

PROJECT ID: 9261-07-61

COUNTY: FOREST

WITH: 9261-07-60 & 9261-07-62

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 =



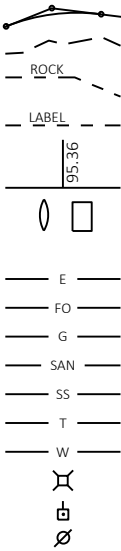
DESIGN DESIGNATION

A.A.D.T.	=
A.A.D.T.	=
D.H.V.	=
D.D.	=
T.	=
DESIGN SPEED	=
ESALS	=

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	
FIBER OPTIC	
GAS	
SANITARY SEWER	
STORM SEWER	
TELEPHONE	
WATER	
UTILITY PEDESTAL	
POWER POLE	
TELEPHONE POLE	



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

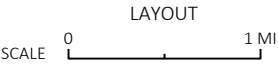
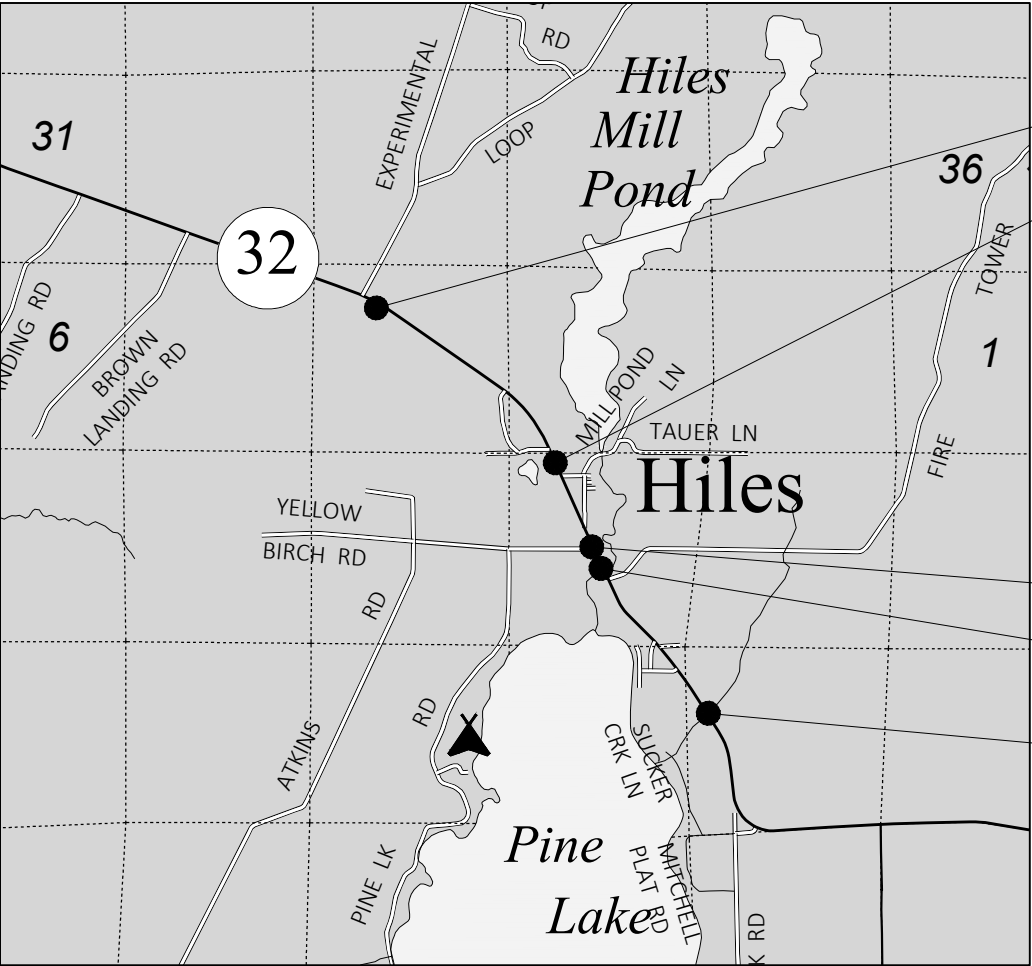
CRANDON - THREE LAKES

HILES CULVERT REPLACEMENTS

STH 32

FOREST COUNTY

STATE PROJECT NUMBER
9261-07-61



TOTAL NET LENGTH OF CENTERLINE = X.XXX

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

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
9261-07-61		
9261-07-60		
9261-07-62		

TRANS 220
PROJECT PLAN
FOR
DESIGN OF UTILITY FACILITY
ALTERATIONS OR RELOCATIONS

Date: SUBMITTAL #1 - 01/28/2021

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	NE REGION
Surveyor	K. BRADLEY
Designer	A. FULCER & D. ERVA
Project Manager	REGIONAL EXAMINER
Regional Examiner	J. PETERS
Regional Supervisor	

APPROVED FOR THE DEPARTMENT
DATE: (Signature)

E

GENERAL NOTES

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

DNR LIAISON

JON SIMONSEN
107 SUTLIFF AVE
RHINELANDER, WI 54501
JON SIMONSEN
(715) 367-1936
jonathan.simonsen@wisconsin.gov

UTILITIES CONTACTS

FRONTIER COMMUNICATIONS OF WI LLC - COMMUNICATION LINE
RUSS RYAN
118 DIVISION ST
PLYMOUTH, WI 53073
(920) 583-3275
russell.w.ryan@ftr.com

WISCONSIN PUBLIC SERVICE CORP - ELECTRICITY/GAS/PETROLEUM
LORI BUTRY
700 N ADAMS ST
PO BOX 19001
GREEN BAY, WI 54307-9001
(920) 433-1703
utilitiesrelocation@wisconsinpublicservice.com

ORDER OF SECTION 2 DETAIL SHEETS

- GENERAL NOTES
- TYPICAL SECTIONS
- CONSTRUCTION DETAILS
- PLAN DETAILS
- TRAFFIC CONTROL
- DETOUR PLAN
- ALIGNMENT PLAN

RUNOFF COEFFICIENT TABLE

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

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

DIGGERS

HOTLINE

Dial

811

or (800)242-8511

www.DiggersHotline.com

EMERGENCY CONTACT NUMBERS FOR WISCONSIN POWER AND LIGHT COMPANY

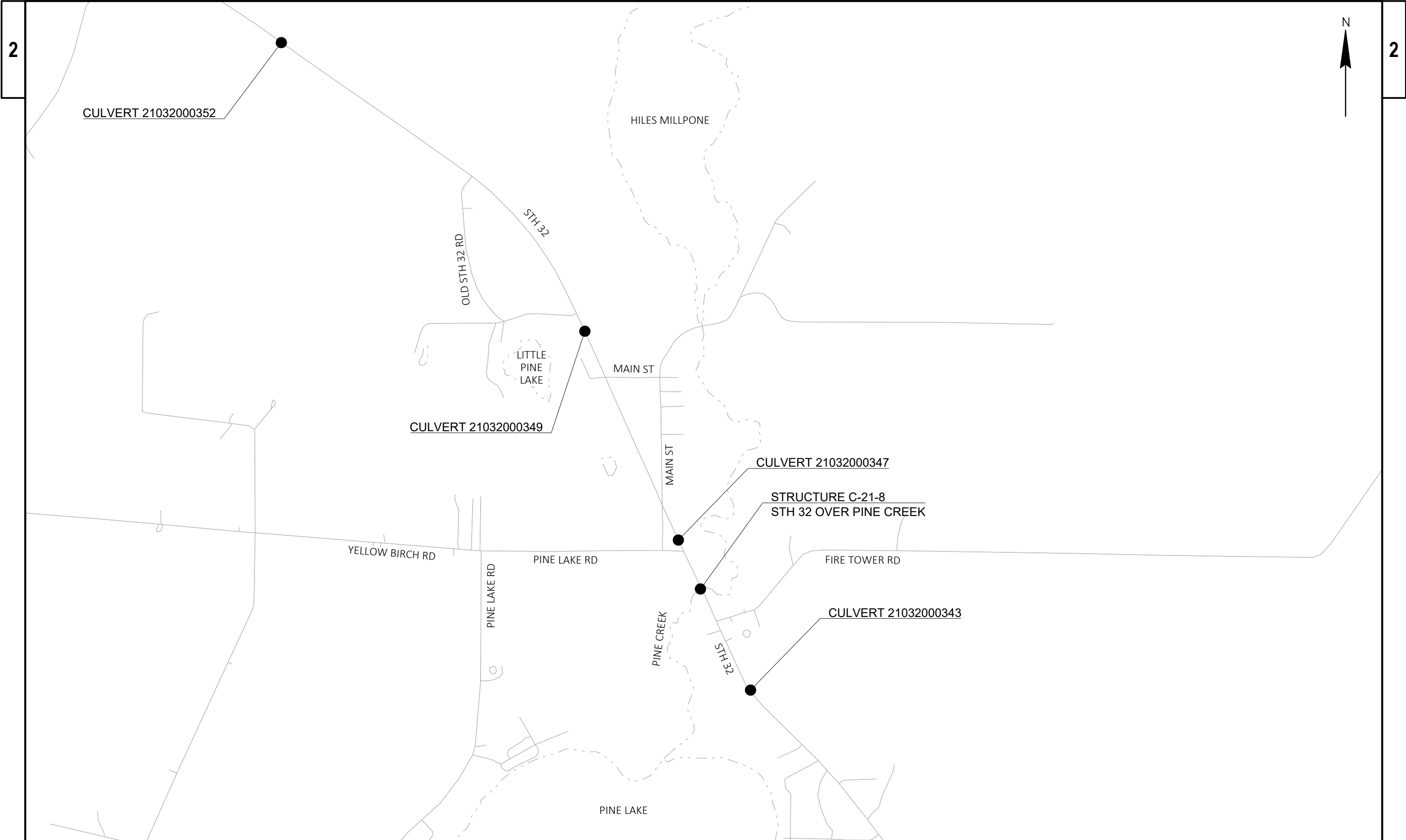
ELECTRIC 24 HOUR EMERGENCY SERVICE: 1-800-862-6261
GAS 24 HOUR EMERGENCY SERVICE: 1-800-862-6263

EMERGENCY CONTACT NUMBERS FOR WISCONSIN PUBLIC SERVICE

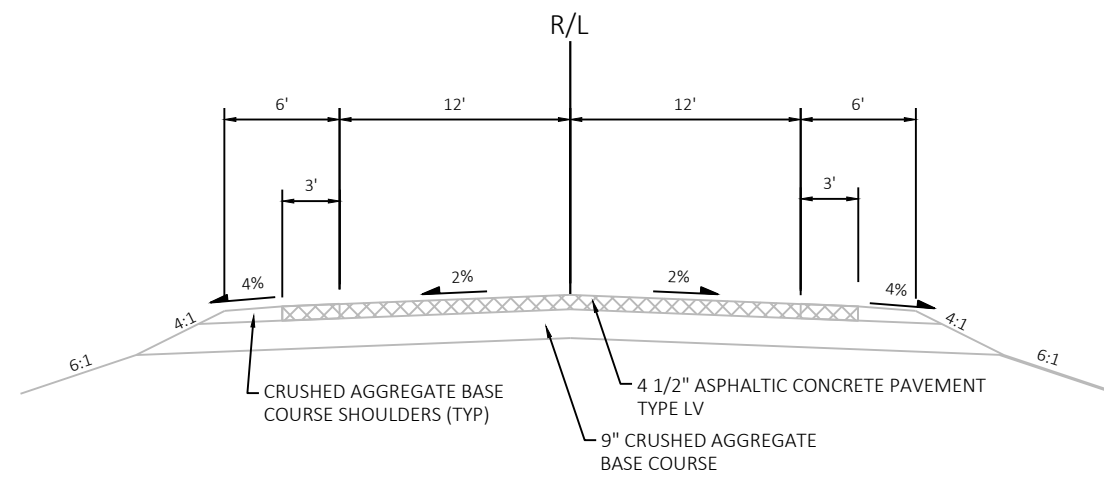
ELECTRIC 24 HOUR EMERGENCY SERVICE: 1-800-450-7240
GAS 24 HOUR EMERGENCY SERVICE: 1-800-450-7280

EMERGENCY CONTACT NUMBERS FOR WE ENERGIES

ELECTRIC 24 HOUR EMERGENCY SERVICE: 1-800-662-4797
GAS 24 HOUR EMERGENCY SERVICE: 1-800-261-5325

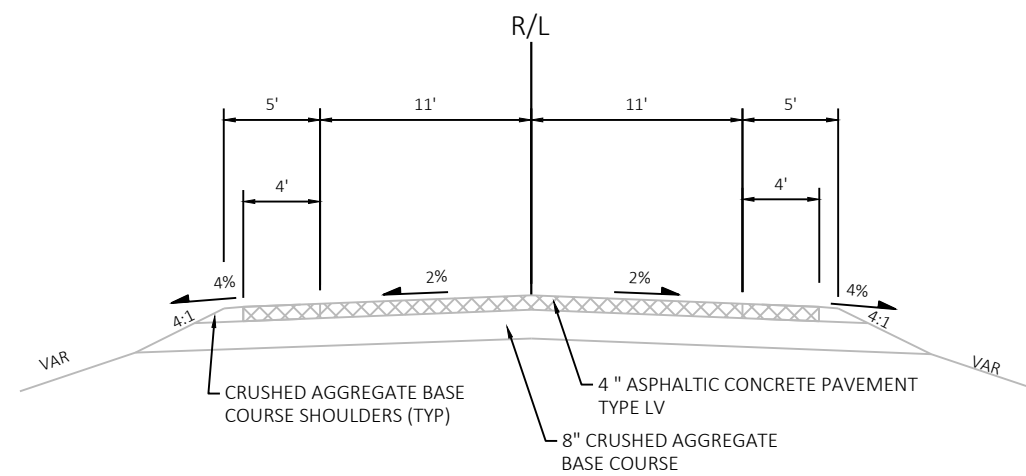


PROJECT NO: 9261-07-61	HWY: STH 32	COUNTY: FOREST	PROJECT OVERVIEW	SHEET	E
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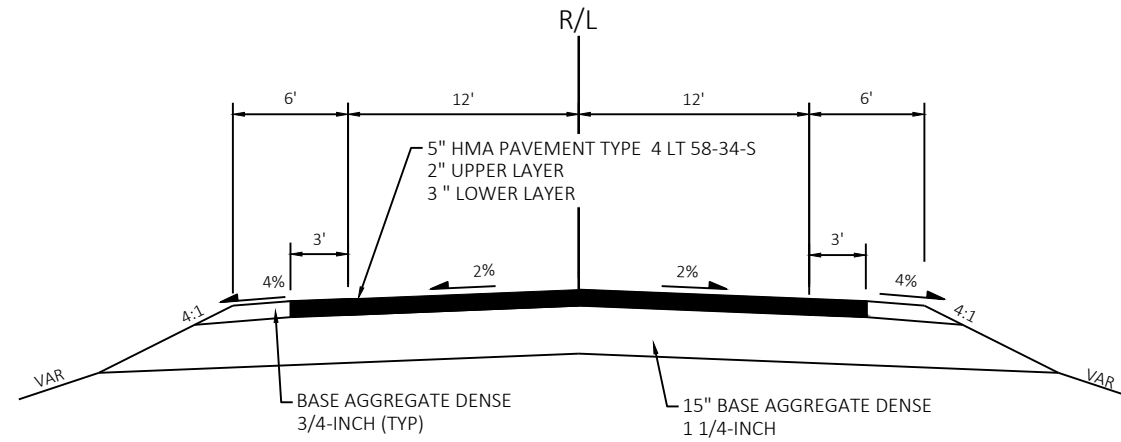
EXISTING TYPICAL SECTION STH 32

