

MAD PROJECT ID: 3300-01-73 WITH: 3300-01-74 COUNTY: JEFFERSON

MARCH 2018

ORDER OF SHEETS

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

TOTAL SHEETS = 450

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

C LAKE MILLS, MAIN STREET

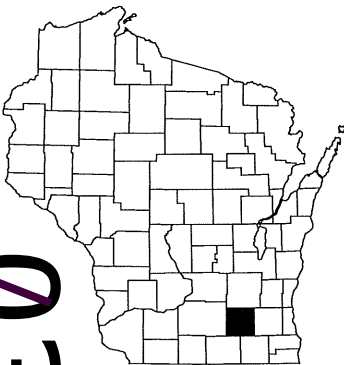
TOPEL STREET TO MADISON STREET

STH 89

JEFFERSON COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
3300-01-73	WISC 2018137	1
3300-01-74		

ROADWAY	SANITARY SEWER & WATER MAIN
STATE PROJECT NUMBER	STATE PROJECT NUMBER
3300-01-73	3300-01-74



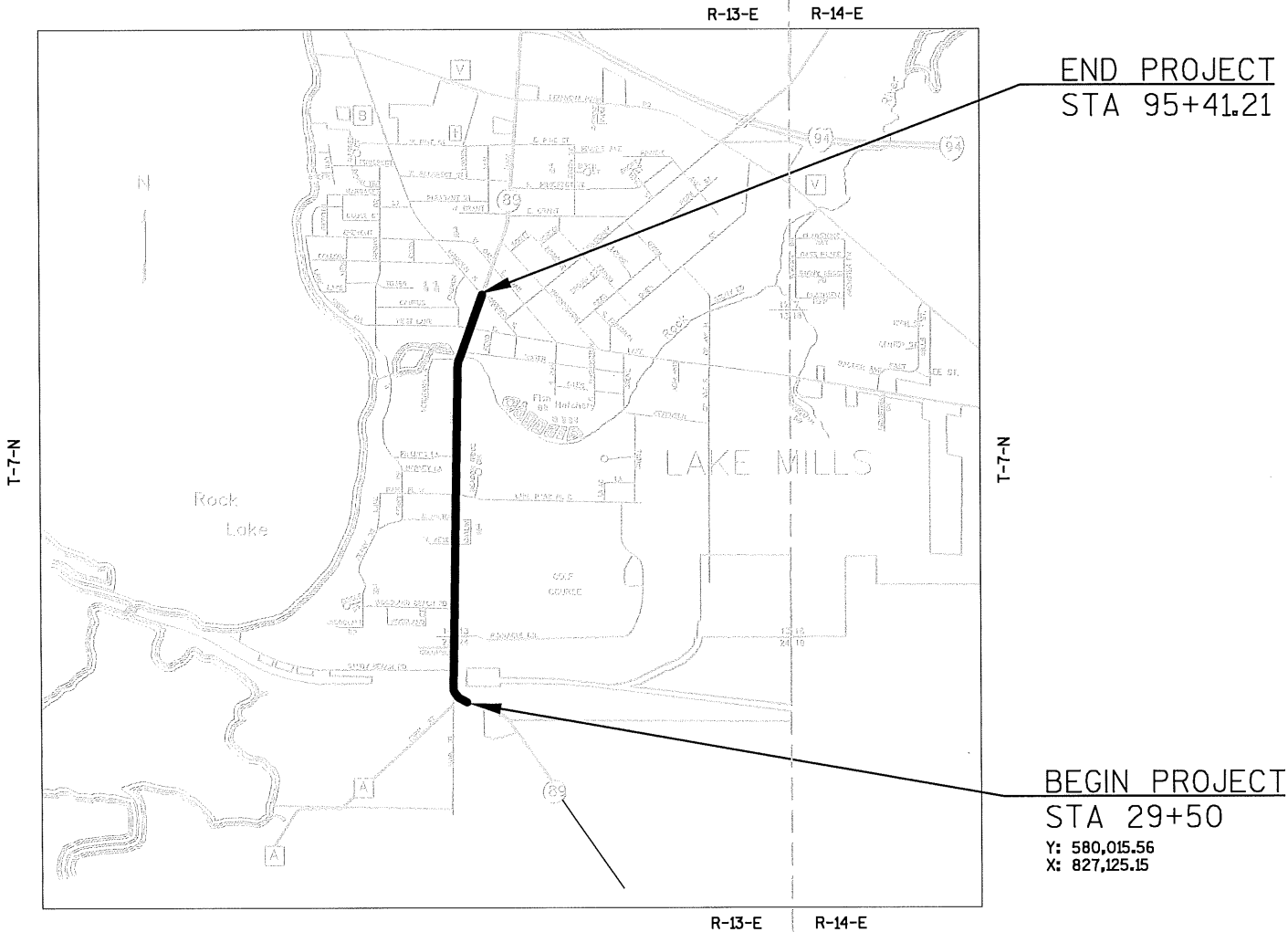
DESIGN DESIGNATION 3300-01-03

A.A.D.T.	2018	= 8500
A.A.D.T.	2038	= 9300
D.H.V.		= 4.9%
D.D.		= 59/41
T.		= 5.7%
DESIGN SPEED		= 30 M.P.H.
ESALS		= 1,900,000

CONVENTIONAL SYMBOLS

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

PROFILE	
GRADE LINE	
ORIGINAL GROUND	
MARSH OR ROCK PROFILE (To be noted as such)	
SPECIAL DITCH	
GRADE ELEVATION	
CULVERT (Profile View)	
UTILITIES	
ELECTRIC	
OVERHEAD UTILITY	
FIBER OPTIC	
GAS	
SANITARY SEWER	
STORM SEWER	
TELEPHONE	
WATER	
UTILITY PEDESTAL	
POWER POLE	
TELEPHONE POLE	



LAYOUT
SCALE 0 0.5 MILES

TOTAL NET LENGTH OF CENTERLINE = 1.248 MI.

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, JEFFERSON COUNTY, NAD83 (2007), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.
ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF NAVD 88 (2007).

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	
Surveyor	R.A. SMITH NATIONAL
Designer	JEREMY WHITE
Project Manager	BRANDAN HAGER
Regional Examiner	
Regional Supervisor	JIM OETTINGER

APPROVED FOR THE DEPARTMENT
DATE: 11-1-17

E

GENERAL NOTES

NO TREES OR SHRUBS THAT ARE NOT MARKED ON THE PLAN TO BE REMOVED SHALL BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER IN THE FIELD.

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

ASPHALTIC SURFACE AND WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.

PLACE THE 3.5" AND 5" ASPHALTIC SURFACE IN TWO LAYERS.

APPLY TACK COAT BETWEEN LAYERS OF ASPHALTIC SURFACE. THE APPLICATION RATE IS 0.05 GALLONS PER SQUARE YARD OR AS DIRECTED BY THE ENGINEER.

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

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

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

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

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

INLETS SHALL BE COVERED AS NECESSARY TO PREVENT CONSTRUCTION MATERIAL FROM FALLING INTO THE INLETS.

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

ALL PROPERTY LINES IN PLANS ARE APPROXIMATE.

THE LOCATION OF STOP LINES SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

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

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

UTILITY LINES IN CROSS SECTIONS ARE FOR HORIZONTAL REFERENCE ONLY.

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

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY SHALL BE FERTILIZED, SEEDED AND MULCHED.

CONSTRUCT INSIDE EDGE OF SIDEWALK 1/2 INCH HIGHER THAN TOP OF CURB WHEN THEY ARE ADJACENT TO EACH OTHER.

SIDEWALK REPLACEMENT SHOULD BE TO THE NEAREST JOINT.

IF REMOVING CONCRETE STEPS IS NECESSARY AND APPROVED BY THE ENGINEER, IT WILL BE PAID FOR AS REMOVING CONCRETE SIDEWALK. NEW STEPS OR NEW DROPS BETWEEN ENTRANCES AND SIDEWALK SHALL NOT BE ADDED AT ANY LOCATION WITHIN THE PROJECT UNLESS APPROVED BY THE ENGINEER.

CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES EXCEPT WHEN PAVING OR INSTALLING UTILITIES REQUIRE THE DRIVEWAY TO BE CLOSED. ACCESS TO DRIVEWAY SHALL BE RE-ESTABLISHED IMMEDIATELY AFTER PAVEMENT OR UTILITIES ARE INSTALLED.

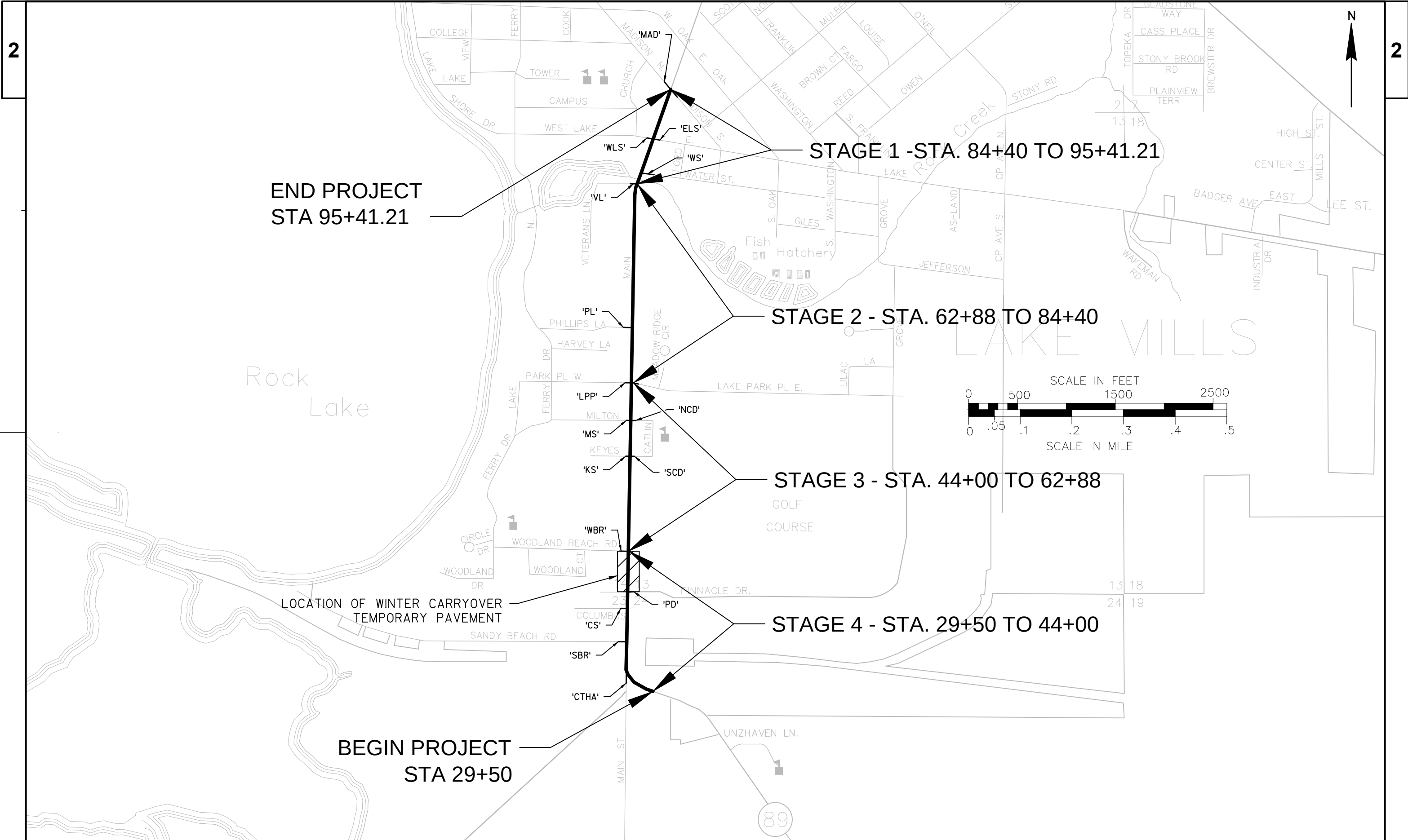
UTILITIES AND OTHER CONTACTS

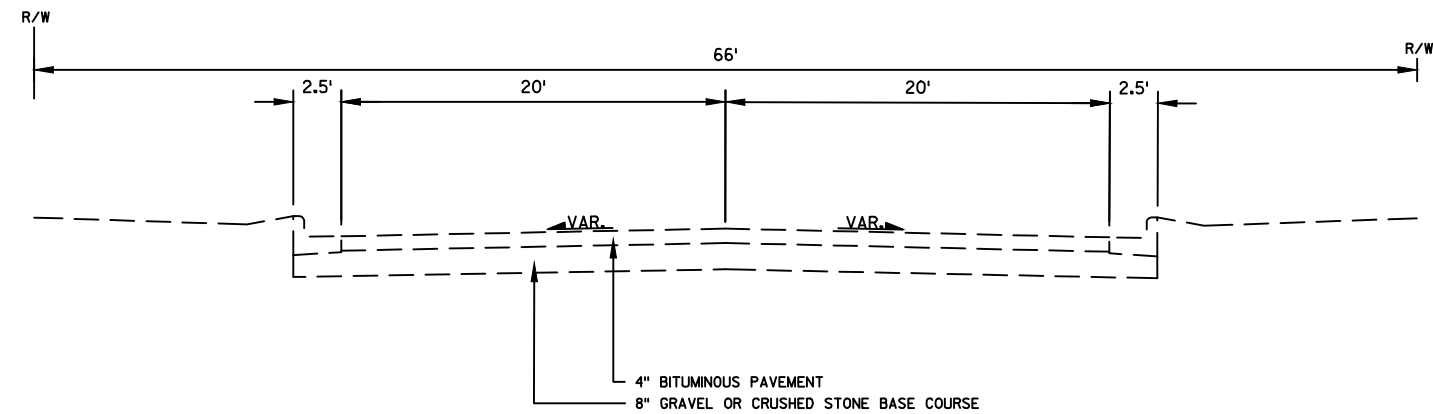
<u>CHARTER COMMUNICATIONS (COMMUNICATION)</u> FIELD CONTACT: RON FRASE N3760 CTH DJ JUNEAU, WI 53039 (920) 349-3202 x103; MOBILE (608)438-9648 ron.frase@charter.com	<u>FRONTIER COMMUNICATIONS OF WI LLC (COMMUNICATION)</u> FIELD CONTACT: ED STIEBER 100 COMMUNICATIONS DR SUN PRAIRIE, WI 53590 (608)-837-1410; MOBILE (262) 325-7048 Edward.o.stieber@ftr.com
BRANDON STORM 2701 DANIELS ST. MADISON, WI 53718 (608) 274-3822; MOBILE (608) 444-9493	RUSS RYAN 107 PLEASANT VIEW DR. PLYMOUTH, WI 53703 (920) 893-7212; MOBILE (920) 737-9662
<u>LAKE MILLS LIGHT AND WATER DEPT (ELECTRICITY)</u> FIELD CONTACT: CHRIS EVERSON or AL MILBRATH 155 S. INDUSTRIAL DRIVE LAKE MILLS, WI 53551 (920) 648-4026	<u>LAKE MILLS LIGHT AND WATER DEPT (WATER)</u> PAUL HERMANSON 155 S. INDUSTRIAL DRIVE LAKE MILLS, WI 53551 (920) 648-4026 MOBILE (920) 723-4684 phermanson@ci.lake-mills.wi.us
<u>LAKE MILLS WASTEWATER UTILITY (SANITARY)</u> PAUL HERMANSON 155 S. INDUSTRIAL DRIVE LAKE MILLS, WI 53551 (920) 648-4026; MOBILE (920) 723-4684 phermanson@ci.lake-mills.wi.us	<u>CITY OF LAKE MILLS (COMMUNICATION)</u> PAUL HERMANSON 155 S. INDUSTRIAL DRIVE LAKE MILLS, WI 53551 (920) 648-4026 MOBILE (920) 723-4684 phermanson@ci.lake-mills.wi.us
<u>SPRINT COMMUNICATIONS (COMMUNICATION)</u> FIELD CONTACT: KENNETH M. NINE 110 N. MAIN ST. CULVER, IN 46511 (574) 842-8830;MOBILE (574) 904-6336 Kennethnine@att.net	<u>WE ENERGIES (GAS/PETROLEUM)</u> FIELD CONTACT: JACOB SCHOENUNG 500 S 116th ST. WEST ALLIS, WI 53024 (414) 262-6705; MOBILE (414) 416-3365 jacob.schoenung@we-energies.com
JAMES BURTON 1901 N. ROSELLE RD. SUITE 500 SCHAUMBURG, IL 60195 (800) 788-0751; MOBILE (708) 955-6659	DAN SANDE 333 W. EVERETT ST. A299 MILWAUKEE, WI 53203 (414) 221-4578; MOBILE (414) 550-4993
DIGGERSHOTLINE Dial 811 or (800)242-8511 www.DiggersHotline.com	
<u>WI DNR LIASON</u> LAURA BUB 3911 FISH HATCHERY ROAD FITCHBURG, WI 53711-5397 (608) 275-3485 Laura.bub@wisconsin.gov	<u>DESIGN PROJECT LEADER (WISDOT)</u> JEREMY WHITE 2101 WRIGHT ST. MADISON, WI 53704 (608) 246-7545 Jeremy.White@dot.wi.gov
<u>DESIGN PROJECT MANAGER (WISDOT)</u> BRANDAN HAGER 2101 WRIGHT ST. MADISON, WI 53704 (608) 245-2625 Brandan.Hager@dot.wi.gov	

STANDARD ABBREVIATIONS

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

SECTION 2 ORDER OF SHEETS
GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
TREE REMOVALS
PAVING & INTERSECTION DETAILS
CURB RAMP DETAILS
SITE GRADING PLAN
EROSION CONTROL
STORM SEWER
SANITARY SEWER & WATER
EXISTING SIGNING
PERMANENT SIGNING & PAVEMENT MARKING
STREET LIGHTING
TRAFFIC CONTROL
DETOUR ROUTE
ALIGNMENT DETAILS

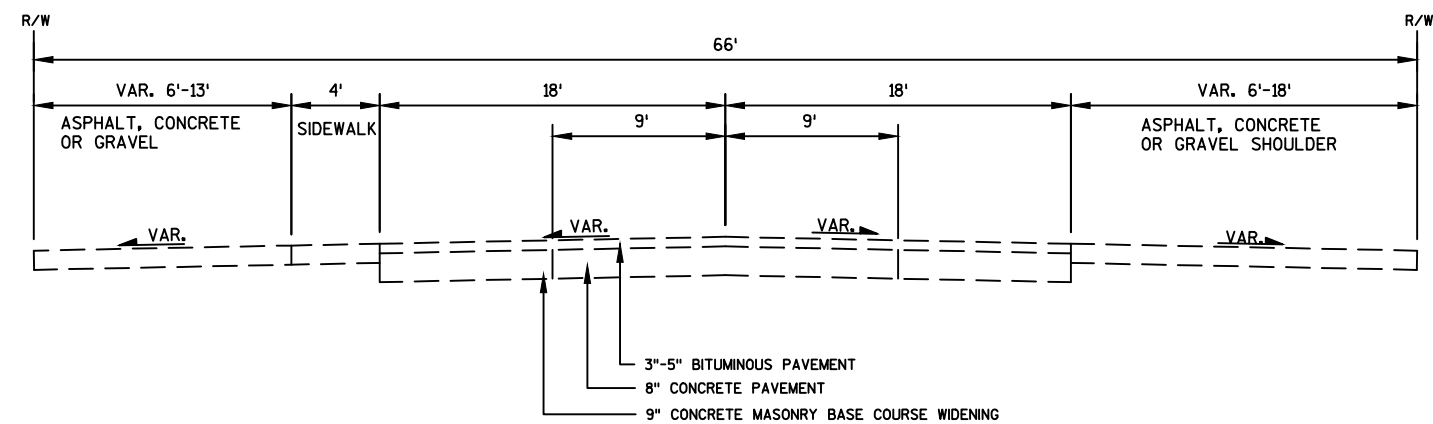




EXISTING TYPICAL SECTION

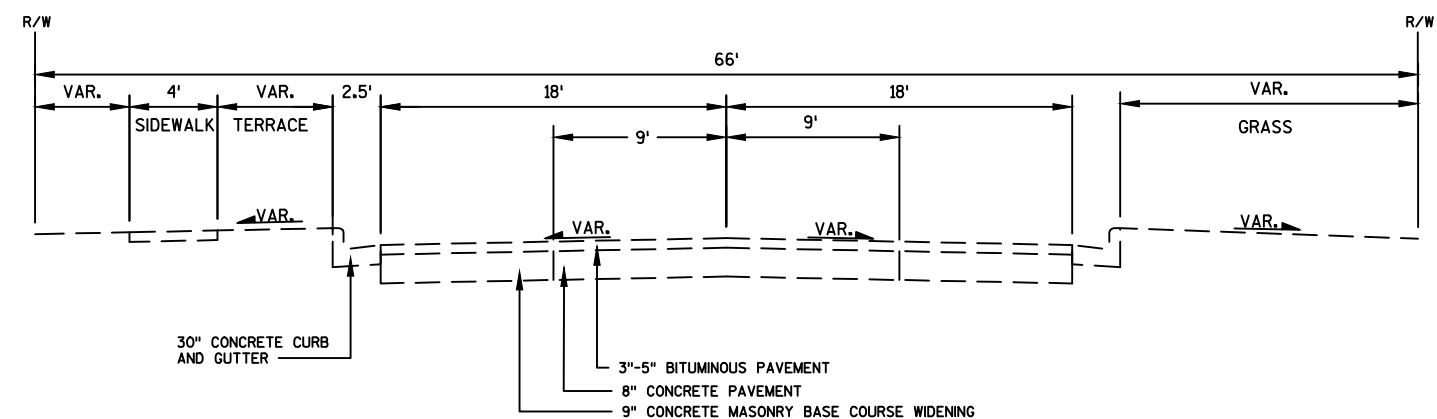
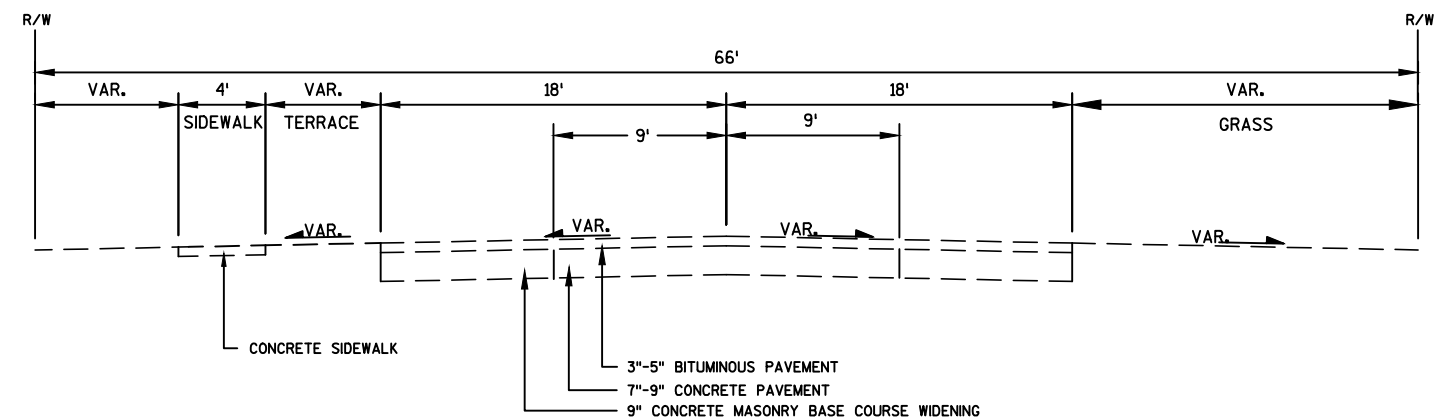
BEG. OF PROJECT TO TRAIL CROSSING
STA 29+50 TO STA 33+47
STH 89

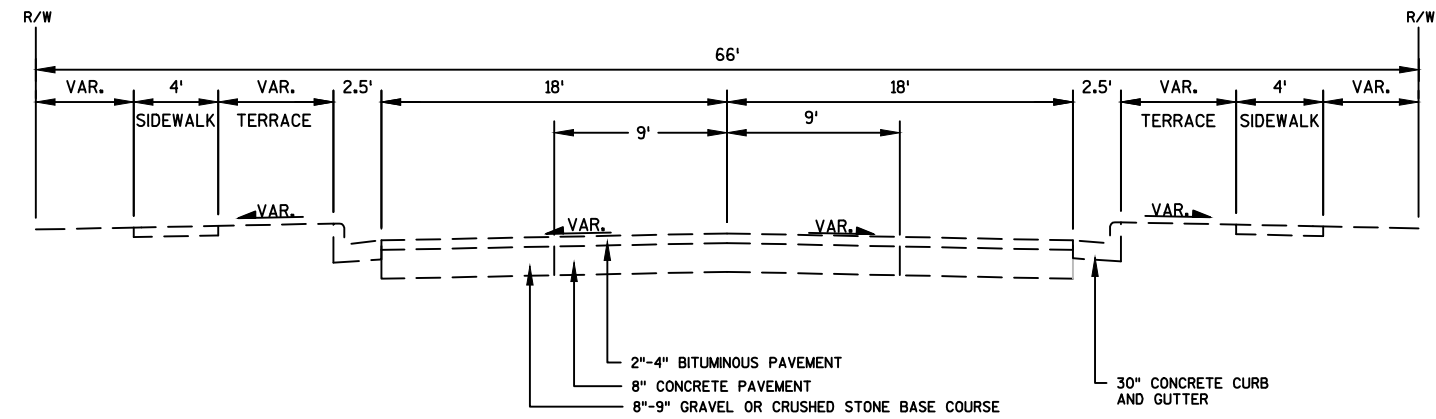
CTH A/TOPEL ST.
STA 8+25-CTHA to STA 9+83-CTHA



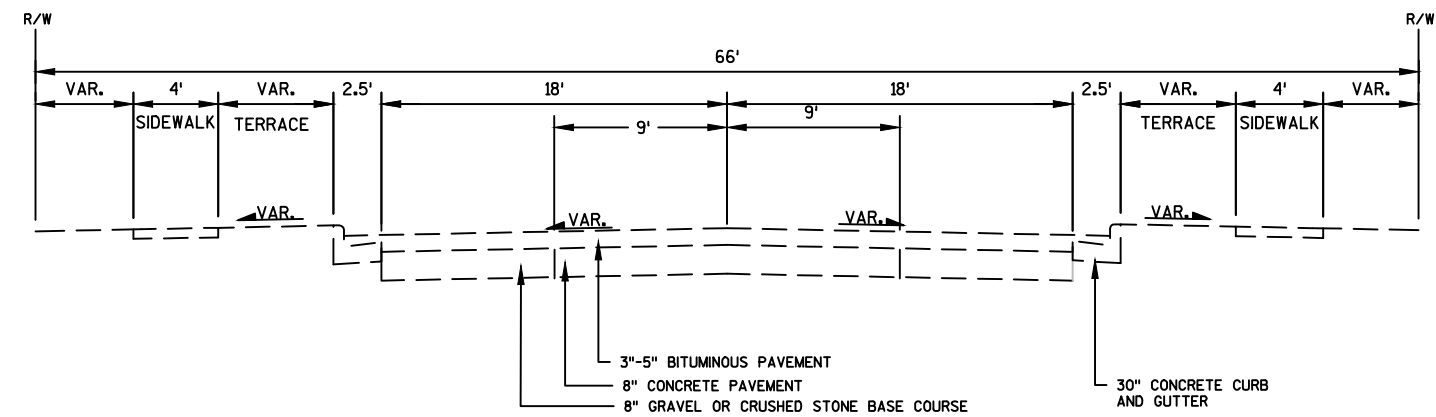
EXISTING TYPICAL SECTION

TRAIL CROSSING TO COLUMBUS STREET
STA 33+47 TO STA 38+37
STH 89

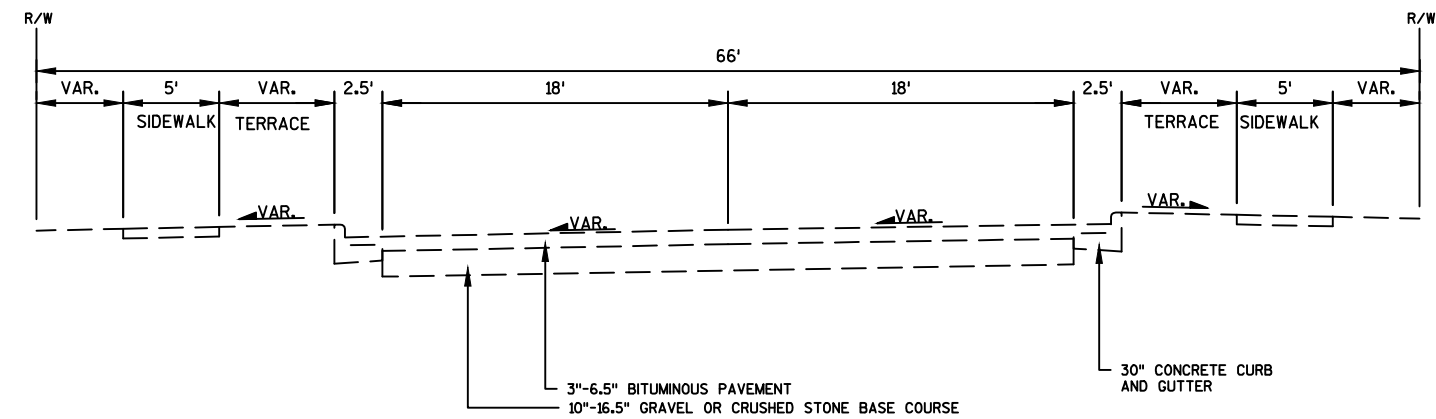




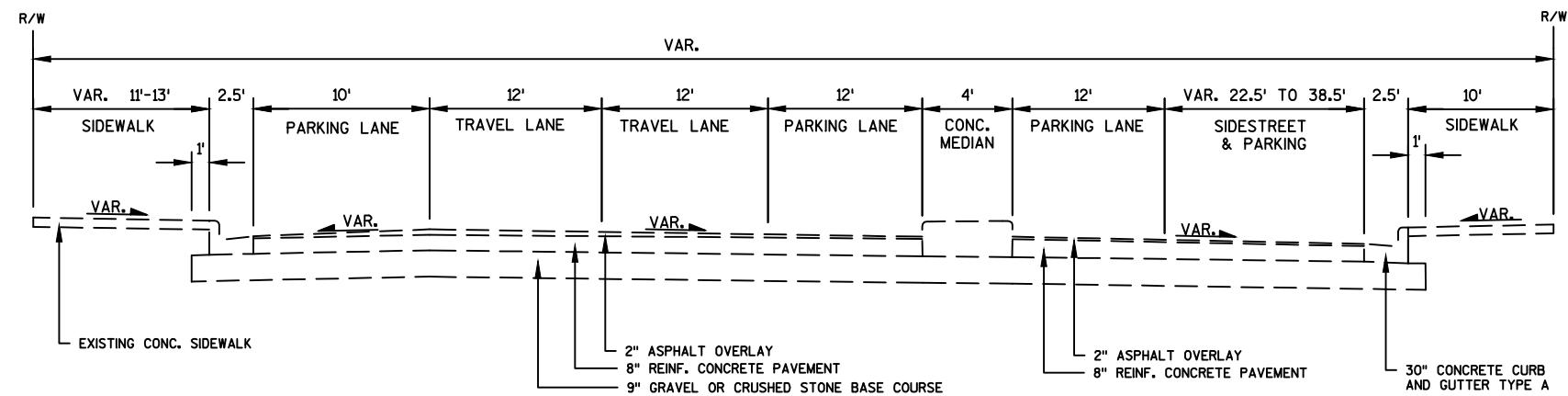
EXISTING TYPICAL SECTION
CATLIN DRIVE/KEYES STREET TO E. LAKE PARK PLACE
STA 55+17 TO STA 63+08
STH 89



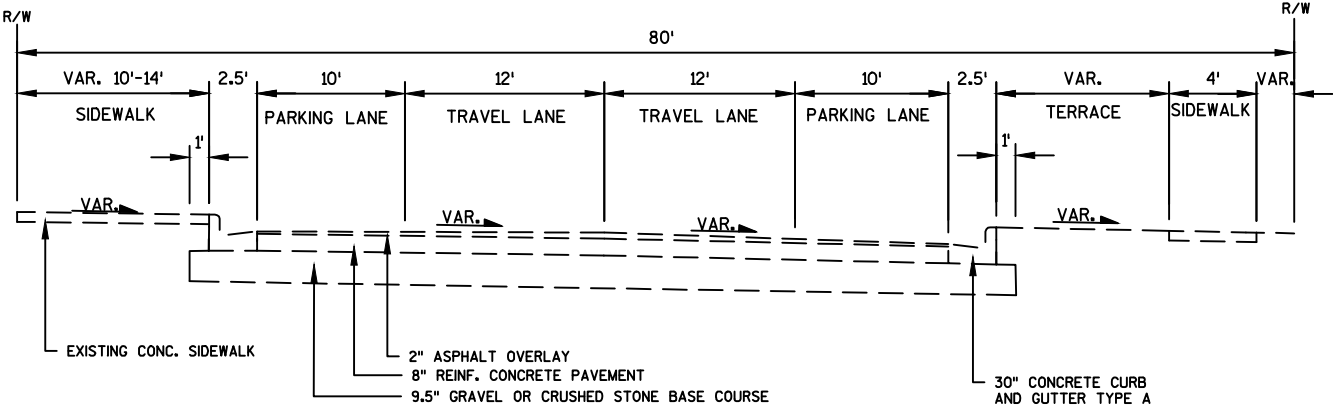
EXISTING TYPICAL SECTION
E. LAKE PARK PL. TO 354' NORTH OF E. LAKE PARK PLACE
STA 63+08 TO STA 66+41
STH 89



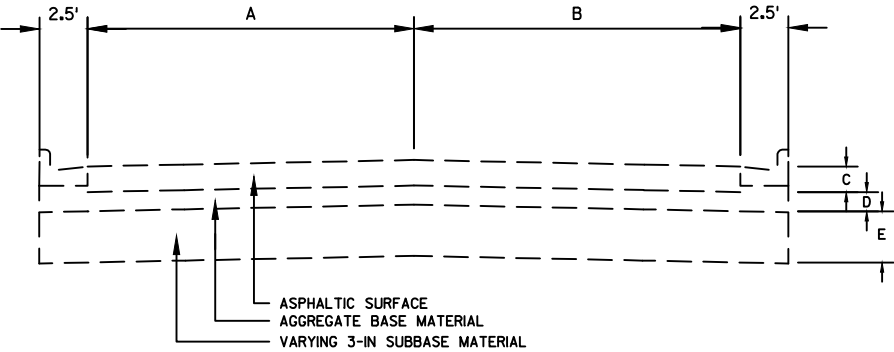
EXISTING TYPICAL SECTION
354' NORTH OF E. LAKE PARK PLACE TO WATER STREET
STA 66+41 TO STA 86+09
STH 89



EXISTING TYPICAL SECTION
WATER STREET TO LAKE STREET
STA 86+09 TO STA 90+00
STH 89

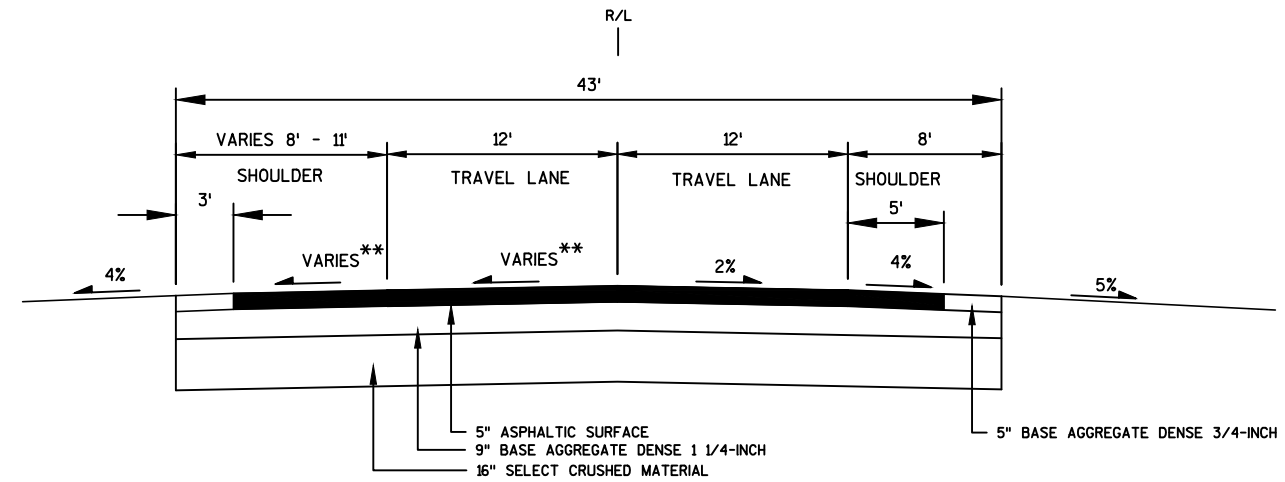


EXISTING TYPICAL SECTION
LAKE STREET TO MADISON STREET
STA 90+00 TO STA 95+41.21
STH 89



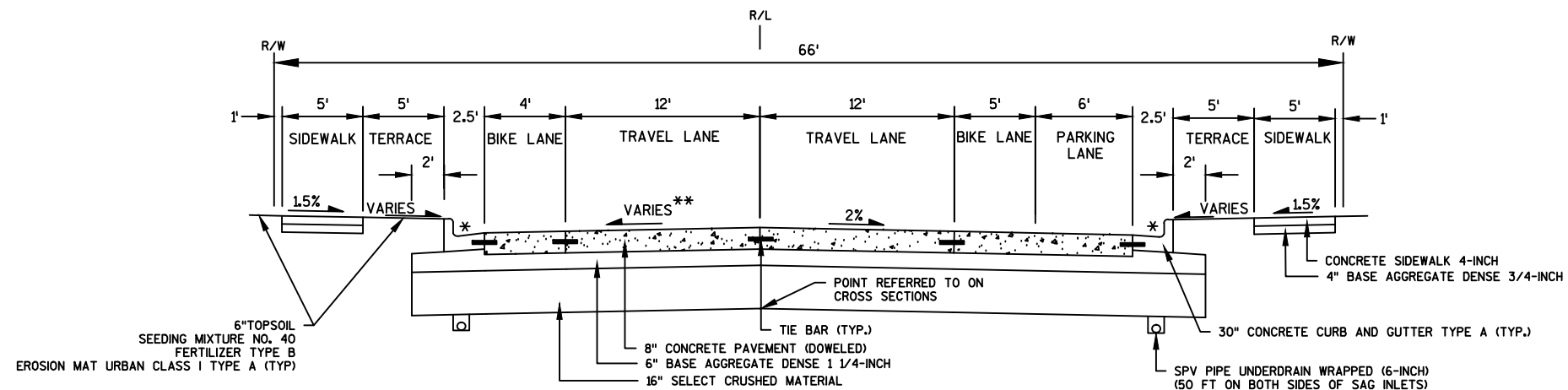
EXISTING TYPICAL SECTION
VARIOUS SIDE STREETS

	LANE WIDTH A (FT)	LANE WIDTH B (FT)	PAVEMENT THICKNESS C (IN)	BASE THICKNESS D (IN)	SUBBASE THICKNESS E (IN)	PAVEMENT TYPE	STA	TO	STA
CTH A	20'	20'	4	8	0	ASPHALT	8+25.0-CTH A	-	9+19.5-CTH A
SANDY BEACH ROAD	9.5	10.5	3.5	3	9	ASPHALT	8+80.0-SBR	-	9+59.8-SBR
CATLIN DRIVE, SOUTH	18'	19	3.5	3	9	ASPHALT	10+50.6-SCD	-	10+92.3-SCD
CATLIN DRIVE, NORTH	18'	19'	3.5	3	9	ASPHALT	10+49.6-NCD	-	10+91.2-NCD
WATER STREET	16.5'	16.5'	3.5	3	9	ASPHALT	10+46.3-WS	-	11+19.3-WS



PROPOSED TYPICAL SECTION

SOUTH PROJECT TERMINI
STA 29+50 TO STA 30+00
STH 89



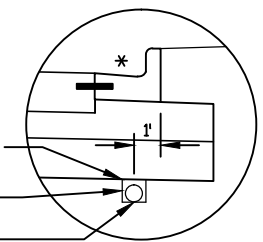
PROPOSED TYPICAL SECTION

TOPEL STREET TO WATER STREET
STA 30+00 TO STA 86+58
STH 89

*GUTTER SLOPES ARE TO BE 6.25% UNLESS OTHERWISE NOTED IN THE CURB RAMP DETAIL SHEETS

**CROSS SLOPES VARY DUE TO CURVE SUPERELEVATION. REFER TO CROSS SECTIONS AND ALIGNMENT DIAGRAM SHEETS.

SPV PIPE UNDERDRAIN WRAPPED
(6-INCH) BLOWUP

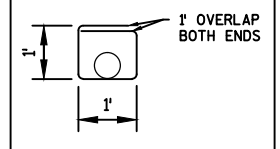


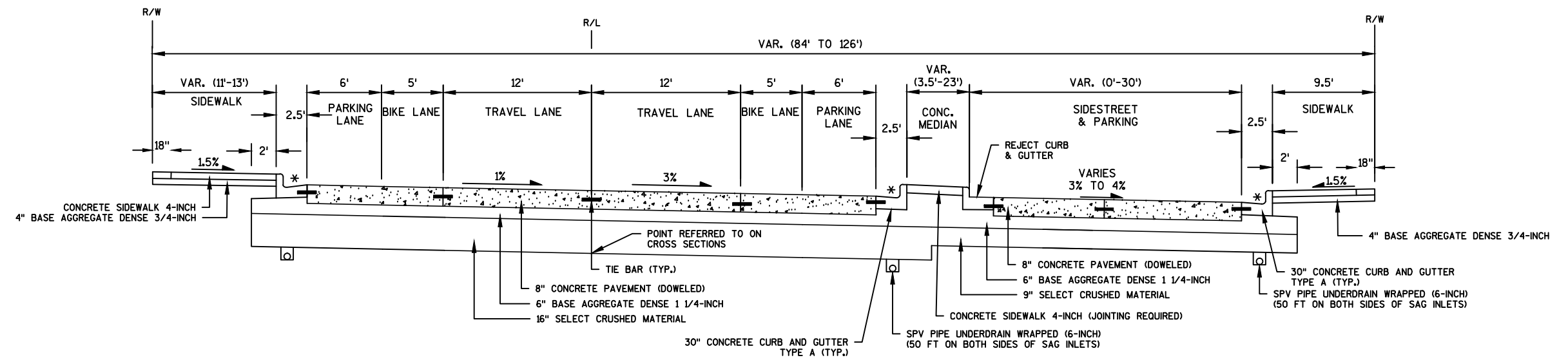
CONCRETE COARSE AGGREGATE SIZE NO. 1
(INCIDENTAL TO PIPE UNDERDRAIN)

GEOTEXTILE FABRIC
TYPE DF SCHEDULE B

PIPE UNDERDRAIN 6-INCH
DISCHARGE INTO NEW STORM SEWER INLETS
(CONNECTION INCIDENTAL TO UNDERDRAIN 6-INCH)

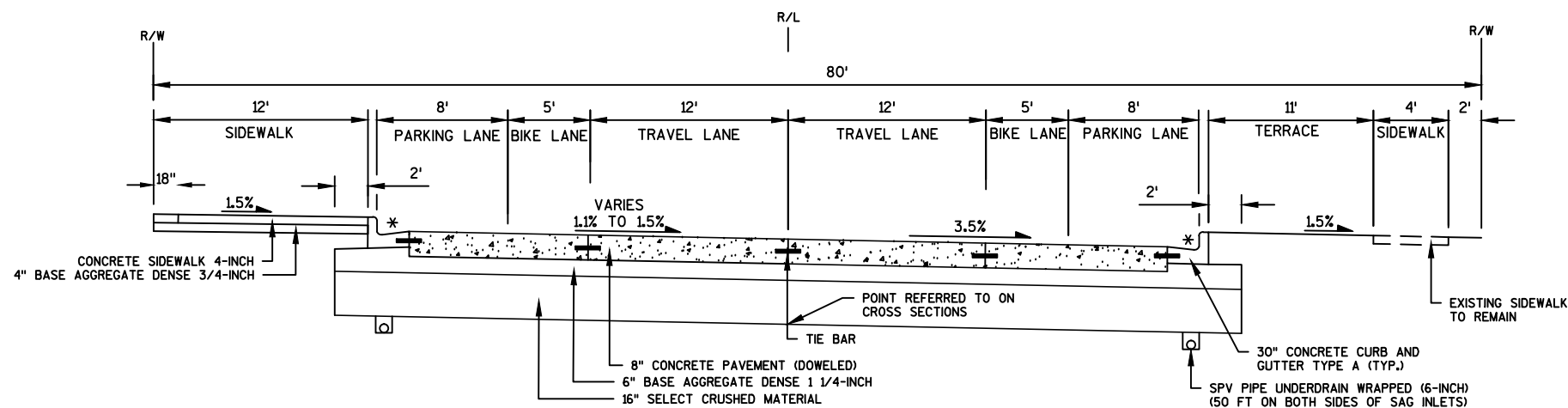
GEOTEXTILE FABRIC
OVERLAP DETAIL





PROPOSED TYPICAL SECTION

WATER STREET TO LAKE STREET
STA. 86+58 TO STA. 89+70
STH 89

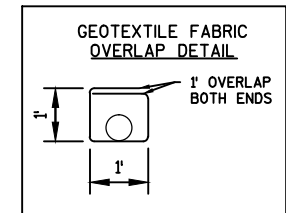
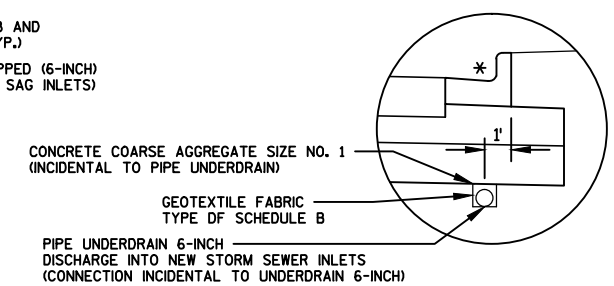


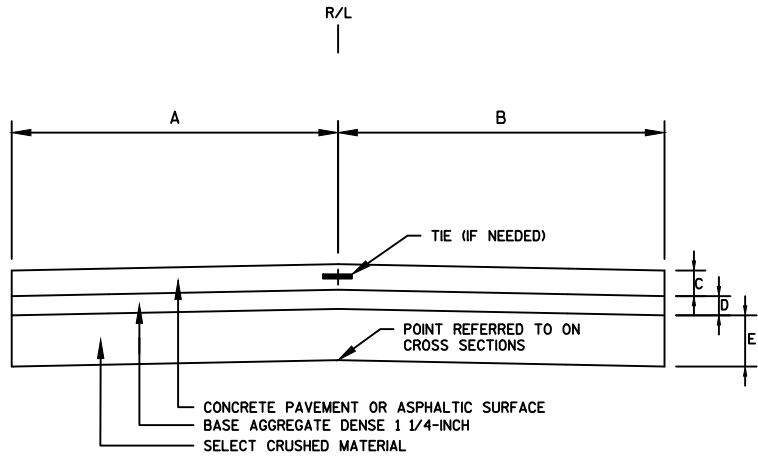
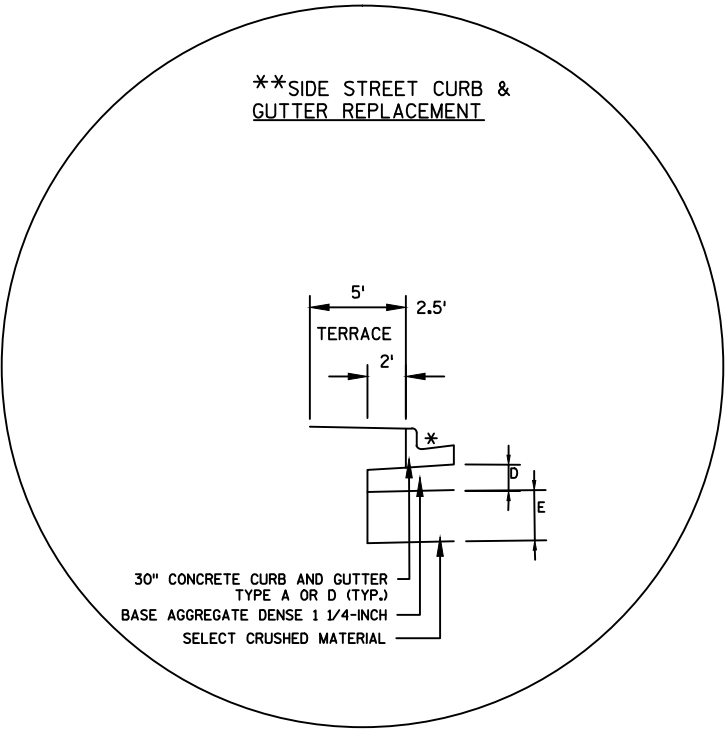
PROPOSED TYPICAL SECTION

LAKE STREET TO MADISON STREET
STA. 89+70 TO STA. 95+41.21
STH 89

*GUTTER SLOPES ARE TO BE 6.25% UNLESS OTHERWISE NOTED IN THE CURB RAMP DETAIL SHEETS

SPV PIPE UNDERDRAIN WRAPPED (6-INCH) BLOWUP

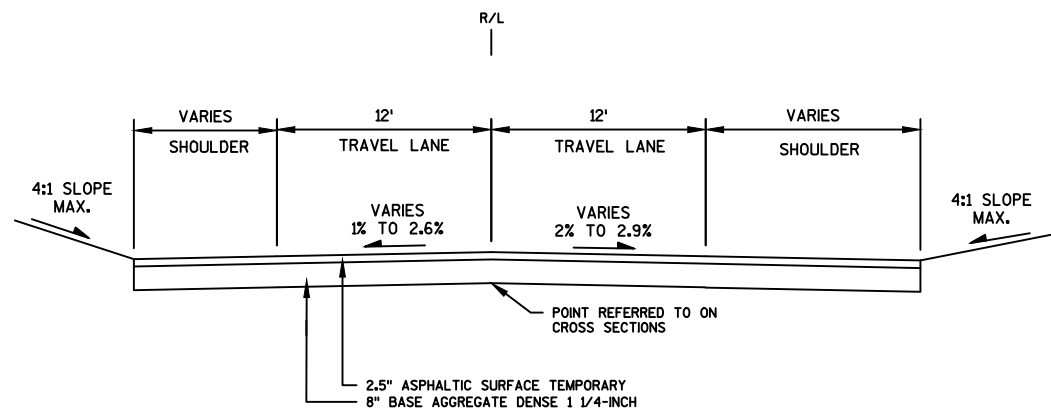




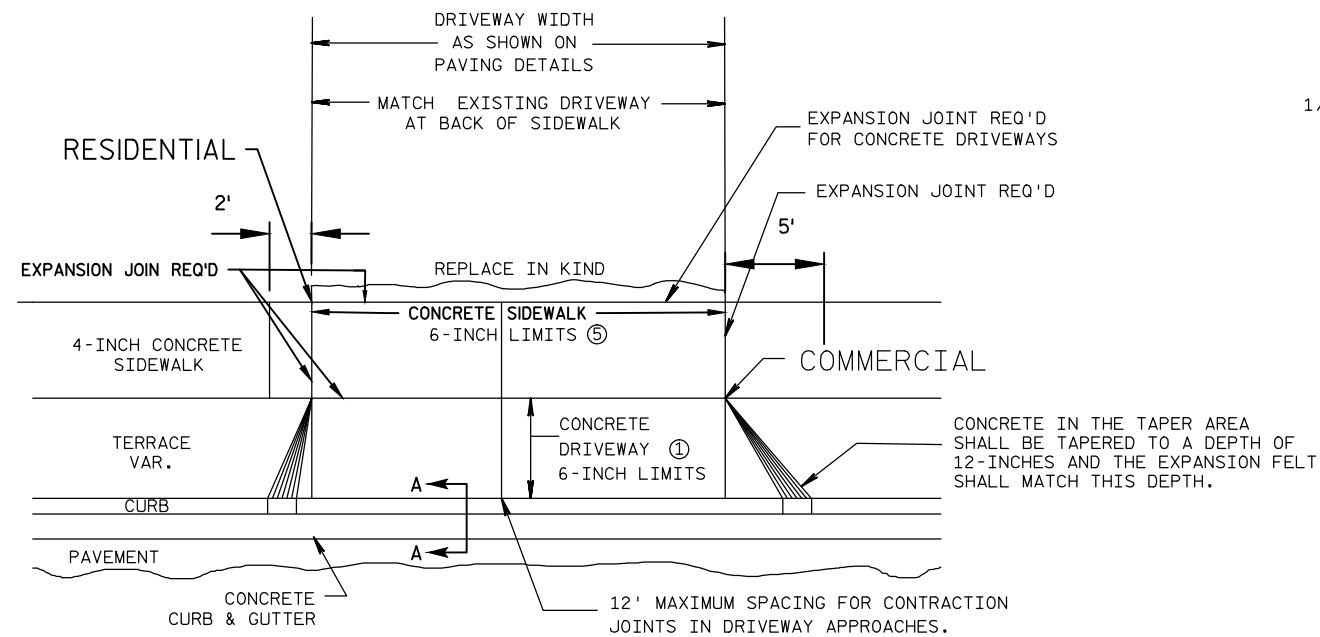
PROPOSED TYPICAL SECTION
VARIOUS SIDE STREETS

*GUTTER SLOPES ARE TO BE 6.25% UNLESS OTHERWISE
NOTED IN THE CURB RAMP DETAIL SHEETS

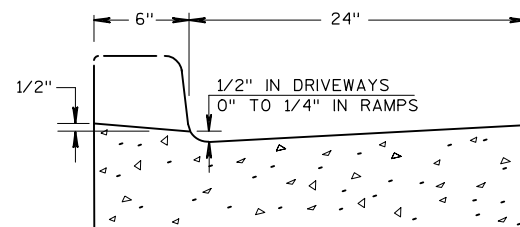
	LANE WIDTH A (FT)	LANE WIDTH B (FT)	PAVEMENT THICKNESS C (IN)	BASE THICKNESS D (IN)	SUBBASE THICKNESS E (IN)	PAVEMENT TYPE	STA	TO	STA
CTH A*	17' - 20'	17' - 20'	5	9	16	ASPHALTIC SURFACE	8+25.0-CTH A	-	9+19.5-CTH A
SANDY BEACH ROAD*	10' - 12'	10' - 19'	3.5	3	9	ASPHALTIC SURFACE	8+80.0-SBR	-	9+59.8-SBR
COLUMBUS STREET	11'	11'	3.5	3	9	ASPHALTIC SURFACE	9+52.5-CS	-	9+66.0-CS
PINNACLE DRIVE*	17'	17'	3	8	-	ASPHALTIC SURFACE	10+52.9-PD	-	10+67.9-PD
WOODLAND BEACH ROAD*	16'	16'	2.5	8	-	ASPHALTIC SURFACE	9+31.0-WBR	-	9+61.0-WBR
KEYES STREET*	13'	13'	3.5	3	9	ASPHALTIC SURFACE	9+51.8-KS	-	9+66.8-KS
CATLIN DRIVE, SOUTH*	12' - 18'	12' - 18.5'	3.5	3	9	ASPHALTIC SURFACE	10+50.6-SCD	-	10+92.3-SCD
MILTON STREET*	13.5'	13.5'	3.5	3	9	ASPHALTIC SURFACE	9+36.6-MS	-	9+66.6-MS
CATLIN DRIVE, NORTH*	12' - 18'	12' - 18'	3.5	3	9	ASPHALTIC SURFACE	10+49.6-NCD	-	10+91.2-NCD
WEST LAKE PARK PLACE*	13.5'	13.5'	3.5	3	9	ASPHALTIC SURFACE	9+46.7-LPP	-	9+61.7-LPP
EAST LAKE PARK PLACE*	17'	17'	3.5	3	9	ASPHALTIC SURFACE	10+39.9-LPP	-	10+54.9-LPP
PHILLIPS LANE*	14'	14'	3.5	3	9	ASPHALTIC SURFACE	9+51.3-PL	-	9+66.3-PL
VETERANS LANE*	17'	17'	3	6	9	ASPHALTIC SURFACE	9+35.6-VL	-	9+50.5-VL
WATER STREET*	16.5'	16.5'	8	6	9	CONCRETE PAVEMENT DOWELED AND TIED	10+46.3-WS	-	11+04.3-WS
WATER STREET*	16.5'	16.5'	3.5	3	9	ASPHALTIC SURFACE	11+04.3-WS	-	11+19.3-WS
WEST LAKE STREET*	19.5'	19.5'	5	9	16	ASPHALTIC SURFACE	9+32.6-WLS	-	9+47.6-WLS
EAST LAKE STREET*	22'	28'	5	9	16	ASPHALTIC SURFACE	10+72.3-ELS	-	10+87.3-ELS



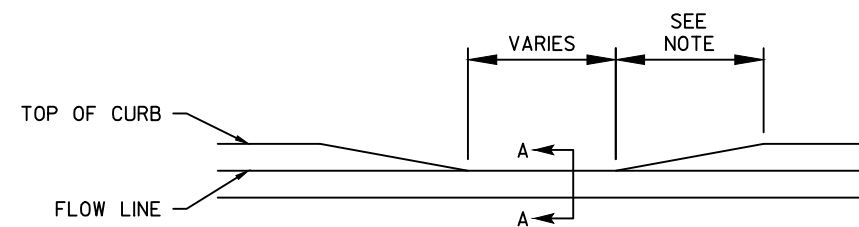
PROPOSED TYPICAL SECTION
WINTER CARRYOVER LANES
STA 40+40-WNTR TO STA 44+00-WNTR



DRIVEWAY PLAN VIEW

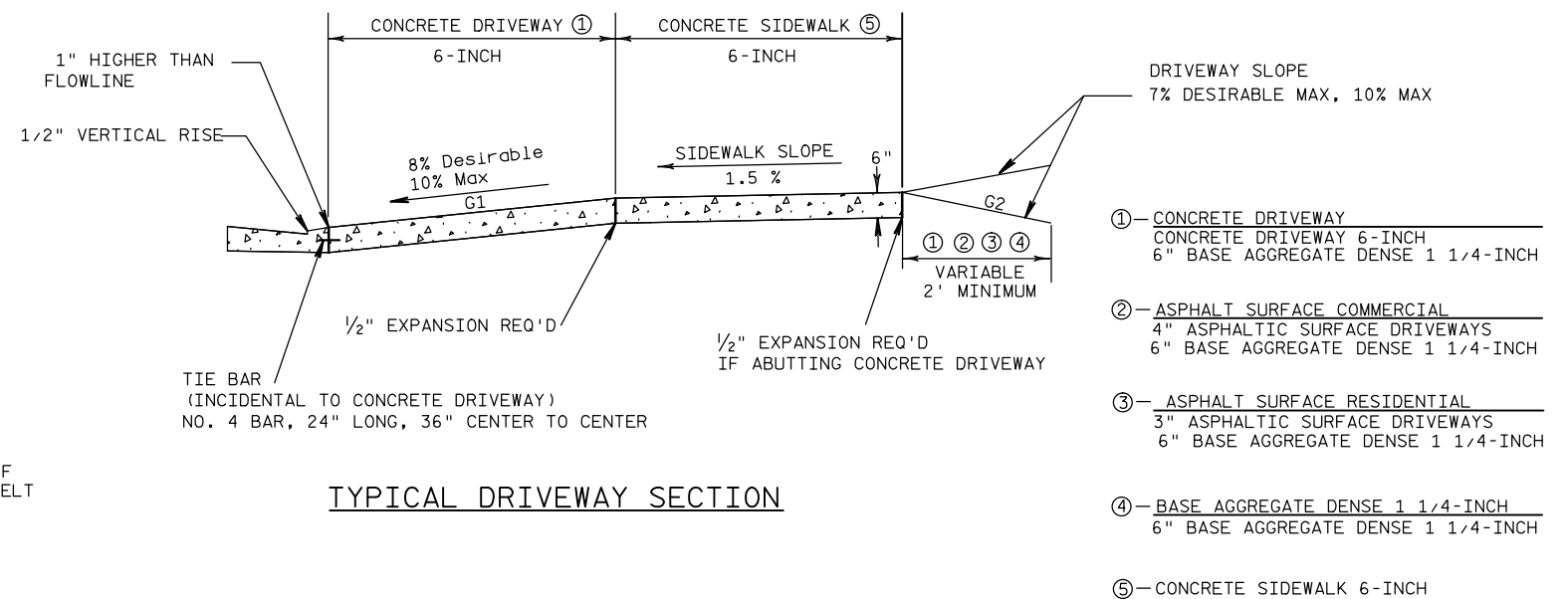


DRIVEWAY SECTION WISDOT TYPE A
CONCRETE CURB & GUTTER
SECTION A-A



TYPICAL CURB CUT DETAIL

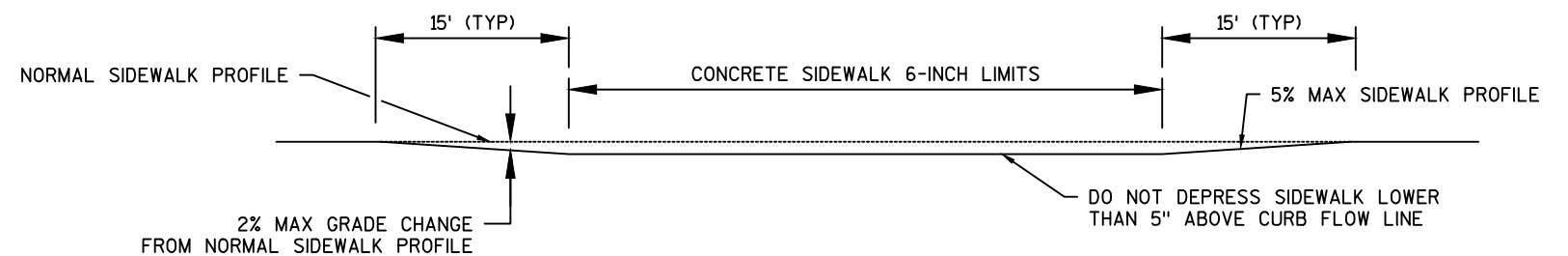
NOTE:
12" TO 18" TAPER FOR STANDARD DRIVEWAY APPROACH
18" TO 24" TAPER FOR STANDARD RAMP



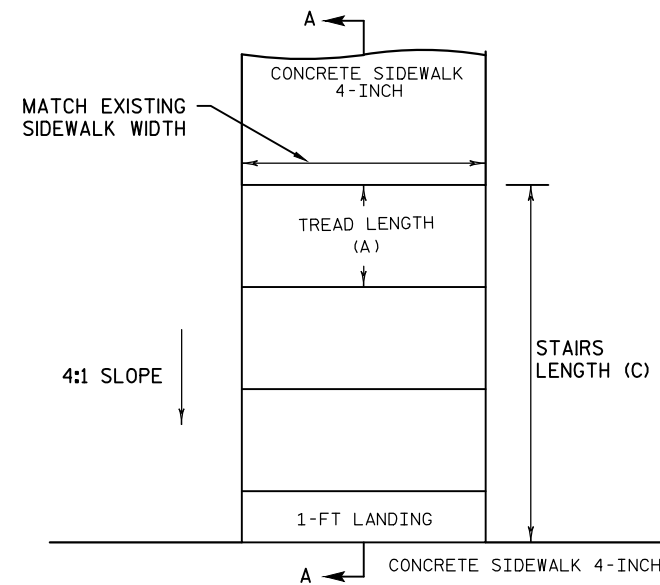
TYPICAL DRIVEWAY SECTION

NOTE: ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G1 & G2 TO NOT EXCEED 15%

DEPRESS SIDEWALK PROFILE IF DRIVEWAY APRON EXCEEDS MAX SLOPE



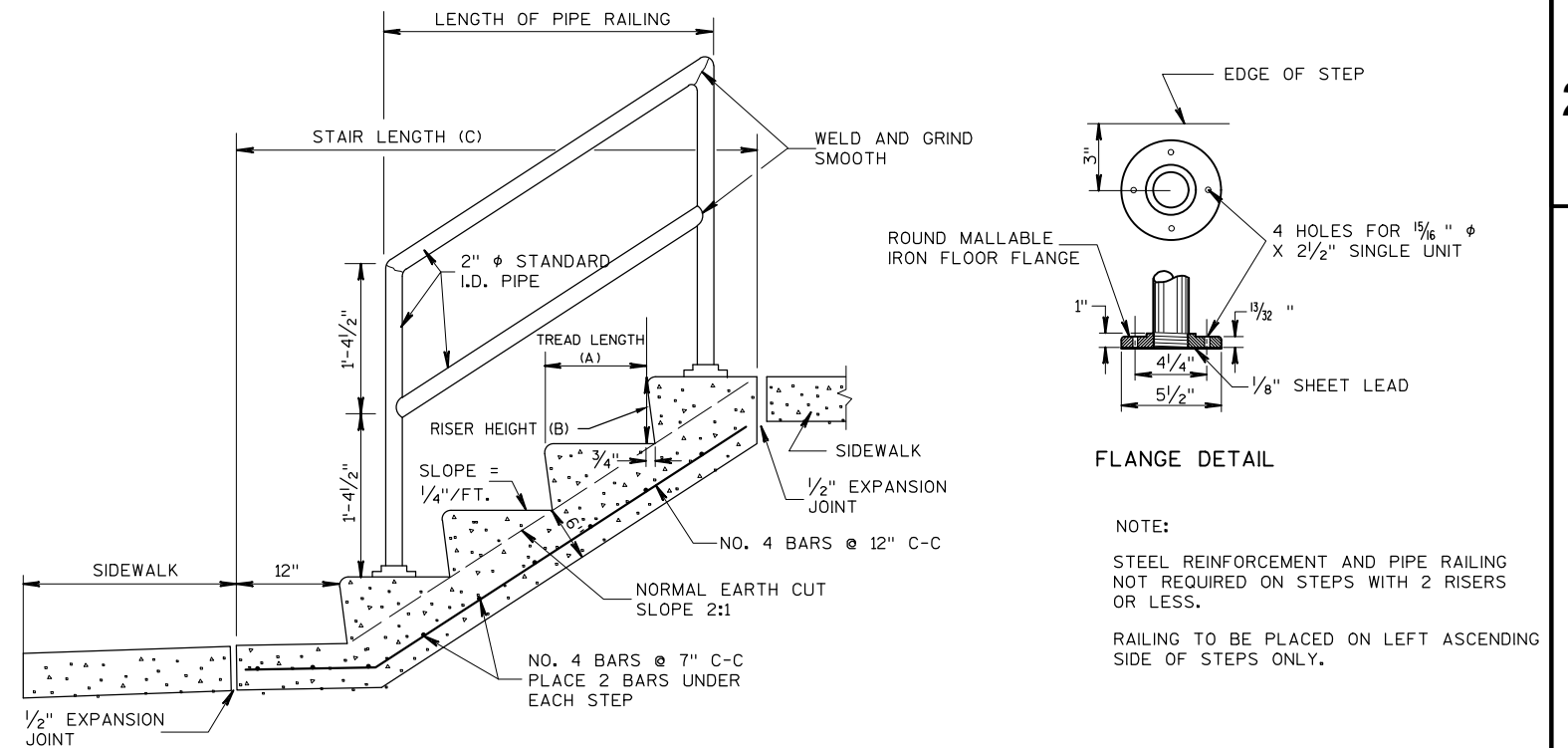
DEPRESSED SIDEWALK PROFILE DETAIL



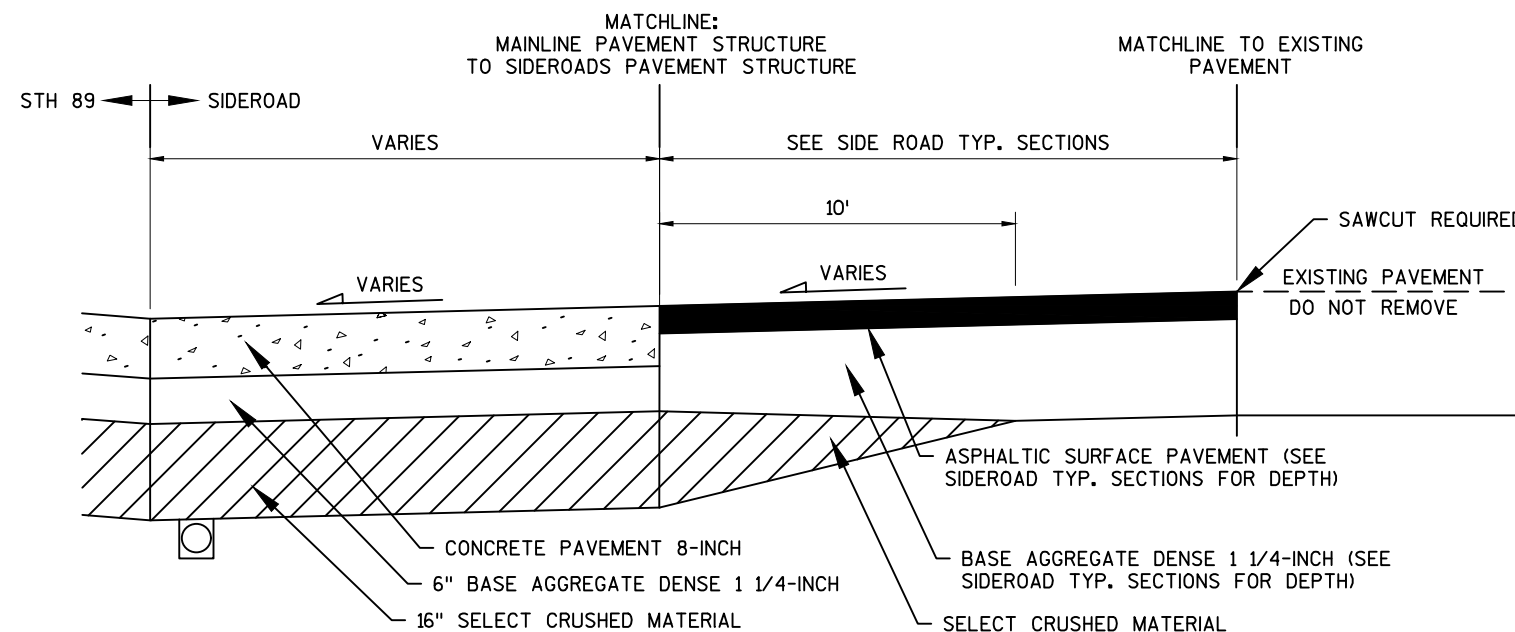
STA	LOCATION	TREAD LENGTH (A) INCH	*RISER HEIGHT (B) INCH	NUMBER OF RISERS	LENGTH OF STAIRS (C) FT
54+25	RT	12	6	2	3
59+62	LT	12	4.5	3	4
65+55	LT	12	6	2	3
72+37	LT	12	6	2	3
74+65	RT	12	6	2	3
75+07	LT	12	6	2	3
75+75	LT	12	6	1	2
77+00	RT	12	5	2	3
78+00	RT	12	4.25	2	3
78+70	RT	12	4	2	3
79+48	RT	12	5	2	3
80+26	RT	12	4	2	3
80+45	LT	12	4	2	3
80+85	RT	12	7	2	3
81+50	RT	12	4	2	3

* IF FIELD ADJUSTMENTS ARE NEEDED FOR RISER HEIGHT, RISERS MUST BE BETWEEN 4 AND 7 INCHES.

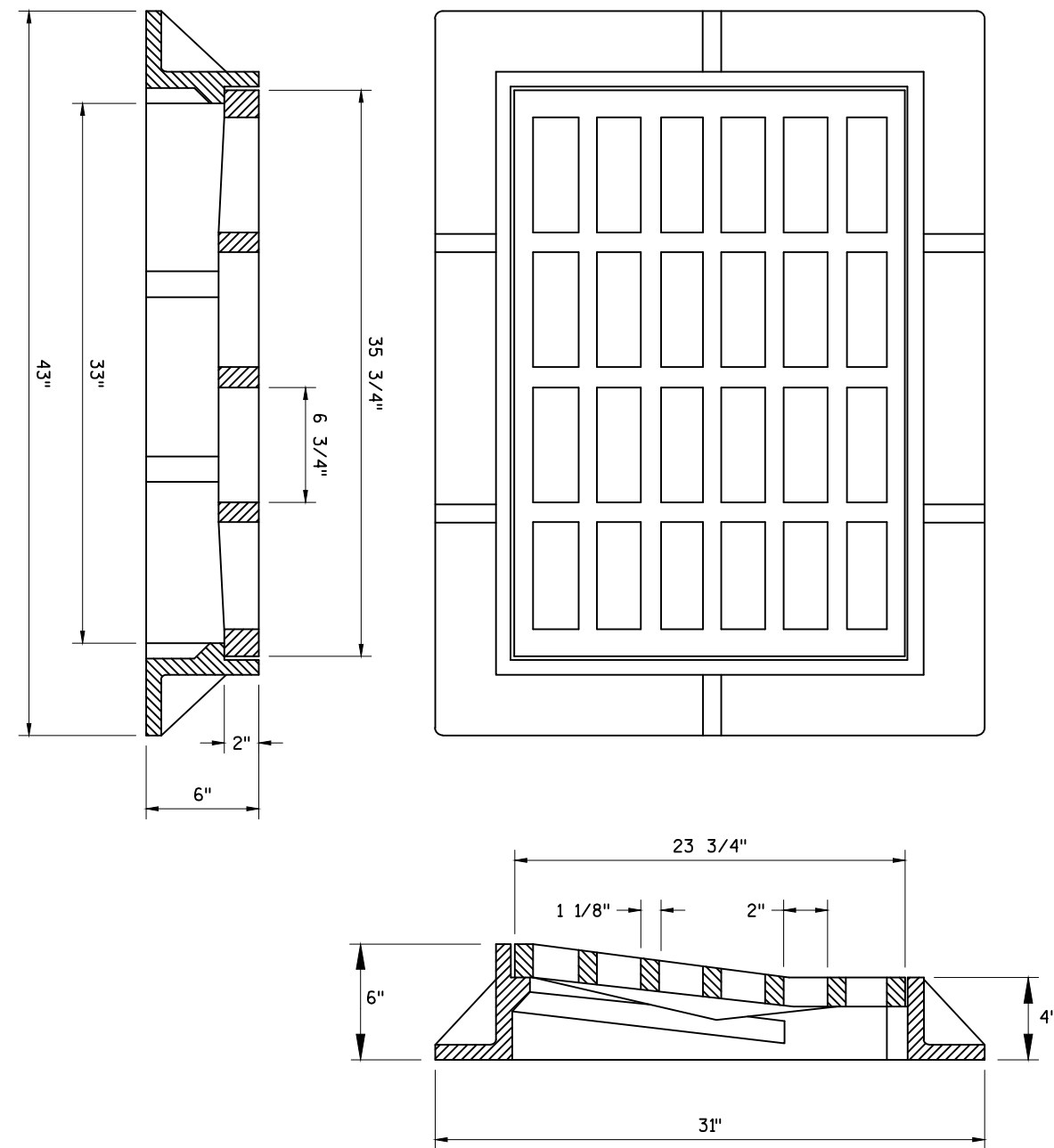
CONCRETE STEPS DETAIL



SECTION A-A

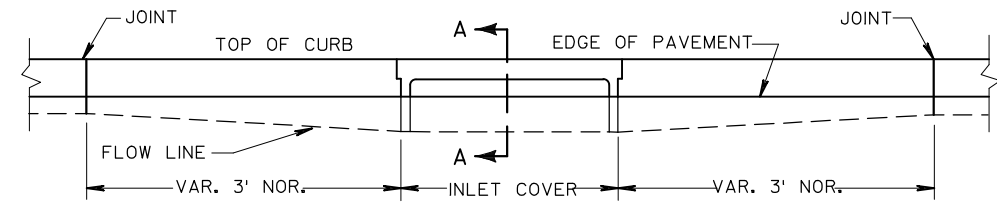


SUBGRADE TRANSITION BETWEEN MAINLINE CONCRETE PAVEMENT STRUCTURE AND SIDEROAD PAVEMENT STRUCTURE

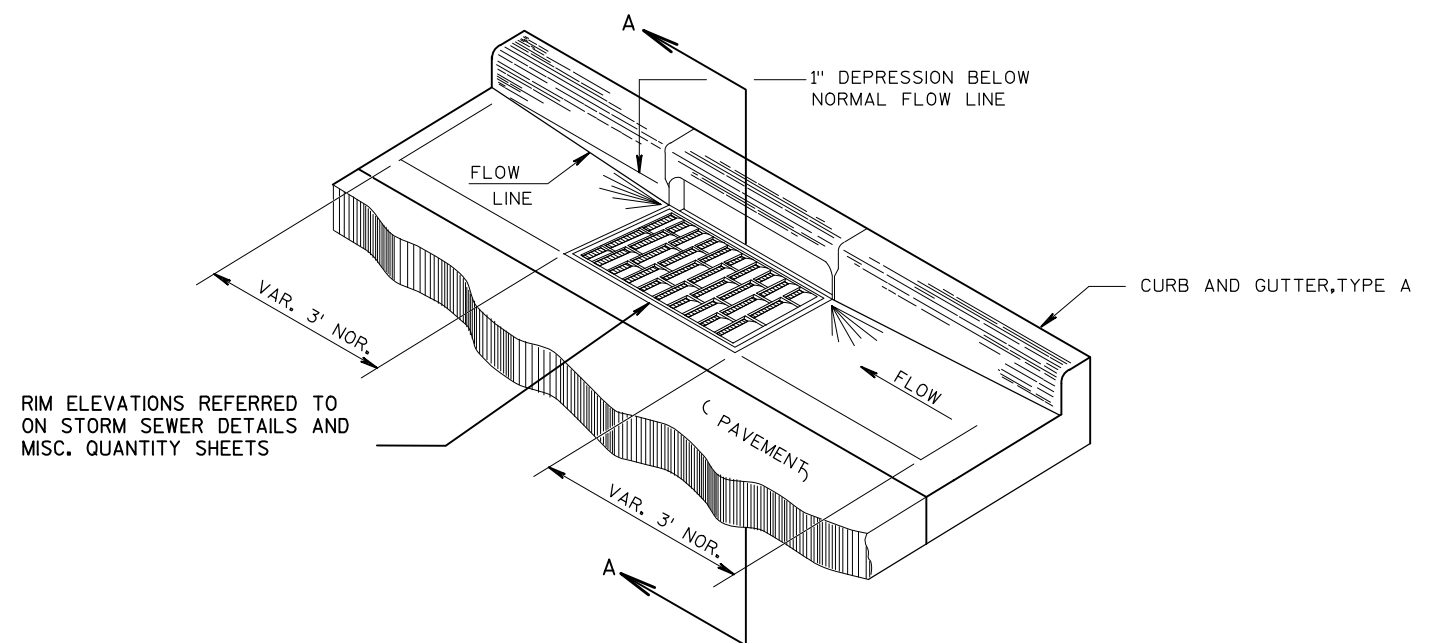


INLET COVER TYPE 3290A

SEE WINTER CARRYOVER PLAN & PROFILE FOR LOCATIONS

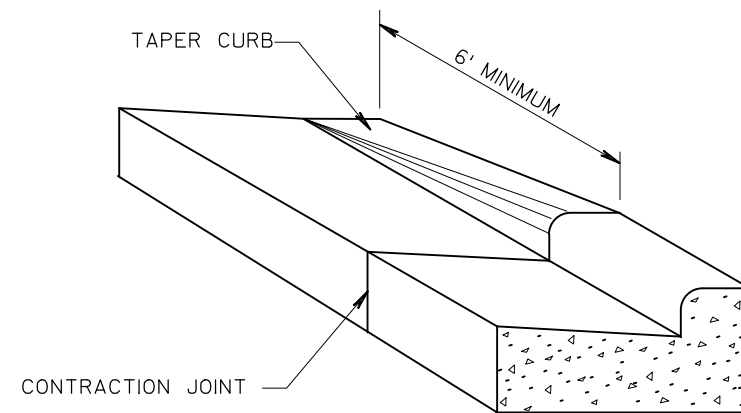


ELEVATION

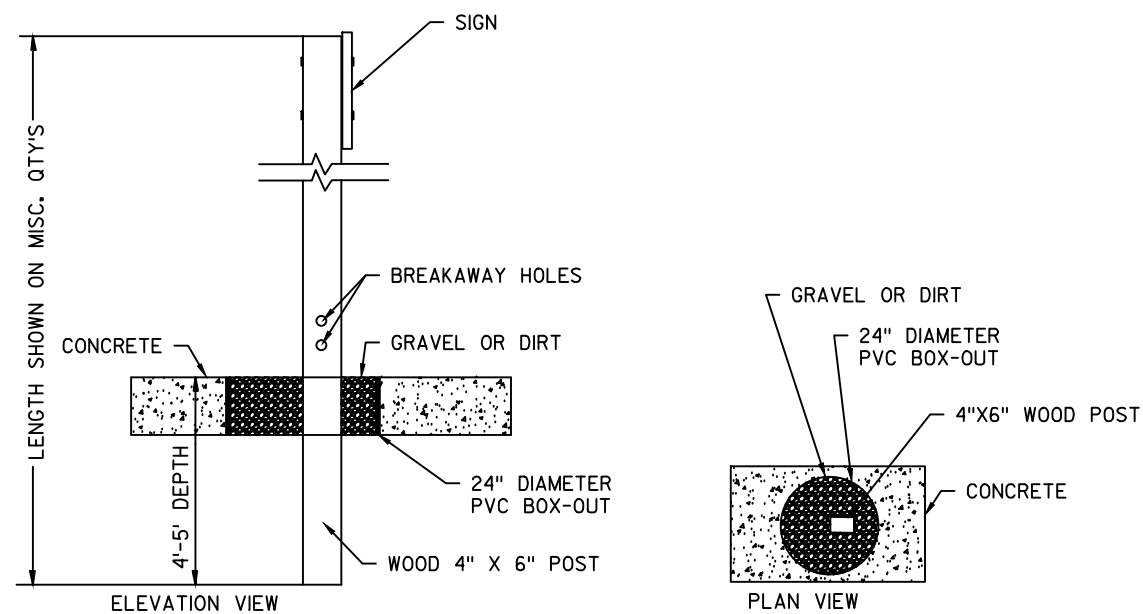


RIM ELEVATIONS REFERRED TO
ON STORM SEWER DETAILS AND
MISC. QUANTITY SHEETS

CONCRETE CURB & GUTTER 30-INCH TYPE A
AT INLET LOCATIONS DETAIL

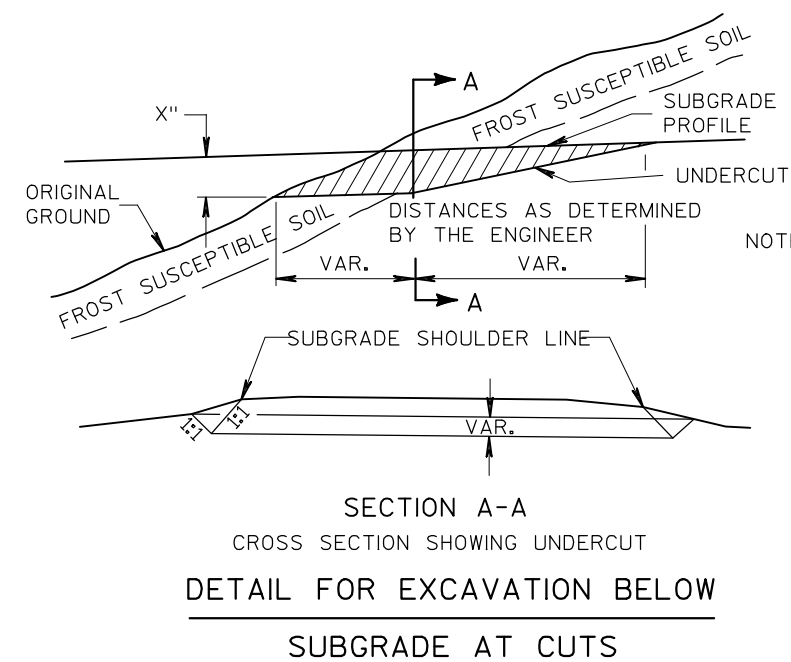


DETAIL OF CURB & GUTTER TERMINI

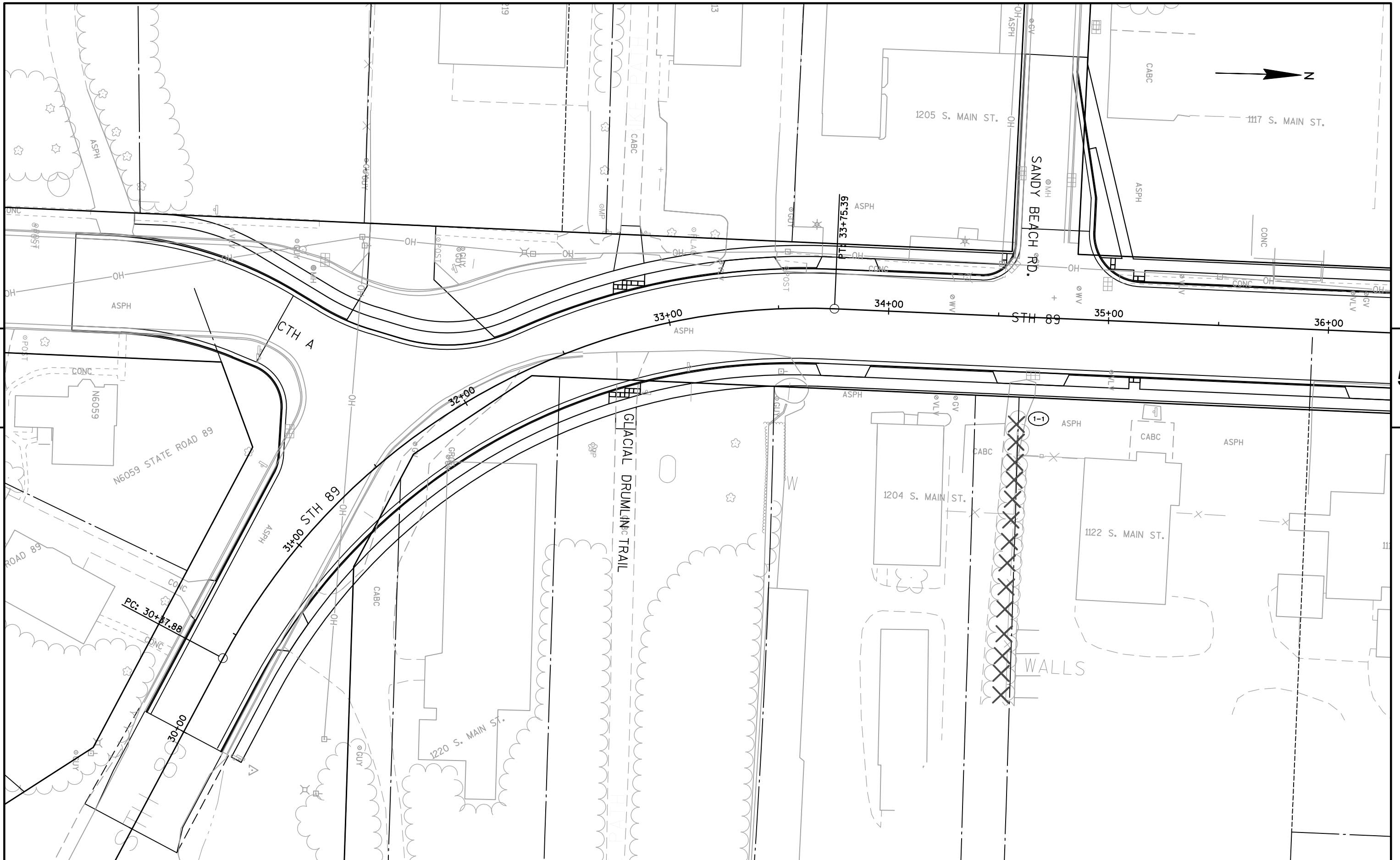


DETAIL OF WOOD 4" X 6" SIGN POST IN BOX-OUT

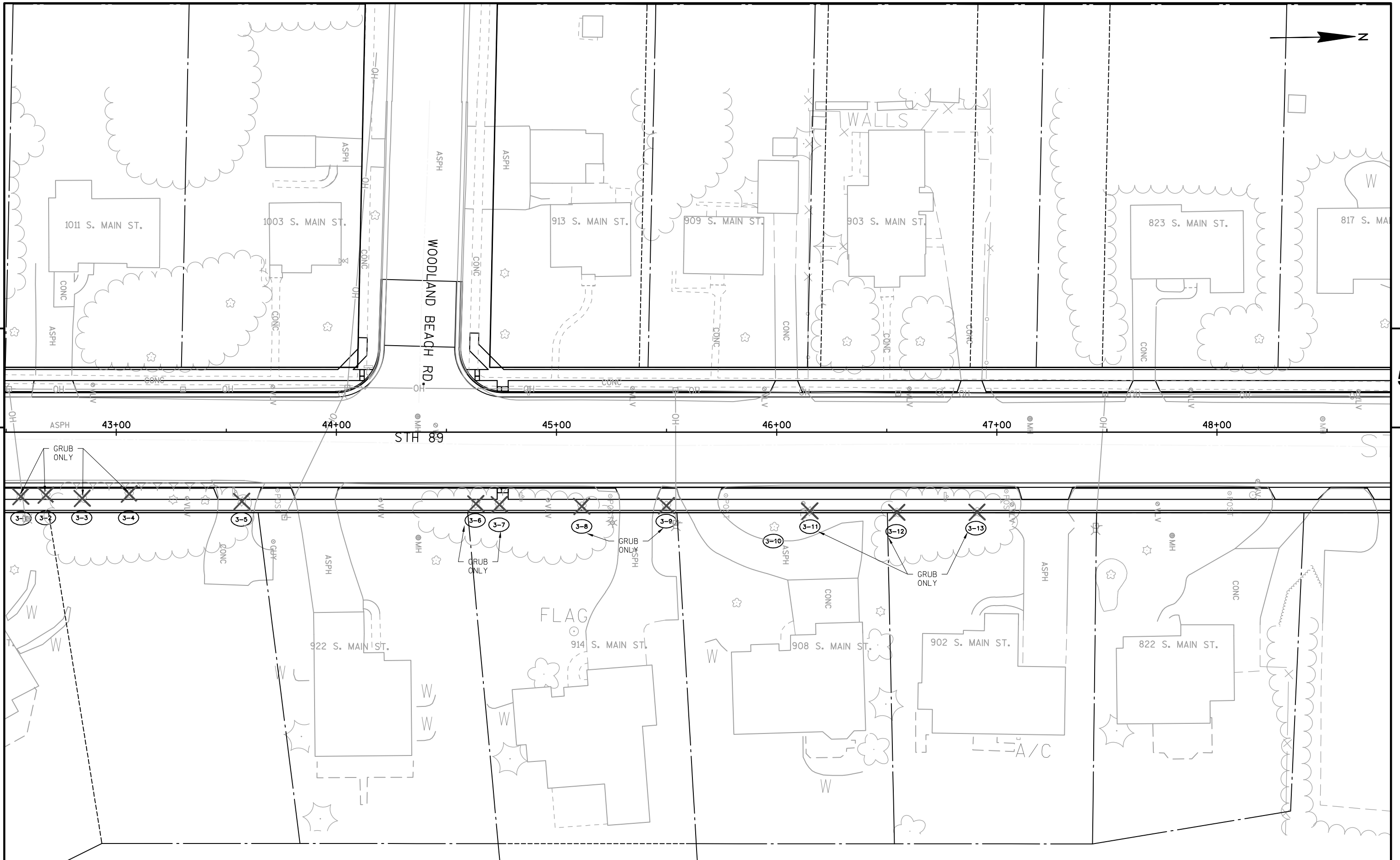
- NOTES: 1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION.
2. 24 INCH X 24 INCH SQUARE BOX-OUTS MAY BE USED.

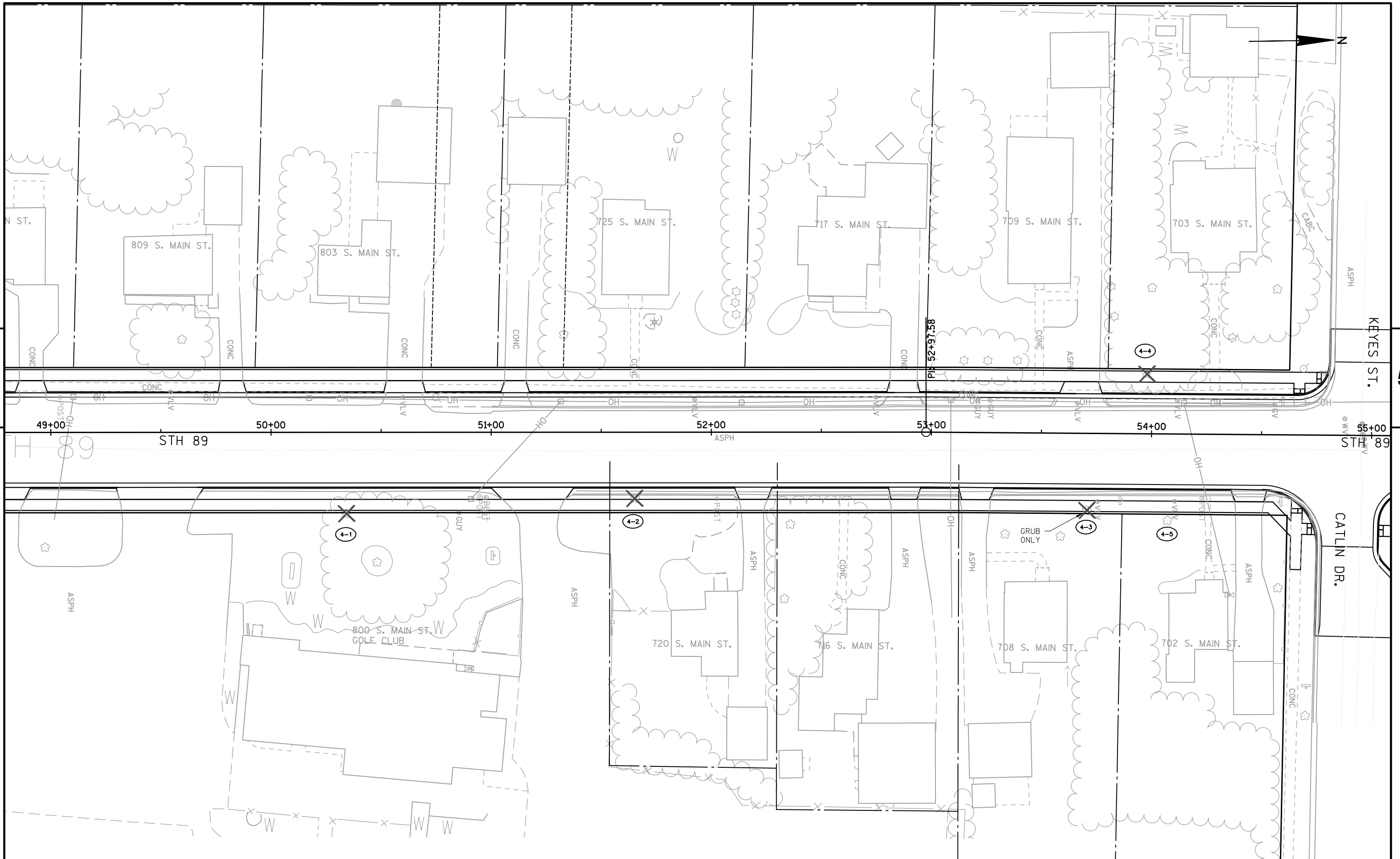


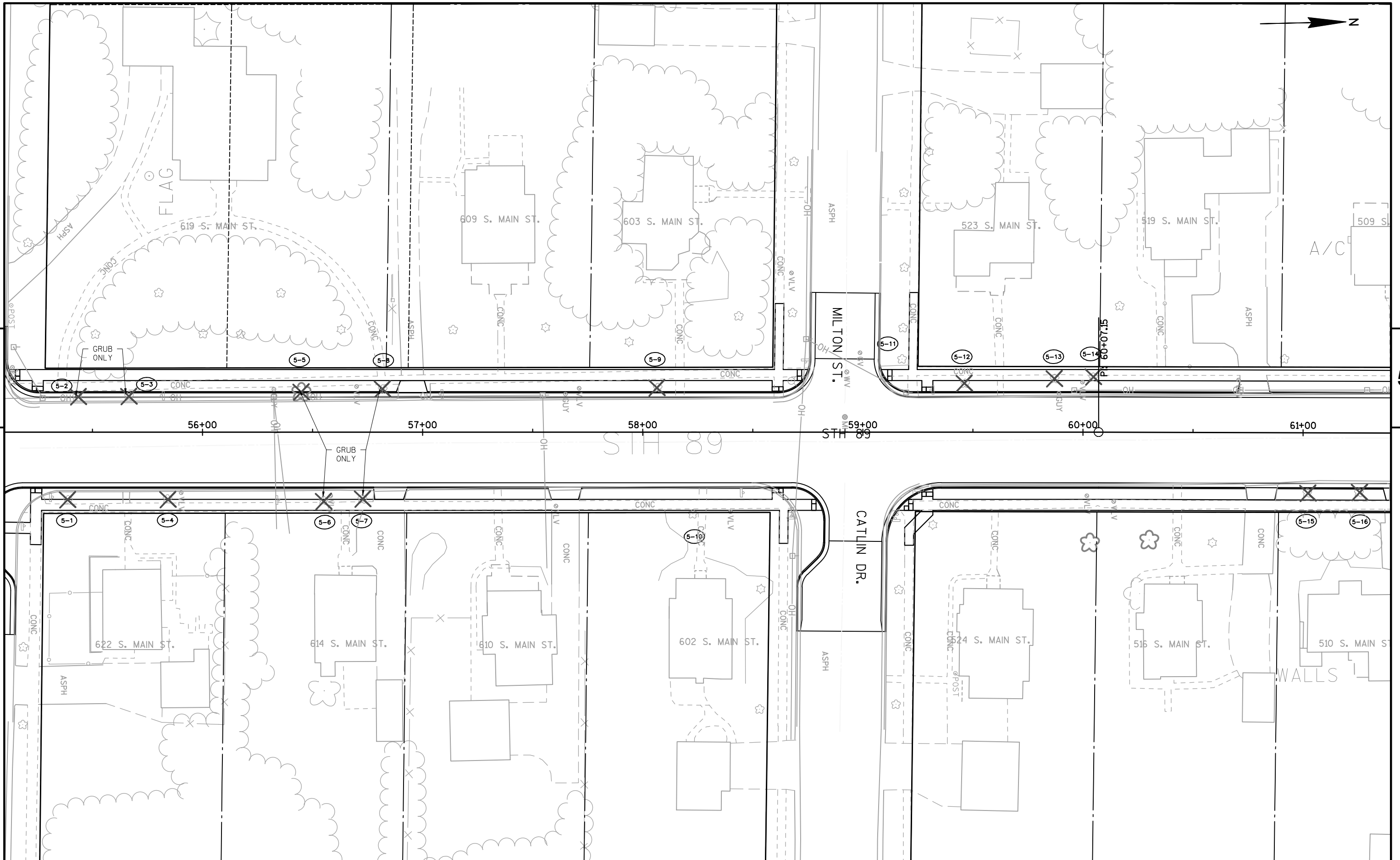
NOTE: EXACT LOCATIONS AND EXTENT OF E.B.S. SECTIONS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
E.B.S. AREA TO BE BACKFILLED WITH MATERIAL ACCEPTABLE TO THE ENGINEER
BACKFILL MUST BE HOMOGENEOUS WITH ADJOINING FILL MATERIAL.
THE FILL SECTION WITHIN 100' OF THE MOUTH OF THE CUT MUST BE KEPT 2' BELOW SUBGRADE UNTIL E.B.S. IS COMPLETED.

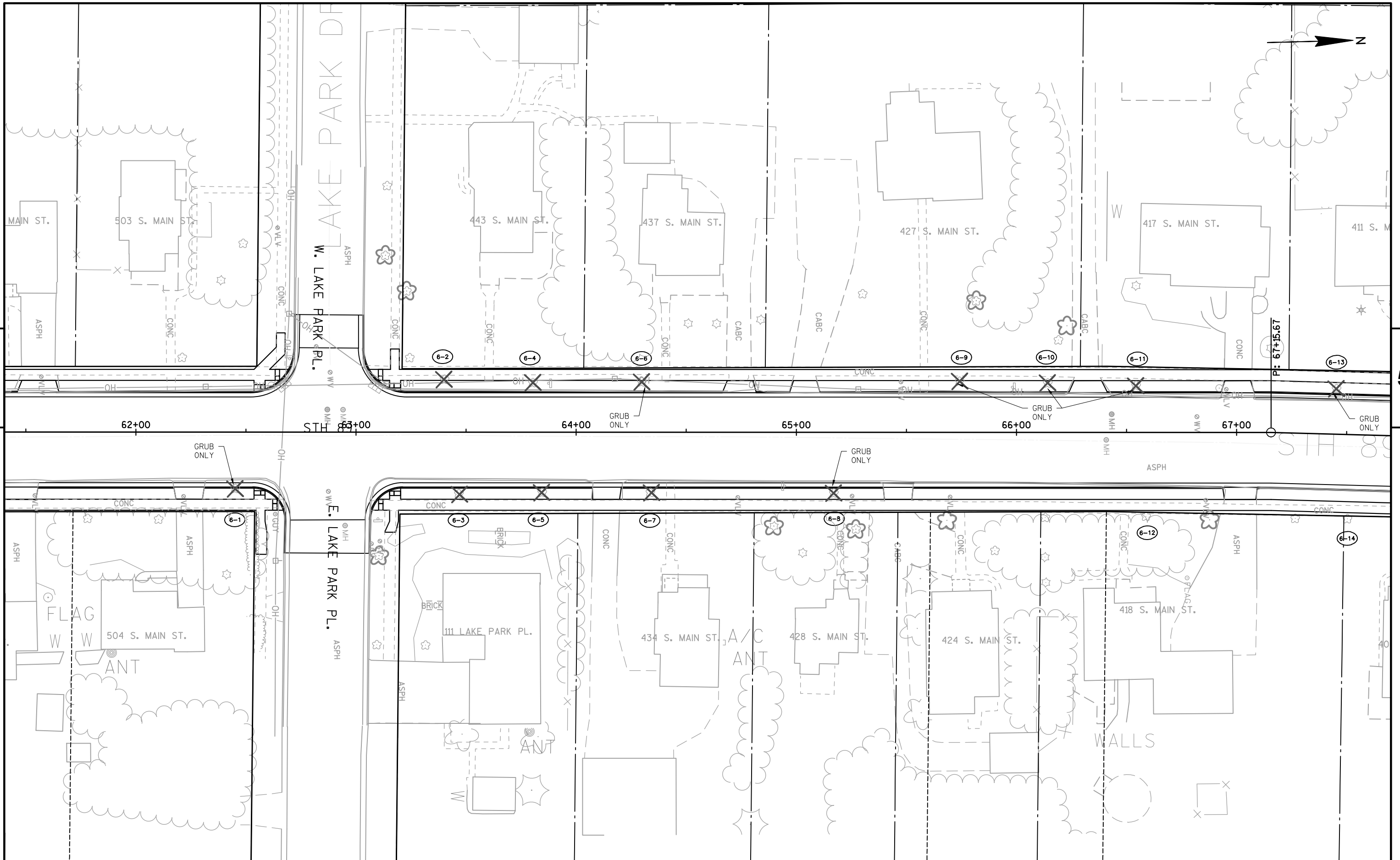


PROJECT NO: 3300-01-73	HWY: STH 89	COUNTY: JEFFERSON	TREE REMOVAL	SHEET 18	E
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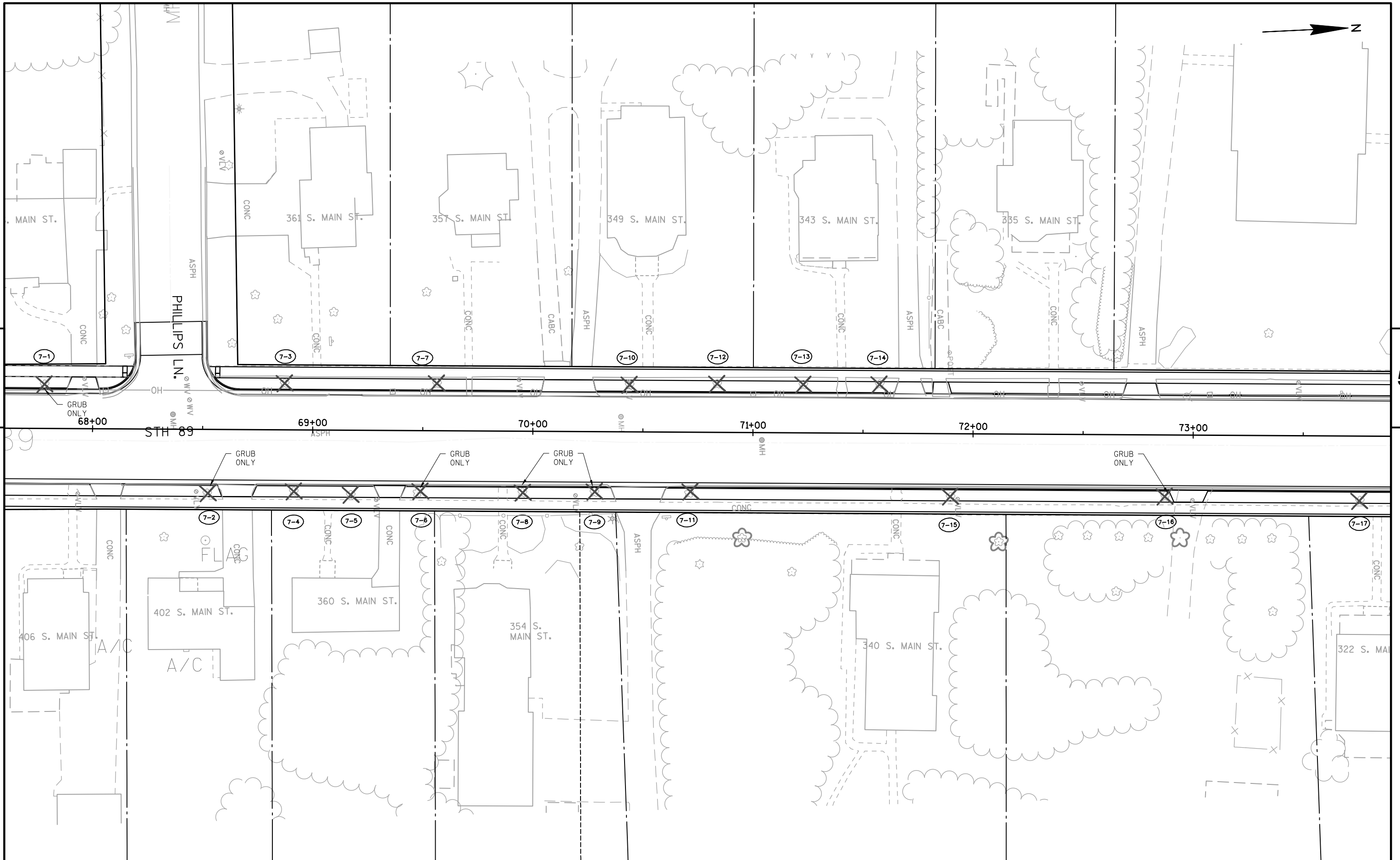




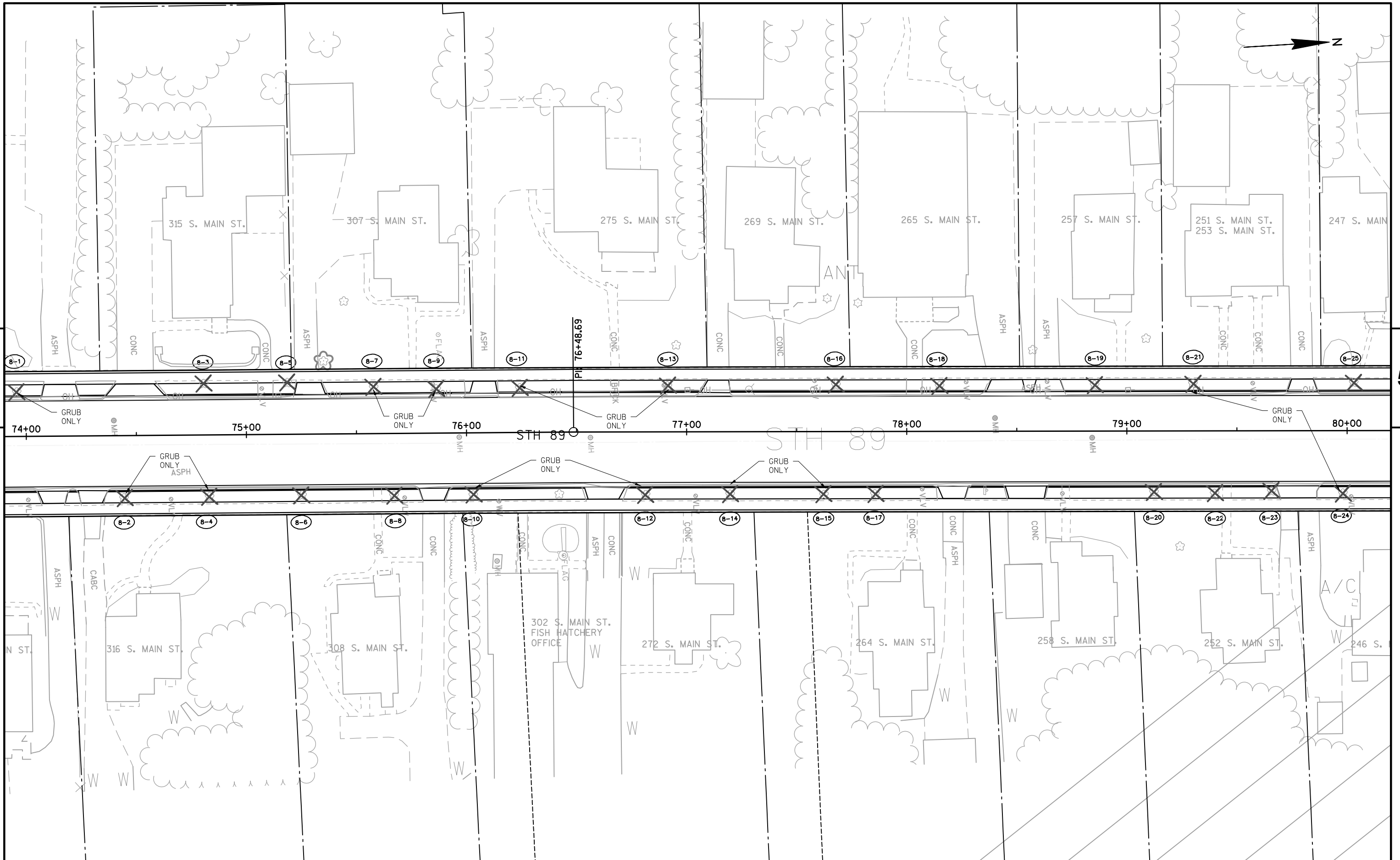


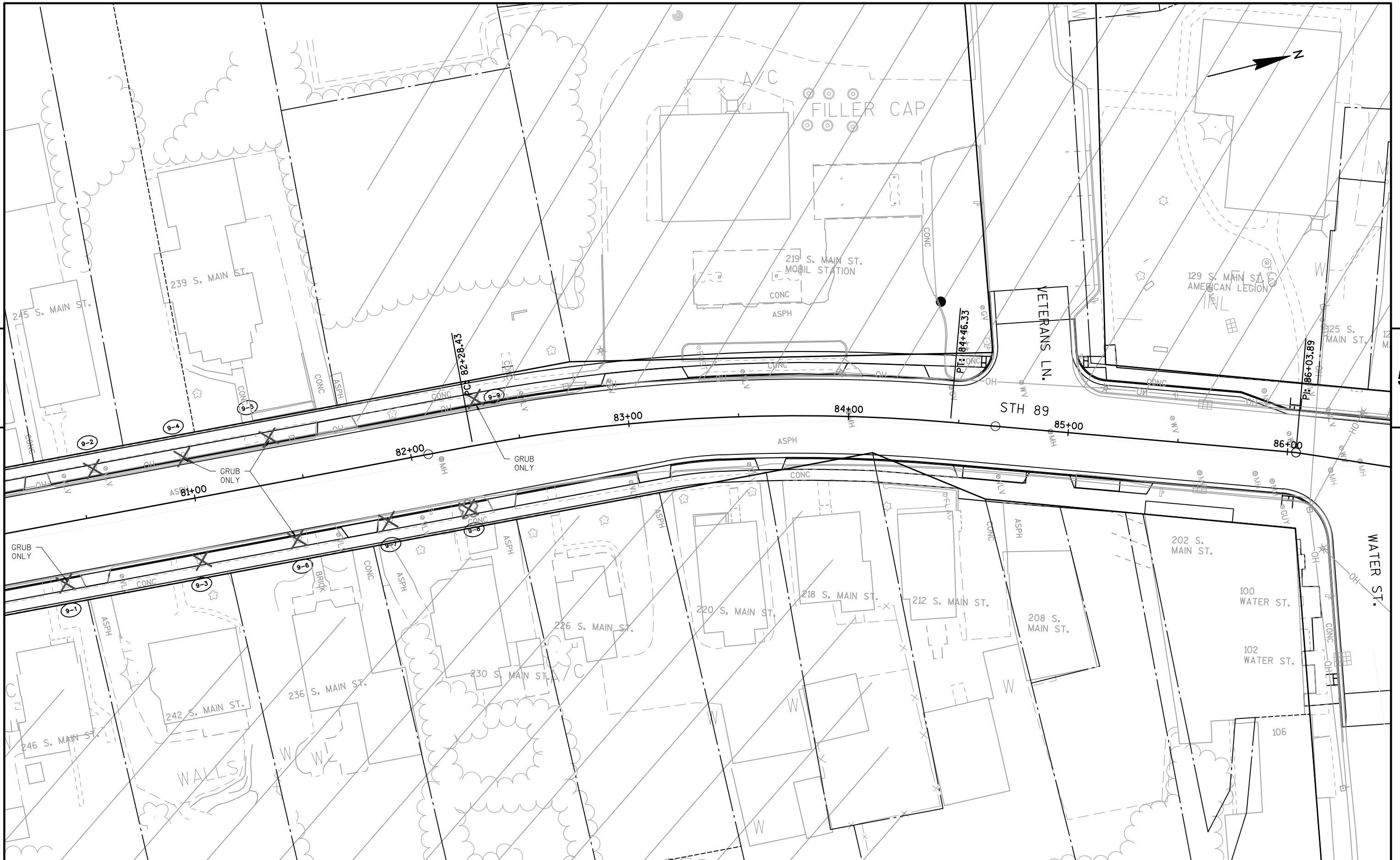


PROJECT NO: 3300-01-73	HWY: STH 89	COUNTY: JEFFERSON	TREE REMOVAL	SHEET 23	E
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PROJECT NO: 3300-01-73	HWY: STH 89	COUNTY: JEFFERSON	TREE REMOVAL	SHEET 24	E
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PROJECT NO: 3300-01-73	HWY: STH 89	COUNTY: JEFFERSON	TREE REMOVAL	SHEET 26	E
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2

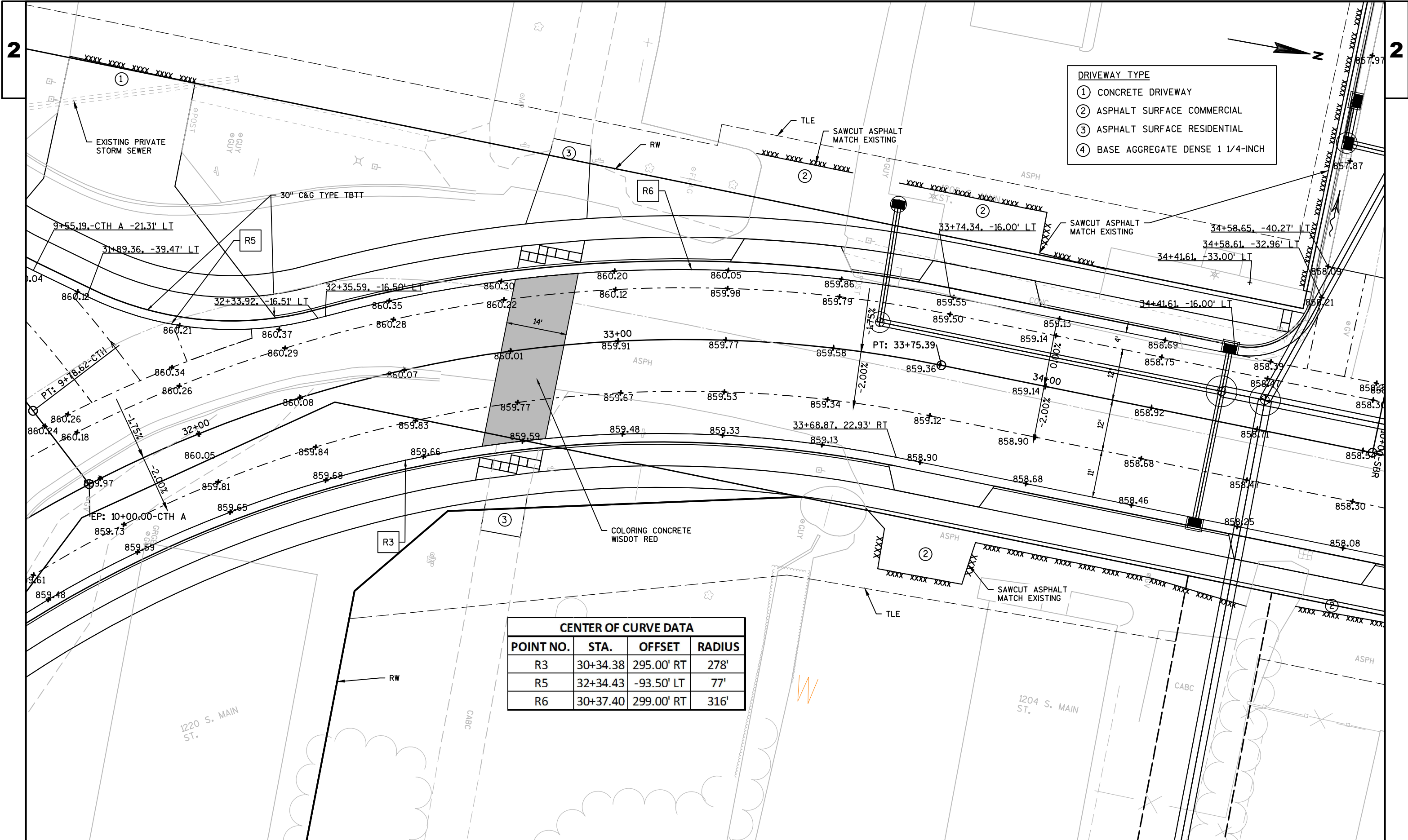
DRIVEWAY TYPE

① CONCRETE DRIVEWAY

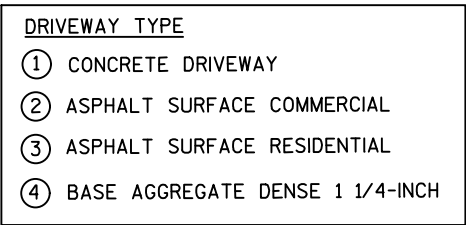
② ASPHALT SURFACE COMMERCIAL

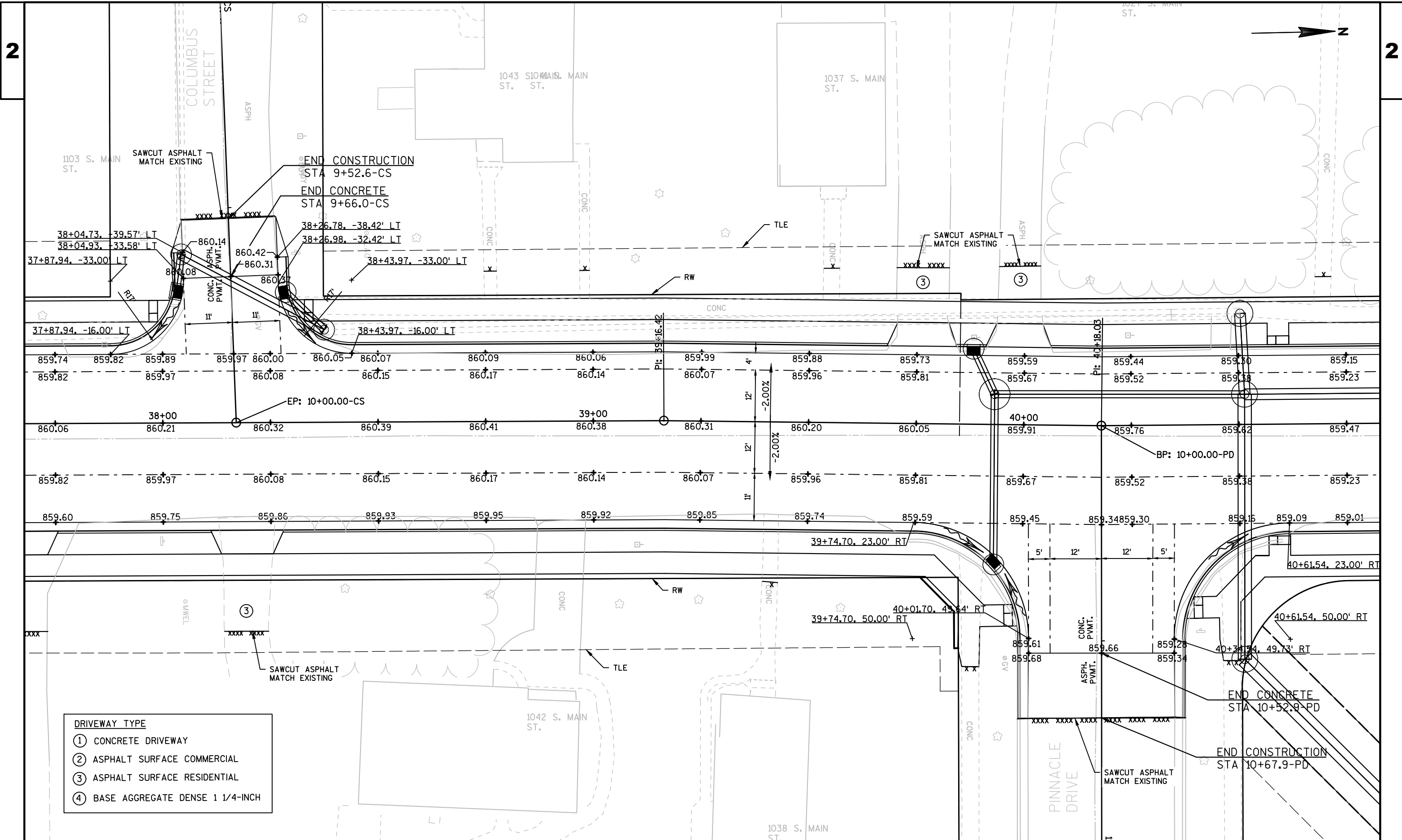
③ ASPHALT SURFACE RESIDENTIAL

④ BASE AGGREGATE DENSE 1 1/4-INCH

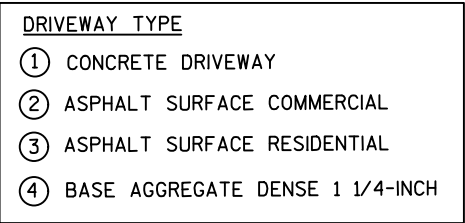


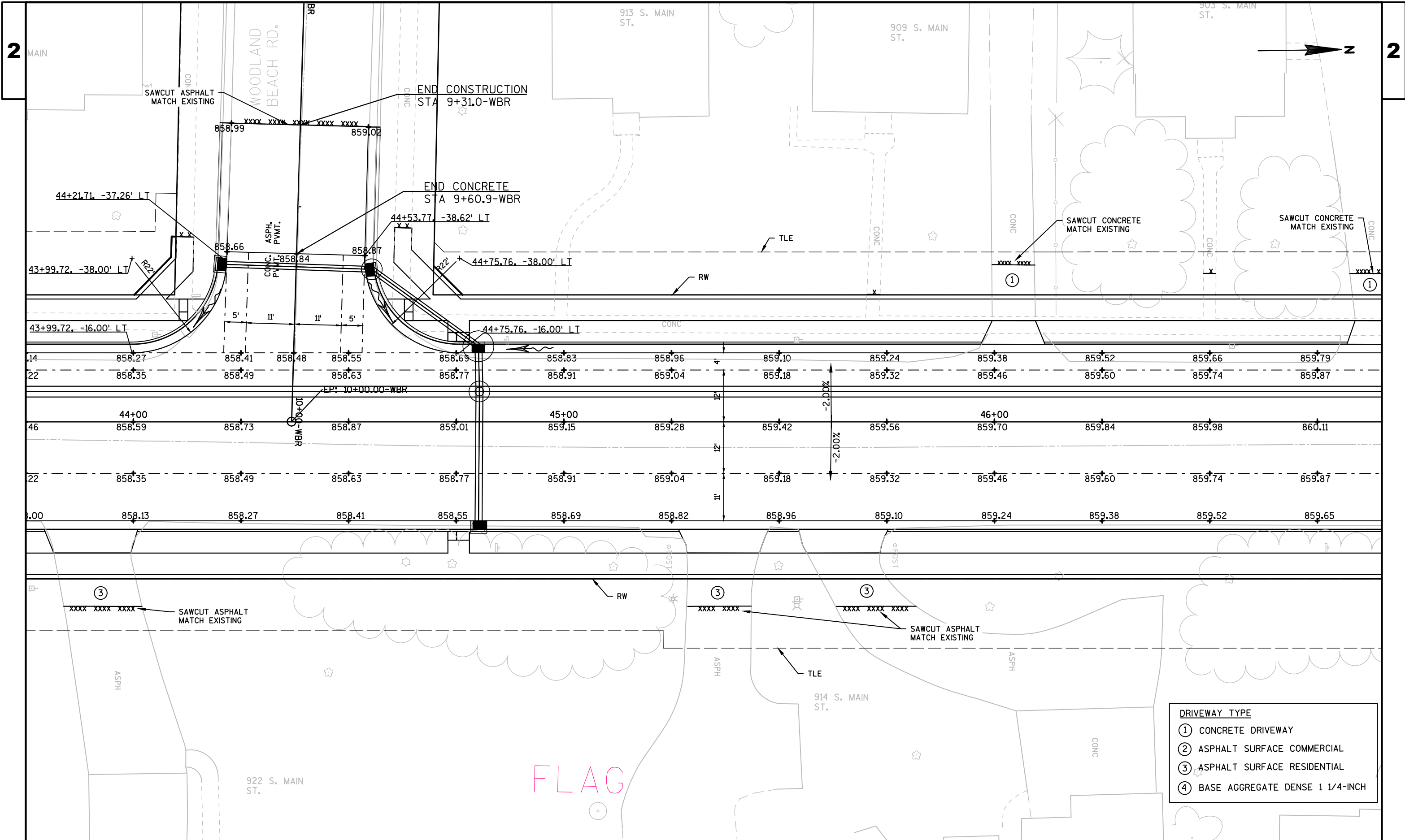
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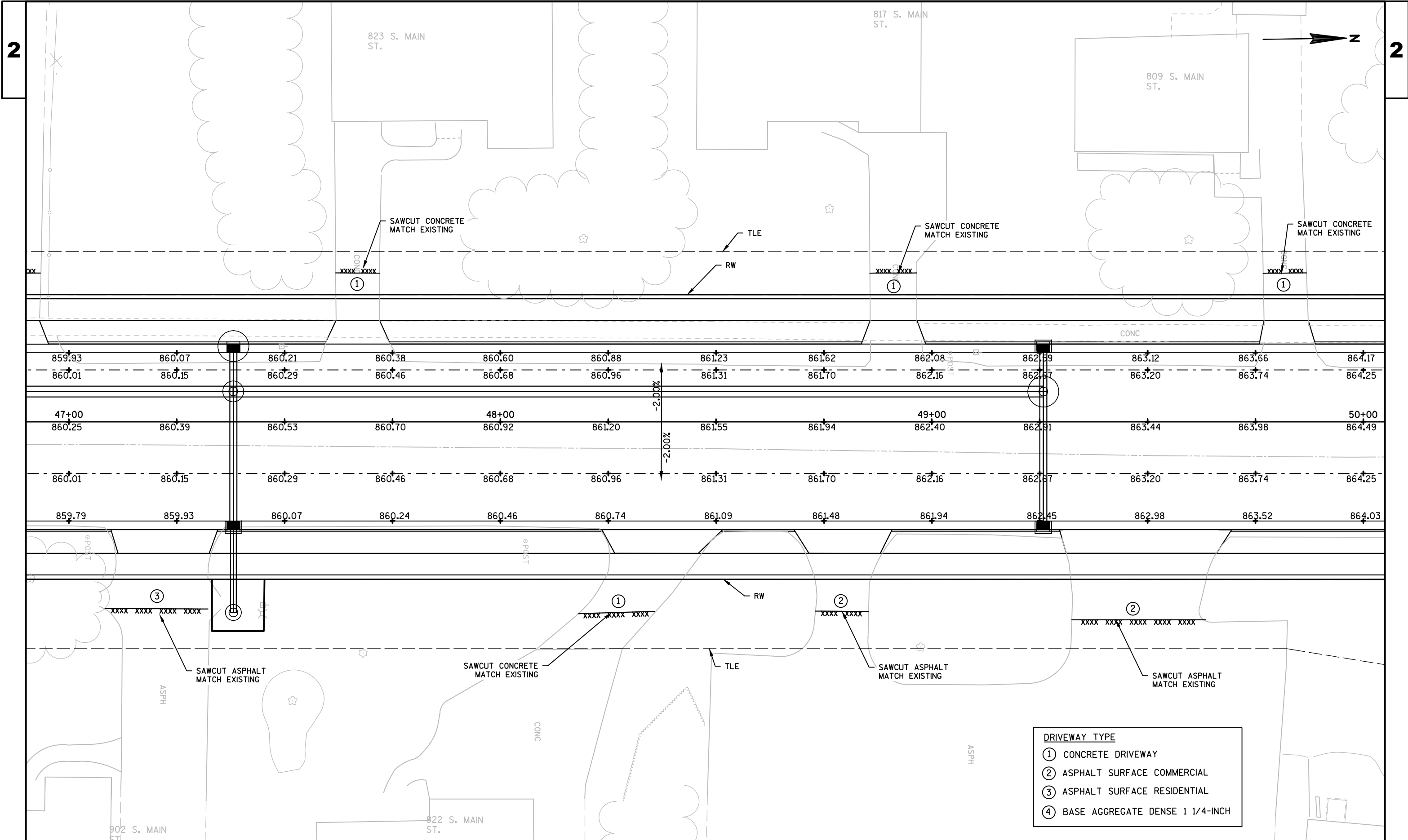


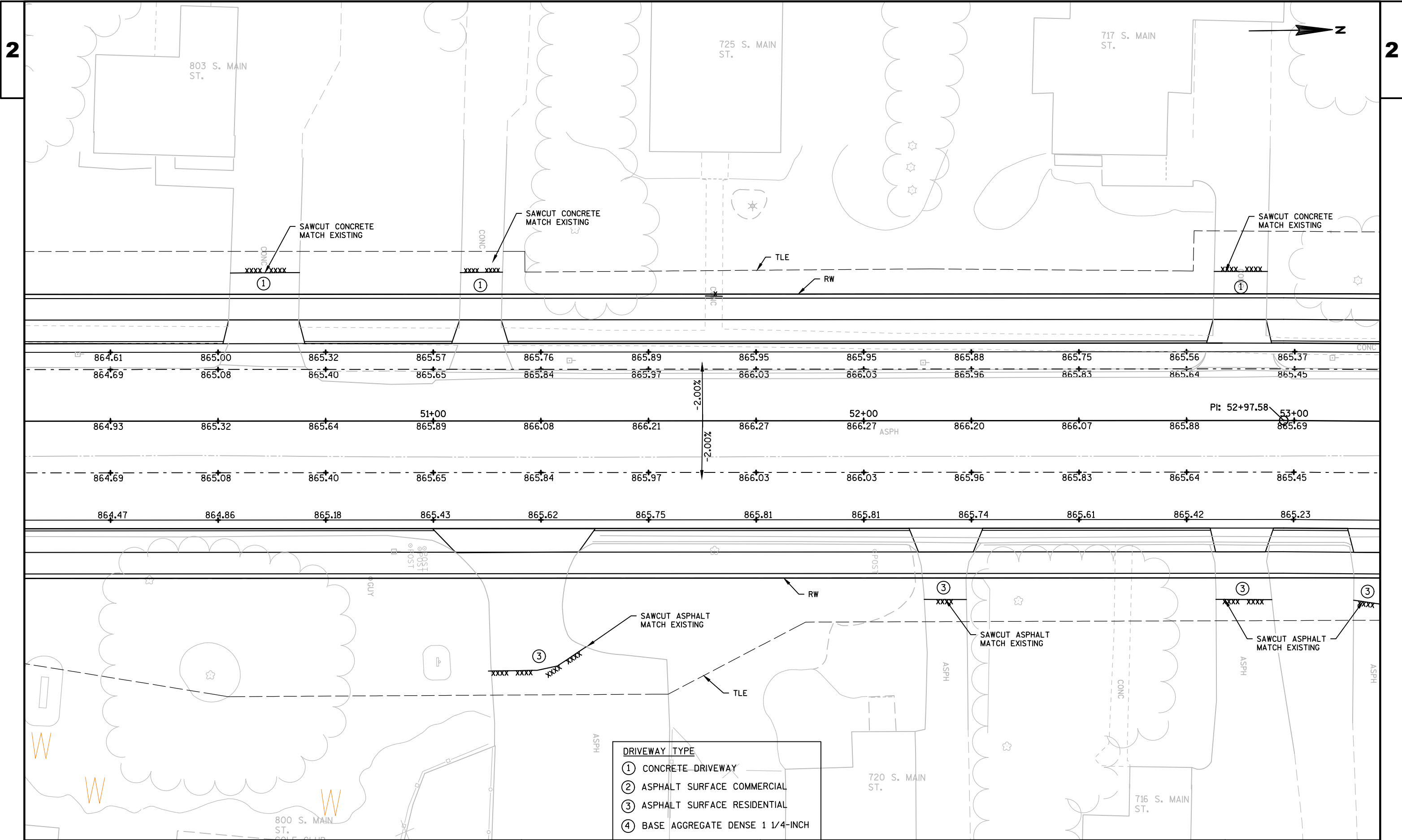


2









2



2



2

523 S. MAIN ST.

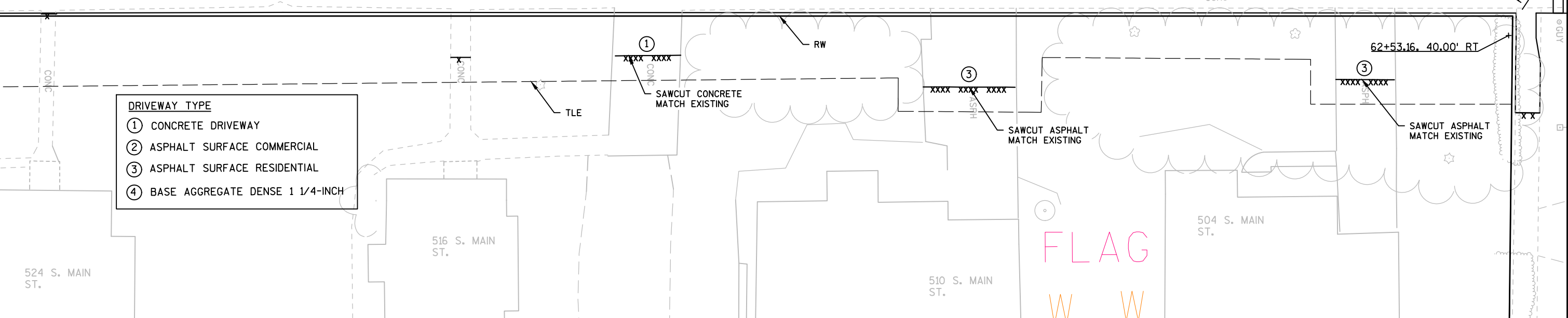
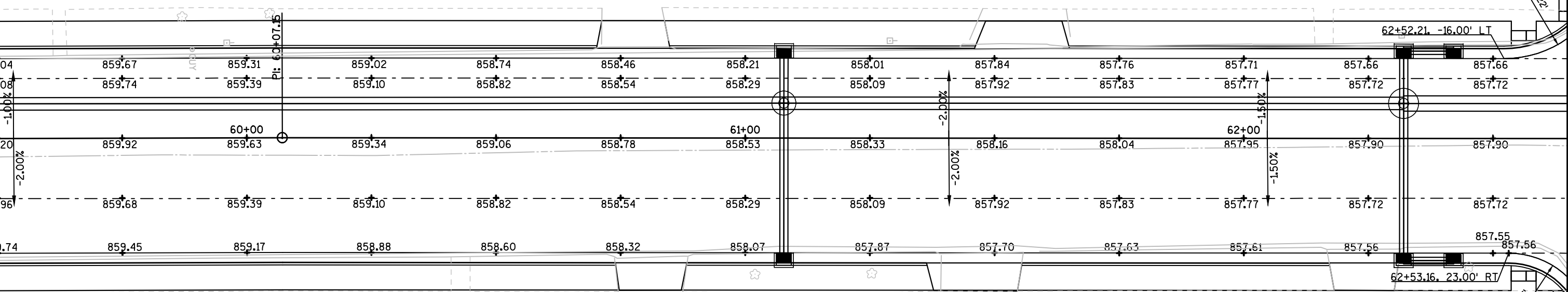
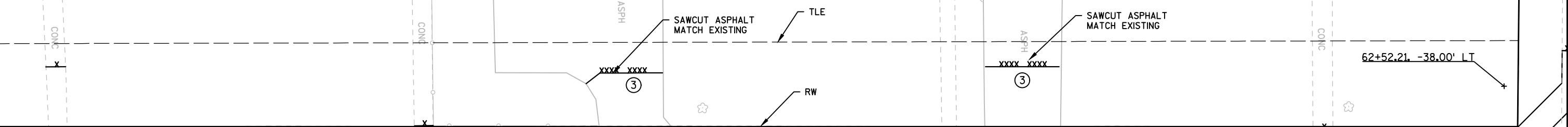
519 S. MAIN ST.

A/C

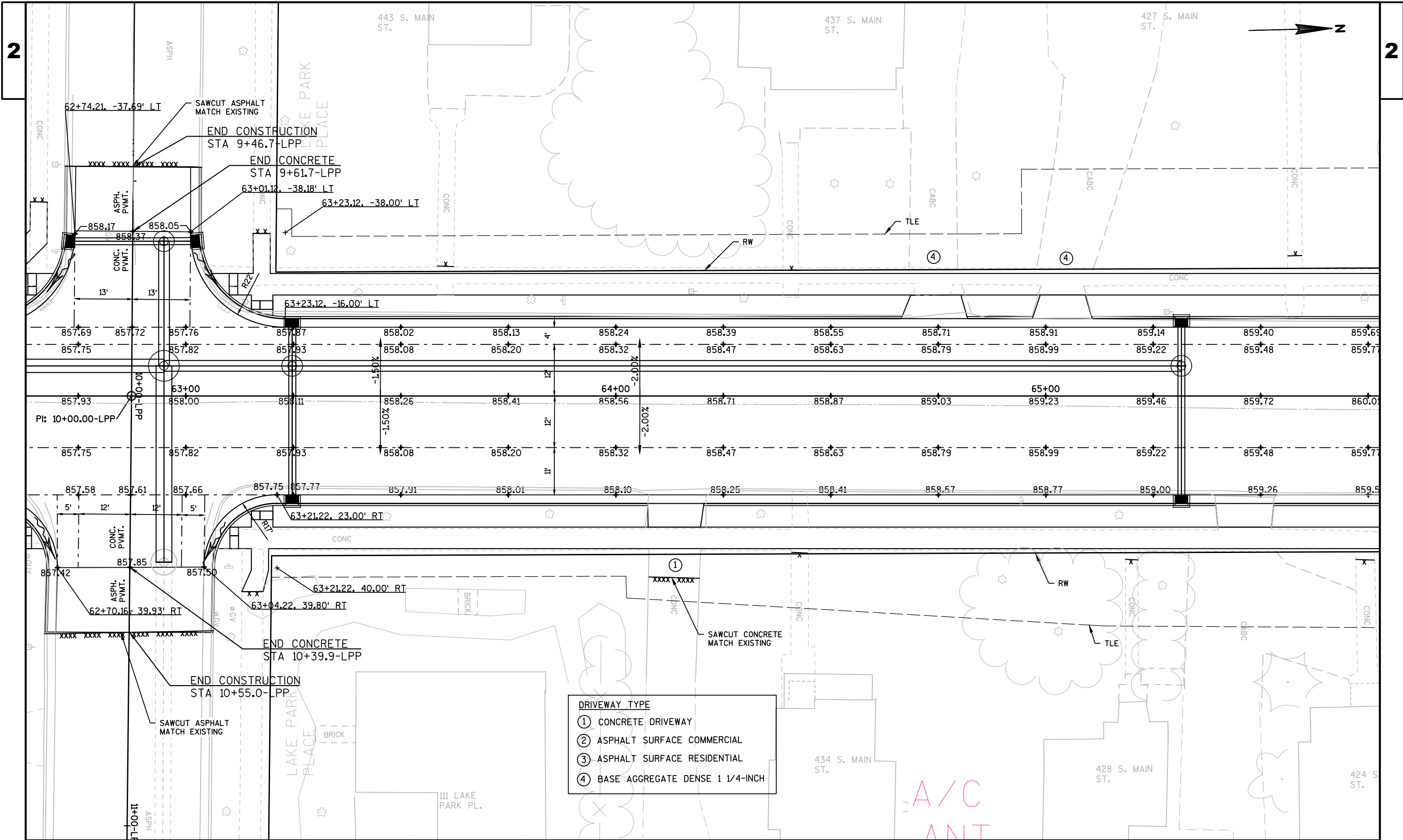
509 S. MAIN ST.

503 S. MAIN ST.

2

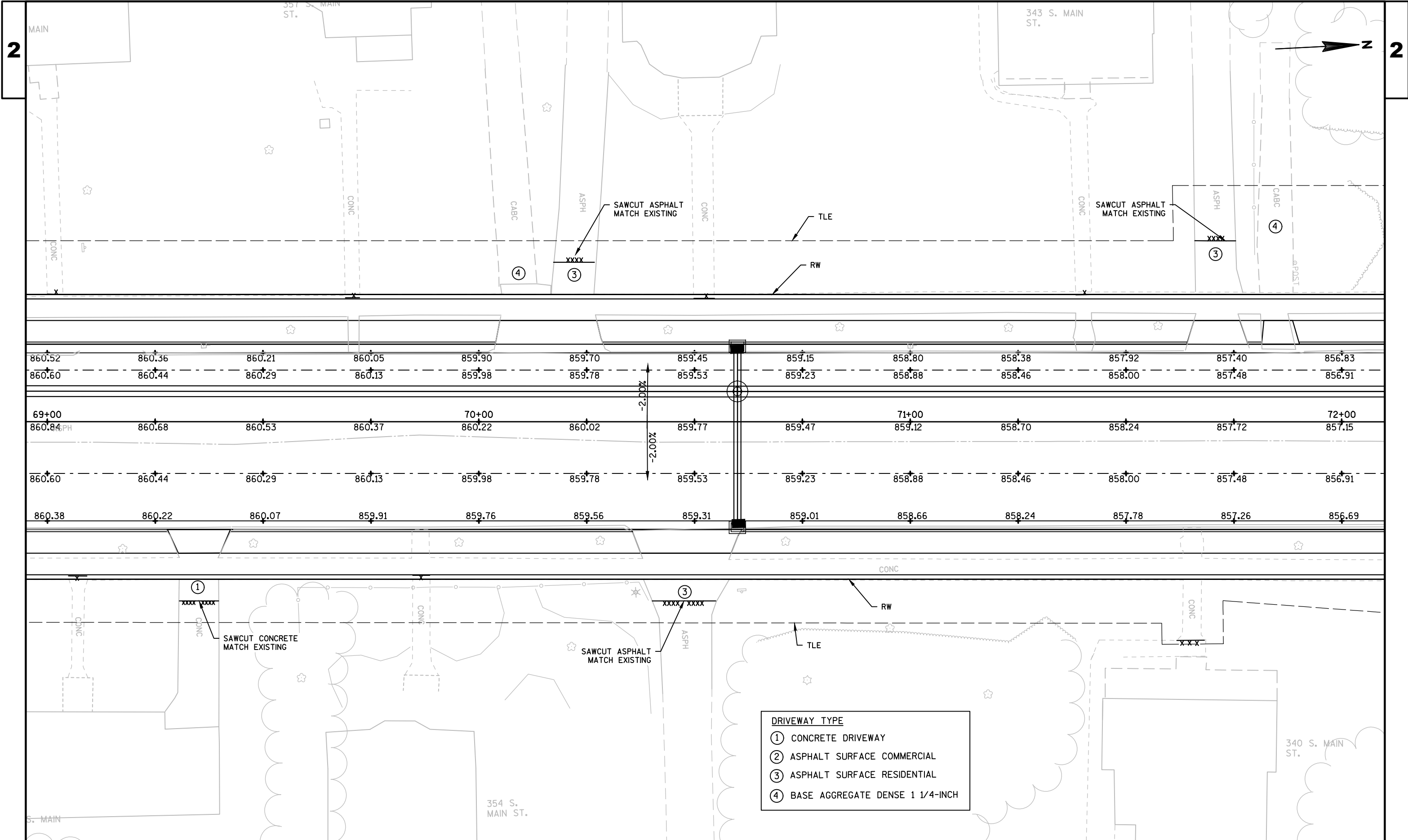


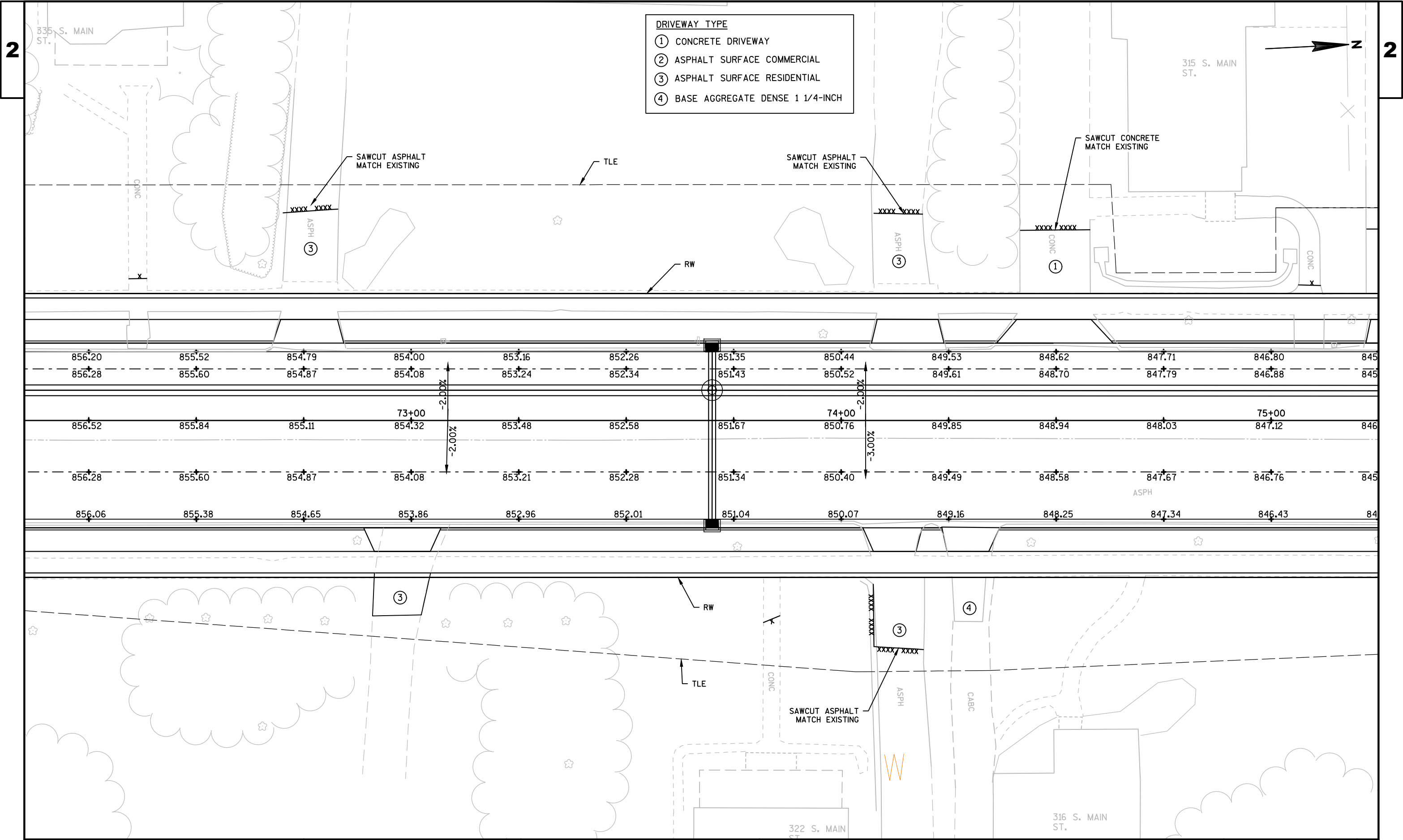
- DRIVEWAY TYPE**
- ① CONCRETE DRIVEWAY
 - ② ASPHALT SURFACE COMMERCIAL
 - ③ ASPHALT SURFACE RESIDENTIAL
 - ④ BASE AGGREGATE DENSE 1 1/4-INCH



2







PROJECT NO: 3300-01-73

HWY: STH 89

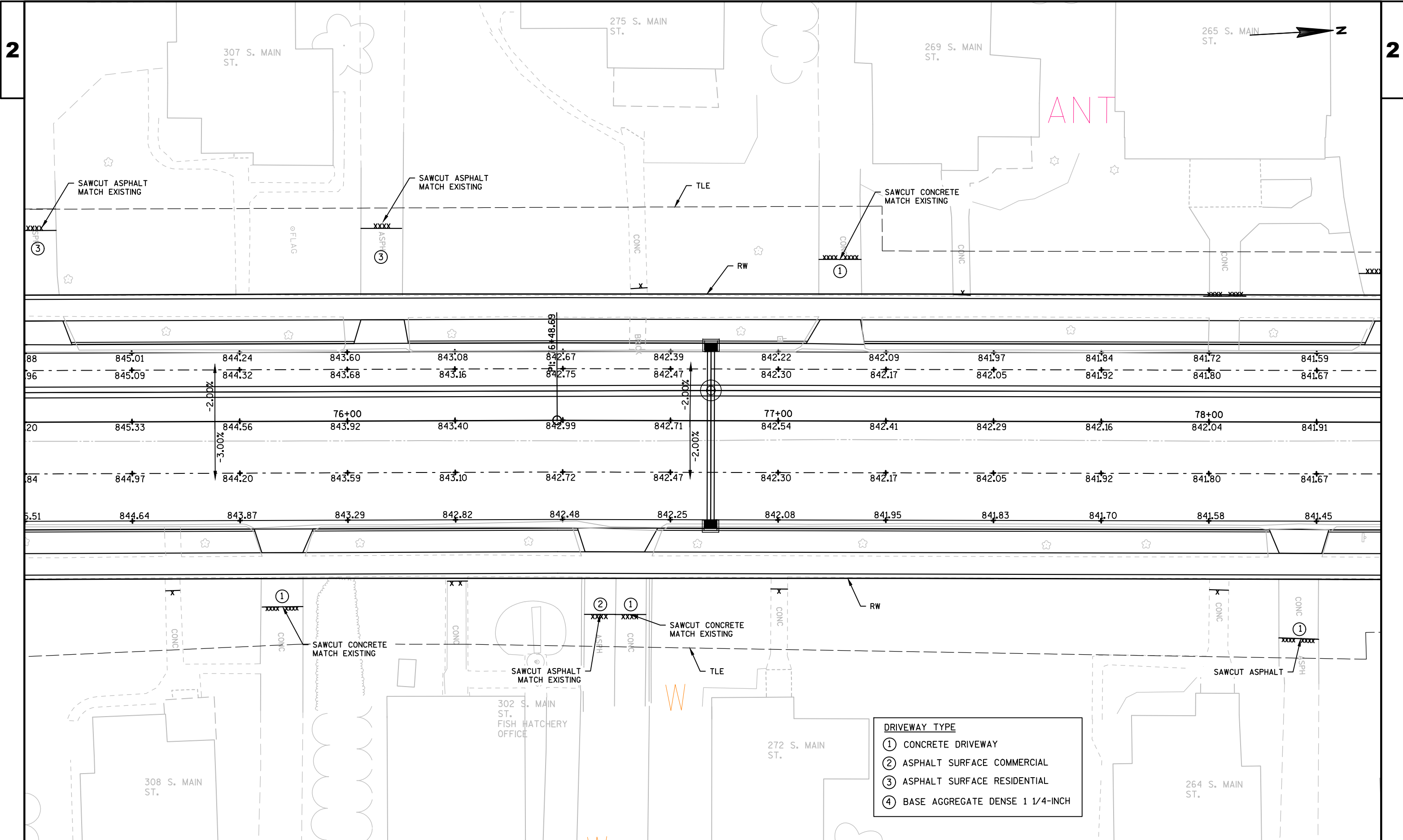
COUNTY: JEFFERSON

PAVING & INTERSECTION DETAILS

SHEET

41

E



PROJECT NO: 3300-01-73

HWY: STH 89

COUNTY: JEFFERSON

PAVING & INTERSECTION DETAILS

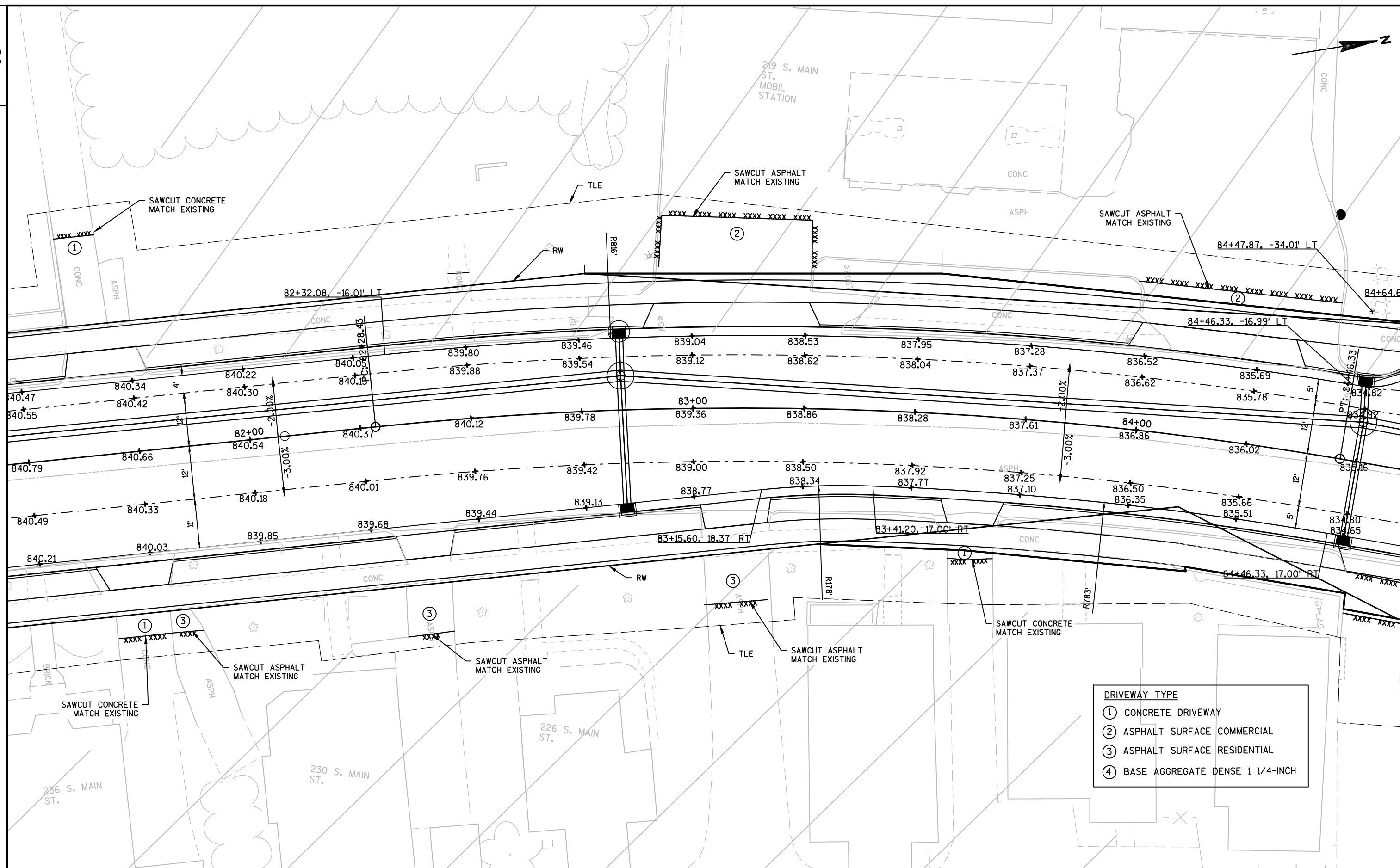
SHEET

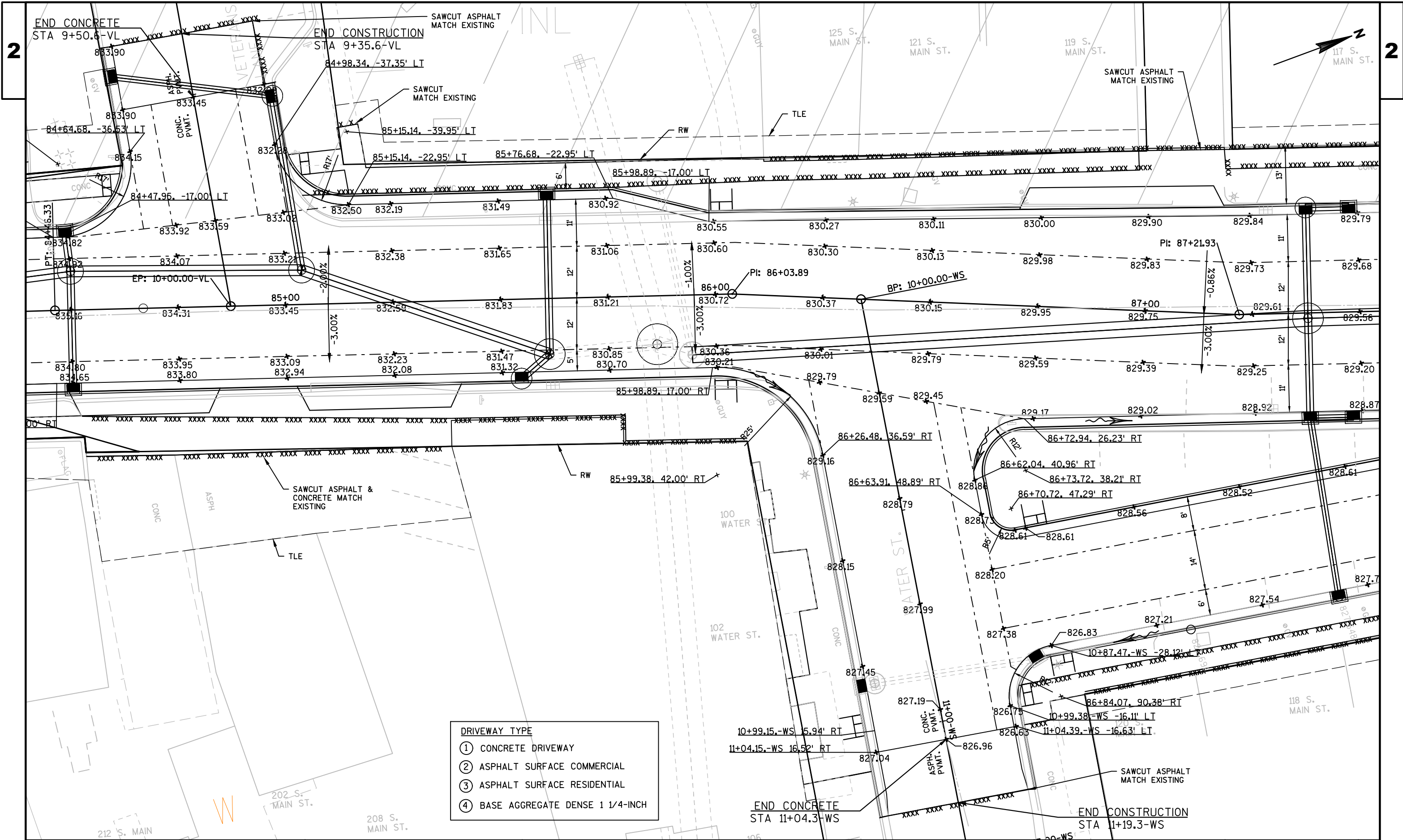
42

E

2







DRIVEWAY TYPE	
①	CONCRETE DRIVEWAY
②	ASPHALT SURFACE COMMERCIAL
③	ASPHALT SURFACE RESIDENTIAL
④	BASE AGGREGATE DENSE 1 1/4-INCH

PROJECT NO: 3300-01-73

HWY: STH 89

COUNTY: JEFFERSON

PAVING & INTERSECTION DETAILS

SHEET

45

E

FILE NAME : N:\PDS\C3D\33000103\SHEETSP\021101-INTERSECTION DETAILS\021101-ID.DWG
LAYOUT NAME - INT - (19)

PLOT DATE : 1/16/2018 2:33 PM

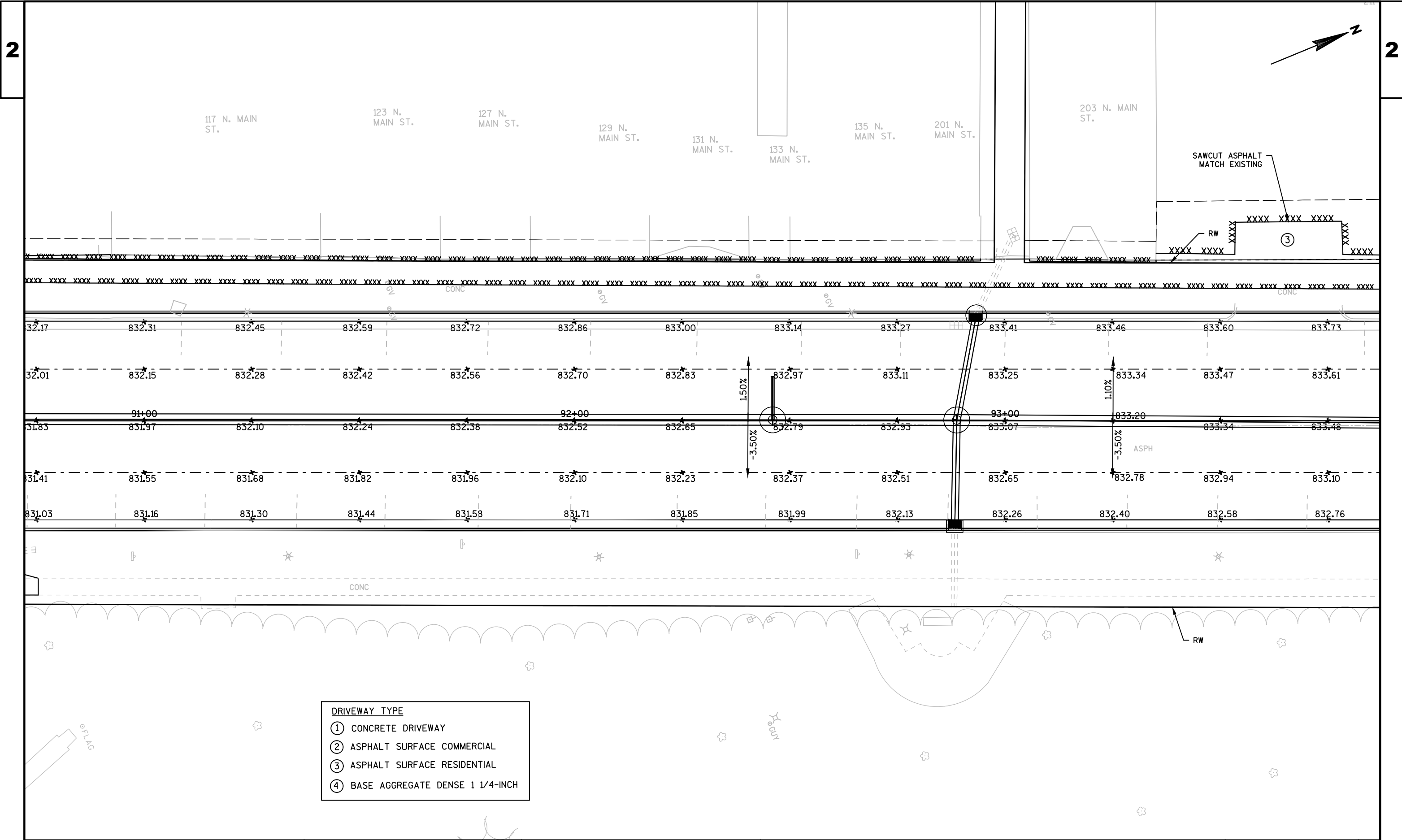
PLOT BY : LEX, BRANDON WILLIAM

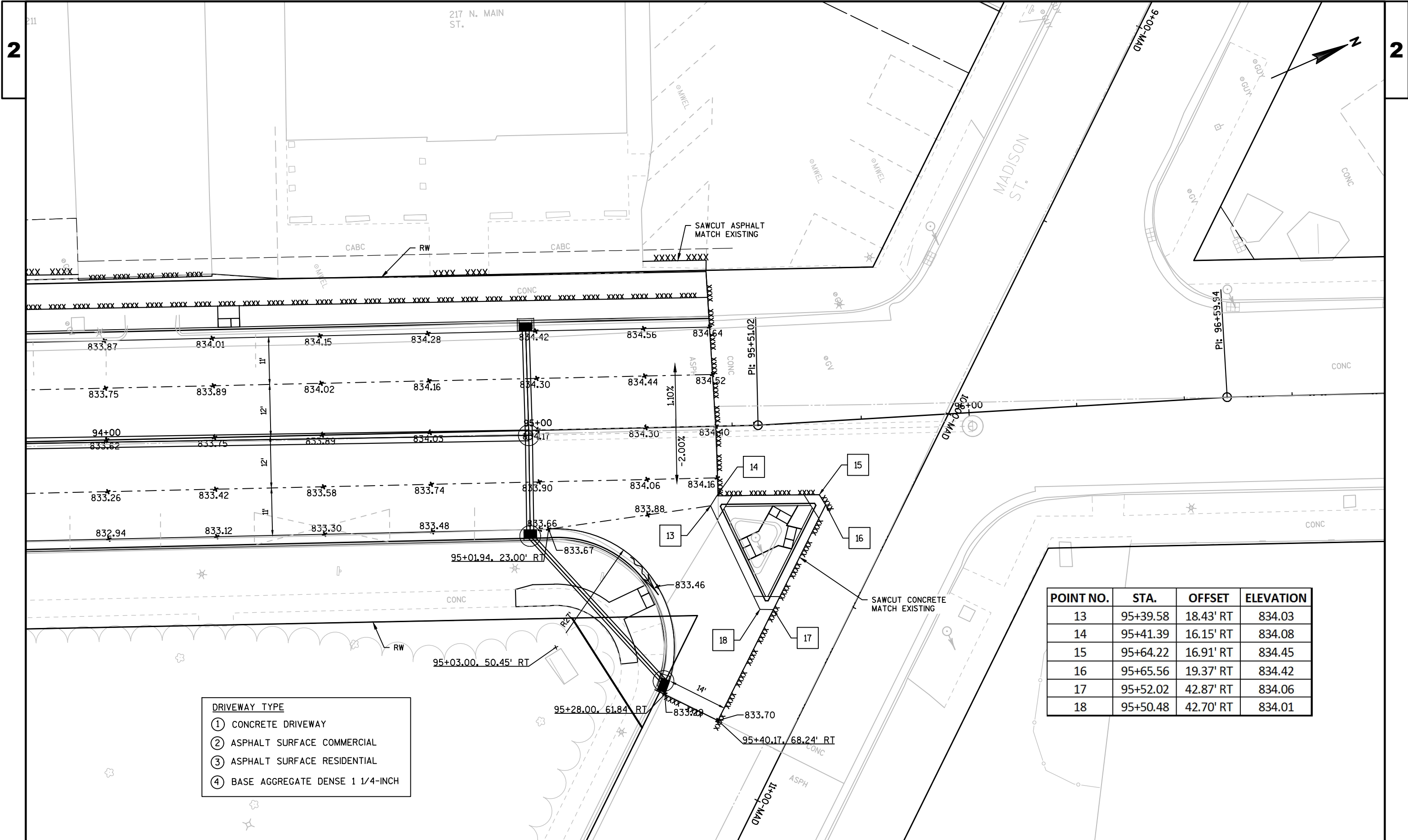
PLOT SCALE : 1 IN:20 FT

WISDOT/CADDs SHEET 42

2







POINT NO.	STA.	OFFSET	ELEVATION
13	95+39.58	18.43' RT	834.03
14	95+41.39	16.15' RT	834.08
15	95+64.22	16.91' RT	834.45
16	95+65.56	19.37' RT	834.42
17	95+52.02	42.87' RT	834.06
18	95+50.48	42.70' RT	834.01

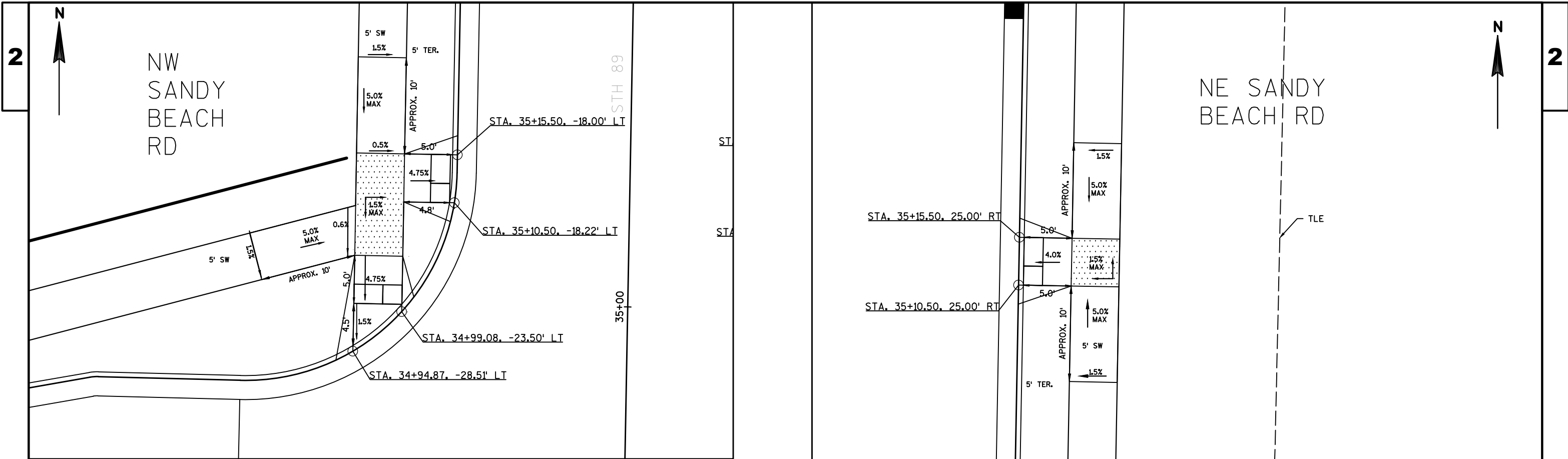
- DRIVEWAY TYPE
- 1

CONCRETE DRIVEWAY
- 2

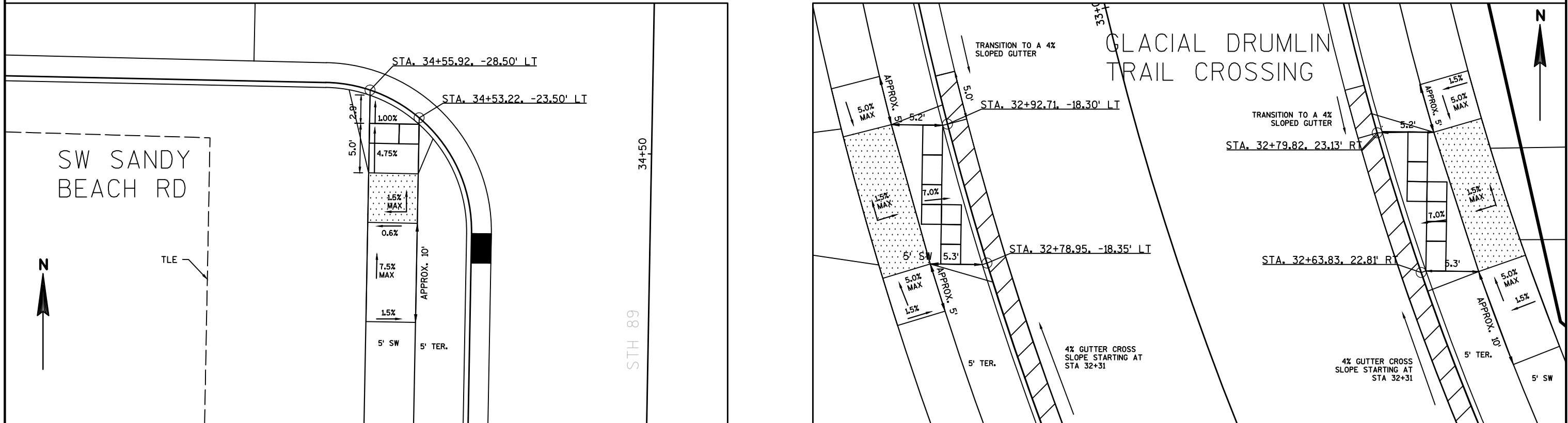
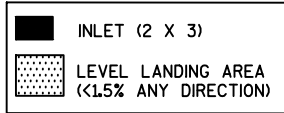
ASPHALT SURFACE COMMERCIAL
- 3

ASPHALT SURFACE RESIDENTIAL
- 4

BASE AGGREGATE DENSE 1 1/4-INCH



ALL TERRACES ARE GRASS
UNLESS OTHERWISE NOTED
IN PLANS



PROJECT NO: 3300-01-73

HWY: STH 89

COUNTY: JEFFERSON

CURB RAMP DETAILS

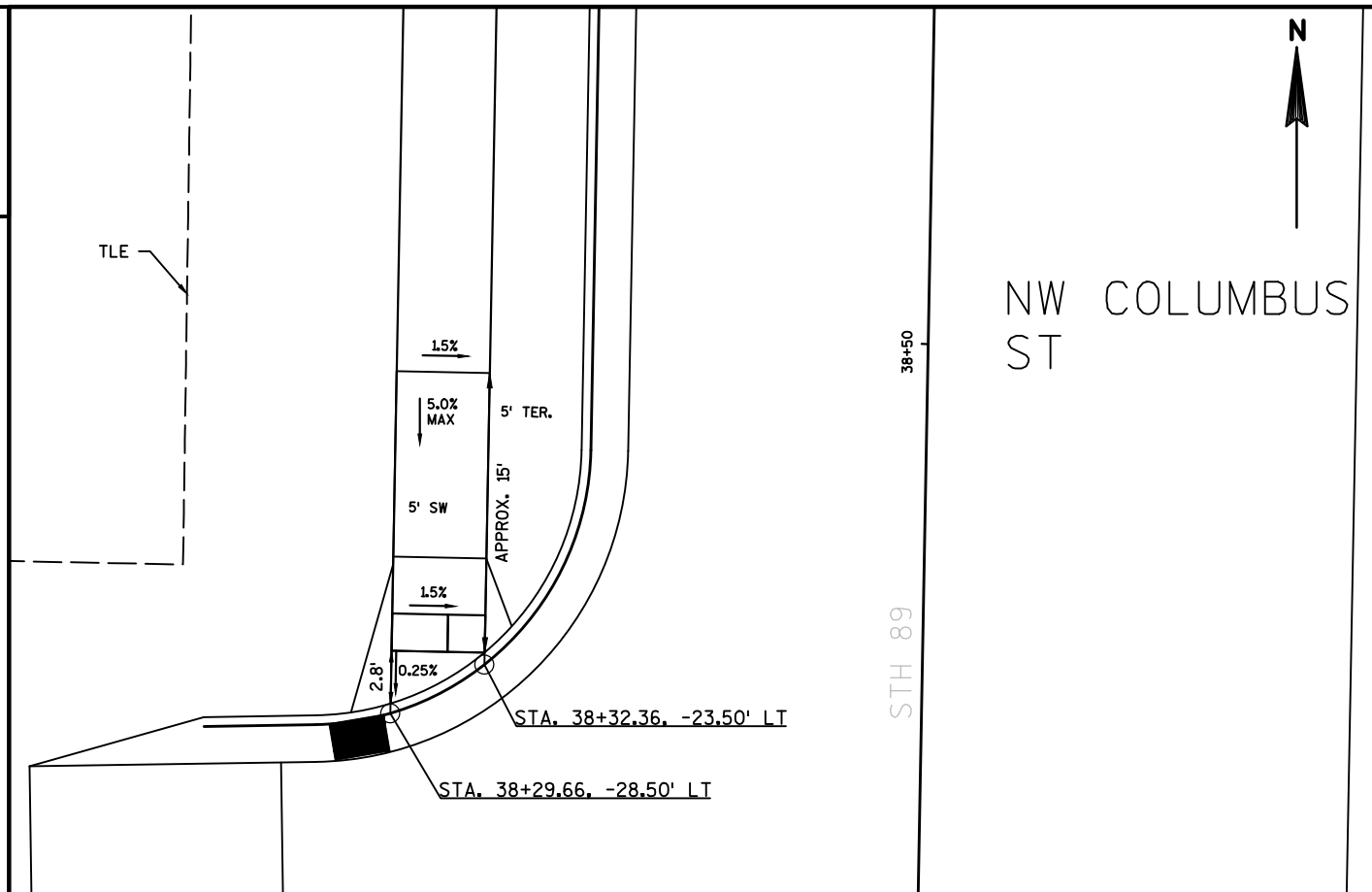
SHEET

49

E

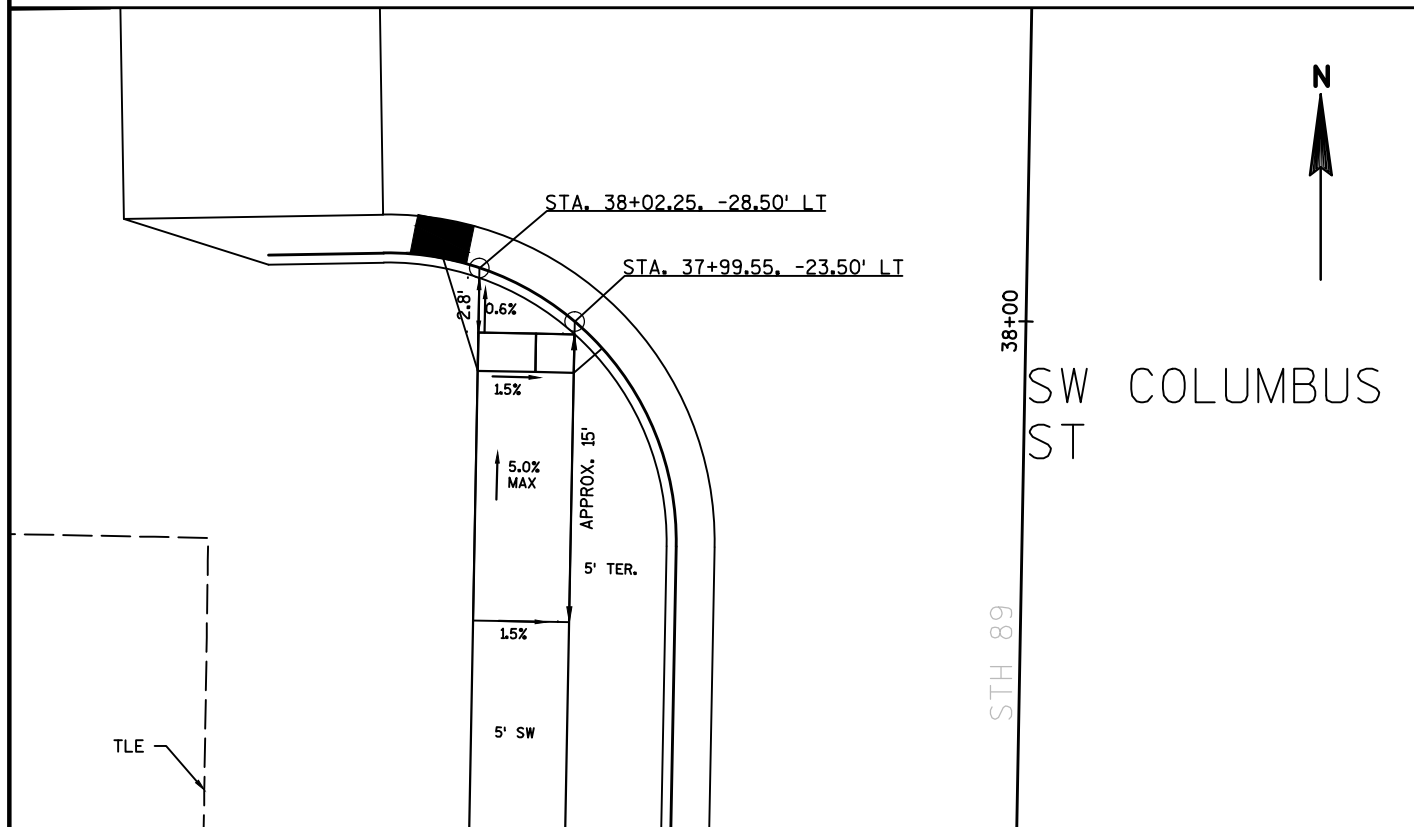
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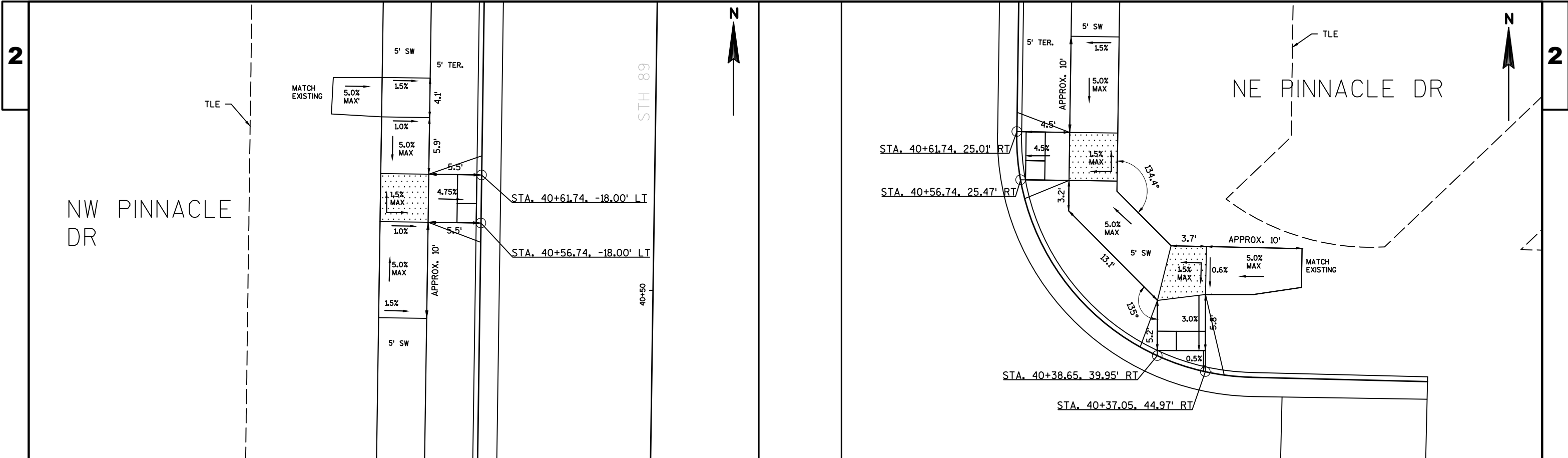
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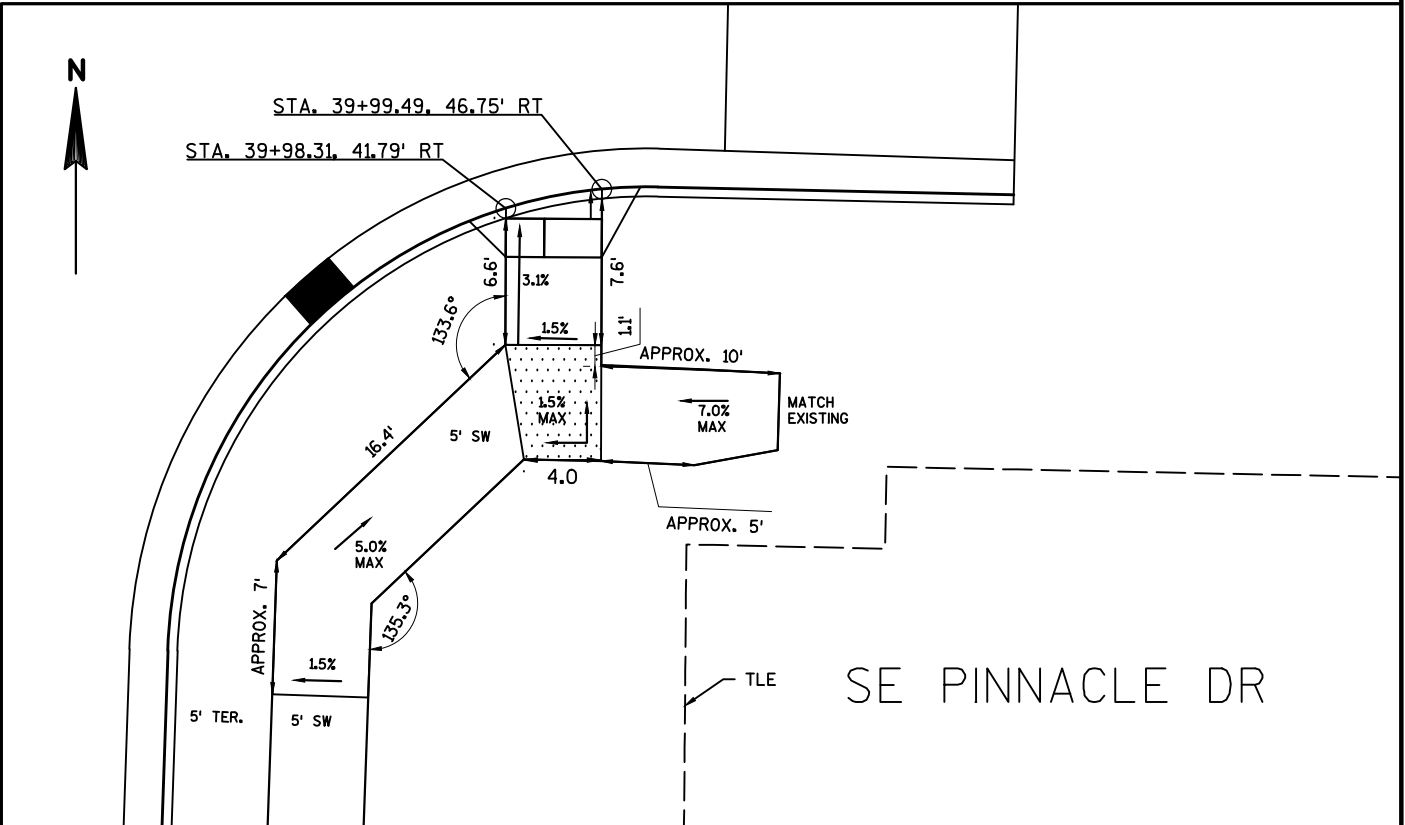
INLET (2 X 3)

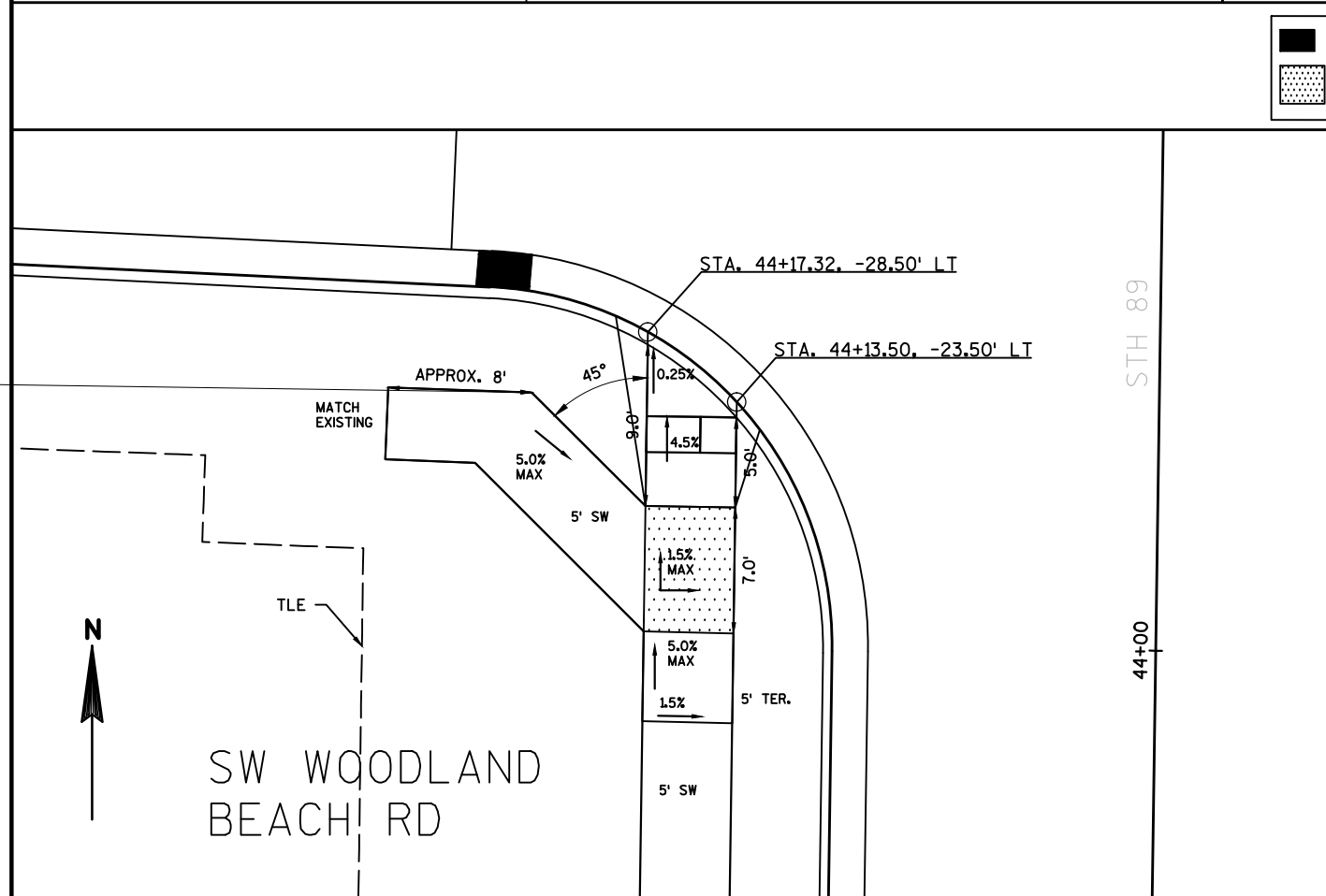
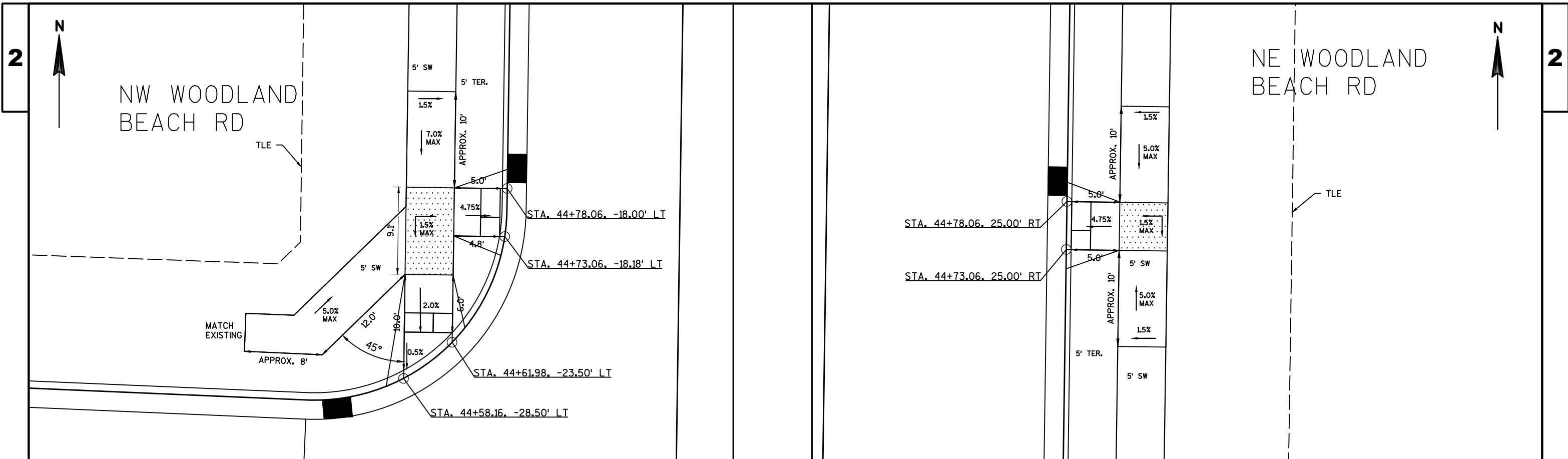
LEVEL LANDING AREA (<1.5% ANY DIRECTION)

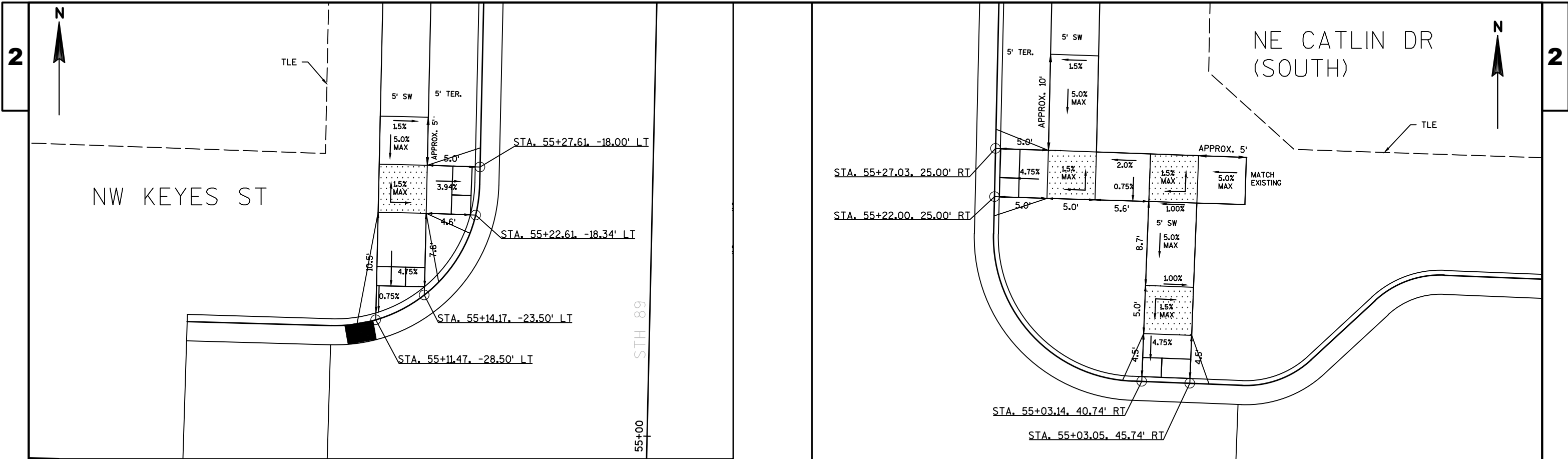




INLET (2 X 3)
 LEVEL LANDING AREA (<1.5% ANY DIRECTION)

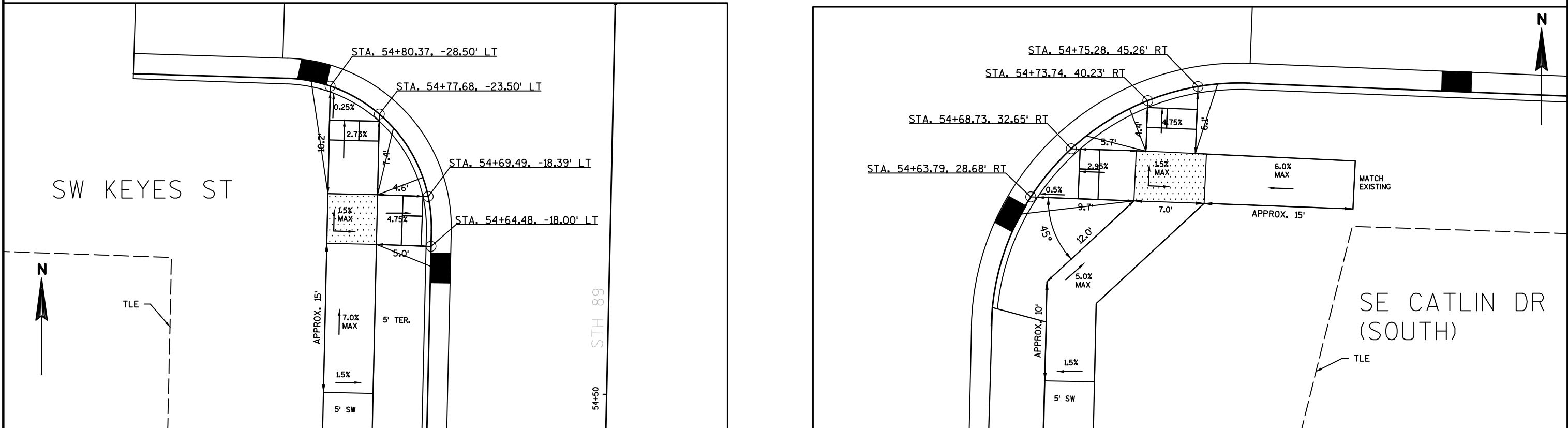


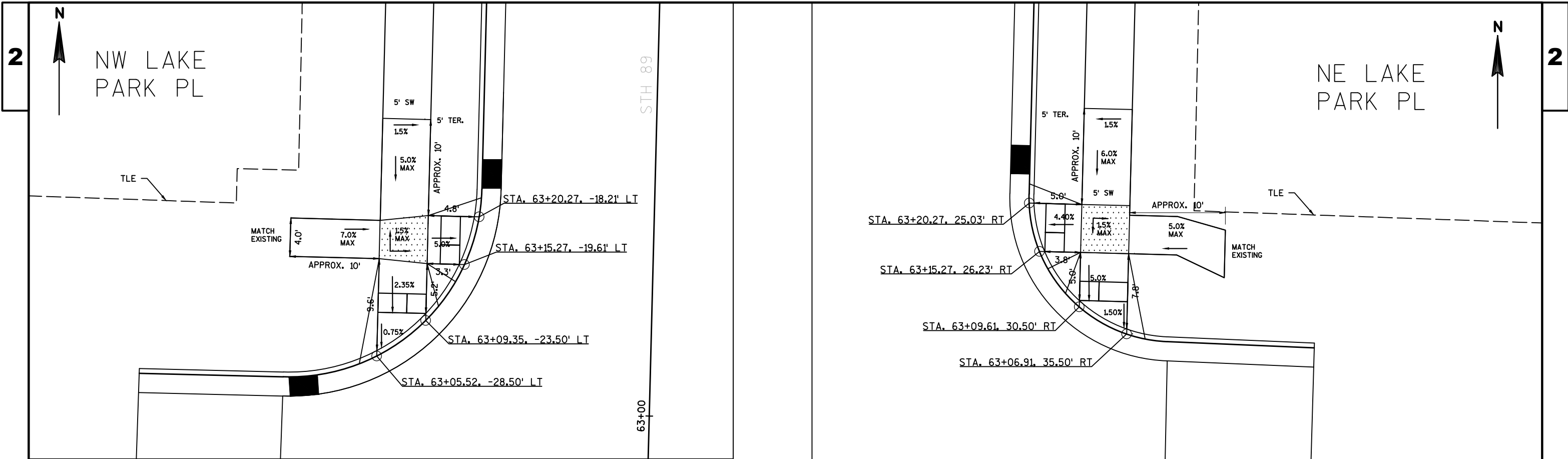




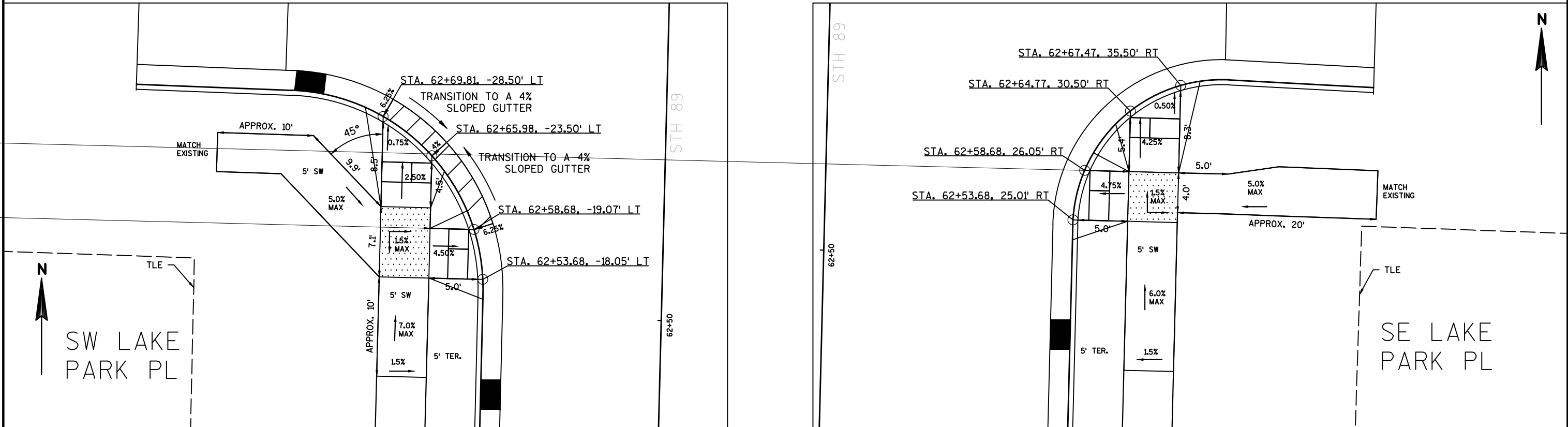
INLET (2 X 3)

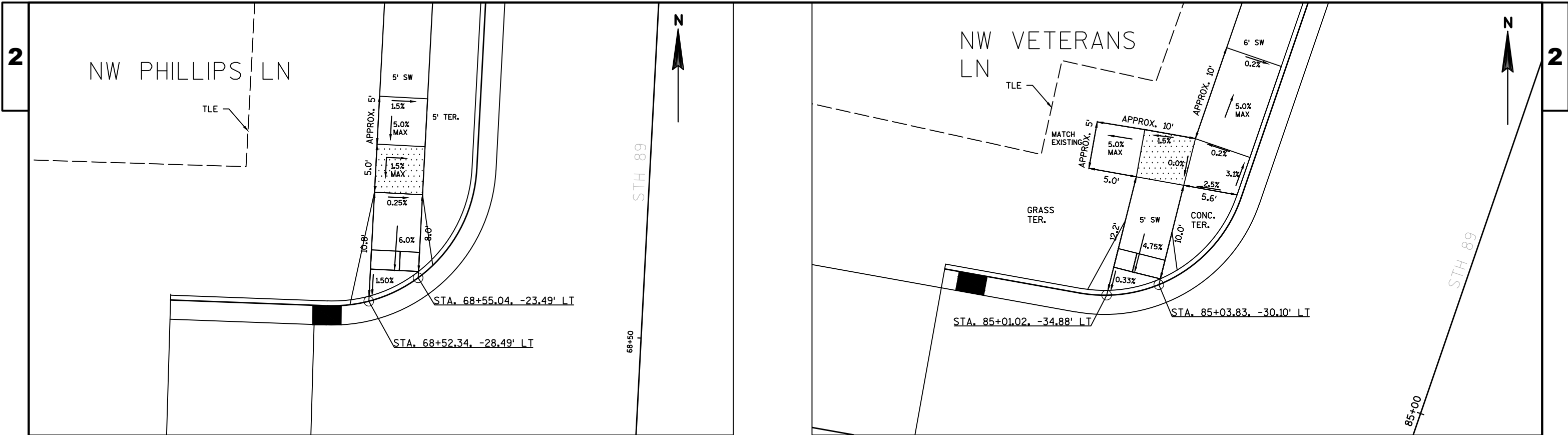
LEVEL LANDING AREA (<1.5% ANY DIRECTION)





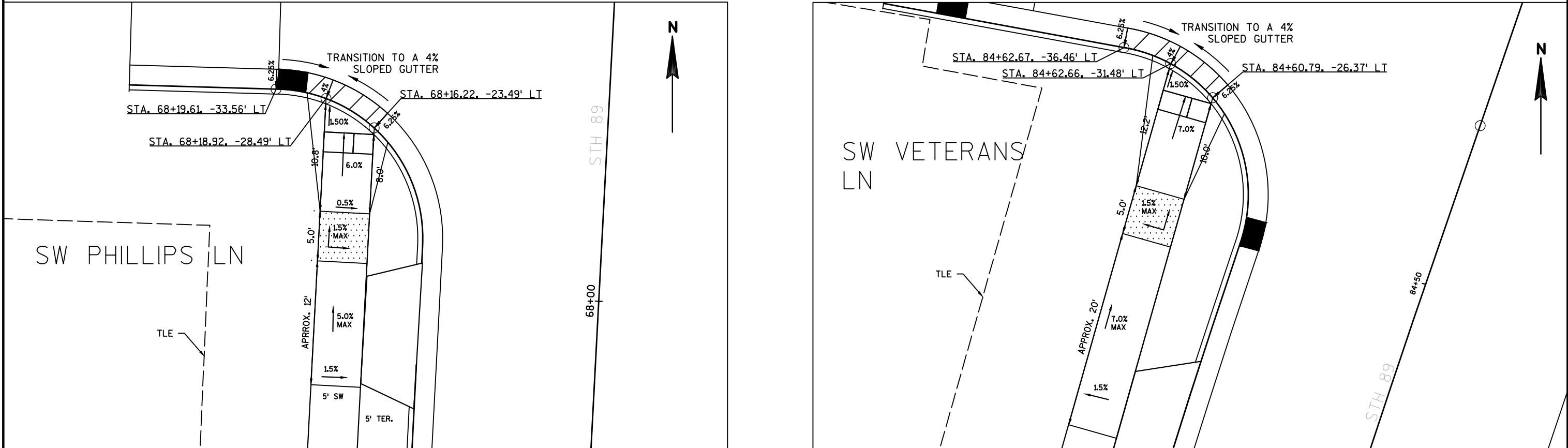
INLET (2 X 3)
 LEVEL LANDING AREA (<1.5% ANY DIRECTION)

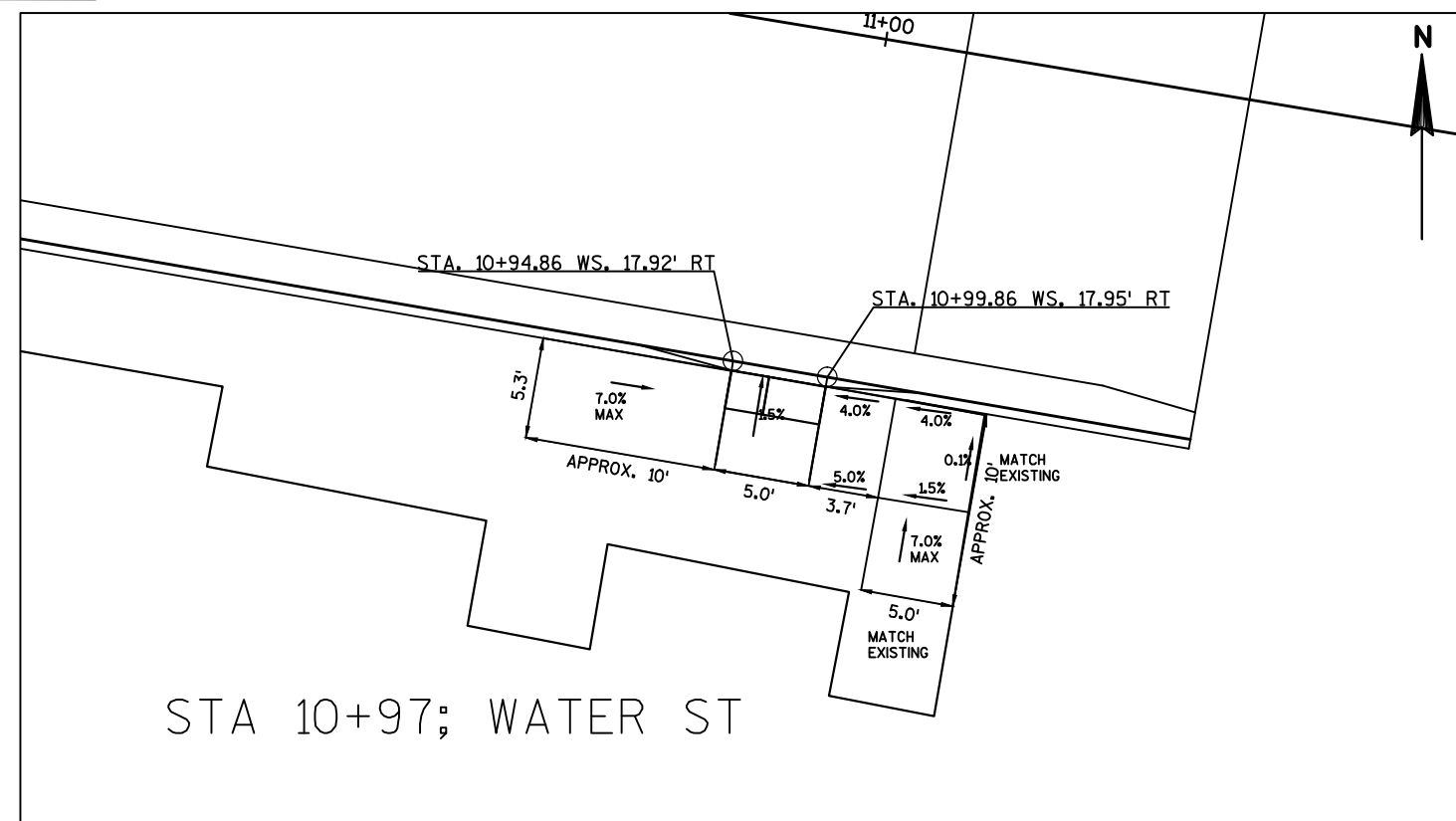
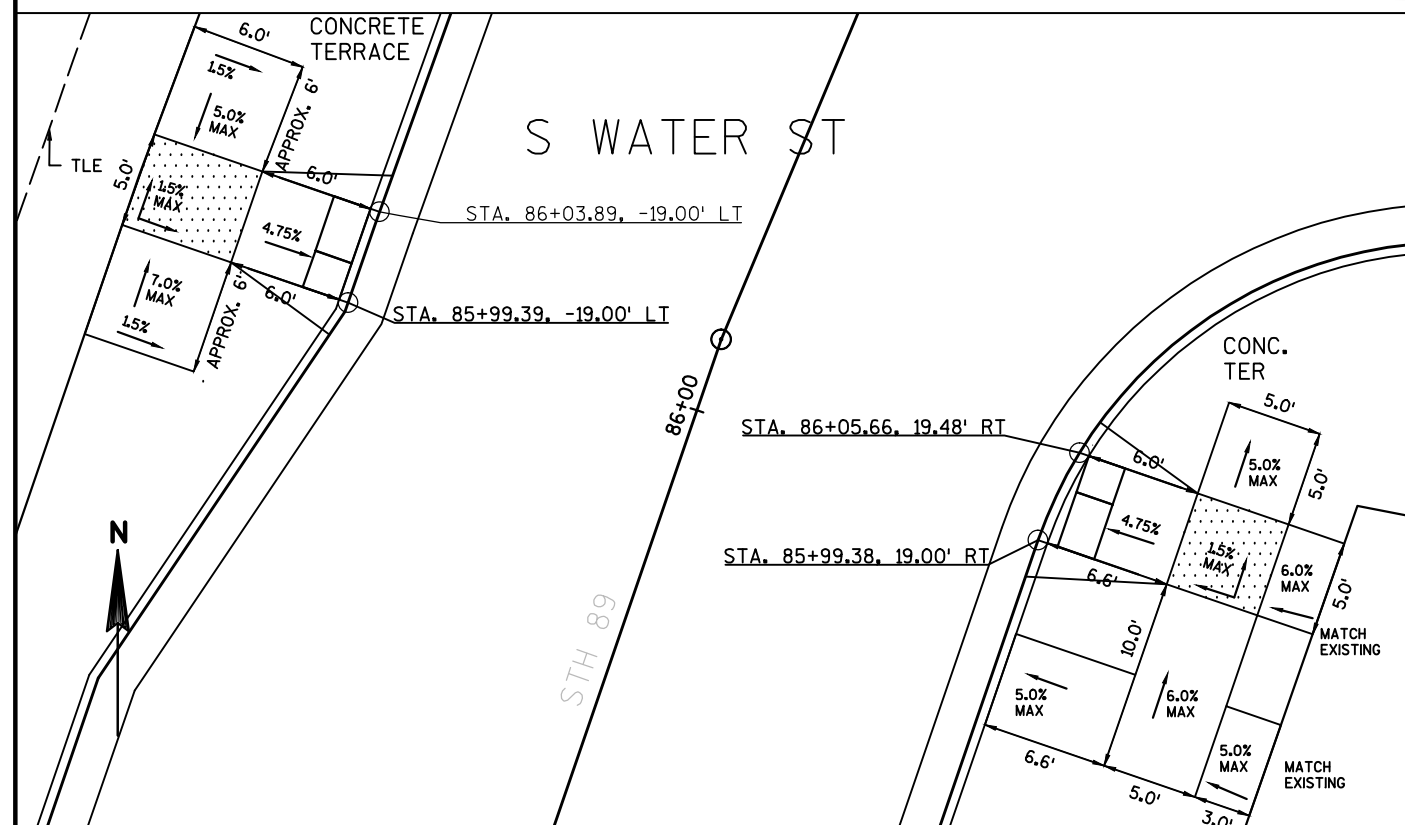
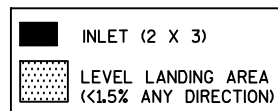
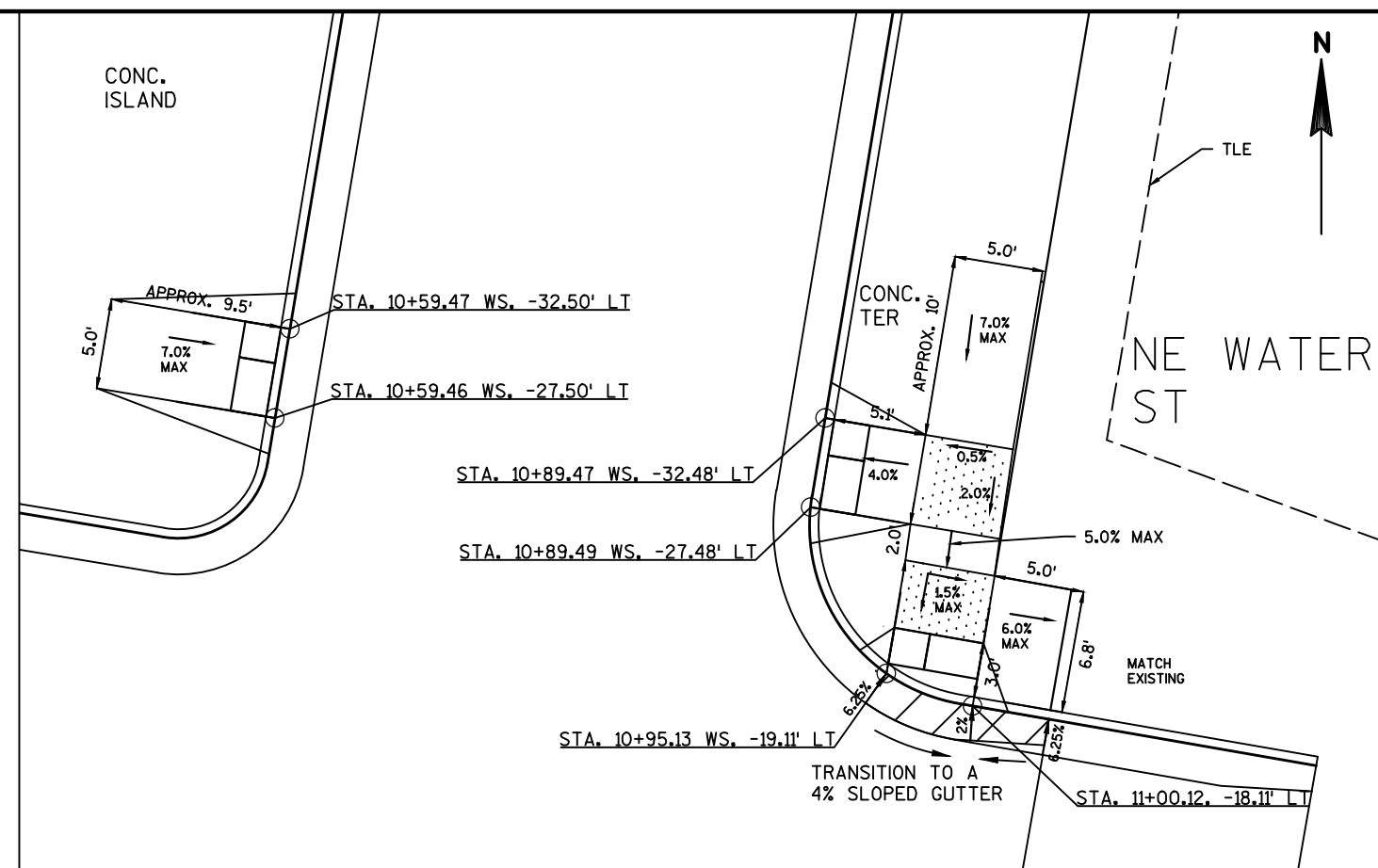


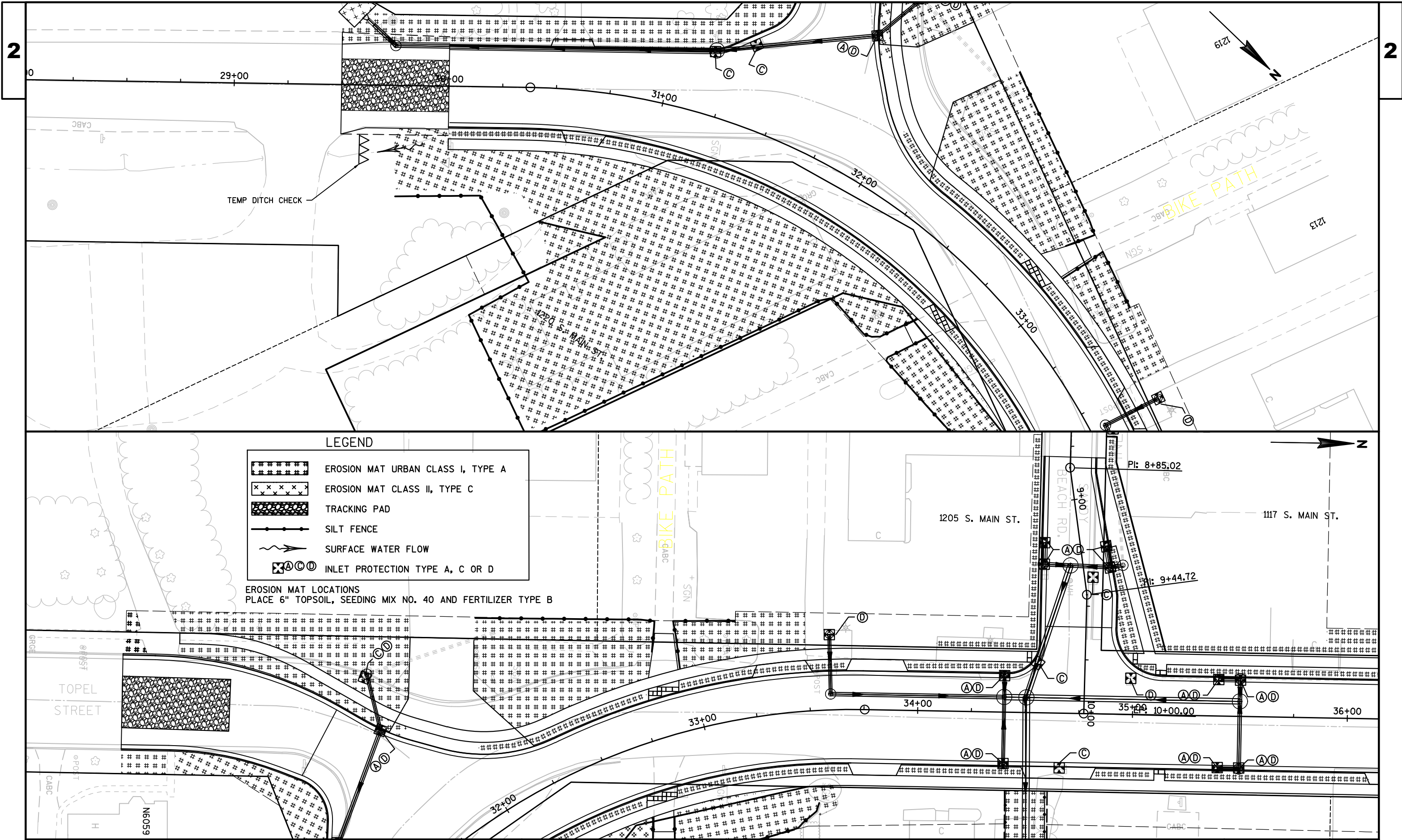


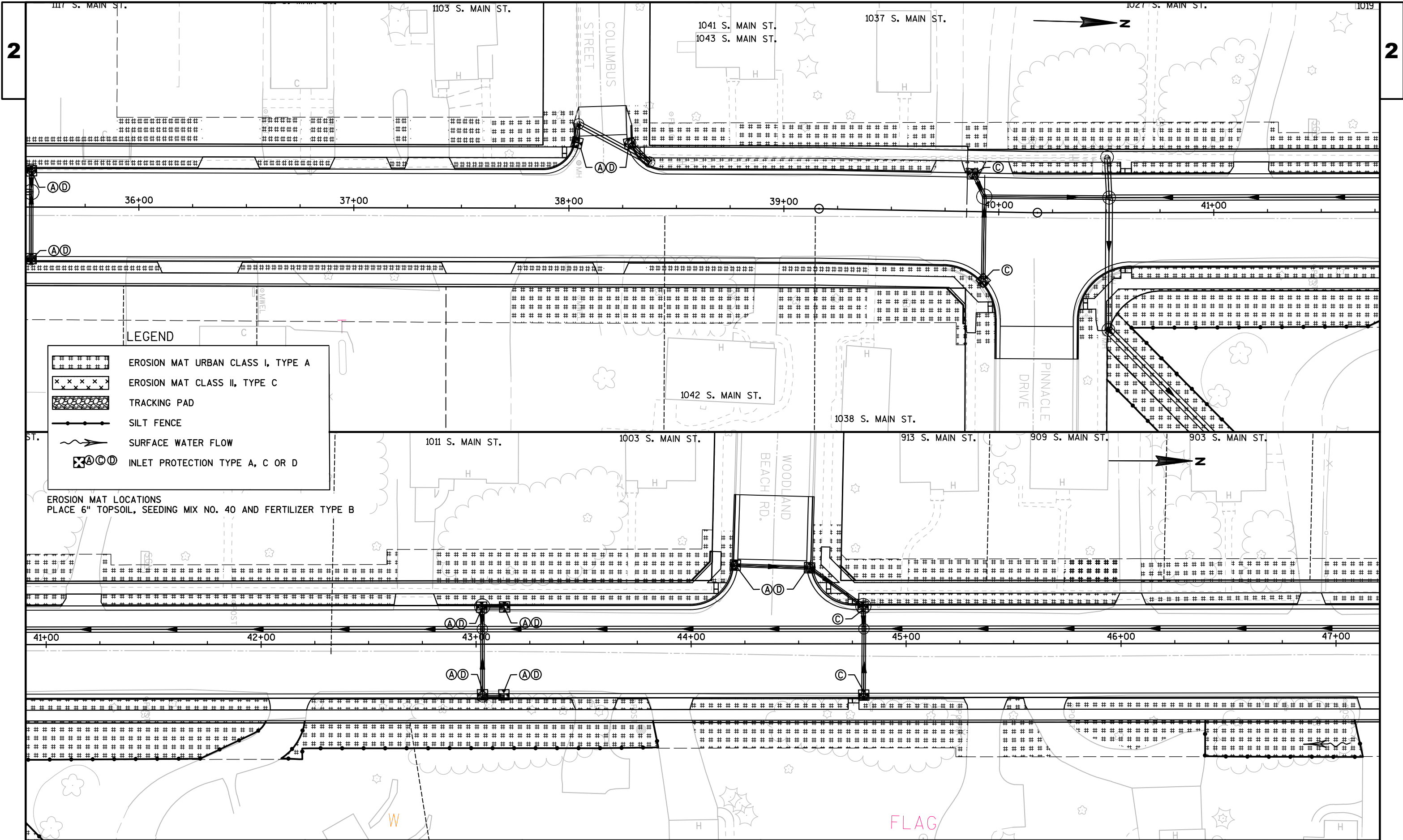
INLET (2 X 3)

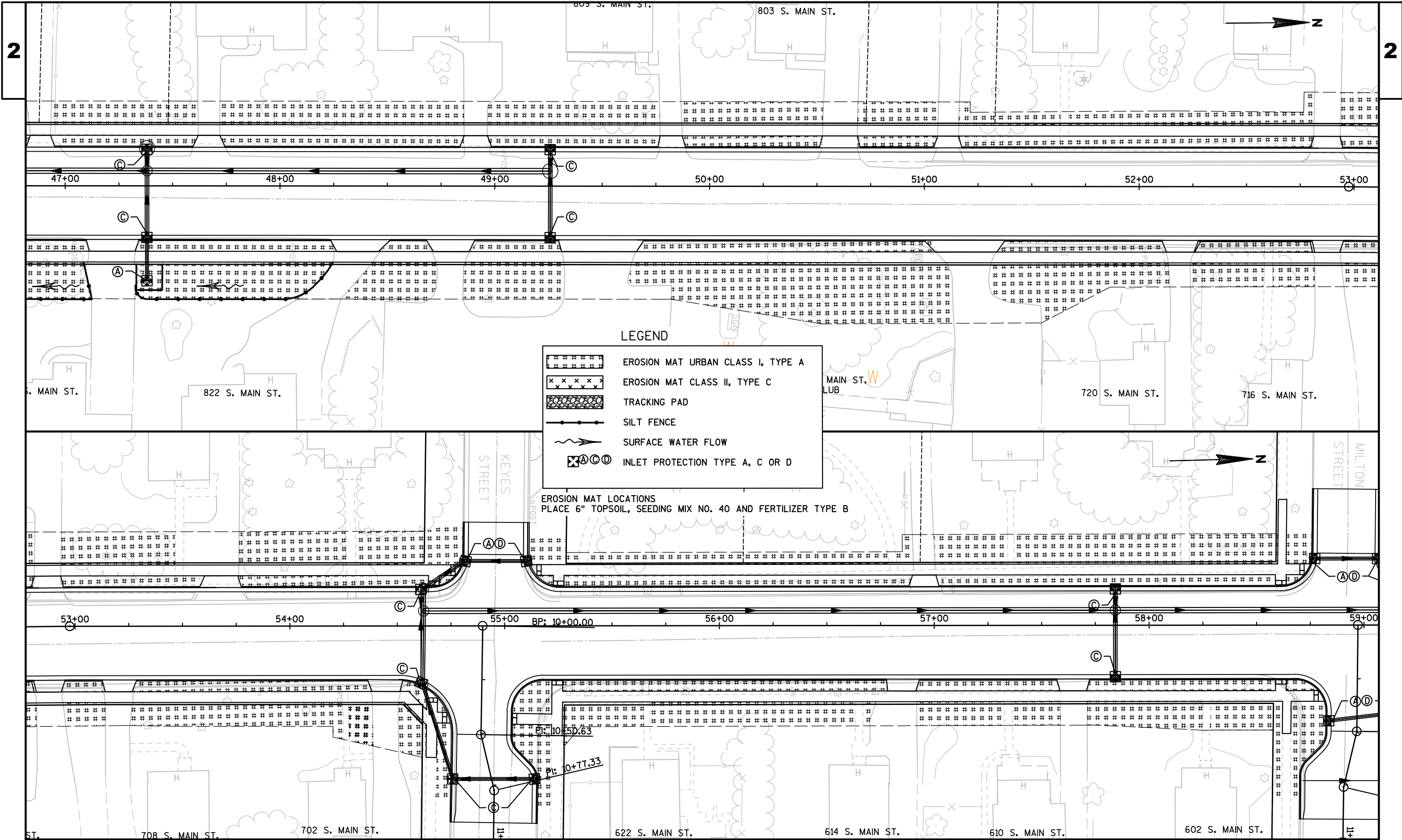
LEVEL LANDING AREA (<1.5% ANY DIRECTION)



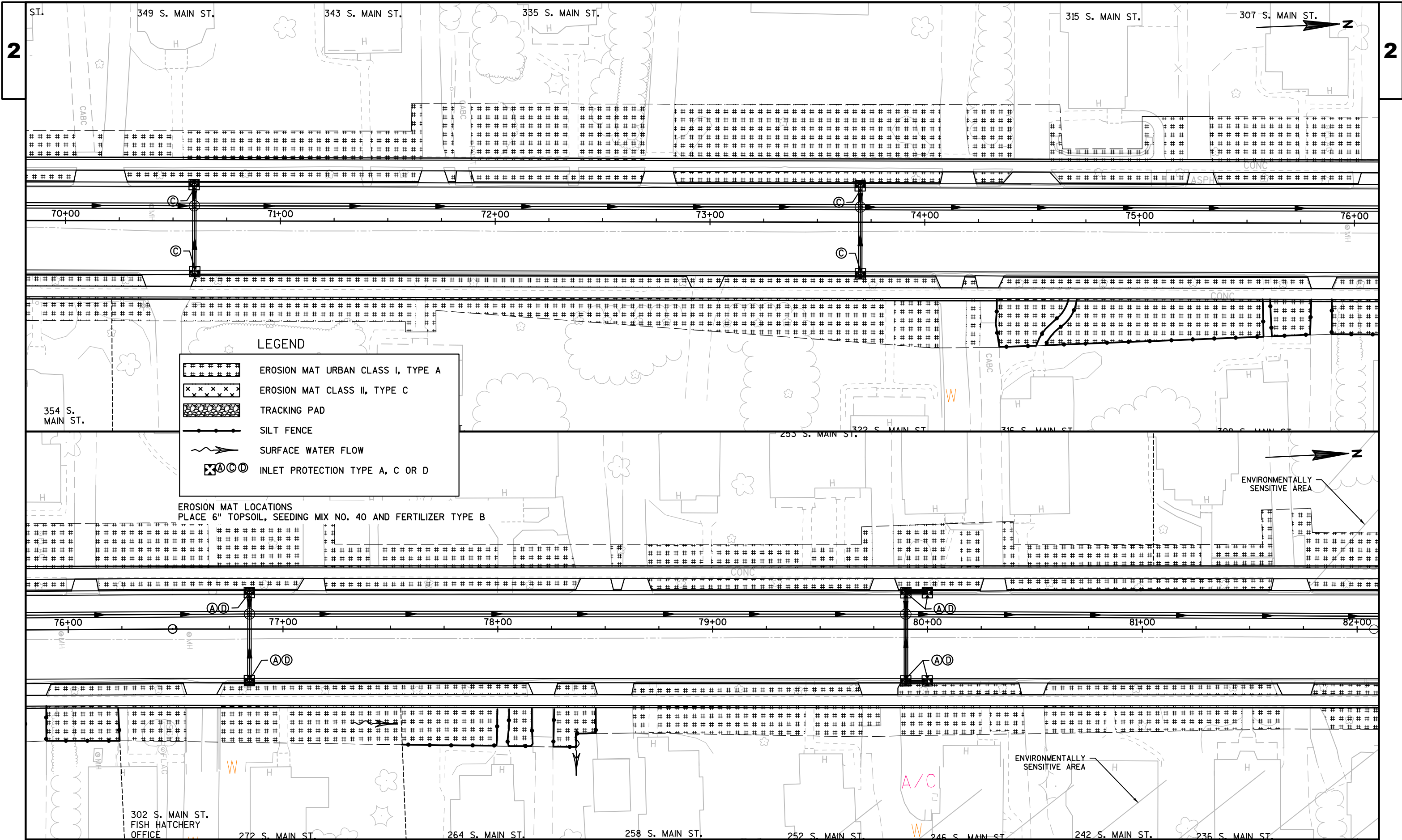


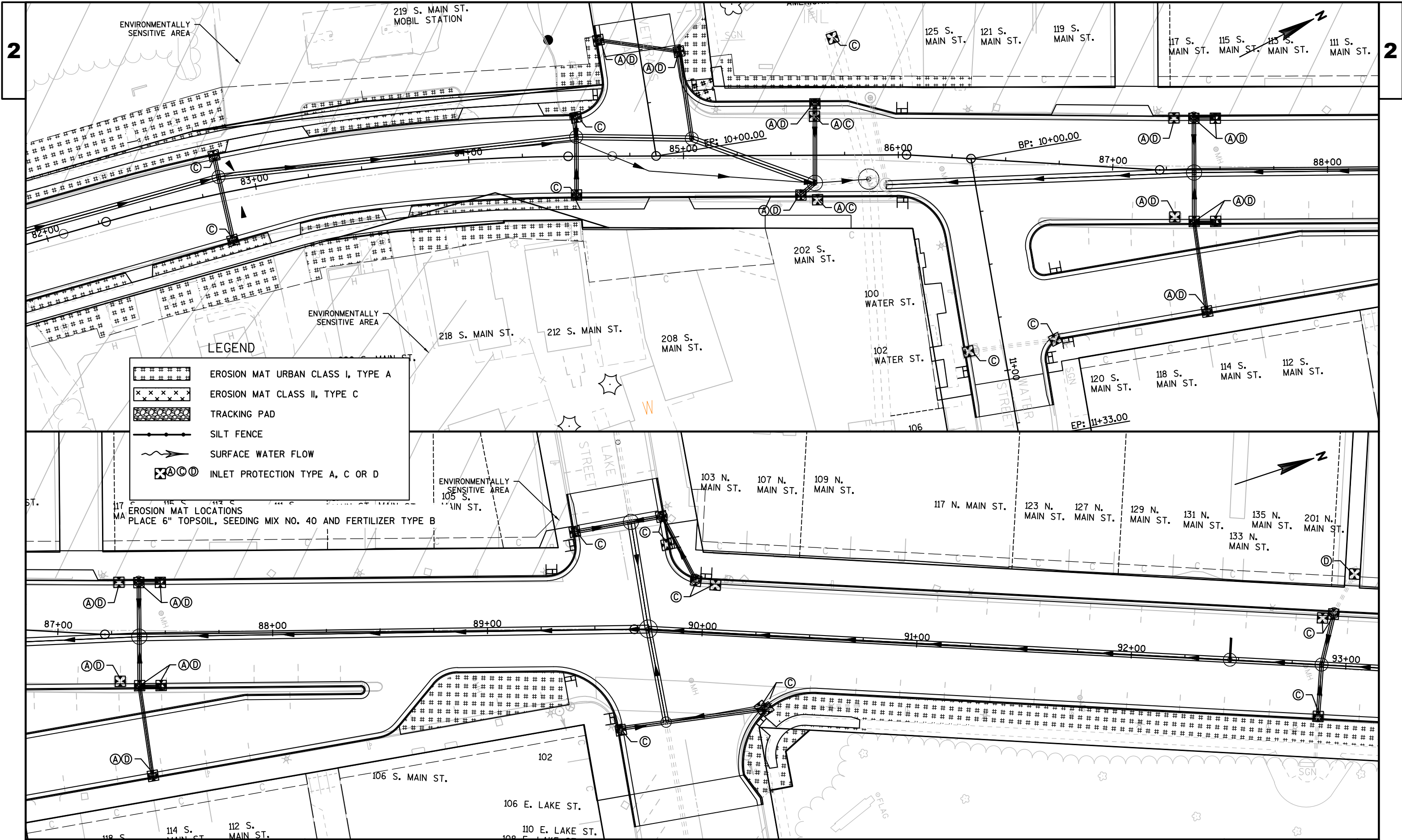


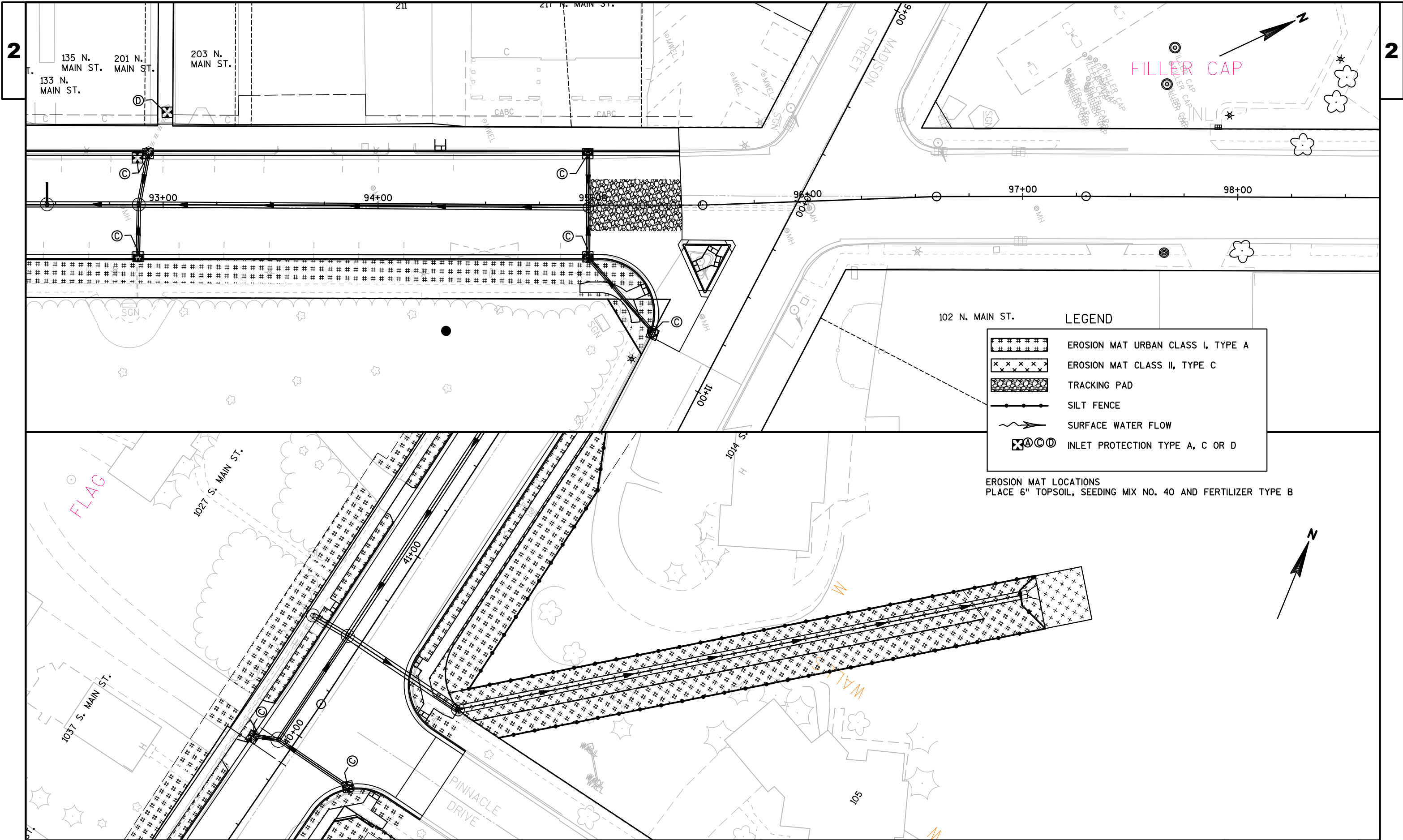


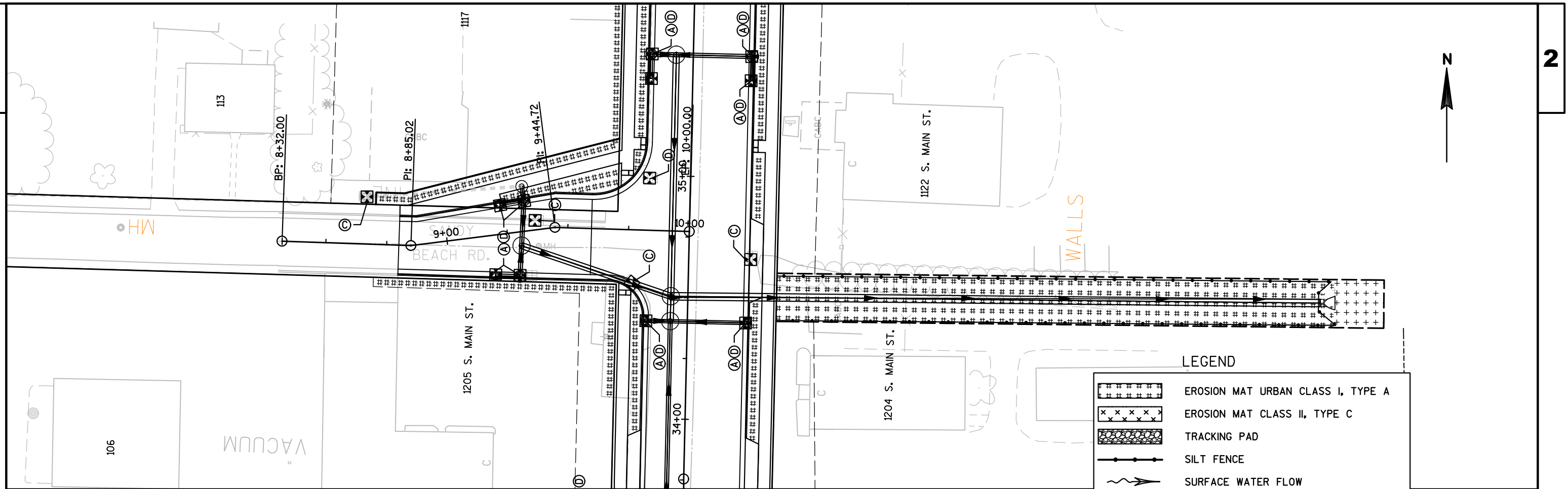








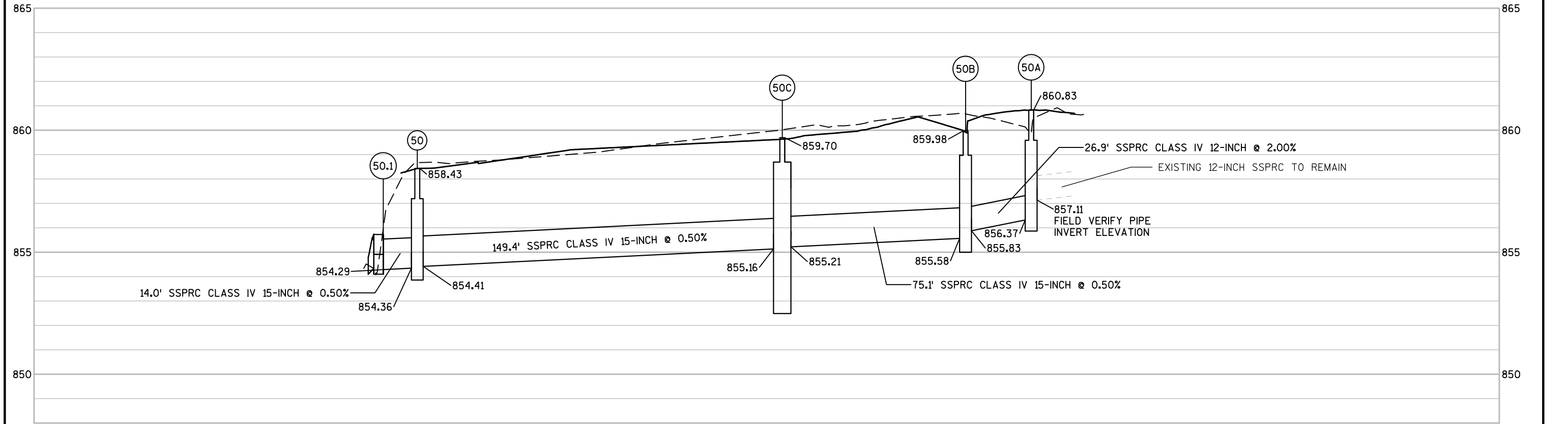


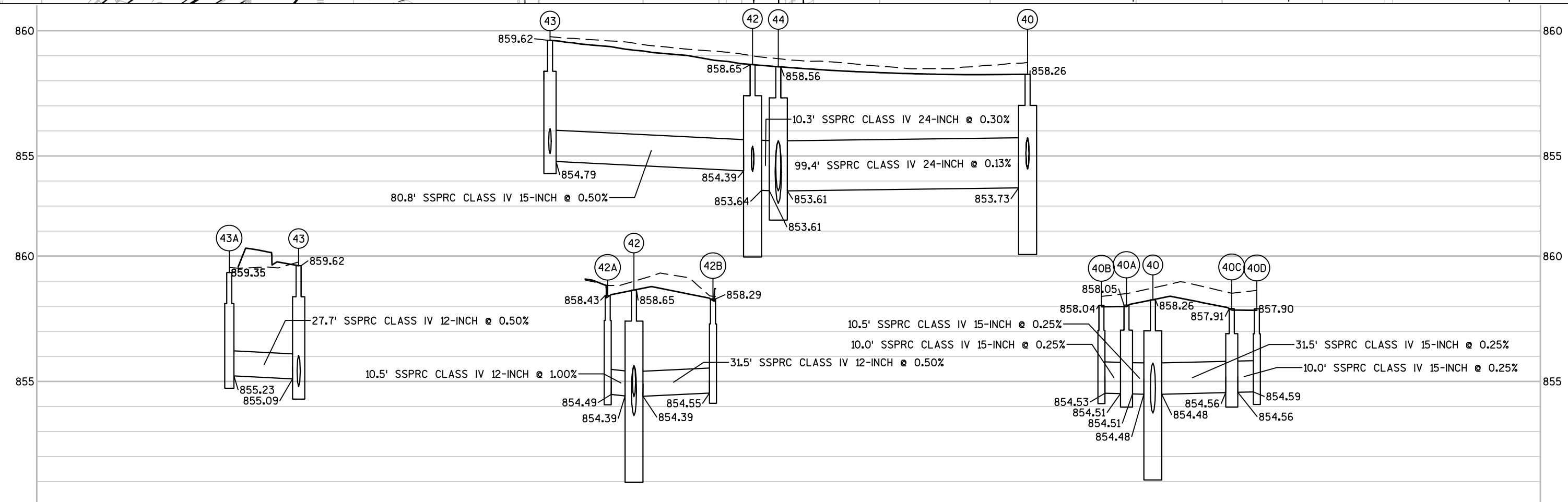
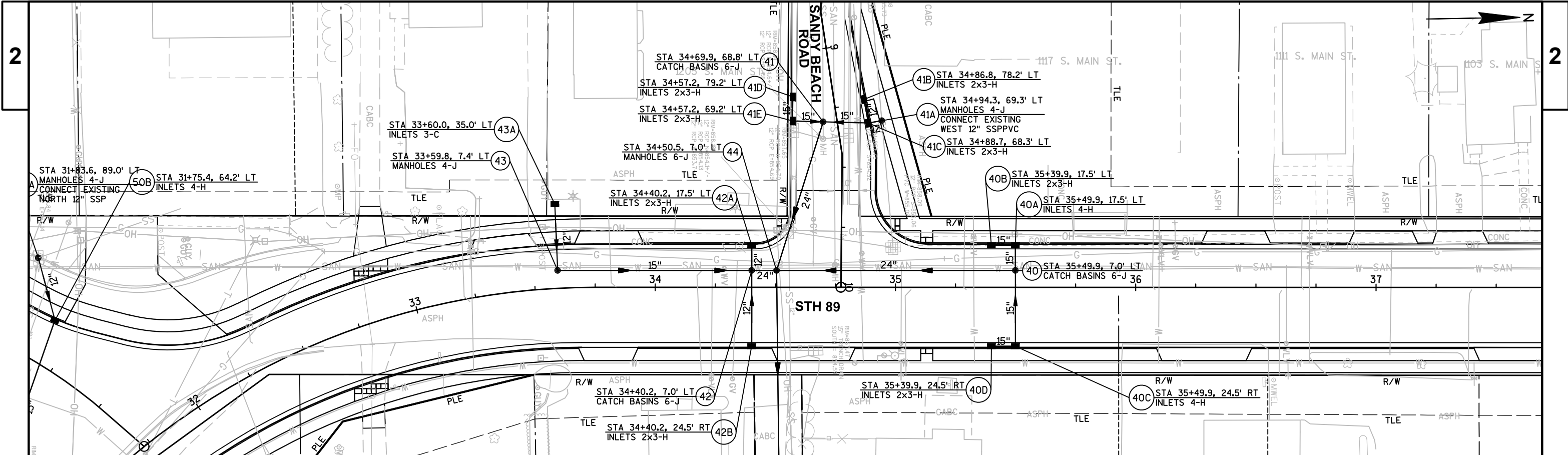


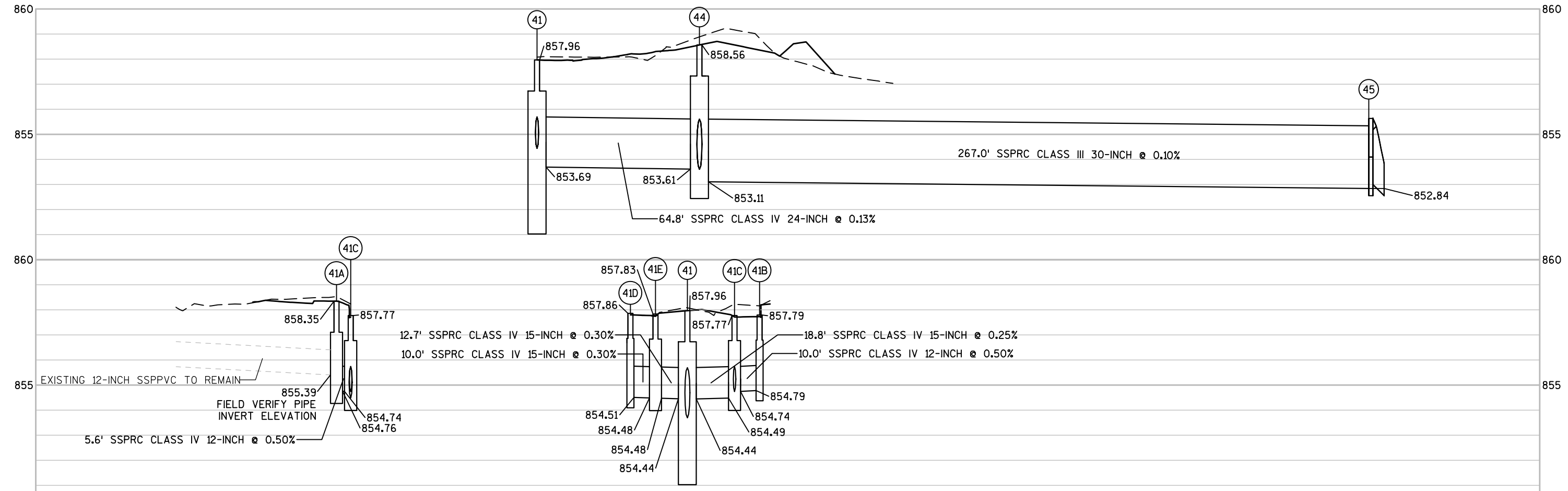
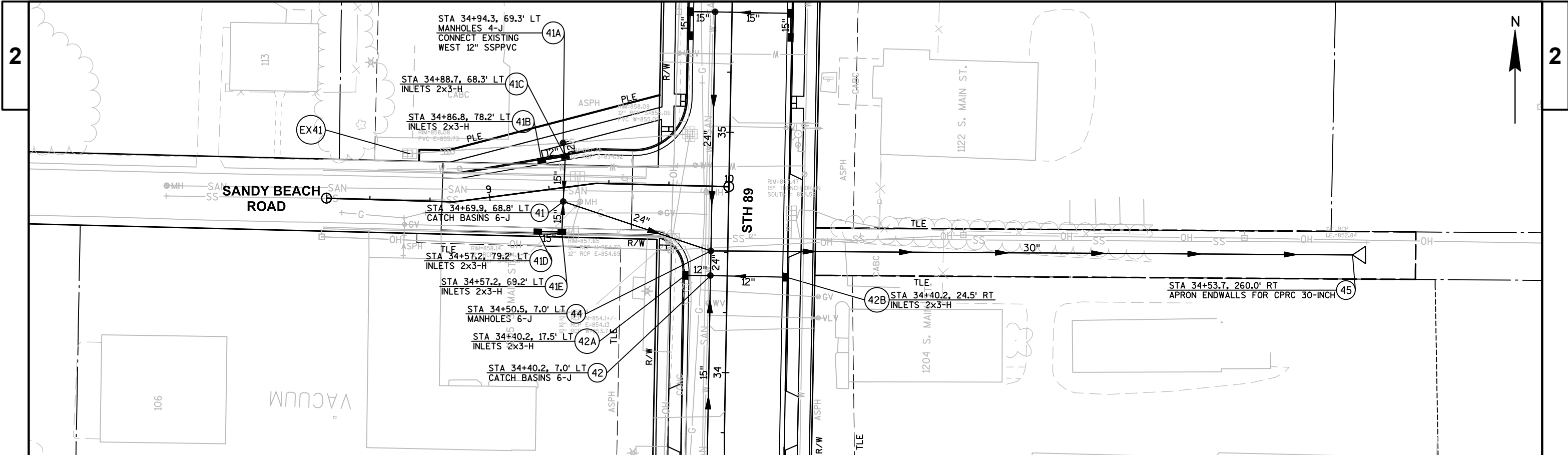
LEGEND

