

NCL
PROJECT ID: 9360-02-70
WITH: N/A

COUNTY: LANGLADE

27

10/3/2013

APR 2014

ORDER OF SHEETS	
Section No. 1	Title
Section No. 2	Typical Sections and Details (Includes Erosion Control Plan)
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 = 110

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT

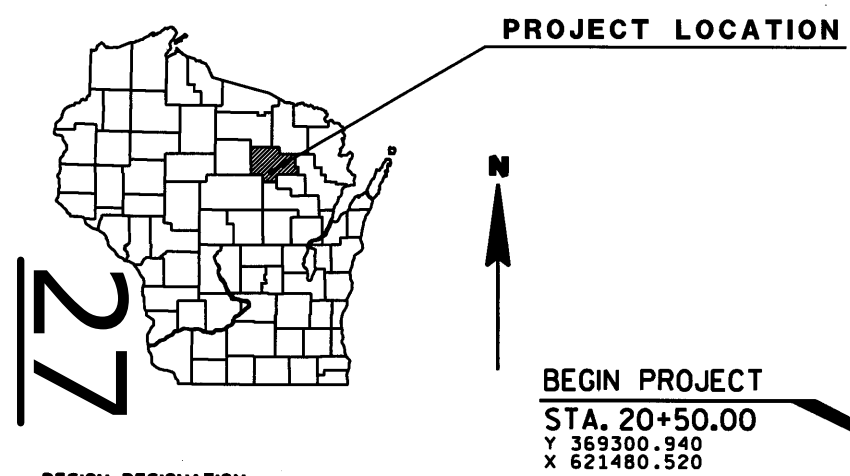
USH 45 - STH 52

USH 45 - CHILLIE ROAD

CTH B
LANGLADE COUNTY

STATE PROJECT NUMBER
9360-02-70

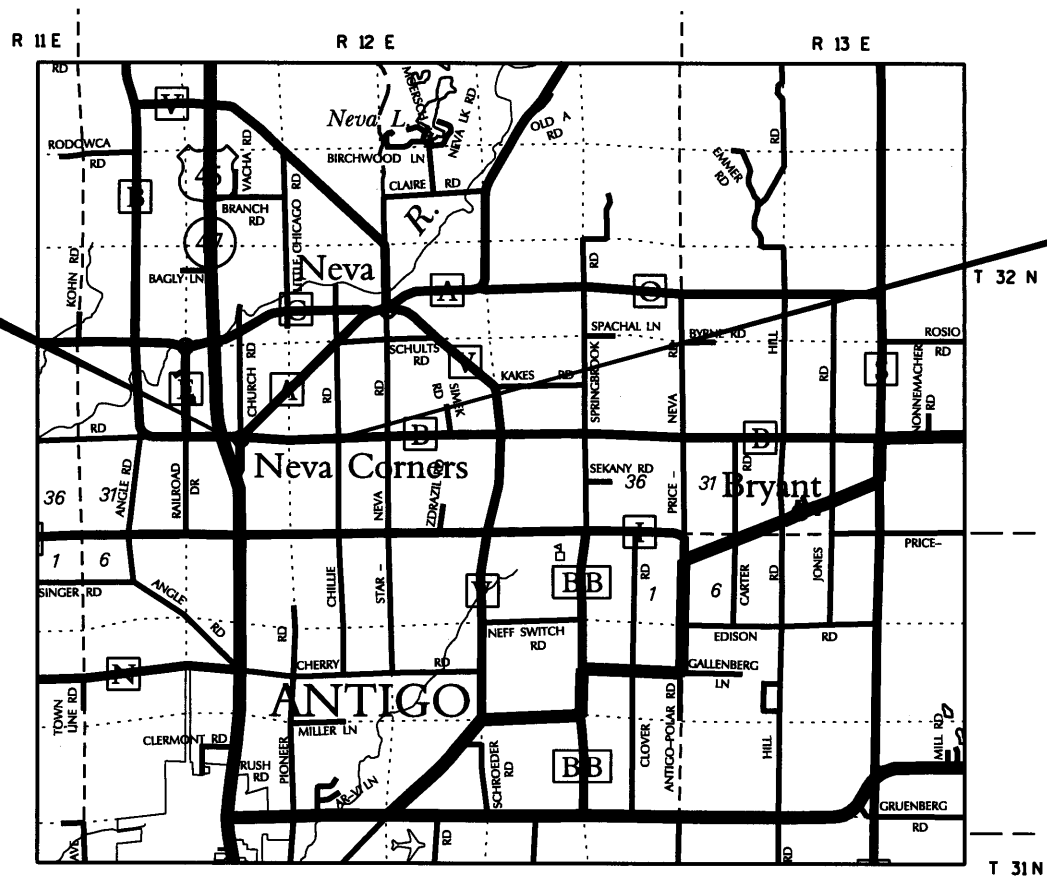
STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
9360-02-70	WISC 2014114	1



DESIGN DESIGNATION	
A.A.D.T. (2014)	= 420
A.A.D.T. (2034)	= 560
D.H.V. (2034)	= 88
D.D.	= 61/39
T.	= 8.3%
DESIGN SPEED	= 50 MPH URBAN (STA. 20+50 TO STA. 32+25) 60 MPH RURAL (STA. 32+25 TO STA. 81+25)
ESALS	= 142,350

CONVENTIONAL SYMBOLS

PLAN	
CORPORATE LIMITS	////
PROPERTY LINE	---
LOT LINE	- - - -
LIMITED HIGHWAY EASEMENT	L - - - -
EXISTING RIGHT OF WAY	---
PROPOSED OR NEW R/W LINE	---
SLOPE INTERCEPT	- - - -
REFERENCE LINE	---
EXISTING CULVERT	- - - -
PROPOSED CULVERT (Box or Pipe)	---
COMBUSTIBLE FLUIDS	CAUTION
MARSH AREA	---
WOODED OR SHRUB AREA	---
PROFILE	
GRADE LINE	---
ORIGINAL GROUND	---
MARSH OR ROCK PROFILE (To be noted as such)	---
SPECIAL DITCH	---
GRADE ELEVATION	95.36
CULVERT (Profile View)	---
UTILITIES	
ELECTRIC	E
FIBER OPTIC	FO
GAS	G
SANITARY SEWER	SAN
STORM SEWER	SS
TELEPHONE	T
WATER	W
UTILITY PEDESTAL	---
POWER POLE	---
TELEPHONE POLE	---



END PROJECT
STA. 81+25.00

LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.222 MI. URBAN
0.929 MI. RURAL
1.151 MI. TOTAL

"Coordinates on this plan are referenced to the Langlade County
Coordinate System Langlade Zone NAD 83 (1991)"

APPROVED
FOR
LANGLADE COUNTY

10/15/2013
DATE
COUNTY HIGHWAY COMMISSIONER

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES

WISCONSIN
PHILLIP J. VERVILLE III
E46336
GREEN BAY, WI
PROFESSIONAL ENGINEER

DATE: 10/11/13

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor AYRES ASSOCIATES
Designer AYRES ASSOCIATES
Management Consultant CEDAR CORPORATION

APPROVED FOR THE DEPARTMENT
DATE: 10-31-2013
(Management Consultant Signature)

E

GENERAL NOTES

DISTURBED AREAS WITHIN THE RIGHT OF WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, WILL BE FERTILIZED, SEEDED AND EROSION MAT OR MULCH.

THE LOCATION OF EXISTING UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

EROSION CONTROL MEASURES WILL BE PLACED AS SHOWN ON THE CONSTRUCTION DETAILS. THE EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

SAW CUT LOCATIONS SHOWN ON THE PLAN ARE SUBJECTED TO ADJUSTMENT BY THE ENGINEER IN FIELD. THE LINE OF SUCH SAW CUTS WILL BE NEATLY DELINEATED THROUGH THE ASPHALT AND/OR CONCRETE WITHOUT ANY DAMAGE TO THE REMAINING PORTION OF THE EXISTING PAVEMENT.

BEARINGS SHOWN ON THIS PLAN ARE TRUE BEARINGS TO THE NEAREST SECOND.

ALL DISTANCES ARE GROUND DISTANCES.

ALL TIES ON THIS PLAN ARE HORIZONTAL UNLESS DESCRIBED OTHERWISE.

PROPERTY LINE AS SHOWN ARE APPROXIMATE.

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

CURVE DATA IS BASED ON ARC DEFINITION.

THE FACTOR USED FOR EXPANDING THE FILLS TO TO COMPUTE THE VOLUME OF MATERIAL REQUIRED IS 1.30.

CURB AND GUTTER ELEVATIONS ARE ALONG THE FLANGE LINE UNLESS OTHERWISE NOTED.

RADIUS POINTS, UNLESS OTHERWISE NOTED, ARE TO THE EDGE OF PAVEMENT.

ELEVATIONS SHOWN ON THE ROADWAY CROSS SECTIONS ARE SUBGRADE ELEVATIONS AT THE CONSTRUCTION REFERENCE LINES.

EXISTING DRIVEWAYS AND FIELD ENTRANCES SHALL BE RESTORED IN KIND AS DIRECTED BY THE ENGINEER IN THE FIELD AND AT THE LOCATION DETERMINED BY THE ENGINEER.

THE REMOVAL OF ASPHALT DRIVEWAYS WILL BE PAID FOR AS EXCAVATION COMMON UNLESS OTHERWISE NOTED.

MAINTAIN DRIVING SURFACE TO ALL PROPERTY OWNERS WITH BASE AGGREGATE DENSE 1 1/4-INCH OR SALVAGED ASPHALTIC PAVEMENT BASE.

EXCAVATION BELOW SUBGRADE (EBS) WILL BE MEASURED AND PAID FOR AS EXCAVATION COMMON. THE LOCATION FOR EBS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE PIPES SHOWN ON THE PLAN SHEETS ARE APPROXIMATE AND WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

PRIOR TO ORDERING DRAINAGE PIPES, THE CONTRACTOR WILL VERIFY RELATED DRAINAGE INFORMATION IN THE PLAN WITH THE ENGINEER IN THE FIELD.

ALL ELEVATIONS ON THIS PROJECT ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF NAVD 88.

THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING MOTORISTS AND PEDESTRIANS THAT MAY ENTER THE WORK ZONE FROM POSSIBLE HAZARDS.

DESIGN CONTACT

AYRES ASSOCIATES

3376 PACKERLAND DRIVE
ASHWAUBENON, WISCONSIN 54115-9586
ATTENTION: PHIL VERVILLE III
E-MAIL: VERVILLE@AYRESASSOCIATES.COM

COUNTY HIGHWAY COMMISSIONER

1521 ARCTIC STREET
ANTIGO, WISCONSIN 54409
ATTENTION: TIMOTHY RUSCH
E-MAIL: TRUSCH@CO.LANGLADE.WI.US

TELEPHONE 920-498-1200

TELEPHONE 715-627-6272

DNR LIAISON

DEPARTMENT OF NATURAL RESOURCES

107 SUTLIFF
RHINELANDER, WISCONSIN 54501
ATTENTION: MR. JON SIMONSEN
E-MAIL: JONATHAN.SIMONSEN@WISCONSIN.GOV

TELEPHONE 1-715-365-8916

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 AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 13.08 ACRES
SOIL GROUP B

STANDARD ABBREVIATIONS

ADT	AVERAGE DAILY TRAFFIC	NC	NORMAL CROWN
AC	ASPHALT CEMENT	PT	POINT OF TANGENCY
AGG	AGGREGATE	PC	POINT OF CURVATURE
ASPH	ASPHALT	PI	POINT OF INTERSECTION
BM	BENCH MARK	PE	PRIVATE ENTRANCE
C/L	CENTERLINE	R	RADIUS
CONC	CONCRETE	REM	REMOVE
CMP	CORRUGATED METAL PIPE	R/L OR RL	REFERENCE LINE
CR.	CREEK	RCCP	REINFORCED CONCRETE CULVERT PIPE
D	DEGREE OF CURVE	RCPSS	REINFORCED CONCRETE PIPE STORM SEWER
DHV	DESIGN HOUR VOLUME	R.O.	RUNOUT
ESALS	EQUIVALENT SINGLE AXIS LOADS	R/W	RIGHT-OF-WAY
EXIST	EXISTING	STA	STATION
FE	FIELD ENTRANCE	SE	SUPER ELEVATION
HYD	HYDRANT	SS	STORM SEWER
IP	IRON PIPE OR PIN	T	TANGENT
L	LENGTH OF CURVE	TEL	TELEPHONE
LC	LONG CHORD OF CURVE	TLE	TEMPORARY LIMITED EASEMENT
LR	LENGTH OF RUNOFF	T	TRUCKS
MH	MANHOLE	VC	VERTICAL CURVE
		W	WELL

UTILITIES

WISCONSIN PUBLIC SERVICE CORPORATION

700 NORTH ADAMS STREET
PO BOX 19001
GREEN BAY, WISCONSIN 54307
ATTENTION: LORIBUTRY
FAX: 920-433-1360
E-MAIL: LBUTRY@INTEGRYSGROUP.COM

TELEPHONE 920-433-1703

AMERICAN TRANSMISSION COMPANY

801 O'KEEFE ROAD
PO BOX 6113
DE PERE, WISCONSIN 54115-6113
ATTENTION: MS. KIM HACKELBERG
E-MAIL: KHACKELBERG@ATCLLC.COM

TELEPHONE 920-338-6556

CITY GAS COMPANY

809 5TH AVENUE
ANTIGO, WISCONSIN 54409
ATTENTION: ROD MADESON
E-MAIL: RMADESON@CITYGASANTIGO.COM

TELEPHONE 715-627-4351
715-216-3571

FRONTIER COMMUNICATIONS

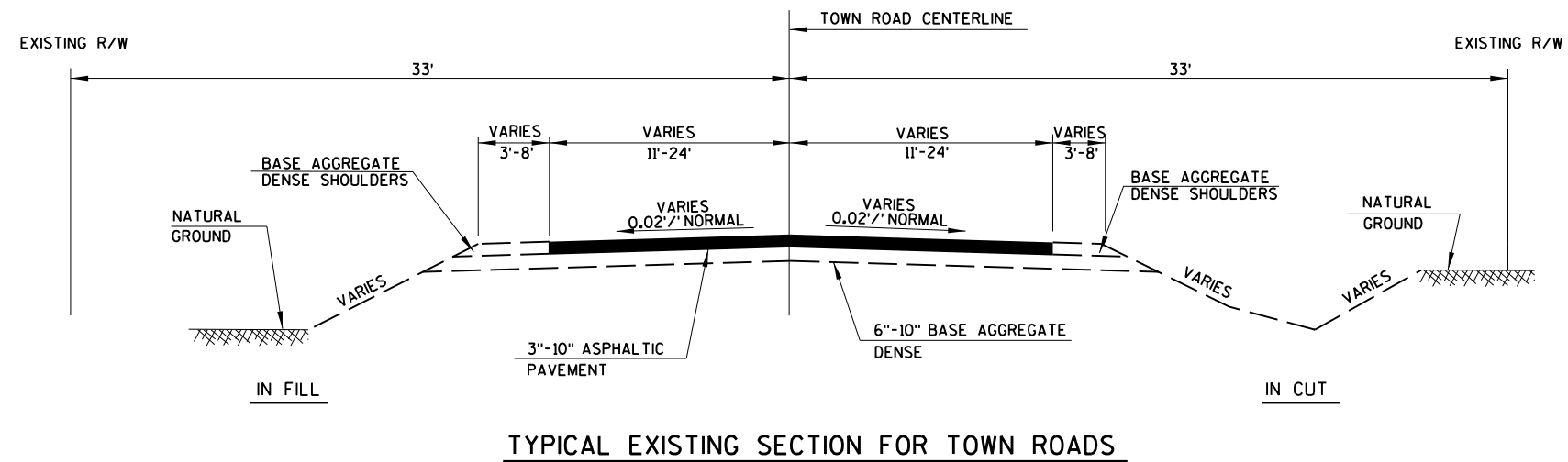
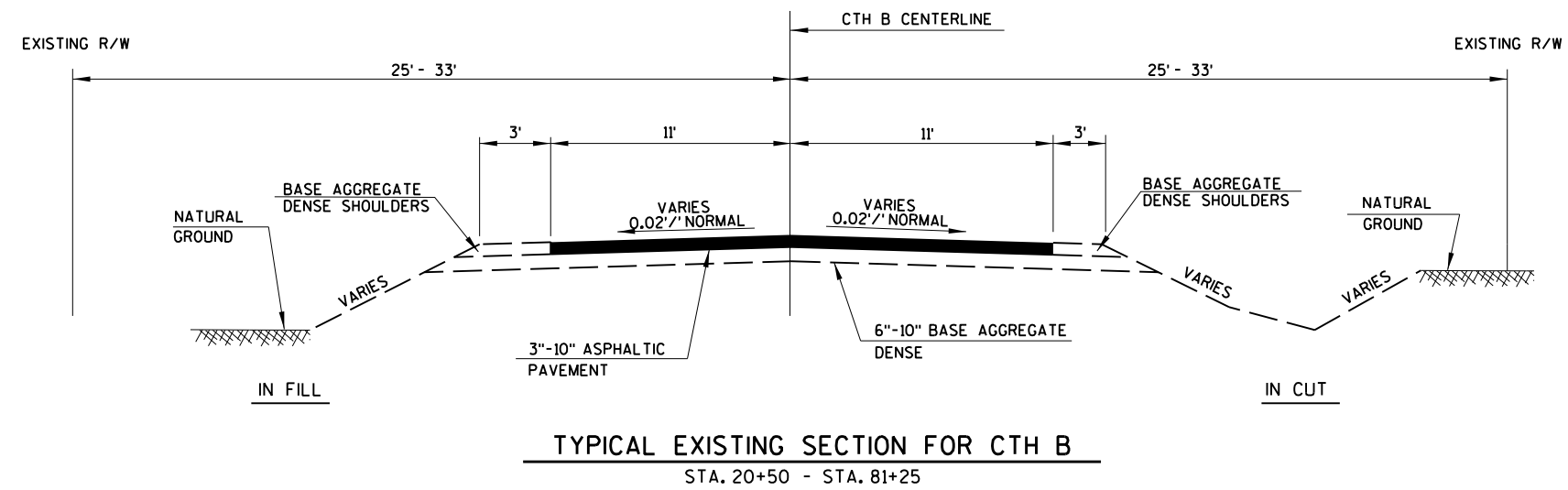
525 SUPERIOR STREET
ANTIGO, WISCONSIN 54409
ATTENTION: MR. WARREN INMAN
E-MAIL: WARREN.E.INMAN@FTR.COM

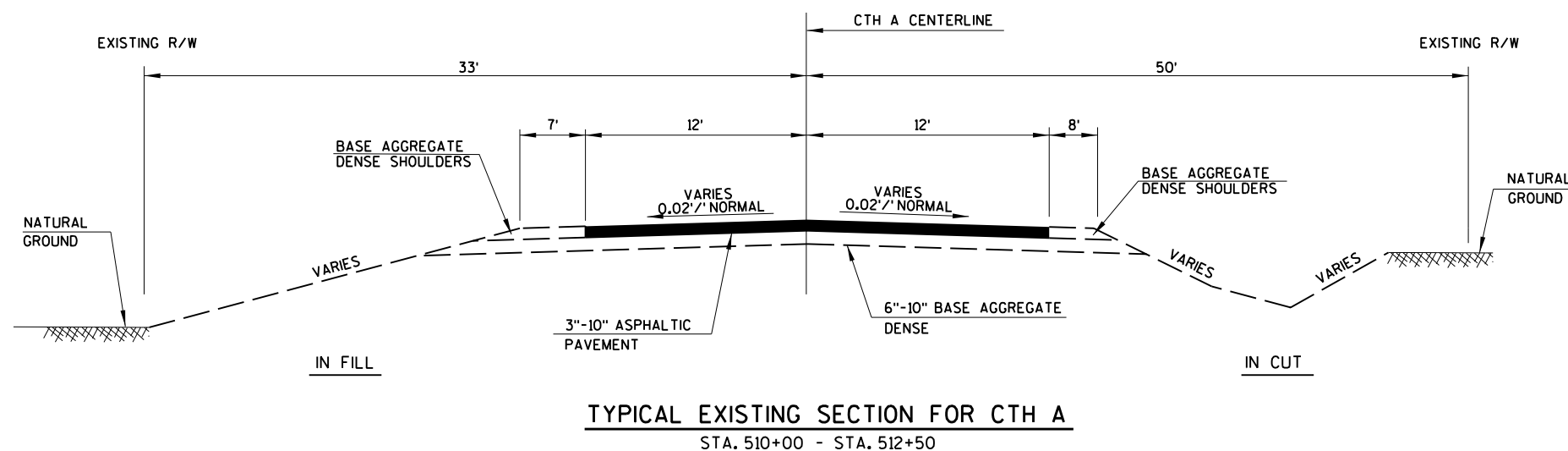
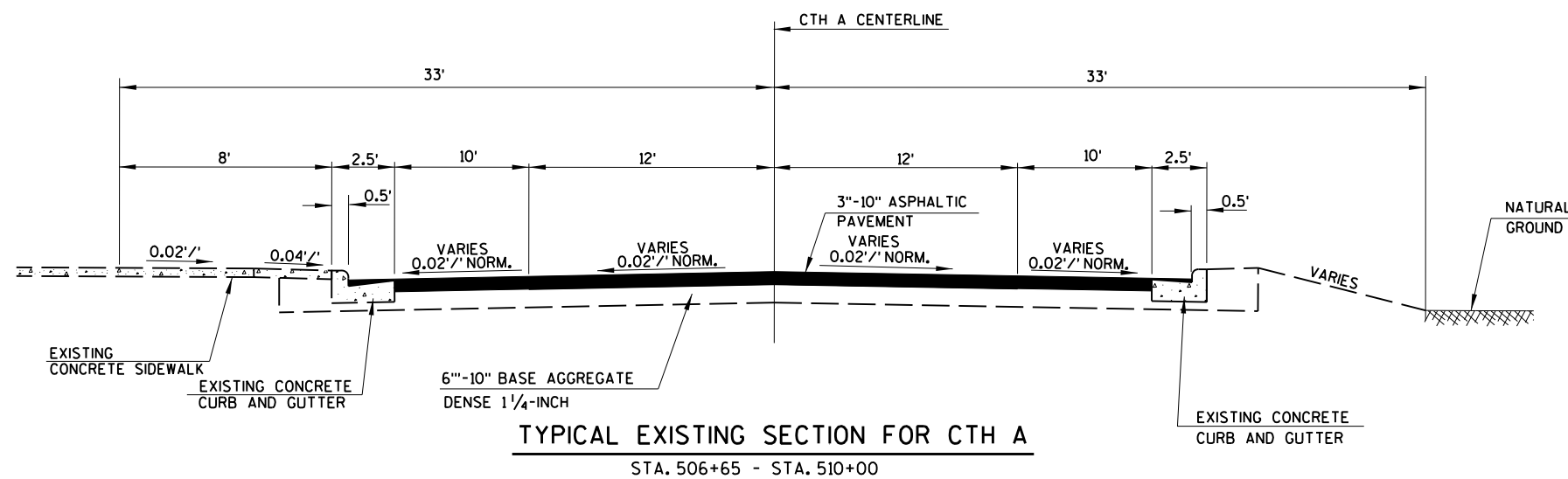
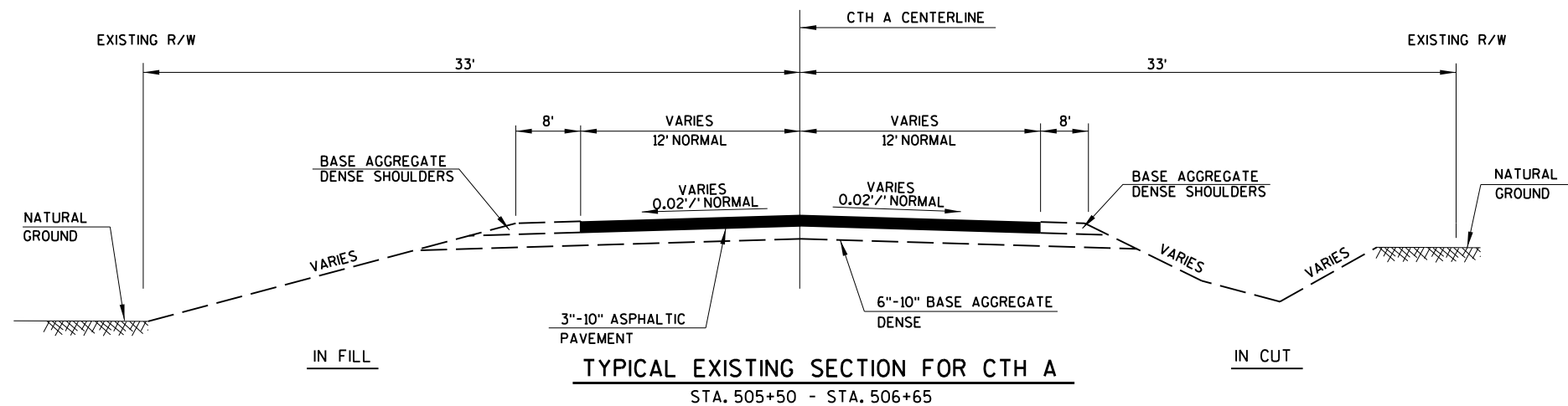
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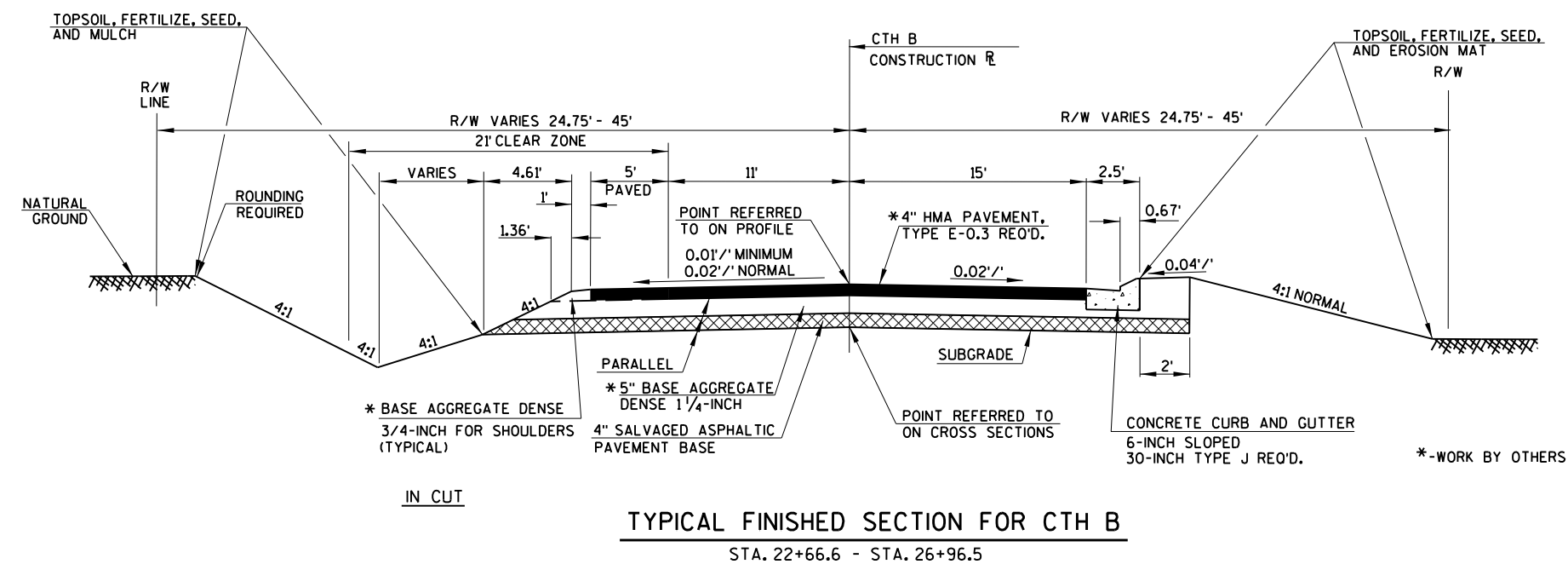
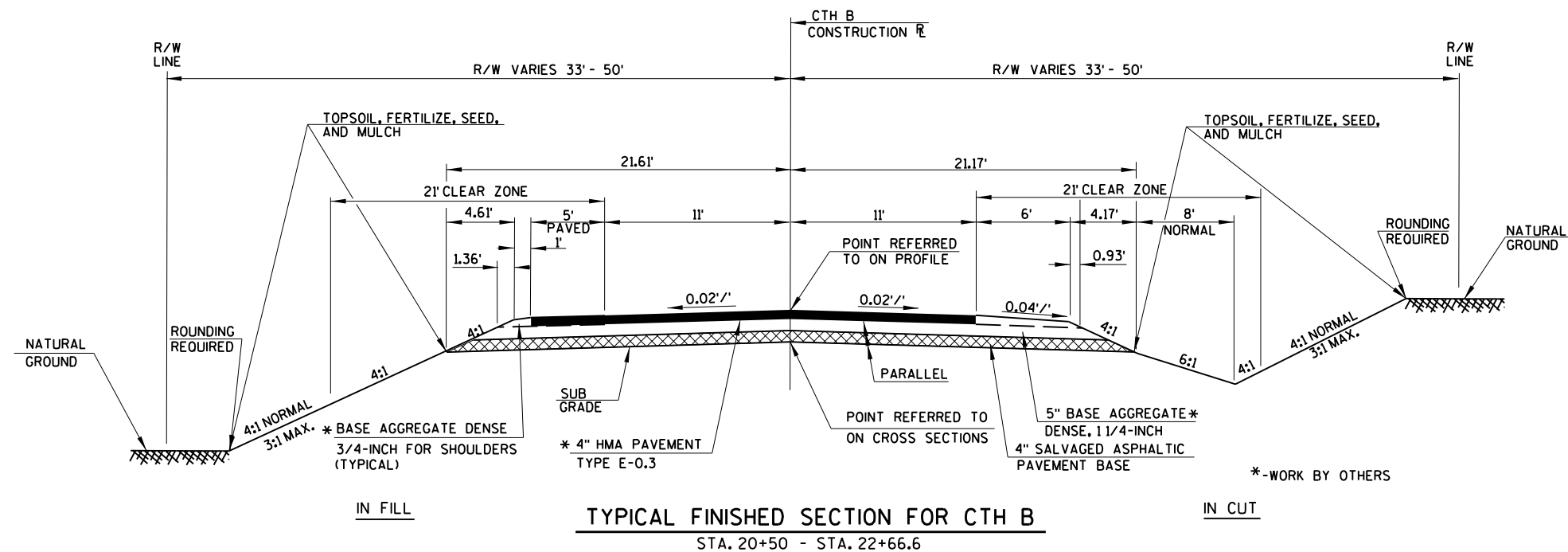
DIGGERSHOTLINE

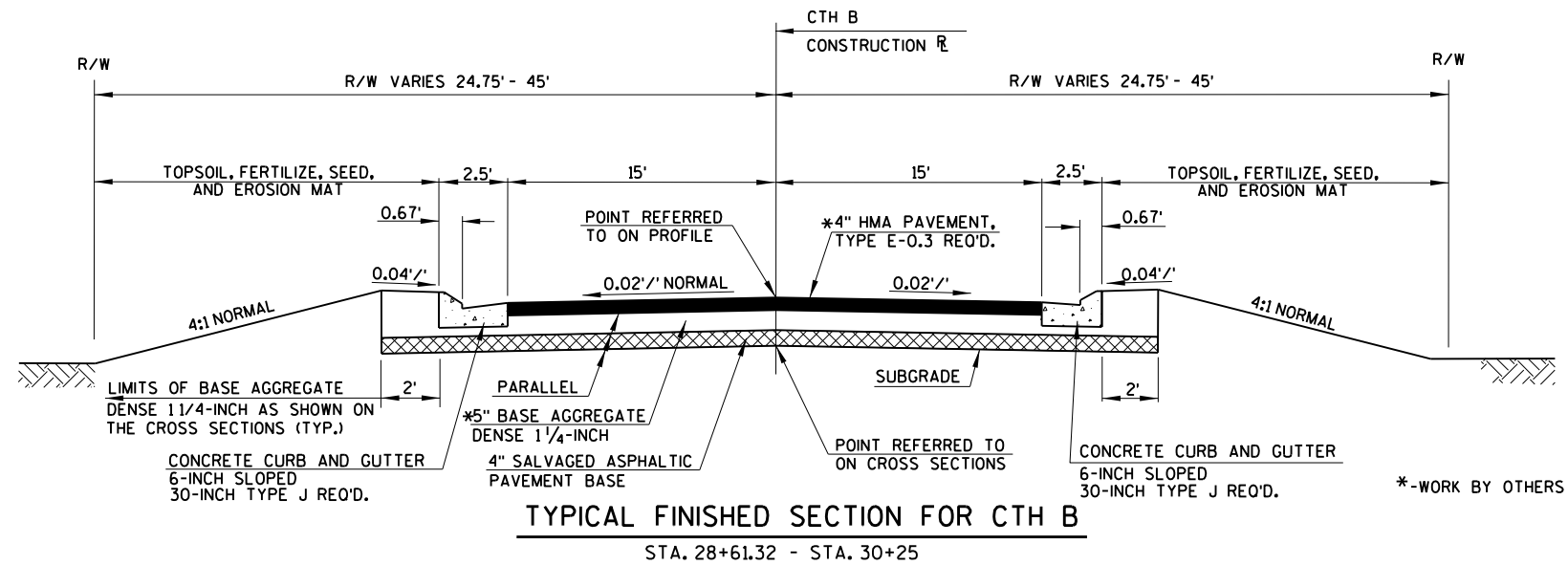
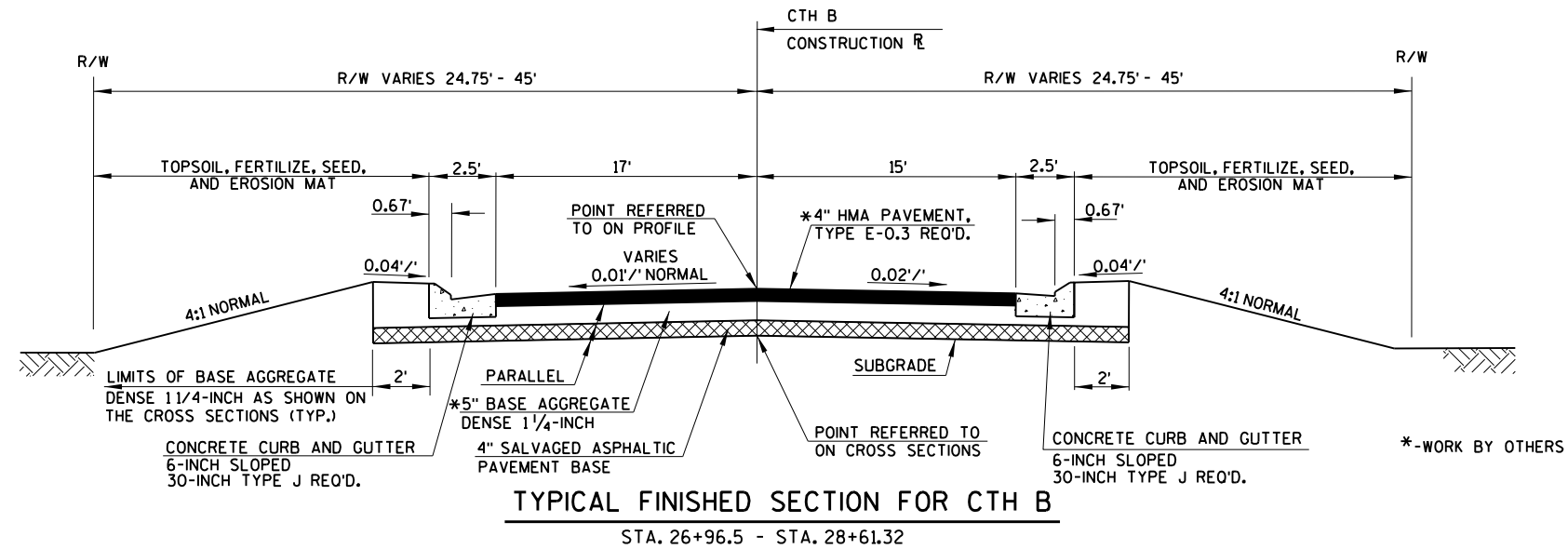
Dial 811 or (800) 242-8511

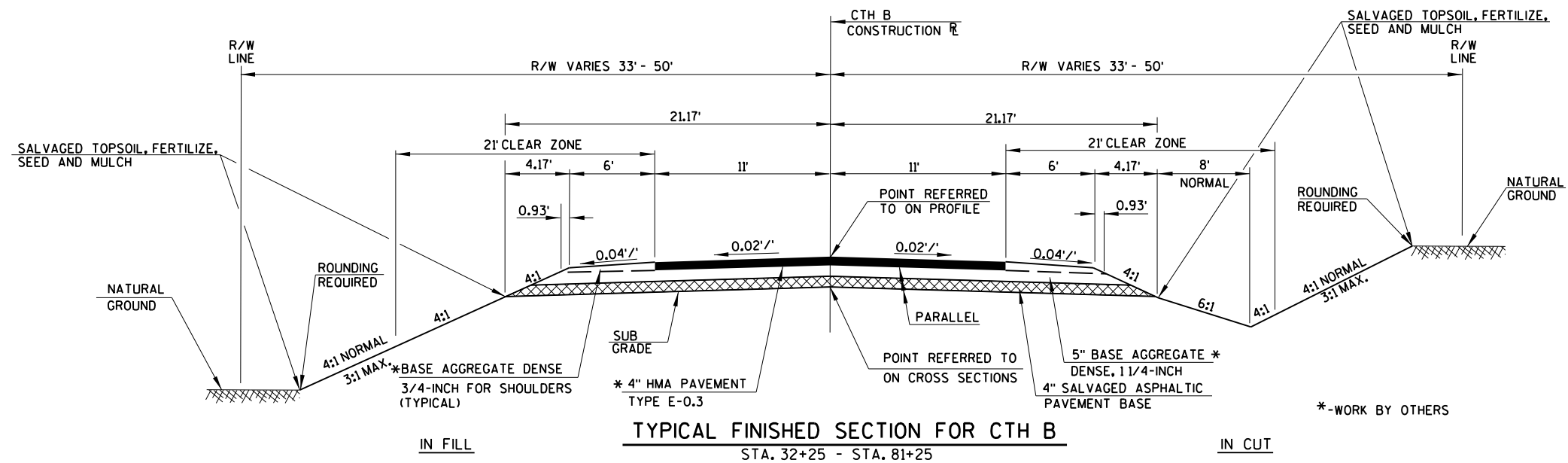
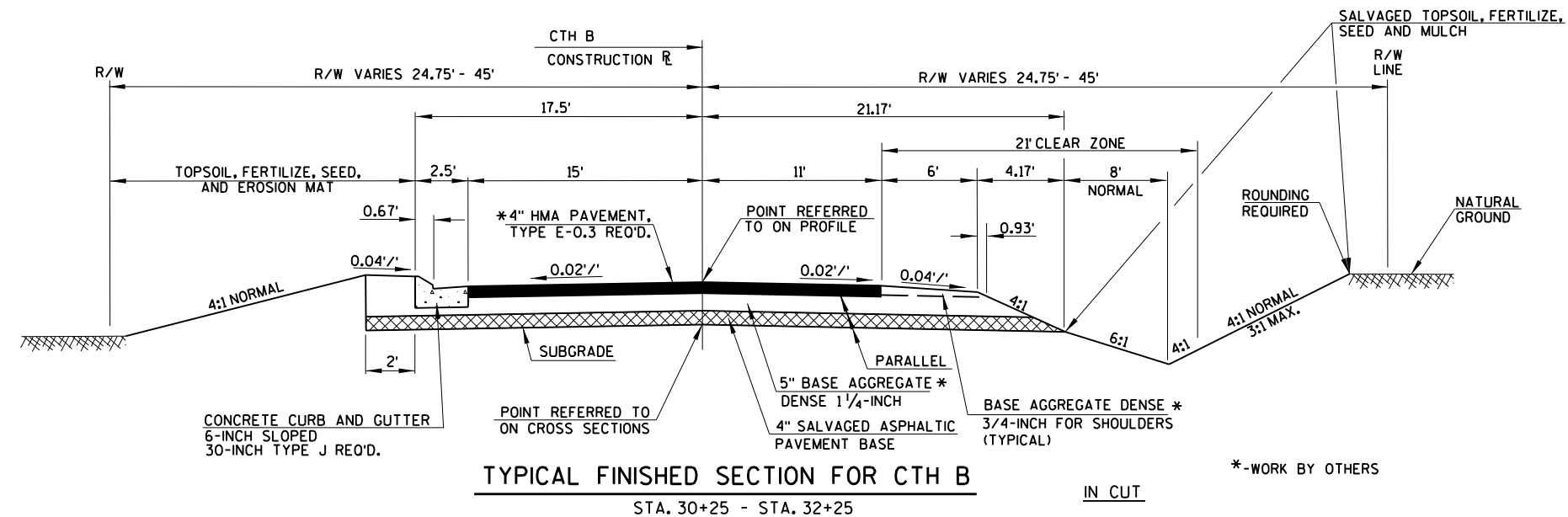
www.DiggersHotline.com