STA 143+96 TO STA 145+08
STA 163+55 TO STA 163+95
STA 201+58 TO STA 202+65



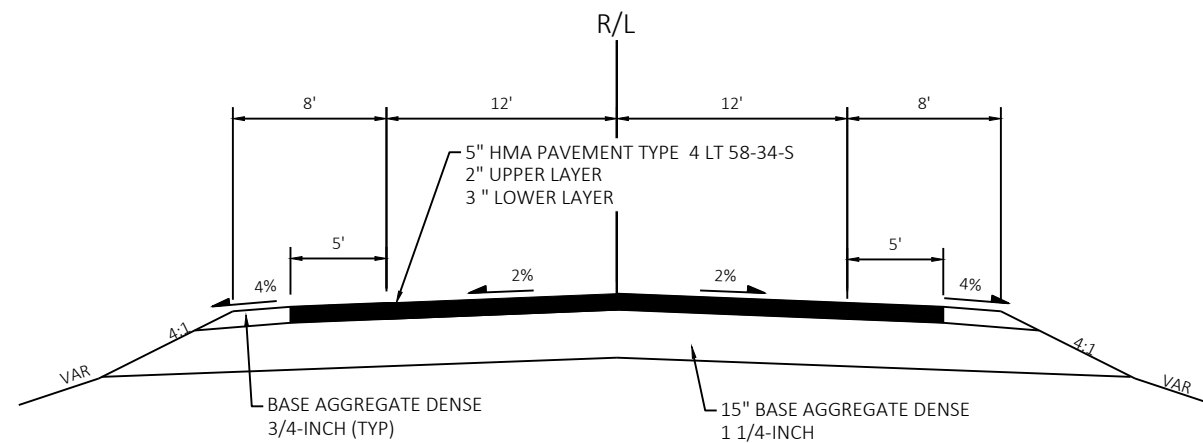
EXISTING TYPICAL SECTION STH 32

STA 301+95 TO STA 303+00



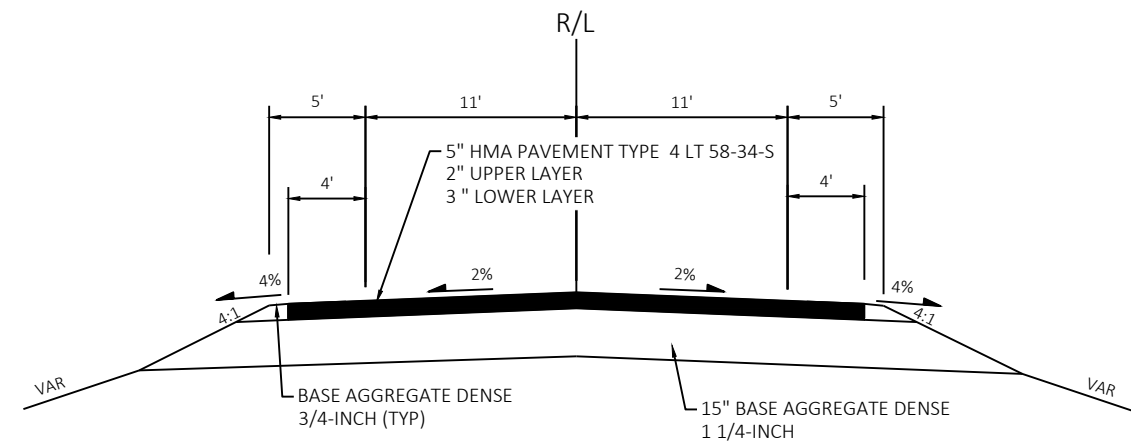
FINISHED TYPICAL SECTION STH 32

STA 143+96 TO STA 145+08
STA 201+58 TO STA 202+65



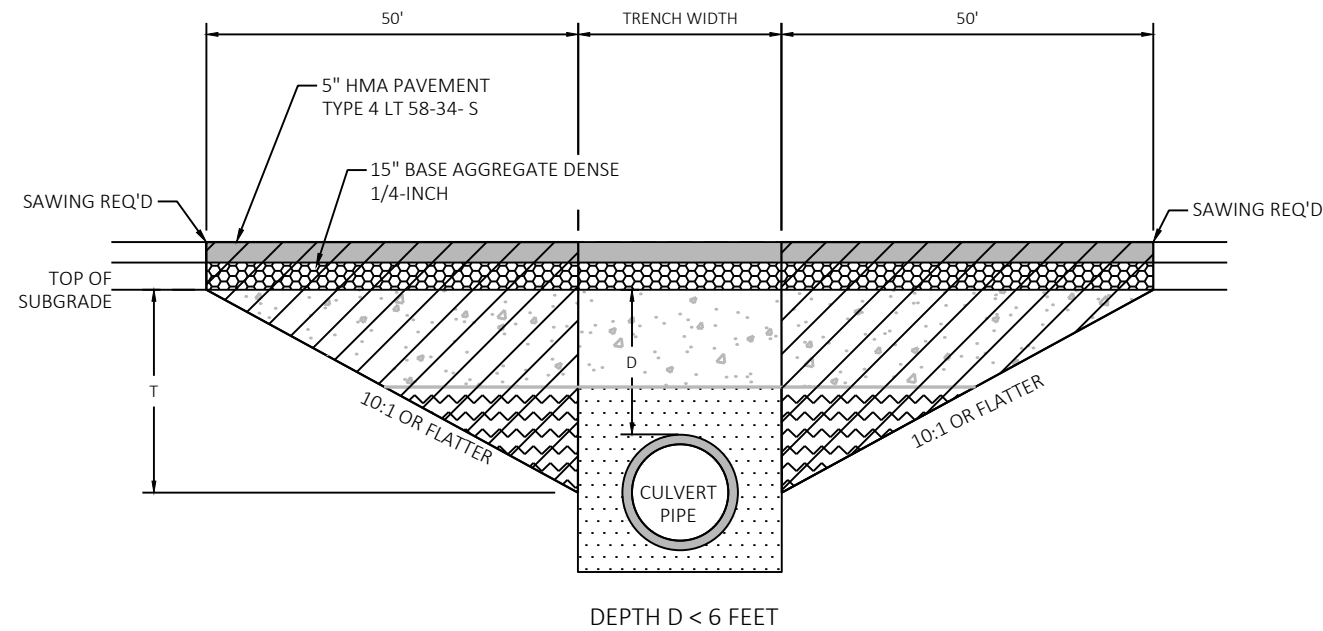
FINISHED TYPICAL SECTION STH 32

STA 157+92 TO STA 159+13



FINISHED TYPICAL SECTION STH 32

STA 301+95 TO STA 303+00



TRANSITION CUT DEPTH (T) = THE LESSER OF DEPTH TO CENTER OF PIPE OR 5 FEET.
DO NOT EXTEND TRANSITION CUT BELOW HORIZONTAL CENTER OF PIPE.

NOTES

TRANSITION CUT IS PAID AS EXCAVATION COMMON.

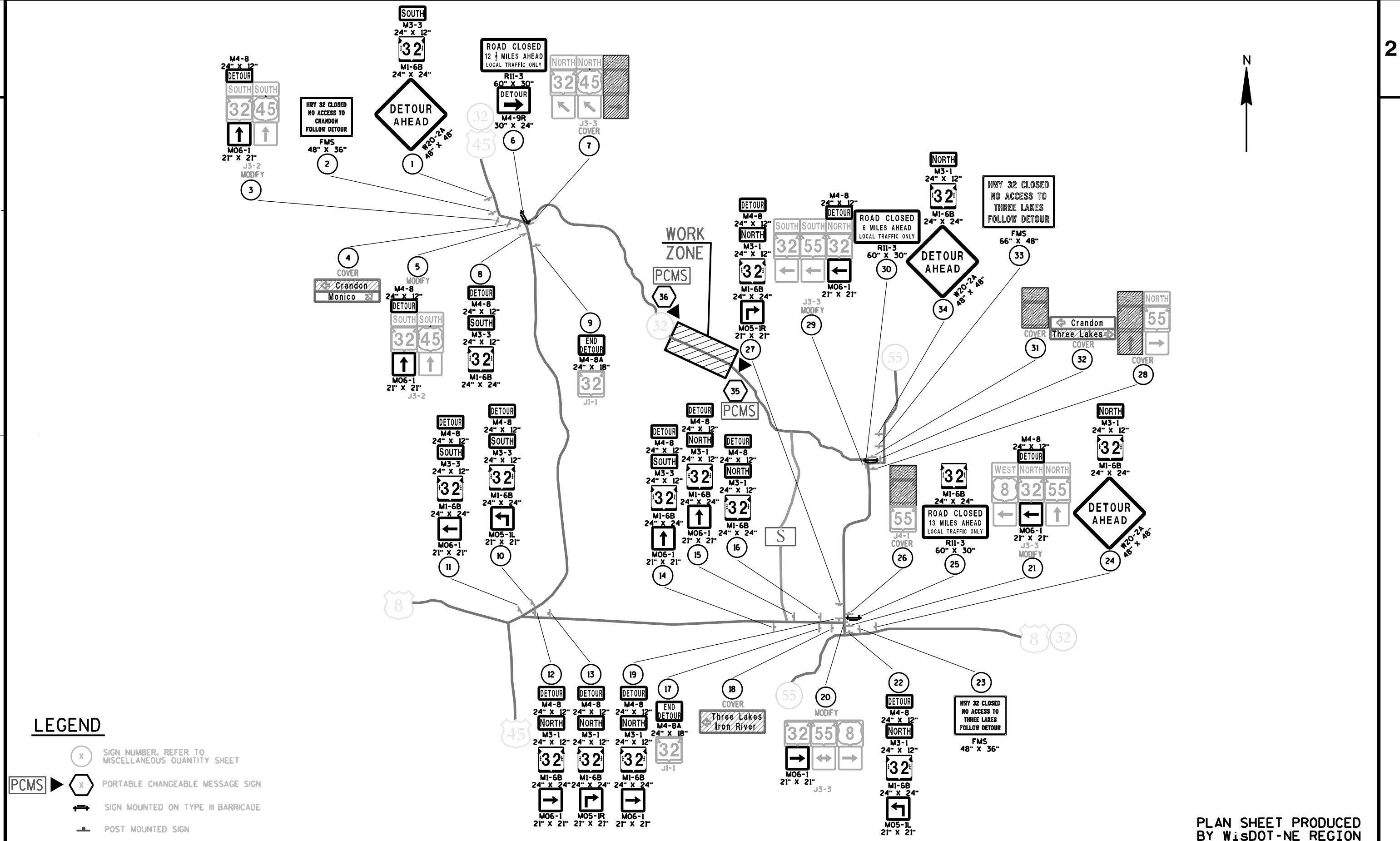
TRANSITION CUT WIDTH IS FROM SUBGRADE SHOULDER POINT TO SUBGRADE SHOULDER POINT.

BACKFILL THE TRANSITION CUT AREAS WITH FOUNDATION AND TRENCH BACKFILL AS SPECIFIED IN STANDARD SPEC 520.

PERFORM CULVERT PIPE INSTALLATION BEFORE (INSERT PAVEMENT OPERATION, i.e. MILLING AND PAVING).

PLACE (INSERT PAVEMENT BID ITEM) AFTER CULVERT PIPE INSTALLATION AND BEFORE (INSERT PAVEMENT OPERATION).

CULVERT PIPE TRANSITION				
ROUTE	STA (CL)	DEPTH D (FT)	PIPE DIAMETER (IN)	REMARKS
STH 32	144+51	1.8'	54"	21032000343
STH 32	158+52	2.4'	77"X121"	C-21-8
STH 32	202+12	5.48'	24"	21032000349
STH 32	302+48	5.48'	24"	21032000352



TRANSPORTATION PROJECT PLAT NO: 9261-07-20-4.02

LOCATED IN PART OF THE NW1/4 OF THE SE1/4 AND PART OF THE NE1/4 OF THE SW1/4 OF SECTION 10, TOWNSHIP 37 NORTH, RANGE 12 EAST, TOWN OF HILES, FOREST COUNTY, WISCONSIN

RELOCATION ORDER - STH 32, CRANDON - THREE LAKES (CULVERT REPLACEMENTS), FOREST COUNTY

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION 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 DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

CONVENTIONAL ABBREVIATIONS

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

CURVE DATA

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

CONVENTIONAL SYMBOLS

SECTION LINE	SECTION CORNER SYMBOL	R/W MONUMENT (TO BE SET)
QUARTER LINE	SECTION CORNER MONUMENT	NON-MONUMENTED R/W POINT
SIXTEENTH LINE	SECTION CORNER MONUMENT	FOUND IRON PIN (1/4" INCH UNLESS NOTED)
NEW REFERENCE LINE	SECTION CORNER MONUMENT	OFF-PREMISE SIGN
NEW R/W LINE	SECTION CORNER MONUMENT	COMPENSABLE
EXISTING R/W OR HE LINE	SECTION CORNER MONUMENT	NON-COMPENSABLE
PROPERTY LINE	SECTION CORNER MONUMENT	
LOT, TIE & OTHER MINOR LINES	SECTION CORNER MONUMENT	
SLOPE INTERCEPT	SECTION CORNER MONUMENT	
CORPORATE LIMITS	SECTION CORNER MONUMENT	
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)	SECTION CORNER MONUMENT	
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)	SECTION CORNER MONUMENT	
TEMPORARY LIMITED EASEMENT AREA	SECTION CORNER MONUMENT	
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)	SECTION CORNER MONUMENT	
TRANSMISSION STRUCTURES	SECTION CORNER MONUMENT	
BUILDING	SECTION CORNER MONUMENT	
BRIDGE	SECTION CORNER MONUMENT	

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), FOREST 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.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4"x24" IRON REBARS) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

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

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

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

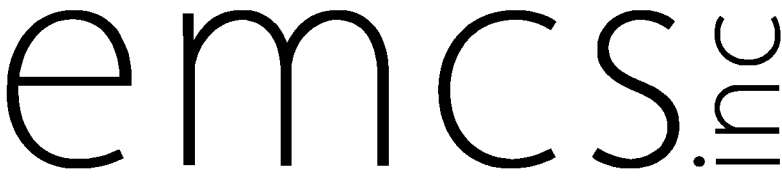
AN EASEMENT FOR HIGHWAY PURPOSES (HE), AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE.

