

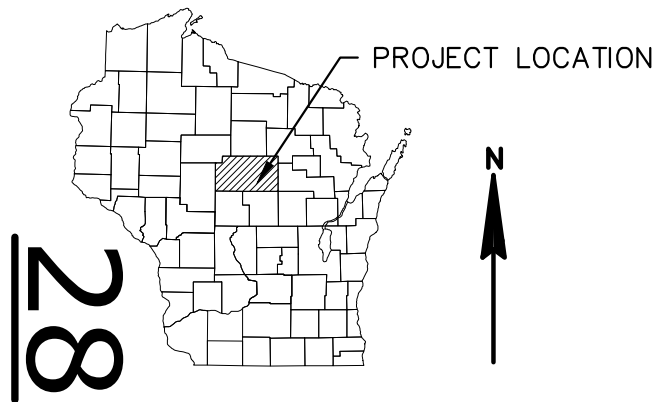
RHI
PROJECT ID: 1053-02-62
WITH: NA
COUNTY: MARATHON

NOV 2016

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 = 170



DESIGN DESIGNATION

	CTH J	CTH Q	STH 29
A.A.D.T. 2015	= 4,400	970	13,600
A.A.D.T. 2035	= 5,500	1,200	18,400
D.H.V.	= N/A	N/A	N/A
D.D.	= N/A	N/A	64/36
T.	= N/A	N/A	9.2%
DESIGN SPEED	= 50 MPH	50 MPH	70 MPH
ESALS	= N/A	N/A	5,314,400

CONVENTIONAL SYMBOLS	
PLAN	PROFILE
CORPORATE LIMITS	GRADE LINE
PROPERTY LINE	ORIGINAL GROUND
LOT LINE	MARSH OR ROCK PROFILE (To be noted as such)
LIMITED HIGHWAY EASEMENT	SPECIAL DITCH
EXISTING RIGHT OF WAY	GRADE ELEVATION
PROPOSED OR NEW R/W LINE	CULVERT (Profile View)
SLOPE INTERCEPT	UTILITIES
REFERENCE LINE	ELECTRIC
EXISTING CULVERT	FIBER OPTIC
PROPOSED CULVERT (Box or Pipe)	GAS
COMBUSTIBLE FLUIDS	SANITARY SEWER
	STORM SEWER
	TELEPHONE
	WATER
MARSH AREA	UTILITY PEDESTAL
	POWER POLE
WOODED OR SHRUB AREA	TELEPHONE POLE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

WAUSAU — WITTENBERG

B-37-179, 180, 181, 182

STH 29

MARATHON COUNTY

STATE PROJECT NUMBER
1053-02-62

BEGIN PROJECT 1053-02-62

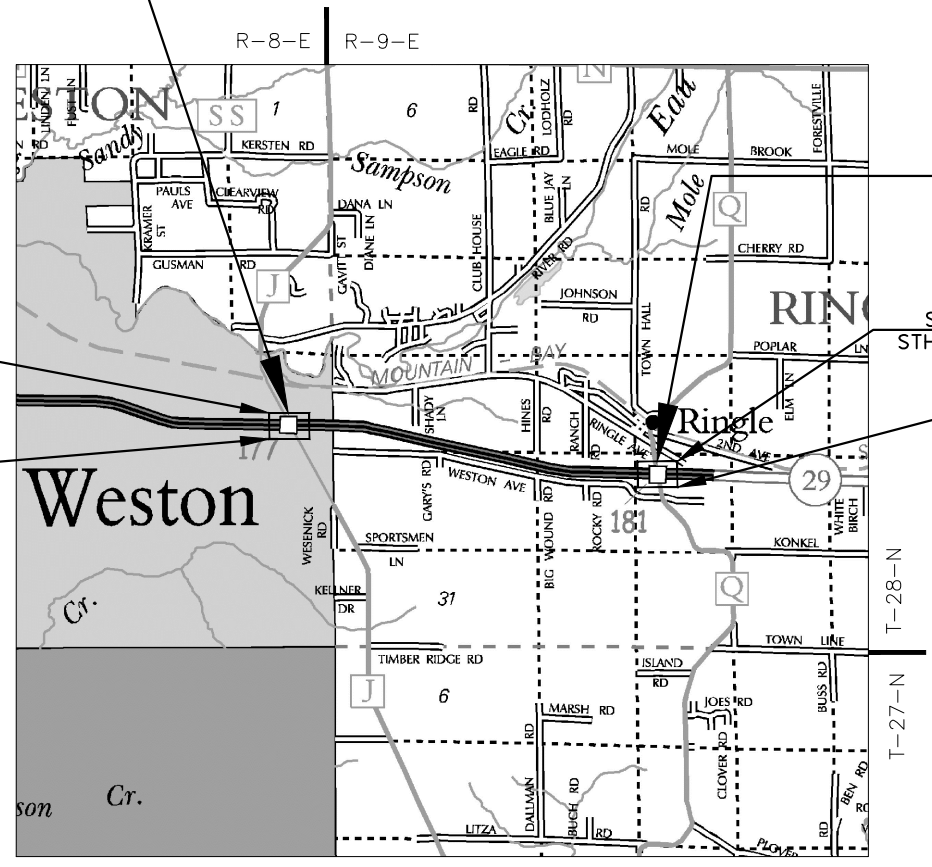
END PROJECT

STRUCTURE B-37-180
STH 29WB OVER CTH J

STRUCTURE B-37-179
STH 29EB OVER CTH J

STRUCTURE B-37-182
STH 29WB OVER CTH Q

STRUCTURE B-37-181
STH 29EB OVER CTH Q



LAYOUT
SCALE 0 2 MILES

TOTAL NET LENGTH OF CENTERLINE = N/A

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, MARATHON 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.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1053-02-62	WISC 2016441	1

ORIGINAL PLAN PREPARED BY
BECHER HOPPE 330 Fourth Street • PO Box 8000
Wausau, WI • 54402-8000
715.845.8000 • Fax 715.845.8008
becherhoppe.com



8-17-2016
(Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	BECHER-HOPPE ASSOCIATES, INC.
Designer	BECHER-HOPPE ASSOCIATES, INC.
Project Manager	JED PETERS, PE
Regional Examiner	CHERYL SIMON, PE
Regional Supervisor	ROBIN STAFFORD, PE

APPROVED FOR THE DEPARTMENT
DATE: 8/17/2016 (Signature)

GENERAL NOTES

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

SEE EROSION CONTROL SHEETS FOR BENCHMARK DATA.

NO WETLANDS HAVE BEEN PERMITTED AS PART OF THIS PROJECT. NO WORK SHALL BE PERFORMED WITHIN WETLANDS AS PART OF THIS PROJECT.

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

SECTION 2 ORDER

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
EROSION CONTROL
PERMANENT SIGNING
TRAFFIC CONTROL DETAILS

UTILITIES

COMMUNICATION
CENTURYLINK
1310 EAST MARY STREET
OTTUMA, IA 52501
ROBERT SAMPSON
PHONE: (636) 887-5367
Robert.Sampson@centurylink.com

COMMUNICATION
PACKERLAND BROADBAND
105 KENT STREET
IRON MOUNTAIN, MI 49801
WAYNE CRETTON
MOBILE: (906) 282-3768
Wayne.Cretton@packerlandbroadband.com

SANITARY SEWER
VILLAGE OF WESTON
5500 SCHOFIELD AVENUE
WESTON, WI 54476
MICHAEL WODALSKI
PHONE: (715) 359-6114
MOBILE: (715) 241-2636
MWodalski@westonwi.gov

STREET LIGHTING
VILLAGE OF WESTON
5500 SCHOFIELD AVENUE
WESTON, WI 54476
MICHAEL WODALSKI
PHONE: (715) 359-6114
MOBILE: (715) 241-2636
MWodalski@westonwi.gov

WATER
VILLAGE OF WESTON
5500 SCHOFIELD AVENUE
WESTON, WI 54476
MICHAEL WODALSKI
PHONE: (715) 359-6114
MOBILE: (715) 241-2636
MWodalski@westonwi.gov

ELECTRIC
WISCONSIN PUBLIC SERVICE CORPORATION
1700 SHERMAN STREET
WAUSAU, WI 54402
CLAYTON VIRCKS
PHONE: (715) 848-7317
MOBILE: (715) 573-7806
CHVircks@wisconsinpublicservice.com

GAS/PETROLEUM
WISCONSIN PUBLIC SERVICE CORPORATION
1700 SHERMAN STREET
WAUSAU, WI 54402
MICHAEL BOSI
PHONE: (715) 848-7471
MOBILE: (715) 803-8009
MABosi@wisconsinpublicservice.com

DNR CONTACT

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
WISCONSIN RAPIDS SERVICE CENTER
473 GRIFFITH AVENUE
WISCONSIN RAPIDS, WI 54494
MR. MARC HERSHFIELD
PHONE: (715) 421-7867
Marc.Hershfield@wisconsin.gov

RUNOFF COEFFICIENT TABLE

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

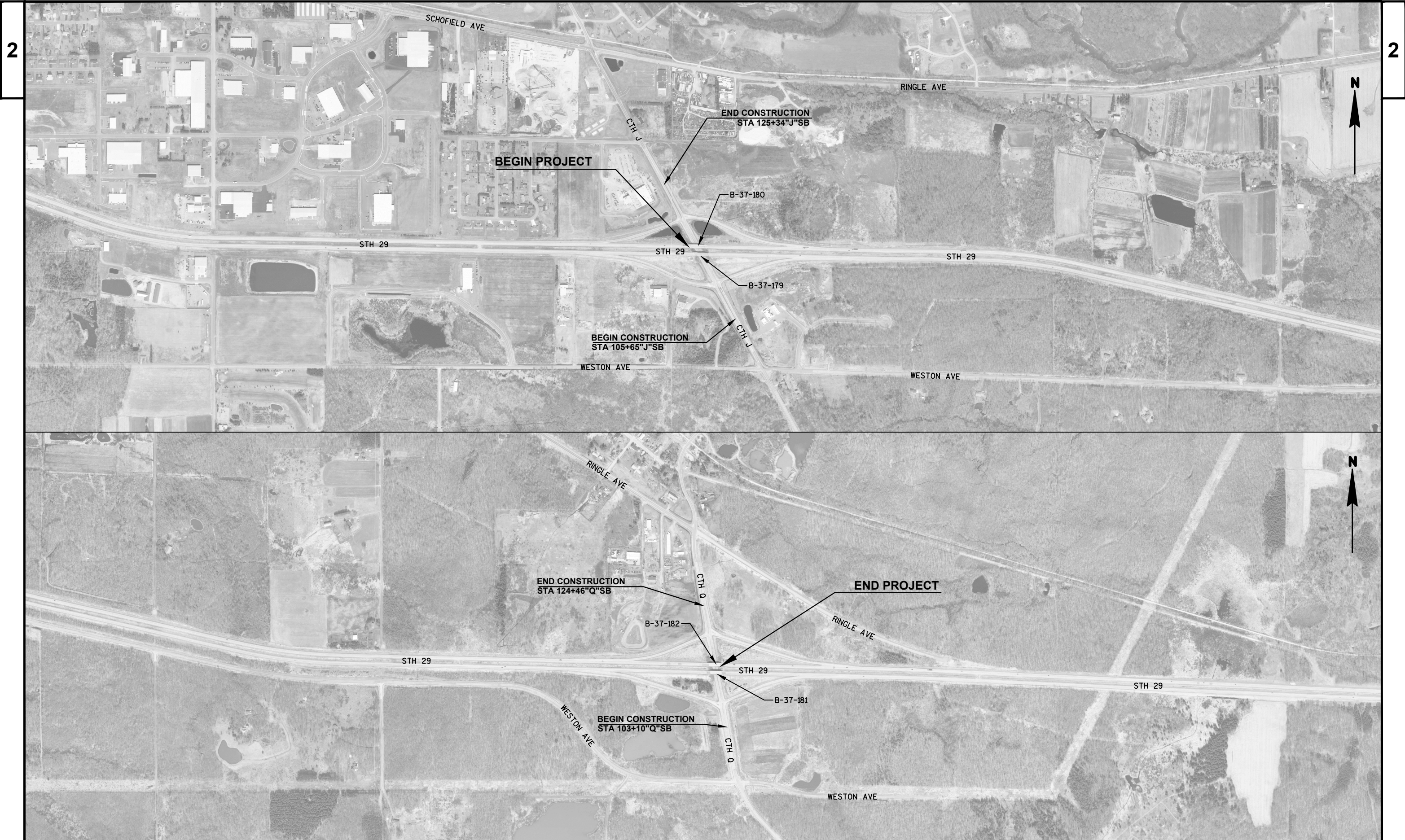
TOTAL PROJECT AREA = .61 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 1.5 ACRES

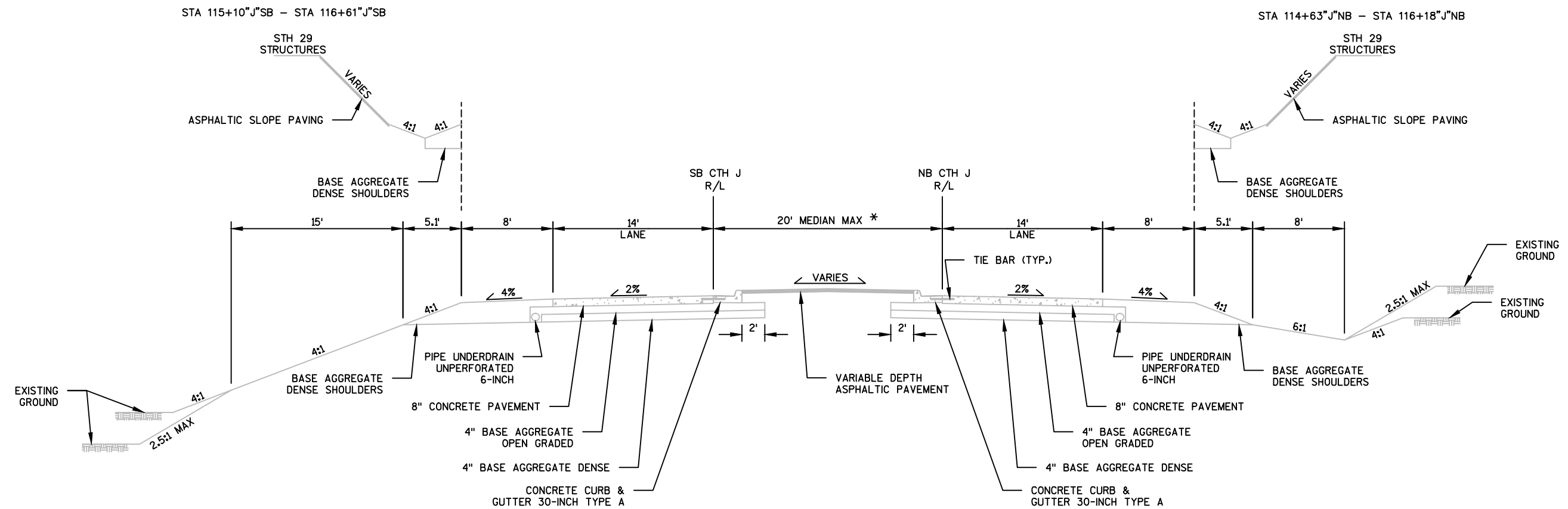
DIGGERSHOTLINE

Dial 811 or (800)242-8511

www.DiggersHotline.com

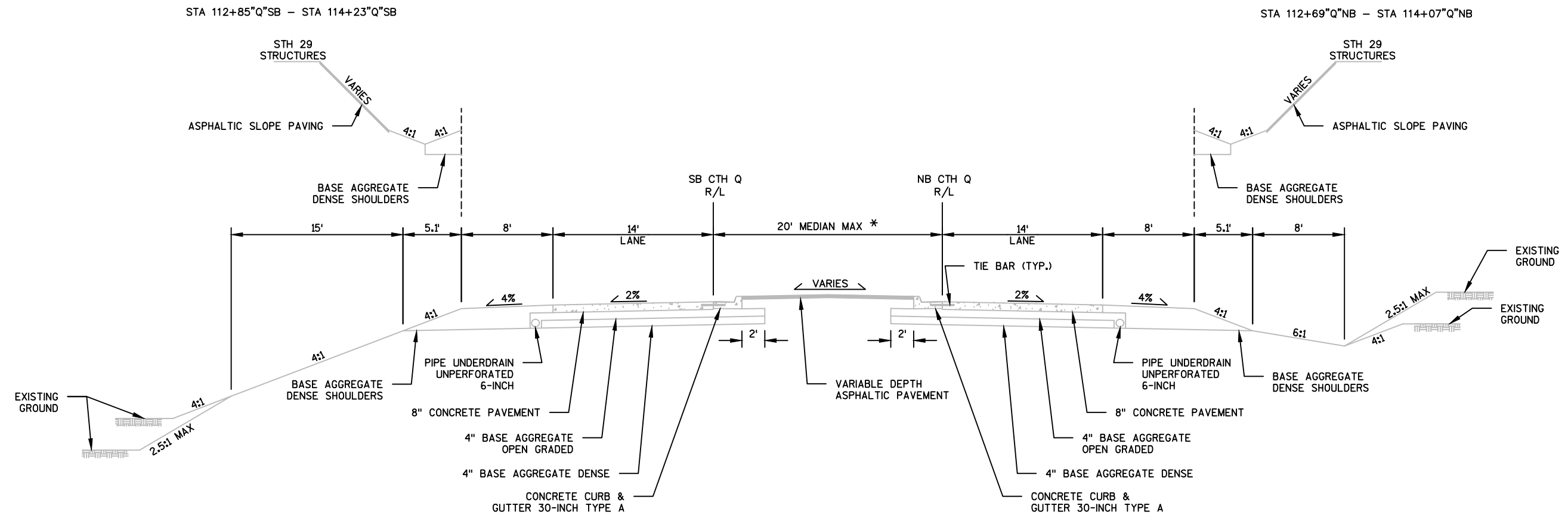
** DENOTES UTILITIES THAT ARE NOT DIGGERS HOTLINE MEMBERS





EXISTING TYPICAL SECTION
CTH J
STATION 105+65"J"SB - STATION 125+34"J"SB

* MEDIAN CONFIGURATION VARIES BETWEEN RAMP
TERMINALS DUE TO LEFT TURN LANES



EXISTING TYPICAL SECTION

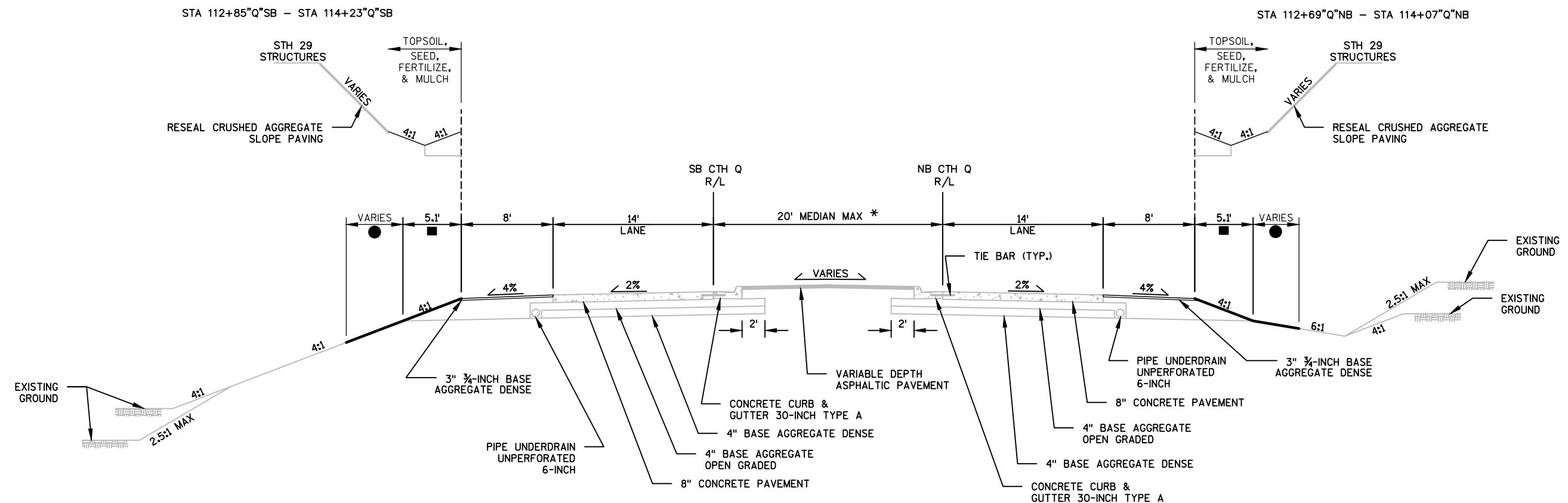
CTH Q

STATION 103+10"Q"SB - STATION 124+46"Q"SB

* MEDIAN CONFIGURATION VARIES BETWEEN RAMP
TERMINALS DUE TO LEFT TURN LANES



* MEDIAN CONFIGURATION VARIES BETWEEN RAMP
TERMINALS DUE TO LEFT TURN LANES



FINISHED TYPICAL SECTION

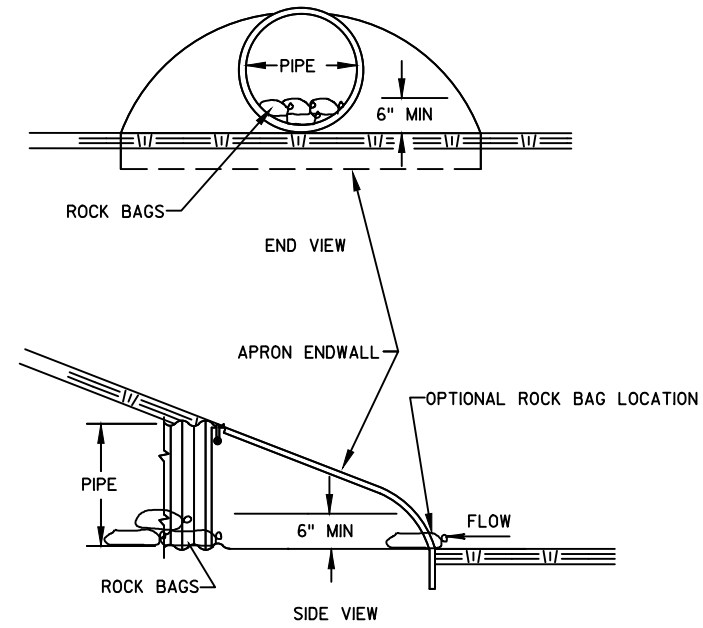
CTH Q

STATION 103+10"Q"SB - STATION 124+46"Q"SB

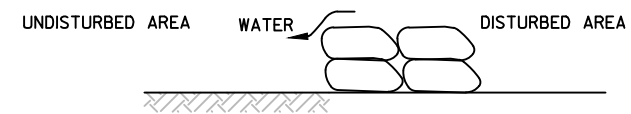
■ SEED & FERTILIZE

● TOPSOIL, SEED, FERTILIZE, & MULCH

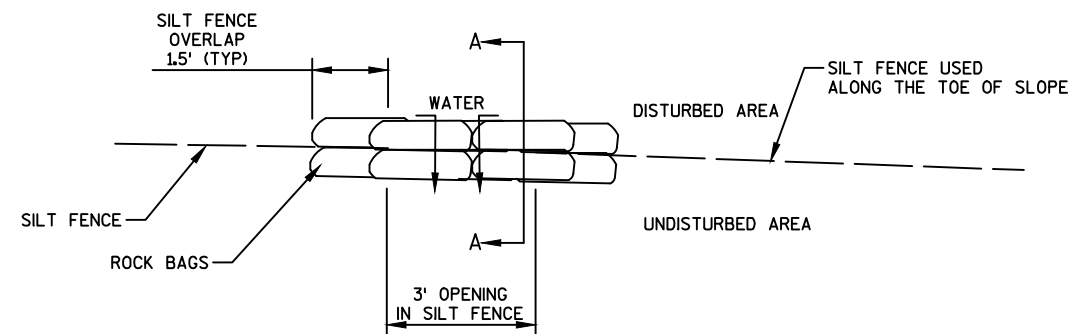
* MEDIAN CONFIGURATION VARIES BETWEEN RAMP
TERMINALS DUE TO LEFT TURN LANES



CULVERT PIPE CHECKS

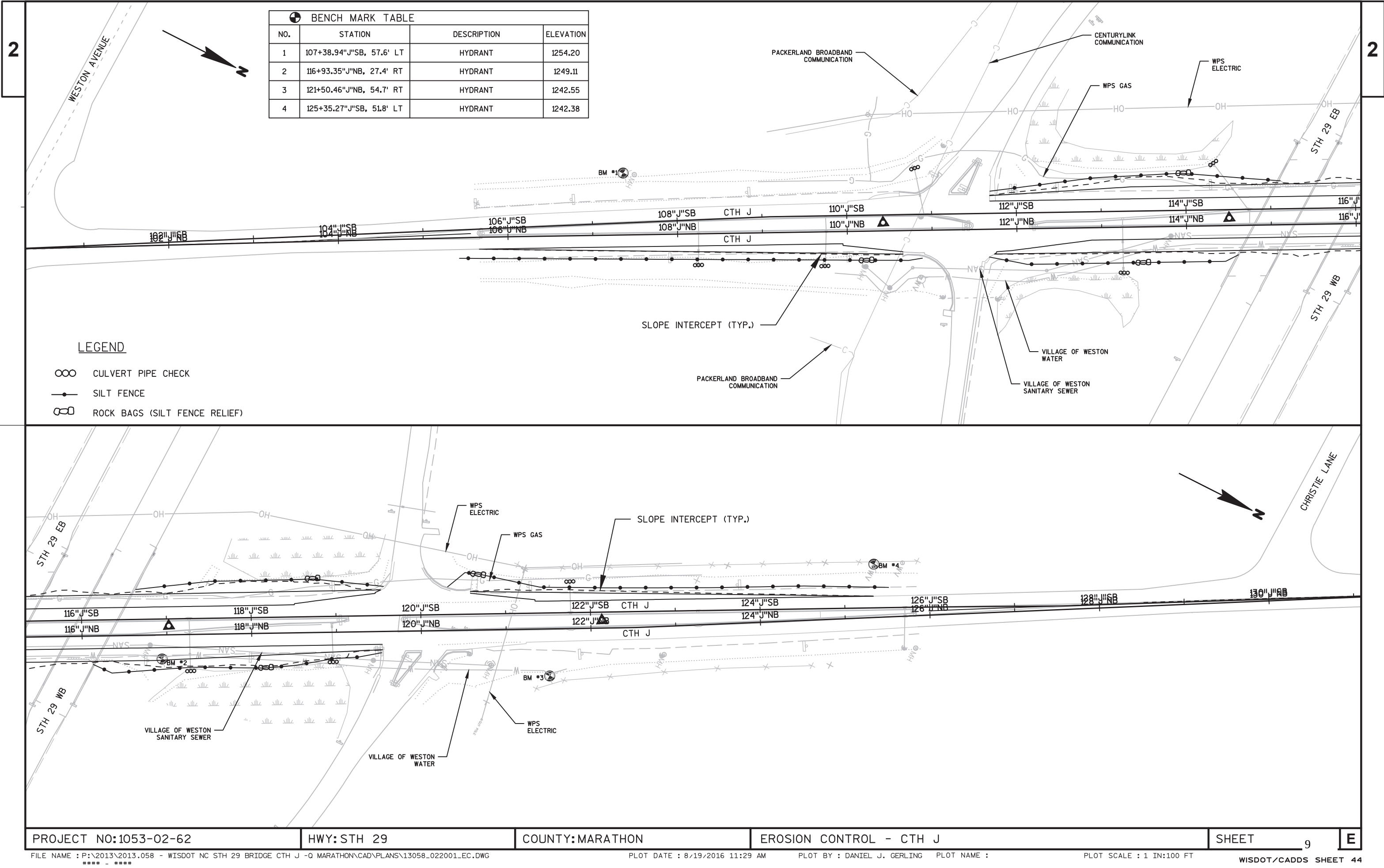


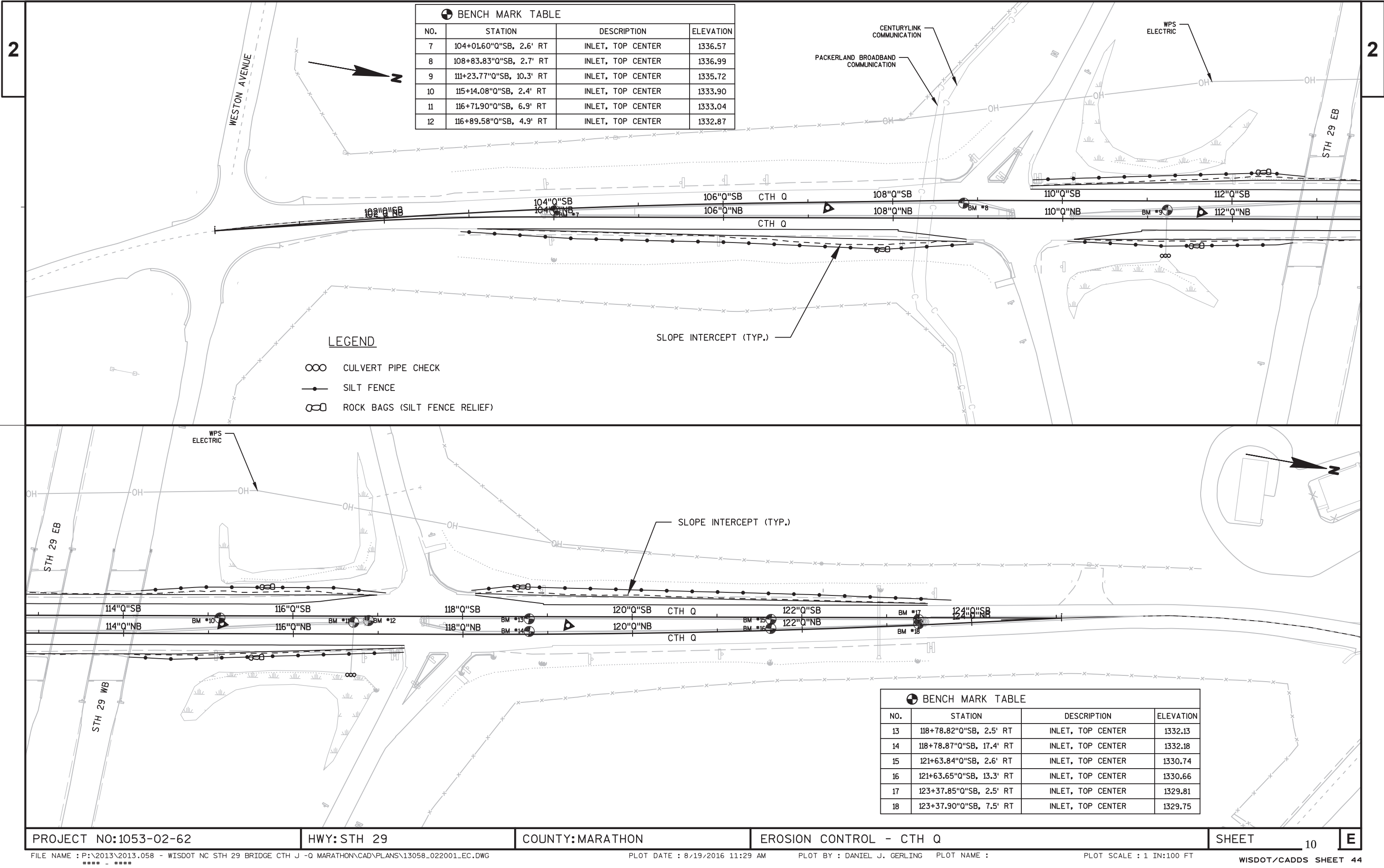
SECTION A-A

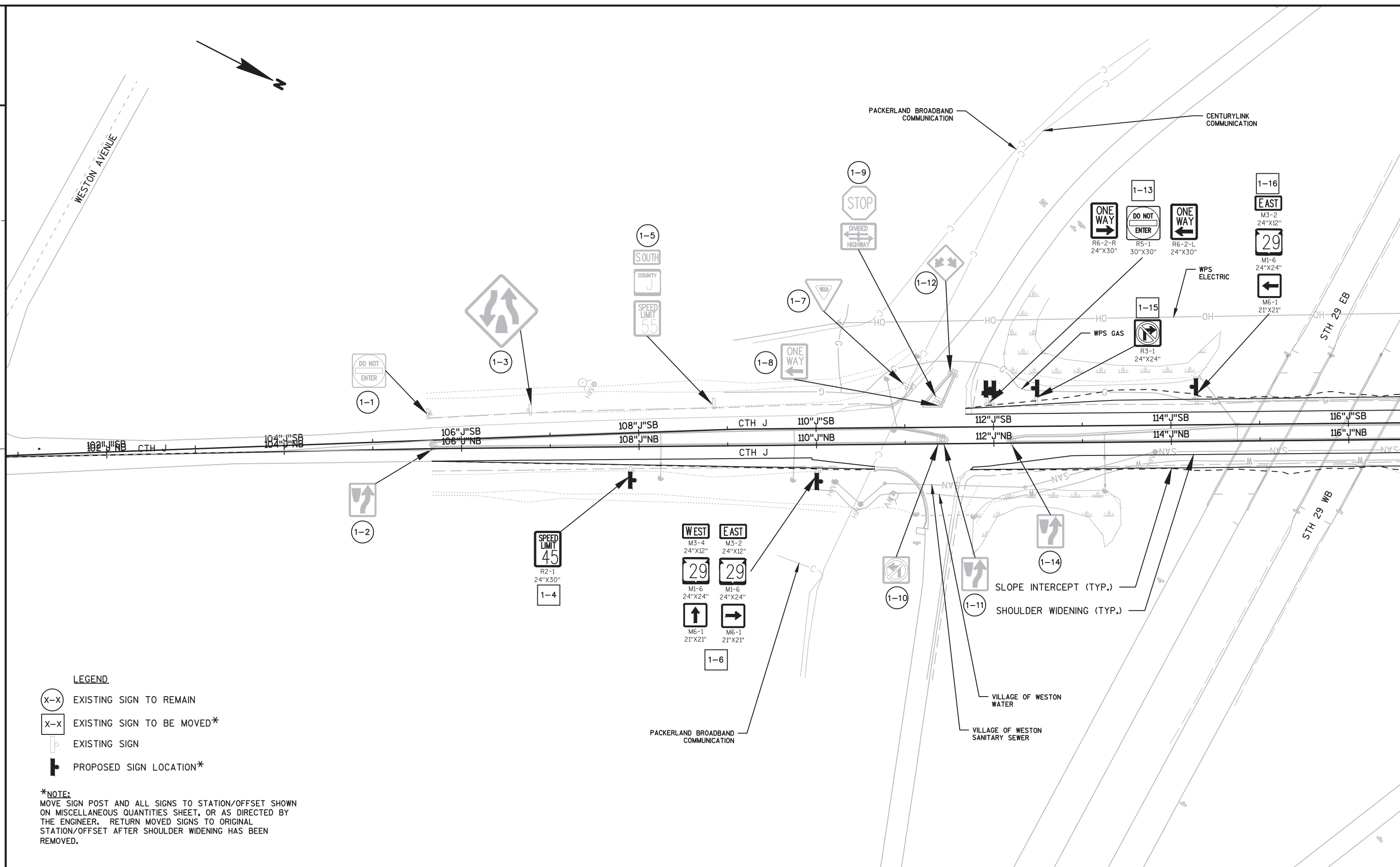


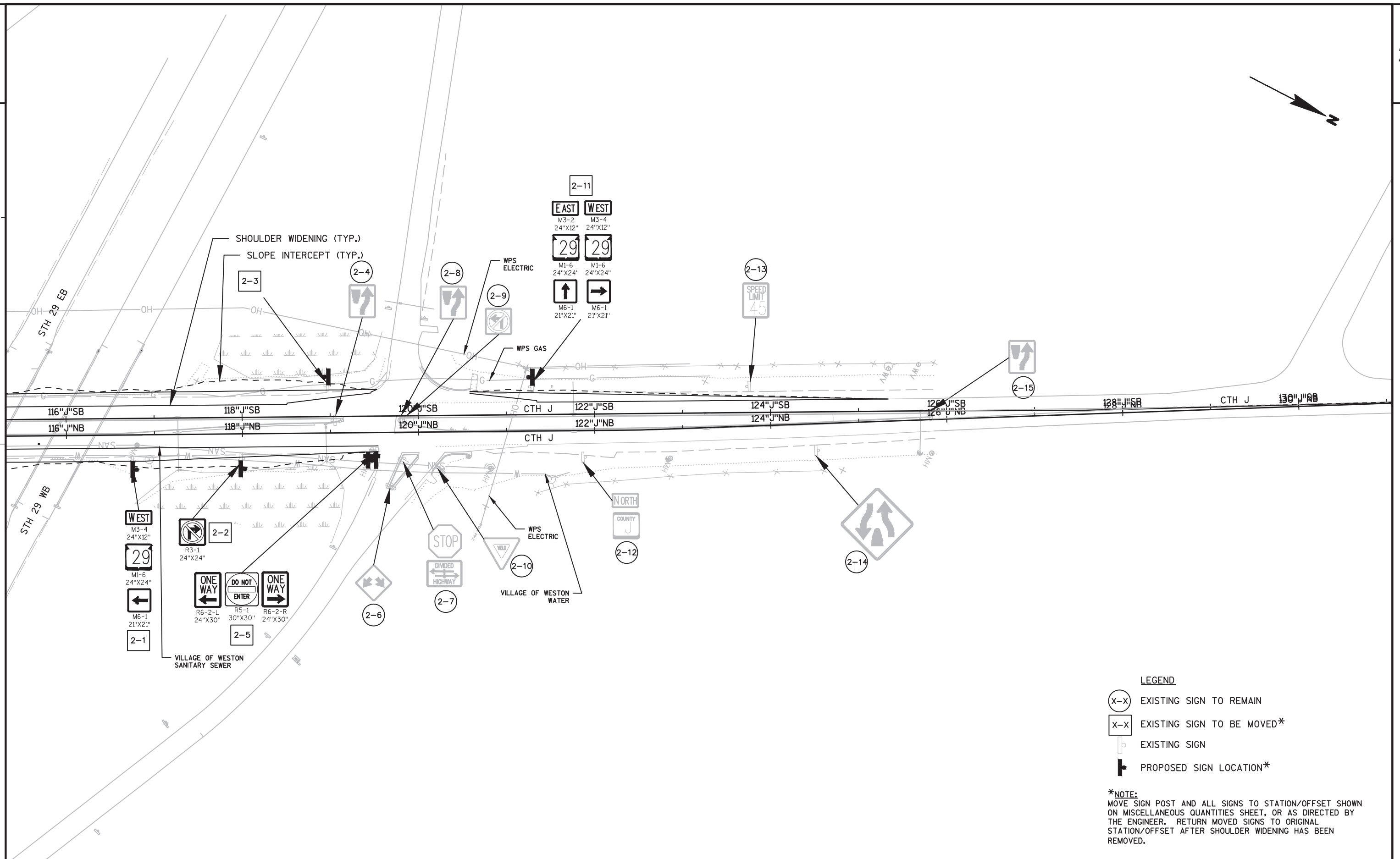
TOP VIEW

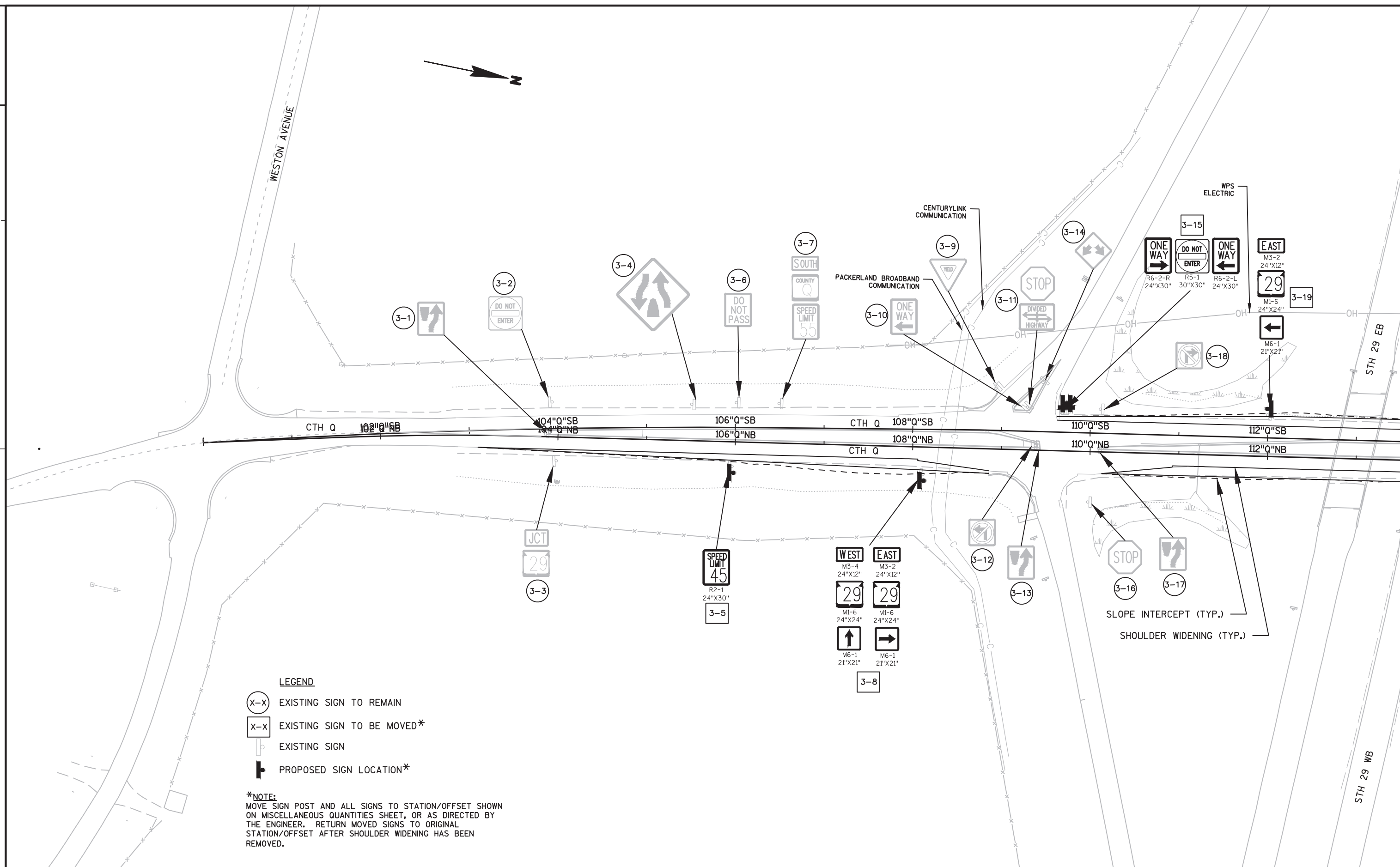
ROCK BAGS USED FOR SILT FENCE RELIEF









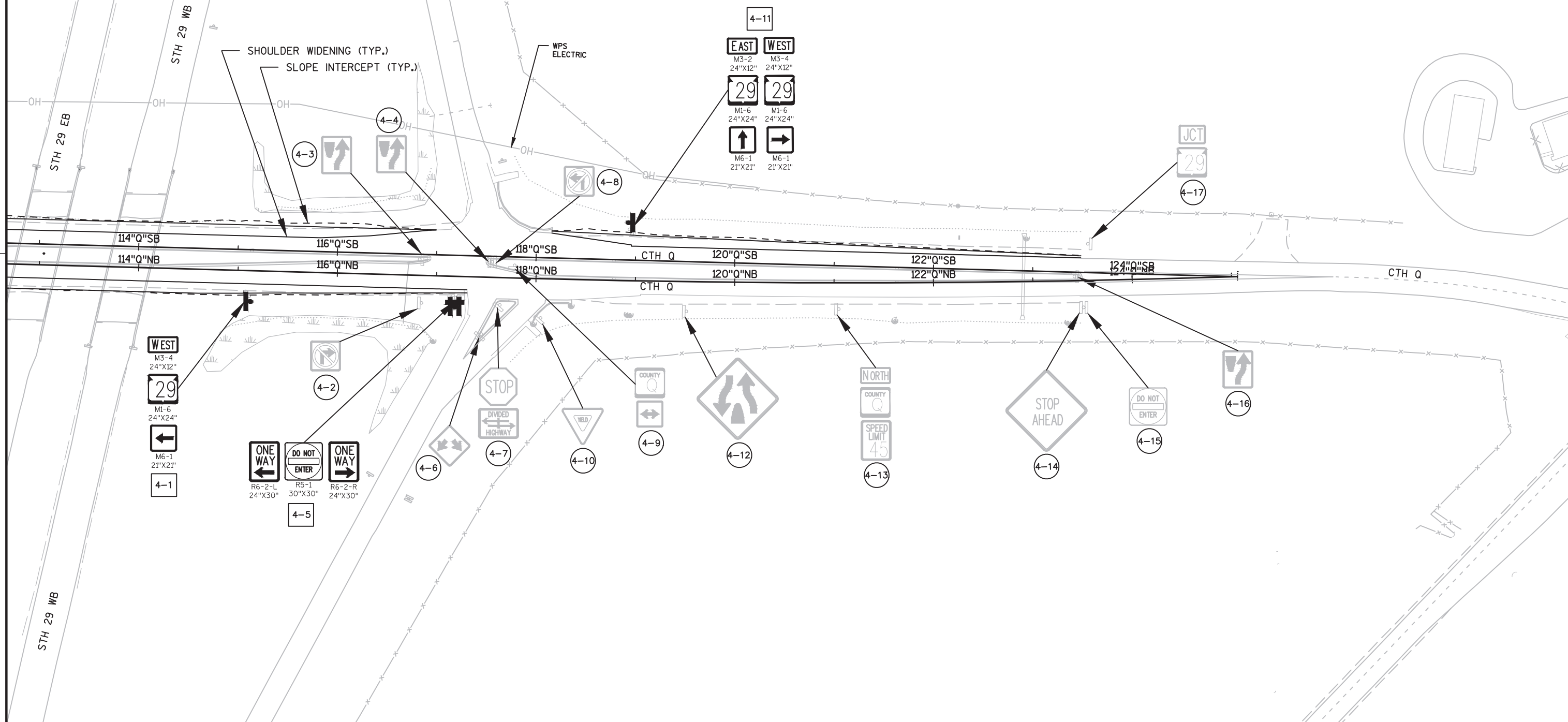


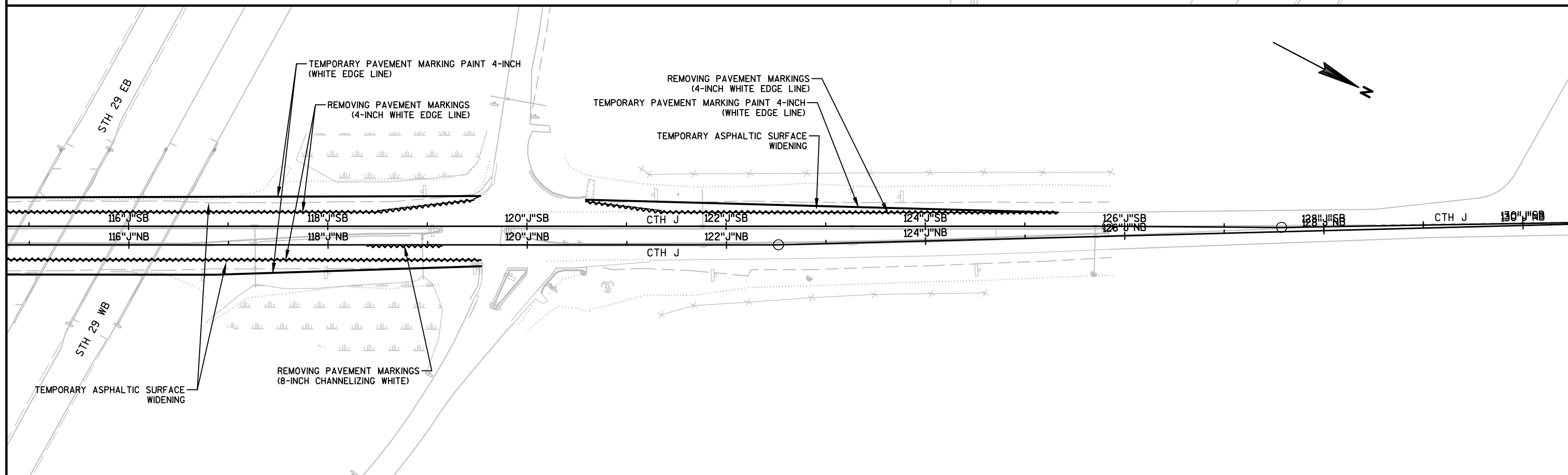
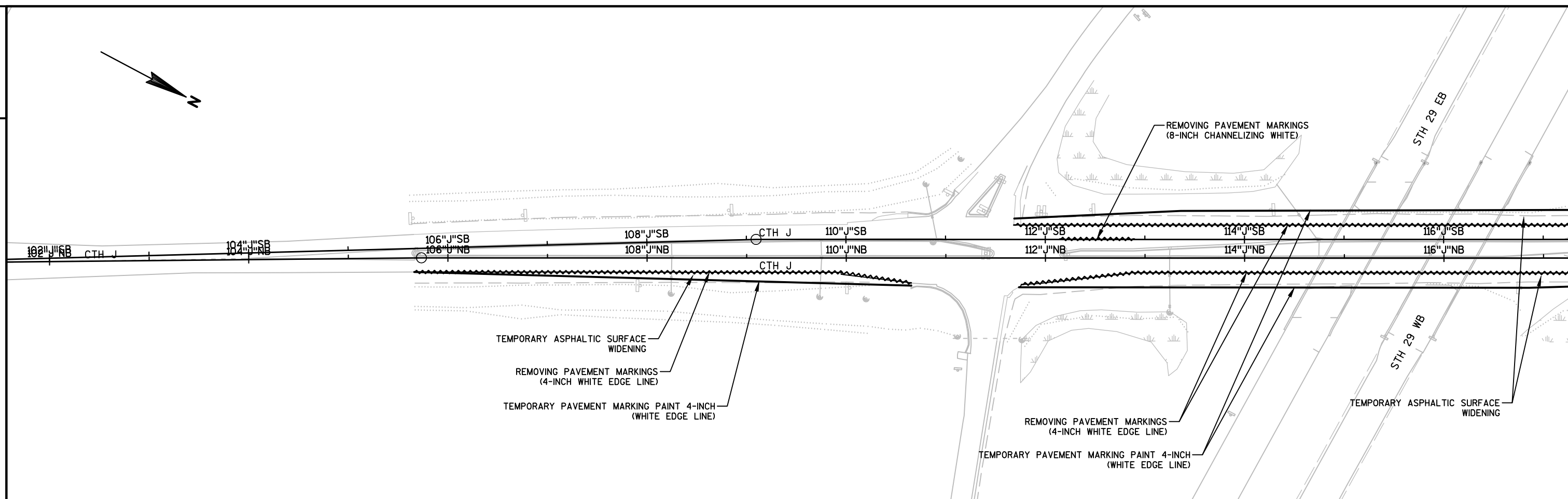
LEGEND

- (X-X) EXISTING SIGN TO REMAIN
(X-X) EXISTING SIGN TO BE MOVED*
[Symbol] EXISTING SIGN
[Symbol] PROPOSED SIGN LOCATION*

*NOTE:

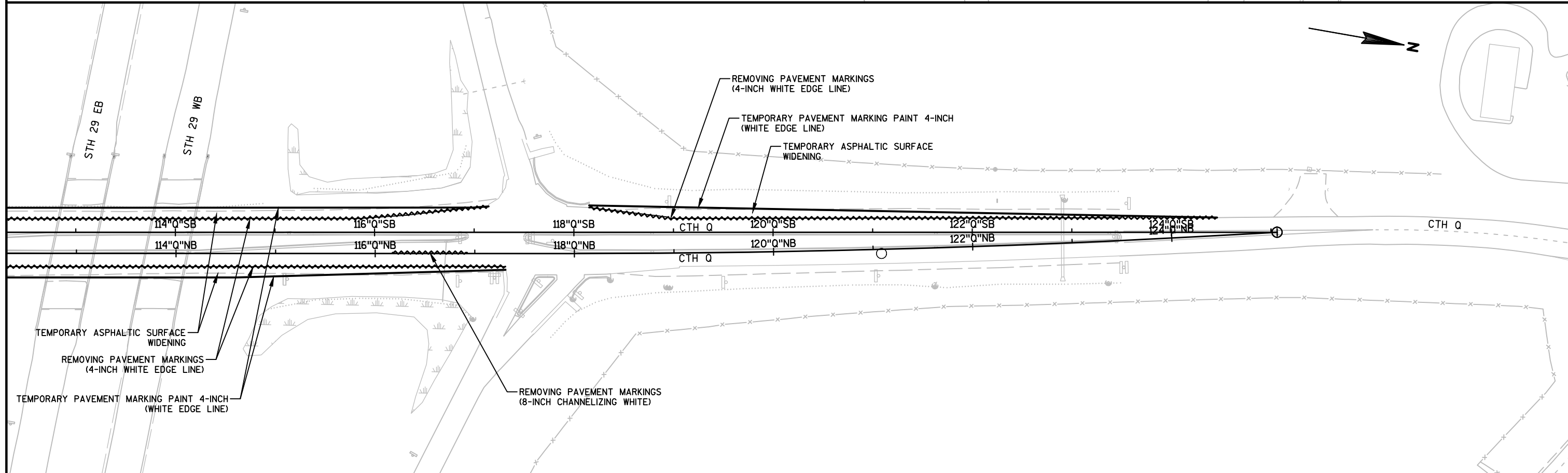
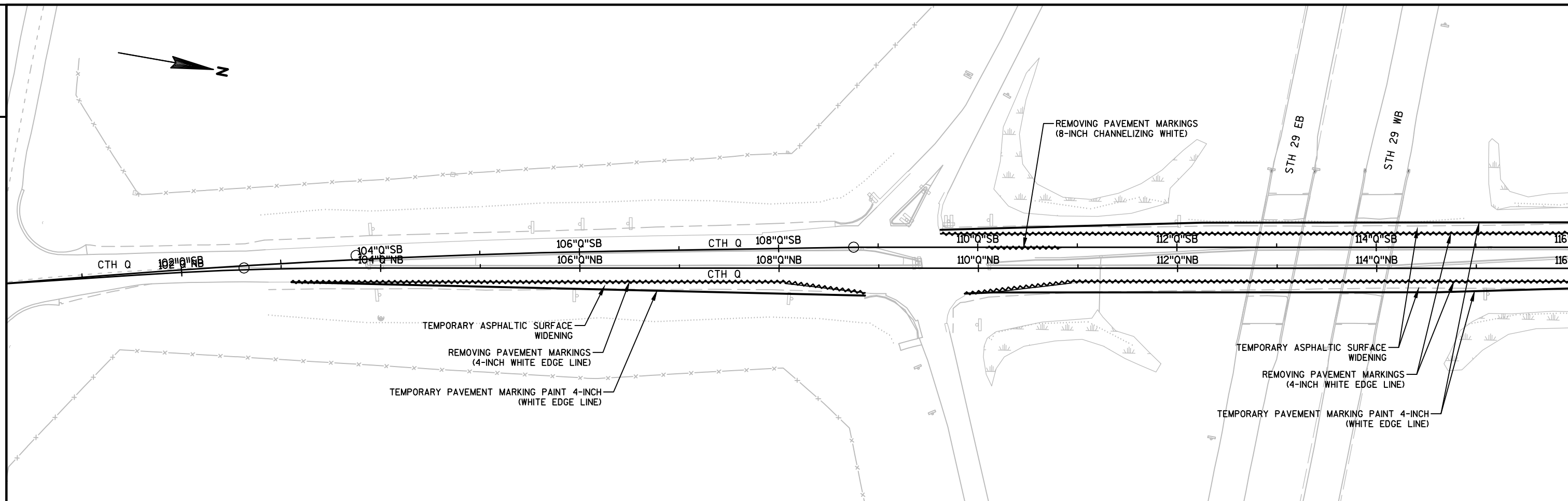
MOVE SIGN POST AND ALL SIGNS TO STATION/OFFSET SHOWN ON MISCELLANEOUS QUANTITIES SHEET, OR AS DIRECTED BY THE ENGINEER. RETURN MOVED SIGNS TO ORIGINAL STATION/OFFSET AFTER SHOULDER WIDENING HAS BEEN REMOVED.





2

2



PROJECT NO:1053-02-62

HWY:STH 29

COUNTY:MARATHON

TEMPORARY PAVEMENT MARKING & REMOVALS - CTH Q

SHEET

16

E

FILE NAME : P:\2013\2013.058 - WISDOT NC STH 29 BRIDGE CTH J -Q MARATHON\CAD\PLANS\13058_024501-PM.DWG
LAYOUT NAME - *****

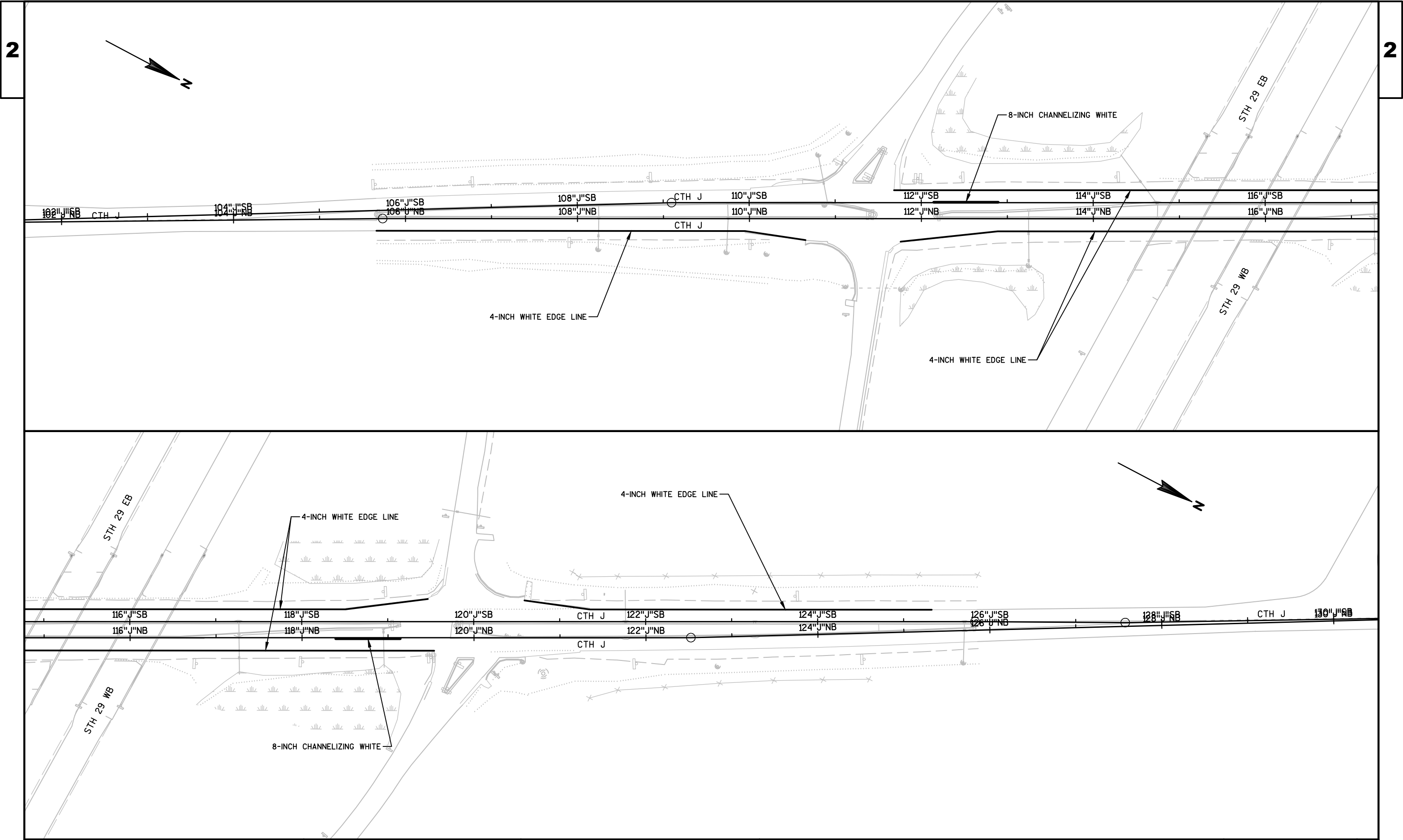
PLOT DATE : 8/17/2016 9:33 AM

PLOT BY : DANIEL J. GERLING

PLOT NAME :

PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



PROJECT NO:1053-02-62

HWY:STH 29

COUNTY:MARATHON

PAVEMENT MARKING - CTH J

SHEET

17

E

FILE NAME : P:\2013\2013.058 - WISDOT NC STH 29 BRIDGE CTH J -Q MARATHON\CAD\PLANS\13058_024502_PM.DWG
LAYOUT NAME - *****

PLOT DATE : 7/30/2015 12:53 PM

PLOT BY : DANIEL J. GERLING

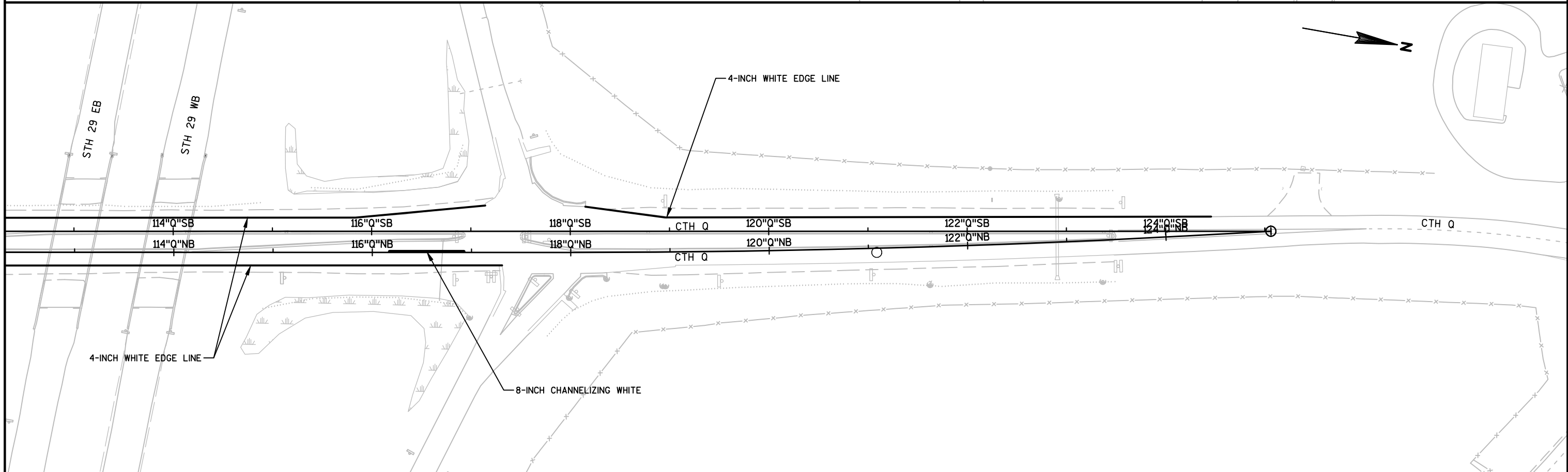
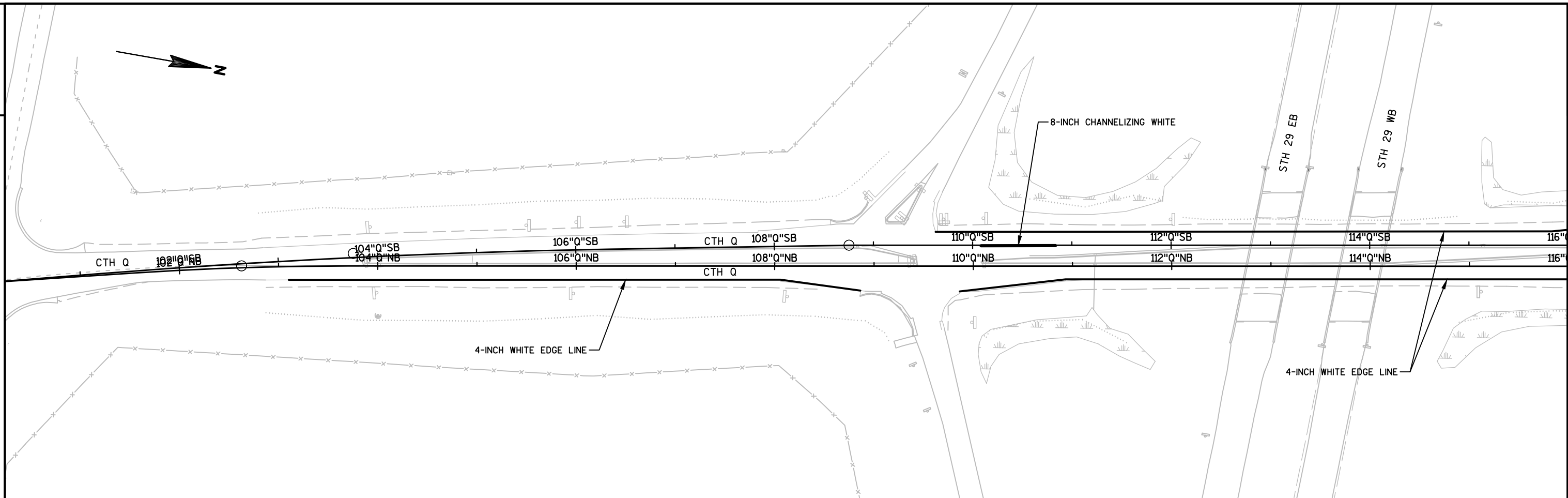
PLOT NAME :

PLOT SCALE : 1 IN:100 FT

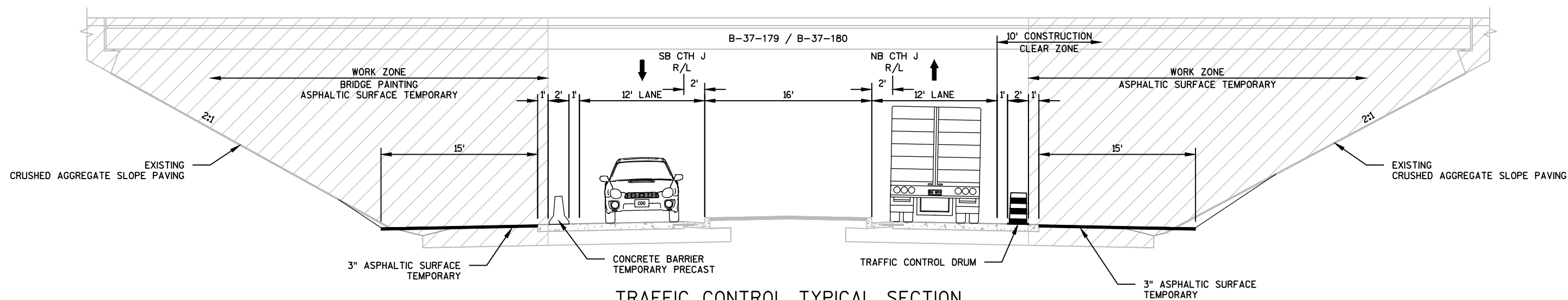
WISDOT/CADDS SHEET 44

2

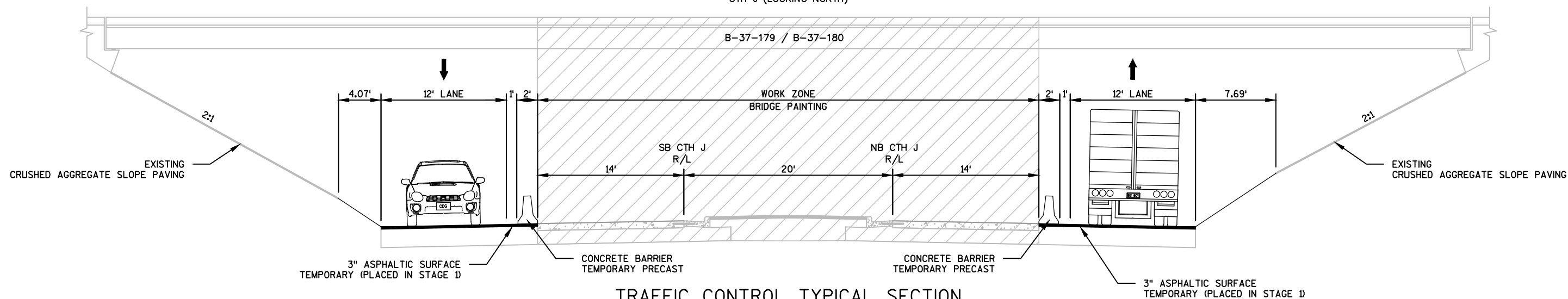
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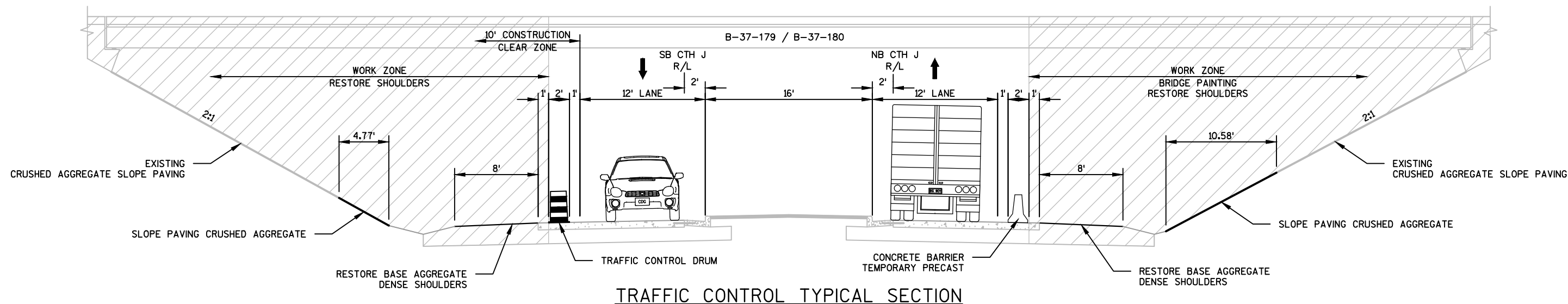
PROJECT NO:1053-02-62	HWY:STH 29	COUNTY:MARATHON	PAVEMENT MARKING - CTH Q	SHEET 18	E
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TRAFFIC CONTROL TYPICAL SECTION

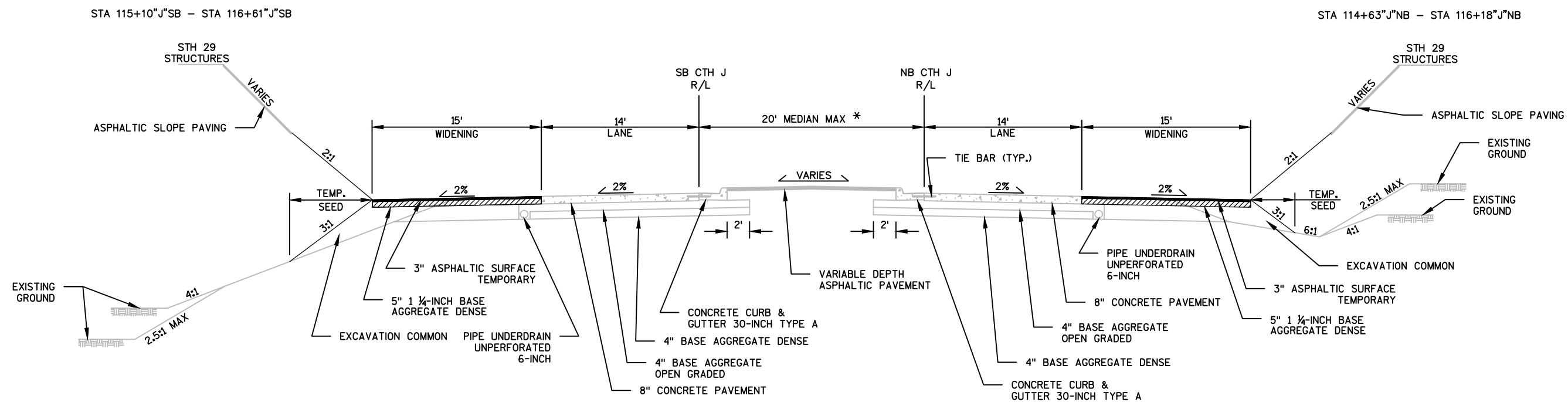
STAGE 1
CTH J (LOOKING NORTH)

TRAFFIC CONTROL TYPICAL SECTION

STAGE 2
CTH J (LOOKING NORTH)

TRAFFIC CONTROL TYPICAL SECTION

STAGE 3
CTH J (LOOKING NORTH)



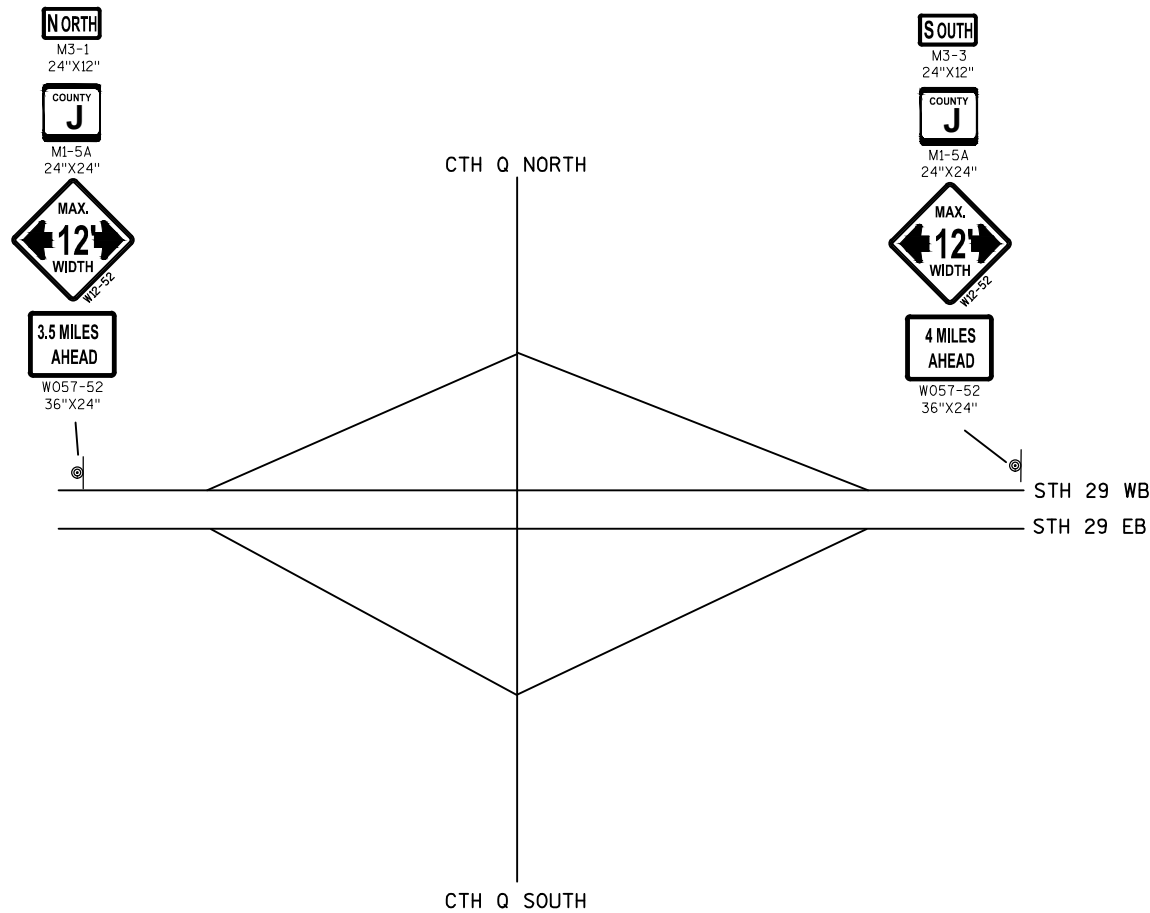
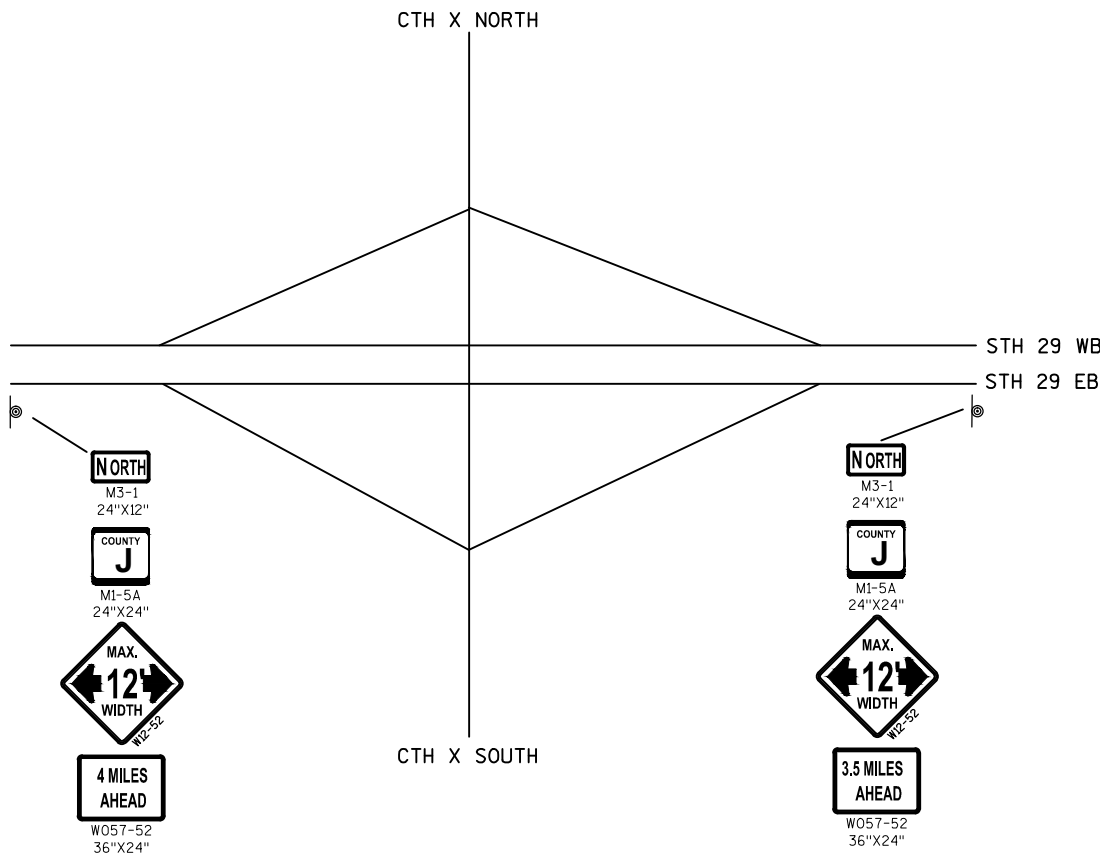
SHOULDER WIDENING TYPICAL SECTION
CTH J

STATION 105+65"J"SB - STATION 125+34"J"SB

* MEDIAN CONFIGURATION VARIES BETWEEN RAMP
TERMINALS DUE TO LEFT TURN LANES

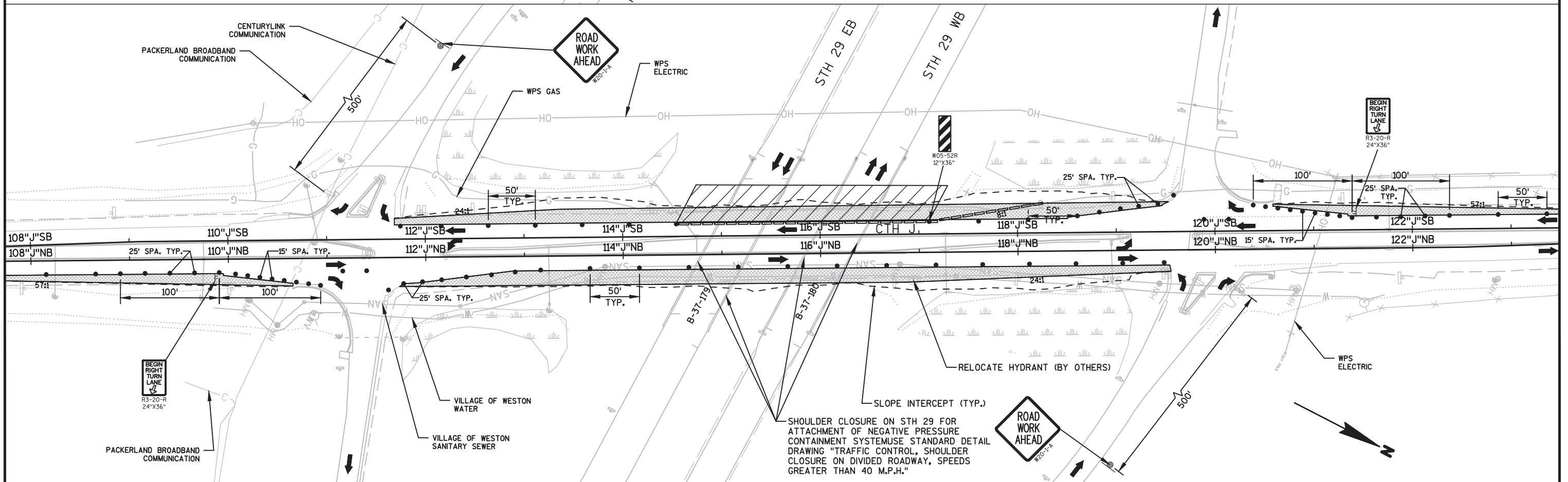
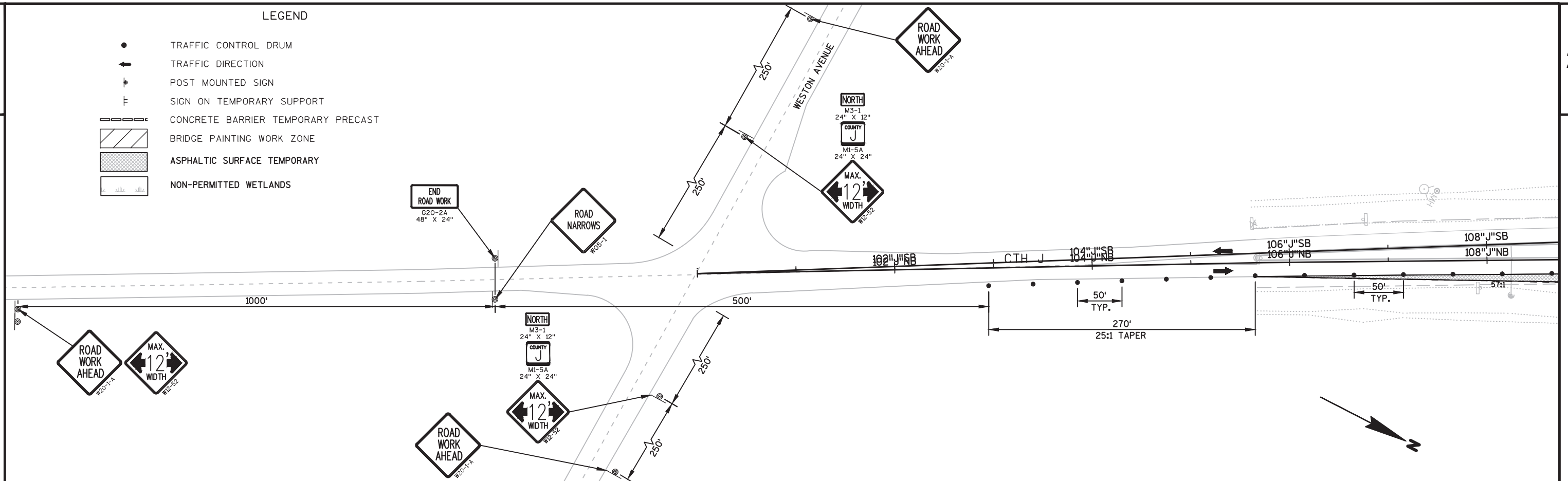
LEGEND

POST WITH ATTACHED SIGN



LEGEND

- TRAFFIC CONTROL DRUM
- ← TRAFFIC DIRECTION
- ┆ POST MOUNTED SIGN
- ┆ SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- BRIDGE PAINTING WORK ZONE
- ASPHALTIC SURFACE TEMPORARY
- NON-PERMITTED WETLANDS



PROJECT NO:1053-02-62

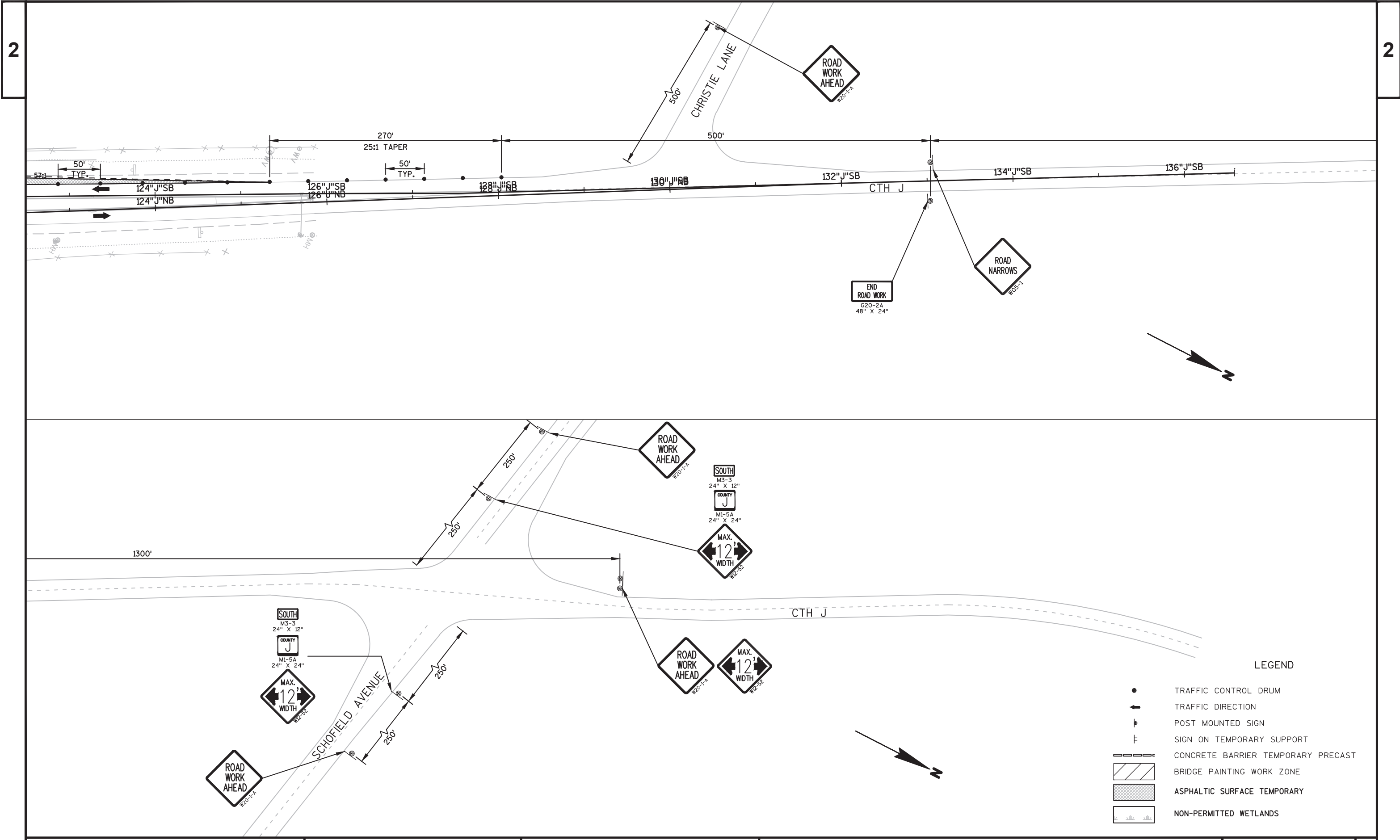
HWY:STH 29

COUNTY:MARATHON

TRAFFIC CONTROL - CTH J (STAGE 1)