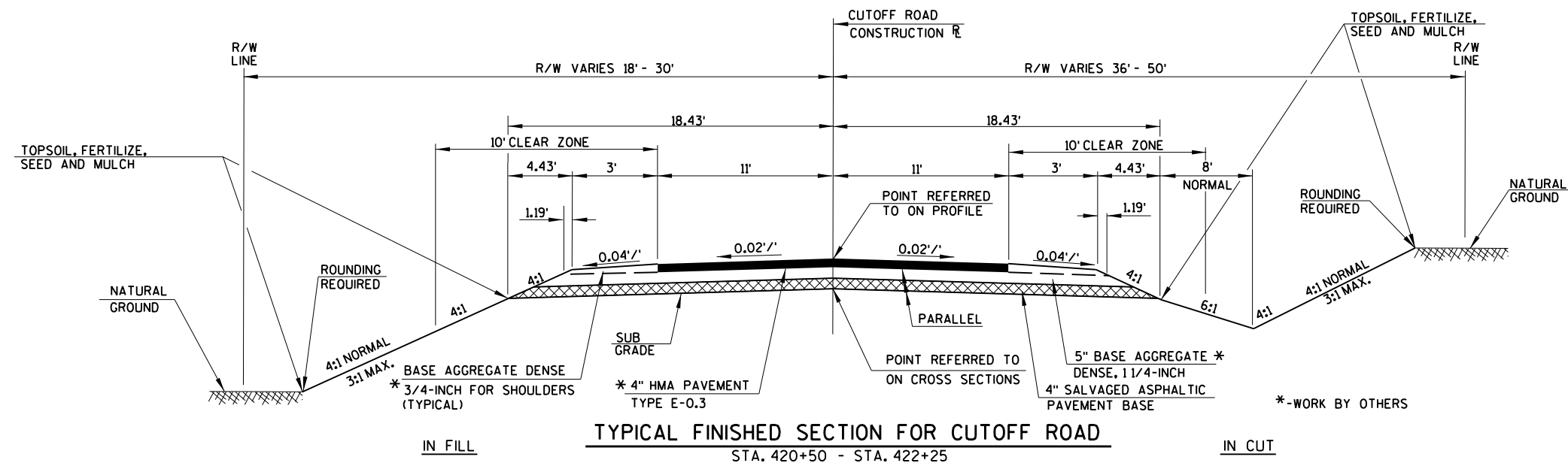
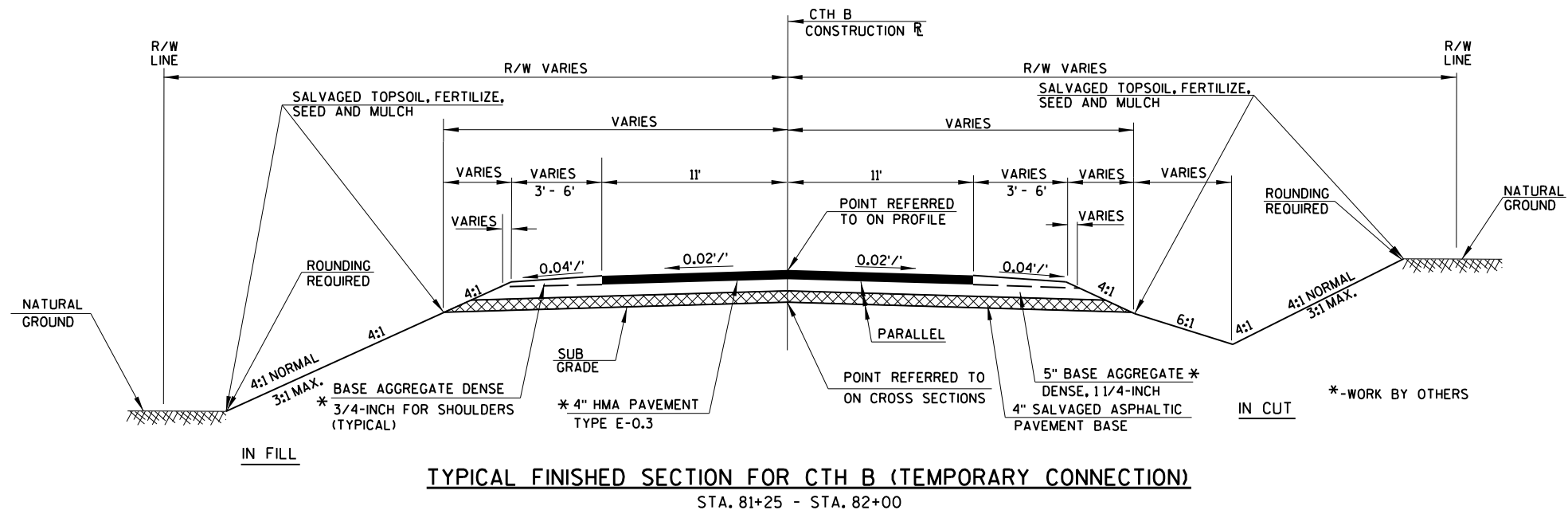


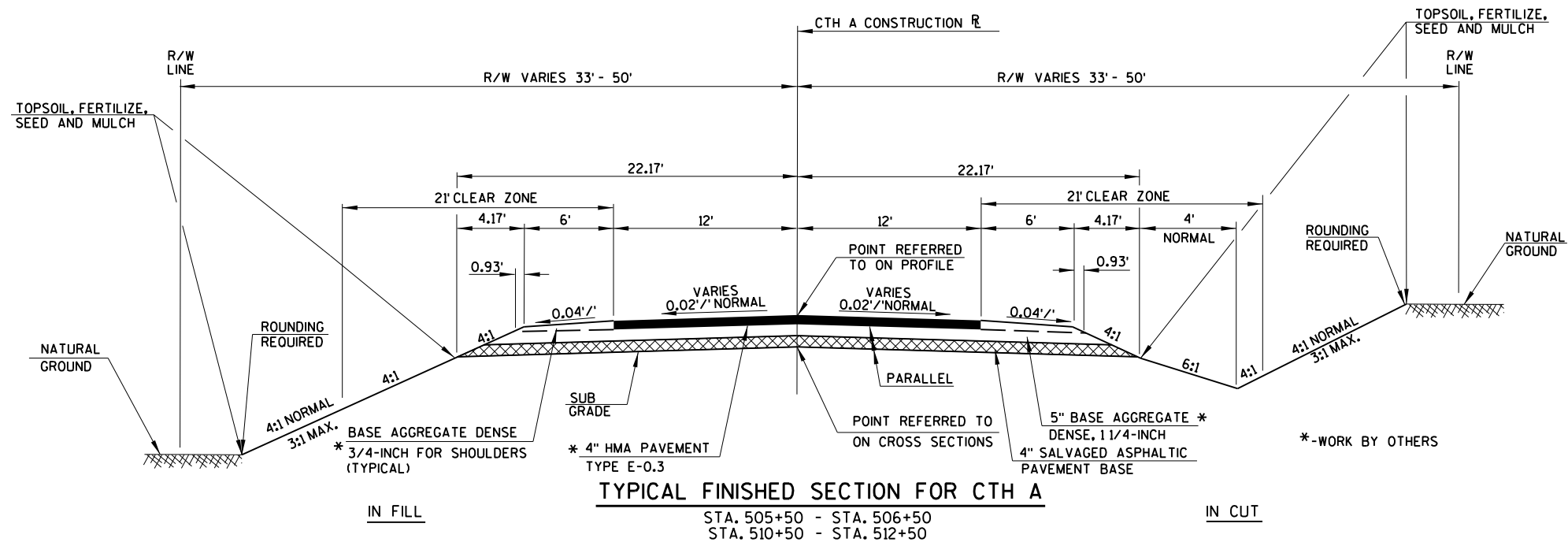
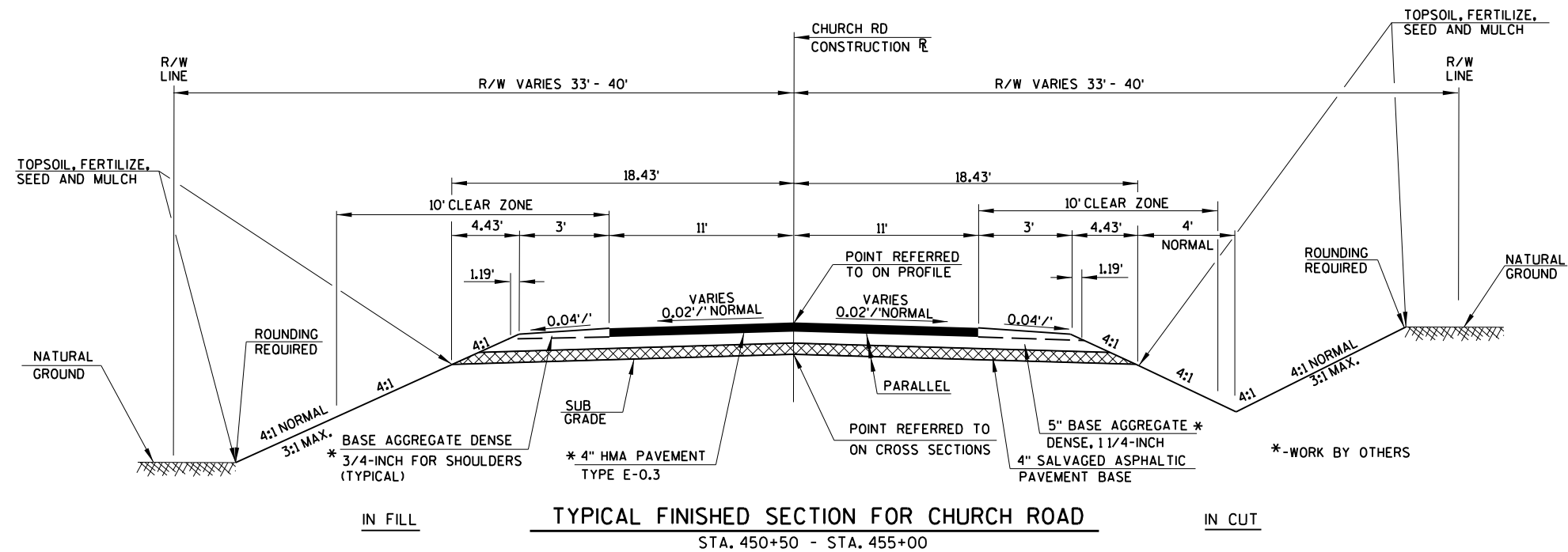


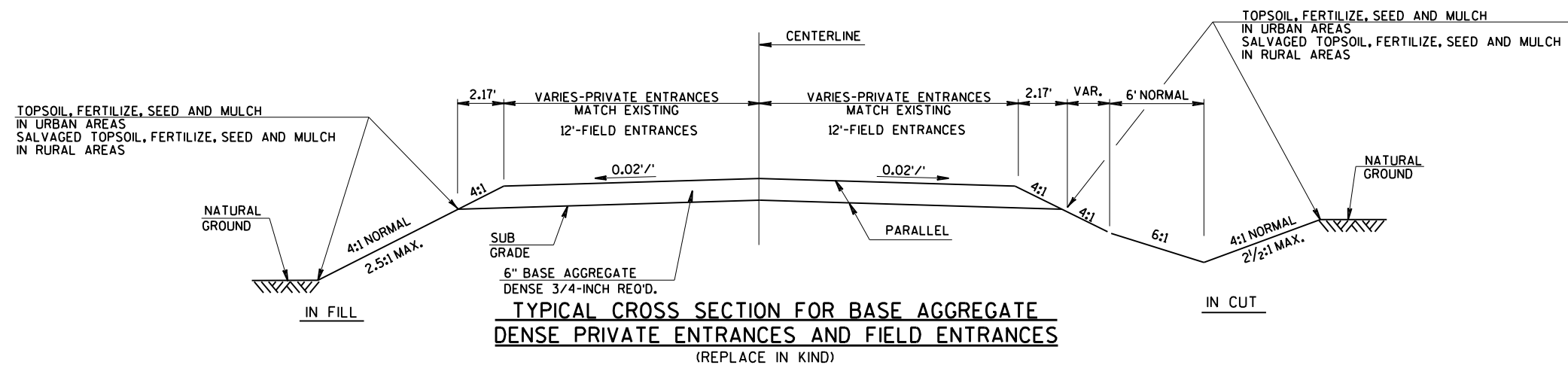


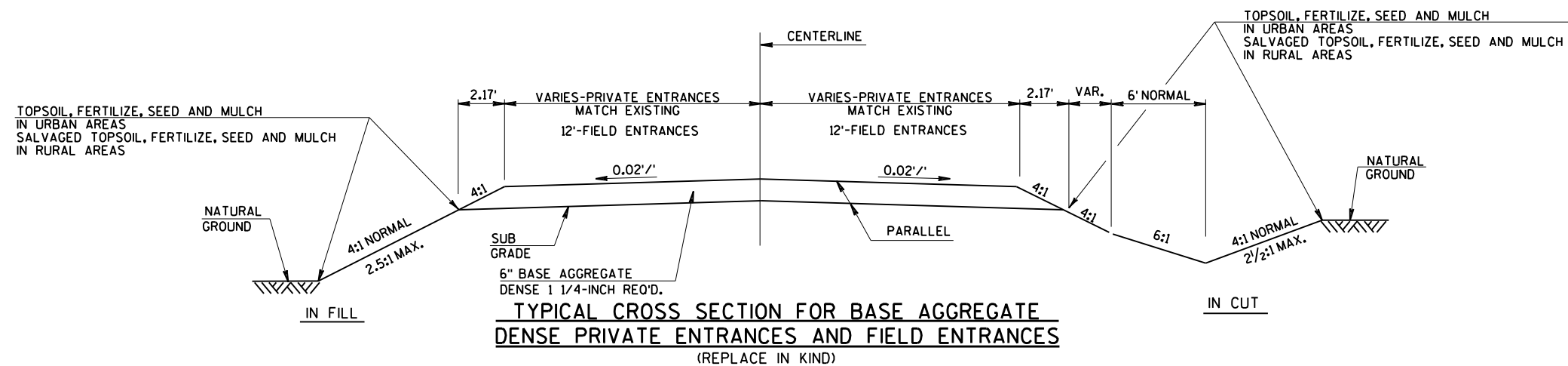
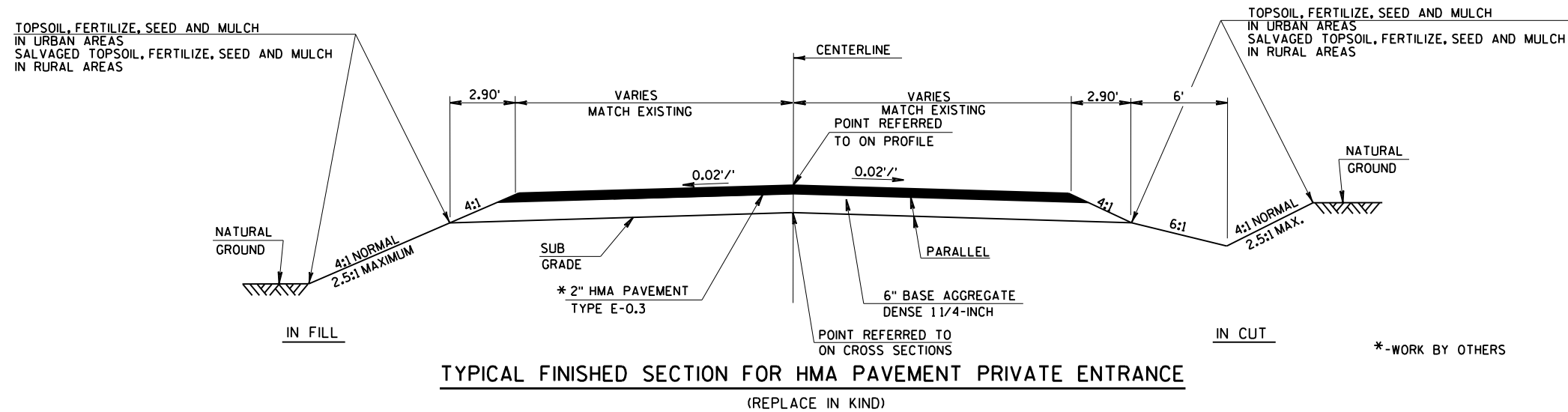
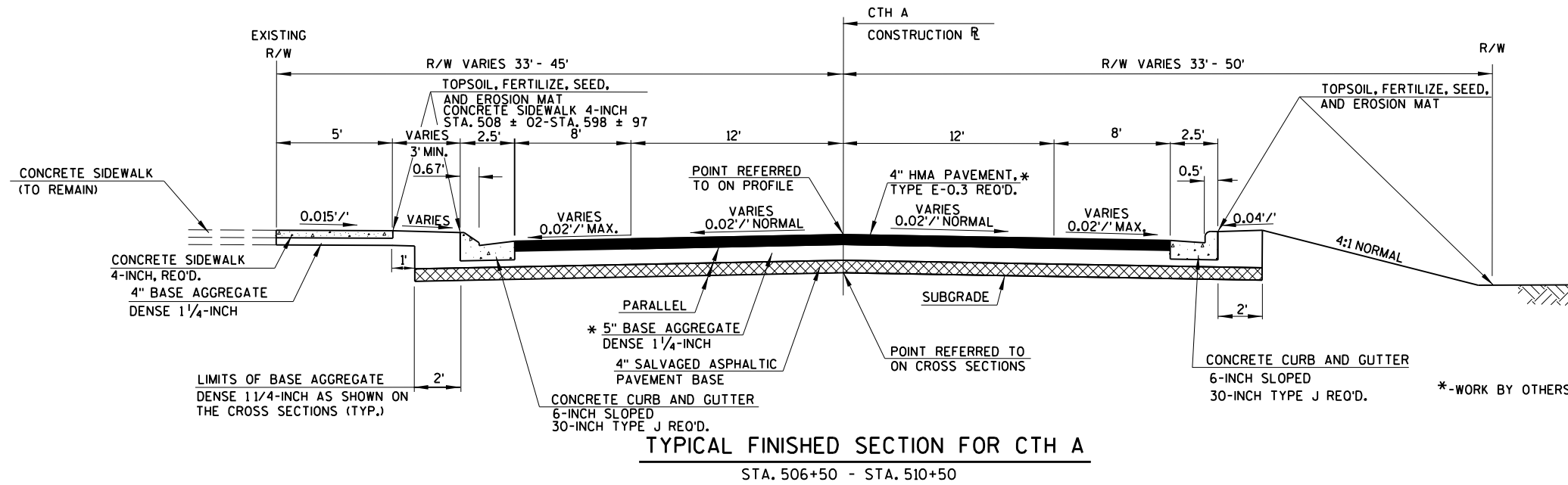


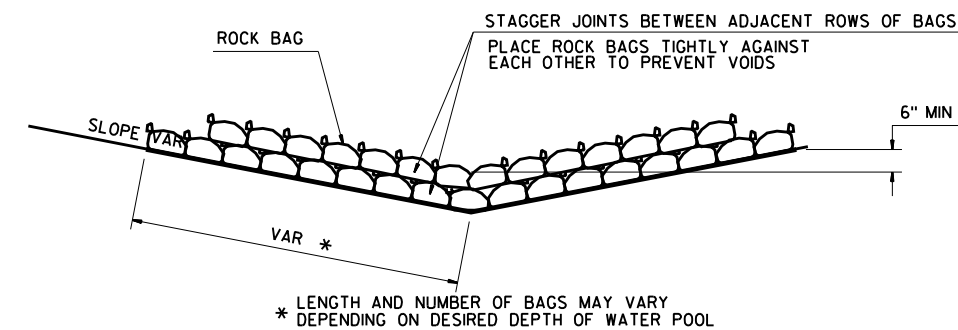
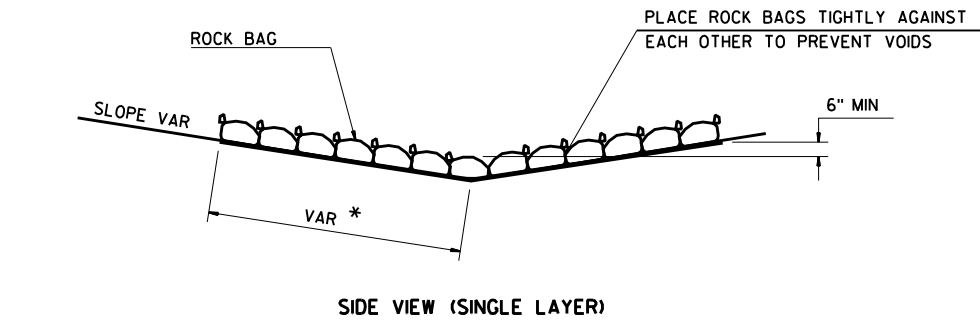
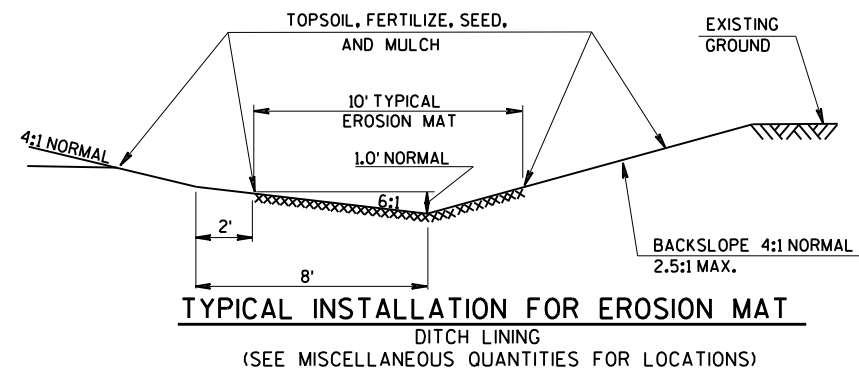
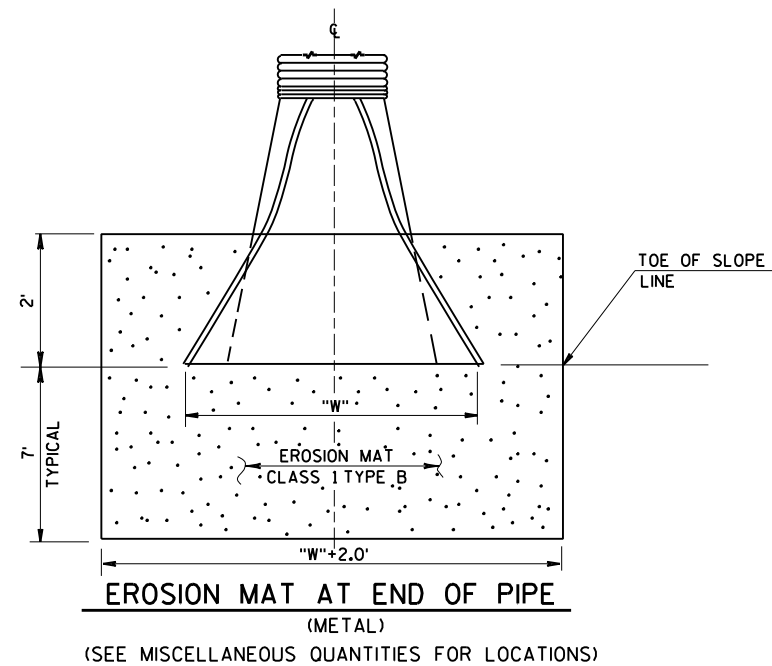






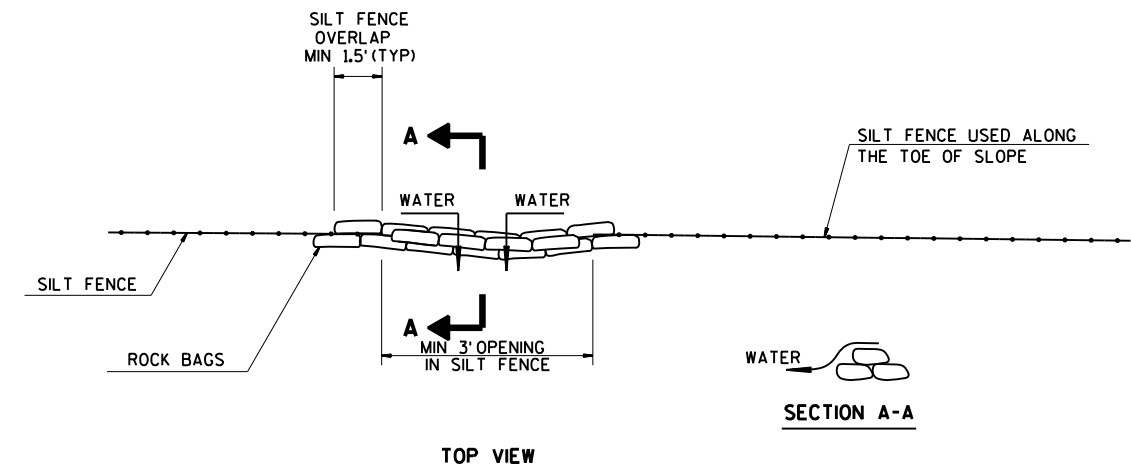






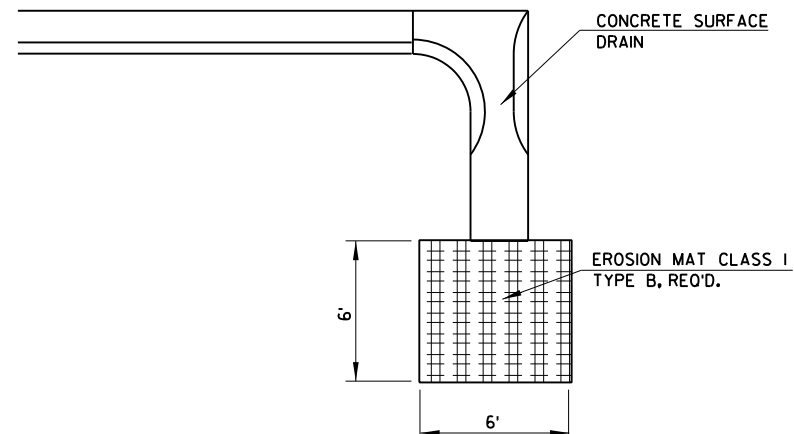
ROCK BAGS DITCH CHECK

PAID AS ROCK BAGS
(SEE MISCELLANEOUS QUANTITIES FOR LOCATIONS)

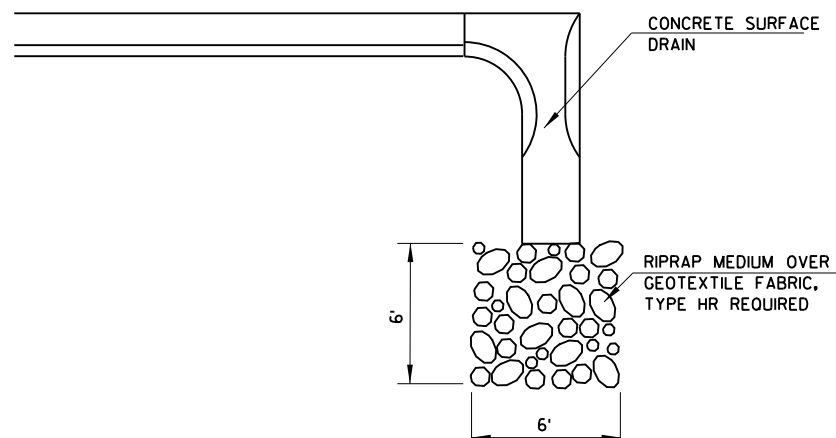


ROCK BAGS USED FOR SILT FENCE RELIEF DETAIL

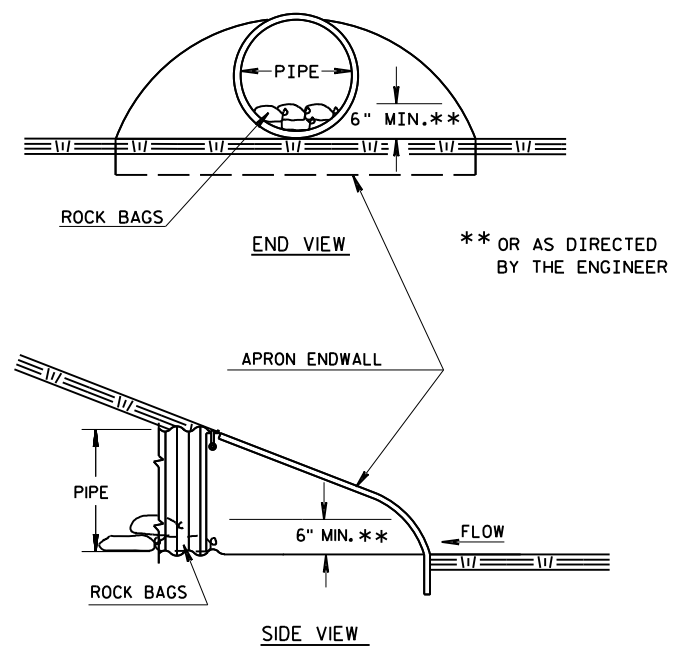
PAID AS ROCK BAGS
(SEE MISCELLANEOUS QUANTITIES FOR LOCATIONS)



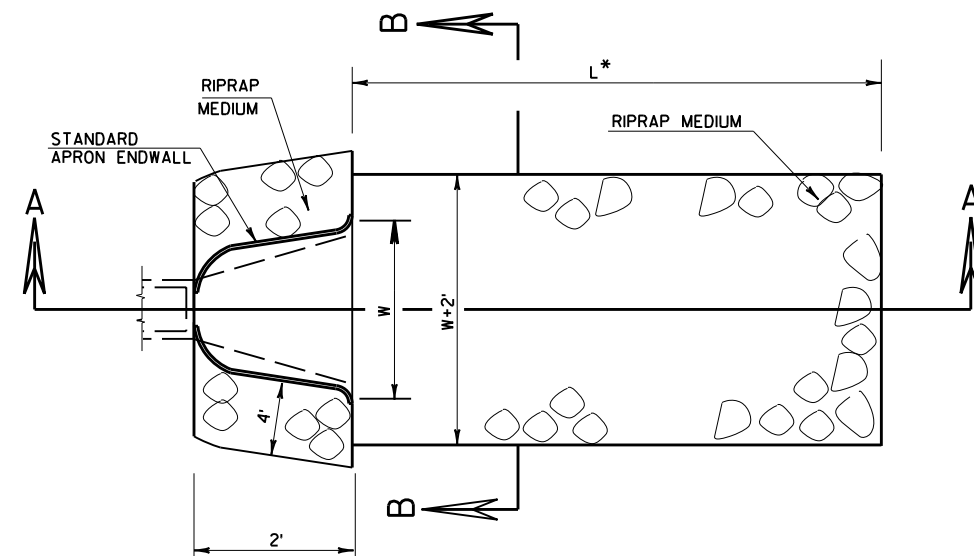
EROSION MAT AT CONCRETE SURFACE DRAINS
(SEE MISCELLANEOUS QUANTITIES FOR LOCATION)



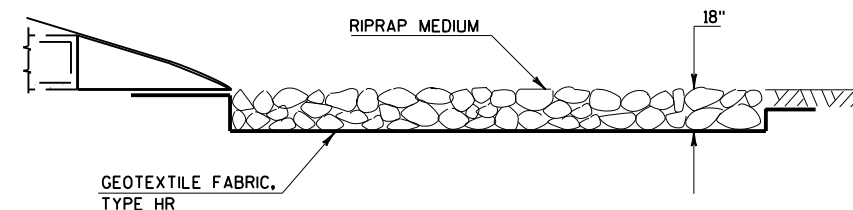
RIPRAP MEDIUM AT CONCRETE SURFACE DRAINS
(SEE MISCELLANEOUS QUANTITIES FOR LOCATION)



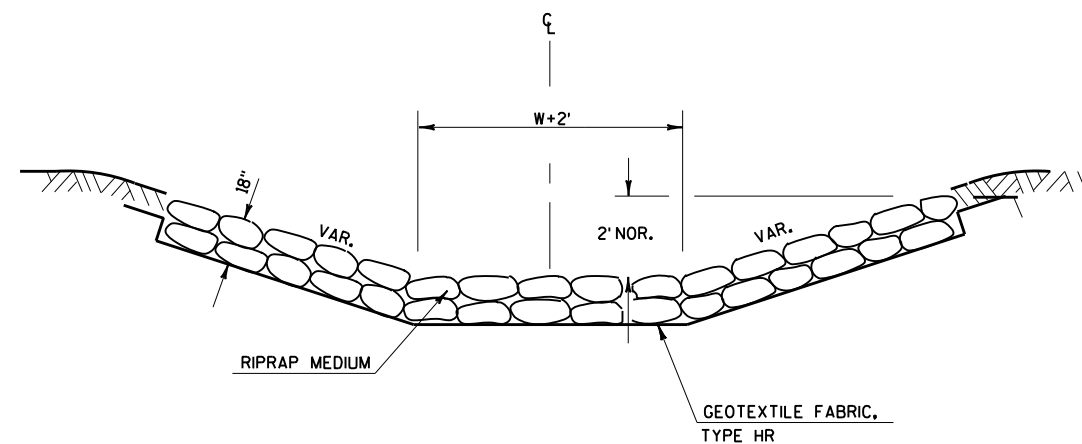
CULVERT PIPE DITCH CHECK



* L = 3 TIMES DIAMETER (NORMAL) OR
10' MIN. OR AS DIRECTED BY THE
ENGINEER

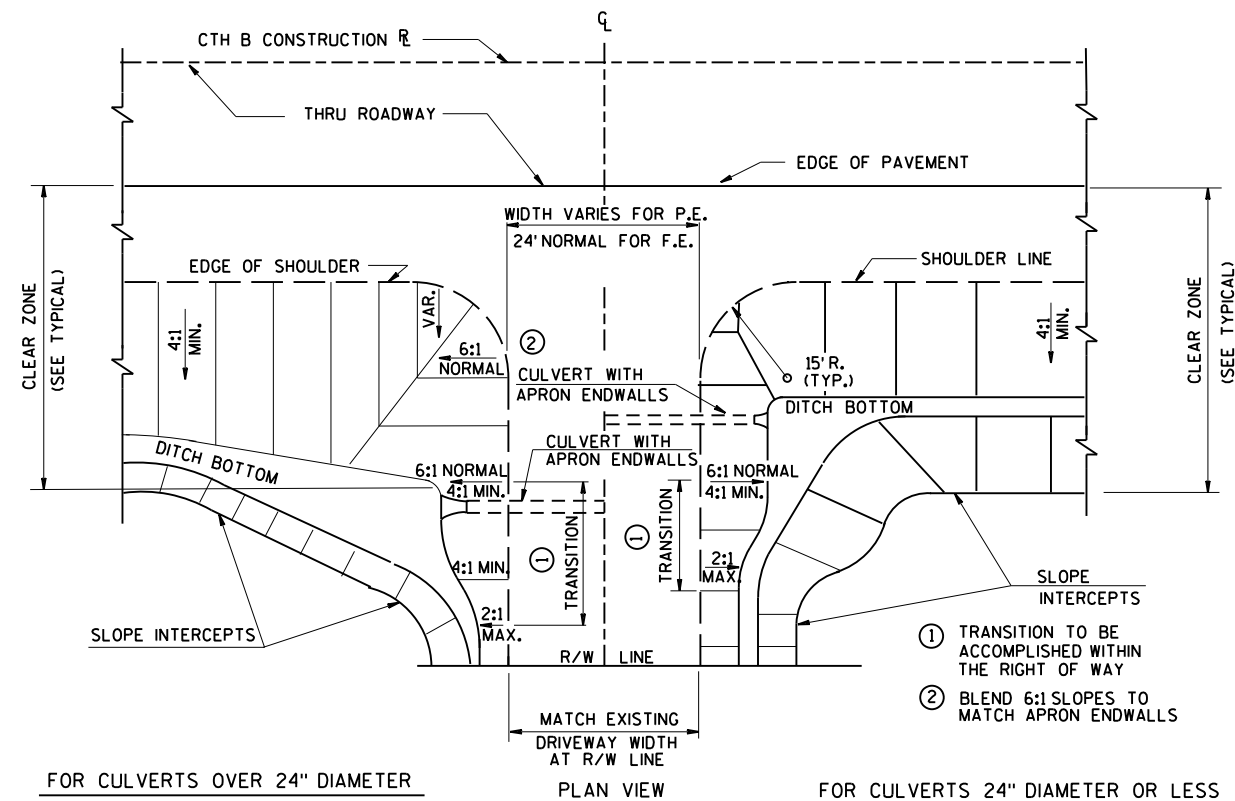


SECTION A-A

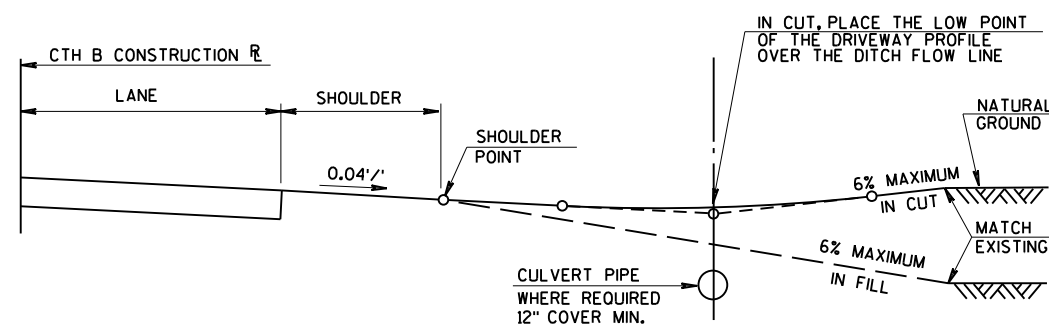


SECTION B-B

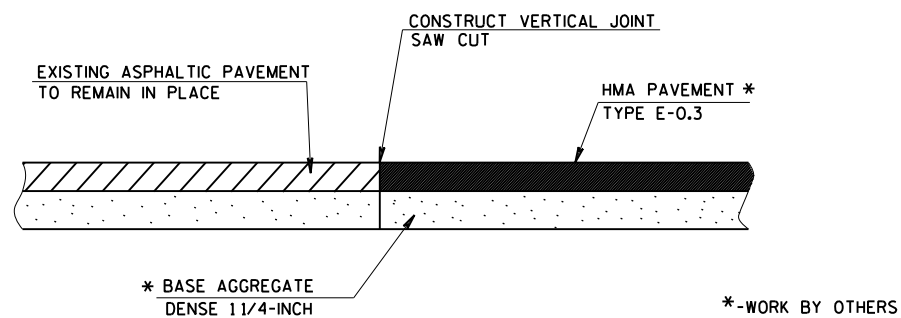
**RIPRAP MEDIUM AND GEOTEXTILE FABRIC
DETAIL AT APRON ENDWALLS**
(SEE MISCELLANEOUS QUANTITIES FOR LOCATIONS)



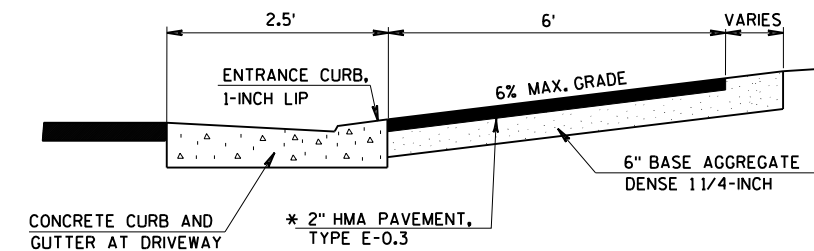
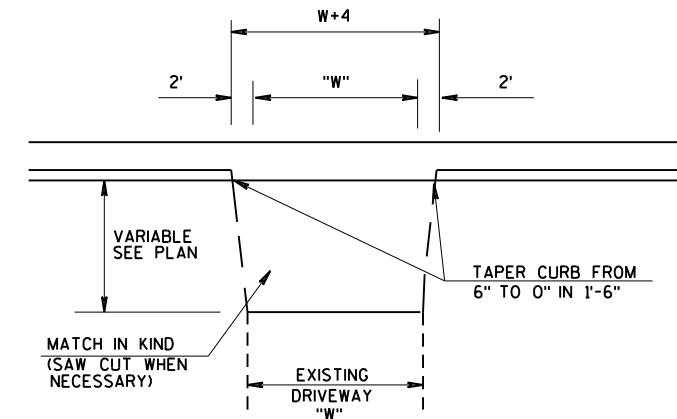
PRIVATE ENTRANCE GRADING DETAIL