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

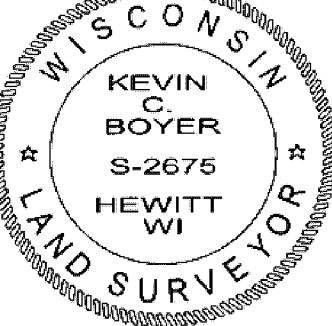
FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN RHINELANDER, WI.

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

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE FOR STH 32: WISDOT RW PLAT PROJECT # 9261-03-21 AND EXISTING CENTERLINE.

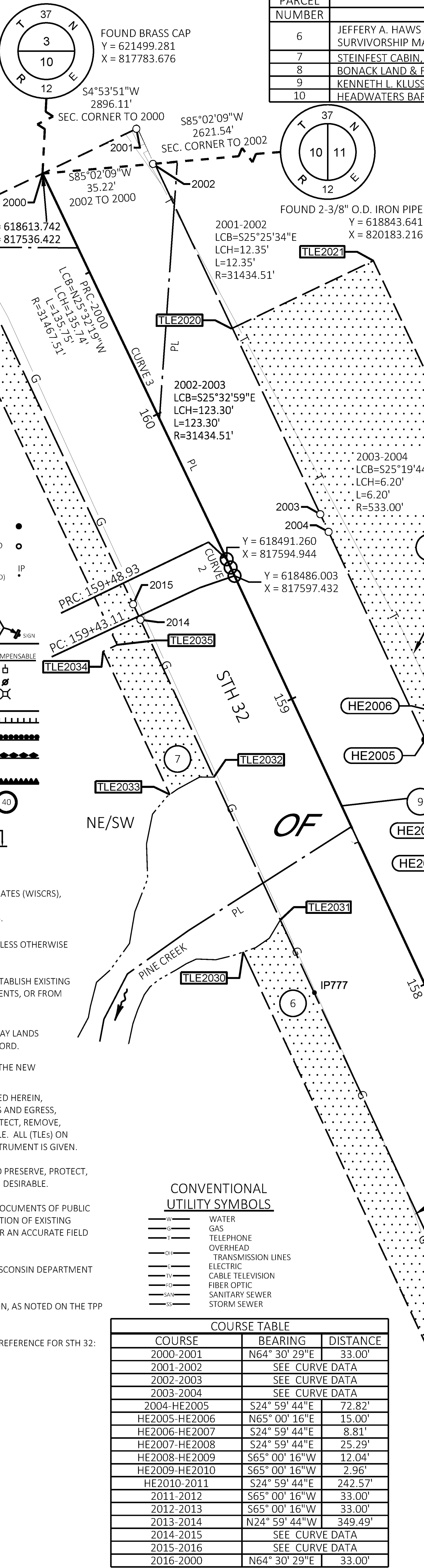


I, KEVIN C. BOYER PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.



SIGNATURE: *Kevin C. Boyer* DATE: 1/13/2021
PRINT NAME: KEVIN C. BOYER
REGISTRATION NUMBER: S-2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION
SIGNATURE: *Curt Van Erem* DATE: 1/13/2021
PRINT NAME: CURT VAN EREM

- (202) WISCONSIN PUBLIC SERVICE COMPANY (GAS)
NO RECORD EASEMENT - PAR 6, PAR 7
- (203) FRONTIER NORTH INC. (COMMUNICATION)
NO RECORD EASEMENT - PAR 8, PAR 9



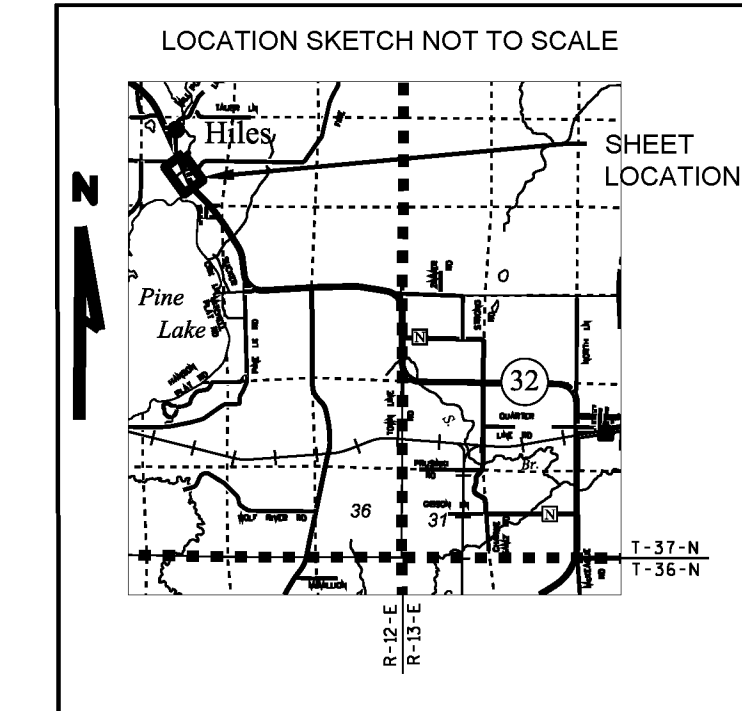
CONVENTIONAL UTILITY SYMBOLS

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

COURSE	BEARING	DISTANCE
2000-2001	N64° 30' 29"E	33.00'
2001-2002	SEE CURVE DATA	
2002-2003	SEE CURVE DATA	
2003-2004	SEE CURVE DATA	
2004-HE2005	S24° 59' 44"E	72.82'
HE2005-HE2006	N65° 00' 16"E	15.00'
HE2006-HE2007	S24° 59' 44"E	8.81'
HE2007-HE2008	S24° 59' 44"E	25.29'
HE2008-HE2009	S65° 00' 16"W	12.04'
HE2009-HE2010	S65° 00' 16"W	2.96'
HE2010-2011	S24° 59' 44"E	242.57'
2011-2012	S65° 00' 16"W	33.00'
2012-2013	S65° 00' 16"W	33.00'
2013-2014	N24° 59' 44"W	349.49'
2014-2015	SEE CURVE DATA	
2015-2016	SEE CURVE DATA	
2016-2000	N64° 30' 29"E	33.00'

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
202	WISCONSIN PUBLIC SERVICE CORPORATION (GAS)	RELEASE OF RIGHTS
203	FRONTIER NORTH INC. (COMMUNICATION)	RELEASE OF RIGHTS



SCALE, FEET 0 20 40

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNERS	INTEREST REQUIRED	HE SQ FT	TLE SQ FT
6	JEFFERY A. HAWS AND VICKI M. HAWS, HUSBAND AND WIFE AS SURVIVORSHIP MARITAL PROPERTY	TLE	---	3614
7	STEINFEST CABIN, LLC	TLE	---	2121
8	BONACK LAND & FORESTRY, LLP	HE/TLE	321	7342
9	KENNETH L. KLUSS	HE/TLE	189	1602
10	HEADWATERS BAR & GILL LLC	TLE	---	78

POINT NO.	STATION	OFFSET
TLE2020	160+14.35	33.00'
TLE2021	160+14.35	83.00'
TLE2022	158+70.29	83.00'
TLE2023	158+70.29	63.00'
TLE2024	158+56.18	63.00'
TLE2025	158+00.65	62.55'
TLE2026	158+00.65	43.00'
TLE2027	156+95.74	43.00'
TLE2028	156+95.74	33.00'
TLE2029	155+93.62	-48.00'
TLE2030	158+33.68	-48.00'
TLE2031	158+37.92	-33.00'
TLE2032	158+87.95	-33.00'
TLE2033	158+88.86	-48.01'
TLE2034	159+39.01	-48.01'
TLE2035	159+39.01	-43.07'
TLE2036	160+84.62	-43.00'

POINT NO.	STATION	OFFSET
2000	160+84.68	0.00'
2001	160+84.72	33.00'
2002	160+72.36	33.00'
2003	159+48.93	33.00'
2004	159+43.11	33.00'
HE2005	158+70.29	33.00'
HE2006	158+70.29	48.00'
HE2007	158+61.48	48.00'
HE2008	158+36.20	48.00'
HE2009	158+36.20	35.96'
HE2010	158+36.20	33.00'
2011	155+93.62	33.00'
2012	155+93.62	0.00'
2013	155+93.62	-33.00'
2014	159+43.11	-33.00'
2015	159+48.93	-33.00'
2016	160+84.63	-33.00'

EXISTING MONUMENTS

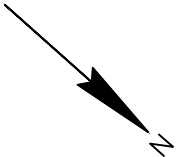
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP777	618353.639	817622.829	1.00" O.D. IRON PIPE

CURVE 2
PI STA = 159+46.02
Y = 618488.639
X = 817596.204
DELTA = 0°40'00" LT
D = 11°27'33"
T = 2.91'
L = 5.82'
R = 500.00'
PC STA = 159+43.11
PRC STA = 159+48.93
DB = S24°59'44"E
DA = N25°39'44"W

CURVE 3
PI STA = 163+37.34
Y = 618841.358
X = 817426.738
DELTA = 1°24'52" RT
D = 0°10'55"
T = 388.41'
L = 776.78'
R = 31467.51'
PRC STA = 159+48.93
PT STA = 167+25.71
DB = S25°39'44"E
DA = N24°14'52"W

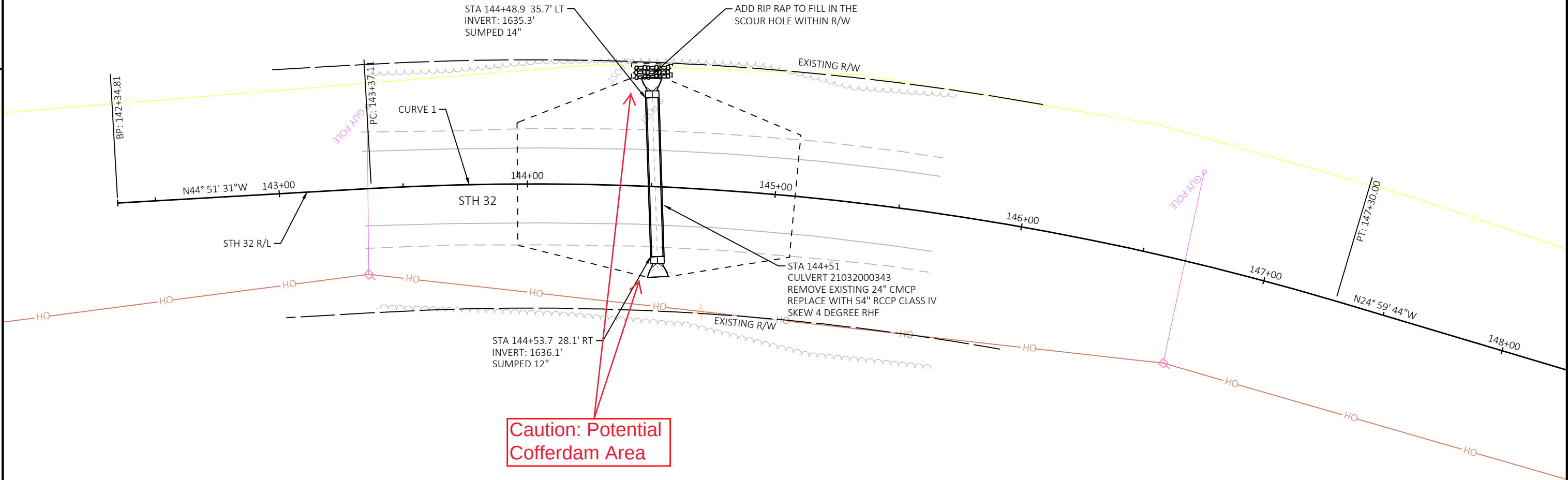
ALL TLES ARE FOR SLOPE GRADING PURPOSES.