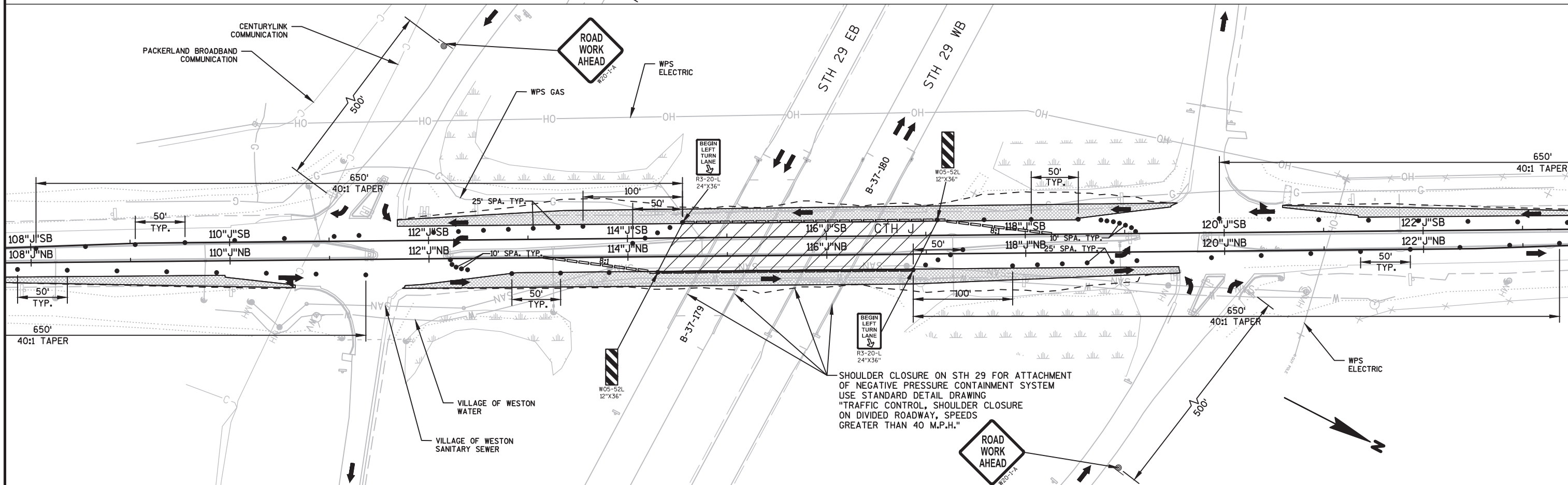
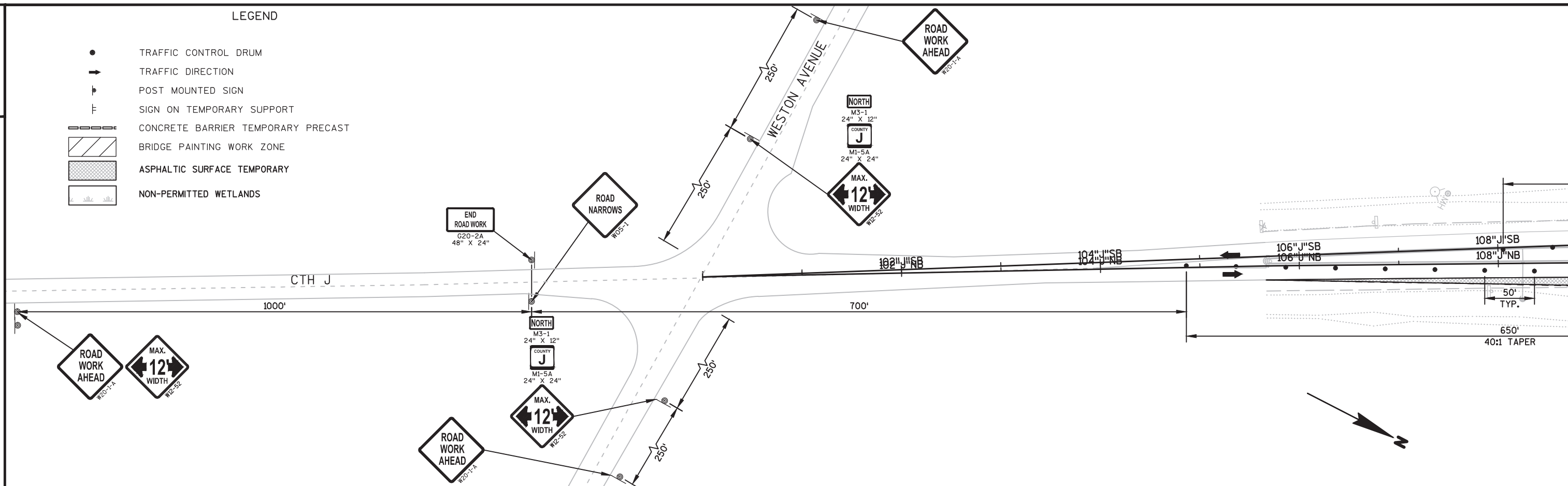
SHEET 22

E



LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC DIRECTION
- ┆ POST MOUNTED SIGN
- ┆ SIGN ON TEMPORARY SUPPORT
- ▬ CONCRETE BARRIER TEMPORARY PRECAST
- ▨ BRIDGE PAINTING WORK ZONE
- ▩ ASPHALTIC SURFACE TEMPORARY
- NON-PERMITTED WETLANDS



PROJECT NO:1053-02-62

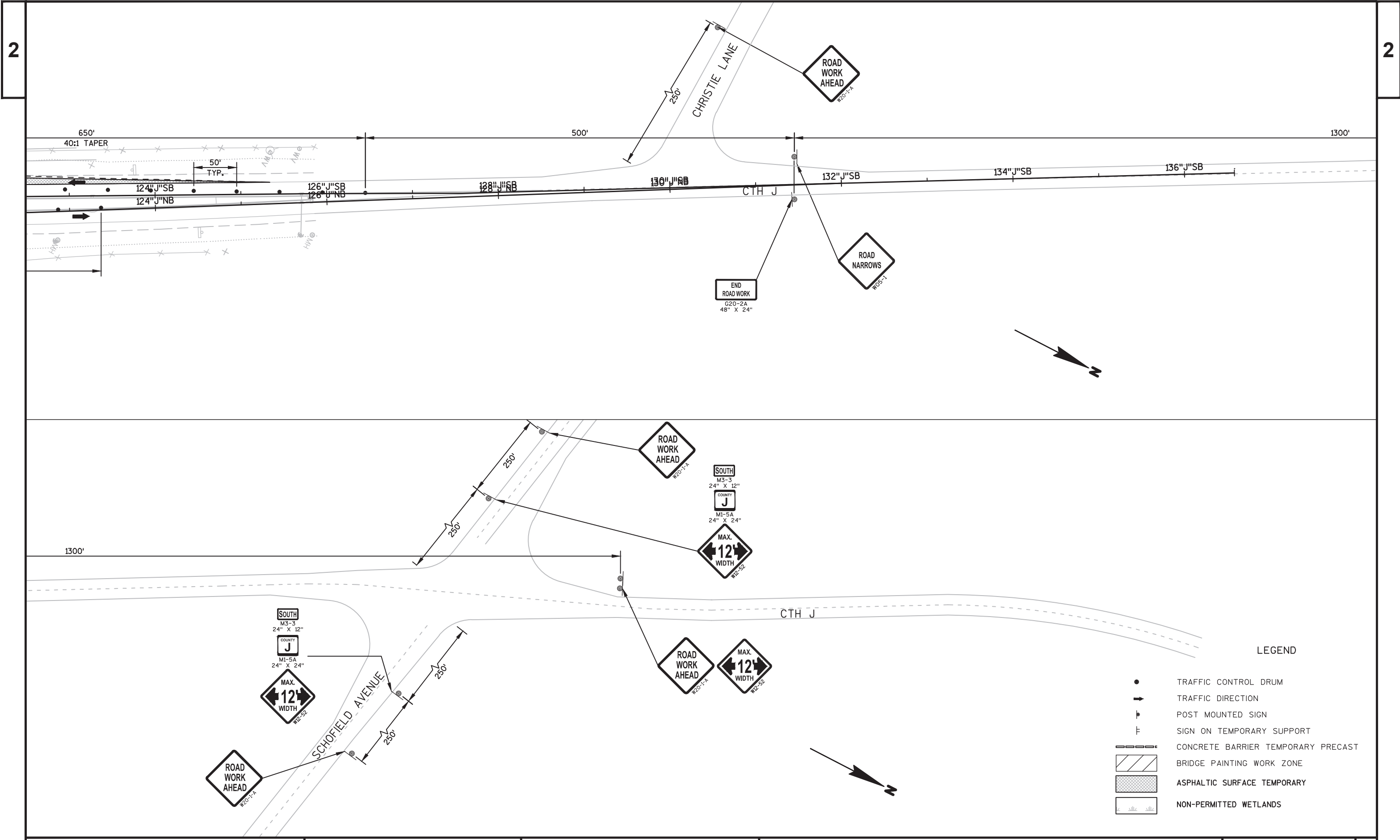
HWY:STH 29

COUNTY:MARATHON

TRAFFIC CONTROL - CTH J (STAGE 2)

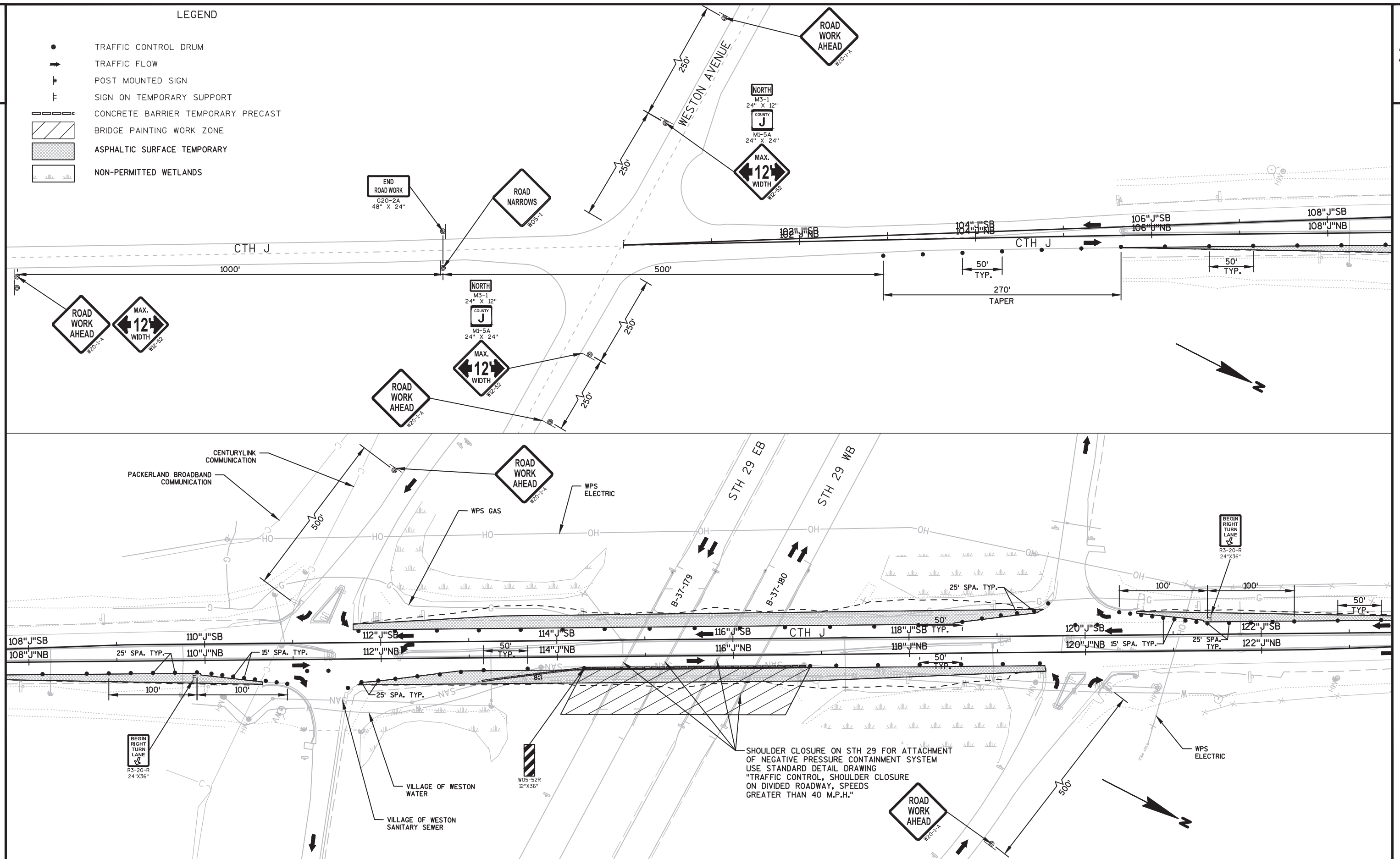
SHEET 24

E



LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC FLOW
- ⌋ POST MOUNTED SIGN
- ⌋ SIGN ON TEMPORARY SUPPORT
- ▬ CONCRETE BARRIER TEMPORARY PRECAST
- ▨ BRIDGE PAINTING WORK ZONE
- ▩ ASPHALTIC SURFACE TEMPORARY
- ▨ NON-PERMITTED WETLANDS



PROJECT NO:1053-02-62

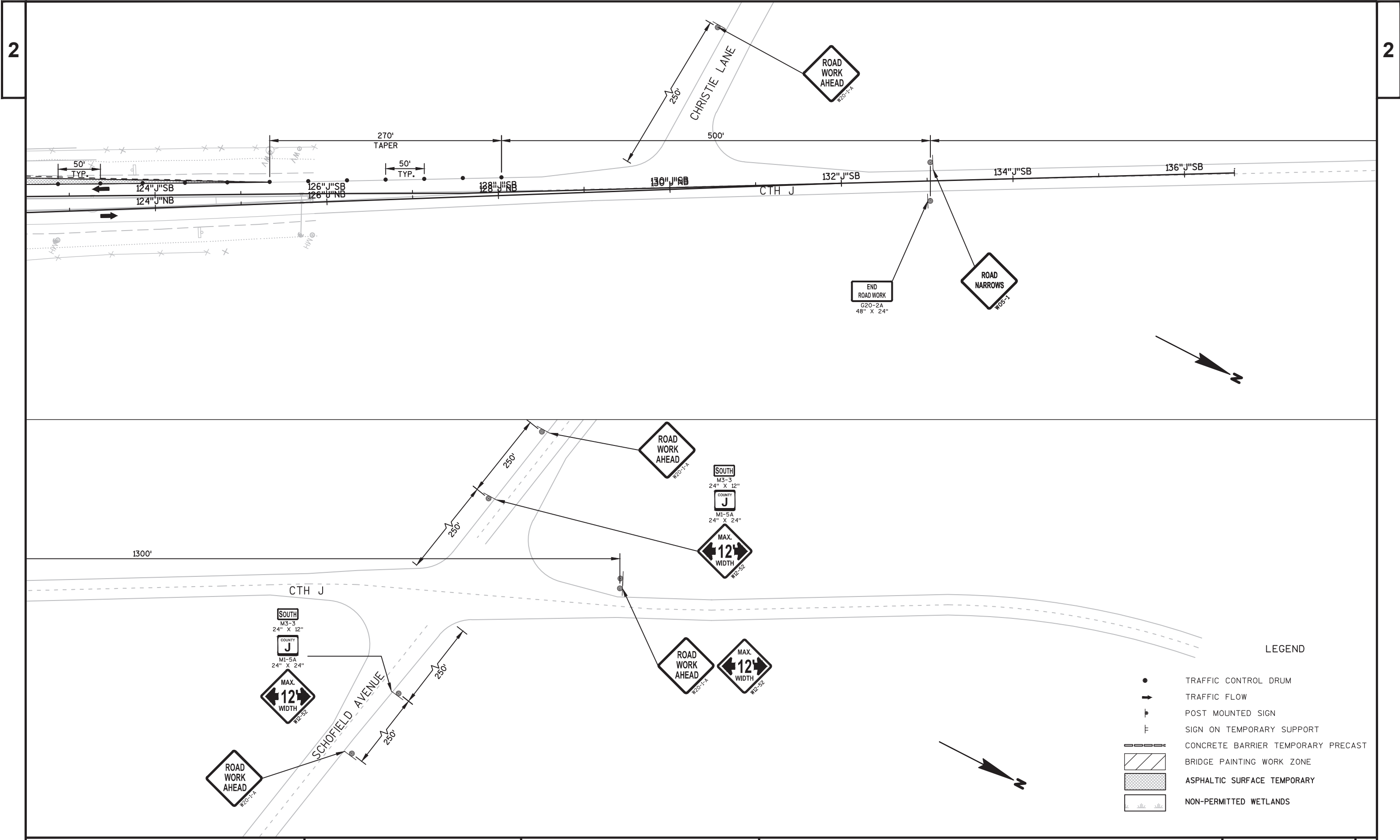
HWY:STH 29

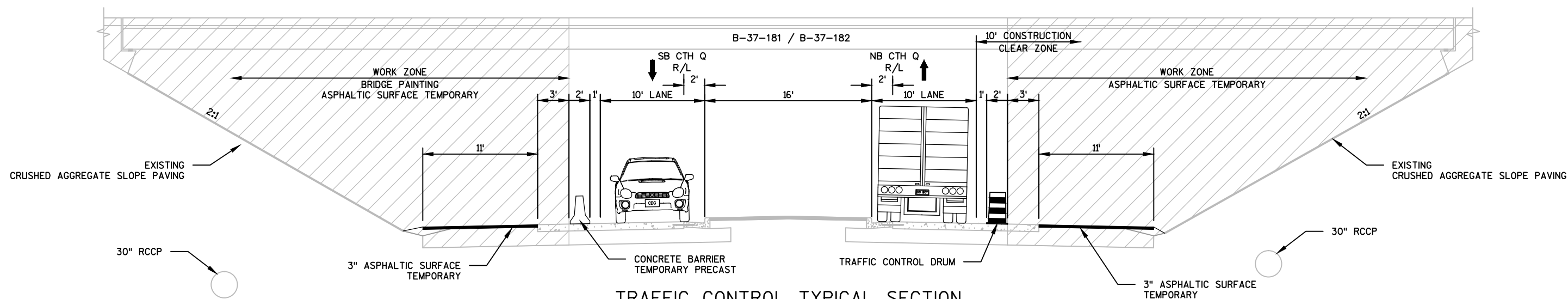
COUNTY:MARATHON

TRAFFIC CONTROL - CTH J (STAGE 3)

SHEET 26

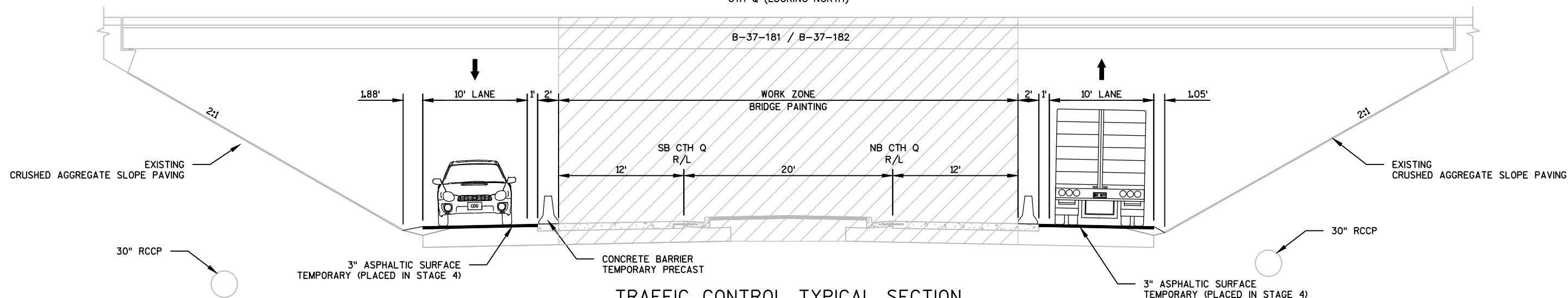
E





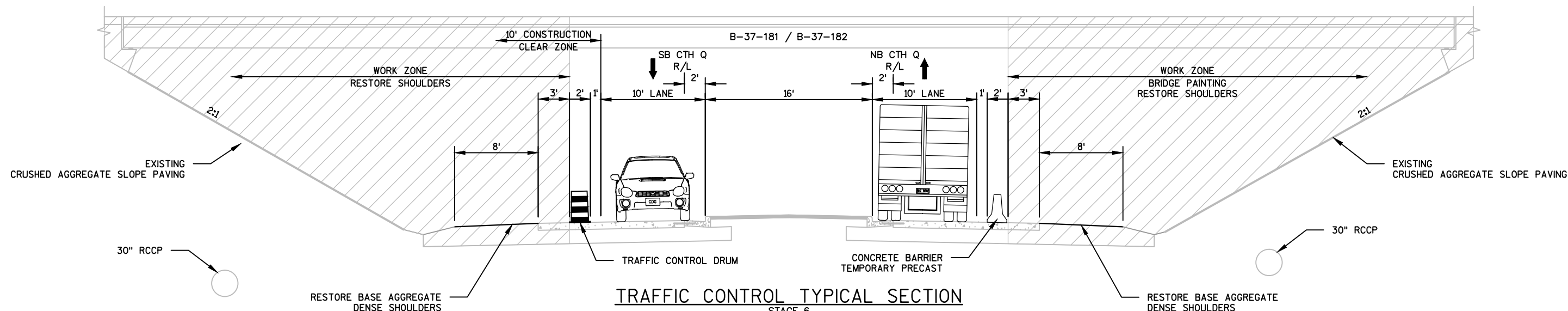
TRAFFIC CONTROL TYPICAL SECTION

STAGE 4
CTH Q (LOOKING NORTH)



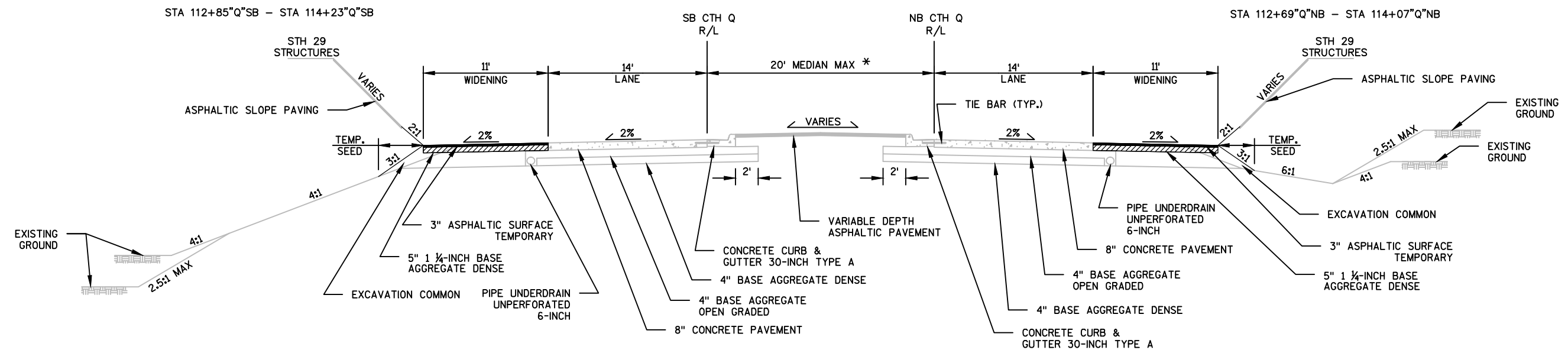
TRAFFIC CONTROL TYPICAL SECTION

STAGE 5
CTH Q (LOOKING NORTH)



TRAFFIC CONTROL TYPICAL SECTION

STAGE 6
CTH Q (LOOKING NORTH)



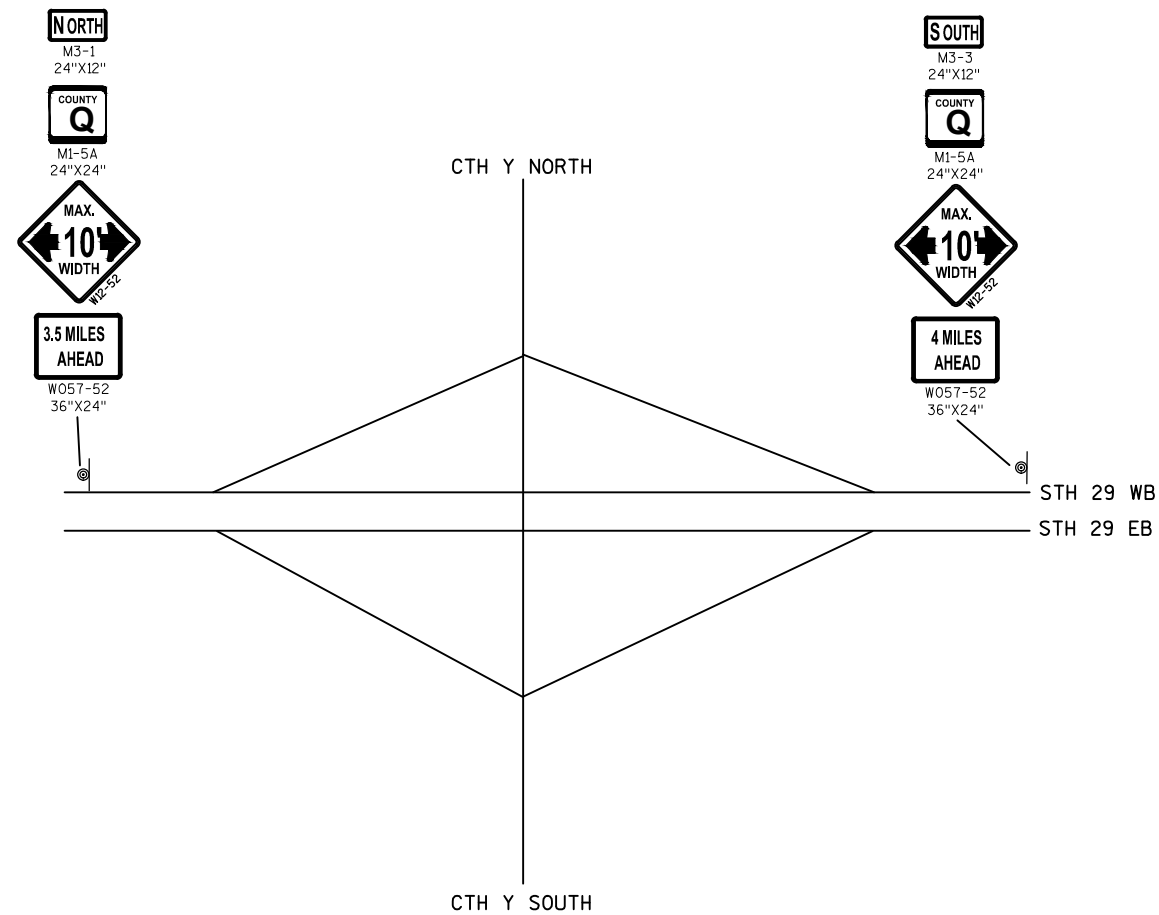
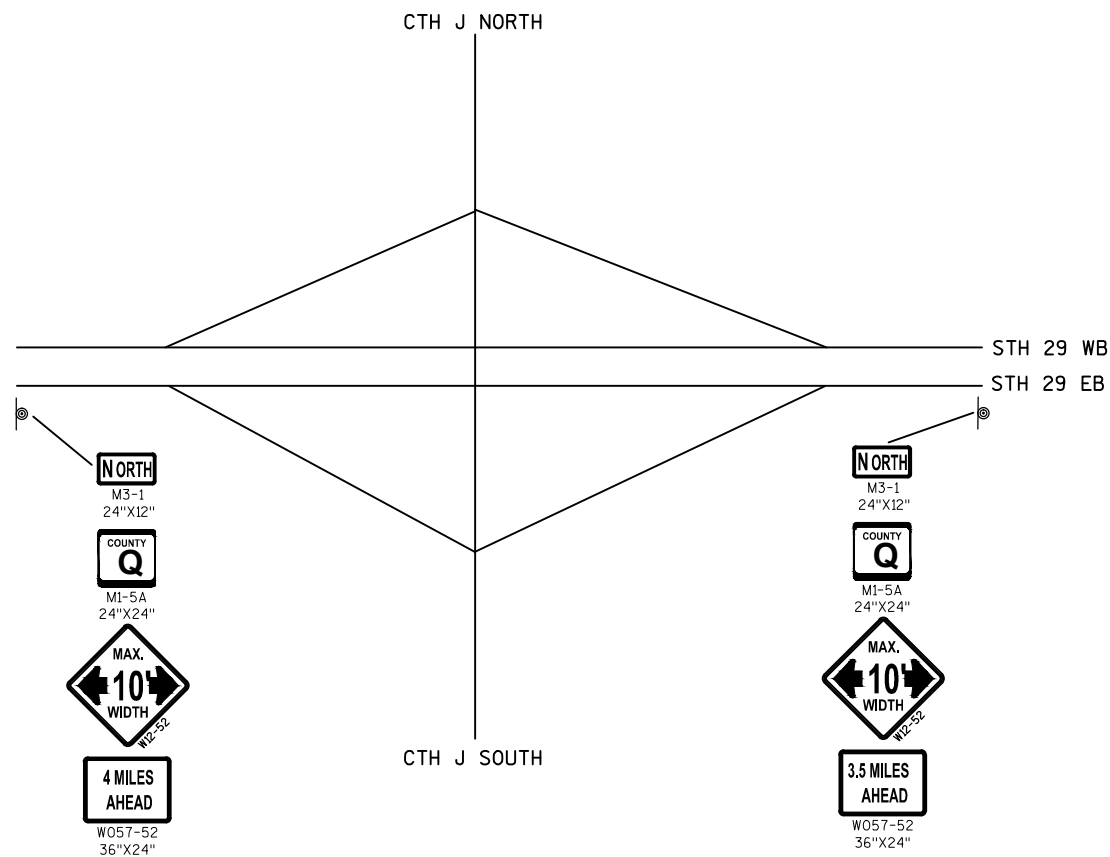
SHOULDER WIDENING TYPICAL SECTION

CTH Q

STATION 103+10"Q"SB - STATION 124+46"Q"SB

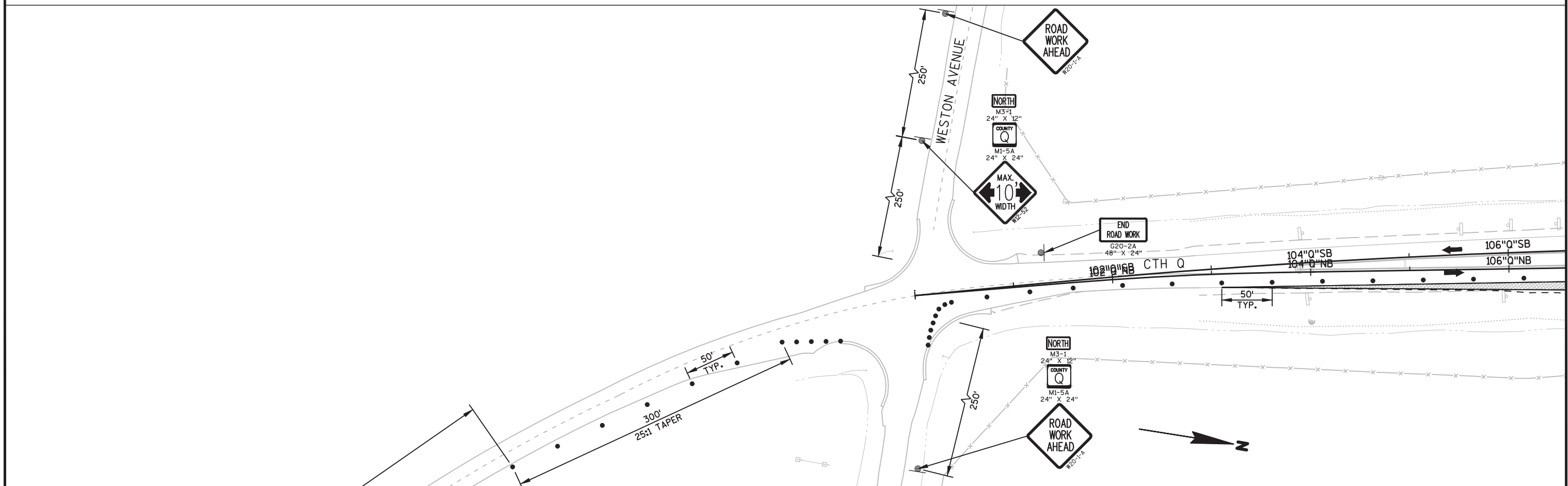
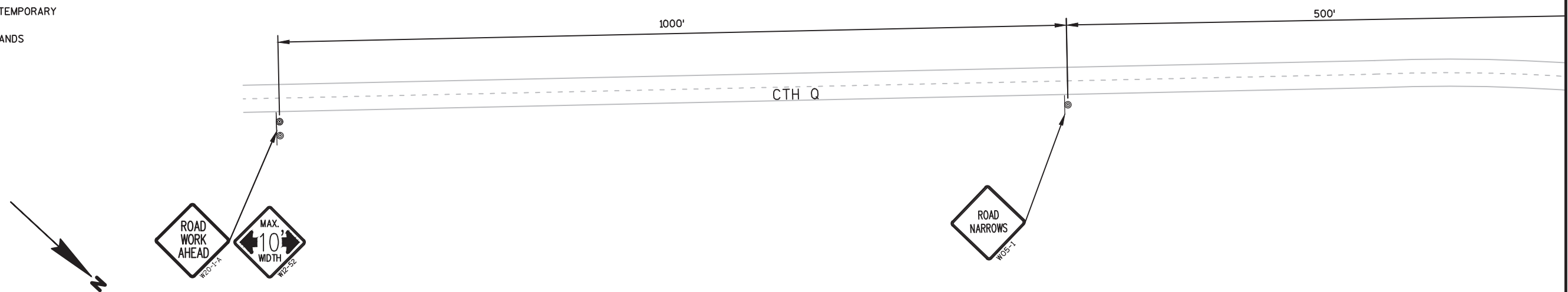
* MEDIAN CONFIGURATION VARIES BETWEEN RAMP
TERMINALS DUE TO LEFT TURN LANES

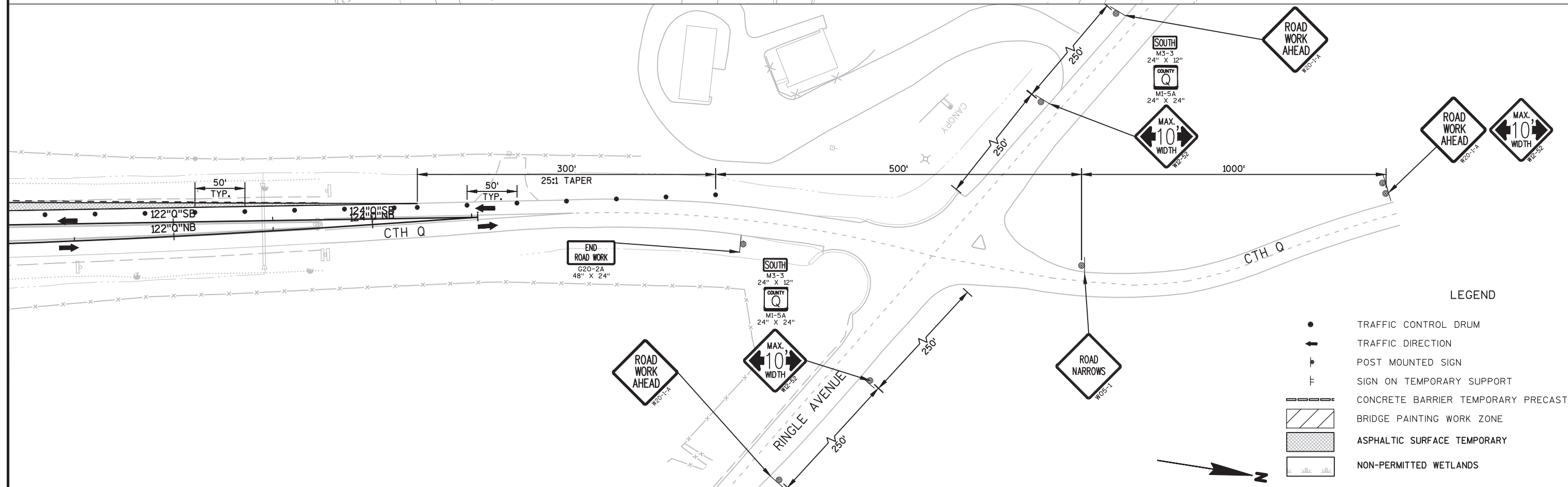
LEGEND
⊙ POST WITH ATTACHED SIGN



LEGEND

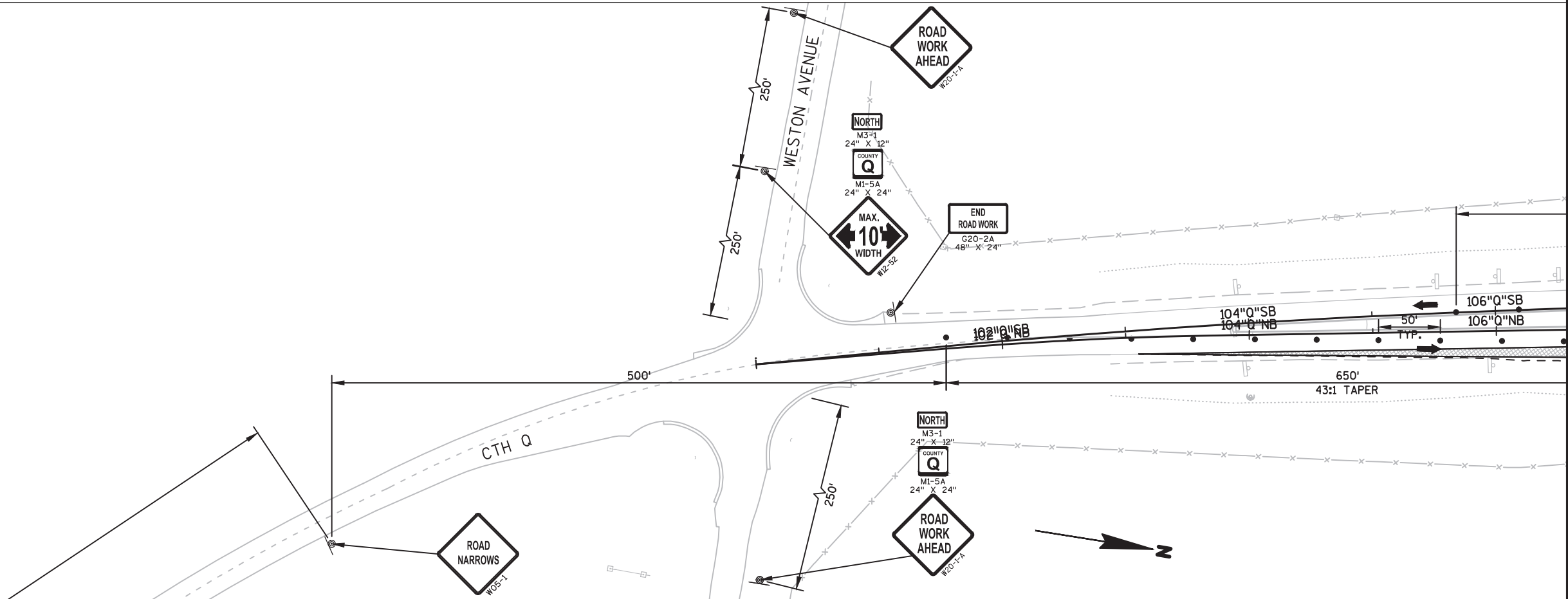
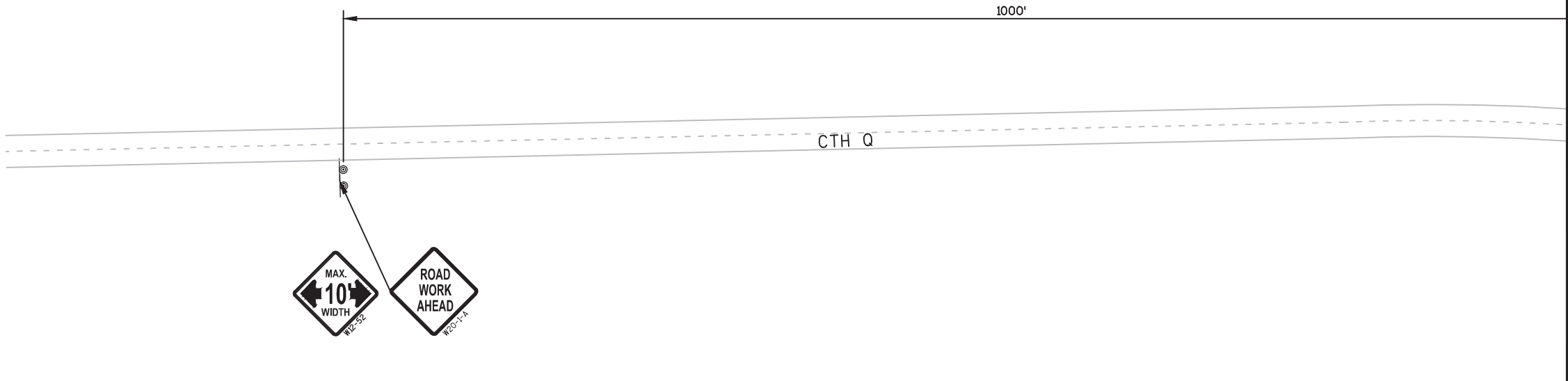
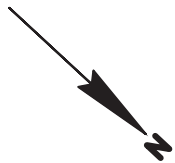
- TRAFFIC CONTROL DRUM
- ← TRAFFIC DIRECTION
- ⌋ POST MOUNTED SIGN
- ⌋ SIGN ON TEMPORARY SUPPORT
- ▬▬▬ CONCRETE BARRIER TEMPORARY PRECAST
- ▨ BRIDGE PAINTING WORK ZONE
- ▨ ASPHALTIC SURFACE TEMPORARY
- ▨ NON-PERMITTED WETLANDS

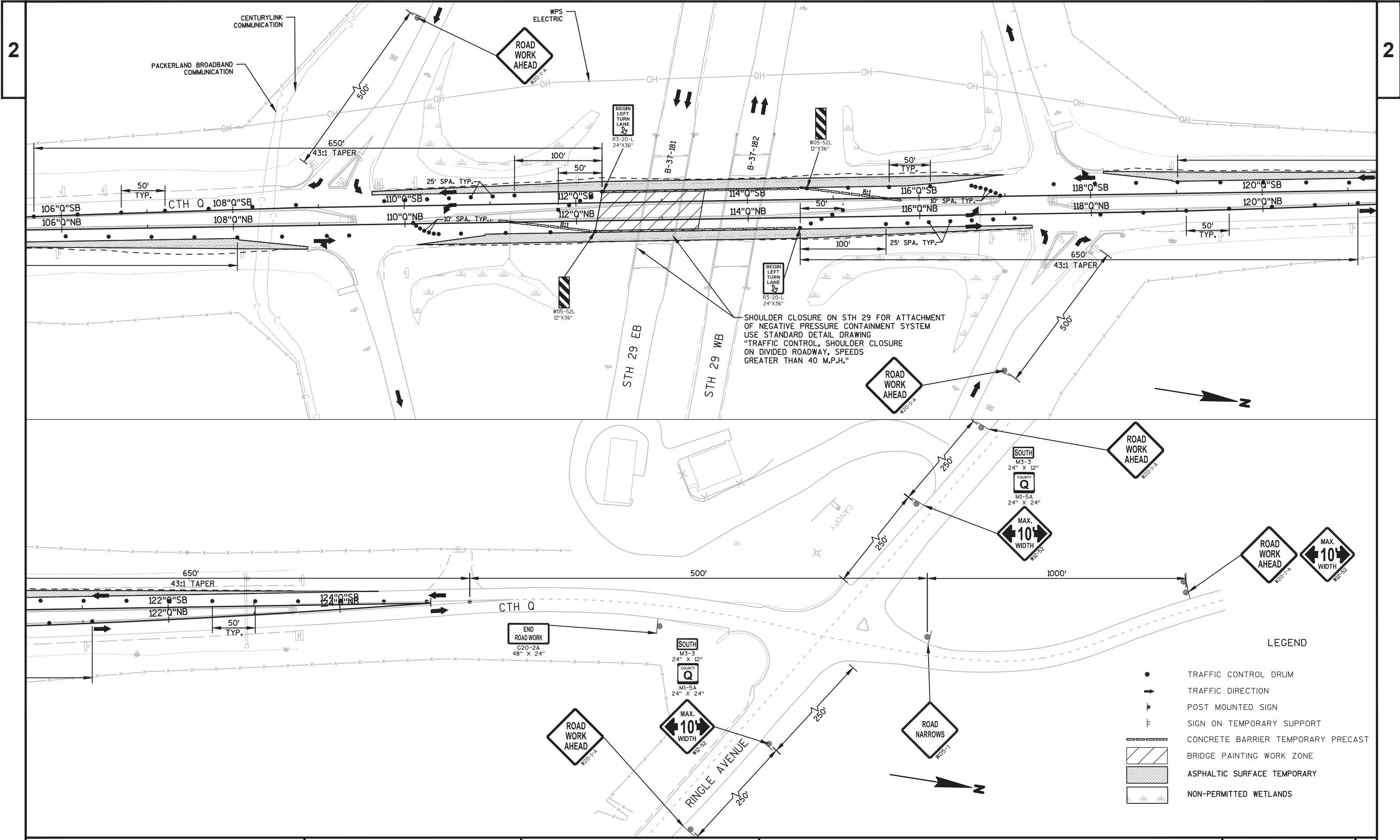




LEGEND

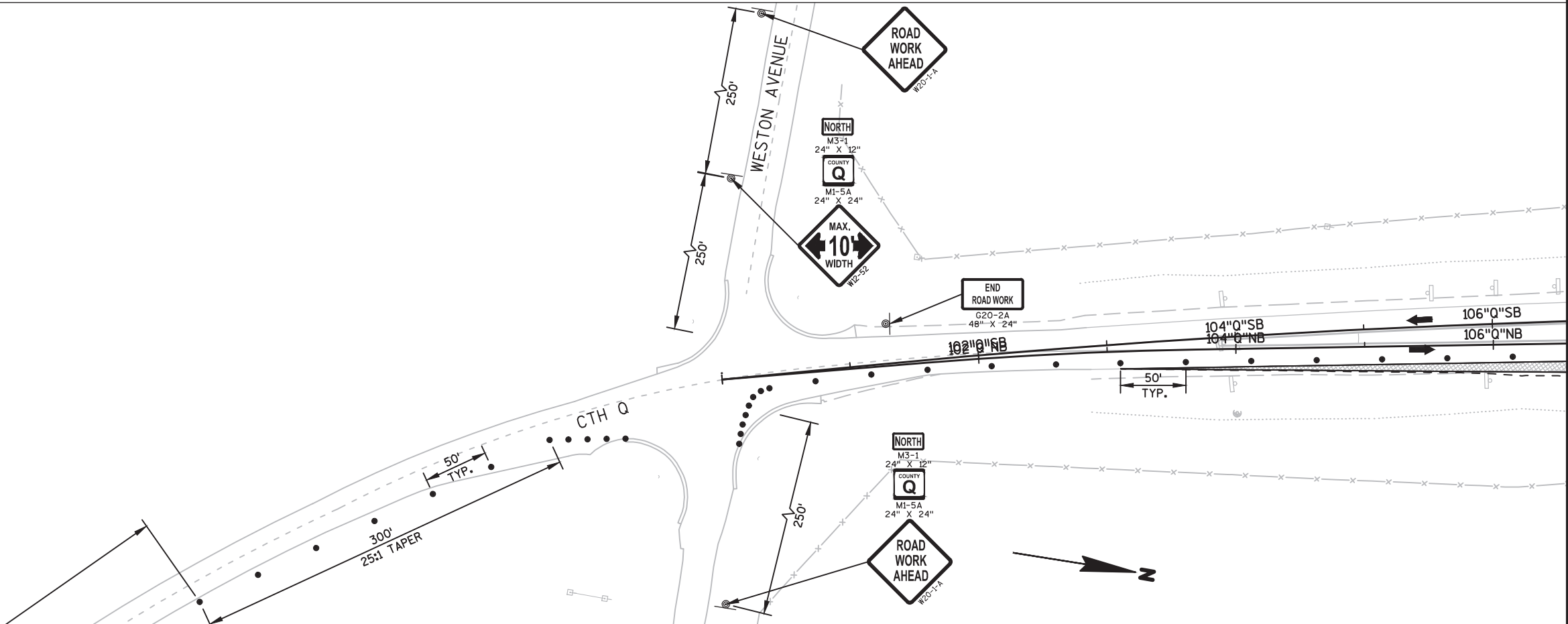
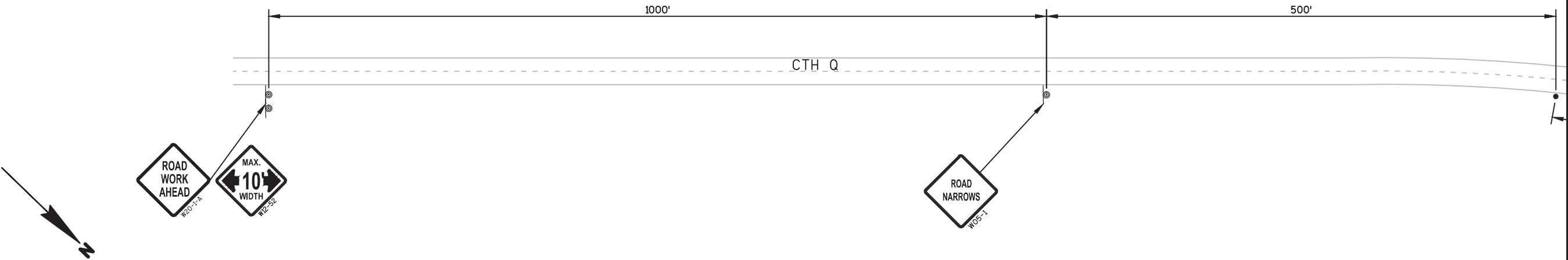
- TRAFFIC CONTROL DRUM
- ➔ TRAFFIC DIRECTION
- ┆ POST MOUNTED SIGN
- ┆ SIGN ON TEMPORARY SUPPORT
- ▬▬▬ CONCRETE BARRIER TEMPORARY PRECAST
- ▨ BRIDGE PAINTING WORK ZONE
- ▩ ASPHALTIC SURFACE TEMPORARY
- ▨ NON-PERMITTED WETLANDS

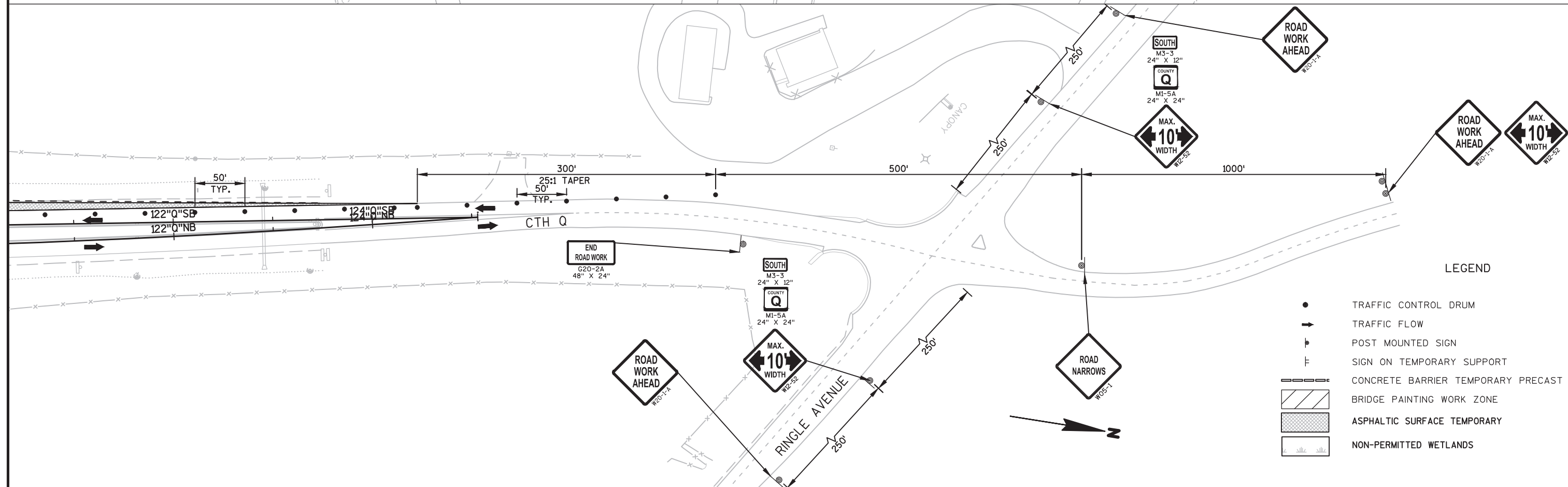




LEGEND

- TRAFFIC CONTROL DRUM
- ➔ TRAFFIC FLOW
- ⌋ POST MOUNTED SIGN
- ⌋ SIGN ON TEMPORARY SUPPORT
- ▬ CONCRETE BARRIER TEMPORARY PRECAST
- ▨ BRIDGE PAINTING WORK ZONE
- ▩ ASPHALTIC SURFACE TEMPORARY
- ▨ NON-PERMITTED WETLANDS





3

DATE 31AUG16		E S T I M A T E O F Q U A N T I T I E S			
LINE					1053-02-62
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	204.0110	Removing Asphaltic Surface	SY	5,040.000	5,040.000
0020	205.0100	Excavation Common	CY	1,553.000	1,553.000
0030	213.0100	Finishing Roadway (project) 01. 1053-02-62	EACH	1.000	1.000
0040	305.0110	Base Aggregate Dense 3/4-Inch	TON	875.000	875.000
0050	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	1,405.000	1,405.000
0060	465.0125	Asphaltic Surface Temporary	TON	830.000	830.000
0070	517.1800.S	Structure Repainting Recycled Abrasive (structure) 01. B-37-179	LS	1.000	1.000
0080	517.1800.S	Structure Repainting Recycled Abrasive (structure) 02. B-37-180	LS	1.000	1.000
0090	517.1800.S	Structure Repainting Recycled Abrasive (structure) 03. B-37-181	LS	1.000	1.000
0100	517.4500.S	Negative Pressure Containment and Collection of Waste Materials (structure) 01. B-37-179	LS	1.000	1.000
0110	517.4500.S	Negative Pressure Containment and Collection of Waste Materials (structure) 02. B-37-180	LS	1.000	1.000
0120	517.4500.S	Negative Pressure Containment and Collection of Waste Materials (structure) 03. B-37-181	LS	1.000	1.000
0130	517.6001.S	Portable Decontamination Facility	EACH	2.000	2.000
0140	603.8000	Concrete Barrier Temporary Precast Delivered	LF	1,550.000	1,550.000
0150	603.8125	Concrete Barrier Temporary Precast Installed	LF	3,100.000	3,100.000
0160	604.0500	Slope Paving Crushed Aggregate	SY	66.000	66.000
0170	604.9015.S	Reseal Crushed Aggregate Slope Paving	SY	1,211.000	1,211.000
0180	619.1000	Mobilization	EACH	1.000	1.000
0190	624.0100	Water	MGAL	0.050	0.050
0200	625.0100	Topsoil	SY	3,500.000	3,500.000
0210	627.0200	Mulching	SY	4,870.000	4,870.000
0220	628.1504	Silt Fence	LF	5,240.000	5,240.000
0230	628.1520	Silt Fence Maintenance	LF	12,350.000	12,350.000
0240	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0250	628.1910	Mobilizations Emergency Erosion Control	EACH	5.000	5.000
0260	628.7015	Inlet Protection Type C	EACH	5.000	5.000
0270	628.7555	Culvert Pipe Checks	EACH	10.000	10.000
0280	628.7570	Rock Bags	EACH	145.000	145.000
0290	629.0210	Fertilizer Type B	CWT	4.000	4.000
0300	630.0120	Seeding Mixture No. 20	LB	75.000	75.000
0310	630.0200	Seeding Temporary	LB	40.000	40.000
0320	638.2102	Moving Signs Type II	EACH	34.000	34.000
0330	638.4000	Moving Small Sign Supports	EACH	34.000	34.000
0340	642.5001	Field Office Type B	EACH	1.000	1.000
0350	643.0100	Traffic Control (project) 01. 1053-02-62	EACH	1.000	1.000
0360	643.0300	Traffic Control Drums	DAY	15,886.000	15,886.000
0370	643.0800	Traffic Control Arrow Boards	DAY	360.000	360.000
0380	643.0900	Traffic Control Signs	DAY	7,782.000	7,782.000
0390	646.0106	Pavement Marking Epoxy 4-Inch	LF	5,620.000	5,620.000
0400	646.0126	Pavement Marking Epoxy 8-Inch	LF	300.000	300.000
0410	646.0600	Removing Pavement Markings	LF	5,220.000	5,220.000
0420	649.0402	Temporary Pavement Marking Paint 4-Inch	LF	5,590.000	5,590.000
0430	650.4500	Construction Staking Subgrade	LF	5,230.000	5,230.000
0440	650.5000	Construction Staking Base	LF	10,460.000	10,460.000

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DATE 31AUG16		E S T I M A T E O F Q U A N T I T I E S			
LINE		1053-02-62			
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0450	650.8000	Construction Staking Resurfacing Reference	LF	5,230.000	5,230.000
0460	650.9910	Construction Staking Supplemental Control (project) 01. 1053-02-62	LS	1.000	1.000
0470	650.9920	Construction Staking Slope Stakes	LF	10,460.000	10,460.000
0480	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	300.000	300.000
0490	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	600.000	600.000

EARTHWORK SUMMARY												
				205.0100		UNUSABLE	AVAILABLE		MASS			
				EXCAVATION COMMON (1)		PAVEMENT	MATERIAL	UNEXPANDED	EXPANDED	ORDINATE		
				CUT (2)	EBS (3)			FILL	FILL (6)	± (7)	WASTE	
DIVISION	STATION	TO	STATION	CY	CY	(4)	(5)	CY	CY	CY	CY	COMMENTS:
1	111+69"J"SB	-	125+33"J"SB	179	0	0	179	127	159	20	20	CTH J SB SHOULDER WIDENING
	105+66"J"NB	-	119+54"J"NB	246	0	0	246	70	87	159	159	CTH J NB SHOULDER WIDENING
	109+63"Q"SB	-	123+47"Q"SB	158	0	0	158	36	45	113	113	CTH Q SB SHOULDER WIDENING
	103+10"Q"NB	-	117+31"Q"NB	167	0	0	167	22	27	139	139	CTH Q NB SHOULDER WIDENING
SUBTOTALS				750	0	0	750	254	318	432	432	
2	111+69"J"SB	-	125+33"J"SB	284	0	116	169	1	1	167	283	CTH J SB SHOULDER RESTORATION
	105+66"J"NB	-	119+54"J"NB	214	0	116	98	2	2	96	211	CTH J NB SHOULDER RESTORATION
	109+63"Q"SB	-	123+47"Q"SB	155	0	92	64	0	0	64	155	CTH Q SB SHOULDER RESTORATION
	103+10"Q"NB	-	117+31"Q"NB	150	0	89	61	0	0	61	150	CTH Q NB SHOULDER RESTORATION
SUBTOTALS				803	0	412	392	3	4	388	799	
TOTAL				1,553	0	412	1,141	257	322	820	1,231	

1) EXCAVATION COMMON IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NO. 205.0100.

2) UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.

3) EBS EXCAVATION TO BE BACKFILLED WITH CUT MATERIAL.

4) UNUSABLE PAVEMENT MATERIAL.

5) AVAILABLE MATERIAL = CUT - UNUSABLE PAVEMENT MATERIAL.

6) EXPANDED FILL = UNEXPANDED FILL * EXPANDED FILL FACTOR. EXPANDED FILL FACTOR = 1.25.

7) MASS ORDINATE = (AVAILABLE MATERIAL) - (EXPANDED FILL). PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

*NOTE: DIVISION 1 IS EARTHWORK FOR WIDENING SHOULDERS ON CTH J & CTH Q. DIVISION 2 IS EARTHWORK FOR REMOVING TEMPORARY SHOULDER WIDENING ON CTH J & CTH Q.

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

HMA PAVEMENT							
				204.0110	465.0125		
				REMOVING	ASPHALTIC SURFACE		
				ASPHALTIC SURFACE	TEMPORARY		
STATION	TO	STATION	OPERATION	LOCATION	SY	TON	COMMENTS
105+66"J"NB	-	119+53"J"NB	CTH J	RT	1,400	230	NB SHOULDER
111+67"J"SB	-	125+34"J"SB	CTH J	LT	1,425	235	SB SHOULDER
103+11"Q"NB	-	117+31"Q"NB	CTH Q	RT	1,090	180	NB SHOULDER
109+63"Q"SB	-	124+46"Q"SB	CTH Q	LT	1,125	185	SB SHOULDER
TOTAL					5,040	830	

BASE AGGREGATE DENSE								
					305.0110	305.0120	624.0100	
					3/4-INCH	1 1/4-INCH	WATER	
STATION	TO	STATION	OPERATION	LOCATION	TON	TON	MGAL	COMMENT
105+66"J"NB	-	119+53"J"NB	CTH J	RT	215	390	0.015	NB SHOULDER
111+67"J"SB	-	125+34"J"SB	CTH J	LT	210	395	0.015	SB SHOULDER
103+11"Q"NB	-	117+31"Q"NB	CTH Q	RT	220	305	0.010	NB SHOULDER
109+63"Q"SB	-	124+46"Q"SB	CTH Q	LT	230	315	0.010	SB SHOULDER
TOTAL					875	1,405	0.05	

CONCRETE BARRIER TEMP PRECAST					
				603.8000	603.8125
				DELIVERED	INSTALLED
STATION	TO	STATION	OPERATION	LF	LF
114"J"SB+60	-	118"J"SB+60	STAGE 1	400	400
113"J"NB+10	-	117"J"NB+10	STAGE 2	400	400
114"J"SB+60	-	118"J"SB+60	STAGE 2	-	400
113"J"NB+10	-	117"J"NB+10	STAGE 3	-	400
112"Q"SB+25	-	116"Q"SB+00	STAGE 4	375	375
111"Q"NB+10	-	114"Q"NB+85	STAGE 5	375	375
112"Q"SB+25	-	116"Q"SB+00	STAGE 5	-	375
111"Q"NB+10	-	114"Q"NB+85	STAGE 6	-	375
TOTALS				1,550	3,100

TRAFFIC CONTROL								
			643.0100	643.0300	643.0800		643.0900	
			PROJECT					
			DURATION	(01. 1053-02-62)	DRUMS	ARROW	BOARDS	SIGNS
OPERATION	DAYS	EACH	EACH	DAY	EACH	DAY	EACH	DAY
STH 29 EB OVER CTH J	62	-	24	1,488	2	124	24	1,488
STH 29 WB OVER CTH J	62	-	24	1,488	2	124	24	1,488
STAGE 1	22	-	93	2,046	-	-	30	660
STAGE 2	18	-	85	1,530	-	-	31	558
STAGE 3	22	-	93	2,046	-	-	30	660
STH 29 EB OVER CTH Q	56	-	24	1,344	2	112	24	1,344
STAGE 4	20	-	111	2,220	-	-	28	560
STAGE 5	16	-	94	1,504	-	-	29	464
STAGE 6	20	-	111	2,220	-	-	28	560
PROJECT	-	1	-	-	-	-	-	-
TOTALS			1	15,886	360		7,782	

PAVEMENT MARKING								
646.0106				646.0126		646.0600		649.0402
EPOXY 4-INCH				EPOXY 8-INCH		REMOVING		TEMPORARY
(WHITE EDGE LINE)				(CHANNELIZING)		PAVEMENT MARKINGS		(WHITE EDGE LINE)
STATION	TO	STATION	LOCATION	LF	LF	LF	LF	COMMENT
105+66"J"NB	-	119+53"J"NB	RT	-	-	1,280	-	STAGE 1
111+67"J"SB	-	125+34"J"SB	LT	-	-	1,260	-	STAGE 1
105+66"J"NB	-	119+53"J"NB	RT	-	-	-	1,260	STAGE 2
111+67"J"SB	-	125+34"J"SB	LT	-	-	-	1,280	STAGE 2
105+66"J"NB	-	119+53"J"NB	RT	1,260	75	-	-	STAGE 3
111+67"J"SB	-	125+34"J"SB	LT	1,280	75	-	-	STAGE 3
103+11"Q"NB	-	117+31"Q"NB	RT	-	-	1,380	-	STAGE 4
109+63"Q"SB	-	124+46"Q"SB	LT	-	-	1,300	-	STAGE 4
103+11"Q"NB	-	117+31"Q"NB	RT	-	-	-	1,280	STAGE 5
109+63"Q"SB	-	124+46"Q"SB	LT	-	-	-	1,370	STAGE 5
103+11"Q"NB	-	117+31"Q"NB	RT	1,380	75	-	-	STAGE 6
109+63"Q"SB	-	124+46"Q"SB	LT	1,300	75	-	-	STAGE 6
UNDISTRIBUTED				400	-	-	400	PROJECT
				5,620	300	5,220	5,590	

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

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EROSION CONTROL ITEMS																		
				625.0100	627.0200	628.1504	628.1520	628.1905	628.1910	628.7015	628.7555	628.7570	629.0210	630.0120	630.0200			
				TOPSOIL	MULCHING	SILT FENCE	SILT FENCE	MOBILIZATIONS	MOBILIZATIONS	INLET PROTECTION	CULVERT PIPE	ROCK BAGS	FERTILIZER	SEEDING	SEEDING			
							MAINTENANCE		EMERGENCY	TYPE C	CHECKS		TYPE B	MIXTURE NO. 20	TEMPORARY			
STATION	TO	STATION	LOCATION	SY	SY	LF	LF	EACH	EACH	EACH	EACH	EACH	CWT	LB	LB	REMARKS		
105+35"J"NB	-	110+90"J"NB	RT	100	100	550	1,375	-	-	-	-	-	0.1	2	-			
108+24"J"NB	-	---	RT	-	-	-	-	-	-	-	1	-	-	-	-	24-INCH CULVERT		
109+33"J"NB	-	119+55"J"NB	RT	-	380	-	-	-	-	-	-	-	0.2	-	10	SHOULDER WIDENING STABILIZATION		
109+73"J"NB	-	---	RT	-	-	-	-	-	-	-	1	-	-	-	-	24-INCH CULVERT		
110+22"J"SB	-	---	LT	-	-	-	-	-	-	-	-	10	-	-	-	SILT FENCE RELIEF		
110+80"J"SB	-	---	LT	-	-	-	-	-	-	-	1	-	-	-	-	24-INCH CULVERT		
111+55"J"NB	-	114+65"J"NB	RT	-	-	300	750	-	-	-	-	-	-	-	-			
111+55"J"NB	-	119+45"J"NB	RT	600	600	-	-	-	-	-	-	-	0.5	11	-			
113+26"J"NB	-	---	RT	-	-	-	-	-	-	-	1	-	-	-	-	24-INCH CULVERT		
113+48"J"NB	-	---	RT	-	-	-	-	-	-	-	-	10	-	-	-	SILT FENCE RELIEF		
111+55"J"SB	-	115+10"J"SB	LT	-	-	345	863	-	-	-	-	-	-	-	-			
111+55"J"SB	-	119+55"J"SB	LT	880	880	-	-	-	-	-	-	-	0.6	15	-			
111+79"J"SB	-	122+19"J"SB	LT	-	560	-	-	-	-	-	-	-	0.4	-	15	SHOULDER WIDENING STABILIZATION		
114+00"J"SB	-	---	LT	-	-	-	-	-	-	-	-	10	-	-	-	SILT FENCE RELIEF		
114+31"J"SB	-	---	LT	-	-	-	-	-	-	-	1	-	-	-	-	24-INCH CULVERT		
116+10"J"NB	-	119+45"J"NB	RT	-	-	345	863	-	-	-	-	-	-	-	-			
116+60"J"SB	-	119+55"J"SB	LT	-	-	295	738	-	-	-	-	-	-	-	-			
117+28"J"NB	-	---	RT	-	-	-	-	-	-	-	1	-	-	-	-	24-INCH CULVERT		
118+16"J"NB	-	---	RT	-	-	-	-	-	-	-	-	10	-	-	-	SILT FENCE RELIEF		
118+73"J"SB	-	---	LT	-	-	-	-	-	-	-	-	10	-	-	-	SILT FENCE RELIEF		
118+96"J"NB	-	---	RT	-	-	-	-	-	-	-	1	-	-	-	-	24-INCH CULVERT		
120+30"J"SB	-	125+50"J"SB	LT	200	200	530	1,325	-	-	-	-	-	0.1	4	-			
120+68"J"SB	-	---	LT	-	-	-	-	-	-	-	-	10	-	-	-	SILT FENCE RELIEF		
121+76"J"SB	-	---	LT	-	-	-	-	-	-	-	1	-	-	-	-	24-INCH CULVERT		
102+90"Q"NB	-	108+90"Q"NB	RT	250	250	605	1,513	-	-	-	-	-	0.2	5	-			
105+75"Q"NB	-	116+00"Q"NB	RT	-	200	-	-	-	-	-	-	-	0.1	-	6	SHOULDER WIDENING STABILIZATION		
107+88"Q"NB	-	---	RT	-	-	-	-	-	-	-	-	10	-	-	-	SILT FENCE RELIEF		
109+70"Q"SB	-	112+90"Q"SB	LT	-	-	320	800	-	-	-	-	-	-	-	-			
109+70"Q"SB	-	117+10"Q"SB	LT	380	380	-	-	-	-	-	-	-	0.3	7	-			
110+05"Q"NB	-	112+70"Q"NB	RT	-	-	270	675	-	-	-	-	-	-	-	-			
110+05"Q"NB	-	117+25"Q"NB	RT	240	240	-	-	-	-	-	-	-	0.2	5	-			
110+58"Q"SB	-	120+69"Q"SB	LT	-	230	-	-	-	-	-	-	-	0.2	-	6	SHOULDER WIDENING STABILIZATION		
111+22"Q"NB	-	---	RT	-	-	-	-	-	-	-	1	-	-	-	-	24-INCH CULVERT		
111+59"Q"NB	-	---	RT	-	-	-	-	-	-	-	-	10	-	-	-	SILT FENCE RELIEF		
112+37"Q"SB	-	---	LT	-	-	-	-	-	-	-	-	10	-	-	-	SILT FENCE RELIEF		
114+05"Q"NB	-	117+25"Q"NB	RT	-	-	325	813	-	-	-	-	-	-	-	-			
114+20"Q"SB	-	117+10"Q"SB	LT	-	-	290	725	-	-	-	-	-	-	-	-			
115+56"Q"NB	-	---	RT	-	-	-	-	-	-	-	-	10	-	-	-	SILT FENCE RELIEF		
115+70"Q"SB	-	---	LT	-	-	-	-	-	-	-	-	10	-	-	-	SILT FENCE RELIEF		
116+67"Q"NB	-	---	RT	-	-	-	-	-	-	-	1	-	-	-	-	24-INCH CULVERT		
118+05"Q"SB	-	123+80"Q"SB	LT	450	450	565	1,413	-	-	-	-	-	0.3	10	-			
118+71"Q"SB	-	---	LT	-	-	-	-	-	-	-	-	10	-	-	-	SILT FENCE RELIEF		
PROJECT				-	-	-	-	4	5	-	-	-	-	-	-			
UNDISTRIBUTED				400	400	500	500	-	-	5	-	25	0.8	16	3			
TOTAL				3,500	4,870	5,240	12,350	4	5	5	10	145	4.0	75	40			
ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED																		
PROJECT NO:1053-02-62				HWY: STH 29				COUNTY: MARATHON				MISCELLANEOUS QUANTITIES				SHEET: 41		E

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CONSTRUCTION STAKING									
				650.4500	650.5000	650.8000	650.9910	650.9920	
				SUBGRADE	BASE	RESURFACING	SUPPLEMENTAL	SLOPE	
						REFERENCE	CONTROL	STAKES	
(01. 1053-02-62)									
STATION	TO	STATION	LOCATION	LF	LF	LF	LS	LF	COMMENT
105+66"J"NB	-	119+53"J"NB	RT	1,280	1,280	1,280	-	1,280	CTH J NB SHOULDER WIDENING
111+67"J"SB	-	125+34"J"SB	LT	1,260	1,260	1,260	-	1,260	CTH J SB SHOULDER WIDENING
103+11"Q"NB	-	117+31"Q"NB	RT	1,310	1,310	1,310	-	1,310	CTH Q NB SHOULDER WIDENING
109+63"Q"SB	-	124+46"Q"SB	LT	1,380	1,380	1,380	-	1,380	CTH Q SB SHOULDER WIDENING
105+66"J"NB	-	119+53"J"NB	RT	-	1,280	-	-	1,280	CTH J NB SHOULDER RESTORATION
111+67"J"SB	-	125+34"J"SB	LT	-	1,260	-	-	1,260	CTH J SB SHOULDER RESTORATION
103+11"Q"NB	-	117+31"Q"NB	RT	-	1,310	-	-	1,310	CTH Q NB SHOULDER RESTORATION
109+63"Q"SB	-	124+46"Q"SB	LT	-	1,380	-	-	1,380	CTH Q SB SHOULDER RESTORATION
PROJECT				-	-	-	1	-	PROJECT ID 1053-02-62
TOTALS				5,230	10,460	5,230	1	10,460	

SIGNING SCHEDULE (CTH J)									
						638.2102	638.4000		
						MOVING SIGNS	MOVING SMALL		
						TYPE II	SIGN SUPPORTS		
		FROM	TO			WIDENING	RESTORATION	WIDENING	RESTORATION
SIGN NO.	DESCRIPTION	STATION	OFFSET	STATION	OFFSET	EACH	EACH	EACH	EACH
1-1	Do Not Enter	105+66"J"SB	30.4' LT	-	-	-	-	-	-
1-2	Keep Right	105+71"J"SB	5.0' RT	-	-	-	-	-	-
1-3	Divided Highway Ends Symbol	106+76"J"SB	28.9' LT	-	-	-	-	-	-
1-4	Speed Limit 45 MPH	107+93"J"NB	27.9' RT	107+93"J"NB	33.9' RT	1	1	1	1
1-5	South / County J / Speed Limit 55 MPH	108+83"J"SB	29.4' LT	-	-	-	-	-	-
1-6	West / STH 29 / [UA] / East / STH 29 / [RA]	110+04"J"NB	29.8' RT	110+04"J"NB	39.8' RT	1	1	1	1
1-7	Yield	111+02"J"SB	43.4' LT	-	-	-	-	-	-
1-8	One Way Left	111+39"J"SB	27.9' LT	-	-	-	-	-	-
1-9	Stop / Divided Highway Crossing Sign and Intersection	111+39"J"SB	27.9' LT	-	-	-	-	-	-
1-10	No Left Turn Symbol	111+40"J"NB	5.0' LT	-	-	-	-	-	-
1-11	Keep Right	111+40"J"NB	5.0' LT	-	-	-	-	-	-
1-12	Double Down Arrows	111+53"J"NB	56.4' LT	-	-	-	-	-	-
1-13	One Way Right / Do Not Enter / One Way Left	111+96"J"SB	27.0' LT	111+96"J"SB	35.0' LT	1	1	1	1
1-14	Keep Right	112+23"J"NB	3.8' LT	-	-	-	-	-	-
1-15	No Right Turn Symbol	112+46"J"SB	28.8' LT	112+46"J"SB	38.8' LT	1	1	1	1
1-16	East / STH 29 / [LA]	114+26"J"SB	29.6' LT	114+26"J"SB	39.6' LT	1	1	1	1
2-1	West / STH 29 / [LA]	116+77"J"NB	29.3' RT	116+77"J"NB	39.3' RT	1	1	1	1
2-2	No Right Turn Symbol	118+01"J"NB	27.3' RT	118+01"J"NB	37.3' RT	1	1	1	1
2-3	No Parking Fire Lane	118+95"J"SB	34.8' LT	118+95"J"SB	39.8' LT	1	1	1	1
2-4	Keep Right	119+02"J"SB	4.6' RT	-	-	-	-	-	-
2-5	One Way Left / Do Not Enter / One Way Right	119+49"J"NB	22.1' RT	119+49"J"NB	27.1' RT	1	1	1	1
2-6	Double Down Arrows	119+69"J"NB	58.3' RT	-	-	-	-	-	-
2-7	Stop / Divided Highway Crossing Sign and Intersection	119+84"J"NB	28.9' RT	-	-	-	-	-	-
2-8	Keep Right	119+83"J"SB	4.5' RT	-	-	-	-	-	-
2-9	No Left Turn Symbol	119+83"J"SB	4.5' RT	-	-	-	-	-	-
2-10	Yield	120+23"J"NB	38.9' RT	-	-	-	-	-	-
2-11	East / STH 29 / [UA] / West / STH 29 / [RA]	121+27"J"SB	31.9' LT	121+27"J"SB	39.5' LT	1	1	1	1
2-12	North / County J	121+89"J"NB	29.8' RT	-	-	-	-	-	-
2-13	Speed Limit 45 MPH	123+74"J"SB	29.7' LT	-	-	-	-	-	-
2-14	Divided Highway Ends Symbol	124+53"J"NB	29.6' RT	-	-	-	-	-	-
2-15	Keep Right	125+79"J"SB	5.0' RT	-	-	-	-	-	-
SUBTOTALS						10	10	10	10

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

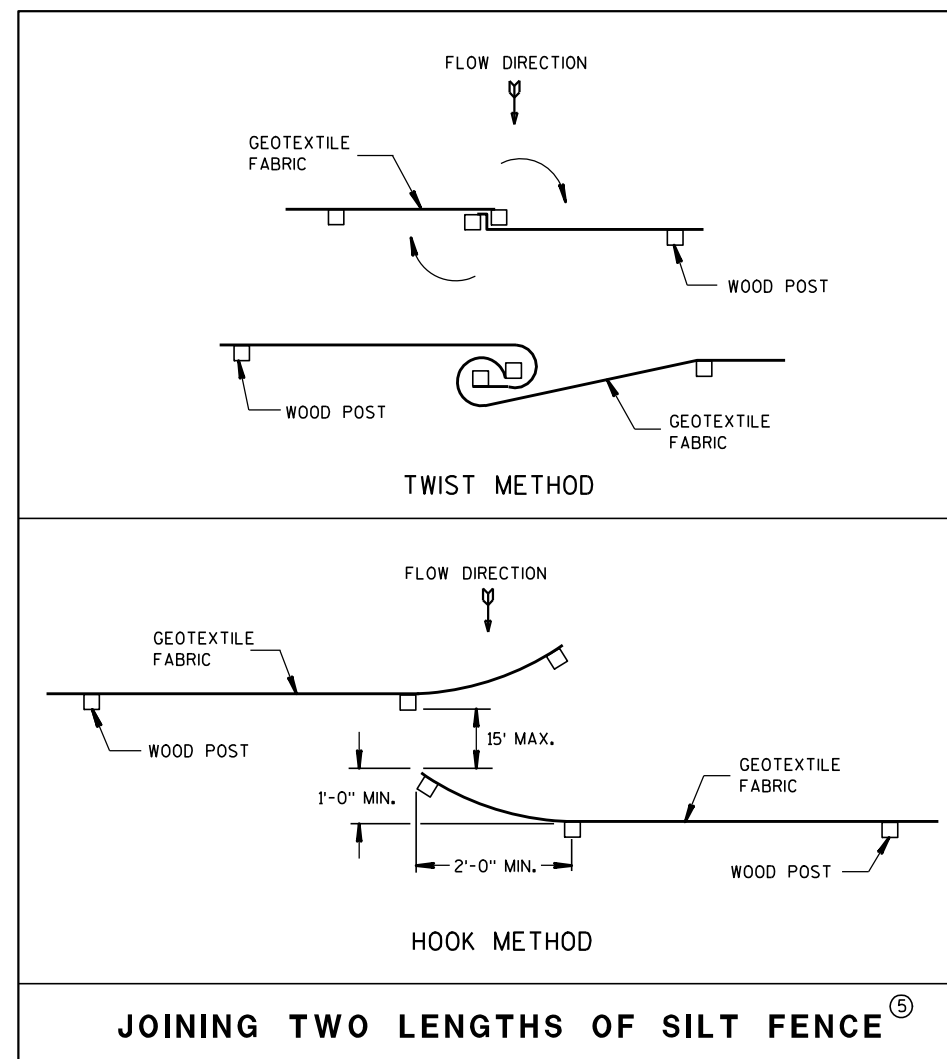
SIGNING SCHEDULE (CTH Q)

						638.2102		638.4000	
						MOVING SIGNS		MOVING SMALL	
						TYPE II		SIGN SUPPORTS	
						WIDENING	RESTORATION	WIDENING	RESTORATION
SIGN NO.	DESCRIPTION	STATION	OFFSET	STATION	OFFSET	EACH	EACH	EACH	EACH
3-1	Keep Right	103+91"Q"SB	4.7' RT	-	-	-	-	-	-
3-2	Do Not Enter	103+94"Q"SB	29.6' LT	-	-	-	-	-	-
3-3	JCT / STH 29	103+99"Q"NB	27.2' RT	-	-	-	-	-	-
3-4	Divided Highway Ends Symbol	105+51"Q"SB	25.5' LT	-	-	-	-	-	-
3-5	Speed Limit 45 MPH	105+97"Q"NB	27.6' RT	105+97"Q"NB	31.6' RT	1	1	1	1
3-6	Do Not Pass	106+01"Q"SB	27.7' LT	-	-	-	-	-	-
3-7	South / County Q / Speed Limit 55 MPH	106+49"Q"SB	27.0' LT	-	-	-	-	-	-
3-8	West / STH 29 / [UA] / East / STH 29 / [RA]	108+13"Q"NB	31.1' RT	108+13"Q"NB	39.1' RT	1	1	1	1
3-9	Yield	108+93"Q"SB	47.7' LT	-	-	-	-	-	-
3-10	One Way Left	109+29"Q"SB	27.8' LT	-	-	-	-	-	-
3-11	Stop / Divided Highway Crossing Sign and Intersection	109+29"Q"SB	27.8' LT	-	-	-	-	-	-
3-12	No Left Turn Symbol	109+38"Q"NB	4.4' LT	-	-	-	-	-	-
3-13	Keep Right	109+38"Q"NB	4.4' LT	-	-	-	-	-	-
3-14	Double Down Arrows	109+46"Q"SB	56.0' LT	-	-	-	-	-	-
3-15	One Way Right / Do Not Enter / One Way Left	109+71"Q"SB	26.0' LT	109+71"Q"SB	31.0' LT	1	1	1	1
3-16	Stop	109+99"Q"NB	57.5' RT	-	-	-	-	-	-
3-17	Keep Right	110+14"Q"NB	3.7' LT	-	-	-	-	-	-
3-18	No Right Turn Symbol	110+11"Q"SB	27.7' LT	-	-	-	-	-	-
3-19	East / STH 29 / [LA]	112+00"Q"SB	26.4' LT	112+00"Q"SB	31.4' LT	1	1	1	1
4-1	West / STH 29 / [LA]	115+12"Q"NB	26.8' RT	115+12"Q"NB	31.8' RT	1	1	1	1
4-2	No Right Turn Symbol	116+86"Q"NB	28.8' RT	-	-	-	-	-	-
4-3	Keep Right	116+83"Q"SB	5.0' RT	-	-	-	-	-	-
4-4	Keep Right	117+56"Q"SB	5.3' RT	-	-	-	-	-	-
4-5	One Way Left / Do Not Enter / One Way Right	117+20"Q"NB	24.6' RT	117+20"Q"NB	28.6' RT	1	1	1	1
4-6	Double Down Arrows	117+47"Q"NB	58.5' RT	-	-	-	-	-	-
4-7	Stop / Divided Highway Crossing Sign and Intersection	117+64"Q"NB	28.6' RT	-	-	-	-	-	-
4-8	No Left Turn Symbol	117+56"Q"SB	5.3' RT	-	-	-	-	-	-
4-9	County Q / Double Arrows Left - Right	117+79"Q"NB	11.4' LT	-	-	-	-	-	-
4-10	Yield	118+06"Q"NB	40.6' RT	-	-	-	-	-	-
4-11	East / STH 29 / [UA] / West / STH 29 / [RA]	118+93"Q"SB	30.9' LT	118+93"Q"SB	35.9' LT	1	1	1	1
4-12	Divided Highway Ends Symbol	119+52"Q"NB	30.7' RT	-	-	-	-	-	-
4-13	North / County Q / Speed Limit 45 MPH	121+05"Q"NB	26.6' RT	-	-	-	-	-	-
4-14	Stop Ahead	123+50"Q"NB	26.2' RT	-	-	-	-	-	-
4-15	Do Not Enter	123+50"Q"NB	26.2' RT	-	-	-	-	-	-
4-16	Keep Right	123+42"Q"NB	4.7' RT	-	-	-	-	-	-
4-17	JCT / STH 29	123+54"Q"SB	29.0' LT	-	-	-	-	-	-
SUBTOTALS						7	7	7	7
TOTALS						34		34	

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

Standard Detail Drawing List

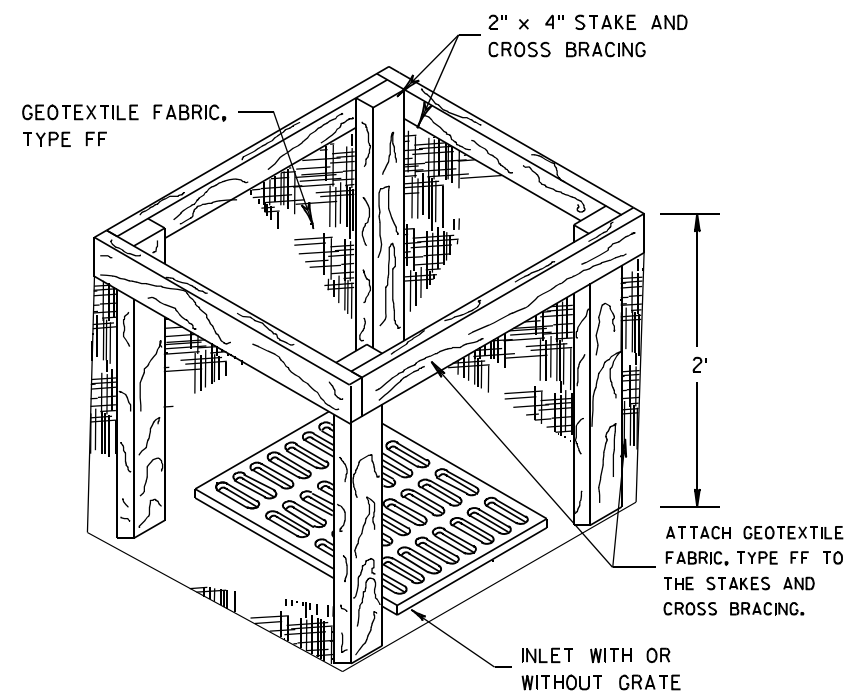
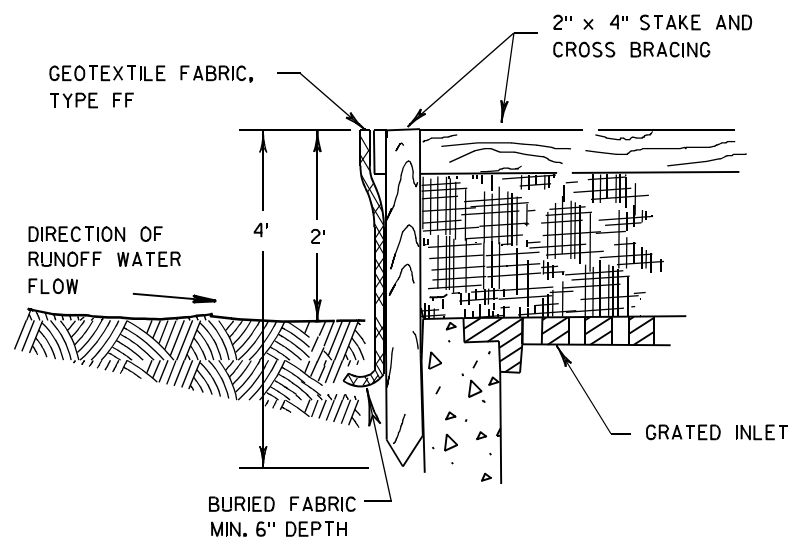
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
14B07-14A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
15C04-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16E	PAVEMENT MARKING (LEFT TURN LANE)
15C19-03A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15D03-02	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER
15D21-03	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE



- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1½" X 1½" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



SILT FENCE
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED <u>4-29-05</u> DATE /s/ Beth Conn***** CHIEF ROADWAY DEVELOP 45 ENGINEER FHWA



INLET PROTECTION, TYPE A

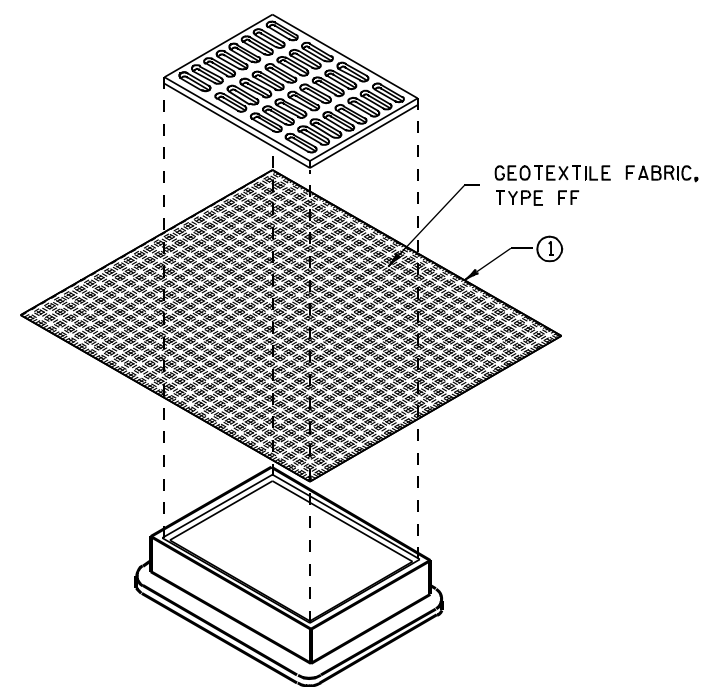
GENERAL NOTES

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.