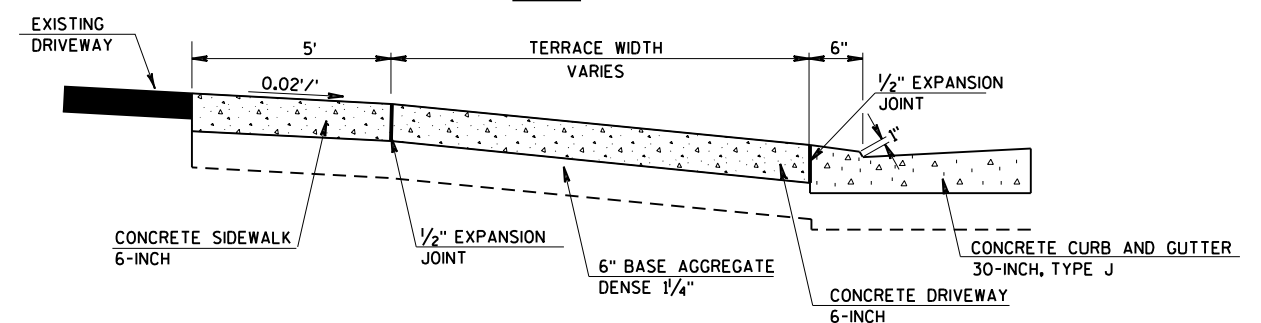
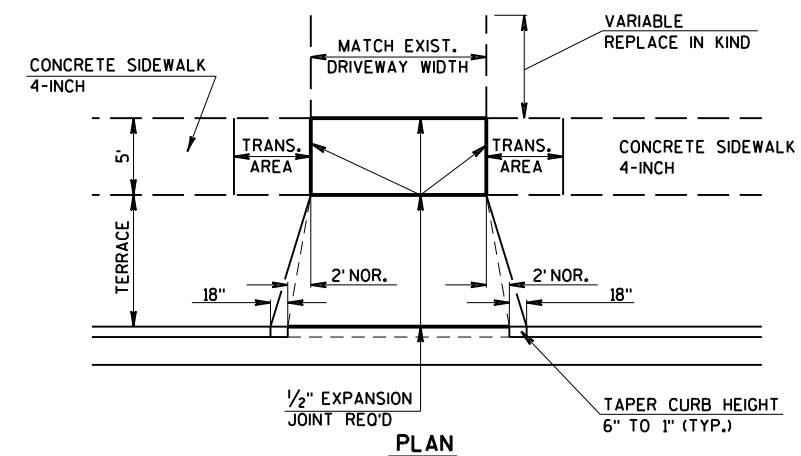
TYPICAL DRIVEWAY PROFILES



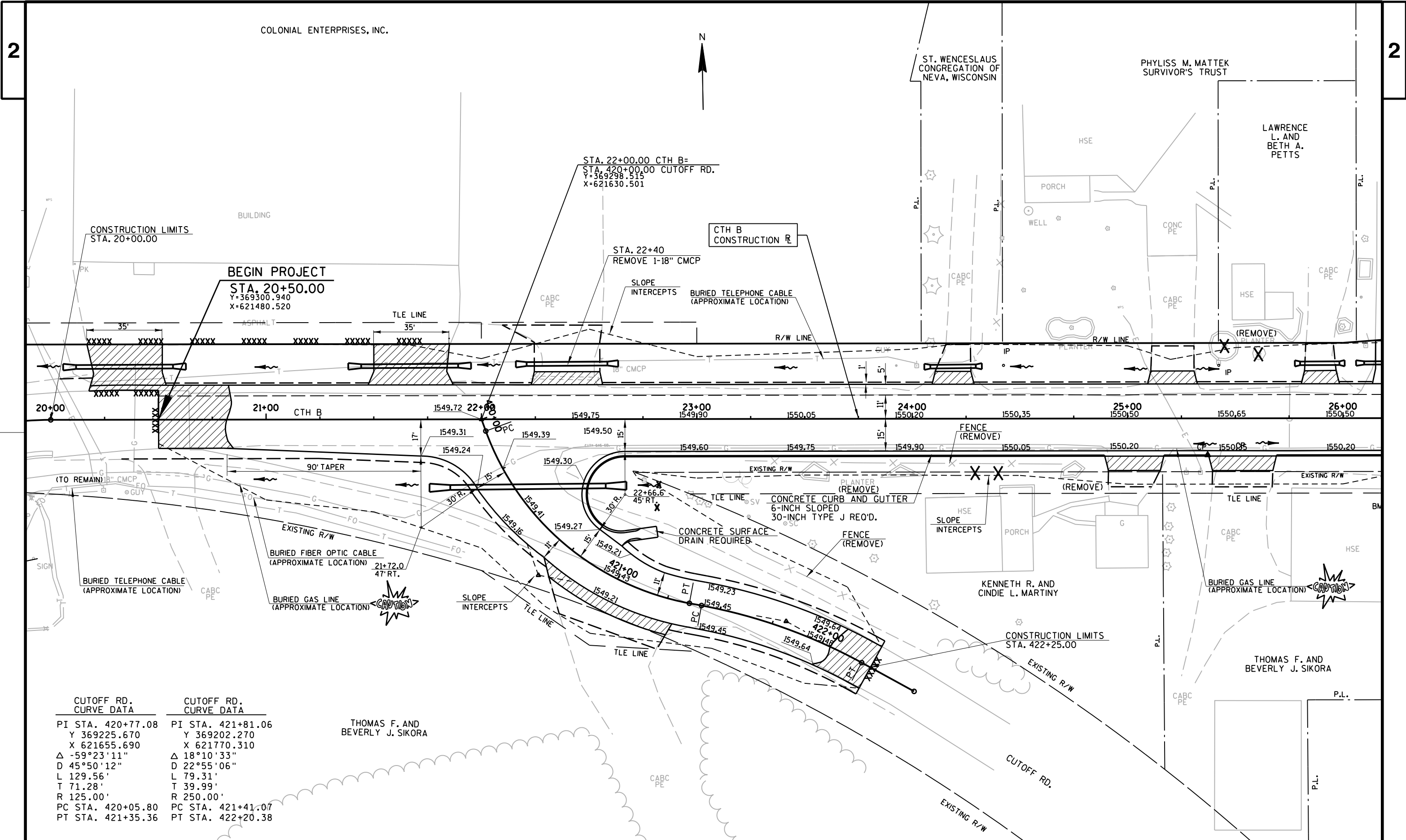
SAW CUT DETAIL

TYPICAL LONGITUDINAL SECTION AT
BASE AGGREGATE DENSE PRIVATE ENTRANCE

CURB CUT DETAIL FOR P.E.'s AND F.E.'s



TYPICAL LONGITUDINAL SECTION AT CONCRETE DRIVEWAY WITH SIDEWALK



CUTOFF RD. CURVE DATA	CUTOFF RD. CURVE DATA
PI STA. 420+77.08	PI STA. 421+81.06
Y 369225.670	Y 369202.270
X 621655.690	X 621770.310
Δ -59°23'11"	Δ 18°10'33"
D 45°50'12"	D 22°55'06"
L 129.56'	L 79.31'
T 71.28'	T 39.99'
R 125.00'	R 250.00'
PC STA. 420+05.80	PC STA. 421+41.07
PT STA. 421+35.36	PT STA. 422+20.38

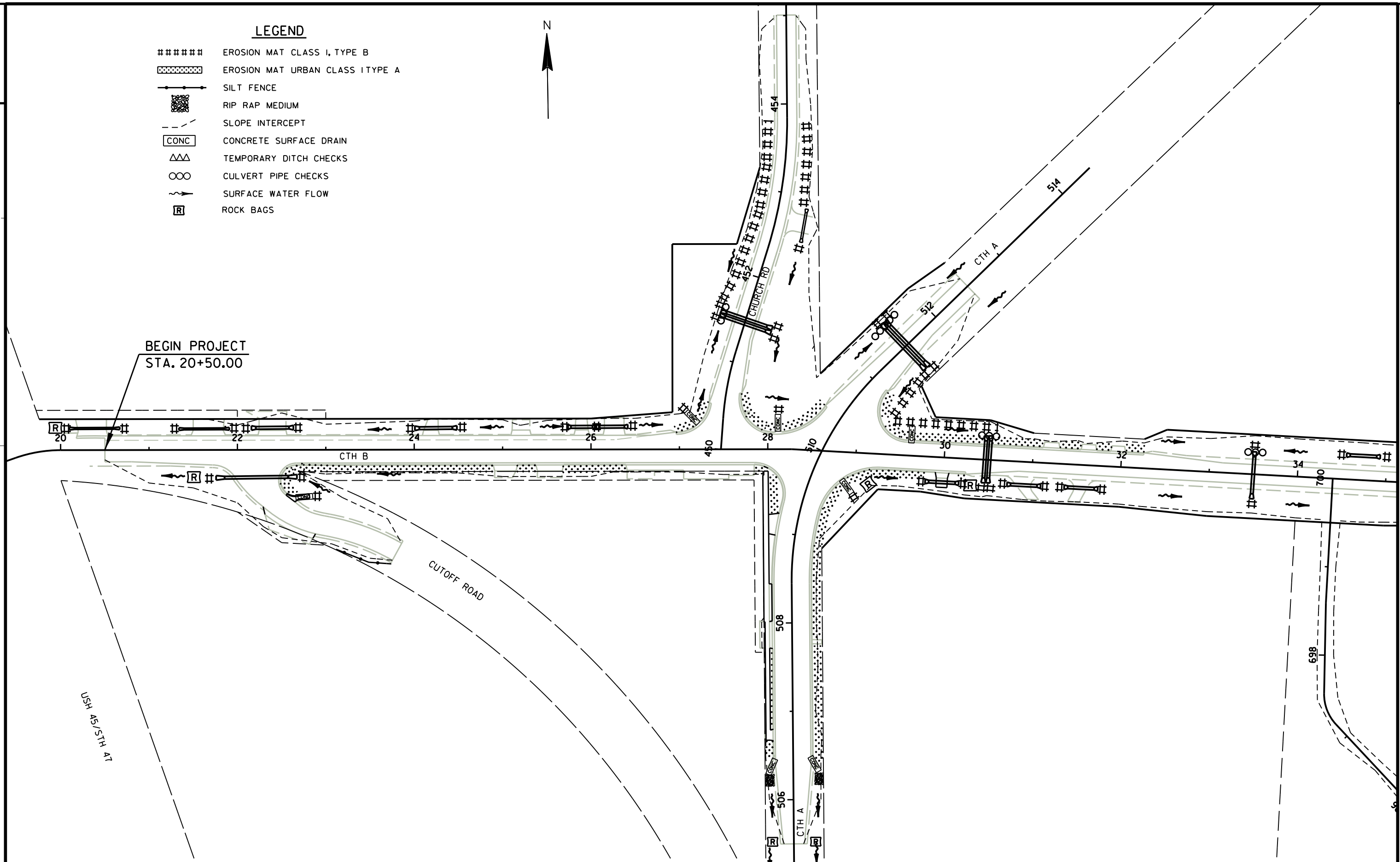
THOMAS F. AND
BEVERLY J. SIKORA

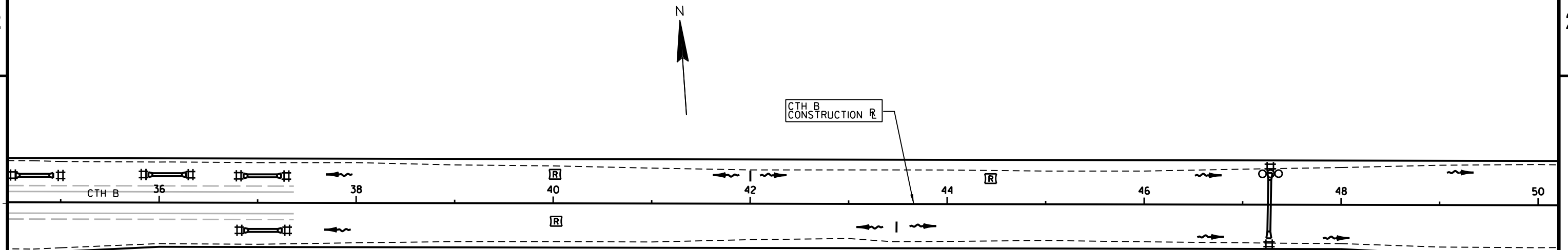


- LEGEND**
- ##### EROSION MAT CLASS I, TYPE B
 - ▤ EROSION MAT URBAN CLASS I TYPE A
 - SILT FENCE
 - ▣ RIP RAP MEDIUM
 - - - SLOPE INTERCEPT
 - CONC CONCRETE SURFACE DRAIN
 - △△ TEMPORARY DITCH CHECKS
 - CULVERT PIPE CHECKS
 - ~> SURFACE WATER FLOW
 - R ROCK BAGS

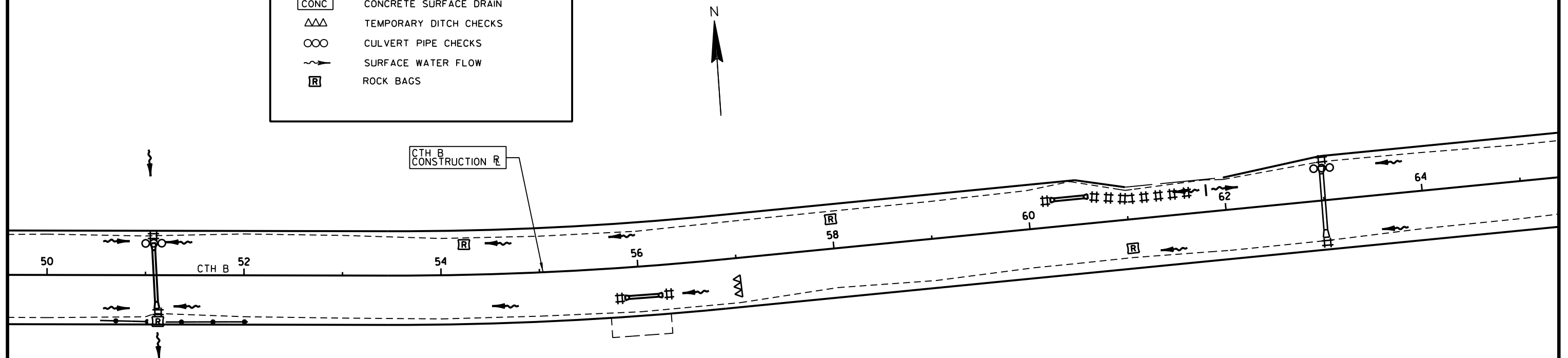


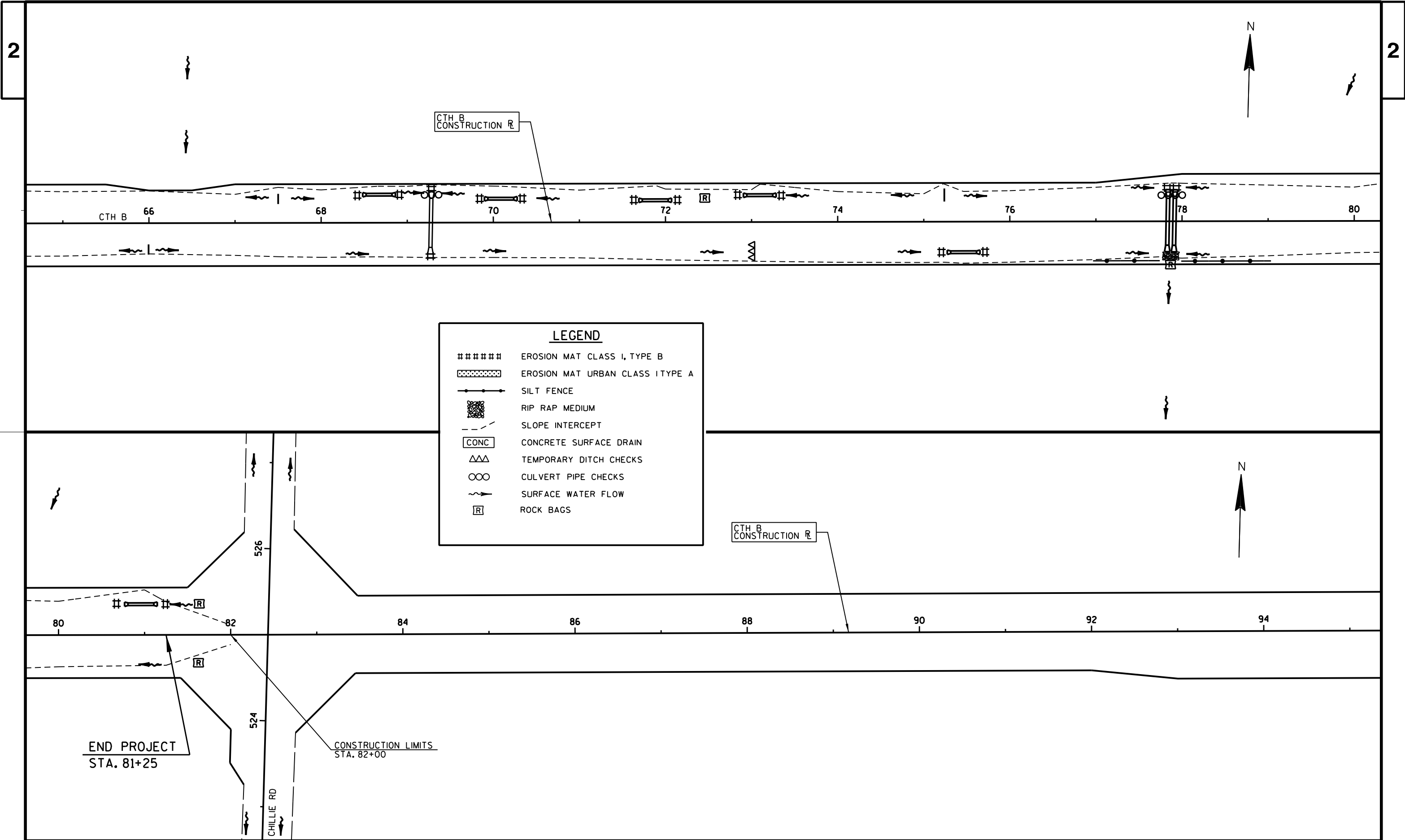
BEGIN PROJECT
STA. 20+50.00



**LEGEND**

#####	EROSION MAT CLASS I, TYPE B
▨▨▨▨▨	EROSION MAT URBAN CLASS I TYPE A
—●—●—	SILT FENCE
▨▨▨	RIP RAP MEDIUM
- - -	SLOPE INTERCEPT
CONC	CONCRETE SURFACE DRAIN
△△△	TEMPORARY DITCH CHECKS
○○○	CULVERT PIPE CHECKS
~>	SURFACE WATER FLOW
R	ROCK BAGS



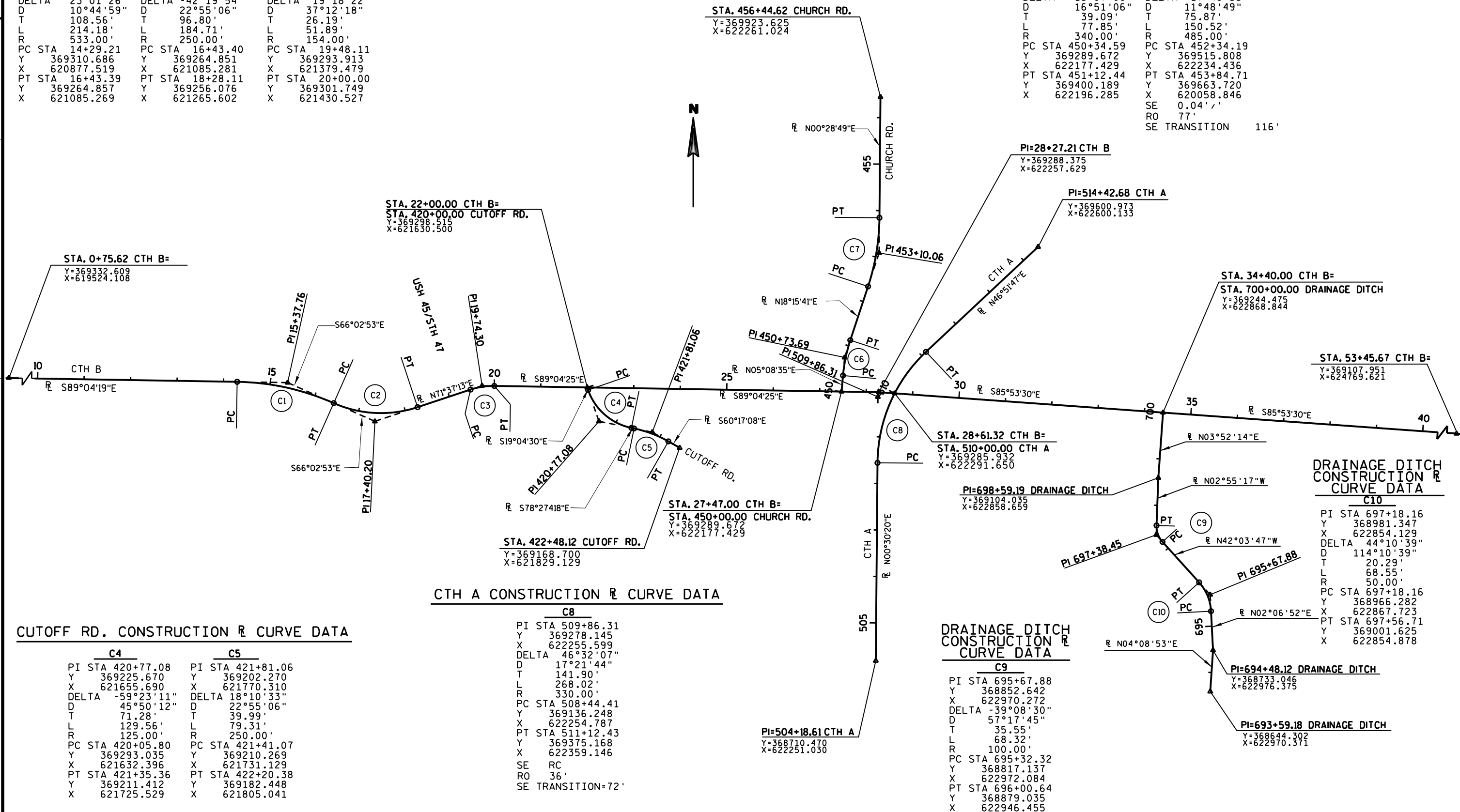


CTH B CONSTRUCTION & CURVE DATA

C1			C2			C3		
PI	STA	15+37.76	PI	STA	17+40.20	PI	STA	19+74.30
Y		369308.927	Y		369225.555	Y		369302.172
X		620986.061	X		621173.742	X		621404.336
DELTA		23°01'26"	DELTA		-42°19'54"	DELTA		19°18'22"
D		10°44'59"	D		22°55'06"	D		37°12'18"
T		108.56'	T		96.80'	T		26.19'
L		214.18'	L		184.71'	L		51.89'
R		533.00'	R		250.00'	R		154.00'
PC	STA	14+29.21	PC	STA	16+43.40	PC	STA	19+48.11
Y		369310.686	Y		369264.851	Y		369293.913
X		620877.519	X		621085.281	X		621379.479
PT	STA	16+43.39	PT	STA	18+28.11	PT	STA	20+00.00
Y		369264.857	Y		369256.076	Y		369301.749
X		621085.269	X		621265.602	X		621430.527

CHURCH RD. CONSTRUCTION & CURVE DATA

C6			C7		
PI	STA	450+73.69	PI	STA	453+10.06
Y		369363.064	Y		369587.855
X		622184.035	X		622258.210
DELTA		13°07'06"	DELTA		-17°46'53"
D		16°51'06"	D		11°48'49"
T		39.09'	T		75.87'
L		77.85'	L		150.52'
R		340.00'	R		485.00'
PC	STA	450+34.59	PC	STA	452+34.19
Y		369289.672	Y		369515.808
X		622177.429	X		622234.436
PT	STA	451+12.44	PT	STA	453+84.71
Y		369400.189	Y		369663.720
X		622196.285	X		620058.846
			SE	0.04' / ' /	
			RO	77'	
			SE TRANSITION	116'	



3 |

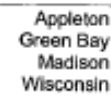
PROJECT NUMBER: 9360-02-70

COUNTY: LANGLADE

SHEET

BORING LOCATION APPROXIMATELY STATION 29+50

3



TEST BORING LOG

Boring No: 3-11

LL/PL = Liquid Limit/Plastic Limit
P200 = Percent Passing #200 Sieve
MA* = Mechanical Analysis
Qu = Unconfined Compressive Str
Pg = Hand Penetrometer Reading
DD = Dry Density
W = Moisture Content (by Weight)
RQD = Rock Quality Designation
* = See attached graph

BORING LOCATION APPROXIMATELY STATION 74+75

DATE 05FEB14		E S T I M A T E O F Q U A N T I T I E S			
LINE		9360-02-70			
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	201.0105	CLEARING	STA	6.000	6.000
0020	201.0205	GRUBBING	STA	17.000	17.000
0030	203.0100	REMOVING SMALL PIPE CULVERTS	EACH	26.000	26.000
0040	204.0100	REMOVING PAVEMENT	SY	95.000	95.000
0050	204.0150	REMOVING CURB & GUTTER	LF	615.000	615.000
0060	204.0155	REMOVING CONCRETE SIDEWALK	SY	120.000	120.000
0070	204.0170	REMOVING FENCE	LF	175.000	175.000
0080	204.9060.S	REMOVING (ITEM DESCRIPTION) 01. PLANTER	EACH	1.000	1.000
0090	205.0100	EXCAVATION COMMON	CY	12,600.000	12,600.000
0100	208.0100	BORROW	CY	2,160.000	2,160.000
0110	213.0100	FINISHING ROADWAY (PROJECT) 01. 9360-02-70	EACH	1.000	1.000
0120	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	1,000.000	1,000.000
0130	306.0110	SALVAGED ASPHALTIC PAVEMENT BASE	TON	8,000.000	8,000.000
0140	416.0160	CONCRETE DRIVEWAY 6-INCH	SY	46.000	46.000
0150	416.1010	CONCRETE SURFACE DRAINS	CY	7.000	7.000
0160	490.0200	SALVAGED ASPHALTIC PAVEMENT MILLING	SY	22,100.000	22,100.000
0170	521.1018	APRON ENDWALLS FOR CULVERT PIPE STEEL 18-INCH	EACH	24.000	24.000
0180	521.1024	APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH	EACH	2.000	2.000
0190	521.1030	APRON ENDWALLS FOR CULVERT PIPE STEEL 30-INCH	EACH	6.000	6.000
0200	521.1221	APRON ENDWALLS FOR PIPE ARCH STEEL 21X15-INCH	EACH	36.000	36.000
0210	521.1228	APRON ENDWALLS FOR PIPE ARCH STEEL 28X20-INCH	EACH	6.000	6.000
0220	528.0321	PIPE ARCH POLYMER COATED CORRUGATED STEEL 21X15-INCH	LF	780.000	780.000
0230	528.0328	PIPE ARCH POLYMER COATED CORRUGATED STEEL 28X20-INCH	LF	156.000	156.000
0240	530.0118	CULVERT PIPE CORRUGATED POLYETHYLENE 18-INCH	LF	426.000	426.000
0250	530.0124	CULVERT PIPE CORRUGATED POLYETHYLENE 24-INCH	LF	54.000	54.000
0260	530.0130	CULVERT PIPE CORRUGATED POLYETHYLENE 30-INCH	LF	168.000	168.000
0270	601.0415	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J	LF	1,920.000	1,920.000
0280	602.0405	CONCRETE SIDEWALK 4-INCH	SF	1,290.000	1,290.000
0290	602.0415	CONCRETE SIDEWALK 6-INCH	SF	310.000	310.000
0300	606.0200	RIPRAP MEDIUM	CY	15.000	15.000
0310	619.1000	MOBILIZATION	EACH	1.000	1.000
0320	623.0200	DUST CONTROL SURFACE TREATMENT	SY	20,000.000	20,000.000
0330	624.0100	WATER	MGAL	110.000	110.000
0340	625.0100	TOPSOIL	SY	8,550.000	8,550.000
0350	625.0500	SALVAGED TOPSOIL	SY	26,170.000	26,170.000
0360	627.0200	MULCHING	SY	39,700.000	39,700.000
0370	628.1504	SILT FENCE	LF	1,300.000	1,300.000
0380	628.1520	SILT FENCE MAINTENANCE	LF	3,900.000	3,900.000
0390	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	6.000	6.000
0400	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	3.000	3.000
0410	628.2004	EROSION MAT CLASS I TYPE B	SY	1,500.000	1,500.000
0420	628.2006	EROSION MAT URBAN CLASS I TYPE A	SY	2,900.000	2,900.000
0430	628.7504	TEMPORARY DITCH CHECKS	LF	55.000	55.000
0440	628.7555	CULVERT PIPE CHECKS	EACH	82.000	82.000

DATE 05FEB14			E S T I M A T E O F Q U A N T I T I E S		
LINE			9360-02-70		
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0450	628.7570	ROCK BAGS	EACH	160.000	160.000
0460	629.0210	FERTILIZER TYPE B	CWT	28.000	28.000
0470	630.0120	SEEDING MIXTURE NO. 20	LB	850.000	850.000
0480	630.0140	SEEDING MIXTURE NO. 40	LB	200.000	200.000
0490	630.0200	SEEDING TEMPORARY	LB	430.000	430.000
0500	630.0300	SEEDING BORROW PIT	LB	35.000	35.000
0510	642.5001	FIELD OFFICE TYPE B	EACH	1.000	1.000
0520	643.0100	TRAFFIC CONTROL (PROJECT) 01. 9360-02-70	EACH	1.000	1.000
0530	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	1,602.000	1,602.000
0540	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	3,204.000	3,204.000
0550	643.0900	TRAFFIC CONTROL SIGNS	DAY	4,291.000	4,291.000
0560	645.0120	GEOTEXTILE FABRIC TYPE HR	SY	50.000	50.000
0570	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	7,525.000	7,525.000
0580	650.5000	CONSTRUCTION STAKING BASE	LF	7,525.000	7,525.000
0590	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	1,920.000	1,920.000
0600	650.6000	CONSTRUCTION STAKING PIPE CULVERTS	EACH	14.000	14.000
0610	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 9360-02-70	LS	1.000	1.000
0620	650.9920	CONSTRUCTION STAKING SLOPE STAKES	LF	7,988.000	7,988.000
0630	690.0150	SAWING ASPHALT	LF	540.000	540.000
0640	690.0250	SAWING CONCRETE	LF	205.000	205.000
0650	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT \$5.00/HR	HRS	1,200.000	1,200.000
0660	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT \$5.00/HR	HRS	600.000	600.000
0670	SPV.0060	SPECIAL 01. RESTORING OF EXISTING MONUMENTS	EACH	14.000	14.000

CLEARING

STATION	TO	STATION	LOCATION	201.0105 QUANTITY STATION
22+00	-	23+00	CTH B	1
24+00	-	27+00	CTH B	3
29+00	-	30+00	CTH B	1
506+00	-	507+00	CTH A	1
TOTAL				6

REMOVING PAVEMENT

STATION	LOCATION	204.0100 QUANTITY SY
70+10	CTH B, LT	60
506+75	CTH A, LT	10
509+05	CTH A, LT	25
TOTAL		95

REMOVING PLANTER

STATION	LOCATION	204.9060.S.01 QUANTITY EACH	DESCRIPTION
26+75	CTH B, LT	1	PLANTER
TOTAL		1	

GRUBBING

STATION	TO	STATION	LOCATION	201.0205 QUANTITY STATION
22+00	-	23+00	CTH B	1
24+00	-	27+00	CTH B	3
29+00	-	30+00	CTH B	1
34+00	-	35+00	CTH B	1
36+00	-	37+00	CTH B	1
69+00	-	71+00	CTH B	2
73+00	-	77+00	CTH B	4
79+00	-	82+00	CTH B	3
506+00	-	507+00	CTH A	1
TOTAL				17

REMOVING CURB & GUTTER

STATION	TO	STATION	LOCATION	204.0150 QUANTITY LF
506+64	-	509+57	CTH A, LT	305
506+65	-	509+82	CTH A, RT	310
TOTAL				615

REMOVING CONCRETE SIDEWALK

STATION	TO	STATION	LOCATION	204.0155 SY
508+03	-	508+96	CTH B, LT	40
509+12	-	509+57	CTH B, LT	80
TOTAL				120

REMOVING SMALL PIPE CULVERTS

STATION	LOCATION	203.0100 QUANTITY EACH	DESCRIPTION
22+40	CTH B, LT	1	18" X 34', CMCP
29+26	CTH B	1	18" X 36" X 52', CMPA
30+00	CTH B, RT	1	15" X 30', CMCP
31+20	CTH B, RT	1	15" X 118', CMCP
32+85	CTH B	1	18" X 42', CMCP
34+72	CTH B, LT	1	12" X 40', CMCP
36+10	CTH B, LT	1	12" X 23', CMCP
37+00	CTH B, RT	1	15" X 25', CMCP
37+05	CTH B, LT	1	18" X 34', CMCP
47+27	CTH B	1	24" X 40', PCP
51+10	CTH B	1	27" X 50', CMCP
60+45	CTH B, LT	1	18" X 26', CMCP
61+80	CTH B, LT	1	18" X 25', CMCP
67+50	CTH B, LT	1	18" X 24', CMCP
68+66	CTH B, LT	1	15" X 20', CMCP
69+28	CTH B	1	24" X 46', PCP
70+10	CTH B, LT	1	15" X 25', CMCP
71+90	CTH B, LT	1	15" X 32', PCP
73+10	CTH B, LT	1	15" X 31', PCP
75+23	CTH B, LT	1	18" X 28', CMCP
75+46	CTH B, RT	1	12" X 20', CMCP
77+87	CTH B	1	24" X 48', PCP
77+92	CTH B	1	24" X 48', PCP
81+00	CTH B, LT	1	18" X 26', CMCP
451+15	CHURCH ROAD	1	18" X 45', CMCP
510+90	CTH A	1	18" X 60', CMCP
TOTAL		26	

REMOVING FENCE

STATION	LOCATION	204.0170 QUANTITY LF	DESCRIPTION
24+00	CTH B, RT	120	WOODEN FENCE
75+23	CTH B, LT	15	WOODEN FENCE
507+00	CTH A, LT	40	WOODEN FENCE
TOTAL		175	

EARTHWORK SUMMARY

Division	From/To Station	Location	Common Excavation (item # 205.0100)	Salvaged Pavement Material (4)	Available Material (5)	Unexpanded Fill	Expanded Fill (13)	Mass Ordinate +/- (14)	Borrow (item #208.0100)
			Cut				Factor 1.25		
1	20+50 - 82+00	CTH B	8,164	4,371	3,793	7,092	8,865	-5,072	2,160
	505+50 - 512+50	CTH A	2,679	1,000	1,679	14	18	1,661	0
	420+50 - 422+25	CUTOFF ROAD	281	77	204	6	8	196	0
	450+50 - 455+00	CHURCH ROAD	1,265	179	1,085	193	241	844	0
	695+00 - 699+62.25	DRAINAGE DITCH	211	0	211	0	0	211	0
Division 1 Total			12,600	5,627	6,972	7,305	9,132	-2,160	2,160

- 4) Salvaged Pavement Material
- 5) Available Material = Cut
- 13) Expanded Fill. Factor = 1.3 Expanded Fill = Unexpanded Fill * Fill Factor
- 14) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material w ithin the Division. Minus indicates a shortage of material w ithin the Division.