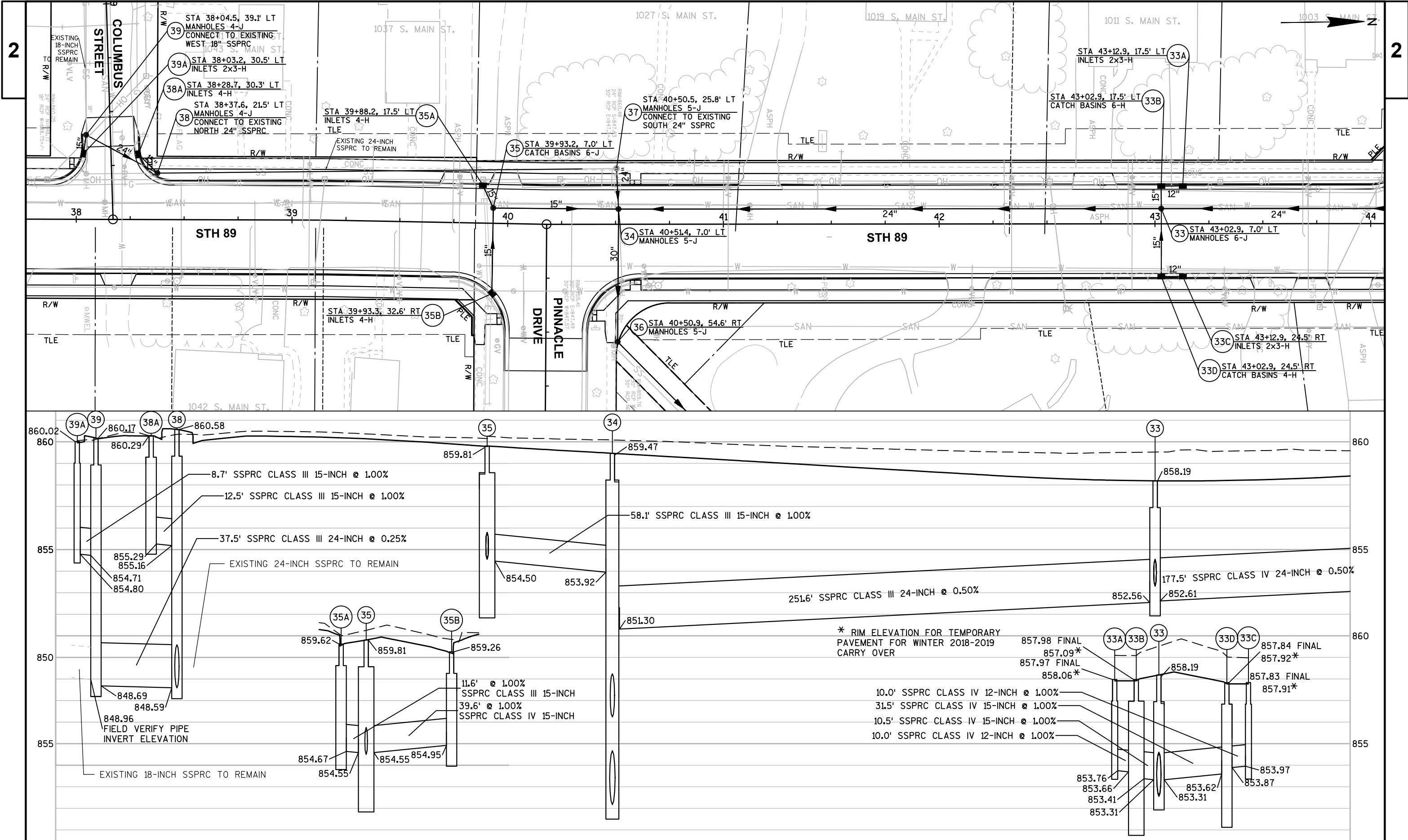
- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE C
- TRACKING PAD
- SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE A, C OR D

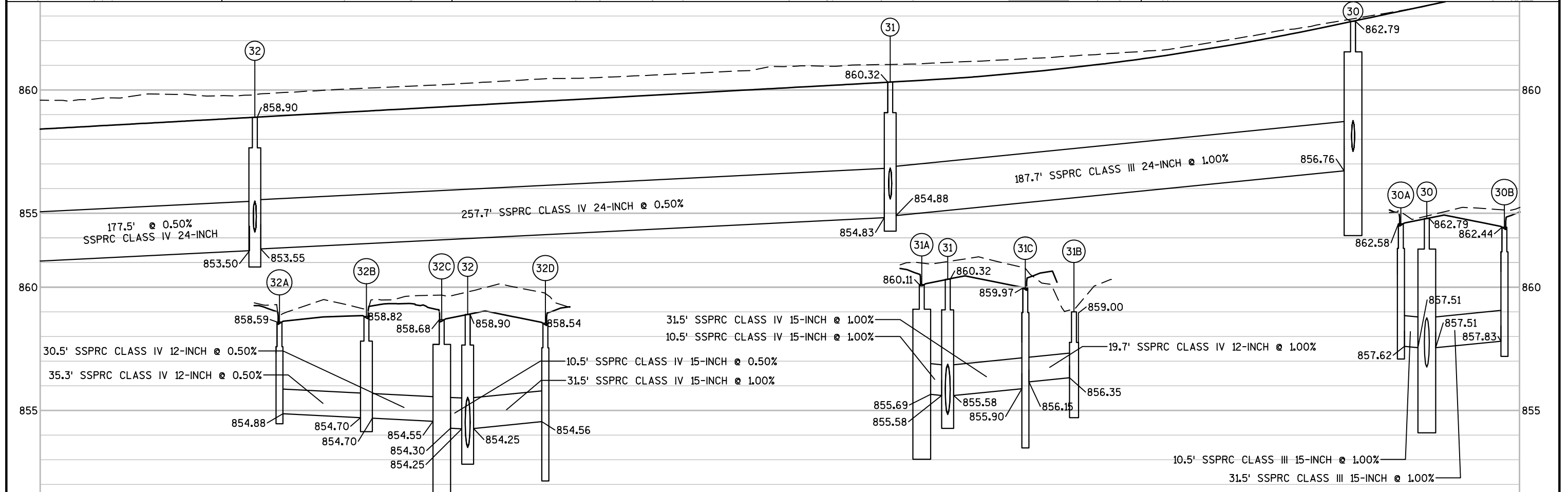
EROSION MAT LOCATIONS
PLACE 6" TOPSOIL, SEEDING MIX NO. 40 AND FERTILIZER TYPE B

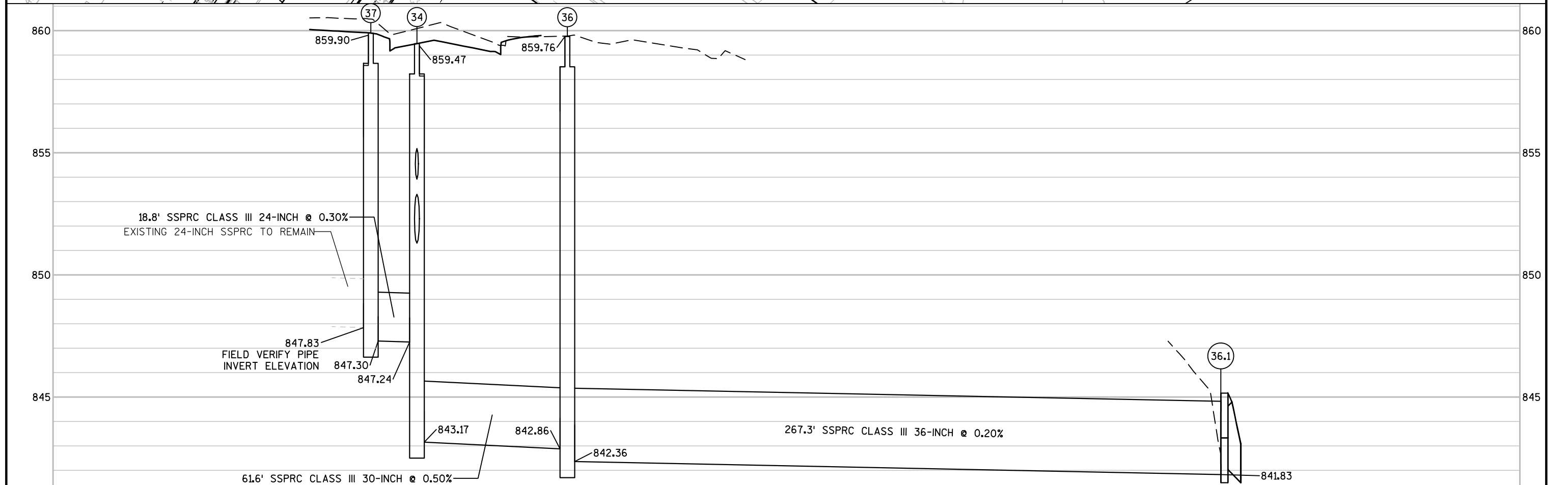
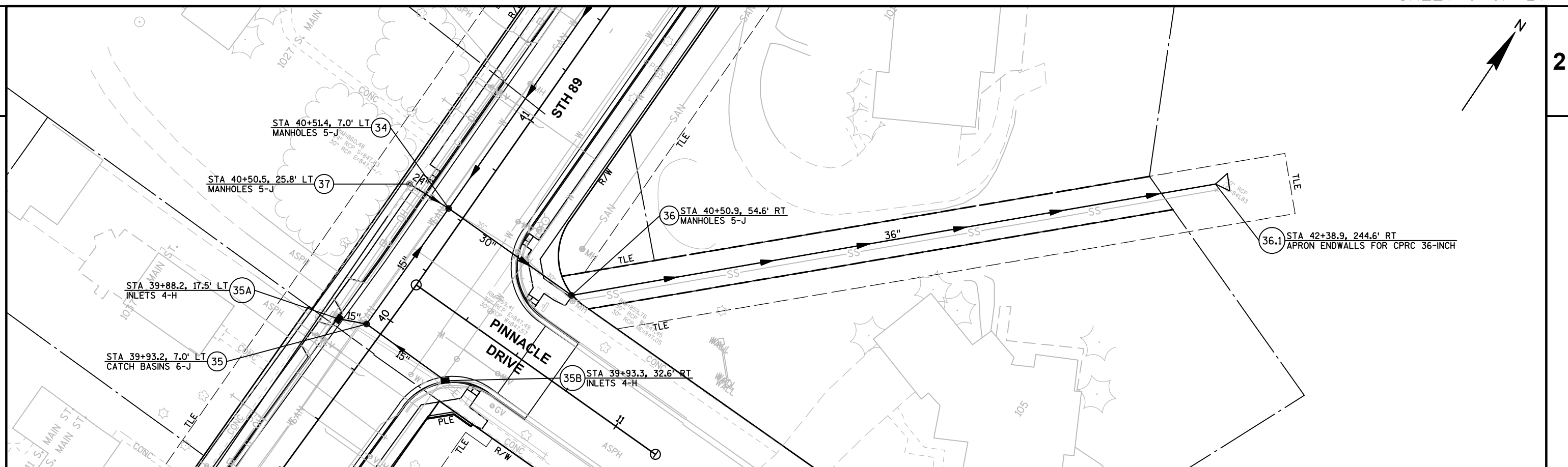


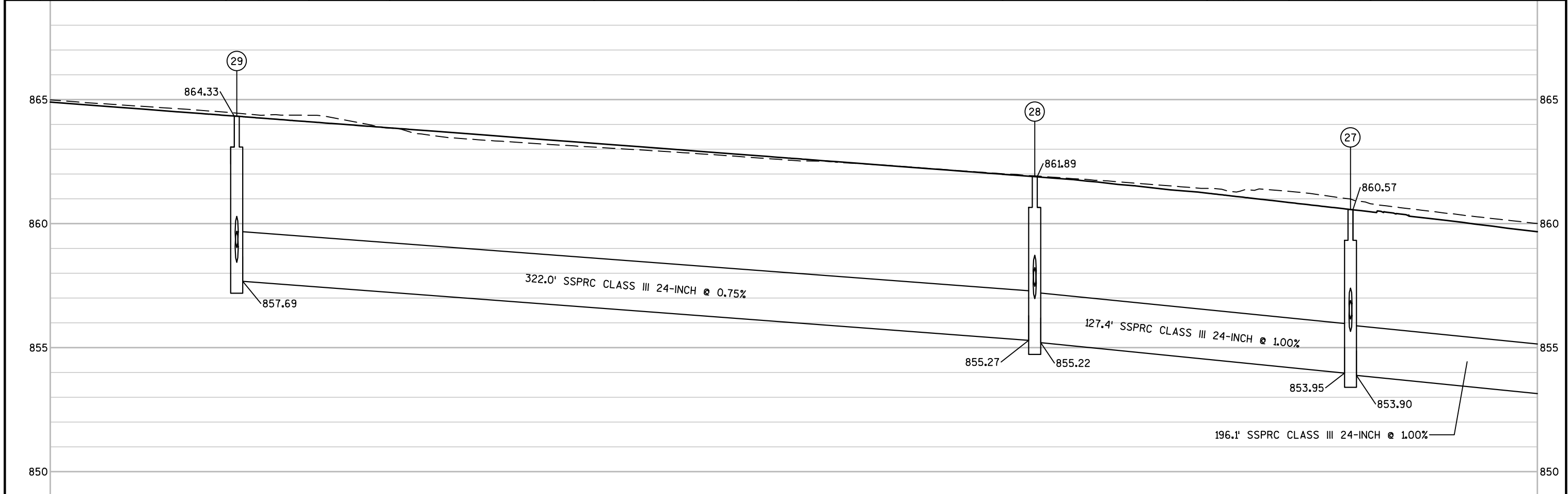
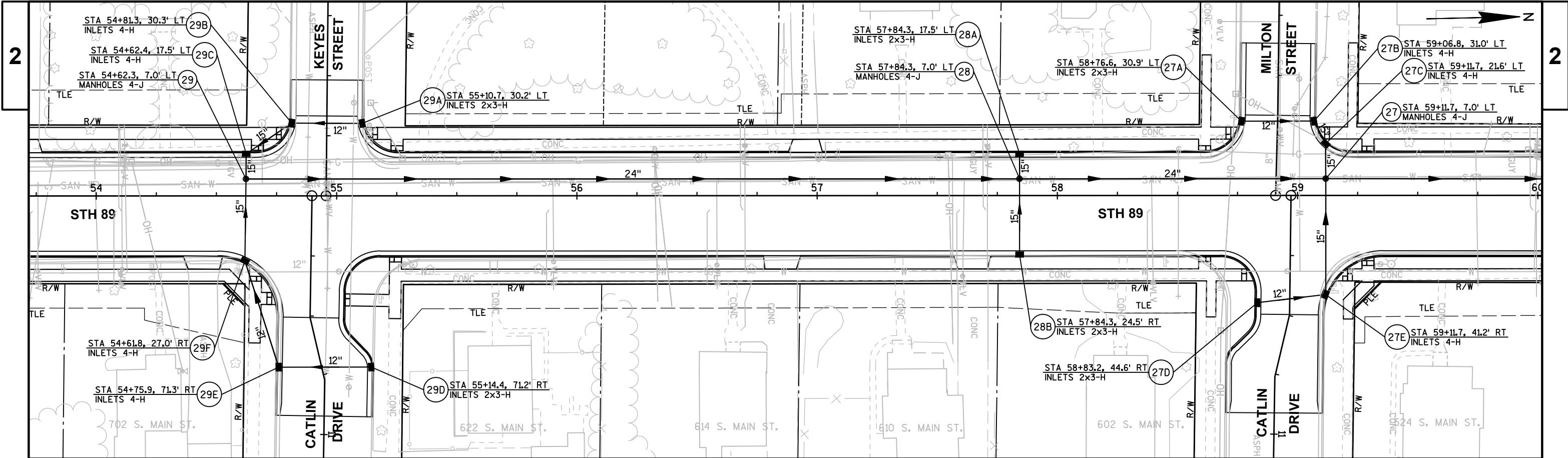




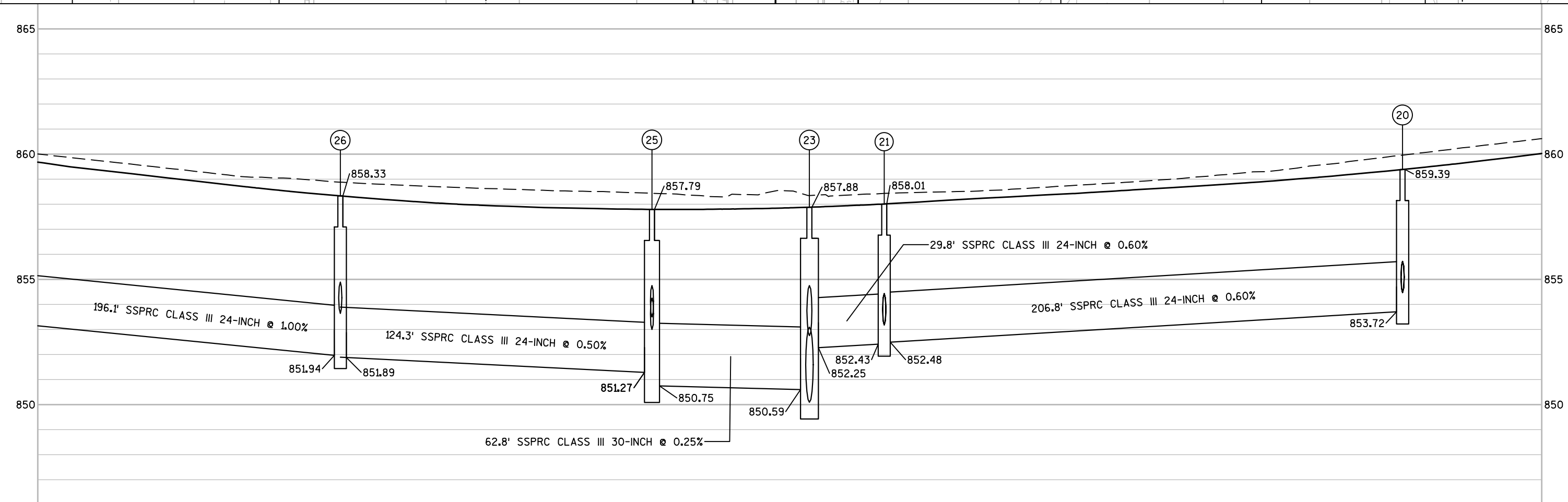
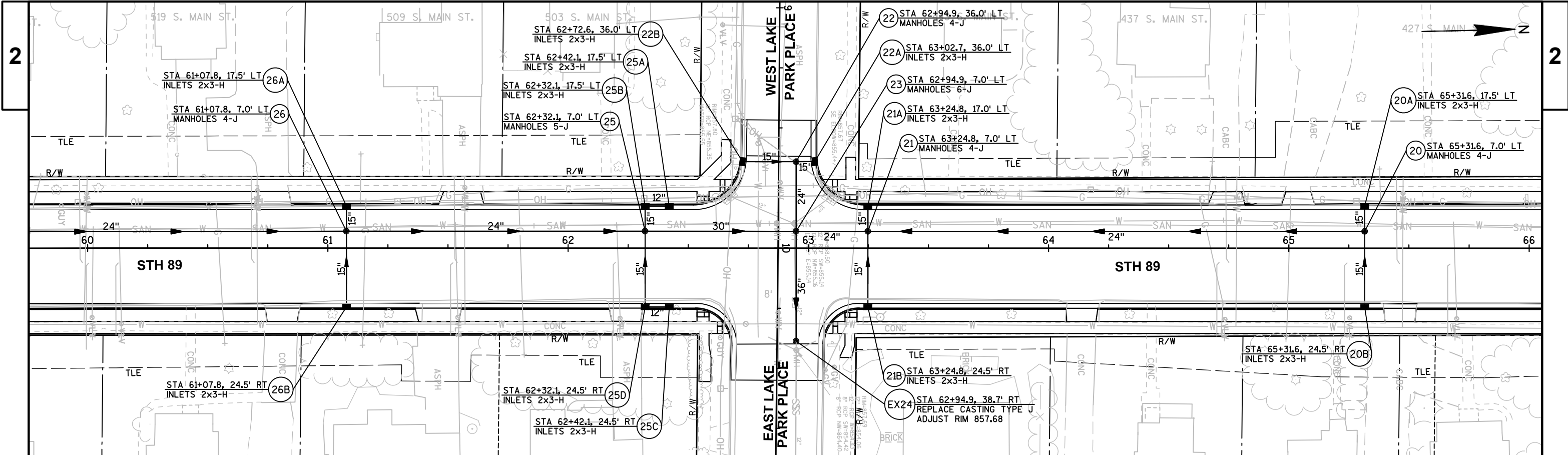


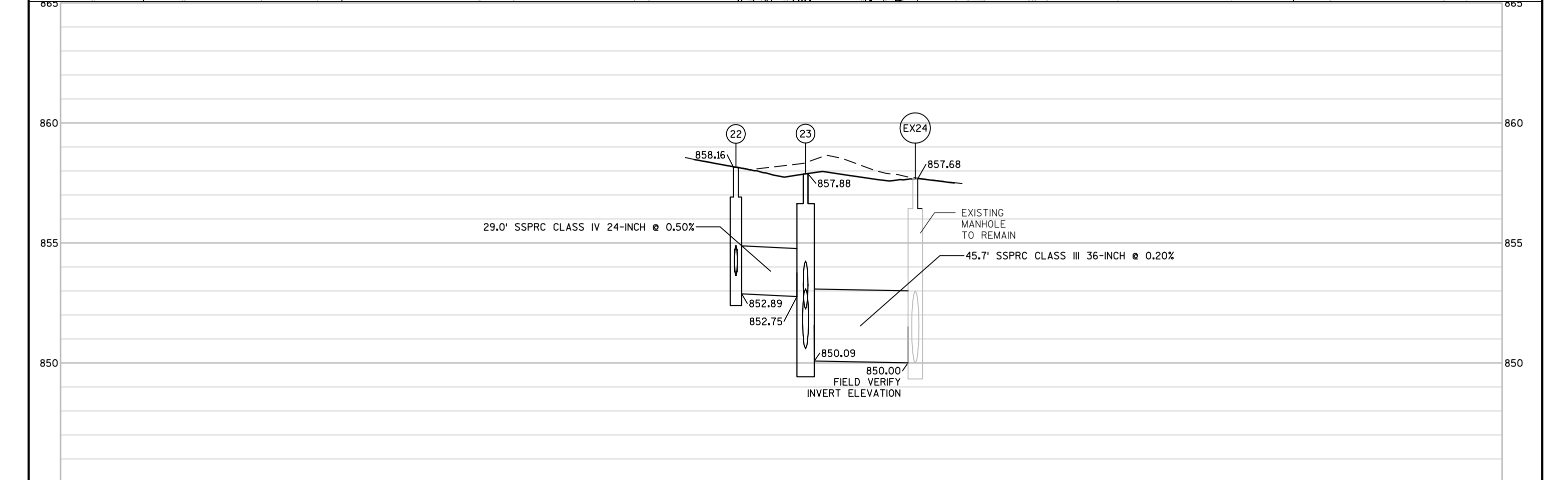


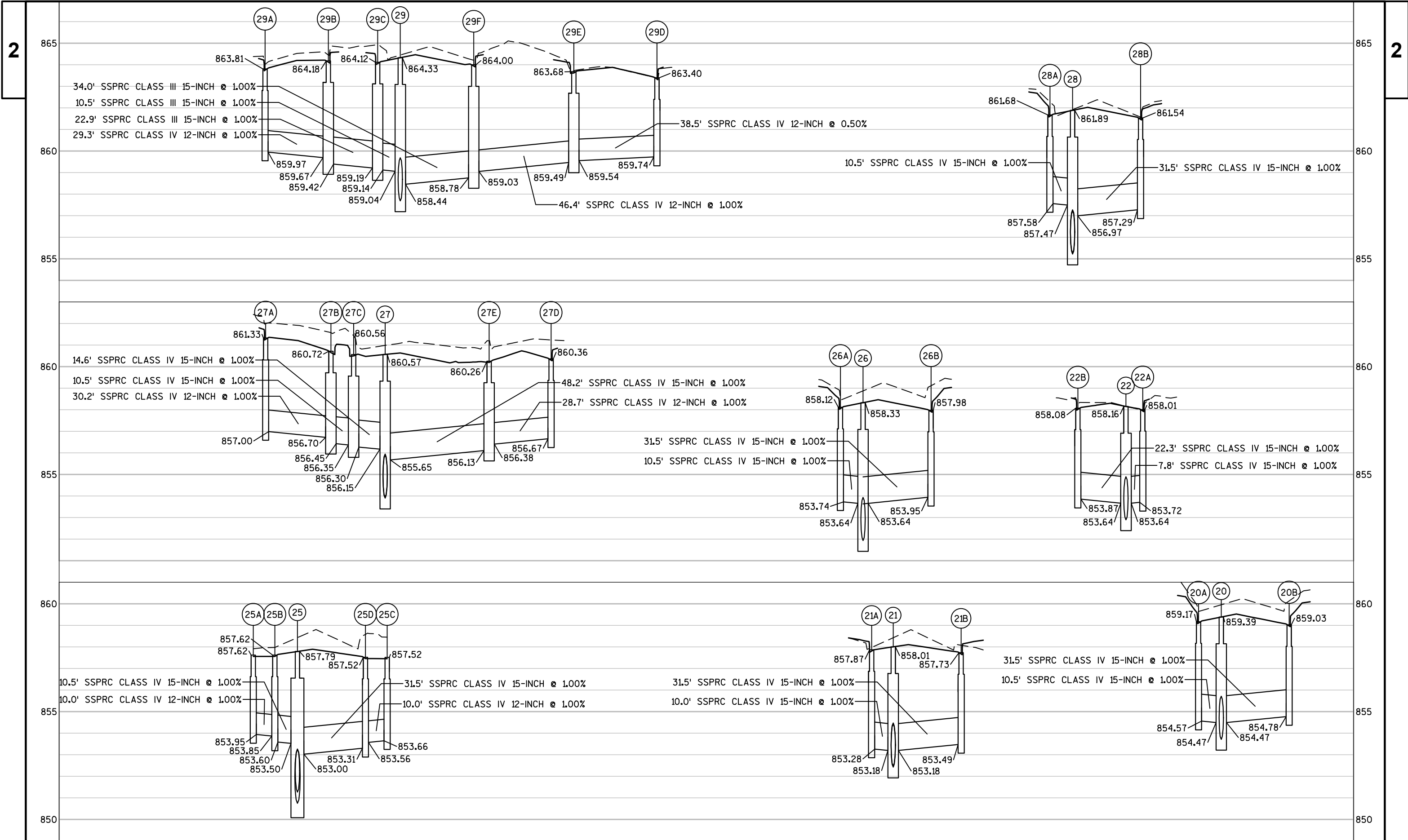


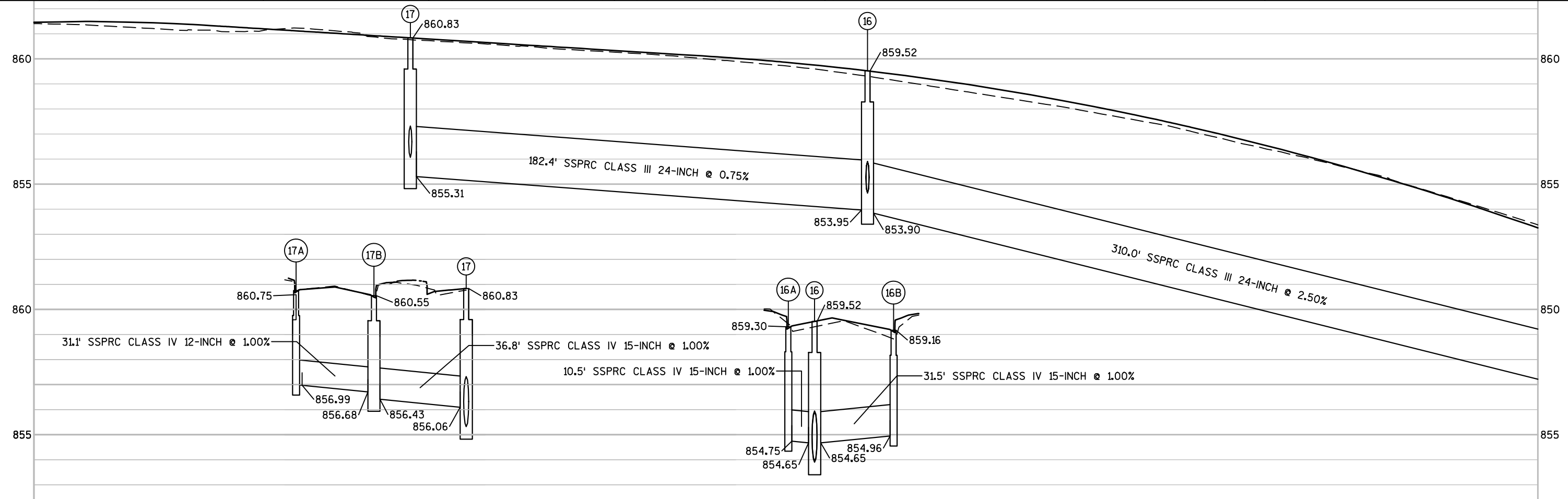
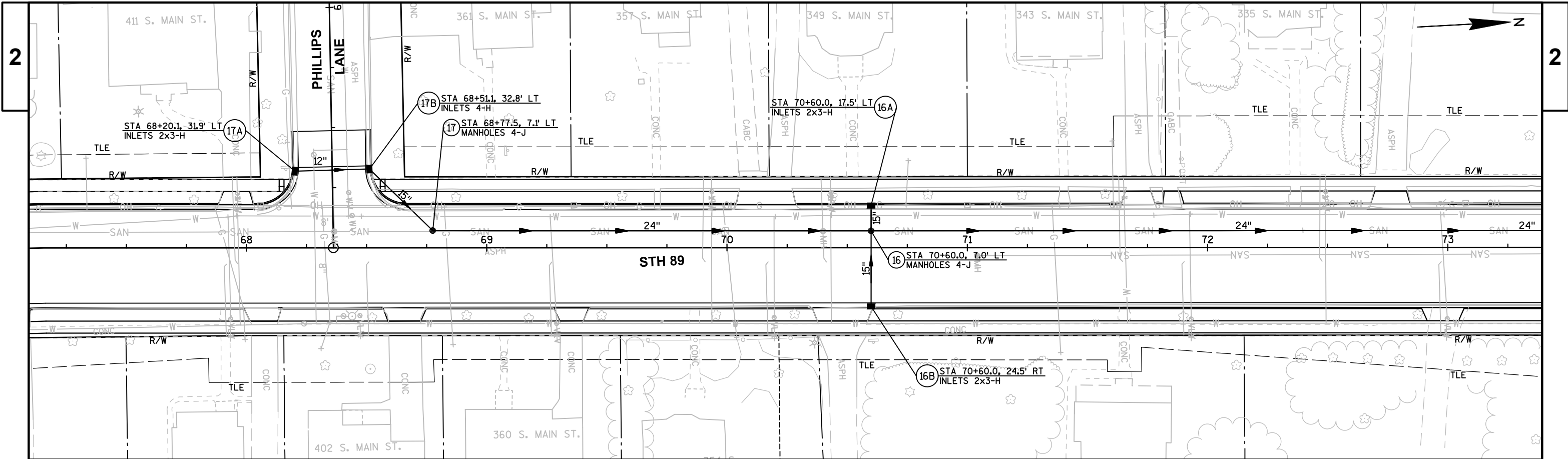


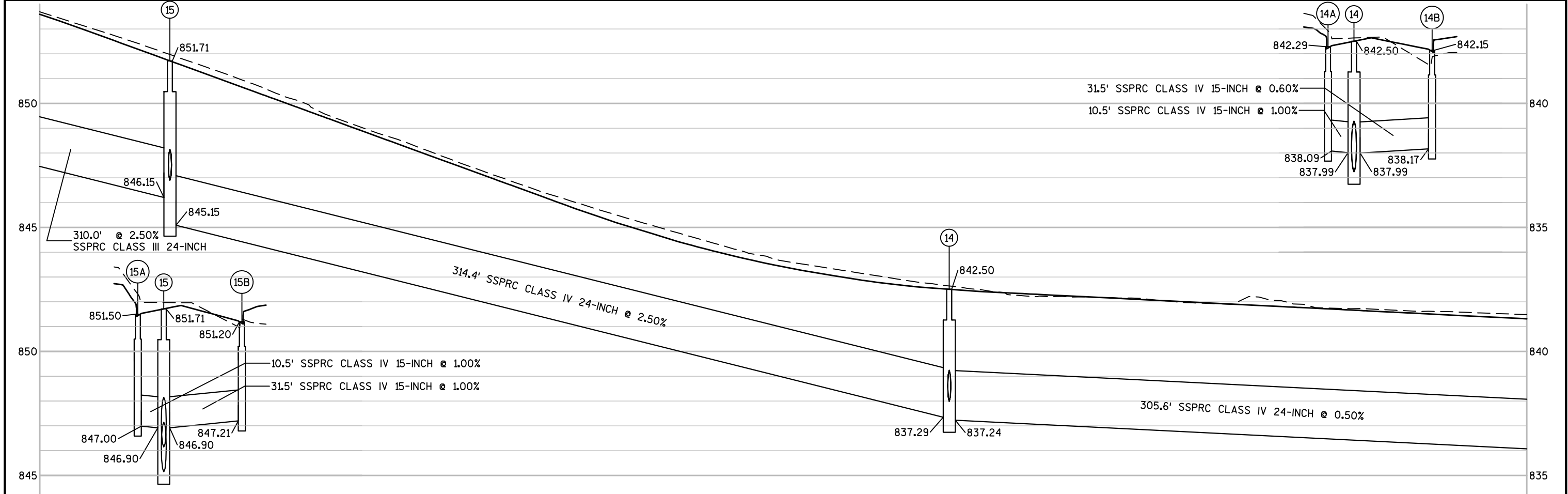
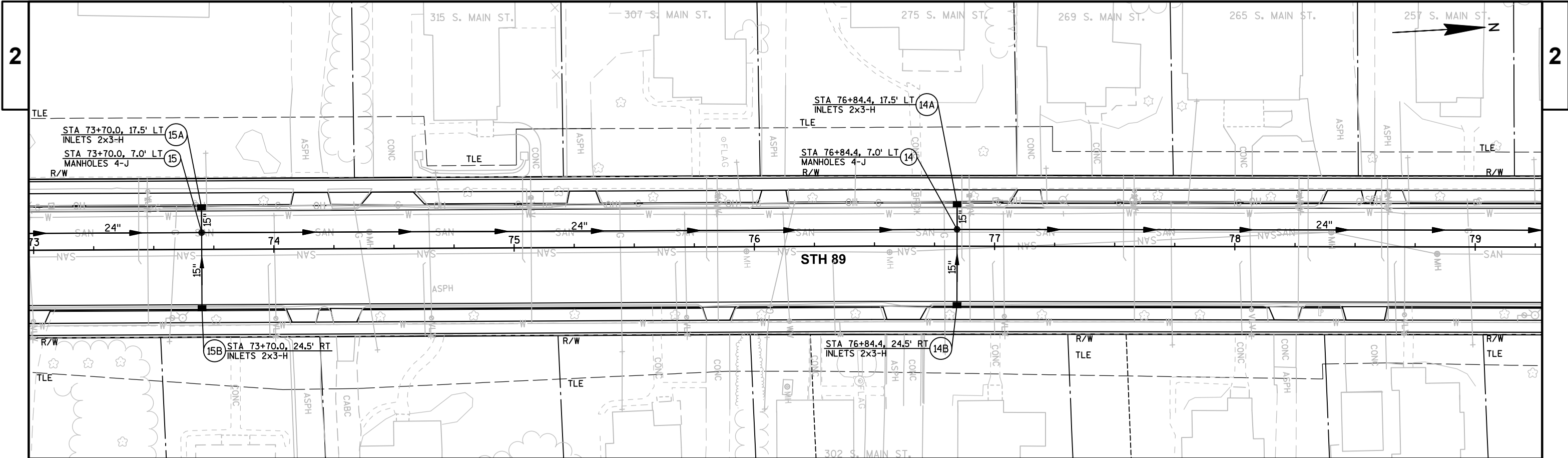
PROJECT NO: 3300-01-73	HWY: STH 89	COUNTY: JEFFERSON	STORM SEWER	SHEET 75	E
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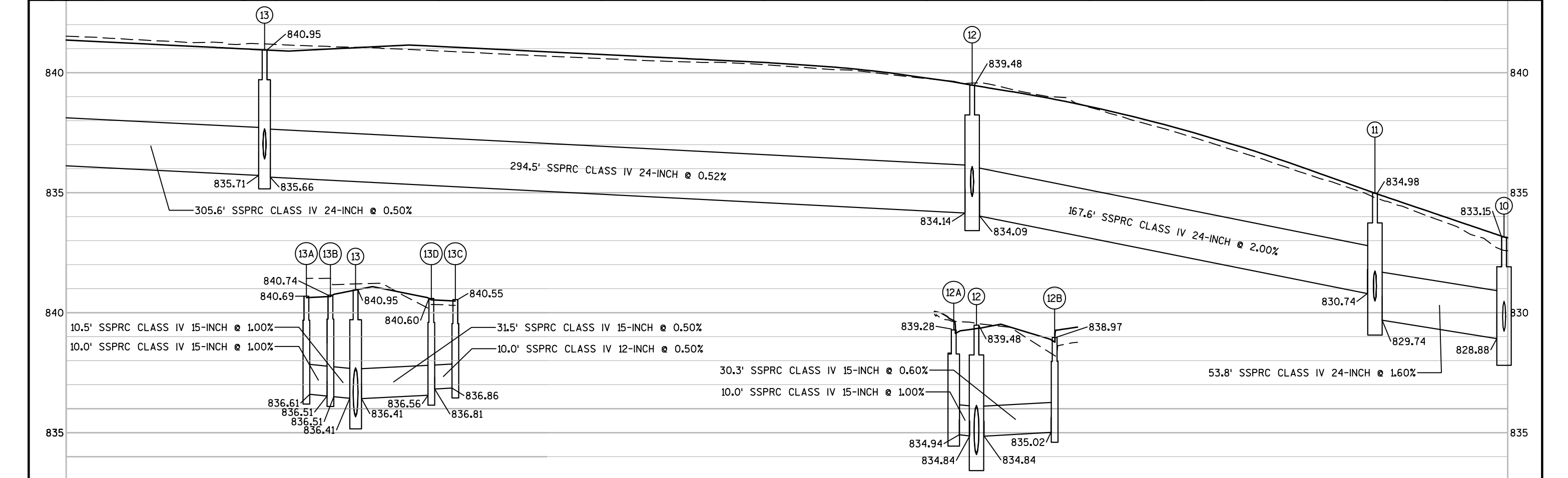
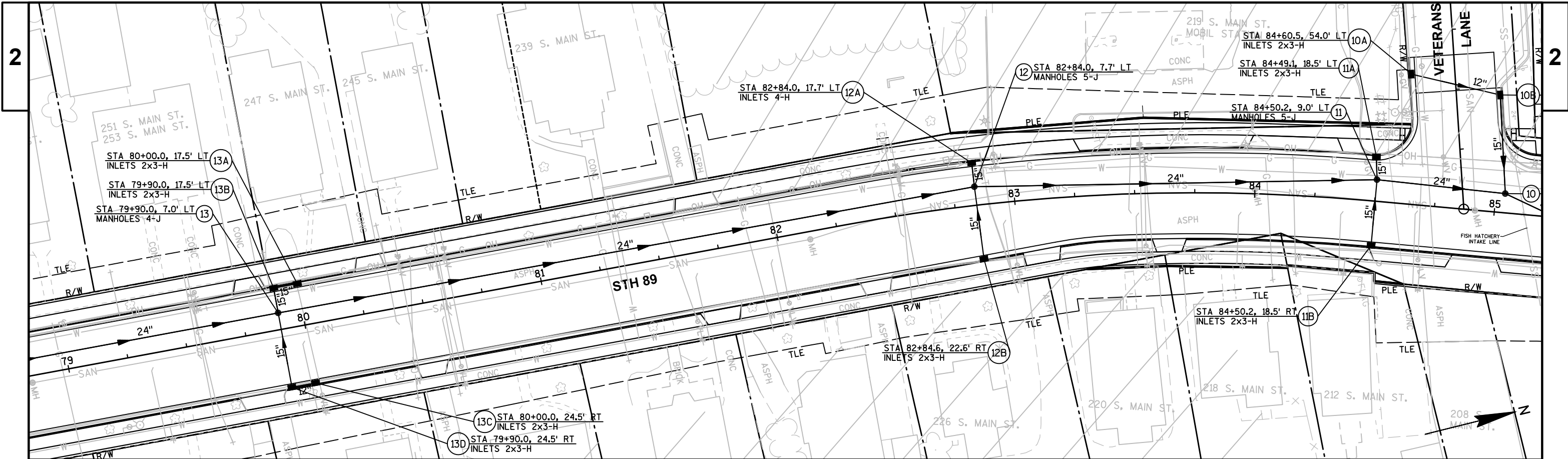


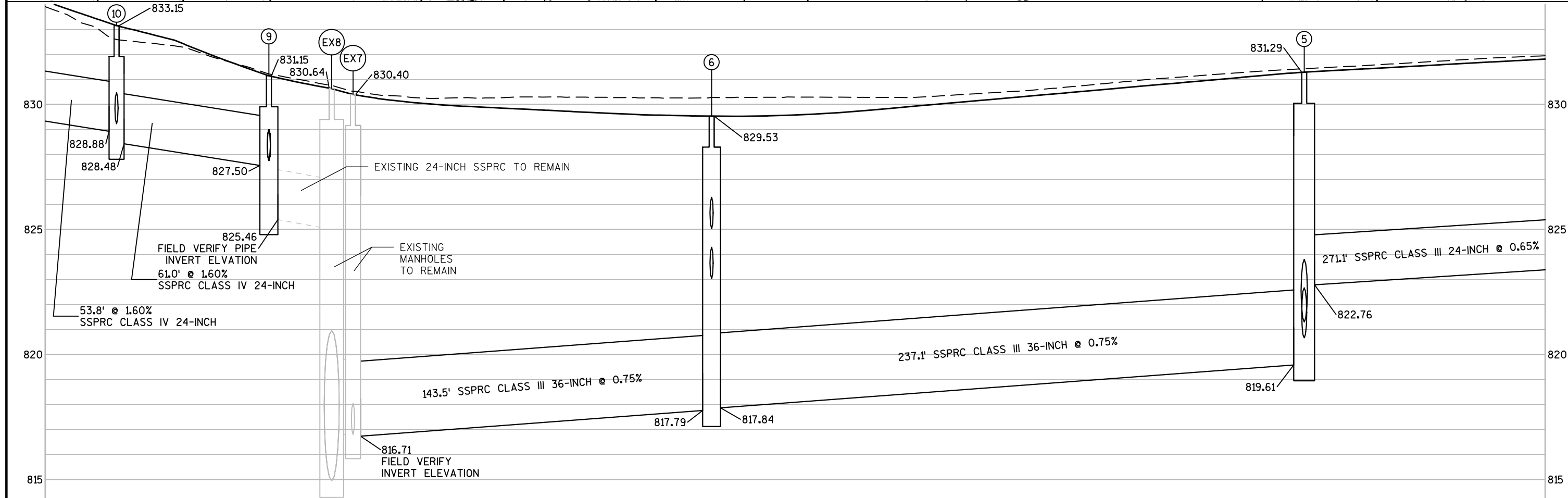


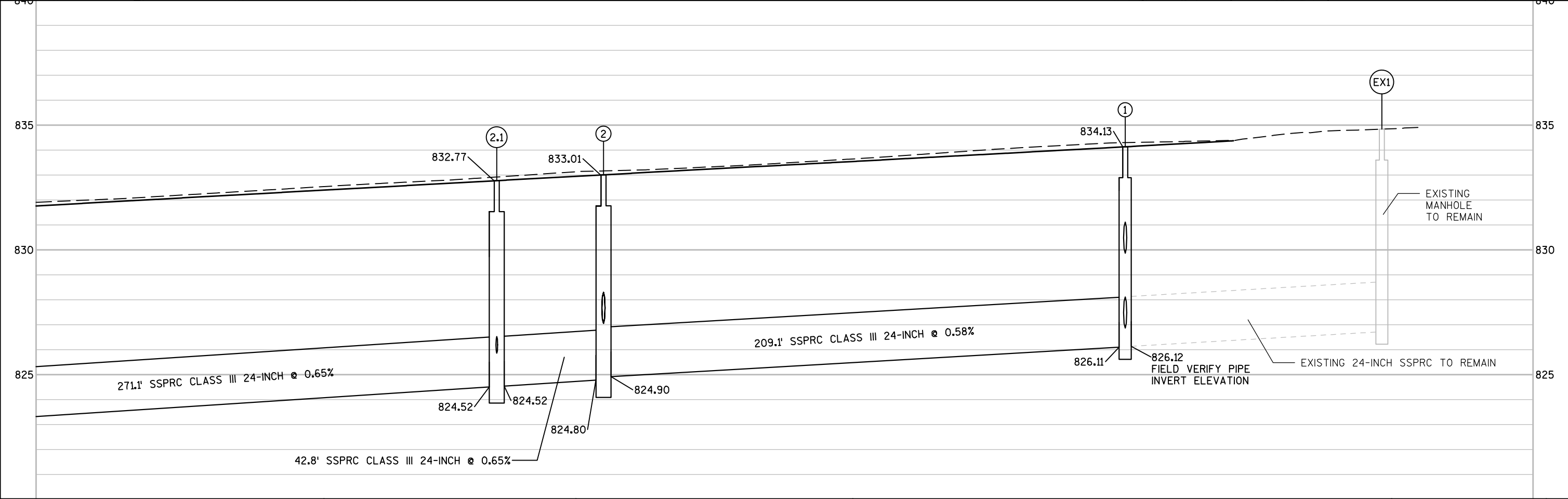
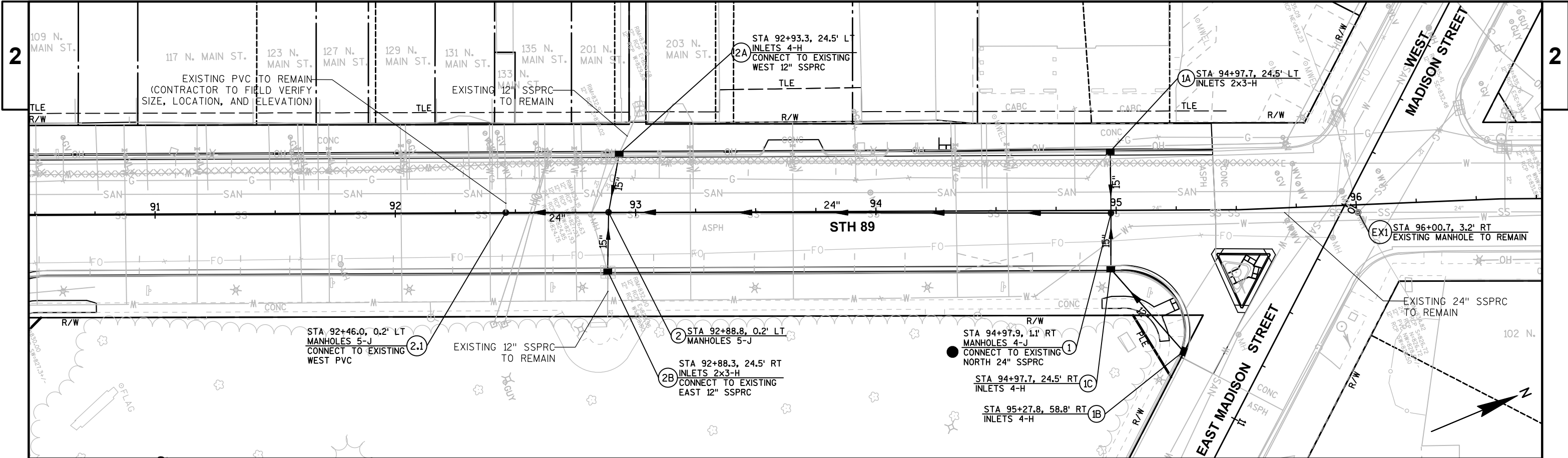




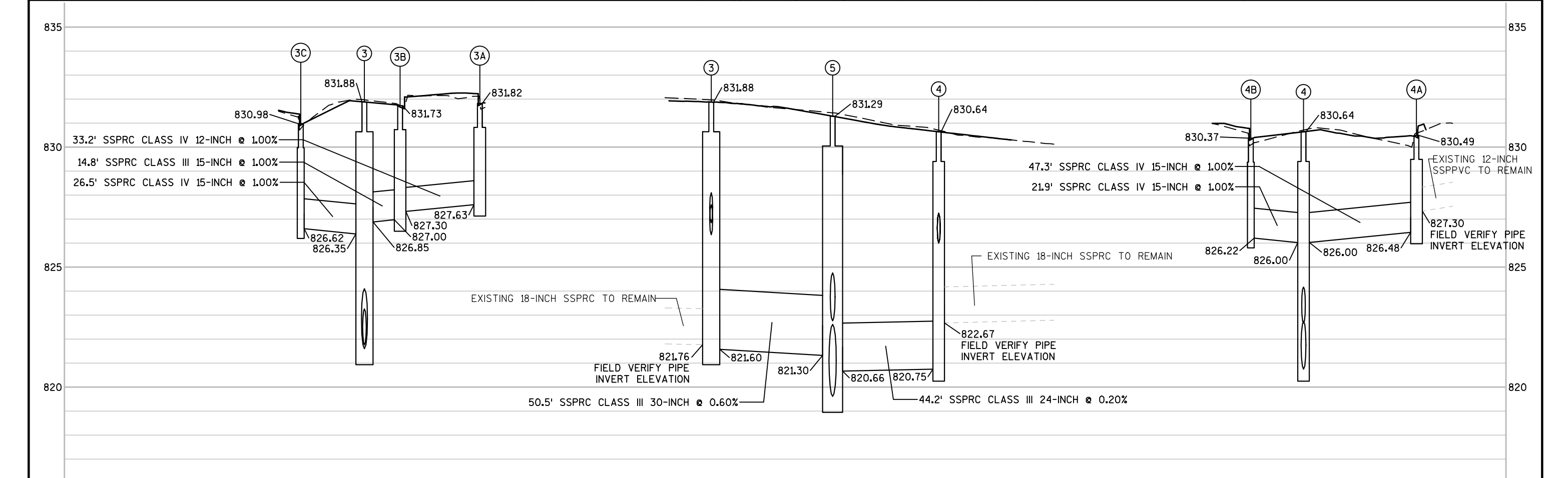
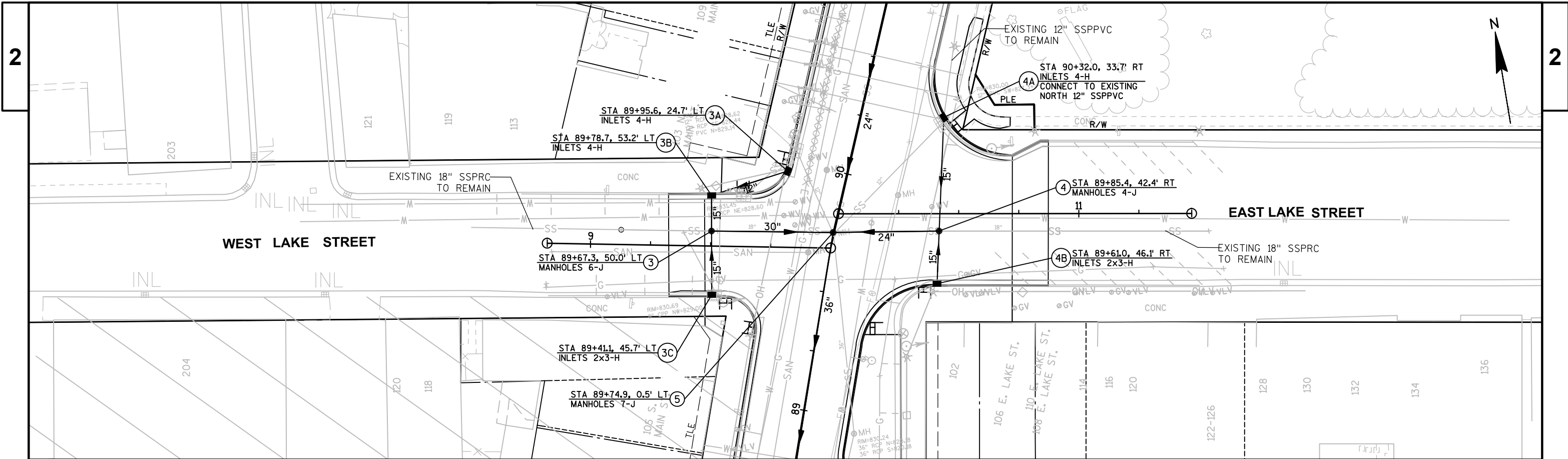


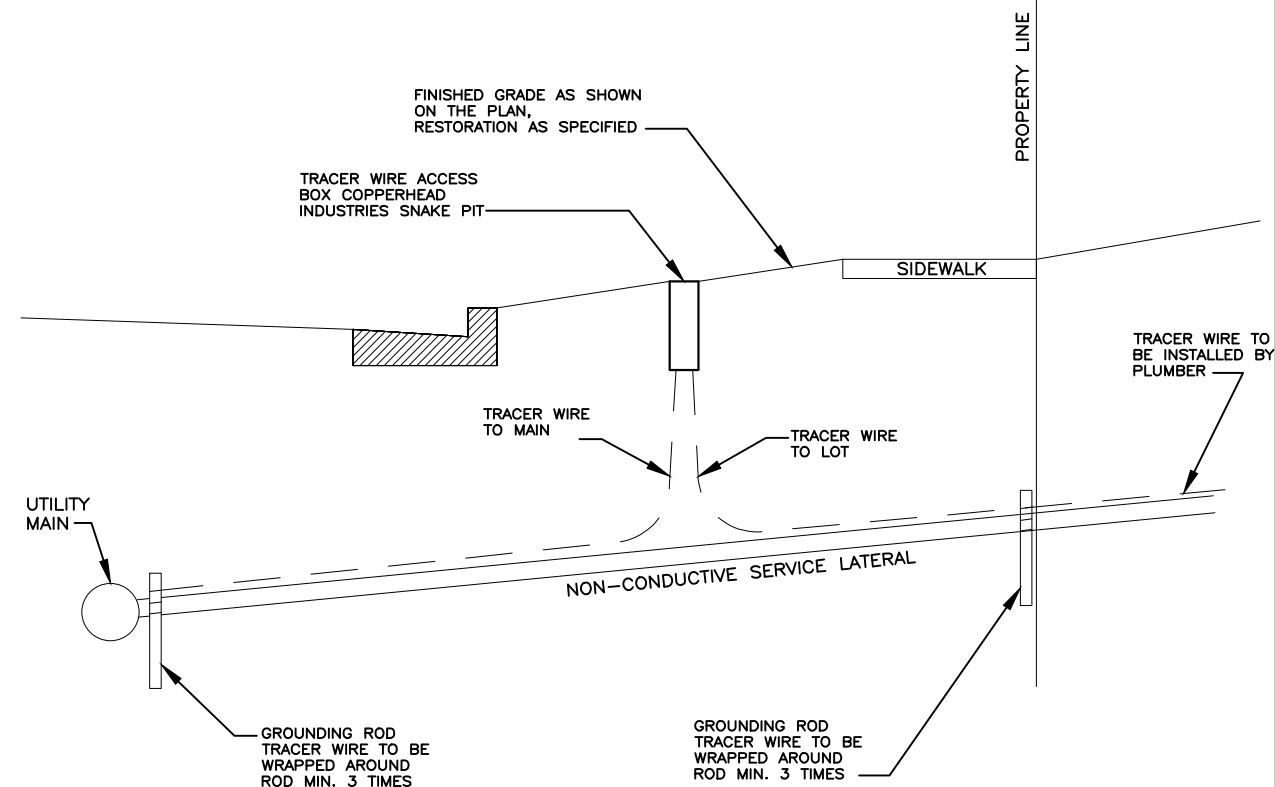






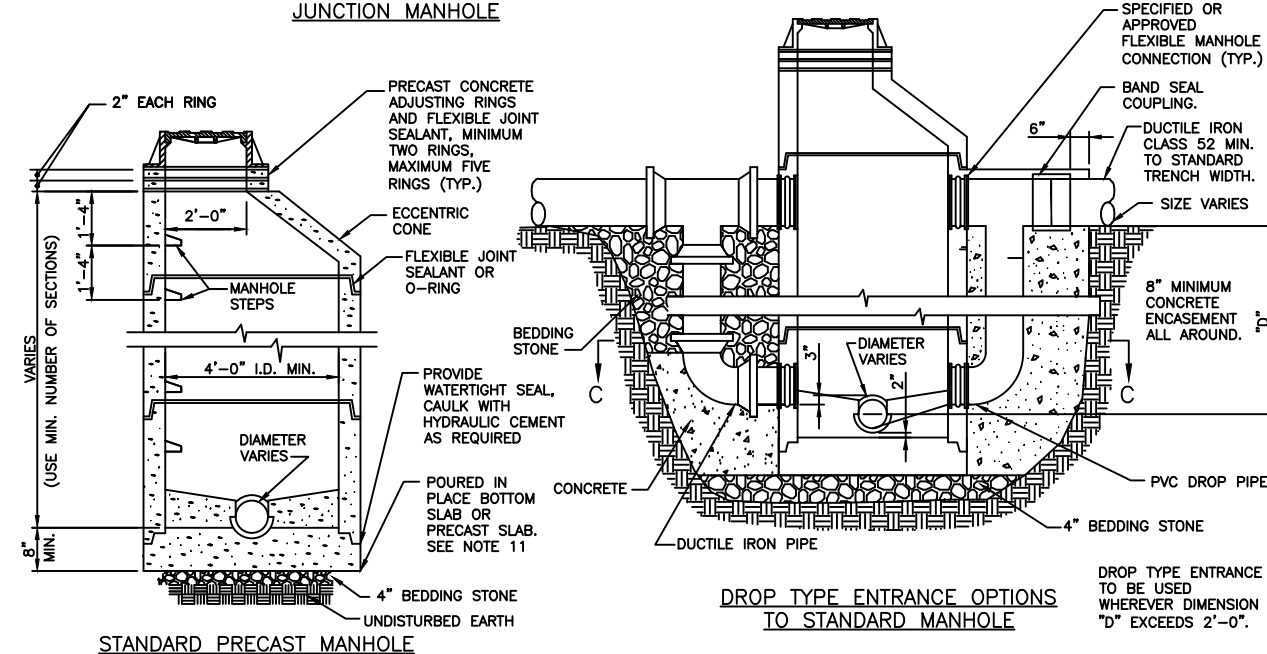
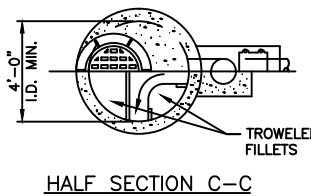
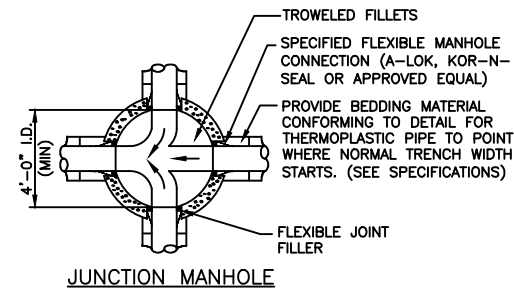
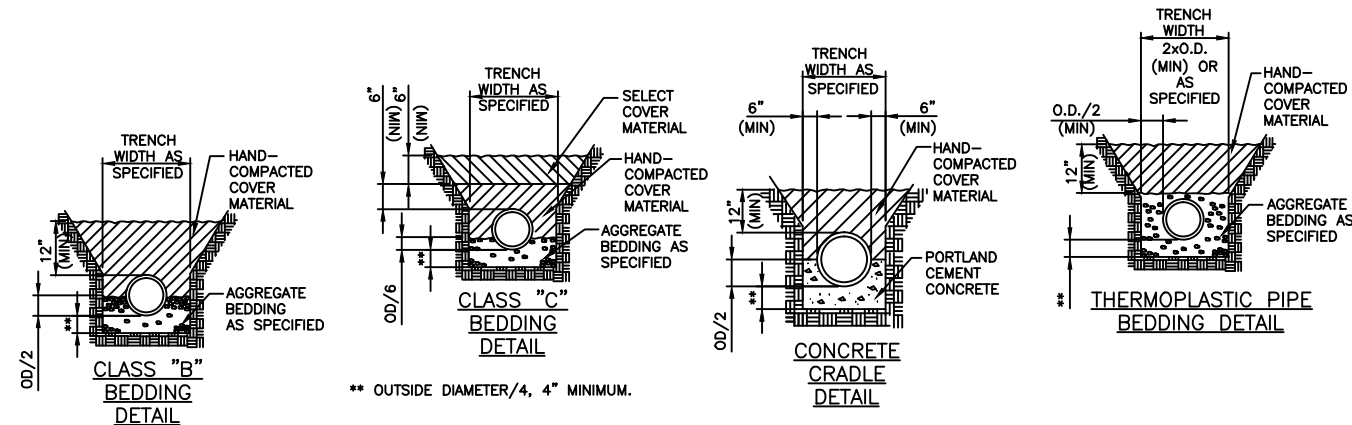






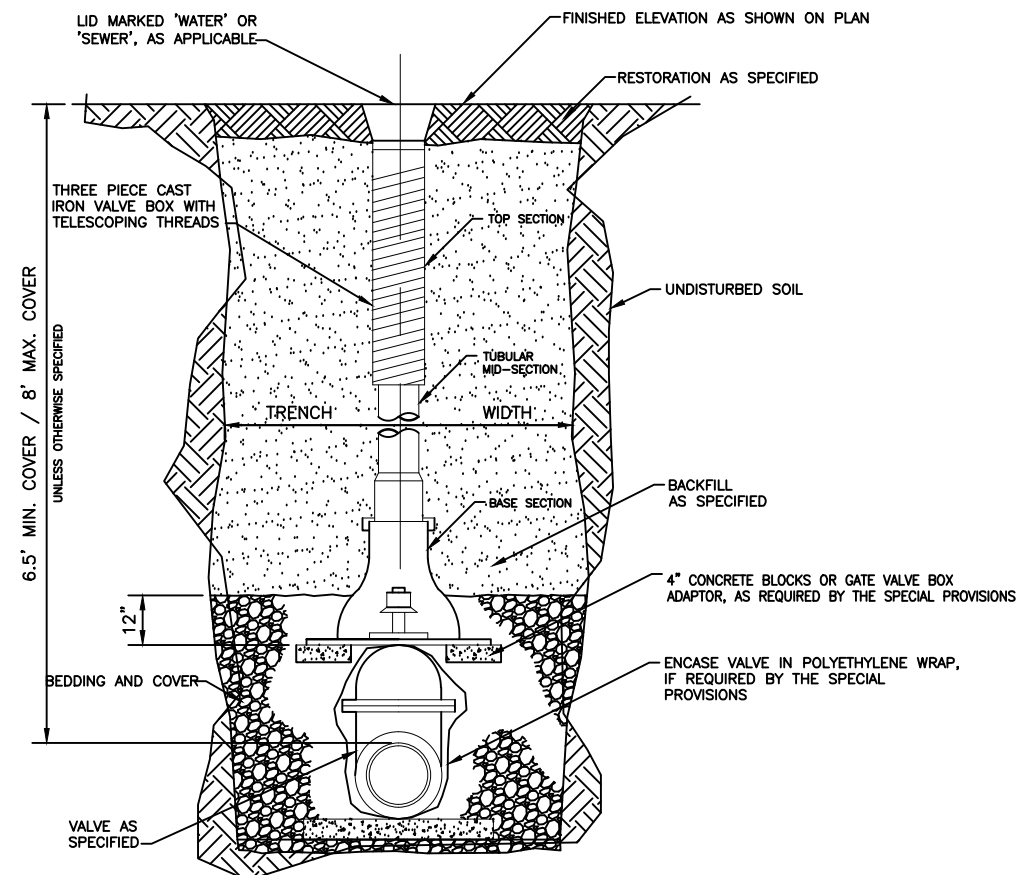
- NOTES:**
1. TRACER WIRE ACCESS BOX TO INSTALLED IN THE TERRACE. EXACT LOCATION TO BE DETERMINED IN THE FIELD BY OWNER.
 2. TRACER WIRE ACCESS BOX COVER TO BE PERMANENTLY ENGRAVED WITH "SEWER" BY THE MANUFACTURER.
 3. MINIMUM 18-IN OF WIRE TO BE COILED WITHIN THE ACCESS BOX.
 4. GROUNDING ROD TO BE A 2-FT LONG, 5/8-IN DIAMETER STEEL GROUNDING ROD.
 5. TRACER WIRE TO BE 10 GAUGE SOLID WIRE

TRACER WIRE INSTALLATION

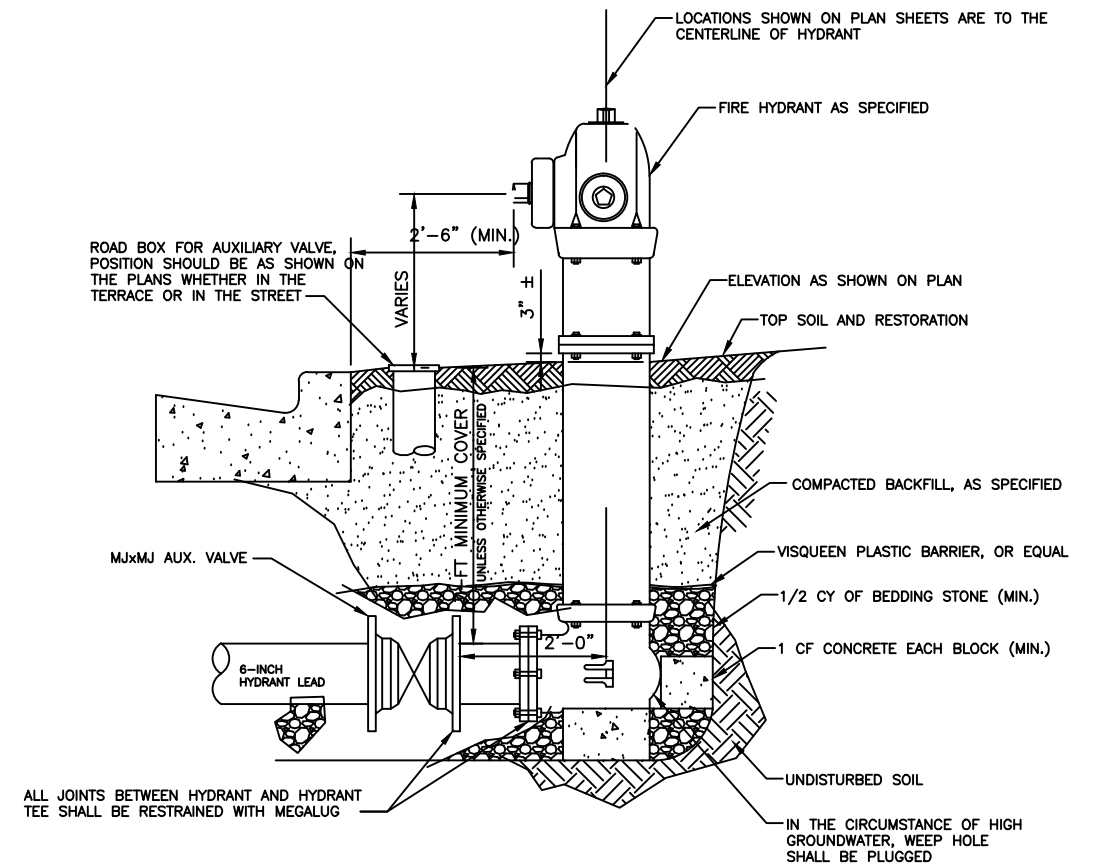
**NOTES:**

1. DETAILS RELATIVE TO ITEMS SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
2. VARIATIONS IN DIMENSIONS AND DESIGN MAY BE PERMISSIBLE, PROVIDING EQUIVALENT CAPACITY AND STRENGTH ARE ATTAINED.
3. ALL CONCRETE FILLETS SHALL BE HAND TROWELED WITH A 1/4" FT. SLOPE.
4. INSIDE DIMENSIONS FOR MANHOLES: USE MINIMUM 4' DIAMETER FOR SEWER LESS THAN 18" IN DIAMETER; USE MINIMUM 5' DIAMETER FOR SEWER 18" THRU 24" IN DIAMETER; USE MINIMUM 6' DIAMETER OR MINIMUM 6' SQUARE FOR SEWER OVER 24" IN DIAMETER.
5. BEDDING CLASSES "B" AND "C" SHALL MEET OR EXCEED ASTM C12 REQUIREMENTS.
6. DROP TYPE ENTRANCE TO STANDARD MANHOLE WILL BE PAID FOR SEPARATELY IF SO LISTED IN THE BID.
7. SEE DRAWINGS FOR DROP TYPE ENTRANCES FOR SANITARY SEWERS LARGER THAN 15".
8. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF REGULATORY BODIES OF THE STATE AND APPLICABLE MUNICIPAL ORDINANCES.
9. ALL NEW CONSTRUCTION SHALL BE PLACED ON UNDISTURBED EARTH OR STONE BEDDING.
10. FLAT SLAB TOPS SHALL BE DESIGNED FOR H-20 TRUCK LOADING AND SHALL MEET REQUIREMENTS OF ASTM C-478.
11. BASE SLABS SHALL BE REINFORCED AS FOLLOWS: REINFORCING SHALL BE PLACED IN EACH DIRECTION AT 2" CLEAR FROM TOP SURFACE OF SLAB, REINFORCING SHALL BE GRADE 60. USE OF CAST-IN-PLACE SLAB SHALL NOT RELIEVE CONTRACTOR OF REQUIREMENTS TO PROVIDE WATERTIGHT JOINTS.
12. FLAT SLABS SHALL BE PROVIDED IN SHALLOW DEPTH SITUATIONS IN LIEU OF ECCENTRIC CONES.

INSIDE DIA.	DEPTH	REINF.
4'	≤ 30'	#3@8"
5'	≤ 20'	#3@8"
5'	20'-30'	#4@10"
6'	≤ 20'	#4@10"
6'	20'-25'	#4@8"
6'	25'-30'	#4@6"



WATER MAIN GATE VALVE AND VALVE BOX

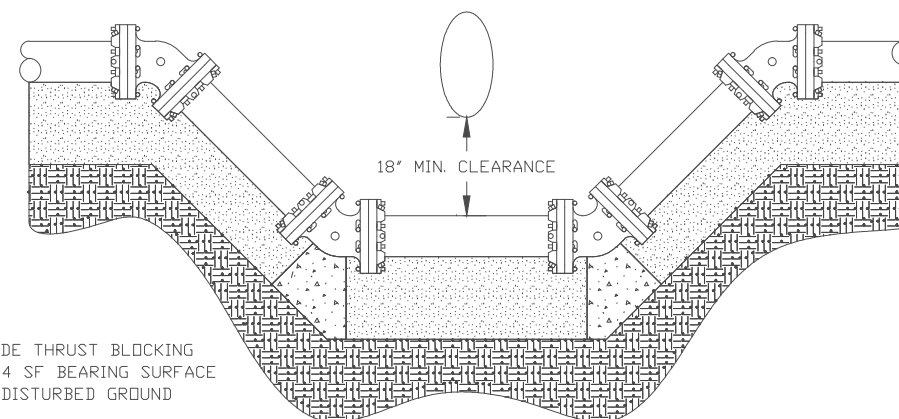


FIRE HYDRANT WITH AUXILIARY VALVE AND LEAD

PROVIDE MEGALUG FITTINGS AS NECESSARY TO OBTAIN 18\"/>

TOP OF WATER MAIN, DUCTILE IRON, 12-INCH

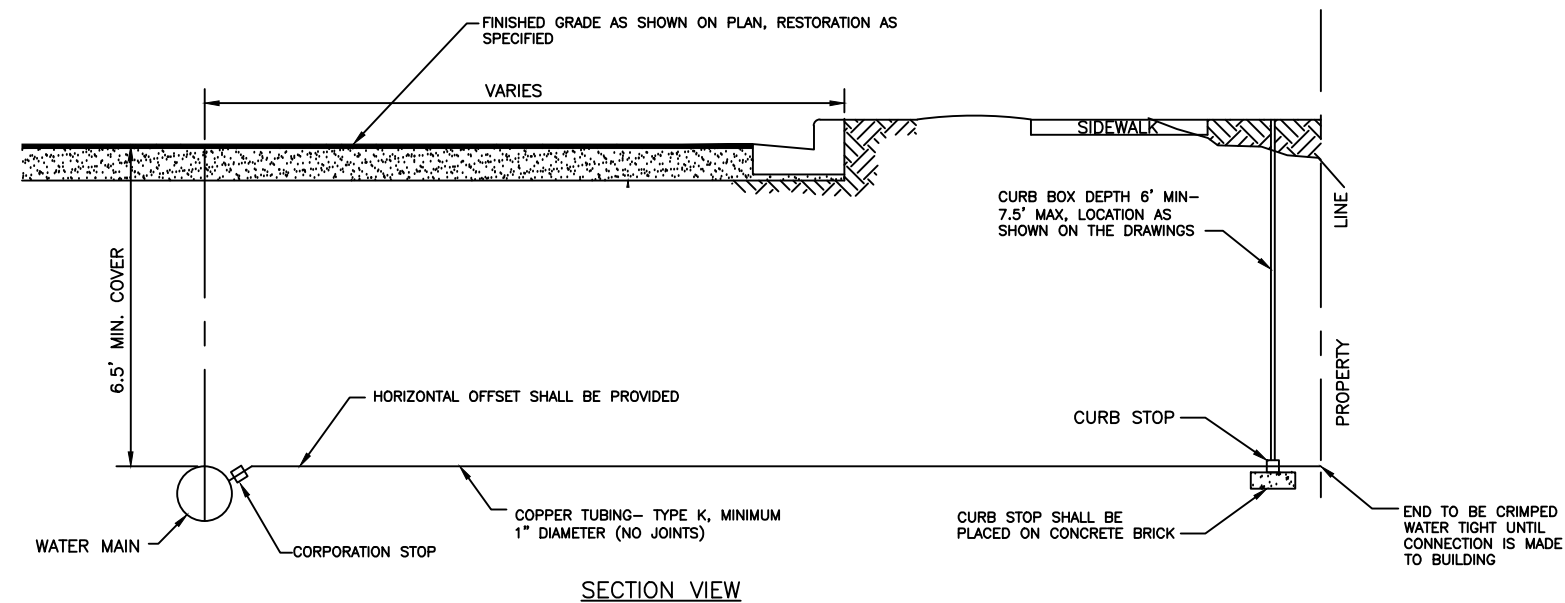
EXISTING UTILITY



PROVIDE THRUST BLOCKING WITH 4 SF BEARING SURFACE ON UNDISTURBED GROUND

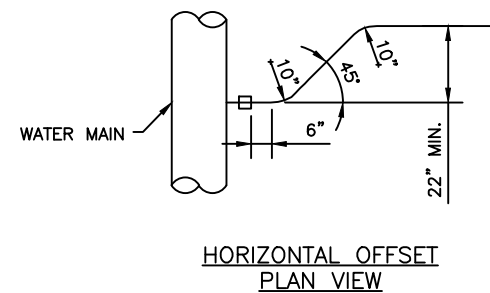
WATER MAIN, DUCTILE IRON, 12-INCH OFFSET DETAIL

NO SCALE

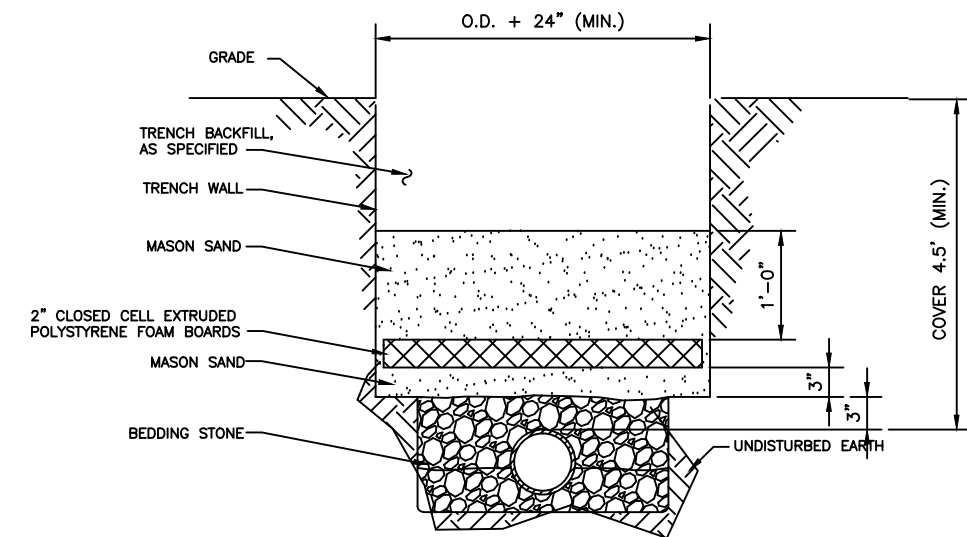


NOTES

1. ALL FITTINGS SHALL BE FLARED OR COMPRESSION JOINT TYPE, AND CONFORM TO AWWA REQUIREMENTS
2. CORPORATION STOP TO BE TAPPED INTO DUCTILE IRON WATER MAIN, UNLESS OTHERWISE SPECIFIED, AND ATTACHED TO PVC WATER MAIN WITH A SADDLE
3. ALL TAPS TO BE MADE UNDER PRESSURE WHEN APPLICABLE.
4. NO TAPS TO BE CLOSER THAN 18" APART ALONG MAIN
5. ALL COPPER TUBE BENDS TO BE SMOOTH RADIUS, 10" MIN
6. WATER SERVICE LATERAL TO BE TESTED ALONG WITH WATER MAIN, UNLESS IT IS AN EXISTING SERVICE BEING RECONNECTED

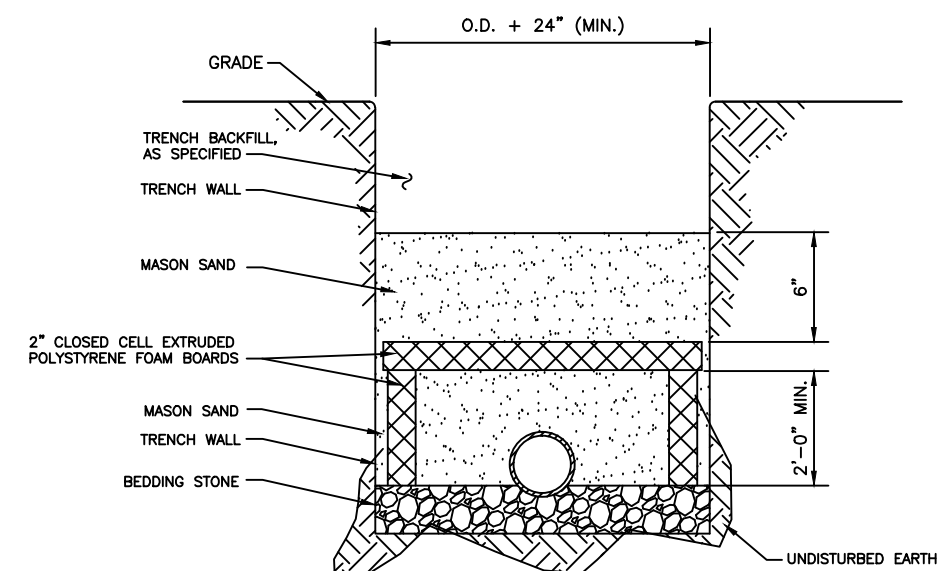


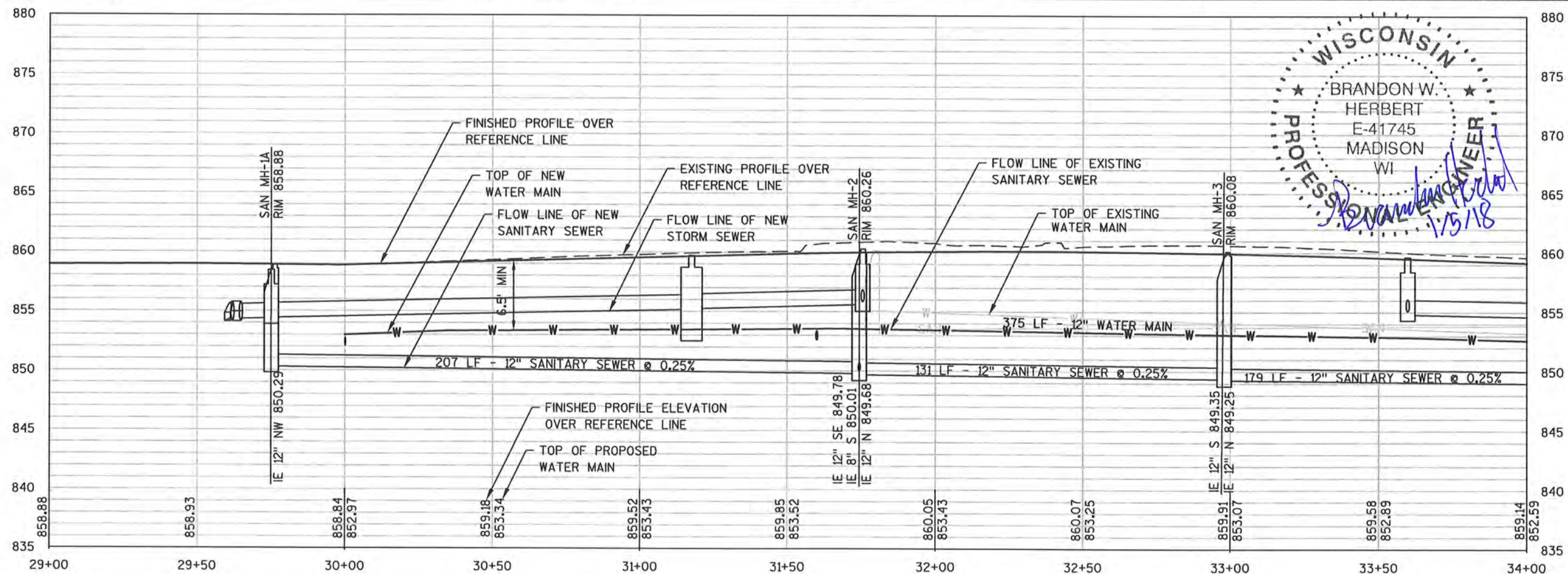
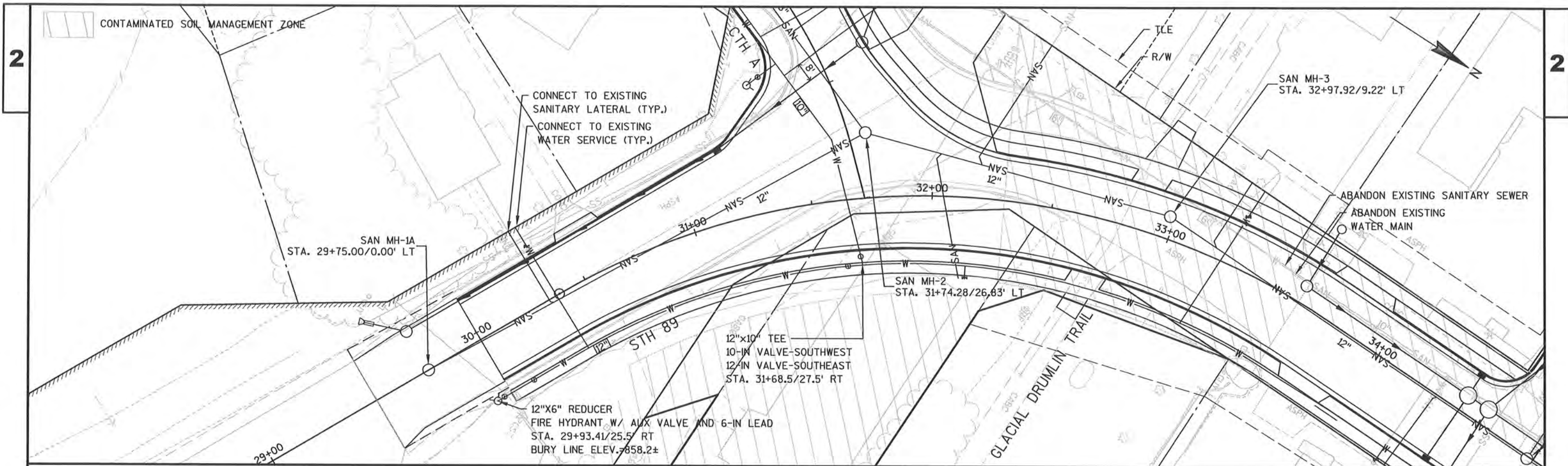
WATER SERVICE, COPPER



NOTES:

1. INSULATION REQUIRED ON ALL PIPES HAVING LESS THAN 6-FT OF COVER, AND NO PIPES SHALL BE INSTALLED WITH LESS THAN 5-FT OF COVER
2. INSULATION REQUIRED ON ALL WATER MAIN PIPES WITHIN 3 FT OF STORM SEWER





PROJECT NO: 3300-01-74

HWY: STH 89

COUNTY: JEFFERSON

WATER AND SANITARY SEWER

SHEET

90

E

FILE NAME : S:\MAD\1000--1099\1060\037\ACAD\CIVIL3D\33000103\SHEETS\PLAN\023001-UTILITY PLAN\023001-PP.DWG
LAYOUT NAME - 023001-PP - PP - (1)

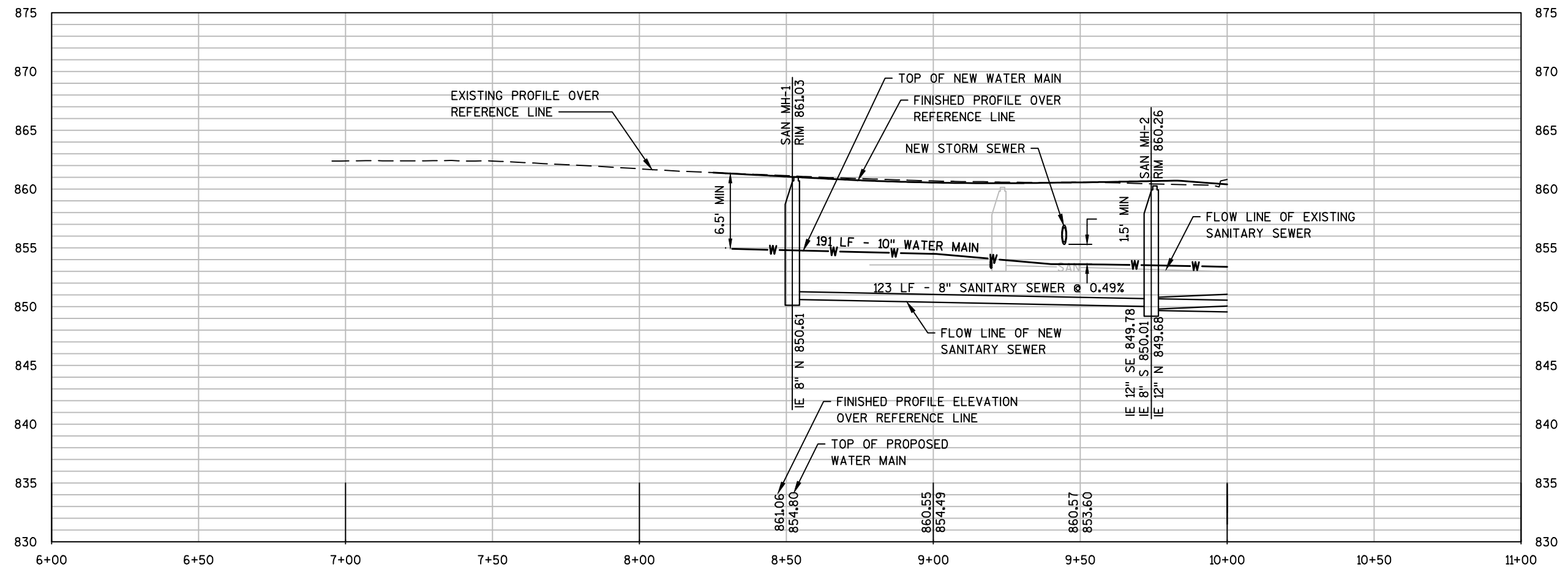
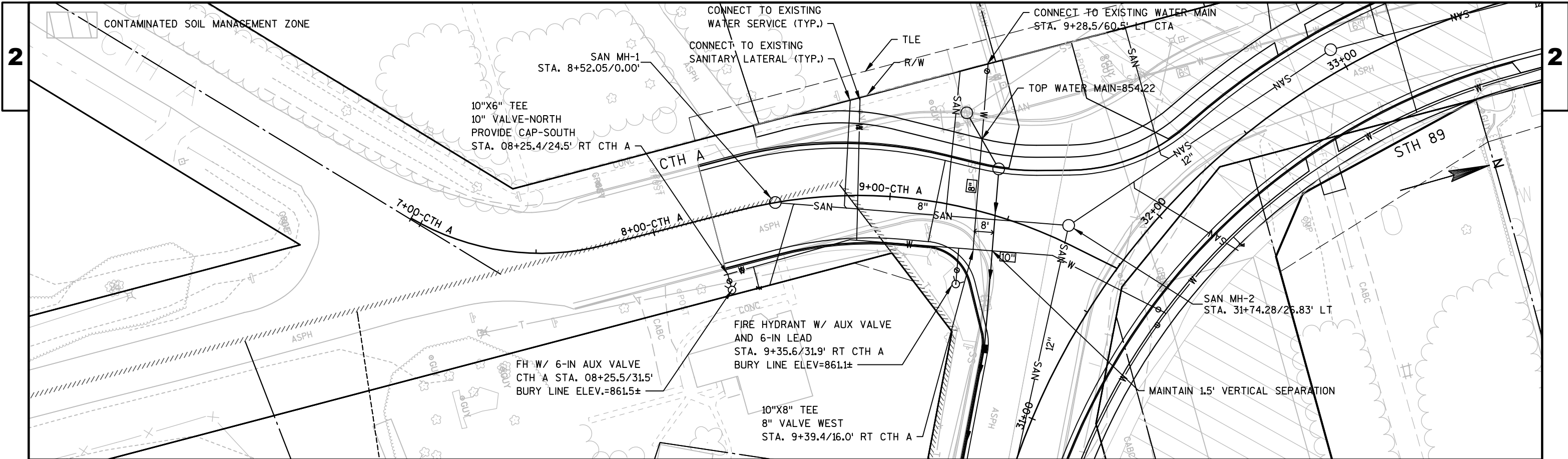
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PLOT BY : POLYDORIS, DIANE

PLOT NAME :

PLOT SCALE : 1:40_XREF

WISDOT/CADDs SHEET 41



PROJECT NO: 3300-01-74

HWY: STH 89

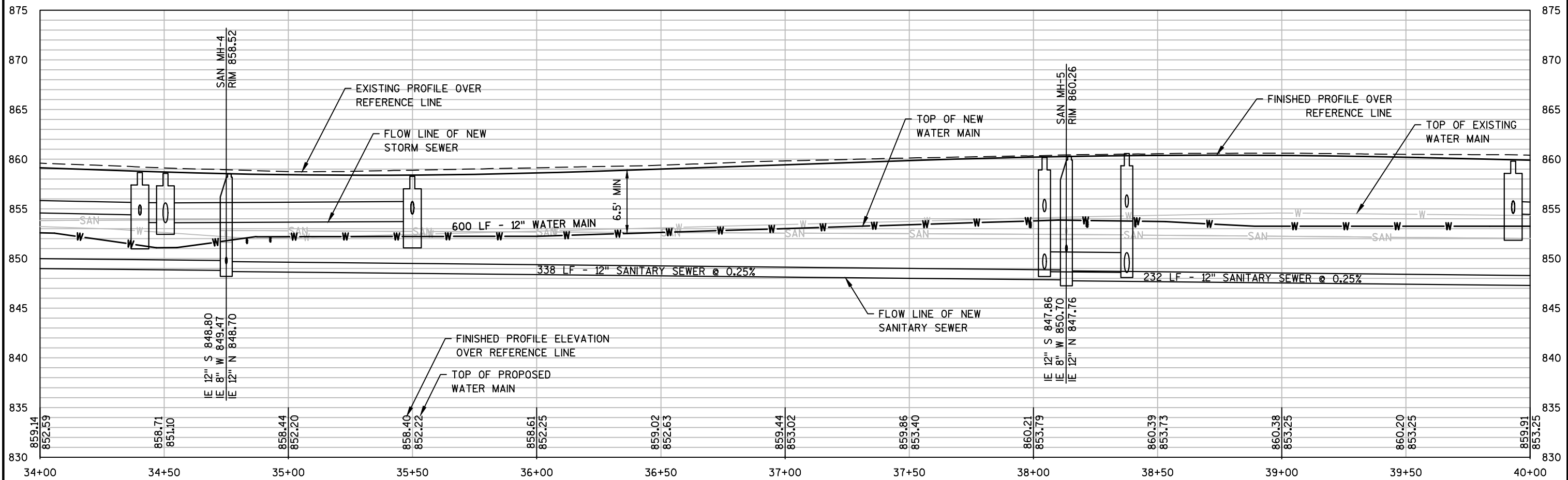
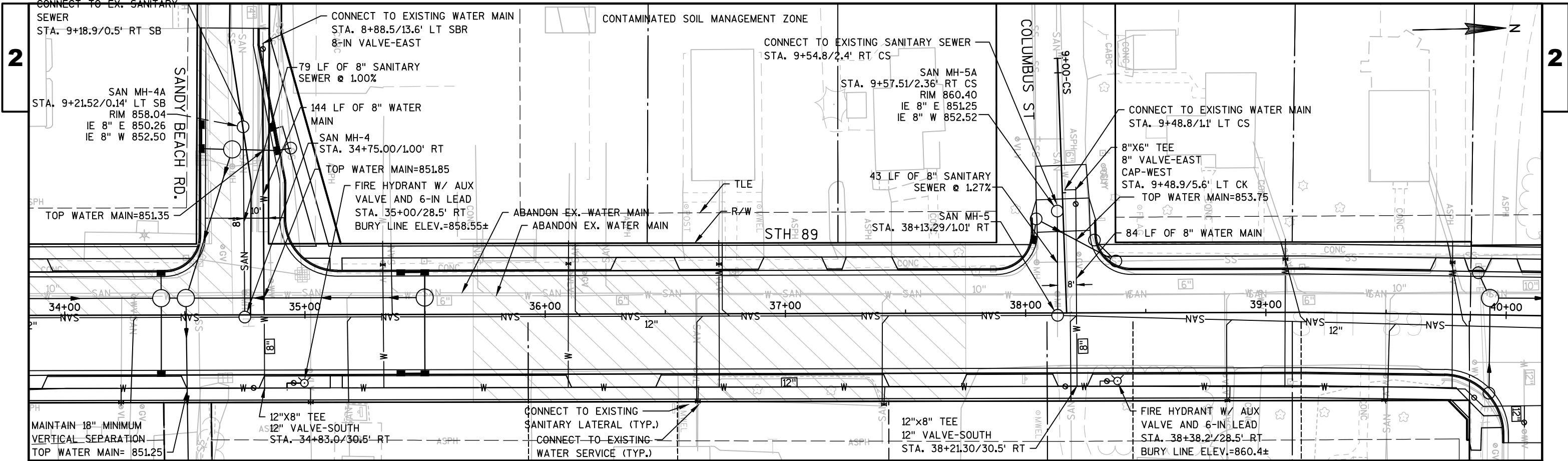
COUNTY: JEFFERSON

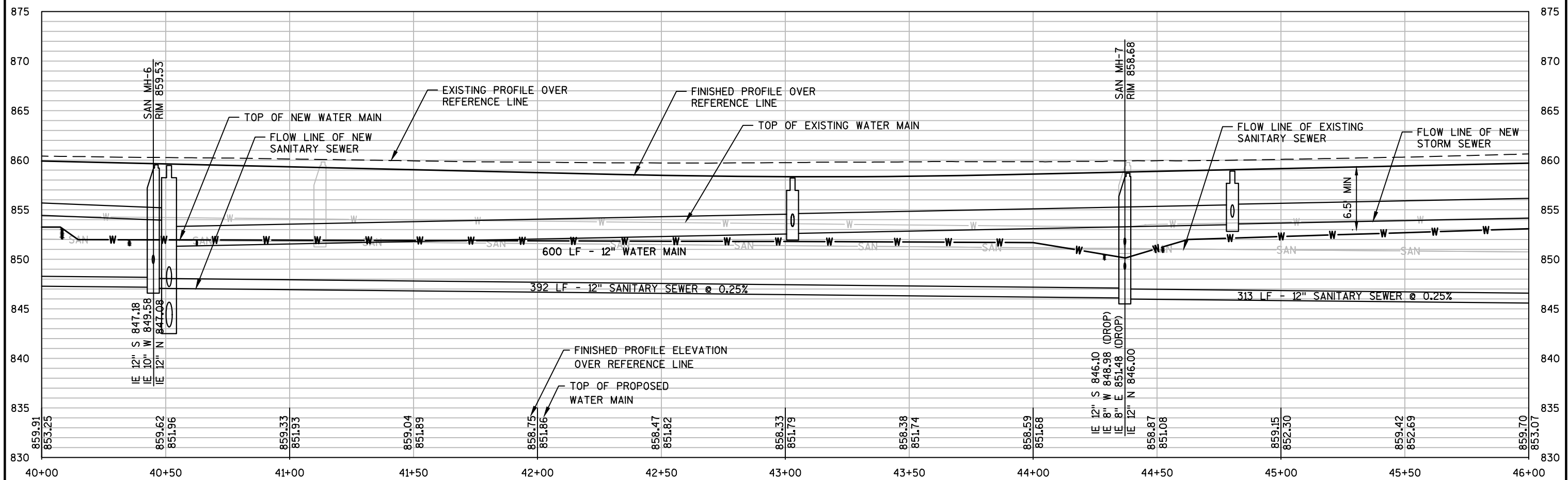
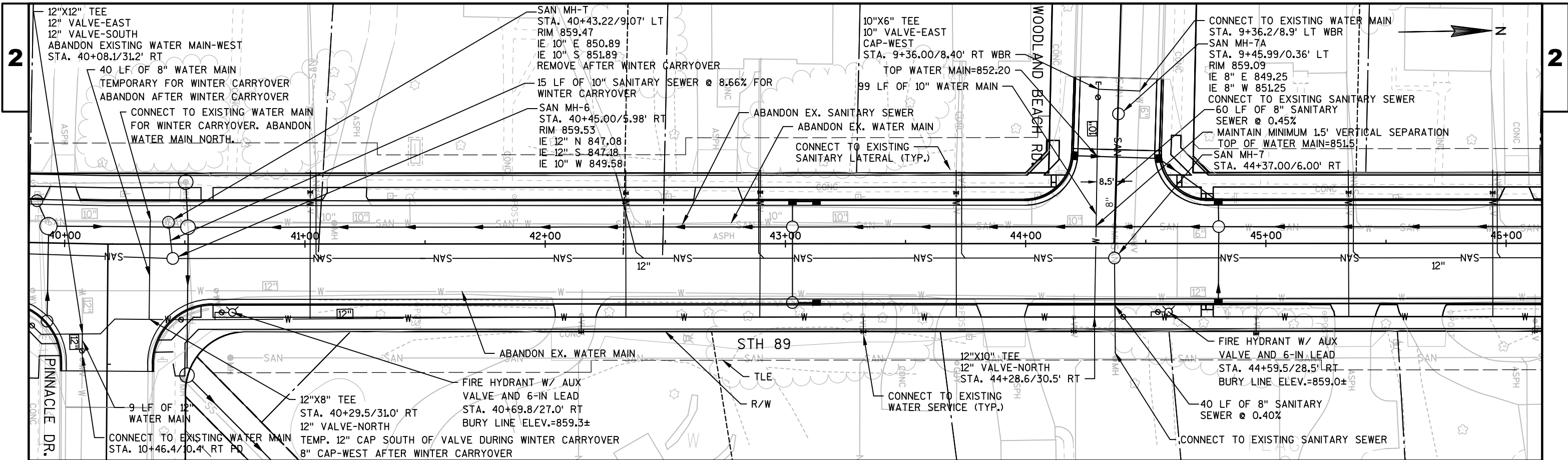
WATER AND SANITARY SEWER

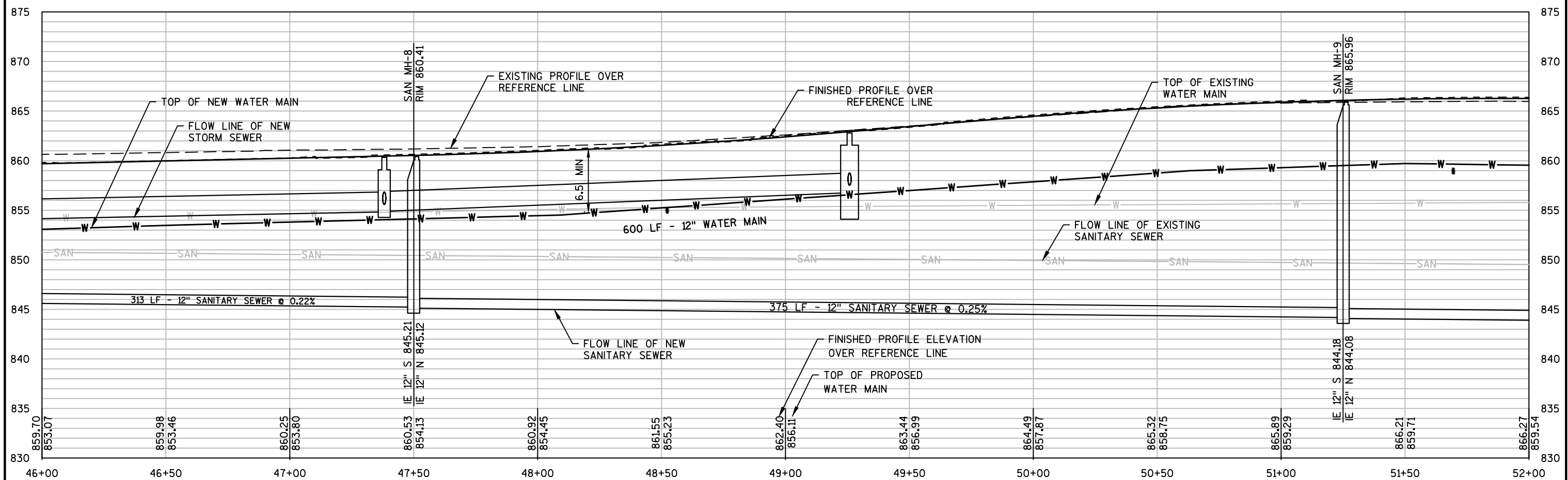
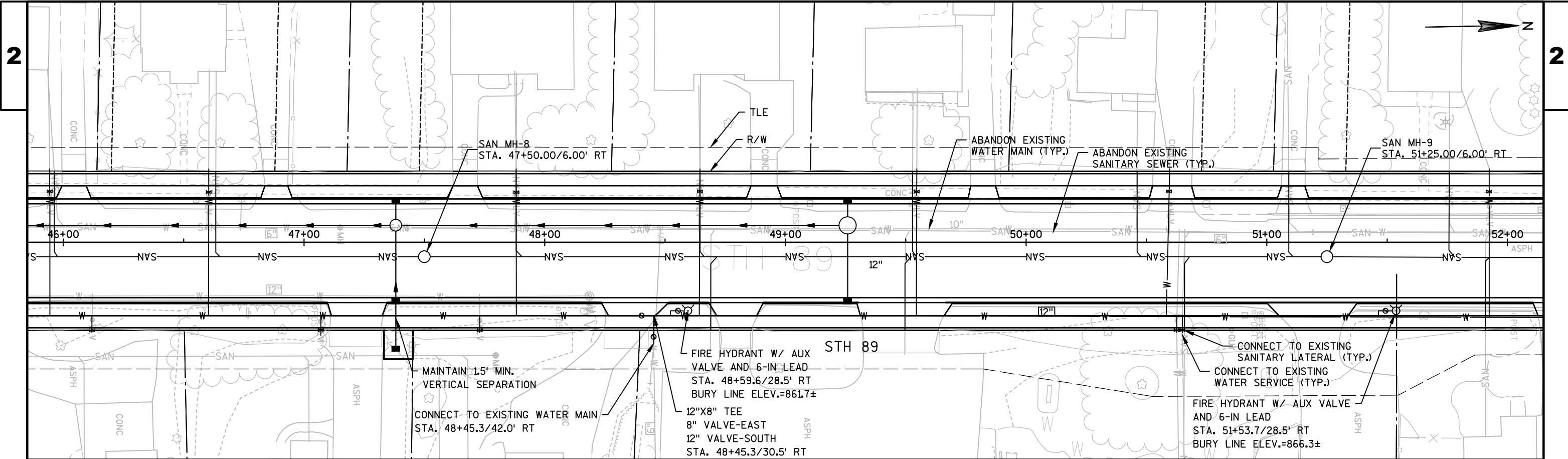
SHEET

91

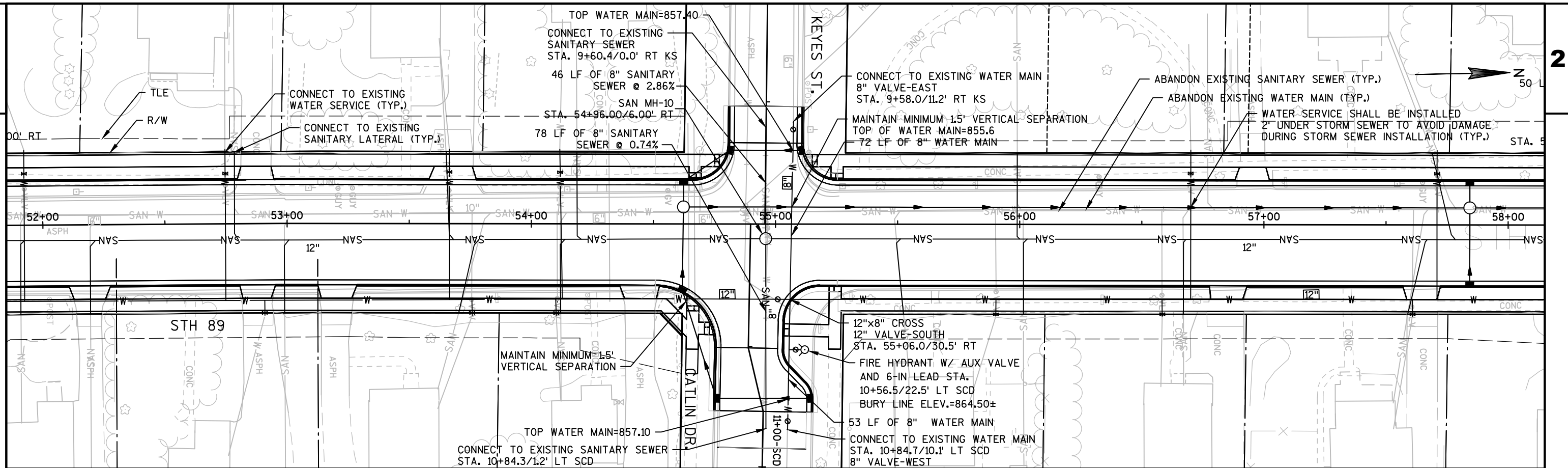
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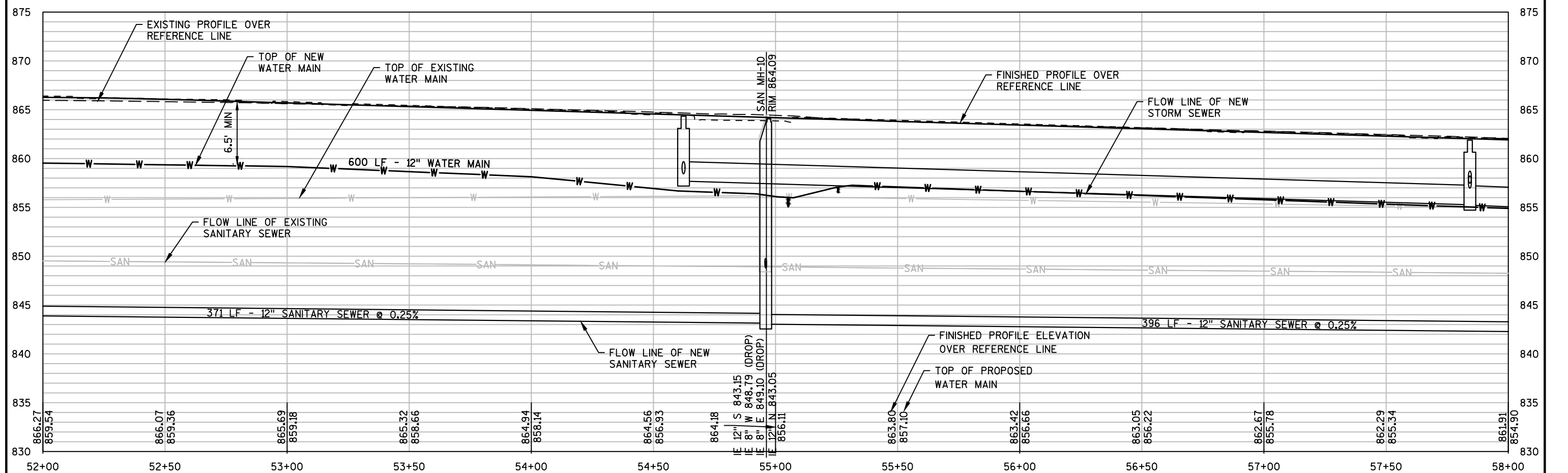




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2



PROJECT NO: 3300-01-74

HWY: STH 89

COUNTY: JEFFERSON

WATER AND SANITARY SEWER

SHEET

95

E

FILE NAME : S:\MAD\1000--1099\1060\037\ACAD\CIVIL3D\33000103\SHEETSP\PLAN\023001-UTILITY PLAN\023001-PP.DWG
LAYOUT NAME - 023001-PP - PP - (6)

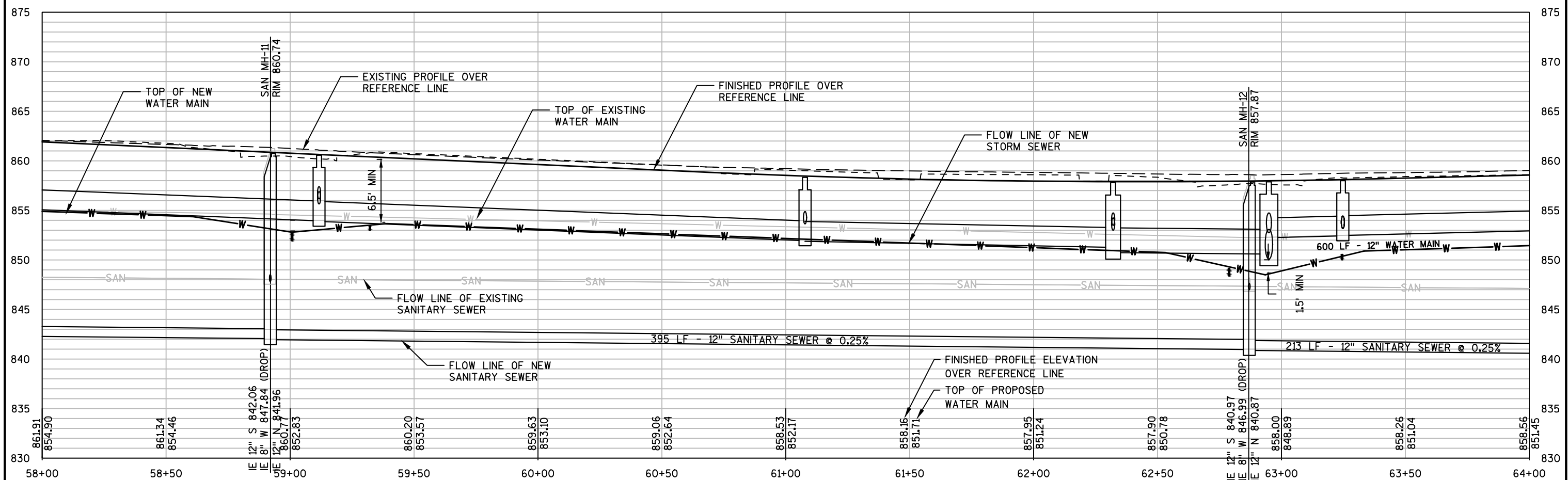
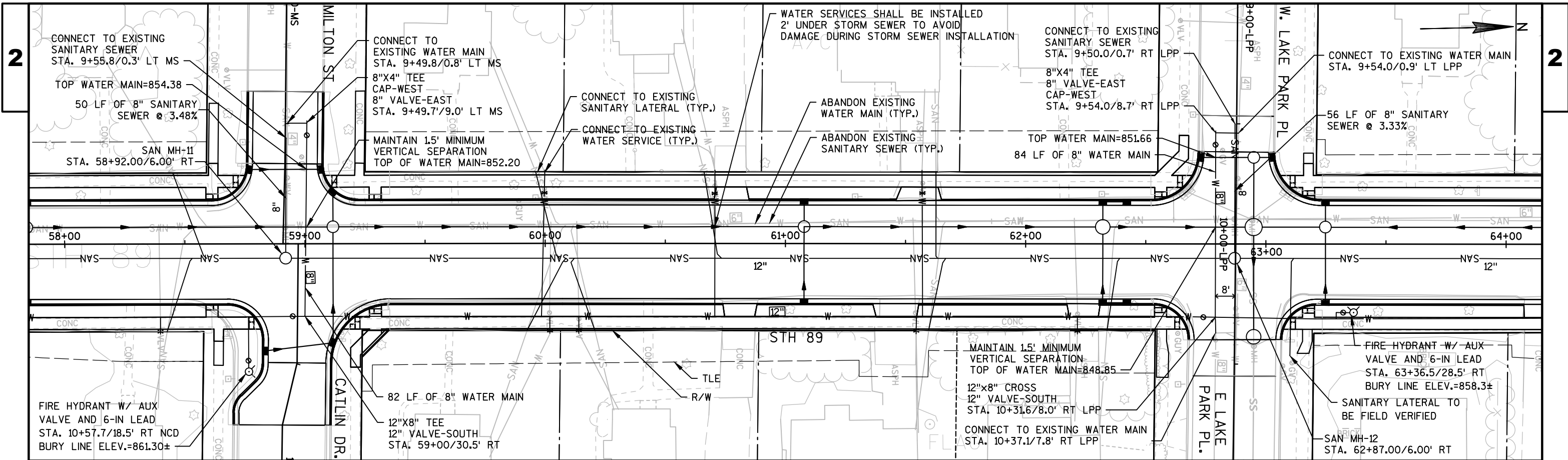
PLOT DATE : 1/5/2018 3:15 PM

PLOT BY : POLYDORIS, DIANE

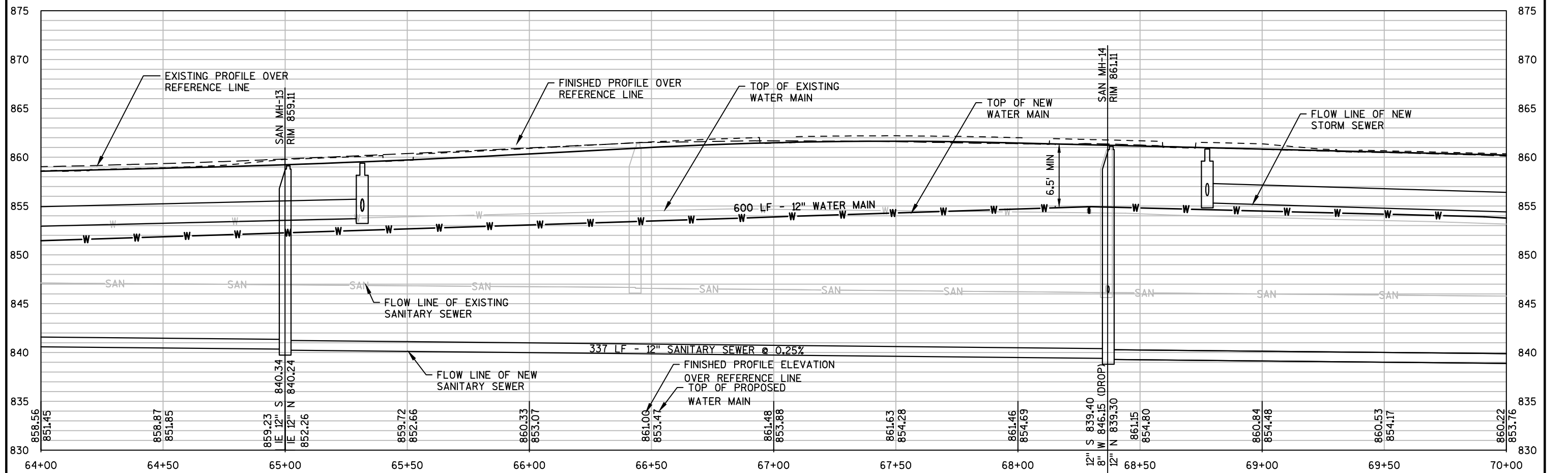
PLOT NAME :

PLOT SCALE : 1:40_XREF

WISDOT/CADDs SHEET 41

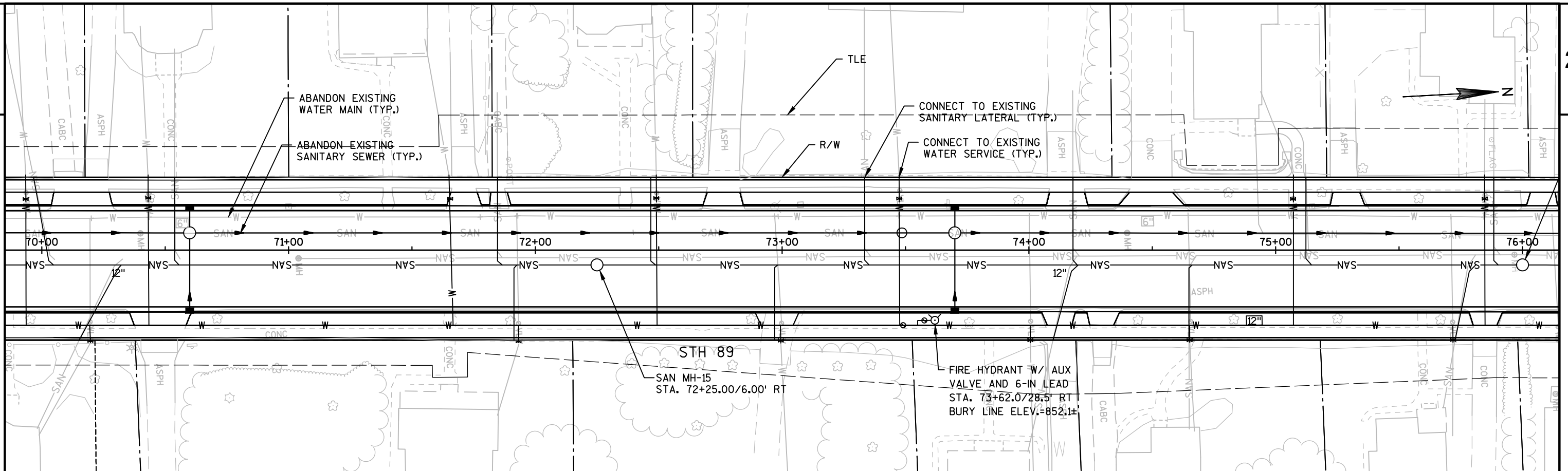


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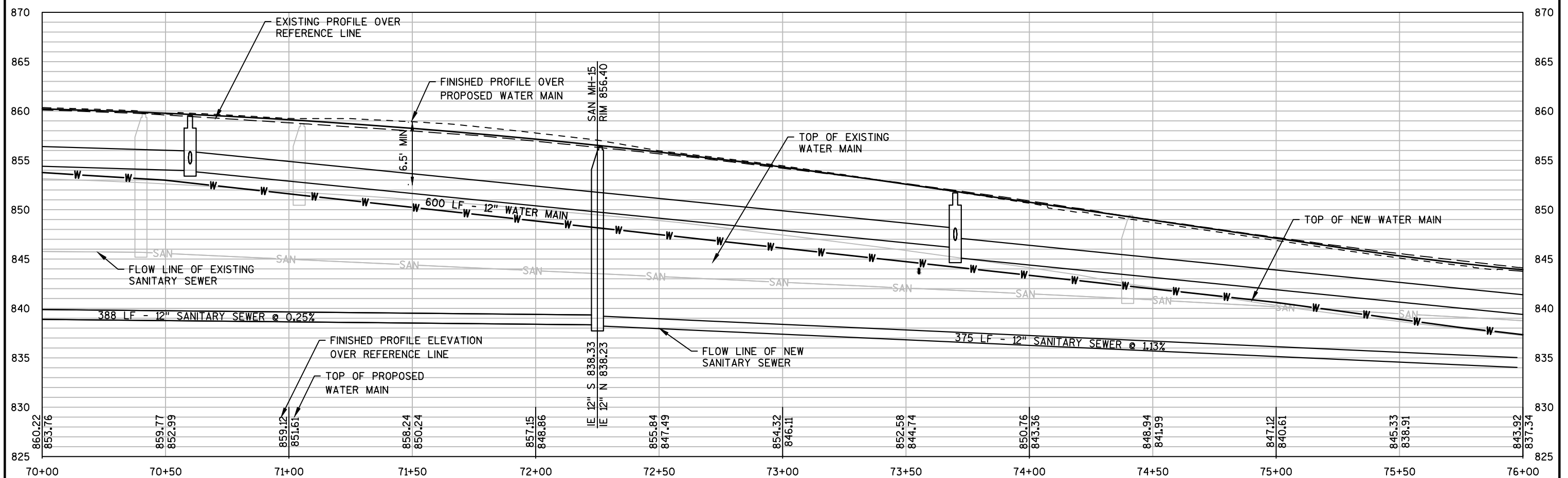


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2



2



PROJECT NO: 3300-01-74

HWY:

COUNTY:

WATER AND SANITARY SEWER

SHEET

98

E

FILE NAME : S:\MAD\1000--1099\1060\037\ACAD\CIVIL3D\33000103\SHEETSP\023001-UTILITY PLAN\023001-PP.DWG
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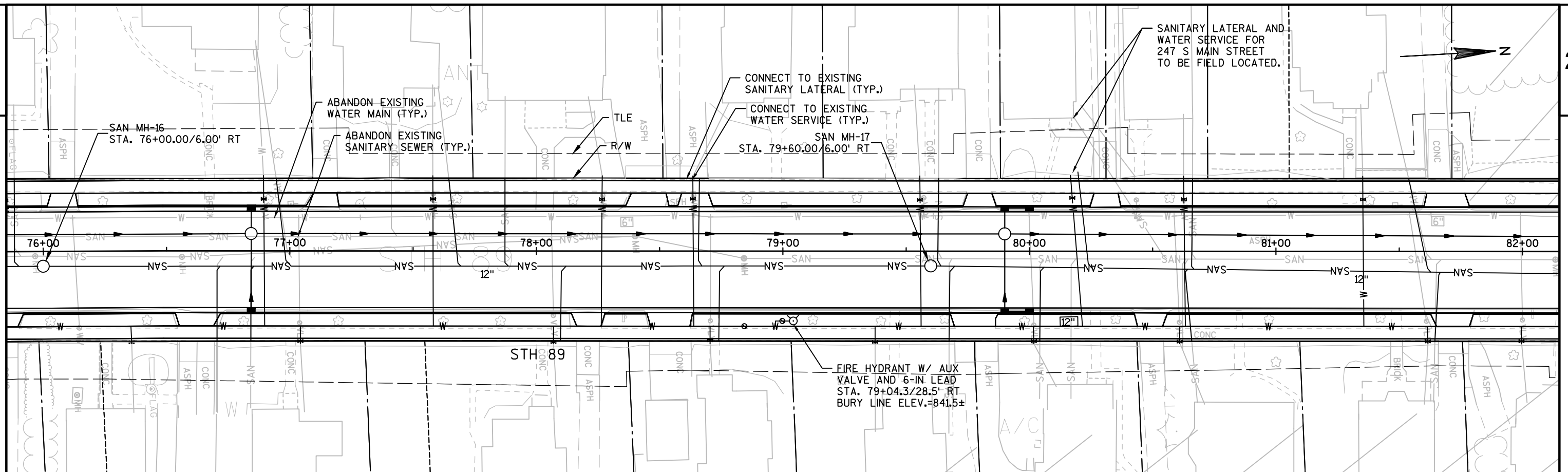
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PLOT BY : POLYDORIS, DIANE

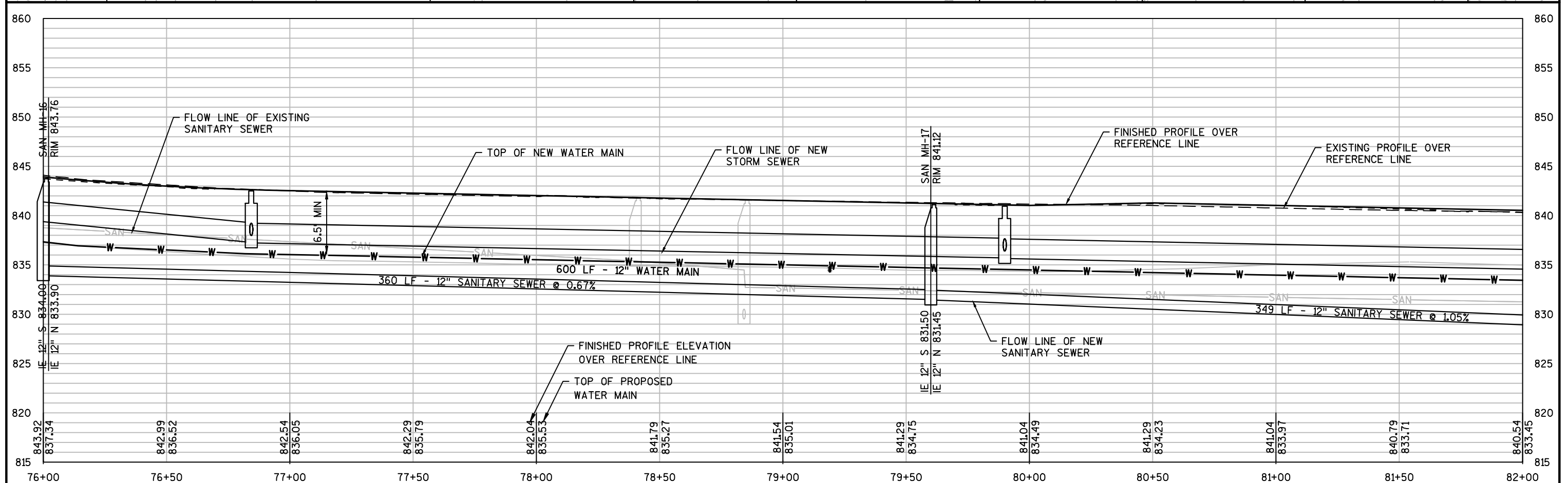
PLOT NAME :

WISDOT/CADDs SHEET 41

2



2



PROJECT NO: 3300-01-74

HWY: STH 89

COUNTY: JEFFERSON

WATER AND SANITARY SEWER

SHEET

99

E

FILE NAME : S:\MAD\1000--1099\1060\037\ACAD\CIVIL3D\33000103\SHEETSP\PLAN\023001-UTILITY PLAN\023001-PP.DWG
LAYOUT NAME - 023001-PP - PP -(10)

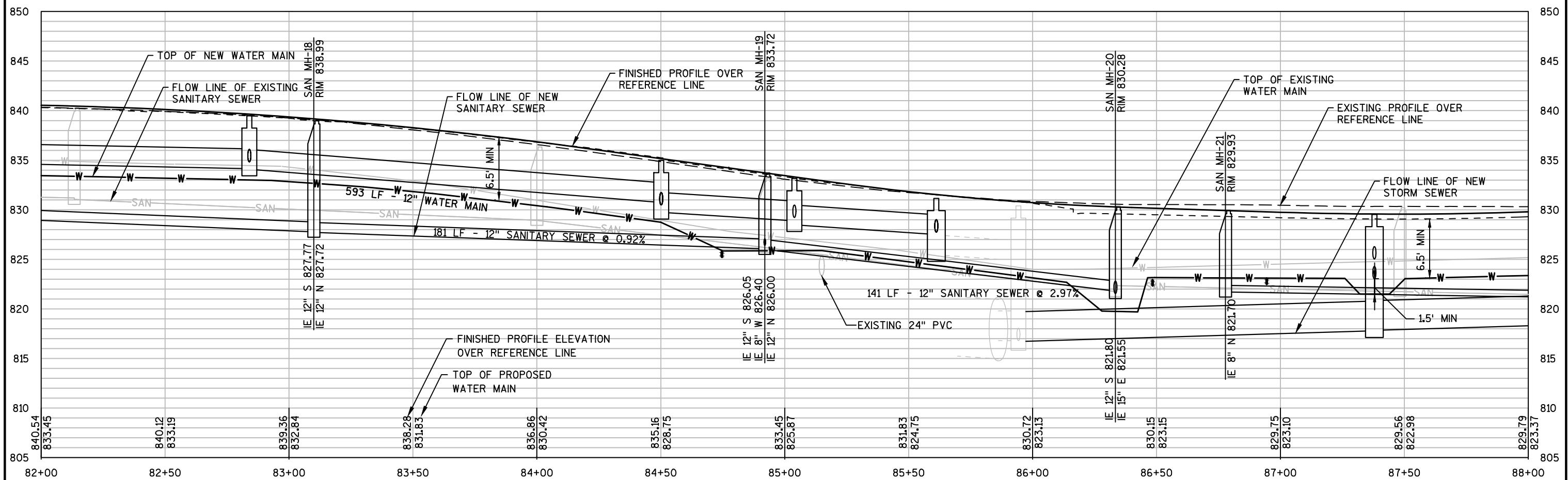
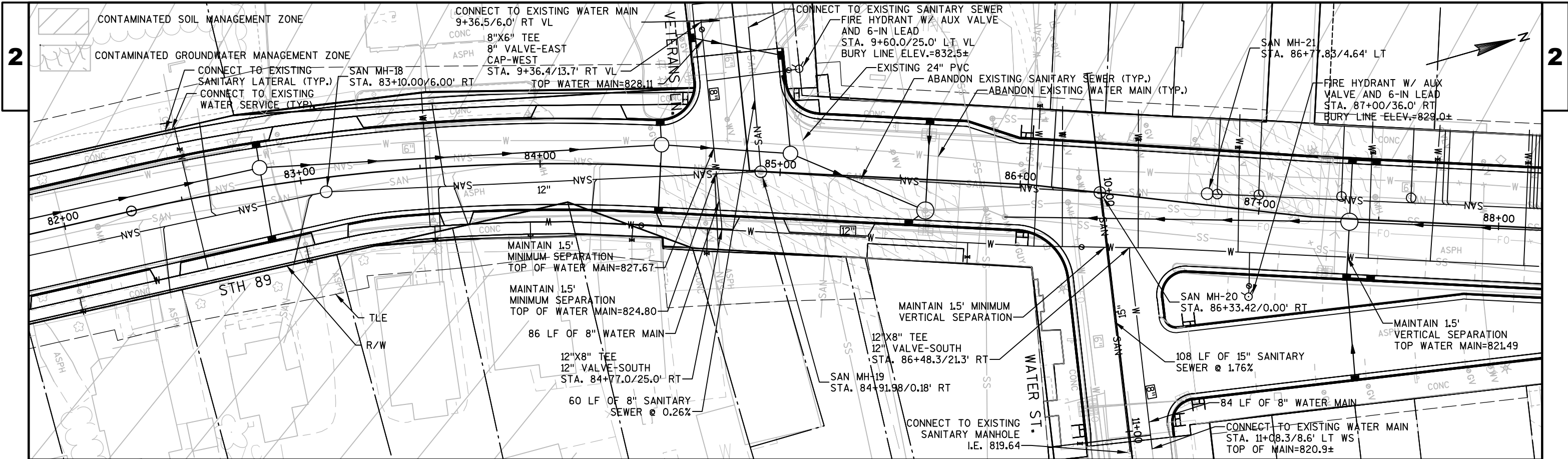
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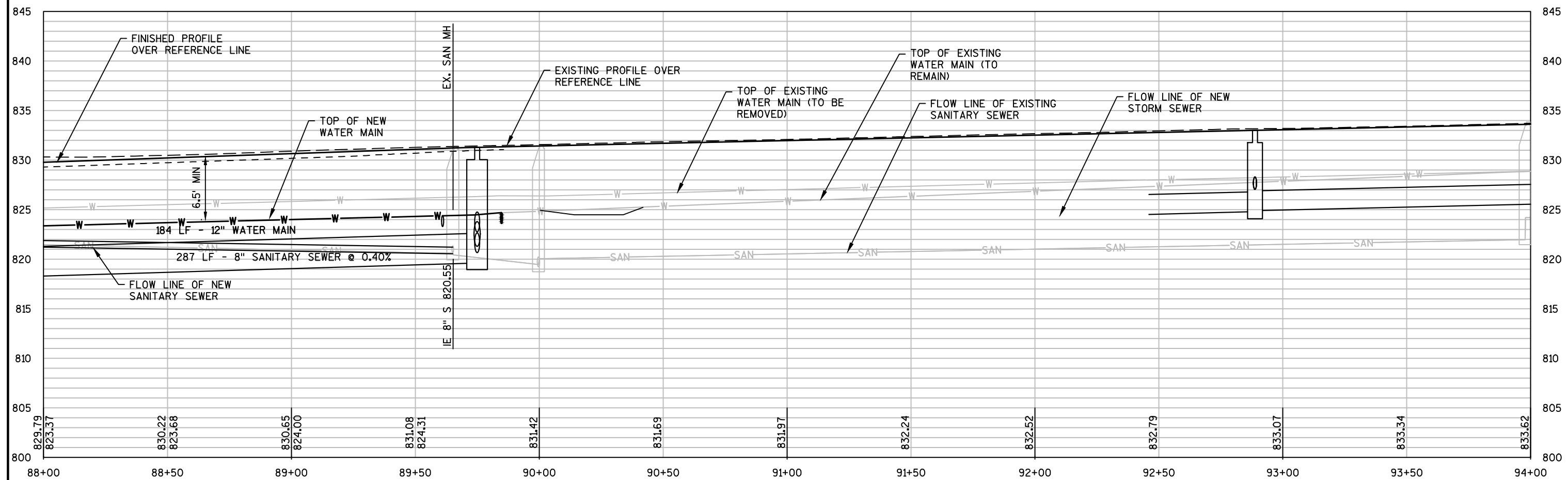
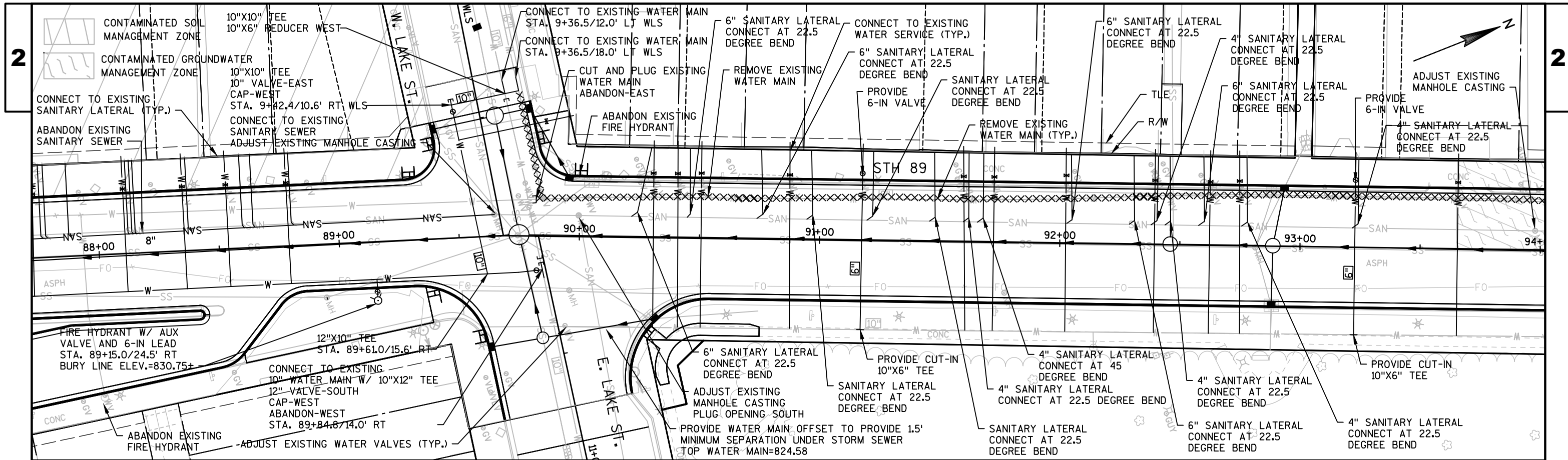
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PLOT NAME :

PLOT SCALE : 1:40_XREF

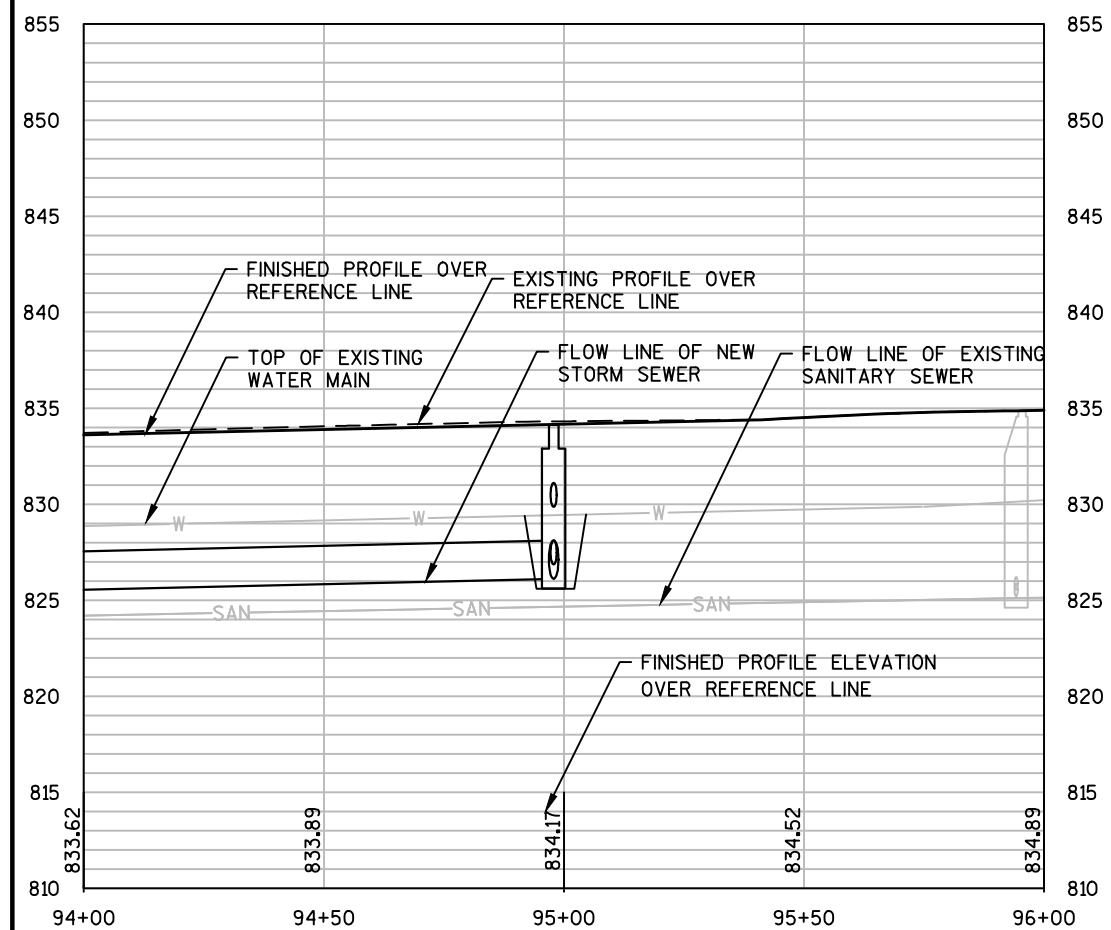
WISDOT/CADDs SHEET 41



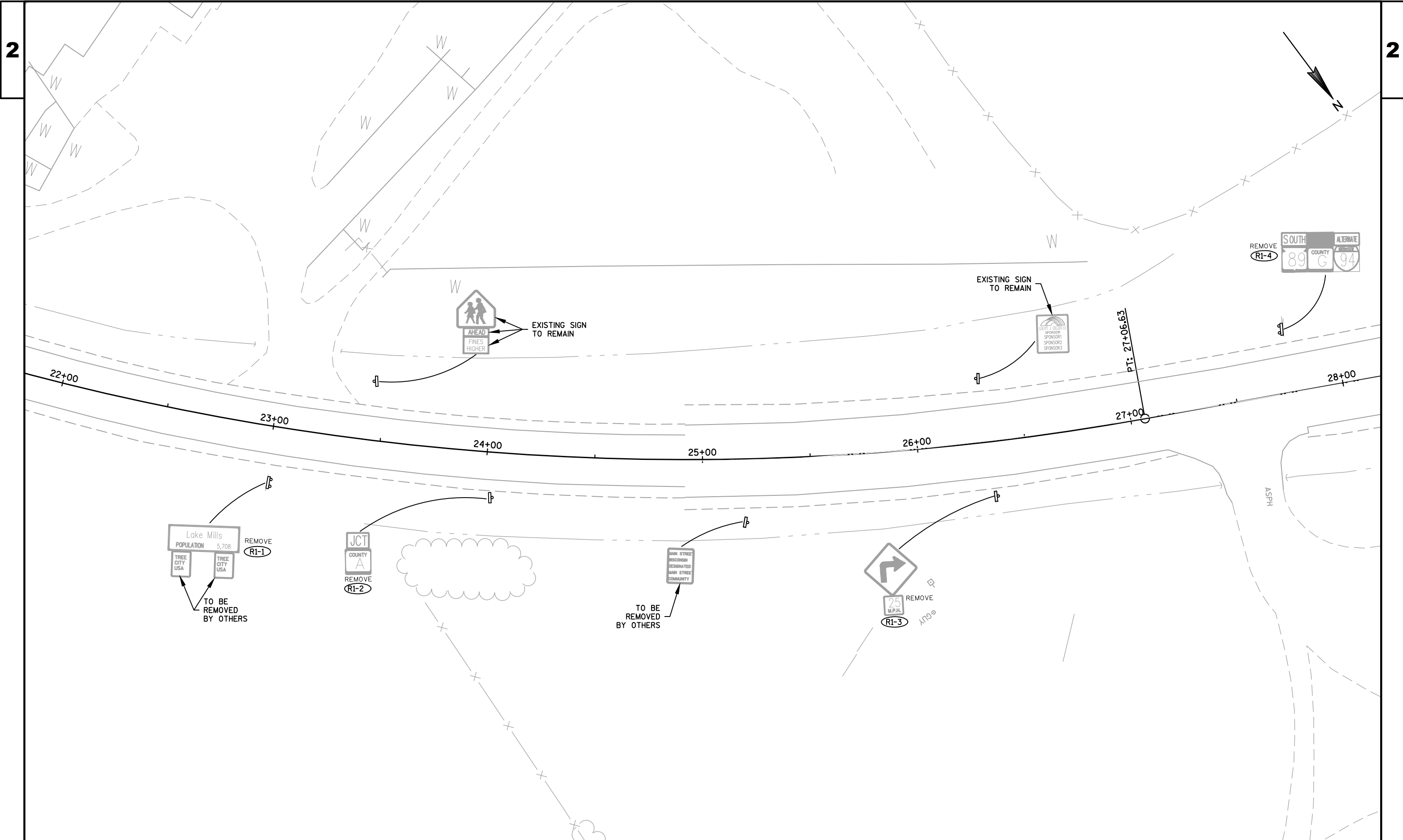


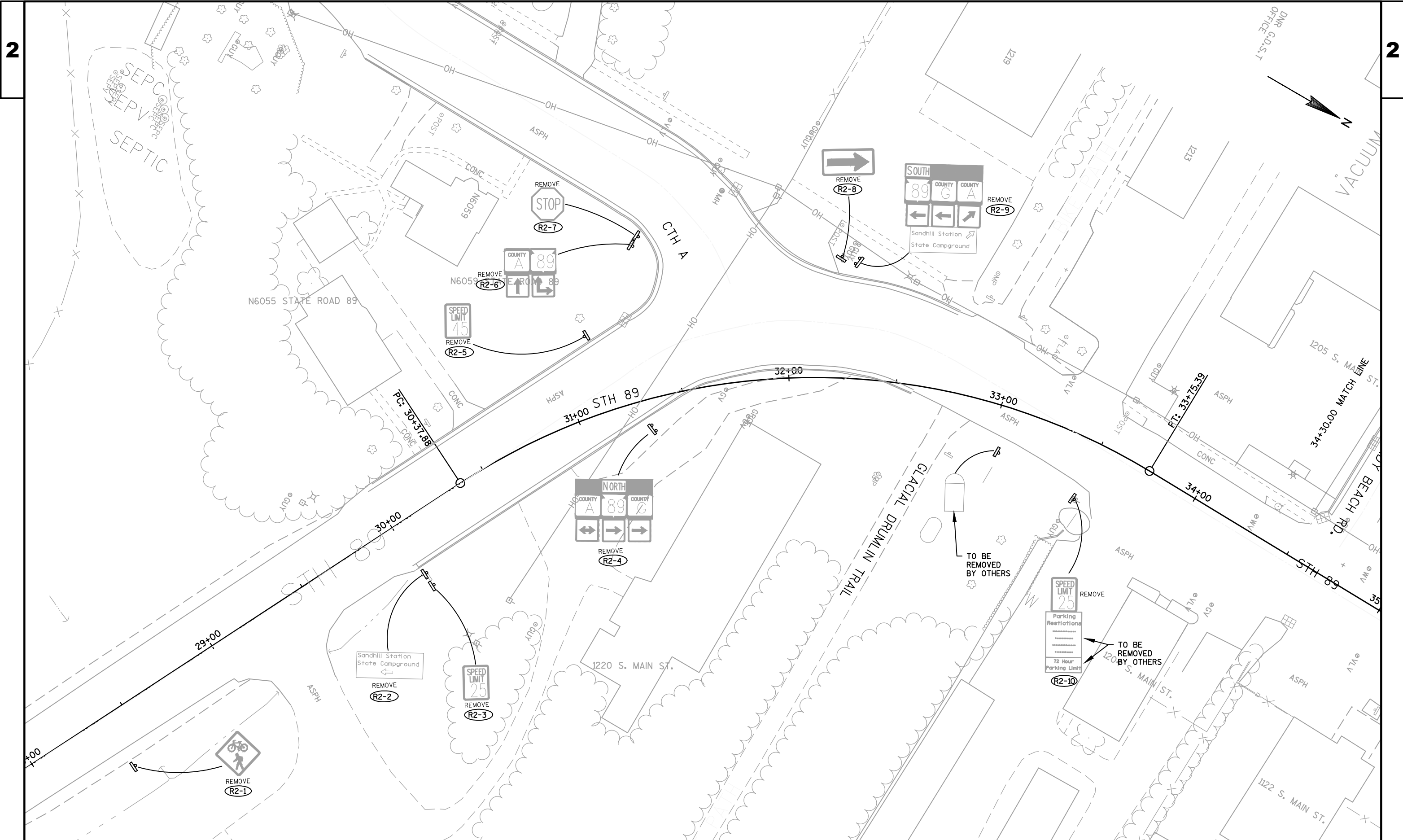
PROJECT NO: 3300-01-74	HWY: STH 89	COUNTY: JEFFERSON	WATER AND SANITARY SEWER	SHEET 101	E
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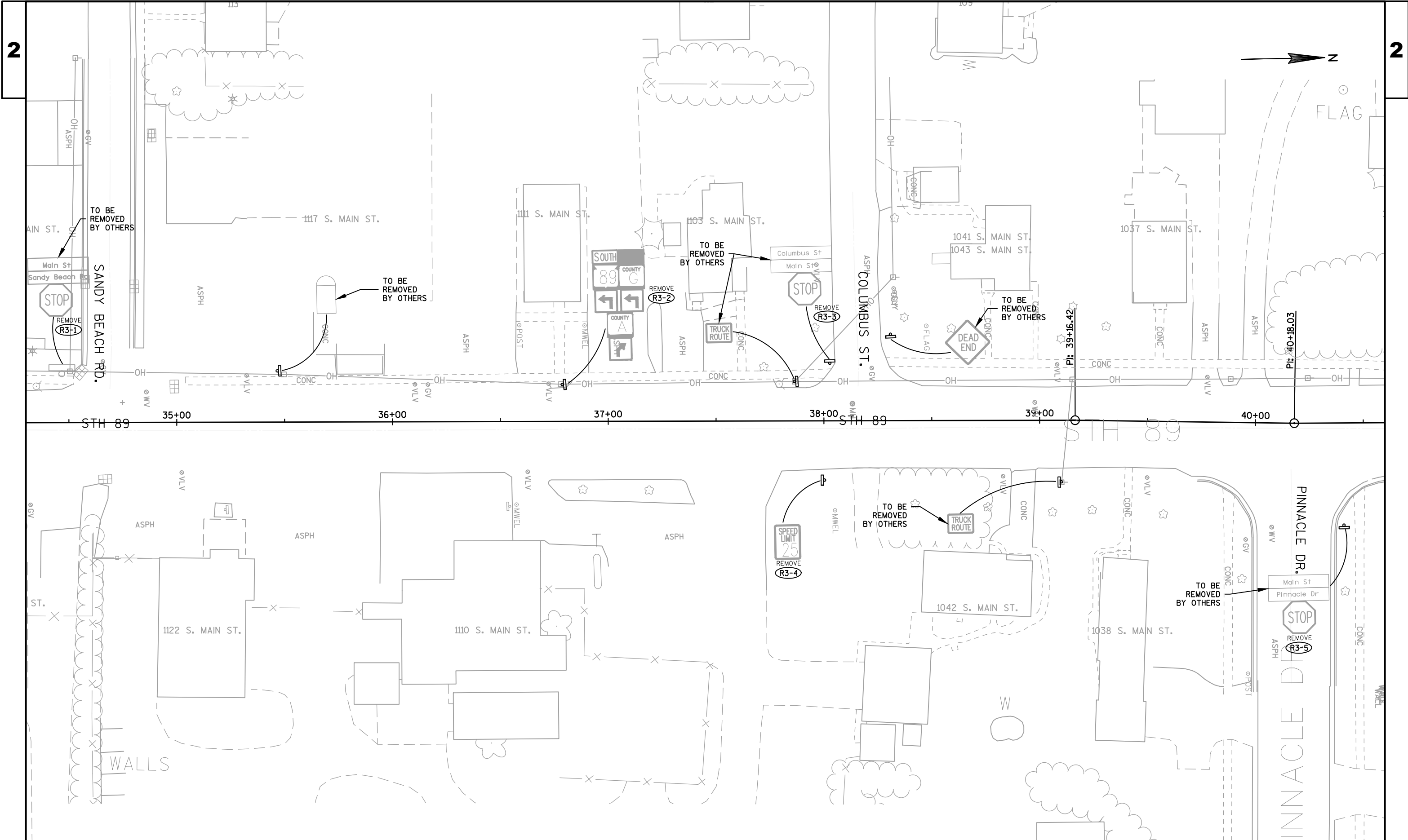
— PROVIDE WATER MAIN OFFSET TO
PROVIDE MINIMUM 1.5' SEPARATION
UNDER STORM SEWER

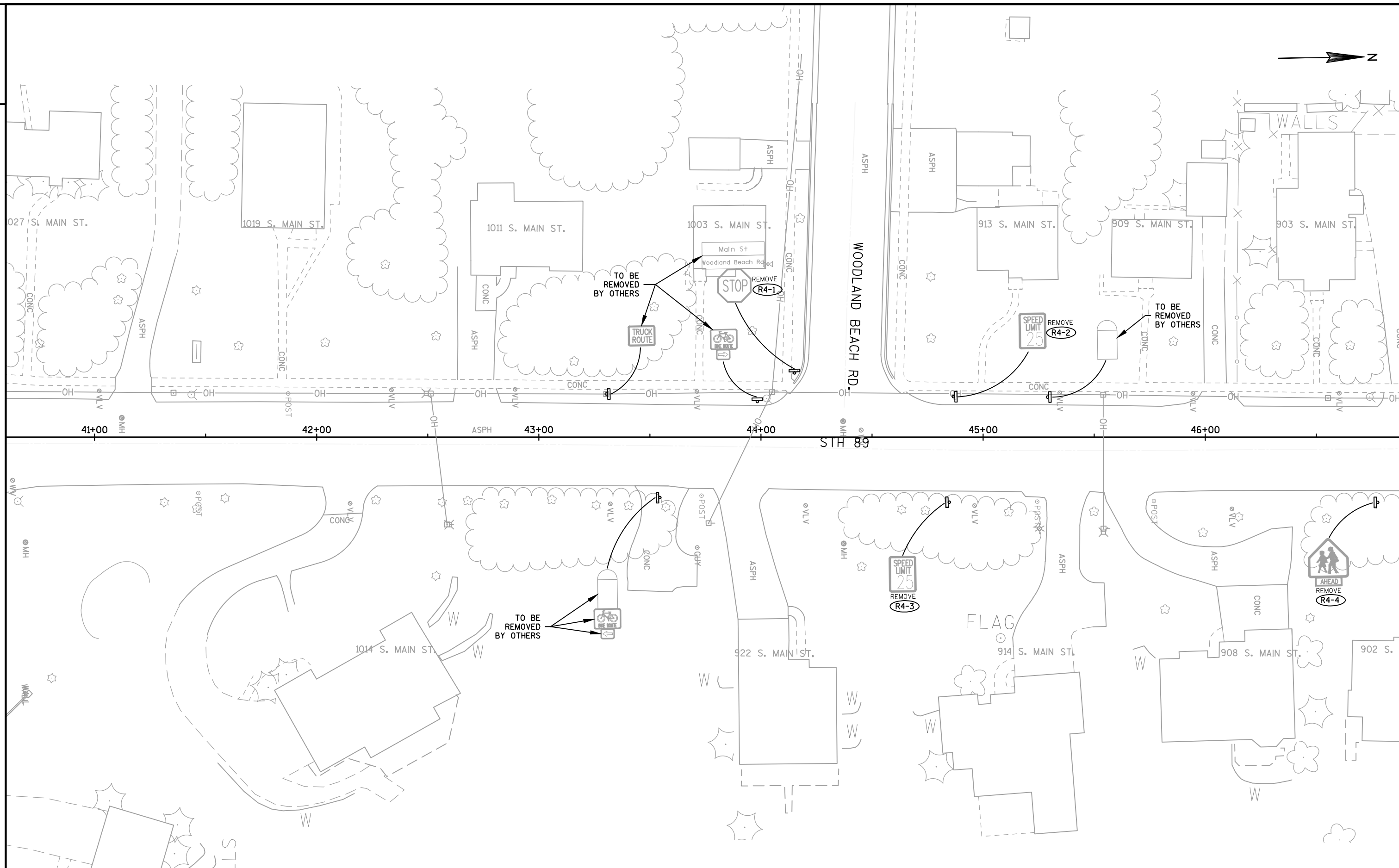


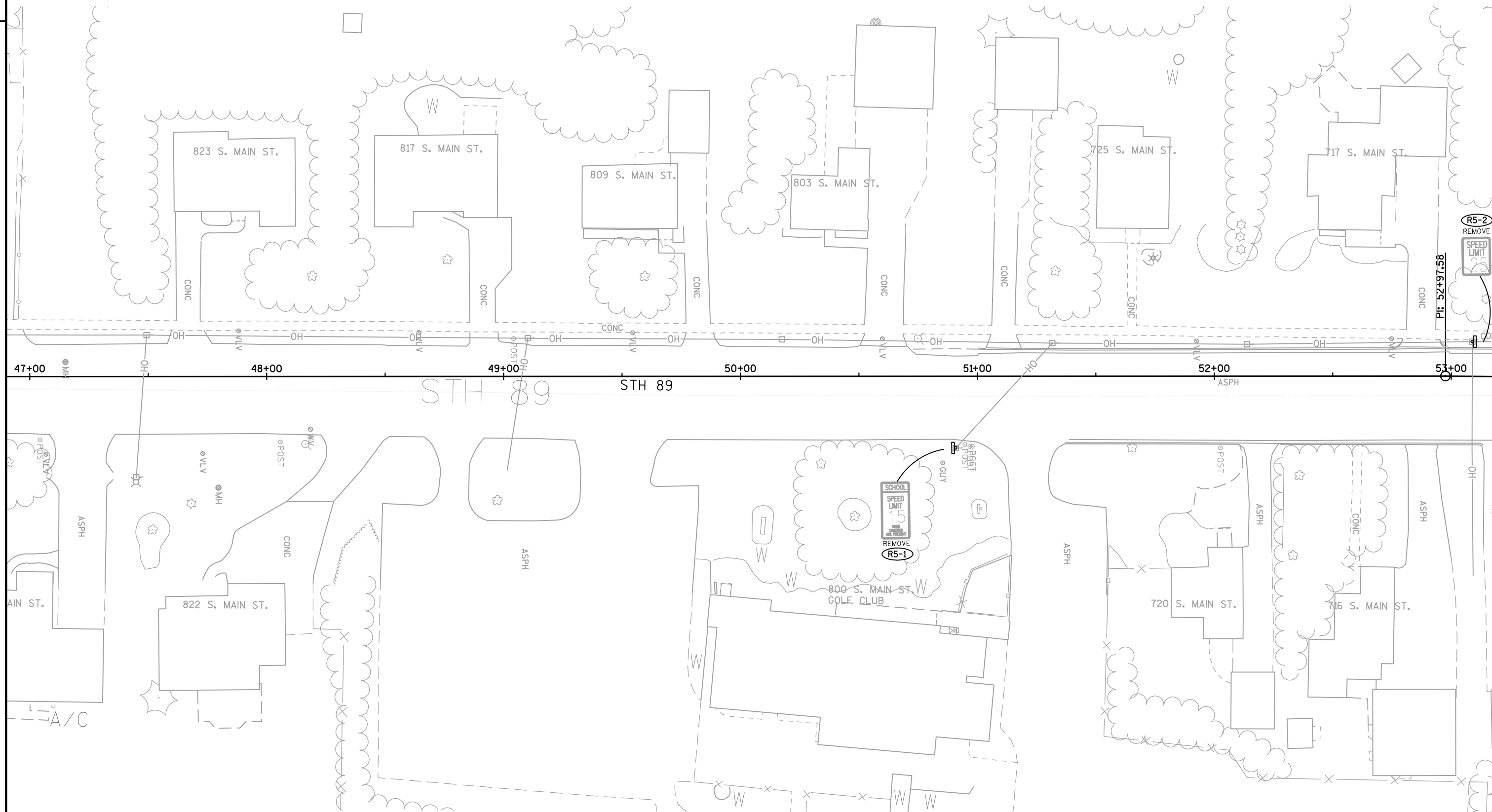
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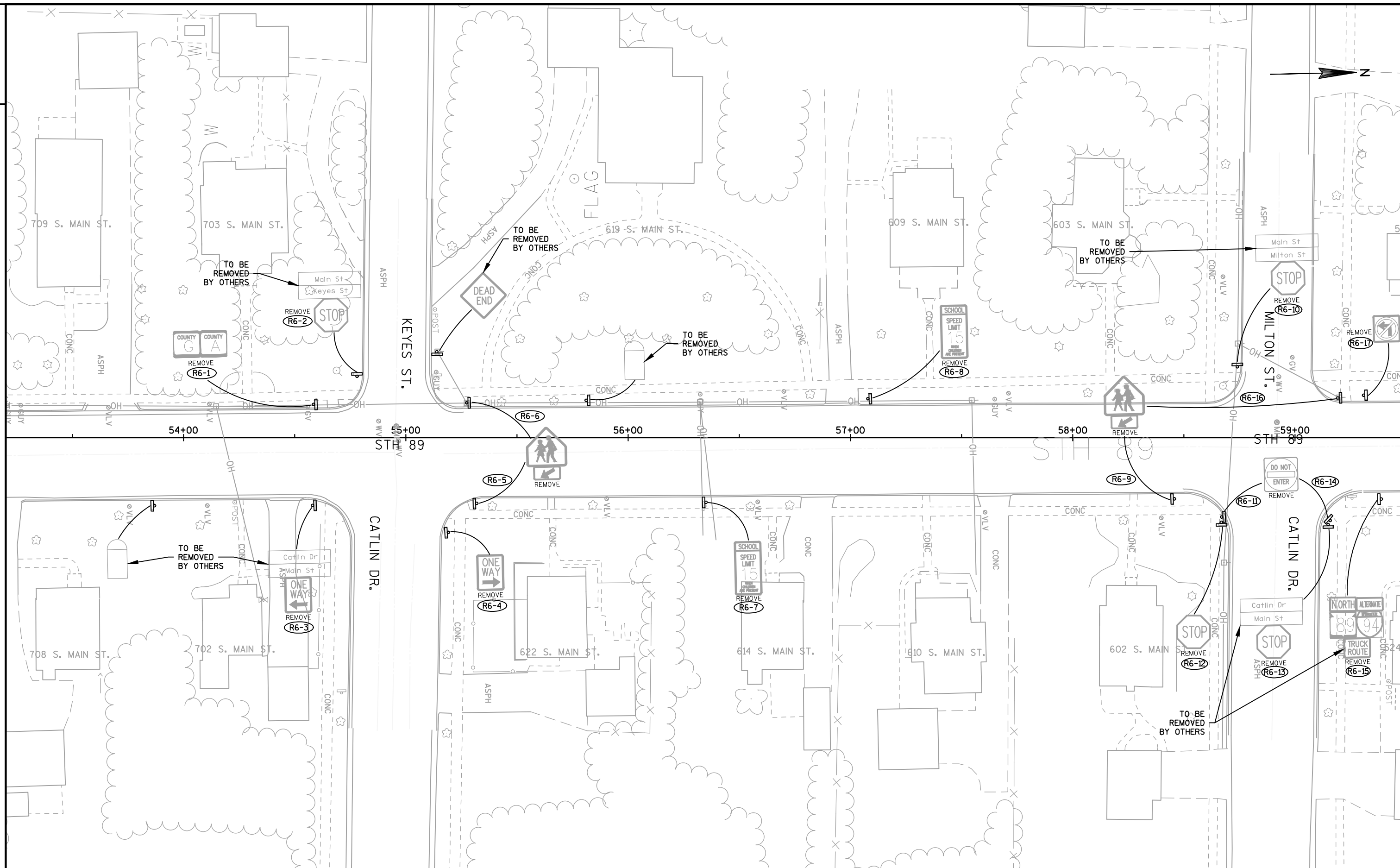


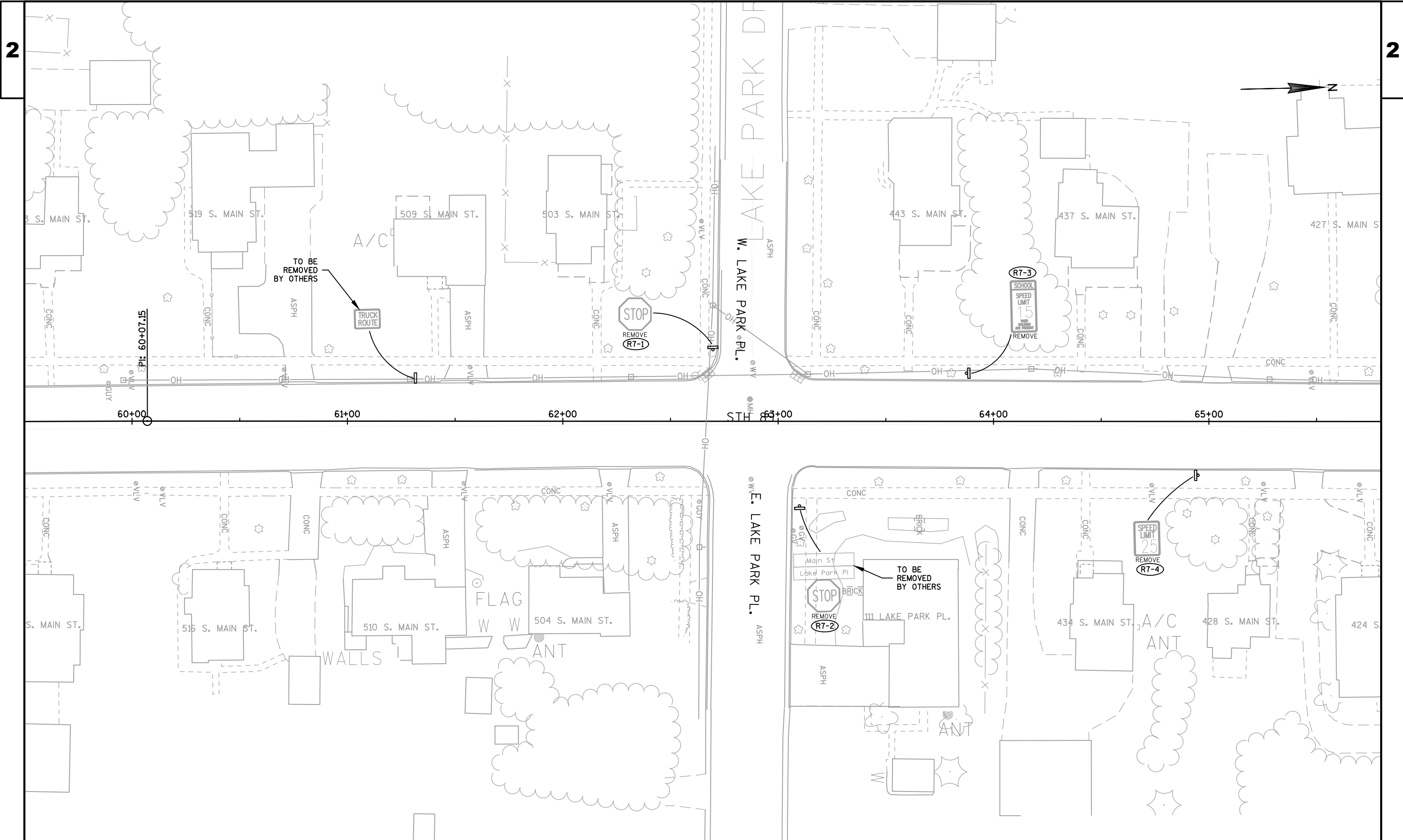


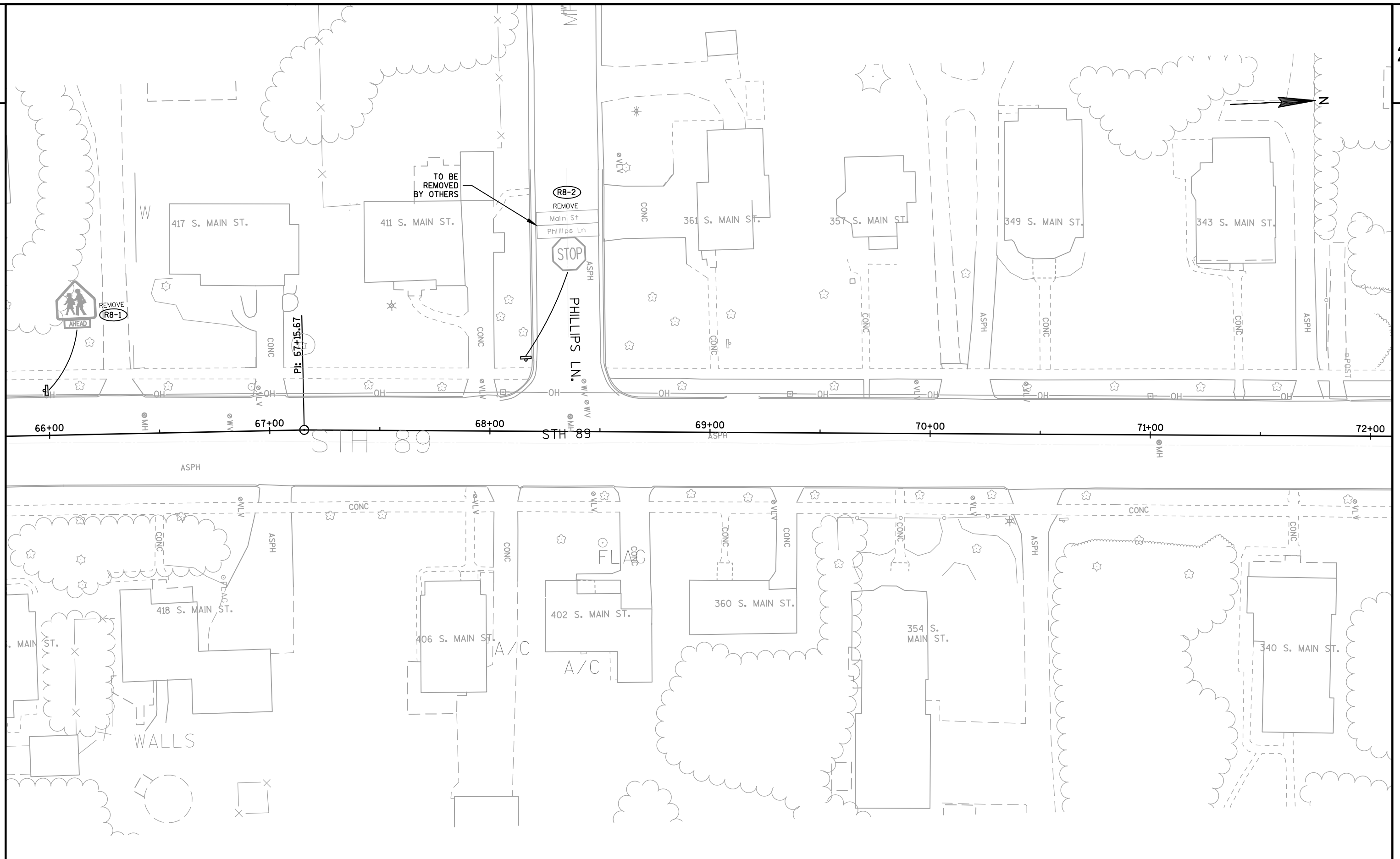




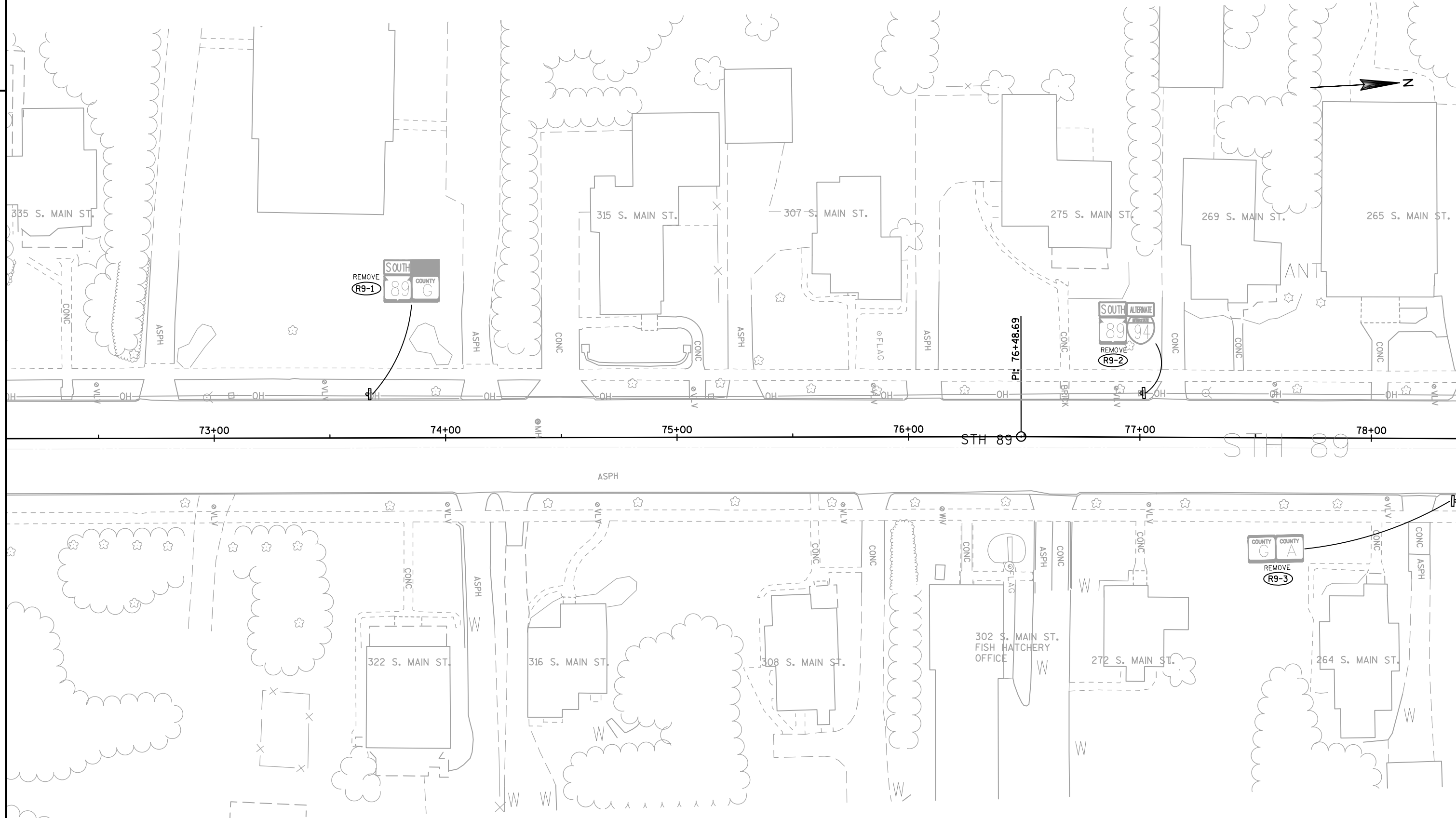


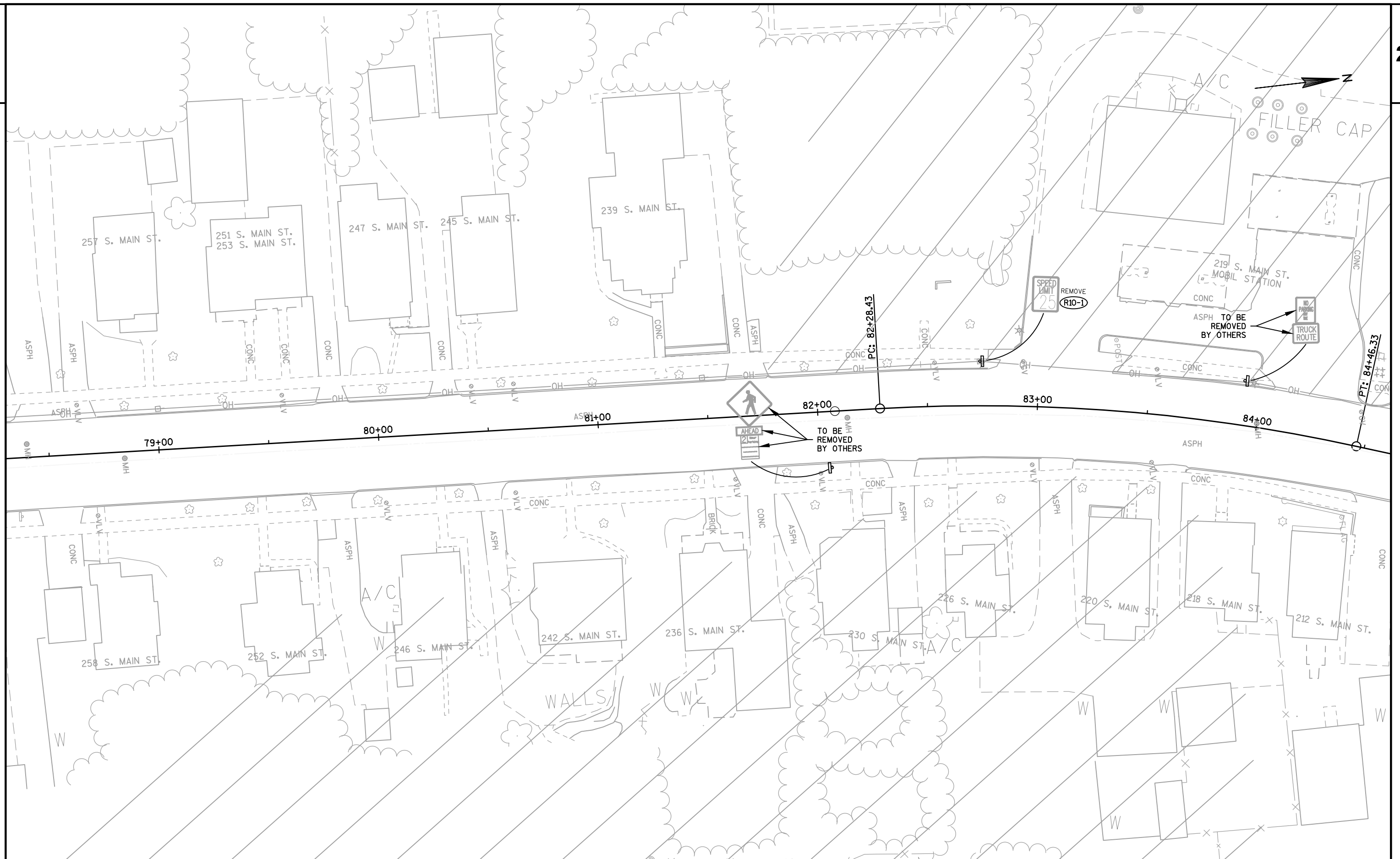


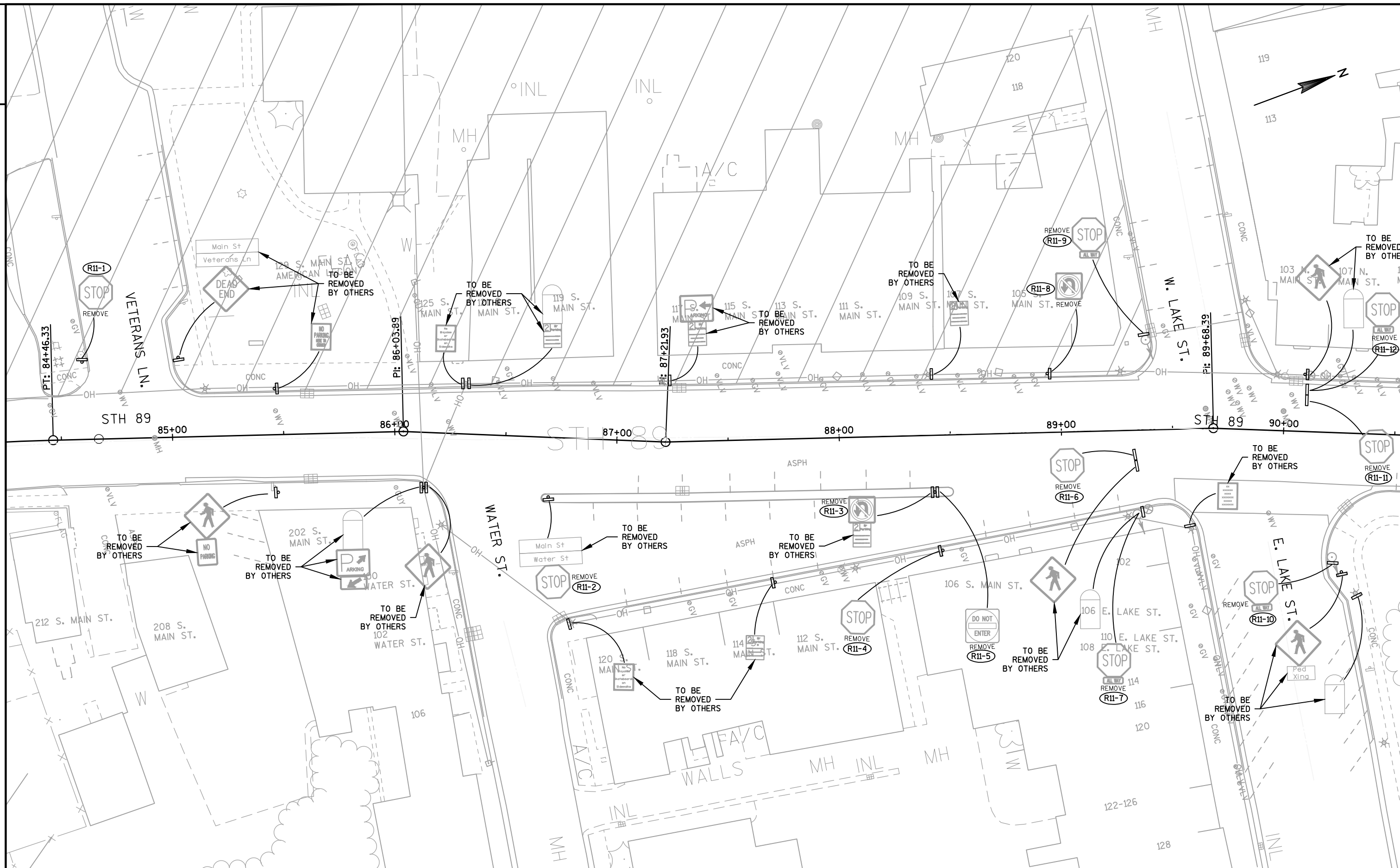




PROJECT NO: 3300-01-73	HWY: STH 89	COUNTY: JEFFERSON	EXISTING SIGNING - REMOVALS	SHEET 110	E
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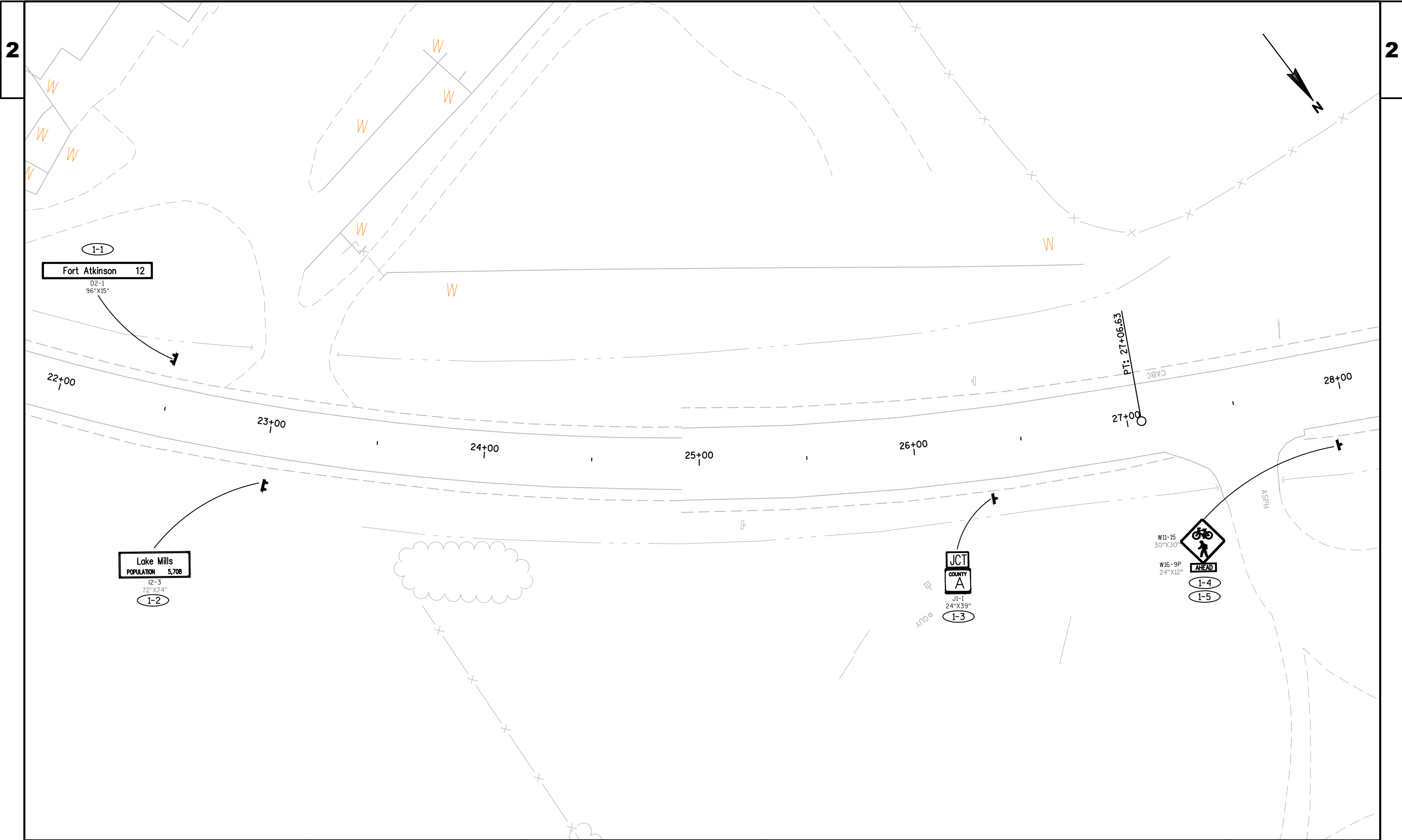


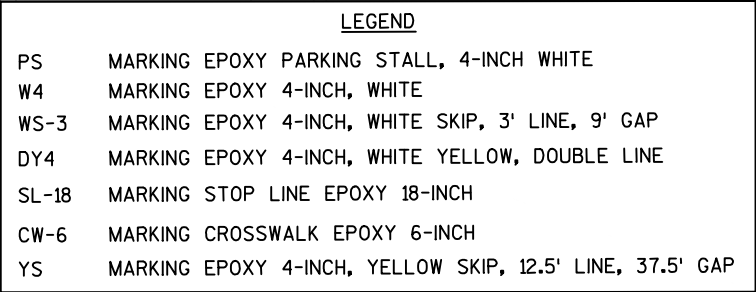


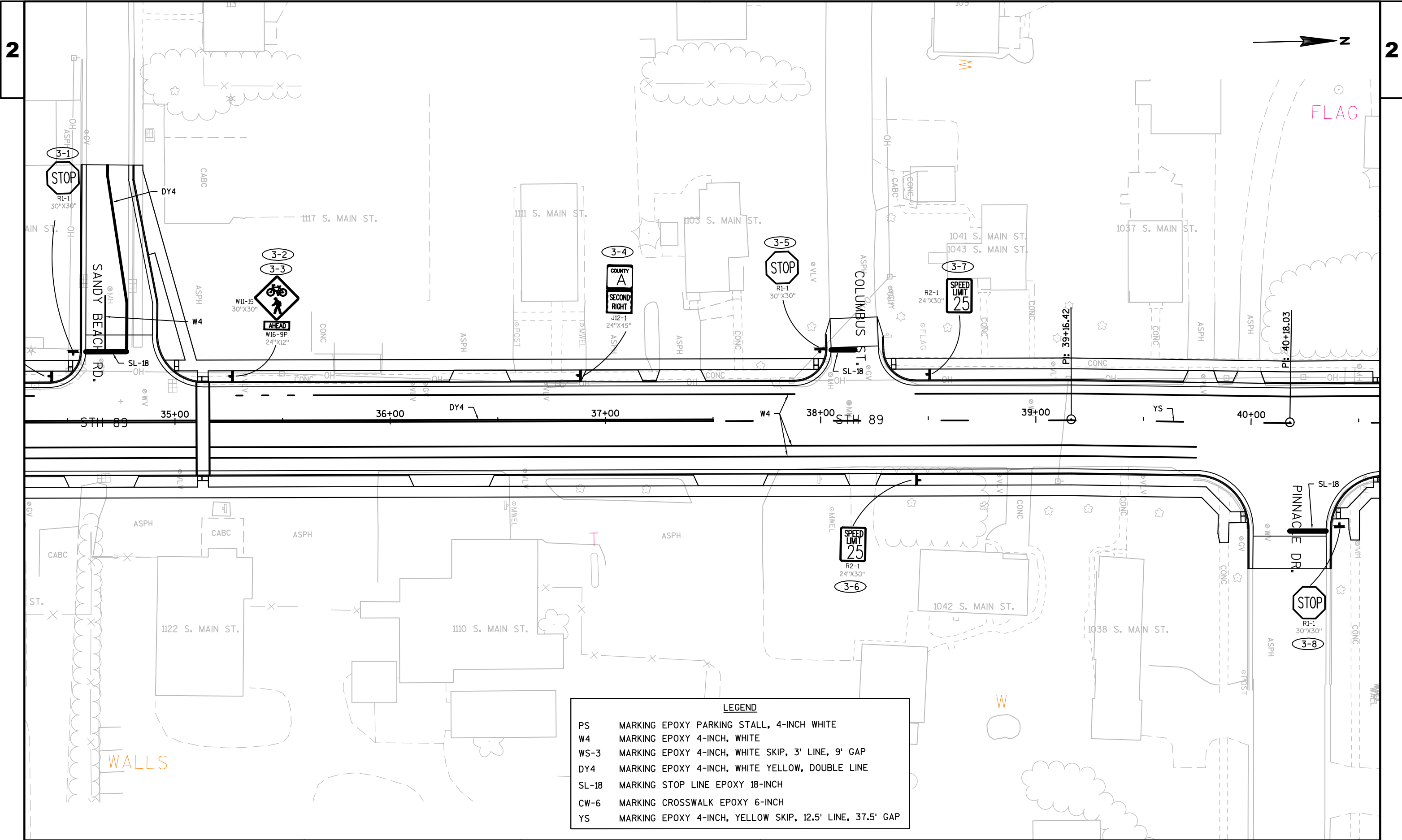


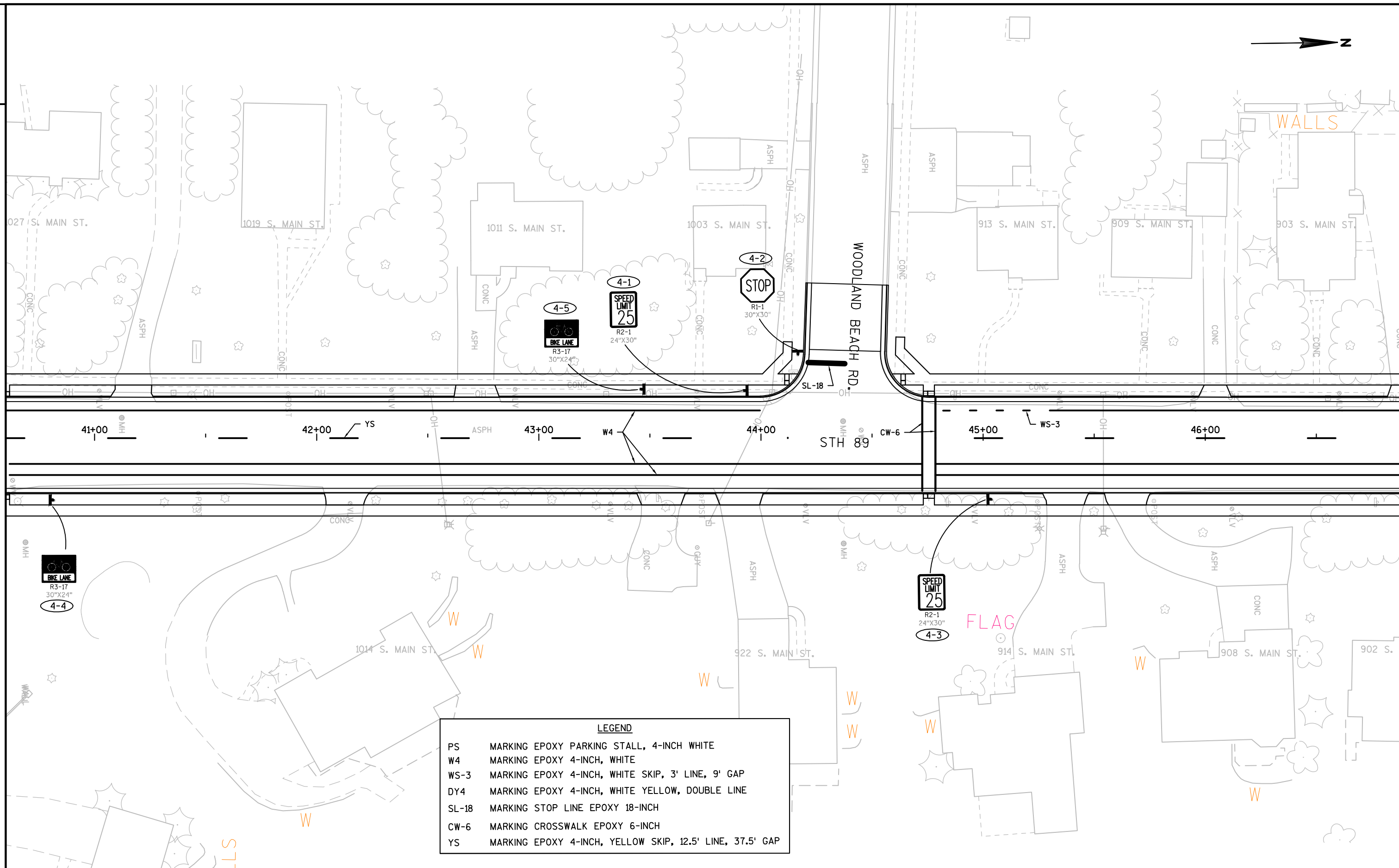
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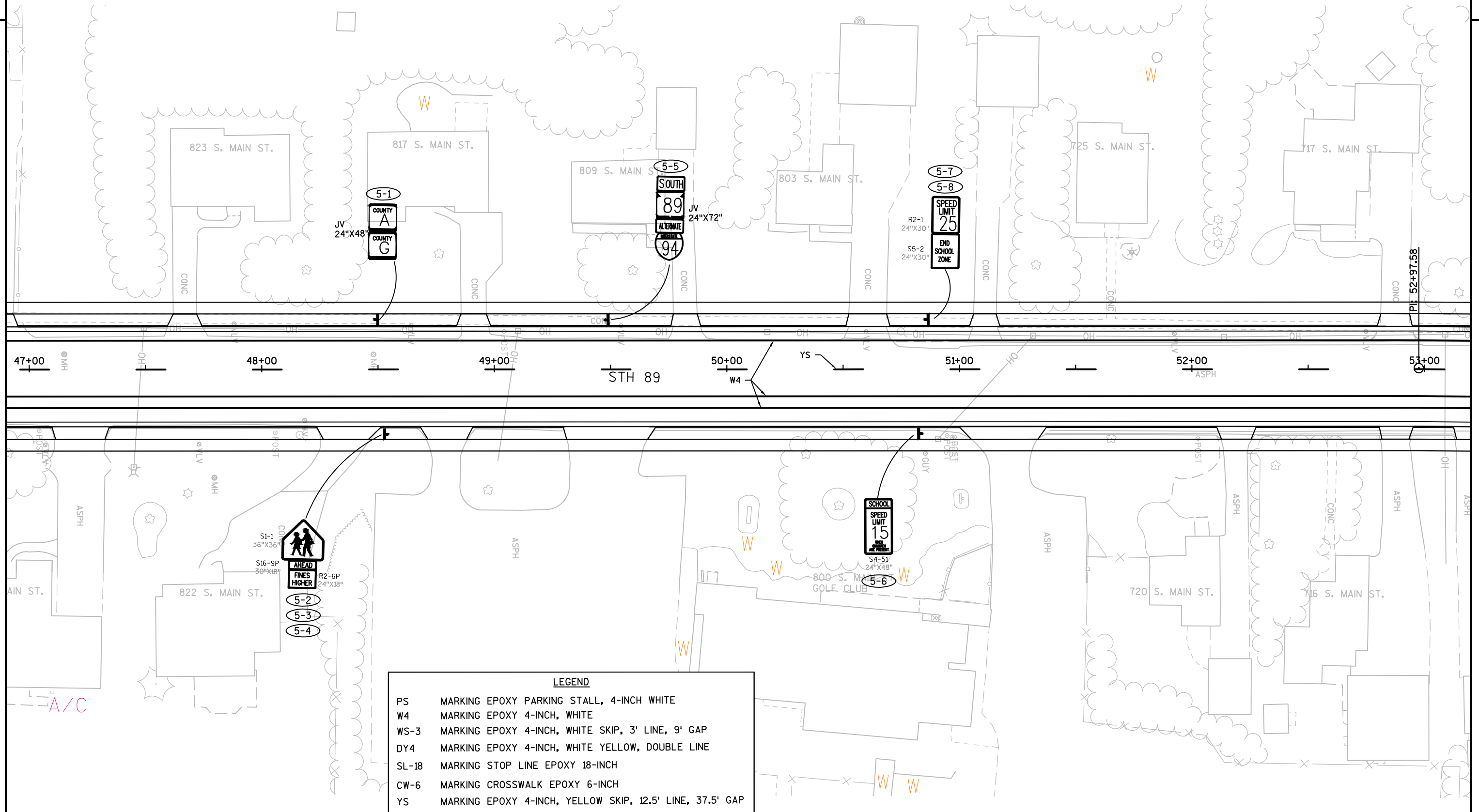












PROJECT NO: 3300-01-73

HWY: STH 89

COUNTY: JEFFERSON

PERMANENT SIGNING & PAVEMENT MARKING

SHEET

119

E

FILE NAME : N:\PDS\C3D\33000103\SHEETPLAN\023201-PERMANENT SIGNING & MARKING\023201-PS.DWG
LAYOUT NAME - PS - (5)

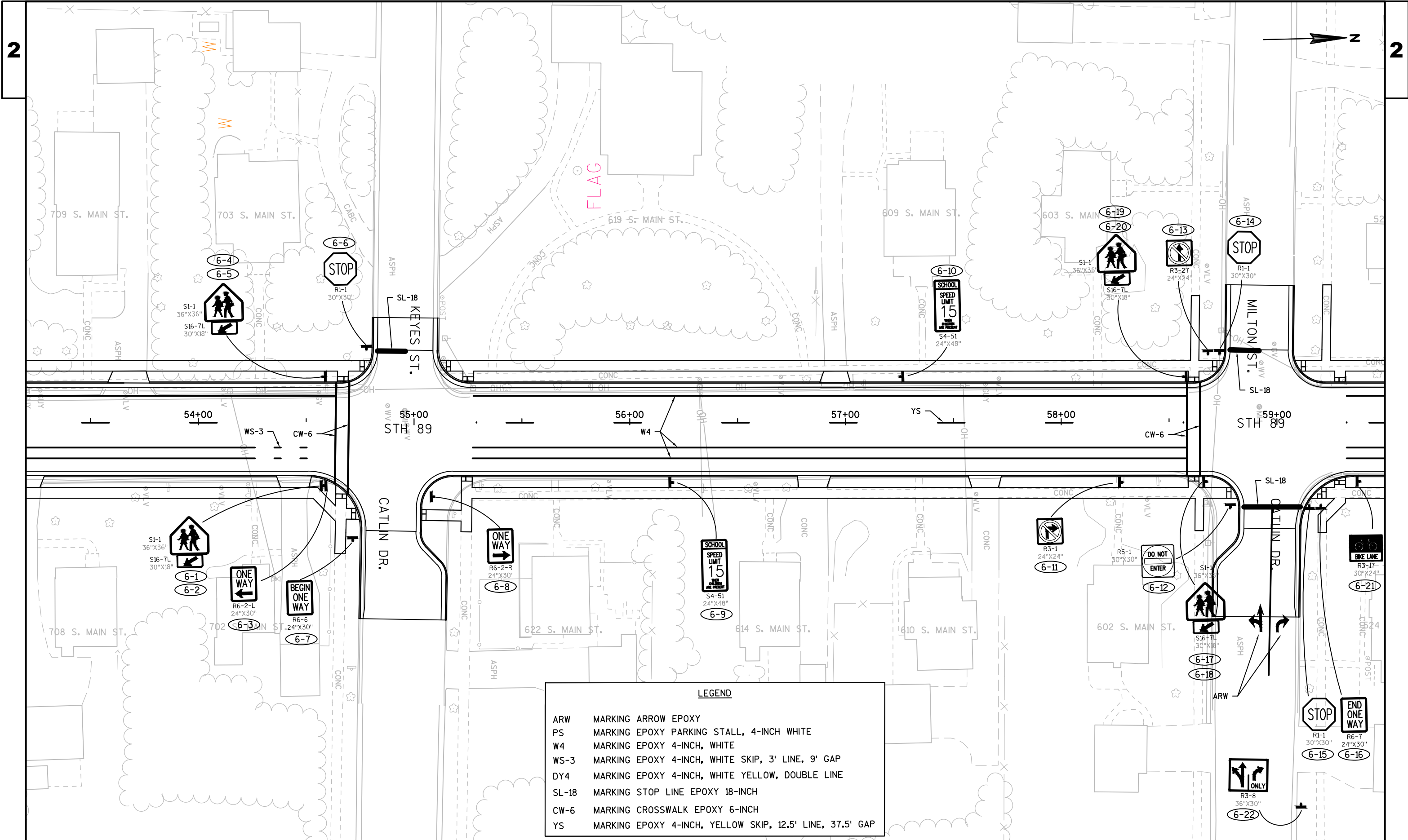
PLOT DATE : 10/27/2017 6:49 PM

PLOT BY : WHITE, JEREMY J

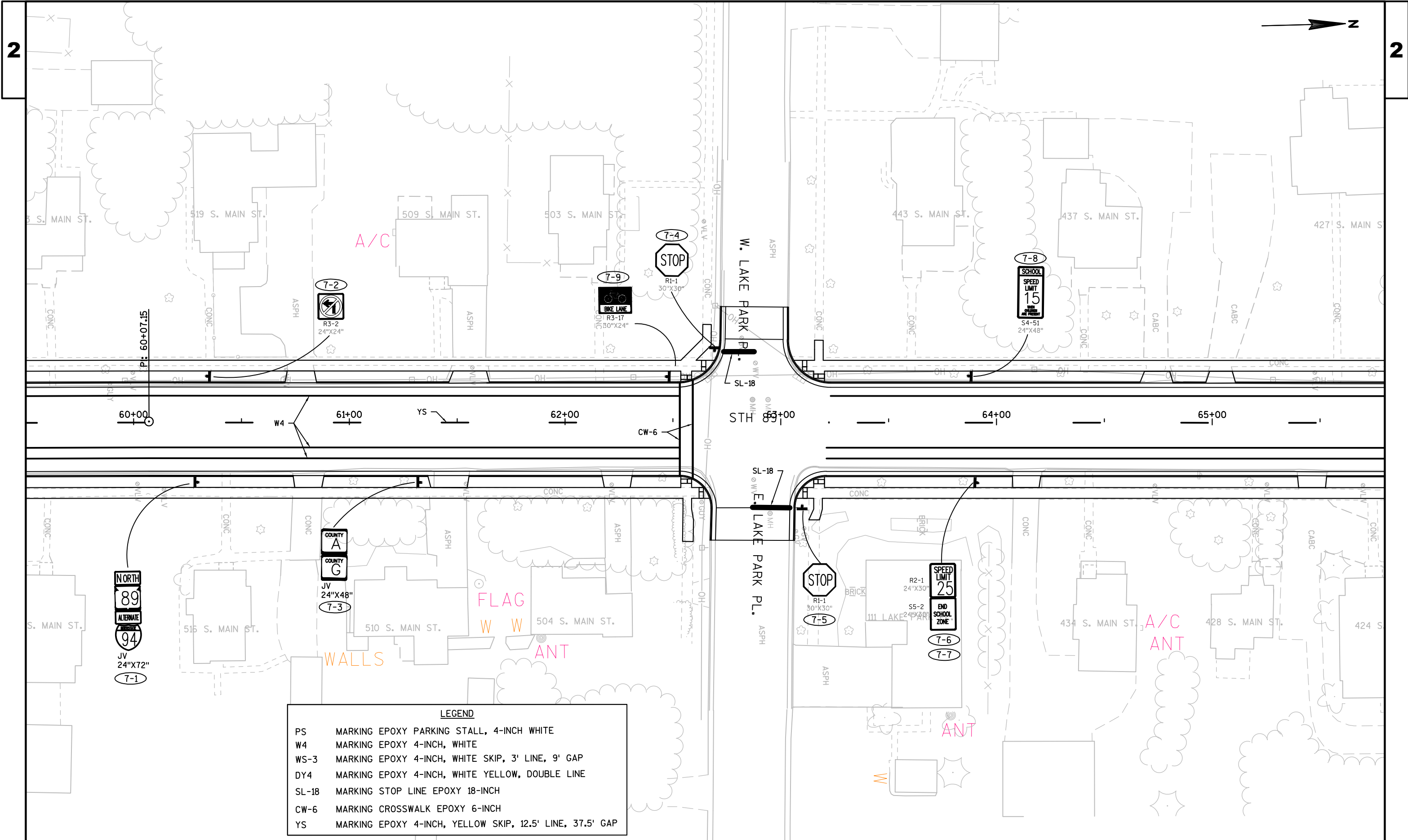
PLOT NAME :

PLOT SCALE : 1 IN:40 FT

WISDOT/CADDs SHEET 42



LEGEND	
ARW	MARKING ARROW EPOXY
PS	MARKING EPOXY PARKING STALL, 4-INCH WHITE
W4	MARKING EPOXY 4-INCH, WHITE
WS-3	MARKING EPOXY 4-INCH, WHITE SKIP, 3' LINE, 9' GAP
DY4	MARKING EPOXY 4-INCH, WHITE YELLOW, DOUBLE LINE
SL-18	MARKING STOP LINE EPOXY 18-INCH
CW-6	MARKING CROSSWALK EPOXY 6-INCH
YS	MARKING EPOXY 4-INCH, YELLOW SKIP, 12.5' LINE, 37.5' GAP



LEGEND	
PS	MARKING EPOXY PARKING STALL, 4-INCH WHITE
W4	MARKING EPOXY 4-INCH, WHITE
WS-3	MARKING EPOXY 4-INCH, WHITE SKIP, 3' LINE, 9' GAP
DY4	MARKING EPOXY 4-INCH, WHITE YELLOW, DOUBLE LINE
SL-18	MARKING STOP LINE EPOXY 18-INCH
CW-6	MARKING CROSSWALK EPOXY 6-INCH
YS	MARKING EPOXY 4-INCH, YELLOW SKIP, 12.5' LINE, 37.5' GAP

PROJECT NO:3300-01-73

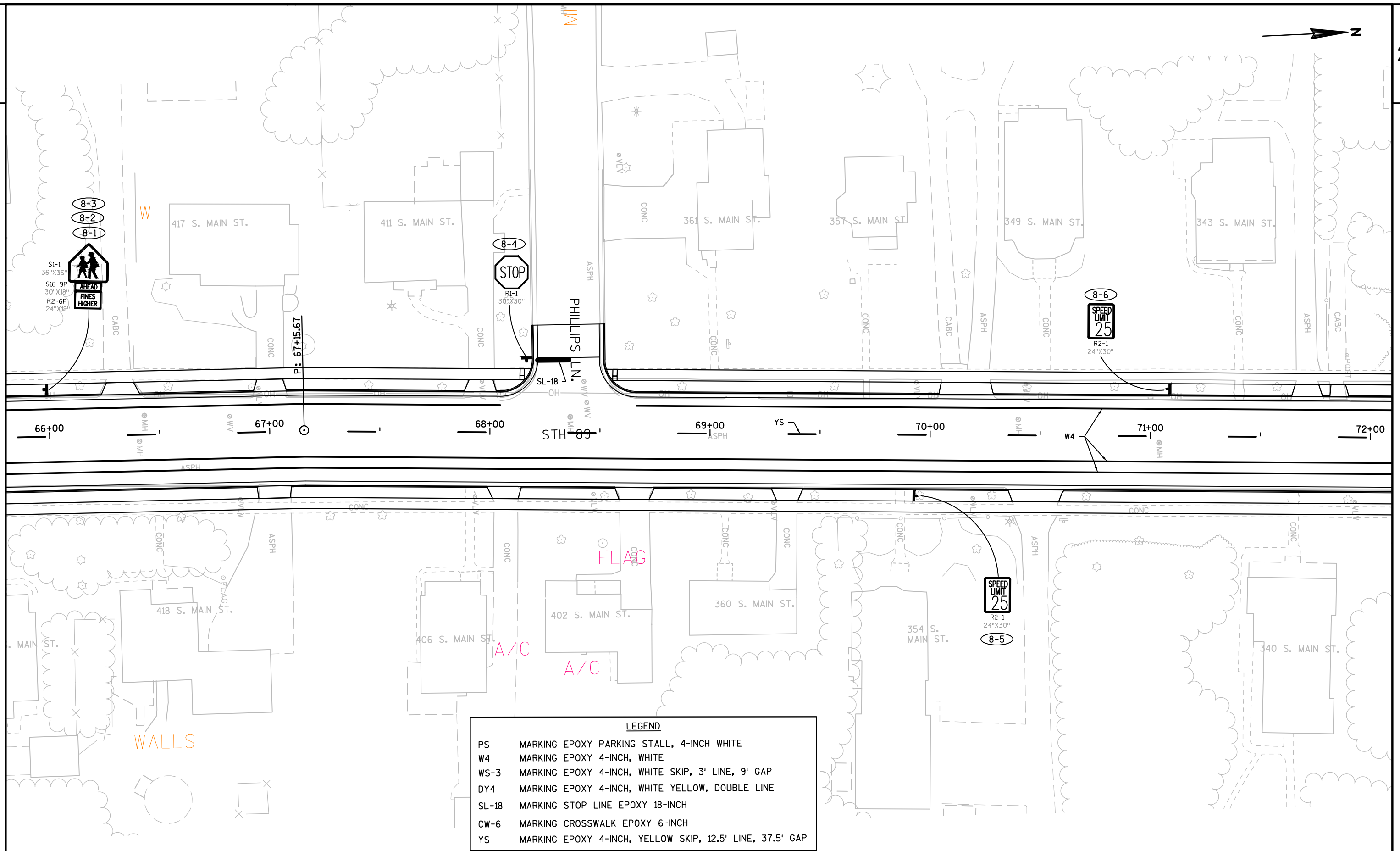
HWY:STH 89

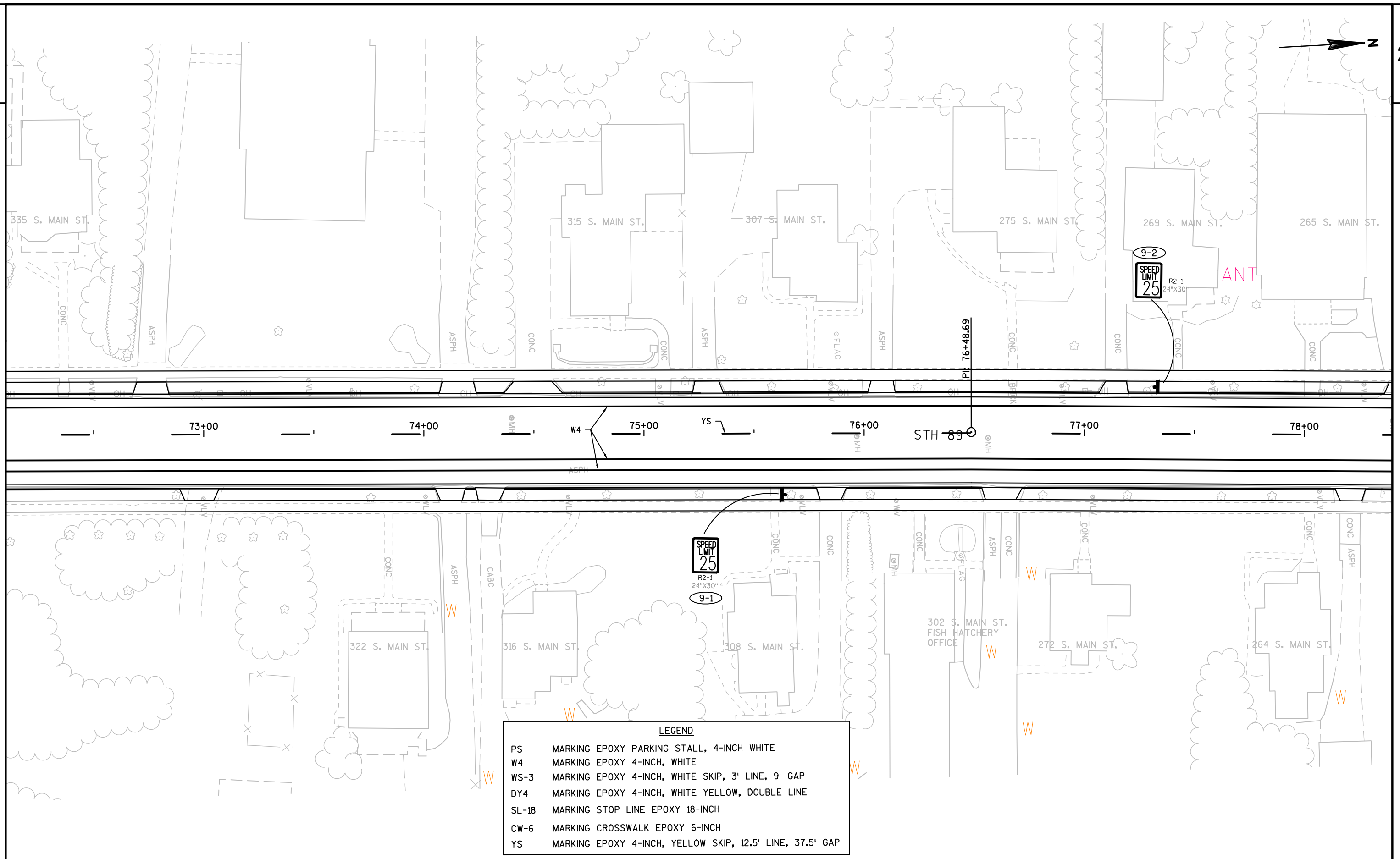
COUNTY:JEFFERSON

PERMANENT SIGNING & PAVEMENT MARKING

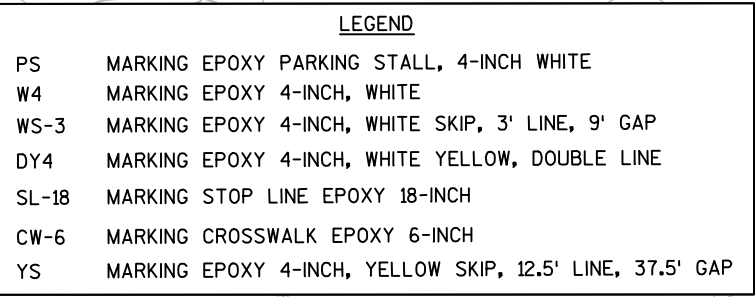
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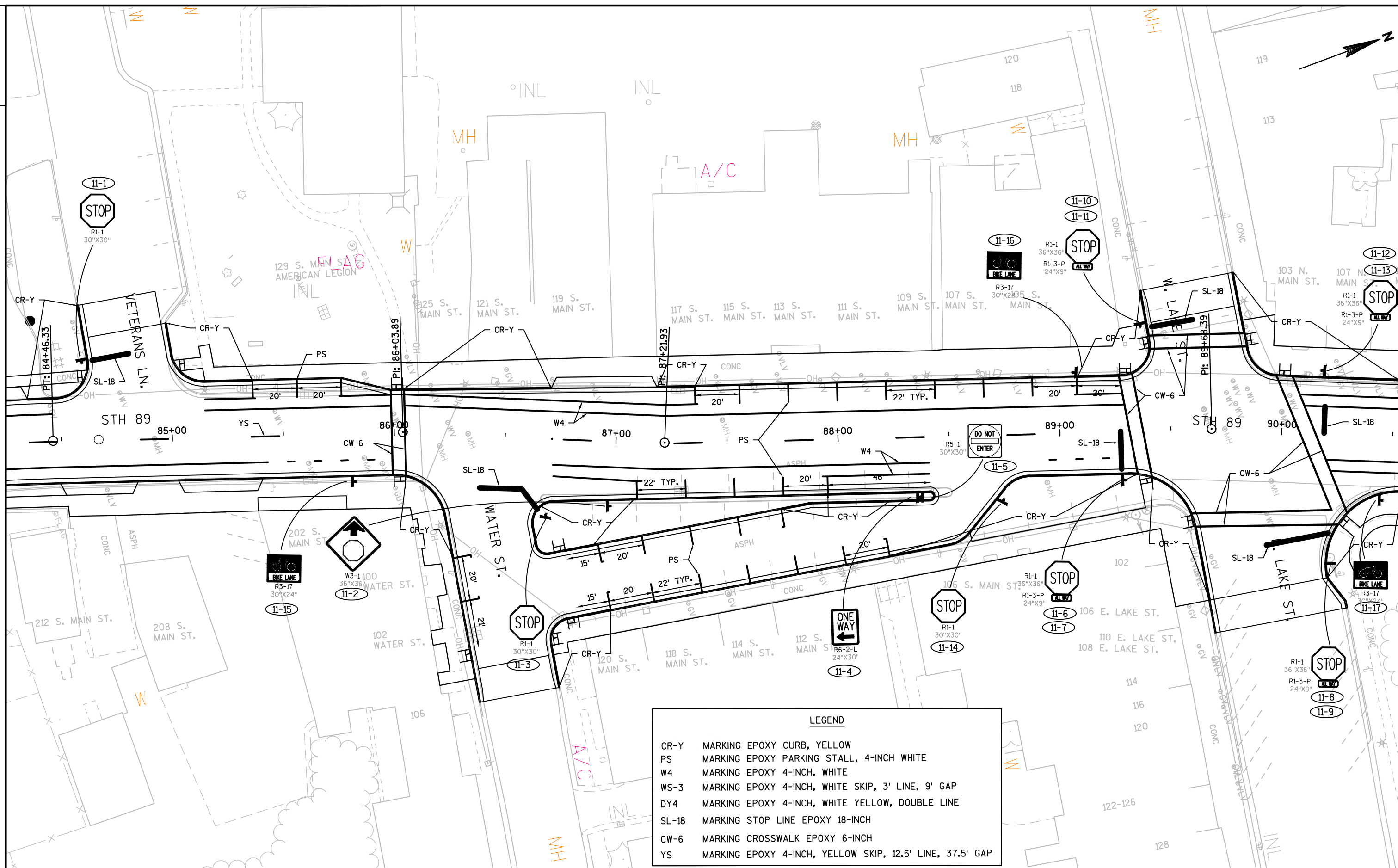
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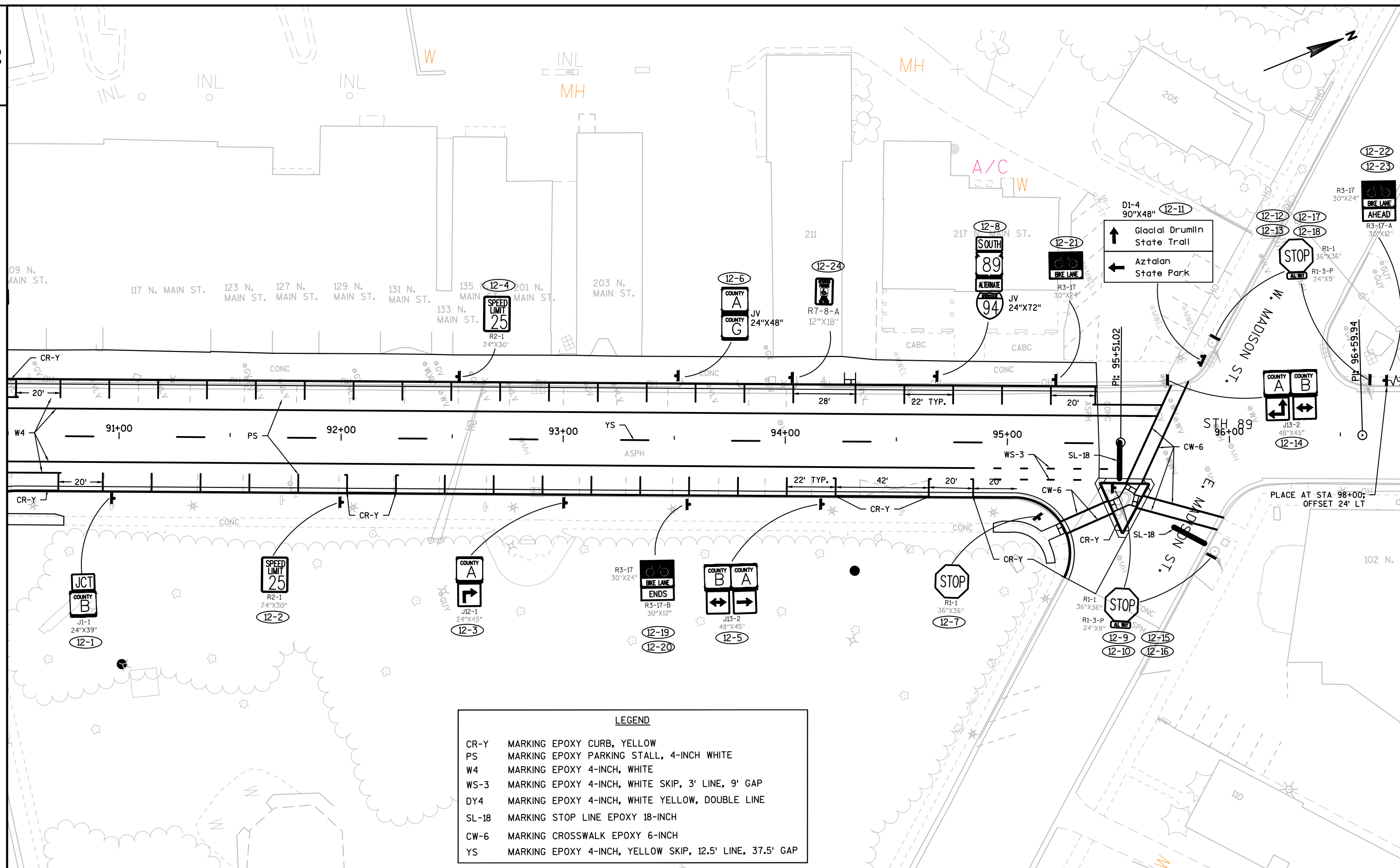




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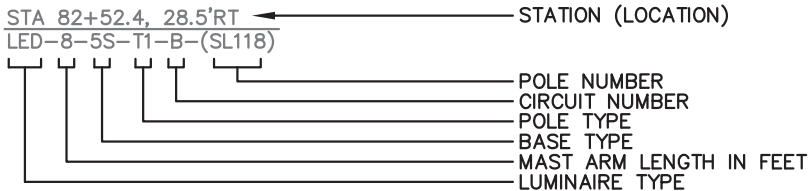
LIGHTING PLANS PREPARED BY:

LEGEND:

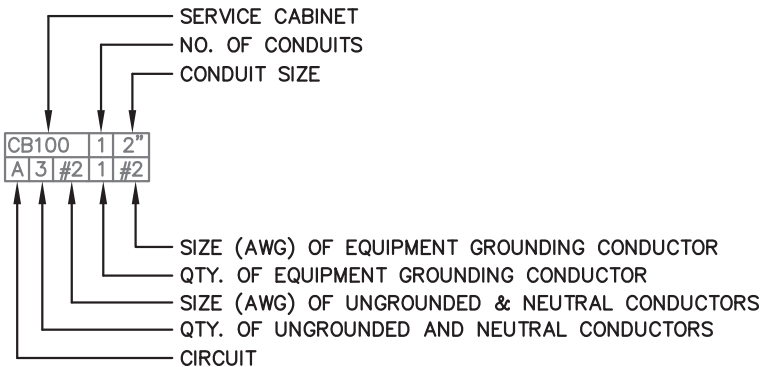
-
- SINGLE ARM LIGHTING UNIT – TYPE 1
(DECORATIVE LIGHT POLE)
-
- ARMLESS LIGHTING UNIT – TYPE 2
(DECORATIVE LIGHT POLE)
-
- LIGHTING CONDUIT (2" SCHEDULE 40 PVC UNLESS NOTED)
-
- CONCRETE CONTROL CABINET BASE/ELECTRICAL SERVICE
-
- PULL BOX (24"x42" STEEL)
-
- POLE MOUNTED RECTANGULAR RAPID FLASHING BEACON W/ SIGN
-
- PUSH BUTTON
-
- SF1 STOP SIGN WITH FLASHER

DATE SIGNATURE

LIGHTING UNIT LEGEND



CONDUIT/CONDUCTOR LEGEND



ABBREVIATIONS:

PWO = PULL WIRE ONLY

NOTES:

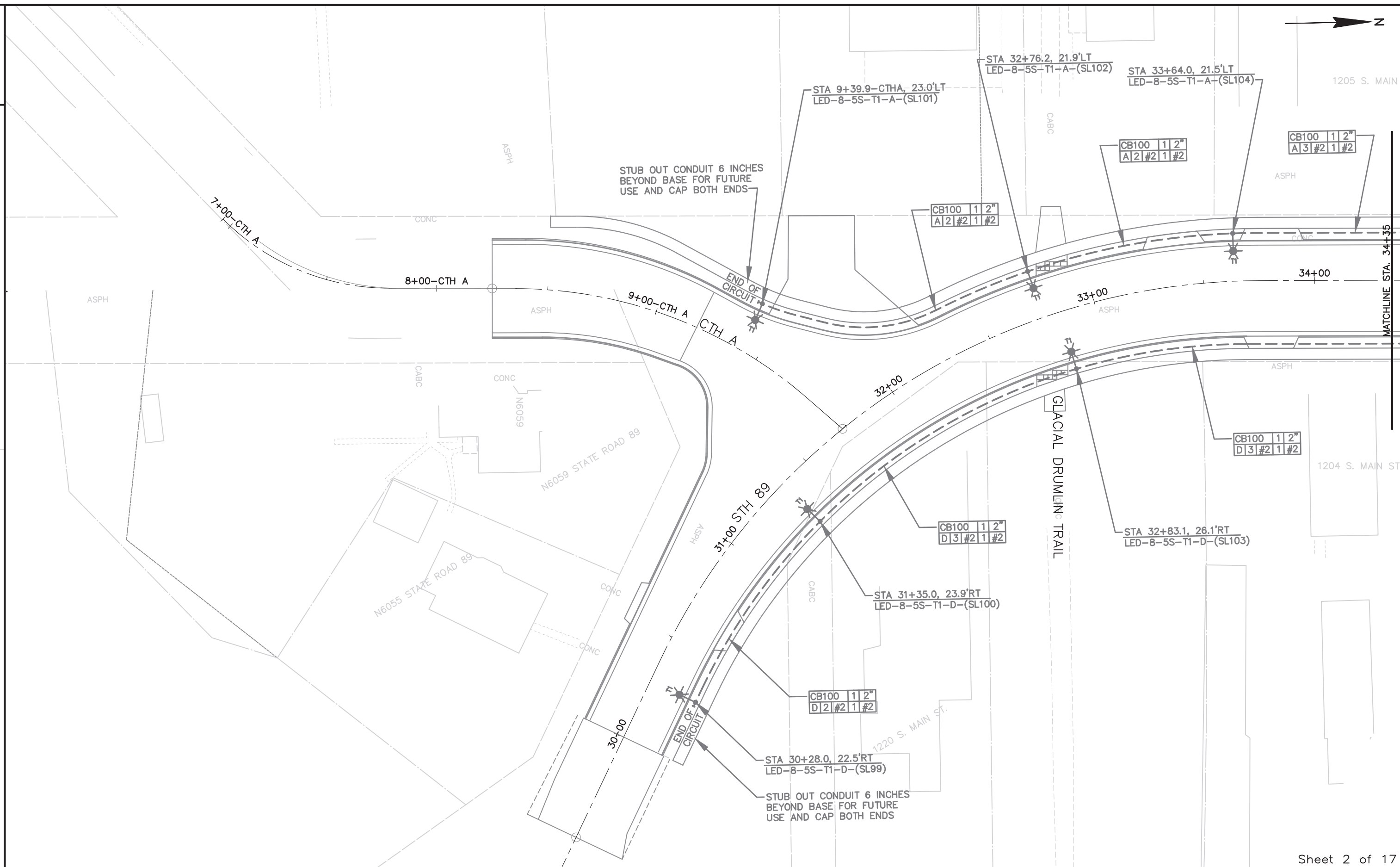
- 1) WISCONSIN DOT ELECTRICAL UNIT SHALL APPROVE THE FINAL LOCATION FOR ALL CONCRETE BASES AND PULLBOXES IN THE FIELD PRIOR TO INSTALLATION. CONTACT THEM 3 DAYS IN ADVANCE.
- 2) PITCH ALL CONDUIT TOWARD PULLBOXES. A 2" DRAIN DUCT TO DITCH OR STORM SEWER REQUIRED FOR ALL PULLBOXES IN LOW POINTS. REFER TO THE MISCELLANEOUS QUANTITIES FOR LOCATIONS OF DRAIN DUCT.
- 3) THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- 4) ALL POLES SHALL BE PLACED A MINIMUM OF 2-3 FEET FROM THE BACK OF CURB.
- 5) CABINET BASES AND THE PULLBOXES AND CONDUIT WITHIN THE AREA OF CABINET BASES SHALL BE INSTALLED PER FIELD CONDITIONS (WITH ENGINEER APPROVAL). VERIFY THE LOCATION OF ALL ELECTRICAL FACILITIES WITH THE ENGINEER PRIOR TO INSTALLING.
- 6) ALL STREET LIGHT CIRCUITS TO BE 120/240 SINGLE PHASE. STREET LIGHTS TO OPERATE AT 120 VOLTS, ALTERNATING PHASE CONDUCTORS FROM POLE TO POLE. CONTRACTOR TO BALANCE ELECTRICAL LOADS ON EACH FEEDER.
- 7) NO SPLICES ALLOWED IN PULLBOXES UNLESS NOTED OTHERWISE.
- 8) CONDUIT MUST BE PLACED PRIOR TO CURB AND GUTTER AND SIDEWALK CONSTRUCTION.
- 9) FLASHER ASSEMBLIES TO OPERATE AT 120VOLTS.
- 10) FOR LAKE MILLS LIGHT AND WATER ASSISTANCE CONTACT MR. CHRIS EVENSON, LEAD FOREMAN, AT 920-648-4026.

HIGHWAY LIGHTING
STH 89 (N/S MAIN ST.)
CITY OF LAKE MILLS
JEFFERSON COUNTY

DESIGN: FORSTER ELECTRICAL ENGINEERING

DATE: 2017-10-10

REV: 2



Sheet 2 of 17

PROJECT NO:3300-01-73

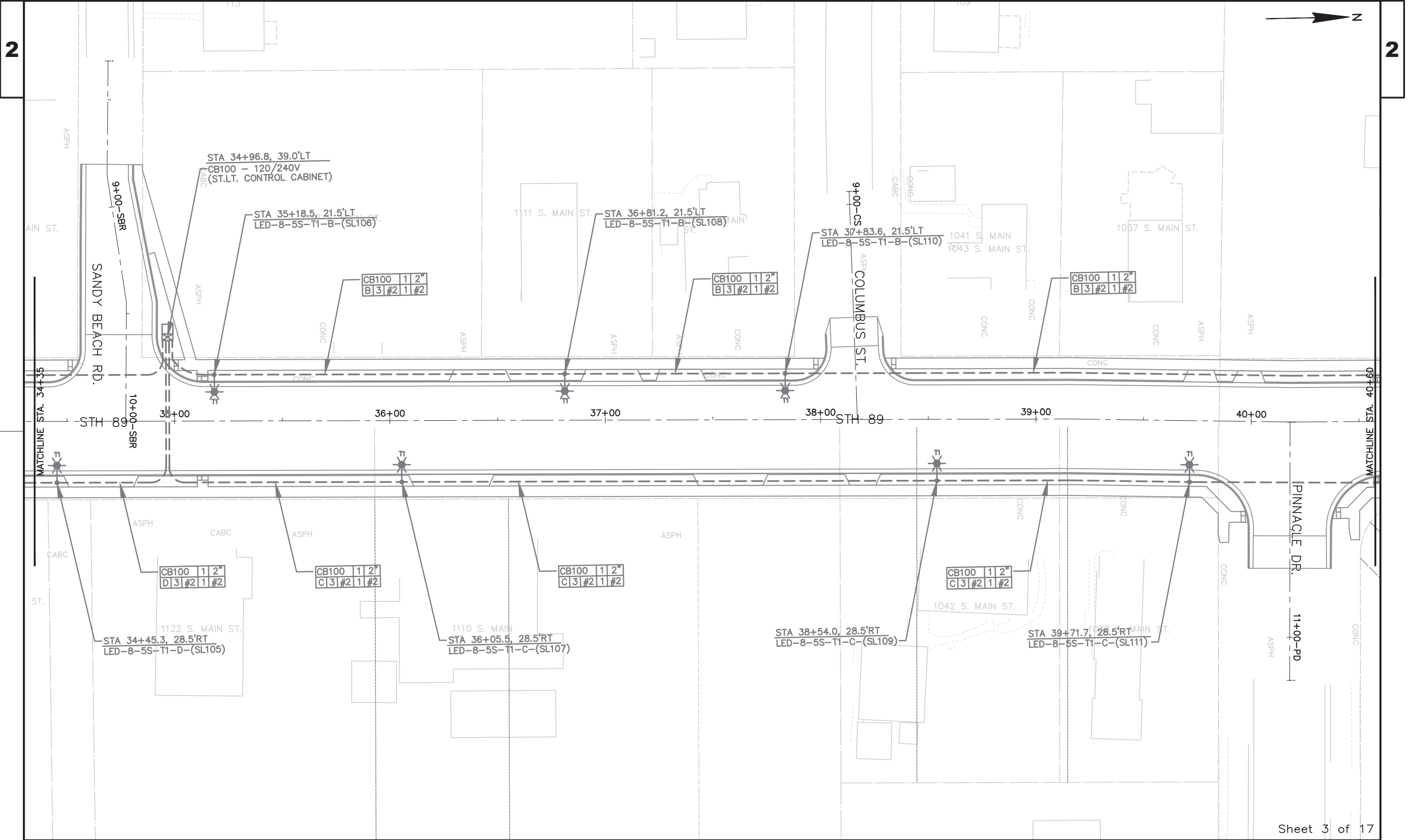
HWY:STH 89

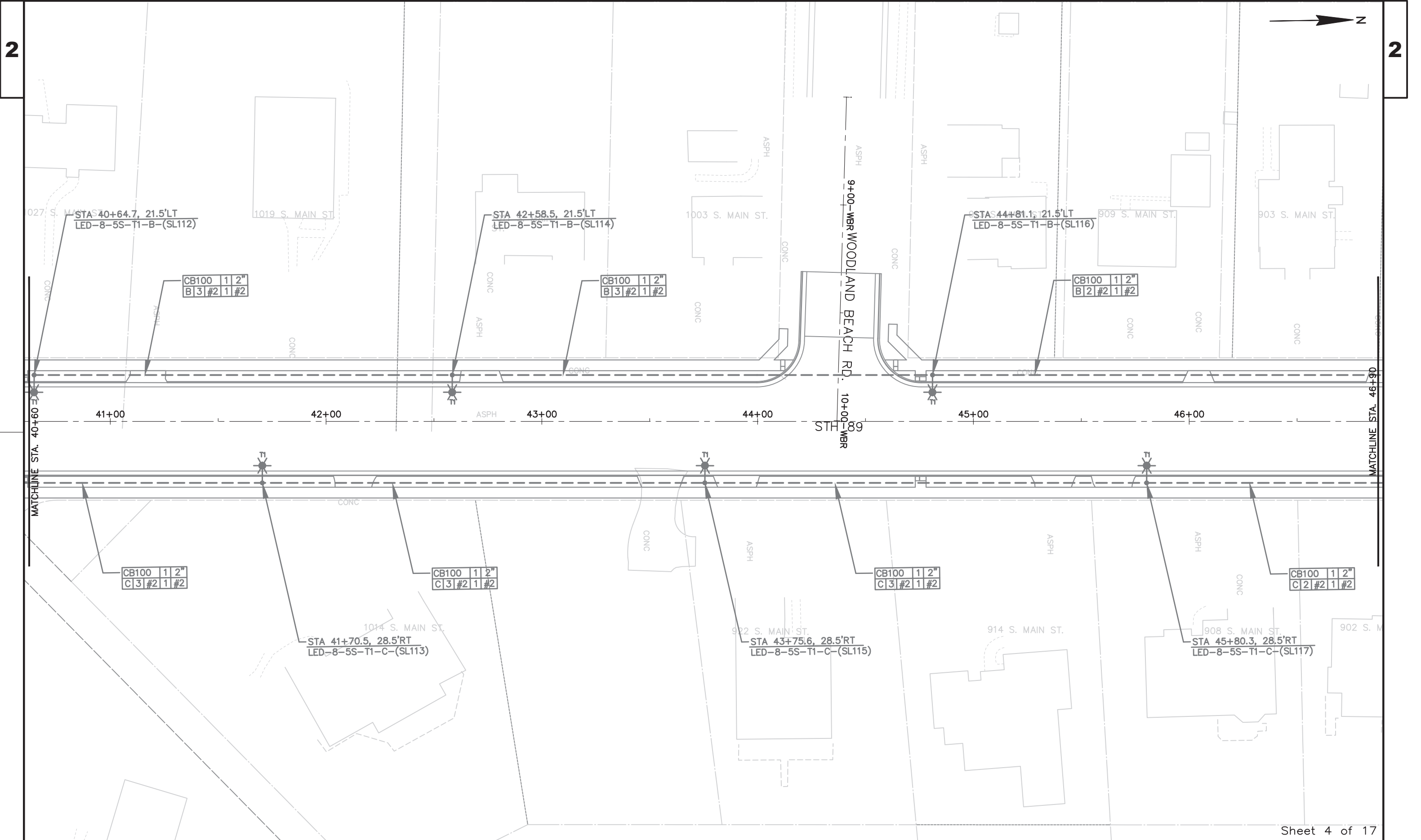
COUNTY:JEFFERSON

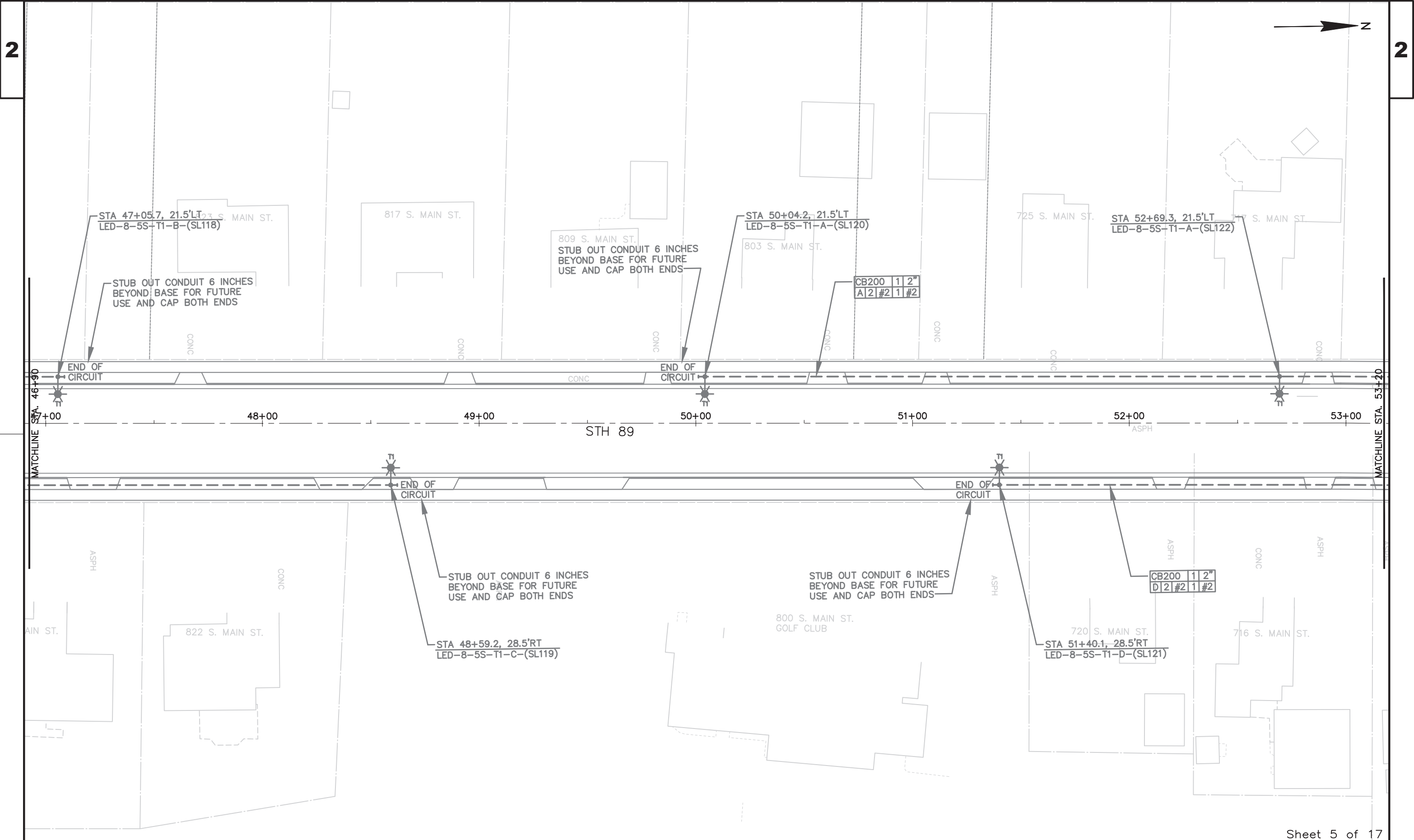
LIGHTING PLAN - LAYOUTS

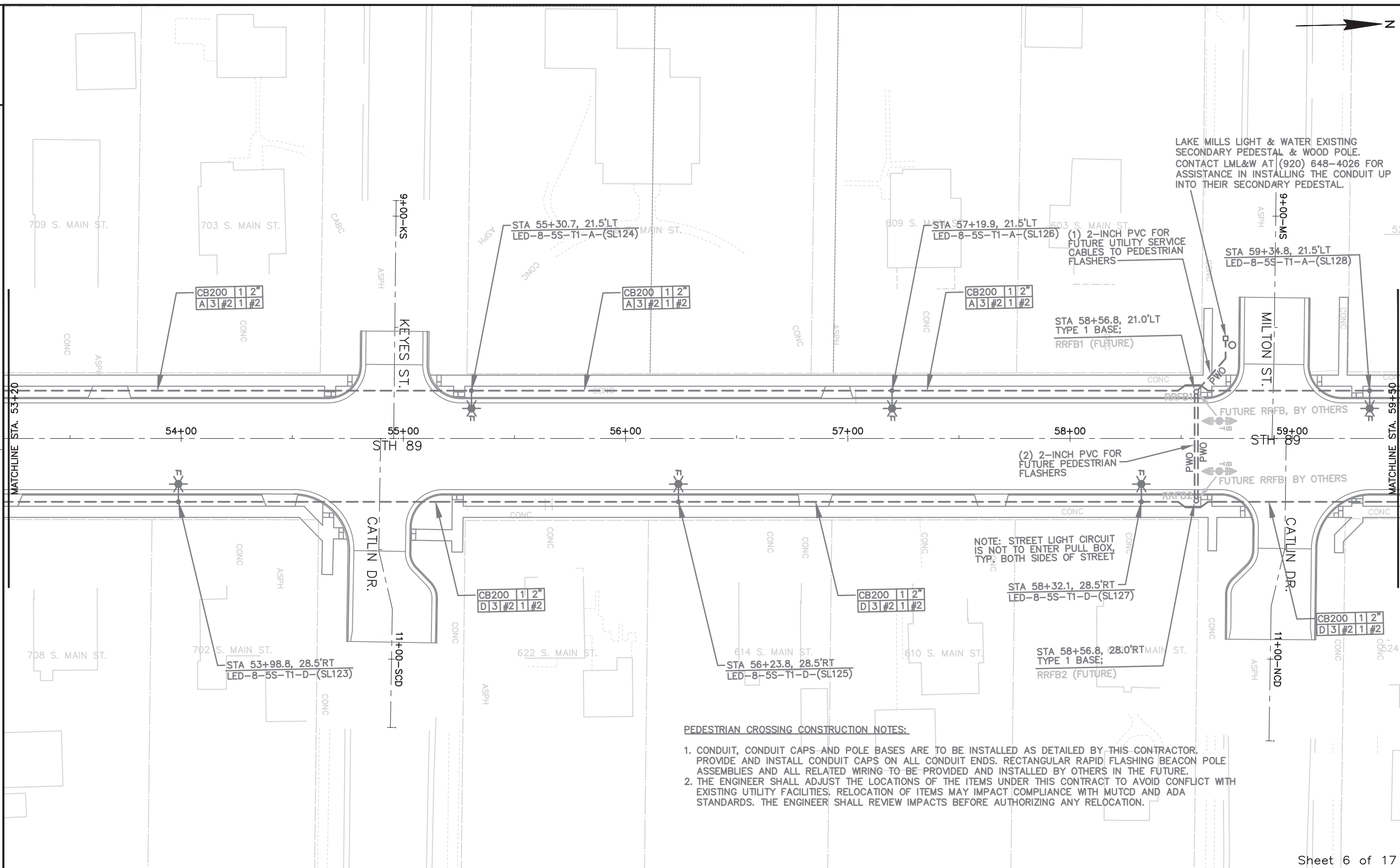
SHEET 128

E

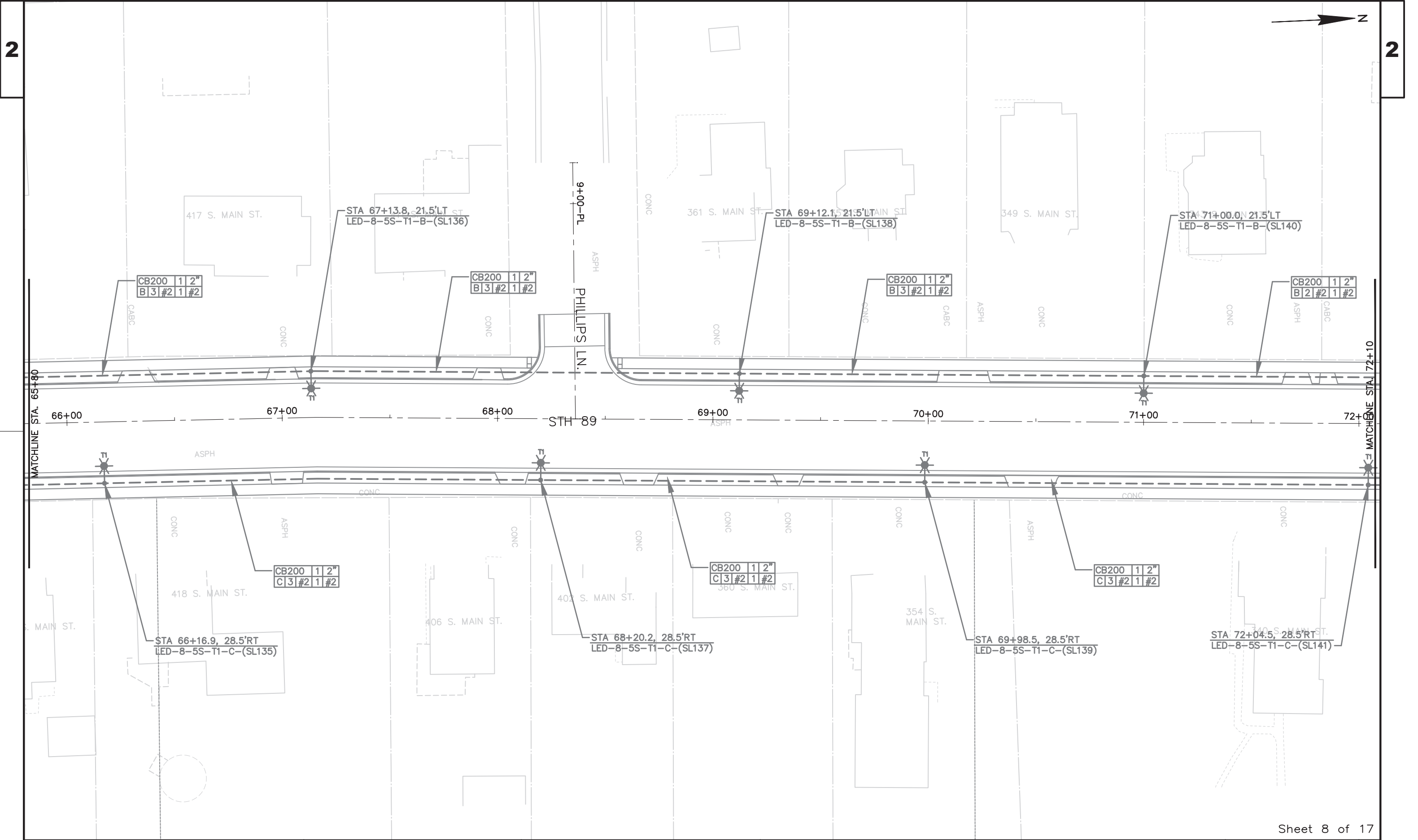






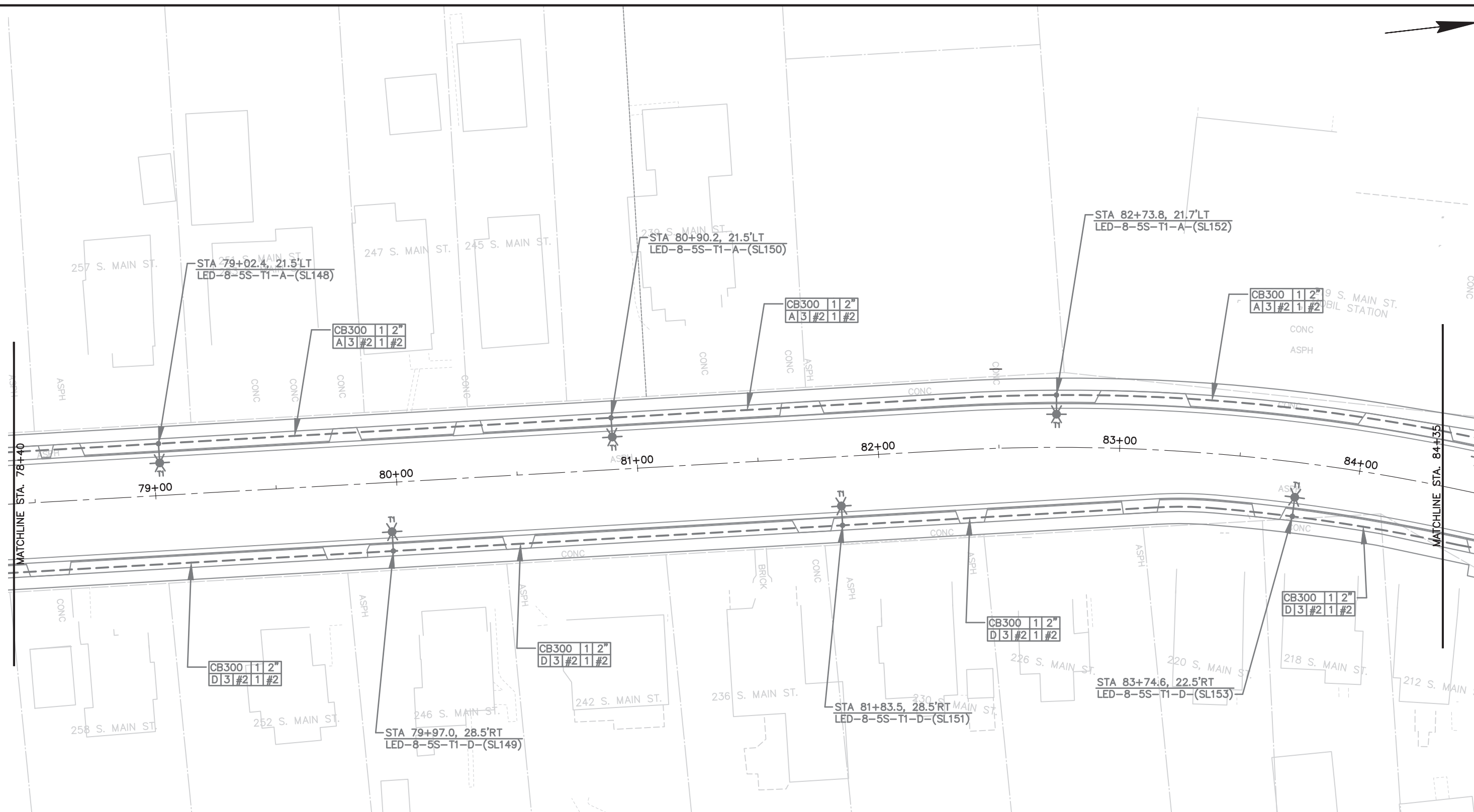


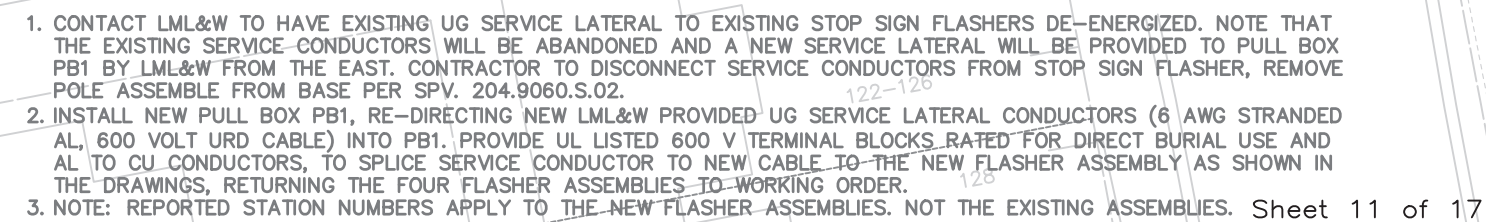




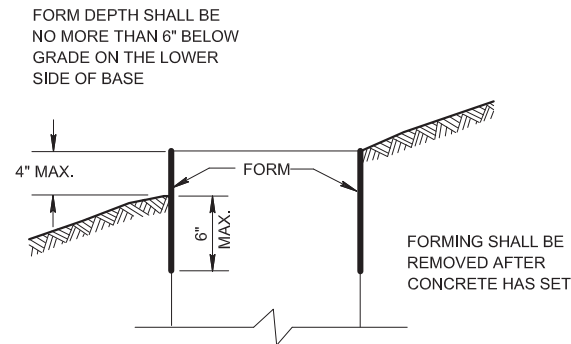
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FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE
	SPECIAL TYPE 5
APPROX. CUBIC YARDS OF CONCRETE	0.58
LBS. OF HOOP BAR STEEL	18
LBS. OF VERTICAL BAR STEEL	18

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

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

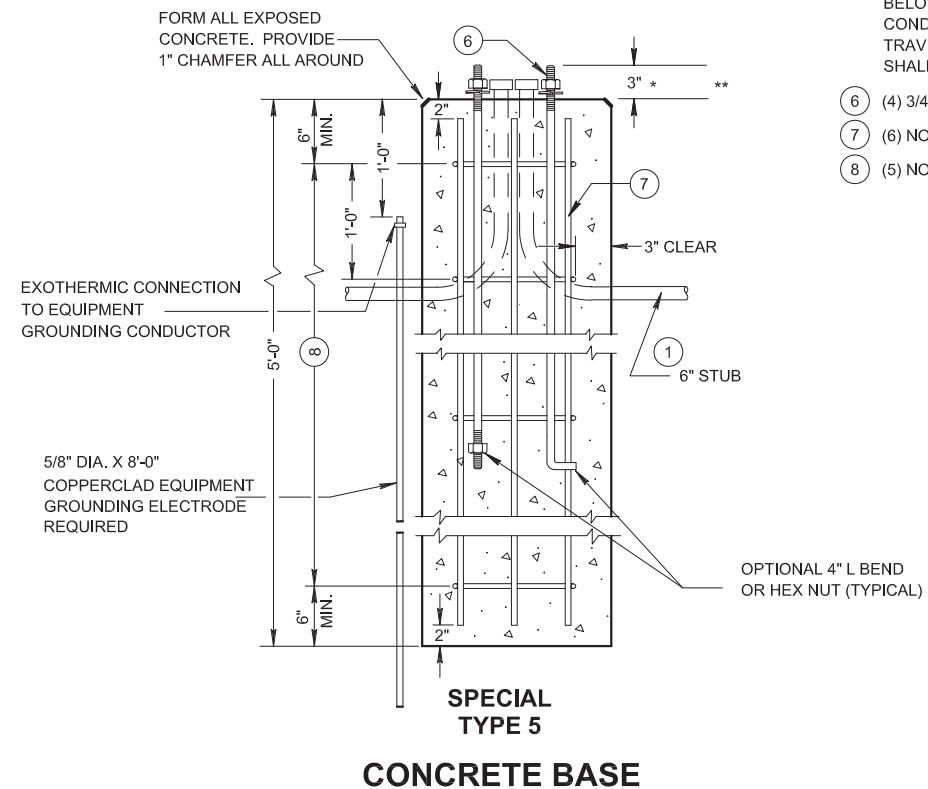
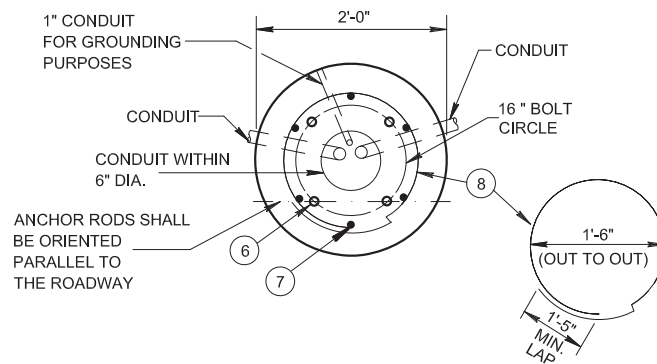
CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

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

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

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

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



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

** FOR NONBREAKAWAY INSTALLATIONS, 4 -1/2" \ ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

GENERAL NOTES (CONTINUED)

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

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

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

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

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

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

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

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

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

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

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

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

- ① THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.
- ⑥ (4) 3/4" DIA. X 18" ANCHOR RODS.
- ⑦ (6) NO.4 X 4-8" BAR STEEL REINFORCEMENT.
- ⑧ (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

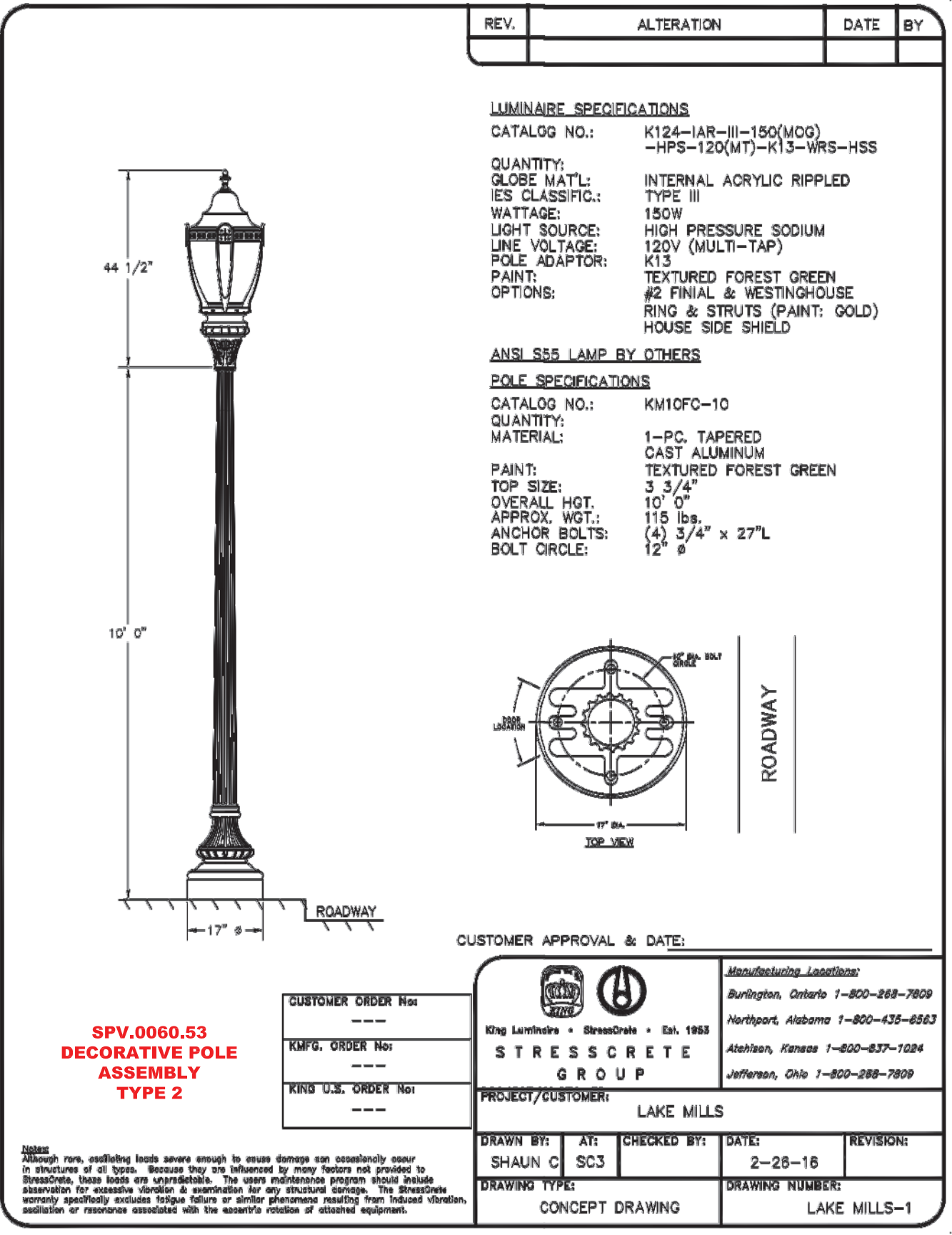
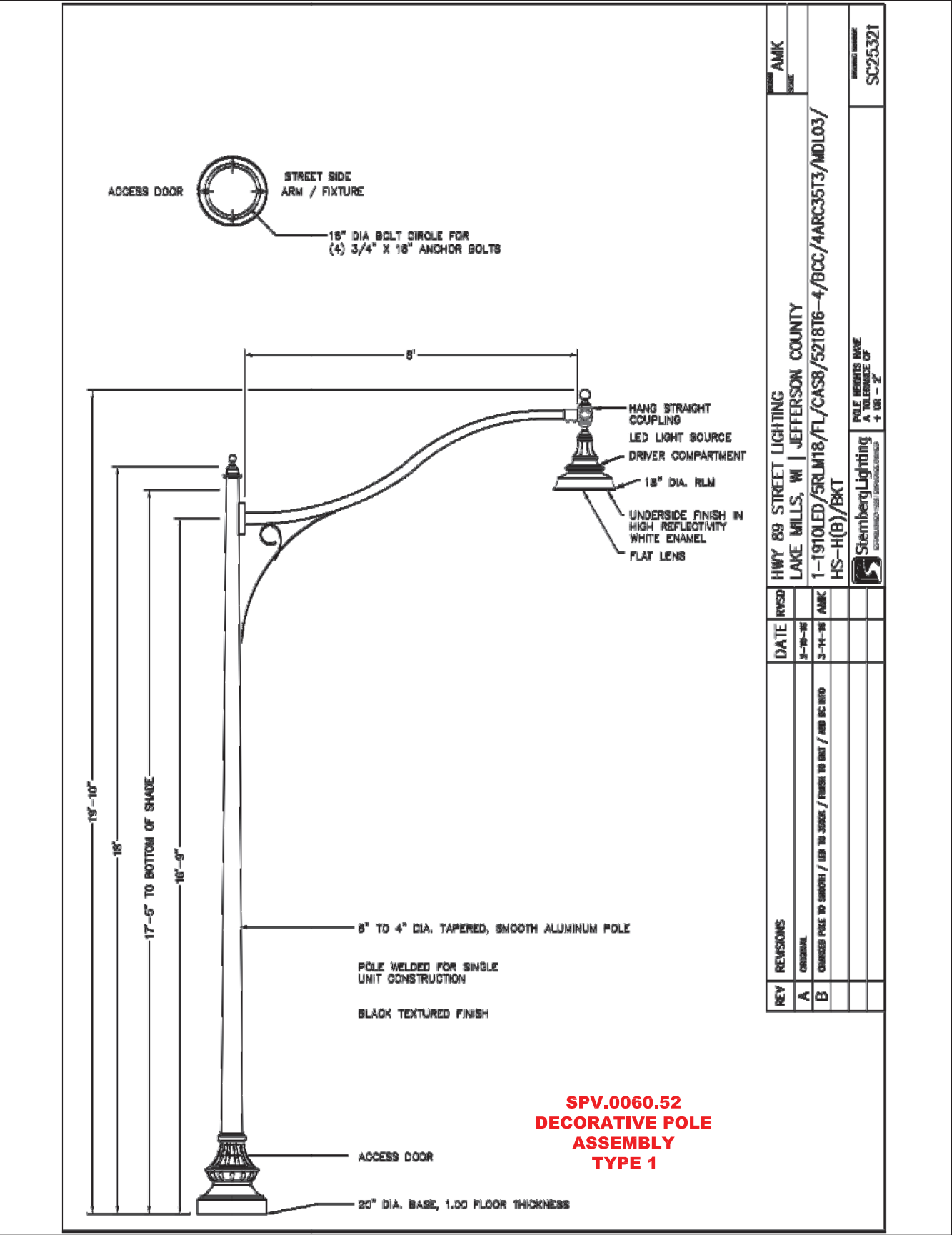
Sheet 13 of 17

**SPECIAL
CONCRETE BASE
TYPE 5**

DESIGN: FORSTER ELECTRICAL ENGINEERING

DATE: 2017-10-10

REV: 1



REV.	ALTERATION	DATE	BY

LUMINAIRE SPECIFICATIONS

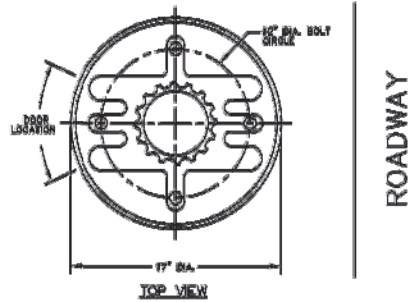
CATALOG NO.: K124-IAR-III-150(MOG)
-HPS-120(MT)-K13-WRS-HSS

QUANTITY:
GLOBE MAT'L: INTERNAL ACRYLIC RIPPLED
IES CLASSIFIC.: TYPE III
WATTAGE: 150W
LIGHT SOURCE: HIGH PRESSURE SODIUM
LINE VOLTAGE: 120V (MULTI-TAP)
POLE ADAPTOR: K13
PAINT: TEXTURED FOREST GREEN
OPTIONS: #2 FINIAL & WESTINGHOUSE
RING & STRUTS (PAINT: GOLD)
HOUSE SIDE SHIELD

ANSI S85 LAMP BY OTHERS

POLE SPECIFICATIONS

CATALOG NO.: KM10FC-10
QUANTITY:
MATERIAL: 1-PC. TAPERED
CAST ALUMINUM
PAINT: TEXTURED FOREST GREEN
TOP SIZE: 3 3/4"
OVERALL HGT: 10' 0"
APPROX. WGT.: 115 lbs.
ANCHOR BOLTS: (4) 3/4" x 27"L
BOLT CIRCLE: 12" Ø



CUSTOMER APPROVAL & DATE:

CUSTOMER ORDER No:

KMFG. ORDER No:

KING U.S. ORDER No:

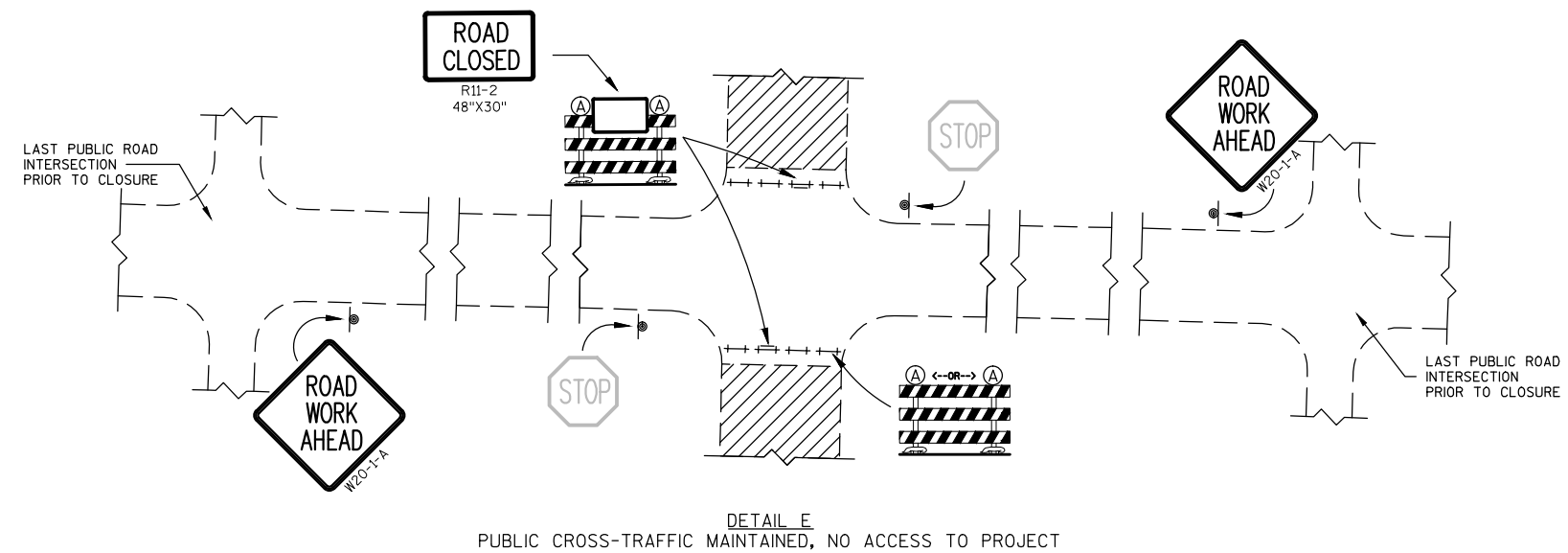
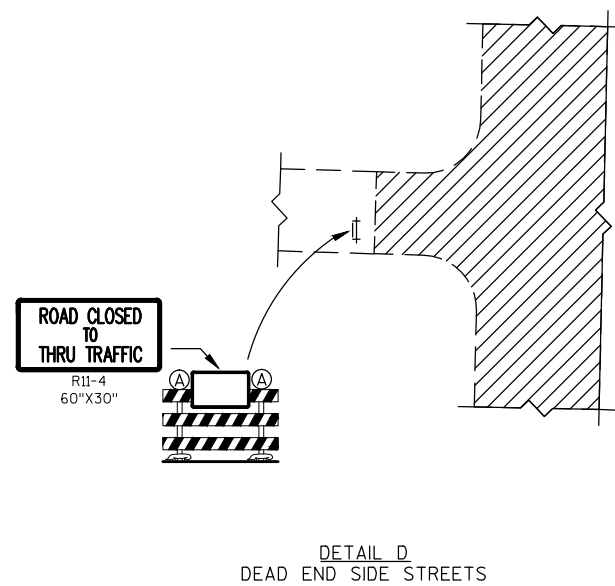
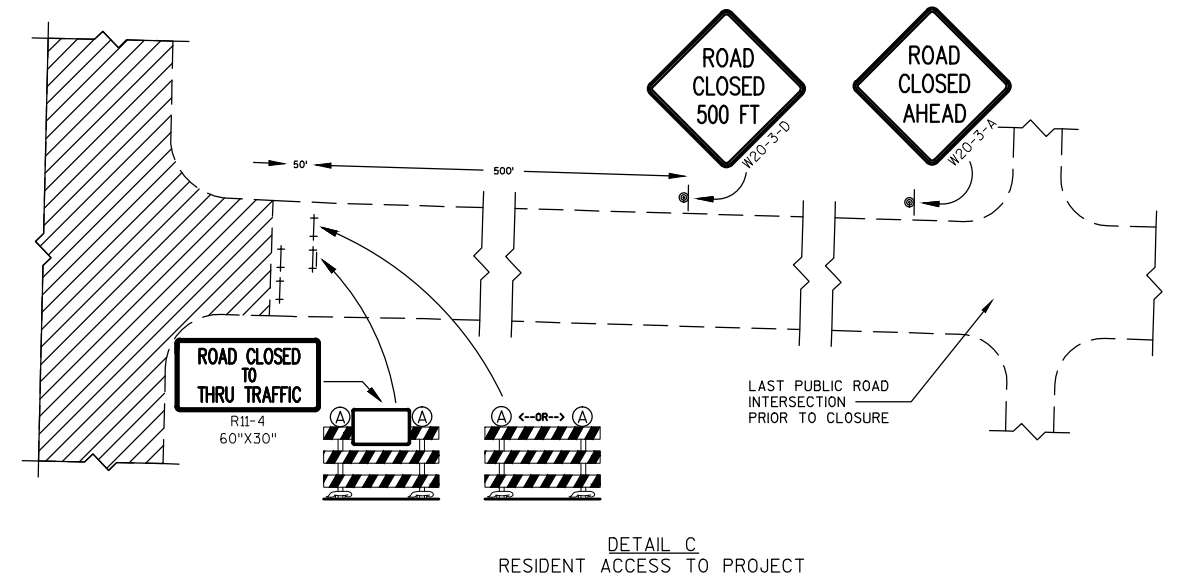
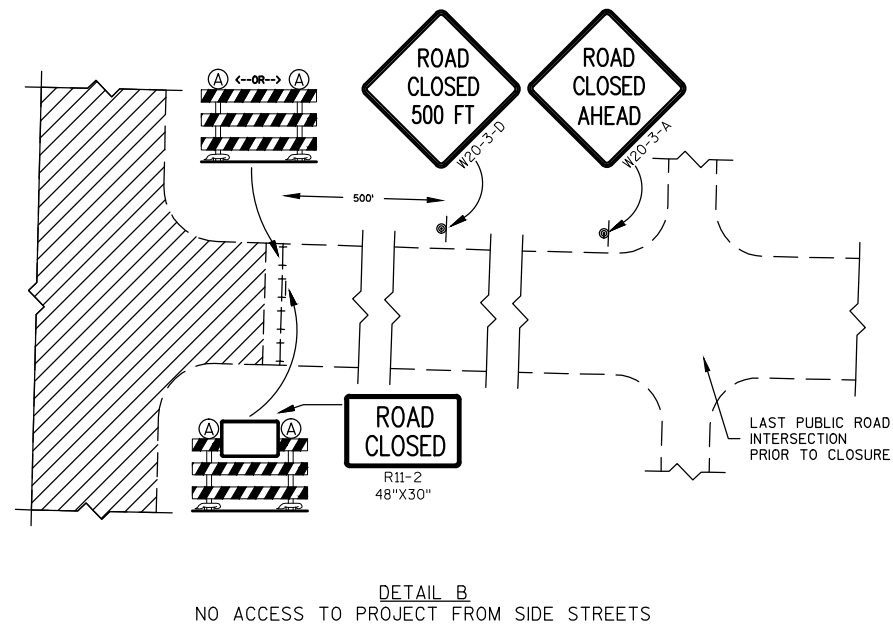
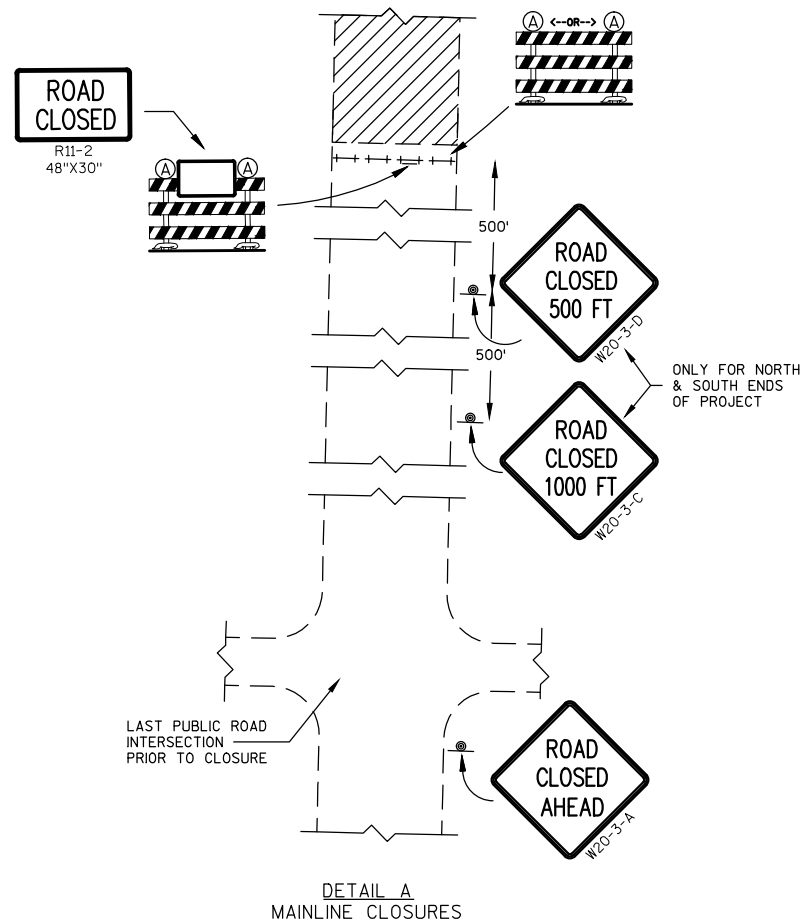


Manufacturing Locations:
Burlington, Ontario 1-800-268-7809
Northport, Alabama 1-800-436-6563
Atchison, Kansas 1-800-837-1024
Jefferson, Ohio 1-800-268-7809

PROJECT/CUSTOMER: LAKE MILLS

DRAWN BY: SHAUN C
AT: SC3
CHECKED BY:
DATE: 2-26-16
REVISION:
DRAWING TYPE: CONCEPT DRAWING
DRAWING NUMBER: LAKE MILLS-1

Notes:
Although rare, oscillating loads severe enough to cause damage can occasionally occur in structures of all types. Because they are influenced by many factors not provided to StressCrete, these loads are unpredictable. The users maintenance program should include observation for excessive vibration & examination for any structural damage. The StressCrete warranty specifically excludes fatigue failure or similar phenomena resulting from induced vibration, oscillation or resonance associated with the eccentric rotation of attached equipment.