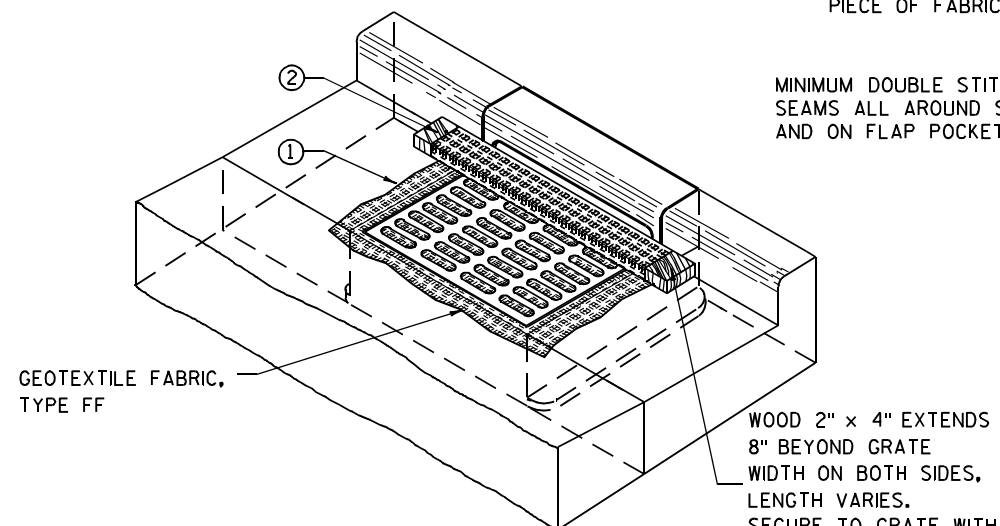
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- 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.

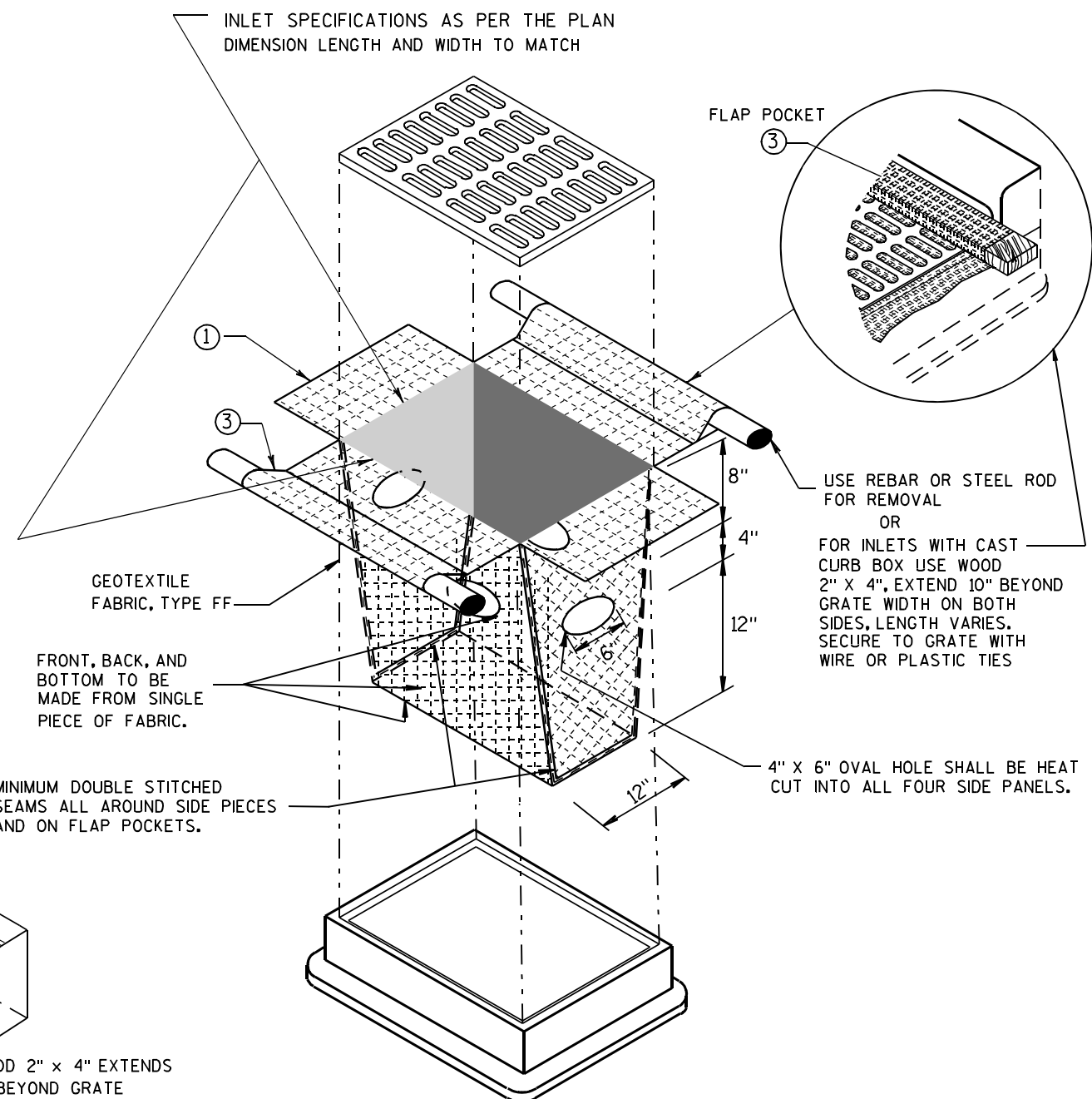
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

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.



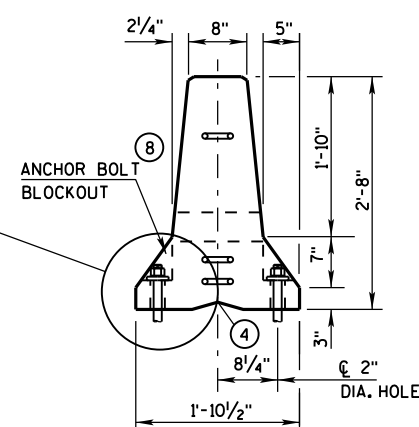
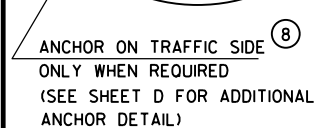
INLET PROTECTION, TYPE D

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

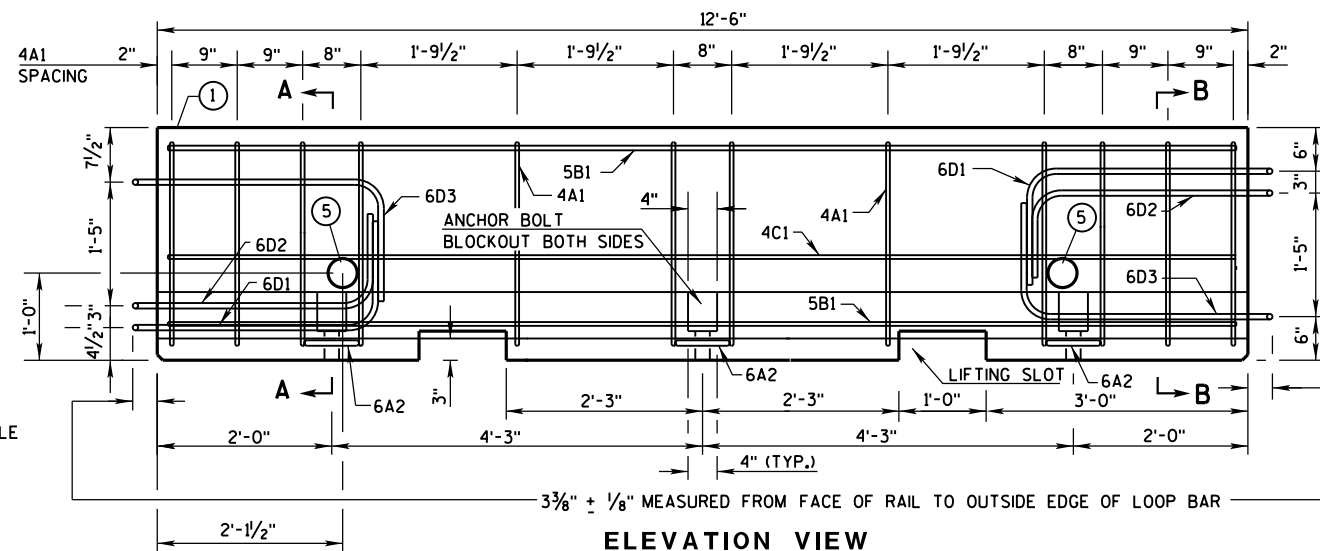
**INLET PROTECTION
TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

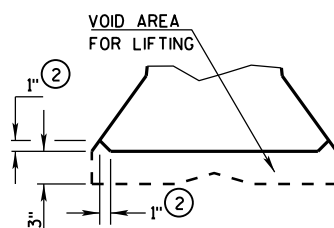
APPROVED
10/16/02 /S/ Beth Connolly
DATE 46
FHWA CHIEF ROADWAY DEVELOPMENT ENGINEER



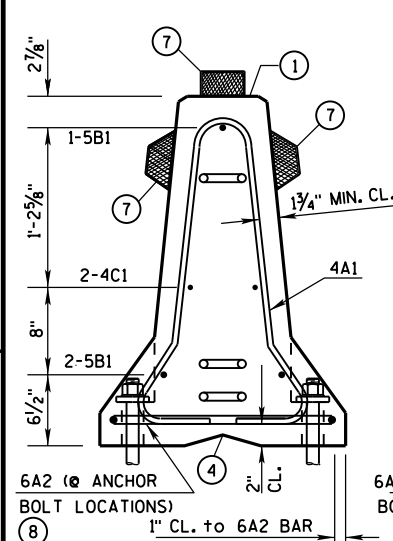
END VIEW



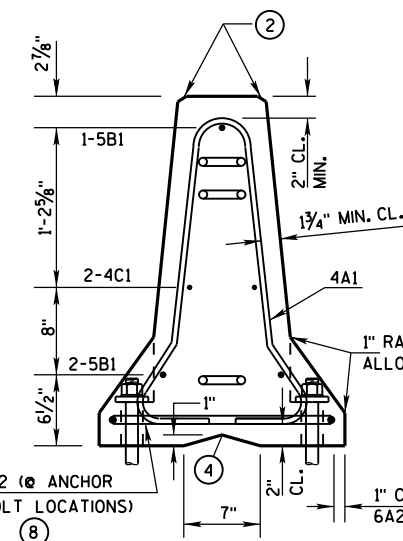
ELEVATION VIEW



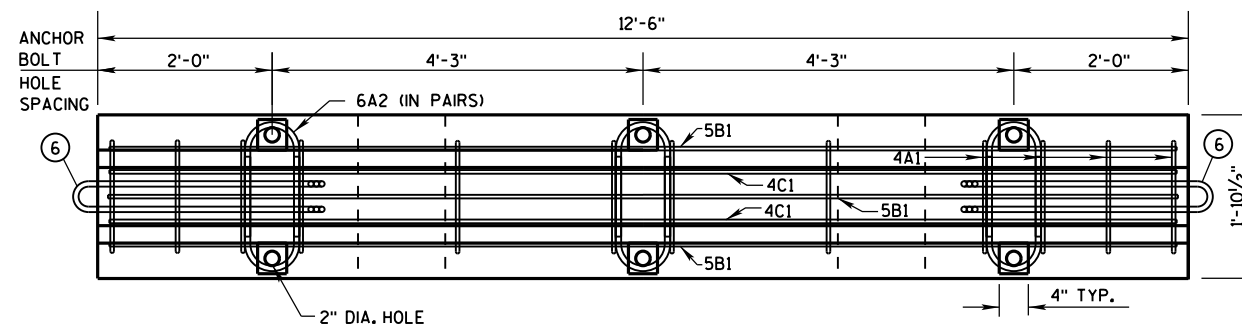
DETAIL "B"
LIFTING SLOT DETAIL



SECTION A-A
(STIRRUP PLACEMENT)

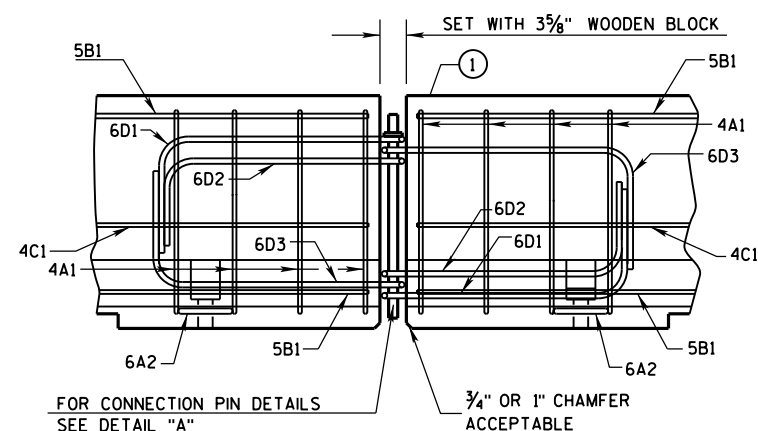


SECTION B-B
(STIRRUP PLACEMENT)

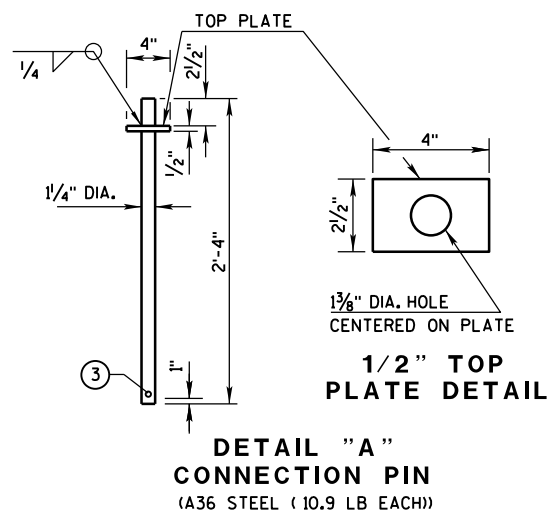


PLAN VIEW

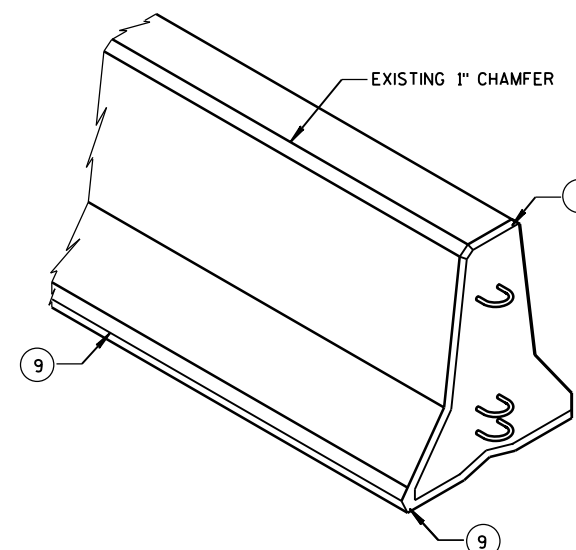
DETAILS OF BARRIER SECTION



DETAILS OF BARRIER CONNECTION



DETAIL "A"
CONNECTION PIN
(A36 STEEL (10.9 LB EACH))



GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-14(d) THRU 14B7-14(h).

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" (CBTP12.5) WITH OTHER TEMPORARY CONCRETE BARRIERS.

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR BARS 4A1, 6A2, 5B1 AND 4C1 IN THE BARRIER SECTION AND FOR 4V1, 4V2, 4V3, 4V4, 4V5, 4V6, 4F1, 4F2 AND 5F3 IN THE BARRIER TAPER SECTION.

LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE $\frac{3}{4}$ " SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A $3\frac{1}{2}$ " PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN $\frac{1}{8}$ " OF THE PLAN DIMENSION.

CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

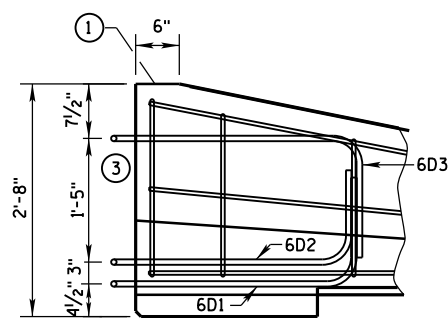
PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

INSTALL MECHANICAL OR ADHESIVE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS.
PROVIDE MANUFACTURER'S INFORMATION TO PROJECT ENGINEER.

- ① MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
 - a. TYPE: WICBTP
 - b. MANUFACTURER
 - c. DATE MANUFACTURED (MONTH AND YEAR)
- ② 1" CHAMFER TO PREVENT SPALLING.
- ③ A $\frac{3}{8}$ " HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..
- ④ "V" NOTCH IS OPTIONAL.
- ⑤ THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).
- ⑥ NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.
- ⑦ USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.
- ⑧ SEE SHEET D FOR ANCHORING CRITERIA.
- ⑨ 1" CHAMFER OPTIONAL.

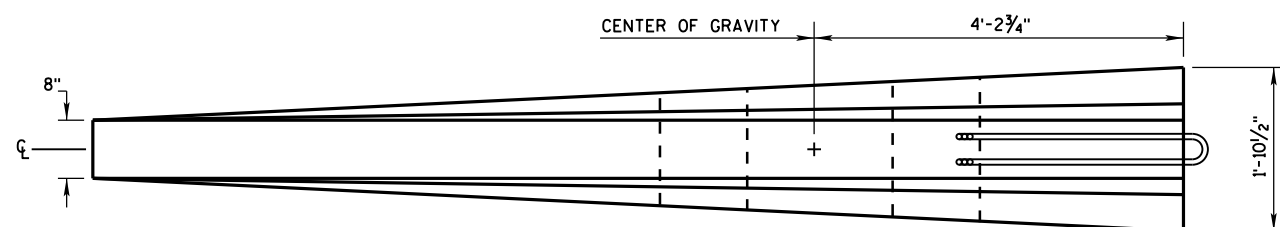
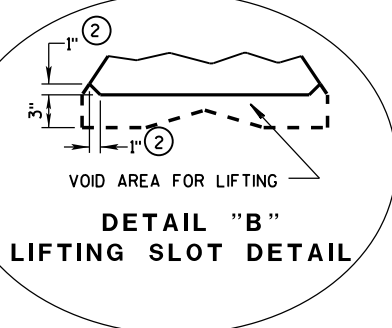
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION⁴⁷



- ① MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
 - a. TYPE WICBTP
 - b. MANUFACTURER
 - c. DATE MANUFACTURED (MONTH AND YEAR)
- ② 1" CHAMFER TO PREVENT SPALLING.
- ③ NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

LOOP BAR ASSEMBLY INVERTED
FOR OPPOSITE END.
(FOR CONNECTION TO RIGHT END OF BARRIER)



**CHAMFER
DETAIL**

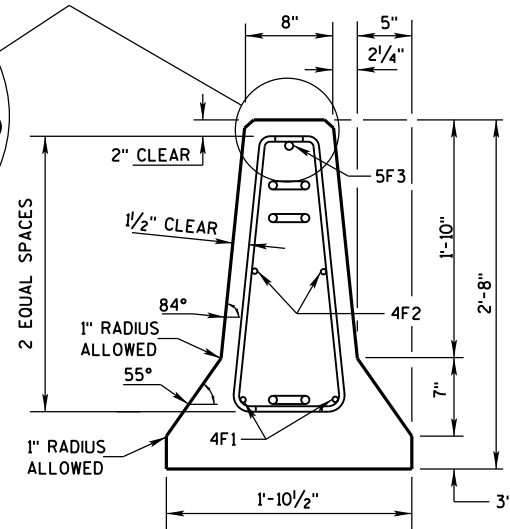


Diagram illustrating the placement of a barrier on a curve. The diagram shows a cross-section of the barrier and the road surface. Key dimensions and labels include:

- 10"± OFFSET**: The distance from the centerline to the barrier.
- 5°± MAX.**: The maximum angle of the barrier relative to the centerline.
- 12'-6"**: The length of the barrier segments.
- BARRIER ON CURVE**: The title of the diagram.
- END SECTION**: The label for the end of the barrier section.

FLARE AT BARRIER END

POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1

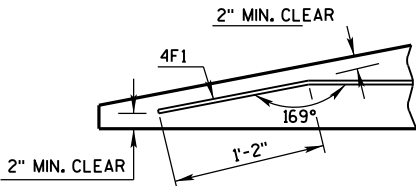
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION⁴⁸

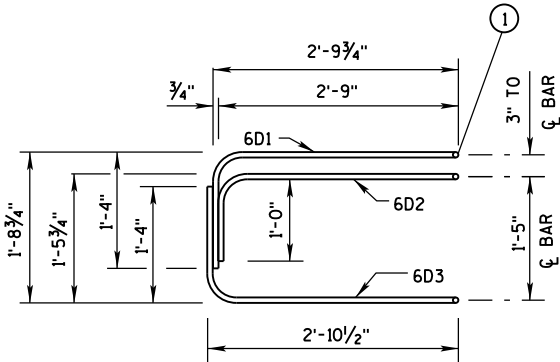
BARRIER TAPER SECTION
BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

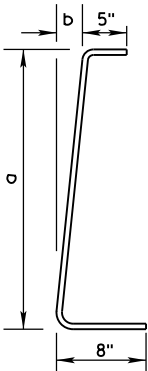
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



DETAIL "C"
BENT BAR DETAIL



ELEVATION
LOOP BAR ASSEMBLY



BAR	a	b
V1	10"	1"
V2	1'-1"	1 1/4"
V3	1'-5"	1 5/8"
V4	1'-8"	1 7/8"
V5	2'-0 1/2"	2 3/8"
V6	2'-3"	2 3/4"

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

TAPER BARRIER SECTION

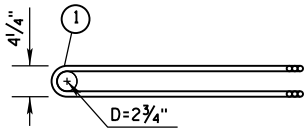
GENERAL NOTES

① NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

BARRIER SECTION
BILL OF MATERIALS

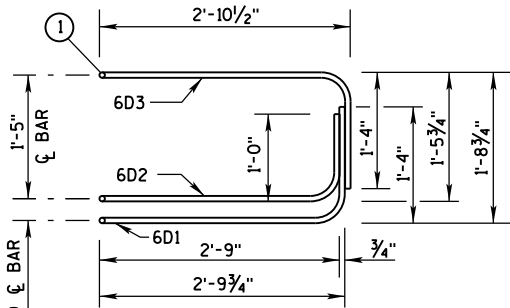
(PER 12'-6" BARRIER SECTION)

BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"

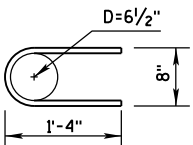


PLAN VIEW
LOOP BAR ASSEMBLY

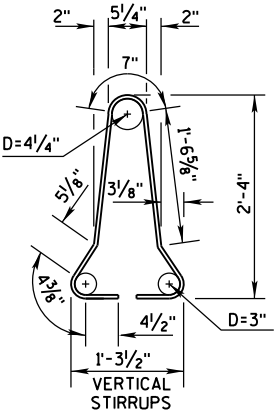
(MARKED END SHOWN, INVERT FOR OTHER END)



ELEVATION VIEW



6A2

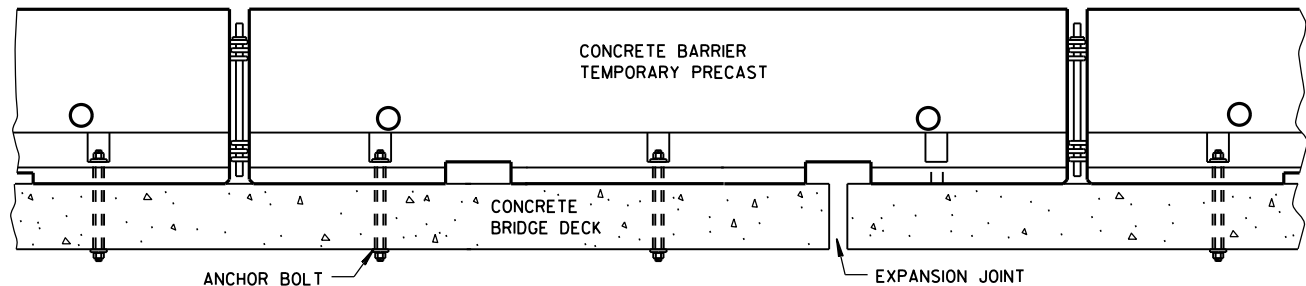
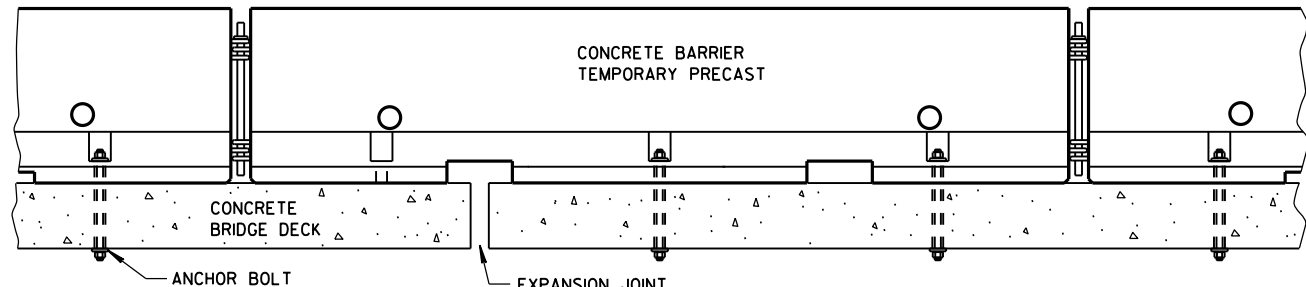


4A1

BARRIER SECTION

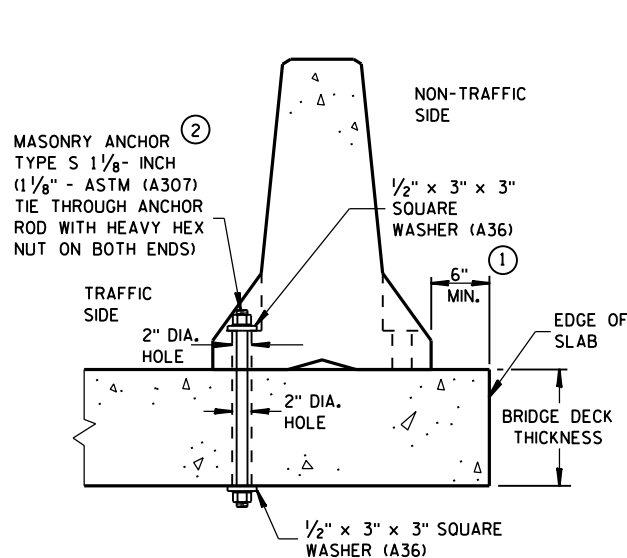
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



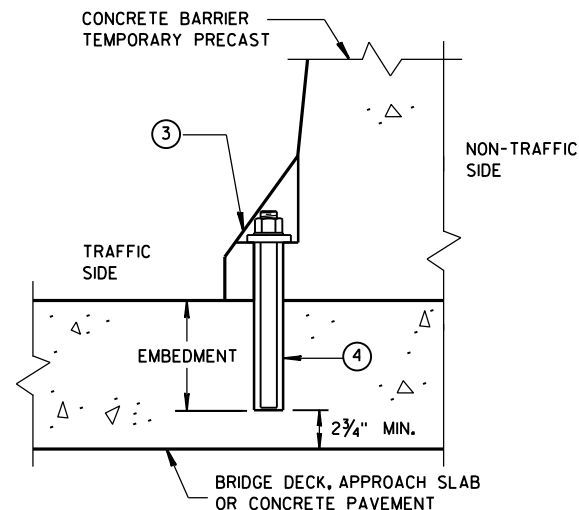
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.)



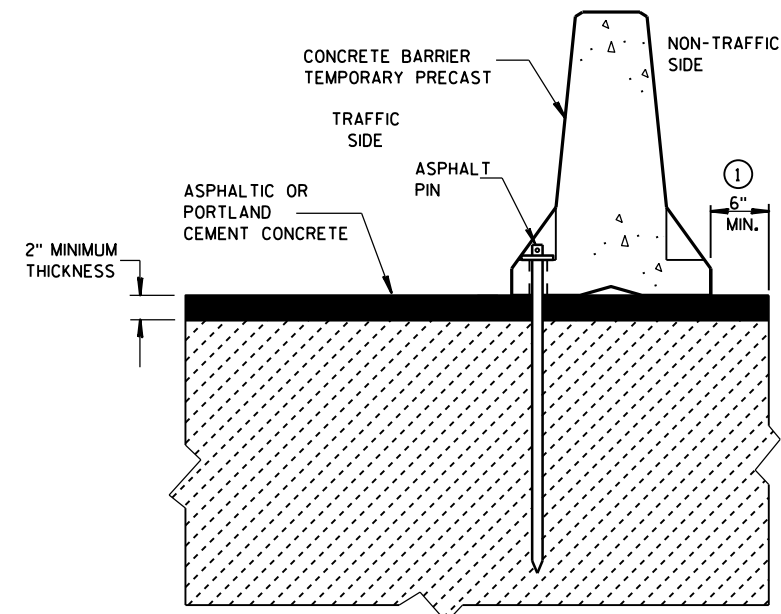
THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOT USE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)



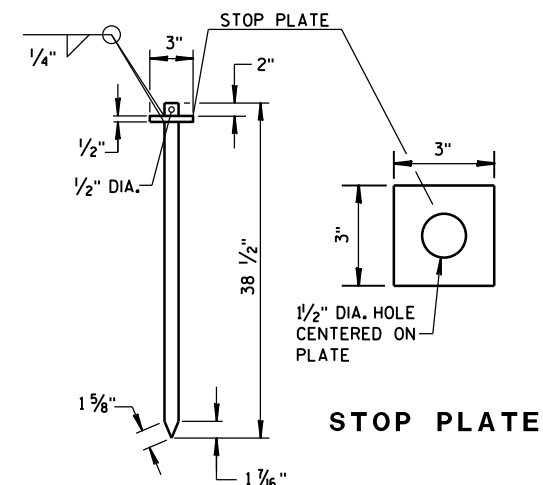
REMOVABLE ADHESIVE BONDED ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)

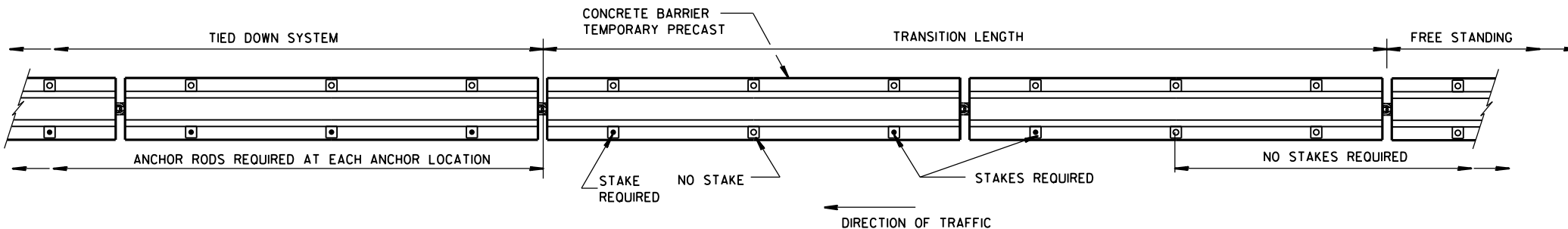


STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE

(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



ASPHALT PIN
(ASTM A36 STEEL)



PLAN VIEW

FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

GENERAL NOTES

- ① CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" SHALL BE ANCHORED IF:
THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V,
FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT,
IS LESS THAN 4 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF
AND THE POSTED SPEED IS 45 MPH OR GREATER, OR

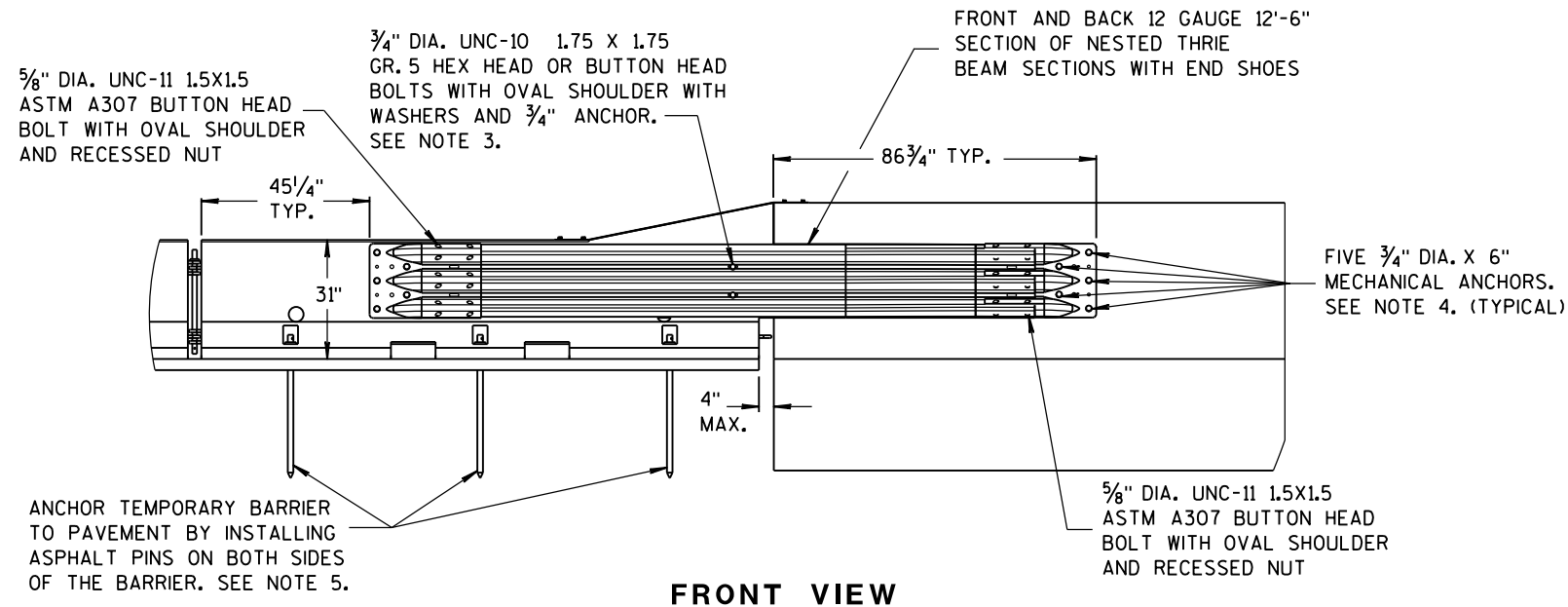
THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V,
FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT,
IS LESS THAN 2 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF
AND THE POSTED SPEED IS 40 MPH OR LESS.
- ② ANCHORING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST.

WITH THE APPROVAL OF THE ENGINEER, REMOVABLE ADHESIVE BONDED ANCHOR BOLT
INSTALLATION MAY BE USED IN LIEU OF THROUGH BOLTED ANCHOR INSTALLATION. THE ADHESIVE
BONDED ANCHOR BOLT MUST BE REMOVABLE. USE ASTM (A307) MASONRY ANCHORS TYPE
S 1 1/8"-INCH, EMBEDDED TO A DEPTH SUFFICIENT TO DEVELOP THE ULTIMATE CAPACITY OF THE
ANCHOR BOLT AND PROVIDE DOCUMENTATION TO CONFIRM THIS.

UPON REMOVAL OR RELOCATION OF THE BARRIER UNITS, REMOVE ALL ANCHOR BOLTS AND COMPLETELY
FILL IN THE REMAINING HOLES IN CONCRETE BRIDGE DECKS, CONCRETE APPROACH SLABS AND CON-
CRETE PAVEMENTS THAT ARE TO REMAIN, WITH A NON-SHRINK COMMERCIAL GROUT OR MATERIAL
IDENTIFIED ON THE CURRENT WISDOT APPROVED PRODUCTS LIST.
- ③ 1/8" DIAMETER A307 THREADED ROD, 1/2" x 3" x 3" SQUARE PLATE WASHER WITH ASTM A36 STEEL,
ASTM A563A HEAVY HEX NUT.
- ④ ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5/4" EMBEDMENT. SEE 603.2
AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

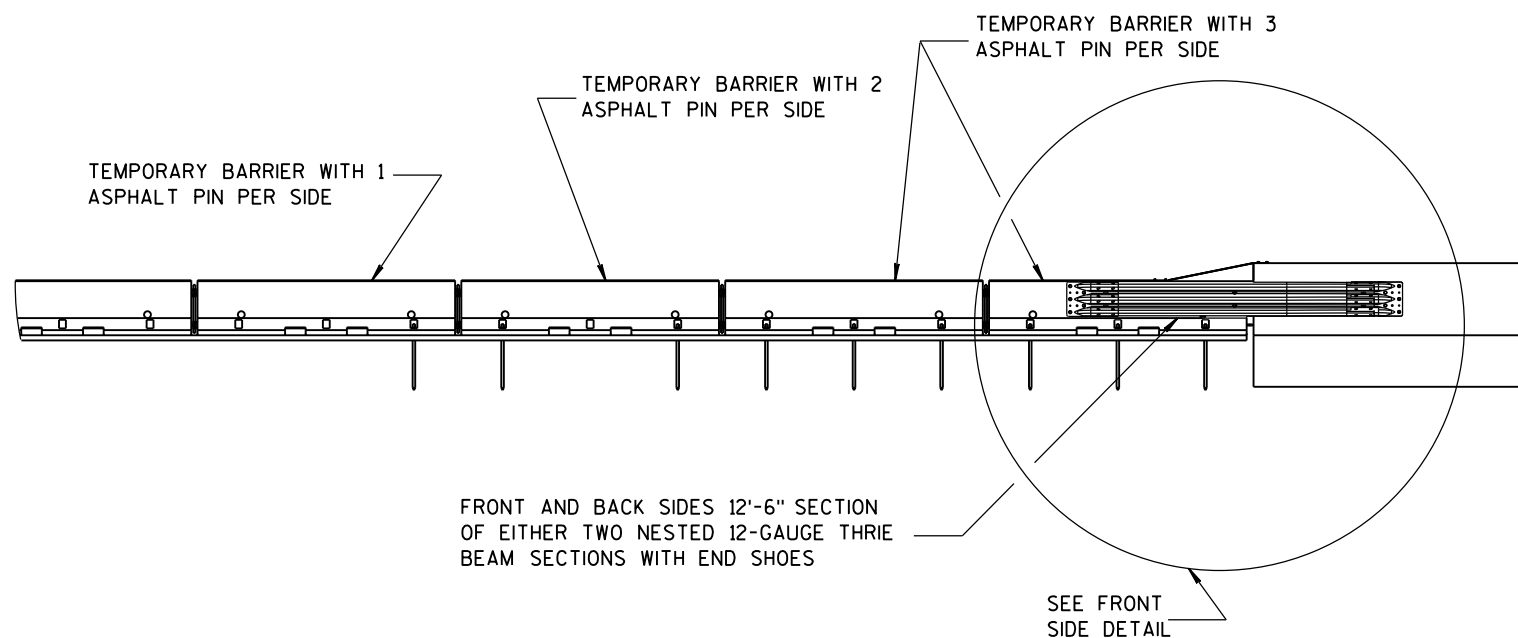
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



FRONT VIEW

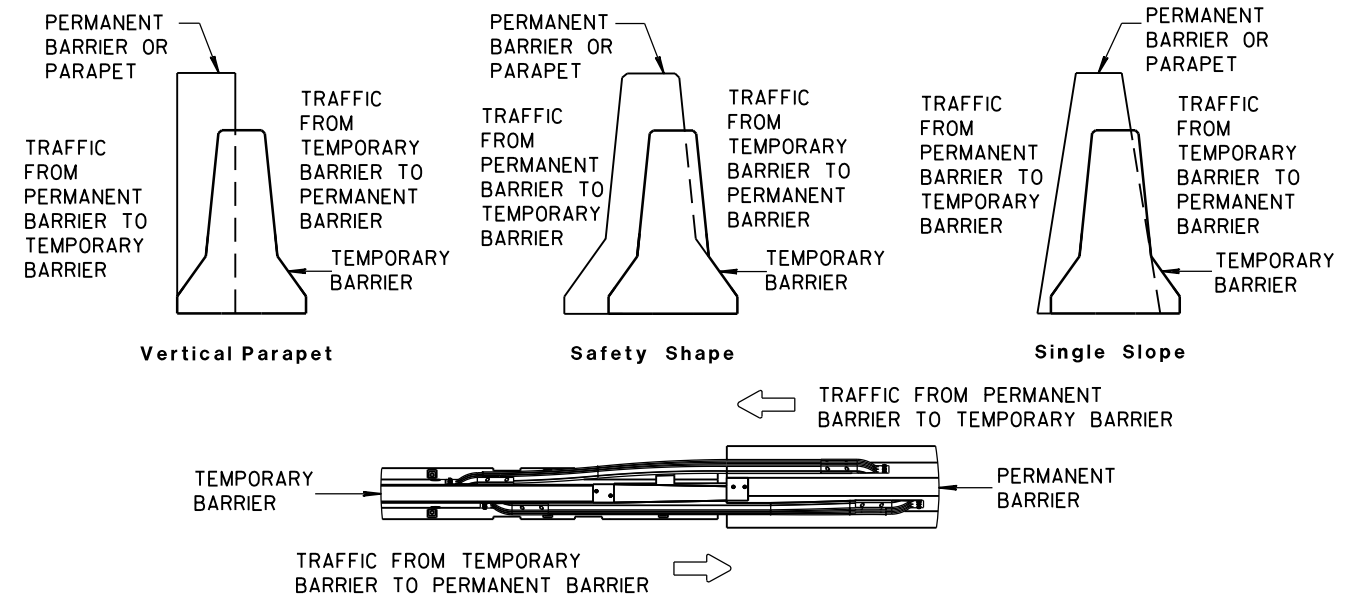
NOTES

1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS.
5. MAY BE USED ON CONCRETE OR ASPHALT PAVEMENTS. ASPHALT OPTION SHOWN. FOR CONCRETE OPTION SEE OTHER DETAILS.
6. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.

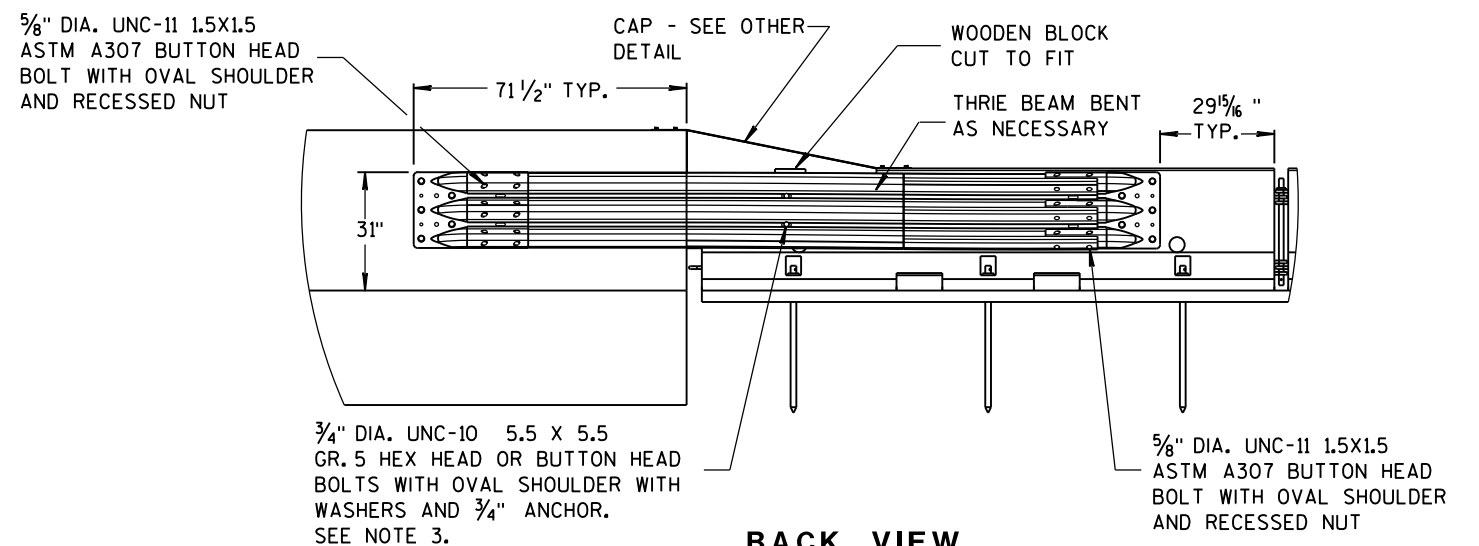


FRONT VIEW

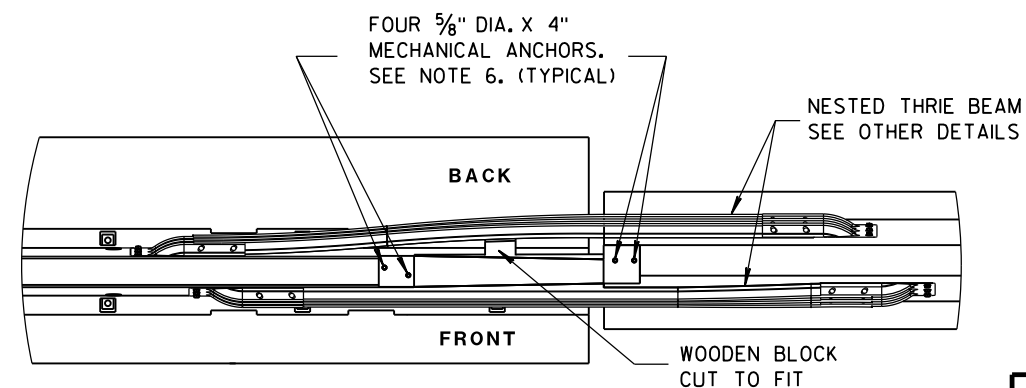
BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM



TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM



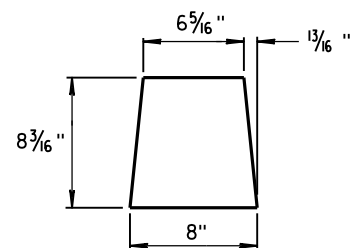
BACK VIEW



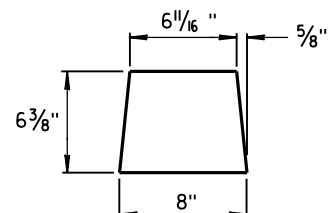
PLAN VIEW

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

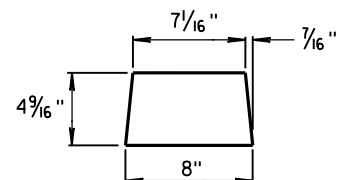
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



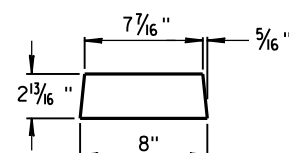
GUSSET 1



GUSSET 2

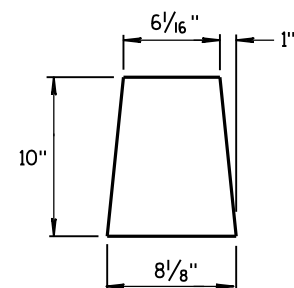


GUSSET 3

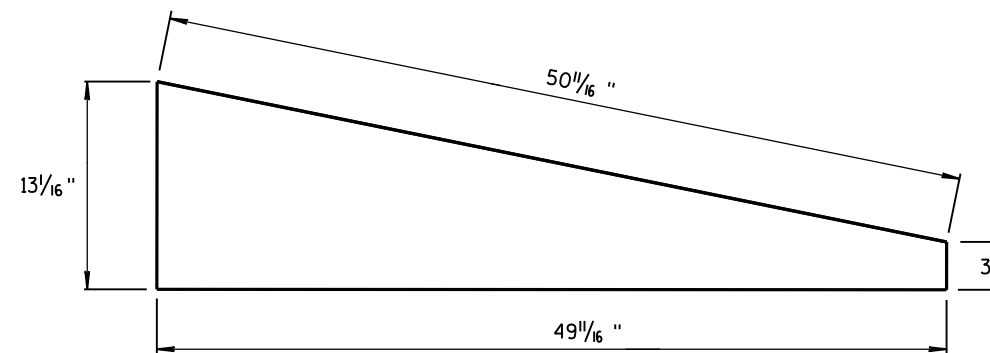


GUSSET 4

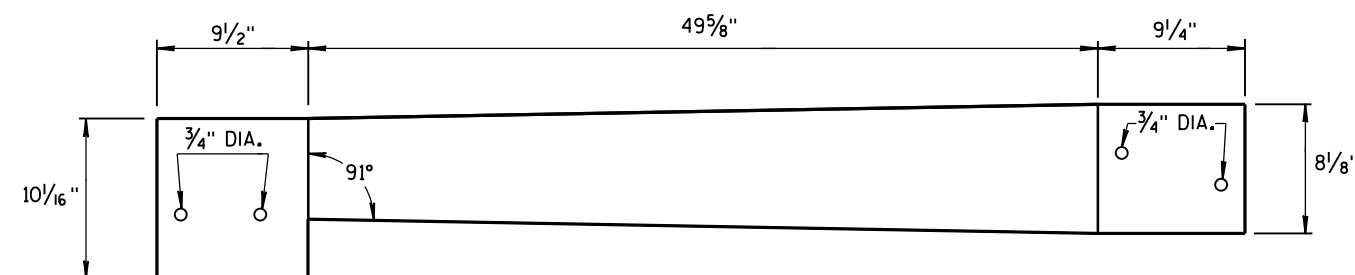
GUSSETS



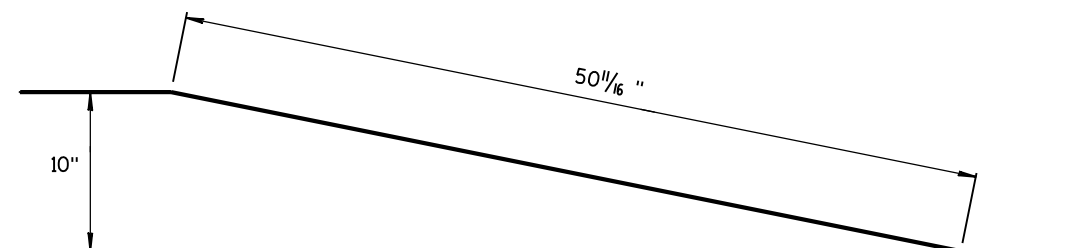
END PLATE



SIDE PLATE

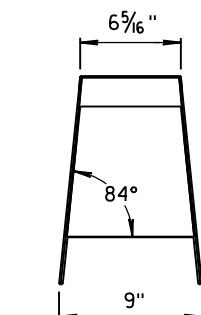
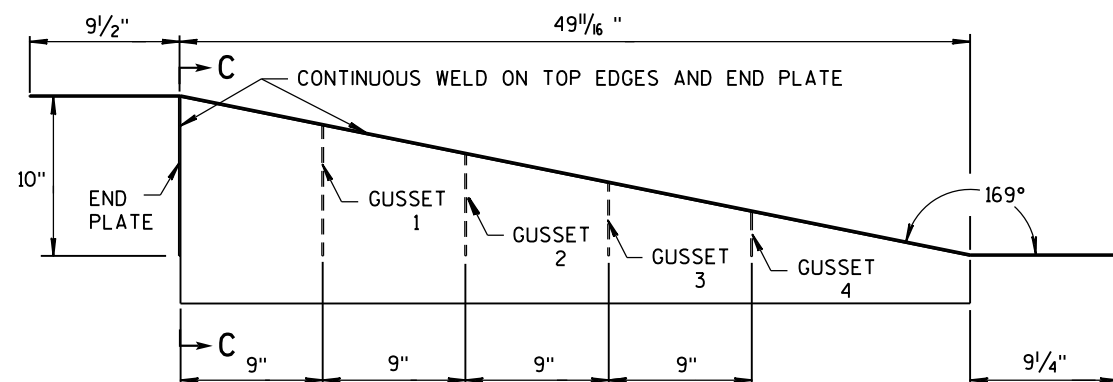
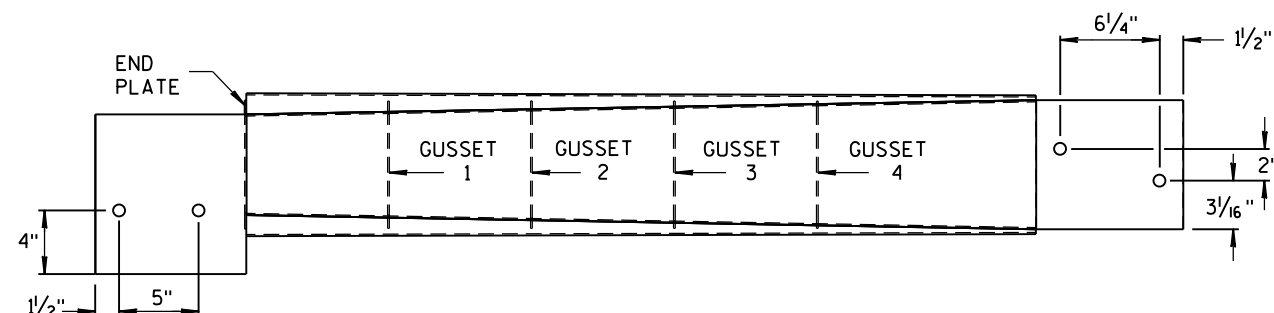


TOP PLATE



**SIDE, TOP AND END PLATES FOR CAP
FROM TEMPORARY CONCRETE BARRIER
TO 42" PERMANENT CONCRETE BARRIER**

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.



SECTION C-C

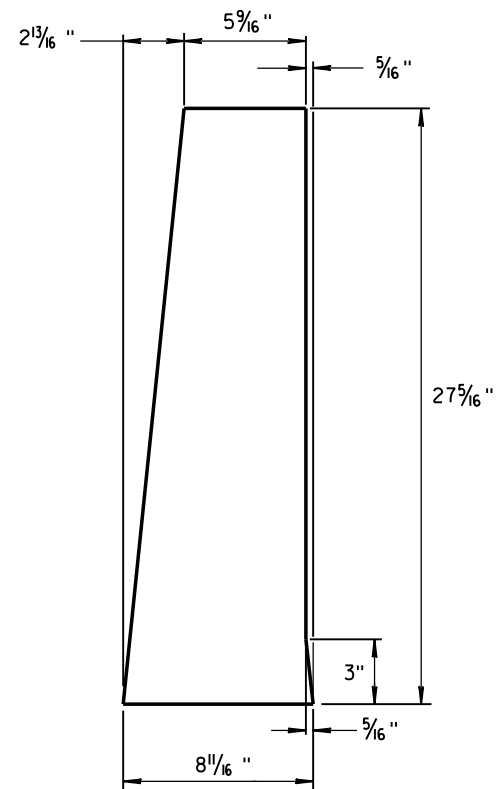
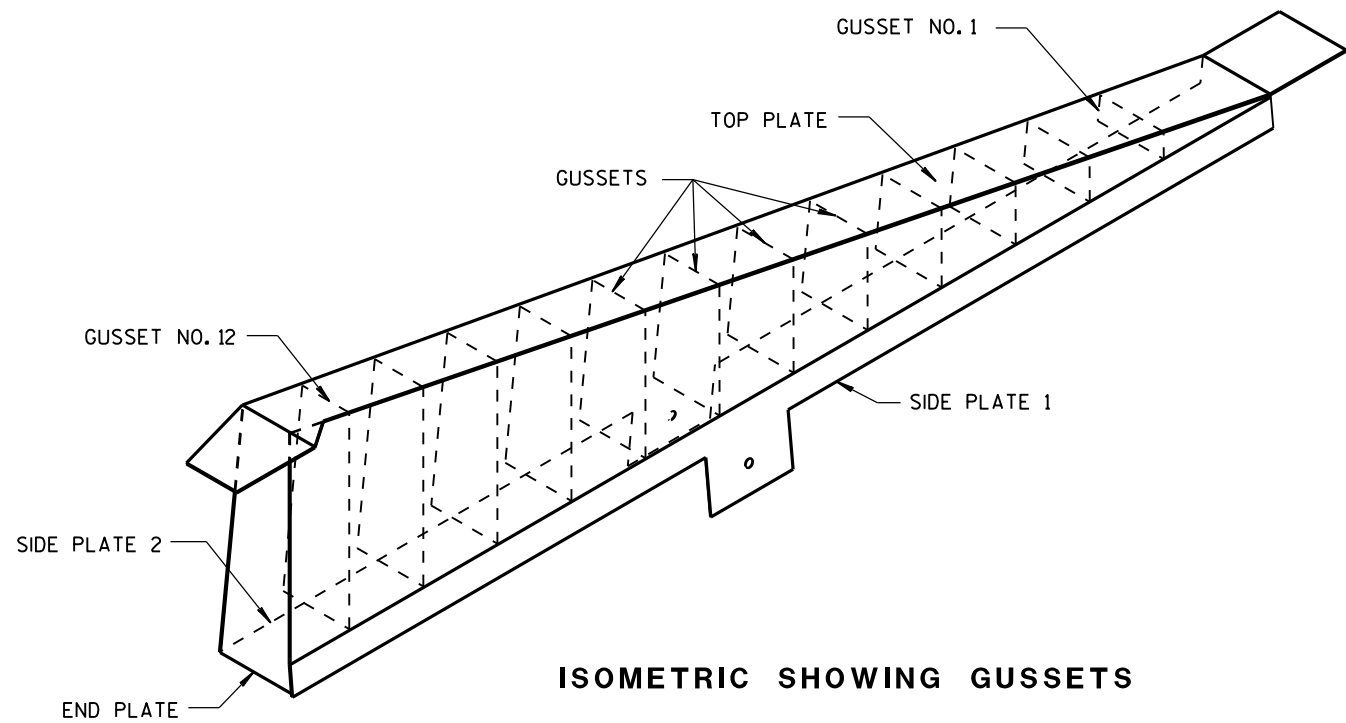
NOTES

1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

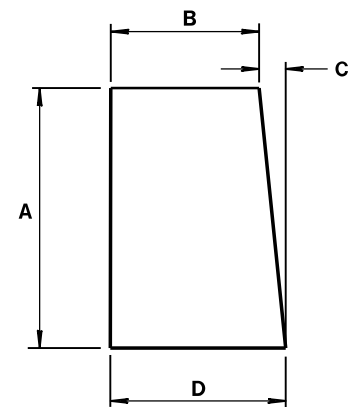
**CAP DETAILS FOR TEMPORARY CONCRETE
BARRIER TO 42" PERMANENT CONCRETE BARRIER**

**CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



END PLATE
1/8" STEEL PLATE

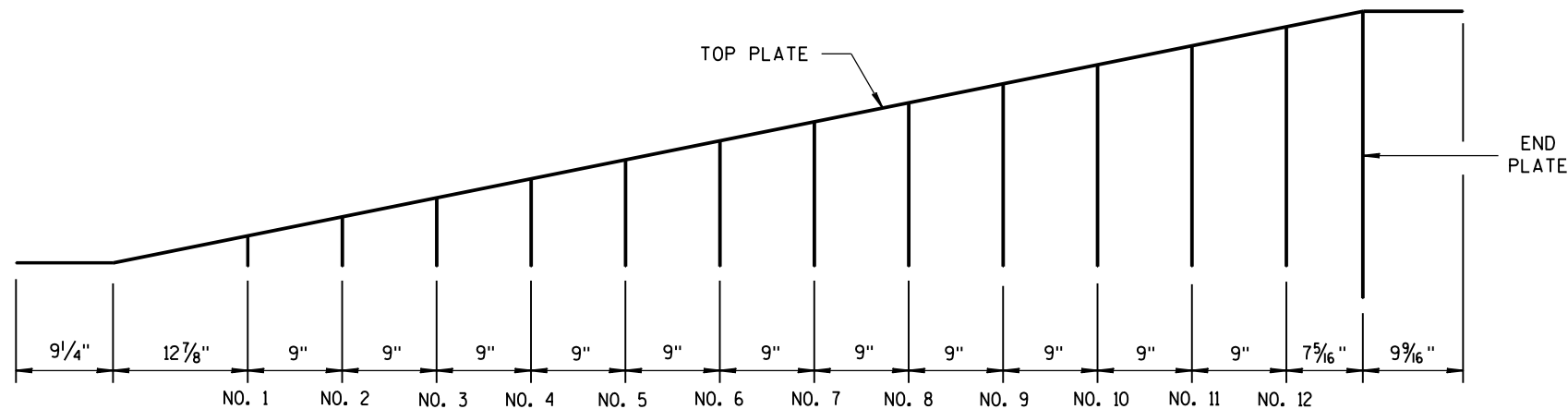


GUSSETS 1 - 12
ALL GUSSETS 1/8" STEEL PLATE

GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
1	2 7/8"	7 3/4"	1/4"	8
2	4 1/16 "	7 9/16 "	1/2"	8
3	6 1/2"	7 3/8 "	1 1/16 "	8 1/16 "
4	8 5/16 "	7 3/16 "	7/8"	8 1/16 "
5	10 1/8 "	7"	1 1/16 "	8 1/16 "
6	11 5/16 "	6 13/16 "	1 1/4"	8 1/16 "
7	13 3/4"	6 5/8 "	1 7/16 "	8 1/16 "
8	15 9/16 "	6 7/16 "	1 9/16 "	8 1/16 "
9	17 3/8"	6 1/4"	1 13/16 "	8 1/16 "
10	19 3/16 "	6 1/16 "	1 15/16 "	8 1/16 "
11	21"	5 7/8 "	2 3/16 "	8 1/16 "
12	22 13/16 "	5 11/16 "	2 5/16 "	8 1/16 "

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 STEEL AND GALVANIZED.

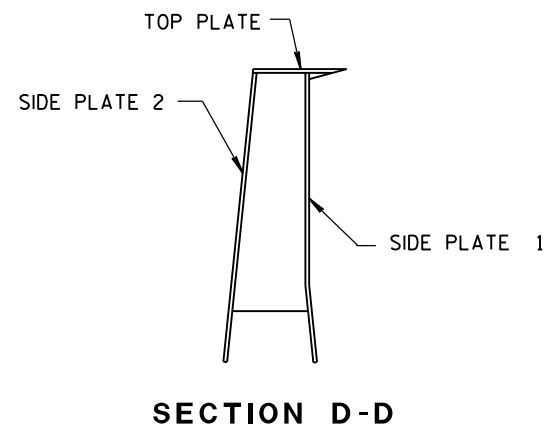
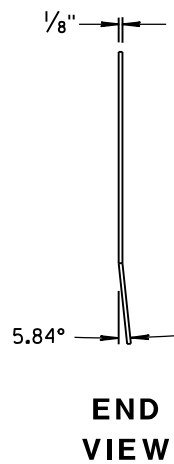
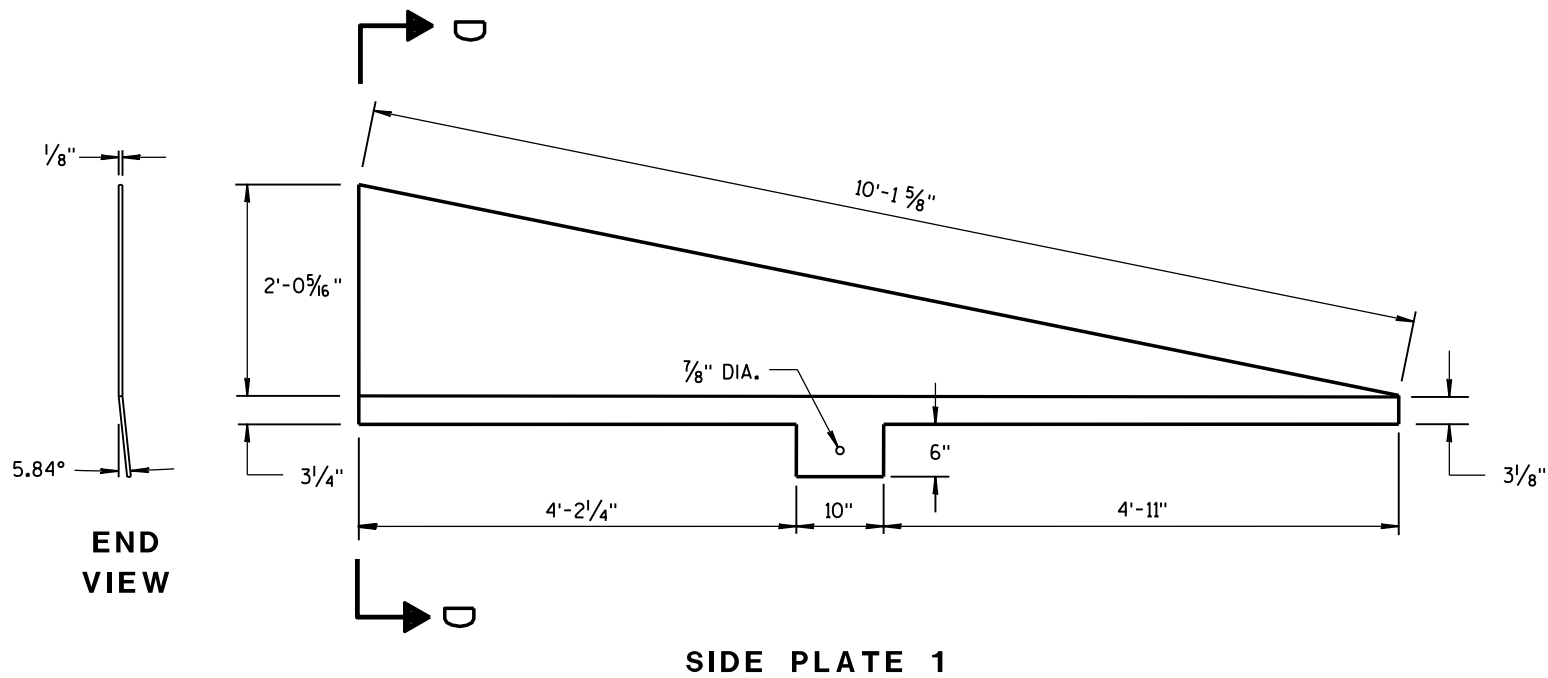
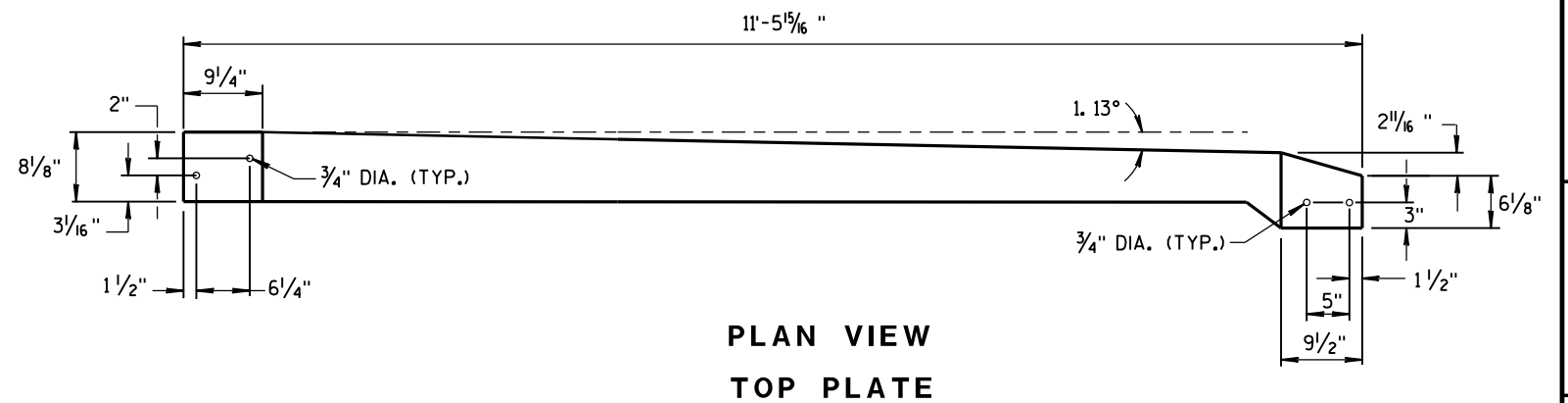
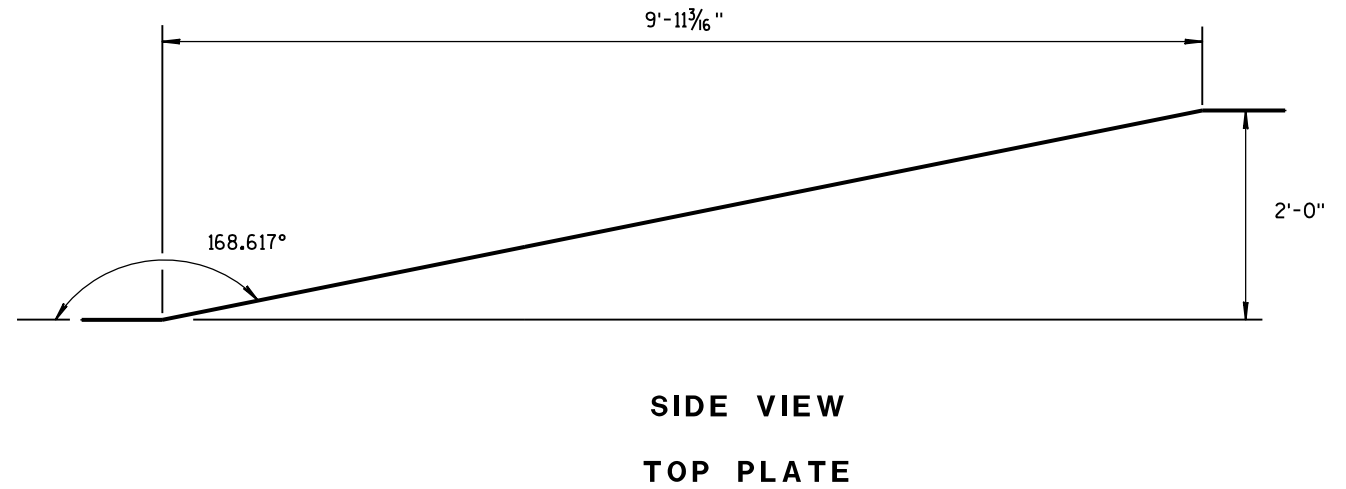
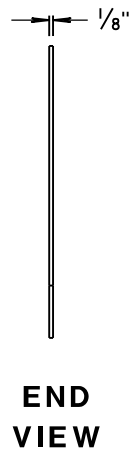
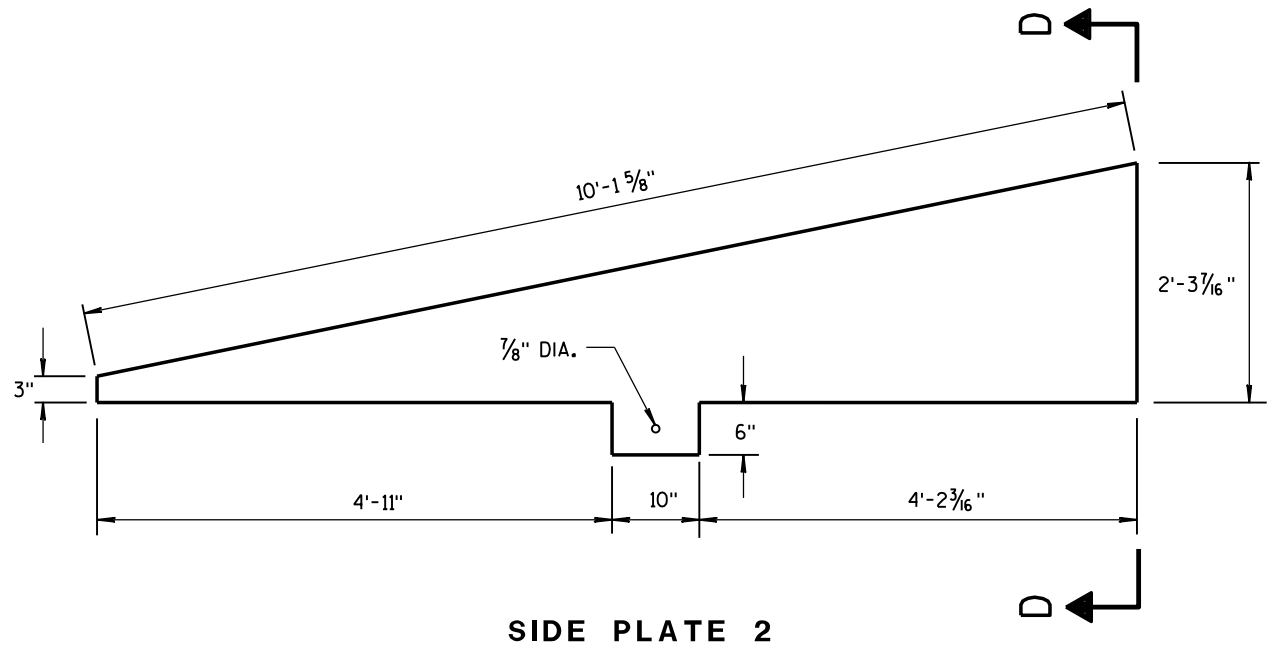
GUSSETS AND END PLATE ARE STITCH WELDED ON 3 SIDES. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE AND GUSSETS.



