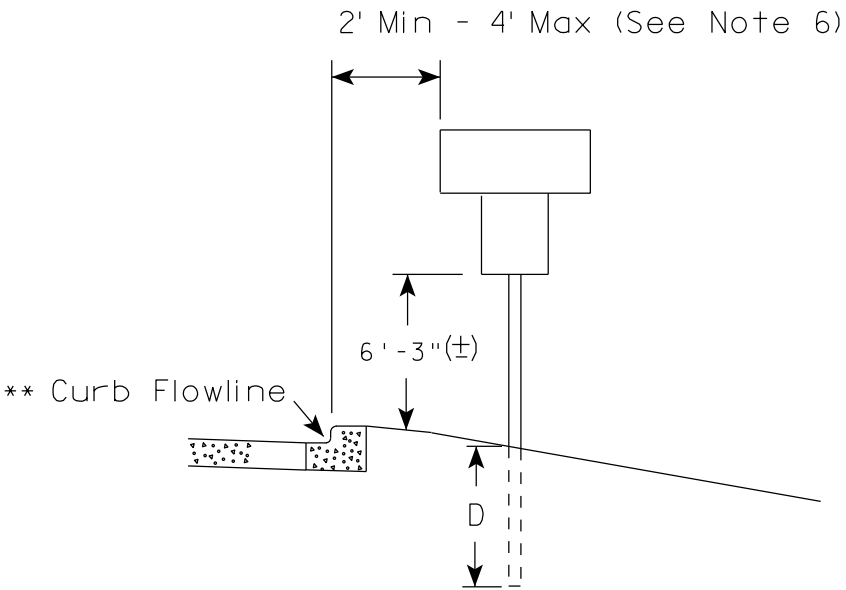
URBAN AREA



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 barrier wall, see A4-10 sign plate.
 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 J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
 5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
 6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
 7. The (±) tolerance for mounting height is 3 inches.
 8. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
 9. 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), 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" (±).



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.

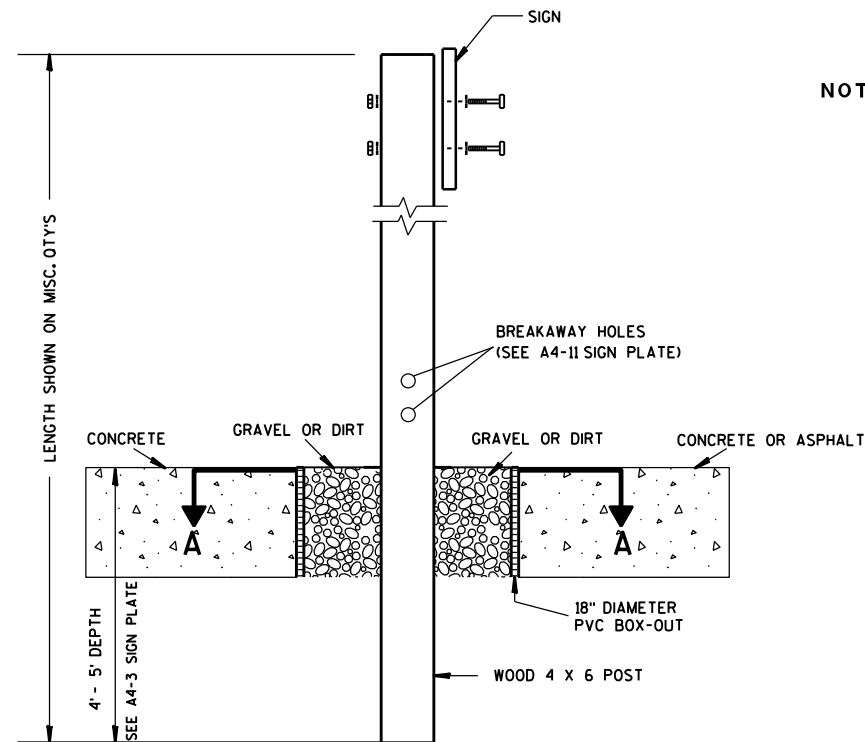
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

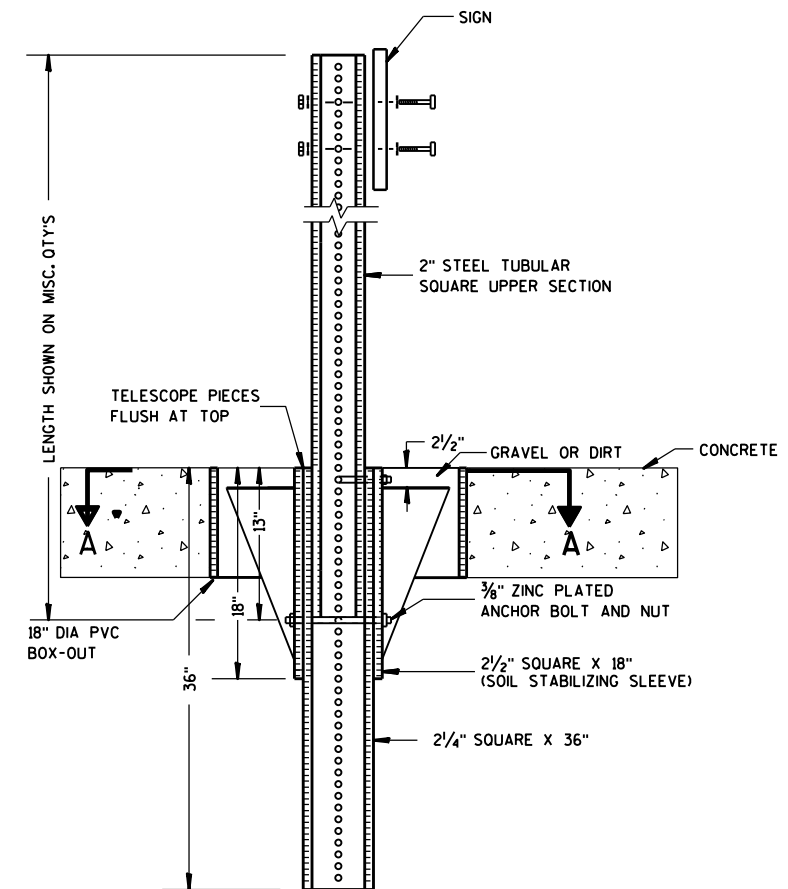
DATE 7/23/15 PLATE NO. A4-3.20



ELEVATION VIEW

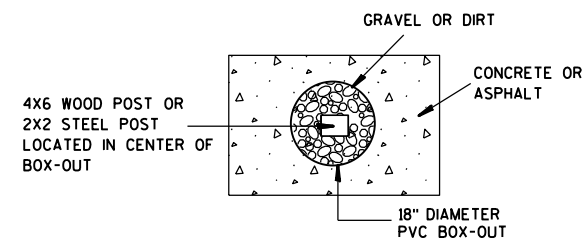
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST
BOX-OUTS
A4-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

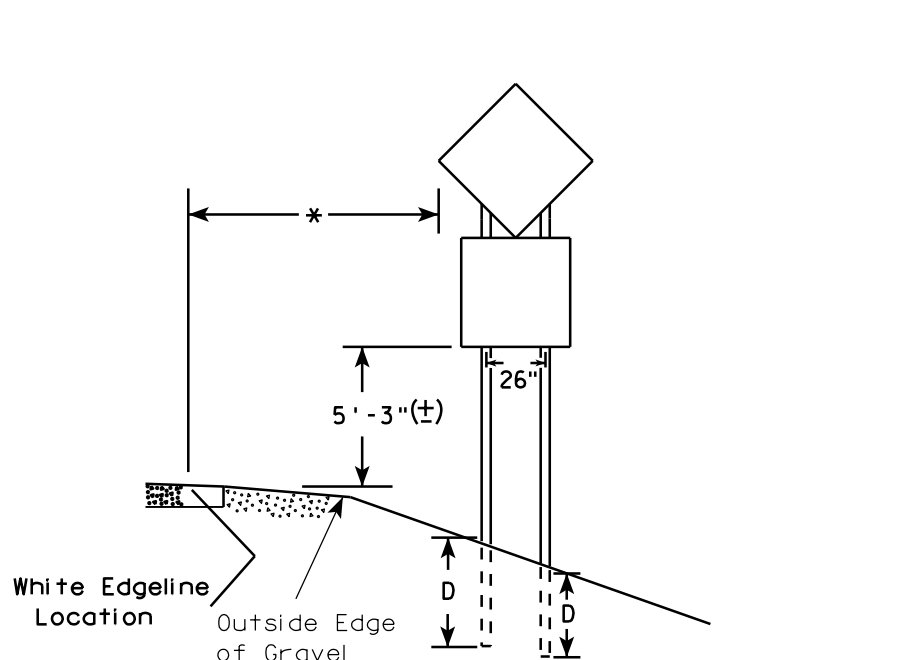
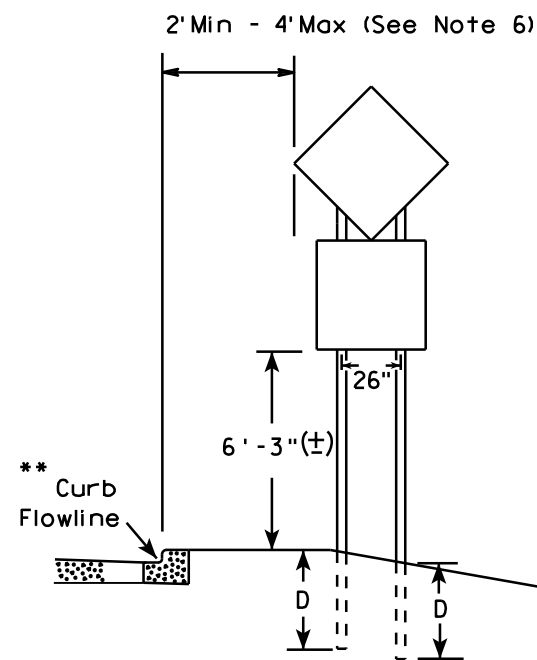
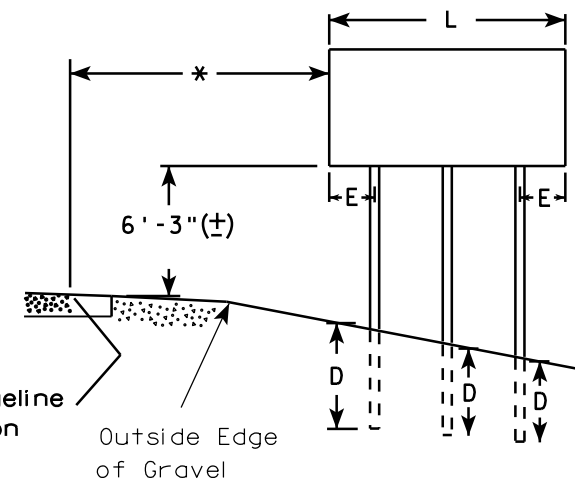
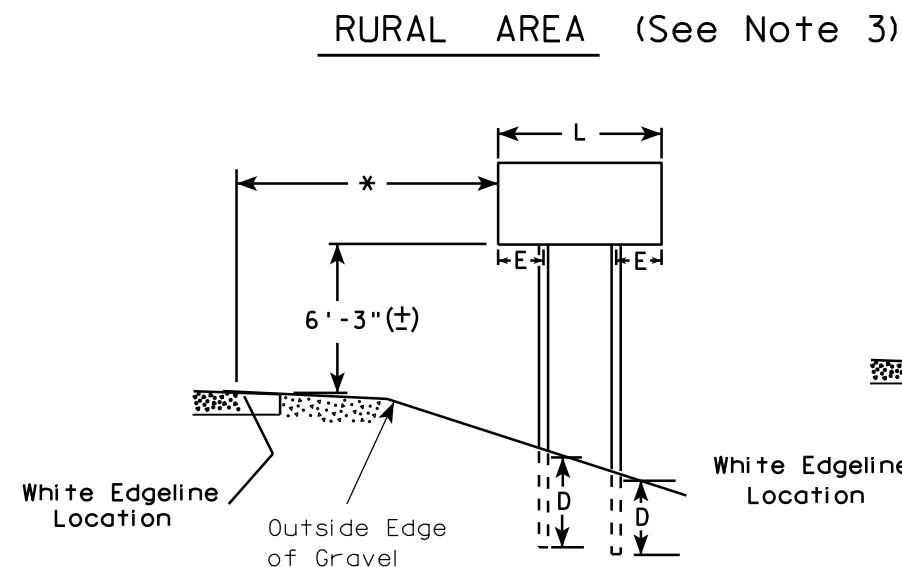
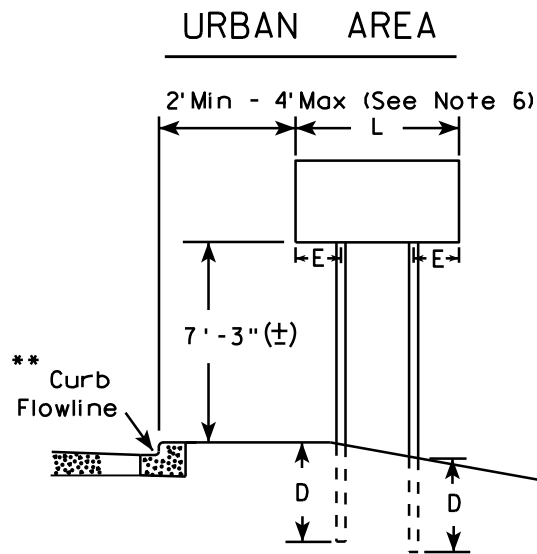
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



48" DIAMOND WARNING SIGN

48" DIAMOND WARNING SIGN

- GENERAL NOTES**
1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
 2. See tables below for required number of posts.
 3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
 4. The (±) tolerance for mounting height is 3 inches.
 5. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
 6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
 7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
 8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

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

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

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

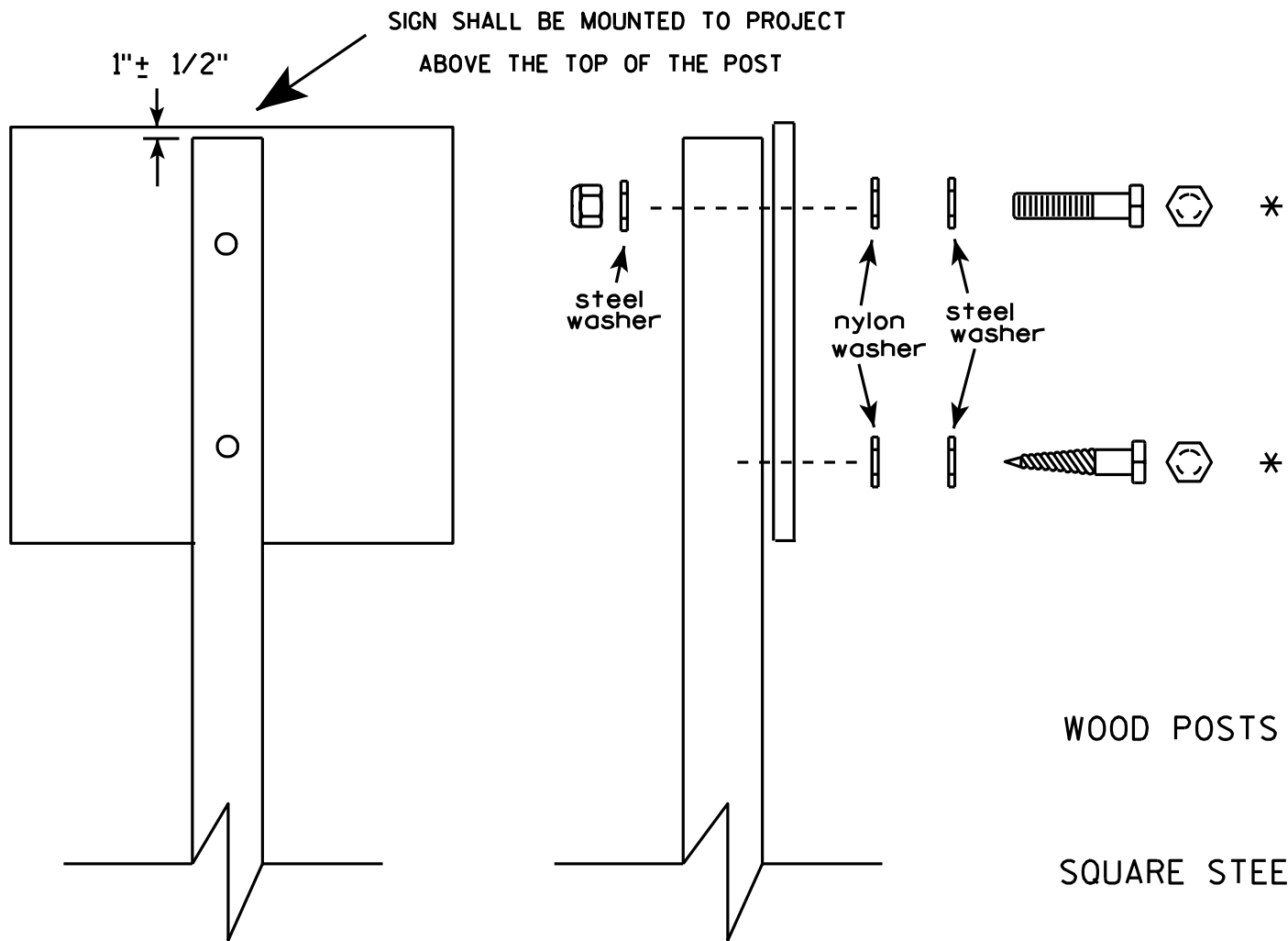
SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

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

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 7/23/15	PLATE NO. A4-4.14

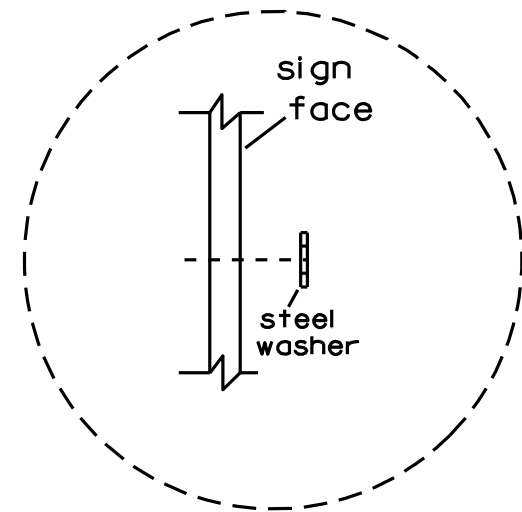


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

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

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

- WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts
- SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
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 for all Type H signs.

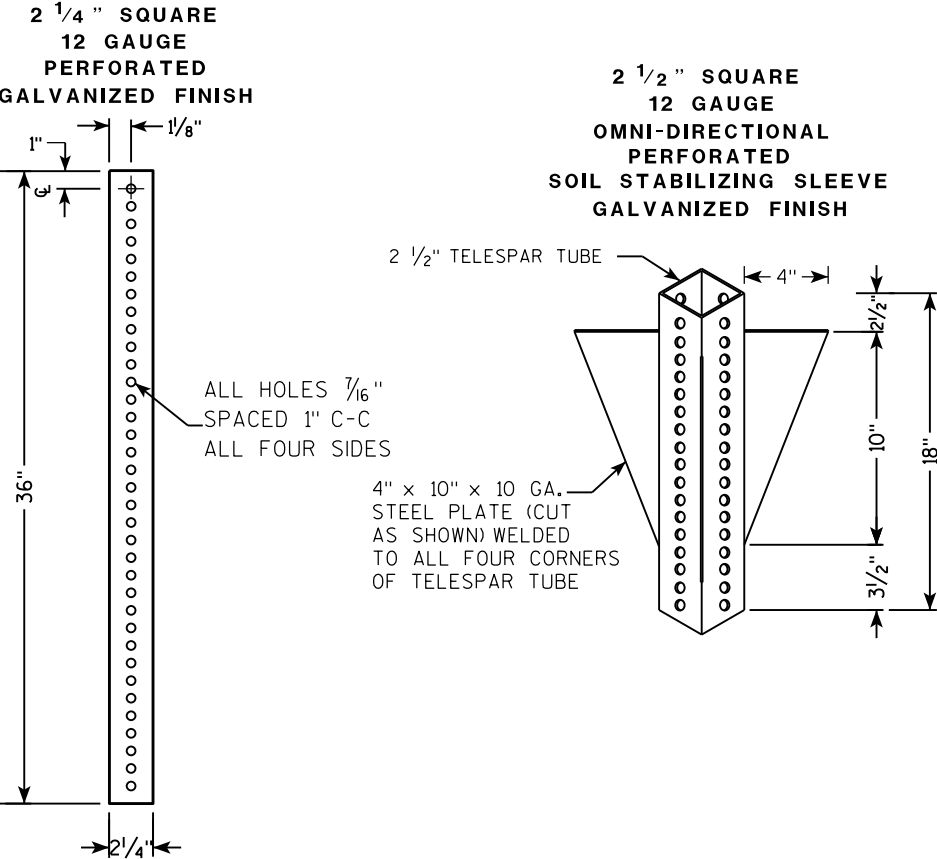


Washer Placement when Sign Has Other Than Type H or Type F Face

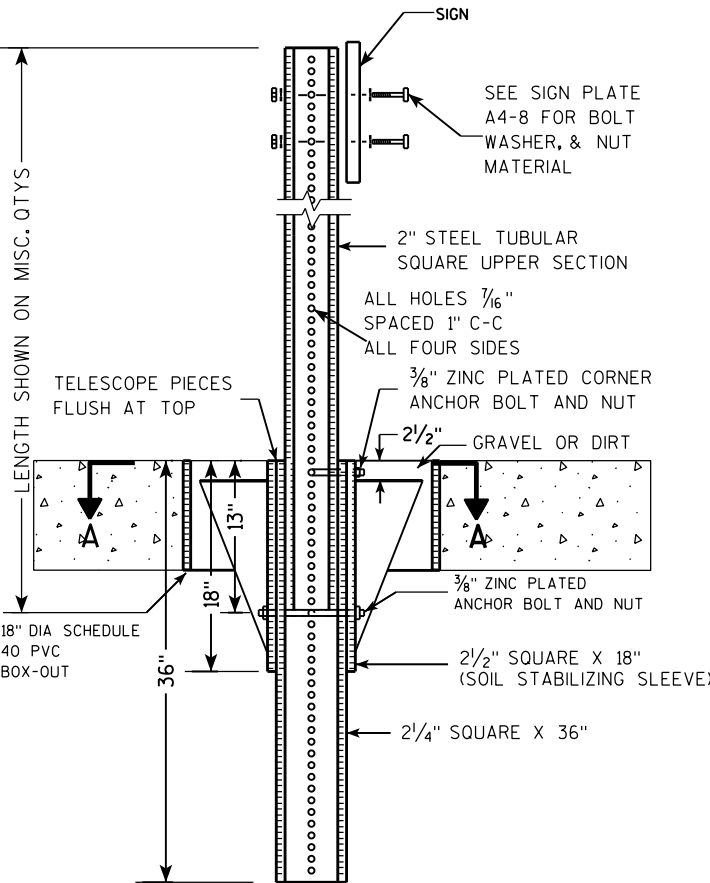
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require 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 3/23/10	PLATE NO. A4-8.7

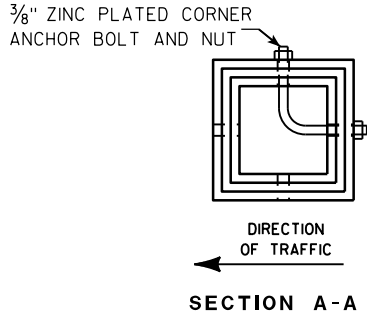
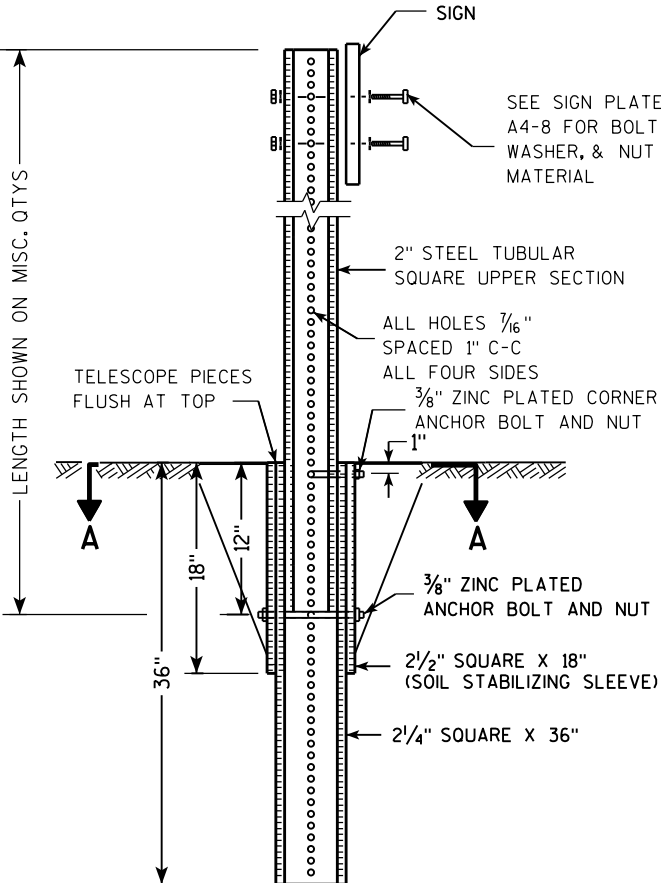
TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM



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



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



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

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

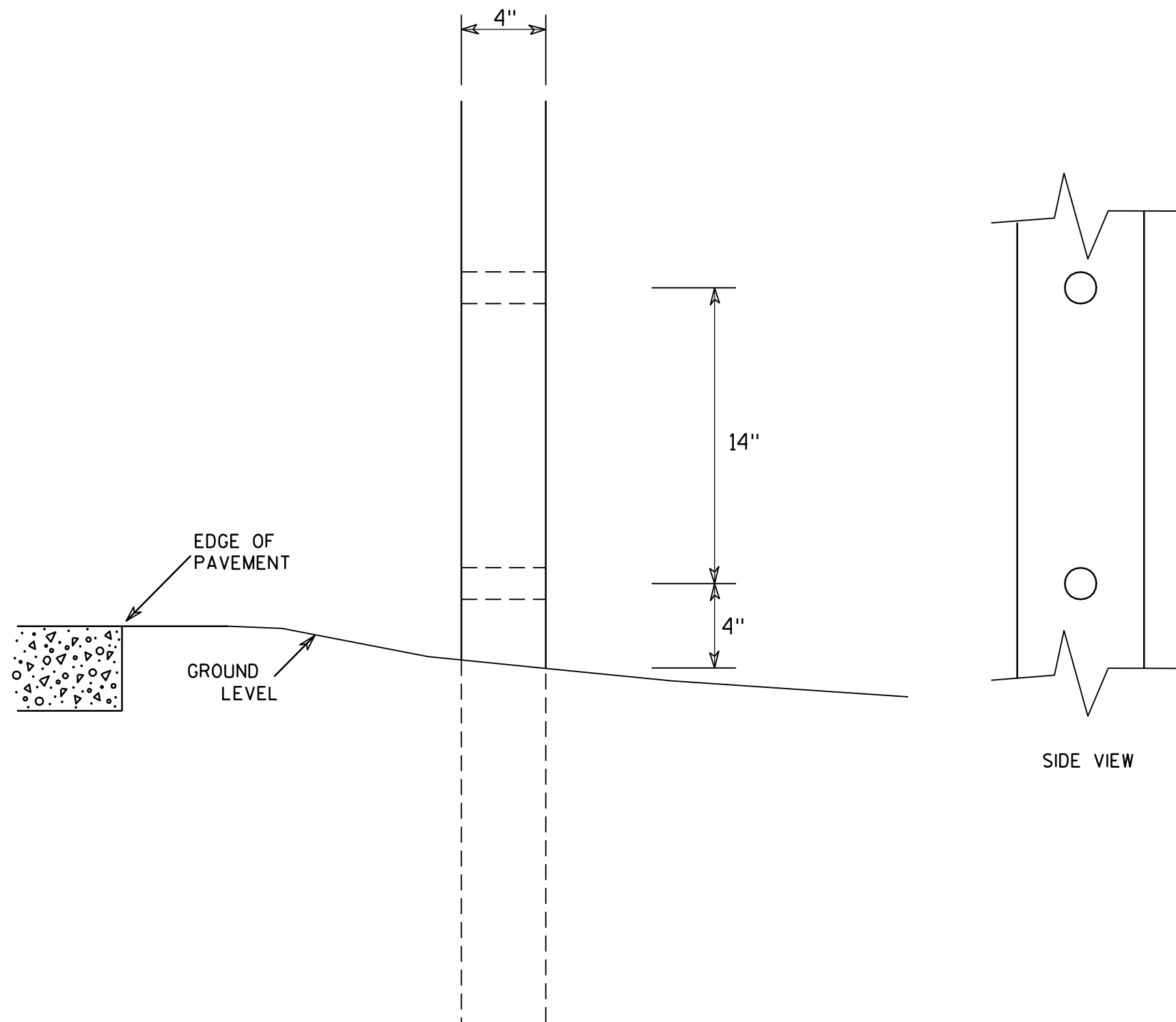
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

7



GENERAL NOTES

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

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

HWY:

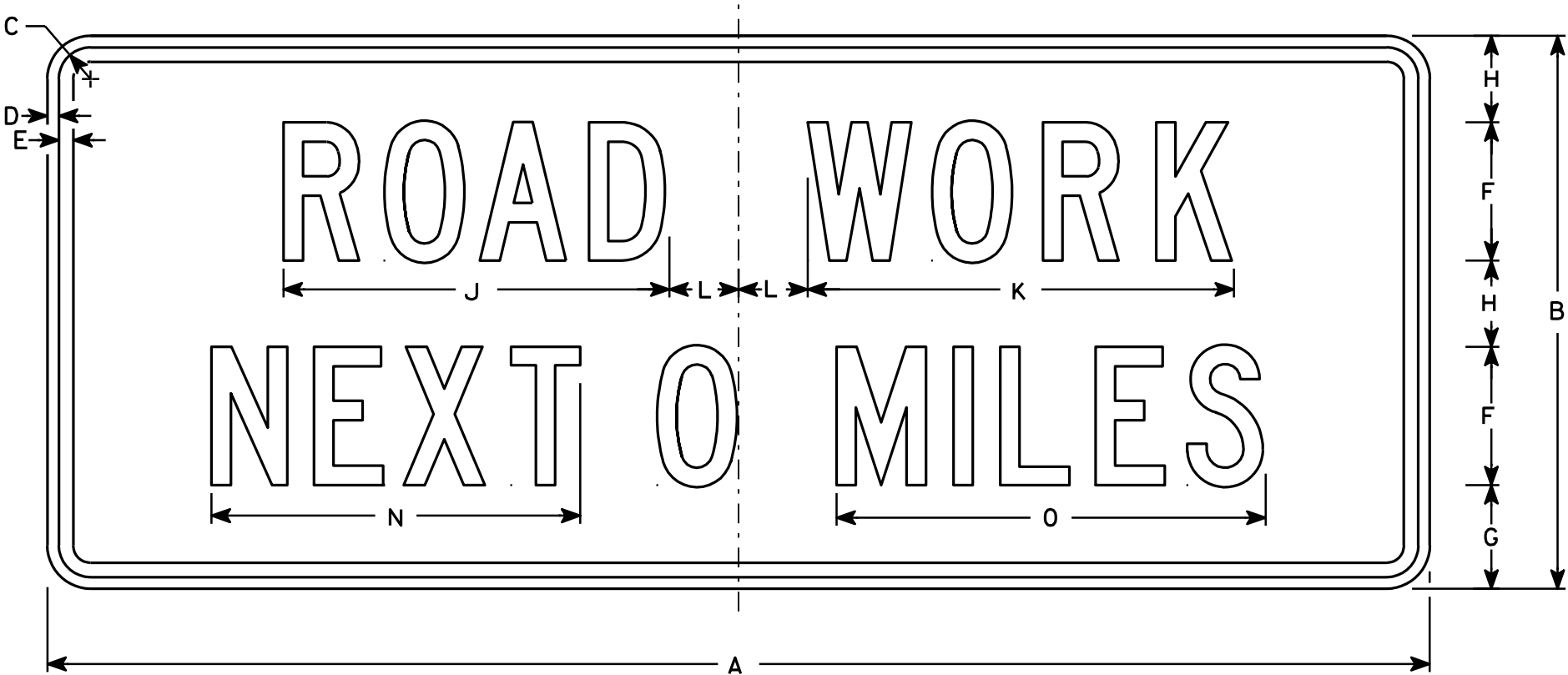
COUNTY:

SHEET NO:

E

NOTES

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



G20-1

Metric equivalent
for this sign is:

SIZE	
1	
2	1500 mm X 600 mm
3	
4	1500 mm X 600 mm
5	

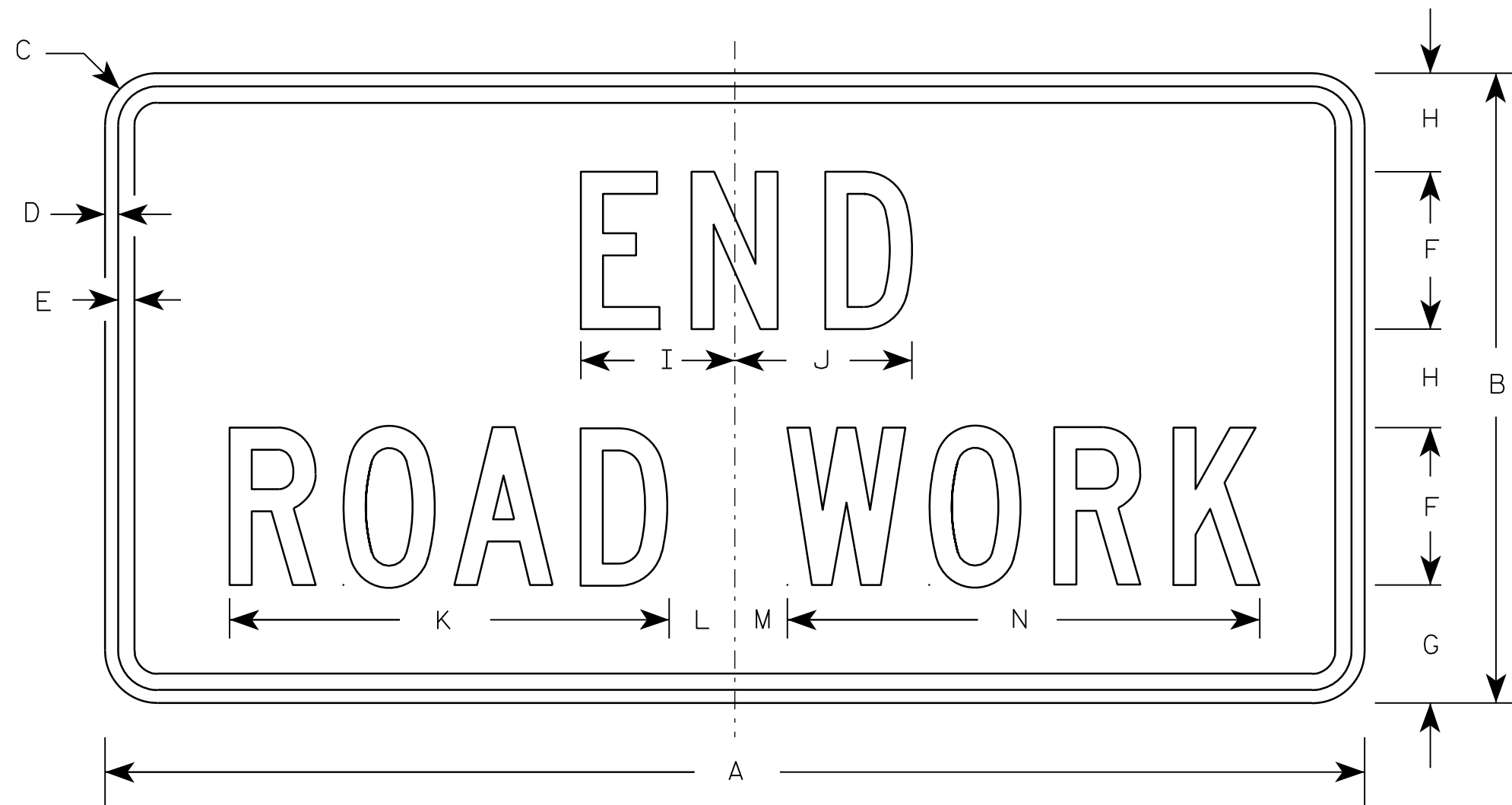
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	60	24	1 3⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4		16 3⁄4	18 1⁄2	3		16	18 5⁄8												10	.90
3																												
4	60	24	1 3⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4		16 3⁄4	18 1⁄2	3		16	18 5⁄8												10	.90
5																												

STANDARD SIGN
G20-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Chris J. Spay
State Traffic Engineer
DATE 4/8/97 PLATE NO. G20-1.7

7



G20-2A

Metric equivalent
for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 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	Z	Area sq. ft.	Area sq. m.
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

NOTES

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Orange
Message - Black
- Message Series - 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.