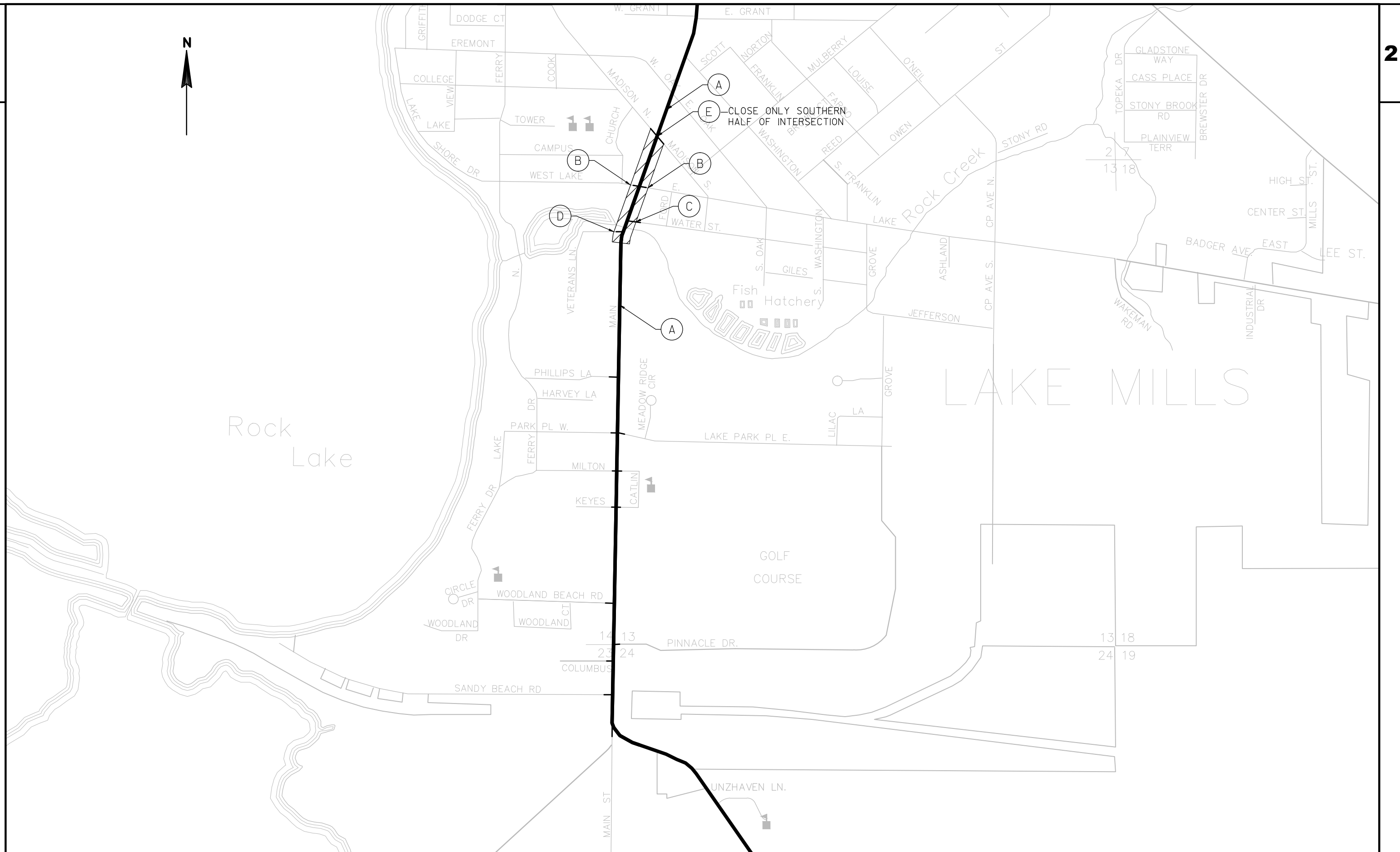
*REFER TO TRAFFIC CONTROL SHEETS
FOR LOCATIONS OF EACH DETAIL

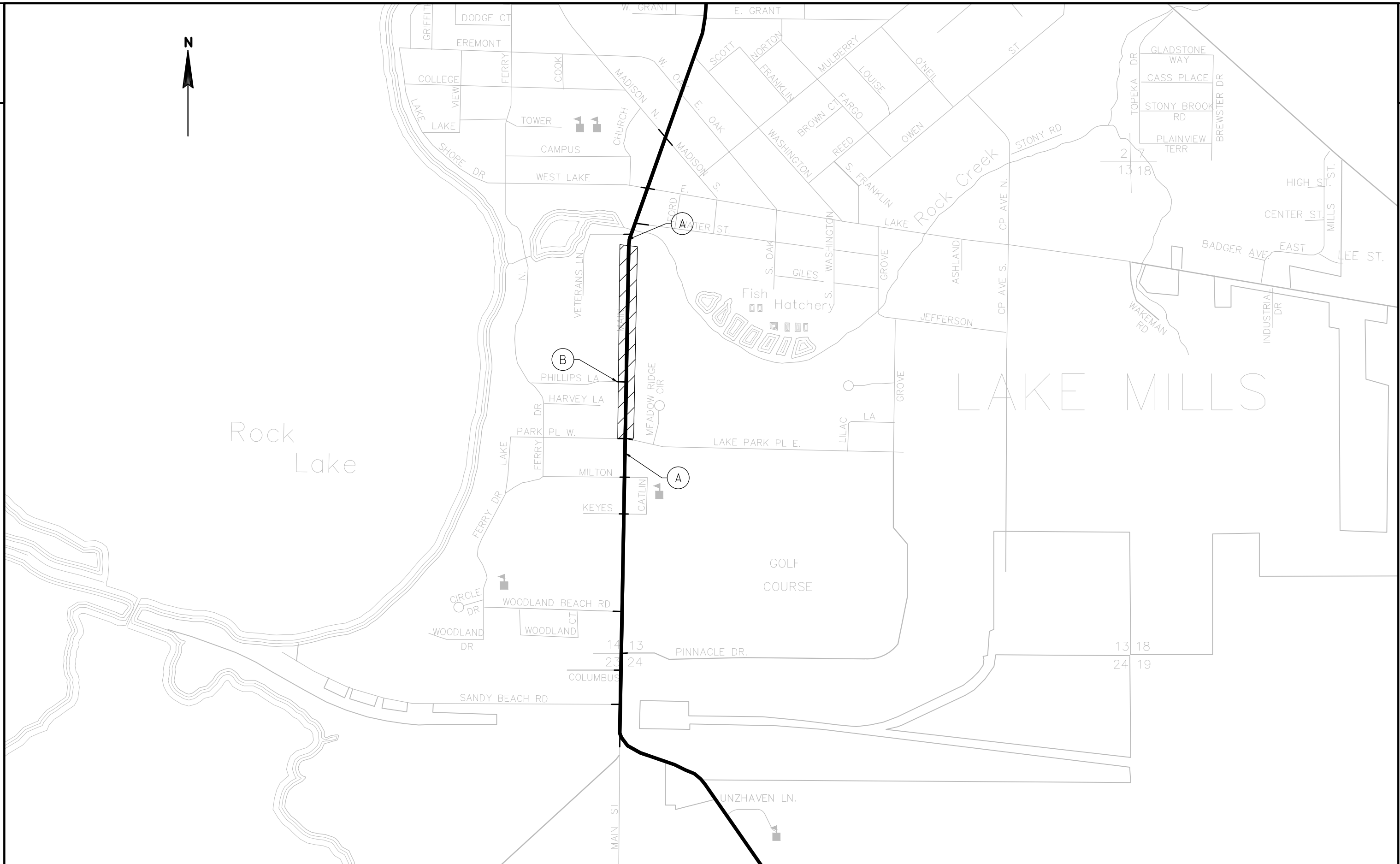
LEGEND

- (A) - TYPE A WARNING LIGHT (FLASHING)
- † - TYPE III BARRICADE
- †† - TYPE III BARRICADE WITH ATTACHED SIGN
- ⊙ - POST MOUNTED WARNING SIGN
- ▨ - WORK ZONE

2

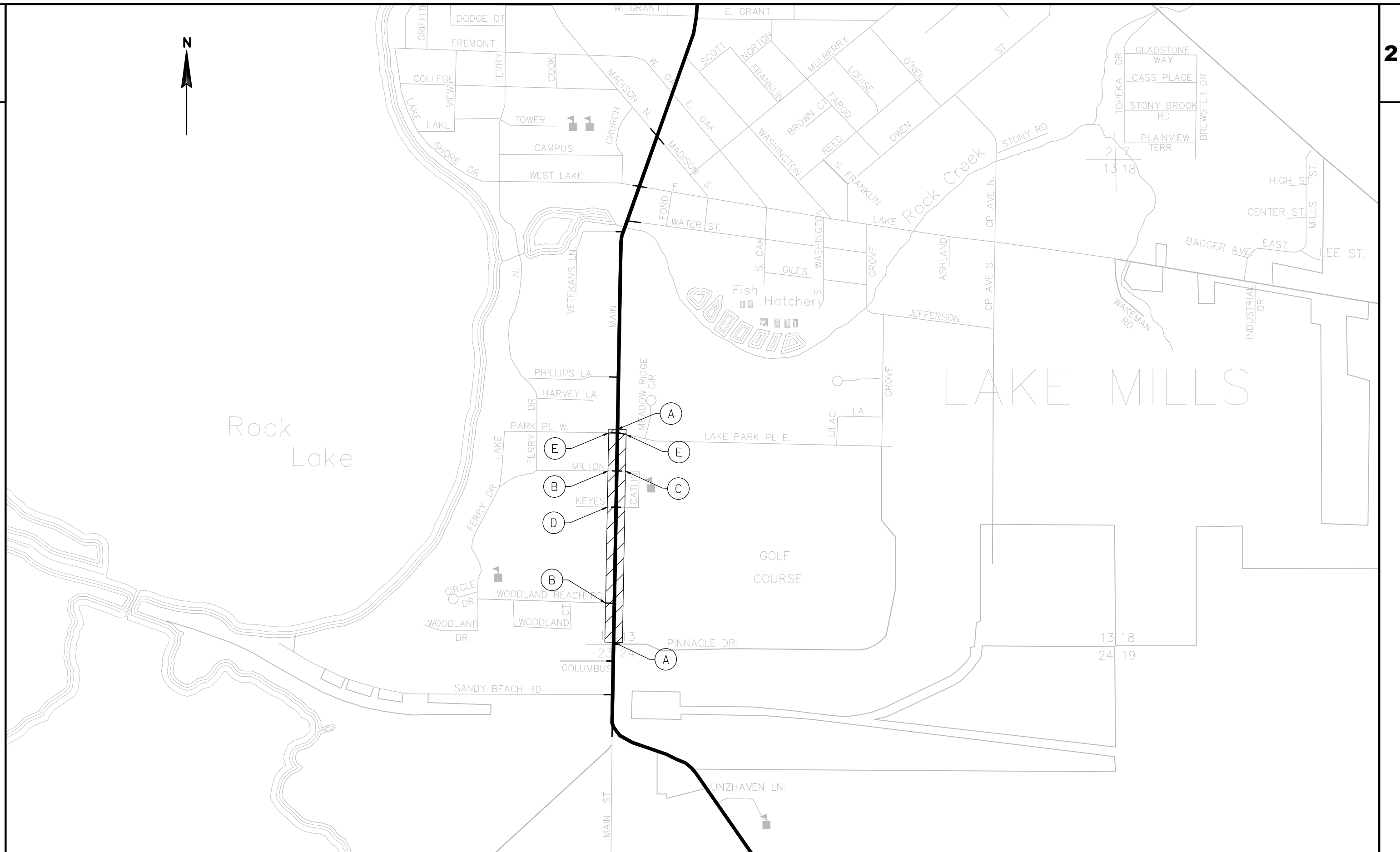
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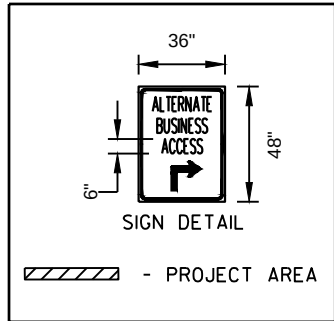
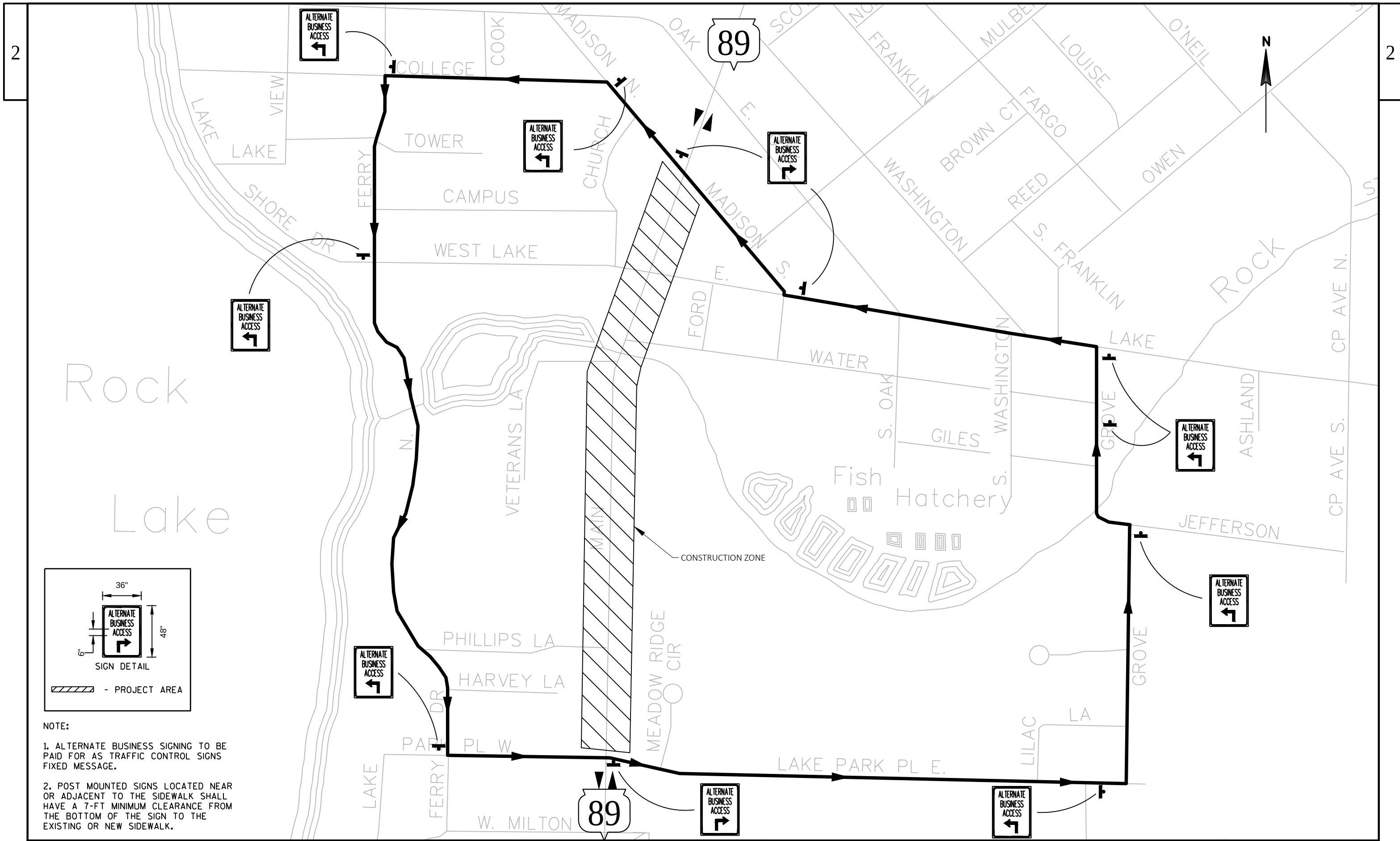


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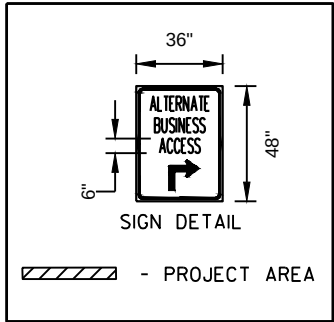
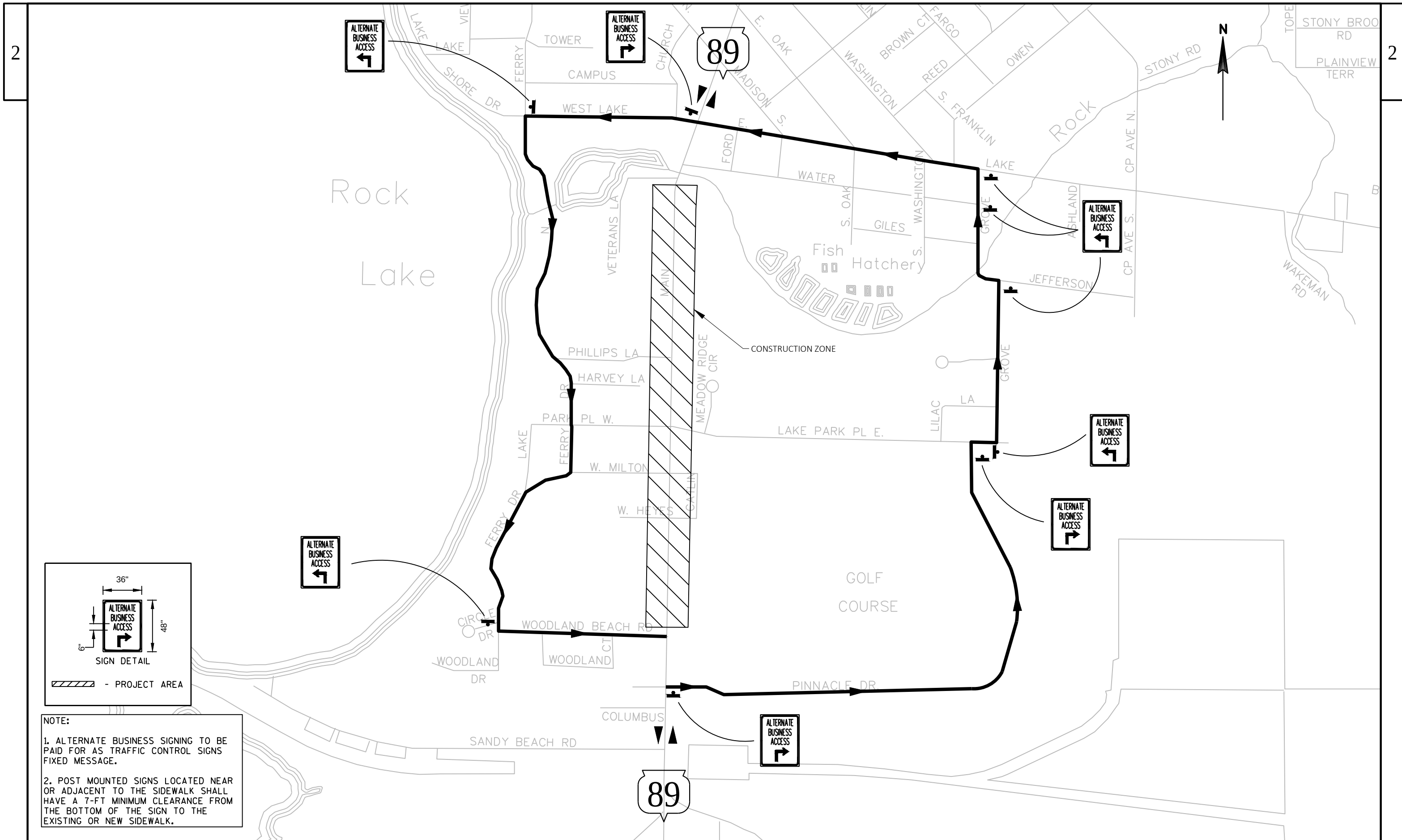
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- NOTE:
1. ALTERNATE BUSINESS SIGNING TO BE PAID FOR AS TRAFFIC CONTROL SIGNS FIXED MESSAGE.
 2. POST MOUNTED SIGNS LOCATED NEAR OR ADJACENT TO THE SIDEWALK SHALL HAVE A 7-FT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE EXISTING OR NEW SIDEWALK.



NOTE:

1. ALTERNATE BUSINESS SIGNING TO BE PAID FOR AS TRAFFIC CONTROL SIGNS FIXED MESSAGE.

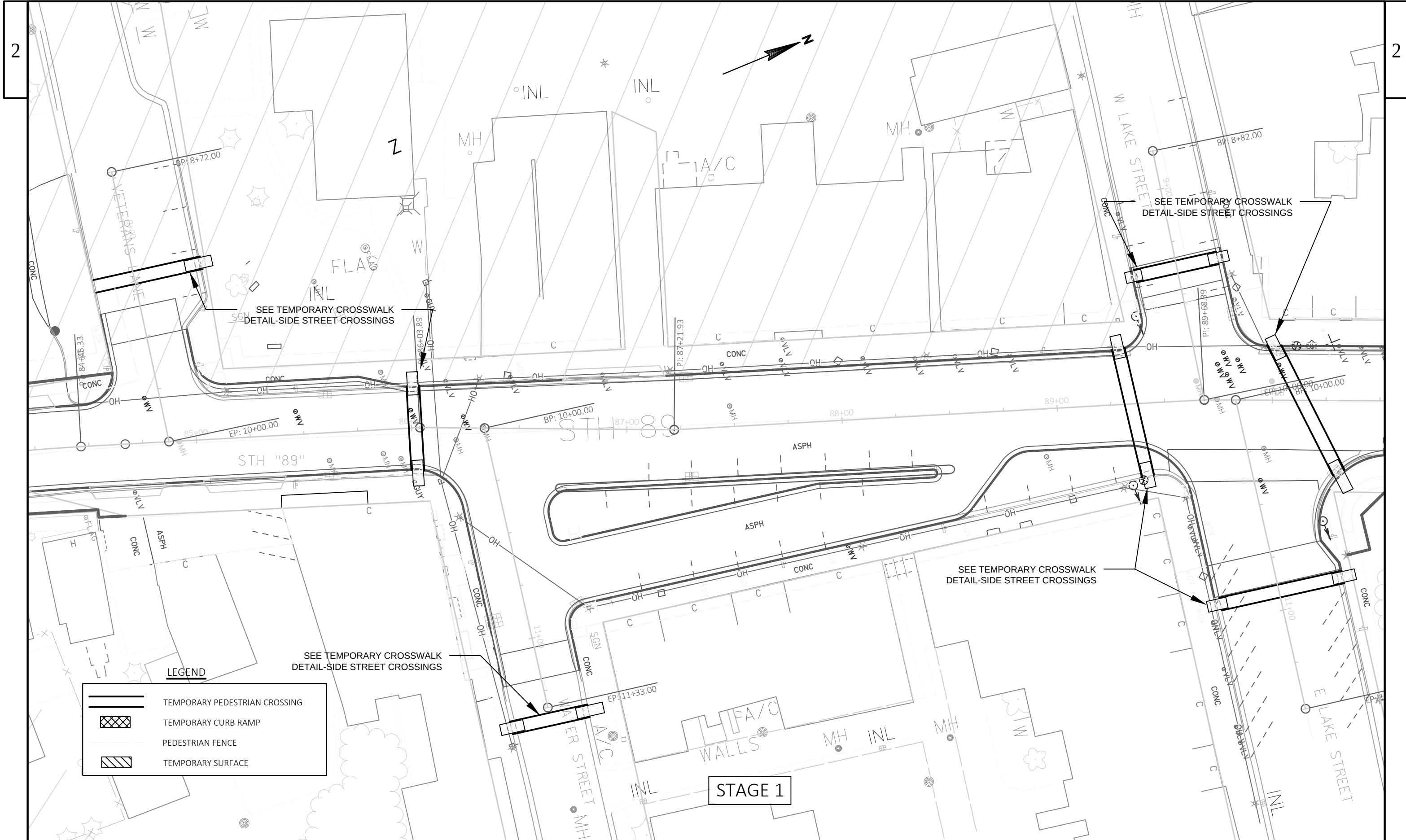
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NOTE:

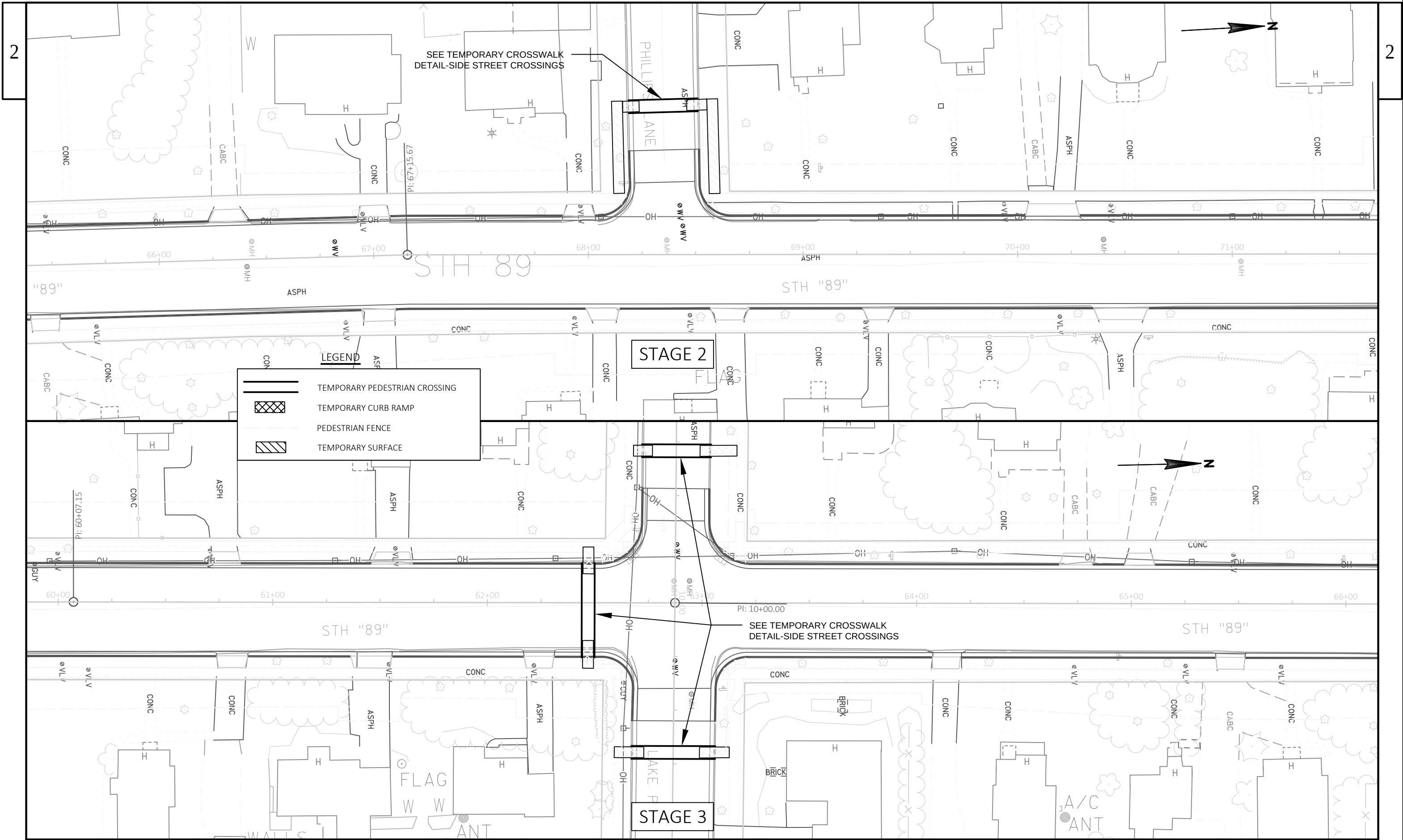
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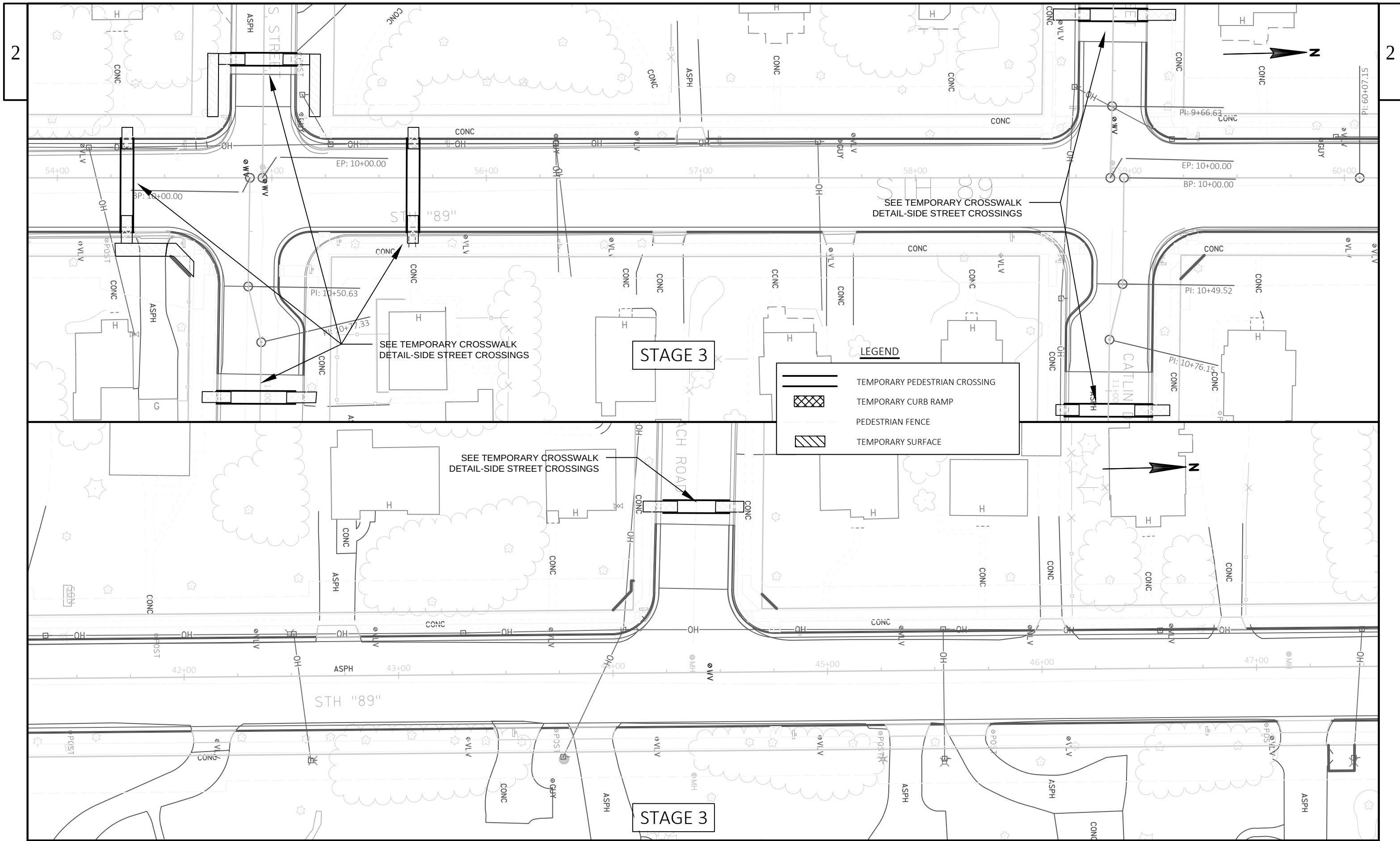


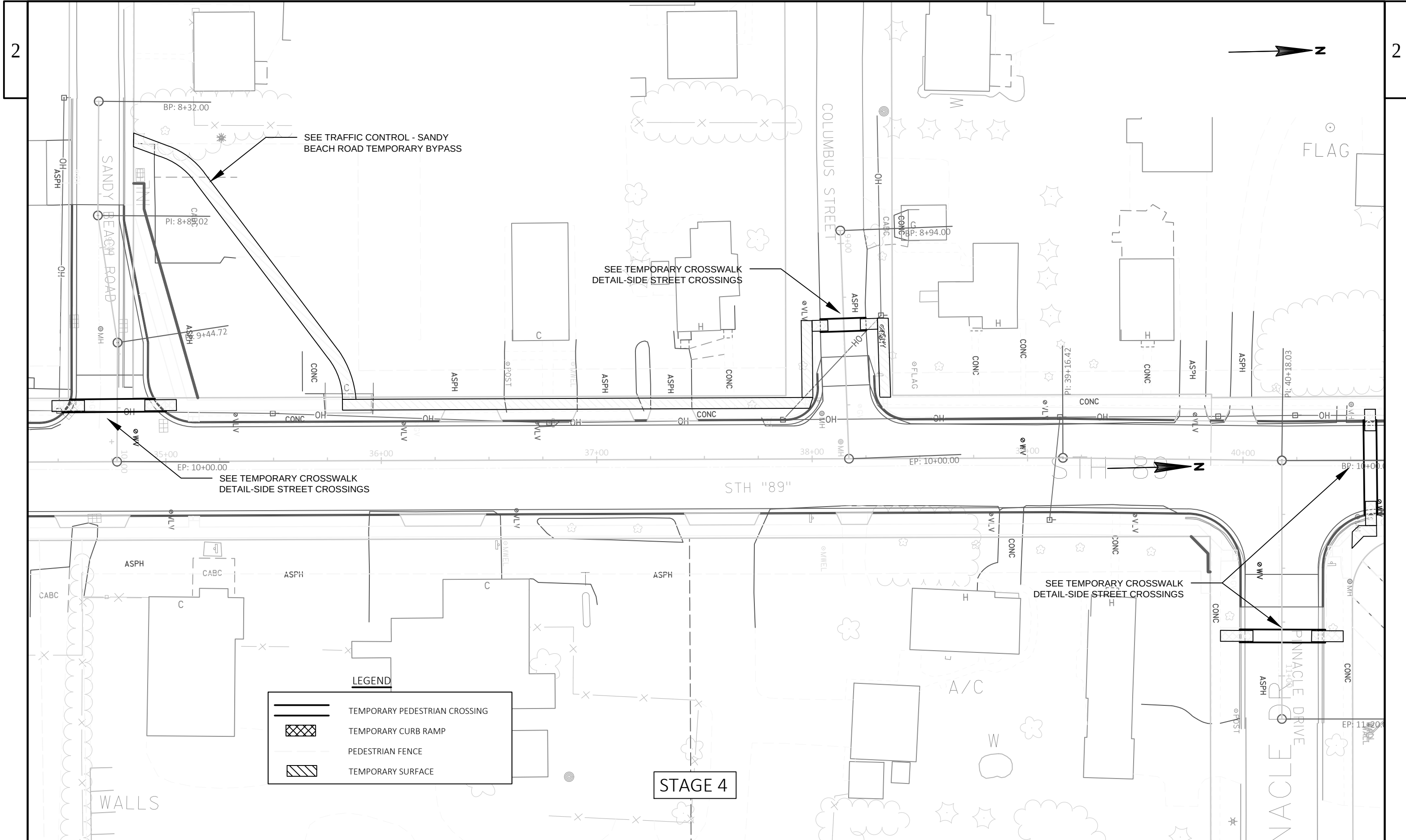


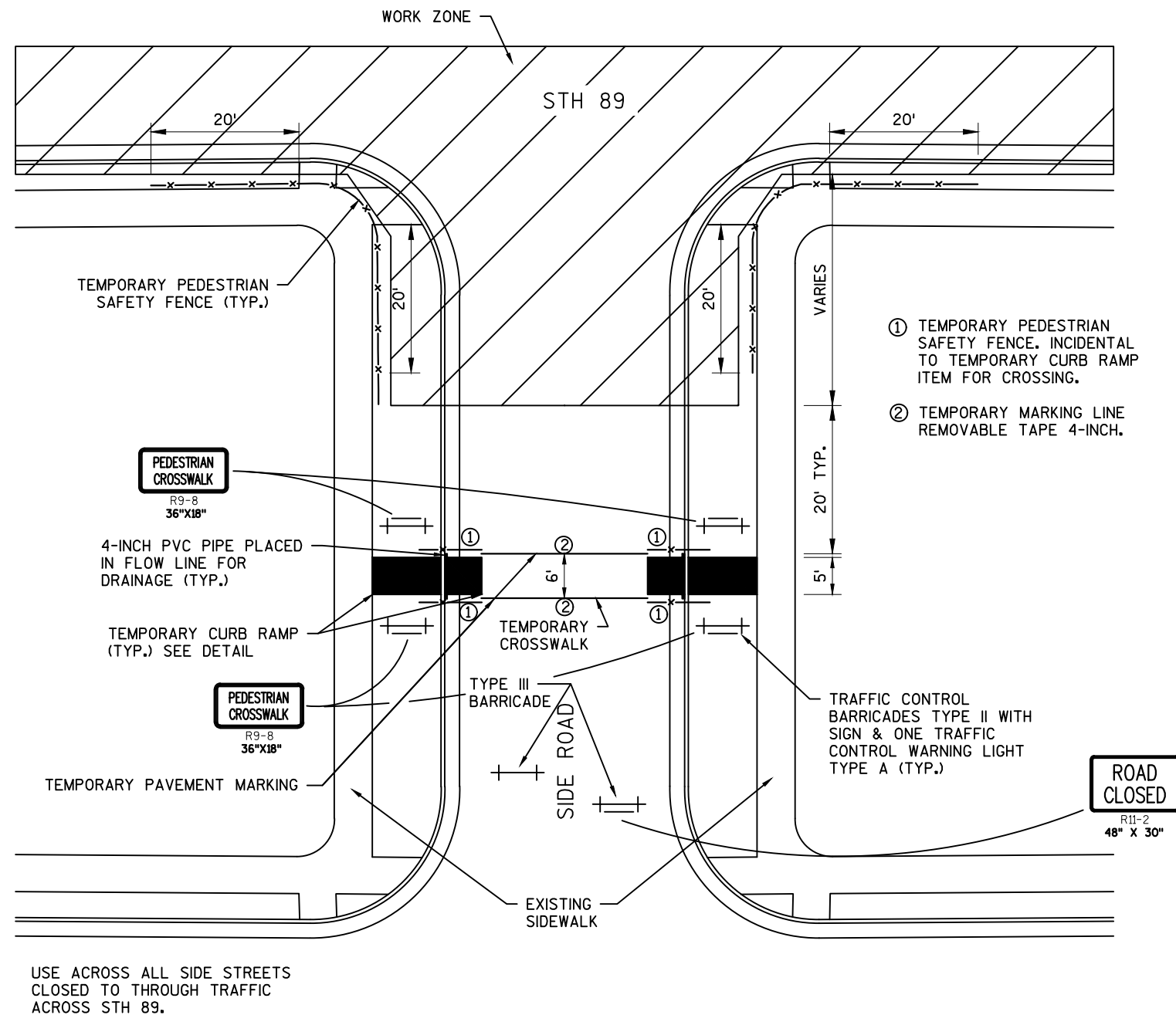
LEGEND

	TEMPORARY PEDESTRIAN CROSSING
	TEMPORARY CURB RAMP
	PEDESTRIAN FENCE
	TEMPORARY SURFACE

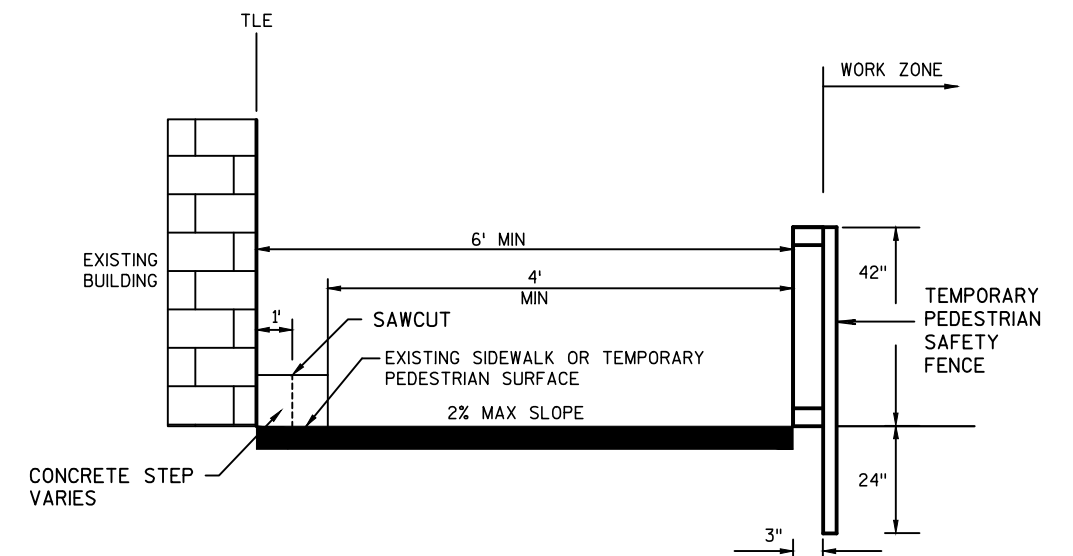




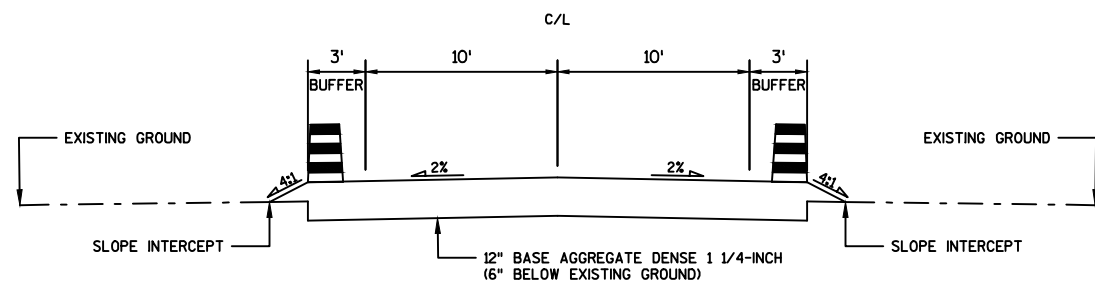




TEMPORARY CROSSWALK DETAIL – SIDE STREET CROSSINGS
(REQUIRED AT ALL CLOSED SIDE STREETS)



TEMPORARY PEDESTRIAN ACCESS AT BUILDING FACE

W1-6
48"X24"

PI: 8+85.02

BP: 8+32.00

8+73.99 SBR, -16.53' LT

RADIUS: 17.5'

PI: 9+44.72

RADIUS: 17.5'

35+67.22, -21.47' LT

PT: 33+75.39

34+00

ER: 10+00.00

35+00

36+00

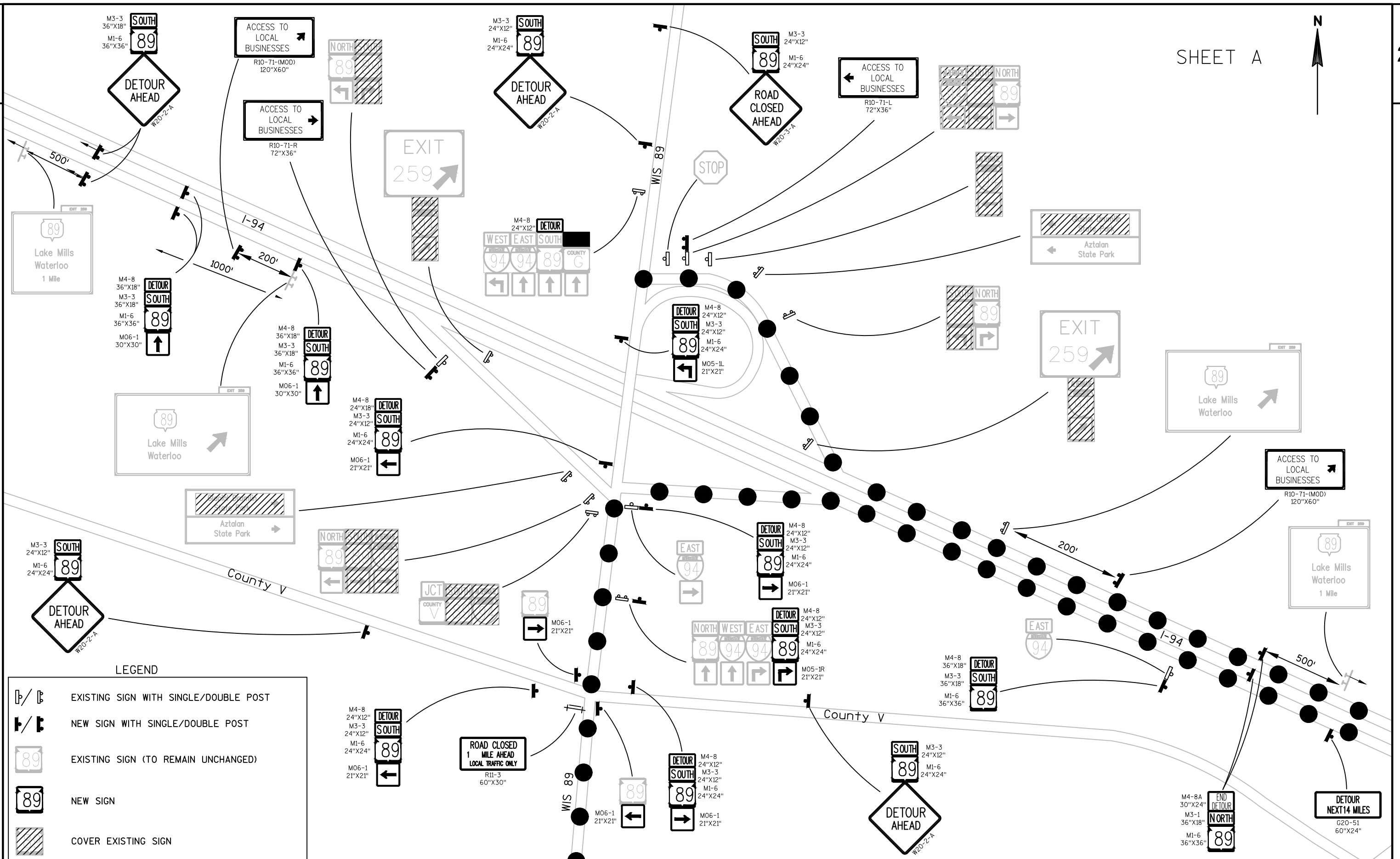
37+00

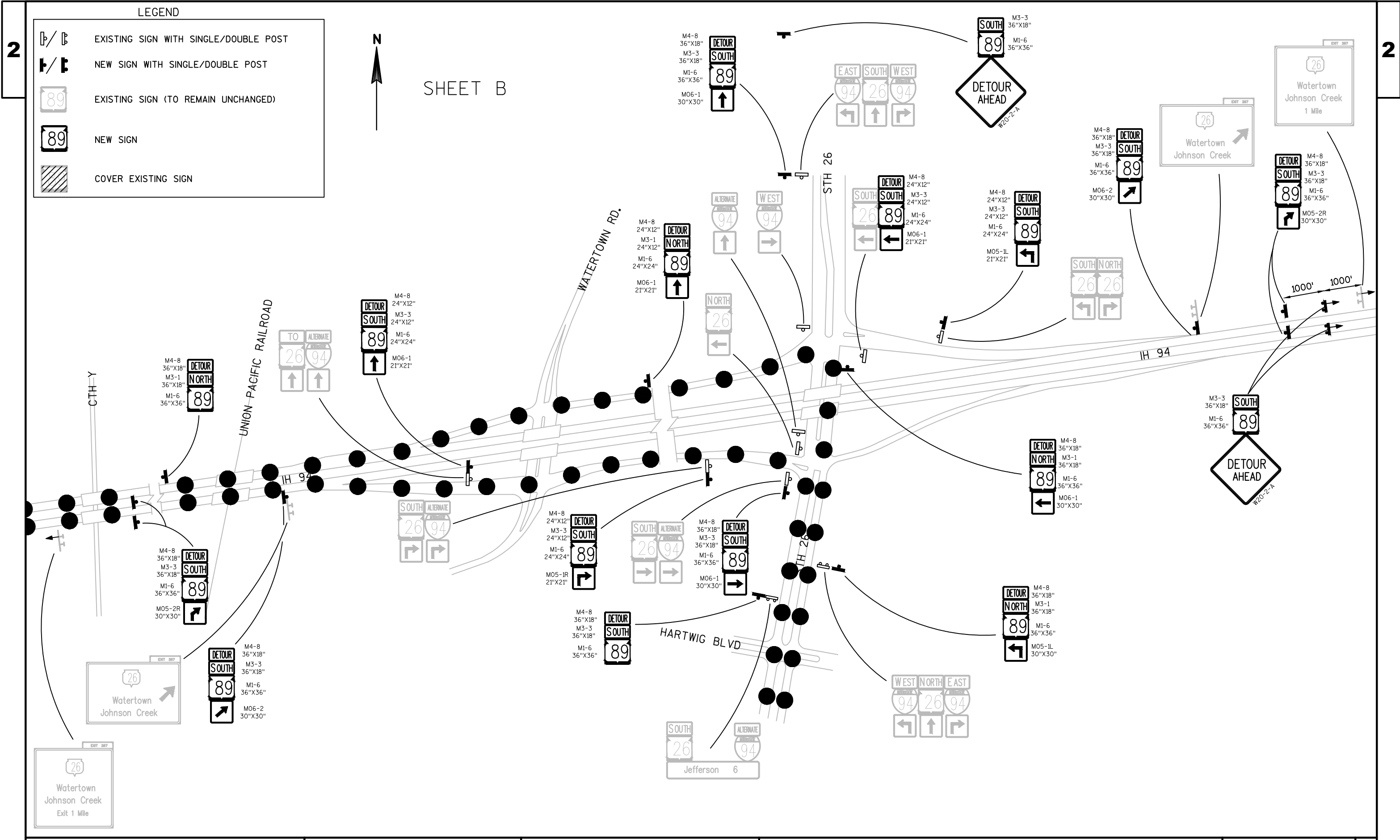
LEGEND

- NEW SIGN ON POST
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH SIGN
- CONSTRUCTION ZONE

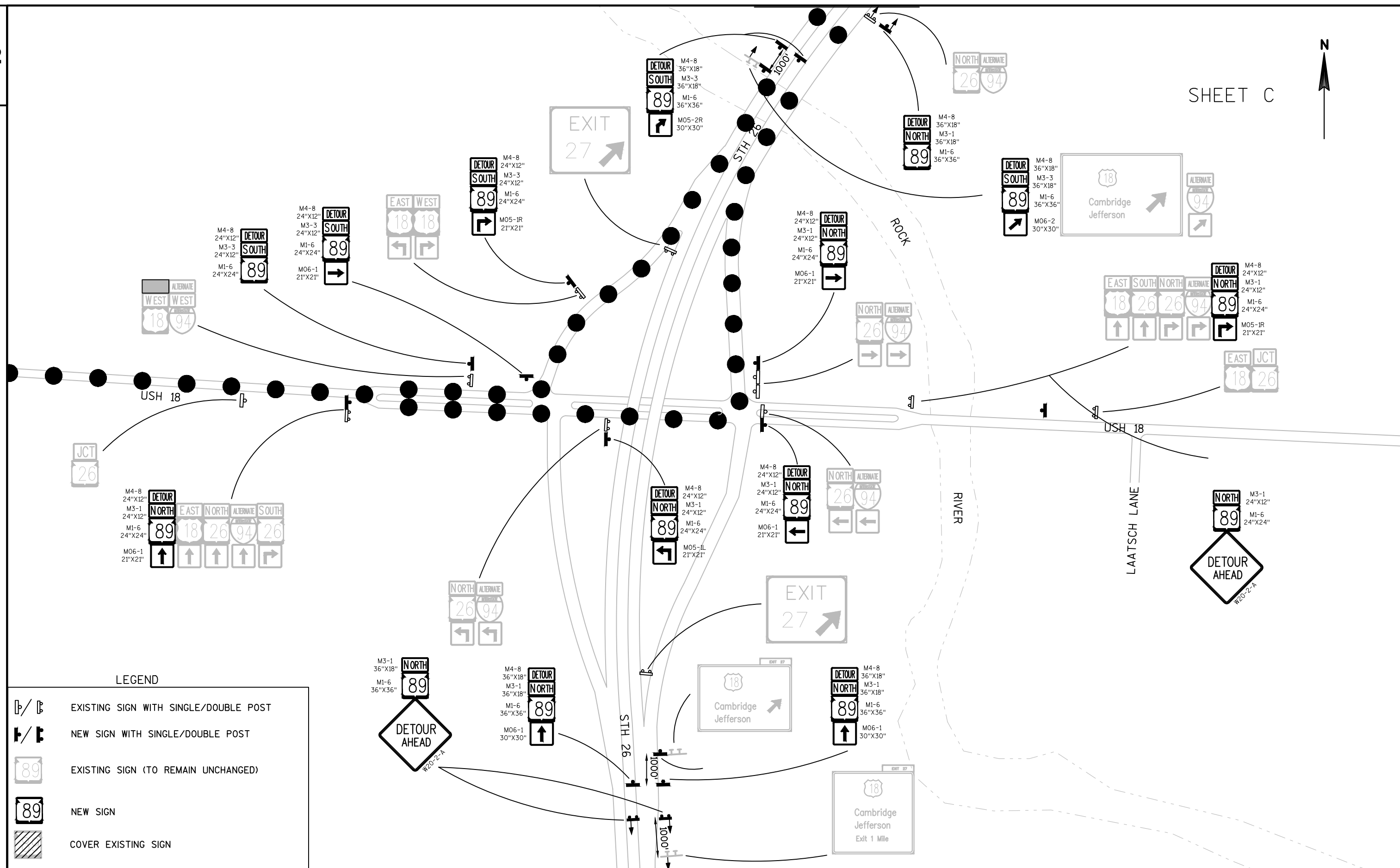
ALL SIGNS ARE 48"X48" UNLESS OTHERWISE INDICATED







SHEET C



P



PI STA = 7+39.25-CTHA
Y = 579892.626
X = 826875.184
DELTA = 44°54'58"
D = 54°03'09"
T = 43.82'
L = 83.10'
R = 106.00'
PC STA = 6+95.43-CTHA
Y = 579862.330
X = 826843.529
PT STA = 7+78.53-CTHA
Y = 579936.429
X = 826876.209
BK = N46°15'27.2"E
AH = N01°20'28.7"E

PI STA = 9+10.47-CTHA
Y = 580068.333
X = 826879.298
DELTA = 40°52'34"
D = 28°38'52"
T = 74.53'
L = 142.68'
R = 200.00'
PC STA = 8+35.94-CTHA
Y = 579993.823
X = 826877.553
PT STA = 9+78.62-CTHA
Y = 580123.530
X = 826929.378
BK = N01°20'28.7"E
AH = N42°13'02.2"E

EP=10+00.00-CTHA
Y=580139.36
X=826943.74

BP=8+32.00-SBR
Y=580425.82
X=826715.31

PI=8+85.02-SBR
Y=580424.26
X=826768.30

PI=9+44.72-SBR
Y=580432.00
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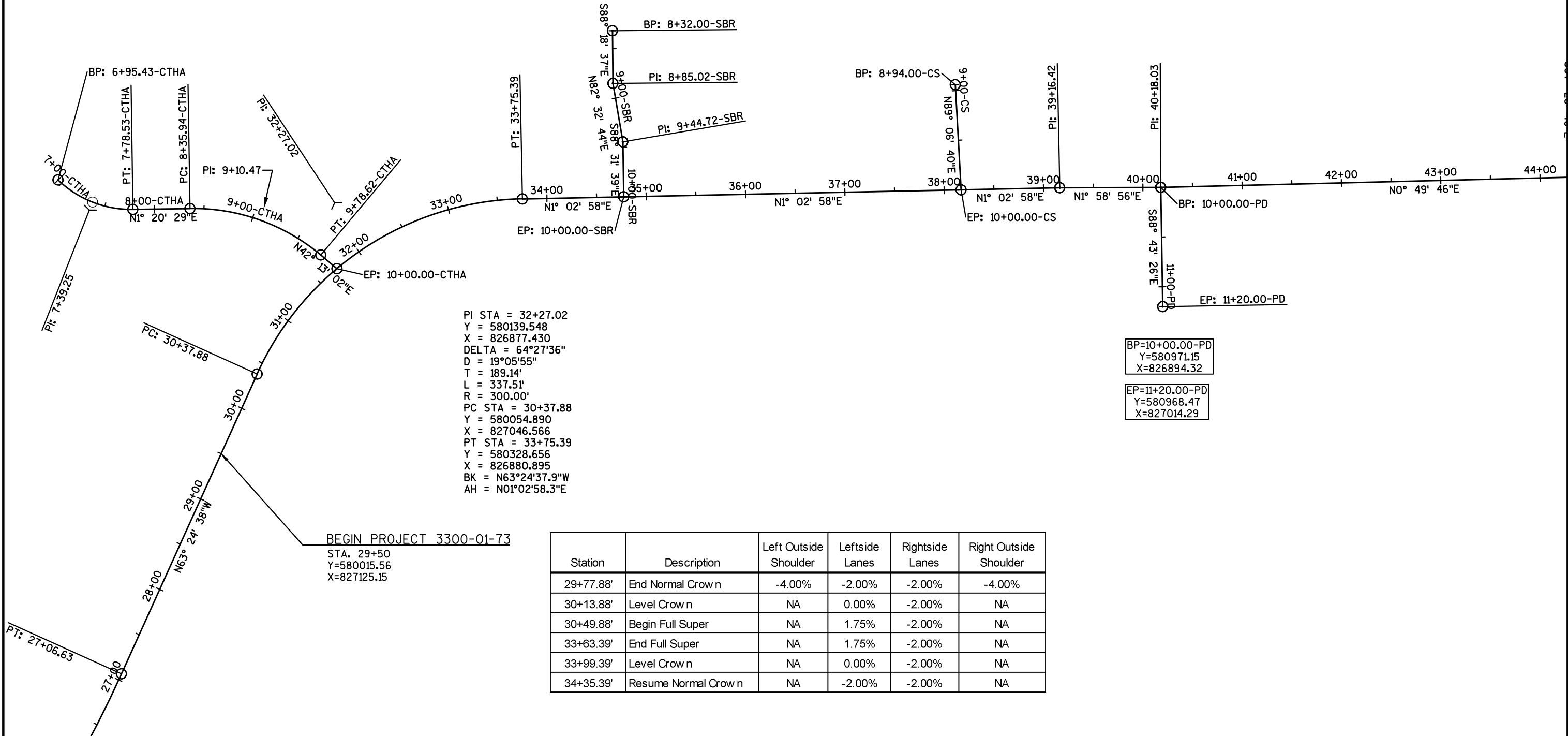
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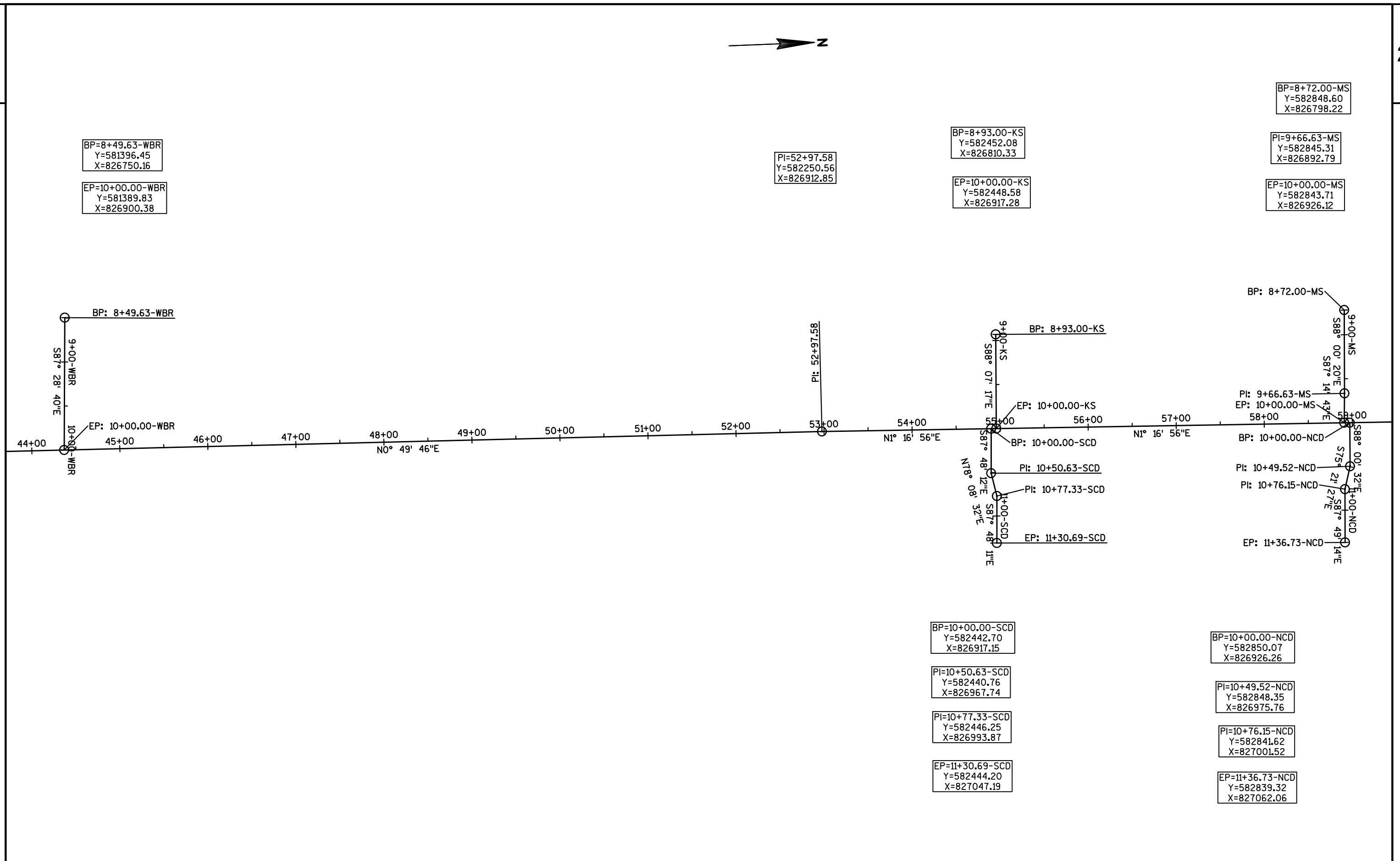
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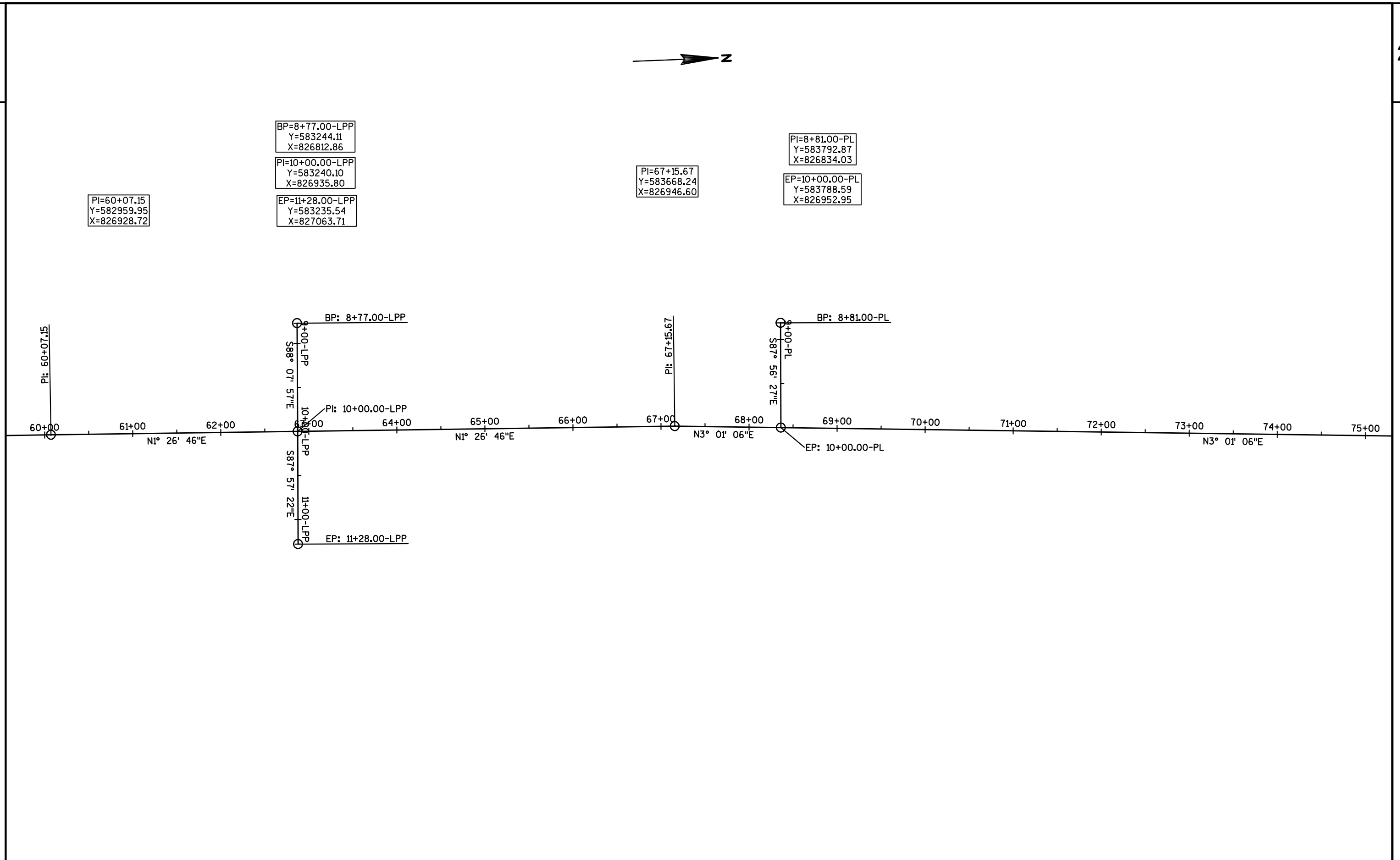
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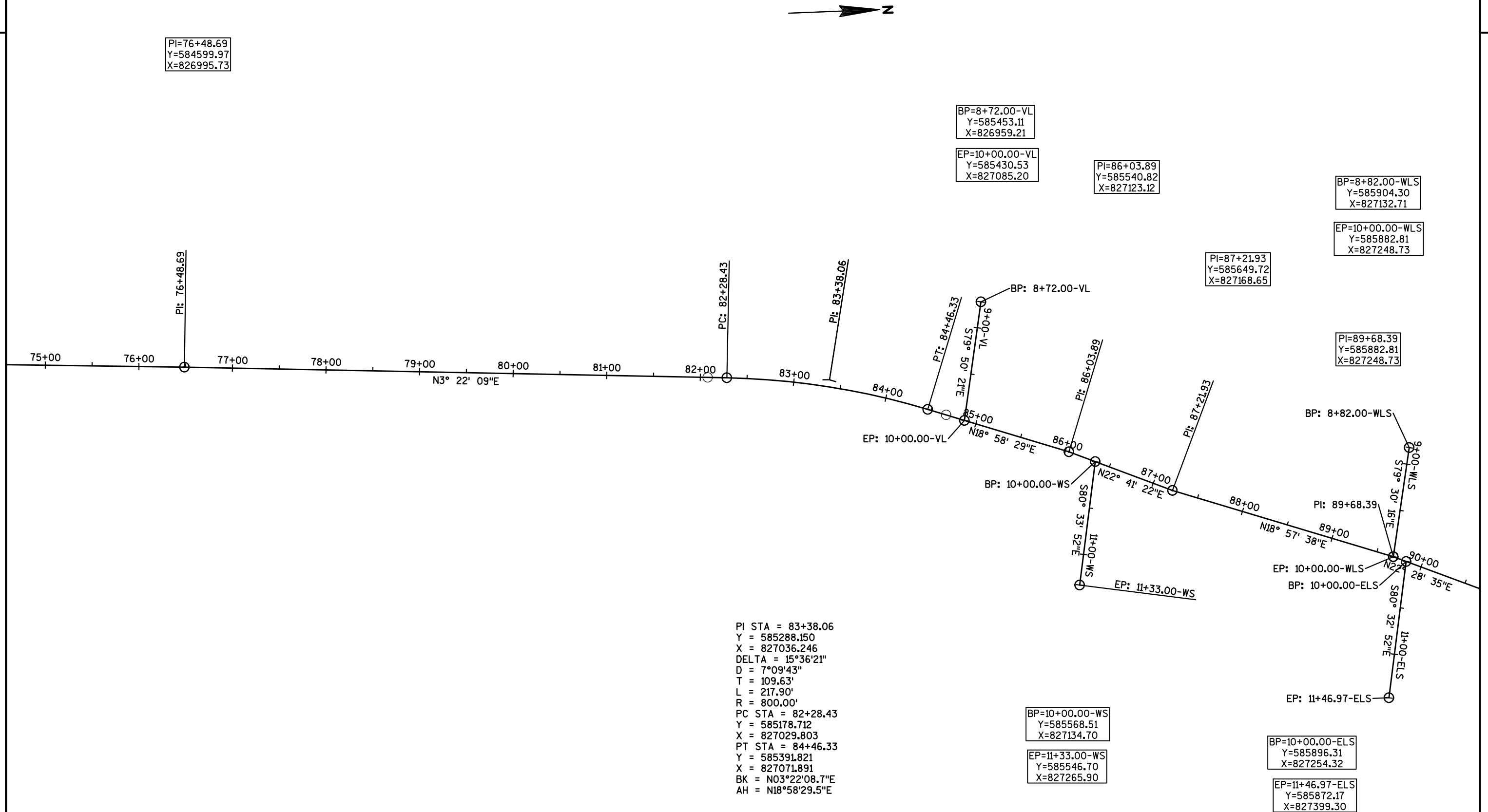
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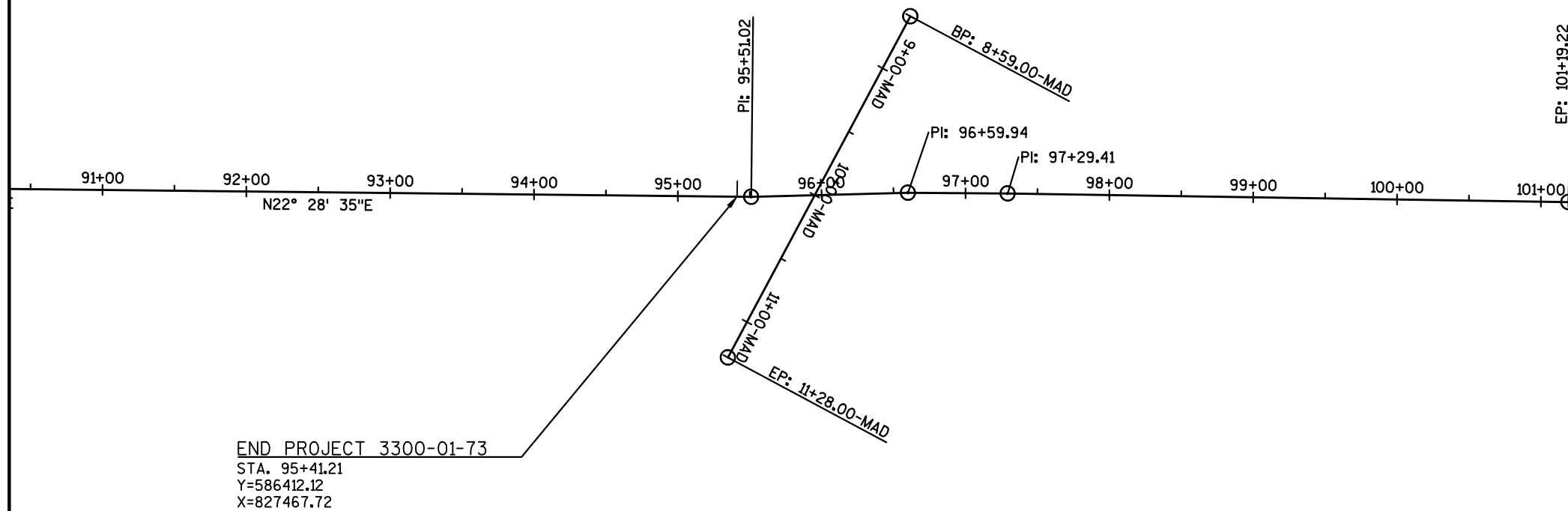
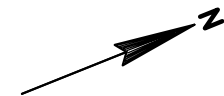
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X=826894.32











Estimate Of Quantities

3300-01-73 3300-01-74

Line	Item	Item Description	Unit	Total	Qty	Qty
0002	201.0110	Clearing	SY	280.000	280.000	
0004	201.0120	Clearing	ID	1,397.000	1,397.000	
0006	201.0210	Grubbing	SY	280.000	280.000	
0008	201.0220	Grubbing	ID	2,481.000	2,481.000	
0010	204.0100	Removing Pavement	SY	14,340.000	14,340.000	
0012	204.0150	Removing Curb & Gutter	LF	8,254.000	8,254.000	
0014	204.0155	Removing Concrete Sidewalk	SY	6,245.000	6,245.000	
0016	204.0195	Removing Concrete Bases	EACH	15.000	15.000	
0018	204.0210	Removing Manholes	EACH	10.000	10.000	
0020	204.0220	Removing Inlets	EACH	19.000	19.000	
0022	204.0235	Removing Buildings (parcel) 01. Parcel #2	LS	1.000	1.000	
0024	204.0240	Site Clearance (parcel) 01. Parcel #2	LS	1.000	1.000	
0026	204.0245	Removing Storm Sewer (size) 01. 8-Inch To 20-Inch	LF	1,272.000	1,272.000	
0028	204.0245	Removing Storm Sewer (size) 02. 21-Inch To 36-Inch	LF	1,053.000	1,053.000	
0030	204.9060.S	Removing (item description) 01. Street Light Assembly	EACH	15.000	15.000	
0032	204.9060.S	Removing (item description) 02. Stop Sign Flasher Assembly	EACH	4.000	4.000	
0034	204.9090.S	Removing (item description) 01. Existing Concrete Steps	LF	37.000	37.000	
0036	205.0100	Excavation Common	CY	41,322.000	41,322.000	
0038	213.0100	Finishing Roadway (project) 01. 3300-01-73	EACH	1.000	1.000	
0040	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,949.000	1,949.000	
0042	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	15,423.000	15,423.000	
0044	312.0110	Select Crushed Material	TON	28,985.000	28,985.000	
0046	405.0100	Coloring Concrete WisDOT Red	CY	14.000	14.000	
0048	415.0080	Concrete Pavement 8-Inch	SY	32,211.000	32,211.000	
0050	415.0210	Concrete Pavement Gaps	EACH	10.000	10.000	
0052	415.1080	Concrete Pavement HES 8-Inch	SY	73.000	73.000	
0054	415.5110.S	Concrete Pavement Joint Layout	LS	1.000	1.000	
0056	416.0160	Concrete Driveway 6-Inch	SY	2,133.000	2,133.000	
0058	416.0180	Concrete Driveway 8-Inch	SY	230.000	230.000	
0060	416.0610	Drilled Tie Bars	EACH	31.000	31.000	
0062	416.0620	Drilled Dowel Bars	EACH	40.000	40.000	
0064	440.4410	Incentive IRI Ride	DOL	4,992.000	4,992.000	
0066	455.0605	Tack Coat	GAL	82.700	82.700	
0068	465.0105	Asphaltic Surface	TON	421.000	421.000	
0070	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	212.000	212.000	
0072	465.0125	Asphaltic Surface Temporary	TON	233.000	233.000	
0074	522.1015	Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	EACH	1.000	1.000	

Estimate Of Quantities

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Line	Item	Item Description	Unit	Total	Qty	Qty
0076	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	1.000	1.000	
0078	522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH	1.000	1.000	
0080	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	13,587.000	13,587.000	
0082	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	1,016.000	1,016.000	
0084	601.0586	Concrete Curb & Gutter 4-Inch Sloped 30-Inch Type TBTT	LF	30.000	30.000	
0086	602.0405	Concrete Sidewalk 4-Inch	SF	67,993.000	67,993.000	
0088	602.0415	Concrete Sidewalk 6-Inch	SF	122.000	122.000	
0090	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	668.000	668.000	
0092	602.1500	Concrete Steps	SF	177.000	177.000	
0094	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	311.000	311.000	
0096	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	2,562.000	2,562.000	
0098	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	442.000	442.000	
0100	608.0336	Storm Sewer Pipe Reinforced Concrete Class III 36-Inch	LF	693.000	693.000	
0102	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	589.000	589.000	
0104	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	1,470.000	1,470.000	
0106	608.0424	Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	LF	1,835.000	1,835.000	
0108	611.0530	Manhole Covers Type J	EACH	48.000	48.000	
0110	611.0612	Inlet Covers Type C	EACH	2.000	2.000	
0112	611.0624	Inlet Covers Type H	EACH	90.000	90.000	
0114	611.1004	Catch Basins 4-FT Diameter	EACH	1.000	1.000	
0116	611.1006	Catch Basins 6-FT Diameter	EACH	9.000	9.000	
0118	611.1230	Catch Basins 2x3-FT	EACH	2.000	2.000	
0120	611.2004	Manholes 4-FT Diameter	EACH	22.000	22.000	
0122	611.2005	Manholes 5-FT Diameter	EACH	9.000	9.000	
0124	611.2006	Manholes 6-FT Diameter	EACH	6.000	6.000	
0126	611.2007	Manholes 7-FT Diameter	EACH	1.000	1.000	
0128	611.3003	Inlets 3-FT Diameter	EACH	2.000	2.000	
0130	611.3004	Inlets 4-FT Diameter	EACH	24.000	24.000	
0132	611.3230	Inlets 2x3-FT	EACH	57.000	57.000	
0134	611.8105	Adjusting Catch Basin Covers	EACH	2.000	2.000	
0136	611.8115	Adjusting Inlet Covers	EACH	2.000	2.000	
0138	611.8120.S	Cover Plates Temporary	EACH	10.000	10.000	

Estimate Of Quantities

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Line	Item	Item Description	Unit	Total	Qty	Qty
0140	618.0100	Maintenance And Repair of Haul Roads (project) 01. 3300-01-73	EACH	1.000	1.000	
0142	619.1000	Mobilization	EACH	1.000	0.559	0.441
0144	624.0100	Water	MGAL	210.000	210.000	
0146	625.0100	Topsoil	SY	12,343.000	12,343.000	
0148	625.0500	Salvaged Topsoil	SY	470.000	470.000	
0150	628.1504	Silt Fence	LF	1,890.000	1,890.000	
0152	628.1520	Silt Fence Maintenance	LF	1,890.000	1,890.000	
0154	628.1905	Mobilizations Erosion Control	EACH	10.000	10.000	
0156	628.1910	Mobilizations Emergency Erosion Control	EACH	8.000	8.000	
0158	628.2006	Erosion Mat Urban Class I Type A	SY	21,858.000	21,858.000	
0160	628.2027	Erosion Mat Class II Type C	SY	125.000	125.000	
0162	628.7005	Inlet Protection Type A	EACH	45.000	45.000	
0164	628.7015	Inlet Protection Type C	EACH	56.000	56.000	
0166	628.7020	Inlet Protection Type D	EACH	48.000	48.000	
0168	628.7560	Tracking Pads	EACH	3.000	3.000	
0170	629.0210	Fertilizer Type B	CWT	7.790	7.790	
0172	630.0140	Seeding Mixture No. 40	LB	222.200	222.200	
0174	630.0200	Seeding Temporary	LB	28.800	28.800	
0176	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	3.000	3.000	
0178	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	20.000	20.000	
0180	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	13.000	13.000	
0182	634.0810	Posts Tubular Steel 2x2-Inch X 10-FT	EACH	2.000	2.000	
0184	634.0811	Posts Tubular Steel 2x2-Inch X 11-FT	EACH	49.000	49.000	
0186	634.0812	Posts Tubular Steel 2x2-Inch X 12-FT	EACH	5.000	5.000	
0188	634.0814	Posts Tubular Steel 2x2-Inch X 14-FT	EACH	8.000	8.000	
0190	637.2210	Signs Type II Reflective H	SF	656.560	656.560	
0192	637.2230	Signs Type II Reflective F	SF	147.000	147.000	
0194	638.2602	Removing Signs Type II	EACH	73.000	73.000	
0196	638.3000	Removing Small Sign Supports	EACH	67.000	67.000	
0198	638.4000	Moving Small Sign Supports	EACH	8.000	8.000	
0200	642.5401	Field Office Type D	EACH	1.000	1.000	
0202	643.0300	Traffic Control Drums	DAY	360.000	360.000	
0204	643.0420	Traffic Control Barricades Type III	DAY	7,045.000	7,045.000	
0206	643.0705	Traffic Control Warning Lights Type A	DAY	8,382.000	8,382.000	
0208	643.0900	Traffic Control Signs	DAY	64,262.000	64,262.000	
0210	643.0920	Traffic Control Covering Signs Type II	EACH	42.000	42.000	
0212	643.1000	Traffic Control Signs Fixed Message	SF	476.000	476.000	
0214	643.1050	Traffic Control Signs PCMS	DAY	52.000	52.000	
0216	643.5000	Traffic Control	EACH	1.000	1.000	

Estimate Of Quantities

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Line	Item	Item Description	Unit	Total	Qty	Qty
0218	644.1410.S	Temporary Pedestrian Surface Asphalt	SF	3,458.000	3,458.000	
0220	644.1616.S	Temporary Pedestrian Safety Fence	LF	3,567.000	3,567.000	
0222	646.1020	Marking Line Epoxy 4-Inch	LF	20,229.000	20,229.000	
0224	646.5020	Marking Arrow Epoxy	EACH	2.000	2.000	
0226	646.6120	Marking Stop Line Epoxy 18-Inch	LF	342.000	342.000	
0228	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	1,265.000	1,265.000	
0230	646.8120	Marking Curb Epoxy	LF	1,133.000	1,133.000	
0232	646.8320	Marking Parking Stall Epoxy	LF	444.000	444.000	
0234	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	960.000	960.000	
0236	650.4000	Construction Staking Storm Sewer	EACH	146.000	146.000	
0238	650.4500	Construction Staking Subgrade	LF	8,043.000	8,043.000	
0240	650.5000	Construction Staking Base	LF	518.000	518.000	
0242	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	1,016.000	1,016.000	
0244	650.7000	Construction Staking Concrete Pavement	LF	7,526.000	7,526.000	
0246	650.8500	Construction Staking Electrical Installations (project) 01. 3300-01-73	LS	1.000	1.000	
0248	650.9000	Construction Staking Curb Ramps	EACH	62.000	62.000	
0250	650.9910	Construction Staking Supplemental Control (project) 01. 3300-01-73	LS	1.000	1.000	
0252	650.9920	Construction Staking Slope Stakes	LF	8,043.000	8,043.000	
0254	652.0215	Conduit Rigid Nonmetallic Schedule 40 1 1/4-Inch	LF	465.000	465.000	
0256	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	12,302.000	12,302.000	
0258	653.0140	Pull Boxes Steel 24x42-Inch	EACH	2.000	2.000	
0260	654.0101	Concrete Bases Type 1	EACH	8.000	8.000	
0262	654.0102	Concrete Bases Type 2	EACH	1.000	1.000	
0264	654.0105	Concrete Bases Type 5	EACH	8.000	8.000	
0266	654.0230	Concrete Control Cabinet Bases Type L30	EACH	3.000	3.000	
0268	655.0610	Electrical Wire Lighting 12 AWG	LF	6,234.000	6,234.000	
0270	655.0615	Electrical Wire Lighting 10 AWG	LF	1,749.000	1,749.000	
0272	655.0635	Electrical Wire Lighting 2 AWG	LF	47,810.000	47,810.000	
0274	656.0400	Electrical Service Main Lugs Only Meter Pedestal (location) 01. STA 34+96.8, 39.0' LT	LS	1.000	1.000	
0276	656.0400	Electrical Service Main Lugs Only Meter Pedestal (location) 02. STA 62+63.4, 63.5' RT	LS	1.000	1.000	
0278	656.0400	Electrical Service Main Lugs Only Meter Pedestal (location) 03. STA 85+08.9, 45.3' LT	LS	1.000	1.000	
0280	657.0100	Pedestal Bases	EACH	4.000	4.000	
0282	657.0415	Traffic Signal Standards Aluminum 11-FT	EACH	4.000	4.000	
0284	658.0170	Traffic Signal Face 1S 8-Inch	EACH	4.000	4.000	
0286	659.2130	Lighting Control Cabinets 120/240 30-Inch	EACH	3.000	3.000	
0288	690.0150	Sawing Asphalt	LF	2,103.000	2,103.000	

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Line	Item	Item Description	Unit	Total	Qty	Qty
0290	690.0250	Sawing Concrete	LF	3,378.000	3,378.000	
0292	715.0415	Incentive Strength Concrete Pavement	DOL	8,494.000	8,494.000	
0294	999.1000.S	Seismograph	LS	1.000	1.000	
0296	999.1500.S	Crack and Damage Survey	LS	1.000	1.000	
0298	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	2,200.000	2,200.000	
0300	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	1,550.000	1,550.000	
0302	SPV.0035	Special 26. Granular Backfill, Sanitary Sewer	CY	3,572.000		3,572.000
0304	SPV.0035	Special 27. Granular Backfill, Water Main	CY	3,595.000		3,595.000
0306	SPV.0045	Special 01. Temporary Curb Ramp	DAY	3,964.000	3,964.000	
0308	SPV.0045	Special 02. Temporary Crosswalk	DAY	2,018.000	2,018.000	
0310	SPV.0060	Special 01. Remove, Salvage, And Reinstall Stop Sign Flasher Assembly	EACH	1.000	1.000	
0312	SPV.0060	Special 02. Landmark Reference Monuments Special	EACH	2.000	2.000	
0314	SPV.0060	Special 03. Research And Locate Existing Land Parcel Monuments	EACH	64.000	64.000	
0316	SPV.0060	Special 04. Verify And Replace Existing Land Parcel Monuments	EACH	64.000	64.000	
0318	SPV.0060	Special 05. Inlet Cover Type 3290A	EACH	4.000	4.000	
0320	SPV.0060	Special 06. Connect Storm Sewer To Existing Manhole	EACH	6.000	6.000	
0322	SPV.0060	Special 07. Connect Storm Sewer Manhole To Existing Storm Sewer Pipe	EACH	10.000	10.000	
0324	SPV.0060	Special 26. Connect to Existing Water Main	EACH	19.000		19.000
0326	SPV.0060	Special 27. Connect to Existing Water Service	EACH	142.000		142.000
0328	SPV.0060	Special 28. Water Service Corporation, Curb Stop and Box, 1-Inch	EACH	135.000		135.000
0330	SPV.0060	Special 29. Water Service Corporation, Curb Stop, and Box, 2-Inch	EACH	7.000		7.000
0332	SPV.0060	Special 30. Fire Hydrant with Auxilary Valve and 6-Inch Lead	EACH	18.000		18.000
0334	SPV.0060	Special 31. Water Main Gate Valve and Valve Box, 6-Inch	EACH	2.000		2.000
0336	SPV.0060	Special 32. Water Main Gate Valve and Valve Box, 8-Inch	EACH	10.000		10.000
0338	SPV.0060	Special 33. Water Main Gate Valve and Valve Box, 10-Inch	EACH	4.000		4.000
0340	SPV.0060	Special 34. Water Main Gate Valve and Valve Box, 12-Inch	EACH	18.000		18.000
0342	SPV.0060	Special 35. Adjust Existing Valve Box	EACH	6.000		6.000
0344	SPV.0060	Special 36. Water Main Offset	EACH	5.000		5.000
0346	SPV.0060	Special 37. Utility Line Opening (ULO)	EACH	12.000		12.000
0348	SPV.0060	Special 38. Betonite Clay Dams	EACH	4.000		4.000
0350	SPV.0060	Special 39. Flourocarbon Water Main Gaskets	EACH	15.000		15.000

Estimate Of Quantities

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Line	Item	Item Description	Unit	Total	Qty	Qty
0352	SPV.0060	Special 40. Nitrile Water Main Gaskets	EACH	20.000		20.000
0354	SPV.0060	Special 41. Connect to Existing Sanitary Sewer Main or Manhole	EACH	13.000		13.000
0356	SPV.0060	Special 42. Connect to Existing Sanitary Sewer Lateral	EACH	151.000		151.000
0358	SPV.0060	Special 43. Sanitary Sewer Manhole (4-Foot Diameter)	EACH	26.000		26.000
0360	SPV.0060	Special 44. Construct Outside Drop	EACH	7.000		7.000
0362	SPV.0060	Special 51. Special Concrete Base-Type 5	EACH	66.000	66.000	
0364	SPV.0060	Special 52. Decorative Pole Assembly-Type 1	EACH	66.000	66.000	
0366	SPV.0060	Special 53. Decorative Pole Assembly-Type 2	EACH	8.000	8.000	
0368	SPV.0090	Special 01. Pipe Underdrain Wrapped 6-Inch And Aggregate	LF	7,612.000	7,612.000	
0370	SPV.0090	Special 02. Stair Hand Railing	LF	3.000	3.000	
0372	SPV.0090	Special 03. Concrete Curb And Gutter 30-Inch Type A Special	LF	273.000	273.000	
0374	SPV.0090	Special 26. Water Service Copper, 1-Inch	LF	5,153.000		5,153.000
0376	SPV.0090	Special 27. Water Service Copper, 2-Inch	LF	200.000		200.000
0378	SPV.0090	Special 28. Water Main, Ductile Iron (DI), 6-Inch	LF	204.000		204.000
0380	SPV.0090	Special 29. Water Main, Ductile Iron (DI), 8-Inch	LF	841.000		841.000
0382	SPV.0090	Special 30. Water Main, Ductile Iron (DI), 10-Inch	LF	387.000		387.000
0384	SPV.0090	Special 31. Water Main, Ductile Iron (DI), 12-Inch	LF	5,961.000		5,961.000
0386	SPV.0090	Special 32. Sanitary Lateral, 4-Inch	LF	5,095.000		5,095.000
0388	SPV.0090	Special 33. Sanitary Lateral, 6-Inch	LF	200.000		200.000
0390	SPV.0090	Special 34. Sanitary Sewer, Polyvinyl Chloride (PVC), SDR 35, 8-Inch	LF	1,222.000		1,222.000
0392	SPV.0090	Special 35. Sanitary Sewer, Polyvinyl Chloride (PVC), SDR 35, 10-Inch	LF	15.000		15.000
0394	SPV.0090	Special 36. Sanitary Sewer, Polyvinyl Chloride (PVC), SDR 35, 12-Inch	LF	4,409.000		4,409.000
0396	SPV.0090	Special 37. Sanitary Sewer, Polyvinyl Chloride (PVC), SDR 26, 12-Inch	LF	1,389.000		1,389.000
0398	SPV.0090	Special 38. Sanitary Sewer, Polyvinyl Chloride (PVC), SDR 35, 15-Inch	LF	108.000		108.000
0400	SPV.0090	Special 39. Water Main Insulation	LF	100.000		100.000
0402	SPV.0105	Special 26. Temporary Water Main and Service Connections	LS	1.000		1.000
0404	SPV.0105	Special 27. Remove Existing Water Main	LS	1.000		1.000
0406	SPV.0105	Special 28. Abandon Existing Water Main	LS	1.000		1.000
0408	SPV.0105	Special 29. Abandon Existing Sanitary Sewer	LS	1.000		1.000
0410	SPV.0195	Special 01. Excavation, Hauling, and Disposal of Contaminated Soil	TON	3,591.000	1,623.000	1,968.000

Division	From/To Station	Location	205.0100 Common Excavation (1)		Salvaged/Unusable Pavement Material (4)	Available Material (5)	Reduced EBS in Fill (9)	Expanded EBS Backfill (11)	Unexpanded Fill	Expanded Fill (13)	Mass Ordinate +/- (14)	Waste	Comment:
			Cut (2)	EBS Excavation (3)			Factor 0.80	Factor 1.30		Factor 1.25			
Stage 1													
	84+40 - 95+41.2	STH 89	6,032	0	0	6,032	0	0	239	298	5,734	5,734	
	10+19.2 ELS - 10+72.3	E LAKE ST	232	0	0	232	0	0	0	0	232	232	
	9+32.8 WLS - 9+75 WLS	W LAKE ST	176	0	0	176	0	0	0	0	176	176	
	9+35.6 VL - 9+75 VL	VETERANS LN	95	0	0	95	0	0	0	0	95	95	
	10+22.4 WS - 11+15 WS	WATER ST	272	0	0	272	0	0	0	0	272	272	
		DOWNTOWN PARKING ANNEX	532	0	0	532	0	0	0	0	532	532	
	EBS	UNDISTRIBUTED	0	176	0	0			0	0			
Stage 1 Subtotal			7,339	176	0	7,339	0	0	239	299	7,041	7,041	
Stage 2													
	62+88 - 84+40	STH 89	10,879	0	0	10,879	0	0	471	0	10,879	10,879	
	9+46.7 LPP - 10+50 LPP	LAKE PARK PL	77	0	0	77	0	0	0	0	77	77	
	9+51.4 PL - 9+80 PL	PHILLIPS LN	53	0	0	53	0	0	0	0	53	53	
	EBS	UNDISTRIBUTED	0	176	0	0							
Stage 2 Subtotal			11,009	176	0	11,009	0	0	471	0	11,009	11,009	
Stage 3													
	44+00 - 62+88	STH 89	11,082	0	0	11,082	0	0	458	0	11,082	11,082	
	9+51.8 KS - 9+80 KS	KEYES ST	60	0	0	60	0	0	0	0	60	60	
	9+46.7 LPP - 10+50 LPP	LAKE PARK PL	77	0	0	77	0	0	0	0	77	77	
	9+36.6 MS - 9+80 MS	MILTON ST	104	0	0	104	0	0	0	0	104	104	
	10+23.2 NCD - 10+90 NCD	N CATLIN DR	161	0	0	161	0	0	0	0	161	161	
	10+23.3 SCD - 10+90 SCD	S CATLIN DR	122	0	0	122	0	0	0	0	122	122	
	9+31 WBR - 9+80 WBR	WOODLAND BEACH RD	104	0	0	104	0	0	0	0	104	104	
	EBS	UNDISTRIBUTED	0	176	0	0							
Stage 3 Subtotal			11,710	176	0	11,710	0	0	458	0	11,710	11,710	
Stage 4													
	29+50 - 44+00	STH 89	8,717	0	0	8,717	0	0	447	0	8,717	8,717	
	9+55 CS - 9+80 CS	COLUMBUS ST	47	0	0	47	0	0	0	0	47	47	
	8+25 A - 9+80 A	CTH A	779	0	0	779	0	0	0	0	779	779	
	10+24 PD - 10+65 PD	PINNACLE DR	109	0	0	109	0	0	0	0	109	109	
	8+80 SBR - 9+80 SBR	SANDY BEACH RD	229	0	0	229	0	0	0	0	229	229	
	8+32 SBR - 10+00 SBR	SANDY BEACH RD BYPASS	212	0	0	212	0	0	0	0	212	212	
	40+40 WNTR - 44+00 WNTR	WINTER CARRYOVER	467	0	0	467	0	0	0	0	467	467	
	EBS	UNDISTRIBUTED	0	176	0	0							
Stage 4 Subtotal			10,560	176	0	10,560	0	0	447	0	10,560	10,560	
Grand Total			40,618	704	0	40,618	0	0	1,615	299	40,320	40,320	
Total Common Exc			41,322										

Notes:

- (1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
- (2) Salvaged/Unsuable Pavement Material is included in Cut.
- (3) EBS Excavation to be backfilled w ith Select Borrow material. Note: this is designers choice, can be backfilled with Borrow , or Cut as w ell.
- (4) Salvaged/Unusable Pavement Material
- (5) Available Material = Cut - Salvaged/Unusuable Pavement Material
- (6) Marsh Excavation - to be backfilled with Select Borrow Material. Note: this is designers choice, can be backfilled with Borrow , or Cut as w ell. Item number 205.0500
- (7) Rock Excavation item number 205.0200
- (8) Reduced Marsh in Fill - Excavated Marsh material is usable in Fills outside the 1:1 slope. Marsh in Fill Reduction factor = 0.6
- (9) Reduced EBS in Fill - Excavated EBS material is usable in Fills outside the 1:1 slope. EBS in Fill Reduction factor = 0.8
- (10) Expanded Marsh Backfill - This is to be filled w ith Select Borrow material. Marsh Backfill Factor = 1.5. Item number 208.1100
- (11) Expanded EBS Backfill - This is to be filled w ith Select Borrow material. EBS Backfill Factor = 1.3. Item number 208.1100
- (12) Expanded Rock Factor = 1.1
- (13) Expanded Fill Factor = 1.25

Depending on selections:

Or

Or

Or

Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh - Reduced EBS) * Fill Factor

Expanded Fill = (Unexpanded Fill - Rock * Rock Factor - Reduced EBS) * Fill Factor

Expanded Fill = (Unexpanded Fill - Rock * Rock Factor - Reduced Marsh) * Fill Factor

Expanded Fill = (Unexpanded Fill - Rock * Rock Factor) * Fill Factor

(14) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material w ithin the Division. Minus indicates a shortage of material w ithin the Division.

CLEARING & GRUBBING							
				201.0110	201.0120	201.0210	201.0220
CATEGORY	STATION	OFFSET	LOCATION	CLEARING		GRUBBING	
				SY	ID	SY	ID
STAGE 2							
0010	82+33	21' LT	STH 89	-	-	-	16
0010	82+21	28' RT	STH 89	-	24	-	24
0010	81+55	27' RT	STH 89	-	24	-	24
0010	81+42	27' RT	STH 89	-	-	-	12
0010	81+38	21' LT	STH 89	-	-	-	23
0010	80+98	19' LT	STH 89	-	-	-	26
0010	80+97	28' RT	STH 89	-	13	-	13
0010	80+57	22' LT	STH 89	-	12	-	12
0010	80+35	27' RT	STH 89	-	-	-	18
0010	80+03	22' LT	STH 89	-	15	-	15
0010	79+98	28' RT	STH 89	-	-	-	20
0010	79+66	27' RT	STH 89	-	21	-	21
0010	79+40	28' RT	STH 89	-	22	-	22
0010	79+30	21' LT	STH 89	-	-	-	56
0010	79+12	28' RT	STH 89	-	21	-	21
0010	78+85	21' LT	STH 89	-	27	-	27
0010	78+15	21' LT	STH 89	-	28	-	28
0010	77+86	28' RT	STH 89	-	23	-	23
0010	77+68	21' LT	STH 89	-	29	-	29
0010	77+62	28' RT	STH 89	-	-	-	22
0010	77+20	28' RT	STH 89	-	-	-	23
0010	76+91	21' LT	STH 89	-	-	-	22
0010	76+81	28' RT	STH 89	-	-	-	28
0010	76+24	20' LT	STH 89	-	-	-	28
0010	76+02	28' RT	STH 89	-	-	-	13
0010	75+86	20' LT	STH 89	-	-	-	15
0010	75+67	28' RT	STH 89	-	26	-	26
0010	75+58	21' RT	STH 89	-	-	-	16
0010	75+25	28' RT	STH 89	-	24	-	24
0010	75+19	23' LT	STH 89	-	26	-	26
0010	74+83	28' RT	STH 89	-	-	-	18
0010	74+81	23' LT	STH 89	-	25	-	25
0010	74+44	28' RT	STH 89	-	-	-	20
0010	73+96	20' LT	STH 89	-	-	-	16
0010	73+76	29' RT	STH 89	-	27	-	27
0010	72+87	28' RT	STH 89	-	-	-	35
0010	71+90	29' RT	STH 89	-	23	-	23
0010	71+57	22' LT	STH 89	-	23	-	23
0010	71+23	22' LT	STH 89	-	25	-	25
0010	70+84	22' LT	STH 89	-	14	-	14
0010	70+71	28' RT	STH 89	-	31	-	31
0010	70+44	21' LT	STH 89	-	16	-	16
0010	70+28	27' RT	STH 89	-	-	-	16
0010	69+96	28' RT	STH 89	-	-	-	14
0010	69+56	21' LT	STH 89	-	17	-	17
0010	69+48	28' RT	STH 89	-	-	-	26
0010	69+17	29' RT	STH 89	-	19	-	19
0010	68+92	28' RT	STH 89	-	22	-	22
SUBTOTAL 0010				0	577	0	1060

CLEARING & GRUBBING

				201.0110		201.0120		201.0210		201.0220		
CATEGORY	STATION	OFFSET	LOCATION	CLEARING		GRUBBING						
				SY	ID	SY	ID					
STAGE 2												
0010	68+87	21' LT	STH 89	-	24	-	24	POSSIBLE REMOVAL				
0010	68+52	29' RT	STH 89	-	-	-	15					
0010	67+78	20' LT	STH 89	-	-	-	22					
0010	67+52	38' RT	STH 89	-	28	-	28					
0010	67+45	21' LT	STH 89	-	-	-	26					
0010	66+59	38' RT	STH 89	-	34	-	34	POSSIBLE REMOVAL				
0010	66+54	21' LT	STH 89	-	-	-	22					
0010	66+14	23' LT	STH 89	-	-	-	11					
0010	65+74	23' LT	STH 89	-	-	-	14					
0010	65+17	27' RT	STH 89	-	-	-	17					
0010	64+34	27' RT	STH 89	-	22	-	22					
0010	64+30	23' LT	STH 89	-	-	-	20					
0010	63+85	27' RT	STH 89	-	26	-	26					
0010	63+80	23' LT	STH 89	-	16	-	16					
0010	63+47	28' RT	STH 89	-	26	-	26					
0010	63+40	24' LT	STH 89	-	24	-	24					
STAGE 3												
0010	62+45	26' RT	STH 89	-	-	-	23					
0010	61+26	27' RT	STH 89	-	39	-	39					
0010	61+02	27' RT	STH 89	-	33	-	33					
0010	60+05	25' LT	STH 89	-	25	-	25					
0010	59+87	24' LT	STH 89	-	26	-	26					
0010	59+46	22' LT	STH 89	-	20	-	20	POSSIBLE REMOVAL POSSIBLE REMOVAL				
0010	59+18	33' LT	STH 89	-	-	-	24					
0010	58+23	37' RT	STH 89	-	31	-	31					
0010	58+07	20' LT	STH 89	-	30	-	30					
0010	56+82	20' LT	STH 89	-	-	-	9					
0010	56+73	30' RT	STH 89	-	-	-	28					
0010	56+55	31' RT	STH 89	-	-	-	24					
0010	55+45	18' LT	STH 89	-	-	-	3					
0010	55+84	30' RT	STH 89	-	25	-	25					
0010	55+67	16' LT	STH 89	-	-	-	8					
0010	55+44	16' LT	STH 89	-	-	-	28	POSSIBLE REMOVAL				
0010	55+39	31' RT	STH 89	-	26	-	26					
0010	54+08	39' RT	STH 89	-	27	-	27					
0010	53+98	27' LT	STH 89	-	30	-	30					
0010	53+71	35' RT	STH 89	-	-	-	13					
0010	51+65	30' RT	STH 89	-	22	-	22					
0010	50+34	37' RT	STH 89	-	18	-	18					
0010	46+91	36' RT	STH 89	-	-	-	21					
0010	46+55	36' RT	STH 89	-	-	-	26					
0010	46+15	36' RT	STH 89	-	-	-	16					
0010	45+99	43' RT	STH 89	-	16	-	16					
0010	45+50	33' RT	STH 89	-	-	-	19					
0010	45+12	34' RT	STH 89	-	-	-	25					
0010	44+74	33' RT	STH 89	-	-	-	25					
0010	44+63	33' RT	STH 89	-	-	-	7					
SUBTOTAL 0010				0	568	0	1014					

CLEARING & GRUBBING CONT.

CATEGORY	STATION	OFFSET	LOCATION	201.0110		201.0120		201.0210		201.0220		REMARKS
				CLEARING		GRUBBING						
				SY	ID	SY	ID					
STAGE 4												
0010	43+57	31' RT	STH 89	-	22	-	22					
0010	43+06	28' RT	STH 89	-	-	-	25					
0010	42+85	30' RT	STH 89	-	-	-	24					
0010	42+68	29' RT	STH 89	-	-	-	19					
0010	42+57	29' RT	STH 89	-	-	-	11					
0010	42+27	28' RT	STH 89	-	23	-	23					
0010	41+59	27' RT	STH 89	-	-	-	20					
0010	41+46	32' RT	STH 89	-	26	-	26					
0010	41+32	29' LT	STH 89	-	-	-	27					
0010	40+15	34' LT	STH 89	-	51	-	51					
0010	39+25	41' RT	STH 89	-	22	-	22					
0010	38+76	40' RT	STH 89	-	46	-	46					POSSIBLE REMOVAL
0010	38+42	39' RT	STH 89	-	46	-	46					POSSIBLE REMOVAL
0010	37+72	25' LT	STH 89	-	-	-	29					
0010	37+19	32' RT	STH 89	-	9	-	9					
0010	36+88	32' RT	STH 89	-	7	-	7					
0010	34+50	RT	STH 89	280	-	280	-					DENSE VEGETATION
SUBTOTAL 0010				280	252	280	407					
TOTAL 0010				280	1,397	280	2,481					

REMOVING STORM SEWER ITEMS

CATEGORY	STATION	Offset	TO	STATION	Offset	DIAMETER (INCH)	204.0245.01	204.0245.02
							REMOVING STORM SEWER (01. 8-INCH TO 20-INCH)	REMOVING STORM SEWER (01. 21-INCH TO 36-INCH)
							LF	LF
STAGE 1								
0010	92+81	1' RT	-	92+93	25' LT	12	28	-
0010	92+81	1' RT	-	92+89	25' RT	12	25	-
0010	92+81	1' RT	-	92+87	23' LT	12	25	-
0010	89+74	0'	-	90+05	23' LT	12	38	-
0010	89+83	38' LT	-	90+05	23' LT	12	27	-
0010	89+67	50' LT	-	89+74	0'	18	51	-
0010	89+41	44' LT	-	89+60	62' LT	8	29	-
0010	89+74	0'	-	90+30	34' RT	12	65	-
0010	89+74	0'	-	89+80	43' RT	18	44	-
0010	89+74	0'	-	94+98	1' RT	24	-	524
0010	88+94	22' RT	-	89+74	0' LT	36		84
0010	87+23	13' RT	-	87+28	21' RT	12	10	-
0010	87+27	13' RT	-	87+28	25' LT	15	38	-
0010	85+86	14' RT	-	88+94	22' RT	36		300
0010	85+61	13' RT	-	85+61	21' RT	15	8	-
0010	85+61	19' LT	-	85+61	13' RT	15	32	-
STAGE 2								
0010	62+94	10' LT	-	62+94	43' RT	12	53	-
0010	62+94	10' LT	-	63+09	21' LT	12	19	-
STAGE 3								
0010	62+66	22' LT	-	62+94	10' LT	12	30	-
STAGE 4								
0010	40+49	56' RT	-	42+37	246' RT	30	-	30
0010	40+49	56' RT	-	40+53	26' RT	30	-	30
0010	40+50	26' LT	-	40+53	26' RT	30	-	52
0010	38+04	21' LT	-	38+35	21' LT	24	-	33
0010	38+04	22' LT	-	38+04	40' LT	18	18	-
0010	34+94	69' LT	-	34+98	17' LT	12	53	-
0010	34+55	23' LT	-	34+98	17' LT	12	44	-
0010	34+69	62' LT	-	34+79	64' LT	12	11	-
0010	34+69	62' LT	-	34+69	69' LT	12	7	-
0010	34+55	65' LT	-	34+69	62' LT	12	14	-
0010	34+55	26' RT	-	34+66	26' RT	15	11	-
0010	34+55	23' LT	-	34+55	266' RT	12	289	-
0010	34+55	23' LT	-	34+56	65' LT	12	42	-
0010	31+33	38' LT	-	31+83	90' LT	12	80	-
0010	29+62	30' LT	-	31+33	38' LT	12	181	-
TOTAL 0010							1,272	1,053

REMOVING PAVEMENT						
204.0100						
CATEGORY	STATION TO	STATION	LOCATION	SY	REMARKS	
STAGE 1						
0010	89+76	-	95+41	STH 89	2,390	LAKE ST TO MADISON ST
0010	86+34	-	89+76	STH 89	2,535	WATER ST TO LAKE ST
0010	84+40	-	86+34	STH 89	29	VETERANS LN TO WATER ST
STAGE 2						
0010	68+37	-	84+40	STH 89	454	PHILLIPS LN TO VETERANS LN
0010	62+88	-	68+37	STH 89	806	LAKE PARK PL TO PHILLIPS LN
STAGE 3						
0010	58+91	-	62+88	STH 89	848	MILTON ST TO LAKE PARK PL
0010	54+95	-	58+91	STH 89	834	KEYES ST TO MILTON ST
0010	51+20		54+95	STH 89	792	LM GOLF CLUB TO KEYES ST
0010	44+00	-	51+20	STH 89	1,535	WOODLAND BEACH RD TO LM GOLF CLUB
STAGE 4						
0010	40+40	-	44+00	STH 89	765	PINNACLE DR TO WOODLAND BEACH RD
0010	38+17	-	40+40	STH 89	462	COLUMBUS ST TO PINNACLE DR
0010	34+77	-	38+17	STH 89	807	SANDY BEACH RD TO COLUMBUS ST
0010	31+72	-	34+77	STH 89	367	CTH A TO SANDY BEACH RD
TOTAL 0010					12,624	
STAGE 1						
0030	90+00	-	95+41	STH 89	548	LAKE ST TO MADISON ST (PARKING STALLS)
0030	86+09	-	90+00	STH 89	1,168	WATER ST TO LAKE ST (PARKING STALLS)
TOTAL 0030					1,716	
TOTAL					14,340	

REMOVING CURB & GUTTER					
204.0150					
CATEGORY	STATION	TO	STATION	LOCATION	REMOVING CURB & GUTTER LF
STAGE 1					
0010	8440	-	86+09	STH 89	309
0010	9+35 'VL'	-	9+68 'VL'	VETERANS LN	50
STAGE 2					
0010	68+20	-	84+68	STH 89	3201
0010	63+04	-	68+20	STH 89	1085
STAGE 3					
0010	59+11	-	62+70	STH 89	771
0010	55+12	-	58+76	STH 89	763
0010	51+00	-	54+80	STH 89	748
0010	10+44 'NCD'	-	10+91 'NCD'	N. CATLIN DR	61
0010	9+50 'MS'	-	9+72 'MS'	MILTON ST	67
0010	10+43 'SCD'	-	10+90 'SCD'	S. CATLIN DR	58
0010	9+66 'KS'	-	9+52 'KS'	KEYES ST	15
0010	9+46 'WBR'	-	9+76 'WBR'	WOODLAND BEACH RD	94
STAGE 4					
0010	30+00	-	32+59	STH 89	568
0010	10+25 'PD'	-	10+68 'PD'	PINNACLE DR	80
0010	8+80 'SBR'	-	9+73 'SBR'	SANDY BEACH RD	177
0010	8+24 'A'	-	9+14 'A'	CTH A	207
TOTAL 0010					8254

REMOVING CONCRETE SIDEWALK					
					204.0155
REMOVING CONCRETE SIDEWALK					SY
CATEGORY	STATION	TO	STATION	LOCATION	
STAGE 1					
0010	94+90	-	95+25	STH 89 - RT	19
0010	90+19	-	90+75	STH 89 - RT	32
0010	89+90	-	95+41	STH 89 - LT	830
0010	86+54	-	89+50	STH 89 - RT	388
0010	85+05	-	89+50	STH 89 - LT	630
0010	84+50	-	86+03	STH 89 - RT	181
0010	84+44	-	84+65	STH 89 - LT	12
0010	10+19 'WS'	-	11+09 'WS'	WATER ST - LT	96
STAGE 2					
0010	83+35	-	84+05	STH 89 - LT	32
0010	68+54	-	82+78	STH 89 - LT	815
0010	63+06	-	84+50	STH 89 - RT	1,192
0010	63+04	-	68+19	STH 89 - LT	262
STAGE 3					
0010	59+12	-	62+66	STH 89 - RT	180
0010	59+07	-	62+71	STH 89 - LT	176
0010	55+19	-	58+68	STH 89 - RT	177
0010	55+13	-	58+76	STH 89 - LT	177
0010	54+25	-	54+25	STH 89 - RT	3
0010	52+60	-	52+60	STH 89 - RT	4
0010	44+59	-	54+80	STH 89 - LT	473
0010	10+28 'SCD'	-	10+52 'SCD'	S. CATLIN DR - RT	18
STAGE 4					
0010	39+43	-	39+43	STH 89 - RT	6
0010	38+31	-	44+17	STH 89 - LT	266
0010	35+04	-	38+05	STH 89 - LT	135
0010	33+45	-	34+53	STH 89 - LT	44
0010	31+50	-	32+50	STH 89 - LT	35
0010	10+29 'PD'	-	10+53 'PD'	PINNACLE DR - LT	12
0010	10+29 'PD'	-	10+53 'PD'	PINNACLE DR - RT	12
0010	8+79 'SBR'	-	9+65 'SBR'	SANDY BEACH RD - LT	38
0010	8+50 'A'	-	9+39 'A'	CTH A - LT	35
TOTAL 0010					6,245

REMOVING CONCRETE BASES

204.0195			
REMOVING CONCRETE BASES			
CATEGORY	STATION	OFFSET	EACH
STAGE 1			
0010	95+71	27' LT	1
0010	93+99	25' LT	1
0010	92+64	25' LT	1
0010	91+24	25' LT	1
0010	89+96	25' LT	1
0010	89+57	45' RT	1
0010	89+29	39' LT	1
0010	89+27	27' LT	1
0010	88+41	27' LT	1
0010	88+06	59' RT	1
0010	87+20	27' LT	1
0010	86+83	83' RT	1
0010	86+31	23' LT	1
0010	86+22	41' RT	1
0010	85+15	22' LT	1
TOTAL 0010			15

REMOVING INLETS

204.0220			
REMOVING INLETS			
CATEGORY	STATION	OFFSET	EACH
STAGE 1			
0010	92+89	23' LT	1
0010	92+88	24' RT	1
0010	90+30	34' RT	1
0010	90+05	23' LT	1
0010	89+80	39' LT	1
0010	89+41	44' LT	1
0010	87+29	22.5' RT	1
0010	87+29	25' LT	1
0010	85+61	18' LT	1
0010	85+61	20' RT	1
STAGE 2			
0010	63+09	22' LT	1
0010	62+66	22' LT	1
STAGE 4			
0010	34+98	16.5' LT	1
0010	34+80	63' LT	1
0010	34+66	26' RT	1
0010	34+55	65' LT	1
0010	34+55	23' LT	1
0010	31+33	38' LT	1
0010	31+84	90' LT	1
TOTAL 0010			19

REMOVING MANHOLES

204.0210			
REMOVING MANHOLES			
CATEGORY	STATION	OFFSET	EACH
STAGE 1			
0010	92+81	0.7' RT	1
0010	89+74	0.1' LT	1
0010	88+94	22' RT	1
0010	85+61	13' RT	1
STAGE 2			
0010	62+94	10' LT	1
STAGE 4			
0010	40+53	26' RT	1
0010	40+50	26' LT	1
0010	40+49	56' RT	1
0010	38+04	21' LT	1
0010	34+69	62' LT	1
TOTAL 0010			10

REMOVING STREET LIGHT ASSEMBLY

204.9060.S.01 (01. STREET LIGHT ASSEMBLY)			
CATEGORY	STATION	OFFSET	EACH
STAGE 1			
0010	95+71	27' LT	1
0010	93+99	25' LT	1
0010	92+64	25' LT	1
0010	91+24	25' LT	1
0010	89+96	25' LT	1
0010	89+57	45' RT	1
0010	89+27	27' LT	1
0010	89+30	39' RT	1
0010	88+41	27' LT	1
0010	88+06	59' RT	1
0010	87+20	27' LT	1
0010	86+83	83' RT	1
0010	86+31	23' LT	1
0010	86+23	41' RT	1
0010	85+15	22' LT	1
TOTAL 0010			15

REMOVING EXISTING CONCRETE STEPS

204.9090.S.01 (01. EXISTING CONCRETE STEPS)			
CATEGORY	STATION	OFFSET	LF
STAGE 2			
0010	83+47	31' RT	5
0010	82+61	37' RT	5
0010	82+49	25' LT	8
0010	81+30	21' LT	3
0010	73+84	37' RT	5
0010	72+37	31' LT	1
0010	72+37	22' LT	3
0010	71+65	28' RT	3
0010	67+91	27' RT	1
0010	65+68	21' LT	3
TOTAL 0010			37

BASE AGGREGATE ITEMS

					305.0110	305.0120	312.0110		
					BASE AGGREGATE	BASE AGGREGATE	SELECT CRUSHED		
					DENSE 3/4-INCH	DENSE 1 1/4-INCH	MATERIAL		
CATEGORY	STATION	TO	STATION	LOCATION	TON	TON	TON	REMARKS	
STAGE 1									
0010	89+68	-	95+41	STH 89	191	1109	2588	LAKE ST TO N. PROJECT LIMITS	
0010	86+34	-	89+68	STH 89	256	477	1112	WATER ST TO LAKE ST	
0010	84+52	-	86+34	STH 89	68	299	699	VETERANS LN TO WATER ST	
0010	10+72 'ELS'	-	10+87 'ELS'	E. LAKE ST	-	57	29		
0010	9+39 'WLS'	-	9+54 'WLS'	W. LAKE ST	-	42	21		
0010	11+04 'WS'	-	11+19 'WS'	WATER ST	26	12	10		
0010	9+35 'VL'	-	9+51 'VL'	VETERANS LN	-	24	10		
0010	84+40	-	95+41	STH 89 - LT/RT	-	57	-	DRIVEWAYS	
STAGE 2									
0010	68+37	-	84+87	STH 89	419	2610	6090	PHILLIPS LN TO VETERANS LN	
0010	62+87	-	68+37	STH 89	137	901	2102	LAKE PARK PL TO PHILLIPS LN	
0010	9+51 'PL'	-	9+66 'PL'	PHILLIPS LN	-	10	9		
0010	10+40 'LPP'	-	10+55 'LPP'	E. LAKE PARK PL	-	6	5		
0010	9+46 'LPP'	-	9+61 'LPP'	W. LAKE PARK PL	-	5	4		
0010	62+88	-	84+40	STH 89 - LT/RT	-	601	-	DRIVEWAYS	
STAGE 3									
0010	58+91	-	62+87	STH 89	104	700	1632	MILTON ST TO LAKE PARK PL	
0010	54+95	-	58+91	STH 89	105	677	1580	KEYES ST TO MILTON ST	
0010	44+36	-	54+95	STH 89	278	1717	4007	WOODLAND BEACH RD TO KEYES ST	
0010	10+40 'LPP'	-	10+55 'LPP'	E. LAKE PARK PL	-	6	5		
0010	9+46 'LPP'	-	9+61 'LPP'	W. LAKE PARK PL	-	5	4		
0010	10+49 'NCD'	-	10+75 'NCD'	N. CATLIN DR	-	32	28		
0010	9+52 'MS'	-	9+66 'MS'	MILTON ST	-	19	17		
0010	10+51 'SCD'	-	10+75 'SCD'	S. CATLIN DR	-	32	27		
0010	9+52 'KS'	-	9+66 'KS'	KEYES ST	-	9	8		
0010	9+45 'WBR'	-	9+60 'WBR'	WOODLAND BEACH RD	-	61	-		
0010	44+00	-	62+88	STH 89 - LT/RT	-	233	-	DRIVEWAYS	
STAGE 4									
0010	40+18	-	44+36	STH 89	104	706	1647	PINNACLE DR TO WOODLAND BEACH RD.	
0010	38+17	-	40+18	STH 89	50	360	839	COLUMBUS ST TO PINNACLE DR	
0010	34+77	-	38+17	STH 89	85	563	699	SANDY BEACH RD TO COLUMBUS ST	
0010	30+00	-	34+77	STH 89	91	957	2233	BEGIN CONCRETE TO SANDY BEACH RD	
0010	29+50	-	30+00	STH 89	-	127	65		
0010	40+40	-	44+00	STH 89	-	711	-	WINTER CARRY OVER	
0010	10+52 'PD'	-	10+68 'PD'	PINNACLE DR	-	33	-		
0010	9+54 'CS'	-	9+66 'CS'	COLUMBUS ST	-	7	6		
0010	8+30 'SBR'	-	9+71 'SBR'	SANDY BEACH RD	14	-	-		
0010	8+30 'SBR'	-	9+71 'SBR'	SANDY BEACH RD	-	282	-	TEMPORARY ACCESS	
0010	8+25 'A'	-	9+20 'A'	CTH A	21	250	127		
0010	29+50	-	44+00	STH 89 - LT/RT	-	231	-	DRIVEWAYS	
TOTAL 0010					1,949	13,928	25,603		

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

BASE AGGREGATE ITEMS								
* * *								
305.0110 305.0120 312.0110								
BASE AGGREGATE BASE AGGREGATE SELECT CRUSHED								
DENSE 3/4-INCH DENSE 1 1/4-INCH MATERIAL								
CATEGORY	STATION	TO	STATION	LOCATION	TON	TON	TON	REMARKS
STAGE 1								
0030	89+68	-	95+41	STH 89 - RT	-	82	192	ON-STREET PARKING
0030	89+68	-	95+41	STH 89 - LT	-	88	205	ON-STREET PARKING
0030	86+34	-	89+68	STH 89 - RT	-	249	582	ADJACENT PARKING AREA
0030	86+34	-	89+68	STH 89 - RT	-	19	45	ON-STREET PARKING
0030	86+34	-	89+68	STH 89 - LT	-	38	89	ON-STREET PARKING
0030	84+87	-	86+34	STH 89 - LT	-	9	21	ON-STREET PARKING
STAGE 2								
0030	68+37	-	84+87	STH 89 - RT	-	309	721	ON-STREET PARKING
0030	62+87	-	68+37	STH 89 - RT	-	110	257	ON-STREET PARKING
STAGE 3								
0030	58+91	-	62+87	STH 89 - RT	-	63	146	ON-STREET PARKING
0030	54+95	-	58+91	STH 89 - RT	-	65	151	ON-STREET PARKING
0030	44+36	-	54+95	STH 89 - RT	-	214	499	ON-STREET PARKING
STAGE 4								
0030	40+18	-	44+36	STH 89 - RT	-	79	184	ON-STREET PARKING
0030	38+17	-	40+18	STH 89 - RT	-	30	40	ON-STREET PARKING
0030	34+77	-	38+17	STH 89 - RT	-	66	153	ON-STREET PARKING
0030	33+75	-	34+77	STH 89 - RT	-	23	53	ON-STREET PARKING
0030	8+80 'SBR'	-	9+59 'SBR'	SANDY BEACH RD	-	51	44	
TOTAL 0030					0	1,495	3,382	
TOTAL					1,949	15,423	28,985	

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

WATER					
624.0100					
CATEGORY	STATION	TO	STATION	LOCATION	WATER MGAL
0010	29+50	-	95+41.21	PROJECT	210
TOTAL 0010					210

3

3

3

CONCRETE PAVEMENT												
CATEGORY	STATION	TO	STATION	LOCATION	405.0100 COLORING CONCRETE WISDOT RED CY	415.0080 CONCRETE PAVEMENT 8-INCH SY	415.0210 CONCRETE PAVEMENT GAPS EACH	415.1080 CONCRETE PAVEMENT HES 8-INCH SY	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT LF	REMARKS
STAGE 1												
0010	89+68	-	95+41	STH 89	-	2,710	-	-	22	40	698	LAKE ST TO END CONCRETE
0010	86+34	-	89+68	STH 89	-	1,841	1	-	9	-	618	WATER ST TO LAKE ST
0010	84+87	-	86+34	STH 89	-	736	1	-	-	-	197	VETERANS LN TO WATER ST
0010	84+40	-	84+87	STH 89	-	246	-	-	-	-	47	S. END OF STAGE 1 TO VETERANS LN
STAGE 2												
0010	68+37	-	84+40	STH 89	-	6,216	1	-	-	-	1,637	PHILLIPS LN TO S. END OF STAGE 1
0010	62+88	-	68+37	STH 89	-	2,166	1	-	-	-	628	LAKE PARK PL TO PHILLIPS LN
STAGE 3												
0010	58+91	-	62+88	STH 89	-	1,717	1	-	-	-	480	MILTON ST TO LAKE PARK PL
0010	54+95	-	58+91	STH 89	-	1,632	1	-	-	-	480	KEYES ST TO MILTON ST
0010	44+36	-	54+95	STH 89	-	4,105	1	-	-	-	1,098	WOODLAND BEACH RD TO KEYES ST
0010	44+00	-	44+36	STH 89	-	188	-	-	-	-	36	S. END OF STAGE 3 TO WOODLAND BEACH RD
STAGE 4												
0010	40+18	-	44+00	STH 89	-	1,705	1	-	-	-	435	PINNACLE DR TO WOODLAND BEACH RD.
0010	38+17	-	40+18	STH 89	-	881	1	-	-	-	235	COLUMBUS ST TO S. END OF STAGE 3
0010	34+77	-	38+17	STH 89	-	1,351	-	-	-	-	380	SANDY BEACH RD TO COLUMBUS ST
0010	30+00	-	34+77	STH 89	14	1,931	1	-	-	-	477	BEGIN CONCRETE TO SANDY BEACH RD
0010	9+20 'A'	-	9+83 'A'	CTH A	-	449	-	-	-	-	80	
0010	UNDISTRIBUTED				-	-	-	73	-	-	-	
TOTAL 0010					14	27,874	10	73	31	40	7,526	
STAGE 1												
0030	89+68	-	95+41	STH 89 - RT	-	247	-	-	-	-	-	ON-STREET PARKING
0030	89+68	-	95+41	STH 89 - LT	-	264	-	-	-	-	-	ON-STREET PARKING
0030	86+34	-	89+68	STH 89 - RT	-	748	-	-	-	-	-	ADJACENT PARKING AREA
0030	86+34	-	89+68	STH 89 - RT	-	58	-	-	-	-	-	ON-STREET PARKING
0030	86+34	-	89+68	STH 89 - LT	-	115	-	-	-	-	-	ON-STREET PARKING
0030	84+40	-	86+34	STH 89 - LT	-	27	-	-	-	-	-	ON-STREET PARKING
STAGE 2												
0030	68+37	-	84+40	STH 89 - RT	-	927	-	-	-	-	-	ON-STREET PARKING
0030	62+88	-	68+37	STH 89 - RT	-	331	-	-	-	-	-	ON-STREET PARKING
0030	58+91	-	62+88	STH 89 - RT	-	188	-	-	-	-	-	ON-STREET PARKING
STAGE 3												
0030	54+95	-	58+91	STH 89 - RT	-	195	-	-	-	-	-	ON-STREET PARKING
0030	44+36	-	54+95	STH 89 - RT	-	642	-	-	-	-	-	ON-STREET PARKING
STAGE 4												
0030	40+18	-	44+36	STH 89 - RT	-	237	-	-	-	-	-	ON-STREET PARKING
0030	38+17	-	40+18	STH 89 - RT	-	92	-	-	-	-	-	ON-STREET PARKING
0030	34+77	-	38+17	STH 89 - RT	-	198	-	-	-	-	-	ON-STREET PARKING
0030	33+75	-	34+77	STH 89 - RT	-	68	-	-	-	-	-	ON-STREET PARKING
TOTAL 0030					0	4,337	0	0	0	0	0	
TOTAL					14	32,211	10	73	31	40	7,526	

DRIVEWAYS						
CATEGORY	STATION	LOCATION	416.0160	416.0180	465.0120	REMARKS
			CONCRETE	CONCRETE	ASPHALTIC SURFACE	
			DRIVEWAY	DRIVEWAY	DRIVEWAYS AND	
			6-INCH	8-INCH	FIELD ENTRANCES	
			SY	SY	TON	
STAGE 1						
0010	85+24	STH 89 - RT	56	-	11	208 S. MAIN ST
0010	84+68	STH 89 - RT	89	-	10	208 S. MAIN ST
STAGE 2						
0010	84+20	STH 89 - LT	43	-	-	219 S. MAIN ST
0010	83+64	STH 89 - RT	16	-	-	218 S. MAIN ST
0010	83+10	STH 89 - RT	17	-	3	220 S. MAIN ST
0010	83+08	STH 89 - LT	42	-	12	219 S. MAIN ST
0010	82+38	STH 89 - RT	13	-	2	230 S. MAIN ST
0010	81+72	STH 89 - RT	25	-	-	236 S. MAIN ST
0010	81+69	STH 89 - LT	39	-	-	239 S. MAIN ST
0010	80+49	STH 89 - RT	13	-	2	242 S. MAIN ST
0010	80+31	STH 89 - LT	28	-	-	247 & 245 S. MAIN ST
0010	79+80	STH 89 - LT	13	-	-	251 & 253 S. MAIN ST
0010	79+78	STH 89 - RT	21	-	3	252 & 246 S. MAIN ST
0010	78+64	STH 89 - LT	14	-	1	257 S. MAIN ST
0010	78+54	STH 89 - RT	31	-	-	258 S. MAIN ST
0010	78+45	STH 89 - LT	18	-	2	265 S. MAIN ST
0010	78+21	STH 89 - RT	27	-	-	264 S. MAIN ST
0010	77+14	STH 89 - LT	22	-	-	269 S. MAIN ST
0010	76+63	STH 89 - RT	21	-	1	302 & 272 S. MAIN ST
0010	76+08	STH 89 - LT	12	-	3	275 S. MAIN ST
0010	75+85	STH 89 - RT	20	-	-	308 S. MAIN ST
0010	75+29	STH 89 - LT	14	-	3	307 S. MAIN ST
0010	74+50	STH 89 - LT	52	-	-	315 S. MAIN ST
0010	74+30	STH 89 - RT	12	-	-	316 S. MAIN ST
0010	74+15	STH 89 - LT	17	-	4	321 S. MAIN ST
0010	74+12	STH 89 - RT	13	-	4	322 S. MAIN ST
0010	73+00	STH 89 - RT	17	-	2	330 S. MAIN ST
0010	72+76	STH 89 - LT	16	-	5	321 S. MAIN ST
0010	71+85	STH 89 - LT	8	-	-	335 S. MAIN ST
0010	71+71	STH 89 - LT	13	-	2	343 S. MAIN ST
0010	70+47	STH 89 - RT	26	-	2	340 & 354 S. MAIN ST
0010	70+16	STH 89 - LT	27	-	2	357 & 349 S. MAIN ST
0010	69+35	STH 89 - RT	19	-	-	360 S. MAIN ST
0010	68+66	STH 89 - RT	44	-	-	402 S. MAIN ST
0010	68+07	STH 89 - RT	33	-	-	406 S. MAIN ST
0010	67+96	STH 89 - LT	21	-	-	411 S. MAIN ST
0010	67+02	STH 89 - RT	17	-	3	418 S. MAIN ST
0010	67+00	STH 89 - LT	23	-	-	417 S. MAIN ST
0010	66+32	STH 89 - LT	16	-	-	417 S. MAIN ST
0010	65+46	STH 89 - RT	15	-	-	424 S. MAIN ST
0010	65+04	STH 89 - LT	14	-	-	427 S. MAIN ST
0010	64+74	STH 89 - LT	14	-	-	437 S. MAIN ST
0010	64+14	STH 89 - RT	23	-	-	434 S. MAIN ST
STAGE 3						
0010	62+24	STH 89 - RT	15	-	3	504 S. MAIN ST
0010	61+56	STH 89 - LT	19	-	4	509 S. MAIN ST
SUBTOTAL 0010			1068	0	84	

DRIVEWAYS						
CATEGORY	STATION	LOCATION	416.0160	416.0180	465.0120	REMARKS
			CONCRETE	CONCRETE	ASPHALTIC SURFACE	
			DRIVEWAY	DRIVEWAY	DRIVEWAYS AND	
			6-INCH	8-INCH	FIELD ENTRANCES	
			SY	SY	TON	
STAGE 3						
0010	61+47	STH 89 - RT	20	-	5	510 S. MAIN ST
0010	60+81	STH 89 - RT	28	-	-	516 S. MAIN ST
0010	60+77	STH 89 - LT	15	-	3	519 S. MAIN ST
0010	57+65	STH 89 - RT	24	-	-	610 S. MAIN ST
0010	56+95	STH 89 - LT	13	-	2	609 S. MAIN ST
0010	56+85	STH 89 - RT	27	-	-	614 S. MAIN ST
0010	54+45	STH 89 - RT	16	-	3	702 S. MAIN ST
0010	53+63	STH 89 - LT	19	-	5	709 S. MAIN ST
0010	53+20	STH 89 - RT	16	-	2	708 S. MAIN ST
0010	52+88	STH 89 - RT	15	-	1	716 S. MAIN ST
0010	52+87	STH 89 - LT	23	-	-	717 S. MAIN ST
0010	52+19	STH 89 - RT	16	-	1	720 S. MAIN ST
0010	51+20	STH 89 - RT	34	-	8	800 S. MAIN ST
0010	51+11	STH 89 - LT	19	-	-	725 S. MAIN ST
0010	50+61	STH 89 - LT	30	-	-	803 S. MAIN ST
0010	49+82	STH 89 - LT	19	-	-	809 S. MAIN ST
0010	49+49	STH 89 - RT	41	-	8	800 S. MAIN ST
0010	48+91	STH 89 - LT	21	-	-	817 S. MAIN ST
0010	48+78	STH 89 - RT	20	-	3	800 S. MAIN ST
0010	48+36	STH 89 - RT	25	-	3	822 S. MAIN ST
0010	47+67	STH 89 - LT	20	-	-	823 S. MAIN ST
0010	47+21	STH 89 - RT	26	-	3	902 S. MAIN ST
0010	46+89	STH 89 - LT	12	-	1	903 S. MAIN ST
0010	46+05	STH 89 - LT	13	-	1	909 S. MAIN ST
0010	45+65	STH 89 - RT	20	-	2	908 S. MAIN ST
0010	45+37	STH 89 - RT	20	-	2	914 S. MAIN ST
STAGE 4						
0010	43+91	STH 89 - RT	22	-	2	922 S. MAIN ST
0010	42+71	STH 89 - LT	20	-	3	1011 S. MAIN ST
0010	42+14	STH 89 - RT	44	-	-	1014 S. MAIN ST
0010	41+17	STH 89 - LT	20	-	2	1019 S. MAIN ST
0010	39+99	STH 89 - LT	14	-	2	1027 S. MAIN ST
0010	39+76	STH 89 - LT	15	-	2	1037 S. MAIN ST
0010	38+24	STH 89 - RT	15	-	-	1042 S. MAIN ST
0010	37+58	STH 89 - RT	37	-	10	1042 & 1110 S. MAIN ST
0010	37+35	STH 89 - LT	24	-	0	1103 S. MAIN ST
0010	37+05	STH 89 - LT	30	-	4	1111 S. MAIN ST
0010	36+42	STH 89 - LT	30	-	6	1117 S. MAIN ST
0010	36+28	STH 89 - RT	90	-	-	1110 S. MAIN ST
0010	34+66	STH 89 - RT	36	-	18	1122 S. MAIN ST
0010	33+81	STH 89 - LT	30	-	8	1205 S. MAIN ST
0010	33+80	STH 89 - RT	25	-	11	1204 S. MAIN ST
0010	33+39	STH 89 - LT	28	-	7	1213 S. MAIN ST
0010	30+65	STH 89 - RT	19	-	-	1220 S. MAIN ST
0010	30+56	STH 89 - LT	14	-	-	N6055 STH 89
0010	9+65 'A'	CTH A - LT	-	230	-	1219 S. MAIN ST
SUBTOTAL 0010			1065	230	128	
TOTAL 0010			2,133	230	212	

ASPHALTIC SURFACE							
CATEGORY	STATION	TO	STATION	LOCATION	455.0605	465.0105	465.0125
					TACK COAT	ASPHALTIC SURFACE	ASPHALTIC SURFACE TEMPORARY
STAGE 1							
0010	10+72 'ELS'	-	10+87 'ELS'	E LAKE ST	4.4	25	-
0010	9+39 'WLS'	-	9+54 'WLS'	W LAKE ST	3.3	18	-
0010	11+04 'WS'	-	11+19 'WS'	WATER ST	2.8	11	-
0010	9+35 'VL'	-	9+51 'VL'	VETERANS LN	-	9	-
STAGE 2							
0010	9+51 'PL'	-	9+66 'PL'	PHILLIPS LN	2.3	9	-
0010	10+40 'LPP'	-	10+55 'LPP'	E LAKE PARK PL	1.4	6	-
0010	9+46 'LPP'	-	9+61 'LPP'	W LAKE PARK PL	1.2	4	-
STAGE 3							
0010	10+40 'LPP'	-	10+55 'LPP'	E LAKE PARK PL	1.4	6	-
0010	9+46 'LPP'	-	9+61 'LPP'	W LAKE PARK PL	1.2	4	-
0010	10+49 'NCD'	-	10+75 'NCD'	CATLIN DR N	7.5	29	-
0010	9+52 'MS'	-	9+66 'MS'	MILTON ST	4.5	18	-
0010	10+51 'SCD'	-	10+75 'SCD'	CATLIN DR S	7.3	29	-
0010	9+52 'KS'	-	9+66 'KS'	KEYES ST	2.1	8	-
0010	9+45 'WBR'	-	9+60 'WBR'	WOODLAND BEACH RD	-	15	-
STAGE 4 WC							
0010	40+40	-	44+00	STH 89	-	-	233
STAGE 4							
0010	29+50	-	30+00	STH 89	10.2	57	-
0010	10+52 'PD'	-	10+68 'PD'	PINNACLE DR	-	10	-
0010	9+54 'CS'	-	9+66 'CS'	COLUMBUS ST	1.7	6	-
0010	8+25 'A'	-	9+20 'A'	CTH A	20.0	112	-
TOTAL 0010					71.3	376	233
0030	8+80 'SBR'	-	9+59 'SBR'	SANDY BEACH RD	11.4	45	-
TOTAL 0030					11.4	45	0
TOTAL					82.7	421	233

CURB RAMPS							
CATEGORY	STATION	TO	STATION	LOCATION	602.0505	650.9000	REMARKS
					CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	CONSTRUCTION STAKING CURB RAMPS EACH	
STAGE 1							
0010	95+25	-	95+65	STH 89 - RT	40	4	MADISON ST
0010	94+25	-	94+30	STH 89 - LT	10	1	HANDICAP PARKING SPACE
0010	89+25	-	90+05	STH 89 - LT	40	4	W LAKE ST
0010	89+35	-	90+30	STH 89 - RT	30	3	E LAKE ST
0010	86+00	-	86+05	STH 89	20	2	WATER ST
0010	84+60	-	85+05	STH 89 - LT	20	2	VETERANS LN
0010	10+55 'WS'	-	11+00 'WS'	WATER ST	40	4	WATER ST
STAGE 2							
0010	68+15	-	68+55	STH 89 - LT	20	2	PHILLIPS LN
0010	62+55	-	63+20	STH 89 - LT	20	2	W LAKE PARK PL
0010	62+55	-	63+20	STH 89 - RT	20	2	E LAKE PARK PL
STAGE 3							
0010	62+55	-	63+20	STH 89 - LT	20	2	W LAKE PARK PL
0010	62+55	-	63+20	STH 89 - RT	20	2	E LAKE PARK PL
0010	58+60	-	59+30	STH 89 - LT	40	4	MILTON ST
0010	58+60	-	59+30	STH 89 - RT	44	4	N CATLIN DR
0010	54+65	-	55+25	STH 89 - LT	40	4	KEYES ST
0010	54+65	-	55+25	STH 89 - RT	40	4	S CATLIN DR
0010	44+10	-	44+75	STH 89 - LT	40	4	WOODLAND BEACH RD
STAGE 4							
0010	39+95	-	40+60	STH 89	40	4	PINNACLE DR
0010	38+00	-	38+35	STH 89 - LT	20	2	COLUMBUS ST
0010	34+50	-	35+15	STH 89	40	4	SANDY BEACH RD
0010	32+70	-	32+85	STH 89	64	2	GLACIER DRUMLIN BIKE TRAIL
TOTAL 0010					668	62	

CURB & GUTTER ITEMS										
CATEGORY	STATION	TO	STATION	LOCATION	601.0409	601.0411	601.0586	650.5500	SPV.0090.03	REMARKS
					CONCRETE CURB & GUTTER 30-INCH TYPE A	CONCRETE CURB & GUTTER 30-INCH TYPE D	CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBTT	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	CONCRETE CURB & GUTTER 30-INCH TYPE A SPECIAL	
					LF	LF	LF	LF	LF	
STAGE 1										
0010	95+41	-	95+65	STH 89 - RT	73	-	-	-	-	MADISON ST. PEDESTRIAN REFUGE ISLAND
0010	89+83	-	95+41	STH 89 - RT	559	17	-	17	10	E. LAKE ST TO MADISON ST
0010	86+34	-	89+83	STH 89 - RT	365	30	-	30	-	WATER ST TO E. LAKE ST
0010	84+40	-	86+34	STH 89 - RT	262	16	-	16	9	STAGE 1 S. LIMITS TO WATER ST
0010	89+68	-	95+41	STH 89 - LT	583	15	-	15	42	W. LAKE ST TO MADISON ST
0010	84+87	-	89+68	STH 89 - LT	481	15	-	15	37	VETERANS LN TO W. LAKE ST
0010	84+40	-	84+87	STH 89 - LT	44	16	-	16	11	STAGE 1 S. LIMITS TO VETERANS LN
STAGE 2										
0010	62+87	-	84+40	STH 89 - RT	2,136	15	-	15	-	LAKE PARK PL TO STAGE 1 S. LIMITS
0010	68+37	-	84+40	STH 89 - LT	1,604	15	-	15	-	PHILLIPS LN TO STAGE 1 S. LIMITS
0010	62+87	-	68+37	STH 89 - LT	538	30	-	30	11	LAKE PARK PL TO PHILLIPS LN
STAGE 3										
0010	58+97	-	62+87	STH 89 - RT	380	57	-	57	-	N. CATLIN DR TO LAKE PARK PL
0010	54+90	-	58+97	STH 89 - RT	418	91	-	91	-	S. CATLIN DR TO N. CATLIN DR
0010	44+00	-	54+90	STH 89 - RT	1,091	41	-	41	-	STAGE 3 S. LIMITS TO S. CATLIN DR
0010	58+91	-	62+87	STH 89 - LT	386	45	-	45	15	MILTON ST TO LAKE PARK PL
0010	54+95	-	58+91	STH 89 - LT	384	46	-	46	17	KEYES ST TO MILTON ST
0010	44+37	-	54+95	STH 89 - LT	1,047	45	-	45	-	WOODLAND BEACH RD TO KEYES ST
0010	44+00	-	44+37	STH 89 - LT	33	30	-	30	-	STAGE 3 S. LIMITS TO WOODLAND BEACH RD
STAGE 4										
0010	40+18	-	44+00	STH 89 - RT	381	15	-	15	-	PINNACLE DR TO WOODLAND BEACH RD
0010	30+00	-	40+18	STH 89 - RT	993	15	-	15	51	STAGE 4 S. LIMITS TO PINNACLE DR
0010	38+17	-	44+00	STH 89 - LT	581	5	-	5	-	COLUMBUS ST TO WOODLAND BEACH RD
0010	34+77	-	38+17	STH 89 - LT	334	22	-	22	-	SANDY BEACH RD TO COLUMBUS ST
0010	31+72	-	34+77	STH 89 - LT	353	185	30	185	70	CTH A TO SANDY BEACH RD
0010	30+00	-	31+72	STH 89 - LT	178	120	-	120	-	STAGE 4 S. LIMITS TO CTH A
TOTAL 0010					13,204	886	30	886	273	
STAGE 1										
0030	86+62	-	88+43	STH 89 - RT	383	-	-	-	-	MEDIAN PARKING ISLAND
STAGE 4										
0030	8+80 'SBR'	-	9+45 'SBR'	SANDY BEACH RD - RT	-	65	-	65	-	
0030	8+80 'SBR'	-	9+45 'SBR'	SANDY BEACH RD - LT	-	65	-	65	-	
TOTAL 0030					383	130	0	130	0	
TOTAL					13,587	1,016	30	1,016	273	

CONCRETE SIDEWALK							
CATEGORY	STATION	TO	STATION	LOCATION	602.0405	602.0415	REMARKS
					CONCRETE SIDEWALK 4-INCH SF	CONCRETE SIDEWALK 6-INCH SF	
STAGE 1							
0010	95+41	-	95+65	STH 89 - RT	225	-	PEDESTRIAN REFUGE ISLAND
0010	94+93	-	95+22	STH 89 - RT	206	-	SW CORNER OF MADISON ST
0010	89+68	-	95+41	STH 89 - LT	6,864	-	LAKE ST TO END CONCRETE
0010	90+17	-	90+73	STH 89 - RT	314	-	NE CORNER OF LAKE ST
0010	86+55	-	88+40	STH 89 - RT	2,002	-	MEDIAN ISLAND
0010	86+34	-	89+68	STH 89 - LT	4,108	-	WATER ST TO LAKE ST
0010	86+34	-	89+68	STH 89 - RT	3,763	-	WATER ST TO LAKE ST
0010	84+87	-	86+34	STH 89 - LT	1,068	-	VETERANS LN TO WATER ST
0010	84+52	-	86+34	STH 89 - RT	1,239	-	VETERANS LN TO WATER ST
0010	10+18 'WS'	-	11+09 'WS'	WATER ST - RT	999	-	WATER ST
STAGE 2							
0010	68+37	-	84+87	STH 89 - LT	6,885	-	PHILLIPS LN TO VETERANS LN
0010	68+37	-	84+52	STH 89 - RT	6,795	-	PHILLIPS LN TO VETERANS LN
0010	62+87	-	68+37	STH 89 - LT	2,313	-	LAKE PARK PL TO PHILLIPS LN
0010	62+87	-	68+37	STH 89 - RT	2,450	-	LAKE PARK PL TO PHILLIPS LN
STAGE 3							
0010	58+91	-	62+87	STH 89 - LT	1,928	-	MILTON ST TO LAKE PARK PL
0010	58+91	-	62+87	STH 89 - RT	1,756	-	MILTON ST TO LAKE PARK PL
0010	54+95	-	58+91	STH 89 - LT	1,912	-	KEYES ST TO MILTON ST
0010	54+95	-	58+91	STH 89 - RT	1,943	-	KEYES ST TO MILTON ST
0010	44+36	-	54+95	STH 89 - LT	4,711	-	WOODLAND BEACH RD TO KEYES ST
0010	44+01	-	54+95	STH 89 - RT	4,548	-	WOODLAND BEACH RD TO KEYES ST
STAGE 4							
0010	40+18	-	44+36	STH 89 - LT	1,929	-	PINNACLE DR TO WOODLAND BEACH RD.
0010	40+18	-	44+01	STH 89 - RT	1,734	-	PINNACLE DR TO WOODLAND BEACH RD.
0010	38+17	-	40+18	STH 89 - LT	823	-	COLUMBUS ST TO PINNACLE DR
0010	38+17	-	40+18	STH 89 - RT	914	-	COLUMBUS ST TO PINNACLE DR
0010	34+77	-	38+17	STH 89 - LT	1,202	-	SANDY BEACH RD TO COLUMBUS ST
0010	34+77	-	38+17	STH 89 - RT	1,404	-	SANDY BEACH RD TO COLUMBUS ST
0010	30+00	-	34+77	STH 89 - LT	1,043	-	BEGIN PROJECT TO SANDY BEACH RD
0010	30+00	-	34+77	STH 89 - RT	1,896	-	BEGIN PROJECT TO SANDY BEACH RD
0010	8+30 'SBR'	-	9+71 'SBR'	SANDY BEACH RD - LT	519	-	SANDY BEACH RD
0010		32+87		STH 89 - LT	-	72	GLACIER DRUMLIN BIKE TRAIL
0010		32+71		STH 89 - RT	-	50	GLACIER DRUMLIN BIKE TRAIL
0010	9+20 'A'	-	9+83 'A'	CTH A - LT	500	-	CTH A
TOTAL 0010					67,993	122	

CONCRETE STEPS

602.1500				
CONCRETE				
STEPS				
CATEGORY	STATION	OFFSET	SF	REMARKS
STAGE 2				
0010	81+50	35' RT	15	236 S. MAIN ST
0010	80+85	28' LT	12	242 S. MAIN ST
0010	80+45	30' LT	12	245 S. MAIN ST
0010	80+26	30' LT	12	246 S. MAIN ST
0010	79+48	35' RT	11	252 S. MAIN ST
0010	78+70	28' LT	11	258 S. MAIN ST
0010	78+00	28' LT	14	264 S. MAIN ST
0010	77+00	35' RT	11	272 S. MAIN ST
0010	75+75	35' RT	6	307 S. MAIN ST
0010	75+07	35' RT	14	315 S. MAIN ST
0010	74+65	35' RT	12	316 S. MAIN ST
0010	72+37	35' RT	13	335 S. MAIN ST
0010	65+55	28' LT	10	427 S. MAIN ST
STAGE 3				
0010	59+62	35' RT	15	523 S. MAIN ST
0010	54+25	35' RT	9	702 S. MAIN ST
TOTAL 0010			177	

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STORMSEWER STRUCTURES

STORM SEWER STRUCTURES				611.1004		611.1006		611.1230		611.2004		611.2005		611.2006		611.2007		611.3003		611.3004		611.3230		611.0530		611.0612		611.0624		611.8105		611.8115		SPV.0060.07		
STRUCTURE				TOP	RIM OR	BOTTOM	STR	CATCH	CATCH	CATCH	MANHOLE	MANHOLE	MANHOLE	MANHOLE	INLET	INLET	INLET	MANHOLE	INLET	INLET	ADJUSTING	ADJUSTING	CONNECT	STORM SEWER												
NUMBER	STATION	OFFSET		STRUCTURE	FLANGE	STRUCTURE	DEPTH	4-FT DIA.	6-FT DIA.	2x3-FT	4-FT	5-FT	6-FT	7-FT	3-FT	4-FT	2x3-FT	COVERS	COVERS	COVERS	CATCH BASIN	INLET	STRUCTURE TO EXISTING													
				ELEV	ELEV	ELEV	FEET	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	COVERS	COVERS	STORM SEWER PIPE	STAGE												
1	94+97.9	1.1	RT	833.05	834.13	825.86	7.2				1							1					1	1												
1A	94+97.7	24.5	LT	833.54	834.37	829.93	3.6										1				1			1												
1B	95+27.8	58.8	RT	832.45	833.28	830.59	1.9											1				1		1												
1C	94+97.7	24.5	RT	832.77	833.60	826.91	5.9											1				1		1												
2	92+88.8	0.2	LT	831.92	833.01	824.55	7.4					1							1					1												
2A	92+93.3	24.5	LT	832.51	833.34	827.11	5.4										1						1	1												
2B	92+88.3	24.5	RT	831.33	832.16	827.11	4.2											1				1		1												
2.1	92+46.0	0.2	LT	831.69	832.77	824.27	7.4					1										1		1												
3	89+67.3	50.0	LT	830.80	831.88	821.31	9.5						1											1												
3A	89+95.6	24.7	LT	830.99	831.82	827.47	3.5											1					1	1												
3B	89+78.7	53.2	LT	830.90	831.73	826.81	4.1											1					1		1											
3C	89+41.1	45.7	LT	830.14	830.98	826.43	3.7												1				1		1											
4	89+85.4	42.4	RT	829.56	830.64	820.50	9.1				1													1												
4A	90+32.0	33.7	RT	829.65	830.49	826.29	3.4											1						1												
4B	89+61.0	46.1	RT	829.54	830.37	826.03	3.5												1					1												
5	89+74.9	0.5	LT	830.21	831.29	819.28	10.9							1					1					1												
6	87+37.9	1.2	RT	828.45	829.53	817.46	11.0						1						1					1												
6A	87+47.9	24.5	LT	828.92	829.76	825.48	3.4												1				1	1												
6B	87+37.9	24.5	LT	828.93	829.77	825.10	3.8											1					1	1												
6C	87+47.9	24.5	RT	828.00	828.84	824.95	3.1												1				1	1												
6D	87+43.5	66.2	RT	826.77	827.61	823.77	3.0											1					1	1												
6E	87+37.9	24.5	RT	828.01	828.85	823.08	4.9												1				1	1												
EX7	85+94.3	13.9	RT		830.40																			1												
EX7A	85+87.2	26.7	LT		831.18																			1												
EX8	85+86.2	11.3	RT		830.64																			1												
9	85+61.2	12.9	RT	830.06	831.15	825.21	4.9						1						1					1												
9A	85+61.3	24.5	LT	830.35	831.18	827.93	2.4												1					1												
9B	85+54.5	18.5	RT	830.33	831.17	827.65	2.7												1					1												
10	85+03.9	8.0	LT	832.07	833.15	828.23	3.8					1												1												
10A	84+60.5	54.0	LT	833.01	833.84	829.63	3.4												1					1												
10B	84+98.1	48.7	LT	831.26	832.09	829.17	2.1												1					1												
11	84+50.2	9.0	LT	833.90	834.98	829.49	4.4					1												1												
11A	84+49.1	18.5	LT	833.97	834.80	830.39	3.6																	1												
11B	84+50.2	18.5	RT	833.78	834.62	830.46	3.3												1					1												
12	82+84.0	7.7	LT	838.40	839.48	833.84	4.6					1												1												
12A	82+84.0	17.7	LT	838.45	839.28	834.75	3.7												1					1												
12B	82+84.6	22.6	RT	838.14	838.97	834.83	3.3																	1												
13	79+90.0	7.0	LT	839.87	840.95	835.41	4.5				1													1												
13A	80+00.0	17.5	LT	839.85	840.69	836.42	3.4												1					1												
13B	79+90.0	17.5	LT	839.90	840.74	836.32	3.6												1					1												
13C	80+00.0	24.5	RT	839.71	840.55	836.70	3.0												1					1												
13D	79+90.0	24.5	RT	839.76	840.60	836.37	3.4												1					1												
14	76+84.4	7.0	LT	841.42	842.50	836.98	4.4				1													1												
14A	76+84.4	17.5	LT	841.45	842.29	837.90	3.6												1					1												
14B	76+84.4	24.5	RT	841.31	842.15	837.98	3.3												1					1												
15	73+70.0	7.0	LT	850.63	851.71	844.90	5.7				1													1												
15A	73+70.0	17.5	LT	850.67	851.50	846.81	3.9																	1												
15B	73+70.0	24.5	RT	850.36	851.20	847.02	3.3					</																								

ALL ITEMS CATEGORY 0010 UNLESS NOTED

PROJECT NO: 3300-01-73

HWY: STH 89

COUNTY: JEFFERSON

MISCELLANEOUS QUANTITIES

SHEET NO: 184

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STORMSEWER STRUCTURES (CONTINUED)

STRUCTURE NUMBER	STATION	OFFSET		TOP	RIM OR	BOTTOM	STR	611.1004	611.1006	611.1230	611.2004	611.2005	611.2006	611.2007	611.3003	611.3004	611.3230	611.0530	611.0612	611.0624	611.8105	611.8115	SPV.0060.07	STAGE	COMMENTS
				STRUCTURE ELEV	FLANGE ELEV	STRUCTURE ELEV	DEPTH FEET	CATCH BASIN 4-FT DIA EACH	CATCH BASIN 6-FT DIA EACH	CATCH BASIN 2x3-FT EACH	MANHOLE 4-FT DIA EACH	MANHOLE 5-FT DIA EACH	MANHOLE 6-FT DIA EACH	MANHOLE 7-FT DIA EACH	INLET 3-FT DIA EACH	INLET 4-FT DIA EACH	INLET 2x3-FT EACH	MANHOLE COVERS TYPE J EACH	INLET COVERS TYPE C EACH	INLET COVERS TYPE H EACH	ADJUSTING CATCH BASIN COVERS EACH	ADJUSTING INLET COVERS EACH	CONNECT STORM SEWER STRUCTURE TO EXISTING STORM SEWER PIPE EACH		
22A	63+02.7	36.0	LT	857.17	858.01	853.53	3.6										1			1				3	
22B	62+72.6	36.0	LT	857.24	858.08	853.68	3.6										1			1				3	
23	62+94.9	7.0	LT	856.79	857.88	849.76	7.0						1					1						2	
EX24	62+94.9	38.7	RT	857.68														1						2	
25	62+32.1	7.0	LT	856.71	857.79	850.46	6.3					1						1						3	
25A	62+42.1	17.5	LT	856.79	857.62	853.79	3.0										1			1				3	
25B	62+32.1	17.5	LT	856.79	857.62	853.41	3.4										1			1				3	
25C	62+42.1	24.5	RT	856.68	857.52	853.50	3.2										1			1				3	
25D	62+32.1	24.5	RT	856.69	857.52	853.12	3.6										1			1				3	
26	61+07.8	7.0	LT	857.25	858.33	851.64	5.6				1							1						3	
26A	61+07.8	17.5	LT	857.28	858.12	853.55	3.7										1			1				3	
26B	61+07.8	24.5	RT	857.14	857.98	853.76	3.4										1			1				3	
27	59+11.7	7.0	LT	859.48	860.57	853.65	5.8				1							1						3	
27A	58+76.6	30.9	LT	860.49	861.33	856.84	3.7										1			1				3	
27B	59+06.8	31.0	LT	859.88	860.72	856.26	3.6									1				1				3	
27C	59+11.7	21.6	LT	859.73	860.56	856.11	3.6									1				1				3	
27D	58+83.2	44.6	RT	859.53	860.36	856.50	3.0										1			1				3	
27E	59+11.7	41.2	RT	859.42	860.26	855.94	3.5									1				1				3	
28	57+84.3	7.0	LT	860.81	861.89	854.97	5.8				1							1						3	
28A	57+84.3	17.5	LT	860.84	861.68	857.39	3.5										1			1				3	
28B	57+84.3	24.5	RT	860.70	861.54	857.10	3.6										1			1				3	
29	54+62.3	7.0	LT	863.24	864.33	857.44	5.8				1							1						3	
29A	55+10.7	30.2	LT	862.98	863.81	859.80	3.2										1			1				3	
29B	54+81.3	30.3	LT	863.35	864.18	859.23	4.1									1				1				3	
29C	54+62.4	17.5	LT	863.28	864.12	858.95	4.3									1				1				3	
29D	55+14.4	71.2	RT	862.56	863.40	859.57	3.0										1			1				3	
29E	54+75.9	71.3	RT	862.85	863.68	859.33	3.5									1				1				3	
29F	54+61.8	27.0	RT	863.17	864.00	858.59	4.6									1				1				3	
30	49+25.9	7.0	LT	861.71	862.79	854.51	7.2		1									1						3	SEE NOTE 1
30A	49+25.8	17.5	LT	861.74	862.58	857.43	4.3										1			1				3	
30B	49+25.8	24.5	RT	861.60	862.44	857.64	4.0										1			1				3	
31	47+38.1	7.0	LT	859.24	860.32	854.58	4.7				1							1						3	
31A	47+38.1	17.5	LT	859.28	860.11	853.50	5.8		1											1				3	SEE NOTE 1
31B	47+38.1	44.2	RT	857.92	859.00	856.18	1.7							1					1					3	
31C	47+38.1	24.5	RT	859.14	859.97	853.71	5.4			1										1				3	
32	44+80.4	7.0	LT	857.81	858.90	853.25	4.6				1							1						3	
32A	44+20.2	36.6	LT	857.76	858.59	854.71	3.0										1			1				3	
32B	44+55.4	35.4	LT	857.98	858.82	854.54	3.4									1				1				3	
32C	44+80.2	17.5	LT	857.85	858.68	852.11	5.7		1											1				3	SEE NOTE 1
32D	44+80.2	24.5	RT	857.71	858.54	852.37	5.3			1										1				3	
33	43+02.9	7.0	LT	857.11	858.19	852.31	4.8					1						1						4 (2018)	
33A	43+12.9	17.5	LT	857.14	857.97	853.60	3.5										1			1		1		4 (2018)	SEE NOTE 2
33B	43+02.9	17.5	LT	857.14	857.98	851.22	5.9		1											1				4 (2018)	SEE NOTES 1 & 2
33C	43+12.9	24.5	RT	857.00	857.83	853.81	3.2										1			1		1		4 (2018)	SEE NOTE 2
33D	43+02.9	24.5	RT	857.00	857.84	851.43	5.6	1												1		1		4 (2018)	SEE NOTES 1 & 2
34	40+51.4	7.0	LT	858.39	859.47	842.88	15.5					1						1						4 (2018)	
35	39+93.2	7.0	LT	858.72	859.81	852.31	6.4		1									1						4 (2018)	SEE NOTE 1
35A	39+88.2	17.5	LT	858.79	859.62	854.48	4.3									1				1			1	4 (2018)	
35B	39+93.3	32.6	RT	858.43	859.26	854.76	3.7									1				1				4 (2018)	
36	40+50.9	54.6	RT	858.68	859.76	842.03	16.6					1						1						4 (2018)	
36.1	42+38.9	244.6	RT																					4 (2018)	
37	40+50.5	25.8	LT	858.82	859.90	847.05	11.8					1						1						4 (2018)	
38	38+37.6	21.5	LT	859.49	860.58	848.34	11.2				1							1					1	4 (2019)	
38A	38+28.7	30.3	LT	859.45	860.29	855.10	4.4									1				1				4 (2019)	
39	38+04.5	39.1	LT	859.08	860.17	848.44	10.6				1							1					1	4 (2019)	
39A	38+03.2	30.5	LT	859.18	860.02	854.61	4.6										1			1				4 (2019)	
40	35+49.9	7.0	LT	857.18	858.26	851.48	5.7		1									1						4 (2019)	SEE NOTE 1
40A	35+49.9	17.5	LT	857.22	858.05	854.32	2.9									1				1				4 (2019)	
40B	35+39.9	17.5	LT	857.21	858.04	854.34	2.9										1			1				4 (2019)	
40C	35+49.9	24.5	RT	857.08	857.91	854.37	2.7									1				1				4 (2019)	
SUBTOTAL								1	6	2	8	4	2	0	1	13	21	18	1	40	2	2	3		

ALL ITEMS CATEGORY 0010 UNLESS NOTED

PROJECT NO: 3300-01-73

HWY: STH 89

COUNTY: JEFFERSON

MISCELLANEOUS QUANTITIES

SHEET NO: 185

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STORM SEWER STRUCTURES (CONTINUED)

STRUCTURE NUMBER	STATION	OFFSET	RT	TOP STRUCTURE	RIM OR FLANGE	BOTTOM STRUCTURE	STR DEPTH	611.1004 CATCH BASIN	611.1006 CATCH BASIN	611.1230 CATCH BASIN	611.2004 MANHOLE	611.2005 MANHOLE	611.2006 MANHOLE	611.2007 MANHOLE	611.3003 INLET	611.3004 INLET	611.3230 INLET	611.0530 MANHOLE	611.0612 INLET	611.0624 INLET	611.8105 ADJUSTING CATCH BASIN	611.8115 ADJUSTING INLET	SPV.0060.07 CONNECT STORM SEWER STRUCTURE TO EXISTING STORM SEWER PIPE	STAGE	COMMENTS
				ELEV	ELEV	ELEV	FEET	4-FT DIA. EACH	6-FT DIA. EACH	2x3-FT EACH	4-FT DIA. EACH	5-FT DIA. EACH	6-FT DIA. EACH	7-FT DIA. EACH	3-FT DIA. EACH	4-FT DIA. EACH	2x3-FT EACH	COVERS TYPE J EACH	COVERS TYPE C EACH	COVERS TYPE H EACH	COVERS EACH	COVERS EACH	EACH		
40D	35+39.9	24.5	RT	857.07	857.90	854.40	2.7										1			1				4 (2019)	
41	34+69.9	68.8	LT	856.88	857.96	851.44	5.4		1									1						4 (2019)	SEE NOTE 1
41A	34+94.3	69.3	LT	857.26	858.35	854.60	2.7				1							1					1	4 (2019)	
41B	34+86.9	78.2	LT	856.96	857.79	854.62	2.3										1			1				4 (2019)	
41C	34+88.7	68.3	LT	856.94	857.77	854.30	2.6										1			1				4 (2019)	
41D	34+57.2	79.2	LT	857.02	857.86	854.32	2.7										1			1				4 (2019)	
41E	34+57.2	69.2	LT	857.00	857.83	854.29	2.7										1			1				4 (2019)	
42	34+40.2	7.0	LT	857.56	858.65	851.39	6.2		1									1						4 (2019)	SEE NOTE 1
42A	34+40.2	17.5	LT	857.60	858.43	854.30	3.3										1			1				4 (2019)	
42B	34+40.2	24.5	RT	857.46	858.29	854.36	3.1										1			1				4 (2019)	
43	33+59.8	7.4	LT	858.54	859.62	854.60	3.9				1							1						4 (2019)	
43A	33+60.0	35.0	LT	858.26	859.35	855.07	3.2								1					1		1		4 (2019)	
44	34+50.5	7.0	LT	857.48	858.56	852.82	4.7						1					1						4 (2019)	
45	34+53.7	260.0	RT																					4 (2019)	
50	29+75.0	18.5	LT	857.35	858.43	854.17	3.2				1							1						4 (2019)	
50A	31+83.6	89.0	LT	859.75	860.83	856.20	3.5				1							1					1	4 (2019)	
50B	31+75.4	64.2	LT	859.14	859.98	855.39	3.8								1					1				4 (2019)	SEE NOTE 1
50C	31+17.5	30.1	LT	858.86	859.70	852.97	5.9		1											1				4 (2019)	
50.1	29+64.7	27.9	LT																					4 (2019)	
EX60	86+40.7	89.2	RT		827.37													1						1	
EX60A	86+78.3	81.8	RT		826.71																1			1	
EX60B	86+37.2	89.9	RT		827.32															1				1	
SUBTOTAL								0	3	0	4	0	1	0	1	1	7	8	1	11	0	0	2		
TOTAL								1	9	2	22	9	6	1	2	24	57	48	2	90	2	2	10		

GENERAL NOTES

- RIM ELEVATIONS ARE GIVEN AT THE FLANGE LINE OF THE CASTING FOR INLET GRATES OR THE CENTER OF THE STRUCTURE FOR MANHOLES AND FIELD INLETS.
- STATIONS AND OFFSETS ARE TO THE CENTER OF STRUCTURES OR TO THE END OF PIPE WHERE THERE IS AN ENDWALL.
- STR DEPTH = RIM ELEV - INV - PIPE THICKNESS - CASTING HEIGHT - ADJUSTMENT
 - CASTING HEIGHT = 9" FOR TYPE J AND TYPE C COVERS AND 6" FOR TYPE H COVERS
 - ADJUSTMENT = 4" TYPICAL

NOTE 1: STRUCTURE UP-SIZED AND 2 FOOT SUMP ADDED FOR WATER QUALITY TSS REMOVAL.

NOTE 2: RIM ELEVATIONS FOR TEMPORARY PAVEMENT FOR WINTER 2018-2019 CARRY OVER: 33A = 858.06, 33B = 858.09, 33C = 857.91, 33D = 857.92

ALL ITEMS CATEGORY 0010 UNLESS NOTED

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STORMSEWER PIPES						608.0315	608.0324	608.0330	608.0330	608.0412	608.0415	608.0424	SPV.0060.06	522.1015	522.1030	522.1036
						CLASS III	CLASS III	CLASS III	CLASS III	CLASS IV	CLASS IV	CLASS IV	CONNECT NEW STORM	AEW FOR CULVERT	AEW FOR CULVERT	AEW FOR CULVERT
FROM	TO	INLET	DISCH	SLOPE	STAGE	15"	24"	30"	36"	12"	15"	24"	SEWER PIPE TO EXISTING	PIPE REIN. CONC.	PIPE REIN. CONC.	PIPE REIN. CONC.
STR	STR	ELEV	ELEV	(FT/FT)		(LF)	(LF)	(LF)	(LF)	(LF)	(LF)	(LF)	STORM SEWER STRUCTURE	15"	30"	36"
													EACH	EACH	EACH	EACH
1	2	826.11	824.90	0.0058	1		209.1									
1A	1	830.12	829.86	0.0100	1						25.6					
1B	1C	830.76	830.53	0.0050	1					45.5						
1C	1	827.10	826.86	0.0100	1	23.4										
2	2.1	824.80	824.52	0.0065	1		42.8									
2A	2	827.30	827.05	0.0100	1	24.7										
2B	2	827.30	827.05	0.0100	1	24.7										
2.1	5	824.52	822.76	0.0065	1		271.1									
3	5	821.60	821.30	0.0060	1			50.5								
3A	3B	827.63	827.30	0.0100	1					33.2						
3B	3	827.00	826.85	0.0100	1	14.8										
3C	3	826.62	826.35	0.0100	1						26.5					
4	5	820.75	820.66	0.0020	1		44.2									
4A	4	826.48	826.00	0.0100	1						47.3					
4B	4	826.22	826.00	0.0100	1						21.9					
5	6	819.61	817.84	0.0075	1				237.1							
6	EX7	817.79	816.71	0.0075	1				143.5				1			
6A	6B	825.64	825.54	0.0100	1					10.0						
6B	6	825.29	825.04	0.0100	1						25.8					
6C	6E	825.12	825.02	0.0100	1					10.0						
6D	6E	823.94	823.52	0.0100	1					42.0						
6E	6	823.27	823.04	0.0100	1	23.3										
EX7					1											
EX7A					1											
EX8					1											
9		825.46			1											
9A	9	828.12	827.75	0.0100	1						37.4		1			
9B	9	827.84	827.75	0.0100	1						8.7		1			
10	9	828.48	827.50	0.0160	1							61.0	1			
10A	10B	829.80	829.61	0.0050	1					38.0						
10B	10	829.36	829.23	0.0032	1						41.1					
11	10	829.74	828.88	0.0160	1							53.8				
11A	11	830.58	830.49	0.0100	1						9.6					
11B	11	830.65	830.49	0.0060	1						27.5					
12	11	834.09	830.74	0.0200	2							167.6				
12A	12	834.94	834.84	0.0100	2						10.0					
12B	12	835.02	834.84	0.0060	2						30.3					
13	12	835.66	834.14	0.0052	2							294.5				
13A	13B	836.61	836.51	0.0100	2						10.0					
13B	13	836.51	836.41	0.0100	2						10.5					
13C	13D	836.86	836.81	0.0050	2					10.0						
13D	13	836.56	836.41	0.0050	2						31.5					
14	13	837.23	835.71	0.0050	2							305.6				
14A	14	838.09	837.98	0.0100	2						10.5					
14B	14	838.17	837.98	0.0060	2						31.5					
15	14	845.15	837.28	0.0250	2							314.4				
15A	15	847.00	846.90	0.0100	2						10.5					
15B	15	847.21	846.90	0.0100	2						31.5					
16	15	853.90	846.15	0.0250	2		310.0									
16A	16	854.75	854.65	0.0100	2						10.5					
16B	16	854.96	854.65	0.0100	2						31.5					
17	16	855.31	853.95	0.0075	2		182.4									
17A	17B	856.99	856.68	0.0100	2					31.1						
17B	17	856.43	856.06	0.0100	2						36.8					
20	21	853.72	852.48	0.0060	2		206.8									
20A	20	854.57	854.47	0.0100	2						10.5					
20B	20	854.78	854.47	0.0100	2						31.5					
21	23	852.43	852.25	0.0060	2		29.8									
21A	21	853.28	853.18	0.0100	2						10.0					
21B	21	853.49	853.18	0.0100	2						31.5					
22	23	852.89	852.75	0.0050	3							29.0				
SUBTOTAL						110.9	1296.2	50.5	380.5	219.8	610.1	1225.8	4	0	0	0

ALL ITEMS CATEGORY 0010 UNLESS NOTED

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STORM SEWER PIPES (CONTINUED)						608.0315	608.0324	608.0330	608.0330	608.0412	608.0415	608.0424	SPV.0060.06	522.1015	522.1030	522.1036
FROM	TO	INLET	DISCH	SLOPE	STAGE	CLASS III	CLASS III	CLASS III	CLASS III	CLASS IV	CLASS IV	CLASS IV	CONNECT NEW STORM	AEW FOR CULVERT	AEW FOR CULVERT	AEW FOR CULVERT
STR	STR	ELEV	ELEV	(FT/FT)		15"	24"	30"	36"	12"	15"	24"	SEWER PIPE TO EXISTING	PIPE REIN. CONC.	PIPE REIN. CONC.	PIPE REIN. CONC.
						(LF)	(LF)	(LF)	(LF)	(LF)	(LF)	(LF)	STORM SEWER STRUCTURE	15"	30"	36"
													EACH	EACH	EACH	EACH
22A	22	853.72	853.64	0.0100	3						7.8					
22B	22	853.87	853.64	0.0100	3						22.3					
23	24	850.09	850.00	0.0020	2				45.7				1			
EX24					2											
25	23	850.75	850.59	0.0025	3		62.8									
25A	25B	853.95	853.85	0.0100	3					10.0						
25B	25	853.60	853.50	0.0100	3						10.5					
25C	25D	853.66	853.56	0.0100	3					10.0						
25D	25	853.31	853.00	0.0100	3						31.5					
26	25	851.89	851.27	0.0050	3		124.3									
26A	26	853.74	853.64	0.0100	3						10.5					
26B	26	853.95	853.64	0.0100	3						31.5					
27	26	853.90	851.94	0.0100	3		196.1									
27A	27B	857.00	856.70	0.0100	3					30.2						
27B	27C	856.45	856.35	0.0100	3						10.5					
27C	27	856.30	856.15	0.0100	3						14.6					
27D	27E	856.67	856.38	0.0100	3					28.7						
27E	27	856.13	855.65	0.0100	3						48.2					
28	27	855.22	853.95	0.0100	3		127.4									
28A	28	857.58	857.47	0.0100	3						10.5					
28B	28	857.29	856.97	0.0100	3						31.5					
29	28	857.69	855.27	0.0075	3		322.0									
29A	29B	859.97	859.67	0.0100	3					29.3						
29B	29C	859.42	859.19	0.0100	3	22.9										
29C	29	859.14	859.04	0.0100	3	10.5										
29D	29E	859.74	859.54	0.0050	3					38.5						
29E	29F	859.49	859.03	0.0100	3					46.4						
29F	29	858.78	858.44	0.0100	3	34.0										
30	31	856.76	854.88	0.0100	3		187.7									
30A	30	857.62	857.51	0.0100	3	10.5										
30B	30	857.83	857.51	0.0100	3	31.5										
31	32	854.83	853.55	0.0050	3							257.7				
31A	31	855.69	855.58	0.0100	3						10.5					
31B	31C	856.35	856.15	0.0100	3					19.7						
31C	31	855.90	855.58	0.0100	3						31.5					
32	33	853.50	852.61	0.0050	3							177.5				
32A	32B	854.88	854.70	0.0050	3					35.3						
32B	32C	854.70	854.55	0.0050	3					30.5						
32C	32	854.30	854.25	0.0050	3						10.5					
32D	32	854.56	854.25	0.0100	3						31.5					
33	34	852.56	851.30	0.0050	4 (2018)		251.6									
33A	33B	853.76	853.66	0.0100	4(2018)					10.0						
33B	33	853.41	853.31	0.0100	4(2018)						10.5					
33C	33D	853.97	853.87	0.0100	4(2018)					10.0						
33D	33	853.62	853.31	0.0100	4(2018)						31.5					
34	36	843.17	842.86	0.0050	4 (2018)			61.6								
35	34	854.50	853.92	0.0100	4(2018)	58.1										
35A	35	854.67	854.55	0.0100	4(2018)	11.6										
35B	35	854.95	854.55	0.0100	4(2018)						39.6					
36	36.1	842.36	841.83	0.0020	4(2018)				267.3							1
36.1					4 (2018)											
37	34	847.30	847.24	0.0030	4(2018)		18.8						1			
38		848.59			4(2019)											
38A	38	855.29	855.16	0.0100	4(2019)	12.5										
39	38	848.69	848.59	0.0025	4(2019)		37.5									
39A	39	854.80	854.71	0.0100	4(2019)	8.7										
40	44	853.73	853.61	0.0013	4(2019)							99.4				
40A	40	854.51	854.48	0.0025	4(2019)						10.5					
40B	40A	854.53	854.51	0.0025	4(2019)						10.0					
40C	40	854.56	854.48	0.0025	4(2019)						31.5					
SUBTOTAL						200.3	1265.4	124.4	313.0	298.7	447.1	534.6	2	0	0	1

ALL ITEMS CATEGORY 0010 UNLESS NOTED

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STORM SEWER PIPES (CONTINUED)

FROM STR	TO STR	INLET ELEV	DISCH ELEV	SLOPE (FT/FT)	STAGE	608.0315	608.0324	608.0330	608.0336	608.0412	608.0415	608.0424	SPV.0060.06	522.1015	522.1030	522.1036
						CLASS III 15" (LF)	CLASS III 24" (LF)	CLASS III 30" (LF)	CLASS III 36" (LF)	CLASS IV 12" (LF)	CLASS IV 15" (LF)	CLASS IV 24" (LF)	CONNECT NEW STORM SEWER PIPE TO EXISTING STORM SEWER STRUCTURE EACH	AEW FOR CULVERT PIPE REIN. CONC. 15" EACH	AEW FOR CULVERT PIPE REIN. CONC. 30" EACH	AEW FOR CULVERT PIPE REIN. CONC. 36" EACH
40D	40C	854.59	854.56	0.0025	4(2019)						10.0					
41	44	853.69	853.61	0.0013	4(2019)							64.8				
41A	41C	854.76	854.74	0.0050	4(2019)					5.6						
41B	41C	854.79	854.74	0.0050	4(2019)					10.0						
41C	41	854.49	854.44	0.0025	4(2019)						18.8					
41D	41E	854.51	854.48	0.0030	4(2019)						10.0					
41E	41	854.48	854.44	0.0030	4(2019)						12.7					
42	44	853.64	853.61	0.0030	4(2019)							10.3				
42A	42B	854.49	854.39	0.0100	4(2019)						10.5					
42B	42	854.55	854.39	0.0050	4(2019)						31.5					
43	42	854.79	854.39	0.0050	4(2019)						80.8					
43A	43	855.23	855.09	0.0050	4(2019)					27.7						
44	45	853.11	852.84	0.0010	4(2019)			267.0								
45					4(2019)										1	
50	50.1	854.36	854.29	0.0050	4(2019)						14.0					
50A	50B	856.37	855.83	0.0200	4(2019)					26.9						
50B	50C	855.58	855.21	0.0050	4(2019)						75.1					
50C	50	855.16	854.41	0.0050	4(2019)						149.4					
50.1					4(2019)									1		
EX60					1											
EX60A					1											
EX60B					1											
SUBTOTAL						0.0	0.0	267.0	0.0	70.2	412.9	75.1	0	1	1	0
TOTAL						311	2562	442	693	589	1470	1835	6	1	1	1

GENERAL NOTES

1. STATIONS AND OFFSETS ARE TO THE CENTER OF STRUCTURES OR TO THE END OF PIPE WHERE THERE IS AN ENDWALL.
2. PIPE LENGTHS ARE MEASURED TO THE CENTER OF STRUCTURES.
3. JOINT TIES FOR CONCRETE PIPE SHALL BE PROVIDED AT ALL REINFORCED CONCRETE APRON ENDWALL LOCATIONS. APRON ENDWALLS SHALL BE TIED FOR THE LAST THREE JOINTS AT PIPE ENDS.
- THE COST OF THESE TIES SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE REINFORCED CONCRETE STORM SEWER PIPE.

ALL ITEMS CATEGORY 0010 UNLESS NOTED

RESTORATION ITEMS												
CATEGORY	STATION	TO	STATION	LOCATION	625.0100	625.0500	628.2006	628.2027	629.0210	630.0140	630.0200	REMARKS
					TOPSOIL	SALVAGED	EROSION MAT	EROSION MAT	FERTILIZER	SEEDING	SEEDING	
					SY	TOPSOIL	CLASS I TYPE A	CLASS II TYPE C	TYPE B	MIXTURE NO. 40	TEMPORARY	
					SY	SY	SY	SY	CWT	LB	LB	
STAGE 1												
0010	89+83	-	95+41	STH 89 - RT	-	-	691	-	-	-	-	E. LAKE ST TO MADISON ST
0010	86+34	-	89+83	STH 89 - RT	-	-	160	-	-	-	-	WATER ST TO E. LAKE ST
0010	84+87	-	89+68	STH 89 - LT	-	-	97	-	-	-	-	VETERANS LN TO W. LAKE ST
0010	84+40	-	86+34	STH 89 - RT	22	-	20	-	0.01	0.4	-	S. STAGE 1 LIMITS TO WATER ST
0010	84+40	-	84+87	STH 89 - LT	22	-	45	-	0.01	0.4	-	S. STAGE 1 LIMITS TO VETERANS LN
STAGE 2												
0010	62+88	-	84+40	STH 89 - RT	2,410	-	3,824	-	1.52	43.4	-	E. LAKE PARK PL TO N. STAGE 2 LIMITS
0010	68+37	-	84+40	STH 89 - LT	1,795	-	3,066	-	1.13	32.3	-	PHILLIPS LN TO N. STAGE 2 LIMITS
0010	62+88	-	68+37	STH 89 - LT	615	-	944	-	0.39	11.1	-	W. LAKE PARK PL TO PHILLIPS LN
STAGE 3												
0010	58+97	-	62+88	STH 89 - RT	438	-	651	-	0.28	7.9	-	N. CATLIN DR TO E. LAKE PARK PL
0010	58+91	-	62+88	STH 89 - LT	445	-	813	-	0.28	8.0	-	MILTON ST TO W. LAKE PARK PL
0010	54+90	-	58+97	STH 89 - RT	456	-	687	-	0.29	8.2	-	S. CATLIN DR TO N. CATLIN DR
0010	54+95	-	58+91	STH 89 - LT	444	-	605	-	0.28	8.0	-	KEYES ST TO MILTON ST
0010	44+36	-	54+95	STH 89 - LT	1,186	-	1,601	-	0.75	21.3	-	WOODLAND BEACH RD TO KEYES ST
0010	44+00	-	54+90	STH 89 - RT	1,221	-	2,049	-	0.77	22.0	-	S. STAGE 3 LIMITS TO S. CATLIN DR
0010	44+00	-	44+36	STH 89 - LT	40	-	48	-	0.03	0.7	-	S. STAGE 3 LIMITS TO WOODLAND BEACH RD
STAGE 4												
0010	40+18	-	44+00	STH 89 - RT	428	-	1,432	61	0.27	7.7	-	PINNACLE DR TO N. STAGE 4 LIMITS
0010	38+17	-	44+00	STH 89 - LT	653	-	968	-	0.41	11.8	-	COLUMBUS ST TO N. STAGE 4 LIMITS
0010	29+50	-	40+18	STH 89 - RT	1,196	-	2,298	49	0.75	21.5	-	S. STAGE 4 LIMITS TO PINNACLE DR
0010	34+77	-	38+17	STH 89 - LT	381	-	450	-	0.24	6.9	-	SANDY BEACH RD TO COLUMBUS ST
0010	31+72	-	34+77	STH 89 - LT	342	-	1,014	-	0.22	6.1	-	CTH A TO SANDY BEACH RD
0010	29+50	-	31+72	STH 89 - LT	249	-	395	15	0.16	4.5	-	S. STAGE 4 LIMITS TO CTH A
0010	8+32 'SBR'	-	10+00 'SBR'	SANDY BEACH RD	-	470	-	-	-	-	28.8	SANDY BEACH RD TEMPORARY ACCESS
TOTAL 0010					12,343	470	21,858	125	7.79	222.2	28.8	

EROSION CONTROL ITEMS							
CATEGORY	STATION	TO	STATION	LOCATION	628.1504	628.1520	628.7560
					SILT	SILT FENCE	TRACKING
					FENCE	MAINTENANCE	PADS
					LF	LF	EACH
0010	84+40	-	95+41	STH 89	-	-	1
0010	62+88	-	84+40	STH 89	492	492	-
0010	44+00	-	62+88	STH 89	211	211	-
0010	29+50	-	44+00	STH 89	1,187	1,187	1
0010	8+25 A	-	8+75 A	CTH A	-	-	1
TOTAL 0010					1,890	1,890	3

MOBILIZATION EROSION CONTROL						
CATEGORY	STATION	TO	STATION	LOCATION	628.1905	628.1910
					MOBILIZATIONS	MOBILIZATIONS
					EROSION	EMERGENCY
					CONTROL	EROSION CONTROL
					EACH	EACH
0010	29+50	-	95+41	PROJECT	10	8
TOTAL 0010					10	8

3

INLET PROTECTION ITEMS					
CATEGORY	STATION	LOCATION	628.7005	628.7015	628.7020
			INLET	INLET	INLET
			PROTECTION TYPE A EACH	PROTECTION TYPE C EACH	PROTECTION TYPE D EACH
STAGE 1					
0010	94+97	STH 89 - RT	-	1	-
0010	94+97	STH 89 - LT	-	1	-
0010	93+01	STH 89 - LT	-	-	1
0010	92+92	STH 89 - LT	-	1	-
0010	92+88	STH 89 - RT	-	1	-
0010	92+88	STH 89 - LT	-	1	-
0010	90+34	STH 89 - RT	-	1	-
0010	90+29	STH 89 - RT	-	1	-
0010	90+04	STH 89 - LT	-	1	-
0010	89+95	STH 89 - LT	-	1	-
0010	89+81	STH 89 - LT	-	1	-
0010	89+78	STH 89 - LT	-	1	-
0010	89+62	STH 89 - RT	-	1	-
0010	89+41	STH 89 - LT	-	1	-
0010	87+47	STH 89 - RT	1	-	1
0010	87+47	STH 89 - LT	1	-	1
0010	87+44	STH 89 - RT	1	-	1
0010	87+37	STH 89 - RT	1	-	1
0010	87+37	STH 89 - LT	1	-	1
0010	87+28	STH 89 - RT	1	-	1
0010	87+28	STH 89 - LT	1	-	1
0010	85+70	STH 89 - LT	-	1	-
0010	85+62	STH 89 - RT	-	-	1
0010	85+61	STH 89 - RT	2	1	1
0010	85+61	STH 89 - LT	2	1	-
0010	85+60	STH 89 - LT	-	-	-
0010	84+50	STH 89 - RT	-	1	-
0010	84+50	STH 89 - LT	-	1	-
0010	10+85 'MAD'	MADISON ST - RT	-	1	-
0010	10+88 'WS'	WATER ST - RT	-	1	-
0010	10+88 'WS'	WATER ST - LT	-	1	-
0010	9+42 'VL'	VETERANS LN - RT	1	-	1
0010	9+54 'VL'	VETERANS LN - LT	1	-	1
STAGE 2					
0010	82+91	STH 89 - RT	-	-	-
0010	82+84	STH 89 - LT	-	1	-
0010	80+00	STH 89 - RT	1	-	1
0010	80+00	STH 89 - LT	1	-	1
SUBTOTAL 0010			15	22	14

INLET PROTECTION ITEMS					
CATEGORY	STATION	LOCATION	628.7005	628.7015	628.7020
			INLET	INLET	INLET
			PROTECTION TYPE A	PROTECTION TYPE C	PROTECTION TYPE D
			EACH	EACH	EACH
STAGE 2					
0010	79+89	STH 89 - RT	1	-	1
0010	79+89	STH 89 - LT	1	-	1
0010	76+84	STH 89 - RT	1	-	1
0010	76+84	STH 89 - LT	1	-	1
0010	73+70	STH 89 - RT	-	1	-
0010	73+70	STH 89 - LT	-	1	-
0010	70+60	STH 89 - RT	-	1	-
0010	70+60	STH 89 - LT	-	1	-
0010	68+50	STH 89 - LT	-	1	-
0010	68+20	STH 89 - LT	-	1	-
0010	65+31	STH 89 - RT	-	1	-
0010	65+31	STH 89 - LT	-	1	-
0010	63+24	STH 89 - RT	1	-	1
0010	63+24	STH 89 - LT	1	-	1
0010	63+09	STH 89 - LT	1	-	1
0010	63+02	STH 89 - LT	-	1	-
STAGE 3					
0010	62+72	STH 89 - LT	-	1	-
0010	62+67	STH 89 - LT	1	-	1
0010	62+42	STH 89 - RT	1	-	1
0010	62+42	STH 89 - LT	1	-	1
0010	62+31	STH 89 - RT	1	-	1
0010	62+31	STH 89 - LT	1	-	1
0010	61+07	STH 89 - RT	-	1	-
0010	61+06	STH 89 - LT	-	1	-
0010	59+11	STH 89 - LT	-	-	1
0010	59+06	STH 89 - LT	-	-	1
0010	58+76	STH 89 - LT	1	-	-
0010	57+84	STH 89 - RT	-	1	-
0010	57+84	STH 89 - LT	-	1	-
0010	55+10	STH 89 - LT	-	-	1
0010	54+81	STH 89 - LT	1	-	-
0010	54+61	STH 89 - RT	-	1	-
0010	54+61	STH 89 - LT	-	1	-
0010	49+25	STH 89 - RT	-	1	-
0010	49+25	STH 89 - LT	-	1	-
0010	47+38	STH 89 - RT	1	1	-
0010	47+38	STH 89 - LT	-	1	-
SUBTOTAL 0010			15	20	15

INLET PROTECTION ITEMS					
CATEGORY	STATION	LOCATION	628.7005	628.7015	628.7020
			INLET	INLET	INLET
			PROTECTION TYPE A EACH	PROTECTION TYPE C EACH	PROTECTION TYPE D EACH
STAGE 3					
0010	44+80	STH 89 - RT	-	1	-
0010	44+80	STH 89 - LT	-	1	-
0010	44+54	STH 89 - LT	-	-	1
0010	44+20	STH 89 - LT	-	1	-
0010	10+44 'NCD'	N. CATLIN DR - RT	1	-	-
0010	10+69 'NCD'	N. CATLIN DR - LT	-	-	1
0010	10+67 'SCD'	S. CATLIN DR - RT	-	1	-
0010	10+76 'SCD'	S. CATLIN DR - LT	-	1	-
STAGE 4					
0010	43+13	STH 89 - LT	1	-	1
0010	43+13	STH 89 - RT	1	-	1
0010	43+03	STH 89 - LT	1	-	1
0010	43+03	STH 89 - RT	1	-	1
0010	39+93	STH 89 - RT	-	1	-
0010	39+88	STH 89 - LT	-	1	-
0010	38+28	STH 89 - LT	-	-	1
0010	38+03	STH 89 - LT	1	-	-
0010	35+50	STH 89 - LT	1	-	1
0010	35+50	STH 89 - RT	1	-	1
0010	35+40	STH 89 - LT	1	-	1
0010	35+40	STH 89 - RT	1	-	1
0010	34+98	STH 89 - LT	-	-	1
0010	34+66	STH 89 - RT	-	1	-
0010	34+55	STH 89 - LT	-	1	-
0010	34+40	STH 89 - LT	1	-	1
0010	34+40	STH 89 - RT	1	-	1
0010	33+60	STH 89 - LT	-	-	1
0010	31+82	STH 89 - LT	-	1	1
0010	31+78	STH 89 - LT	1	-	1
0010	31+32	STH 89 - LT	-	1	-
0010	31+17	STH 89 - LT	-	1	-
0010	8+66 'SBR'	SANDY BEACH RD - LT	-	1	-
0010	9+23 'SBR'	SANDY BEACH RD - LT	-	-	1
0010	9+33 'SBR'	SANDY BEACH RD - LT	-	-	1
0010	9+37 'SBR'	SANDY BEACH RD - LT	-	1	-
0010	9+18 'SBR'	SANDY BEACH RD - RT	1	-	-
0010	9+27 'SBR'	SANDY BEACH RD - RT	1	-	-
SUBTOTAL 0010			15	14	19
TOTAL 0010			45	56	48

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PERMANENT SIGNING

CATEGORY	SIGN NO.	SIGN CODE	SIGN SIZE			MESSAGE	634.0614	634.0616	634.0618	634.0810	634.0811	634.0812	634.0814	637.2210	637.2230	REMARKS
							POSTS	POSTS	POSTS	POSTS	POSTS	POSTS	POSTS	SIGNS	SIGNS	
							WOOD	WOOD	WOOD	TUBULAR	TUBULAR	TUBULAR	TUBULAR	TYPE II	TYPE II	
							4X6-INCH X 14-FT EACH	4X6-INCH X 16-FT EACH	4X6-INCH X 18-FT EACH	STEEL 2X2-INCH X 10-FT EACH	STEEL 2X2-INCH X 11-FT EACH	STEEL 2X2-INCH X 12-FT EACH	STEEL 2X2-INCH X 14-FT EACH	REFLECTIVE H SF	REFLECTIVE F SF	
0010	1-1	D2-1	96	X	15	FORT ATKINSON 12	-	2	-	-	-	-	-	10	-	-
0010	1-2	I2-3	72	X	24	LAKE MILLS, POPULATION 5708	-	-	2	-	-	-	-	12	-	-
0010	1-3	J1-1	24	X	39	JCT, COUNTY A	-	1	-	-	-	-	-	6.5	-	-
0010	1-4	W11-15	30	X	30	"BIKE AND PEDESTRIAN" SYMBOLS	-	-	1	-	-	-	-	-	6.25	-
0010	1-5	W16-9P	24	X	12	AHEAD	-	-	-	-	-	-	-	-	2	ON SAME POST AS 1-4
0010	2-1	R2-1	24	X	30	SPEED LIMIT 45	-	1	-	-	-	-	-	5	-	-
0010	2-2	R2-1	24	X	30	SPEED LIMIT 25	-	1	-	-	-	-	-	5	-	-
0010	2-3	SP	60	X	30	SANDHILL STATION STATE CAMPGROUND, "LEFT ARROW" SYMBOL	-	2	-	-	-	-	-	12.5	-	-
0010	2-4	J4-3	72	X	36	SOUTH 89, COUNTY G, ALTERNATE 94	-	2	-	-	-	-	-	18	-	-
0010	2-5	J13-1	24	X	45	COUNTY A, "LEFT AND TILT RIGHT ARROW" SYMBOL	-	-	-	-	-	-	1	7.5	-	-
0010	2-6	JV	48	X	69	COUNTY A, "UP ARROW" SYMBOL, 89, COUNTY G, "AHEAD AND RIGHT ARROW" SYMBOL	-	-	2	-	-	-	-	23	-	-
0010	2-7	R1-1	30	X	30	STOP	-	-	-	-	1	-	-	5.18	-	-
0010	2-8	M1-5A	24	X	24	COUNTY A	-	-	-	-	1	-	-	4	-	-
0010	2-9	R1-1	30	X	30	STOP	-	-	-	-	1	-	-	5.18	-	-
0010	2-10	W1-6	48	X	24	"LARGE RIGHT ARROW" SYMBOL	1	-	-	-	-	-	-	-	8	-
0010	2-11	SP	60	X	30	SANDHILL STATION STATE CAMPGROUND, "RIGHT ARROW" SYMBOL	2	-	-	-	-	-	-	12.5	-	-
0010	2-12	J13-1	24	X	45	COUNTY A, "RIGHT ARROW" SYMBOL	-	-	-	-	-	1	-	7.5	-	-
0010	2-13	W11-15	30	X	30	"BIKE AND PEDESTRIAN" SYMBOLS	-	1	-	-	-	-	-	-	6.25	-
0010	2-14	W16-7L	24	X	12	"TILT DOWN LEFT ARROW" SYMBOL	-	-	-	-	-	-	-	-	2	ON SAME POST AS 2-13
0010	2-15	W11-15	30	X	30	"BIKE AND PEDESTRIAN" SYMBOLS	-	1	-	-	-	-	-	-	6.25	-
0010	2-16	W16-7L	24	X	12	"TILT DOWN LEFT ARROW" SYMBOL	-	-	-	-	-	-	-	-	2	ON SAME POST AS 2-15
0010	2-17	JV	48	X	60	NORTH 89, COUNTY A; ALTERNATE 94, COUNTY G	-	-	1	-	-	-	-	20	-	-
0010	2-18	R3-17	30	X	24	"BIKE LANE"	-	-	-	-	1	-	-	5	-	-
0010	2-19	R3-17-A	30	X	12	"AHEAD"	-	-	-	-	-	-	-	2.5	-	ON SAME POST AS 2-18
0010	2-20	R3-17	30	X	24	"BIKE LANE"	-	-	-	-	1	-	-	5	-	-
0010	2-21	R3-17-B	30	X	12	"ENDS"	-	-	-	-	-	-	-	2.5	-	ON SAME POST AS 2-20
0010	2-22	R1-1	18	X	18	STOP	-	-	-	1	-	-	-	1.86	-	-
0010	2-23	R1-1	18	X	18	STOP	-	-	-	1	-	-	-	1.86	-	-
0010	2-24	R3-17	30	X	24	BIKE LANE	-	-	-	-	1	-	-	5	-	-
0010	3-1	R1-1	30	X	30	STOP	-	-	-	-	1	-	-	5.18	-	-
0010	3-2	W11-15	30	X	30	"BIKE AND PEDESTRIAN" SYMBOLS	-	1	-	-	-	-	-	-	6.25	-
0010	3-3	W16-9P	24	X	12	AHEAD	-	-	-	-	-	-	-	-	2	ON SAME POST AS 3-2
0010	3-4	J12-1	24	X	45	COUNTY A, SECOND RIGHT	-	-	-	-	-	1	-	7.5	-	-
0010	3-5	R1-1	30	X	30	STOP	-	-	-	-	1	-	-	5.18	-	-
0010	3-6	R2-1	24	X	30	SPEED LIMIT 25	-	-	-	-	1	-	-	5	-	-
0010	3-7	R2-1	24	X	30	SPEED LIMIT 25	-	-	-	-	1	-	-	5	-	-
0010	3-8	R1-1	30	X	30	STOP	-	-	-	-	1	-	-	5.18	-	-
0010	4-1	R2-1	24	X	30	SPEED LIMIT 25	-	-	-	-	1	-	-	5	-	-
0010	4-2	R1-1	30	X	30	STOP	-	-	-	-	1	-	-	5.18	-	-
0010	4-3	R2-1	24	X	30	SPEED LIMIT 25	-	-	-	-	1	-	-	5	-	-
0010	4-4	R3-17	30	X	24	BIKE LANE	-	-	-	-	1	-	-	5	-	-
0010	4-5	R3-17	30	X	24	BIKE LANE	-	-	-	-	1	-	-	5	-	-
0010	5-1	JV	24	X	48	COUNTY A, COUNTY G	-	-	-	-	-	-	1	8	-	-
0010	5-2	S1-1	36	X	36	SCHOOL ADVANCE	-	-	1	-	-	-	-	-	6.75	-
0010	5-3	S16-9P	30	X	18	AHEAD	-	-	-	-	-	-	-	-	3.75	ON SAME POST AS 5-2
0010	5-4	R2-6P	24	X	18	FINES HIGHER	-	-	-	-	-	-	-	3	-	ON SAME POST AS 5-2
0010	5-5	JV	24	X	72	ALTERNATE 94, SOUTH 89	-	-	1	-	-	-	-	12	-	-
0010	5-6	S4-51	24	X	48	SCHOOL, SPEED LIMIT 15 WHEN CHILDREN ARE PRESENT	-	-	-	-	-	-	1	8	-	-
SUBTOTAL 0010							3	12	8	2	16	2	3	266.80	51.50	

PERMANENT SIGNING CONT.