BASE AGGREGATE DENSE 1 1/4-INCH

LOCATION	305.0120 QUANTITY TON
DRIVEWAYS/ENTRANCES	955
SIDEWALK	45
TOTAL	1,000

SALVAGED ASPHALTIC PAVEMENT BASE

STATION	TO	STATION	LOCATION	306.0110 QUANTITY TON
20+50	-	32+25	CTH B	1,262
32+25	-	82+00	CTH B	5,200
420+25	-	422+25	CUTOFF ROAD	205
450+25	-	455+00	CHURCH ROAD	459
505+50	-	512+50	CTH A	875
TOTAL				8,000

CONCRETE DRIVEWAY 6-INCH

STATION	LOCATION	416.0160 QUANTITY SY
506+75	CTH B, LT	9
507+80	CTH B, LT	11
509+00	CTH B, LT	26
TOTAL		46

CONCRETE SURFACE DRAINS

STATION	LOCATION	416.1010 QUANTITY CY
27+24	CTH B, LT	1
28+13	CTH B, LT	1
28+84	CTH B, RT.	1
29+62	CTH B, LT	1
506+44	CTH A, RT	1
506+44	CTH A, LT	1
420+89	CUTOFF ROAD, LT	1
TOTAL		7

SALVAGED ASPHALTIC PAVEMENT MILLING

STATION	TO	STATION	LOCATION	490.0200 QUANTITY SY
20+50	-	30+00	CTH B	3,600
30+00	-	82+00	CTH B	13,000
420+25	-	422+25	CUTOFF ROAD	800
450+25	-	455+00	CHURCH ROAD	1,300
505+50	-	512+50	CTH A	3,400
TOTAL				22,100

NOTE: MILLING DEPTH TO EXISTING FULL DEPTH ASPHALT

ALL ITEMS ARE GROUP CODE 0010 UNLESS OTHERWISE STATED

CULVERT PIPES														
STATION	LOCATION	528.0321 PIPE ARCH POLYMER COATED CORRUGATED STEEL	528.0328 PIPE ARCH POLYMER COATED CORRUGATED STEEL	530.0118 CULVERT PIPE CORRUGATED POLYETHYLENE	530.0124 CULVERT PIPE CORRUGATED POLYETHYLENE	530.0130 CULVERT PIPE CORRUGATED POLYETHYLENE	THICKNESS	521.1018 APRON ENDWALLS CULVERT PIPE STEEL	521.1024 APRON ENDWALLS CULVERT PIPE STEEL	521.1030 APRON ENDWALLS CULVERT PIPE STEEL	521.1221 APRON ENDWALLS PIPE ARCH STEEL	521.1228 APRON ENDWALLS PIPE ARCH STEEL	ELEVATION	
		21 X 15-INCH LF	28 X 20-INCH LF	18-INCH LF	24-INCH LF	30-INCH LF	STEEL INCH	18-INCH EACH	24-INCH EACH	30-INCH EACH	21 X 15-INCH EACH	28 X 20-INCH EACH	INLET	OUTLET
30+45	CTH B	58	-	-	-	-	0.064	-	-	-	2	-	1546.65	1546.50
30+50	CTH B	58	-	-	-	-	0.064	-	-	-	2	-	1546.65	1546.50
33+50	CTH B	-	-	-	54	-	-	-	2	-	-	-	1546.80	1546.50
47+27	CTH B	-	52	-	-	-	0.064	-	-	-	-	2	1549.75	1549.60
51+10	CTH B	-	-	-	-	52	-	-	-	2	-	-	1548.75	1548.60
63+00	CTH B	-	52	-	-	-	0.064	-	-	-	-	2	1551.40	1551.20
69+28	CTH B	-	52	-	-	-	0.064	-	-	-	-	2	1551.85	1551.60
77+87	CTH B	-	-	-	-	58	-	-	-	2	-	-	1551.33	1551.15
77+95	CTH B	-	-	-	-	58	-	-	-	2	-	-	1551.33	1551.15
451+45	CHURCH ROAD	46	-	-	-	-	0.064	-	-	-	2	-	1547.05	1546.90
451+50	CHURCH ROAD	46	-	-	-	-	0.064	-	-	-	2	-	1547.05	1546.90
511+50	CTH A	56	-	-	-	-	0.064	-	-	-	2	-	1547.00	1546.80
511+55	CTH A	56	-	-	-	-	0.064	-	-	-	2	-	1547.00	1546.80
420+35	CUTOFF ROAD	76	-	-	-	-	0.064	-	-	-	2	-	1546.75	1546.75
20+50	CTH B, LT.	48	-	-	-	-	0.064	-	-	-	2	-	-	-
21+67	CTH B, LT.	44	-	-	-	-	0.064	-	-	-	2	-	-	-
22+50	CTH B, LT.	44	-	-	-	-	0.064	-	-	-	2	-	-	-
24+20	CTH B, LT.	28	-	-	-	-	0.064	-	-	-	2	-	-	-
25+90	CTH B, LT.	26	-	-	-	-	0.064	-	-	-	2	-	-	-
26+25	CTH B, LT.	34	-	-	-	-	0.064	-	-	-	2	-	-	-
30+00	CTH B, RT.	30	-	-	-	-	0.064	-	-	-	2	-	-	-
30+90	CTH B, RT.	-	-	34	-	-	-	2	-	-	-	-	-	-
31+60	CTH B, RT.	-	-	30	-	-	-	2	-	-	-	-	-	-
34+72	CTH B, LT.	-	-	30	-	-	-	2	-	-	-	-	-	-
36+10	CTH B, LT.	-	-	30	-	-	-	2	-	-	-	-	-	-
37+00	CTH B, LT.	-	-	42	-	-	-	2	-	-	-	-	-	-
37+00	CTH B, RT.	-	-	36	-	-	-	2	-	-	-	-	-	-
56+00	CTH B, RT.	-	-	52	-	-	-	2	-	-	-	-	-	-
60+45	CTH B, LT.	-	-	36	-	-	-	2	-	-	-	-	-	-
68+66	CTH B, LT.	-	-	26	-	-	-	2	-	-	-	-	-	-
70+10	CTH B, LT.	-	-	30	-	-	-	2	-	-	-	-	-	-
71+90	CTH B, LT.	32	-	-	-	-	0.064	-	-	-	2	-	-	-
73+10	CTH B, LT.	34	-	-	-	-	0.064	-	-	-	2	-	-	-
75+23	CTH B, LT.	32	-	-	-	-	0.064	-	-	-	2	-	-	-
75+46	CTH B, RT.	-	-	50	-	-	-	2	-	-	-	-	-	-
81+00	CTH B, LT.	-	-	30	-	-	-	2	-	-	-	-	-	-
452+70	CHURCH ROAD, RT.	32	-	-	-	-	0.064	-	-	-	2	-	-	-
TOTALS		780	156	426	54	168		24	2	6	36	6		

ALL ITEMS ARE GROUP CODE 0010 UNLESS OTHERWISE STATED

CONCRETE CURB AND GUTTER 6-INCH SLOPED 30-INCH TYPE J

STATION	TO	STATION	LOCATION	601.0415 QUANTITY L.F.
22+45	-	27+85	CTH B, RT	566
26+96	-	27+37	CTH B, LT	57
27+68	-	28+68	CTH B, LT	137
29+22	-	32+25	CTH B, LT	345
29+29	-	30+25	CTH B, RT	97
506+50	-	510+00	CTH A, RT	368
506+50	-	509+70	CTH A, LT	350
TOTAL				1,920

CONCRETE SIDEWALK

STATION	TO	STATION	LOCATION	602.0405 SIDEWALK 4-INCH SF	602.0415 SIDEWALK 6-INCH SF
506+68	-	506+97	CTH A, LT	-	55
506+79	-	507+00	CTH A, LT	465	-
507+00	-	508+02	CTH A, LT	-	150
507+76	-	507+81	CTH A, RT	55	-
508+02	-	508+97	CTH A, LT	500	-
508+97	-	509+16	CTH A, LT	-	105
509+16	-	509+61	CTH A, LT	270	-
TOTALS				1,290	310

WATER

STATION	TO	STATION	LOCATION	624.0100 QUANTITY MGAL
20+50	-	32+25	CTH B	13
32+25	-	82+00	CTH B	52
420+25	-	422+25	CUTOFF ROAD	2
450+25	-	455+00	CHURCH ROAD	5
505+50	-	512+50	CTH A	9
-	-	-	DRIVEWAYS/ENTRANCES	10
-	-	-	DUST CONTROL	19
TOTAL				110

RIPRAP MEDIUM

STATION	LOCATION	606.0200 QUANTITY C.Y.	REMARKS
506+31	CTH A, RT	2	CONCRETE SURFACE DRAIN
506+35	CTH A, LT	2	CONCRETE SURFACE DRAIN
77+91	CTH B, RT	11	CULVERT PIPE ENDWALLS
TOTAL		15	

GEOTEXTILE FABRIC TYPE HR

STATION	LOCATION	645.0120 QUANTITY S.Y.	REMARKS
506+31	CTH A, RT	7	CONCRETE SURFACE DRAIN
506+35	CTH A, LT	7	CONCRETE SURFACE DRAIN
77+91	CTH B, RT	36	CULVERT PIPE ENDWALLS
TOTAL		50	

SALVAGED TOPSOIL, MULCHING, FERTILIZER, AND SEED

STATION	STATION	LOCATION	625.0100 TOPSOIL SY	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT.	630.0120 SEEDING MIXTURE NO 20 LB.	630.0140 SEEDING MIXTURE NO 40 LB.	630.0200 SEEDING TEMPORARY LB.	630.0300 SEEDING BORROW PIT LB.
20+50	-	32+25	CTH B	4,200	-	2,375	2.6	-	76	-
32+25	-	82+00	CTH B	-	25,200	25,200	15.9	680	-	-
420+50	-	422+25	CUTOFF ROAD	500	-	395	0.3	-	10	-
450+50	-	455+00	CHUIRCH ROAD	2,200	-	1,820	1.4	-	40	-
505+50	-	512+50	CTH A	1,650	970	750	1.0	-	29	-
		BORROW PIT	-	-	2,535	1.6	-	-	25	35
		UNDISTRIBUTED	-	-	6,625	5.2	170	45	65	-
TOTALS			8,550	26,170	39,700	28	850	200	430	35

NOTE: SEEDING MIXTURE 40 IS TO BE USED IN URBAN AREAS

ALL ITEMS ARE GROUP CODE 0010 UNLESS OTHERWISE STATED

EROSION MAT				
STATION	LOCATION	CLASS I TYPE B	URBAN CLASS I TYPE A	REMARKS
		628.2004 QUANTITY SY	628.2006 QUANTITY SY	
20+50	CTH B, LT	10	-	CULVERT PIPE ENDS
21+67	CTH B, RT	10	-	CULVERT PIPE ENDS
22+50	CTH B, LT	10	-	CULVERT PIPE ENDS
24+20	CTH B, LT	10	-	CULVERT PIPE ENDS
25+90	CTH B, LT	10	-	CULVERT PIPE ENDS
26+25	CTH B, LT	10	-	CULVERT PIPE ENDS
30+00	CTH B, RT	10	-	CULVERT PIPE ENDS
30+45	CTH B	10	-	CULVERT PIPE ENDS
30+50	CTH B	10	-	CULVERT PIPE ENDS
30+90	CTH B, RT	10	-	CULVERT PIPE ENDS
31+60	CTH B, RT	10	-	CULVERT PIPE ENDS
33+50	CTH B, LT	12	-	CULVERT PIPE ENDS
34+72	CTH B, LT	10	-	CULVERT PIPE ENDS
36+10	CTH B, LT	10	-	CULVERT PIPE ENDS
37+00	CTH B, LT	10	-	CULVERT PIPE ENDS
37+00	CTH B, RT	10	-	CULVERT PIPE ENDS
47+27	CTH B	12	-	CULVERT PIPE ENDS
51+10	CTH B	12	-	CULVERT PIPE ENDS
56+00	CTH B, RT	10	-	CULVERT PIPE ENDS
60+45	CTH B, LT	10	-	CULVERT PIPE ENDS
63+00	CTH B	12	-	CULVERT PIPE ENDS
68+66	CTH B, LT	10	-	CULVERT PIPE ENDS
69+28	CTH B	12	-	CULVERT PIPE ENDS
70+10	CTH B, LT	10	-	CULVERT PIPE ENDS
71+90	CTH B, LT	10	-	CULVERT PIPE ENDS
73+10	CTH B, LT	10	-	CULVERT PIPE ENDS
75+23	CTH B, LT	10	-	CULVERT PIPE ENDS
75+46	CTH B, RT	10	-	CULVERT PIPE ENDS
77+87	CTH B	12	-	CULVERT PIPE ENDS
77+95	CTH B	12	-	CULVERT PIPE ENDS
81+00	CTH B, LT	10	-	CULVERT PIPE ENDS
451+45	CHURCH ROAD	10	-	CULVERT PIPE ENDS
451+50	CHURCH ROAD	10	-	CULVERT PIPE ENDS
452+70	CHURCH ROAD, RT	10	-	CULVERT PIPE ENDS
420+35	CUTOFF ROAD	10	-	CULVERT PIPE ENDS
511+50	CTH A	10	-	CULVERT PIPE ENDS
511+55	CTH A	10	-	CULVERT PIPE ENDS
27+24	CTH B, LT	4	-	CONCRETE SURFACE DRAIN
28+13	CTH B, LT	4	-	CONCRETE SURFACE DRAIN
28+84	CTH B, RT	4	-	CONCRETE SURFACE DRAIN
29+62	CTH B, LT	4	-	CONCRETE SURFACE DRAIN
420+89	CUTOFF ROAD, LT	4	-	CONCRETE SURFACE DRAIN
22+50 - 28+00	CTH B, RT	-	740	SLOPE BEHIND CURB
26+96 - 27+37	CTH B, LT	-	55	8' WIDTH BEHIND CURB
27+68 - 28+65	CTH B, LT	-	125	8' WIDTH BEHIND CURB

EROSION MAT (CONTINUED)

STATION	LOCATION	CLASS I TYPE B	URBAN CLASS I TYPE A	REMARKS
		628.2004 QUANTITY SY	628.2006 QUANTITY SY	
29+00 - 30+25	CTH B, RT	-	115	8' WIDTH BEHIND CURB
29+50 - 32+25	CTH B, LT	-	580	SLOPE BEHIND CURB
506+44 - 507+72	CTH A, LT	-	85	SLOPE BEHIND CURB
506+44 - 509+78	CTH A, RT	-	285	SLOPE BEHIND CURB
509+16 - 509+61	CTH A, LT	-	75	SLOPE BEHIND CURB
510+50 - 511+50	CTH A, RT	-	175	SLOPE BEHIND CURB
420+50 - 421+00	CUTOFF ROAD, LT	-	95	SLOPE BEHIND CURB
29+50 - 30+45	CTH B, LT	85	-	DITCH BOTTOM
60+60 - 61+70	CTH B, LT	110	-	DITCH BOTTOM
451+50 - 453+80	CHURCH ROAD, LT	205	-	DITCH BOTTOM
453+00 - 454+40	CHURCH ROAD, RT	145	-	DITCH BOTTOM
511+55 - 512+50	CTH A, LT	85	-	DITCH BOTTOM
510+50 - 512+50	CTH A, RT	175	-	DITCH BOTTOM
UNDISTRIBUTED	CTH B	291	570	
TOTALS		1,500	2,900	

DUST CONTROL SURFACE TREATMENT

				623.0200
STATION	TO	STATION	LOCATION	QUANTITY SY
UNDISTRIBUTED			CTH B	20,000
TOTAL				20,000

SILT FENCE

STATION	TO	STATION	LOCATION	628.1504 QUANTITY LF	628.1520 MAINTENANCE LF
50+50	-	52+00	CTH B, RT	150	450
77+00	-	79+00	CTH B, RT	200	600
421+30	-	422+25	CUTOFF ROAD, RT	95	285
			BORROW PIT	600	1,800
UNDISTRIBUTED			CTH B	255	765
TOTALS				1,300	3,900

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ROCK BAGS		
STATION	LOCATION	628.7570 QUANTITY EACH
20+50	CTH B, LT	15
21+50	CTH B, RT	15
29+10	CTH B, RT	5
30+60	CTH B, RT	5
40+00	CTH B, RT	5
40+00	CTH B, LT	15
44+50	CTH B, LT	5
54+25	CTH B, LT	5
58+00	CTH B, LT	5
61+00	CTH B, RT	5
72+50	CTH B, LT	15
81+60	CTH B, RT	5
81+60	CTH B, LT	15
505+50	CTH A, RT	5
505+50	CTH A, LT	5
696+50	DRAINAGE DITCH	5
UNDISTRUBUTED	CTH B	30
TOTAL		160

TEMPORARY DITCH CHECKS		
STATION	LOCATION	628.7504 QUANTITY LF
34+50	CTH B, RT.	15
57+00	CTH B, RT.	15
73+00	CTH B, RT.	15
UNDISTRIBUTED	CTH B	10
TOTAL		55

CULVERT PIPE CHECKS		
STATION	LOCATION	628.7555 QUANTITY EACH
30+45	CTH B, LT.	5
30+50	CTH B, LT.	5
33+50	CTH B, LT.	5
47+27	CTH B, LT.	7
51+10	CTH B, LT.	7
63+00	CTH B, LT.	7
69+28	CTH B, LT.	7
77+87	CTH B, LT.	7
77+95	CTH B, LT.	7
451+45	CHURCH ROAD, LT.	5
451+50	CHURCH ROAD, LT.	5
508+75	CTH A, RT.	5
511+50	CTH A, LT.	5
511+55	CTH A, LT.	5
TOTAL		82

TRAFFIC CONTROL SUMMARY								
LOCATION	APPROXIMATE SERVICE DAYS	643.0420 BARRICADES TYPE III		643.0705 WARNING LIGHTS TYPE A		643.0900 SIGNS		REMARKS
		NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	
CTH B, WEST OF USH 45	89	-	-	-	-	2	178	BARRICADES AND SIGNS FOR MAINLINE CLOSURES - DETAIL B
CTH B, EAST OF USH 45	89	2	178	4	356	1	89	BARRICADES AND SIGNS FOR MAINLINE CLOSURES - DETAIL B
CTH B / CHILLIE ROAD	89	2	178	4	356	4	356	BARRICADES AND SIGNS FOR MAINLINE CLOSURES - DETAIL C
CTH A NORTH PROJECT LIMITS	89	2	178	4	356	4	356	BARRICADES AND SIGNS FOR MAINLINE CLOSURES - DETAIL C
CTH A SOUTH PROJECT LIMITS	89	2	178	4	356	4	356	BARRICADES AND SIGNS FOR MAINLINE CLOSURES - DETAIL C
CHURCH ROAD PROJECT LIMITS	89	2	178	4	356	3	267	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES - DETAIL 4
CUTOFF ROAD PROJECT LIMITS	89	2	178	4	356	4	356	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES - DETAIL 4
CTH B / CTH V	89	1	89	2	178	1	89	ROAD CLOSED 1.7 MILES AHEAD LOCAL TRAFFIC ONLY
CTH A / CTH C	89	1	89	2	178	1	89	ROAD CLOSED 2 MILES AHEAD LOCAL TRAFFIC ONLY
CTH A / CHILLIE ROAD	89	1	89	2	178	1	89	ROAD CLOSED 1 MILE AHEAD LOCAL TRAFFIC ONLY
CTH A / USH 45	89	1	89	2	178	1	89	ROAD CLOSED 0.5 MILES AHEAD LOCAL TRAFFIC ONLY
CTH A / CUTOFF ROAD	89	1	89	2	178	1	89	ROAD CLOSED 0.2 MILES AHEAD LOCAL TRAFFIC ONLY
CHURCH ROAD / CTH C	89	1	89	2	178	1	472	ROAD CLOSED 1 MILES AHEAD LOCAL TRAFFIC ONLY
CTH B / CUTOFF ROAD	89	-	-	-	-	1	472	STOP SIGN
CTH B / CHURCH ROAD	89	-	-	-	-	1	472	STOP SIGN
CTH B / CTH A	89	-	-	-	-	2	472	STOP SIGN
TOTALS			1,602		3,204		4,291	

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CONSTRUCTION STAKING

STATION	TO	STATION	LOCATION	650.4500	650.5000	650.5500	650.6000	650.9910	650.9920
				SUBGRADE	BASE	CURB, GUTTER, AND	PIPE	SUPPLEMENTAL	SLOPE
				LF	LF	CURB AND GUTTER	CULVERTS	CONTROL	STAKES
						LF	EACH	LS	LF
20+50	-	32+25	CTH B	1,175	1,175	1,202	2	1	1,175
32+25	-	82+00	CTH B	4,975	4,975	-	7	-	4,975
420+25	-	422+25	CUTOFF ROAD	200	200	-	1	-	200
450+25	-	455+00	CHURCH ROAD	475	475	-	2	-	475
505+50	-	512+50	CTH A	700	700	718	2	-	700
695+00	-	699+62.25	DRAINAGE DITCH	-	-	-	-	-	463
TOTALS				7,525	7,525	1,920	14	1	7,988

SAWING ASPHALT

STATION	LOCATION	690.0150 QUANTITY LF
20+35	CTH B, LT	32
20+50	CTH B	28
21+00	CTH B, LT	168
26+25	CTH B, LT	22
71+90	CTH B, LT	22
73+10	CTH B, LT	24
82+00	CTH B	22
422+25	CUTOFF ROAD	22
454+00	CHURCH ROAD, LT	22
454+60	CHURCH ROAD, RT	50
454+90	CHURCH ROAD, LT	21
455+00	CHURCH ROAD	27
505+50	CTH A	24
507+80	CTH A, LT	31
512+50	CTH A	25
TOTAL		540

SAWING CONCRETE

STATION	LOCATION	690.0250 QUANTITY LF
70+10	CTH B, LT	19
506+75	CTH A, LT	13
507+80	CTH A, RT	5
508+50	CTH A, LT	168
TOTAL		205

RESTORING OF EXISTING MONUMENTS

LOCATION	SPV.0060.01 QUANTITY EACH
ENTIRE PROJECT	14
TOTAL	14

ALL ITEMS ARE GROUP CODE 0010 UNLESS OTHERWISE STATED

Conventional Signs

STATE LINE	=====	SECTION CORNER	
COUNTY LINE	=====		
TOWNSHIP & RANGE LINE	=====		
COUNTY LINE	=====		
QUARTER LINE	=====		
SIXTEENTH LINE	=====		
NEW REFERENCE LINE	=====	NOTATION FOR COMBUSTIBLE FLUIDS	
NEW R/W LINE	=====		
EXISTING R/W LINE	=====	CULVERT (BOX, PIPE OR CATTLE	
PROPERTY LINE	=====		
CORPORATE LIMITS	=====	BRIDGE	
NO ACCESS (BY ACQUISITION)	=====	STREAM OR RIVER	
TEMPORARY LIMITED EASEMENT	=====		
FENCE	=====	CHANNEL CHANGE	
BEAM GUARD	=====		
SLOPE INTERCEPTS	=====	LAKE	
PERMANENT LIMITED EASEMENT	=====		
UNDERGROUND FACILITIES (GAS, TELEPHONE, ELECTRIC, ETC..)	=====	RAIL LINE	
NO ACCESS (BY STATUTORY AUTHORITY)	=====		
LOT & TIE	=====	BUSHES	

Abbreviations

A.P.	ACCESS POINT	L.C.B.	LONG CHORD BEARING
AC.	ACRES	M.H.	MANHOLE
A.H.	AHEAD	MON.	MONUMENT
ALUM.	ALUMINUM	O.L.	OUTLOT
ET.AL.	AND OTHERS	P.	PAGE
BK.	BACK	P.K.	PARKER-KALON
BIT.	BITUMINOUS	P.C.	POINT OF CURVATURE
C.M.	CABLE MARKER	P.I.	POINT OF INTERSECTION
CL.	CENTERLINE	P.T.	POINT OF TANGENCY
C.T.H.	COUNTY TRUNK HIGHWAY	P.L.	PROPERTY LINE
C.S.M.	CERTIFIED SURVEY MAP	R	RADIUS
CONC.	CONCRETE	R.R.	RAILROAD
COR.	CORNER	R.L.	REFERENCE LINE
CULV.	CULVERT	R.D.E.	RESTRICTED DEVELOPMENT EASEMENT
d/b/o	DOING BUSINESS AS	RT.	RIGHT
E	ELECTRIC	R/W	RIGHT OF WAY
FDN.	FOUNDATION	SEC.	SECTION
G.	GARAGE	S	SHED
G.M.	GAS MARKER	S.T.H.	STATE TRUNK HIGHWAY
G.P.	GAS PUMPS	STA.	STATION
H.	HOUSE	T	TANGENT LENGTH OF CURVE
I.P.	IRON PIPE	TAV.	TAVERN
L.C.	LAND CONTRACT	T.L.E.	TEMPORARY LIMITED EASEMENT
LT.	LEFT	U.S.H.	UNITED STATES HIGHWAY
L	LENGTH OF CURVE	W.	WALL
L.H.E.	LIMITED HIGHWAY EASEMENT	X	EAST COORDINATE
L.C.	LONG CHORD	Y	NORTH COORDINATE

R/W PROJECT NUMBER	9360-02-00	SHEET NUMBER	4.01	TOTAL SHEETS	18
FEDERAL PROJECT NUMBER					
PLAT OF RIGHT-OF-WAY REQUIRED FOR USH 45 - STH 52					
CTH B LANGLADE COUNTY					
CONSTRUCTION PROJECT NUMBER					

BEGIN RELOCATION ORDER
STA. 19+78.67

Y=369300.618
X=621409.245
LOCATED 31.99 FEET SOUTH AND 1,885.14 FEET EAST OF THE SOUTHWEST CORNER OF SECTION 29, TOWNSHIP 32 NORTH, RANGE 11 EAST.

END RELOCATION ORDER
STA. 379+43.64

Y=338881.230
X=657356.400
LOCATED 1.18 FEET NORTH AND 0.03 FEET WEST OF THE NORTHEAST CORNER OF SECTION 32, TOWNSHIP 32 NORTH, RANGE 12 EAST.

NOTES

COORDINATES AND BEARINGS ON THIS PLAT ARE ORIENTED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, LANGLADE COUNTY ZONE, NAD 83 (1991) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (1"x18" IRON PIPE WEIGHING 1.13 LBS./ LIN. FT.) WITH CAP AND ARE PLACED PRIOR TO OR AT THE TIME OF LAND TRANSFER.

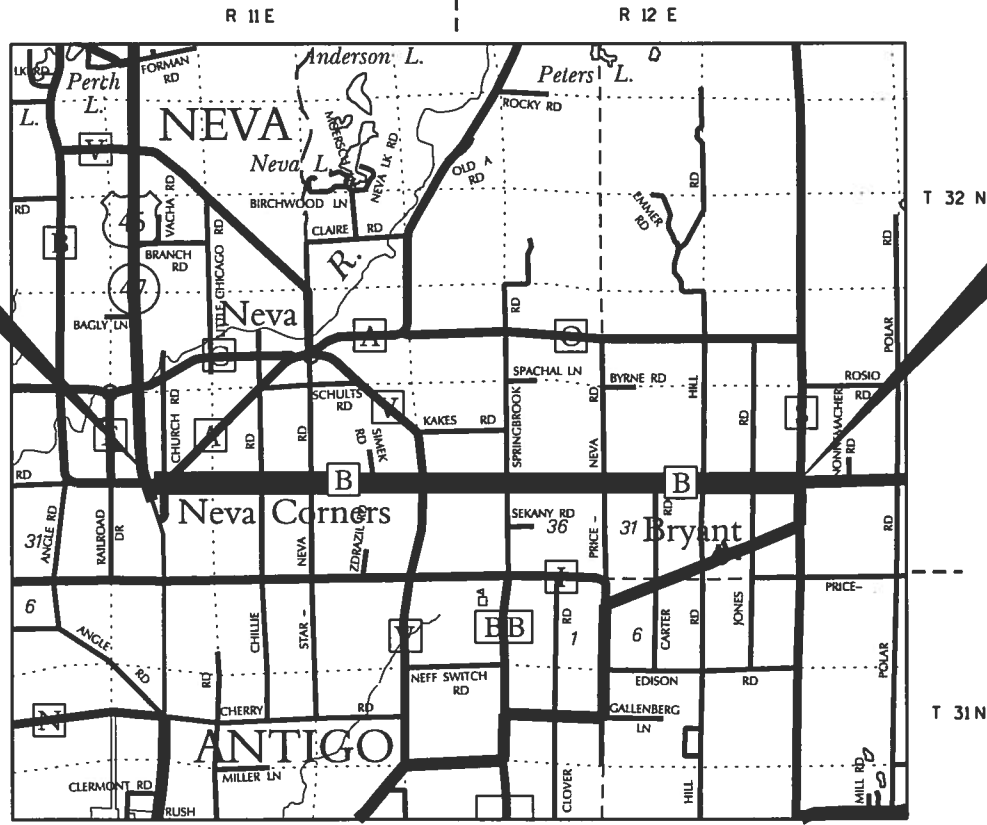
RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER SURVEYS OF PUBLIC RECORD.

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

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN FOR CTH B IS BASED ON TRANSPORTATION PROJECT PLAT NO. 1602-13-20 4.01 TOWN OF NEVA AND PRICE ROAD RECORDS PRESUMED 4 RODS (WISCONSIN STATUTE 82.31) IN AREAS OF NO TOWN ROAD RECORDS VARIOUS CERTIFIED SURVEY MAPS

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN FOR CTH A IS BASED ON THE PLAT OF RIGHT-OF-WAY REQUIRED FOR CTH A-STATE PROJECT NO. S 0937(2)

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN FOR SIDE ROADS IS BASED ON TOWN OF NEVA AND PRICE ROAD RECORDS PRESUMED 4 RODS (WISCONSIN STATUTE 82.31) IN AREAS OF NO TOWN ROAD RECORDS



LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF RELOCATION ORDER = 6.812 MI.

APPROVED FOR
LANGLADE COUNTY
06/12/2013
DATE
COUNTY HIGHWAY COMMISSIONER

PLAT PREPARED BY

AYRES ASSOCIATES

THE SURVEY IS PREPARED AT THE REQUEST OF THE LANGLADE COUNTY HIGHWAY DEPARTMENT.

THE FIELD SURVEY WAS PERFORMED NOVEMBER 2010 THROUGH MAY 2011

THIS SURVEY IS ACCURATE TO THE BEST OF MY KNOWLEDGE



REVISION DATE
12-16-2013 NC
01-30-2014 NC

JACOB S. JENSEN, S-2961
DATE 6-14-13

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE
PURPOSED ONLY AND ARE SUBJECT TO CHANGE
PRIOR TO THE TRANSFER OF LAND INTERESTS
TO THE COUNTY.

PARCEL NUMBER	SHEET NUMBER	OWNER (S)	INTEREST REQUIRED	R/W ACRES OR S.F.		TOTAL	PLE ACRES	TLE ACRES OR S.F.
				NEW	EXISTING			
1	4.04	COLONIAL ENTERPRISES, INC.	FEE AND TLE	4327 S.F.	----	4327 S.F.	----	3260 S.F.
2	4.04	KENNETH R. AND CINDIE L. MARTINY	TLE	----	----	----	----	2324 S.F.
3	4.04	ST. WENCESLAUS CONGREGATION OF NEVA, WI.	FEE	22480 S.F.	----	22480 S.F.	----	----
4	4.04	PHYLISS M. MATTEK SURVIVOR'S TRUST	FEE	1025 S.F.	----	1025 S.F.	----	----
5	4.04	LAWRENCE L. AND BETH A. PETTS	FEE	660 S.F.	----	660 S.F.	----	----
6	4.04	DAVID J. AND CHRLENE M. BAUKNECHT	FEE	1203 S.F.	----	1203 S.F.	----	----
7	4.04, 4.05, 4.06	THOMAS F. AND BEVERLY J. SIKORA	FEE, TLE AND PLE	0.95	2.13	3.08	0.69	3.32
8	4.04	PAMELLA D. BECERRA	TLE	----	----	----	----	1689 S.F.
9	4.05	TOWN OF NEVA	FEE	0.03	0.21	0.24	----	----
10	4.05	JOHN K. AND JEANNE SPIEGL	FEE	0.06	0.29	0.35	----	----
11	4.05	HENRY EUGENE AND JUDITH JACOBUS-LC VENDOR THOMAS A. GUENTHER-LC VENDEE	FEE	0.01	0.15	0.16	----	----
12	4.05	HENRY EUGENE AND JUDITH JACOBUS-LC VENDOR ROBERT J. ECKES-LC VENDEE	FEE	0.11	0.30	0.41	----	----
13	4.05, 4.06	J. W. MATTEK AND SONS, INC.	FEE	0.78	2.27	3.05	----	----
14	4.05	KAKES FARMS LTD.	FEE	0.45	1.02	1.47	----	----
15	4.06	DANIEL J. JAHNKE	FEE	0.05	----	0.05	----	----
16	4.06	BEVERLY J. BOSTWICK	FEE	0.06	0.16	0.22	----	----
17	4.06	JACKIE AND CYNTHIA CARLEY	FEE	0.07	----	0.07	----	----
18	4.06	JAMES R. AND THERESA E. HITZ	FEE	0.19	----	0.19	----	----
19	4.06	ROBERT J. DOLESHAL	FEE	0.20	----	0.20	----	----
20	4.06	PATTY MURPHY, LENARD DUDZIK, JEROME DUDZIK EDWARD PANACEK AND RICHARD PANACEK	FEE	0.61	1.12	1.73	----	----
21	4.07	FRANK AND BARBARA BERG	FEE	0.12	0.22	0.34	----	----
22	4.07	GREGORY AND SHERYL FLACK	FEE	0.17	0.41	0.58	----	----
23	4.07, 4.10, 4.11	RONALD AND DAWN HOUDEK, RANDY AND LISA HOUDEK AND THOMAS AND JANICE HOUDEK	FEE AND TLE	1.45	3.33	4.78	----	0.03
24	4.07	RITA SIMON	FEE	1.06	1.82	2.88	----	----
25	4.07	RONALD AND DAWN HOUDEK	FEE	0.05	0.14	0.19	----	----
26	4.07, 4.08	HOUDEK FARMS, INC.	FEE	1.12	1.12	2.24	----	----
27	4.08	ALVIN P. AND KATHRYN A. HOPFENSPERGER	FEE	0.75	1.40	2.15	----	----
28	4.09	LOIS J. HELMS	FEE	0.10	0.28	0.38	----	----
29	4.09	TRUDY ANN BULA, GARY LEE BENES, JULIE JEAN BRANDT, MARTY LOUIS BENES AND STANLEY AND LUCILLE R. BENES-LIFE ESTATE	FEE AND TLE	0.54	1.38	1.92	----	0.07
30	4.09, 4.10	THE BERNARD AND DONNA URBAN REVOCABLE TRUST	FEE AND TLE	0.69	2.06	2.75	----	0.08
31	4.10	DAWN RIESING	FEE	0.22	0.59	0.81	----	----
32	4.10	KEITH B. AND CATHERINE M. MICHELS	FEE	0.04	----	0.04	----	----
33	4.10	RANDALL J. AND LISA HOUDEK	TLE	----	----	----	----	0.05
34	4.10	THOMAS R. AND JANICE M. HOUDEK	FEE	0.06	0.17	0.23	----	----
35	4.11	RUSSELL SULLIVAN	FEE	0.09	----	0.09	----	----

REVISION DATE
12-16-2013
01-30-2014 NC

DATE 06-12-2013



HWY: CTH B

COUNTY: LANGLADE

STATE R/W PROJECT NUMBER 9360-02-00

CONSTRUCTION PROJECT NUMBER

PLAT SHEET 4.02

PS&E SHEET

E

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE
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PRIOR TO THE TRANSFER OF LAND INTERESTS
TO THE COUNTY.

PARCEL NUMBER	SHEET NUMBER	OWNER (S)	INTEREST REQUIRED	R/W ACRES OR SQ. FT.			PLE ACRES	TLE	
				NEW	EXISTING	TOTAL		ACRES	OR SQ. FT.
36	4.11	JACK DENNIS JR. AND DIANNE L. WURTINGER-LC PURCHASER	FEE AND TLE	0.11	----	0.11	----		0.01
37	4.11	TODD SCHULTZ	FEE	0.85	1.25	2.10	----		----
38	4.11,4.12	DAVID G. AND DARWIN M. GALLENBERG	FEE	0.77	1.49	2.26	----		----
39	4.11	DUANE EDWARD AND BETH ANN HOERMAN	FEE AND TLE	0.09	0.14	0.23	----		0.03
40	4.12	KEVIN HAFNER	FEE	0.60	1.50	2.10	----		----
41	4.12	GILBERT A. JR. AND CHERYL A. FUITEN	FEE	0.32	0.88	1.20	----		----
42	4.13	FLANNERY AND FLANNERY LOGGING	FEE	0.46	0.91	1.37	----		----
43	4.13,4.14	DAVID A. AND DANIEL B. HAFNER	FEE AND TLE	1.82	4.70	6.52	----		0.09
44	4.14	HAFNER SEED FARMS, INC.	FEE	0.58	1.66	2.24	----		----
45	4.14	JOHN F. AND DEBRA WOLTER	FEE	0.36	1.10	1.46	----		----
46	4.08	BRIAN URBAN AND KYLE URBAN	FEE	0.01	0.01	0.02	----		----
47	4.15	JOHN AND LEILANI HAFNER	FEE	0.45	1.17	1.62	----		----
48	4.15,4.16	JOHN F. AND DEBRA WOLTER	FEE	1.44	3.84	5.28	----		----
49	4.15	CHUCK OTTO	FEE	0.03	0.07	0.10	----		----
50	4.15	TOWN OF PRICE	FEE	0.01	0.01	0.02	----		----
51	4.16	JPR FARMS, LLC	FEE	0.83	2.15	2.98	----		----
52	4.16	JPR FARMS, LLC	FEE AND TLE	0.63	1.67	2.30	----		0.09
53	4.17,4.18	J.W. MATTEK AND SONS, INC.	FEE AND TLE	1.61	4.30	5.91	----		0.08
54	4.17,4.18	SCHROEDER FAMILY REALTY, LLC	FEE AND TLE	1.31	3.68	4.99	----		0.05
55	4.08	ANITA TOMANY	FEE	0.01	----	0.01	----		----
100	4.04, 4.05-4.07, 4.10-4.13, 4.15, 4.16, 4.18	FRONTIER COMMUNICATIONS CORP.	RELEASE	----	----	----	----		----
101	4.05	AMERICAN TRANSMISSION COMPANY	RELEASE	----	----	----	----		----
102	4.05, 4.10	CITY GAS COMPANY	RELEASE	----	----	----	----		----
103	4.04, 4.05, 4.06, 4.08 4.09, 4.11, 4.12, 4.14, 4.18	WISCONSIN PUBLIC SERVICE CORPORATION	RELEASE	----	----	----	----		----
104	4.11	FRONTIER COMMUNICATIONS CORP.	RELEASE	----	----	----	----		----
105	4.13	AGRIBANK, FCB	RELEASE	----	----	----	----		----

TOWN

CURVE TABLE					
CURVE	CHORD DISTANCE	CHORD BEARING	RADIUS	ARC LENGTH	PI COORDINATES Y X
C11	106.87'	N68°24'53"W	848.45'	106.94'	369211.803 621680.295

SW - SW
29-32-11

PARCELS 1, 3, 4, 5, AND 6

COURSE	DISTANCE	BEARING	PT NO	Y	X
2262-776	851.44'	N 89°04'23" W	2262	369288.375	622257.629
776-774	35.00'	N 00°55'37" E	776	369302.152	621406.296
774-771	624.23'	S 89°04'22" E	774	369337.147	621406.862
771-782	92.73'	N 86°35'49" E	771	369327.044	622031.014
782-461	190.25'	N 00°55'37" E	782	369332.548	622123.576
461-513	72.85'	S 89°04'23" E	461	369522.775	622126.654
513-472	90.55'	N 17°42'21" E	513	369521.597	622199.490
472-473	33.00'	S 89°34'11" E	472	369607.853	622227.027
473-2262	319.24'	S 00°25'49" W	473	369607.605	622260.026

COMPUTED FROM TIES
Y=369332.609
X=619524.108

PARCEL 7 TLE AT CUTOFF RD.

COURSE	DISTANCE	BEARING	PT NO	Y	X
2262-785	627.21'	N 89°04'25" W	2262	369288.375	622257.629
785-PT808	70.20'	S 00°55'35" W	785	369298.515	621630.501
PT808-810	60.92'	S 54°14'05" E	PTT808	369228.326	621629.366
810-PC809	50.08'	S 85°44'60" E	810	369192.721	621678.797
PC809-PT808	106.87'	N 68°24'53" W	PC809	369189.009	621728.743

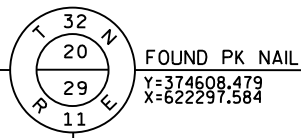
NW - NW
32-32-11

CUTOFF RD. CURVE DATA	CUTOFF RD. CURVE DATA
PI STA. 420+77.08 Y 369225.670 X 621655.690 Δ -59°23'11" D 45°50'12" L 129.56' T 71.28' R 125.00' PC STA. 420+05.80 PT STA. 421+35.36	PI STA. 421+81.06 Y 369202.270 X 621770.310 Δ 18°10'33" D 22°55'06" L 79.31' T 39.99' R 250.00' PC STA. 421+41.07 PT STA. 422+20.38

CTH B CURVE DATA	CTH B CURVE DATA	CTH B CURVE DATA
PI STA. 15+37.76 Y 369308.927 X 620986.061 Δ 23°01'26" D 10°44'59" L 214.18' T 108.56' R 533.00' PC STA. 14+29.21 PT STA. 16+43.39	PI STA. 17+40.20 Y 369225.555 X 621173.742 Δ -42°19'54" D 22°55'06" L 184.71' T 96.80' R 250.00' PC STA. 16+42.40 PT STA. 18+28.11	PI STA. 19+74.30 Y 369302.172 X 621404.336 Δ 19°18'22" D 37°12'18" L 51.89' T 26.19' R 154.00' PC STA. 19+48.11 PT STA. 19+74.30

REVISION DATE 12-16-2013 NC 01-30-2014	DATE 06-12-2013	SCALE. FEET 0 100 200	HWY: CTH B	STATE R/W PROJECT NUMBER 9360-02-00	PLAT SHEET 4.04
GRID FACTOR			COUNTY: LANGLADE	CONSTRUCTION PROJECT NUMBER	PS&E SHEET E

TOWN



CTH A CURVE DATA
PI STA. 509+86.31
Y 369278.145
X 622255.599
Δ 46°32'07"
D 17°21'44"
L 268.02'
T 141.90'
R 330.00'
PC STA. 508+44.41
PT STA. 514+42.68

101 EASEMENT
AMERICAN TRANSMISSION CO.
DOC. 347735
V326, P494, DOC 206738

SW-SE
29-32-11 J.W. MATTEK AND SONS, INC.
6.75 ACRES REMAINING

HENRY EUGENE AND
JUDITH JACOBUS-LC VENDOR
THOMAS A. GUENTHER-LC VENDEE

HENRY EUGENE AND
JUDITH JACOBUS-LC VENDOR
ROBERT J. ECKES-LC VENDEE

STA. 34+40.00 CTH B=
STA. 700+00.00
DRAINAGE DITCH
Y=369244.475
X=622868.844

TLE FOR CONSTRUCTING
A DRAINAGE DITCH

STA. 698+59.19
DRAINAGE DITCH
Y=369104.035
X=622858.659

STA. 694+48.12
DRAINAGE DITCH
Y=368733.046
X=622969.788

STA. 693+50.53
DRAINAGE DITCH
Y=368635.679
X=622969.788

PARCEL 7 TLE

COURSE	DISTANCE	BEARING	PT NO	Y	X
2262-856	572.79'	S 85°53'30" E	2262	369288.375	622257.629
856-851	50.00'	S 04°06'30" W	856	369247.340	622828.947
851-852	550.00'	S 04°06'30" W	851	369197.469	622825.365
852-853	250.00'	S 85°53'30" E	852	368648.882	622785.962
853-855	555.00'	N 04°06'30" E	853	368630.972	623035.320
855-848	50.00'	N 85°53'30" W	855	369184.546	623075.081
848-849	100.12'	N 88°45'15" W	848	369188.128	623025.209
849-851	100.00'	N 85°53'30" W	849	369190.305	622925.108

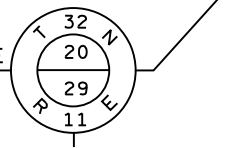
DRAINAGE DITCH
CURVE DATA

PI STA 697+38.45	PI STA 695+67.88
Y 368981.347	Y 368852.642
X 622854.129	X 622970.272
Δ 44°10'39"	Δ 39°08'30"
D 114°35'30"	D 57°17'45"
T 20.29'	T 35.55'
R 38.55'	R 68.32'
PC STA 697+18.16	PC STA 695+35.32
PT STA 697+56.71	PT STA 696+00.64

NOTE:

AYRES ASSOCIATES AND THE LANGLADE COUNTY HIGHWAY DEPARTMENT
HAVE AGREED TO WAIVE STATUTES AE 7.03 AND AE 7.07 RELATED TO
SETTING MONUMENTS. NO MONUMENTS WILL BE SET BY AYRES ASSOCIATES
WITHIN AGRICULTURAL LANDS FROM STATION 34+00 TO STATION 379+43.64.