7

PROJECT NO:

HWY:

COUNTY:

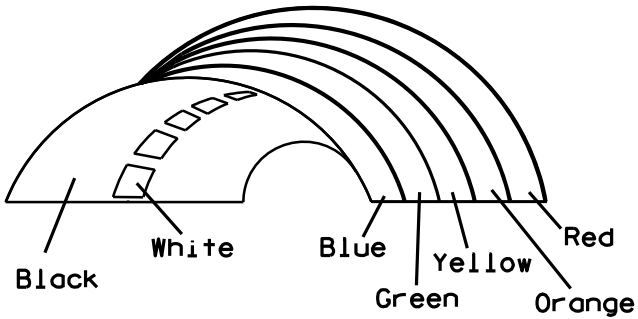
SHEET NO:

E



* VARIES

Background Colors of Symbol*



*1/4" Black Border between each color of rainbow and border of rainbow

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 - (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. Border - Blue
Line 1 - Red
Line 2 - Black
Line 3-5 - Blue
6. Line 1 - Dutch 8011L
Line 2 - Series E
Line 3-5 - Series C
7. Contractor shall provide and install a new post bracket in accordance with the I55-56B sign 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																											
2	30	36	1 1/2	1/2	5/8	3	2	3 1/2	2 7/8	1	8	2 1/8	11 1/4	11 1/8	9 3/8	1 1/4		3/4	12 5/8	7 1/2							7.5
3																											
4																											
5																											

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

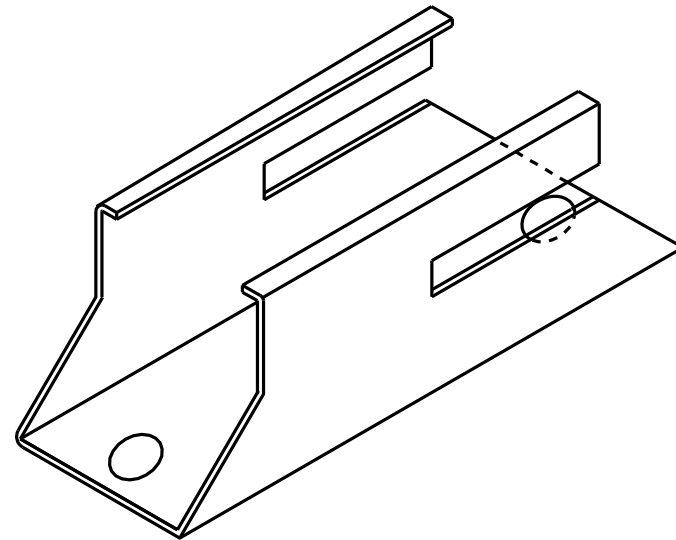
STANDARD SIGN
I55-56

WISCONSIN DEPT OF TRANSPORTATION

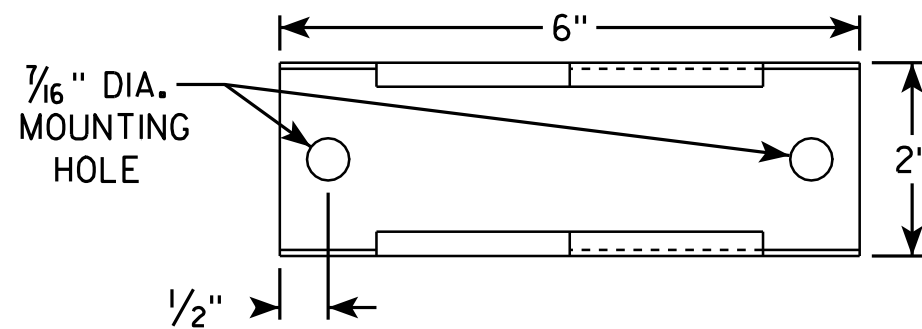
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 4/27/11 PLATE NO. I55-56.3

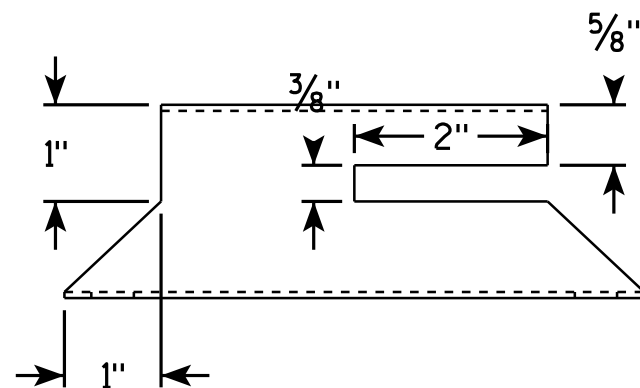
ISOMETRIC VIEW



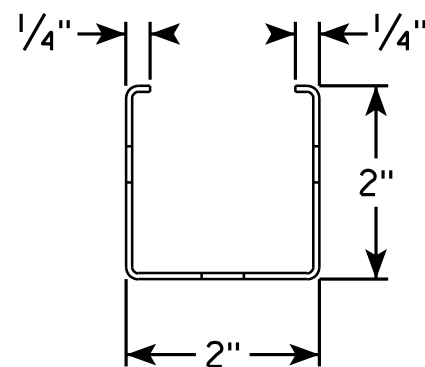
TOP VIEW



SIDE VIEW



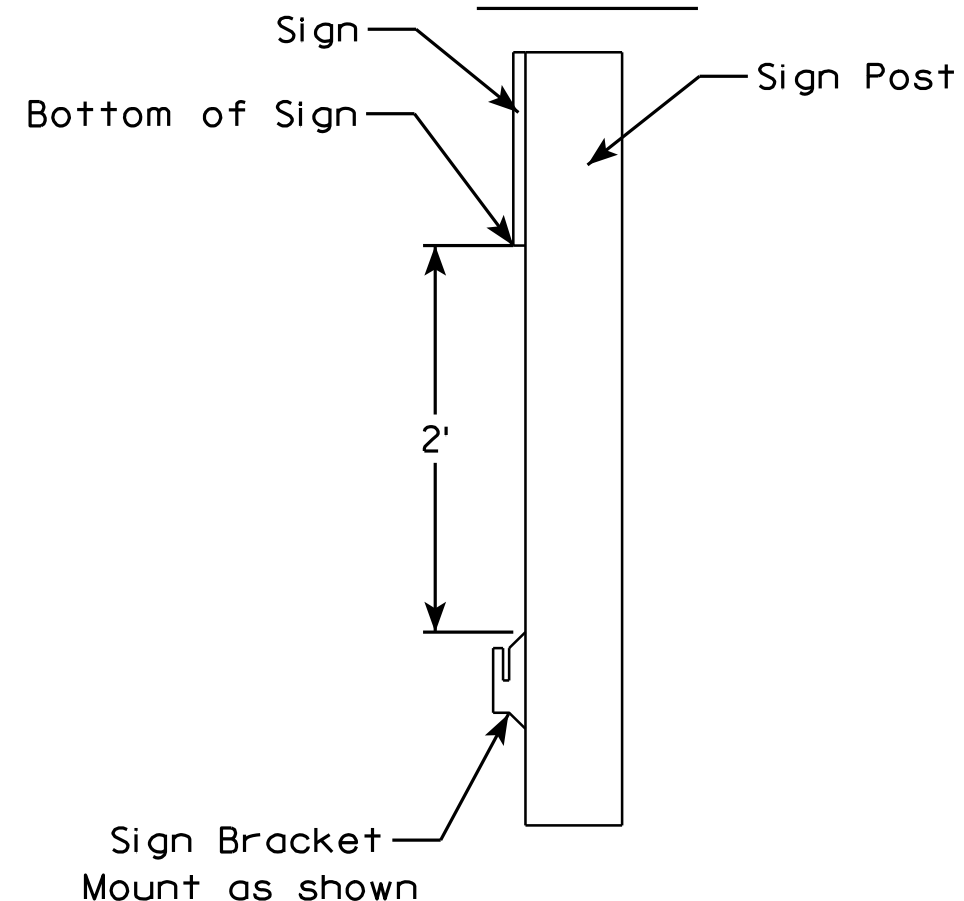
END VIEW



NOTES

1. Must be capable of permanent attachment to a wood or steel channel sign post utilizing the fastening hardware specified on the A4-8 sign plate.
2. Shall be entirely primed and painted with two coats of a black powder coated enamel paint.
3. Shall be made with 12 gauge steel, and incorporate no welds, no hinged components, no threaded lock-type components, and no parts which are loose or can be separated from the main body.
4. Shall have rounded edges with at least 1/8" radii.
5. Shall not have unrounded and uncoated metal edges which can contact the back surface of the roll-up sign.
6. Top of bracket shall be mounted 2' below the bottom of the I55-56 sign.
7. Cost of bracket and fastening hardware shall be incidental to the I55-56 sign.

SIDE VIEW



ROLLUP SIGN BRACKET
I55-56B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 2/5/10 PLATE NO. I55-56B.1

PROJECT NO:

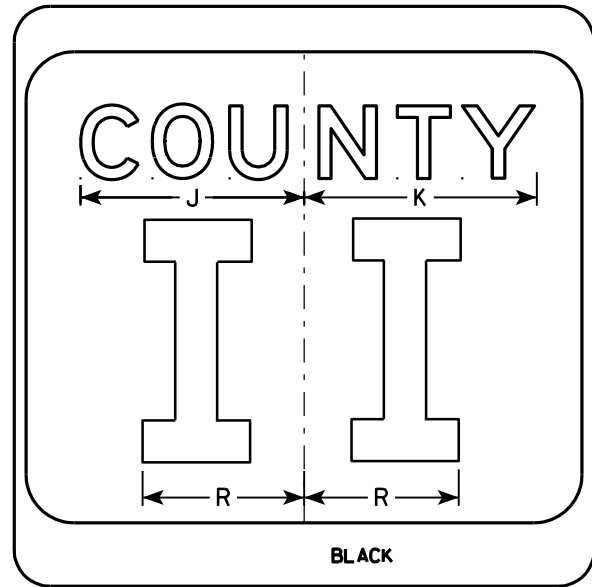
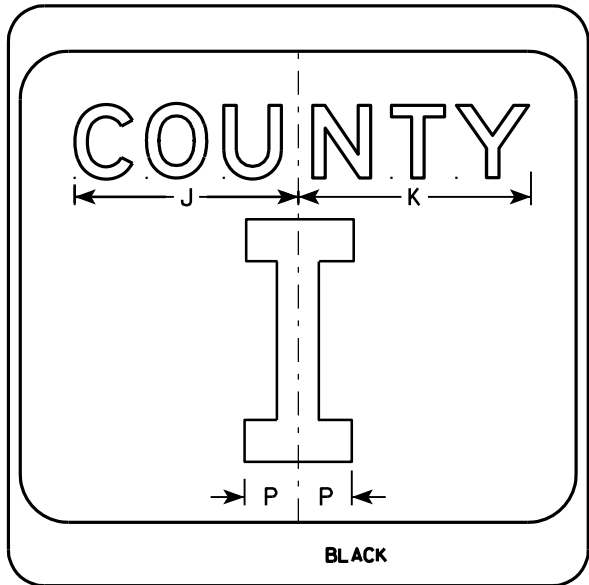
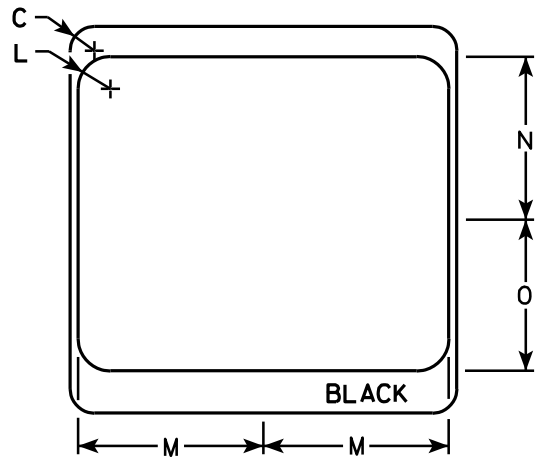
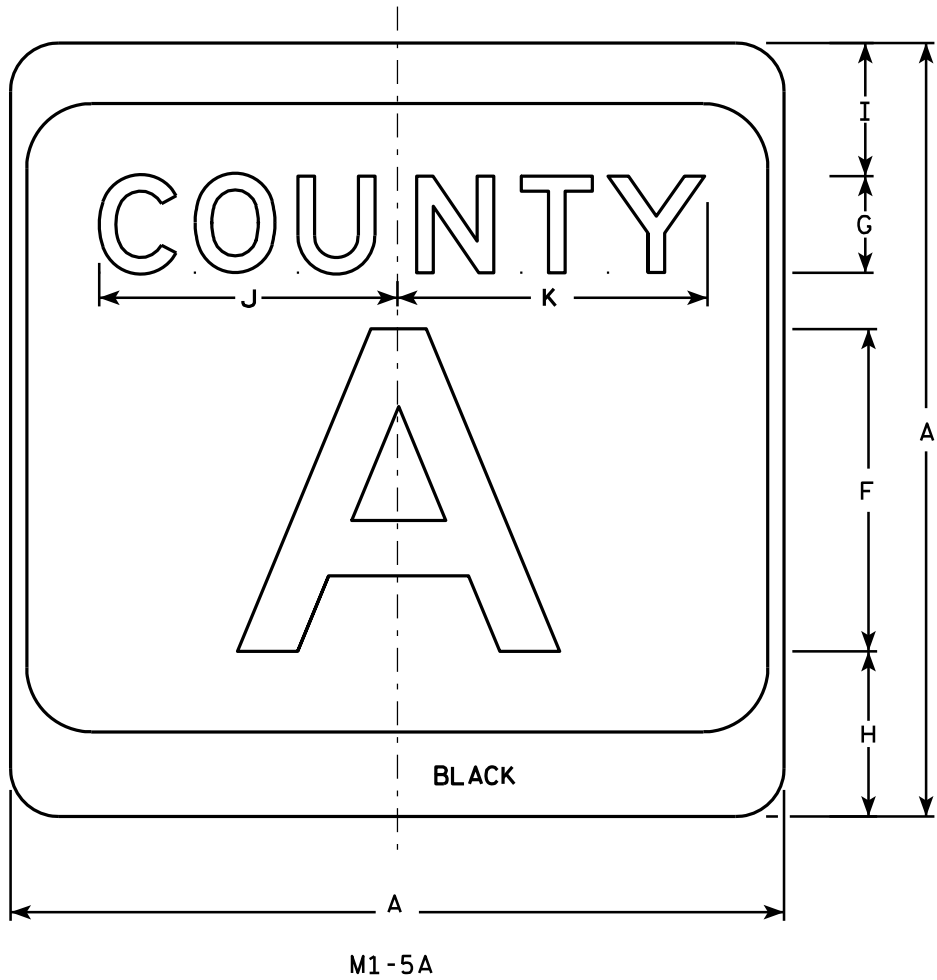
HWY:

COUNTY:

SHEET NO:

E

7



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

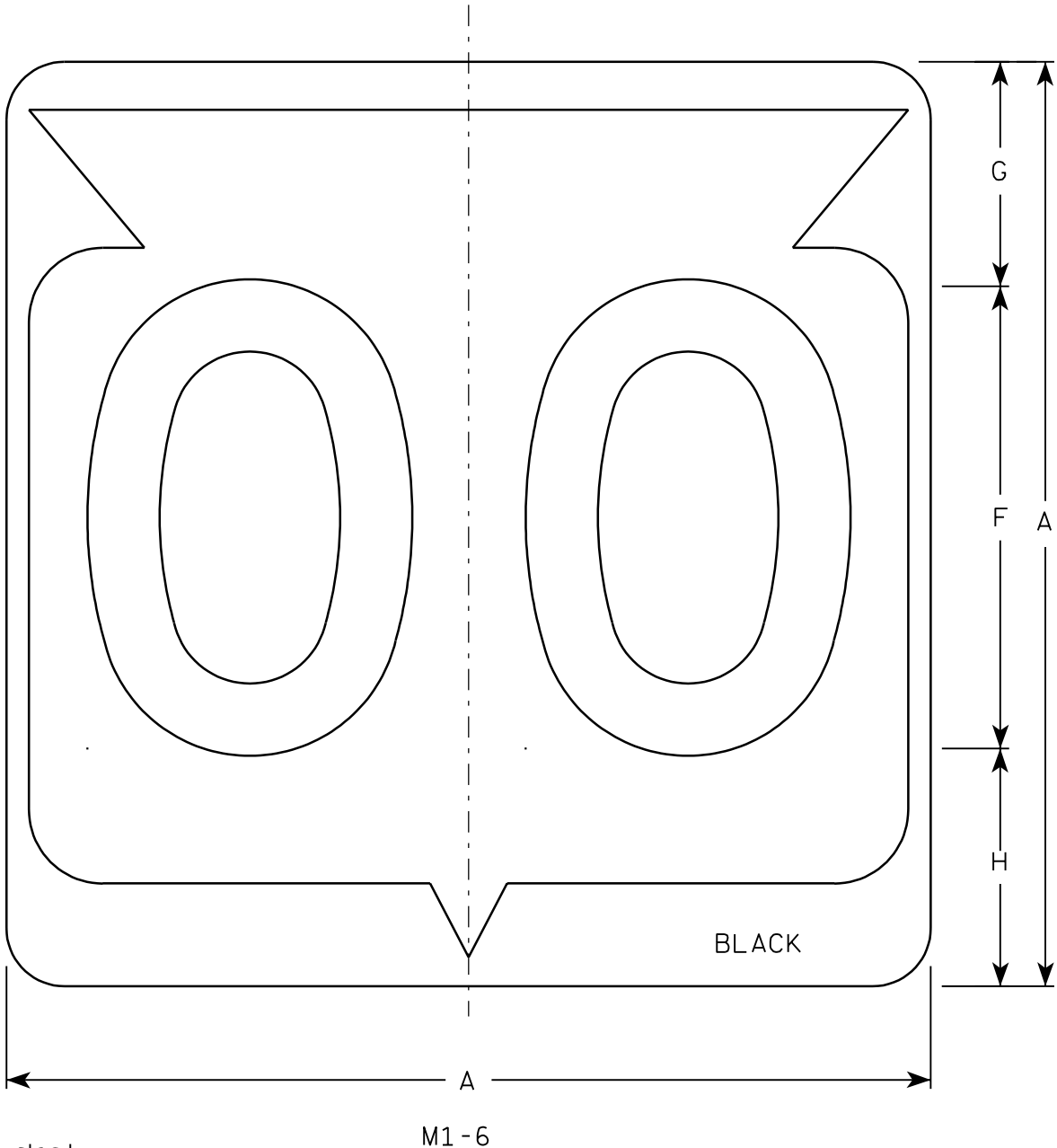
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 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	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 9/27/11	PLATE NO. M1-5A.8

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

7

7



Metric equivalent
for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 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	Z	Area sq. ft.	Area m ²
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	.36
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	.81
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	.81
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	.81

PROJECT NO:

HWY:

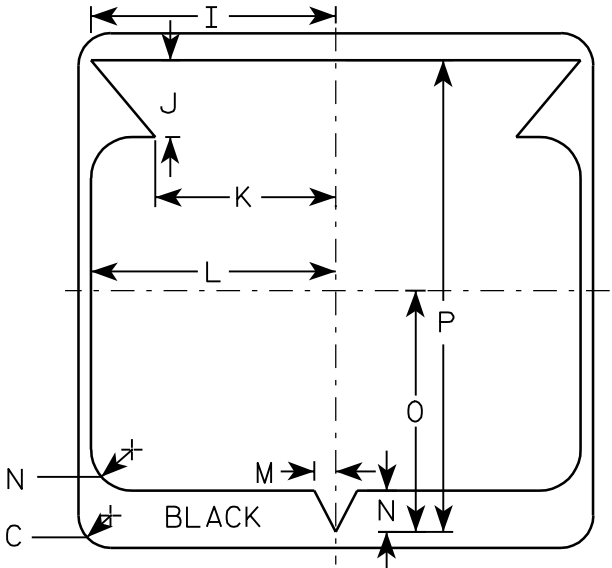
COUNTY:

SHEET NO:

E

NOTES

1. Sign is Type II - See Note 6 - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White & Black - See Note 6
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. Substitute appropriate Series numerals and
adjust spacing as per plate A10-1.
6. Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective



STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Chester J. Spang
for State Traffic Engineer

DATE 3/20/02 PLATE NO. M1-6.9

7

7

Metric equivalent
for this sign is:

SIZE	
1	
2	450 mm X 900 mm
3	
4	
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.	Area m ²
1																												
2	18	36	1 1/8	3/8		4	2	13 3/4	2 1/2	1 5/8	7 1/4	7	4 3/8	1 3/4	2 5/8	7/8	1/4	3/4	5 1/8	2 1/8							4.5	.41
3																												
4																												
5																												

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

FILE NAME : C:\Users\Projects\tr_stdplate\M186.DGN

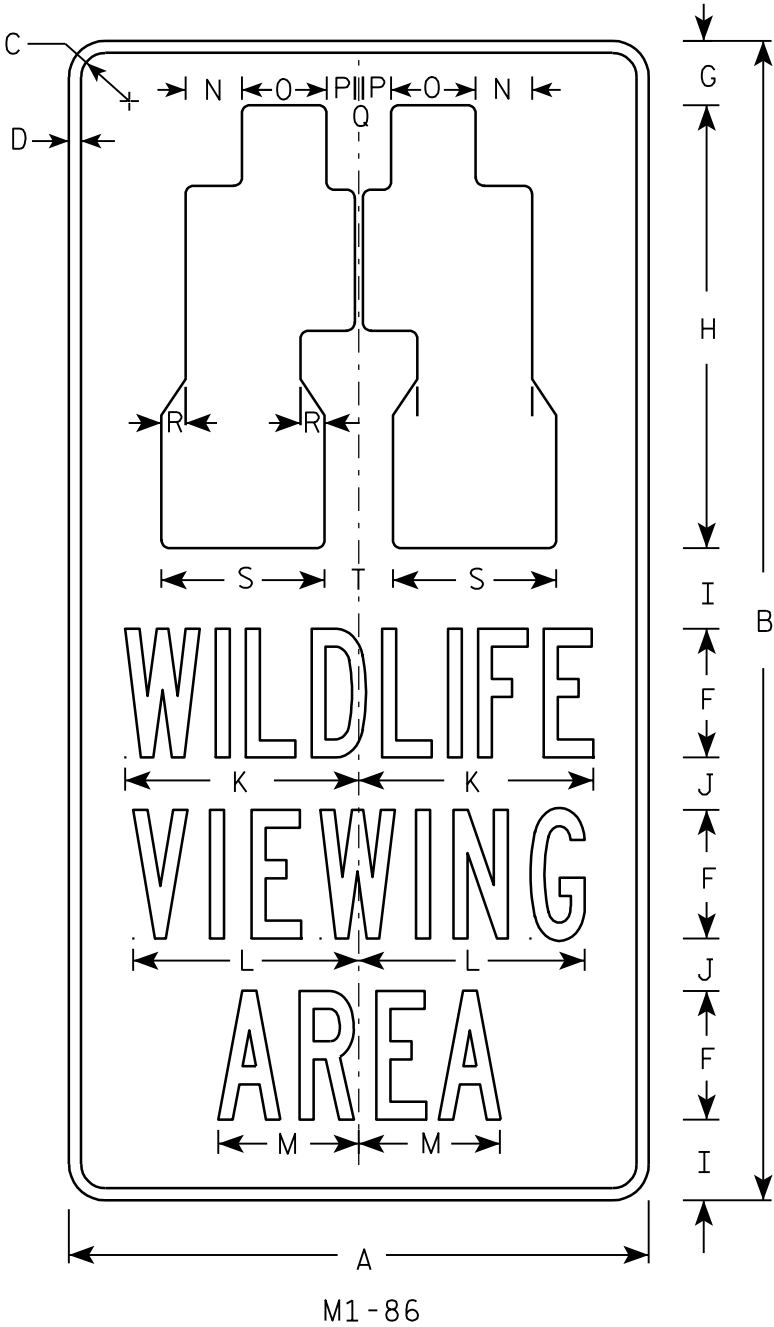
PLOT DATE : 13-OCT-2005 15:31

PLOT BY : DITJPH

PLOT NAME :

PLOT SCALE : 5.960833:1.000000

WISDOT/CADDs SHEET 42



NOTES

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

STANDARD SIGN
M1-86

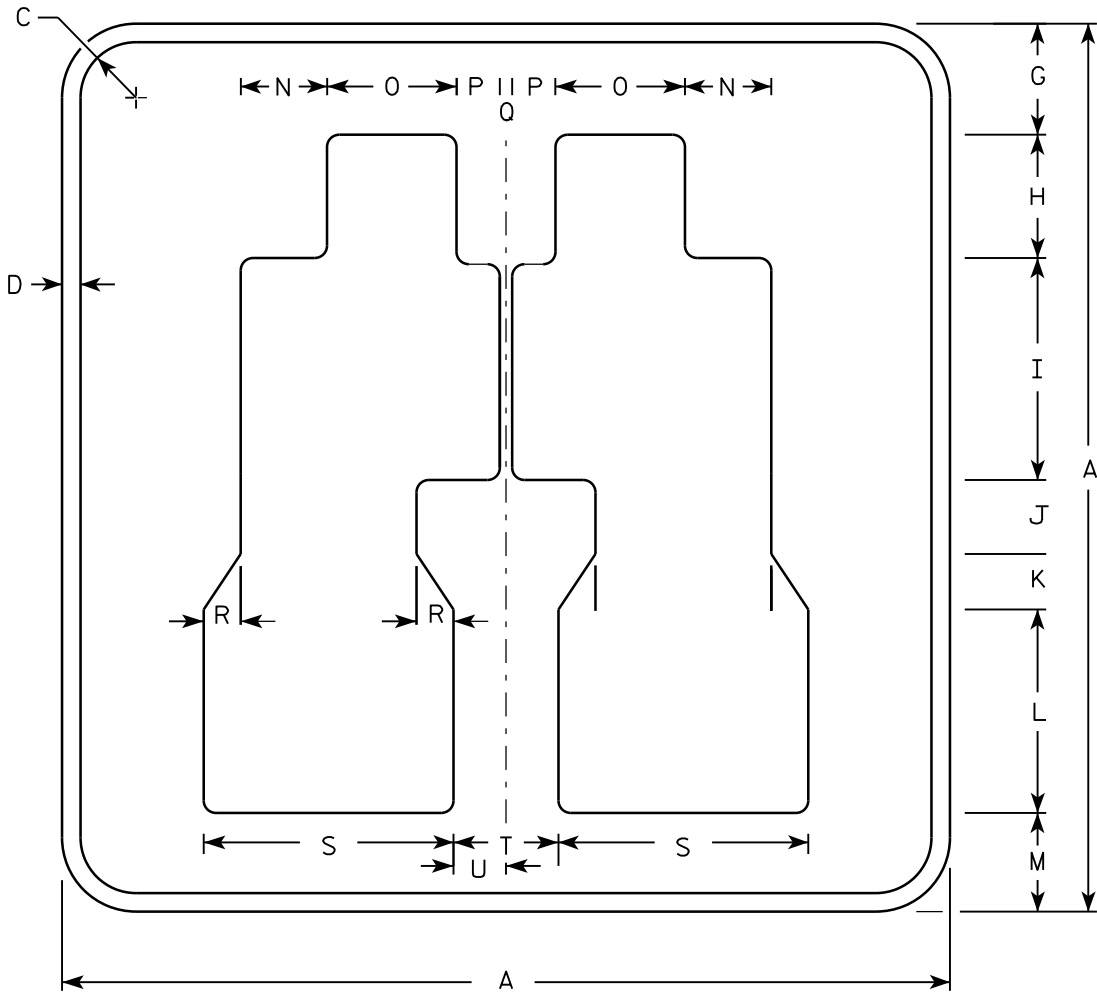
WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Chester J. Spang
for State Traffic Engineer

DATE 1/30/02 PLATE NO. M1-86.3

NOTES

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



M1-88

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	8		1 1/8	3/8			1	1 1/8	2	3/4	1/2	1 7/8	7/8	3/4	1 1/8	3/8	1/8	3/8	2 1/4	1							.44
2	18		1 1/8	3/8			2 1/4	2 1/2	4 1/2	1 1/2	1 1/8	4 1/8	2	1 3/4	2 5/8	7/8	1/4	3/4	5 1/8	2 1/8	1 1/16						2.25
3																											
4																											
5																											

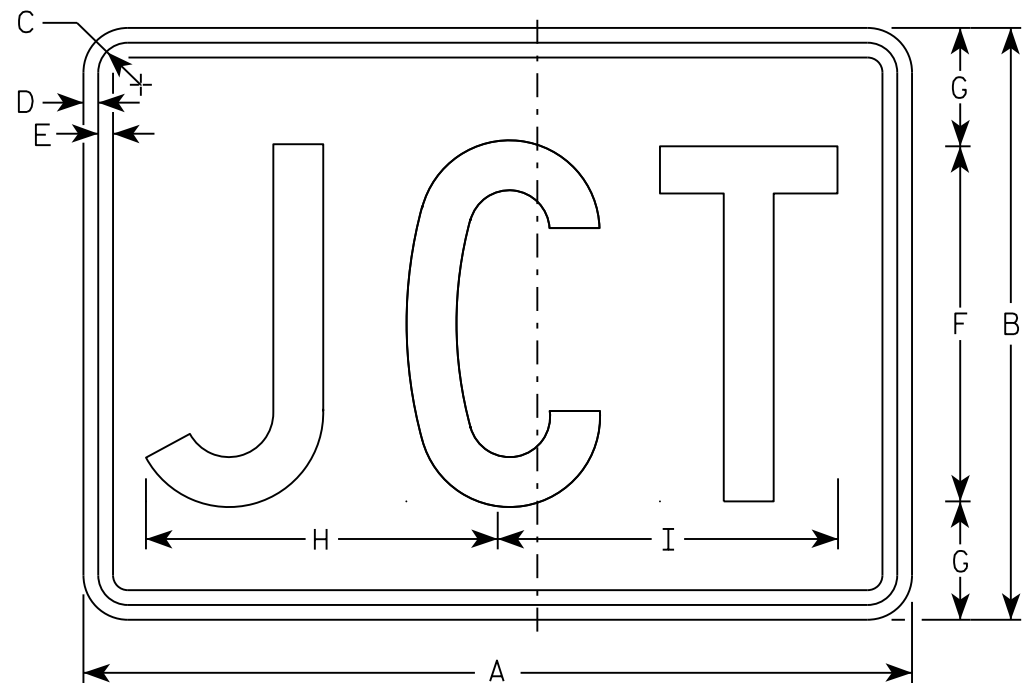
STANDARD SIGN

M1-88

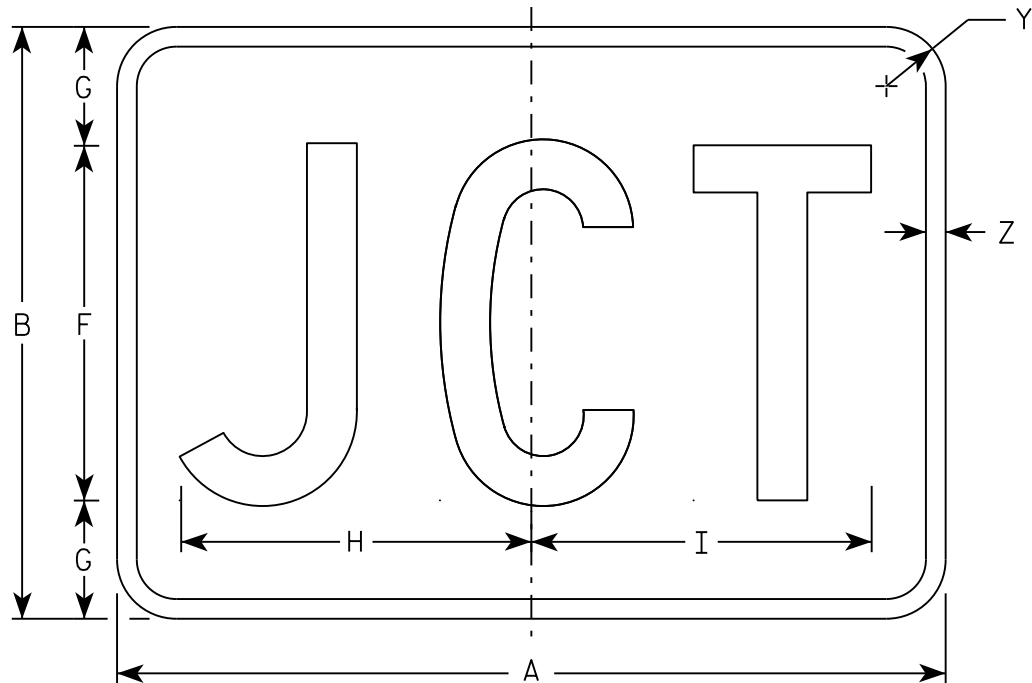
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/16/15 PLATE NO. M1-88.3