CATEGORY	SIGN NO.	SIGN CODE	SIGN SIZE			MESSAGE	634.0614	634.0616	634.0618	634.0810	634.0811	634.0812	634.0814	637.2210	637.2230	REMARKS
							POSTS	POSTS	POSTS	POSTS	POSTS	POSTS	POSTS	SIGNS	SIGNS	
							WOOD	WOOD	WOOD	TUBULAR	TUBULAR	TUBULAR	TUBULAR	TYPE II	TYPE II	
							4X6-INCH X 14-FT EACH	4X6-INCH X 16-FT EACH	4X6-INCH X 18-FT EACH	STEEL 2X2-INCH X 10-FT EACH	STEEL 2X2-INCH X 11-FT EACH	STEEL 2X2-INCH X 12-FT EACH	STEEL 2X2-INCH X 14-FT EACH	REFLECTIVE H SF	REFLECTIVE F SF	
0010	5-7	R2-1	24	X	30	SPEED LIMIT 25	-	-	1	-	-	-	-	5	-	-
0010	5-8	S5-2	24	X	30	END SCHOOL ZONE	-	-	-	-	-	-	-	-	5	ON SAME POST AS 5-7
0010	6-1	S1-1	36	X	36	SCHOOL ADVANCE	-	1	-	-	-	-	-	-	6.75	-
0010	6-2	S16-7L	30	X	18	"TILT DOWN LEFT ARROW" SYMBOL	-	-	-	-	-	-	-	-	3.75	ON SAME POST AS 6-1
0010	6-3	R6-2-L	24	X	30	ONE WAY, "LEFT ARROW" SYMBOL	-	-	-	-	-	-	-	5	-	ON SAME POST AS 6-1, OPPOSITE SIDE
0010	6-4	S1-1	36	X	36	"SCHOOL ADVANCE" SYMBOL	-	1	-	-	-	-	-	-	6.75	-
0010	6-5	S16-7L	30	X	18	"TILT DOWN LEFT ARROW" SYMBOL	-	-	-	-	-	-	-	-	3.75	ON SAME POST AS 6-4
0010	6-6	R1-1	30	X	30	STOP	-	-	-	-	1	-	-	5.18	-	-
0010	6-7	R6-6	24	X	30	BEGIN ONE WAY	-	-	-	-	1	-	-	5	-	-
0010	6-8	R6-2-R	24	X	30	ONE WAY, "RIGHT ARROW" SYMBOL	-	-	-	-	1	-	-	5	-	-
0010	6-9	S4-51	24	X	48	SCHOOL, SPEED LIMIT 15 WHEN CHILDREN ARE PRESENT	-	-	-	-	-	-	1	-	8	-
0010	61-0	S4-51	24	X	48	SCHOOL, SPEED LIMIT 15 WHEN CHILDREN ARE PRESENT	-	-	-	-	-	-	1	-	8	-
0010	61-1	R3-1	24	X	24	"NO RIGHT TURN" SYMBOL	-	-	-	-	1	-	-	4	-	-
0010	61-2	R5-1	30	X	30	DO NOT ENTER	-	-	-	-	1	-	-	6.25	-	-
0010	6-13	R3-27	24	X	24	"NO AHEAD MOVEMENT" SYMBOL	-	-	-	-	1	-	-	4	-	-
0010	6-14	R1-1	30	X	30	STOP	-	-	-	-	1	-	-	5.18	-	-
0010	6-15	R1-1	30	X	30	STOP	-	-	-	-	1	-	-	5.18	-	-
0010	6-16	R6-7	24	X	30	END ONE WAY	-	-	-	-	1	-	-	5	-	-
0010	6-17	S1-1	36	X	36	"SCHOOL ADVANCE" SYMBOL	-	1	-	-	-	-	-	-	6.75	-
0010	6-18	S16-7L	30	X	18	"TILT DOWN LEFT ARROW" SYMBOL	-	-	-	-	-	-	-	-	3.75	ON SAME POST AS 6-17
0010	6-19	S1-1	36	X	36	"SCHOOL ADVANCE" SYMBOL	-	1	-	-	-	-	-	-	6.75	-
0010	6-20	S16-7L	30	X	18	"TILT DOWN LEFT ARROW" SYMBOL	-	-	-	-	-	-	-	-	3.75	ON SAME POST AS 6-19
0010	6-21	R3-17	30	X	24	BIKE LANE	-	-	-	-	1	-	-	5	-	-
0010	6-22	R3-8	30	X	36	LANE CONTROL	-	-	-	-	-	1	-	7.5	-	-
0010	7-1	JV	24	X	72	ALTERNATE 94, NORTH 89	-	-	1	-	-	-	-	12	-	-
0010	7-2	R3-2	24	X	24	"NO LEFT TURN" SYMBOL	-	-	-	-	1	-	-	4	-	-
0010	7-3	JV	24	X	48	COUNTY A, COUNTY G	-	-	-	-	-	-	1	8	-	-
0010	7-4	R1-1	30	X	30	STOP	-	-	-	-	1	-	-	5.18	-	-
0010	7-5	R1-1	30	X	30	STOP	-	-	-	-	1	-	-	5.18	-	-
0010	7-6	R2-1	24	X	30	SPEED LIMIT 25	-	-	1	-	-	-	-	5	-	-
0010	7-7	S5-2	24	X	30	END SCHOOL ZONE	-	-	-	-	-	-	-	-	5	ON SAME POST AS 7-6
0010	7-8	S4-51	24	X	48	SCHOOL, SPEED LIMIT 15 WHEN CHILDREN ARE PRESENT	-	-	-	-	-	-	1	-	8	-
0010	7-9	R3-17	30	X	24	BIKE LANE	-	-	-	-	1	-	-	5	-	-
0010	8-1	S1-1	36	X	36	"SCHOOL ADVANCE" SYMBOL	-	-	1	-	-	-	-	-	6.75	-
0010	8-2	S16-9P	30	X	18	AHEAD	-	-	-	-	-	-	-	-	3.75	ON SAME POST AS 8-1
0010	8-3	R2-6P	24	X	18	FINES HIGHER	-	-	-	-	-	-	-	3	-	ON SAME POST AS 8-1
0010	8-4	R1-1	30	X	30	STOP	-	-	-	-	1	-	-	5.18	-	-
0010	8-5	R2-1	24	X	30	SPEED LIMIT 25	-	-	-	-	1	-	-	5	-	-
0010	8-6	R2-1	24	X	30	SPEED LIMIT 25	-	-	-	-	1	-	-	5	-	-
0010	9-1	R2-1	24	X	30	SPEED LIMIT 25	-	-	-	-	1	-	-	5	-	-
0010	9-2	R2-1	24	X	30	SPEED LIMIT 25	-	-	-	-	1	-	-	5	-	-
0010	10-1	R3-17	30	X	24	BIKE LANE	-	-	-	-	1	-	-	5	-	-
0010	11-1	R1-1	30	X	30	STOP	-	-	-	-	1	-	-	5.18	-	-
0010	11-2	W3-1	36	X	36	"STOP SIGN AHEAD" SYMBOL	-	1	-	-	-	-	-	-	9	-
0010	11-3	R1-1	30	X	30	STOP	-	-	-	-	1	-	-	5.18	-	-
0010	11-4	R6-2-L	24	X	30	ONE WAY, "LEFT ARROW" SYMBOL	-	-	-	-	1	-	-	5	-	-
0010	11-5	R5-1	30	X	30	DO NOT ENTER	-	-	-	-	-	-	-	6.25	-	ON SAME POST AS 11-4, OPPOSITE SIDE
0010	11-6	R1-1	36	X	36	STOP	-	-	-	-	-	-	-	7.46	-	ON FLASHING BEACON
SUBTOTAL 0010							0	5	4	0	23	1	4	173.90	95.50	

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PERMANENT SIGNING CONT.																
CATEGORY	SIGN NO.	SIGN CODE	SIGN SIZE W X H MESSAGE				634.0614	634.0616	634.0618	634.0810	634.0811	634.0812	634.0814	637.2210	637.2230	REMARKS
							POSTS	POSTS	POSTS	POSTS	POSTS	POSTS	POSTS	SIGNS	SIGNS	
							WOOD	WOOD	WOOD	TUBULAR	TUBULAR	TUBULAR	TUBULAR	TYPE II	TYPE II	
							4X6-INCH X 14-FT EACH	4X6-INCH X 16-FT EACH	4X6-INCH X 18-FT EACH	STEEL 2X2-INCH X 10-FT EACH	STEEL 2X2-INCH X 11-FT EACH	STEEL 2X2-INCH X 12-FT EACH	STEEL 2X2-INCH X 14-FT EACH	REFLECTIVE H SF	REFLECTIVE F SF	
0010	11-7	R1-3-P	24	X	9	ALL WAY	-	-	-	-	-	-	-	1.5	-	ON SAME FLASHING BEACON AS 11-6
0010	11-8	R1-1	36	X	36	STOP	-	-	-	-	-	-	-	7.46	-	ON FLASHING BEACON
0010	11-9	R1-3-P	24	X	9	ALL WAY	-	-	-	-	-	-	-	1.5	-	ON SAME FLASHING BEACON AS 11-8
0010	11-10	R1-1	36	X	36	STOP	-	-	-	-	-	-	-	7.46	-	ON FLASHING BEACON
0010	11-11	R1-3-P	24	X	9	ALL WAY	-	-	-	-	-	-	-	1.5	-	ON SAME FLASHING BEACON AS 11-10
0010	11-12	R1-1	36	X	36	STOP	-	-	-	-	-	-	-	7.46	-	ON FLASHING BEACON
0010	11-13	R1-3-P	24	X	9	ALL WAY	-	-	-	-	-	-	-	1.5	-	ON SAME FLASHING BEACON AS 11-12
0010	11-14	R1-1	30	X	30	STOP	-	-	-	-	1	-	-	5.18	-	-
0010	11-15	R3-17	30	X	24	BIKE LANE	-	-	-	-	1	-	-	5	-	-
0010	11-16	R3-17	30	X	24	BIKE LANE	-	-	-	-	1	-	-	5	-	-
0010	11-17	R3-17	30	X	24	BIKE LANE	-	-	-	-	1	-	-	5	-	-
0010	12-1	J1-1	24	X	39	JCT, COUNTY B	-	-	-	-	-	1	-	6.5	-	-
0010	12-2	R2-1	24	X	30	SPEED LIMIT 25	-	-	-	-	1	-	-	5	-	-
0010	12-3	J12-1	24	X	45	COUNTY A, "RIGHT ARROW" SYMBOL	-	-	-	-	-	1	-	7.5	-	-
0010	12-4	R2-1	24	X	30	SPEED LIMIT 25	-	-	-	-	1	-	-	5	-	-
0010	12-5	J13-2	48	X	45	COUNTY B, "DOUBLE ARROW" SYMBOL, COUNTY A, "RIGHT ARROW" SYMBOL	-	1	-	-	-	-	-	15	-	-
0010	12-6	JV	24	X	48	COUNTY A, COUNTY G	-	-	-	-	-	-	1	8	-	-
0010	12-7	R1-1	36	X	36	STOP	-	-	-	-	1	-	-	7.46	-	-
0010	12-8	JV	24	X	72	ALTERNATE 94, SOUTH 89	-	-	1	-	-	-	-	12	-	-
0010	12-9	R1-1	36	X	36	STOP	-	-	-	-	-	-	-	7.46	-	ON FLASHING BEACON
0010	12-10	R1-3-P	24	X	9	ALL WAY	-	-	-	-	-	-	-	1.5	-	ON SAME FLASHING BEACON AS 12-9
0010	12-11	D1-4	90	X	48	"UP ARROW" SYMBOL, GLACIAL DRUMLIN STATE TRAIL, "LEFT ARROW" SYMBOL, AZTALAN STATE PARK	-	2	-	-	-	-	-	30	-	-
0010	12-12	R1-1	36	X	36	STOP	-	-	-	-	-	-	-	7.46	-	ON FLASHING BEACON
0010	12-13	R1-3-P	24	X	9	ALL WAY	-	-	-	-	-	-	-	1.5	-	ON SAME FLASHING BEACON AS 12-12
0010	12-14	J13-2	48	X	45	COUNTY A, "AHEAD AND LEFT ARROW" SYMBOL, COUNTY B, "DOUBLE ARROW" SYMBOL	-	-	-	-	-	-	-	15	-	ON FLASHING BEACON
0010	12-15	R1-1	36	X	36	STOP	-	-	-	-	-	-	-	7.46	-	ON FLASHING BEACON
0010	12-16	R1-3-P	24	X	9	ALL WAY	-	-	-	-	-	-	-	1.5	-	ON SAME FLASHING BEACON AS 12-15
0010	12-17	R1-1	36	X	36	STOP	-	-	-	-	-	-	-	7.46	-	ON FLASHING BEACON
0010	12-18	R1-3-P	24	X	9	ALL WAY	-	-	-	-	-	-	-	1.5	-	ON SAME FLASHING BEACON AS 12-17
0010	12-19	R3-17	30	X	24	BIKE LANE	-	-	-	-	1	-	-	5	-	-
0010	12-20	R3-17-B	30	X	12	"ENDS"	-	-	-	-	-	-	-	2.5	-	ON SAME POST AS 12-19
0010	12-21	R3-17	30	X	24	BIKE LANE	-	-	-	-	1	-	-	5	-	-
0010	12-22	R3-17	30	X	24	BIKE LANE	-	-	-	-	1	-	-	5	-	-
0010	12-23	R3-17-A	30	X	12	"AHEAD"	-	-	-	-	-	-	-	2.5	-	-
SUBTOTAL 0010							0	3	1	0	10	2	1	215.86	0.00	
TOTAL 0010							3	20	13	2	49	5	8	656.56	147.00	

SIGN REMOVALS					638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
CATEGORY	SIGN NO.	STATION	LOCATION	SIGN MESSAGE			
0010	1-01	23+03	STH 89 - RT	LAKE MILLS POPULATION 5708	1	2	-
0010	1-02	24+04	STH 89 - RT	JCT, COUNTY A	1	1	-
0010	1-03	26+35	STH 89 - RT	"ROAD TURNS RIGHT" SYMBOL, 25 M.P.H.	1	1	-
0010	1-04	27+75	STH 89 - LT	SOUTH, 89, COUNTY G, ALTERNATE, 94	1	2	-
0010	2-01	28+40	STH 89 - RT	"BIKE AND PEDESTRIAN" SYMBOLS	1	1	-
0010	2-02	30+02	STH 89 - RT	SANDHILL STATION STATE CAMPGROUND, "LEFT ARROW" SYMBOL	1	1	-
0010	2-03	30+02	STH 89 - RT	SPEED LIMIT 25	1	1	-
0010	2-04	31+32	STH 89 - RT	COUNTY A, "DOUBLE ARROW" SYMBOL, NORTH, 89, "RIGHT ARROW" SYMBOL, COUNTY G, "RIGHT ARROW" SYMBOL	1	2	-
0010	2-05	31+15	STH 89 - LT	SPEED LIMIT 45	1	1	-
0010	2-06	9+21 'CTHA'	CTH A - RT	COUNTY A, "UP ARROW" SYMBOL, 89, "AHEAD AND RIGHT ARROW" SYMBOL	1	1	-
0010	2-07	9+18 'CTHA'	CTH A - RT	STOP	1	1	-
0010	2-08	32+23	STH 89 - LT	"LARGE RIGHT ARROW" SYMBOL	1	1	-
0010	2-09	32+28	STH 89 - LT	SOUTH, 89, "LEFT ARROW" SYMBOL, COUNTY G, "LEFT ARROW" SYMBOL, COUNTY A, "TILT RIGHT ARROW" SYMBOL, SANDHILL STATION STATE CAMPGROUND "TILT RIGHT ARROW" SYMBOL	1	2	-
0010	2-10	33+50	STH 89 - RT	SPEED LIMIT 25, PARKING RESTRICTIONS, 72 HOUR PARKING LIMIT	1	1	-
0010	3-01	9+71 'SBR'	SANDY BEACH RD - RT	STOP	1	1	-
0010	3-02	36+79	STH 89 - LT	SOUTH, 89, "RIGHT TURN ARROW" SYMBOL, COUNTY G, "RIGHT TURN ARROW" SYMBOL, COUNTY A, "ADVANCE RIGHT TURN ARROW" SYMBOL	1	1	-
0010	3-03	9+73 'CS'	COLUMBUS ST - RT	STOP	1	1	-
0010	3-04	38+00	STH 89 - RT	SPEED LIMIT 25	1	1	-
0010	3-05	10+47 'PD'	PINNACLE DR - LT	STOP	1	1	-
0010	4-01	9+72 'WBR'	WOODLAND BEACH RD - RT	STOP	1	1	-
0010	4-02	44+85	STH 89 - RT	SPEED LIMIT 25	1	1	-
0010	4-03	44+87	STH 89 - LT	SPEED LIMIT 25	1	1	-
0010	4-04	46+78	STH 89 - RT	SCHOOL ADVANCE, AHEAD	1	1	-
0010	5-01	50+91	STH 89 - RT	SCHOOL, SPEED LIMIT 15 WHEN CHILDREN ARE PRESENT	1	1	-
0010	5-02	53+09	STH 89 - LT	SPEED LIMIT 25	1	1	-
0010	6-01	54+58	STH 89 - LT	COUNTY G, COUNTY A	1	1	-
0010	6-02	9+73 'KS'	KEYES ST - RT	STOP	1	1	-
0010	6-03	54+58	STH 89 - RT	ONE WAY "LEFT ARROW" SYMBOL	1	1	-
0010	6-04	55+19	STH 89 - RT	ONE WAY RIGHT ARROW" SYMBOL	1	1	-
0010	6-05	55+32	STH 89 - RT	SCHOOL ADVANCE, "TILT DOWN LEFT ARROW" SYMBOL	1	1	-
0010	6-06	55+27	STH 89 - LT	SCHOOL ADVANCE, "TILT DOWN LEFT ARROW" SYMBOL	1	1	-
0010	6-07	56+35	STH 89 - RT	SCHOOL, SPEED LIMIT 15 WHEN CHILDREN ARE PRESENT	1	1	-
0010	6-08	57+08	STH 89 - LT	SCHOOL, SPEED LIMIT 15 WHEN CHILDREN ARE PRESENT	1	1	-
0010	6-09	58+46	STH 89 - RT	SCHOOL ADVANCE, "TILT DOWN LEFT ARROW" SYMBOL	1	1	-
0010	6-10	9+69 'MS'	MILTON ST - RT	STOP	1	1	-
0010	6-11	58+67	STH 89 - RT	DO NOT ENTER	1	1	-
0010	6-12	10+38 'NCD'	N. CATLIN DR - RT	STOP	1	1	-
0010	6-13	10+39 'NCD'	N. CATLIN DR - LT	STOP	1	1	-
0010	6-14	59+16	STH 89 - RT	DO NOT ENTER	1	1	-
0010	6-15	59+39	STH 89 - RT	NORTH, 89, ALTERNATE, 94	1	1	-
0010	6-16	59+19	STH 89 - LT	SCHOOL ADVANCE, "TILT DOWN LEFT ARROW" SYMBOL	1	1	-
0010	6-17	59+31	STH 89 - LT	"NO LEFT TURN" SYMBOL	1	1	-
0010	7-01	9+67 'LPP'	W. LAKE PARK PL - RT	STOP	1	1	-
0010	7-02	10+39 'LPP'	E. LAKE PARK PL - LT	STOP	1	1	-
0010	7-03	63+87	STH 89 - LT	SCHOOL, SPEED LIMIT 15 WHEN CHILDREN ARE PRESENT	1	1	-
0010	7-04	64+95	STH 89 - RT	SPEED LIMIT 25	1	1	-
0010	8-01	65+98	STH 89 - LT	SCHOOL ADVANCE, AHEAD	1	1	-
0010	8-02	9+67 'PL'	PHILLIPS LN - RT	STOP	1	1	-
0010	9-01	73+66	STH 89 - LT	SOUTH, 89, COUNTY G	1	1	-
0010	9-02	77+00	STH 89 - LT	SOUTH, 89, ALTERNATE, 94	1	1	-
0010	9-03	78+36	STH 89 - RT	COUNTY G, COUNTY A	1	1	-
0010	10-01	82+74	STH 89 - LT	SPEED LIMIT 25	1	1	-
0010	11-01	9+62 'VL'	VETERANS LN - RT	STOP	1	1	-
0010	11-02	10+34 'WS'	WATER ST - LT	STOP	1	1	-
0010	11-03	88+42	STH 89 - RT	"NO U-TURNS" SYMBOL	1	1	-
0010	11-04	88+45	STH 89 - RT	STOP	1	1	-
0010	11-05	88+42	STH 89 - RT	DO NOT ENTER	1	-	ON SAME SUPPORT AS 11-03
0010	11-06	89+33	STH 89 - RT	STOP	1	-	ON OVERHEAD SUPPORT ARM
0010	11-07	89+36	STH 89 - RT	STOP, ALL WAY	1	-	ON LIGHT POLE
0010	11-08	88+94	STH 89 - LT	"NO U-TURNS" SYMBOL	1	1	-
0010	11-09	9+53 'ELS'	W. LAKE ST - RT	STOP, ALL WAY	1	-	ON LIGHT POLE
0010	11-10	10+66 'WLS'	E. LAKE ST - LT	STOP, ALL WAY	1	-	ON LIGHT POLE
0010	11-11	90+10	STH 89 - LT	STOP	1	-	ON OVERHEAD SUPPORT ARM
0010	11-12	90+10	STH 89 - LT	STOP, ALL WAY	1	-	ON LIGHT POLE
0010	12-01	91+74	STH 89 - RT	JCT, COUNTY B, COUNTY A, "RIGHT TURN ARROW" SYMBOL	1	1	-
0010	12-02	95+15	STH 89 - RT	STOP	1	1	-
0010	12-03	95+47	STH 89 - RT	STOP, ALL WAY	1	-	ON LIGHT POLE
0010	12-04	95+73	STH 89 - LT	COUNTY A, "AHEAD AND LEFT ARROW" SYMBOL, COUNTY B, "DOUBLE ARROW" SYMBOL	1	-	ON LIGHT POLE
0010	12-05	95+88	STH 89 - LT	"UP ARROW" SYMBOL, GLACIAL DRUMLIN STATE TRAIL, "LEFT ARROW" SYMBOL, AZTALAN STATE PARK	1	2	-
0010	12-06	9+60 'MAD'	W. MADISON ST - RT	STOP, ALL WAY	1	-	ON LIGHT POLE
0010	12-07	10+48 'MAD'	E. MADISON ST - LT	STOP, ALL WAY	1	-	ON LIGHT POLE
0010	12-08	96+49	STH 89 - RT	COUNTY B, "DOUBLE ARROW" SYMBOL, COUNTY A, "RIGHT ARROW" SYMBOL	1	-	ON LIGHT POLE
0010	12-09	96+61	STH 89 - LT	STOP, ALL WAY	1	1	-
TOTAL:					73	66	

TRAFFIC CONTROL										
* * * *										
643.0300 643.0420 643.0705 643.0900										
TRAFFIC TRAFFIC CONTROL TRAFFIC CONTROL TRAFFIC										
CONTROL BARRICADES WARNING LIGHTS CONTROL										
DRUMS TYPE III TYPE A SIGNS										
CATEGORY	LOCATION	DAYS	EACH	DAY	EACH	DAY	EACH	DAY	EACH	DAY
STAGE 1										
0010	STH 89	31	-	-	4	124	5	155	5	155
0010	STH 89	76	-	-	-	-	-	-	5	380
0010	MADISON ST	76	-	-	4	304	5	380	2	152
0010	W. LAKE ST	76	-	-	4	304	5	380	3	228
0010	E. LAKE ST	76	-	-	4	304	5	380	3	228
0010	WATER ST	76	-	-	4	304	5	380	3	228
0010	VETERANS LN	76	-	-	1	76	2	152	1	76
STAGE 2										
0010	STH 89	46	-	-	4	184	5	230	5	230
0010	STH 89	32	-	-	4	128	5	160	5	160
0010	PHILLIPS LN	91	-	-	4	364	5	455	3	273
STAGE 3										
0010	STH 89	42	-	-	4	168	5	210	5	210
0010	STH 89	62	-	-	4	248	5	310	5	310
0010	LAKE PARK PL	101	-	-	8	808	10	1010	4	404
0010	N. CATLIN DR	101	-	-	4	404	5	505	2	202
0010	MILTON ST	101	-	-	4	404	5	505	3	303
0010	KEYES ST	101	-	-	1	101	2	202	1	101
0010	WOODLAND BEACH RD	101	-	-	4	404	5	505	3	303
STAGE 4 WC										
0010	STH 89	39	-	-	4	156	5	195	5	195
STAGE 4										
0010	STH 89	84	-	-	8	672	10	840	10	840
0010	PINNACLE DR	84	-	-	4	336	5	420	3	252
0010	COLUMBUS ST	84	-	-	1	84	2	168	1	84
0010	SANDY BEACH RD	84	-	-	4	336	5	420	2	168
0010	SANDY BEACH RD	30	12	360	-	-	-	-	-	-
0010	CTH A	84	-	-	4	336	5	420	3	252
TOTAL 0010										
			360		6,549		8,382		5,734	

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

PEDESTRIAN ACCESS ITEMS									
644.1410.S 644.1616.S 649.0150 SPV.0045.01 SPV.0045.02									
TEMPORARY TEMPORARY TEMPORARY MARKING TEMPORARY TEMPORARY									
PEDESTRIAN PEDESTRIAN LINE REMOVABLE CURB CROSSWALK									
SURFACE ASPHALT SAFETY FENCE TAPE 4-INCH RAMP									
CATEGORY	LOCATION	DAYS	SF	LF	LF	EACH	DAY	EACH	DAY
STAGE 1									
0010	STH 89	72	-	1,894	120	6	432	3	216
0010	MADISON ST	72	-	-	80	2	144	1	72
0010	E. LAKE ST	72	-	85	40	2	144	1	72
0010	W. LAKE ST	72	-	77	40	2	144	1	72
0010	WATER ST	72	-	110	40	2	144	1	72
0010	VETERANS LN	72	-	59	40	1	72	1	72
STAGE 2									
0010	PHILLIPS LN	88	439	129	40	2	176	1	88
STAGE 3									
0010	STH 89	103	-	-	120	6	618	3	309
0010	LAKE PARK PL	103	-	241	80	4	412	2	206
0010	MILTON ST	103	-	130	40	2	206	1	103
0010	N. CATLIN DR	103	-	191	40	2	206	1	103
0010	KEYES ST	103	299	148	40	2	206	1	103
0010	S. CATLIN DR	103	232	193	40	2	206	1	103
0010	WOODLAND BEACH RD	103	-	130	40	2	206	1	103
STAGE 4									
0010	STH 89	81	1,091	-	40	2	162	1	81
0010	PINNACLE DR	81	67	83	40	2	162	1	81
0010	COLUMBUS ST	81	365	97	40	2	162	1	81
0010	SANDY BEACH RD	81	965	-	40	2	162	1	81
TOTAL 0010									
			3,458	3,567	960	3,964		2,018	

TRAFFIC CONTROL SIGNS PCMS					
643.1050 TRAFFIC CONTROL SIGNS PCMS					
CATEGORY	LOCATION	DAYS	EACH	DAY	REMARKS
0010	STH 89	10	2	20	BEFORE PROJECT BEGINS IN 2018
0010	LAKE PARK PL	3	2	6	BEFORE STAGE 2 BEGINS
0010	LAKE PARK PL	3	2	6	BEFORE STAGE 3 BEGINS
0010	STH 89	10	2	20	BEFORE PROJECT BEGINS IN 2019
TOTAL 0010					
				52	

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PAVEMENT MARKING ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	646.1020		646.5020	646.6120	646.7420	646.8120	646.8320
					MARKING LINE		MARKING	MARKING STOP	MARKING CROSSWALK	MARKING	MARKING
					EPOXY 4-INCH		ARROW	LINE EPOXY	EPOXY TRANSVERSE	CURB	PARKING
					WHITE LF	YELLOW LF	EPOXY EACH	18-INCH LF	LINE 6-INCH LF	EPOXY LF	STALL EPOXY LF
STAGE 1											
0010	84+40	-	96+00	STH 89	12319	239	-	17	445	-	-
0010	9+55 'MAD'	-	10+55 'MAD'	MADISON ST	-	-	-	36	74	-	-
0010	10+25 'ELS'	-	10+55 'ELS'	E. LAKE ST	-	-	-	27	127	-	-
0010	9+50 'WLS'	-	9+75 'WLS'	W. LAKE ST	-	-	-	20	87	-	-
0010	10+25 'WS'	-	10+50 'WS'	WATER ST	-	-	-	30	-	-	-
0010	9+60 'VL'	-	9+65 'VL'	VETERANS LN	-	-	-	17	-	-	-

STAGE 3											
0010	44+00	-	62+88	STH 89	1676	418	-	-	359	-	-
0010	9+65 'LPP'	-	10+40 'LPP'	LAKE PARK PL	-	-	-	32	-	-	-
0010	9+65 'MS'	-	9+70 'MS'	MILTON ST	-	-	-	14	-	-	-
0010	10+35 'NCD'	-	11+20 'NCD'	N. CATLIN DR	-	-	2	26	-	-	-
0010	9+65 'KS'	-	9+70 'KS'	KEYES ST	-	-	-	14	-	-	-
0010	9+65 'WBR'	-	9+70 'WBR'	WOODLAND BEACH RD	-	-	-	17	-	-	-

				TOTAL 0010	17,125	3,104	2	342	1,265	0	0
STAGE 1											
0030	85+00	-	96+00	STH 89	-	-	-	-	-	433	354
0030	86+75	-	88+25	PARKING ANNEX	-	-	-	-	-	378	76
0030	10+50 'WS'	-	10+75 'WS'	WATER ST	-	-	-	-	-	46	14
0030	9+30 'VL'	-	9+90 'VL'	VETERANS LN	-	-	-	-	-	109	-
0030	9+30 'WLS'	-	9+80 'WLS'	W. LAKE ST.	-	-	-	-	-	83	-
0030	10+19 'ELS'	-	10+74 'ELS'	E. LAKE ST.	-	-	-	-	-	84	-
				TOTAL 0030	0	0	0	0	0	1,133	444

-QUANTITY FOR COVERING SIGNS TYPE II IS BASED ON 1 COVER CYCLE PER CALANDER YEAR AS LISTED IN THE TABLE

3

SAWCUTS						
CATEGORY	STATION	TO	STATION	LOCATION	690.0150	690.0250
					SAWING ASPHALT LF	SAWING CONCRETE LF
STAGE 1						
0010	84+40	-	95+41	STH 89	64	2,583
0010	10+00 'MAD'	-	11+00 'MAD'	MADISON ST	-	72
0010	10+00 'ELS'	-	10+87 'ELS'	E. LAKE ST	56	5
0010	9+32 'WLS'	-	10+00 'WLS'	W. LAKE ST	39	4
0010	10+00 'WS'	-	11+19 'WS'	WATER ST	33	16
0010	9+35 'VL'	-	10+00 'VL'	VETERANS LN	48	5
STAGE 2						
0010	62+88	-	84+40	STH 89	328	297
0010	9+51 'PL'	-	10+00 'PL'	PHILLIPS LN	29	5
0010	10+00 'ELPP'	-	10+55 'ELPP'	E. LAKE PARK PL	17	3
0010	9+47 'WLPP'	-	10+00 'WLPP'	W. LAKE PARK PL	14	2
STAGE 3						
0010	44+00	-	62+88	STH 89	266	261
0010	10+00 'ELPP'	-	10+55 'ELPP'	E. LAKE PARK PL	17	2
0010	9+47 'WLPP'	-	10+00 'WLPP'	W. LAKE PARK PL	14	2
0010	9+36 'MS'	-	10+00 'MS'	MILTON ST	31	3
0010	10+00 'NCD'	-	10+91 'NCD'	N. CATLIN DR	37	4
0010	9+51 'KS'	-	10+00 'KS'	KEYES ST	26	5
0010	10+00 'SCD'	-	10+92 'SCD'	S. CATLIN DR	38	4
0010	9+31 'WBR'	-	10+00 'WBR'	WOODLAND BEACH RD	32	5
STAGE 4						
0010	29+50	-	44+00	STH 89	794	81
0010	10+00 'PD'	-	10+68 'PD'	PINNACLE DR	34	5
0010	9+52 'CS'	-	10+00 'CS'	COLUMBUS ST	22	-
0010	8+80 'SBR'	-	10+00 'SBR'	SANDY BEACH RD	108	9
0010	8+25 'CTH A'	-	10+00 'CTH A'	CTH A	56	5
TOTAL 0010					2,103	3,378

LANDMARK REFERENCE MONUMENTS SPECIAL

SPV.0060.02 LANDMARK REFERENCE MONUMENTS SPECIAL				
CATEGORY	STATION	OFFSET	EACH	REMARKS
0010	39+85.4	2.7' RT	1	
0010	66+40.6	15.1' RT	1	
TOTAL 0010			2	

CONSTRUCTION STAKING								
					*			
					650.4000	650.4500	650.5000	650.9920
					CONSTRUCTION	CONSTRUCTION	CONSTRUCTION	CONSTRUCTION
					STAKING	STAKING	STAKING	STAKING
CATEGORY	STATION	TO	STATION	LOCATION	STORM SEWER	SUBGRADE	BASE	SLOPE STAKES
					EACH	LF	LF	LF
STAGE 1								
0010	84+40	-	95+41	STH 89	23	1,101	50	1,101
0010	10+00	-	11+00	MADISON ST	1	-	-	-
0010	10+00	-	10+87	E. LAKE ST	3	87	15	87
0010	9+32	-	10+00	W. LAKE ST	3	68	15	68
0010	10+00	-	11+19	WATER ST	3	119	15	119
0010	86+50	-	88+75	PARKING ANNEX	1	180	-	180
0010	9+35	-	10+00	VETERANS LN	2	65	15	65
STAGE 2								
0010	62+88	-	84+40	STH 89	26	2,152	-	2,152
0010	9+51	-	10+00	PHILLIPS LN	2	49	15	49
0010	10+00	-	10+55	E. LAKE PARK PL	1	55	15	55
0010	9+47	-	10+00	W. LAKE PARK PL	2	53	15	53
STAGE 3								
0010	44+00	-	62+88	STH 89	29	1,888	-	1,888
0010	9+47	-	10+00	W. LAKE PARK PL	1	-	-	-
0010	9+36	-	10+00	MILTON ST	2	64	30	64
0010	10+00	-	10+91	N. CATLIN DR	2	91	42	91
0010	9+51	-	10+00	KEYES ST	2	49	15	49
0010	10+00	-	10+92	S. CATLIN DR	2	92	42	92
0010	9+31	-	10+00	WOODLAND BEACH RD	2	69	30	69
STAGE 4								
0010	29+50	-	44+00	STH 89	26	1,450	-	1,450
0010	10+00	-	10+68	PINNACLE DR	2	68	15	68
0010	9+52	-	10+00	COLUMBUS ST	3	48	14	48
0010	8+80	-	10+00	SANDY BEACH RD	6	120	80	120
0010	8+25	-	10+00	CTH A	2	175	95	175
TOTAL 0010					146	8,043	518	8,043

* THE DEPARTMENT WILL NOT MEASURE STAKING FOR BASE UNDERLYING CONCRETE PAVEMENT

3

EXISTING LAND PARCEL MONUMENTS ITEMS					
			**		**
			SPV.0060.03		SPV.0060.04
			RESEARCH AND		VERIFY AND REPLACE
			LOCATE EXISTING LAND		EXISTING LAND
			PARCEL MONUMENTS		PARCEL MONUMENTS
CATEGORY	STATION	OFFSET	LOCATION	EACH	EACH
STAGE 1					
0010	88+21	38.5'	STH 89 - LT	1	1
0010	87+71	38.5'	STH 89 - LT	1	1
0010	86+32	33.5'	STH 89 - LT	1	1
0010	84+49	35.5'	STH 89 - LT	1	1
SUBTOTAL 0010				4	4
STAGE 2					
0010	83+56	30.5'	STH 89 - RT	1	1
0010	82+42	36.5'	STH 89 - RT	1	1
0010	81+71	29.5'	STH 89 - LT	1	1
0010	80+72	29.5'	STH 89 - LT	1	1
0010	80+44	36.5'	STH 89 - RT	1	1
0010	77+72	29.5'	STH 89 - LT	1	1
0010	77+07	29.5'	STH 89 - LT	1	1
0010	76+03	29.5'	STH 89 - LT	1	1
0010	75+21	29.5'	STH 89 - LT	1	1
0010	75+18	36.5'	STH 89 - RT	1	1
0010	74+33	29.5'	STH 89 - LT	1	1
0010	74+19	36.5'	STH 89 - RT	1	1
0010	73+53	36.5'	STH 89 - RT	1	1
0010	72+64	42.0'	STH 89 - LT	1	1
0010	72+15	36.5'	STH 89 - RT	1	1
0010	71+83	29.5'	STH 89 - LT	1	1
0010	70+60	36.5'	STH 89 - RT	1	1
0010	69+56	36.5'	STH 89 - RT	1	1
0010	69+35	29.5'	STH 89 - LT	1	1
0010	68+82	36.5'	STH 89 - RT	1	1
0010	68+66	29.5'	STH 89 - LT	1	1
0010	68+15	36.5'	STH 89 - RT	1	1
0010	67+59	37.0'	STH 89 - RT	1	1
0010	67+23	28.5'	STH 89 - LT	1	1
0010	65+46	36.5'	STH 89 - RT	1	1
0010	64+86	29.5'	STH 89 - LT	1	1
0010	64+81	36.5'	STH 89 - RT	1	1
0010	64+01	37.0'	STH 89 - RT	1	1
SUBTOTAL 0010				28	28

*ALL STATIONS AND OFFSETS ARE APPROXIMATE
**ADDITIONAL QUANTITIES SHOWN ELSEWHERE

EXISTING LAND PARCEL MONUMENTS ITEMS					
			**		**
			SPV.0060.03		SPV.0060.04
			RESEARCH AND		VERIFY AND REPLACE
			LOCATE EXISTING LAND		EXISTING LAND
			PARCEL MONUMENTS		PARCEL MONUMENTS
CATEGORY	STATION	OFFSET	LOCATION	EACH	EACH
STAGE 3					
0010	61+71	36.0'	STH 89 - RT	1	1
0010	58+59	29.5'	STH 89 - LT	1	1
0010	58+58	36.5'	STH 89 - RT	1	1
0010	57+76	29.5'	STH 89 - LT	1	1
0010	56+93	36.5'	STH 89 - RT	1	1
0010	53+87	36.5'	STH 89 - RT	1	1
0010	53+80	29.5'	STH 89 - LT	1	1
0010	52+98	29.5'	STH 89 - LT	1	1
0010	50+73	23.5'	STH 89 - LT	1	1
0010	49+10	26.5'	STH 89 - LT	1	1
0010	48+40	36.5'	STH 89 - RT	1	1
0010	48+28	29.5'	STH 89 - LT	1	1
0010	47+45	36.5'	STH 89 - RT	1	1
0010	47+18	29.5'	STH 89 - LT	1	1
0010	46+88	29.5'	STH 89 - LT	1	1
0010	46+50	36.5'	STH 89 - RT	1	1
0010	46+14	29.5'	STH 89 - LT	1	1
0010	45+42	29.5'	STH 89 - LT	1	1
SUBTOTAL				18	18
STAGE 4					
0010	44+60	36.5'	STH 89 - RT	1	1
0010	43+30	29.5'	STH 89 - LT	1	1
0010	42+33	29.5'	STH 89 - LT	1	1
0010	41+19	36.5'	STH 89 - RT	1	1
0010	41+08	29.5'	STH 89 - LT	1	1
0010	40+82	74.0'	STH 89 - RT	1	1
0010	39+85	29.5'	STH 89 - LT	1	1
0010	39+11	36.5'	STH 89 - RT	1	1
0010	39+11	29.5'	STH 89 - LT	1	1
0010	38+09	36.5'	STH 89 - RT	1	1
0010	37+22	29.5'	STH 89 - LT	1	1
0010	33+57	29.5'	STH 89 - LT	1	1
0010	32+83	46.0'	STH 89 - LT	1	1
0010	32+02	93.5'	STH 89 - LT	1	1
SUBTOTAL 0010				14	14
TOTAL 0010				64	64

*ALL STATIONS AND OFFSETS ARE APPROXIMATE
**ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

EXCAVATION, HAULING, AND DISPOSAL OF CONTAMINATED SOIL
SPV.0195.01

EXCAVATION, HAULING, AND DISPOSAL OF CONTAMINATED SOIL					
CATEGORY	STATION	TO	STATION	LOCATION	TON
STAGE 1					
0010	84+50	-	85+75	STH 89	76
STAGE 4					
0010	35+70	-	37+75	STH 89	646
0010	33+60	-	34+70	STH 89	394
0010	32+30	-	33+60	STH 89	507
TOTAL 0010					1,623

SPECIAL (05. INLET COVER TYPE 3290A)

SPV.0060.05 INLET COVER 3290 A					
CATEGORY	STATION	OFFSET	LOCATION	EACH	REMARKS
0010	43+12.9	17.5'	LT	1	STORM SEWER STRUCTURE 33A
0010	43+02.9	17.5'	LT	1	STORM SEWER STRUCTURE 33B
0010	43+12.9	24.5'	RT	1	STORM SEWER STRUCTURE 33C
0010	43+02.9	24.5'	RT	1	STORM SEWER STRUCTURE 33D
TOTAL 0010				4	

PIPE UNDERDRAIN ITEM

SPV.0090.01
PIPE UNDERDRAIN WRAPPED
6-INCH AND AGGREGATE
LF

CATEGORY	STATION	TO	STATION	LOCATION	LF
STAGE 1					
0010	89+75	-	95+40	STH 89 - RT	371
0010	89+75	-	95+40	STH 89 - LT	439
0010	84+90	-	89+75	STH 89 - RT	490
0010	84+90	-	89+75	STH 89 - LT	314
STAGE 2					
0010	68+35	-	84+90	STH 89 - RT	785
0010	68+35	-	84+90	STH 89 - LT	786
0010	62+97	-	68+35	STH 89 - RT	156
0010	62+97	-	68+35	STH 89 - LT	182
STAGE 3					
0010	58+92	-	62+97	STH 89 - RT	125
0010	58+92	-	62+97	STH 89 - LT	124
0010	54+95	-	58+92	STH 89 - RT	258
0010	54+95	-	58+92	STH 89 - LT	259
0010	44+36	-	54+95	STH 89 - RT	498
0010	44+36	-	54+95	STH 89 - LT	498
STAGE 4					
0010	40+19	-	44+36	STH 89 - RT	402
0010	40+19	-	44+36	STH 89 - LT	367
0010	38+18	-	40+19	STH 89 - RT	91
0010	38+18	-	40+19	STH 89 - LT	62
0010	34+77	-	38+18	STH 89 - RT	325
0010	34+77	-	38+18	STH 89 - LT	365
0010	30+00	-	34+77	STH 89 - RT	323
0010	30+00	-	34+77	STH 89 - LT	392
TOTAL 0010					7,612

STAIR HAND RAILING ITEM

SPV.0090.02
STAIR HAND RAILING

CATEGORY	STATION	OFFSET	LOCATION	LF	REMARKS
STAGE 3					
0010	59+62	28'	STH 89 - LT	3	523 S. MAIN ST
TOTAL 0010				3	

3

3

LIGHTING BASES, POLES, ARMS, FIXTURES AND WIRE

State Project No. 3300-01-73				SPV.0060.51	SPV.0060.52	654.0105	SPV.0060.53	655.0610
				SPECIAL	DECORATIVE POLE	CONCRETE	DECORATIVE POLE	ELECTRICAL WIRE
				CONCRETE	ASSEMBLY	BASES	ASSEMBLY	LIGHTING
LIGHT				BASE - TYPE 5	TYPE 1	TYPE 5	TYPE 2	12 AWG
NUMBER	STATION	OFFSET	R/L	EACH	EACH	EACH	EACH	LF
ALL ITEMS ARE CATEGORY 0020								
SL 99	30+28.0	22.5'	RT	1	1	--	--	87
SL 100	31+35.0	23.9'	RT	1	1	--	--	87
SL 101	9+39.9-CTHA	23.0'	LT	1	1	--	--	87
SL 102	32+76.2	21.9'	LT	1	1	--	--	87
SL 103	32+83.1	26.7'	RT	1	1	--	--	87
SL 104	33+64.0	21.5'	LT	1	1	--	--	87
SL 105	34+45.3	28.5'	RT	1	1	--	--	87
SL 106	35+18.5	21.5'	LT	1	1	--	--	87
SL 107	36+05.5	28.5'	RT	1	1	--	--	87
SL 108	36+81.2	21.5'	LT	1	1	--	--	87
SL 109	38+54.0	28.5'	RT	1	1	--	--	87
SL 110	37+83.6	21.5'	LT	1	1	--	--	87
SL 111	39+71.7	28.5'	RT	1	1	--	--	87
SL 112	40+64.7	21.5'	LT	1	1	--	--	87
SL 113	41+70.5	28.5'	RT	1	1	--	--	87
SL 114	42+58.5	21.5'	LT	1	1	--	--	87
SL 115	43+75.6	28.5'	RT	1	1	--	--	87
SL 116	44+81.1	21.5'	LT	1	1	--	--	87
SL 117	45+80.3	28.5'	RT	1	1	--	--	87
SL 118	47+05.7	21.5'	LT	1	1	--	--	87
SL 119	48+59.2	28.5'	RT	1	1	--	--	87
SL 120	50+04.2	21.5'	LT	1	1	--	--	87
SL 121	51+40.1	28.5'	RT	1	1	--	--	87
SL 122	52+69.3	21.5'	LT	1	1	--	--	87
SL 123	53+98.8	28.5'	RT	1	1	--	--	87
SL 124	55+30.7	21.5'	LT	1	1	--	--	87
SL 125	56+23.8	28.5'	RT	1	1	--	--	87
SL 126	57+19.9	21.5'	LT	1	1	--	--	87
SL 127	58+32.1	28.5'	RT	1	1	--	--	87
SL 128	59+34.8	21.5'	LT	1	1	--	--	87
SL 129	60+34.1	28.5'	RT	1	1	--	--	87
SL 130	61+33.4	21.5'	LT	1	1	--	--	87
SL 131	62+50.2	28.5'	RT	1	1	--	--	87
SL 132	63+26.1	21.5'	LT	1	1	--	--	87
SL 133	64+28.1	28.5'	RT	1	1	--	--	87
SL 134	65+20.0	21.5'	LT	1	1	--	--	87

SL 135	66+16.9	28.5'	RT	1	1	--	--	87
SL 136	67+13.8	21.5'	LT	1	1	--	--	87
SL 137	68+20.2	28.5'	RT	1	1	--	--	87
SL 138	69+12.1	21.5'	LT	1	1	--	--	87
SL 139	69+98.5	28.5'	RT	1	1	--	--	87
SL 140	71+00.0	21.5'	LT	1	1	--	--	87
SL 141	72+04.5	28.5'	RT	1	1	--	--	87
SL 142	73+07.5	21.5'	LT	1	1	--	--	87
SL 143	73+94.7	28.5'	RT	1	1	--	--	87
SL 144	75+00.0	21.5'	LT	1	1	--	--	87
SL 145	76+00.0	28.5'	RT	1	1	--	--	87
SL 146	77+00.0	21.5'	LT	1	1	--	--	87
SL 147	77+97.2	28.5'	RT	1	1	--	--	87
SL 148	79+02.4	21.5'	LT	1	1	--	--	87
SL 149	79+97.0	28.5'	RT	1	1	--	--	87
SL 150	80+90.2	21.5'	LT	1	1	--	--	87
SL 151	81+83.5	28.5'	RT	1	1	--	--	87
SL 152	82+73.8	21.7'	LT	1	1	--	--	87
SL 153	83+74.6	22.5'	RT	1	1	--	--	87
SL 154	84+47.9	22.5'	LT	1	1	--	--	87
SL 155	85+45.3	20.5'	RT	1	1	--	--	87
SL 156	86+28.8	21.8'	LT	1	1	--	--	87
SL 157	86+65.8	41.8'	RT	1	1	--	--	87
SL 158	86+89.3	80.4'	RT	1	1	--	--	87
SL 159	87+23.3	26.5'	LT	1	1	--	--	87
SL 160	87+66.0	64.4'	RT	1	1	--	--	87
SL 161	88+40.7	26.5'	LT	1	1	--	--	87
SL 162	88+50.5	50.3'	RT	1	1	--	--	87
SL 163	89+24.1	26.5'	LT	1	1	--	--	87
SL 164	89+31.8	20.5'	RT	1	1	--	--	87
SL 200	90+10.2	26.5'	LT	--	--	1	1	39
SL 201	90+97.5	26.5'	LT	--	--	1	1	39
SL 202	91+69.3	26.5'	LT	--	--	1	1	39
SL 203	92+45.6	26.5'	LT	--	--	1	1	39
SL 204	93+13.6	26.5'	LT	--	--	1	1	39
SL 205	93+88.5	26.5'	LT	--	--	1	1	39
SL 206	94+57.6	26.5'	LT	--	--	1	1	39
SL 207	95+36.7	26.5'	LT	--	--	1	1	39
TOTALS				66	66	8	8	6054

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

HIGHWAY LIGHTING
STH 89 (N/S MAIN ST.)
CITY OF LAKE MILLS
JEFFERSON COUNTY

DESIGN: FORSTER ELECTRICAL ENGINEERING

DATE: 2017-10-10REV: 1

State Project No. 3300-01-73				LIGHTING CONDUIT AND WIRE	
				652.0225 *	655.0635 *
				CONDUIT RIGID	ELECTRICAL
				NONMETALLIC SCH. 40	WIRE LIGHTING
				2-INCH	2 AWG
FROM	-	TO	LF	LF	REMARKS
ALL ITEMS ARE CATEGORY 0020					
SL 101	-	SL 102	126	399	
SL 102	-	SL 104	94	404	
SL 104	-	CB 100	147	616	
SL 99	-	SL 100	99	424	
SL 100	-	SL 103	136	572	
CB 103	-	SL 105	154	660	
CB 105	-	CB 100	115	504	
CB 100	-	SL 106	31	152	
SL 106	-	SL 108	163	680	
SL 108	-	SL 110	102	436	
SL 110	-	SL 112	281	1136	
SL 112	-	SL 114	194	820	
SL 114	-	SL 116	223	920	
SL 116	-	SL 118	225	696	
CB 100	-	SL 107	175	728	
SL 107	-	SL 109	246	1012	
SL 109	-	SL 111	117	496	
SL 111	-	SL 113	199	824	
SL 113	-	SL 115	205	848	
SL 115	-	SL 117	205	848	
SL 117	-	SL 119	279	858	
SL 120	-	SL 122	265	816	
SL 122	-	SL 124	262	1076	
SL 124	-	SL 126	189	784	
SL 126	-	SL 128	215	888	Refer to separate material list for RRFB conduit/pull box system also in this vicinity.
SL 128	-	SL 130	199	824	
SL 130	-	CB 200	212	876	
SL 121	-	SL 123	259	798	
SL 123	-	SL 125	225	928	
SL 125	-	SL 127	208	860	
SL 127	-	SL 129	202	836	Refer to separate material list for RRFB conduit/pull box system also in this vicinity.
SL 129	-	SL 131	216	908	
SL 131	-	CB 200	44	220	
CB 200	-	SL 132	144	620	
SL 132	-	SL 134	194	804	
SL 134	-	SL 136	194	804	
SL 136	-	SL 138	199	824	
SL 138	-	SL 140	188	780	
SL 140	-	SL 142	208	645	
CB 200	-	SL 133	196	828	
SL 133	-	SL 135	189	784	
SL 135	-	SL 137	203	840	
SL 137	-	SL 139	178	740	
SL 139	-	SL 141	206	852	
SL 141	-	SL 143	190	591	
SL 144	-	SL 146	200	621	
SL 146	-	SL 148	202	836	
SL 148	-	SL 150	188	780	
SL 150	-	SL 152	185	768	
SL 152	-	SL 154	179	744	
SL 154	-	CB 300	78	356	
SL 145	-	SL 147	197	816	
SL 147	-	SL 149	199	824	
SL 149	-	SL 151	187	776	
SL 151	-	SL 153	173	720	
SL 153	-	CB 300	211	888	
SUB-TOTALS			10300	41088	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

State Project No. 3300-01-73				<u>LIGHTING CONDUIT AND WIRE</u>	
		652.0225 *		655.0635 *	
		CONDUIT RIGID		ELECTRICAL	
		NONMETALLIC SCH. 40		WIRE LIGHTING	
		2-INCH		2 AWG	
FROM	-	TO	LF	LF	REMARKS
ALL ITEMS ARE CATEGORY 0020					
CB 300	-	SL 156	135	584	Refer to separate material list for RRFB conduit/pull box system also in this vicinity.
SL 156	-	SL 159	93	400	
SL 159	-	SL 161	117	496	
SL 161	-	SL 163	83	360	
SL 163	-	SL 200	88	380	
SL 200	-	SL 201	87	376	
SL 201	-	SL 202	72	316	
SL 202	-	SL 203	76	332	
SL 203	-	SL 204	68	300	
SL 204	-	SL 205	75	328	
SL 205	-	SL 206	69	304	
SL 206	-	SL 207	79	258	
SL 200	-	Proj. Boundary	41	0	Cap conduit below grade. To be extended down W. Lake St. by other.
CB 300	-	SL 155	96	428	
SL 155	-	SL 157	123	520	Refer to separate material list for RRFB conduit/pull box system also in this vicinity.
SL 157	-	SL 158	45	208	
SL 158	-	SL 160	83	360	
SL 160	-	SL 162	86	372	
SL 162	-	SL 164	93	400	
SL 164	-	Proj. Boundary	69	0	Cap conduit below grade. To be extended down E. Lake St. by other.
SUB-TOTALS			1678	6722	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

State Project No. 3300-01-73							<u>LIGHTING CONTROL</u>		
		654.0230	659.2130	656.0400.01	656.0400.02	656.0400.03			
		CONCRETE	LIGHTING	ELECTRICAL SERVICE	ELECTRICAL SERVICE	ELECTRICAL SERVICE			
		CONTROL CABINET	CONTROL CABINET	MAIN LUGS ONLY	MAIN LUGS ONLY	MAIN LUGS ONLY			
CABINET		BASES TYPE L30	120/240 30-inch	METER PEDESTAL	METER PEDESTAL	METER PEDESTAL			
NUMBER	STATION	OFFSET R/L	EACH	LS	LS	LS	REMARKS		
ALL ITEMS ARE CATEGORY 0020									
CB 100	34+96.8	39.0' LT	1	1			Service voltage to be 120/240V single phase		
CB 200	62+63.4	63.5' RT	1		1		Service voltage to be 120/240V single phase		
CB 300	85+08.9	45.3' LT	1	1		1	Service voltage to be 120/208V single phase. Provide 5th meter Jaw at 9 o'clock position. Snap on Jaw is not acceptable. Include IP-20 breaker space in panelboard for future RRFB lights.		
TOTALS			3	3	1	1	1		

HIGHWAY LIGHTING
STH 89 (N/S MAIN ST.)
CITY OF LAKE MILLS
JEFFERSON COUNTY

DESIGN: FORSTER ELECTRICAL ENGINEERING

DATE: 2018-01-12REV: 2

LIGHTING CONDUIT AND WIRE					
State Project No. 3300-01-73					
		652.0225 * CONDUIT RIGID NONMETALLIC SCH. 40 2 INCH	652.0215 CONDUIT RIGID NONMETALLIC SCH. 40 1 1/4-Inch	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG	
FROM	- TO	LF	LF	LF	REMARKS
ALL ITEMS ARE CATEGORY 0030					
Milton Street and Main (future RRFB)					
Utility	- RRFB 1	32			Contact Utility for assistance in installing conduit up into their pedestal. (920)-648-4026)
Podestal					
RRFB 1	RRFB 2	100			2 conduits in run
Water Street and Main (future RRFB)					
CB300	- RRFB 3	100			
RRFB 3	- RRFB 4	92			2 conduits in run
Lake Street and Main (Standard Flasher Assembly)					
PB 1	- SF 1		15	78	Contact Utility for assistance in installing service conductors into PB1. (920)-648-4026). Contractor to provide UL listed 600 V terminal blocks rated for direct burial use and Al to Cu conductors, to splice service conductor to new cable.
SF 1	- SF 2		130	423	
SF 1	- SF 4		85	288	
SF 4	- SF 3		105	348	
Madison Street and Main (Standard Flasher Assembly)					
PB 2	- PB 3		85	444	Contact Utility to de-energize service conductors near PB2. (920)-648-4026). Contractor to provide UL listed 600 V terminal blocks rated for direct burial use and Al to Cu conductors for all necessary cable splicing. Refer to plan drawing for more detail.
PB 2	- SF 5		45	168	Contractor to provide UL listed 600 V terminal blocks rated for direct burial use and Al to Cu conductors for all necessary cable splicing. Refer to plan drawing for more detail.
SUB-TOTALS		324	465	1749	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

BASES, POLES AND ARMS													
State Project No. 3300-01-73													
				654.0101 CONCRETE BASES TYPE 1	654.0102 CONCRETE BASES TYPE 2	204.9060.S.02 REMOVING STOP SIGN FLASHER ASSEMBLY	SPV.0060.01 REMOVE, SALVAGE, AND REINSTALL STOP SIGN FLASHER ASSEMBLY	657.0100 PEDESTAL BASES TYPE 1	657.0415 TRAFFIC SIGNAL STANDARDS ALUMINUM 11-FT	658.0170 TRAFFIC SIGNAL FACE 1S 8-INCH	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG		
POLE NUMBER	STATION	OFFSET	LOCATION	EACH	EACH	EACH	EACH	EACH	EACH	EACH	LF		REMARKS
ALL ITEMS ARE CATEGORY 0030													
RRFB 1	58+56.8	21'	LT	1	--	--	--	--	--	--	--		Concrete base by Contractor. Future RRFB pole assembly and wiring by others.
RRFB 2	58+56.8	28'	RT	1	--	--	--	--	--	--	--		Concrete base by Contractor. Future RRFB pole assembly and wiring by others.
RRFB 3	85+97.4	22.5'	LT	--	1	--	--	--	--	--	--		Concrete base by Contractor. Future RRFB pole assembly and wiring by others.
RRFB 4	85+97.5	22'	RT	1	--	--	--	--	--	--	--		Concrete base by Contractor. Future RRFB pole assembly and wiring by others.
SF 1	90+24.5	55.7'	RT	1	--	1	--	1	1	1	45		Note: The reported station applies to the new assembly, not the existing assembly. Provide and install new Standard Flasher pole assembly, with pedestal base, 11 foot tall pole, and single 8 inch diameter red LED signal light. Light to be mounted at top of pole using single slipfitter offset-serated mounting assembly, omitting pole cap (refer to SDD 9-E-7-5 for more information). All flash electronics, mounting hardware and cable terminations required to complete the installation are considered incidental to the bid items.
SF 2	89+26.8	20.5'	RT	1	--	1	--	1	1	1	45		Note: The reported station applies to the new assembly, not the existing assembly. Provide and install new Standard Flasher pole assembly, with pedestal base, 11 foot tall pole, and single 8 inch diameter red LED signal light. Light to be mounted at top of pole using single slipfitter offset-serated mounting assembly, omitting pole cap (refer to SDD 9-E-7-5 for more information). All flash electronics, mounting hardware and cable terminations required to complete the installation are considered incidental to the bid items.
SF 3	89+37.4	50.0'	LT	1	--	1	--	1	1	1	45		Note: The reported station applies to the new assembly, not the existing assembly. Provide and install new Standard Flasher pole assembly, with pedestal base, 11 foot tall pole, and single 8 inch diameter red LED signal light. Light to be mounted at top of pole using single slipfitter offset-serated mounting assembly, omitting pole cap (refer to SDD 9-E-7-5 for more information). All flash electronics, mounting hardware and cable terminations required to complete the installation are considered incidental to the bid items.
SF 4	90+15.2	26.5'	LT	1	--	1	--	1	1	1	45		Note: The reported station applies to the new assembly, not the existing assembly. Provide and install new Standard Flasher pole assembly, with pedestal base, 11 foot tall pole, and single 8 inch diameter red LED signal light. Light to be mounted at top of pole using single slipfitter offset-serated mounting assembly, omitting pole cap (refer to SDD 9-E-7-5 for more information). All flash electronics, mounting hardware and cable terminations required to complete the installation are considered incidental to the bid items.
SF 5	95+45.5	20.7'	RT	1	--	--	1	--	--	--	--		Note: The reported station applies to the new assembly, not the existing assembly. Contractor to Remove existing Standard Flasher pole assembly and store for reinstallation. Re-install Stop Sign pole assembly on new concrete base. Reuse existing internal wiring and flash electronics.
TOTALS				8	1	4	1	4	4	4	180		

State Project No. 3300-01-73					
PULL BOXES					
		653.0140 PULL BOXES STEEL 24x42-Inch			
PULL BOX NUMBER	STATION	OFFSET	R/L	EACH	
ALL ITEMS ARE CATEGORY 0030					
PB 1	90+39.2	54.7'	RT	1	
PB 2	95+15.7	52.8'	RT	1	
PB 3	(Existing Pull Box)				
SHEET TOTALS				2	

HIGHWAY LIGHTING STH 89 (N/S MAIN ST.) CITY OF LAKE MILLS JEFFERSON COUNTY	
DESIGN: FORSTER ELECTRICAL ENGINEERING	
DATE: 2017-10-10	REV: 1

WATER MAIN, DUCTILE IRON (DI)												
							SPV.0090.28	SPV.0090.29	SPV.0090.30	SPV.0090.31	SPV.0035.27	
							6-INCH	8-INCH	10-INCH	12-INCH	GRANULAR BACKFILL, WATER MAIN	
	START			END								
CATEGORY	ALIGNMENT	STATION	OFFSET	ALIGNMENT	STATION	OFFSET	LF	LF	LF	LF	CY	
0010	89 PROP	30+00.00	25.5' RT	89 PROP	89+84.8	14.0' RT	---	---	---	5,952	---	
	89 PROP	48+45.30	30.5' RT	89 PROP	48+45.30	42.0' RT	---	12	---	---	---	
	89 PROP	91+17.40	37.0' RT	89 PROP	91+17.40	40.0' LT	77	---	---	---	---	
	89 PROP	93.23.00	37.0' RT	89 PROP	93.23.00	40.0' LT	77	---	---	---	---	
	SBR	8+88.50	13.6' LT	89 PROP	34+83.0	31.5' RT	---	144	---	---	---	
	CS	9+48.90	5.6' LT	89 PROP	38+21.3	31.5' RT	---	83	---	---	---	
	CTH A	8+25.40	24.5' RT	89 PROP	31+68.5	27.5' RT	---	---	191	---	---	
	CTH A	9+28.50	60.5' LT	CTH A	9+39.4	16.0' RT	---	78	---	---	---	
	PD	10+37.50	10.4' RT	PD	10+46.4	10.4' RT	---	---	---	9	---	
	WBR	9+36.00	8.4' RT	89 PROP	44+28.60	31.5' RT	---	---	96	---	---	
	KS	9+58.00	11.2' LT	SCD	10+73.70	11.3' LT	---	113	---	---	---	
	MS	9+49.70	9.0' LT	89 PROP	59+00	31.5' RT	---	83	---	---	---	
	LPP	9+54.00	8.7' RT	LPP	10+37.1	7.8' RT	---	84	---	---	---	
	PL	9+59.00	7.5' RT	89 PROP	68+29.0	31.5' RT	---	72	---	---	---	
	VL	9+36.40	13.7' RT	89 PROP	84+77.0	25.75' RT	---	88	---	---	---	
	WS	11+08.30	8.6' RT	89 PROP	86+48.3	21.3' RT	---	84	---	---	---	
	WLS	9+42.00	18.0' LT	89 PROP	89+61.00	15.6' RT	---	---	100	---	---	
	UNDISTRIBUTED							50	---	---	---	3,595
	TOTALS							204	841	387	5,961	3,595

ADJUST EXISTING VALVE BOX				
SPV.0060.35				
CATEGORY	ALI	STATION	OFFSET	EA
0010	89 PROP	62+79.10	40.0' RT	1
UNDISTRIBUTED				5
TOTALS				6

WATER MAIN OFFSET			
SPV.0060.36			
CATEGORY	ALI	STATION	EA
0010	89 PROP	95+00.00	1
UNDISTRIBUTED			4
TOTALS			5

FIRE HYDRANT WITH AUXILIARY VALVE AND 6-INCH LEAD				
SPV.0060.30				
CATEGORY	ALI	STATION	OFFSET	EA
0010	89 PROP	29+93.41	25.5' RT	1
	89 PROP	35+00.00	28.5' RT	1
	89 PROP	38+38.20	28.5' RT	1
	89 PROP	40+69.80	28.5' RT	1
	89 PROP	44+59.50	28.5' RT	1
	89 PROP	48+59.60	28.5' RT	1
	89 PROP	51+53.70	28.5' RT	1
	89 PROP	63+36.50	28.5' RT	1
	89 PROP	73+62.00	28.5' RT	1
	89 PROP	79+04.30	28.5' RT	1
	89 PROP	87+00.00	36.0' RT	1
	89 PROP	89+15.00	24.5' RT	1
	CTH A	8+25.50	31.5' RT	1
	CTH A	9+35.60	31.9' RT	1
	SCD	10+56.50	22.5' LT	1
	NCD	10+57.70	18.5' RT	1
	PL	9+59.90	23.0' RT	1
	VL	9+60.00	25.0' LT	1
TOTALS				18

CONNECT TO EXISTING WATER MAIN				
SPV.0060.26				
CATEGORY	ALI	STATION	OFFSET	EA
0010	SBR	8+88.50	13.6' LT	1
	CS	9+48.80	1.1' LT	1
	CTH A	9+28.50	60.5' LT	1
	PD	10+46.40	10.4' RT	1
	WBR	9+36.20	8.9' LT	1
	KS	9+58.00	11.2' LT	1
	SCD	10+84.70	11.4' LT	1
	MS	9+49.80	0.8' LT	1
	LPP	9+54.00	0.9' LT	1
	LPP	10+37.10	7.8' RT	1
	PL	9+54.30	6.2' LT	1
	VL	9+36.50	6.0' RT	1
	WS	11+08.30	8.6' LT	1
	WLS	9+36.50	12.0' LT	1
	WLS	9+36.50	18.0' LT	1
	89 PROP	48+45.30	42.0' RT	1
	89 PROP	89+84.80	14.0' RT	1
	89 PROP	91+17.40	37.0' RT	1
	89 PROP	93+23.00	37.0' RT	1
TOTALS				19

WATER MAIN GAVE VALVE AND VALVE BOX							
				SPV.0060.31	SPV.0060.32	SPV.0060.33	SPV.0060.34
				6-INCH	8-INCH	10-INCH	12-INCH
CATEGORY	ALI	STATION	OFFSET	EA	EA	EA	EA
0010	89 PROP	30+10.80	25.5' RT	---	---	---	1
	89 PROP	31+62.00	27.3' RT	---	---	---	1
	89 PROP	31+68.15	24.0' RT	---	---	1	---
	89 PROP	34+78.60	30.5' RT	---	---	---	1
	89 PROP	38+16.50	30.5' RT	---	---	---	1
	89 PROP	39+87.20	34.5' RT	---	---	---	1
	89 PROP	40+08.20	44.6' RT	---	---	---	1
	89 PROP	40+48.50	31.5' RT	---	---	---	1
	89 PROP	44+40.50	30.5' RT	---	---	---	1
	89 PROP	48+40.27	30.5' RT	---	---	---	1
	89 PROP	48+45.25	39.3' RT	---	1	---	---
	89 PROP	55+01.00	30.5' RT	---	---	---	1
	89 PROP	58+94.90	30.2' RT	---	---	---	1
	89 PROP	62+74.00	30.5' RT	---	---	---	1
	89 PROP	68+27.00	30.5' RT	---	---	---	1
	89 PROP	73+49.20	30.5' RT	---	---	---	1
	89 PROP	78+84.35	30.5' RT	---	---	---	1
	89 PROP	84+43.20	25.0' RT	---	---	---	1
	89 PROP	86+28.50	23.3' RT	---	---	---	1
	89 PROP	89+82.50	14.25' RT	---	---	---	1
	89 PROP	91+17.40	27.0' LT	1	---	---	---
	89 PROP	93+23.00	27.0' LT	1	---	---	---
	CTH A	8+31.60	24.5' RT	---	---	1	---
	CTH A	9+28.80	57.4' LT	---	1	---	---
	SANDY BEACH RD	8+90.75	13.2' LT	---	1	---	---
	COLUMBUS ST	9+54.84	5.4' LT	---	1	---	---
	WOODLAND BEACH RD	9+39.40	8.3' RT	---	---	1	---
	KEYES ST	9+61.20	11.2' LT	---	1	---	---
	S CATLIN DR	10+81.10	10.1' LT	---	1	---	---
	MILTON ST	9+54.75	9.0' LT	---	1	---	---
LAKE PARK PL	9+58.80	8.7' RT	---	1	---	---	
PHILLIPS LN	9+56.45	7.5' RT	---	1	---	---	
VETERANS LN	9+39.50	13.6' RT	---	1	---	---	
W LAKE ST	9+45.35	10.6' RT	---	---	1	---	
TOTALS				2	10	4	18

EXCAVATION, HAULING AND DISPOSAL OF CONTAMINATED SOIL						
SPV.0195.01						
CATEGORY	STATION	TO	STATION	LOCATION	TON	COMMENTS
0010	32+30.00	-	33+60.00	LT TO RT LIMITS	88	SITE 7
	35+70.00	-	37+75.00	LT TO RT LIMITS	269	SITE 11
	84+50.00	-	85+75.00	CL TO RT LIMITS	138	SITE 17
	86+80.00	-	87+25.00	CL TO LT LIMITS	33	SITE 25
	93+65.00	-	94+70.00	CL TO LT LIMITS	54	SITE 38
UNDISTRIBUTED					50	---
SUBTOTALS (0010)					633	
SPV.0195.01						
CATEGORY	STATION	TO	STATION	LOCATION	TON	COMMENTS
0020	32+30.00	-	33+60.00	LT TO RT LIMITS	227	SITE 7
	33+60.00	-	34+70.00	CL TO LT LIMITS	159	SITE 9
	35+70.00	-	37+75.00	LT TO RT LIMITS	623	SITE 11
	84+50.00	-	85+75.00	CL TO RT LIMITS	160	SITE 17
	86+80.00	-	87+25.00	CL TO LT LIMITS	116	SITE 25
UNDISTRIBUTED					50	---
SUBTOTALS (0020)					1,335	
TOTALS					1,968	

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WATER SERVICES SUMMARY								
			SPV.0090.26	SPV.0090.27	SPV.0060.28	SPV.0060.29	SPV.0060.27	
			WATER SERVICE COPPER,		WATER SERVICE CORPORATION, CURB STOP, AND BOX,		CONNECT TO EXISTING WATER SERVICE	
CATEGORY	ALIGNMENT	STATION	OFFSET TO MAIN CONNECTION	1-INCH	2-INCH	1-INCH	2-INCH	EA
0010	CTH A	08+36.65	24.40	10		1	---	1
	CTH A	08+86.00	18.60	59	---	1	---	1
	89 PROP	30+37.00	25.50	59	---	1	---	1
	89 PROP	32+15.60	28.00	6	---	1	---	1
	89 PROP	33+18.30	33.40	65	---	1	---	1
	89 PROP	34+23.40	30.50	7	---	1	---	1
	89 PROP	35+02.30	30.50	7	---	1	---	1
	89 PROP	35+32.85	30.50	61	---	1	---	1
	89 PROP	36+09.50	30.50	61	---	1	---	1
	89 PROP	36+63.70	30.50	7	---	1	---	1
	89 PROP	36+72.40	30.50	61	---	1	---	1
	89 PROP	37+41.30	30.50	7	---	1	---	1
	89 PROP	38+85.00	30.50	7	---	1	---	1
	89 PROP	39+07.80	31.00	61	---	1	---	1
	89 PROP	39+49.50	30.50	7	---	1	---	1
	89 PROP	39+78.00	30.50	62	---	1	---	1
	89 PROP	41+02.00	31.20	61	---	1	---	1
	89 PROP	42+15.00	30.50	7	---	1	---	1
	89 PROP	42+33.60	30.50	61	---	1	---	1
	89 PROP	42+90.00	30.50	61	---	1	---	1
	89 PROP	43+32.50	30.50	7	---	1	---	1
	89 PROP	43+71.00	30.50	61	---	1	---	1
	89 PROP	44+20.00	30.50	7	---	1	---	1
	89 PROP	44+96.00	30.50	7	---	1	---	1
	89 PROP	45+34.50	30.50	61	---	1	---	1
	89 PROP	45+94.50	30.50	61	---	1	---	1
	89 PROP	46+11.90	30.50	7	---	1	---	1
	89 PROP	46+60.30	30.50	61	---	1	---	1
	89 PROP	47+07.00	30.50	7	---	1	---	1
	89 PROP	47+73.00	30.50	7	---	1	---	1
	89 PROP	47+88.20	30.50	61	---	1	---	1
	89 PROP	48+64.20	30.50	61	---	1	---	1
	89 PROP	49+54.50	30.50	61	---	1	---	1
	89 PROP	50+58.20	30.50	61	---	1	---	1
	89 PROP	50+62.50	30.50	7	---	1	---	1
	89 PROP	50+64.90	30.50	7	---	1	---	1
	89 PROP	51+92.40	31.20	62	---	1	---	1
	89 PROP	52+74.80	31.30	62	---	1	---	1
	89 PROP	52+90.70	31.50	6	---	1	---	1
	89 PROP	53+66.50	31.00	62	---	1	---	1
	89 PROP	53+75.90	31.00	7	---	1	---	1
	89 PROP	54+10.00	30.50	7	---	1	---	1
	89 PROP	54+13.00	30.50	62	---	1	---	1
	89 PROP	55+90.30	30.50	8	---	1	---	1
	89 PROP	56+58.40	30.50	7	---	1	---	1
SUBTOTALS				1,561	---	45	---	45

CONT. ON RIGHT

3

WATER SERVICES SUMMARY (CONT.)								
			SPV.0090.26	SPV.0090.27	SPV.0060.28	SPV.0060.29	SPV.0060.27	
			WATER SERVICE COPPER,		WATER SERVICE CORPORATION, CURB STOP, AND BOX,		CONNECT TO EXISTING WATER SERVICE	
CATEGORY	ALIGNMENT	STATION	OFFSET TO MAIN CONNECTION	1-INCH	2-INCH	1-INCH	2-INCH	EA
0010 (CONT)	89 PROP	56+70.00	30.50	61	---	1	---	1
	89 PROP	57+60.90	30.50	7	---	1	---	1
	89 PROP	57+70.90	30.50	61	---	1	---	1
	89 PROP	58+40.00	30.50	7	---	1	---	1
	89 PROP	59+98.50	30.50	61	---	1	---	1
	89 PROP	60+02.00	30.50	7	---	1	---	1
	89 PROP	60+14.00	30.50	7	---	1	---	1
	89 PROP	60+70.53	30.50	62	---	1	---	1
	89 PROP	61+54.50	30.50	6	---	1	---	1
	89 PROP	61+57.00	30.50	61	---	1	---	1
	89 PROP	62+21.50	30.50	7	---	1	---	1
	89 PROP	64.73.50	30.50	6	---	1	---	1
	89 PROP	64+78.00	30.50	62	---	1	---	1
	89 PROP	65+25.20	30.50	6	---	1	---	1
	89 PROP	65+47.50	30.50	63	---	1	---	1
	89 PROP	65+69.00	30.50	6	---	1	---	1
	89 PROP	66+86.20	30.50	6	---	1	---	1
	89 PROP	66+95.00	30.50	62	---	1	---	1
	89 PROP	67+93.50	30.50	7	---	1	---	1
	89 PROP	67+97.40	30.50	62	---	1	---	1
	89 PROP	68+47.50	30.50	7	---	1	---	1
	89 PROP	69+29.20	30.50	7	---	1	---	1
	89 PROP	69+93.50	30.50	61	---	1	---	1
	89 PROP	70+19.50	30.50	7	---	1	---	1
	89 PROP	70+43.50	30.50	61	---	1	---	1
	89 PROP	71+67.00	30.50	61	---	1	---	1
	89 PROP	71+93.30	30.50	7	---	1	---	1
	89 PROP	72+49.50	30.50	62	---	1	---	1
	89 PROP	73+00.00	30.50	7	---	1	---	1
	89 PROP	73+47.50	30.50	61	---	1	---	1
	89 PROP	74+00.00	30.50	7	---	1	---	1
	89 PROP	74+65.20	30.50	7	---	1	---	1
	89 PROP	75+07.00	30.50	61	---	1	---	1
	89 PROP	75+71.90	30.50	7	---	1	---	1
	89 PROP	75+84.70	30.50	61	---	1	---	1
	89 PROP	76+35.40	30.50	61	---	1	---	1
	89 PROP	76+89.50	30.50	61	---	1	---	1
	89 PROP	77+04.00	30.50	7	---	1	---	1
	89 PROP	77+58.00	30.50	61	---	1	---	1
	89 PROP	78+07.00	30.50	7	---	1	---	1
	89 PROP	78+26.70	30.50	61	---	1	---	1
	89 PROP	78+63.50	30.50	61	---	1	---	1
	89 PROP	78+70.50	30.50	7	---	1	---	1
	89 PROP	79+37.00	30.50	7	---	1	---	1
	89 PROP	79+56.00	30.50	61	---	1	---	1
SUBTOTALS				1,503	---	45	---	45

CONT. ON NEXT SHEET

WATER SERVICES SUMMARY (CONT.)								
			SPV.0090.26	SPV.0090.27	SPV.0060.28	SPV.0060.29	SPV.0060.27	
			WATER SERVICE COPPER,		WATER SERVICE CORPORATION, CURB STOP, AND BOX,		CONNECT TO EXISTING WATER SERVICE	
			1-INCH	2-INCH	1-INCH	2-INCH		
CATEGORY	ALIGNMENT	STATION	OFFSET TO MAIN CONNECTION	LF	LF	EA	EA	EA
0010 (CONT)	89 PROP	80+01.80	30.50	7	---	1	---	1
	89 PROP	80+21.55	30.50	61	---	1	---	1
	89 PROP	80+61.00	30.50	7	---	1	---	1
	89 PROP	80+63.20	30.50	61	---	1	---	1
89 PROP	81+35.50	30.50	61	---	1	---	---	1
89 PROP	81+61.60	30.50	7	---	1	---	---	1
89 PROP	82+00.00	30.50	7	---	1	---	---	1
89 PROP	82+55.00	30.00	61	---	1	---	---	1
89 PROP	83+00.00	27.50	8	---	1	---	---	1
89 PROP	83+52.40	24.50	54	---	1	---	---	1
89 PROP	83+54.50	24.50	7	---	1	---	---	1
89 PROP	83+95.40	24.50	7	---	1	---	---	1
89 PROP	84+39.80	25.00	9	---	1	---	---	1
89 PROP	84+71.10	25.00	11	---	1	---	---	1
89 PROP	85+79.50	25.50	9	---	1	---	---	1
89 PROP	86+08.60	25.00	58	---	1	---	---	1
89 PROP	86+20.40	24.00	60	---	1	---	---	1
89 PROP	86+52.00	20.90	60	---	1	---	---	1
89 PROP	86+93.30	18.00	56	---	1	---	---	1
89 PROP	87+46.50	16.00	55	---	1	---	---	1
89 PROP	87+72.25	16.00	55	---	1	---	---	1
89 PROP	88+11.30	16.00	55	---	1	---	---	1
89 PROP	88+36.00	16.00	55	---	1	---	---	1
89 PROP	88+54.00	16.00	55	---	1	---	---	1
89 PROP	88+79.30	15.50	55	---	1	---	---	1
89 PROP	90+31.00	37.00	75	---	1	---	---	1
89 PROP	90+41.30	37.00	75	---	1	---	---	1
89 PROP	90+50.80	37.00	75	---	1	---	---	1
89 PROP	90+88.00	37.00	74	---	1	---	---	1
89 PROP	91+61.00	36.80	74	---	1	---	---	1
89 PROP	91+72.40	36.70	74	---	1	---	---	1
89 PROP	92+02.40	36.50	74	---	1	---	---	1
89 PROP	92+39.40	36.70	74	---	1	---	---	1
89 PROP	92+62.40	36.50	73	---	1	---	---	1
89 PROP	92+75.30	36.50	73	---	1	---	---	1
89 PROP	93+65.50	36.50	74	---	1	---	---	1
89 PROP	94+33.80	35.90	72	---	1	---	---	1
89 PROP	94+55.20	35.70	72	---	1	---	---	1
WS	11+02.55	-8.60	41	---	1	---	---	1
WLS	9+57.32	10.40	48	---	1	---	---	1
UNDISTRIBUTED				100	200	5	7	12
SUBTOTALS				2,089	200	45	7	52
TOTALS				5,153	200	135	7	142

WATER MAIN INSULATION			
			SPV.0090.39
CATEGORY	ALIGNMENT	LOCATION	LF*
0010	89 PROP	85+00 - 86+00	16
	UNDISTRIBUTED		84
TOTALS			100

* ACTUAL QUANTITY AND LOCATION TO BE FIELD DETERMINED BY ENGINEER

WATER MAIN GASKETS			
		SPV.0060.39	SPV.0060.40
		FLUOROCARBON	NITRILE
CATEGORY	LOCATION	EA	EA
0010	UNDISTRIBUTED	15	20

BENTONITE CLAY DAMS		
		SPV.0060.38
CATEGORY	LOCATION	EA
0010	UNDISTRIBUTED	4

UTILITY LINE OPENING (ULO)		
		SPV.0060.37
CATEGORY	LOCATION	EA
0010	UNDISTRIBUTED	8
0020	UNDISTRIBUTED	4
TOTALS		12

SANITARY SEWER MANHOLE, (4-FOOT DIAMETER)							SPV.0060.43	SPV.0060.44	
STRUCTURE		REFERENCE ALIGNMENT	LOCATION		FINAL TOP OF		SANITARY SEWER MANHOLE, (4-FOOT DIAMETER)	CONSTRUCT OUTSIDE DROP	
CATEGORY	NUMBER		STATION	(OFFSET)	CASTING	IE	DEPTH	EA	EA
0020	1	CTH A	8+52.05	0.00	861.03	850.61	10.4	1	---
	2	89 PROP	31+74.28	-26.83	860.26	849.68	10.6	1	---
	3	89 PROP	32+97.92	-9.22	860.08	849.25	10.8	1	---
	4	89 PROP	34+75.00	1.00	858.52	848.70	9.8	1	---
	5	89 PROP	38+13.29	1.01	860.26	847.76	12.5	1	---
	6	89 PROP	40+45.00	5.98	859.53	847.08	12.4	1	---
	7	89 PROP	44+37.00	6.00	858.68	846.00	12.7	1	2
	8	89 PROP	47+50.00	6.00	860.41	845.12	15.3	1	---
	9	89 PROP	51+25.00	6.00	865.96	844.08	21.9	1	---
	10	89 PROP	54+96.00	6.00	864.09	843.05	21.0	1	2
	11	89 PROP	58+92.00	6.00	860.74	841.96	18.8	1	1
	12	89 PROP	62+87.00	6.00	857.87	840.87	17.0	1	1
	13	89 PROP	65+00.00	6.00	859.11	840.24	18.9	1	---
	14	89 PROP	68+37.00	6.00	861.11	839.30	21.8	1	1
	15	89 PROP	72+25.00	6.00	856.40	838.23	18.2	1	---
	16	89 PROP	76+00.00	6.00	843.76	833.90	9.9	1	---
	17	89 PROP	79+60.00	6.00	841.12	831.45	9.7	1	---
	18	89 PROP	83+10.00	6.00	838.99	827.72	11.3	1	---
	19	89 PROP	84+91.98	0.18	833.72	826.00	7.7	1	---
	20	89 PROP	86+33.42	0.00	830.28	821.55	8.7	1	---
	21	89 PROP	86+77.83	-4.64	829.93	821.70	8.2	1	---
	1A	89 PROP	29+75.00	0.00	858.88	850.29	8.6	1	---
	4A	SBR	9+21.52	-0.14	858.04	850.26	7.8	1	---
	5A	CS	9+57.51	2.36	860.40	851.25	9.1	1	---
	7A	WBR	9+45.99	-0.36	859.09	849.25	9.8	1	---
	T	89 PROP	40+43.22	-9.07	859.48	850.89	8.6	1	---
TOTALS							26	7	

3

SANITARY LATERALS						
CATEGORY	REFERENCE ALIGNMENT	STATION	OFFSET TO MAIN CONNECTION	SPV.0090.32	SPV.0090.33	SPV.0060.42
				SANITARY LATERAL,		CONNECT TO EXISTING SANITARY SEWER LATERAL EACH
				4-INCH LF	6-INCH LF	
0020	CTH A	8+59.94	1.83	35	---	1
	CTH A	8+81.85	5.23	46	---	1
	CTH A	9+25.63	4.87	61	---	1
	89 PROP	30+34.12	1.82	36	---	1
	89 PROP	32+03.46	-17.50	30	---	1
	89 PROP	32+19.72	-13.80	59	---	1
	89 PROP	33+19.36	-4.15	31	---	1
	89 PROP	34+29.72	1.01	36	---	1
	89 PROP	35+19.24	1.00	36	---	1
	89 PROP	35+38.04	1.00	31	---	1
	89 PROP	36+14.81	1.01	31	---	1
	89 PROP	36+65.55	1.01	37	---	1
	89 PROP	36+76.51	1.01	41	---	1
	89 PROP	37+43.02	1.01	43	---	1
	89 PROP	38+21.04	1.23	41	---	1
	89 PROP	38+85.78	3.05	35	---	1
	89 PROP	39+16.71	3.92	35	---	1
	89 PROP	39+54.03	4.36	33	---	1
	89 PROP	39+83.79	4.71	36	---	1
	89 PROP	41+06.54	5.99	36	---	1
	89 PROP	42+41.00	5.99	38	---	1
	89 PROP	42+91.05	5.99	36	---	1
	89 PROP	43+74.69	6.00	36	---	1
	89 PROP	45+38.98	6.00	43	---	1
	89 PROP	45+97.65	6.00	36	---	1
	89 PROP	46+65.08	6.00	36	---	1
	89 PROP	47+90.56	6.00	36	---	1
	89 PROP	48+66.27	6.00	36	---	1
	89 PROP	48+71.62	6.00	31	---	1
	89 PROP	49+52.24	6.00	31	---	1
	89 PROP	49+54.39	6.00	36	---	1
	89 PROP	50+47.71	6.00	36	---	1
	89 PROP	50+67.87	6.00	31	---	1
	89 PROP	51+10.92	6.00	36	---	1
	89 PROP	51+78.09	6.22	37	---	1
	89 PROP	51+92.46	6.29	31	---	1
	89 PROP	52+21.53	6.41	31	---	1
	89 PROP	52+80.03	6.66	37	---	1
	89 PROP	53+00.77	6.72	31	---	1
	89 PROP	53+68.20	6.47	37	---	1
	89 PROP	53+78.58	6.43	32	---	1
	89 PROP	54+13.84	6.30	31	---	1
	89 PROP	54+20.42	6.28	37	---	1
	89 PROP	55+51.19	6.00	32	---	1
	89 PROP	56+00.00	6.00	36	---	1
	89 PROP	56+03.06	6.00	31	---	1
	89 PROP	56+68.03	6.00	31	---	1
	89 PROP	57+66.83	6.00	32	---	1
	89 PROP	57+78.37	6.00	37	---	1
	89 PROP	58+53.11	6.00	32	---	1
SUBTOTALS				1,801	---	50

CONT. ON RIGHT

SANITARY LATERALS (CONT.)						
CATEGORY	REFERENCE ALIGNMENT	STATION	OFFSET TO MAIN CONNECTION	SPV.0090.32	SPV.0090.33	SPV.0060.42
				SANITARY LATERAL,		CONNECT TO EXISTING SANITARY SEWER LATERAL EACH
				4-INCH LF	6-INCH LF	
0020	89 PROP	58+59.13	6.00	39	---	1
	(CONT.) 89 PROP	60+05.86	6.23	38	---	1
	89 PROP	60+08.67	6.23	34	---	1
	89 PROP	60+12.18	6.23	32	---	1
	89 PROP	60+73.42	6.18	37	---	1
	89 PROP	61+63.42	6.10	36	---	1
	89 PROP	61+66.70	6.10	31	---	1
	89 PROP	62+39.14	6.04	31	---	1
	89 PROP	63+11.54	6.04	41	---	1
	89 PROP	64+80.07	6.00	33	---	1
	89 PROP	64+81.65	6.00	36	---	1
	89 PROP	65+22.41	6.22	31	---	1
	89 PROP	65+27.54	6.27	36	---	1
	89 PROP	65+55.13	6.55	31	---	1
	89 PROP	65+76.04	6.75	37	---	1
	89 PROP	67+00.85	7.98	30	---	1
	89 PROP	67+03.16	8.01	38	---	1
	89 PROP	67+45.62	7.61	30	---	1
	89 PROP	67+49.11	7.54	37	---	1
	89 PROP	68+02.66	6.60	31	---	1
	89 PROP	68+05.56	6.55	36	---	1
	89 PROP	68+54.66	6.00	31	---	1
	89 PROP	68+91.98	6.00	36	---	1
	89 PROP	69+44.25	6.00	31	---	1
	89 PROP	70+04.75	6.00	37	---	1
	89 PROP	70+32.23	6.00	35	---	1
	89 PROP	70+55.63	6.00	36	---	1
	89 PROP	71+86.61	6.00	36	---	1
	89 PROP	71+92.56	6.00	31	---	1
	89 PROP	72+48.75	6.00	36	---	1
	89 PROP	72+98.27	6.00	31	---	1
	89 PROP	73+35.29	6.00	36	---	1
	89 PROP	74+19.55	6.00	36	---	1
	89 PROP	74+20.00	6.00	33	---	1
	89 PROP	74+66.09	6.00	31	---	1
	89 PROP	75+14.52	6.00	36	---	1
	89 PROP	75+81.14	6.00	32	---	1
	89 PROP	75+90.15	6.00	36	---	1
	89 PROP	76+71.72	6.24	31	---	1
	89 PROP	76+85.40	6.23	31	---	1
	89 PROP	77+00.58	6.22	37	---	1
	89 PROP	77+69.42	6.16	36	---	1
	89 PROP	77+88.67	6.14	36	---	1
	89 PROP	78+12.07	6.12	31	---	1
	89 PROP	78+67.14	6.08	36	---	1
	89 PROP	78+76.26	6.08	31	---	1
	89 PROP	79+64.16	6.05	36	---	1
	89 PROP	79+69.65	6.12	31	---	1
	89 PROP	80+05.90	6.54	31	---	1
	89 PROP	80+25.23	6.77	39	---	1
SUBTOTALS				1,710	---	50

CONT. ON RIGHT

SANITARY LATERALS (CONT.)						
CATEGORY	REFERENCE ALIGNMENT	STATION	OFFSET TO MAIN CONNECTION	SPV.0090.32	SPV.0090.33	SPV.0060.42
				SANITARY LATERAL,		CONNECT TO EXISTING SANITARY SEWER LATERAL EACH
				4-INCH LF	6-INCH LF	
0020	89 PROP	80+64.29	7.23	30	---	1
	(CONT.) 89 PROP	80+66.80	7.26	37	---	1
	89 PROP	81+62.71	8.39	39	---	1
	89 PROP	81+66.72	8.44	28	---	1
	89 PROP	82+40.74	9.22	28	---	1
	89 PROP	82+62.85	8.84	40	---	1
	89 PROP	83+04.08	6.51	30	---	1
	89 PROP	83+58.06	8.13	19	---	1
	89 PROP	83+60.44	8.16	35	---	1
	89 PROP	83+65.28	8.20	18	---	1
	89 PROP	84+23.73	6.40	14	---	1
	89 PROP	84+73.96	1.91	32	---	1
	89 PROP	86+04.20	1.54	34	---	1
	89 PROP	86+14.08	1.02	34	---	1
	89 PROP	86+82.75	-4.99	32	---	1
	89 PROP	86+99.91	-6.19	31	---	1
	89 PROP	87+35.09	-7.78	31	---	1
	89 PROP	87+63.73	-7.92	31	---	1
	89 PROP	87+76.98	-7.99	31	---	1
	89 PROP	87+78.92	-8.00	31	---	1
	89 PROP	87+88.58	-8.05	31	---	1
	89 PROP	88+12.91	-8.17	31	---	1
	89 PROP	88+14.57	-8.17	31	---	1
	89 PROP	88+15.90	-8.18	31	---	1
	89 PROP	88+38.55	-8.29	31	---	1
	89 PROP	88+60.91	-8.40	30	---	1
	89 PROP	88+65.38	-8.43	30	---	1
	89 PROP	88+81.49	-8.51	30	---	1
	89 PROP	90+21.66	-8.76	31	---	1
	89 PROP	90+44.83	-8.71	29	---	1
	89 PROP	90+73.83	-8.63	30	---	1
	89 PROP	90+94.60	-8.58	30	---	1
	89 PROP	91+19.62	-8.52	30	---	1
	89 PROP	91+45.68	-8.46	30	---	1
	89 PROP	91+59.71	-8.42	30	---	1
	89 PROP	91+65.57	-8.29	30	---	1
	89 PROP	92+02.81	-8.32	30	---	1
	89 PROP	92+28.72	-8.25	30	---	1
	89 PROP	92+37.86	-8.23	30	---	1
	89 PROP	92+43.66	-8.21	30	---	1
	89 PROP	92+57.68	-8.18	30	---	1
	89 PROP	92+75.57	-8.15	30	---	1
	89 PROP	93+21.59	-8.02	30	---	1
	89 PROP	94+29.86	-7.59	30	---	1
	89 PROP	94+41.90	-7.75	30	---	1
	89 PROP	94+43.85	-7.75	30	---	1
UNDISTRIBUTED				200	200	5
SUBTOTALS				1,585	200	51
TOTALS				5,095	200	151

3

SANITARY SEWER PIPES																							
		SPV.0090.34		SPV.0090.35		SPV.0090.36		SPV.0090.38		SPV.0090.37		SPV.0035.26		SPV.0060.41									
		SANITARY SEWER, POLYVINYL CHLORIDE (PVC),																					
		SDR 35,					SDR 26,					GRANULAR BACKFILL, SANITARY SEWER		CONNECT TO EXISTING SANITARY SEWER MAIN OR MANHOLE									
LOCATION		LOCATION		IE		IE		SLOPE		8-INCH		10-INCH		12-INCH		15-INCH		12-INCH		LF		EA	
CATEGORY	(DOWNSTREAM)	(UPSTREAM)	(DOWNSTREAM)	(UPSTREAM)	(%)	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	EA						
0020	2	1	850.01	850.61	0.49%	123	---	---	---	---	---	---	---	---	62	---							
	3	2	849.35	849.68	0.25%	---	---	131	---	---	---	---	---	---	66	---							
	4	3	848.80	849.25	0.25%	---	---	179	---	---	---	---	---	---	90	---							
	5	4	847.86	848.70	0.25%	---	---	338	---	---	---	---	---	---	169	---							
	6	5	847.18	847.76	0.25%	---	---	232	---	---	---	---	---	---	116	---							
	7	6	846.10	847.08	0.25%	---	---	392	---	---	---	---	---	---	196	---							
	8	7	845.21	846.00	0.25%	---	---	313	---	---	---	---	---	---	157	---							
	9	8	844.18	845.12	0.25%	---	---	375	---	---	---	---	---	---	188	---							
	10	9	843.15	844.08	0.25%	---	---	371	---	---	---	---	---	---	186	---							
	11	10	842.06	843.05	0.25%	---	---	396	---	---	---	---	---	---	198	---							
	12	11	840.97	841.96	0.25%	---	---	395	---	---	---	---	---	---	198	---							
	13	12	840.34	840.87	0.25%	---	---	213	---	---	---	---	---	---	107	---							
	14	13	839.40	840.24	0.25%	---	---	337	---	---	---	---	---	---	169	---							
	15	14	838.33	839.30	0.25%	---	---	---	---	---	388	---	---	---	194	---							
	16	15	834.00	838.23	1.13%	---	---	---	---	---	375	---	---	---	188	---							
	17	16	831.50	833.90	0.67%	---	---	---	---	---	360	---	---	---	180	---							
	18	17	827.77	831.45	1.05%	---	---	349	---	---	---	---	---	---	175	---							
	19	18	826.05	827.72	0.92%	---	---	181	---	---	---	---	---	---	91	---							
	20	19	821.80	826.00	2.97%	---	---	---	---	---	141	---	---	---	71	---							
	EX MH SAN-1	20	819.64	821.55	1.77%	---	---	---	---	108	---	---	---	---	54	1							
	EX MH SAN-6941	21	820.55	821.70	0.40%	287	---	---	---	---	---	---	---	---	144	1							
	12	CONNECT TO EXISTING	846.99	848.86	3.33%	56	---	---	---	---	---	---	---	---	28	1							
	10	CONNECT TO EXISTING	848.79	850.11	2.86%	46	---	---	---	---	---	---	---	---	23	1							
	10	CONNECT TO EXISTING	849.10	849.68	0.74%	78	---	---	---	---	---	---	---	---	39	1							
	11	CONNECT TO EXISTING	847.84	849.58	3.48%	50	---	---	---	---	---	---	---	---	25	1							
	14	CONNECT TO EXISTING	846.15	846.35	0.40%	50	---	---	---	---	---	---	---	---	25	1							
	19	CONNECT TO EXISTING	826.40	826.56	0.26%	60	---	---	---	---	---	---	---	---	30	1							
	2	1A	849.78	850.29	0.25%	---	---	---	207	---	---	---	---	---	104	---							
	4	4A	849.47	850.26	1.00%	79	---	---	---	---	---	---	---	---	40	1							
	5	5A	850.70	851.25	1.27%	43	---	---	---	---	---	---	---	---	22	1							
	7	7A	848.98	849.25	0.45%	60	---	---	---	---	---	---	---	---	30	1							
	7	CONNECT TO EXISTING	851.48	851.64	0.40%	40	---	---	---	---	---	---	---	---	20	1							
	6	T	849.58	850.89	8.66%	---	15	---	---	---	---	---	---	---	8	1							
TOTALS						1,222	15	4,409	108	1,389		3,572		13									

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED IN THE OFFICE OF REGISTER OF DEEDS, IN JEFFERSON COUNTY AS SHEET 2 OF 2 OF DOCUMENT #1374770 AND FILED IN 13 PAGE 11.

SEE SHEET 2 OF 2 FOR DETAILS

UTILITY SCHEDULE & INTEREST REQUIRED			
UTILITY NUMBER	UTILITY OWNERS	INTEREST REQUIRED	
200	WE ENERGIES	RELEASE OF RIGHTS	
201	LAKE MILLS LIGHT & WATER-WATER	RELEASE OF RIGHTS	
202	FRONTIER - COMMUNICATION	RELEASE OF RIGHTS	
206	SPRINT COMMUNICATIONS	RELEASE OF RIGHTS	
207	US TELECOM INC. - COMMUNICATION	RELEASE OF RIGHTS	

TRANSPORTATION PROJECT PLAT 3300-01-20 - 4.01 AMENDMENT 1
ADDS PARCELS 15 AND 20 AND AMENDS PARCELS 2 AND 9 OF TRANSPORTATION PROJECT PLAT 3300-01-20 - 4.01 RECORDED AS DOCUMENT NUMBER 1374846 AND FILED IN VOLUME 173, PAGE 72.
THAT PART OF LOT 2, CSM 1478 LOCATED IN AND ALSO INCLUDING PART OF THE NE 1/4 OF SECTION 23, CITY OF LAKE MILLS, JEFFERSON COUNTY, WISCONSIN, ALSO PART OF LOT 2, CSM 1285 LOCATED IN THE NW 1/4 OF SECTION 24, CITY OF LAKE MILLS, JEFFERSON COUNTY, WISCONSIN, LOCATED IN THE NW 1/4 OF SECTION 24, TOWN OF LAKE MILLS, ALL LOCATED IN 17N, R 13E, JEFFERSON COUNTY, WISCONSIN.

RELOCATION ORDER STH 89 CITY OF LAKE MILLS, MAIN ST. (TOPEL ST. TO MADISON ST.)
TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF LAKE MILLS DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT. TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF LAKE MILLS HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS Laid OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THAT THE LANDS AND INTERESTS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF LAKE MILLS, PURSUANT TO THE PROVISIONS OF SECTION 62.22, WISCONSIN STATUTES.

WISCONSIN STATUTES.

GN

R/W Course Table

Point No.	Station	Offset
100-101	101+02.1	5.96'
101-102	S 01° 09' 38" W	1.00'
102-103	N 88° 49' 55" W	8.53'
103-104	S 46° 38' 51" W	11.13'
104-105	S 01° 04' 57" W	51.48'
105-106	S 01° 04' 57" W	19.78'
106-107	S 12° 43' 33" E	81.92'
107-108	S 51° 03' 44" E	26.47'
108-109	S 89° 34' 26" E	232.91'
109-110	S 60° 25' 25" W	70.73'
110-111	N 89° 34' 26" W	144.02'
111-112	S 51° 03' 44" E	32.09'
112-113	S 89° 35' 20" E	103.34'
113-114	S 26° 15' 16" W	32.99'
114-115	S 63° 26' 25" E	50.13'
115-116	N 34° 11' 23" W	85.95'
116-117	N 63° 26' 25" W	154.51'
117-118	S 68° 22' 25" W	41.17'
118-119	S 01° 04' 57" W	62.38'
119-120	N 01° 04' 57" E	423.99'
120-121	N 88° 35' 28" W	59.93'
121-122	N 30° 04' 41" W	39.18'
122-123	S 88° 35' 28" E	18.52'
123-124	N 01° 24' 32" E	4.89'
124-125	S 88° 35' 03" E	11.84'
125-126	N 73° 23' 37" E	91.14'
126-127	N 01° 04' 57" E	272.99'
127-128	N 01° 04' 57" E	49.50'
128-129	N 01° 04' 57" E	148.11'
129-130	S 89° 03' 18" E	1.93'
130-131	S 89° 49' 56" E	0.24'
131-132	S 89° 36' 33" E	250.02'
132-133	S 01° 04' 57" W	19.78'
133-134	S 01° 04' 57" W	250.02'
134-135	N 89° 36' 33" W	250.02'

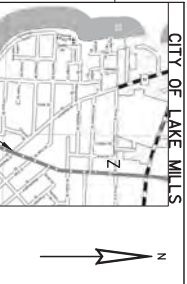
R/W Station & Offset Table

Point No.	Station	Offset
100	39+85.55	62.07'
101	39+85.41	52.10'
102	39+84.91	52.12'
103	39+84.29	43.59'
104	39+76.37	35.77'
105	39+46.05	35.11'
106	32+53.08	34.09'
107	32+53.49	46.56'
108	29+75.82	196.23'
109	29+44.63	132.73'
110	30+84.33	66.43'
111	30+43.77	62.33'
112	29+49.81	107.97'
113	29+49.61	74.98'
114	28+99.49	75.01'
115	31+23.25	176.99'
116	29+74.42	74.99'
117	31+17.93	45.33'
118	31+22.23	82.82'
119	31+02.30	129.99'
120	31+23.25	176.99'
121	30+54.91	29.56'
122	30+55.54	129.49'
123	34+85.54	129.16'
124	34+90.42	117.29'
125	34+90.35	117.29'
126	37+84.94	28.52'
127	37+87.93	28.37'
128	36+37.43	23.34'
129	38+85.06	30.38'
130	39+85.06	28.84'
131	39+85.20	28.85'
132	34+60.91	36.44'
133	34+63.78	286.45'
134	34+44.00	286.44'
135	34+41.13	36.43'
136	34+05.65	147.67'

LAKE MILLS

PLAT OF SURVEY 018M012

- GENEAL TELEPHONE COMPANY VOL 1369, P 416, DOC 55582 - PARCEL 2
- GENEAL TELEPHONE COMPANY VOL 1369, P 416, DOC 55582 - PARCEL 2
- SPRINT COMMUNICATIONS COMPANY VOL 1709, P 559-564, DOC 386574 - PARCELS 4 & 6
- SPRINT COMMUNICATIONS COMPANY VOL 1709, P 559-564, DOC 386574 - PARCELS 4 & 6
- US TELECOM INC VOL 658, P 850-852, DOC 906285 - PARCELS 4 & 6
- US TELECOM INC VOL 658, P 850-852, DOC 906285 - PARCELS 4 & 6

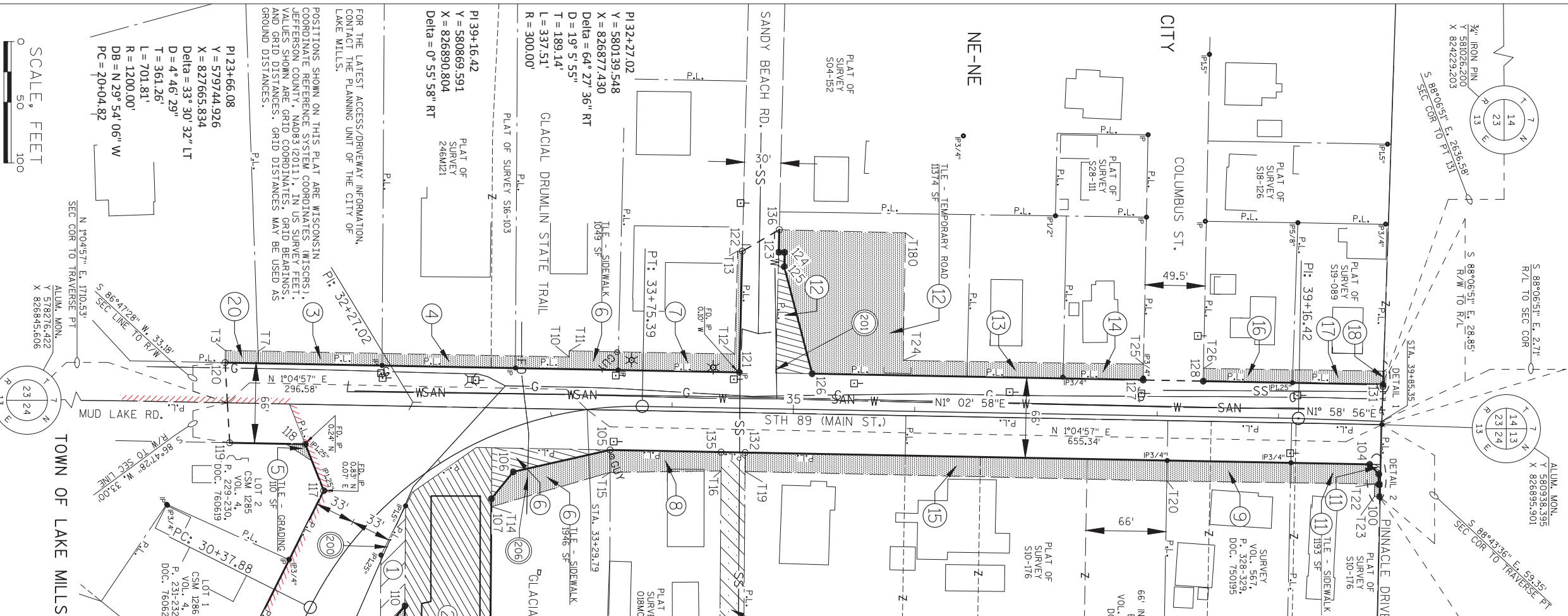


PLOT DATE :

PLOT DATE : 1/31/2017 1:01 PM

PLOT BY : CLARK, CLYDE J

PLOT NAME : PLOT SCALE : *****



SCALE, FEET
0 50 100

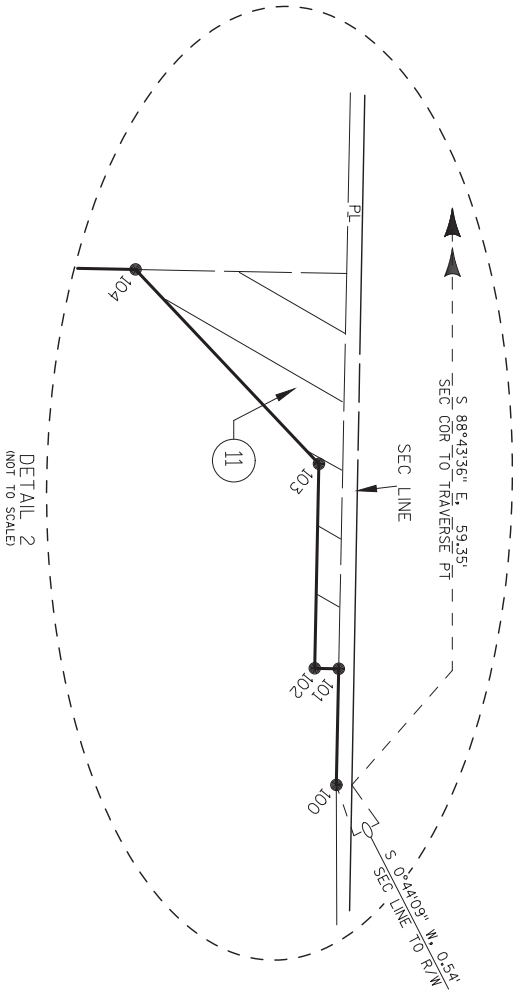
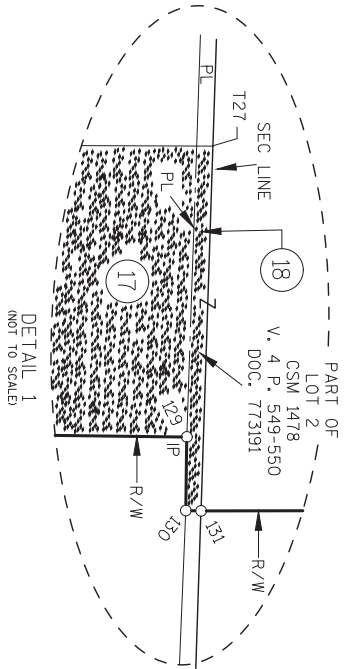
SCHEDULE OF LANDS & INTERESTS REQUIRED

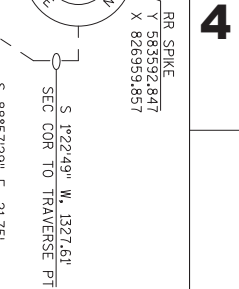
PARCEL NUMBER	OWNERS	INTEREST	NEW R/W ACRES OR S.F. REQUIRED	TOTAL ACRES OR S.F.	PIE ACRES OR S.F.
1	VP PROPERTIES LLC	FEE & TIE	2493	2493	984
2	TOPEL IRREVOCABLE TRUST	TIE	18240	18240	
3	TOPEL LAKESIDE PARK, INC.	TIE			1021
4	LAKE MILLS FEED & GRAIN INC.	TIE			1099
5	MARIWAT MTRIFOP	TIE			1335
6	WISCONSIN DEPARTMENT OF NATURAL RESOURCES	FEE & TIE	1335	2993	
7	K TOPEL ENTERPRISES LLC	TIE			1844
8	DOWNLAD & SHERIDAN JENSEN	TIE	3358	3358	1695
9	DELORES TOPEL	FEE & TIE			4041
10	UNKNOWN OWNER	PIE			
11	CONNIE ZASTROW	FEE & TIE	2423	2423	1193
12	CITY OF LAKE MILLS	FEE & TIE	1590	1590	11374
13	TOWN OF LAKE MILLS	TIE			851
14	LEGITIM TOMAZAK	TIE	7109	7109	5696
15	TOPEL IRREVOCABLE TRUST	TIE			729
16	DOWNLAD & SHERIDAN JENSEN	TIE			813
17	BAILEY BUSHOP	TIE			3
18	JORDAN OSCAMP	TIE			272
20	TOPEL IRREVOCABLE TRUST	TIE			

*PURPOSE FOR TIES IS TO REMOVE & REPLACE SIDE WALK. UNLESS NOTED, BUILDINGS WILL NOT BE AFFECTED BY TIES.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
I, KEIF S. CALLAWAY, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY OF LAKE MILLS, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.
SIGNATURE: *Keif S. Callaway* DATE: 1/23/17
PRINT NAME: KEIF S. CALLAWAY
REGISTRATION NUMBER: S-2607
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF LAKE MILLS
SIGNATURE: *Steve Wilke* DATE: 1/24/17
PRINT NAME: STEVE WILKE

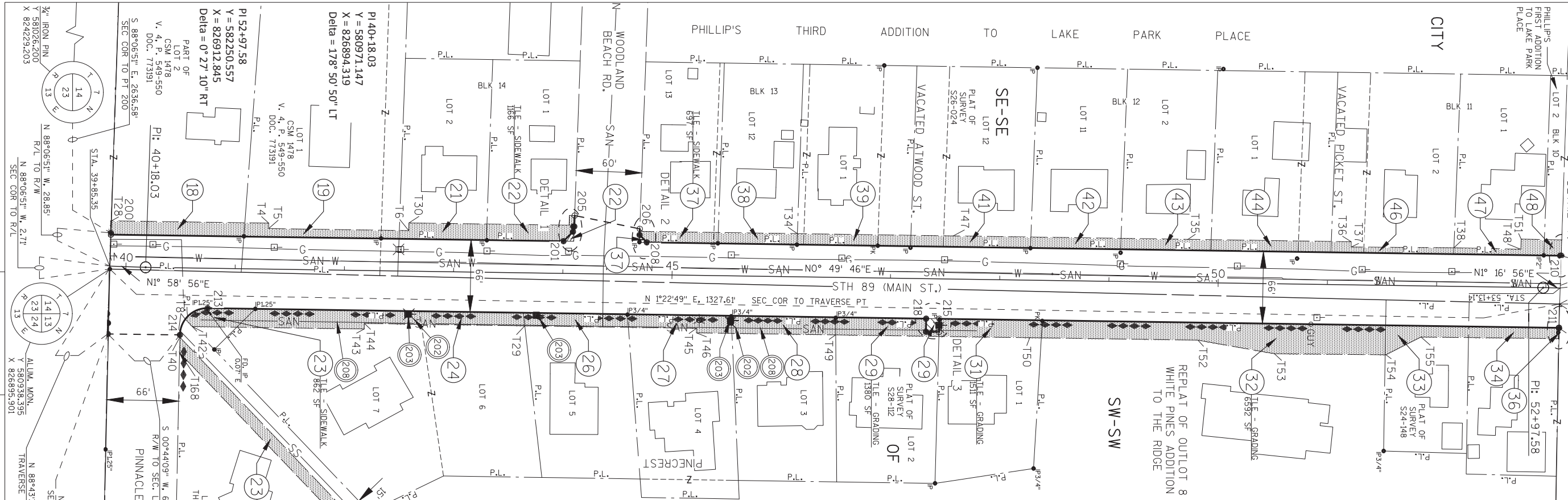






S 88°05'30" E, 14.69'
R/L TO SEC. LINE
S 88°05'30" E, 29.56'
R/W TO R/L
SEC. COR. TO TRAVERSE PT
S 88°57'29" E, 21.75'
SEC. LINE TO R/W

CITY



TRANSPORTATION PROJECT PLAT NO: 3300-01-20-4.02

THAT PART OF LOTS 1 & 2, CSM 1478, LOTS 1 & 2, BLOCK 11, LOTS 1, 2, 11 & 12, BLOCK 12, LOTS 1, 12 & 13, BLOCK 13 AND LOTS 1 & 2, BLOCK 14 OF PHILLIPS THIRD ADDITION TO LAKE PARK PLACE; LOT 2, BLOCK 10, PHILLIPS FIRST ADDITION TO LAKE PARK PLACE; ALSO THAT PART OF VACATED PICKET STREET AND VACATED ATWOOD STREET, ALL LOCATED IN AND ALSO INCLUDING PART OF THE SW¼ OF SECTION 14; ALSO THAT PART OF LOT 96 OF THE RIDGE, LOTS 1 - 7 OF PINECREST, LOT 15 OF PHILLIPS SECOND ADDITION TO LAKE PARK PLACE, THE REPLAT OF OUTLOT 8, WHITE PINES ADDITION TO THE RIDGE, ALL LOCATED IN AND ALSO INCLUDING PART OF THE SW¼ OF SECTION 13, ALL IN T7N, R13E, CITY OF LAKE MILLS, JEFFERSON COUNTY, WISCONSIN.

RELOCATION ORDER STH 89 CITY OF LAKE MILLS, MAIN ST. (TOPEL ST. TO MADISON ST.) TO PROPERLY ESTABLISH LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF LAKE MILLS DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT. TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF LAKE MILLS HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF LAKE MILLS, PURSUANT TO THE PROVISIONS OF SECTION 62.22, WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

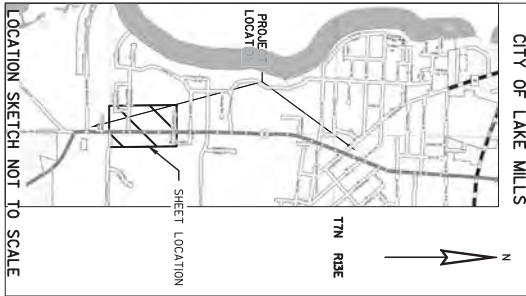
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	NEW		TOTAL	TILE ACRES OR S.F.
			R/W ACRES OR S.F. REQUIRED	EXISTING		
18	JORDAN D SAFF	TILE			1534	
19	STEVEN R & TERESA WILSON	TILE			1189	
21	JENNIFER M THURNBAUER	TILE			1110	
22	RYAN WILSON	FEE & TILE	51		1166	
23	OPA & GIGI REVOCABLE TRUST	TILE			3260	
24	ROGER & SUSAN RUCHOWITZ	TILE			3585	
26	MICHAEL P & DAWN M GANZOW	TILE			1133	
27	NICOLE K & JOHN D GLAD	TILE			1266	
28	JAMES D & ELIZABETH A CERTEL	TILE			1332	
29	DONALDA & SARAH HARRIN	FEE & TILE	145		1390	
31	DALE D & THERESA L WRASSE	TILE			1211	
32	LAKE MILLS GOLF LLC	TILE			6592	
33	MARC NELSON	TILE			1054	
34	FRIEDRICH C & LAURA B HAHN (DNR) TRREVOCABLE TRUST	TILE			825	
36	JOHN A & KATHRYN E WITTWER	TILE			4	
37	RICHARD R & BONNIE L POMURSKY	FEE & TILE	23		697	
38	JAMES W & KERRY L LATSCH	TILE			723	
39	PEGGY A MCGRAH	TILE			1040	
41	SHELL WEGGENT	TILE			1100	
42	N CHARLES EGGERT & LAUREN MOSCHADEN	TILE			826	
43	WAYNE D & JEANETTE E HILLS	TILE			825	
44	HERBERT G DIETZ JR	TILE			1098	
46	JOHN P & BONNIE L GAFF	TILE			699	
47	KAREN J HAMMER	TILE			652	
48	JOSHUA J BURBUTZ	TILE			231	

*PURPOSE FOR TILES IS TO REMOVE & REPLACE SIDE WALK, UNLESS NOTED. BUILDINGS WILL NOT BE AFFECTED BY TILES.

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

EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 89 ESTABLISHED FROM PREVIOUS SURVEYS: PHILLIPS THIRD ADDITION TO LAKE PARK PLACE, PINECREST SUBDIVISION, PHILLIPS FIRST ADDITION TO LAKE PARK PLACE, CSM 1478, PLATS OF SURVEYS S28-112, S26-024 AND S19-089. EXISTING HIGHWAY RIGHT-OF-WAY FOR PINNACLE DRIVE ESTABLISHED FROM PREVIOUS SURVEY: THE RIDGE SUBDIVISION. EXISTING HIGHWAY RIGHT-OF-WAY FOR WOODLAND BEACH ROAD ESTABLISHED FROM PREVIOUS SURVEY: PHILLIPS THIRD ADDITION TO LAKE PARK PLACE.

FOUND IRON PINS ARE "I", UNLESS OTHERWISE NOTED. EXISTING ACCESS CONTROL ALONG STH 89 HAS BEEN ESTABLISHED FROM THE RIDGE AND PINECREST SUBDIVISIONS. SEE SHEET 2 OF 2 FOR STATION/OFFSET TABLES, R/W COURSE TABLE AND DETAILS.



UTILITY SCHEDULE & INTEREST REQUIRED			
UTILITY NUMBER	UTILITY OWNERS	INTEREST REQUIRED	
202	FRONTIER COMMUNICATION	RELEASE OF RIGHTS	
203	LAKE MILLS LIGHT & WATER ELECTRIC	RELEASE OF RIGHTS	
208	LAKE MILLS LIGHT & WATER SANITARY SEWER	RELEASE OF RIGHTS	

15' DRAINAGE EASEMENT VOL. 11, P 11, DOC 924932 OF PLATS
25' DEDICATED UTILITY EASEMENT VOL. 10 OF PLATS, P 73, DOC 880300

LAKE MILLS



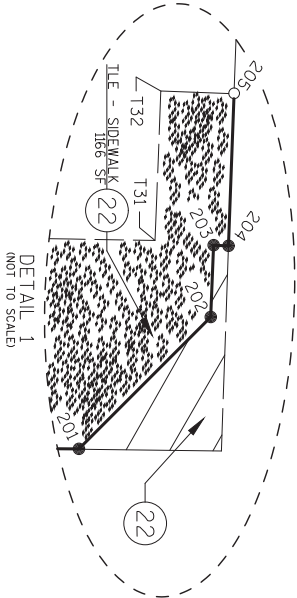
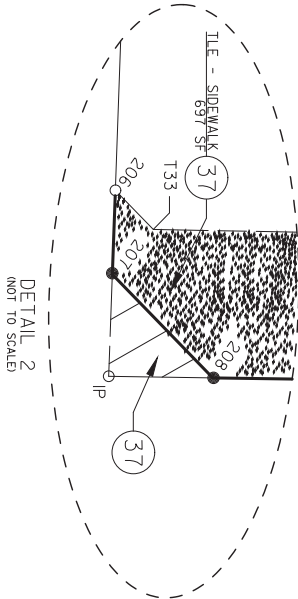
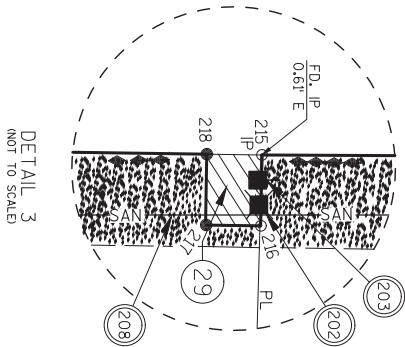
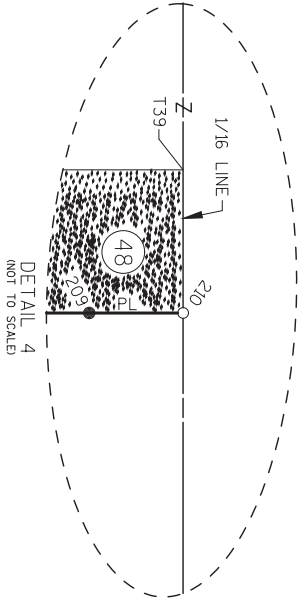
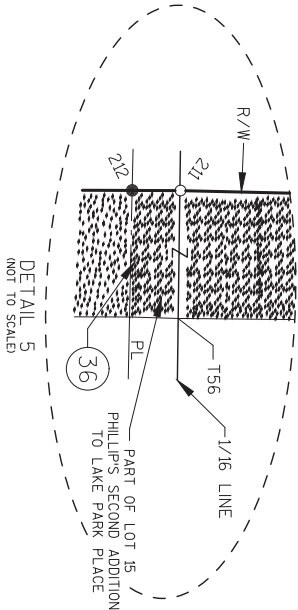
213-214
LC=39.09
LC=35.23
LCB= S 43°53'42" E
R=25.00'

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I, KEIF S. CALLAWAY, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY OF LAKE MILLS, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: *Keif S. Callaway* DATE: 10/25/16
PRINT NAME: KEIF S. CALLAWAY
REGISTRATION NUMBER: S-2607
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF LAKE MILLS
SIGNATURE: *Steve Wilke* DATE: 10/25/16
PRINT NAME: STEVE WILKE





TLE Station & Offset Table

Point No.	Station	Offset
T4	41+30.18	42.07'
T5	41+30.18	37.10'
T6	42+58.46	37.10'
T8	40+55.04	46.87'
T8	39+83.28	41.44'
T9	43+65.94	48.45'
T10	42+58.53	44.10'
T31	44+05.06	40.17'
T32	44+05.29	53.14'
T33	44+72.19	39.45'
T34	46+14.17	39.47'
T35	49+71.83	39.45'
T36	51+21.28	39.41'
T37	51+21.31	34.59'
T38	52+15.40	35.28'
T39	53+13.62	43.97'
T40	40+50.30	63.44'
T41	42+20.30	336.29'
T42	40+61.62	51.56'
T43	42+19.10	53.44'
T44	42+19.10	48.45'
T45	45+23.08	48.45'
T46	45+23.11	52.61'
T47	47+56.89	39.48'
T48	52+76.56	34.75'
T49	46+50.61	52.61'
T50	48+28.30	52.62'
T51	52+76.76	44.11'
T52	49+82.24	52.63'
T53	50+52.38	64.05'
T54	51+54.58	61.51'
T55	51+86.47	46.79'
T56	53+13.11	46.74'
T167	42+16.53	246.72'
T168	40+50.22	77.62'

R/W Course Table

200-201	N 00° 49' 56" E	414.31'
201-202	N 45° 00' 00" W	12.29'
202-203	N 87° 43' 10" W	4.75'
203-204	N 02° 02' 26" E	1.00'
204-205	N 87° 57' 34" W	10.02'
205-206	N 11° 31' 44" E	60.83'
206-207	S 67° 57' 34" E	5.54'
207-208	N 43° 50' 38" E	9.51'
208-209	N 00° 49' 56" E	836.19'
209-210	N 01° 19' 42" E	1.01'
211-212	S 01° 19' 42" W	0.39'
212-215	S 00° 49' 56" W	567.05'
215-216	S 88° 27' 38" E	12.00'
216-217	S 00° 49' 56" W	12.00'
217-218	N 89° 10' 04" W	12.00'
218-219	S 00° 49' 56" W	657.85'
219-224	SEE CURVE NOTE	

R/W Station & Offset Table

Point No.	Station	Offset
200	39+85.30	28.85'
201	44+00.22	29.48'
202	44+08.79	36.30'
203	44+08.91	43.04'
204	44+09.91	43.02'
205	44+10.12	53.03'
206	44+69.90	41.74'
207	44+69.78	36.20'
208	44+76.50	29.48'
209	53+12.45	29.56'
210	53+13.46	29.56'
211	53+13.07	36.44'
212	53+12.68	36.44'
213	40+75.34	36.50'
214	40+50.31	61.29'
215	47+45.34	36.54'
216	47+45.19	46.54'
217	47+33.19	46.54'
218	47+33.19	36.54'

THAT PART OF LOTS 1 & 2, BLOCK 1 AND LOTS 1 THRU 4, BLOCK 2 OF LAKE PARK PLACE, LOTS 1 & 2, BLOCK 8, LOTS 1 & 2, BLOCK 9 AND LOTS 1 & 2, BLOCK 10 OF PHILLIPS FIRST ADDITION TO LAKE PARK PLACE. ALSO THAT PART OF GOVERNMENT LOT 3, ALL LOCATED IN THE NW 1/4 OF SECTION 14, ALSO THAT PART OF LOTS 1 THRU 12, 14 & 15 OF PHILLIPS SECOND ADDITION TO LAKE PARK PLACE. ALL LOCATED IN THE NW 1/4 OF THE SW 1/4 OF SECTION 13, ALIN 17 N, R 13 E, CITY OF LAKE MILLS, JEFFERSON COUNTY, WISCONSIN.

RELOCATION ORDER 5TH 89 CITY OF LAKE MILLS, MAIN ST. TO MADISON ST.)
TO PROPERLY ESTABLISH, LAY OUT, WHEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION
OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF LAKE MILLS DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY
AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

1. INITIAL PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAN IS LAID OUT AND ESTABLISHED IN THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.

2. THE LANDS OR INTERESTS IN LANDS AS SHOWN ON THIS PLAN ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF LAKE MILLS, PURSUANT TO THE PROVISIONS OF SECTION 62.22, WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED				
PARCEL NUMBER	OWNERS)	INTEREST REQUIRED	OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE CITY	
			R/W ACRES OR S.F. REQUIRED NEW EXISTING	TIE ACRES OR S.F.

[illegible]

TLE Station & Offset Table

R/W Station & Offset Table

Point No.	Station	Offset
757	53+13.62	43.97'
758	53+25.46	46.21'
759	61+30.73	48.58'
760	54+62.79	44.10'
761	55+29.66	34.12'
762	56+85.12	34.33'
763	56+85.11	42.33'
764	58+59.21	42.56'
765	59+25.25	46.54'
766	61+30.69	55.28'
767	62+55.11	47.14'
768	63+24.65	43.51'
769	63+24.65	37.11'
770	64+94.41	37.74'
771	64+94.35	52.74'
772	61+59.40	55.46'
773	66+41.21	53.29'
775	53+13.81	46.34'
776	53+19.99	46.62'
777	54+20.01	46.68'
778	54+20.01	51.68'
779	64+02.50	47.00'
780	55+35.47	46.96'
781	57+75.21	46.50'
782	58+25.01	48.90'
783	58+57.68	48.85'
784	59+27.92	61.41'
785	59+27.96	50.46'
786	61+59.61	44.47'
787	62+13.46	44.80'
788	62+13.47	53.60'
789	62+53.79	53.78'
790	63+19.90	42.19'
791	64+02.37	41.94'
792	65+13.59	53.51'
793	65+81.73	53.91'
794	66+41.04	52.09'

R/W Course Table

Point No.	Station	Offset
300-301	S 01° 14' 12" W	320.91'
301-302	S 02° 24' 12" W	66.00'
302-303	S 01° 24' 50" W	314.14'
303-304	S 43° 43' 04" E	15.58'
304-305	S 87° 59' 00" E	14.31'
305-306	S 82° 04' 24" W	70.26'
306-307	S 01° 12' 23" W	330.00'
307-308	S 88° 04' 33" E	149.14'
308-309	S 03° 06' 00" E	66.25'
309-310	N 88° 04' 33" W	15.39'
310-311	S 47° 07' 35" W	12.76'
311-312	S 01° 19' 42" W	139.78'
312-313	N 01° 19' 42" E	149.14'
313-314	N 01° 33' 30" E	66.00'
314-315	N 01° 12' 23" E	330.47'
315-316	N 00° 53' 38" E	66.01'
316-317	N 00° 53' 38" E	329.96'
317-318	N 10° 24' 55" W	67.51'
318-319	N 10° 10' 05" W	14.69'
319-320	S 88° 04' 33" E	320.91'
320-321	N 01° 14' 07" E	320.07'

R/W Station & Offset Table

Point No.	Station	Offset
300	66+40.86	36.00'
301	65+53.95	37.19'
302	62+53.96	36.09'
303	59+24.72	36.06'
304	53+23.73	47.07'
305	53+23.52	61.39'
306	58+57.84	36.43'
307	53+27.84	36.88'
308	52+27.62	56.04'
309	54+61.56	61.10'
310	54+61.73	45.71'
311	54+52.85	26.56'
312	53+13.87	36.48'
313	53+13.46	29.56'
314	54+62.61	29.44'
315	53+28.60	29.13'
316	58+59.07	29.55'
318	64+55.08	29.96'
319	62+54.95	29.91'
320	63+21.08	43.51'
321	63+20.94	28.83'
322	66+41.01	30.00'

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

FOR THE LATEST ACCESS/DRIVEWAY
INFORMATION, CONTACT THE PLANNING
UNIT OF THE CITY OF LAKE MILLS.

SCALE, FEET



0 50 100

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR CATLIN DR., ESTABLISHED FROM PREVIOUS SURVEY; PHILLIPS SECOND ADDITION TO LAKE PARK PLACE.
EXISTING HIGHWAY RIGHT-OF-WAY FOR KEYES ST., ESTABLISHED FROM PREVIOUS SURVEY; PHILLIPS FIRST ADDITION TO LAKE PARK PLACE.
EXISTING HIGHWAY RIGHT-OF-WAY FOR WILTON ST., ESTABLISHED FROM PREVIOUS SURVEY; PHILLIPS FIRST ADDITION TO LAKE PARK PLACE AND LAKE PARK PLACE.
EXISTING HIGHWAY RIGHT-OF-WAY FOR LAKE PARK PL., ESTABLISHED FROM PREVIOUS SURVEYS; LAKE PARK PLACE AND PHILLIPS SECOND ADDITION TO LAKE PARK PLACE.
FOUND IRON PINS ARE "I", UNLESS OTHERWISE NOTED.

LAKE MILLS

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I, KEF S. CALLAWAY, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY OF LAKE MILLS, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

PI 60+07.15
Y = 582959.948
X = 826928.723
Delta = 0° 09' 50" RT

SIGNATURE: Steve Wilke DATE: 10/20/16
PRINT NAME: KEIT S. CALLAWAY
REGISTRATION NUMBER: S-2607
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR
THE CITY OF LAKE MILLS
SIGNATURE: Steve Wilke DATE: 10/20/16
PRINT NAME: STEVE WILKE

LOCATED IN THE SE¼ OF THE NE¼ OF SECTION 14. ALSO THAT PART OF LOTS 1 & 2, BLOCK 1 OF W.H. RAYNOR'S ADDITION, OUTLOTS 81 THRU 83 OF THE ORIGINAL PLAT OF LAKE MILLS. ALL LOCATED IN THE SW¼ OF THE NW¼ OF SECTION 13. ALL IN T 7 N, R 13 E, CITY OF LAKE MILLS, JEFFERSON COUNTY, WISCONSIN.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF LAKE MILLS HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.

2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF LAKE MILLS, PURSUANT TO THE PROVISIONS OF SECTION 62.22, WISCONSIN STATUTES.

TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

RELOCATION ORDER 5TH 89 CITY OF LAKE MILS, MAIN ST., (TOPEL ST., MADISON ST.) TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE. THE CITY OF LAKE MILLS DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED.

LAKE MILLS

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 89 ESTABLISHED FROM PREVIOUS SURVEYS: ORIGINAL PLAT OF LAKE MILLS, FIRST ADDITION TO PHILLIPS WOODS, W.H. RAINORS ADDITION, CSM 5420, PLATS OF SURVEYS 2460093, 508-0174, 504-146, 514-064, 522-181 AND US FISH HATCHERY SURVEY. EXISTING HIGHWAY RIGHT-OF-WAY FOR PHILLIPS LN, ESTABLISHED FROM PREVIOUS SURVEY: FIRST ADDITION TO PHILLIPS WOODS. FOUND IRON PINS ARE 1", UNLESS OTHERWISE NOTED.

P1/6+48.69
Y = 584599.970
X = 826995.733
Delta = 0° 21' 30" RT

EXISTING ACCESS CONTROL ALONG STH 89 HAS BEEN ESTABLISHED FROM FIRST ADDITION TO PHILLIPS WOODS.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN
COORDINATE REFERENCE SYSTEM COORDINATES

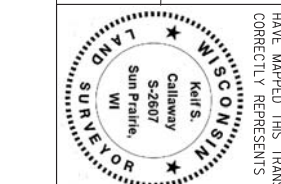
SCALE, FEET



STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I, KEIF S. CALLAWAY, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY OF LAKE MILLS, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: [Signature] DATE: 10/25/16
PRINT NAME: KEIF S. CALLAWAY
REGISTRATION NUMBER: S-2607
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR
THE CITY OF LAKE MILLS
SIGNATURE: [Signature] DATE: 10/25/16
PRINT NAME: STEVE WILKE



FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS, IN JEFFERSON COUNTY AS SHEET 2 OF 2 OF DOCUMENT #1374770 AND FILED IN 13 PAGE 71.

4

SEC. COR. IN WALL
Y 586225.576
X 82700.355

11 12
14 13
N
E
S 87°44'58" E, 335.62'
SEC. COR. TO PT. 533

ALUM. MON.
Y 585621.588
X 826982.380

12
13
N
E
S 87°44'58" E, 46.15'
R/L TO R/W
S 87°44'58" E, 39.38'
R/W TO R/L

N 87°44'58" W, 2253.13'
SEC. COR. TO PT. 500

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 3300-01-20 -4.05
SHEET 1 OF 2
AMENDMENT NO. 1

13832224
B. P.
Office of Register of Deeds
Jefferson County, WI
RECEIVED FOR RECORD
05/31/2017 11:23:35 PM
Said M. Hoffman
REC. REC. 25.00
*The above recording information
verifies that this document has
been electronically recorded
and obtained by the register.*

TRANSPORTATION PROJECT PLAT 3300-01-20 -4.05 AMENDMENT 1 REMOVES PARCEL 6, ADDS UTILITY NUMBER 204 AND AMENDS PARCEL 131 OF TRANSPORTATION PROJECT PLAT 3300-01-20 -4.05 RECORDED AS DOCUMENT NUMBER 1374849 AND FILED IN VOLUME T3, PAGE 75.

THAT PART OF LOT 1 CSM 4681, OUTLOTS 64 THRU 66 OF THE ORIGINAL PLAT OF LAKE MILLS, ALL LOCATED IN THE NE1/4 OF THE NE1/4 OF SECTION 14, ALSO THAT PART OF LOT 1 CSM 4681, LOT 1 CSM 2377, LOTS 3 & 4 CSM 1631, LOTS 2 THRU 4, BLOCK 1 OF W.H. RAYNOR'S ADDITION, LOTS 7 THRU 13, BLOCK 8 OF THE ORIGINAL PLAT OF LAKE MILLS, LOTS 1 THRU 4, 39 & 62, BLOCK 9 OF THE ORIGINAL PLAT OF LAKE MILLS, OUTLOTS 62 THRU 66 OF THE ORIGINAL PLAT OF LAKE MILLS, ALL LOCATED IN AND ALSO INCLUDING PART OF THE NW1/4 OF SECTION 13, ALL IN T7N, R13E, CITY OF LAKE MILLS, JEFFERSON COUNTY, WISCONSIN.

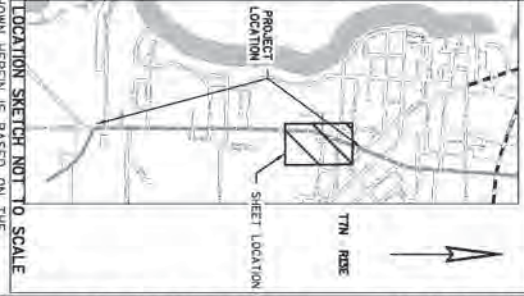
RELOCATION ORDER STH 89 CITY OF LAKE MILLS, MAIN ST. (TOPEL ST. TO MADISON ST.) TO PROPERLY ESTABLISH, LAY OUT, MODERNIZE, EXTEND, RECONSTRUCT, REIMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESCRIBED ABOVE, THE CITY OF LAKE MILLS DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ADJOINING CERTAIN LANDS AND INTERESTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.25, WISCONSIN STATUTES, THE CITY OF LAKE MILLS

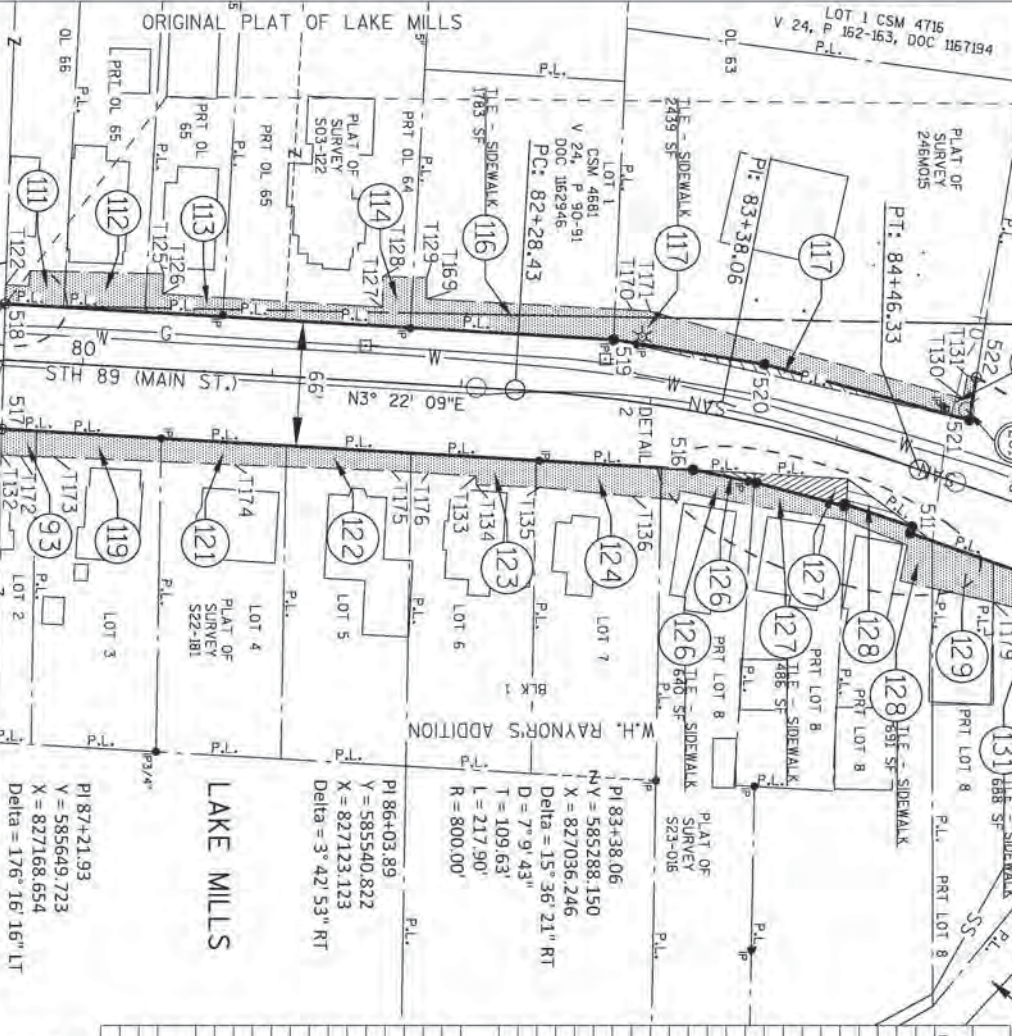
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAND OUT AND ESTABLISHED TO THE LINES AND MOTHS AS SO SHOWN FOR THE ABOVE PROJECT.

2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF LAKE MILLS, PURSUANT TO THE PROVISIONS OF SECTION 62.25, WISCONSIN STATUTES.

UTILITY SCHEDULE & INTERESTS REQUIRED	
UTILITY NUMBER	UTILITY OWNERS
201	LAKE MILLS LIGHT & WATER, WATER
202	FRONTIER, COMMUNICATION
203	LAKE MILLS LIGHT & WATER, ELECTRIC
204	WISCONSIN DEPARTMENT OF NATURAL RESOURCES - WATER
	RELEASE OF RIGHTS



SCHEDULE OF LANDS & INTERESTS REQUIRED			
PARCEL NUMBER	OWNERS	INTEREST	ACRES OR S.F.
12	CITY OF LAKE MILLS	FEE	364
93	STEVEN M. & SUSAN J. STERNWALD	TIE	136
94	DANIEL T. & STEPHANIE L. BRADITCH	TIE	246
111	JOSEPH P. REED	TIE	412
112	THOMAS SUPPENEWITZ & ISSA STUKENBERG LIVING TRUST	TIE	840
113	GILBERT R. SCHAEFER	TIE	507
114	MAE E. BRYANT	TIE	1242
115	D.O. & LUC	TIE	131
116	BARRY GLUCE	TIE	2346
117	LAKE MILLS MOBIL, INC.	FEE & TIE	470
118	CARRIEE BEAN-WARRIOR GEORGE POST NUMBER 67	TIE	623
119	KENNETH WOLFE JR. & DONIS E. WOLFE	TIE	841
120	BERNARD & JEANETTE R. KOHNPASSER	TIE	374
121	LARNA L. SALETNO & ANDREW L. CALUSSEN	TIE	793
122	JAM. REVOCABLE TRUST	TIE	685
123	RAYMOND E. & RUBY RADKE	TIE	799
124	CAROL A. PETZINGER	TIE	998
125	GLASSBORO, LLC	TIE	175
126	BACHEL R. WOLIN	FEE & TIE	77
127	CHRISTINE L. GROSSHAUS	FEE & TIE	473
128	PAUL A. & JOY M. NEIN	FEE & TIE	268
129	PAUL A. & JOY M. NEIN	TIE	733
130	ON THE CORNER RENTALS LLC	TIE	582
131	KIEN RENTALS INC. (VENDOR), MARK & LYNE KLIN (PURCHASER)	TIE	788
132	ALAN F. & DEBRA STEIN	TIE	115
133	RICHIE V. & STEPHANIE V. BRATZ	TIE	140
134	BLUE WOOD STEAK & BERRY LLC	TIE	250
135	KENNELTH SEITZ	TIE	251
136	JENNIFER LEE WALTERSCHEIT	TIE	120
137	TINA M. SCHUENNE	TIE	145
138	ROBERT JR. & DEBRA L. GREGGAS	TIE	124
139	JOHN P. BLACK	TIE	100
140	HUGHES COMMUNICATIONS INC.	TIE	139
141	GREENWOOD STATE BANK	TIE	371
142	HICKOK HOLDINGS LLC	TIE	312
143	DOE LLC	TIE	109
144	CLIVE J. & DEBRA J. MADY	TIE	139
145	WINWOOD PROPERTIES LLC	TIE	124
146	STEVEN STERNWALD, SUSAN J. STERNWALD & STEVEN M. STERNWALD JR.	TIE	117
147		TIE	120
148		TIE	120
149		TIE	120
150		TIE	120
151		TIE	29



PI 87+21.93
Y = 585649.723
X = 827168.654
Delta = 176' 16' 16" LT

PI 86+03.89
Y = 585540.822
X = 827123.123
Delta = 3' 42' 53" RT

PI 87+68.39
Y = 585882.807
X = 827248.732
Delta = 3' 30' 57" RT

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCONSIN, JEFFERSON COUNTY, MAD3 (2011), IN US SURVEY FEET, VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE CITY OF LAKE MILLS.

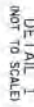
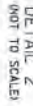
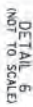
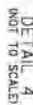


STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
I, KEIF S. CALLAWAY, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 64.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY OF LAKE MILLS, I HAVE MARKED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXISTING BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: *Steve Wilke* DATE: 5/30/17
PRINT NAME: KEIF S. CALLAWAY
REGISTRATION NUMBER: S-2607
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF LAKE MILLS
SIGNATURE: *Steve Wilke* DATE: 5/30/17
PRINT NAME: STEVE WILKE



R/W Station & Offset Table		
Point No.	Station	Offset
500	63+40.44	3.21



TILE Station & Offset Table		
Point No.	Station	Offset

7132	79+57.00	39.30
7123	79+69.29	35.30
7124	79+69.30	47+66
7125	80+39.91	50.33
7126	80+39.91	39.35
7127	81+55.99	35.38
7128	81+55.99	35.38
7129	81+78.47	56.34
7130	84+56.13	42.95
7131	84+54.30	55.95
7132	85+59.80	49.95
7133	82+10.71	46.58
7134	82+16.92	51.23
7135	82+46.52	50.35
7136	82+37.70	45.07
7137	83+73.60	47.56
7138	83+59.82	42.82
7139	84+7.70	37.28
7140	84+53.21	39.55
7141	85+55.83	56.68
7142	85+41.94	50.99
7143	85+37.84	39.55
7144	86+55.90	11.12
7145	86+52.59	47.22
7146	85+37.73	37.26
7147	86+58.55	42.18
7148	87+18.51	42.10
7149	88+22.82	43.88
7150	88+97.99	66.81
7151	89+97.98	42.56
7152	90+97.47	41.80
7153	95+04.47	41.86
7154	93+09.04	41.82
7155	96+08.73	41.12
7156	96+06.71	94.32
7157	96+15.54	70.59
7158	98+30.67	69.09
7159	98+15.40	49.07
7160	81+19.14	43.11
7170	82+44.52	47.75
7171	82+33.32	48.37
7172	79+10.00	50.12
7173	79+67.63	46.62
7174	80+53.20	46.07
7175	81+65.82	46.39
7176	81+65.28	46.47
7177	82+33.31	42.58
7178	83+05.86	53.30

TRANSPORTATION PROJECT PLAT NO: 3300-01-20 - 4.06

THAT PART OF LOTS 4 THRU 8 OF BLOCK 8 OF THE ORIGINAL PLAT OF LAKE MILLS LOCATED IN AND ALSO INCLUDING PART OF THE SW¼ OF THE SW¼ OF SECTION 12, T7 N, R 13 E, CITY OF LAKE MILLS, JEFFERSON COUNTY, WISCONSIN, RELOCATION ORDER STH 89, CITY OF LAKE MILLS, MAIN ST. (TOPEL ST. TO MADISON ST.) TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF LAKE MILLS DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF LAKE MILLS HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.

2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF LAKE MILLS, PURSUANT TO THE PROVISIONS OF SECTION 62.22, WISCONSIN STATUTES.

1374850

MAP#:

VOLUME: T3 PAGE: 76
Office of Register of
Deeds Jefferson County, WI
RECEIVED FOR RECORD
10/26/2016 2:43:01 PM
Staci M. Hoffman
Total Pages 1
REC FEE 25.00
THIS IS A COPY, ORIGINAL DOCUMENT
IS FILED AT THE COUNTY REGISTER
OF DEEDS

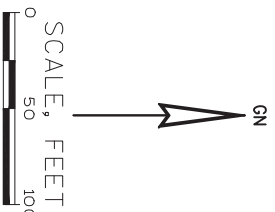
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 3300-01-20 - 4.06
AMENDMENT NO.

SCHEDULE OF LANDS & INTERESTS REQUIRED					OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE CITY.	
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	NEW R/W ACRES OR S.F. REQUIRED	EXISTING TOTAL	TITLE	ACRES OR S.F.
12	CITY OF LAKE MILLS	FEE	375	375		
116	BARRY GLUCE	TIE				292
151	ML PROPERTIES TRUST	TIE				596
152	BURNARD LEWIS PROPERTIES LLC	TIE				518
* PURPOSE FOR TIES IS TO REMOVE & REPLACE SIDE WALK, UNLESS NOTED. BUILDINGS WILL NOT BE AFFECTED BY TIES.						

TIE Station & Offset Table		
Point No.	Station	Offset
T153	93+09.04	41.92'
T156	93+09.07	41.71'
T157	93+35.17	50.95'
T158	93+35.17	51.56'
T159	93+94.27	41.56'
T160	93+46.03	41.17'
T161	93+46.01	36.17'

R/W Station & Offset Table		
Point No.	Station	Offset
600	93+10.94	36.77'
601	93+19.80	35.05'
602	93+22.57	62.52'
603	93+06.87	43.73'
604	93+40.44	43.31'

R/W Course Table		
600-601	0 22° 37' 16" E	267.54'
602-603	8 31° 08' 07" W	50.15'
603-604	5 22° 37' 16" W	166.42'



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

EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 89 ESTABLISHED FROM PREVIOUS PROJECTS AND SURVEYS: 3300-02-21, ORIGINAL PLAT OF LAKE MILLS, CSM 5151, PLATS OF SURVEYS 246M027, S10-038, S10-057

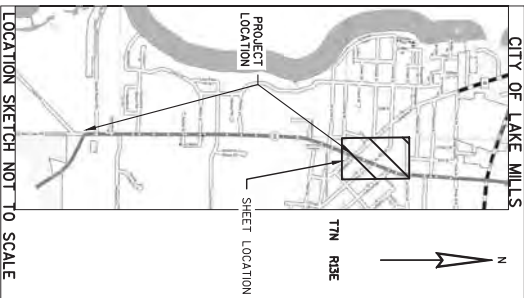
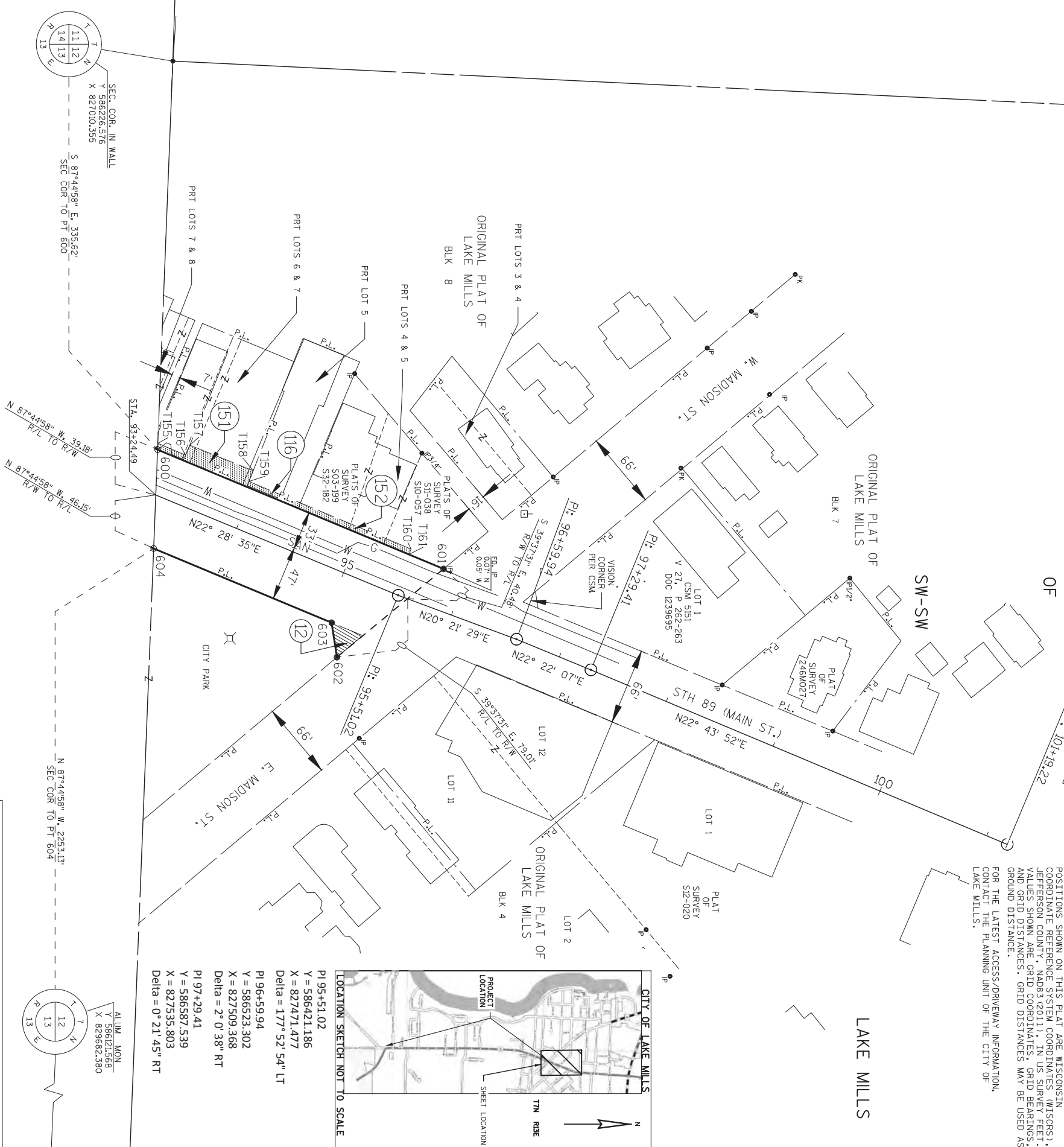
EXISTING HIGHWAY RIGHT-OF-WAY FOR MADISON ST. ESTABLISHED FROM PREVIOUS SURVEYS: ORIGINAL PLAT OF LAKE MILLS, CSM 3643, PLATS OF SURVEYS S10-038, S10-057

FOUND IRON PINS ARE 'I', UNLESS OTHERWISE NOTED.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS, IN JEFFERSON COUNTY AS SHEET 2 OF 2 OF DOCUMENT 13174710 AND FILED IN T3 PAGE 71.

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

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE CITY OF LAKE MILLS.

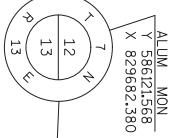
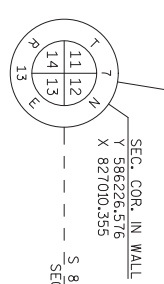


LOCATION SKETCH NOT TO SCALE

PI 95+51.02
Y = 586421.186
X = 827471.477
Delta = 177° 52' 54" LT

PI 96+59.94
Y = 586523.302
X = 827509.368
Delta = 2° 0' 38" RT

PI 97+29.41
Y = 586587.539
X = 827535.803
Delta = 0° 21' 45" RT



STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I, KEIF S. CALLAWAY, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY OF LAKE MILLS, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: *Keif S. Callaway* DATE: 10/25/16
PRINT NAME: KEIF S. CALLAWAY
REGISTRATION NUMBER: S-2607
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF LAKE MILLS

SIGNATURE: *Steve Wilke* DATE: 10/25/16
PRINT NAME: STEVE WILKE

DATE: OCT. 25, 2016

REVISION DATE

TRANSPORTATION PROJECT PLAT NO: 3300-01-20 - 4.07

RELOCATION ORDER STH 89 CITY OF LAKE MILLS, MAIN ST. (TOPEL ST. TO MADISON ST.

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

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE		
POINT	Y	X
POINT	Y	X
100	580,936.541	826,955.226
101	580,936.742	826,945.264
102	580,935.743	826,945.244
103	580,935.916	826,936.720
104	580,928.274	826,928.626
105	580,302.132	826,916.795
106	580,222.219	826,934.842
107	580,204.325	826,956.989
108	580,202.592	827,189.891
109	580,131.859	827,189.368
110	580,132.930	827,045.350
111	580,112.760	827,070.314
112	580,112.018	827,173.649
113	580,082.432	827,159.056
114	580,060.018	827,203.894
115	579,925.848	827,136.825
116	579,996.948	827,088.524
117	580,066.033	826,950.321
118	580,050.859	826,912.048
119	579,988.491	826,910.870
120	579,984.787	826,844.788
121	580,408.704	826,852.797
122	580,411.161	826,752.896
123	580,441.148	826,753.777
124	580,446.033	826,753.897
125	580,445.741	826,765.732
126	580,468.726	826,853.931
127	580,741.665	826,859.088
128	580,791.156	826,860.023
129	580,939.245	826,862.821
130	580,939.193	826,864.354
131	580,939.434	826,864.357
132	580,413.488	826,918.899
133	580,411.783	827,168.912
134	580,392.010	827,168.538
135	580,393.715	826,918.526
136	580,441.603	826,735.265

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE		
POINT	Y	X
200	580,939.434	826,864.357
201	581,353.724	826,870.375
202	581,362.416	826,861.683
203	581,362.604	826,856.941
204	581,363.604	826,856.977
205	581,363.961	826,846.967
206	581,423.565	826,859.125
207	581,423.368	826,864.664
208	581,429.990	826,871.483
209	582,266.085	826,883.629
210	582,267.095	826,883.652
211	582,265.225	826,949.627
212	582,264.840	826,949.618
213	581,027.922	826,931.649
214	581,002.537	826,956.074
215	581,697.850	826,941.381
216	581,697.527	826,953.378
217	581,685.528	826,953.204
218	581,685.703	826,941.205

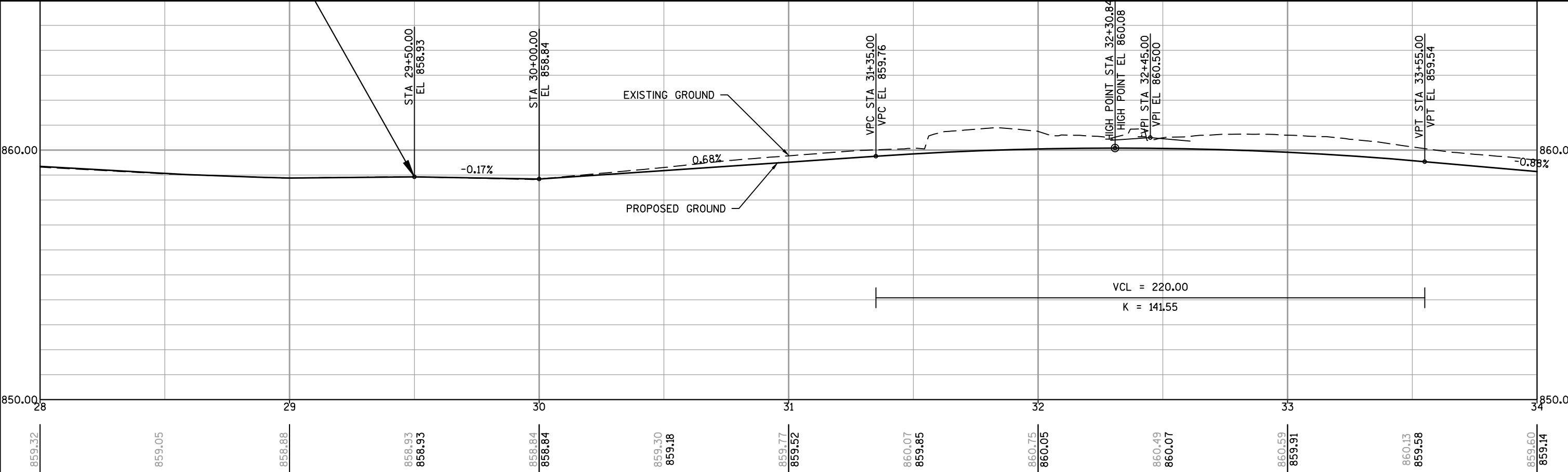
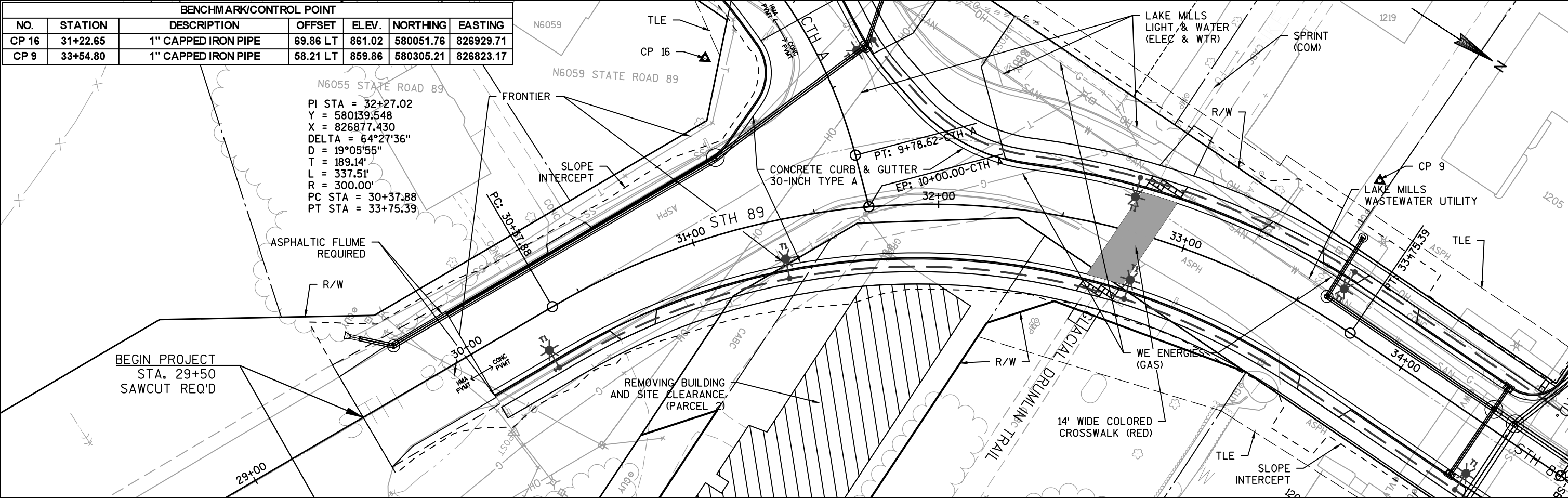
R/W MONUMENT POINT NUMBER AND COORDINATE TABLE		
POINT	Y	X
300	583,592.552	826,980.703
301	583,271.717	826,973.794
302	583,205.774	826,971.026
303	582,886.734	826,963.152
304	582,875.474	826,973.919
305	582,874.970	826,988.224
306	582,809.859	826,961.820
307	582,479.932	826,954.872
308	582,479.289	826,974.018
309	582,413.132	826,977.601
310	582,413.648	826,962.217
311	582,404.968	826,952.867
312	582,265.225	826,949.627
313	582,267.095	826,883.652
314	582,416.192	826,887.109
315	582,482.170	826,888.904
316	582,812.567	826,895.862
318	582,878.568	826,896.931
319	583,208.426	826,905.072
320	583,274.876	826,893.154
321	583,274.369	826,907.836

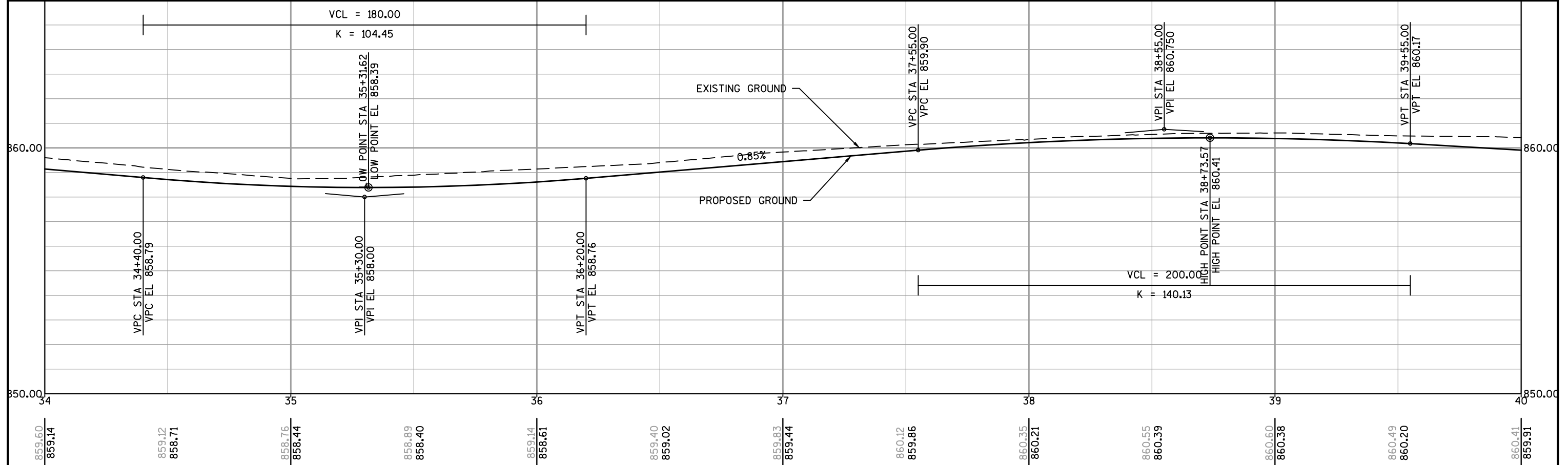
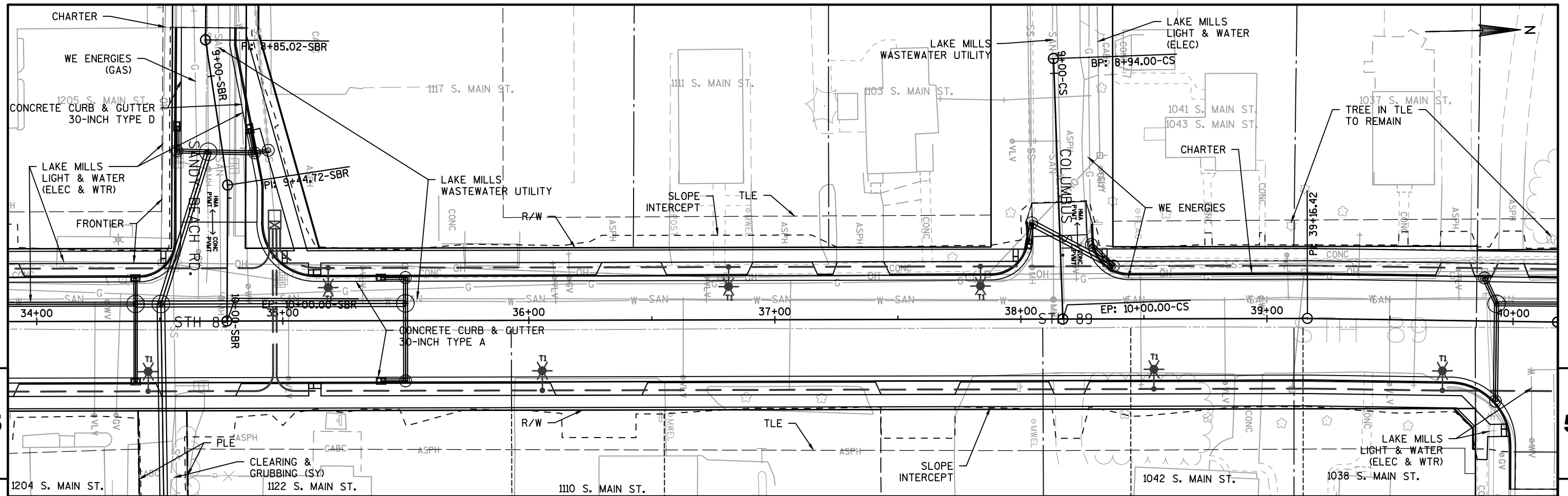
R/W MONUMENT POINT NUMBER AND COORDINATE TABLE		
POINT	Y	X
400	583,594.369	826,914.727
401	583,594.691	826,914.734
402	583,759.782	826,921.886
403	583,819.712	826,925.049
404	584,551.084	826,963.614
405	584,683.303	826,971.088
406	584,909.734	826,984.417
407	584,907.963	827,050.427
408	584,679.501	827,036.978
409	584,547.484	827,029.516
410	583,756.365	826,987.800
411	583,592.552	826,980.703

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE		
POINT	Y	X
500	586,210.045	827,430.990
501	585,944.038	827,320.147
502	585,930.265	827,325.818
503	585,927.752	827,342.106
504	585,917.356	827,340.503
505	585,845.956	827,282.744
506	585,731.268	827,263.445
507	585,716.151	827,260.901
508	585,585.291	827,238.881
509	585,518.168	827,240.026
510	585,532.233	827,156.502
511	585,387.127	827,105.401
512	585,388.056	827,101.942
513	585,352.529	827,089.954
514	585,352.476	827,091.026
515	585,305.836	827,078.748
516	585,272.623	827,071.895
517	584,907.963	827,050.427
518	584,909.734	826,984.417
519	585,230.684	827,003.311
520	585,310.160	827,016.278
521	585,418.211	827,045.744
522	585,421.946	827,023.196
523	585,469.529	827,049.874
524	585,466.541	827,063.395
525	585,642.793	827,129.465
526	585,661.687	827,132.024
527	585,862.096	827,201.039
528	585,864.190	827,187.832
529	585,929.687	827,196.210
530	585,925.033	827,225.560
531	586,200.937	827,340.527
532	586,207.399	827,343.219

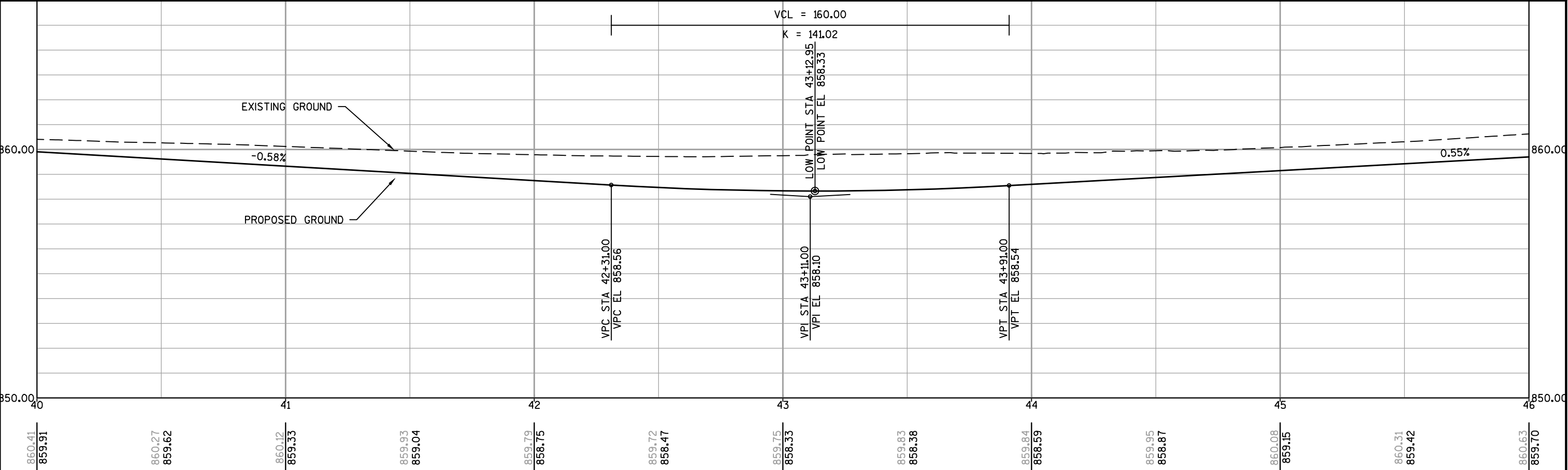
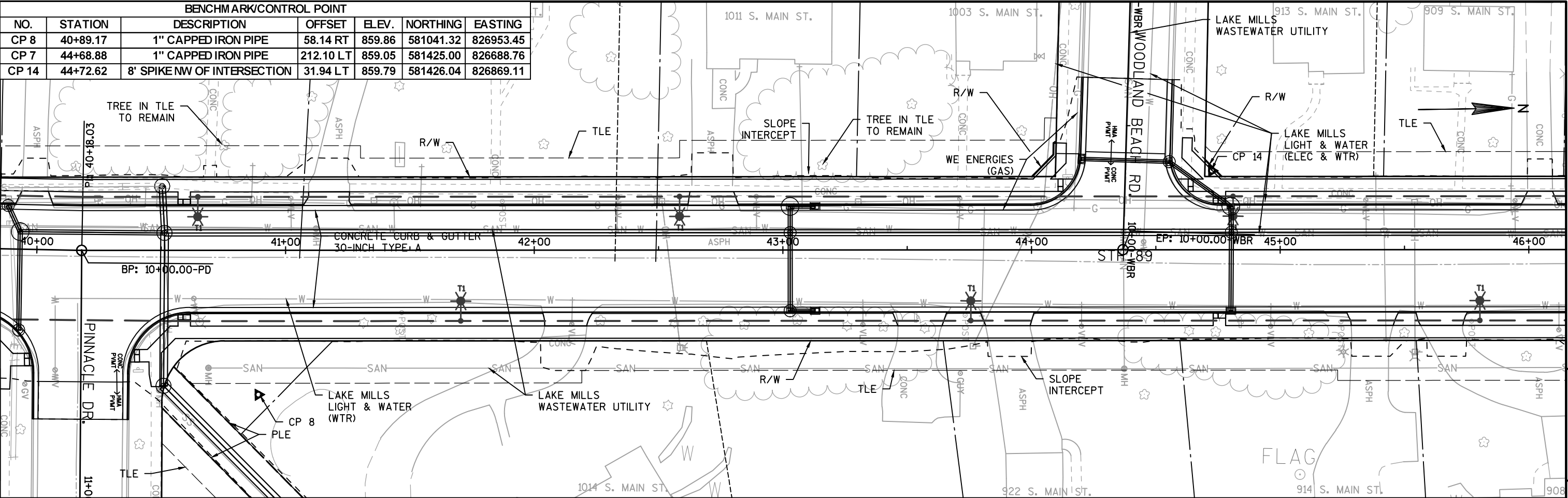
R/W MONUMENT POINT NUMBER AND COORDINATE TABLE		
POINT	Y	X
600	586,213.396	827,345.718
601	586,460.357	827,448.625
602	586,368.318	827,524.834
603	586,363.665	827,495.002
604	586,210.045	827,430.990

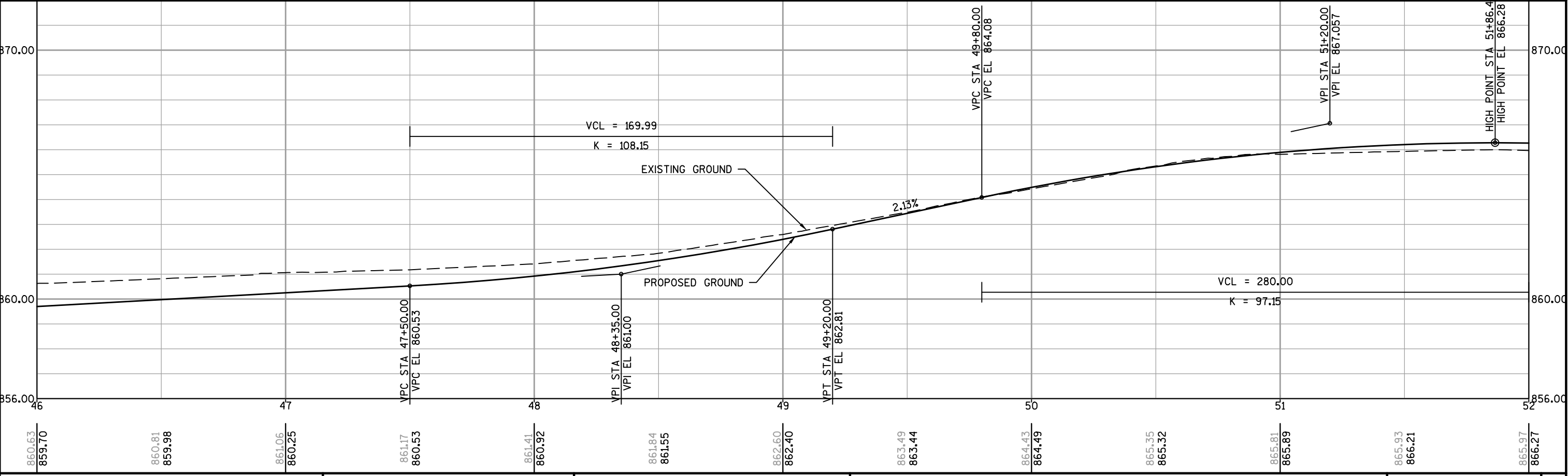
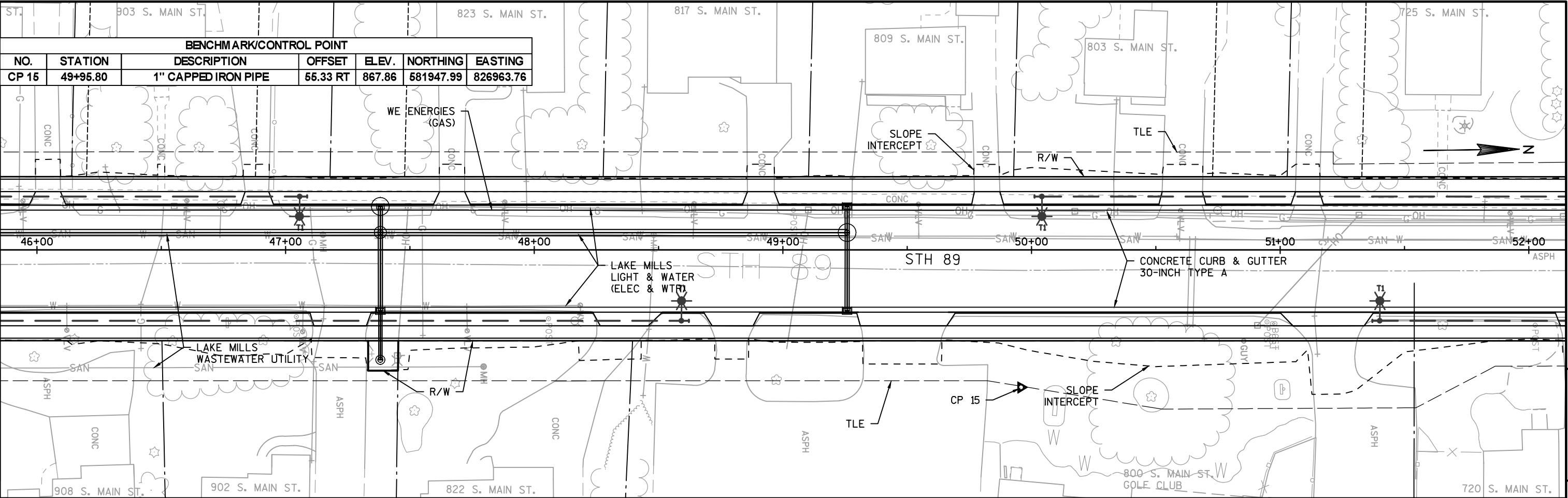
BENCHMARK/CONTROL POINT						
NO.	STATION	DESCRIPTION	OFFSET	ELEV.	NORTHING	EASTING
CP 16	31+22.65	1" CAPPED IRON PIPE	69.86 LT	861.02	580051.76	826929.71
CP 9	33+54.80	1" CAPPED IRON PIPE	58.21 LT	859.86	580305.21	826823.17

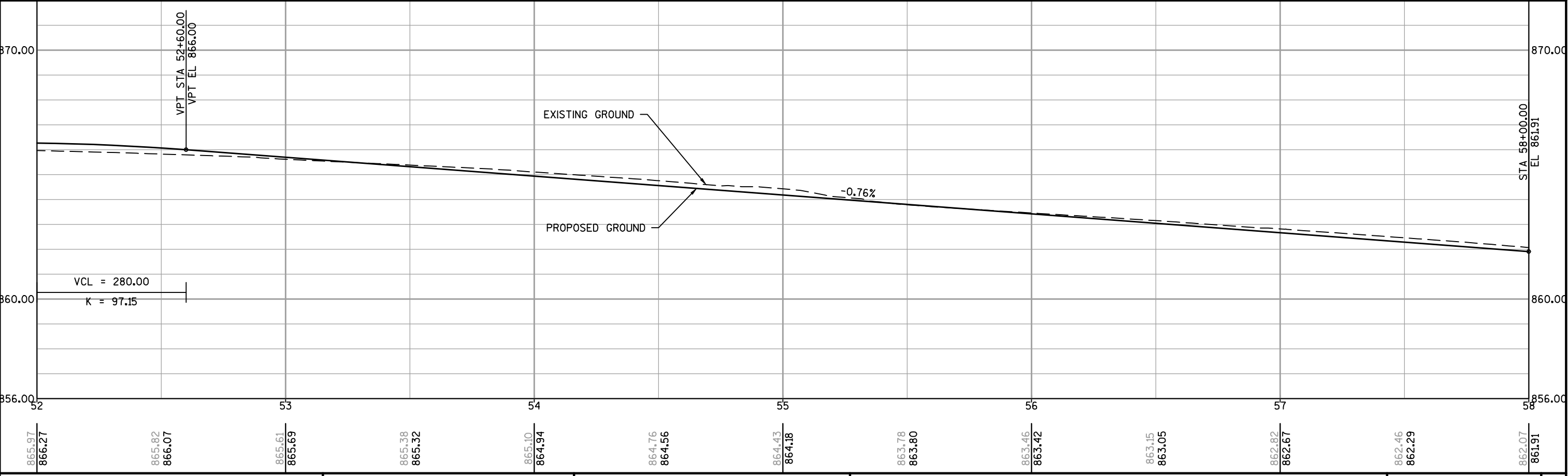
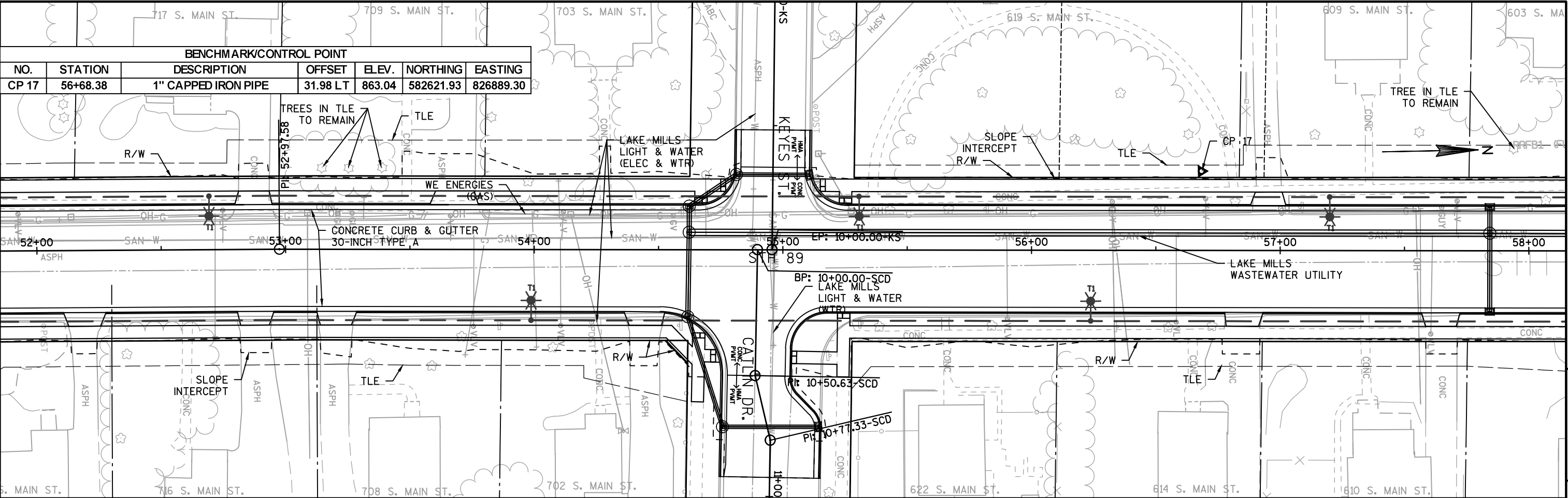




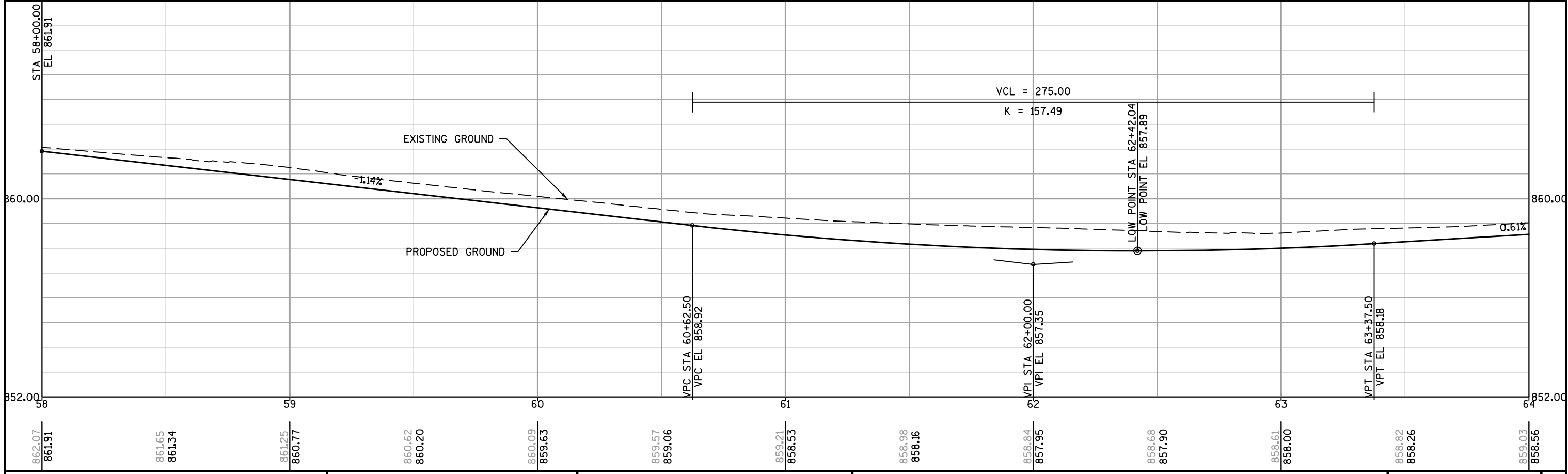
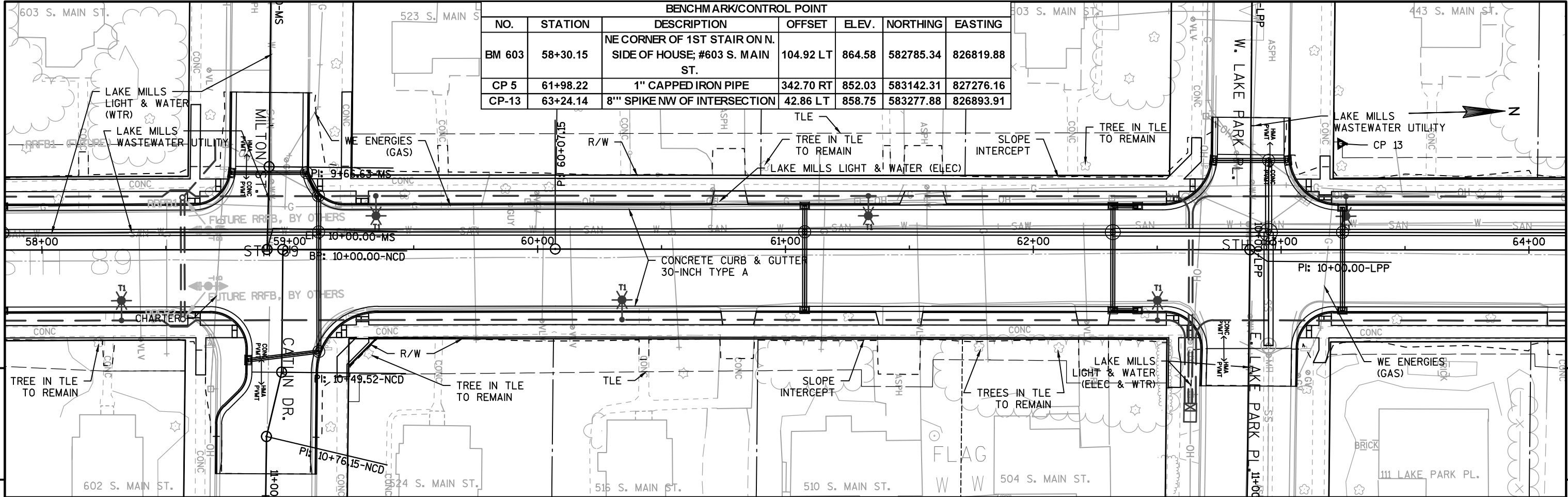
BENCHMARK/CONTROL POINT						
NO.	STATION	DESCRIPTION	OFFSET	ELEV.	NORTHING	EASTING
CP 8	40+89.17	1" CAPPED IRON PIPE	58.14 RT	859.86	581041.32	826953.45
CP 7	44+68.88	1" CAPPED IRON PIPE	212.10 LT	859.05	581425.00	826688.76
CP 14	44+72.62	8' SPIKE NW OF INTERSECTION	31.94 LT	859.79	581426.04	826869.11

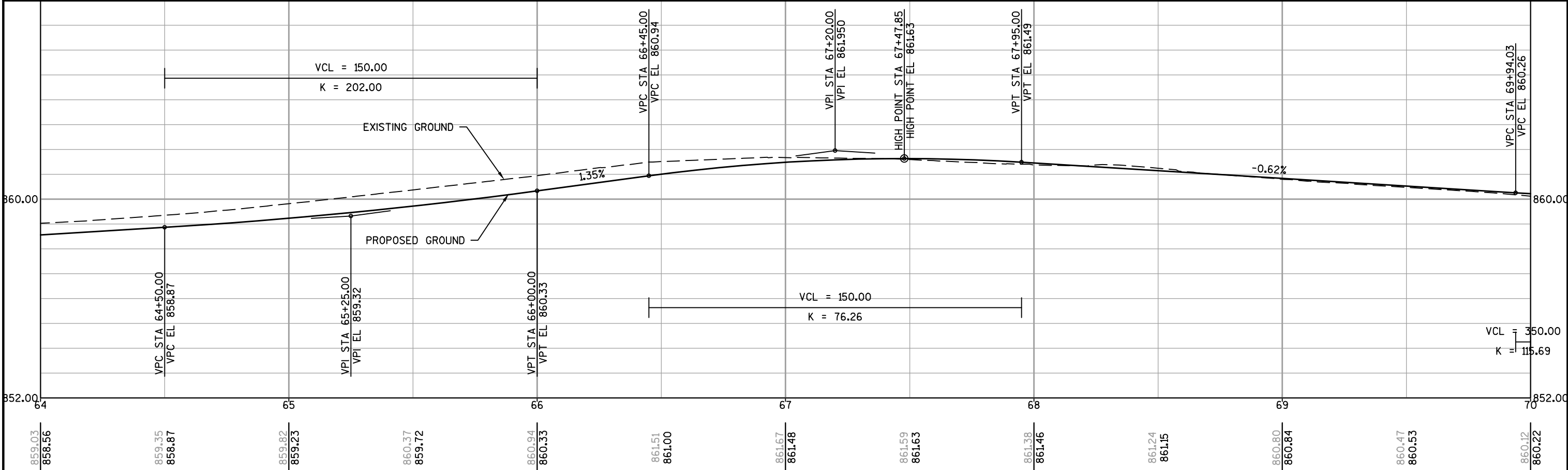
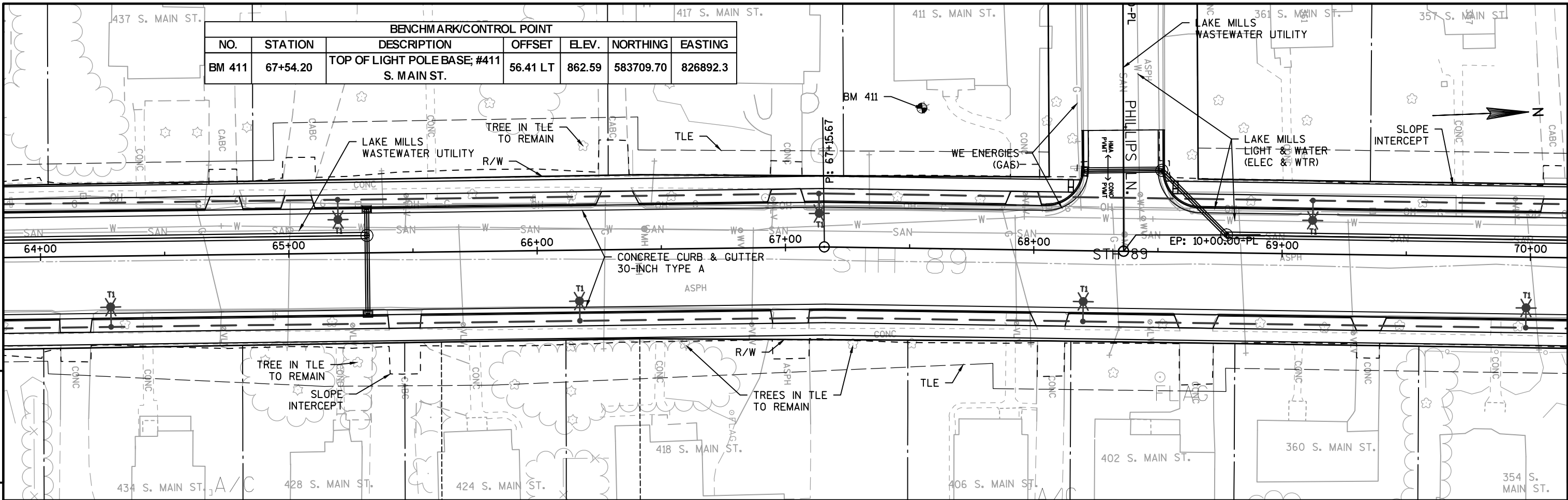


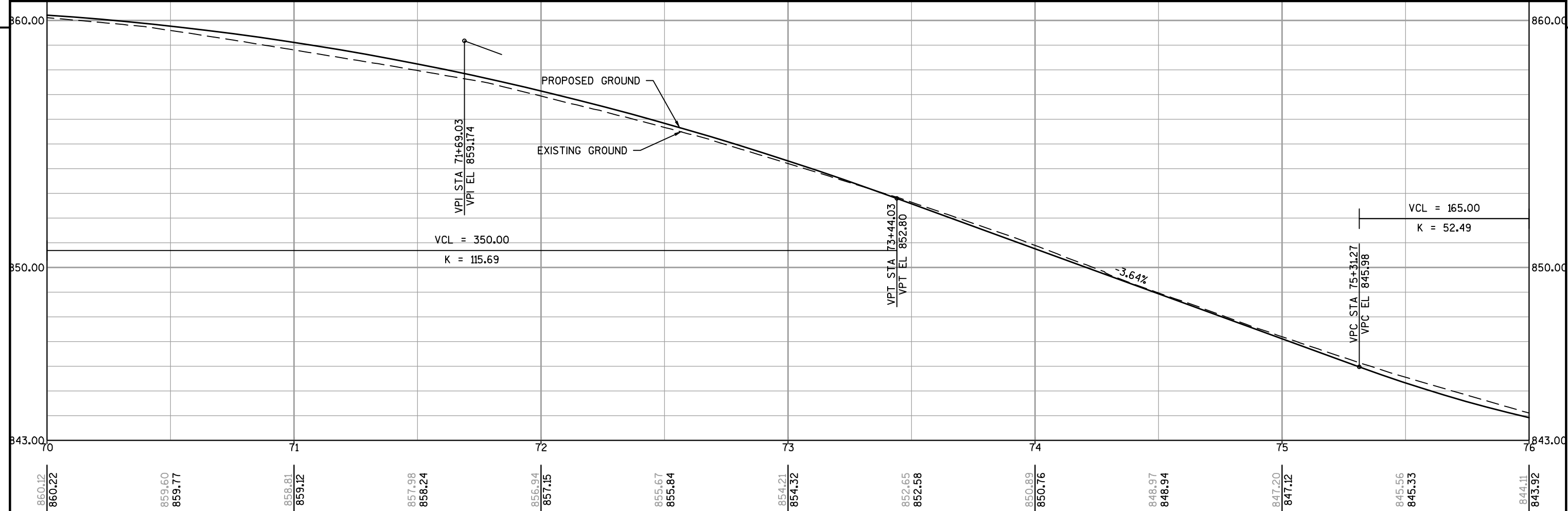
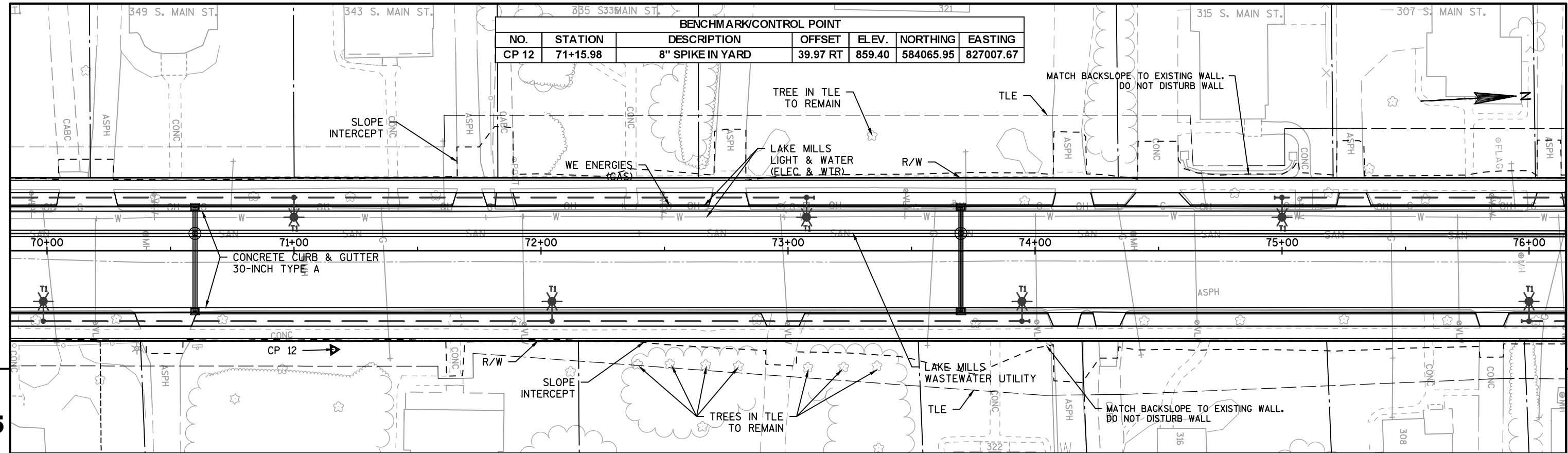


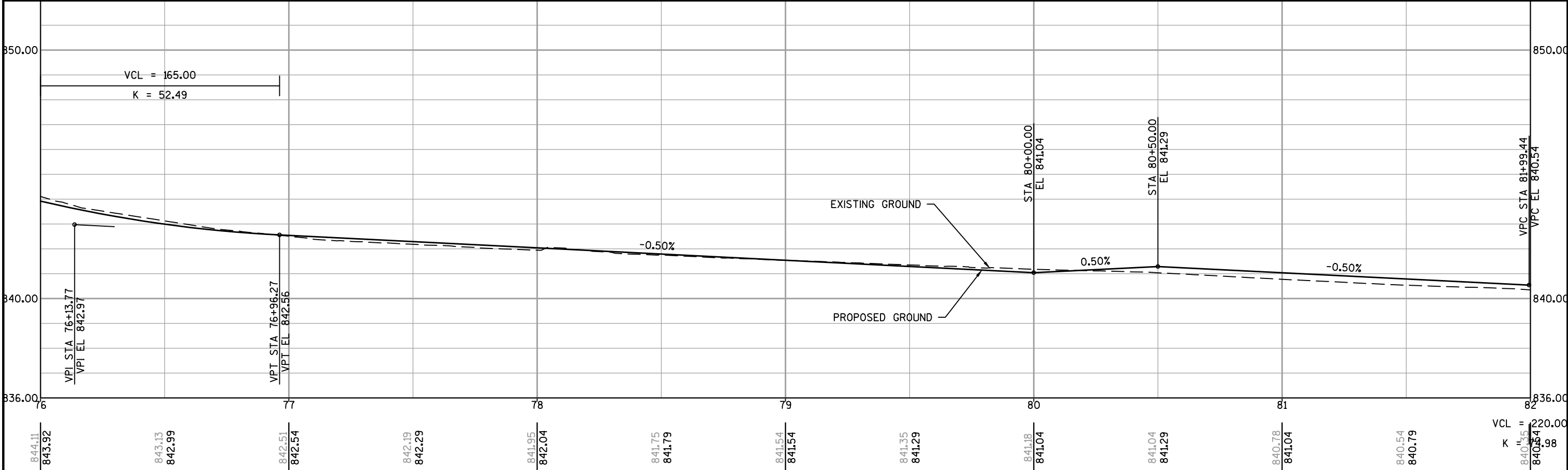
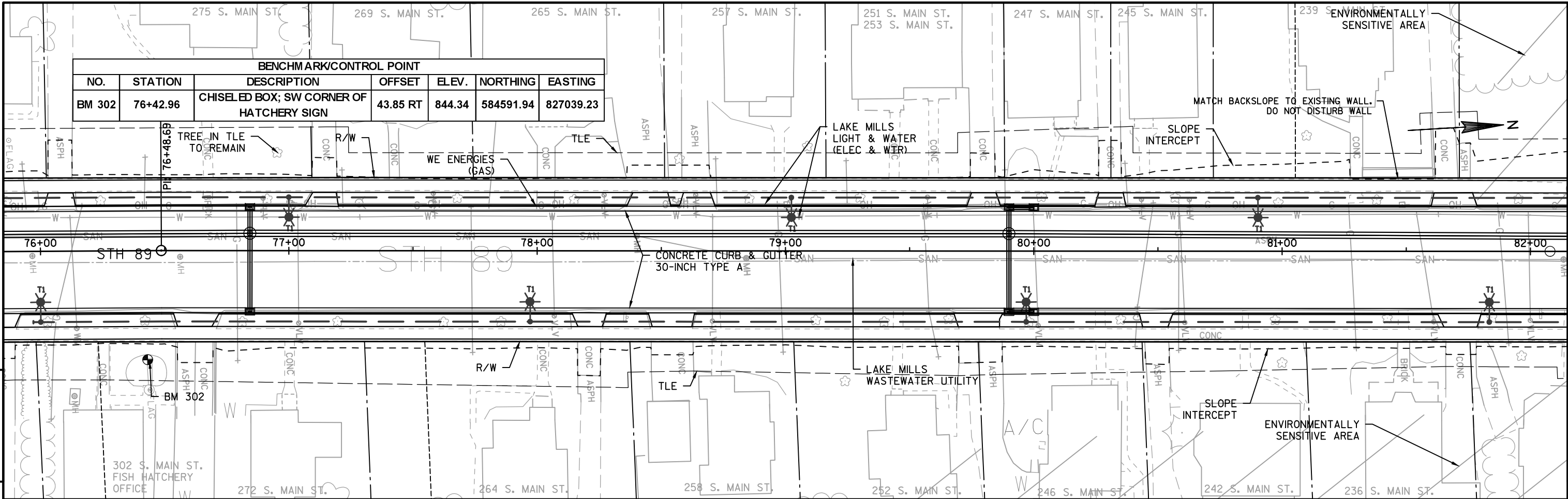


BENCHMARK/CONTROL POINT						
NO.	STATION	DESCRIPTION	OFFSET	ELEV.	NORTHING	EASTING
BM 603	58+30.15	NE CORNER OF 1ST STAIR ON N. SIDE OF HOUSE; #603 S. MAIN ST.	104.92 LT	864.58	582785.34	826819.88
CP 5	61+98.22	1" CAPPED IRON PIPE	342.70 RT	852.03	583142.31	827276.16
CP-13	63+24.14	8" SPIKE NW OF INTERSECTION	42.86 LT	858.75	583277.88	826893.91

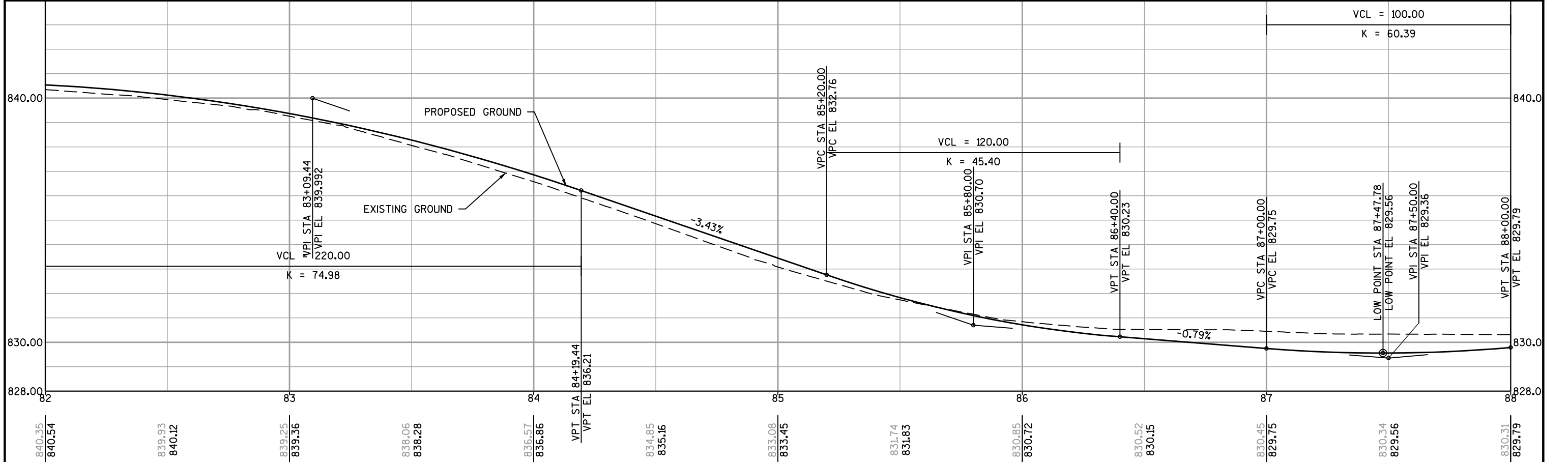
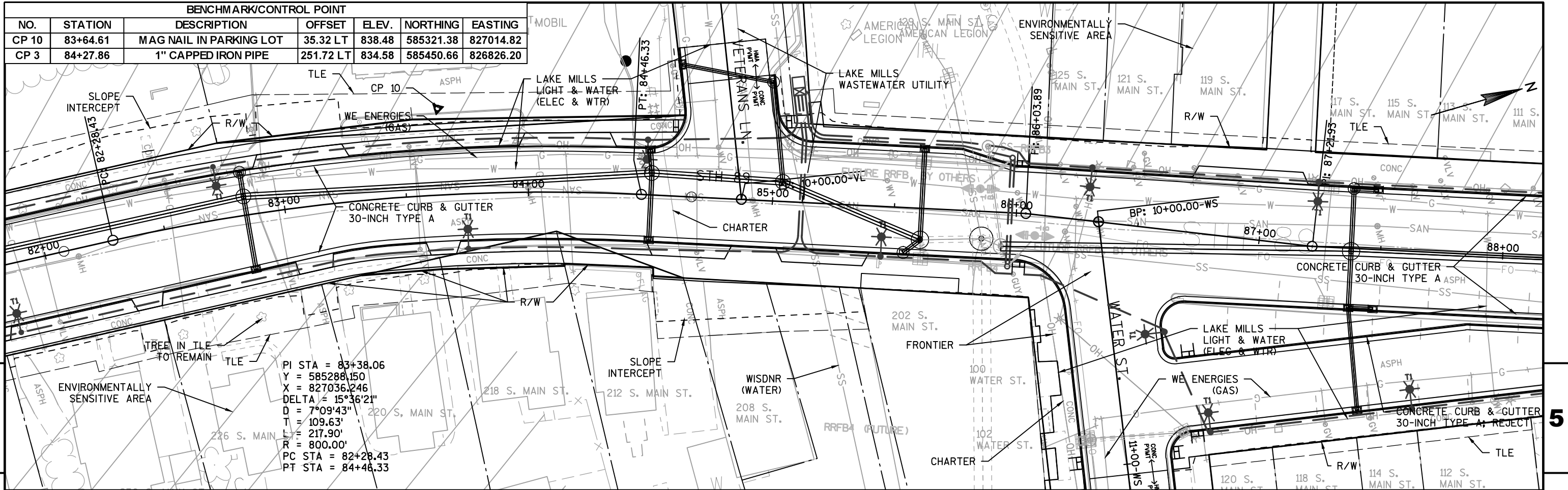


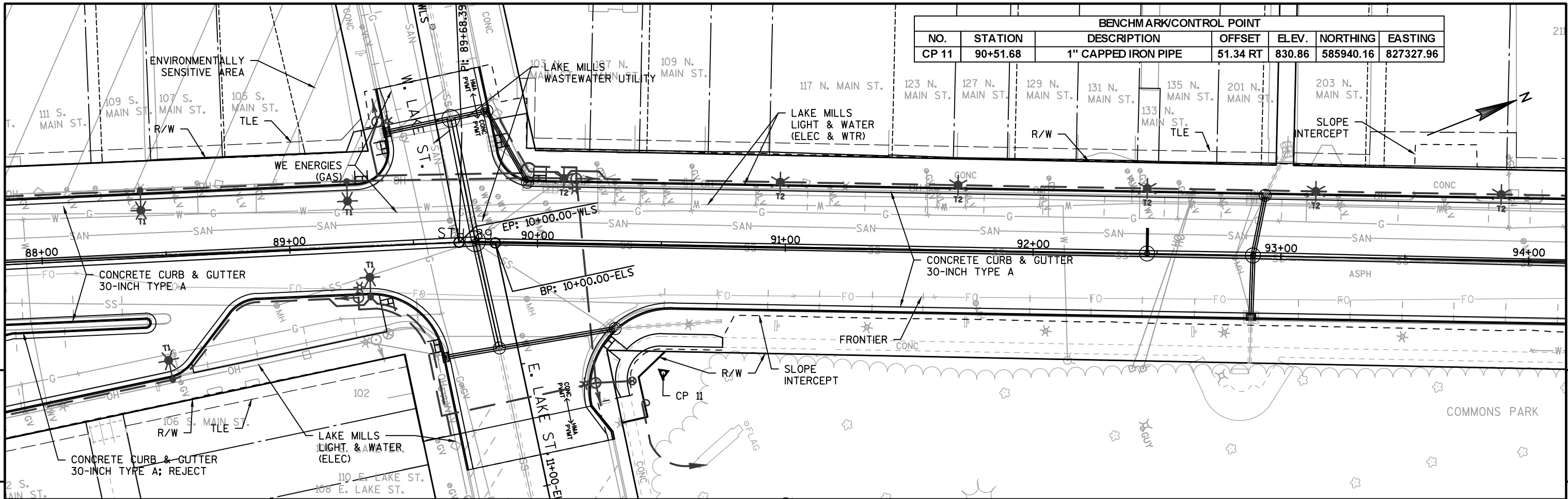




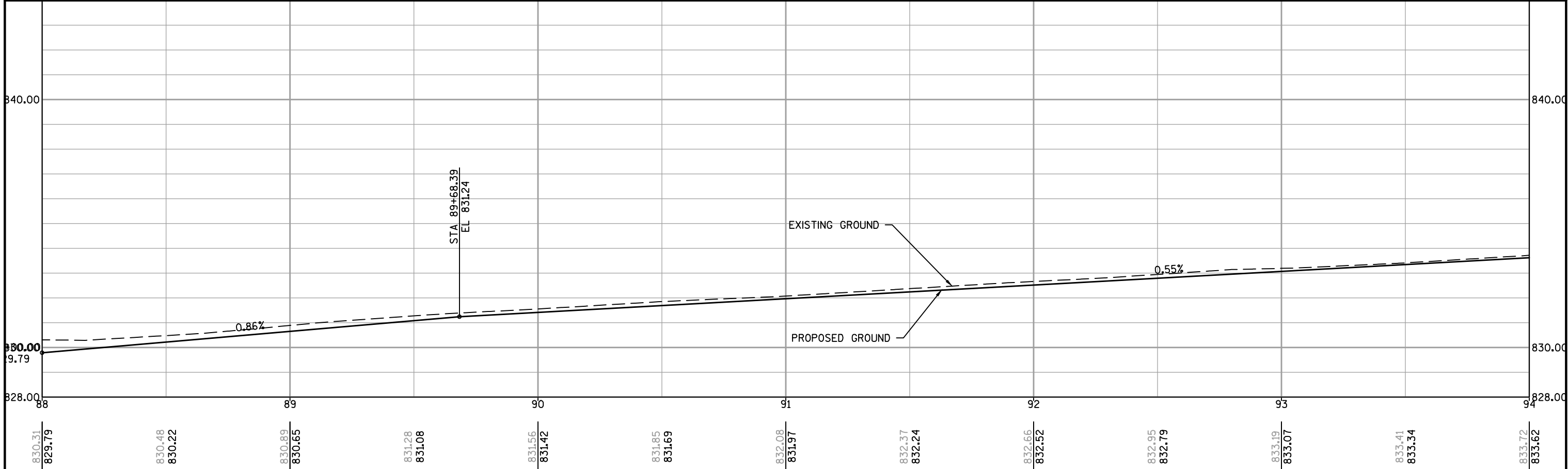


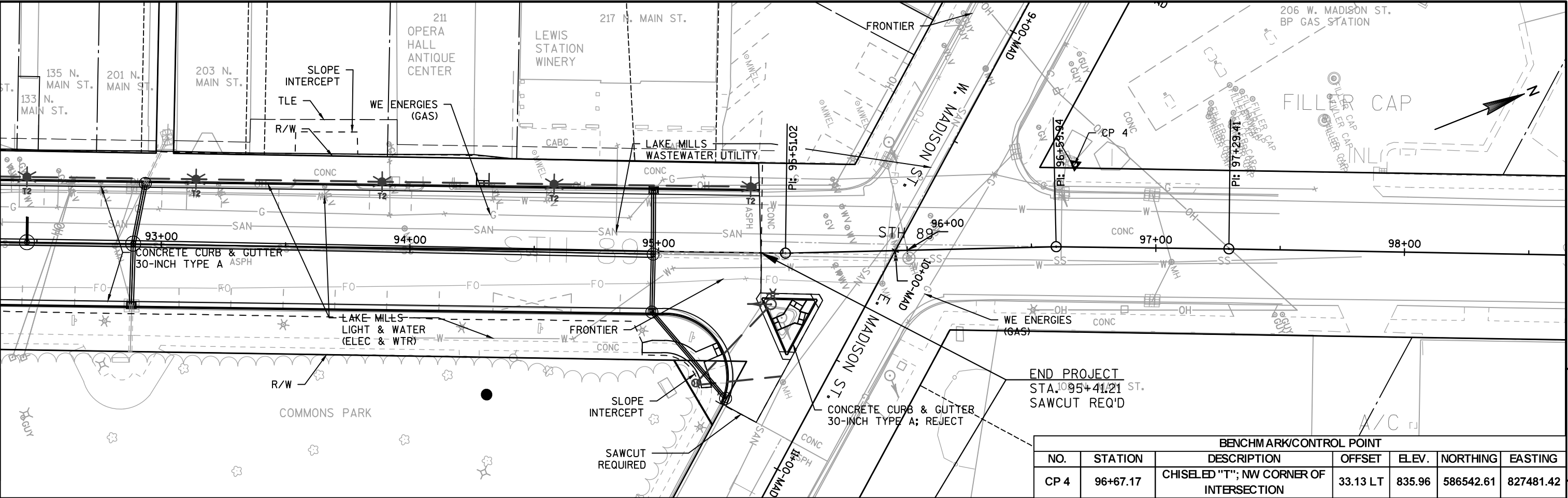
BENCHMARK/CONTROL POINT						
NO.	STATION	DESCRIPTION	OFFSET	ELEV.	NORTHING	EASTING
CP 10	83+64.61	MAG NAIL IN PARKING LOT	35.32 LT	838.48	585321.38	827014.82
CP 3	84+27.86	1" CAPPED IRON PIPE	251.72 LT	834.58	585450.66	826826.20



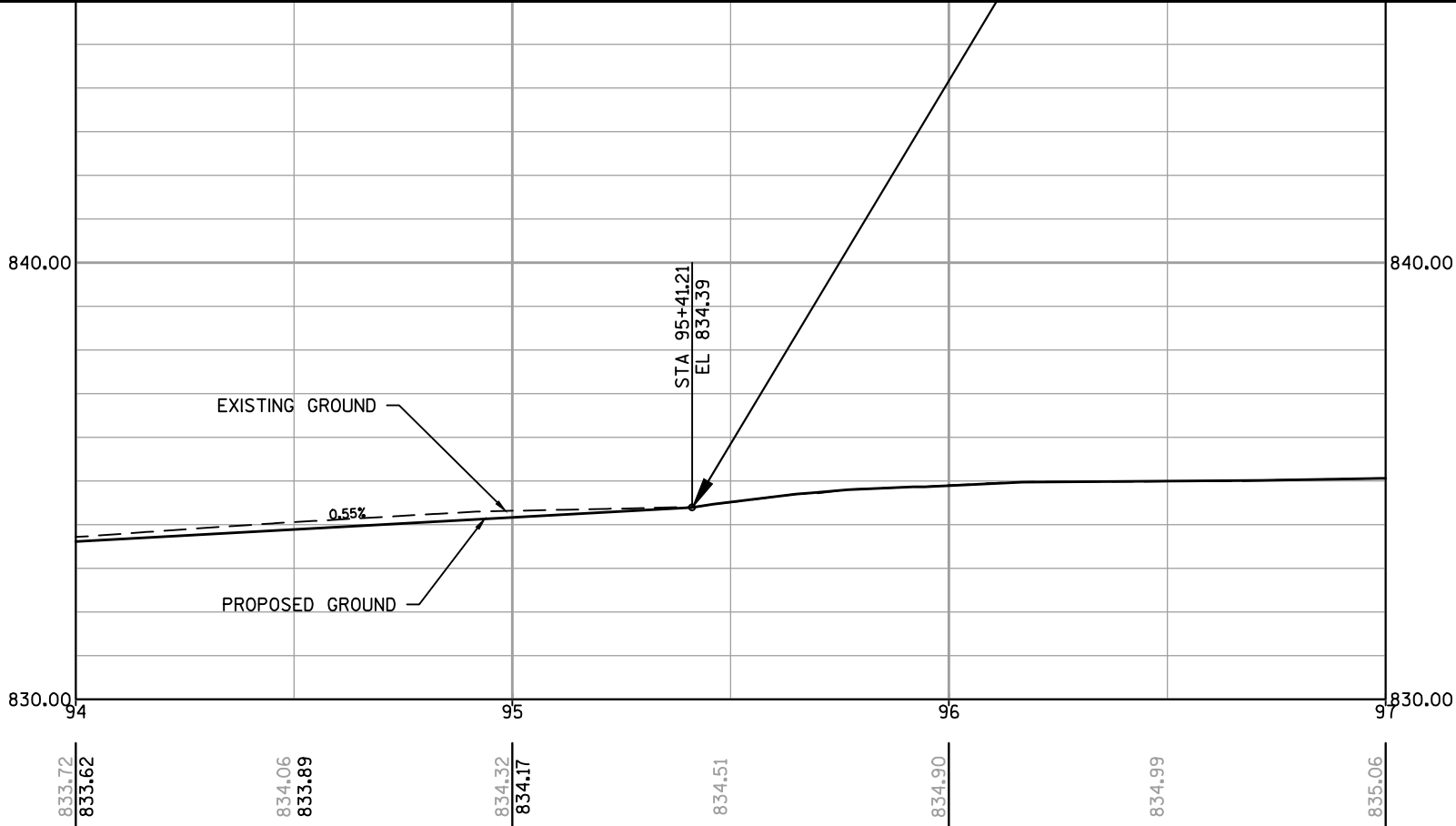


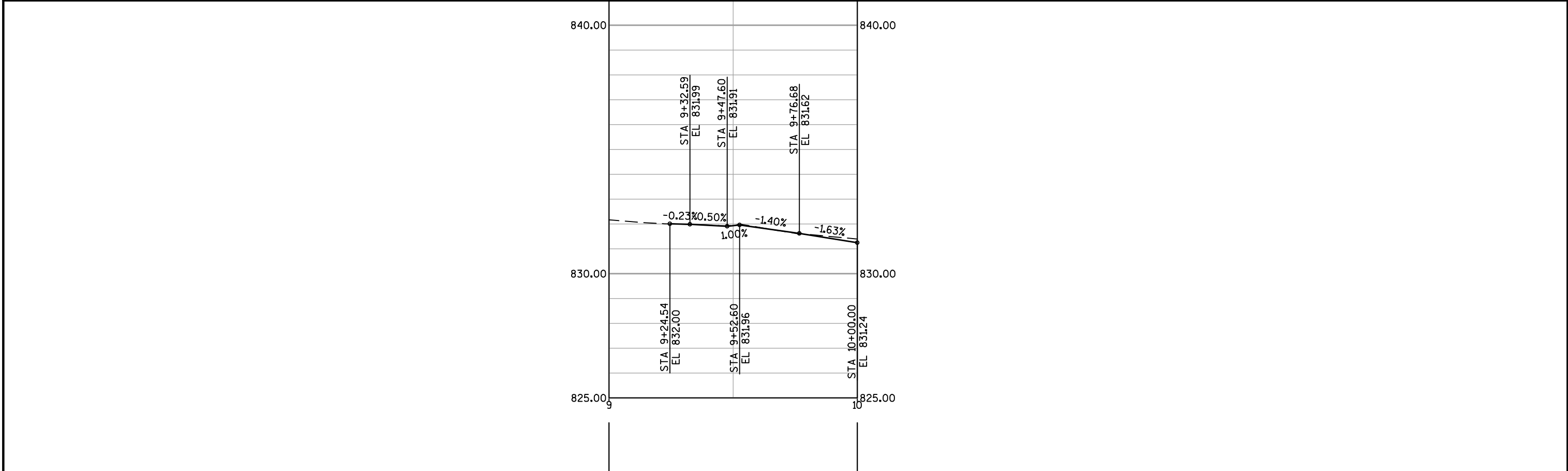
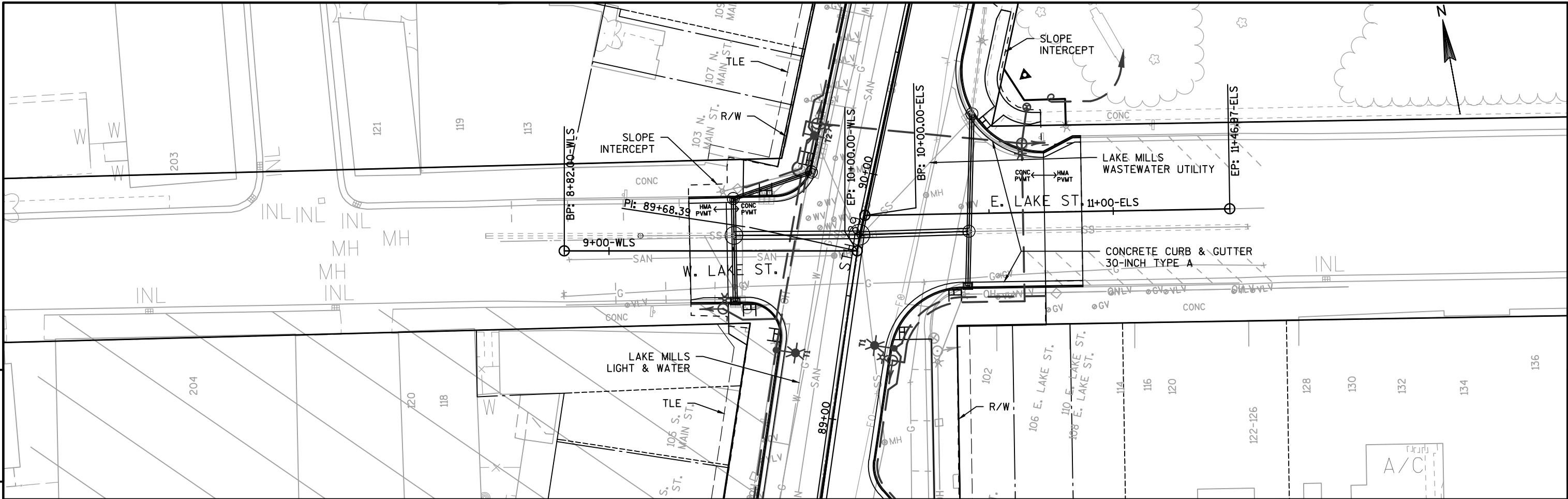
BENCHMARK/CONTROL POINT						
NO.	STATION	DESCRIPTION	OFFSET	ELEV.	NORTHING	EASTING
CP 11	90+51.68	1" CAPPED IRON PIPE	51.34 RT	830.86	585940.16	827327.96

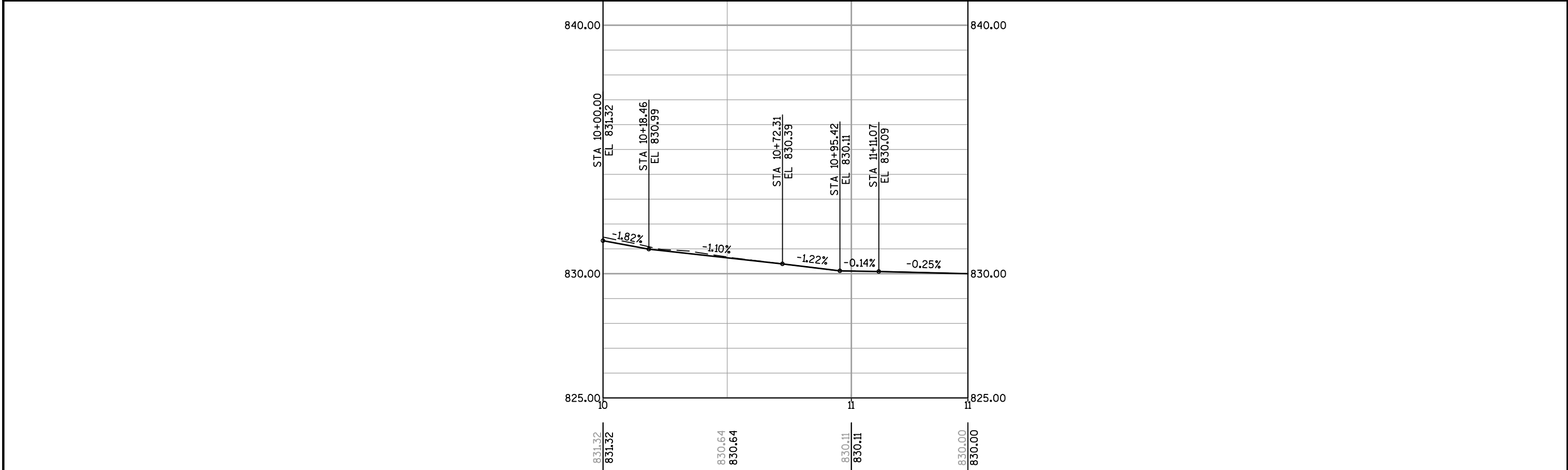
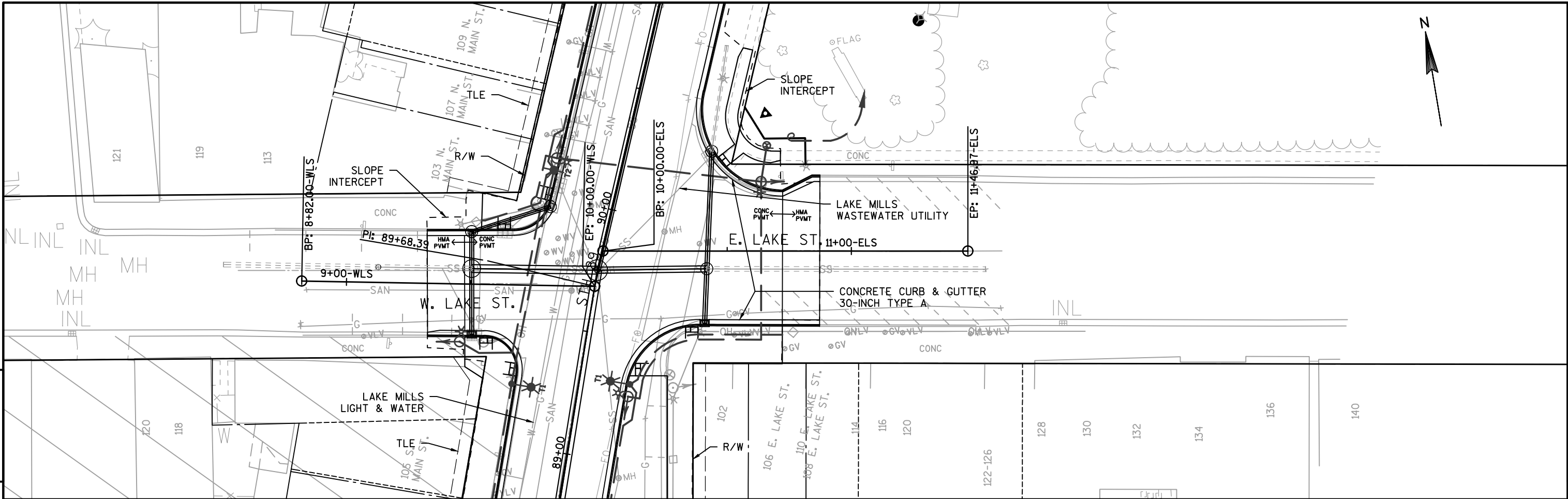


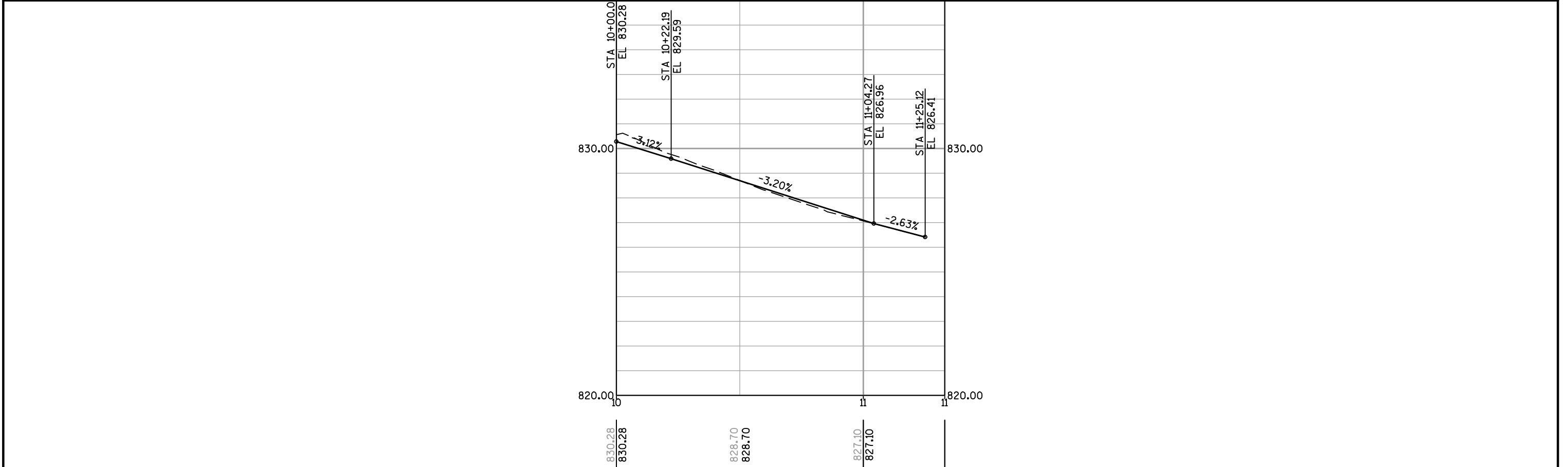
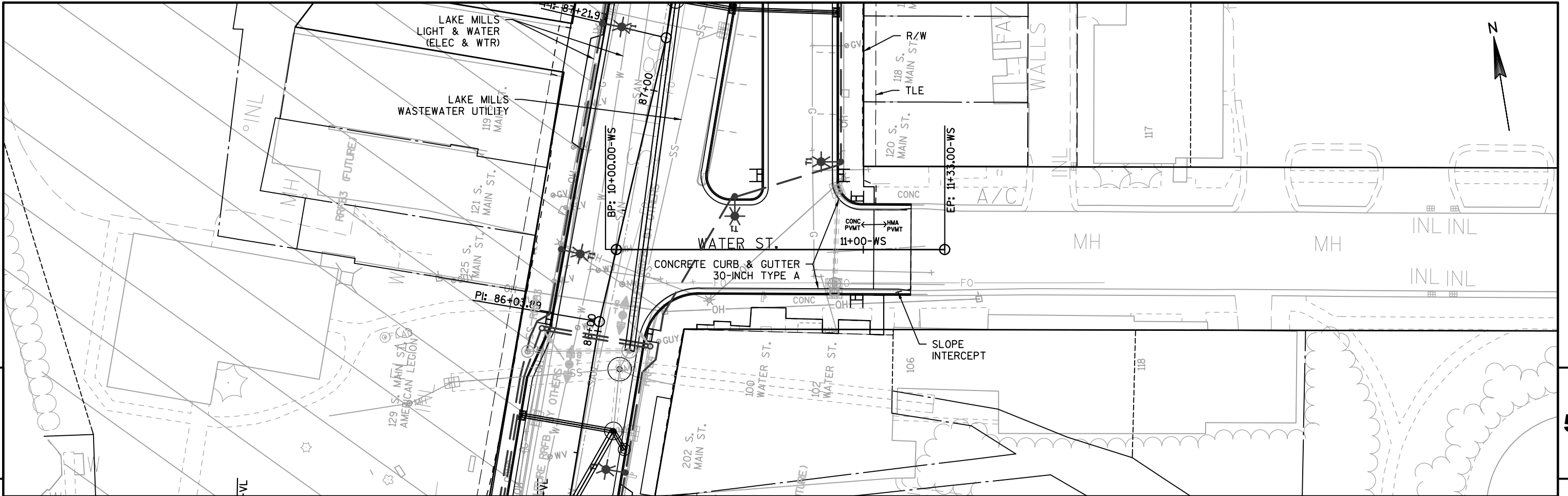


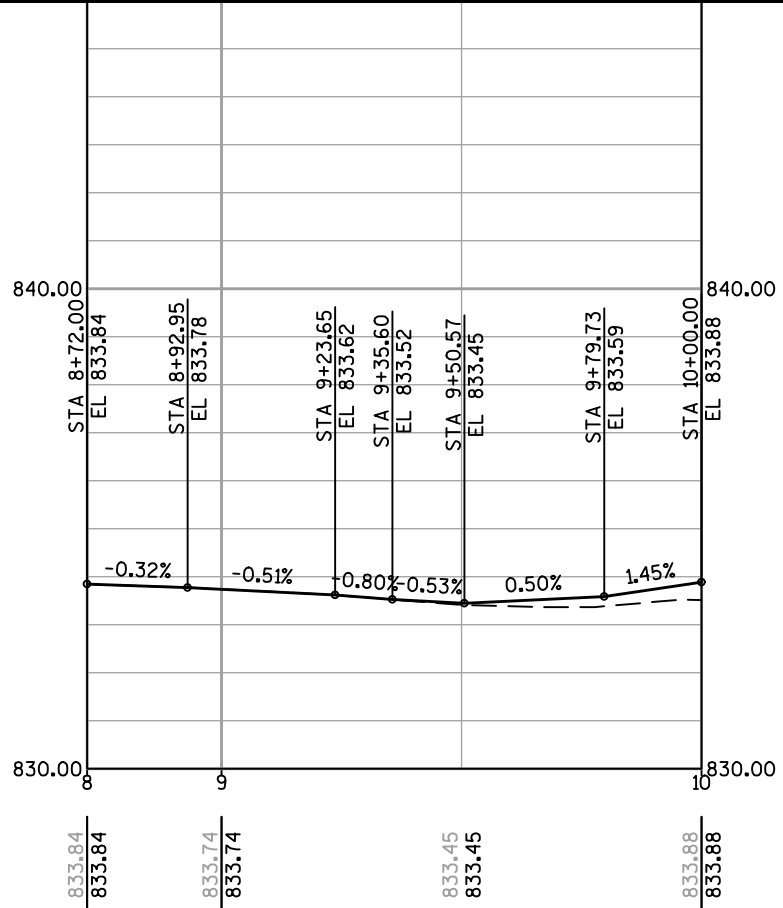
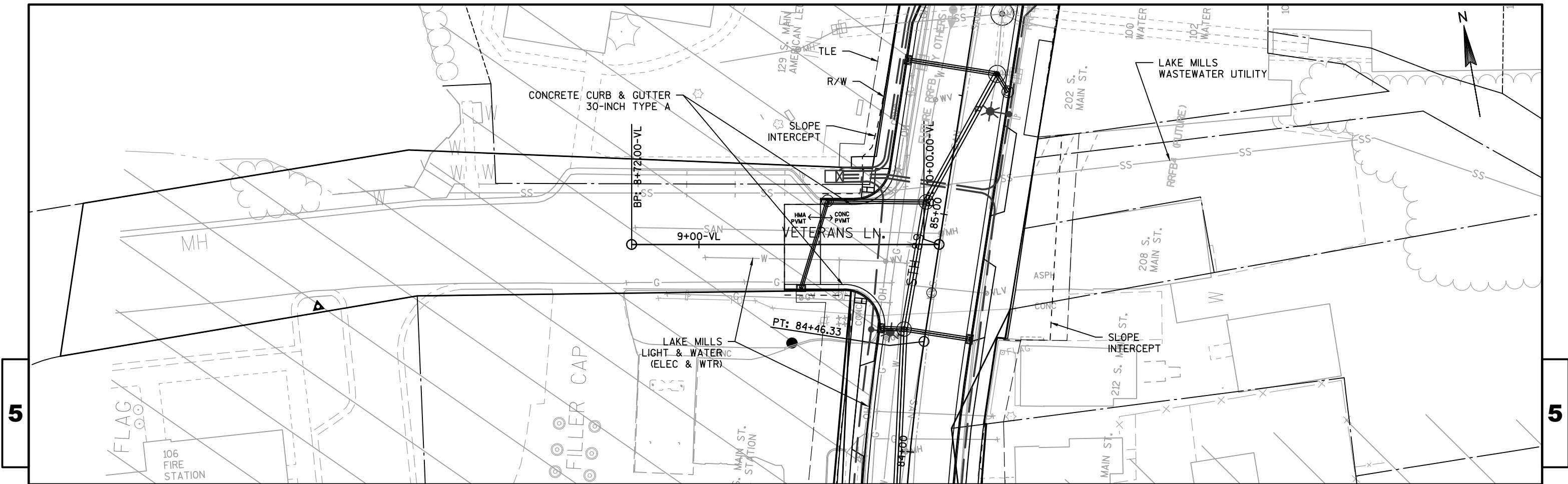
BENCHMARK/CONTROL POINT						
NO.	STATION	DESCRIPTION	OFFSET	ELEV.	NORTHING	EASTING
CP 4	96+67.17	CHISELED "T"; NW CORNER OF INTERSECTION	33.13 LT	835.96	586542.61	827481.42



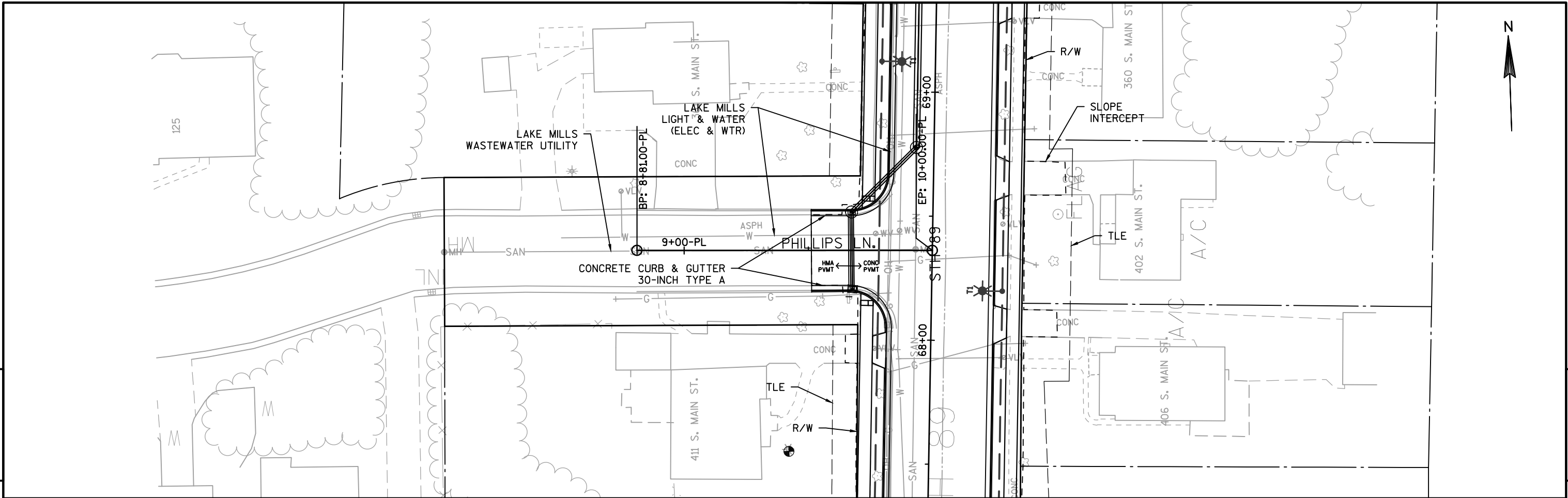




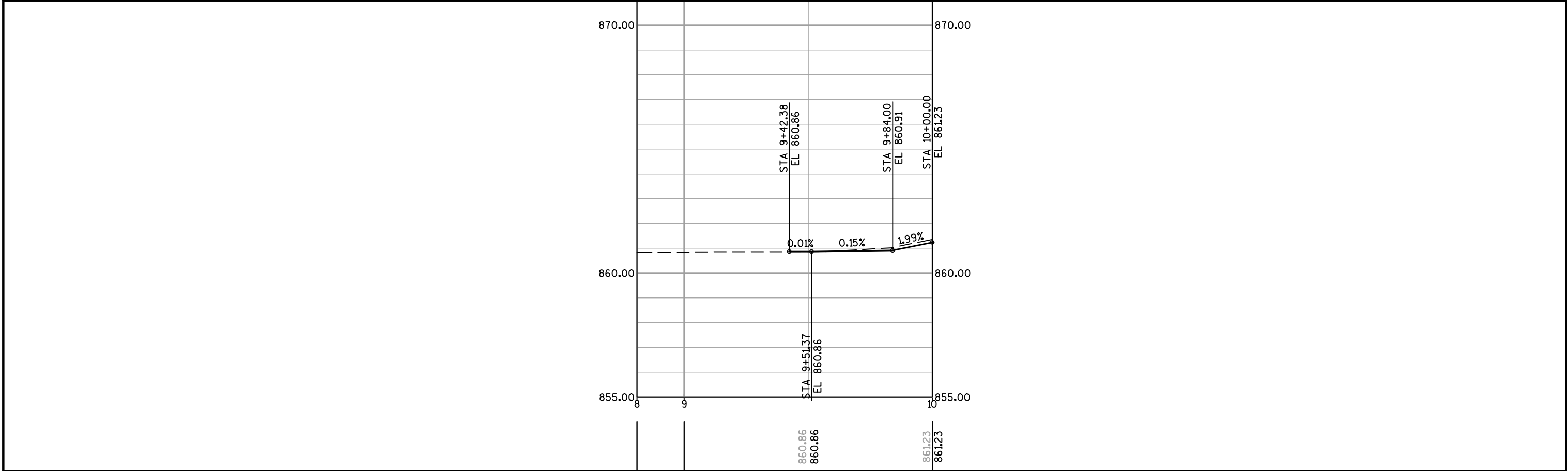


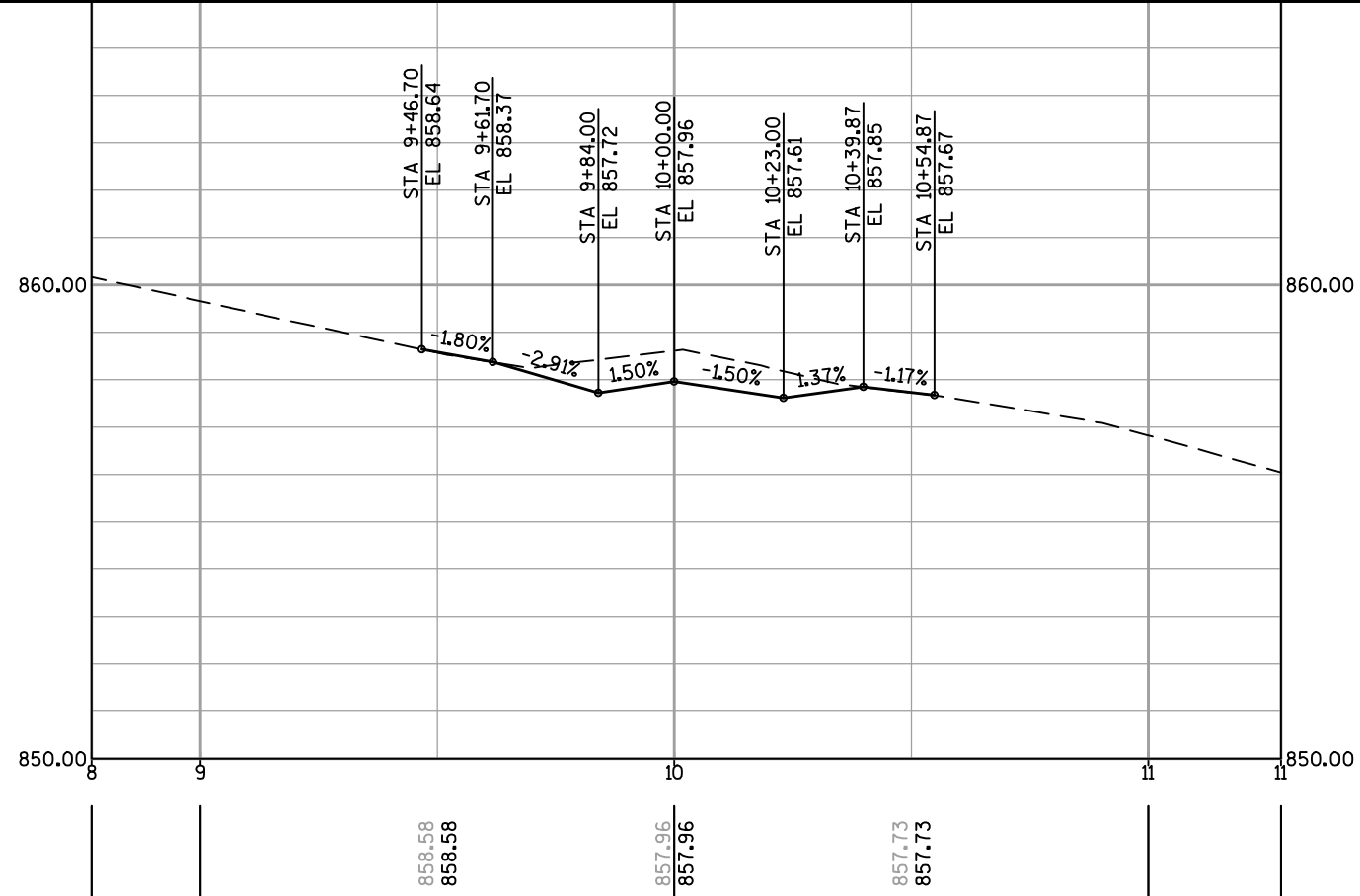
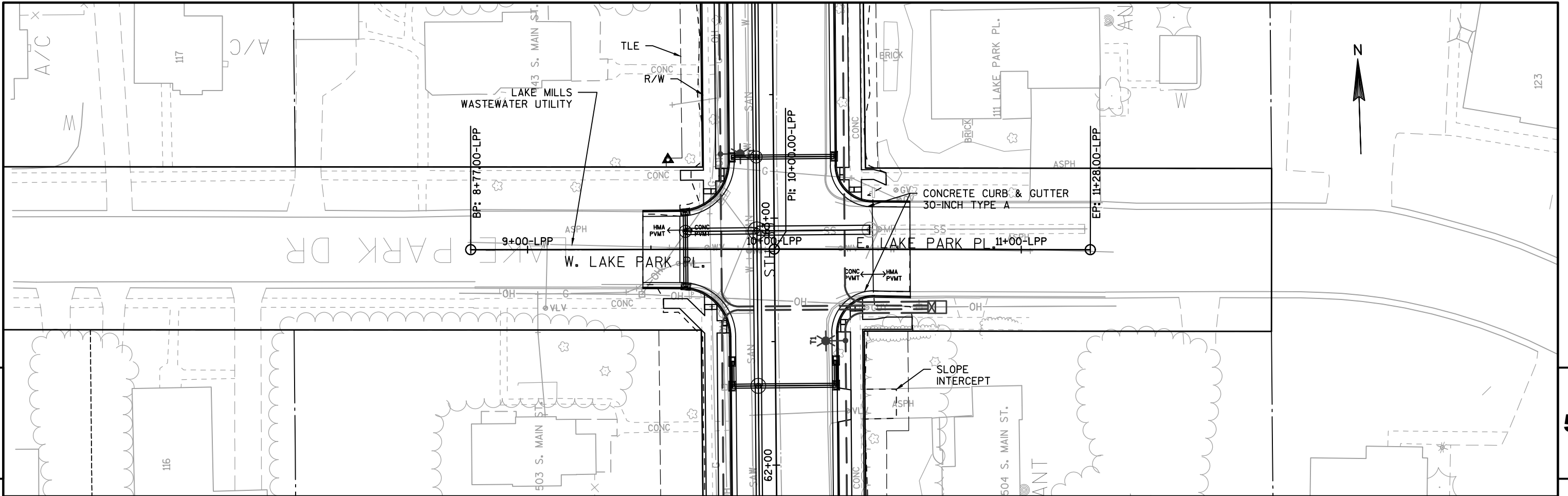


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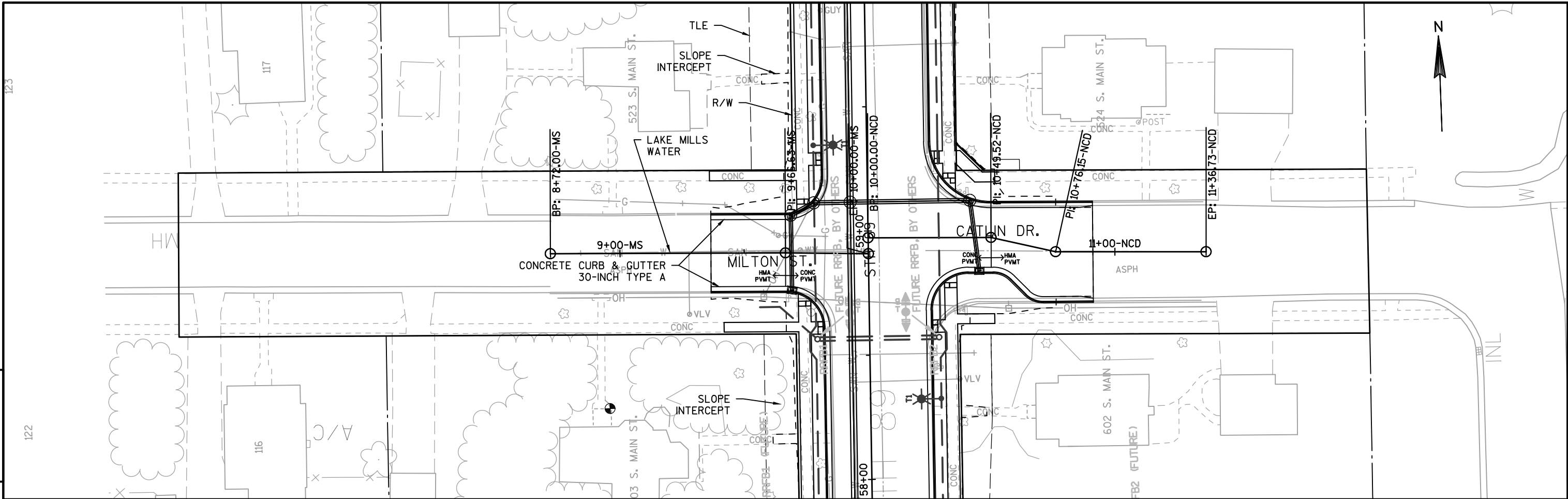


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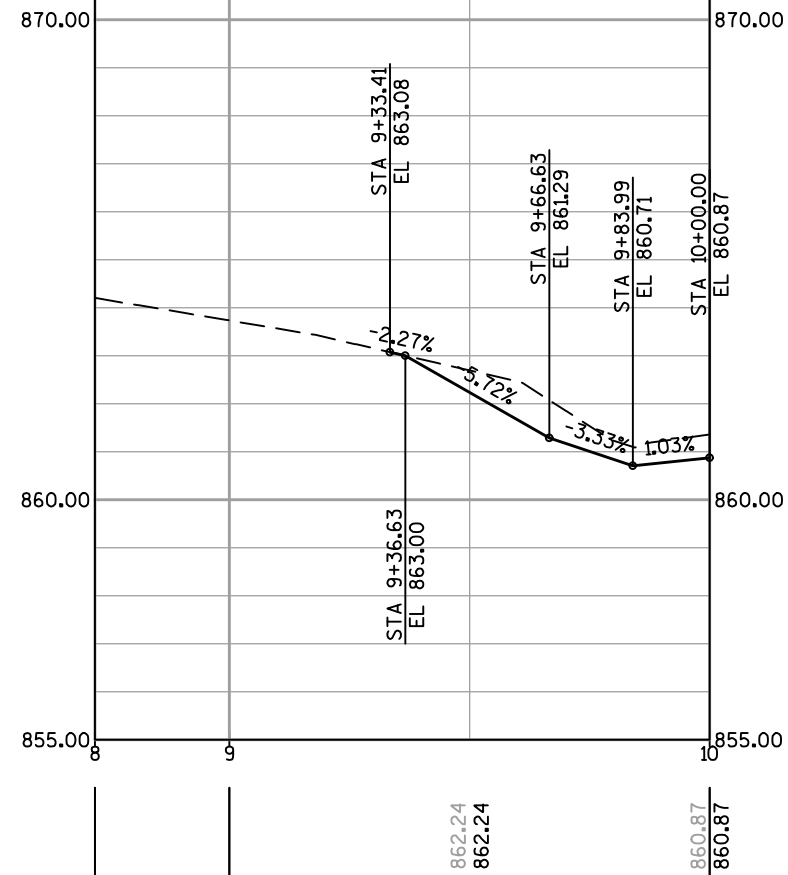


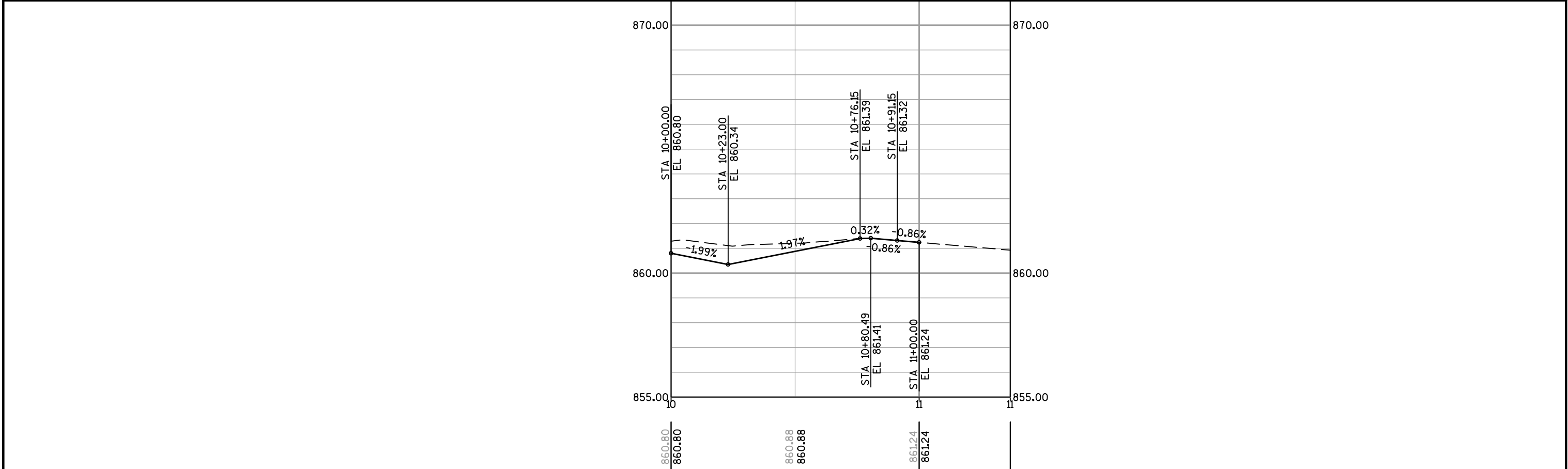
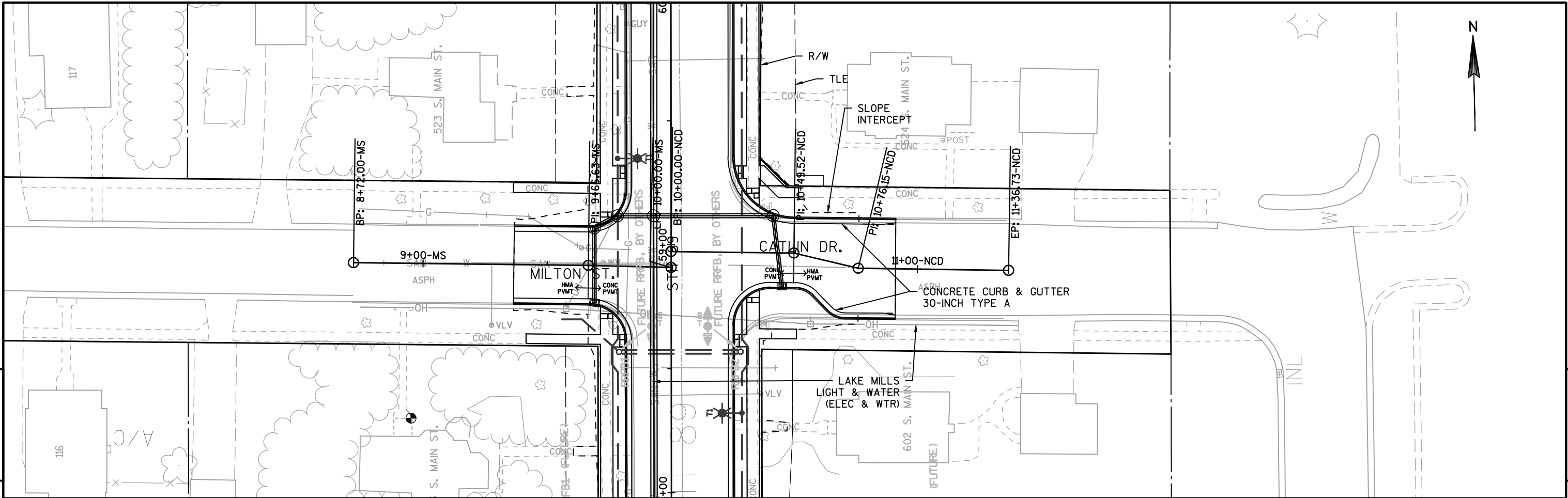


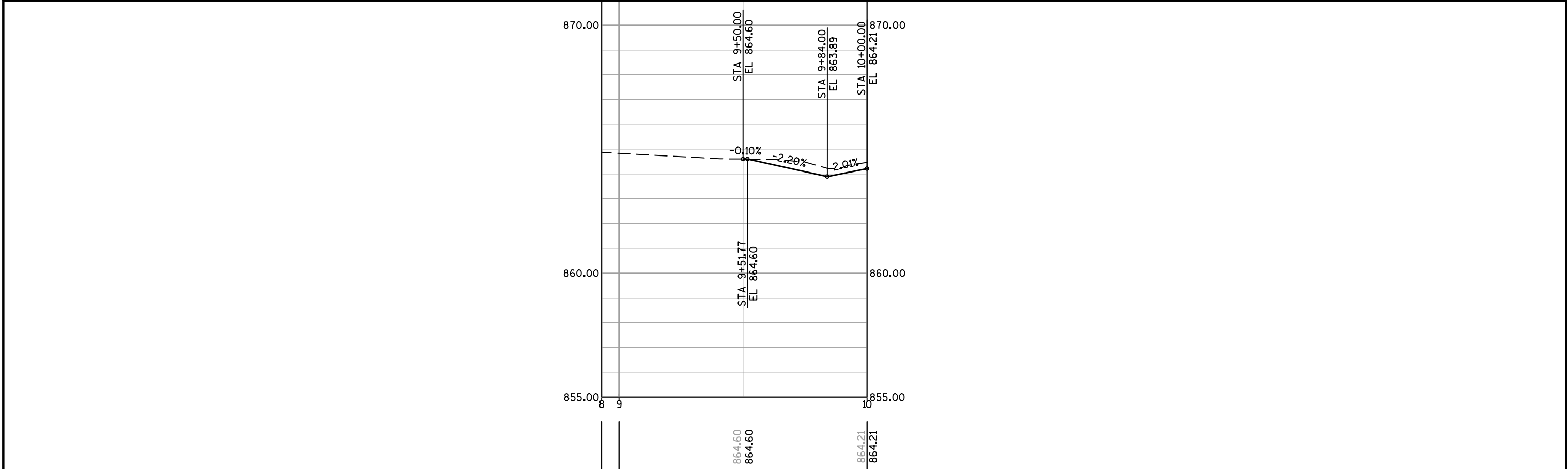
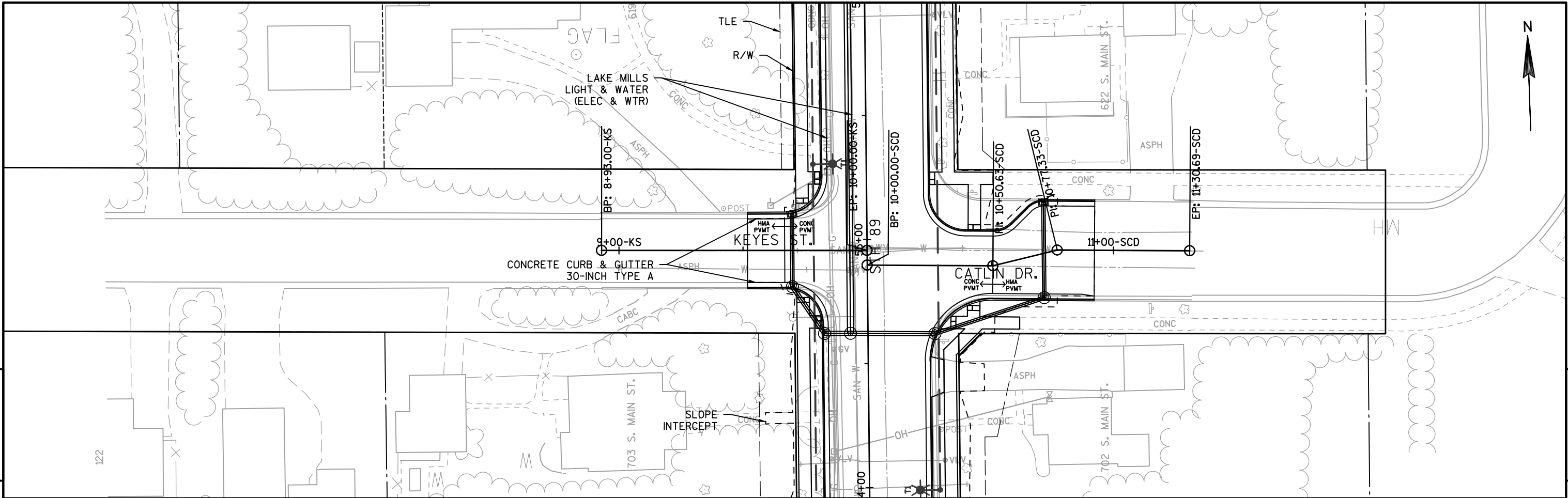
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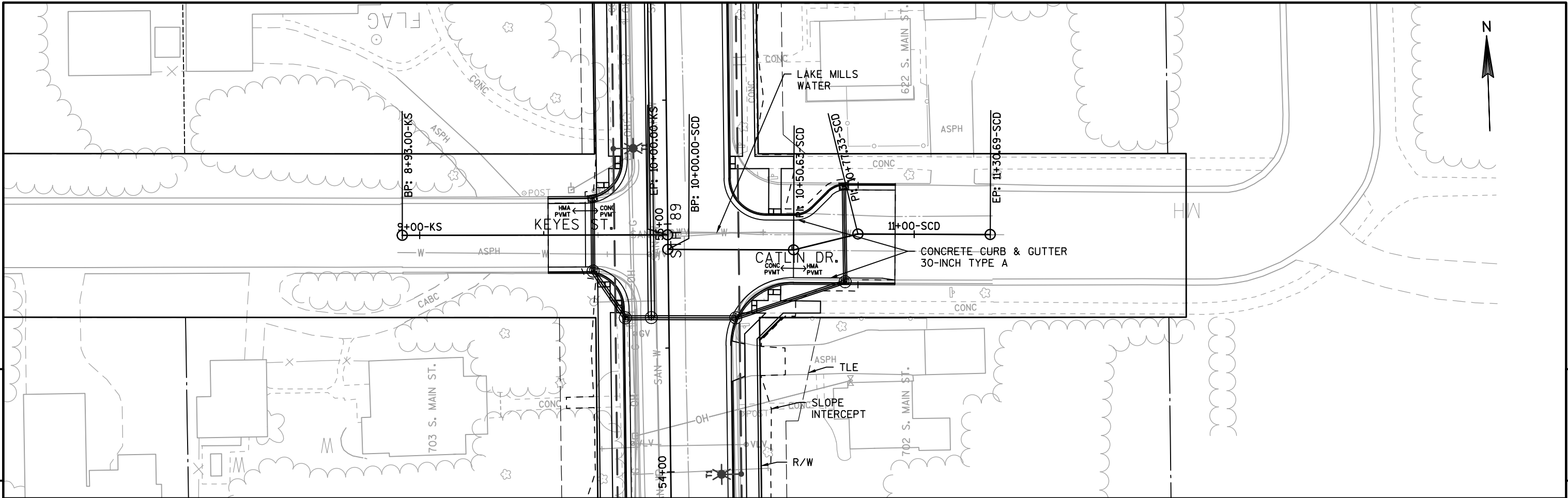
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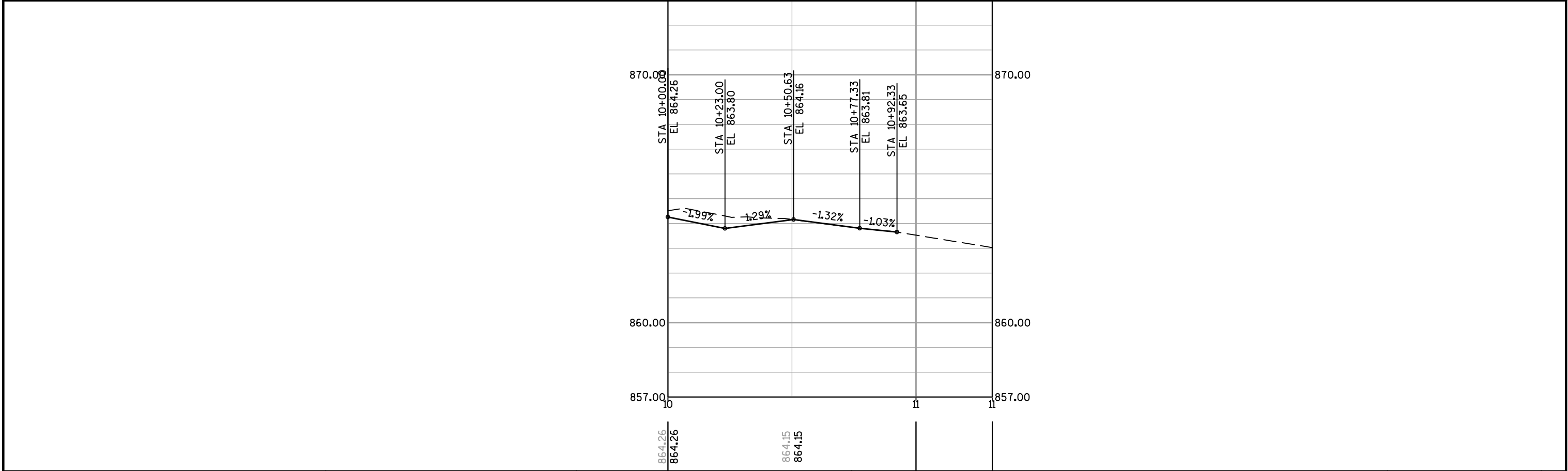


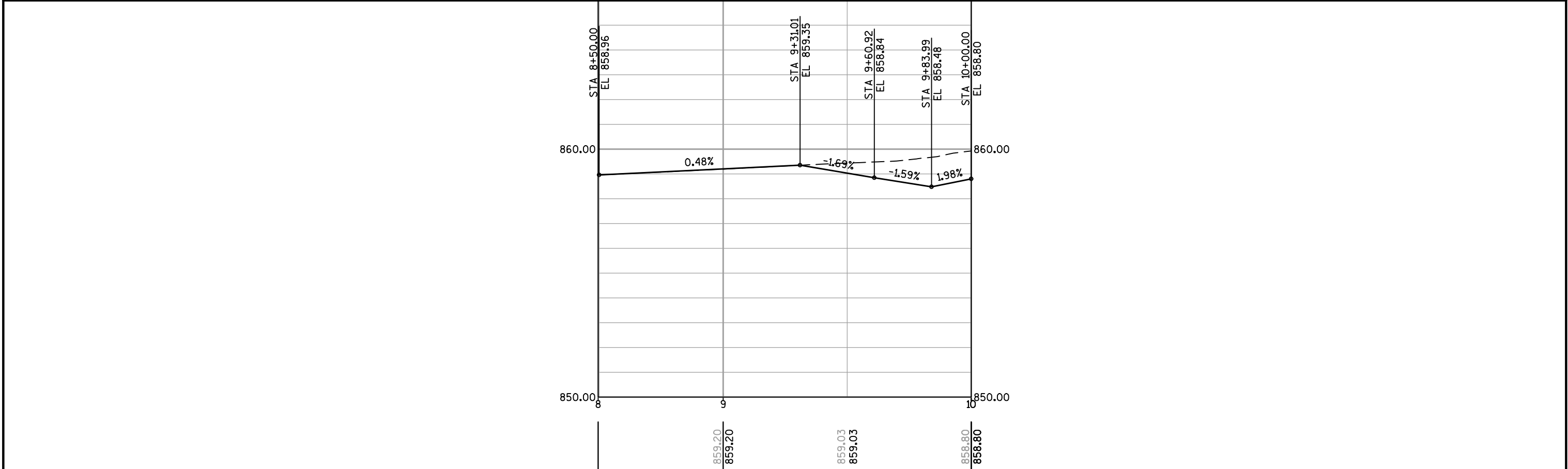
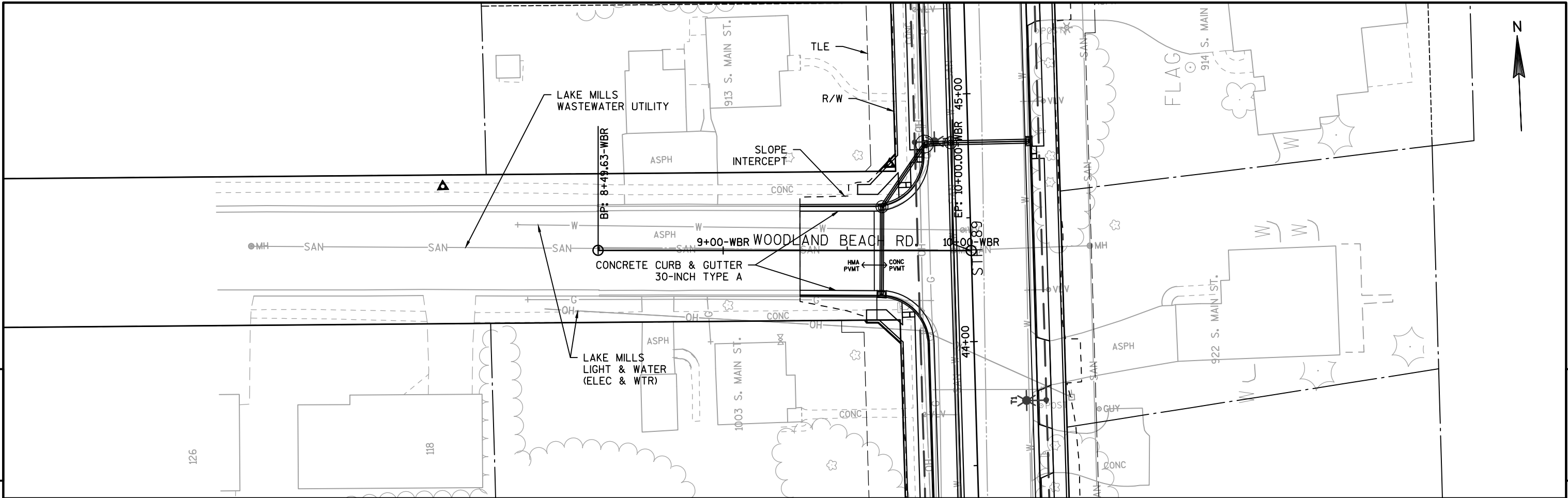


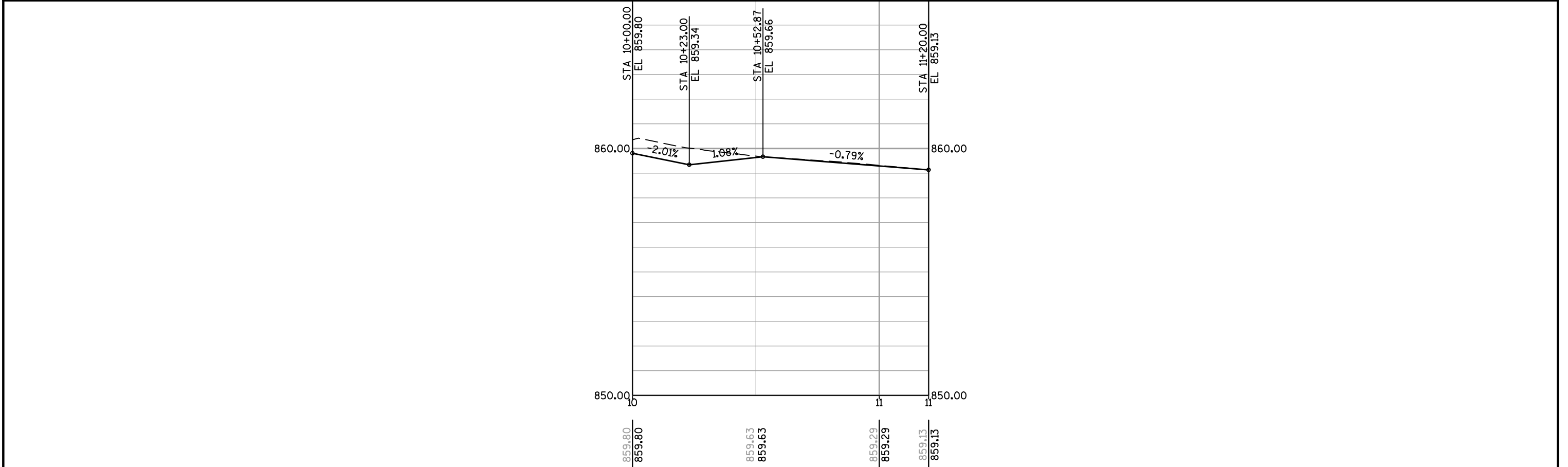
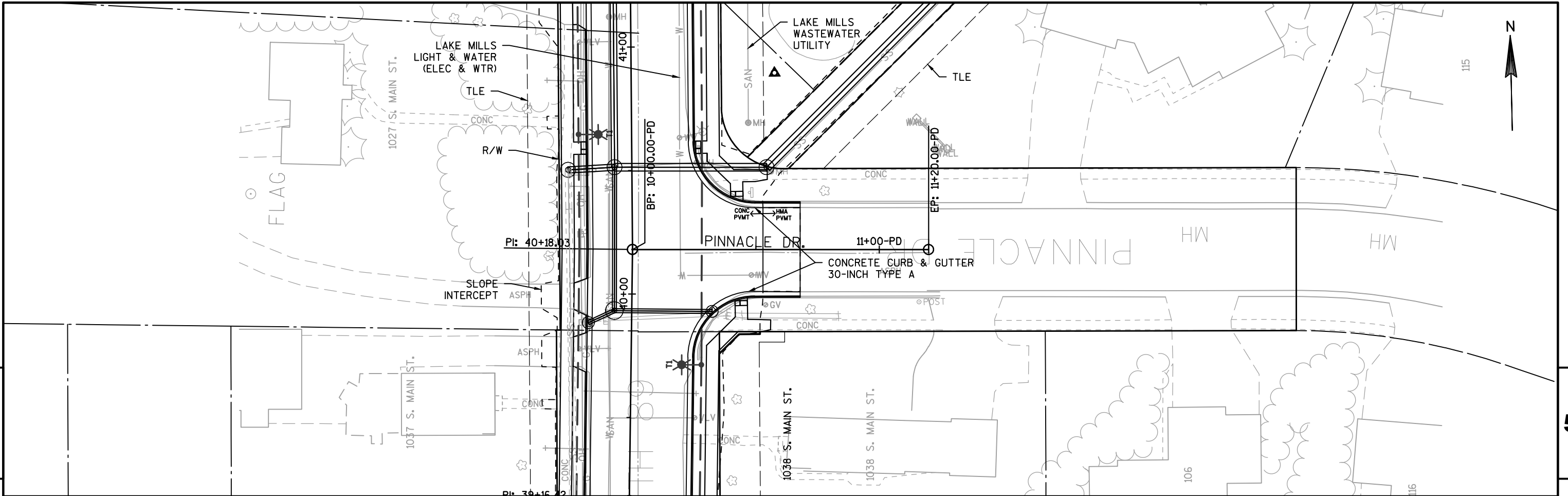
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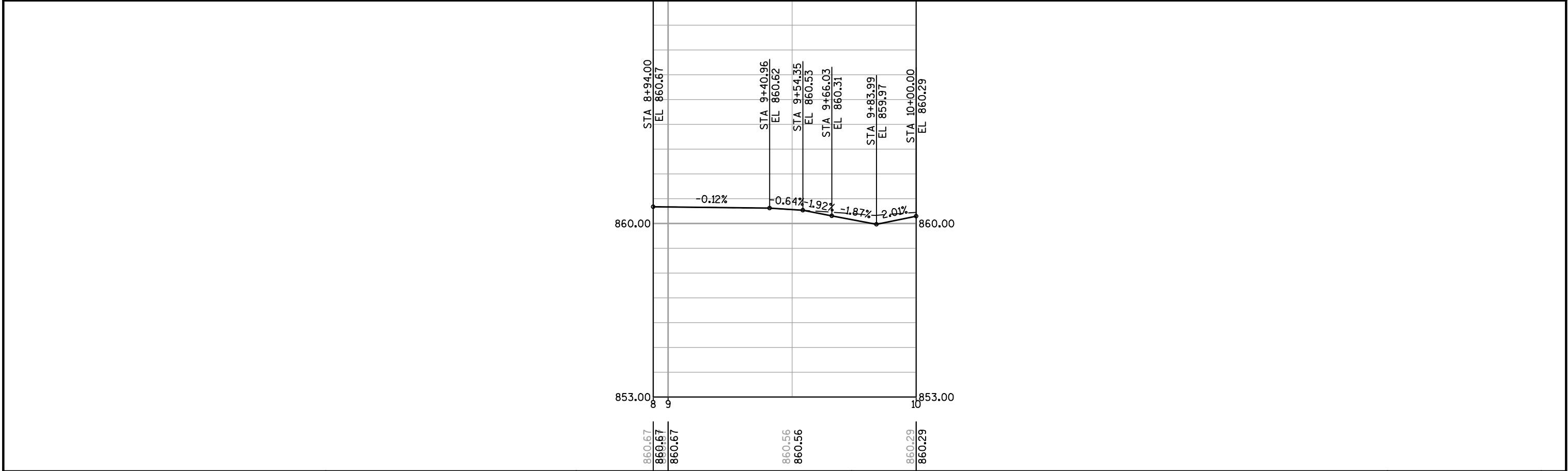
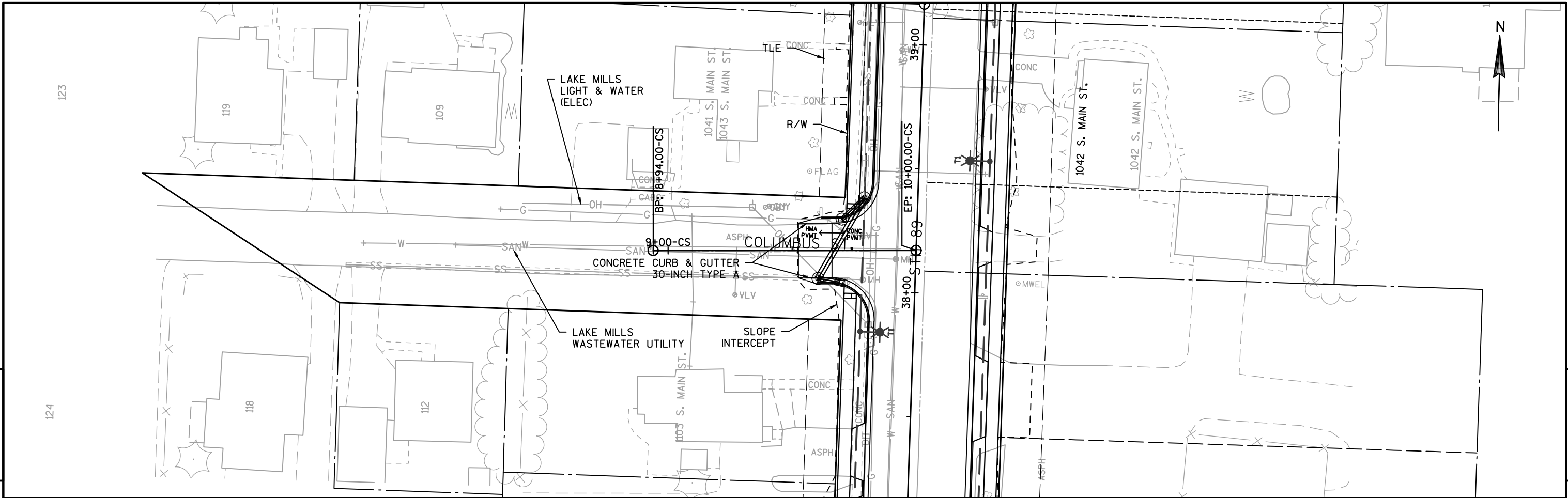


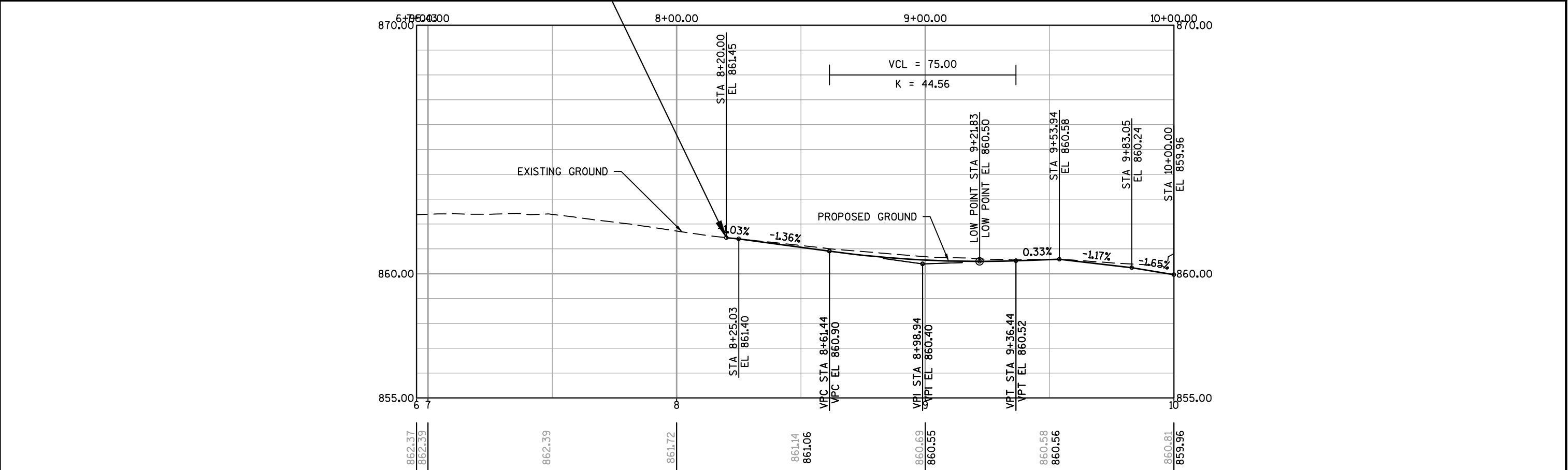
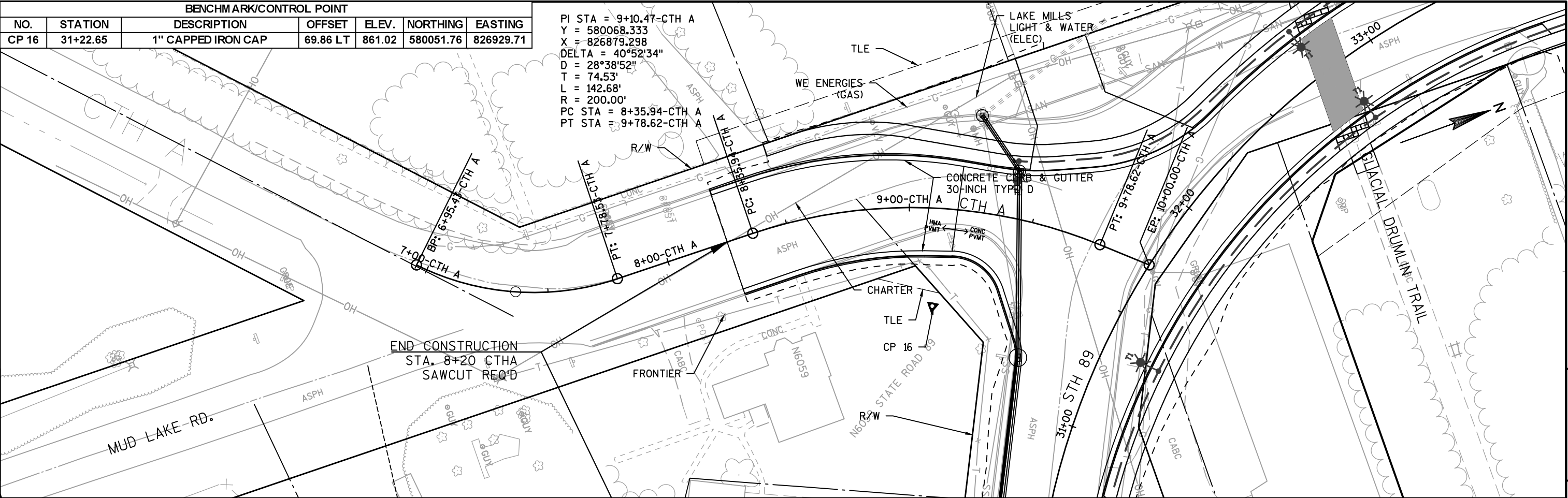
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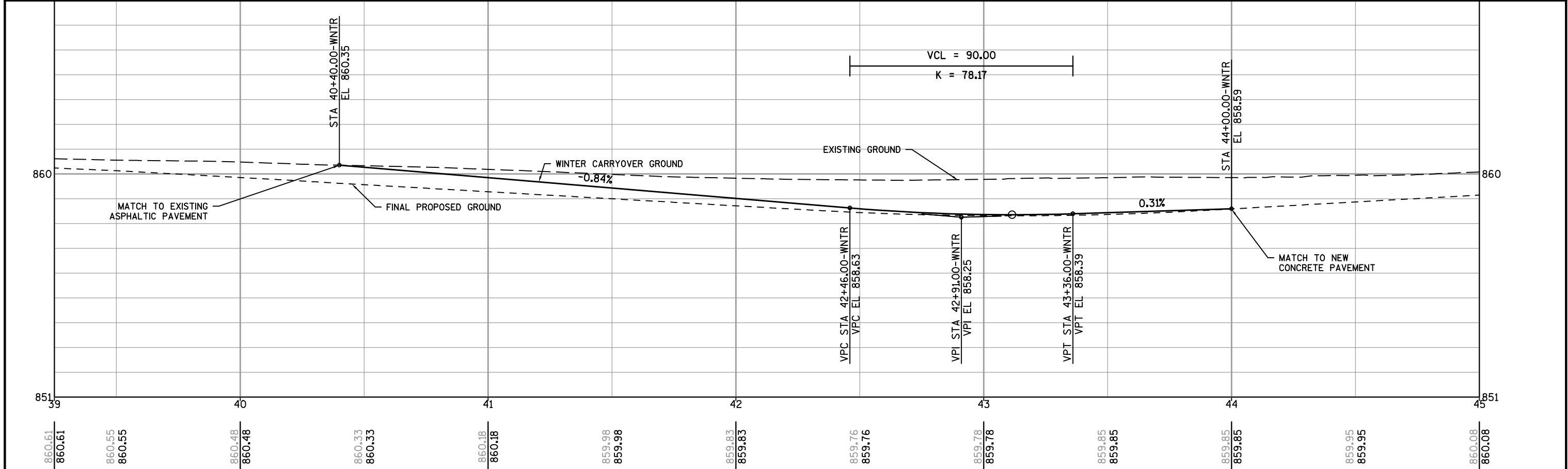
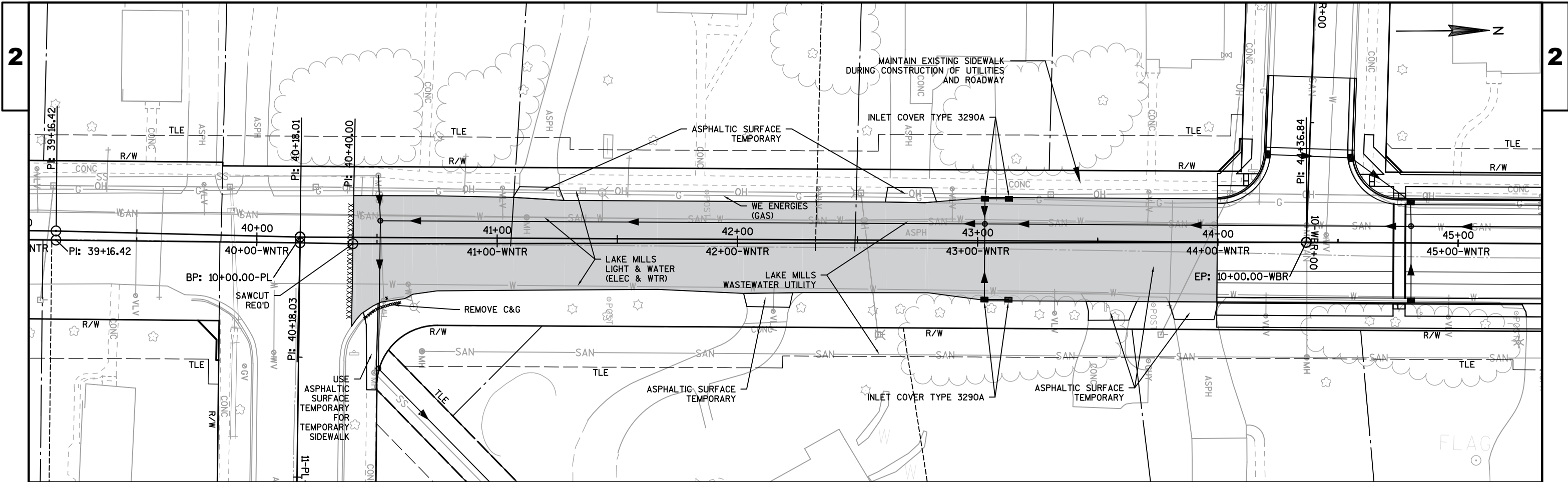






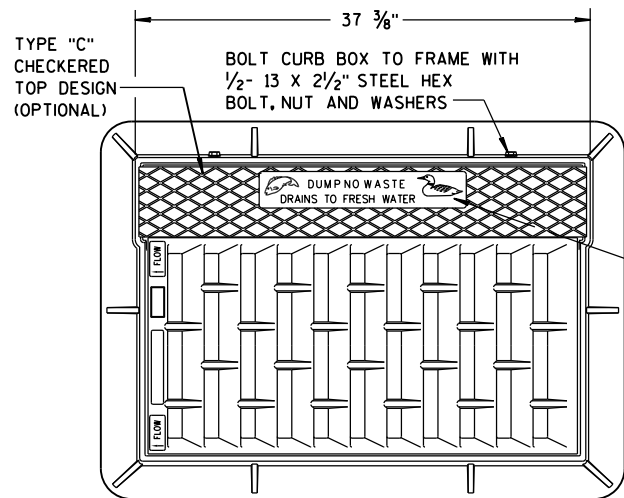




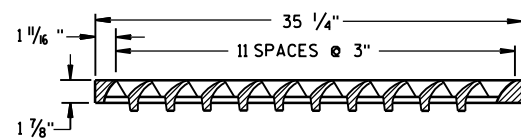
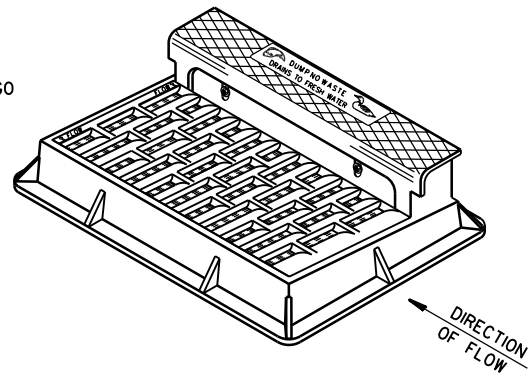


Standard Detail Drawing List

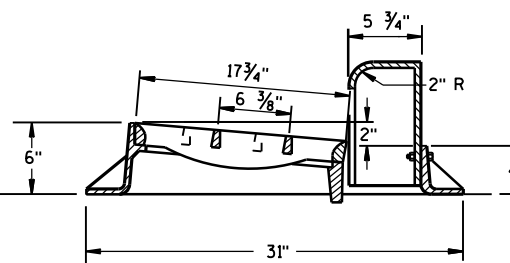
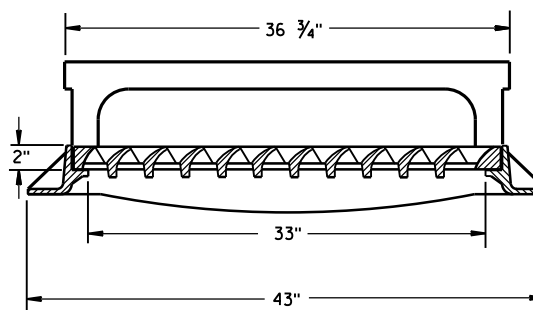
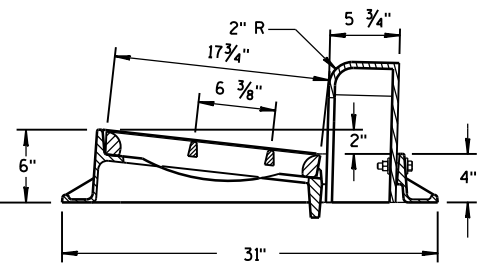
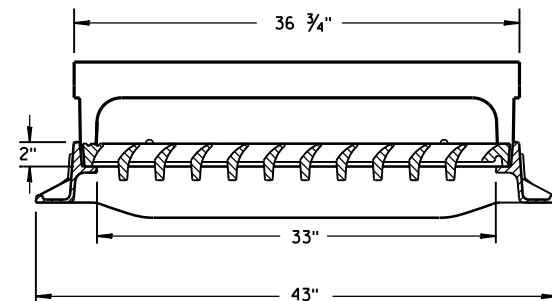
08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08A08-02	CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER
08A09-02	CATCH BASINS 2X3-FT AND 2.5X3-FT
08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C06-02	INLETS 3-FT AND 4-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-19	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D01-20A	CONCRETE CURB & GUTTER
08D01-20B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-19A	CURB RAMPS TYPES 1 AND 1-A
08D05-19B	CURB RAMPS TYPES 2 AND 3
08D05-19C	CURB RAMPS TYPES 4A AND 4A1
08D05-19D	CURB RAMPS TYPE 4B AND 4B1
08D05-19E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-19G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D18-01	DRIVEWAY AND SIDEWALK RAMPS TYPES X & Y
08D19-01	DRIVEWAY AND SIDEWALK RAMPS TYPE Z
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
09B02-10	CONDUIT
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C14-02	CONCRETE CONTROL CABINET BASE, TYPE L
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D04-02	LIGHTING CONTROL CABINET 120/240 VOLT
09E03-05	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E07-05	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
13C01-18	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-08	URBAN DOWELED CONCRETE PAVEMENT
13C18-05A	CONCRETE PAVEMENT JOINTING
13C18-05B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-05C	CONCRETE PAVEMENT JOINT TYPES
13C18-05D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-03	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C07-14C	PAVEMENT MARKING ARROWS
15C08-18A	LONGITUDINAL MARKING (MAINLINE)
15C33-02	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D30-03B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-03C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
16A01-06	LANDMARK REFERENCE MONUMENTS AND COVERS



NOTE:
GRATE IS REVERSIBLE.