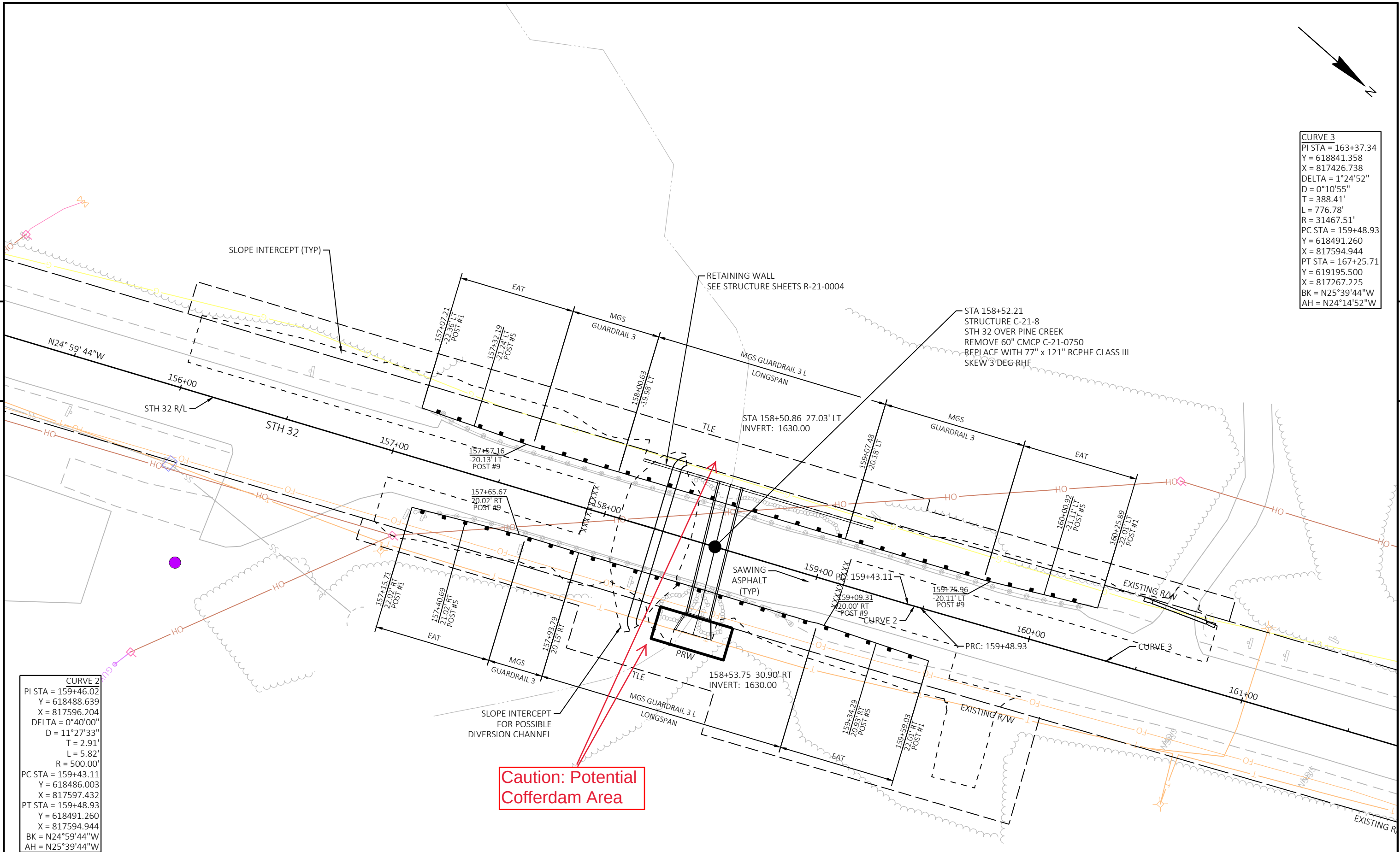
CURVE 1
PI STA = 145+35.55
Y = 617206.656
X = 818193.880
DELTA = 19°51'47"
D = 5°03'20"
T = 198.44'
L = 392.90'
R = 1133.32'
PC STA = 143+37.11
Y = 617065.993
X = 818333.851
PT STA = 147+30.00
Y = 617386.510
X = 818110.030
BK = N44°51'31"W
AH = N24°59'44"W



5

5

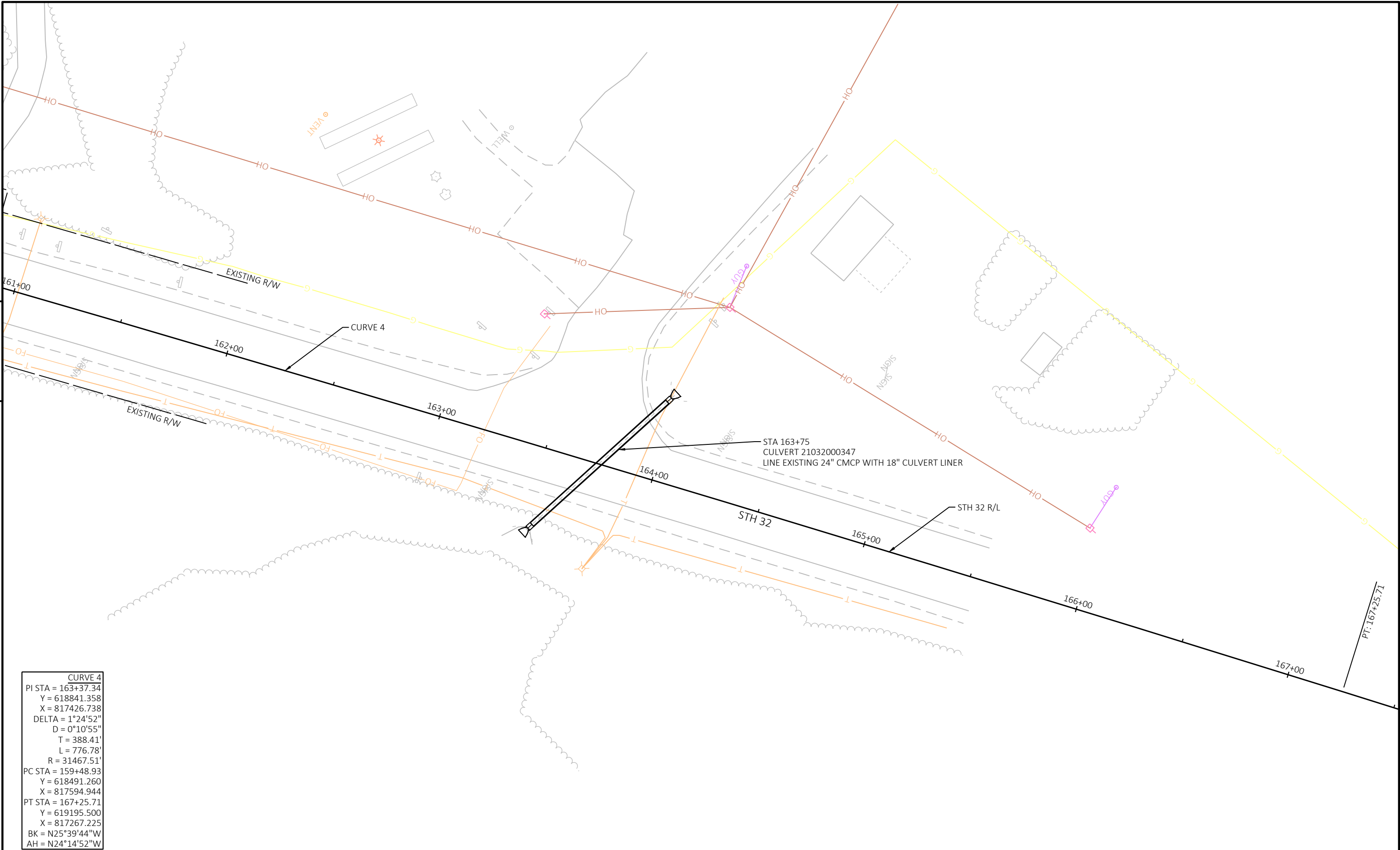


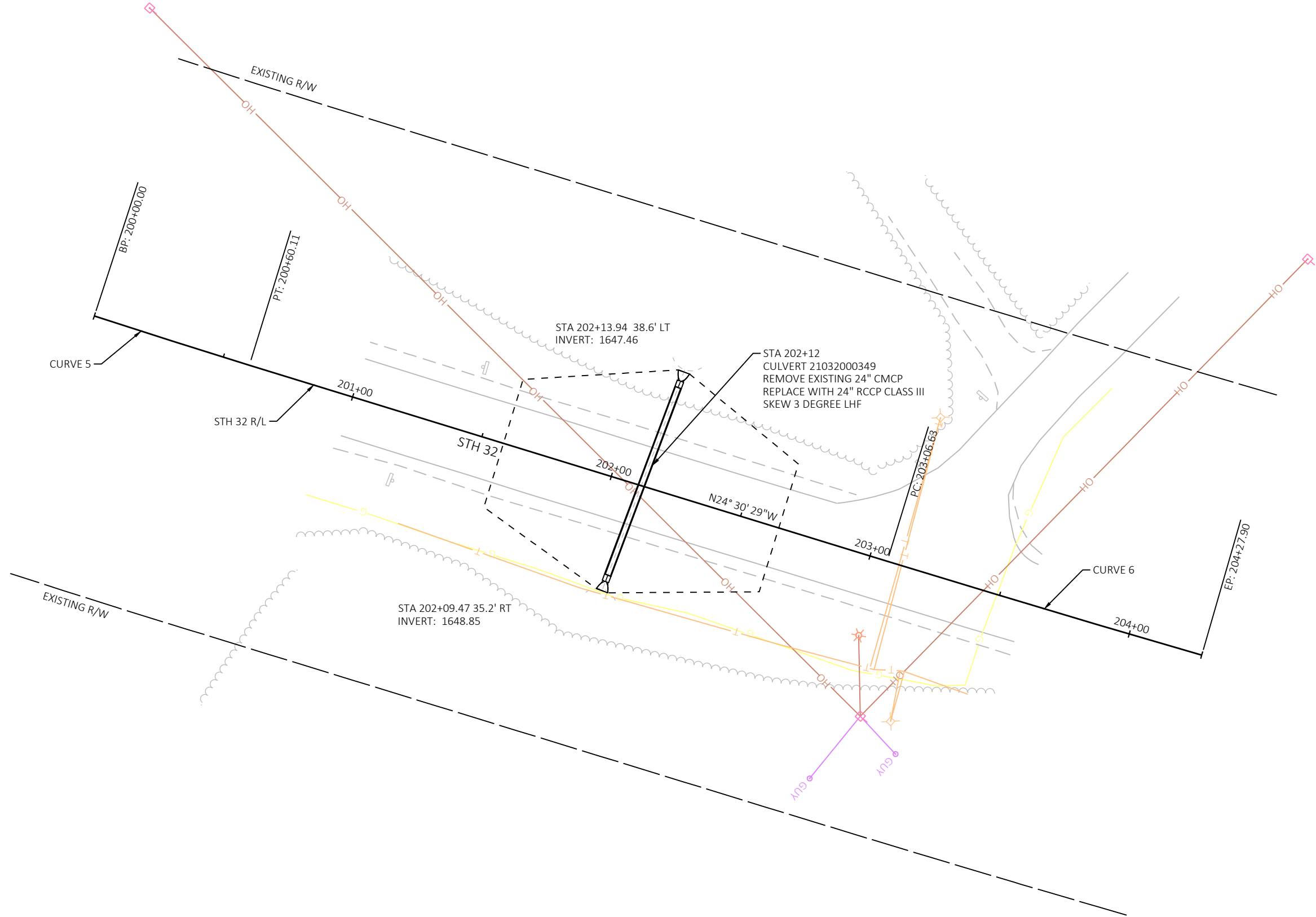


CURVE 3
PI STA = 163+37.34
Y = 618841.358
X = 817426.738
DELTA = 1°24'52"
D = 0°10'55"
T = 388.41'
L = 776.78'
R = 31467.51'
PC STA = 159+48.93
Y = 618491.260
X = 817594.944
PT STA = 167+25.71
Y = 619195.500
X = 817267.225
BK = N25°39'44"W
AH = N24°14'52"W

CURVE 2
PI STA = 159+46.02
Y = 618488.639
X = 817596.204
DELTA = 0°40'00"
D = 11°27'33"
T = 2.91'
L = 5.82'
R = 500.00'
PC STA = 159+43.11
Y = 618486.003
X = 817597.432
PT STA = 159+48.93
Y = 618491.260
X = 817594.944
BK = N24°59'44"W
AH = N25°39'44"W