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

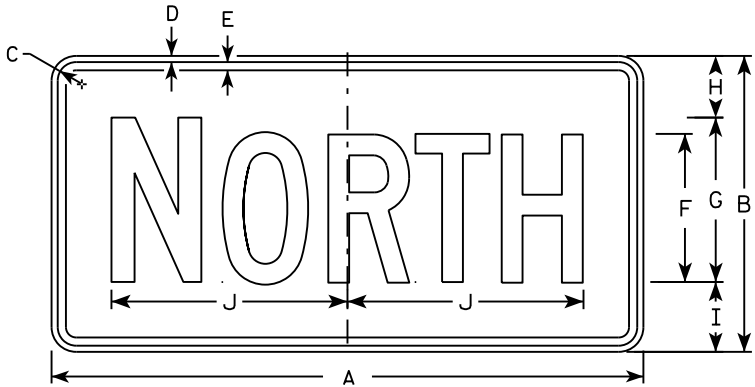
APPROVED

Matthew R. Rauch

For State Traffic Engineer

DATE 10/15/15

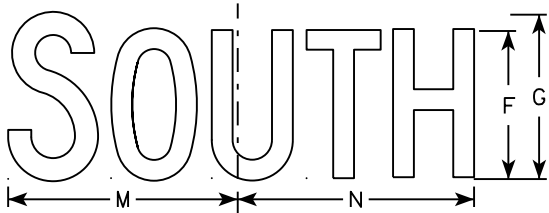
PLATE NO. M2-1.12



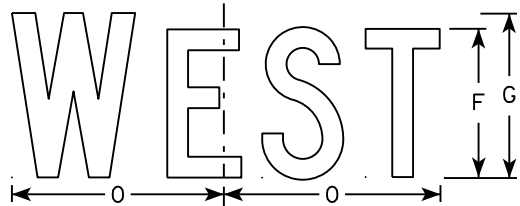
M3-1
MM3-1
MP3-1



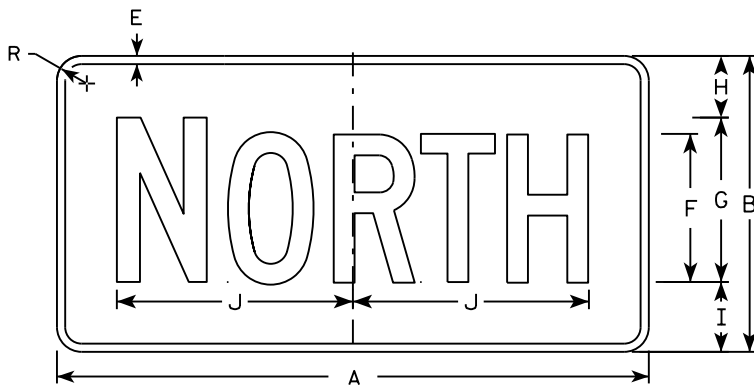
M3-2
MM3-2
MP3-2



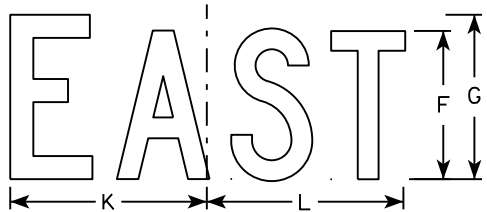
M3-3
MM3-3
MP3-3



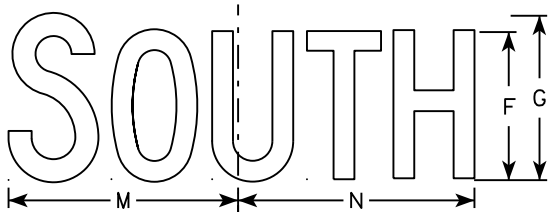
M3-4
MM3-4
MP3-4



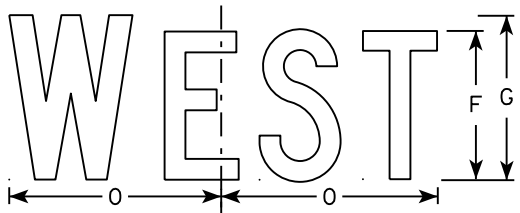
MB3-1
MK3-1
MN3-1



MB3-2
MK3-2
MN3-2



MB3-3
MK3-3
MN3-3



MB3-4
MK3-4
MN3-4

NOTES

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

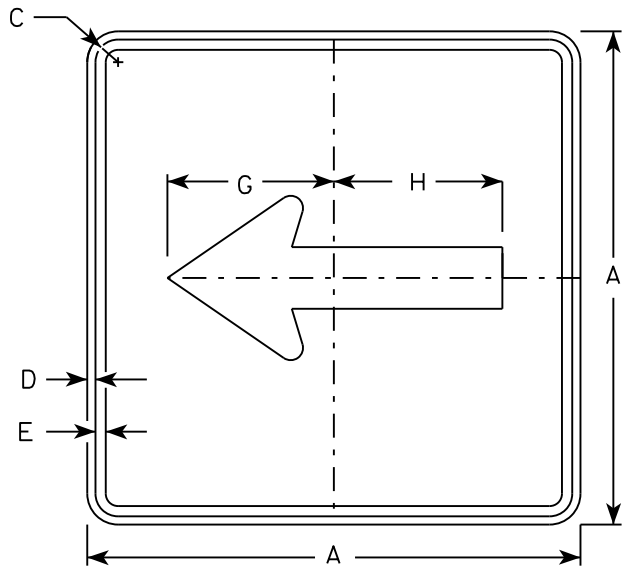
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8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

STANDARD SIGNS
M3-1 thru M3-4
SERIES

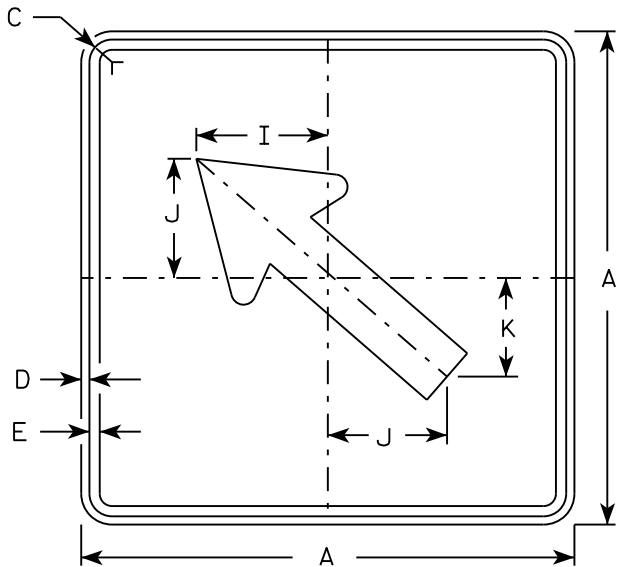
WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

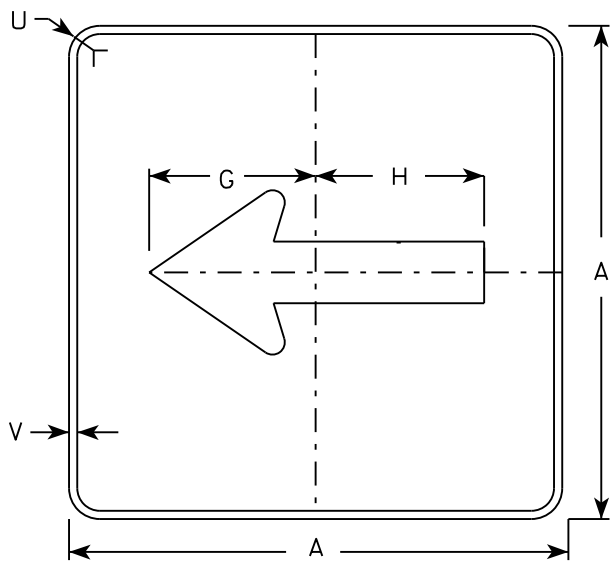
DATE 10/15/15 PLATE NO. M3-1.14



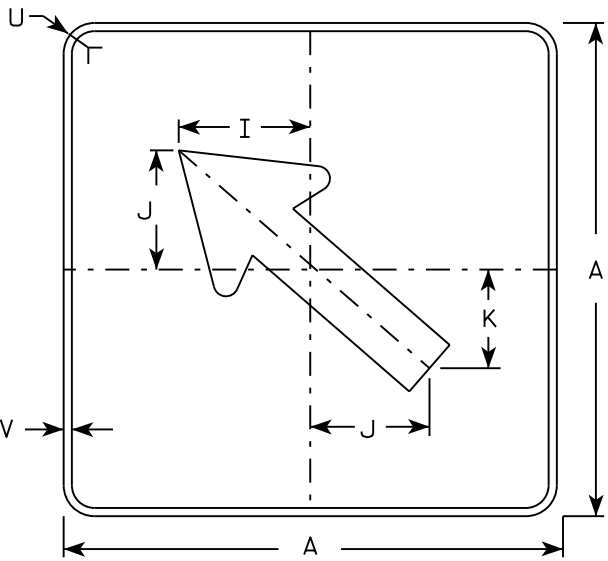
M6 - 1
MM6 - 1
M06 - 1
MP6 - 1



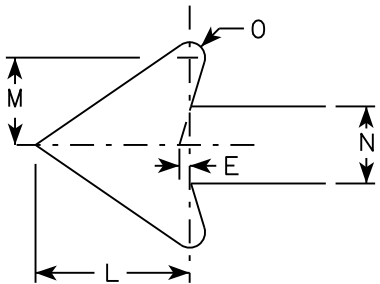
M6 - 2
MM6 - 2
M06 - 2
MP6 - 2



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

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

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

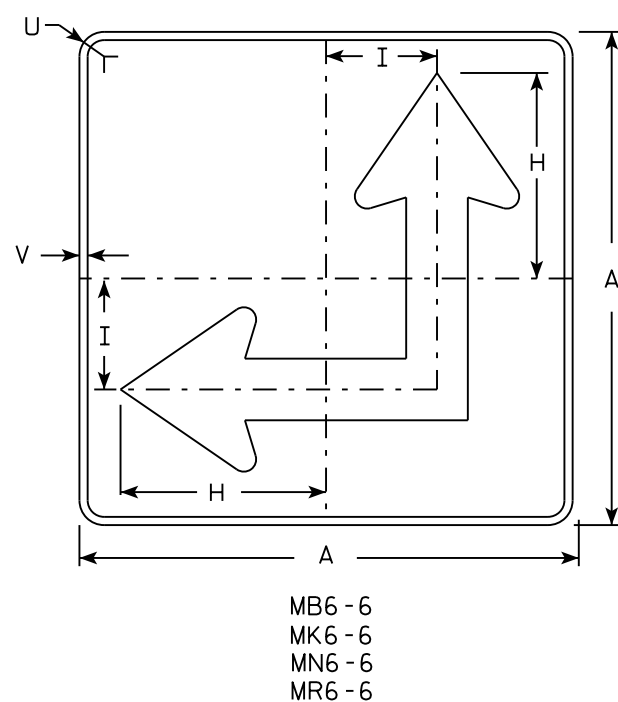
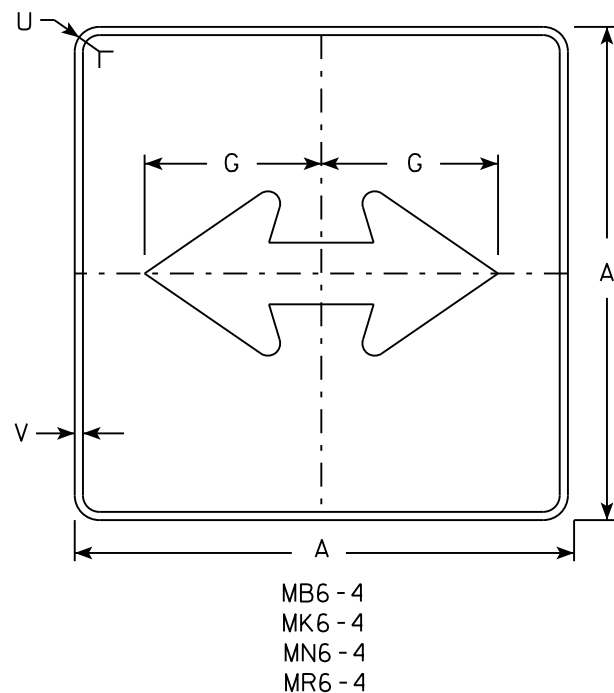
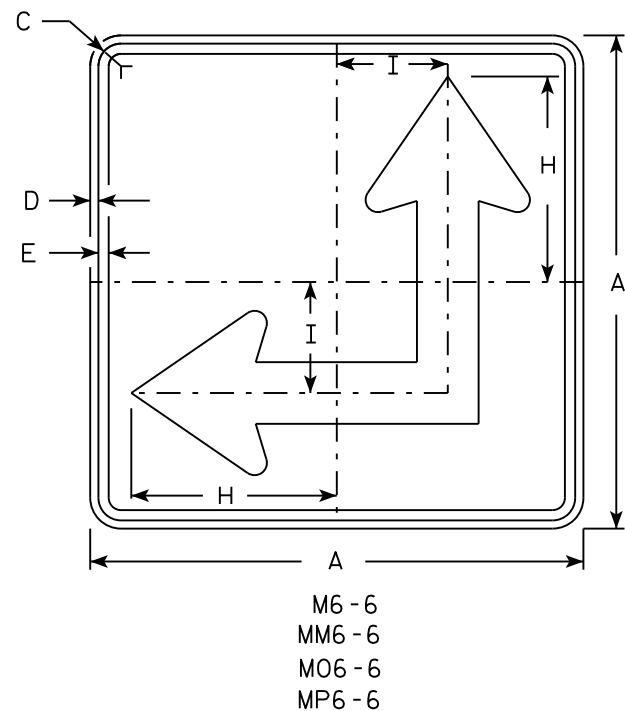
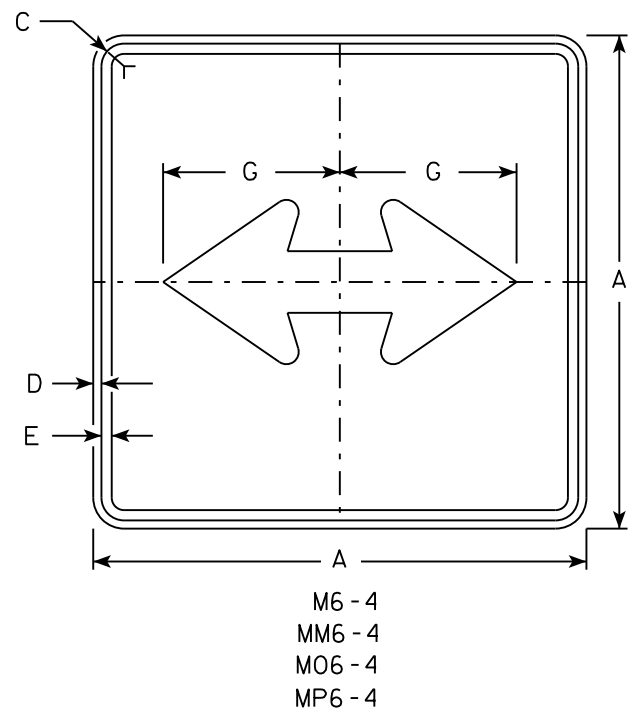
E

STANDARD SIGN
M6 - 1 & M6 - 2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

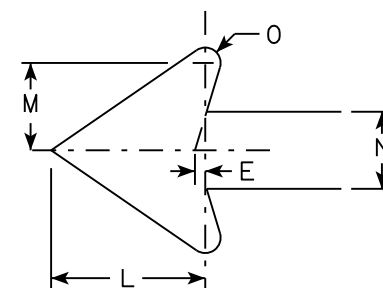
APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M6-1.15



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.
- M6-4 and M6-6 Background - White
Message - Black
MB6-4 and MB6-6 Background - Blue
Message - White
MK6-4 and MK6-6 Background - Green
Message - White
MM6-4 and MM6-6 Background - White
Message - Green
MN6-4 and MN6-6 Background - Brown
Message - White
M06-4 and M06-6 Background - Orange - Type F Reflective
Message - Black
MP6-4 and MP6-6 Background - White
Message - Blue
MR6-4 and MR6-6 Background - Brown
Message - Yellow
- M6-6R same as M6-6L except arrow points ahead and 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 1/2	8 3/4	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	12 1/2	6 3/4			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	12 1/2	6 3/4			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	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

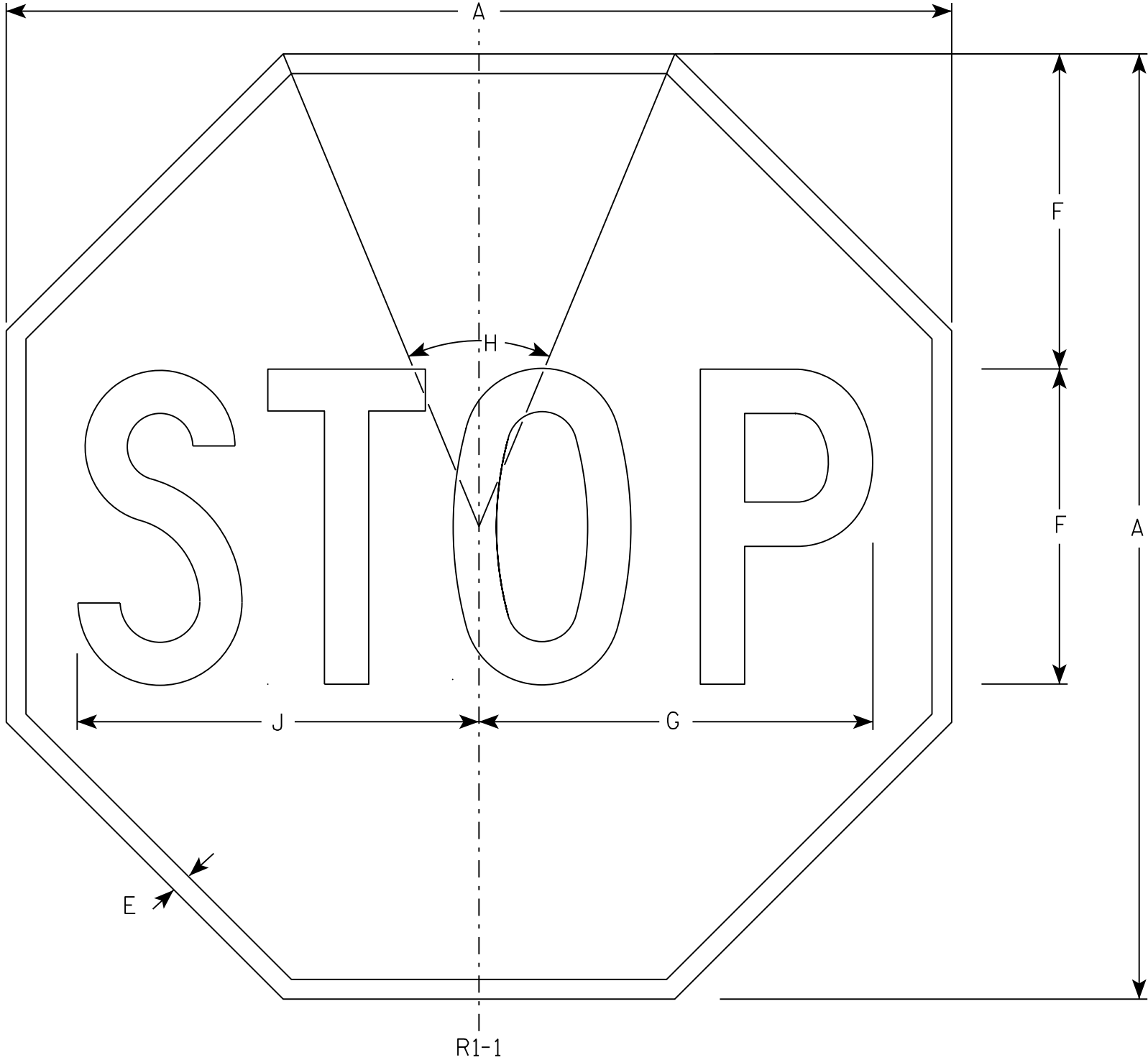
PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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STANDARD SIGN
M6 - 4 & M6 - 6
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M6-4.10



NOTES

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

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

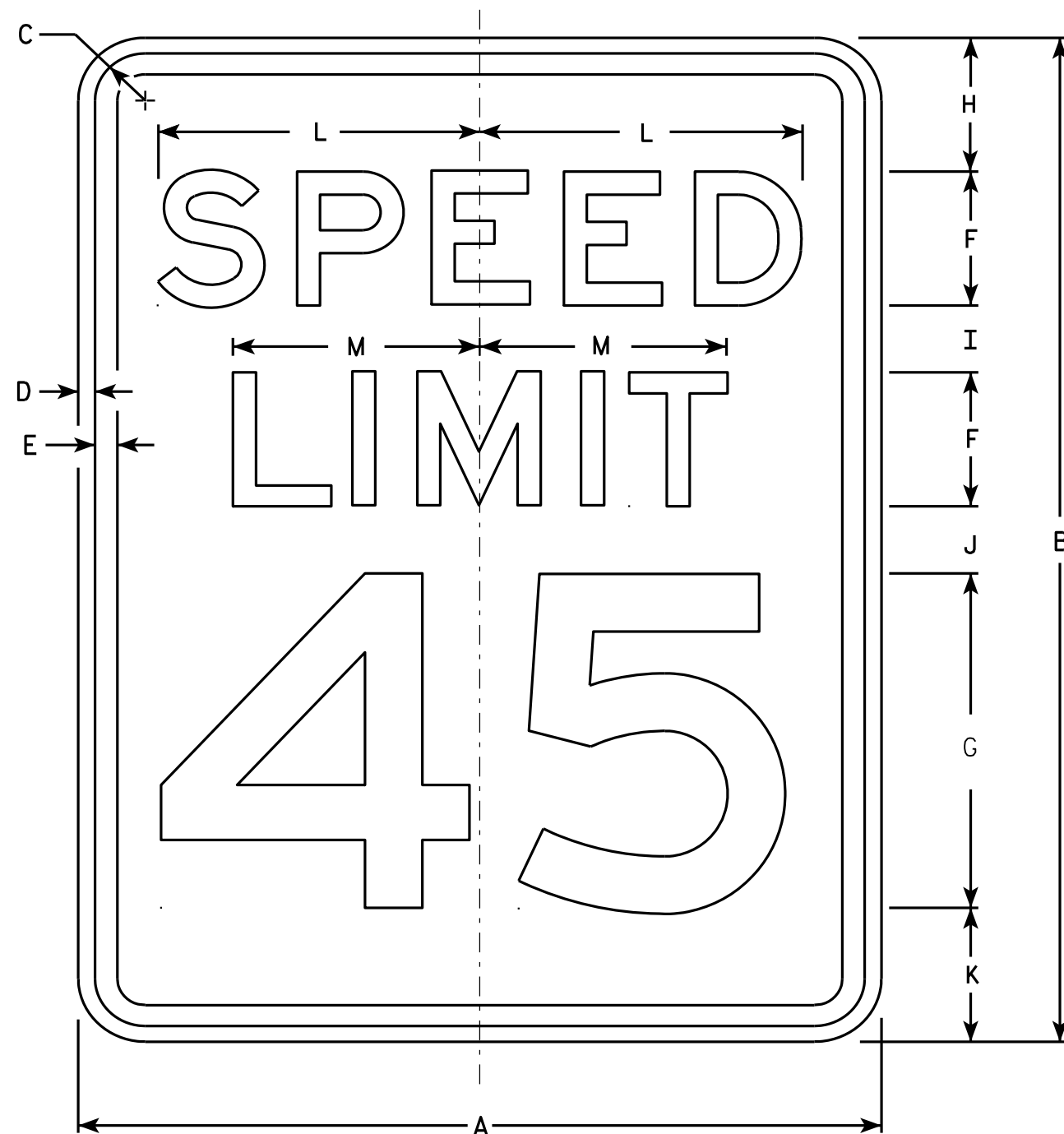
STANDARD SIGN

R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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



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.

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

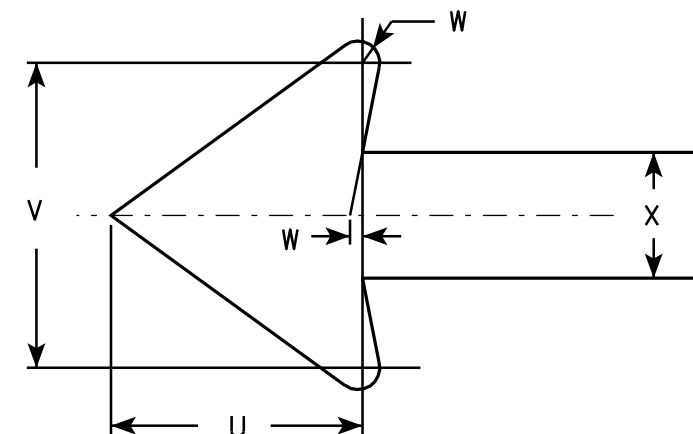
PROJECT NO: HWY: COUNTY: SHEET NO: E



R7-1

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 - Red
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, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
R7-1L (left arrow)
R7-1R (right arrow)



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	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

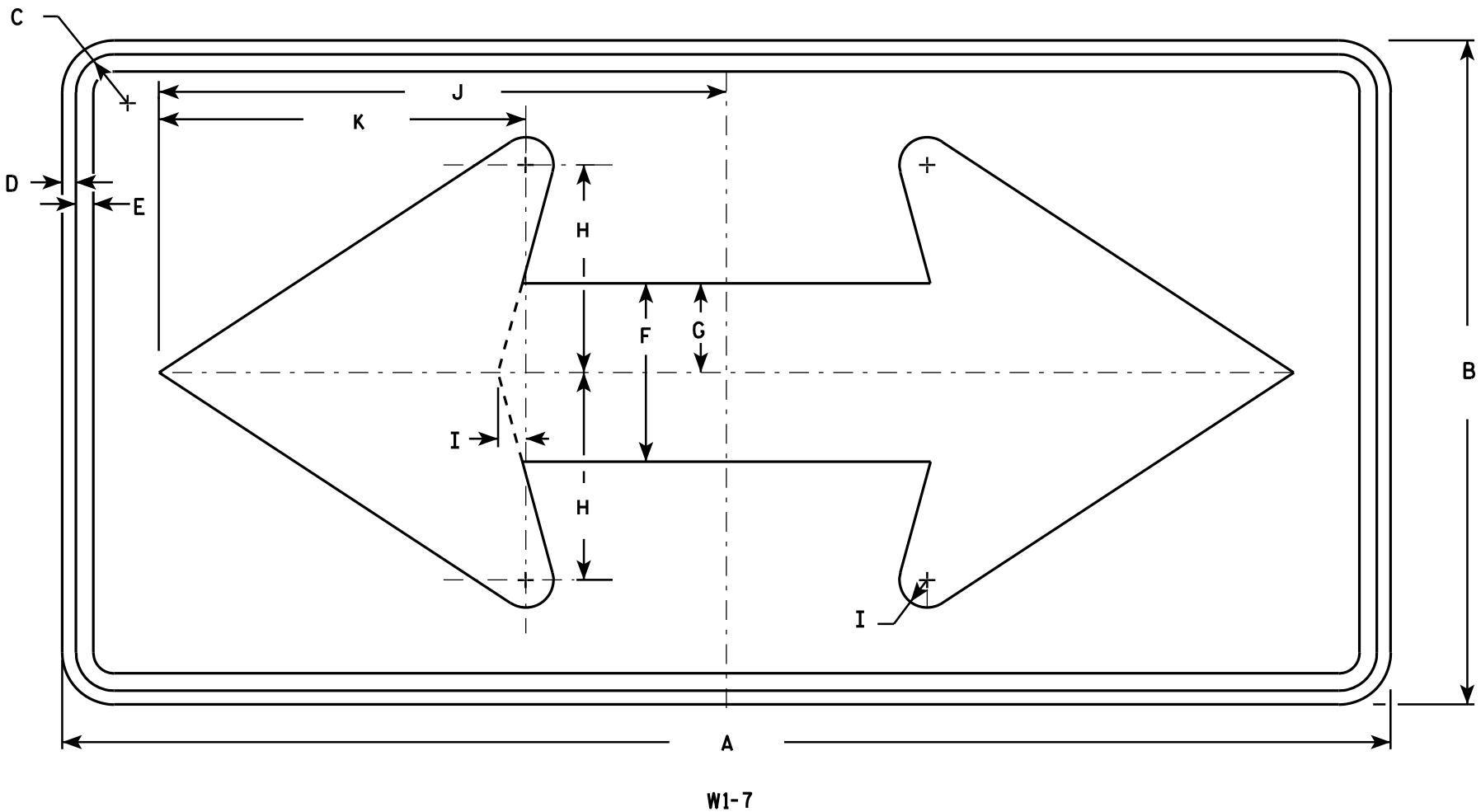
STANDARD SIGN R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-1.9

PROJECT NO: HWY: COUNTY: SHEET NO: 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 - 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	36	18	1 1/8	3/8	1/2	5	2 1/2	5 3/4	3/4	15 5/8	10 1/8																4.5
2S	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
2M	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
3	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
4	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
5	96	48	2 1/4	3/4	1	13	6 1/2	15	2	41	26 1/2																32.0

STANDARD SIGN
W1 - 7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-7.7

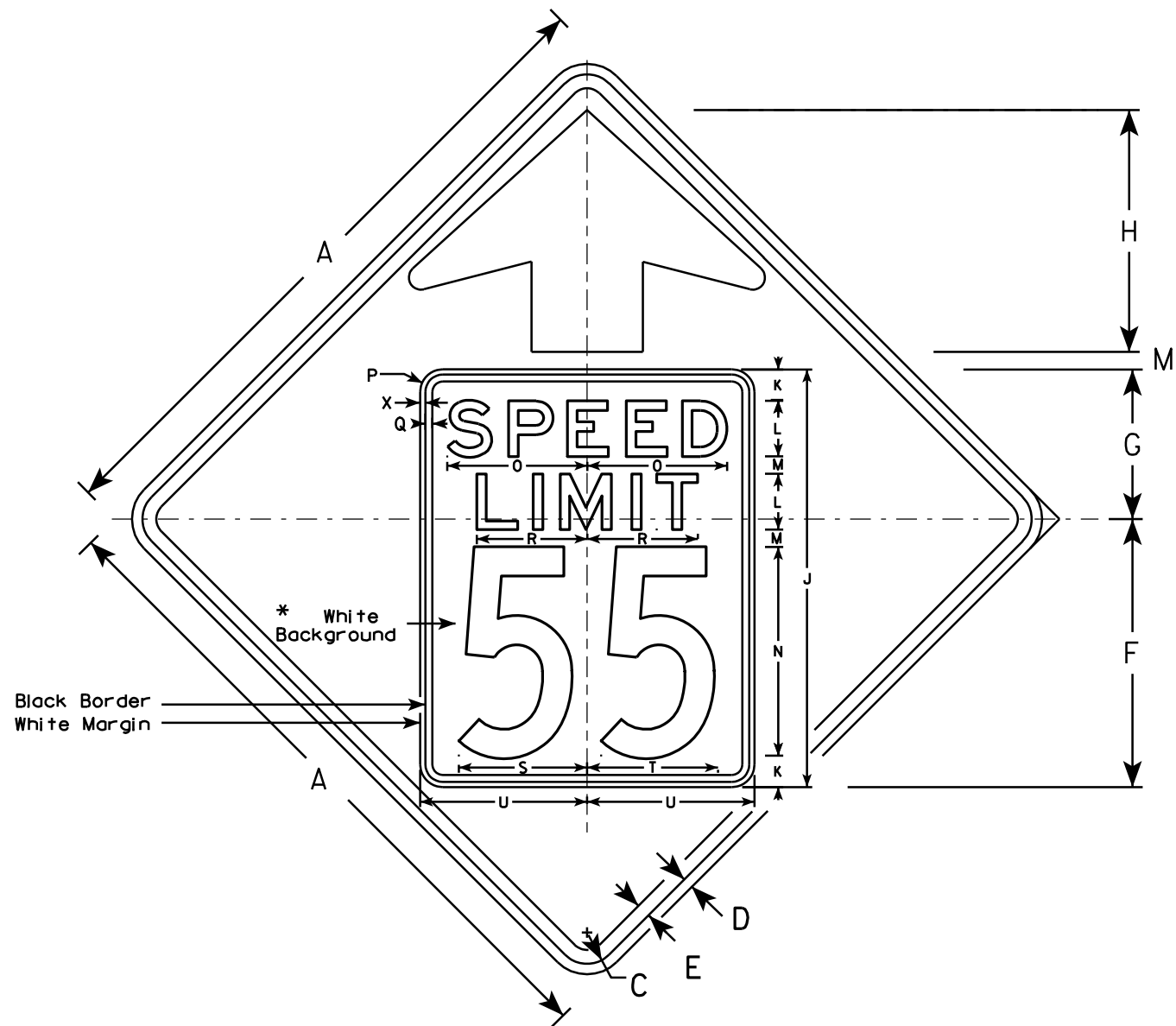
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