FOUND RAILROAD SPIKE
Y=371763.939
X=624939.049



PARCELS 7 AND 14

COURSE	DISTANCE	BEARING	PT NO	Y	X
2262-3333	2688.18'	S 85°53'30" E	2262	369288.375	622257.629
3333-PC23	45.78'	S 00°20'42" E	3333	369095.793	624938.899
PC23-PT25	173.32'	N 87°19'52" W	PC23	369050.009	624939.175
PT25-20	445.67'	N 85°53'30" W	PT25	369058.080	624766.039
20-19	100.12'	N 83°01'46" W	20	369090.008	624321.511
19-848	1200.00'	N 85°53'30" W	19	369102.159	624222.126
848-849	100.12'	N 88°45'15" W	848	369188.128	623025.209
849-847	200.00'	N 85°53'30" W	849	369190.305	622925.108
847-850	100.12'	N 83°01'46" W	847	369204.633	622725.622
850-838	175.00'	N 85°53'30" W	850	369216.784	622626.237
838-836	50.25'	N 80°10'52" W	838	369229.321	622451.687
836-843	48.22'	N 85°53'30" W	836	369237.890	622402.173
843-846	138.62'	S 44°54'58" W	843	369241.345	622354.080
846-2262	145.20'	N 00°33'42" E	846	369143.184	622256.205

PARCELS 9, 10, 11, 12 AND 13

COURSE	DISTANCE	BEARING	PT NO	Y	X
2262-3333	2688.18'	S 85°53'30" E	2262	369288.375	622257.629
3333-PC22	49.24'	N 00°00'12" E	3333	369095.793	624938.899
PC22-PT26	166.24'	N 87°18'41" W	PC22	369145.038	624938.902
PT26-18	2095.67'	N 85°53'30" W	PT26	369152.836	624772.845
18-17	27.73'	S 68°28'02" W	18	369302.971	622682.556
17-4	125.00'	N 85°53'30" W	17	369292.793	622656.761
4-2	51.42'	N 72°23'46" W	4	369301.748	622532.082
2-389	62.24'	N 85°53'30" W	2	369317.299	622483.070
389-10	86.27'	N 23°31'24" W	389	369321.758	622420.992
10-12	100.00'	N 46°51'47" E	10	369400.856	622386.561
12-493	37.08'	N 43°08'13" W	12	369469.231	622459.533
493-15	50.62'	S 55°52'01" W	493	369496.287	622434.181
15-505	138.42'	S 46°51'47" W	15	369467.881	622392.278
505-506	33.00'	N 89°34'11" W	505	369373.234	622291.267
506-2262	85.11'	S 00°25'49" W	506	369373.482	622258.268

CTH B CURVE DATA

PI STA. 55+15.39
Y 369095.793
X 624938.899
Δ -05°42'55"
D 01°41'07"
L 339.15'
T 169.71'
R 3400.00'
PC STA. 53+45.67
PT STA. 56+84.82

SE-SE
29-32-11

J.W. MATTEK AND SONS, INC.
28.60 ACRES REMAINING

CTH B R/W

OF

EASEMENT
AMERICAN TRANSMISSION CO. 101
DOC. 347735
V326, P471, DOC 206722

PARCEL 7 PLE

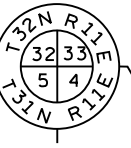
COURSE	DISTANCE	BEARING	PT NO	Y	X
2262-856	572.79'	S 85°53'30" E	2262	369288.375	622257.629
856-851	50.00'	S 04°06'30" W	856	369247.340	622828.947
851-865	14.97'	S 85°53'30" E	851	369197.469	622825.365
865-864	50.00'	S 85°53'30" E	865	369196.397	622840.292
864-881	90.38'	S 04°08'53" W	864	369192.815	622890.163
881-PC867	102.04'	S 02°06'52" W	881	369102.669	622883.626
PC867-PT869	18.80'	S 19°58'27" E	PC867	369000.702	622879.861
PT869-PC871	117.52'	S 42°03'47" E	PT869	368983.031	622886.283
PC871-PT873	83.74'	S 22°29'32" E	PC871	368895.784	622965.015
PT873-878	85.68'	S 02°55'17" E	PT873	368818.411	622997.051
878-877	99.18'	S 03°52'14" W	878	368732.839	623001.418
877-866	50.00'	N 85°53'30" W	877	368633.888	622994.724
866-879	96.00'	N 03°52'14" E	866	368637.470	622944.852
879-PC874	82.72'	N 02°55'17" W	879	368733.253	622951.332
PC874-PT872	50.25'	N 22°29'32" W	PC874	368815.863	622947.116
PT872-PC870	117.52'	N 42°03'47" W	PT872	368862.287	622927.894
PC870-PT868	56.41'	N 19°58'27" W	PC870	368949.534	622849.163
PT868-880	102.92'	N 02°06'52" E	PT868	369002.547	622829.895
880-865	91.23'	N 04°08'53" E	880	369105.401	622833.692

CURVE TABLE

CURVE	CHORD DISTANCE	CHORD BEARING	RADIUS	ARC LENGTH	PI COORDINATES Y	X
C1	166.24'	S87°18'41"E	3355.00'	166.26'	369146.879	624855.777
C2	173.32'	S87°19'52"E	3450.00'	173.34'	369051.869	624852.506
C14	83.74'	S22°29'32"E	125.00'	85.39'	368862.792	622994.787
C15	18.80'	S19°58'27"E	25.00'	19.28'	368990.563	622879.486
C16	50.25'	N22°29'32"W	75.00'	51.24'	368842.491	622945.757
C17	56.41'	N19°58'27"W	75.00'	57.83'	368972.131	622828.772

COMPUTED FROM TIES

Y=363896.317
X=624970.196



NEVA

REVISION DATE
12-16-2013
01-30-2014 NC

DATE 06-12-2013

SCALE: FEET
0 100 200

HWY: CTH B

COUNTY: LANGLADE

STATE R/W PROJECT NUMBER 9360-02-00

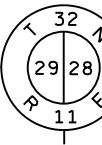
CONSTRUCTION PROJECT NUMBER

PLAT SHEET 4.05

PS&E SHEET

E

TOWN



FOUND RAILROAD SPIKE
Y=371763.939
X=624939.049

CTH B CURVE DATA

PI STA. 55+15.39
Y 369095.793
X 624938.899
Δ -05°42'55"
D 01°41'07"
L 339.15'
T 169.71'
R 3400.00'
PC STA. 53+45.67
PT STA. 56+84.82

SW-SW
28-32-11

J.W. MATTEK AND SONS, INC.
27.64 ACRES REMAINING

THOMAS F. AND BEVERLY J. SIKORA
38.44 ACRES REMAINING
NW-NW
33-32-11

PARCELS 7 AND 20

COURSE	DISTANCE	BEARING	PT NO	Y	X
4563-3333	2731.49'	S 88°23'35" W	4563	369172.393	627669.313
3333-PC23	45.78'	S 00°20'42" E	3333	369095.793	624938.899
PC23-PT28	170.77'	N 89°48'40" E	PC23	369050.009	624939.175
PT28-101	2457.03'	N 88°23'35" E	PT28	369050.572	625109.949
101-603	83.54'	S 45°45'49" E	101	369119.475	627566.010
603-600	38.84'	S 00°04'47" W	603	369061.196	627625.864
600-606	30.11'	S 33°47'45" E	600	369022.356	627625.810
606-607	24.75'	S 89°55'13" E	606	368997.333	627642.559
607-4563	175.11'	N 00°39'19" E	607	368997.298	627667.310

PARCELS 13, 15, 16, 17, 18 AND 19

COURSE	DISTANCE	BEARING	PT NO	Y	X
4563-3333	2731.49'	S 88°23'35" W	4563	369172.393	627669.313
3333-PC22	49.24'	N 00°00'12" E	3333	369095.793	624938.899
PC22-PT27	168.38'	N 89°49'52" E	PC22	369145.038	624938.902
PT27-51	365.18'	N 88°23'35" E	PT27	369145.534	625107.285
51-53	51.42'	S 78°06'40" E	51	369155.775	625472.321
53-54	100.00'	N 88°23'35" E	53	369145.182	625522.637
54-55	100.72'	N 81°33'01" E	54	369147.986	625622.598
55-56	250.00'	N 88°23'35" E	55	369162.786	625722.222
56-57	50.49'	S 83°38'15" E	56	369169.797	625972.124
57-58	50.00'	N 88°23'35" E	57	369164.202	626022.301
58-59	50.49'	N 80°25'24" E	58	369165.604	626072.281
59-81	1000.00'	N 88°23'35" E	59	369174.003	626122.065
81-82	100.50'	N 82°40'57" E	81	369202.047	627121.672
82-100	349.94'	N 88°23'35" E	82	369214.847	627221.352
100-127	139.11'	N 44°14'11" E	100	369224.661	627571.156
127-4563	151.94'	S 00°25'09" E	127	369324.327	627668.201

SE-SW
28-32-11

JACKIE AND CYNTHIA CARLEY
LOT 1
2 CSM 203

JAMES R. AND THERESA E. HITZ
LOT 1
2 CSM 214
1.93 ACRES REMAINING

LOT 2
2 CSM 214
2.15 ACRES REMAINING

ROBERT J. DOLESHAL
LOT 3
2 CSM 214

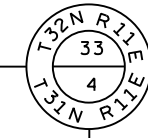
PATTY MURPHY, LENARD DUDZIK,
JEROME DUDZIK, EDWARD PANACEK
AND RICHARD PANACEK
NE-NW
33-32-11

NOTE:
AYRES ASSOCIATES AND THE LANGLADE COUNTY HIGHWAY DEPARTMENT
HAVE AGREED TO WAIVE STATUTES AE 7.03 AND AE 7.07 RELATED TO
SETTING MONUMENTS. NO MONUMENTS WILL BE SET BY AYRES ASSOCIATES
WITHIN AGRICULTURAL LANDS FROM STATION 34+00 TO STATION 379+43.64.

CURVE TABLE

CURVE	CHORD DISTANCE	CHORD BEARING	RADIUS	ARC LENGTH	PI COORDINATES Y	X
C3	166.38'	N89°49'52"E	3355.00'	168.40'	369143.173	625023.100
C4	170.77'	N89°48'40"E	3450.00'	170.79'	369048.176	625024.569

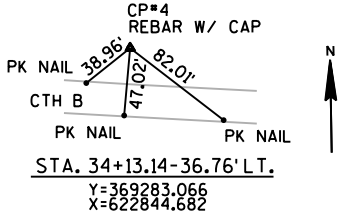
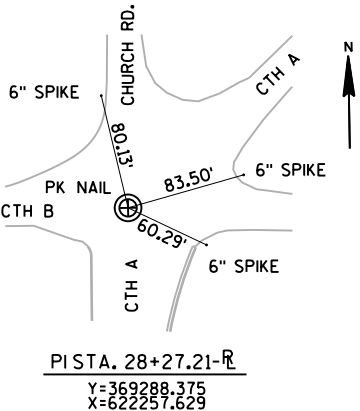
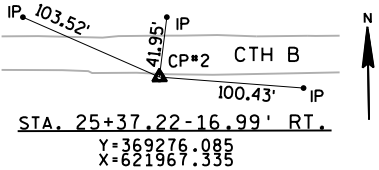
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X=627609.127



NEVA

REVISION DATE 12-16-2013 NC 01-30-2014 NC	DATE 06-12-2013	SCALE. FEET 0 100 200	HWY: CTH B	STATE R/W PROJECT NUMBER 9360-02-00	PLAT SHEET 4.06
GRID FACTOR			COUNTY: LANGLADE	CONSTRUCTION PROJECT NUMBER	PS&E SHEET E

BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
1	19+88	CHIS. BOX SW COR. CONC. PAD-62'LT.	1548.06
2	26+35	CHIS. "X" CONC. SIGN SUPPORT-31'RT.	1552.08
3	31+29	CHIS. BOX SW COR. LOADING DOCK-35'LT.	1552.70



STA. 22+00.00 CTH B=
STA. 420+00.00 CUTOFF RD.
Y=369298.515
X=621630.500

CONSTRUCTION LIMITS
STA. 20+00

BEGIN PROJECT
STA. 20+50.00
Y=369300.940
X=621480.520

STA. 27+47.00 CTH B=
STA. 450+00.00 CHURCH RD.
Y=369289.812
X=622177.429

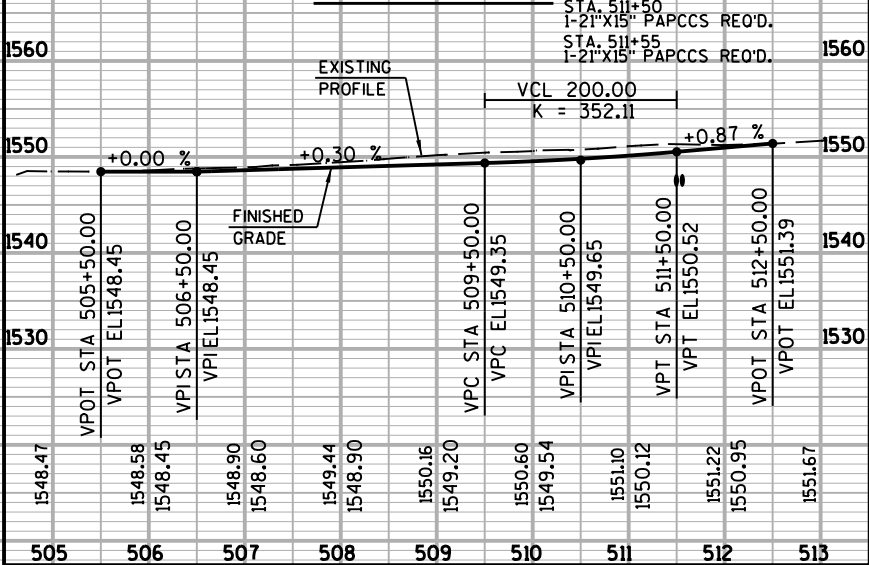
CONSTRUCTION LIMITS
STA. 455+00

SEE CROSS SECTIONS
FOR FLAT BOTTOM
DITCH LAYOUT.

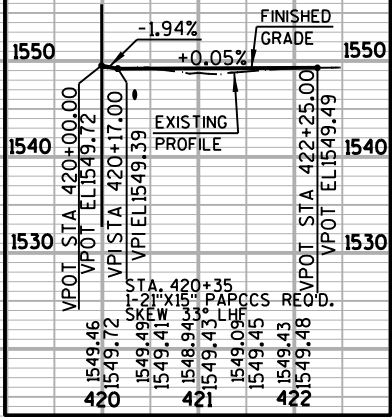
CONSTRUCTION LIMITS
STA. 512+50

STA. 28+61.32 CTH B=
STA. 510+00.00 CTH A
Y=369285.925
X=622291.650
PI=28+27.21 CTH B
Y=369288.375
X=622257.629
TLE FOR
DRAINAGE DITCH
CONSTRUCTION
LIMITS
STA. 505+50
CONSTRUCTION LIMITS
STA. 699+62.25

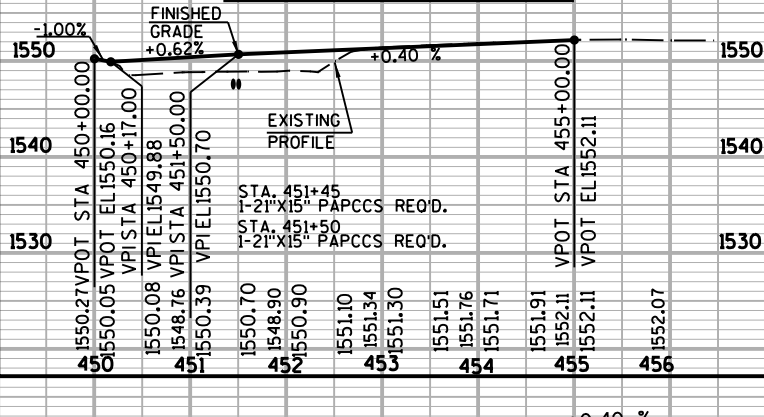
CTH A PROFILE

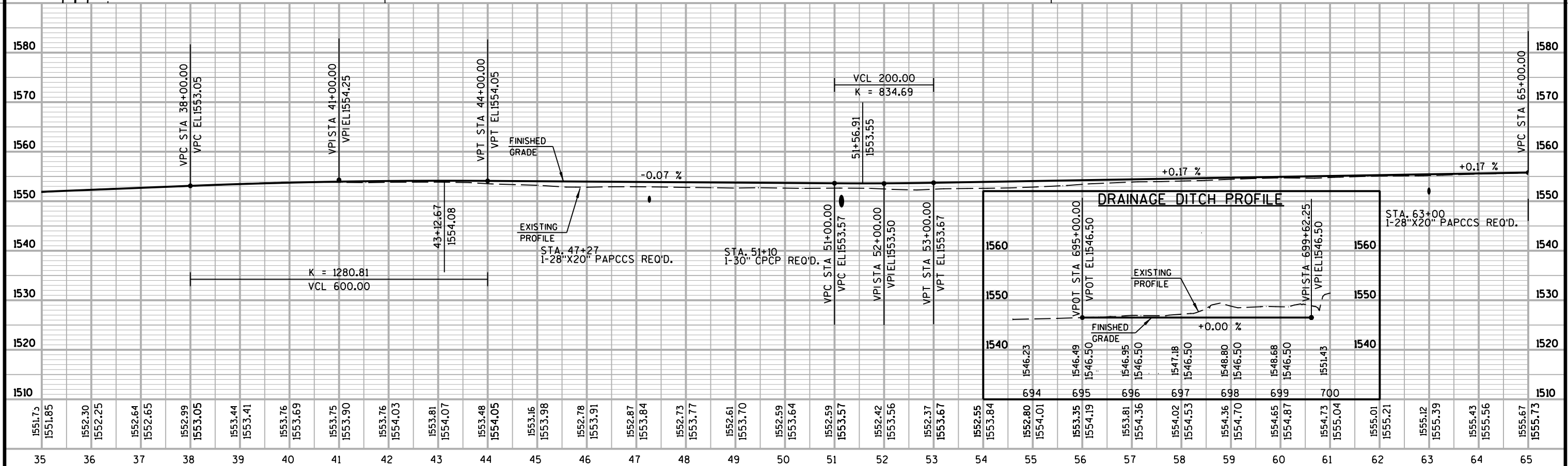
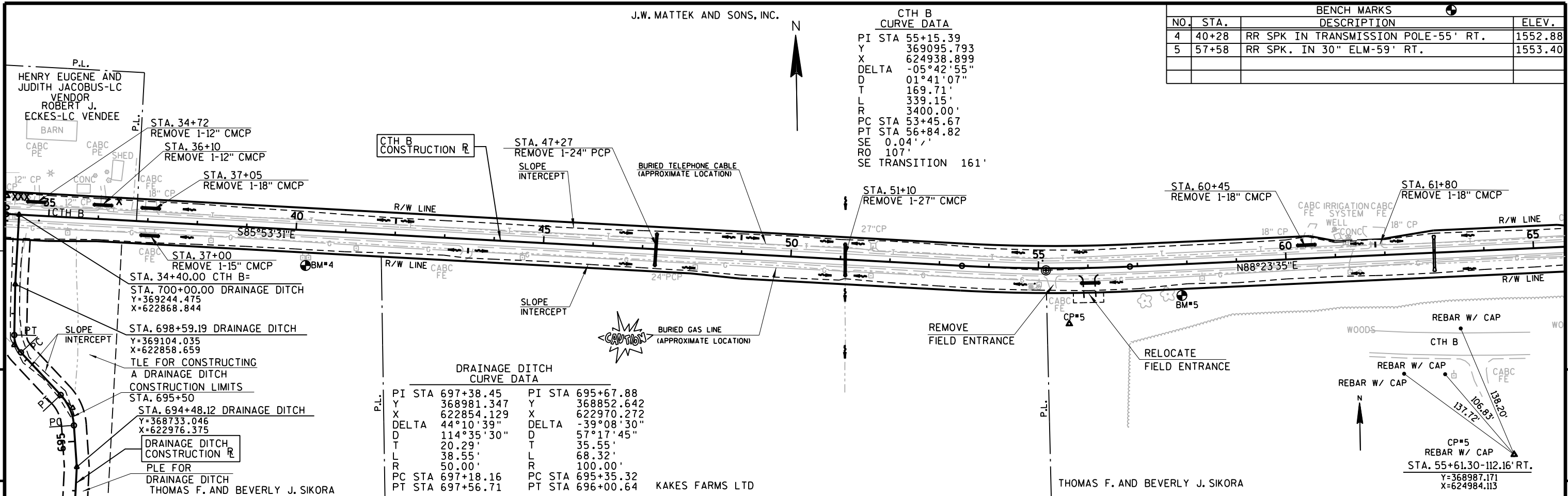


CUT OFF RD. PROFILE

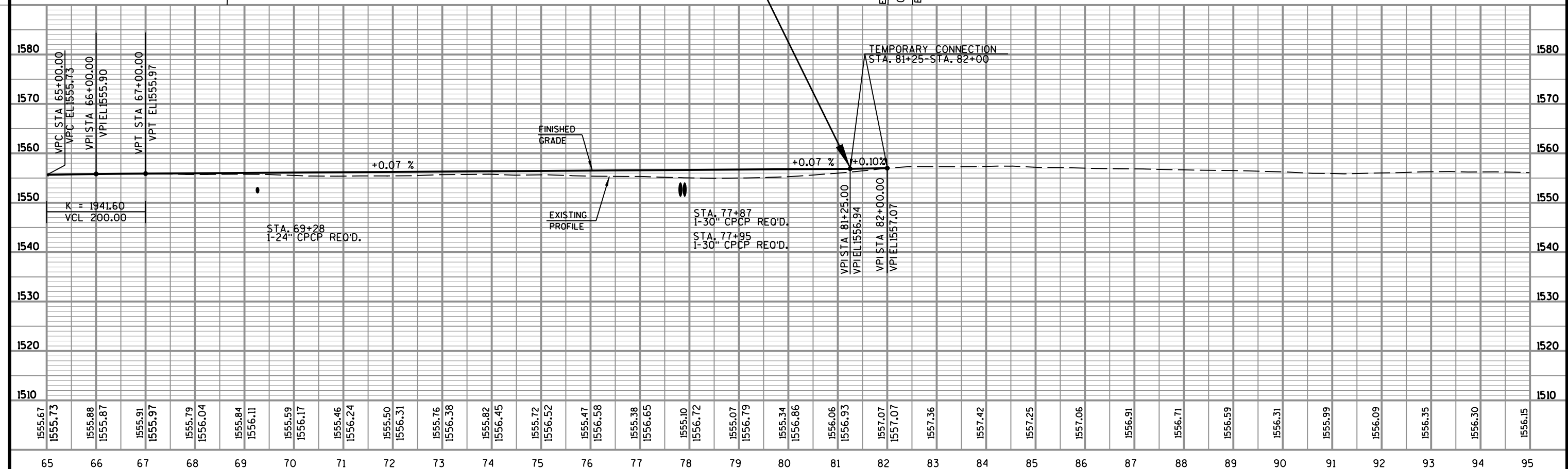
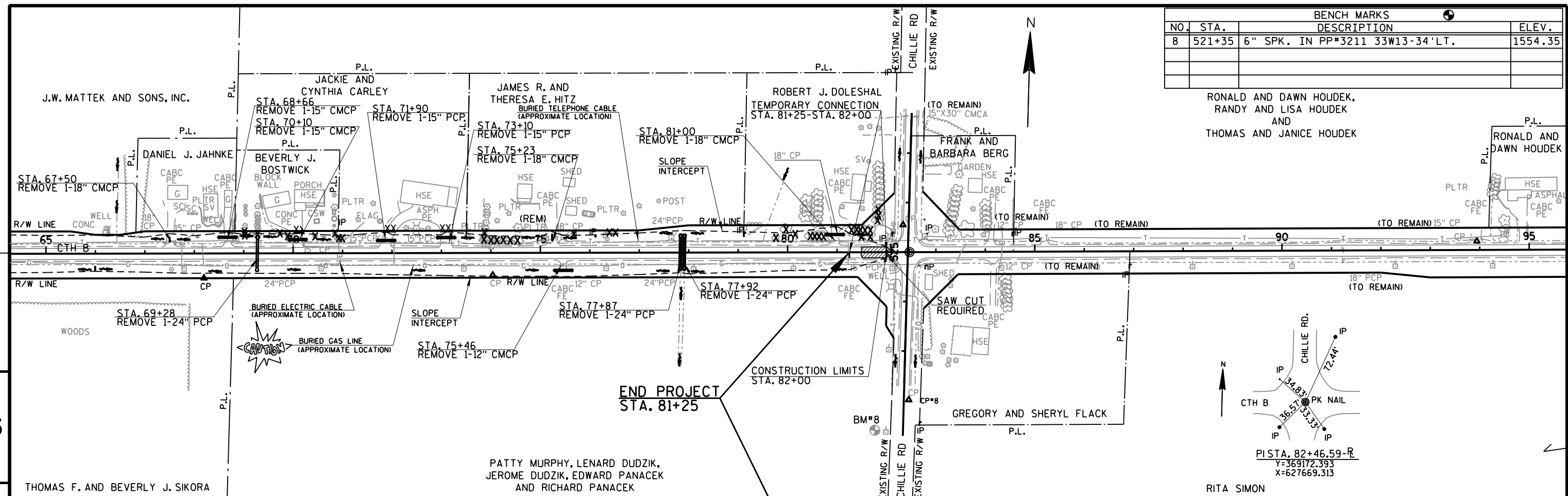


CHURCH ROAD PROFILE





BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
8	521+35	6" SPK. IN PP*3211 33W13-34'LT.	1554.35

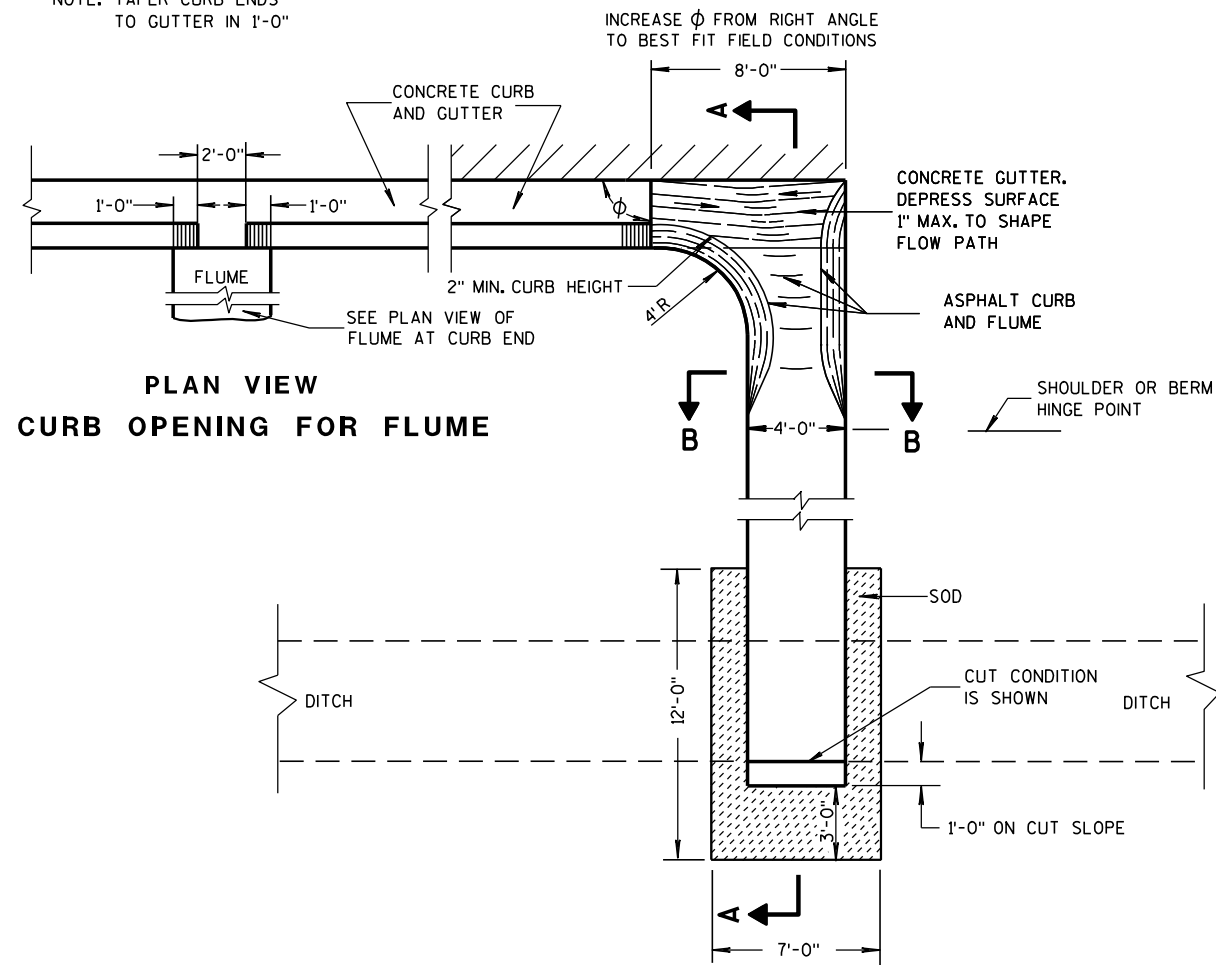


Standard Detail Drawing List

08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C03-02	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

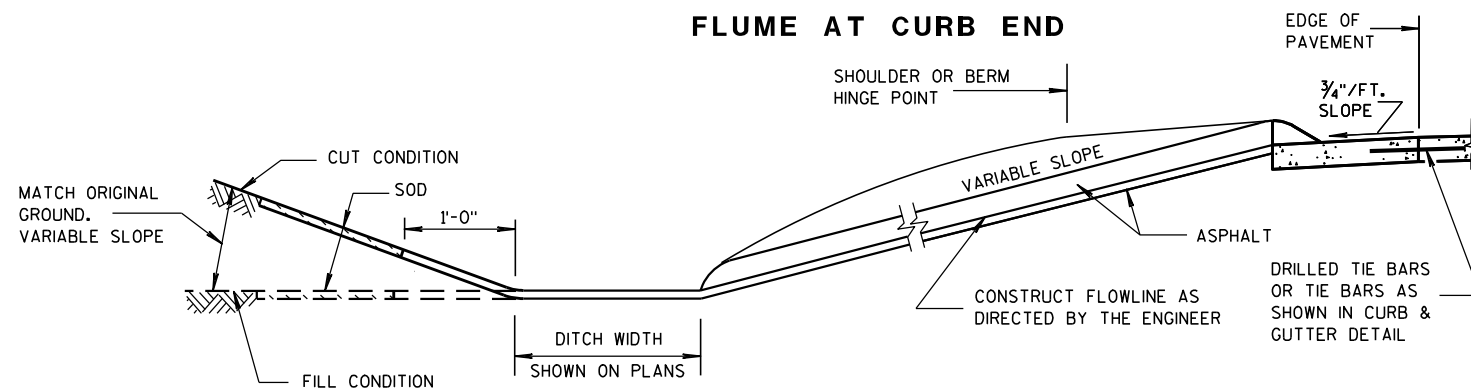
ASPHALTIC FLUME

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

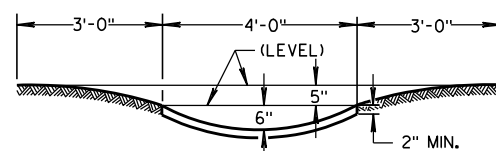


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

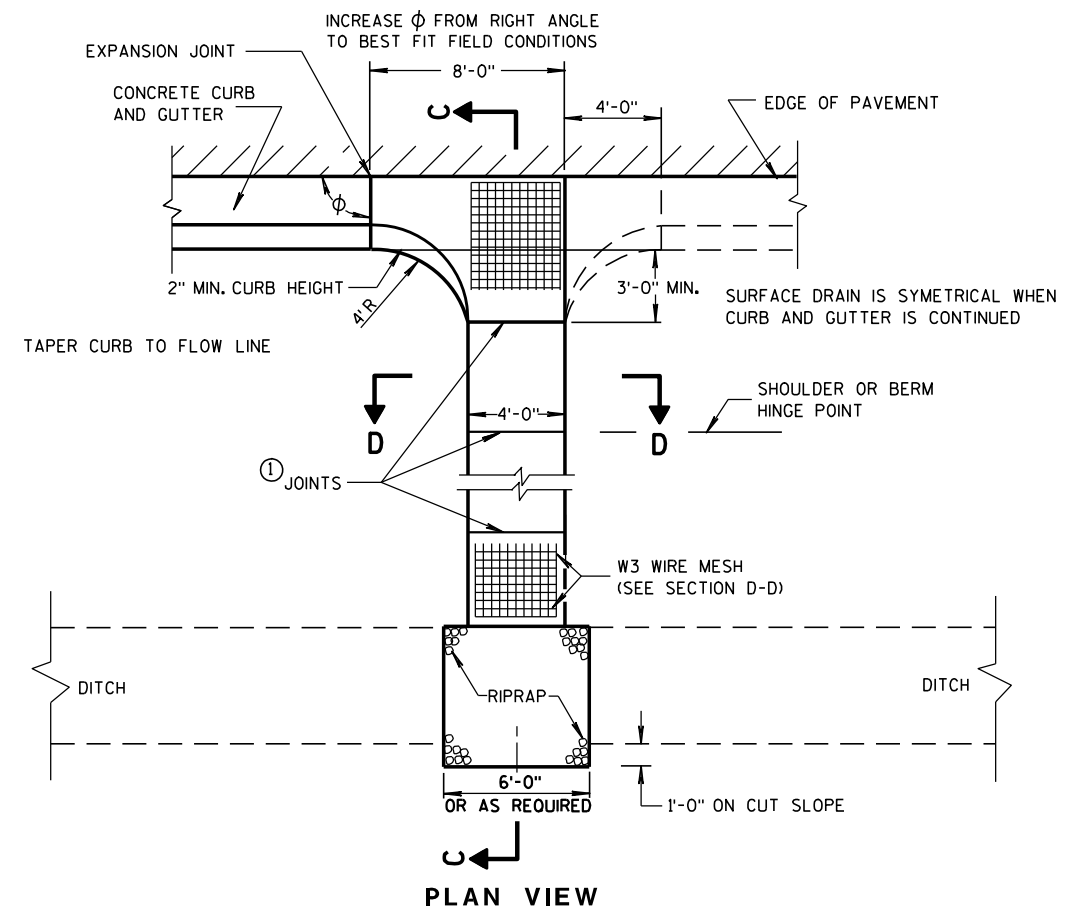
GENERAL NOTES

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

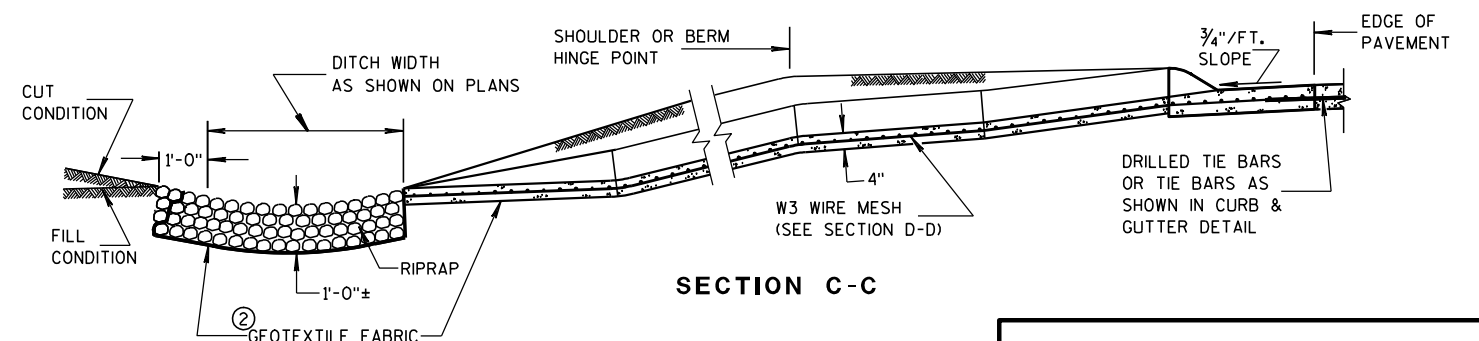
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

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

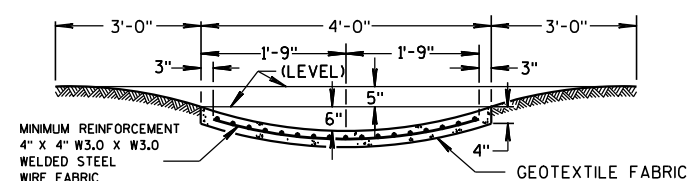
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