CAP DETAILS FOR TEMPORARY CONCRETE
BARRIER TO 56" PERMANENT CONCRETE BARRIER

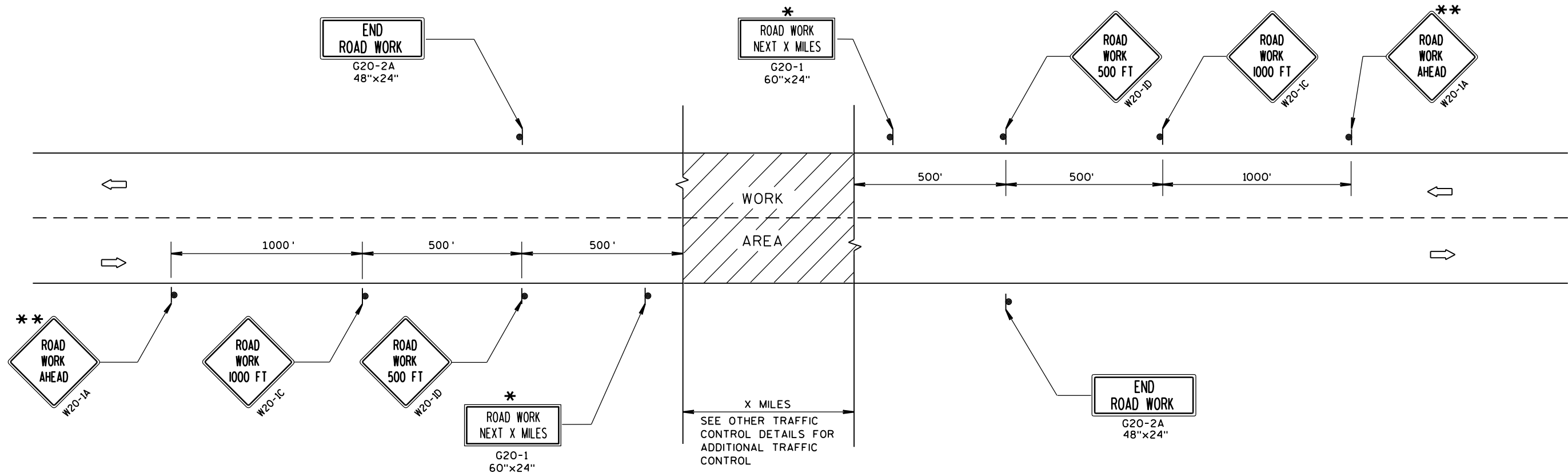
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



**CAP DETAILS FOR TEMPORARY CONCRETE
BARRIER TO 56" PERMANENT CONCRETE BARRIER**

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
APPROVED June 2014 DATE	/S/ Jerry H. Zoag ROADWAY STANDARD ENGINEER	54 INT
FHWA		



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

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

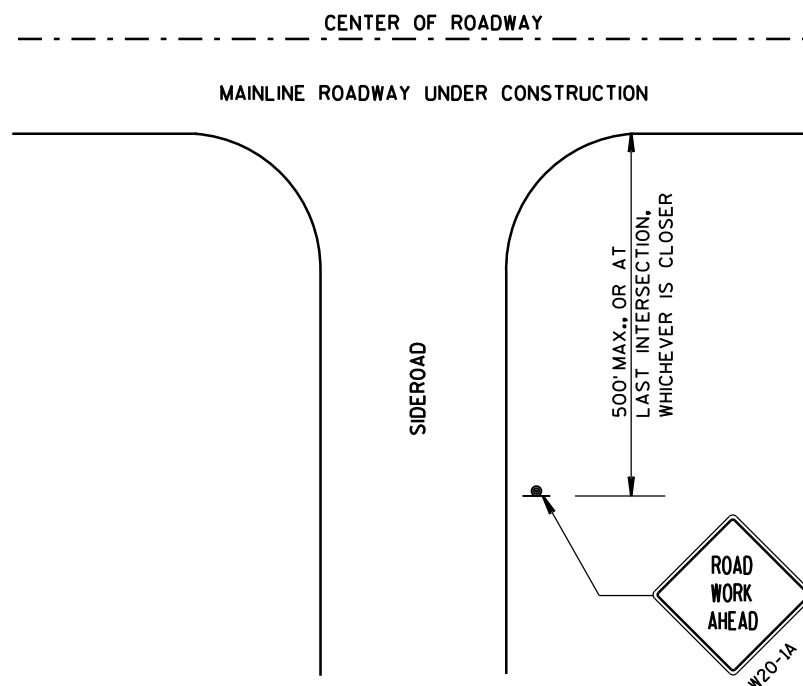
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

** PLACE ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



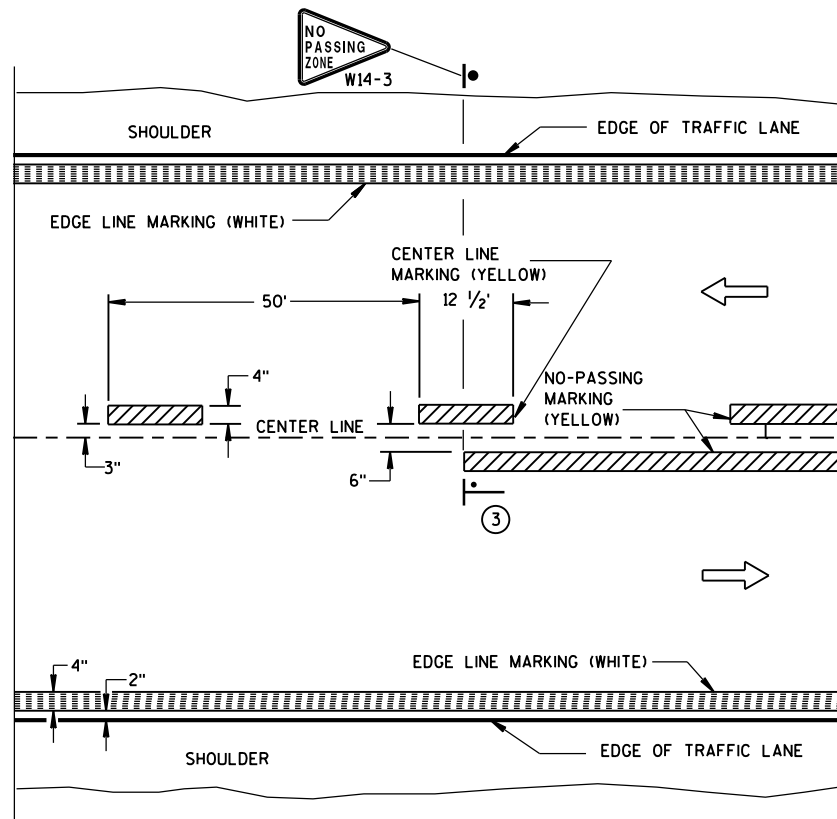
LEGEND

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

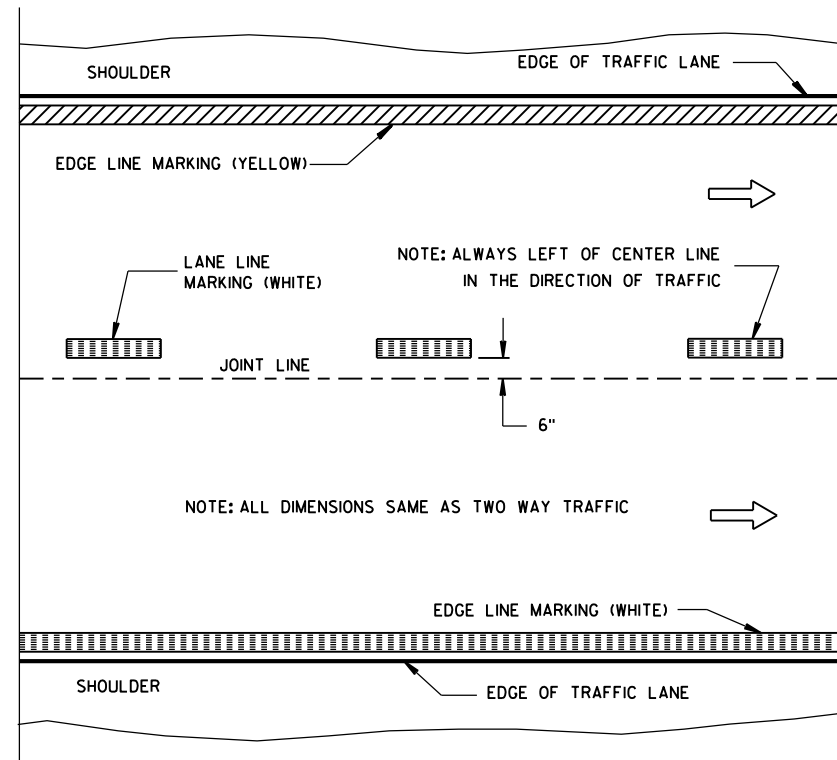
TRAFFIC CONTROL, ADVANCE
WARNING SIGNS 45 M.P.H.
OR GREATER TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

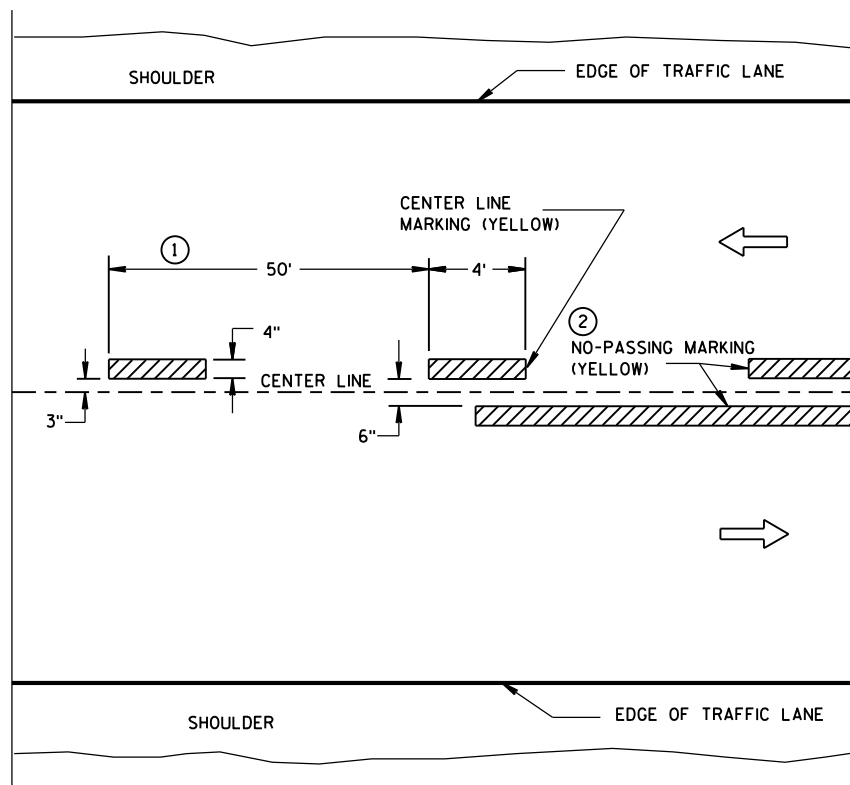


TWO WAY TRAFFIC

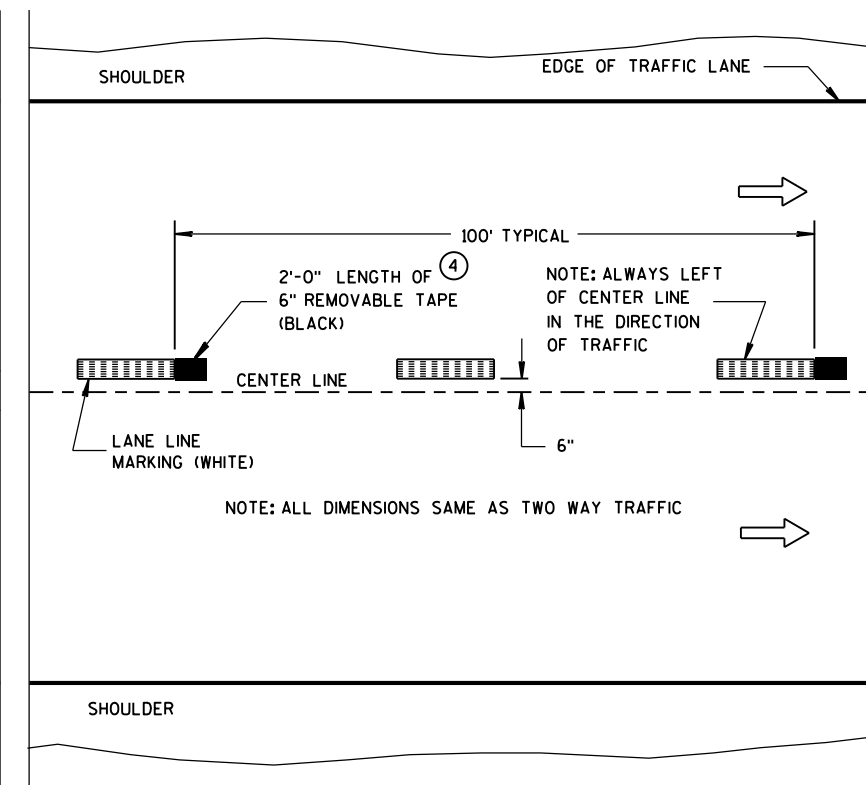


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

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

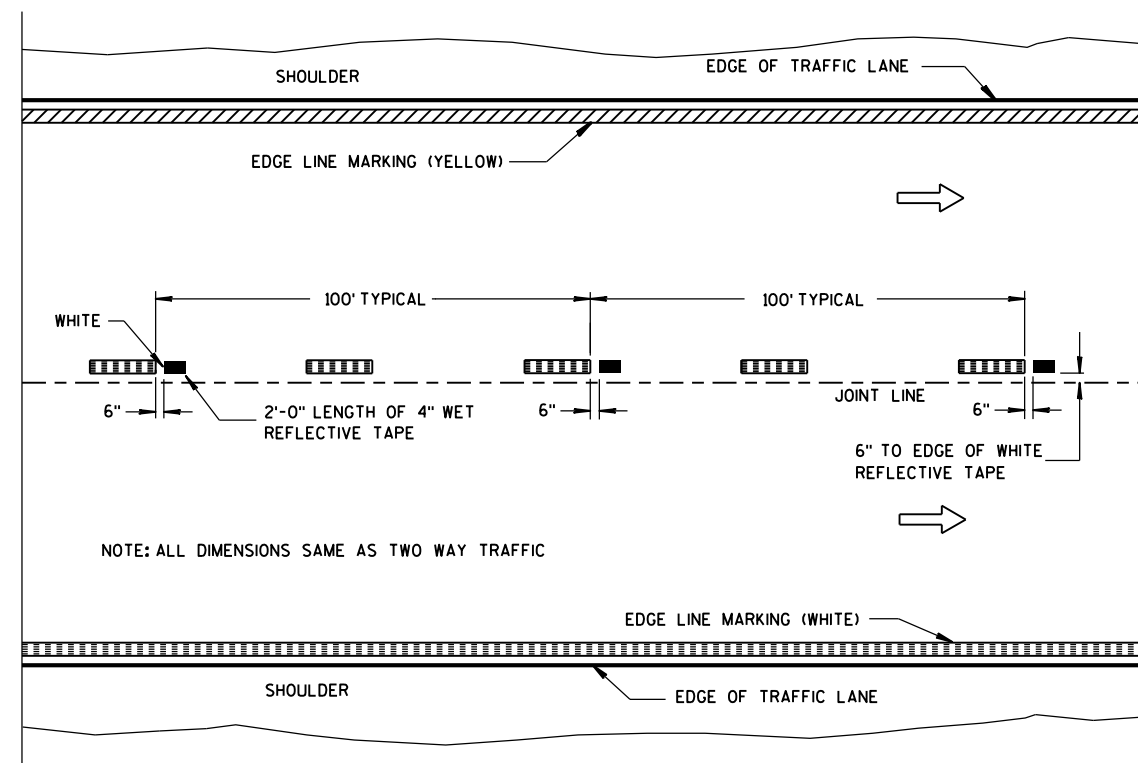
GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



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

LEGEND

- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

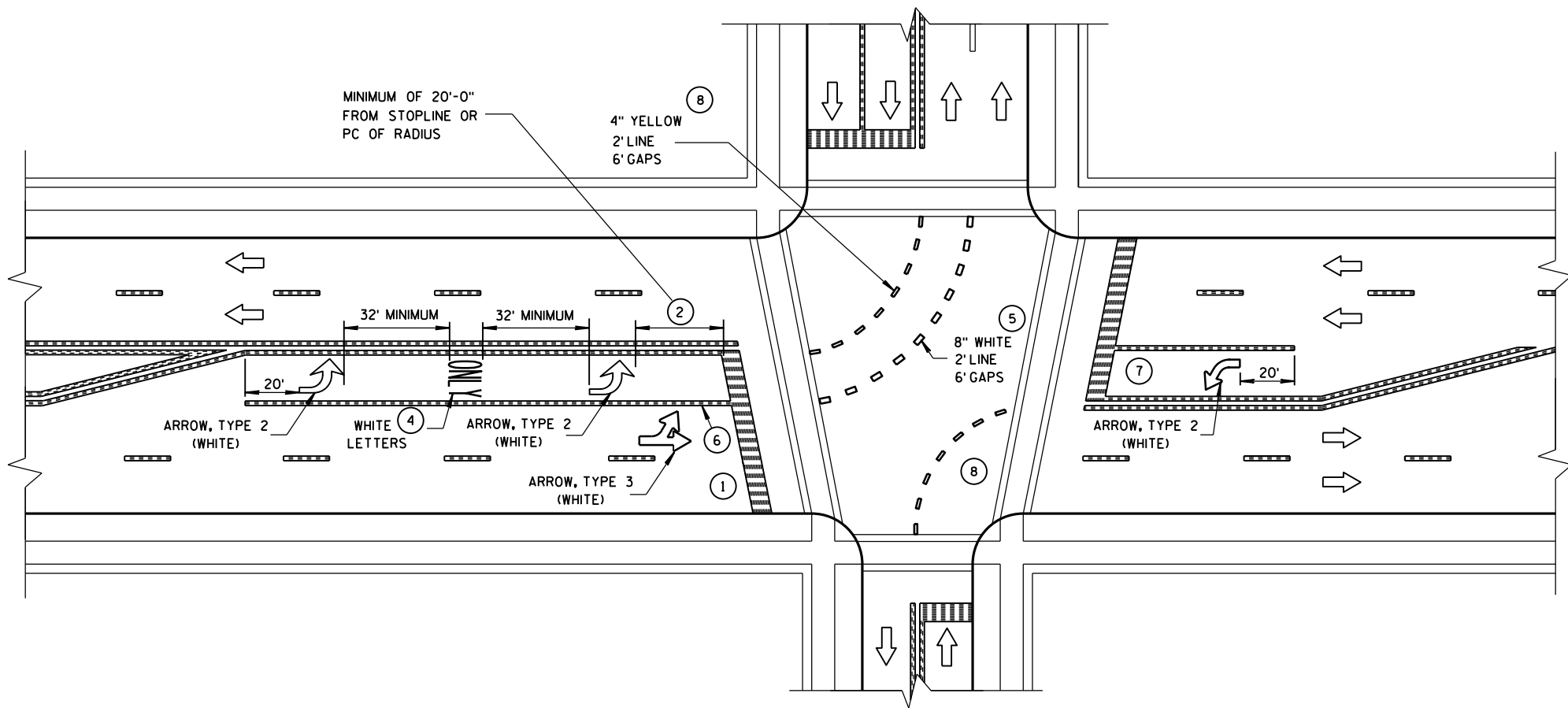
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-13-2013
DATE

FHWA

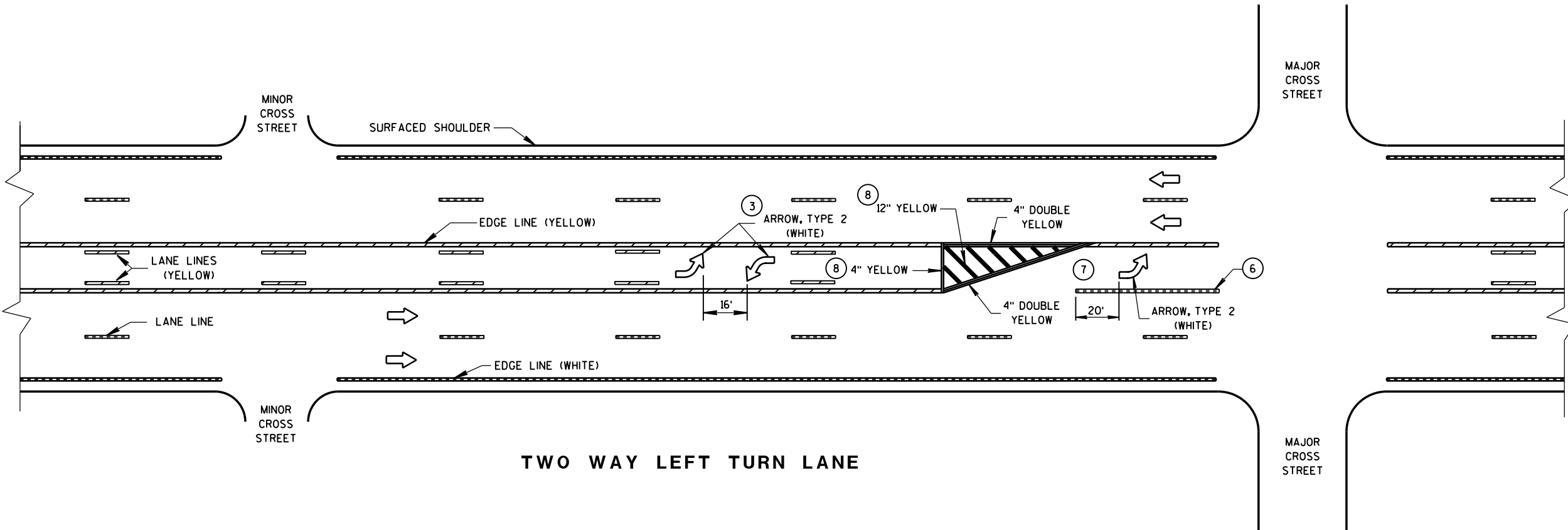
/S/ Travis Feltes
STATE TRAFFIC E 56



GENERAL NOTES

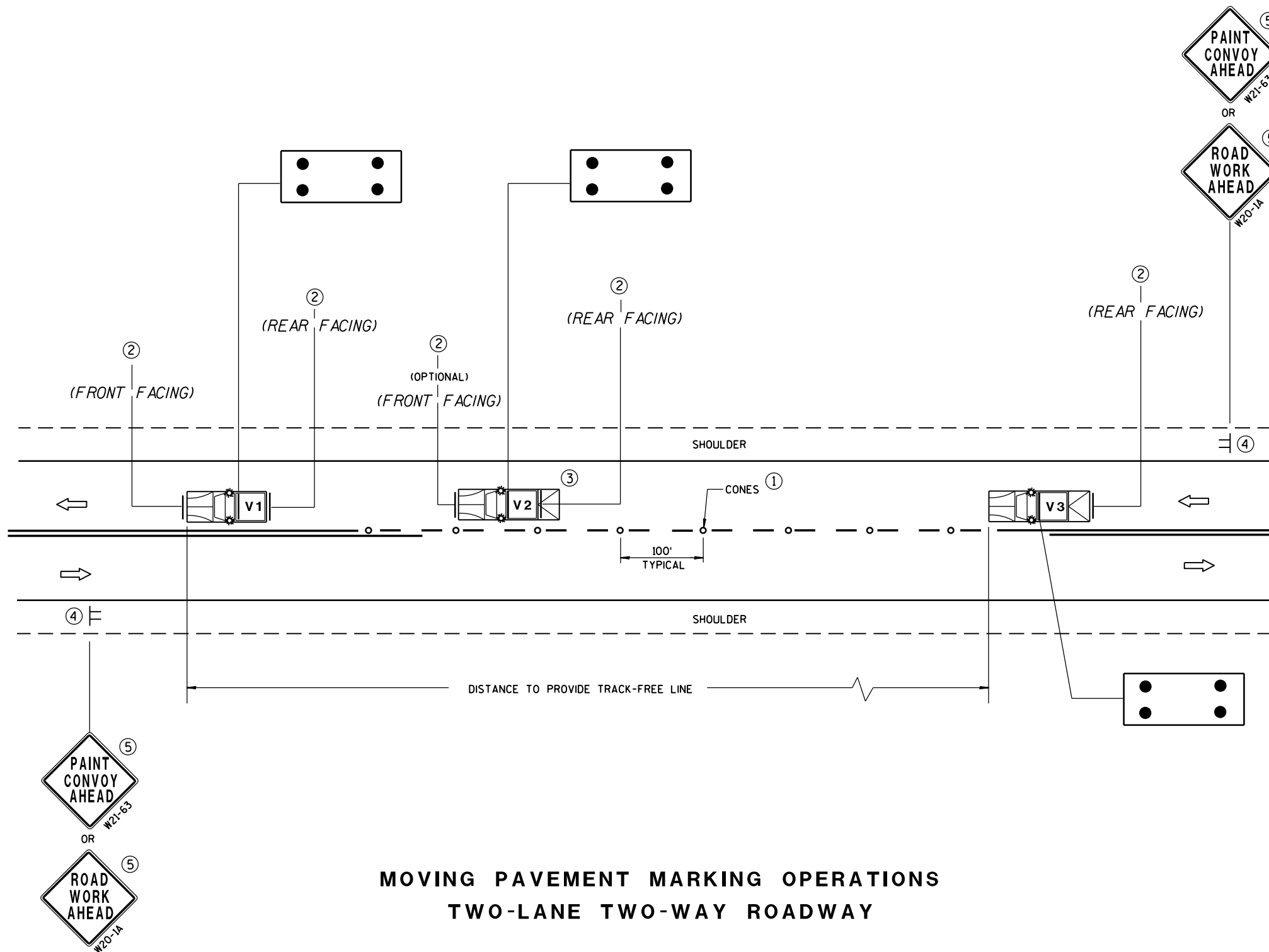
- 1 STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
- 2 DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
- 3 A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
- 4 ADD EXTRA SETS OF ONE ARROW AND ONE ONLY PER 160 FEET OR WHEN ON A CURVE.
- 5 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
- 6 8" WHITE
- 7 ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108 FEET.
- 8 REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (➡)
SHOWS DIRECTION OF TRAVEL



PAVEMENT MARKING
(LEFT TURN LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

GENERAL NOTES

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

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

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

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

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

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

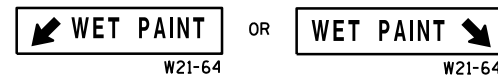
THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

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

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

② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.



③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.

④ SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

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

LEGEND

V1 LEAD VEHICLE

V2 SHADOW VEHICLE

V3 TRAIL VEHICLE WITH TMA

TMA TRUCK-MOUNTED ATTENUATOR

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

CONES

FLASHING ARROW PANEL (CAUTION)

MOVING PAVEMENT MARKING
OPERATION
TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

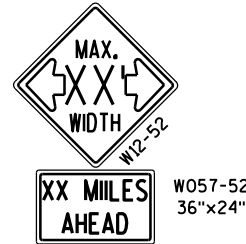
APPROVED

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

FHWA

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- REMOVING PAVEMENT MARKING
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA



INSTALL ON EACH APPROACH AT THE CLOSEST INTERSECTION WITH A STATE OR COUNTY TRUNK HIGHWAY, OR AS DIRECTED BY THE ENGINEER. WIDTH ON SIGN TO BE APPROX. 1 FOOT LESS THAN AVAILABLE WIDTH (OMIT IF AVAILABLE WIDTH IS MORE THAN 16 FEET).



LOCATED 500 FEET IN ADVANCE OF R2-1 SIGN AND 500 FEET BEYOND THE "ROAD WORK 1 MILE" SIGN.



R2-1
48"x60"
(BLACK AND WHITE)

IF THE REGULATORY SPEED HAS BEEN REDUCED, A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. THERE SHOULD BE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY 2 OR 3 MILES.

* INCLUDE RESUME SPEED LIMIT SIGN A MINIMUM OF 200 FEET (500 FEET DESIRABLE) AFTER END ROAD WORK SIGNS.

GENERAL NOTES

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

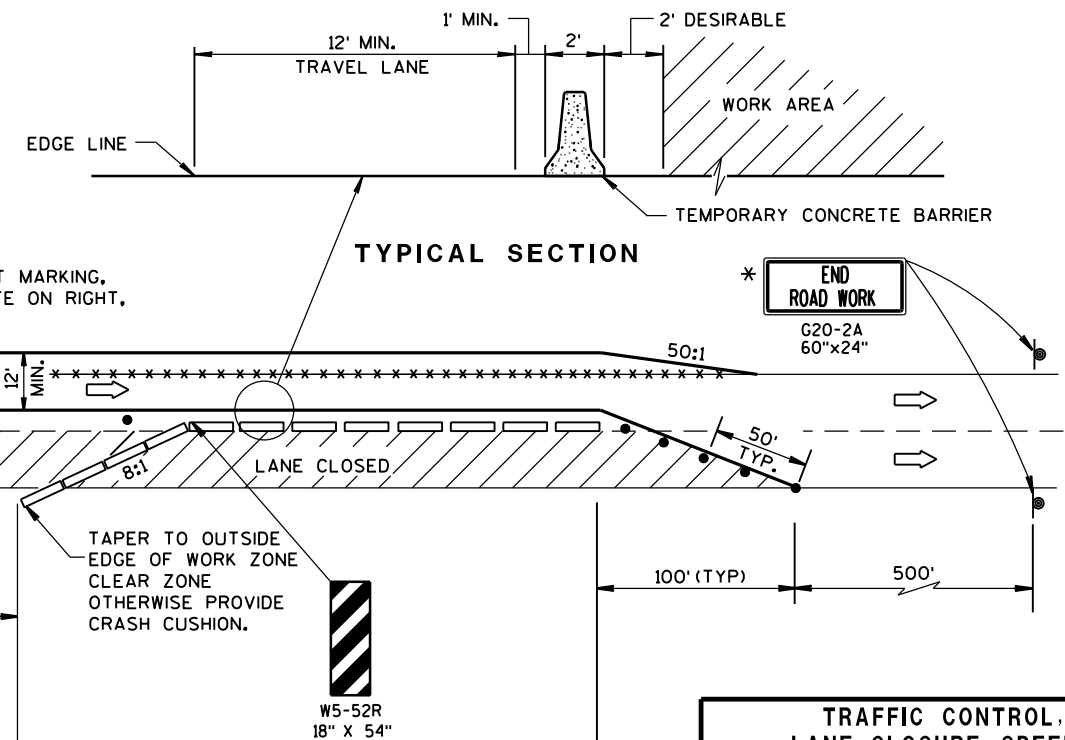
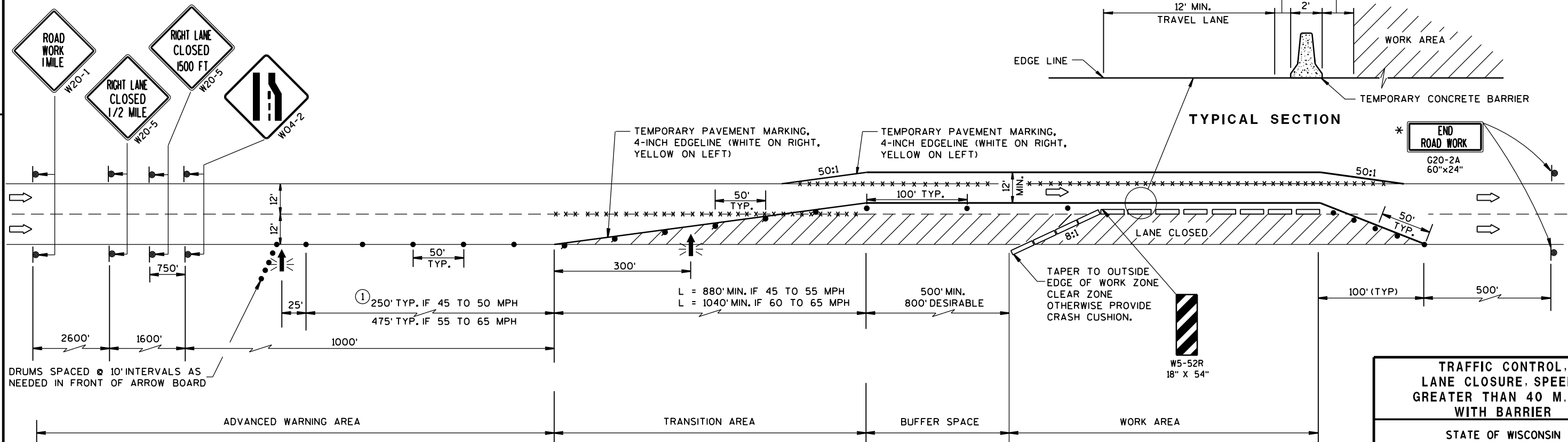
1. CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUM TAPER.

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

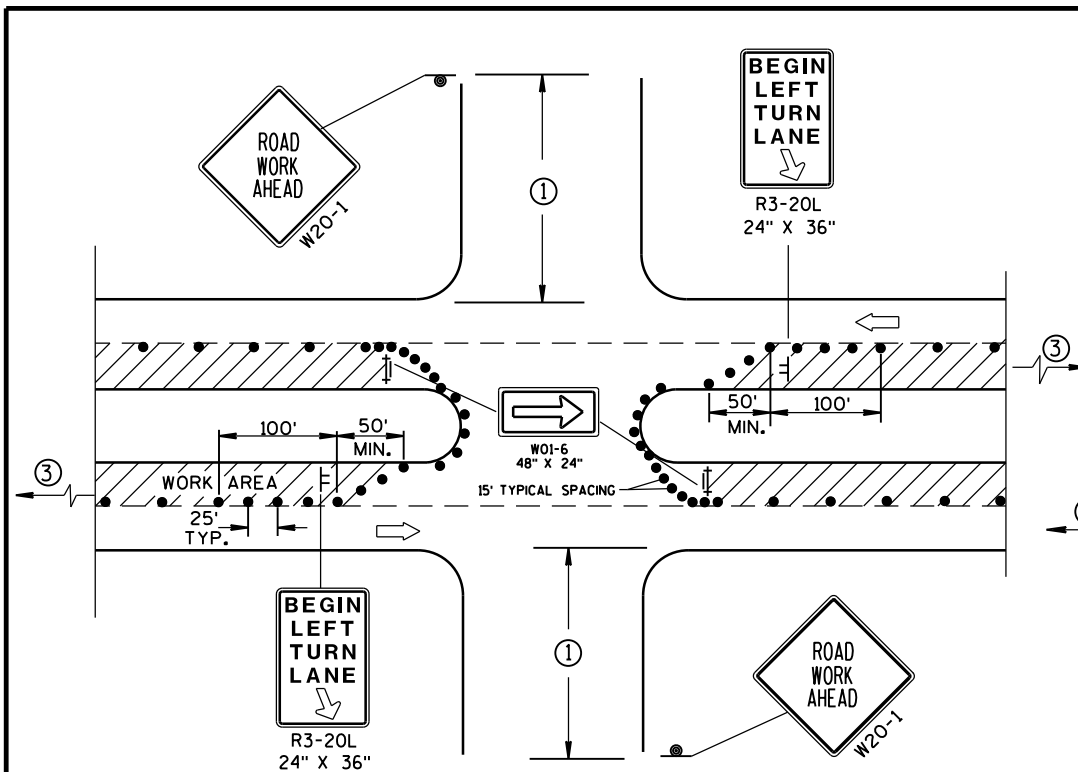
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

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

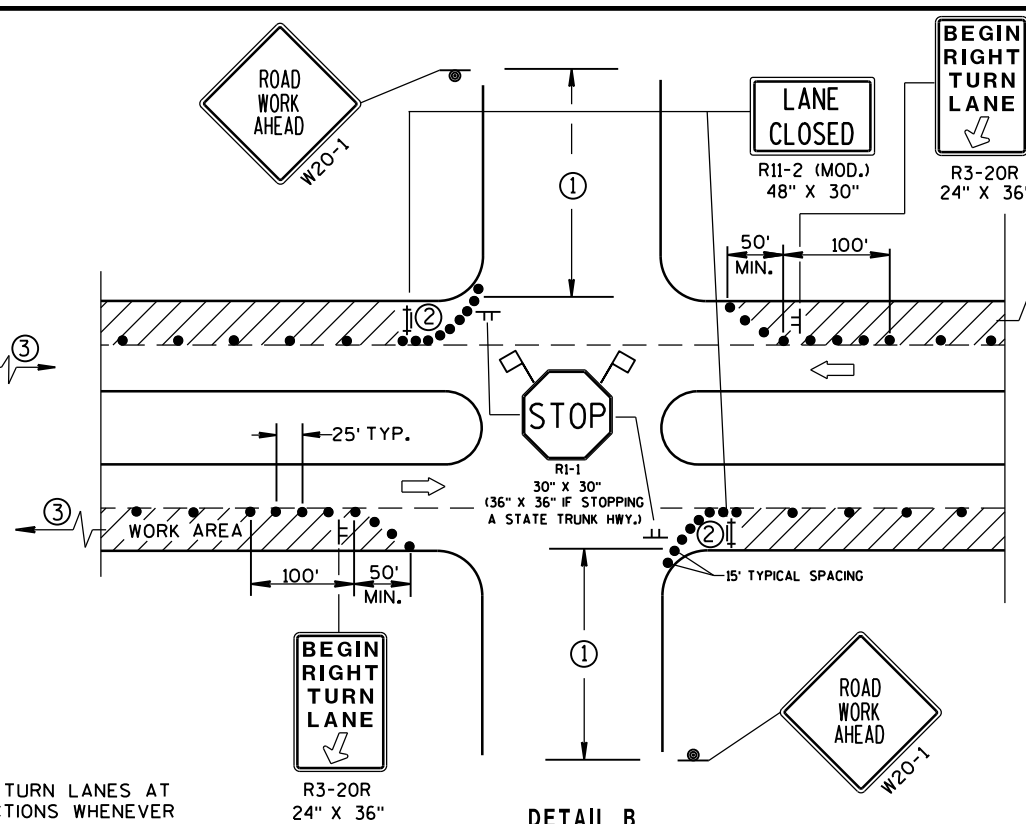


TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
APPROVED 8/2013	/S/ Travis Feltes	
DATE	STATE TRAFFIC ENGINEER	SIGN
FHWA		



DETAIL A
FOR LEFT LANE CLOSURE AT
INTERSECTION OR MEDIAN OPENING

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



DETAIL B
FOR RIGHT LANE CLOSURE
AT INTERSECTION

GENERAL NOTES

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

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

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

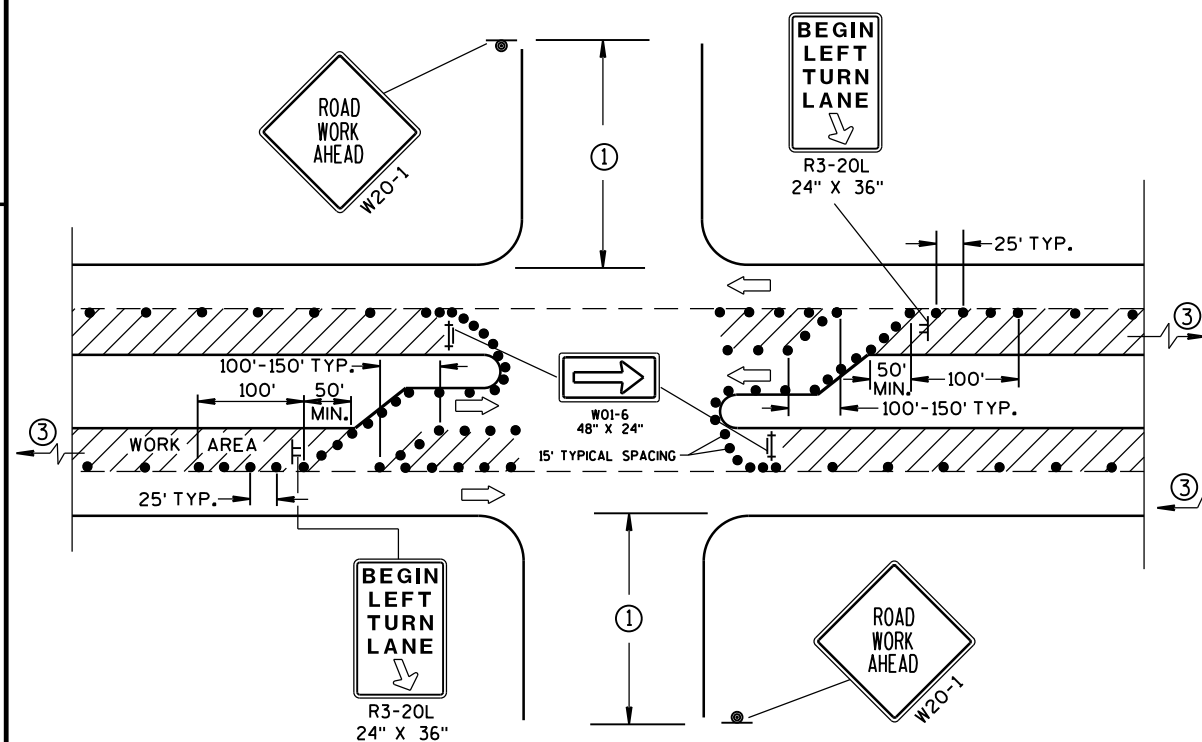
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

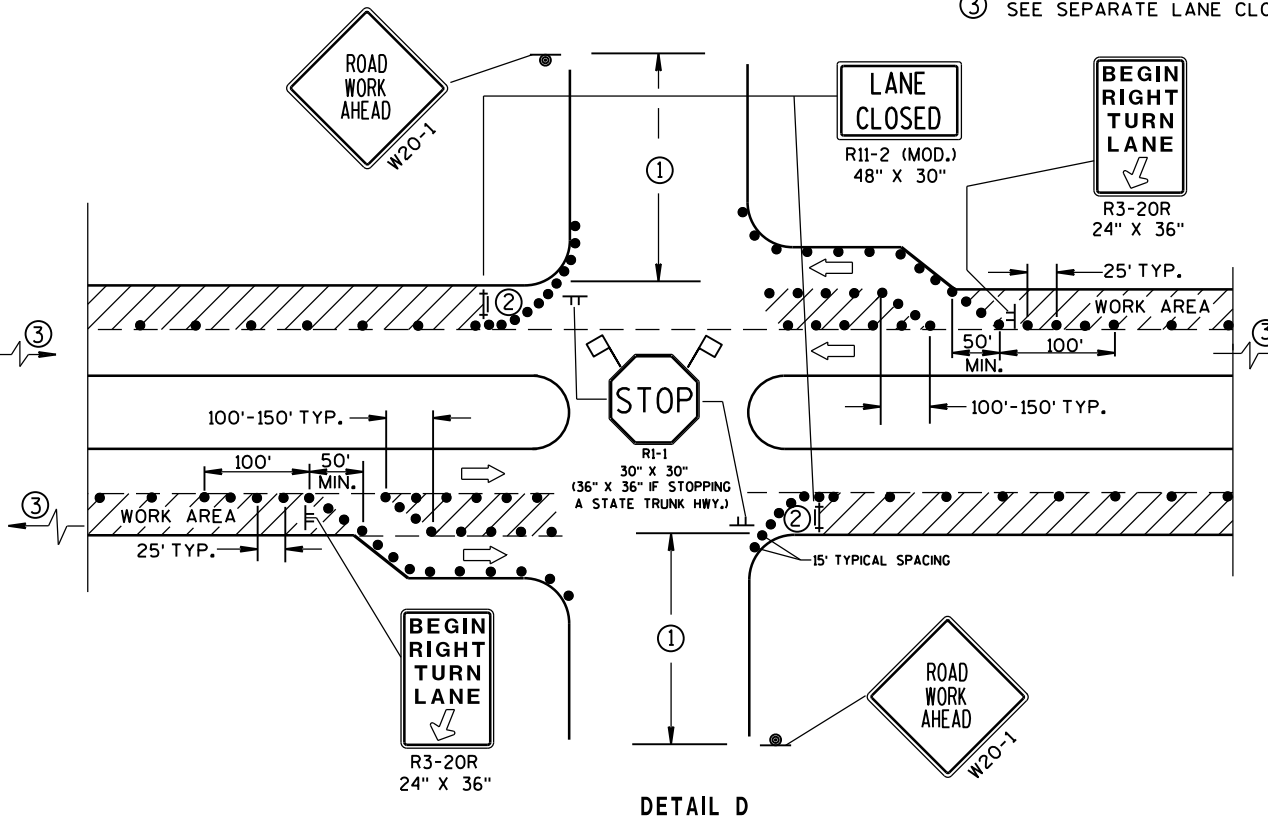
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE 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.

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



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



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

LEGEND

- TRAFFIC CONTROL DRUM
- ⊙ SIGN ON PERMANENT SUPPORT
- ⊢ SIGN ON TEMPORARY SUPPORT (5' MIN. MOUNTING HEIGHT)
- ⊢ TYPE III BARRICADE WITH ATTACHED SIGN AND TYPE "A" WARNING LIGHT (FLASHING)
- ➡ DIRECTION OF TRAFFIC
- ⚑ FLAGS, 16" X 16" MIN., (ORANGE)
- ▨ WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Nov. 2014 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINE 60 SIGN
FHWA

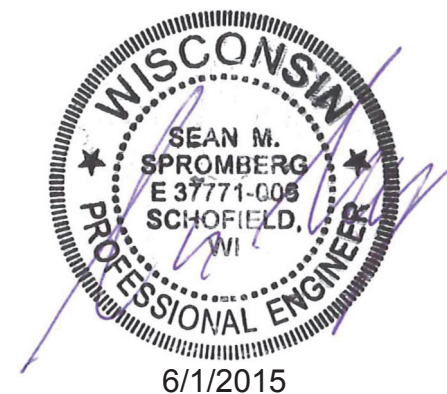
LIVE LOAD
INVENTORY RATING: HS-28
OPERATIONAL RATING: HS-47
WISCONSIN STANDARD PERMIT VEHICLE (Wis-SPV): 250 KIPS
LOAD RATINGS BASED ON WISDOT PROJECT I.D. 1053-02-60.

A.A.D.T. (2035) = 18,400
RDS = 70 MPH

DRAWINGS SHALL NOT BE SCALED.

THE COLOR OF THE FINISH TOP COAT SHALL BE GRAY, (FEDERAL STANDARD COLOR NO. 26293) OR SIMILAR COLOR APPROVED BY THE ENGINEER.

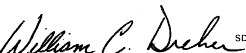
DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

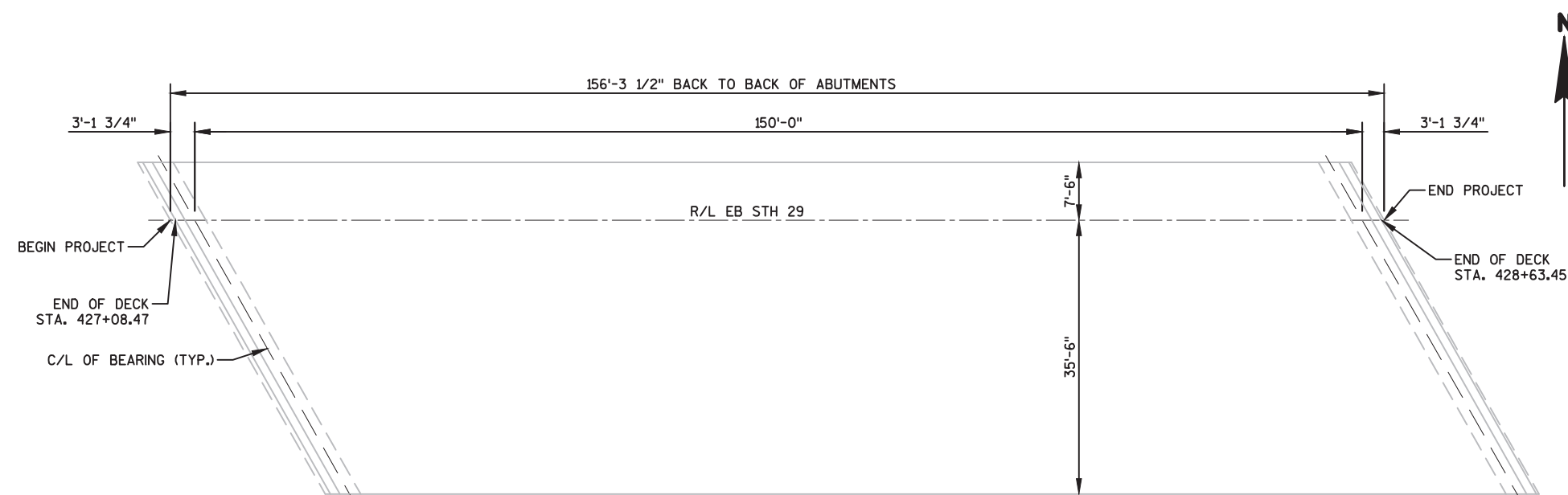


BID ITEM #	BID ITEMS	UNIT	TOTAL
517.1800.S.01	STRUCTURE REPAINTING RECYCLED ABRASIVE B-37-179	LS	1
517.4500.S.01	NEGATIVE PRESSURE CONTAINMENT AND COLLECTION OF WASTE MATERIALS B-37-179	LS	1
517.6001.S	PORTABLE DECONTAMINATION FACILITY	EACH	0.5
604.0500	SLOPE PAVING CRUSHED AGGREGATE	SY	30
604.9015.S	RESEAL CRUSHED AGGREGATE SLOPE PAVING	SY	321

BUREAU OF STRUCTURES CONTACT
WILLIAM DREHER: 608-266-8489

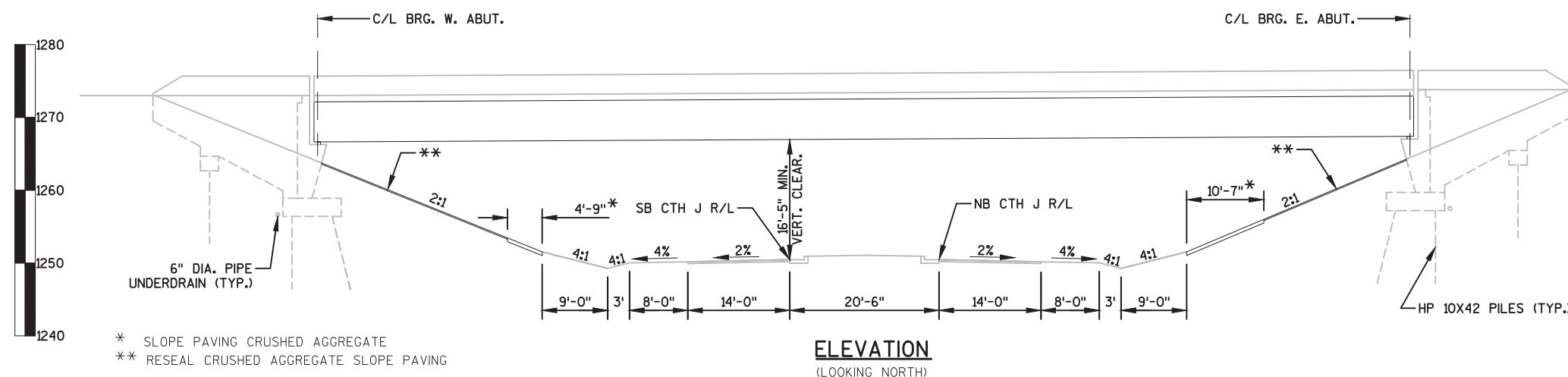
CONSULTANT DESIGN CONTACT
SEAN SPROMBERG: 715-845-8000

NO.		DATE		REVISION		BY	
ORIGINAL PLANS PREPARED BY BECHER HOPPE 330 Fourth Street • PO Box 80 Wausau, WI • 54402-8000 715.845.8000 • Fax 715.845.8000 becherhoppe.com							
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION							
ACCEPTED		 <i>William C. Dreher</i> SDR CHIEF STRUCTURES DESIGN ENGINEER				08/23/11 DATE	
B-37-179							
STH 29 EB OVER CTH J							
COUNTY		MARATHON		TOWN/CITY/VILLAGE		WESTON	
DESIGN SPEC. REHABILITATION N/A							
DESIGNED BY		DESIGN CK'D.		DRAWN BY		PLANS CK'D.	
DJG		SMS		DJG		SMS	
GENERAL PLAN & ELEVATION						SHEET 1 OF	
						61	

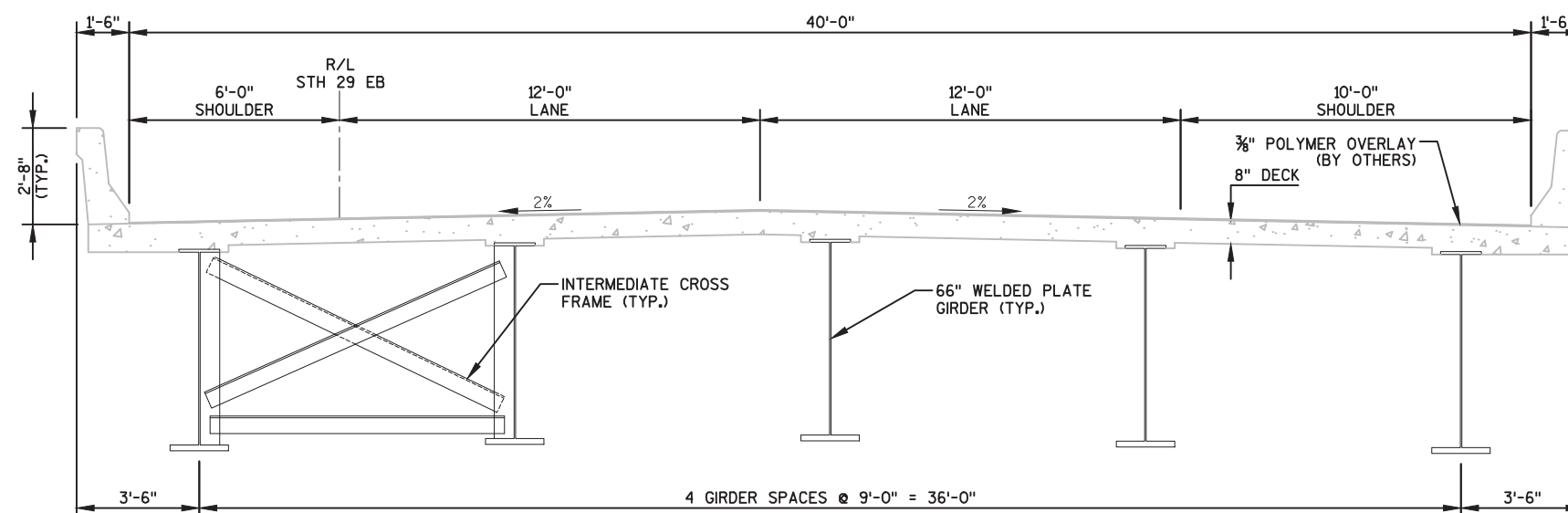


PLAN

SINGLE SPAN WELDED PLATE GIRDER STRUCTURE



ELEVATION
(LOOKING NORTH)



CROSS SECTION THRU ROADWAY
(LOOKING EAST)

DESIGN DATA

LIVE LOAD
INVENTORY RATING: HS-28
OPERATIONAL RATING: HS-47
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS
LOAD RATINGS BASED ON WISDOT PROJECT I.D. 1053-02-60.

TRAFFIC DATA

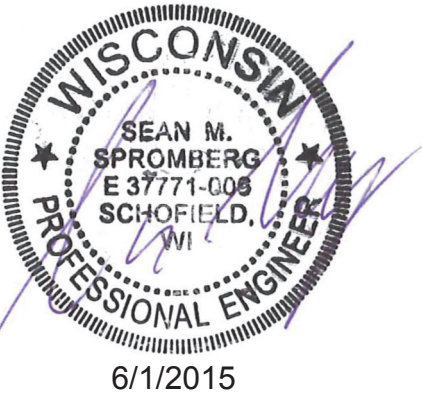
A.A.D.T. (2035) = 18,400
RDS = 70 MPH

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

THE COLOR OF THE FINISH TOP COAT SHALL BE GRAY, (FEDERAL STANDARD COLOR NO. 26293) OR SIMILAR COLOR APPROVED BY THE ENGINEER.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.



TOTAL ESTIMATED QUANTITIES

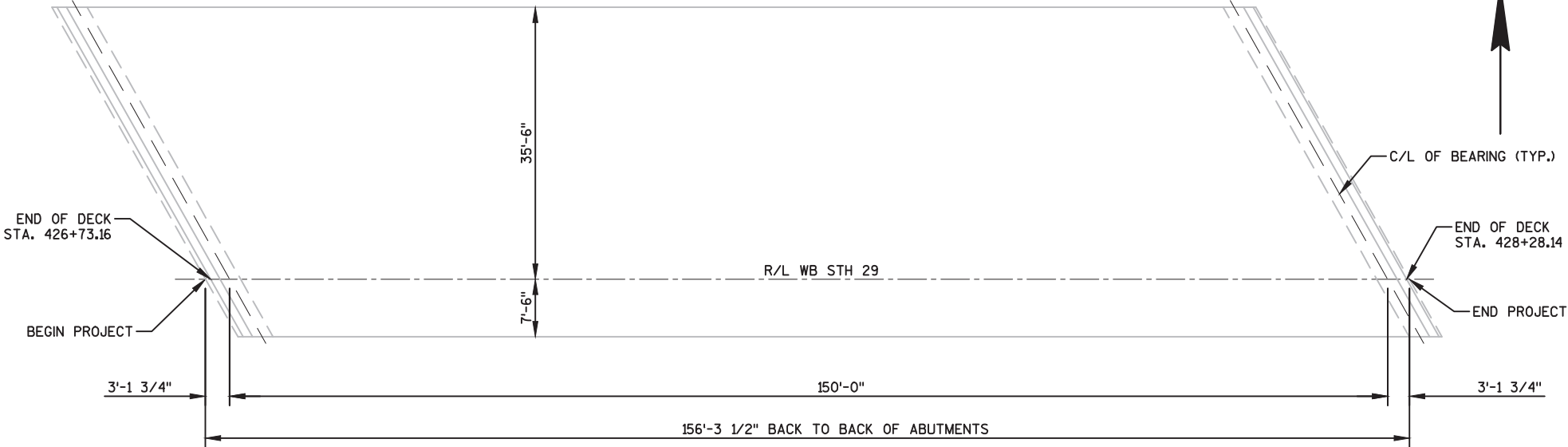
BID ITEM #	BID ITEMS	UNIT	TOTAL
517.1800.S.02	STRUCTURE REPAINTING RECYCLED ABRASIVE B-37-180	LS	1
517.4500.S.02	NEGATIVE PRESSURE CONTAINMENT AND COLLECTION OF WASTE MATERIALS B-37-180	LS	1
517.6001.S	PORTABLE DECONTAMINATION FACILITY	EACH	0.5
604.0500	SLOPE PAVING CRUSHED AGGREGATE	SY	36
604.9015.S	RESEAL CRUSHED AGGREGATE SLOPE PAVING	SY	323

CONTACTS

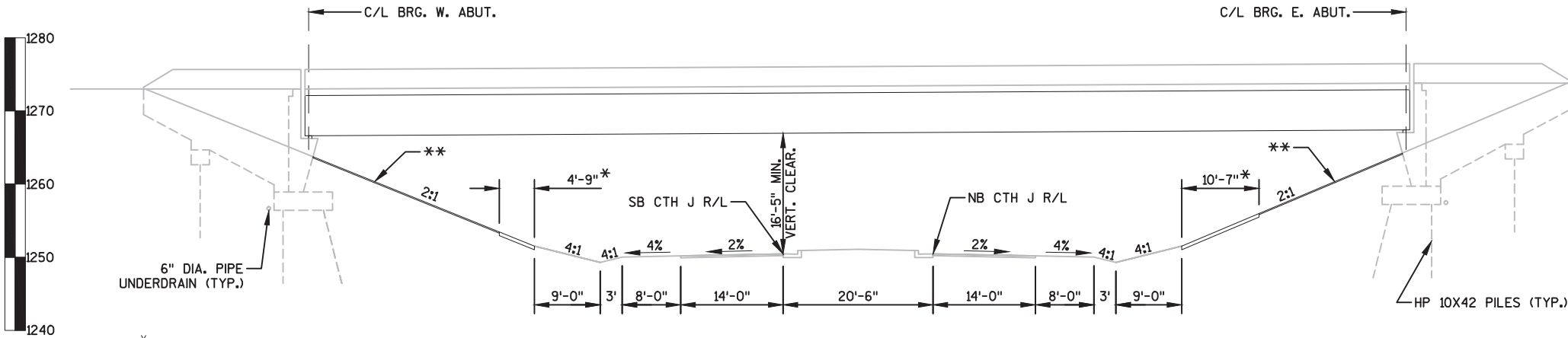
BUREAU OF STRUCTURES CONTACT
WILLIAM DREHER: 608-266-8489

CONSULTANT DESIGN CONTACT
SEAN SPROMBERG: 715-845-8000

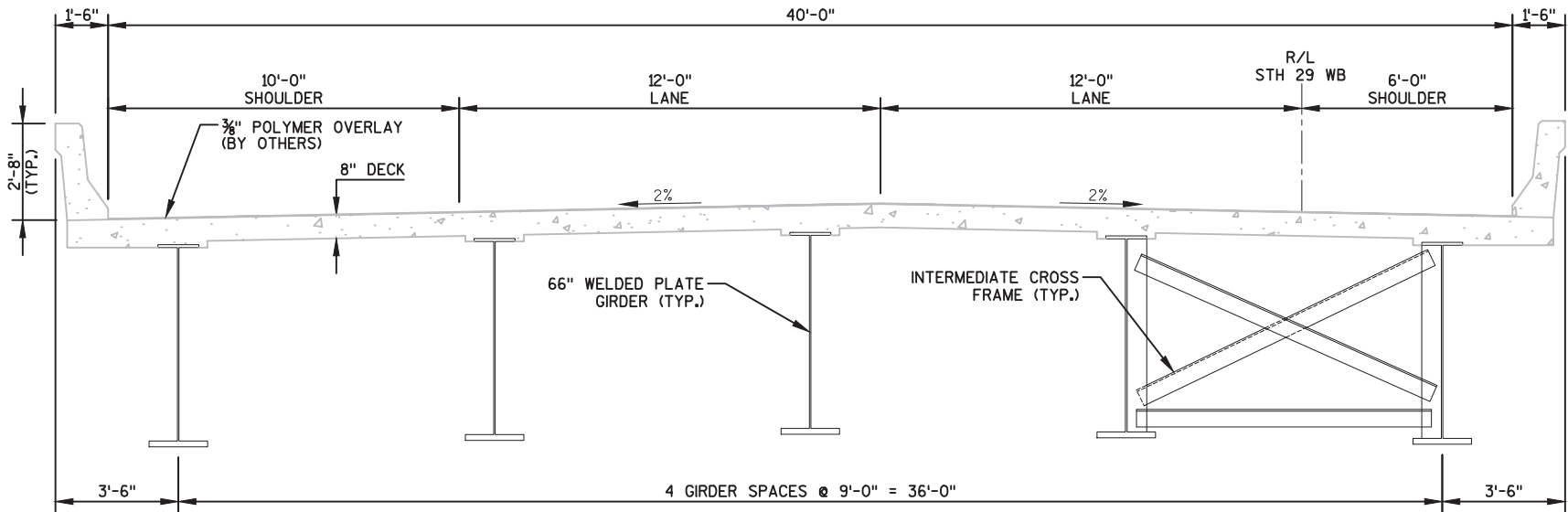
NO.	DATE	REVISION	BY
ORIGINAL PLANS PREPARED BY			
BECHER HOPPE		330 Fourth Street • PO Box 8000 Wausau, WI • 54402-8000 715.845.8000 • Fax 715.845.8008 becherhoppe.com	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED	<i>William C. Dreher</i> SDR	DATE	08/23/16
CHIEF STRUCTURES DESIGN ENGINEER			
B-37-180			
STH 29 WB OVER CTH J			
COUNTY	MARATHON	TOWN/CITY/VILLAGE	WESTON
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	DJG	DESIGN CK'D.	SMS
DRAWN BY	DJG	PLANS CK'D.	SMS
GENERAL PLAN & ELEVATION			SHEET 1 OF 1
			62



PLAN
SINGLE SPAN WELDED PLATE GIRDER STRUCTURE



ELEVATION
(LOOKING NORTH)



CROSS SECTION THRU ROADWAY
(LOOKING EAST)

* SLOPE PAVING CRUSHED AGGREGATE
** RESEAL CRUSHED AGGREGATE SLOPE PAVING

DESIGN DATA

LIVE LOAD
INVENTORY RATING: HS-27
OPERATIONAL RATING: HS-45
WISCONSIN STANDARD PERMIT VEHICLE (Wis-SPV): 250 KIPS
LOAD RATINGS BASED ON WISDOT PROJECT I.D. 1053-02-60.

TRAFFIC DATA

A.A.D.T. (2035) = 18,400
RUS = 70 MPH

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

THE COLOR OF THE FINISH TOP COAT SHALL BE GRAY, (FEDERAL STANDARD COLOR NO. 26293) OR SIMILAR COLOR APPROVED BY THE ENGINEER.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.



TOTAL ESTIMATED QUANTITIES

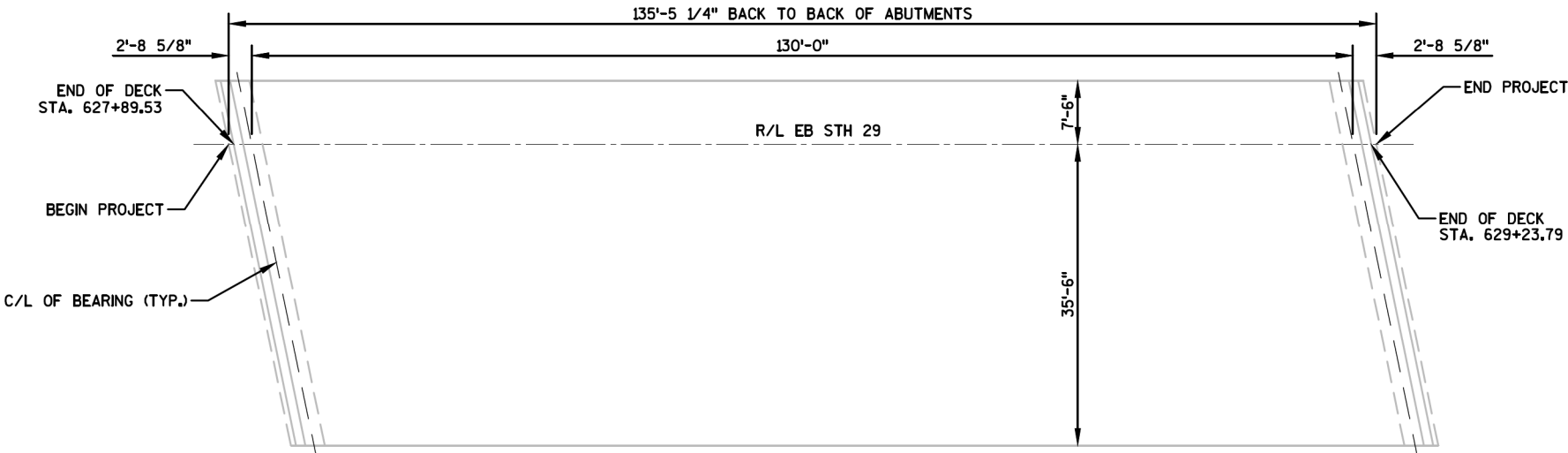
BID ITEM #	BID ITEMS	UNIT	TOTAL
517.1800.S.03	STRUCTURE REPAINTING RECYCLED ABRASIVE B-37-181	LS	1
517.4500.S.03	NEGATIVE PRESSURE CONTAINMENT AND COLLECTION OF WASTE MATERIALS B-37-181	LS	1
517.6001.S	PORTABLE DECONTAMINATION FACILITY	EACH	1
604.9015.S	RESEAL CRUSHED AGGREGATE SLOPE PAVING	SY	281

CONTACTS

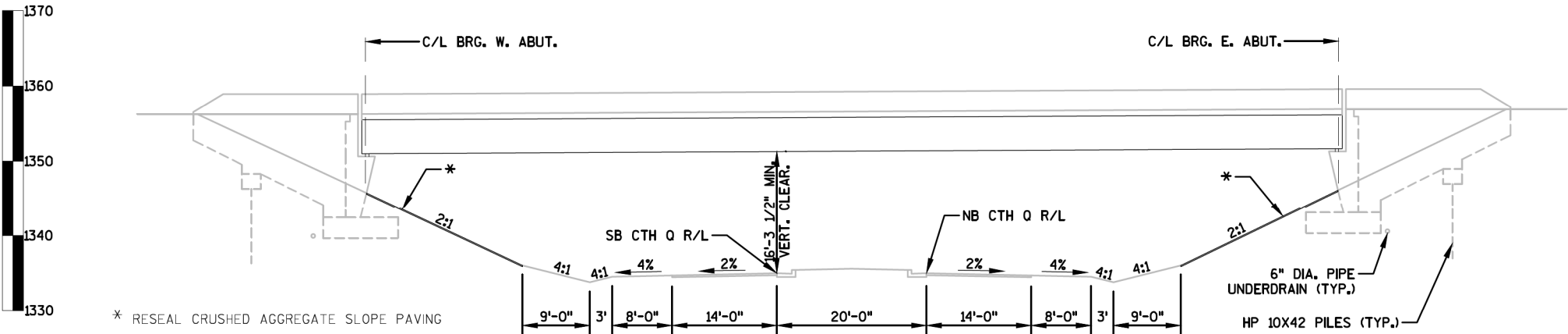
BUREAU OF STRUCTURES CONTACT
WILLIAM DREHER: 608-266-8489

CONSULTANT DESIGN CONTACT
CHAD GRUNDEMANN: 715-845-8000

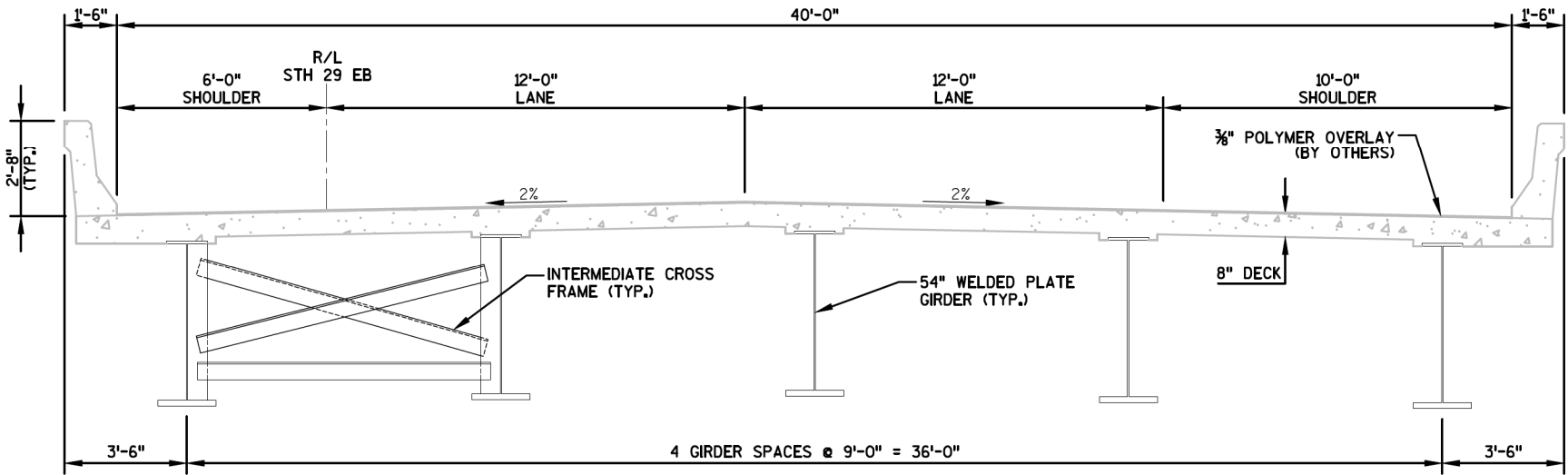
NO.	DATE	REVISION	BY
ORIGINAL PLANS PREPARED BY			
BECHER HOPPE		330 Fourth Street • PO Box 8000 Wausau, WI • 54402-8000 715.845.8000 • Fax 715.845.8008 becherhoppe.com	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED <i>William C. Dreher</i> SDR		08/23/16 DATE	
CHIEF STRUCTURES DESIGN ENGINEER			
B-37-181			
STH 29 EB OVER CTH Q			
COUNTY	MARATHON	TOWN/CITY/VILLAGE	RINGLE
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	DJG	DESIGN CK'D.	CDG
DRAWN BY	DJG	PLANS CK'D.	CDG
GENERAL PLAN & ELEVATION			SHEET 1 OF 1
			63



PLAN
SINGLE SPAN WELDED PLATE GIRDER STRUCTURE



ELEVATION
(LOOKING NORTH)



CROSS SECTION THRU ROADWAY
(LOOKING EAST)

DESIGN DATA

LIVE LOAD
INVENTORY RATING: HS-27
OPERATIONAL RATING: HS-45
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS
LOAD RATINGS BASED ON WISDOT PROJECT I.D. 1053-02-60.

TRAFFIC DATA

A.A.D.T. (2035) = 18,400
RDS = 70 MPH

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.



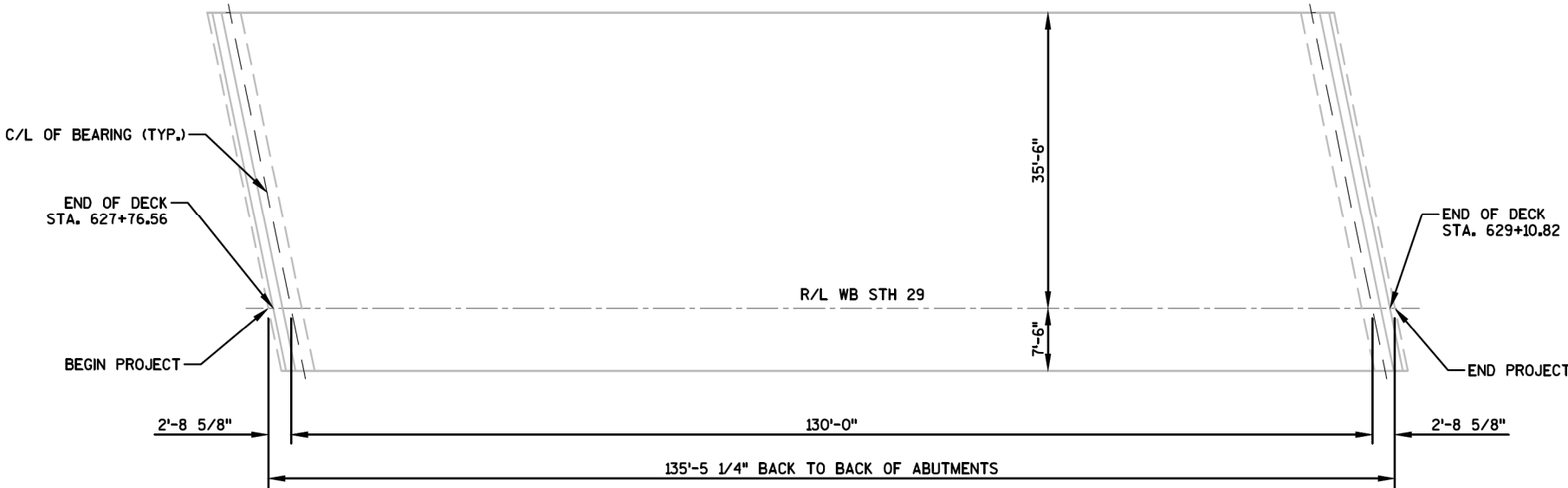
TOTAL ESTIMATED QUANTITIES

BID ITEM #	BID ITEMS	UNIT	TOTAL
604.9015.S	RESEAL CRUSHED AGGREGATE SLOPE PAVING	SY	286

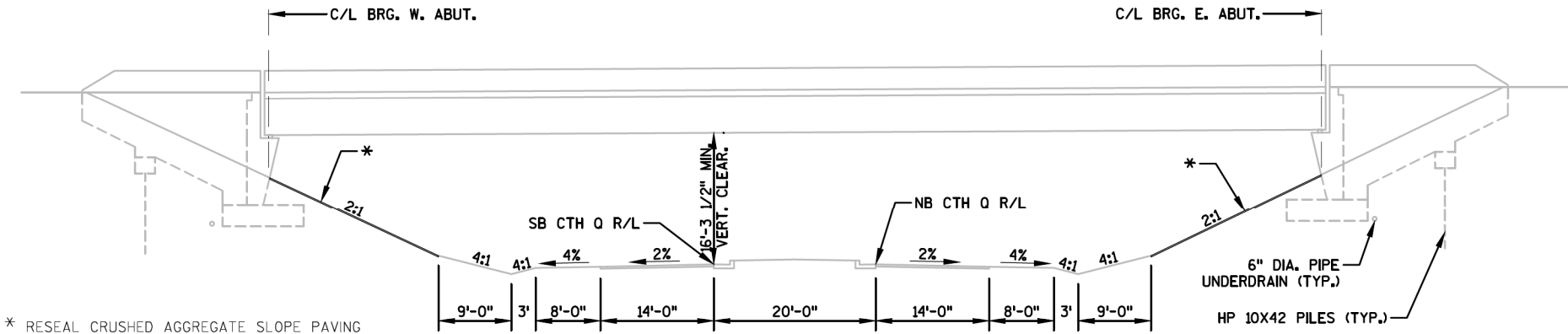
CONTACTS

BUREAU OF STRUCTURES CONTACT
WILLIAM DREHER: 608-266-8489
CONSULTANT DESIGN CONTACT
CHAD GRUNDEMANN: 715-845-8000

NO.	DATE	REVISION	BY
ORIGINAL PLANS PREPARED BY			
 BECHER HOPPE		330 Fourth Street • PO Box 8000 Wausau, WI • 54402-8000 715.845.8000 • Fax 715.845.8008 becherhoppe.com	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED	 SDR		08/23/16
CHIEF STRUCTURES DESIGN ENGINEER			DATE
B-37-182			
STH 29 WB OVER CTH Q			
COUNTY MARATHON		TOWN/CITY/VILLAGE RINGLE	
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY DJG	DESIGN CK'D. CDG	DRAWN BY DJG	PLANS CK'D. CDG
GENERAL PLAN & ELEVATION			SHEET 1 OF 1
			64

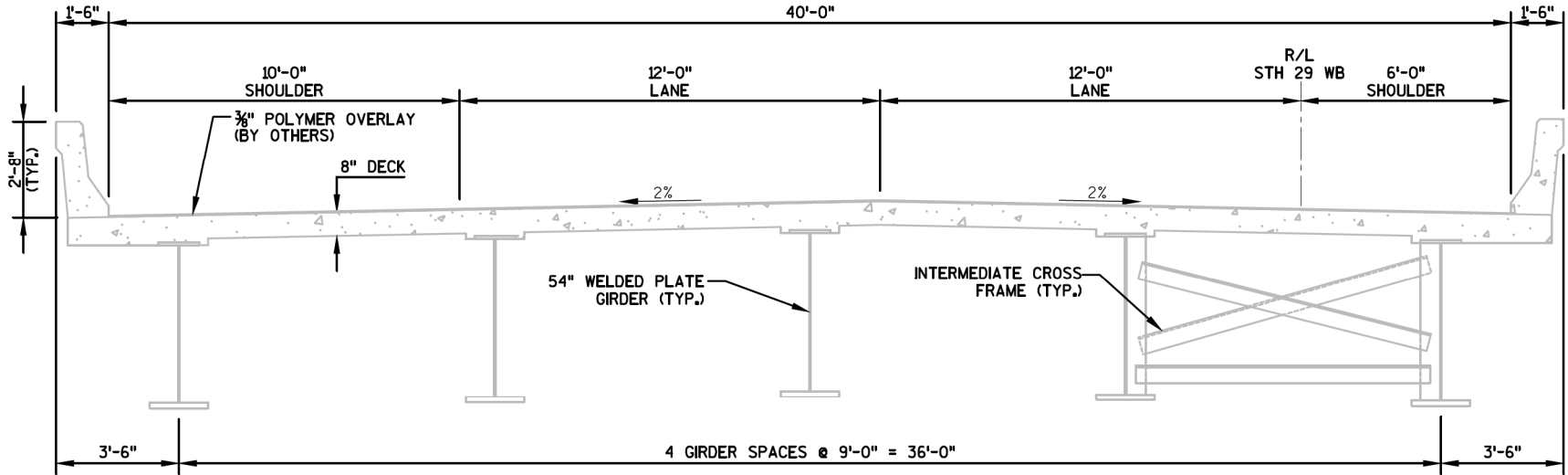


PLAN
SINGLE SPAN WELDED PLATE GIRDER STRUCTURE



ELEVATION

(LOOKING NORTH)

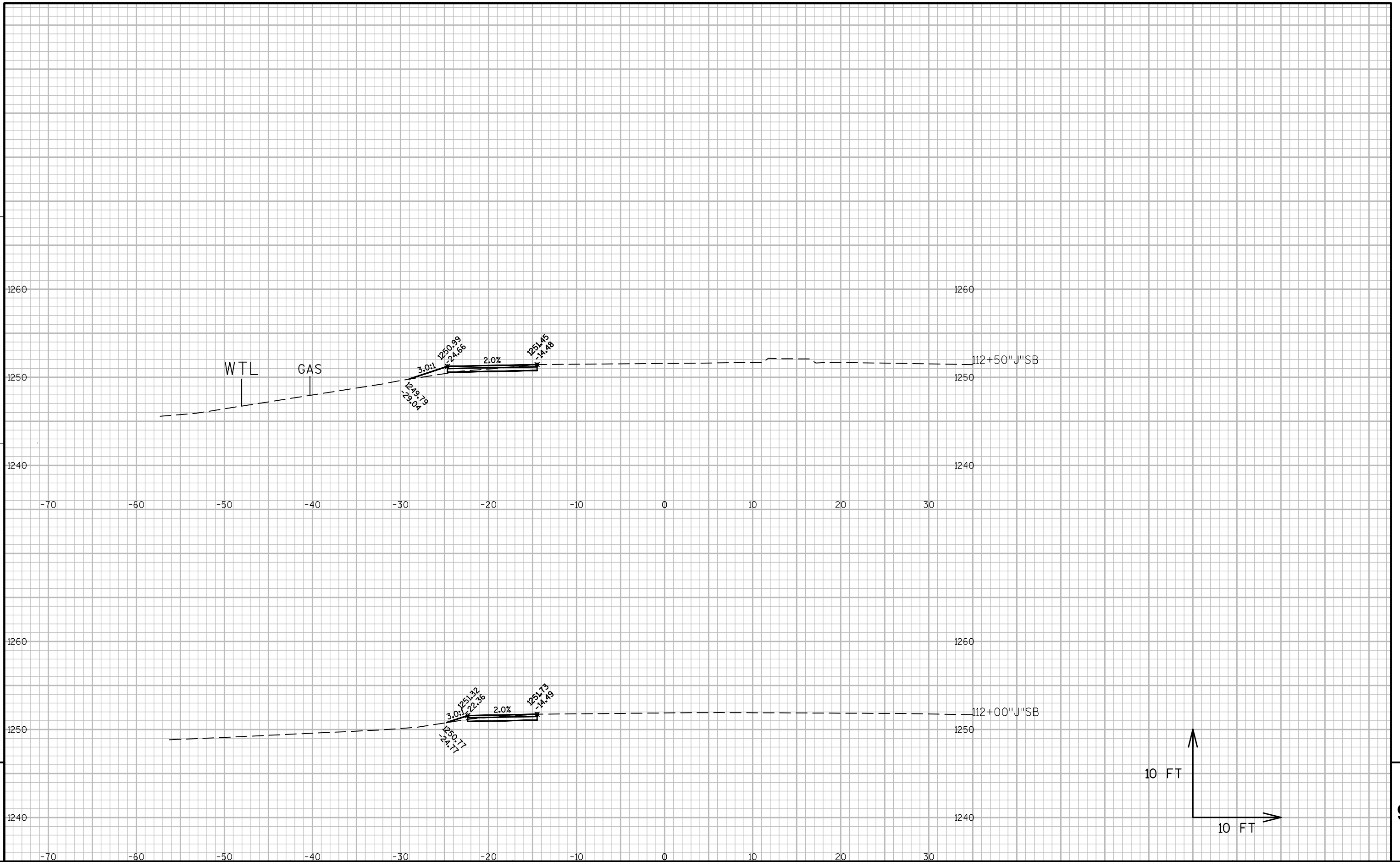


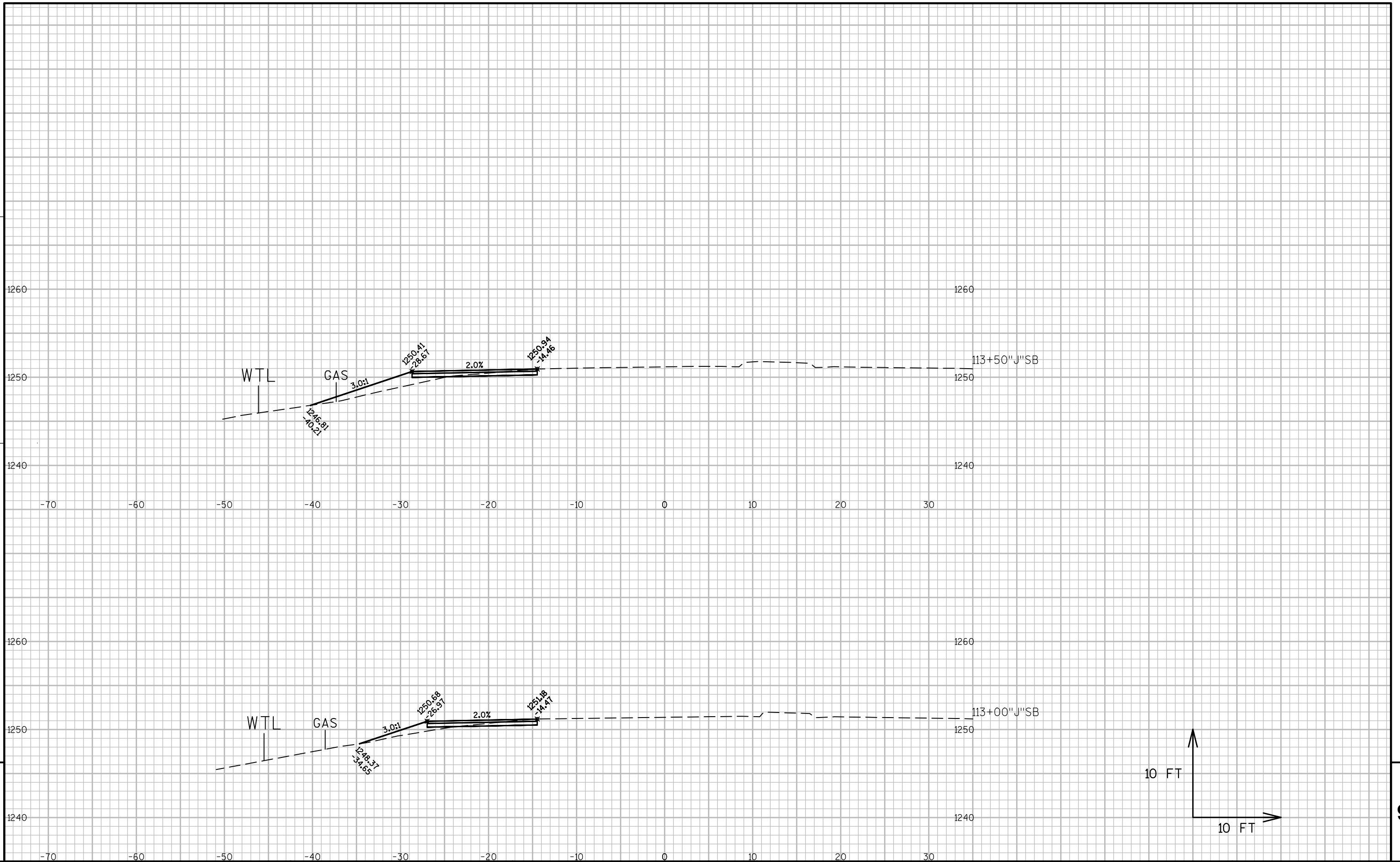
CROSS SECTION THRU ROADWAY

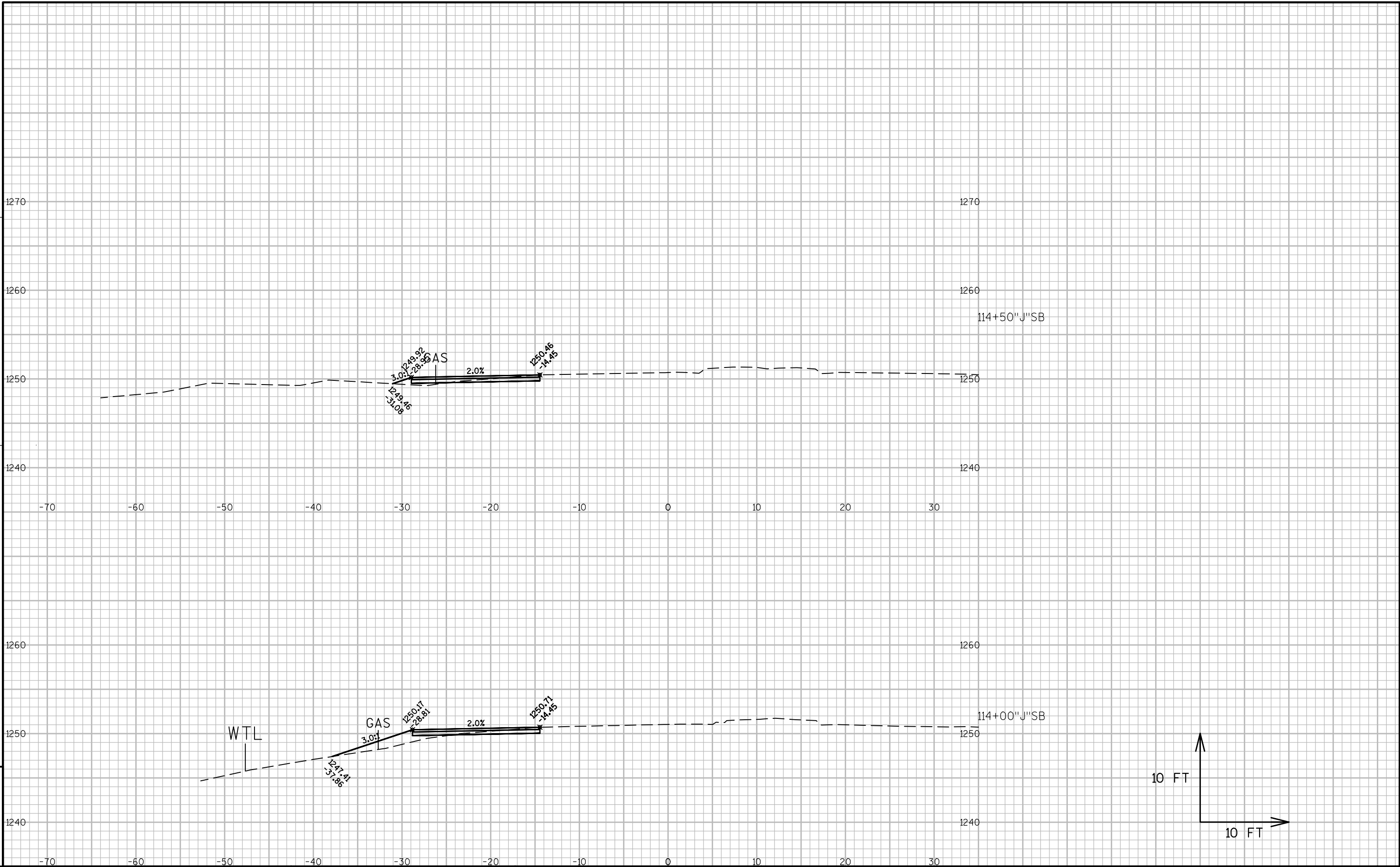
(LOOKING EAST)

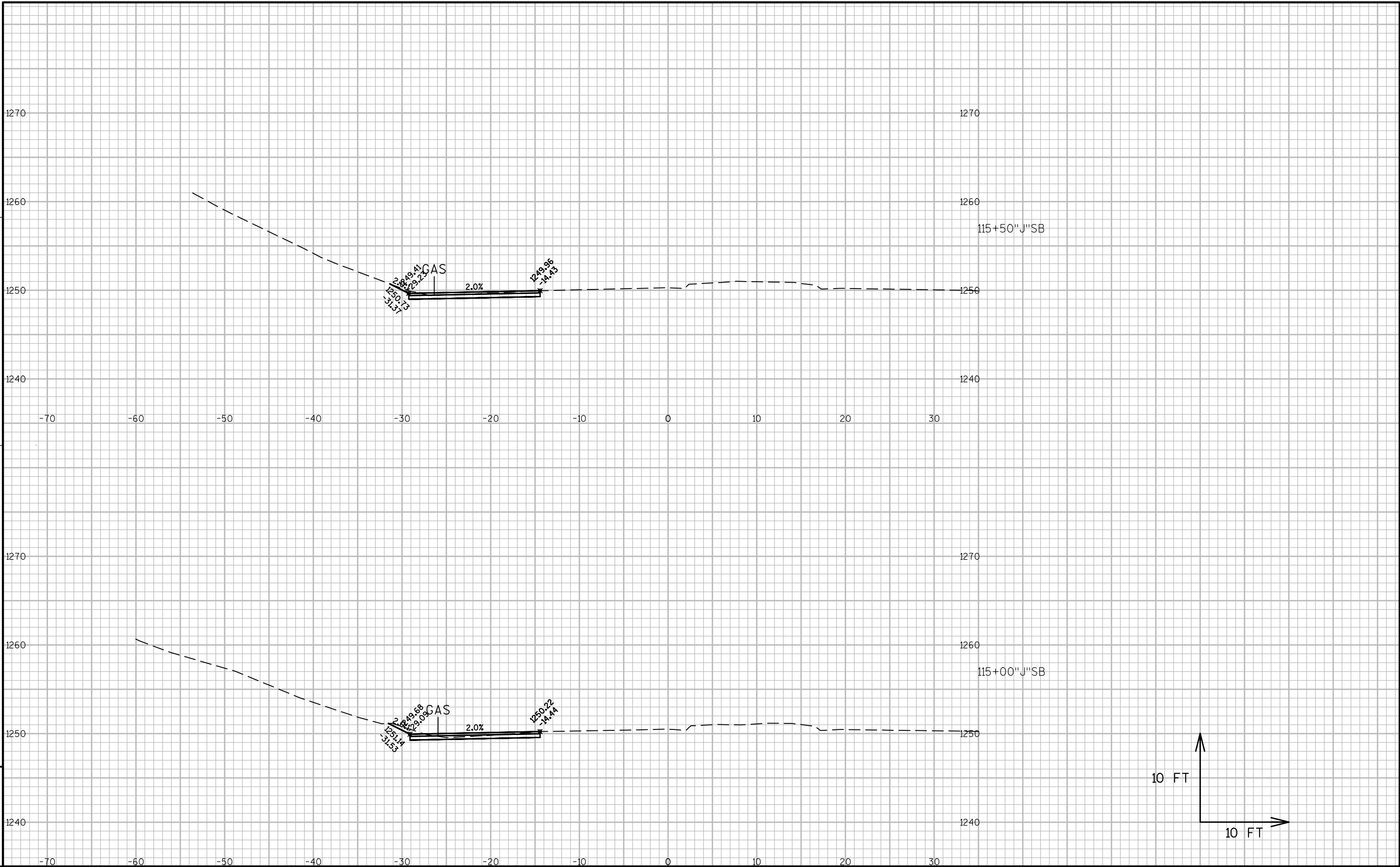
STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)		MASS ORDINATE NOTE 5
		CUT	UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT NOTE 1	UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	EBS	CUT 1.00 NOTE 1	EXPANDED FILL 1.25 NOTE 4	
111+69	---	0	0	0	0	---	---	---	---	---	---	---
112+00	31	4	0	1	0	2	0	0	0	2	0	2
112+50	50	3	0	2	0	6	0	2	0	9	3	6
113+00	50	3	0	5	0	6	0	6	0	15	11	4
113+50	50	4	0	11	0	6	0	15	0	21	29	-8
114+00	50	4	0	8	0	7	0	18	0	27	52	-24
114+50	50	4	0	2	0	7	0	9	0	34	63	-29
115+00	50	8	0	0	0	10	0	2	0	45	65	-20
115+50	50	8	0	0	0	14	0	0	0	59	65	-6
116+00	50	10	0	0	0	17	0	0	0	76	65	11
116+50	50	8	0	0	0	17	0	0	0	92	65	27
117+00	50	5	0	0	0	12	0	0	0	105	65	39
117+50	50	4	0	8	0	8	0	7	0	113	74	39
118+00	50	3	0	16	0	7	0	22	0	120	101	18
118+50	50	4	0	10	0	7	0	24	0	127	132	-5
119+00	50	3	0	3	0	7	0	12	0	133	147	-14
119+50	50	3	0	0	0	5	0	3	0	138	151	-12
119+53	3	0	0	0	0	0	0	0	0	139	151	-12
120+59	106	0	0	0	0	0	0	0	0	139	151	-12
121+00	41	3	0	1	0	2	0	0	0	141	151	-10
121+50	50	4	0	1	0	7	0	1	0	148	153	-5
122+00	50	3	0	1	0	7	0	1	0	154	154	0
122+50	50	3	0	1	0	6	0	1	0	160	156	4
123+00	50	3	0	0	0	5	0	1	0	165	157	8
123+50	50	2	0	0	0	5	0	1	0	170	158	12
124+00	50	2	0	0	0	4	0	0	0	174	158	15
124+50	50	1	0	0	0	3	0	0	0	177	158	18
125+00	50	1	0	0	0	2	0	0	0	178	159	20
125+33	33	0	0	0	0	0	0	0	0	179	159	20
COLUMN TOTALS						179	0	127	0			