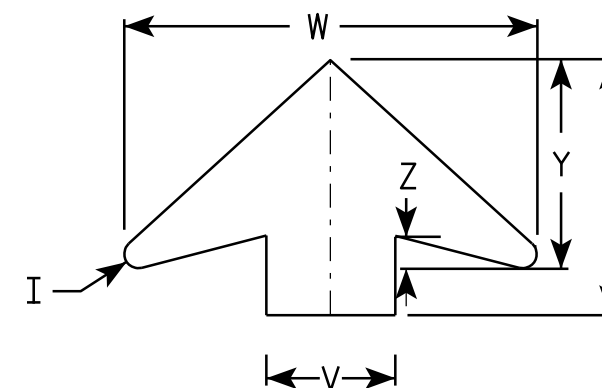


W3-5

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 - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36		1 5⁄8	5⁄8	3⁄4	14 1⁄2	9 1⁄2	11 1⁄2	5⁄8	24	2	3	1	12	7 1⁄8	1 1⁄2	3⁄8	5 3⁄4	7 1⁄4	7 1⁄8	9	6	19 1⁄4	3⁄8	9 3⁄4	1 5⁄8	9.0
2M	36		1 5⁄8	5⁄8	3⁄4	14 1⁄2	9 1⁄2	11 1⁄2	5⁄8	24	2	3	1	12	7 1⁄8	1 1⁄2	3⁄8	5 3⁄4	7 1⁄4	7 1⁄8	9	6	19 1⁄4	3⁄8	9 3⁄4	1 5⁄8	9.0
3	36		1 5⁄8	5⁄8	3⁄4	14 1⁄2	9 1⁄2	11 1⁄2	5⁄8	24	2	3	1	12	7 1⁄8	1 1⁄2	3⁄8	5 3⁄4	7 1⁄4	7 1⁄8	9	6	19 1⁄4	3⁄8	9 3⁄4	1 5⁄8	9.0
4	48		2 1⁄4	3⁄4	1	19 1⁄4	10 3⁄4	17 3⁄8	7⁄8	30	2 1⁄4	4	1 1⁄4	15	10	1 5⁄8	1⁄2	8	9 1⁄4	9 3⁄8	12	8	25 5⁄8	3⁄8	13	2	16.0
5	48		2 1⁄4	3⁄4	1	19 1⁄4	10 3⁄4	17 3⁄8	7⁄8	30	2 1⁄4	4	1 1⁄4	15	10	1 5⁄8	1⁄2	8	9 1⁄4	9 3⁄8	12	8	25 5⁄8	3⁄8	13	2	16.0

STANDARD SIGN

W3-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

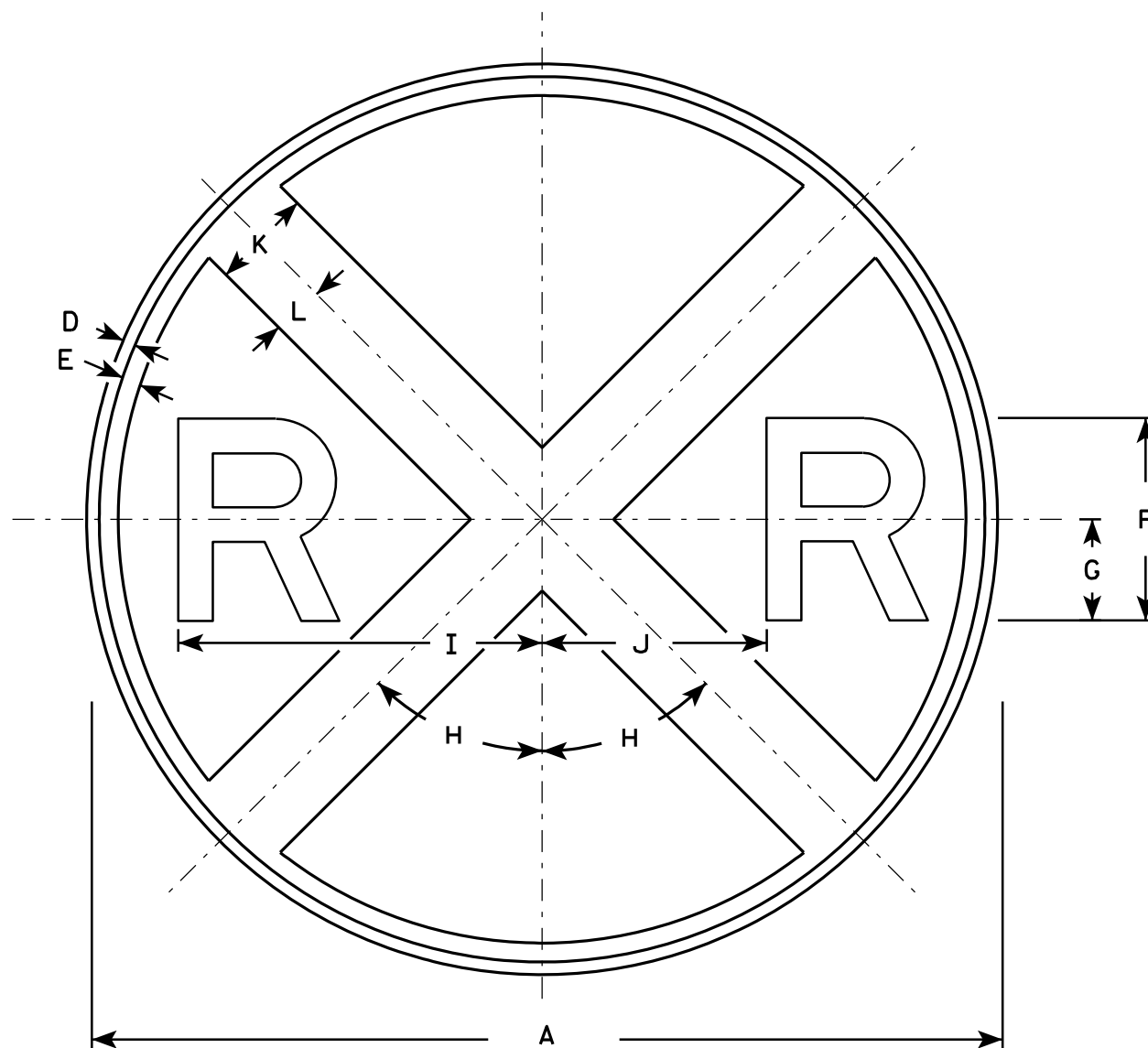
DATE 5/29/12

PLATE NO. W3-5.5

PROJECT NO:

SHEET NO:

E



W10-1

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 - E

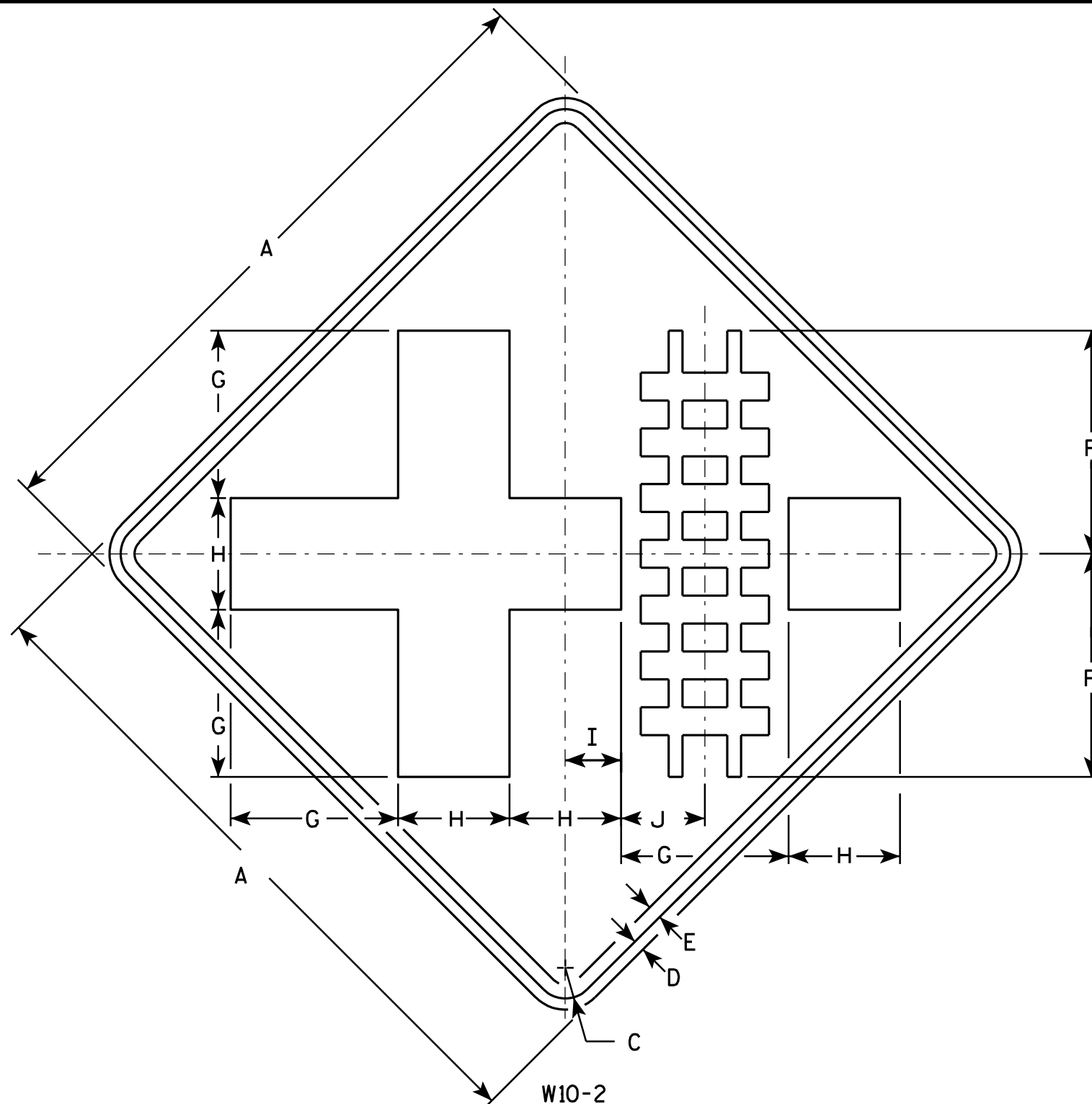
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30			$\frac{3}{8}$	$\frac{5}{8}$	7	$3\frac{1}{2}$	45°	$12\frac{3}{8}$	$7\frac{1}{8}$	3	$1\frac{1}{2}$															4.91
2S	36			$\frac{5}{8}$	$\frac{3}{4}$	8	4	45°	$14\frac{3}{8}$	$8\frac{5}{8}$	4	2															7.07
2M	36			$\frac{5}{8}$	$\frac{3}{4}$	8	4	45°	$14\frac{3}{8}$	$8\frac{5}{8}$	4	2															7.07
3																											
4	48			$\frac{3}{4}$	$1\frac{1}{4}$	10	5	45°	$18\frac{3}{8}$	$11\frac{5}{8}$	5	$2\frac{1}{2}$															12.57
5																											

STANDARD SIGN W10-1

WISCONSIN DEPT OF TRANSPORTATION

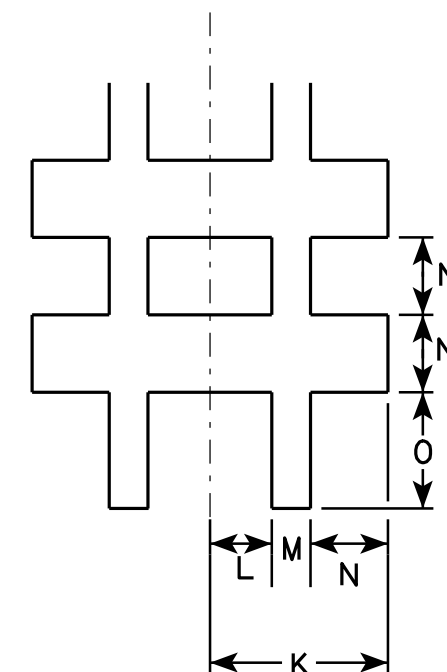
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 3/13/13 PLATE NO. W10-1.8

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: **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 - 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	10	7 1/2	5	2 1/2	3 3/4	2 7/8	1	5/8	1 1/4	1 7/8												6.25
2S	36		1 5/8	5/8	3/4	12	9	6	3	4 1/2	3 3/8	1 1/8	3/4	1 1/2	2 1/4												9.0
2M	36		1 5/8	5/8	3/4	12	9	6	3	4 1/2	3 3/8	1 1/8	3/4	1 1/2	2 1/4												9.0
3	36		1 5/8	5/8	3/4	12	9	6	3	4 1/2	3 3/8	1 1/8	3/4	1 1/2	2 1/4												9.0
4	48		2 1/4	3/4	1	16	12	8	4	6	4 1/2	1 1/2	1	2	3												16.0
5																											

STANDARD SIGN W10-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/13/13 PLATE NO. W10-2.8

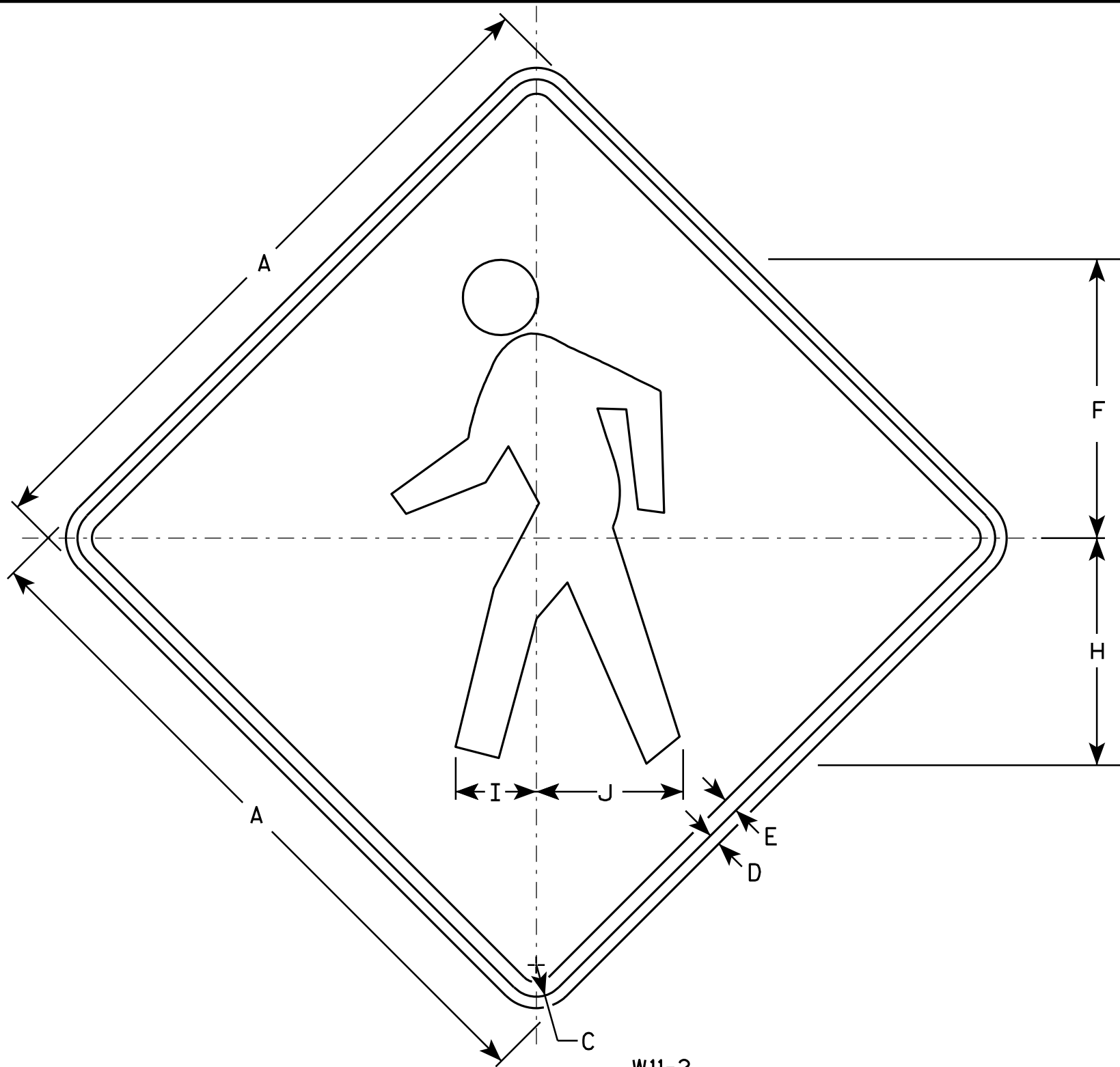
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



W11-2

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	24		1 1/8	3/8	1/2	9 3/4		7 7/8	2 7/8	5 1/8																	4.0
2S	30		1 3/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25
2M	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
3	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
4	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

STANDARD SIGN
W11-2

WISCONSIN DEPT OF TRANSPORTATION

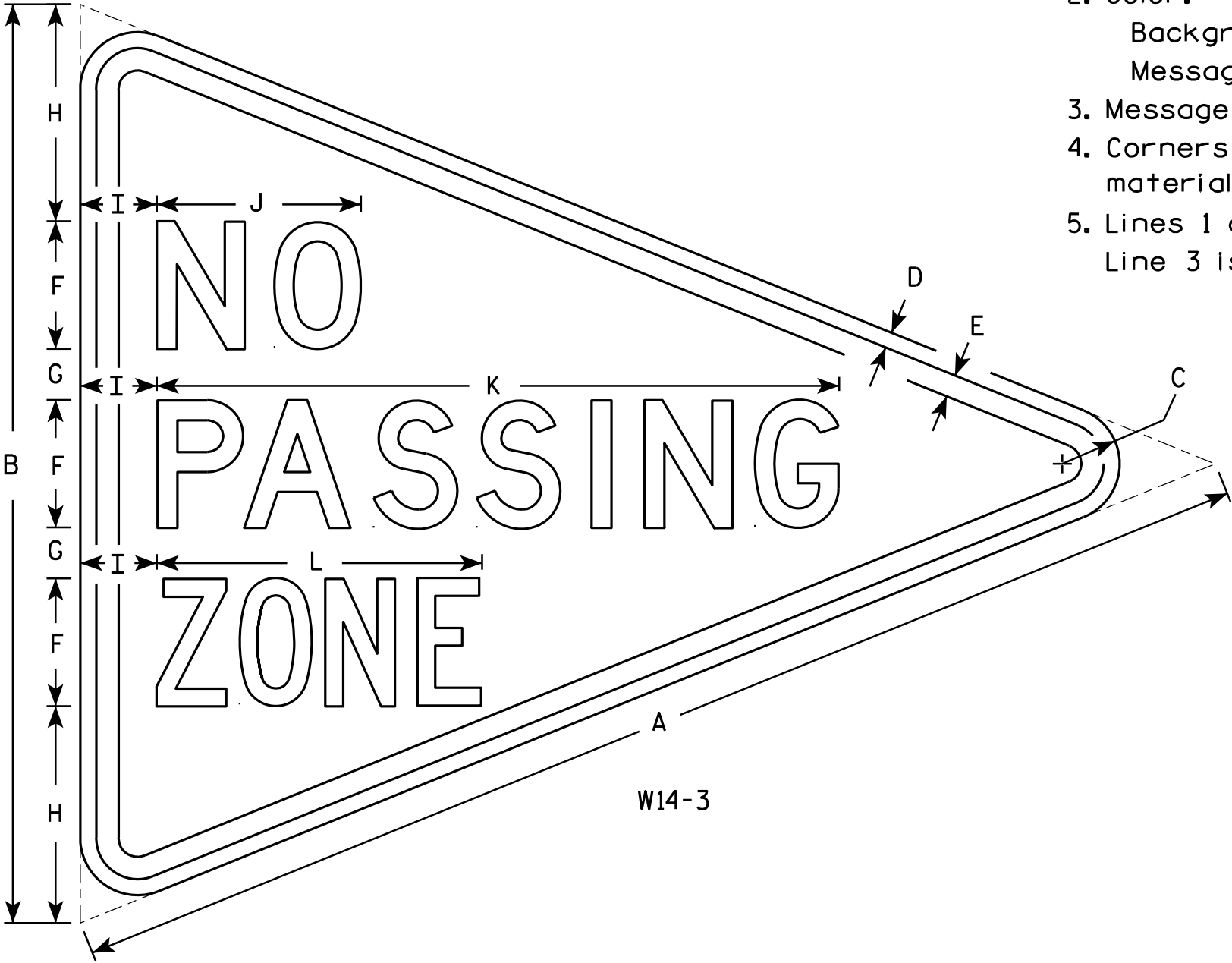
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W11-2.7

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	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. Message Series - See note 5
- 4. Corners and borders shall be rounded on all base materials for this sign.
- 5. Lines 1 and 2 are Series D.
Line 3 is series C.



W14-3

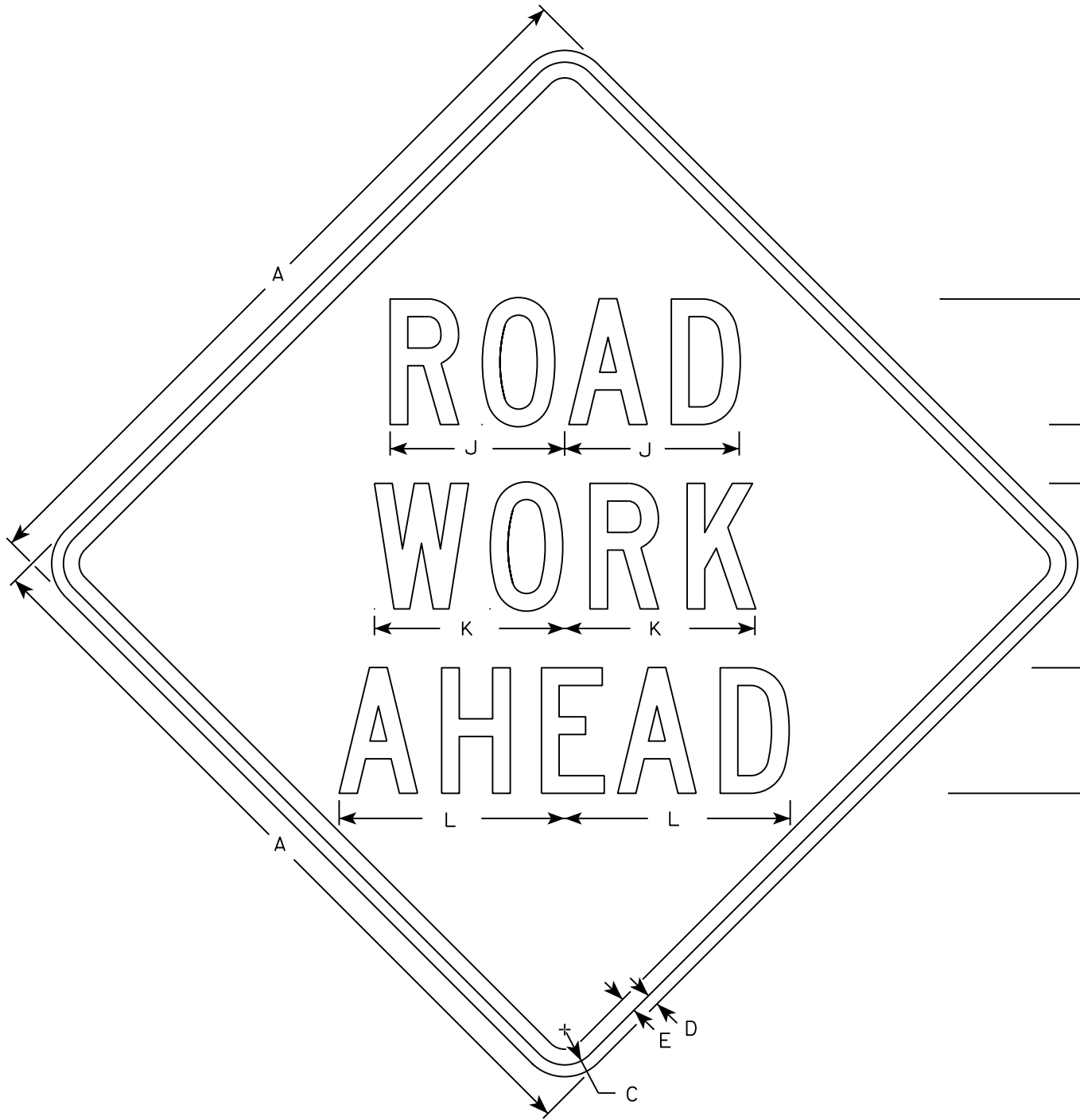
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
2M	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
3	64	48	3	3/4	1 1/4	6	3	12	4	10 3/4	33 5/8	16 1/2															10.7
4																											
5																											

STANDARD SIGN
W14-3

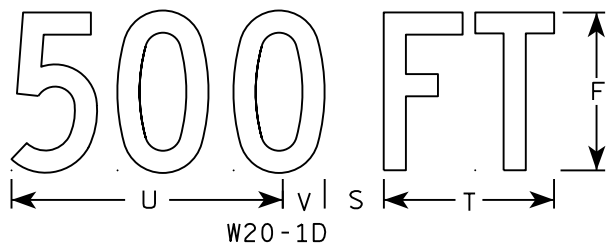
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

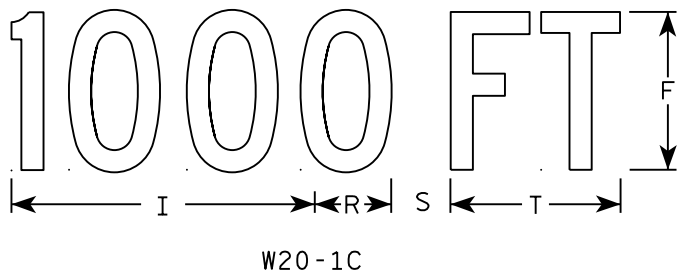
DATE 6/7/10 PLATE NO. W14-3.9



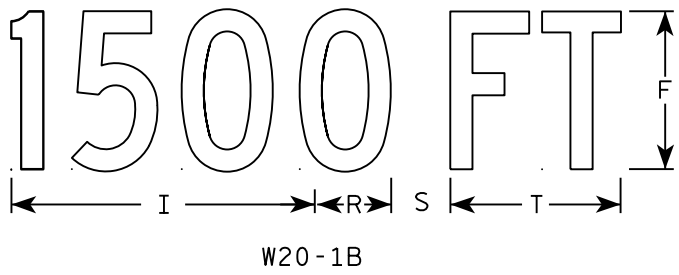
W20-1A



W20-1D



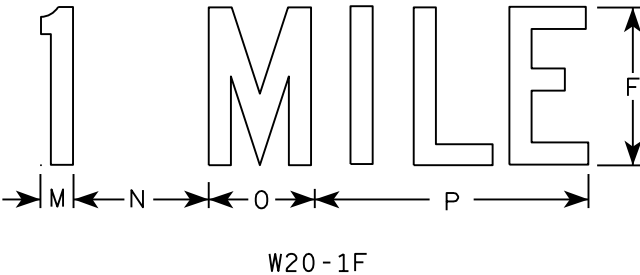
W20-1C



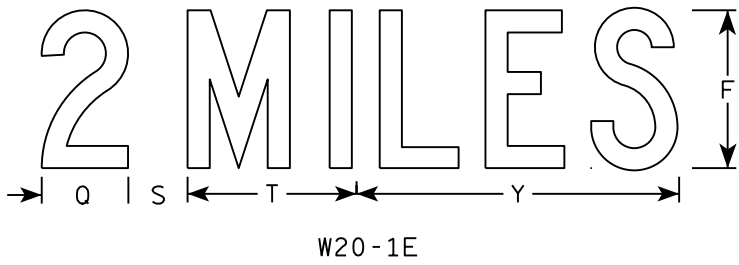
W20-1B



W20-1G



W20-1F



W20-1E

NOTES

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

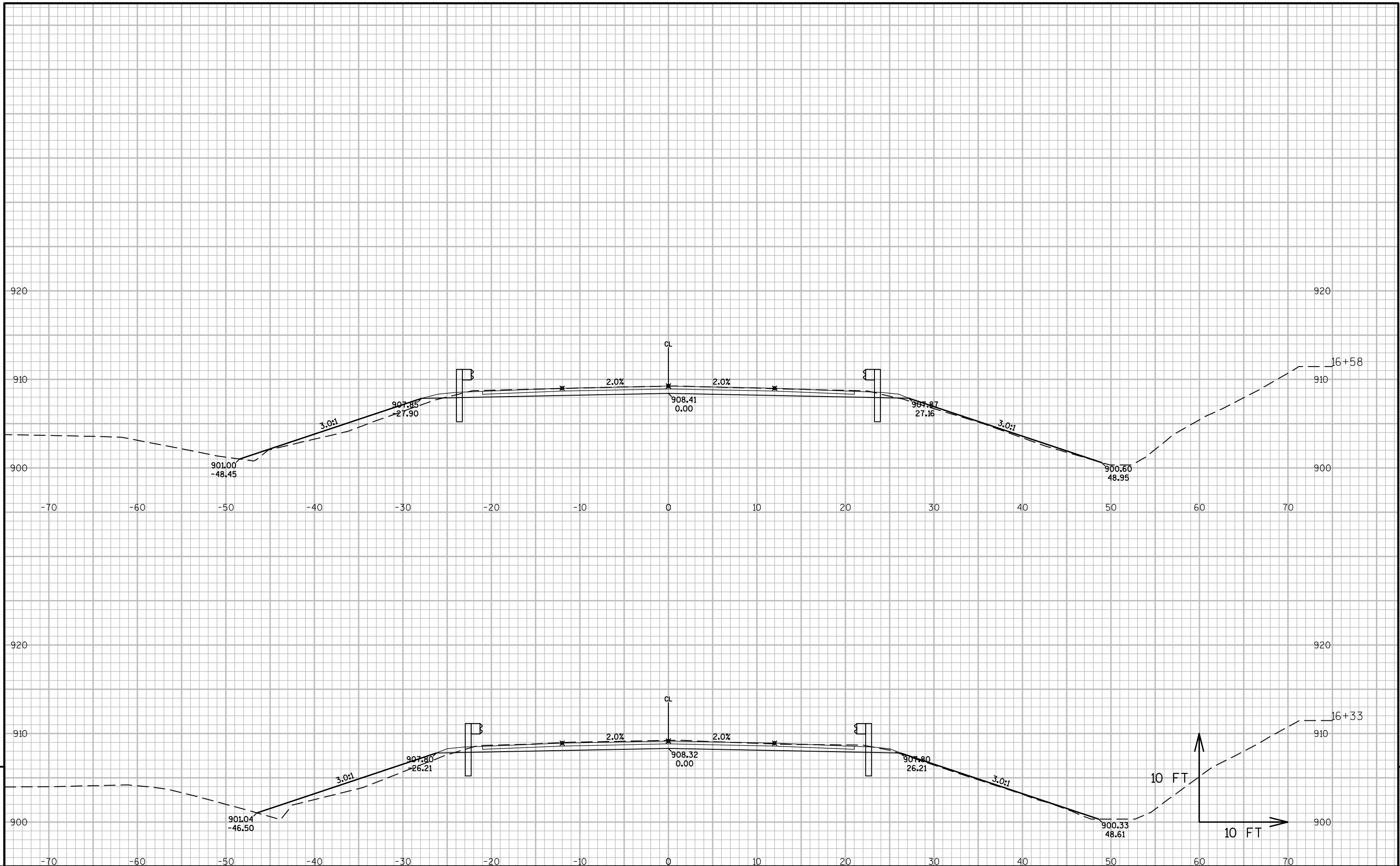
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13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