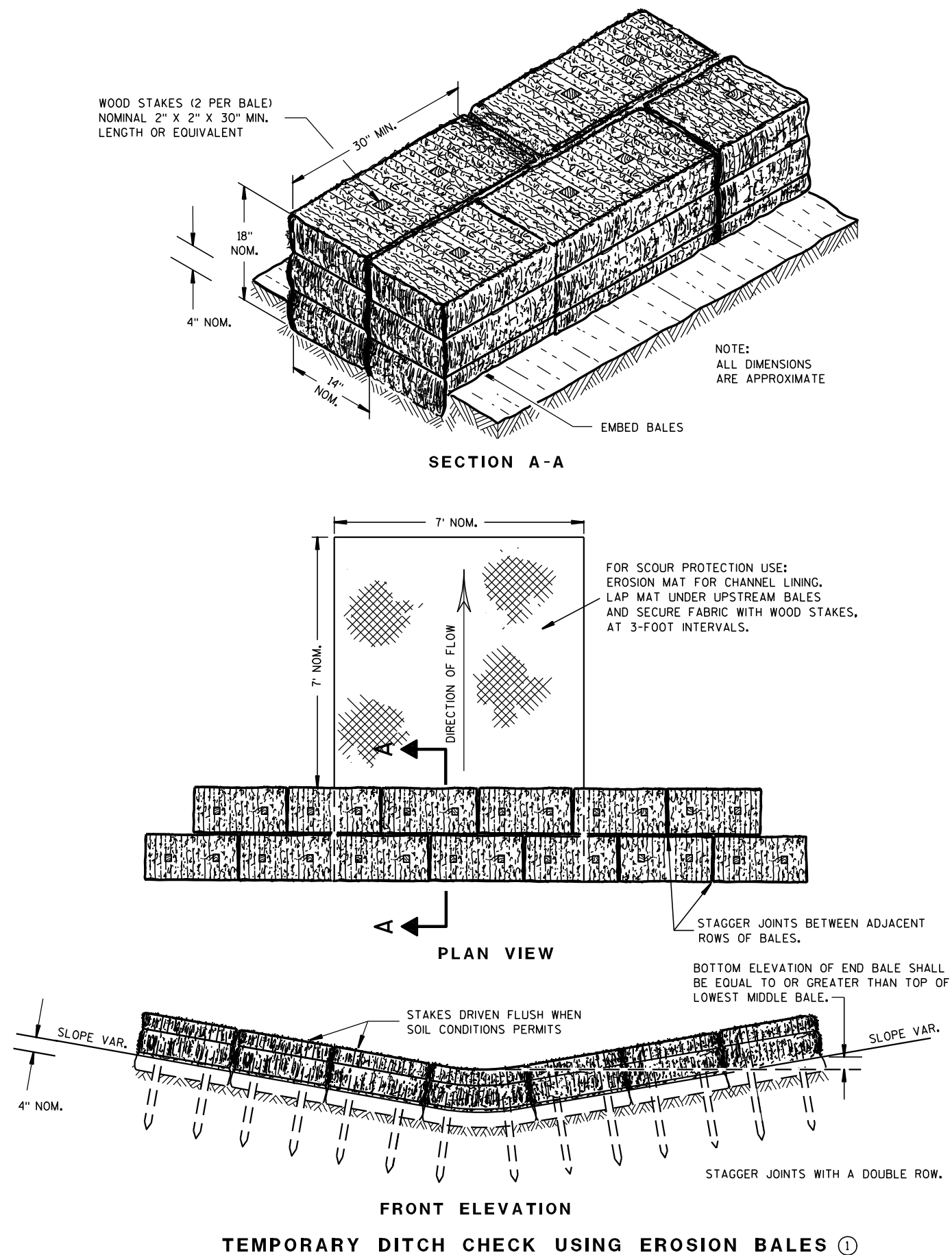
APPROVED

9-4-08

DATE

FHWA

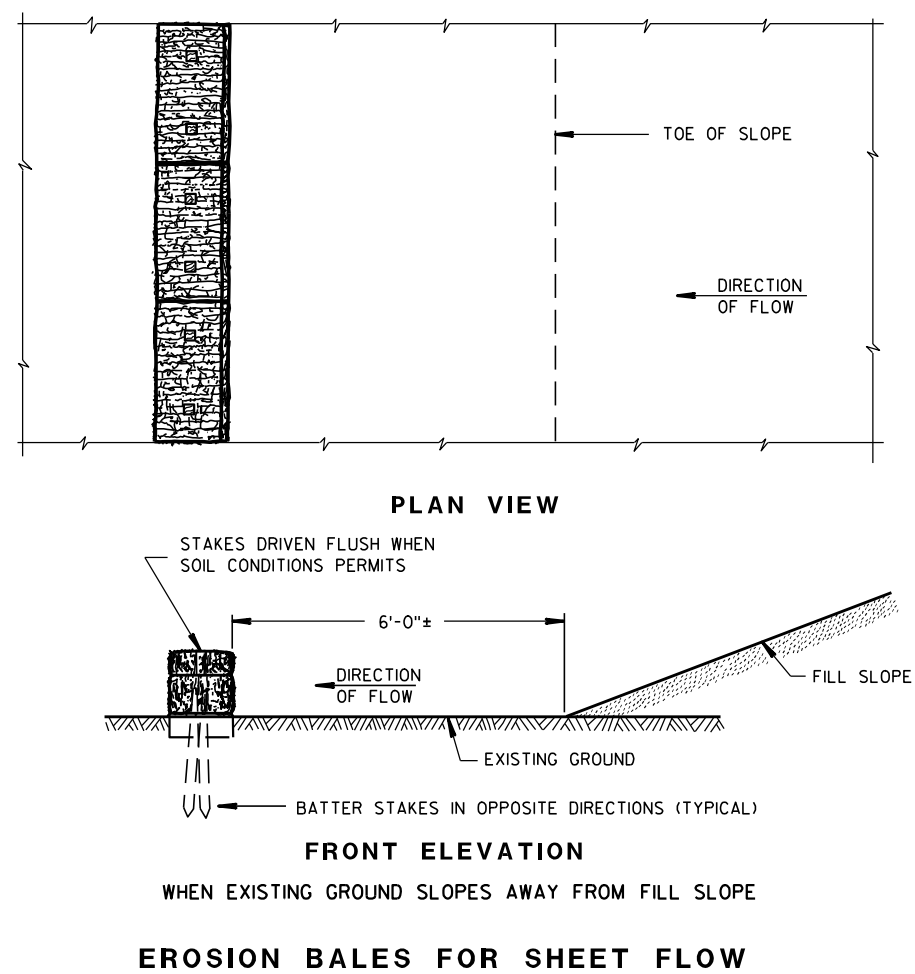
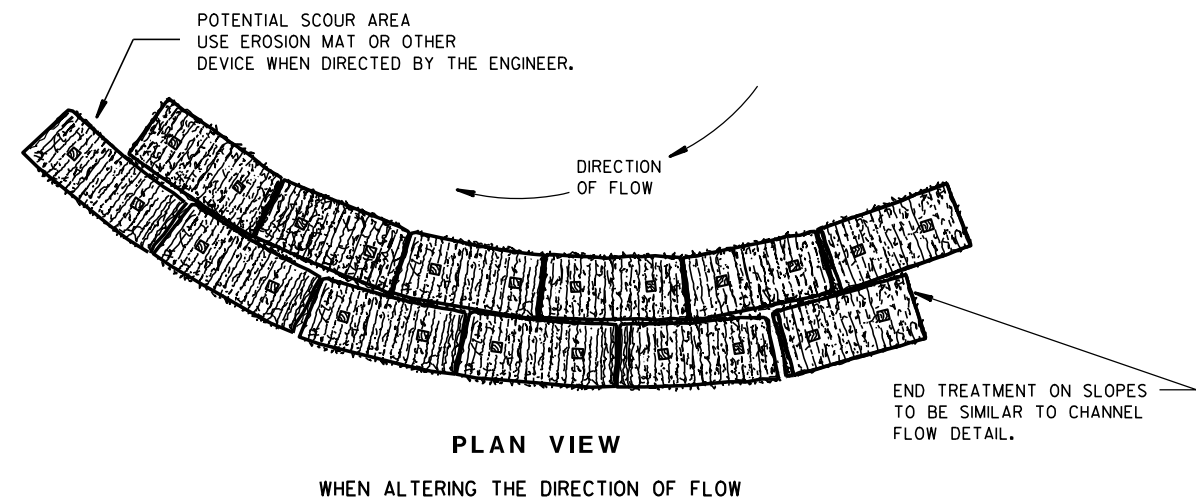
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



GENERAL NOTES

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

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

TYPICAL INSTALLATIONS OF
EROSION BALES / TEMPORARY
DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

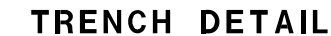
6/04/02
DATE

FHWA

/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER



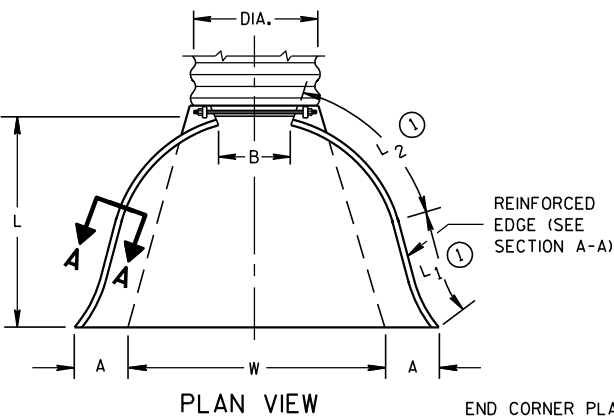
- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS 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> <u>DATE</u>	<u>/S/ Beth Canestra</u> CHIEF ROADWAY DEVELOPMENT ENGINEER

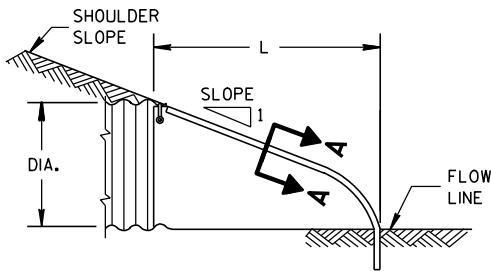
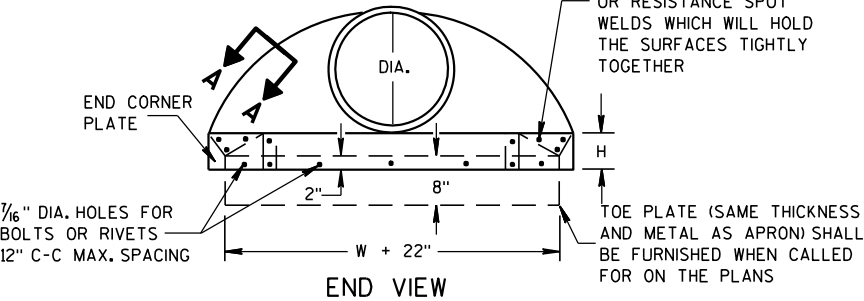
METAL APRON ENDWALLS											
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)						APPROX. SLOPE	BODY	
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L ₁ ①	L ₂ ①			W (±2")
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060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

* EXCEPT CENTER PANEL
SEE GENERAL NOTES



END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER

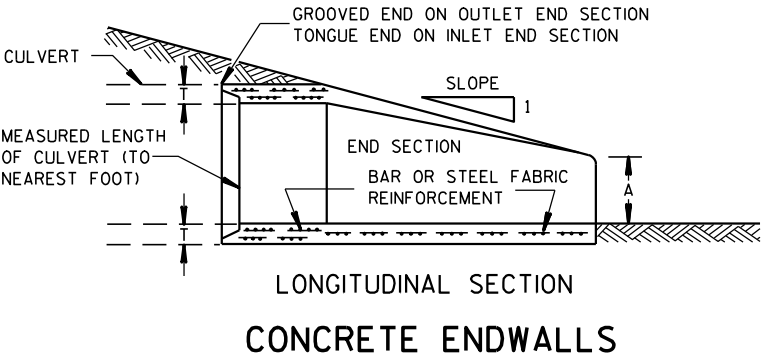
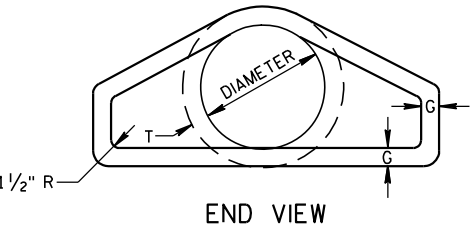
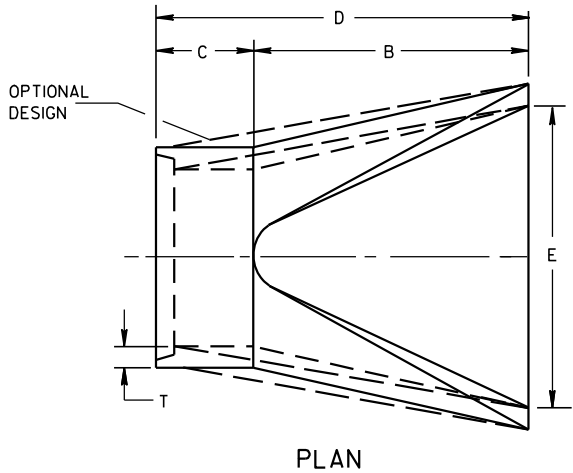
TOE PLATE (SAME THICKNESS AND METAL AS APRON) SHALL BE FURNISHED WHEN CALLED FOR ON THE PLANS



SIDE ELEVATION
METAL ENDWALLS

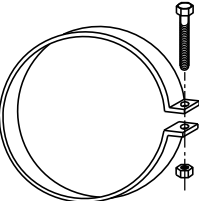
REINFORCED CONCRETE APRON ENDWALLS								
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE
	T	A	B	C	D	E	G	
12	2	4	24	48 ⁷ / ₈	72 ⁷ / ₈	24	2	3 to 1
15	2 ¹ / ₄	6	27	46	73	30	2 ¹ / ₄	3 to 1
18	2 ¹ / ₂	9	27	46	73	36	2 ¹ / ₂	3 to 1
21	2 ³ / ₄	9	36	37 ¹ / ₂	73 ¹ / ₂	42	2 ³ / ₄	3 to 1
24	3	9 ¹ / ₂	43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

* MINIMUM
** MAXIMUM

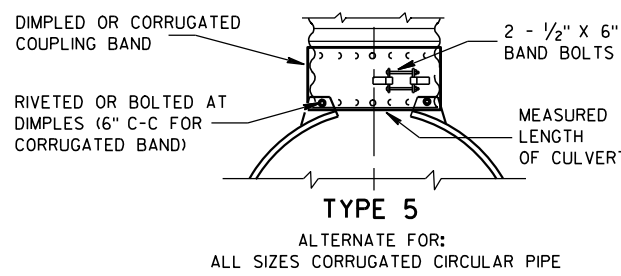
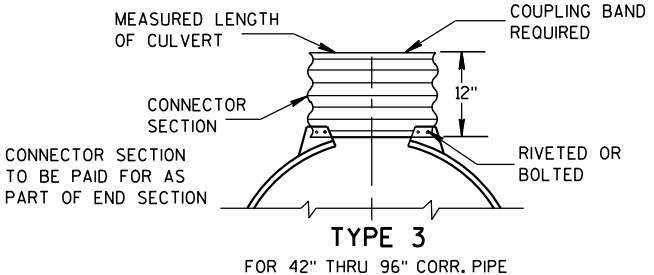
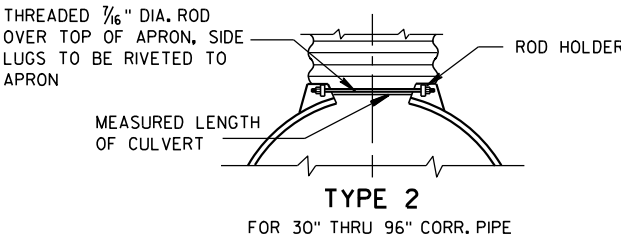
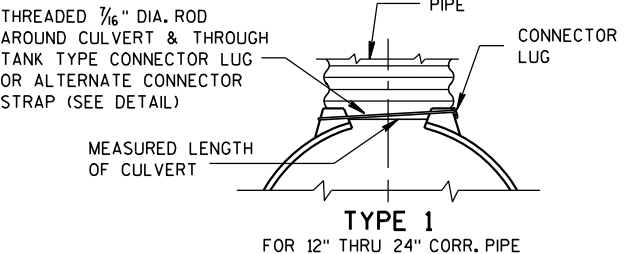


LONGITUDINAL SECTION
CONCRETE ENDWALLS

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



ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



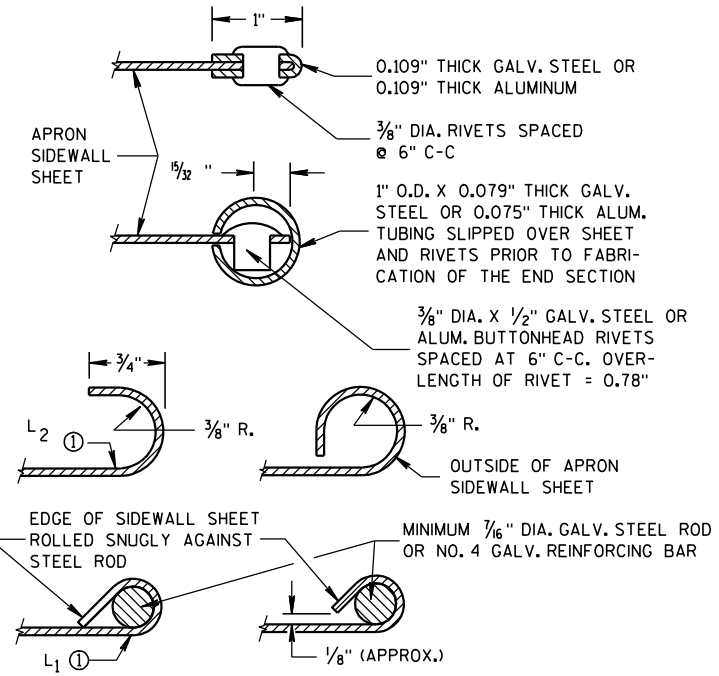
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

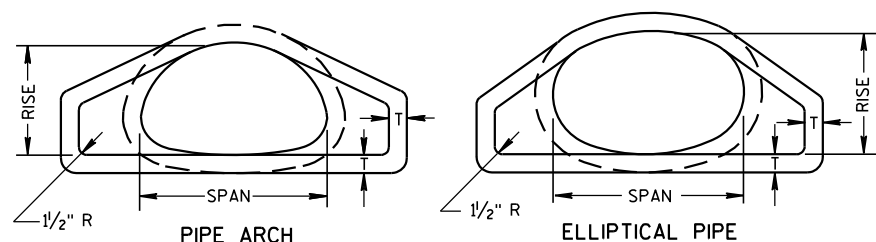
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

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

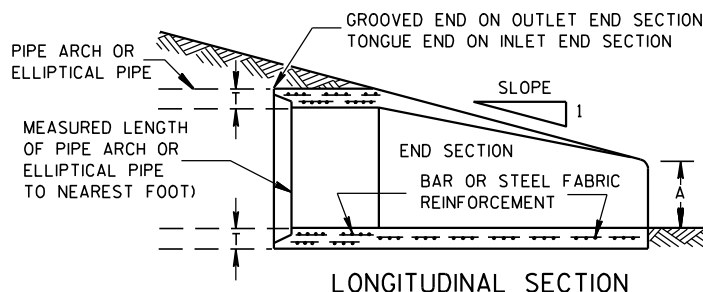
APRON ENDWALLS FOR
CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

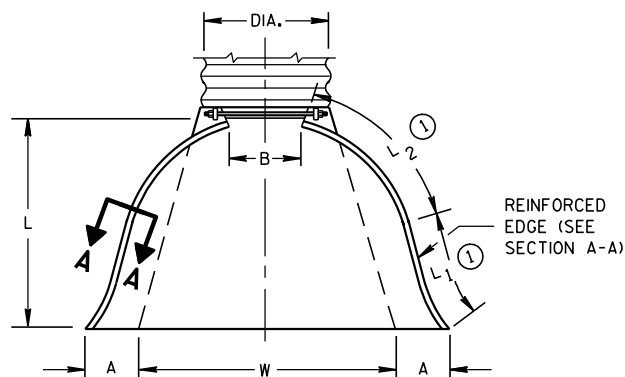


END VIEW



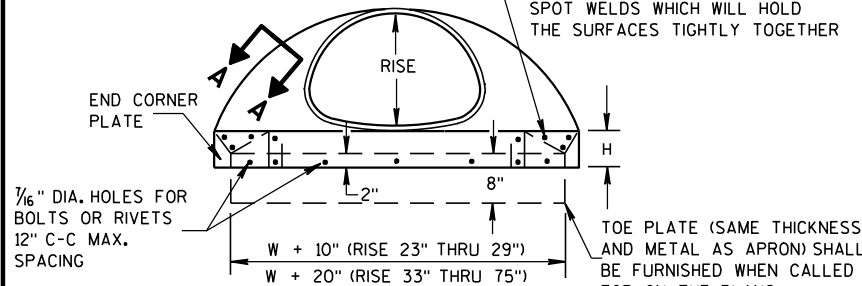
LONGITUDINAL SECTION

CONCRETE ENDWALLS

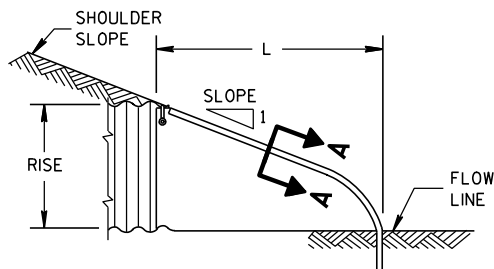


PLAN VIEW

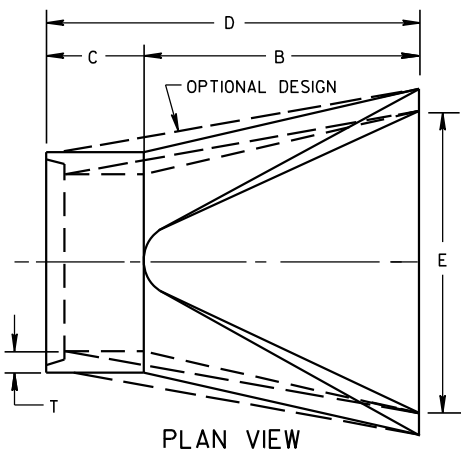
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER



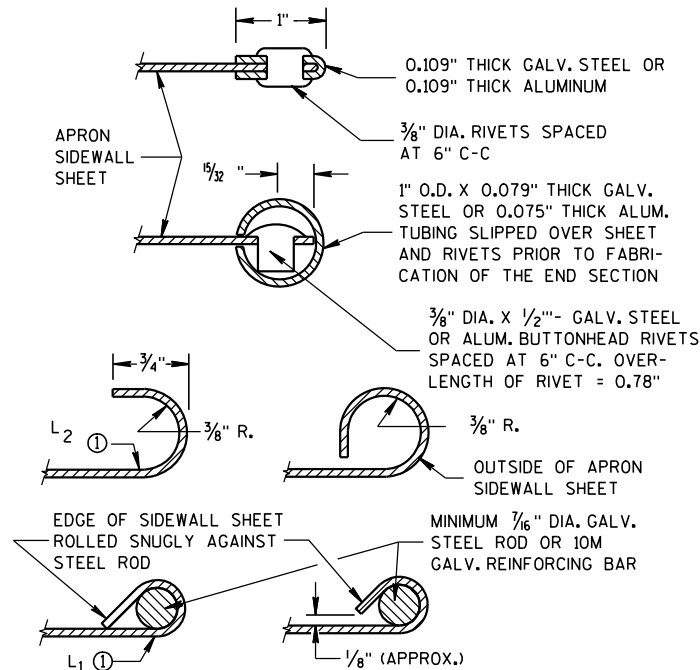
END VIEW



METAL ENDWALLS



PLAN VIEW



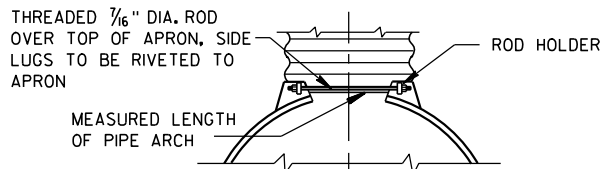
SECTION A-A

2- 2 2/3" X 1/2" CORRUGATIONS													
EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
					(±1")	(MAX.)	(±1")	(±1 1/2")	①	①	(±2")		
15	17	13	.064	.060	7	9	6	19	14	16	30	2 1/2 to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19 3/8	36	2 1/2 to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21 3/4	42	2 1/2 to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27 1/2	48	2 1/2 to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37 5/8	60	2 1/2 to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45 3/8	75	2 1/2 to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54 3/4	85	2 1/2 to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2 1/2 to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72 3/4	102	2 1/4 to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82 1/4	114	2 1/4 to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS													
EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
					(±1")	(MAX.)	(±1")	(±1 1/2")	①	①	(±2")		
48	53	41	.109	.105	18	26	12	63	24	72 3/4	90	2 1/2 to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82 1/4	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1 1/2 to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1 1/2 to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1 1/2 to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1 1/2 to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1 1/2 to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1 1/2 to 1	3 Pc.

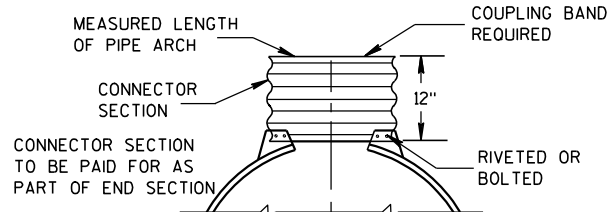
NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES



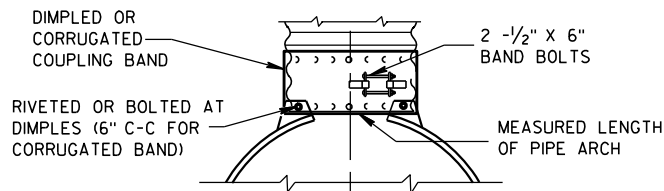
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:
ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches)								APPROX. SLOPE
	** SPAN	** RISE	T	A	B	C	D	E	
	(Inches)	(Inches)	(Inches)	(Inches)	(Inches)	(Inches)	(Inches)	(Inches)	
24	29	18	3	8 1/2	39	33	72	48	3 to 1
30	36	22	3 1/2	9 1/2	50	46	96	60	3 to 1
36	44	27	4	11 1/8	60	36	96	72	3 to 1
42	51	31	4 1/2	15 1/8	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5 1/2	25 1/2	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28 1/2	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

EQUIV. DIA. (Inches)	DIMENSIONS (Inches)								APPROX. SLOPE
	** SPAN	** RISE	T	A	B	C	D	E	
	(Inches)	(Inches)	(Inches)	(Inches)	(Inches)	(Inches)	(Inches)	(Inches)	
24	30	19	3 1/4	8 1/2	39	33	72	48	3 to 1
30	38	24	3 3/4	9 1/2	54	18	72	60	3 to 1
36	45	29	4 1/2	11 1/8	60	24	84	72	2 1/2 to 1
42	53	34	5	15 1/4	60	36	96	78	2 1/2 to 1
48	60	38	5 1/2	21	60	36	96	84	2 1/2 to 1
54	68	43	6	25 1/2	60	36	96	90	2 1/2 to 1
60	76	48	6 1/2	30	60	36	96	96	2 1/2 to 1

**NOMINAL SIZE

GENERAL NOTES

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

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

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

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

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR
PIPE ARCH AND
ELLIPTICAL PIPE

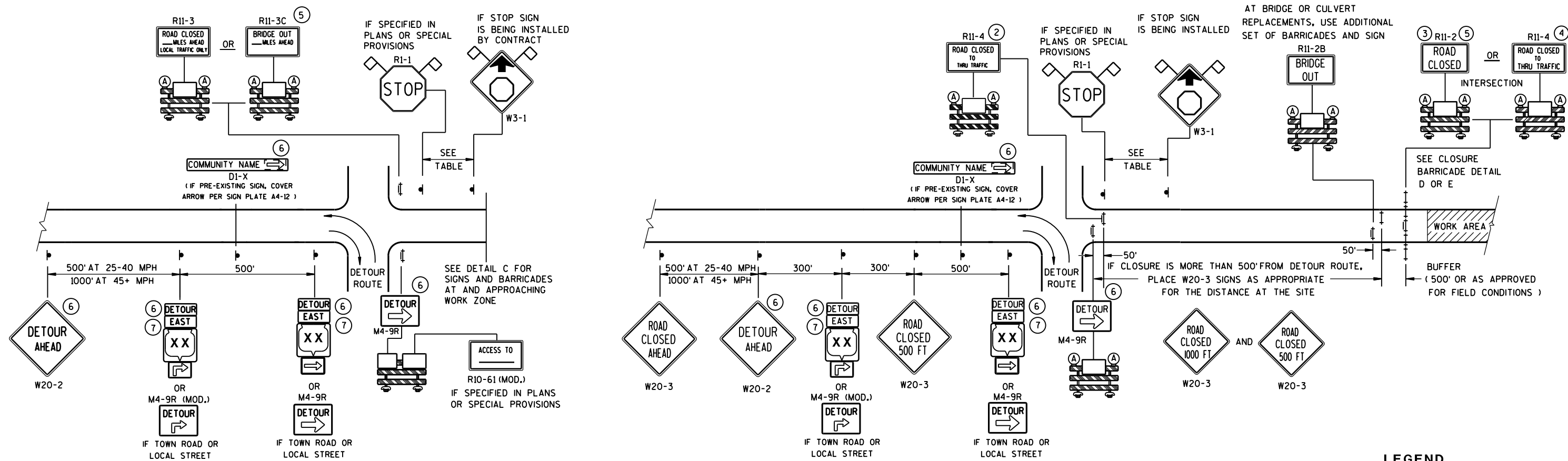
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94
DATE

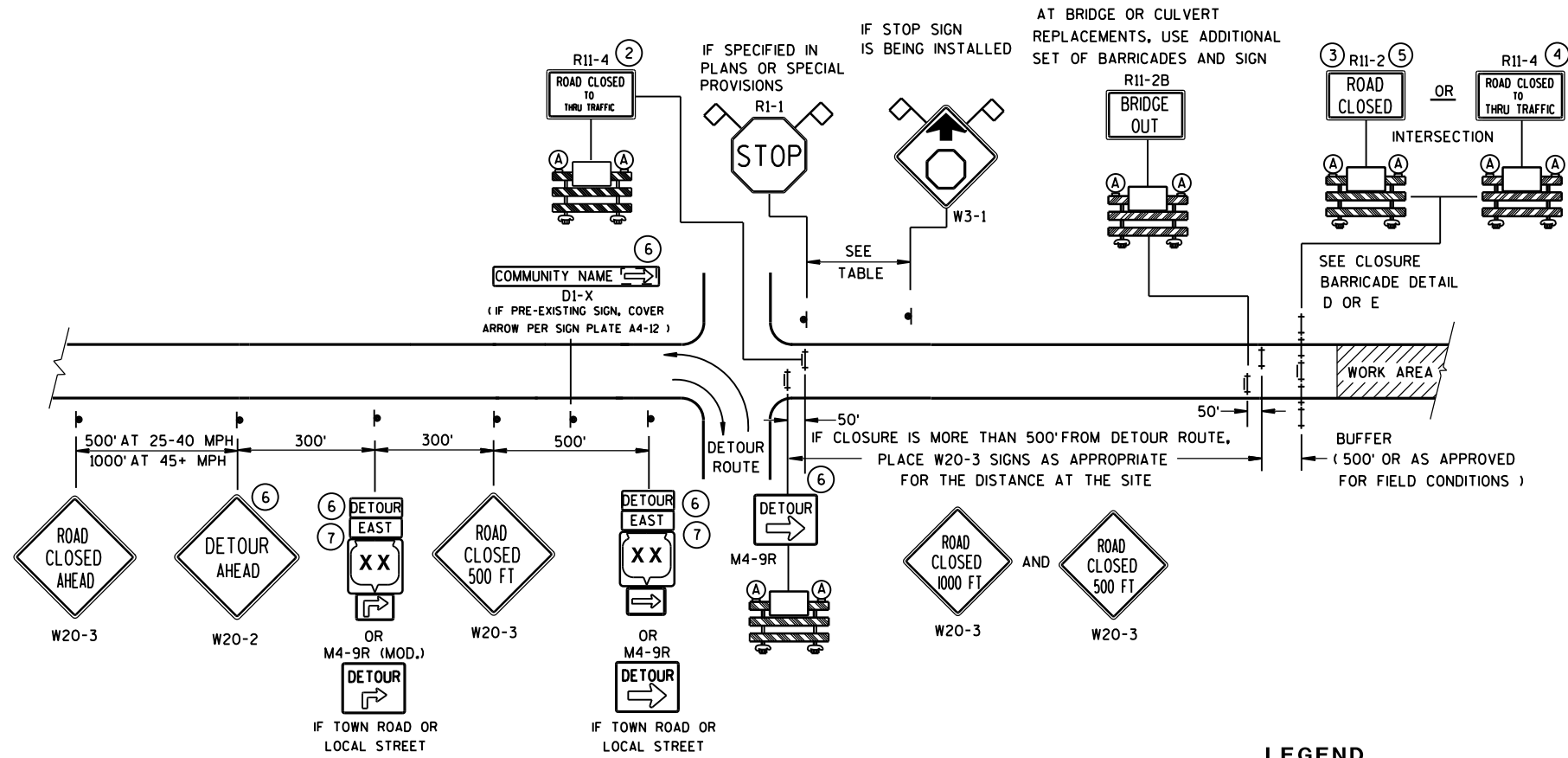
FHWA

/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER



DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

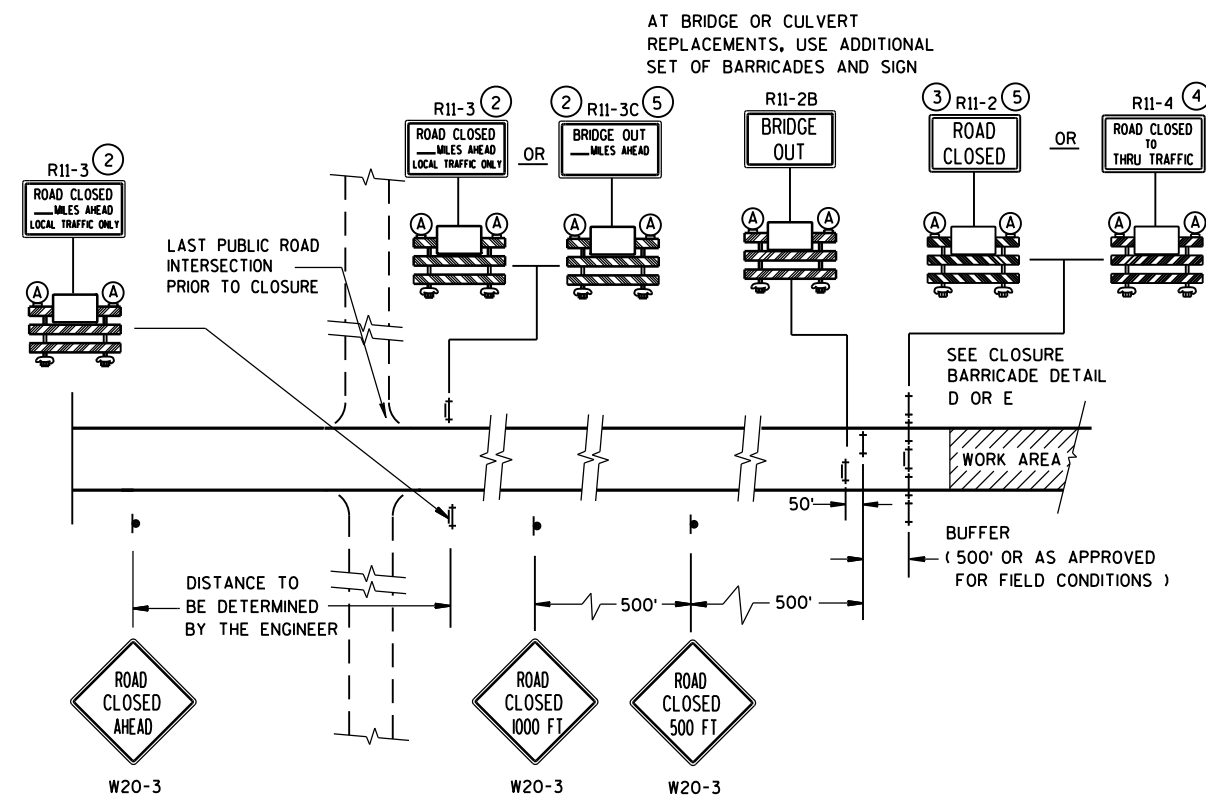
WORK ZONE GREATER THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B

MAINLINE CLOSURE WITH POSTED DETOUR

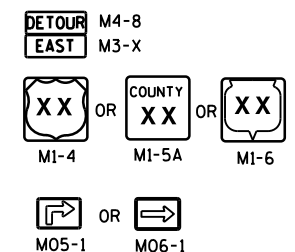
WORK ZONE LESS THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

LEGEND

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

 WORK AREA

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

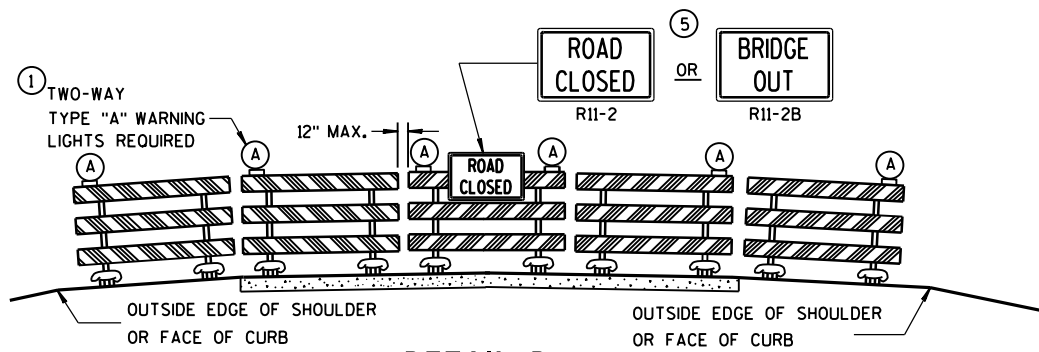
SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

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

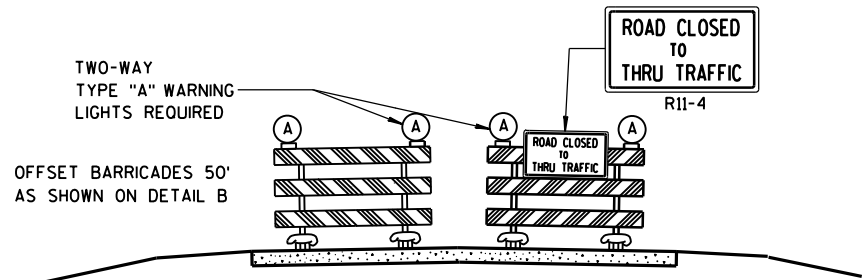
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2-SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

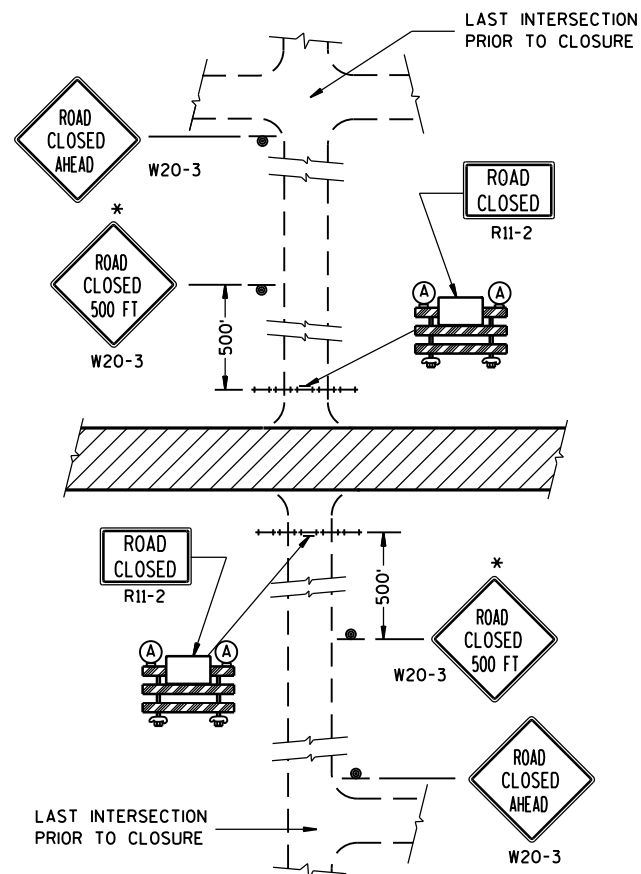
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

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

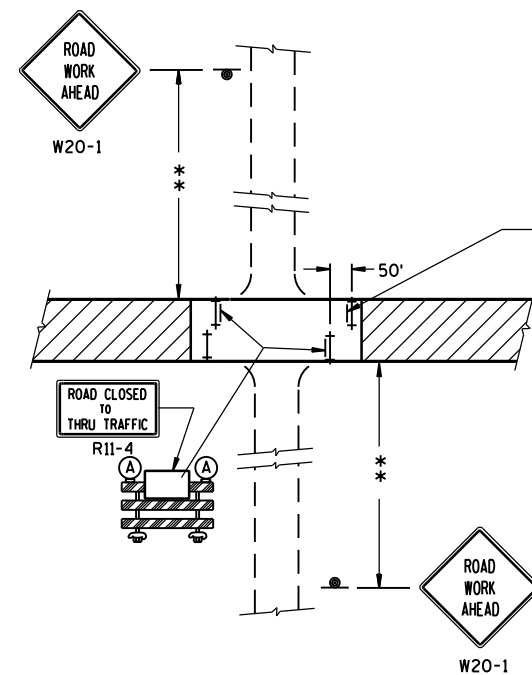
**BARRICADES AND SIGNS
FOR
MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

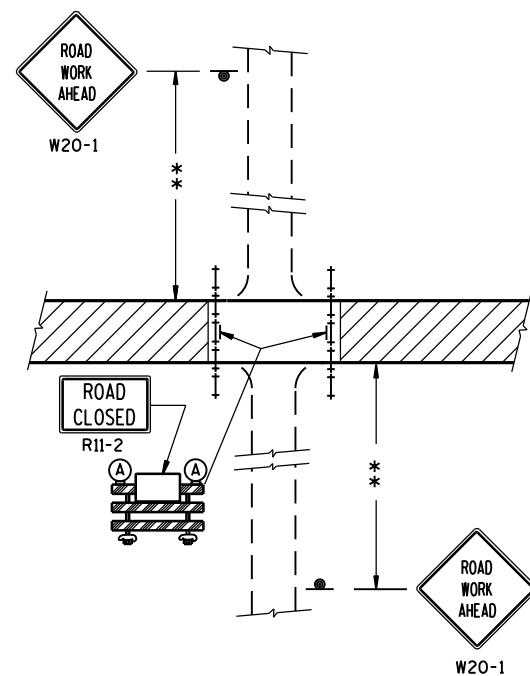
8/2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



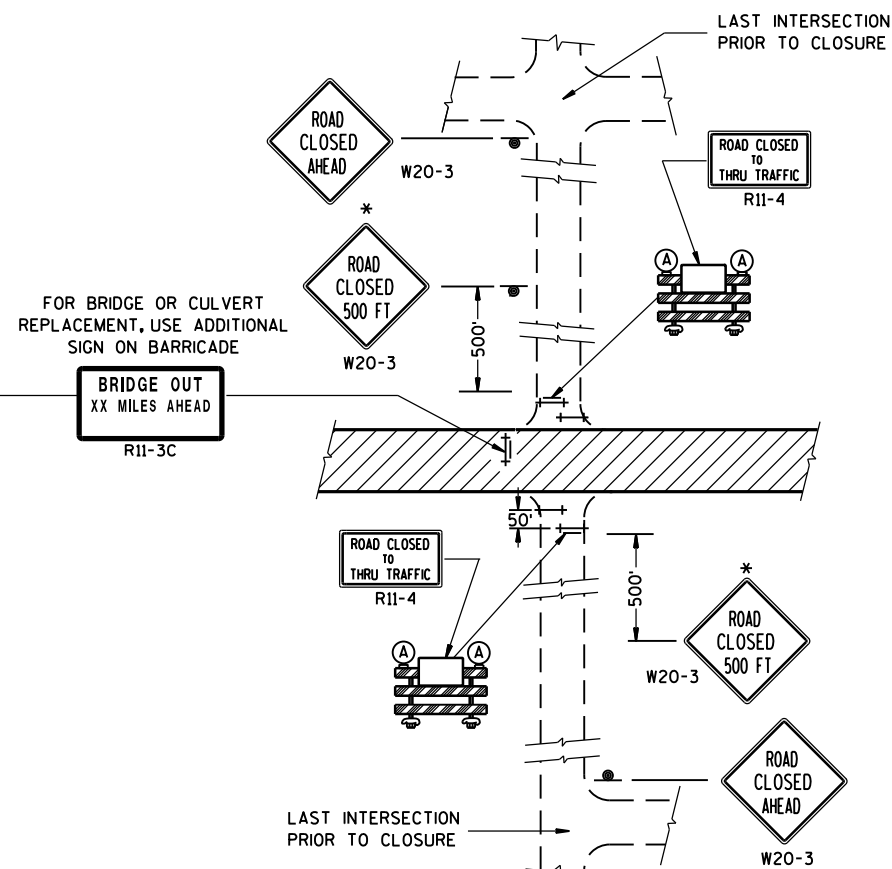
DETAIL 1
(NO ACCESS TO PROJECT)



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



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



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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

R11-2 SHALL BE 48" X 30".