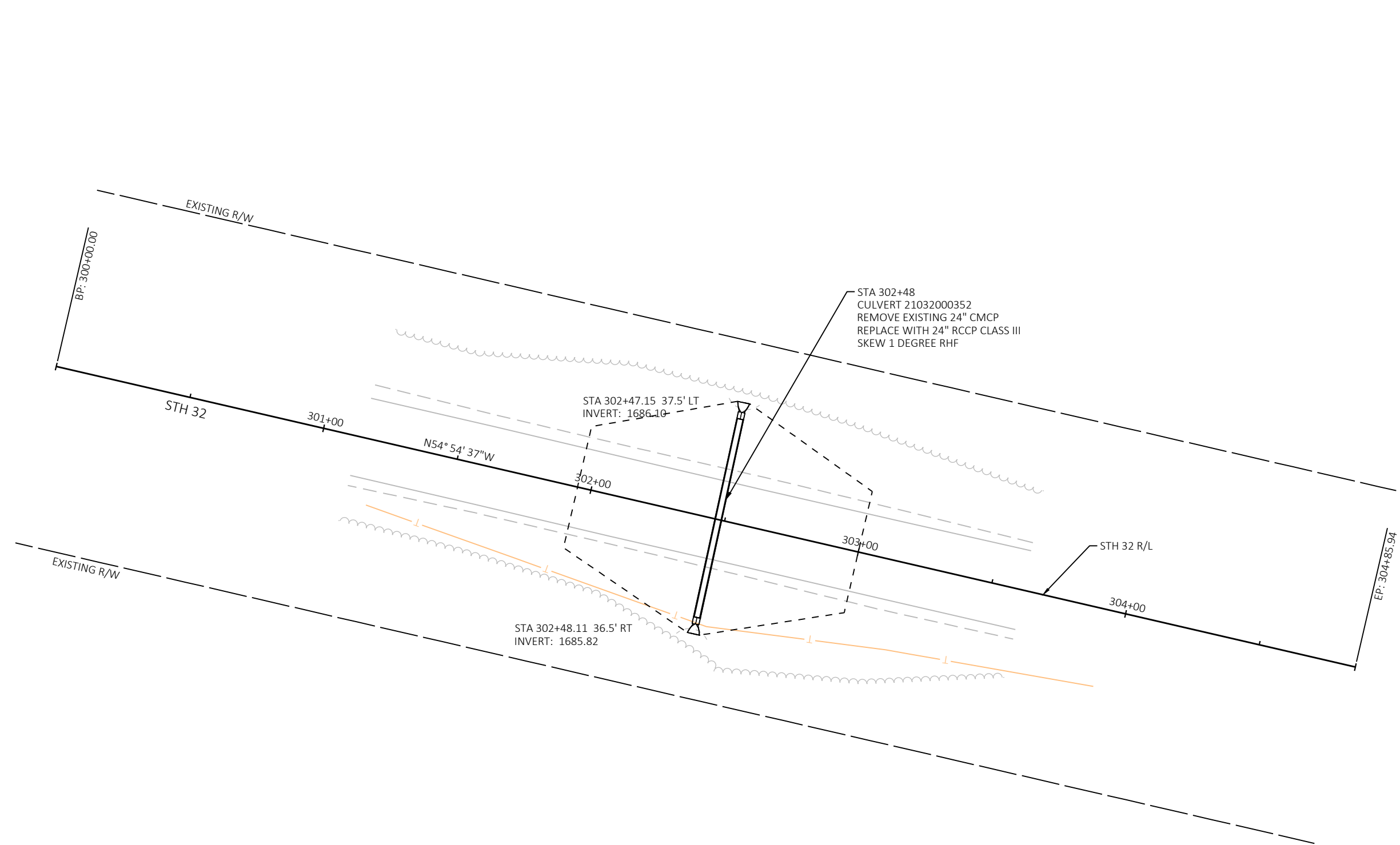
Caution: Potential Cofferdam Area

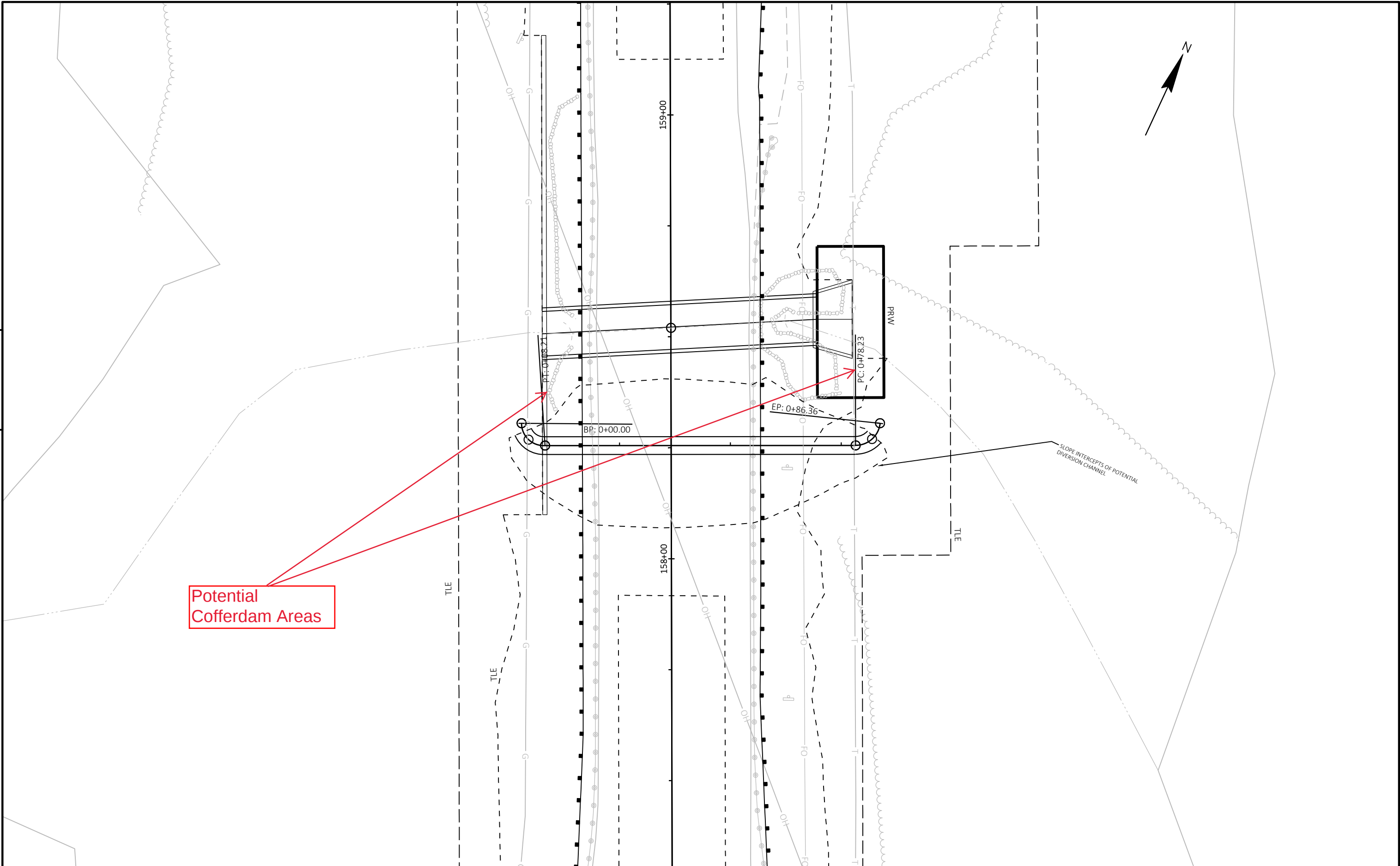




CURVE 5	
PI STA = 200+30.06	
Y = 621318.264	
X = 816318.281	
DELTA = 0°59'47"	
D = 1°39'28"	
T = 30.06'	
L = 60.11'	
R = 3456.28'	
PC STA = 200+00.00	
Y = 621290.703	
X = 816330.271	
PT STA = 200+60.11	
Y = 621345.612	
X = 816305.813	
BK = N23°30'42"W	
AH = N24°30'29"W	

CURVE 6	
PI STA = 203+67.27	
Y = 621625.096	
X = 816178.397	
DELTA = 0°57'09"	
D = 0°47'07"	
T = 60.64'	
L = 121.27'	
R = 7295.14'	
PC STA = 203+06.63	
Y = 621569.924	
X = 816203.549	
PT STA = 204+27.90	
Y = 621679.843	
X = 816152.330	
BK = N24°30'29"W	
AH = N25°27'38"W	





■ PIPE UNDERDRAIN WRAPPED (6 INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.

BAR STEEL REINFORCEMENT: ———— $f_y = 60,000$ P.S.I.
GRADE 60

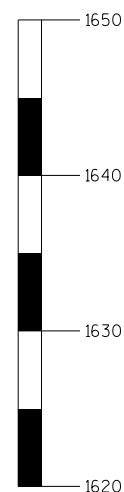
DOMINIQUE BECHLE (608) 261-8205

HEADWALL

1. PIPE CULVERT HEADWALL
2. HEADWALL SECTION & QUANTITIES



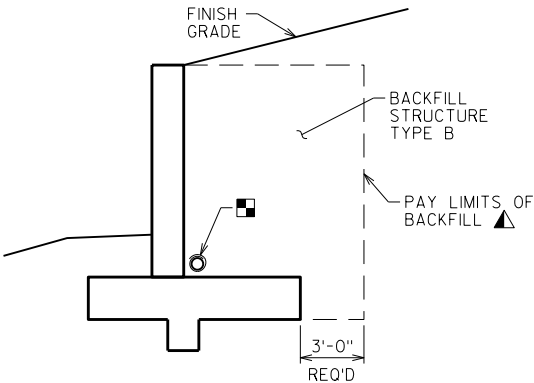
PLAN

ELEVATION

LOOKING WEST AT B.F. HEADWALL

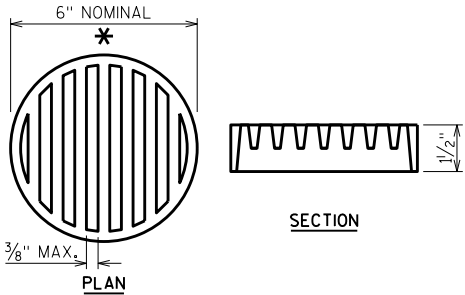
TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
210.2500	BACKFILL STRUCTURE TYPE B	TON	-
504.0100	CONCRETE MASONRY CULVERTS	CY	-
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	-
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	-
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	-
NON-BID ITEMS			
	FILLER	SIZE	3/4"



TYPICAL FILL SECTION

- ▲ BACKFILL PAY LIMITS, BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES, LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.
- PIPE UNDERDRAIN WRAPPED (6 INCH), SLOPE 0.5% MIN. TO SUITABLE DRAINAGE, ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.

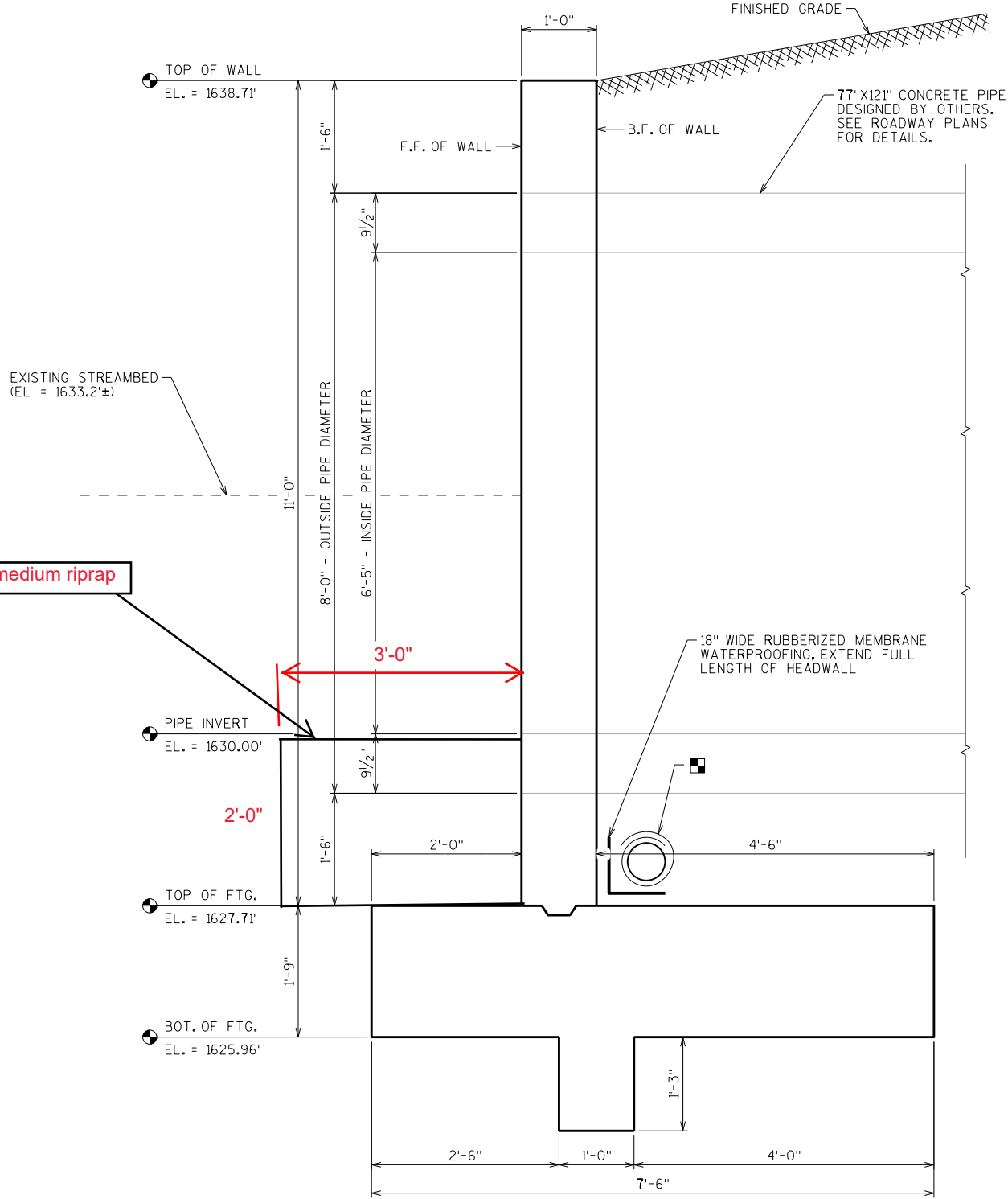


RODENT SHIELD DETAIL

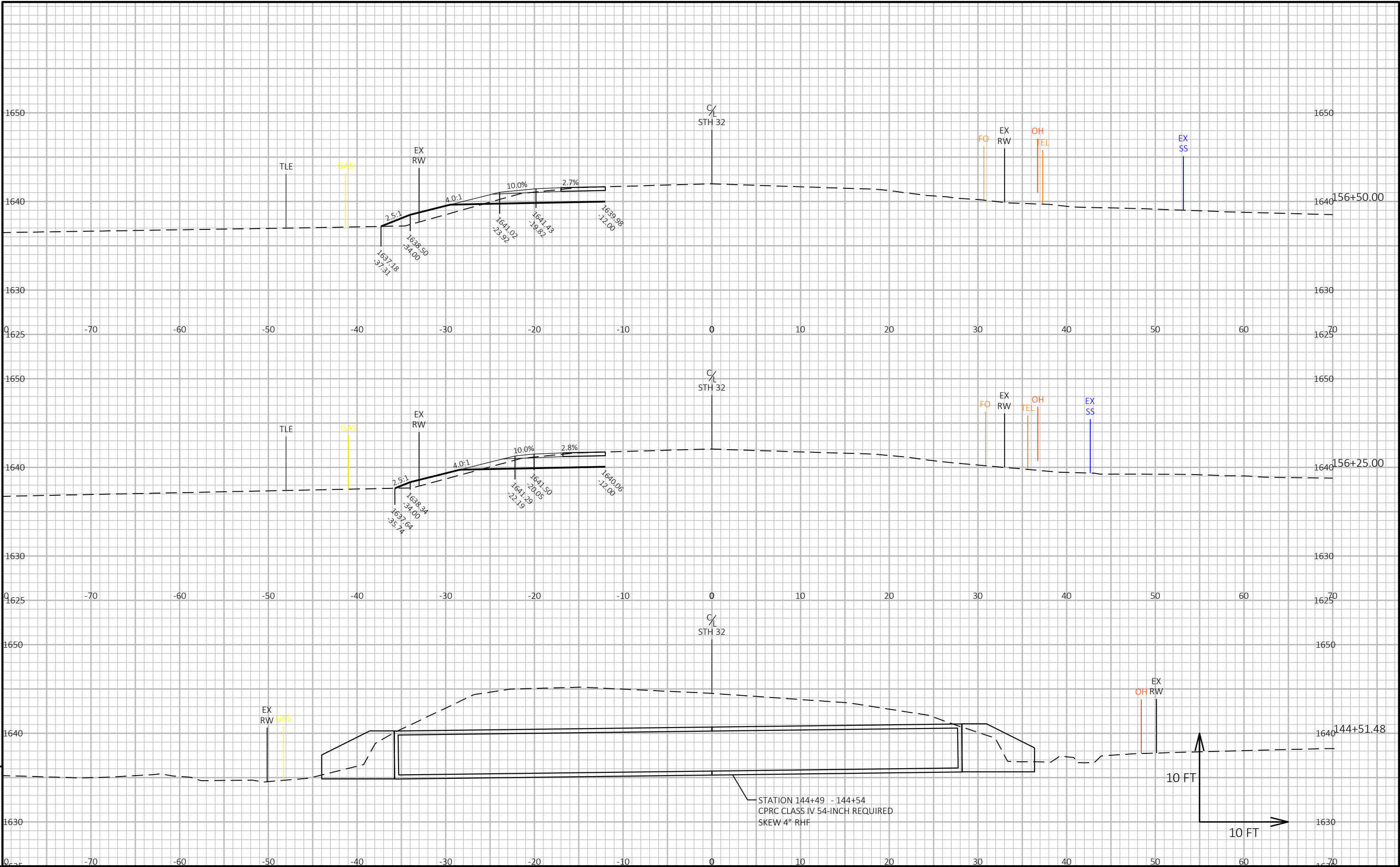
- * DIMENSIONS ARE APPROXIMATE, THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING, ORIENT SO SLOTS ARE VERTICAL.
- THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".
- THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER, A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