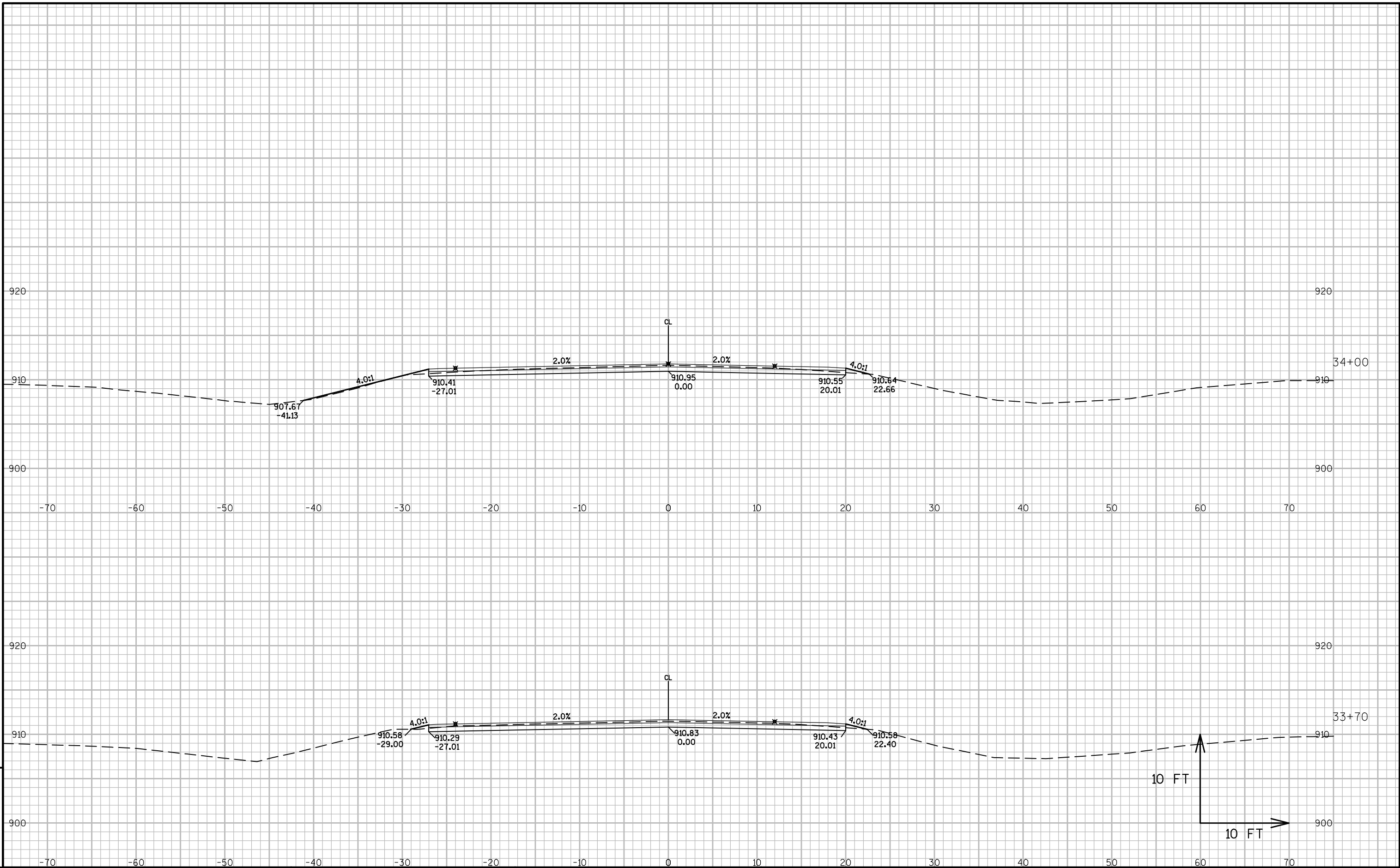
STANDARD SIGN
W20-1A, B, C, D, F & G

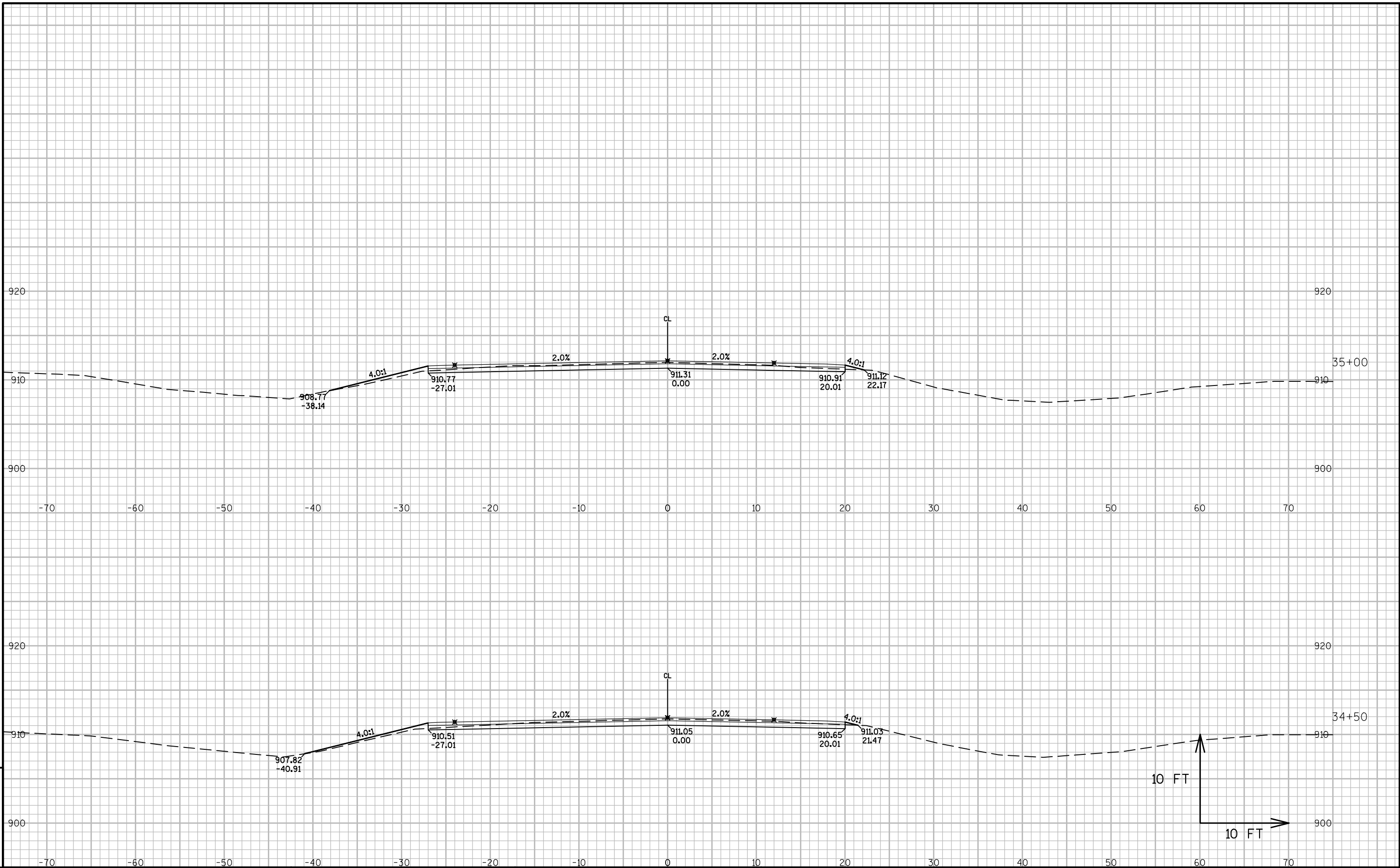
WISCONSIN DEPT OF TRANSPORTATION

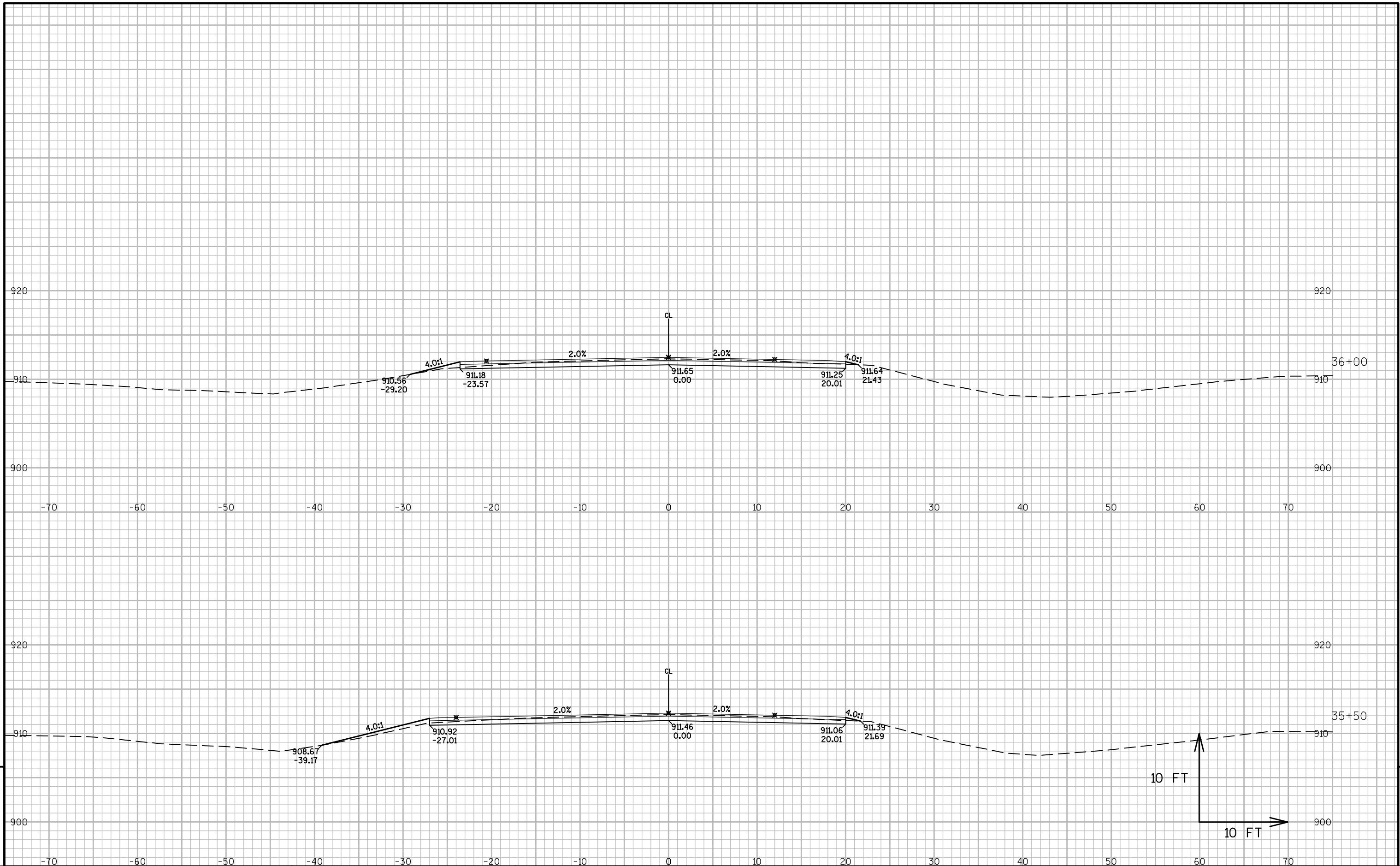
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