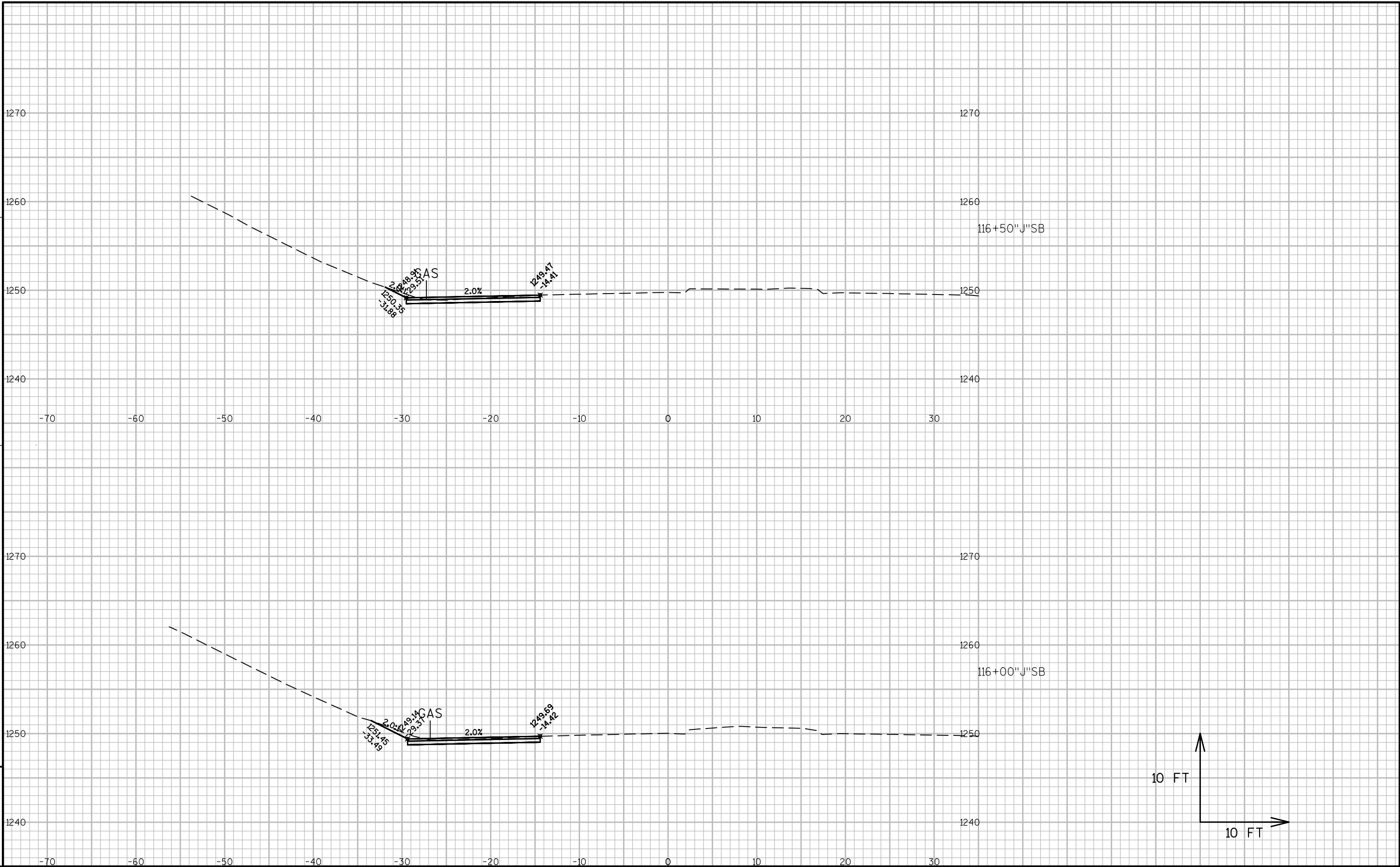
NOTES:
1) CUT INCLUDES UNUSABLE PAVEMENT MATERIAL
2) UNUSABLE PAVEMENT MATERIAL DOES NOT APPEAR IN THE CROSS SECTIONS
3) FILL DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL EXCAVATION VOLUME
4) EXPANDED FILL = UNEXPANDED FILL * EXPANDED FILL FACTOR. EXPANDED FILL FACTOR = 1.25
5) MASS ORDINATE = (CUT - UNUSABLE PAVEMENT MATERIAL) - (FILL * FILL FACTOR)

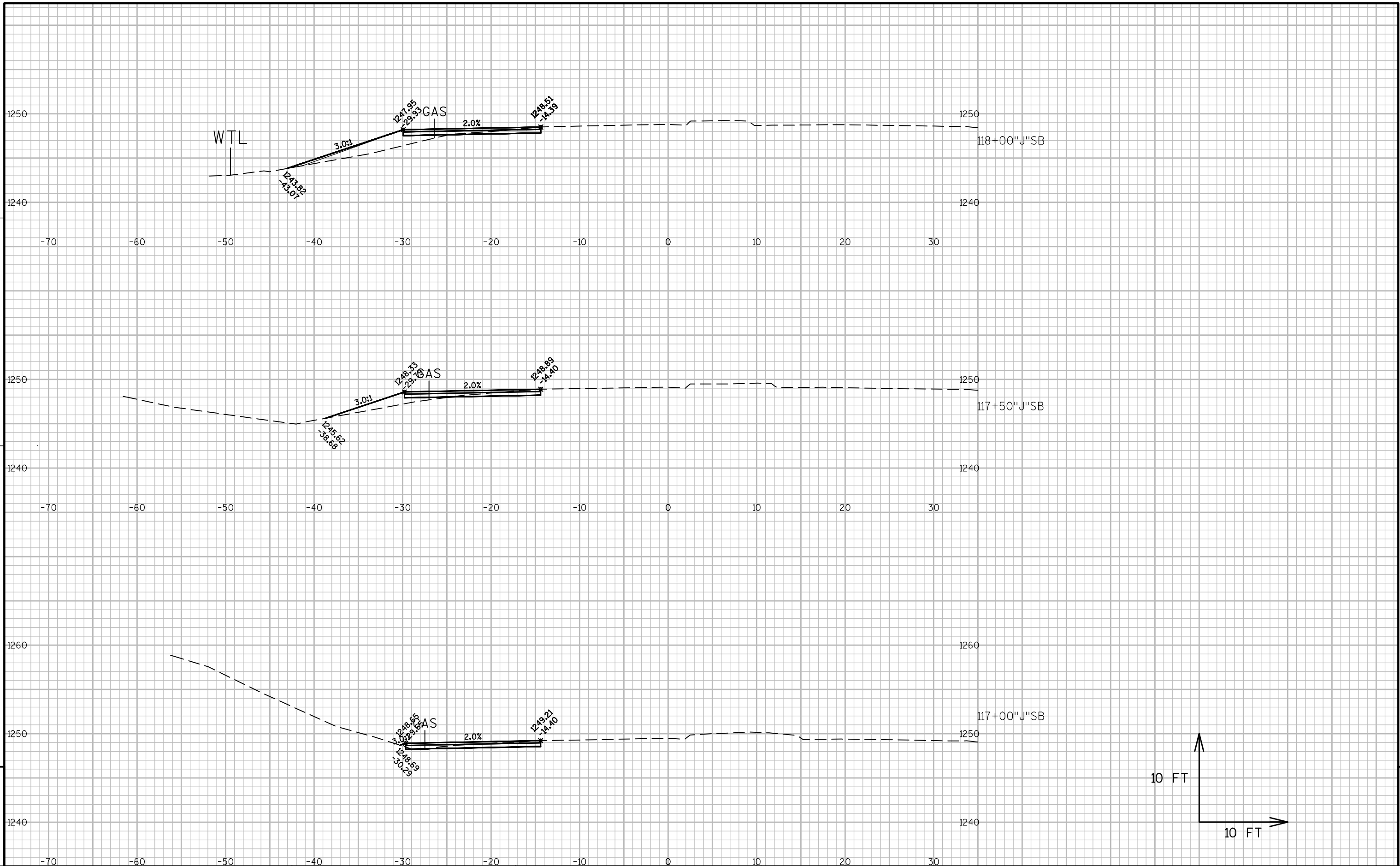


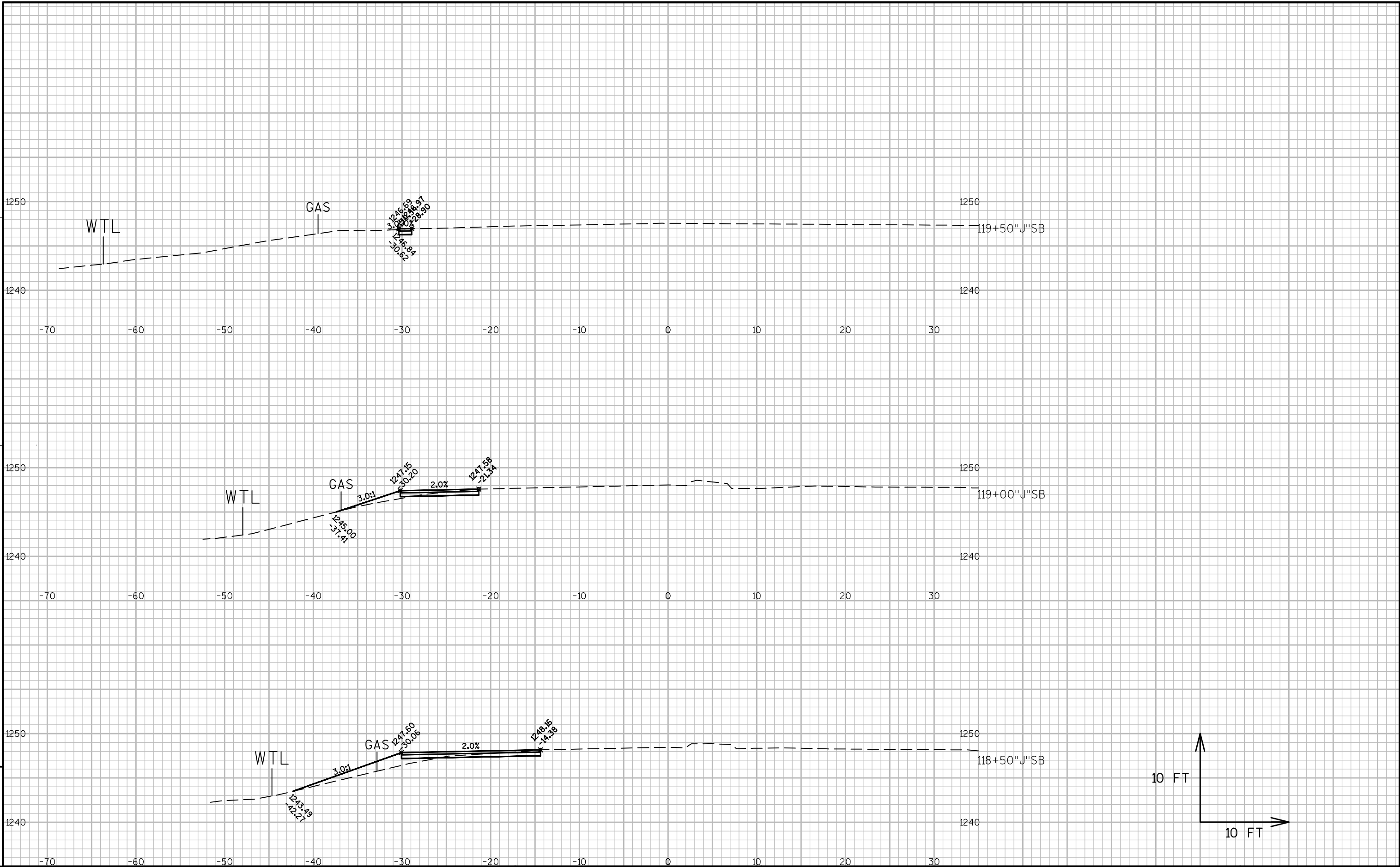


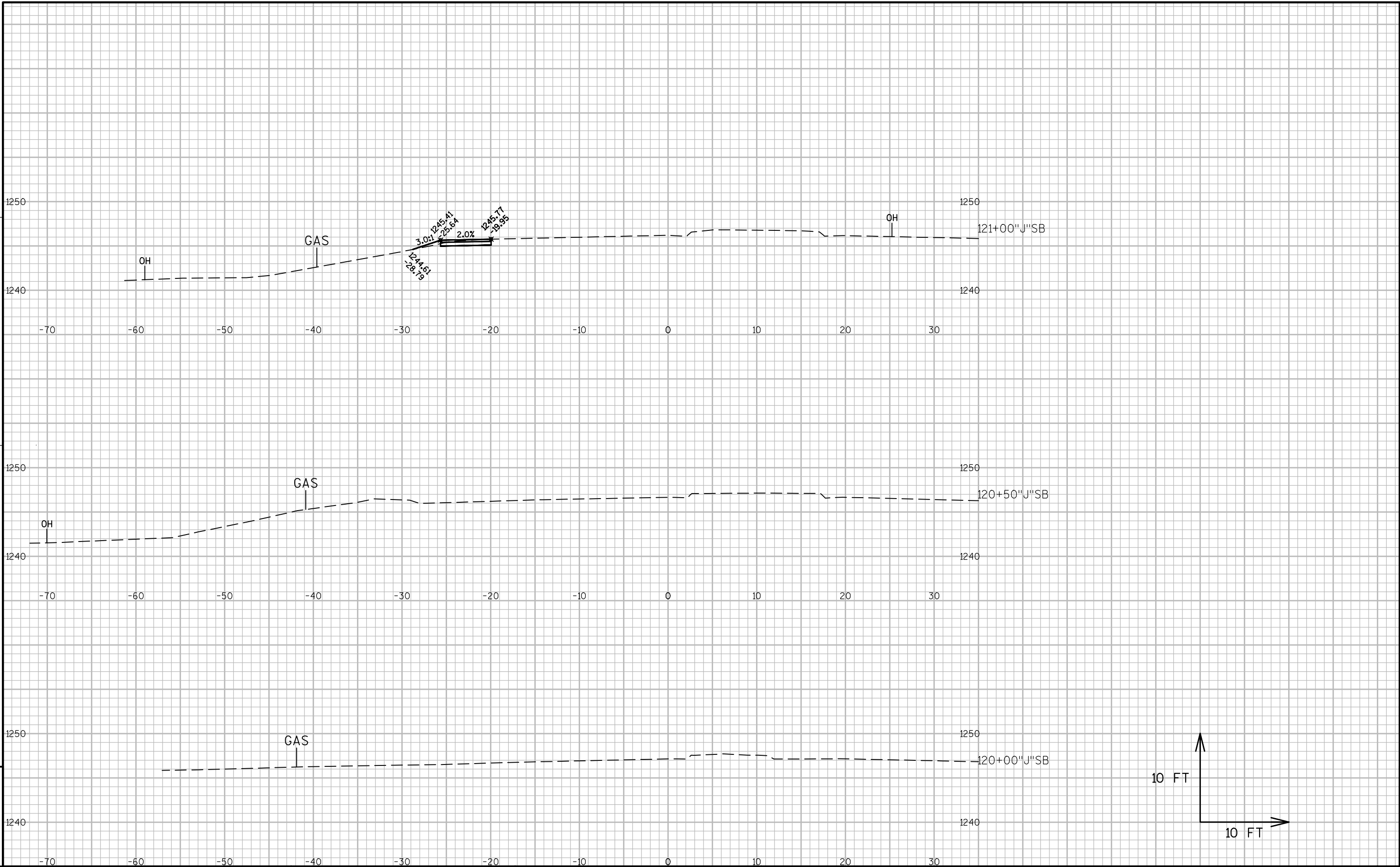


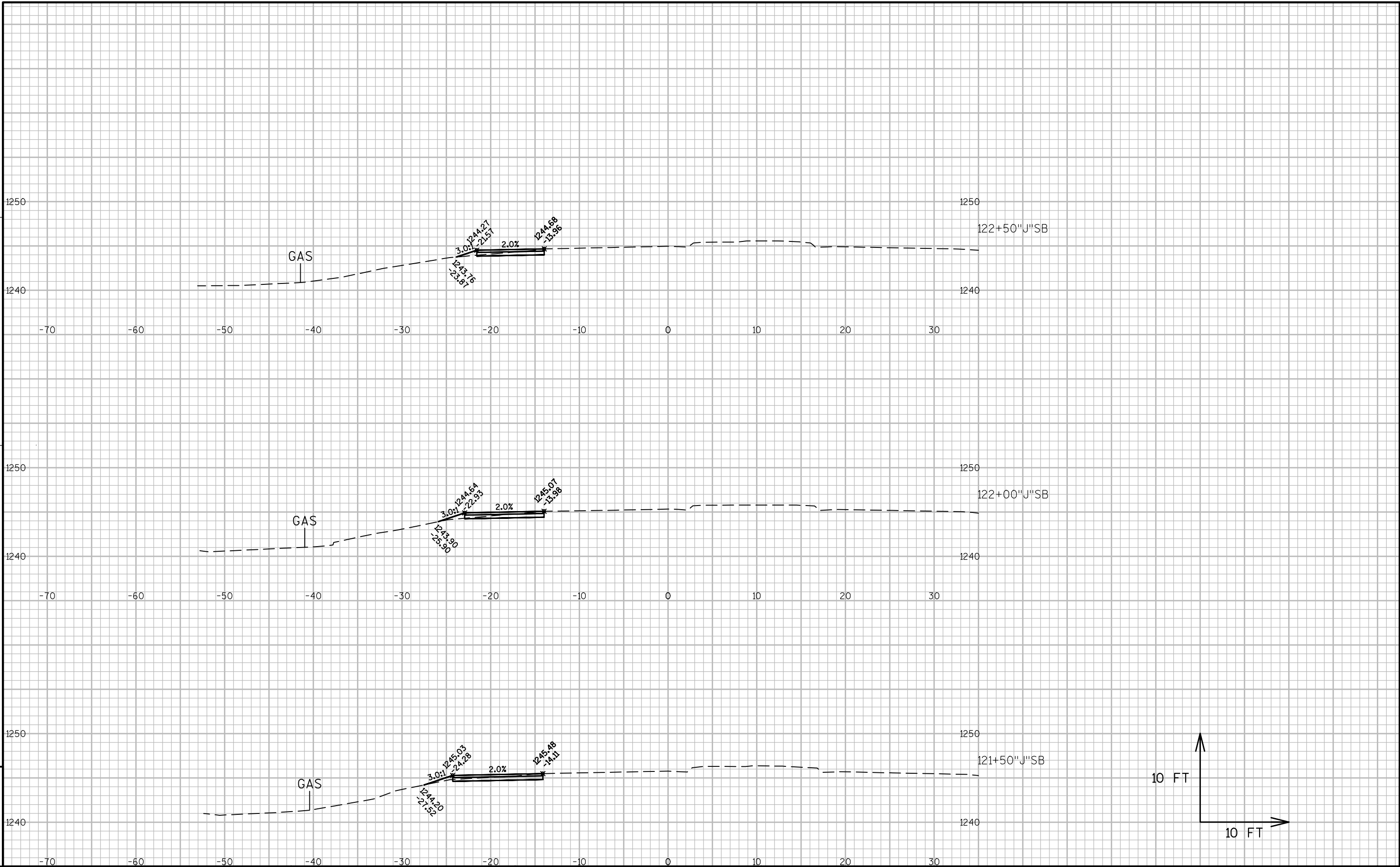


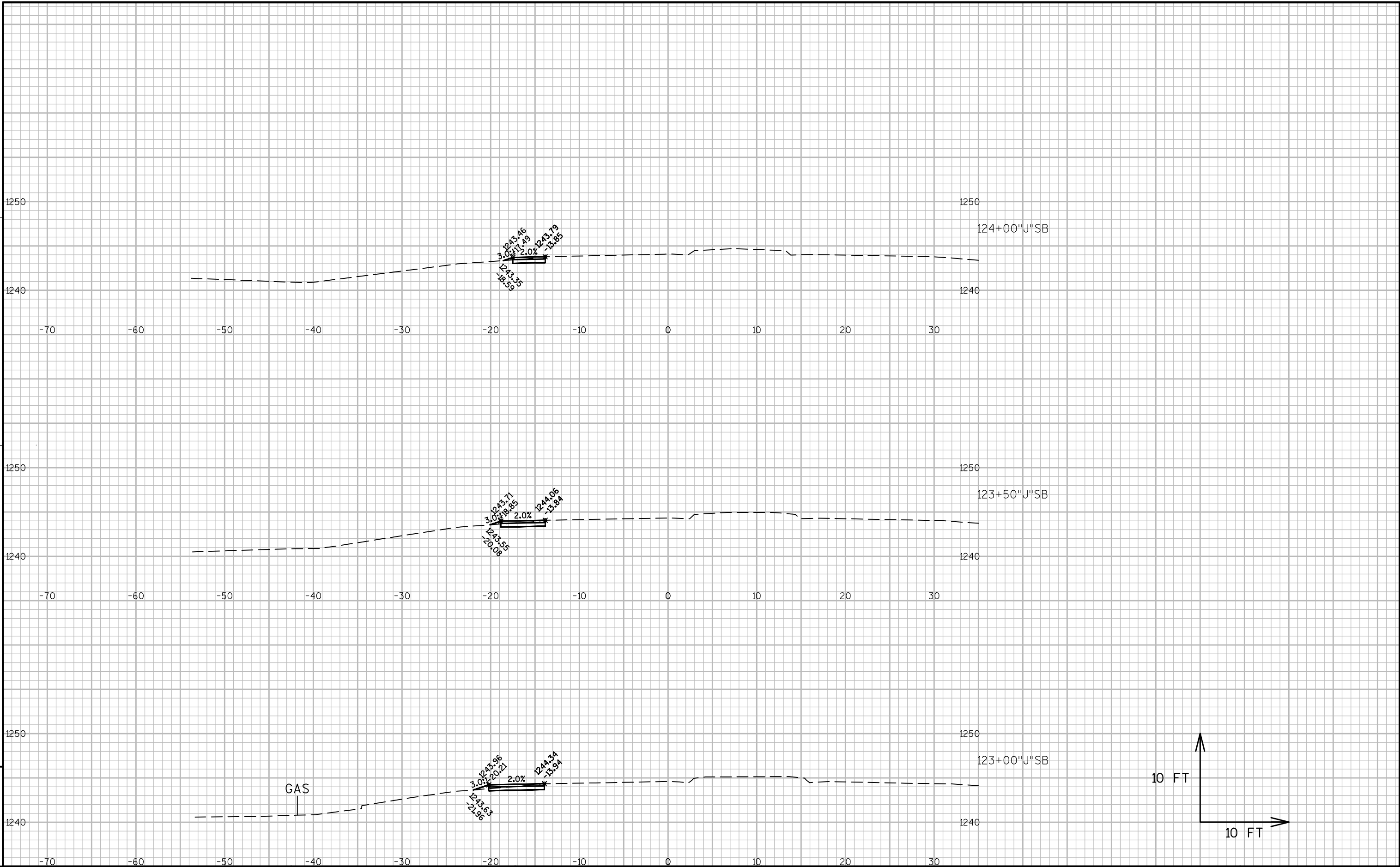


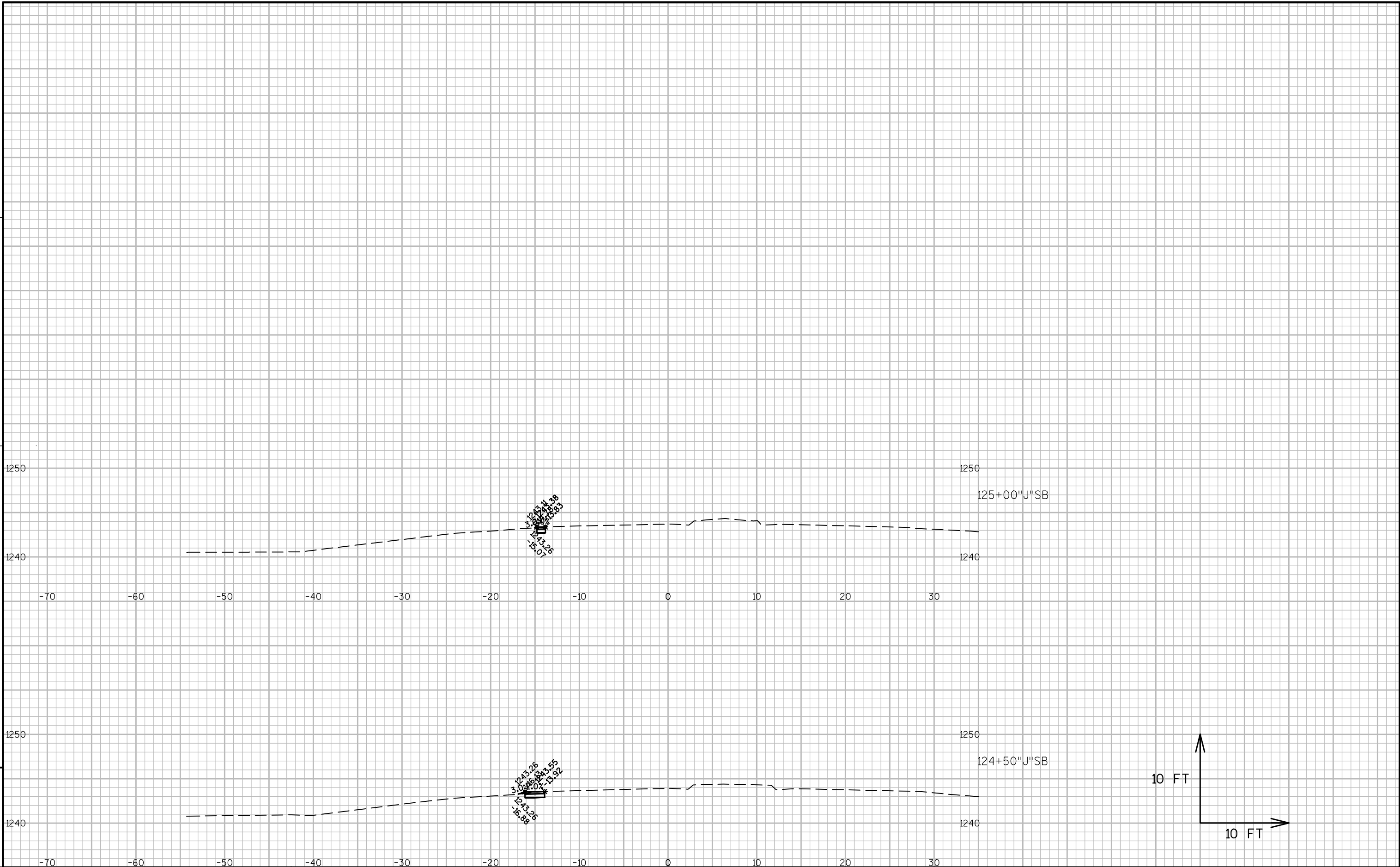






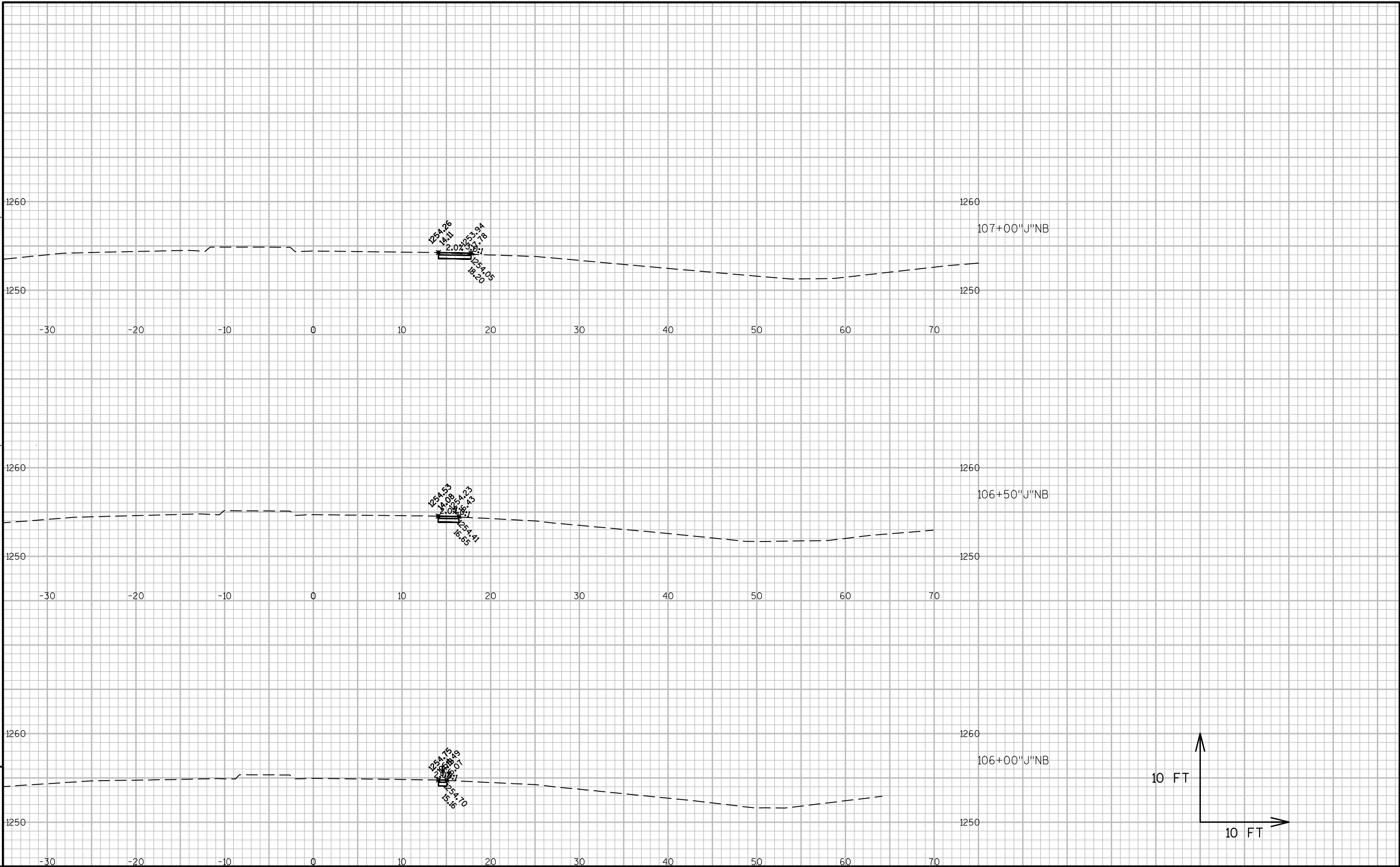


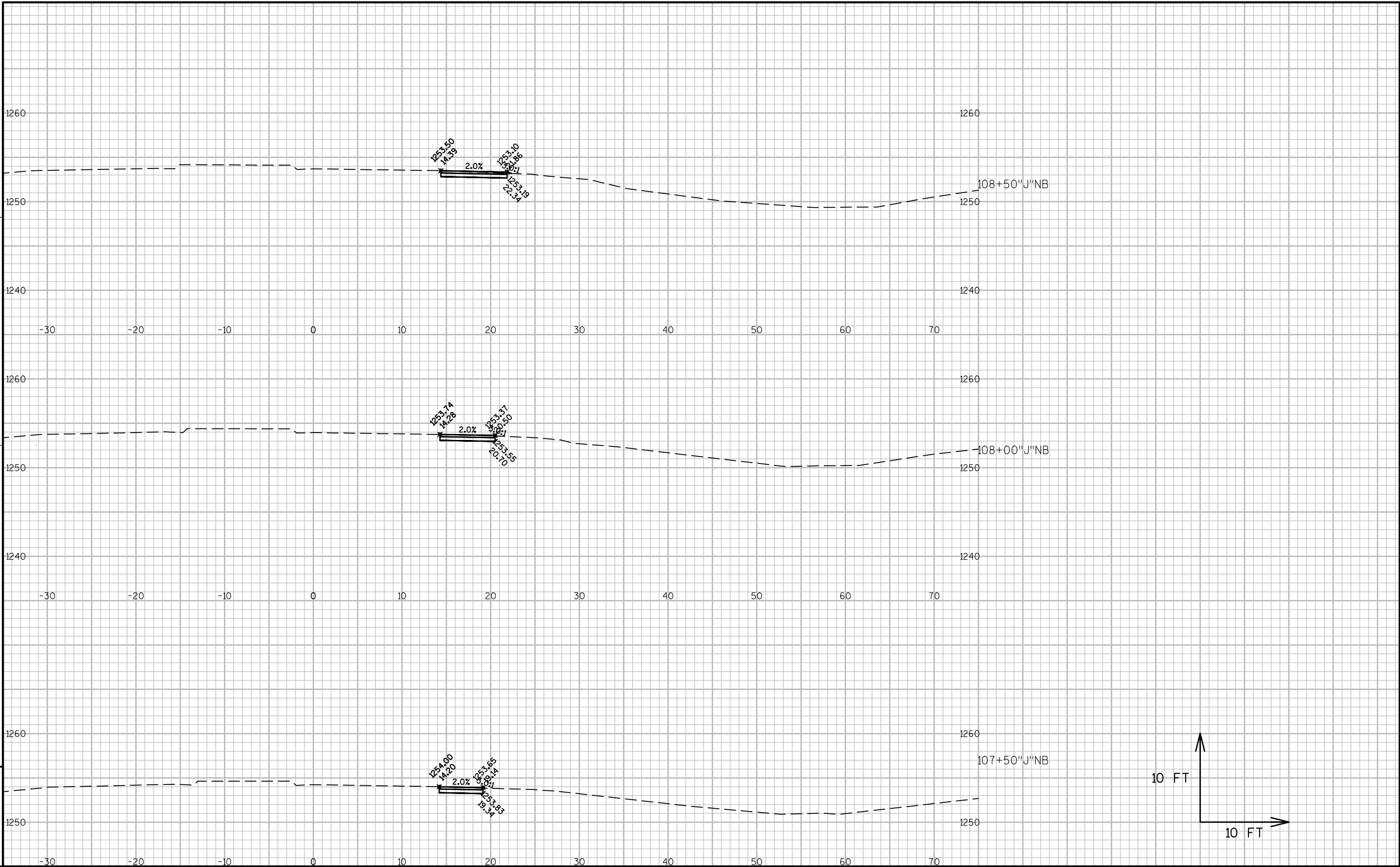


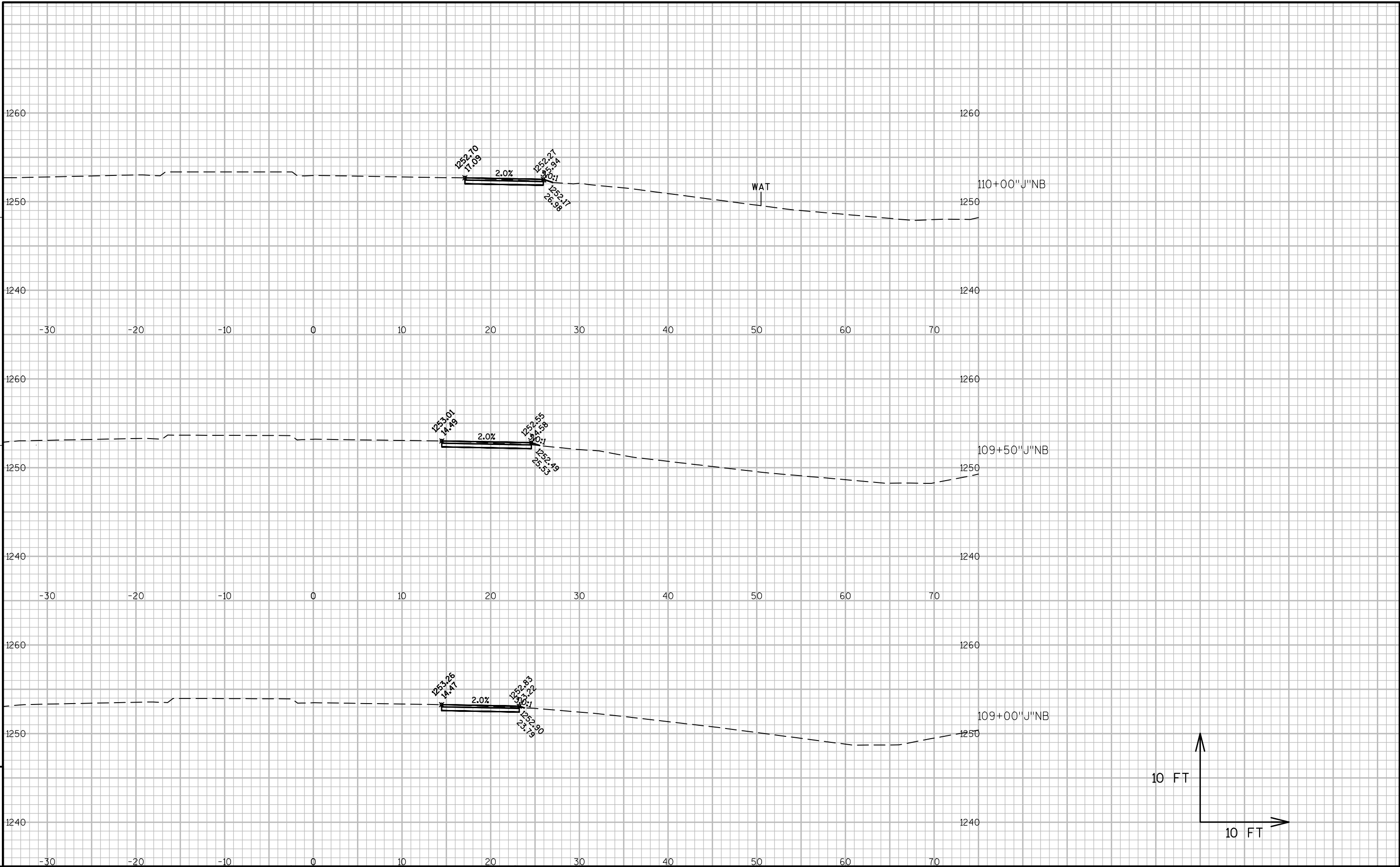


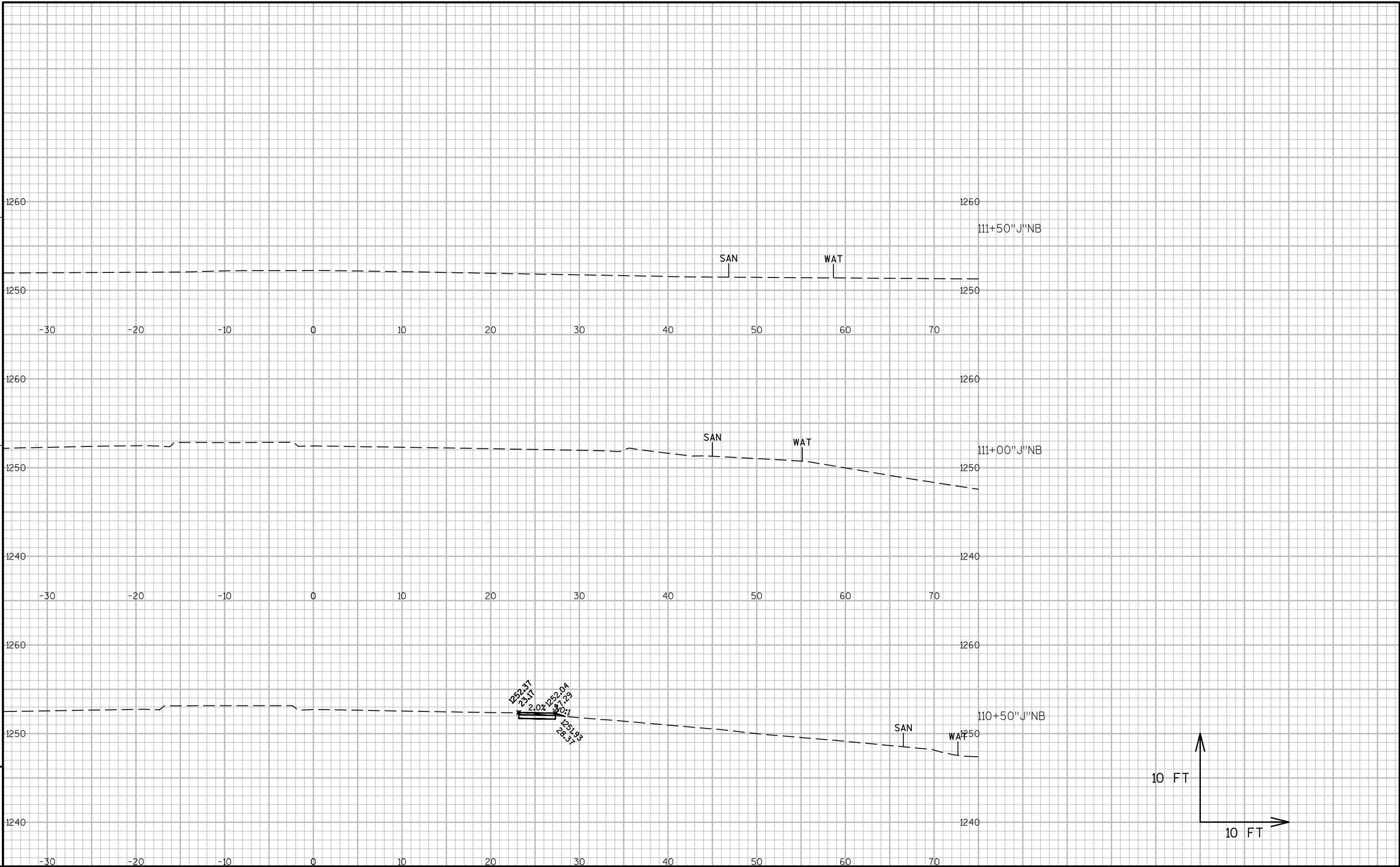
STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)		MASS ORDINATE NOTE 5
		CUT	UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT NOTE 1	UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	EBS	CUT 1.00 NOTE 1	EXPANDED FILL 1.25 NOTE 4	
105+66	---	0	0	0	0	---	---	---	---	---	---	---
106+00	34	1	0	0	0	0	0	0	0	0	0	0
106+50	50	1	0	0	0	2	0	0	0	2	0	2
107+00	50	2	0	0	0	3	0	0	0	6	0	6
107+50	50	3	0	0	0	5	0	0	0	11	0	11
108+00	50	4	0	0	0	7	0	0	0	17	0	17
108+50	50	4	0	0	0	8	0	0	0	25	0	25
109+00	50	5	0	0	0	9	0	0	0	34	0	34
109+50	50	6	0	0	0	10	0	0	0	44	0	44
110+00	50	5	0	0	0	10	0	0	0	54	1	53
110+50	50	2	0	0	0	7	0	0	0	60	1	59
110+65	15	0	0	0	0	1	0	0	0	61	1	60
111+73	108	0	0	0	0	0	0	0	0	61	1	60
112+00	27	3	0	0	0	1	0	0	0	62	1	61
112+50	50	6	0	0	0	8	0	0	0	70	1	69
113+00	50	8	0	0	0	13	0	0	0	83	1	82
113+50	50	8	0	0	0	15	0	0	0	98	2	96
114+00	50	10	0	0	0	16	0	0	0	114	2	112
114+50	50	11	0	0	0	19	0	0	0	133	2	131
115+00	50	12	0	0	0	21	0	0	0	154	2	152
115+50	50	11	0	0	0	22	0	0	0	176	2	174
116+00	50	9	0	0	0	19	0	0	0	194	2	193
116+50	50	5	0	2	0	13	0	2	0	207	4	203
117+00	50	3	0	11	0	7	0	12	0	214	19	195
117+50	50	3	0	8	0	6	0	18	0	220	41	179
118+00	50	3	0	7	0	5	0	14	0	226	58	167
118+50	50	3	0	7	0	5	0	12	0	231	74	157
119+00	50	4	0	2	0	7	0	8	0	238	84	153
119+50	50	5	0	0	0	8	0	2	0	246	87	159
119+54	4	0	0	0	0	0	0	0	0	246	87	159
				COLUMN TOTALS		246	0	70	0			

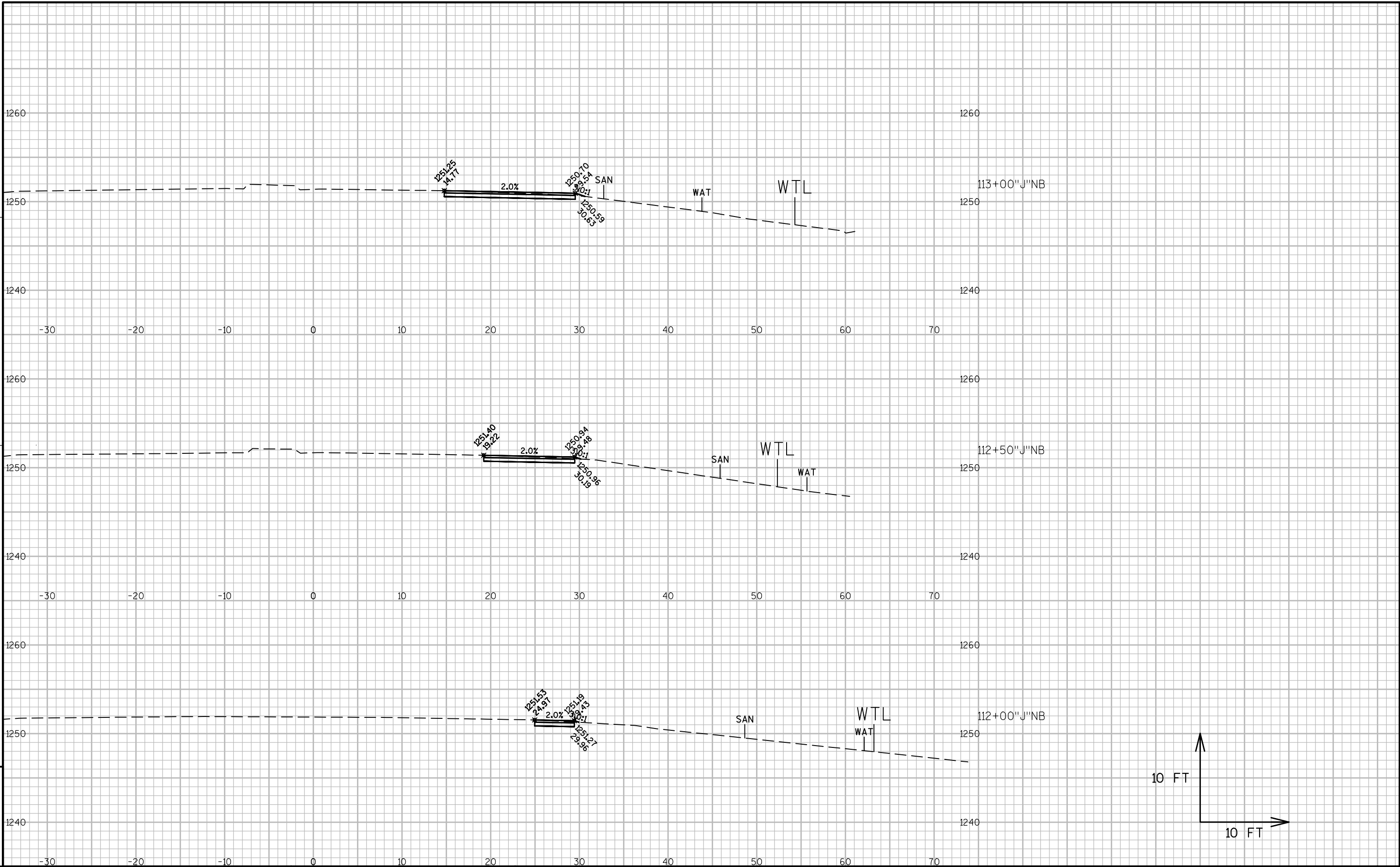
NOTES:
1) CUT INCLUDES UNUSABLE PAVEMENT MATERIAL
2) UNUSABLE PAVEMENT MATERIAL DOES NOT APPEAR IN THE CROSS SECTIONS
3) FILL DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL EXCAVATION VOLUME
4) EXPANDED FILL = UNEXPANDED FILL * EXPANDED FILL FACTOR. EXPANDED FILL FACTOR = 1.25
5) MASS ORDINATE = (CUT - UNUSABLE PAVEMENT MATERIAL) - (FILL * FILL FACTOR)

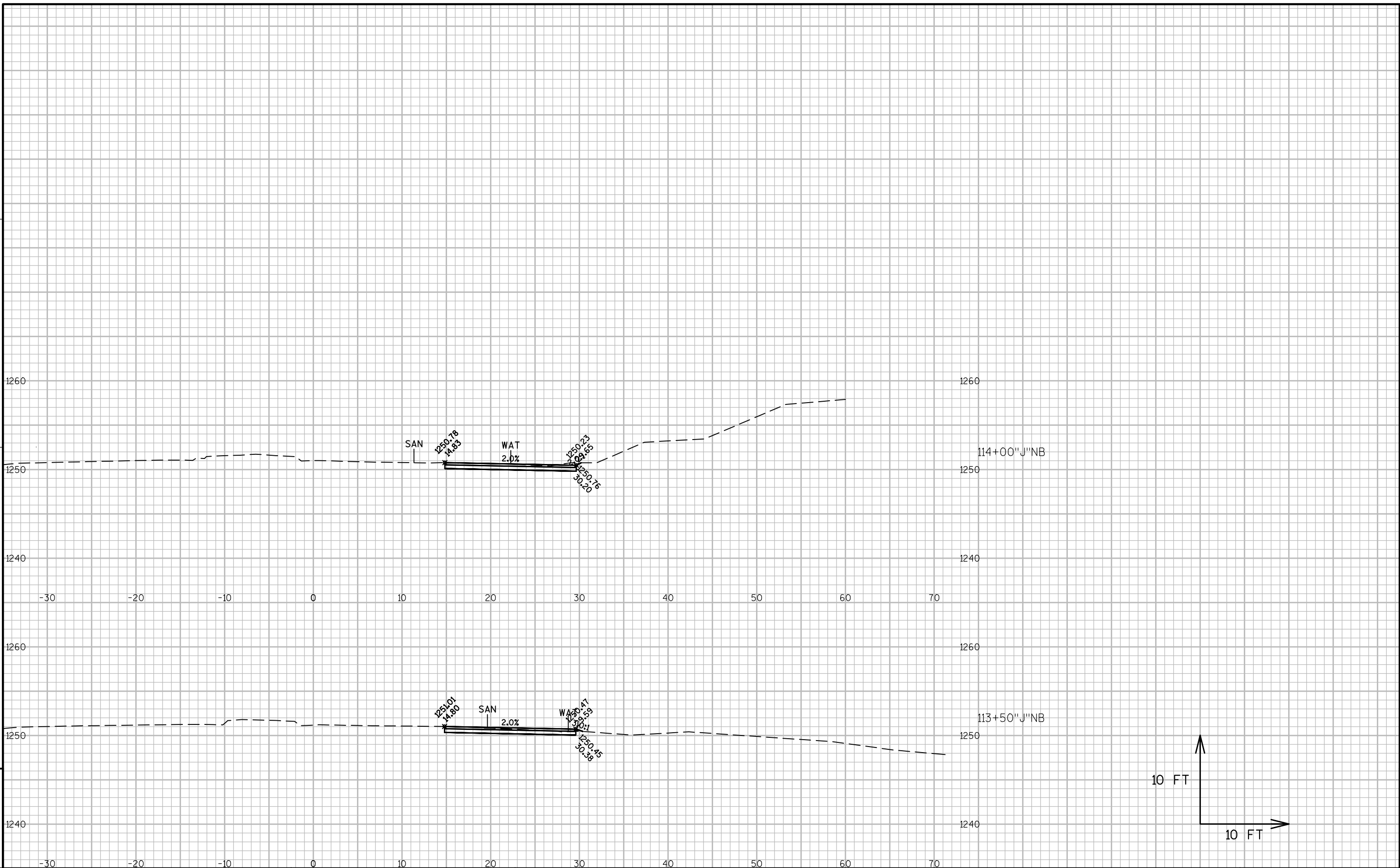


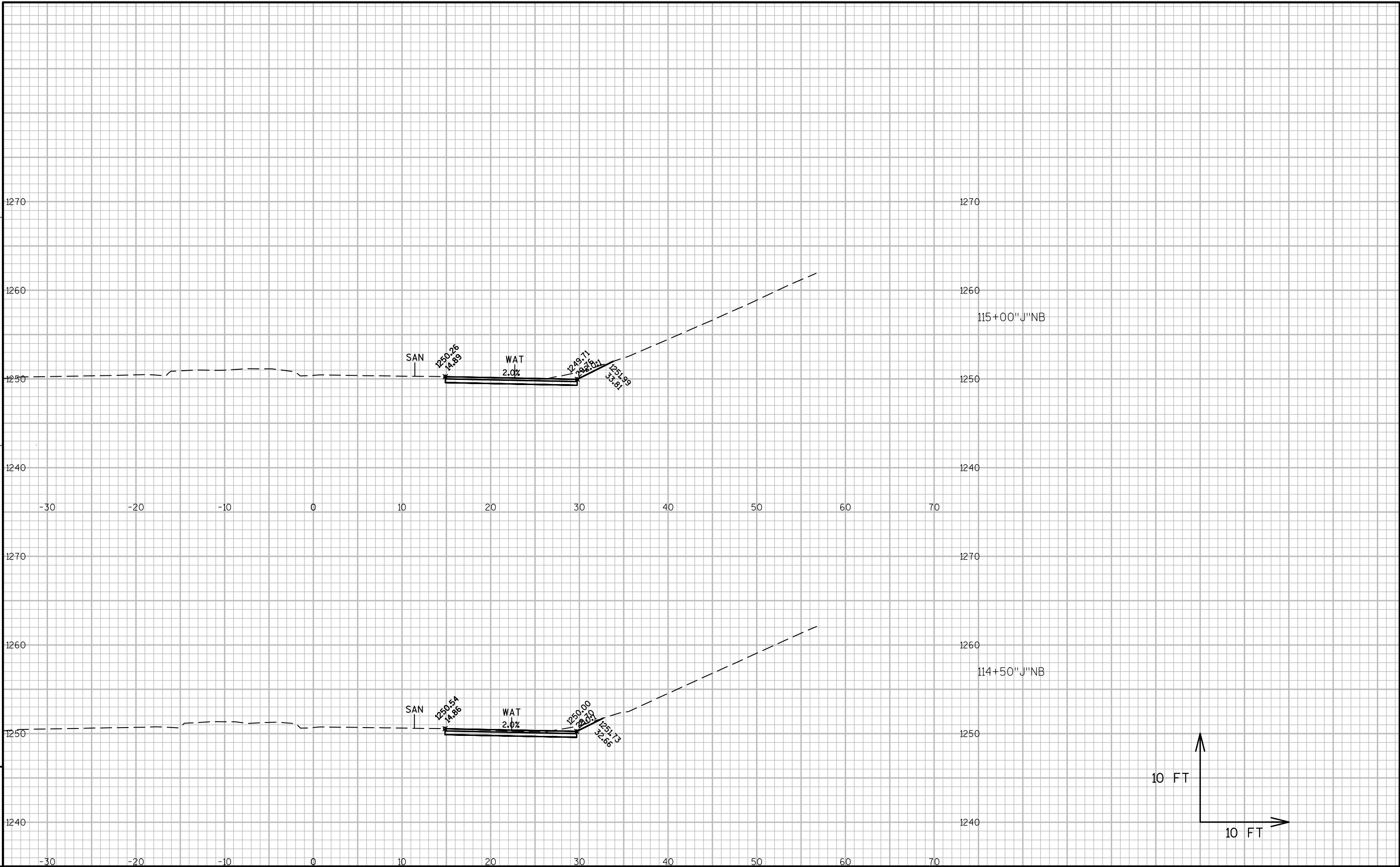


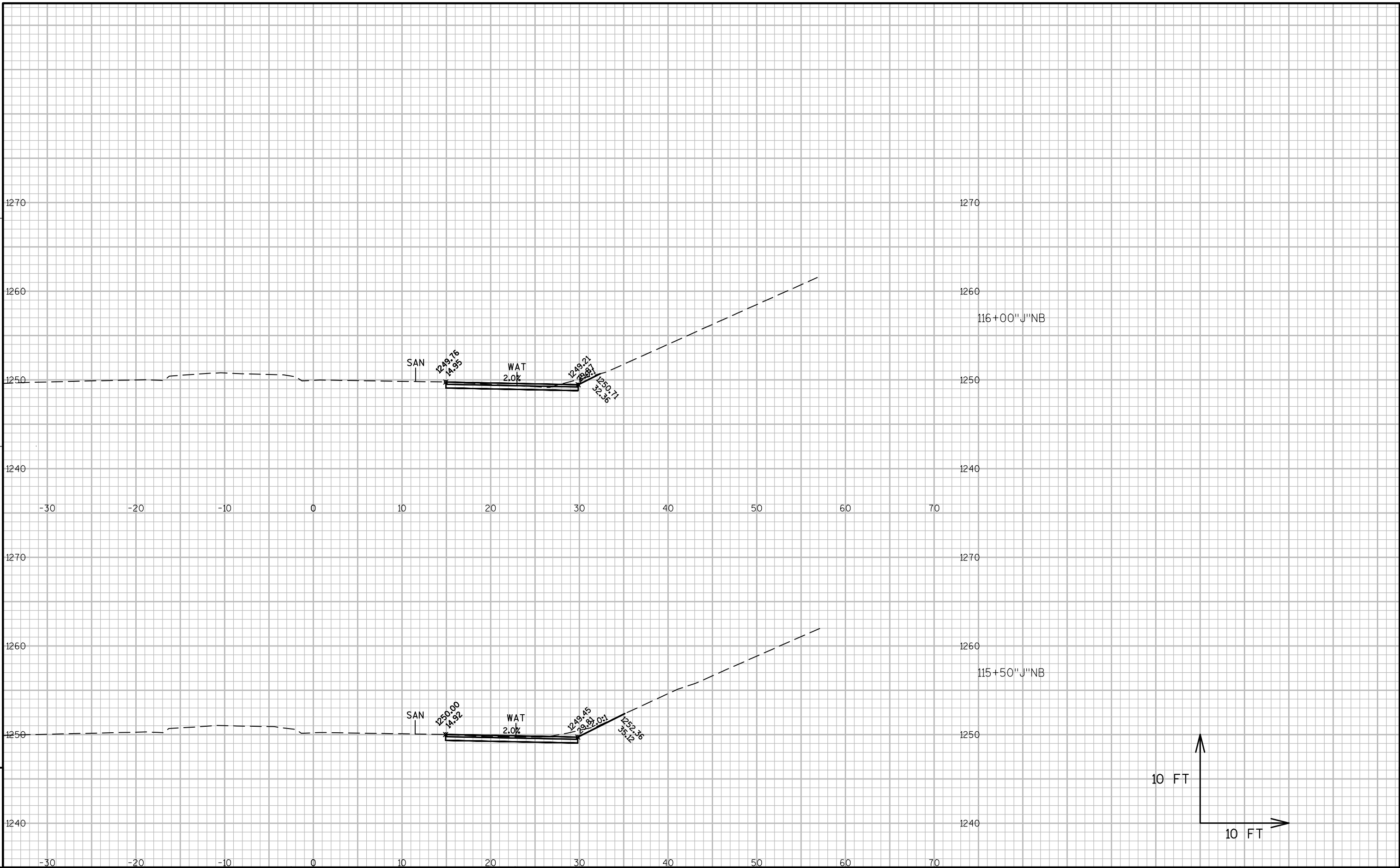


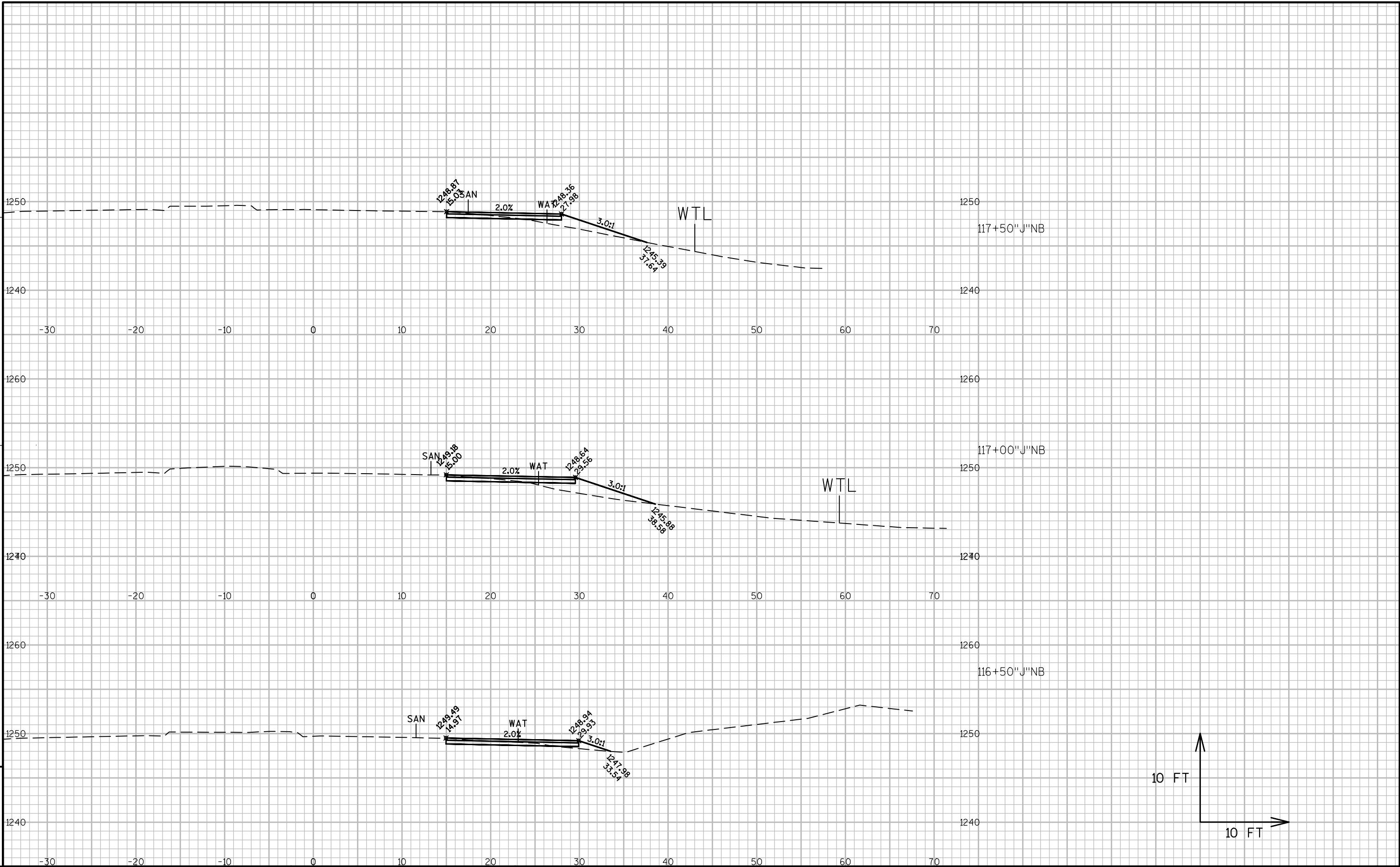


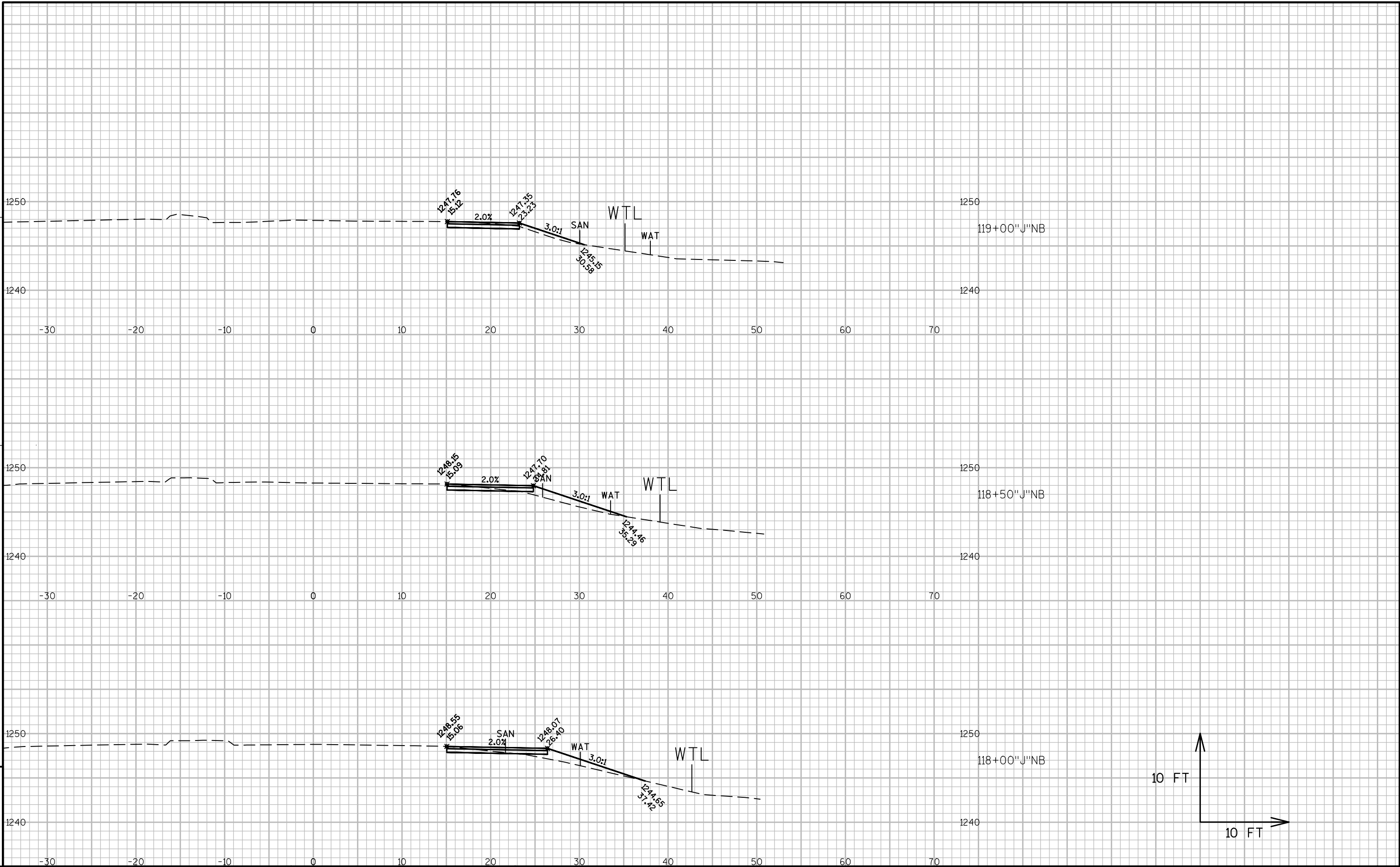


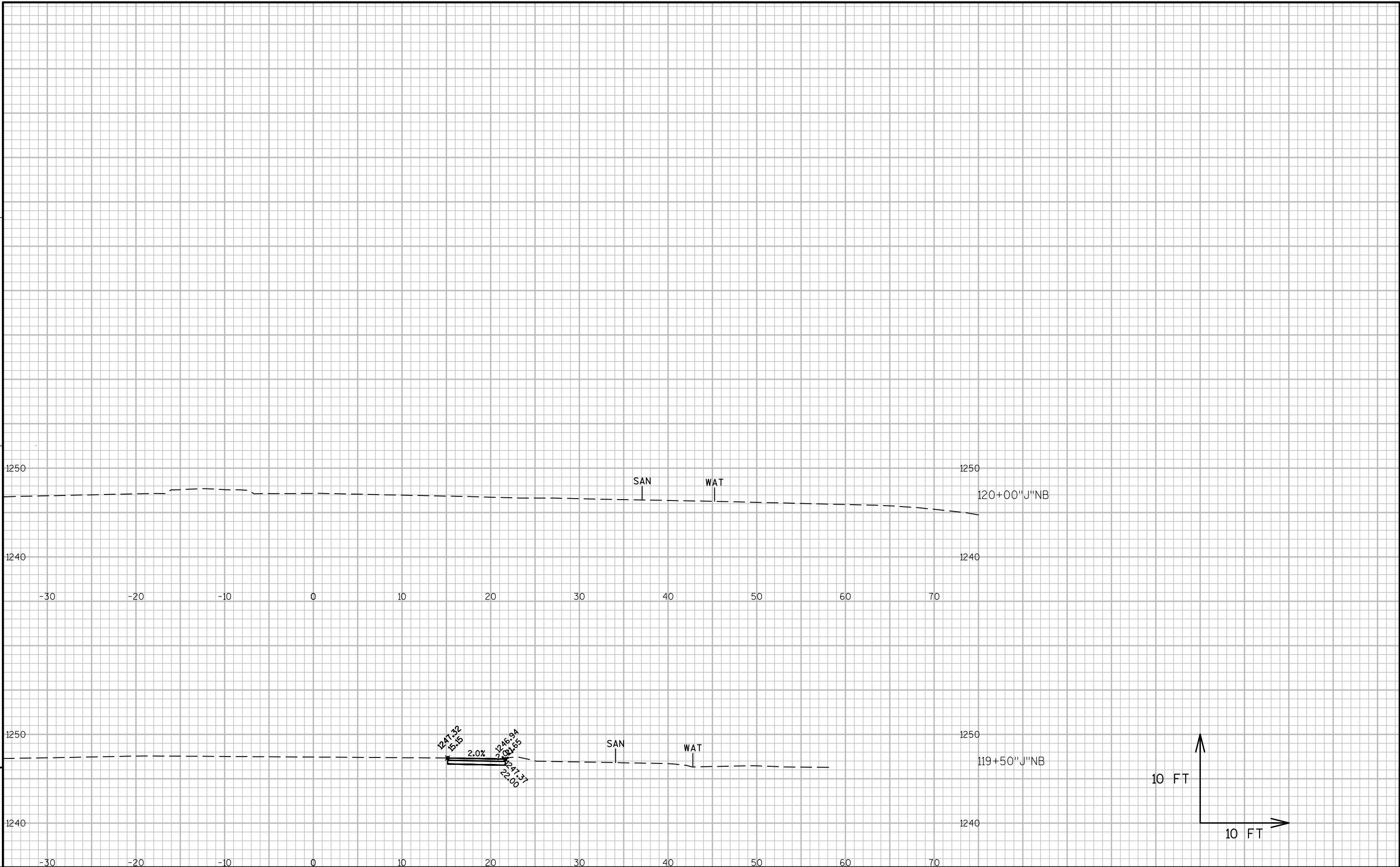






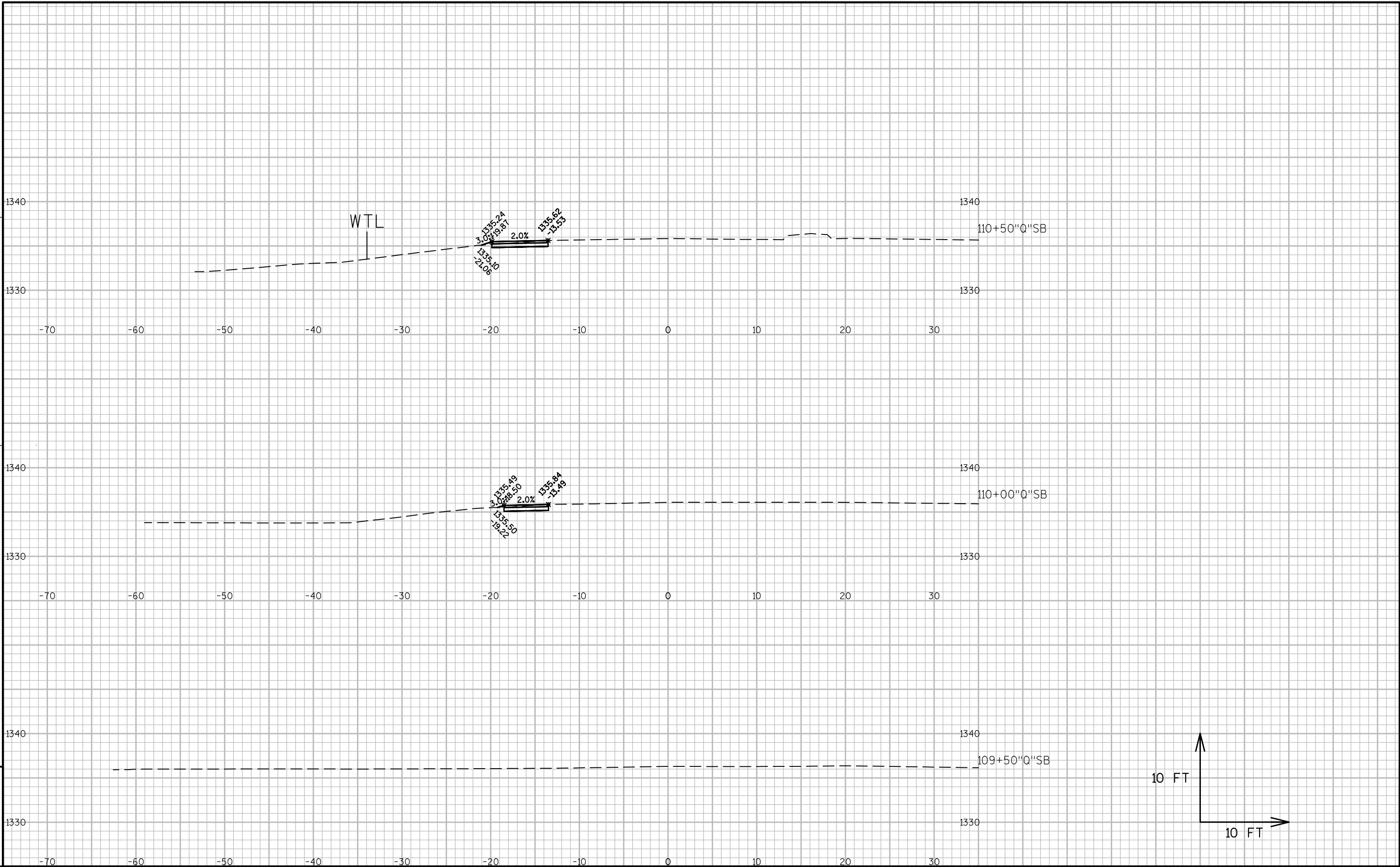


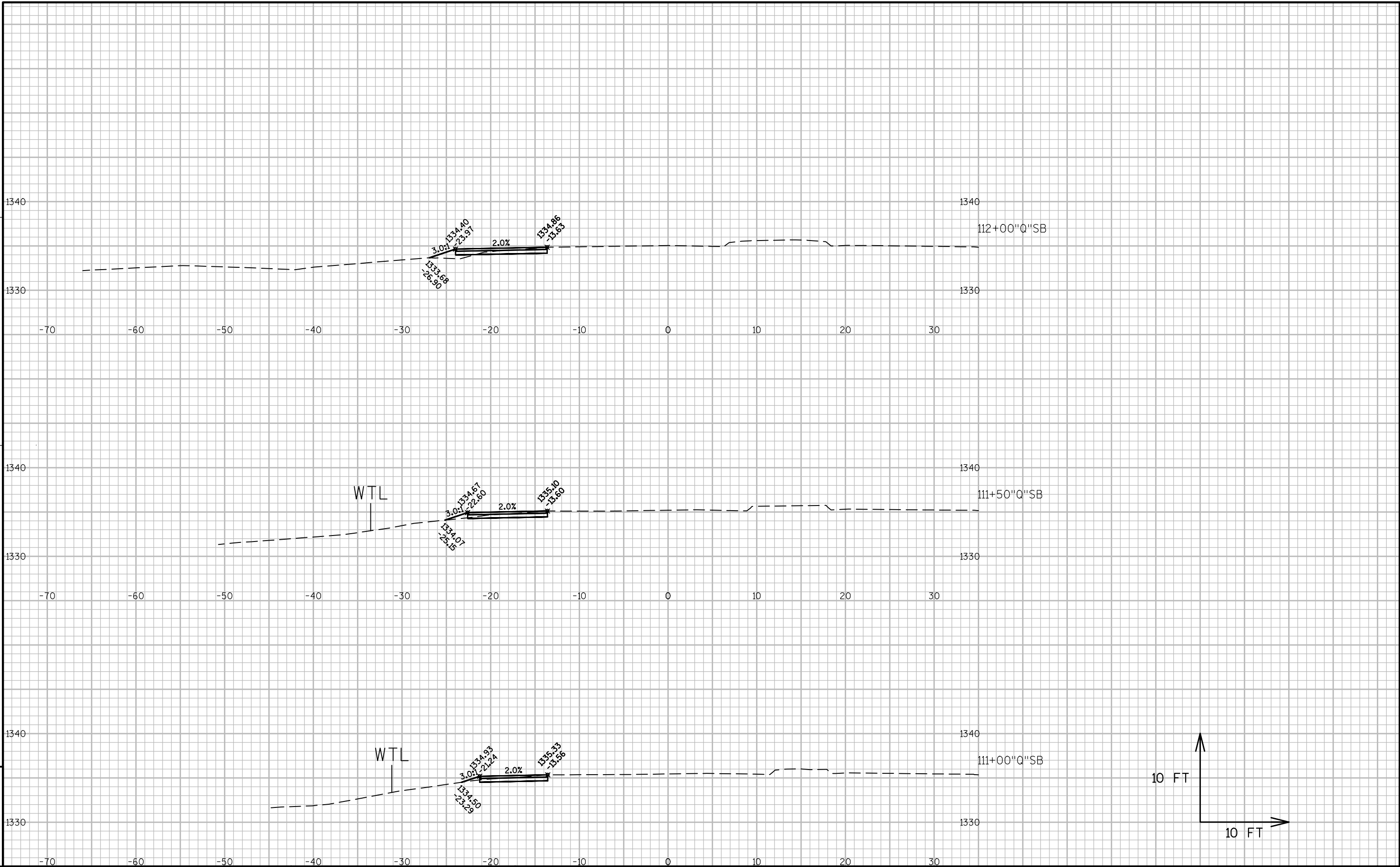


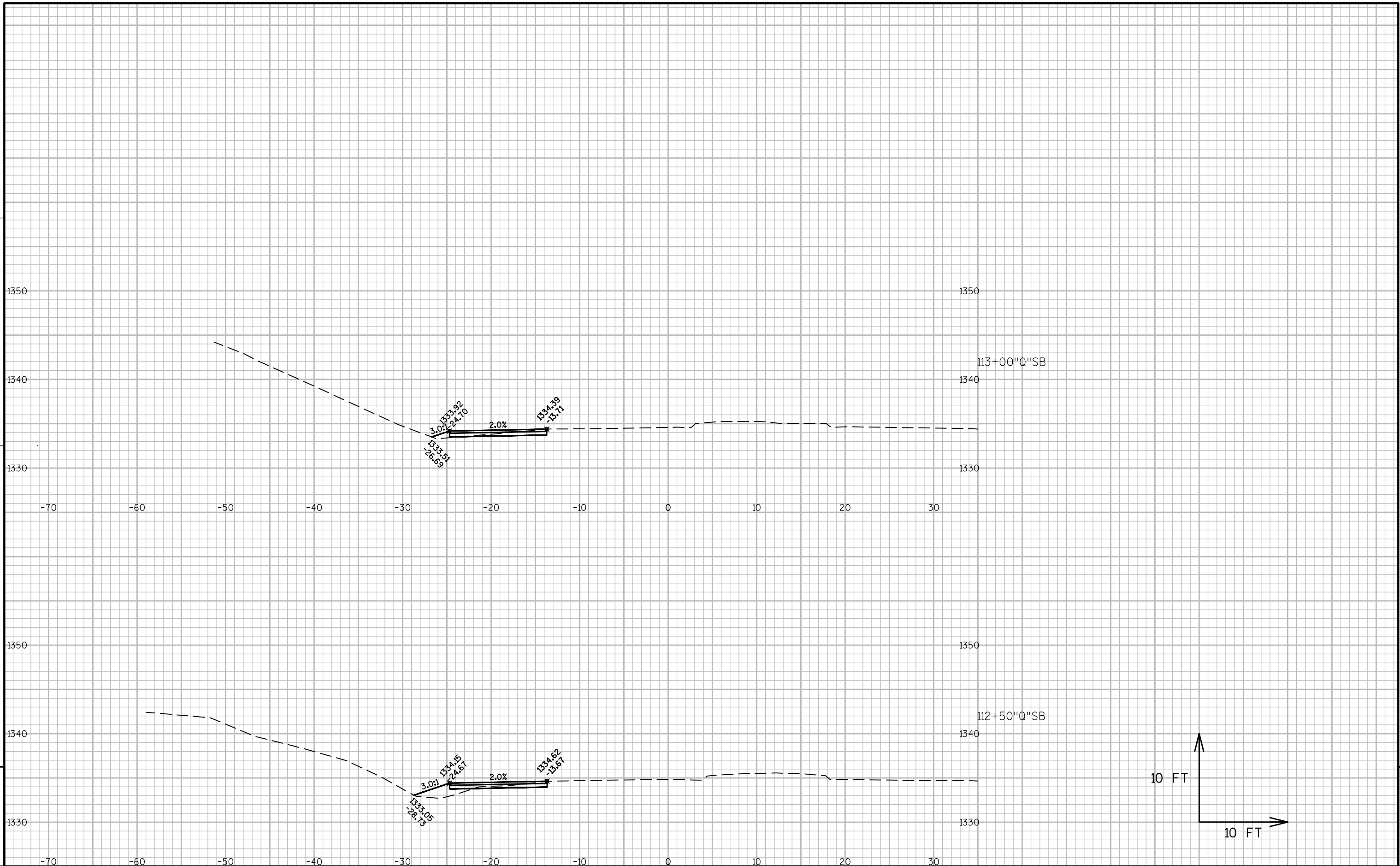


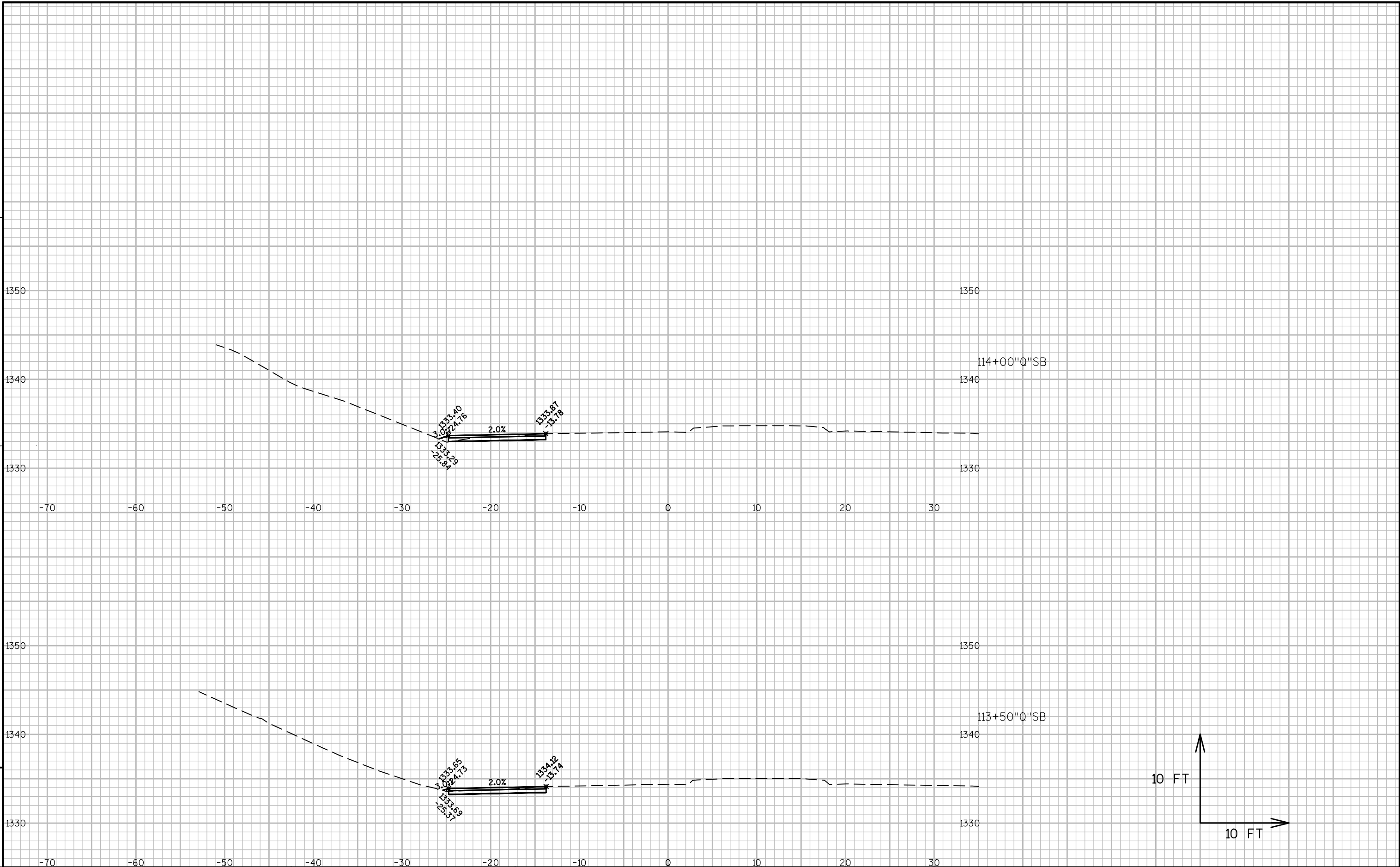
STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)		MASS ORDINATE NOTE 5
		CUT	UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT NOTE 1	UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	EBS	CUT 1.00 NOTE 1	EXPANDED FILL 1.25 NOTE 4	
109+63	---	0	0	0	0	---	---	---	---	---	---	---
110+00	37	3	0	0	0	2	0	0	0	2	0	2
110+50	50	3	0	0	0	6	0	0	0	8	0	7
111+00	50	3	0	0	0	6	0	1	0	14	1	13
111+50	50	4	0	1	0	7	0	1	0	21	2	18
112+00	50	3	0	2	0	7	0	3	0	27	6	21
112+50	50	3	0	5	0	6	0	6	0	33	14	19
113+00	50	3	0	1	0	5	0	5	0	38	21	18
113+50	50	5	0	0	0	8	0	1	0	46	22	24
114+00	50	4	0	0	0	9	0	1	0	55	23	32
114+50	50	5	0	1	0	8	0	1	0	63	24	39
115+00	50	5	0	1	0	9	0	2	0	72	27	45
115+50	50	5	0	1	0	9	0	2	0	81	30	51
116+00	50	4	0	2	0	8	0	2	0	89	32	57
116+50	50	3	0	0	0	6	0	2	0	95	35	60
116+99	49	0	0	0	0	2	0	0	0	97	35	62
118+15	117	0	0	0	0	0	0	0	0	97	35	62
118+50	35	2	0	2	0	2	0	1	0	99	37	62
119+00	50	5	0	1	0	7	0	3	0	106	40	66
119+50	50	5	0	0	0	9	0	1	0	115	41	74
120+00	50	4	0	0	0	9	0	1	0	123	42	82
120+50	50	4	0	0	0	7	0	1	0	131	42	88
121+00	50	3	0	0	0	7	0	1	0	137	43	94
121+50	50	3	0	0	0	6	0	0	0	143	44	99
122+00	50	3	0	0	0	5	0	0	0	148	44	104
122+50	50	2	0	0	0	4	0	0	0	153	44	108
123+00	50	2	0	0	0	4	0	0	0	156	44	112
123+47	47	0	0	0	0	2	0	0	0	158	45	113
				COLUMN TOTALS		158	0	36	0			