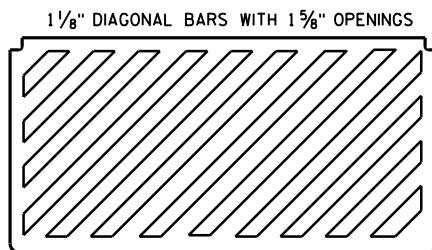


NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"



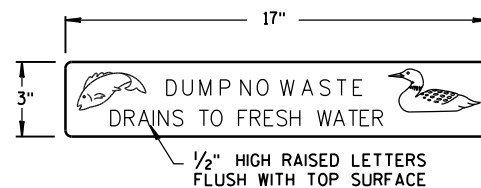
TYPE "H"

NOTE: EITHER CASTING IS ACCEPTABLE

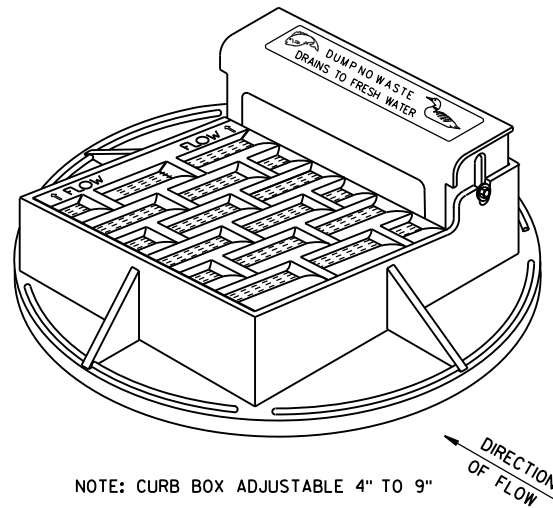


SPECIAL GRATE FOR
TYPE "H" COVER

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

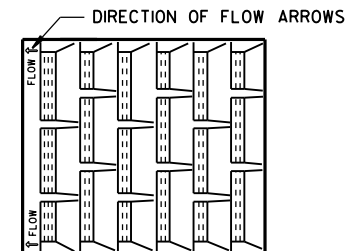


LOGO DETAIL

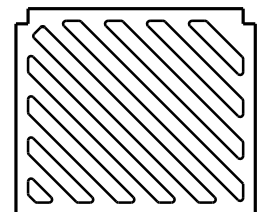


NOTE: CURB BOX ADJUSTABLE 4" TO 9"

NOTE:
GRATE IS REVERSIBLE.

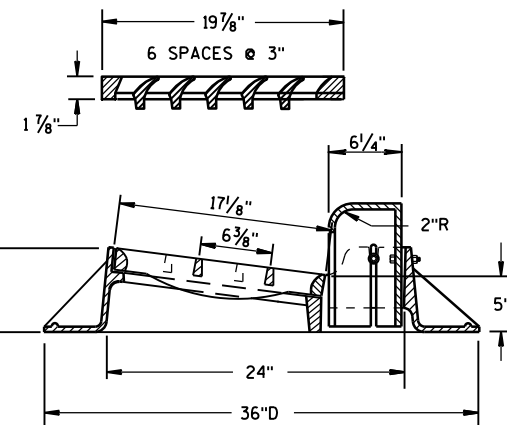
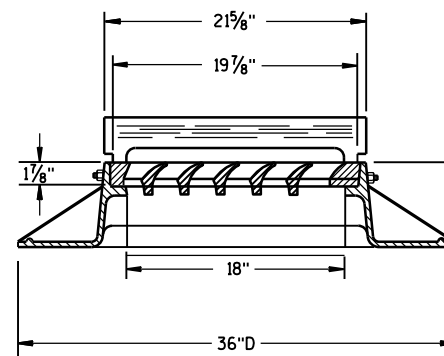


1" DIAGONAL BARS
WITH 1 1/2" OPENINGS

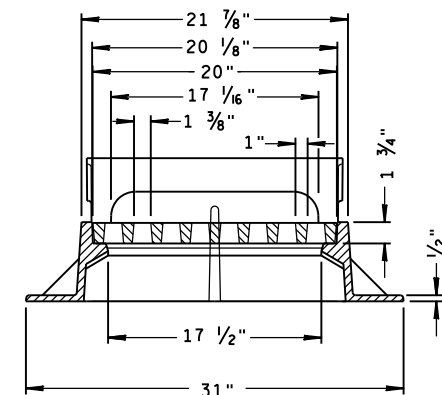
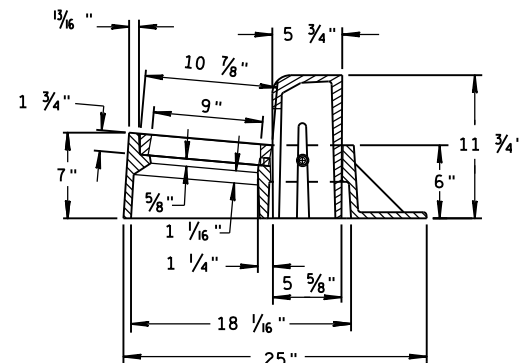


SPECIAL GRATE FOR
TYPE "A" COVER

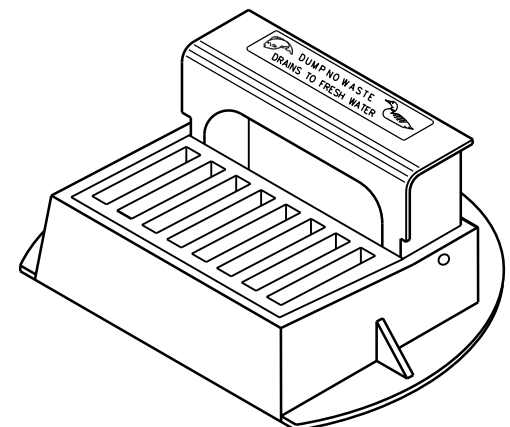
(MEASURES 19 3/4" X 17" X 1 1/8")
(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "A"



TYPE "Z"



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11-27-13

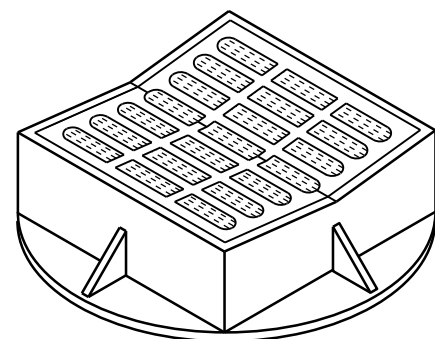
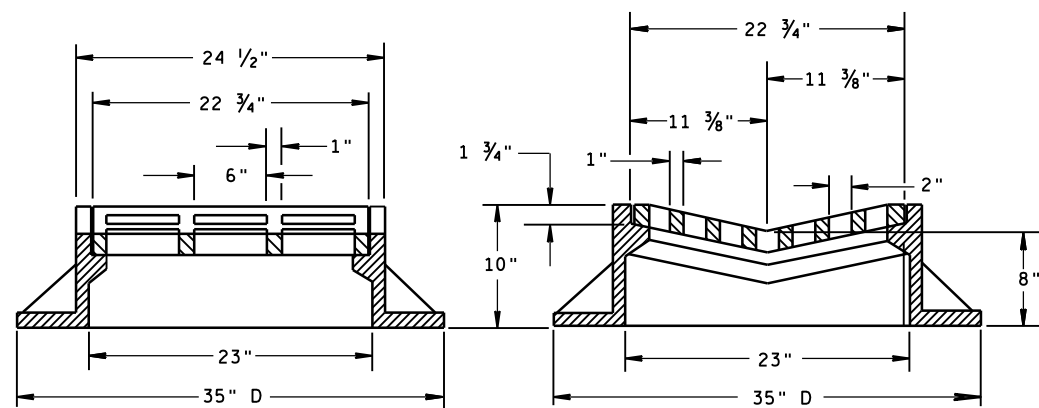
DATE

FHWA

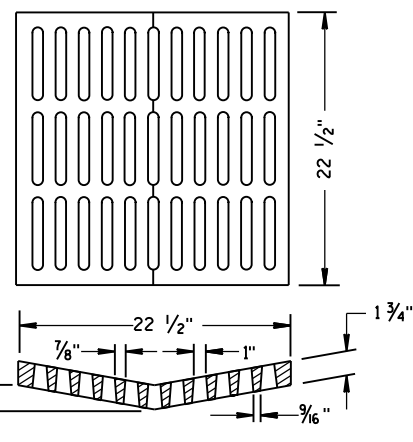
/S/ Jerry H. Zogg

ROADWAY STANDARDS 1249

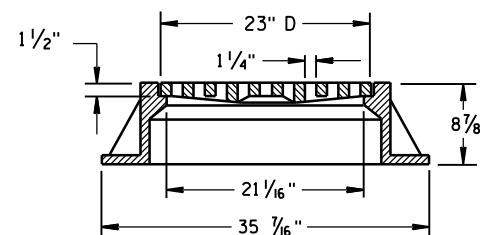
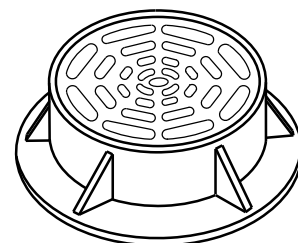
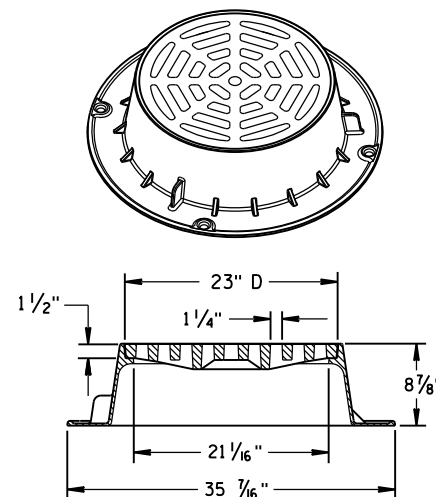
ENGINEER ENT



TYPE "B"

ALTERNATIVE GRATE FOR
TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
 NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

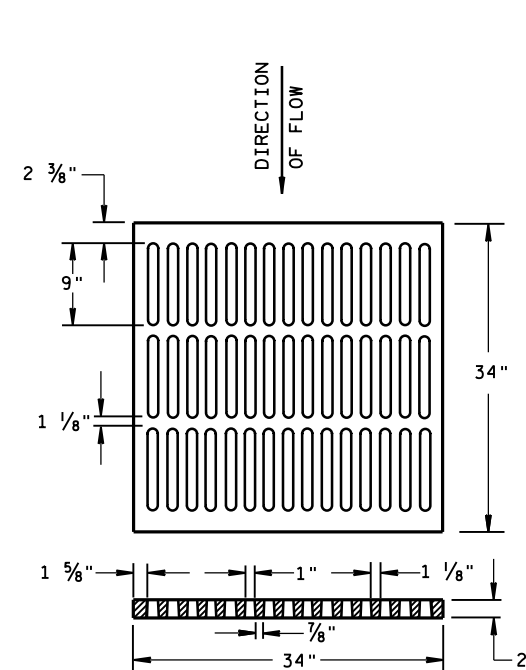
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

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

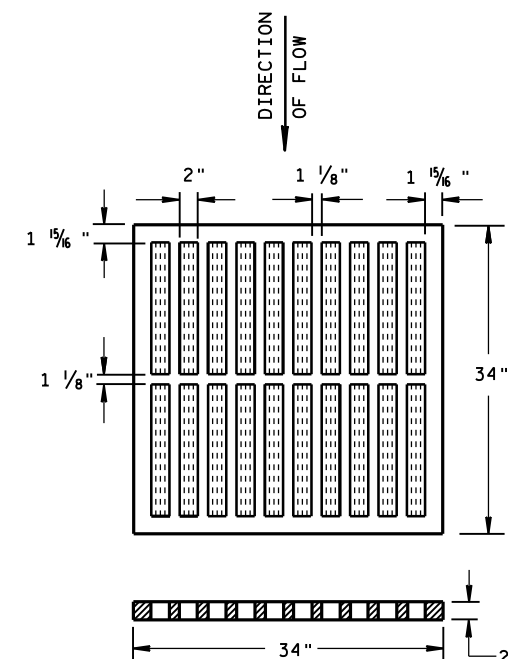
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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



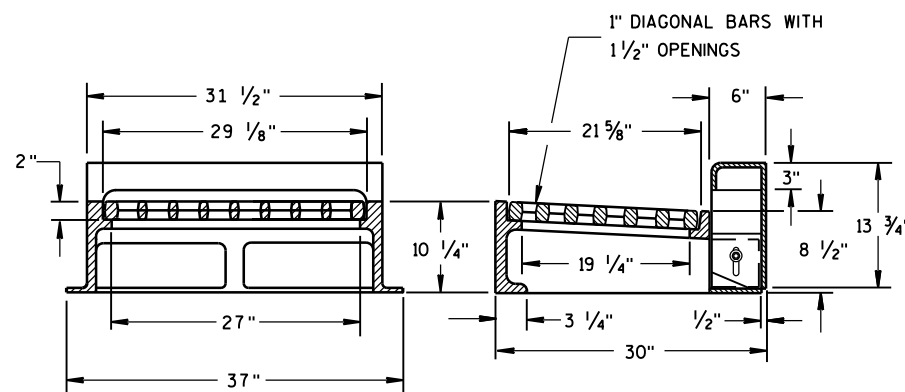
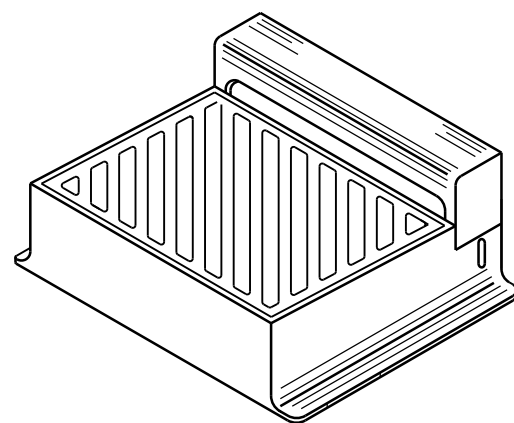
ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
 NOTED AS TYPE MS-A ON THE DRAINAGE TABLE



TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
 NOTED AS TYPE MS ON DRAINAGE TABLE



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

DIAGONAL SLOTS, SHALL BE ORIENTED
 TO THE DIRECTION OF FLOW AS ILLUSTRATED.
 GRATES ARE MANUFACTURED TO BE REVERSIBLE.

DIRECTION
OF FLOW

INLET COVERS
 TYPE B, B-A, C,
 MS, MS-A, & WM

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

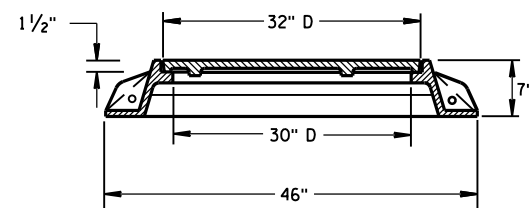
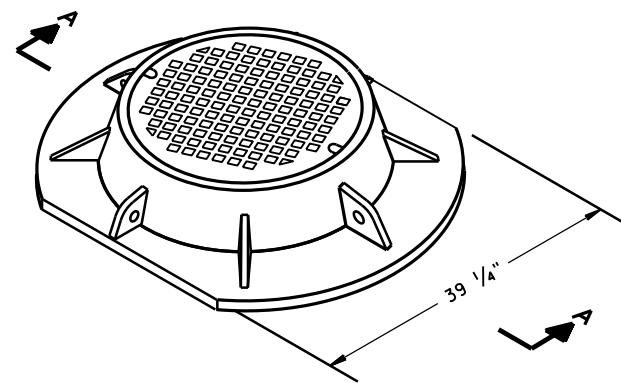
APPROVED

DATE 11/27/2013

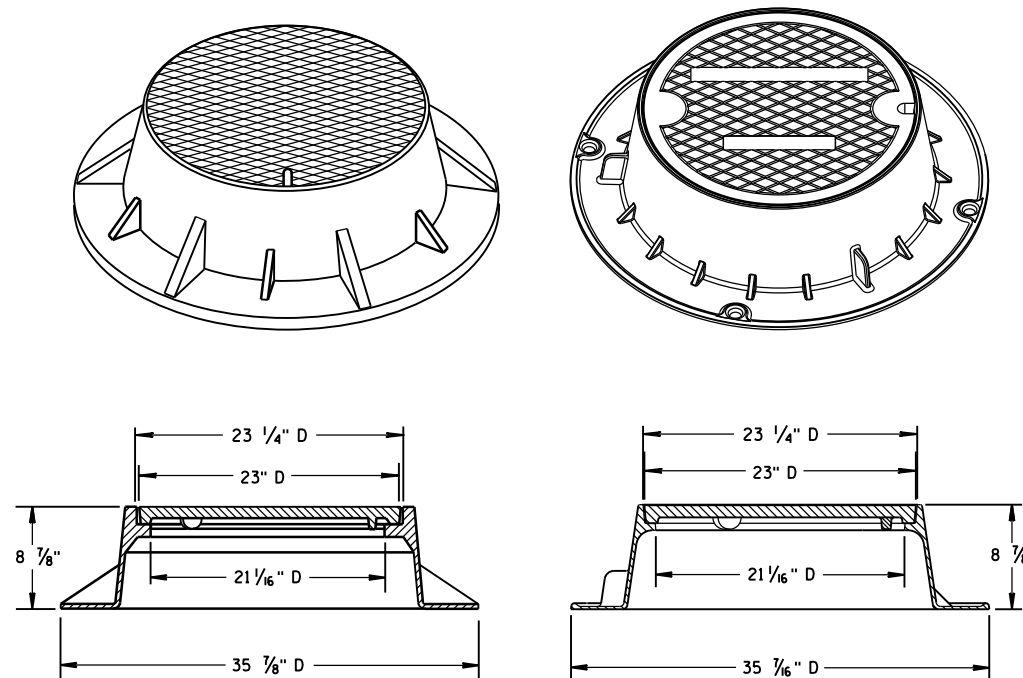
FHWA

/S/ Jerry H. Zogg
 ROADWAY STANDARDS ENGINEER

NT

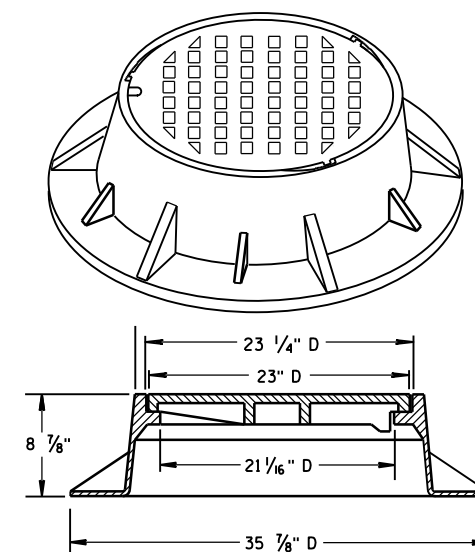
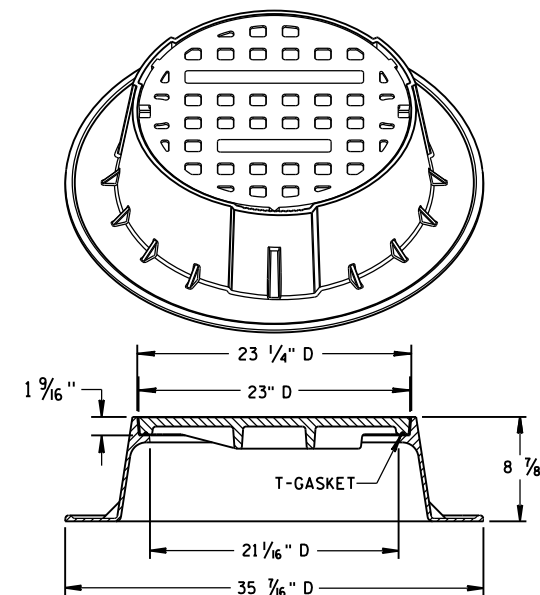


SECTION A-A
TYPE "K"



TYPE "J"

NOTE: EITHER CASTING IS ACCEPTABLE

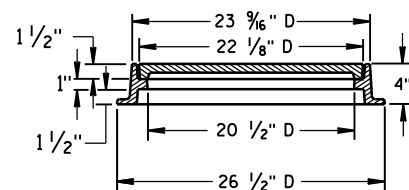
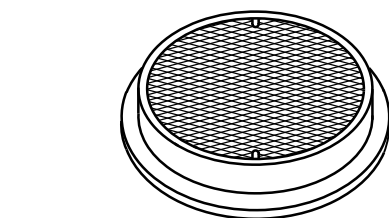


TYPE "J" SPECIAL

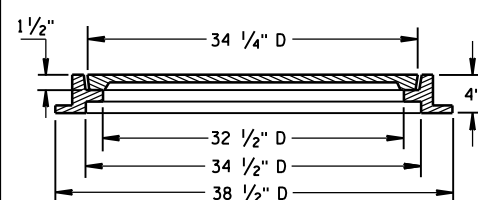
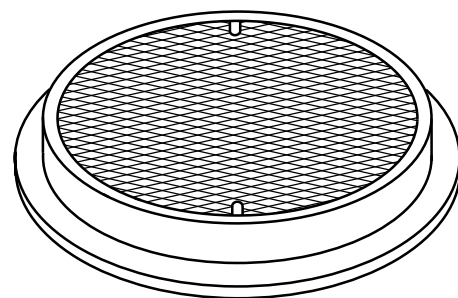
TYPE "B" NON-ROCKING SELF-SEAL LID

(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

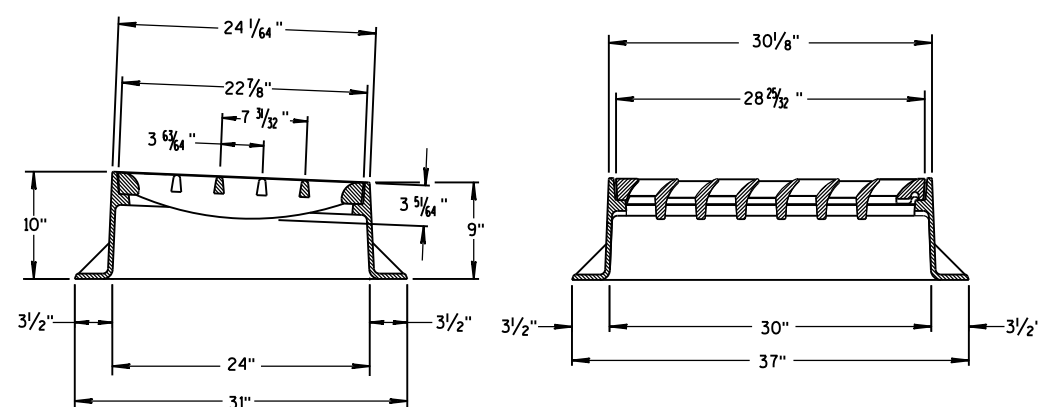
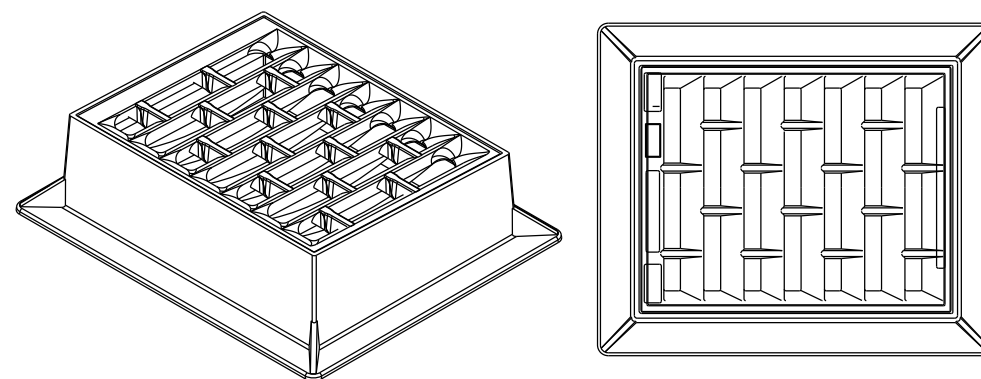
NOTE: EITHER CASTING IS ACCEPTABLE



TYPE "L"



TYPE "M"



INLET COVER TYPE "BW"

GENERAL NOTES

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

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

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

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K,
J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/27/2013

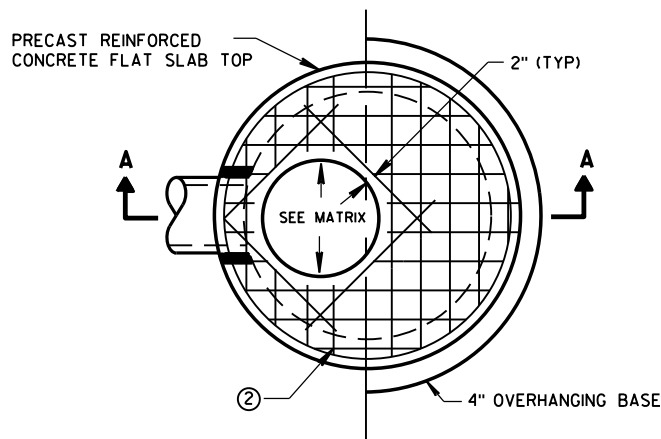
DATE

FHWA

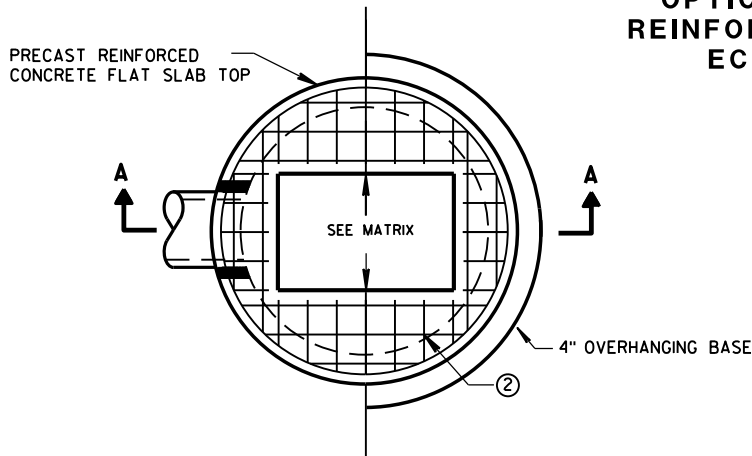
/S/ Jerry H. Zogg

ROADWAY STANDARDS 251

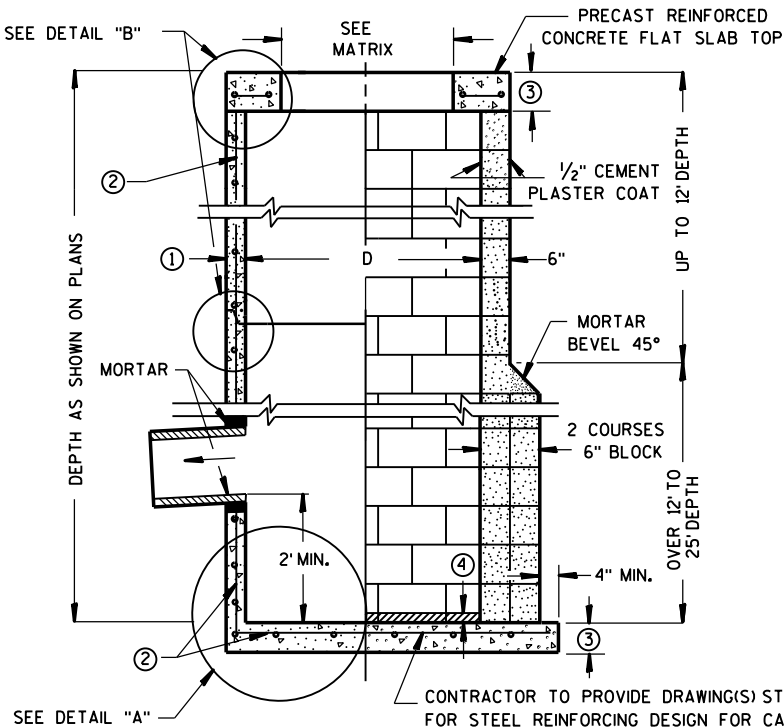
ENGINEER



PLAN VIEW CIRCULAR OPENING



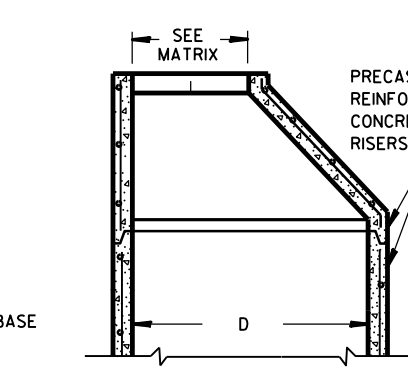
PLAN VIEW RECTANGULAR OPENING



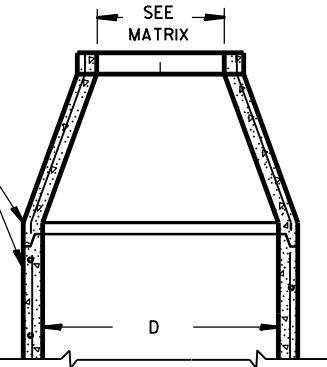
SECTION A-A

PRECAST REINFORCED
CONCRETE WITH
MONOLITHIC BASE

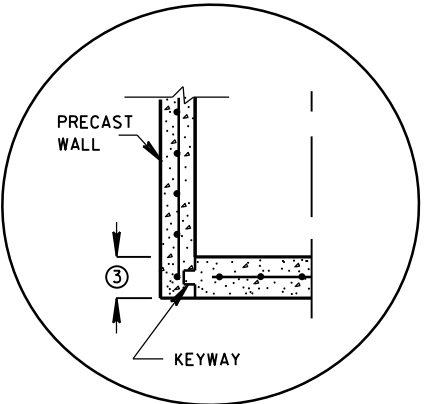
CONCRETE BLOCK WITH CAST-
IN-PLACE OR PRECAST
REINFORCED CONCRETE BASE ②



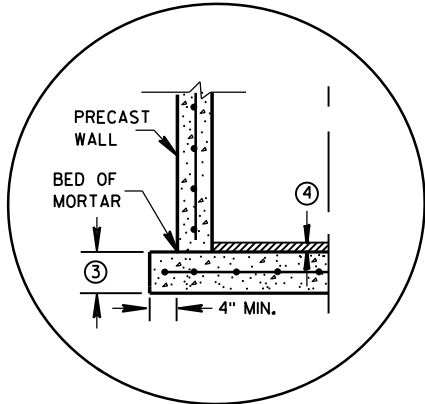
OPTIONAL PRECAST
REINFORCED CONCRETE
ECCENTRIC TOP



OPTIONAL PRECAST
REINFORCED CONCRETE
CONCENTRIC TOP

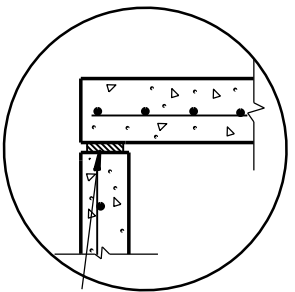


PRECAST REINFORCED
CONCRETE WITH INTEGRAL BASE OPTION

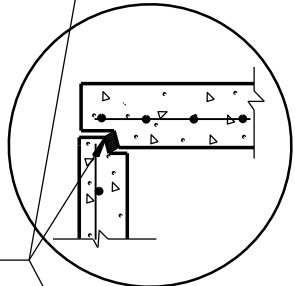


SEPARATE PRECAST REINFORCED
CONCRETE BASE OPTION

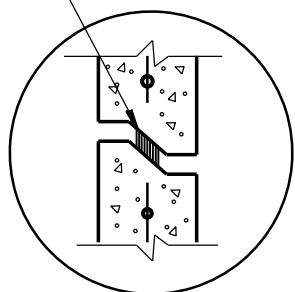
DETAIL "A"



TOP WITH PLAIN END JOINT

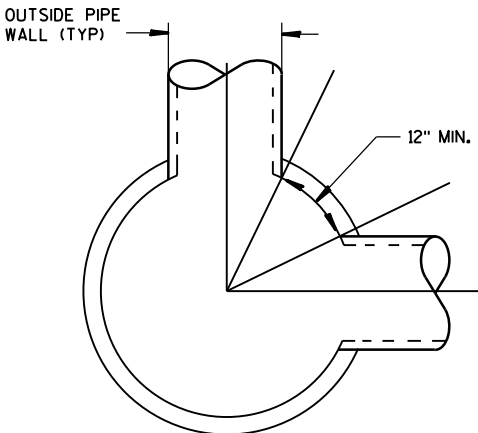


TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"



DETAIL "C"

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

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

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

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

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

- MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT AND 7 INCHES FOR 6-FT DIAMETER PRECAST CATCH BASINS.
- FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.
- PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".
- 1" CONCRETE KEY POURED AFTER INSTALLATION. 2" SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER OPENING MATRIX

CATCH BASIN SIZE	INLET COVER TYPE OPENING SIZE (FT)	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
3-FT	2X2	X	X					X		X		
	2 DIA.				X							X
4-FT- 6-FT	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2 DIA.				X							X
	2X3						X					
	2.5X3					X						

PIPE MATRIX

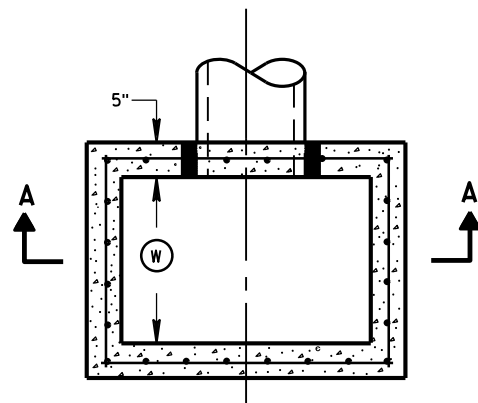
CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	30

CATCH BASINS 3-FT,
4-FT, 5-FT AND
6-FT DIAMETER

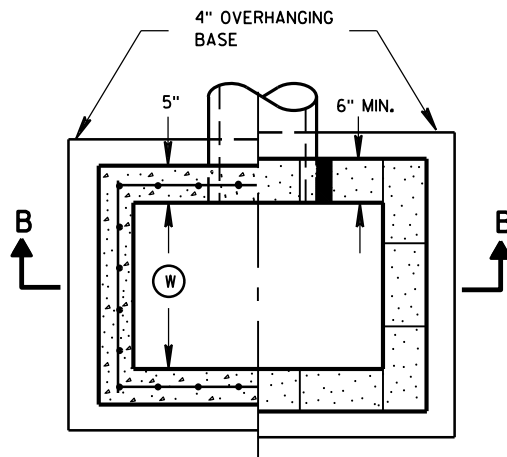
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016
DATE /S/ Rodney Taylor
ROADWAY STANDARDS 252 ENT
FHWA UNIT SUPERVISOR

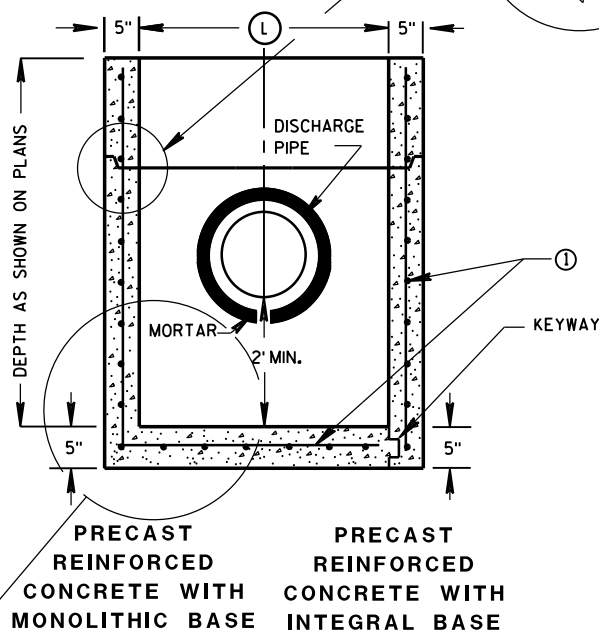
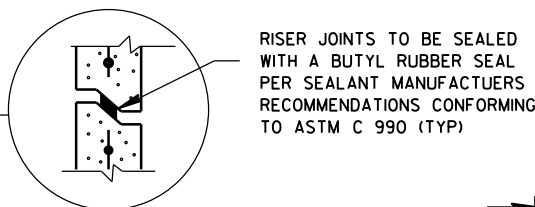
CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER



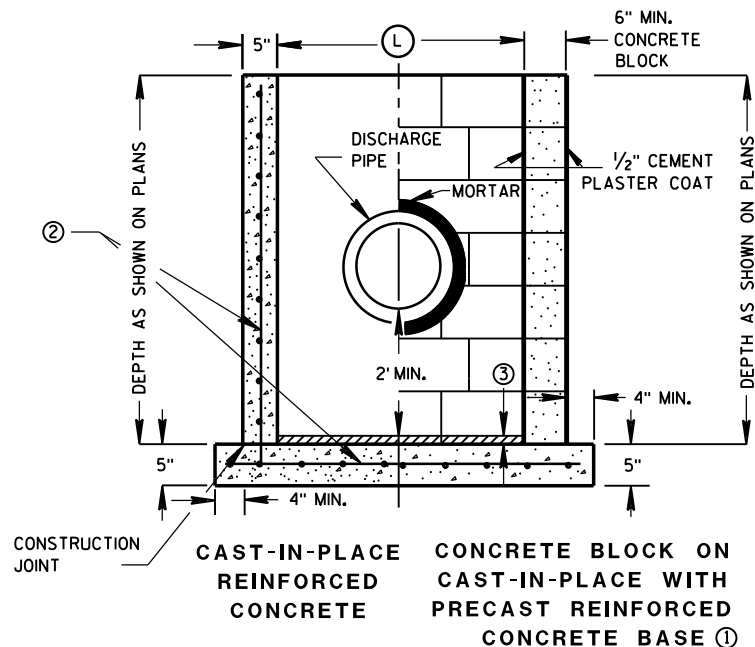
PLAN VIEW



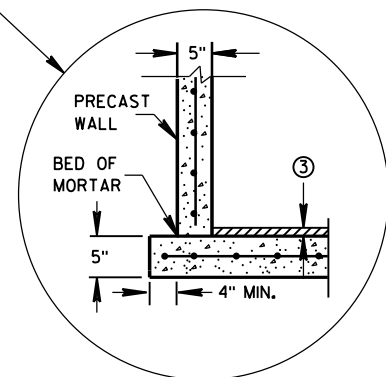
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

CATCH BASINS 2X3-FT AND 2.5X3-FT

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

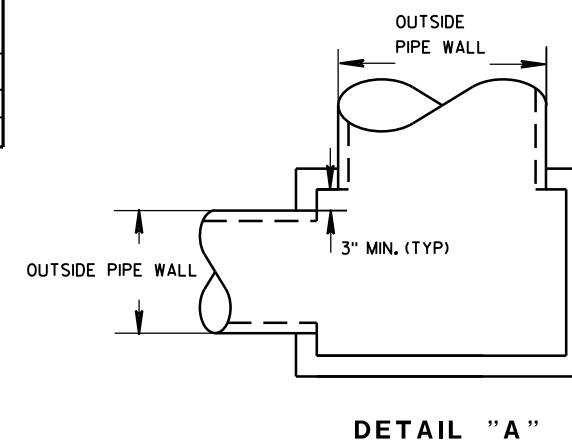
- ① FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.
- ② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.
- ③ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2" SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER MATRIX

CATCH BASIN SIZE	WIDTH ① (FT)	LENGTH ② (FT)	F	ALL H'S
2X3-FT	2	3		X
2.5X3-FT	2.5	3	X	

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2X3-FT	12	24
2.5X3-FT	18	24

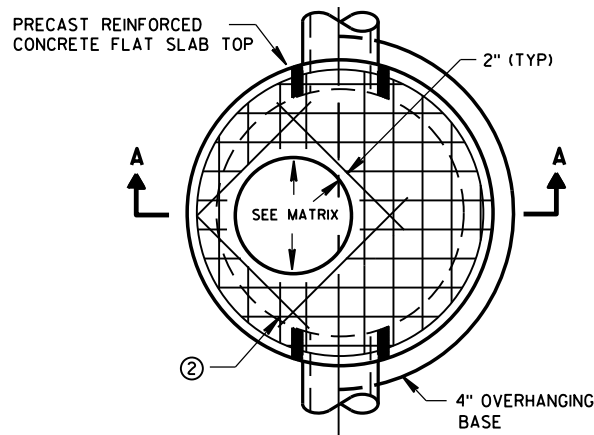


DETAIL "A"

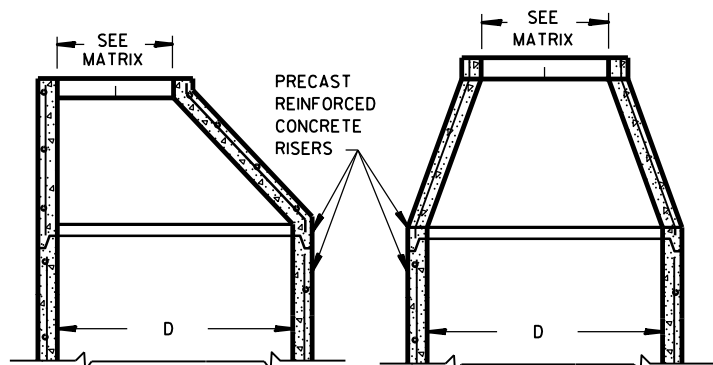
CATCH BASINS 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS UNIT SUPERVISOR
FHWA

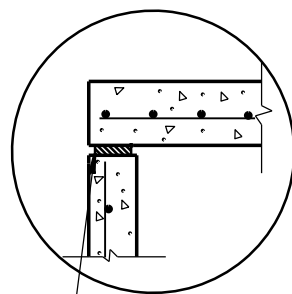


PLAN VIEW CIRCULAR OPENING

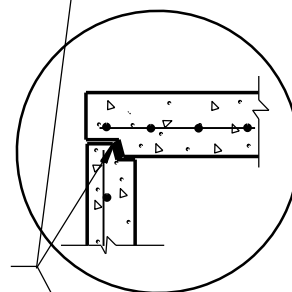


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

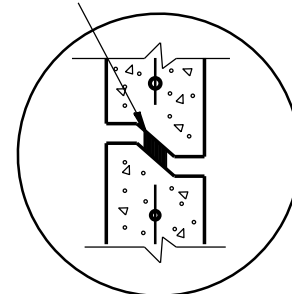
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



TOP WITH PLAIN END JOINT

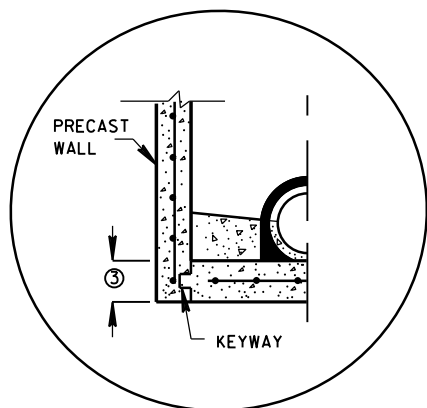


TOP WITH TONGUE AND GROOVE JOINT

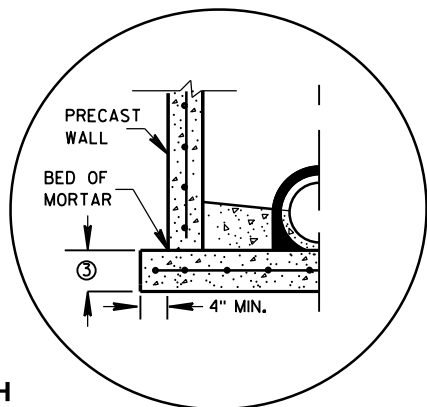


DETAIL "B"

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

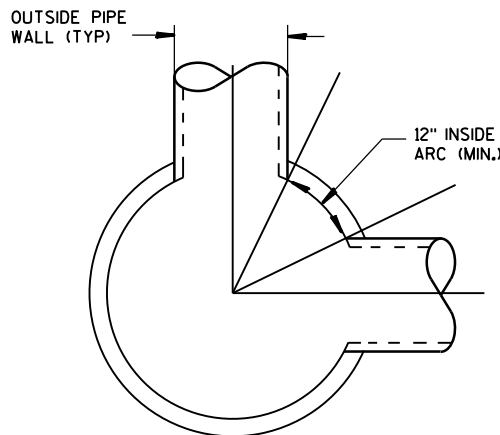


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

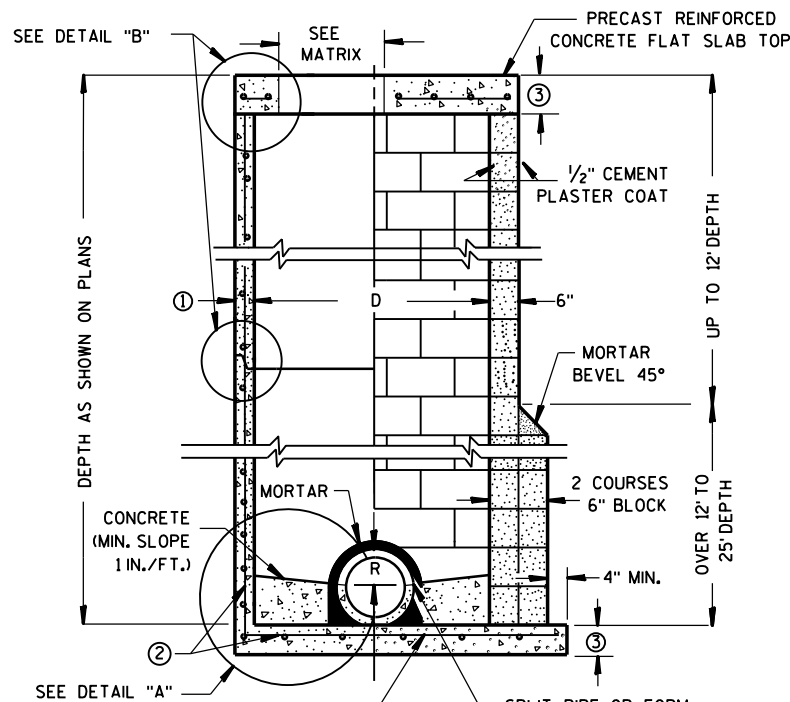


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"



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

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

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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

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

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

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

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

- ① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.
- ② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.
- ③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

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

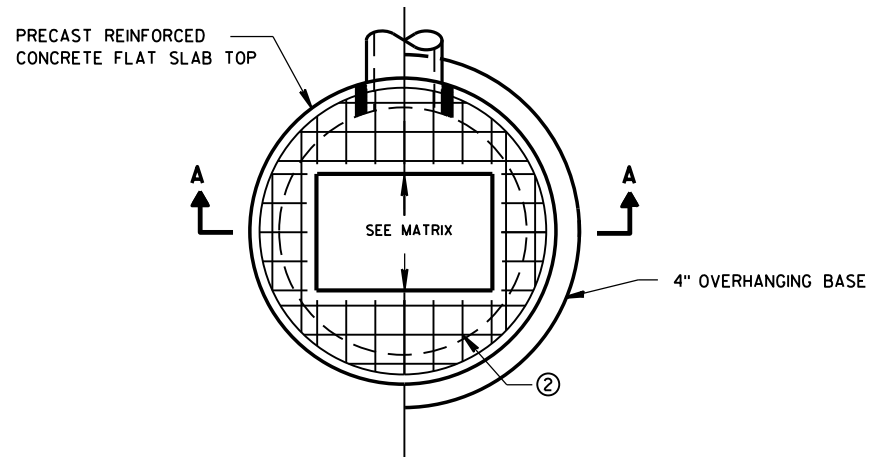
PIPE MATRIX

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

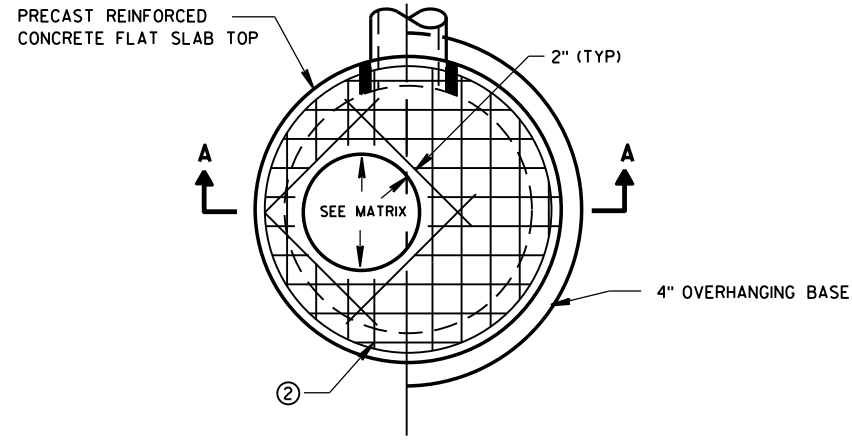
MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

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DEPARTMENT OF TRANSPORTATION

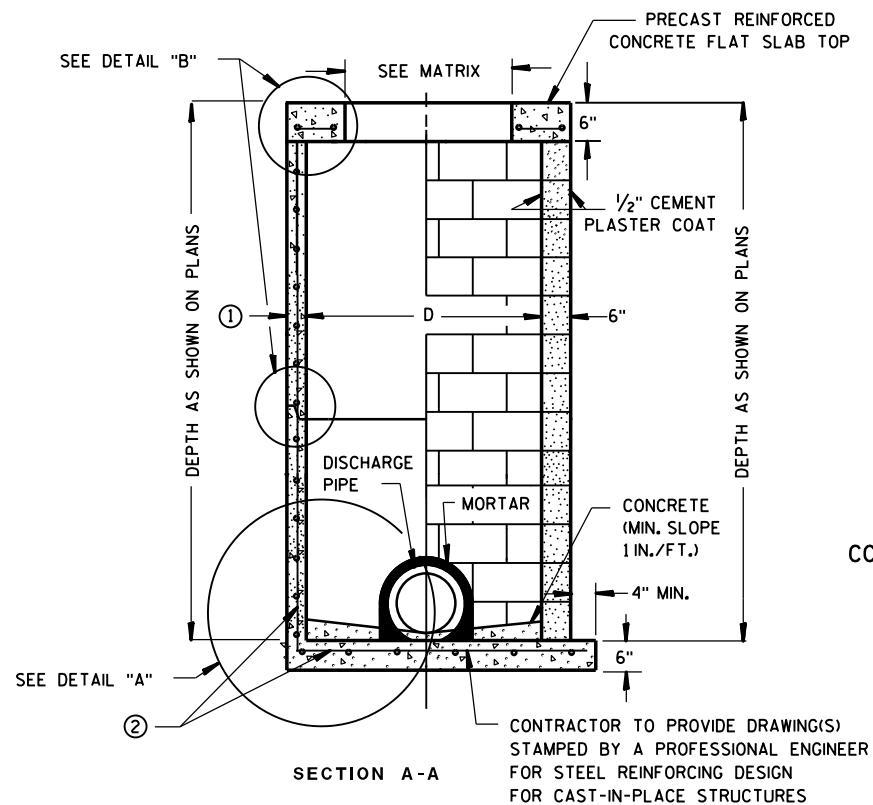
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Sept., 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERV 254



PLAN VIEW RECTANGULAR OPENING

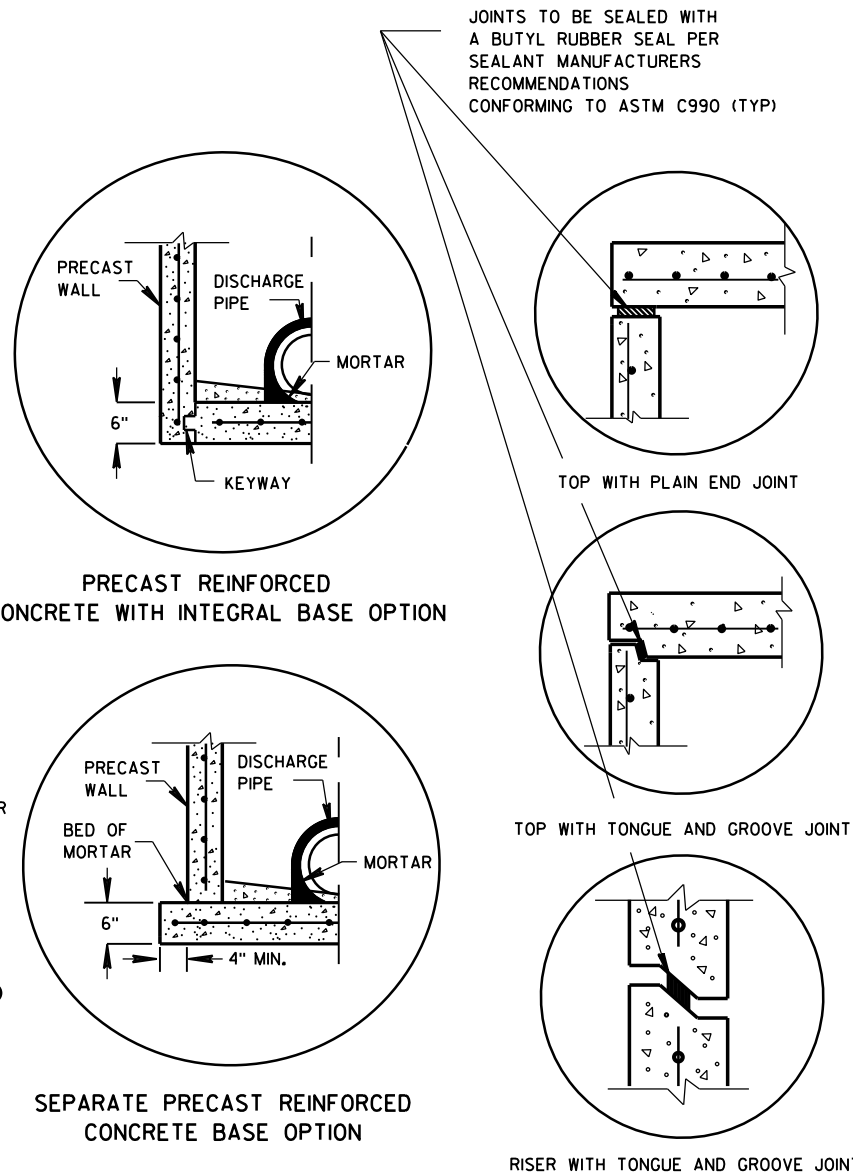


PLAN VIEW CIRCULAR OPENING



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

CIRCULAR INLETS W/ FLAT TOP



DETAIL "A"

DETAIL "B"

INLETS 3-FT AND 4-FT DIAMETER

GENERAL NOTES

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

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

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

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

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

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

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

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

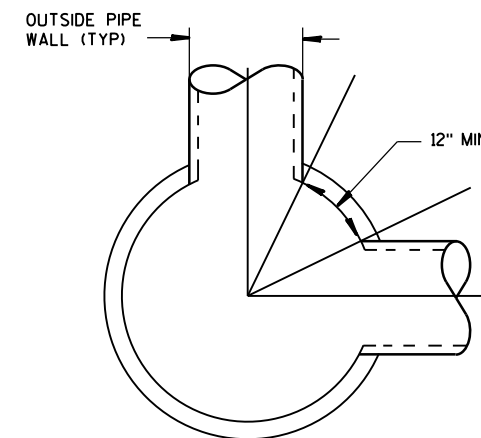
4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

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

- ① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.
- ② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

INLET COVER OPENING MATRIX

	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
INLET SIZE	OPENING SIZE (FT)											
3-FT	2 DIA.				X							X
	2X2	X	X					X		X		
4-FT	2 DIA.				X							X
	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2X3						X					
	2.5X3					X						



DETAIL "C"

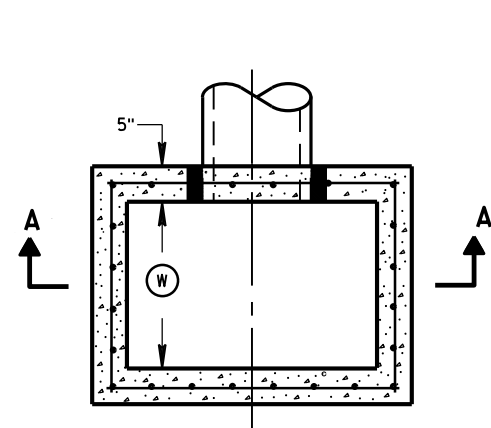
PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

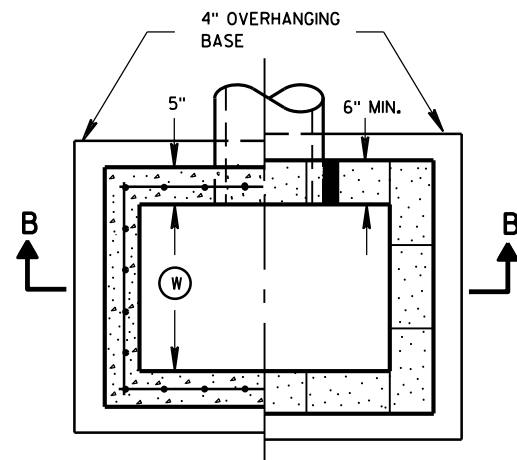
INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

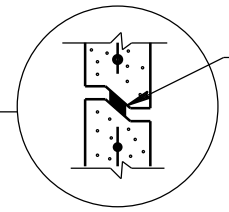
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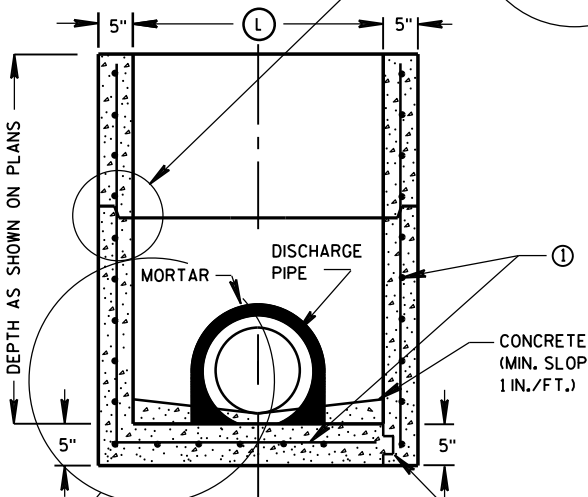
PLAN VIEW



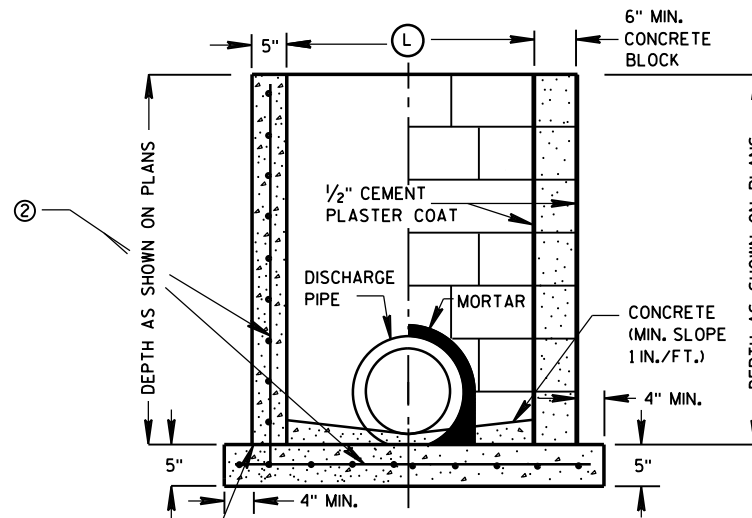
PLAN VIEW



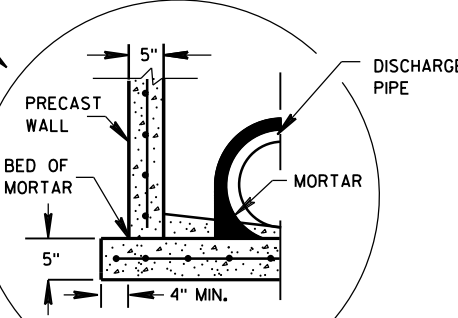
RISER JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

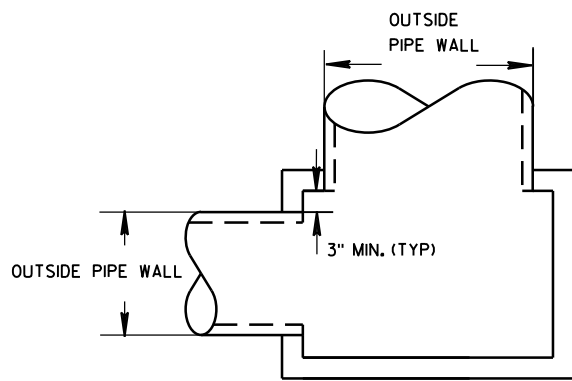
- 1 FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.
- 2 CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE	WIDTH ① (FT)	LENGTH ② (FT)	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

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



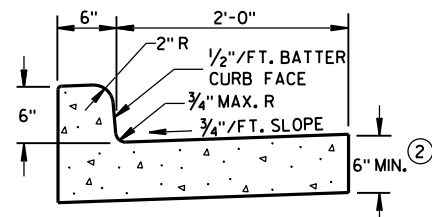
DETAIL "A"

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

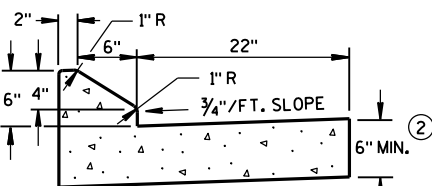
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

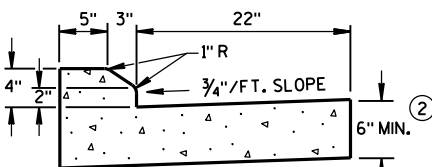
APPROVED
Sept., 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS D 256 IT
FHWA UNIT SUPERVIS



TYPES A & D ①

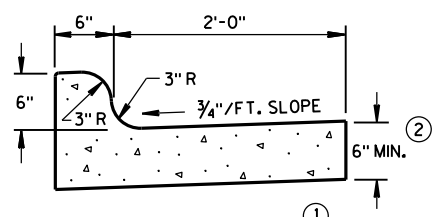


6" SLOPED CURB TYPES G & J ①



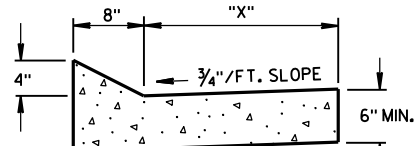
4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"



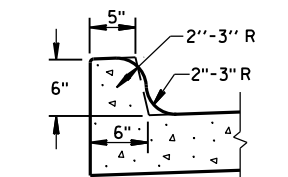
TYPES K & L ①

CONCRETE CURB & GUTTER 30"

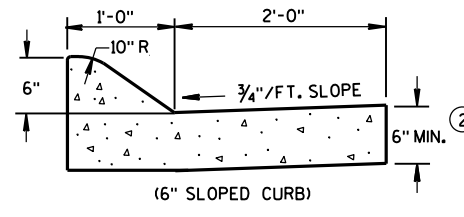


TYPES TBT & TBT ①
CONCRETE CURB & GUTTER

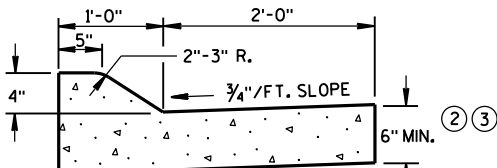
TBT & TBT	"X"
30"	22"
36"	28"



OPTIONAL CURB SHAPE
FOR TYPES K & L ①

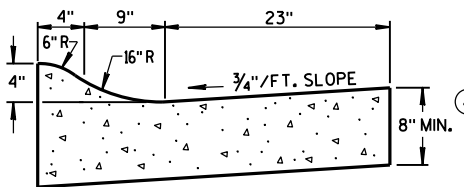


(6" SLOPED CURB)



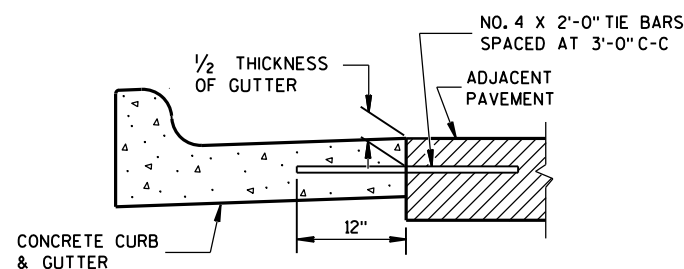
(4" SLOPED CURB)

TYPES A & D ①

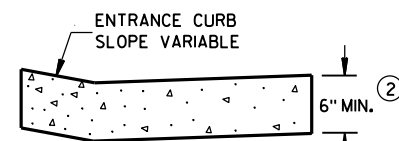


4" SLOPED CURB TYPES R & T ① ⑤

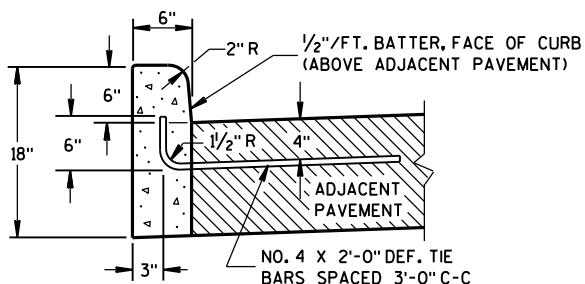
CONCRETE CURB & GUTTER 36"



TYPICAL TIE BAR LOCATION ①

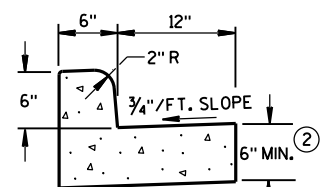


DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

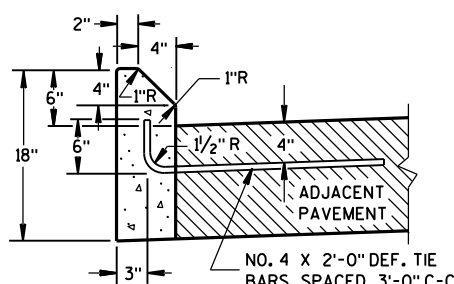


TYPES A & D ①

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.

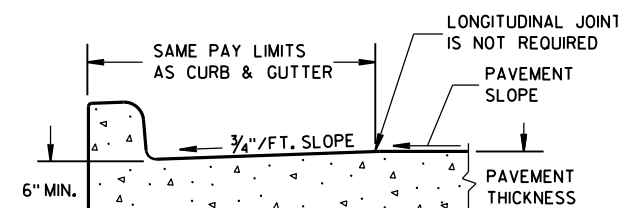
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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.

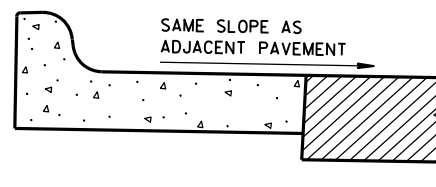
WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

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

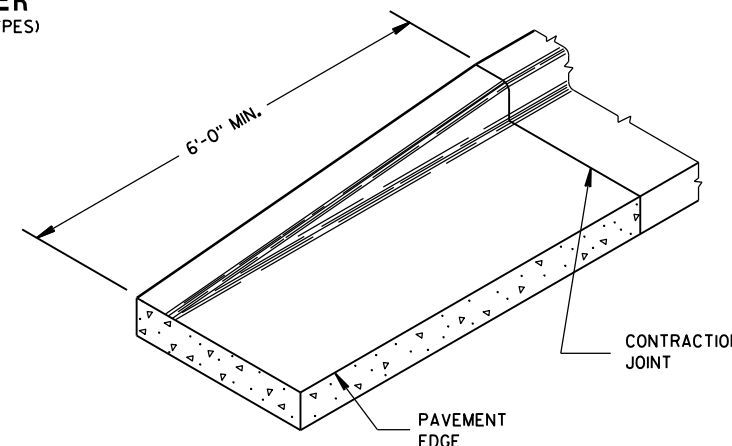
- TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBT.
- THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.
- 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.
- THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



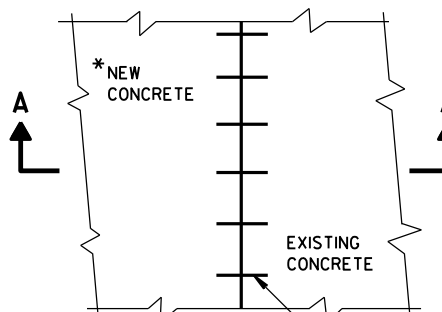
PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



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



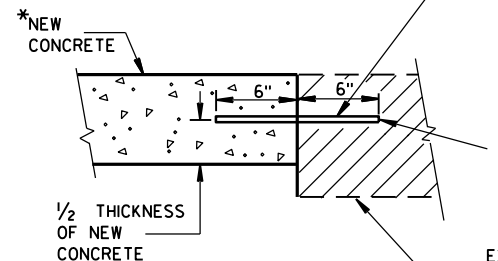
END SECTION CURB & GUTTER



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, 2016

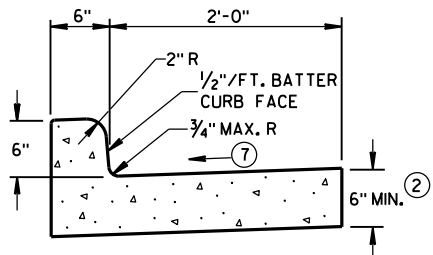
DATE

FHWA

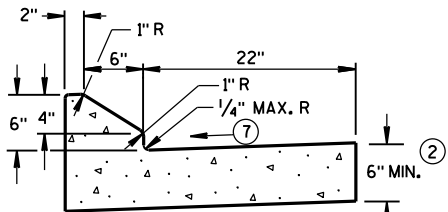
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

257

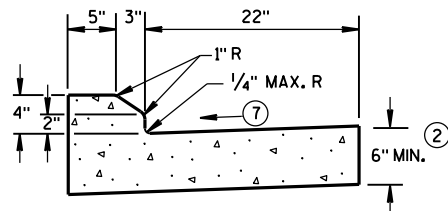
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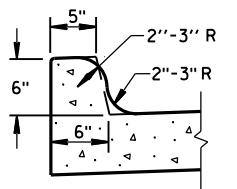
TYPES A^① & D



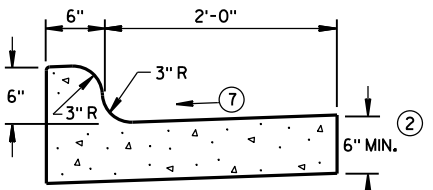
6" SLOPED CURB TYPES G^① & J



4" SLOPED CURB TYPES G^① & J

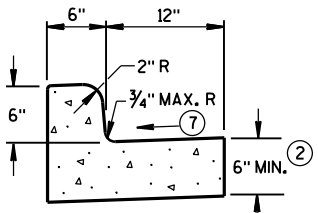


TYPES K^① & L
(OPTIONAL CURB SHAPE)



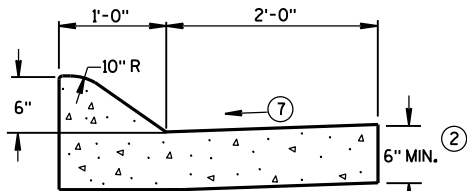
TYPES K^① & L

CONCRETE CURB & GUTTER 30"

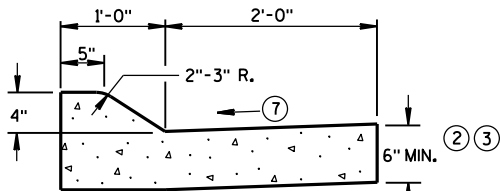


TYPES A^① & D

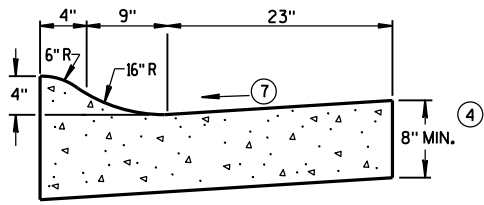
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A^① & D

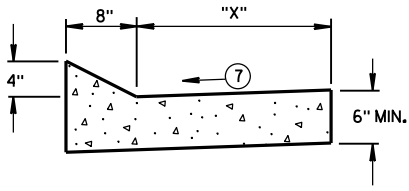


4" SLOPED CURB TYPES A^① & D



4" SLOPED CURB TYPES R^① & T^⑤

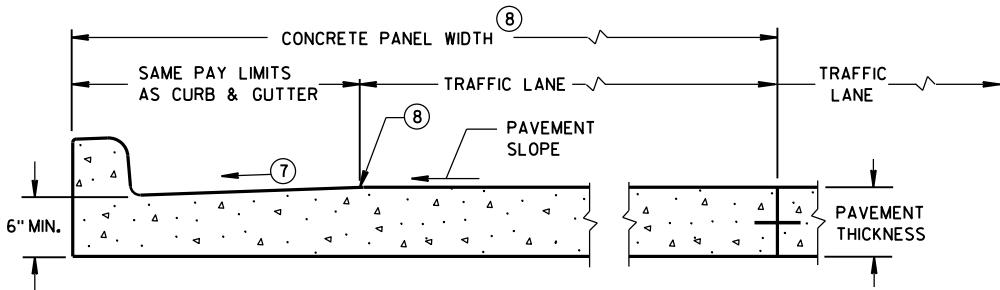
CONCRETE CURB & GUTTER 36"



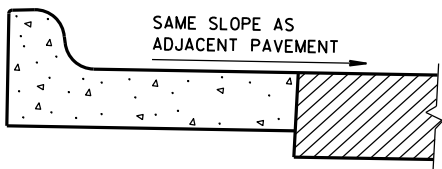
TYPES TBT & TBTT^①

CONCRETE CURB & GUTTER

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



PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



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

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.

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

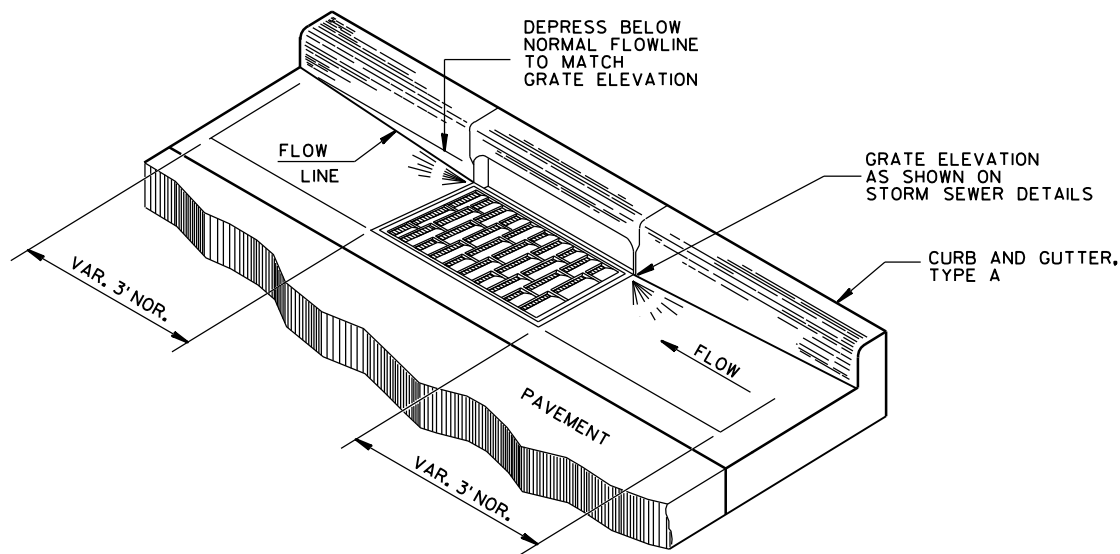
PAVEMENT THICKNESS
AND MAXIMUM CONCRETE
PANEL WIDTH TABLE

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

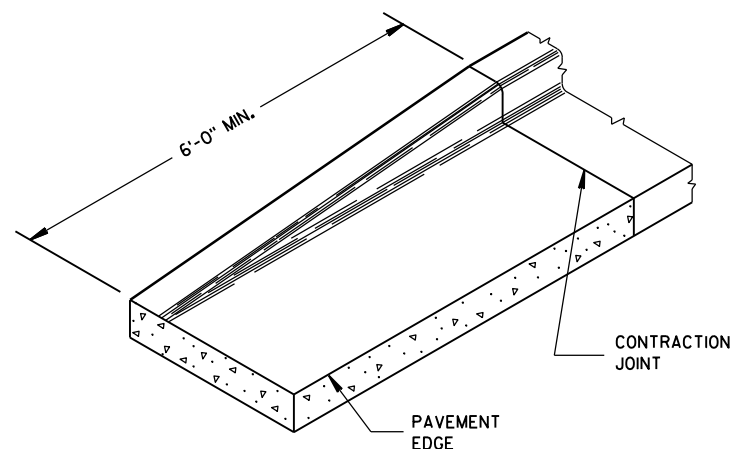
* BIKE LANE IS NOT SHOWN.

CONCRETE CURB & GUTTER

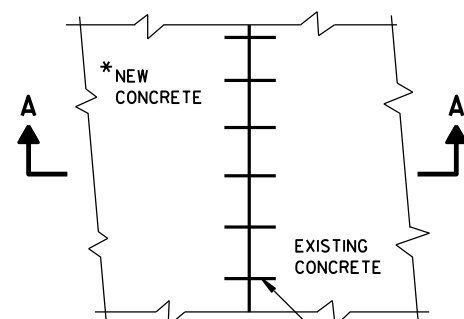
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



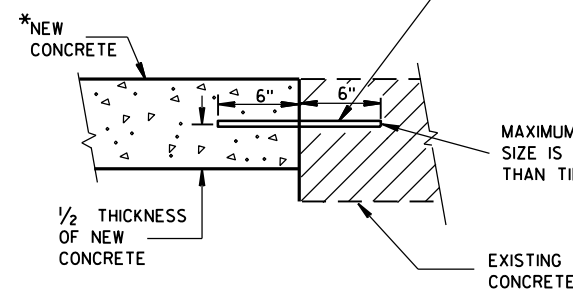
DETAIL OF CURB AND GUTTER AT INLETS
(TYPE H INLET COVER SHOWN)



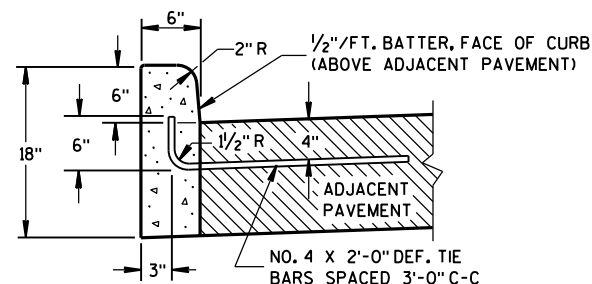
END SECTION CURB & GUTTER



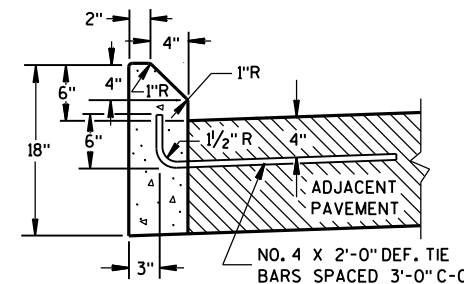
PLAN VIEW



SECTION A-A
TIE BARS DRILLED
INTO EXISTING PAVEMENT



TYPES A^① & D

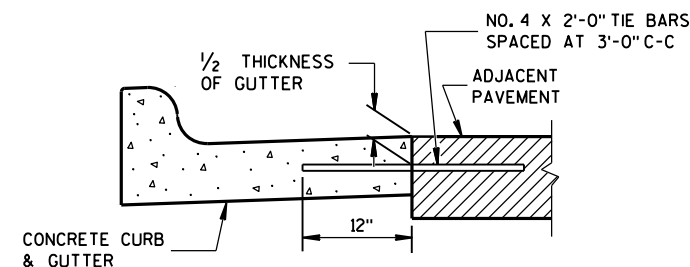


TYPES G^① & J

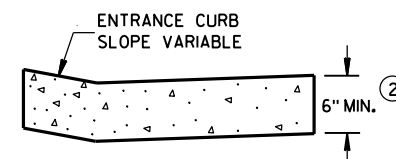
GENERAL NOTES

- 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.
- 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 TBTT.
 - ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
 - ③ REFER TO SDD 8D18 AND SDD 8D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

CONCRETE CURB

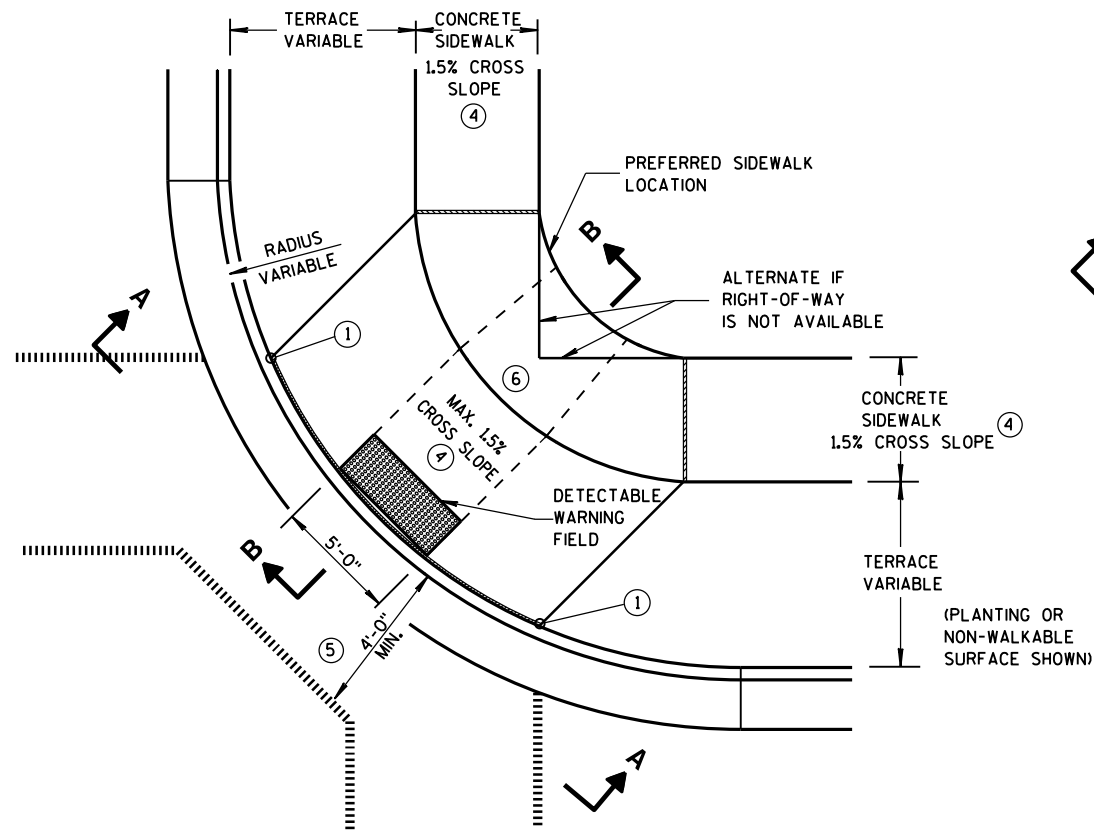


TYPICAL TIE BAR LOCATION^①

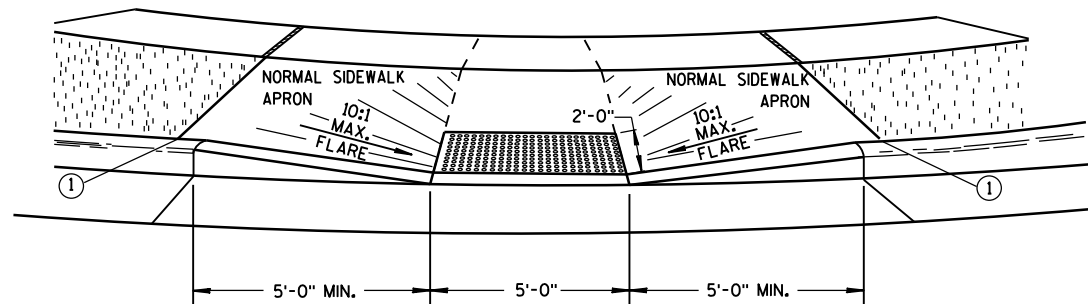


DRIVEWAY ENTRANCE CURB^⑨
(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
APPROVED June, 2017 DATE	/S/ Rodney Taylor ROADWAY STANDARDS 259 UNIT SUPERVISOR	ENT	
FHWA			

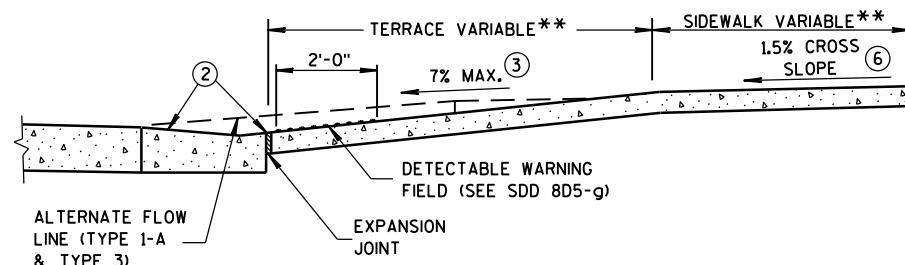


**PLAN VIEW
TYPE 1 RAMP**
(CENTER OF CORNER RADIUS)

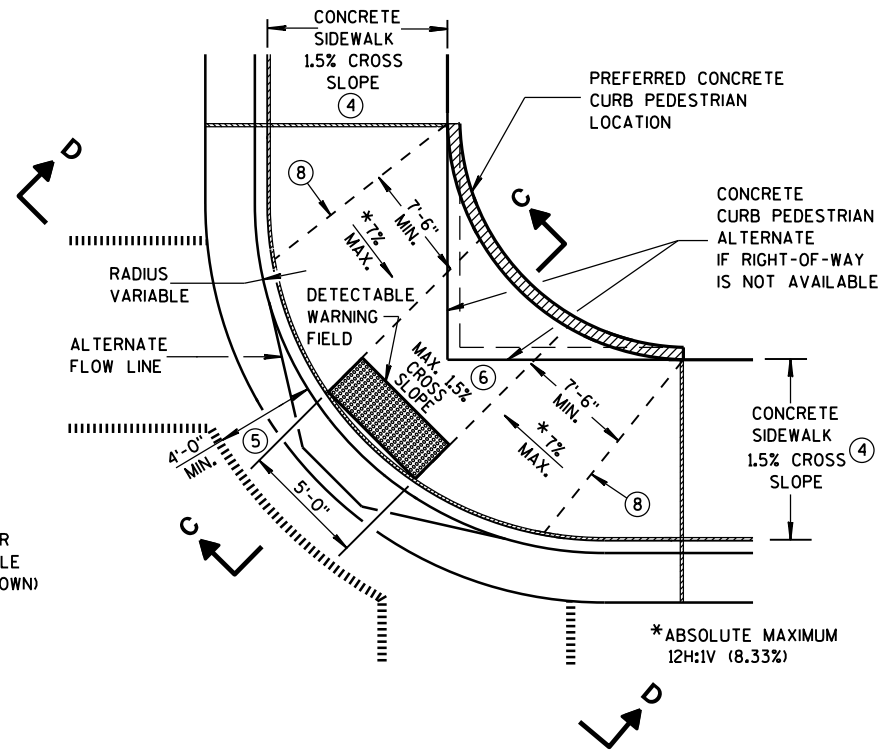


VIEW A-A

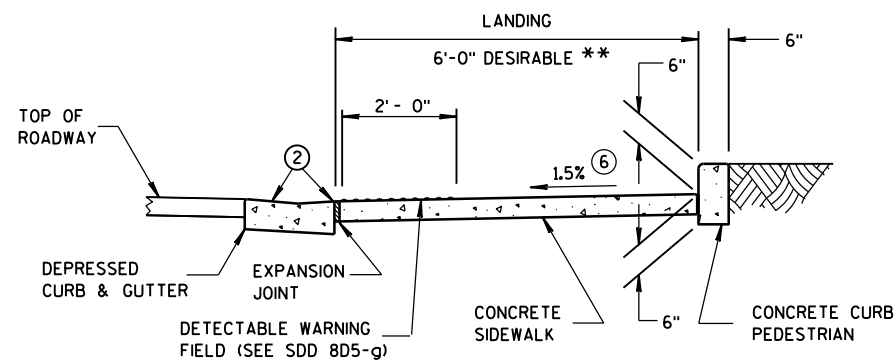
** WIDTH SHOWN ELSEWHERE
IN THE PLANS



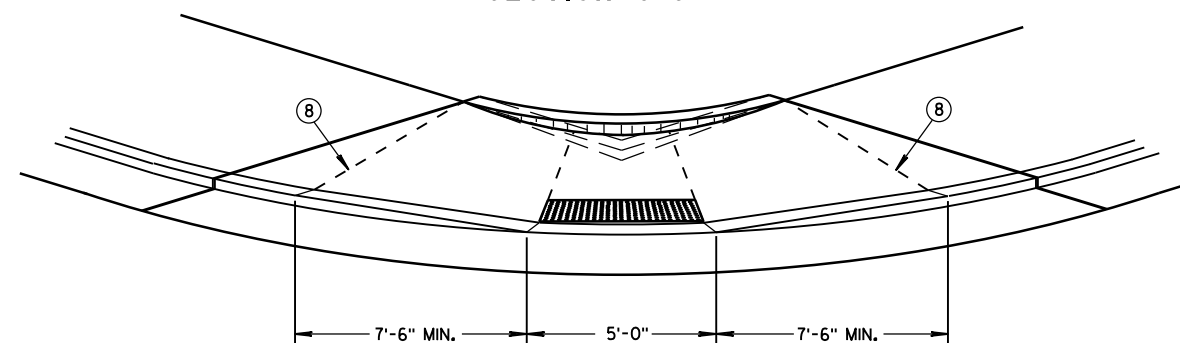
SECTION B-B



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



SECTION C-C



VIEW D-D

GENERAL NOTES

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

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

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

TYPE 1 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.

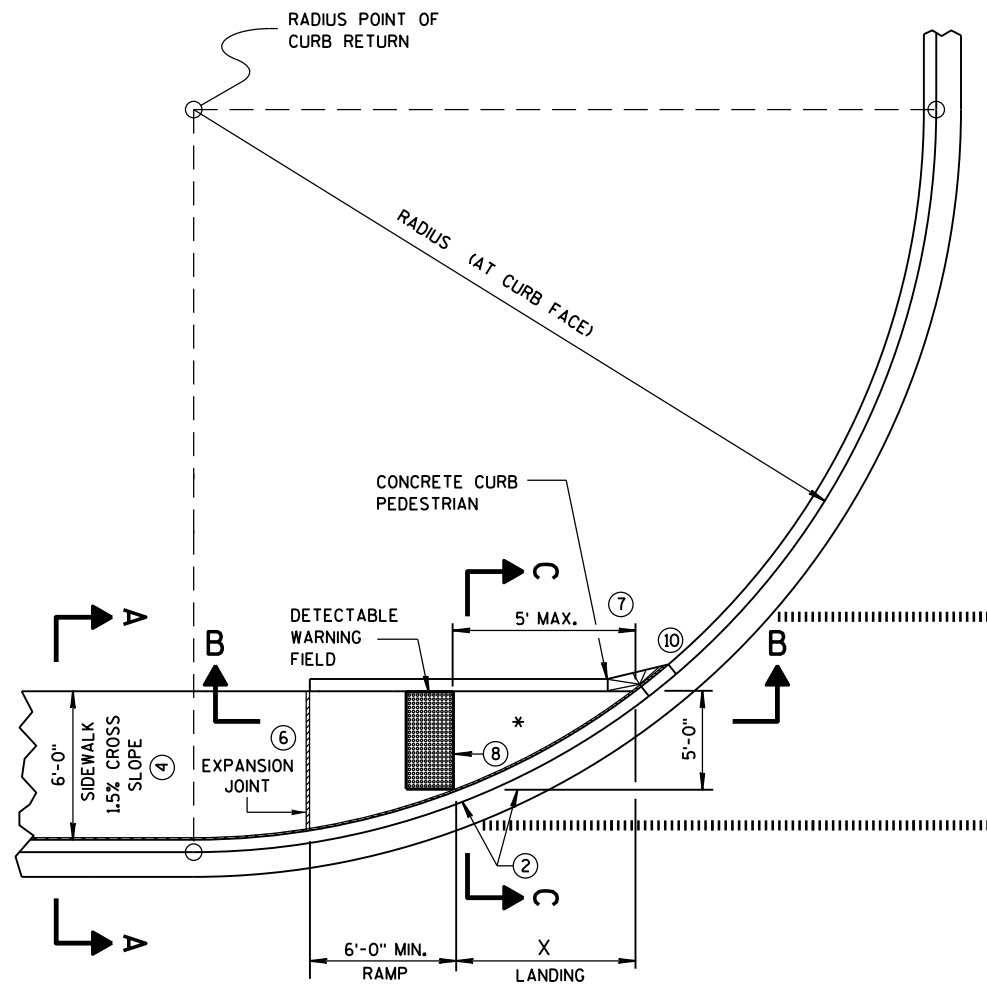
- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ 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.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

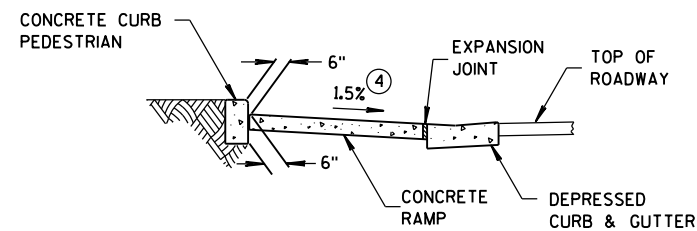
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 260

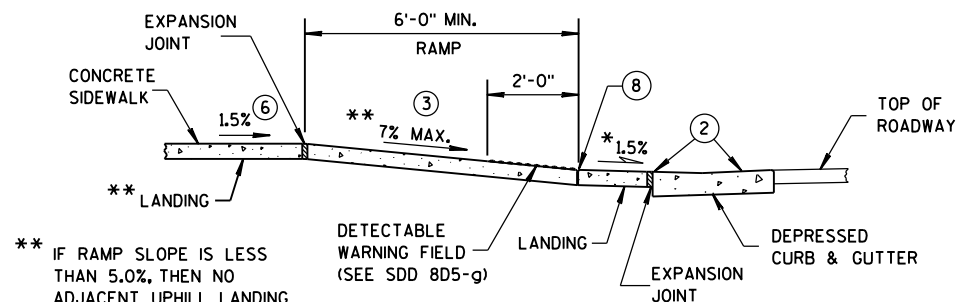


CURB RAMP TYPE 4A
PLAN VIEW



SECTION C-C FOR TYPE 4A

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

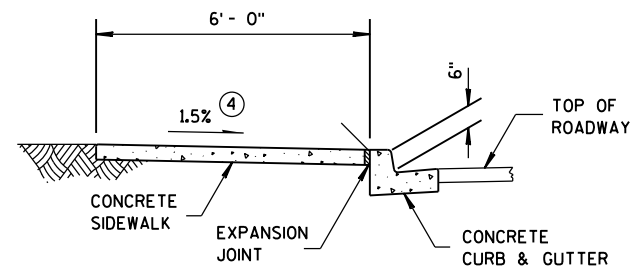


SECTION B-B FOR TYPE 4A

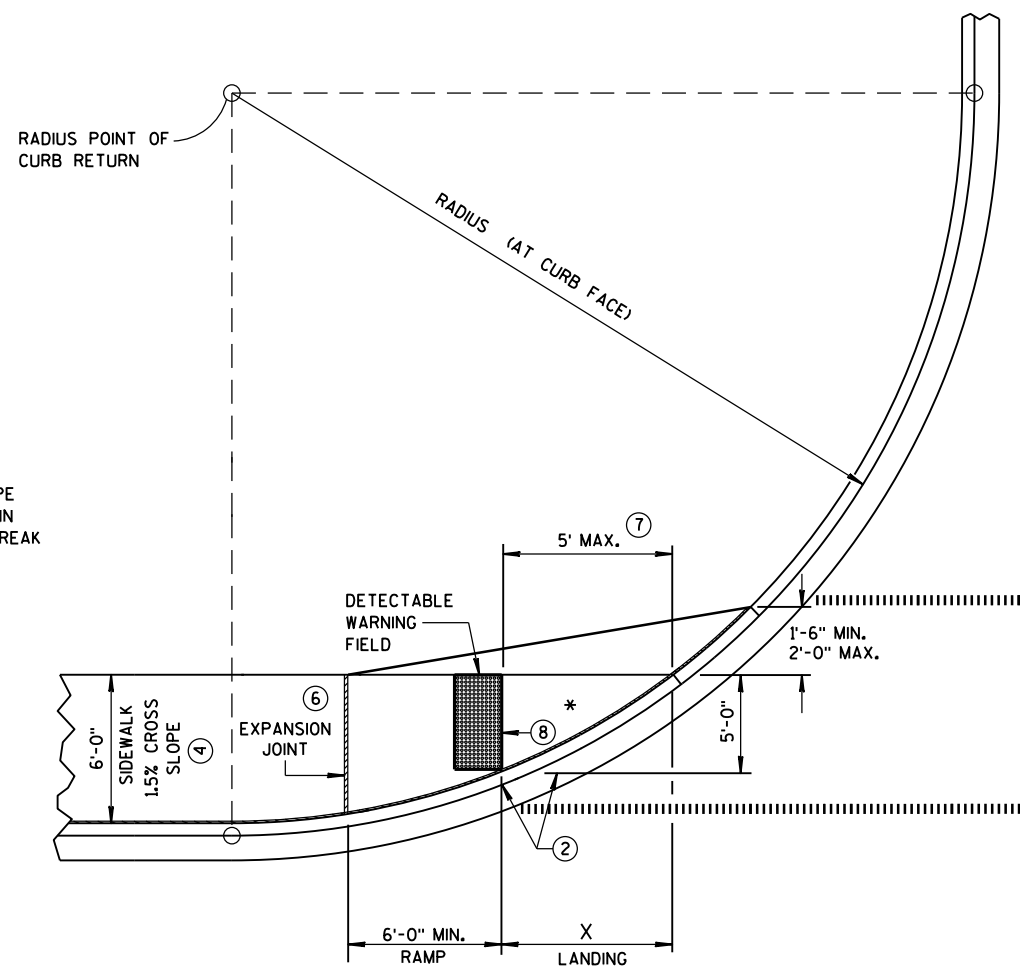
** IF RAMP SLOPE IS LESS
THAN 5.0%, THEN NO
ADJACENT UPHILL LANDING
IS REQUIRED

RADIUS (AT CURB FACE)	X
10 FEET	4'-7"
15 FEET	6'-5½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A



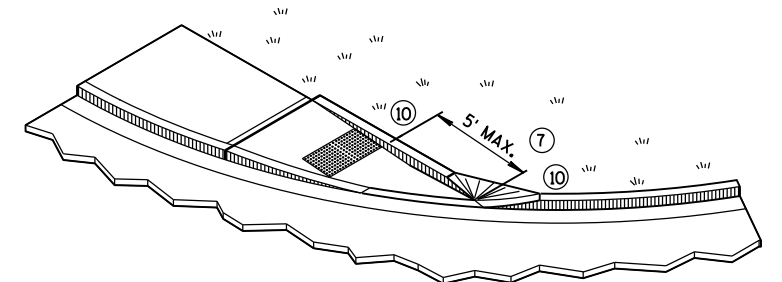
CURB RAMP TYPE 4A1
PLAN VIEW

GENERAL NOTES

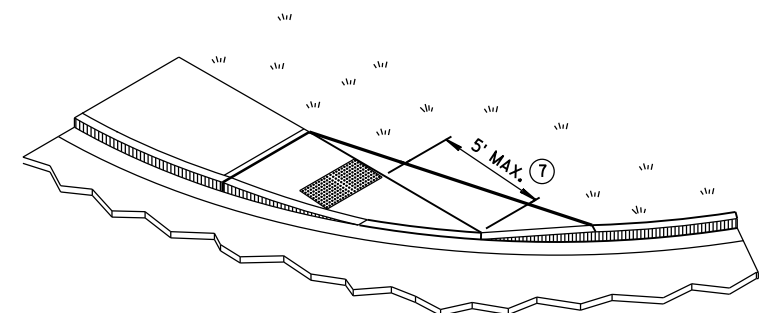
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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 LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ 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.
- ⑦ WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- ⑩ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW FOR TYPE 4A



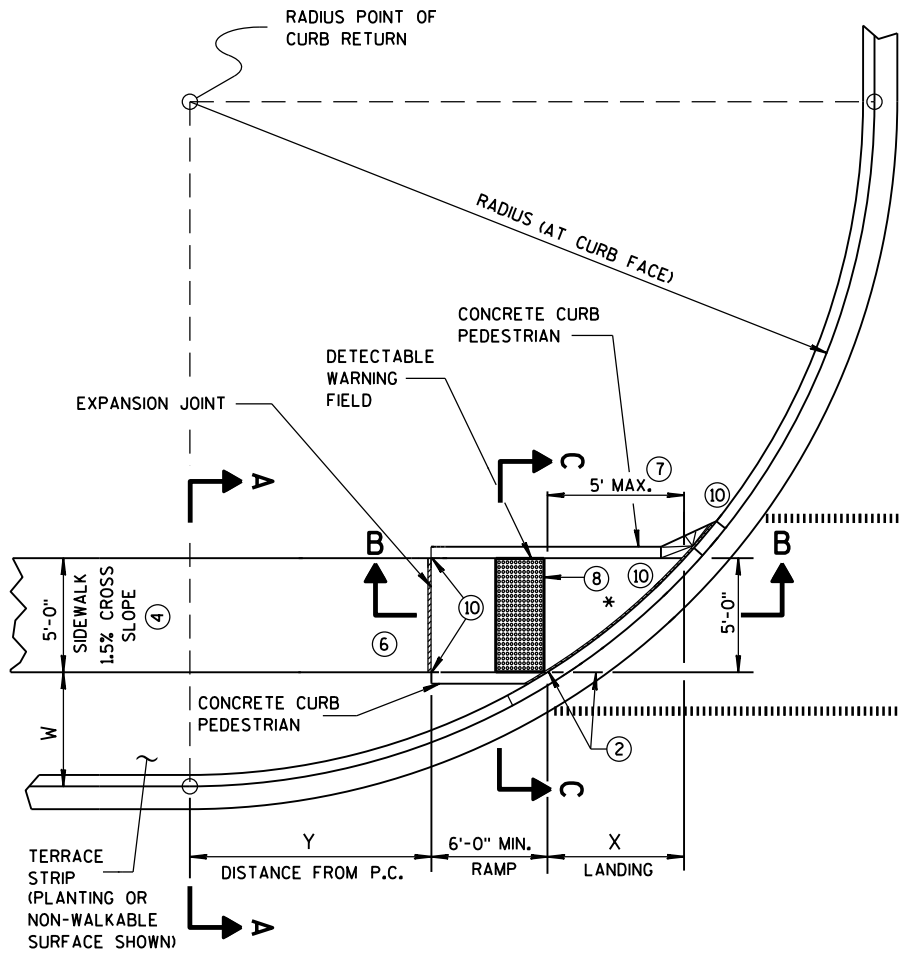
ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

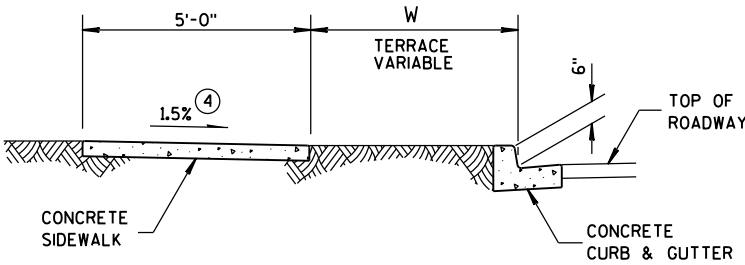
- ½" EXPANSION JOINT-SIDEWALK
- - - - CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 4A AND 4A1

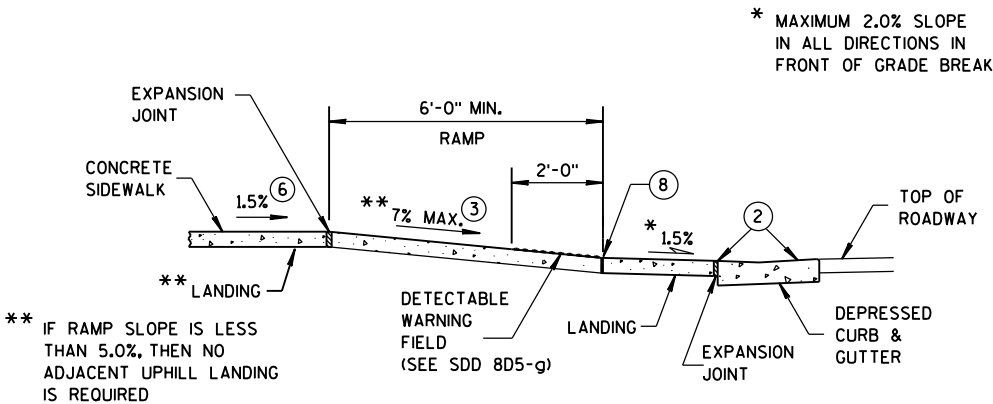
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 262



**CURB RAMP TYPE 4B
PLAN VIEW**



SECTION A-A FOR TYPE 4B



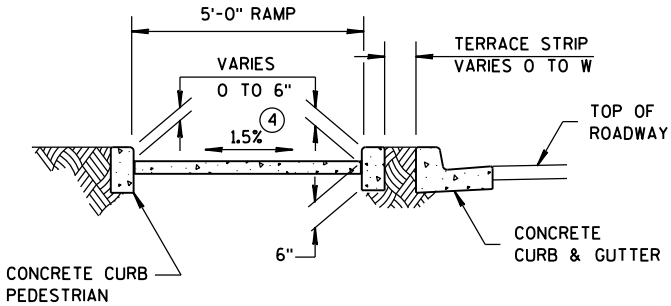
SECTION B-B FOR TYPE 4B

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

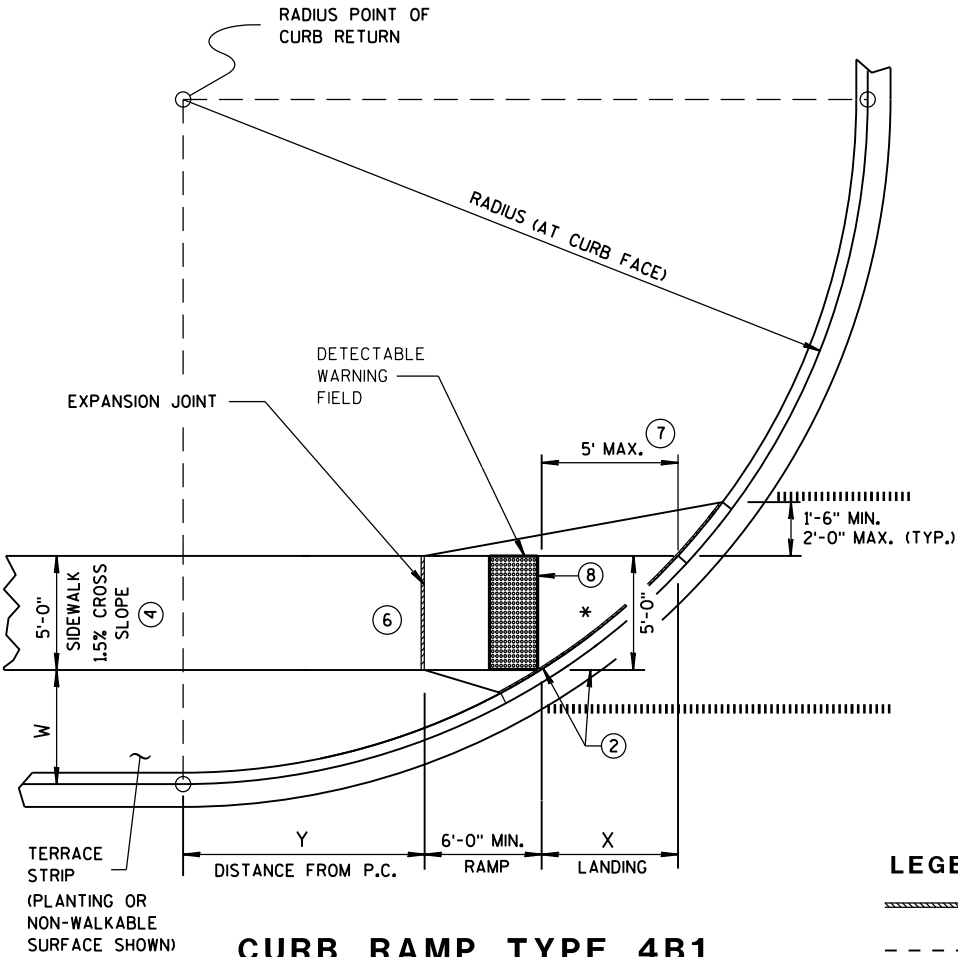
INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH

GENERAL NOTES

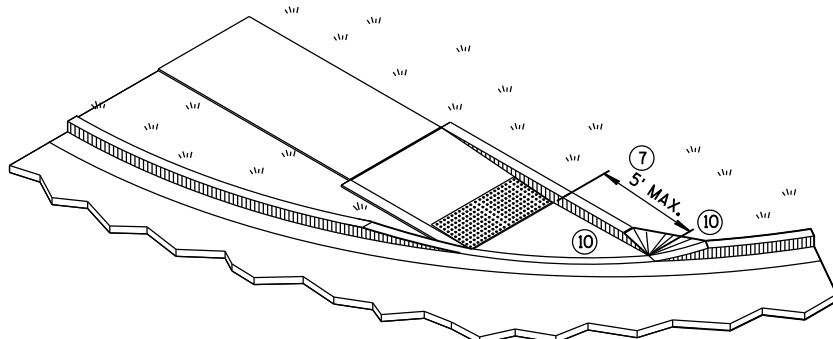
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS. DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.
- WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



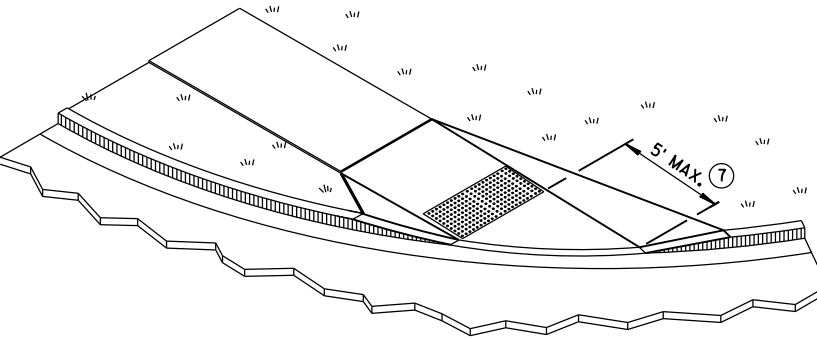
SECTION C-C FOR TYPE 4B



**CURB RAMP TYPE 4B1
PLAN VIEW**



ISOMETRIC VIEW FOR TYPE 4B



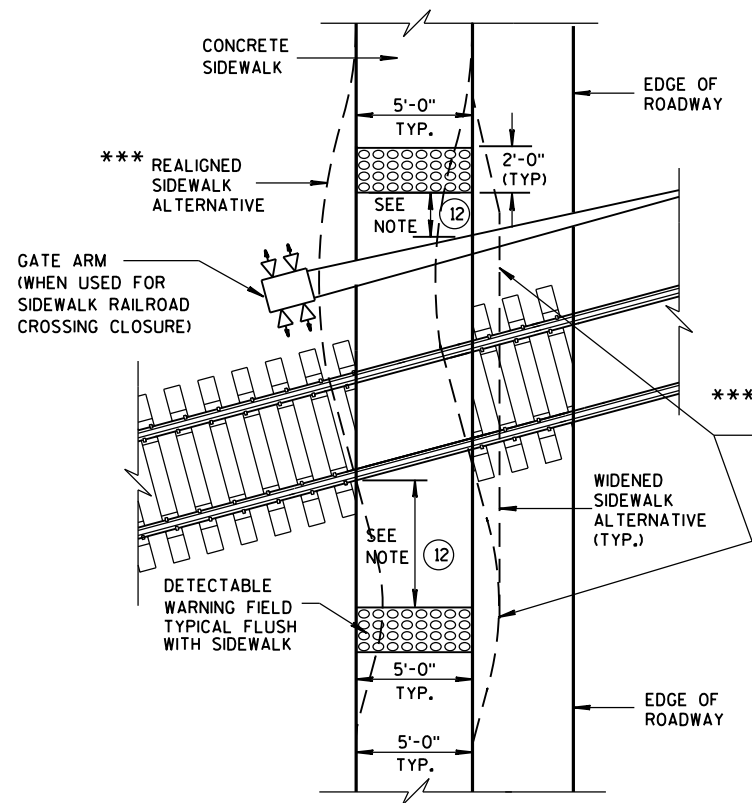
ISOMETRIC VIEW FOR TYPE 4B1

LEGEND

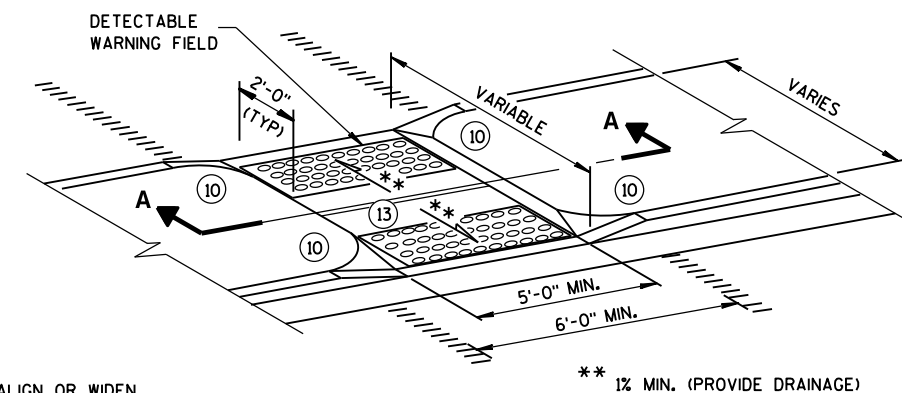
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

**CURB RAMPS
TYPE 4B AND 4B1**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



TYPE 8
DETECTABLE WARNINGS
AT RAILROAD CROSSING



MEDIAN ISLAND
NON-ELEVATED PEDESTRIAN CROSSING
TYPE 5

*** DETAILS TO BE DETERMINED BY DESIGNER

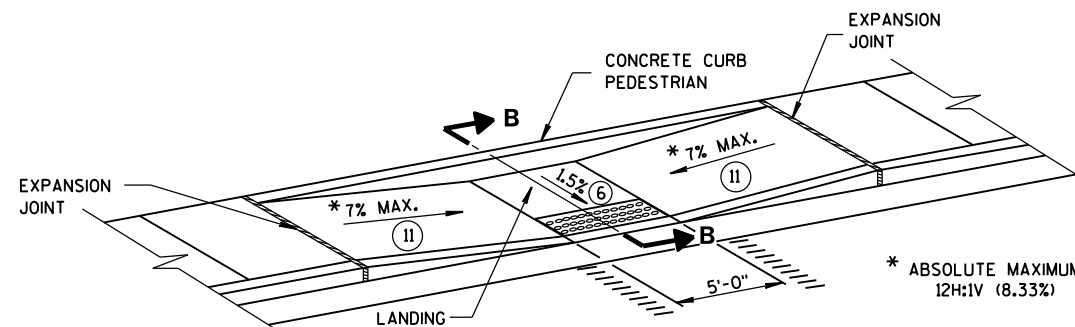
GENERAL NOTES

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

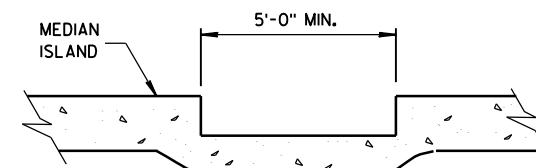
SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ 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.
- 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 15 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- ⑬ DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STREET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2-FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

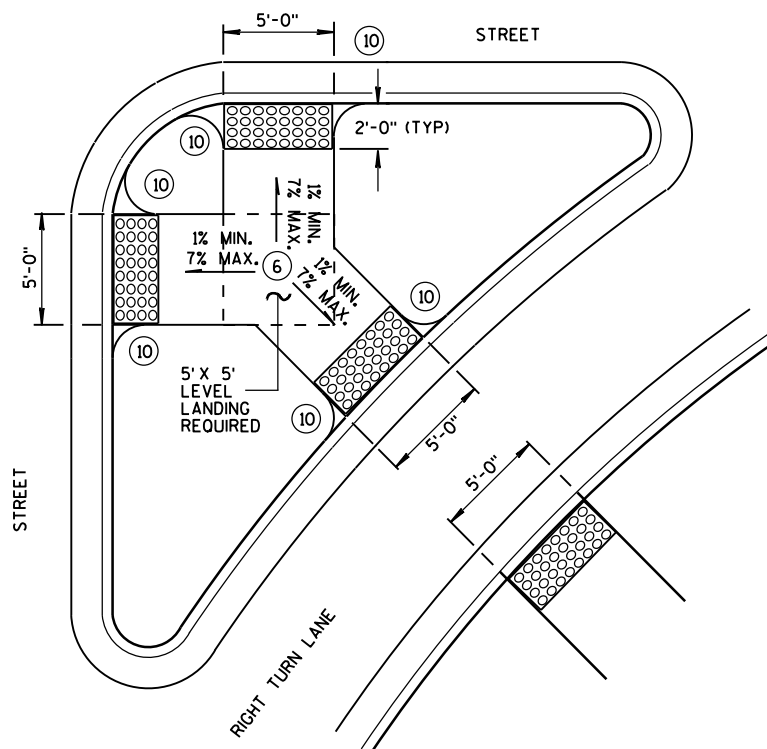


MID-BLOCK CROSSING
TYPE 7A

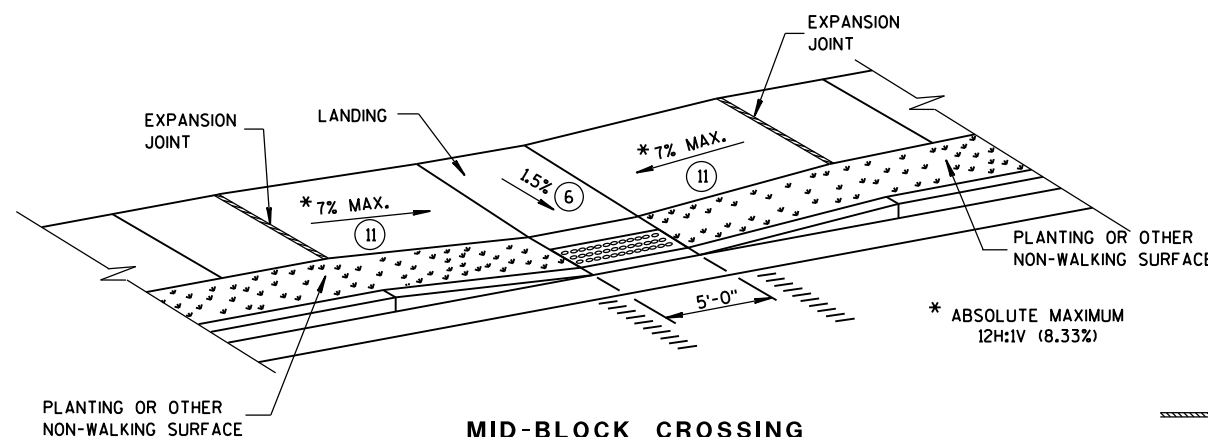


SECTION A-A

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

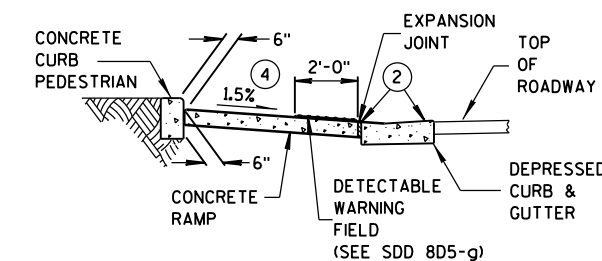


TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

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



SECTION B-B

LEGEND

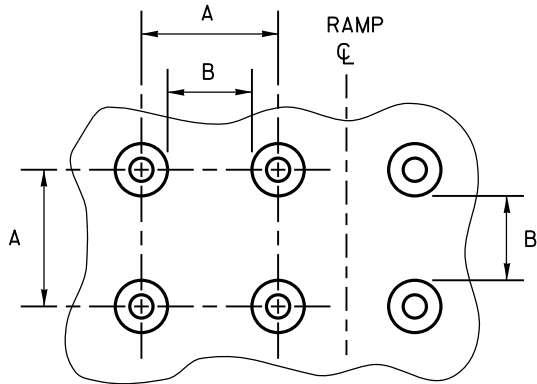
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

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

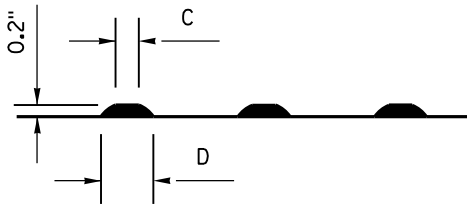
STATE OF WISCONSIN
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	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

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

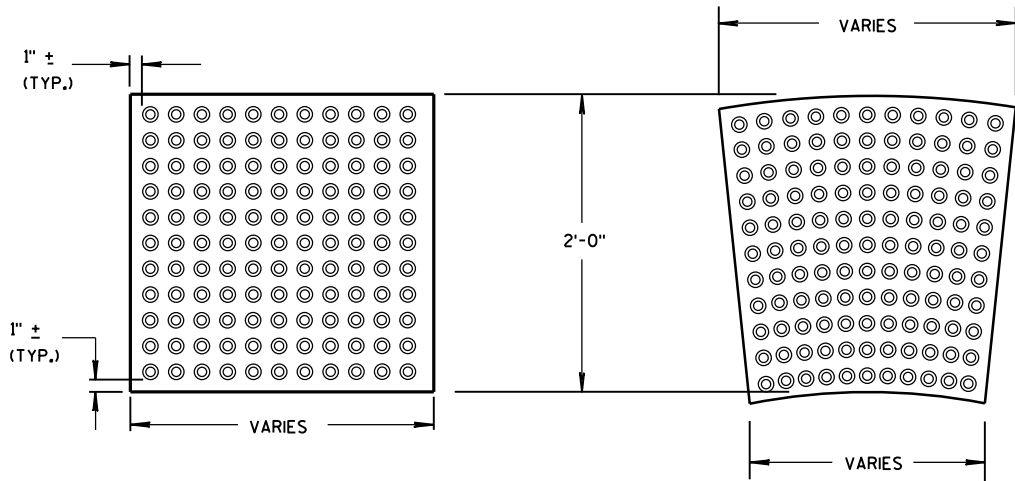


PLAN VIEW



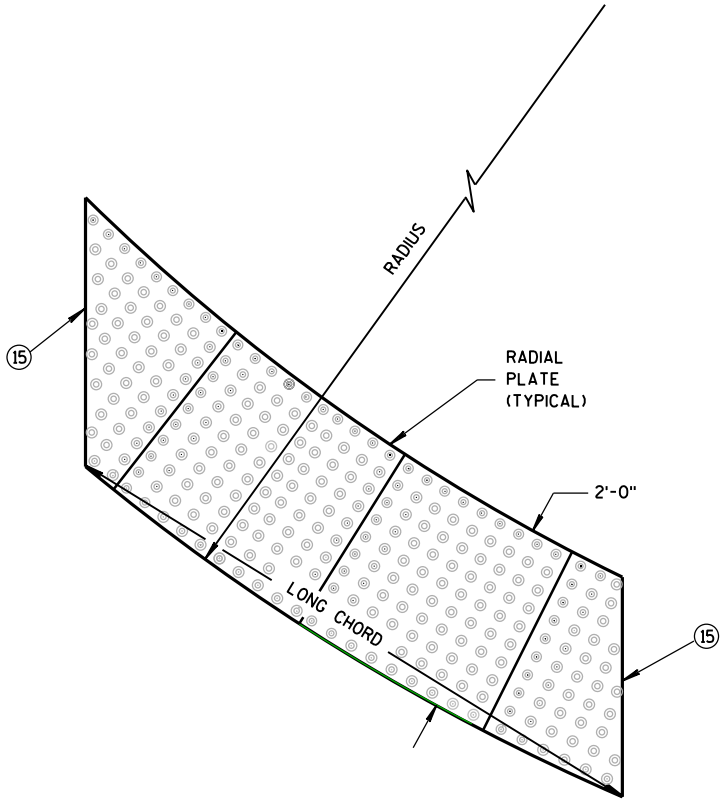
ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



RECTANGULAR
PLATES
DETECTABLE WARNING FIELDS (TYPICAL)

PLAN VIEW



RADIAL DETECTABLE
WARNING FIELD ATTRIBUTES

GENERAL NOTES

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

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

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

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

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

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

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

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

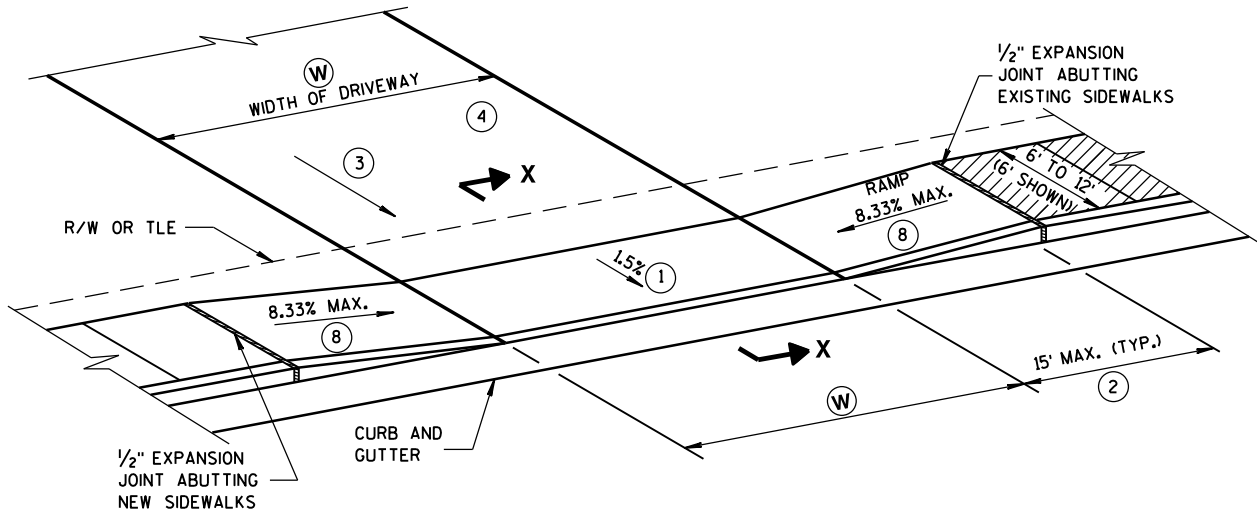
CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

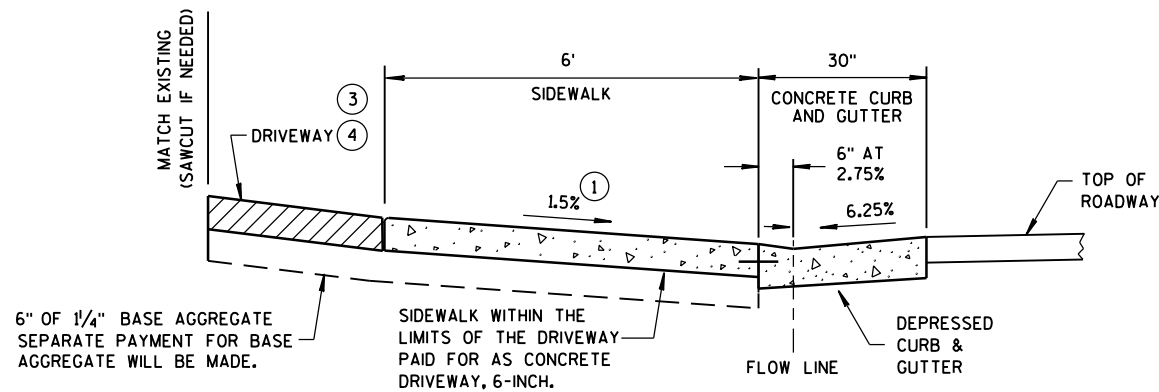
APPROVED
June, 2017 /S/ Rodney Taylor
DATE ROADWAY STANDARDS UNIT SUPERV ENT
FHWA 265

GENERAL NOTES

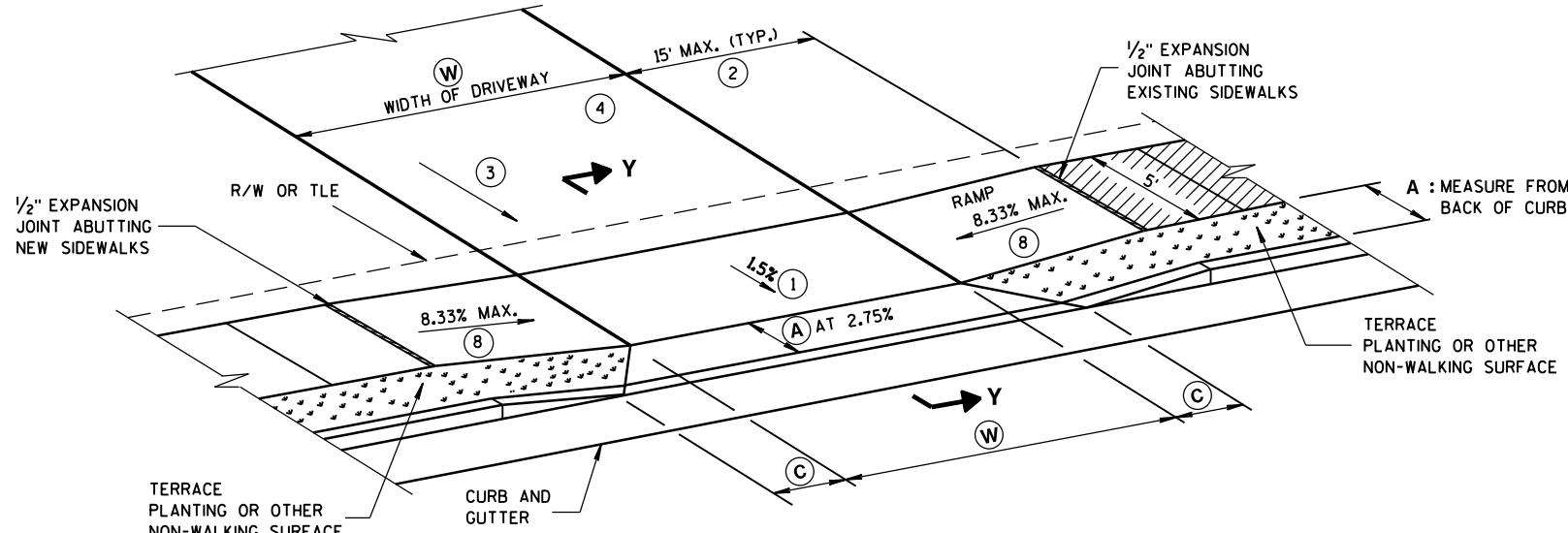
- 1 CONSTRUCTION TOLERANCE OF 0.5% ± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.
- 2 THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY.
- 3 DRIVEWAY SLOPES: DESIRABLE MAXIMUM
10.5% UP AWAY FROM SIDEWALK (SAG)
8.5% DOWN AWAY FROM SIDEWALK (CREST)
ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG
- 4 DRIVEWAY TYPES
 - 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
 - 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
 - 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES)
- 5 PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.
- 6 W IS SHOWN ON PLAN AND PROFILE SHEETS.
- 7 OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.
- 8 SLOPE SIDEWALK RAMP TOWARD APRON AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.



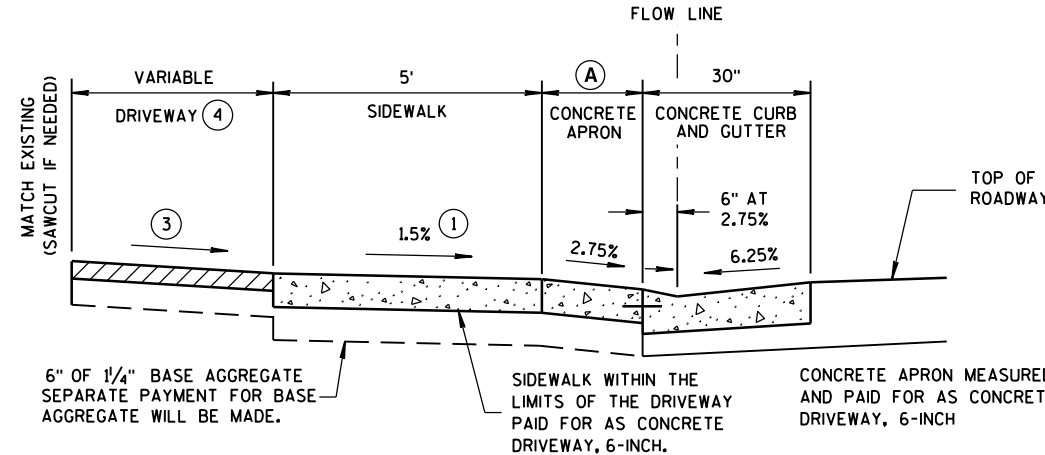
TYPE X
SIDEWALK ABUTS CURB & GUTTER
TERRACE VARIES 0 TO 3 FEET



SECTION X-X



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



NOTE: SIDEWALK MAY BE DEPRESSED IN DRIVEWAY AREAS

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

TABLE Y

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

NOT TO SCALE

DRIVEWAY AND SIDEWALK
RAMPS
TYPES X & Y

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December, 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS UNIT SUPERV 266 ENT
FHWA

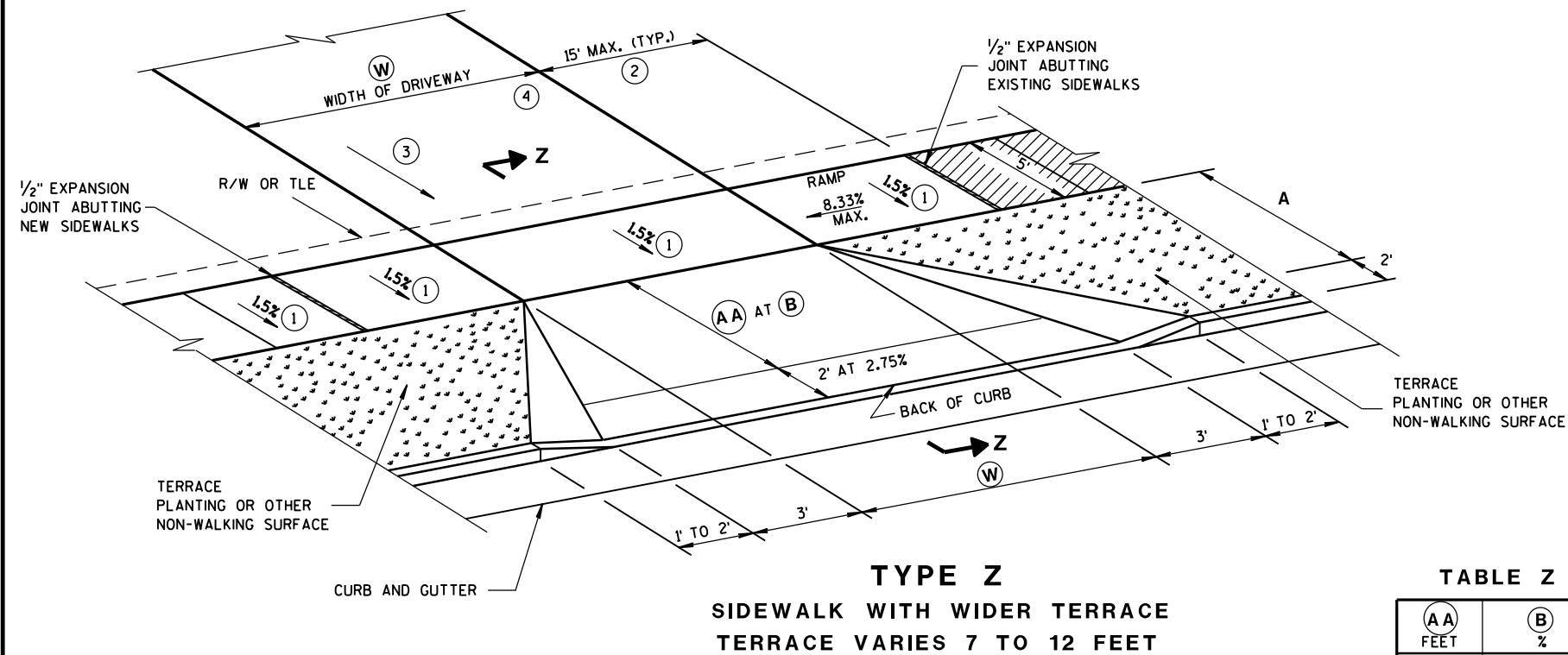
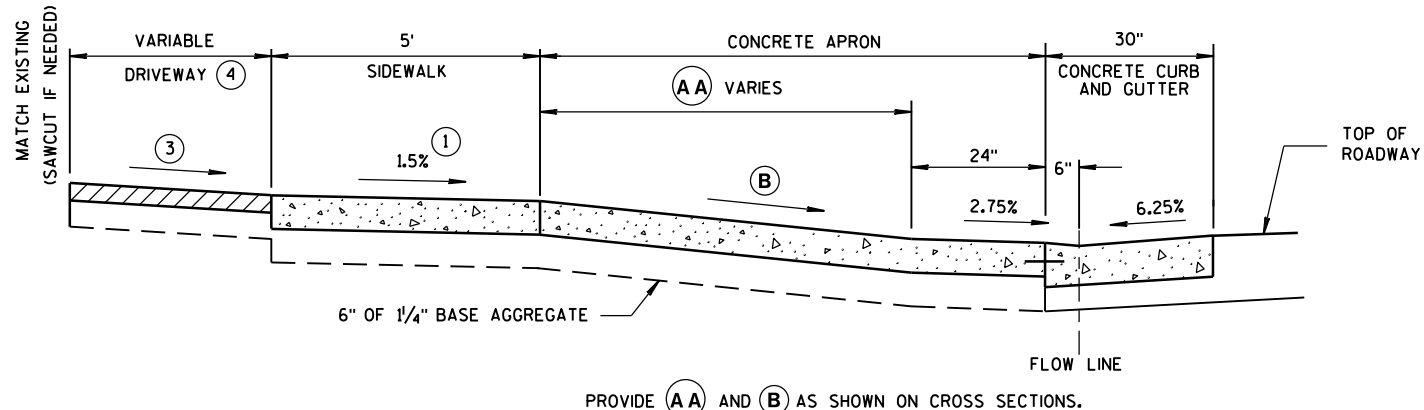


TABLE Z

(A) FEET	(B) %
4.5'	11.5%
5.5'	9-11.5%
6.5'	8-11.5%
7.5'	7-11.5%
8.5'	6-11.5%
9.5'	5-11.5%



NOTE: SIDEWALK MAY BE DEPRESSED IN DRIVEWAY AREAS FOR B VALUES NOT SHOWN IN TABLE Z.
SIDEWALK WITHIN THE LIMITS OF THE DRIVEWAY PAID FOR AS CONCRETE DRIVEWAY, 6-INCH.
SEPARATE PAYMENT FOR BASE AGGREGATE WILL BE MADE.

PROVIDE (A) AND (B) AS SHOWN ON CROSS SECTIONS.

CONCRETE APRON MEASURED AND PAID FOR AS CONCRETE DRIVEWAY, 6-INCH

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

GENERAL NOTES

- CONSTRUCTION TOLERANCE OF 0.5% ± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.
- THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY.
- DRIVEWAY SLOPES: DESIRABLE MAXIMUM**
10.5% UP AWAY FROM SIDEWALK (SAG)
8.5% DOWN AWAY FROM SIDEWALK (CREST)
ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG
- DRIVEWAY TYPES**
 - 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
 - 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
 - 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES)
- PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.
- (W) IS SHOWN ON PLAN AND PROFILE SHEETS.
- OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

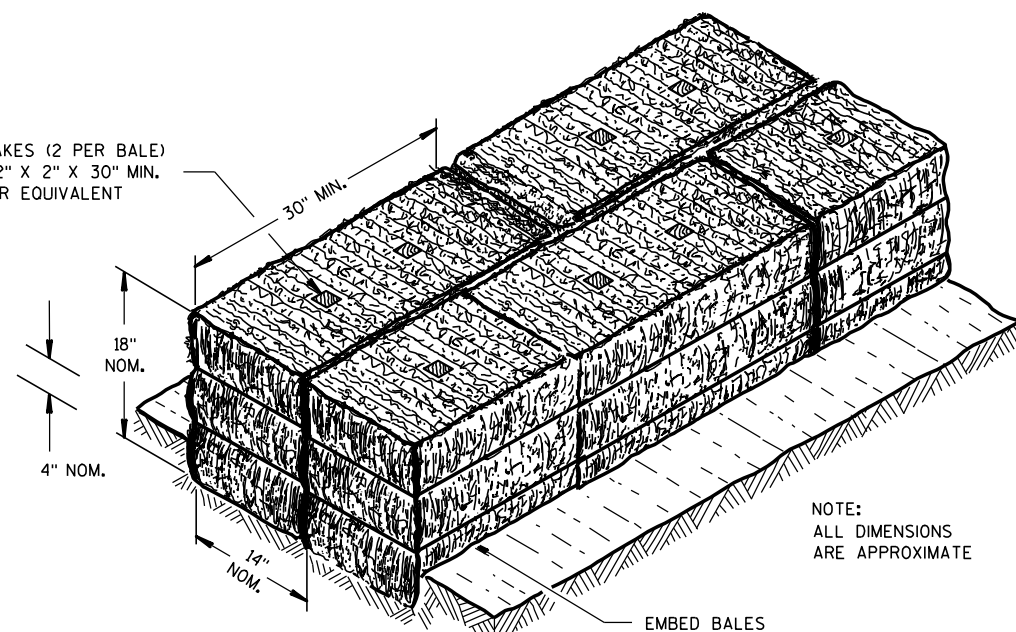
NOT TO SCALE

DRIVEWAY AND SIDEWALK
RAMPS
TYPE Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

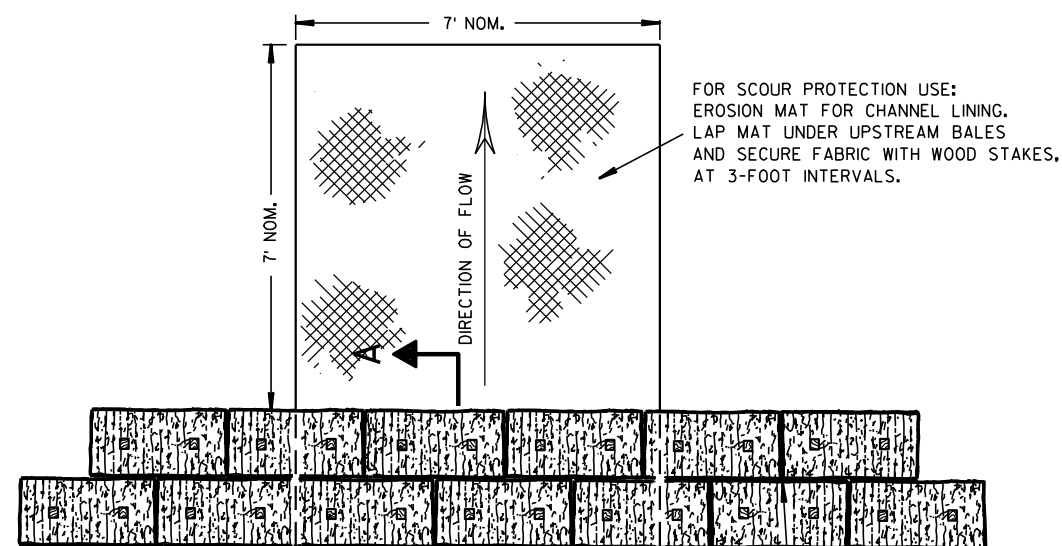
APPROVED
December, 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS UNIT SUPERV 267 ENT
FHWA

WOOD STAKES (2 PER BALE)
NOMINAL 2" X 2" X 30" MIN.
LENGTH OR EQUIVALENT



SECTION A-A

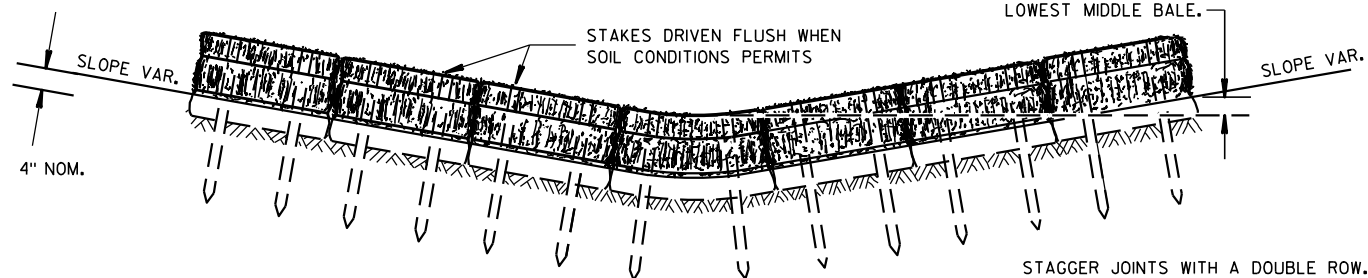
NOTE:
ALL DIMENSIONS
ARE APPROXIMATE



PLAN VIEW

STAGGER JOINTS BETWEEN ADJACENT
ROWS OF BALES.

BOTTOM ELEVATION OF END BALE SHALL
BE EQUAL TO OR GREATER THAN TOP OF
LOWEST MIDDLE BALE.



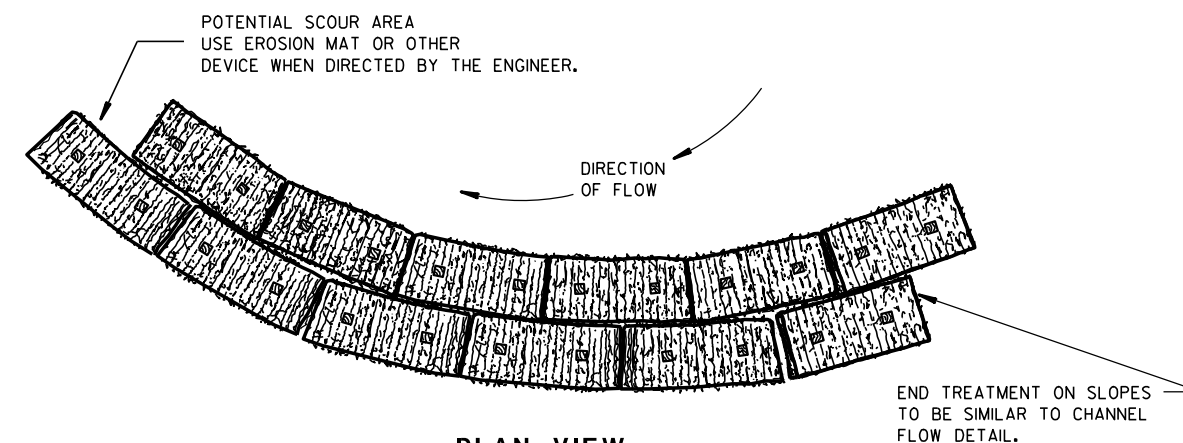
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

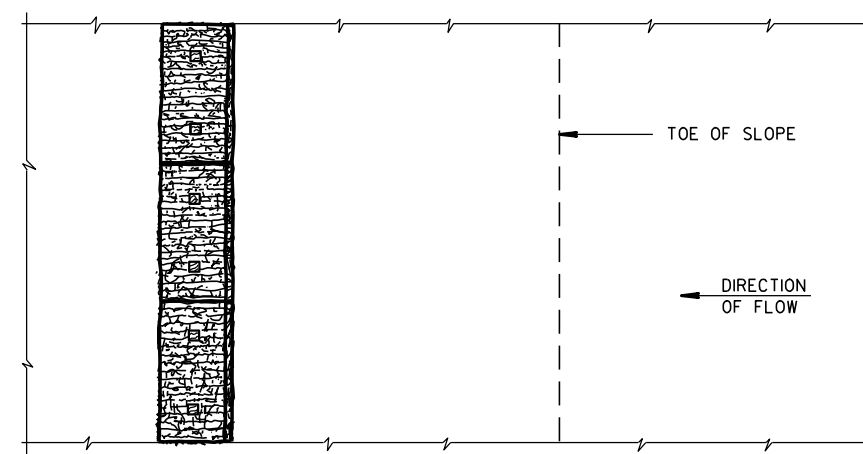
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

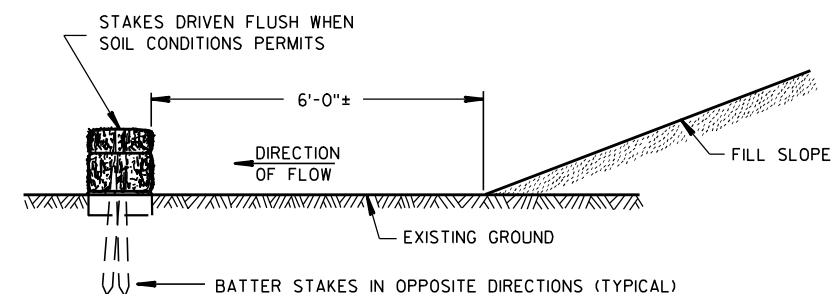


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF
EROSION BALES / TEMPORARY
DITCH CHECKS

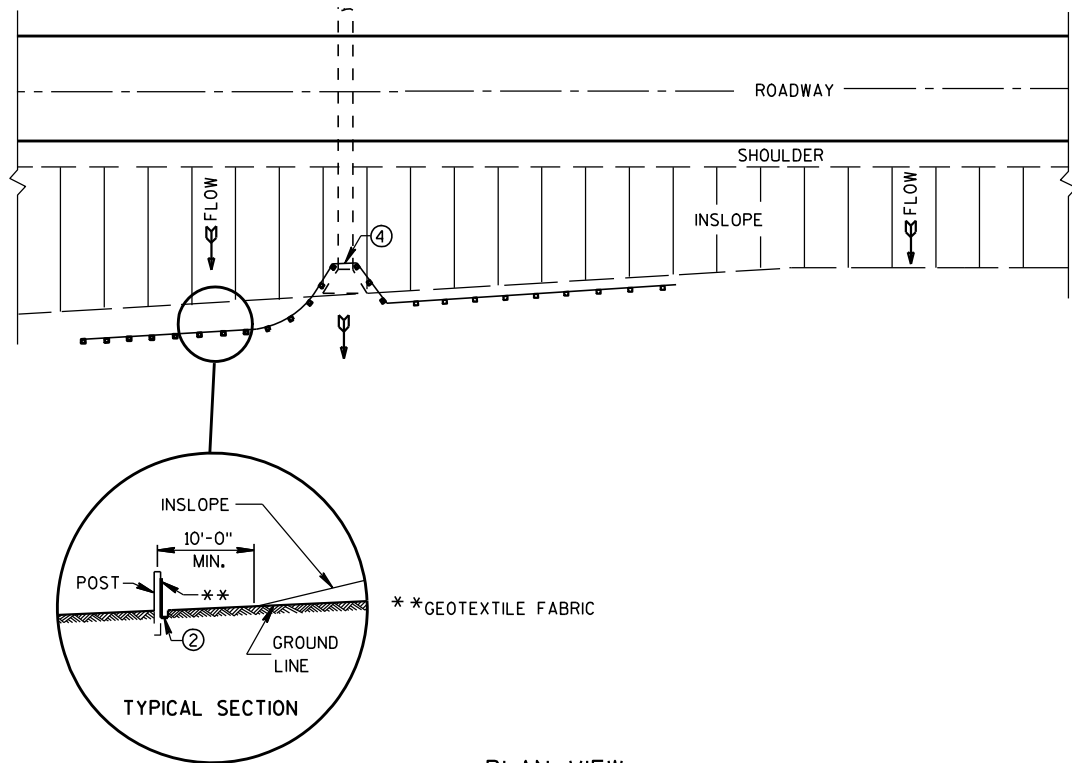
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

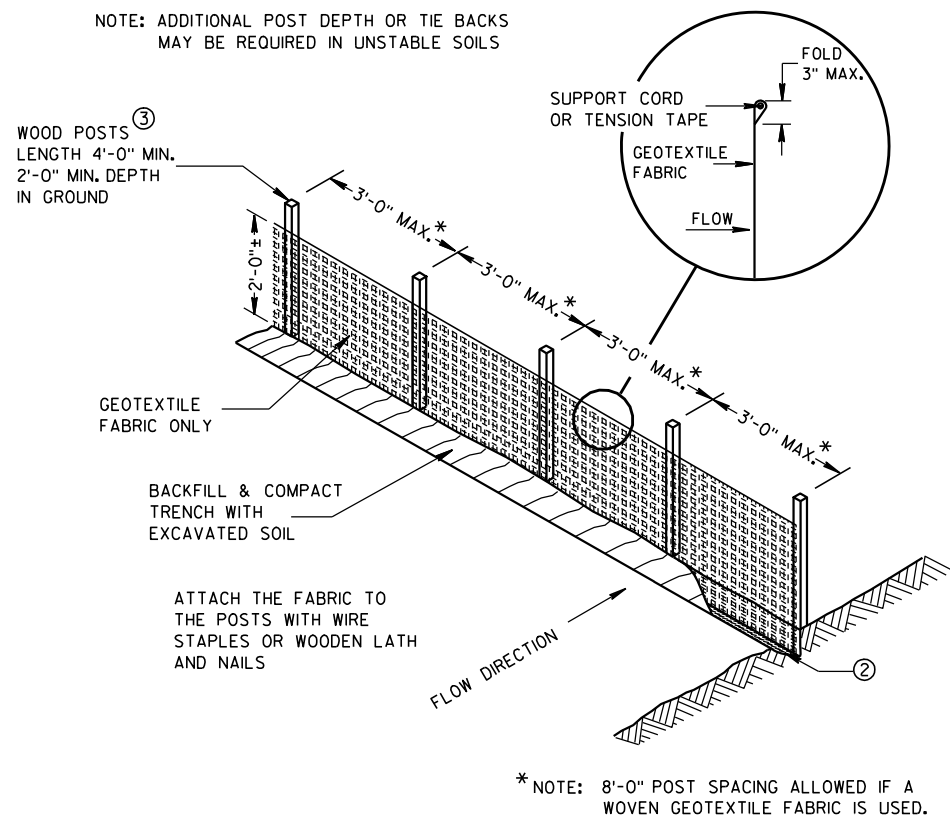
6/04/02
DATE

/S/ Beth Conn-----
CHIEF ROADWAY DEVELOP 268 ENGINEER

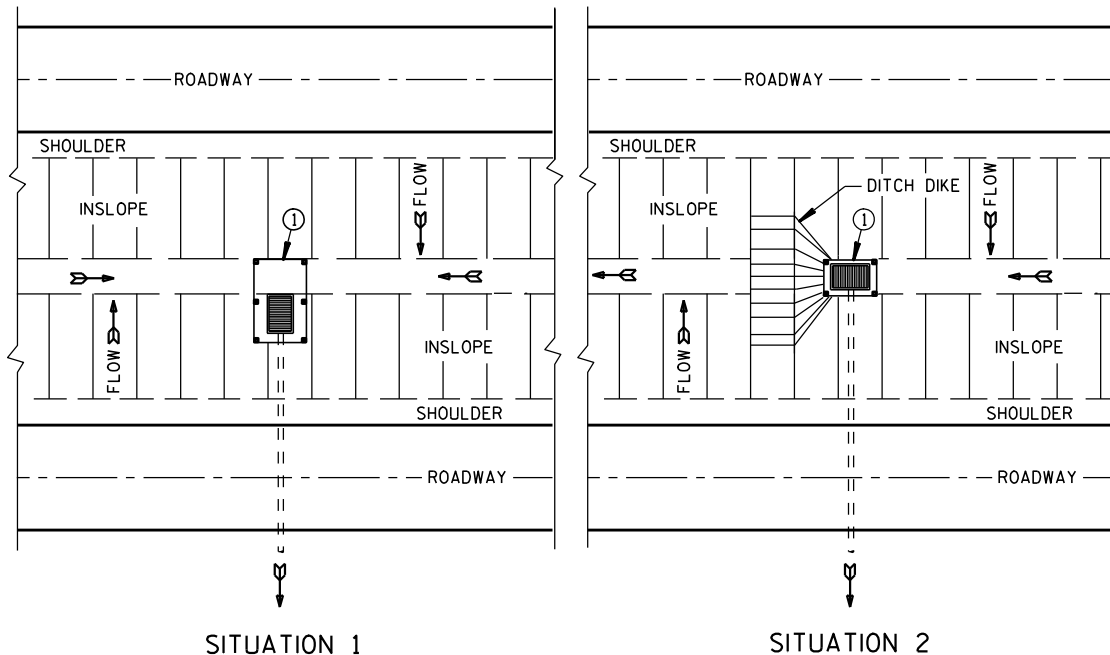
FHWA



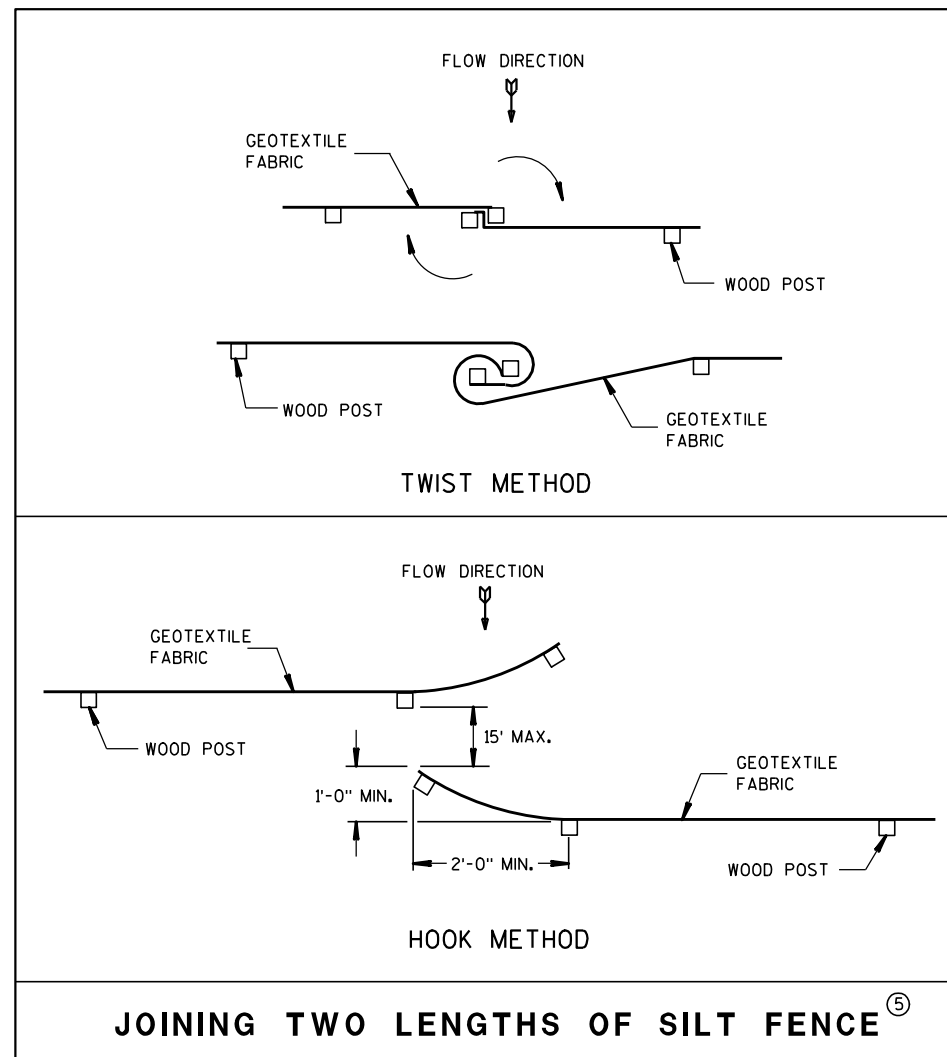
PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE



SILT FENCE



PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

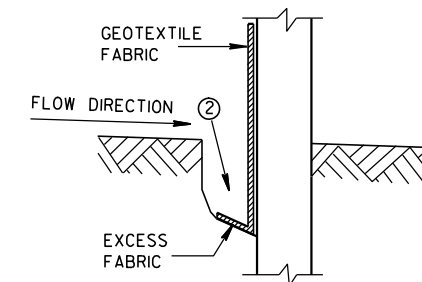


JOINING TWO LENGTHS OF SILT FENCE (5)

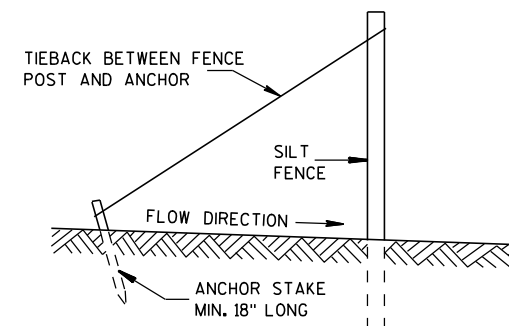
GENERAL NOTES

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

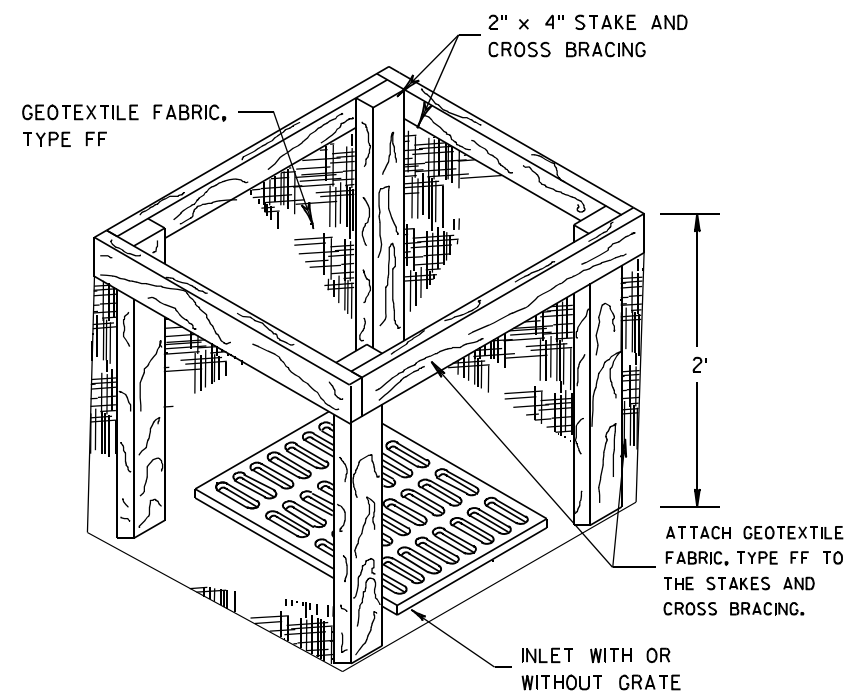
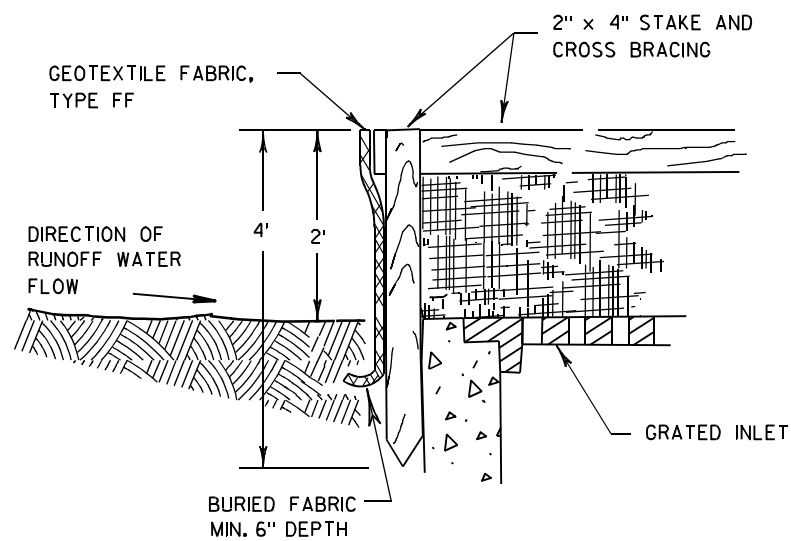


SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05 /S/ Beth Conn-----
DATE CHIEF ROADWAY DEVELOP 269 INEER
FHWA



INLET PROTECTION, TYPE A

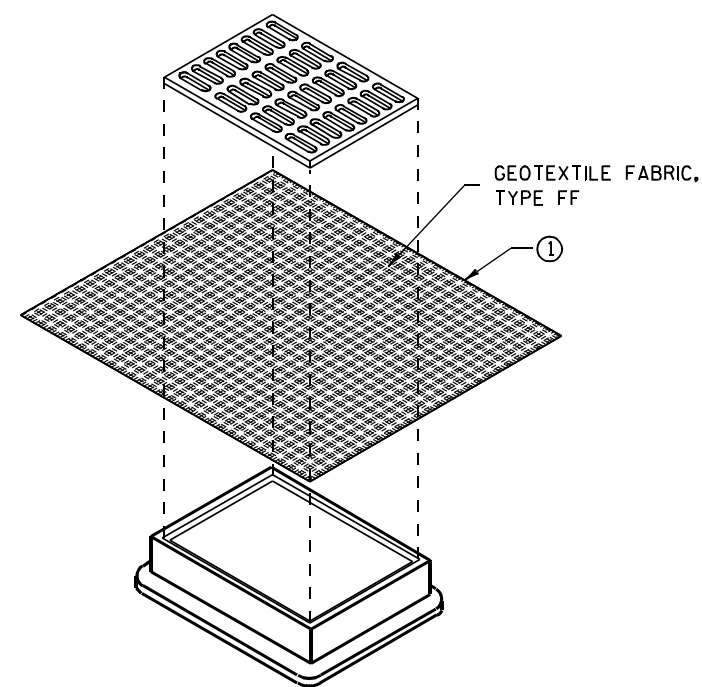
GENERAL NOTES

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

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

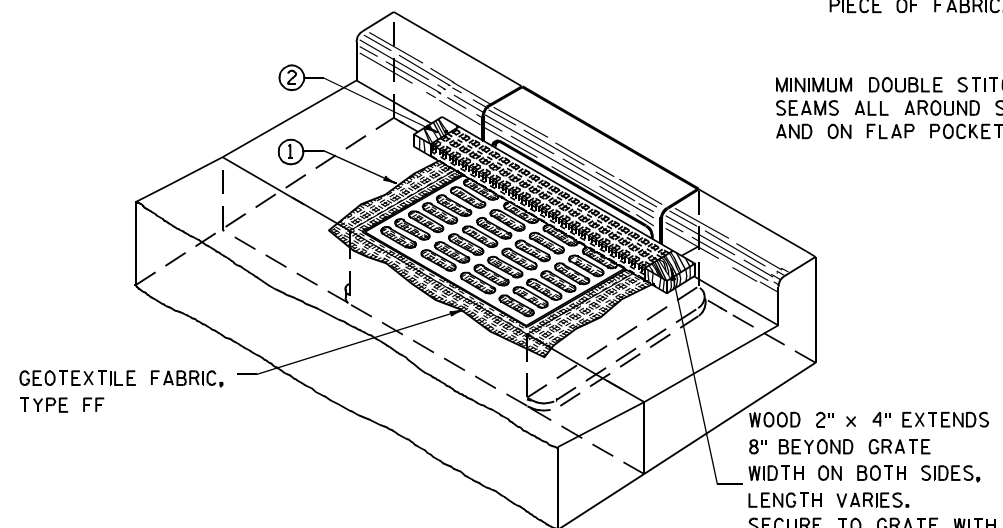
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

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



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

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

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

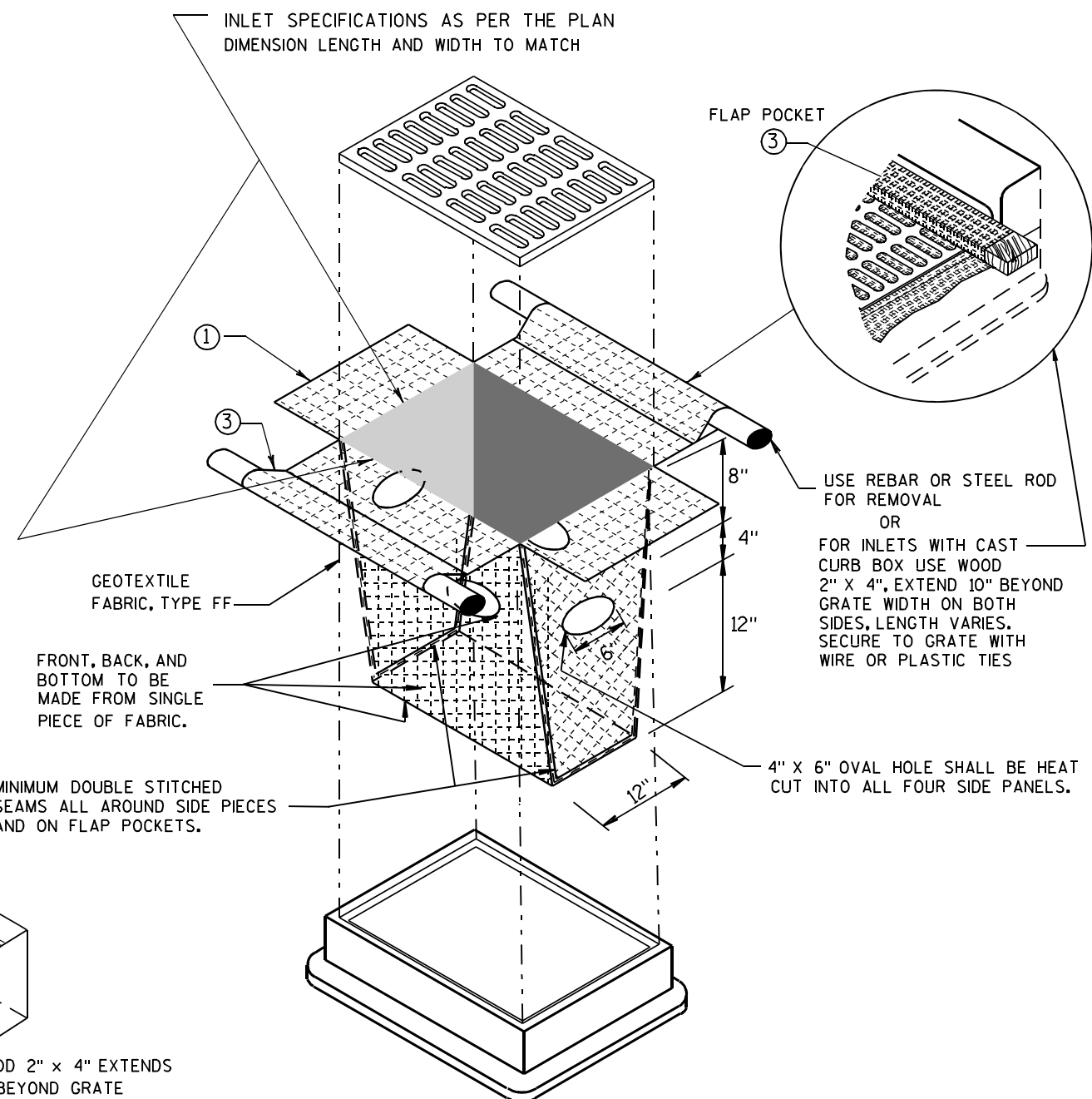
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

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

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

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



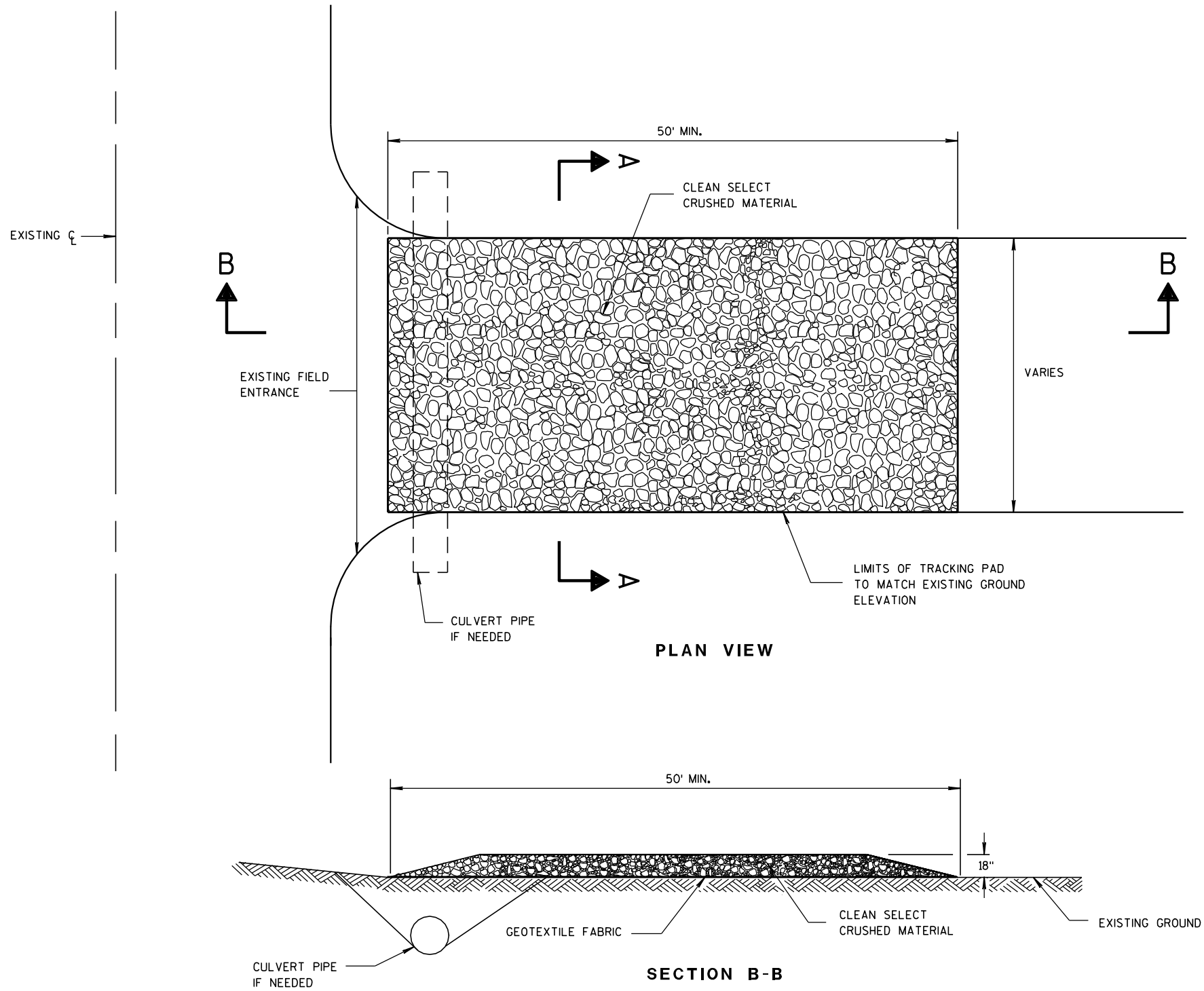
INLET PROTECTION, TYPE D

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02 /S/ Beth Connolly
DATE 270
FHWA CHIEF ROADWAY DEVELOPMENT ENGINEER



TRACKING PAD

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.

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

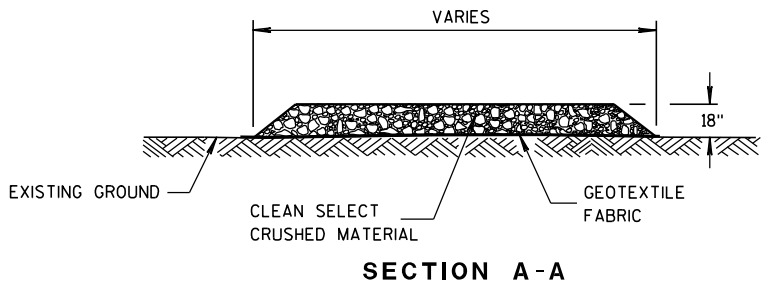
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



TRACKING PAD

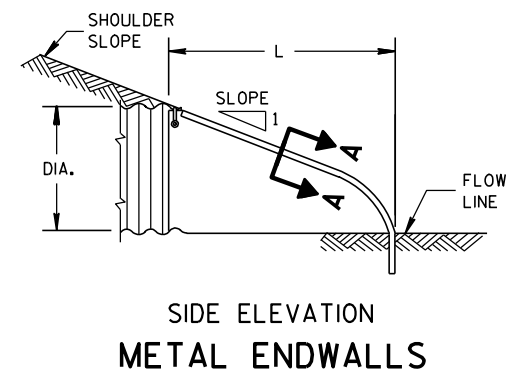
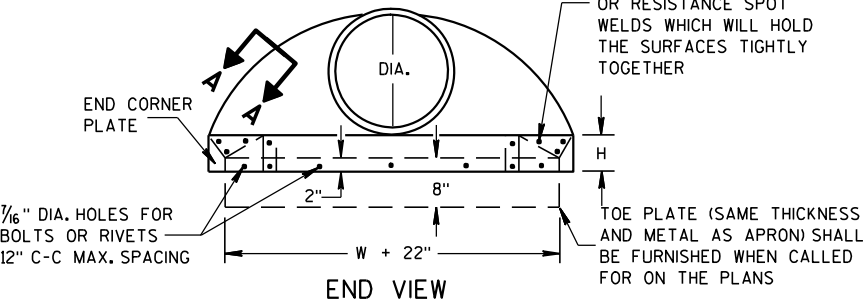
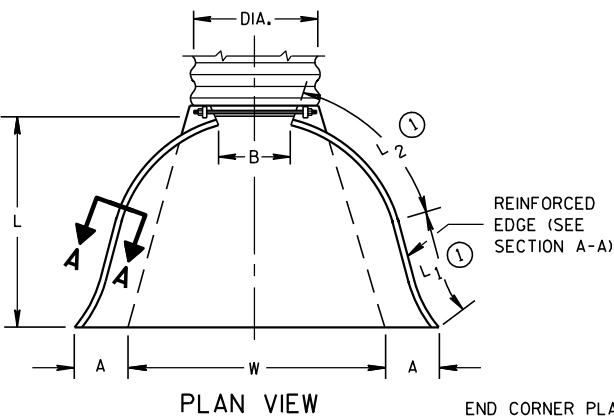
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/24/2011
DATE
/S/ Jerry H. Zonn
ROADWAY STANDARDS 271
ENGINEER
ENT

FHWA

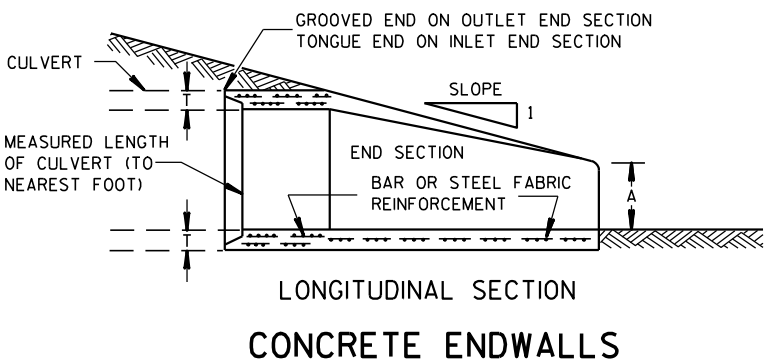
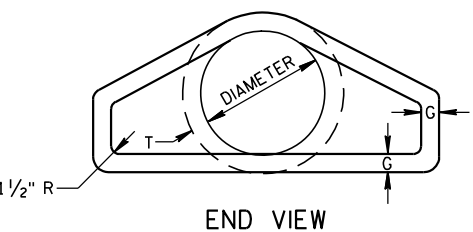
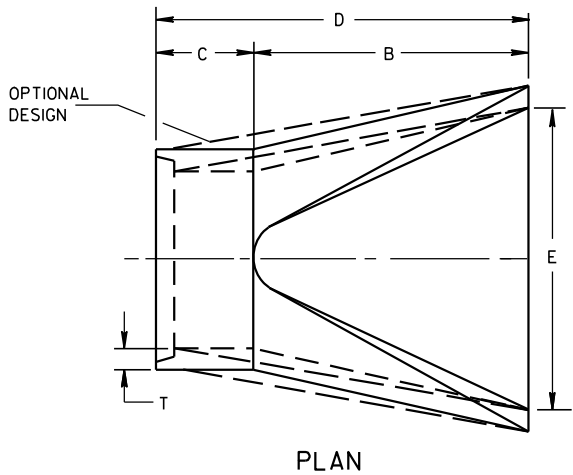
METAL APRON ENDWALLS											
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)						APPROX. SLOPE	BODY	
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L ₁ ①	L ₂ ①			W (±2")
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	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

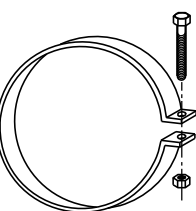


REINFORCED CONCRETE APRON ENDWALLS								
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE
	T	A	B	C	D	E	G	
12	2	4	24	48 ⁷ / ₈	72 ⁷ / ₈	24	2	3 to 1
15	2 ¹ / ₄	6	27	46	73	30	2 ¹ / ₄	3 to 1
18	2 ¹ / ₂	9	27	46	73	36	2 ¹ / ₂	3 to 1
21	2 ³ / ₄	9	36	37 ¹ / ₂	73 ¹ / ₂	42	2 ³ / ₄	3 to 1
24	3	9 ¹ / ₂	43 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	30-35	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

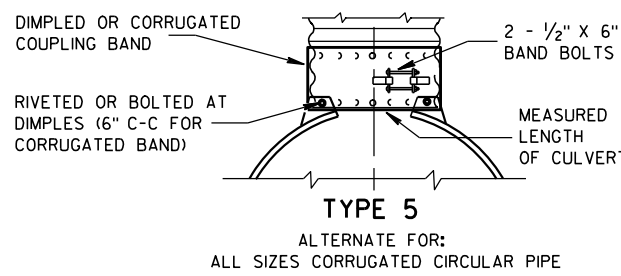
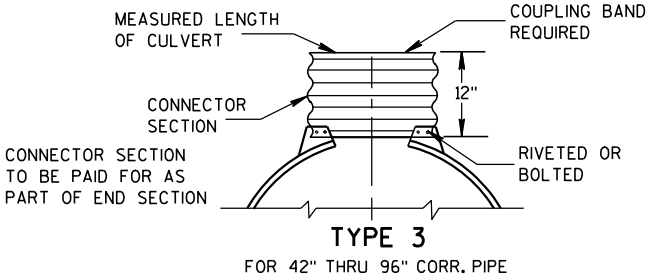
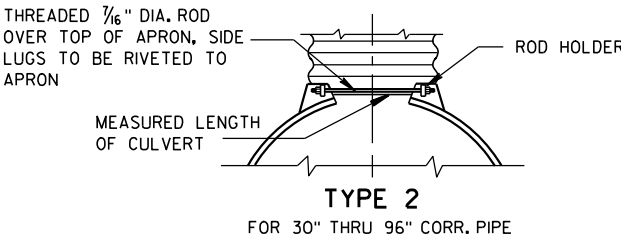
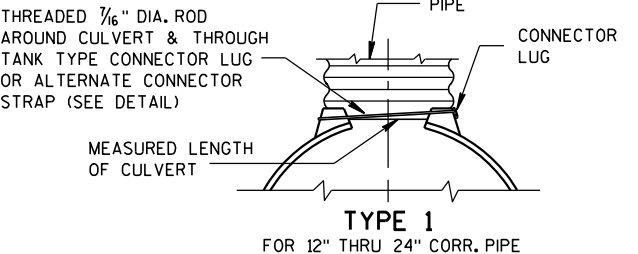
* MINIMUM
** MAXIMUM



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



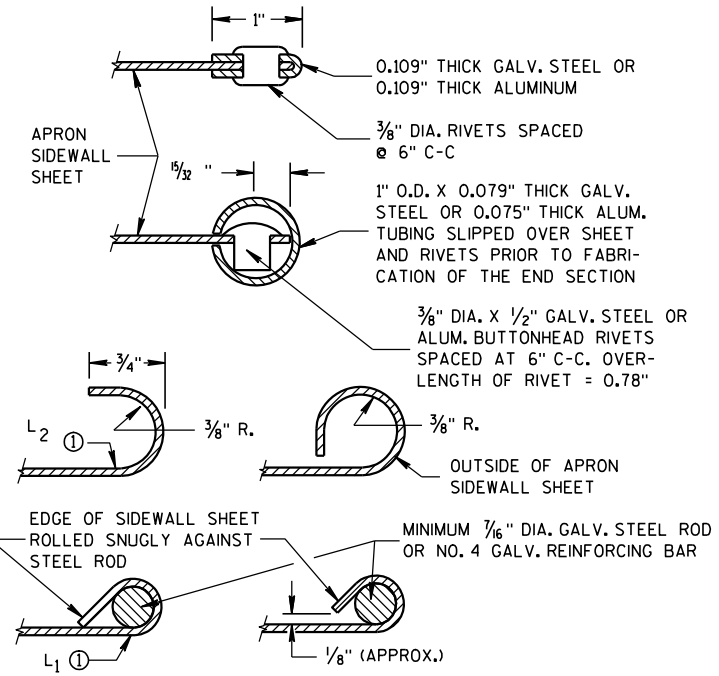
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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



SECTION A-A

GENERAL NOTES

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

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

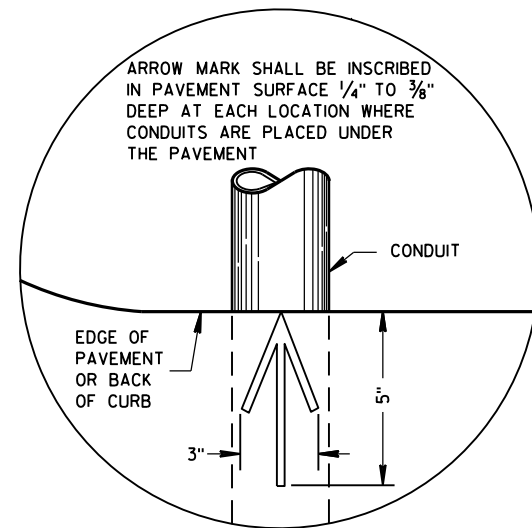
ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT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

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

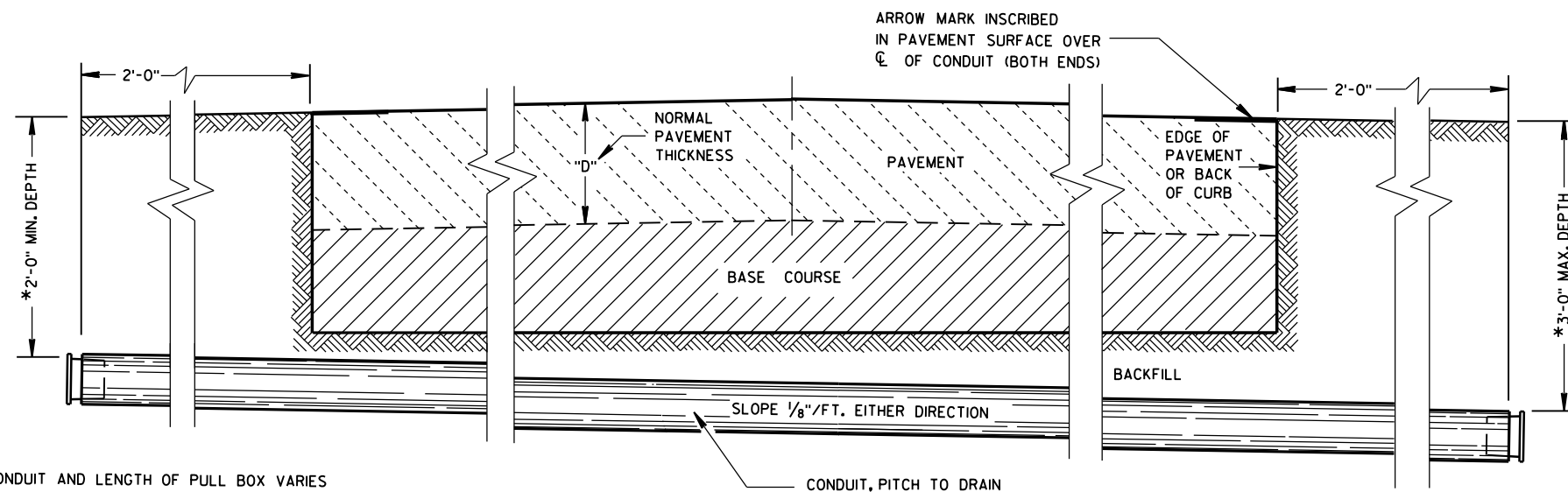
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

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

APRON ENDWALLS FOR CULVERT PIPE			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
APPROVED 11/30/94 DATE	/S/ Rory L. Rhinehart CHIEF ROADWAY DEVELOP	272	NEER
FHWA			



PLAN VIEW
ARROW MARK



SIDE ELEVATION
DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

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

GENERAL NOTES

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

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

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

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

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

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

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

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

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

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

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

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

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

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

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

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

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

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

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

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL 273
FHWA

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

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

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

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

GENERAL NOTES

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

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

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

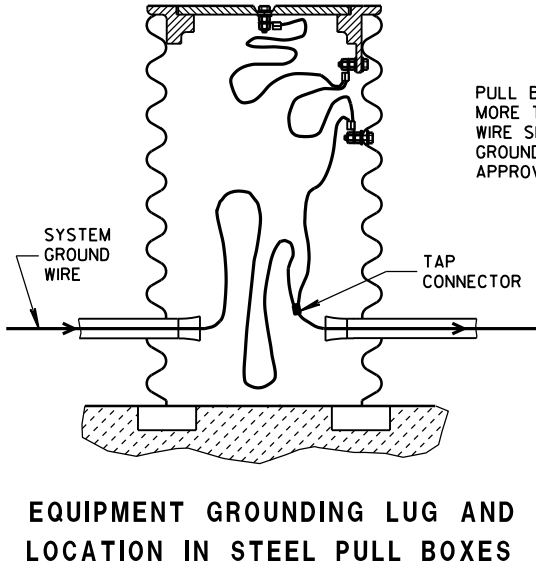
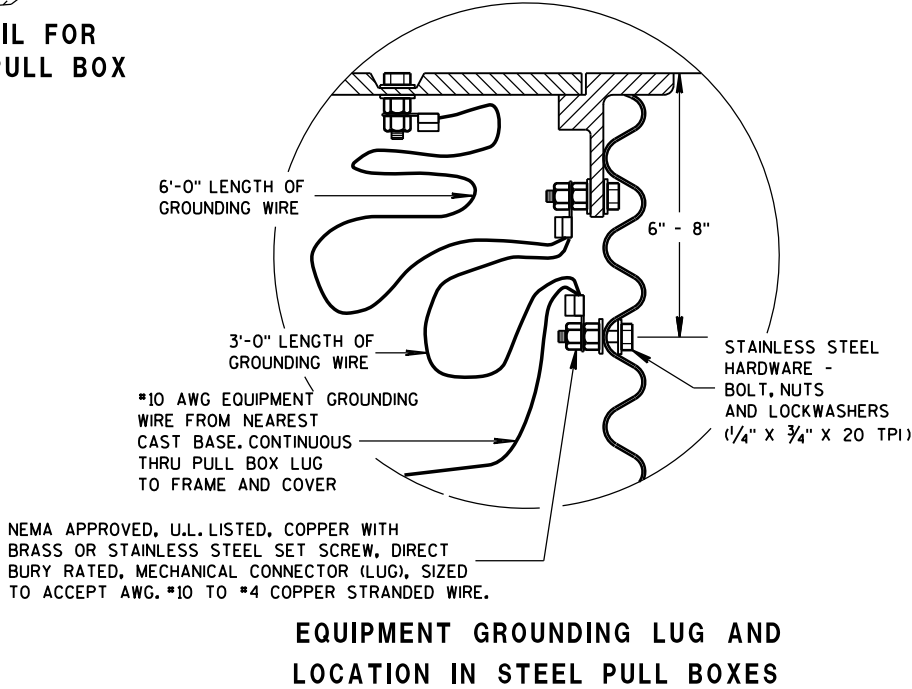
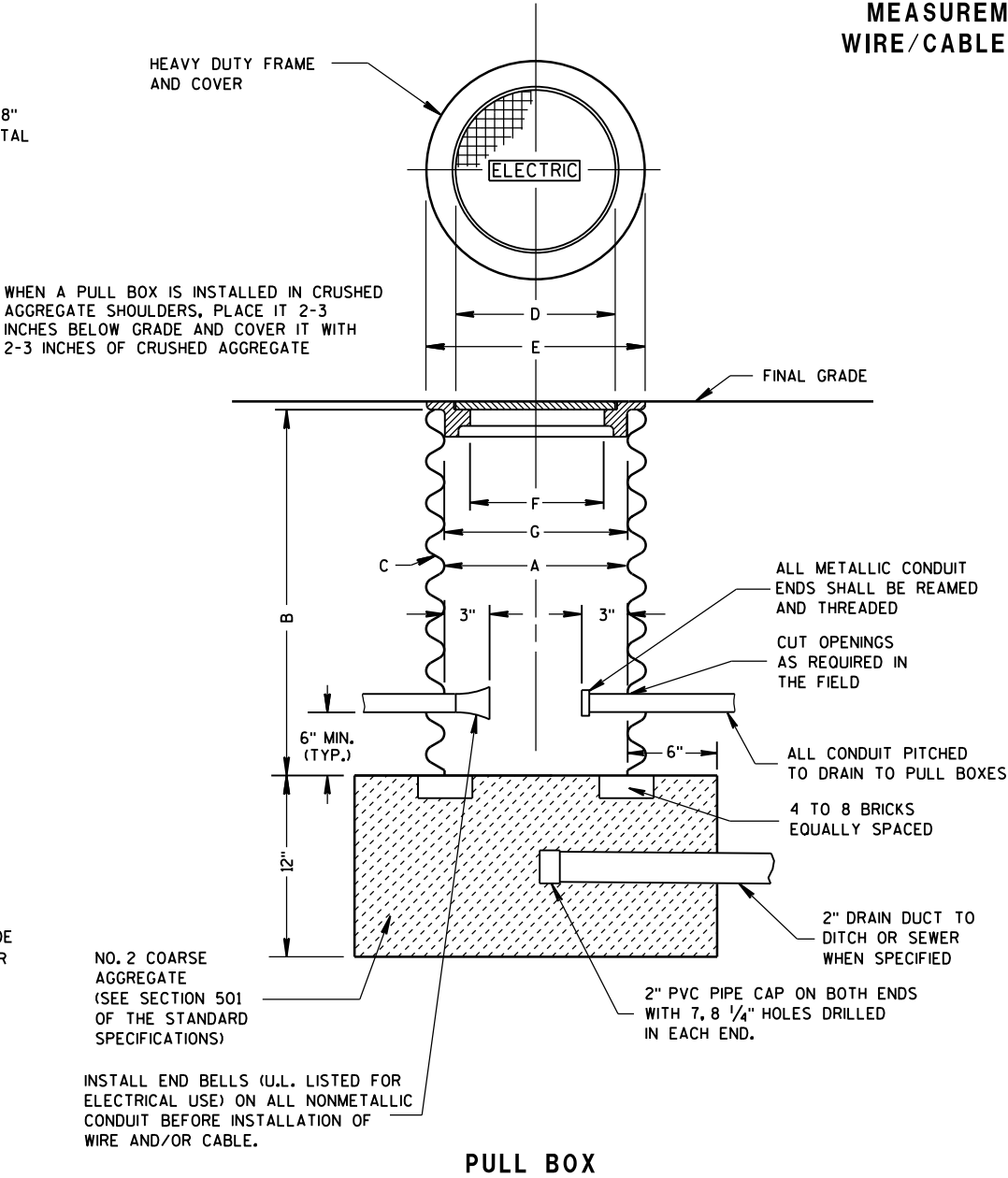
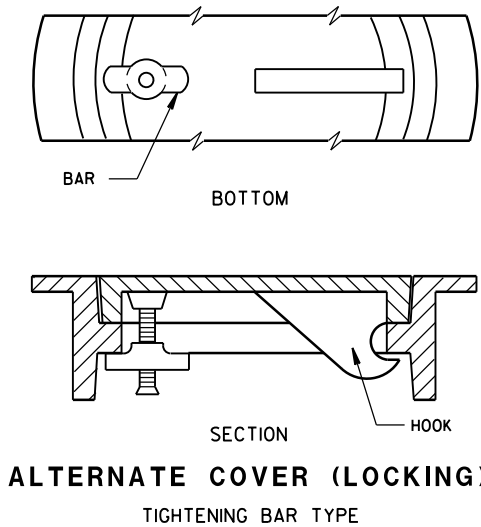
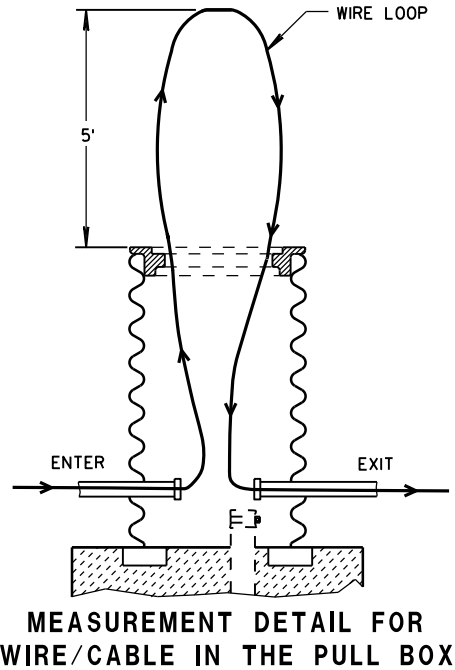
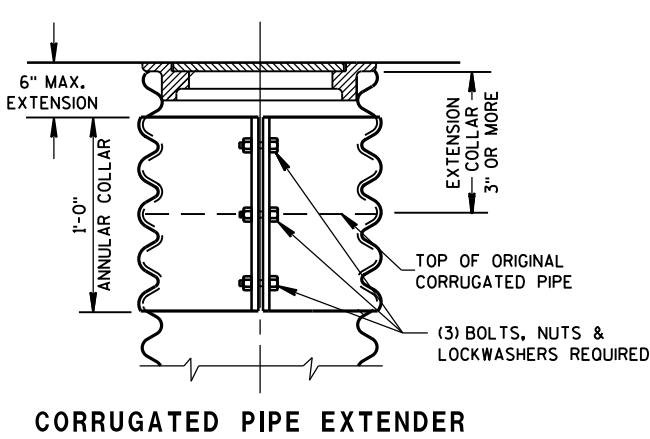
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

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

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

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

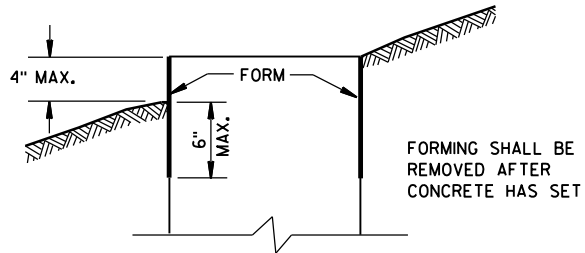
WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



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

PULL BOX	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED Sept. 2014 DATE	/S/ Ahmet Demirelek STATE ELECTRICAL 274
FHWA	

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



FORMING DETAIL

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

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

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

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

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

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

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

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

GENERAL NOTES (CONTINUED)

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

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

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

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

A NO. 4 AWG. STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 1, TYPE 2, TYPE 5, AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

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

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

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

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

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

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

1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

2 (4) 1" DIA. X 3'-6" ANCHOR RODS.

3 (4) 1" DIA. X 5'-0" ANCHOR RODS.

4 (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

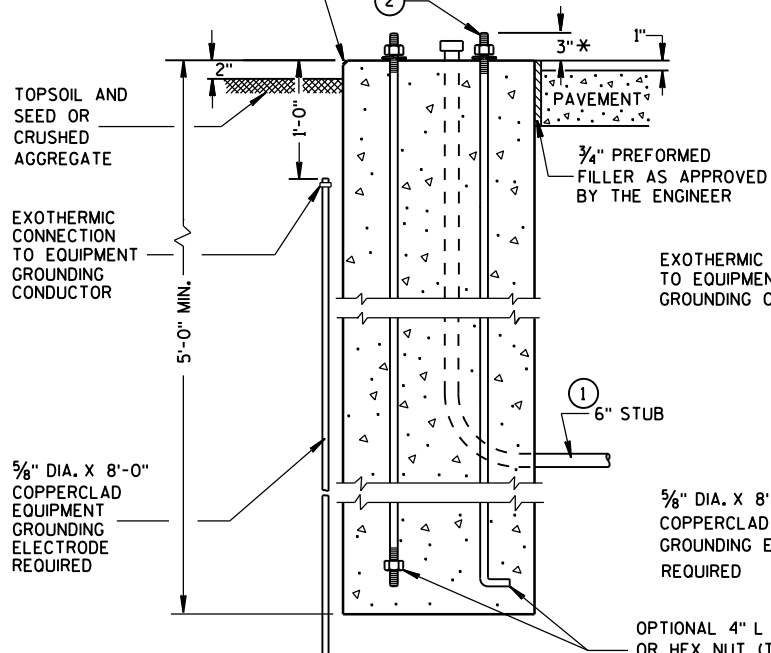
5 (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

6 (4) 1" DIA. X 3'-6" ANCHOR RODS.

7 (6) NO. 4 X 4'-8" BAR STEEL REINFORCEMENT.

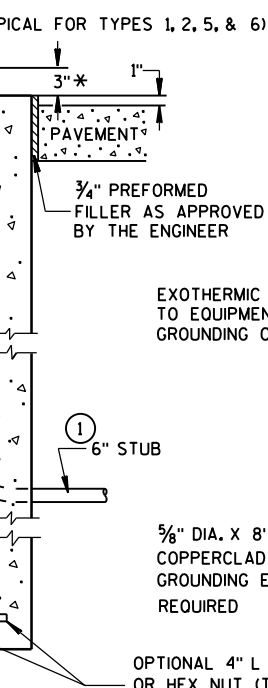
8 (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5, & 6)

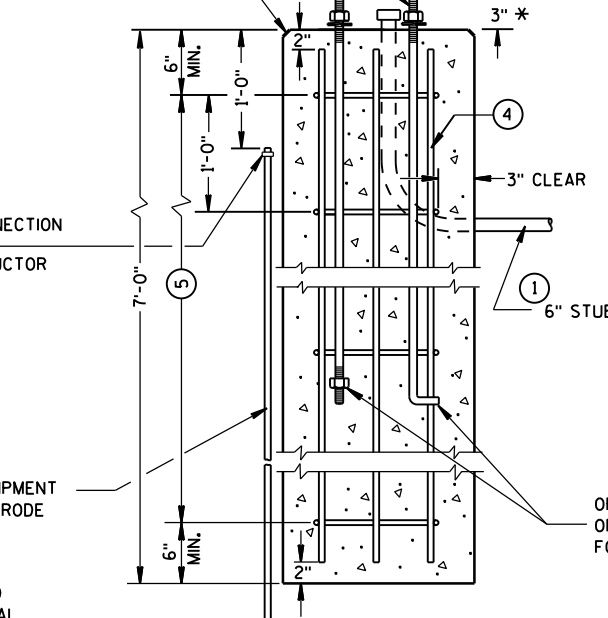


TYPE 1

HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5, & 6)

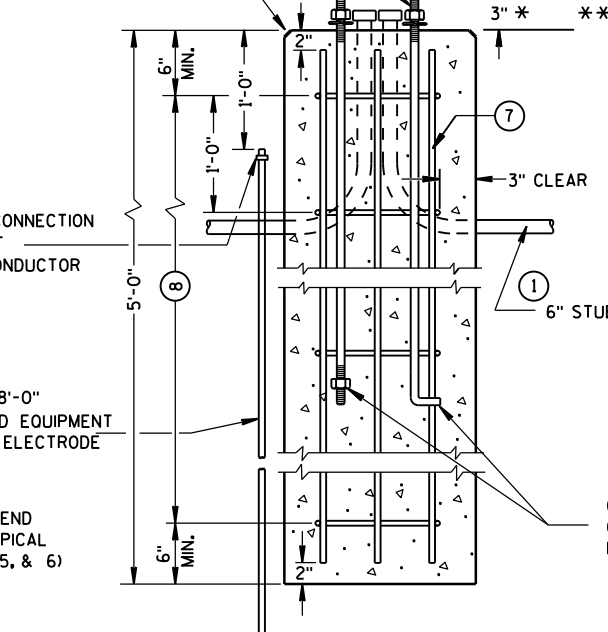


FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND



TYPE 2

FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND



TYPE 5 & 6

CONCRETE BASES

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

** FOR NONBREAKAWAY INSTALLATIONS, 4 1/2" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 /S/ Ahmet Demirel
DATE STATE ELECTRICAL 275
FHWA

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS.

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

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

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

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

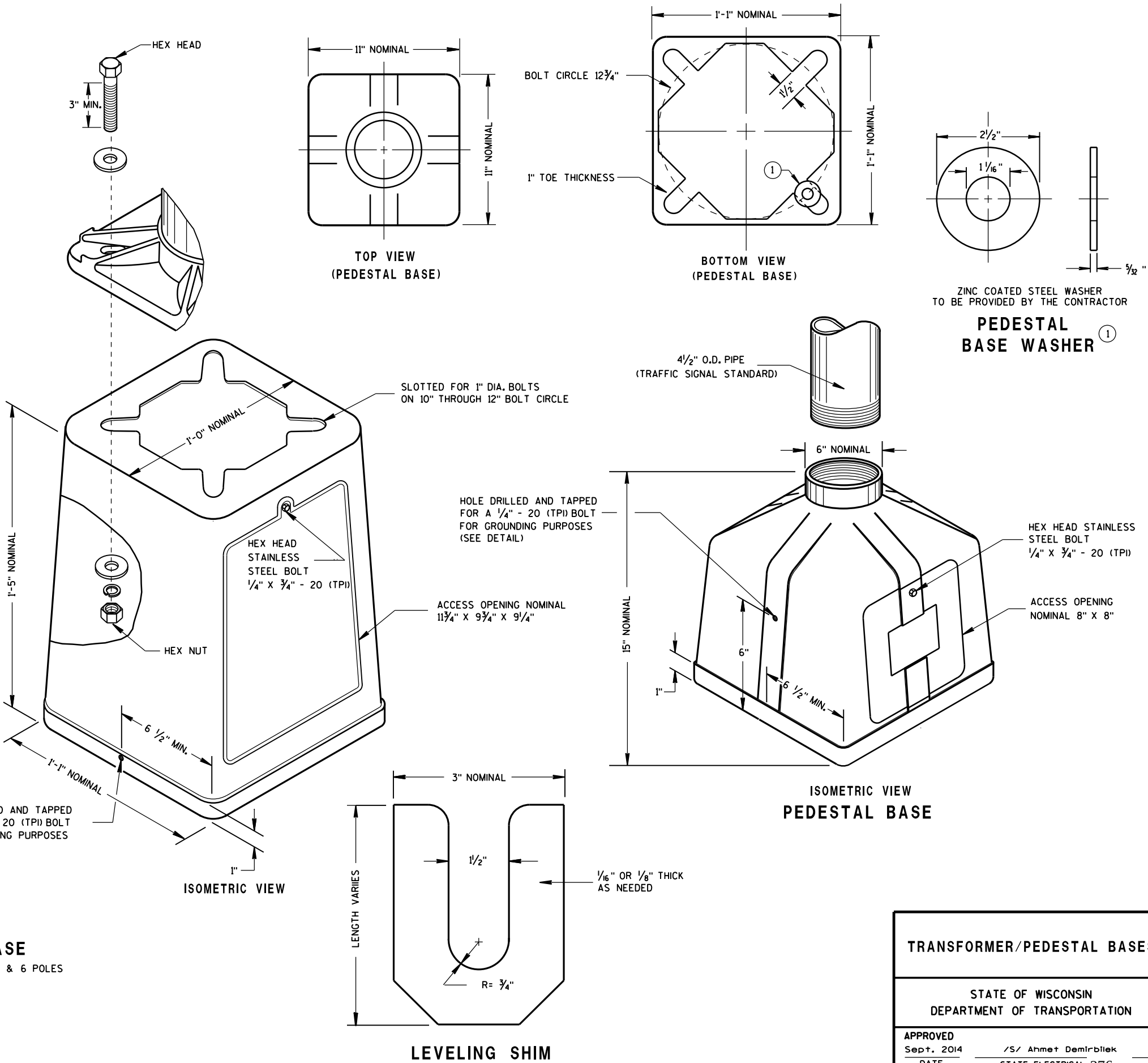
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

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

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

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

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



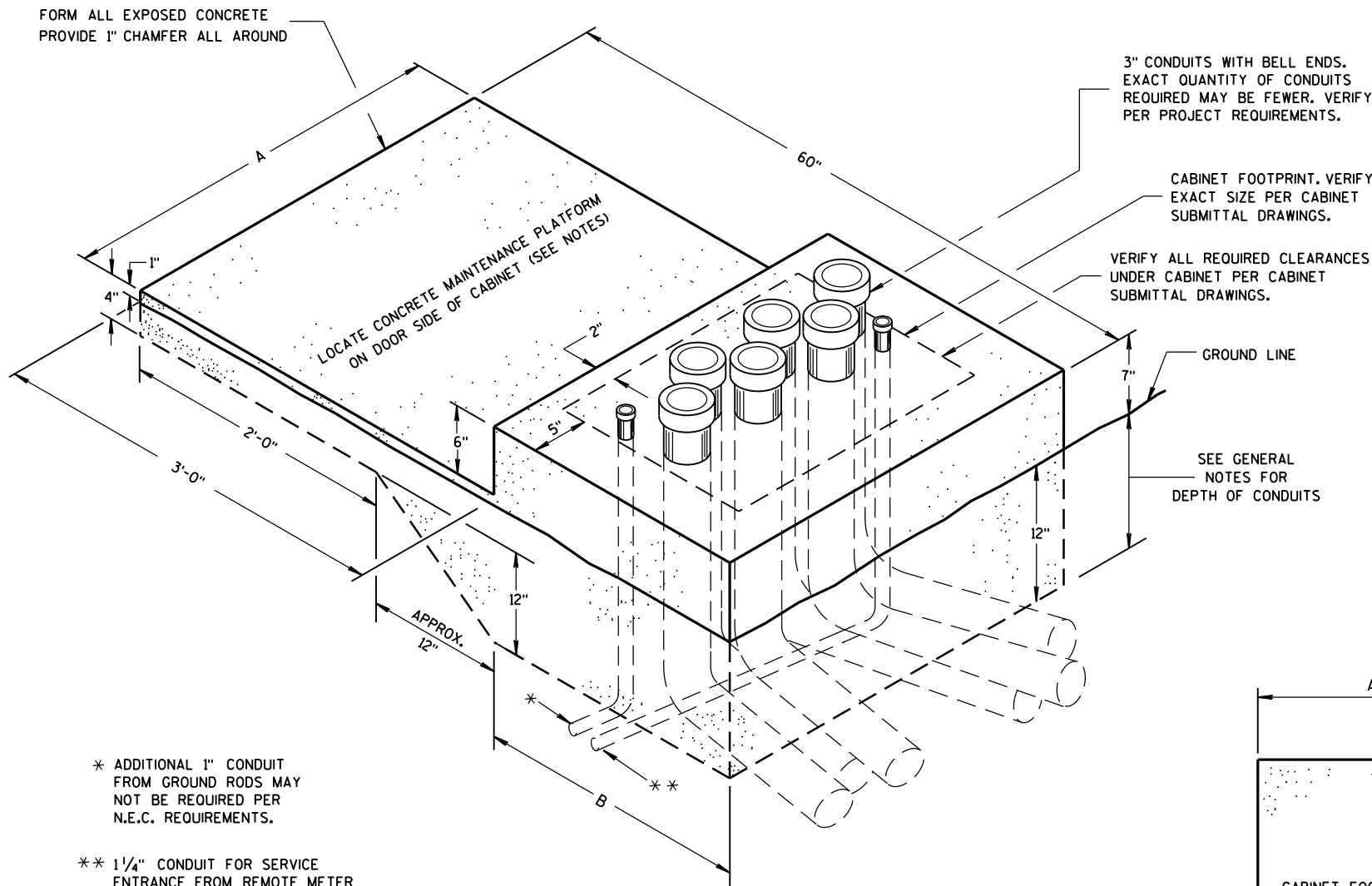
TYPICAL MECHANICAL
CONNECTOR LUG
TO BE FURNISHED WITH EACH BASE

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

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL 276
FHWA

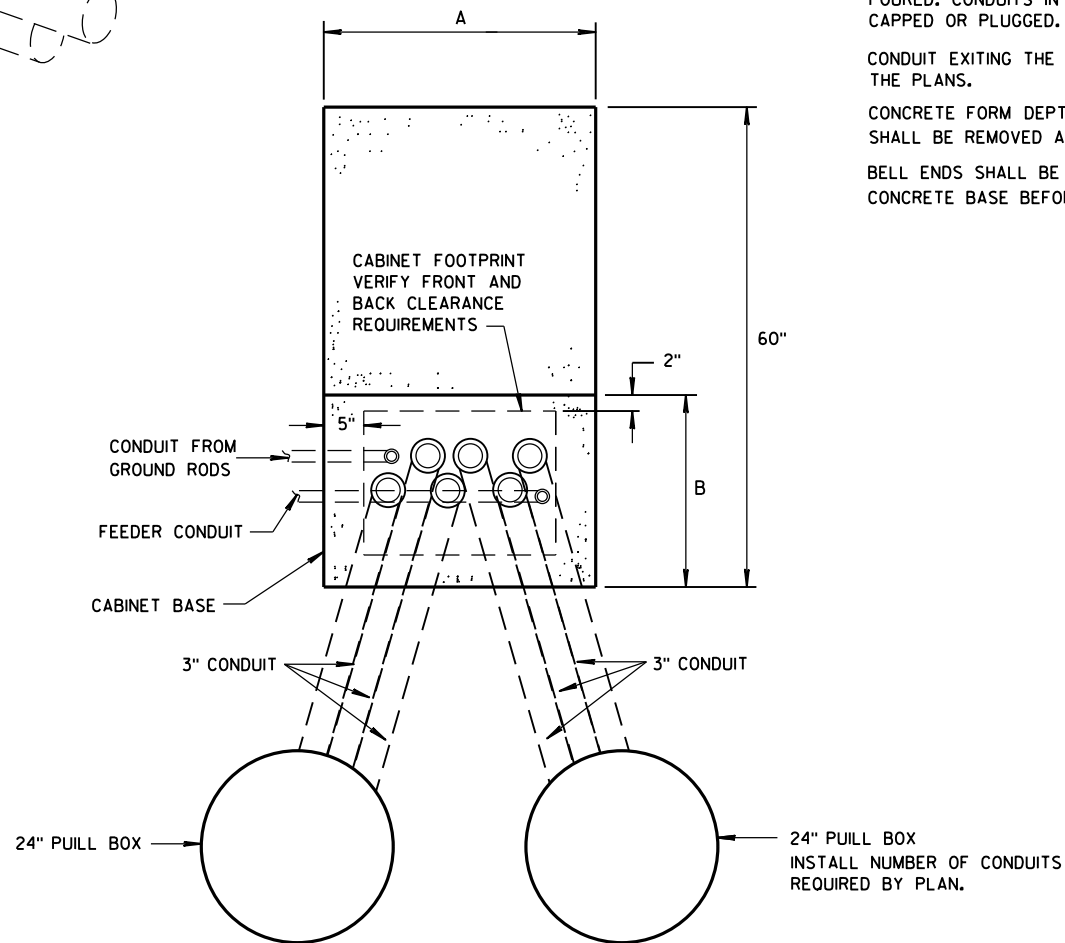


* ADDITIONAL 1" CONDUIT FROM GROUND RODS MAY NOT BE REQUIRED PER N.E.C. REQUIREMENTS.

** 1 1/4" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. VERIFY LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

**ISOMETRIC VIEW
CONCRETE CONTROL
CABINET BASE, TYPE L**
(C.Y. CONCRETE = APPROX. 0.4)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSIONS		MAXIMUM 3" CONDUITS
		A	B	
L24	24"	34"	24"	4
L30	30"	40"	24"	6

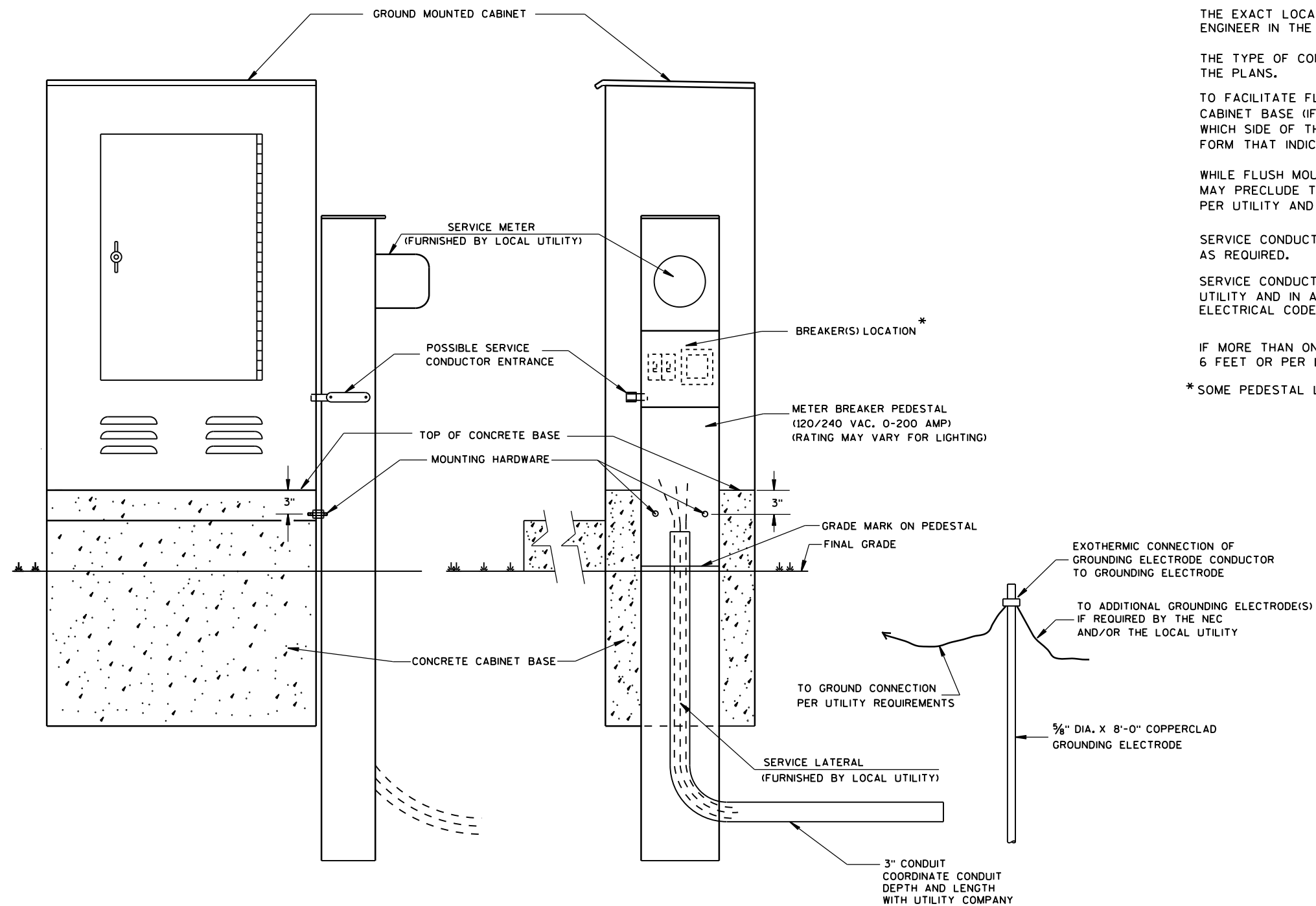


**PLAN VIEW
CONCRETE CONTROL CABINET BASE, TYPE L**

GENERAL NOTES

- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.
- INSTALL FOUR STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET BASES. THE ANCHORS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.
- WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.
- CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.
- DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.
- DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.
- ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.
- CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.
- MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.
- MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.
- MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.
- ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.
- CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.
- PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.
- ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.
- CONDUIT EXITING THE CONCRETE BASE SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.
- CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.
- BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE CONTROL CABINET BASE, TYPE L			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
APPROVED Nov. 2014 DATE	/S/ Thomas Gorrina STATE LIGHTING ENGINEER	277	WYS
FHWA			



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

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

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

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

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

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

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

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

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

CABINET SERVICE INSTALLATION
(METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2014

DATE

FHWA

/S/ Ahmet Demirbilek

STATE ELECTRICAL 278

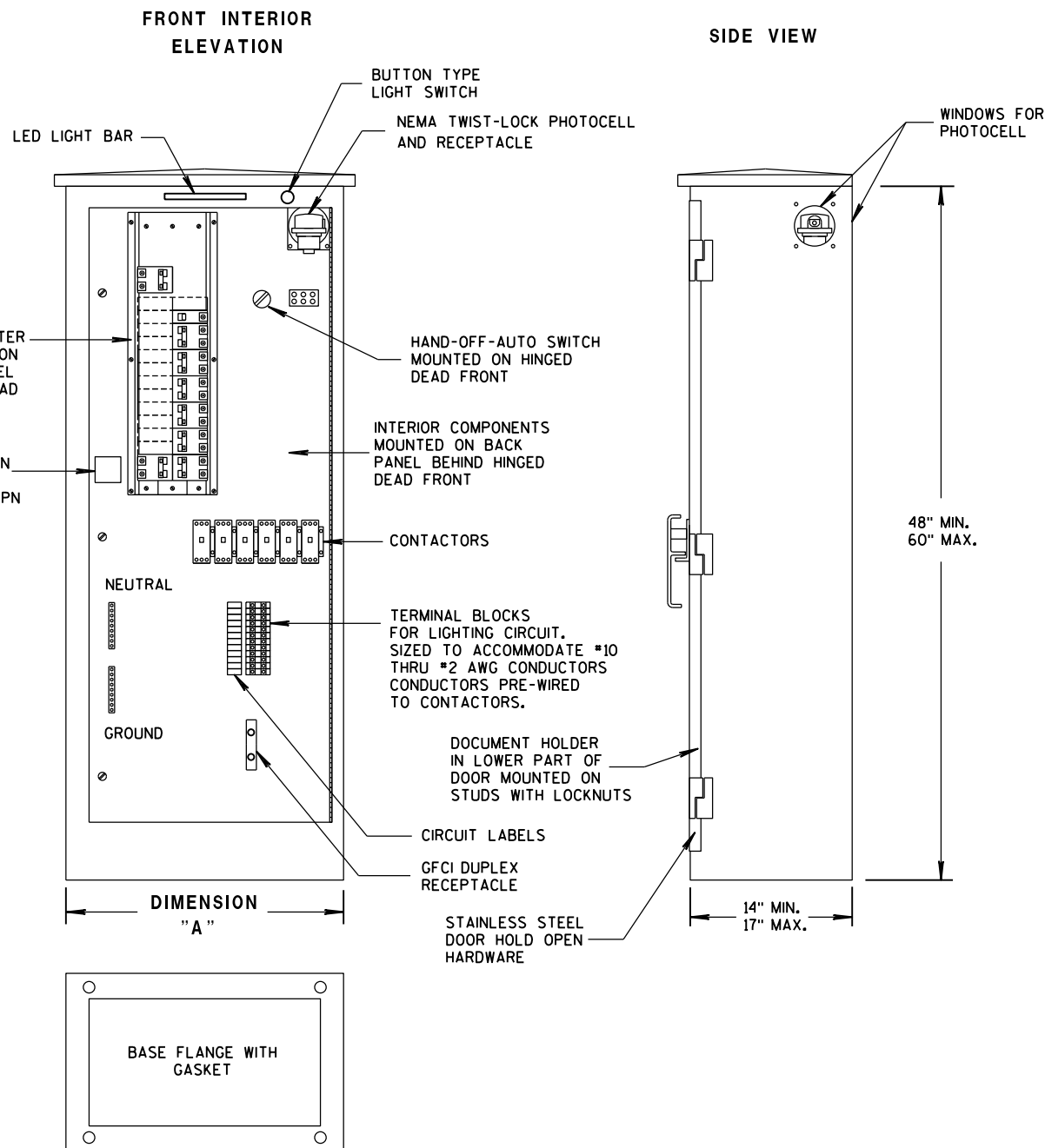
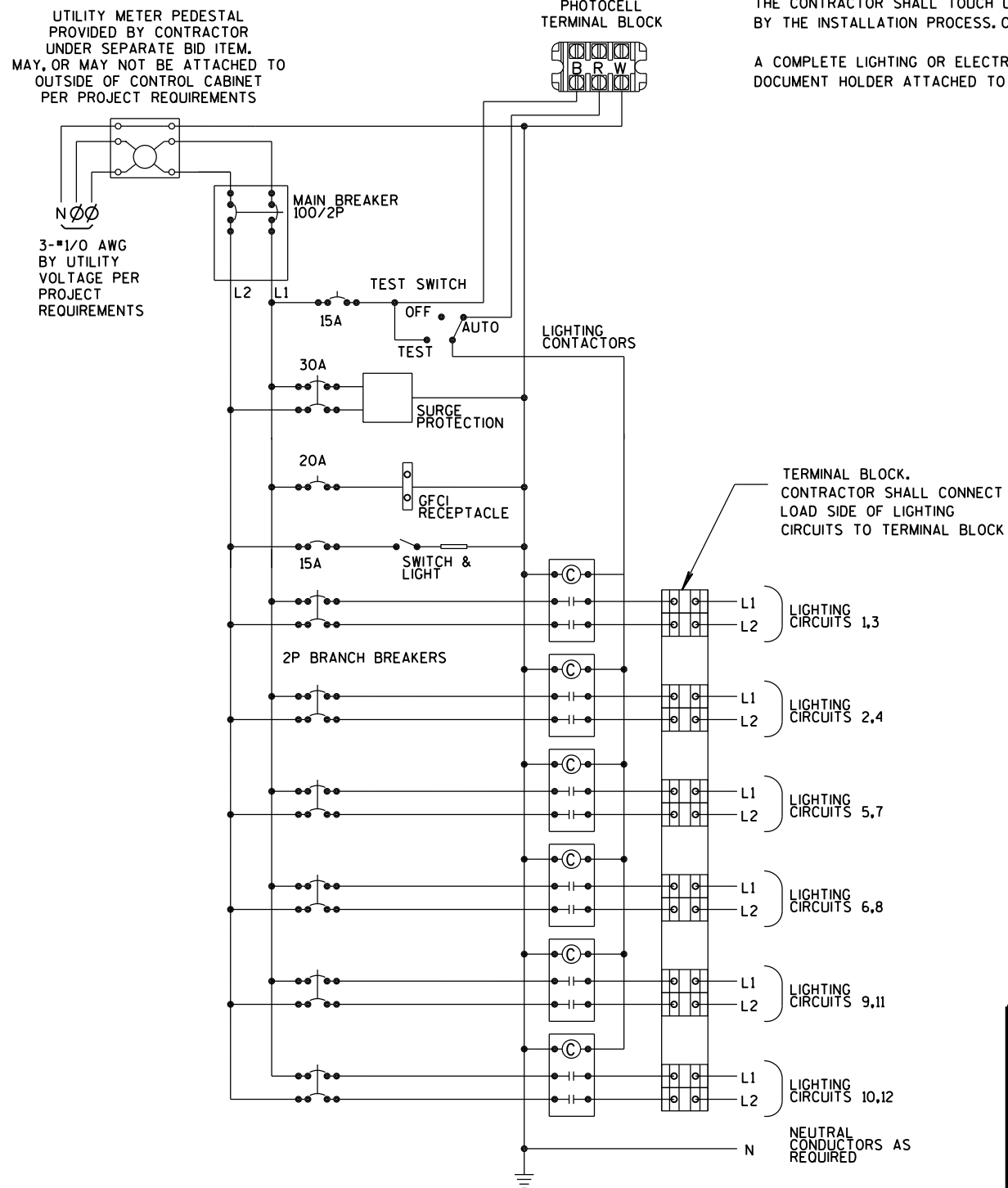


TABLE OF DIMENSIONS (INCHES)		
CONCRETE BASE TYPE	CABINET WIDTH	DIMENSION "A"
L24	24"	24"
L30	30"	30"

LIGHTING CONTROL CABINET



CONTROL CABINET SCHEMATIC

GENERAL NOTES

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

ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE-WIRED BY THE CABINET FABRICATOR.

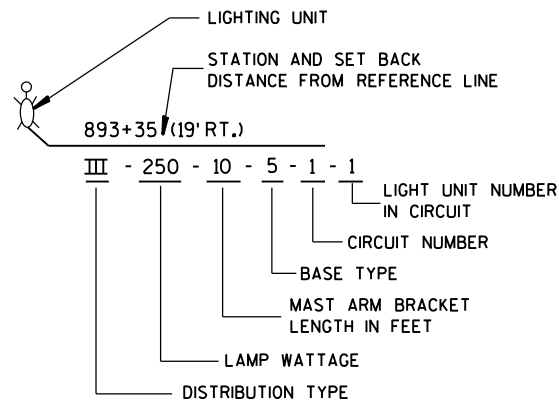
ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS.

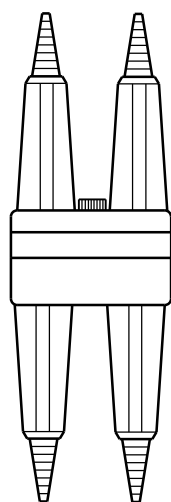
THE CONTRACTOR SHALL TOUCH UP ANY DAMAGE TO THE ANODIZED FINISH CAUSED BY THE INSTALLATION PROCESS. COLOR MATCH PAINT SHALL BE USED.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.

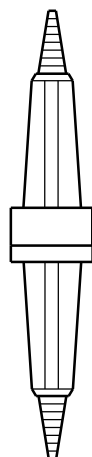
LIGHTING CONTROL CABINET 120/240 VOLT			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
APPROVED DATE FWHA	Sept. 2014	/S/ Thomas Gonnring STATE LIGHTING ENGINEER 279	NYS.



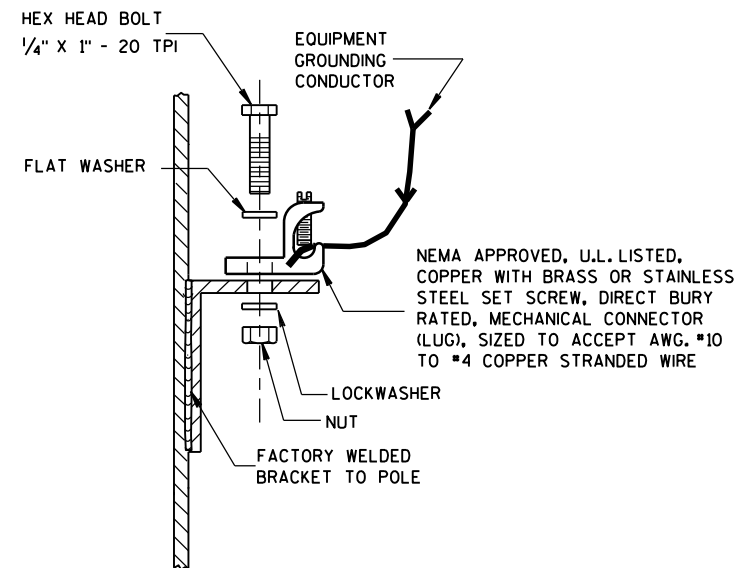
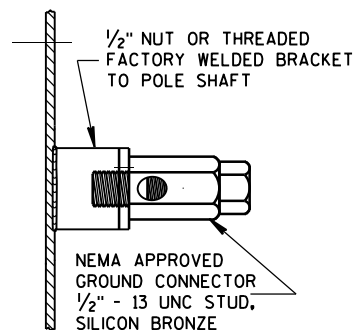
LIGHTING UNIT CODE
(TYPICAL)



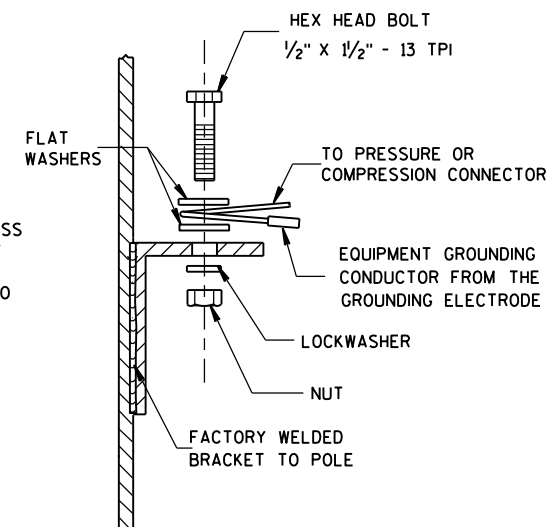
DETAIL "A"
BREAKAWY
DOUBLE POLE WITH
WATERPROOF
INSULATING BOOT



DETAIL "B"
BREAKAWY
SINGLE POLE WITH
WATERPROOF
INSULATING BOOT



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



GENERAL NOTES

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

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

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

ADDITIONAL CONDUCTORS
AND FUSE FOR TWIN
LIGHTING UNITS

EQUIPMENT GROUNDING
CONDUCTOR(S) TO LUMINAIRE(S)

APPROVED MECHANICAL TYPE
CONNECTOR FOR EQUIPMENT
GROUNDING CONDUCTORS.
COMPRESSION, CRIMP OR
WIRE NUT CONNECTORS ARE
NOT ALLOWED.

TYPICAL GROUNDING CONNECTION -
STAINLESS STEEL BOLT,
NUT AND WASHERS
1/2" X 1/2" - 13 TPI

AWG #4 (MIN.) BARE EQUIPMENT
GROUNDING CONDUCTOR.
NOTE: THIS WIRE SHALL BE
CONTINUOUS WITHOUT SPLICES
FROM THE GROUNDING ELECTRODE
TO THE EQUIPMENT GROUNDING
CONDUCTOR SPICE CONNECTOR.

INSULATED EQUIPMENT GROUNDING
CONDUCTORS FROM SYSTEM RACEWAY

EXOTHERMICALLY WELDED
TO GROUNDING ELECTRODE

CONDUCTORS TO
LUMINAIRES SHALL BE #12 AWG,
COPPER STRANDED, U.S.E. RATED,
XLP INSULATED. SINGLE
LIGHTING UNIT SHOWN

CIRCUIT TAGS, BOTH SIDES
OF ALL FUSES (TYPICAL)

IN LINE SINGLE POLE FUSE ASSEMBLY.
600 VAC, WITH 5 AMP FAST ACTING
FUSE (SEE DETAIL "B")
TAPE AND VARNISH
CRIMPED END FERRULES

HANDHOLE & COVER

18" PIGTAIL BETWEEN
CONNECTOR AND FUSEHOLDER

APPROVED INSULATED MULTITAP
TERMINAL BLOCK TYPE CONNECTORS.
COMPRESSION, CRIMP OR WIRE NUT
CONNECTORS ARE NOT ALLOWED.

INSULATED UNGROUNDED CIRCUIT
CONDUCTORS FROM SYSTEM RACEWAY

ALTERNATE PHASE UNGROUNDED
CIRCUIT CONDUCTOR PASSING
THROUGH THIS POLE

**3 WIRE - 120, 240 OR 480 VAC (UNGROUND CONDUCTOR)
WITH GROUNDED CONDUCTOR AND
WITH EQUIPMENT GROUNDING CONDUCTOR**

TWIN LIGHTING UNITS REQUIRE
INDIVIDUAL SETS OF UNGROUNDED
CONDUCTORS AND FUSE ASSEMBLY.

AWG #4 (MIN.) BARE EQUIPMENT
GROUNDING CONDUCTOR.
NOTE: THIS WIRE SHALL BE
CONTINUOUS WITHOUT SPLICES
FROM THE GROUNDING ELECTRODE
TO THE EQUIPMENT GROUNDING
CONDUCTOR SPICE CONNECTOR.

EQUIPMENT GROUNDING
CONDUCTOR(S) TO LUMINAIRE(S)

TYPICAL GROUNDING CONNECTION -
STAINLESS STEEL BOLT,
NUT AND WASHERS
1/2" X 1/2" - 13 TPI

APPROVED MECHANICAL TYPE
CONNECTOR FOR EQUIPMENT
GROUNDING CONDUCTORS.
COMPRESSION, CRIMP OR
WIRE NUT CONNECTORS ARE
NOT ALLOWED.

INSULATED EQUIPMENT GROUNDING
CONDUCTORS FROM SYSTEM RACEWAY

EXOTHERMICALLY WELDED
TO GROUNDING ELECTRODE

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

CIRCUIT TAGS, BOTH SIDES
OF ALL FUSES (TYPICAL)

IN LINE FUSE ASSEMBLY
TWO POLE, 600 VAC,
WITH 5 AMP FAST ACTING
FUSE (SEE DETAIL "A")
TAPE AND VARNISH
CRIMPED END FERRULES

HANDHOLE & COVER

18" PIGTAIL BETWEEN
CONNECTORS AND FUSEHOLDERS

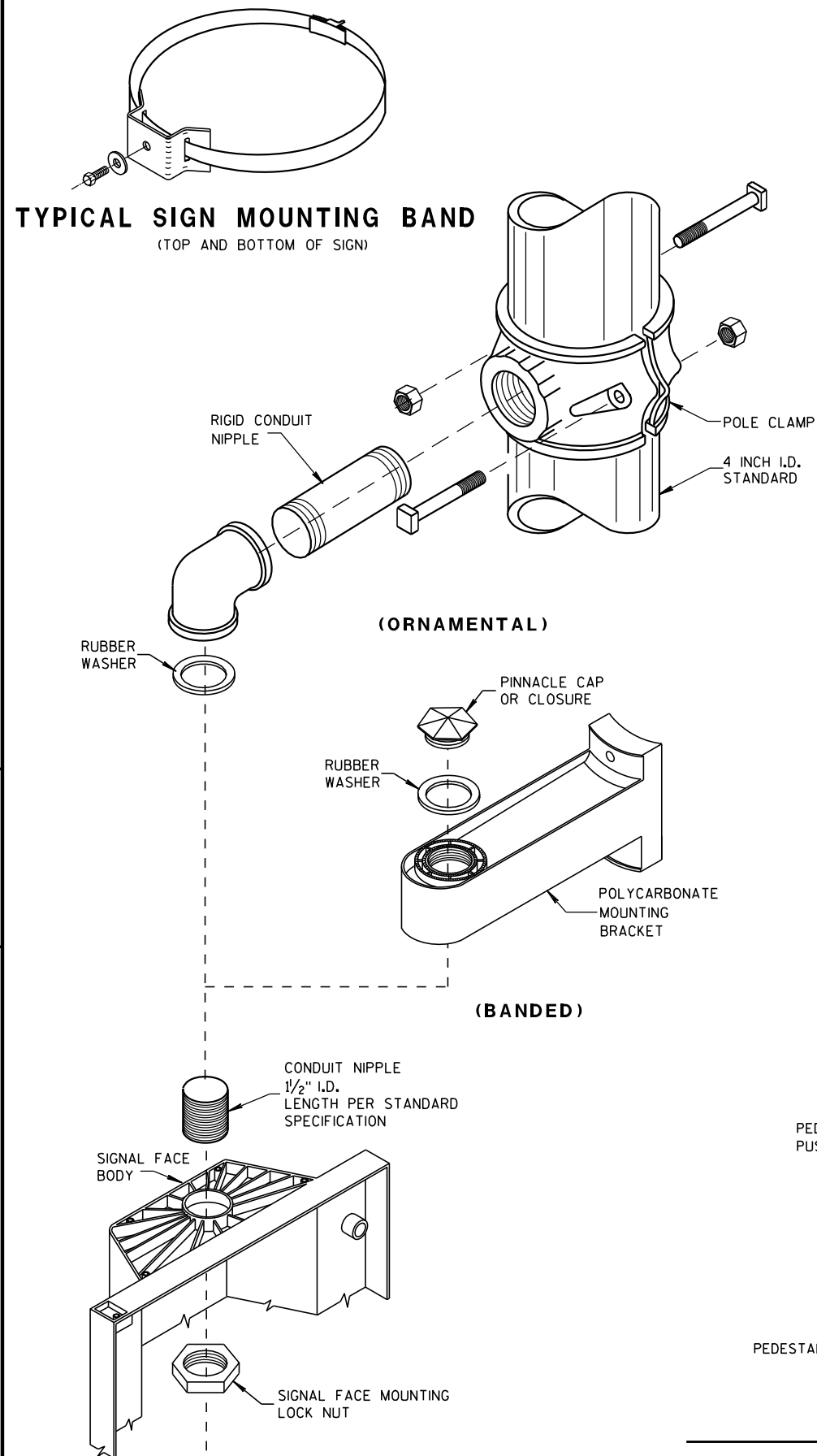
APPROVED INSULATED MULTITAP
TERMINAL BLOCK TYPE CONNECTORS.
COMPRESSION, CRIMP OR WIRE NUT
CONNECTORS ARE NOT ALLOWED.

INSULATED UNGROUNDED CIRCUIT
CONDUCTORS FROM SYSTEM RACEWAY

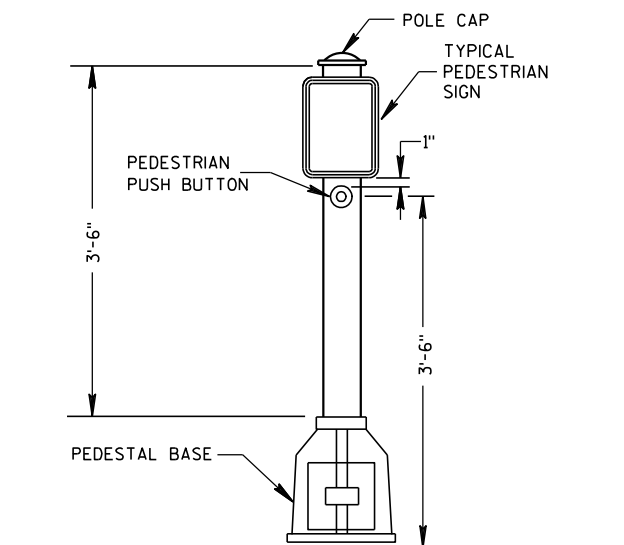
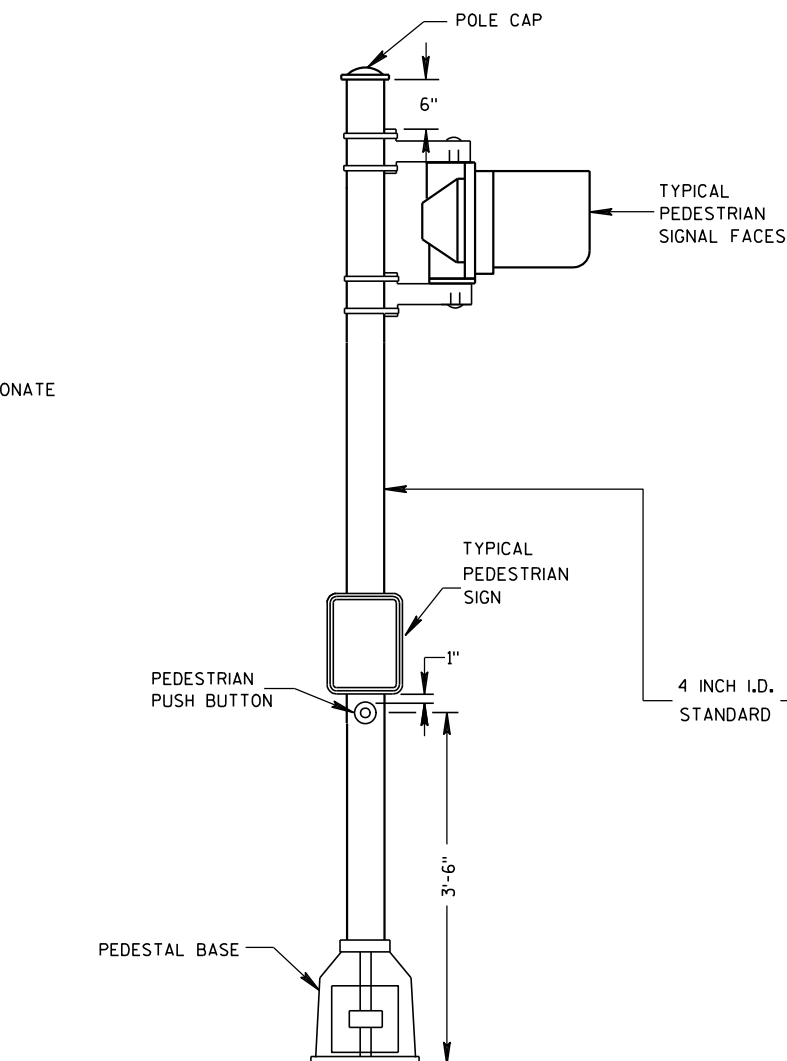
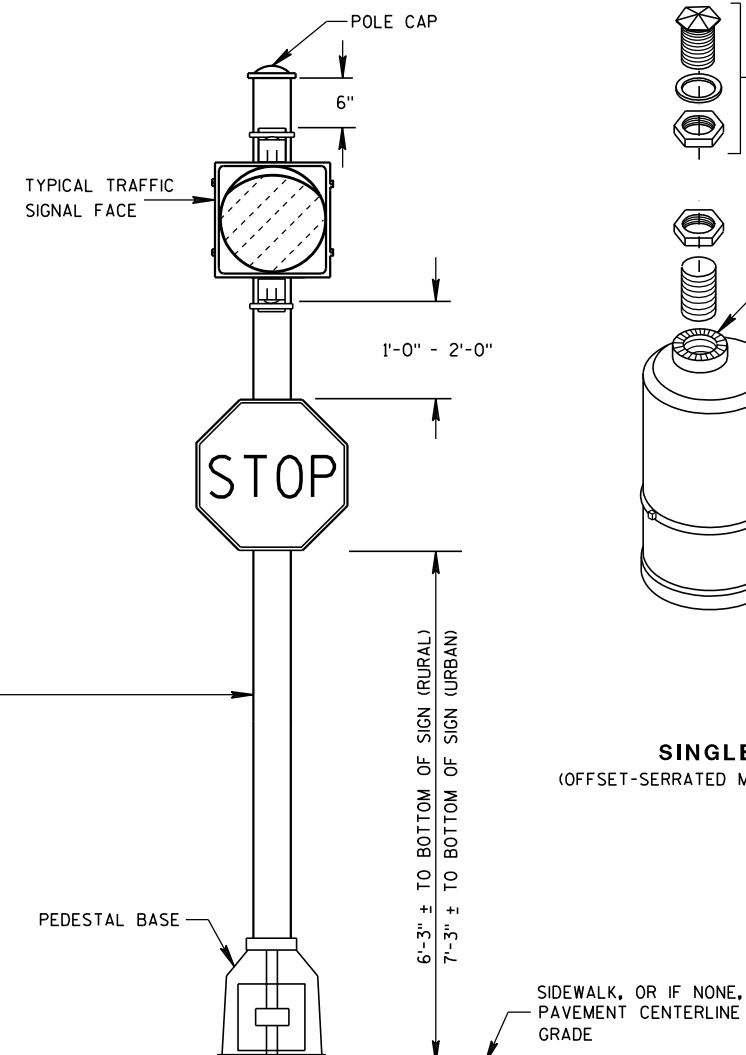
**NON-FREEWAY LIGHTING UNIT
POLE WIRING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL 280
FHWA



SIGNAL FACE MOUNTING DETAILS

PEDESTRIAN PUSH BUTTON
TYPICAL MOUNTINGPEDESTRIAN FACE STANDARD-10 FT.
(WALK-DON'T WALK)STANDARD FLASHER.
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

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

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

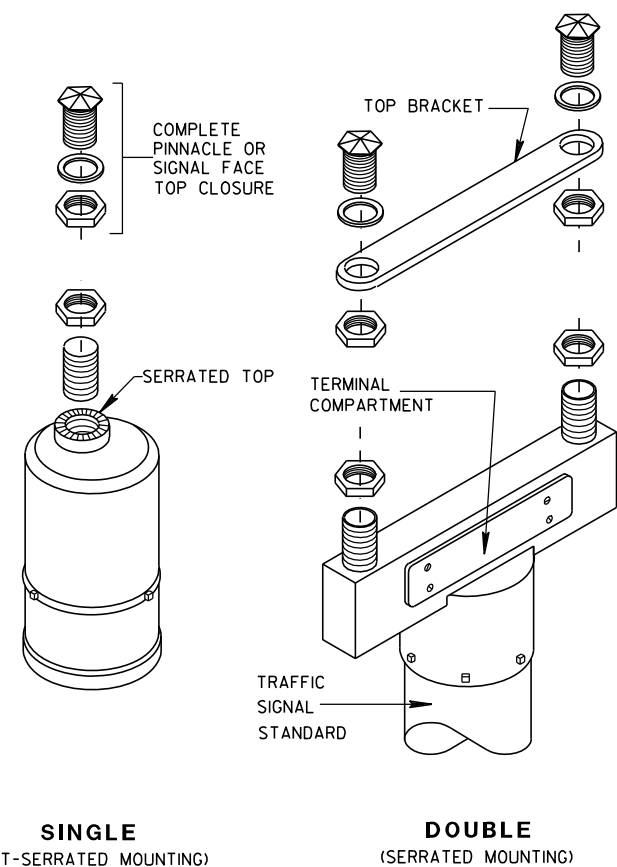
POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

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

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

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

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



SLIPFITTERS

TRAFFIC SIGNAL STANDARD
PEDESTRIAN AND FLASHER
TYPICAL MOUNTING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

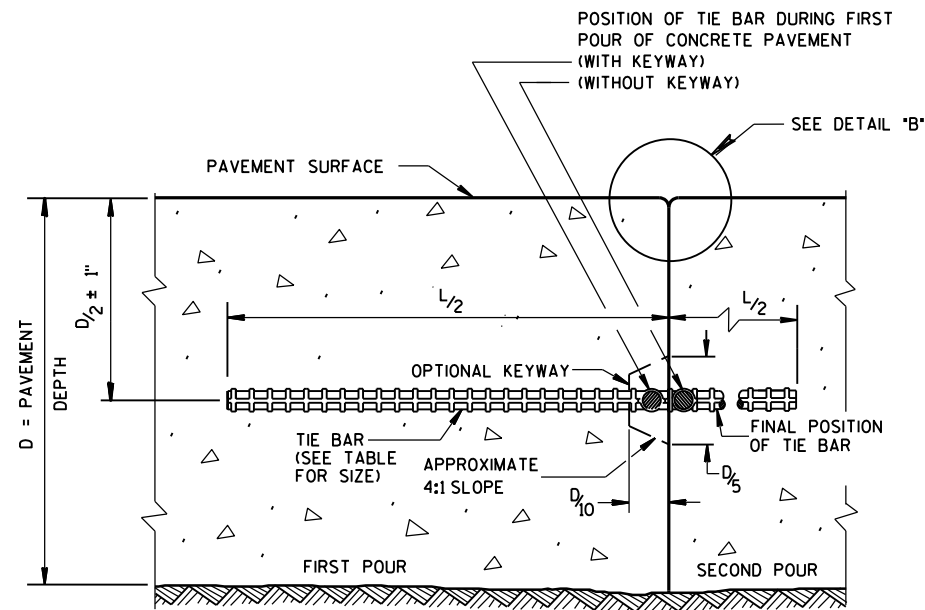
5/11/10

DATE

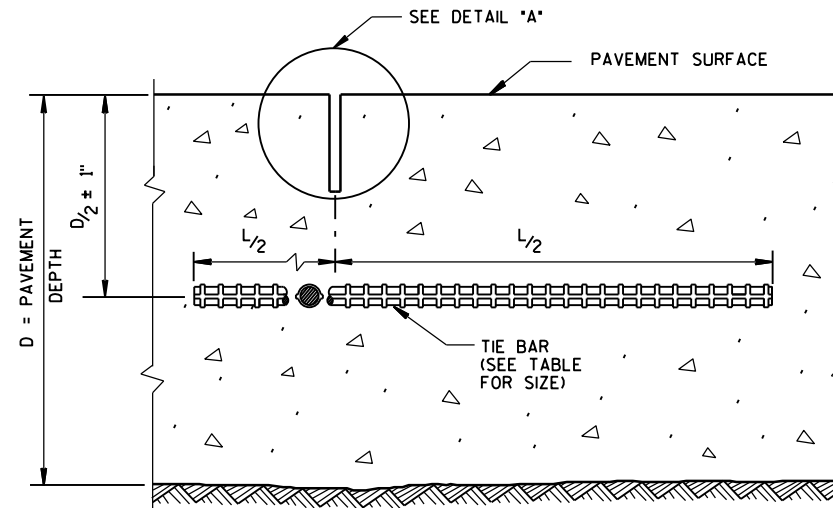
FHWA

/S/ John Corbett
STATE ELECTRICAL ENGR 281

HWYS



CONSTRUCTION JOINT



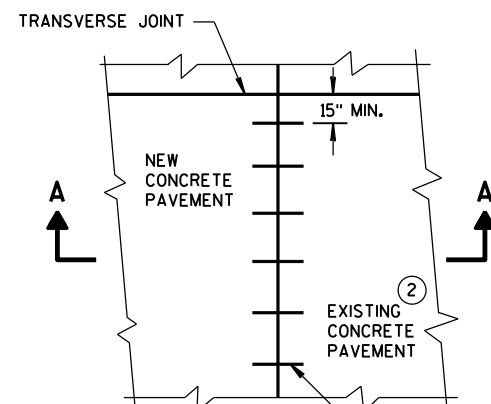
SAWED JOINT

GENERAL NOTES

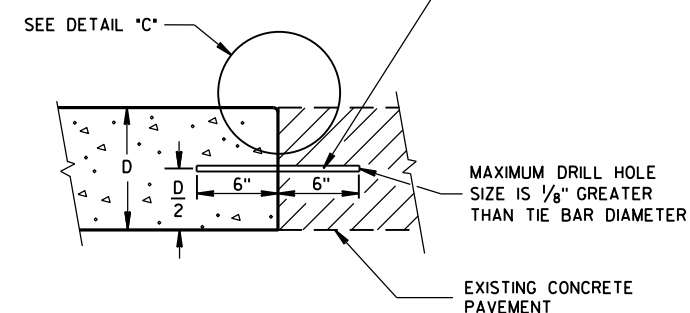
DO NOT SEAL OR FILL LONGITUDINAL JOINTS.
CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

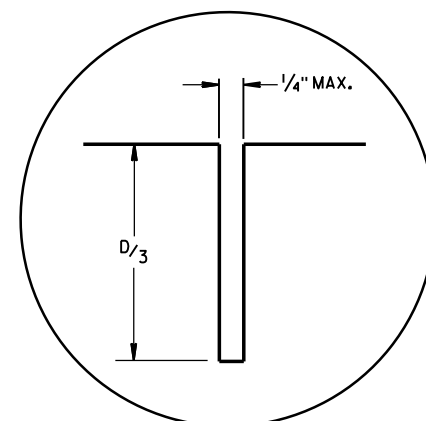
- ① ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.
- ② PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.