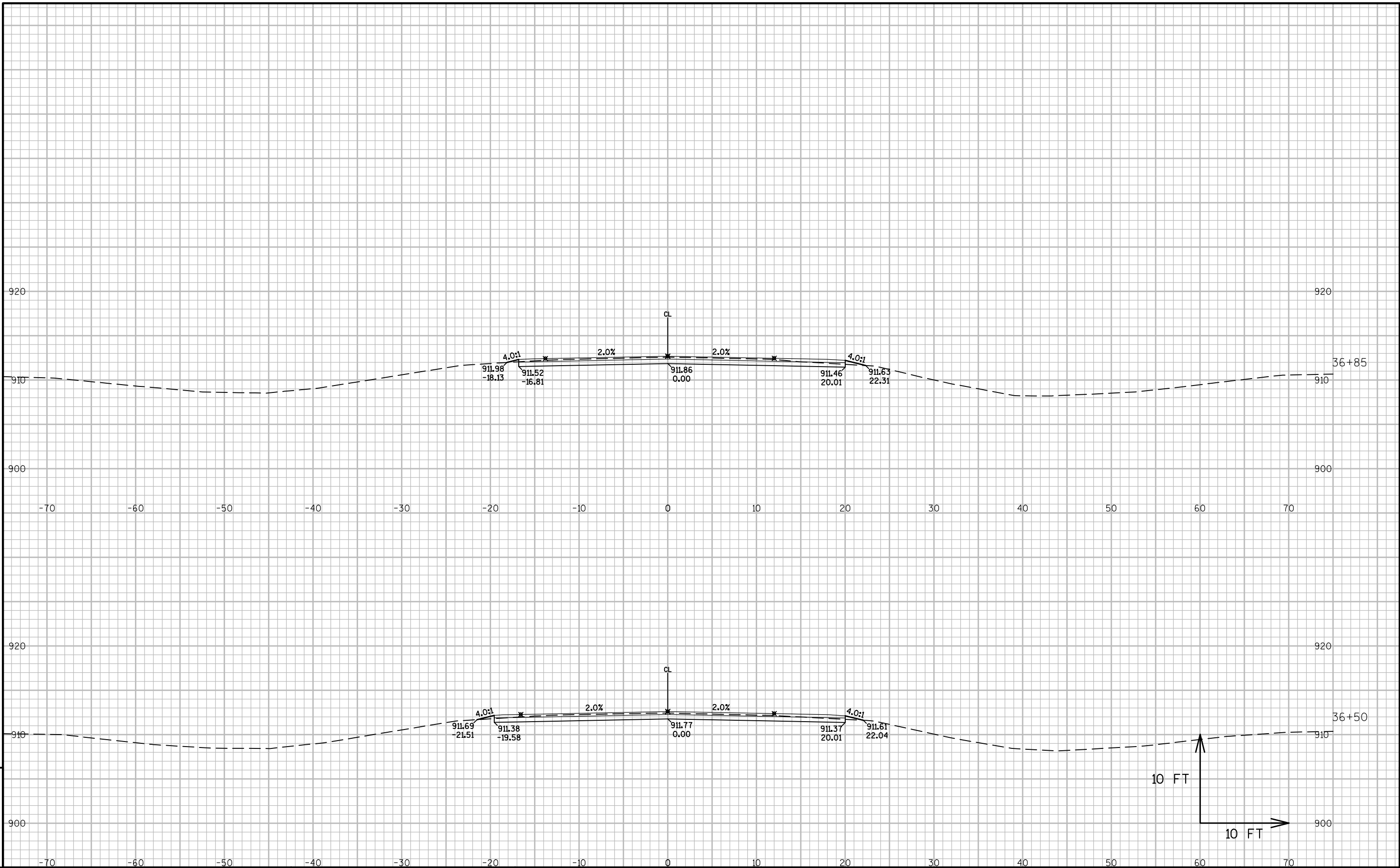
DATE 5/07/15 PLATE NO. W20-1.10

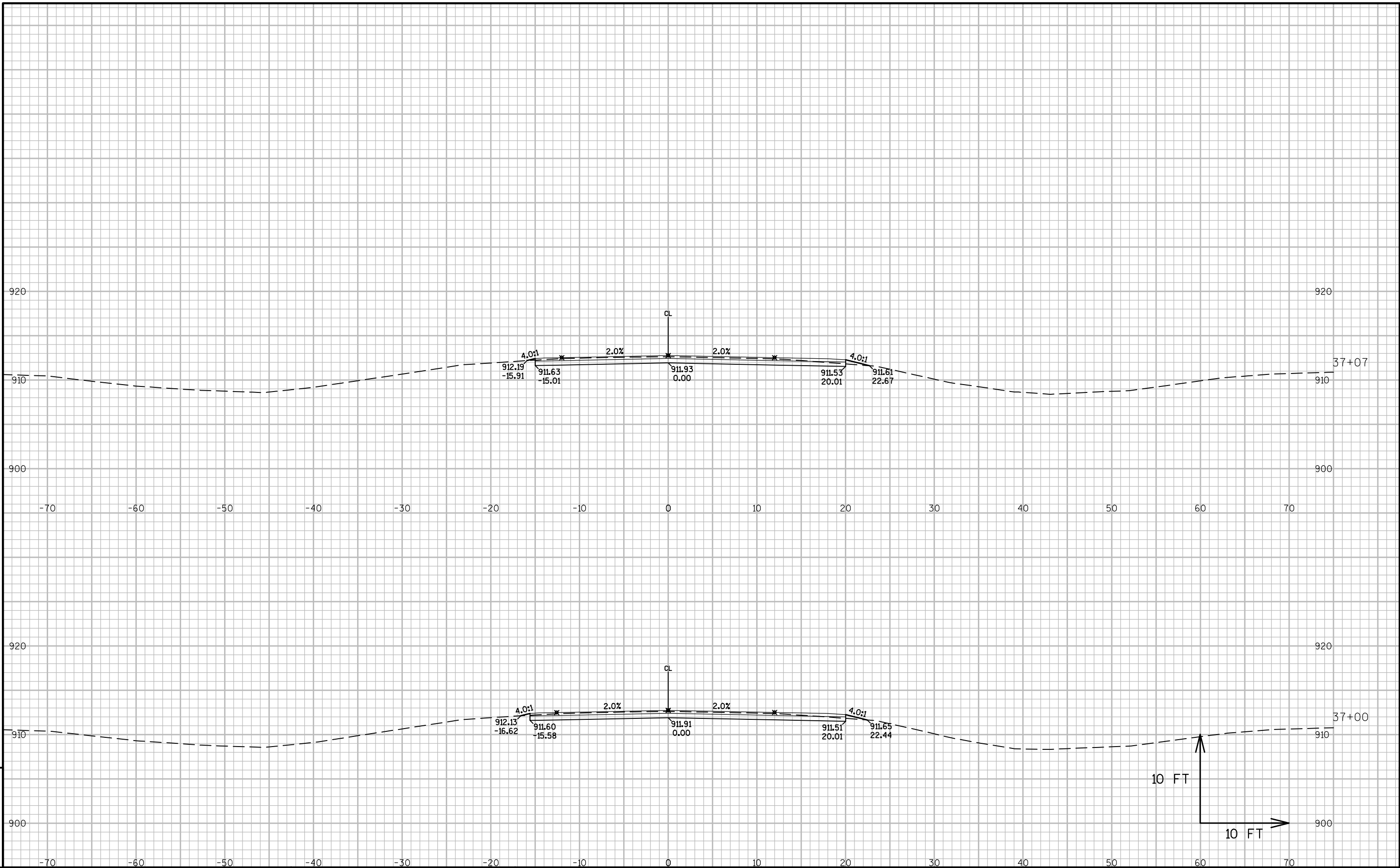






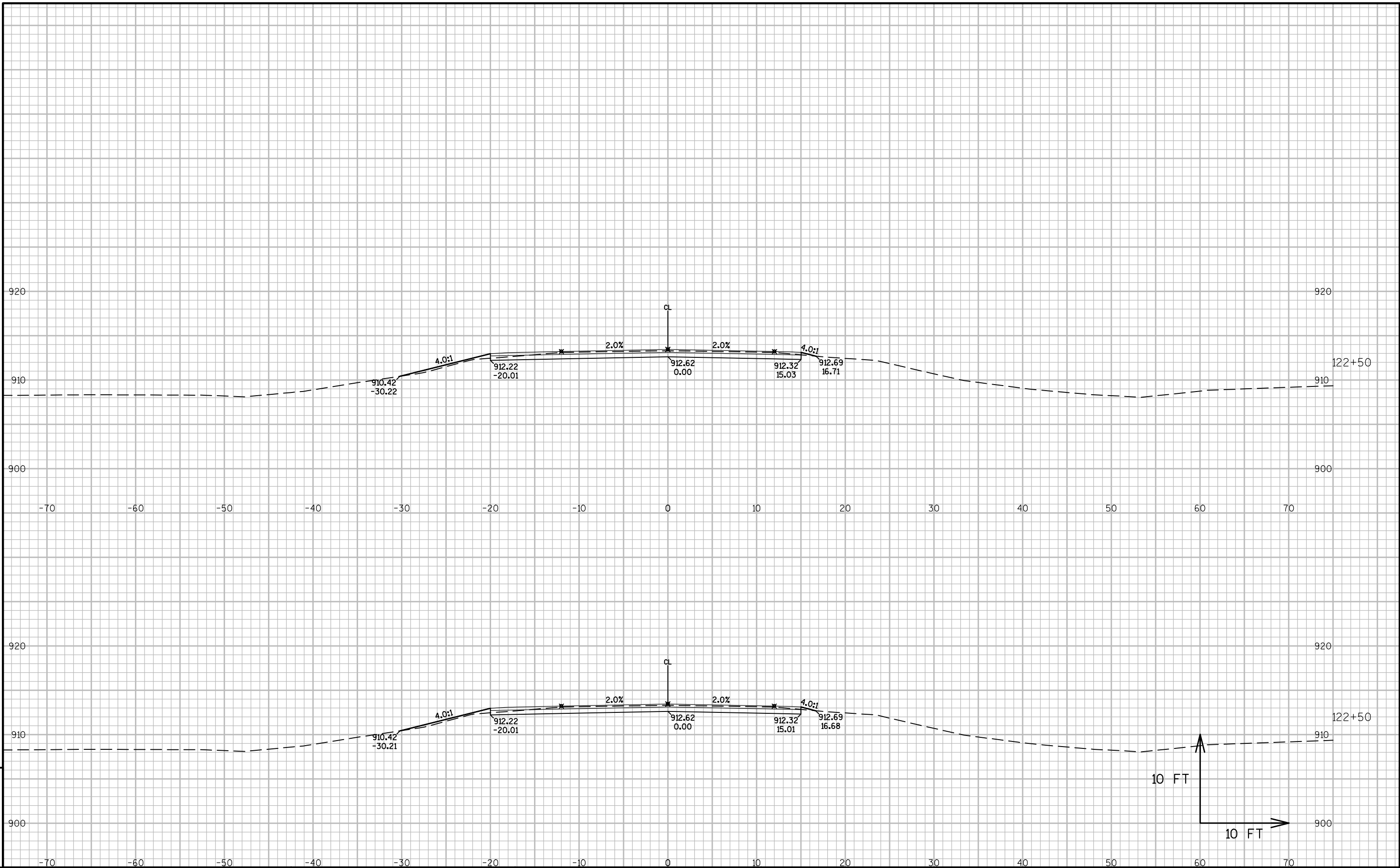


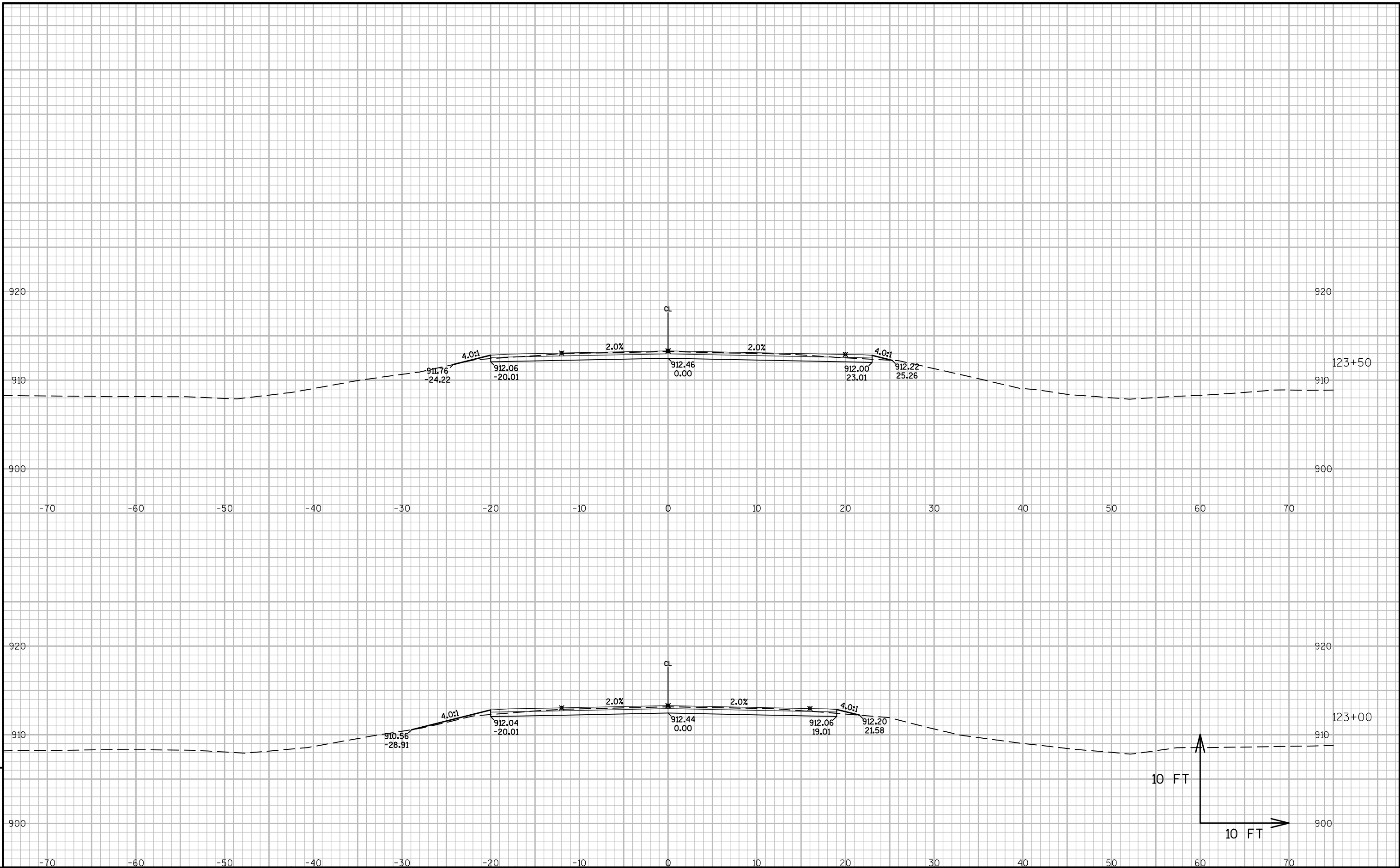


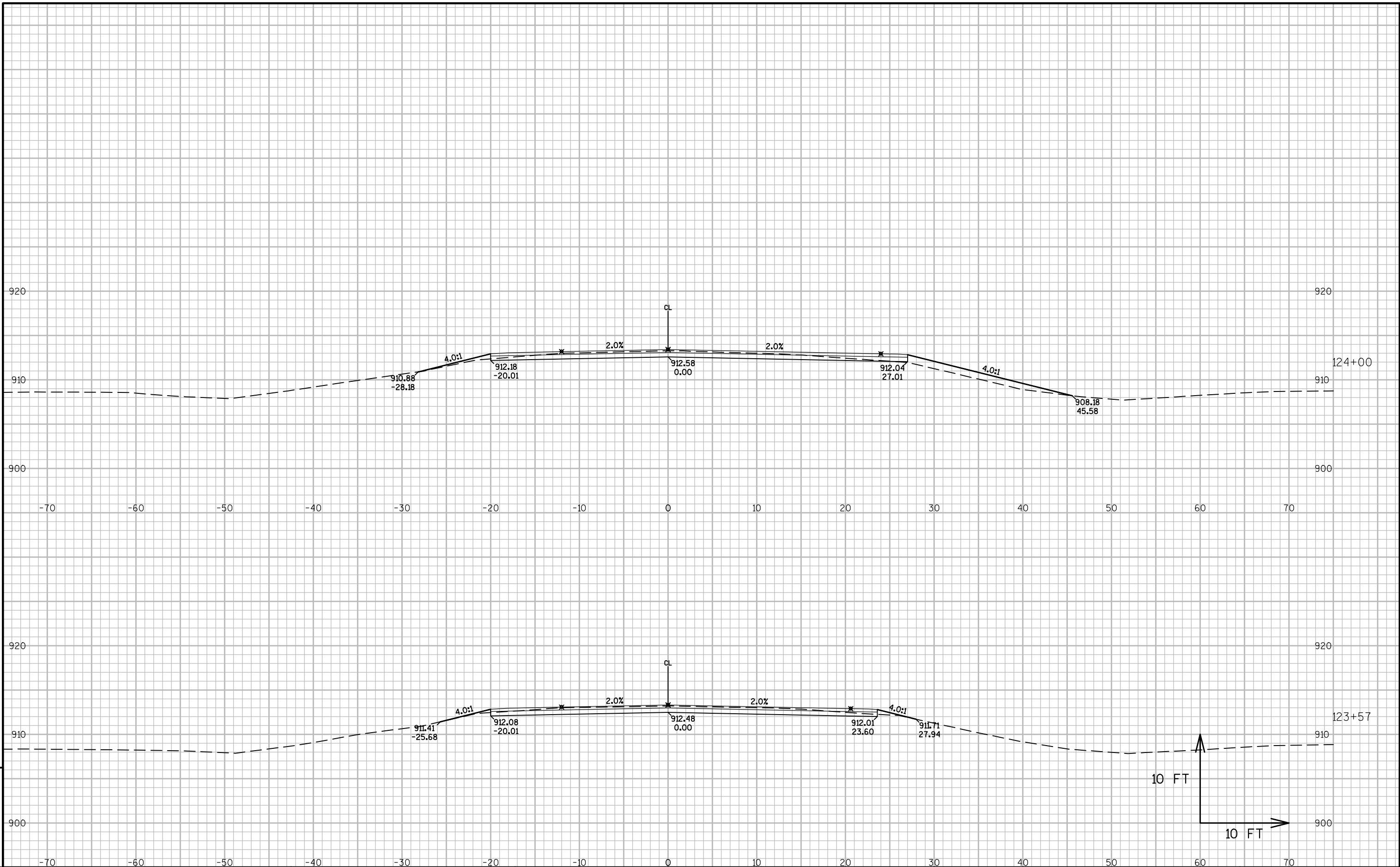


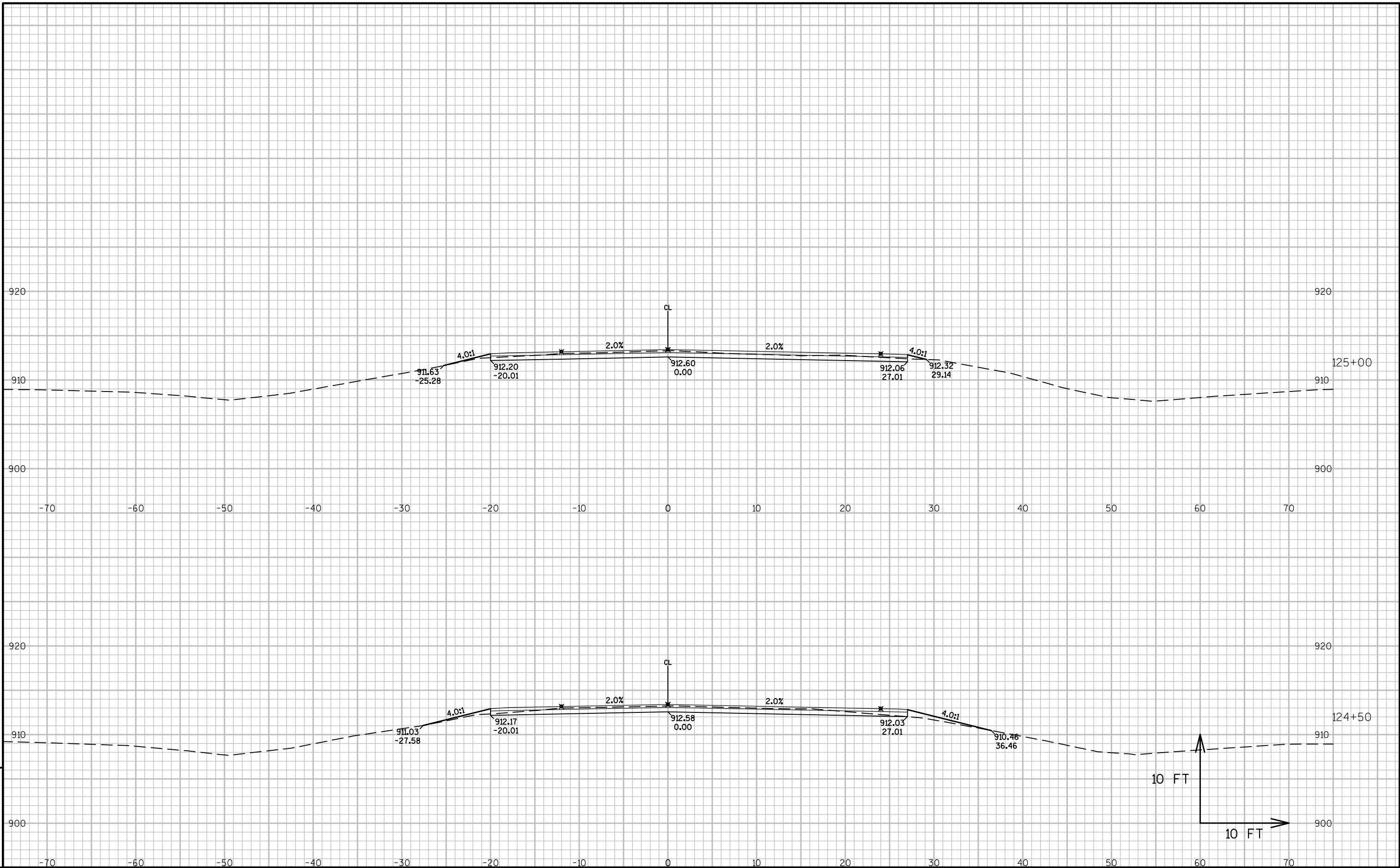
9

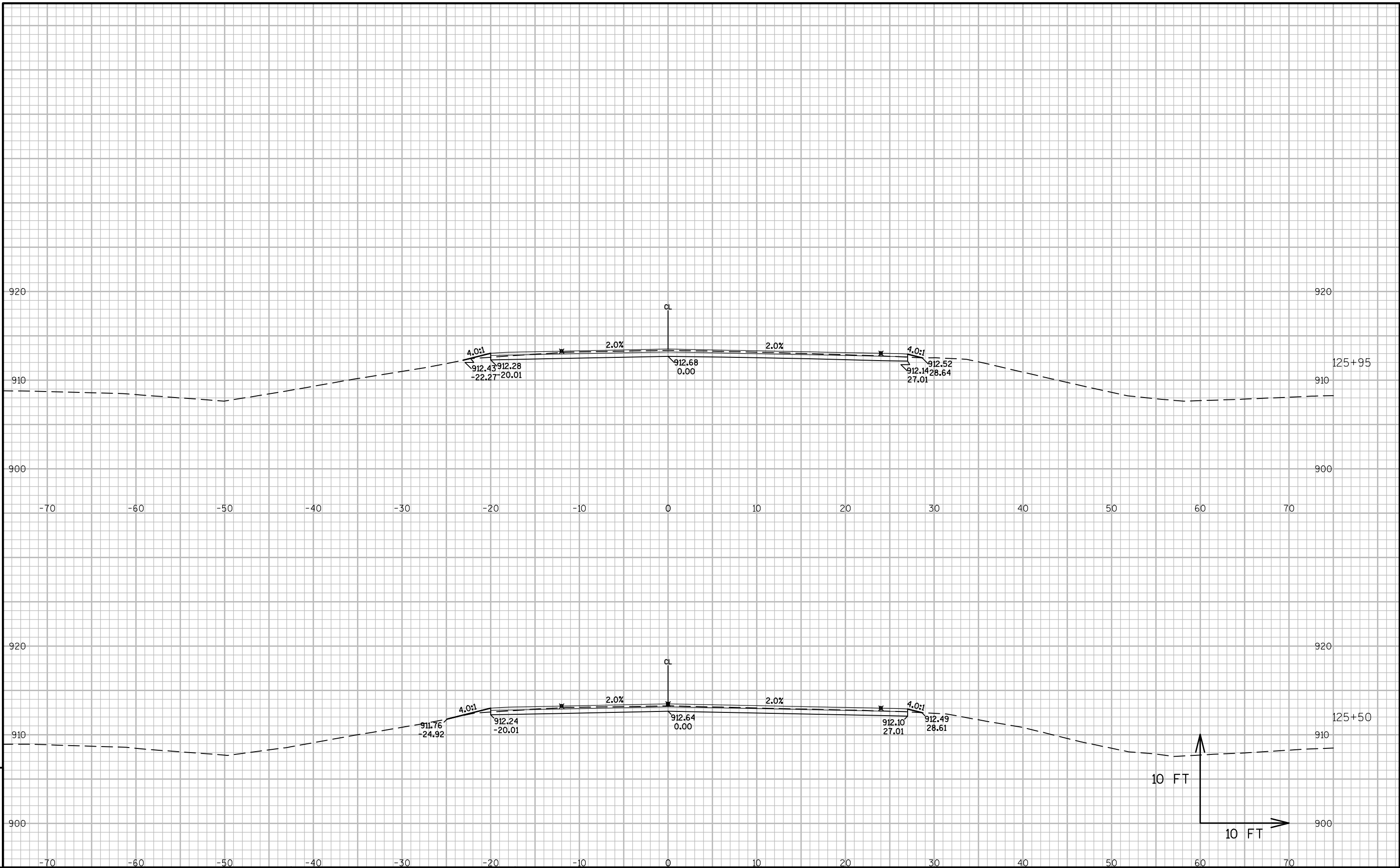
9

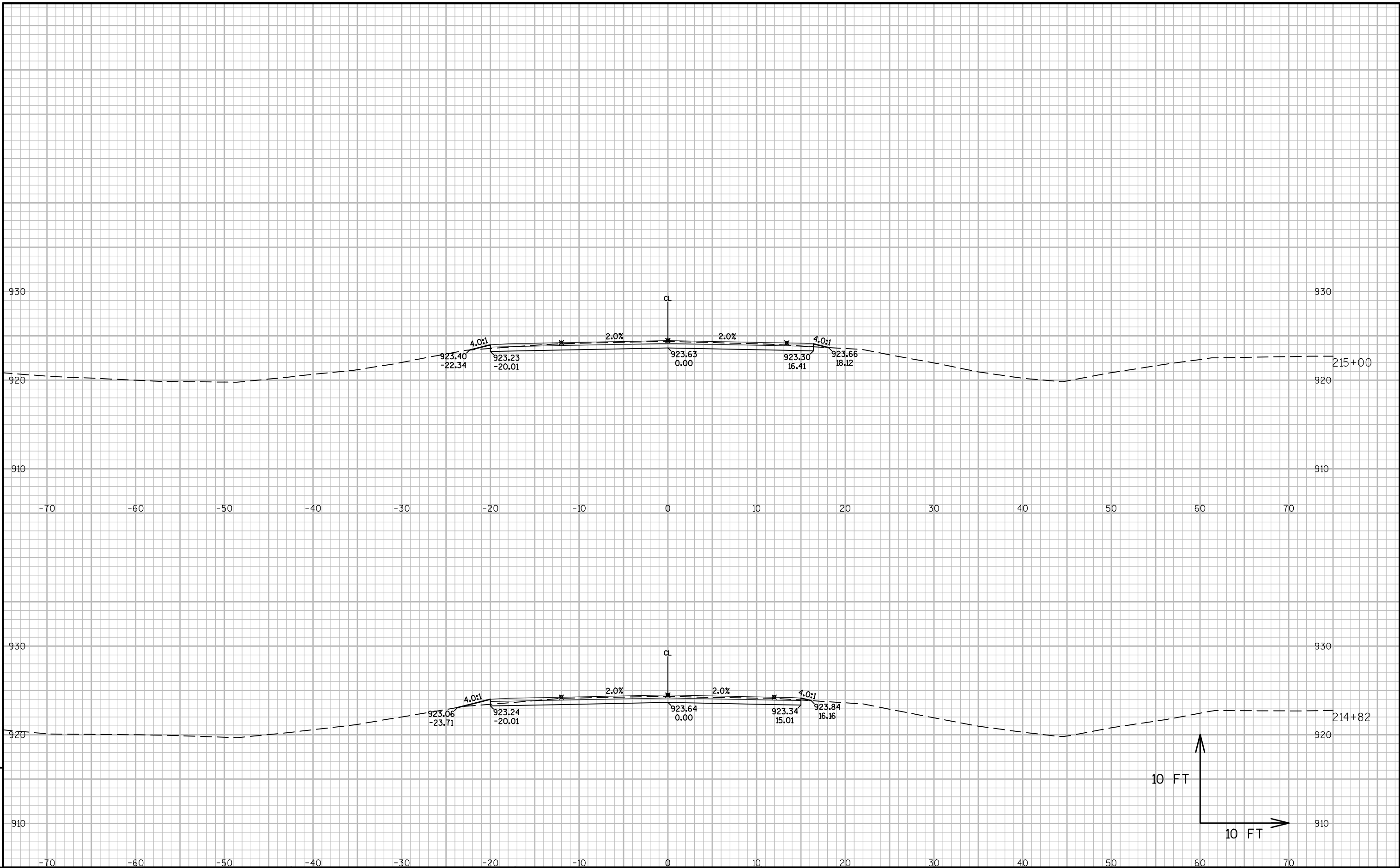


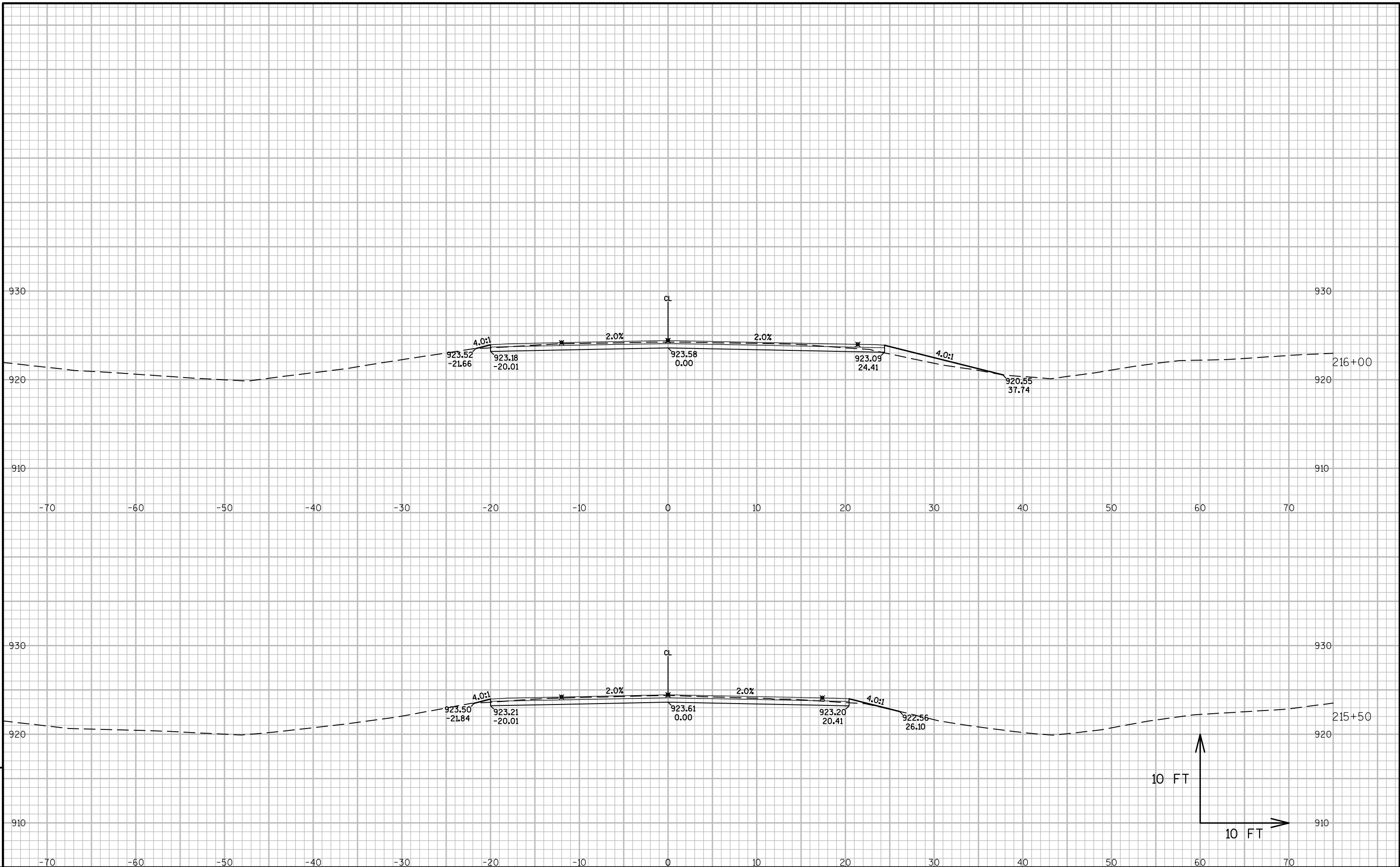


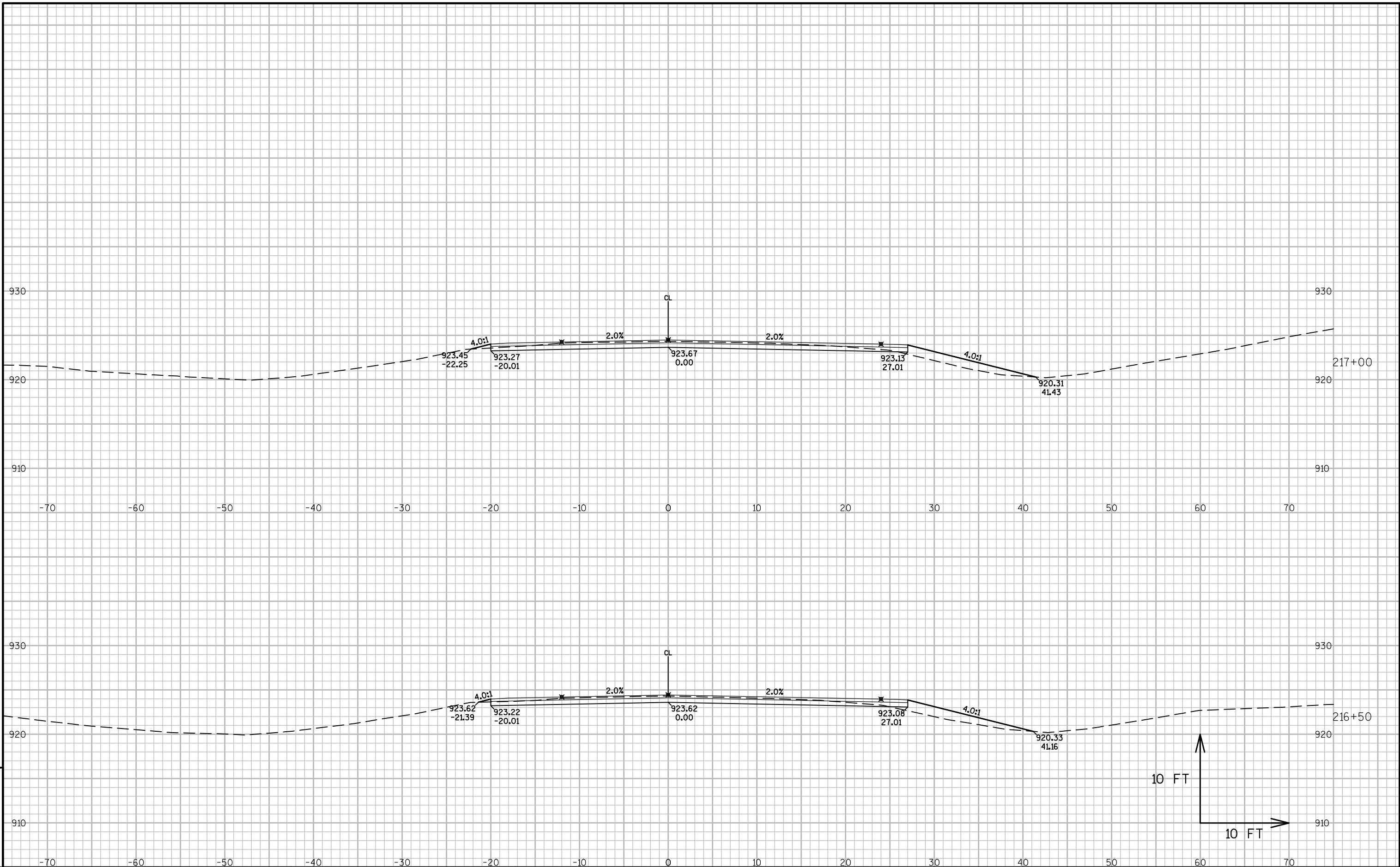


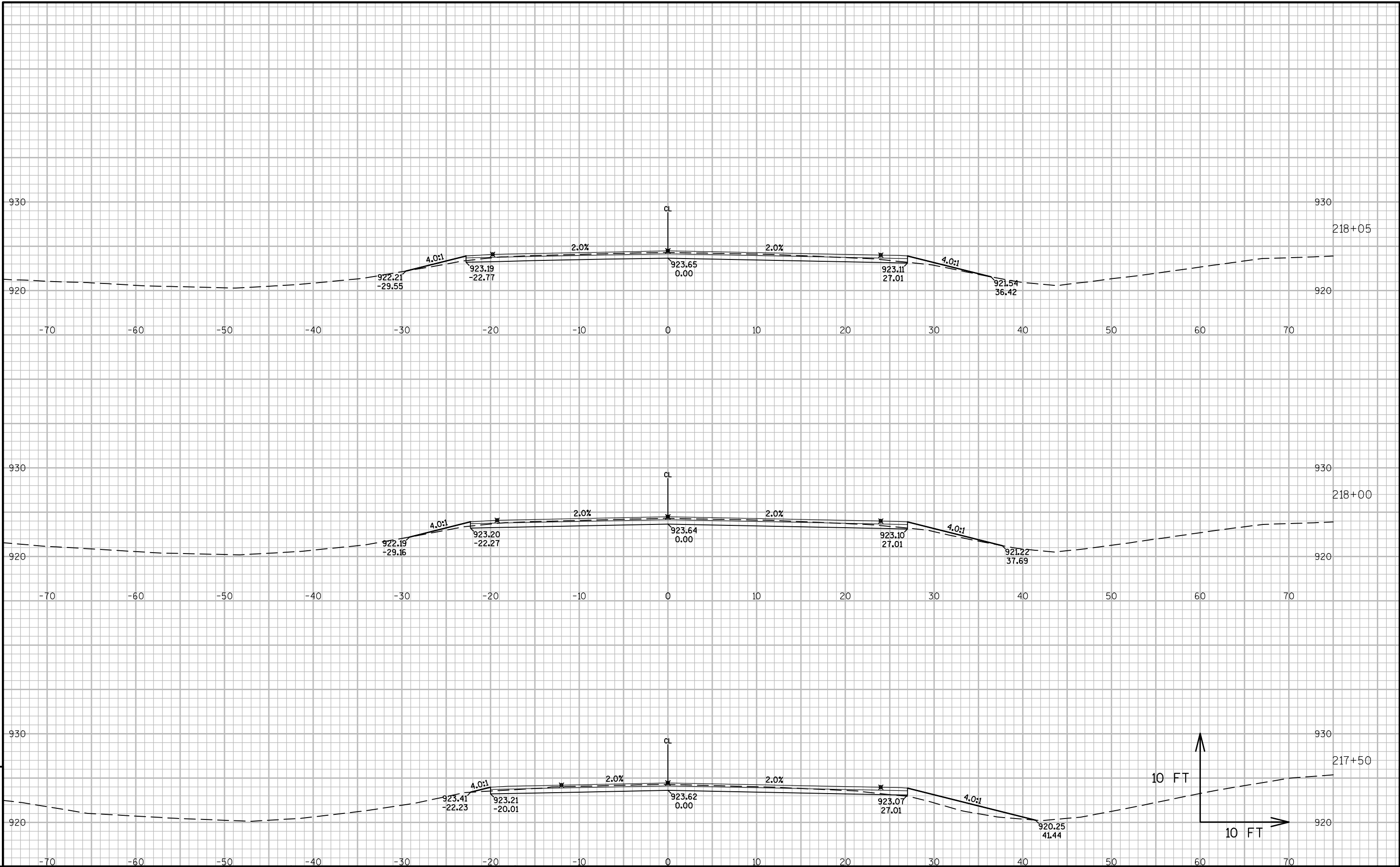


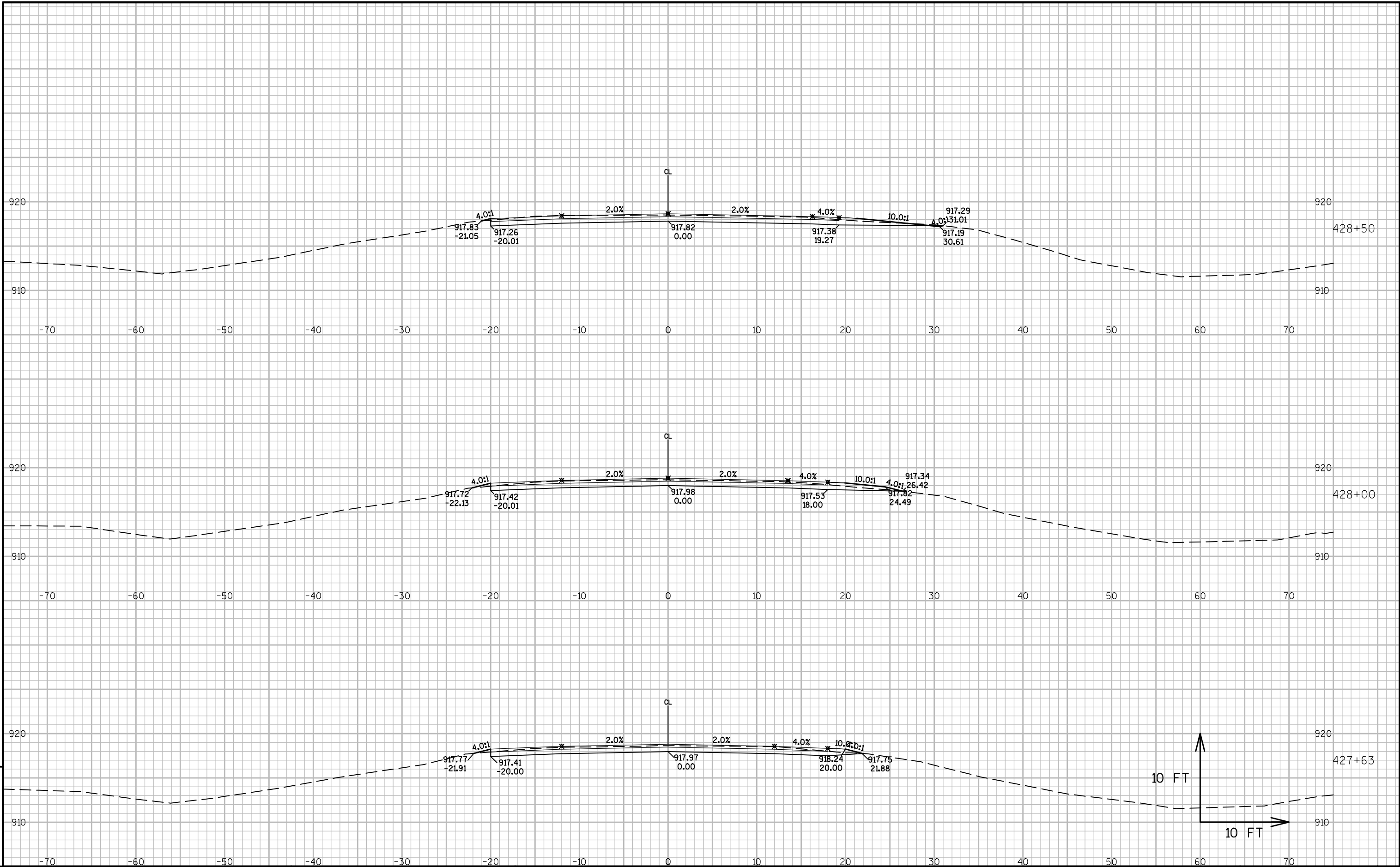


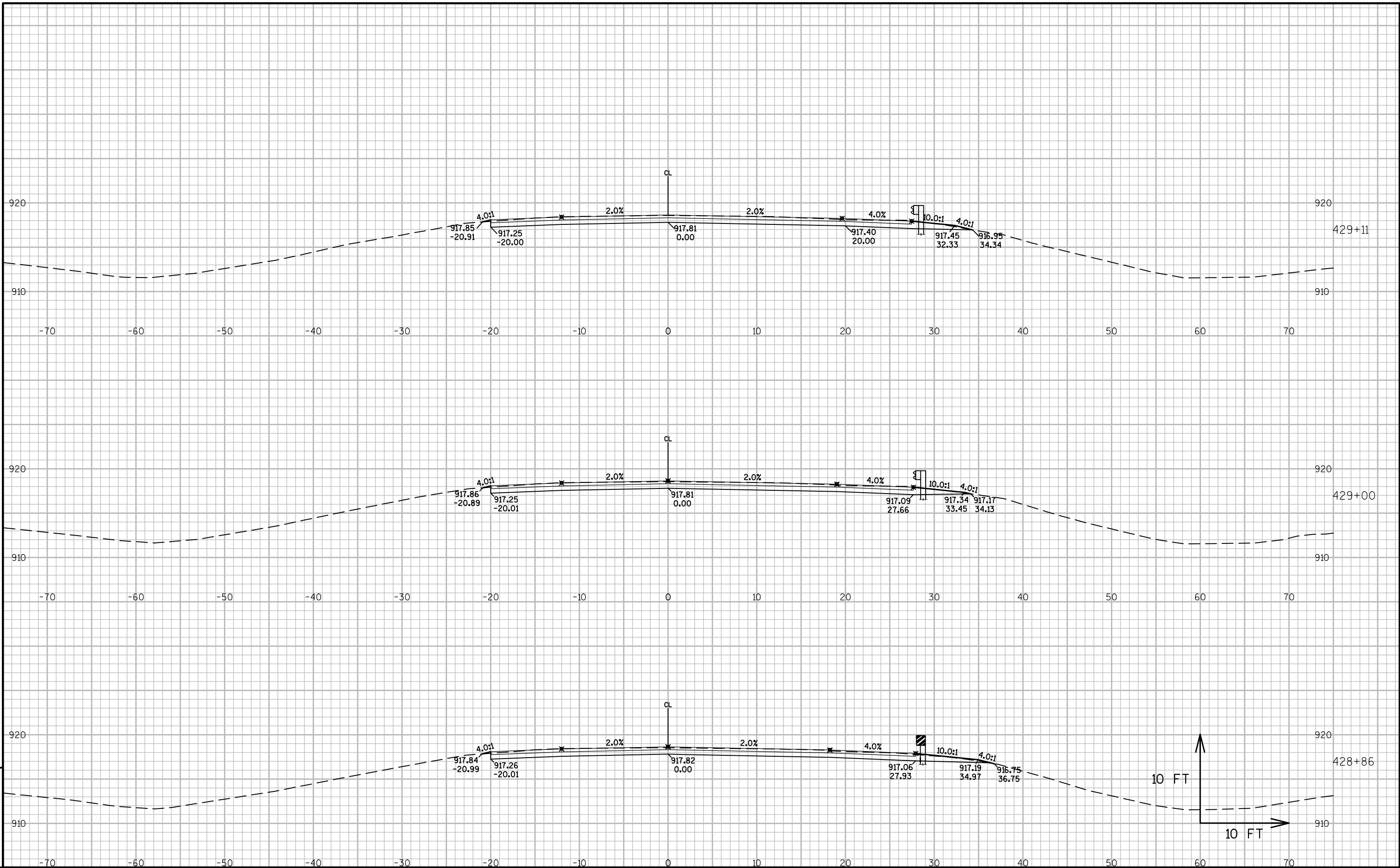