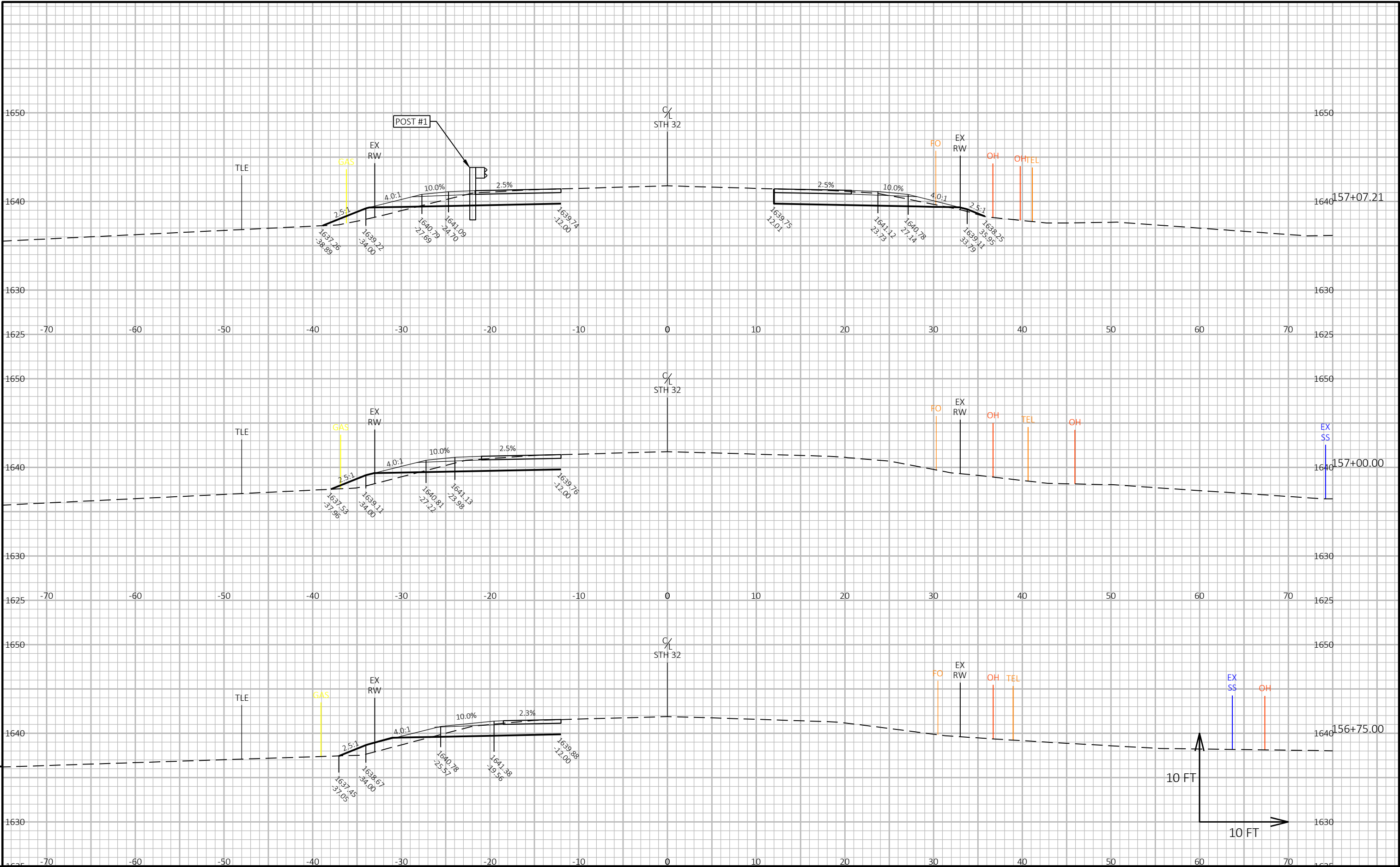
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE C-21-0008			
DRAWN BY		DMB	PLANS CK'D.
HEADWALL SECTION & QUANTITIES		SHEET 2	