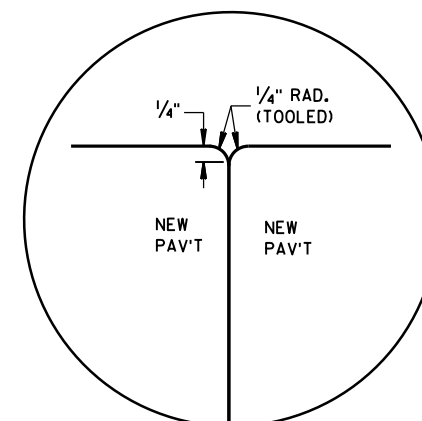
PLAN VIEW



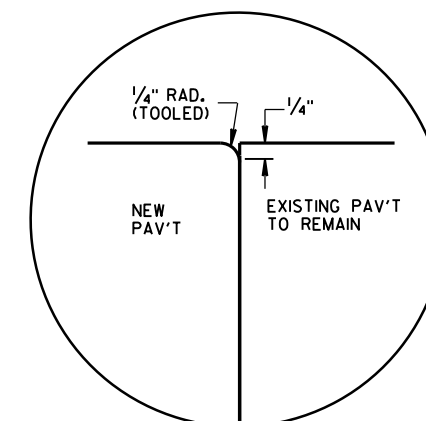
SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT
TIE BARS ANCHORED
INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



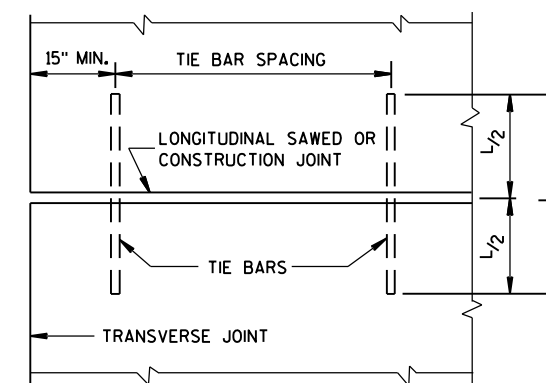
DETAIL "C"

TIE BAR TABLE

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

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

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

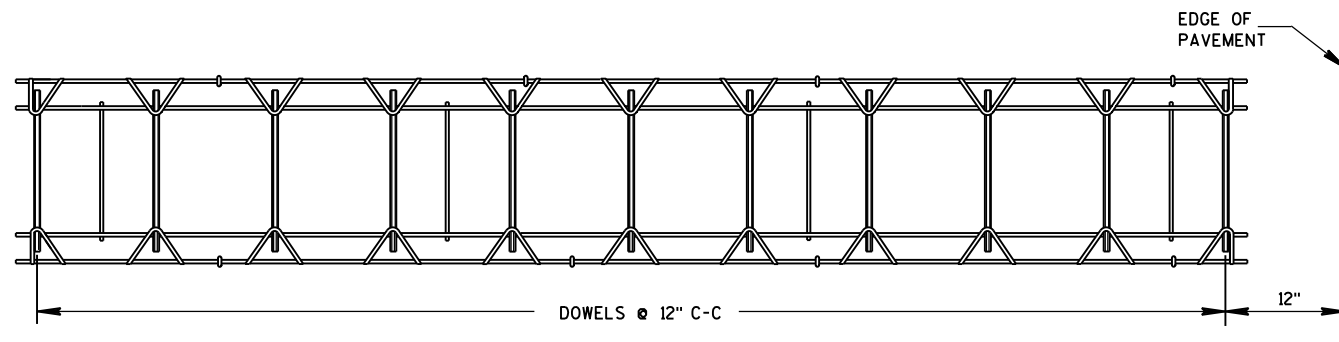


PLAN VIEW
SHOWING LOCATION OF TIE BARS

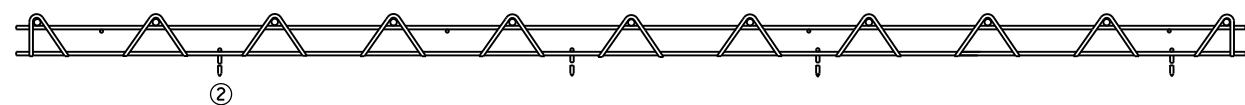
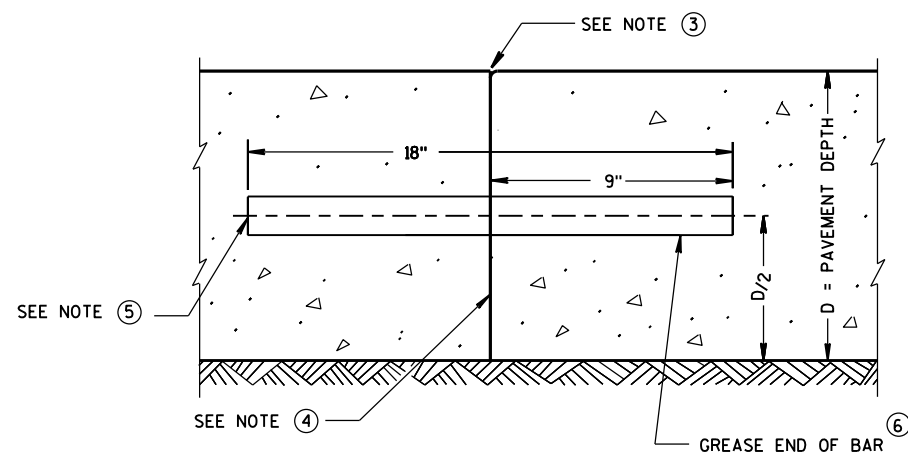
CONCRETE PAVEMENT
LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

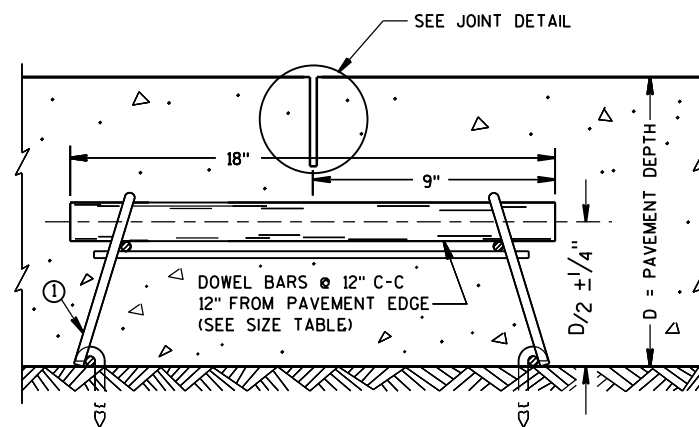
APPROVED
June, 2015 /S/ Peter Kemp, P.E.
DATE PAVEMENT SUPER 282
FHWA



PLAN VIEW

SIDE VIEW
CONTRACTION JOINT DOWEL ASSEMBLY ①

TRANSVERSE CONSTRUCTION JOINT



DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE
AND JOINT SPACING TABLE

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

GENERAL NOTES

CONTRACTION JOINTS

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

DO NOT SEAL OR FILL CONTRACTION JOINTS.

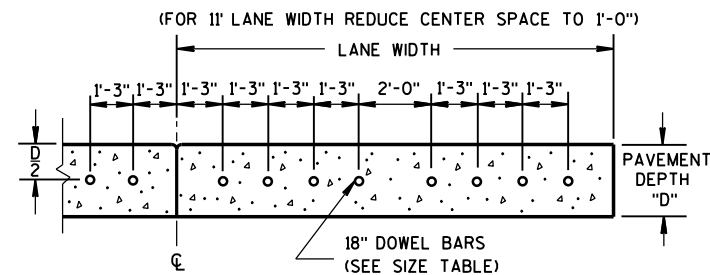
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

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

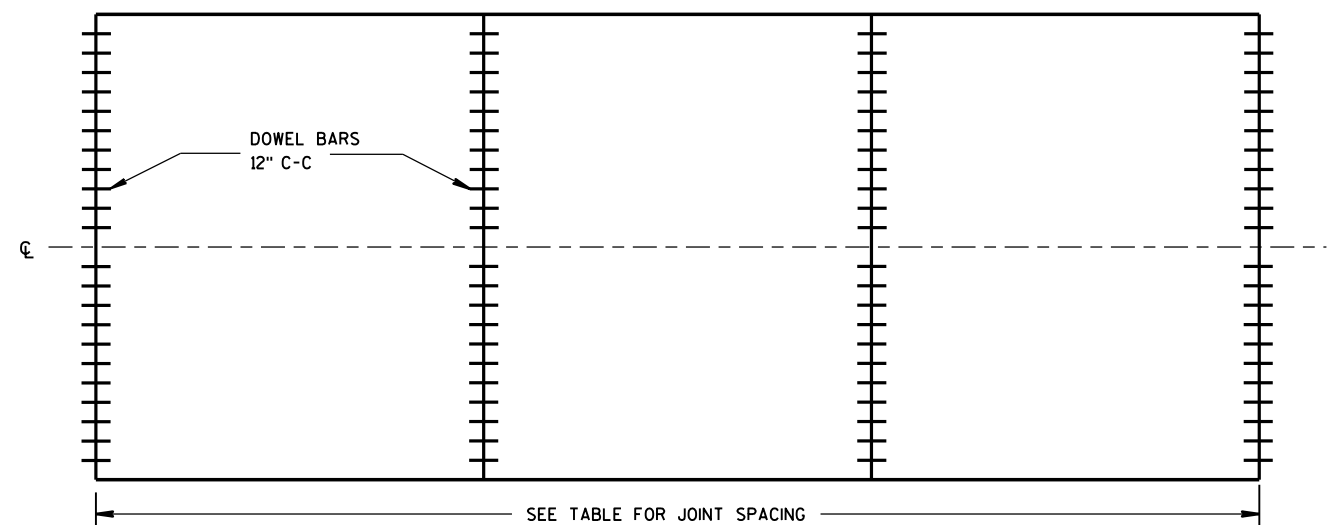
CONSTRUCTION JOINTS

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

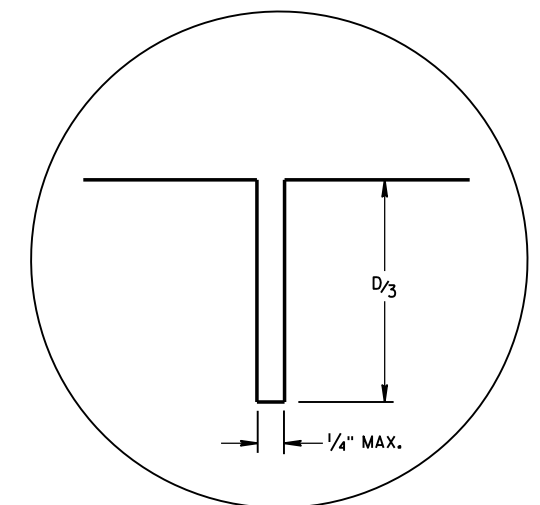
- ① OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.
- ② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND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



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



CONTRACTION JOINT LOCATIONS



JOINT DETAIL

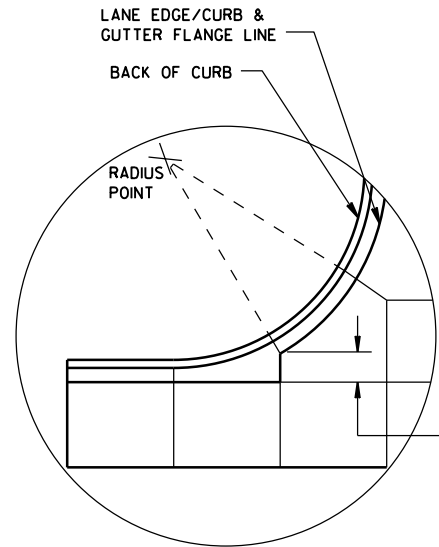
URBAN DOWELED
CONCRETE PAVEMENTSTATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

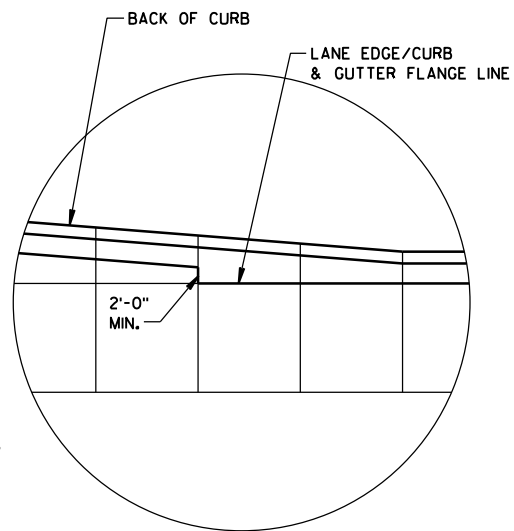
5/3/2013
DATE/S/ Deb Bischoff
PAVEMENT POLICY & DE 283

FHWA

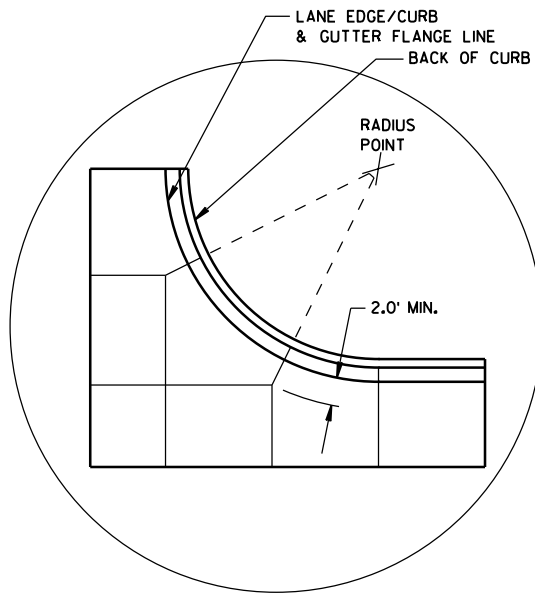
JEER



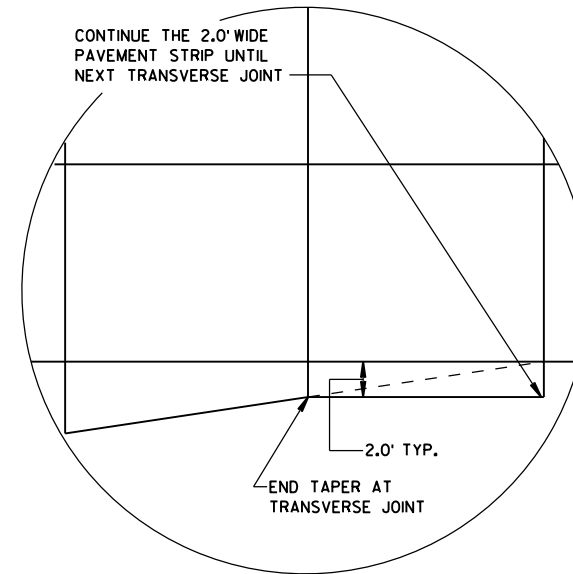
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

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

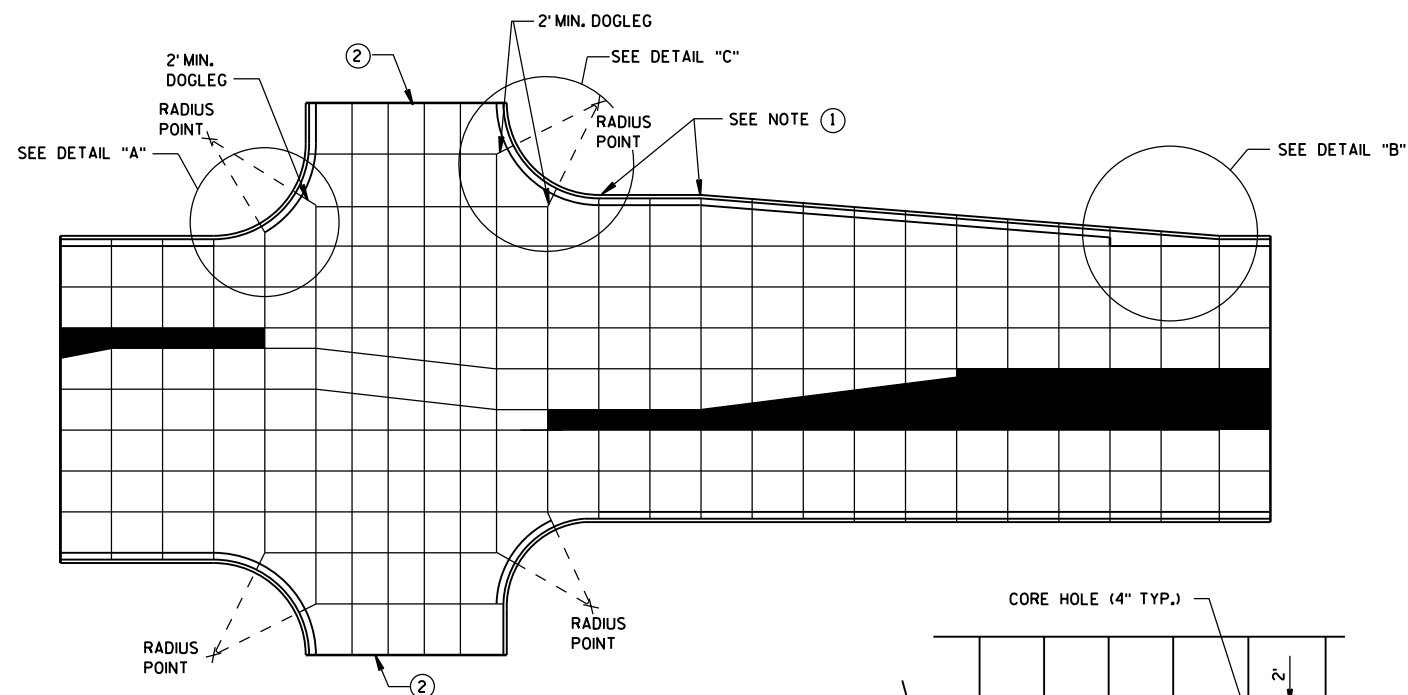
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

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

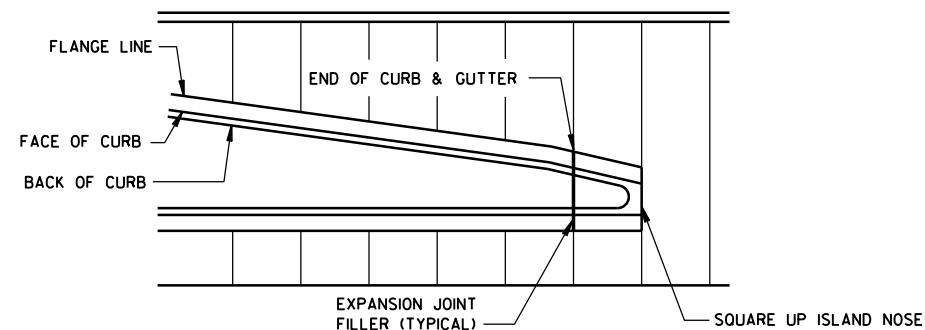
AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

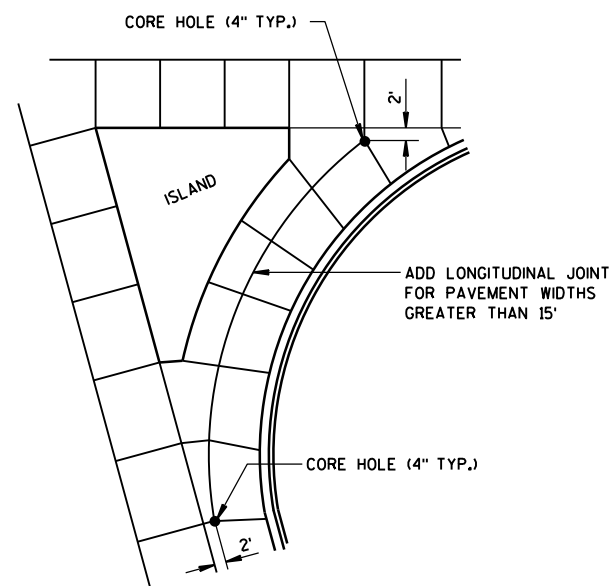
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM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



STANDARD INTERSECTION



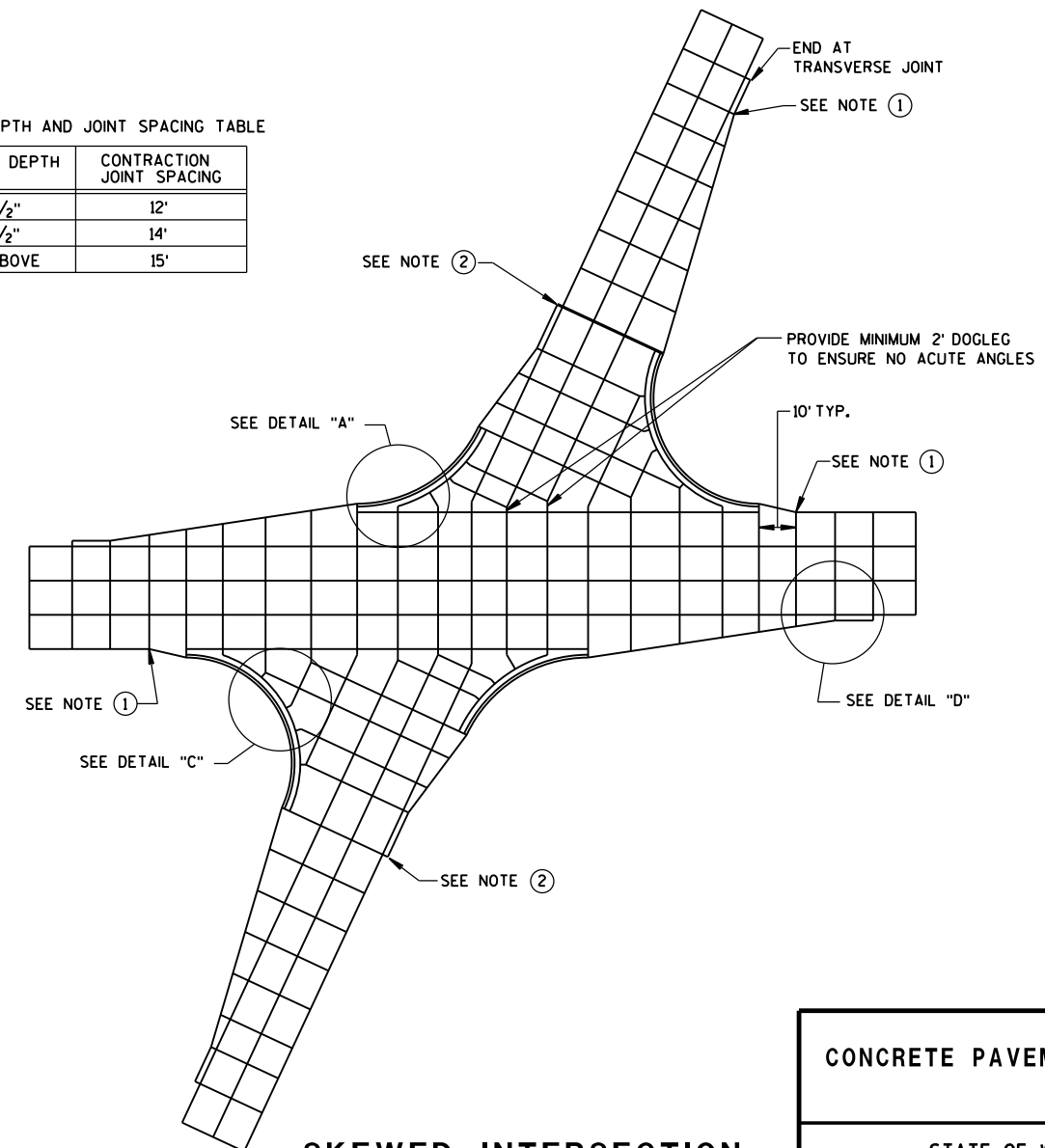
APPROACH TO MEDIAN



LARGE RIGHT TURN

PAVEMENT DEPTH AND JOINT SPACING TABLE

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



SKewed INTERSECTION

CONCRETE PAVEMENT JOINTING

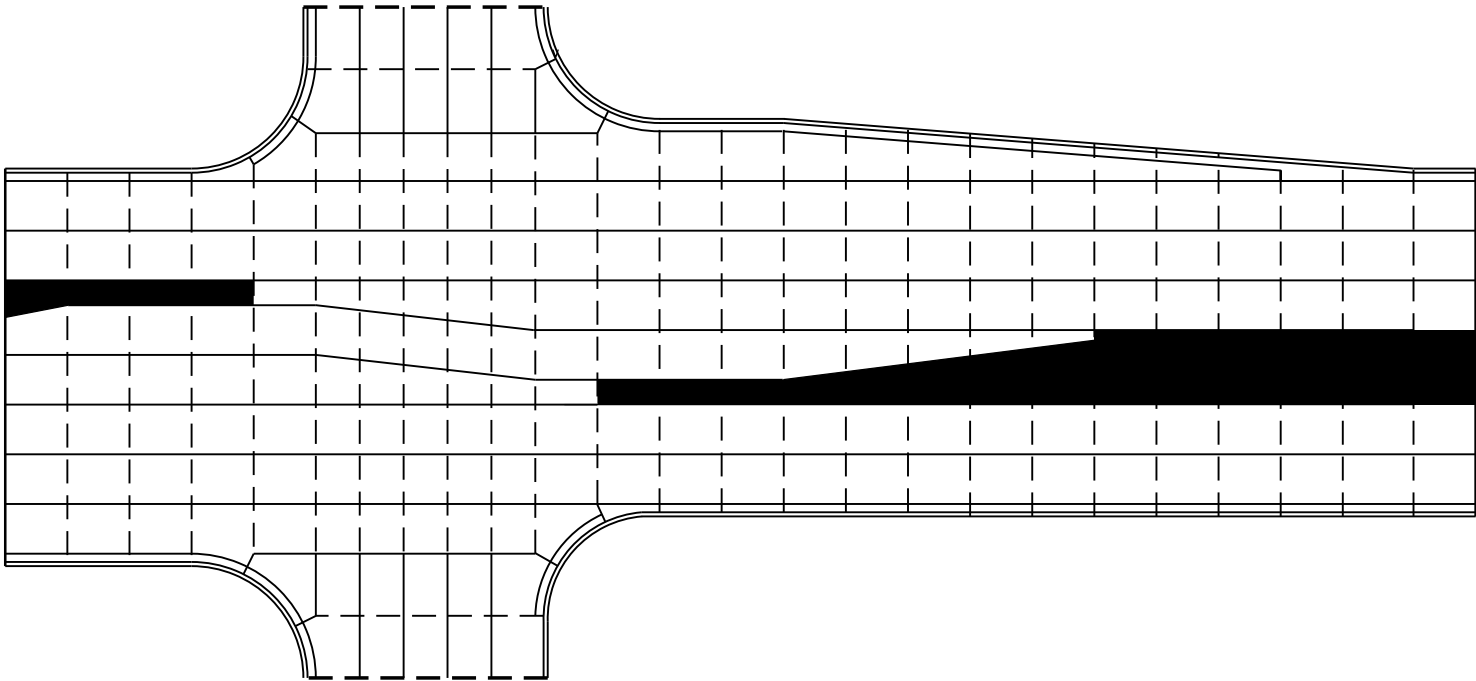
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

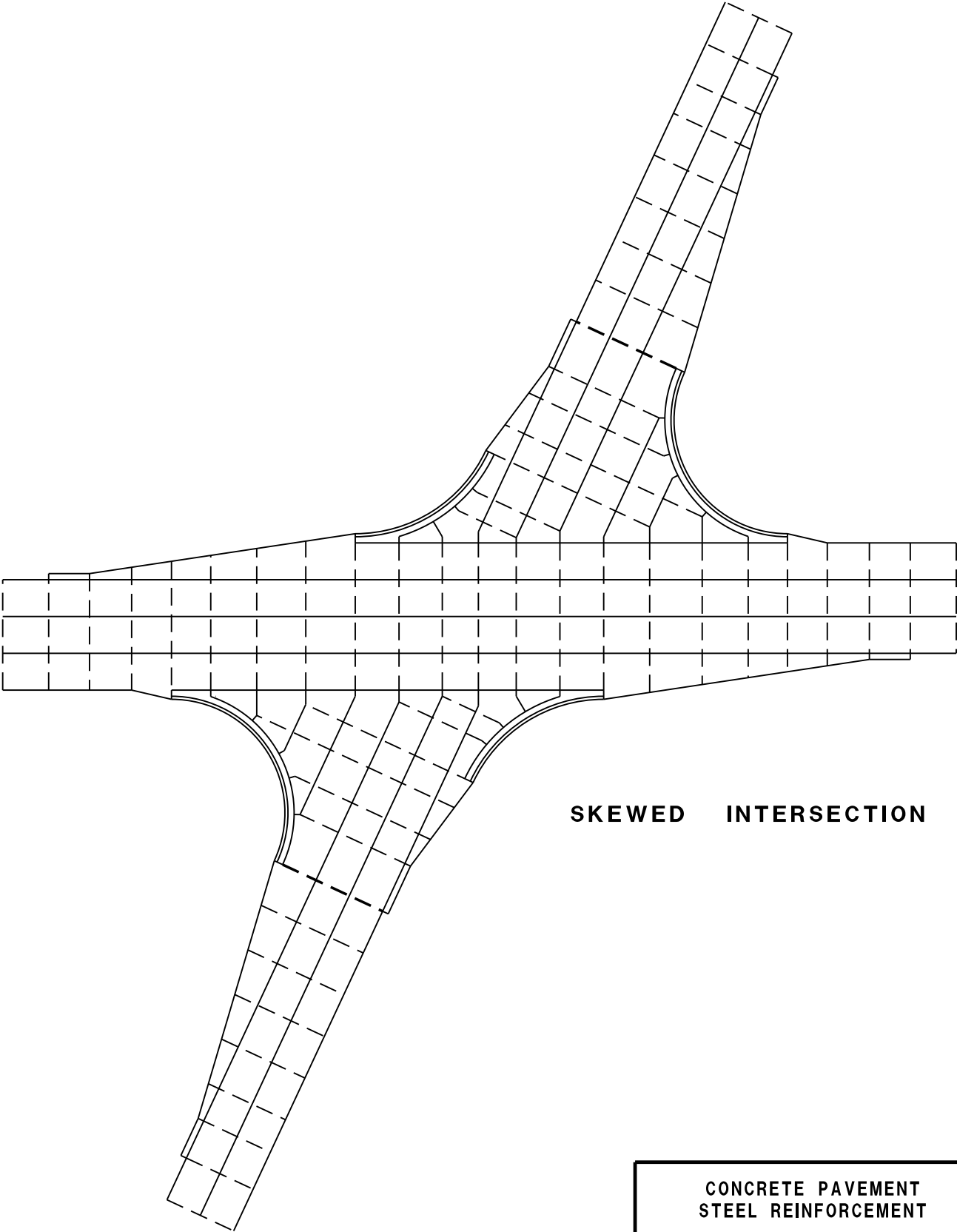
- POTENTIAL DOWELED EXPANSION JOINT
- DOWELED JOINT
- TIED JOINT

GENERAL NOTES

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



STANDARD INTERSECTION

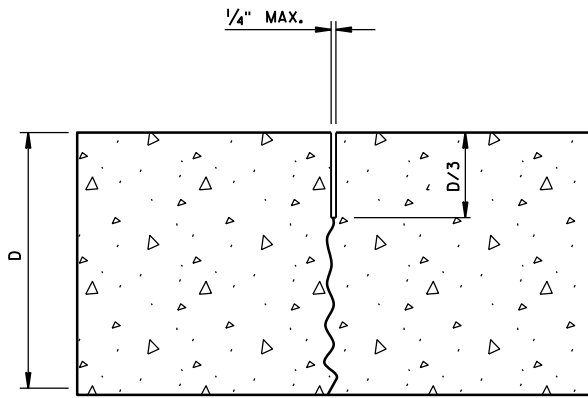


SKewed INTERSECTION

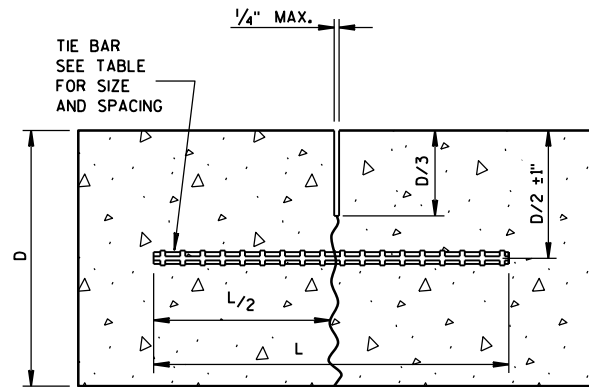
CONCRETE PAVEMENT
STEEL REINFORCEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

285



UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

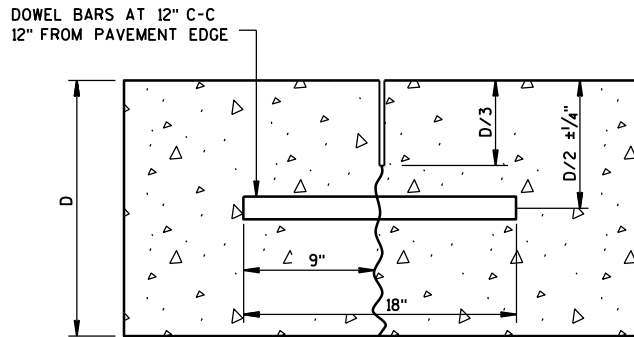
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

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

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

GENERAL NOTES

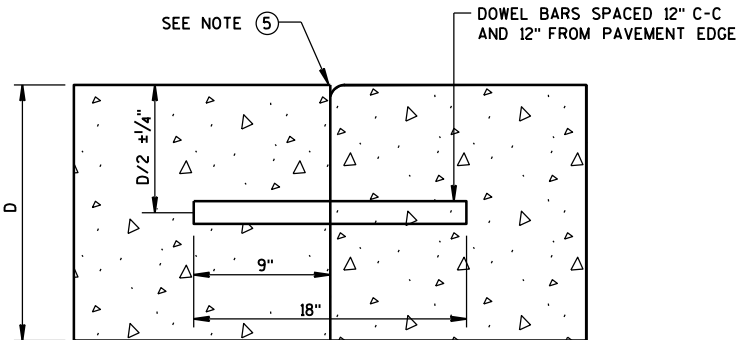
- ① USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
- ② SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
- ③ LOCATE CONSTRUCTION JOINTS A MINIMUM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



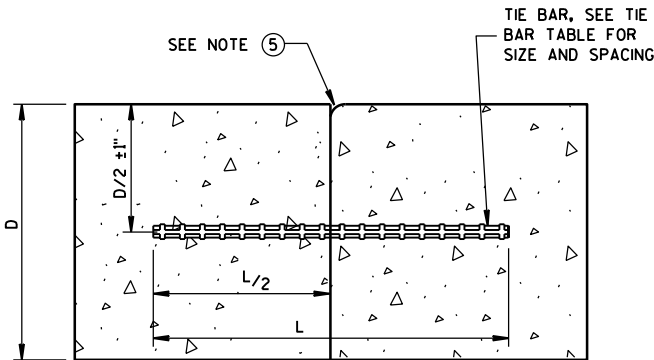
DOWELED-TRANSVERSE

CONTRACTION JOINTS

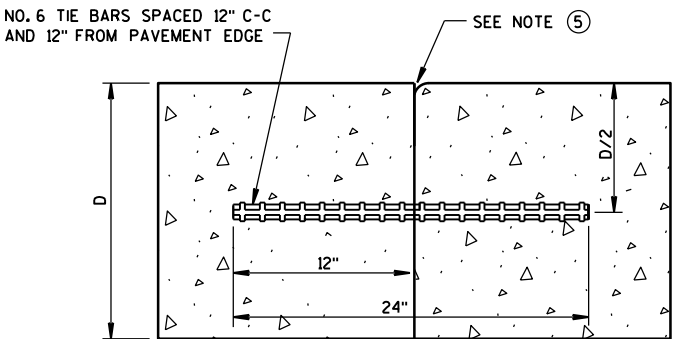
SEE NOTE ②



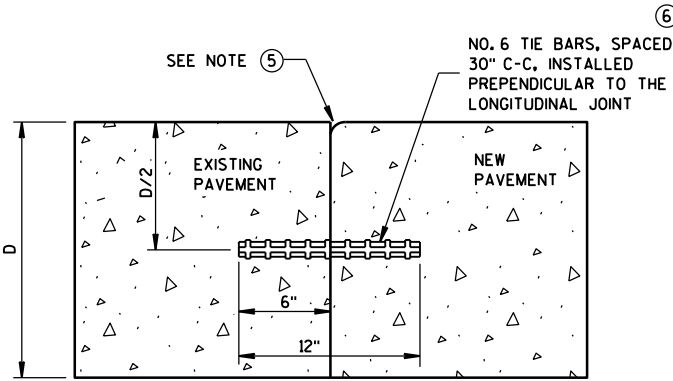
DOWELED TRANSVERSE ③



TIED LONGITUDINAL



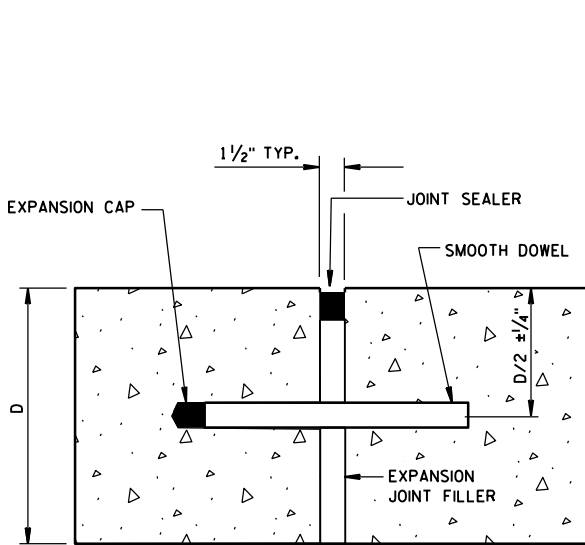
TIED TRANSVERSE ③
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



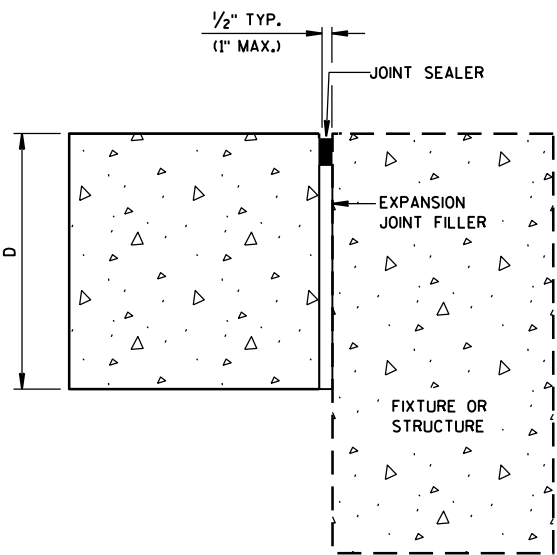
TIED LONGITUDINAL TO EXISTING

CONSTRUCTION JOINTS

SEE NOTE ④



DOWELED-TRANSVERSE
SEE NOTE ①

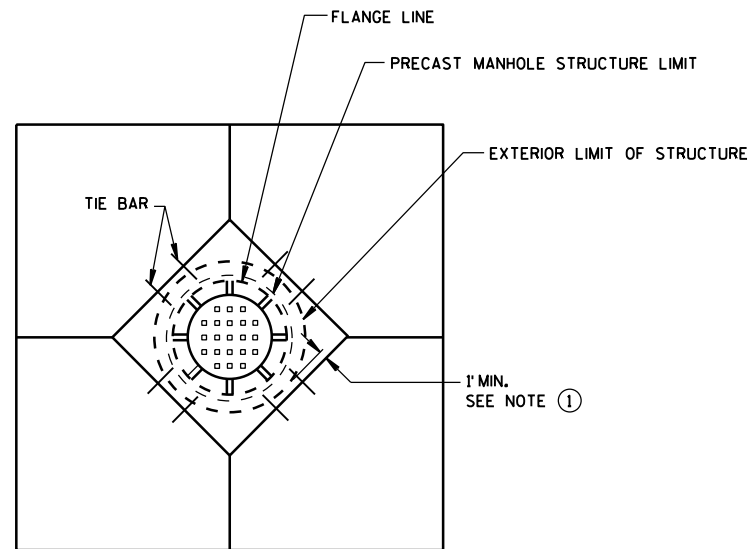


UNTIED-LONGITUDINAL

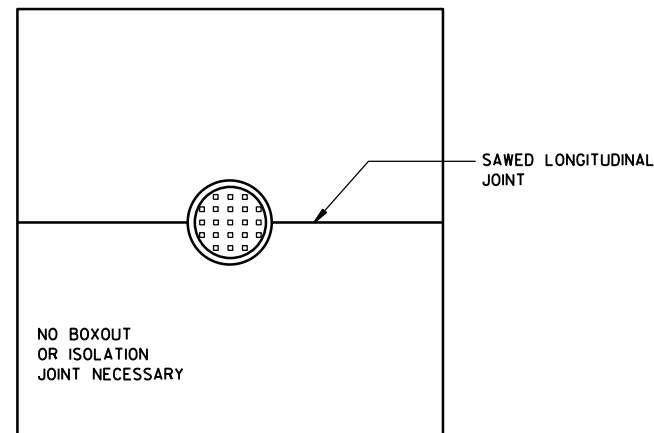
EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

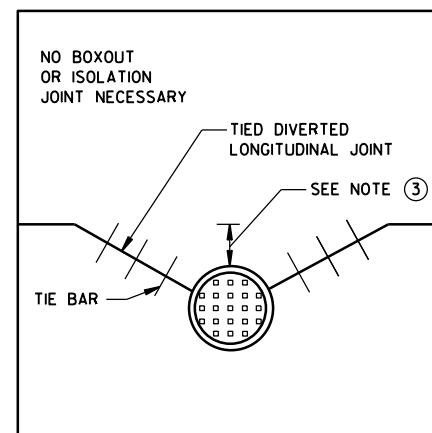
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 286



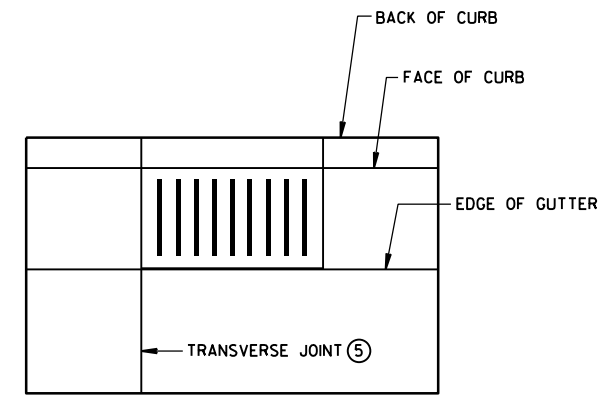
**DIAGONAL MANHOLE BOXOUT
FOR CONSTRUCTION JOINTS**



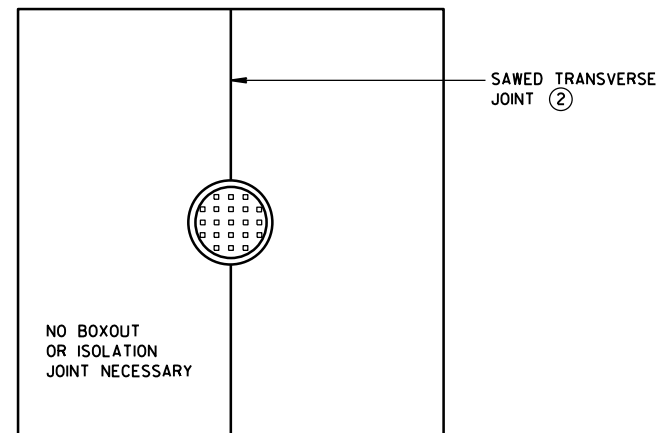
**MANHOLE WITH
LONGITUDINAL JOINT**



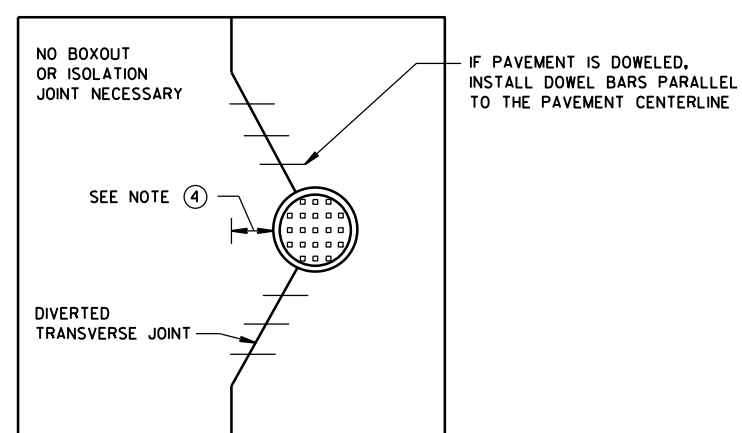
**MANHOLE WITH DIVERTED
LONGITUDINAL CONTRACTION JOINT**



**INLET WITH
TRANSVERSE JOINT**



**MANHOLE WITH
TRANSVERSE JOINT**



**MANHOLE WITH DIVERTED
TRANSVERSE CONTRACTION JOINT**

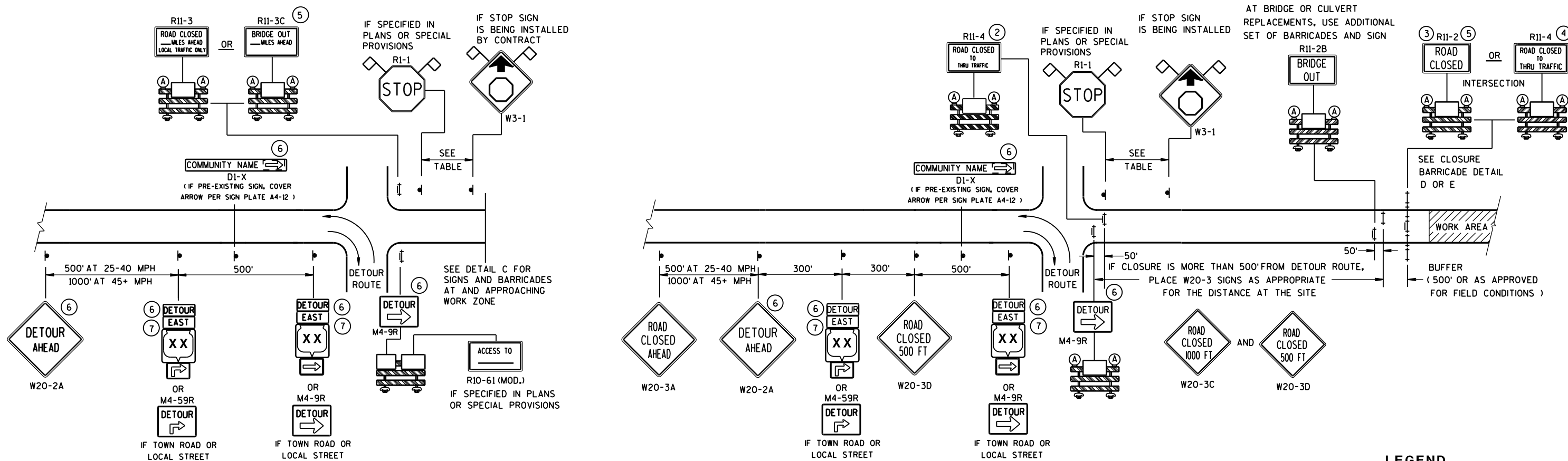
GENERAL NOTES

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

**CONCRETE PAVEMENT
JOINTING AT UTILITY FIXTURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December, 2016 /S/ Peter Kemp, P.E.
DATE PAVEMENT SUPEF 287
FHWA



LEGEND

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

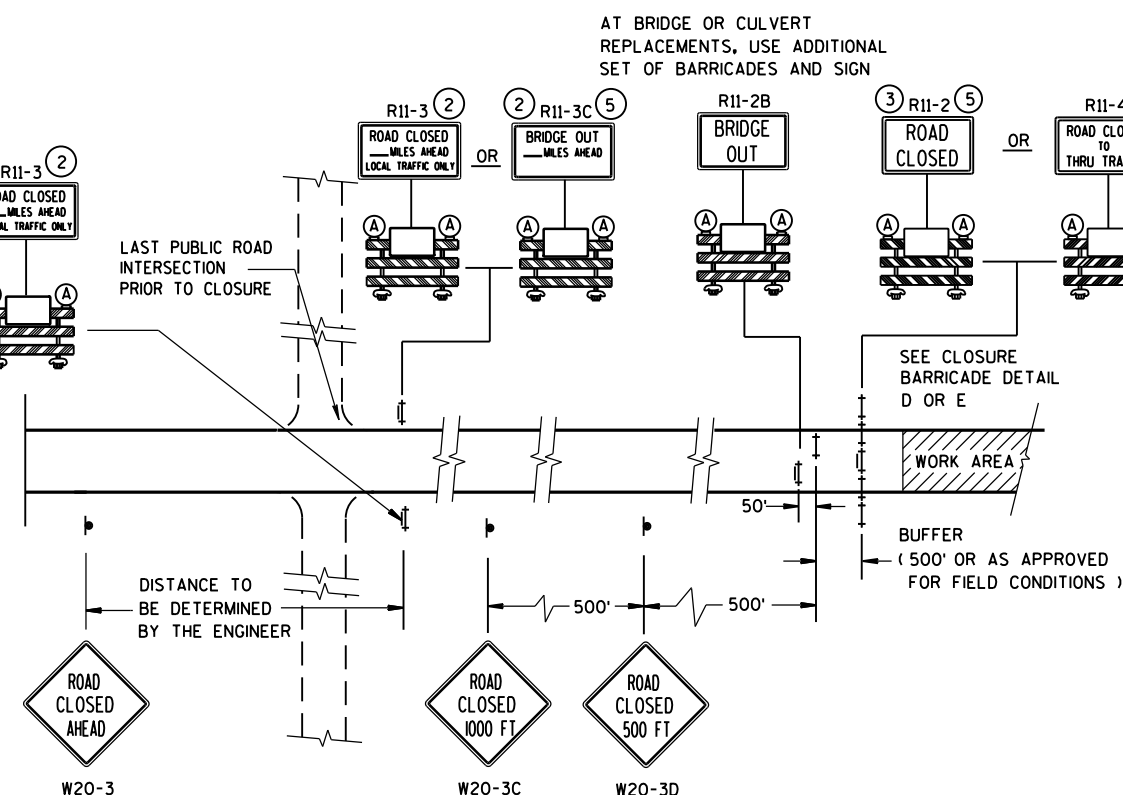
WORK AREA

DETOUR EAST
M4-8
M3-X
M1-4 OR M1-5A OR M1-6

M05-1 OR M06-1

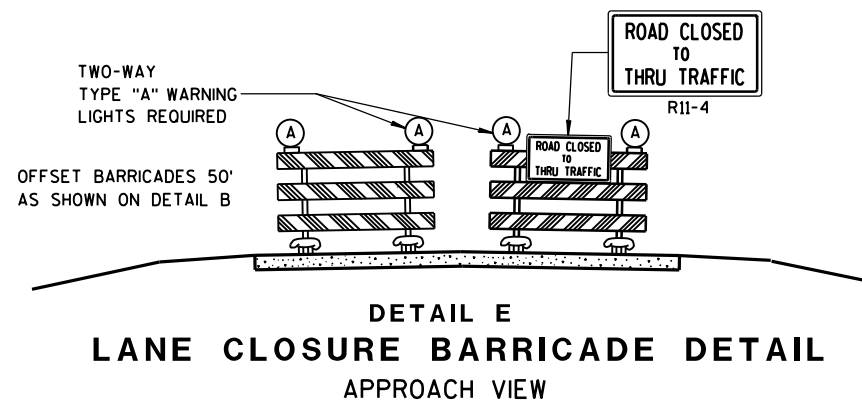
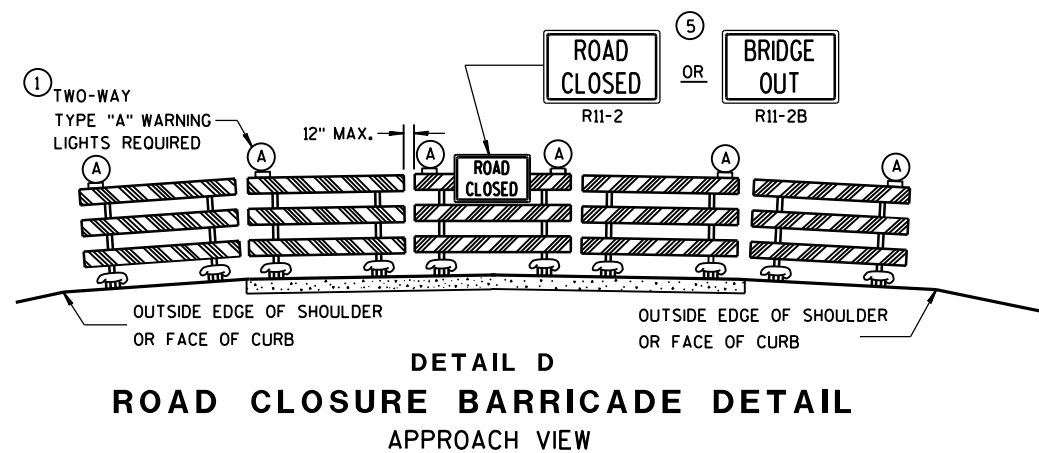
FLAGS, 16" X 16" MIN., (ORANGE)

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



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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
Sept. 2015 DATE	/S/ Peter Amokobe Atepe STATEWIDE WORK ZONE SAFETY ENGINEER	FIC



SEE SDD 15C2-SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

R11-2 SHALL BE 48" X 30".

R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".

M4-9 SHALL BE 30" X 24".

M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)

M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)

M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)

M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)

D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

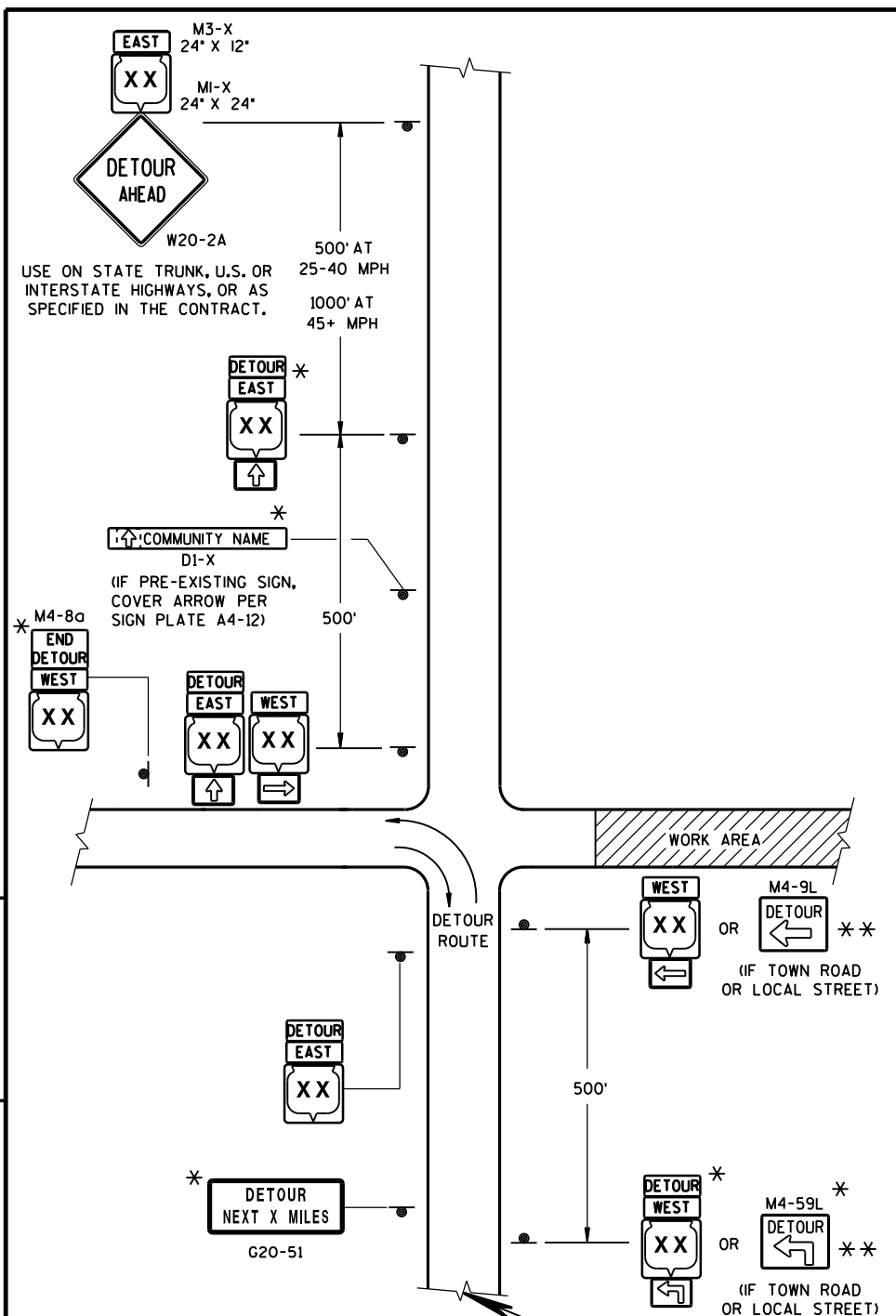
R1-1 SHALL BE 36" X 36".

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 /S/ Peter Amokobe Atepe
DATE STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA 289 FIC



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

MATCH POINT

DETAIL F
DETOUR SIGNING

GENERAL NOTES

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

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

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

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

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

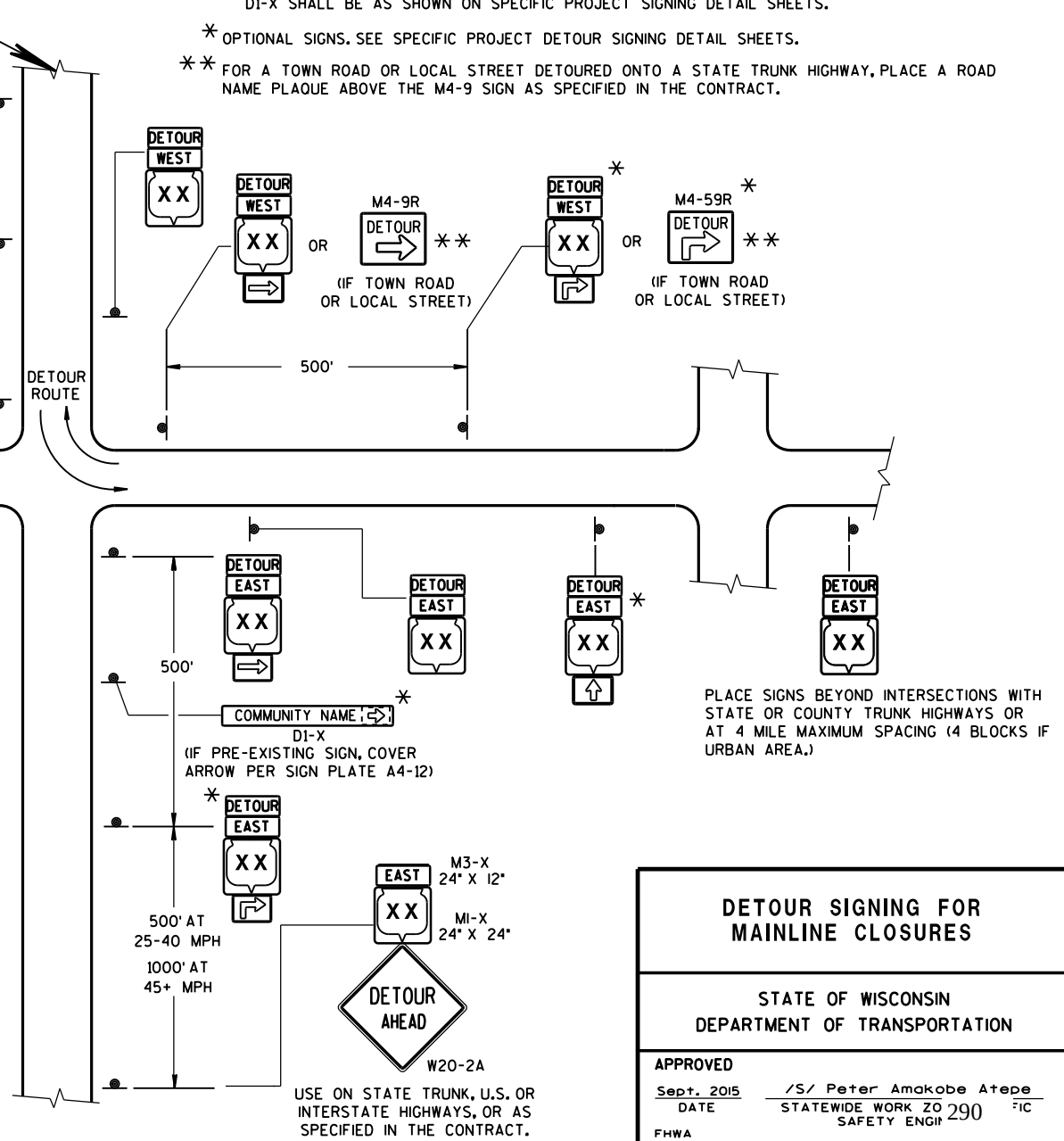
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

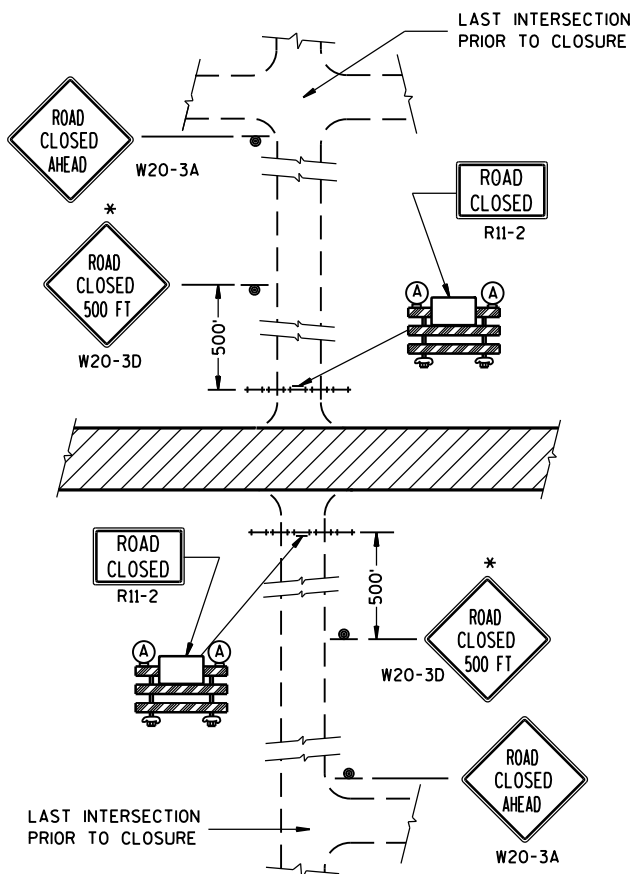
** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



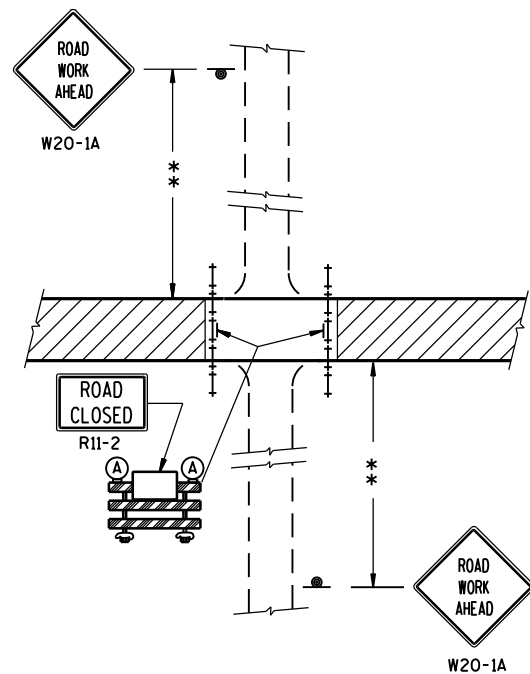
- LEGEND**
- SIGN ON PERMANENT SUPPORT
 - WORK AREA
 - M4-8
M3-X
 - MI-4
MI-5A
MI-6
 - M05-1
M06-1
M06-1

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD 15C2-SHEET "a"

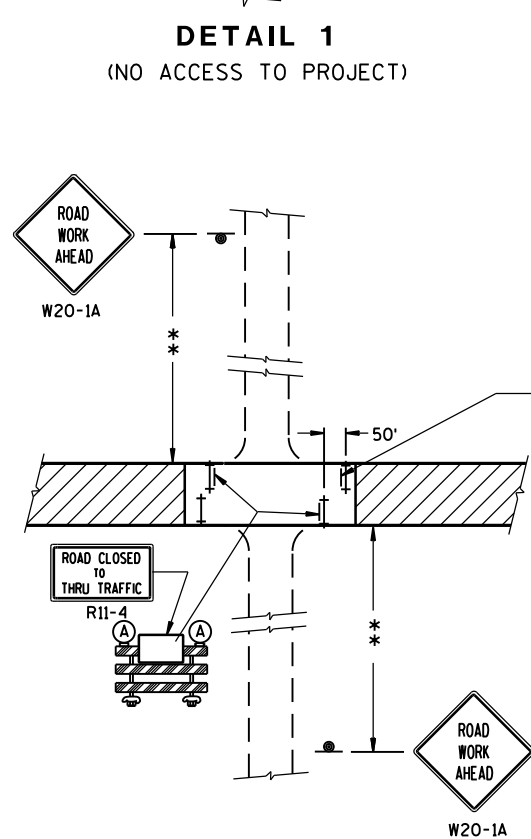
DETOUR SIGNING FOR MAINLINE CLOSURES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE FWHA	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE SAFETY ENGINEER



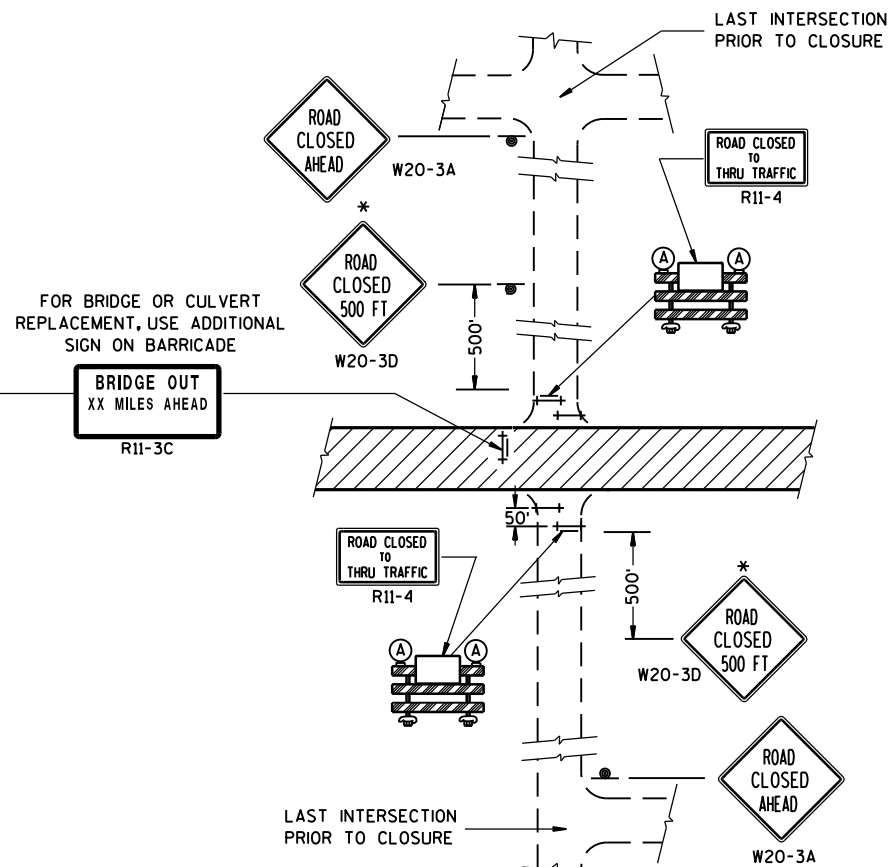
DETAIL 1
(NO ACCESS TO PROJECT)



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



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



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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

R11-2 SHALL BE 48" X 30".

R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

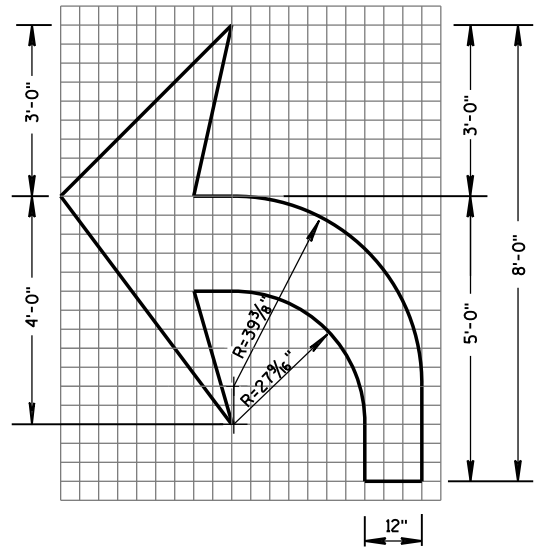
LEGEND

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

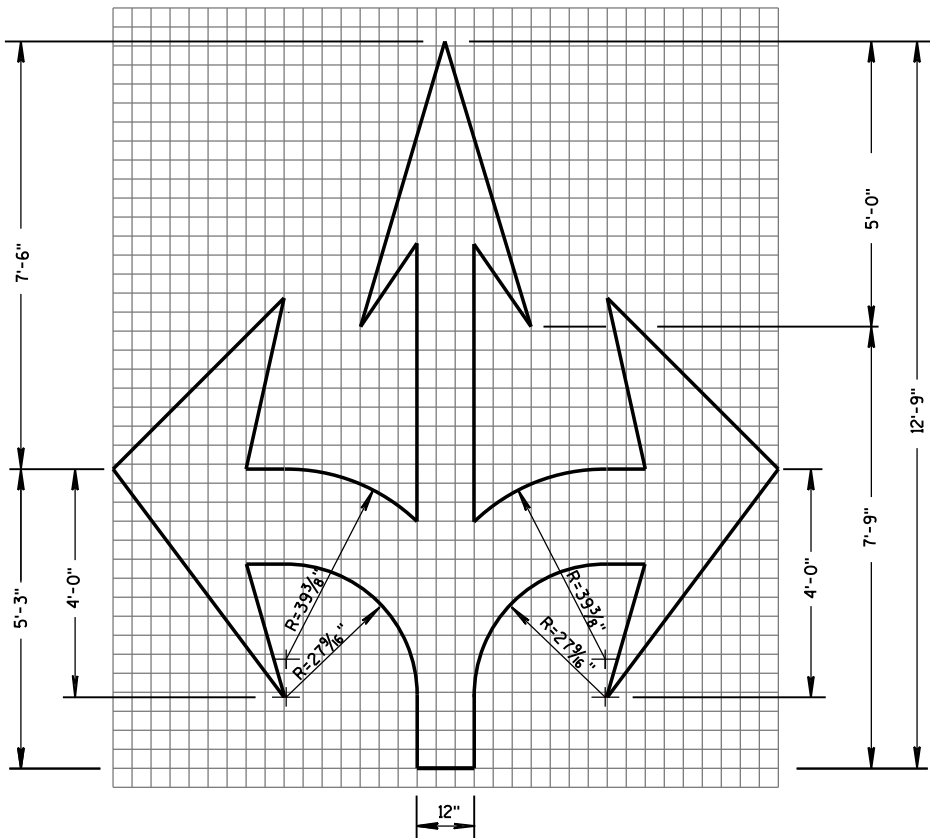
BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

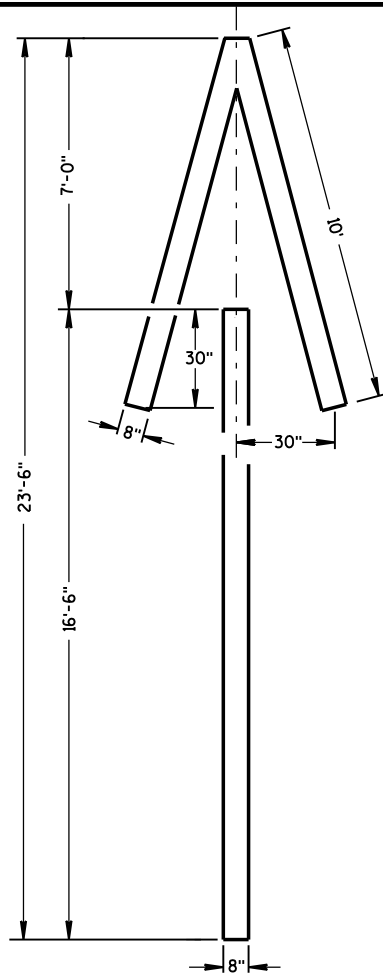
APPROVED
DATE Sept. 2015 /S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA



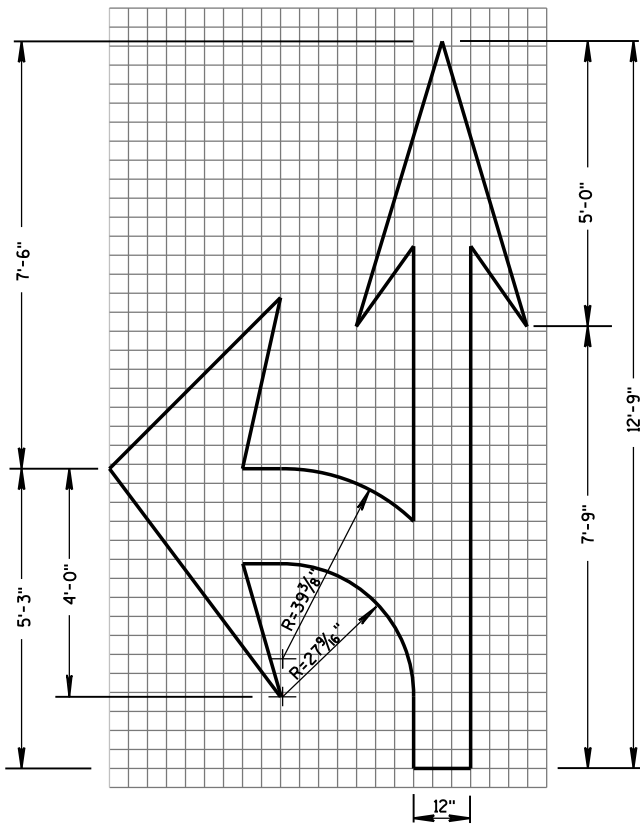
TYPE 2



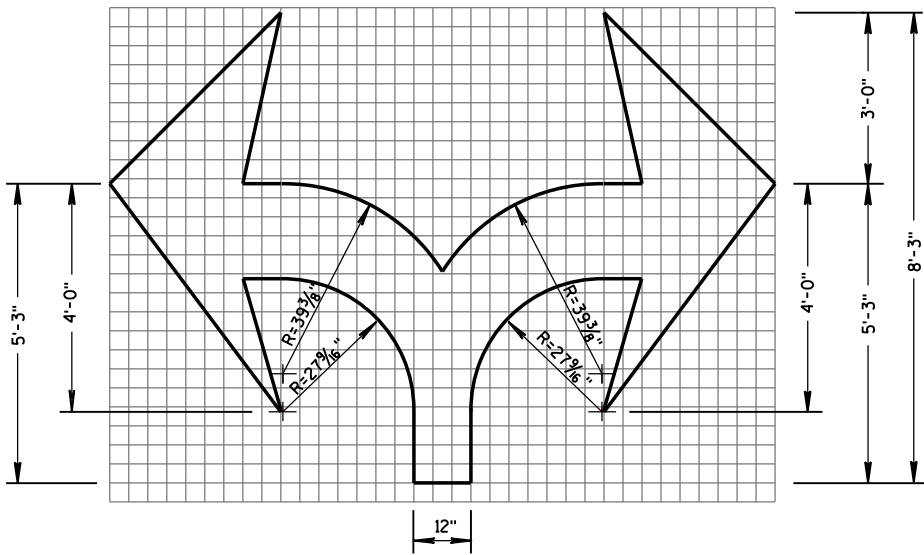
TYPE 6



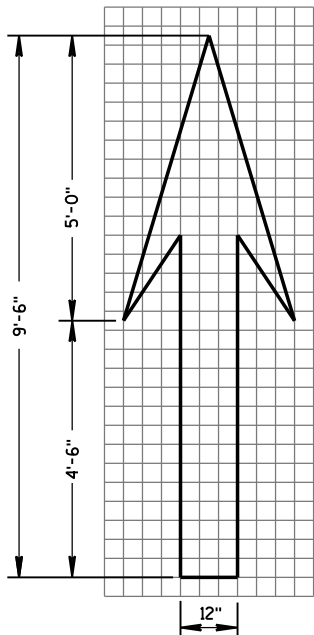
TYPE 4



TYPE 3



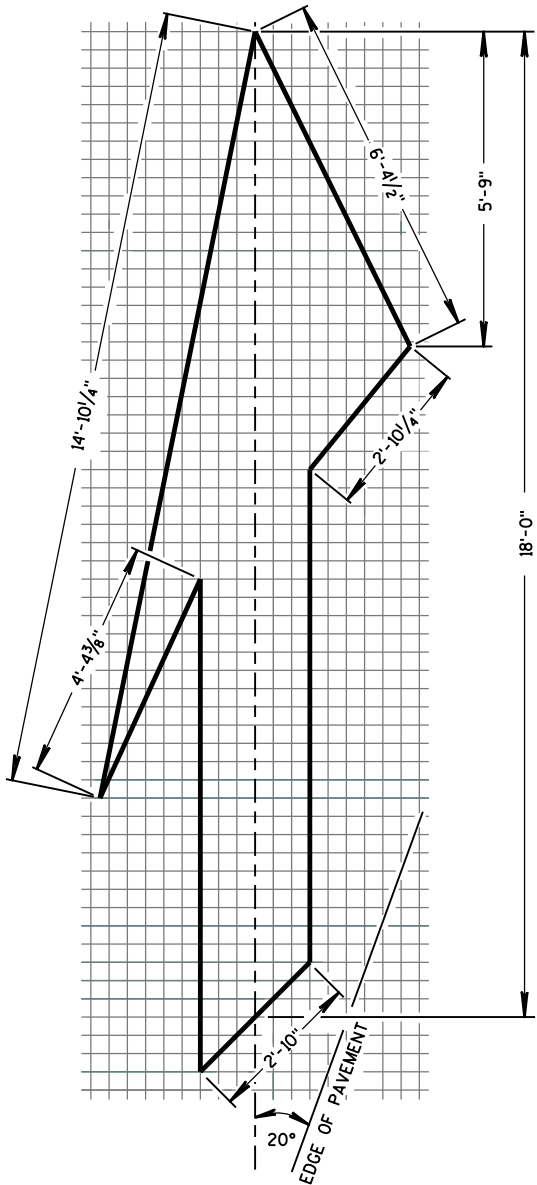
TYPE 7



TYPE 1

GENERAL NOTES

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

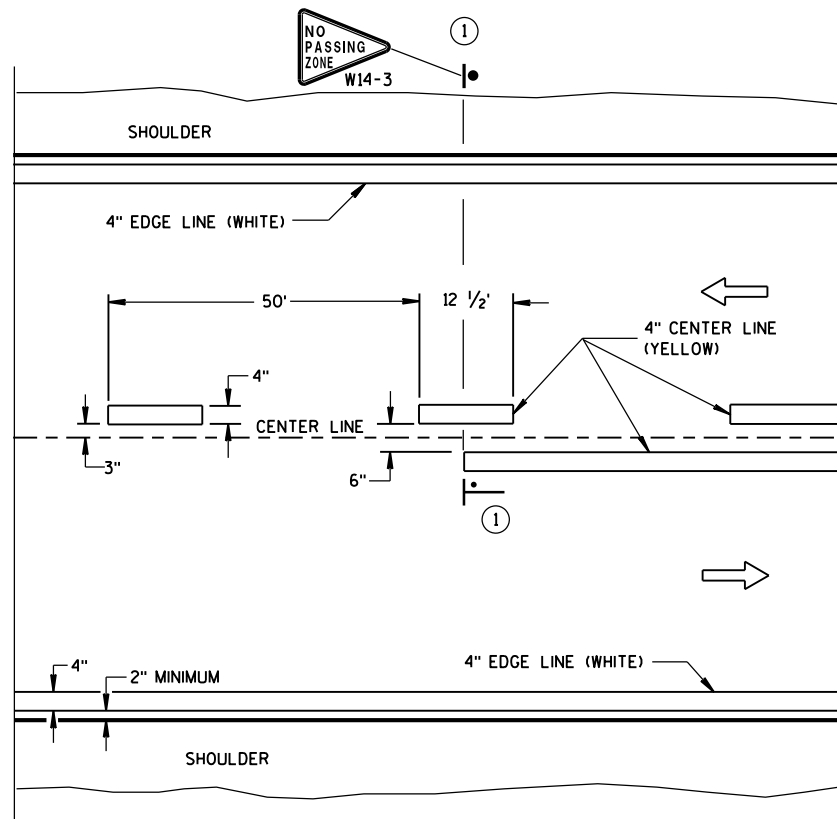


TYPE 5 LANE DROP ARROW

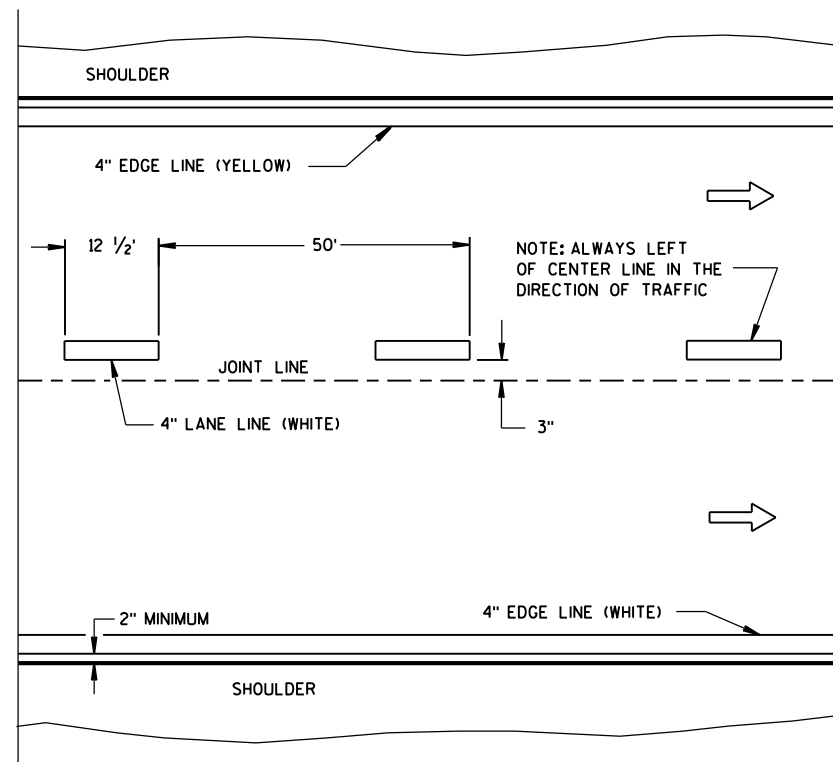
PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 /S/ Matthew R. Rauch
DATE STATE SIGNING AND MAR 292
FHWA VER

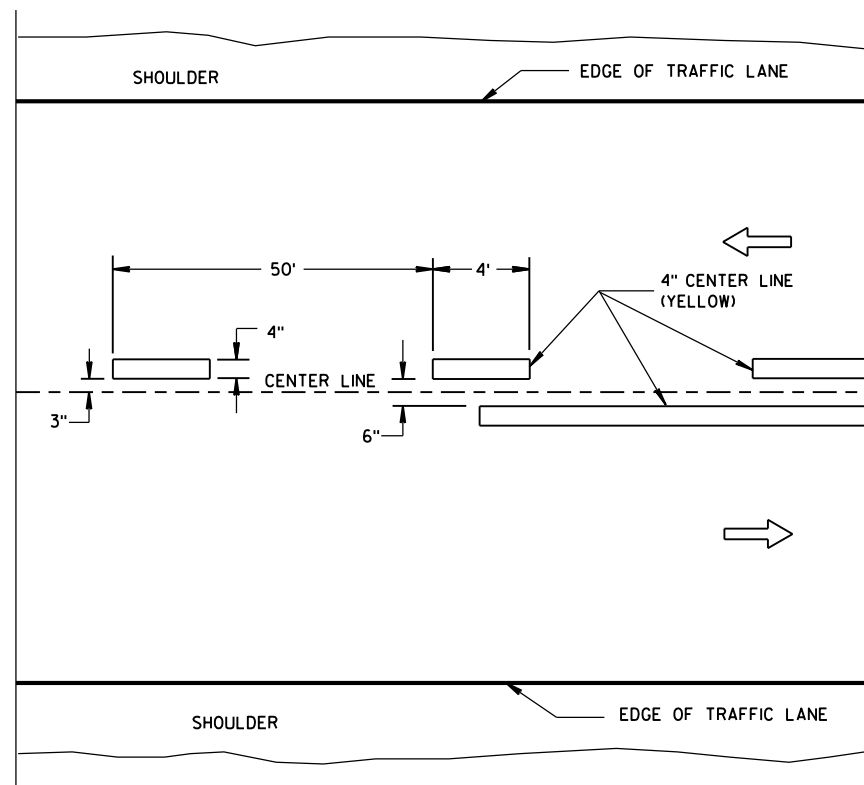


TWO WAY TRAFFIC

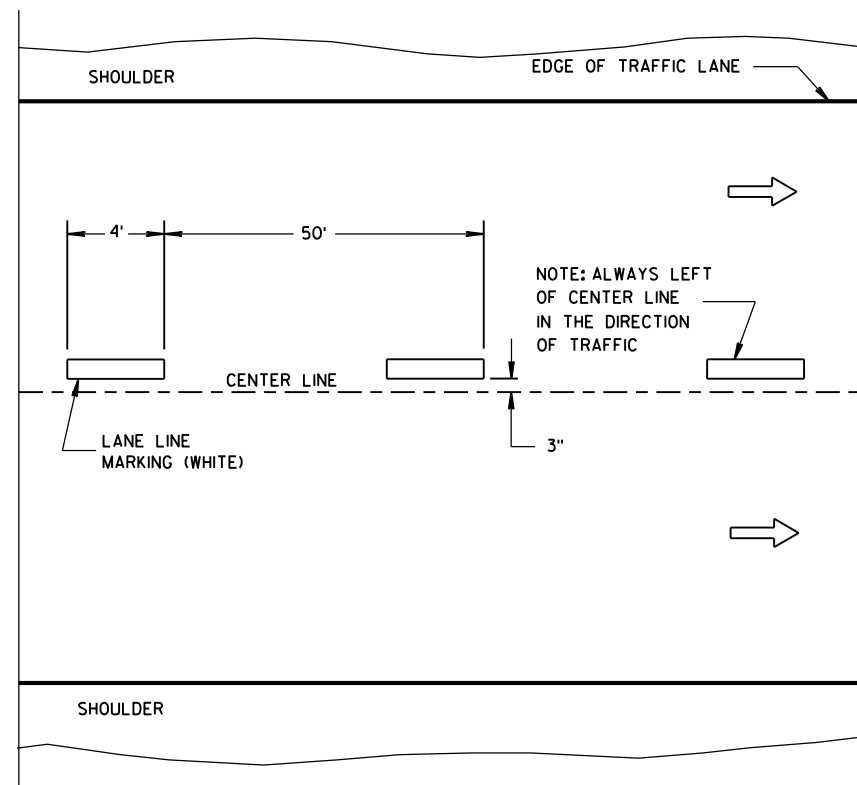


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

- ① LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING.

NOTE

ARROW SYMBOL () SHOWS DIRECTION OF TRAVEL

LEGEND

 "T" MARKING

● POST MOUNTED SIGN

6

6 |

S.D.D. 15 C 8-18a

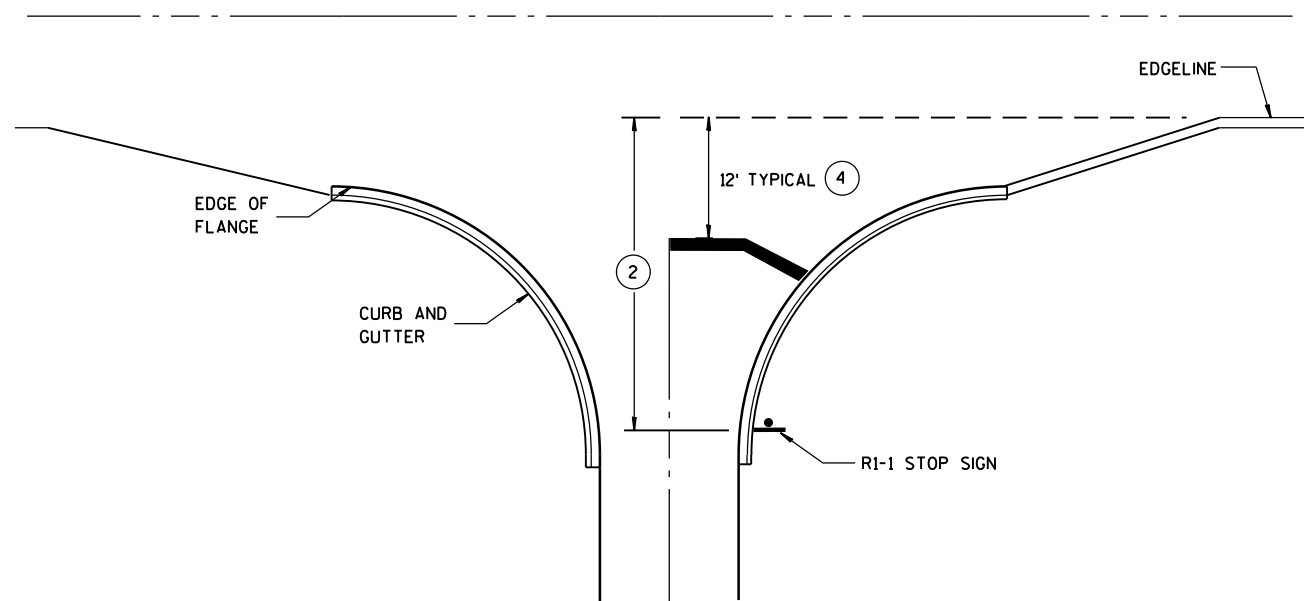
S.D.D. 15 C 8-18a

LONGITUDINAL MARKING (MAINLINE)

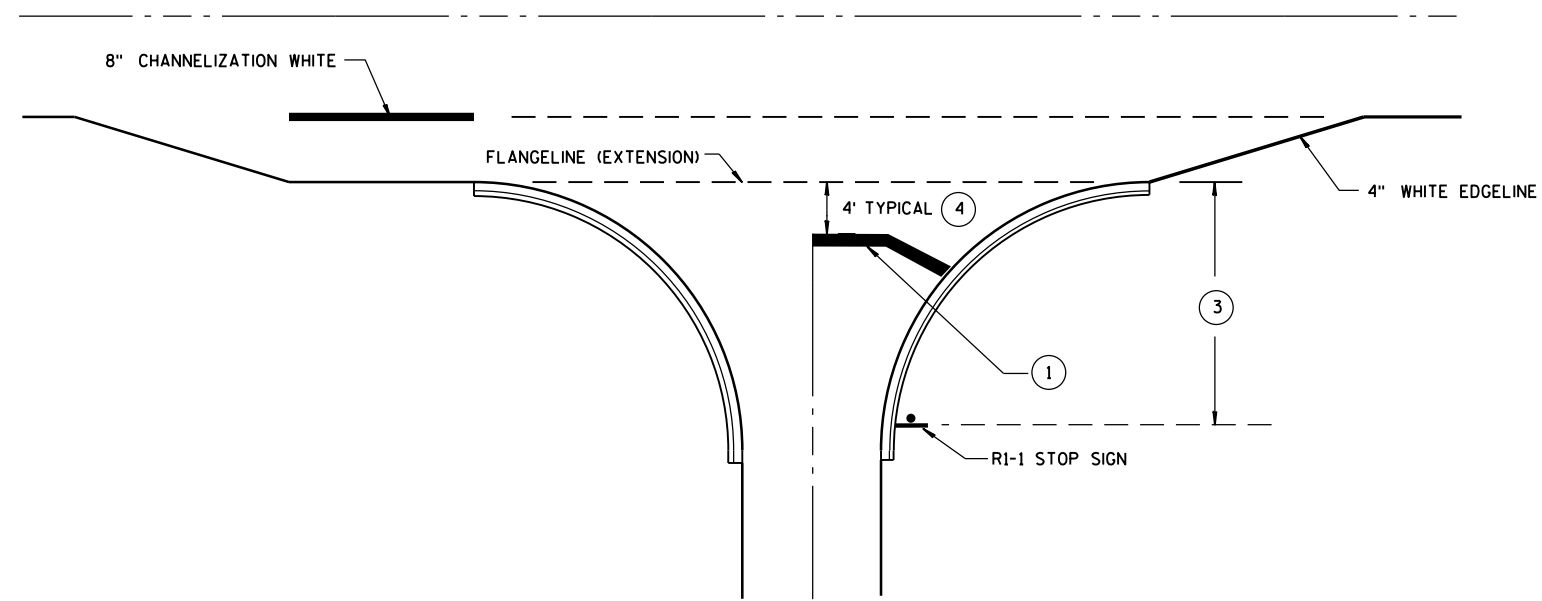
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

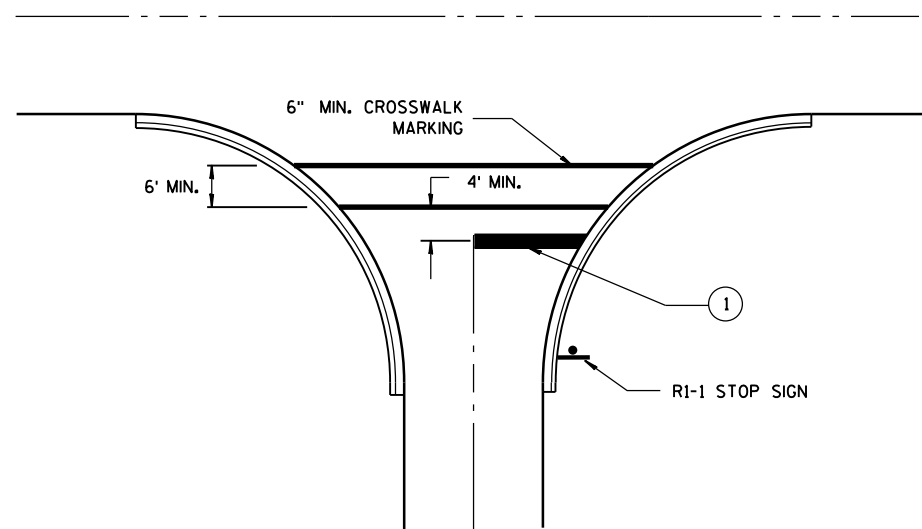
June 2017 /S/ Matthew R. Rauch
DATE STATE SIGNING AND MAP 293 INEER



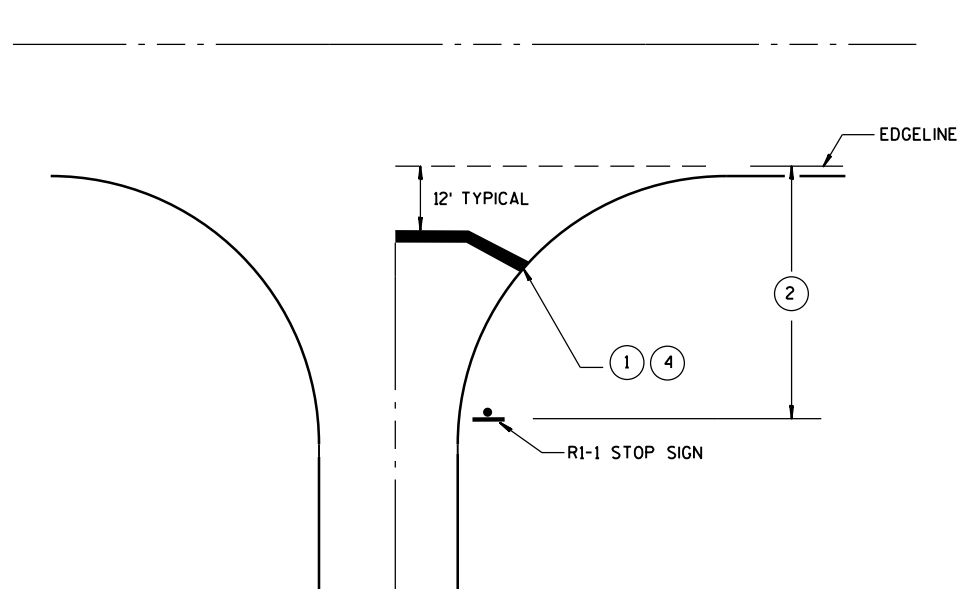
**TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER**



**TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH RIGHT TURN LANE**



**TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH CROSSWALK MARKING**



**TYPICAL STOP LINE PAVEMENT MARKING
WITHOUT CURB AND GUTTER**

GENERAL NOTES

- ① 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- ② IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGE LINE THAN NO STOP LINE IS REQUIRED.
- ③ IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
- ④ MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES. (NO CLOSER THAN 4 FEET).

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-18-2016
DATE

FHWA

/S/ Matthew R. Rauch
STATE SIGNING AND MAR 29 2016

JEER

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

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

- ① CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 8D5 SHEET "E".
- ② PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
- ③ DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
- ④ CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.
- ⑤ CLEAR SPACE OF 48"x48" MIN. SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
- ⑥ THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.
- ⑦ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
- ⑧ LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.
- ⑨ CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHALL BE VERTICAL UP TO 1/4" HIGH, AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".
- ⑩ 5' WIDE MIN. WITH PEDESTRIAN SAFETY FENCE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY FENCE.

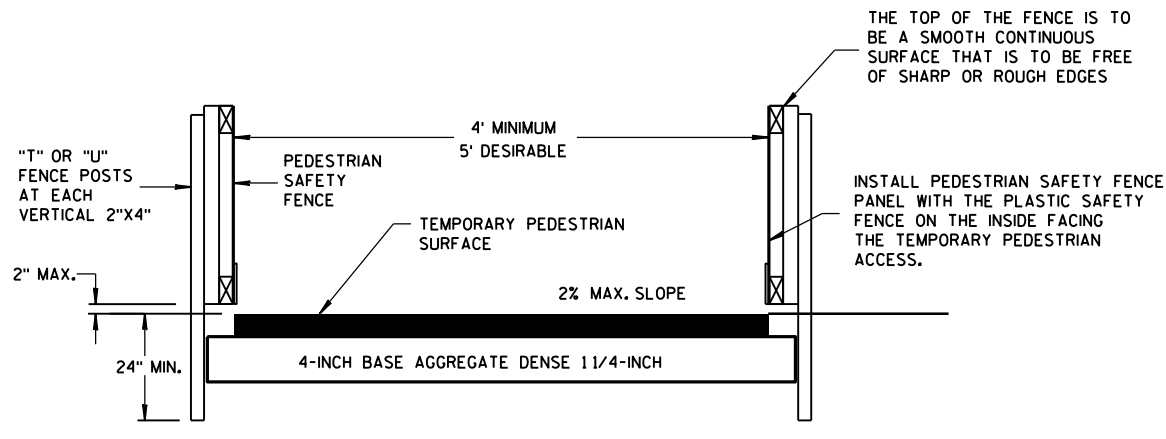


	WORK AREA
	TYPE III BARRICADE
	TRAFFIC CONTROL DRUM

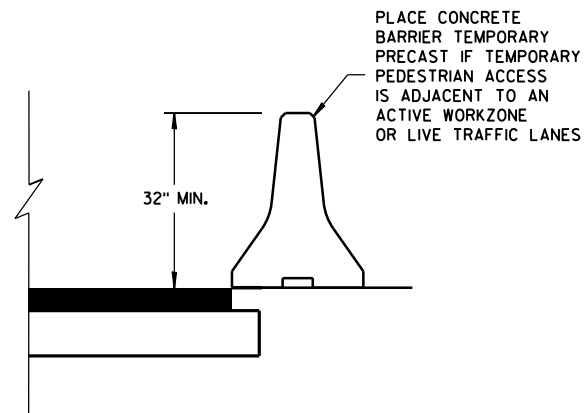
TRAFFIC CONTROL,
TEMPORARY ADA COMPLIANT
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 /S/ Peter Amakobe Atepe
DATE STATEWIDE WORK ZOI 295 IC
SAFETY ENGIN
FHWA

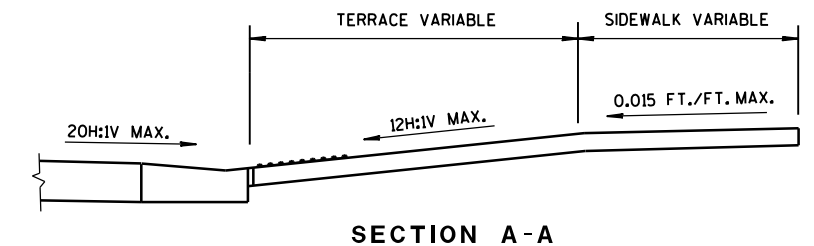


TEMPORARY PEDESTRIAN ACCESS

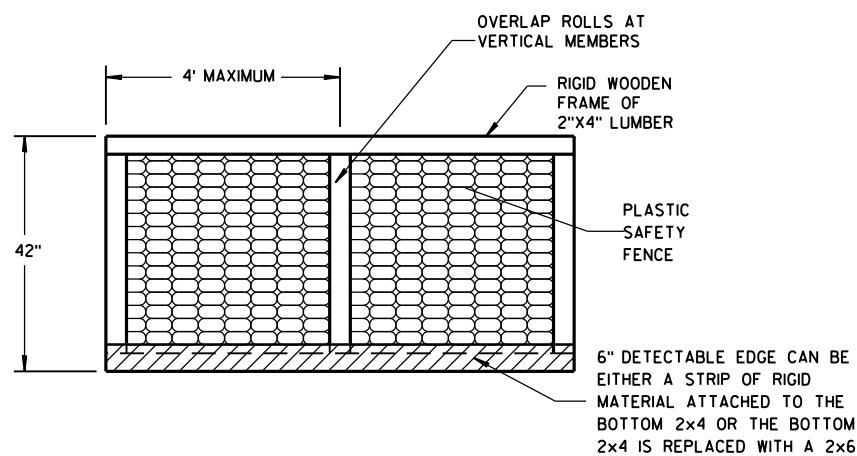


GENERAL NOTES

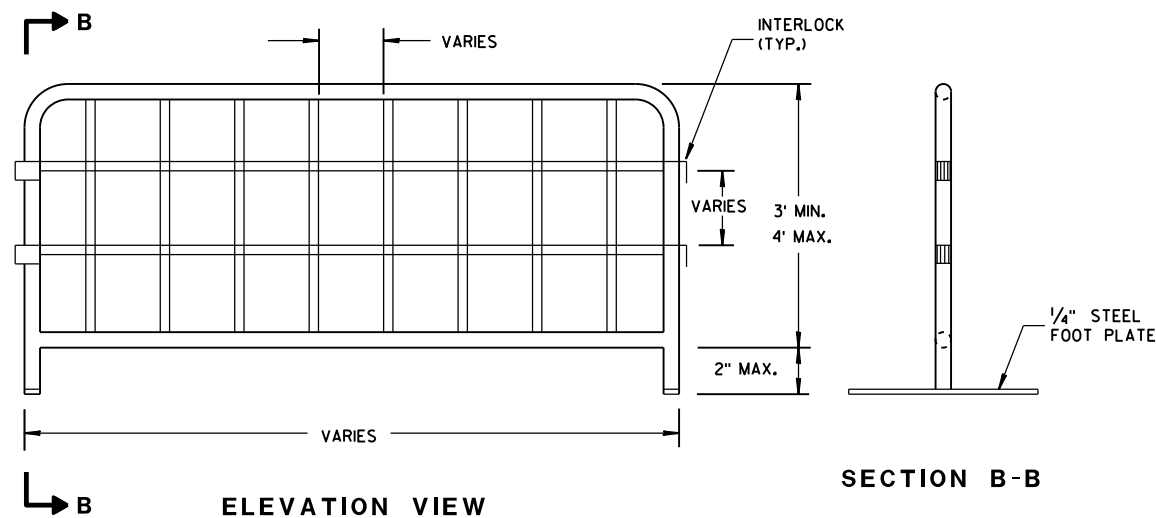
- INTERCHANGEABLE WITH THE PEDESTRIAN SAFETY FENCE.



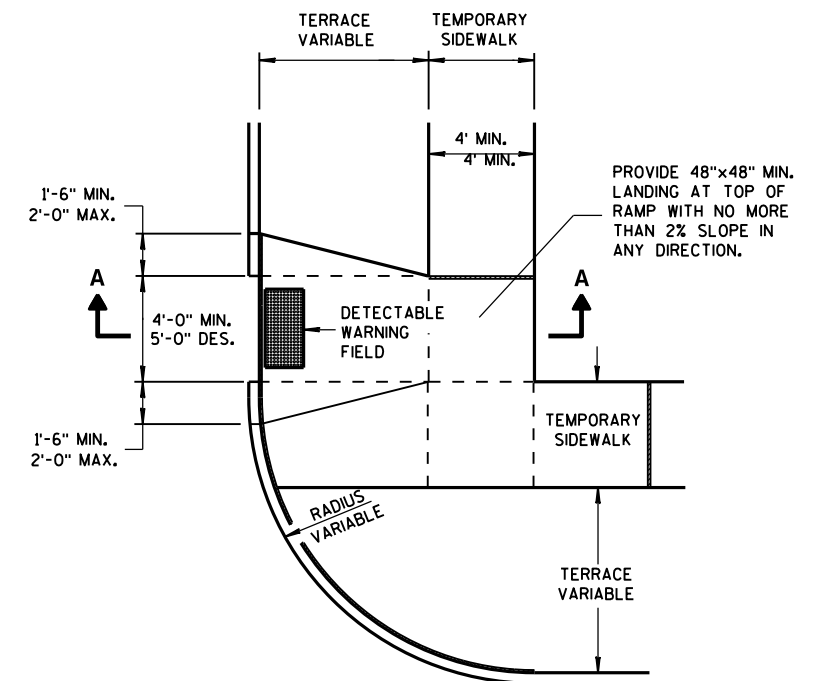
SECTION A-A



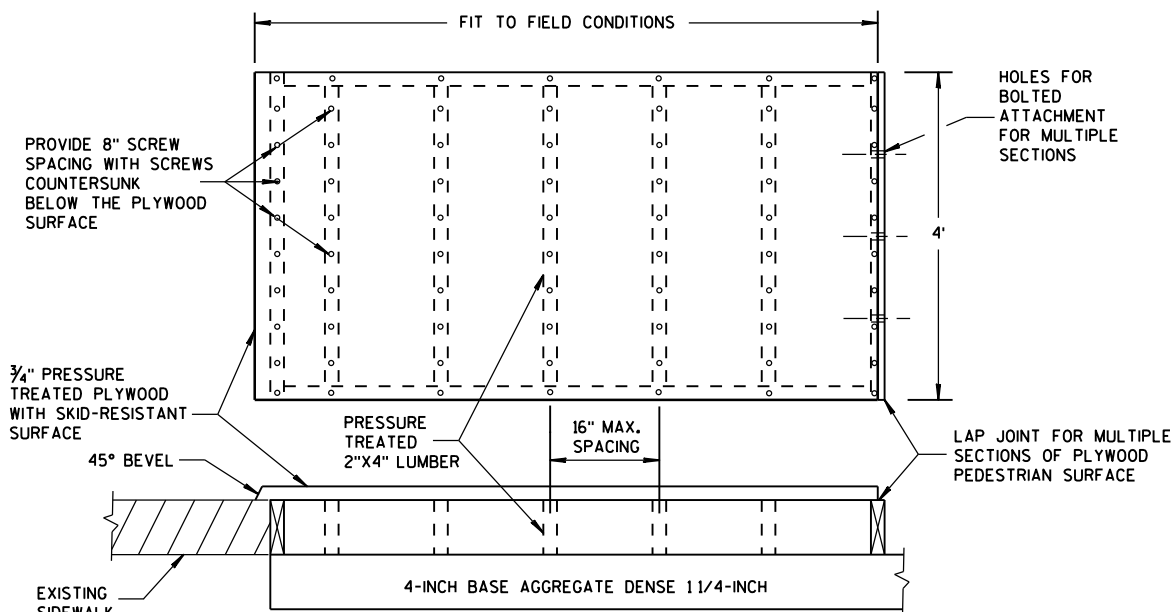
PEDESTRIAN SAFETY FENCE



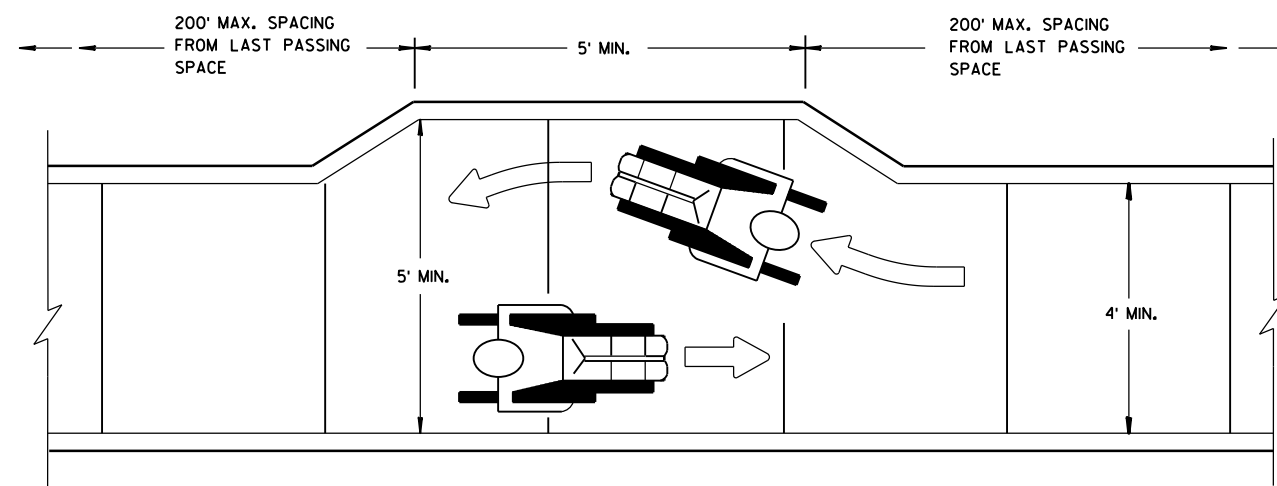
TEMPORARY PEDESTRIAN STEEL BARRICADE



TEMPORARY TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



NARROW SIDEWALK PASSING DETAIL

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

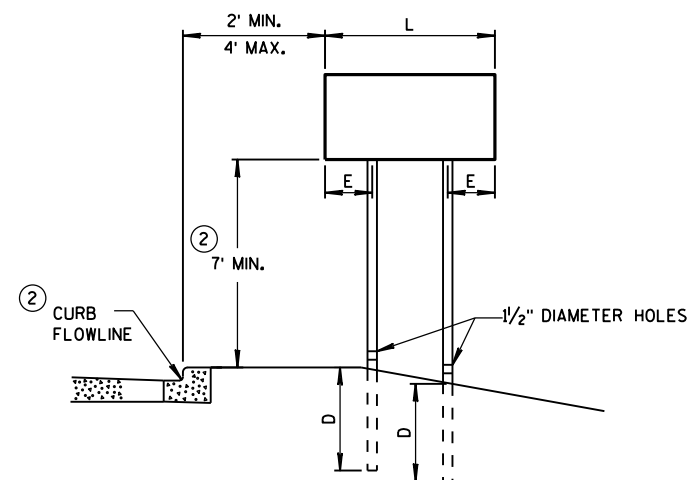
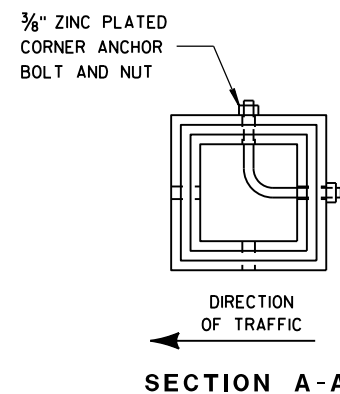
APPROVED
June 2016 /S/ Peter Amakobe Atepe
DATE STATEWIDE WORK ZON 296 ic
FHWA SAFETY ENGINEER



TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL 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 LARGER THAN 27 SQ.FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

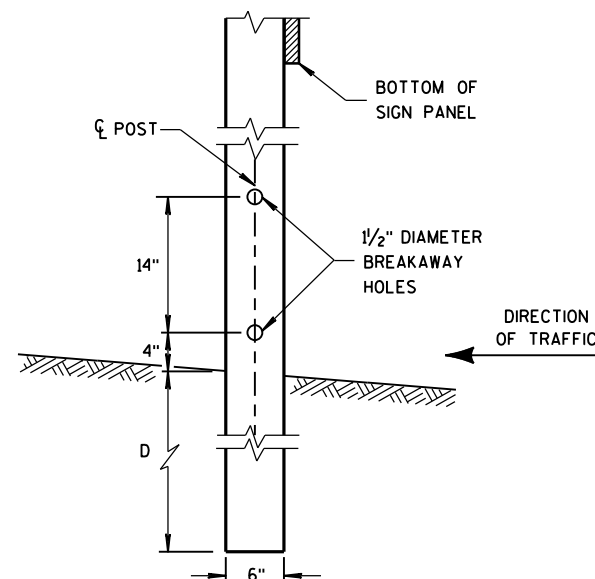


URBAN AREA

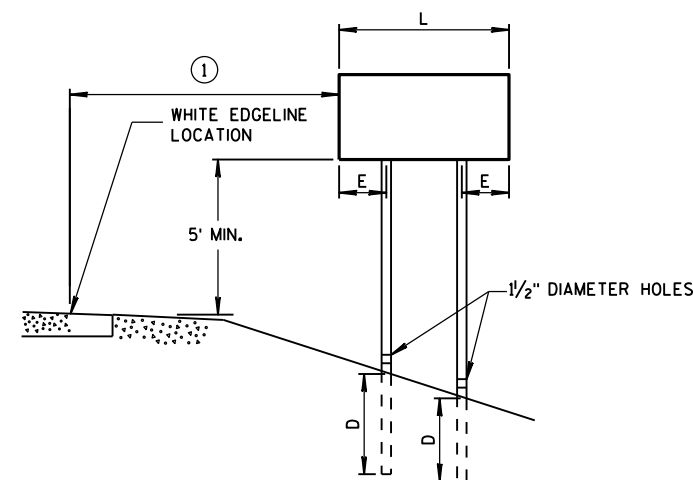
POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

WOOD POST
EMBEDMENT DEPTH

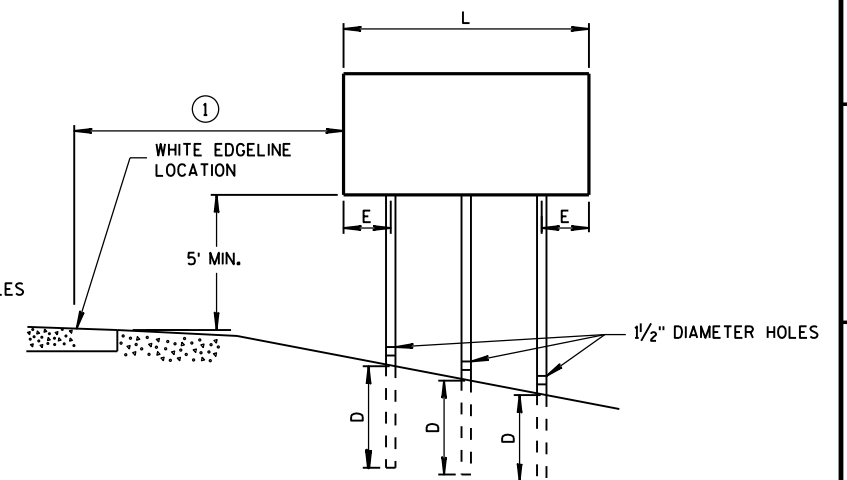
AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'



4"x6" WOOD POST MODIFICATION



RURAL AREA



GENERAL NOTES

- ① 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.
- ② 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. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.
- ③ FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.

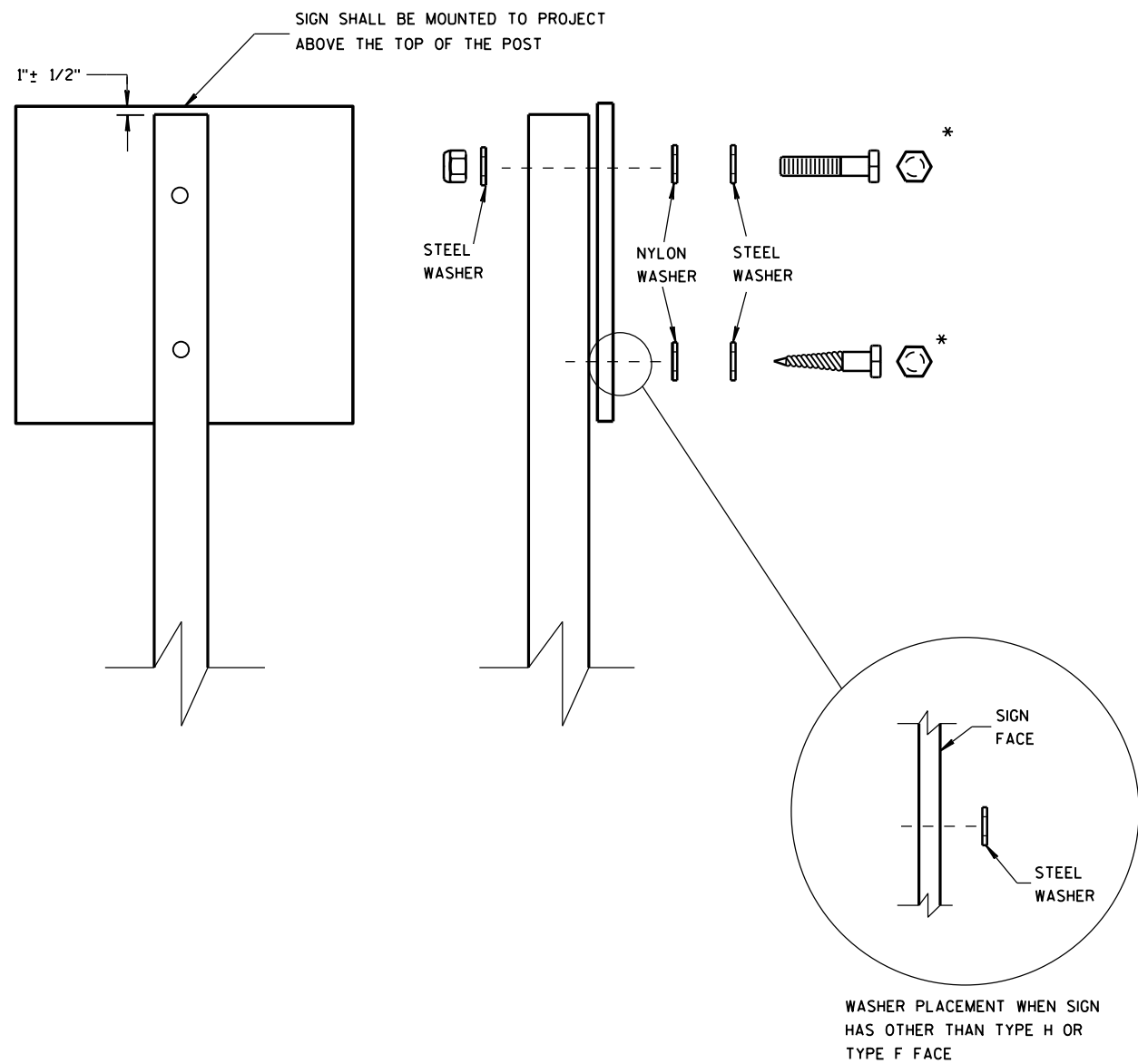
4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 297



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.

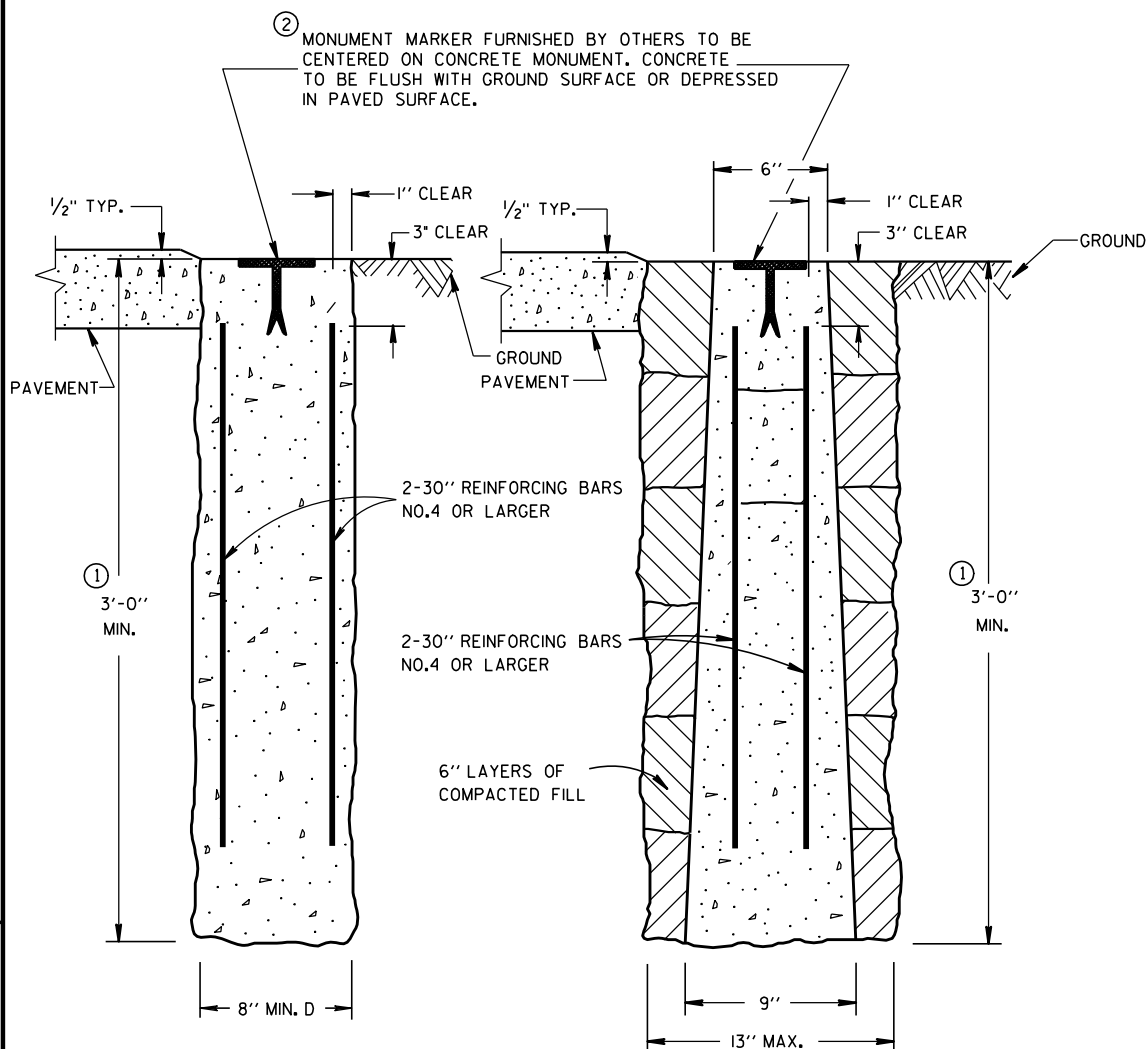
- WOOD POSTS (4" x 4" or 4" x 6")
- LAG SCREWS - 3/8" x 3"
 - MACHINE BOLTS - 5/16" x 6-1/2" OR 7" LENGTH W/ NUTS

- 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

* 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. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

ATTACHMENT OF SIGNS TO POSTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/S/ Andrew Heidtke WORK ZONE ENC 298
FHWA	

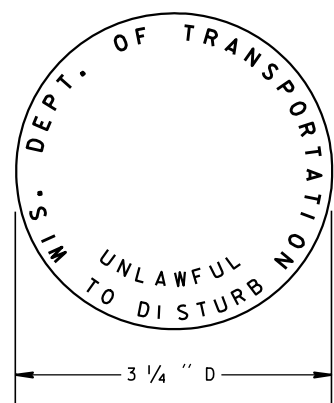


CAST-IN-PLACE

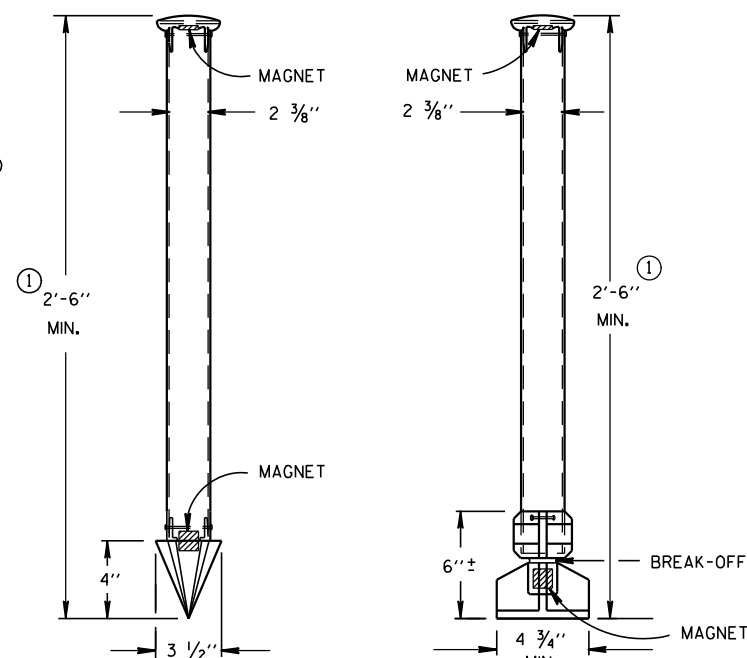
PRECAST

CONCRETE MONUMENTS

TYPE A



② WIS DOT MONUMENT MARKER LOGO
FOR TYPES "A", "C" & "D"



TYPE C

TYPE D

DRIVE-IN MONUMENT

BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)

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.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

INSTALLED METAL MONUMENTS MUST BE EASILY DETECTED WITH A DIP NEEDLE. INSERT PERMANENT MAGNETS SHALL BE ATTACHED NEAR THE TOP AND BOTTOM OF THOSE MONUMENTS CONSTRUCTED OF A METAL ALLOY WHICH IS NOT ATTRACTIVE TO A DIP NEEDLE.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

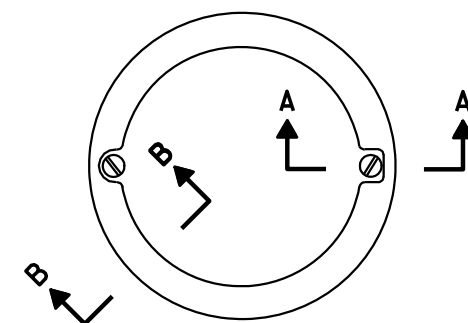
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

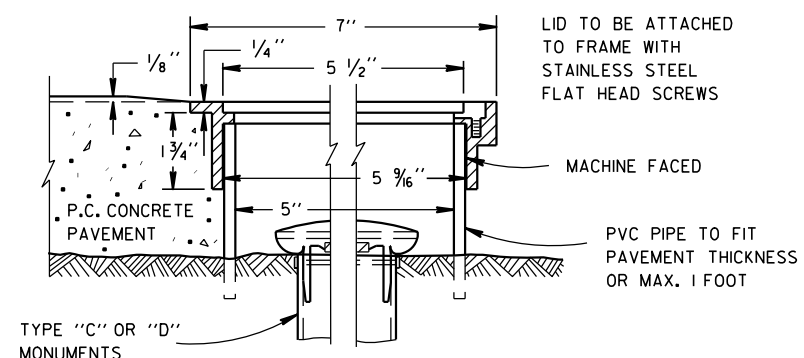
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

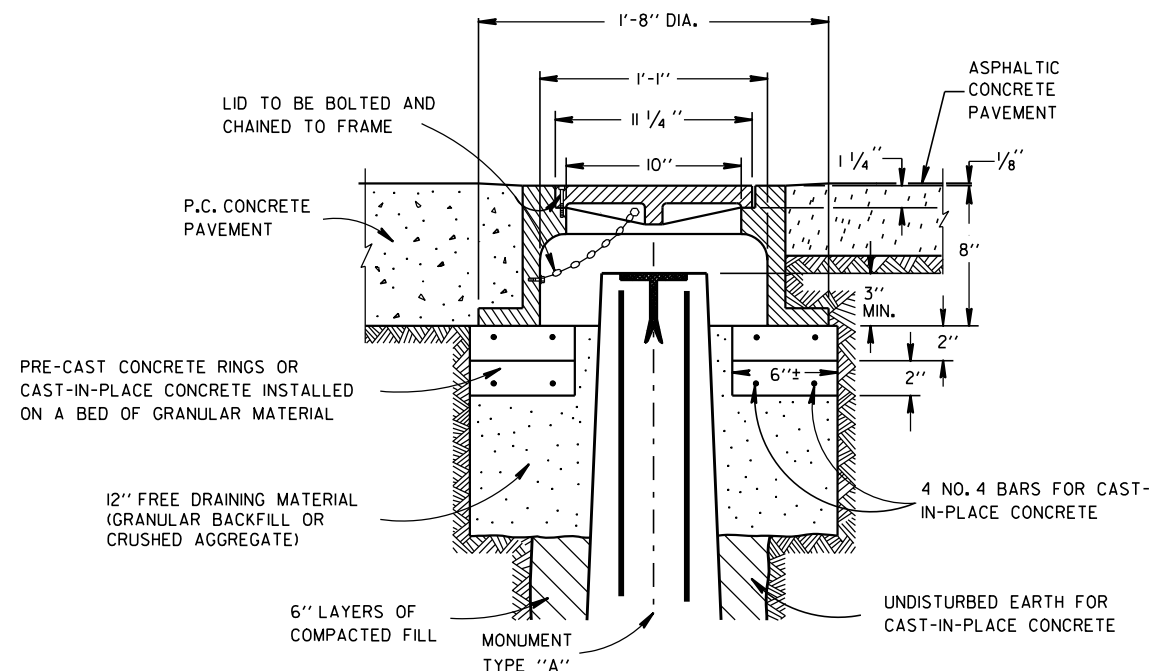
② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.



TOP VIEW

SECTION B-B SECTION A-A
ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)
(FOR CONCRETE PAVEMENT ONLY)



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT - 95 LBS.)

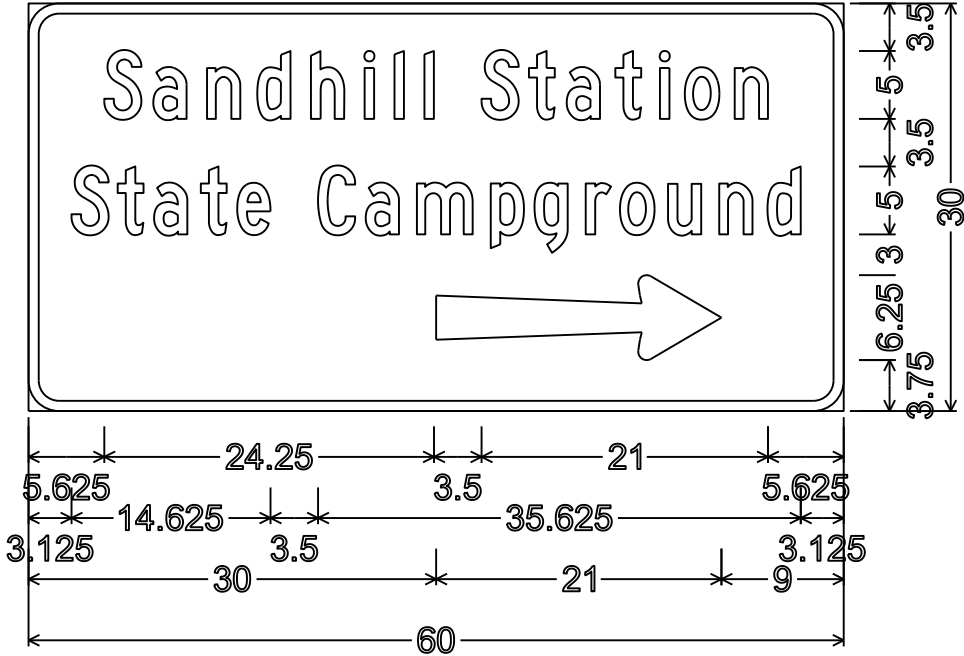
LANDMARK REFERENCE
MONUMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

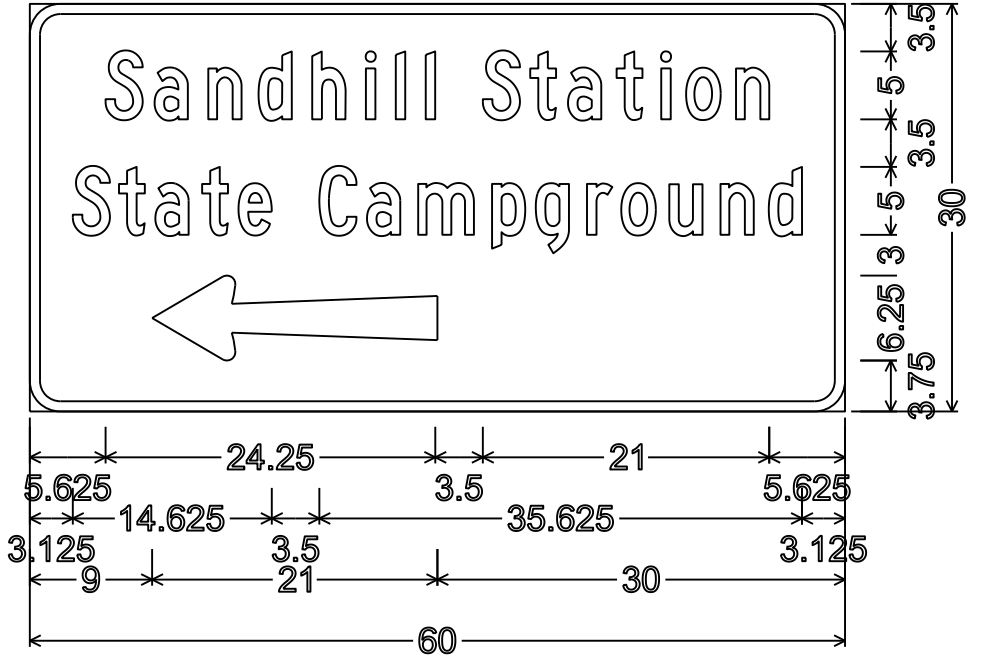
APPROVED
9/22/1999 /S/ Rory L. Rhin...
DATE CHIEF ROADWAY DEVELOP 299 NEER
FHWA



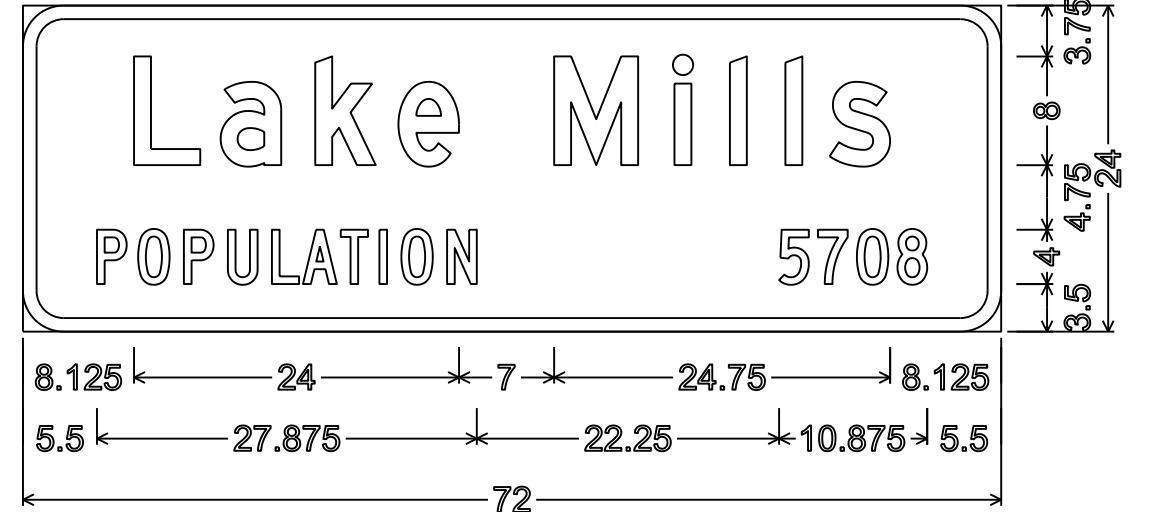
D2-1; 2.250" Radius, 0.750" Border



D7-68R;
2.250" Radius, 0.750" Border, White on Brown;
"Sandhill" C; "Station" C; "State" C; "Campground" C



D7-68L;
2.250" Radius, 0.750" Border, White on Brown;
"Sandhill" C; "Station" C; "State" C; "Campground" C



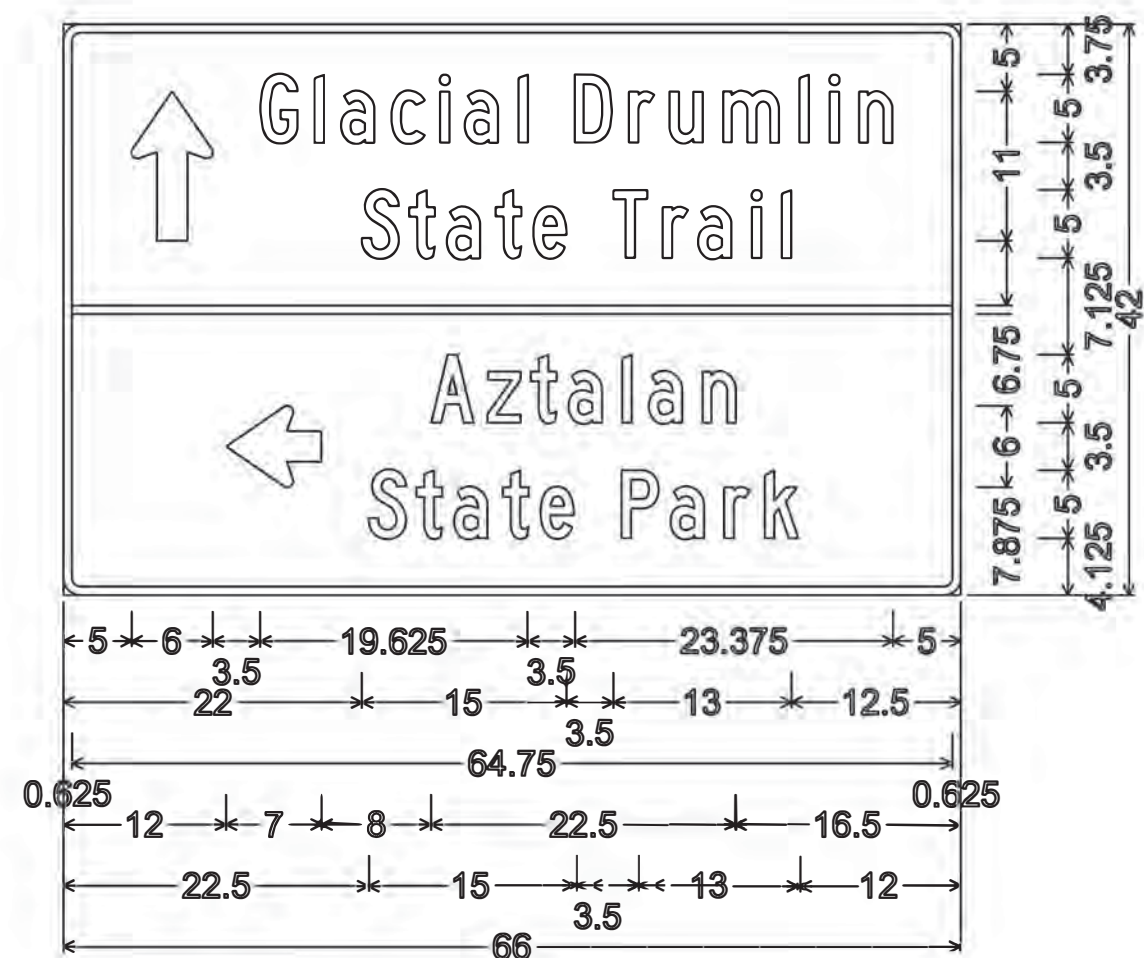
I2-3; 3.000" Radius, 1.000" Border,
"Lake" D; "Mills" D; "POPULATION" C; "5708" C

NOTES

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

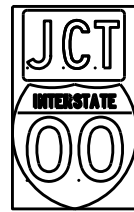
NOTES

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

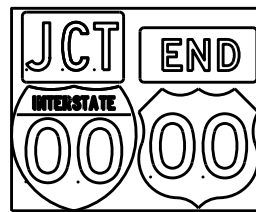


D1-4; 1.250" Radius, 0.625" Border, White on Brown;
"Glacial Drumlin" C; "State Trail" C; "Aztalan" C; "State" C; "Park" C

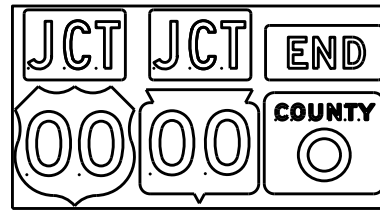
TYPICAL ASSEMBLIES



J1-1



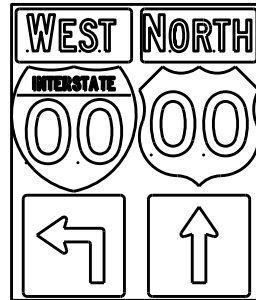
J1-2



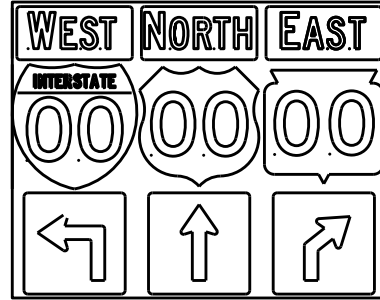
J1-3



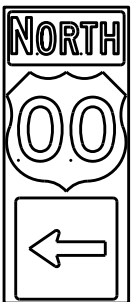
J2-1



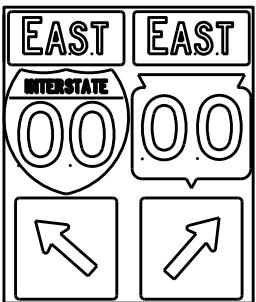
J2-2



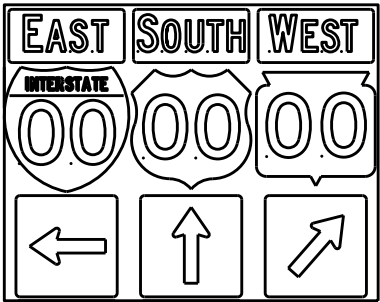
J2-3



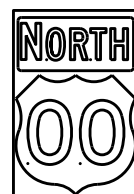
J3-1



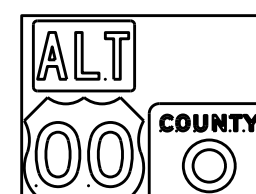
J3-2



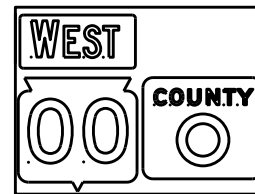
J3-3



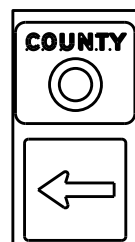
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1



J23-1

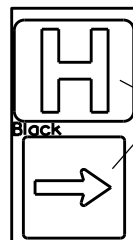


J22-1



JV

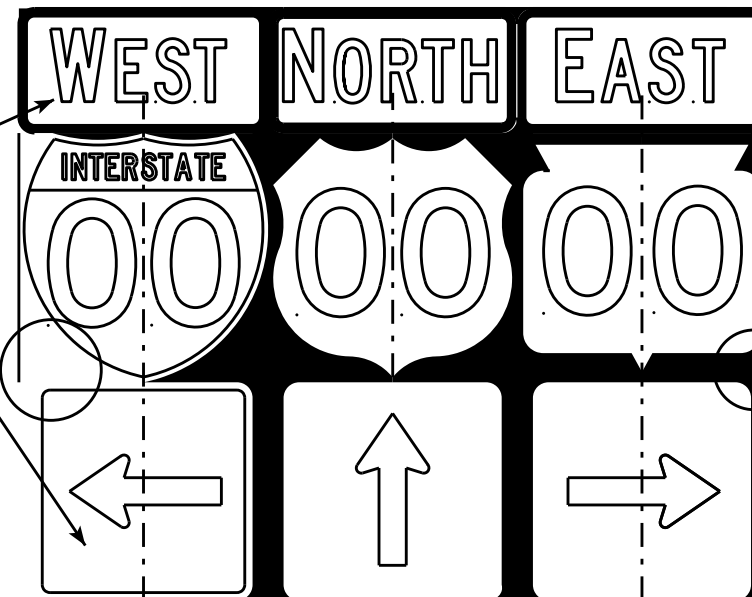
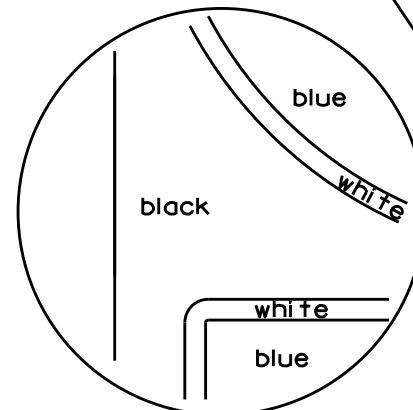
(Typical Vertical J-Assembly
See Note 10 and 11)



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 PL 302 A2-1S.8

SHEET NO: E

NOTES

- Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Black Non-reflective
Message - see Note 5
- Message Series - See Note 5
- Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
- The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
- Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
- Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
- Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
- Route assemblies that have 36 inch shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
- All Vertical J Assemblies are given a Sign Code of JV
- For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

PROJECT NO:

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN

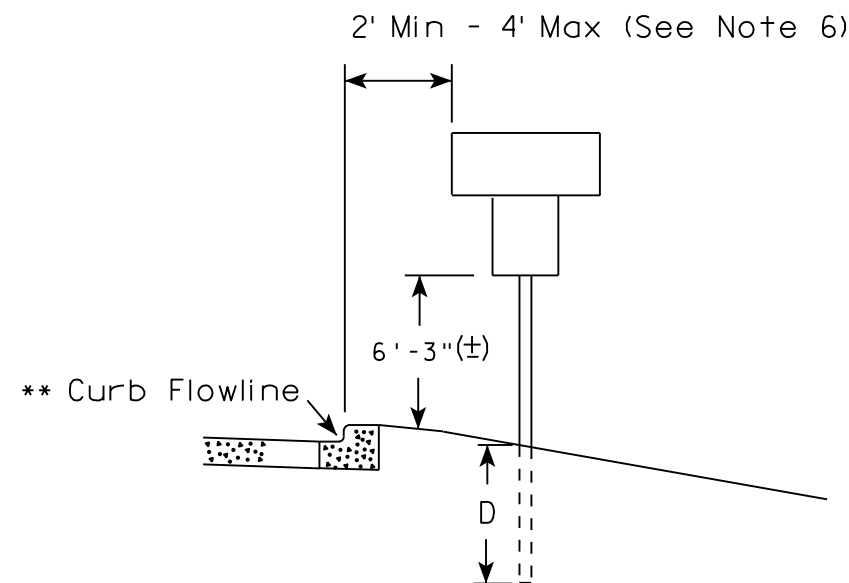
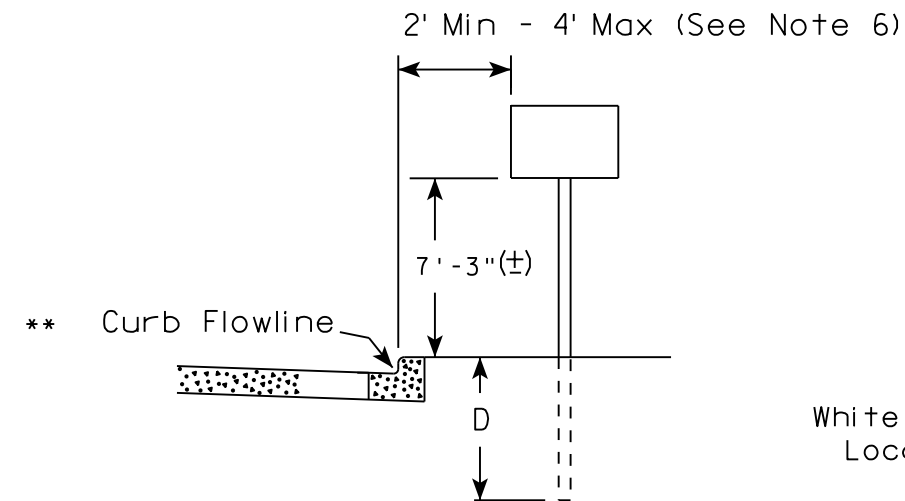
PLOT DATE : 06-FEB-2014 14:10

PLOT BY : mscs.ja

PLOT NAME :

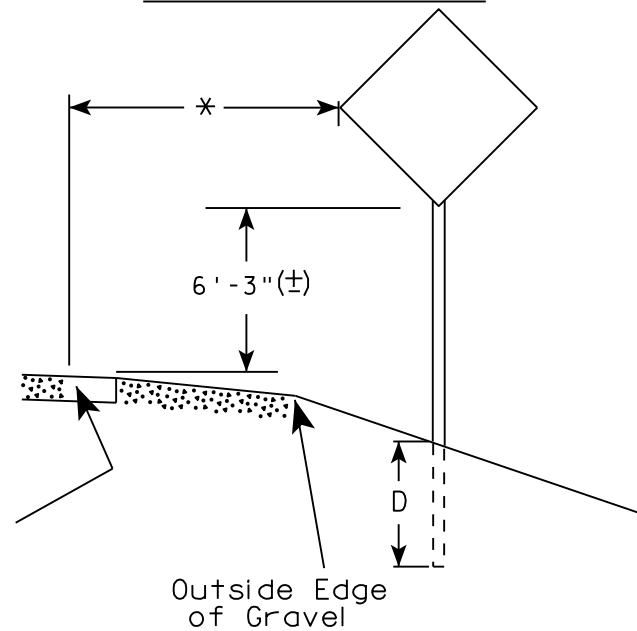
WISDOT/CADDs SHEET 42

URBAN AREA

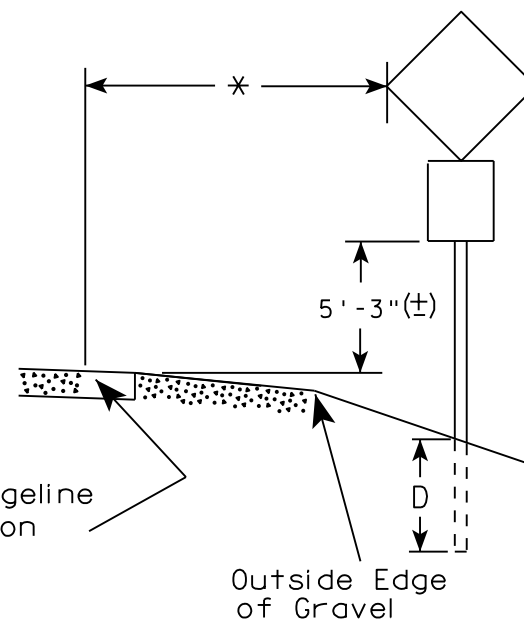


White Edgeline
Location

RURAL AREA (See Note 2)



White Edgeline
Location



Outside Edge
of Gravel

POST EMBEDMENT DEPTH

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

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. J-Assemblies are considered to be one sign for mounting height.
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" (±).

✱✱ 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 8/21/17 PLATE NO. A4-3.21

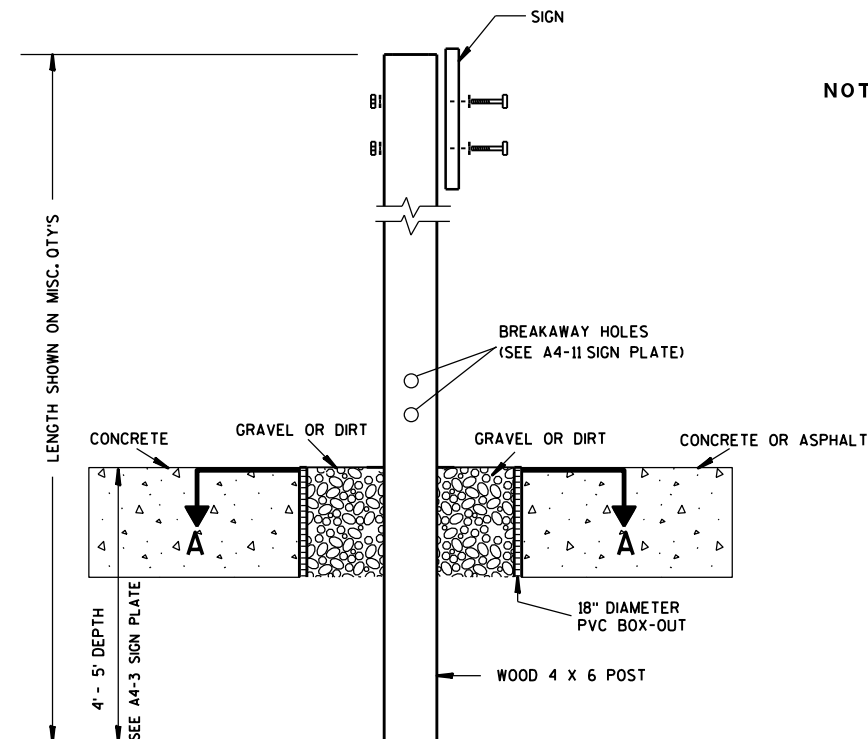
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 303

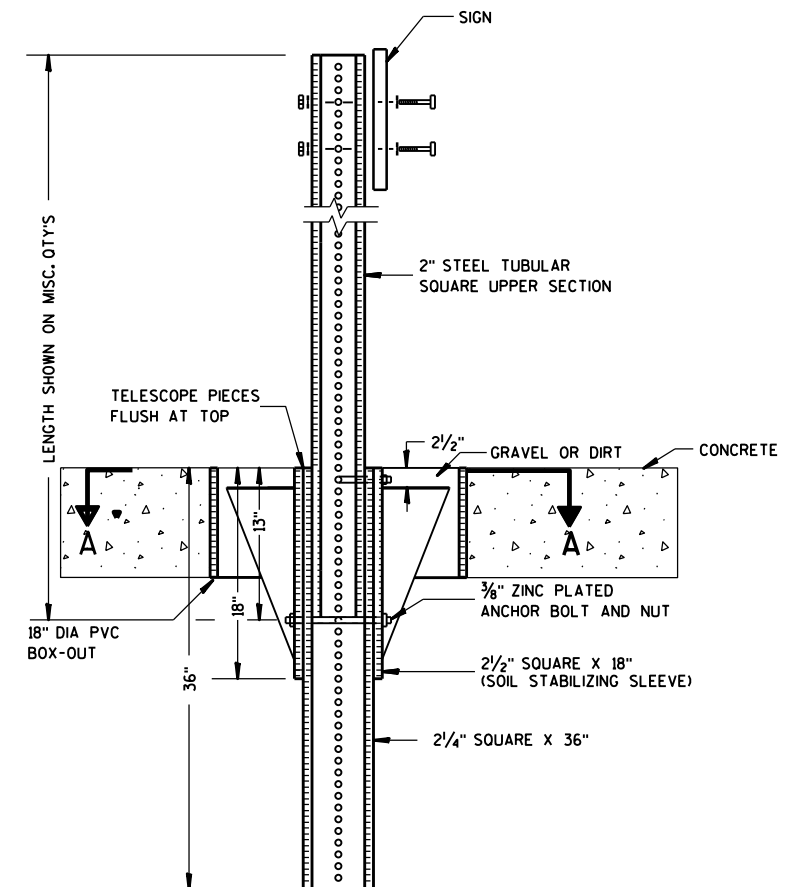
E



ELEVATION VIEW

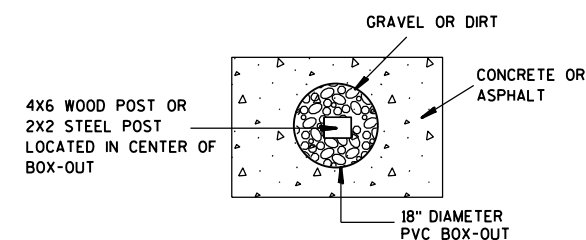
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST
BOX-OUTS
A4-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/27/14 PLAT 304 A4-3B.1

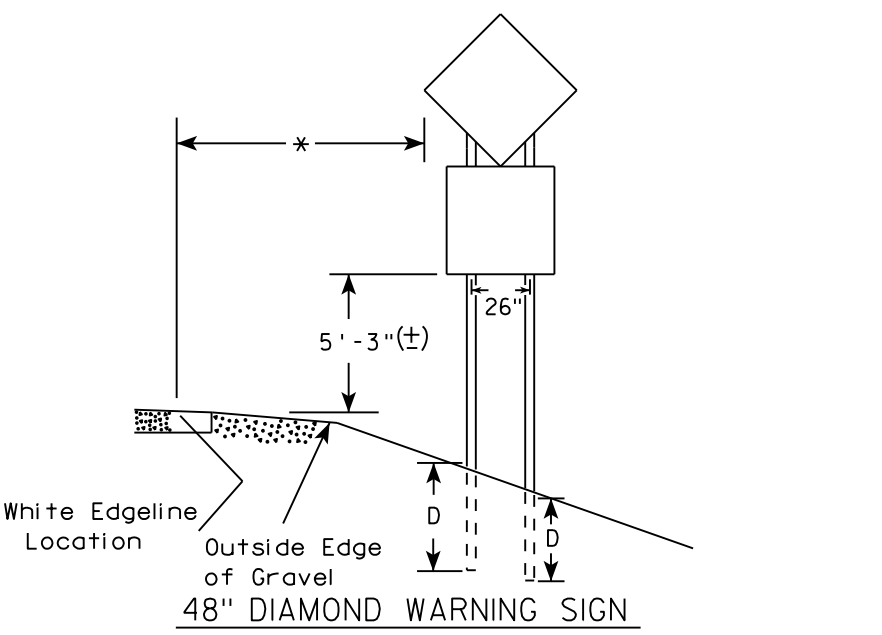
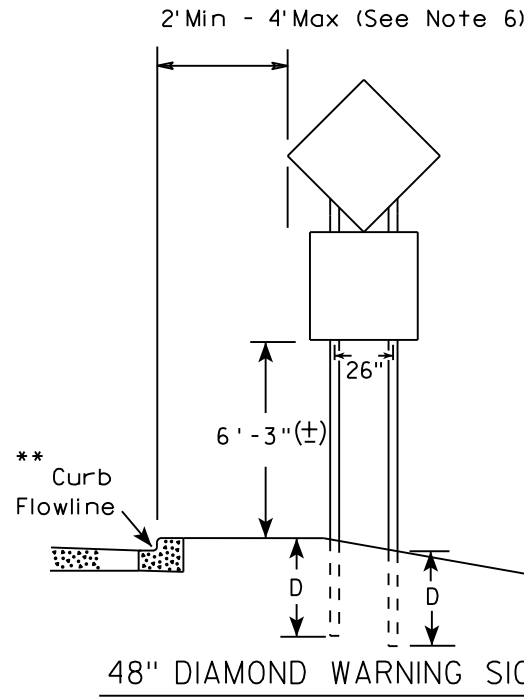
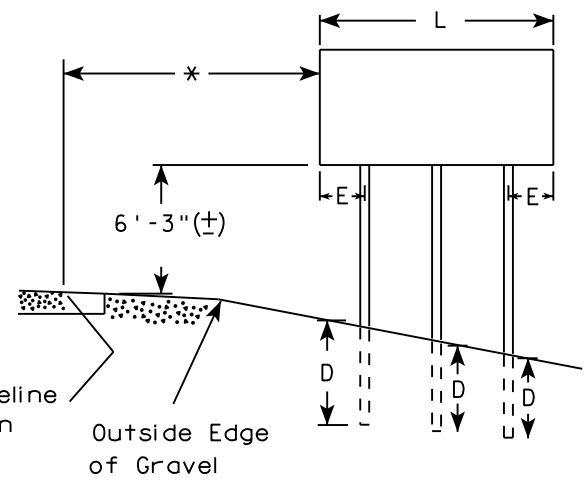
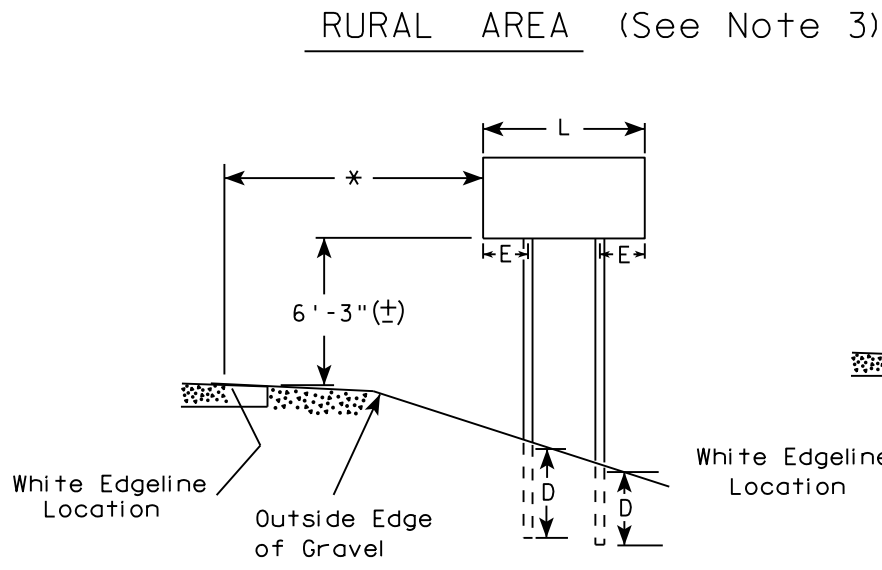
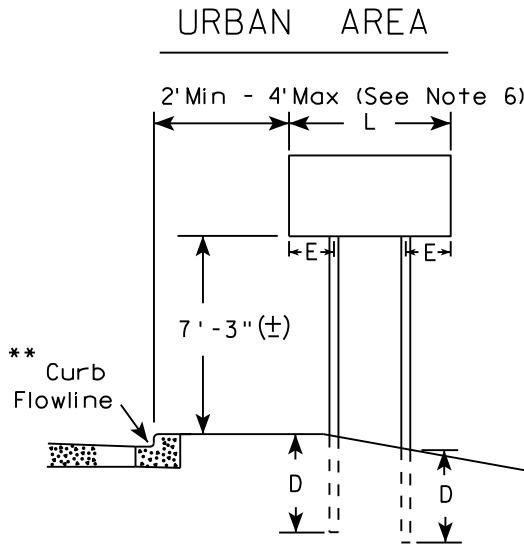
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



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

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

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

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

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

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

POST EMBEDMENT DEPTH

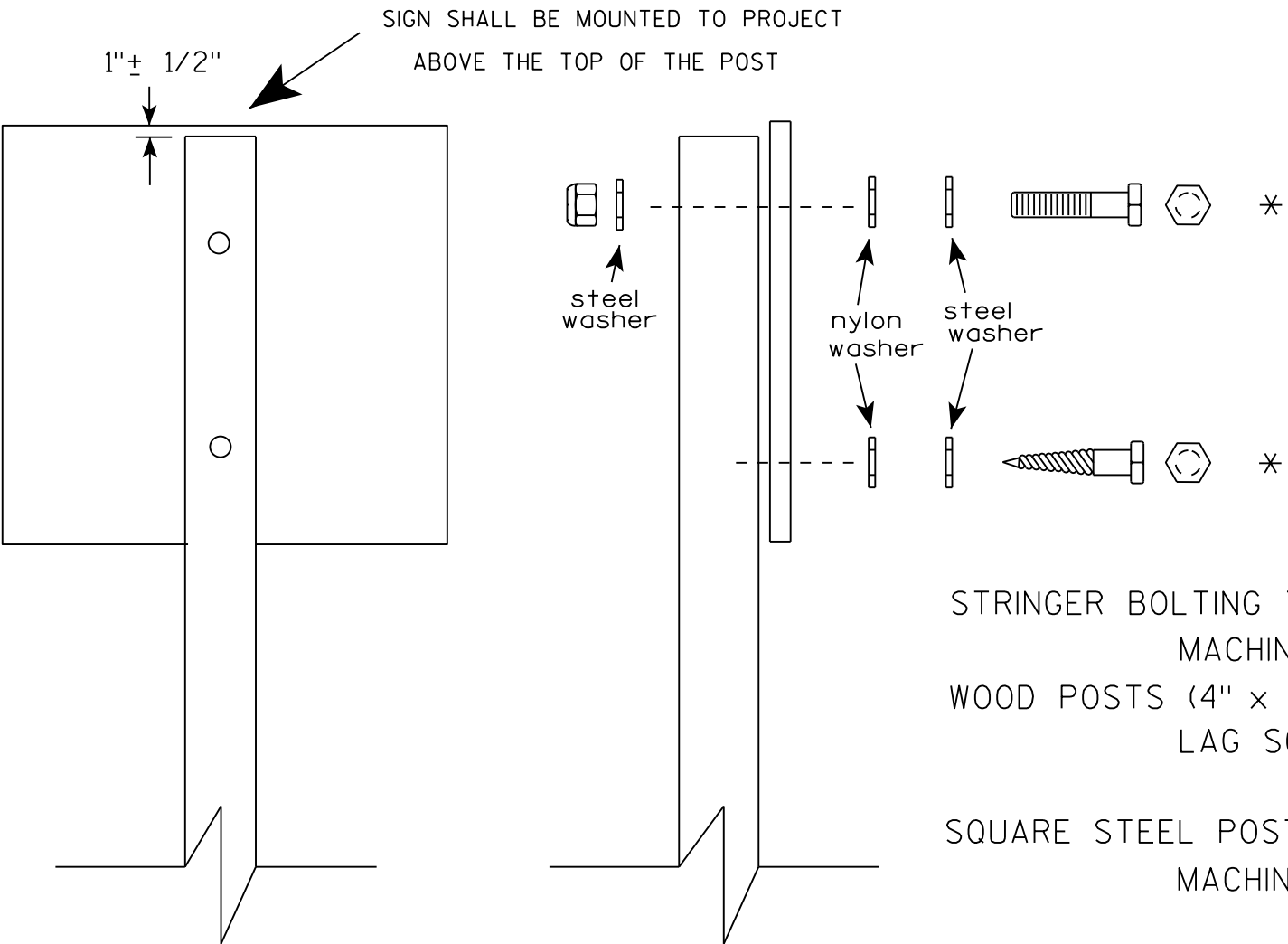
Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15



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

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

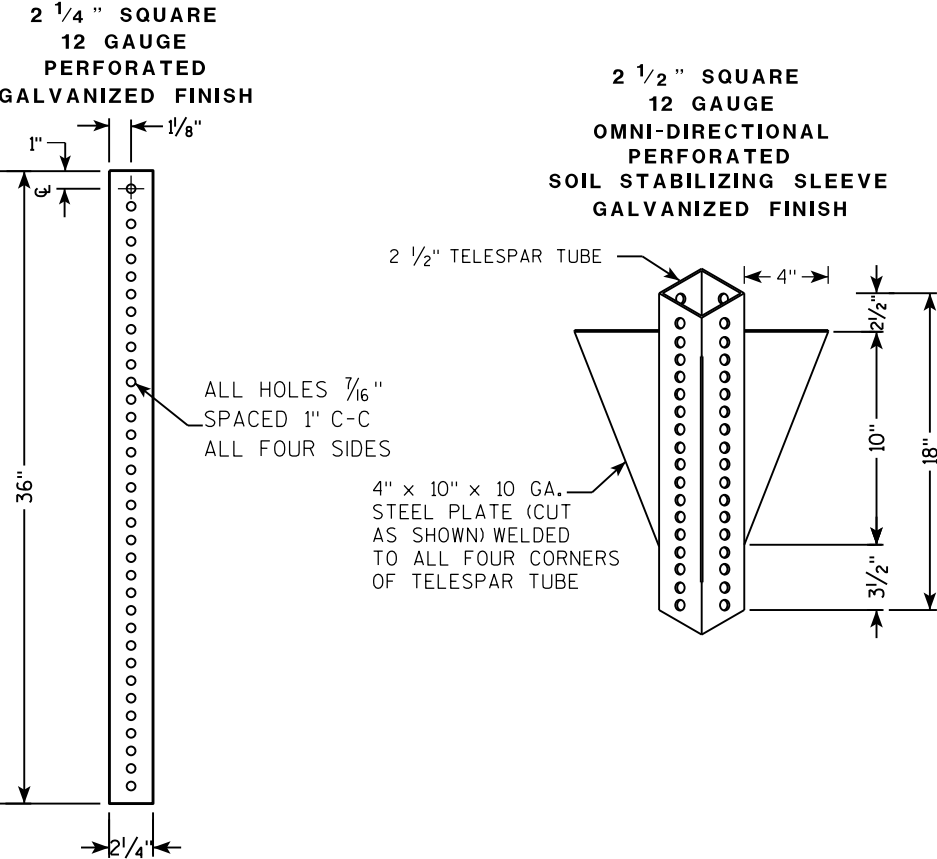
Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

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

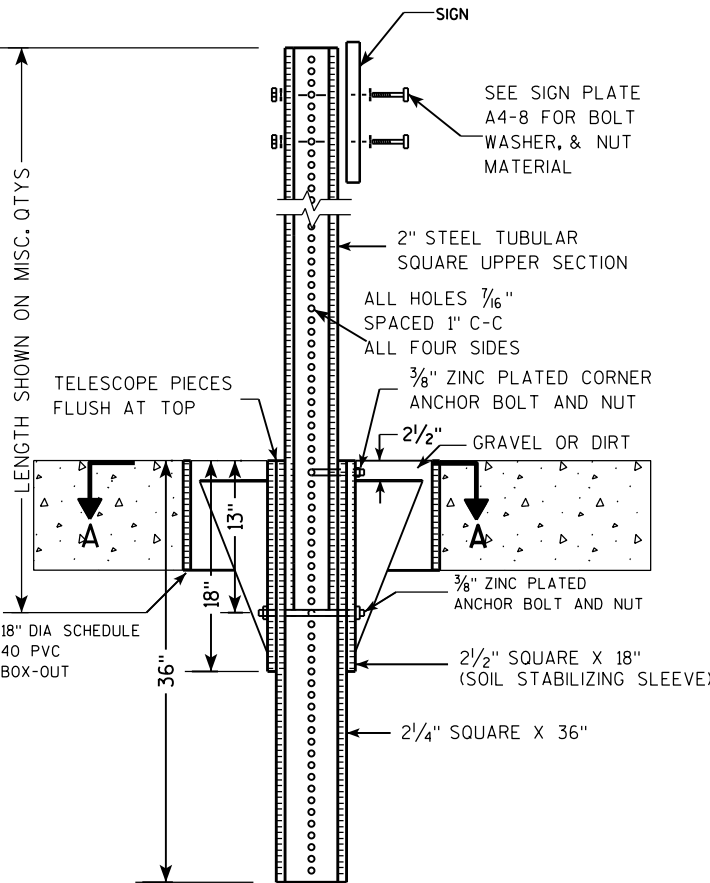
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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

ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 8/11/16	PLATE NO. A4-8.8 306

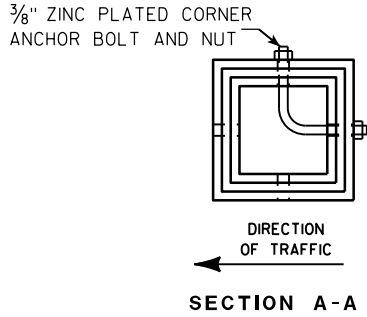
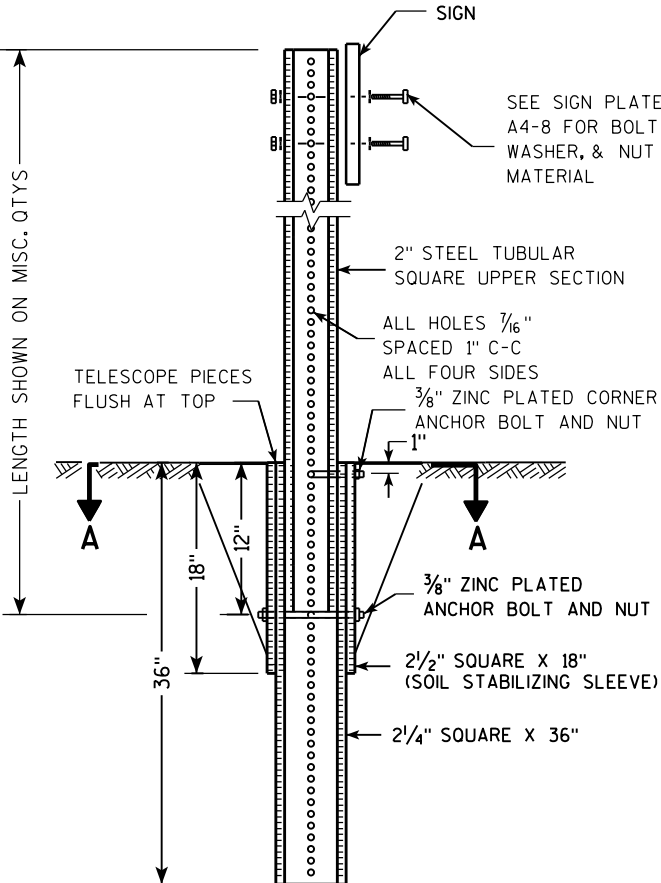
TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM



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



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



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

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

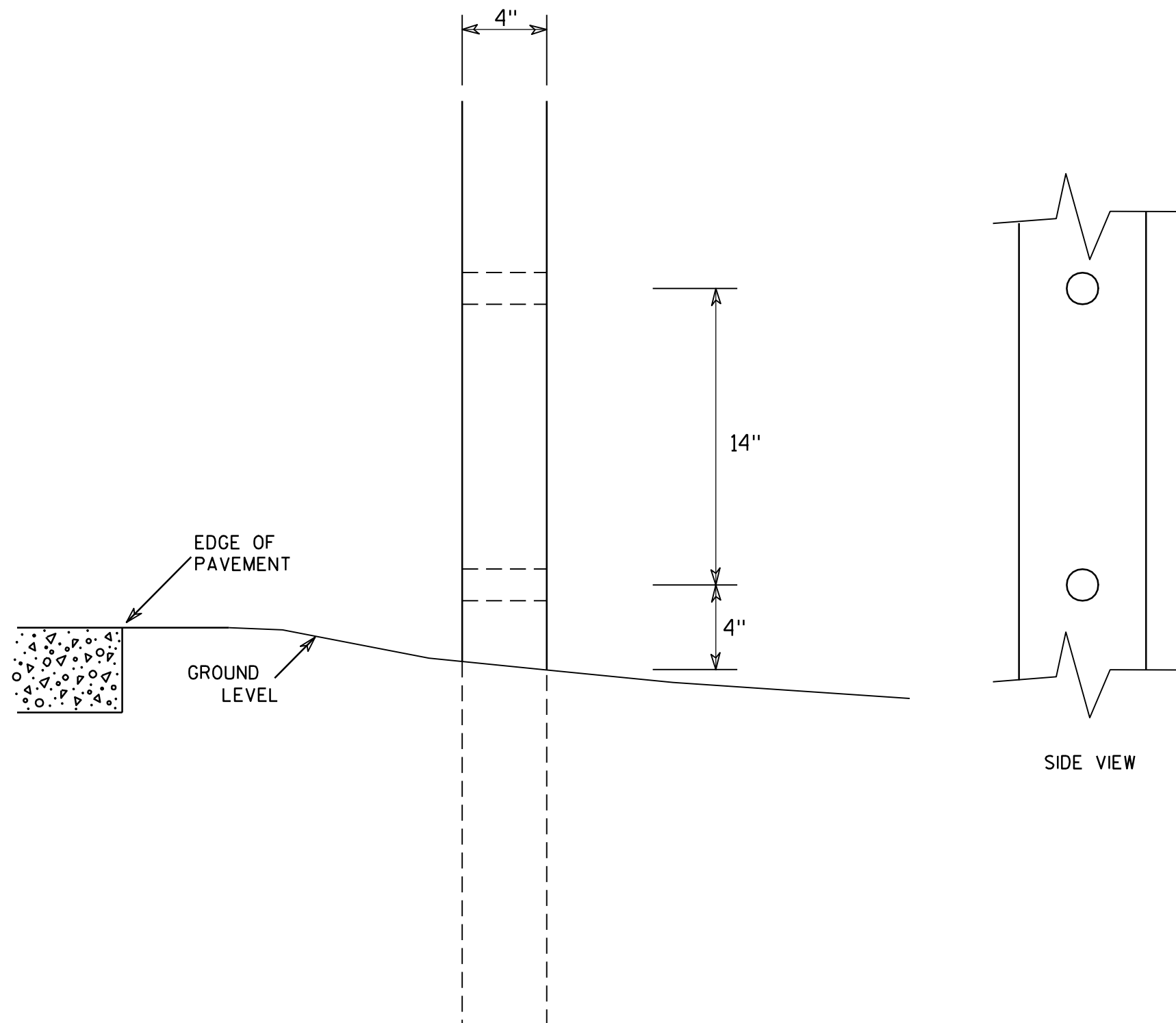
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/05/15 PLAT 307 14-9.9

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

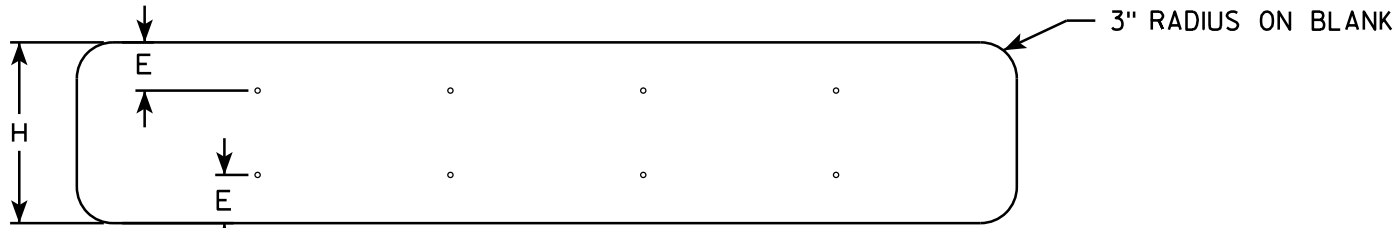
PROJECT NO:

HWY:

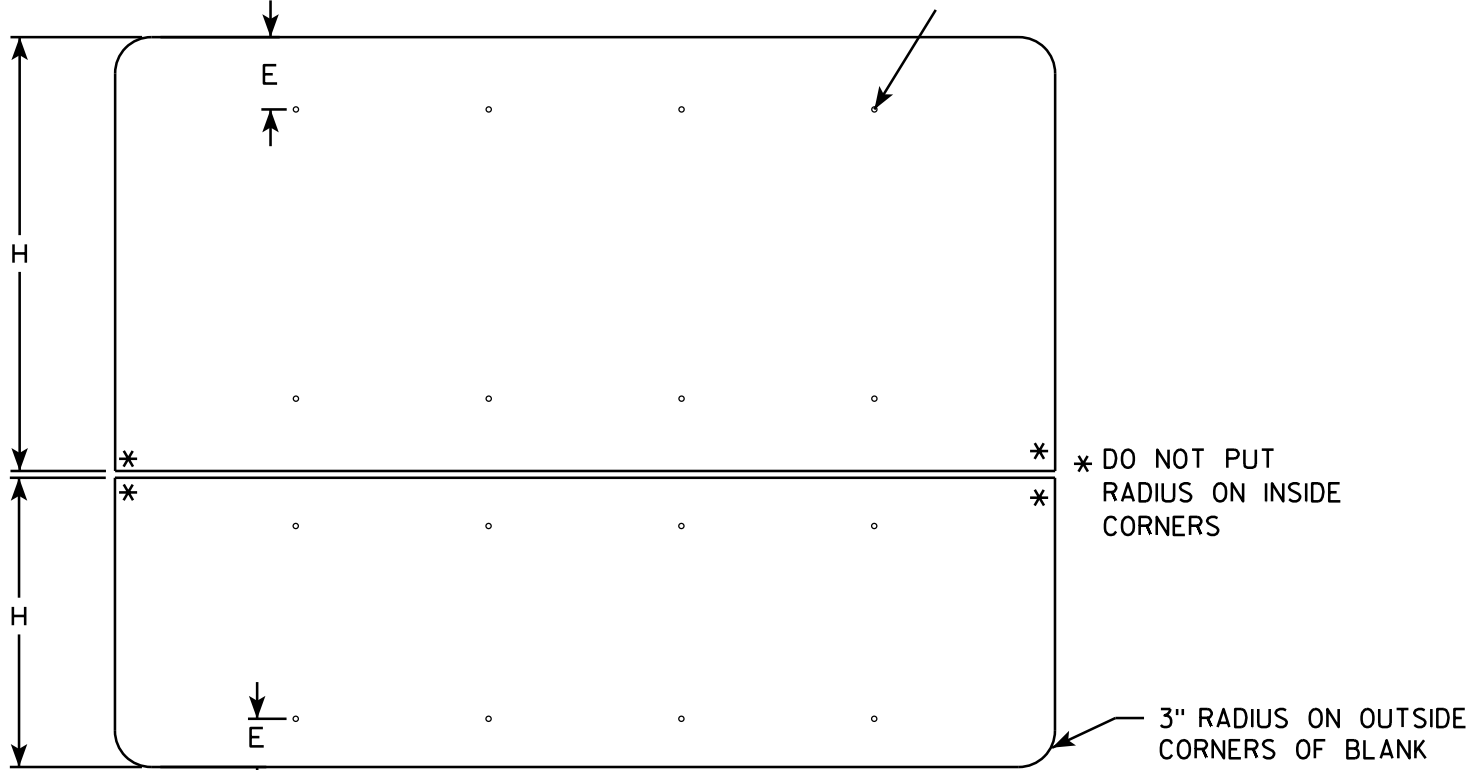
COUNTY:

SHEET NO: 308

E



SINGLE PIECE ALUMINUM SIGN 1/16" MOUNTING HOLES

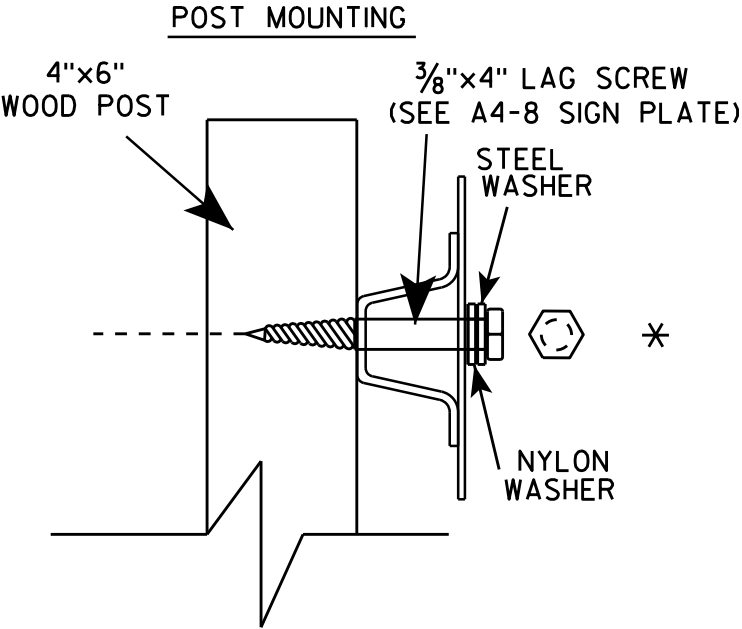
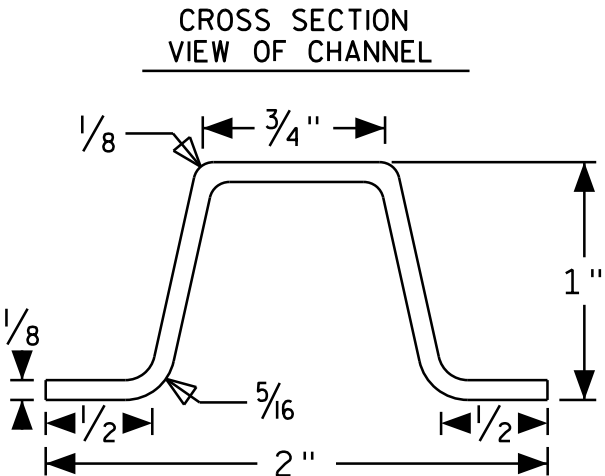
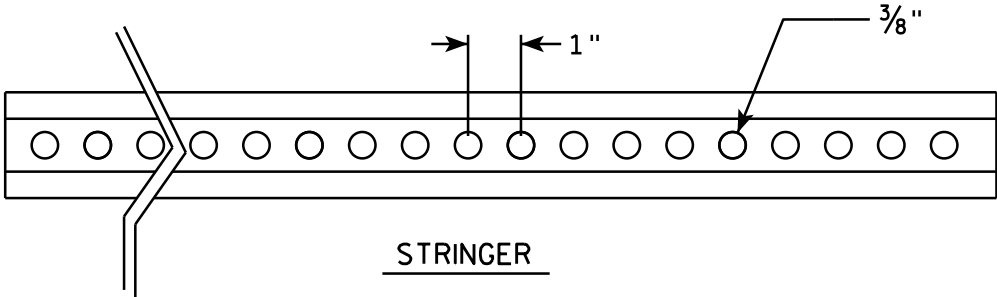


MULTI-PIECE ALUMINUM SIGN

GENERAL NOTES

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

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



SIGN STRINGER
MOUNTING REQUIREMENTS

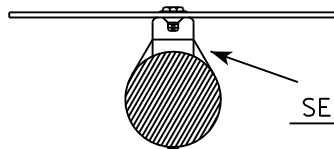
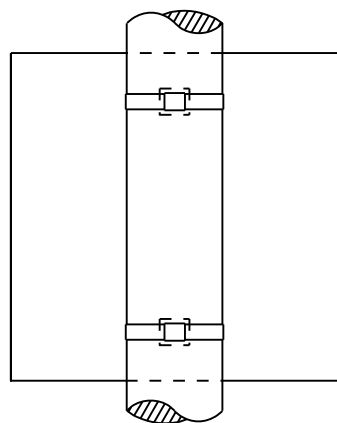
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/26/16 PLATE No A4-18.1
309

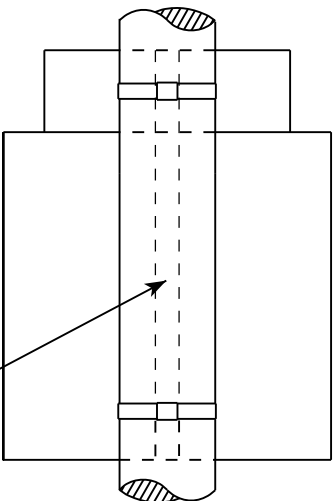
BANDING

SINGLE SIGN

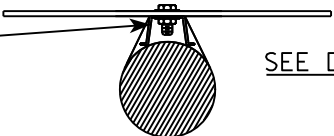


SEE DETAIL A

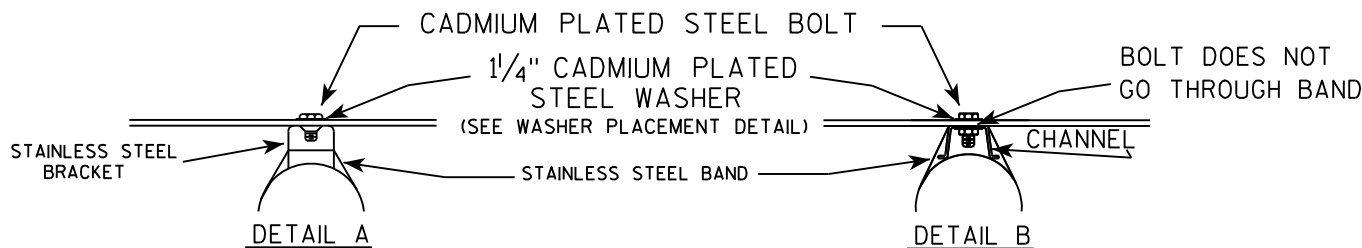
"J" ASSEMBLY



CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



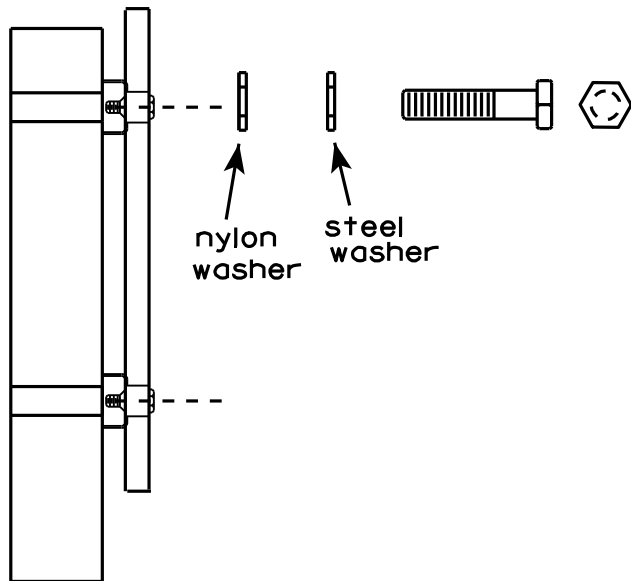
SEE DETAIL B



GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be $\frac{3}{4}$ " in width and 0.025" thickness.

WASHER PLACEMENT



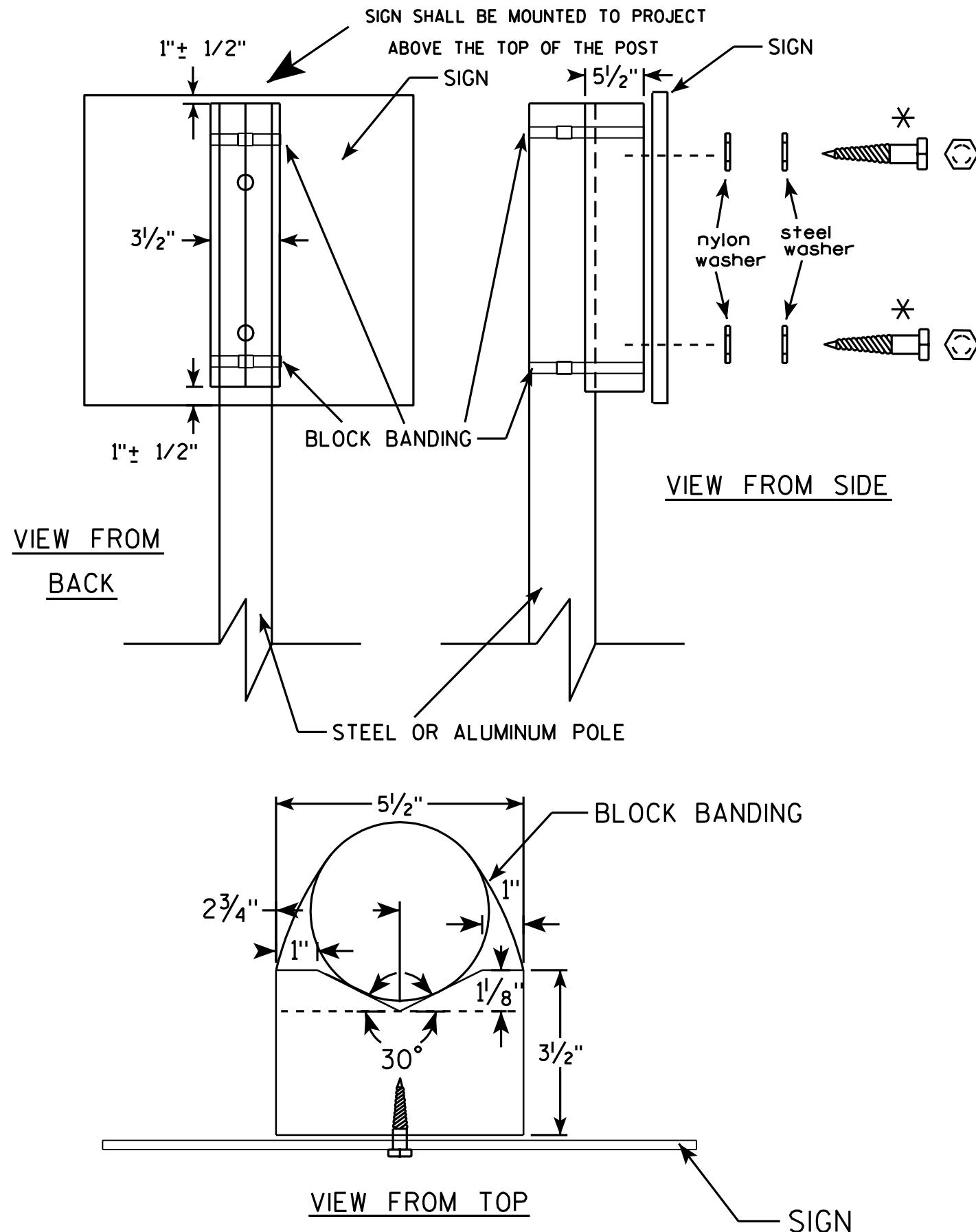
WASHERS (ALL POSTS) -
1-1/4" O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3



GENERAL NOTES

1. WOOD 4"x6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WISDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, 3/4" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORMALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
 - a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
 - b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
 - c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1 1/4" O.D. X 3/8" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1 1/4" O.D. X 3/8" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✱ LAG BOLTS SHALL BE 3/8" X 2 1/2"

BLOCK BANDING DETAIL
(V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

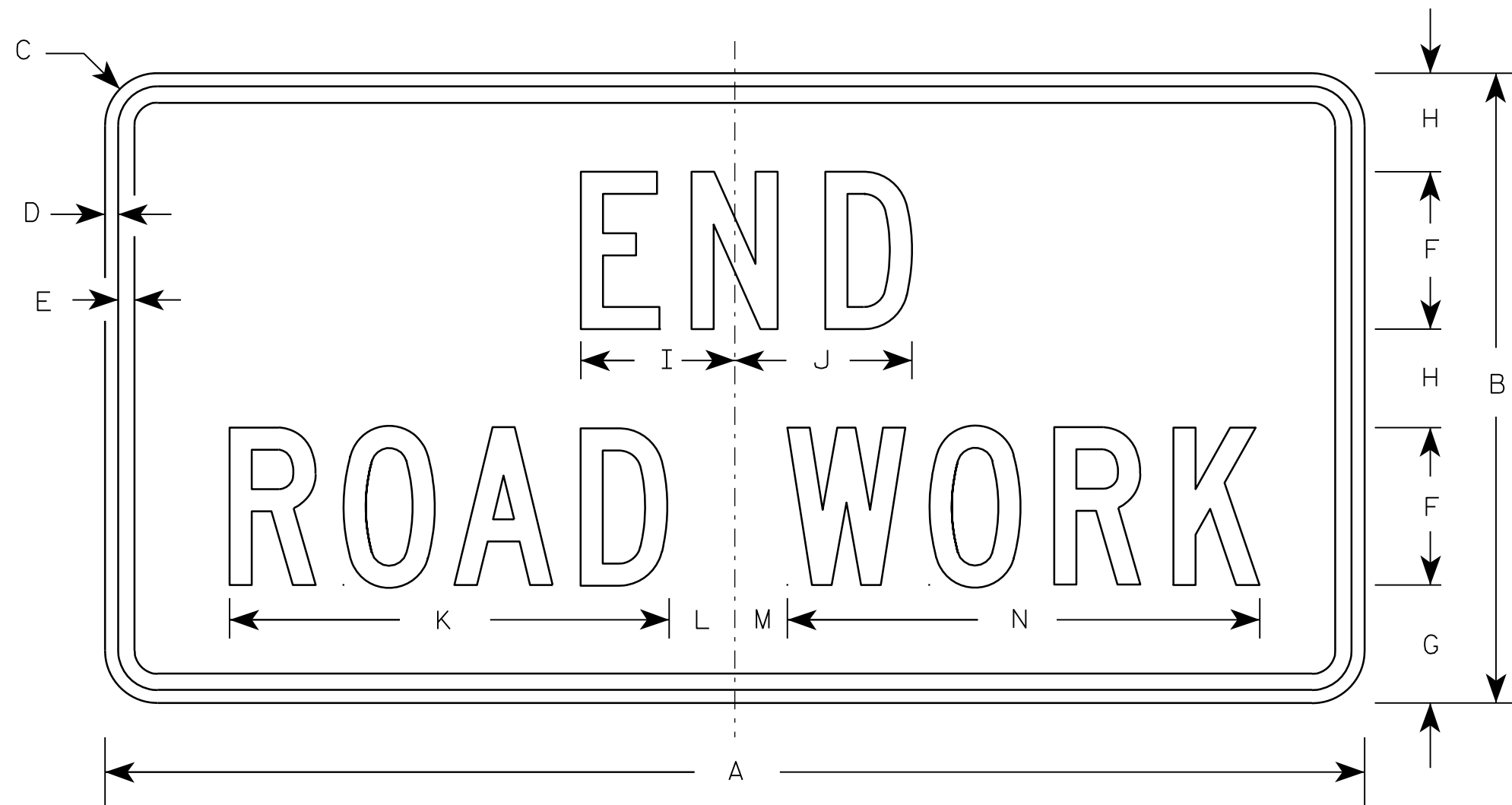
DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

SHEET NO: 311

E

7



G20-2A

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.

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 m ²
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

STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

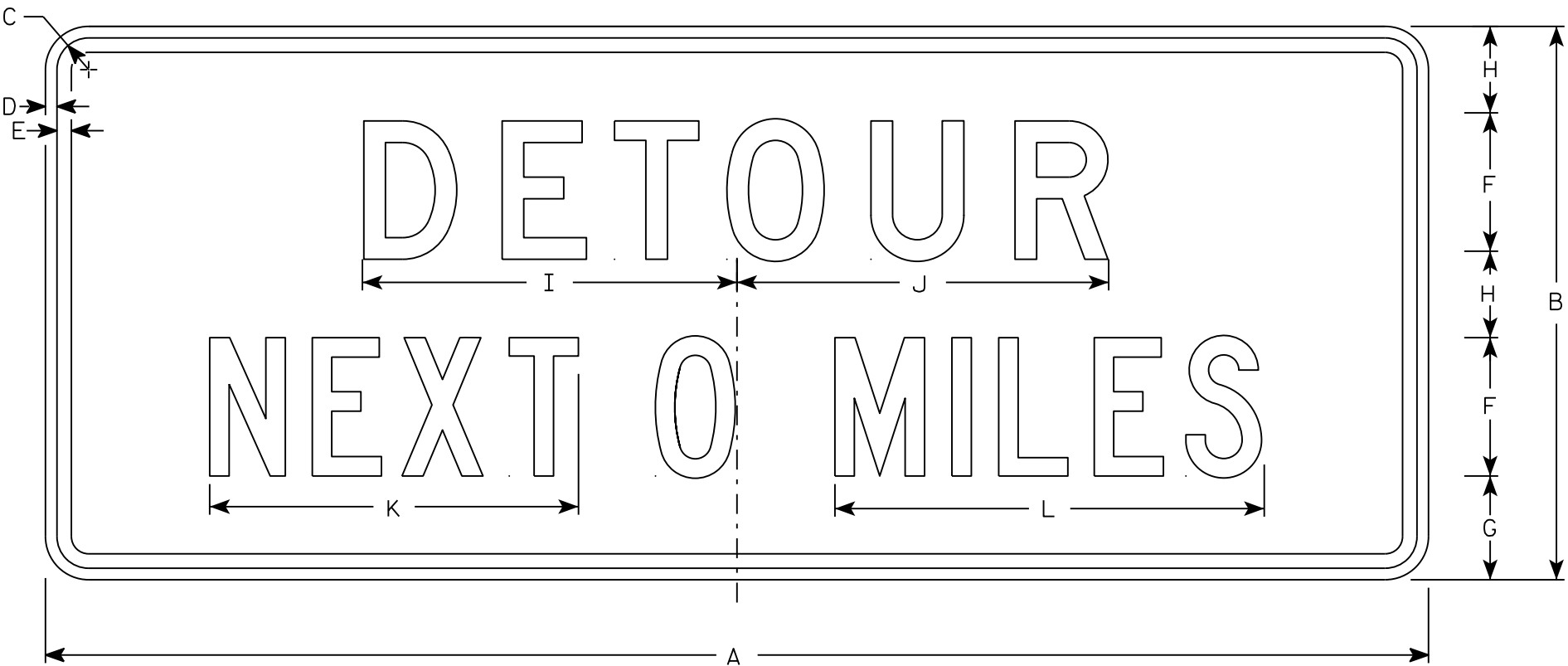
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

7

NOTES

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



G20-51

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

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 313

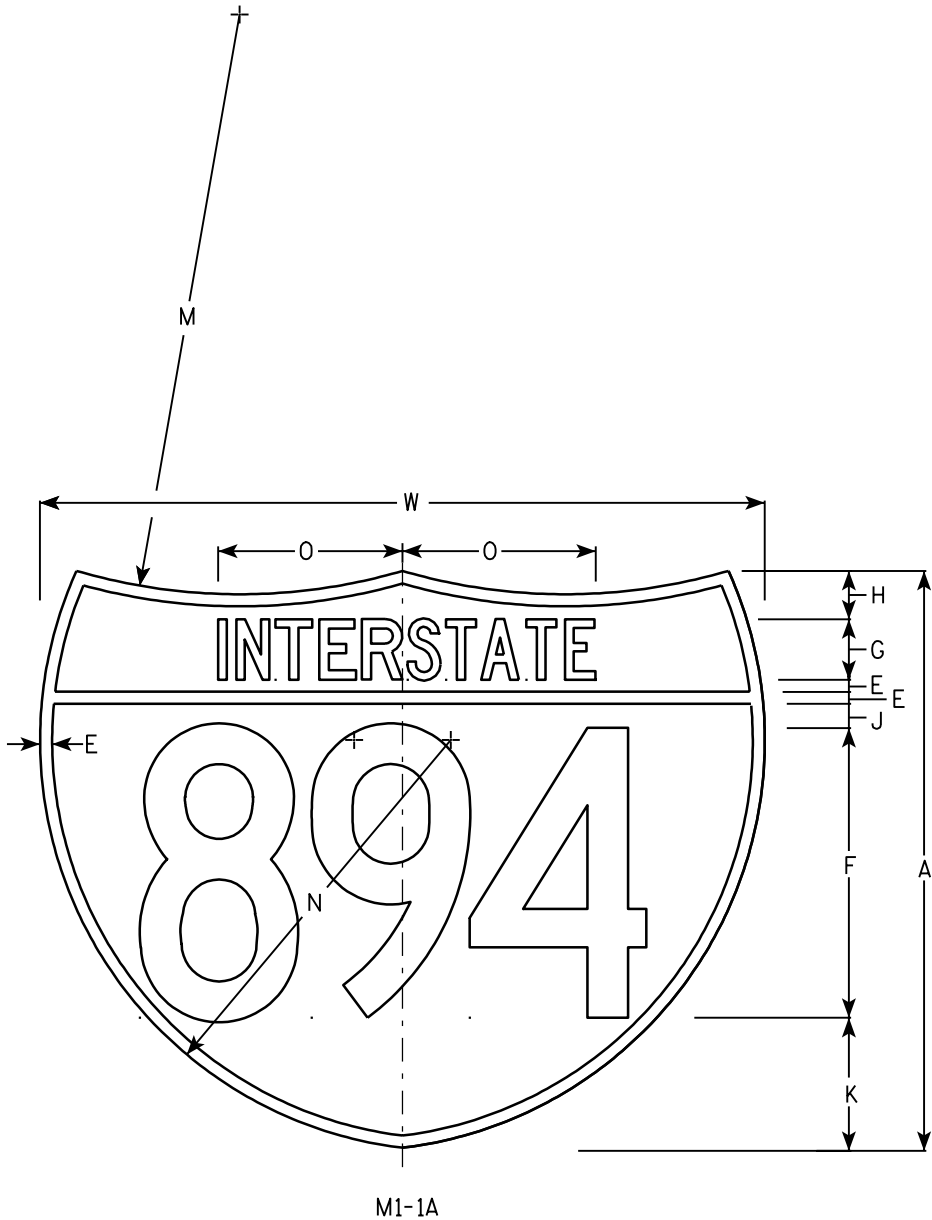
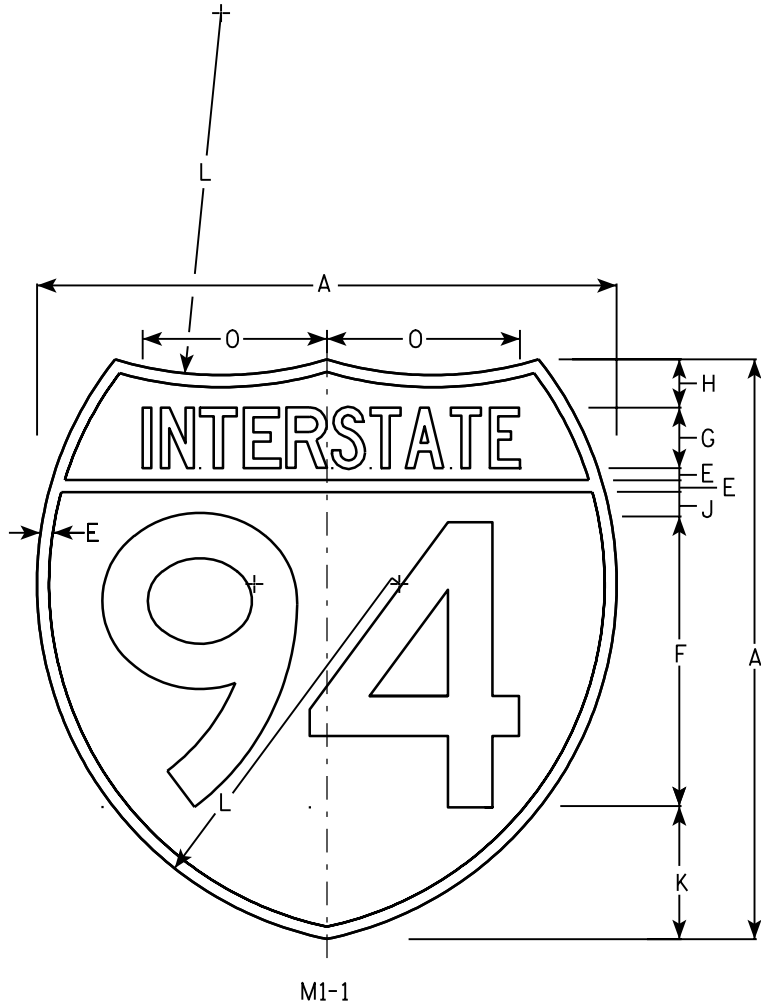
E

STANDARD SIGN
G20-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

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



NOTES

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

Metric equivalent for these signs are:

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

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

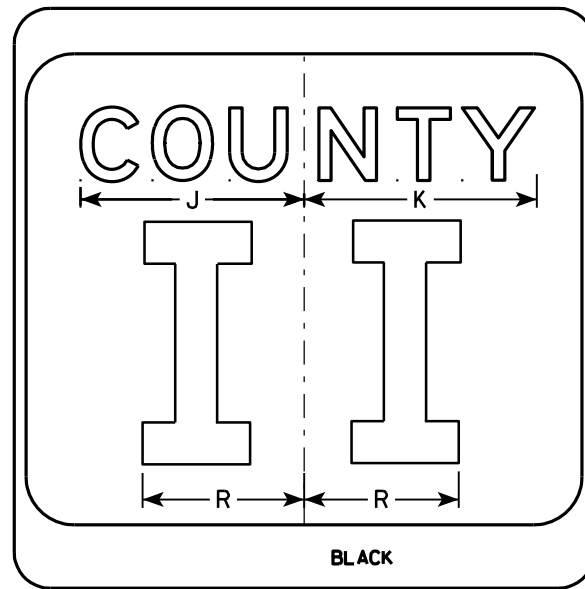
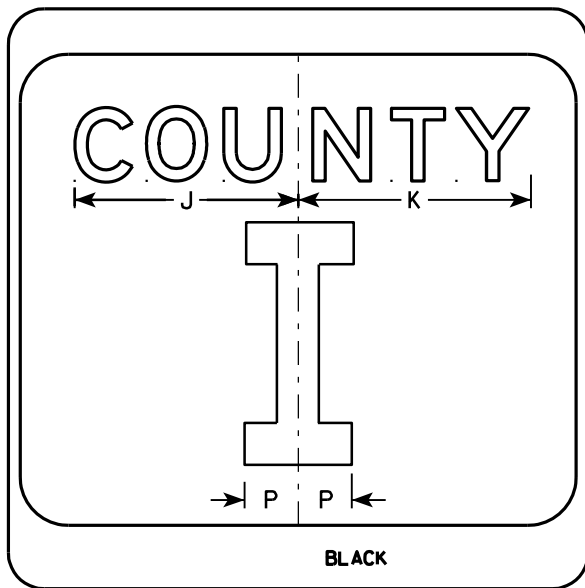
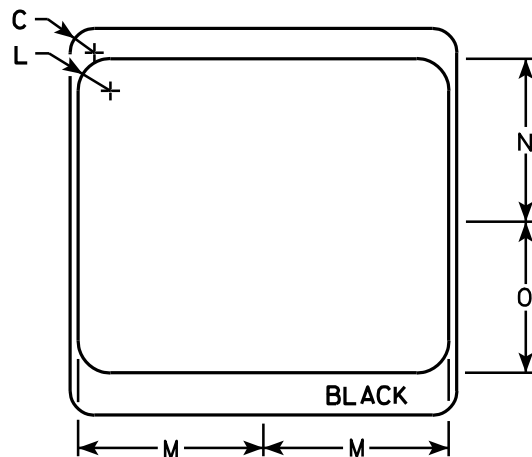
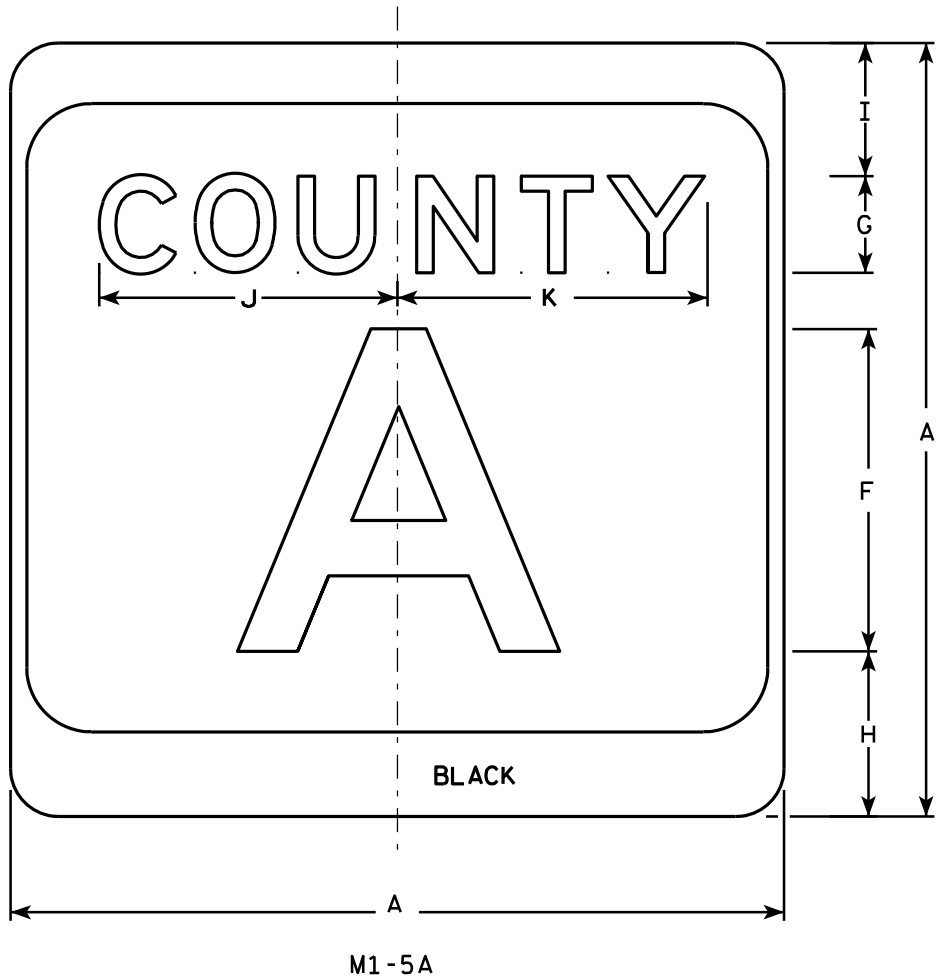
INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

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

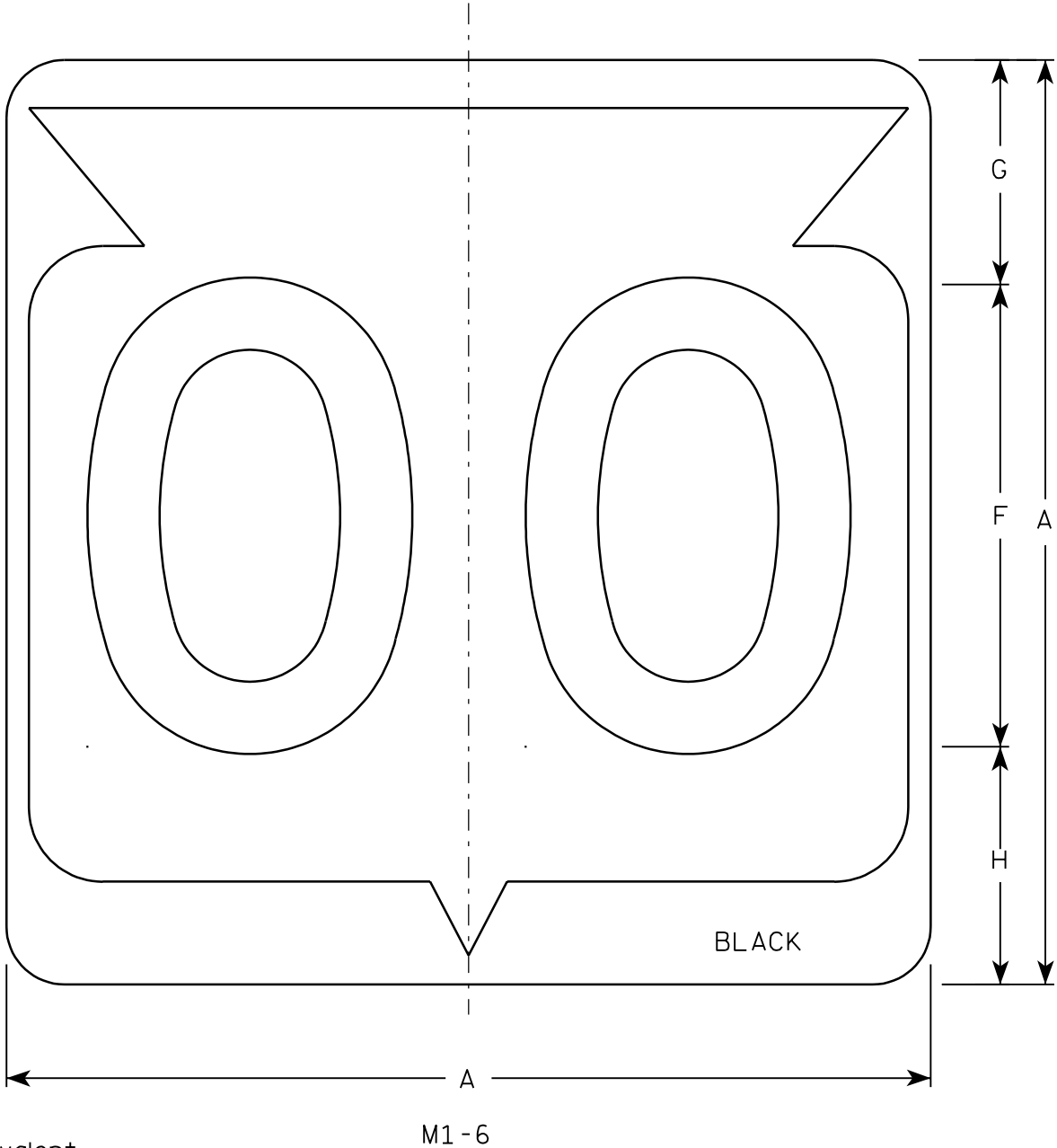
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 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: 315	E
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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:

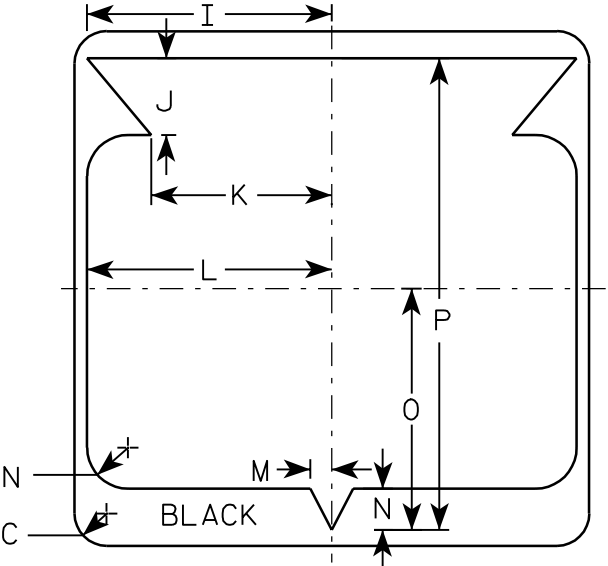
COUNTY:

SHEET NO: 316

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

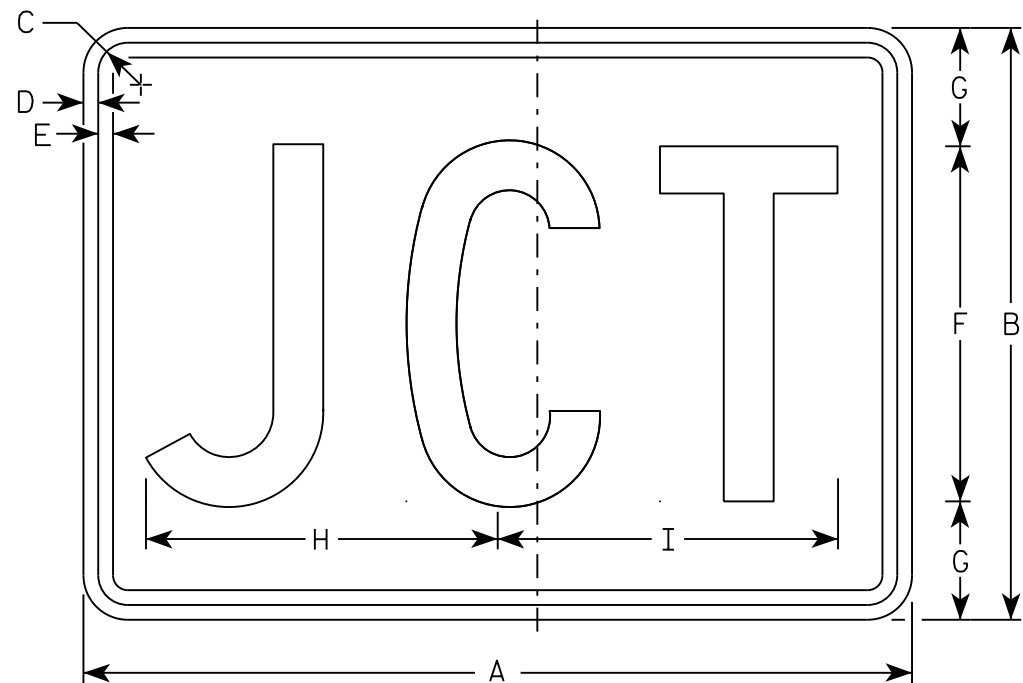
WISCONSIN DEPT OF TRANSPORTATION

APPROVED

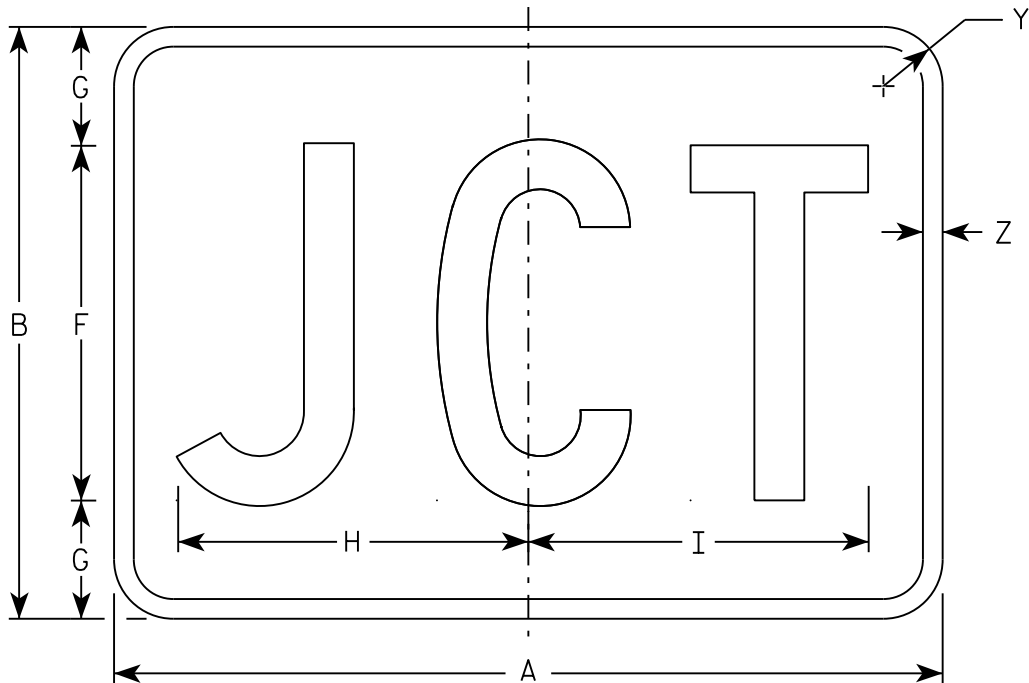
Chester J. Spang
for State Traffic Engineer

DATE 3/20/02

PLATE NO. M1-6.9



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

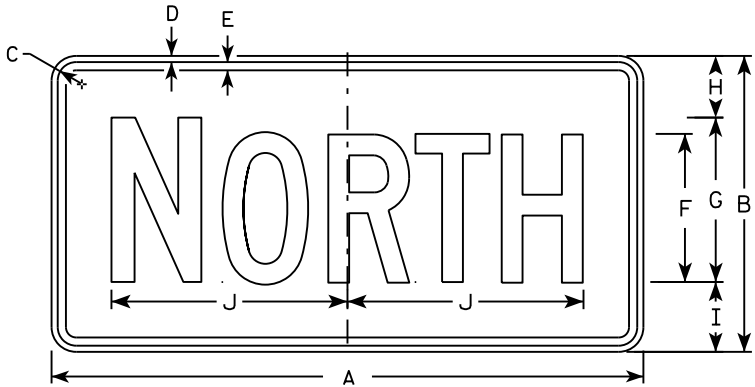
Matthew R. Rauch

For State Traffic Engineer

DATE 10/15/15

PLATE 317

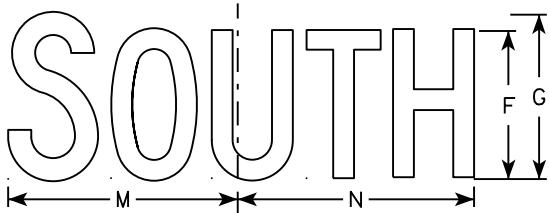
'2-1.12



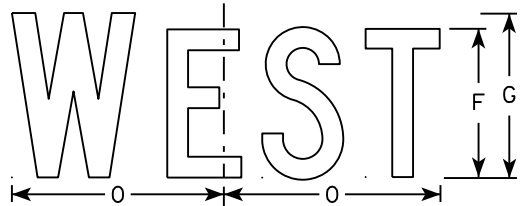
M3-1
MM3-1
MP3-1



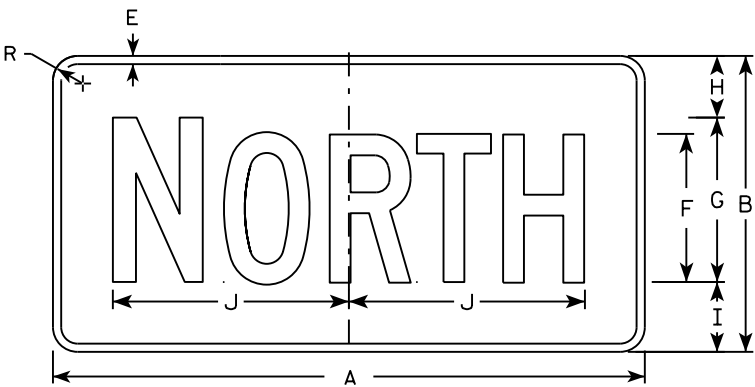
M3-2
MM3-2
MP3-2



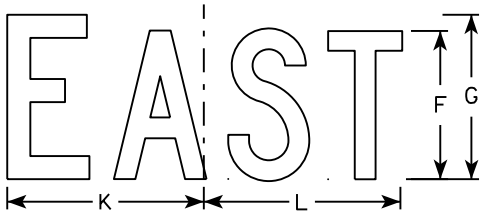
M3-3
MM3-3
MP3-3



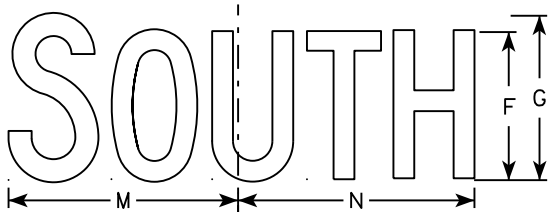
M3-4
MM3-4
MP3-4



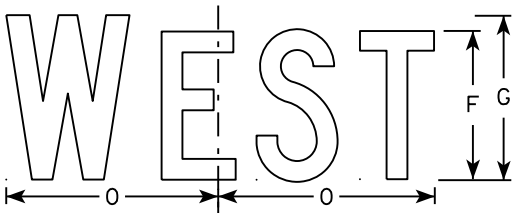
MB3-1
MK3-1
MN3-1



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. 318 M3-1.14

NOTES

1. Sign is Type II - Type H except as Shown
2. Color:

Background - See Note 5

Message - See note 5
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-1

Background - White

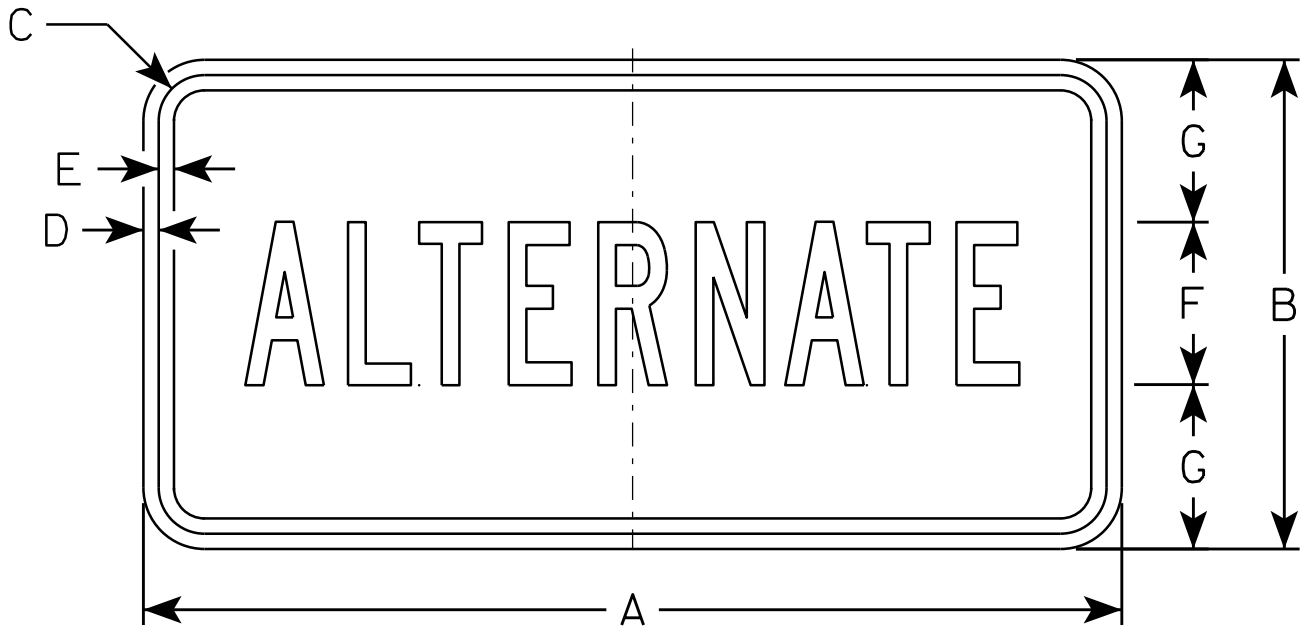
Message - Black
- MB4-1

Background - Blue

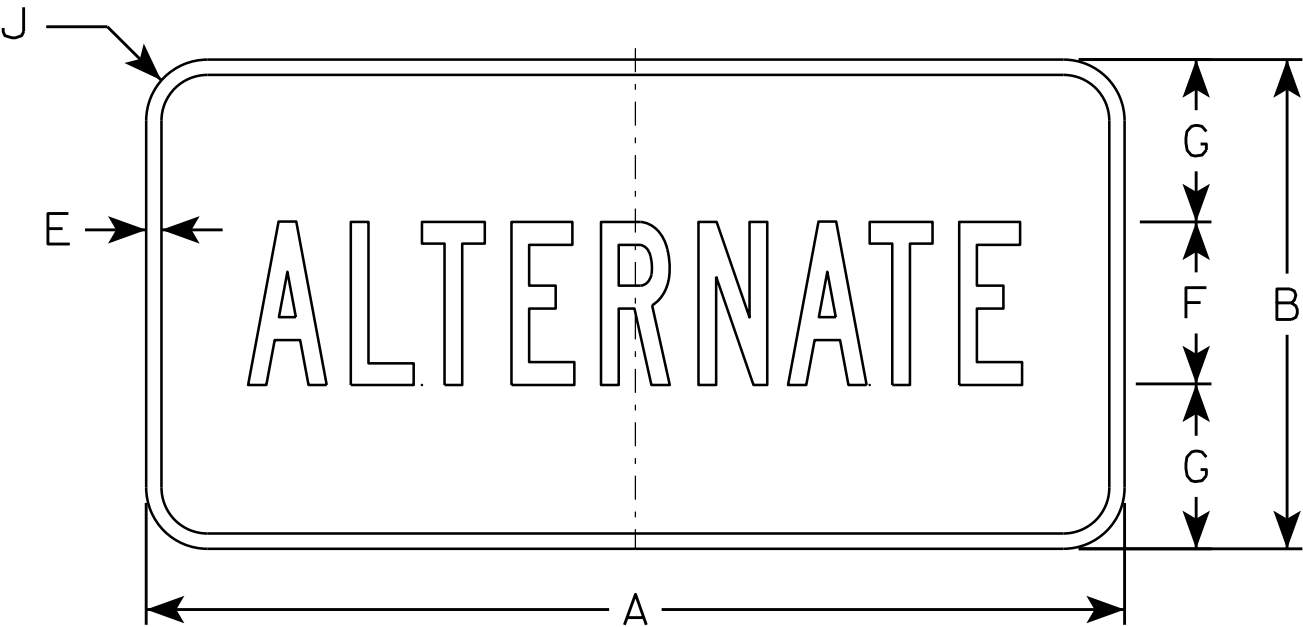
Message - White
- M04-1

Background - Orange - Type F

Message - Black



M4 - 1
M04 - 1



MB4 - 1

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

STANDARD SIGN

M4 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

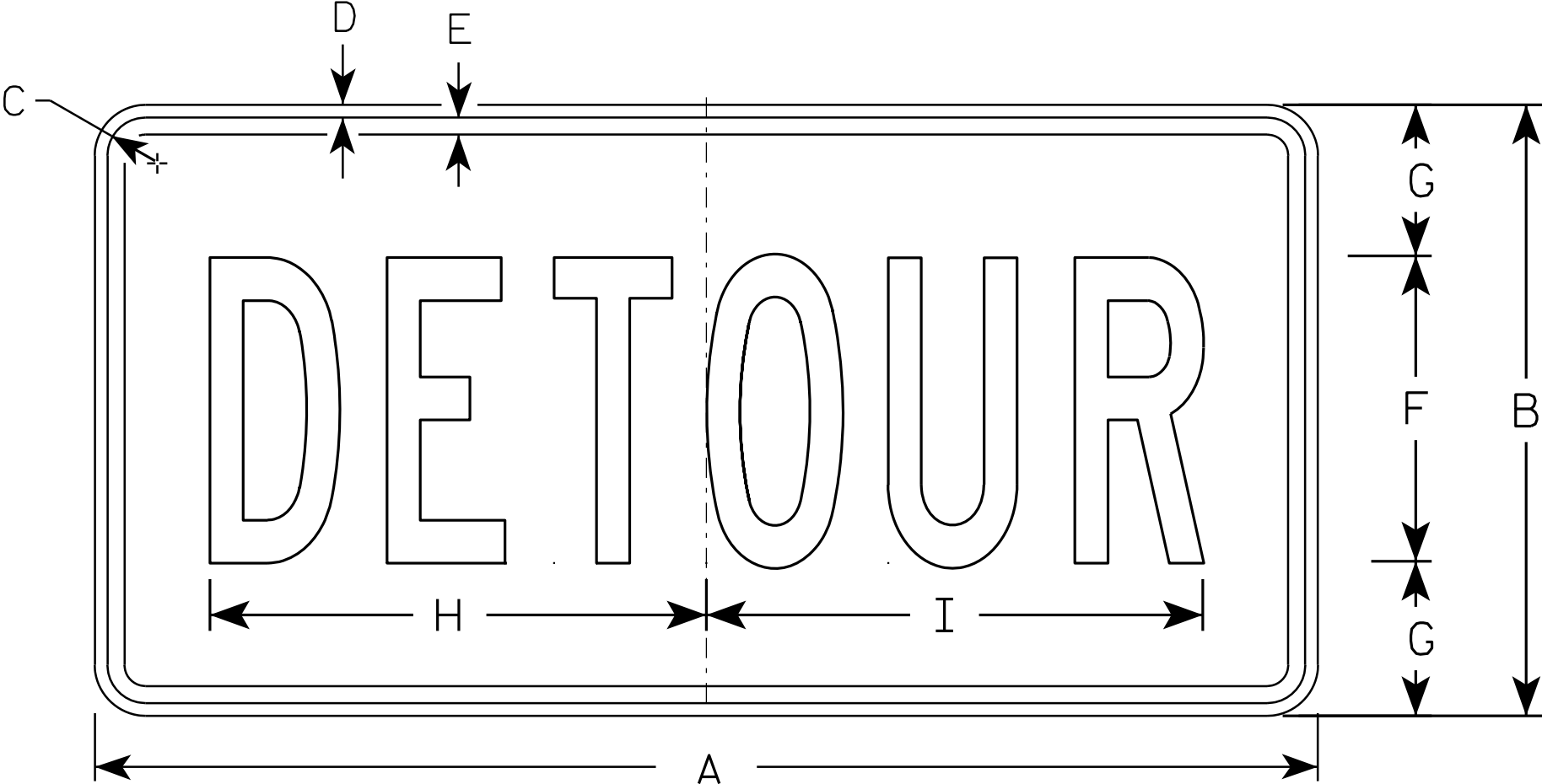
Matthew R. Rauch

for State Traffic Engineer

DATE 6/30/14PLATE 319'14-1.8

NOTES

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



M4 - 8

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

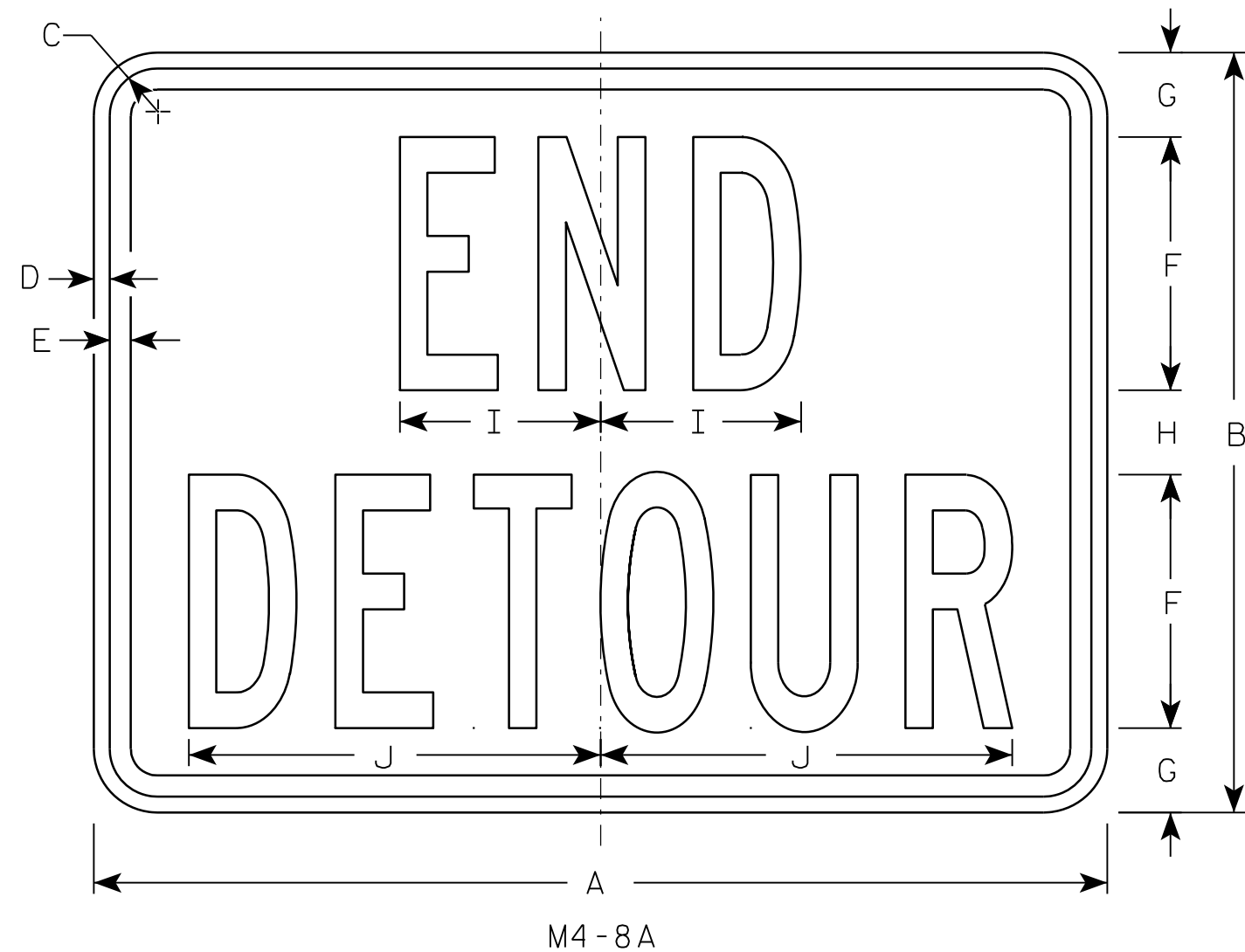
STANDARD SIGN
M4 - 8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

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

7



NOTES

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

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

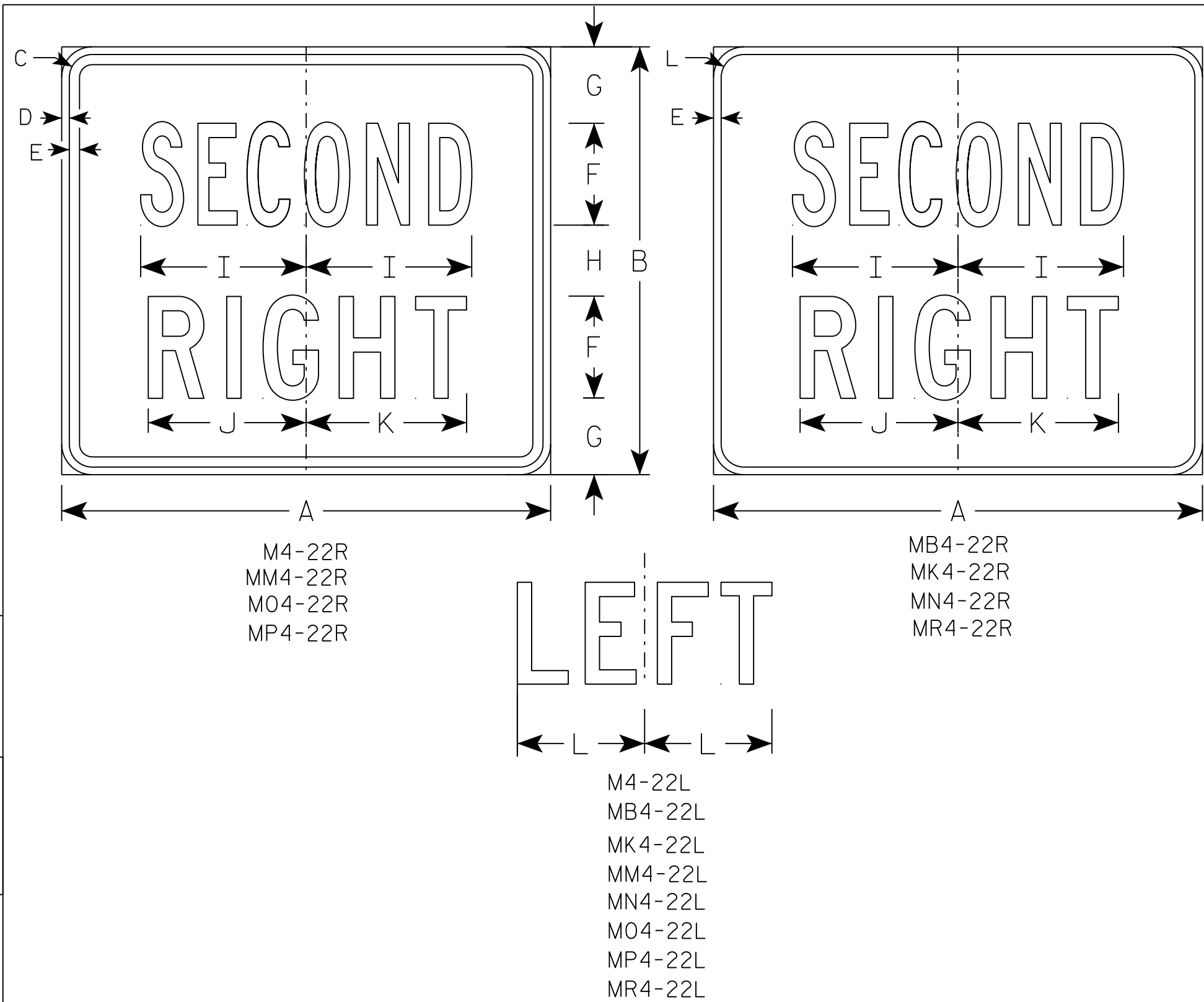
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 321	E
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STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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



NOTES

1. Sign is Type II - Type H except as Shown
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. M4-22 Background - White
Message - Black
MB4-22 Background - Blue
Message - White
MK4-22 Background - Green
Message - White
MM4-22 Background - White
Message - Green
MN4-22 Background - Brown
Message - White
M04-22 Background - Orange - Type F Reflective
Message - Black
MP4-22 Background - White
Message - Blue
MR4-22 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	24	21	1 1/8	3/8	1/2	5	3 3/4	3 1/2	8 1/8	7 3/4	7 7/8	1 1/2															3.5
3	36	30	1 5/8	5/8	3/4	8	4 3/4	4 1/2	13 1/8	12 5/8	12 1/2	1 7/8															7.5
4																											
5																											

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

STANDARD SIGN

M4-22

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

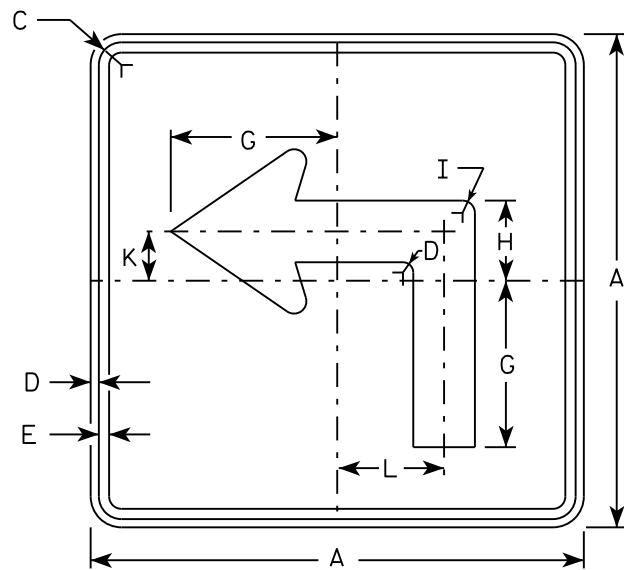
Matthew R. Rauch

for State Traffic Engineer

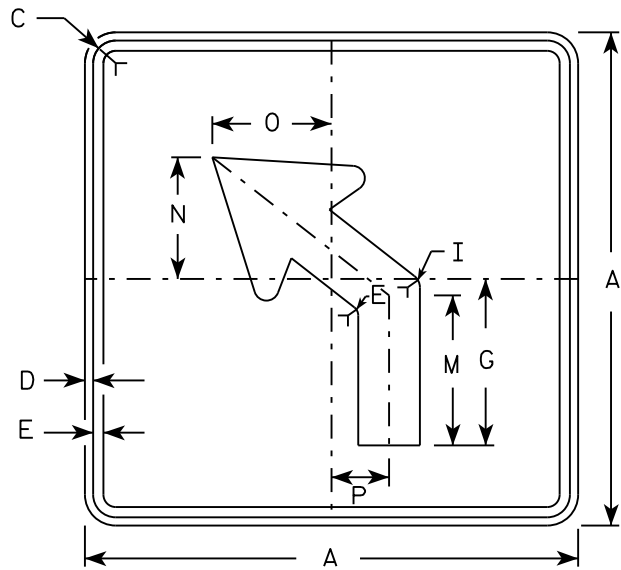
DATE 10/15/15

PLATE 322

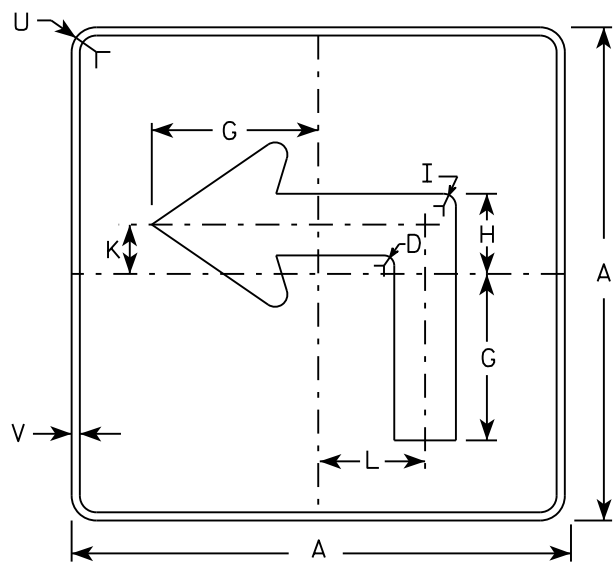
14-22.4



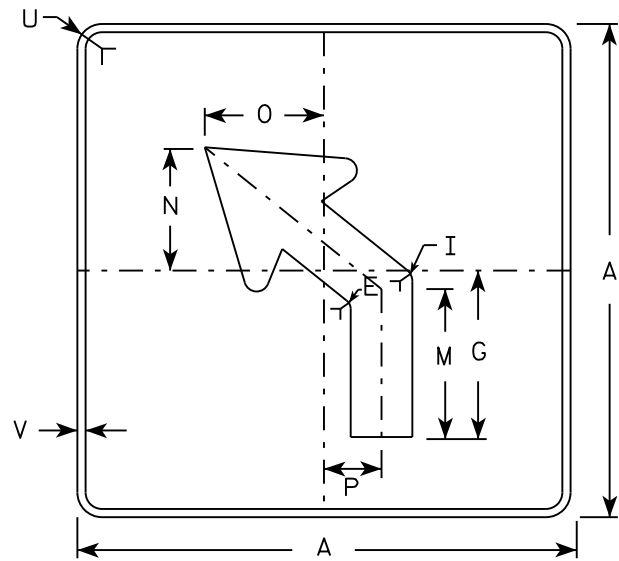
M5-1L
MM5-1L
M05-1L
MP5-1L



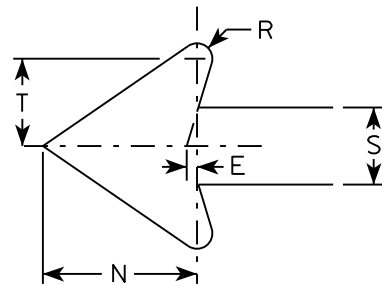
M5-2L
MM5-2L
M05-2L
MP5-2L



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



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



NOTES

- Signs are Type II - Type H reflective except as shown
- Color:
Background - See note 4
Message - See note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- | | |
|-----------------|---|
| M5-1 and M5-2 | Background - White |
| | Message - Black |
| MB5-1 and MB5-2 | Background - Blue |
| | Message - White |
| MK5-1 and MK5-2 | Background - Green |
| | Message - White |
| MM5-1 and MM5-2 | Background - White |
| | Message - Green |
| MN5-1 and MN5-2 | Background - Brown |
| | Message - White |
| M05-1 and M05-2 | Background - Orange - Type F Reflective |
| | Message - Black |
| MP5-1 and MP5-2 | Background - White - Type H Reflective |
| | Message - Blue |
| MR5-1 and MR5-2 | Background - Brown |
| | Message - Yellow |
- M5-1R same as M5-1L except arrow points right.
- M5-2R same as M5-2L except arrow tilts right.