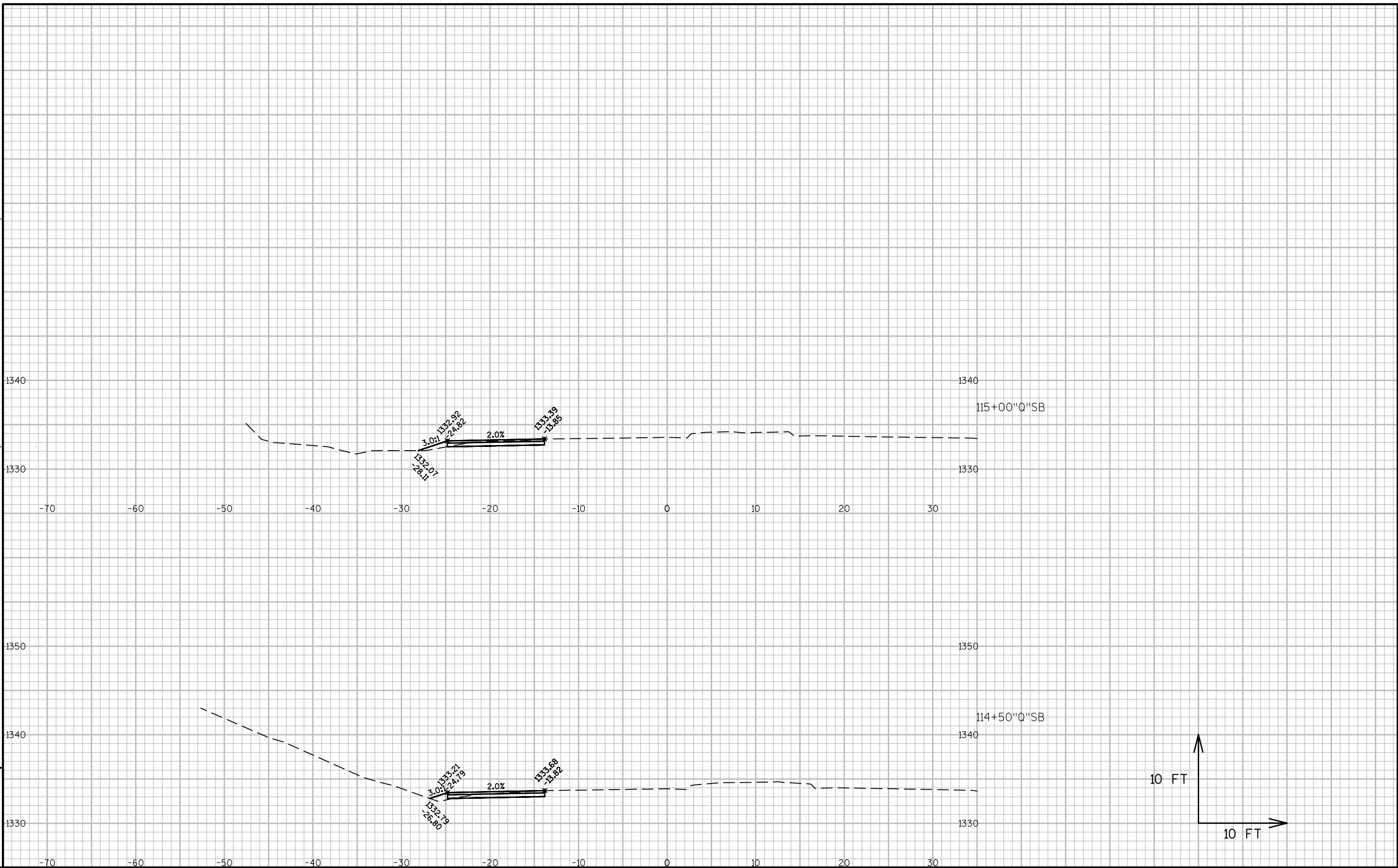
NOTES:
1) CUT INCLUDES UNUSABLE PAVEMENT MATERIAL
2) UNUSABLE PAVEMENT MATERIAL DOES NOT APPEAR IN THE CROSS SECTIONS
3) FILL DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL EXCAVATION VOLUME
4) EXPANDED FILL = UNEXPANDED FILL * EXPANDED FILL FACTOR. EXPANDED FILL FACTOR = 1.25
5) MASS ORDINATE = (CUT - UNUSABLE PAVEMENT MATERIAL) - (FILL * FILL FACTOR)

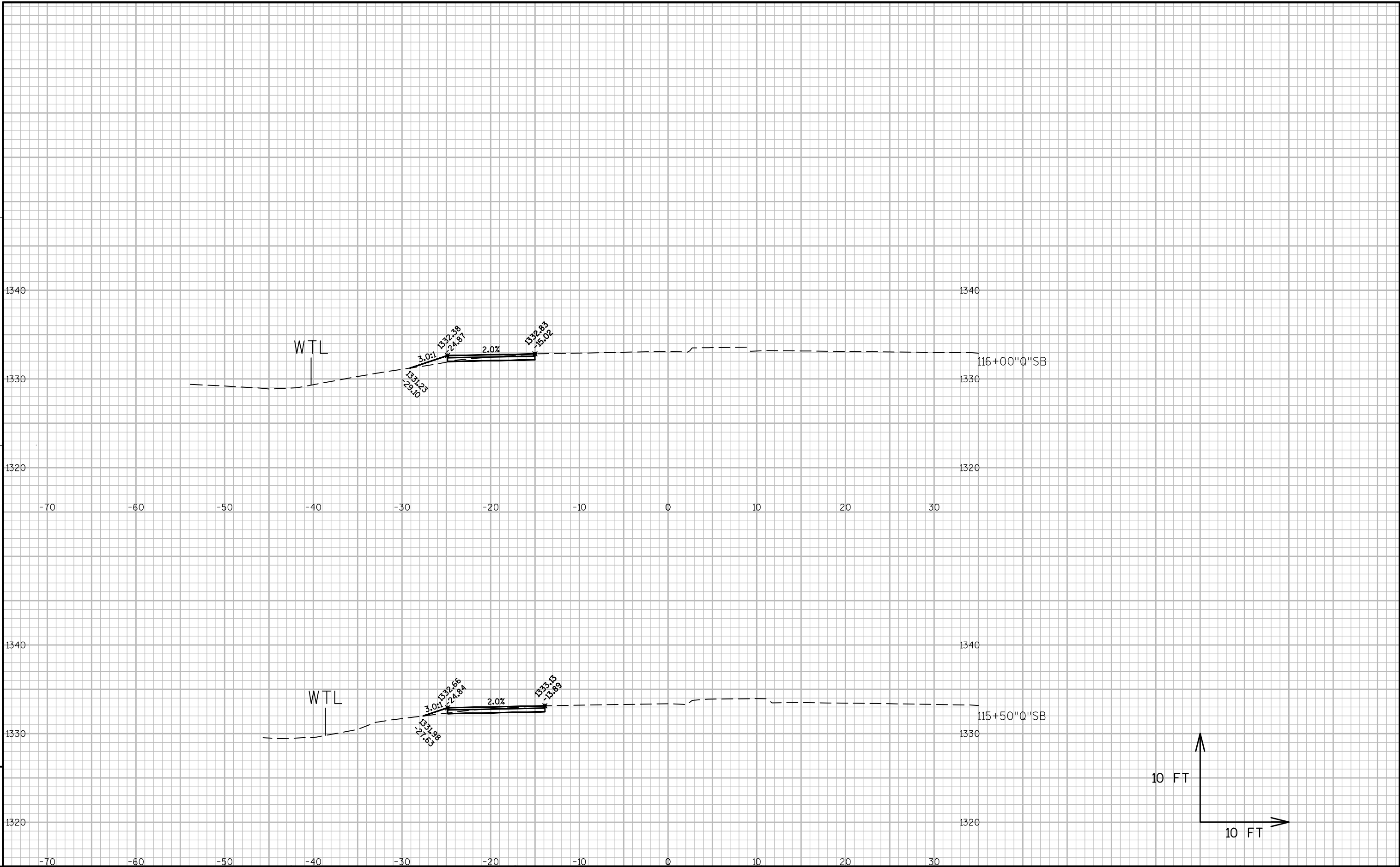


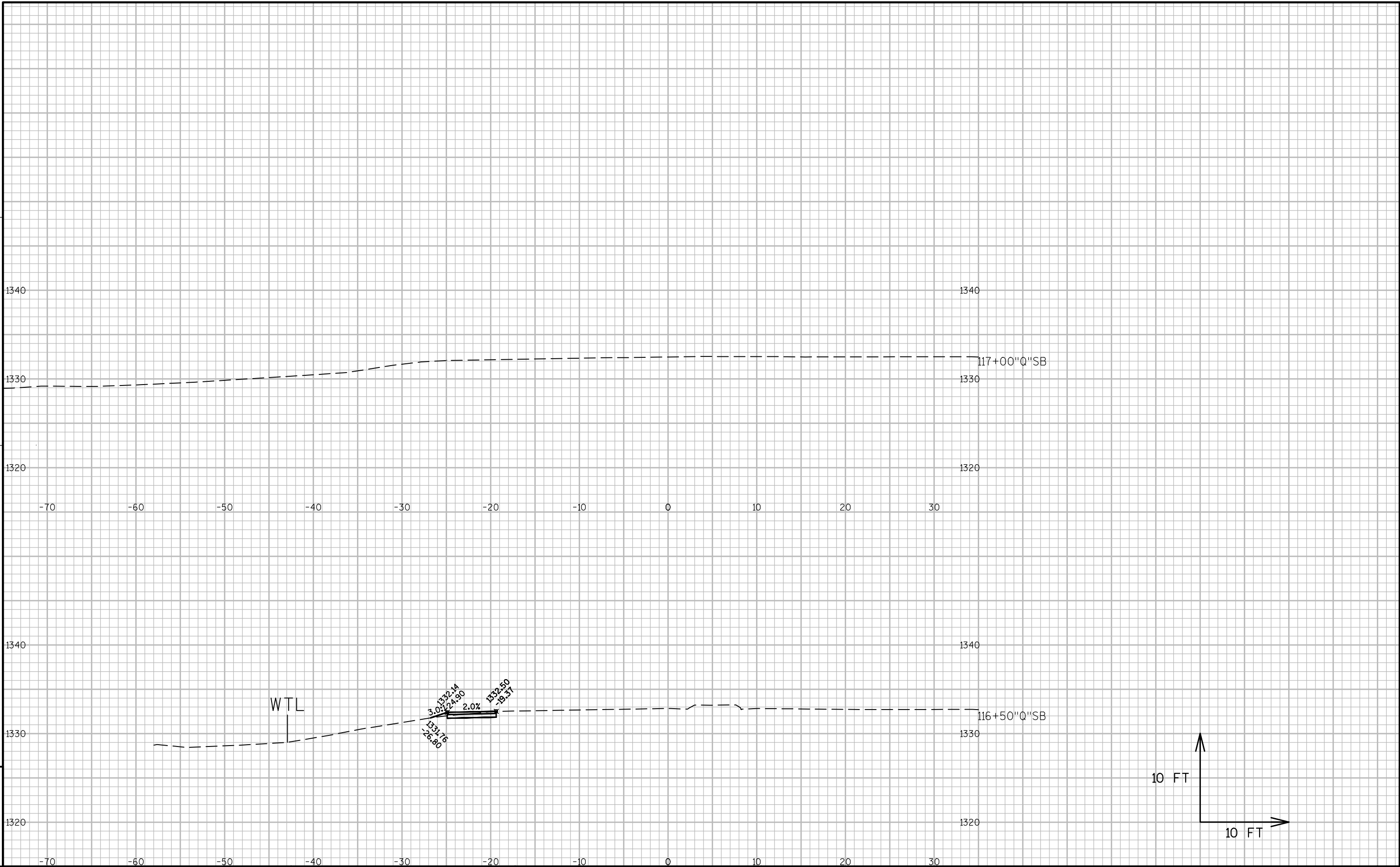


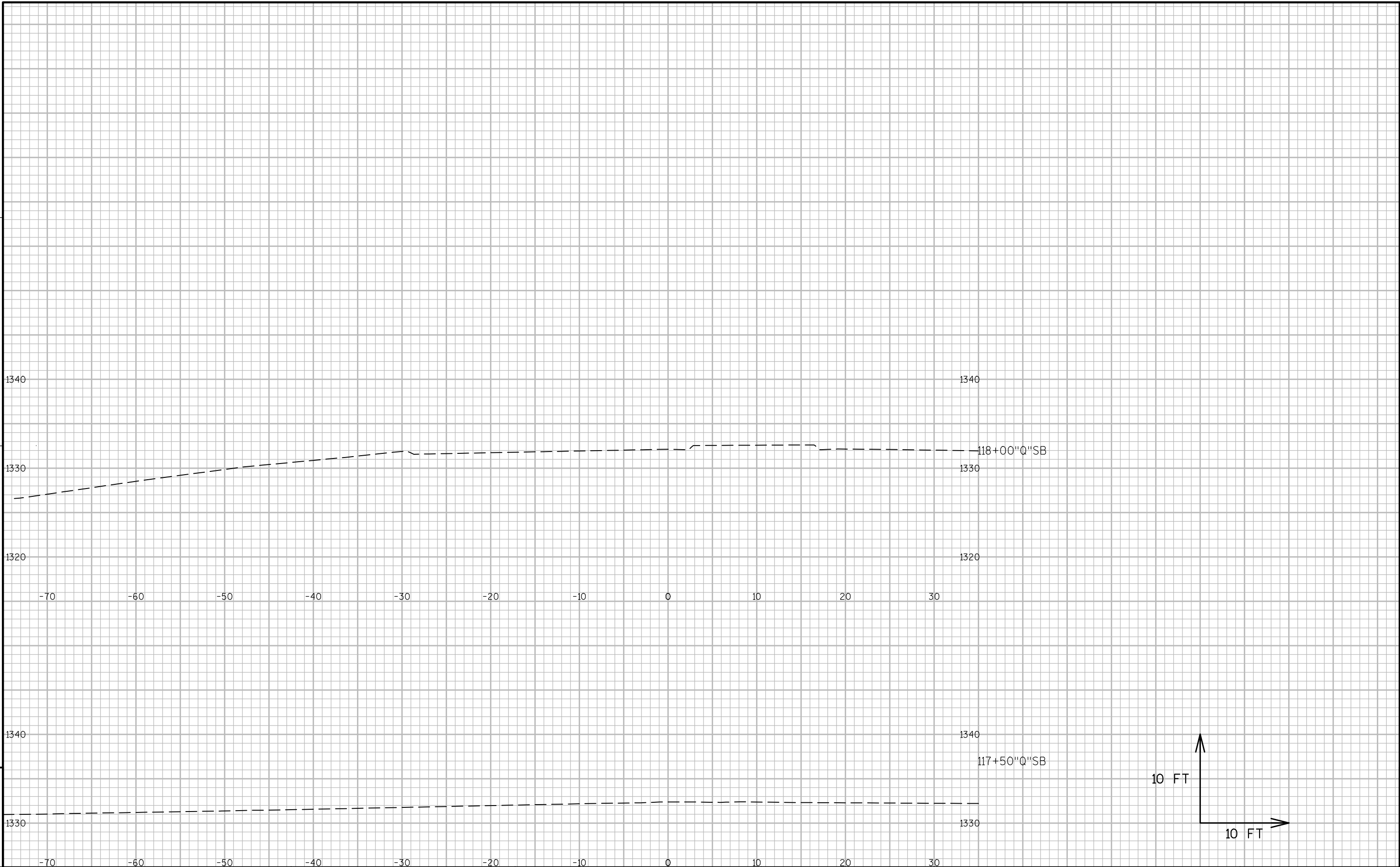






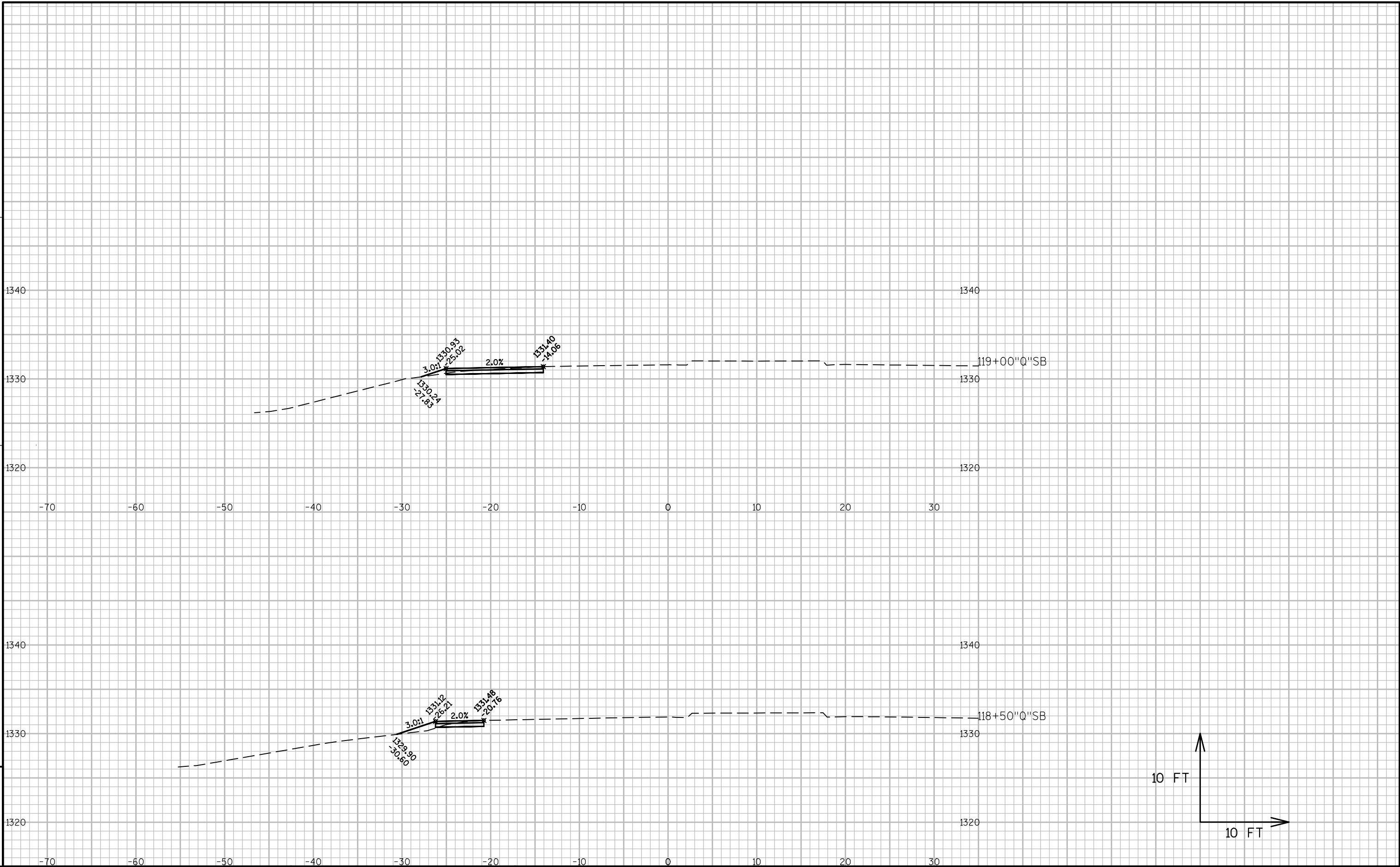


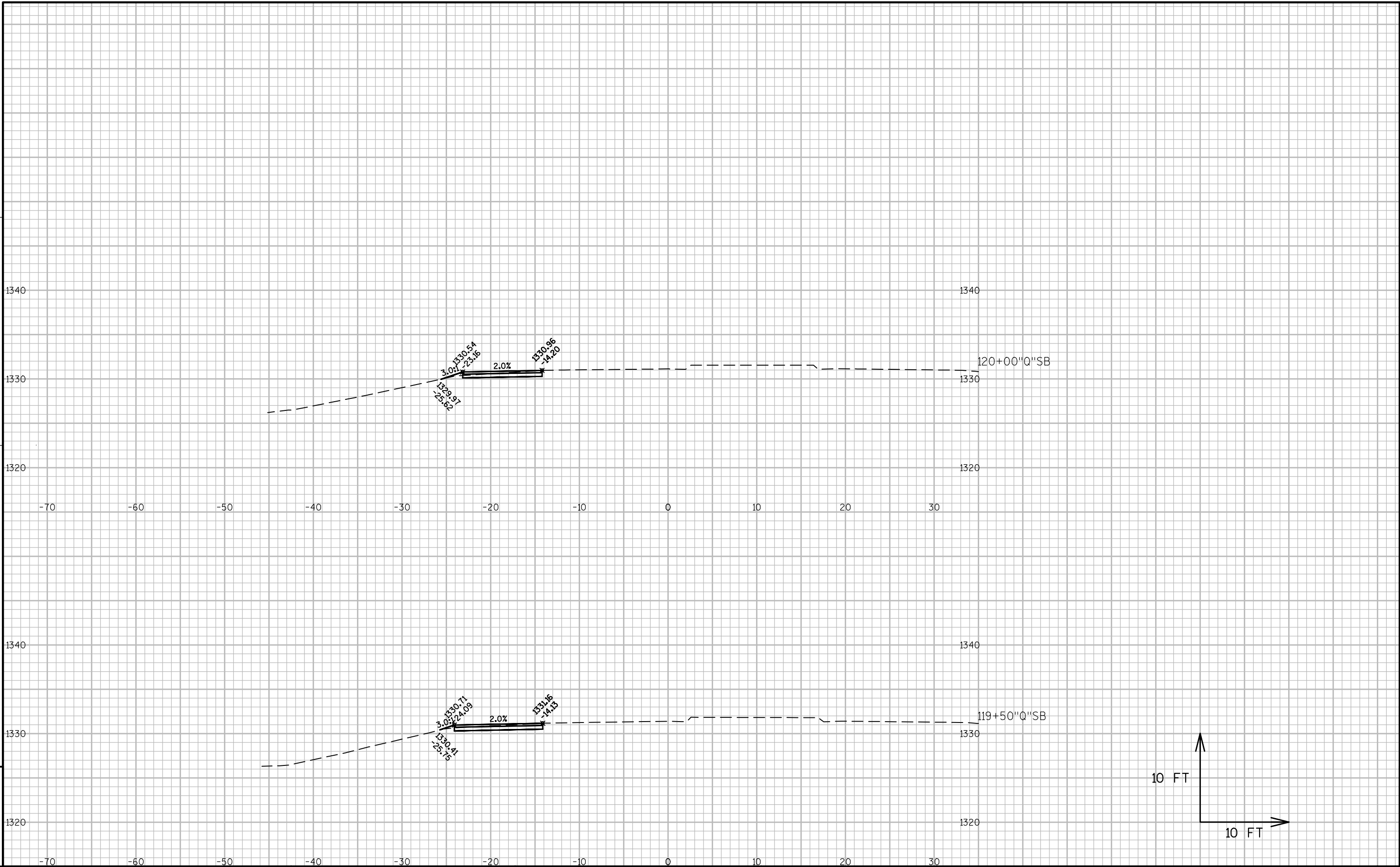


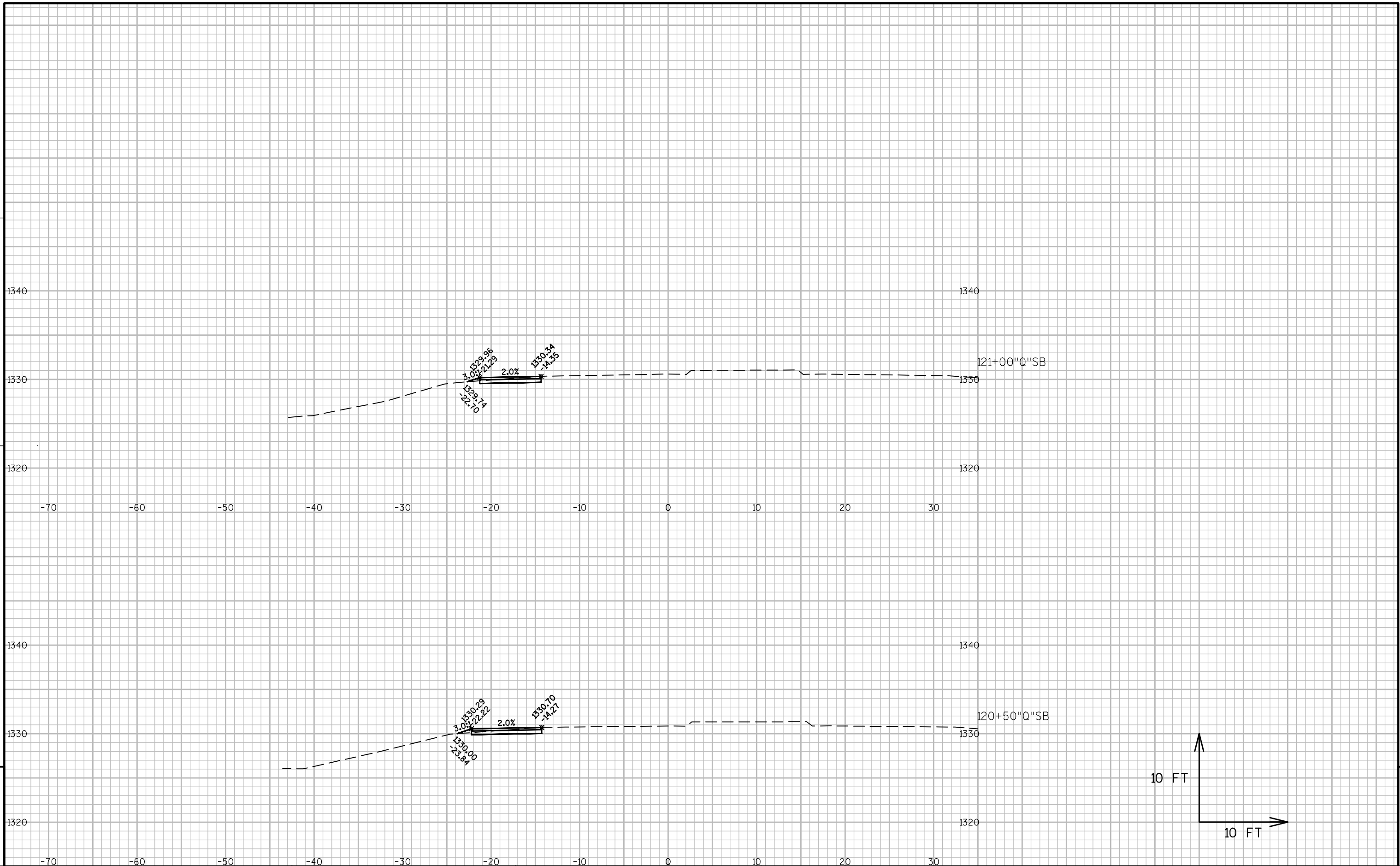


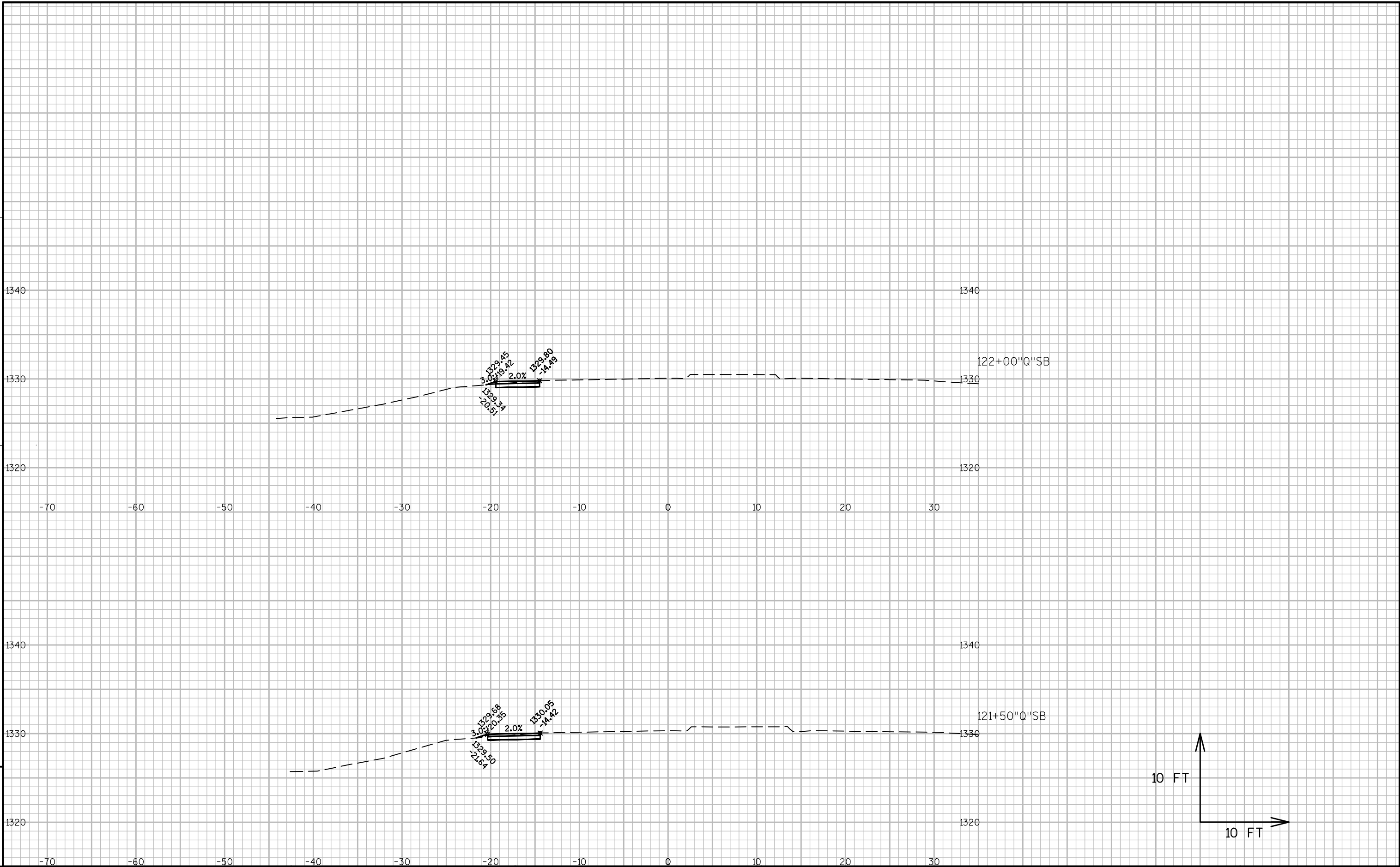
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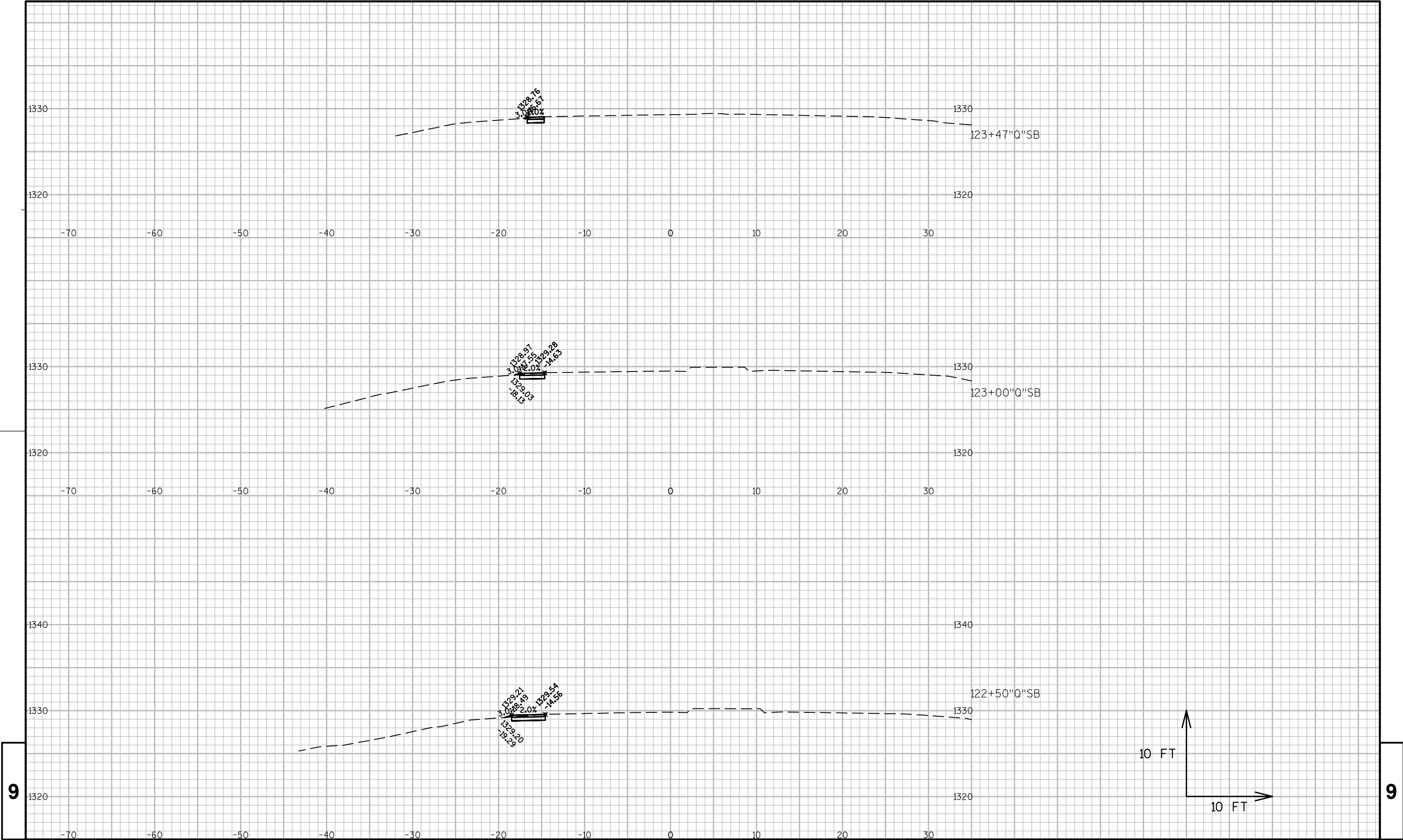
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PROJECT NO:1053-02-62

HWY:STH 29

COUNTY:MARATHON

CROSS SECTIONS: SB CTH Q SHOULDER WIDENING

SHEET

102

E

FILE NAME : P:\2013\2013.058 - WISDOT NC STH 29 BRIDGE CTH J -Q MARATHON\CAD\PLANS\13058_090100_XS.DWG
SB CTH J WIDENING - 119

PLOT DATE : 5/29/2015 10:55 AM

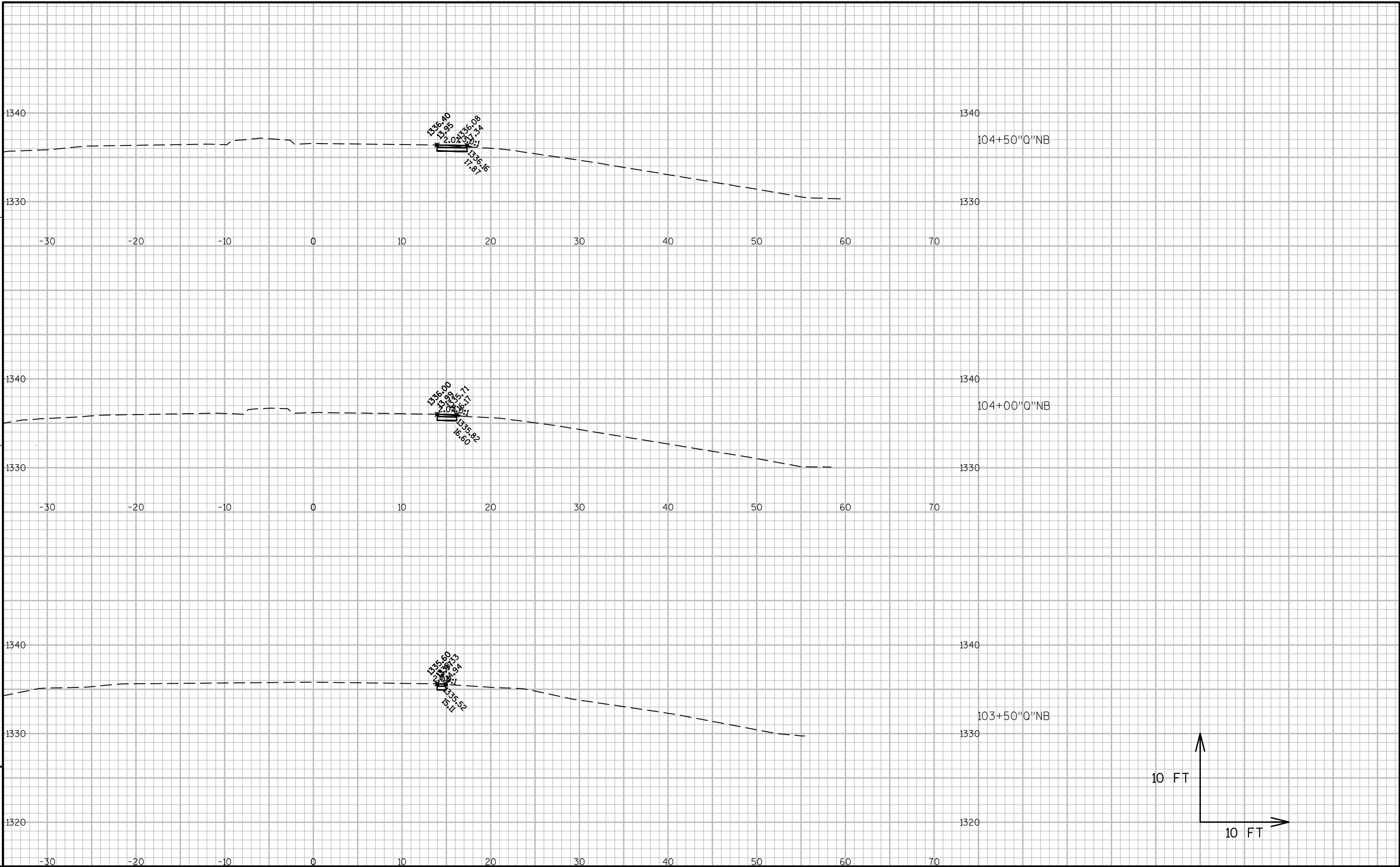
PLOT BY : DANIEL J. GERLING

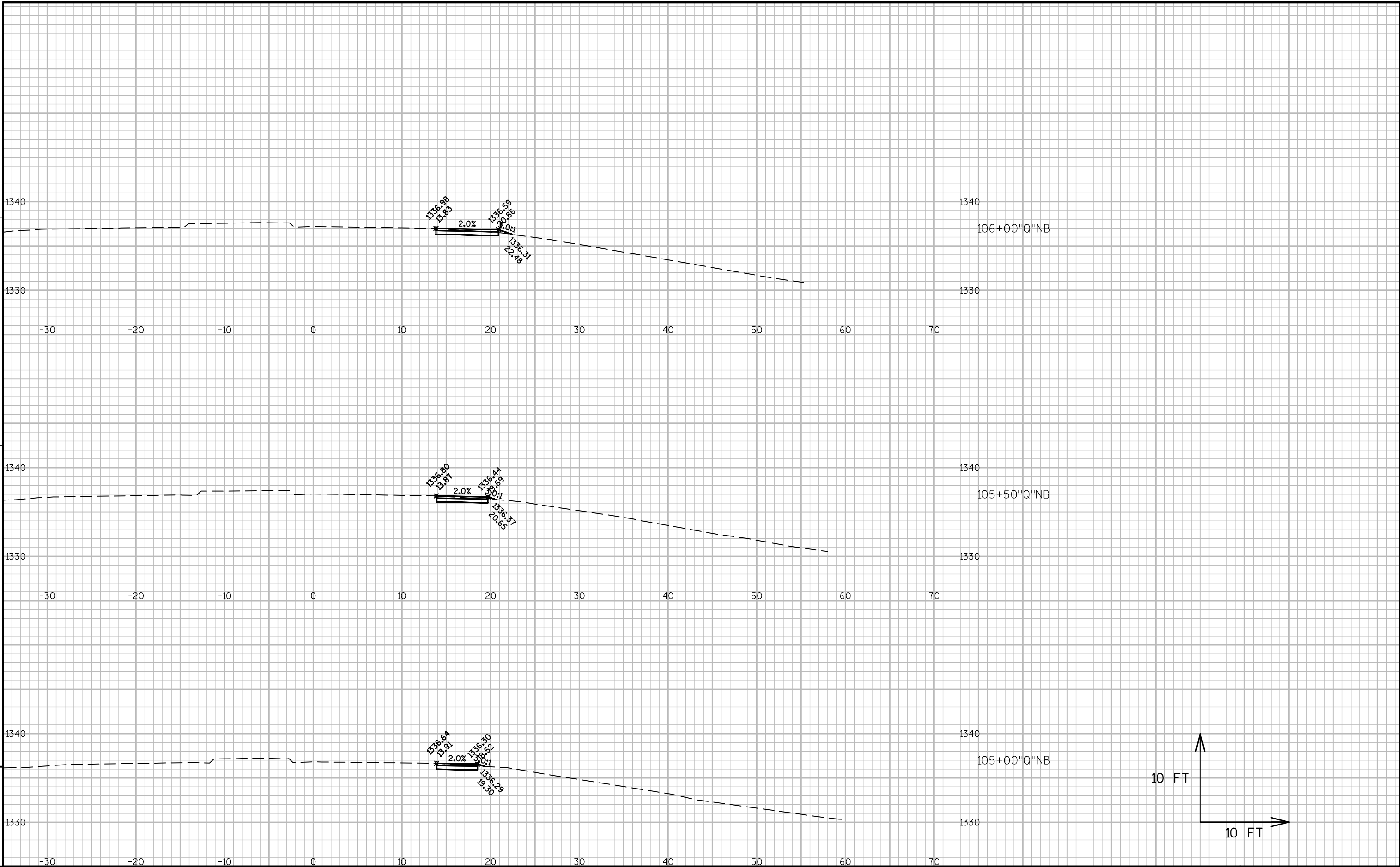
PLOT NAME :

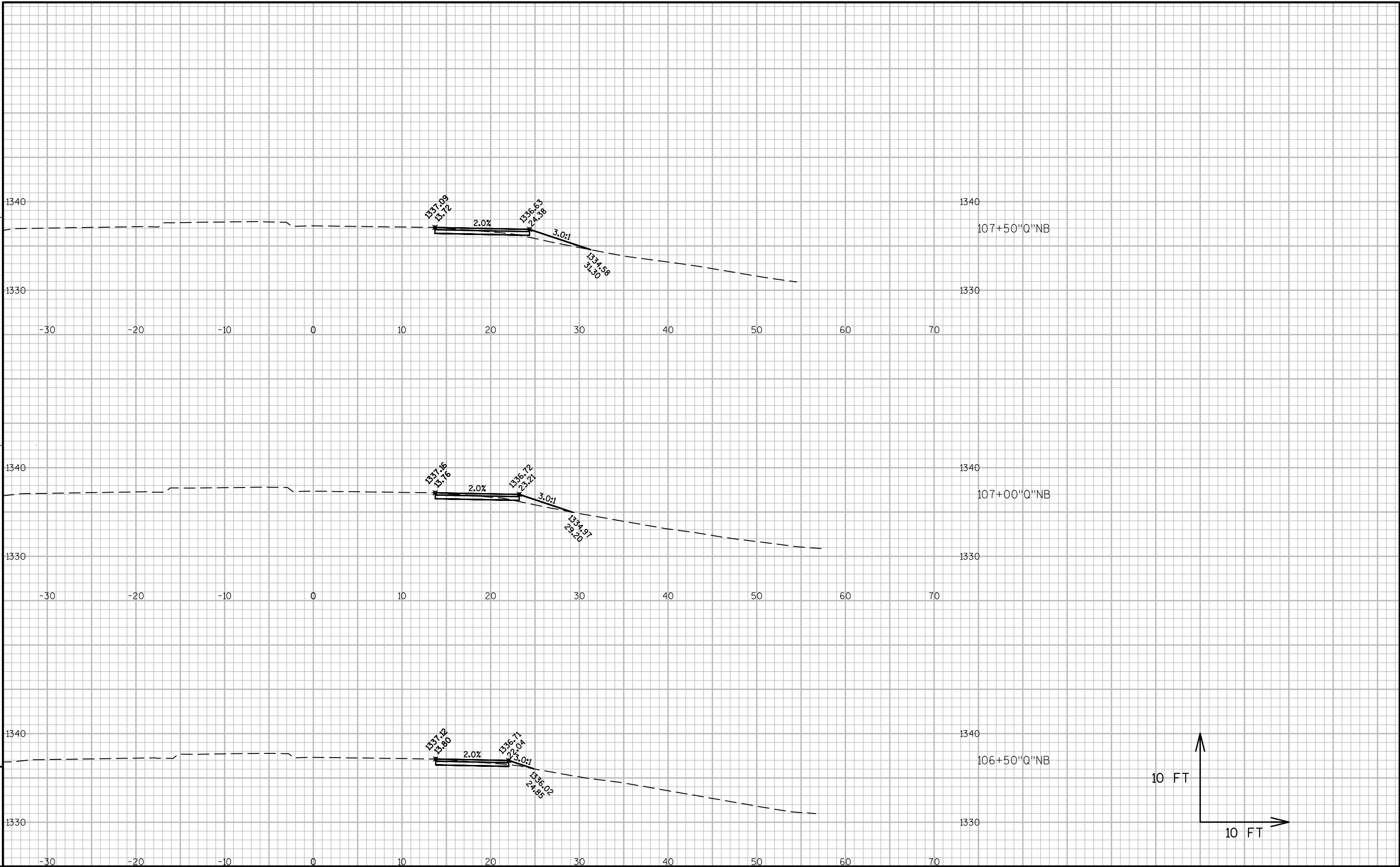
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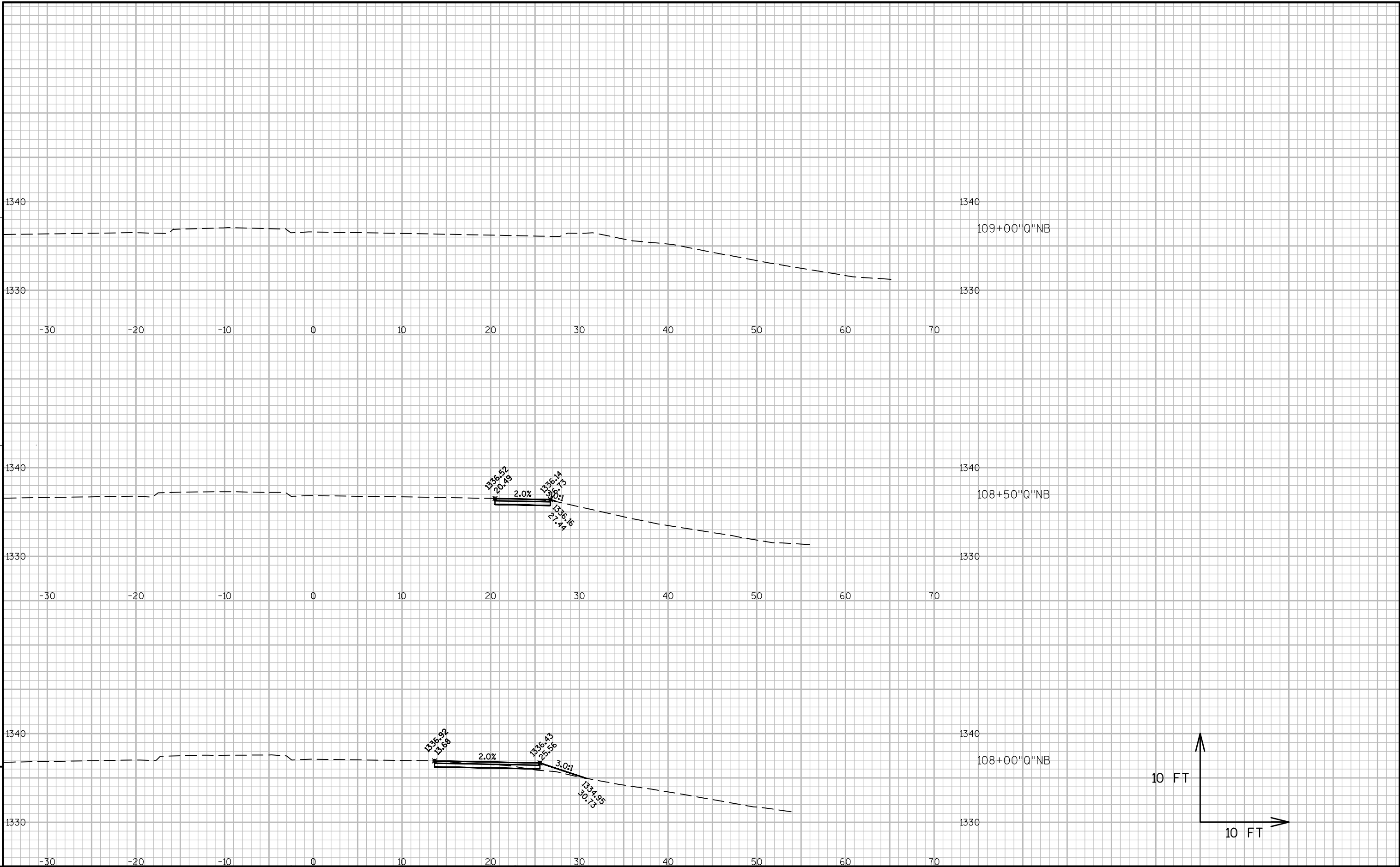
WISDOT/CADDs SHEET 49

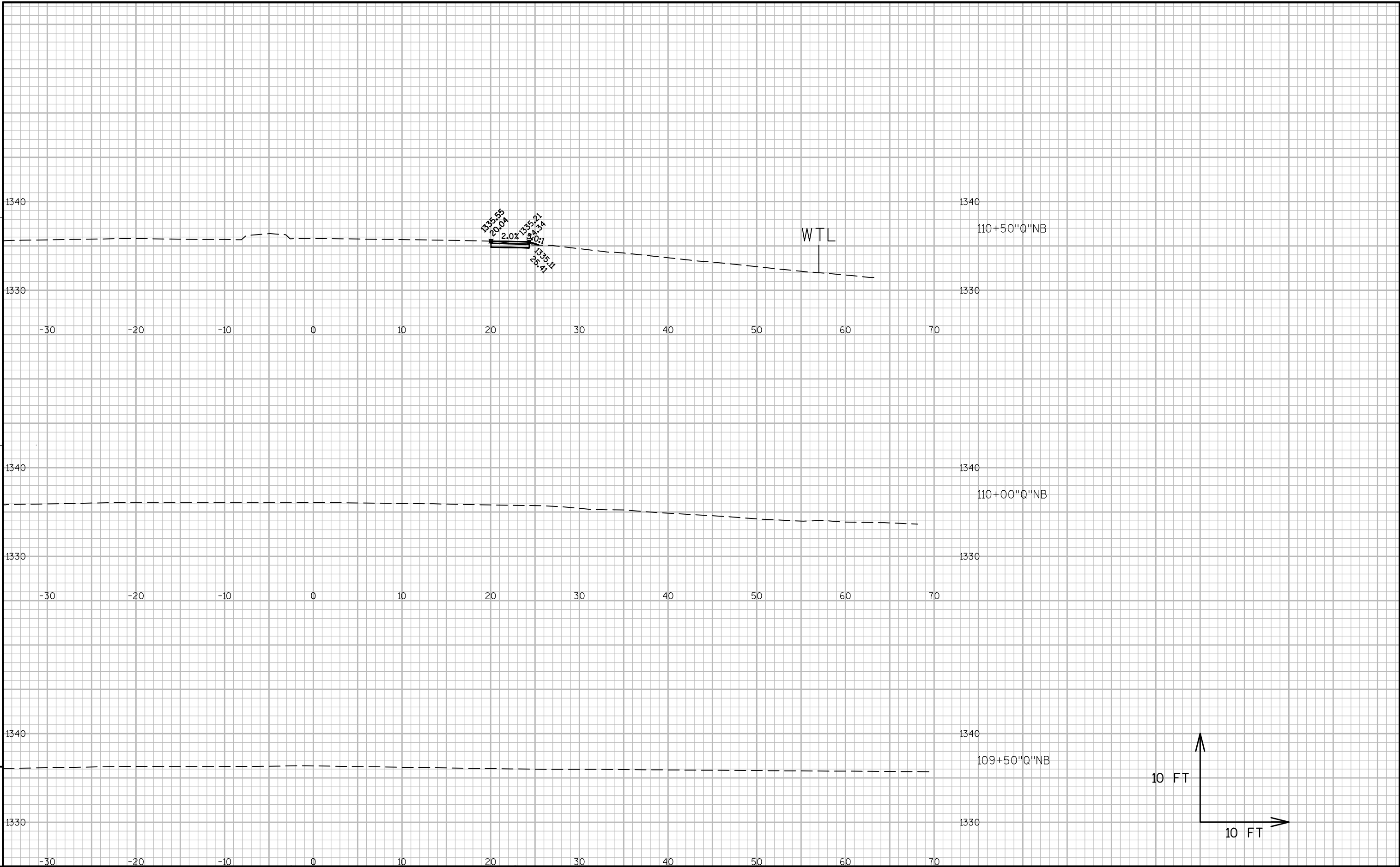
STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)		MASS ORDINATE NOTE 5
		CUT	UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT NOTE 1	UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	EBS	CUT 1.00 NOTE 1	EXPANDED FILL 1.25 NOTE 4	
103+10	---	0	0	0	0	---	---	---	---	---	---	---
103+50	40	1	0	0	0	0	0	0	0	0	0	0
104+00	50	1	0	0	0	2	0	0	0	2	0	2
104+50	50	2	0	0	0	3	0	0	0	5	0	5
105+00	50	3	0	0	0	4	0	0	0	10	0	9
105+50	50	3	0	0	0	5	0	0	0	15	0	14
106+00	50	3	0	0	0	6	0	0	0	21	1	20
106+50	50	4	0	1	0	7	0	1	0	28	2	26
107+00	50	4	0	3	0	7	0	3	0	34	5	29
107+50	50	4	0	3	0	7	0	5	0	41	12	28
108+00	50	4	0	2	0	7	0	5	0	48	18	29
108+50	50	4	0	0	0	8	0	2	0	55	21	35
108+86	36	0	0	0	0	3	0	0	0	58	21	37
110+14	128	0	0	0	0	0	0	0	0	58	21	37
110+50	36	2	0	0	0	1	0	0	0	60	21	39
111+00	50	5	0	0	0	6	0	1	0	66	22	44
111+50	50	4	0	1	0	8	0	1	0	74	23	51
112+00	50	5	0	0	0	8	0	1	0	82	24	58
112+50	50	6	0	0	0	10	0	0	0	92	24	68
113+00	50	6	0	0	0	11	0	0	0	103	24	78
113+50	50	6	0	0	0	10	0	0	0	113	24	89
114+00	50	5	0	0	0	10	0	0	0	123	24	99
114+50	50	5	0	0	0	9	0	0	0	132	24	107
115+00	50	5	0	0	0	8	0	1	0	140	25	115
115+50	50	4	0	0	0	8	0	1	0	148	26	122
116+00	50	3	0	0	0	6	0	1	0	154	27	127
116+50	50	3	0	0	0	6	0	0	0	160	27	133
117+00	50	3	0	0	0	5	0	0	0	165	27	138
117+31	31	0	0	0	0	1	0	0	0	167	27	139
				COLUMN TOTALS		167	0	22	0			
NOTES:												

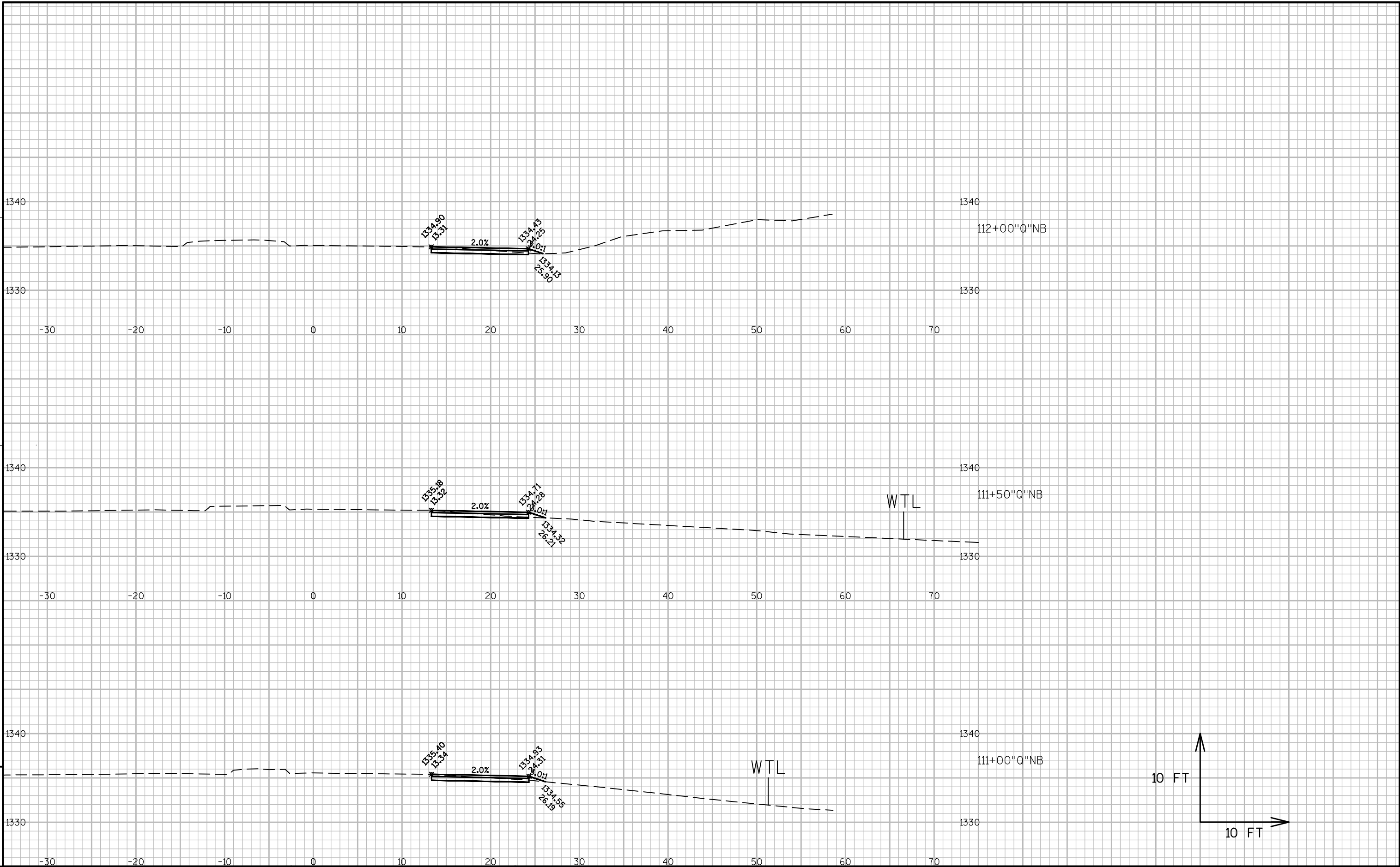


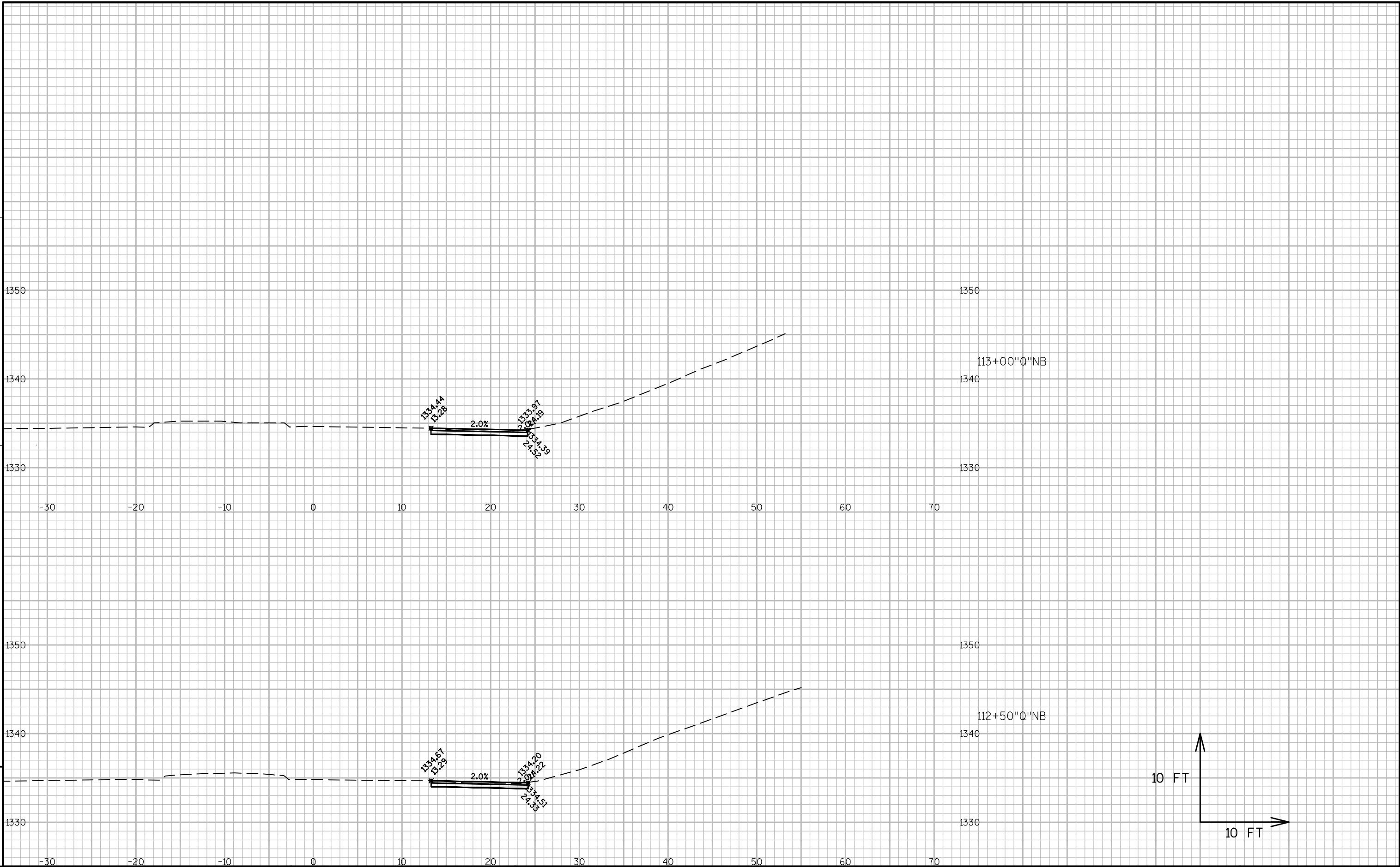


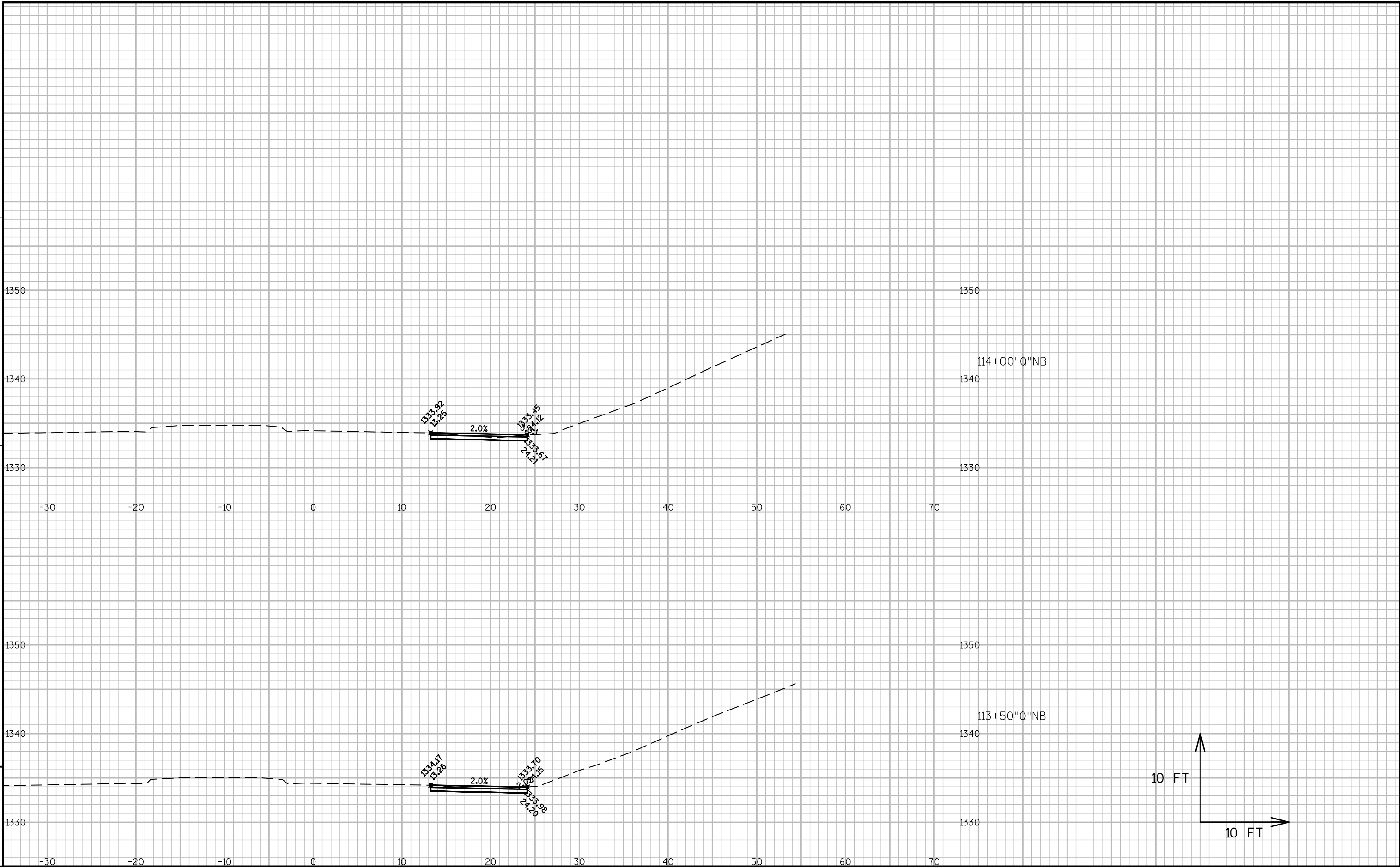


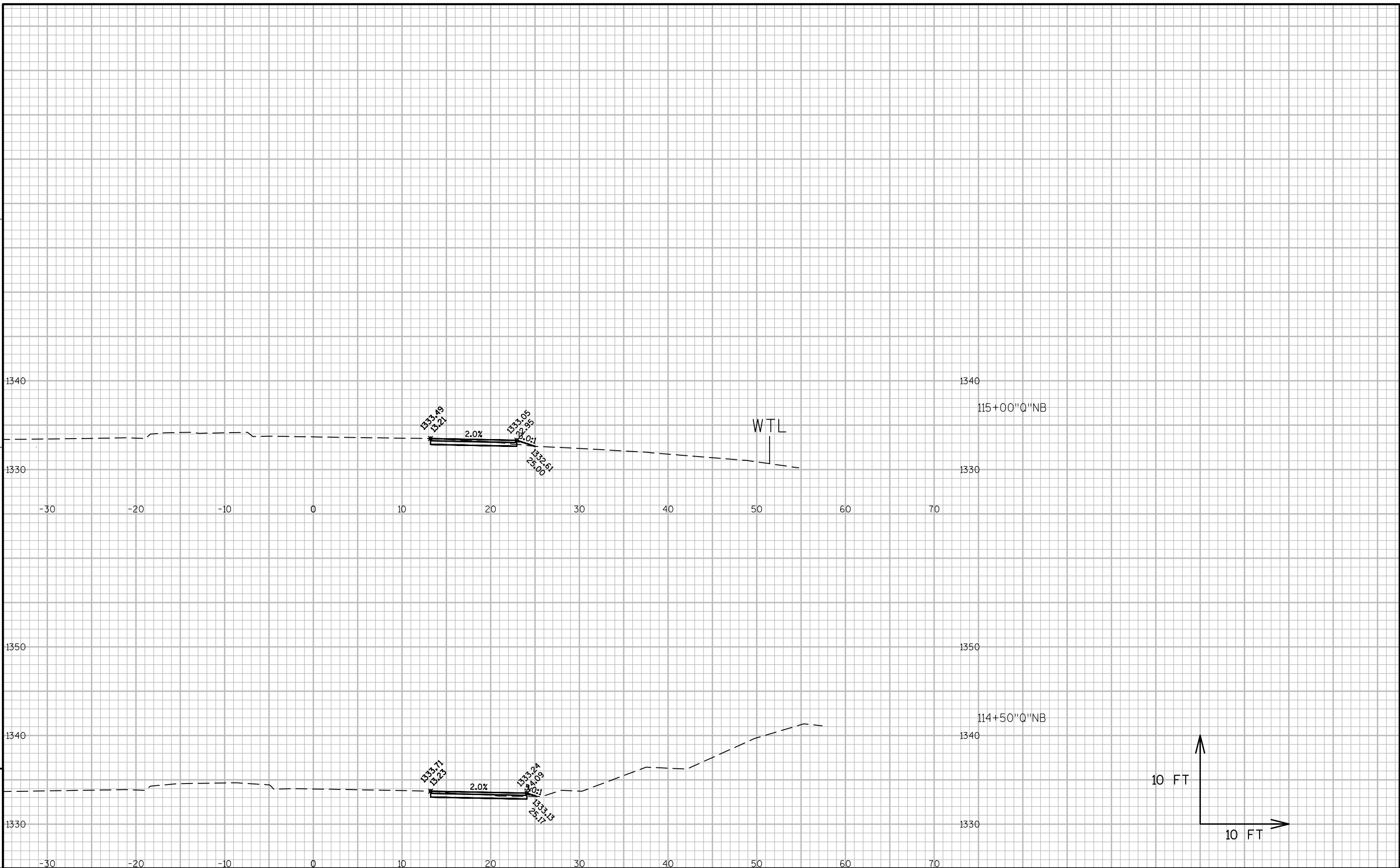


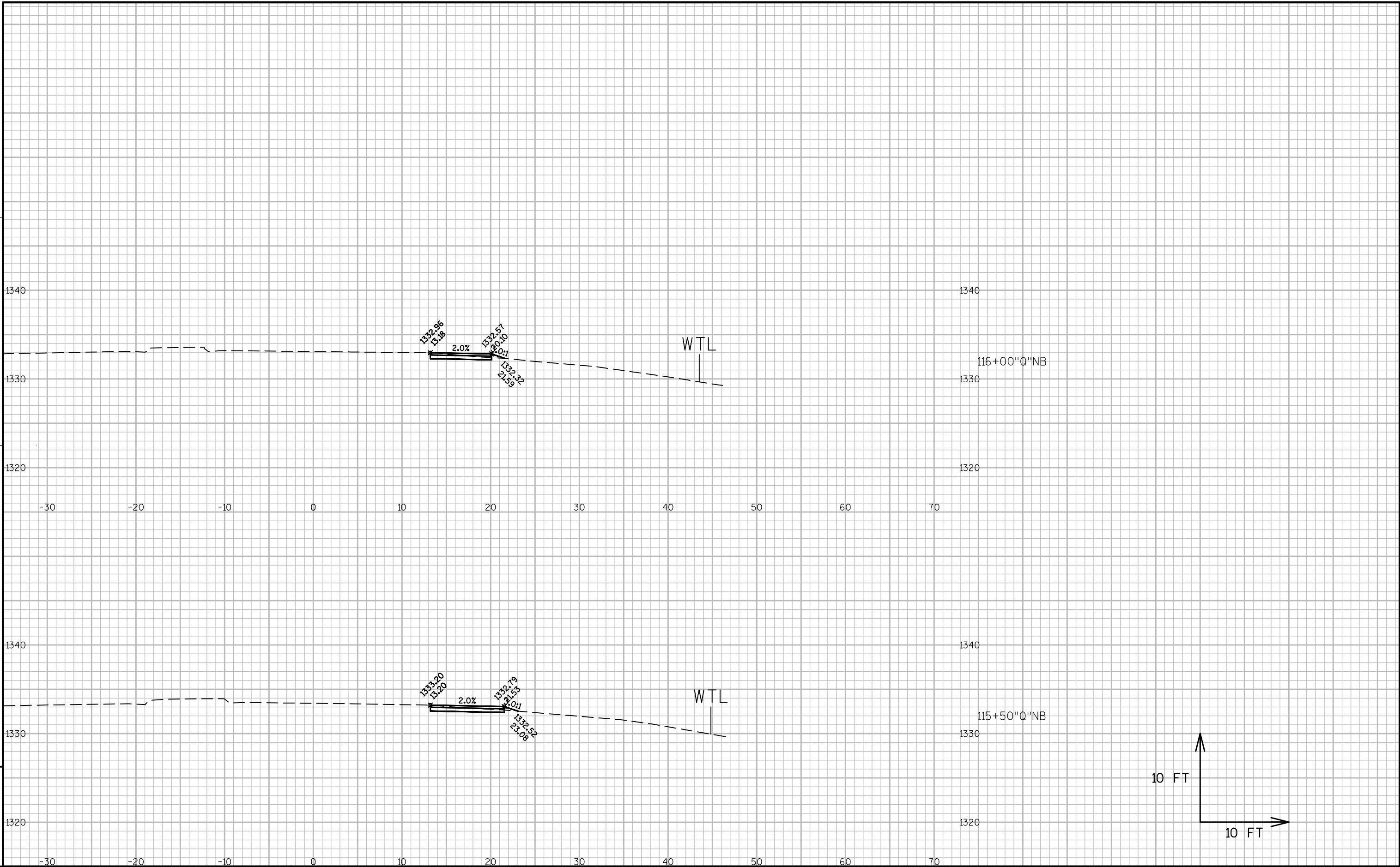


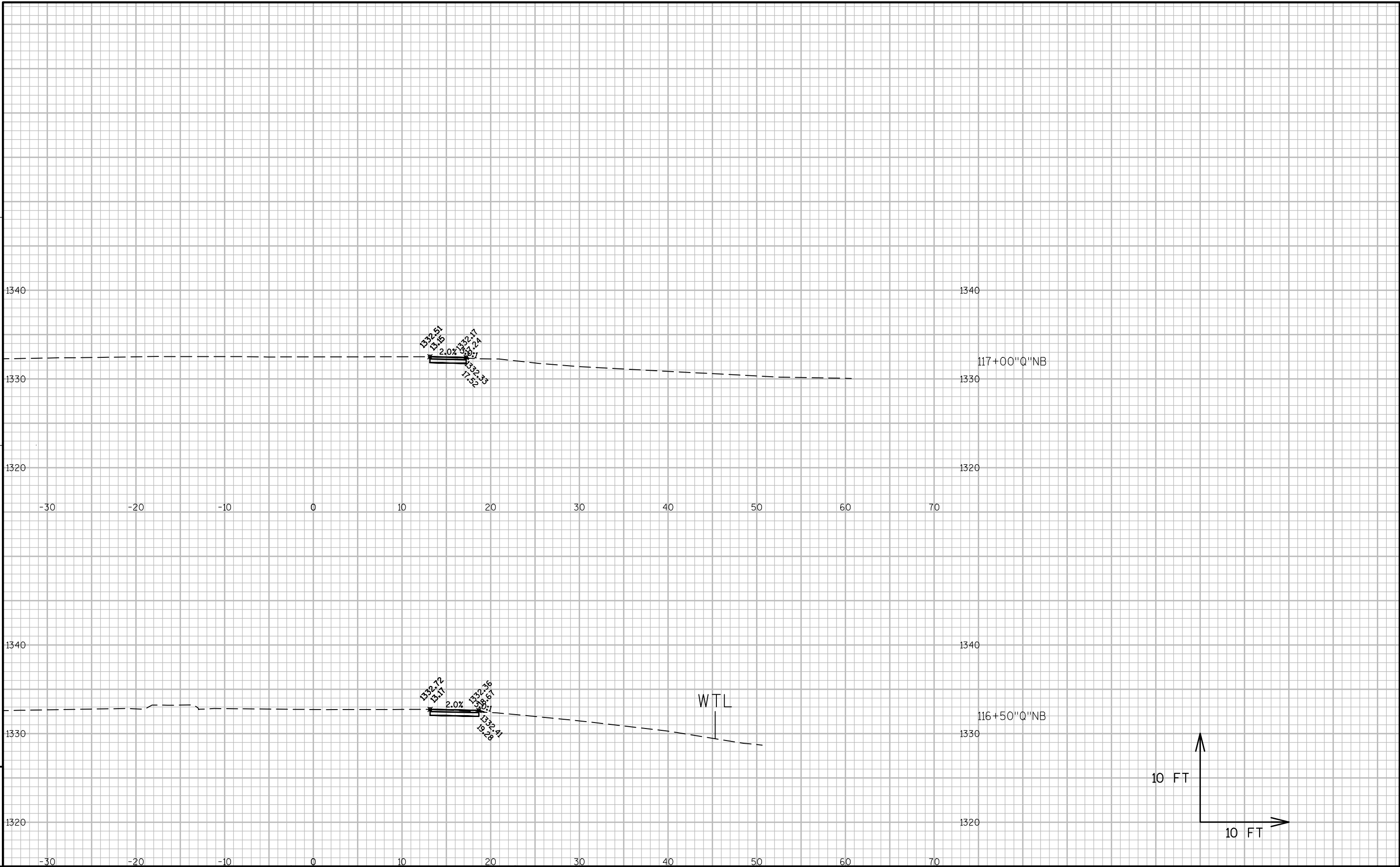


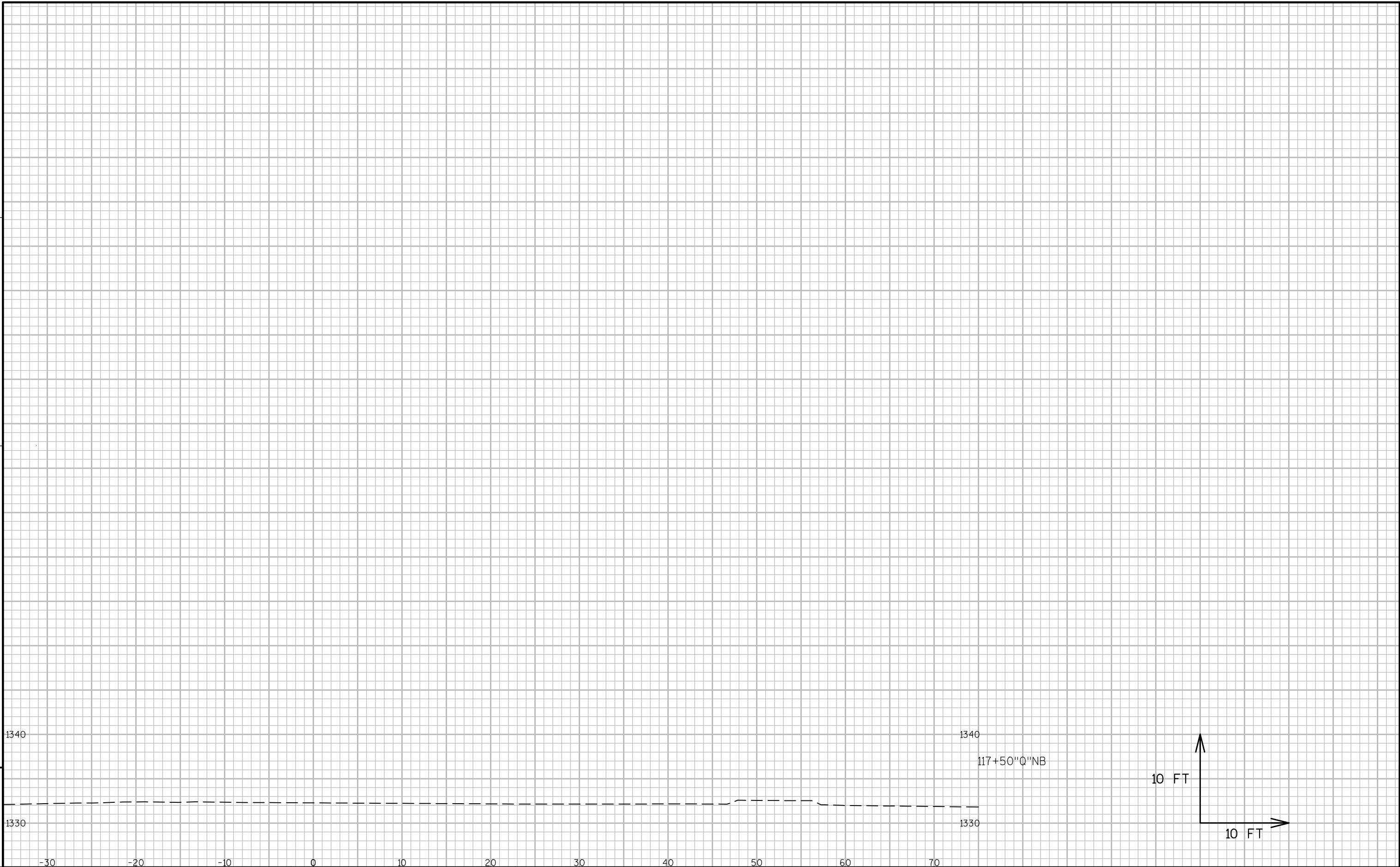










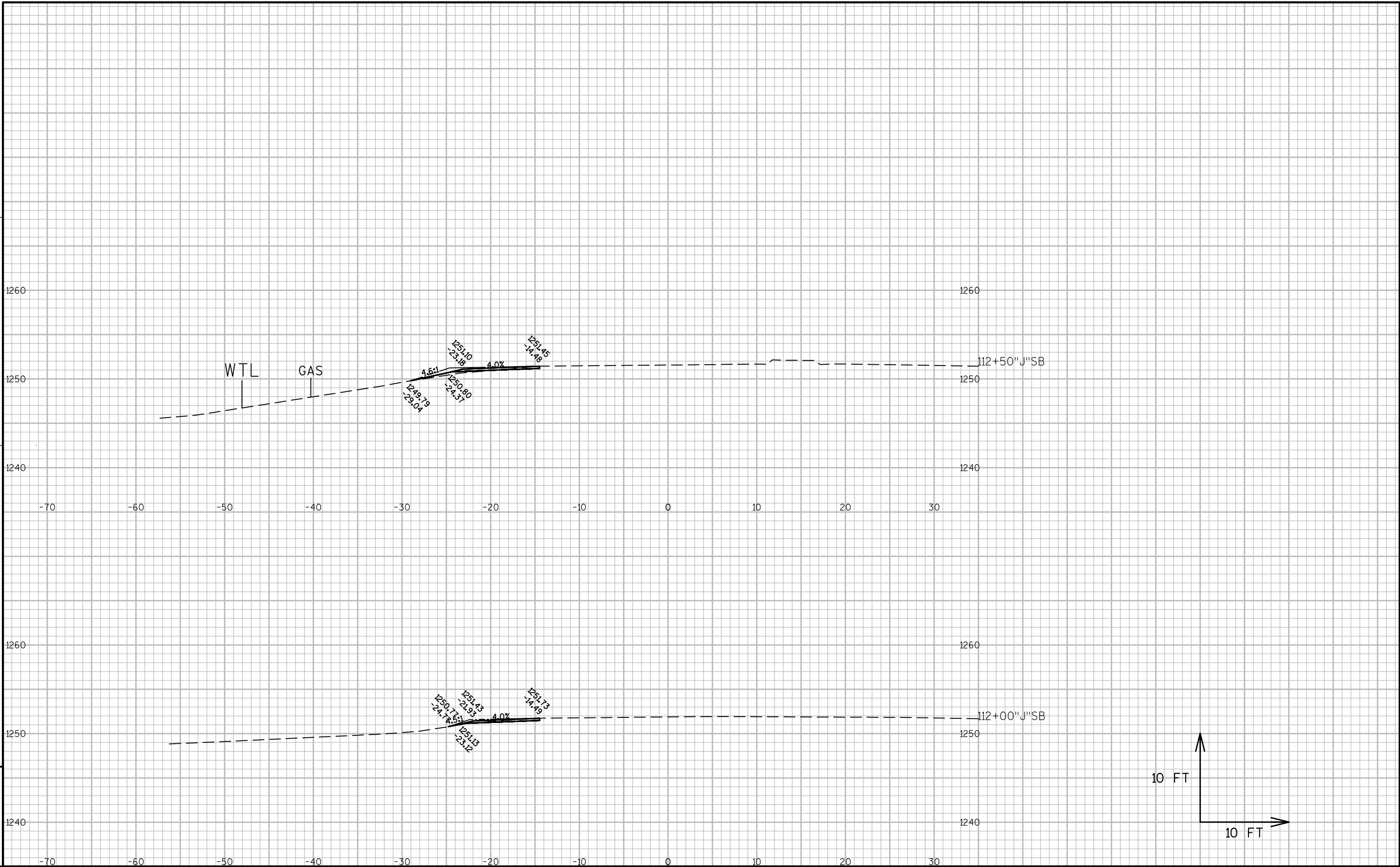


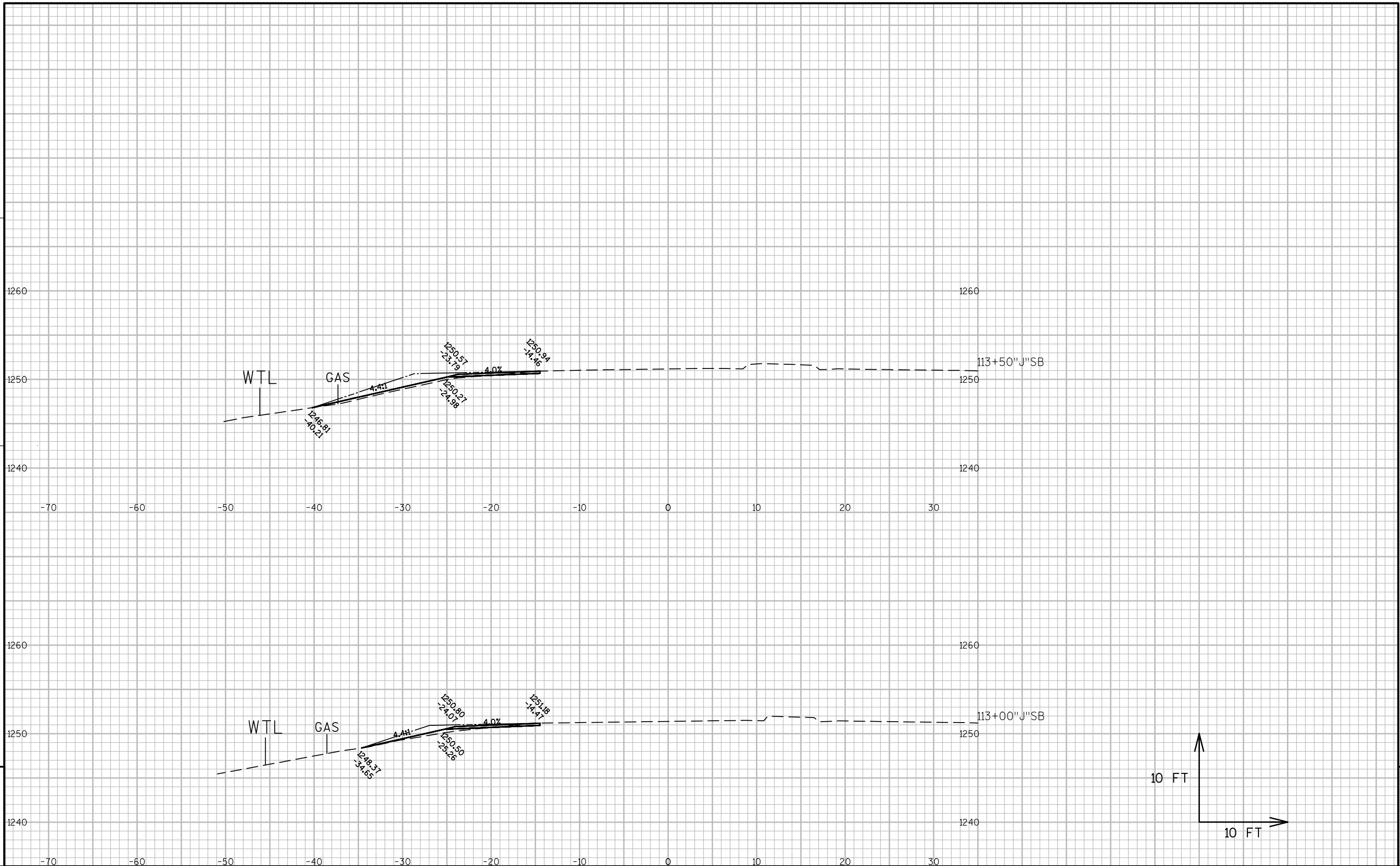
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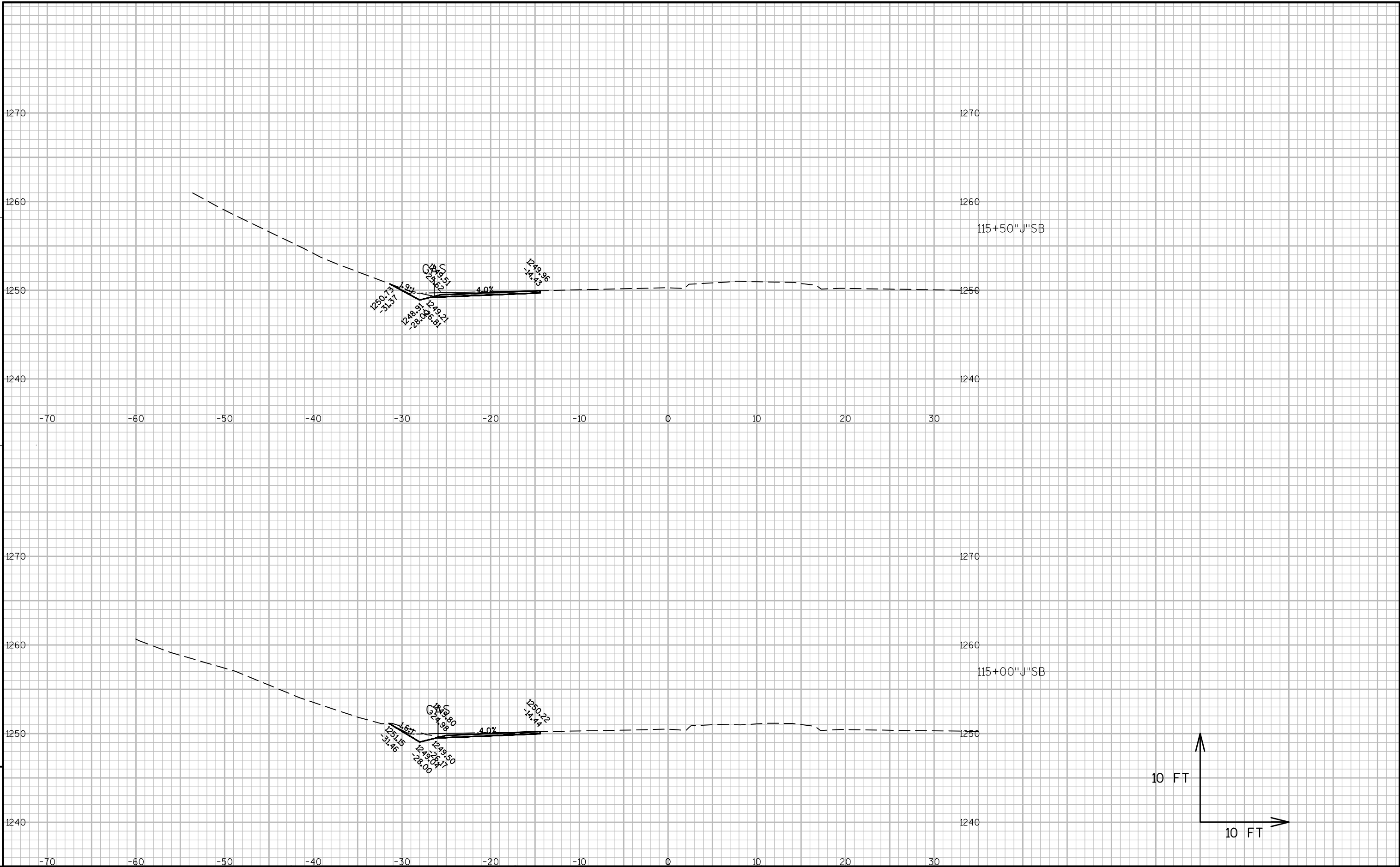
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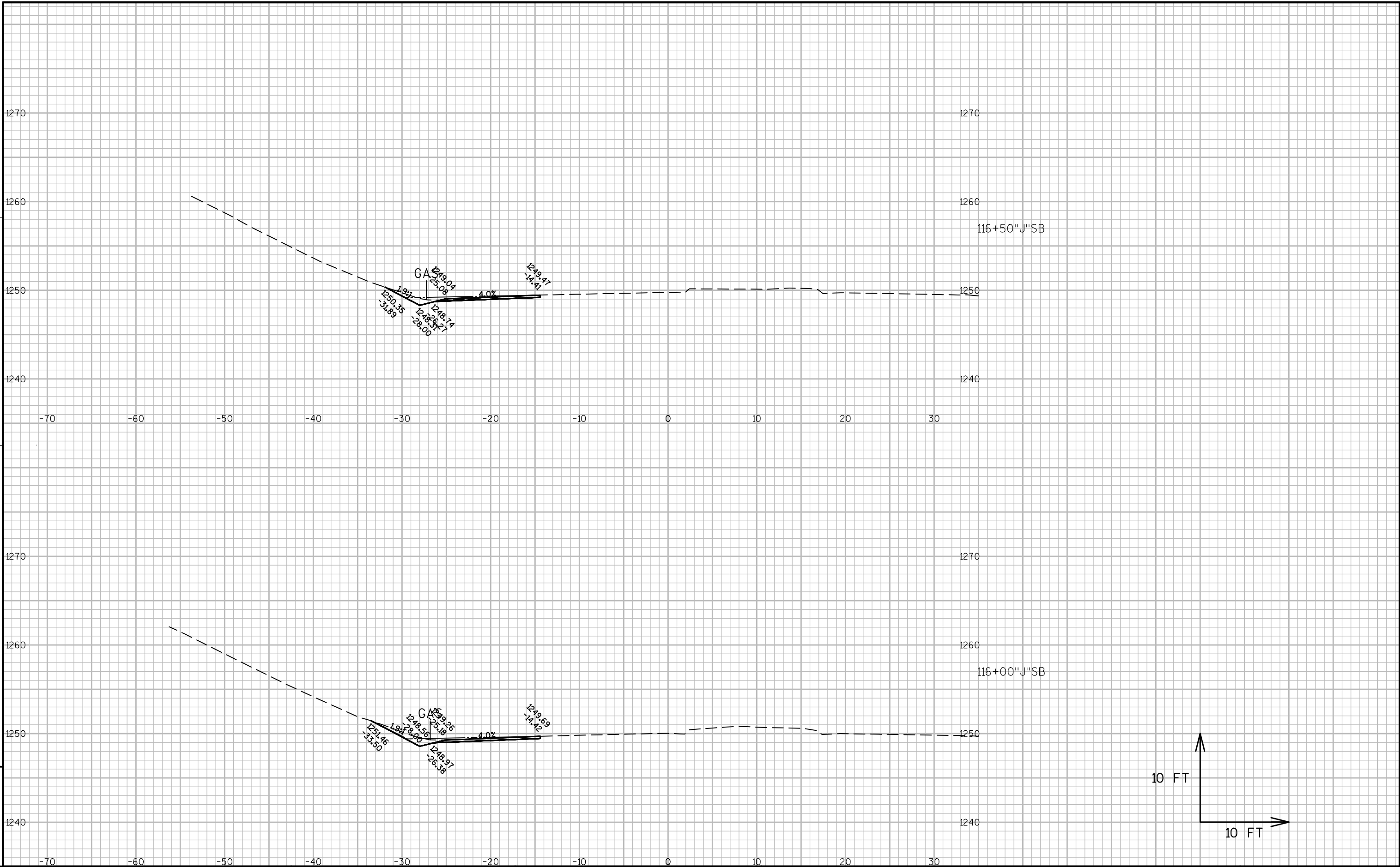
STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)		MASS ORDINATE NOTE 5
		CUT	UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT NOTE 1	UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	EBS	CUT 1.00 NOTE 1	EXPANDED FILL 1.25 NOTE 4	
111+69	---	0	0	0	0	---	---	---	---	---	---	---
112+00	31	3	2	0	0	2	1	0	0	2	0	1
112+50	50	5	3	0	0	7	4	0	0	9	0	4
113+00	50	8	3	0	0	12	5	0	0	21	0	10
113+50	50	14	4	0	0	20	6	0	0	41	0	24
114+00	50	13	4	0	0	25	7	0	0	66	0	42
114+50	50	8	4	0	0	19	7	0	0	85	0	55
115+00	50	6	4	0	0	14	7	0	0	99	0	62
115+50	50	6	4	0	0	12	7	0	0	110	0	66
116+00	50	6	4	0	0	12	7	0	0	122	0	71
116+50	50	6	4	0	0	12	7	0	0	133	0	76
117+00	50	8	4	0	0	13	7	0	0	146	0	82
117+50	50	14	4	0	0	20	7	0	0	167	0	95
118+00	50	16	4	0	0	27	7	0	0	194	0	115
118+50	50	17	4	0	0	30	7	0	0	224	0	138
119+00	50	6	2	0	0	21	6	0	0	244	0	154
119+50	50	1	1	0	0	6	3	0	0	251	0	157
119+53	3	0	0	0	0	0	0	0	0	251	0	157
120+59	106	0	0	0	0	0	0	0	0	251	0	157
121+00	41	2	1	0	0	2	1	0	0	252	0	158
121+50	50	4	3	0	0	6	3	0	0	258	0	160
122+00	50	3	2	0	0	7	4	0	0	265	1	162
122+50	50	3	2	0	0	6	4	0	0	270	1	164
123+00	50	2	2	0	0	5	3	0	0	275	1	165
123+50	50	2	1	0	0	4	3	0	0	279	1	166
124+00	50	1	1	0	0	3	2	0	0	281	1	167
124+50	50	1	1	0	0	2	1	0	0	283	1	167
125+00	50	0	0	0	0	1	1	0	0	284	1	167
125+33	33	0	0	0	0	0	0	0	0	284	1	167
				COLUMN TOTALS		284	116	1	0			