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

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

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

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 /S/ Travis Feltes

DATE STATE TRAFFIC ENGINEER OF DESIGN

FHWA

EARTHWORK - CTH B

STATION	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
	Cut	Salvaged Pavement Material	Fill	Cut	Salvaged Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
	Note 1	Note 2	Note 3	Note 1	Note 2	Note 3	Note 1	Note 1	Note 8
20+50.00	38	22	1						
21+00.00	76	28	0	105	47	1	105	1	57
21+50.00	82	37	1	146	60	1	252	2	143
22+00.00	87	25	2	157	57	2	408	5	239
22+50.00	25	20	11	104	41	12	512	20	287
23+00.00	21	20	15	42	36	24	554	50	262
23+50.00	21	20	13	39	36	27	593	83	232
24+00.00	25	20	7	43	36	19	636	107	214
24+50.00	35	20	7	56	36	13	692	124	217
25+00.00	38	20	3	68	37	10	760	136	236
25+50.00	30	22	4	63	40	7	823	145	251
26+00.00	56	22	1	80	41	5	903	151	283
26+50.00	62	21	0	109	40	1	1,012	152	351
27+00.00	60	21	3	113	39	2	1,124	155	421
27+50.00	62	29	8	113	46	10	1,237	167	476
28+00.00	125	59	0	173	81	7	1,410	177	558
29+00.00	105	34	0						
29+50.00	99	20	7	188	51	6	1,598	185	687
30+00.00	95	19	3	179	36	9	1,777	196	819
30+25.00	80	19	12	81	17	7	1,858	205	874
30+50.00	73	19	9	71	17	10	1,929	217	916
31+00.00	69	19	2	131	35	11	2,061	231	999
31+50.00	64	19	3	123	35	5	2,184	237	1,081
32+00.00	50	19	8	106	35	10	2,290	249	1,140
32+25.00	50	19	15	46	17	11	2,336	263	1,155
32+50.00	56	19	14	49	17	14	2,385	280	1,170
33+00.00	56	19	19	103	35	31	2,488	318	1,200
33+50.00	61	19	20	108	35	36	2,596	363	1,228
34+00.00	65	19	18	117	35	35	2,713	407	1,267
35+00.00	77	19	17	263	69	64	2,976	487	1,380
36+00.00	75	19	10	282	69	50	3,258	549	1,530

1 - Cut	Cut includes Salvaged Pavement Material
2 - Salvaged Pavement Material	Milled Asphalt and Base Coarse
3 - Fill	Does not include Salvaged Pavement Material Volume
4 - Mass Ordinate	Cut - (Fill * Fill Factor) - Salvaged Pavement Material

EARTHWORK - CTH B (CONTINUED)

STATION	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
	Cut	Salvaged Pavement Material	Fill	Cut Note 1	Salvaged Pavement Material Note 2	Fill Note 3	Cut 1.00 Note 1	Expanded Fill 1.25	
37+00.00	79	19	15	286	69	46	3,544	607	1,689
38+00.00	59	19	18	256	69	60	3,800	682	1,801
39+00.00	51	19	19	204	69	67	4,004	765	1,852
40+00.00	51	19	21	189	69	74	4,193	857	1,879
41+00.00	41	19	23	171	69	82	4,364	959	1,879
42+00.00	30	19	28	131	69	94	4,495	1,077	1,823
43+00.00	28	19	30	107	69	108	4,602	1,212	1,726
44+00.00	20	19	30	90	69	112	4,692	1,352	1,606
45+00.00	8	19	42	53	69	135	4,745	1,521	1,421
46+00.00	4	19	55	22	69	181	4,767	1,747	1,147
47+00.00	9	19	43	22	69	182	4,789	1,974	873
48+00.00	10	19	43	34	69	159	4,823	2,173	639
49+00.00	20	19	37	56	69	148	4,880	2,357	442
50+00.00	22	19	36	78	69	135	4,958	2,525	282
51+00.00	11	19	38	61	69	137	5,019	2,696	103
52+00.00	18	19	41	53	69	145	5,072	2,878	-95
53+00.00	13	19	63	56	69	191	5,128	3,117	-348
54+00.00	7	19	75	37	69	254	5,165	3,435	-698
55+00.00	9	19	69	31	69	266	5,196	3,767	-1,069
56+00.00	19	19	130	53	69	369	5,249	4,229	-1,547
57+00.00	25	19	50	81	69	335	5,330	4,648	-1,954
58+00.00	24	19	38	91	69	164	5,421	4,853	-2,137
59+00.00	34	19	32	109	69	130	5,530	5,016	-2,260
60+00.00	37	19	28	131	69	110	5,661	5,153	-2,337
61+00.00	25	19	28	113	69	103	5,774	5,283	-2,422
62+00.00	34	19	22	109	69	93	5,883	5,398	-2,498
63+00.00	39	19	25	136	69	86	6,020	5,506	-2,539
64+00.00	38	19	27	142	69	95	6,162	5,626	-2,585
65+00.00	39	19	23	142	69	93	6,304	5,742	-2,629
66+00.00	40	19	22	145	69	84	6,449	5,848	-2,659

1 - Cut	Cut includes Salvaged Pavement Material
2 - Salvaged Pavement Material	Milled Asphalt and Base Coarse
3 - Fill	Does not include Salvaged Pavement Material Volume
4 - Mass Ordinate	Cut - (Fill * Fill Factor) - Salvaged Pavement Material

EARTHWORK - CTH B (CONTINUED)

STATION	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
	Cut	Salvaged Pavement Material	Fill	Cut Note 1	Salvaged Pavement Material Note 2	Fill Note 3	Cut 1.00 Note 1	Expanded Fill 1.25	
67+00.00	37	19	20	141	69	78	6,590	5,945	-2,685
68+00.00	40	19	25	143	69	83	6,733	6,049	-2,716
69+00.00	46	19	27	161	69	96	6,894	6,169	-2,744
70+00.00	37	19	21	155	69	88	7,049	6,279	-2,769
71+00.00	18	19	37	103	69	108	7,152	6,414	-2,870
72+00.00	29	19	32	88	69	128	7,240	6,574	-3,011
73+00.00	49	19	20	145	69	96	7,385	6,694	-3,055
74+00.00	51	19	25	185	69	84	7,570	6,799	-3,044
75+00.00	40	19	23	168	69	88	7,739	6,909	-3,056
76+00.00	30	19	42	130	69	120	7,868	7,059	-3,145
77+00.00	10	19	65	74	69	200	7,943	7,308	-3,390
78+00.00	11	19	88	39	69	285	7,982	7,665	-3,777
79+00.00	6	19	91	31	69	332	8,013	8,080	-4,230
80+00.00	2	19	81	16	69	318	8,029	8,477	-4,681
81+00.00	23	19	42	46	69	228	8,075	8,762	-4,989
81+25.00	24	19	34	22	17	35	8,096	8,806	-5,029
82+00.00	24	19	0	67	52	47	8,164	8,865	-5,073

TOTALS 8,164 4,371 7,092

1 - Cut	Cut includes Salvaged Pavement Material
2 - Salvaged Pavement Material	Milled Asphalt and Base Coarse
3 - Fill	Does not include Salvaged Pavement Material Volume
4 - Mass Ordinate	Cut - (Fill * Fill Factor) - Salvaged Pavement Material

EARTHWORK - CTH A

STATION	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
	Cut	Salvaged Pavement Material	Fill	Cut Note 1	Salvaged Pavement Material Note 2	Fill Note 3	Cut 1.00 Note 1	Expanded Fill 1.25	
505+50.00	24	19	0						
506+00.00	63	20	0	81	37	0	81	0	44
506+50.00	73	29	4	127	46	4	207	5	120
507+00.00	77	37	0	139	61	4	346	10	193
507+50.00	81	37	0	146	68	0	492	10	271
508+00.00	81	37	0	151	68	0	643	10	354
508+50.00	88	37	0	157	69	0	800	10	442
509+00.00	105	40	0	179	72	0	979	11	548
509+50.00	125	52	0	213	85	0	1,191	11	676
510+00.00	229	93	0	328	134	0	1,520	11	870
510+50.00	227	75	0	422	156	0	1,942	11	1,136
511+00.00	116	22	3	317	90	3	2,259	14	1,360
511+50.00	95	20	0	195	39	3	2,454	18	1,512
512+00.00	61	20	0	145	38	0	2,600	18	1,619
512+50.00	25	20	0	80	38	0	2,679	18	1,661
TOTALS				2,679	1,000	14			

EARTHWORK - CUTOFF ROAD

STATION	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
	Cut	Salvaged Pavement Material	Fill	Cut Note 1	Salvaged Pavement Material Note 2	Fill Note 3	Cut 1.00 Note 1	Expanded Fill 1.25	
420+50.00	57	15	0						
421+00.00	45	12	3	94	25	3	94	3	66
421+50.00	42	11	0	81	21	3	175	6	122
422+00.00	41	11	1	77	21	1	252	7	177
422+25.00	23	11	0	29	10	0	281	8	196
TOTALS				281	77	6			

1 - Cut	Cut includes Salvaged Pavement Material
2 - Salvaged Pavement Material	Milled Asphalt and Base Coarse
3 - Fill	Does not include Salvaged Pavement Material Volume
4 - Mass Ordinate	Cut - (Fill * Fill Factor) - Salvaged Pavement Material

EARTHWORK - CHURCH ROAD

STATION	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate Note 8
	Cut	Salvaged Pavement Material	Fill	Cut	Salvaged Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
	Note 1	Note 2	Note 3	Note 1	Note 2	Note 3	Note 1	Note 1	
450+50.00	77	0	25						
451+00.00	133	14	16	194	13	38	194	48	133
451+50.00	180	11	24	289	23	36	483	93	354
452+00.00	126	11	28	283	20	48	766	153	556
452+50.00	68	11	13	179	20	38	945	201	667
453+00.00	40	11	3	99	20	15	1,044	219	727
453+50.00	36	11	2	70	20	4	1,115	225	772
454+00.00	18	11	3	50	20	5	1,165	231	796
454+50.00	33	11	3	48	20	5	1,213	238	816
455+00.00	23	11	0	52	20	2	1,265	241	845

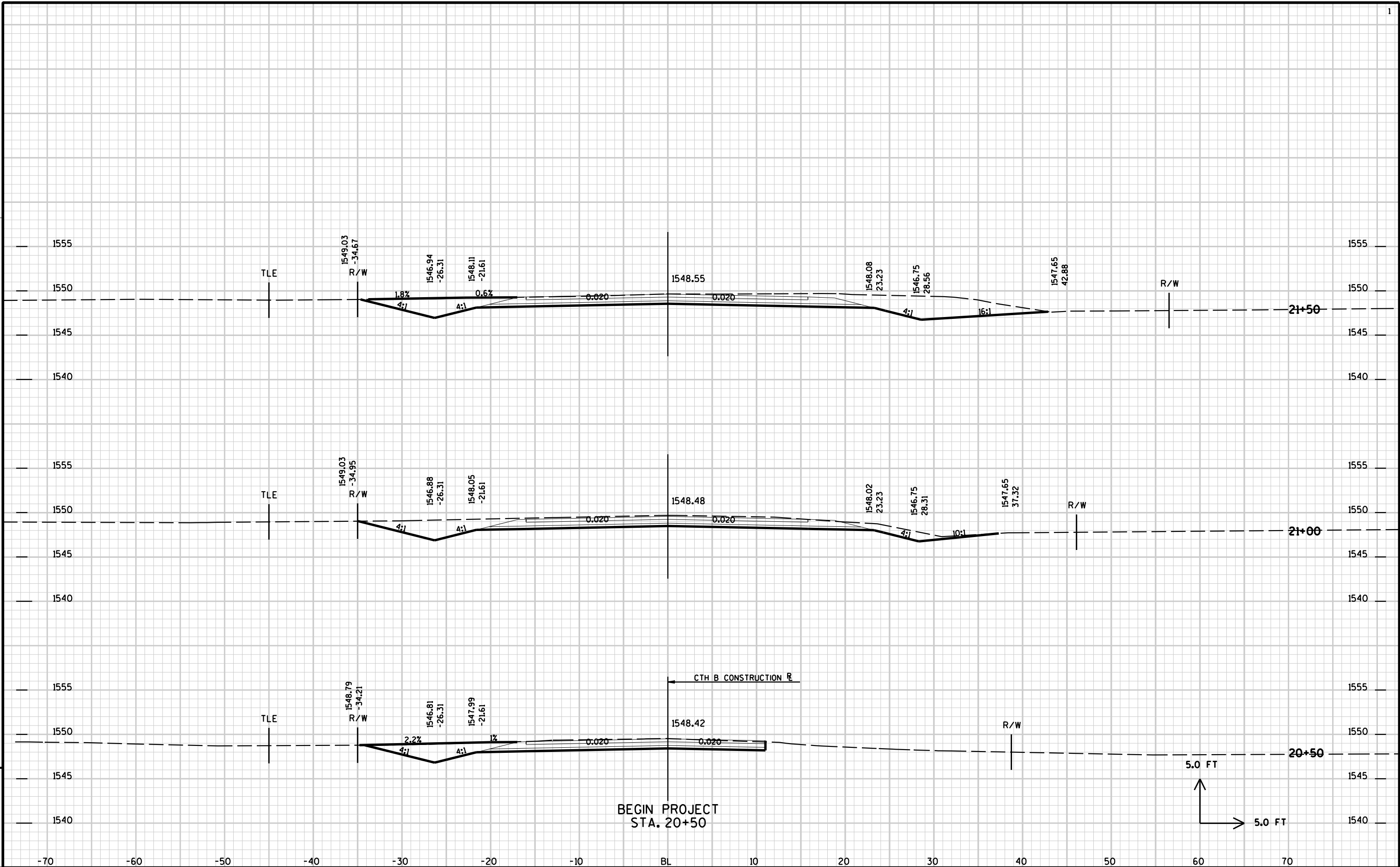
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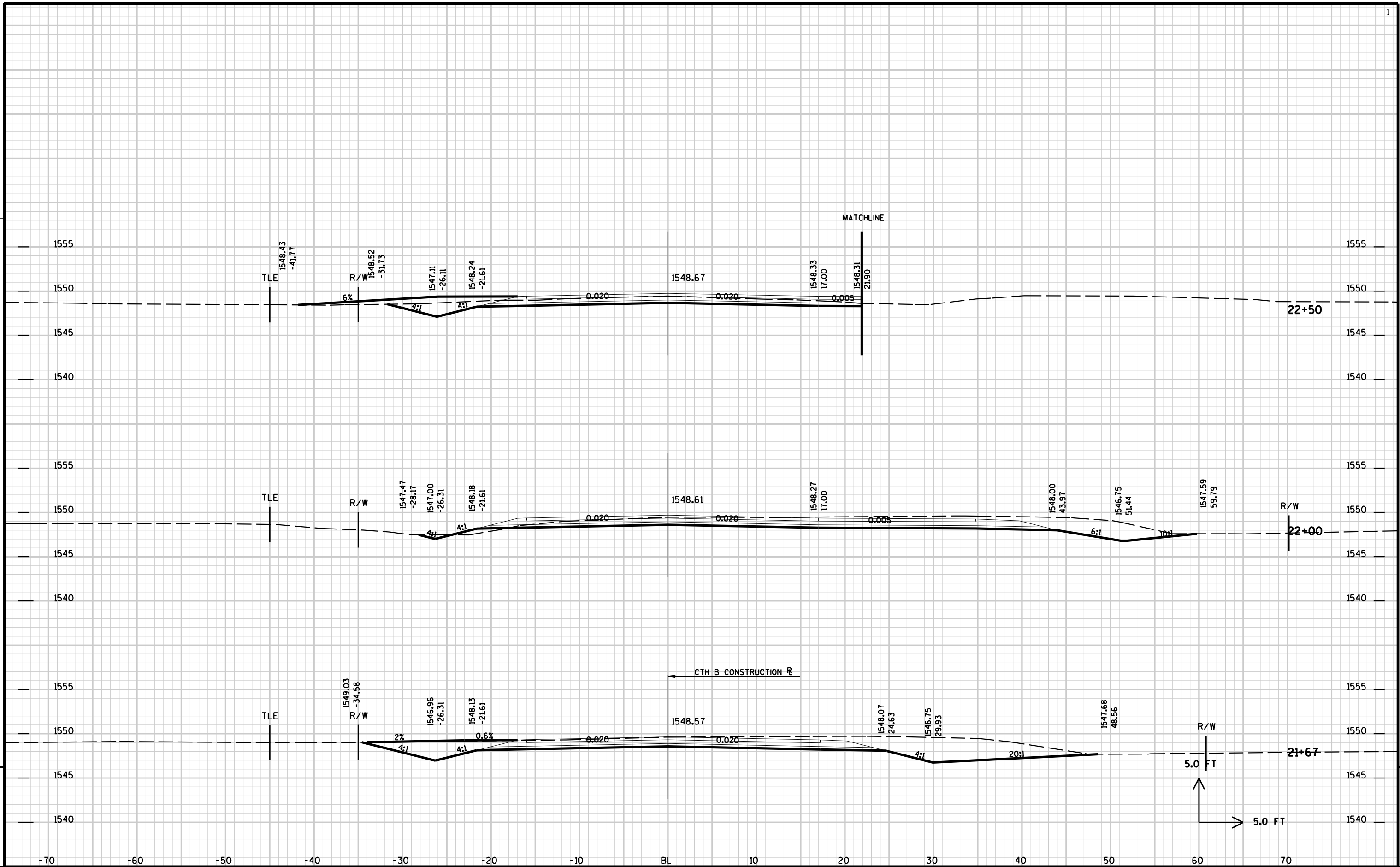
EARTHWORK - DRAINAGE DITCH

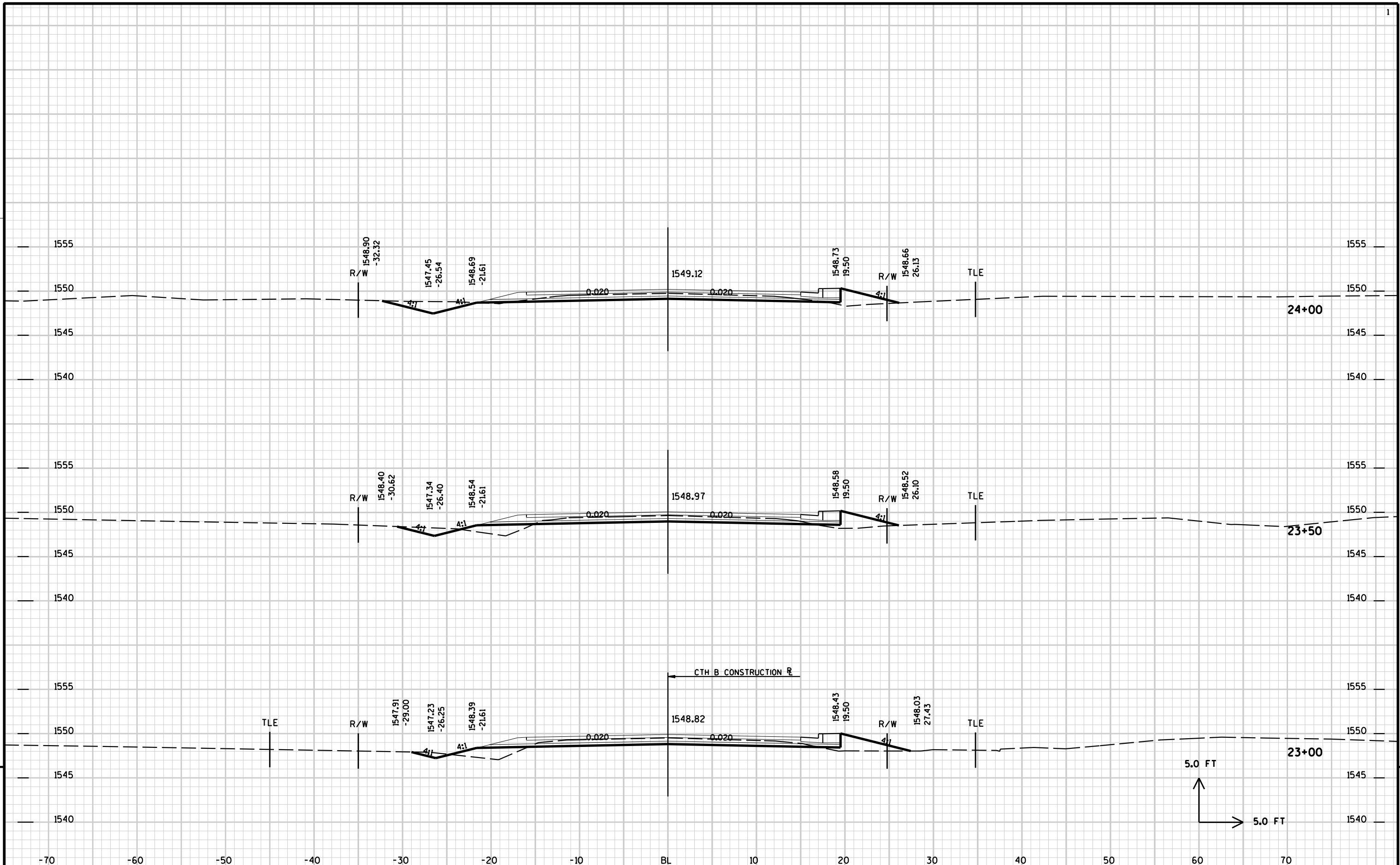
STATION	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate Note 8
	Cut	Salvaged Pavement Material	Fill	Cut	Salvaged Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
	Note 1	Note 2	Note 3	Note 1	Note 2	Note 3	Note 1	Note 1	
695+00.00	0	0	0						
695+50.00	0	0	0	0	0	0	0	0	0
696+00.00	4	0	0	4	0	0	4	0	4
696+50.00	2	0	0	6	0	0	10	0	10
697+00.00	6	0	0	7	0	0	17	0	17
697+50.00	23	0	0	26	0	0	43	0	43
698+00.00	22	0	0	41	0	0	84	0	84
698+50.00	18	0	0	37	0	0	121	0	121
699+00.00	19	0	0	35	0	0	156	0	156
699+50.00	28	0	0	43	0	0	199	0	199
699+62.25	23	0	0	11	0	0	211	0	211

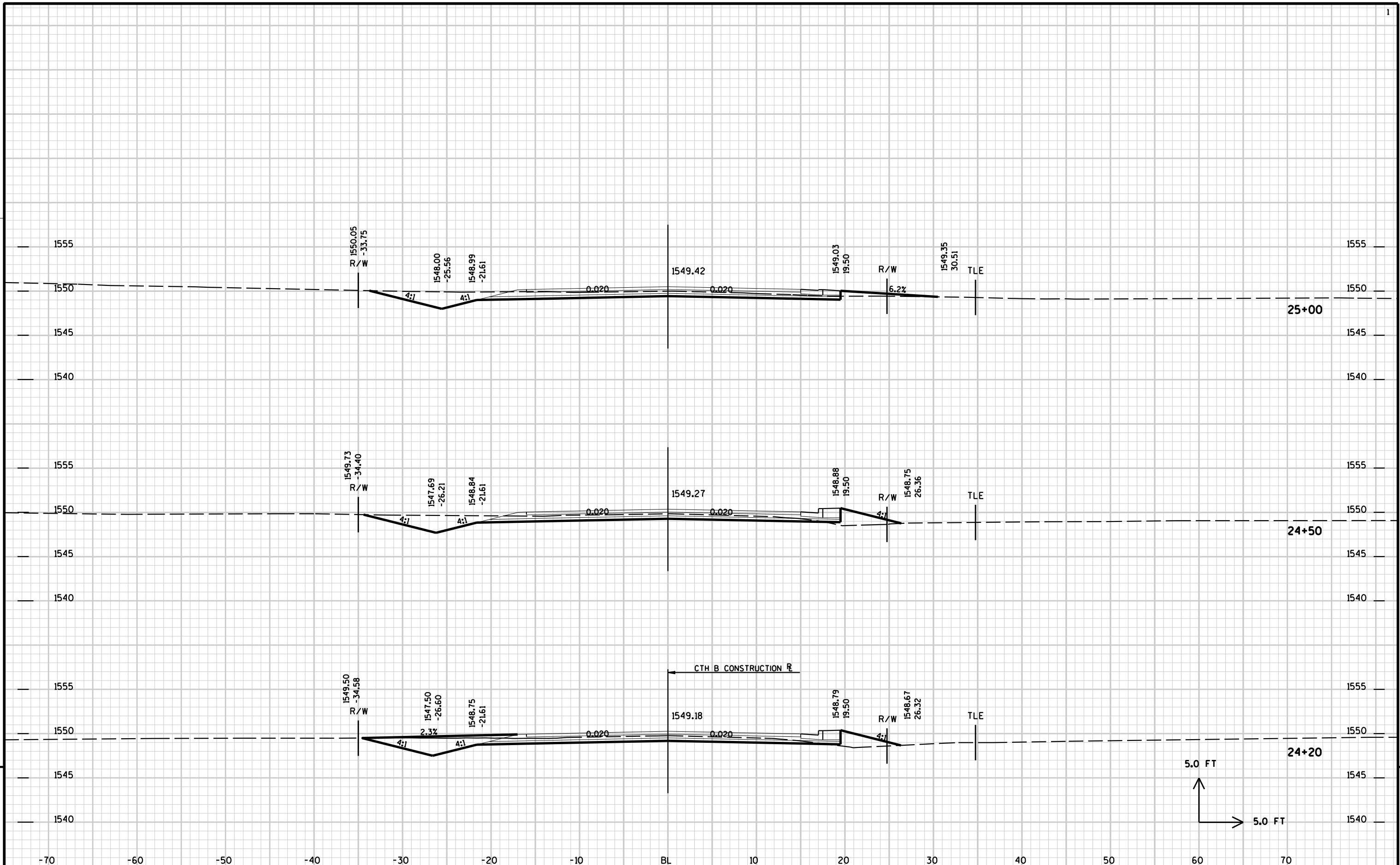
TOTALS21100

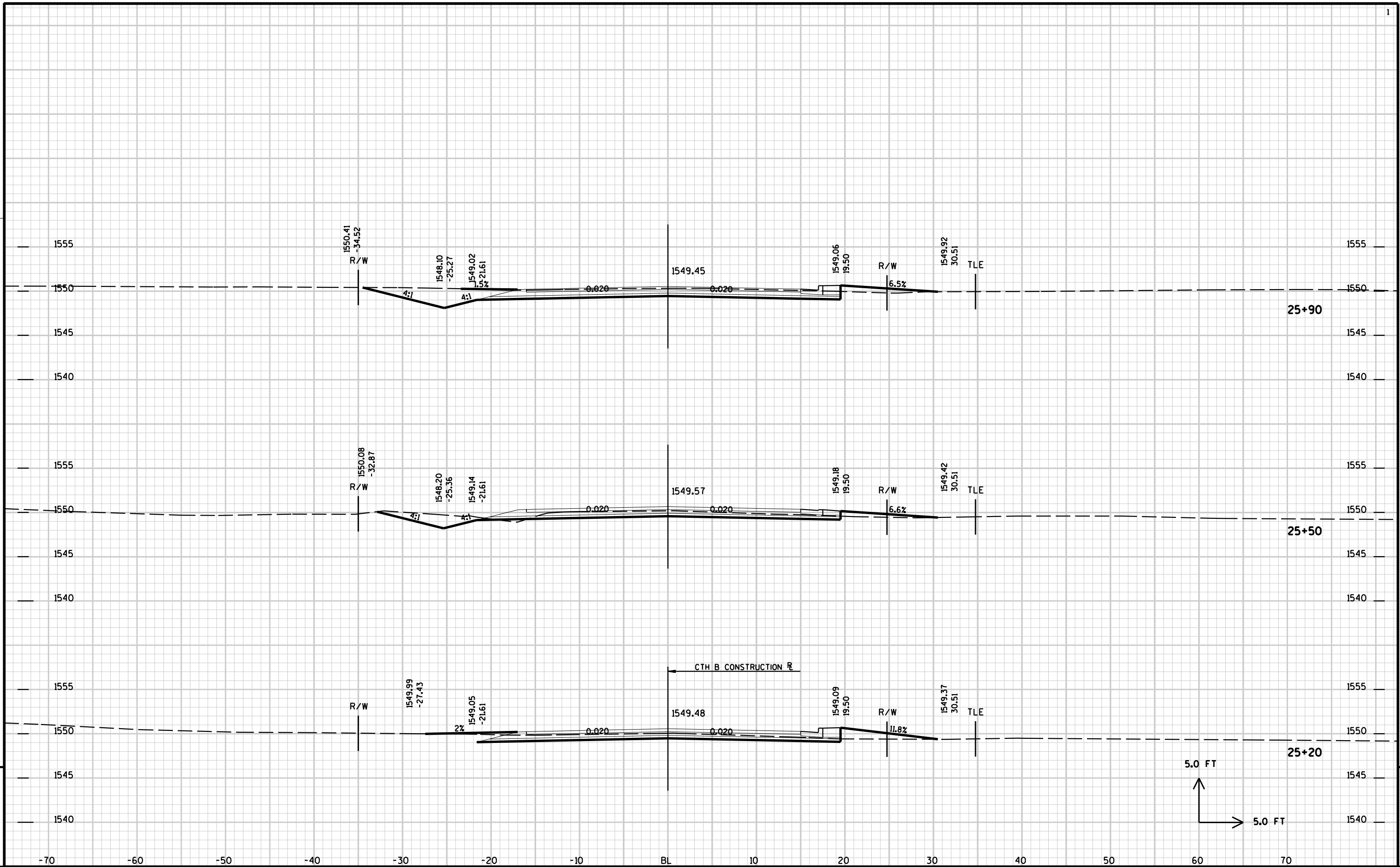
1 - Cut	Cut includes Salvaged Pavement Material
2 - Salvaged Pavement Material	Milled Asphalt and Base Coarse
3 - Fill	Does not include Salvaged Pavement Material Volume
4 - Mass Ordinate	Cut - (Fill * Fill Factor) - Salvaged Pavement Material