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

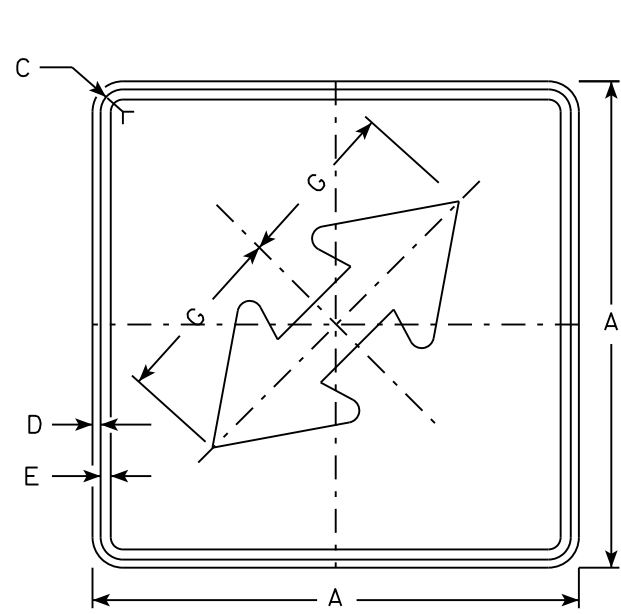
PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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STANDARD SIGN
M5-1 & M5-2

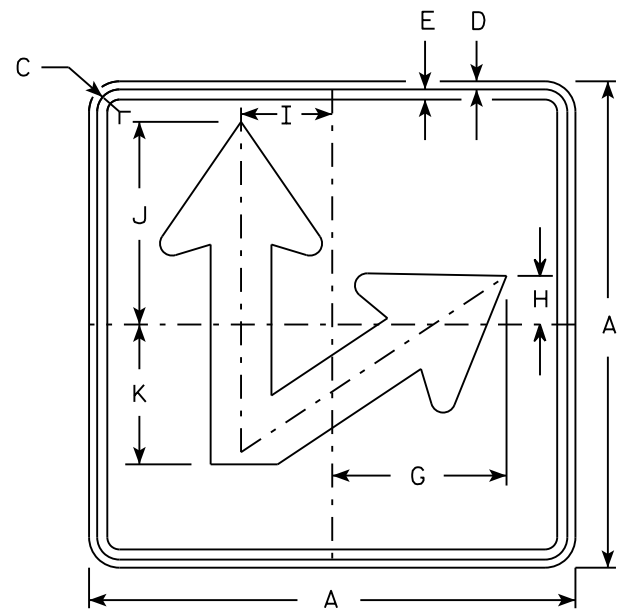
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 10/15/15 PLATE 323 M5-1.13



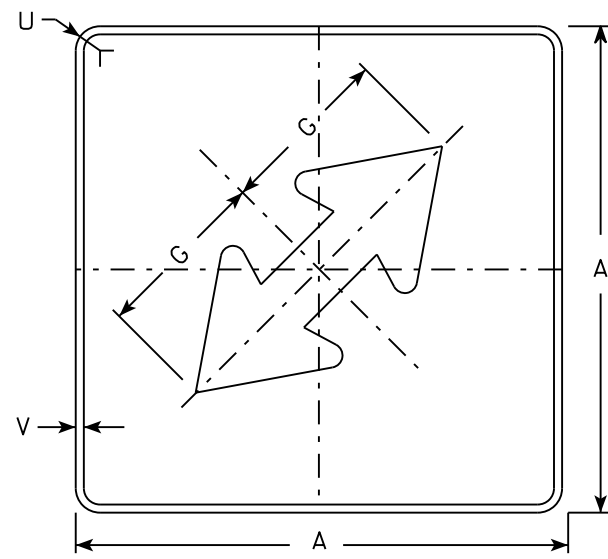
M6 - 5
MM6 - 5
M06 - 5
MP6 - 5



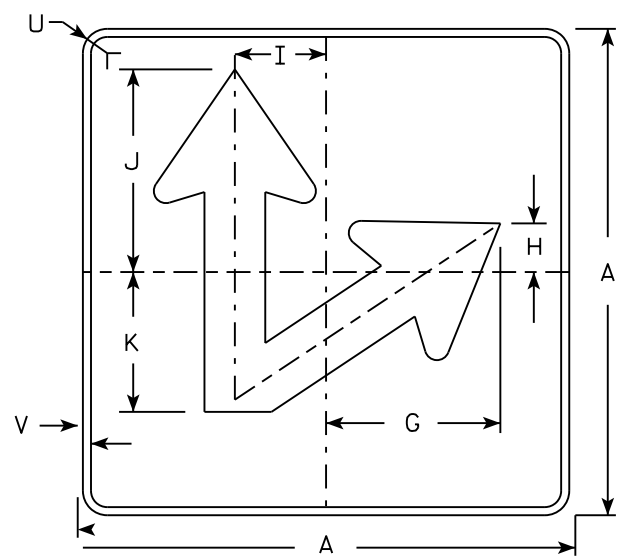
M6 - 7R
MM6 - 7R
M06 - 7R
MP6 - 7R

NOTES

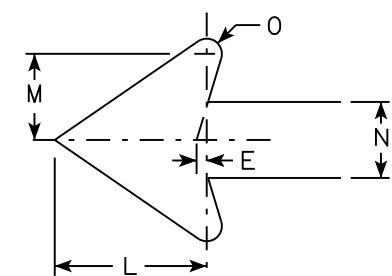
- Sign is Type II - Type H except as Shown
- Color:
 - M6-5 and M6-7 Background - White
Message - Black
 - MB6-5 and MB6-7 Background - Blue
Message - White
 - MK6-5 and MK6-7 Background - Green
Message - White
 - MM6-5 and MM6-7 Background - White
Message - Green
 - MN6-5 and MN6-7 Background - Brown
Message - White
 - M06-5 and M06-7 Background - Orange - Type F Reflective
Message - Black
 - MP6-5 and MP6-7 Background - White
Message - Blue
 - MR6-5 and MR6-7 Background - Brown
Message - Yellow
- M6-7L same as M6-7R except arrow points ahead and left.



MB6 - 5
MK6 - 5
MN6 - 5
MR6 - 5



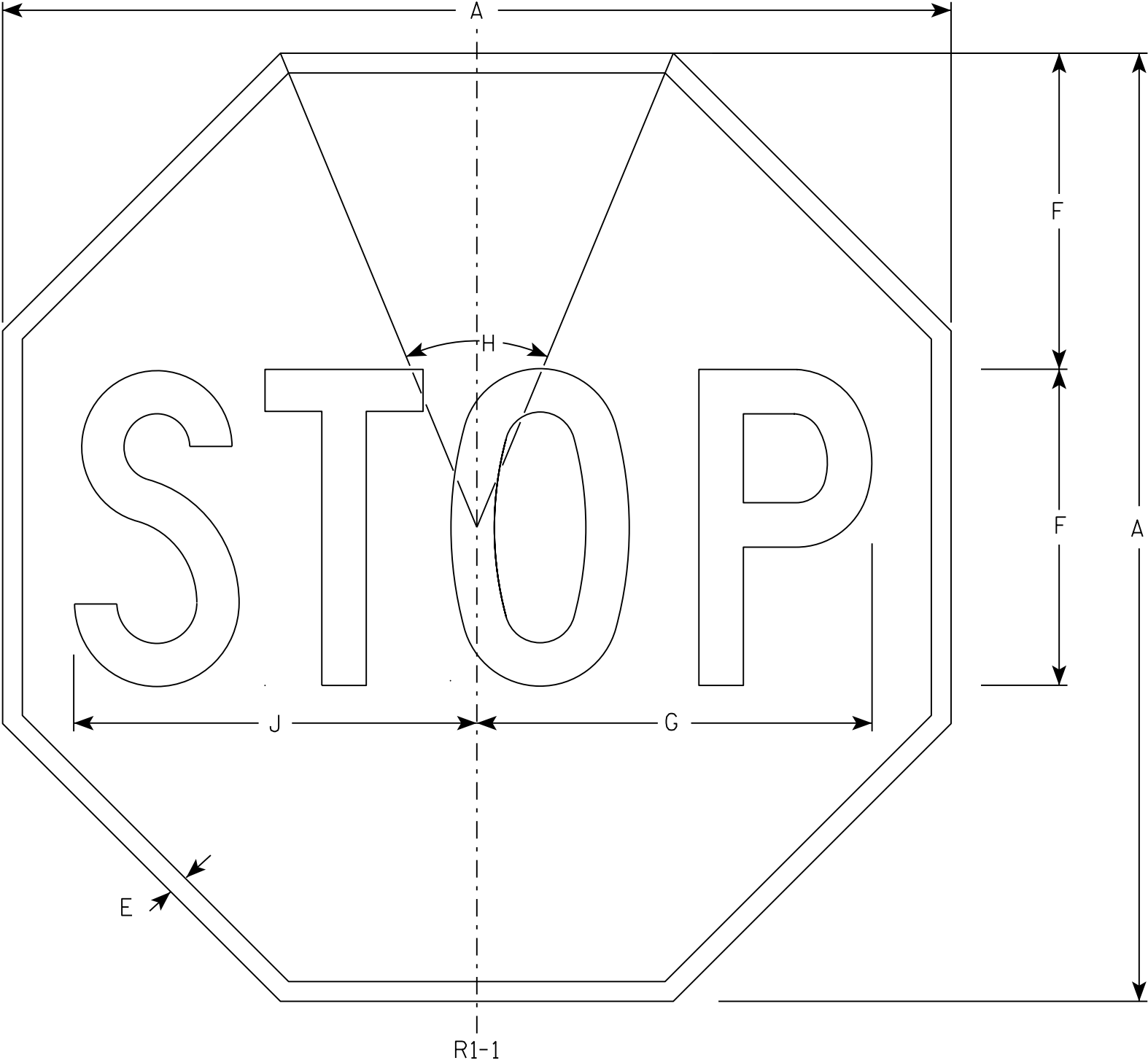
MB6 - 7R
MK6 - 7R
MN6 - 7R
MR6 - 7R



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	2 1/8	4 1/4	8 3/4	6	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	3	6 3/4	12 1/2	8 5/8	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	3	6 3/4	12 1/2	8 5/8	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	3	6 3/4	12 1/2	8 5/8	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

PROJECT NO:			HWY:			COUNTY:			SHEET NO: 325			E											
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M67.DGN												PLOT DATE : 21-MAR-2017 08:41			PLOT BY : \$\$...plotuser...\$\$ PLOT NAME :			PLOT SCALE : 11.838983:1.000000			WISDOT/CADDs SHEET 42		

7



NOTES

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

7

R1-1

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

STANDARD SIGN
R1 - 1

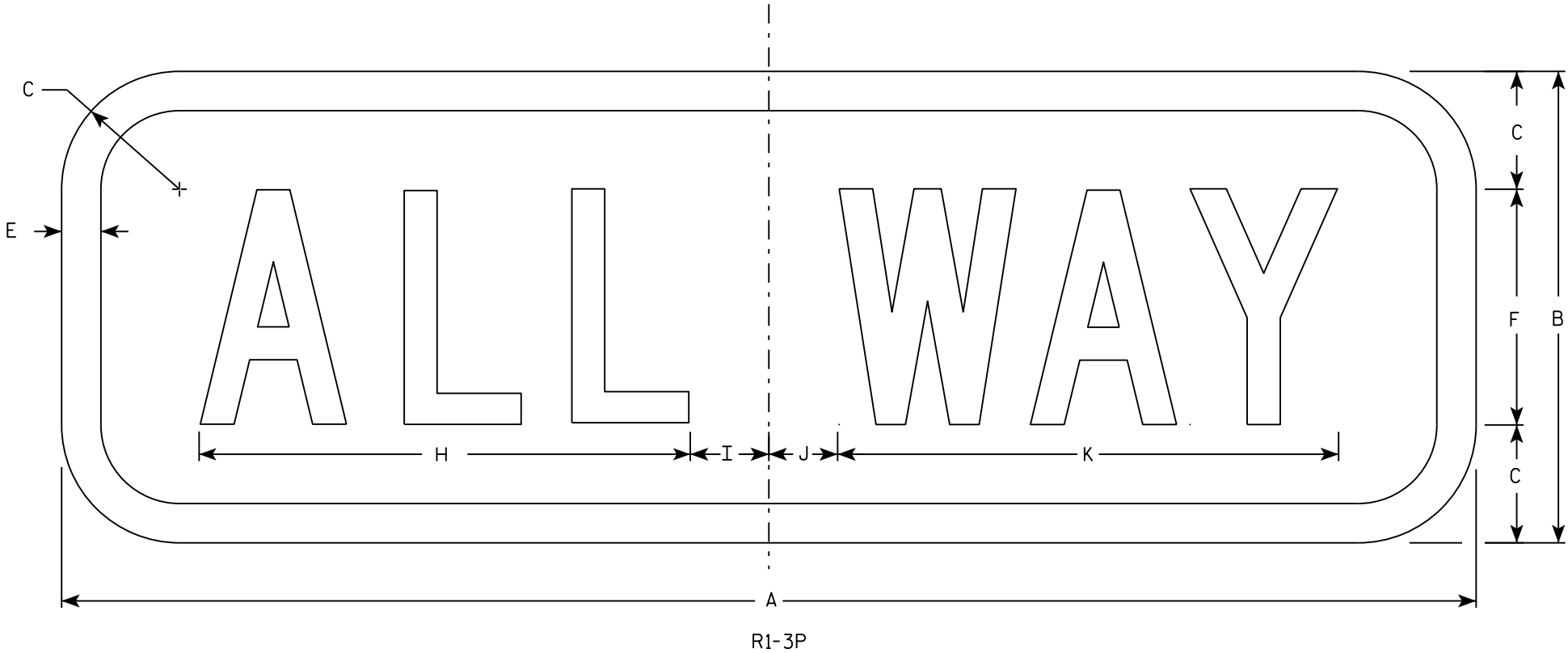
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - Red
Message - White
- 3. Message Series - C
- 4. For 30"x30" R1-1 use 18"x6" R1-3P sign
For 36"x36" R1-1 use 24"x9" R1-3P sign
For 48"x48" R1-1 use 30"x12" R1-3P sign



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	6	1 1/2		1/2	3		6 1/4	1 1/4	7/8	6 3/8																0.75
2S	18	6	1 1/2		1/2	3		6 1/4	1 1/4	7/8	6 3/8																1.5
2M	24	9	1 1/2		1/2	5		9 1/4	1 1/4	3/4	9 3/4																1.5
3	24	9	1 1/2		1/2	5		9 1/4	1 1/4	3/4	9 3/4																1.5
4	30	12	2 1/4		5/8	6		11	2 1/4	1 1/2	11 3/4																2.5
5	30	12	2 1/4		5/8	6		11	2 1/4	1 1/2	11 3/4																2.5

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 327

E

STANDARD SIGN

R1 - 3P

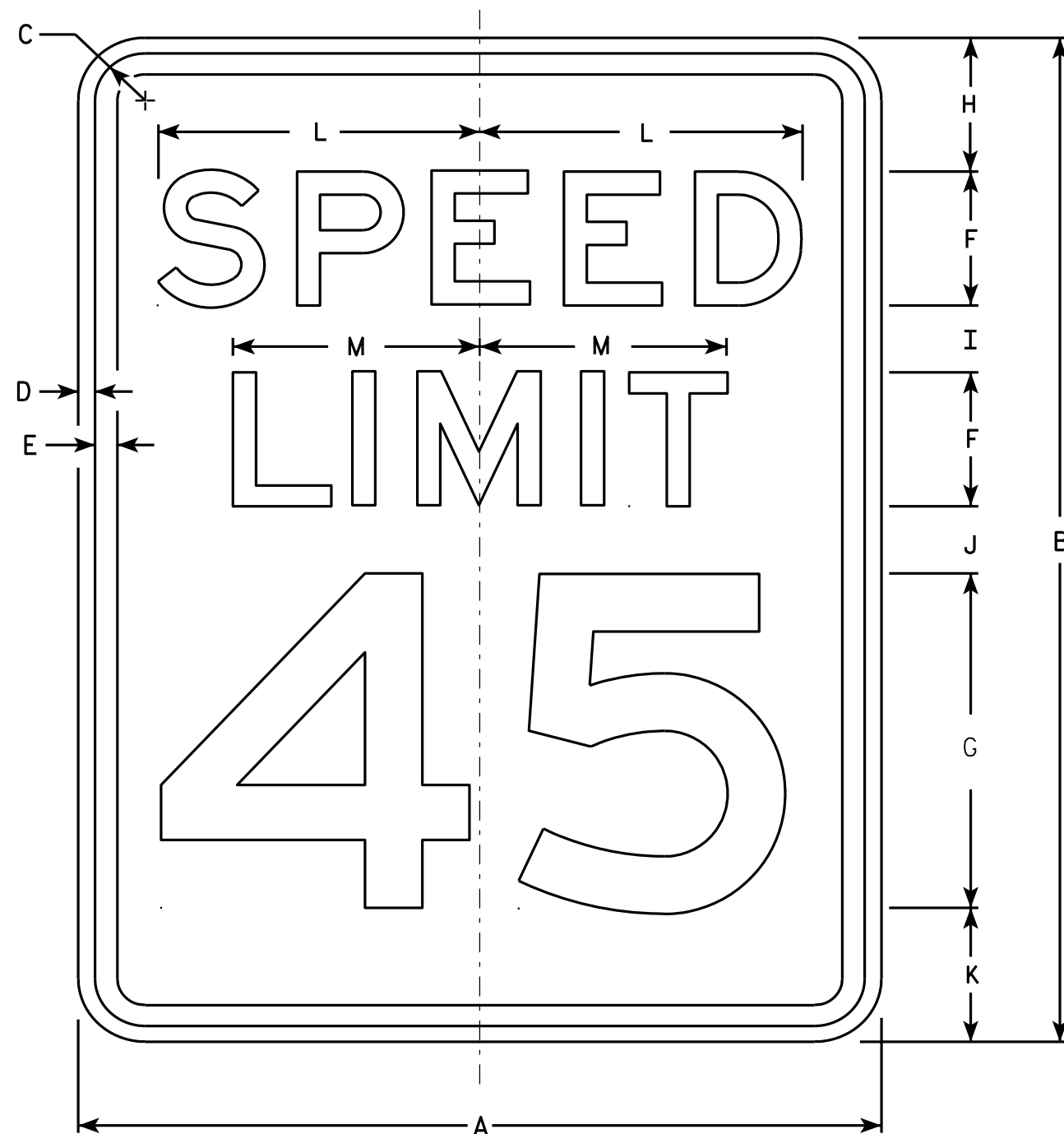
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*

for State Traffic Engineer

DATE 11/29/16

PLATE NO. R1-3P.3



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: 328 E



R2-6P

NOTES

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

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
2M	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
3	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
4	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
5	48	36	1 3/8	1/2	5/8	8	7	6	15 1/8	19																	12.0

STANDARD SIGN
R2-6P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/20/10 PLATE NO. R2-6P.2

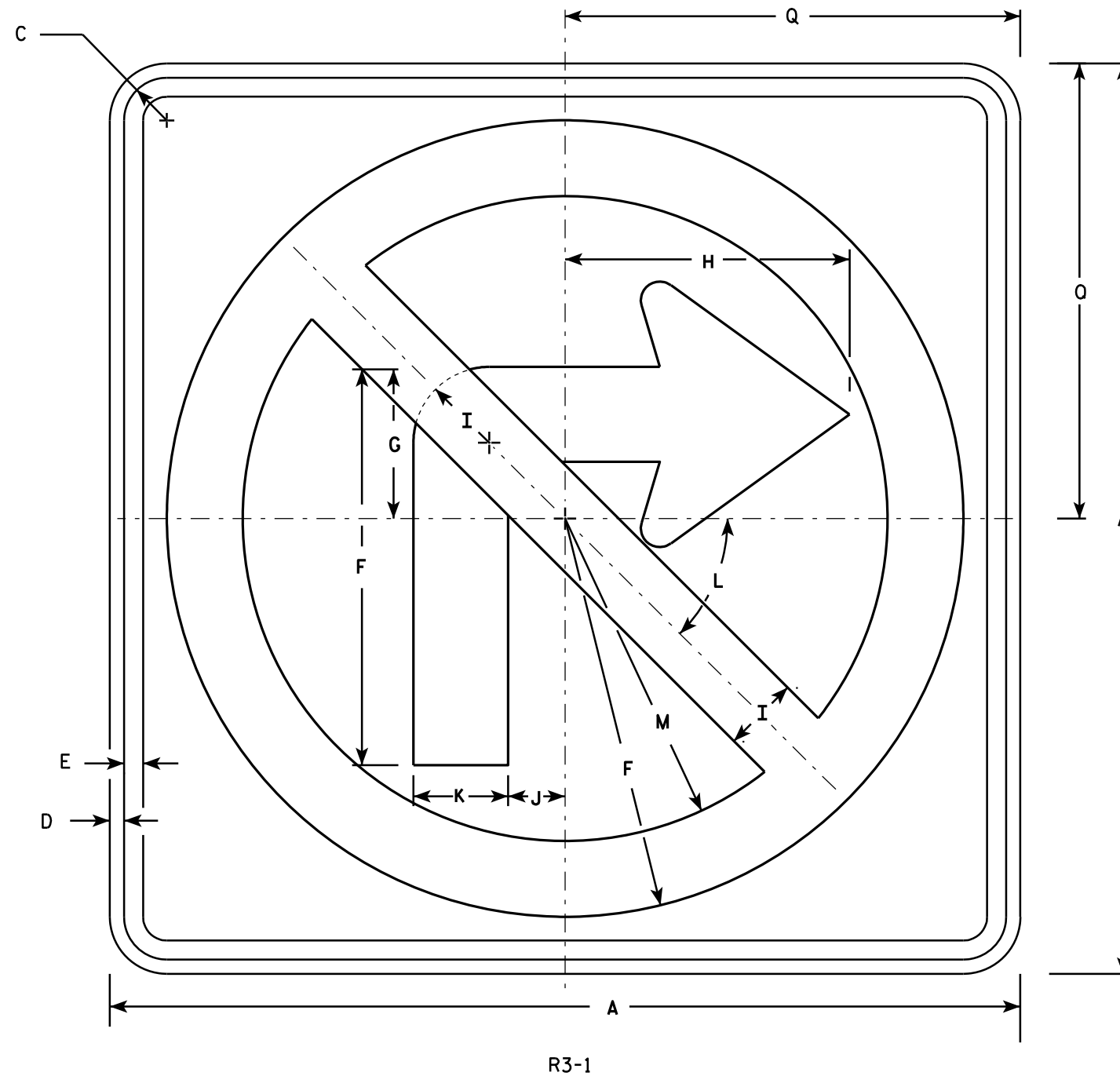
PROJECT NO:

HWY:

COUNTY:

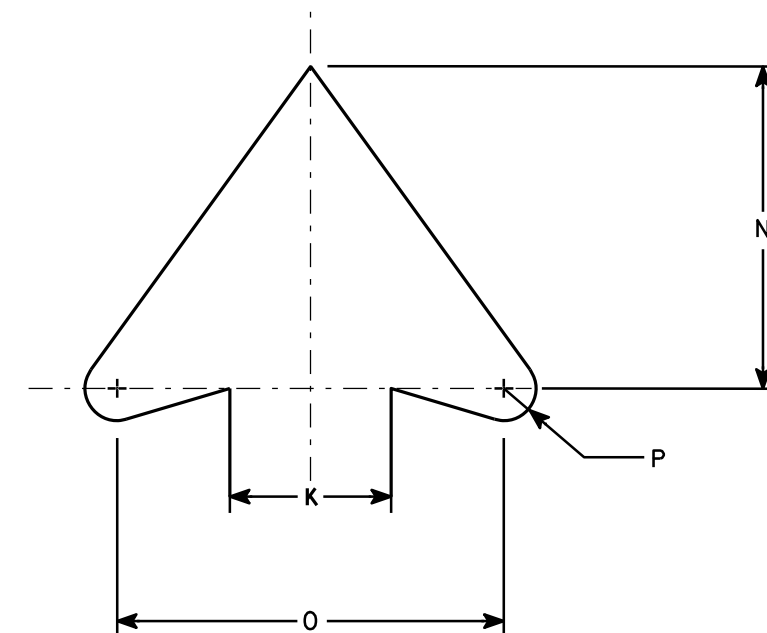
SHEET NO: 329

E



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 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45	8 1/2	5	6	1/2	12										4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2	12										4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

STANDARD SIGN

R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

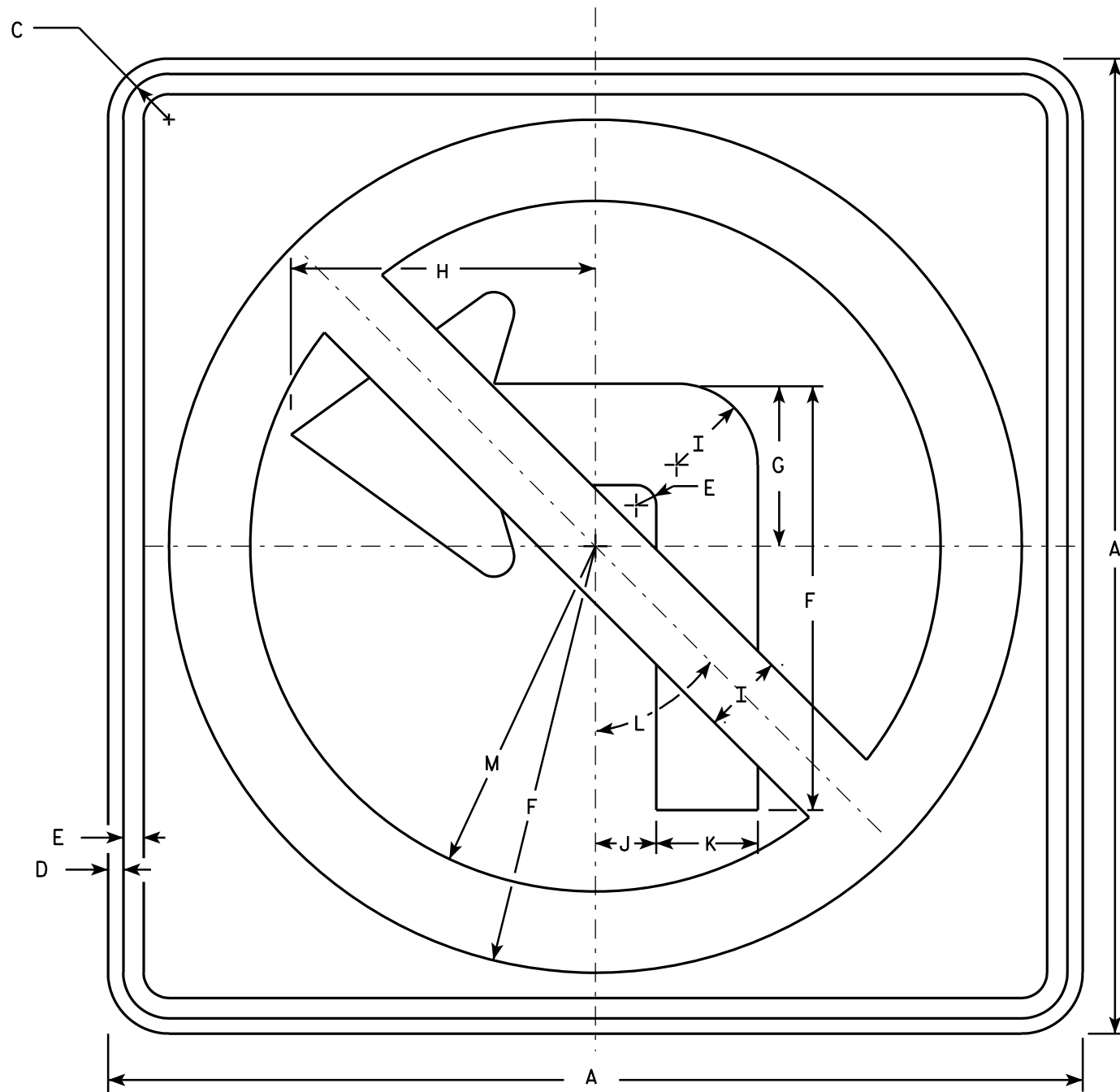
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 330

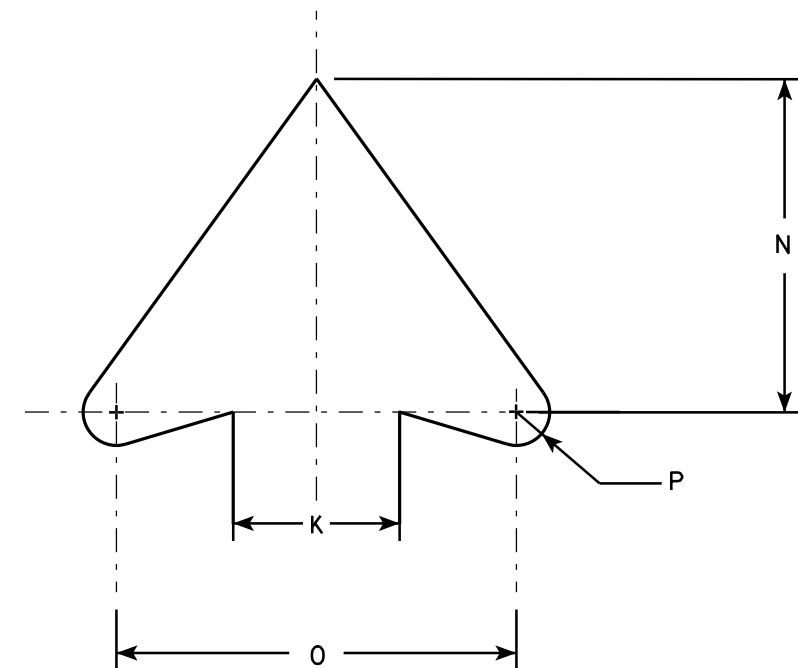
E



R3-2

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 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

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

STANDARD SIGN R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

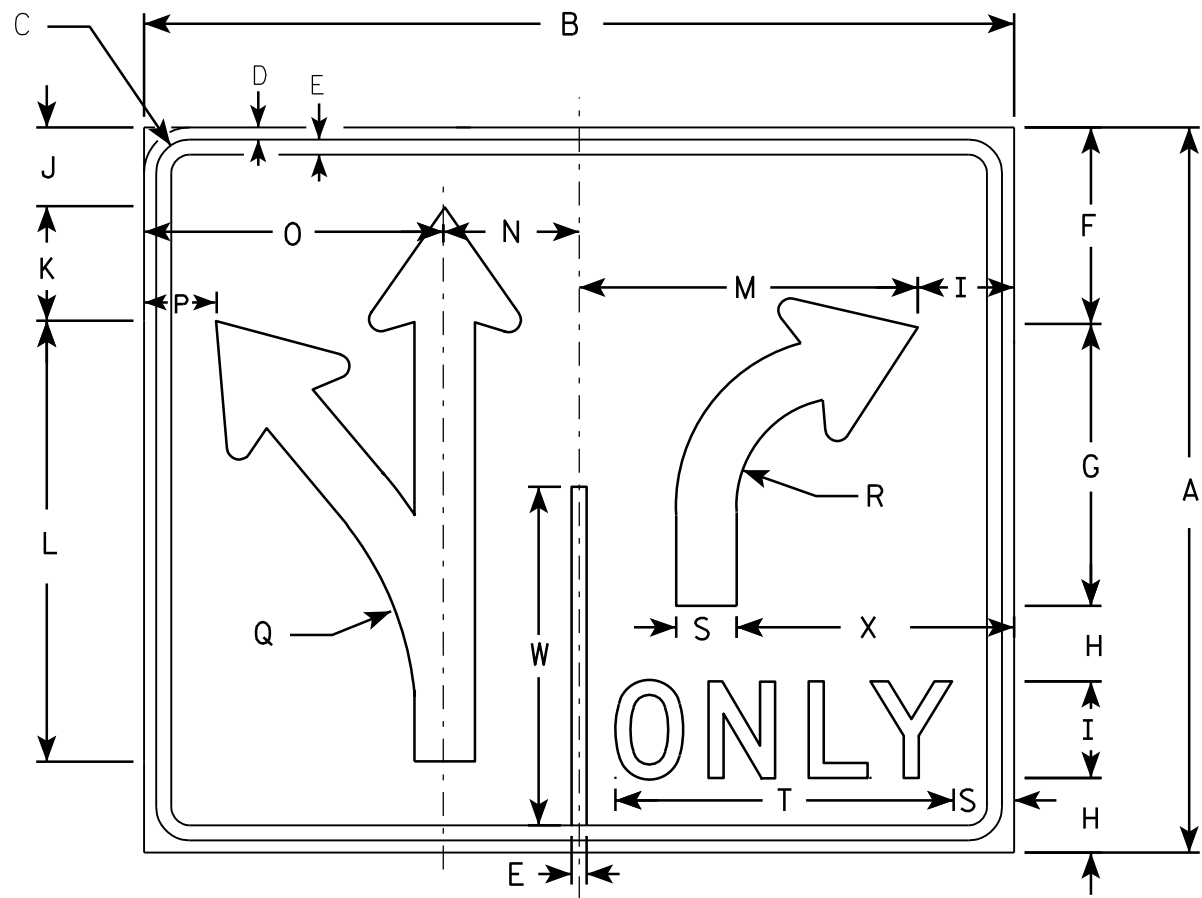
PROJECT NO:

HWY:

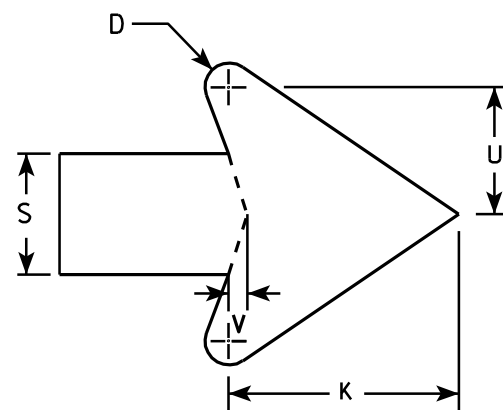
COUNTY:

SHEET NO: 331

E



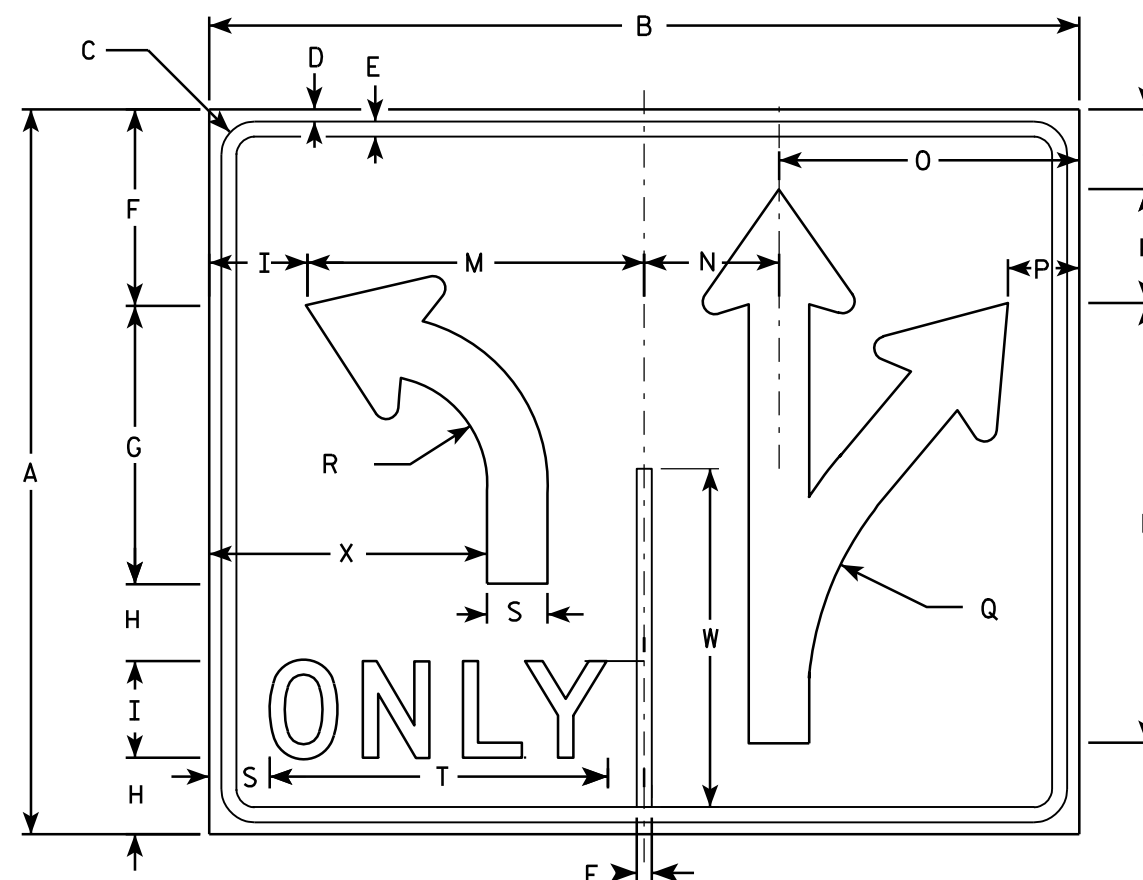
R3-8



ARROW DETAIL

NOTES

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



R3-8A

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 3⁄8	1⁄2	5⁄8	8 1⁄8	11 5⁄8	3 1⁄8	4	3 1⁄4	4 3⁄4	18 1⁄4	14	5 5⁄8	12 3⁄8	3	13 1⁄4	4 1⁄2	2 1⁄2	14	2 5⁄8	3⁄8	14	11 1⁄2			7.5
2M	30	36	1 3⁄8	1⁄2	5⁄8	8 1⁄8	11 5⁄8	3 1⁄8	4	3 1⁄4	4 3⁄4	18 1⁄4	14	5 5⁄8	12 3⁄8	3	13 1⁄4	4 1⁄2	2 1⁄2	14	2 5⁄8	3⁄8	14	11 1⁄2			7.5
3																											
4	48	54	2 1⁄4	3⁄4	1	13 1⁄4	18 1⁄2	5 1⁄8	6	5 1⁄4	7 1⁄8	29 1⁄8	21	8 3⁄8	18 5⁄8	4 3⁄8	21 7⁄8	7 1⁄4	3 3⁄4	20 5⁄8	4	5⁄8	22 3⁄8	17 1⁄4			18.0
5	48	54	2 1⁄4	3⁄4	1	13 1⁄4	18 1⁄2	5 1⁄8	6	5 1⁄4	7 1⁄8	29 1⁄8	21	8 3⁄8	18 5⁄8	4 3⁄8	21 7⁄8	7 1⁄4	3 3⁄4	20 5⁄8	4	5⁄8	22 3⁄8	17 1⁄4			18.0

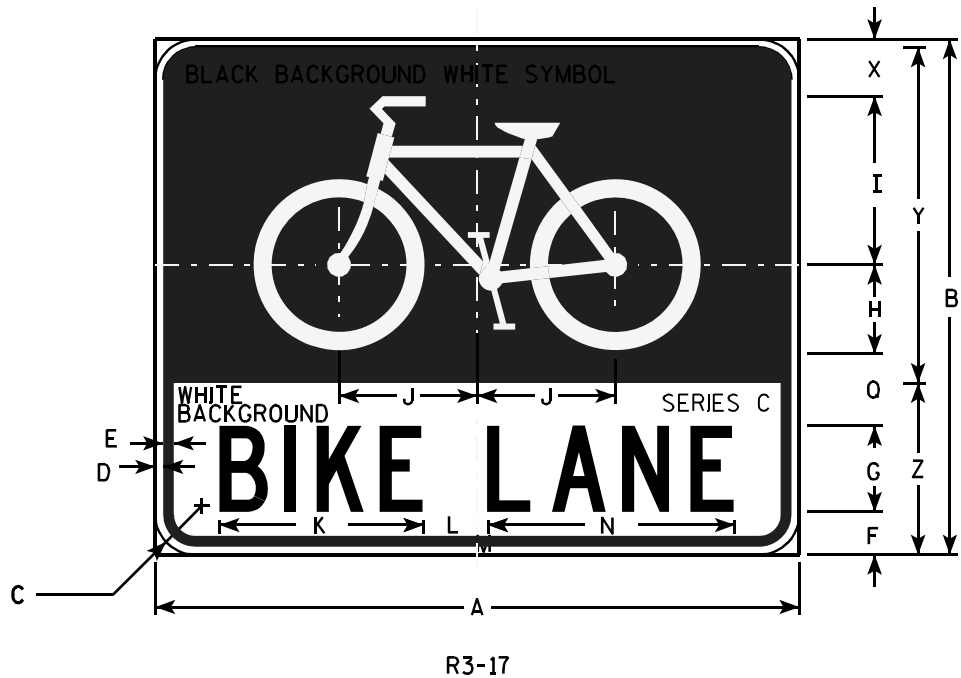
STANDARD SIGN R3-8 & R3-8A

WISCONSIN DEPT OF TRANSPORTATION

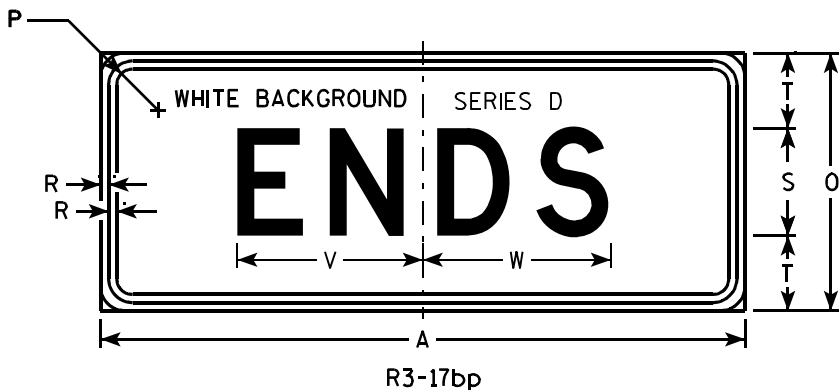
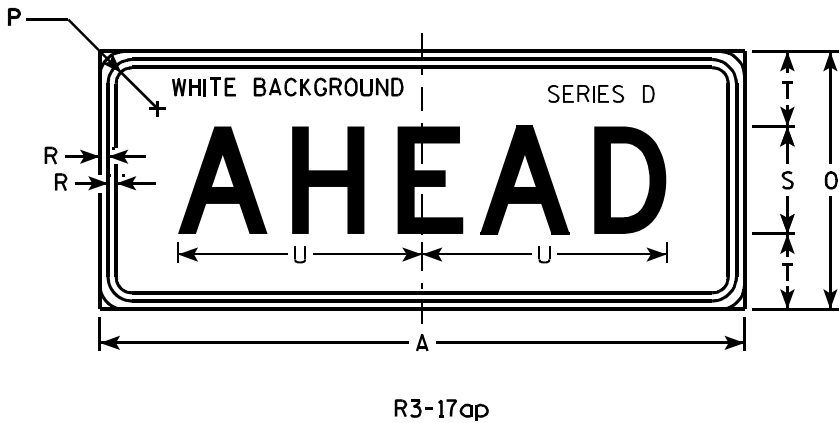
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8.5

PROJECT NO: HWY: COUNTY: SHEET NO: 332 E



- NOTES**
- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
 - 2. Color:
Background - AS SHOWN
Message - BLACK
 - 3. Message Series - C or as noted on the Signs.
 - 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.



																												R3-17	R3-17ap	R3-17bp
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq. ft.	Area sq. ft.	
1																														
2S	30	24	1 1/8	3/8	1/2	2	4	4 1/8	7 7/8	6 3/8	9 1/2	2 5/8	7/8	13	12	1 1/8	3 3/8	3/8	5	3 1/2	11 3/8	8 5/8	8 3/4	2 3/8	15 5/8	8	5.0	2.5	2.5	
2M	30	24	1 1/8	3/8	1/2	2	4	4 1/8	7 7/8	6 3/8	9 1/2	2 5/8	7/8	13	12	1 1/8	3 3/8	3/8	5	3 1/2	11 3/8	8 5/8	8 3/4	2 3/8	15 5/8	8	5.0	2.5	2.5	
3																														
4																														
5																														

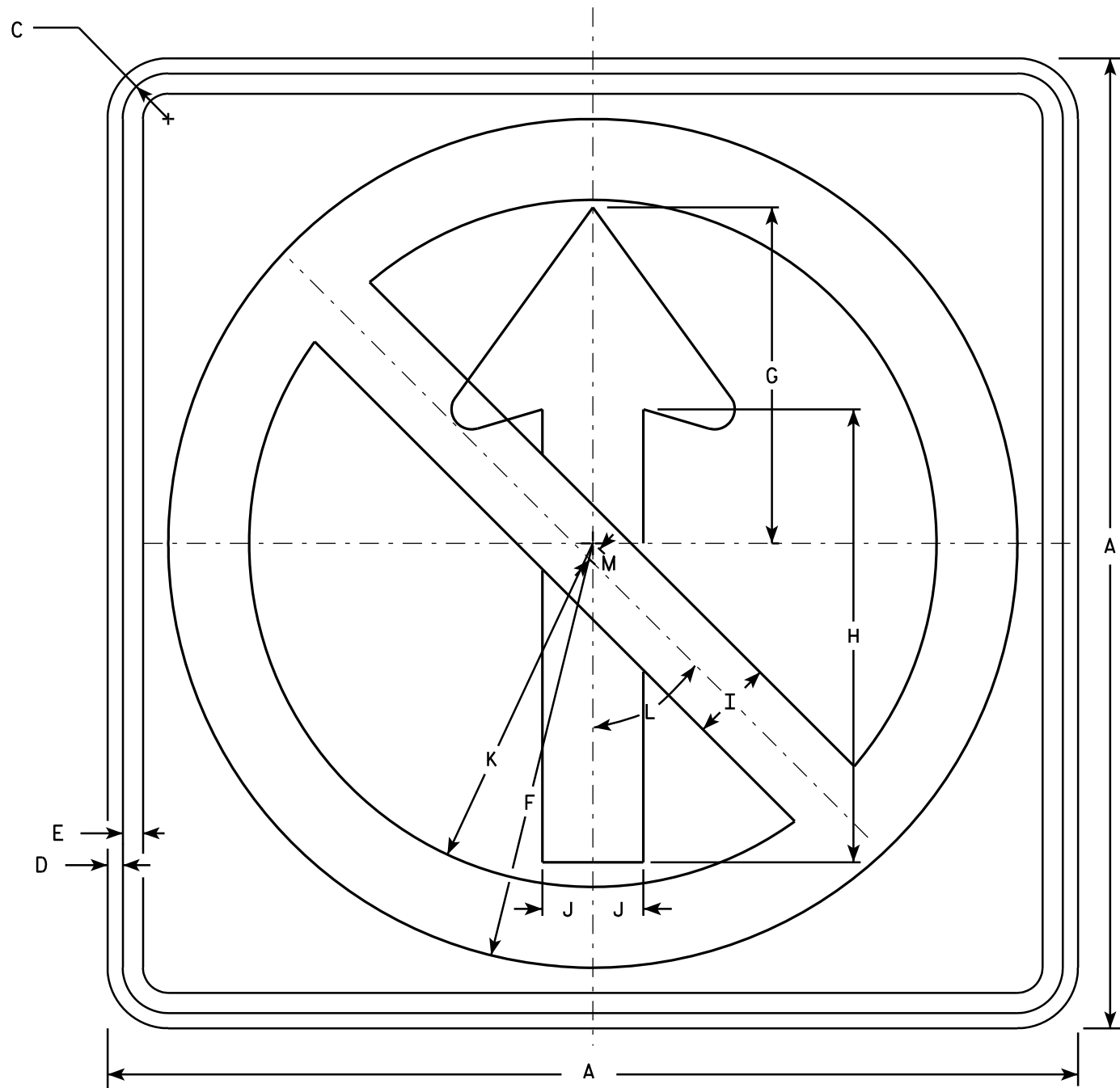
STANDARD SIGN

R3-17 & R3-17a&bp

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

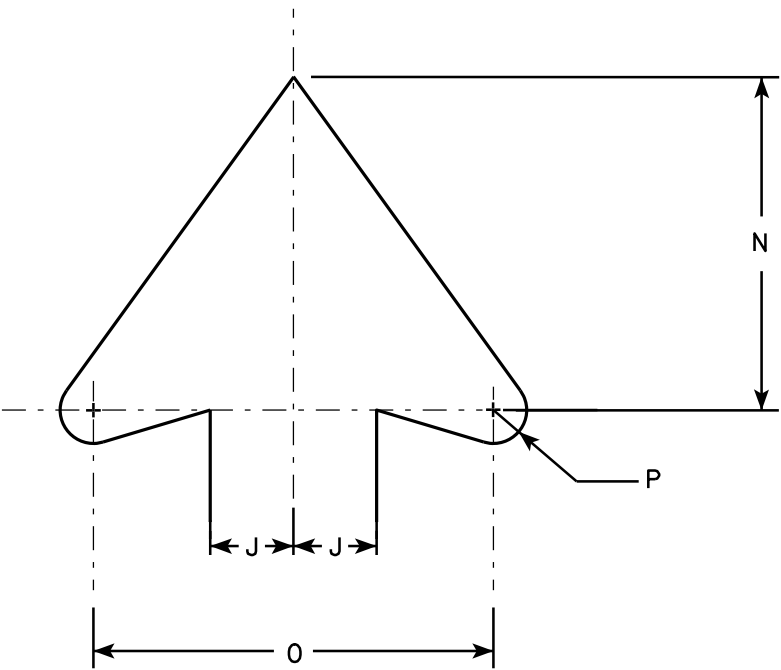
DATE 4/12/2011 PLATE NO. R3-17.2



R3-27

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 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2	10 1/2	8 3/8	11 1/4	2	1 1/4	8 1/2	45°	3/8	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	12 1/2	16 3/4	3	1 7/8	12 3/4	45°	1/2	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	12 1/2	16 3/4	3	1 7/8	12 3/4	45°	1/2	7 1/2	9	3/4											9.0
4	48		2 1/4	3/4	1	21	16 5/8	22 3/8	4	2 1/2	17	45°	3/4	10	12	1											16.0
5																											

STANDARD SIGN
R3-27

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

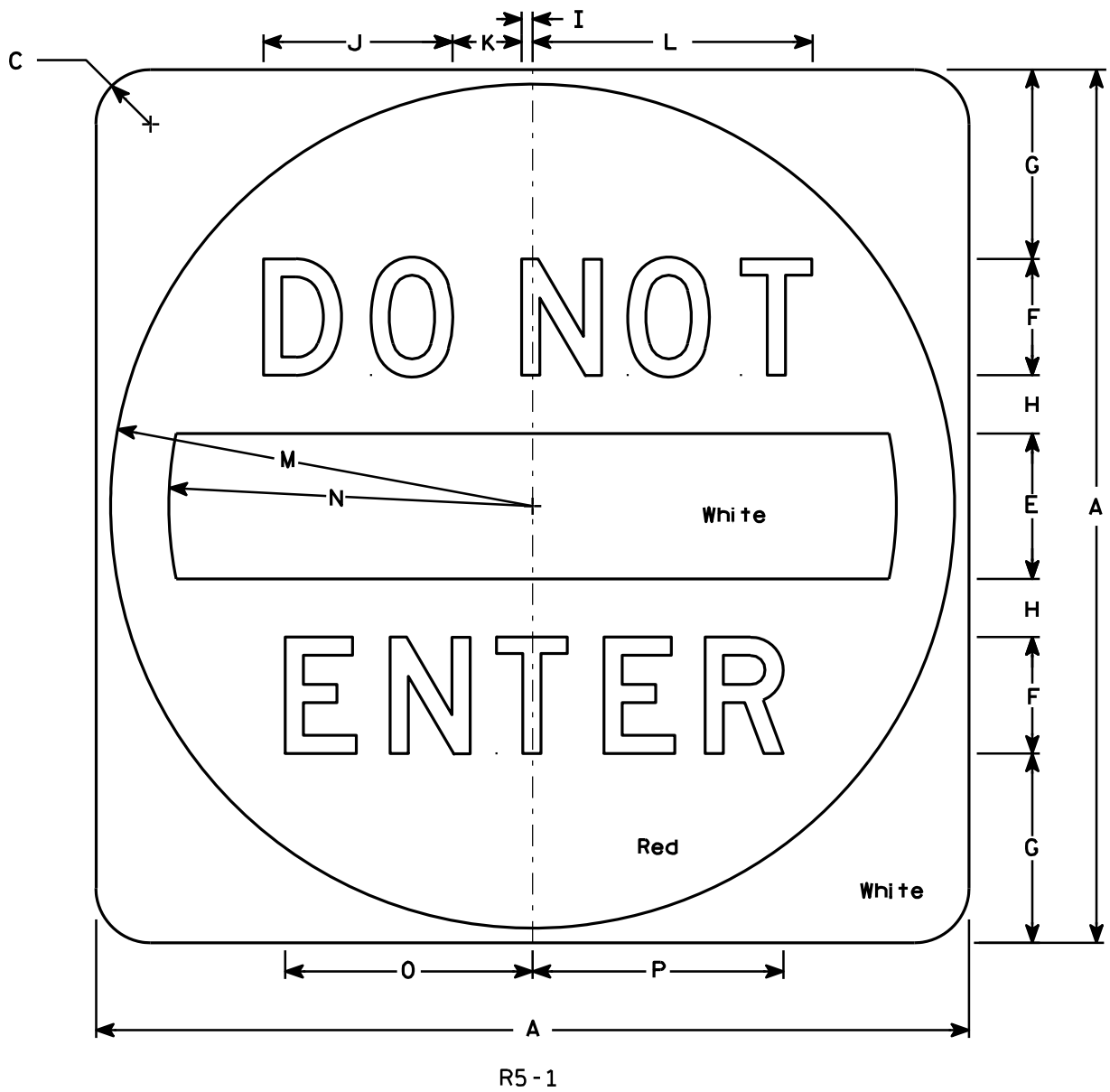
DATE 10/07/10 PLATE NO. R3-27.1

NOTES

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

Background - See detail

Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the corners shall be rounded.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7⁄8		5	4	6 1⁄2	2	3⁄8	6 1⁄2	2 3⁄8	9 5⁄8	14 1⁄2	12 1⁄2	8 1⁄2	8 5⁄8											6.26
2M	36		2 1⁄4		6	5	7 1⁄2	2 1⁄2	1⁄2	8 1⁄8	3	12 1⁄8	17 1⁄2	15	10 5⁄8	10 3⁄4											9.0
3	36		2 1⁄4		6	5	7 1⁄2	2 1⁄2	1⁄2	8 1⁄8	3	12 1⁄8	17 1⁄2	15	10 5⁄8	10 3⁄4											9.0
4	36		2 1⁄4		6	5	7 1⁄2	2 1⁄2	1⁄2	8 1⁄8	3	12 1⁄8	17 1⁄2	15	10 5⁄8	10 3⁄4											9.0
5	48		3		8	6	11	3	5⁄8	9 3⁄4	3 5⁄8	14 1⁄2	23 1⁄2	20	12 3⁄4	12 7⁄8											16.0

STANDARD SIGN
R5 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1.15

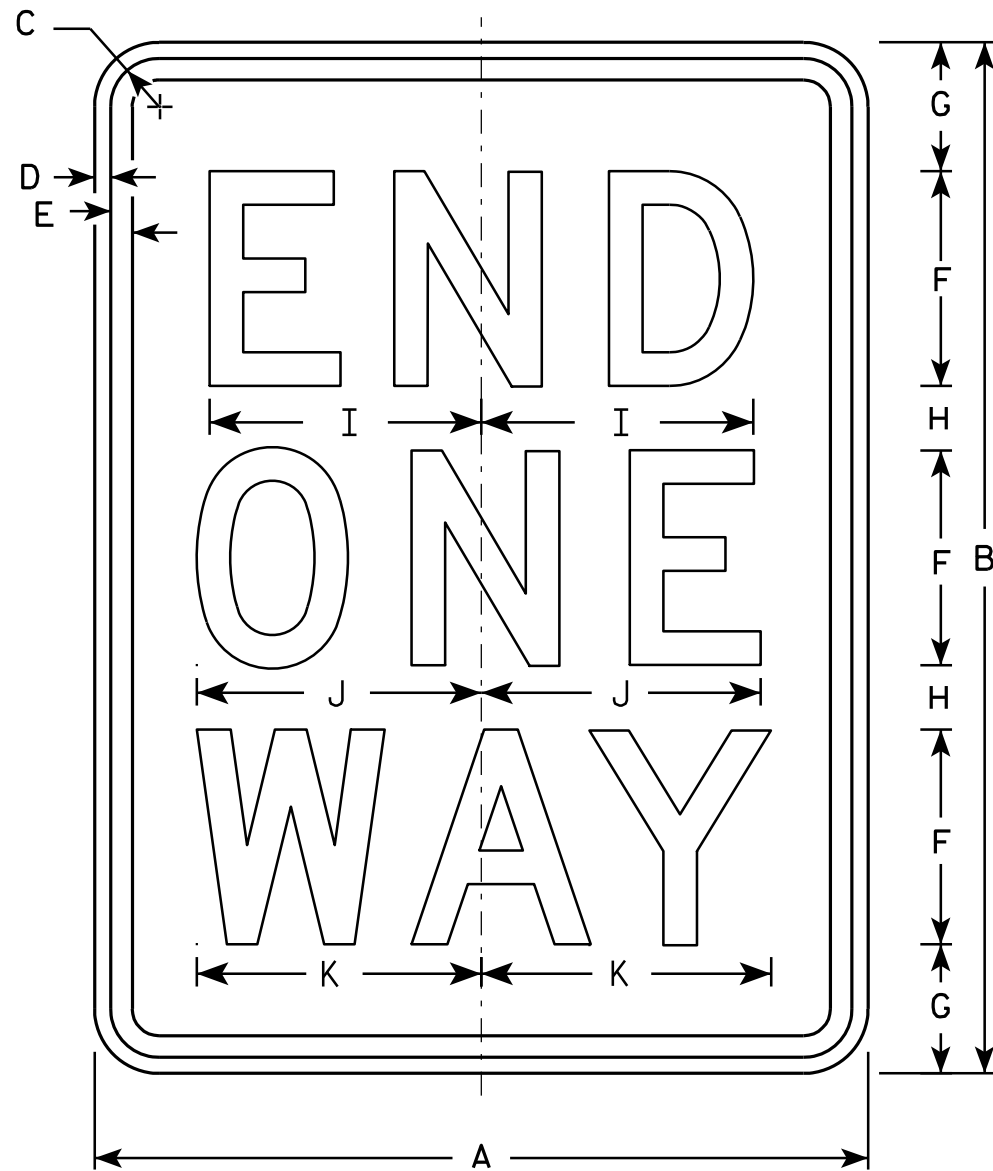
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 335

E



R6 - 7

NOTES

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

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

STANDARD SIGN

R6 - 7

WISCONSIN DEPT OF TRANSPORTATION

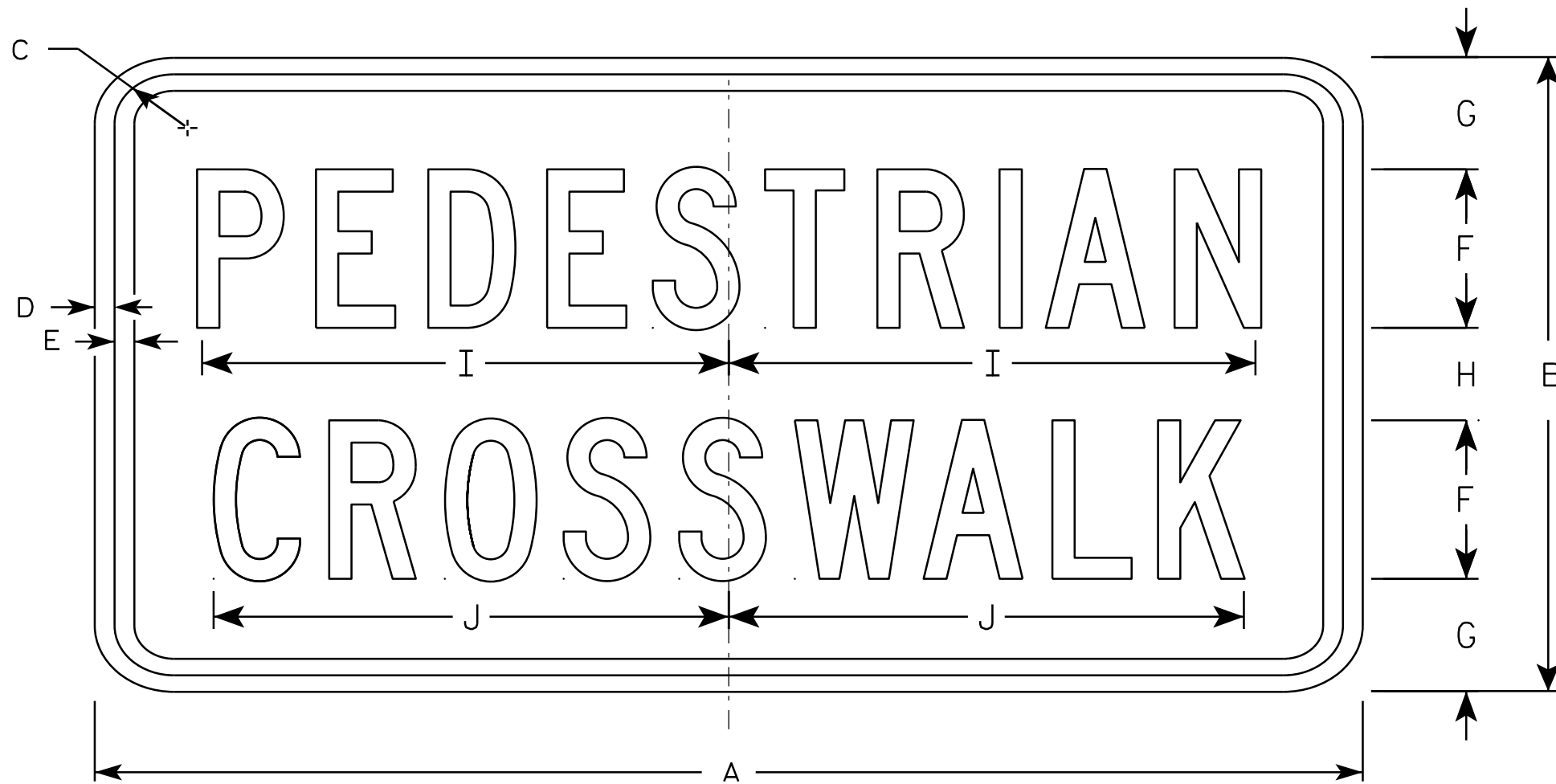
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-7.1

PROJECT NO: HWY: COUNTY: SHEET NO: 336 E

NOTES

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



R9-8

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 ¾	½	½	3	2 ⅛	1 ¾	10	9 ¾																	2.0
2M	24	12	1 ¾	½	½	3	2 ⅛	1 ¾	10	9 ¾																	2.0
3	30	18	1 ¾	½	½	4	3 ½	3	13	13																	3.75
4																											
5																											

STANDARD SIGN
R9-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/17/16 PLATE 337 R9-8.1

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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R10-71



R10-71L



R10-71R

NOTES

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

																											R10-71L&R	R10-71
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq. ft.
1																												
2S	72	36	2 1/4	3/4	1	18	5	4	6	20 5/8	11 3/4	9 1/8	8 1/2	12 7/8	9 7/8	16 1/8	23 7/8	30	5 5/8	26 3/4	66	23 5/8	8 3/4	13	26 7/8	27	18.0	16.5
2M	72	36	2 1/4	3/4	1	18	5	4	6	20 5/8	11 3/4	9 1/8	8 1/2	12 7/8	9 7/8	16 1/8	23 7/8	30	5 5/8	26 3/4	66	23 5/8	8 3/4	13	26 7/8	27	18.0	16.5
3																												
4																												
5																												

STANDARD SIGN

R10-71

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*

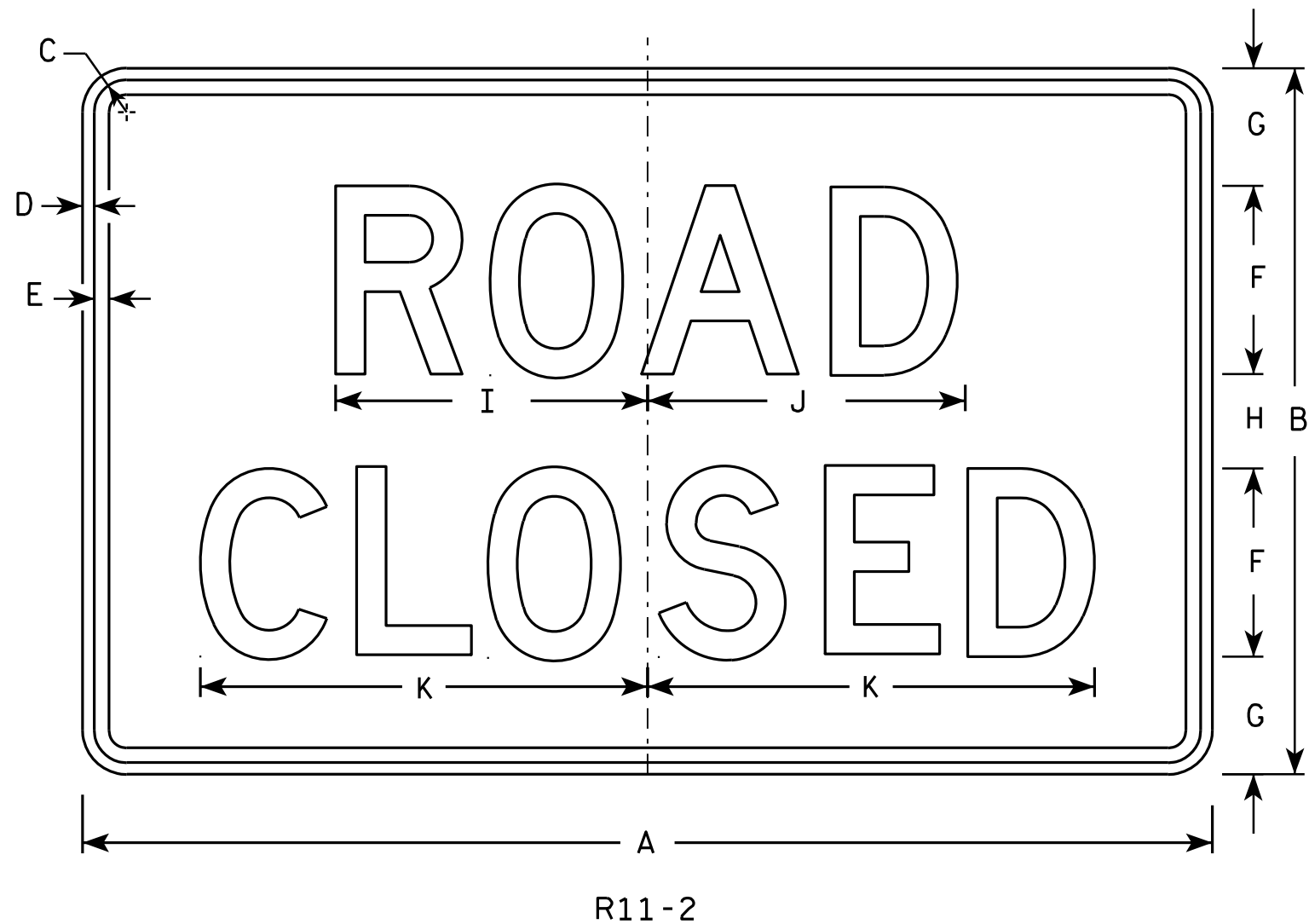
for State Traffic Engineer

DATE 4/4/11 PLATE NO. R10-71.3

PROJECT NO:

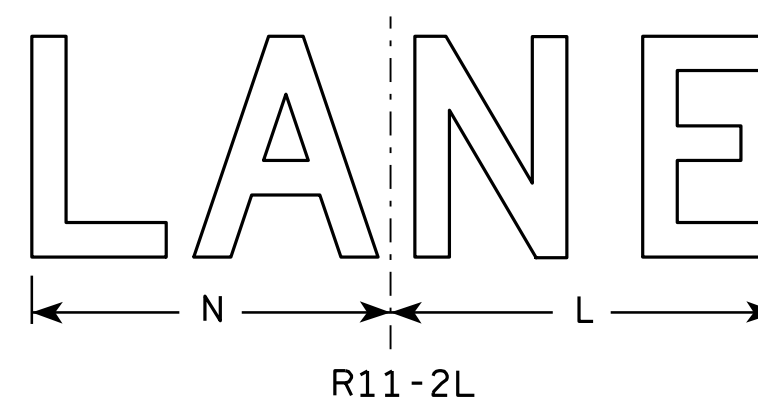
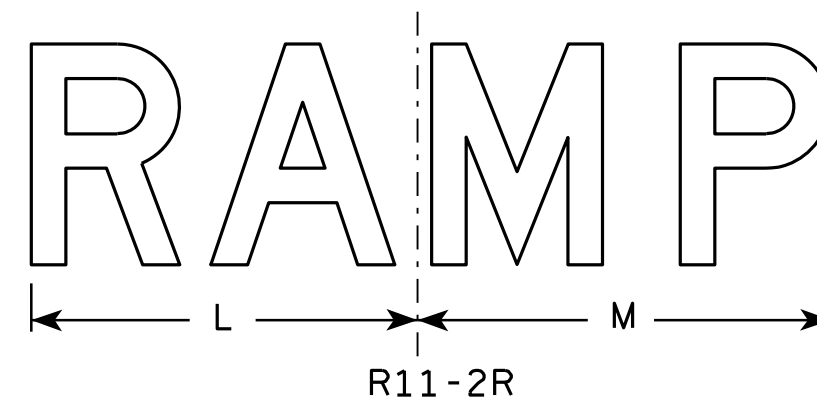
SHEET NO: 338

E



NOTES

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



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

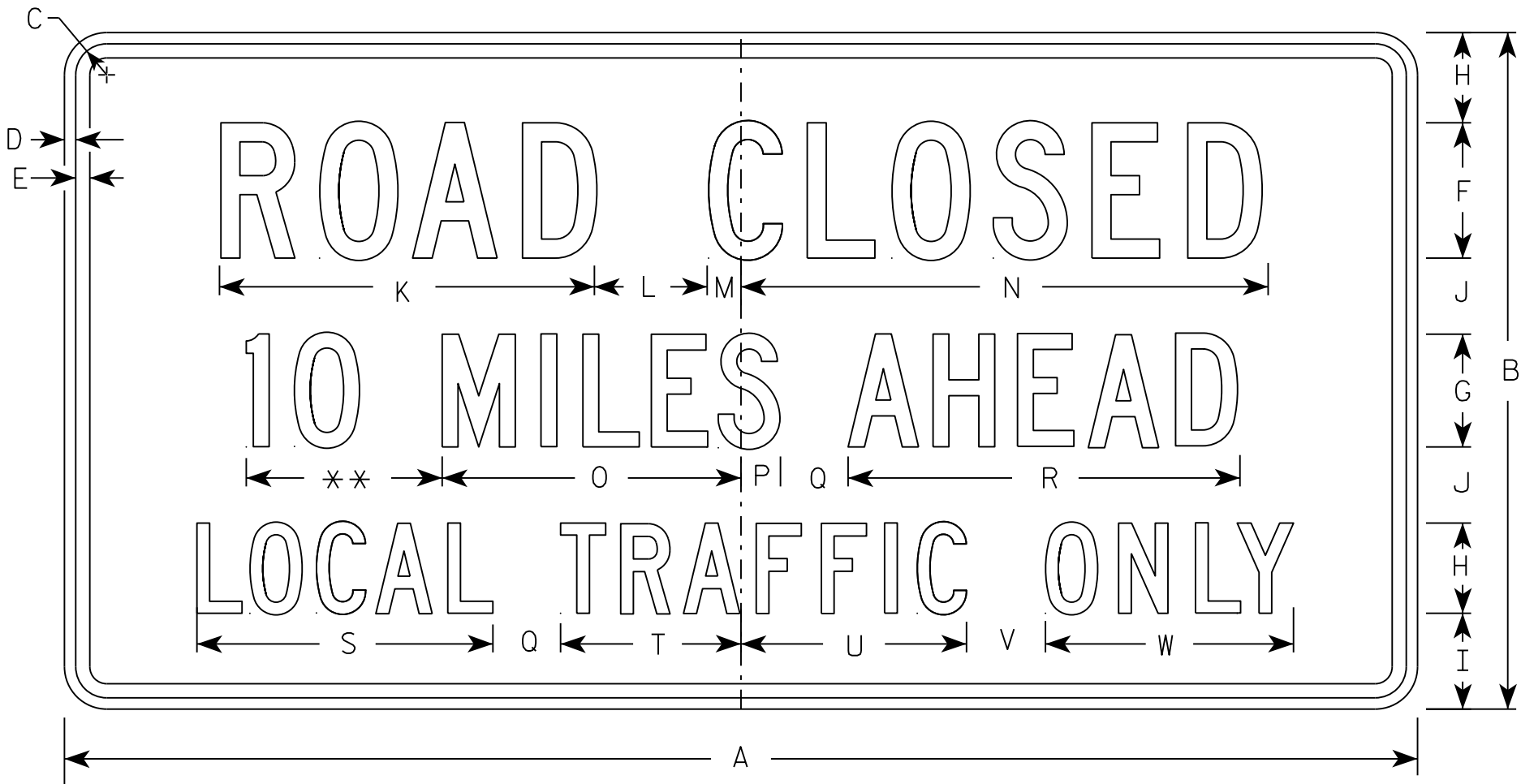
STANDARD SIGN R11-2

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO: HWY: COUNTY: SHEET NO: 339 E

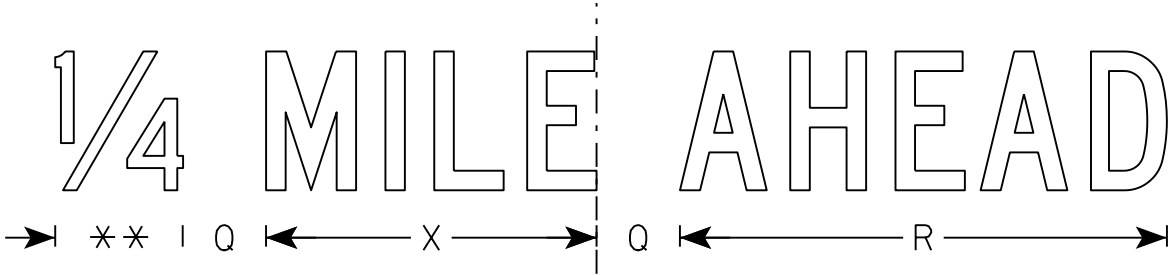
NOTES

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



R11-3

** See Note 5

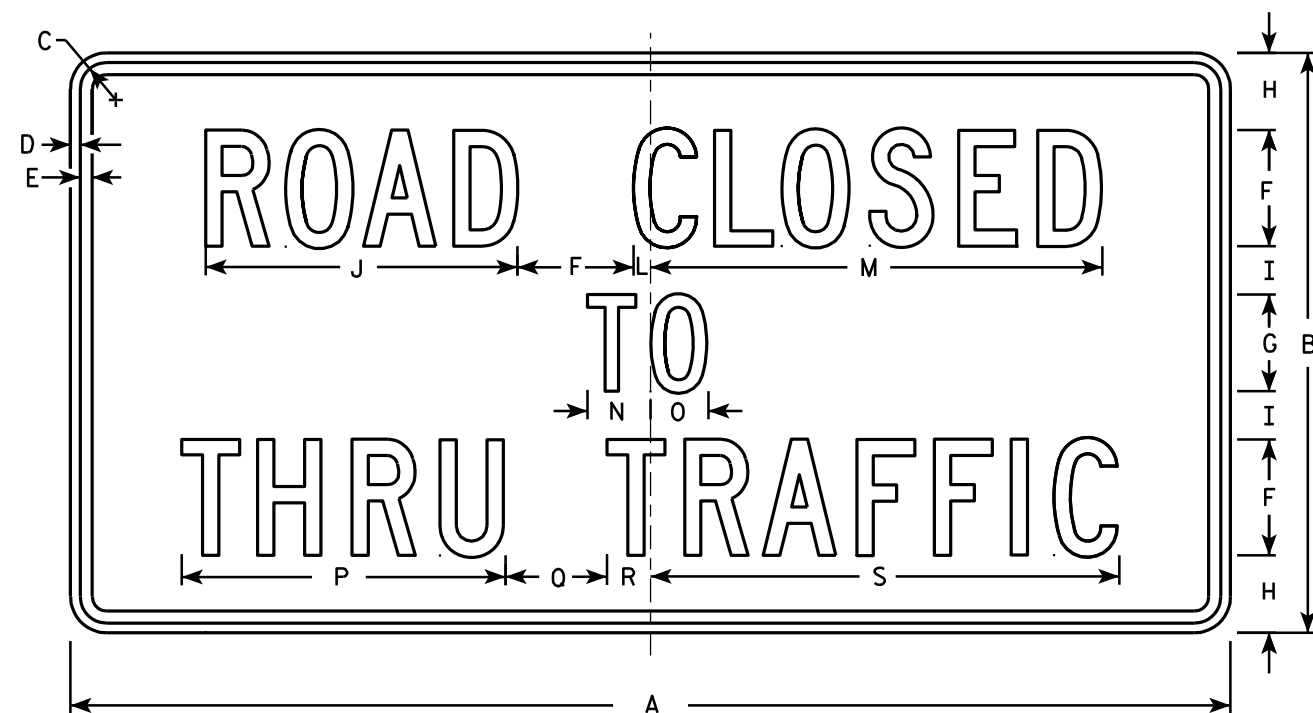


SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 3/8	1/2	5/8	4	3	2 1/2	2	2	11 1/8	3	1 1/8	15 1/4	8	1 1/2	2	10 3/4	8 3/8	4 3/4	6 1/2	2	6 3/4	7 1/8			4.5
2S	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
3																											
4																											
5																											

STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 3/15/17 PLATE NO. R11-3.8



R11-4

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	30	1 3⁄8	½	5⁄8	6	5	4	2 ½	16 ⅛		7⁄8	23 3⁄8	3 ¼	3	16 ¾	5 ¼	2 ¼	24 ¼								12.5
2M	60	30	1 3⁄8	½	5⁄8	6	5	4	2 ½	16 ⅛		7⁄8	23 3⁄8	3 ¼	3	16 ¾	5 ¼	2 ¼	24 ¼								12.5
3																											
4																											
5																											

STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

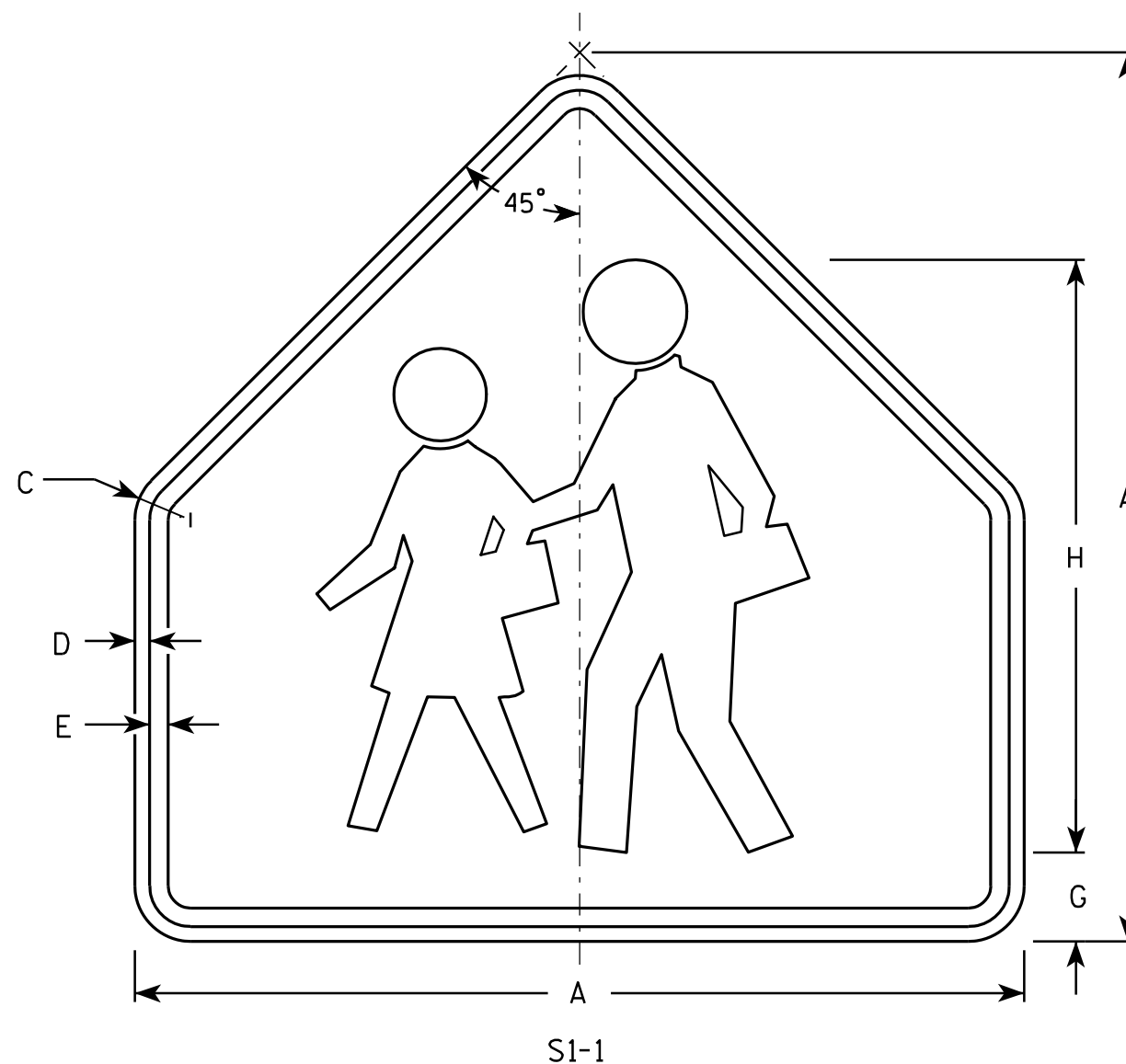
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 341

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-Green
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		3	20																			4.69
2	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
3	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
4	48		2 1/4	3/4	1		4 3/4	32																			12
5																											

STANDARD SIGN S1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R. Rauch
for State Traffic Engineer
DATE 6/30/05 PLATE NO. S1-1.8

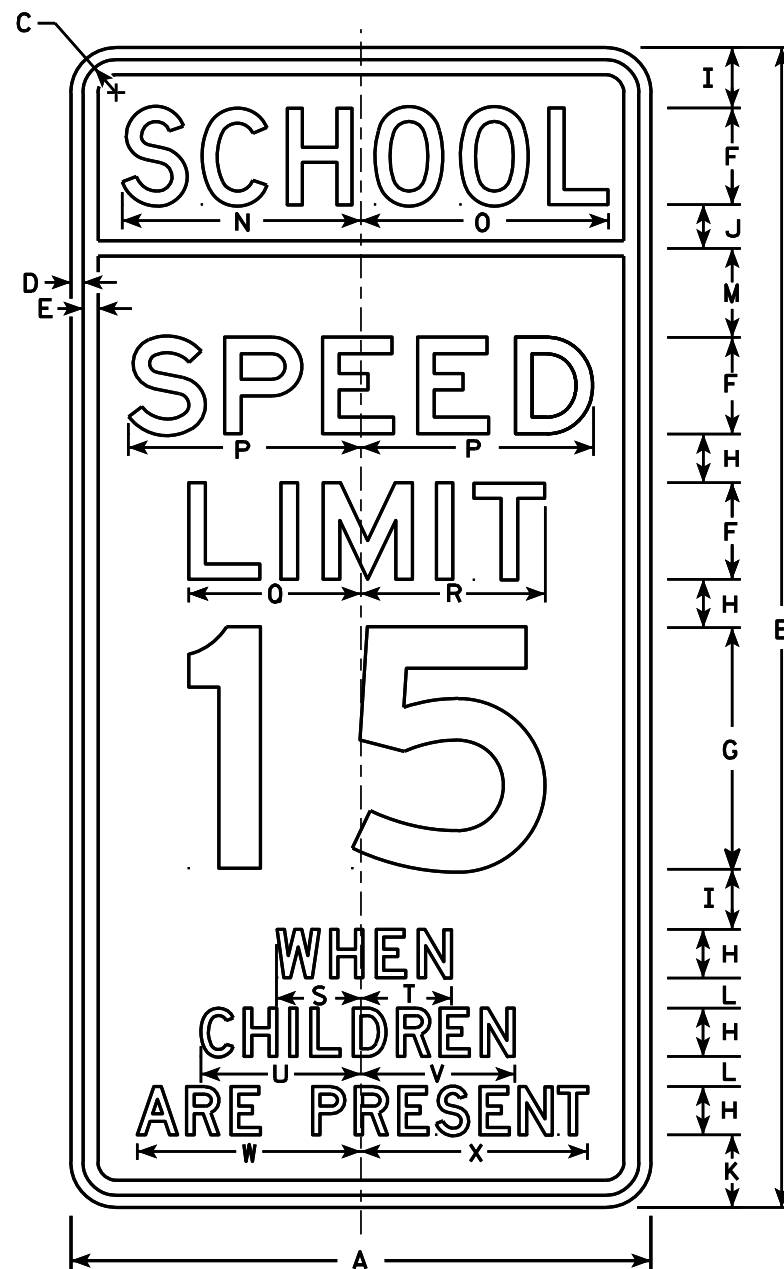
PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: 342 **E**

Metric equivalent
for this sign is:

SIZE	
1	
2	600 mm X 1200 mm
3	900 mm X 1800 mm
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	24	48	1 ⅜	½	⅝	4	10	2	2 ½	1 ¾	3	1 ¼	3 ¾	9 ⅞	10 ¼	9 ⅝	7 ⅛	7 ⅝	3 ½	3 ⅜	6 ⅝	6 ⅜	9 ¼	9 ⅜			8.00	0.72
3	36	72	2 ¼	¾	1	6	15	3	3 ¾	2 ¾	4 ½	1 ⅞	5 ½	15	15 ¼	14 ½	11 ¼	11 ½	5 ½	5 ¾	10	9 ¾	14	14 ⅛			18.00	1.62
4																												
5																												

PROJECT NO:			HWY:			COUNTY:			SHEET NO: 343			E
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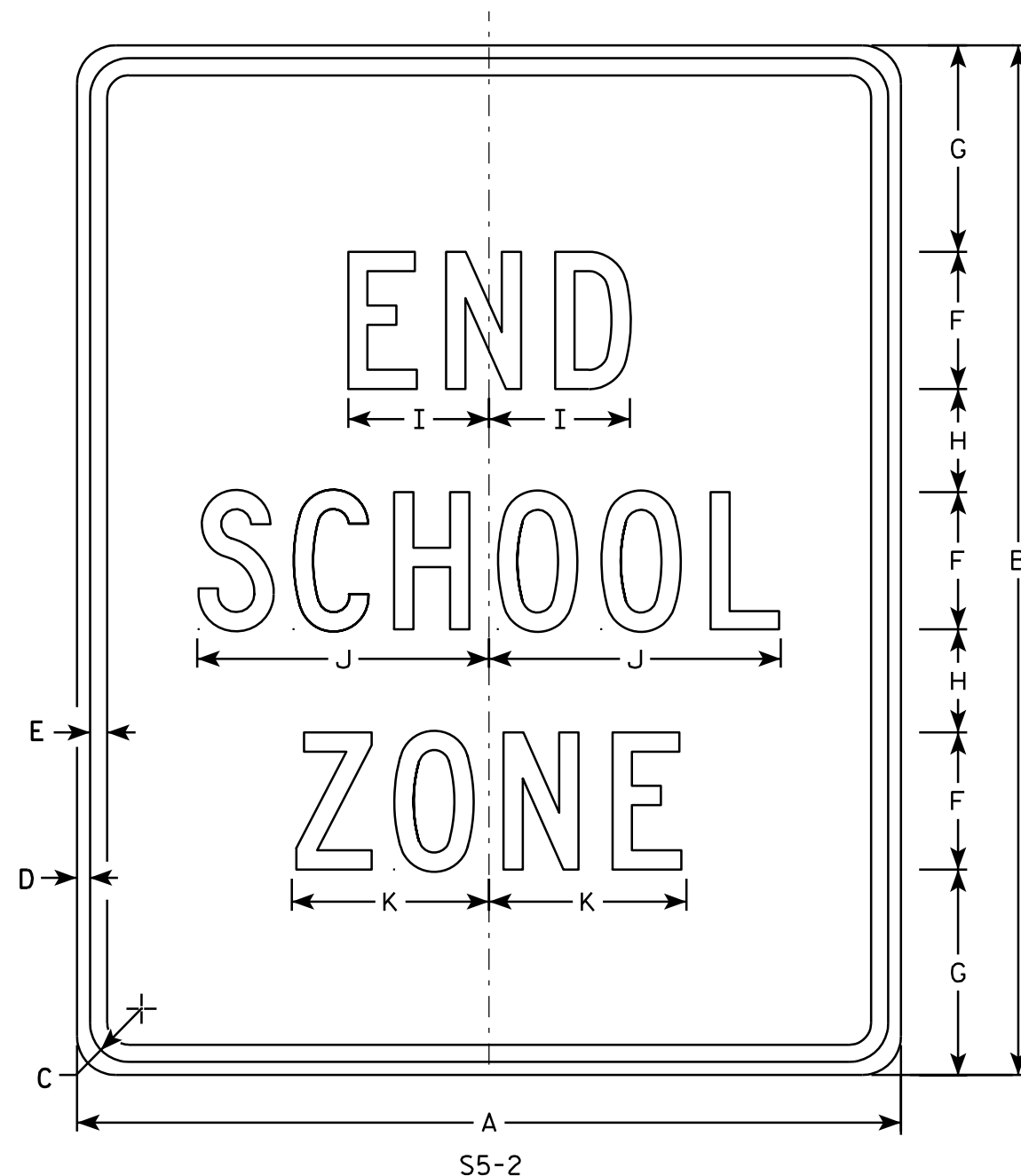


S4-51

NOTES

- Sign is Type II - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition. (See note 5).
- Color:
Background - See note 5
Message - Black
- Message Series - See note 6
- 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.
- Top panel (SCH00L) background - Yellow Green -Type F Reflective.
Lower panel background - White -Type H Reflective.
- From top to bottom:
Lines 1, 5, 6 & 7 are series D
Lines 2, 3 & 4 are series E
- Line 4 substitute appropriate numerals and
adjust spacing to achieve proper balance.

7



NOTES

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

7

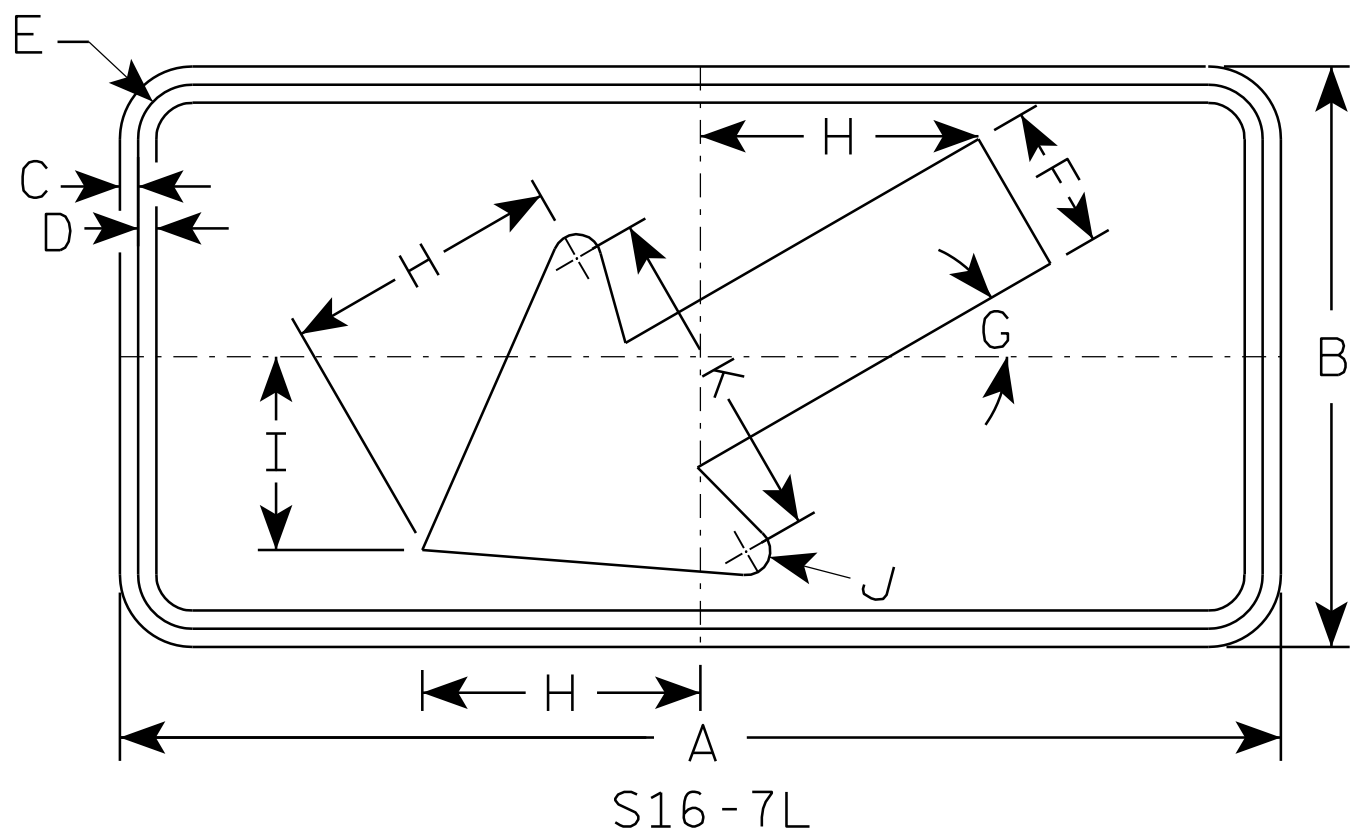
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	30	1 1/8	3/8	1/2	4	6	3	4 1/8	8 1/2	5 3/4																5.0
3	36	42	1 5/8	5/8	3/4	6	7	5	6 1/8	12 5/8	8 5/8																10.5
4																											
5																											

STANDARD SIGN S5-2	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 3/8/11	PLATE NO. S5-2.2

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 344	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-Green
Message - Black
3. Corners may be square or rounded when base
material is plywood but borders shall be rounded
as shown. When base material is metal, the
corners and borders shall be rounded.
4. S16-7R are the same as
S16-7L except the arrow is reversed along
the vertical centerline.

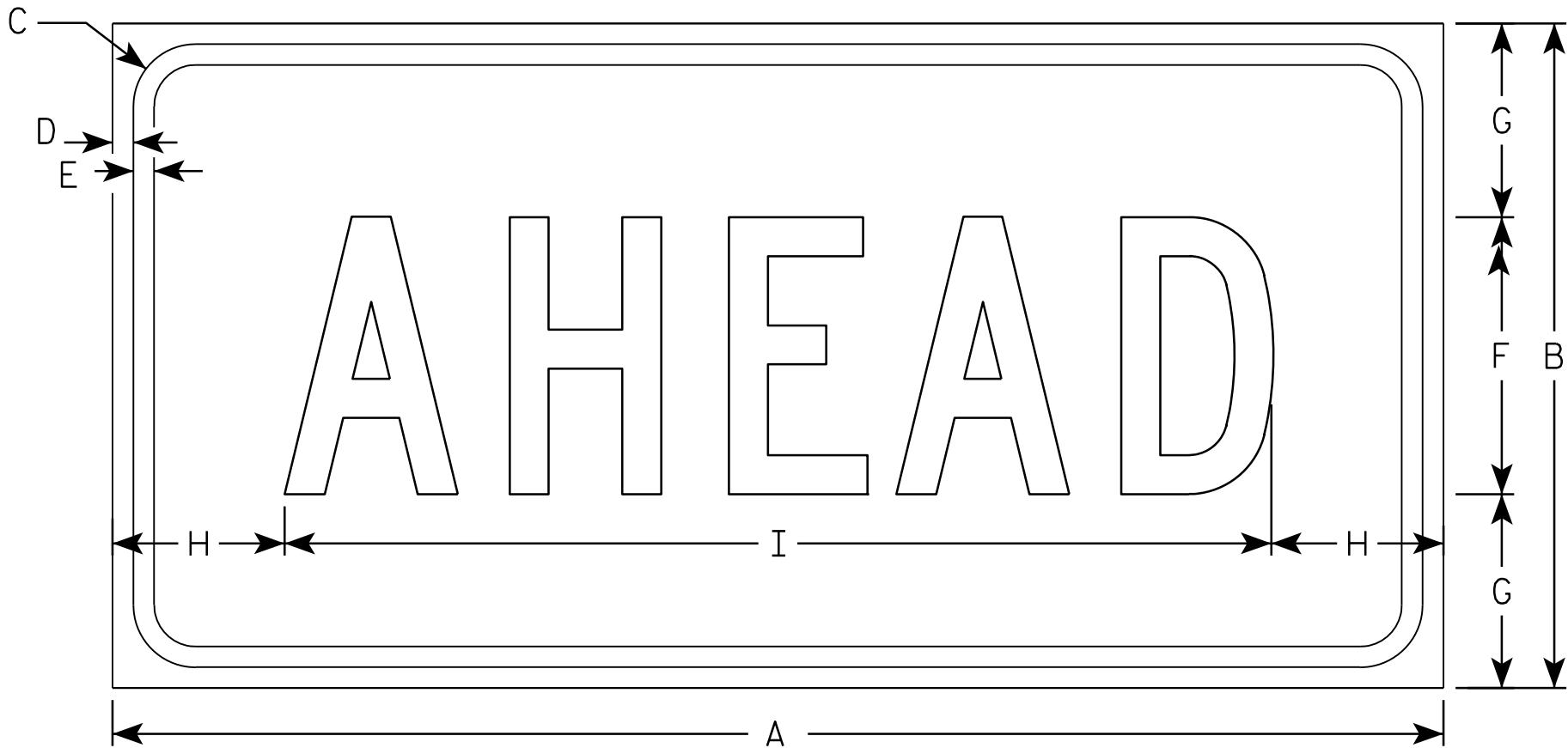


SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
2S	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
5																											

STANDARD SIGN	
S16-7	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 7/22/13	PLATE NO. S16-7.1

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-Green
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.



S16-9P

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2S	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

STANDARD SIGN
S16-9P

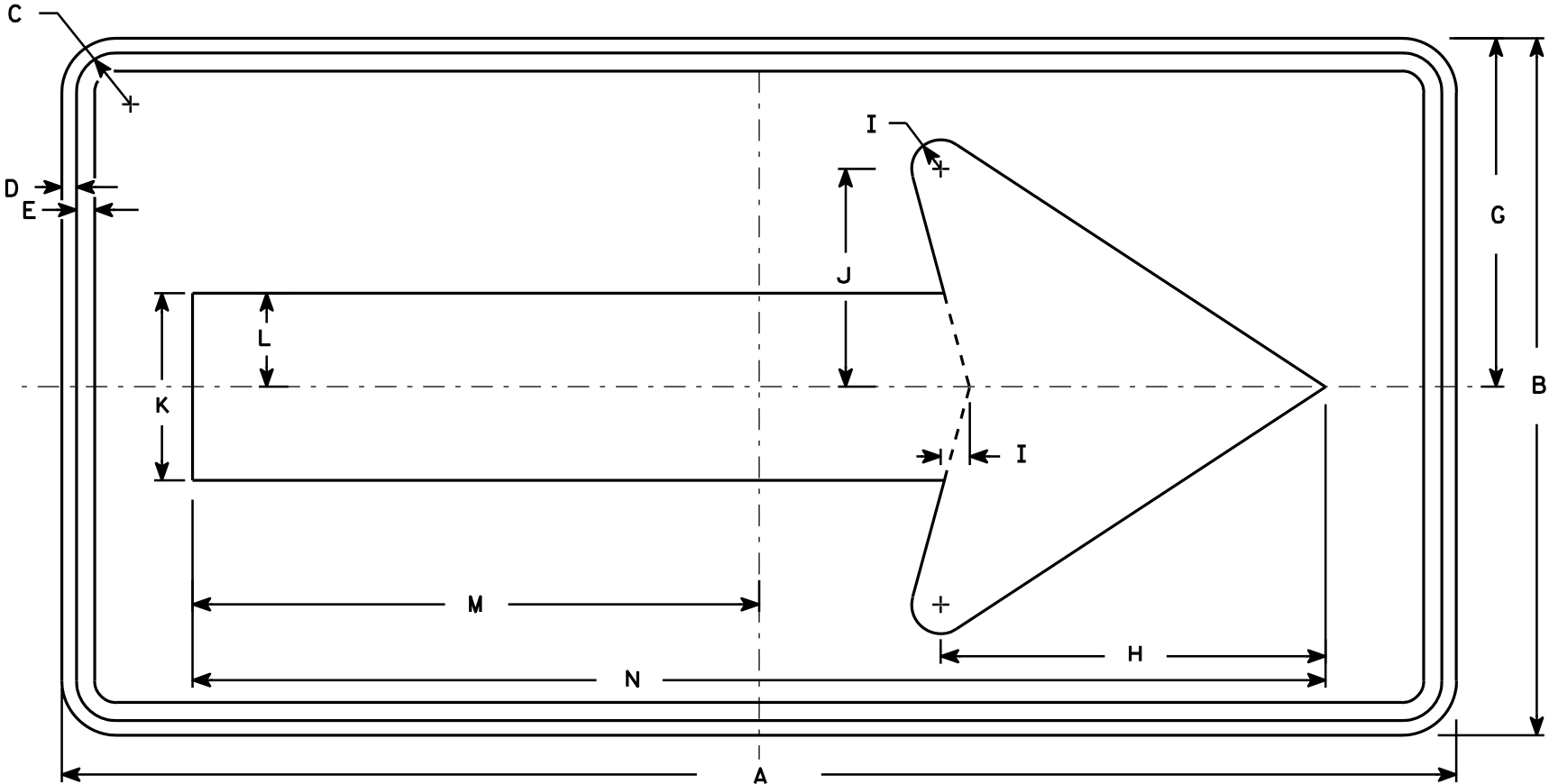
WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 7/22/13 PLATE NO. S16-9P.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. 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.



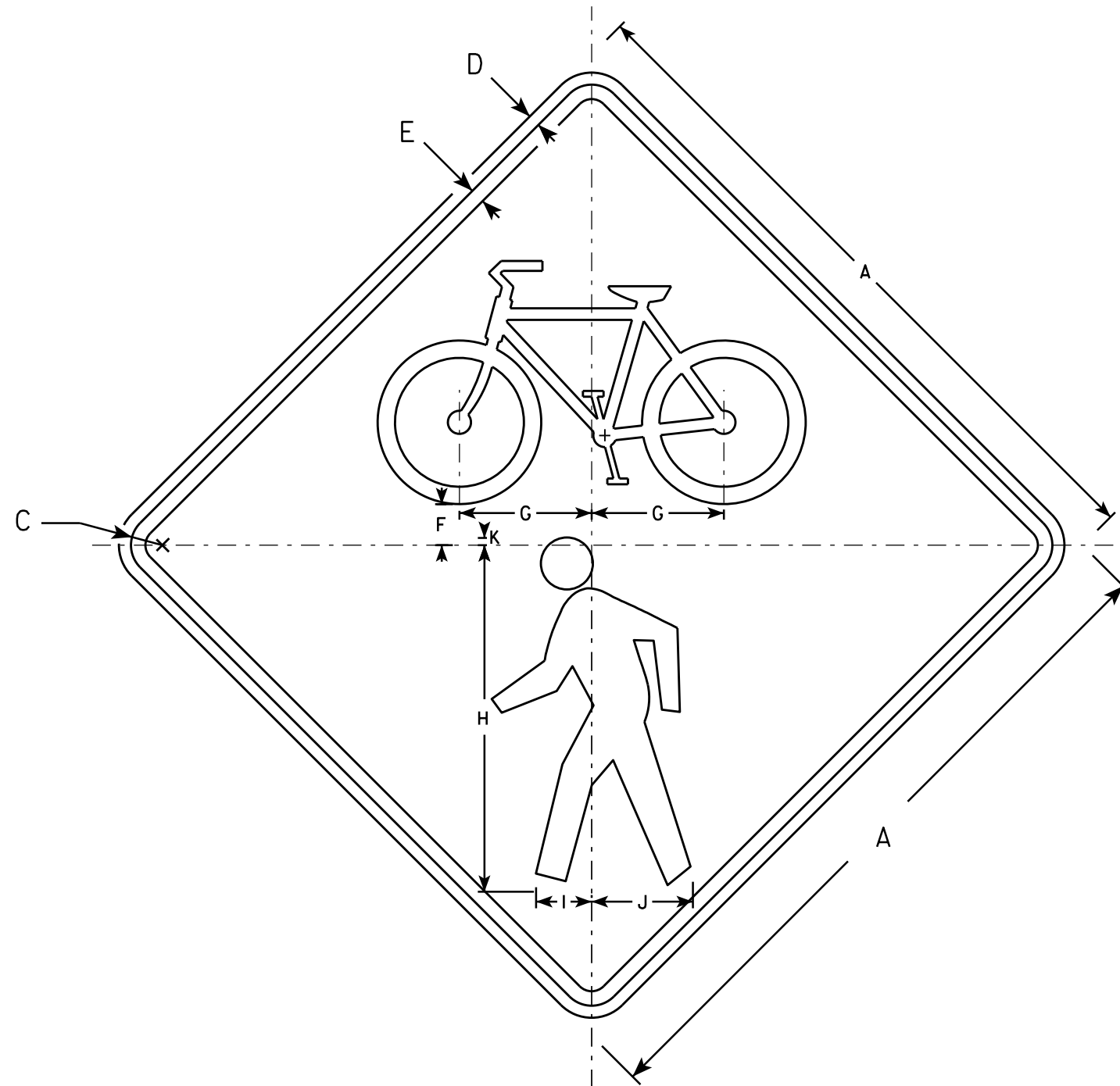
W1-6

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	3/8		9	10	3/4	5 5/8	4 3/4	2 3/8	14 5/8	29 1/4													4.5
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	96	48	2 1/4	3/4	1		24	26 1/2	2	15	13	6 1/2	39	78													32.0

STANDARD SIGN
W1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/7/10 PLATE NO. W1-6.8



W11-15

NOTES

1. Sign is Type II - Type F Reflective
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	1 3/8	4 5/8	12	1 7/8	3 1/2	1/4																4.0
2S	30		1 3/8	1/2	5/8	1 3/4	5 3/4	15	2 3/8	4 3/8	3/8																6.25
2M	36		1 5/8	5/8	3/4	2 1/8	6 7/8	18	2 7/8	5 1/4	3/8																9.0
3	36		1 5/8	5/8	3/4	2 1/8	6 7/8	18	2 7/8	5 1/4	3/8																16.0
4	48		2 1/4	3/4	1	2 7/8	9 1/8	24	3 7/8	7	1/2																16.0
5																											

STANDARD SIGN
W11-15

WISCONSIN DEPT OF TRANSPORTATION

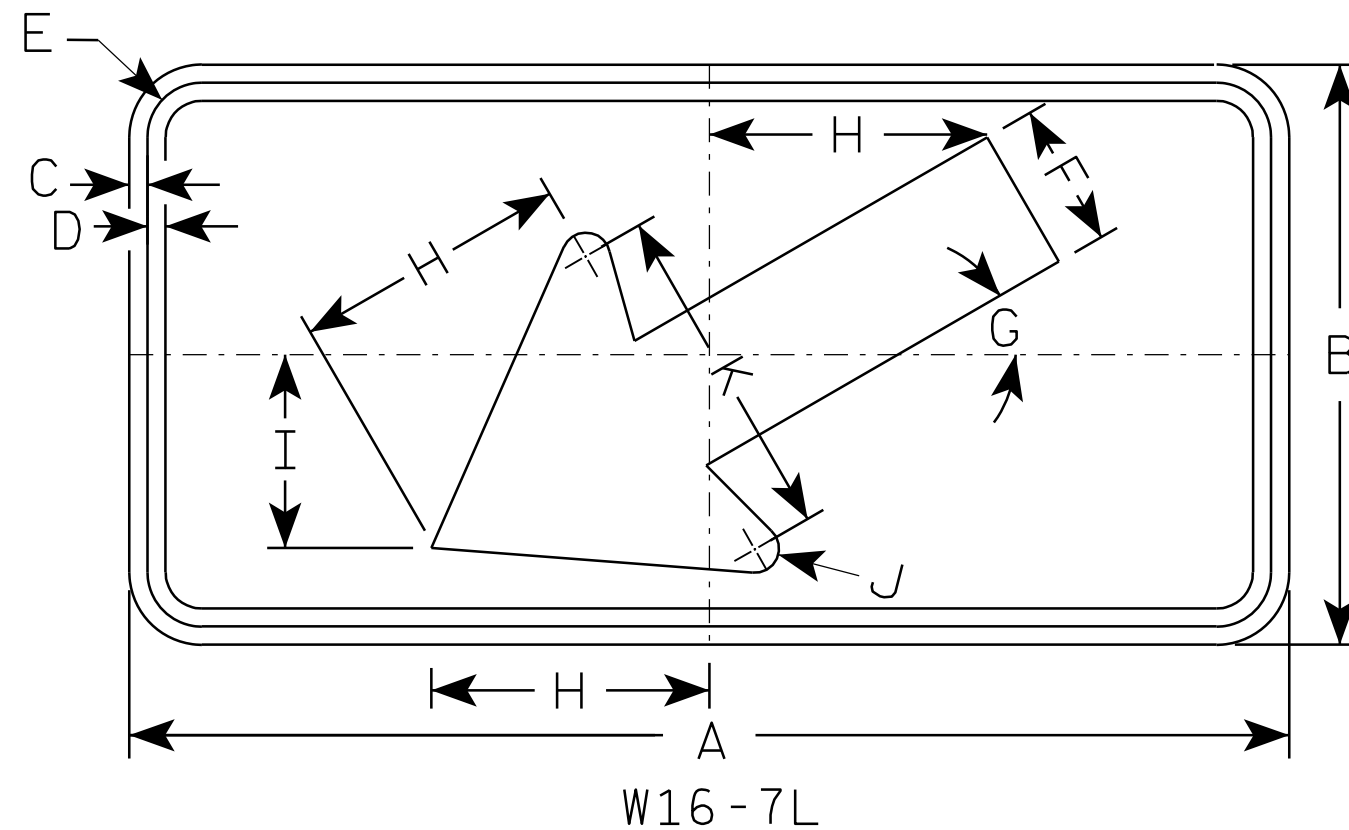
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 2/13/14 PLATE NO. W11-15.4
348

PROJECT NO: HWY: COUNTY: SHEET NO: E

NOTES

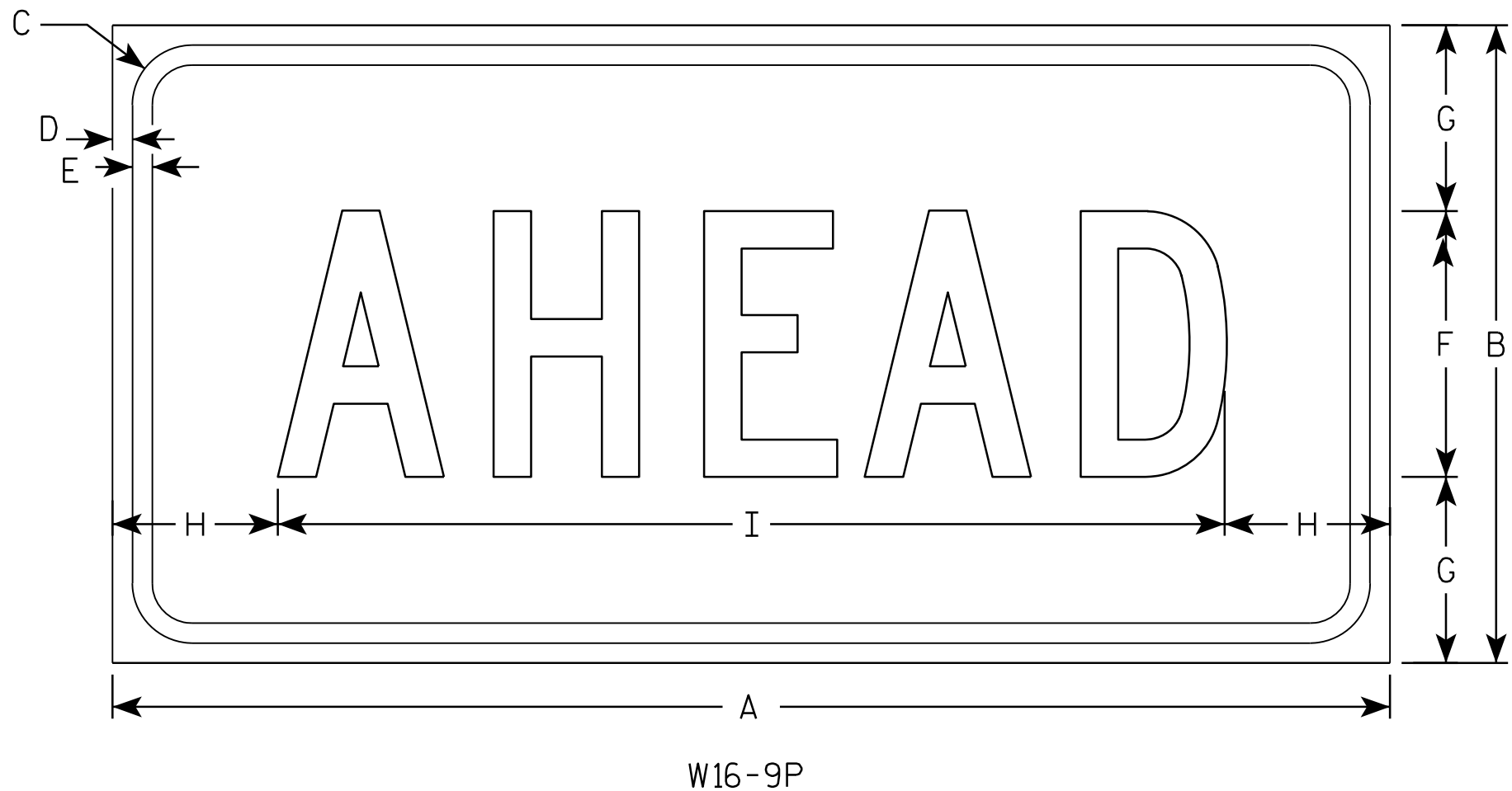
1. Sign is Type II - Type F Reflective -
reference WIS DOT Standard Specification for
HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base
material is plywood but borders shall be rounded
as shown. When base material is metal, the
corners and borders shall be rounded.
4. W16-7R is the same as W16-L
except the arrow is reversed along
the vertical centerline.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	$\frac{3}{8}$	$\frac{3}{8}$	1 $\frac{1}{8}$	3	30°	5 $\frac{3}{4}$	4	$\frac{1}{2}$	7																2.0
2M	30	18	$\frac{3}{8}$	$\frac{1}{2}$	1 $\frac{1}{8}$	4 $\frac{1}{2}$	30°	8 $\frac{1}{2}$	6	$\frac{5}{8}$	10 $\frac{1}{4}$																3.75
3	30	18	$\frac{3}{8}$	$\frac{1}{2}$	1 $\frac{1}{8}$	4 $\frac{1}{2}$	30°	8 $\frac{1}{2}$	6	$\frac{5}{8}$	10 $\frac{1}{4}$																3.75
4																											8
5																											8

STANDARD SIGN	
W16-7	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 11/02/10	PLATE NO. W16-7.5

7



NOTES

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

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

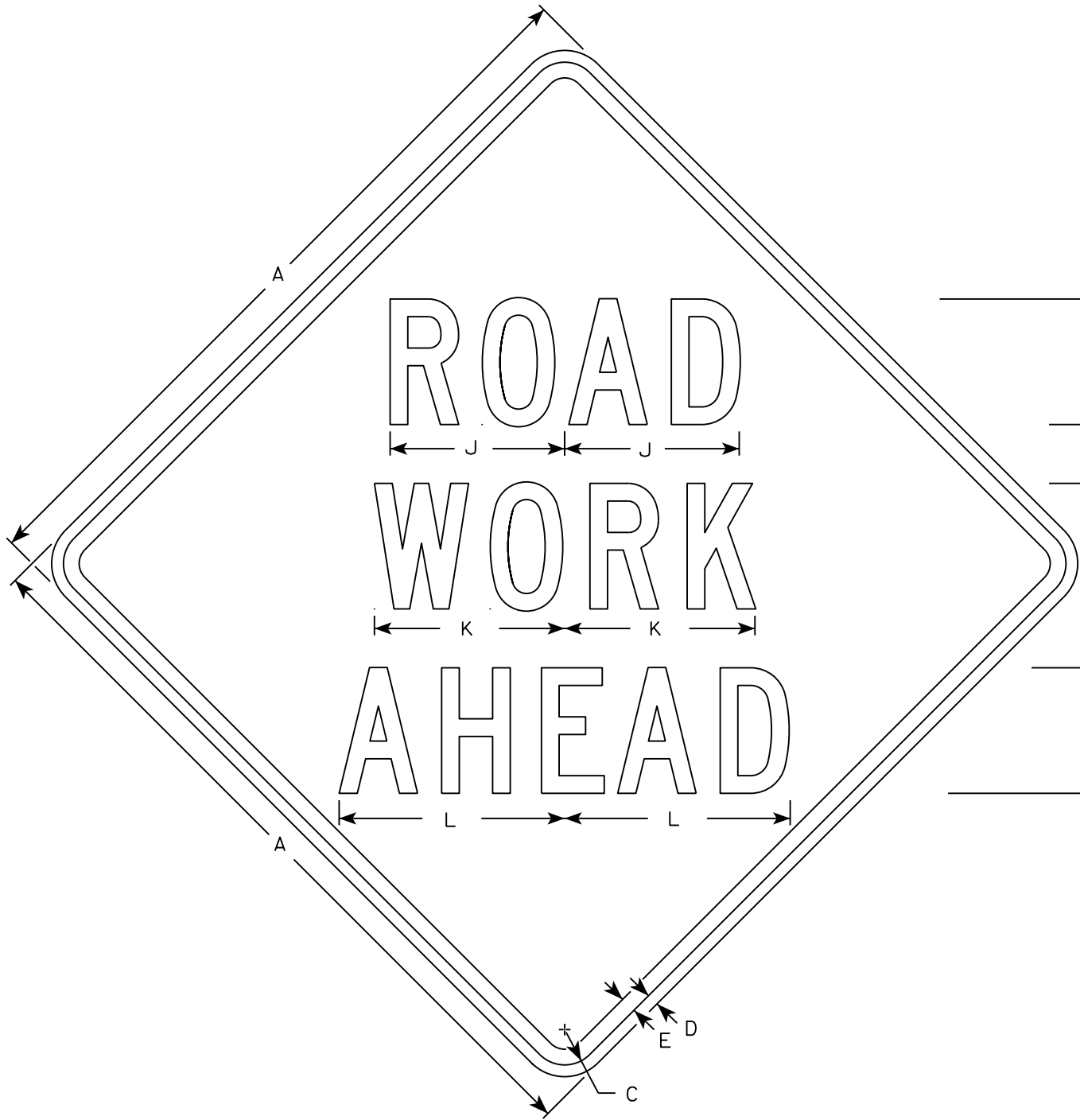
STANDARD SIGN

W16-9P

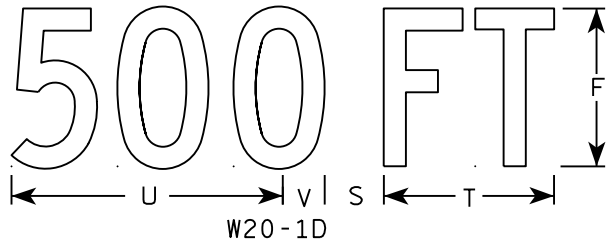
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

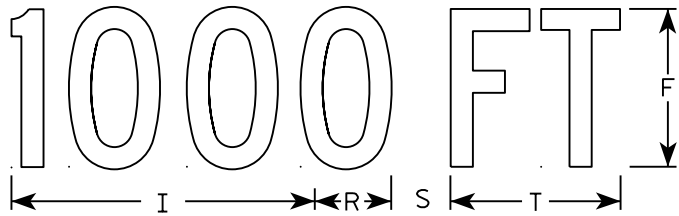
DATE 12/28/10 PLATE NO. W16-9P.6



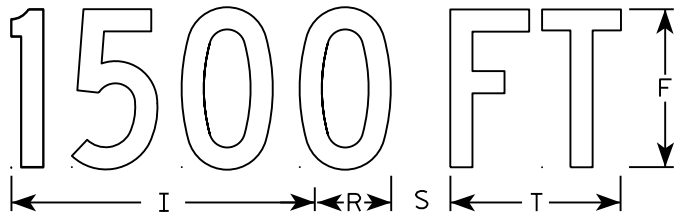
W20-1A



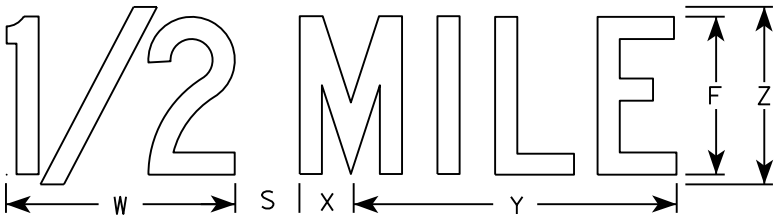
W20-1D



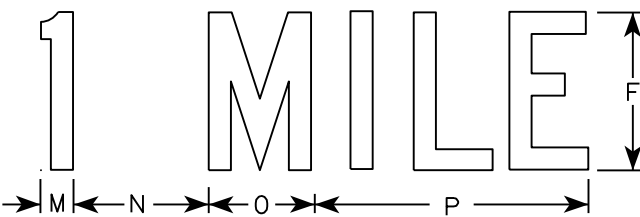
W20-1C



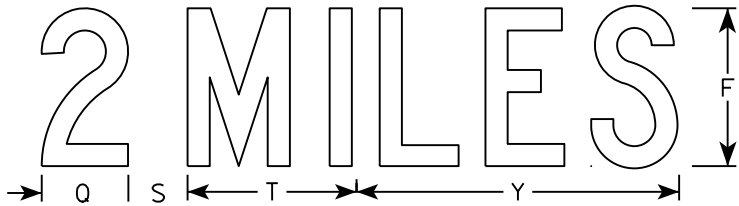
W20-1B



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

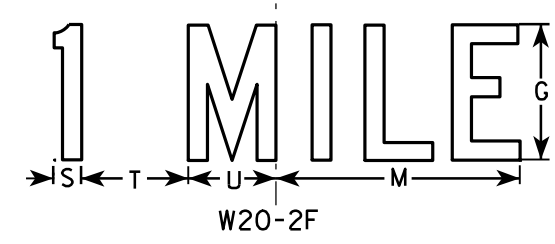
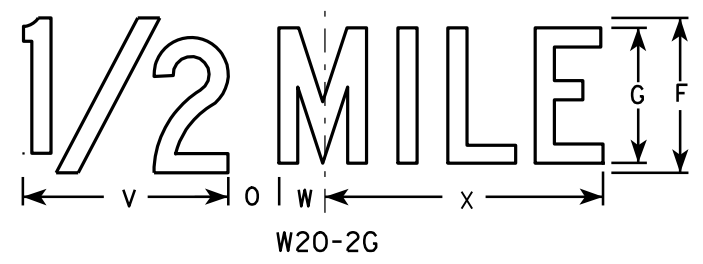
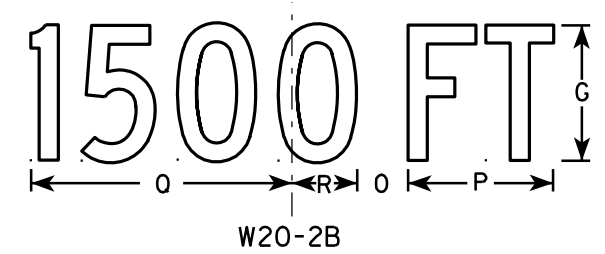
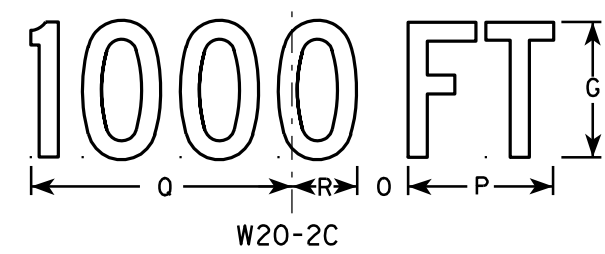
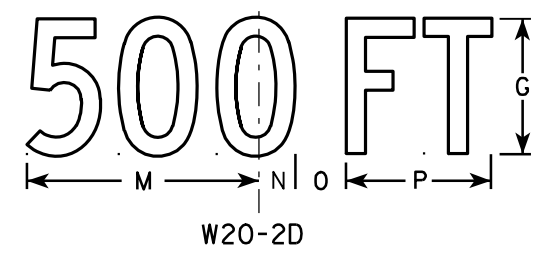
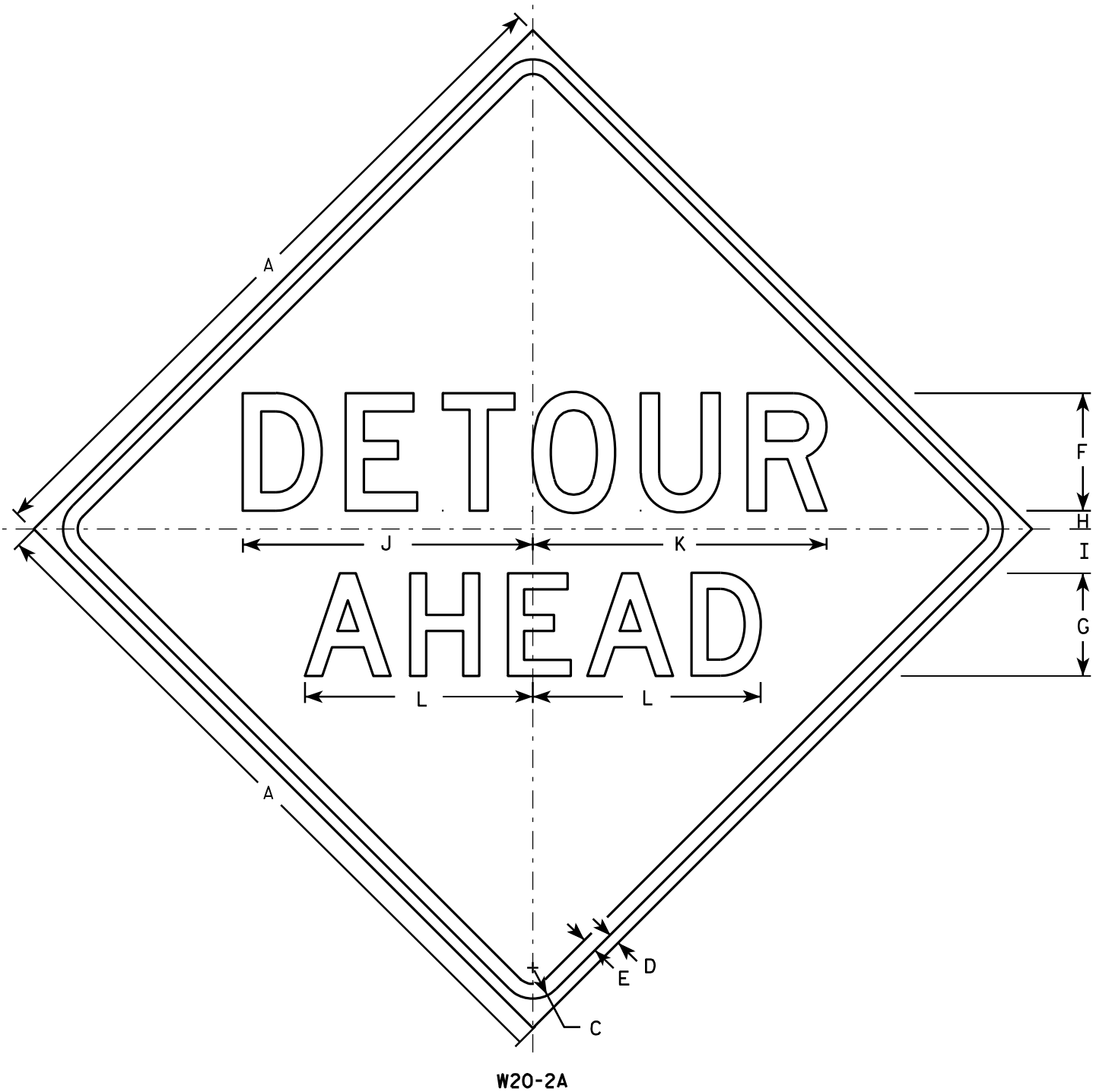
STANDARD SIGN
W20-1A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

351



NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

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

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

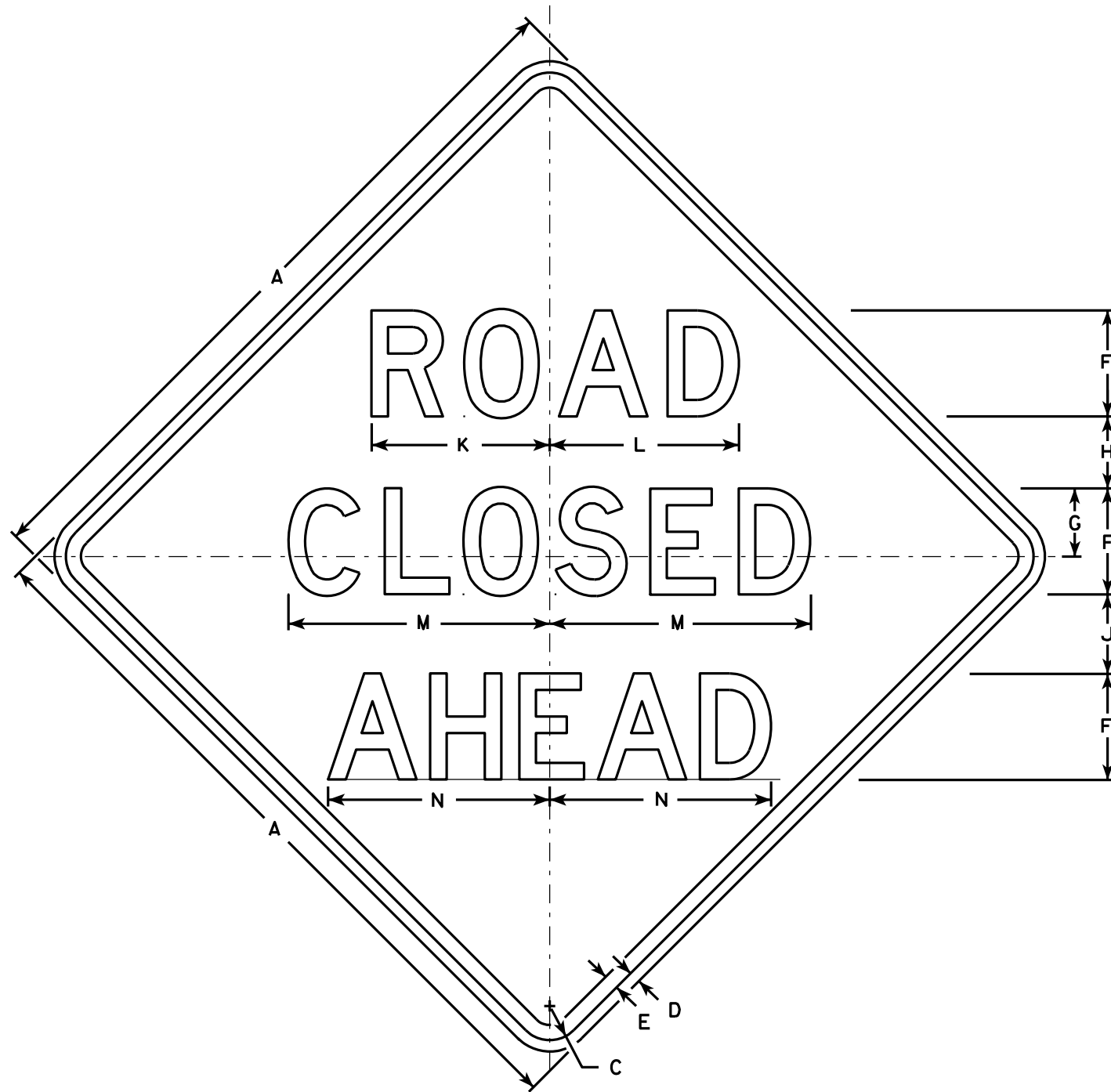
PROJECT NO:

HWY:

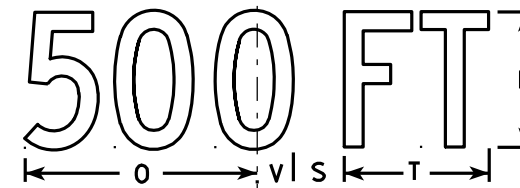
COUNTY:

SHEET NO: 352

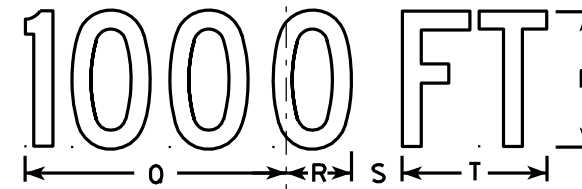
E



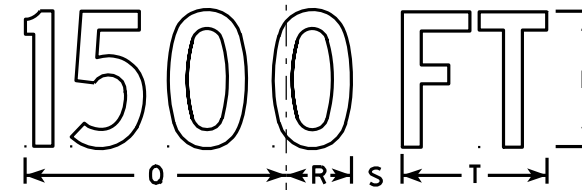
W20-3A



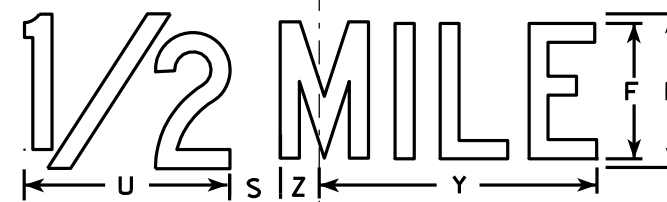
W20-3D



W20-3C



W20-3B



W20-3G



W20-3F

NOTES

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

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

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

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

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

PROJECT NO:

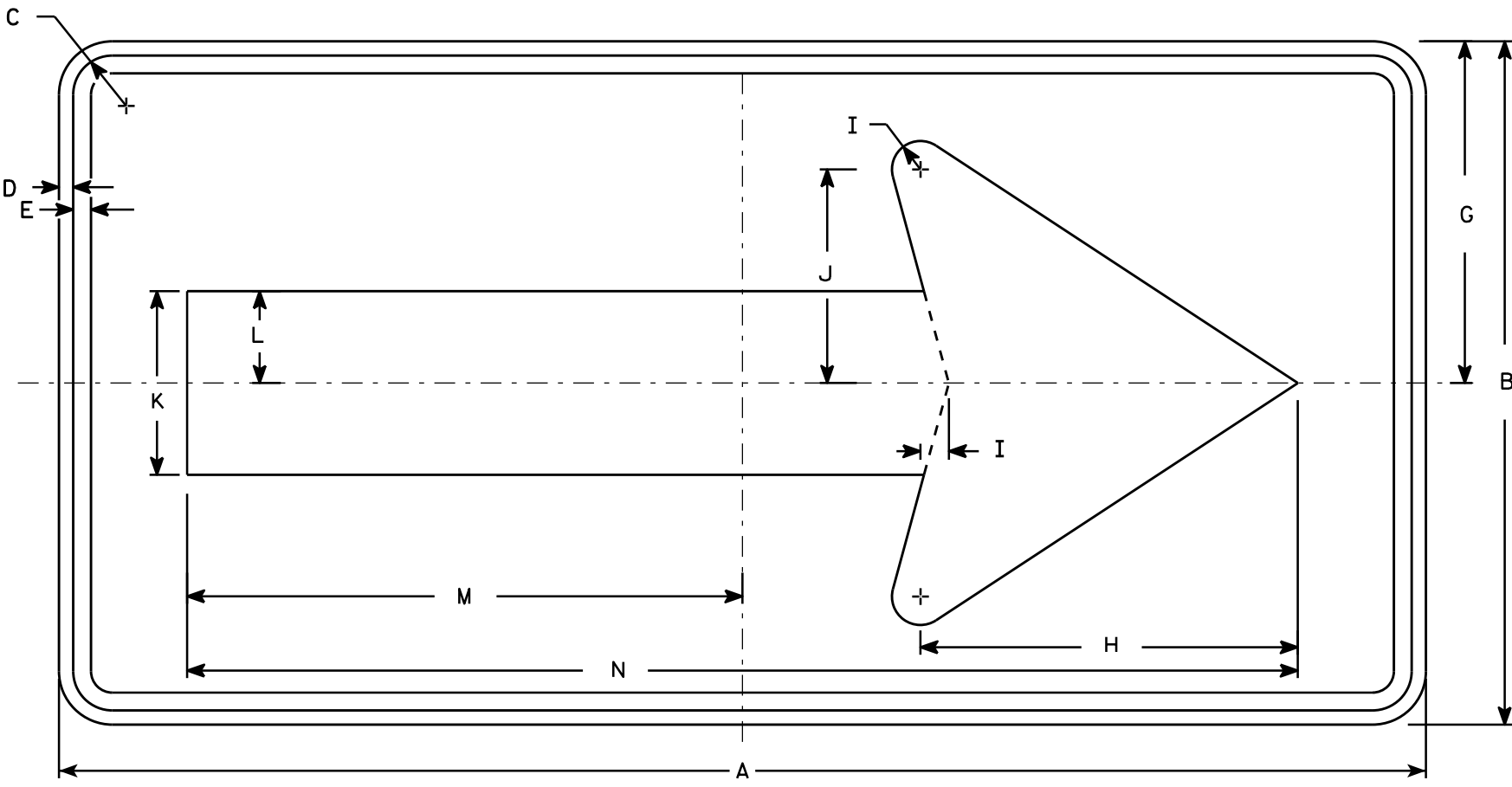
HWY:

COUNTY:

SHEET NO: 353

E

7



W01-6

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. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

7

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

STANDARD SIGN
W01-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. 354 W01-6.1

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

STH 89														
STATION	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
		Cut	Salvaged/Unusable Pavement Material		Fill	EBS	Cut	Salvaged/Unusable Pavement Material		Fill	EBS	Expanded		Reduced EBS in Fill
												Cut 1.00	Fill 1.25	Expanded EBS Backfill 1.30
							Note 1	Note 2	Note 3			Note 1	Note 5	Note 7
29+50	0.00	90.49	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0
29+75	25.00	97.63	0.00	0.18	0.00	87	0	0	0	87	0	0	0	87
30+00	25.00	109.26	0.00	2.86	0.00	96	0	1	0	183	2	0	0	181
30+25	25.00	111.70	0.00	0.96	0.00	102	0	2	0	285	4	0	0	281
30+50	25.00	115.63	0.00	1.61	0.00	105	0	1	0	390	6	0	0	385
30+75	25.00	129.01	0.00	0.52	0.00	113	0	1	0	504	7	0	0	497
31+00	25.00	149.82	0.00	0.27	0.00	129	0	0	0	633	7	0	0	626
31+05	5.00	154.77	0.00	0.25	0.00	28	0	0	0	661	7	0	0	654
31+10	5.00	160.49	0.00	0.32	0.00	29	0	0	0	690	7	0	0	683
31+15	5.00	167.23	0.00	0.25	0.00	30	0	0	0	720	7	0	0	713
31+20	5.00	177.17	0.00	0.00	0.00	32	0	0	0	752	7	0	0	745
31+25	5.00	195.36	0.00	0.00	0.00	34	0	0	0	787	7	0	0	779
31+30	5.00	205.62	0.00	0.00	0.00	37	0	0	0	824	7	0	0	817
31+35	5.00	194.73	0.00	0.00	0.00	37	0	0	0	861	7	0	0	854
31+40	5.00	187.53	0.00	0.00	0.00	35	0	0	0	896	7	0	0	889
31+45	5.00	181.38	0.00	0.00	0.00	34	0	0	0	931	7	0	0	923
31+50	5.00	175.92	0.00	0.00	0.00	33	0	0	0	964	7	0	0	956
31+55	5.00	170.15	0.00	0.00	0.00	32	0	0	0	996	7	0	0	988
31+60	5.00	163.31	0.00	0.00	0.00	31	0	0	0	1,027	7	0	0	1,019
31+65	5.00	154.61	0.00	0.00	0.00	29	0	0	0	1,056	7	0	0	1,049
31+70	5.00	148.46	0.00	0.00	0.00	28	0	0	0	1,084	7	0	0	1,077
31+75	5.00	158.99	0.00	0.00	0.00	28	0	0	0	1,113	7	0	0	1,105
31+80	5.00	170.38	0.00	0.00	0.00	30	0	0	0	1,143	7	0	0	1,136
31+85	5.00	182.94	0.00	0.02	0.00	33	0	0	0	1,176	7	0	0	1,168
31+90	5.00	196.51	0.00	0.01	0.00	35	0	0	0	1,211	7	0	0	1,203
31+95	5.00	208.25	0.00	0.00	0.00	37	0	0	0	1,248	7	0	0	1,241
32+00	5.00	203.54	0.00	0.00	0.00	38	0	0	0	1,287	7	0	0	1,279
32+05	5.00	191.58	0.00	0.22	0.00	37	0	0	0	1,323	8	0	0	1,316
32+10	5.00	177.65	0.00	2.05	0.00	34	0	0	0	1,357	8	0	0	1,350
32+15	5.00	170.41	0.00	5.40	0.00	32	0	1	0	1,390	9	0	0	1,381
32+20	5.00	165.72	0.00	8.22	0.00	31	0	1	0	1,421	10	0	0	1,410
32+25	5.00	154.38	0.00	7.89	0.00	30	0	1	0	1,450	12	0	0	1,438
32+30	5.00	147.48	0.00	8.18	0.00	28	0	1	0	1,478	14	0	0	1,464
32+31.71	1.71	147.24	0.00	7.22	0.00	9	0	0	0	1,488	15	0	0	1,473
32+50	18.29	143.73	0.00	0.82	0.00	99	0	3	0	1,586	18	0	0	1,568
32+75	25.00	156.23	0.00	0.27	0.00	139	0	1	0	1,725	19	0	0	1,706
33+00	25.00	157.86	0.00	0.31	0.00	145	0	0	0	1,870	19	0	0	1,852
33+25	25.00	153.11	0.00	0.71	0.00	144	0	0	0	2,014	20	0	0	1,995
33+50	25.00	137.02	0.00	3.45	0.00	134	0	2	0	2,149	22	0	0	2,127
33+69.2	19.20	134.79	0.00	3.45	0.00	97	0	2	0	2,245	25	0	0	2,220
33+75	5.80	158.74	0.00	0.00	0.00	32	0	0	0	2,277	25	0	0	2,251
33+92.76	17.76	138.67	0.00	3.76	0.00	98	0	1	0	2,375	27	0	0	2,348
34+00	7.24	140.51	0.00	3.12	0.00	37	0	1	0	2,412	28	0	0	2,384
34+25	25.00	145.73	0.00	2.01	0.00	133	0	2	0	2,545	31	0	0	2,514
34+38.3	13.30	144.36	0.00	2.40	0.00	71	0	1	0	2,616	32	0	0	2,584
34+40	1.70	143.66	0.00	2.60	0.00	9	0	0	0	2,625	33	0	0	2,592
34+45	5.00	141.75	0.00	3.66	0.00	26	0	1	0	2,652	33	0	0	2,618
34+50	5.00	147.06	0.00	5.47	0.00	27	0	1	0	2,678	34	0	0	2,644
34+55	5.00	157.35	0.00	0.00	0.00	28	0	1	0	2,707	35	0	0	2,671
34+60	5.00	158.65	0.00	0.00	0.00	29	0	0	0	2,736	35	0	0	2,701
34+65	5.00	152.22	0.00	0.00	0.00	29	0	0	0	2,765	35	0	0	2,729
34+70	5.00	142.24	0.00	0.00	0.00	27	0	0	0	2,792	35	0	0	2,757
34+75	5.00	134.87	0.00	0.00	0.00	26	0	0	0	2,817	35	0	0	2,782
34+80	5.00	134.50	0.00	0.00	0.00	25	0	0	0	2,842	35	0	0	2,807
34+85	5.00	137.52	0.00	4.38	0.00	25	0	0	0	2,868	36	0	0	2,832
34+90	5.00	145.96	0.00	3.19	0.00	26	0	1	0	2,894	36	0	0	2,857
34+95	5.00	155.59	0.00	2.25	0.00	28	0	1	0	2,922	37	0	0	2,885
35+00	5.00	150.40	0.00	3.21	0.00	28	0	1	0	2,950	38	0	0	2,912
35+05	5.00	141.53	0.00	2.52	0.00	27	0	1	0	2,977	38	0	0	2,939

STH 89														
STATION	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
		Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.25	Expanded EBS Backfill 1.30	Reduced EBS in Fill 0.80	Mass Ordinate
						Note 1	Note 2	Note 3		Note 1		Note 5	Note 7	Note 8
35+10	5.00	139.13	0.00	2.26	0.00	26	0	0	0	3,003	39	0	0	2,964
35+15	5.00	140.85	0.00	2.75	0.00	26	0	0	0	3,029	40	0	0	2,990
35+16.42	1.42	141.23	0.00	2.61	0.00	7	0	0	0	3,036	40	0	0	2,997
35+25	8.58	144.86	0.00	1.73	0.00	45	0	1	0	3,082	41	0	0	3,041
35+50	25.00	152.79	0.00	0.95	0.00	138	0	1	0	3,220	42	0	0	3,178
35+75	25.00	160.46	0.00	0.37	0.00	145	0	1	0	3,365	43	0	0	3,322
36+00	25.00	163.45	0.00	0.00	0.00	150	0	0	0	3,515	43	0	0	3,472
36+12.76	12.76	168.53	0.00	0.00	0.00	78	0	0	0	3,593	43	0	0	3,550
36+25	12.24	190.48	0.00	0.00	0.00	81	0	0	0	3,675	43	0	0	3,631
36+29.7	4.70	197.99	0.00	0.00	0.00	34	0	0	0	3,708	43	0	0	3,665
36+45.93	16.23	179.47	0.00	0.00	0.00	113	0	0	0	3,822	43	0	0	3,779
36+50	4.07	178.82	0.00	0.00	0.00	27	0	0	0	3,849	43	0	0	3,806
36+53.71	3.71	166.25	0.00	0.00	0.00	24	0	0	0	3,873	43	0	0	3,829
36+75	21.29	163.68	0.00	0.00	0.00	130	0	0	0	4,003	43	0	0	3,960
36+91.1	16.10	168.08	0.00	0.00	0.00	99	0	0	0	4,101	43	0	0	4,058
37+00	8.90	173.26	0.00	0.00	0.00	56	0	0	0	4,158	43	0	0	4,115
37+25	25.00	154.83	0.00	0.00	0.00	152	0	0	0	4,310	43	0	0	4,267
37+43.1	18.10	158.13	0.00	0.17	0.00	105	0	0	0	4,415	43	0	0	4,371
37+50	6.90	166.57	0.00	0.15	0.00	41	0	0	0	4,456	43	0	0	4,413
37+70.85	20.85	163.73	0.00	0.30	0.00	128	0	0	0	4,584	43	0	0	4,540
37+75	4.15	142.72	0.00	0.40	0.00	24	0	0	0	4,607	43	0	0	4,564
37+80	5.00	141.05	0.00	0.76	0.00	26	0	0	0	4,633	44	0	0	4,590
37+85	5.00	139.27	0.00	1.21	0.00	26	0	0	0	4,659	44	0	0	4,616
37+90	5.00	137.10	0.00	1.42	0.00	26	0	0	0	4,685	44	0	0	4,641
37+95	5.00	140.19	0.00	3.43	0.00	26	0	0	0	4,711	45	0	0	4,666
38+00	5.00	148.68	0.00	0.46	0.00	27	0	0	0	4,737	45	0	0	4,692
38+05	5.00	141.23	0.00	0.57	0.00	27	0	0	0	4,764	45	0	0	4,719
38+10	5.00	133.49	0.00	0.68	0.00	25	0	0	0	4,790	45	0	0	4,744
38+15	5.00	124.90	0.00	0.78	0.00	24	0	0	0	4,814	46	0	0	4,768
38+20	5.00	148.42	0.00	0.00	0.00	25	0	0	0	4,839	46	0	0	4,793
38+25	5.00	160.48	0.00	0.00	0.00	29	0	0	0	4,867	46	0	0	4,822
38+30	5.00	153.08	0.00	0.20	0.00	29	0	0	0	4,897	46	0	0	4,851
38+35	5.00	148.68	0.00	1.68	0.00	28	0	0	0	4,924	46	0	0	4,879
38+40	5.00	144.61	0.00	0.39	0.00	27	0	0	0	4,952	46	0	0	4,905
38+45	5.00	146.95	0.00	0.20	0.00	27	0	0	0	4,979	46	0	0	4,932
38+50	5.00	147.51	0.00	0.10	0.00	27	0	0	0	5,006	46	0	0	4,960
38+55	5.00	147.78	0.00	0.00	0.00	27	0	0	0	5,033	46	0	0	4,987
38+58.3	3.30	148.56	0.00	0.00	0.00	18	0	0	0	5,051	46	0	0	5,005
38+75	16.70	148.96	0.00	0.00	0.00	92	0	0	0	5,143	46	0	0	5,097
39+00	25.00	149.67	0.00	0.00	0.00	138	0	0	0	5,282	46	0	0	5,235
39+25	25.00	150.99	0.00	0.00	0.00	139	0	0	0	5,421	46	0	0	5,375
39+50	25.00	157.53	0.00	0.00	0.00	143	0	0	0	5,564	46	0	0	5,517
39+56.51	6.51	159.68	0.00	0.00	0.00	38	0	0	0	5,602	46	0	0	5,556
39+60	3.49	159.87	0.00	0.00	0.00	21	0	0	0	5,623	46	0	0	5,576
39+65	5.00	159.59	0.00	0.00	0.00	30	0	0	0	5,652	46	0	0	5,606
39+70	5.00	162.94	0.00	0.00	0.00	30	0	0	0	5,682	46	0	0	5,636
39+75	5.00	175.31	0.00	0.00	0.00	31	0	0	0	5,713	46	0	0	5,667
39+80	5.00	175.76	0.00	0.00	0.00	33	0	0	0	5,746	46	0	0	5,699
39+85	5.00	165.90	0.00	0.00	0.00	32	0	0	0	5,777	46	0	0	5,731
39+90	5.00	177.02	0.00	0.19	0.00	32	0	0	0	5,809	46	0	0	5,763
39+95	5.00	213.59	0.00	0.00	0.00	36	0	0	0	5,845	46	0	0	5,799
40+00	5.00	210.01	0.00	0.00	0.00	39	0	0	0	5,885	46	0	0	5,838
40+05	5.00	181.74	0.00	0.00	0.00	36	0	0	0	5,921	46	0	0	5,874
40+10	5.00	169.70	0.00	0.00	0.00	33	0	0	0	5,953	46	0	0	5,907
40+15	5.00	156.99	0.00	0.00	0.00	30	0	0	0	5,984	46	0	0	5,937
40+20	5.00	154.82	0.00	0.00	0.00	29	0	0	0	6,012	46	0	0	5,966
40+25	5.00	169.79	0.00	0.00	0.00	30	0	0	0	6,043	46	0	0	5,996
40+30	5.00	183.46	0.00	0.00	0.00	33	0	0	0	6,075	46	0	0	6,029
40+35	5.00	195.22	0.00	0.00	0.00	35	0	0	0	6,110	46	0	0	6,064

STH 89														
STATION	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
		Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.25	Expanded EBS Backfill 1.30	Reduced EBS in Fill 0.80	Mass Ordinate
						Note 1	Note 2	Note 3		Note 1		Note 5	Note 7	Note 8
40+40	5.00	206.73	0.00	0.00	0.00	37	0	0	0	6,148	46	0	0	6,101
40+45	5.00	188.58	0.00	0.17	0.00	37	0	0	0	6,184	46	0	0	6,138
40+50	5.00	176.70	0.00	0.15	0.00	34	0	0	0	6,218	46	0	0	6,172
40+55	5.00	171.16	0.00	0.01	0.00	32	0	0	0	6,250	46	0	0	6,204
40+60	5.00	171.35	0.00	0.00	0.00	32	0	0	0	6,282	46	0	0	6,235
40+65	5.00	172.43	0.00	0.00	0.00	32	0	0	0	6,314	46	0	0	6,267
40+70	5.00	170.80	0.00	0.00	0.00	32	0	0	0	6,345	46	0	0	6,299
40+75	5.00	169.50	0.00	0.03	0.00	32	0	0	0	6,377	46	0	0	6,331
40+80	5.00	170.97	0.00	0.03	0.00	32	0	0	0	6,409	46	0	0	6,362
40+83.27	3.27	171.98	0.00	0.04	0.00	21	0	0	0	6,429	46	0	0	6,383
41+00	16.73	176.73	0.00	0.00	0.00	108	0	0	0	6,537	46	0	0	6,491
41+25	25.00	191.14	0.00	0.01	0.00	170	0	0	0	6,708	46	0	0	6,661
41+50	25.00	186.11	0.00	0.00	0.00	175	0	0	0	6,882	46	0	0	6,836
41+75	25.00	190.80	0.00	0.00	0.00	174	0	0	0	7,057	46	0	0	7,010
42+00	25.00	195.28	0.00	0.00	0.00	179	0	0	0	7,236	46	0	0	7,189
42+25	25.00	201.13	0.00	0.09	0.00	184	0	0	0	7,419	46	0	0	7,373
42+50	25.00	202.36	0.00	0.86	0.00	187	0	0	0	7,606	47	0	0	7,559
42+62.65	12.65	205.07	0.00	1.21	0.00	95	0	0	0	7,701	48	0	0	7,654
42+75	12.35	222.02	0.00	2.09	0.00	98	0	1	0	7,799	49	0	0	7,750
42+80.19	5.19	205.46	0.00	2.54	0.00	41	0	0	0	7,840	49	0	0	7,791
43+00	19.81	199.58	0.00	7.53	0.00	149	0	4	0	7,989	54	0	0	7,935
43+25	25.00	199.42	0.00	4.89	0.00	185	0	6	0	8,173	61	0	0	8,112
43+50	25.00	197.05	0.00	3.53	0.00	184	0	4	0	8,357	66	0	0	8,291
43+75	25.00	195.37	0.00	0.72	0.00	182	0	2	0	8,539	68	0	0	8,470
43+75.21	0.21	195.36	0.00	0.70	0.00	2	0	0	0	8,540	68	0	0	8,472
43+80	4.79	194.82	0.00	0.34	0.00	35	0	0	0	8,575	68	0	0	8,506
43+85	5.00	206.20	0.00	0.00	0.00	37	0	0	0	8,612	68	0	0	8,543
43+90	5.00	203.90	0.00	0.00	0.00	38	0	0	0	8,650	68	0	0	8,581
43+95	5.00	199.43	0.00	0.08	0.00	37	0	0	0	8,687	68	0	0	8,619
44+00	5.00	187.19	0.00	0.58	0.00	36	0	0	0	8,723	69	0	0	8,654
44+05	5.00	191.08	0.00	0.54	0.00	35	0	0	0	8,758	69	0	0	8,689
44+10	5.00	199.05	0.00	0.00	0.00	36	0	0	0	8,794	69	0	0	8,725
44+15	5.00	212.89	0.00	0.00	0.00	38	0	0	0	8,832	69	0	0	8,764
44+20	5.00	217.30	0.00	0.00	0.00	40	0	0	0	8,872	69	0	0	8,803
44+25	5.00	205.81	0.00	0.00	0.00	39	0	0	0	8,911	69	0	0	8,843
44+30	5.00	192.54	0.00	0.00	0.00	37	0	0	0	8,948	69	0	0	8,879
44+35	5.00	177.54	0.00	0.00	0.00	34	0	0	0	8,982	69	0	0	8,914
44+40	5.00	178.76	0.00	0.00	0.00	33	0	0	0	9,015	69	0	0	8,947
44+45	5.00	193.73	0.00	0.00	0.00	34	0	0	0	9,050	69	0	0	8,981
44+50	5.00	205.26	0.00	0.00	0.00	37	0	0	0	9,087	69	0	0	9,018
44+55	5.00	213.16	0.00	0.04	0.00	39	0	0	0	9,126	69	0	0	9,057
44+60	5.00	209.93	0.00	0.09	0.00	39	0	0	0	9,165	69	0	0	9,096
44+65	5.00	191.33	0.00	0.04	0.00	37	0	0	0	9,202	69	0	0	9,133
44+70	5.00	183.36	0.00	0.03	0.00	35	0	0	0	9,237	69	0	0	9,168
44+75	5.00	180.89	0.00	0.02	0.00	34	0	0	0	9,270	69	0	0	9,202
44+80	5.00	181.92	0.00	0.02	0.00	34	0	0	0	9,304	69	0	0	9,235
44+85	5.00	182.47	0.00	0.02	0.00	34	0	0	0	9,338	69	0	0	9,269
44+90	5.00	182.45	0.00	0.01	0.00	34	0	0	0	9,371	69	0	0	9,303
44+95	5.00	182.56	0.00	0.00	0.00	34	0	0	0	9,405	69	0	0	9,336
45+00	5.00	182.51	0.00	0.00	0.00	34	0	0	0	9,439	69	0	0	9,370
45+02.62	2.62	182.38	0.00	0.00	0.00	18	0	0	0	9,457	69	0	0	9,388
45+25	22.38	181.15	0.00	0.00	0.00	151	0	0	0	9,607	69	0	0	9,539
45+28.57	3.57	188.12	0.00	0.00	0.00	24	0	0	0	9,632	69	0	0	9,563
45+45.4	16.83	189.80	0.00	0.00	0.00	118	0	0	0	9,750	69	0	0	9,681
45+50	4.60	179.09	0.00	0.16	0.00	31	0	0	0	9,781	69	0	0	9,712
45+56.44	6.44	180.78	0.00	0.03	0.00	43	0	0	0	9,824	69	0	0	9,755
45+75	18.56	178.51	0.00	0.06	0.00	123	0	0	0	9,947	69	0	0	9,879
46+00	25.00	196.24	0.00	0.14	0.00	173	0	0	0	10,121	69	0	0	10,052
46+09.52	9.52	181.09	0.00	0.00	0.00	67	0	0	0	10,187	69	0	0	10,118

STH 89														
STATION	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
		Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.25	Expanded EBS Backfill 1.30	Reduced EBS in Fill 0.80	Mass Ordinate
		Note 1	Note 2	Note 3		Note 1	Note 2	Note 3		Note 1	Note 5	Note 7	Note 8	
46+25	15.48	177.45	0.00	0.07	0.00	103	0	0	0	10,290	69	0	0	10,221
46+50	25.00	173.68	0.00	0.18	0.00	163	0	0	0	10,453	69	0	0	10,384
46+75	25.00	169.12	0.00	5.60	0.00	159	0	3	0	10,612	73	0	0	10,539
46+83.78	8.78	179.35	0.00	5.85	0.00	57	0	2	0	10,668	75	0	0	10,593
46+93.2	9.42	180.37	0.00	5.94	0.00	63	0	2	0	10,731	77	0	0	10,654
47+00	6.80	168.04	0.00	5.42	0.00	44	0	1	0	10,775	79	0	0	10,696
47+10.67	10.67	184.08	0.00	0.00	0.00	70	0	1	0	10,844	81	0	0	10,764
47+25	14.33	184.67	0.00	0.00	0.00	98	0	0	0	10,942	81	0	0	10,862
47+32.26	7.26	176.87	0.00	0.00	0.00	49	0	0	0	10,991	81	0	0	10,910
47+50	17.74	162.14	0.00	4.52	0.00	111	0	1	0	11,102	82	0	0	11,020
47+61.95	11.95	171.65	0.00	4.00	0.00	74	0	2	0	11,176	85	0	0	11,091
47+75	13.05	160.72	0.00	3.47	0.00	80	0	2	0	11,256	87	0	0	11,169
48+00	25.00	157.06	0.00	2.77	0.00	147	0	3	0	11,404	91	0	0	11,313
48+25	25.00	172.93	0.00	0.00	0.00	153	0	1	0	11,556	92	0	0	11,464
48+43.09	18.09	156.14	0.00	0.00	0.00	110	0	0	0	11,667	92	0	0	11,574
48+50	6.91	154.51	0.00	0.00	0.00	40	0	0	0	11,706	92	0	0	11,614
48+75	25.00	165.24	0.00	0.00	0.00	148	0	0	0	11,854	92	0	0	11,762
48+85.72	10.72	176.02	0.00	0.00	0.00	68	0	0	0	11,922	92	0	0	11,830
49+00	14.28	148.06	0.00	0.10	0.00	86	0	0	0	12,008	92	0	0	11,916
49+25	25.00	145.98	0.00	0.38	0.00	136	0	0	0	12,144	93	0	0	12,051
49+32.24	7.24	156.09	0.00	0.61	0.00	41	0	0	0	12,184	93	0	0	12,092
49+50	17.76	160.68	0.00	0.80	0.00	104	0	0	0	12,289	93	0	0	12,195
49+64.01	14.01	139.45	0.00	0.71	0.00	78	0	0	0	12,366	94	0	0	12,273
49+75	10.99	138.46	0.00	0.70	0.00	57	0	0	0	12,423	94	0	0	12,329
49+87.25	12.25	137.47	0.00	0.80	0.00	63	0	0	0	12,486	95	0	0	12,391
50+00	12.75	136.70	0.00	2.55	0.00	65	0	1	0	12,550	96	0	0	12,455
50+25	25.00	137.12	0.00	1.55	0.00	127	0	2	0	12,677	98	0	0	12,579
50+50	25.00	147.32	0.00	0.76	0.00	132	0	1	0	12,809	99	0	0	12,710
50+68.75	18.75	155.41	0.00	0.00	0.00	105	0	0	0	12,914	100	0	0	12,814
50+75	6.25	148.62	0.00	1.22	0.00	35	0	0	0	12,949	100	0	0	12,849
51+00	25.00	149.26	0.00	0.92	0.00	138	0	1	0	13,087	101	0	0	12,986
51+06.14	6.14	155.10	0.00	0.00	0.00	35	0	0	0	13,122	101	0	0	13,020
51+12.93	6.79	168.78	0.00	0.00	0.00	41	0	0	0	13,162	101	0	0	13,061
51+15.81	2.88	173.12	0.00	0.00	0.00	18	0	0	0	13,181	101	0	0	13,079
51+25	9.19	168.81	0.00	0.50	0.00	58	0	0	0	13,239	101	0	0	13,138
51+50	25.00	139.61	0.00	0.35	0.00	143	0	0	0	13,382	102	0	0	13,280
51+75	25.00	133.29	0.00	0.55	0.00	126	0	0	0	13,508	102	0	0	13,406
52+00	25.00	126.82	0.00	1.01	0.00	120	0	1	0	13,628	103	0	0	13,525
52+12.71	12.71	125.99	0.00	1.94	0.00	60	0	1	0	13,688	104	0	0	13,584
52+25	12.29	127.66	0.00	1.68	0.00	58	0	1	0	13,746	105	0	0	13,640
52+50	25.00	131.72	0.00	0.99	0.00	120	0	1	0	13,866	107	0	0	13,759
52+75	25.00	136.09	0.00	0.69	0.00	124	0	1	0	13,990	108	0	0	13,882
52+81.56	6.56	145.21	0.00	0.01	0.00	34	0	0	0	14,024	108	0	0	13,916
52+94.23	12.67	132.46	0.00	1.15	0.00	65	0	0	0	14,089	108	0	0	13,981
53+00	5.77	134.93	0.00	0.76	0.00	29	0	0	0	14,118	108	0	0	14,009
53+14.14	14.14	142.75	0.00	0.00	0.00	73	0	0	0	14,190	109	0	0	14,082
53+25	10.86	152.55	0.00	0.01	0.00	59	0	0	0	14,250	109	0	0	14,141
53+50	25.00	149.23	0.00	0.10	0.00	140	0	0	0	14,389	109	0	0	14,281
53+75	25.00	174.33	0.00	0.07	0.00	150	0	0	0	14,539	109	0	0	14,430
54+00	25.00	155.24	0.00	0.02	0.00	153	0	0	0	14,692	109	0	0	14,583
54+25	25.00	155.40	0.00	0.00	0.00	144	0	0	0	14,836	109	0	0	14,727
54+38.4	13.40	153.12	0.00	0.00	0.00	77	0	0	0	14,912	109	0	0	14,803
54+43.8	5.40	168.58	0.00	0.00	0.00	32	0	0	0	14,944	109	0	0	14,835
54+45	1.20	171.02	0.00	0.00	0.00	8	0	0	0	14,952	109	0	0	14,843
54+50	5.00	171.40	0.00	0.00	0.00	32	0	0	0	14,984	109	0	0	14,875
54+55	5.00	138.86	0.00	0.00	0.00	29	0	0	0	15,012	109	0	0	14,903
54+60	5.00	143.43	0.00	0.00	0.00	26	0	0	0	15,038	109	0	0	14,930
54+65	5.00	151.72	0.00	0.00	0.00	27	0	0	0	15,066	109	0	0	14,957
54+70	5.00	170.80	0.00	0.00	0.00	30	0	0	0	15,096	109	0	0	14,987

STH 89														
STATION	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
		Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.25	Expanded EBS Backfill 1.30	Reduced EBS in Fill 0.80	Mass Ordinate
						Note 1	Note 2	Note 3		Note 1		Note 5	Note 7	Note 8
54+75	5.00	205.95	0.00	0.00	0.00	35	0	0	0	15,130	109	0	0	15,022
54+80	5.00	190.98	0.00	0.00	0.00	37	0	0	0	15,167	109	0	0	15,058
54+85	5.00	155.98	0.00	0.00	0.00	32	0	0	0	15,199	109	0	0	15,091
54+90	5.00	126.39	0.00	0.00	0.00	26	0	0	0	15,225	109	0	0	15,117
54+95	5.00	135.98	0.00	0.00	0.00	24	0	0	0	15,250	109	0	0	15,141
55+00	5.00	162.17	0.00	0.00	0.00	28	0	0	0	15,277	109	0	0	15,169
55+05	5.00	190.05	0.00	0.00	0.00	33	0	0	0	15,310	109	0	0	15,201
55+10	5.00	164.16	0.00	0.00	0.00	33	0	0	0	15,343	109	0	0	15,234
55+15	5.00	153.27	0.00	0.00	0.00	29	0	0	0	15,372	109	0	0	15,263
55+20	5.00	136.68	0.00	0.00	0.00	27	0	0	0	15,399	109	0	0	15,290
55+25	5.00	125.31	0.00	0.00	0.00	24	0	0	0	15,423	109	0	0	15,315
55+30	5.00	137.22	0.00	0.46	0.00	24	0	0	0	15,448	109	0	0	15,339
55+35	5.00	135.61	0.00	0.24	0.00	25	0	0	0	15,473	109	0	0	15,364
55+40	5.00	136.10	0.00	0.13	0.00	25	0	0	0	15,498	109	0	0	15,389
55+45	5.00	135.56	0.00	0.10	0.00	25	0	0	0	15,523	109	0	0	15,414
55+49.76	4.76	134.41	0.00	0.09	0.00	24	0	0	0	15,547	109	0	0	15,438
55+50	0.24	134.38	0.00	0.09	0.00	1	0	0	0	15,548	109	0	0	15,439
55+75	25.00	132.77	0.00	0.29	0.00	124	0	0	0	15,672	109	0	0	15,563
56+00	25.00	132.78	0.00	0.48	0.00	123	0	0	0	15,795	110	0	0	15,685
56+25	25.00	132.72	0.00	0.59	0.00	123	0	0	0	15,918	110	0	0	15,807
56+50	25.00	133.51	0.00	0.26	0.00	123	0	0	0	16,041	111	0	0	15,930
56+75	25.00	135.90	0.00	0.00	0.00	125	0	0	0	16,166	111	0	0	16,055
56+91.7	16.70	155.75	0.00	0.00	0.00	90	0	0	0	16,256	111	0	0	16,145
57+00	8.30	153.79	0.00	0.00	0.00	48	0	0	0	16,303	111	0	0	16,193
57+25	25.00	141.12	0.00	0.00	0.00	137	0	0	0	16,440	111	0	0	16,329
57+50	25.00	140.38	0.00	0.00	0.00	130	0	0	0	16,570	111	0	0	16,459
57+58.59	8.59	144.99	0.00	0.00	0.00	45	0	0	0	16,616	111	0	0	16,505
57+71.13	12.54	148.81	0.00	0.00	0.00	68	0	0	0	16,684	111	0	0	16,573
57+75	3.87	139.98	0.00	0.00	0.00	21	0	0	0	16,705	111	0	0	16,594
58+00	25.00	142.25	0.00	0.00	0.00	131	0	0	0	16,835	111	0	0	16,724
58+25	25.00	146.33	0.00	0.00	0.00	134	0	0	0	16,969	111	0	0	16,858
58+36.03	11.03	148.27	0.00	0.01	0.00	60	0	0	0	17,029	111	0	0	16,918
58+40	3.97	149.20	0.00	0.00	0.00	22	0	0	0	17,051	111	0	0	16,940
58+45	5.00	150.00	0.00	0.00	0.00	28	0	0	0	17,079	111	0	0	16,968
58+50	5.00	150.73	0.00	0.00	0.00	28	0	0	0	17,106	111	0	0	16,996
58+55	5.00	152.69	0.00	0.00	0.00	28	0	0	0	17,135	111	0	0	17,024
58+60	5.00	158.81	0.00	0.00	0.00	29	0	0	0	17,163	111	0	0	17,052
58+65	5.00	143.20	0.00	0.00	0.00	28	0	0	0	17,191	111	0	0	17,080
58+70	5.00	155.95	0.00	0.00	0.00	28	0	0	0	17,219	111	0	0	17,108
58+75	5.00	194.46	0.00	0.00	0.00	32	0	0	0	17,252	111	0	0	17,141
58+80	5.00	203.20	0.00	0.00	0.00	37	0	0	0	17,288	111	0	0	17,177
58+85	5.00	186.58	0.00	0.00	0.00	36	0	0	0	17,324	111	0	0	17,213
58+90	5.00	151.58	0.00	0.00	0.00	31	0	0	0	17,356	111	0	0	17,245
58+95	5.00	138.24	0.00	0.00	0.00	27	0	0	0	17,383	111	0	0	17,272
59+00	5.00	151.83	0.00	0.00	0.00	27	0	0	0	17,409	111	0	0	17,298
59+05	5.00	177.93	0.00	0.00	0.00	31	0	0	0	17,440	111	0	0	17,329
59+10	5.00	197.33	0.00	0.00	0.00	35	0	0	0	17,475	111	0	0	17,364
59+15	5.00	181.36	0.00	0.00	0.00	35	0	0	0	17,510	111	0	0	17,399
59+20	5.00	168.76	0.00	0.00	0.00	32	0	0	0	17,542	111	0	0	17,431
59+25	5.00	154.37	0.00	0.00	0.00	30	0	0	0	17,572	111	0	0	17,461
59+30	5.00	147.35	0.00	0.00	0.00	28	0	0	0	17,600	111	0	0	17,489
59+35	5.00	143.36	0.00	0.00	0.00	27	0	0	0	17,627	111	0	0	17,516
59+40	5.00	157.43	0.00	0.00	0.00	28	0	0	0	17,655	111	0	0	17,544
59+45	5.00	157.23	0.00	0.00	0.00	29	0	0	0	17,684	111	0	0	17,573
59+47.52	2.52	156.94	0.00	0.00	0.00	15	0	0	0	17,699	111	0	0	17,588
59+50	2.48	156.69	0.00	0.00	0.00	14	0	0	0	17,713	111	0	0	17,602
59+75	25.00	154.98	0.00	0.00	0.00	144	0	0	0	17,857	111	0	0	17,746
60+00	25.00	158.71	0.00	0.00	0.00	145	0	0	0	18,003	111	0	0	17,892
60+25	25.00	156.92	0.00	0.02	0.00	146	0	0	0	18,149	111	0	0	18,038

STH 89														
STATION	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
		Cut	Salvaged/Unusable Pavement Material		Fill	EBS	Cut	Salvaged/Unusable Pavement Material		Fill	EBS	Expanded		Reduced EBS in Fill
												Cut 1.00	Fill 1.25	Expanded EBS Backfill 1.30
							Note 1	Note 2	Note 3			Note 1	Note 5	Note 7
60+50	25.00	157.41	0.00	0.00	0.00	0.00	146	0	0	0	0	18,294	111	0
60+75	25.00	194.12	0.00	0.00	0.00	0.00	163	0	0	0	0	18,457	111	0
60+83.78	8.78	181.49	0.00	0.00	0.00	0.00	61	0	0	0	0	18,518	111	0
61+00	16.22	164.76	0.00	0.00	0.00	0.00	104	0	0	0	0	18,622	111	0
61+25	25.00	166.67	0.00	0.00	0.00	0.00	153	0	0	0	0	18,775	111	0
61+37.17	12.17	169.00	0.00	0.00	0.00	0.00	76	0	0	0	0	18,851	111	0
61+47.33	10.16	193.48	0.00	0.04	0.00	0.00	68	0	0	0	0	18,919	111	0
61+50	2.67	209.57	0.00	0.00	0.00	0.00	20	0	0	0	0	18,939	111	0
61+54.39	4.39	194.82	0.00	0.00	0.00	0.00	33	0	0	0	0	18,972	111	0
61+63.4	9.01	166.54	0.00	0.00	0.00	0.00	60	0	0	0	0	19,032	111	0
61+75	11.60	166.48	0.00	0.00	0.00	0.00	72	0	0	0	0	19,104	111	0
62+00	25.00	164.19	0.00	0.00	0.00	0.00	153	0	0	0	0	19,257	111	0
62+18.34	18.34	165.22	0.00	0.00	0.00	0.00	112	0	0	0	0	19,369	111	0
62+25	6.66	187.09	0.00	0.00	0.00	0.00	43	0	0	0	0	19,412	111	0
62+30.32	5.32	169.97	0.00	0.00	0.00	0.00	35	0	0	0	0	19,448	111	0
62+40.2	9.88	161.42	0.00	0.00	0.00	0.00	61	0	0	0	0	19,508	111	0
62+45	4.80	160.68	0.00	0.00	0.00	0.00	29	0	0	0	0	19,537	111	0
62+50	5.00	160.86	0.00	0.00	0.00	0.00	30	0	0	0	0	19,567	111	0
62+55	5.00	148.46	0.00	0.00	0.00	0.00	29	0	0	0	0	19,595	111	0
62+60	5.00	156.92	0.00	0.00	0.00	0.00	28	0	0	0	0	19,623	111	0
62+65	5.00	179.14	0.00	0.00	0.00	0.00	31	0	0	0	0	19,655	111	0
62+70	5.00	183.53	0.00	0.00	0.00	0.00	34	0	0	0	0	19,688	111	0
62+75	5.00	167.35	0.00	0.00	0.00	0.00	32	0	0	0	0	19,721	111	0
62+80	5.00	151.73	0.00	0.00	0.00	0.00	30	0	0	0	0	19,750	111	0
62+85	5.00	133.33	0.00	0.00	0.00	0.00	26	0	0	0	0	19,777	111	0
62+90	5.00	134.01	0.00	0.00	0.00	0.00	25	0	0	0	0	19,801	111	0
62+95	5.00	150.75	0.00	0.00	0.00	0.00	26	0	0	0	0	19,828	111	0
63+00	5.00	164.51	0.00	0.00	0.00	0.00	29	0	0	0	0	19,857	111	0
63+05	5.00	176.94	0.00	0.00	0.00	0.00	32	0	0	0	0	19,889	111	0
63+10	5.00	169.66	0.00	0.00	0.00	0.00	32	0	0	0	0	19,921	111	0
63+15	5.00	147.82	0.00	0.00	0.00	0.00	29	0	0	0	0	19,950	111	0
63+20	5.00	138.70	0.00	0.00	0.00	0.00	27	0	0	0	0	19,977	111	0
63+25	5.00	142.49	0.00	1.26	0.00	0.00	26	0	0	0	0	20,003	111	0
63+30	5.00	142.59	0.00	1.01	0.00	0.00	26	0	0	0	0	20,029	111	0
63+32.56	2.56	142.54	0.00	0.89	0.00	0.00	14	0	0	0	0	20,043	111	0
63+50	17.44	142.50	0.00	0.60	0.00	0.00	92	0	0	0	0	20,135	112	0
63+75	25.00	142.59	0.00	0.36	0.00	0.00	132	0	0	0	0	20,267	113	0
64+00	25.00	142.22	0.00	0.95	0.00	0.00	132	0	1	0	0	20,398	113	0
64+07.74	7.74	148.47	0.00	0.49	0.00	0.00	42	0	0	0	0	20,440	114	0
64+19.75	12.01	152.09	0.00	0.11	0.00	0.00	67	0	0	0	0	20,507	114	0
64+25	5.25	146.72	0.00	0.10	0.00	0.00	29	0	0	0	0	20,536	114	0
64+50	25.00	149.74	0.00	0.04	0.00	0.00	137	0	0	0	0	20,673	114	0
64+68.2	18.20	155.23	0.00	0.00	0.00	0.00	103	0	0	0	0	20,776	114	0
64+75	6.80	164.53	0.00	0.00	0.00	0.00	40	0	0	0	0	20,816	114	0
64+80.28	5.28	155.69	0.00	0.73	0.00	0.00	31	0	0	0	0	20,848	114	0
65+00	19.72	181.27	0.00	0.00	0.00	0.00	123	0	0	0	0	20,971	114	0
65+11.07	11.07	171.07	0.00	0.00	0.00	0.00	72	0	0	0	0	21,043	114	0
65+25	13.93	168.96	0.00	0.00	0.00	0.00	88	0	0	0	0	21,131	114	0
65+40.09	15.09	179.10	0.00	0.00	0.00	0.00	97	0	0	0	0	21,228	114	0
65+50	9.91	189.76	0.00	0.00	0.00	0.00	68	0	0	0	0	21,296	114	0
65+52.62	2.62	173.46	0.00	0.00	0.00	0.00	18	0	0	0	0	21,313	114	0
65+75	22.38	178.97	0.00	0.00	0.00	0.00	146	0	0	0	0	21,459	114	0
66+00	25.00	176.46	0.00	0.00	0.00	0.00	165	0	0	0	0	21,624	114	0
66+25	25.00	166.39	0.00	0.00	0.00	0.00	159	0	0	0	0	21,782	114	0
66+37.32	12.32	173.47	0.00	0.00	0.00	0.00	78	0	0	0	0	21,860	114	0
66+50	12.68	161.29	0.00	0.00	0.00	0.00	79	0	0	0	0	21,939	114	0
66+75	25.00	153.07	0.00	0.00	0.00	0.00	146	0	0	0	0	22,084	114	0
66+94.36	19.36	160.53	0.00	0.11	0.00	0.00	112	0	0	0	0	22,197	114	0
67+00	5.64	181.27	0.00	0.00	0.00	0.00	36	0	0	0	0	22,232	114	0

STH 89														
STATION	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
		Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.25	Expanded EBS Backfill 1.30	Reduced EBS in Fill 0.80	Mass Ordinate
						Note 1	Note 2	Note 3		Note 1		Note 5	Note 7	Note 8
67+08.77	8.77	160.32	0.00	0.00	0.00	55	0	0	0	22,288	114	0	0	22,173
67+25	16.23	142.30	0.00	0.32	0.00	91	0	0	0	22,379	115	0	0	22,264
67+50	25.00	139.46	0.00	0.40	0.00	130	0	0	0	22,509	115	0	0	22,394
67+75	25.00	134.75	0.00	0.66	0.00	127	0	0	0	22,636	116	0	0	22,521
67+80.08	5.08	135.01	0.00	0.55	0.00	25	0	0	0	22,662	116	0	0	22,546
67+85	4.92	134.67	0.00	0.89	0.00	25	0	0	0	22,686	116	0	0	22,570
67+90	5.00	133.24	0.00	1.03	0.00	25	0	0	0	22,711	116	0	0	22,595
67+95	5.00	143.68	0.00	0.00	0.00	26	0	0	0	22,737	116	0	0	22,620
68+00	5.00	143.39	0.00	0.00	0.00	27	0	0	0	22,763	116	0	0	22,647
68+05	5.00	154.34	0.00	0.00	0.00	28	0	0	0	22,791	116	0	0	22,674
68+10	5.00	157.69	0.00	0.00	0.00	29	0	0	0	22,820	116	0	0	22,703
68+15	5.00	149.79	0.00	0.00	0.00	28	0	0	0	22,848	116	0	0	22,732
68+20	5.00	150.97	0.00	0.00	0.00	28	0	0	0	22,876	116	0	0	22,760
68+25	5.00	144.26	0.00	0.00	0.00	27	0	0	0	22,903	116	0	0	22,787
68+30	5.00	137.04	0.00	0.00	0.00	26	0	0	0	22,929	116	0	0	22,813
68+35	5.00	128.52	0.00	0.00	0.00	25	0	0	0	22,954	116	0	0	22,838
68+40	5.00	135.22	0.00	0.00	0.00	24	0	0	0	22,978	116	0	0	22,862
68+45	5.00	144.95	0.00	0.00	0.00	26	0	0	0	23,004	116	0	0	22,888
68+50	5.00	155.30	0.00	0.00	0.00	28	0	0	0	23,032	116	0	0	22,916
68+55	5.00	158.13	0.00	0.00	0.00	29	0	0	0	23,061	116	0	0	22,945
68+60	5.00	158.28	0.00	0.00	0.00	29	0	0	0	23,090	116	0	0	22,974
68+65	5.00	165.37	0.00	0.00	0.00	30	0	0	0	23,120	116	0	0	23,004
68+70	5.00	155.89	0.00	0.90	0.00	30	0	0	0	23,150	116	0	0	23,034
68+75	5.00	133.80	0.00	0.79	0.00	27	0	0	0	23,177	117	0	0	23,060
68+80	5.00	133.56	0.00	0.69	0.00	25	0	0	0	23,202	117	0	0	23,085
68+83.81	3.81	133.13	0.00	0.61	0.00	19	0	0	0	23,220	117	0	0	23,104
69+00	16.19	130.79	0.00	0.62	0.00	79	0	0	0	23,300	117	0	0	23,182
69+25	25.00	130.82	0.00	0.23	0.00	121	0	0	0	23,421	118	0	0	23,303
69+30.56	5.56	132.82	0.00	0.20	0.00	27	0	0	0	23,448	118	0	0	23,330
69+39.73	9.17	133.54	0.00	0.03	0.00	45	0	0	0	23,493	118	0	0	23,375
69+50	10.27	130.36	0.00	0.28	0.00	50	0	0	0	23,543	118	0	0	23,425
69+75	25.00	128.71	0.00	0.42	0.00	120	0	0	0	23,663	118	0	0	23,545
70+00	25.00	125.96	0.00	0.47	0.00	118	0	0	0	23,781	119	0	0	23,662
70+04.92	4.92	135.01	0.00	0.55	0.00	24	0	0	0	23,805	119	0	0	23,686
70+25	20.08	136.24	0.00	0.87	0.00	101	0	1	0	23,906	120	0	0	23,786
70+40.02	15.02	120.86	0.00	1.64	0.00	71	0	1	0	23,977	121	0	0	23,857
70+50	9.98	130.16	0.00	0.14	0.00	46	0	0	0	24,024	121	0	0	23,903
70+55.46	5.46	119.08	0.00	1.23	0.00	25	0	0	0	24,049	121	0	0	23,928
70+75	19.54	120.40	0.00	0.16	0.00	87	0	1	0	24,135	122	0	0	24,014
71+00	25.00	119.49	0.00	0.31	0.00	111	0	0	0	24,247	122	0	0	24,125
71+25	25.00	119.88	0.00	0.61	0.00	111	0	0	0	24,357	123	0	0	24,235
71+50	25.00	125.63	0.00	0.24	0.00	114	0	0	0	24,471	123	0	0	24,348
71+66.25	16.25	139.83	0.00	0.10	0.00	80	0	0	0	24,551	123	0	0	24,428
71+75	8.75	148.85	0.00	0.00	0.00	47	0	0	0	24,598	123	0	0	24,475
71+88.74	13.74	127.02	0.00	0.20	0.00	70	0	0	0	24,668	123	0	0	24,545
72+00	11.26	125.65	0.00	0.61	0.00	53	0	0	0	24,721	123	0	0	24,597
72+25	25.00	122.26	0.00	1.57	0.00	115	0	1	0	24,835	125	0	0	24,711
72+50	25.00	126.57	0.00	1.55	0.00	115	0	1	0	24,951	127	0	0	24,824
72+69.85	19.85	124.35	0.00	2.51	0.00	92	0	1	0	25,043	128	0	0	24,914
72+75	5.15	160.01	0.00	2.73	0.00	27	0	0	0	25,070	129	0	0	24,941
72+82.9	7.90	168.31	0.00	2.00	0.00	48	0	1	0	25,118	130	0	0	24,988
73+00	17.10	125.13	0.00	3.90	0.00	93	0	2	0	25,211	132	0	0	25,079
73+25	25.00	129.76	0.00	4.36	0.00	118	0	4	0	25,329	137	0	0	25,192
73+50	25.00	134.89	0.00	4.50	0.00	123	0	4	0	25,451	142	0	0	25,309
73+75	25.00	139.82	0.00	6.27	0.00	127	0	5	0	25,579	148	0	0	25,430
74+00	25.00	139.27	0.00	2.83	0.00	129	0	4	0	25,708	154	0	0	25,554
74+07.47	7.47	148.26	0.00	0.17	0.00	40	0	0	0	25,748	154	0	0	25,593
74+20.63	13.16	145.37	0.00	1.99	0.00	72	0	1	0	25,819	155	0	0	25,664
74+25	4.37	135.76	0.00	1.92	0.00	23	0	0	0	25,842	155	0	0	25,687

STH 89														
STATION	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
		Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.25	Expanded EBS Backfill 1.30	Reduced EBS in Fill 0.80	Mass Ordinate
74+33.66	8.66	132.51	0.00	0.04	0.00	43	0	0	0	25,885	156	0	0	25,729
74+40.97	7.31	126.94	0.00	3.26	0.00	35	0	0	0	25,920	156	0	0	25,764
74+50	9.03	159.48	0.00	4.50	0.00	48	0	1	0	25,968	158	0	0	25,810
74+57.96	7.96	146.80	0.00	5.56	0.00	45	0	1	0	26,013	160	0	0	25,853
74+75	17.04	133.68	0.00	5.84	0.00	89	0	4	0	26,102	164	0	0	25,937
75+00	25.00	134.38	0.00	5.25	0.00	124	0	5	0	26,226	171	0	0	26,055
75+25	25.00	153.59	0.00	4.12	0.00	133	0	4	0	26,359	176	0	0	26,183
75+33.23	8.23	143.32	0.00	4.65	0.00	45	0	1	0	26,404	178	0	0	26,227
75+50	16.77	137.17	0.00	2.91	0.00	87	0	2	0	26,491	181	0	0	26,311
75+75	25.00	139.09	0.00	2.52	0.00	128	0	3	0	26,619	184	0	0	26,436
75+79.88	4.88	140.61	0.00	0.28	0.00	25	0	0	0	26,644	184	0	0	26,460
75+89.58	9.70	143.84	0.00	0.00	0.00	51	0	0	0	26,696	184	0	0	26,512
76+00	10.42	139.16	0.00	1.57	0.00	55	0	0	0	26,750	184	0	0	26,566
76+12.87	12.87	147.26	0.00	1.38	0.00	68	0	1	0	26,818	185	0	0	26,633
76+25	12.13	138.87	0.00	1.38	0.00	64	0	1	0	26,883	186	0	0	26,697
76+50	25.00	135.53	0.00	2.01	0.00	127	0	2	0	27,010	188	0	0	26,822
76+55.19	5.19	133.86	0.00	1.48	0.00	26	0	0	0	27,036	188	0	0	26,847
76+69.48	14.29	136.50	0.00	0.00	0.00	72	0	0	0	27,107	189	0	0	26,918
76+75	5.52	131.57	0.00	2.62	0.00	27	0	0	0	27,135	189	0	0	26,945
77+00	25.00	123.91	0.00	2.98	0.00	118	0	3	0	27,253	193	0	0	27,060
77+09.37	9.37	122.69	0.00	3.43	0.00	43	0	1	0	27,296	194	0	0	27,102
77+19.33	9.96	124.37	0.00	3.30	0.00	46	0	1	0	27,341	196	0	0	27,146
77+25	5.67	118.75	0.00	2.36	0.00	26	0	1	0	27,367	196	0	0	27,171
77+50	25.00	118.01	0.00	3.21	0.00	110	0	3	0	27,476	199	0	0	27,277
77+75	25.00	117.74	0.00	2.92	0.00	109	0	3	0	27,586	203	0	0	27,383
78+00	25.00	118.71	0.00	3.33	0.00	109	0	3	0	27,695	207	0	0	27,488
78+16.3	16.30	122.20	0.00	2.44	0.00	73	0	2	0	27,768	209	0	0	27,559
78+25	8.70	130.76	0.00	0.00	0.00	41	0	0	0	27,808	209	0	0	27,599
78+36.18	11.18	124.68	0.00	3.17	0.00	53	0	1	0	27,861	210	0	0	27,651
78+45.93	9.75	134.53	0.00	0.23	0.00	47	0	1	0	27,908	211	0	0	27,697
78+50	4.07	139.14	0.00	0.00	0.00	21	0	0	0	27,929	211	0	0	27,718
78+62.78	12.78	134.43	0.00	0.70	0.00	65	0	0	0	27,994	211	0	0	27,782
78+69.72	6.94	123.38	0.00	4.29	0.00	33	0	1	0	28,027	212	0	0	27,815
78+75	5.28	120.96	0.00	3.42	0.00	24	0	1	0	28,051	213	0	0	27,838
79+00	25.00	125.09	0.00	2.29	0.00	114	0	3	0	28,164	216	0	0	27,948
79+25	25.00	126.77	0.00	2.17	0.00	117	0	2	0	28,281	219	0	0	28,062
79+50	25.00	126.37	0.00	2.12	0.00	117	0	2	0	28,398	221	0	0	28,177
79+75	25.00	148.79	0.00	0.00	0.00	127	0	1	0	28,526	222	0	0	28,303
79+87.26	12.26	133.59	0.00	0.00	0.00	64	0	0	0	28,590	222	0	0	28,367
80+00	12.74	135.92	0.00	2.05	0.00	64	0	0	0	28,653	223	0	0	28,430
80+25	25.00	120.15	0.00	3.18	0.00	119	0	2	0	28,772	226	0	0	28,546
80+35.94	10.94	115.18	0.00	3.28	0.00	48	0	1	0	28,820	228	0	0	28,592
80+50	14.06	121.71	0.00	0.00	0.00	62	0	1	0	28,881	229	0	0	28,652
80+75	25.00	114.60	0.00	4.24	0.00	109	0	2	0	28,991	231	0	0	28,759
81+00	25.00	117.05	0.00	4.13	0.00	107	0	4	0	29,098	236	0	0	28,862
81+25	25.00	120.97	0.00	2.96	0.00	110	0	3	0	29,208	240	0	0	28,968
81+50	25.00	116.99	0.00	4.13	0.00	110	0	3	0	29,318	244	0	0	29,074
81+61.68	11.68	123.92	0.00	3.46	0.00	52	0	2	0	29,370	246	0	0	29,124
81+75	13.32	138.29	0.00	0.16	0.00	65	0	1	0	29,435	247	0	0	29,188
82+00	25.00	129.55	0.00	2.75	0.00	124	0	1	0	29,559	249	0	0	29,310
82+25	25.00	137.22	0.00	2.36	0.00	124	0	2	0	29,683	252	0	0	29,430
82+31.68	6.68	145.39	0.00	0.00	0.00	35	0	0	0	29,717	252	0	0	29,465
82+42.66	10.98	147.13	0.00	0.03	0.00	59	0	0	0	29,777	252	0	0	29,524
82+50	7.34	145.88	0.00	1.98	0.00	40	0	0	0	29,817	253	0	0	29,564
82+75	25.00	144.88	0.00	2.48	0.00	135	0	2	0	29,951	255	0	0	29,696
82+91.76	16.76	115.77	0.00	3.51	0.00	81	0	2	0	30,032	258	0	0	29,775
83+00	8.24	128.39	0.00	3.60	0.00	37	0	1	0	30,070	259	0	0	29,810
83+02.1	2.10	128.18	0.00	1.19	0.00	10	0	0	0	30,080	259	0	0	29,820
83+17.21	15.11	132.33	0.00	0.00	0.00	73	0	0	0	30,152	260	0	0	29,893

STH 89														
STATION	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
		Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.25	Expanded EBS Backfill 1.30	Reduced EBS in Fill 0.80	Mass Ordinate
						Note 1	Note 2	Note 3		Note 1	Note 5	Note 7	Note 8	
83+25	7.79	125.19	0.00	5.08	0.00	37	0	1	0	30,190	261	0	0	29,929
83+50	25.00	102.48	0.00	5.66	0.00	105	0	5	0	30,295	267	0	0	30,028
83+75	25.00	100.65	0.00	3.26	0.00	94	0	4	0	30,389	272	0	0	30,117
84+00	25.00	97.18	0.00	3.39	0.00	92	0	3	0	30,481	276	0	0	30,205
84+25	25.00	96.52	0.00	3.52	0.00	90	0	3	0	30,570	280	0	0	30,290
84+34.61	9.61	97.22	0.00	3.52	0.00	34	0	1	0	30,605	281	0	0	30,323
84+35	0.39	97.23	0.00	3.50	0.00	1	0	0	0	30,606	281	0	0	30,325
84+40	5.00	97.17	0.00	3.43	0.00	18	0	1	0	30,624	282	0	0	30,342
84+45	5.00	96.84	0.00	3.04	0.00	18	0	1	0	30,642	283	0	0	30,359
84+50	5.00	94.21	0.00	2.97	0.00	18	0	1	0	30,660	284	0	0	30,376
84+55	5.00	118.44	0.00	0.00	0.00	20	0	0	0	30,680	284	0	0	30,395
84+60	5.00	151.52	0.00	0.00	0.00	25	0	0	0	30,705	284	0	0	30,420
84+65	5.00	149.56	0.00	0.00	0.00	28	0	0	0	30,732	284	0	0	30,448
84+70	5.00	138.58	0.00	0.00	0.00	27	0	0	0	30,759	284	0	0	30,475
84+75	5.00	122.45	0.00	0.00	0.00	24	0	0	0	30,783	284	0	0	30,499
84+80	5.00	107.72	0.00	1.02	0.00	21	0	0	0	30,805	284	0	0	30,520
84+85	5.00	101.82	0.00	0.60	0.00	19	0	0	0	30,824	284	0	0	30,540
84+90	5.00	115.78	0.00	0.56	0.00	20	0	0	0	30,844	285	0	0	30,560
84+95	5.00	131.16	0.00	0.52	0.00	23	0	0	0	30,867	285	0	0	30,582
85+00	5.00	142.69	0.00	0.48	0.00	25	0	0	0	30,892	285	0	0	30,608
85+05	5.00	120.80	0.00	0.71	0.00	24	0	0	0	30,917	285	0	0	30,632
85+10	5.00	115.50	0.00	0.63	0.00	22	0	0	0	30,939	285	0	0	30,654
85+15	5.00	115.46	0.00	0.87	0.00	21	0	0	0	30,960	285	0	0	30,675
85+20	5.00	119.42	0.00	0.50	0.00	22	0	0	0	30,982	285	0	0	30,696
85+25	5.00	121.25	0.00	0.13	0.00	22	0	0	0	31,004	285	0	0	30,719
85+25.17	0.17	121.29	0.00	0.13	0.00	1	0	0	0	31,005	285	0	0	30,719
85+30	4.83	117.67	0.00	0.05	0.00	21	0	0	0	31,026	285	0	0	30,741
85+35	5.00	120.49	0.00	0.01	0.00	22	0	0	0	31,048	285	0	0	30,763
85+40	5.00	123.53	0.00	0.00	0.00	23	0	0	0	31,071	285	0	0	30,785
85+45	5.00	126.16	0.00	0.00	0.00	23	0	0	0	31,094	285	0	0	30,808
85+50	5.00	128.57	0.00	0.00	0.00	24	0	0	0	31,118	285	0	0	30,832
85+55	5.00	129.93	0.00	0.00	0.00	24	0	0	0	31,141	285	0	0	30,856
85+60	5.00	131.24	0.00	0.00	0.00	24	0	0	0	31,166	285	0	0	30,880
85+65	5.00	132.27	0.00	0.00	0.00	24	0	0	0	31,190	285	0	0	30,905
85+70	5.00	133.72	0.00	0.00	0.00	25	0	0	0	31,215	285	0	0	30,929
85+75	5.00	134.61	0.00	0.00	0.00	25	0	0	0	31,240	285	0	0	30,954
85+80	5.00	132.78	0.00	0.00	0.00	25	0	0	0	31,264	285	0	0	30,979
85+85	5.00	129.02	0.00	0.01	0.00	24	0	0	0	31,289	285	0	0	31,003
85+90	5.00	125.73	0.00	0.03	0.00	24	0	0	0	31,312	286	0	0	31,027
85+95	5.00	122.05	0.00	0.22	0.00	23	0	0	0	31,335	286	0	0	31,050
86+00	5.00	119.03	0.00	0.72	0.00	22	0	0	0	31,357	286	0	0	31,072
86+05	5.00	120.33	0.00	0.52	0.00	22	0	0	0	31,380	286	0	0	31,094
86+10	5.00	128.69	0.00	0.19	0.00	23	0	0	0	31,403	286	0	0	31,117
86+15	5.00	138.94	0.00	0.07	0.00	25	0	0	0	31,427	286	0	0	31,141
86+20	5.00	149.39	0.00	0.04	0.00	27	0	0	0	31,454	286	0	0	31,168
86+25	5.00	142.52	0.00	0.02	0.00	27	0	0	0	31,481	286	0	0	31,195
86+30	5.00	138.29	0.00	0.00	0.00	26	0	0	0	31,507	286	0	0	31,221
86+35	5.00	132.51	0.00	0.00	0.00	25	0	0	0	31,532	286	0	0	31,246
86+40	5.00	129.72	0.00	0.01	0.00	24	0	0	0	31,556	286	0	0	31,271
86+45	5.00	138.05	0.00	0.02	0.00	25	0	0	0	31,581	286	0	0	31,295
86+50	5.00	147.10	0.00	0.01	0.00	26	0	0	0	31,608	286	0	0	31,322
86+55	5.00	156.24	0.00	0.01	0.00	28	0	0	0	31,636	286	0	0	31,350
86+60	5.00	165.56	0.00	0.01	0.00	30	0	0	0	31,666	286	0	0	31,380
86+65	5.00	175.62	0.00	0.02	0.00	32	0	0	0	31,697	286	0	0	31,411
86+70	5.00	169.71	0.00	0.70	0.00	32	0	0	0	31,729	286	0	0	31,443
86+75	5.00	171.95	0.00	0.08	0.00	32	0	0	0	31,761	286	0	0	31,475
86+75.61	0.61	172.51	0.00	0.07	0.00	4	0	0	0	31,765	286	0	0	31,478
87+00	24.39	178.16	0.00	0.00	0.00	158	0	0	0	31,923	286	0	0	31,637
87+25	25.00	168.80	0.00	0.00	0.00	161	0	0	0	32,084	286	0	0	31,797

STH 89														
STATION	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
		Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.25	Expanded EBS Backfill 1.30	Reduced EBS in Fill 0.80	Mass Ordinate
						Note 1	Note 2	Note 3		Note 1		Note 5	Note 7	Note 8
87+50	25.00	176.47	0.00	0.00	0.00	160	0	0	0	32,243	286	0	0	31,957
87+75	25.00	176.89	0.00	0.00	0.00	164	0	0	0	32,407	286	0	0	32,121
88+00	25.00	168.98	0.00	0.00	0.00	160	0	0	0	32,567	286	0	0	32,281
88+25	25.00	160.24	0.00	0.01	0.00	152	0	0	0	32,720	286	0	0	32,433
88+43.75	18.75	149.82	0.00	0.04	0.00	108	0	0	0	32,827	286	0	0	32,541
88+45	1.25	152.54	0.00	0.04	0.00	7	0	0	0	32,834	286	0	0	32,548
88+50	5.00	164.19	0.00	0.00	0.00	29	0	0	0	32,864	286	0	0	32,577
88+55	5.00	169.61	0.00	0.01	0.00	31	0	0	0	32,895	286	0	0	32,608
88+60	5.00	179.09	0.00	0.00	0.00	32	0	0	0	32,927	286	0	0	32,641
88+65	5.00	172.57	0.00	0.00	0.00	33	0	0	0	32,959	286	0	0	32,673
88+70	5.00	159.52	0.00	0.00	0.00	31	0	0	0	32,990	286	0	0	32,704
88+75	5.00	144.19	0.00	0.00	0.00	28	0	0	0	33,018	286	0	0	32,732
88+80	5.00	134.42	0.00	0.05	0.00	26	0	0	0	33,044	286	0	0	32,758
88+85	5.00	130.06	0.00	0.04	0.00	24	0	0	0	33,069	286	0	0	32,782
88+90	5.00	133.59	0.00	0.00	0.00	24	0	0	0	33,093	286	0	0	32,807
88+95	5.00	133.75	0.00	0.00	0.00	25	0	0	0	33,118	286	0	0	32,831
89+00	5.00	133.85	0.00	0.00	0.00	25	0	0	0	33,142	286	0	0	32,856
89+05	5.00	134.05	0.00	0.05	0.00	25	0	0	0	33,167	286	0	0	32,881
89+10	5.00	134.16	0.00	0.06	0.00	25	0	0	0	33,192	286	0	0	32,906
89+15	5.00	134.26	0.00	0.08	0.00	25	0	0	0	33,217	286	0	0	32,931
89+20	5.00	133.91	0.00	0.11	0.00	25	0	0	0	33,242	286	0	0	32,956
89+25	5.00	134.05	0.00	0.12	0.00	25	0	0	0	33,267	286	0	0	32,980
89+30	5.00	134.20	0.00	0.53	0.00	25	0	0	0	33,291	286	0	0	33,005
89+35	5.00	139.23	0.00	7.08	0.00	25	0	1	0	33,317	287	0	0	33,030
89+40	5.00	147.23	0.00	5.31	0.00	27	0	1	0	33,343	289	0	0	33,055
89+45	5.00	148.41	0.00	2.44	0.00	27	0	1	0	33,371	290	0	0	33,081
89+50	5.00	158.26	0.00	0.92	0.00	28	0	0	0	33,399	290	0	0	33,109
89+55	5.00	168.70	0.00	0.01	0.00	30	0	0	0	33,429	290	0	0	33,139
89+60	5.00	172.34	0.00	0.00	0.00	32	0	0	0	33,461	290	0	0	33,171
89+65	5.00	156.94	0.00	0.00	0.00	30	0	0	0	33,491	290	0	0	33,201
89+70	5.00	161.74	0.00	0.00	0.00	30	0	0	0	33,521	290	0	0	33,231
89+75	5.00	158.08	0.00	0.00	0.00	30	0	0	0	33,551	290	0	0	33,260
89+80	5.00	153.96	0.00	0.00	0.00	29	0	0	0	33,579	290	0	0	33,289
89+85	5.00	151.59	0.00	0.00	0.00	28	0	0	0	33,608	290	0	0	33,318
89+90	5.00	134.14	0.00	0.00	0.00	26	0	0	0	33,634	290	0	0	33,344
89+95	5.00	134.70	0.00	0.09	0.00	25	0	0	0	33,659	290	0	0	33,369
90+00	5.00	142.09	0.00	0.01	0.00	26	0	0	0	33,685	290	0	0	33,395
90+05	5.00	150.83	0.00	0.00	0.00	27	0	0	0	33,712	290	0	0	33,422
90+10	5.00	158.64	0.00	0.00	0.00	29	0	0	0	33,740	290	0	0	33,450
90+15	5.00	166.59	0.00	0.00	0.00	30	0	0	0	33,771	290	0	0	33,480
90+20	5.00	172.46	0.00	0.00	0.00	31	0	0	0	33,802	290	0	0	33,512
90+25	5.00	177.71	0.00	0.00	0.00	32	0	0	0	33,834	290	0	0	33,544
90+30	5.00	0.00	0.00	0.65	0.00	16	0	0	0	33,851	290	0	0	33,561
90+35	5.00	169.41	0.00	0.10	0.00	16	0	0	0	33,867	290	0	0	33,576
90+40	5.00	161.71	0.00	0.00	0.00	31	0	0	0	33,897	290	0	0	33,607
90+45	5.00	156.03	0.00	0.00	0.00	29	0	0	0	33,927	290	0	0	33,636
90+50	5.00	152.57	0.00	0.00	0.00	29	0	0	0	33,955	290	0	0	33,665
90+55	5.00	150.76	0.00	0.00	0.00	28	0	0	0	33,983	290	0	0	33,693
90+60	5.00	150.24	0.00	0.00	0.00	28	0	0	0	34,011	290	0	0	33,721
90+61.21	1.21	150.14	0.00	0.00	0.00	7	0	0	0	34,018	290	0	0	33,728
90+75	13.79	148.77	0.00	0.02	0.00	76	0	0	0	34,094	290	0	0	33,804
91+00	25.00	147.04	0.00	0.04	0.00	137	0	0	0	34,231	290	0	0	33,941
91+25	25.00	148.99	0.00	0.00	0.00	137	0	0	0	34,368	290	0	0	34,078
91+50	25.00	149.52	0.00	0.00	0.00	138	0	0	0	34,506	290	0	0	34,216
91+75	25.00	150.92	0.00	0.00	0.00	139	0	0	0	34,645	290	0	0	34,355
92+00	25.00	149.53	0.00	0.00	0.00	139	0	0	0	34,785	290	0	0	34,494
92+25	25.00	147.69	0.00	0.01	0.00	138	0	0	0	34,922	290	0	0	34,632
92+50	25.00	147.49	0.00	0.01	0.00	137	0	0	0	35,059	290	0	0	34,768
92+75	25.00	147.35	0.00	0.02	0.00	136	0	0	0	35,195	290	0	0	34,905

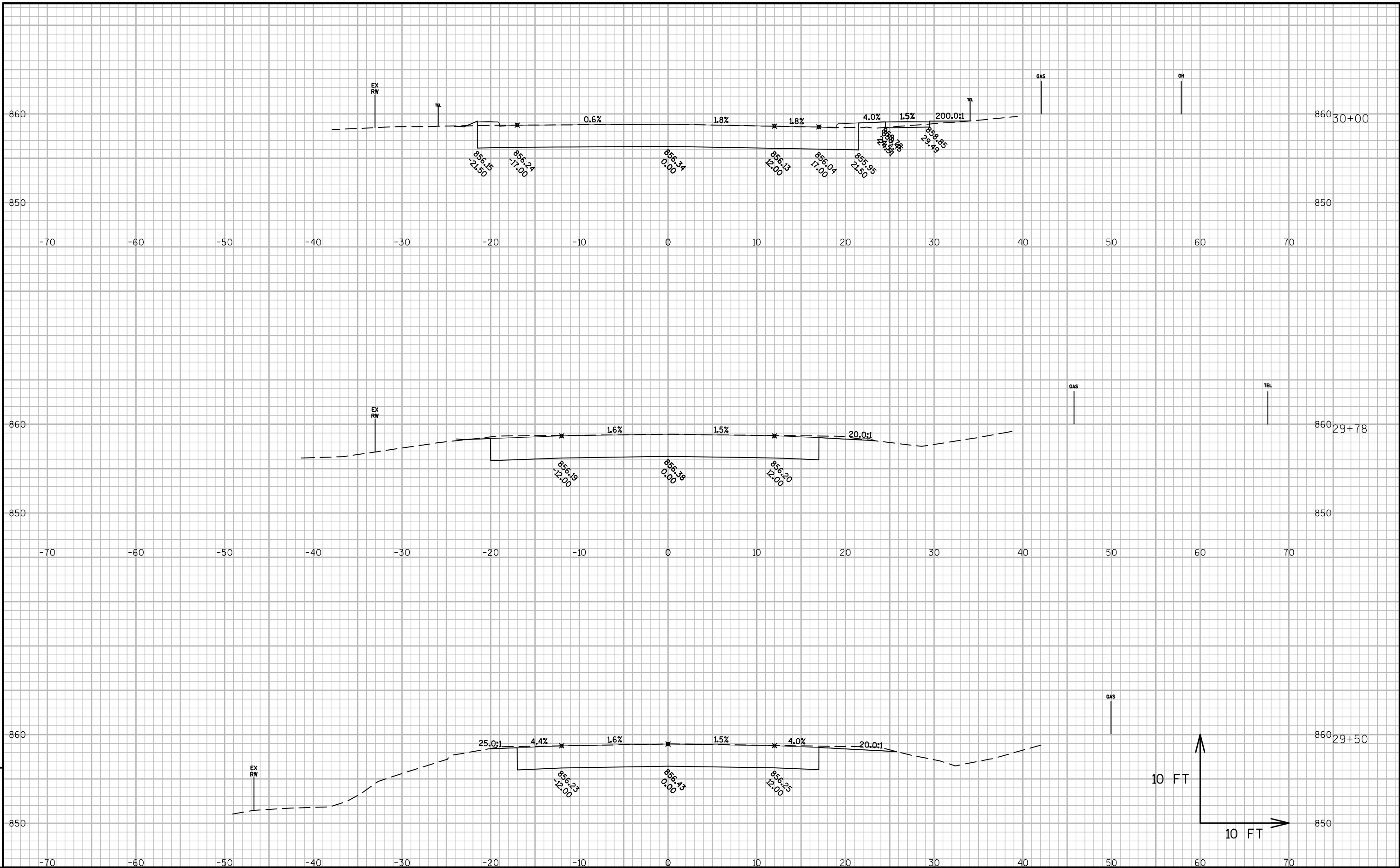
STH 89														
STATION	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
		Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.25	Expanded EBS Backfill 1.30	Reduced EBS in Fill 0.80	Mass Ordinate
93+00	25.00	145.06	0.00	0.03	0.00	135	0	0	0	35,331	290	0	0	35,040
93+25	25.00	145.87	0.00	0.05	0.00	135	0	0	0	35,465	290	0	0	35,175
93+50	25.00	144.58	0.00	0.05	0.00	134	0	0	0	35,600	291	0	0	35,309
93+75	25.00	153.54	0.00	0.08	0.00	138	0	0	0	35,738	291	0	0	35,447
94+00	25.00	146.34	0.00	0.03	0.00	139	0	0	0	35,877	291	0	0	35,586
94+25	25.00	147.64	0.00	0.12	0.00	136	0	0	0	36,013	291	0	0	35,722
94+50	25.00	147.41	0.00	0.05	0.00	137	0	0	0	36,149	291	0	0	35,859
94+75	25.00	146.72	0.00	0.08	0.00	136	0	0	0	36,286	291	0	0	35,995
95+00	25.00	145.42	0.00	0.08	0.00	135	0	0	0	36,421	291	0	0	36,130
95+03.08	3.08	145.24	0.00	0.07	0.00	17	0	0	0	36,437	291	0	0	36,146
95+05	1.92	145.18	0.00	0.06	0.00	10	0	0	0	36,448	291	0	0	36,157
95+10	5.00	147.48	0.00	0.03	0.00	27	0	0	0	36,475	291	0	0	36,184
95+15	5.00	152.66	0.00	0.03	0.00	28	0	0	0	36,503	291	0	0	36,212
95+20	5.00	162.52	0.00	0.06	0.00	29	0	0	0	36,532	291	0	0	36,241
95+25	5.00	154.04	0.00	0.00	0.00	29	0	0	0	36,561	291	0	0	36,270
95+30	5.00	144.31	0.00	0.00	0.00	28	0	0	0	36,589	291	0	0	36,298
95+35	5.00	134.36	0.00	0.00	0.00	26	0	0	0	36,615	291	0	0	36,323
95+40	5.00	120.35	0.00	0.00	0.00	24	0	0	0	36,638	291	0	0	36,347

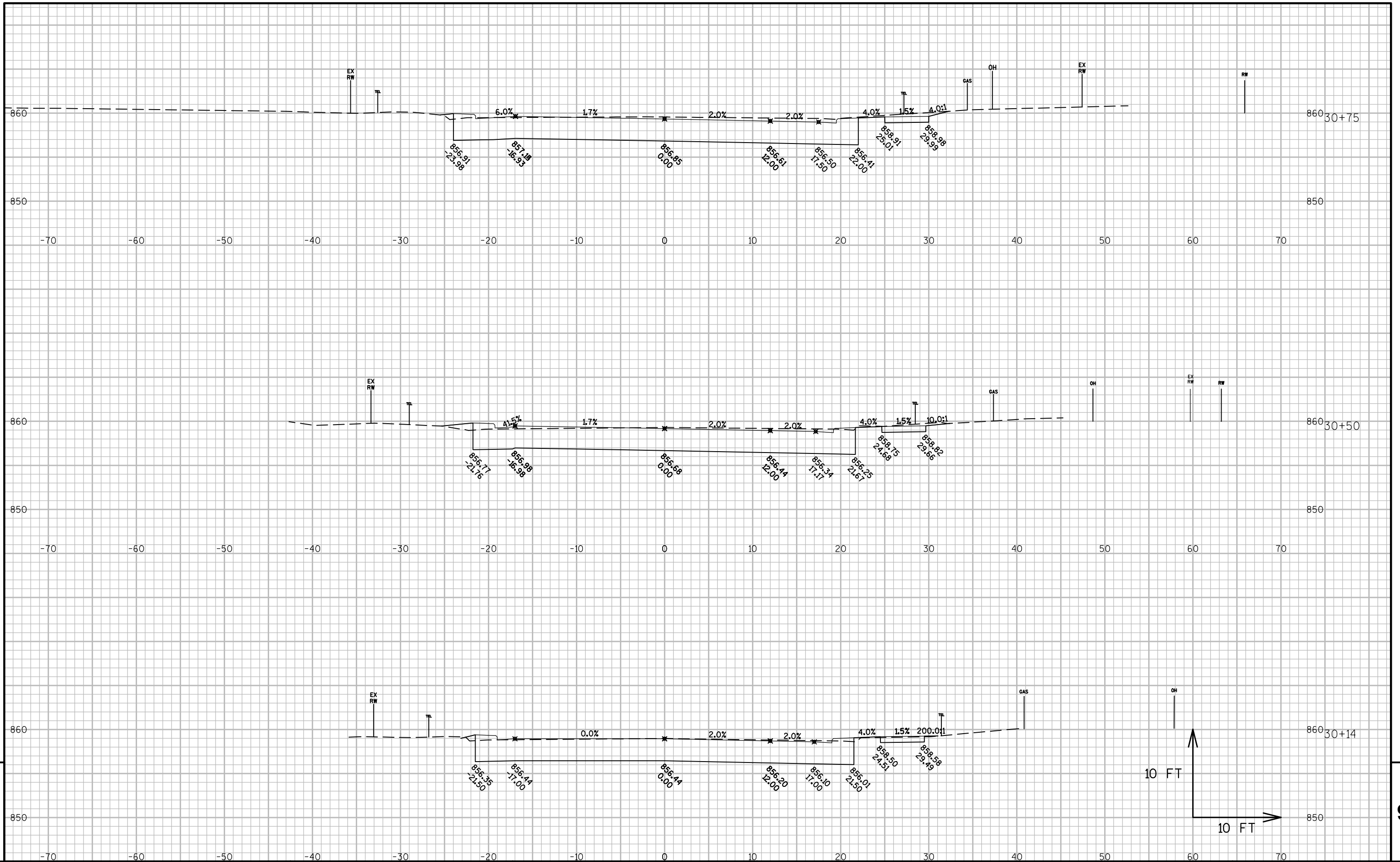
Temp Lane Winter Carryover														
STATION	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
		Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.25	Expanded EBS Backfill 1.30	Reduced EBS in Fill 0.80	Mass Ordinate
Note 1	Note 2	Note 3		Note 1		Note 5	Note 7	Note 8						
40+40	0.00	39.31	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0
40+50	10.00	38.40	0.00	0.14	0.00	14	0	0	0	14	0	0	0	14
40+75	25.00	39.66	0.00	0.00	0.00	36	0	0	0	51	0	0	0	50
41+00	25.00	42.27	0.00	0.00	0.00	38	0	0	0	88	0	0	0	88
41+25	25.00	46.51	0.00	0.00	0.00	41	0	0	0	130	0	0	0	129
41+50	25.00	50.70	0.00	0.00	0.00	45	0	0	0	175	0	0	0	174
41+75	25.00	56.12	0.00	0.00	0.00	49	0	0	0	224	0	0	0	224
42+00	25.00	63.42	0.00	0.00	0.00	55	0	0	0	279	0	0	0	279
42+25	25.00	69.63	0.00	0.00	0.00	62	0	0	0	341	0	0	0	341
42+50	25.00	78.82	0.00	0.00	0.00	69	0	0	0	410	0	0	0	410
42+75	25.00	86.40	0.00	0.00	0.00	76	0	0	0	486	0	0	0	486
43+00	25.00	96.71	0.00	0.00	0.00	85	0	0	0	571	0	0	0	571
43+25	25.00	101.23	0.00	0.00	0.00	92	0	0	0	663	0	0	0	662
43+50	25.00	98.94	0.00	0.00	0.00	93	0	0	0	755	0	0	0	755
43+75	25.00	99.46	0.00	0.00	0.00	92	0	0	0	847	0	0	0	847
44+00	25.00	96.01	0.00	0.00	0.00	90	0	0	0	938	0	0	0	937

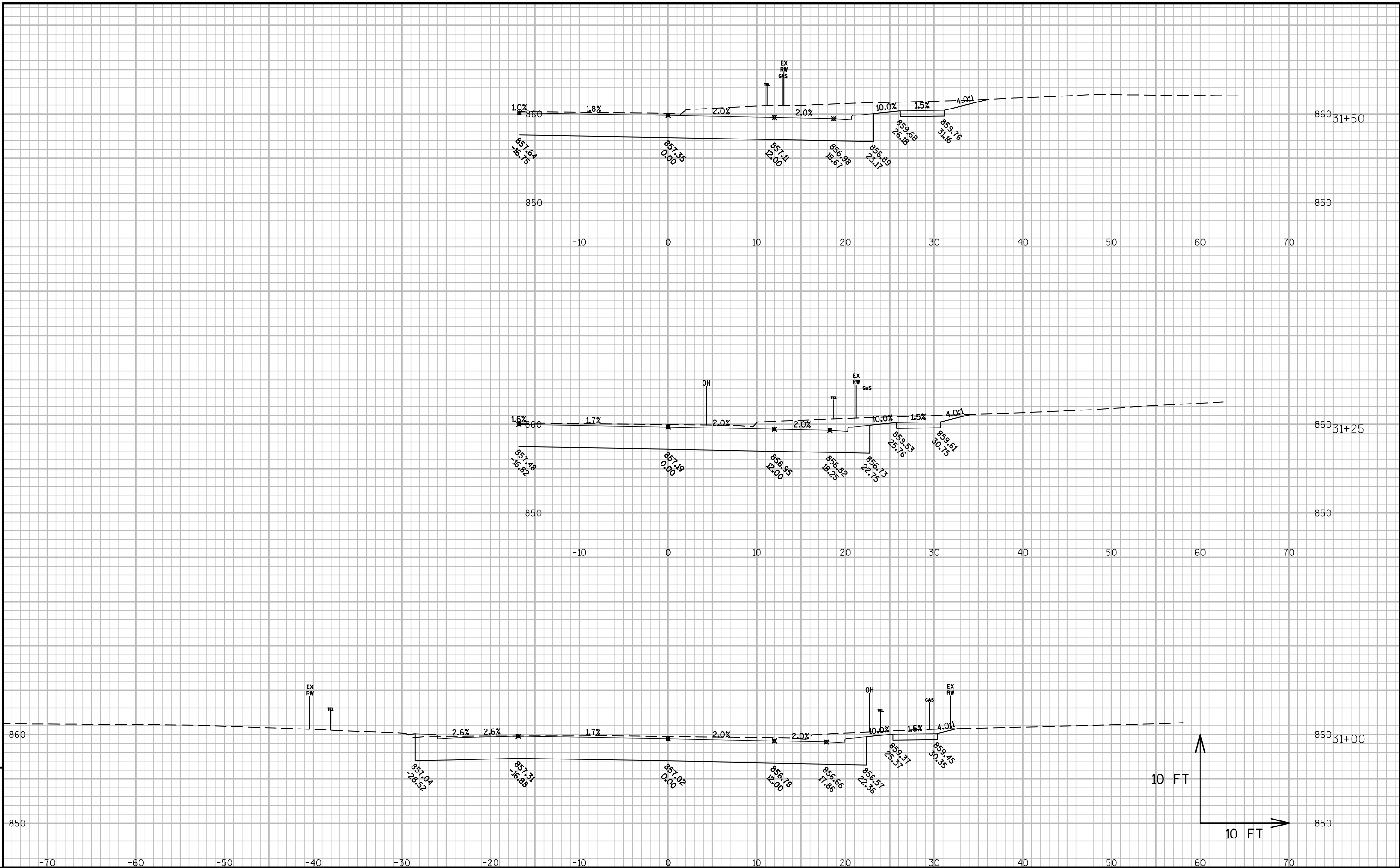
Notes:		
1 - Cut	Cut includes Salvaged/Unusable Pavement material	
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections	
3 - Fill	Does not include Unusable Pavement Exc volume	
4 - Expanded Marsh Backfill	Will be backfilled with Granular Backfill (or Cut, or Borrow)	Note 4 - Select one based on input dialog selection
5 - Expanded EBS	Will be backfilled with Granular Backfill (or Cut, or Borrow)	Note 5 - Select one based on input dialog selection
6 - Reduced Marsh in Fill	Reduced Marsh Excavation that can be used in Fill	Note 6 - If excavated Marsh can be used in Fill
7 - Reduced EBS in Fill	Reduced EBS Excavation that can be used in Fill	Note 7 - If excavated EBS can be used in Fill
8 - Mass Ordinate	If Marsh or EBS to be backfilled with Cut or Borrow: $[(\text{Cut} + \text{Marsh Exc} + \text{EBS}) - ((\text{Fill} - \text{Reduced Marsh in Fill}) - (\text{Reduced EBS in Fill}) - \text{Expanded Rock}) * \text{Fill Factor})]$	Note 8 - Select one based on mass haul input dialog selection. EBS and Marsh Exc used outside 1:1 in fill slopes
8 - Mass Ordinate	If Marsh and EBS to be backfilled with Granular: $[(\text{Cut} + \text{EBS} + \text{Marsh Exc}) - ((\text{Fill} - (\text{Reduced Marsh in Fill}) - (\text{Reduced EBS in Fill}) - (\text{Expanded Rock})) * \text{Fill Factor})]$	EBS and Marsh Exc used outside 1:1 in fill slopes
8 - Mass Ordinate	If Marsh and EBS to be backfilled with Granular: $[(\text{Cut}) - ((\text{Fill} - \text{Expanded Rock}) * \text{Fill Factor})]$	Marsh and EBS are not usable outside the 1:1 slopes
8 - Mass Ordinate	If Marsh and EBS to be backfilled with Cut or Borrow: $[(\text{Cut}) - ((\text{Fill} - \text{Expanded Rock}) * \text{Fill Factor})]$	Marsh and EBS are not usable outside the 1:1 slopes

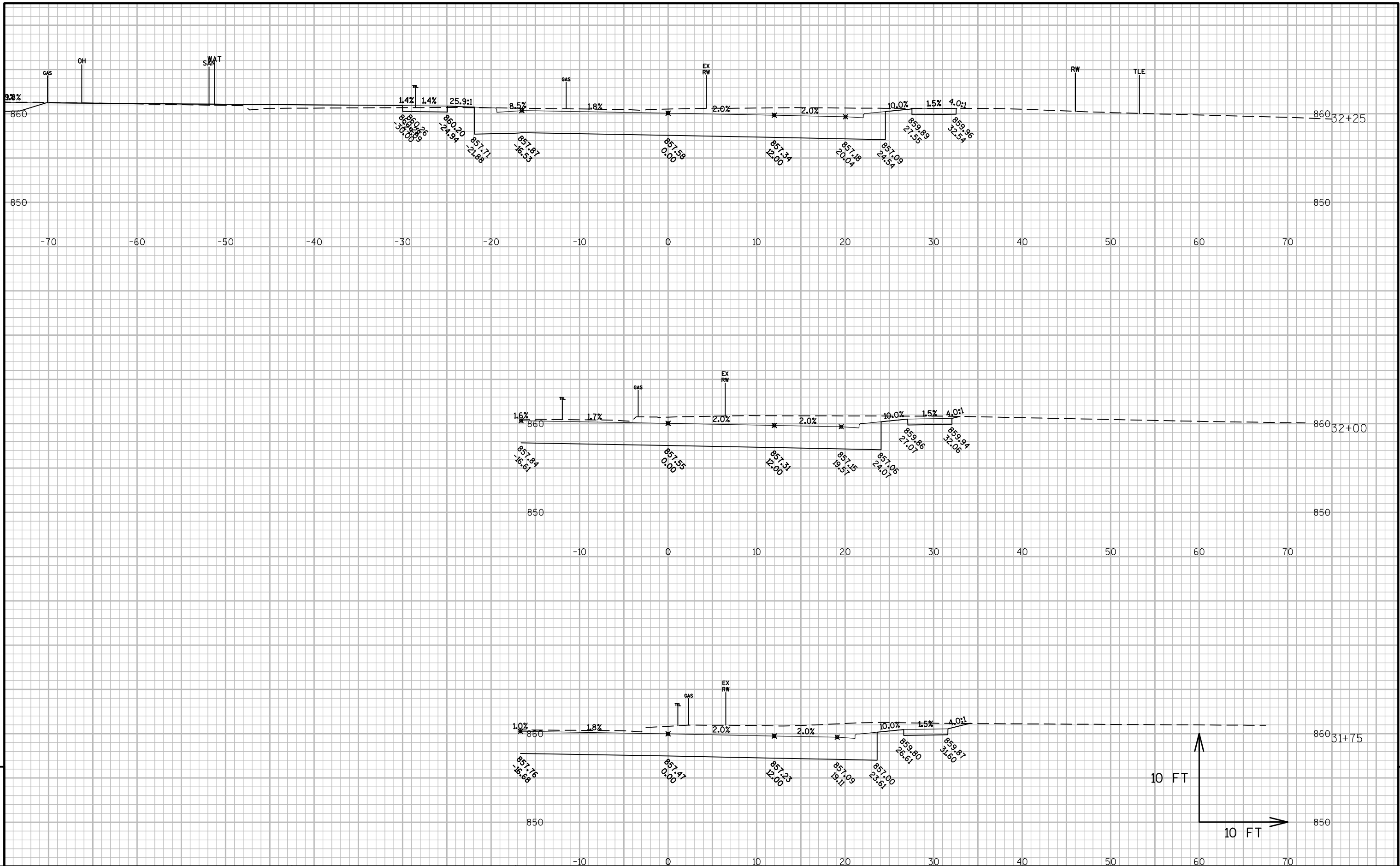
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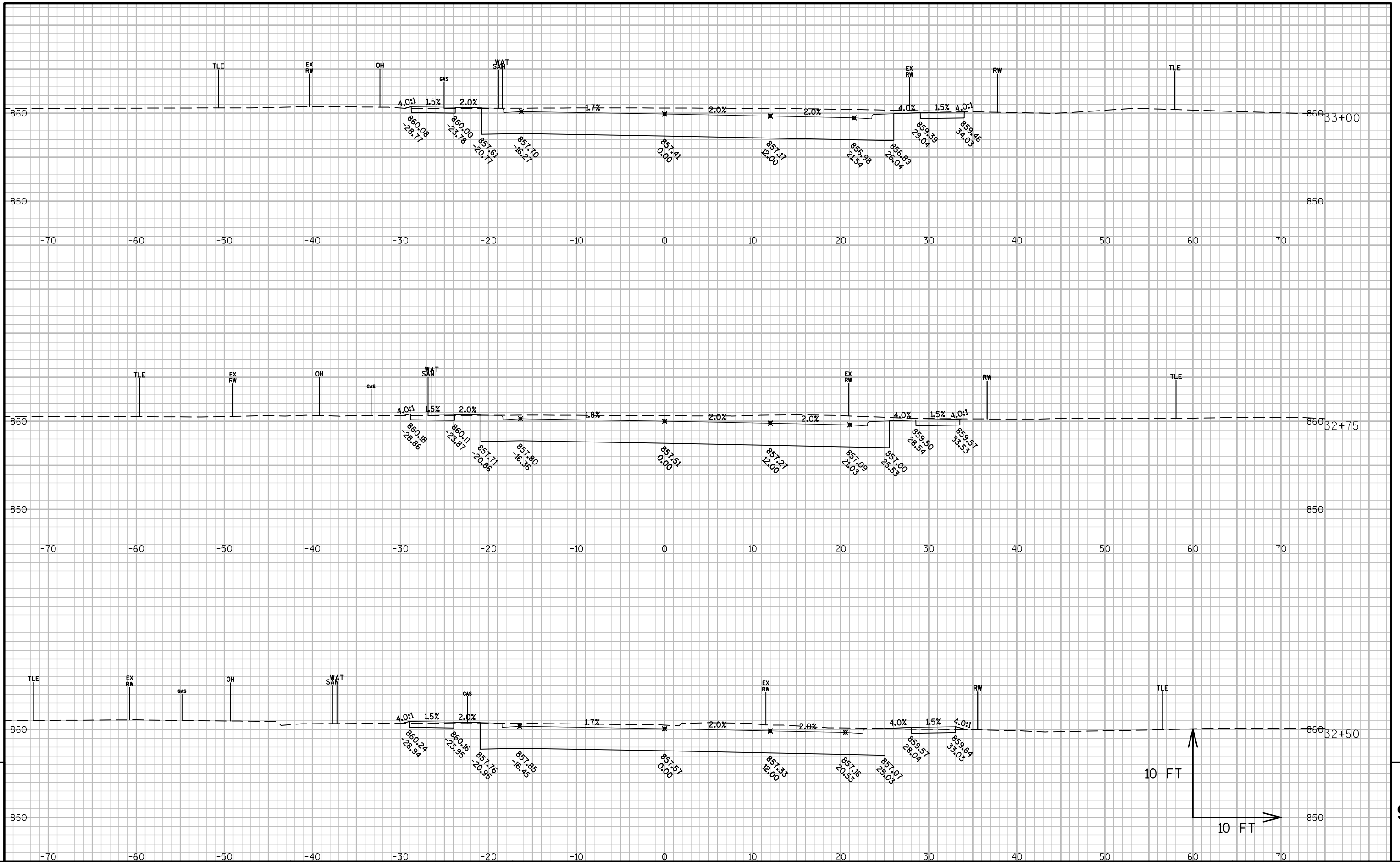
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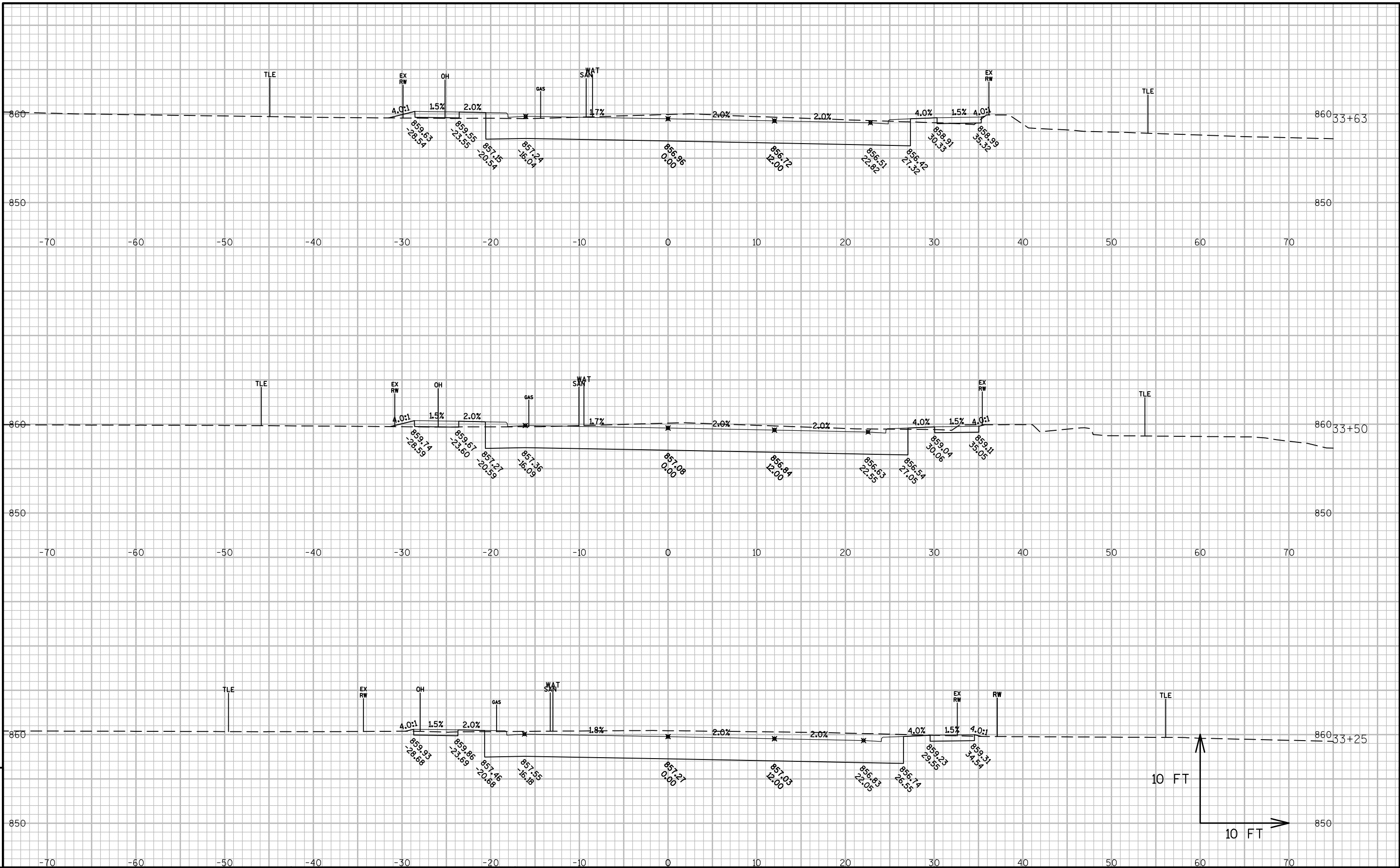