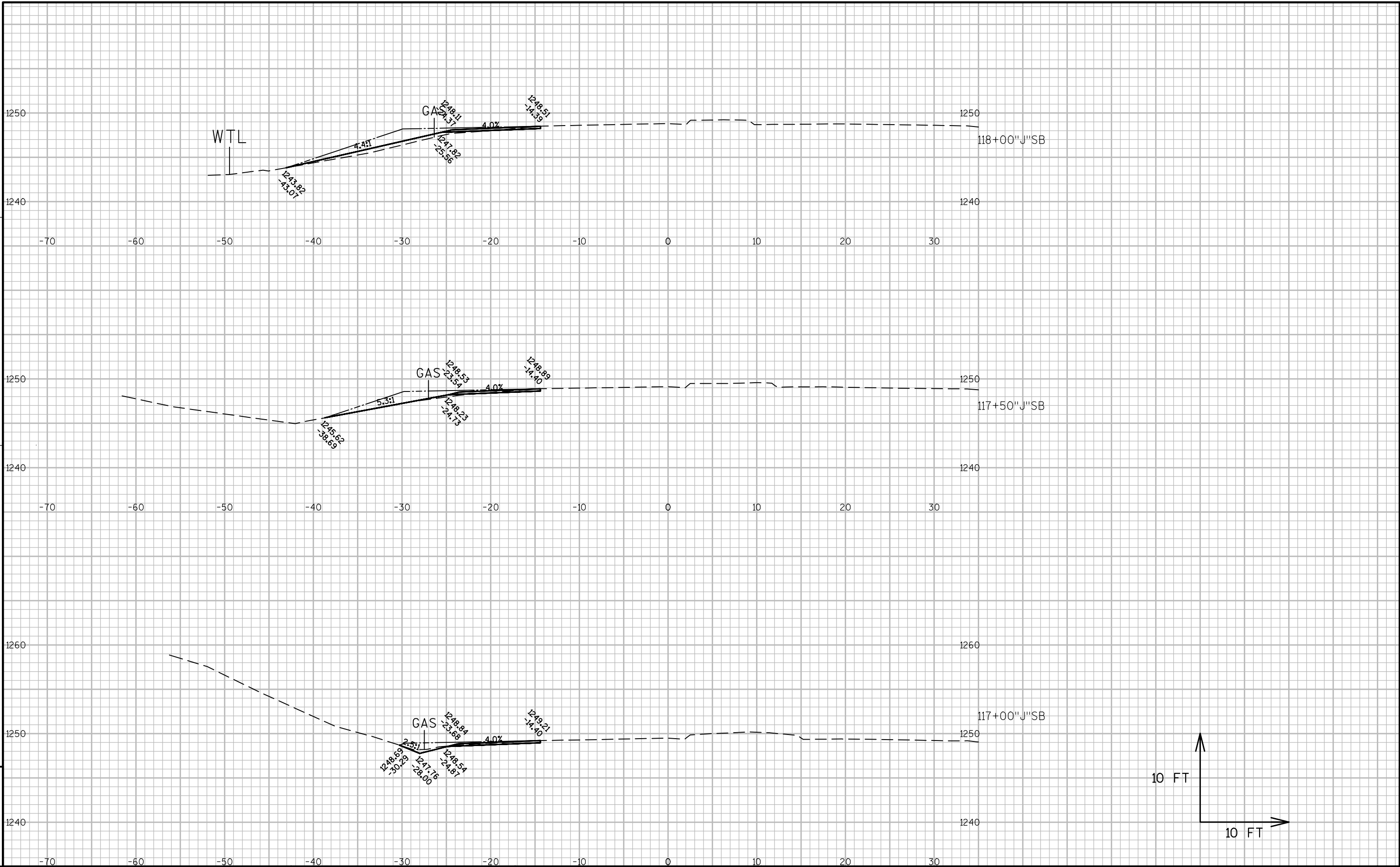
NOTES:
1) CUT INCLUDES UNUSABLE PAVEMENT MATERIAL
2) UNUSABLE PAVEMENT MATERIAL DOES NOT APPEAR IN THE CROSS SECTIONS
3) FILL DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL EXCAVATION VOLUME
4) EXPANDED FILL = UNEXPANDED FILL * EXPANDED FILL FACTOR. EXPANDED FILL FACTOR = 1.25
5) MASS ORDINATE = (CUT - UNUSABLE PAVEMENT MATERIAL) - (FILL * FILL FACTOR)

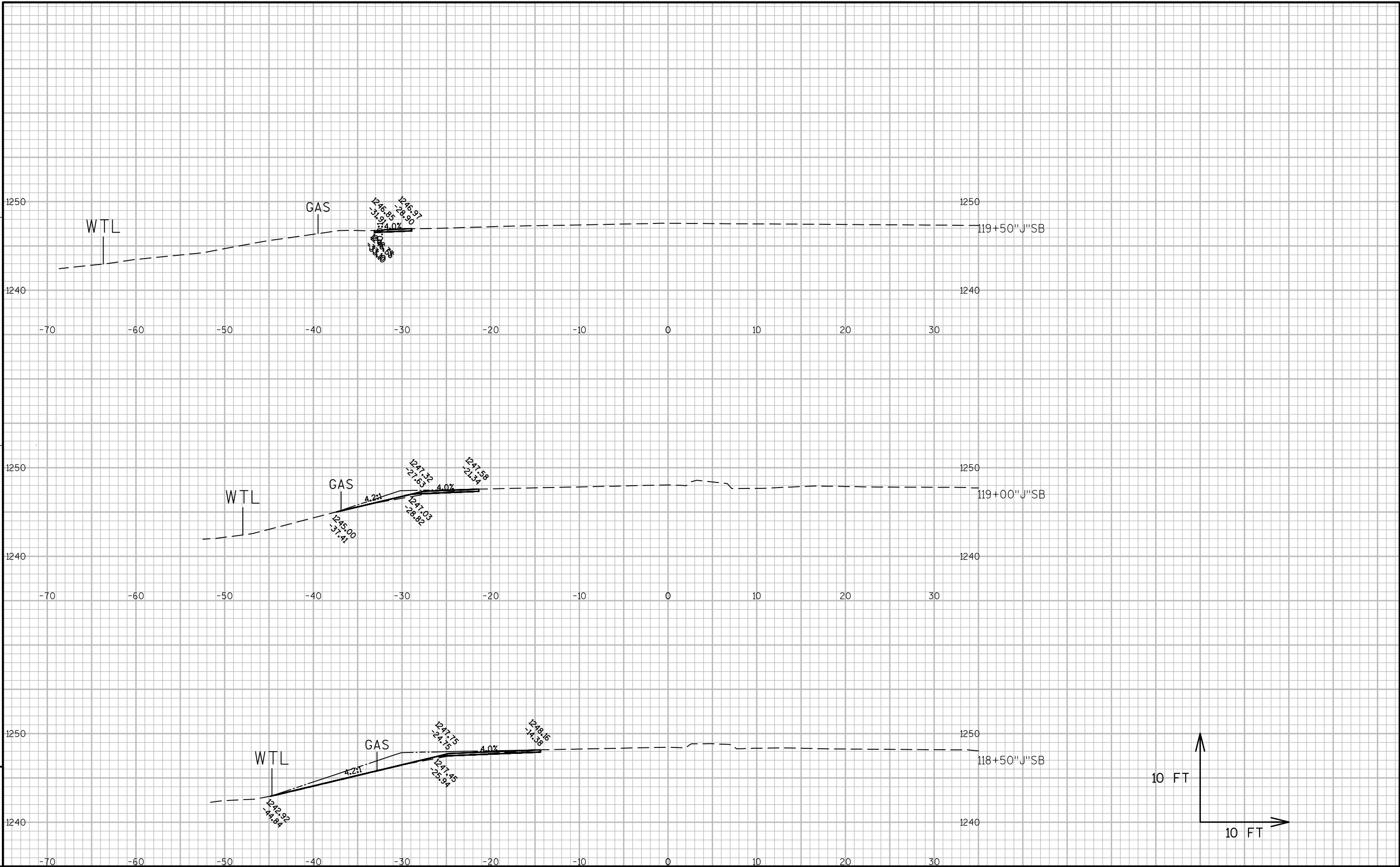


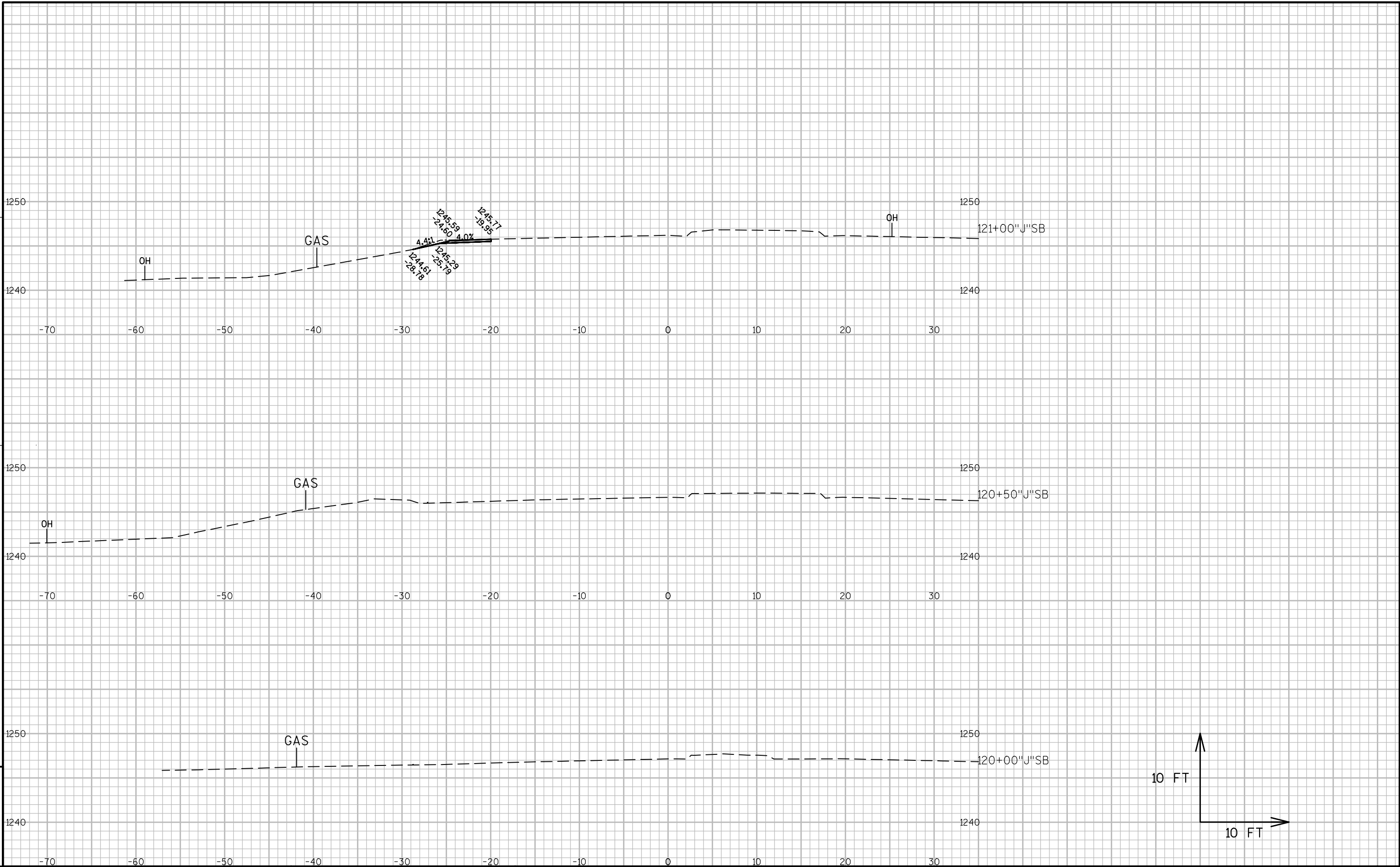


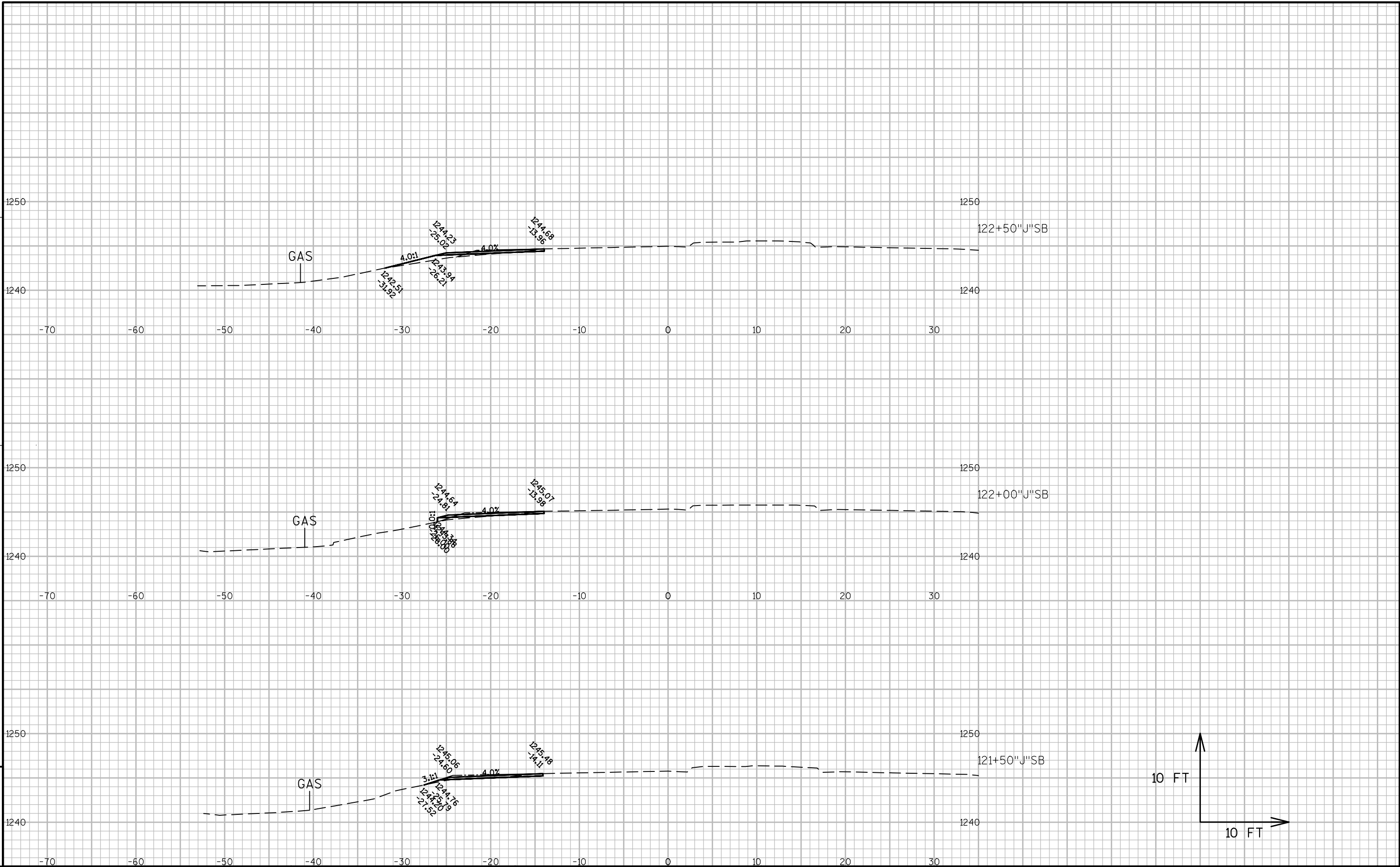


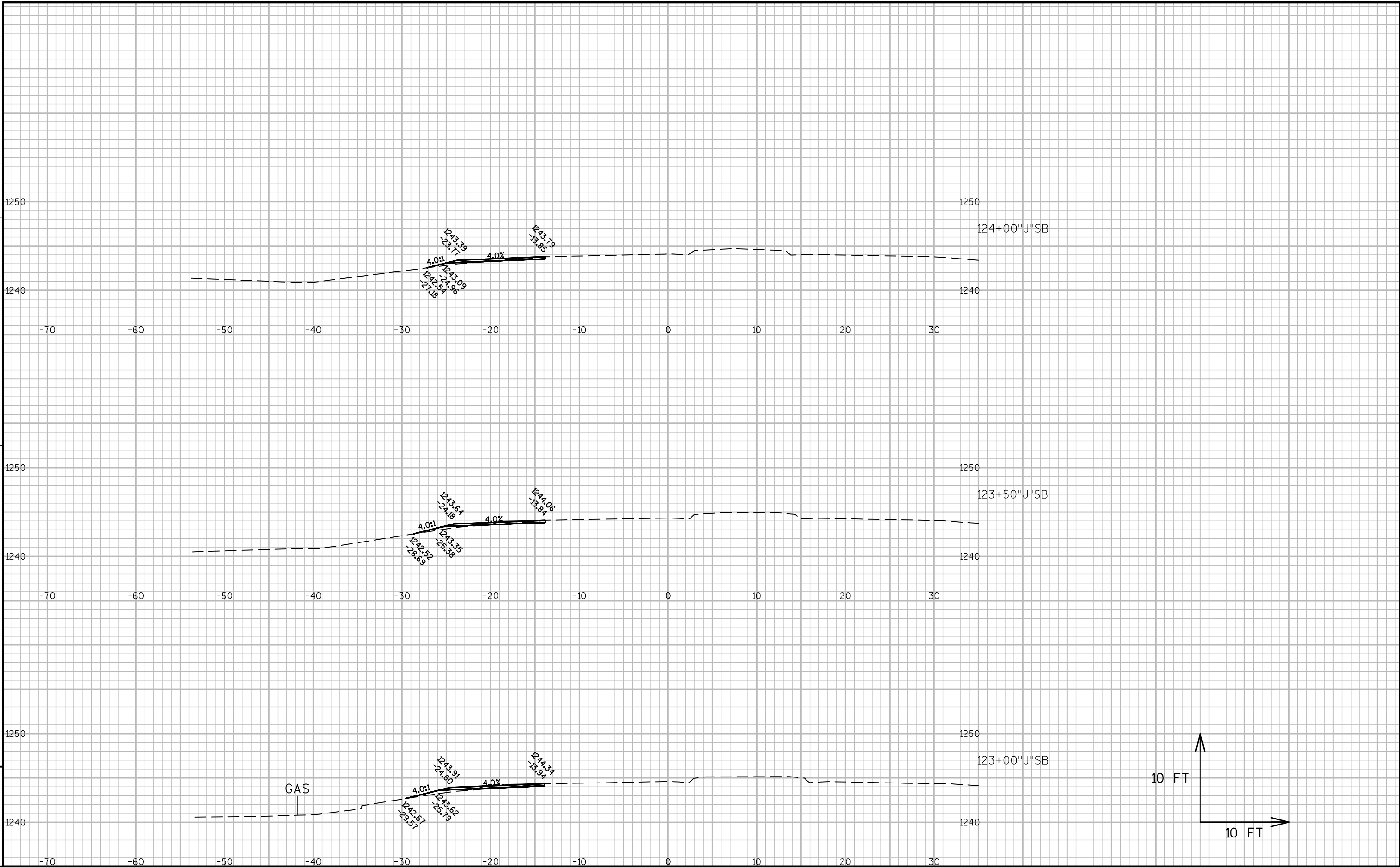


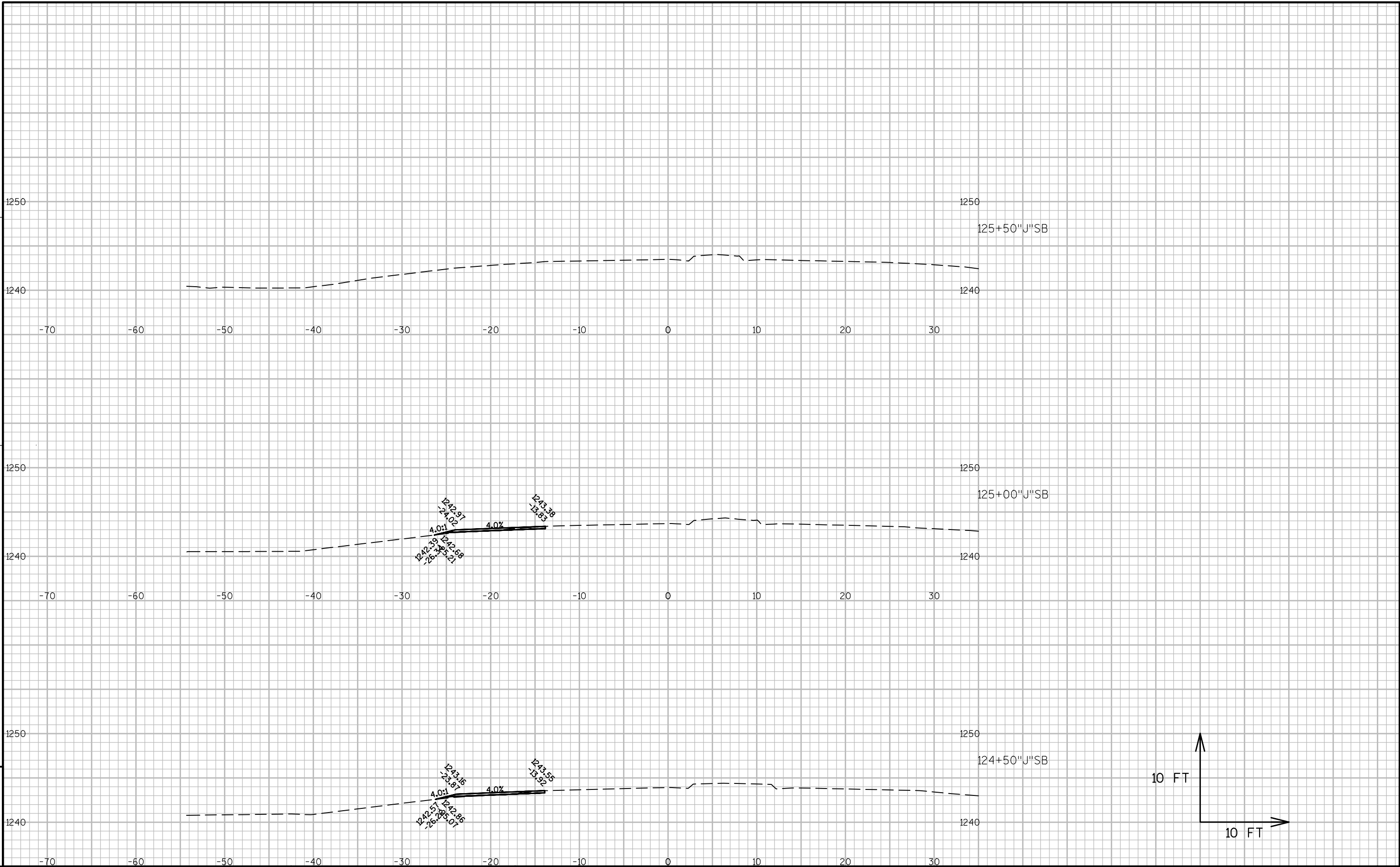






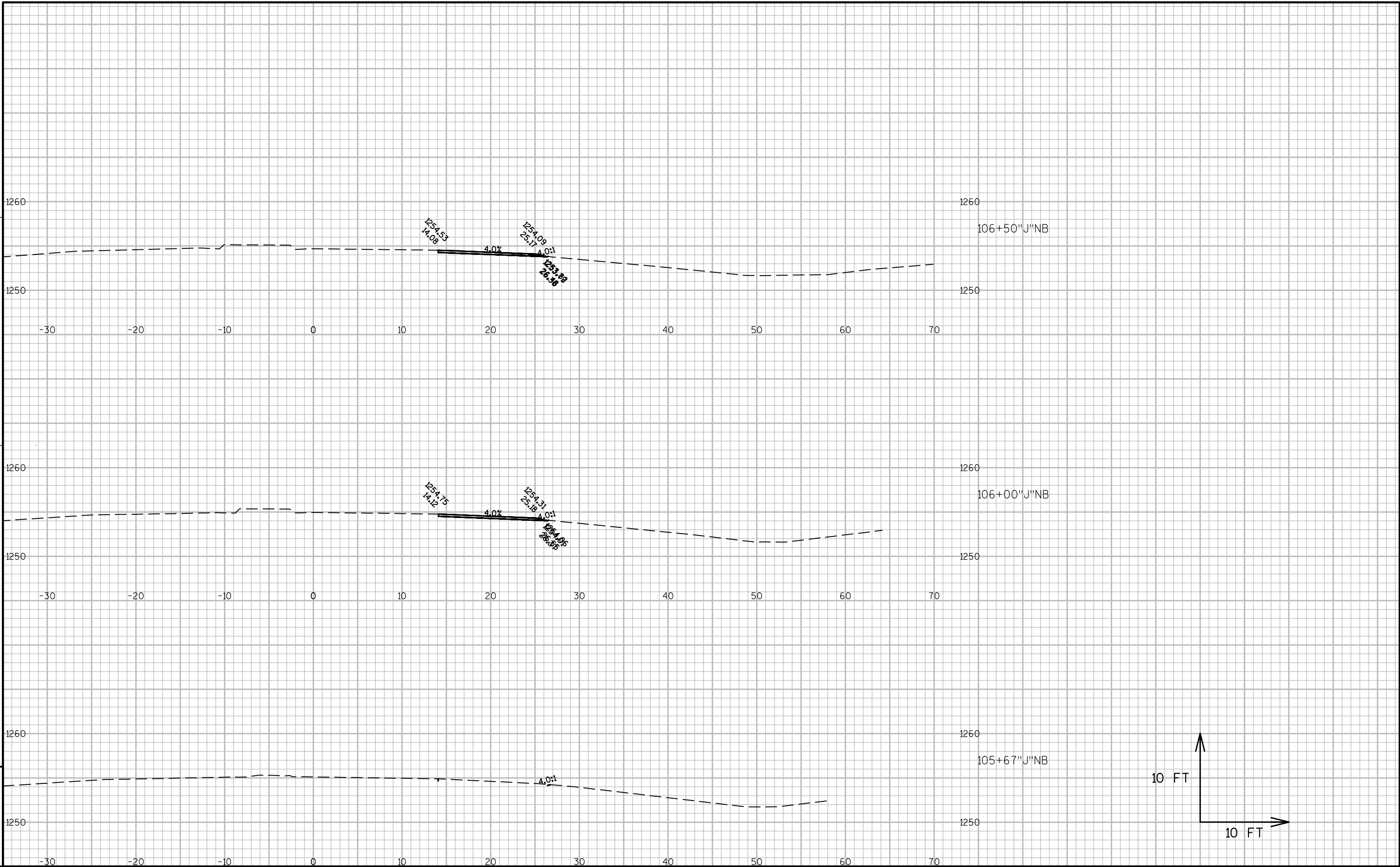


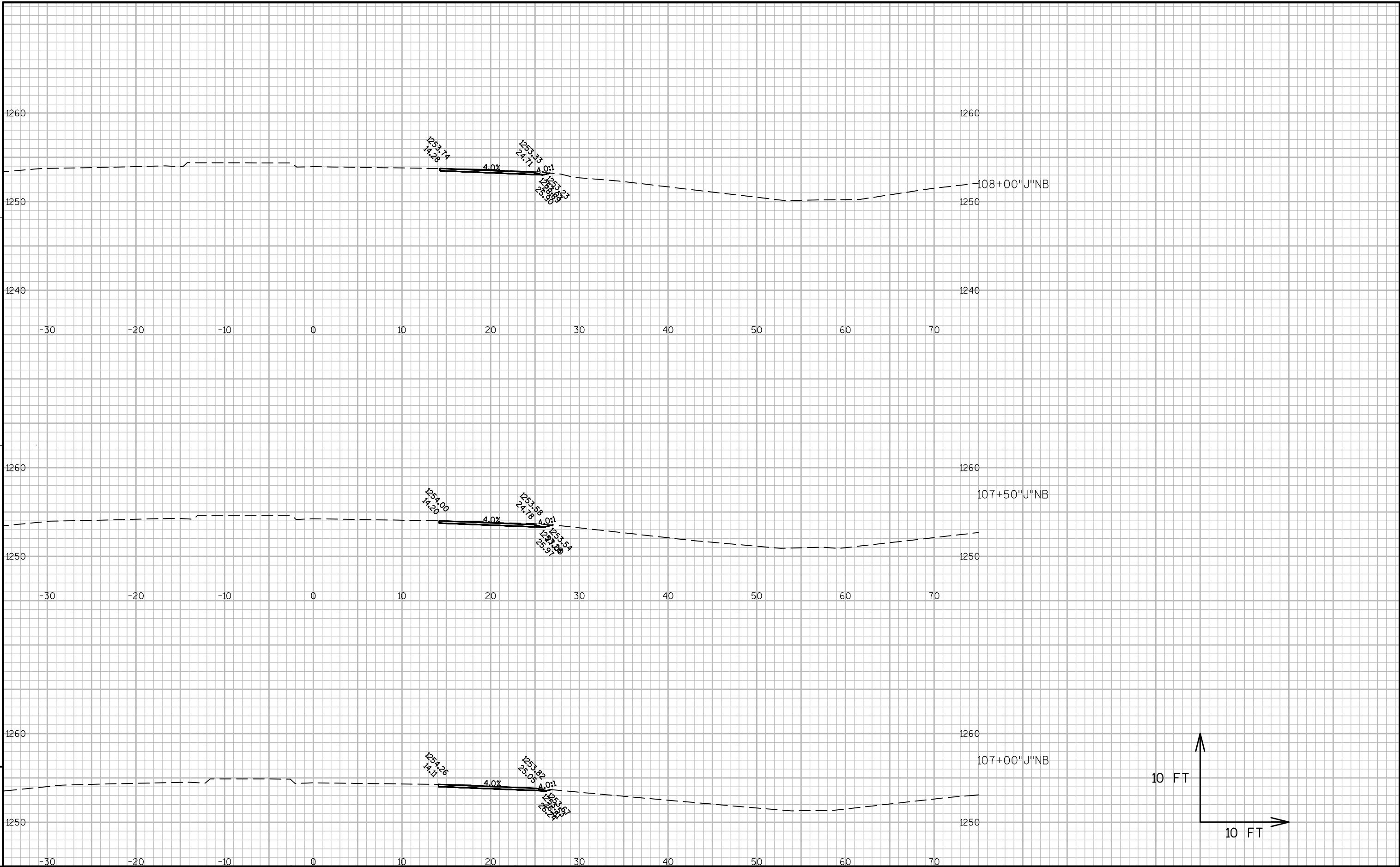


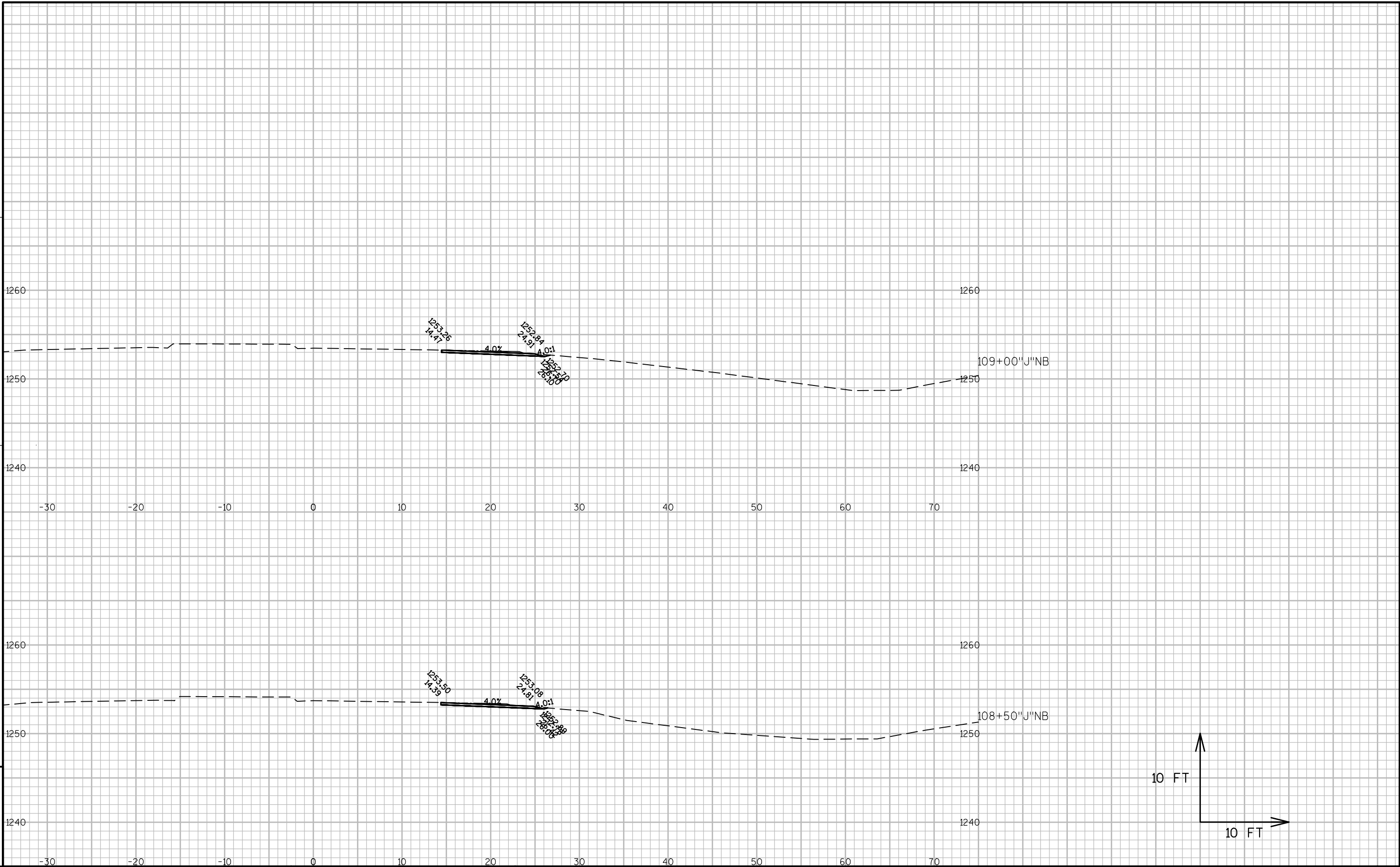


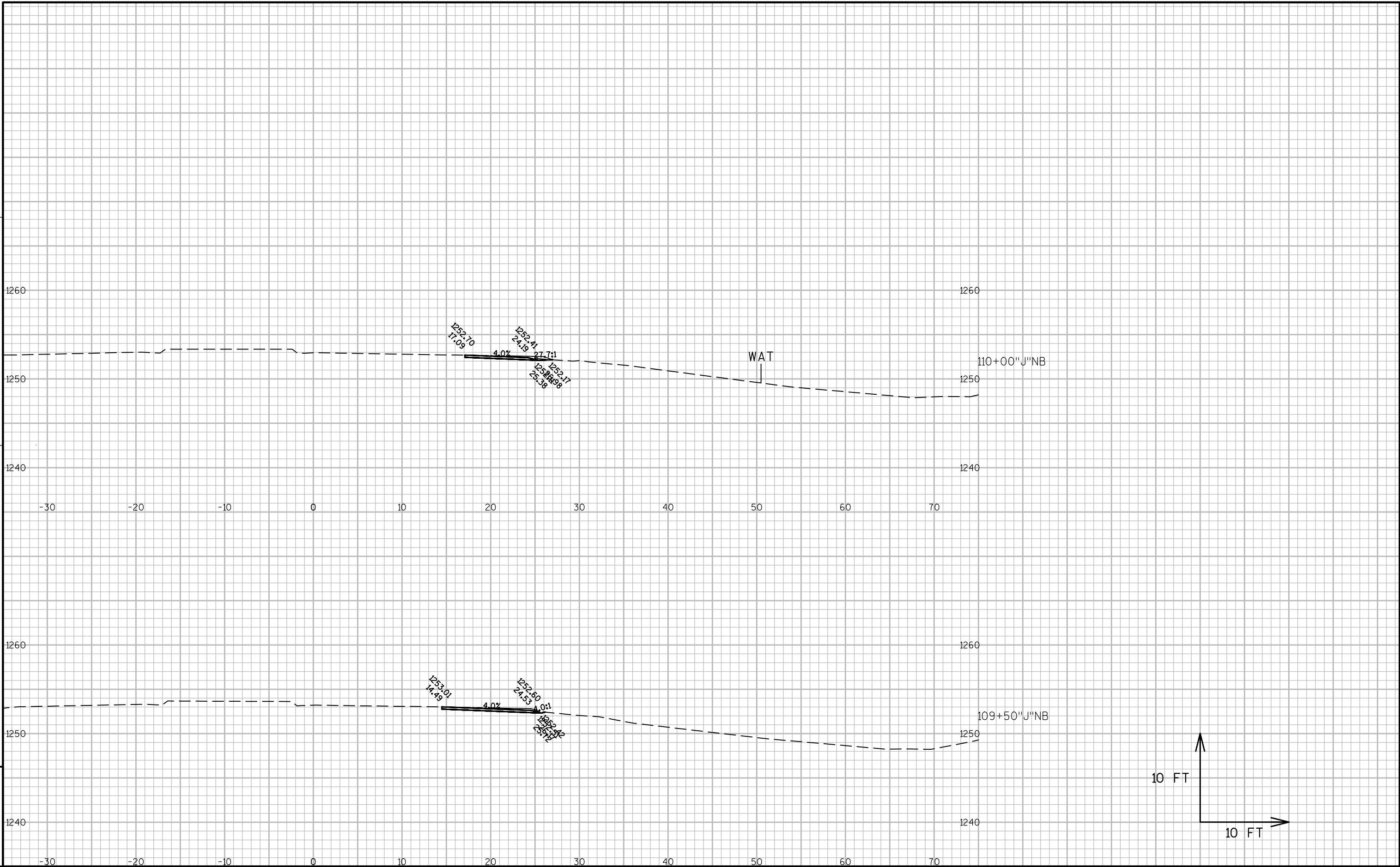
STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)		MASS ORDINATE NOTE 5
		CUT	UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT NOTE 1	UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	EBS	CUT 1.00 NOTE 1	EXPANDED FILL 1.25 NOTE 4	
105+66	---	0	0	0	0	---	---	---	---	---	---	---
106+00	34	0	0	0	0	0	0	0	0	0	0	0
106+50	50	1	1	0	0	1	1	0	0	1	0	0
107+00	50	1	1	0	0	2	1	0	0	3	0	0
107+50	50	2	1	0	0	3	2	0	0	5	0	1
108+00	50	2	2	0	0	3	3	0	0	9	0	2
108+50	50	3	2	0	0	4	3	0	0	13	0	3
109+00	50	3	2	0	0	5	4	0	0	18	0	4
109+50	50	4	3	0	0	6	4	0	0	25	0	6
110+00	50	3	2	0	0	6	4	0	0	31	0	8
110+50	50	1	1	0	0	4	3	0	0	35	0	10
110+65	15	0	0	0	0	0	0	0	0	36	0	10
111+73	108	0	0	0	0	0	0	0	0	36	0	10
112+00	27	1	1	0	0	1	1	0	0	36	0	10
112+50	50	4	3	0	0	5	3	0	0	41	0	11
113+00	50	6	4	0	0	9	6	0	0	51	0	15
113+50	50	6	4	0	0	11	7	0	0	62	0	19
114+00	50	5	4	0	0	10	7	0	0	72	0	23
114+50	50	5	4	0	0	10	7	0	0	82	0	25
115+00	50	6	4	0	0	10	7	1	0	92	1	28
115+50	50	6	4	0	0	10	7	1	0	103	2	31
116+00	50	6	4	0	0	11	7	0	0	114	2	34
116+50	50	9	4	0	0	14	7	0	0	128	2	41
117+00	50	13	4	0	0	20	7	0	0	147	2	54
117+50	50	11	3	0	0	22	6	0	0	169	2	69
118+00	50	9	3	0	0	18	6	0	0	187	2	81
118+50	50	6	3	0	0	14	5	0	0	200	2	90
119+00	50	3	2	0	0	8	4	0	0	209	2	94
119+50	50	2	2	0	0	5	3	0	0	214	2	96
119+54	4	0	0	0	0	0	0	0	0	214	2	96
				COLUMN TOTALS		214	116	2	0			

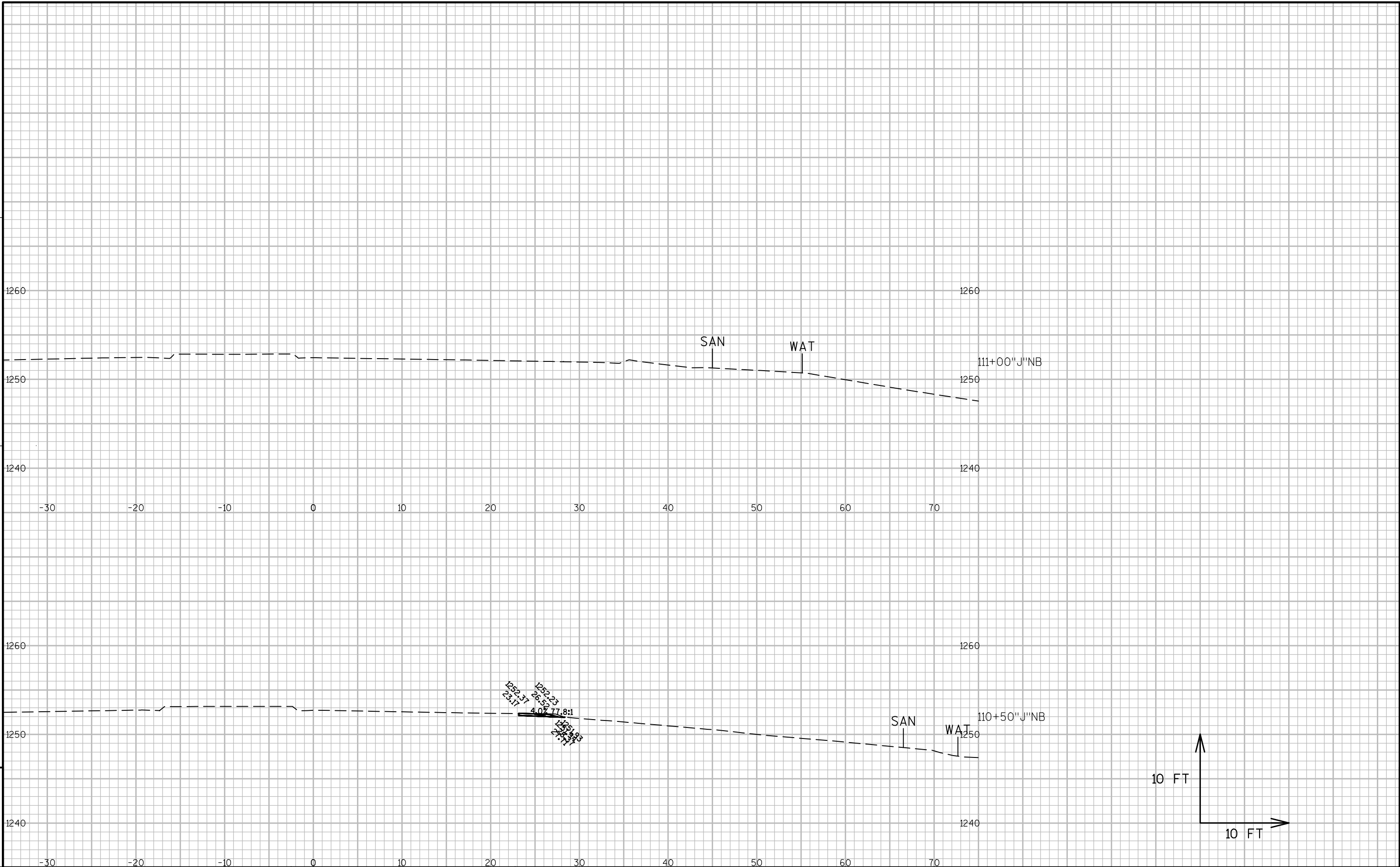
NOTES:
1) CUT INCLUDES UNUSABLE PAVEMENT MATERIAL
2) UNUSABLE PAVEMENT MATERIAL DOES NOT APPEAR IN THE CROSS SECTIONS
3) FILL DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL EXCAVATION VOLUME
4) EXPANDED FILL = UNEXPANDED FILL * EXPANDED FILL FACTOR. EXPANDED FILL FACTOR = 1.25
5) MASS ORDINATE = (CUT - UNUSABLE PAVEMENT MATERIAL) - (FILL * FILL FACTOR)

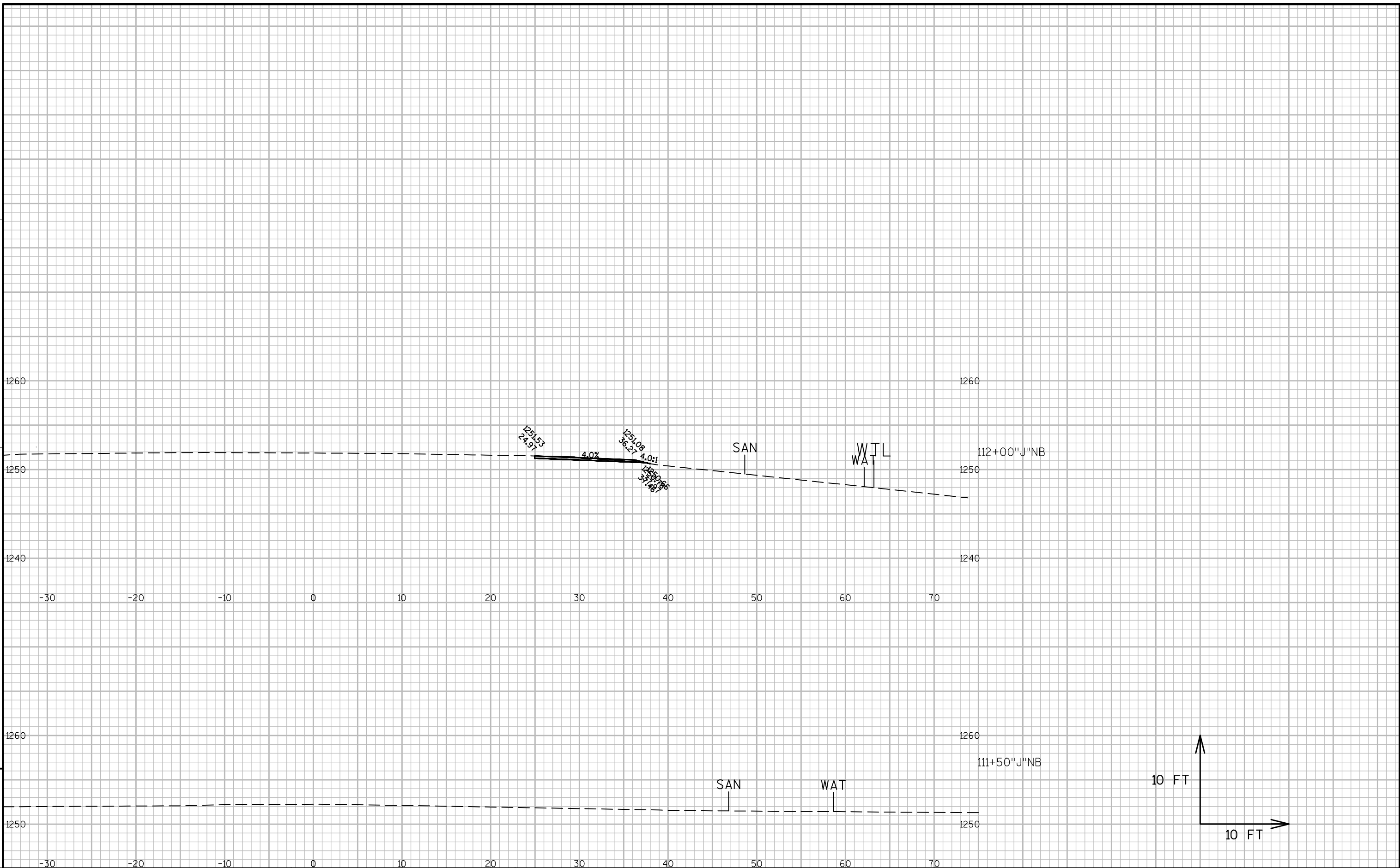


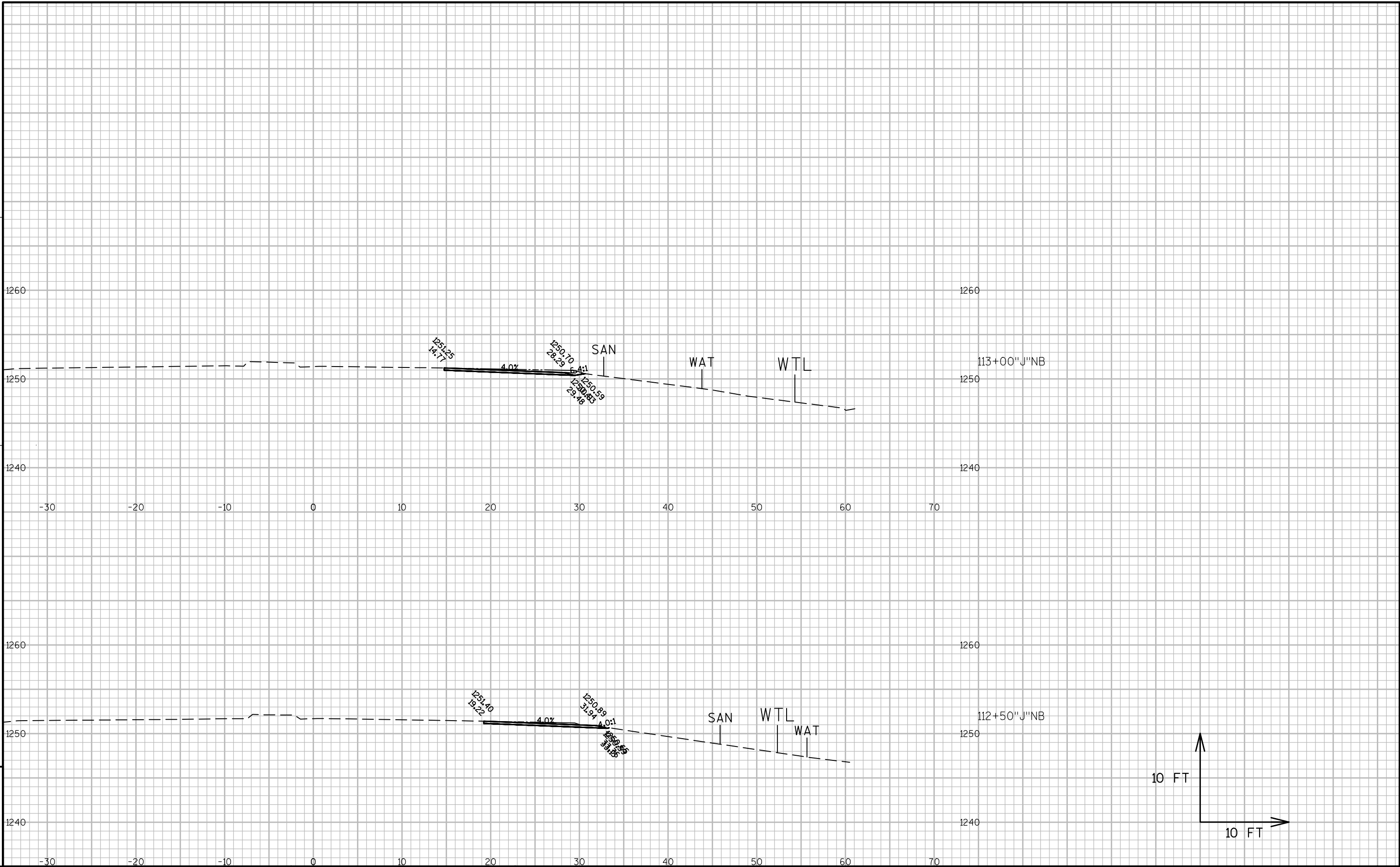


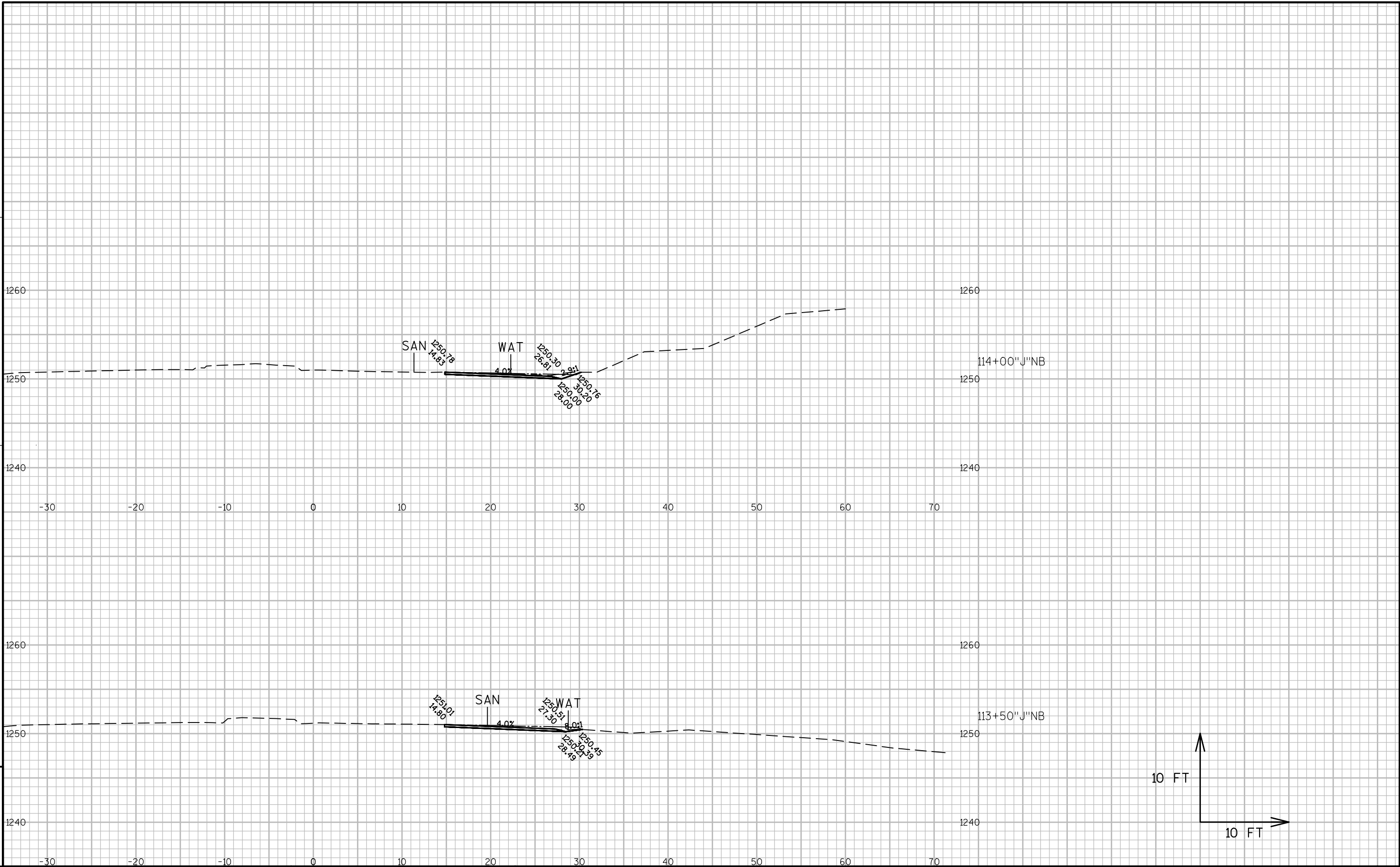


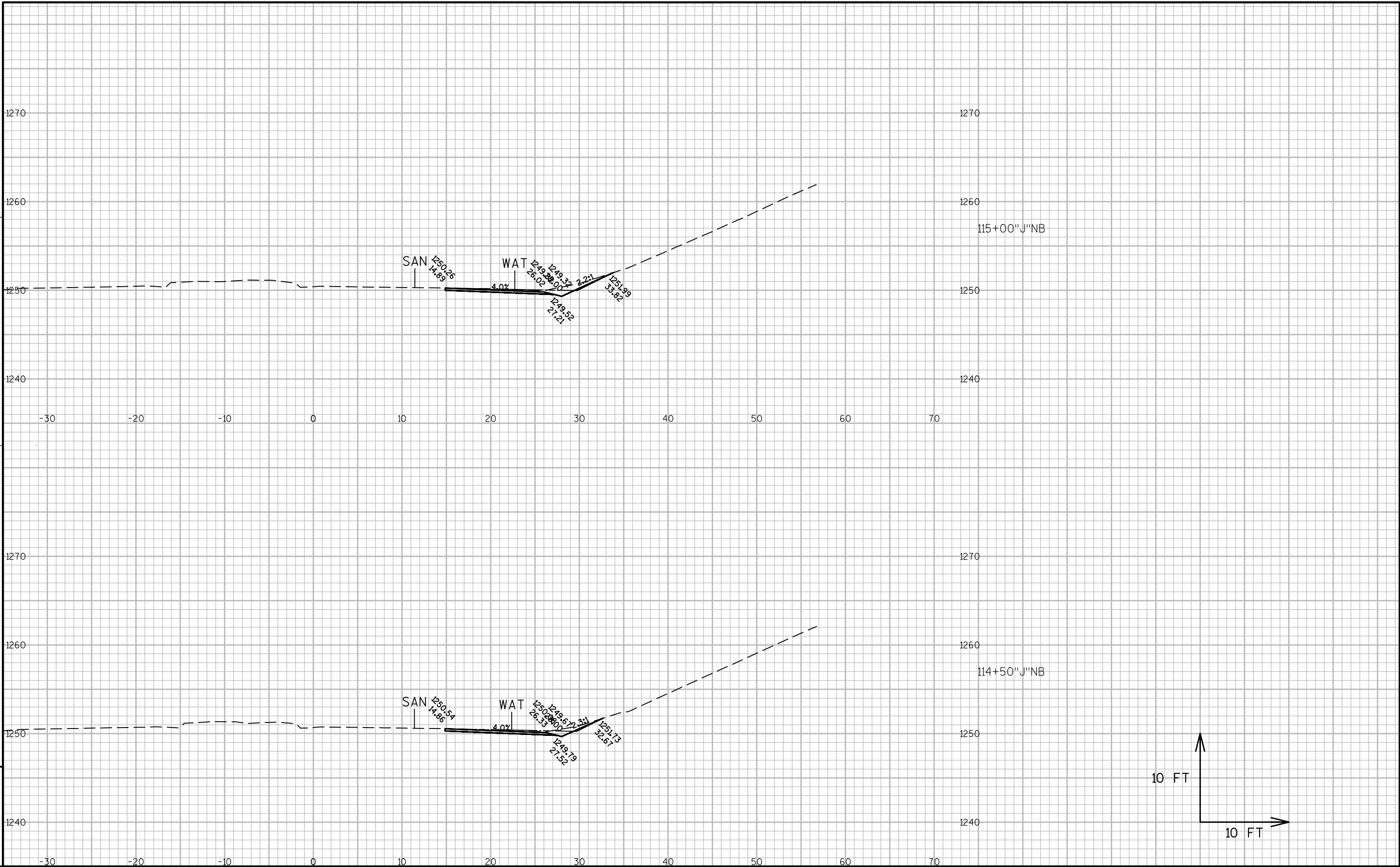


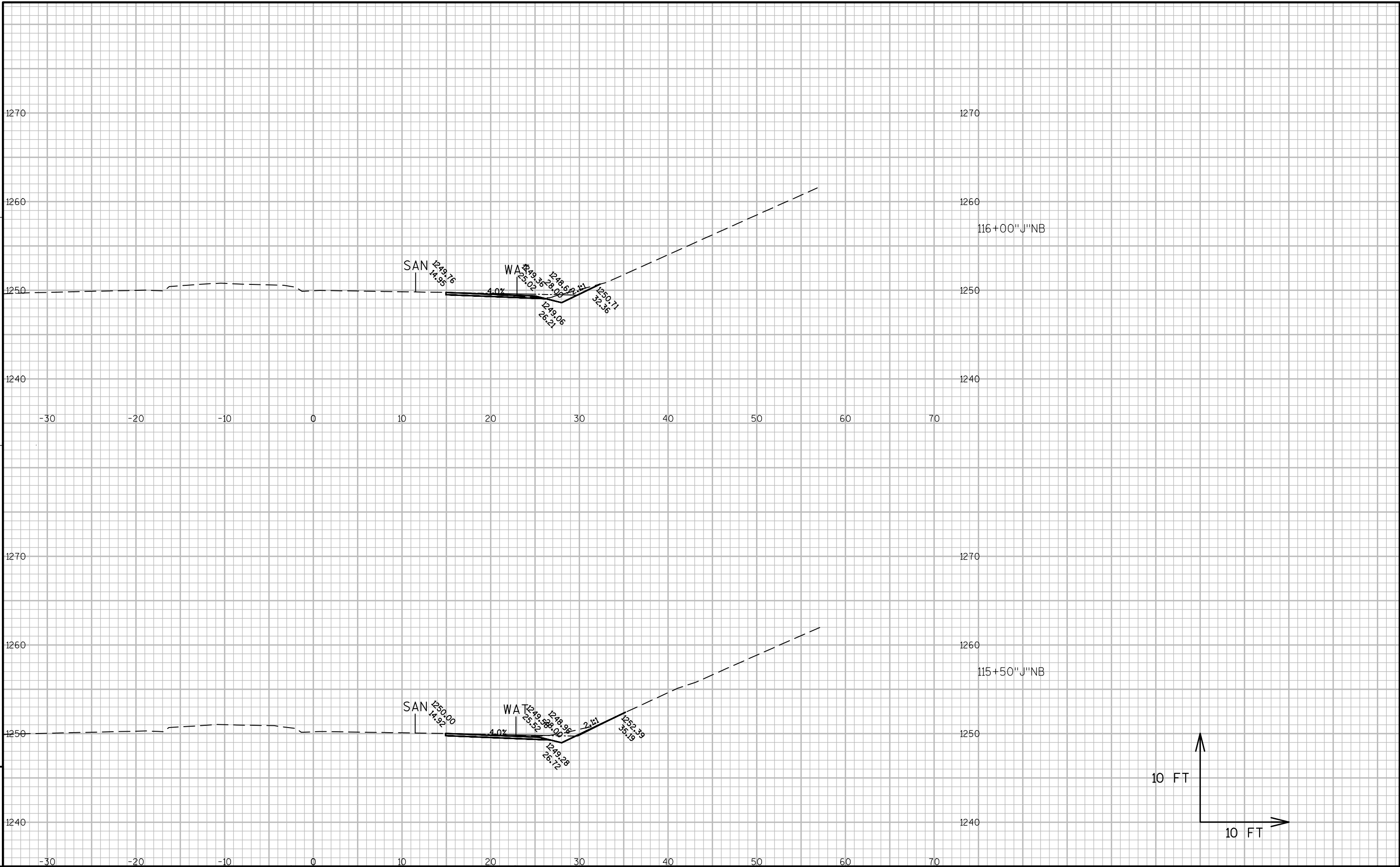


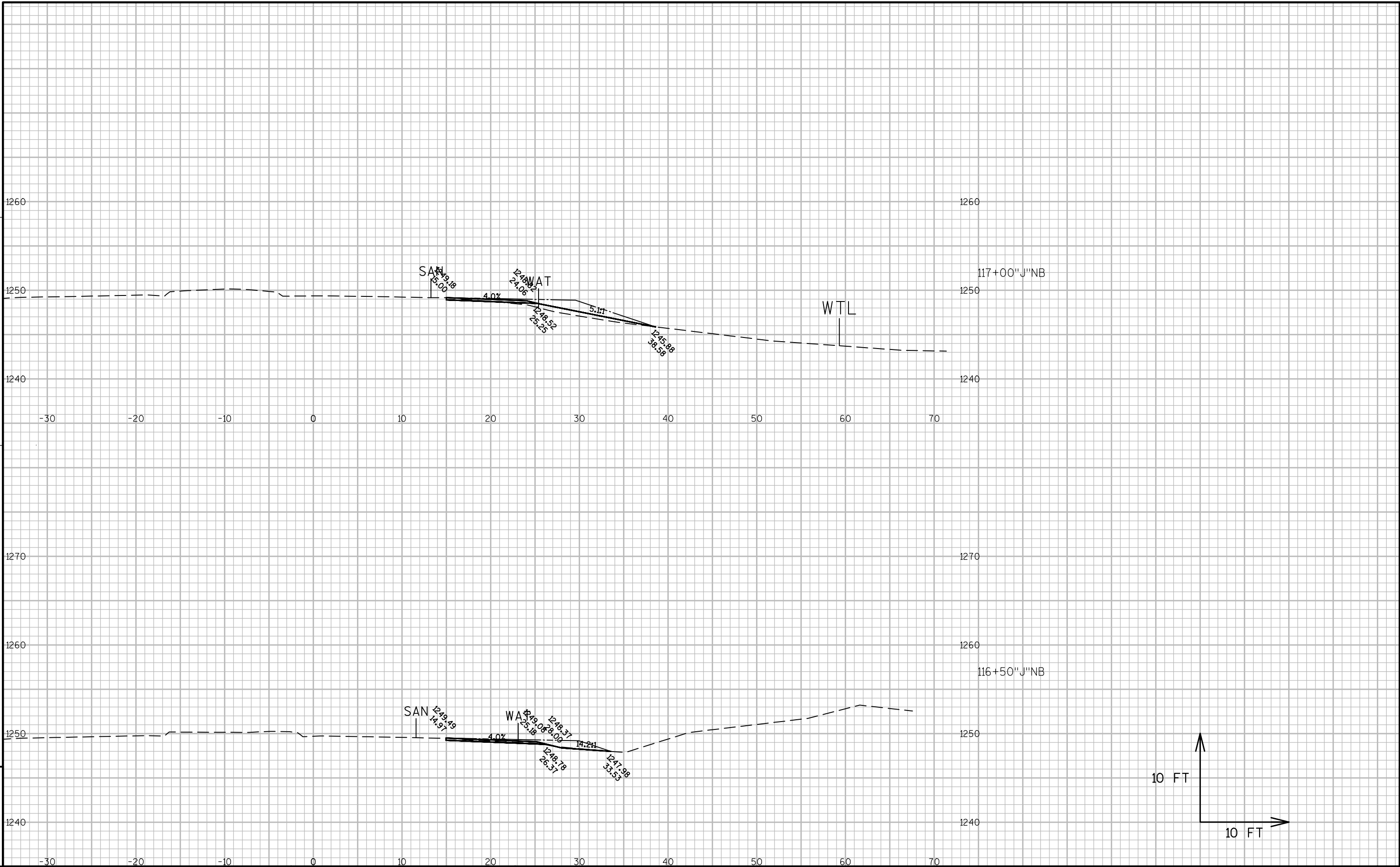


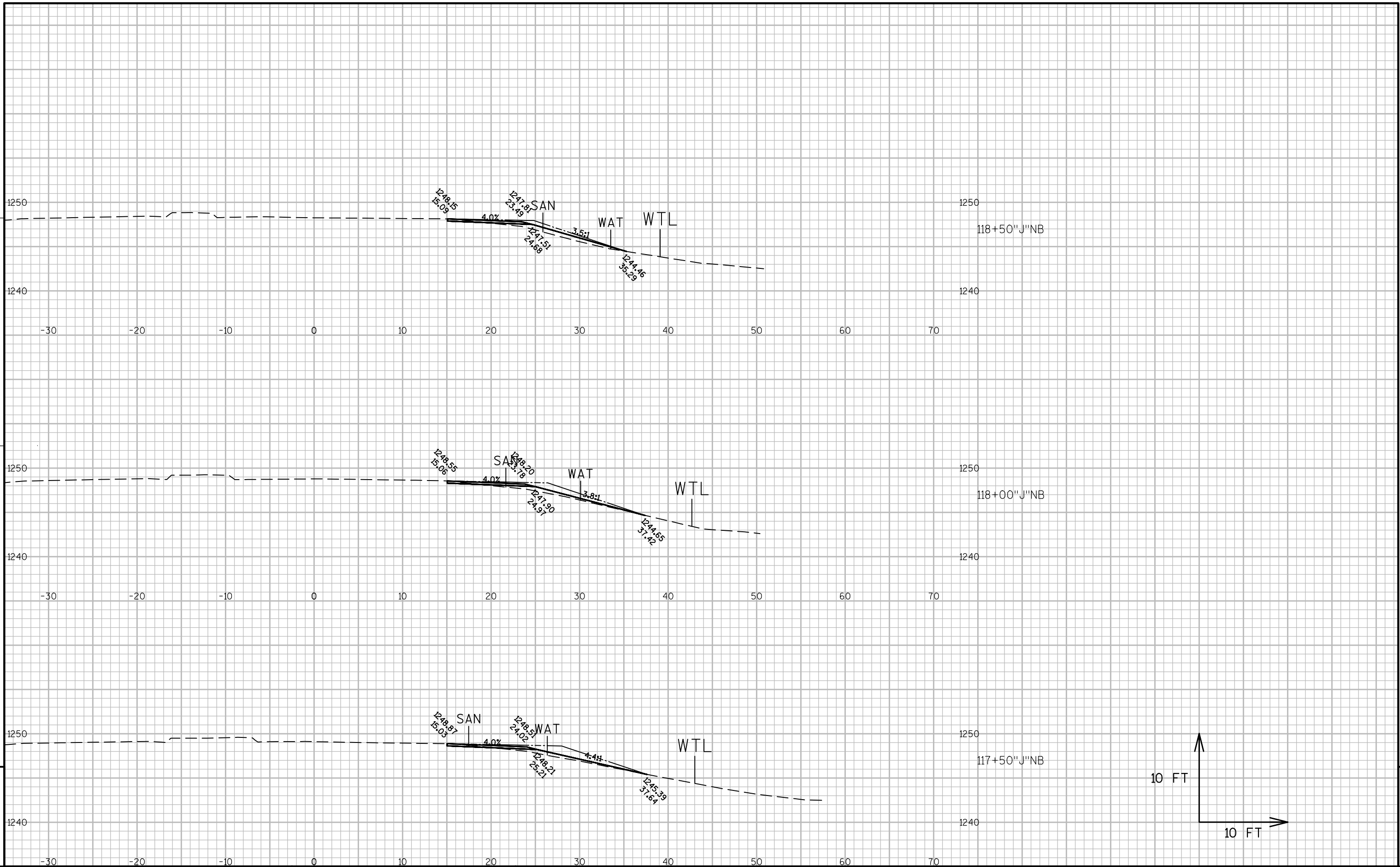


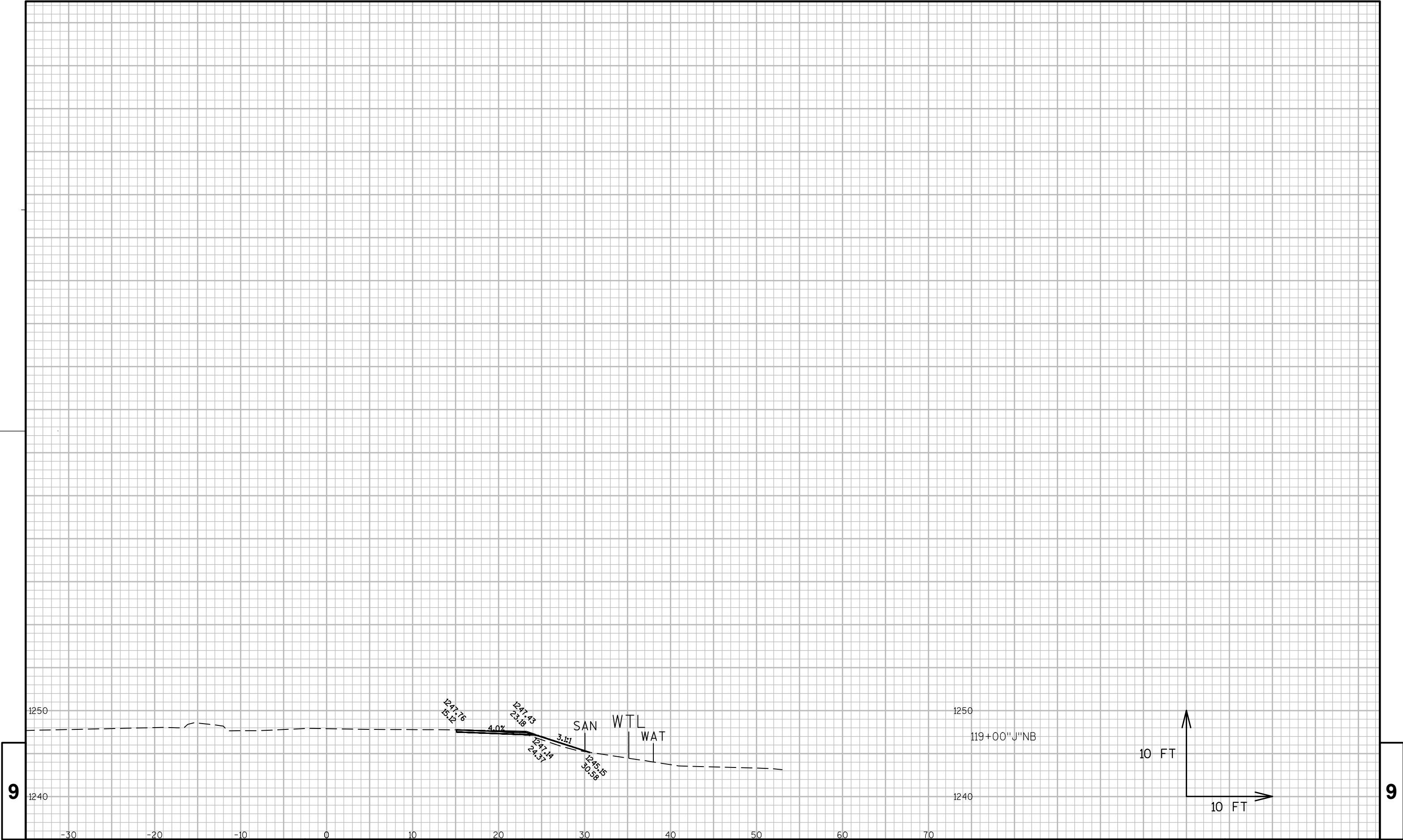








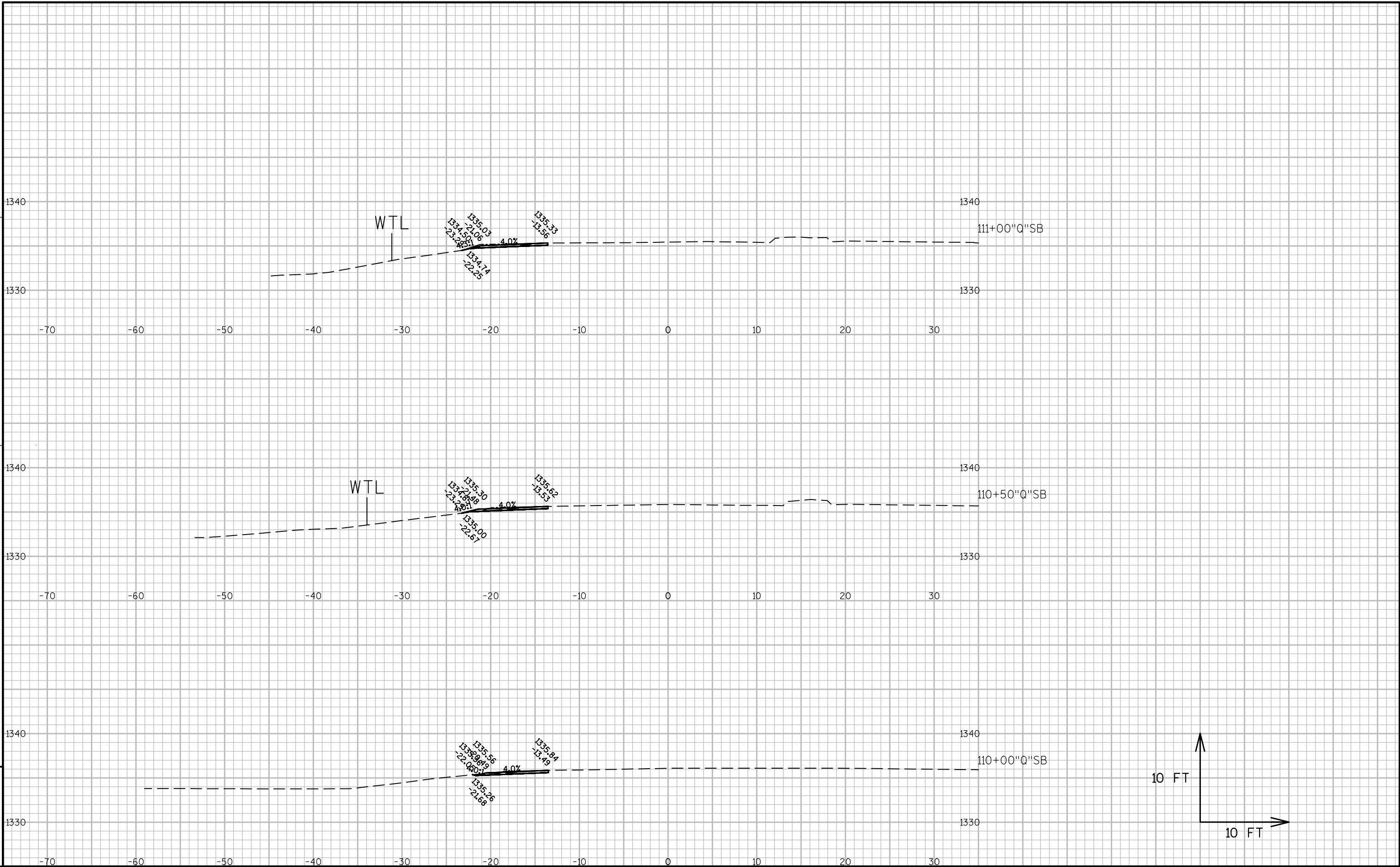


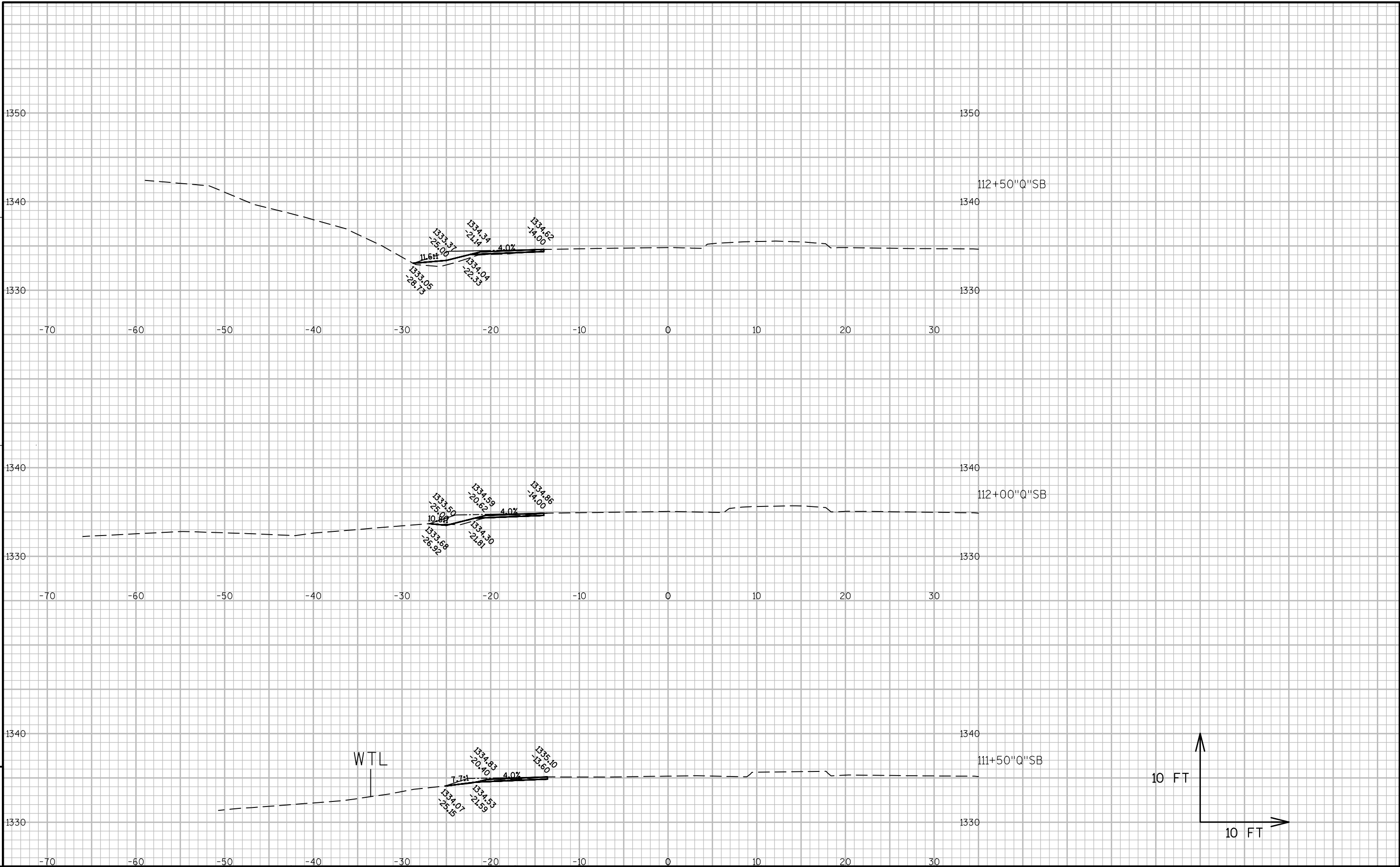


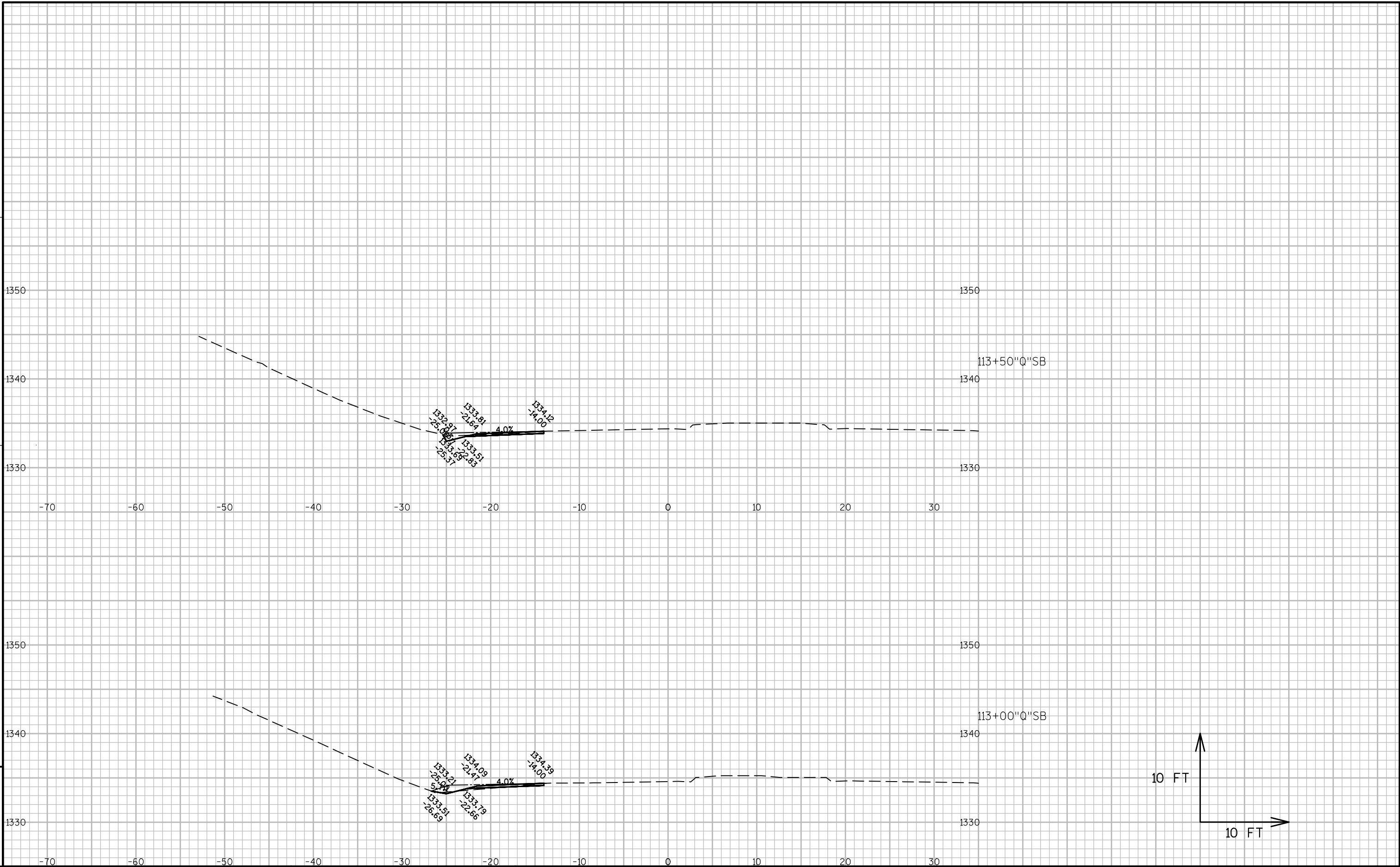
STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)		MASS ORDINATE NOTE 5
		CUT	UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT NOTE 1	UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	EBS	CUT 1.00 NOTE 1	EXPANDED FILL 1.25 NOTE 4	
109+63	---	0	0	0	0	---	---	---	---	---	---	---
110+00	37	2	1	0	0	1	1	0	0	1	0	0
110+50	50	2	2	0	0	4	3	0	0	5	0	1
111+00	50	3	2	0	0	5	3	0	0	9	0	3
111+50	50	4	2	0	0	6	4	0	0	16	0	5
112+00	50	6	3	0	0	9	4	0	0	24	0	9
112+50	50	6	3	0	0	11	5	0	0	35	0	15
113+00	50	5	3	0	0	11	5	0	0	46	0	21
113+50	50	5	3	0	0	9	5	0	0	55	0	25
114+00	50	5	3	0	0	9	5	0	0	64	0	28
114+50	50	5	3	0	0	9	5	0	0	72	0	32
115+00	50	5	3	0	0	9	5	0	0	82	0	36
115+50	50	5	3	0	0	9	5	0	0	91	0	40
116+00	50	4	3	0	0	8	5	0	0	99	0	44
116+50	50	2	1	0	0	6	3	0	0	105	0	46
116+99	49	0	0	0	0	2	1	0	0	107	0	47
118+15	117	0	0	0	0	0	0	0	0	107	0	47
118+50	35	3	2	0	0	2	1	0	0	109	0	48
119+00	50	5	3	0	0	7	4	0	0	116	0	51
119+50	50	4	3	0	0	8	5	0	0	124	0	54
120+00	50	3	2	0	0	7	4	0	0	131	0	57
120+50	50	3	2	0	0	6	4	0	0	137	0	59
121+00	50	2	2	0	0	5	3	0	0	142	0	60
121+50	50	2	2	0	0	4	3	0	0	146	0	61
122+00	50	2	1	0	0	3	3	0	0	149	0	62
122+50	50	1	1	0	0	3	2	0	0	152	0	63
123+00	50	1	1	0	0	2	2	0	0	154	0	63
123+47	47	0	0	0	0	1	1	0	0	155	0	64
				COLUMN TOTALS		155	92	0	0			