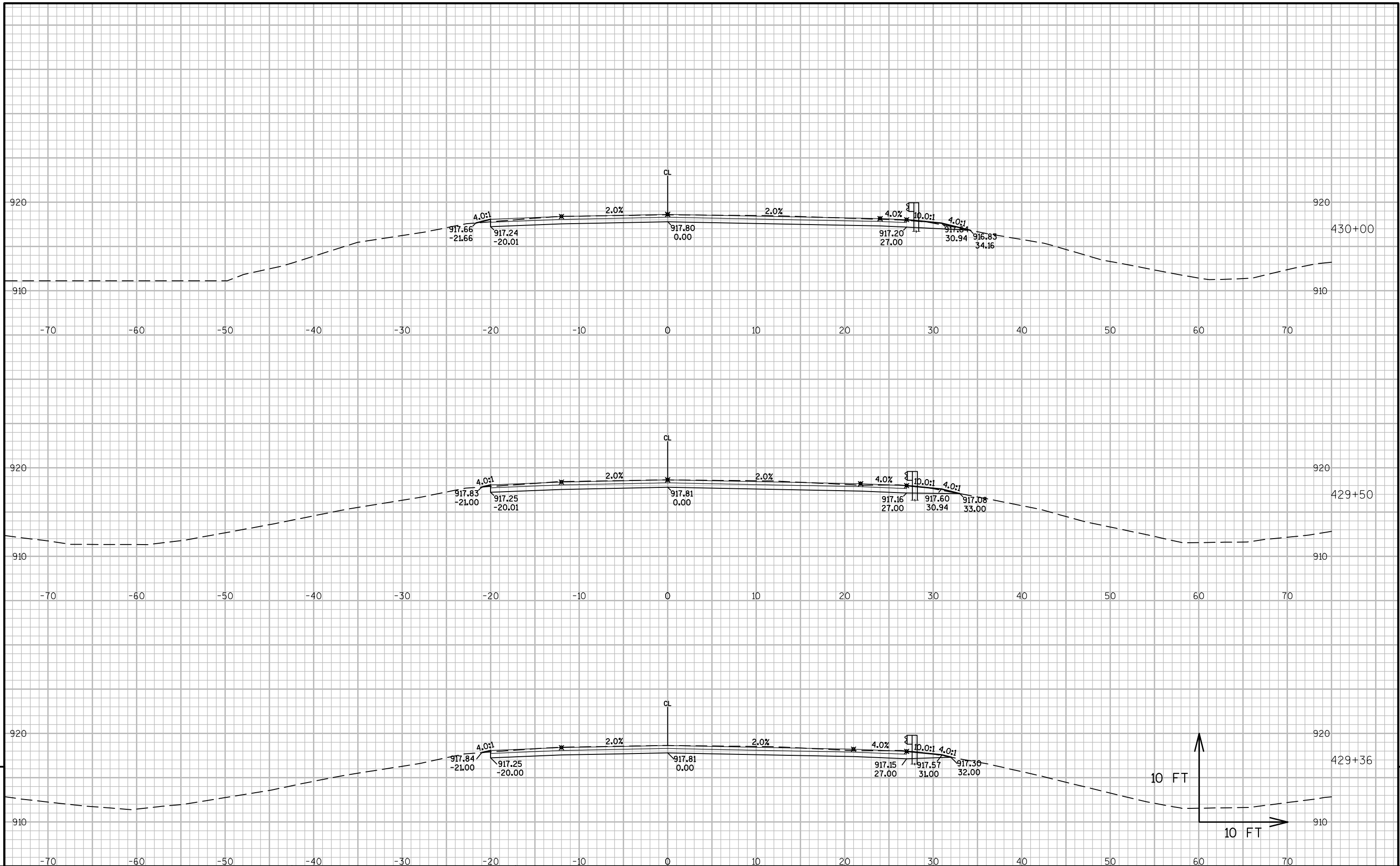


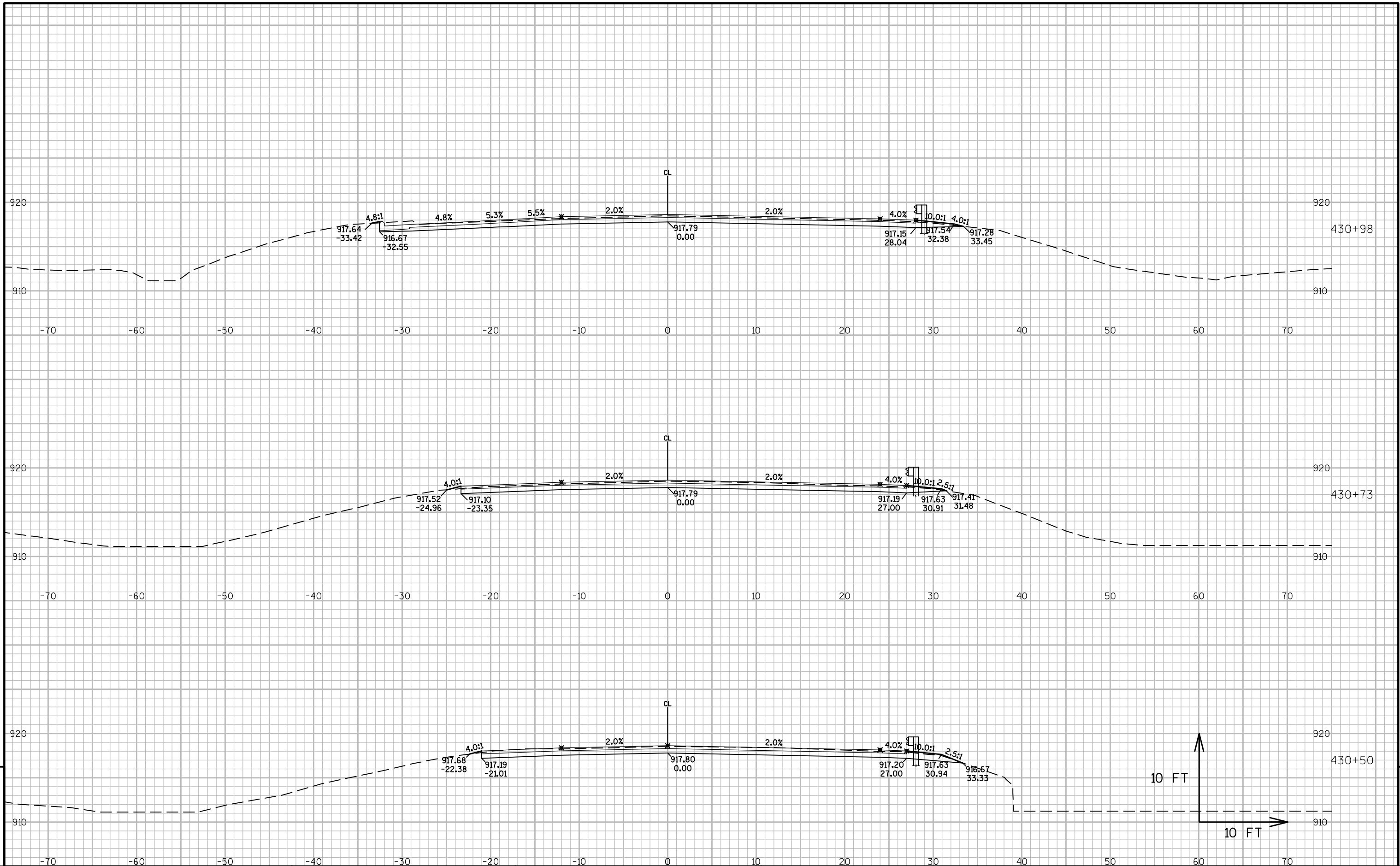


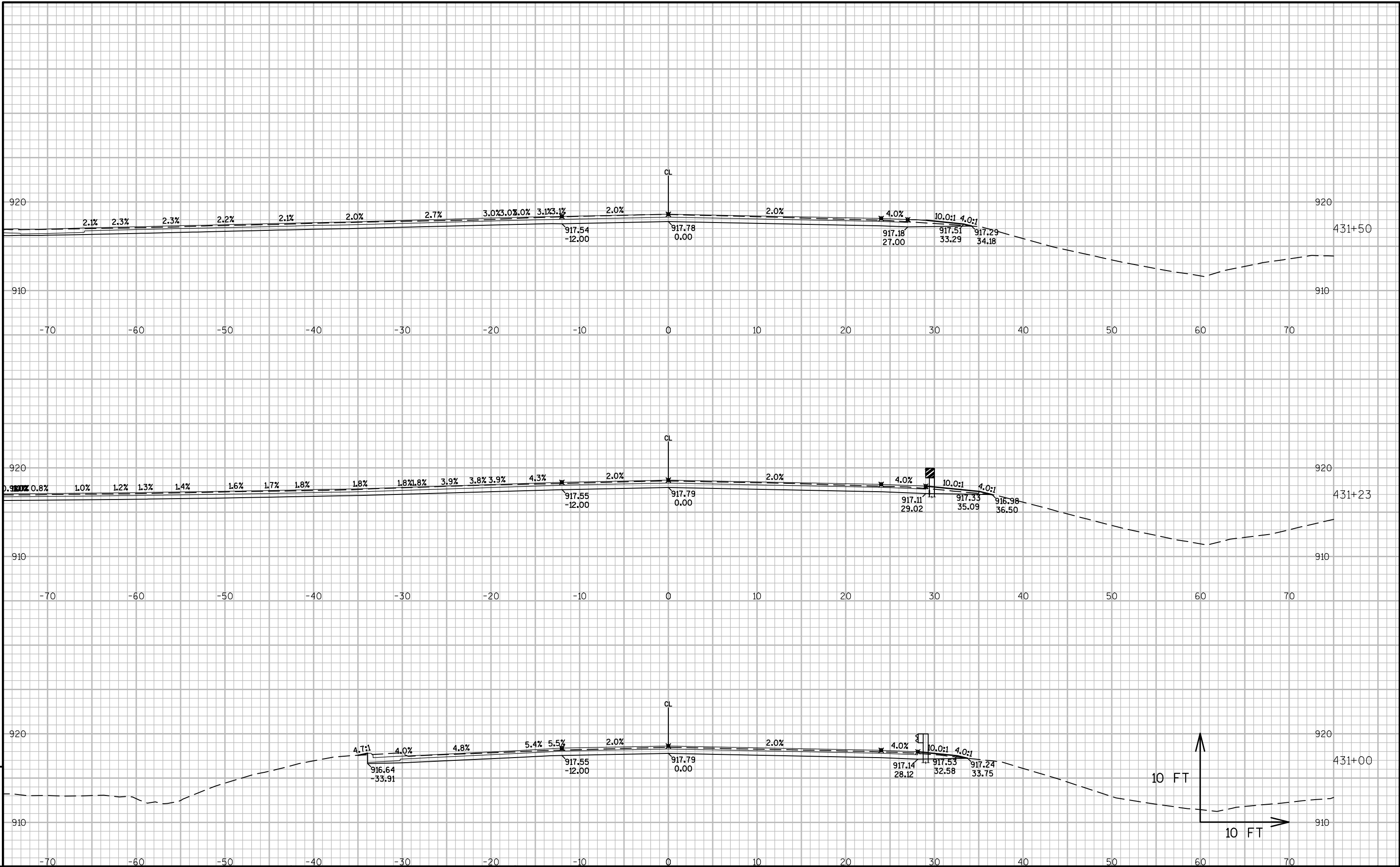


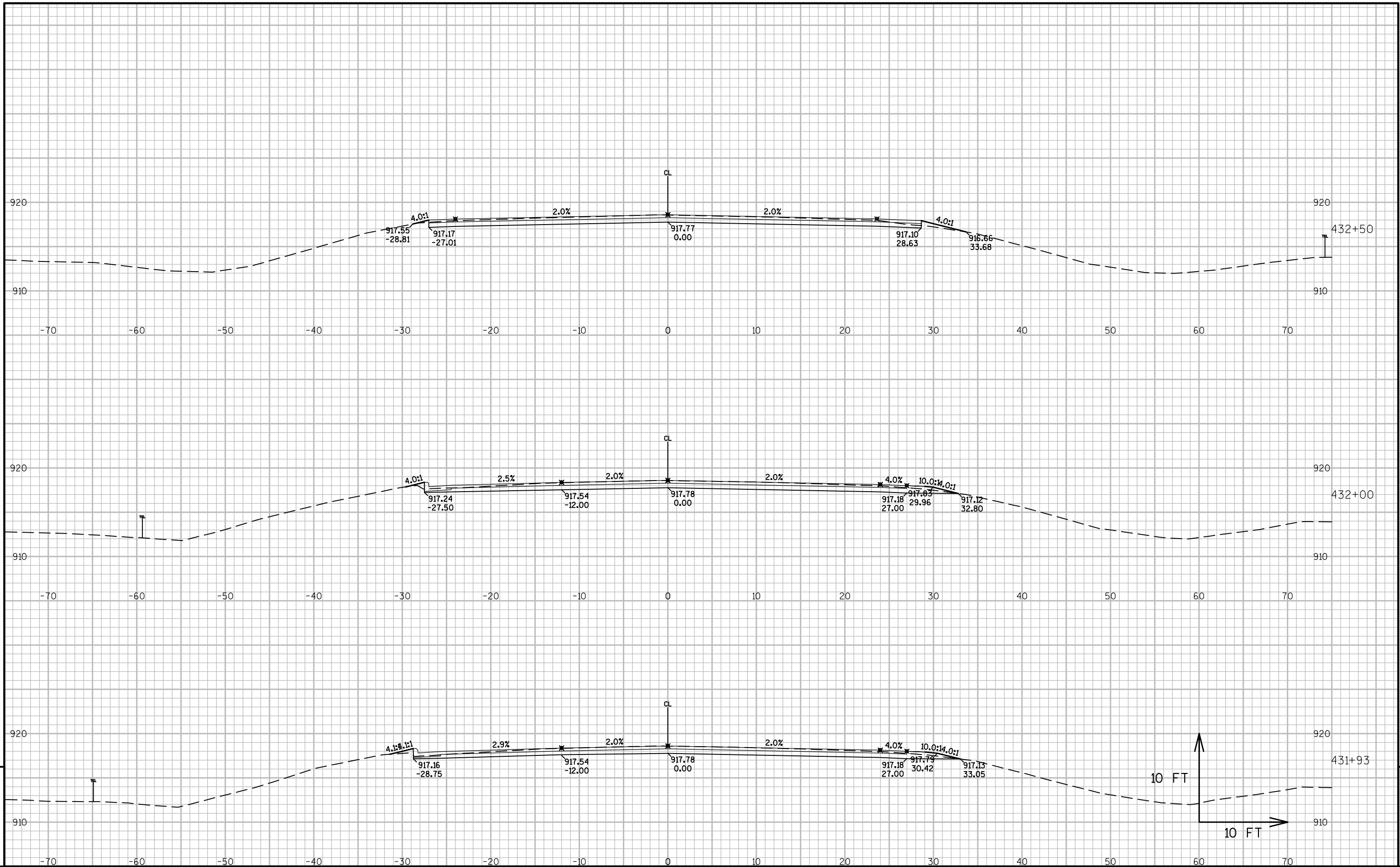


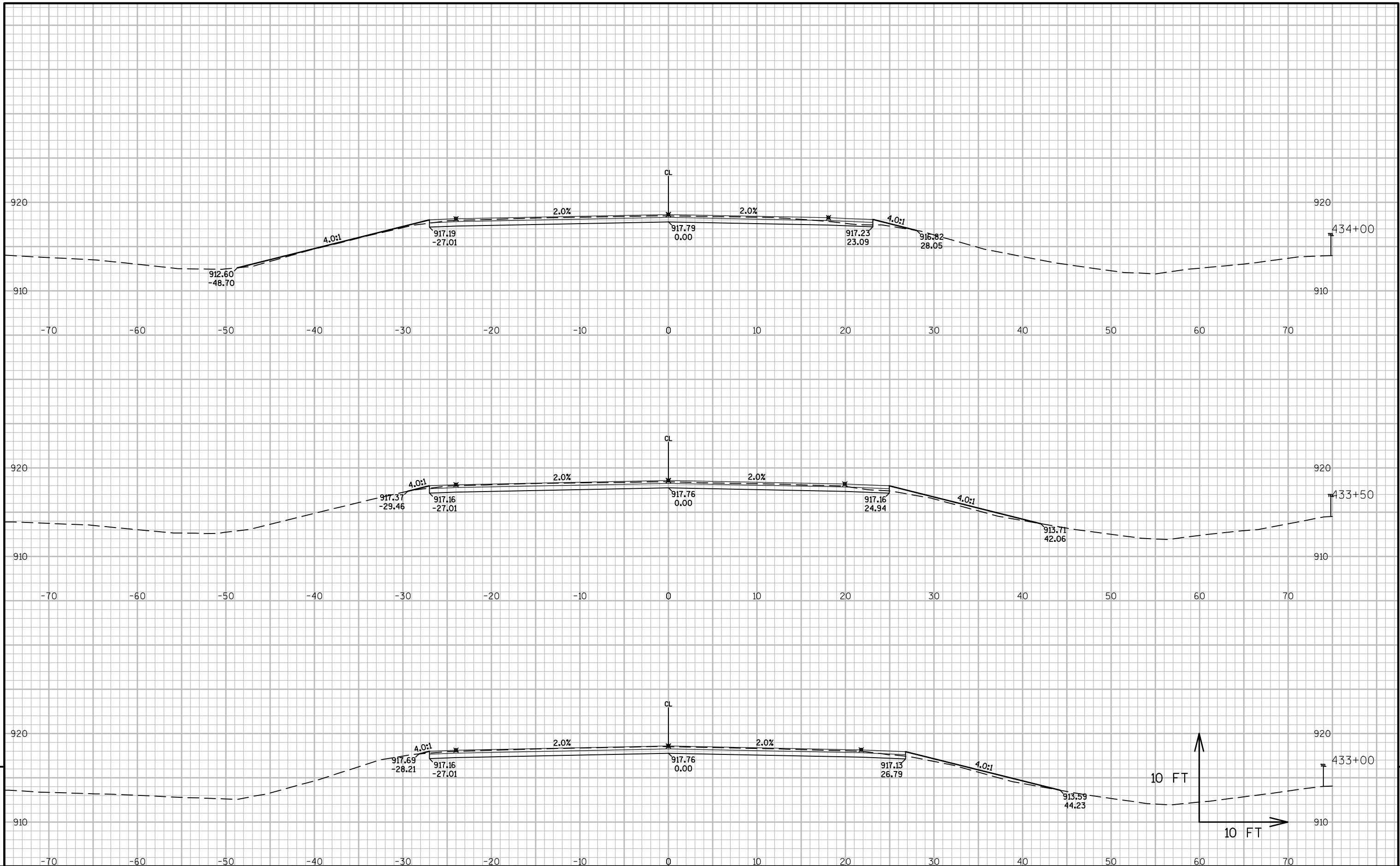


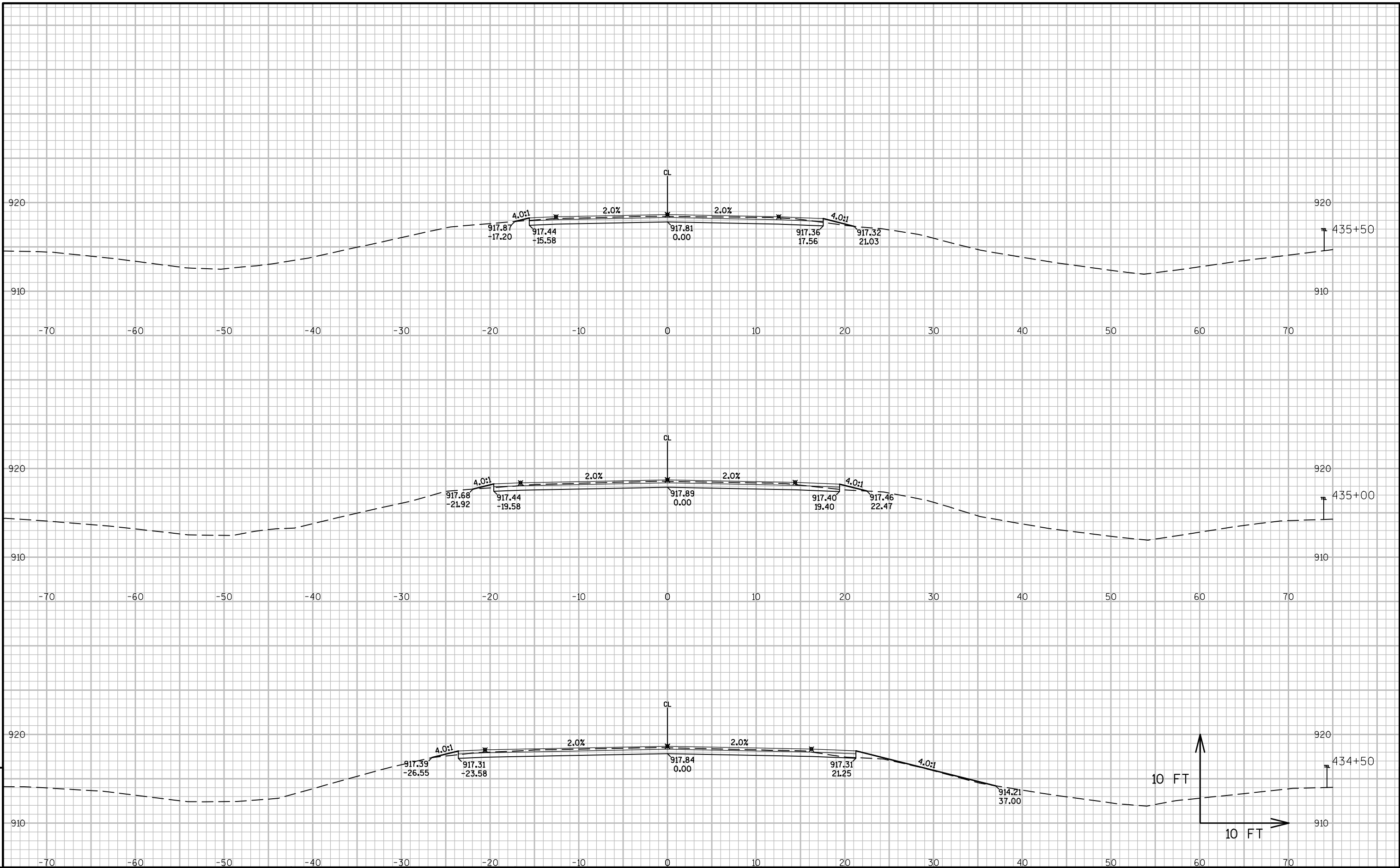


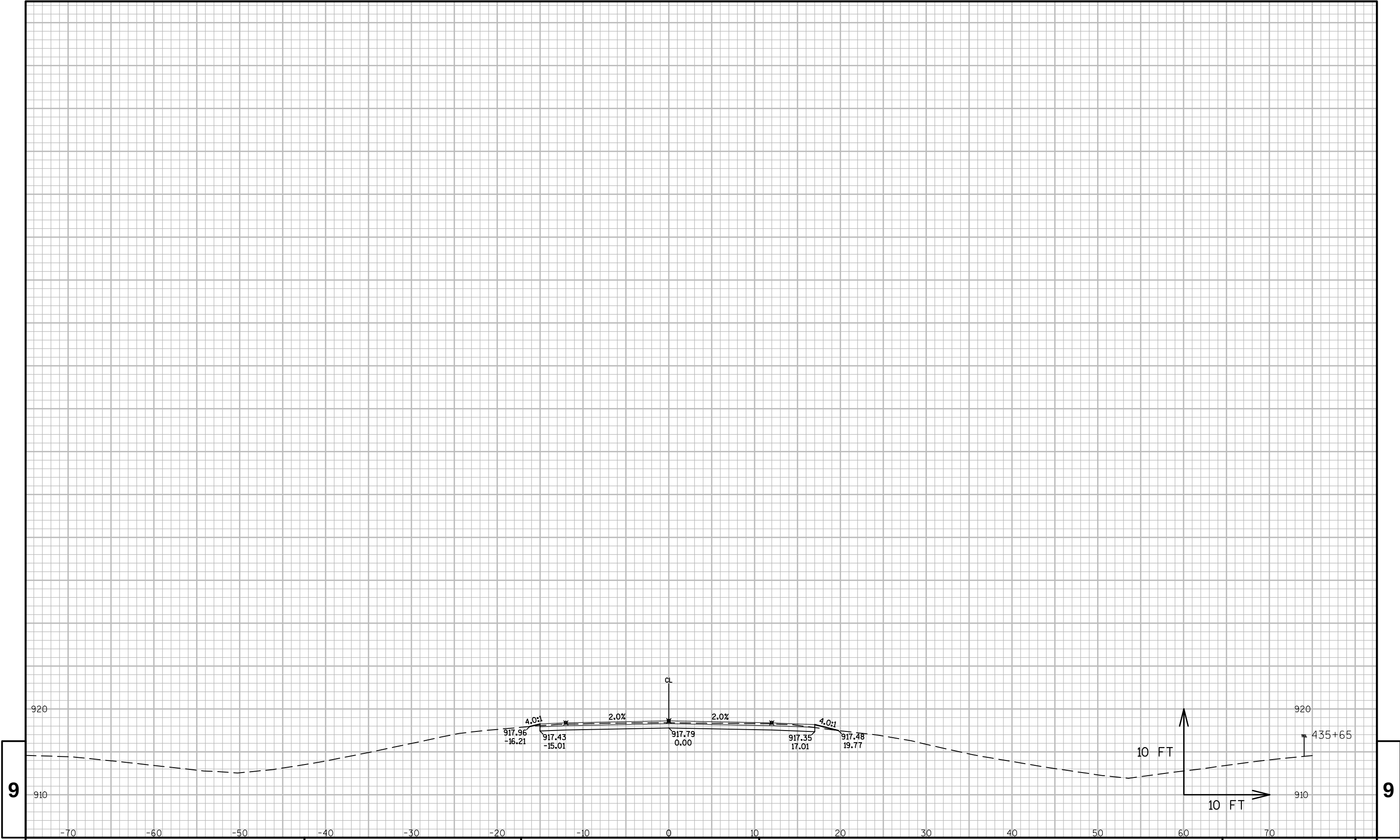


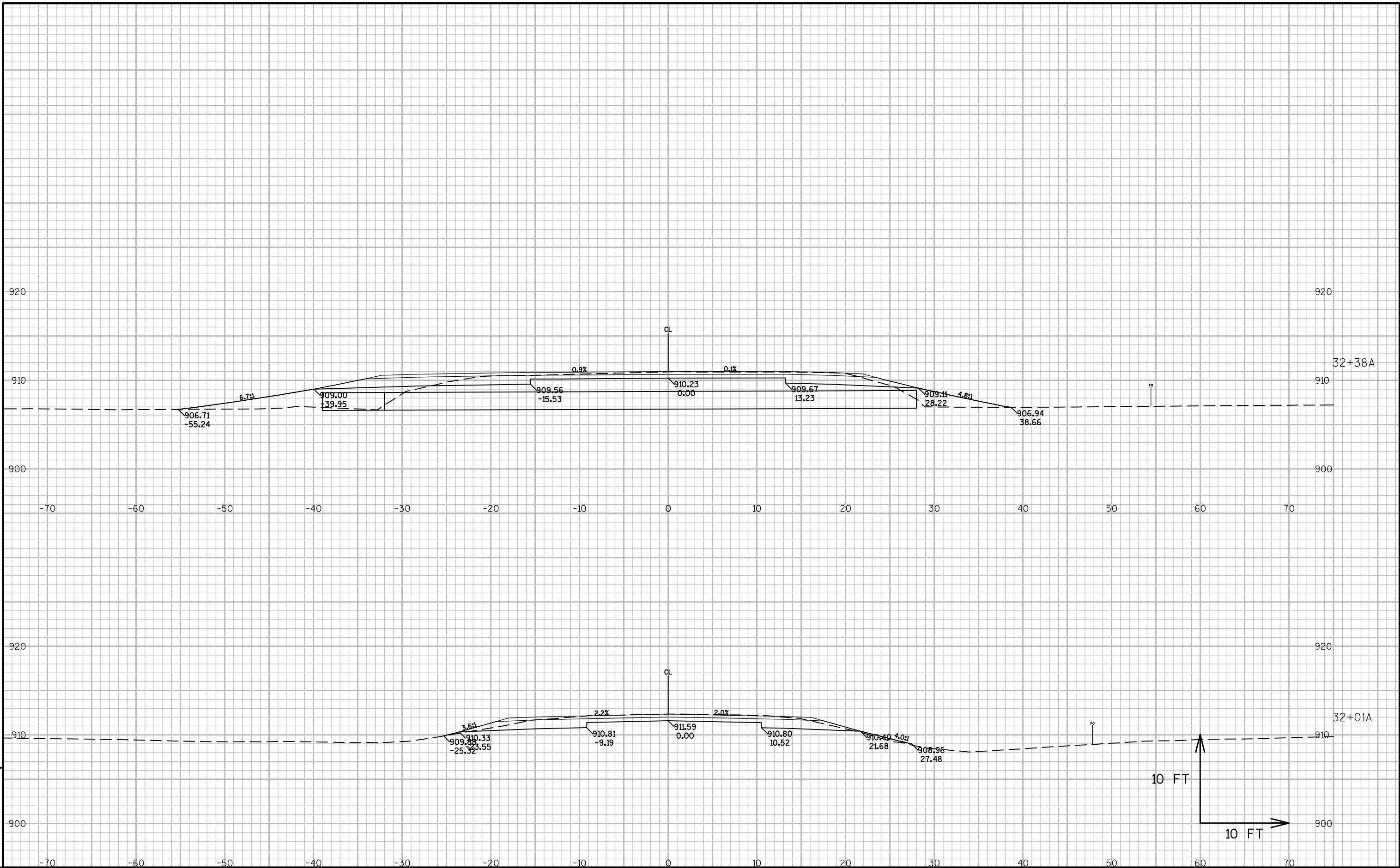


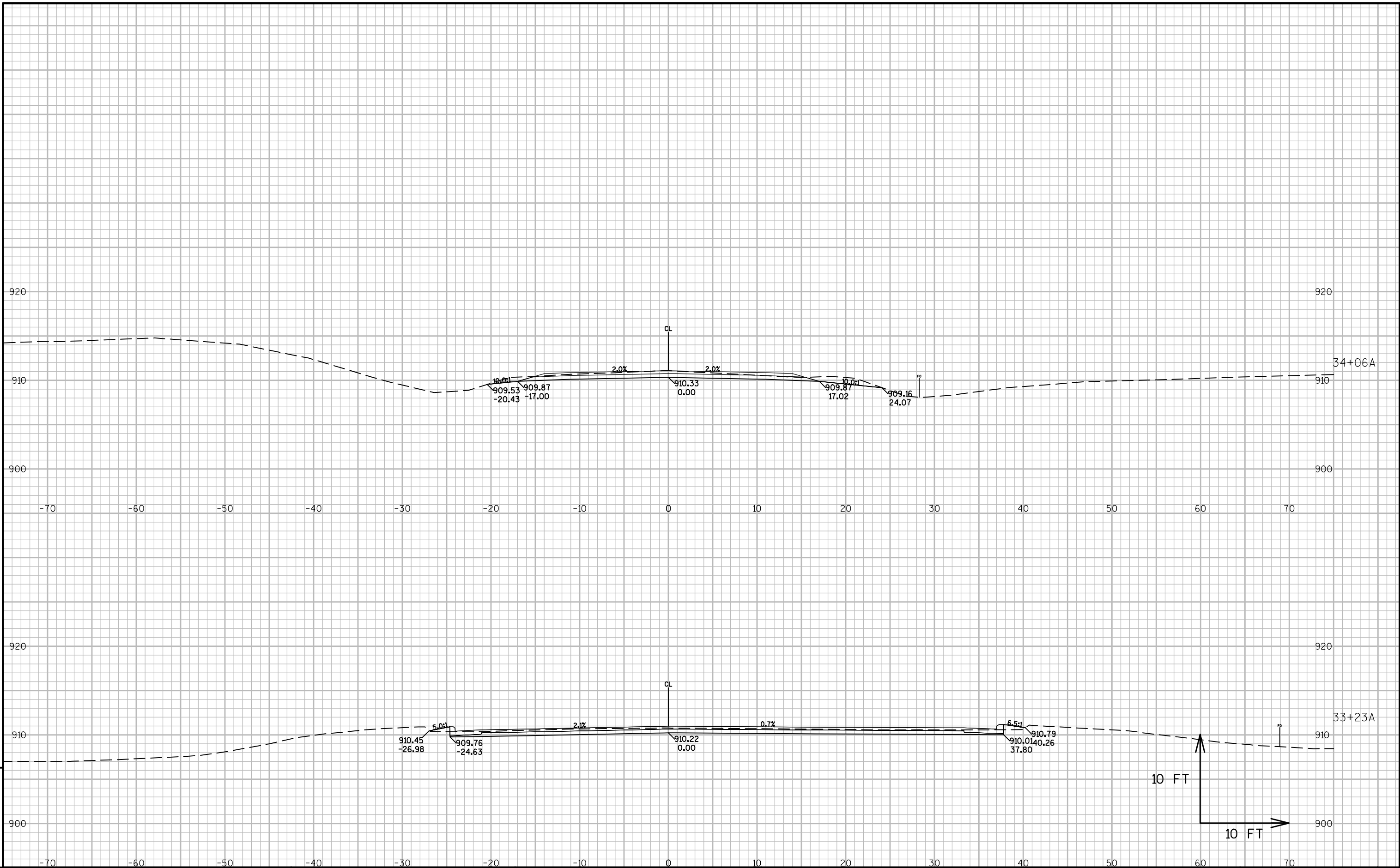


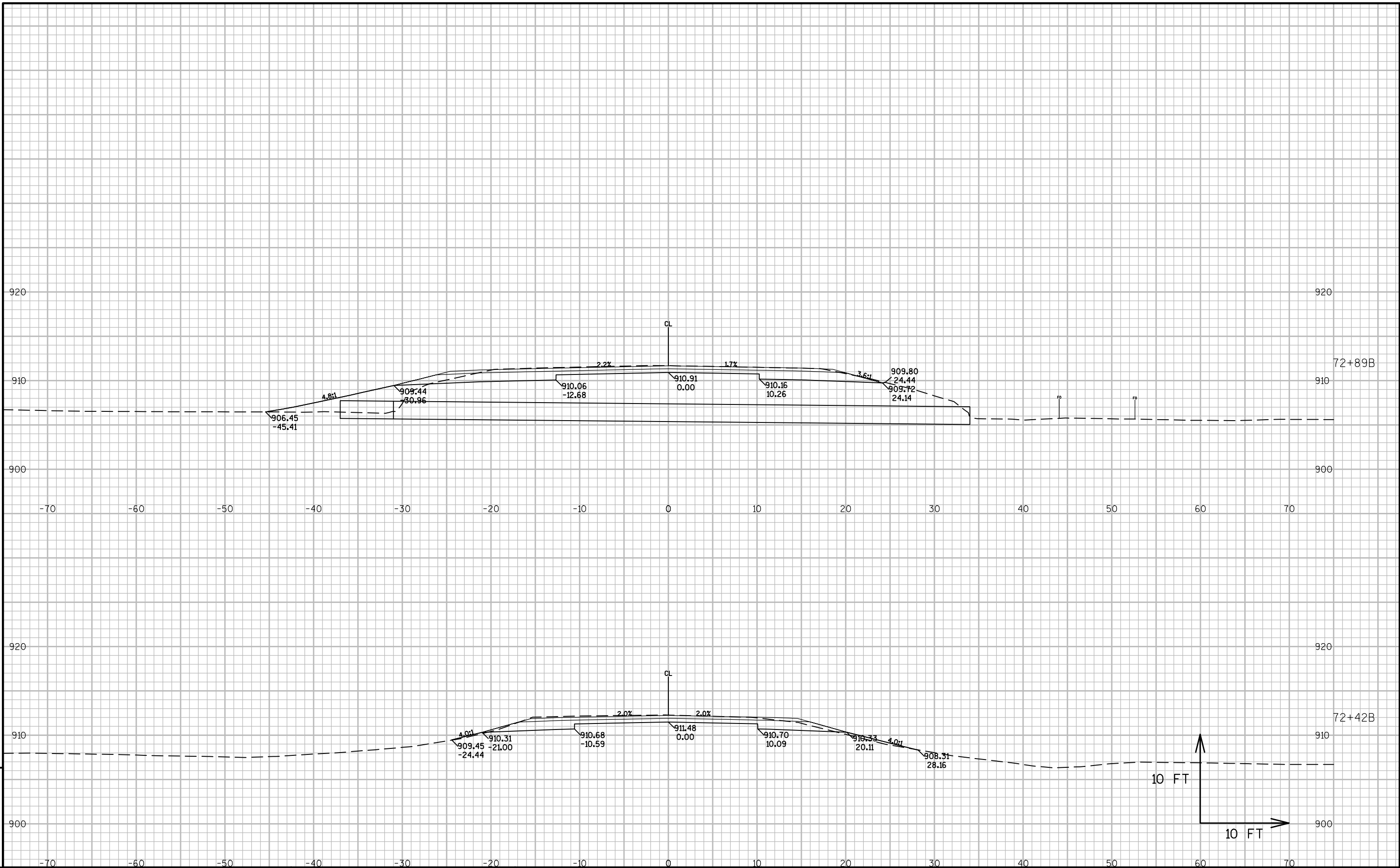


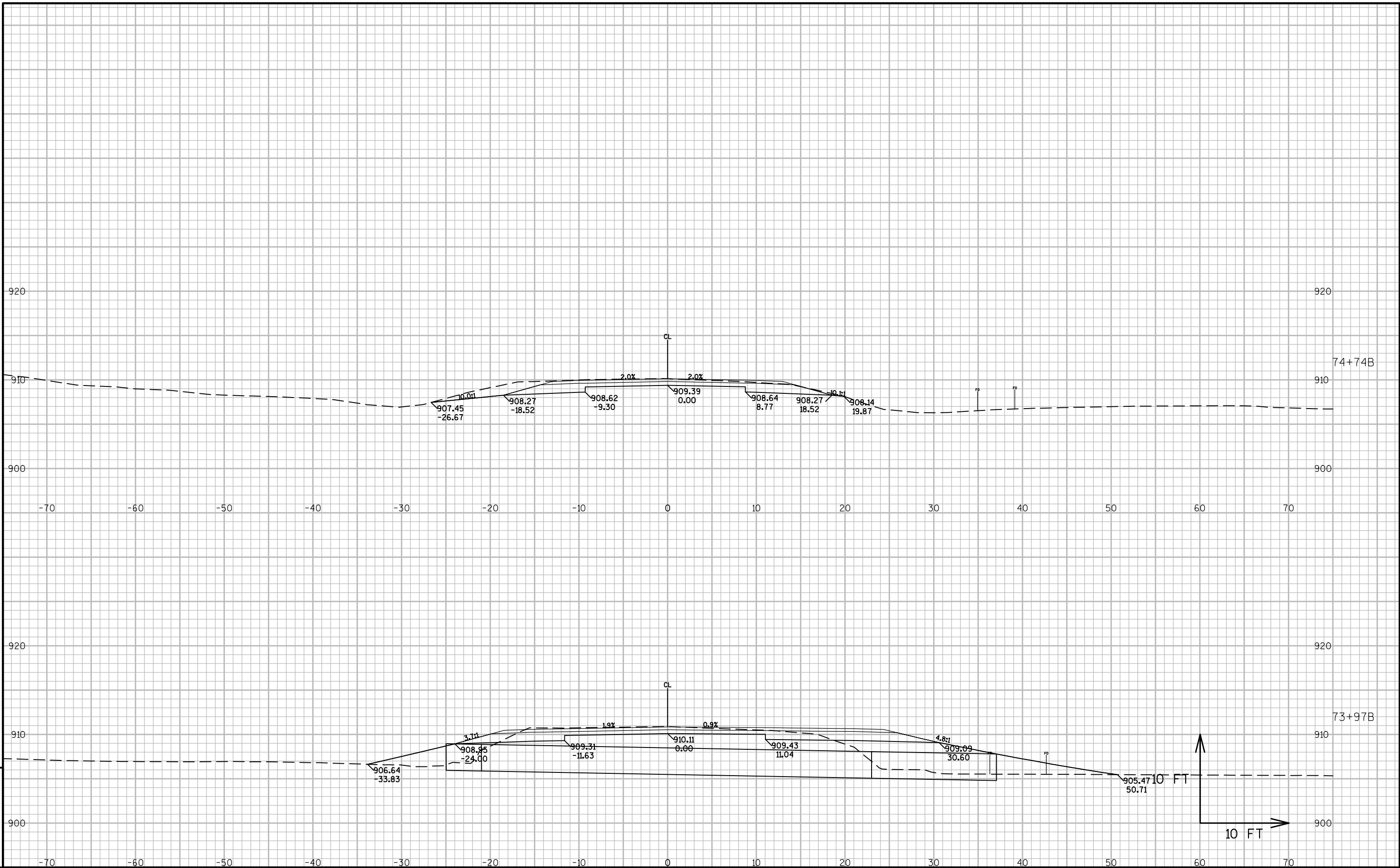


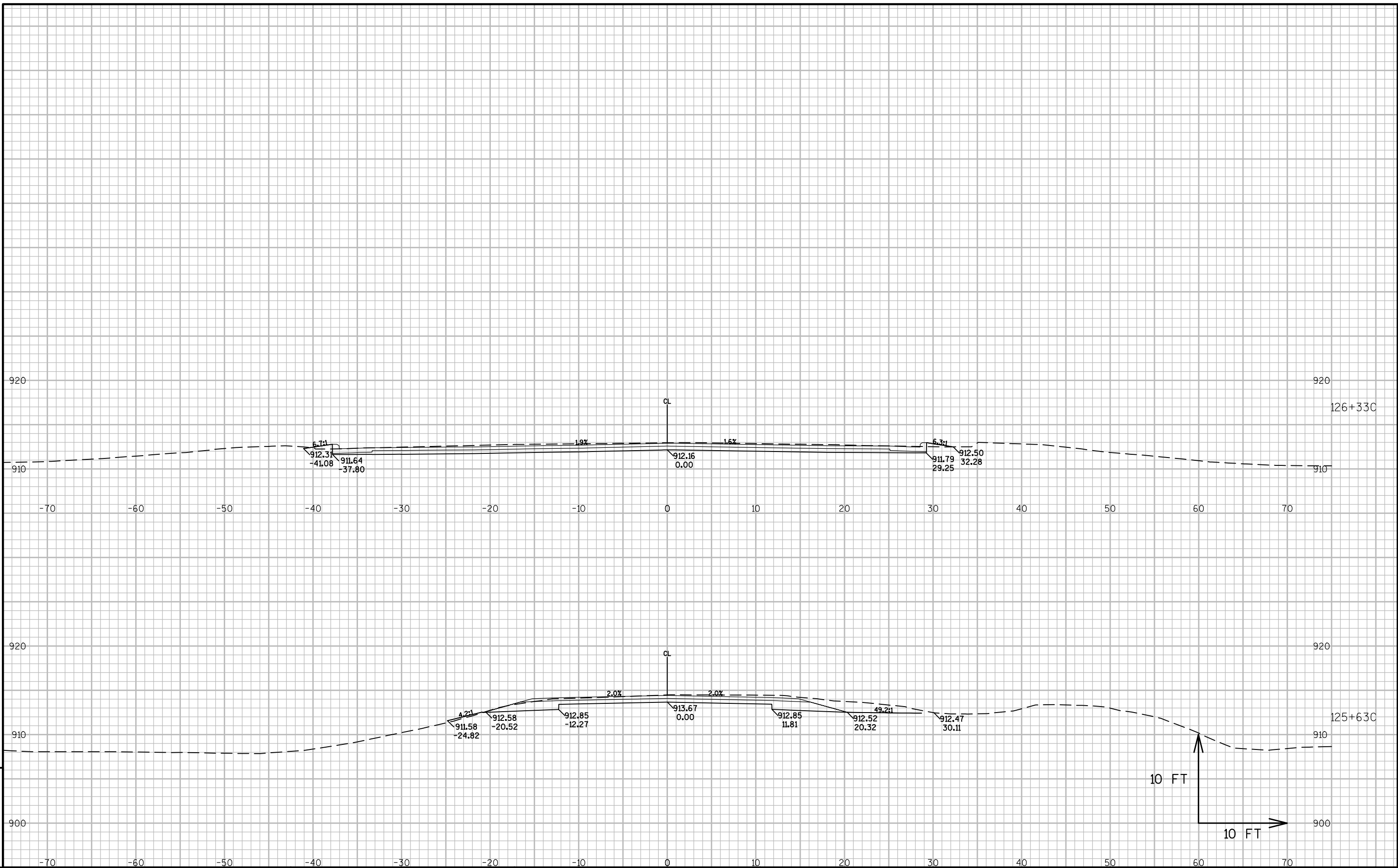


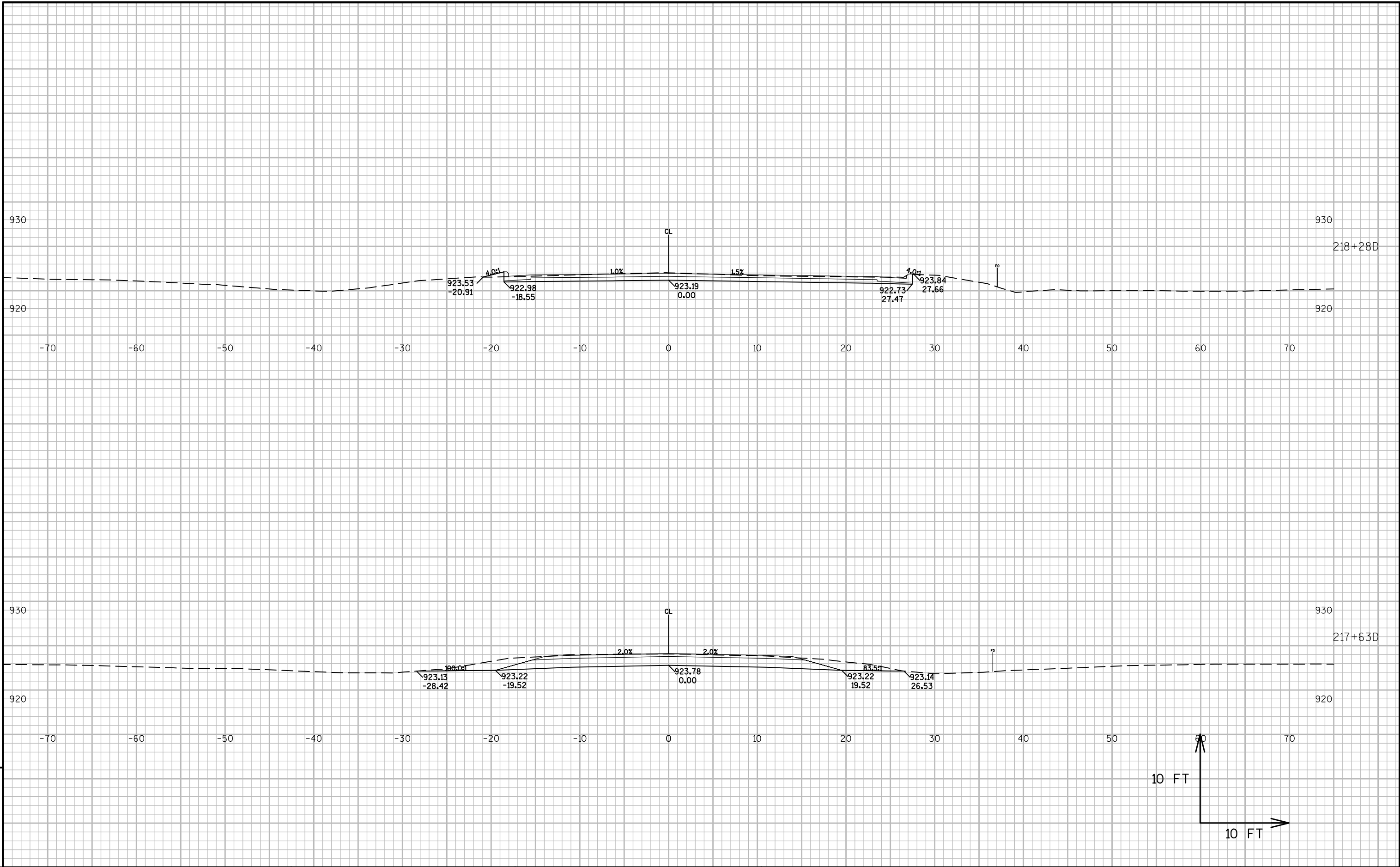