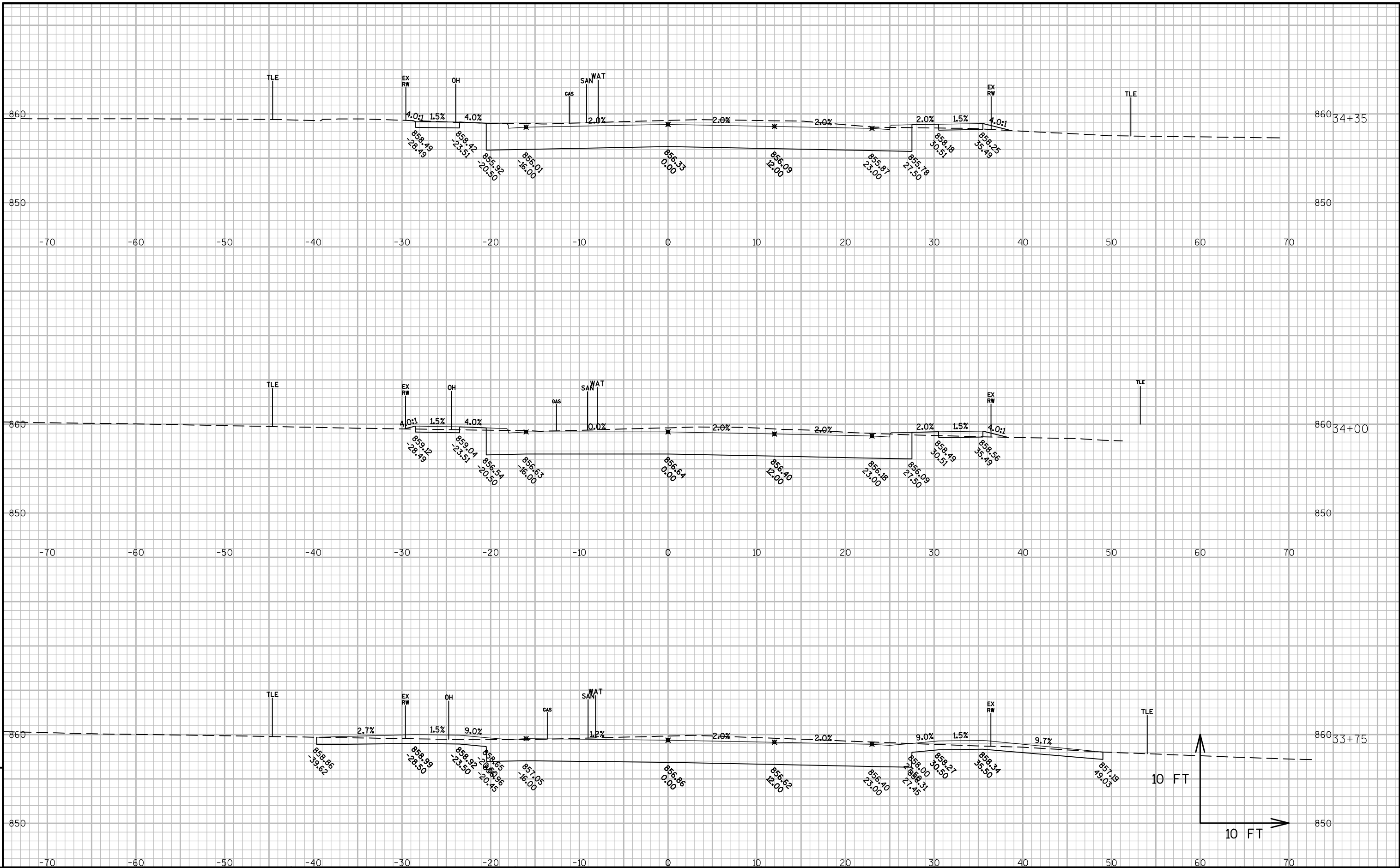


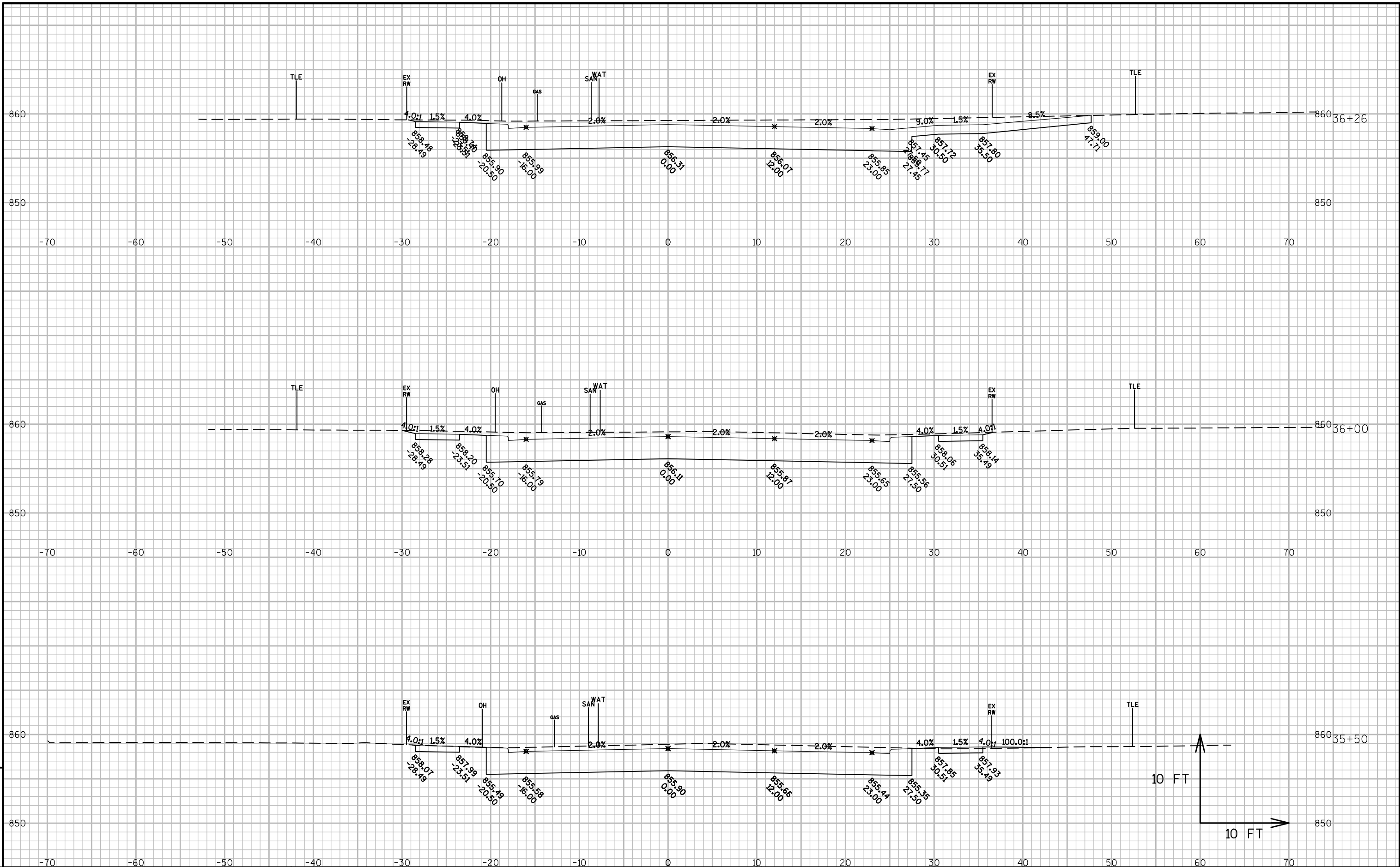


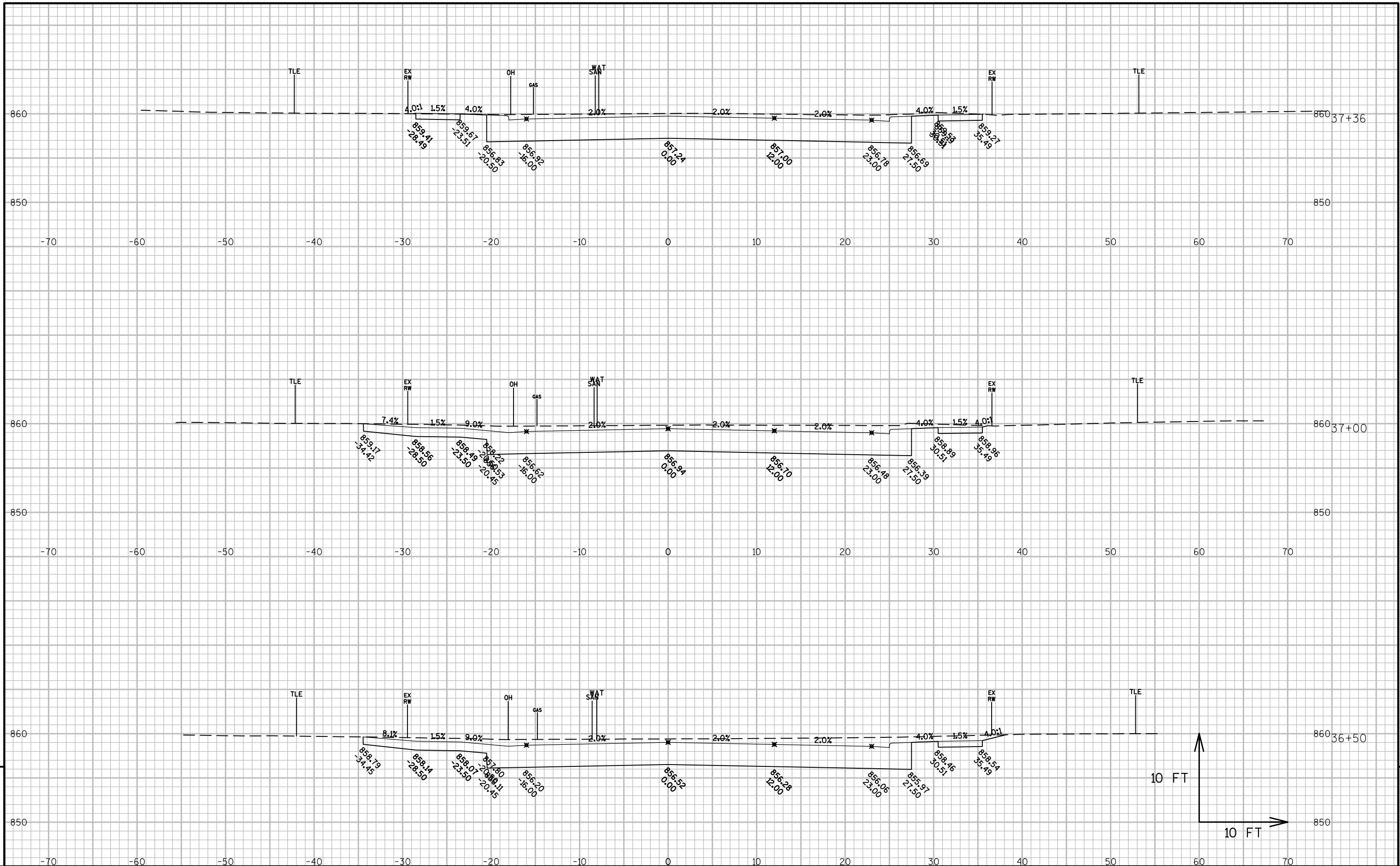


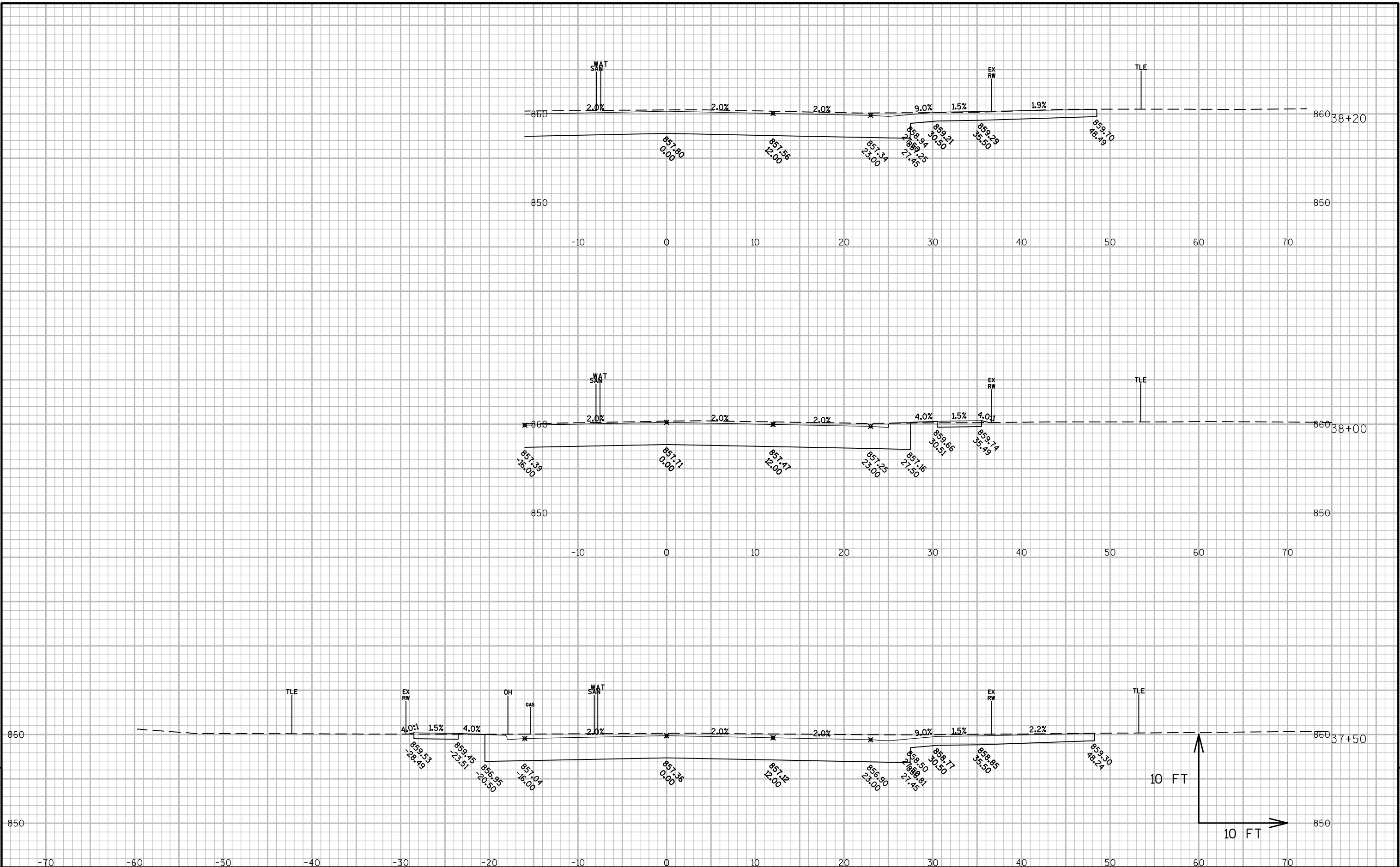


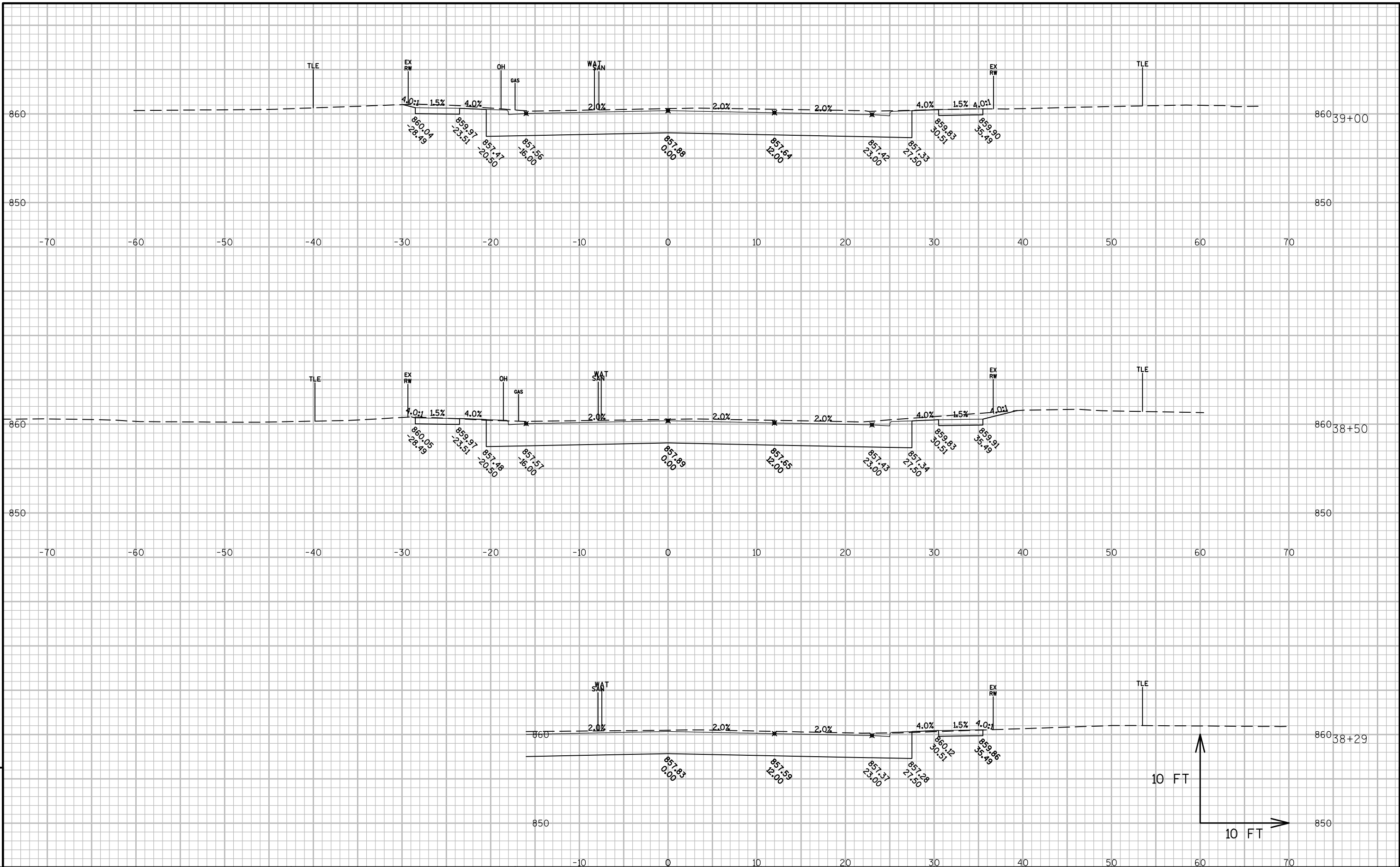


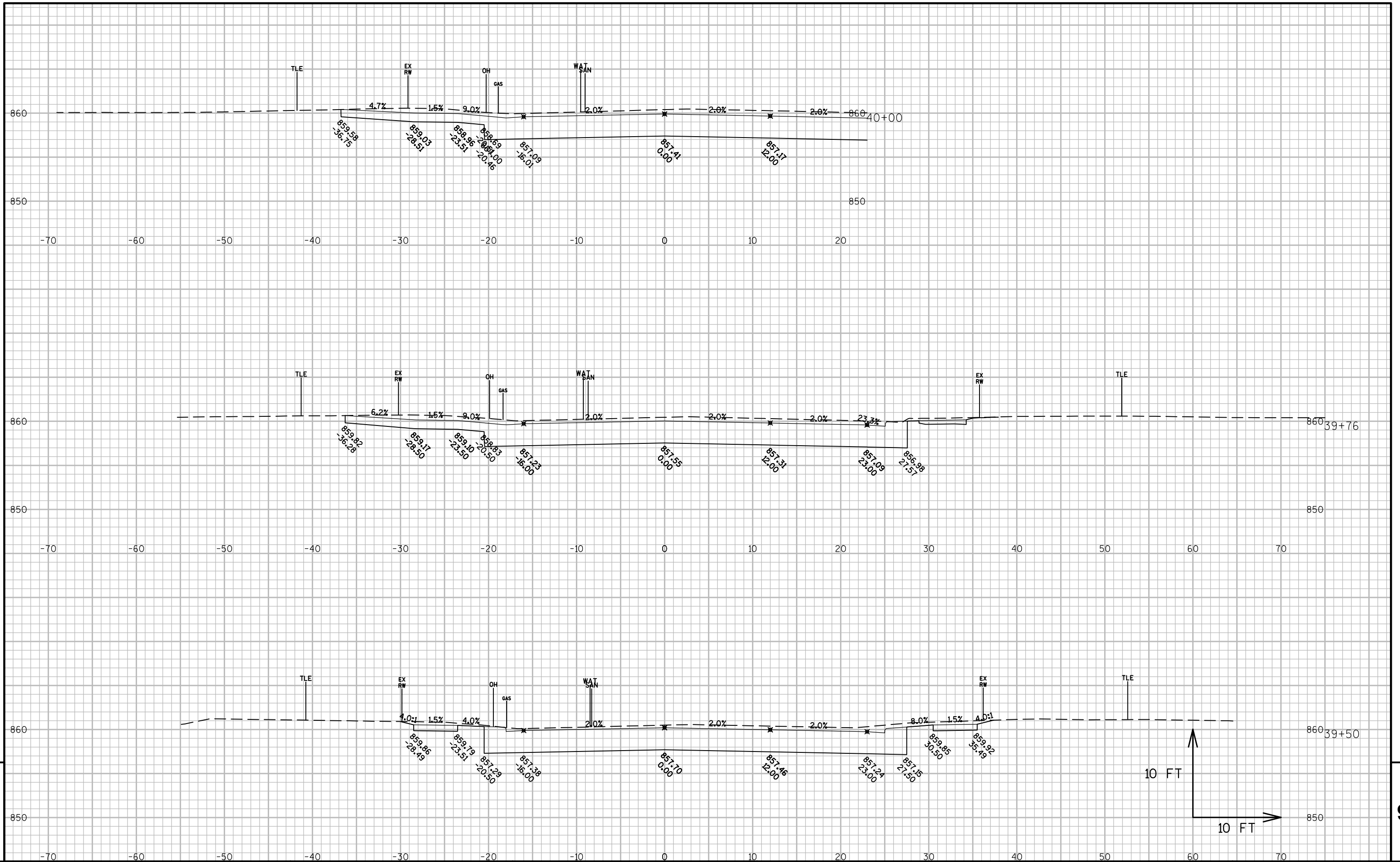


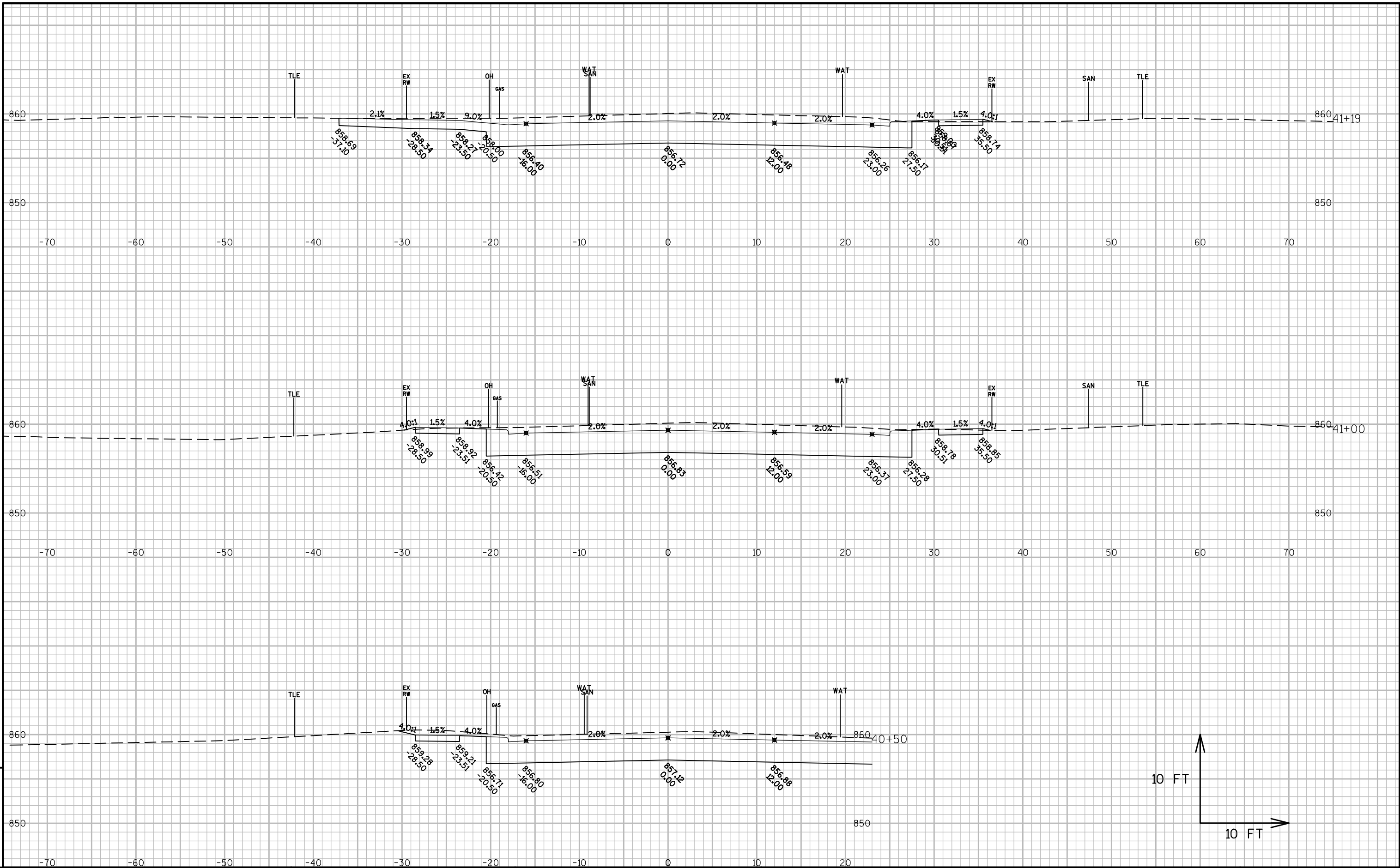


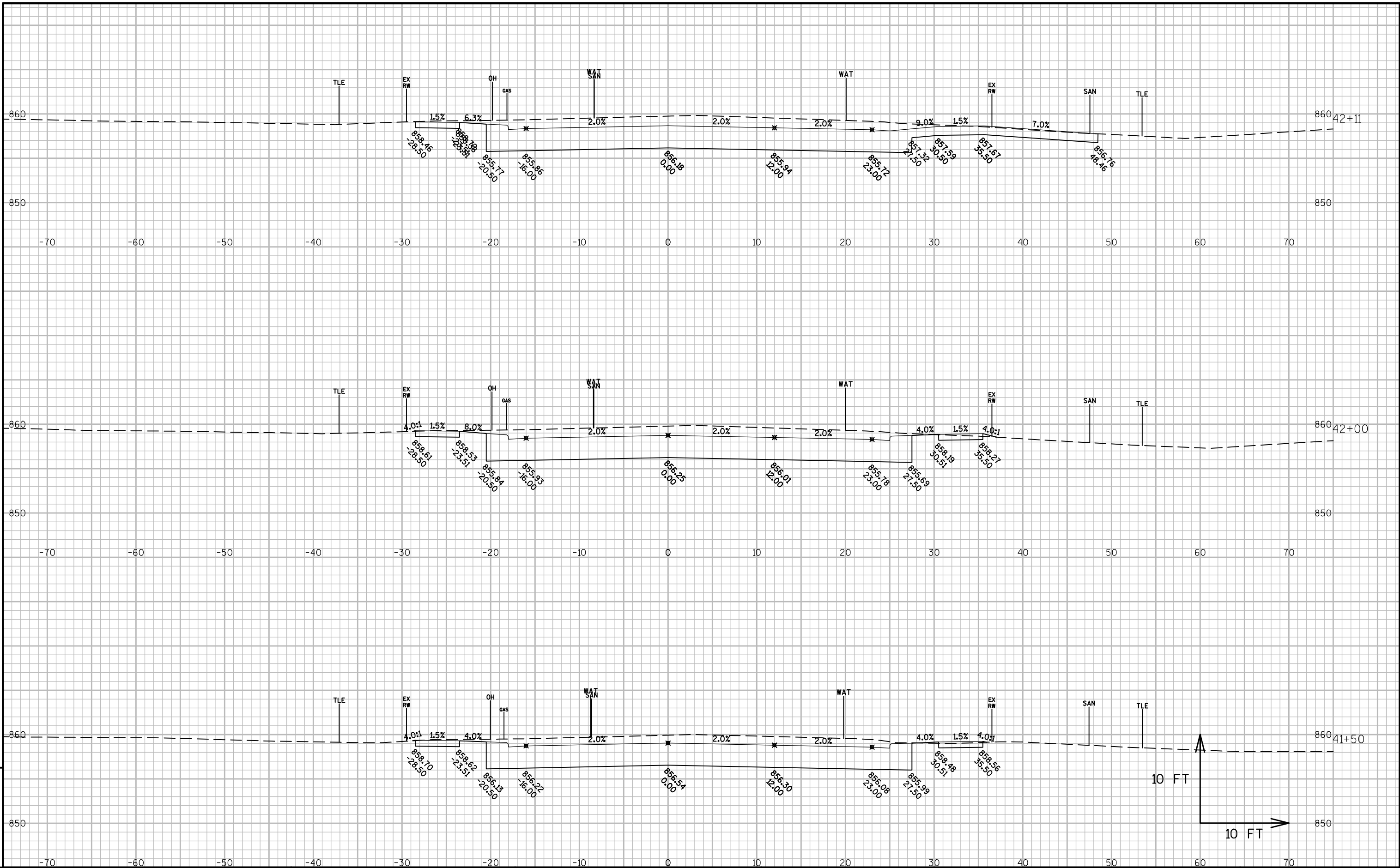


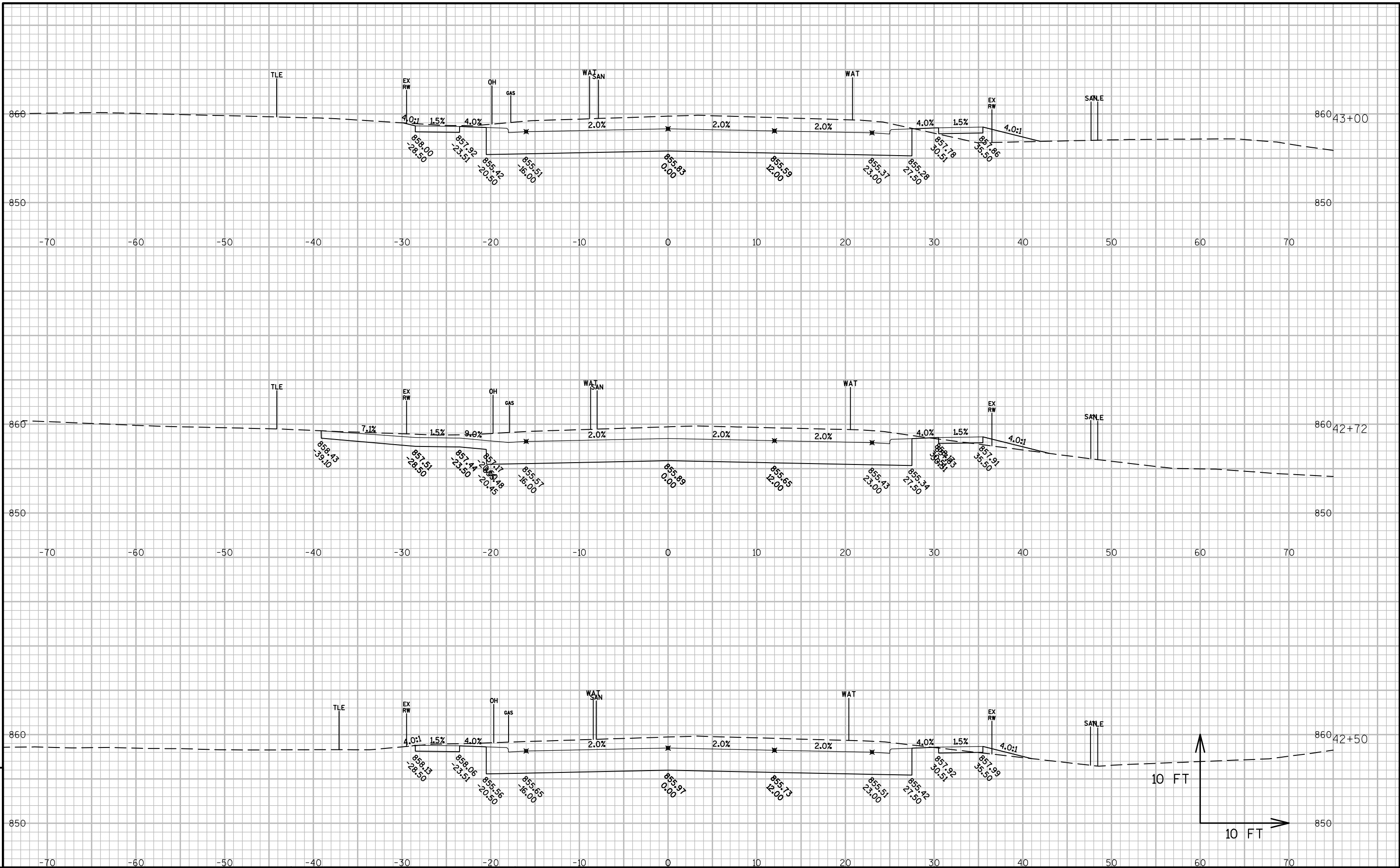


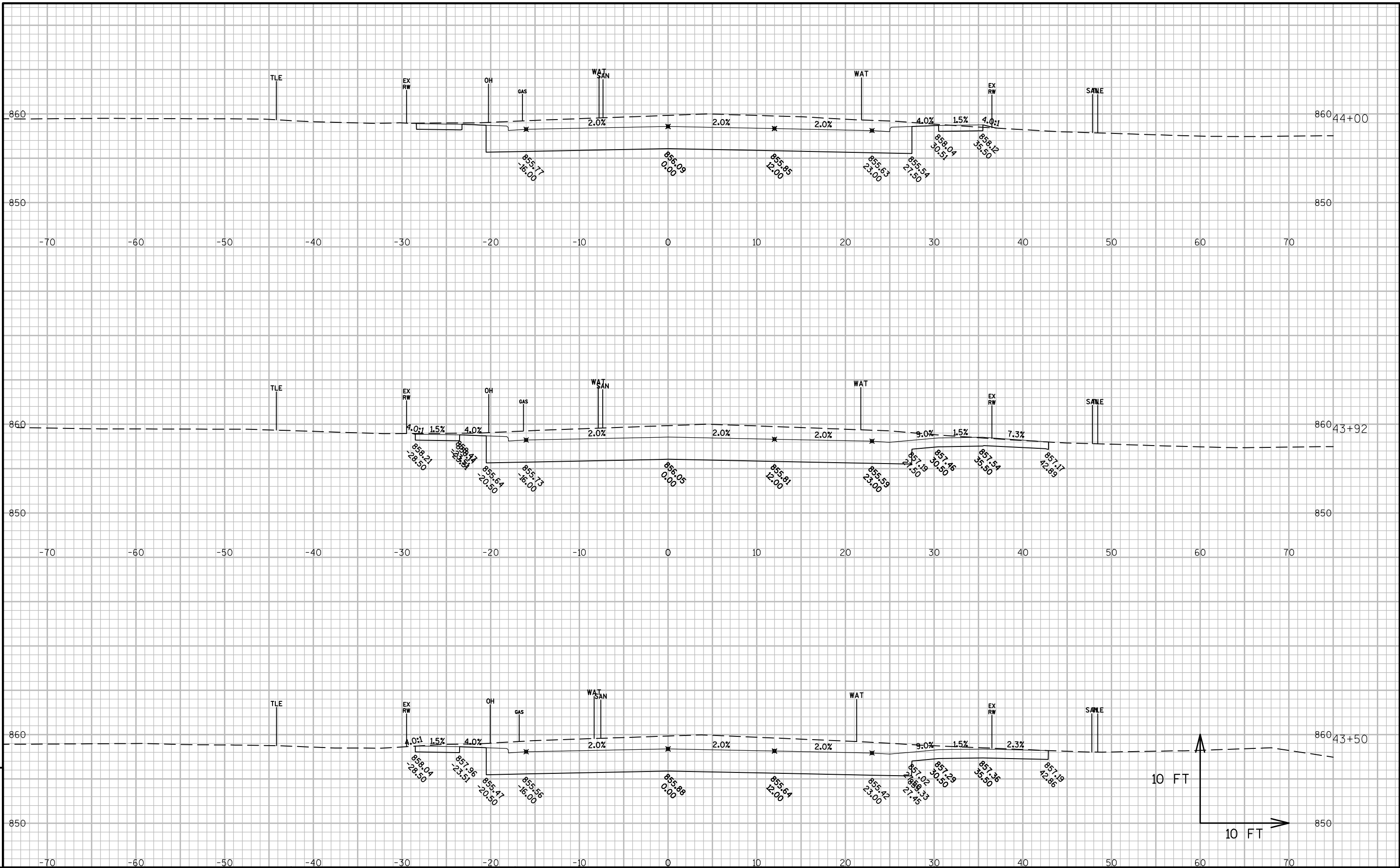


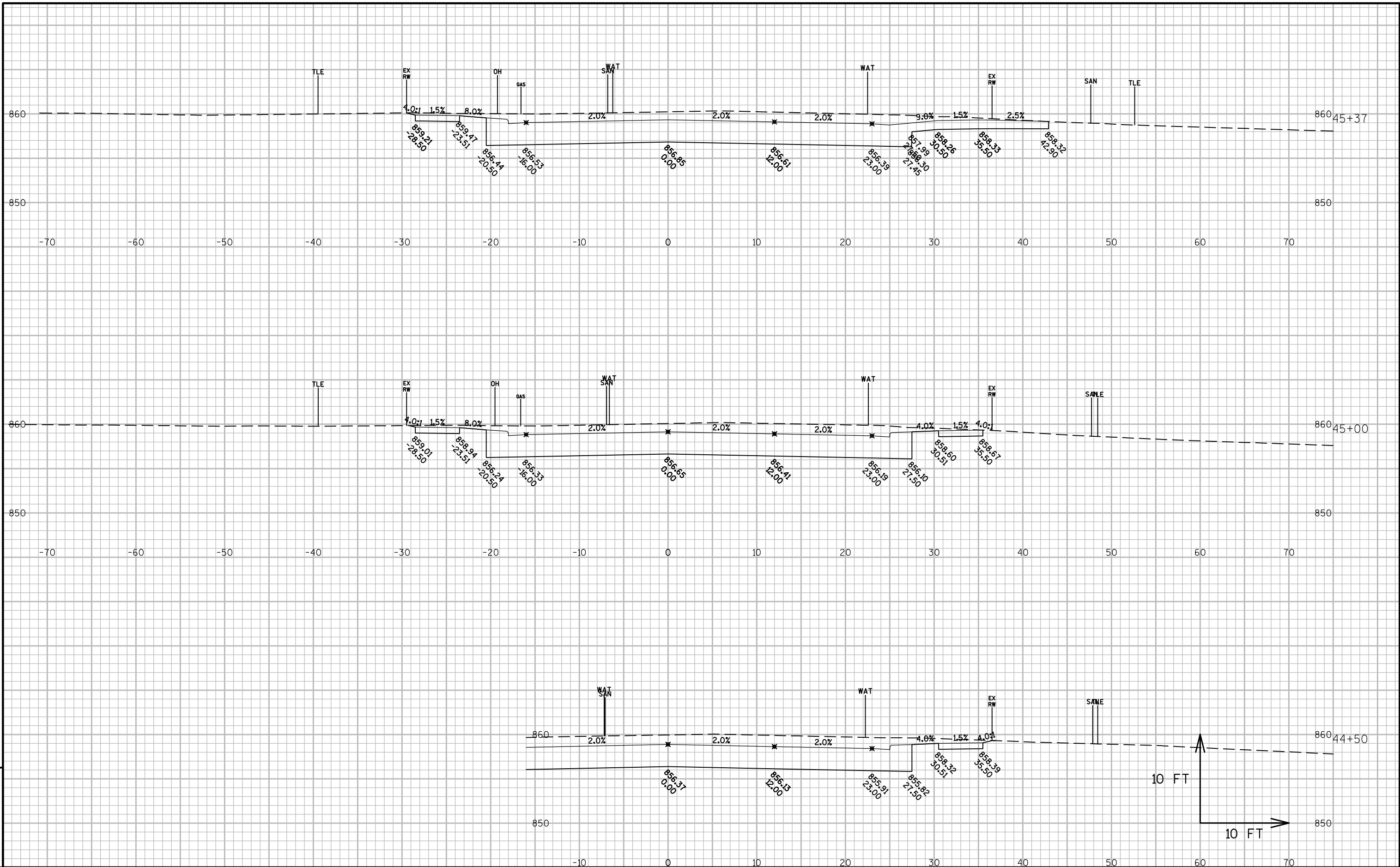


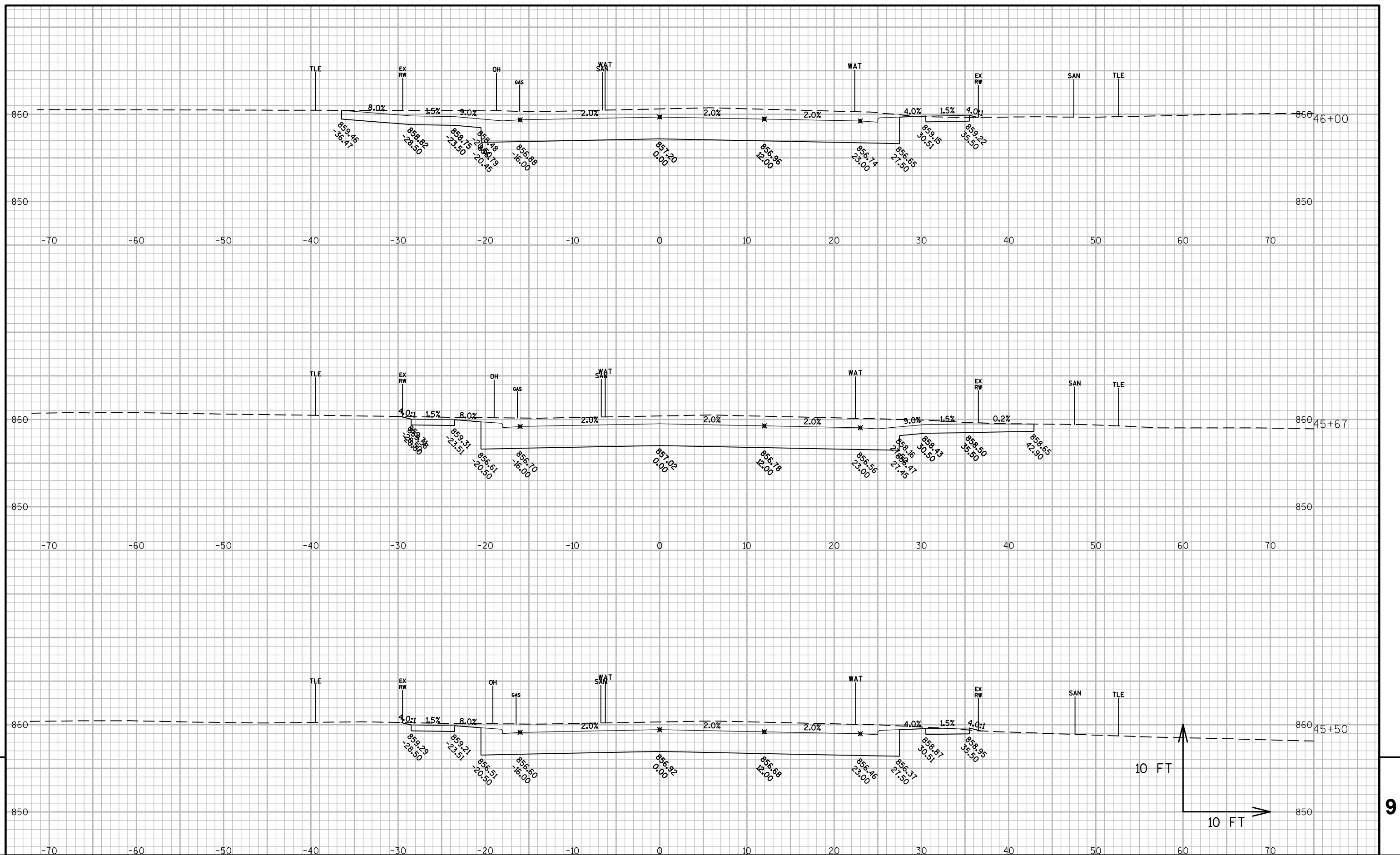












PROJECT NO:3300-01-73

HWY:STH 89

COUNTY: JEFFERSON

CROSS SECTIONS: STH 89 MAINLINE

SHEET 385

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LAYOUT NAME - XS- (19)

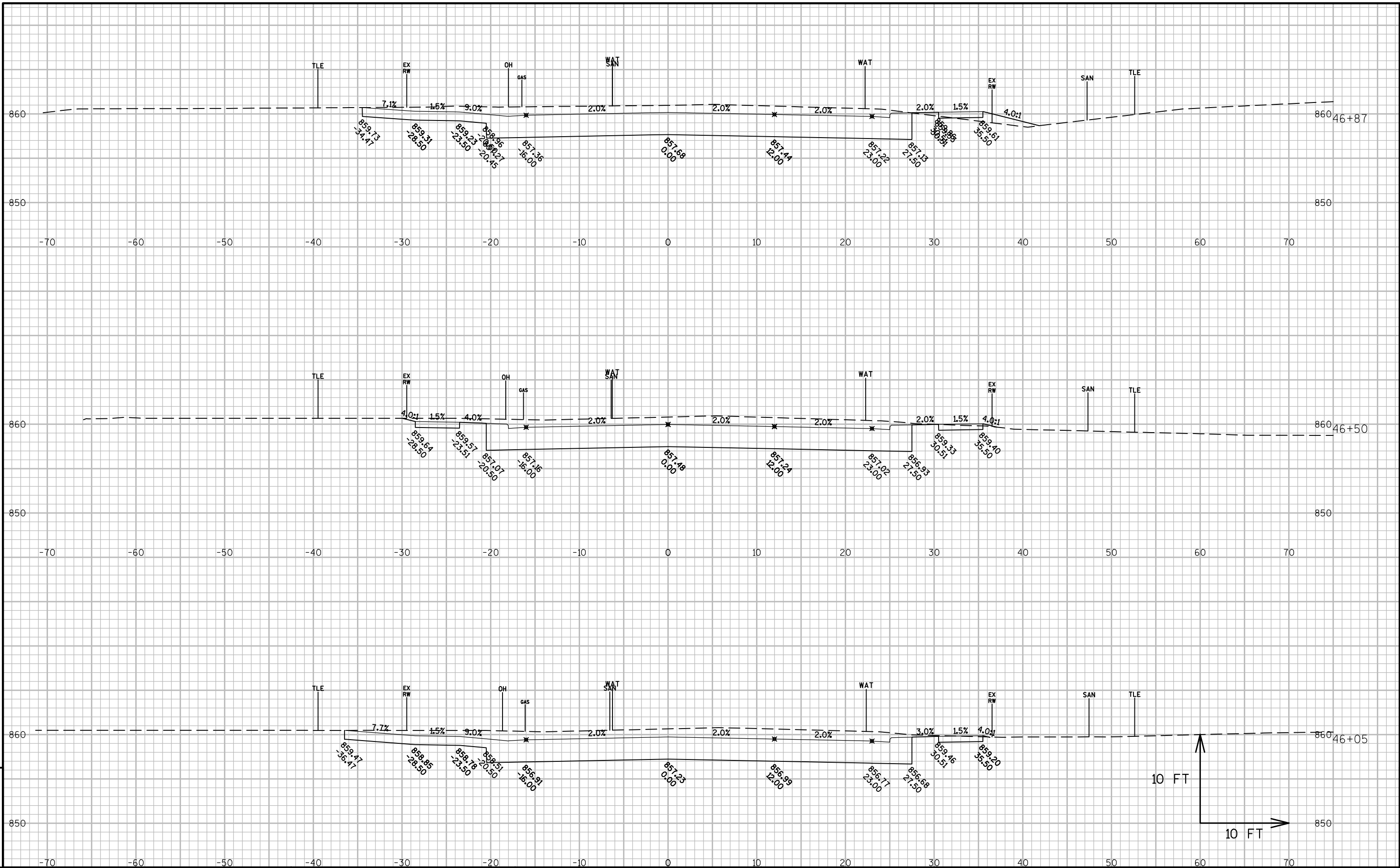
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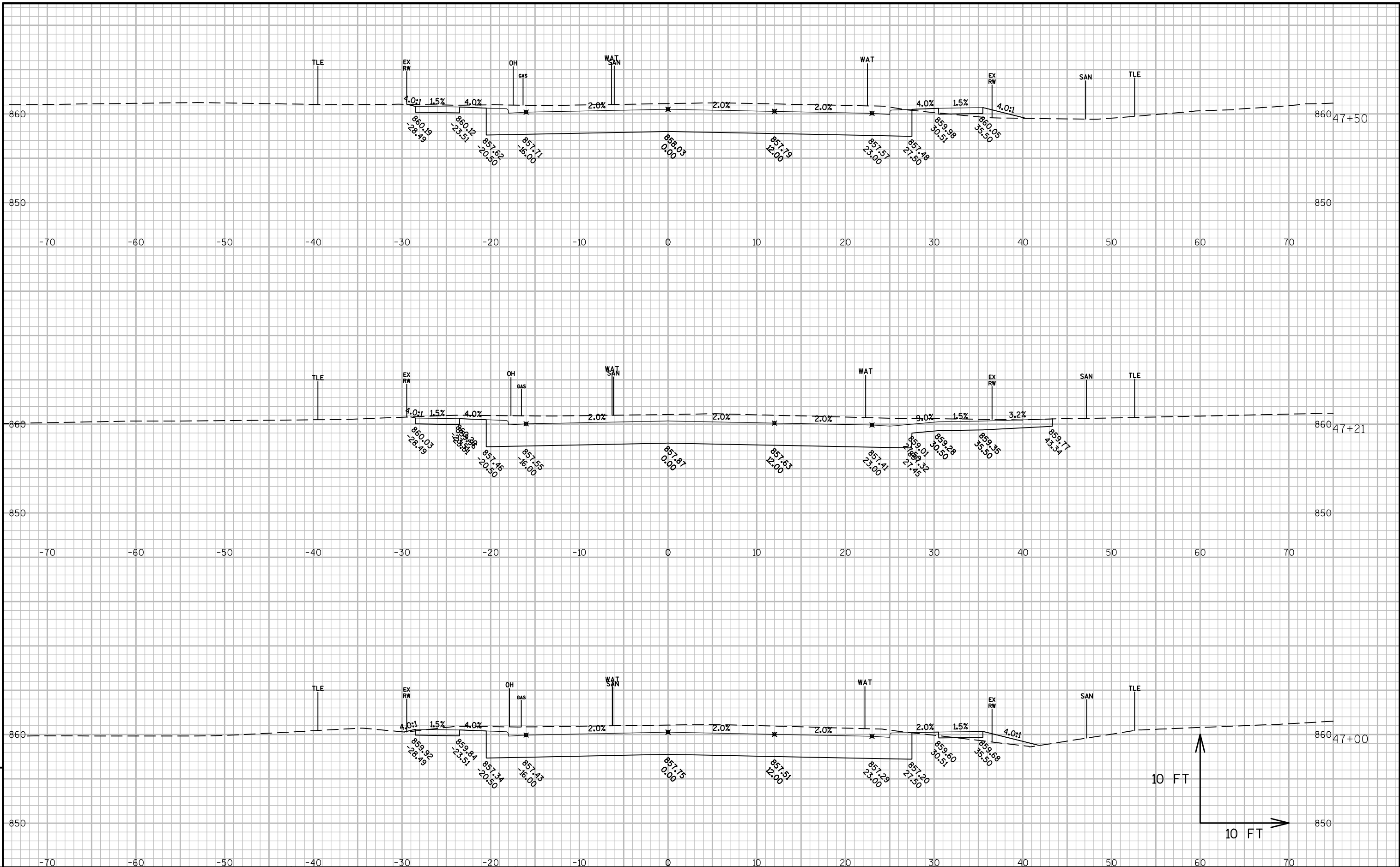
PLOT BY : WHITE, JEREMY J

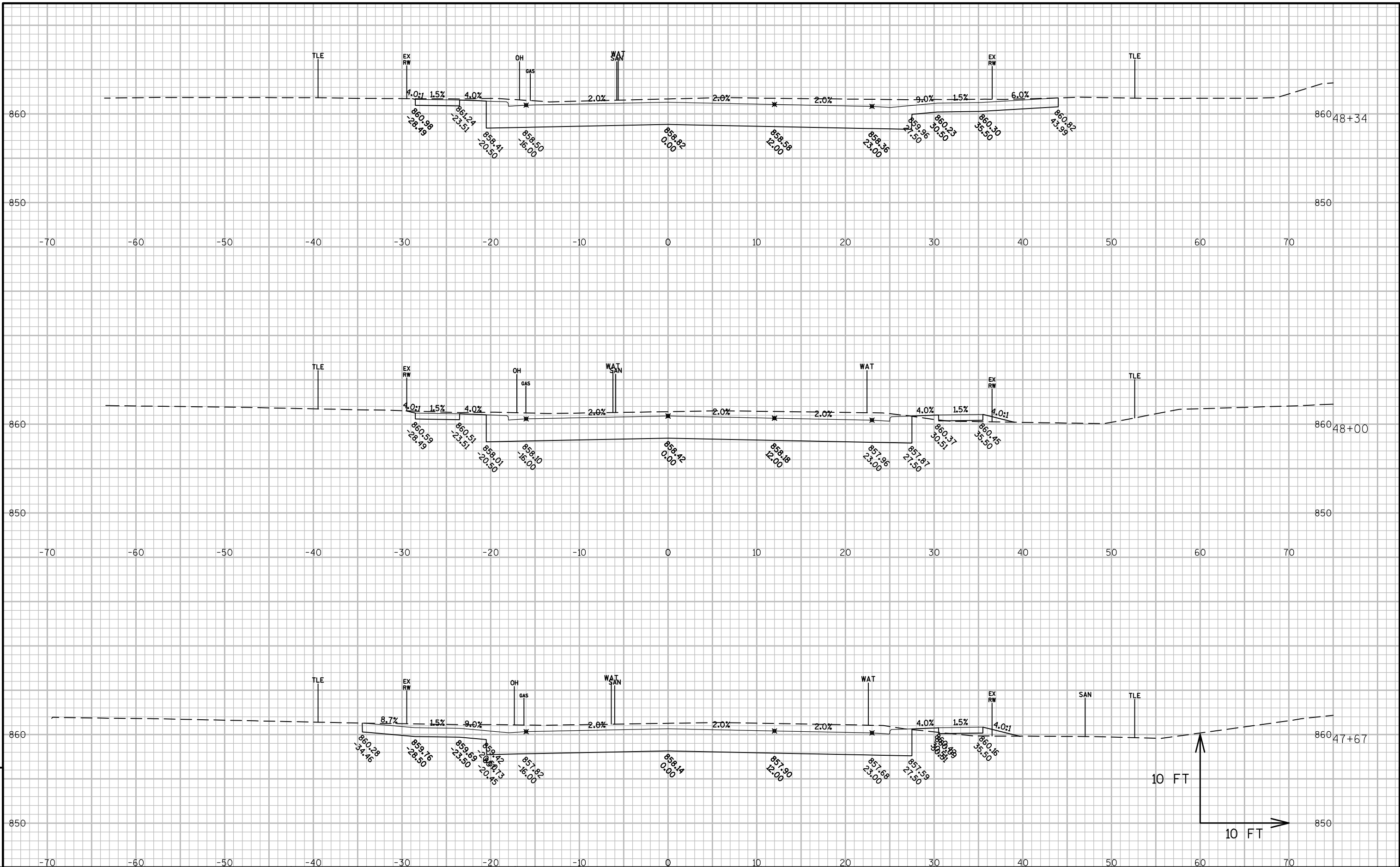
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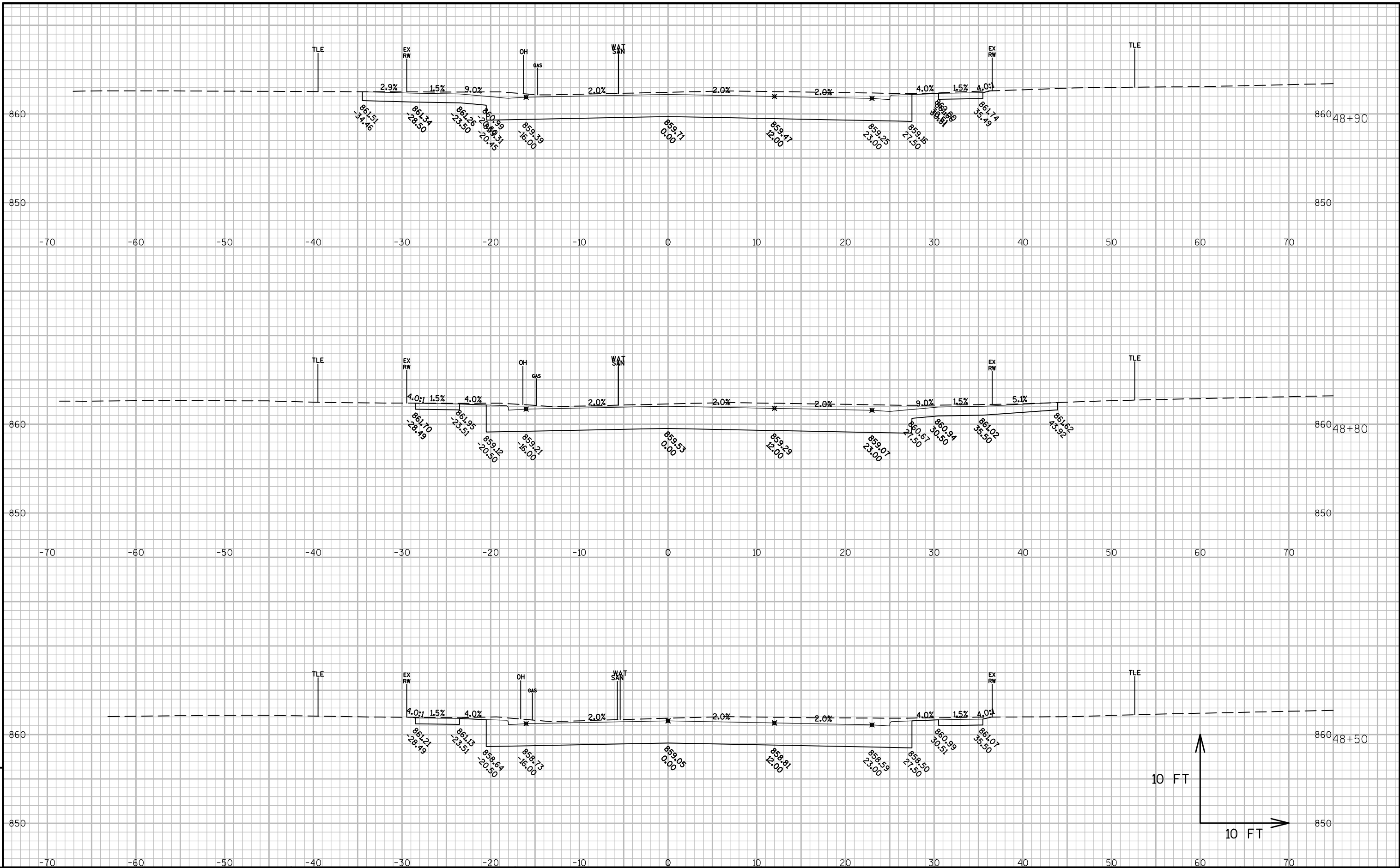
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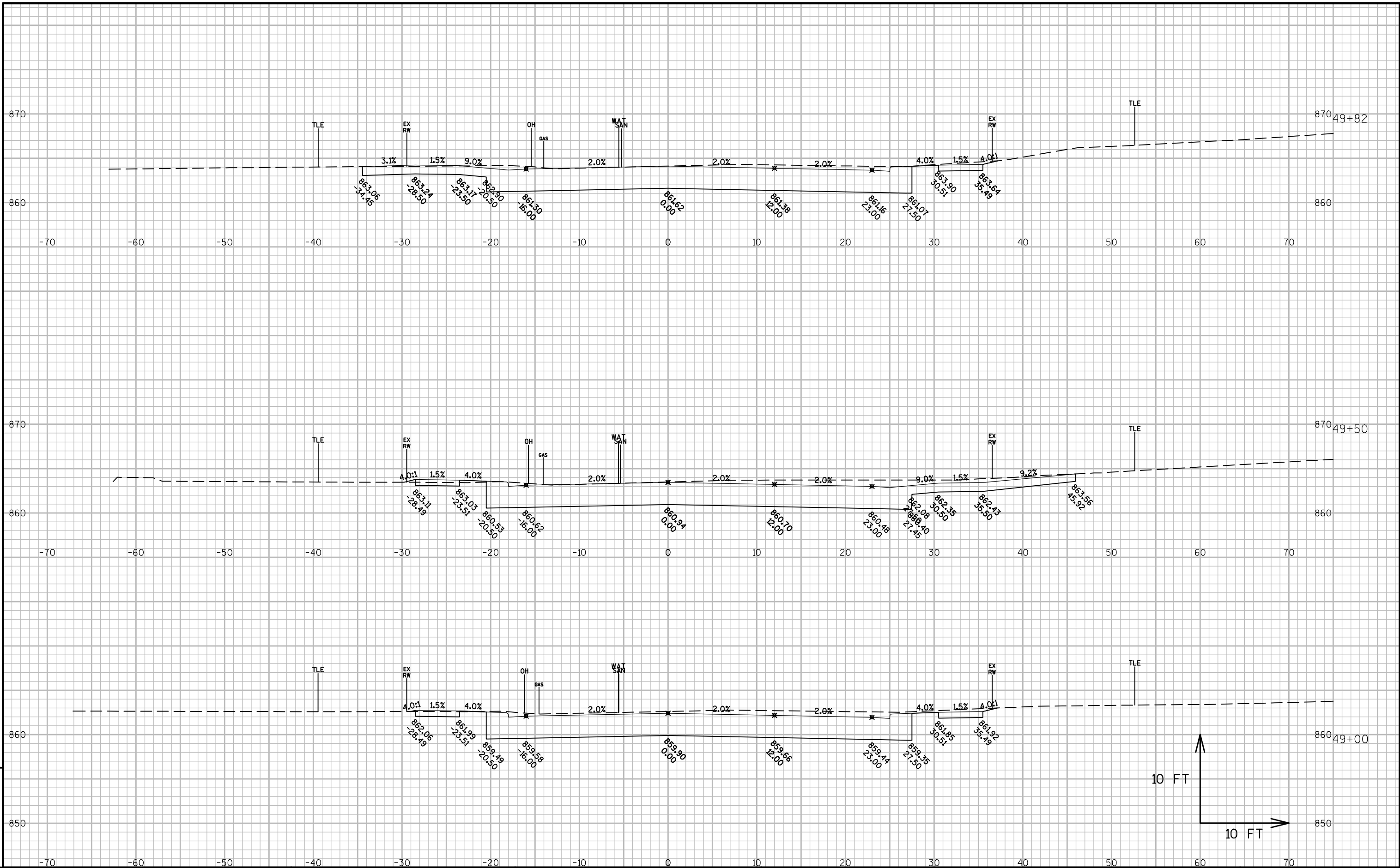
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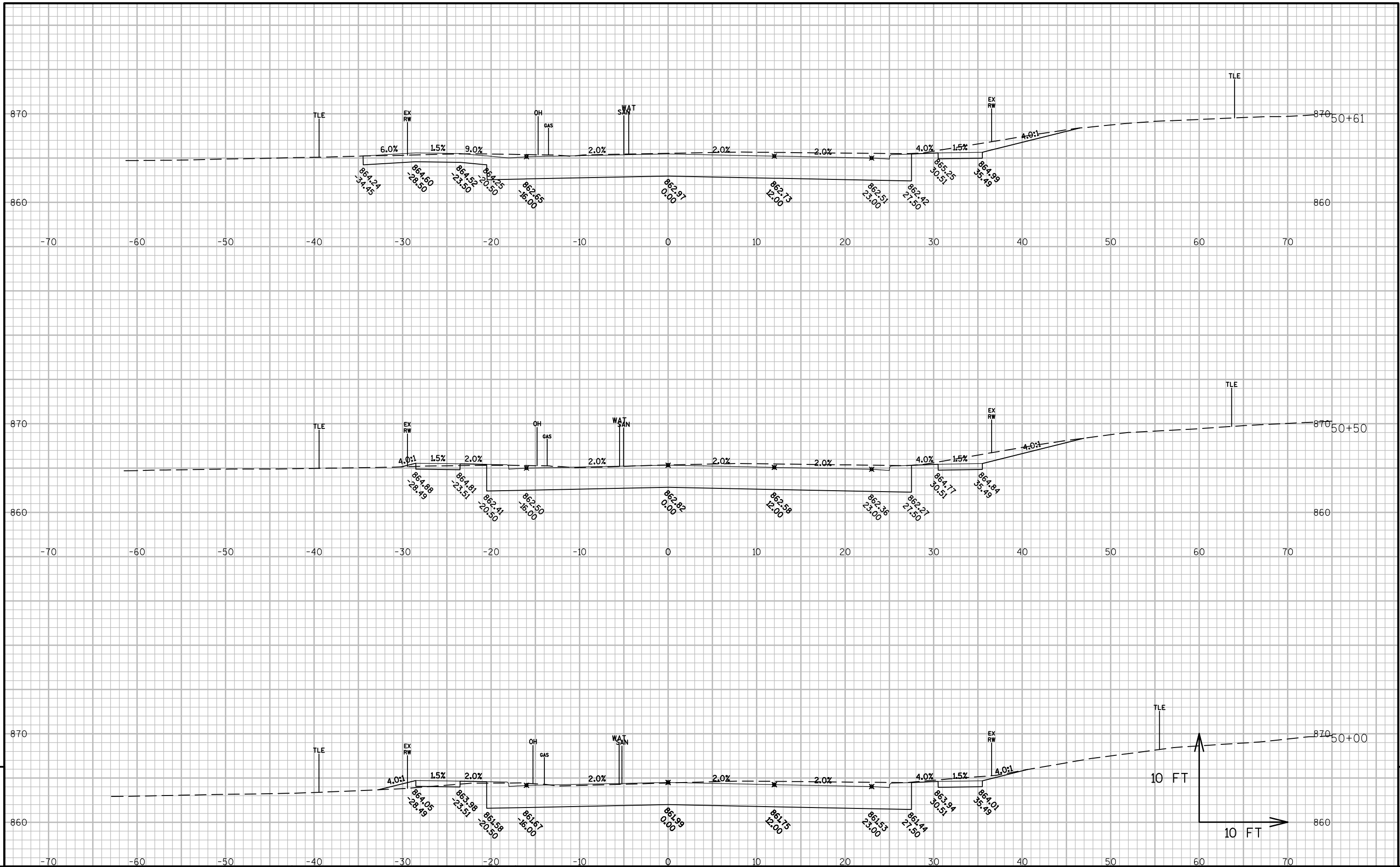


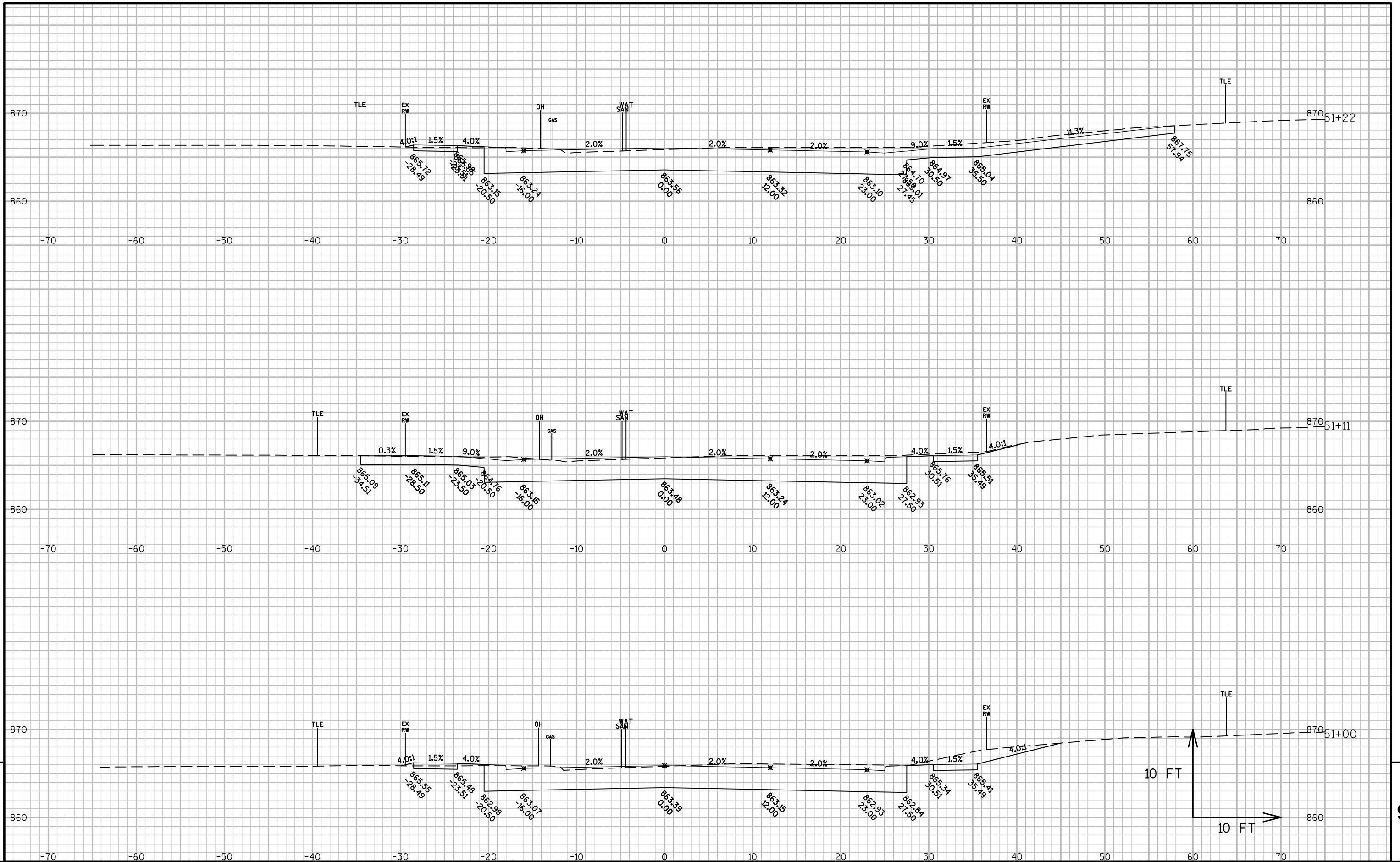


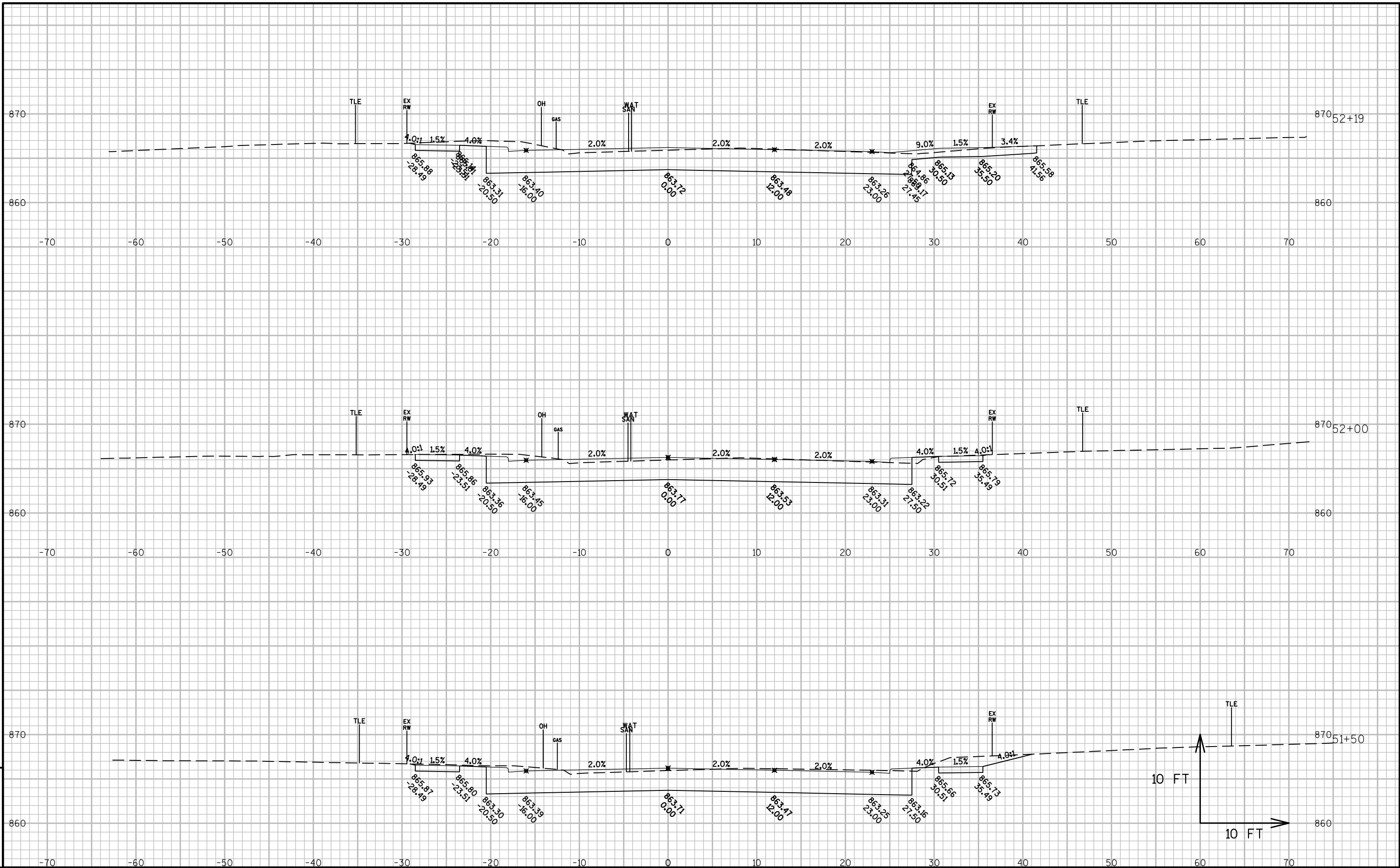


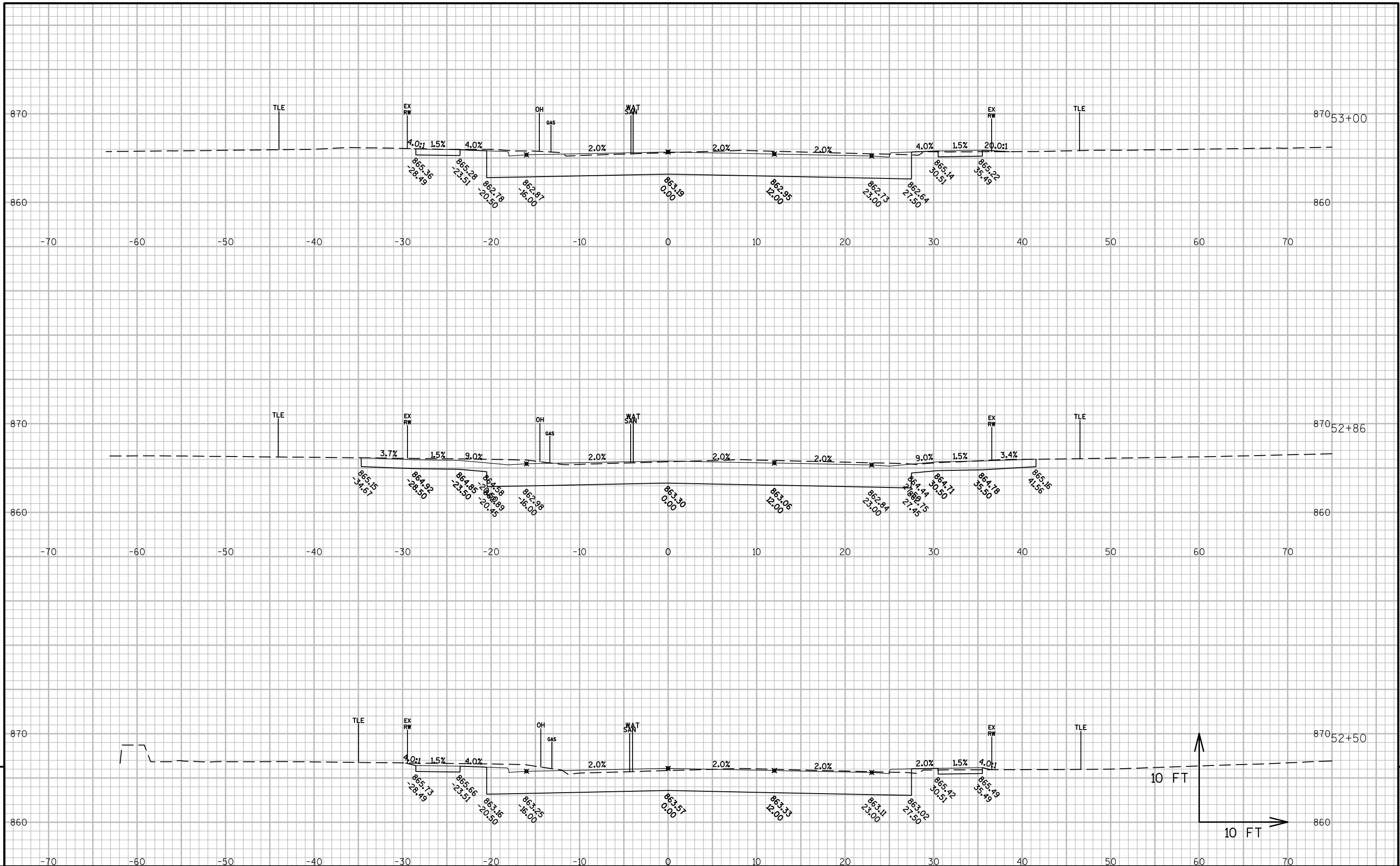


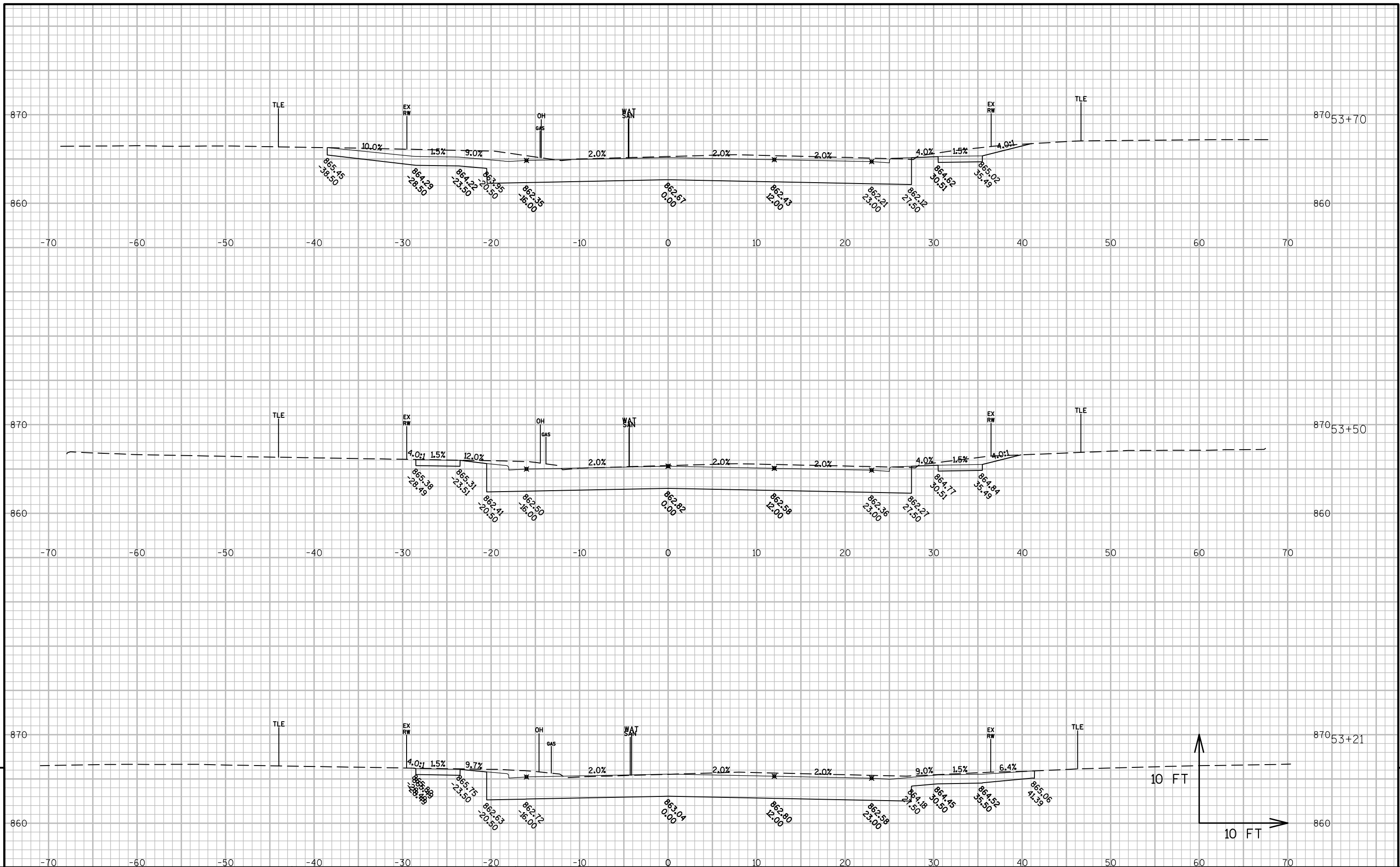


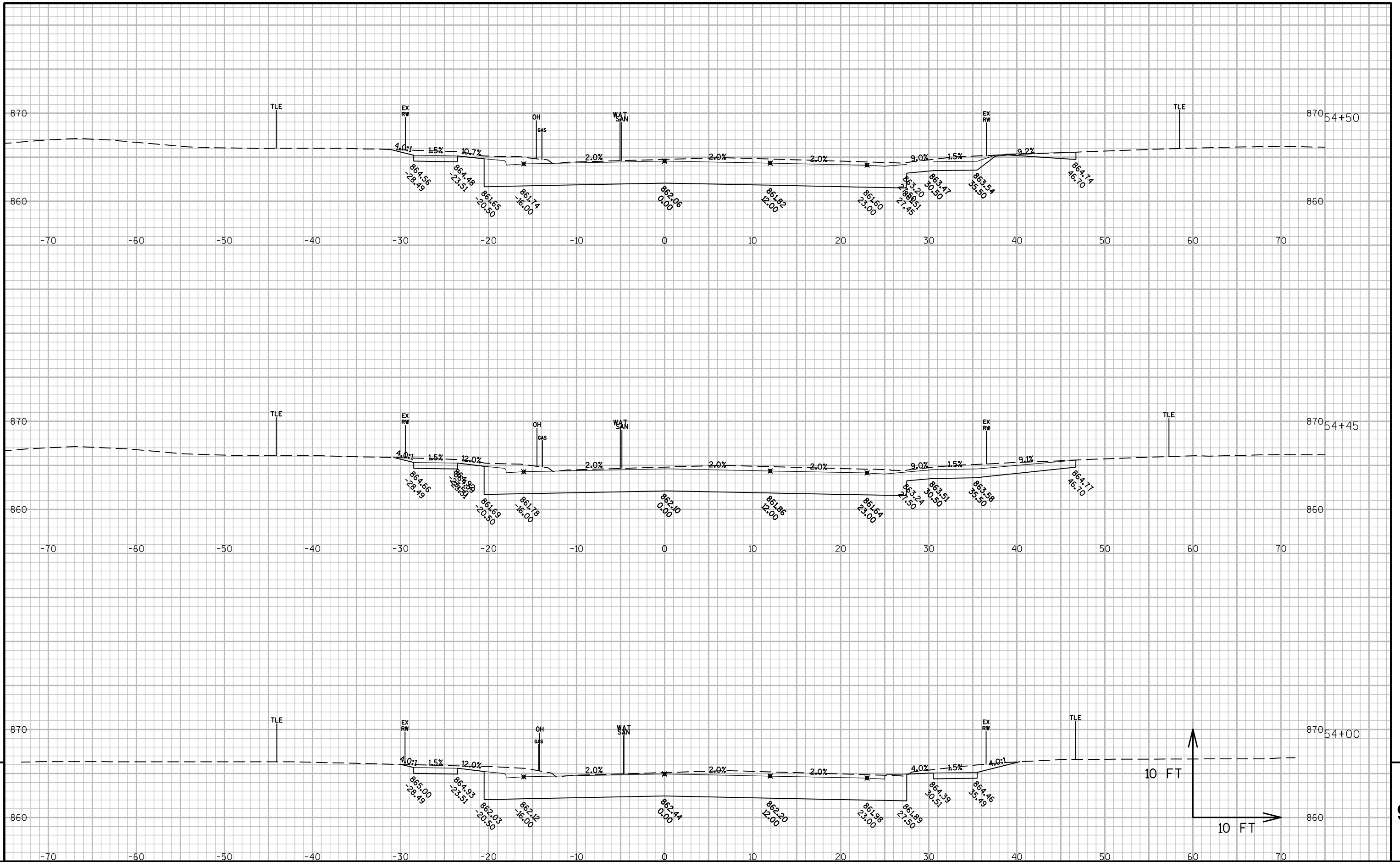


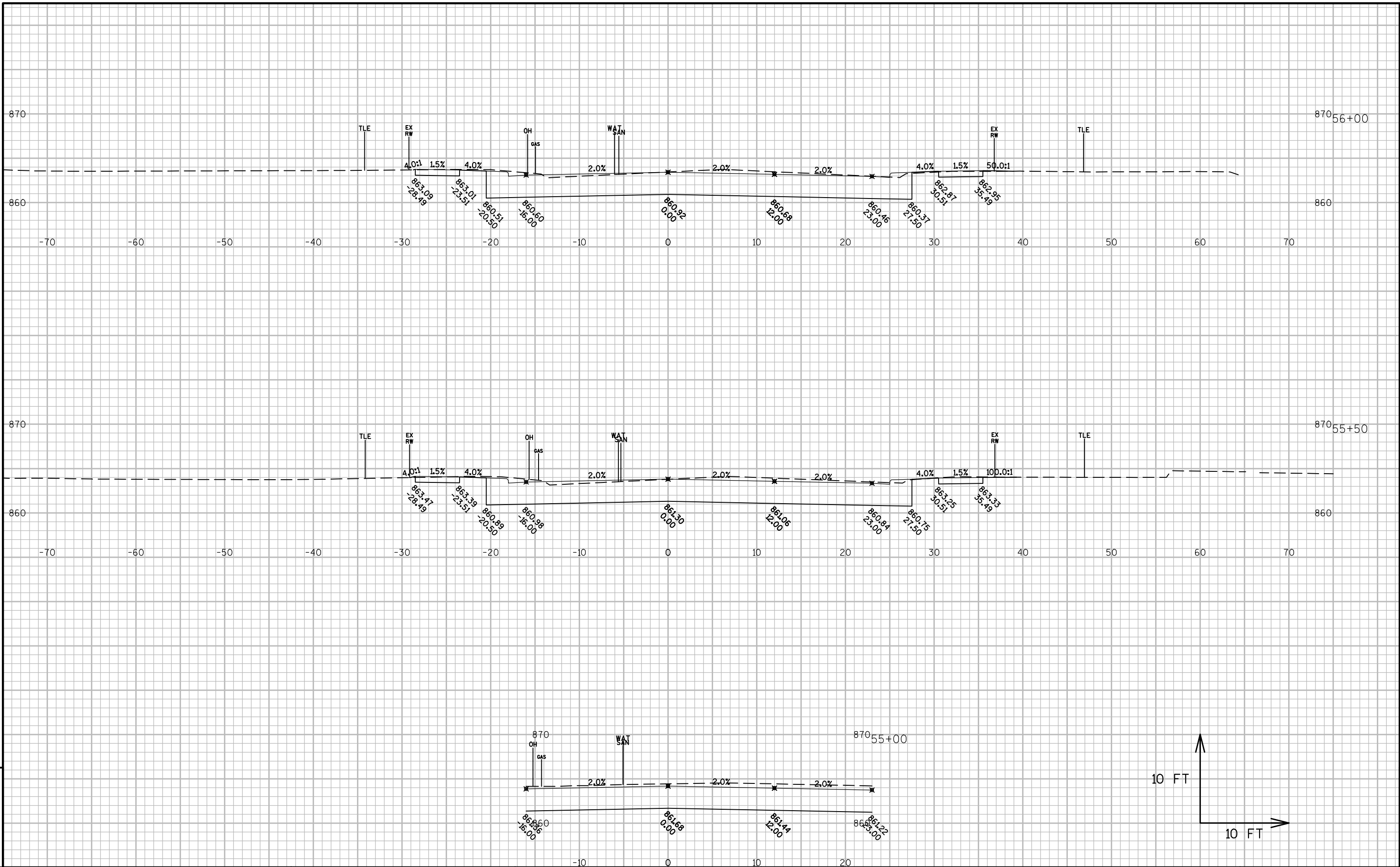


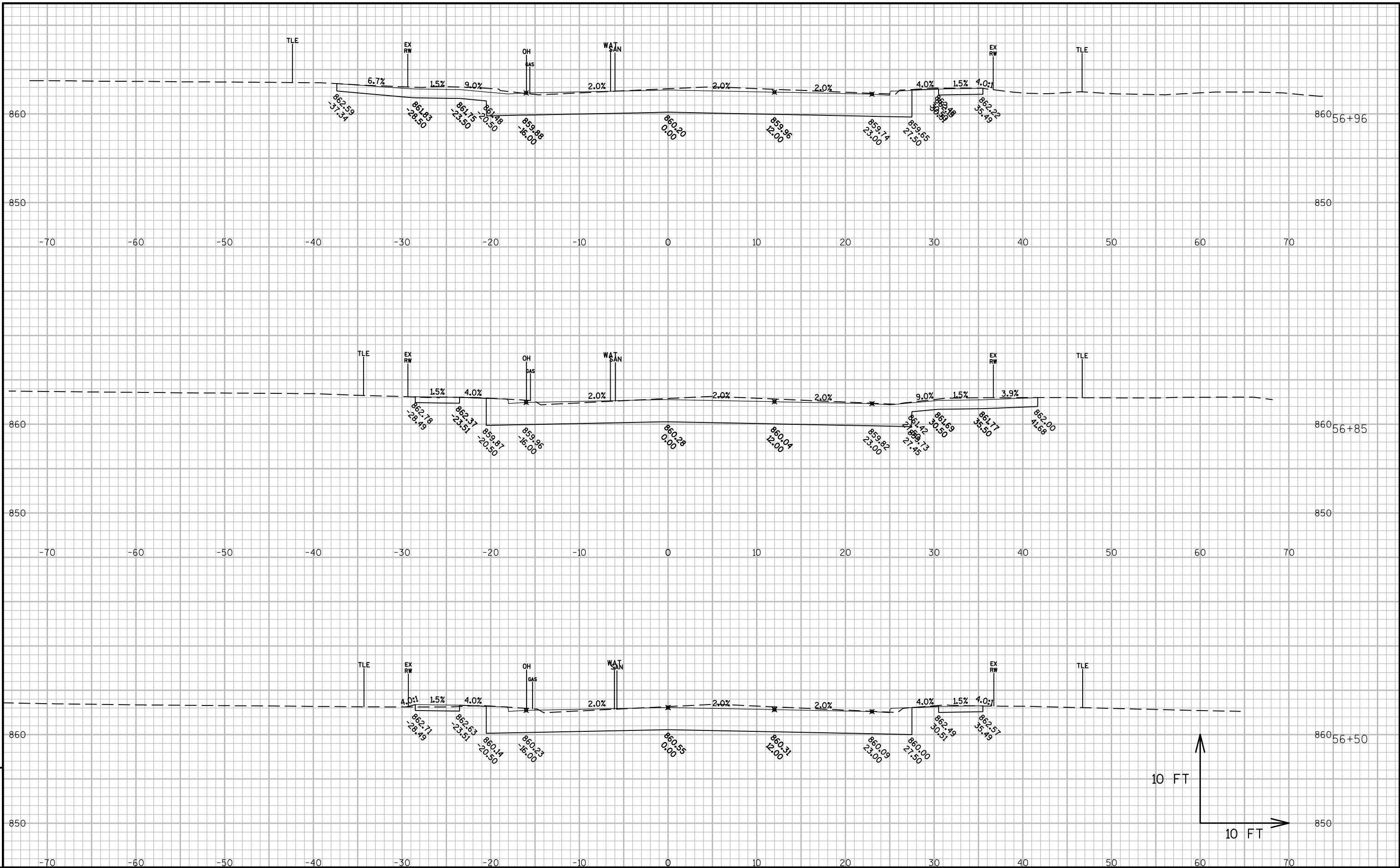


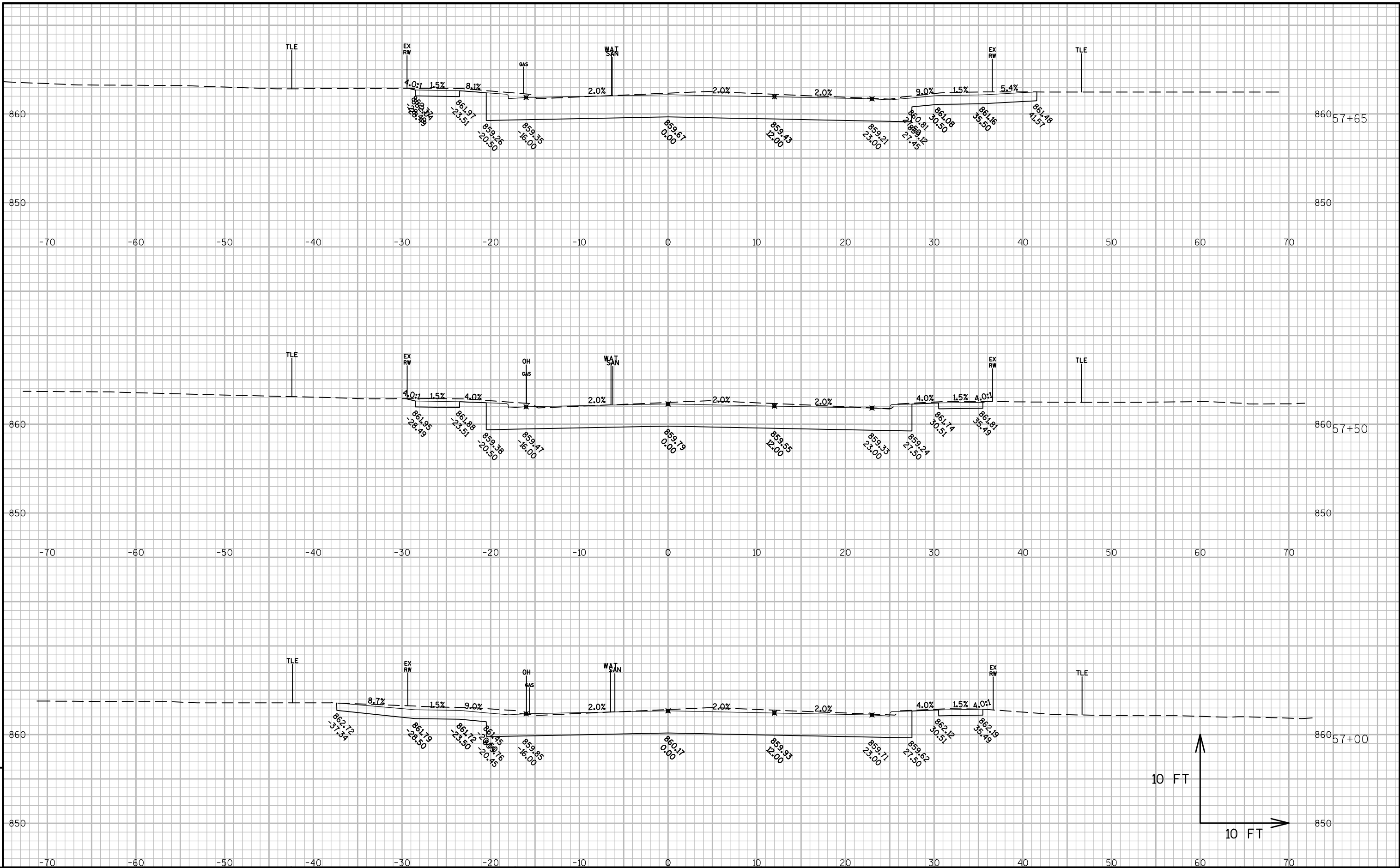


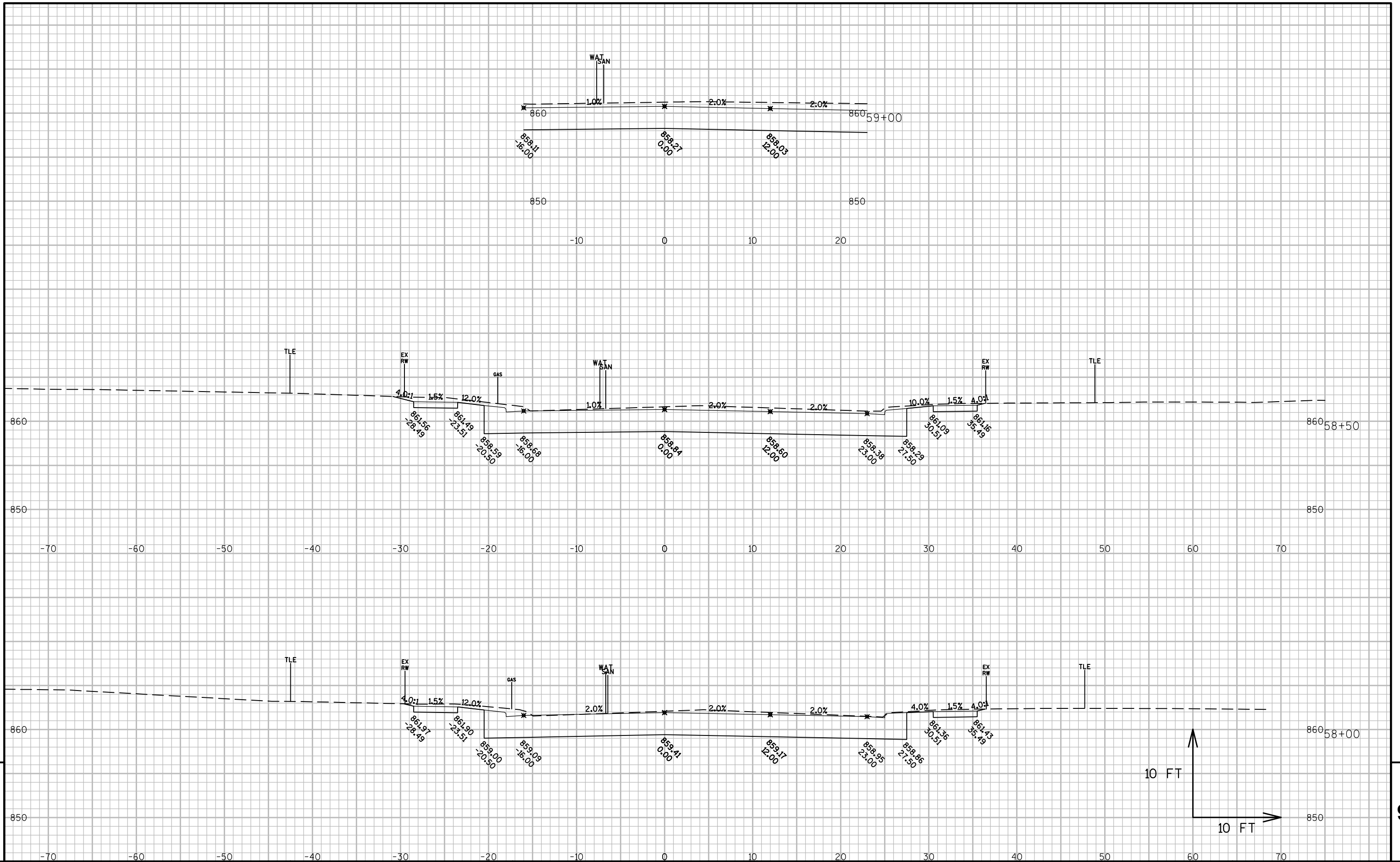


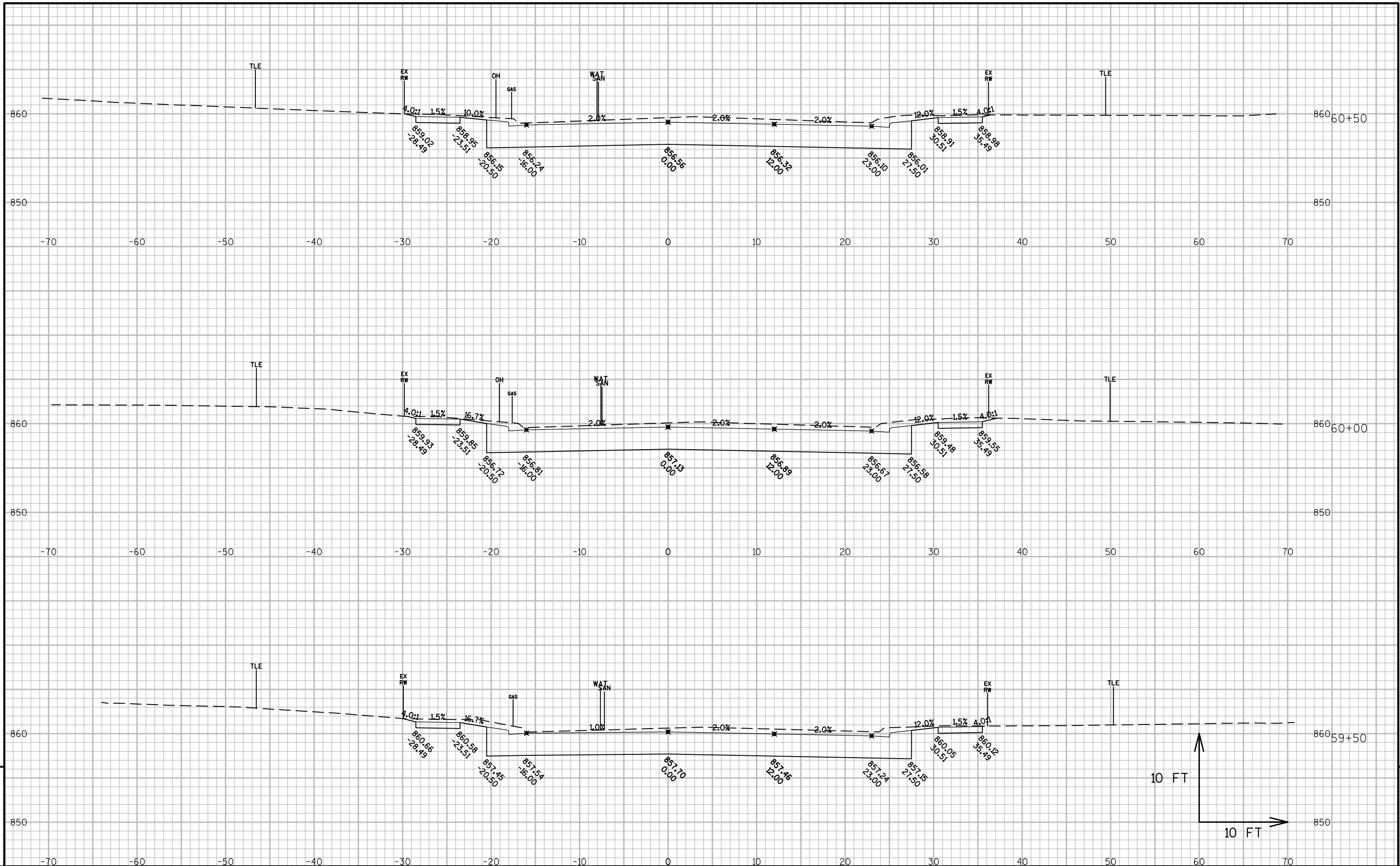


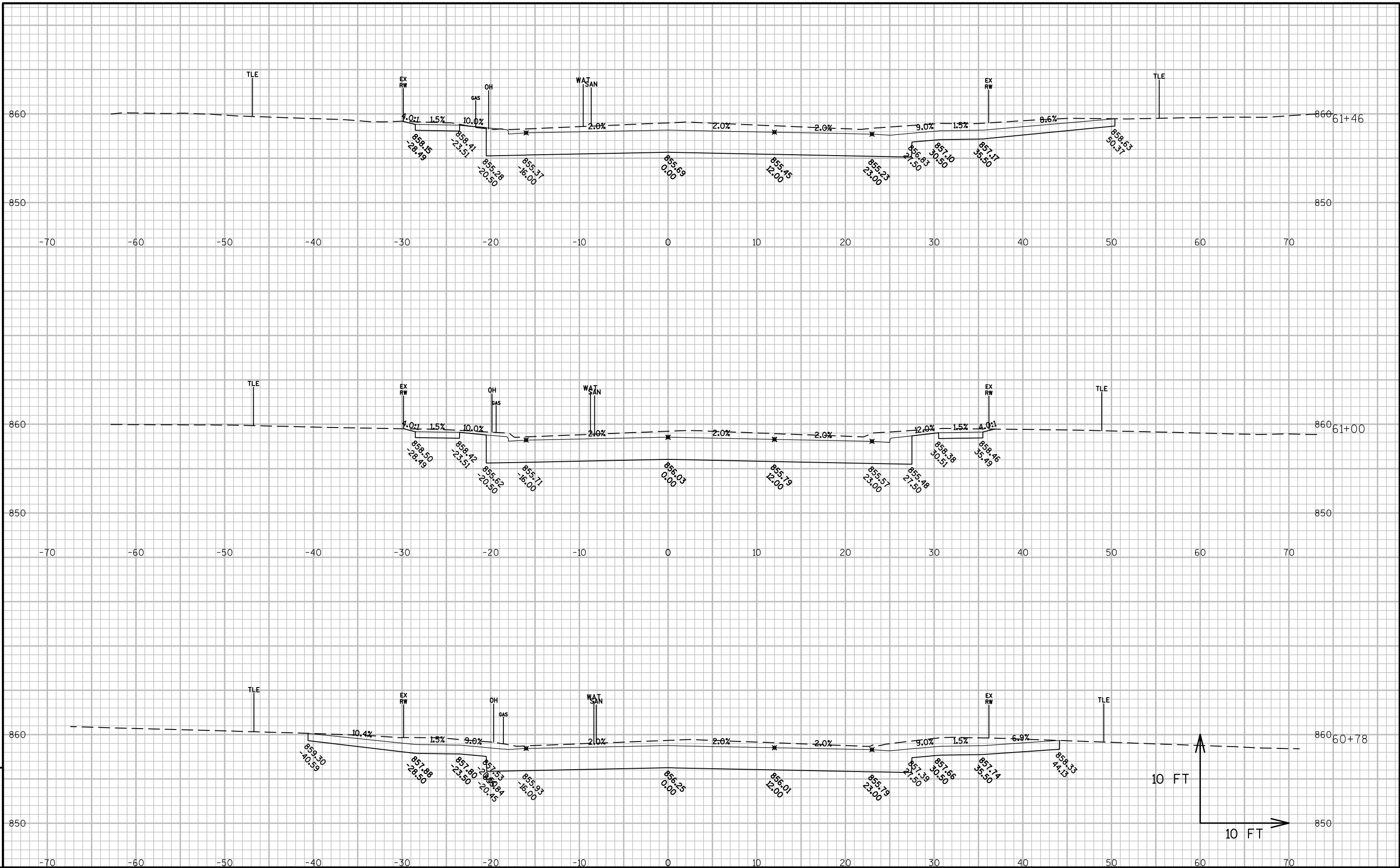


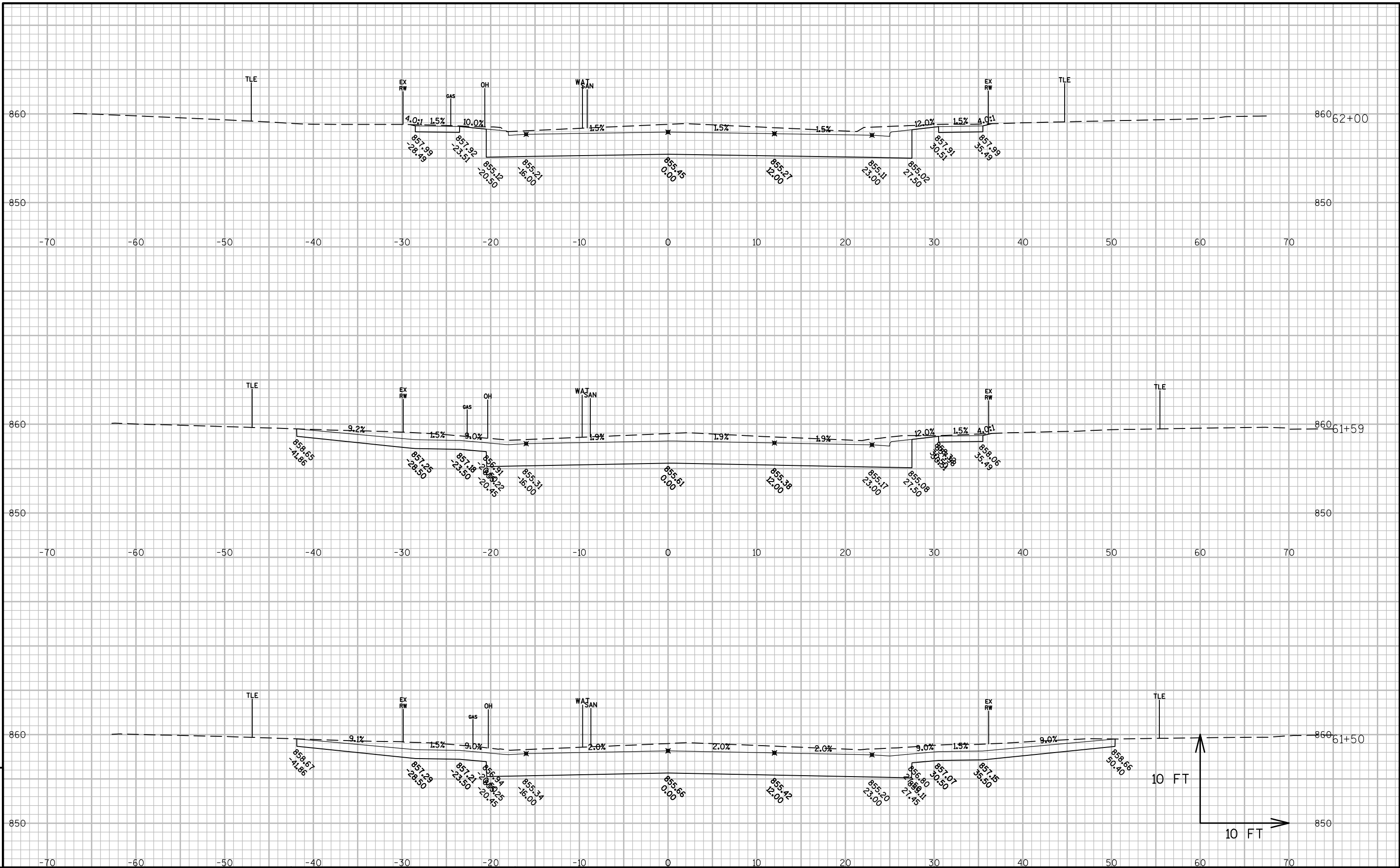


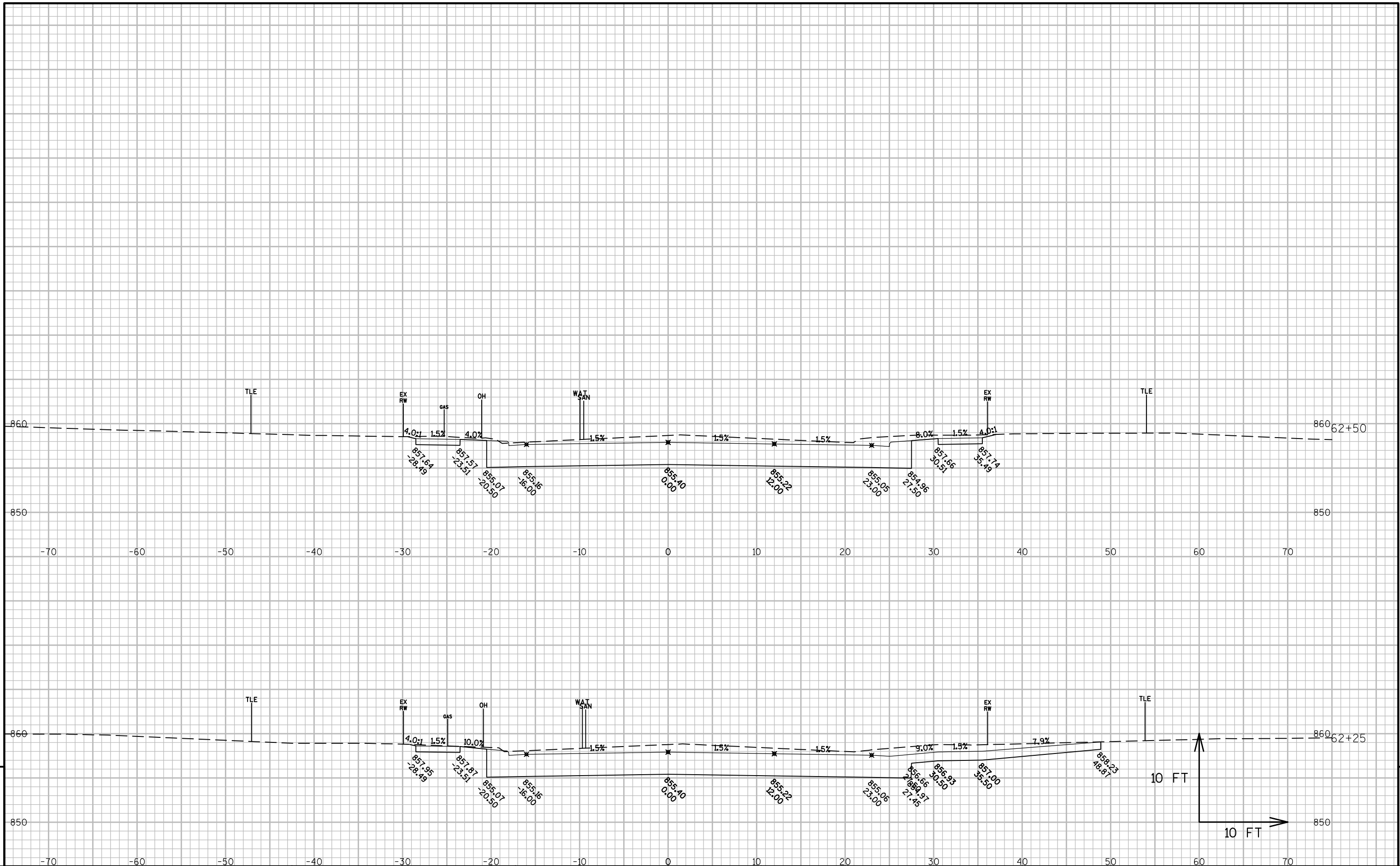


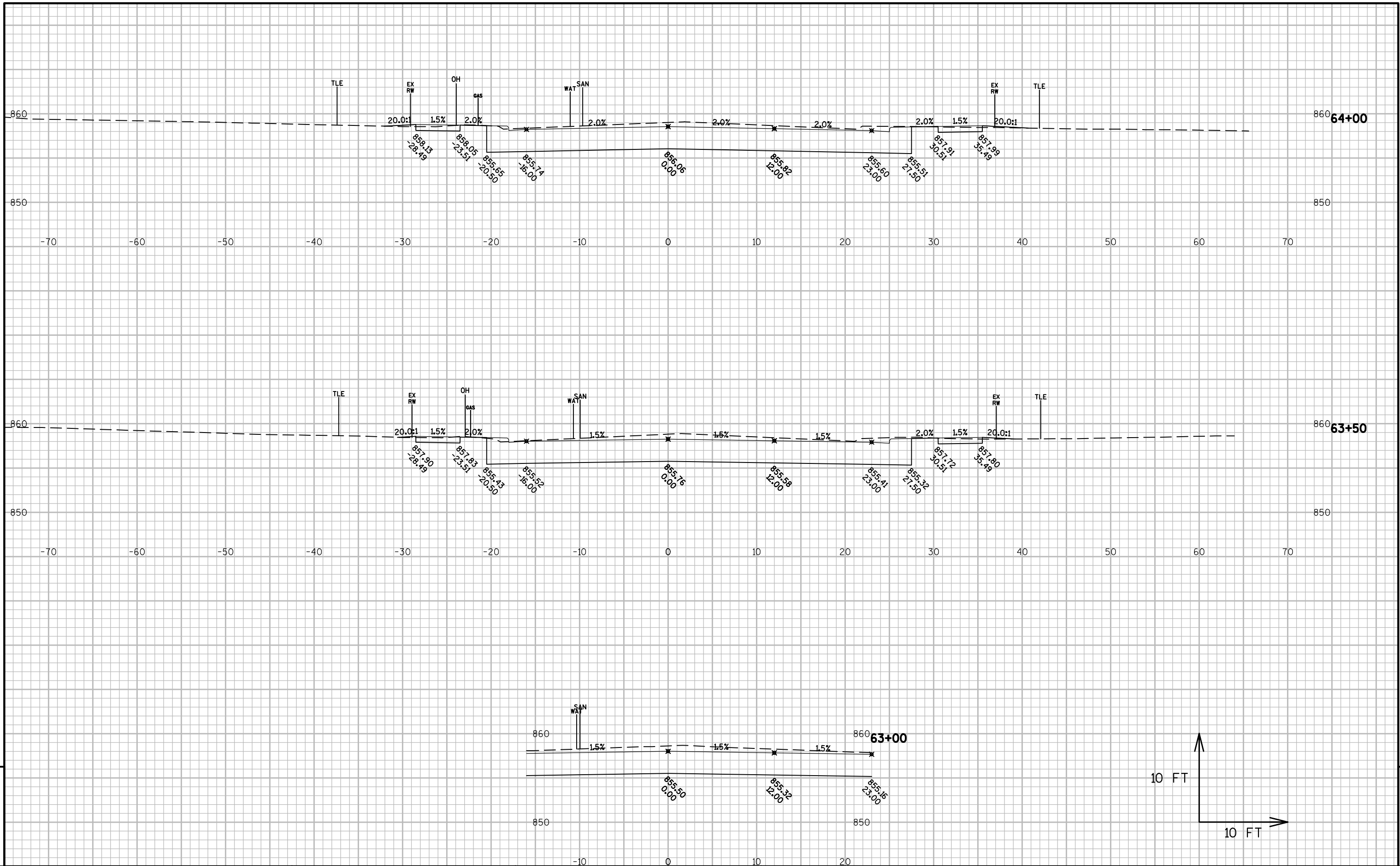


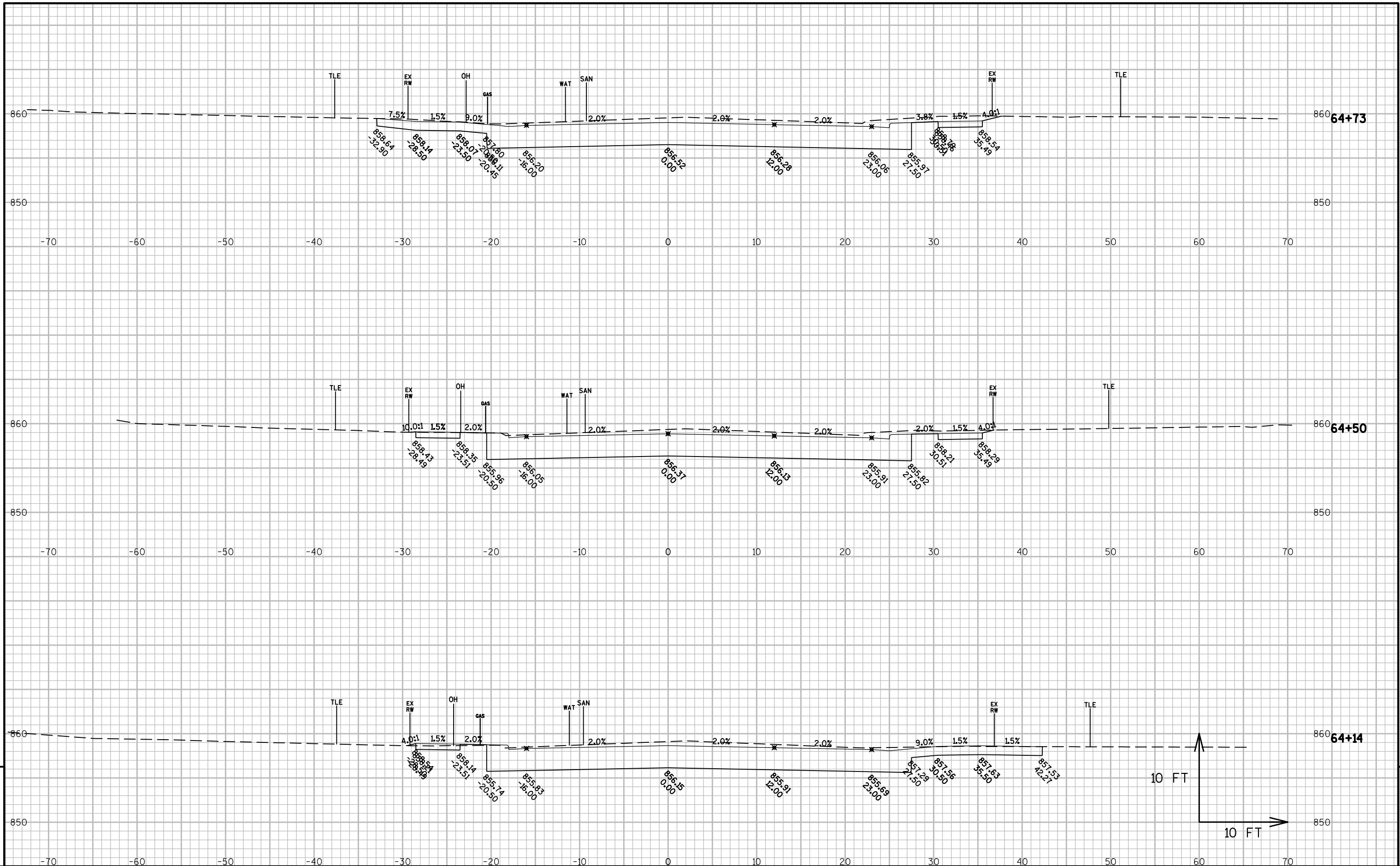


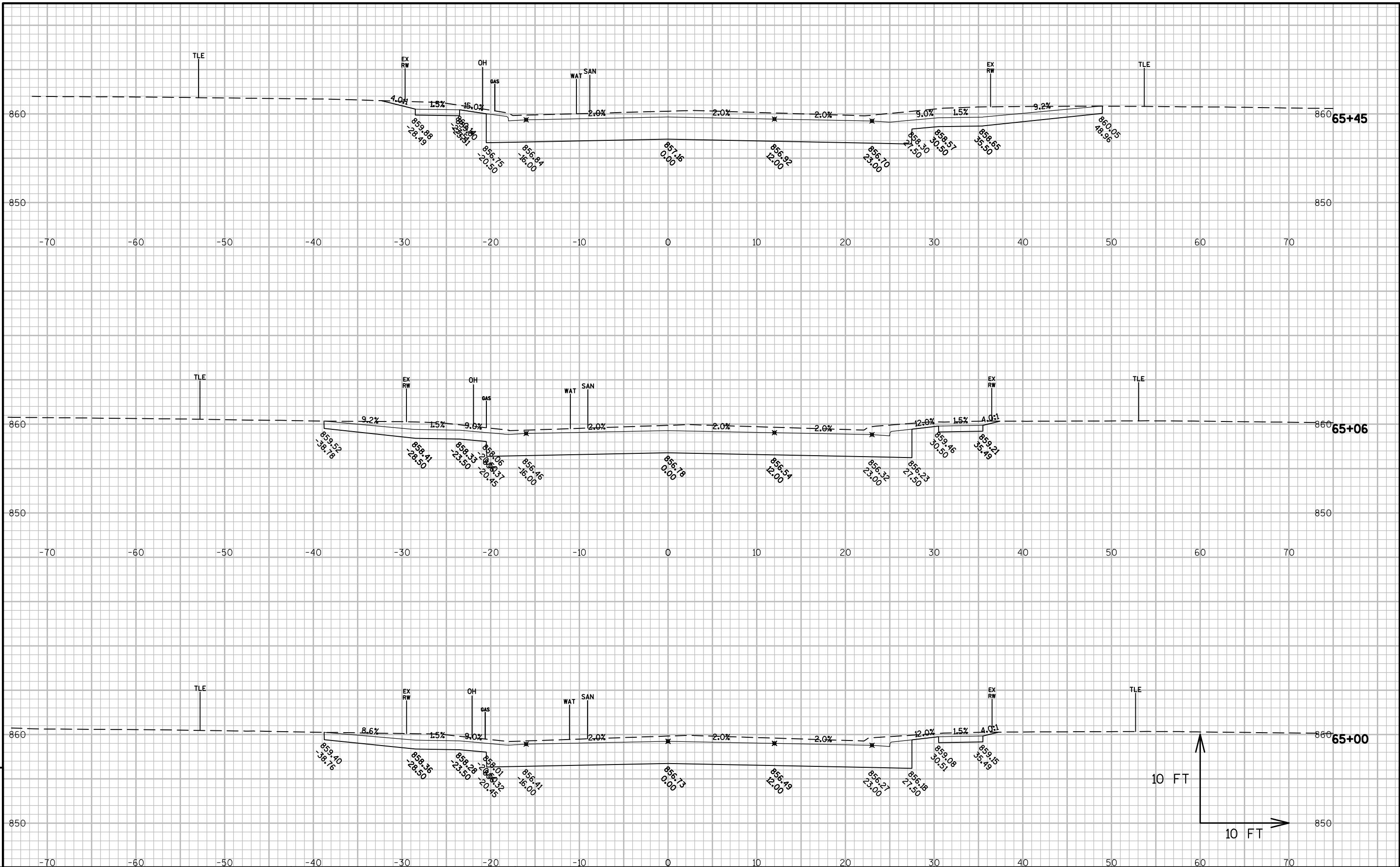


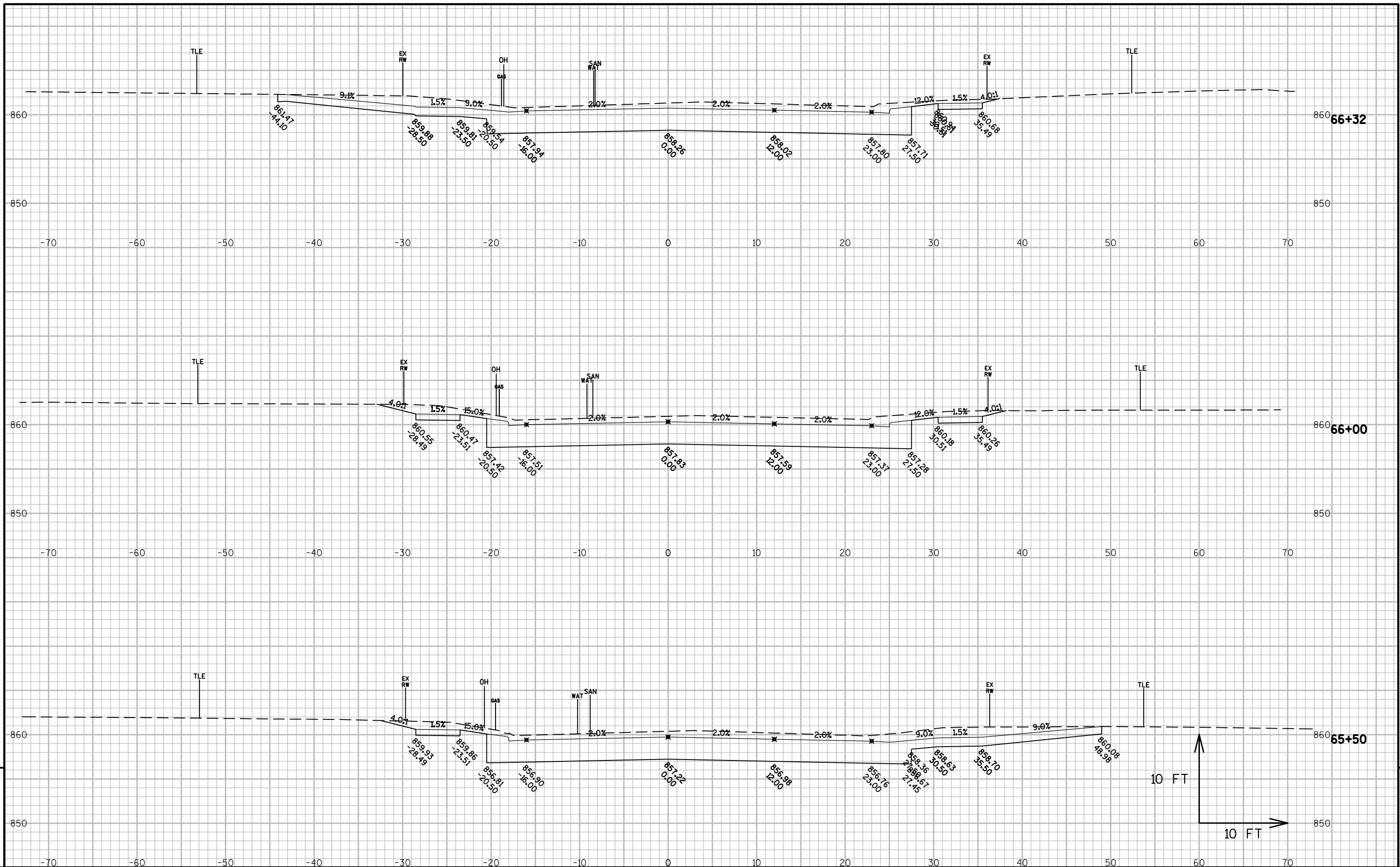


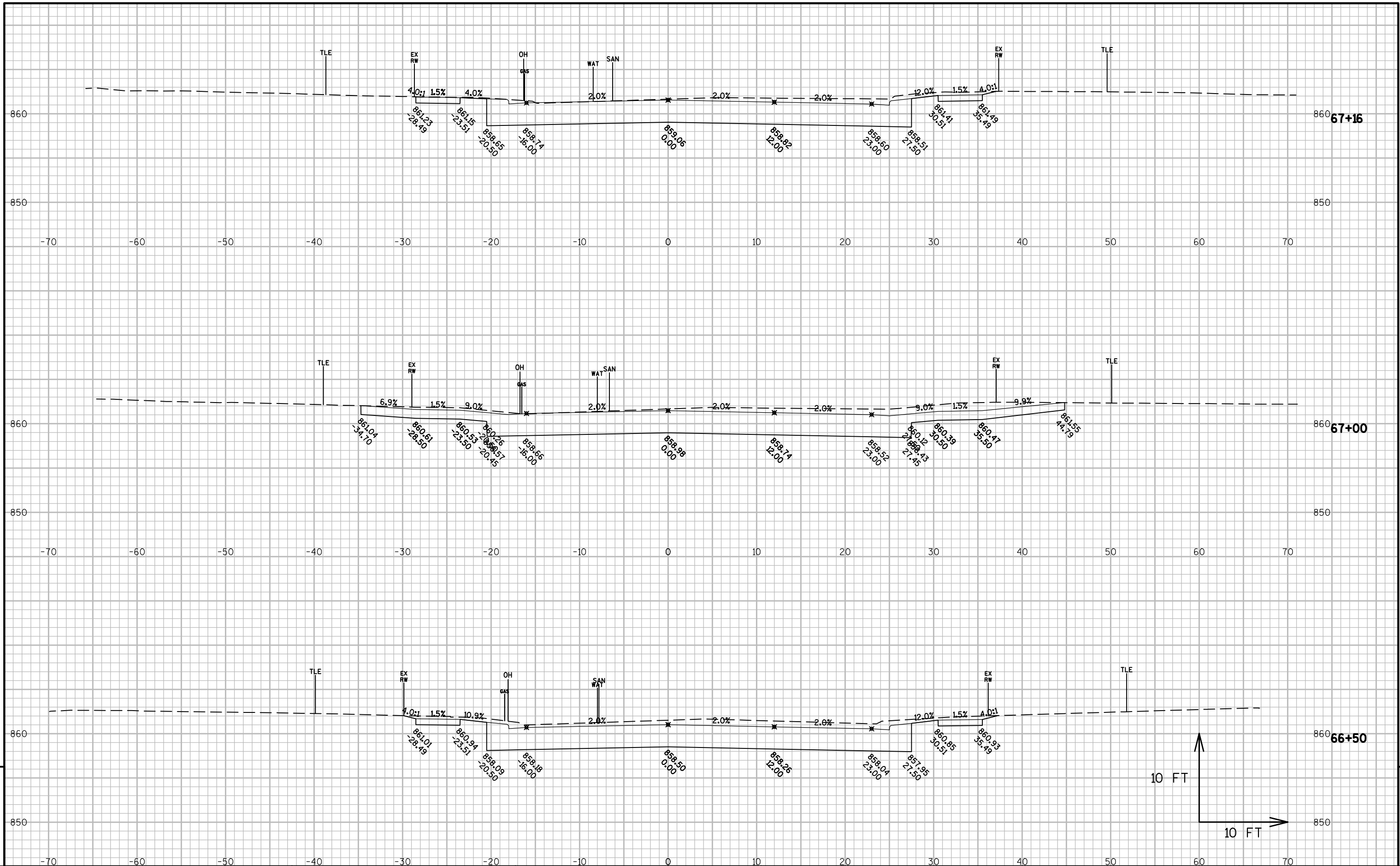


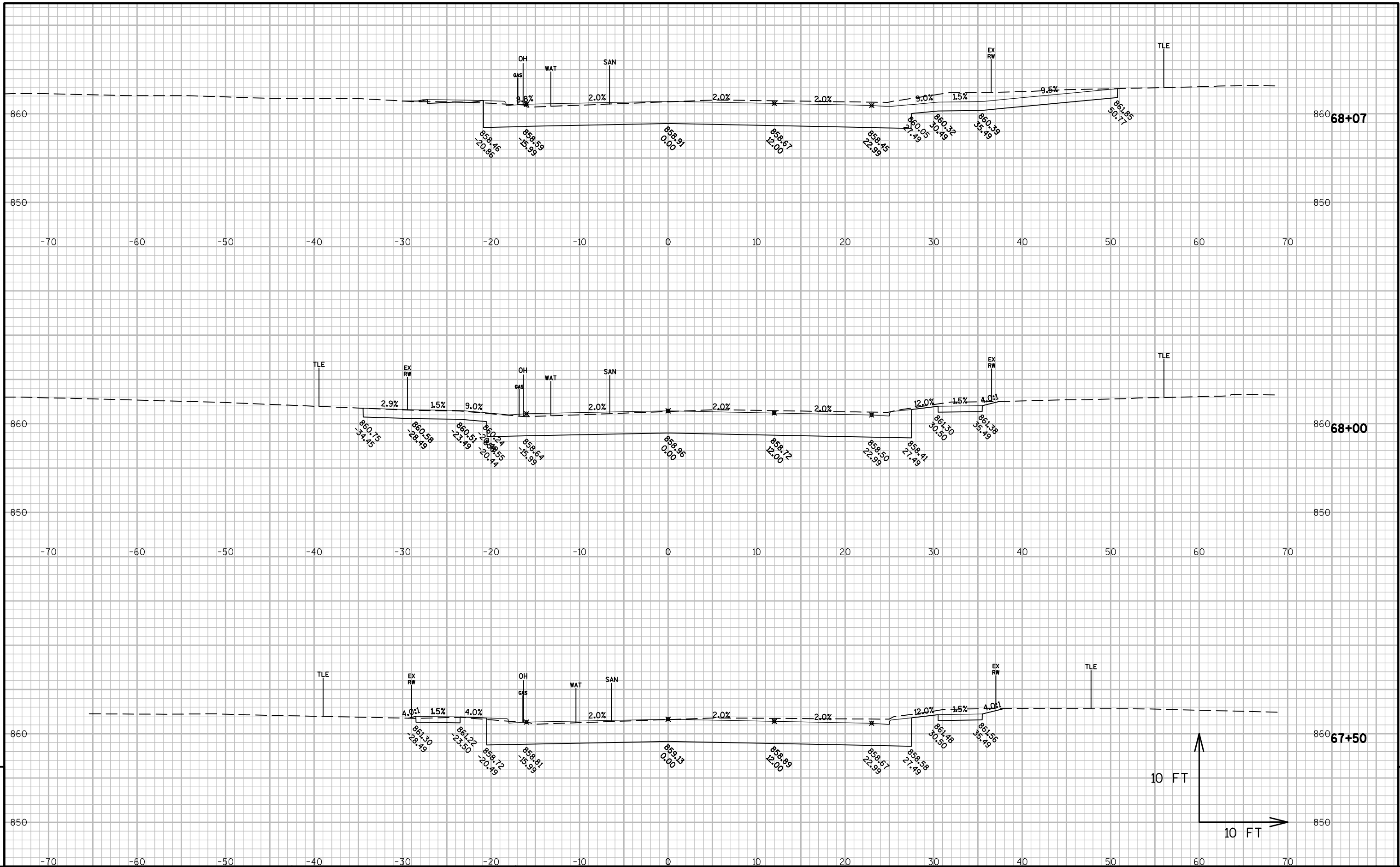


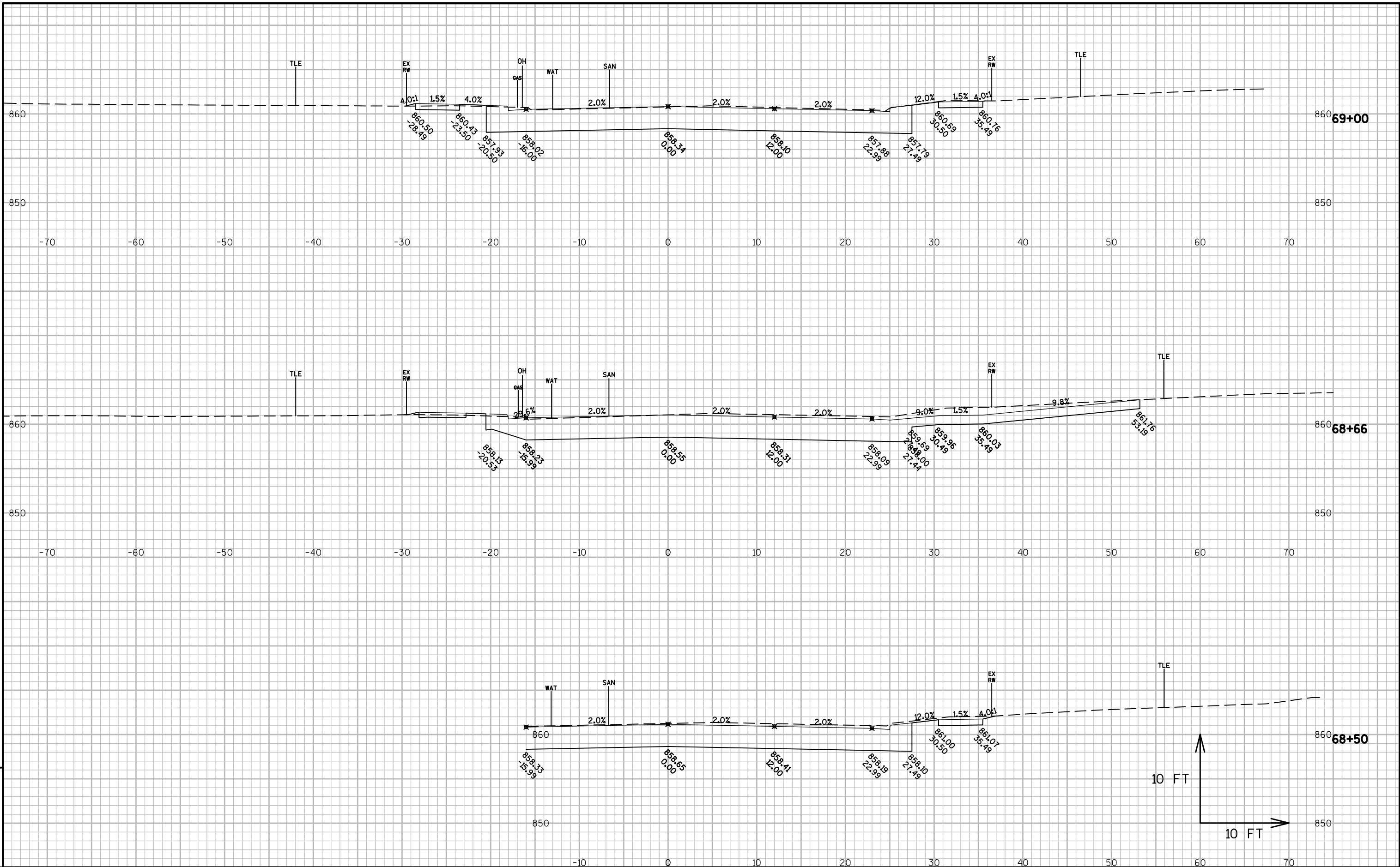


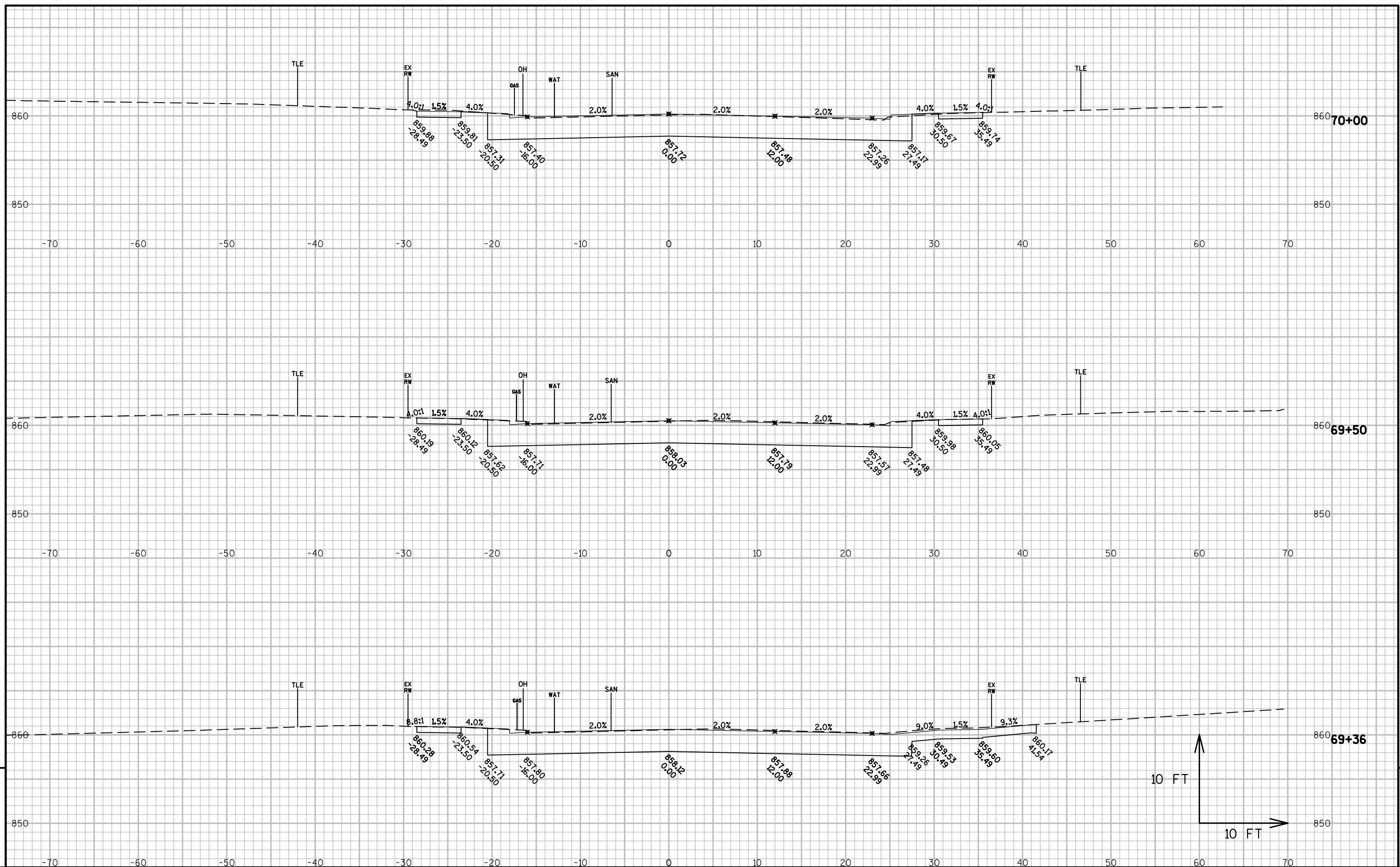


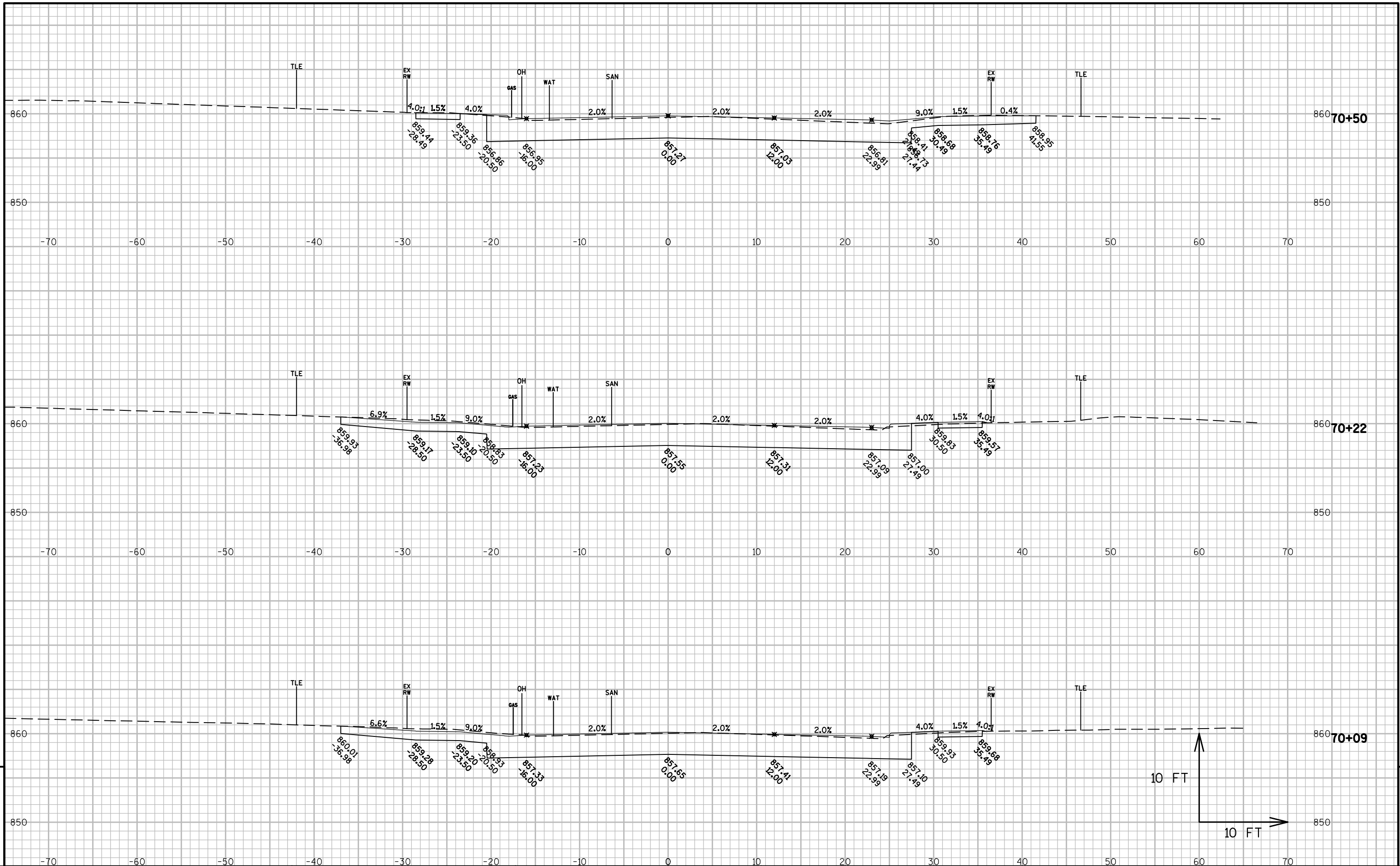


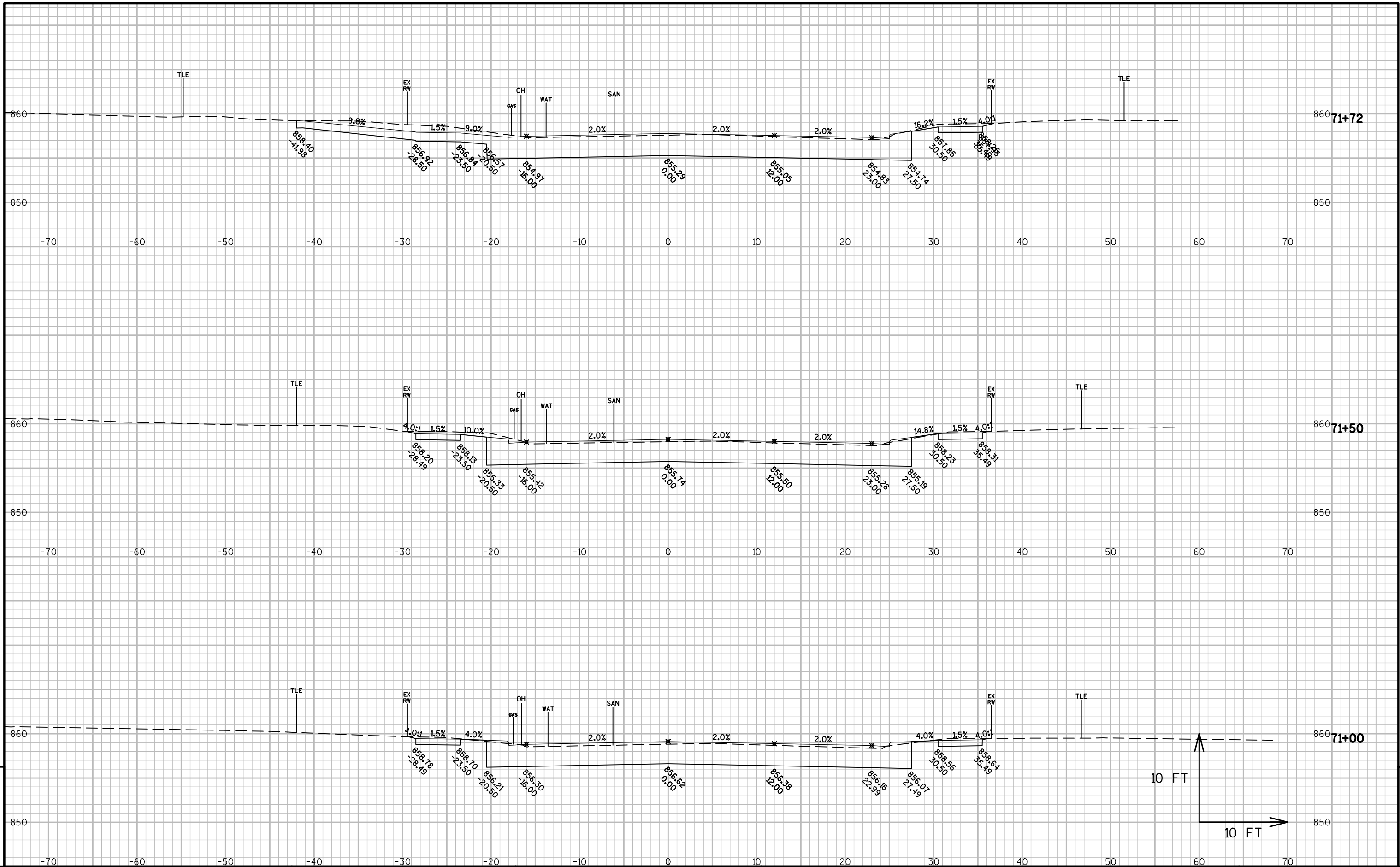


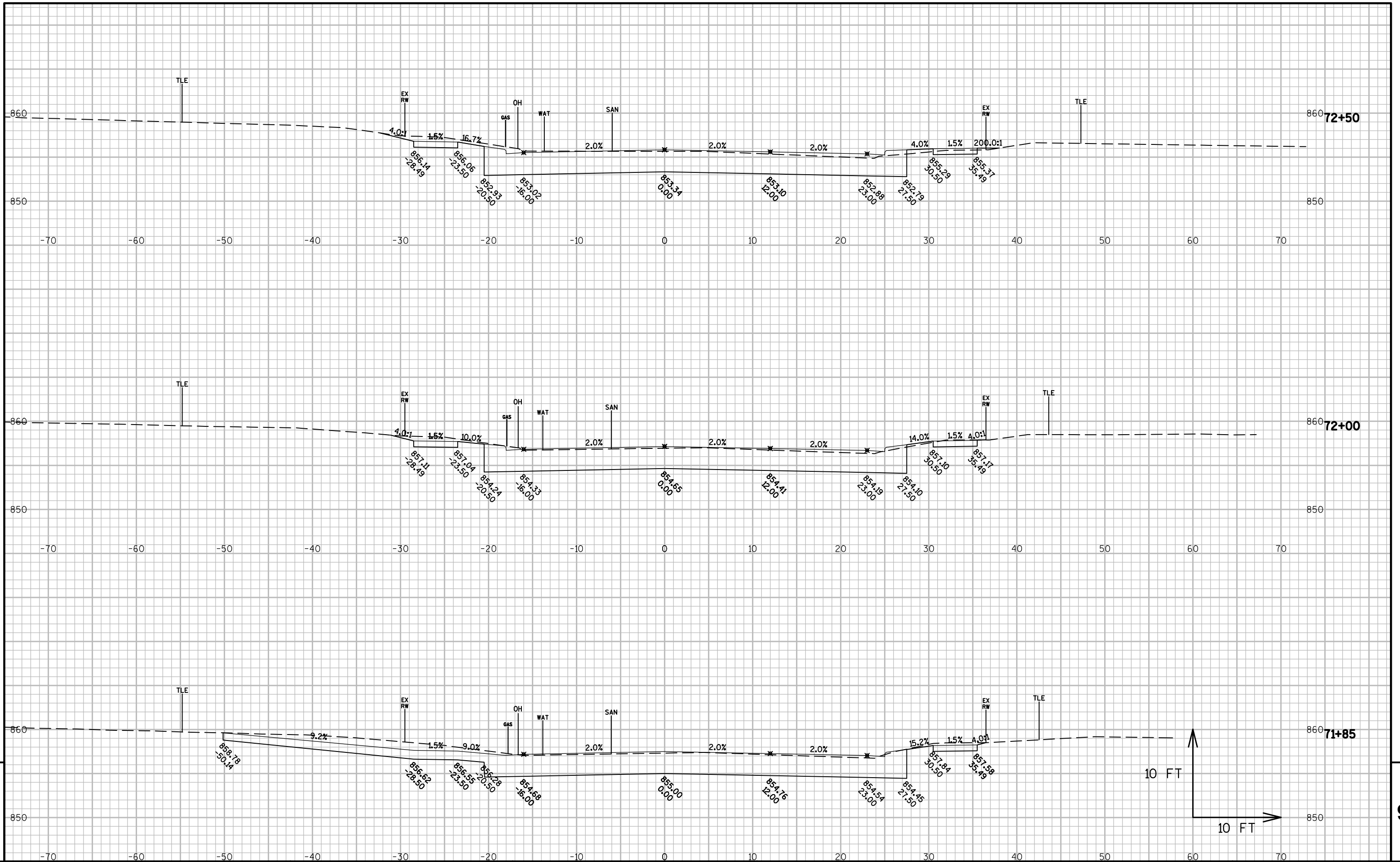


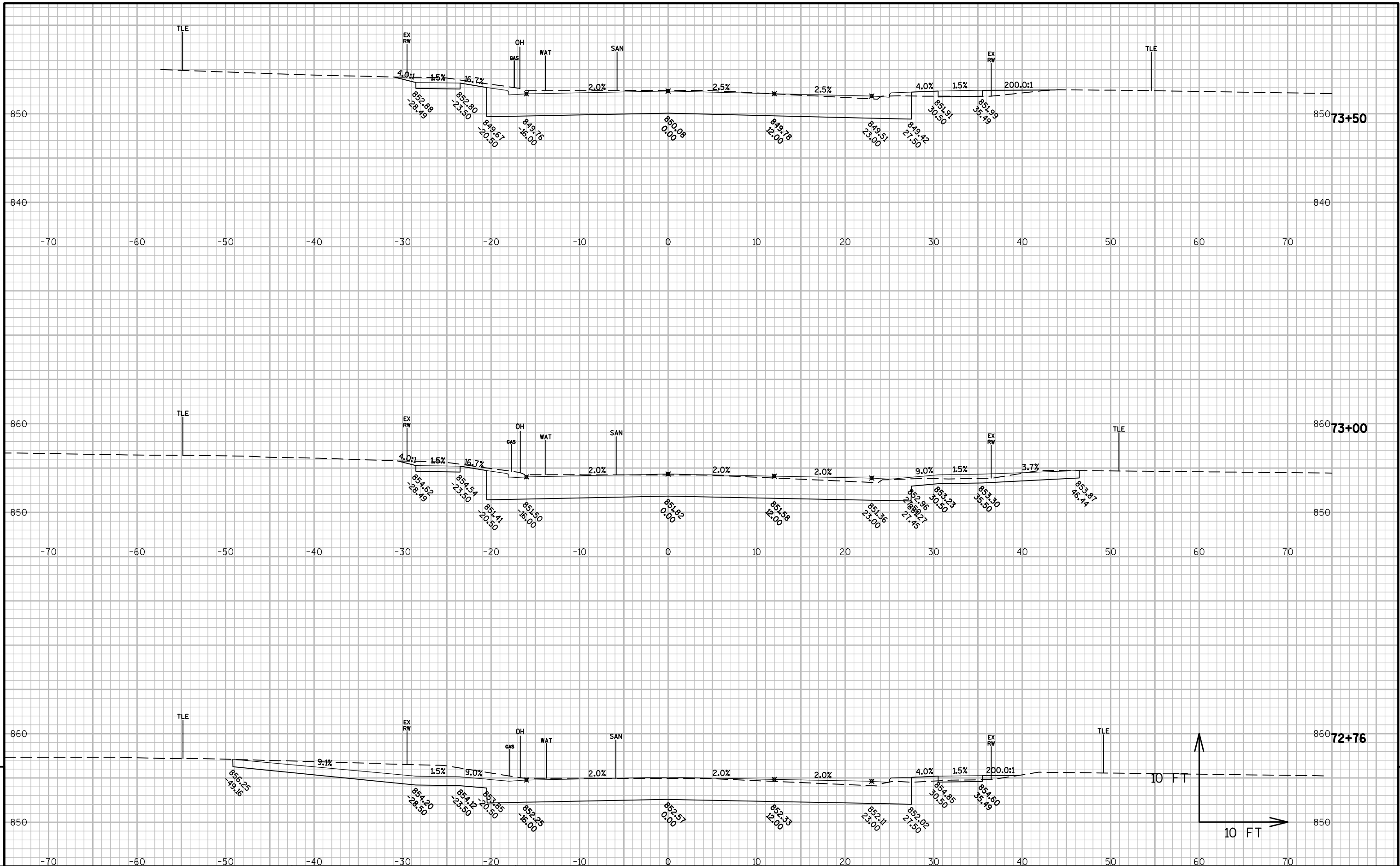


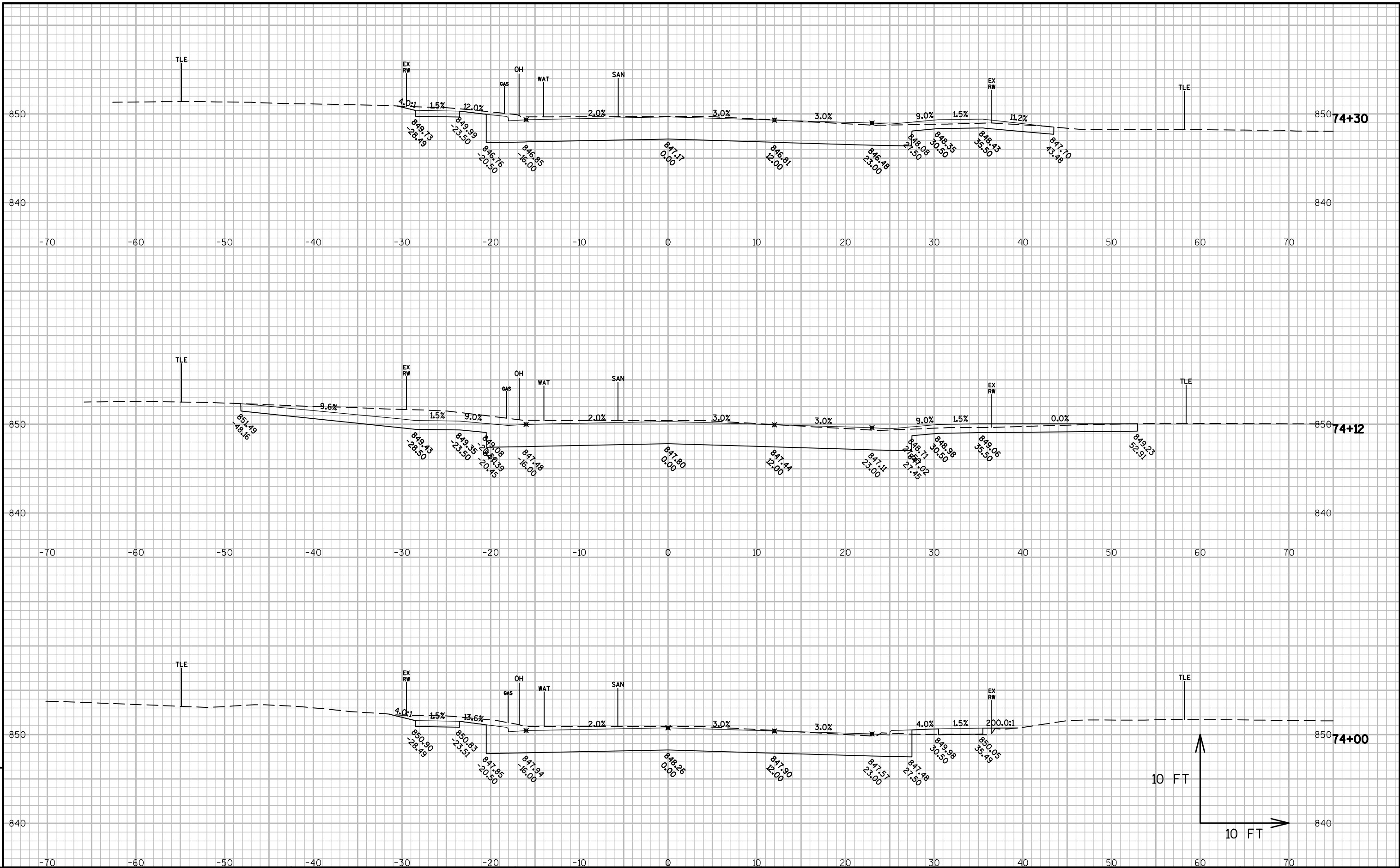


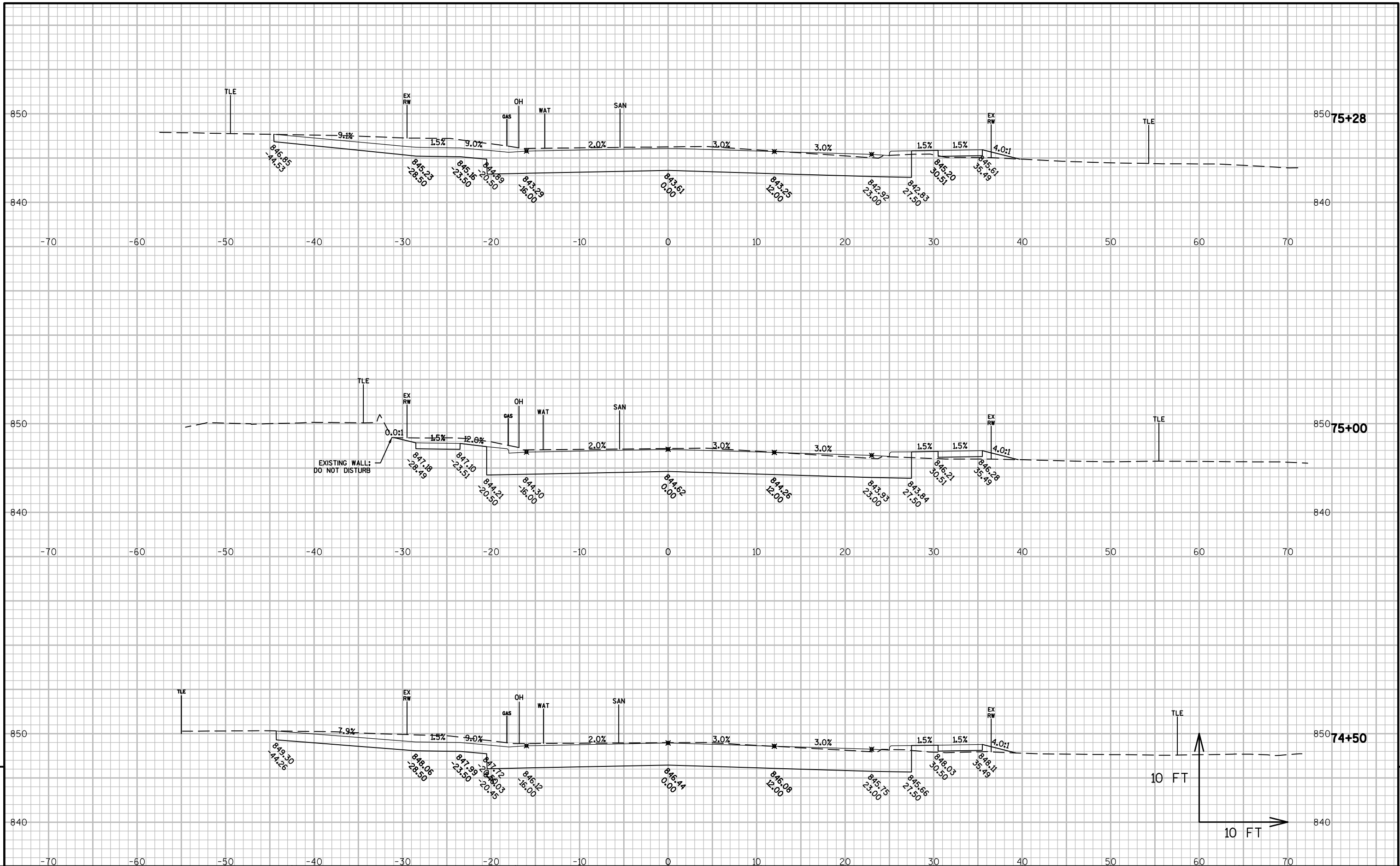


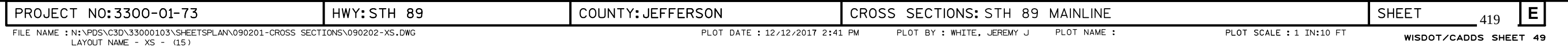
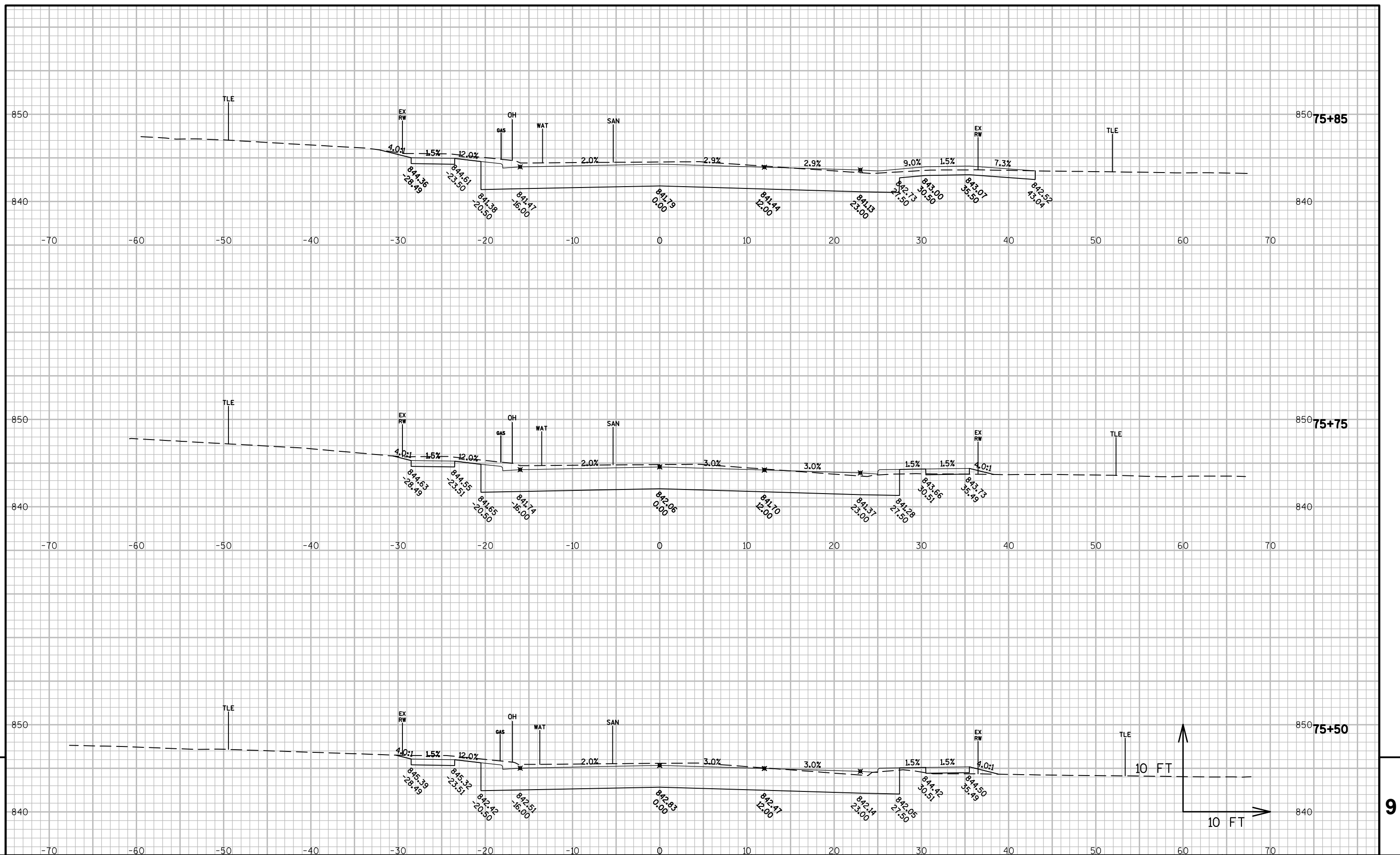


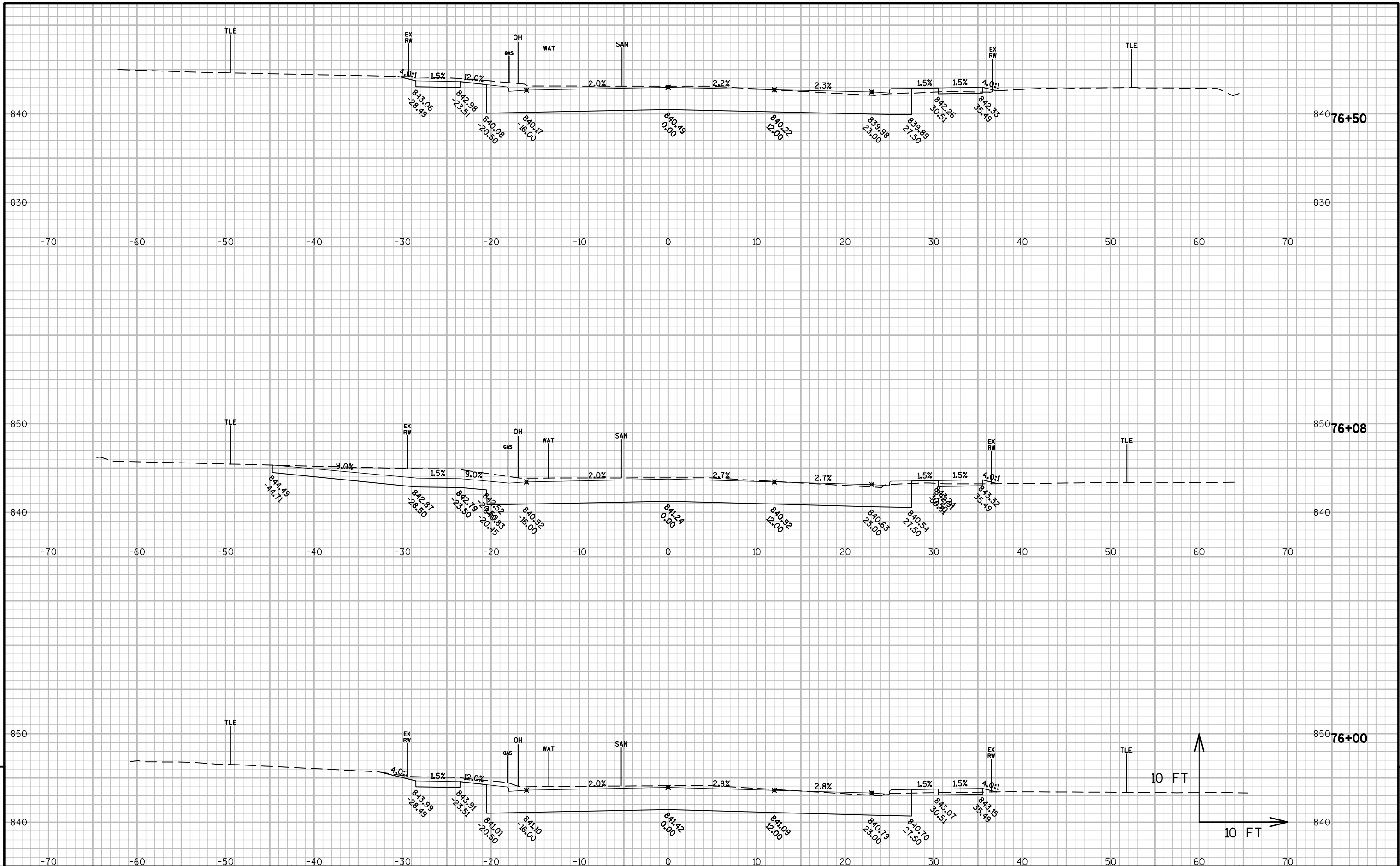


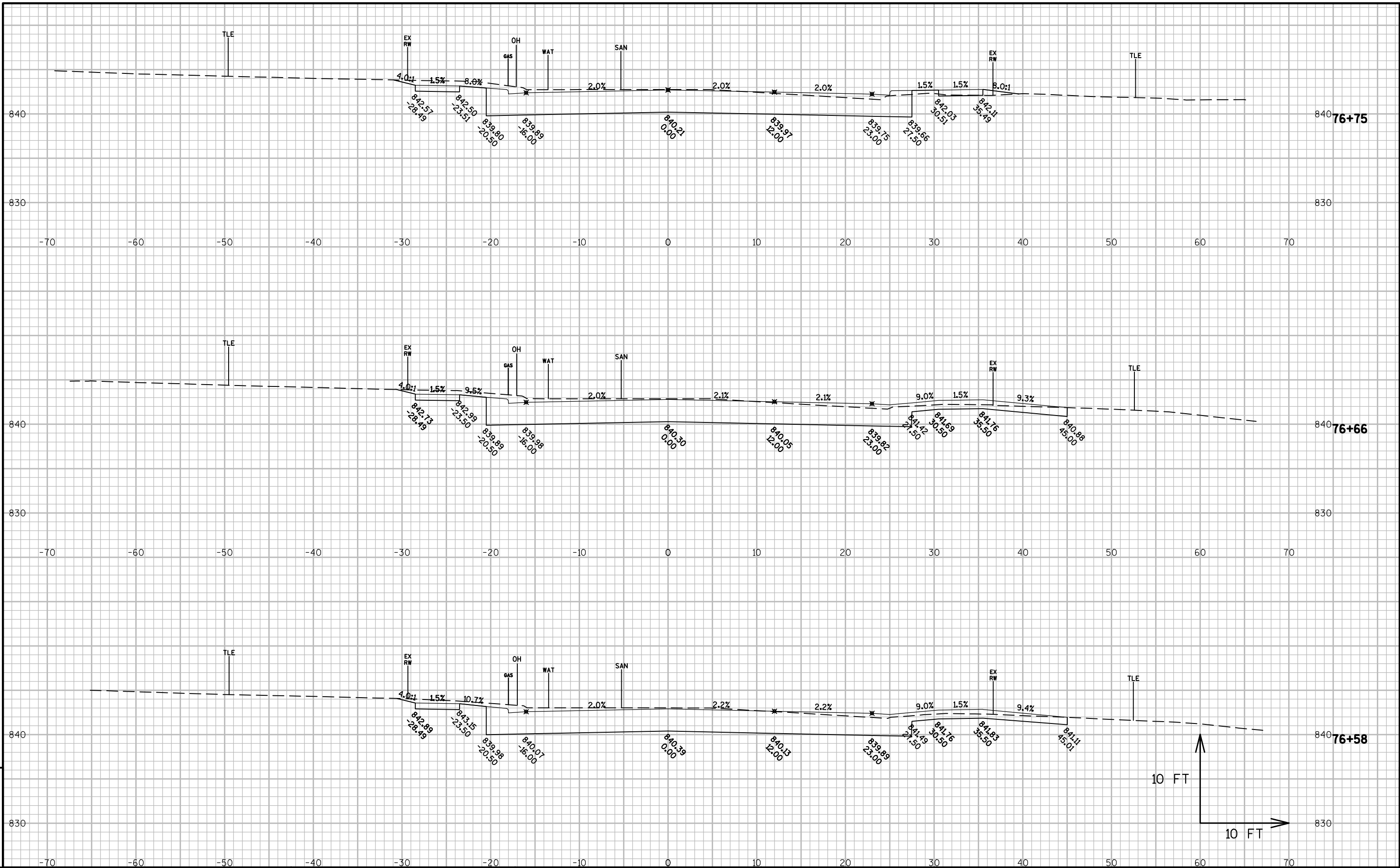


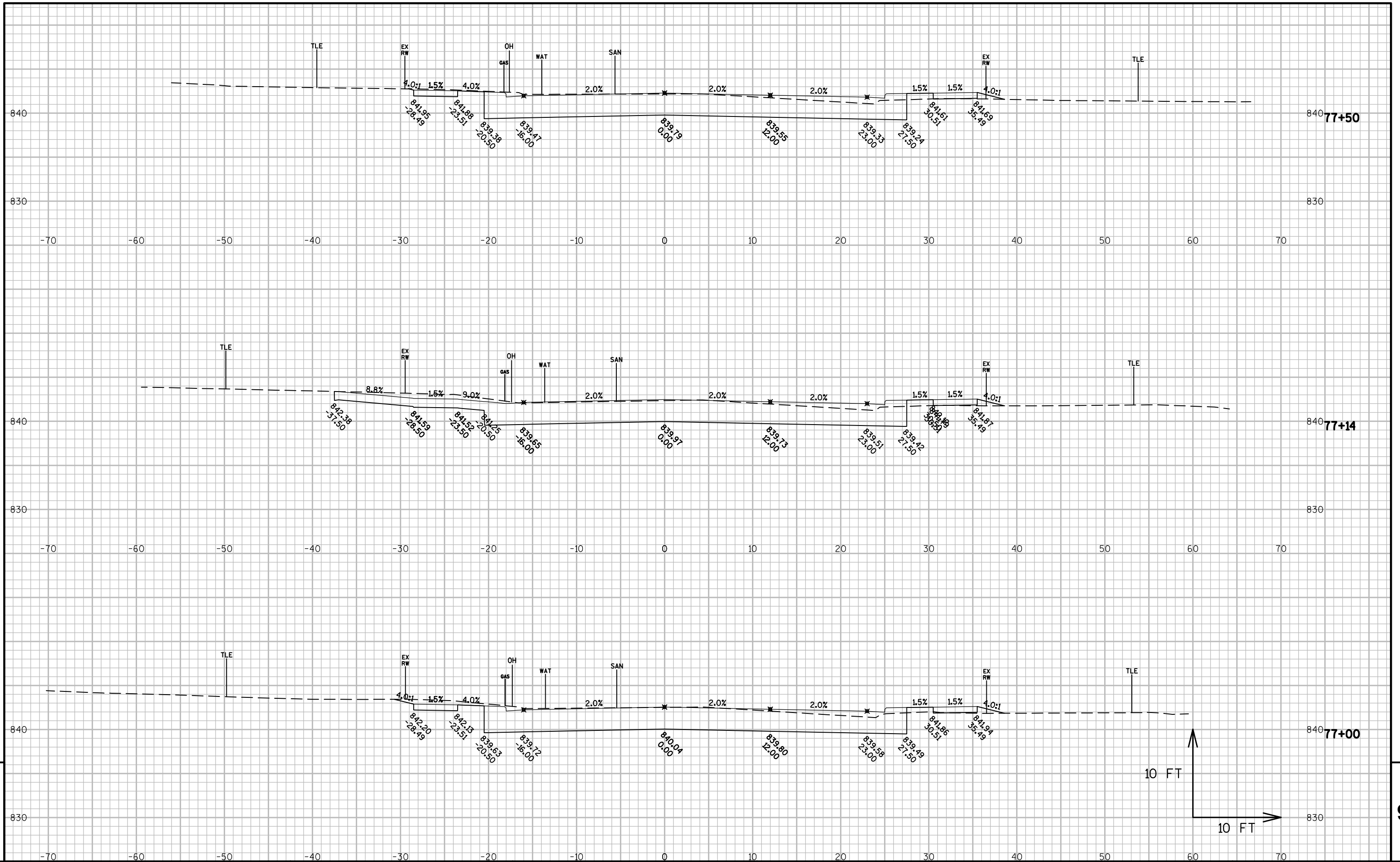


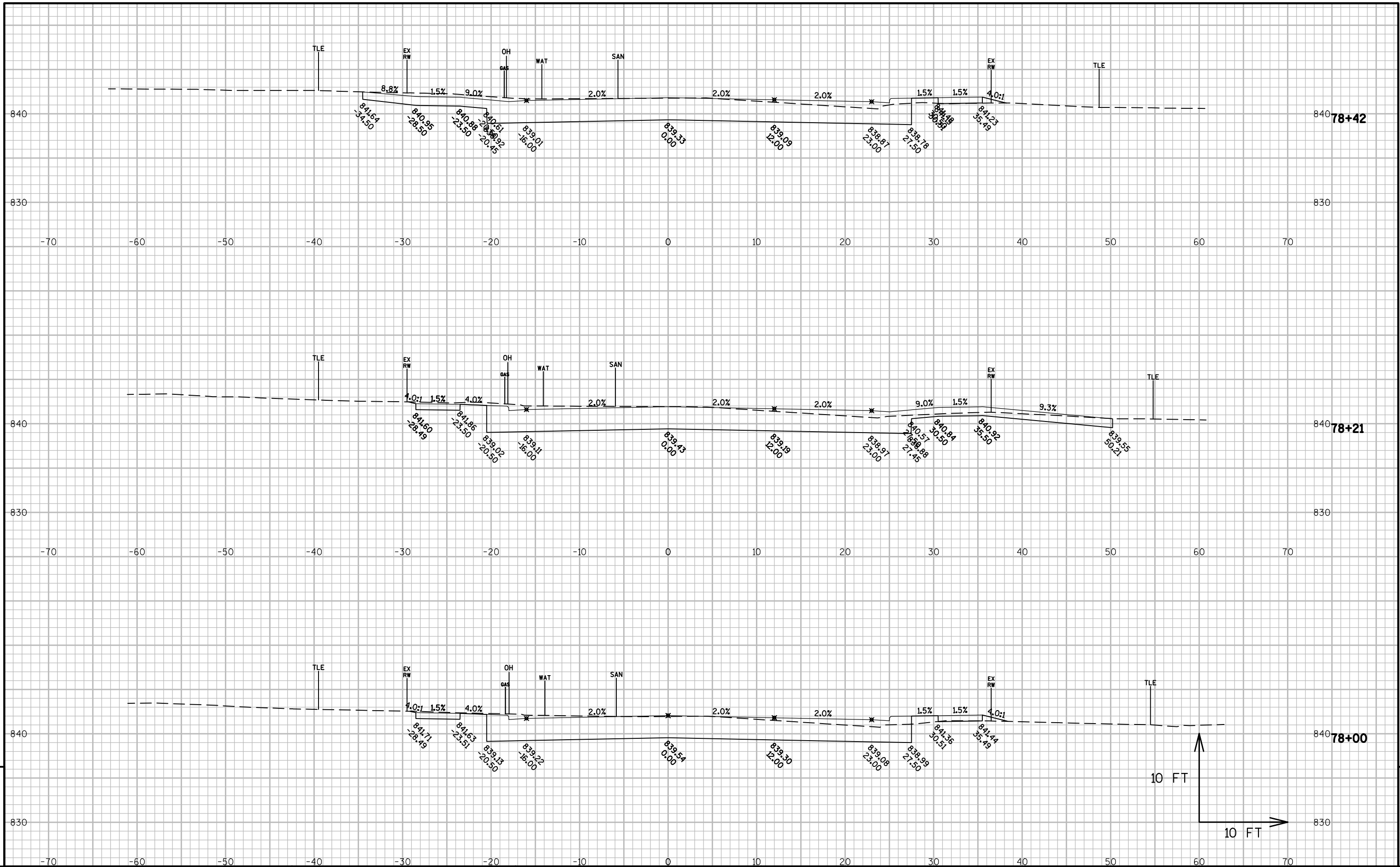


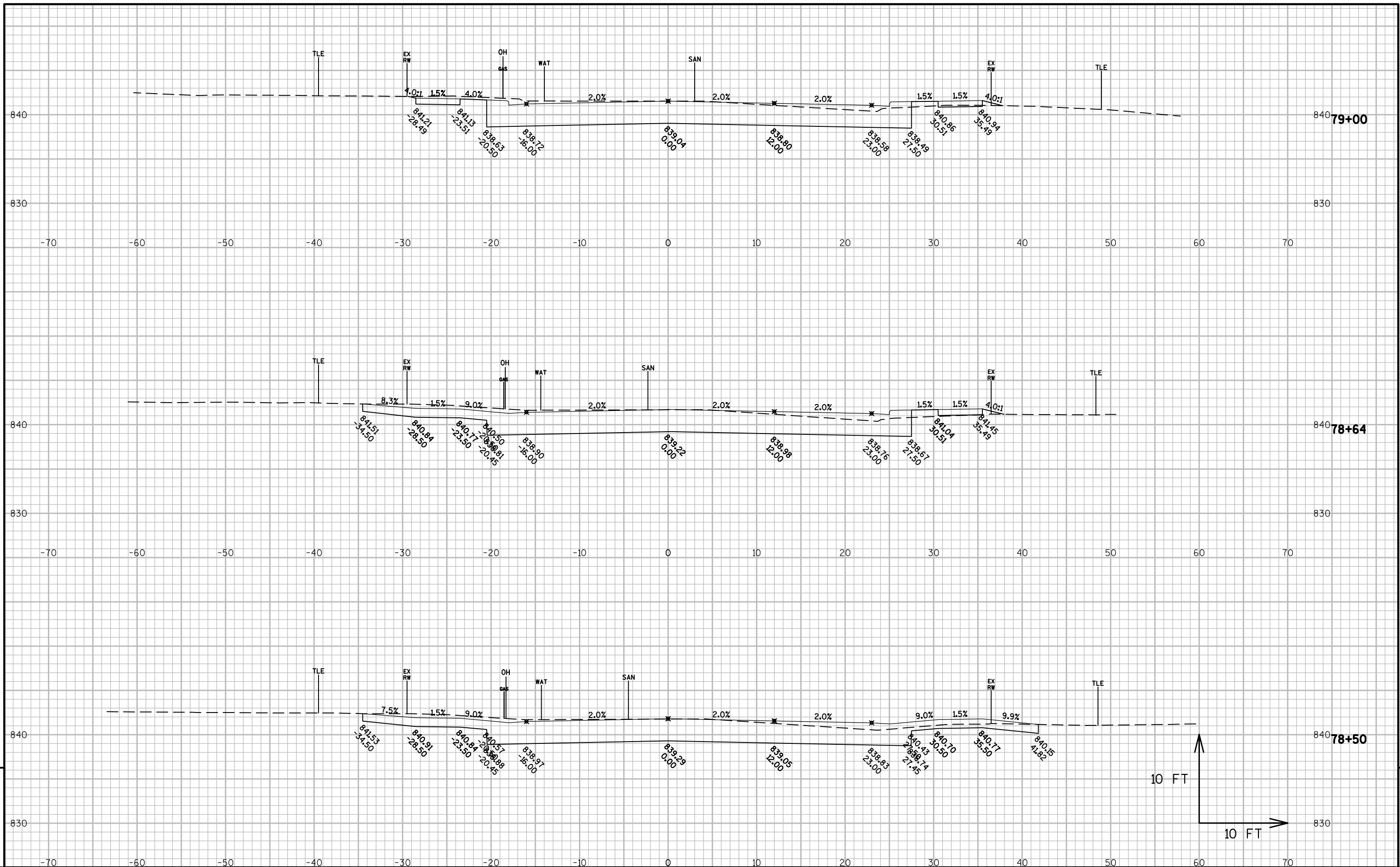


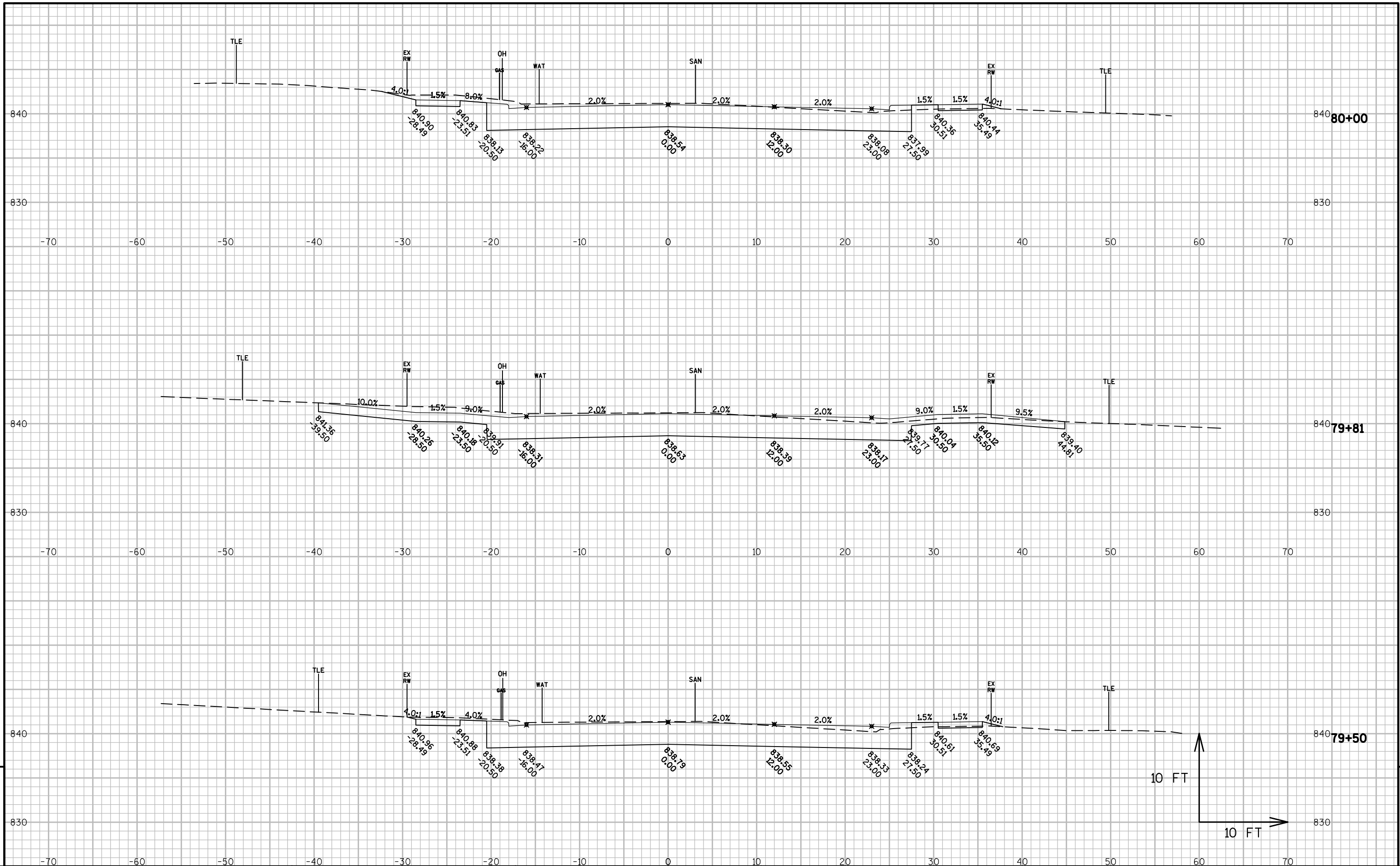


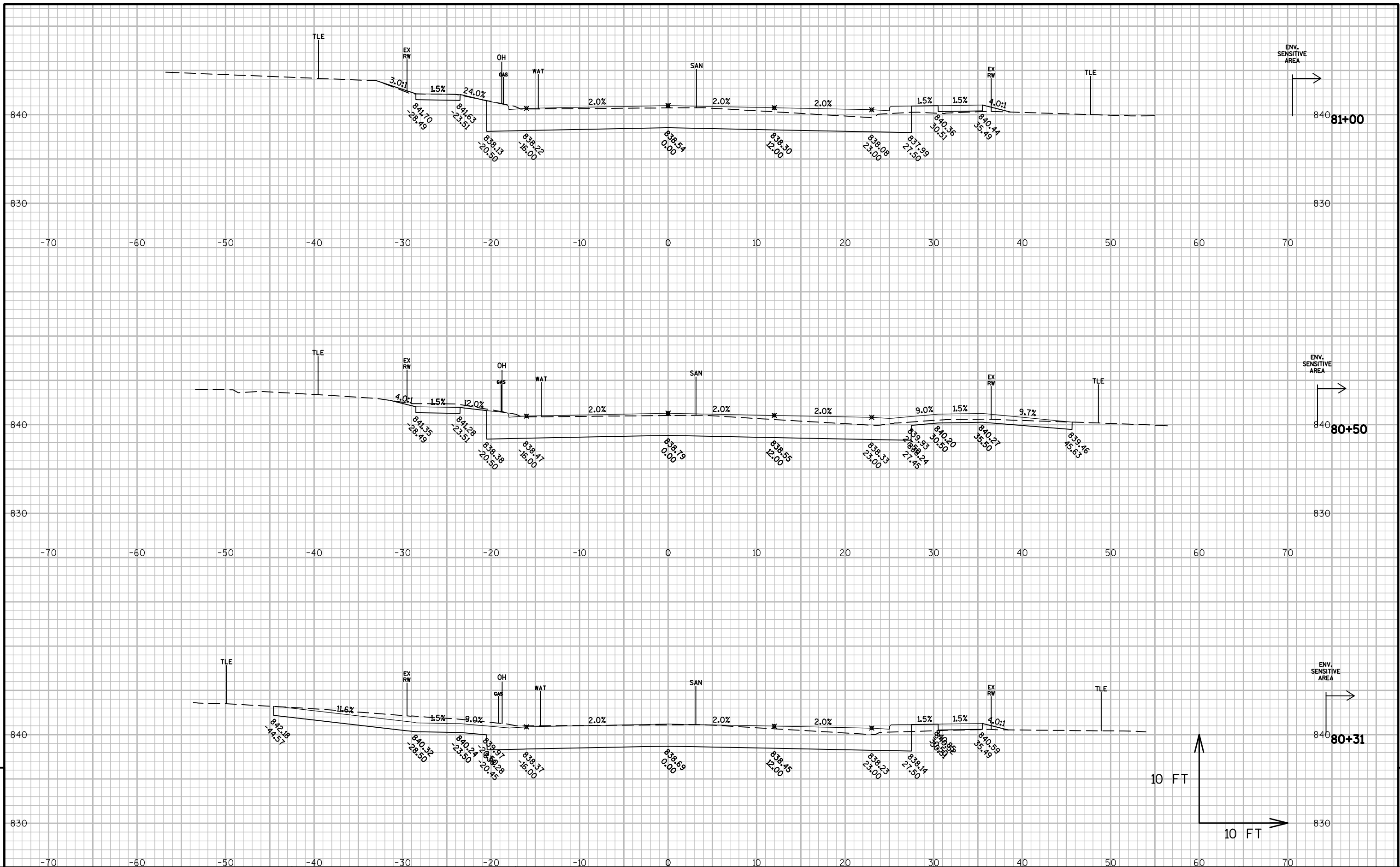


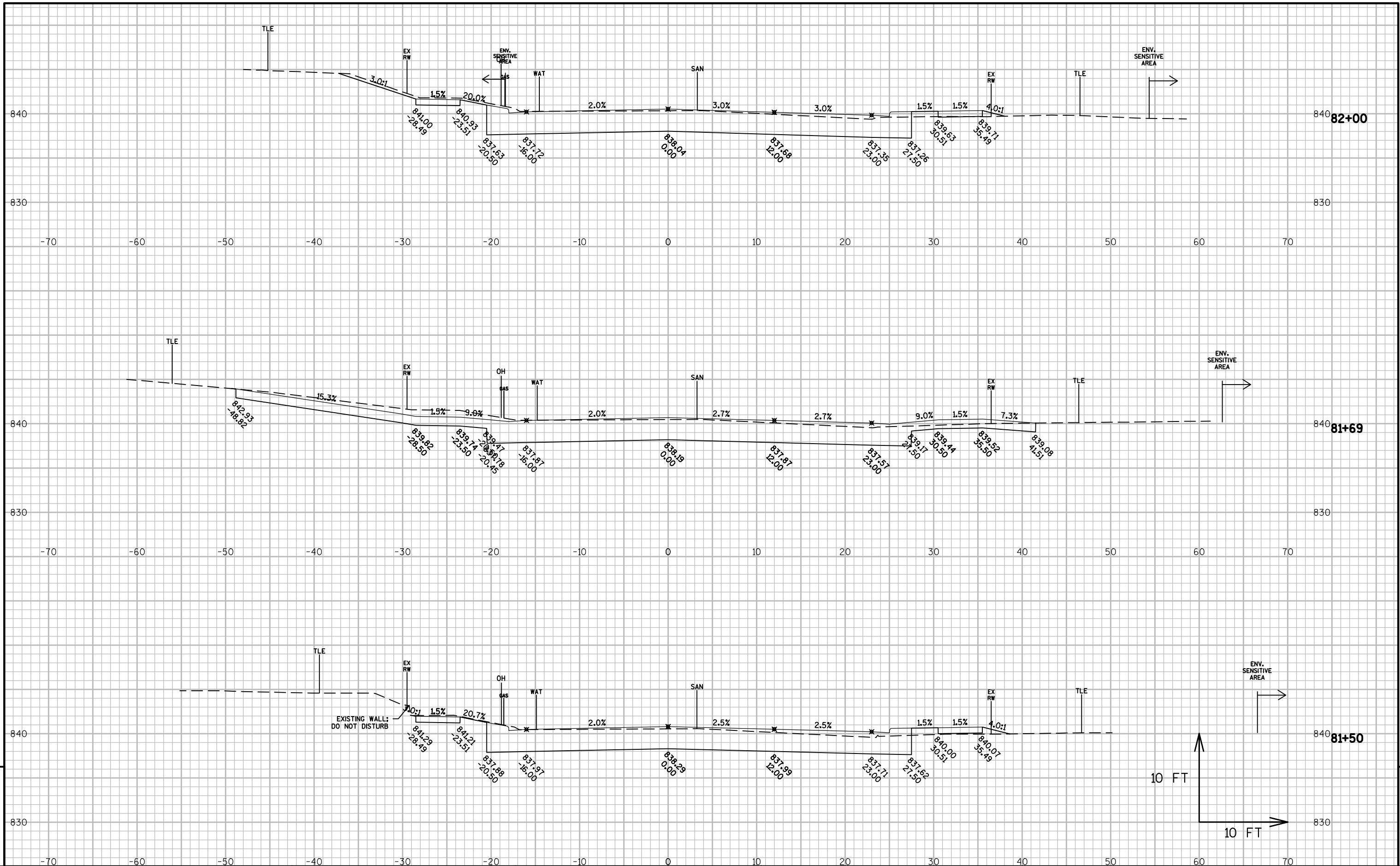


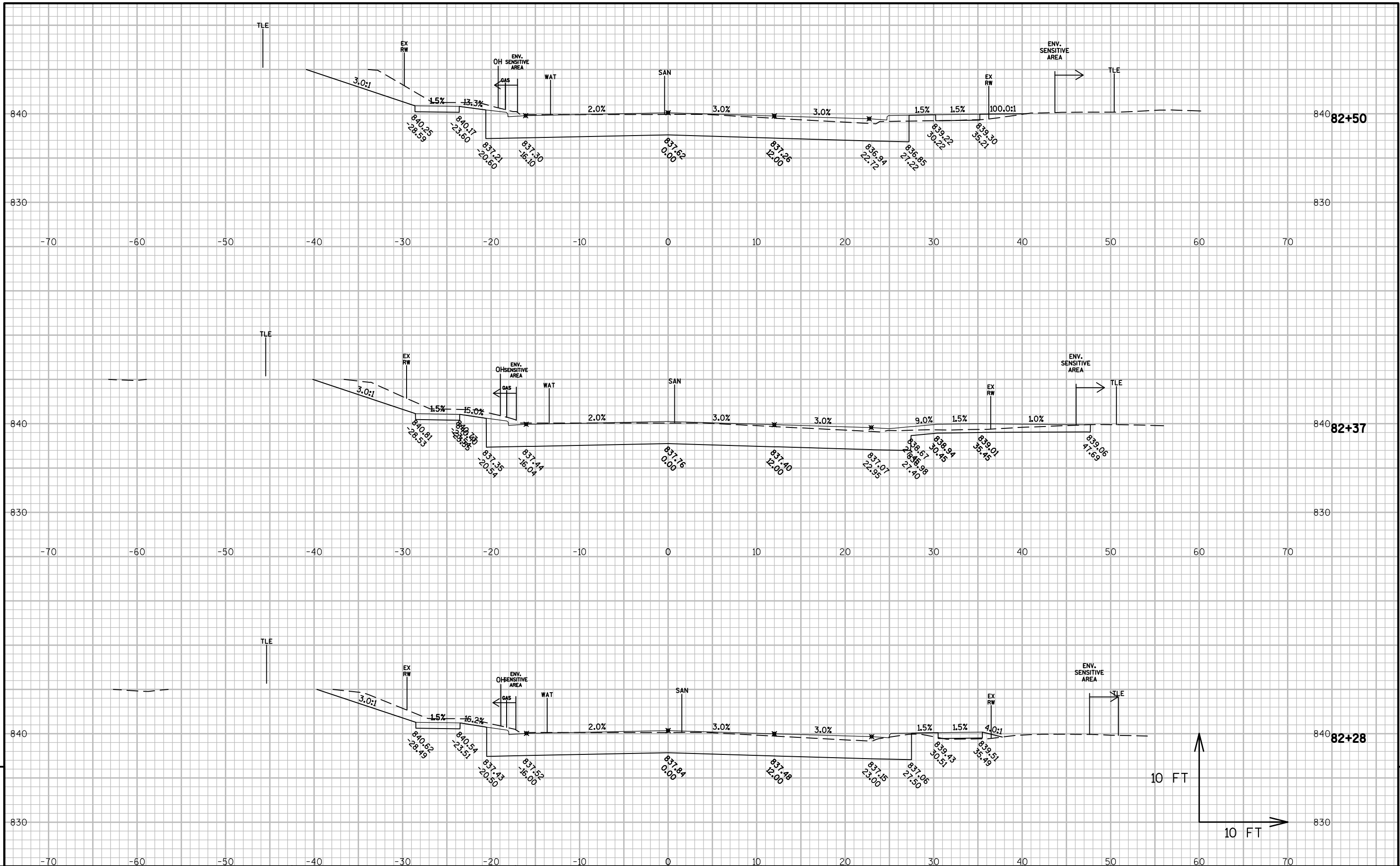


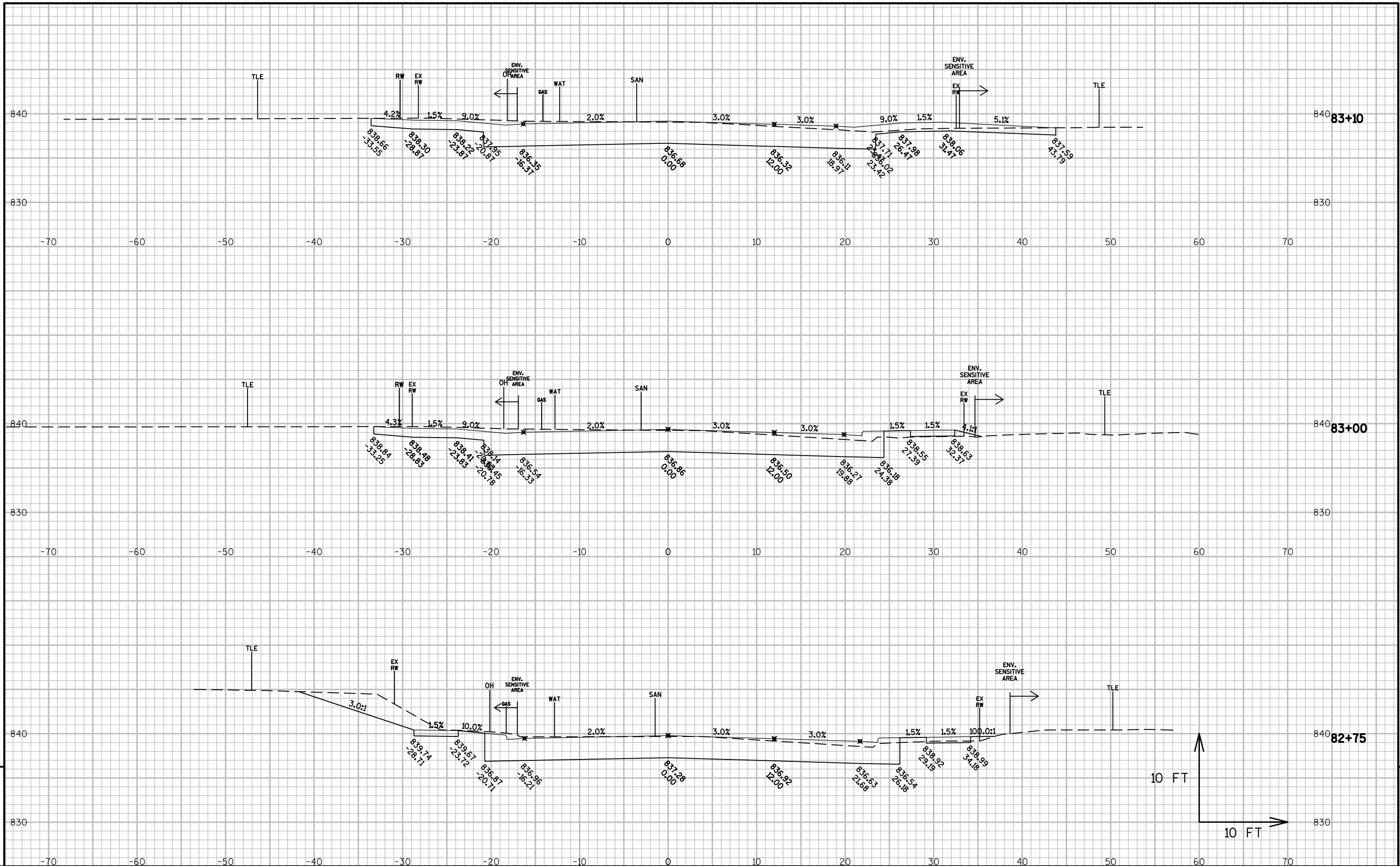


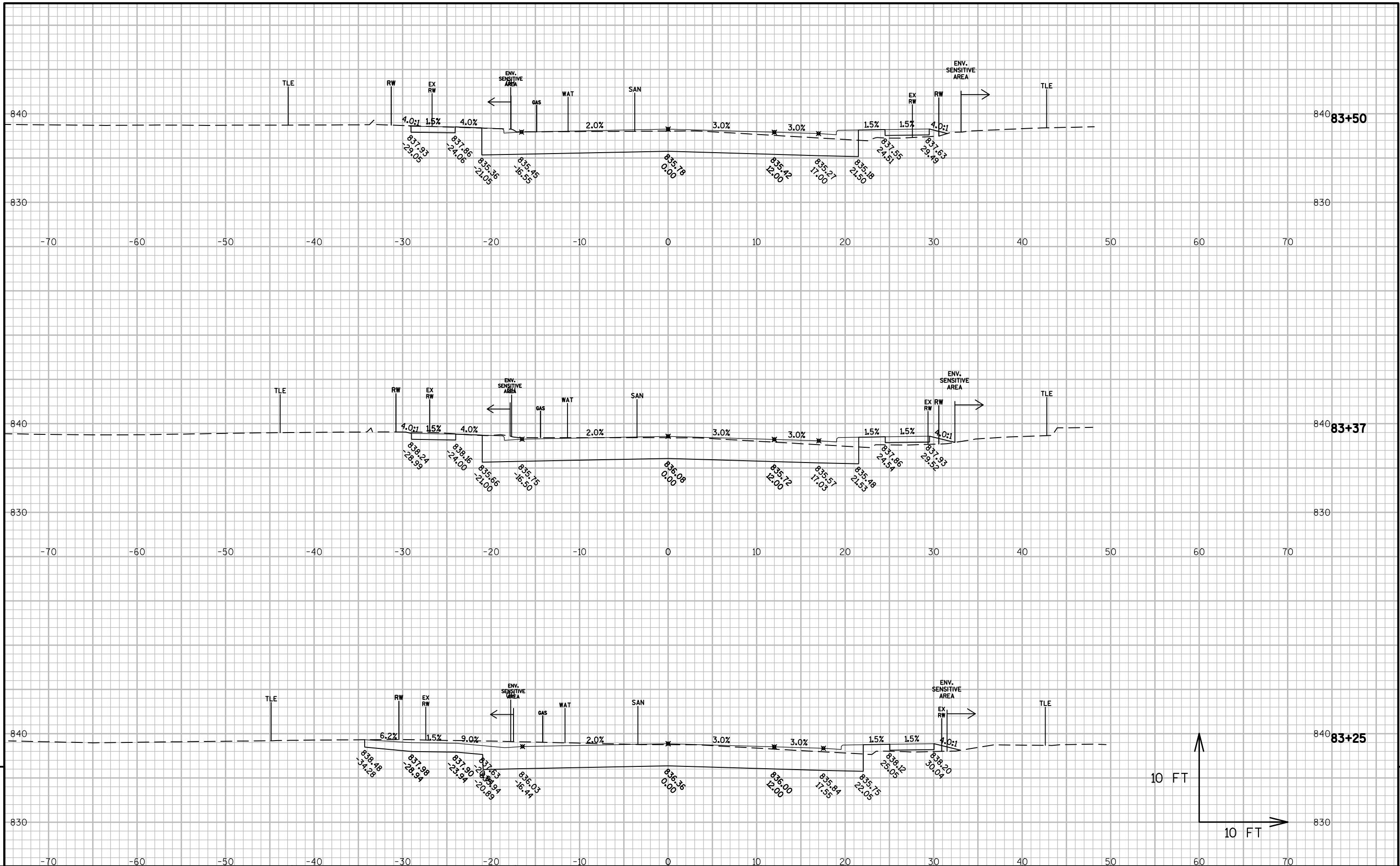


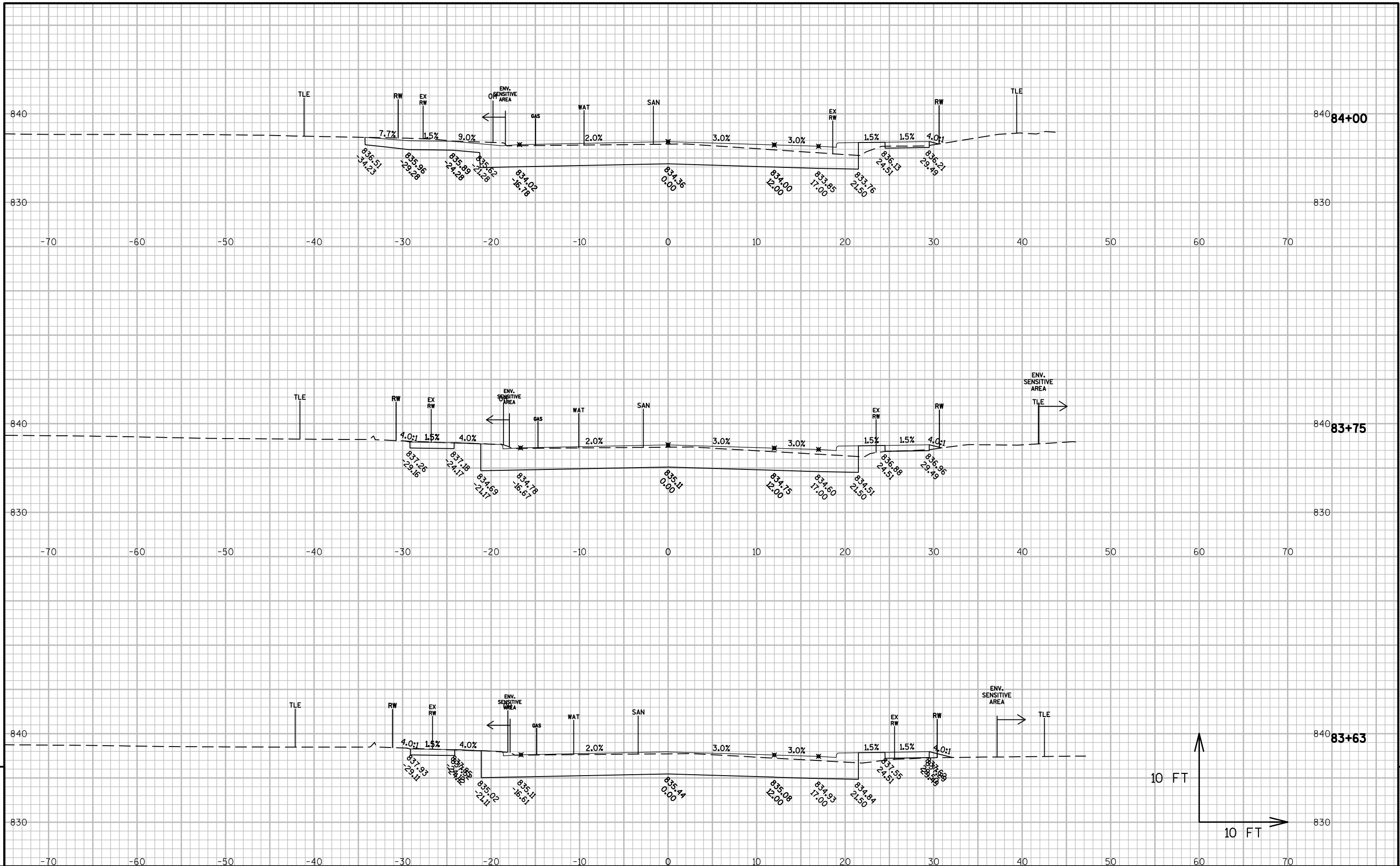


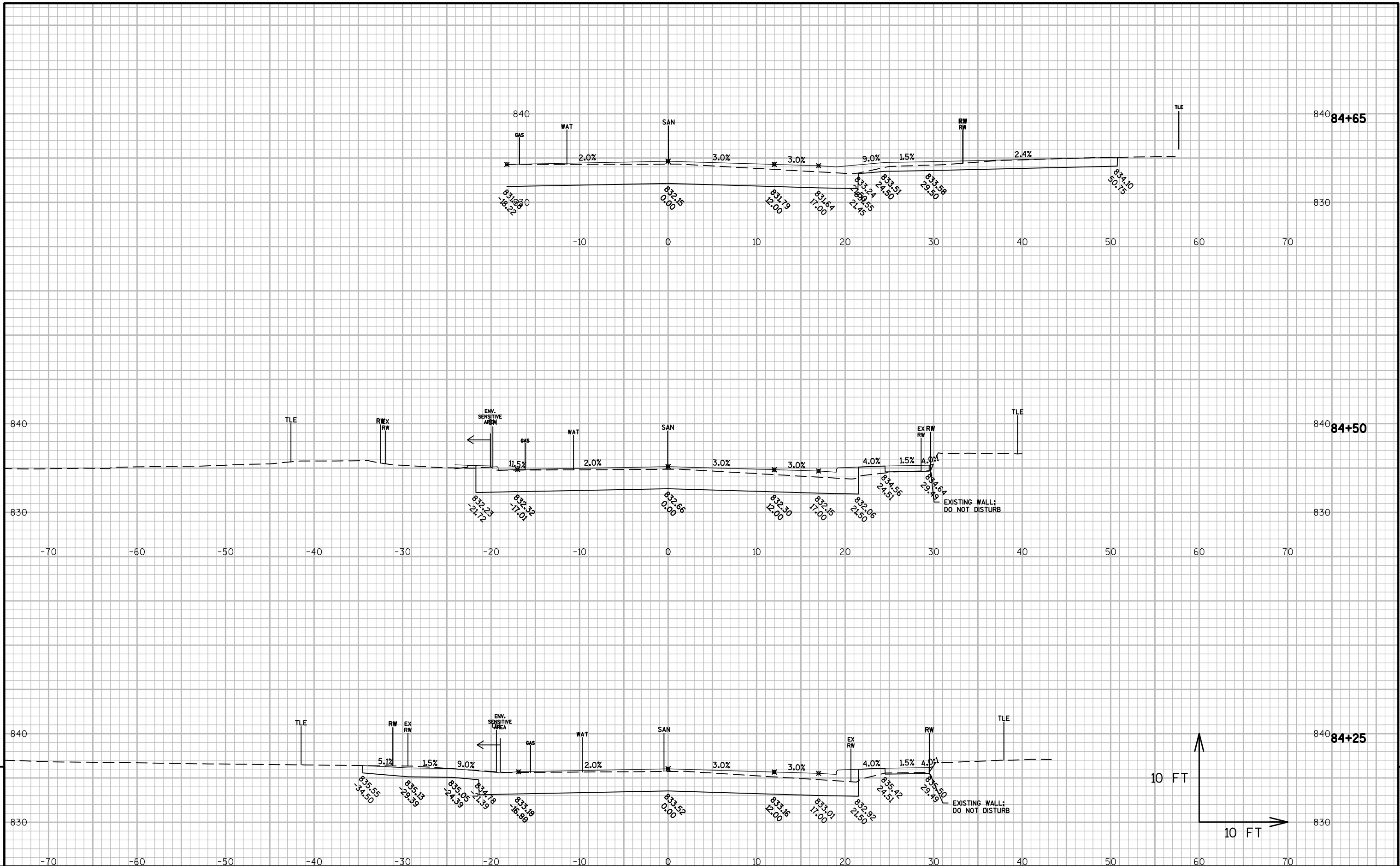


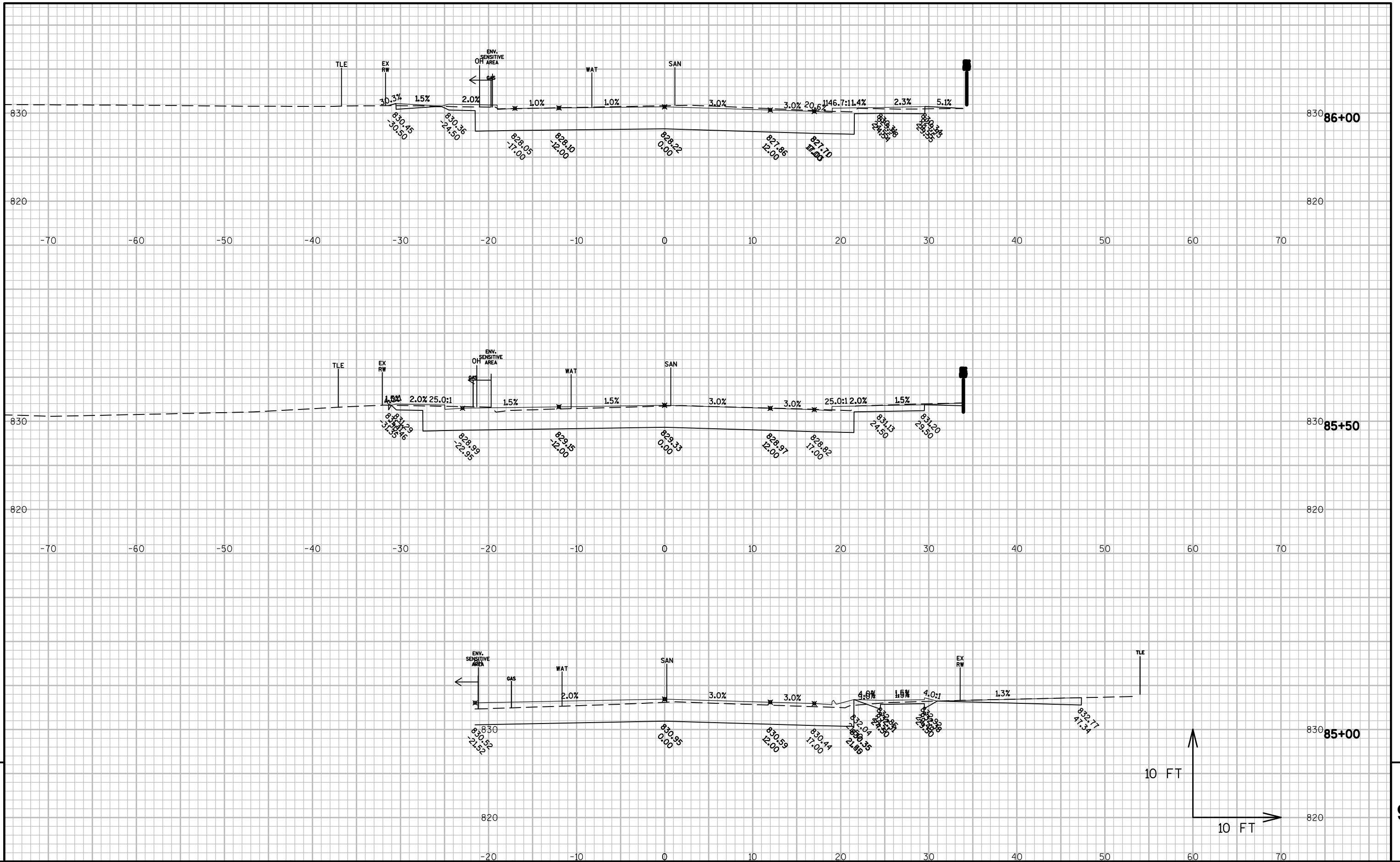


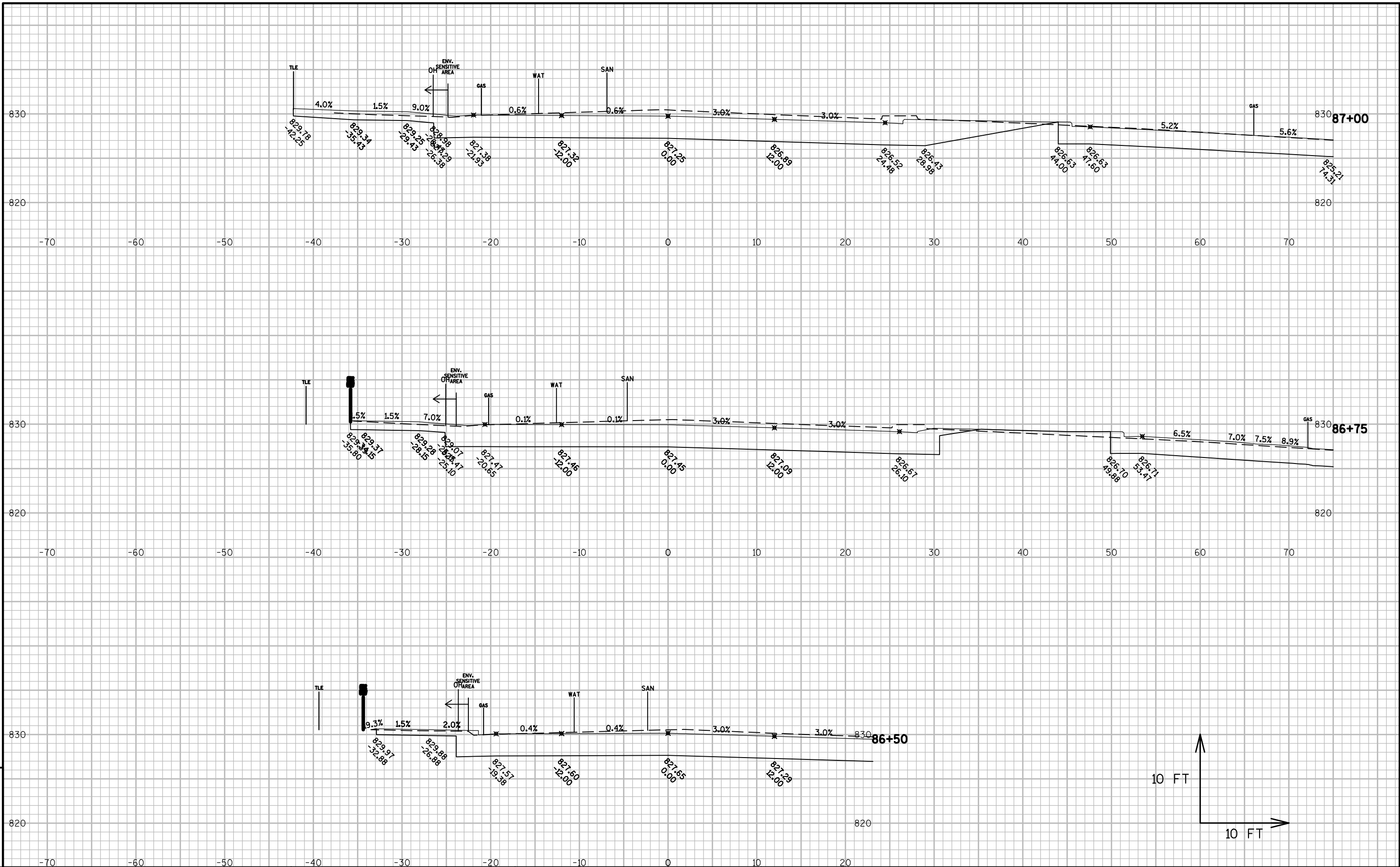


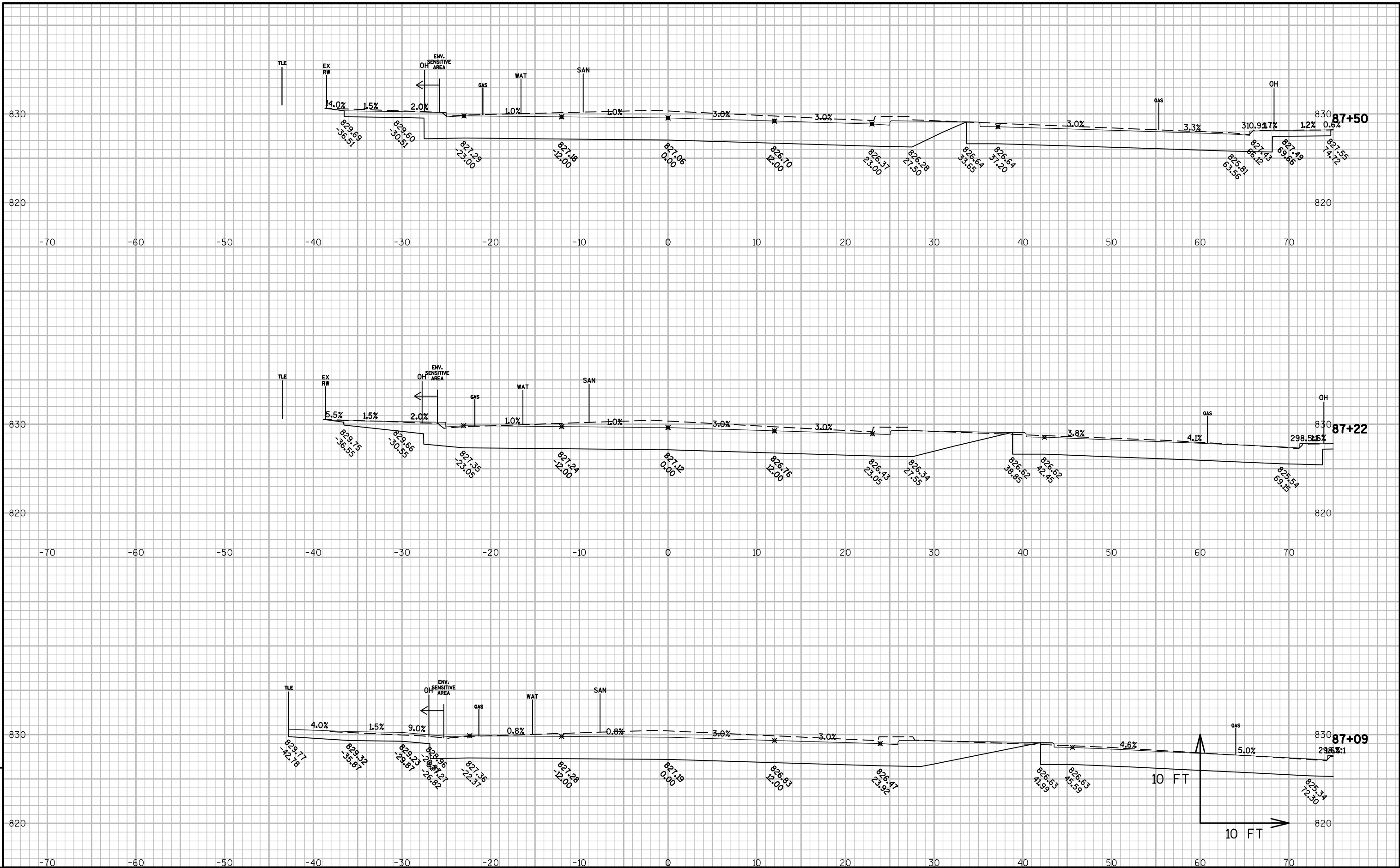


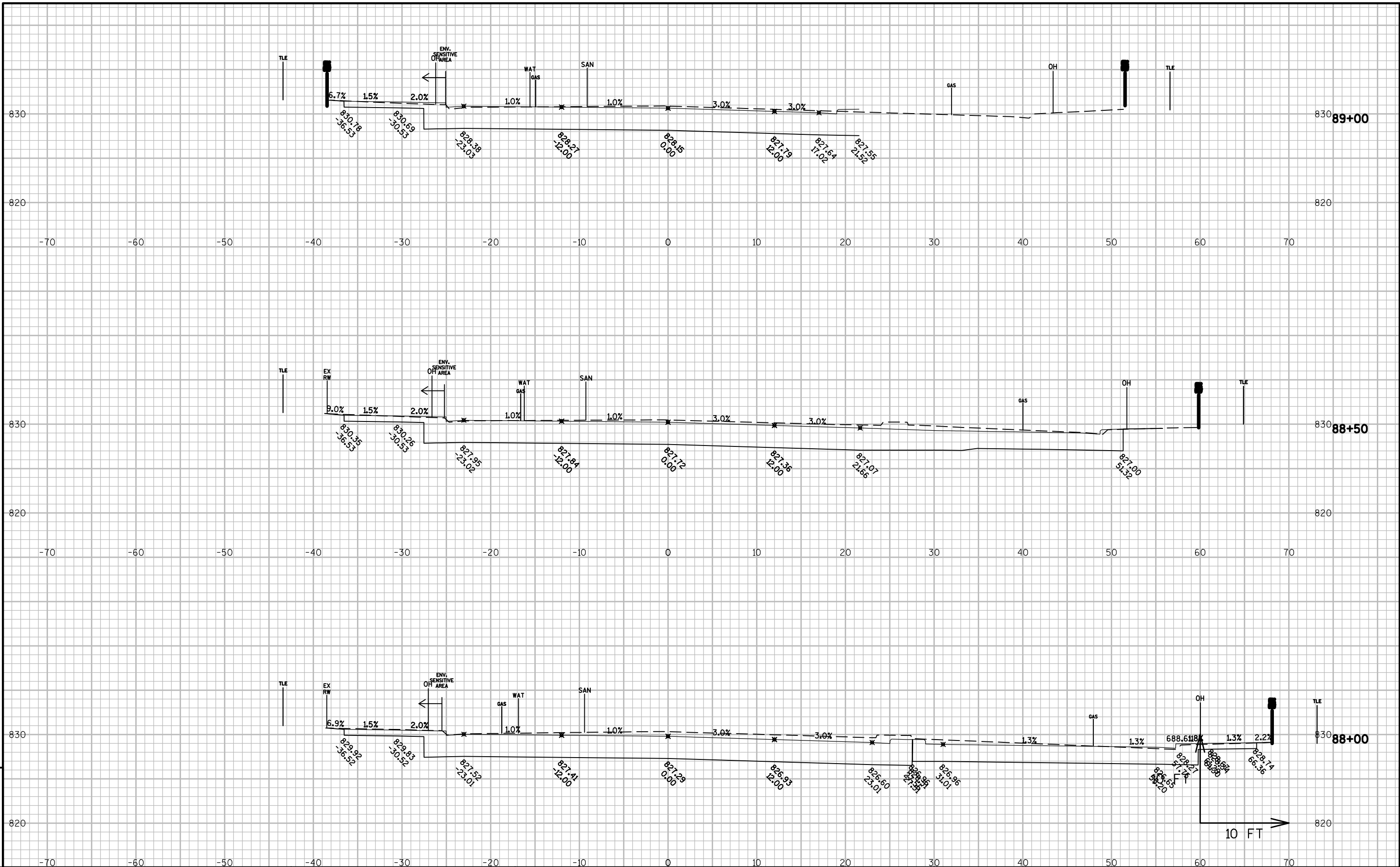


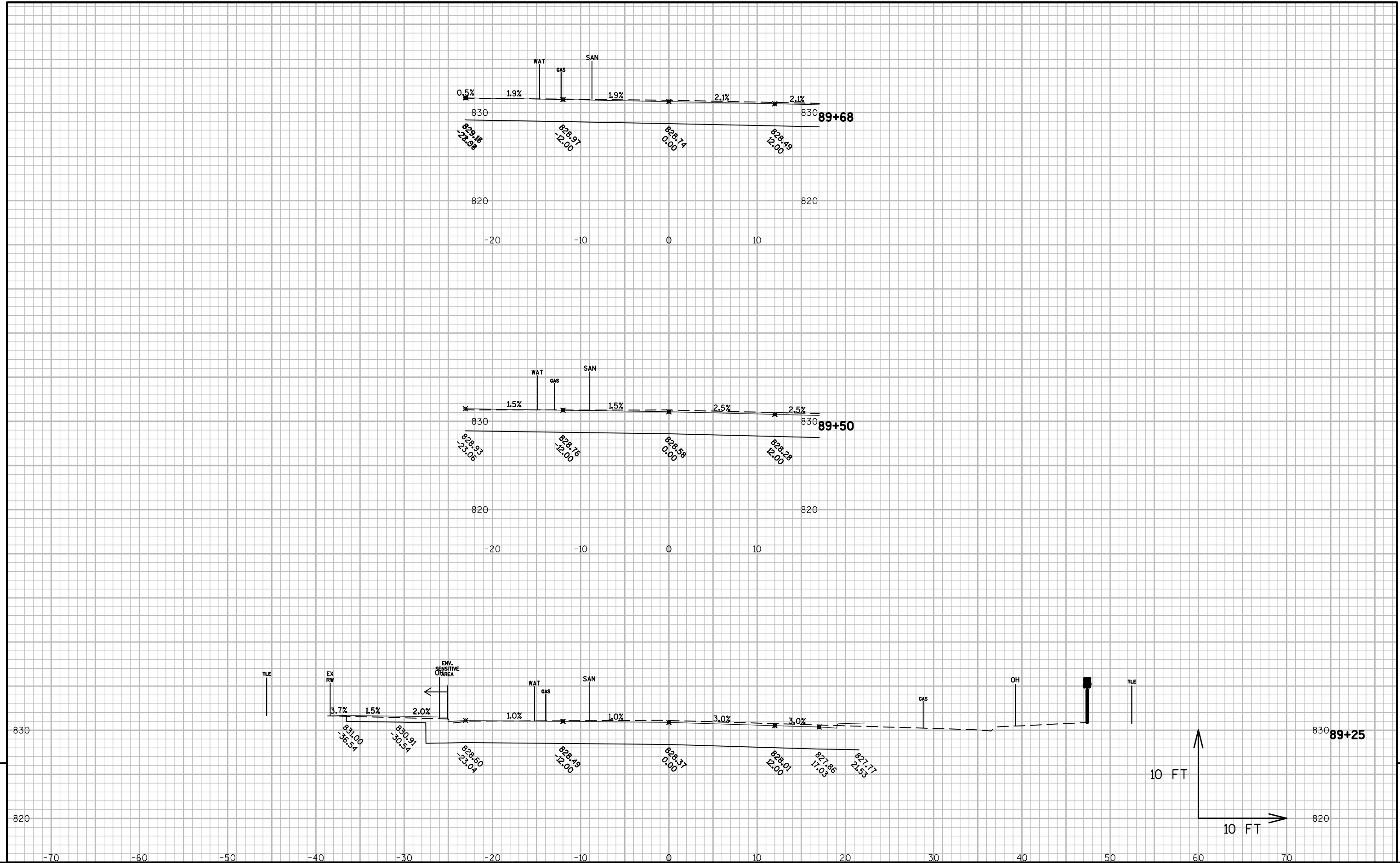


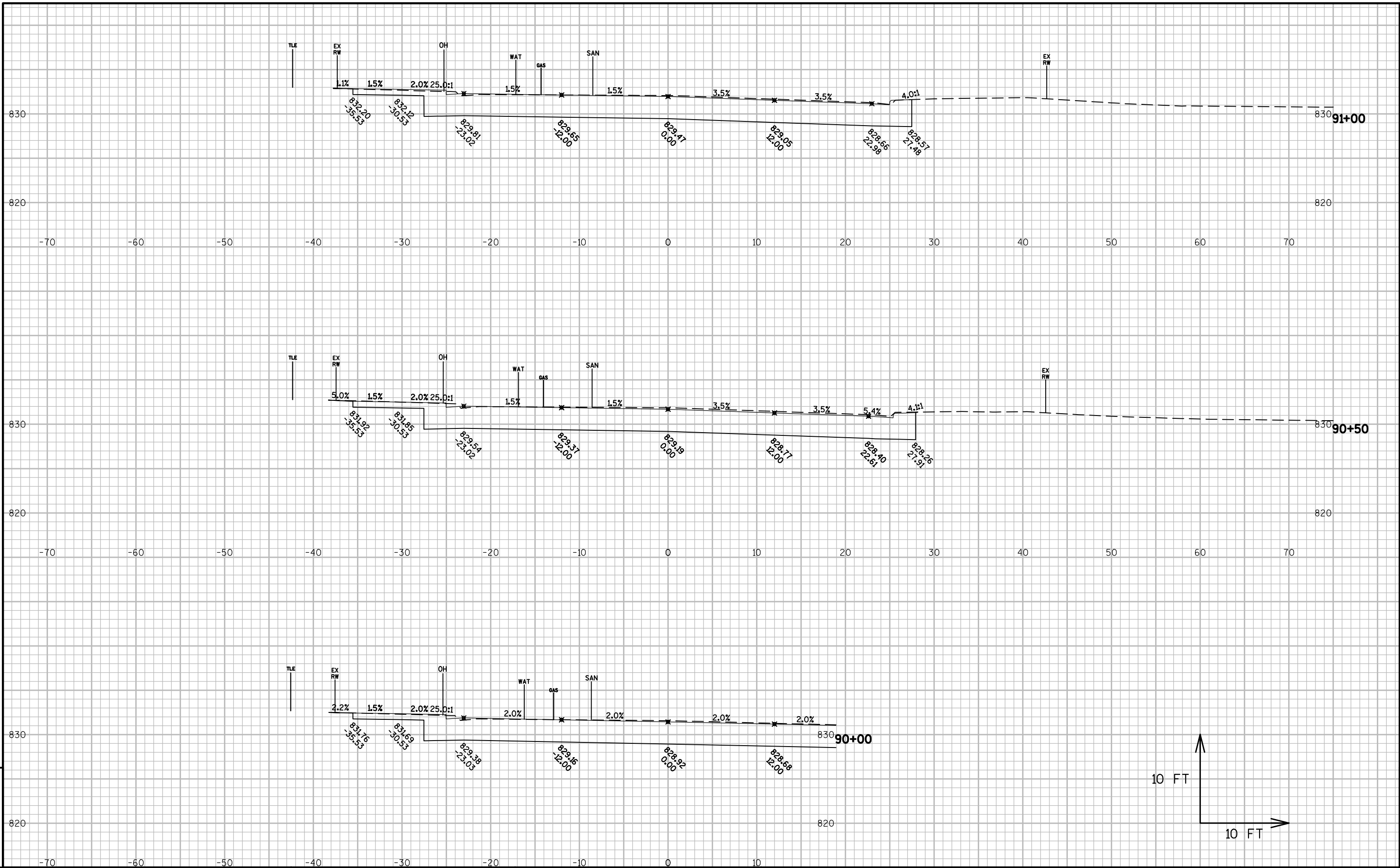


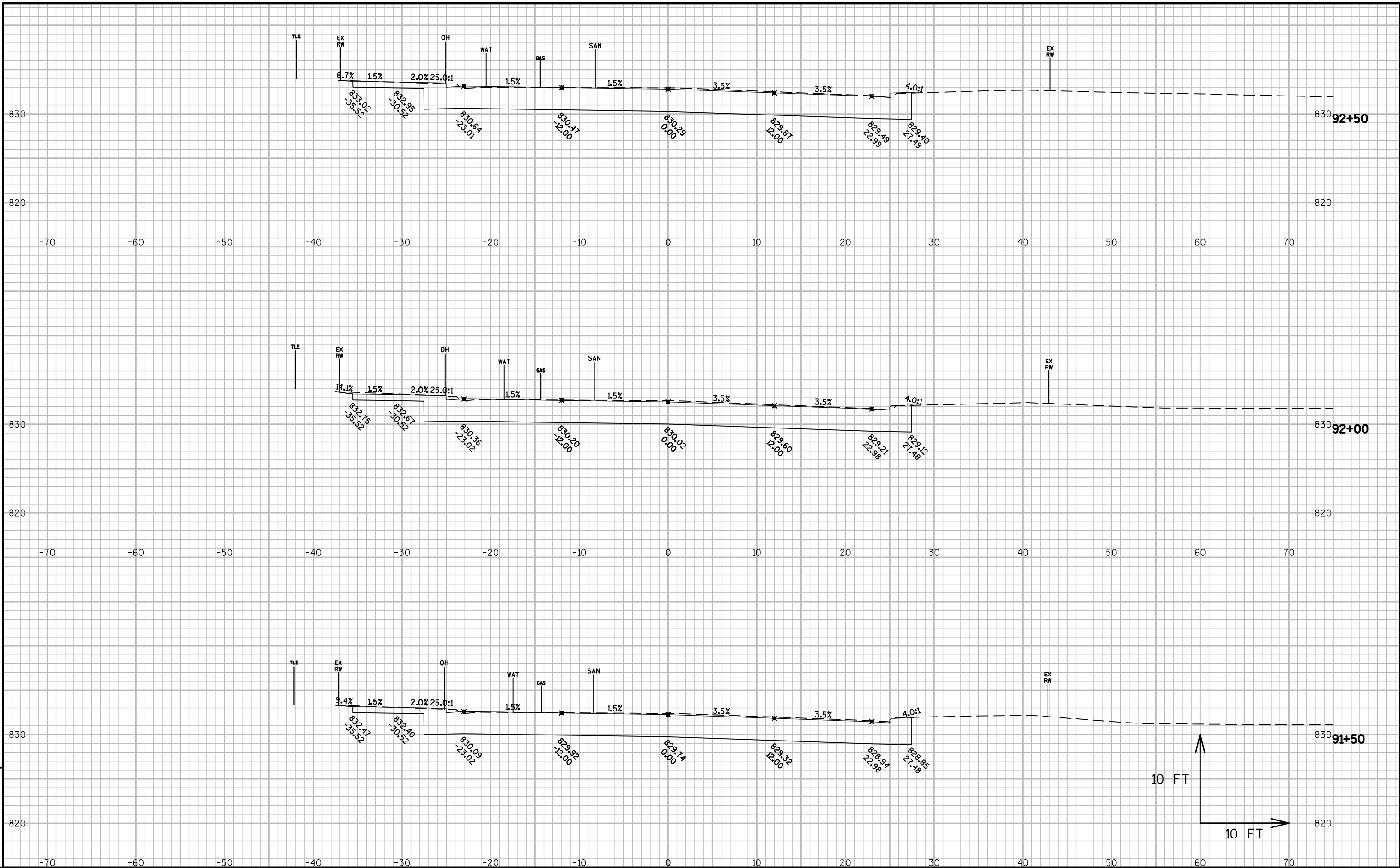


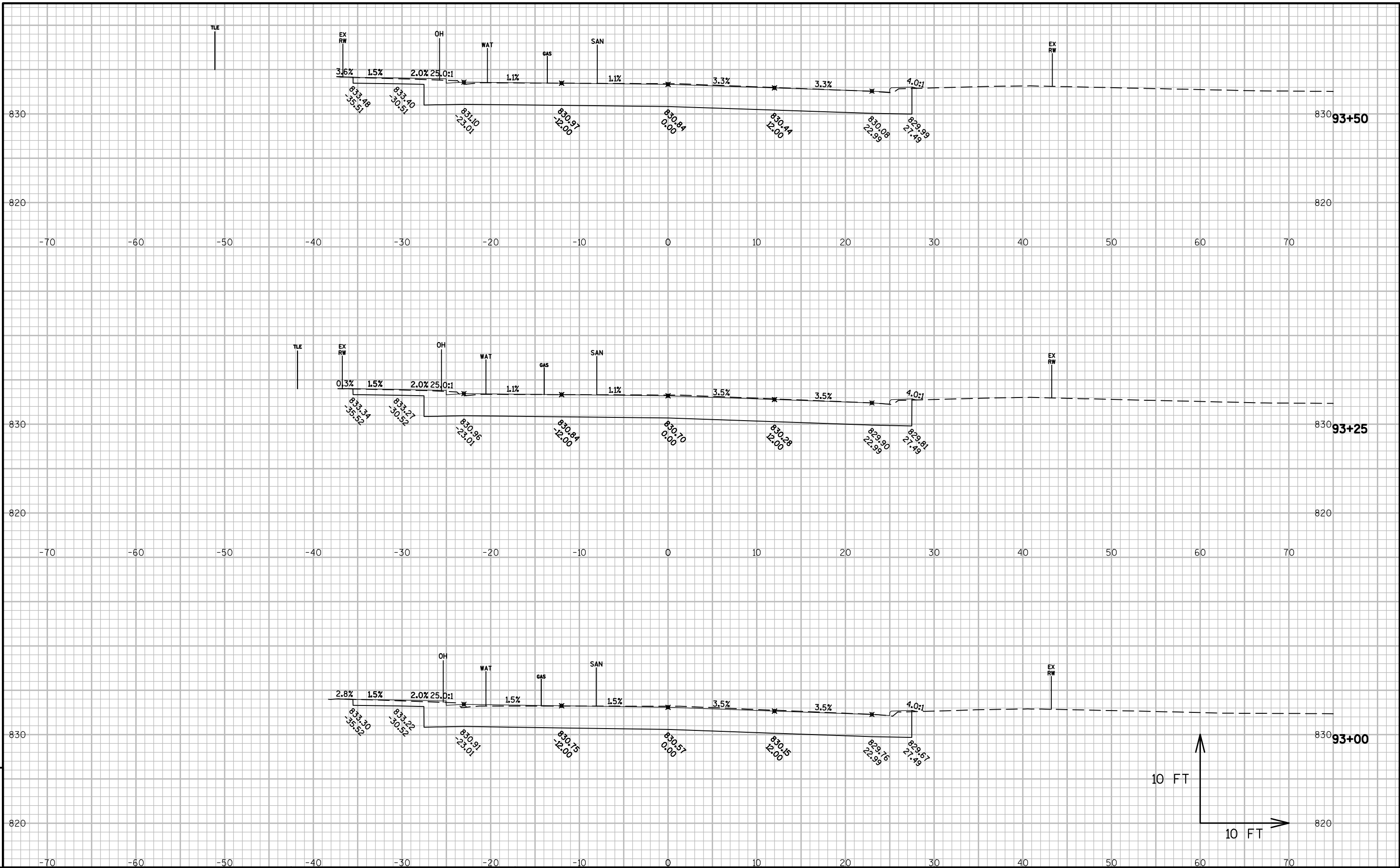


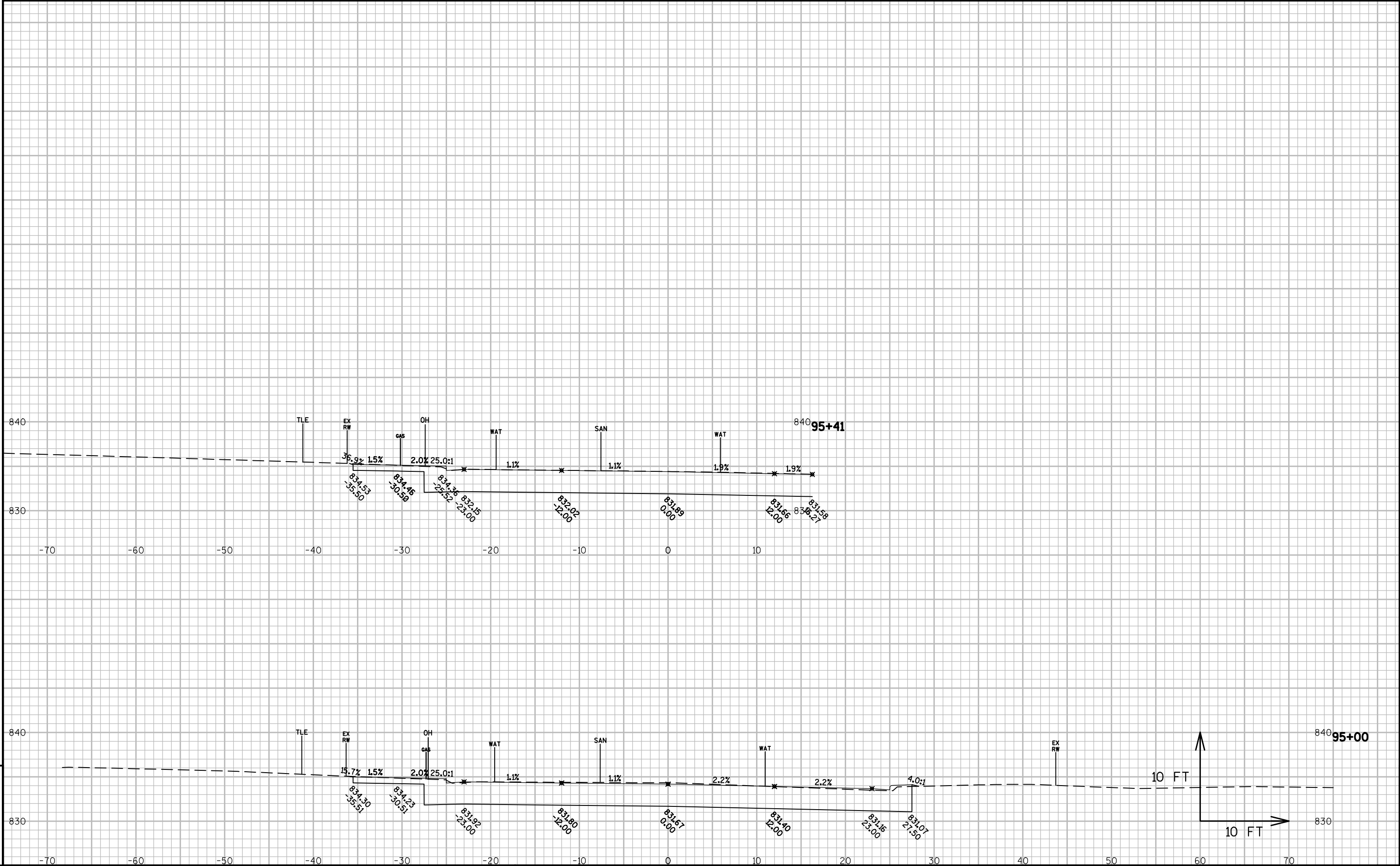


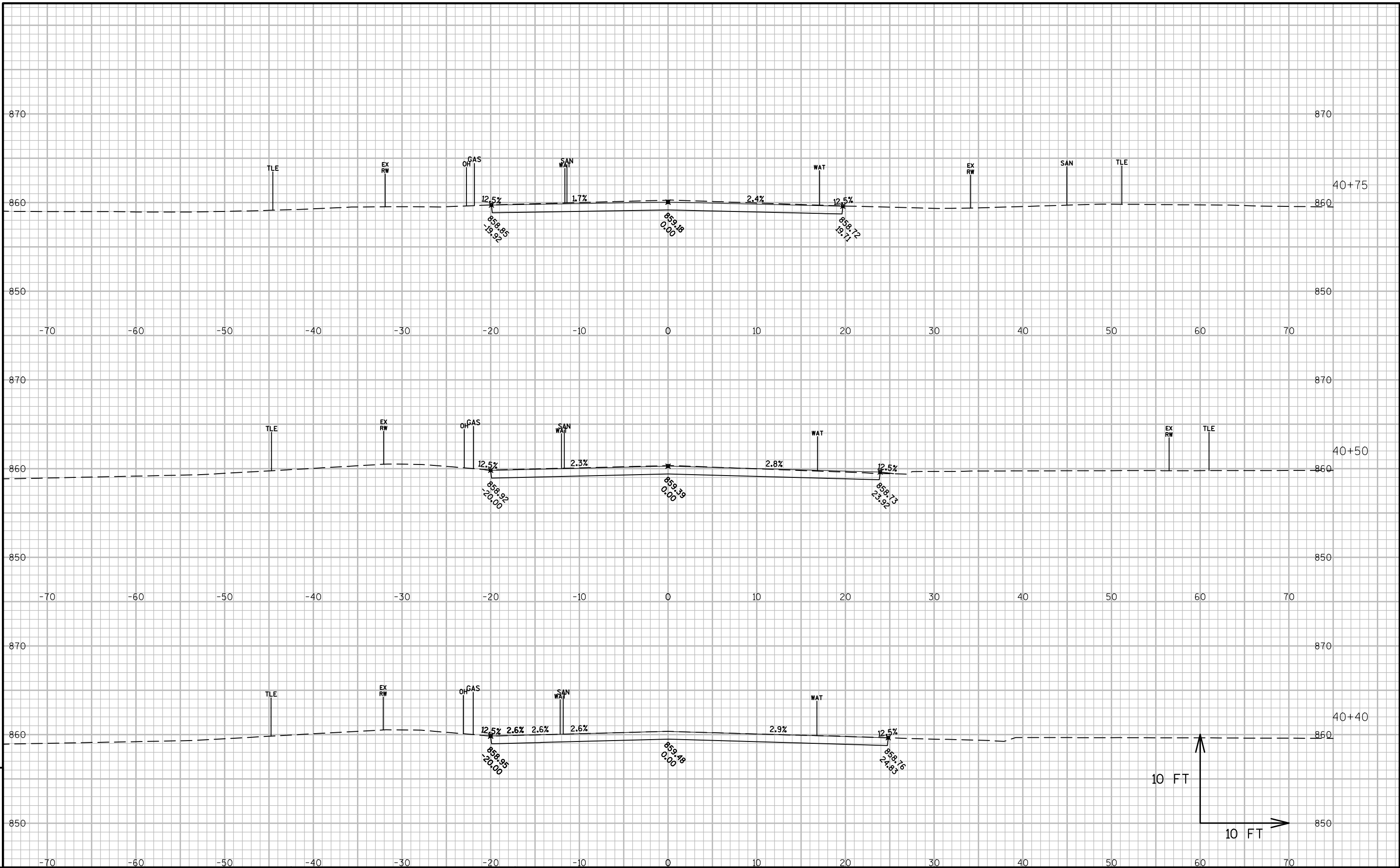


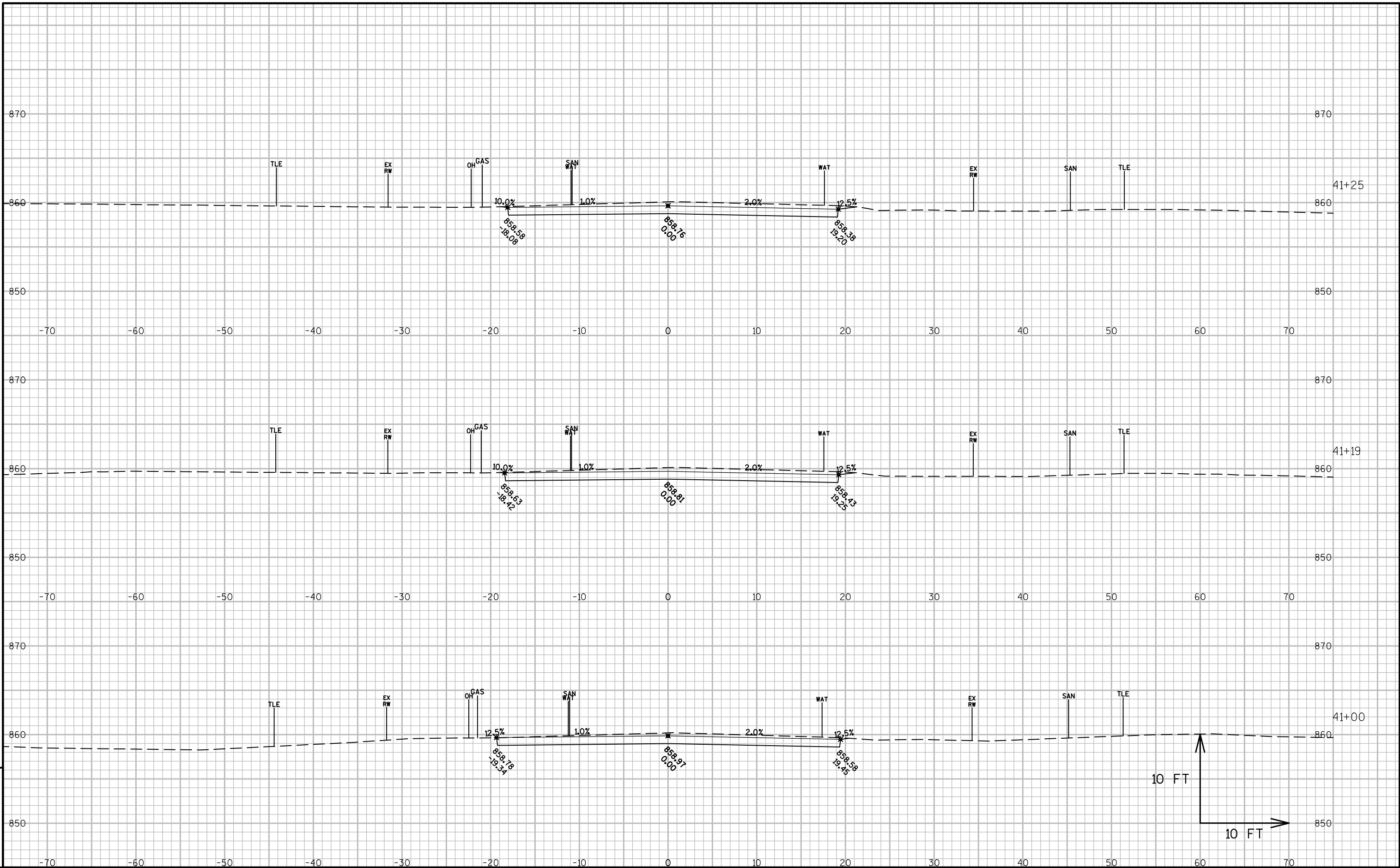


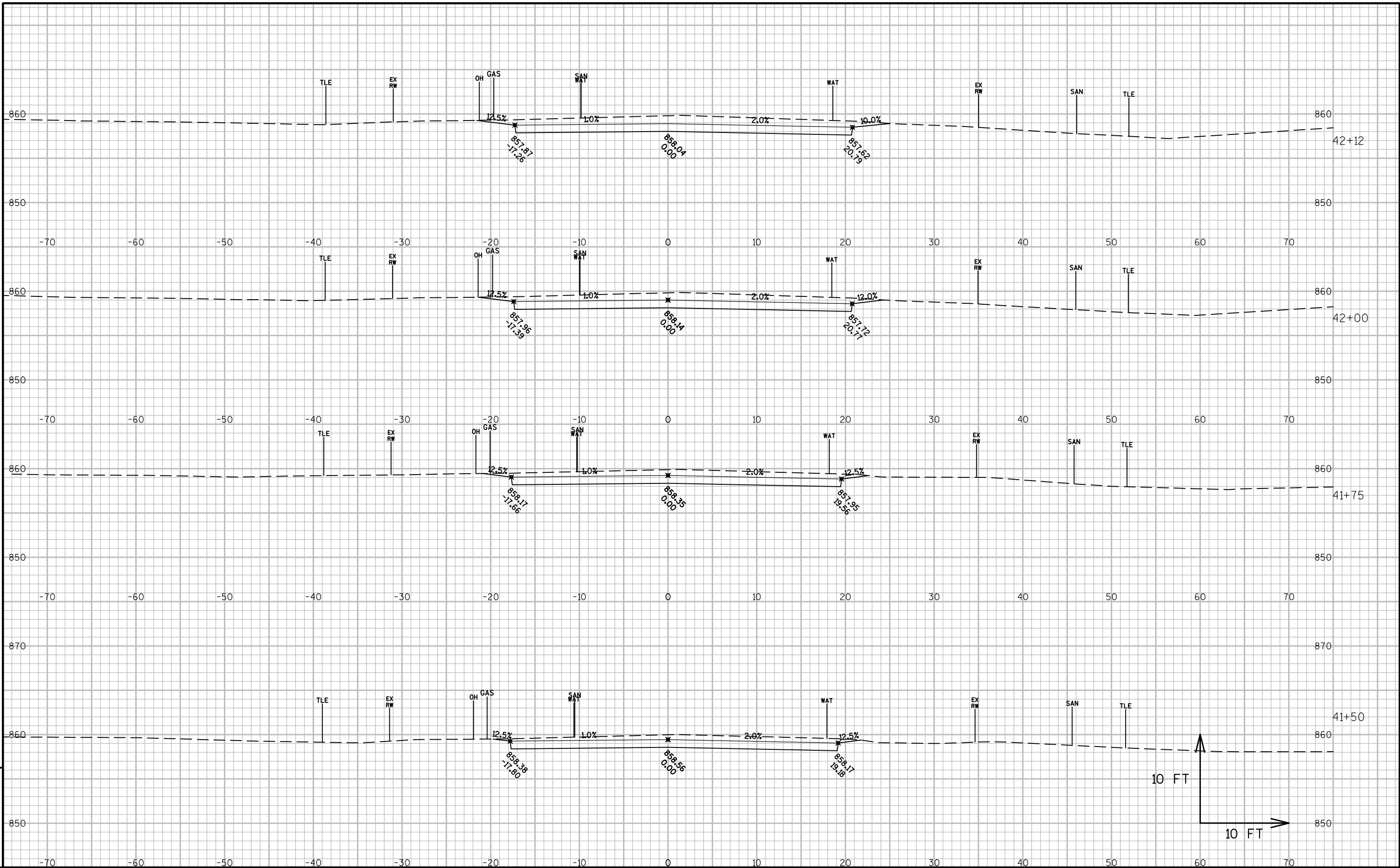


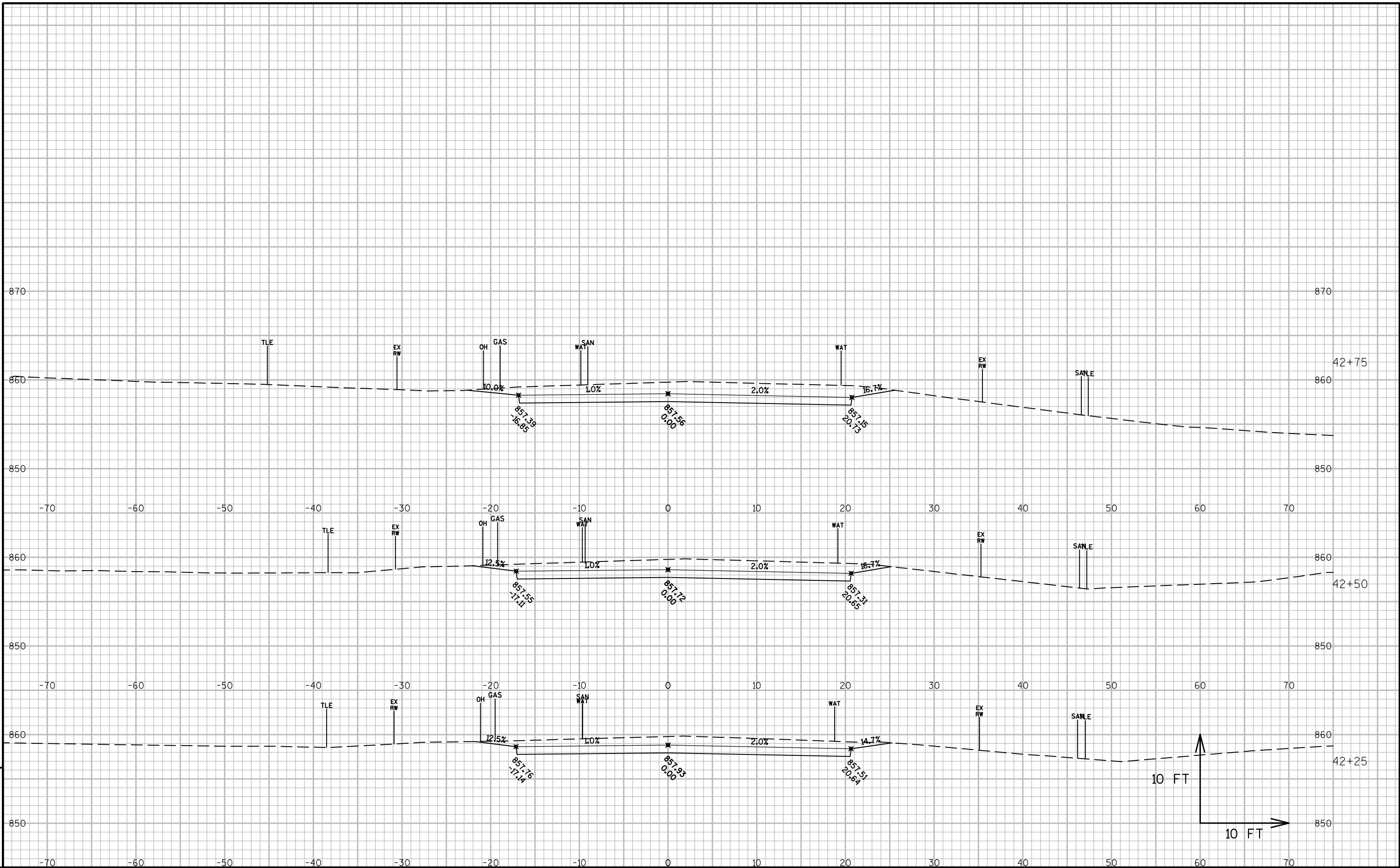


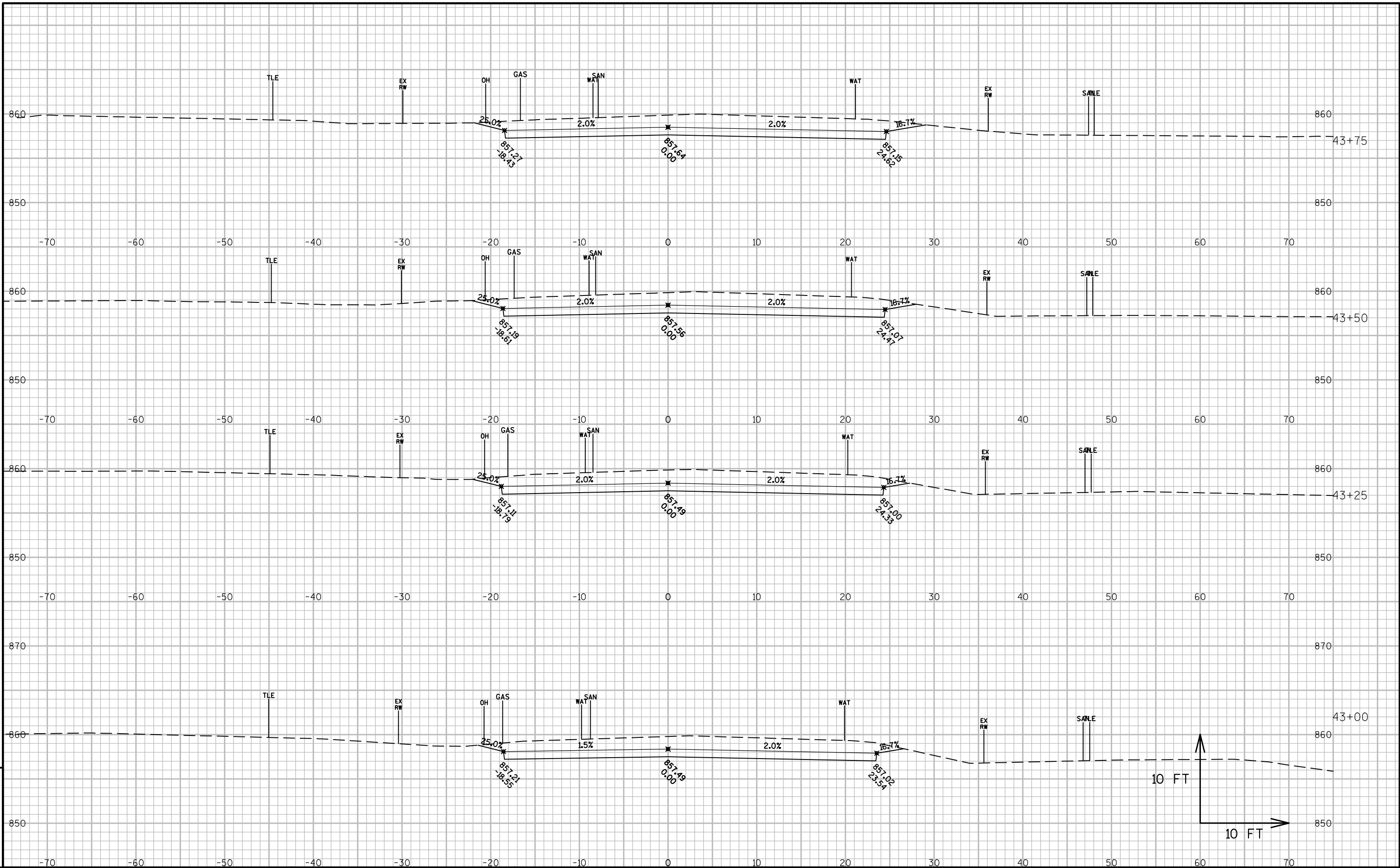


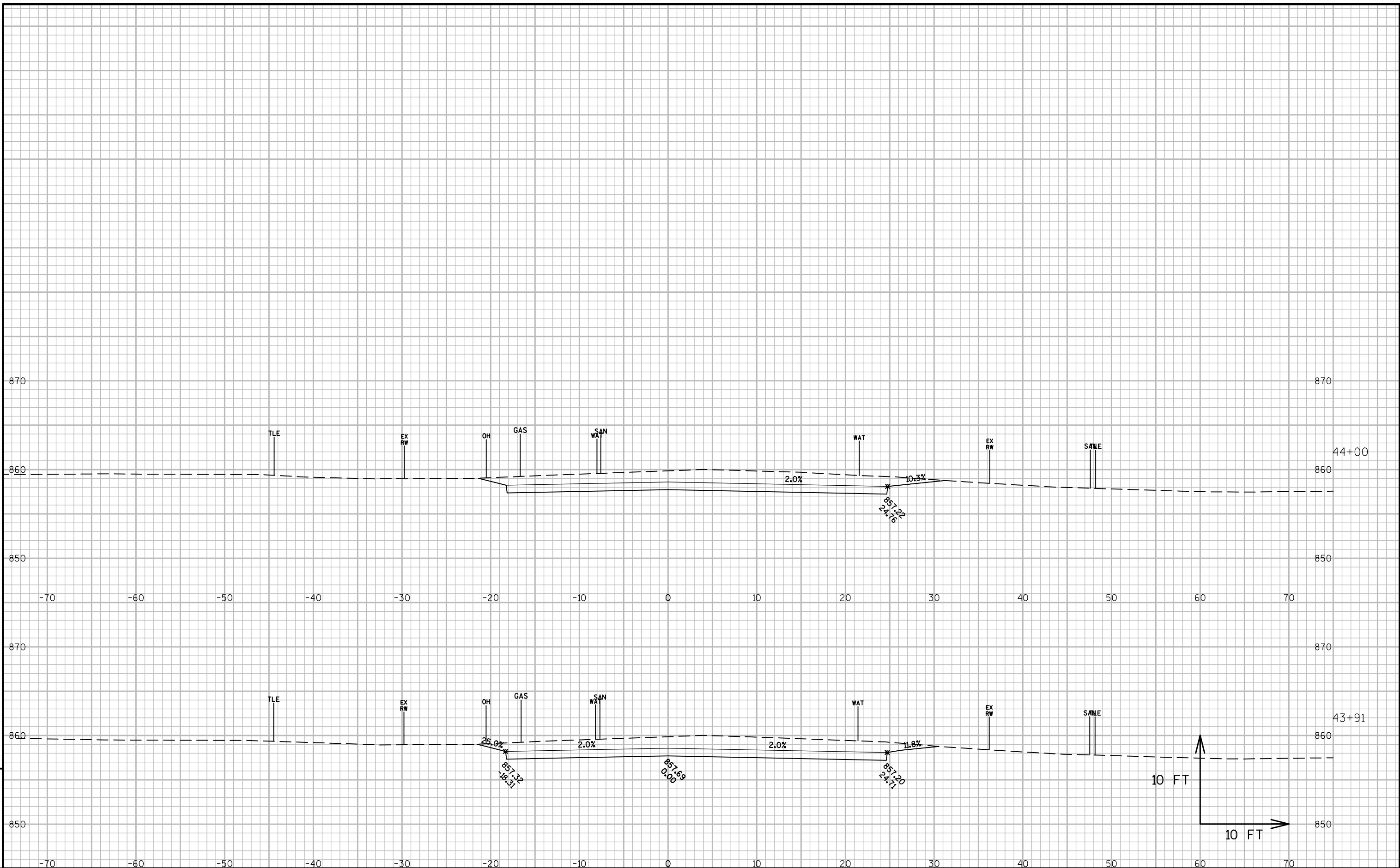




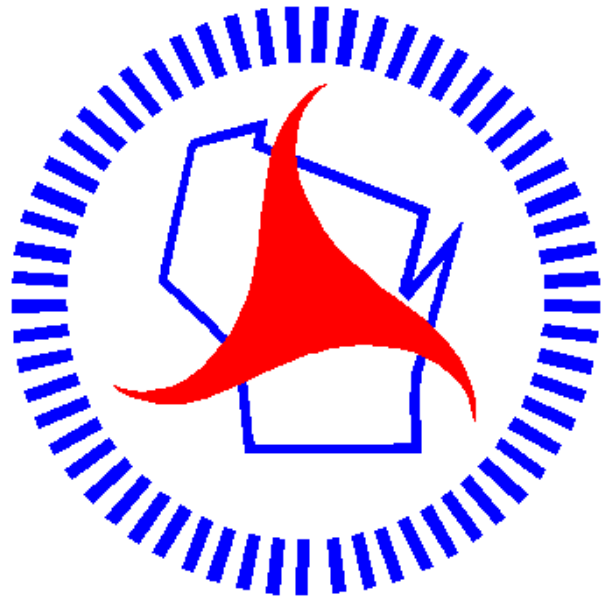








Notes



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