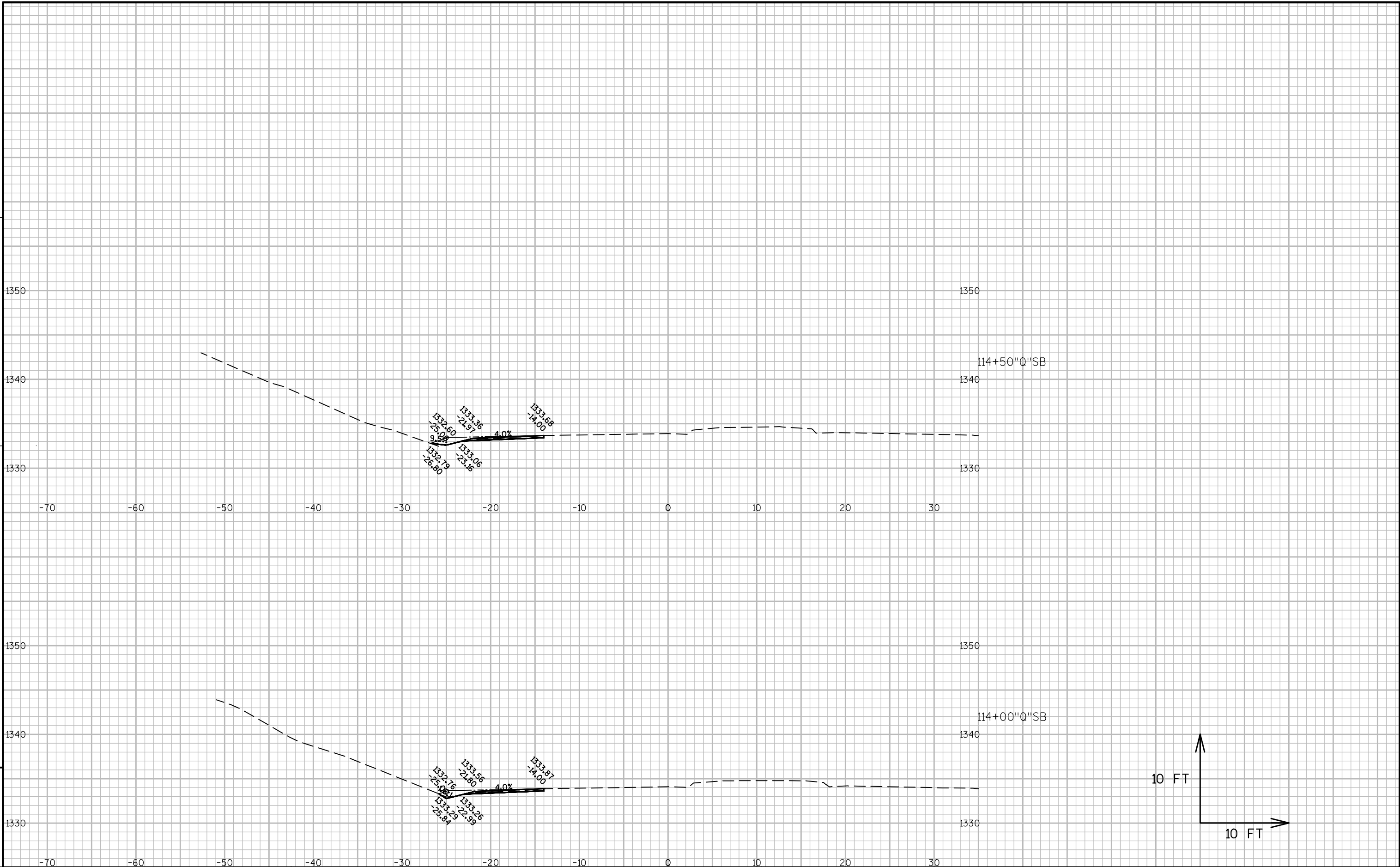
NOTES:

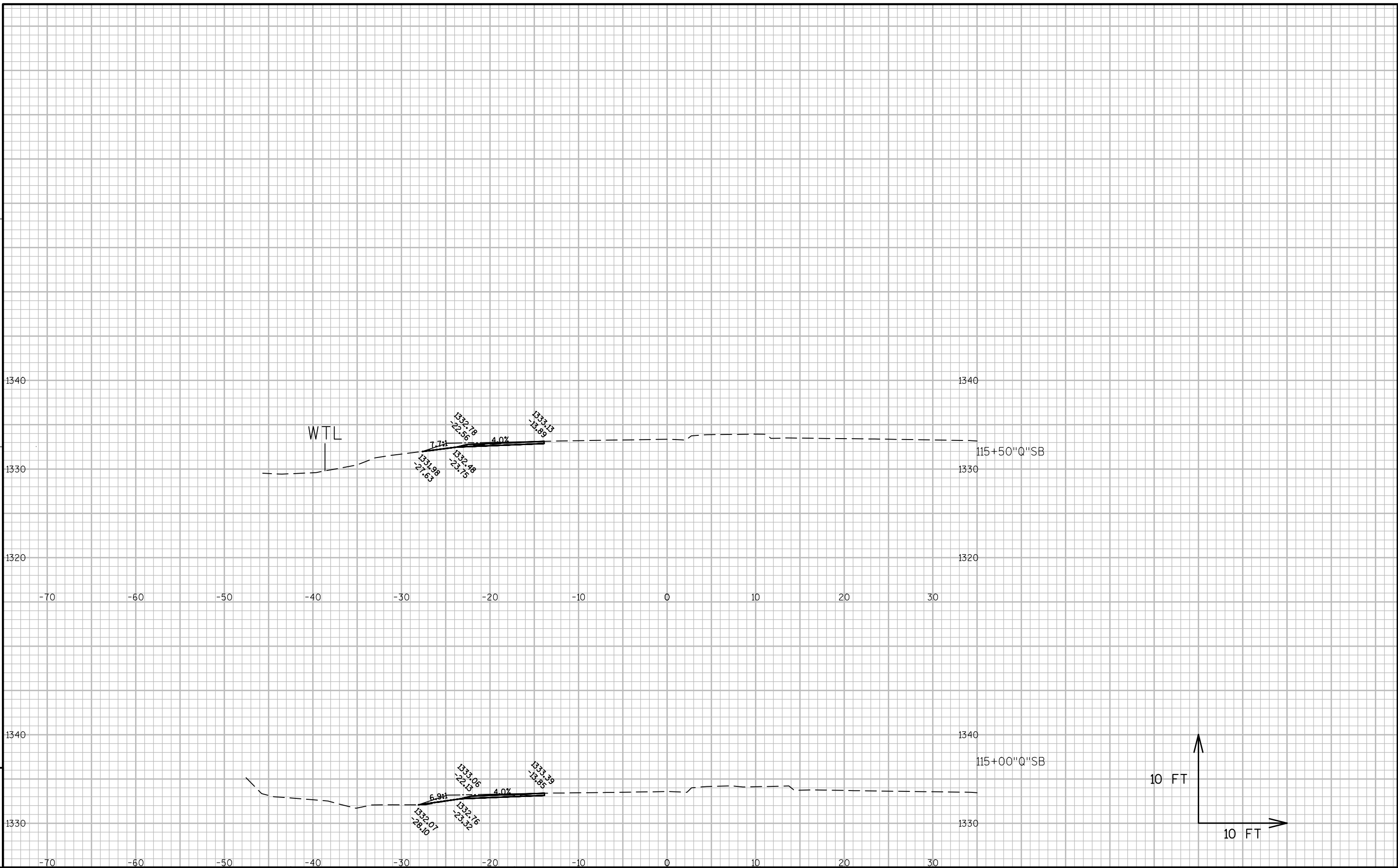
- 1) CUT INCLUDES UNUSABLE PAVEMENT MATERIAL
- 2) UNUSABLE PAVEMENT MATERIAL DOES NOT APPEAR IN THE CROSS SECTIONS
- 3) FILL DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL EXCAVATION VOLUME
- 4) EXPANDED FILL = UNEXPANDED FILL * EXPANDED FILL FACTOR. EXPANDED FILL FACTOR = 1.25
- 5) MASS ORDINATE = (CUT - UNUSABLE PAVEMENT MATERIAL) - (FILL * FILL FACTOR)

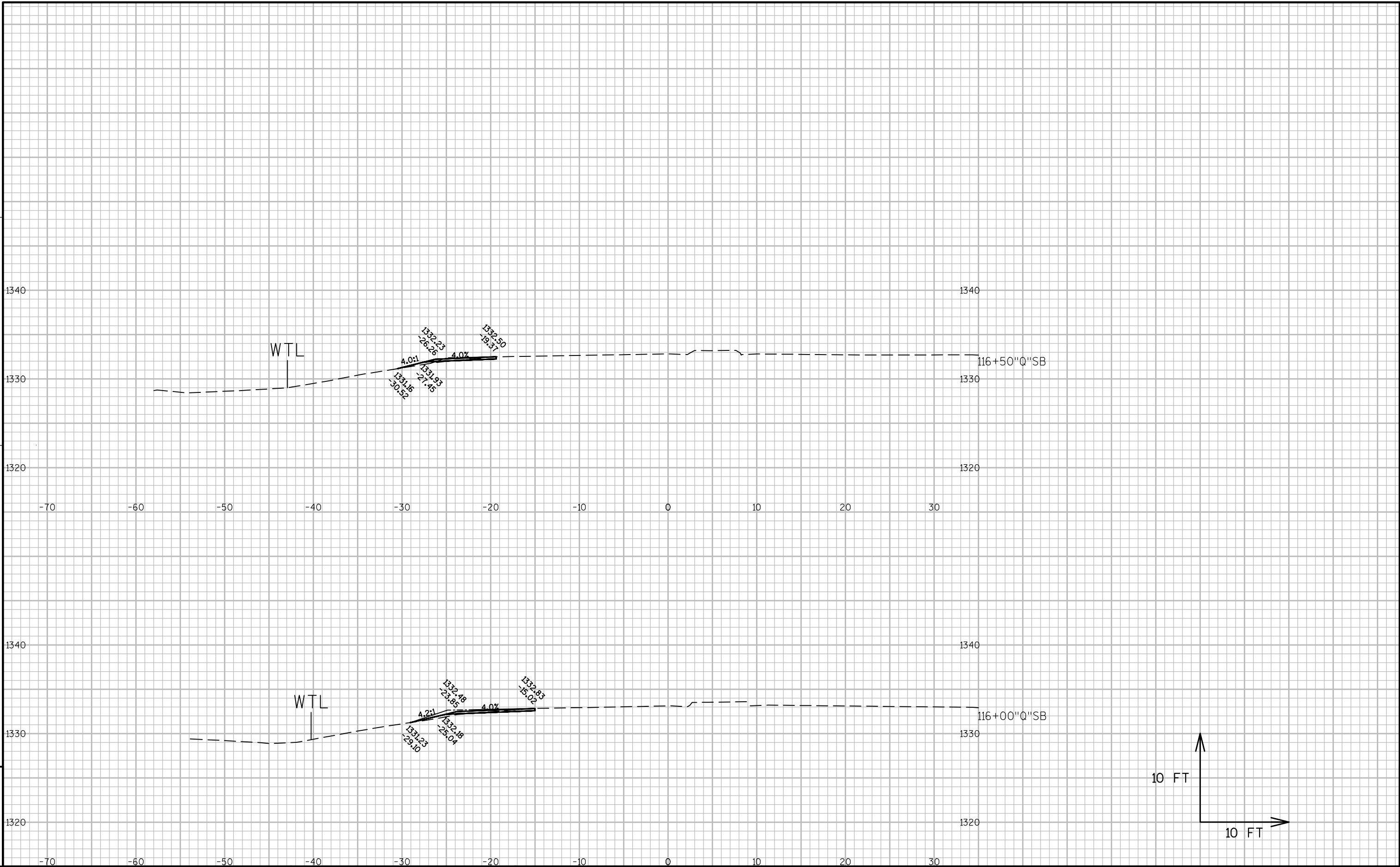


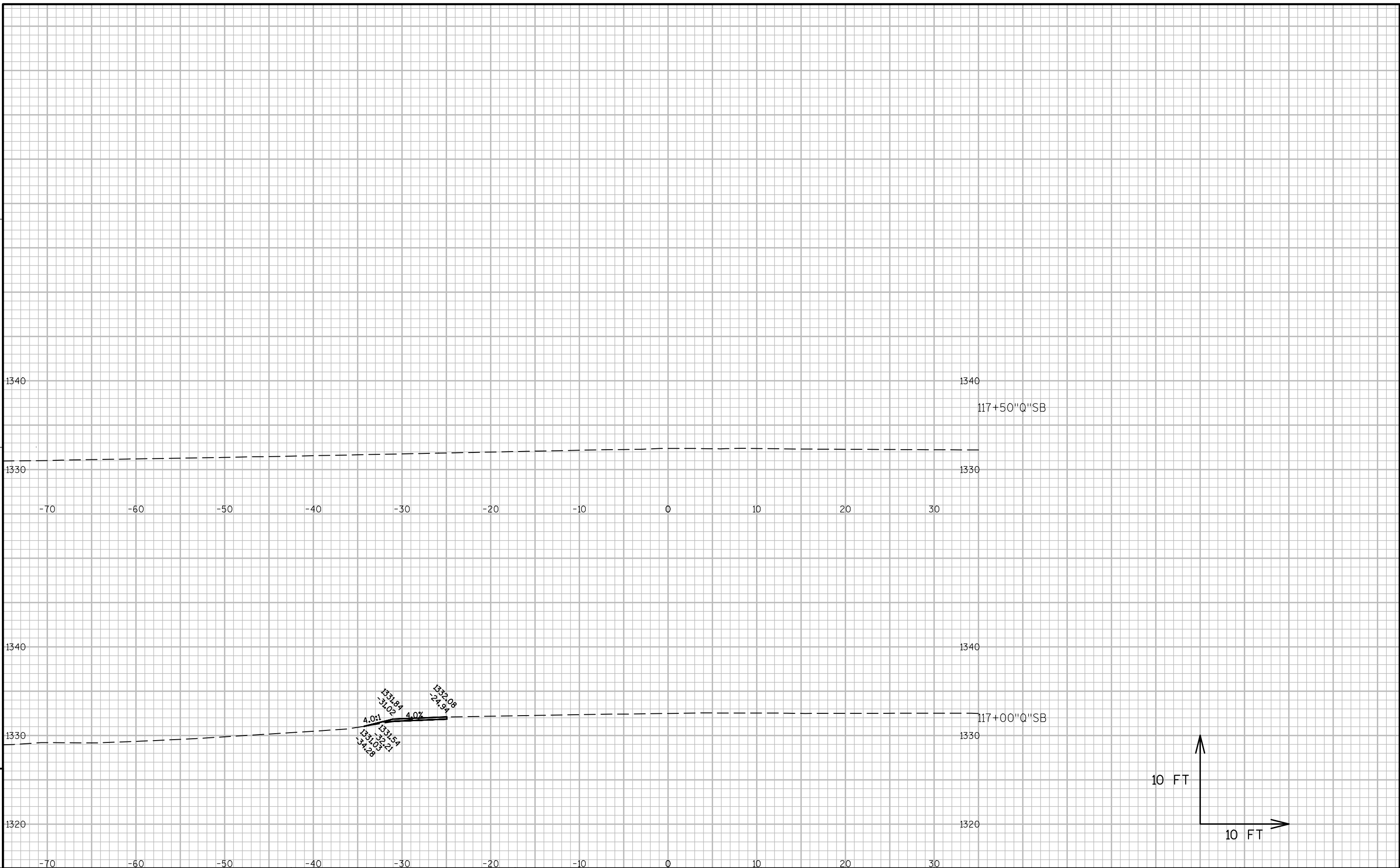


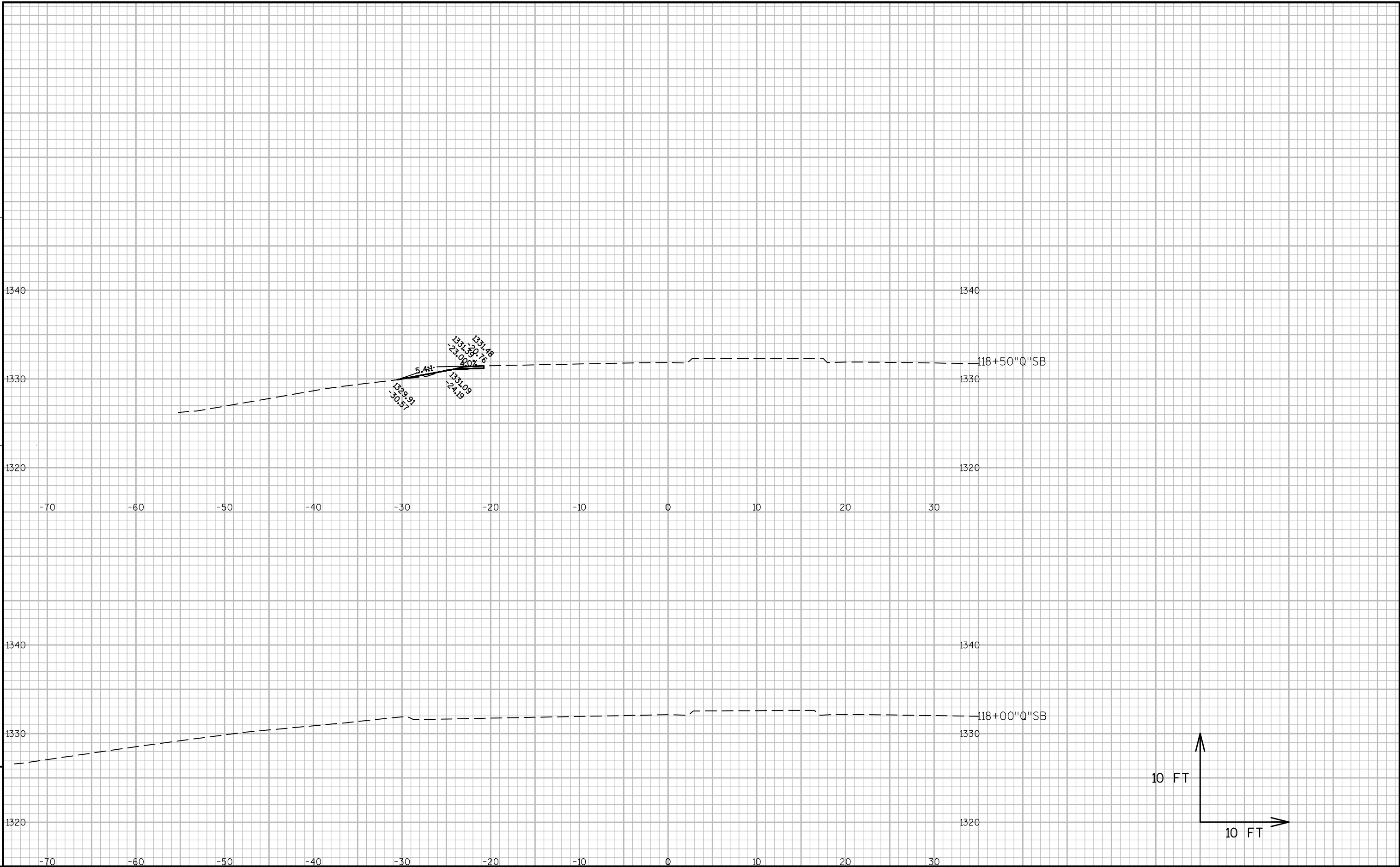


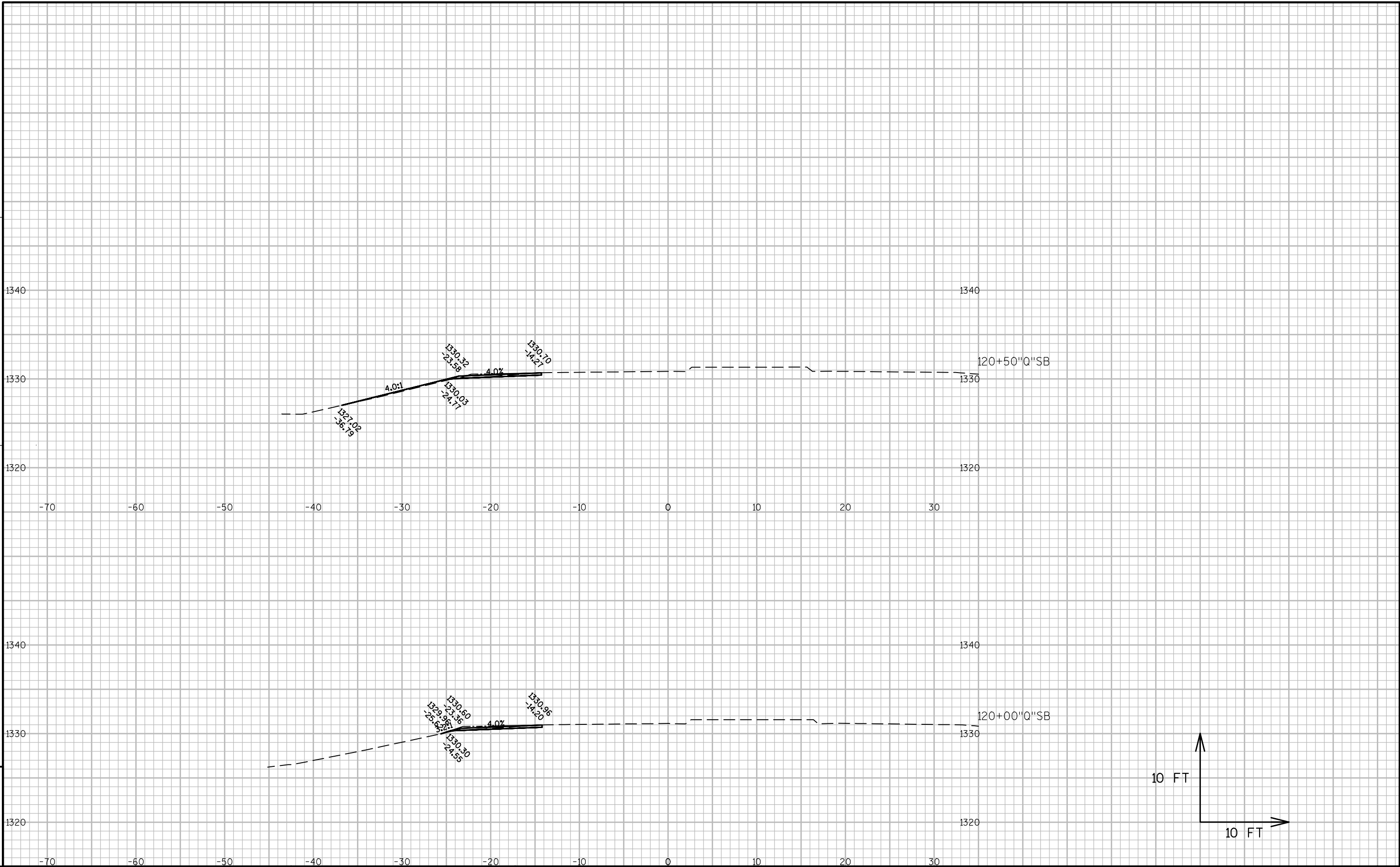


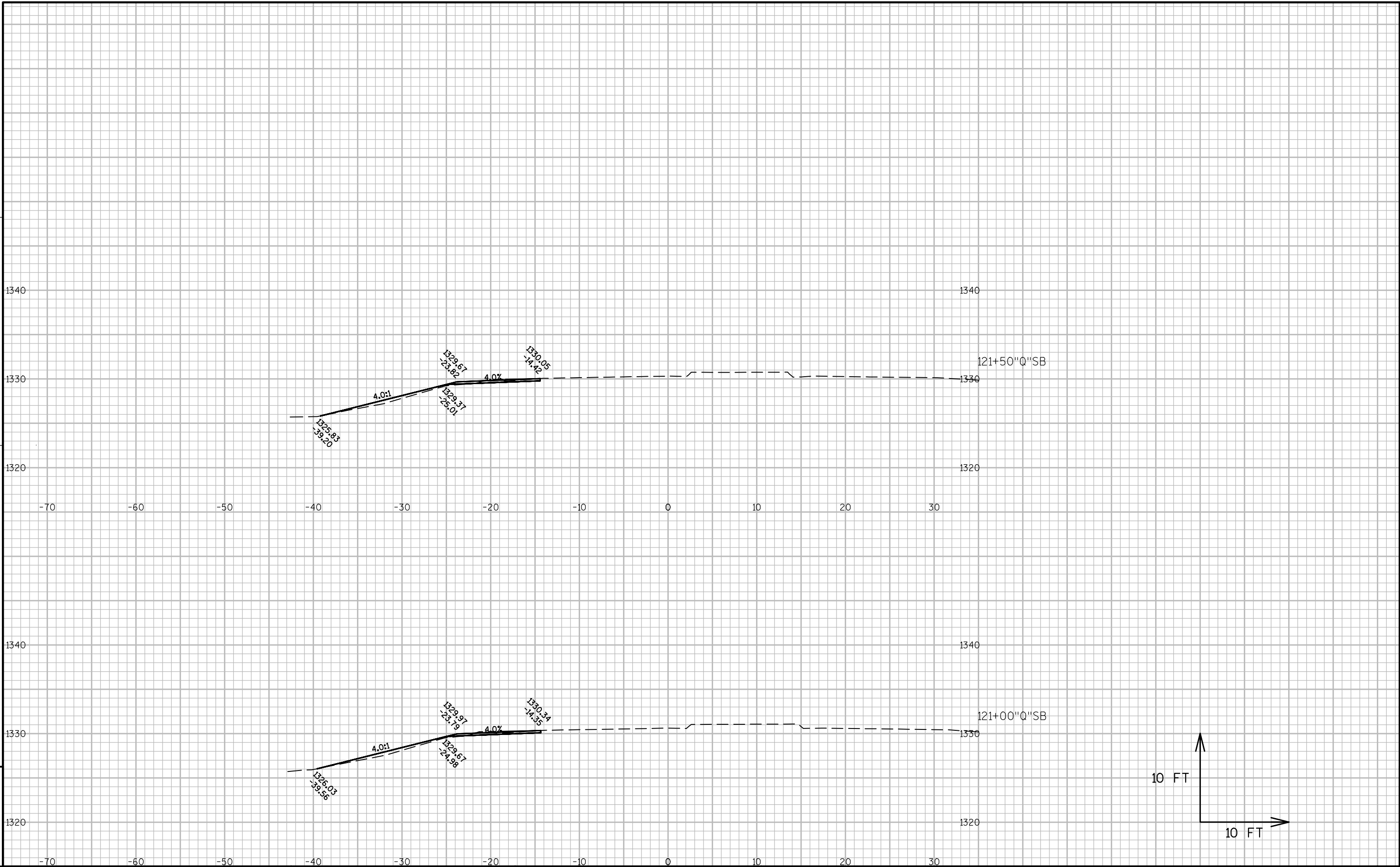


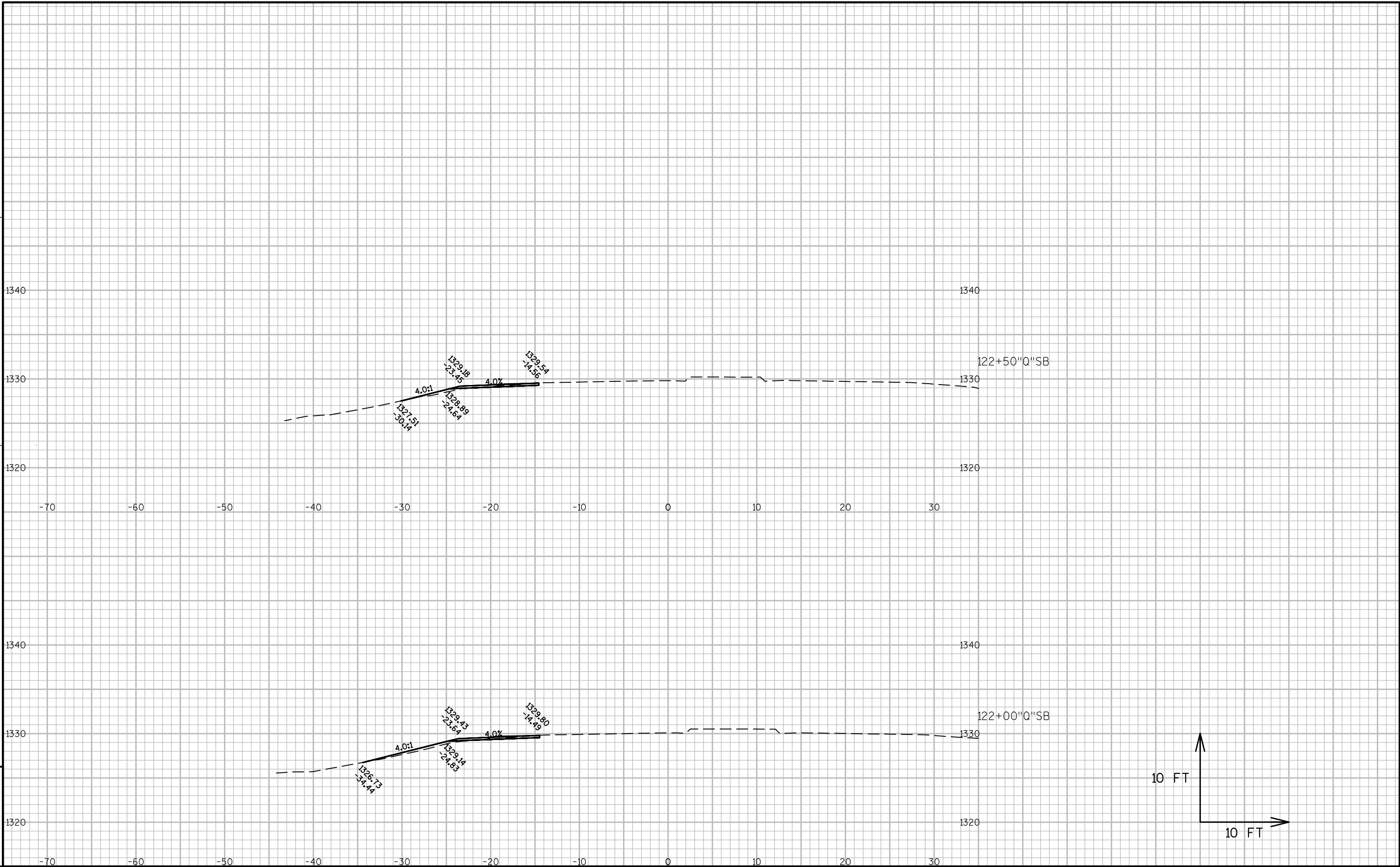




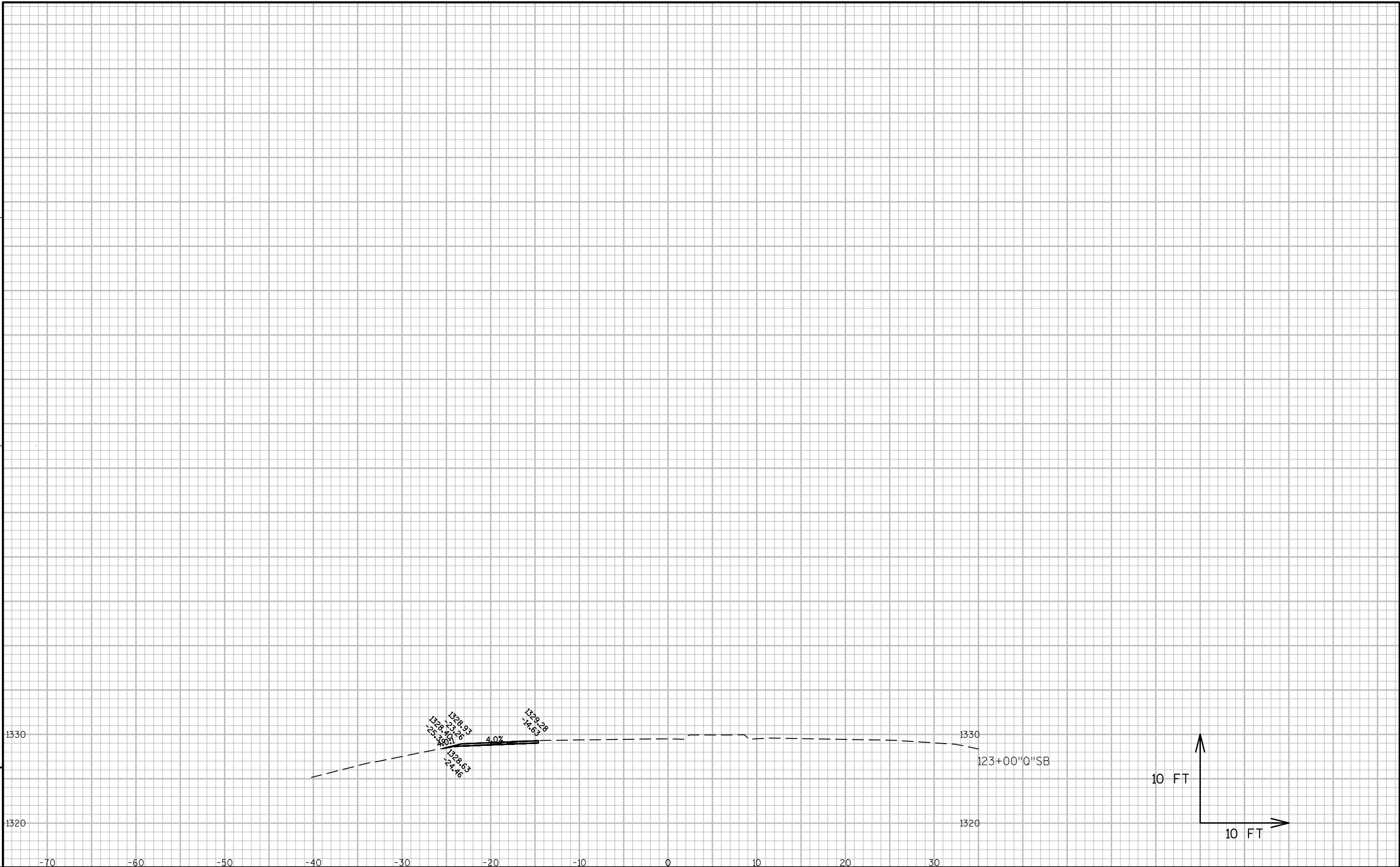








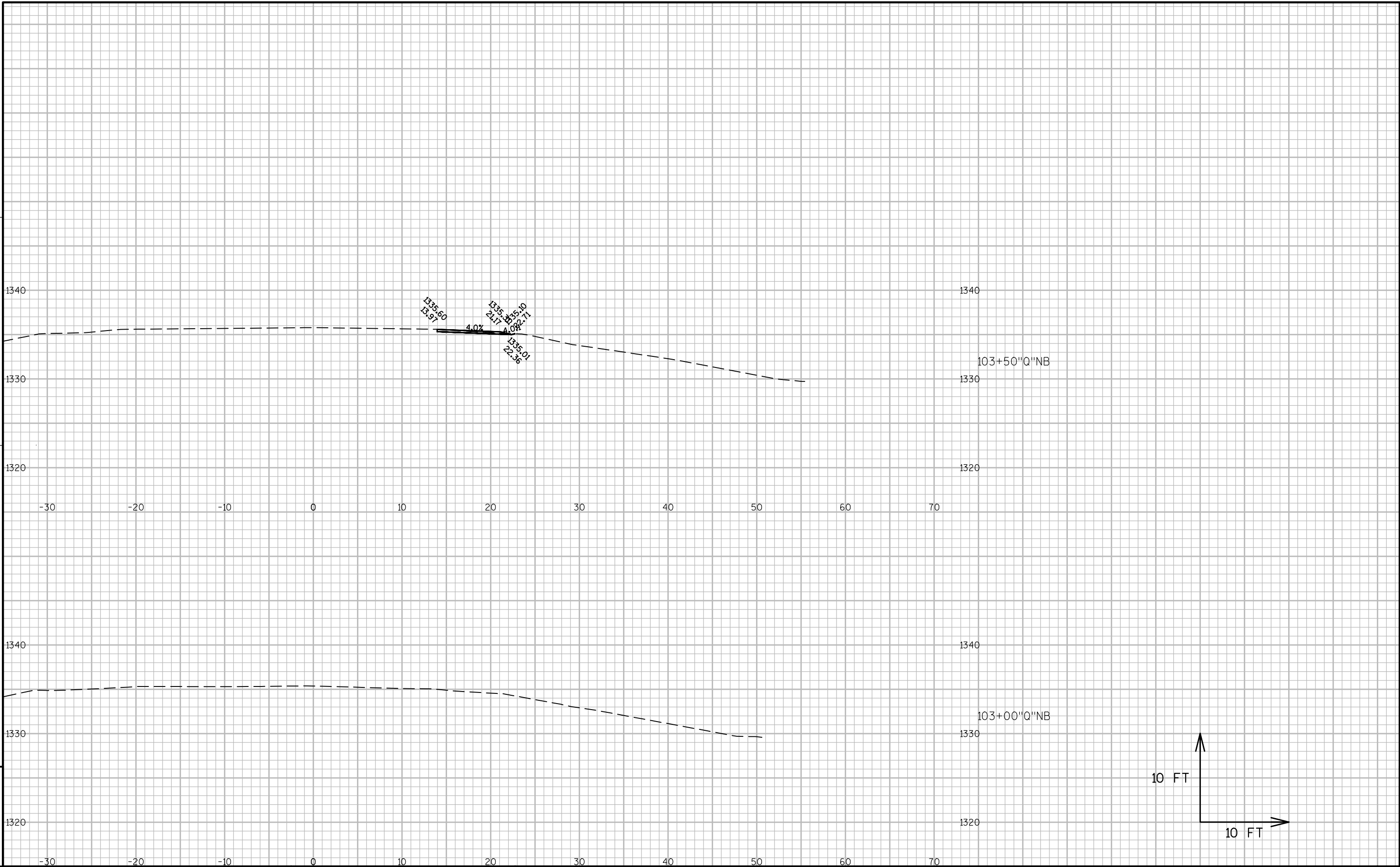
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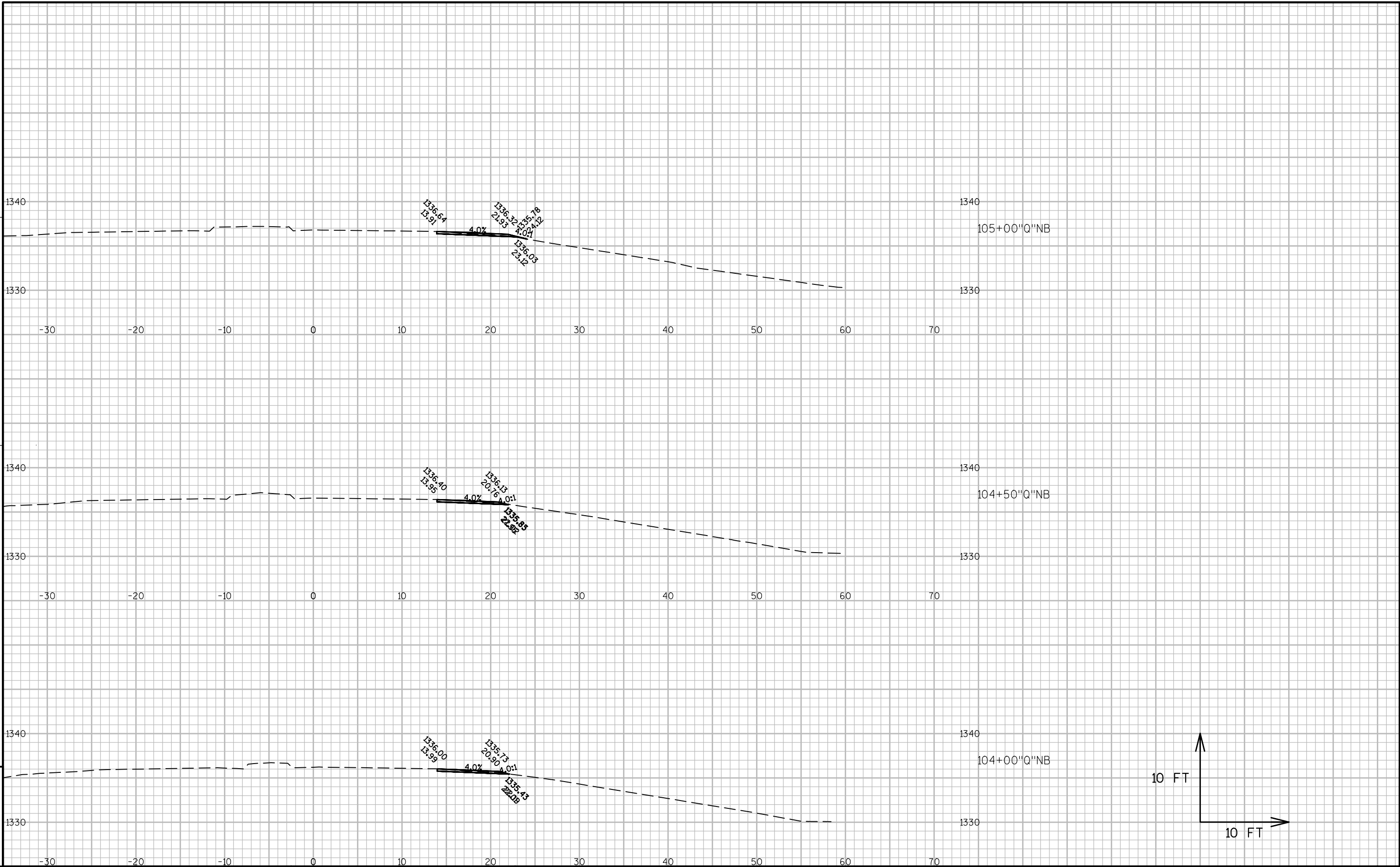


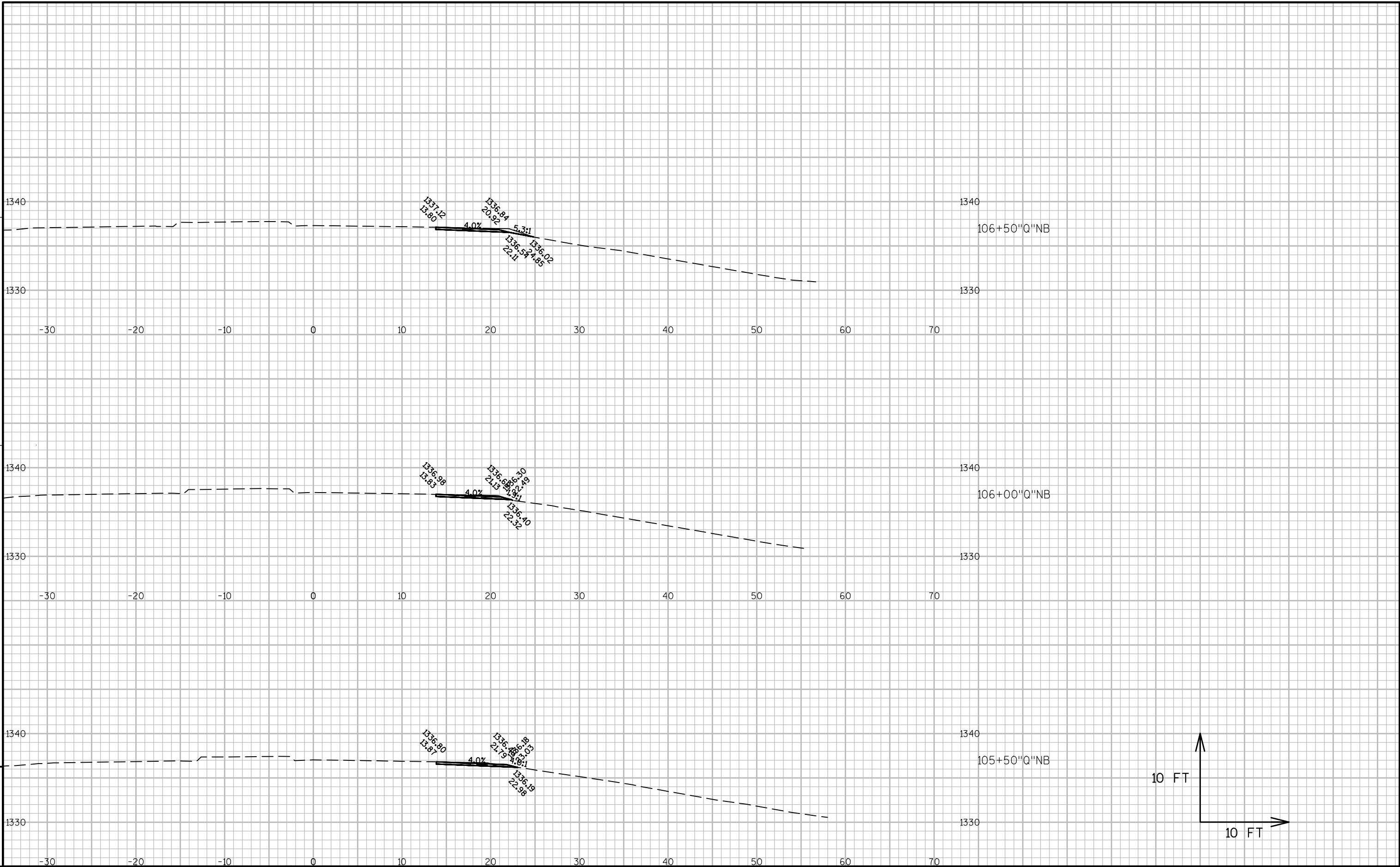
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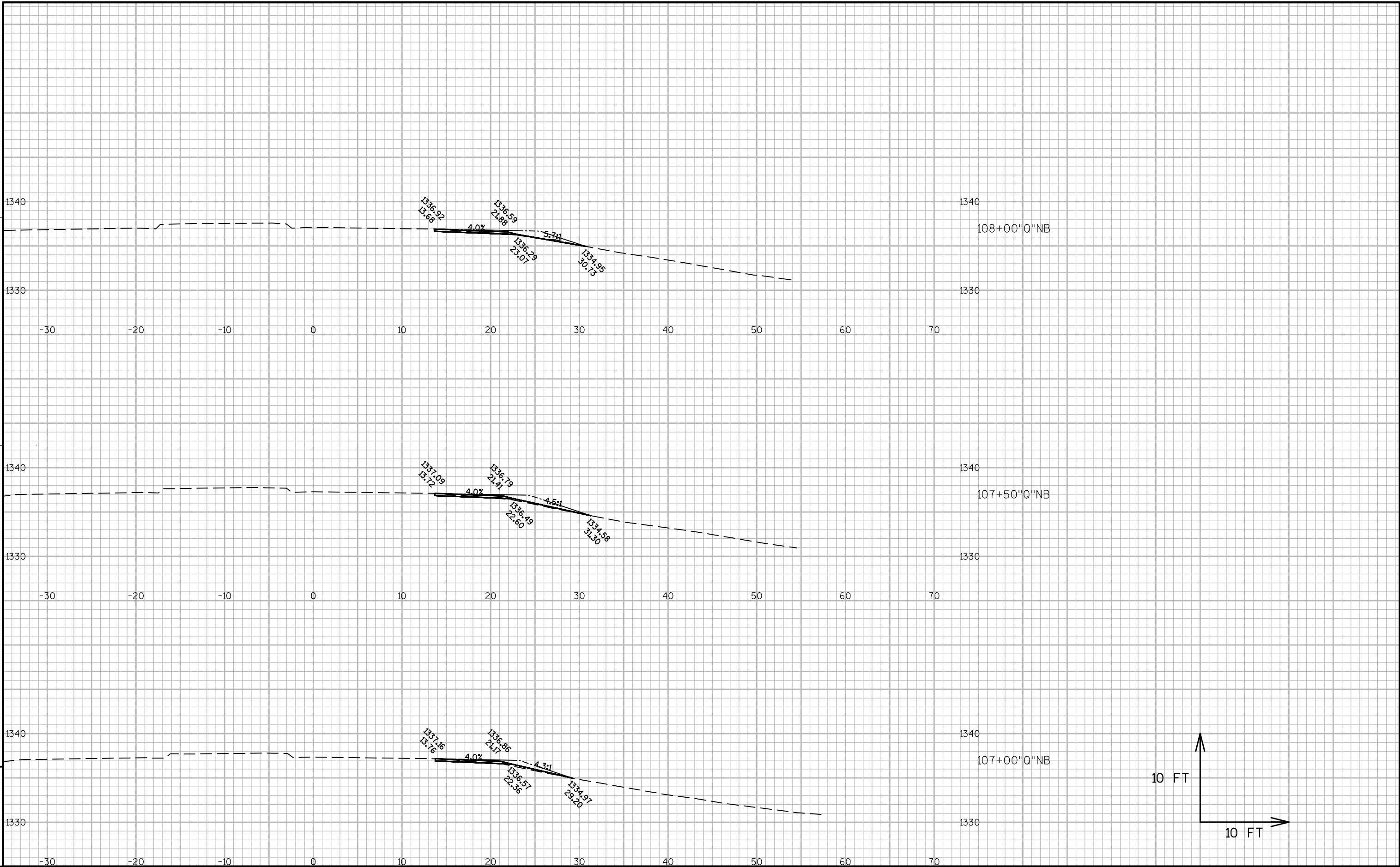
STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)		MASS ORDINATE NOTE 5
		CUT	UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT NOTE 1	UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	EBS	CUT 1.00 NOTE 1	EXPANDED FILL 1.25 NOTE 4	
103+10	---	0	0	0	0	---	---	---	---	---	---	---
103+50	40	1	0	0	0	0	0	0	0	0	0	0
104+00	50	1	1	0	0	2	1	0	0	2	0	1
104+50	50	2	1	0	0	3	1	0	0	5	0	3
105+00	50	3	1	0	0	4	2	0	0	10	0	5
105+50	50	3	1	0	0	5	3	0	0	15	0	8
106+00	50	3	2	0	0	6	3	0	0	21	0	11
106+50	50	4	2	0	0	7	4	0	0	28	0	14
107+00	50	4	3	0	0	7	4	0	0	34	0	16
107+50	50	4	3	0	0	7	5	0	0	41	0	18
108+00	50	4	3	0	0	7	5	0	0	48	0	20
108+50	50	4	2	0	0	8	4	0	0	55	0	23
108+86	36	0	0	0	0	3	1	0	0	58	0	25
110+14	128	0	0	0	0	0	0	0	0	58	0	25
110+50	36	1	1	0	0	1	1	0	0	59	0	25
111+00	50	4	3	0	0	5	4	0	0	64	0	27
111+50	50	4	3	0	0	8	5	0	0	72	0	30
112+00	50	4	3	0	0	8	5	0	0	81	0	33
112+50	50	4	3	0	0	8	5	0	0	88	0	36
113+00	50	4	3	0	0	8	5	0	0	96	0	39
113+50	50	4	3	0	0	8	5	0	0	104	0	42
114+00	50	5	3	0	0	9	5	0	0	112	0	46
114+50	50	5	3	0	0	9	5	0	0	122	0	51
115+00	50	4	3	0	0	9	5	0	0	131	0	55
115+50	50	3	2	0	0	7	4	0	0	137	0	57
116+00	50	2	2	0	0	5	4	0	0	142	0	59
116+50	50	2	1	0	0	4	3	0	0	146	0	60
117+00	50	1	1	0	0	3	2	0	0	149	0	61
117+31	31	0	0	0	0	1	1	0	0	150	0	61
COLUMN TOTALS						150	89	0	0			

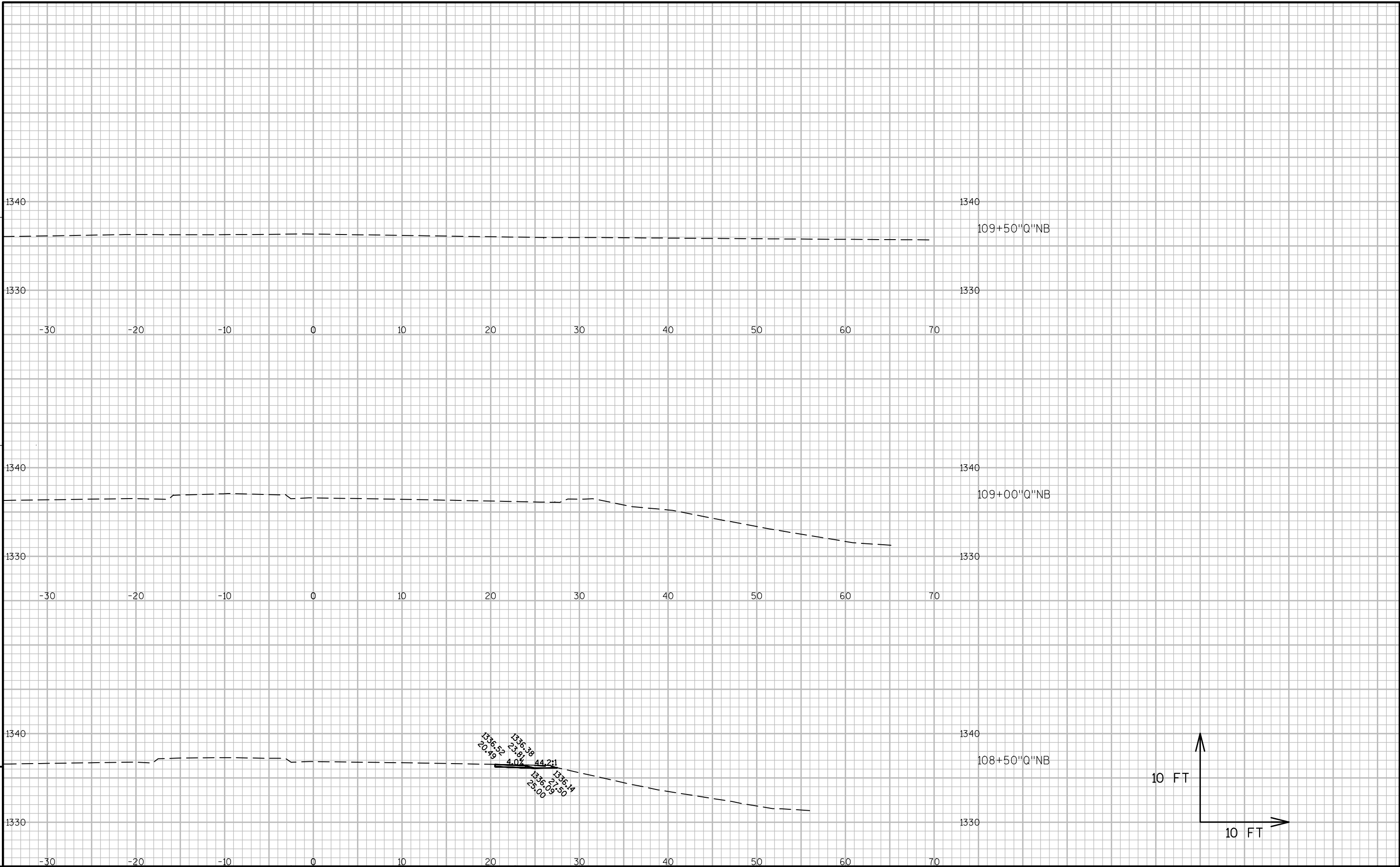
NOTES:
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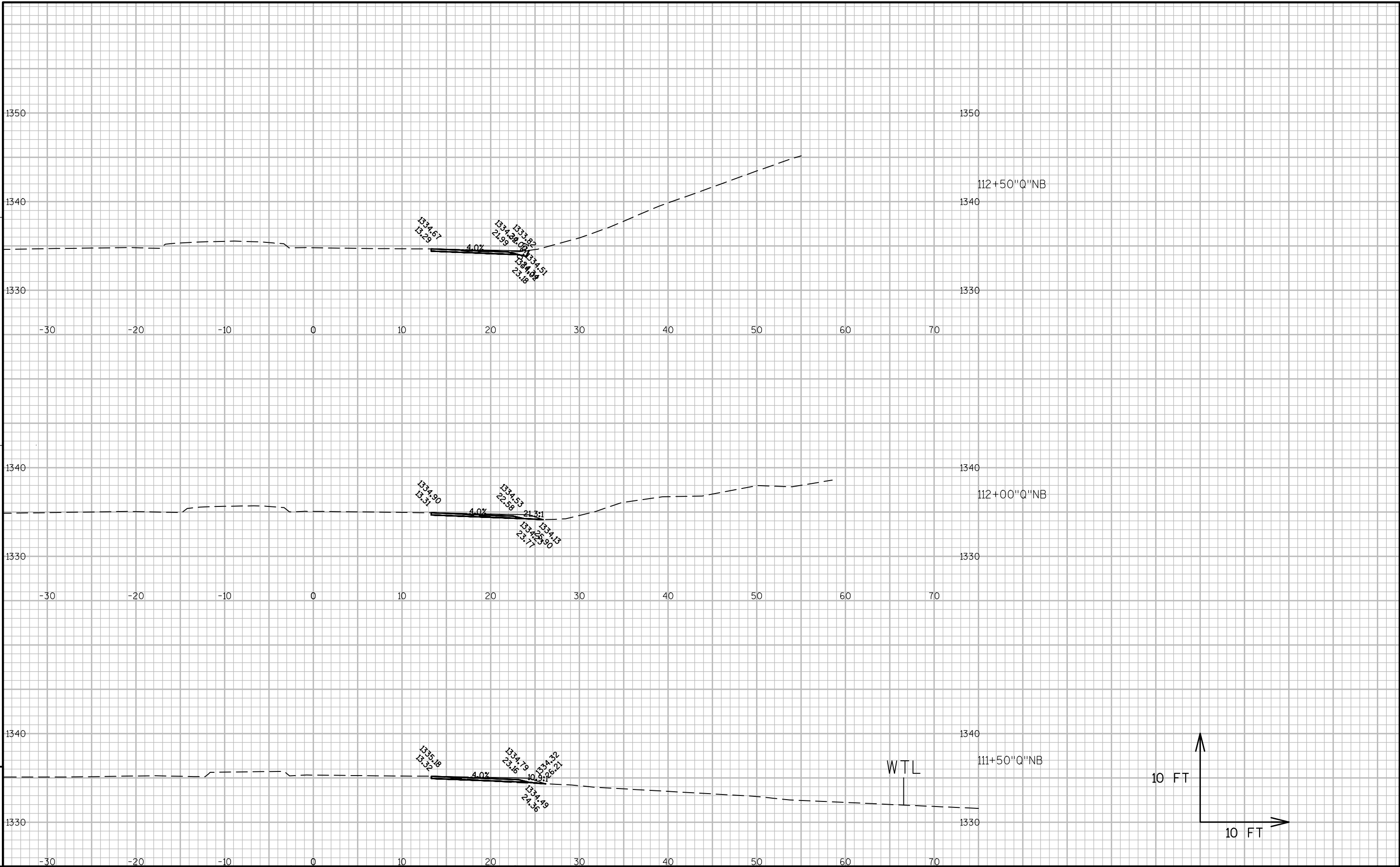


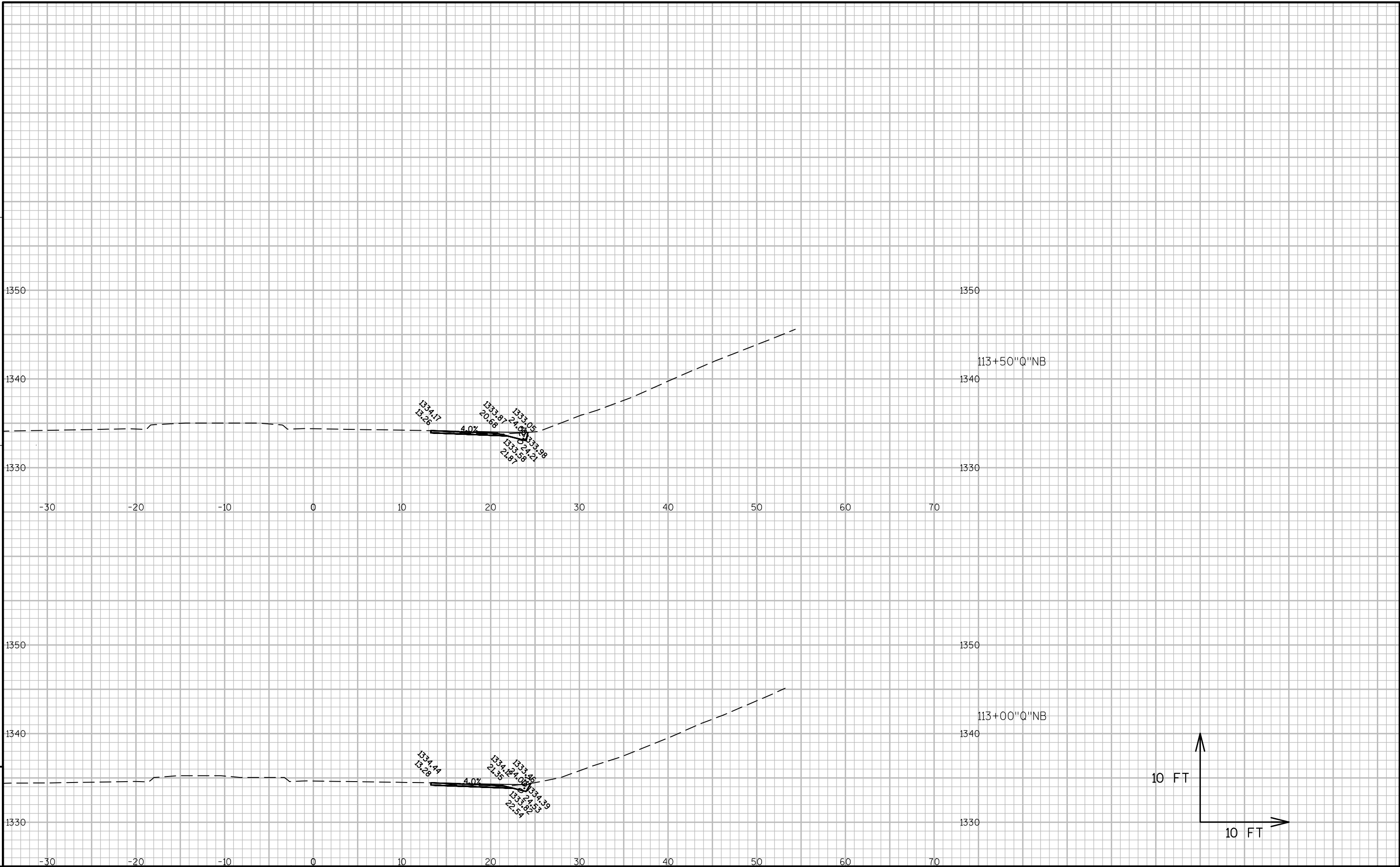


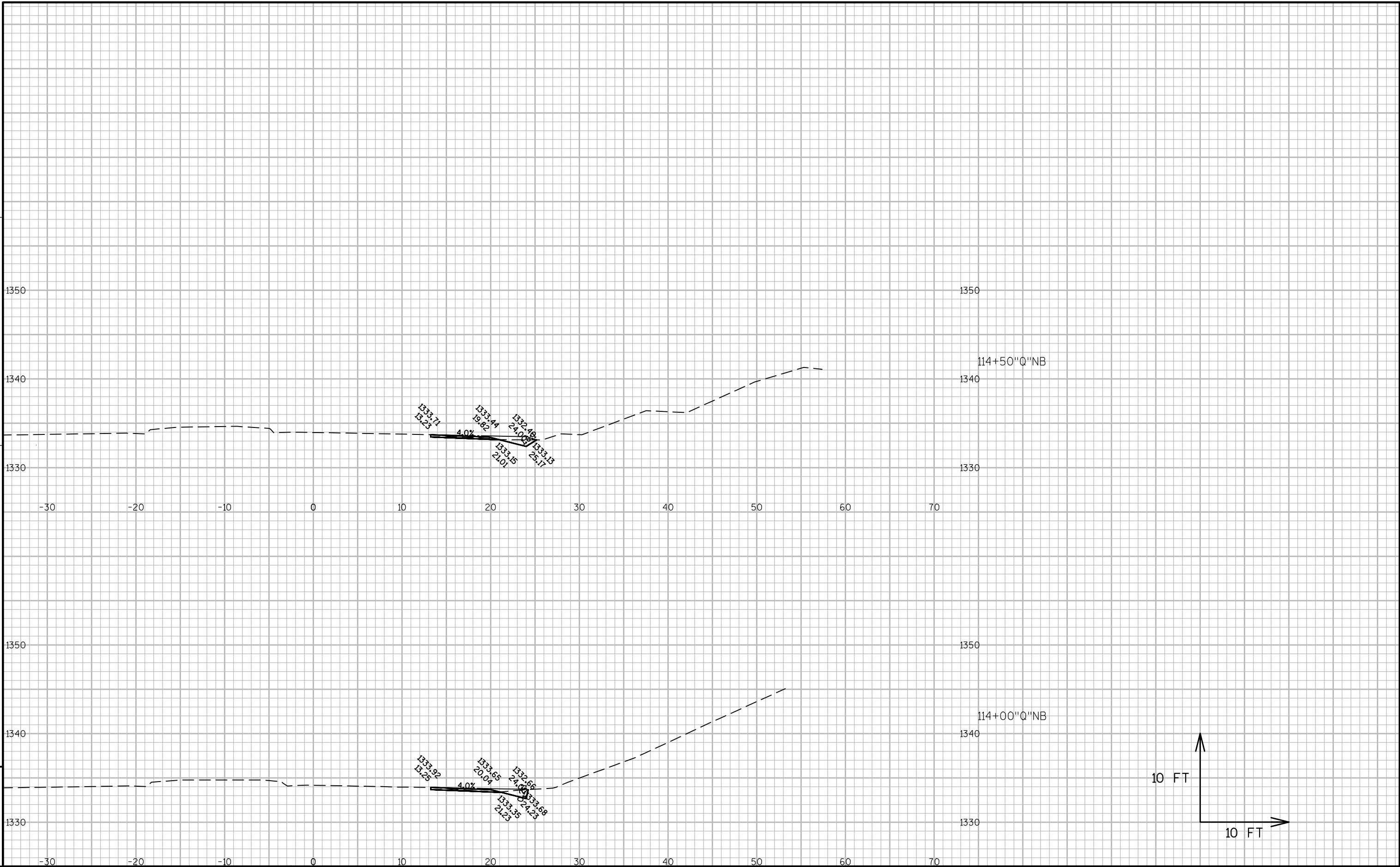


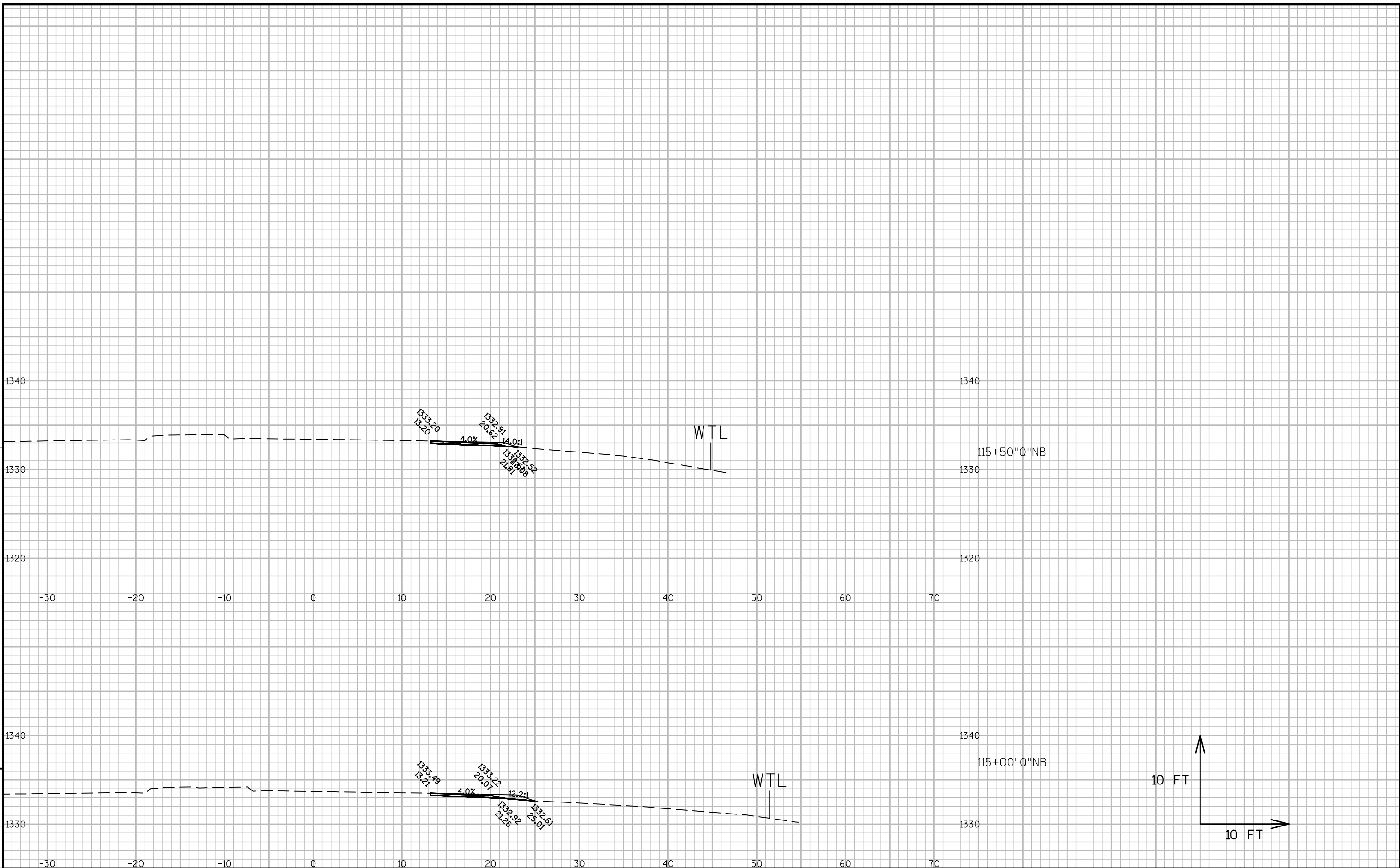


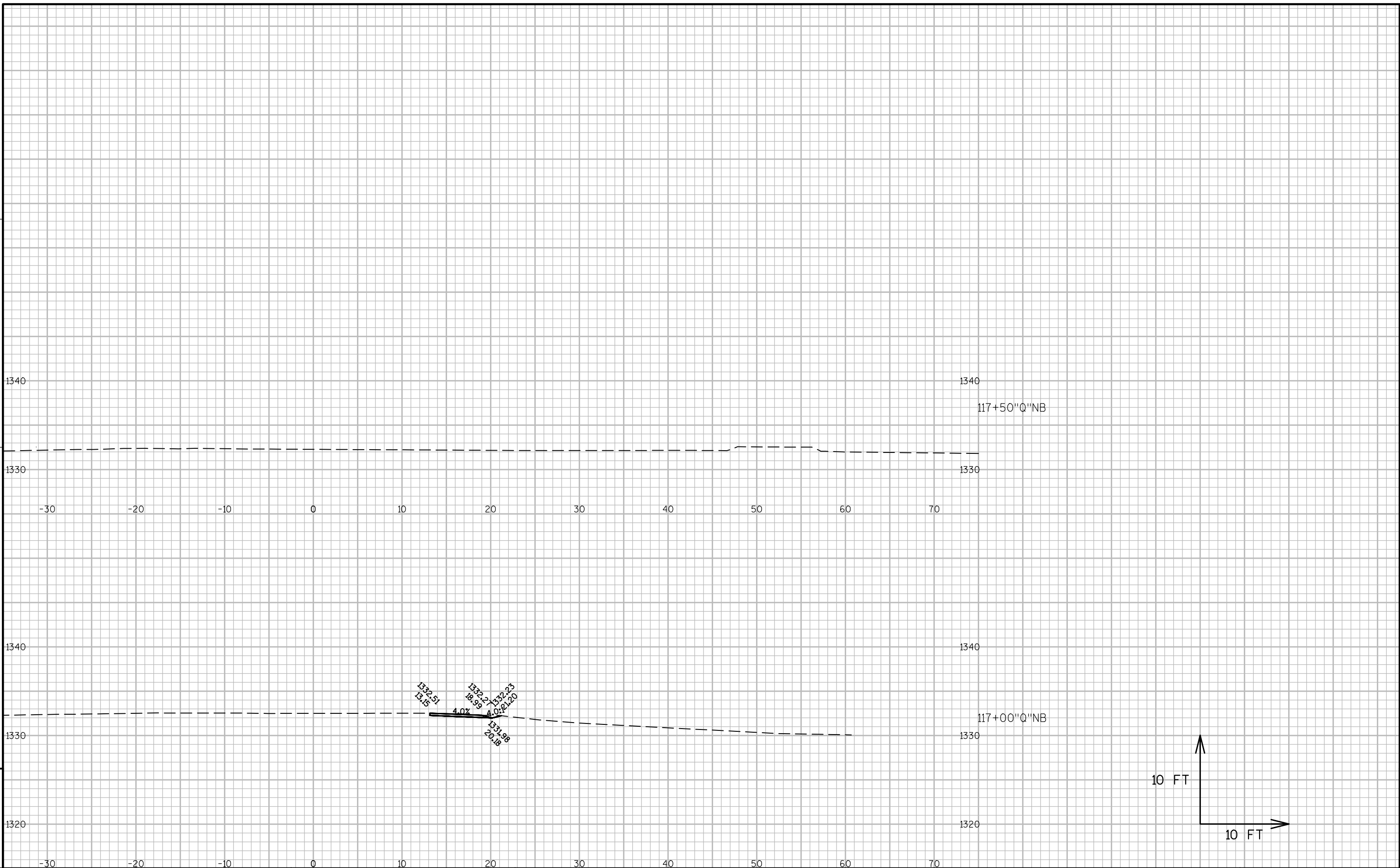




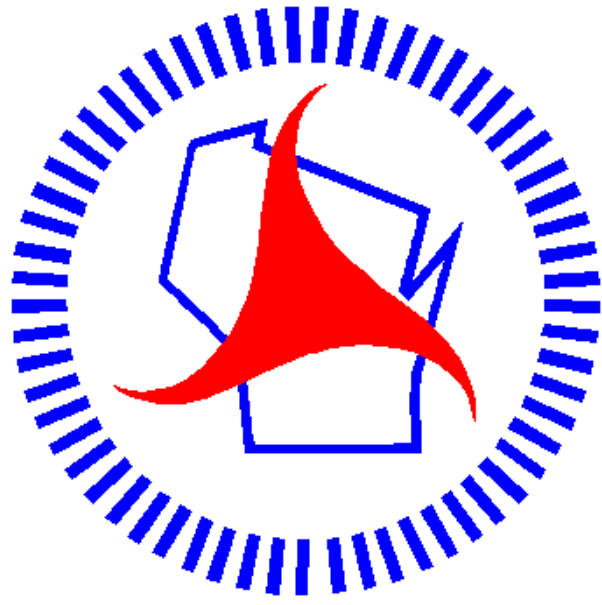








Notes



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