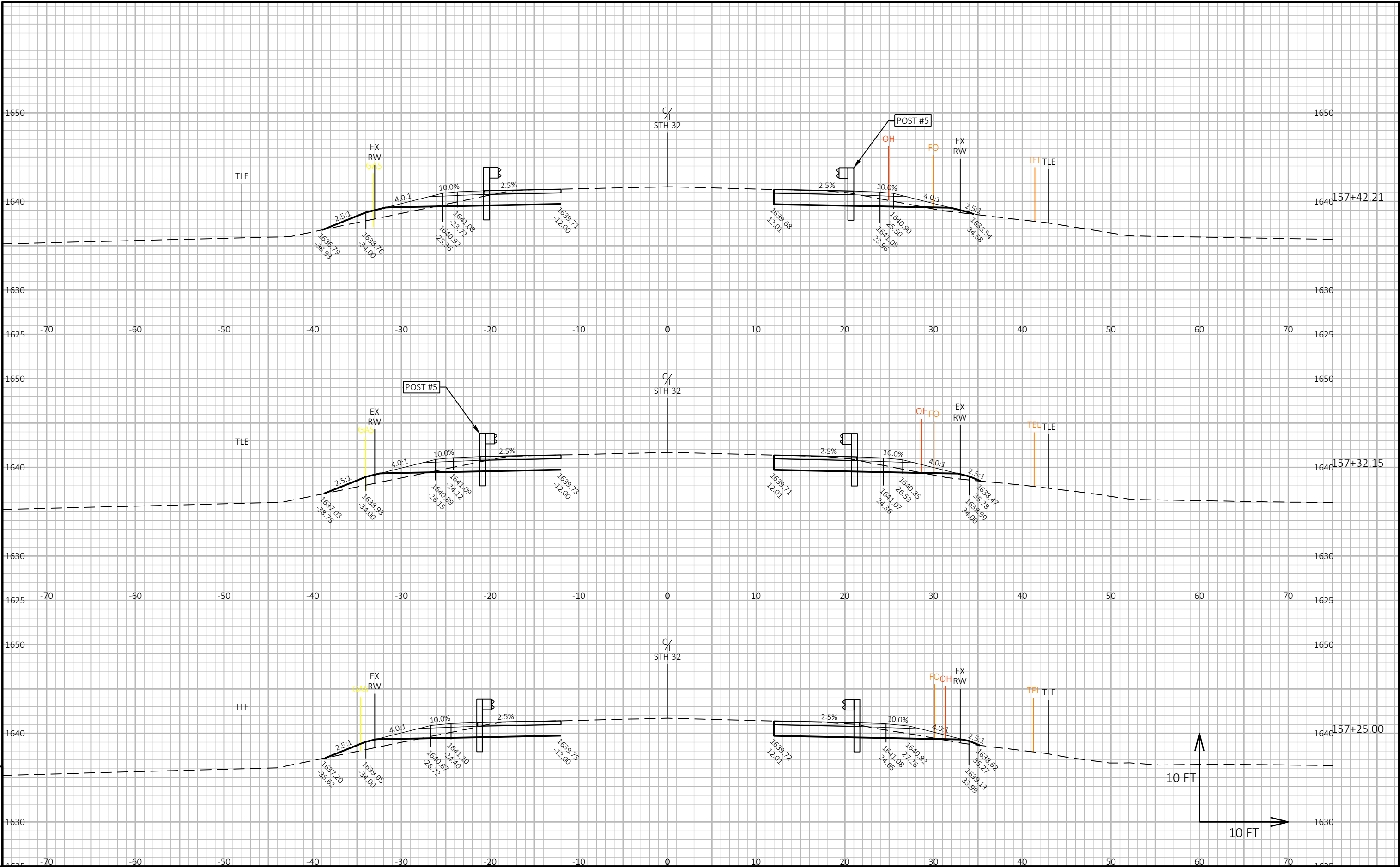
SCALE = 1:00

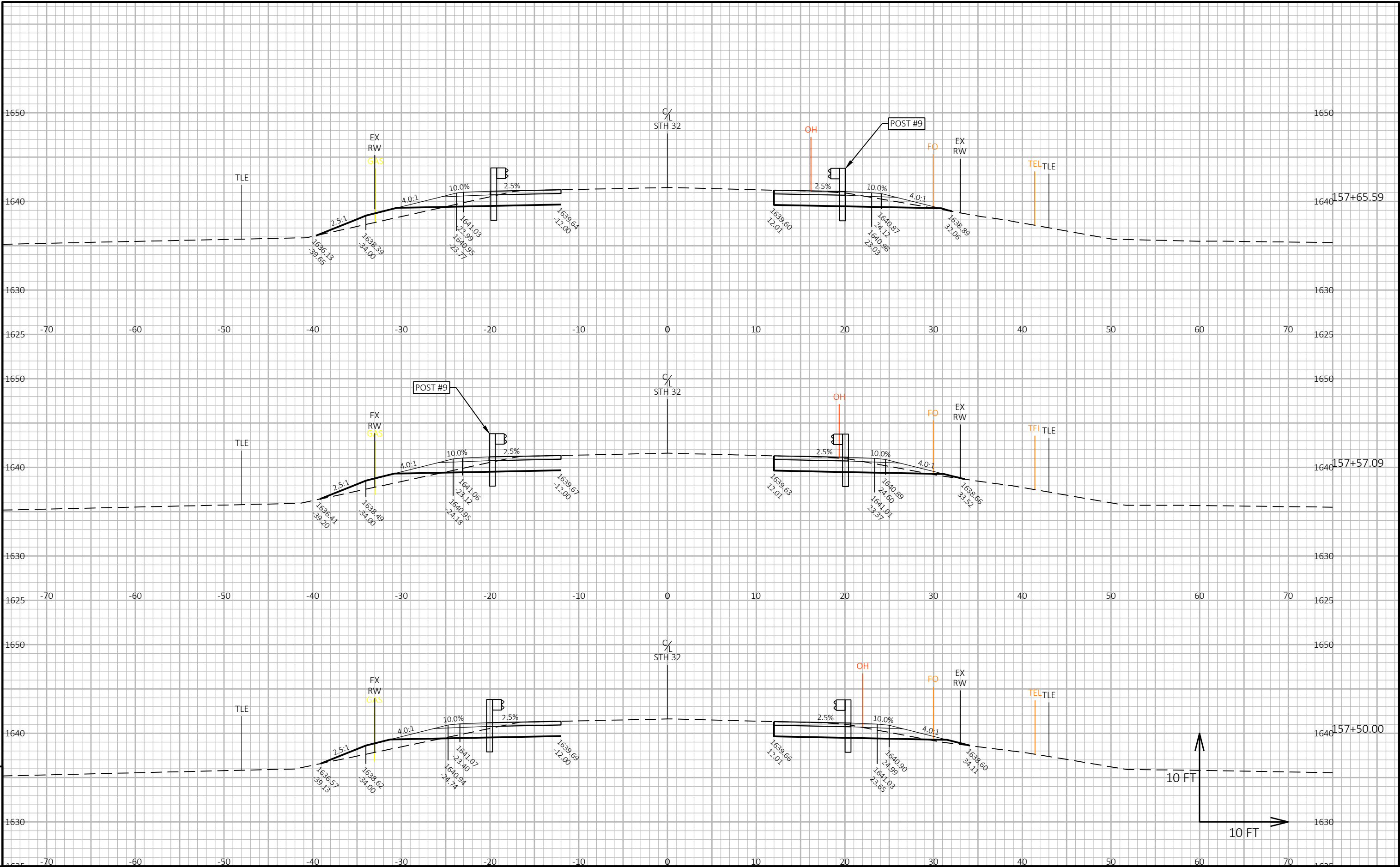


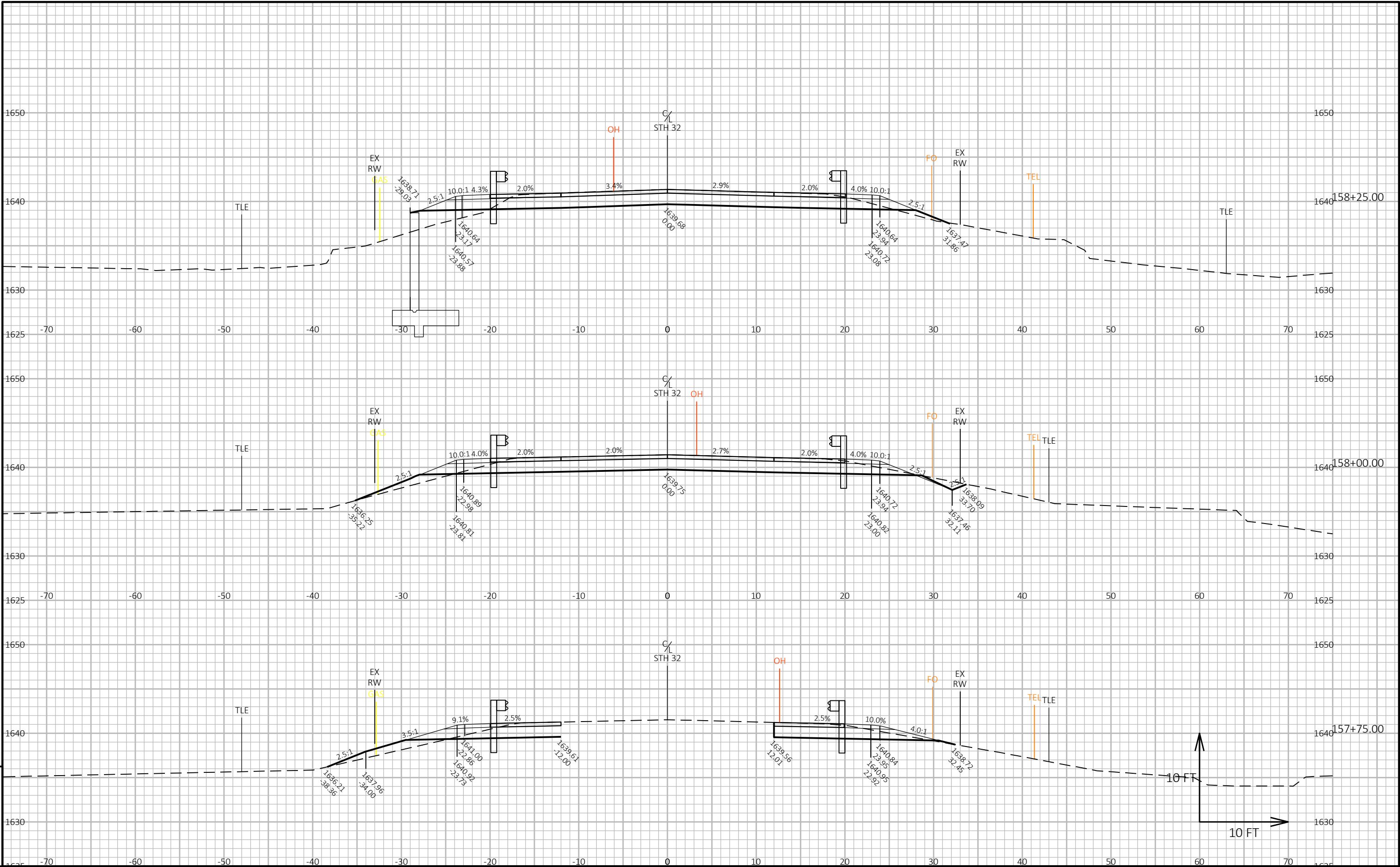
SECTION THRU HEADWALL

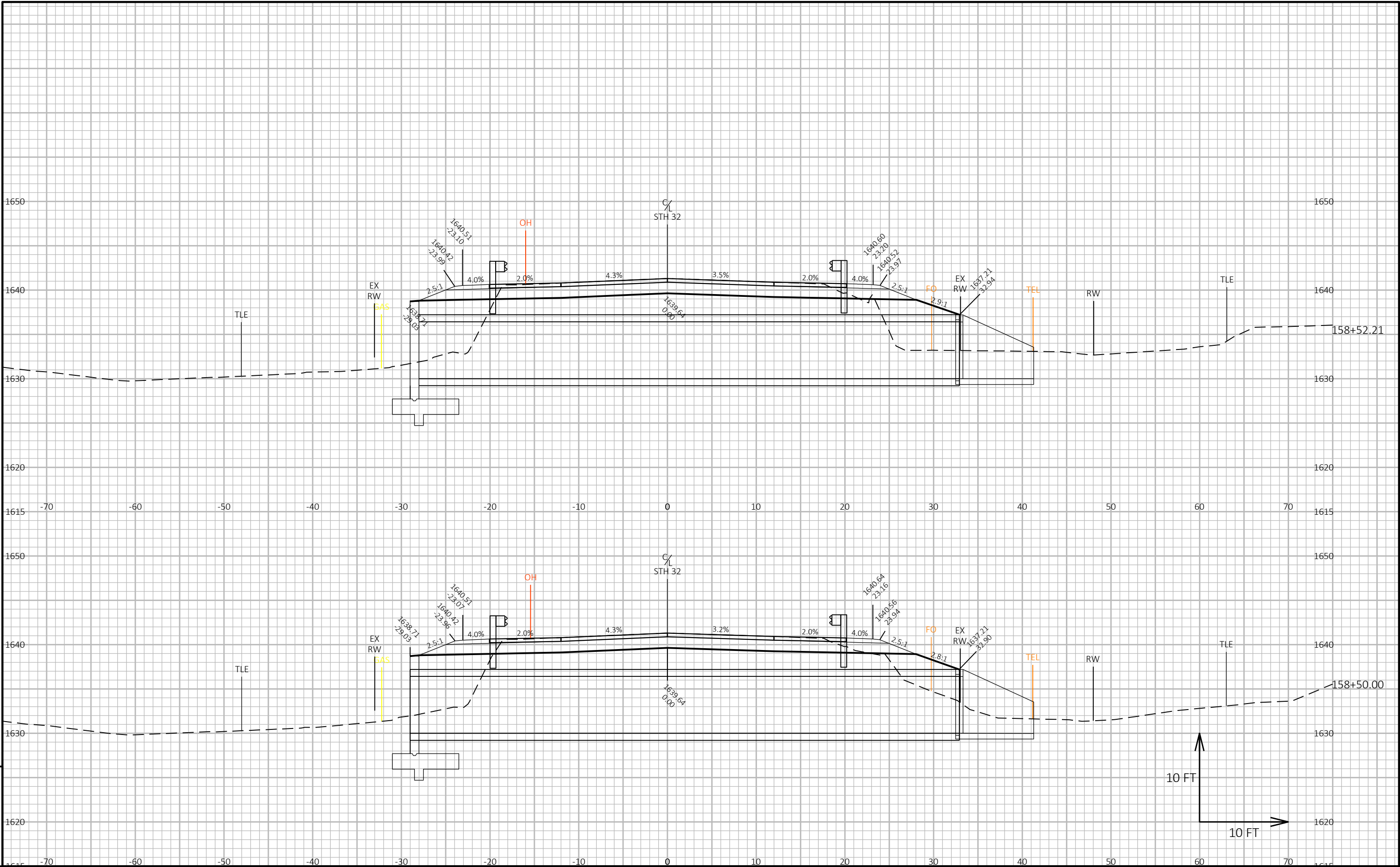


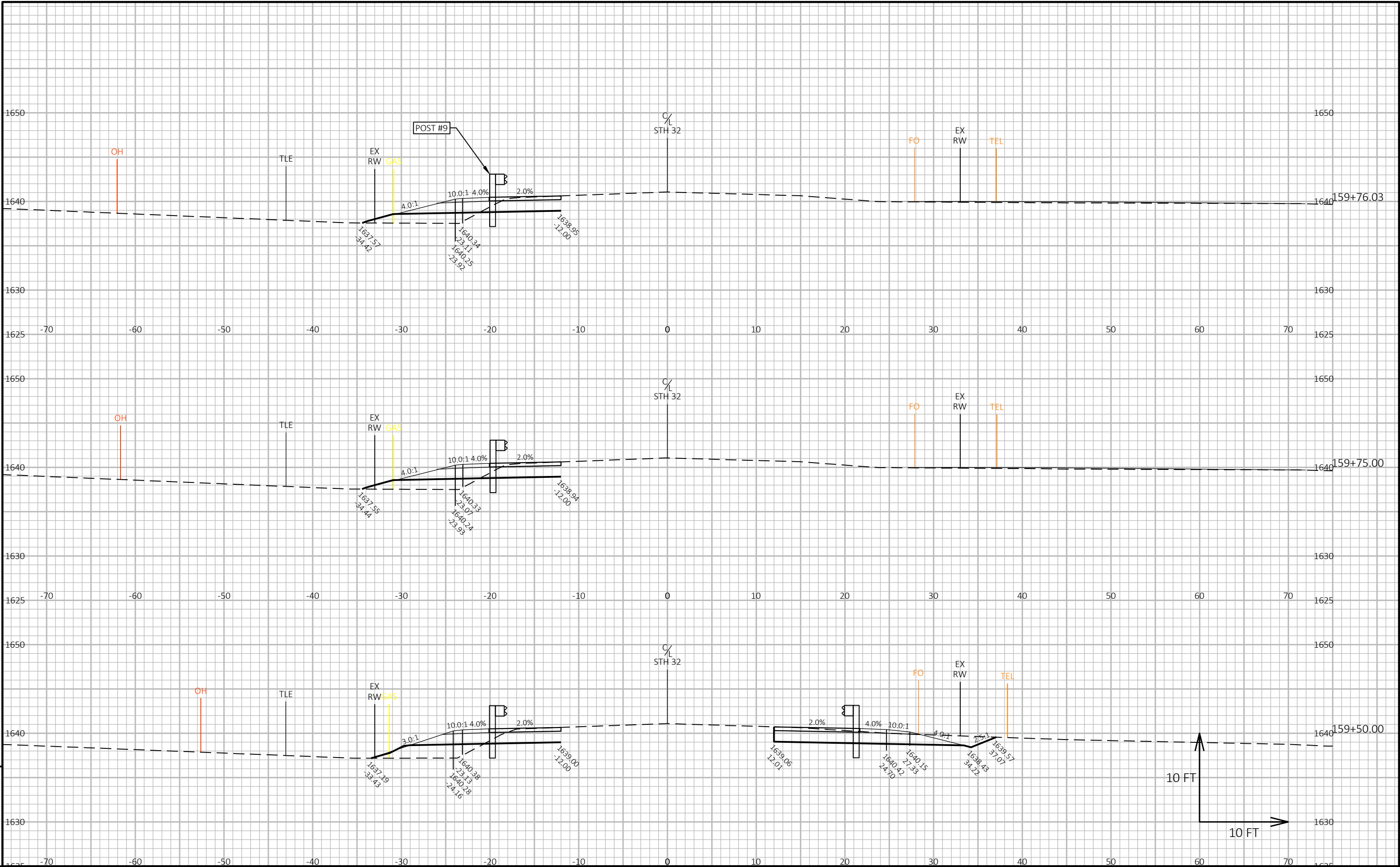








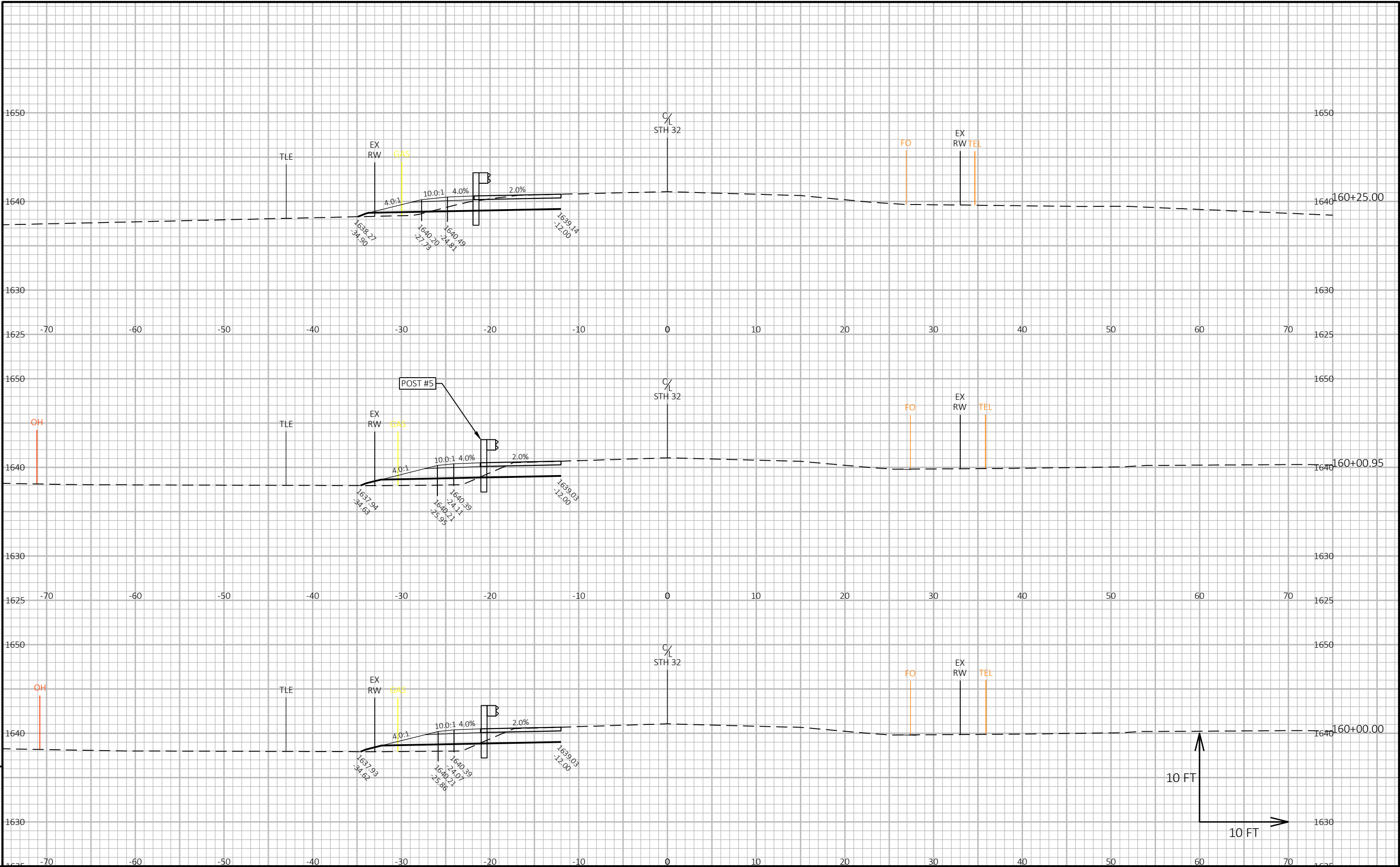


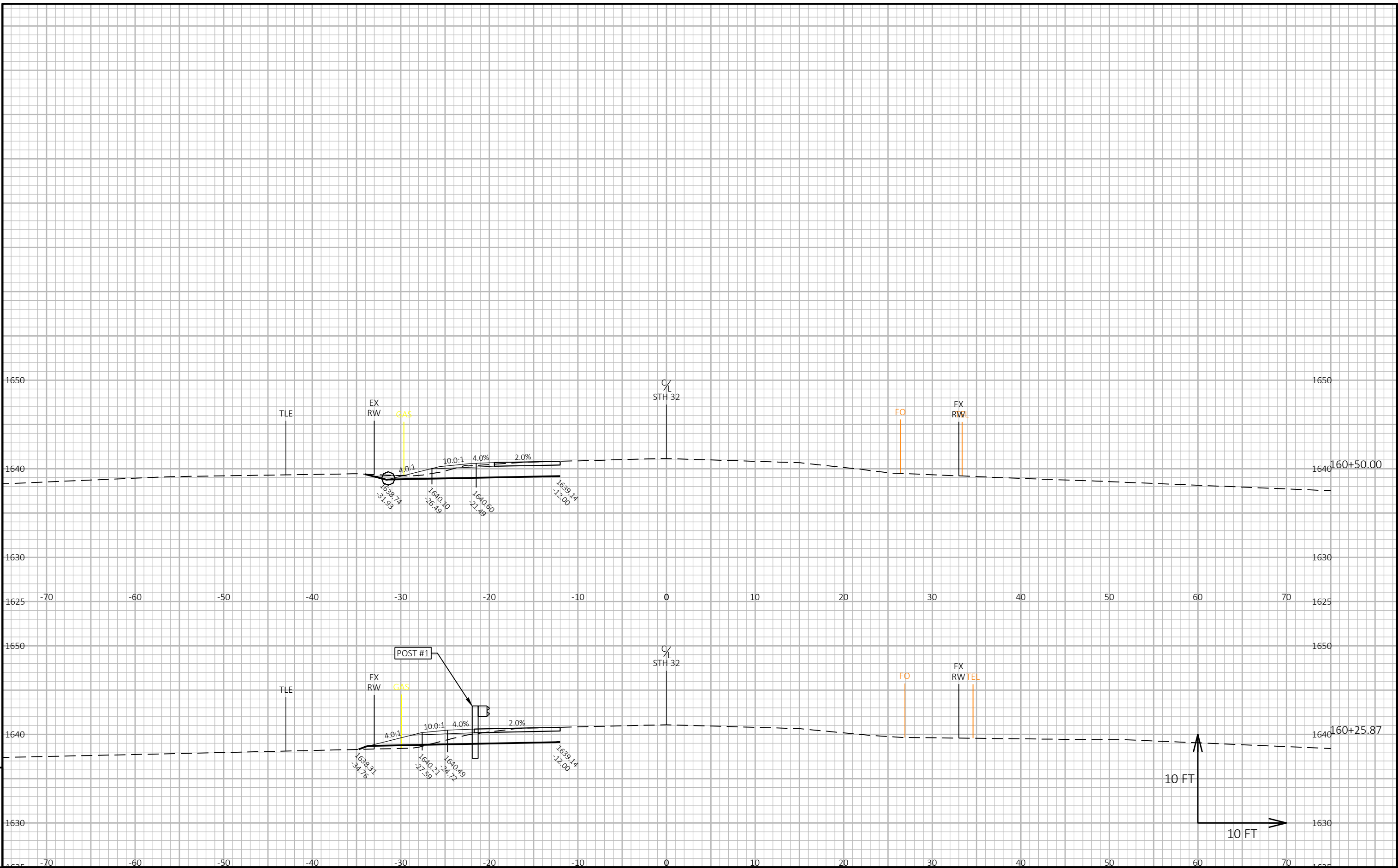


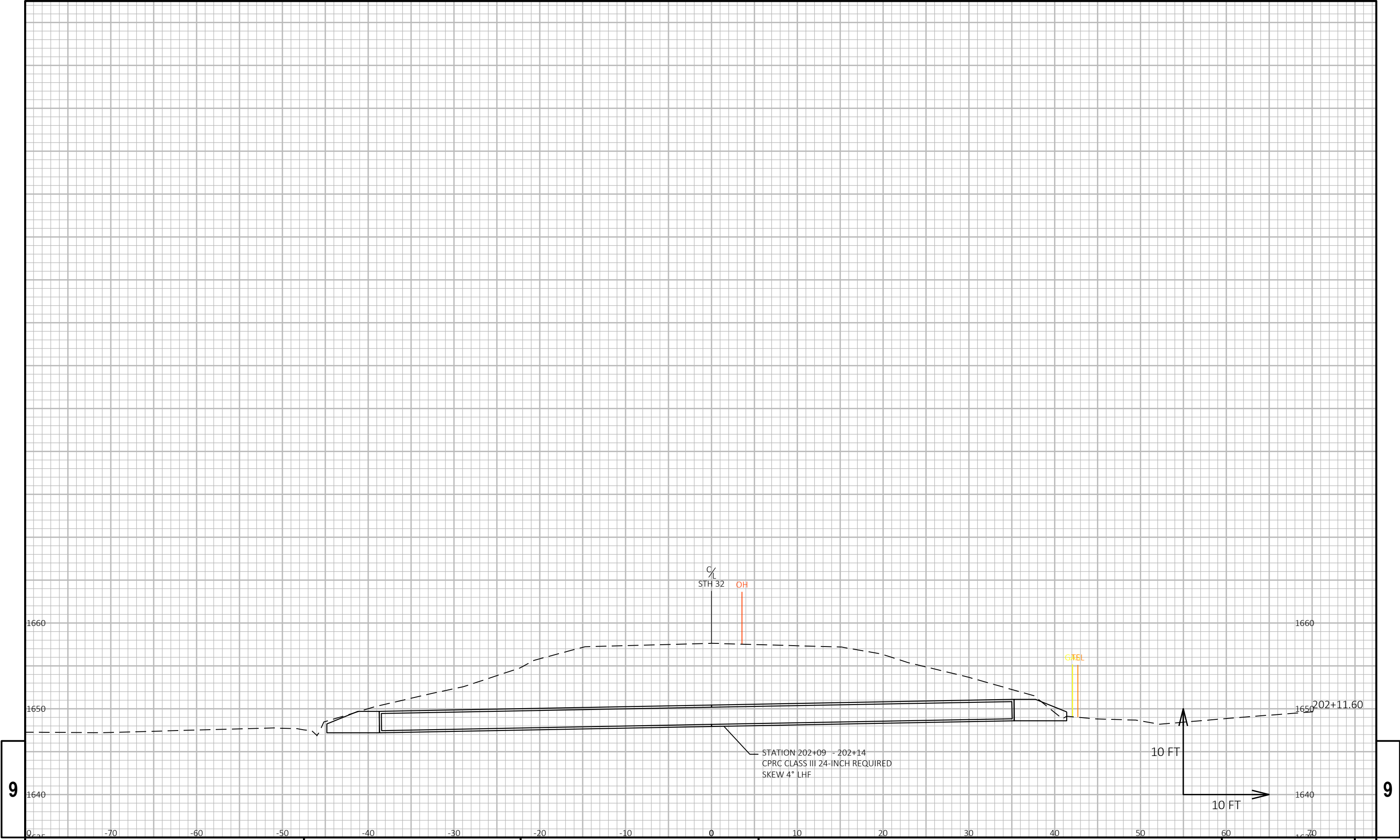
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PROJECT NO: 9261-07-61	HWY: STH 32	COUNTY: FOREST	CROSS SECTIONS: STH 32	SHEET	E
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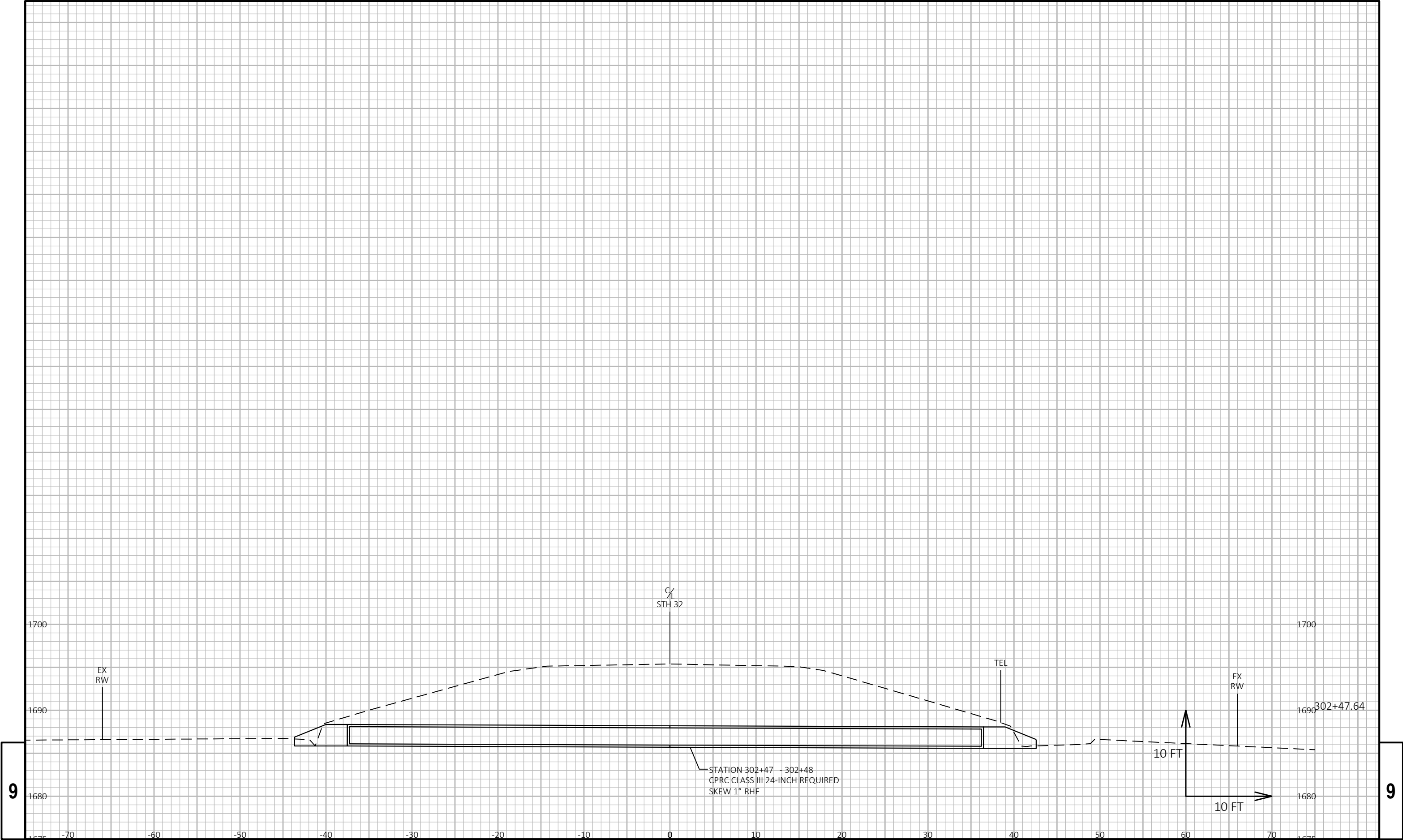




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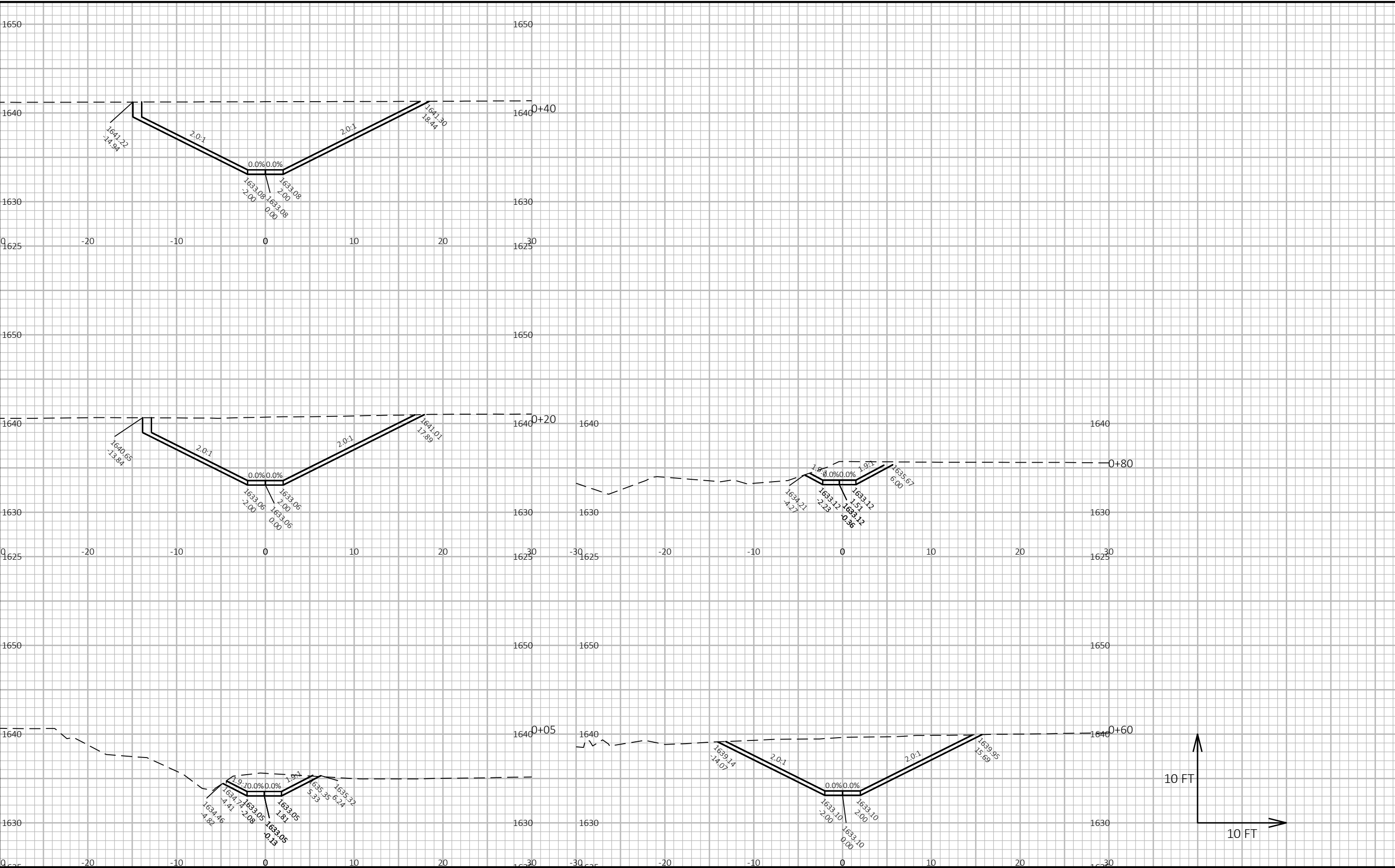
PROJECT NO:	9261-07-61	HWY: STH 32	COUNTY: FOREST	CROSS SECTIONS:	STH 32	SHEET	E
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PROJECT NO: 9261-07-61	HWY: STH 32	COUNTY: FOREST	CROSS SECTIONS: STH 32	SHEET E
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EPlans Preliminary Sheet Numbering Tool

This sheet: ftp://ftp.dot.state.wi.us/transp/roads/eplans/prelim_sheet_numbers.pdf

Notes

- Acrobat 5 or higher is required to use this tool.
- The Bureau of Highway Construction places sheet numbers in the final plan.
- This sheet is for placing preliminary sheet numbers with a "PRE_" prefix.
- If a plan contains multiple projects, number each plan individually.
- Leave this sheet in the plan.

TO ADD PRELIMINARY SHEET NUMBERS

1. Insert this sheet at the end of the plan

- a. With the plan open in Acrobat, select Document > Insert Pages.
- b. In the Select File to Insert dialog box, select this file (prelim_sheet_numbers.pdf)
- c. In the Insert dialog box, choose After for Location and Last page for Page.
- d. Click OK.

2. Click the Place Preliminary Sheet Numbers button

- a. Go to the last sheet of the plan.
- b. Click the Place Preliminary Sheet Numbers button once.
(The preliminary sheet number appears in the bottom right corner of the sheets.
The number should match the page number in the Acrobat Status bar).

3. Re-Save the PDF

- a. Select File > Save As and save the PDF.

TO REMOVE PRELIMINARY SHEET NUMBERS