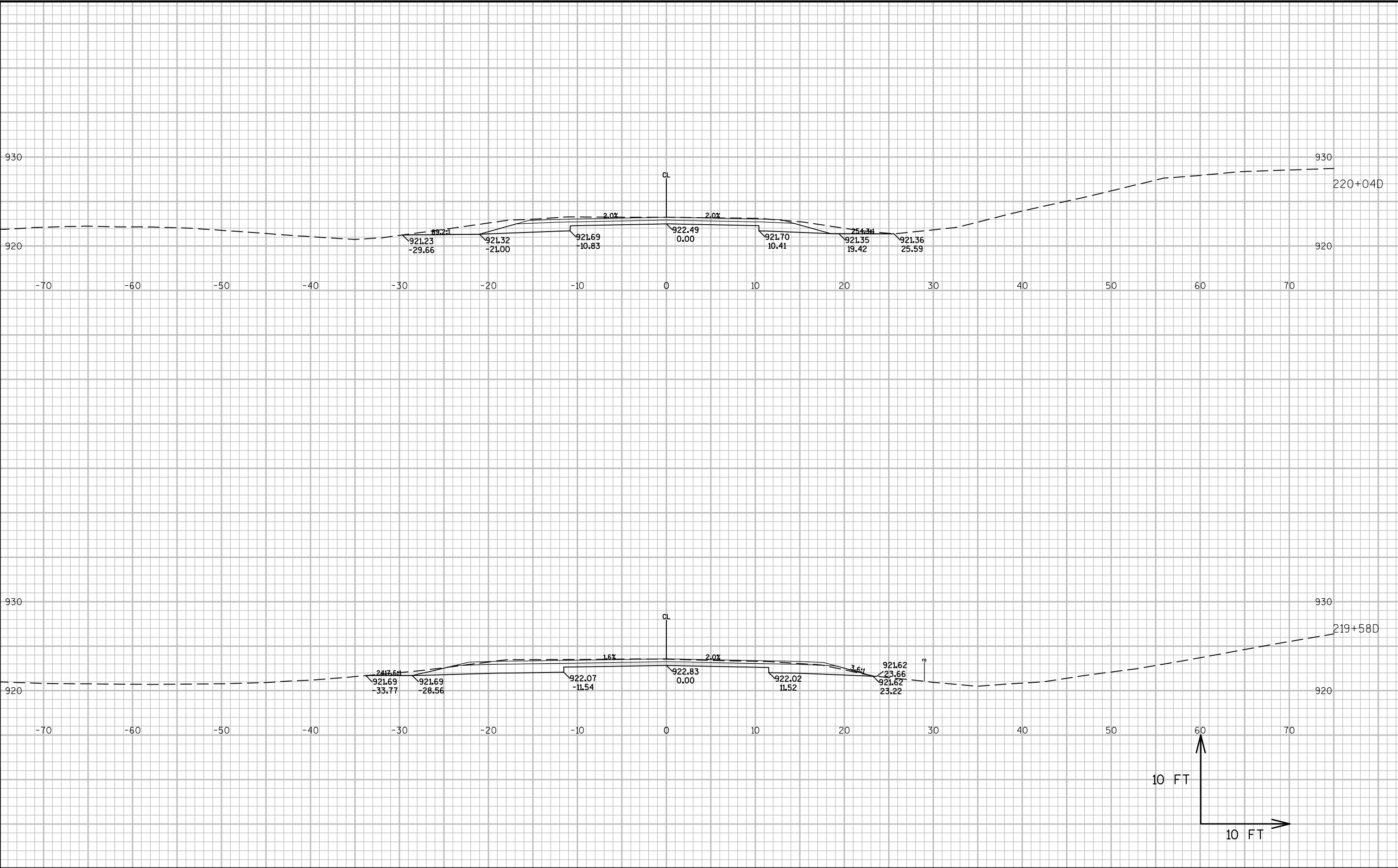


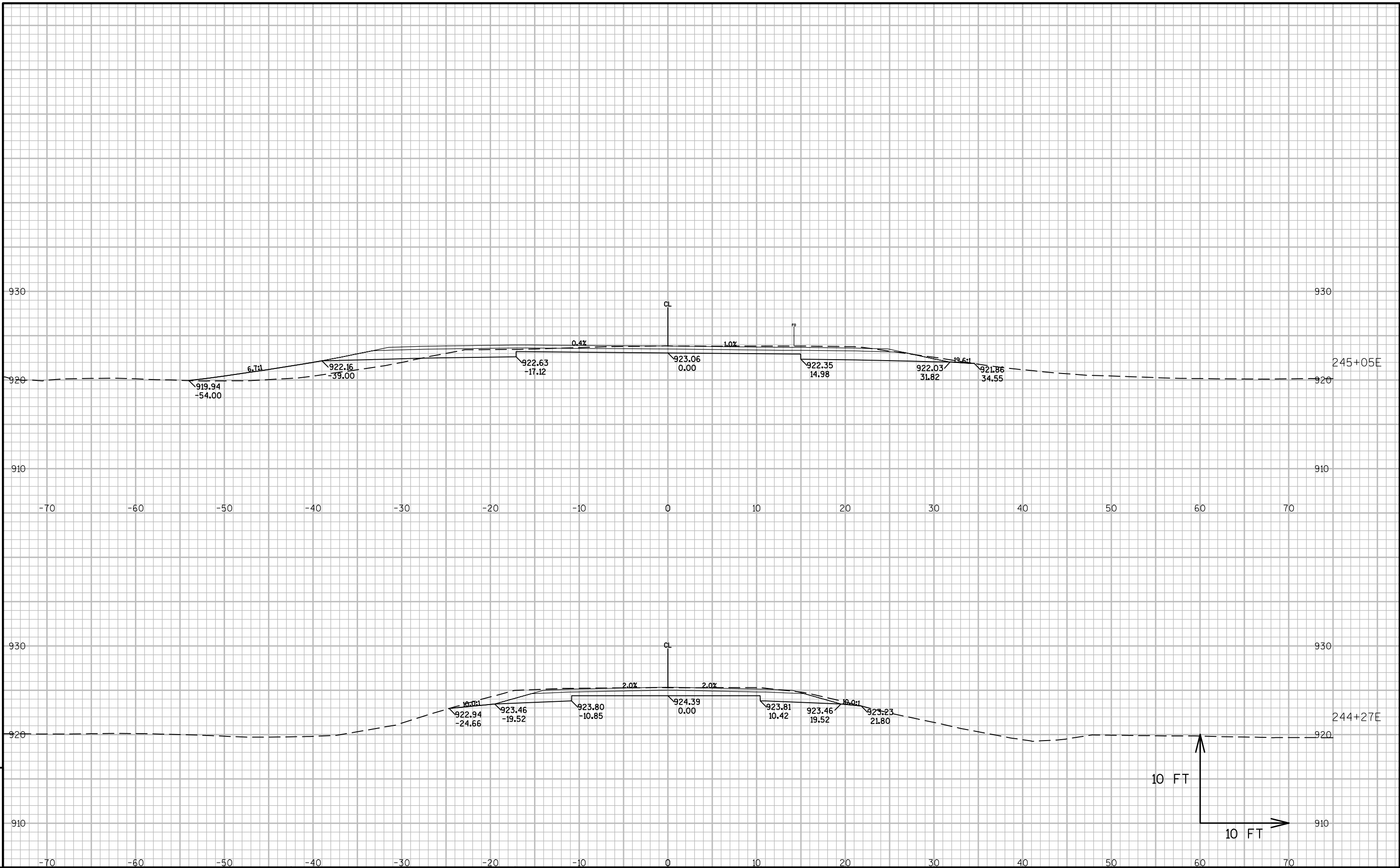


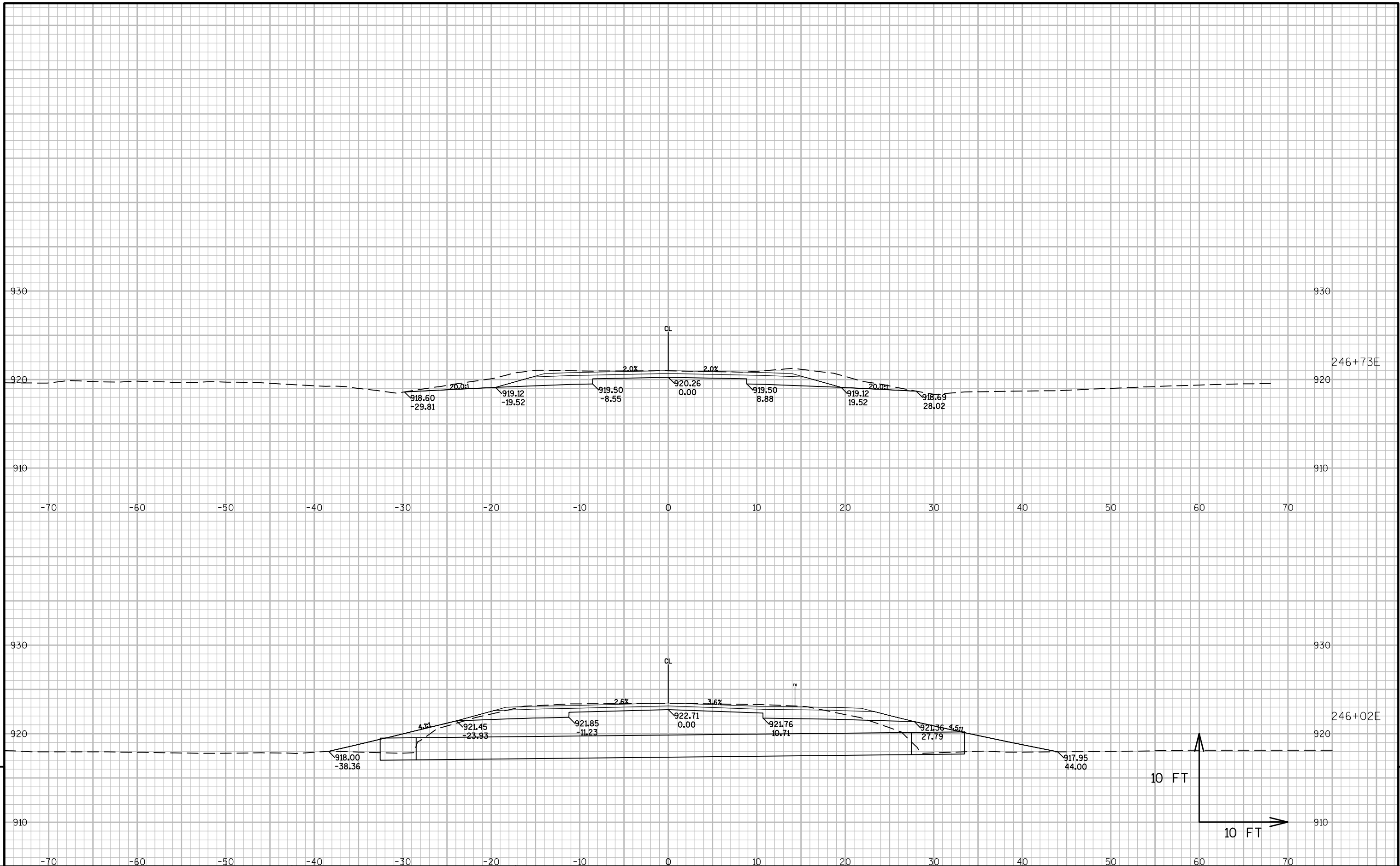


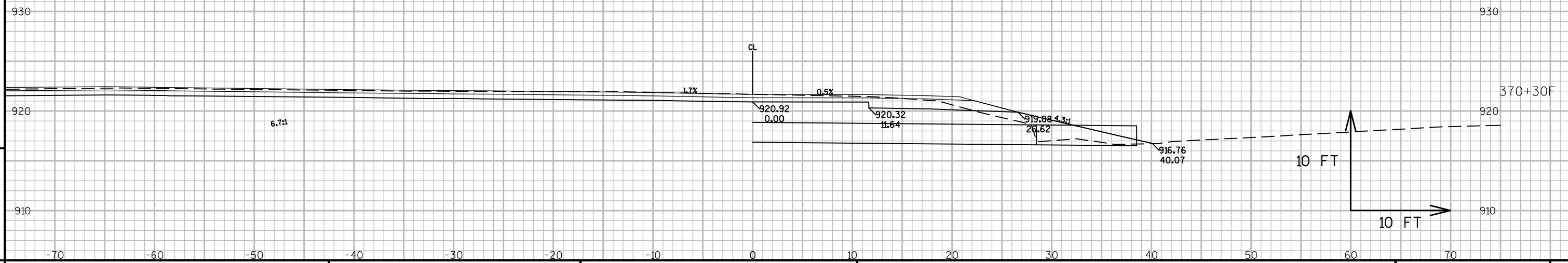
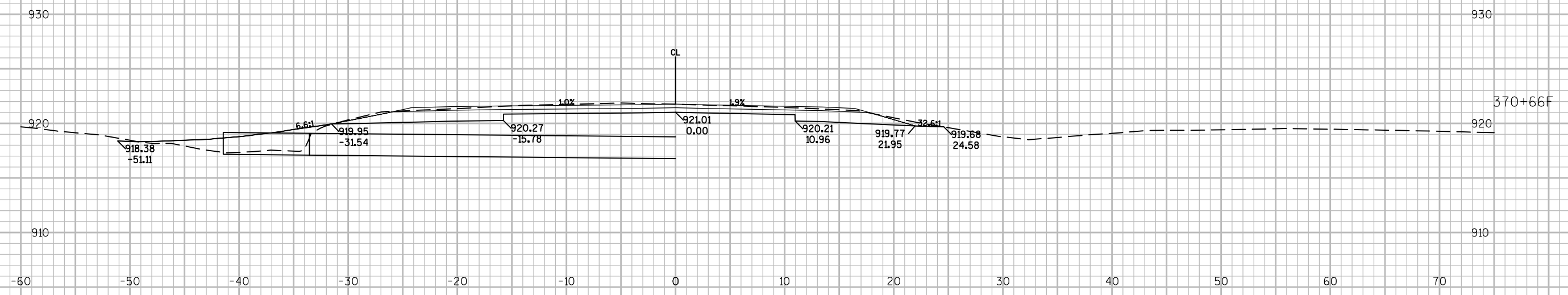


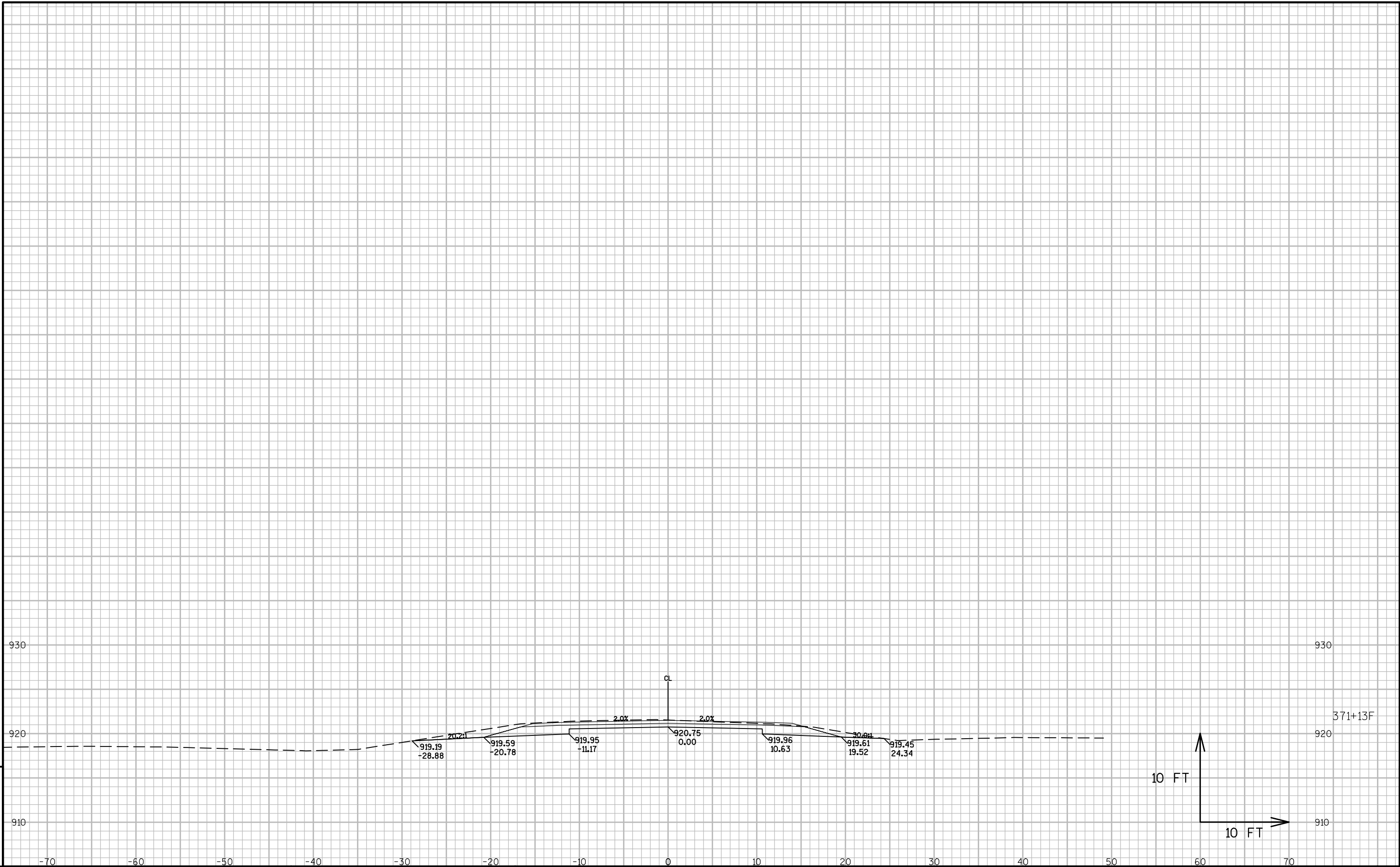


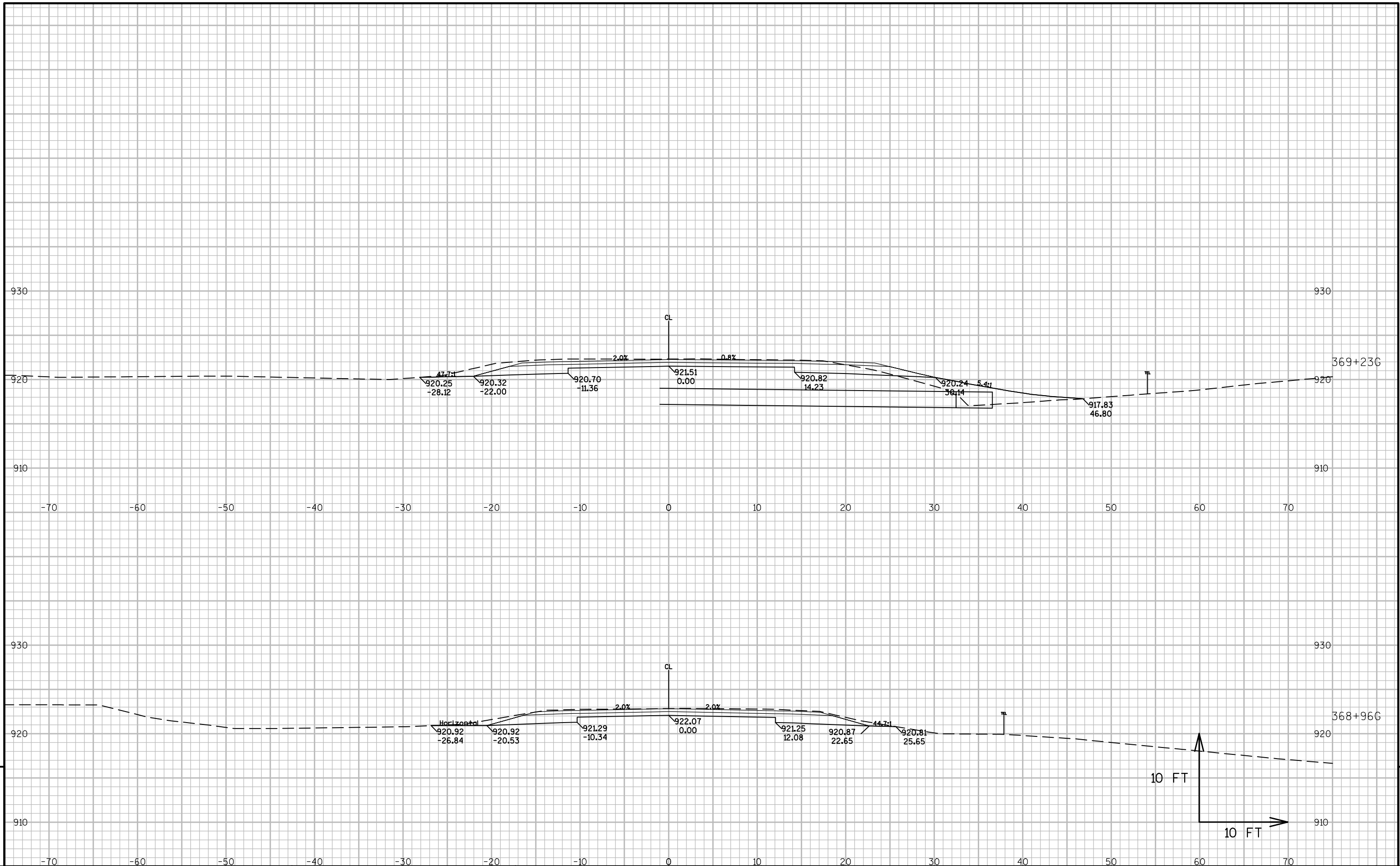


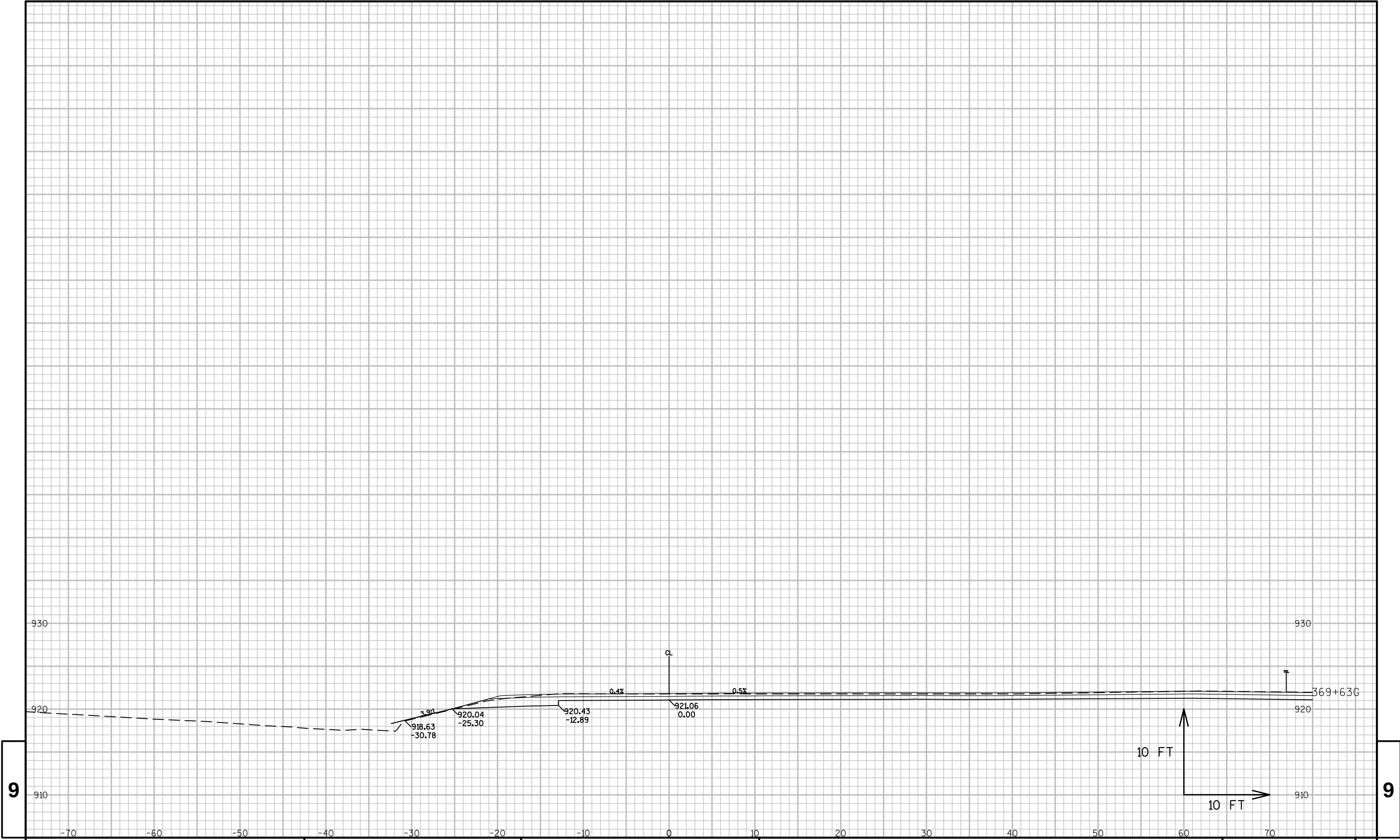


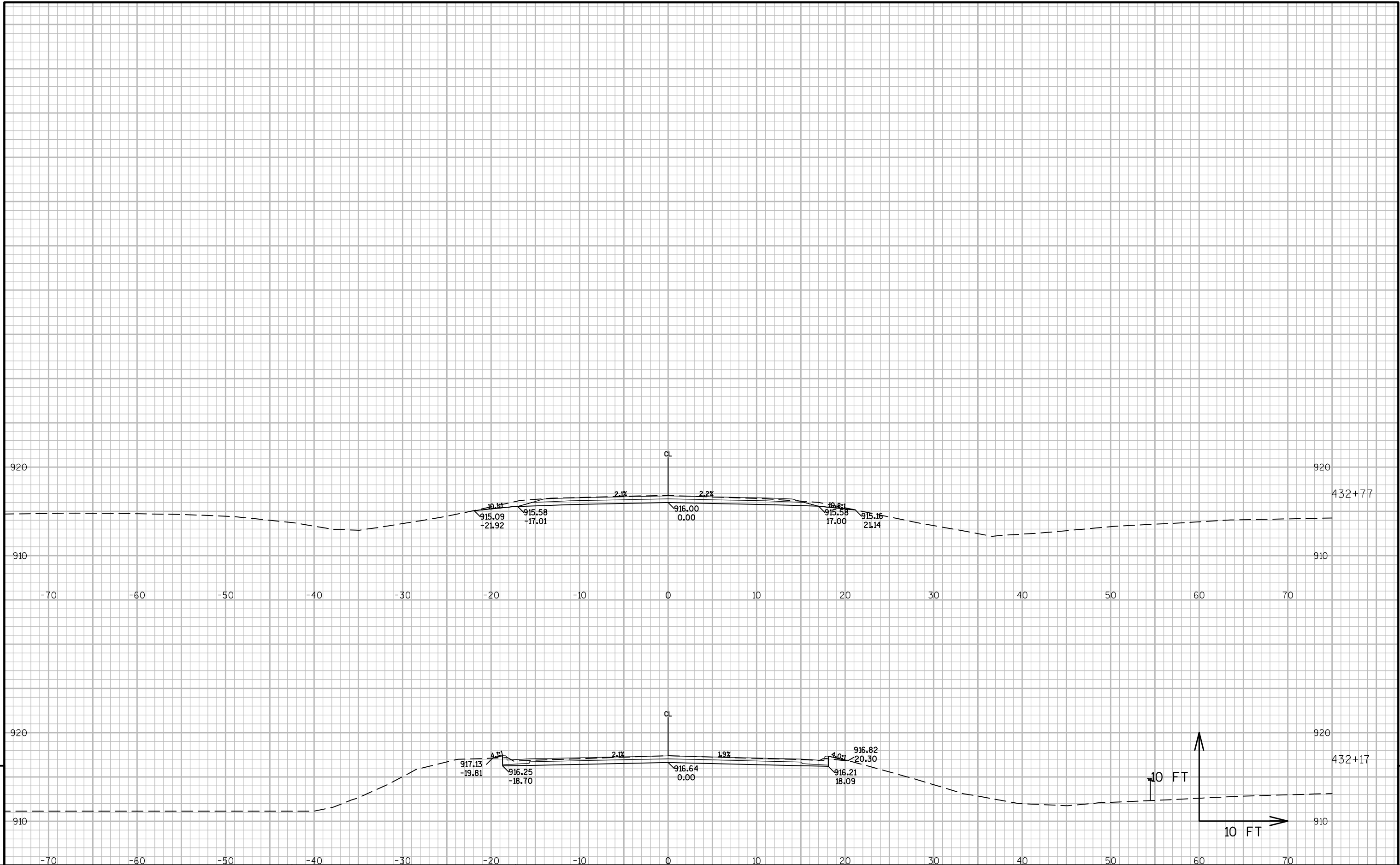


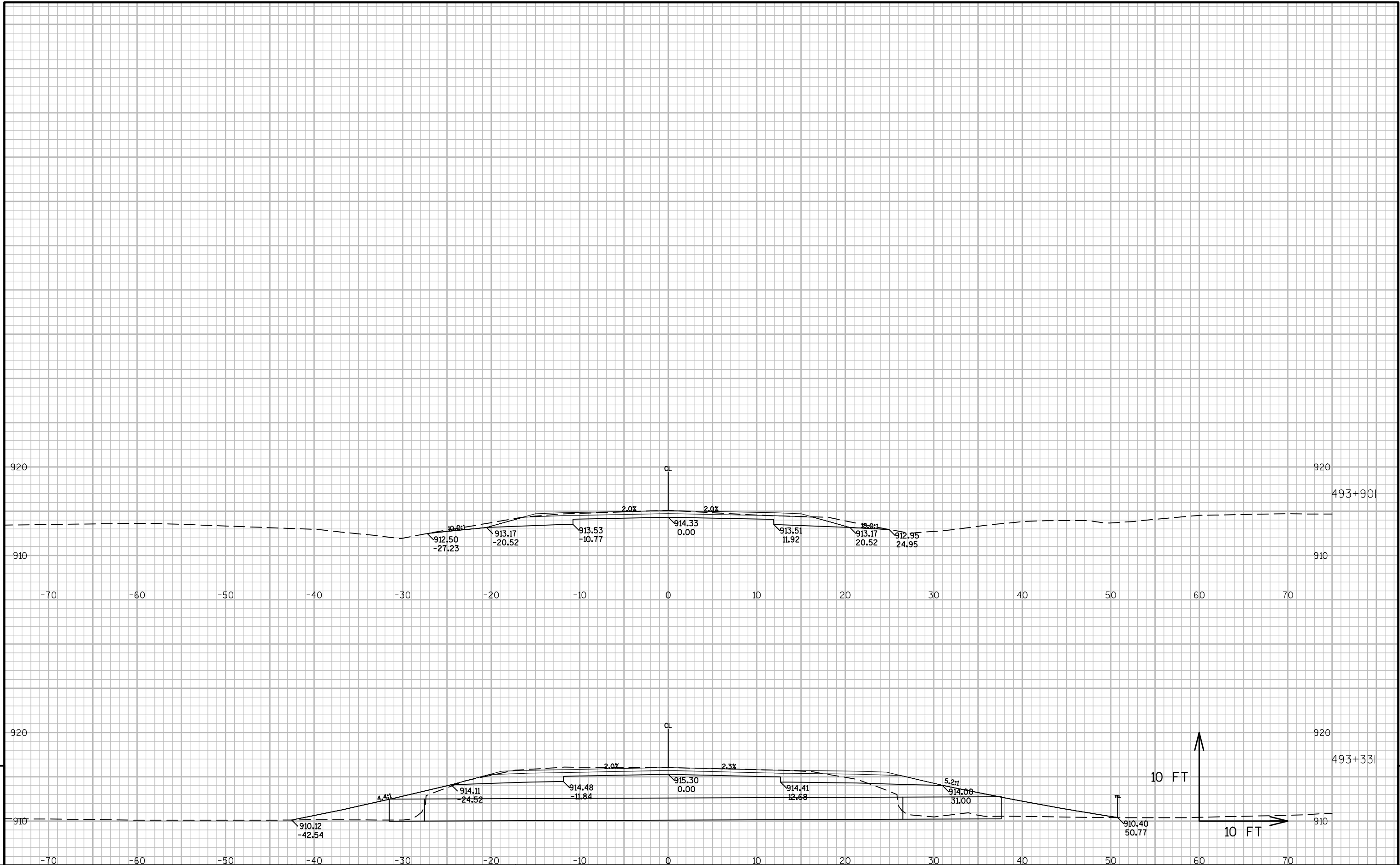




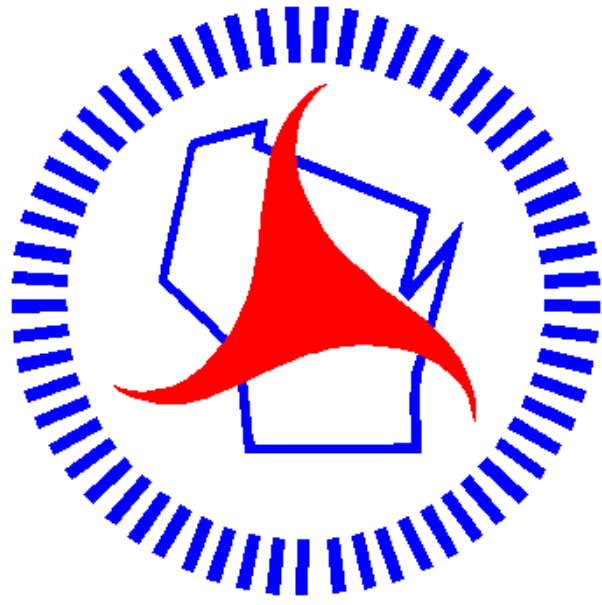








Notes



Wisconsin Department of Transportation

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