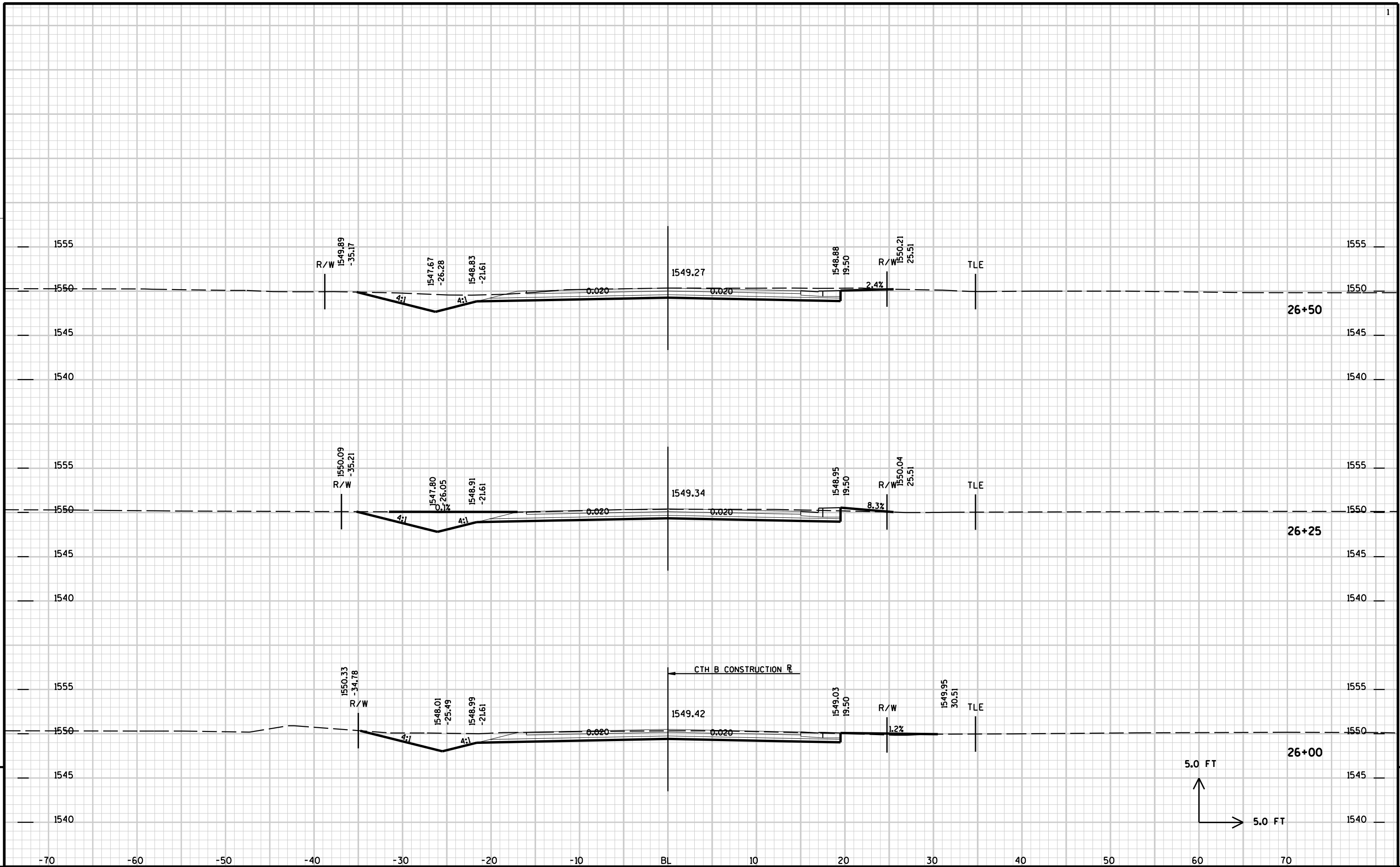






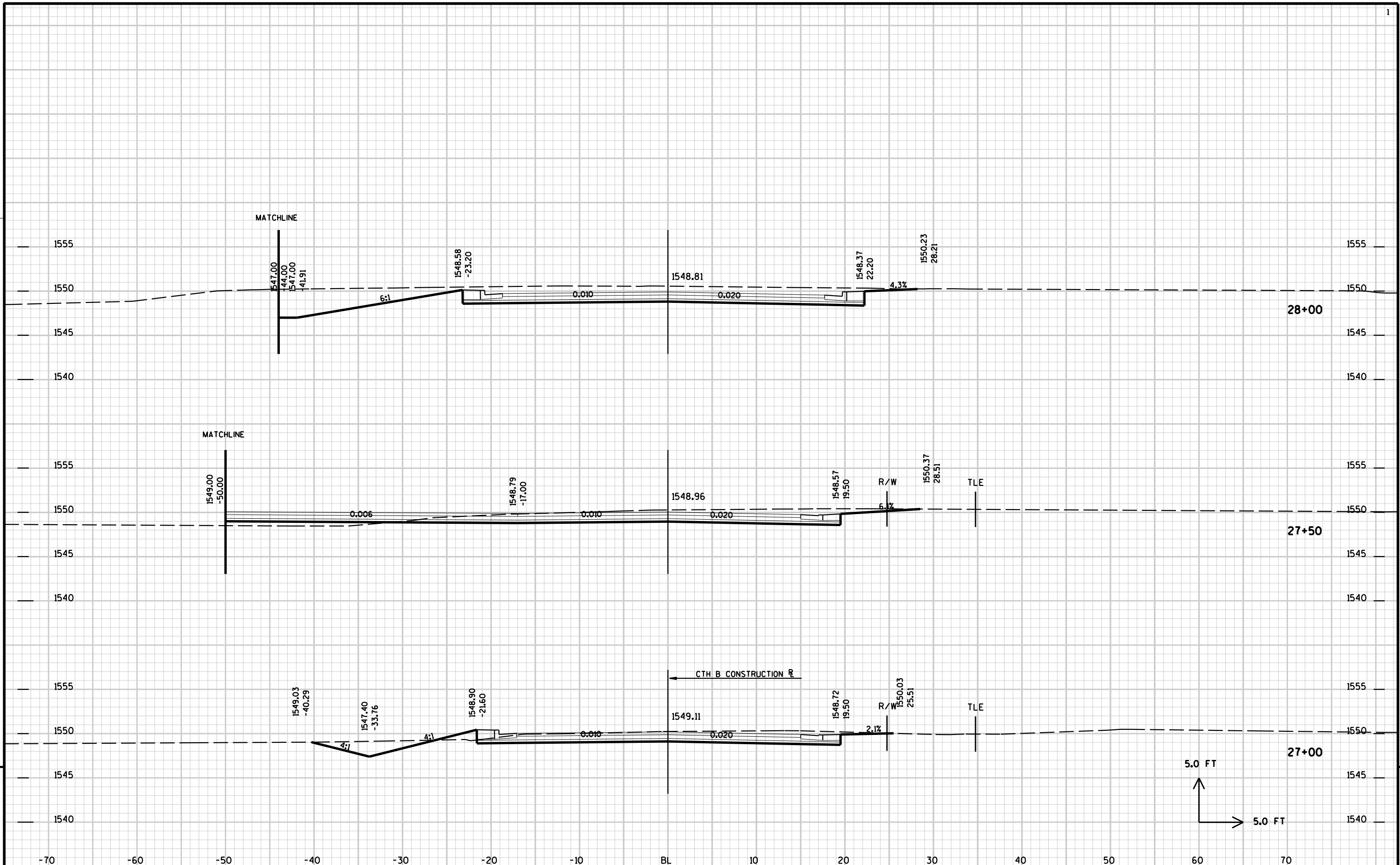


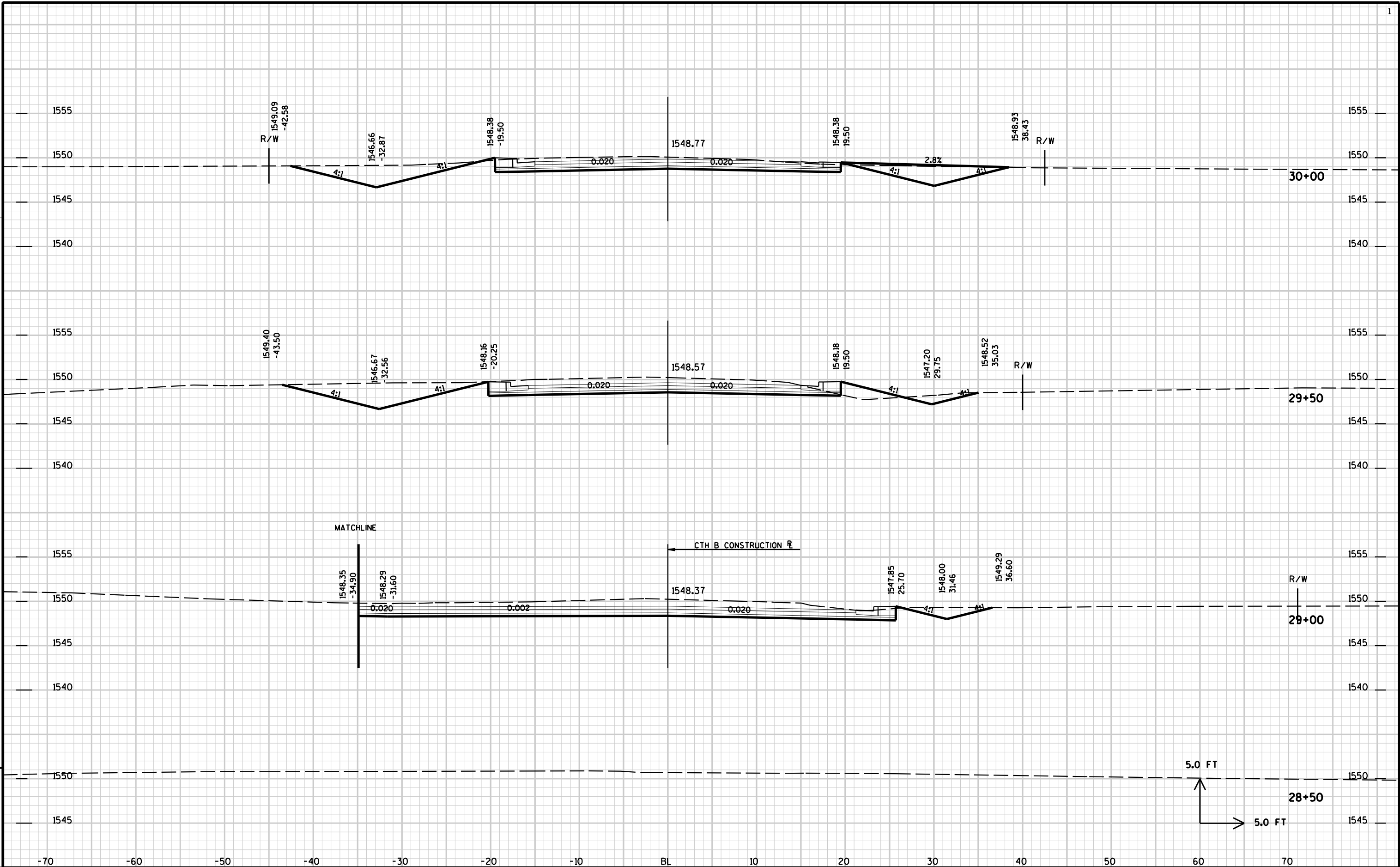


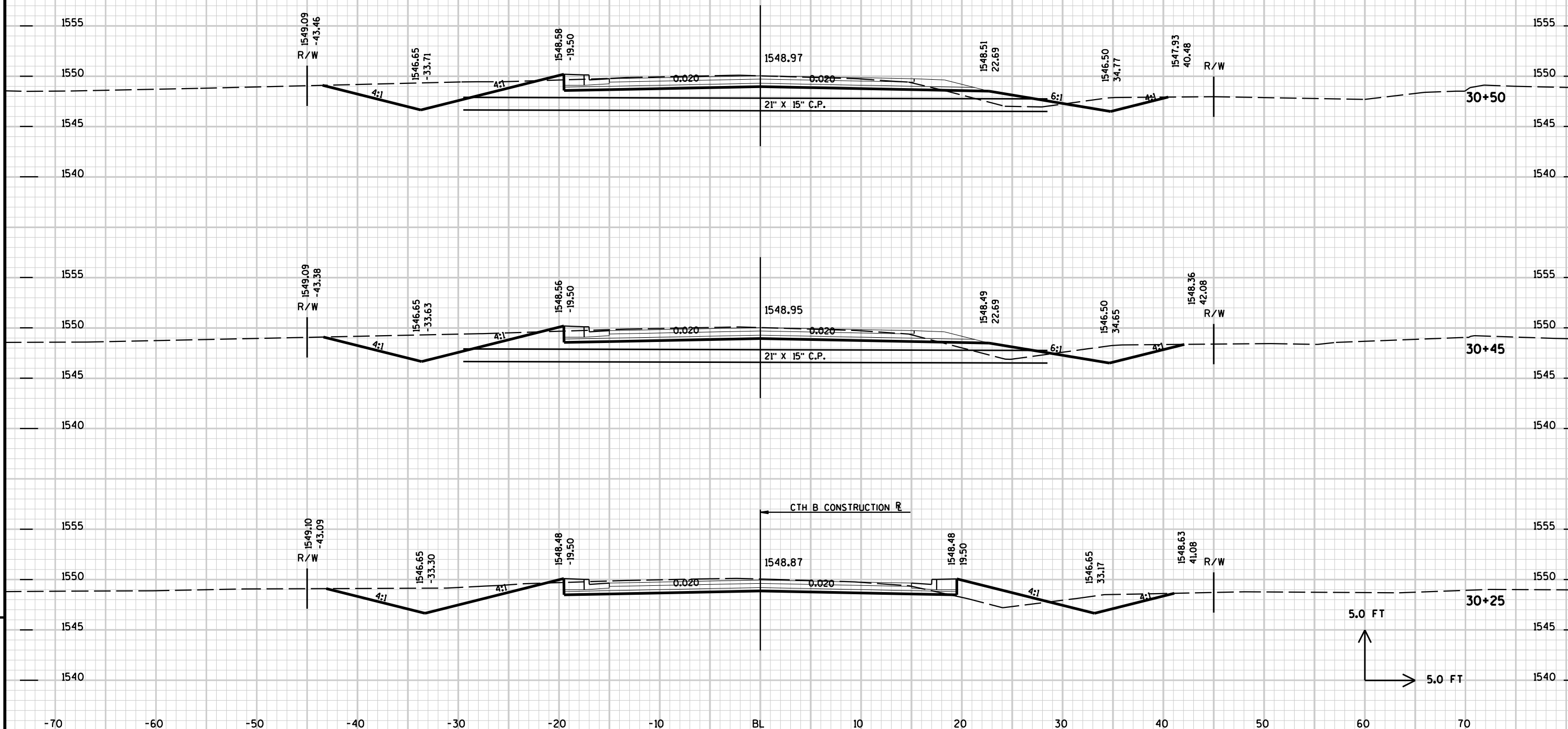


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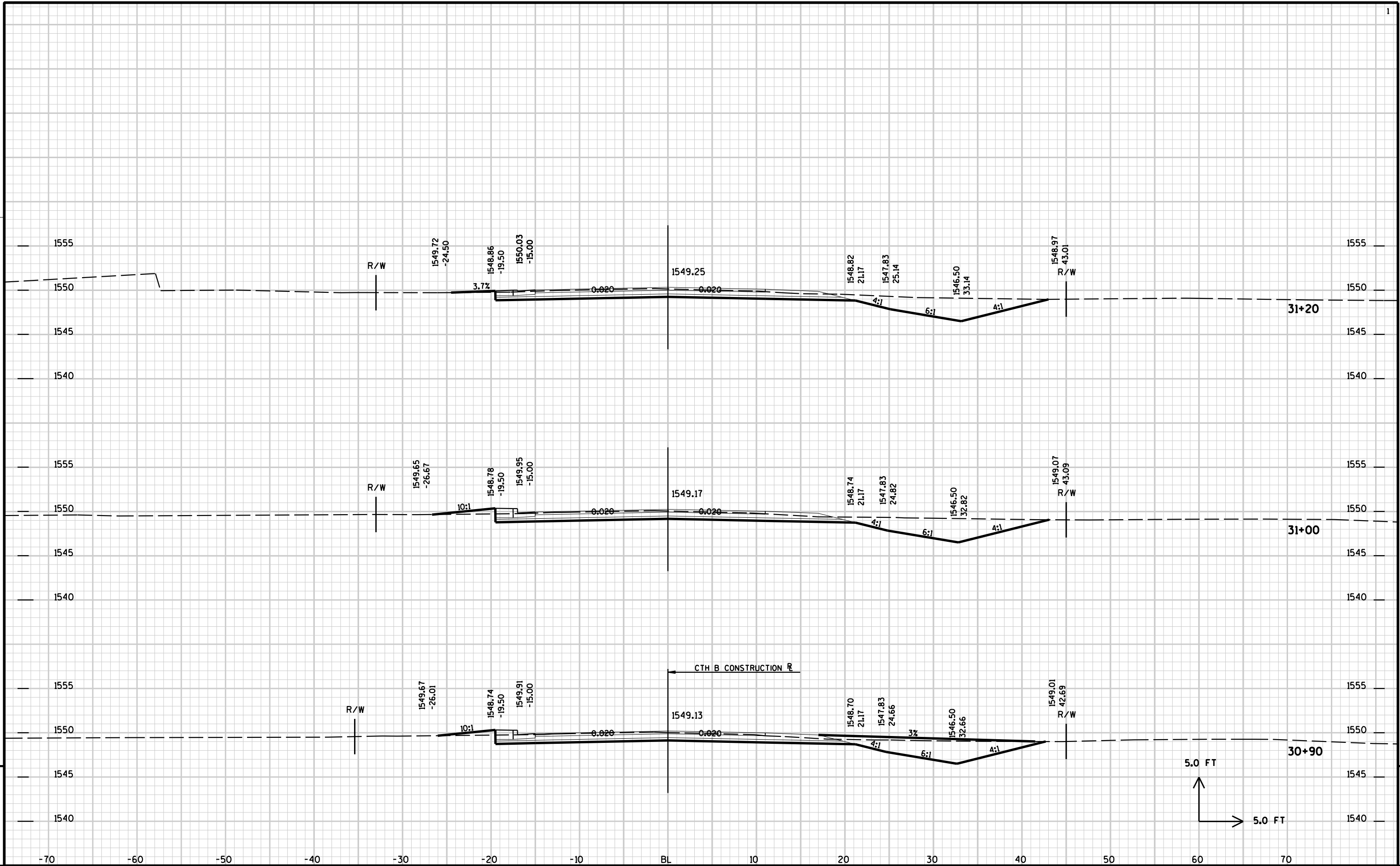


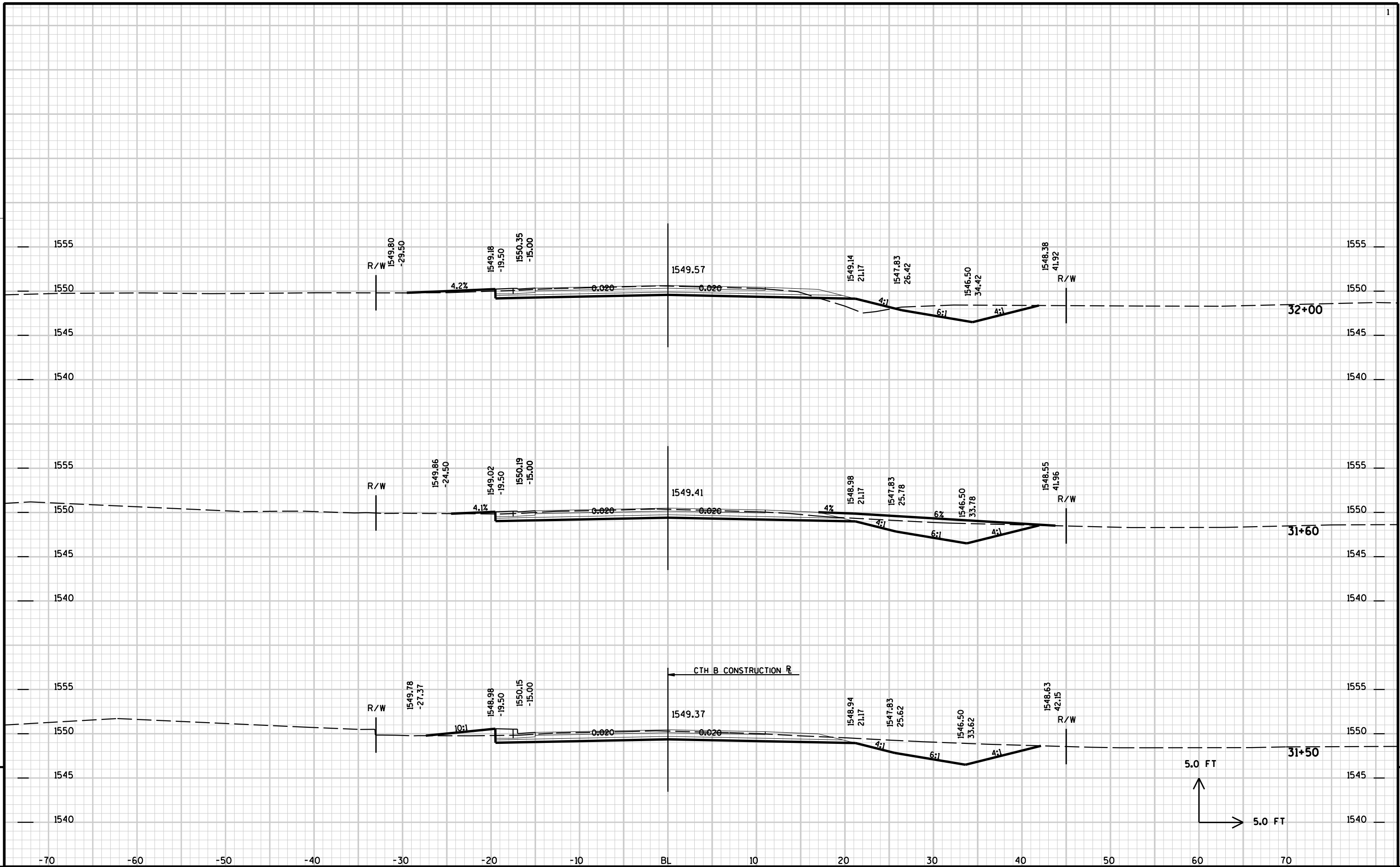




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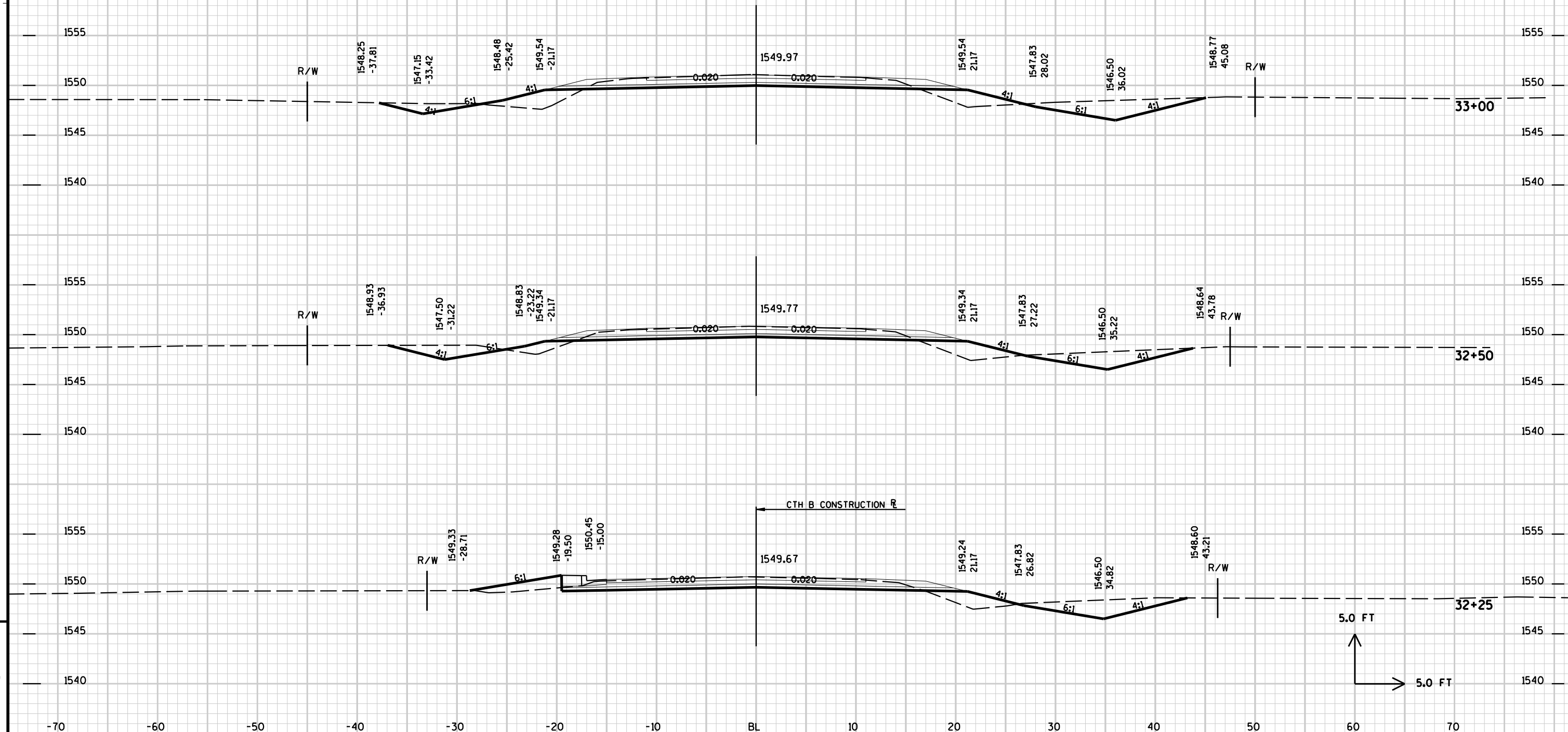
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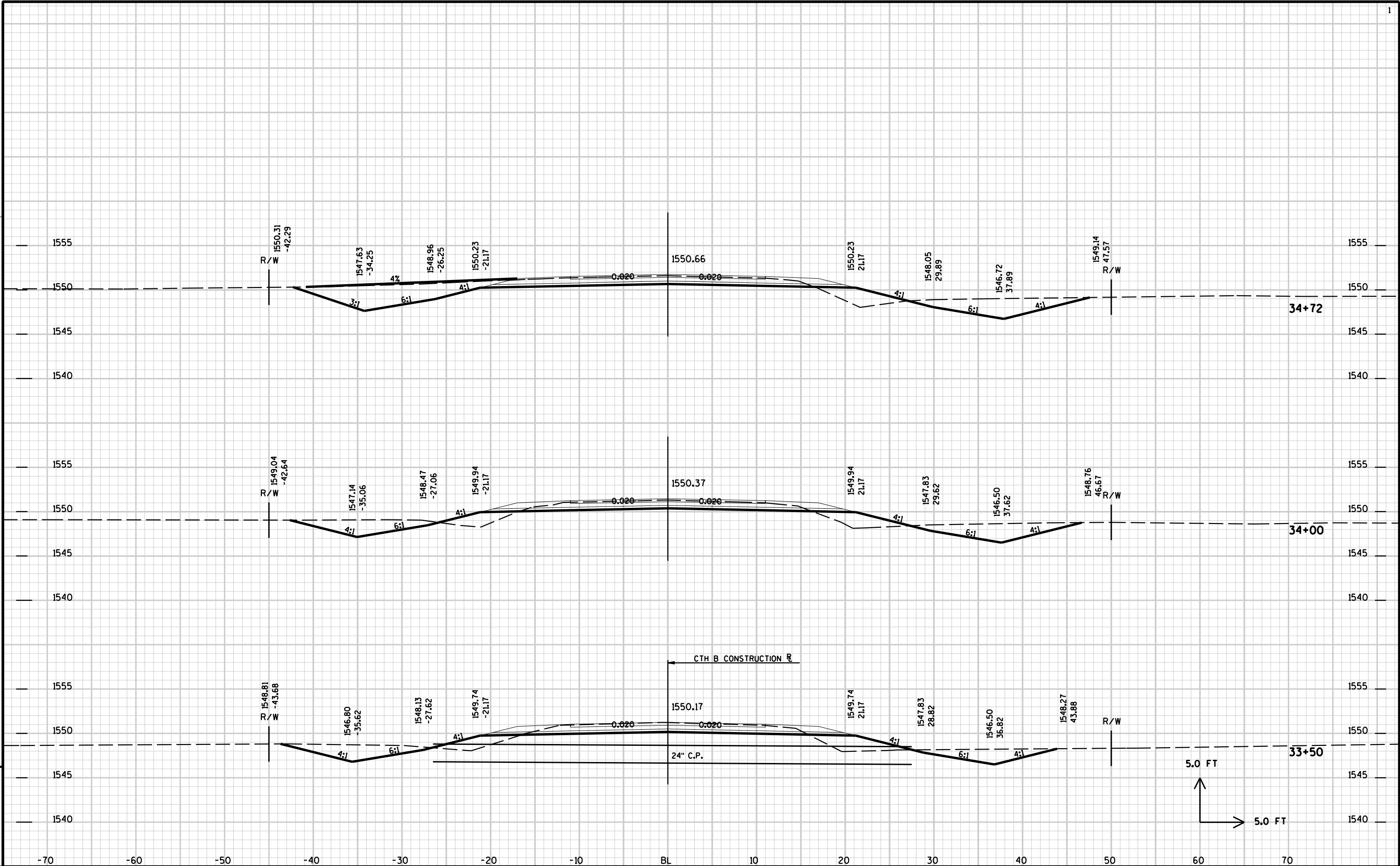


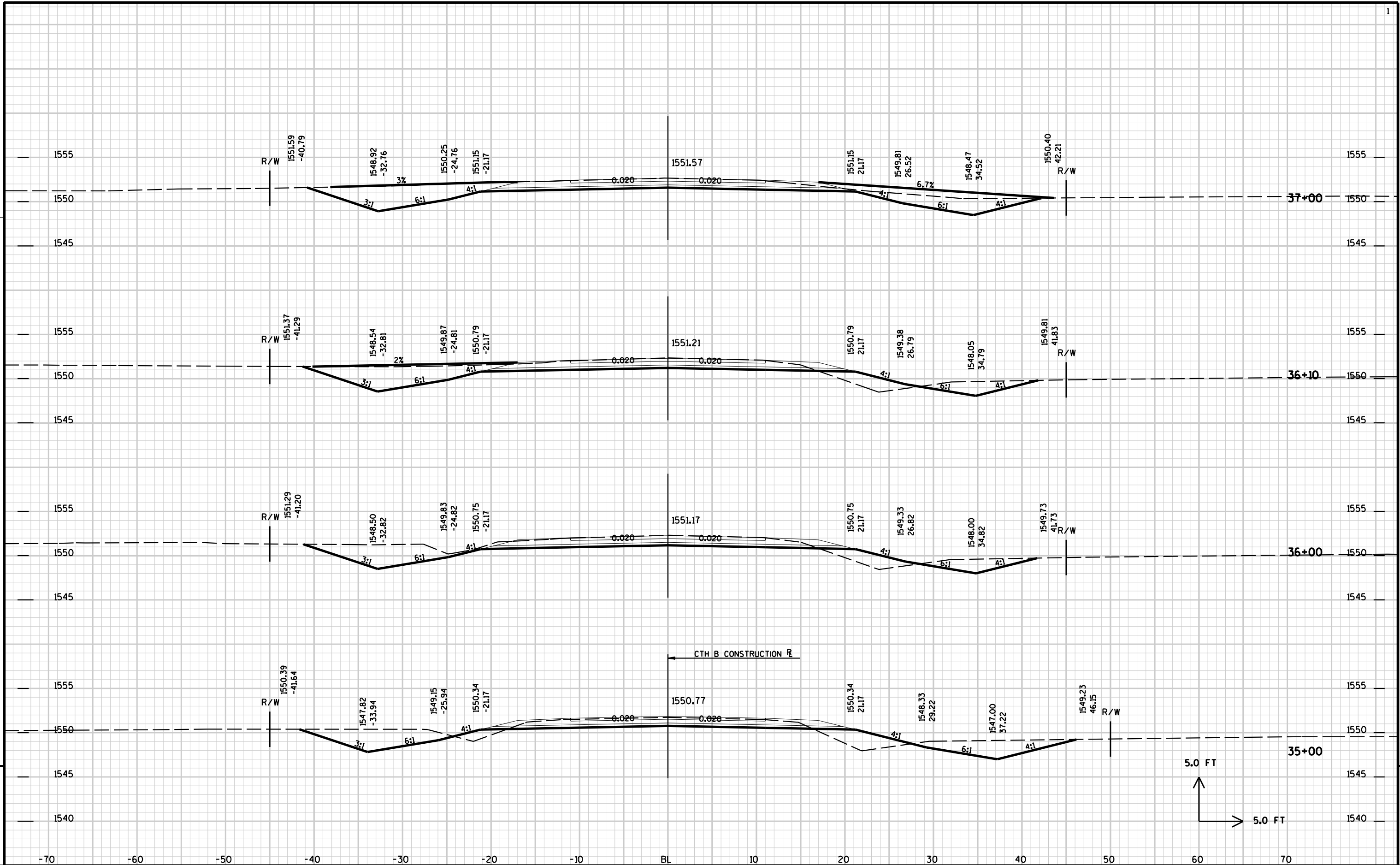


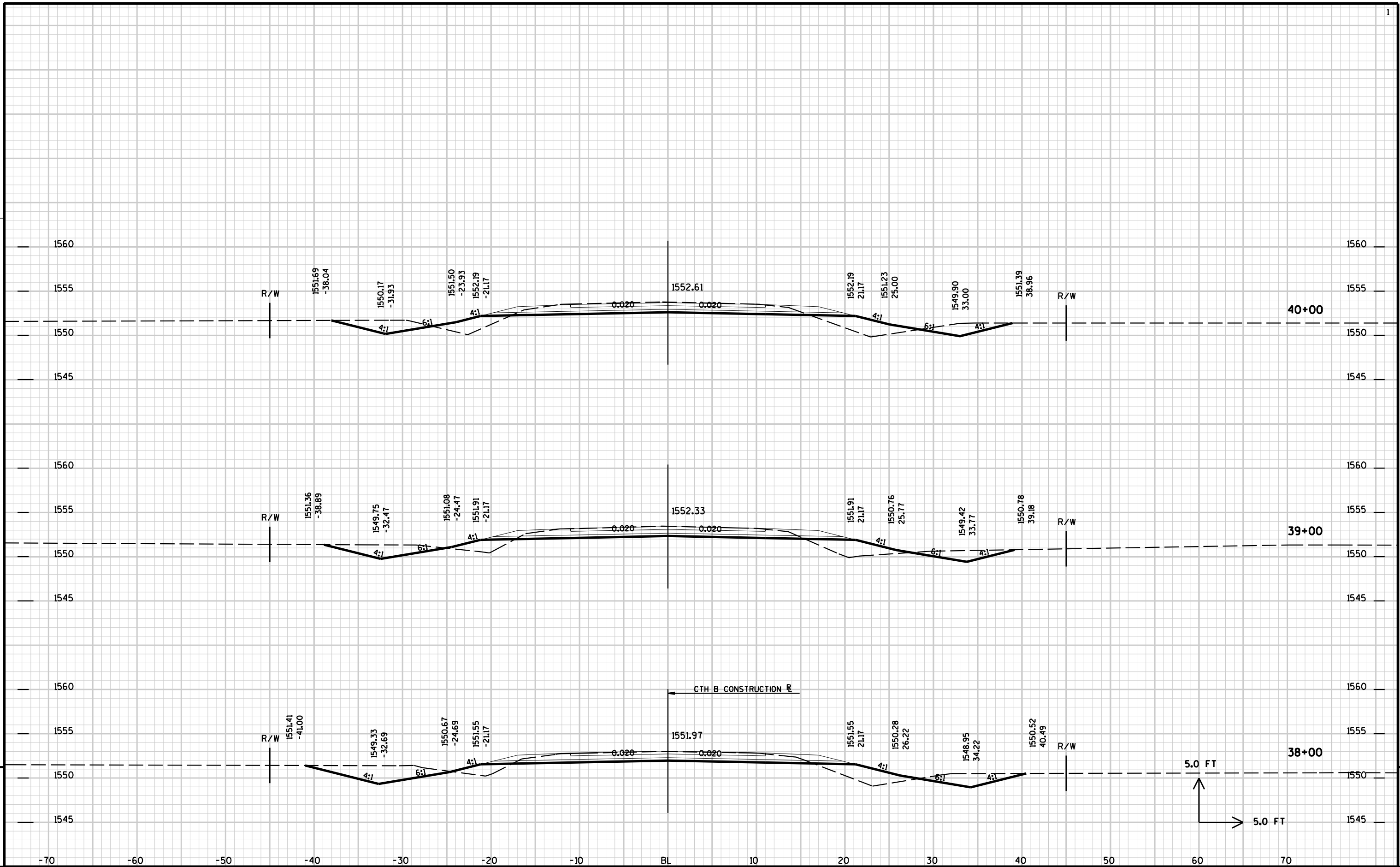
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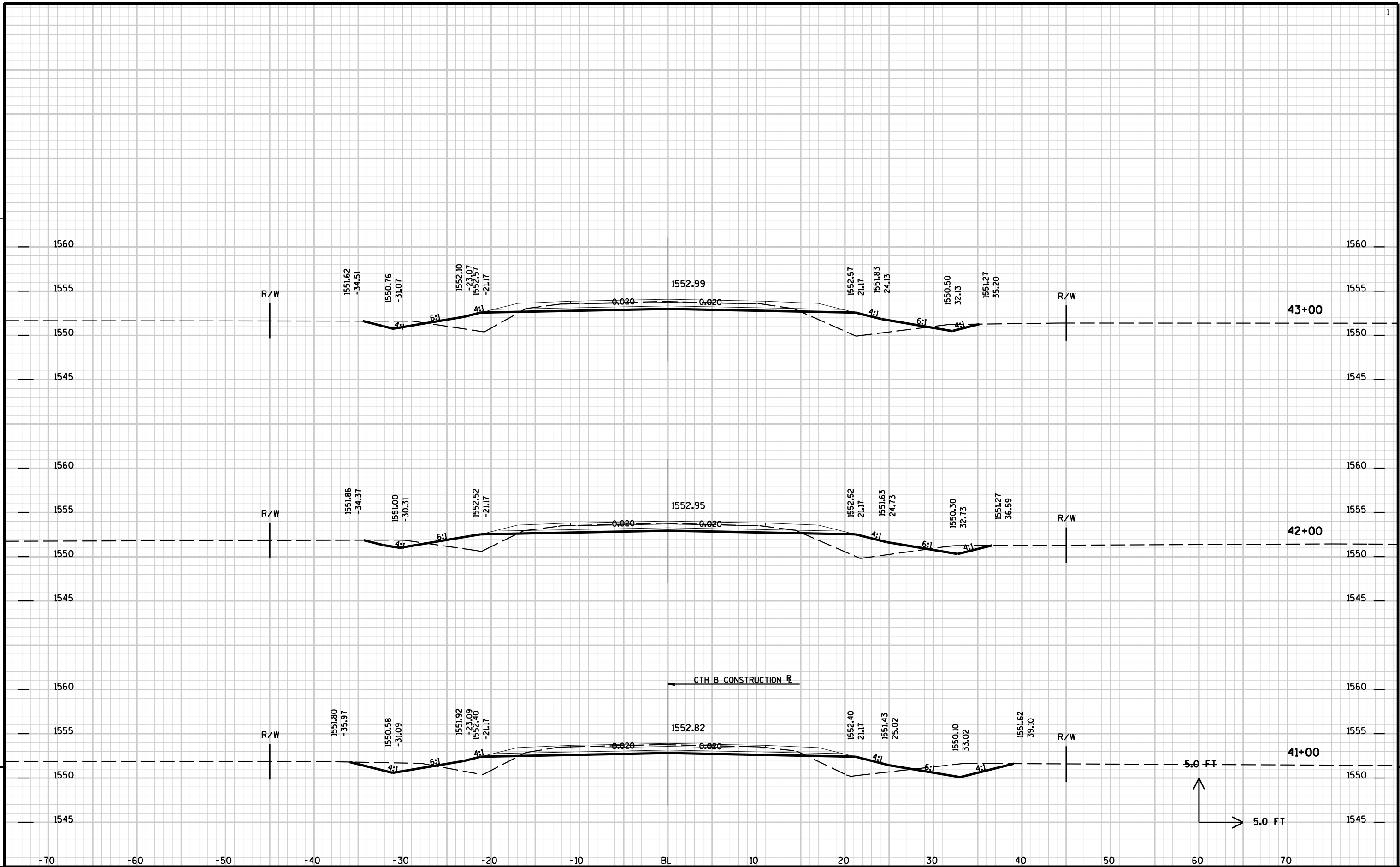
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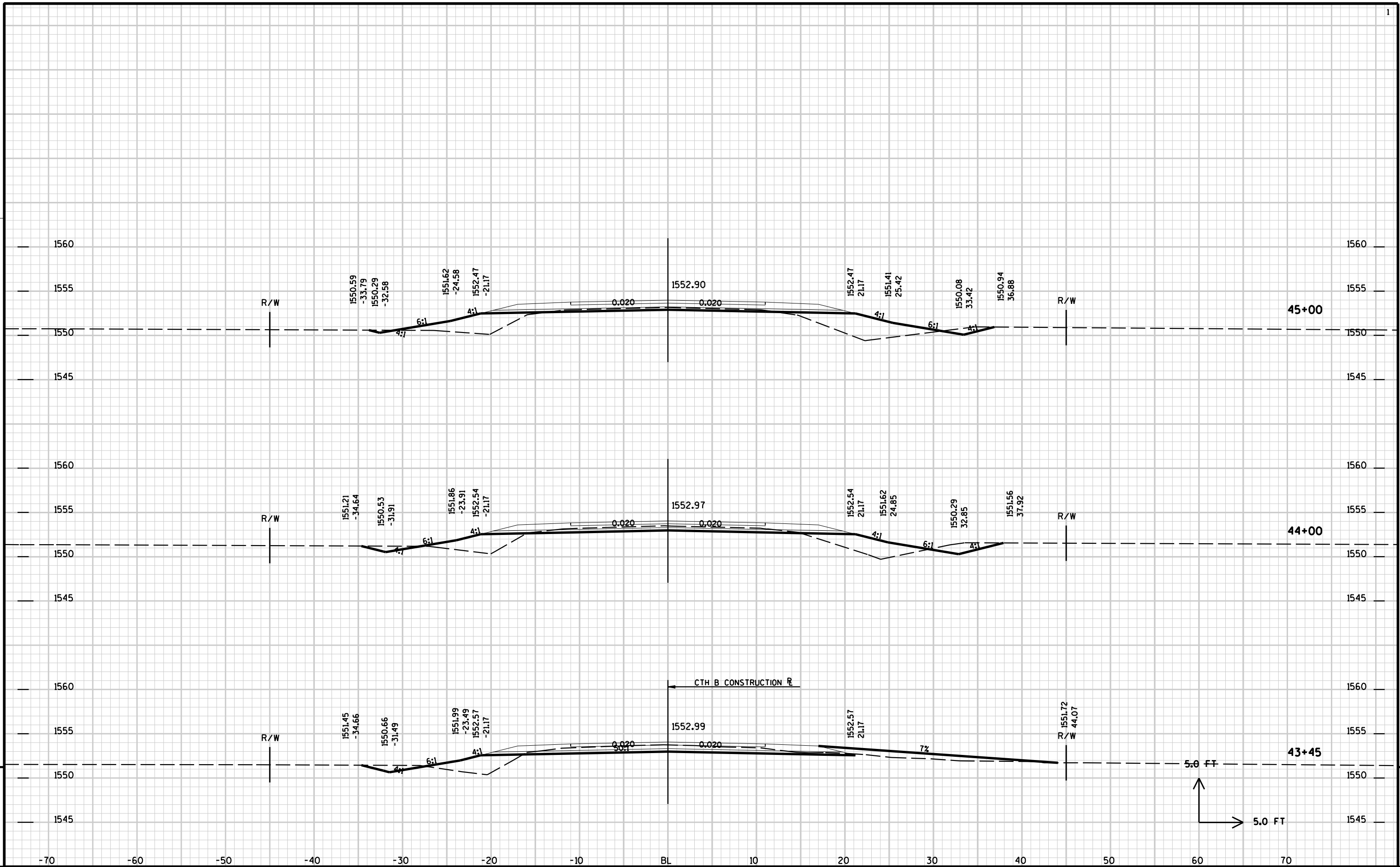


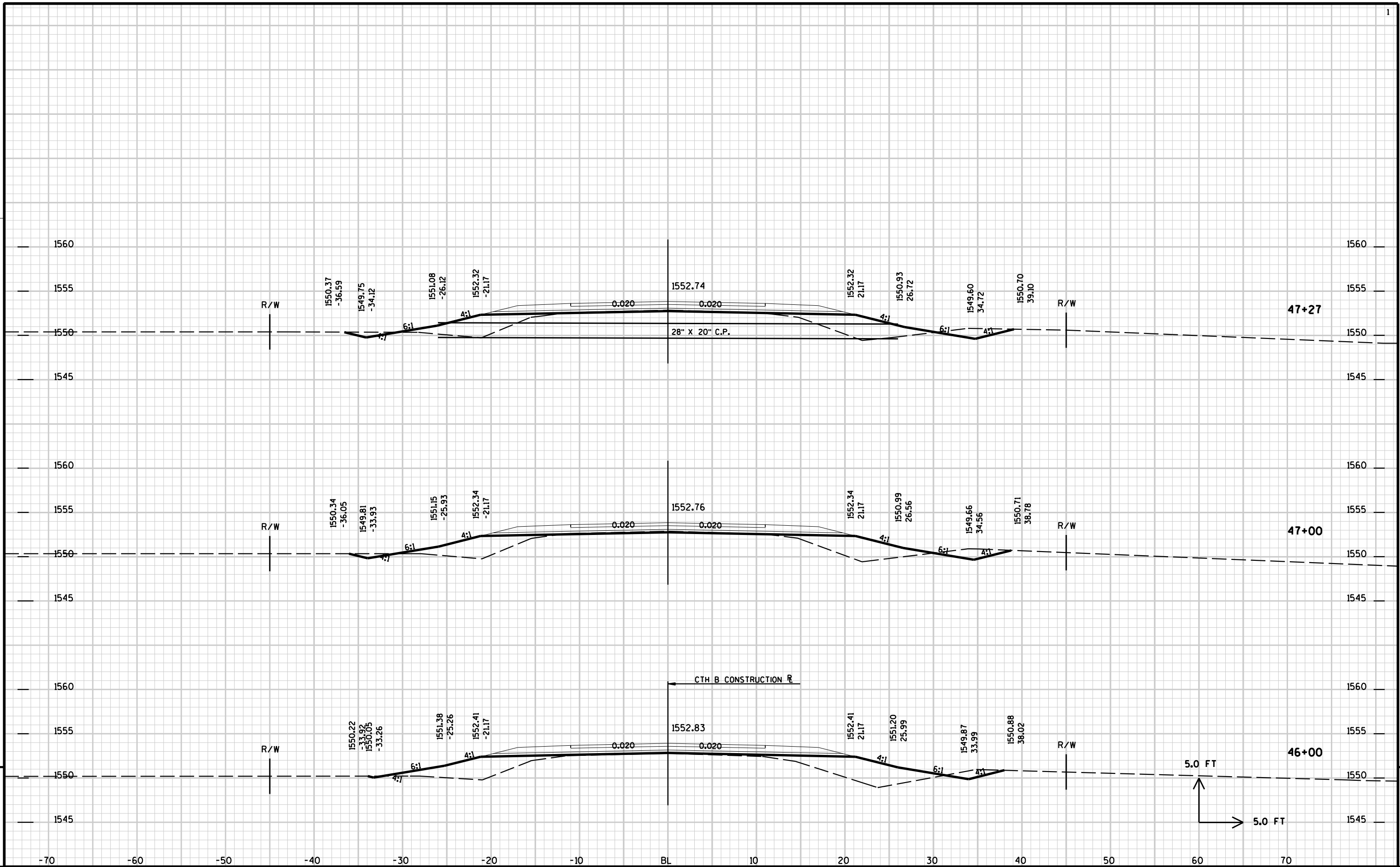


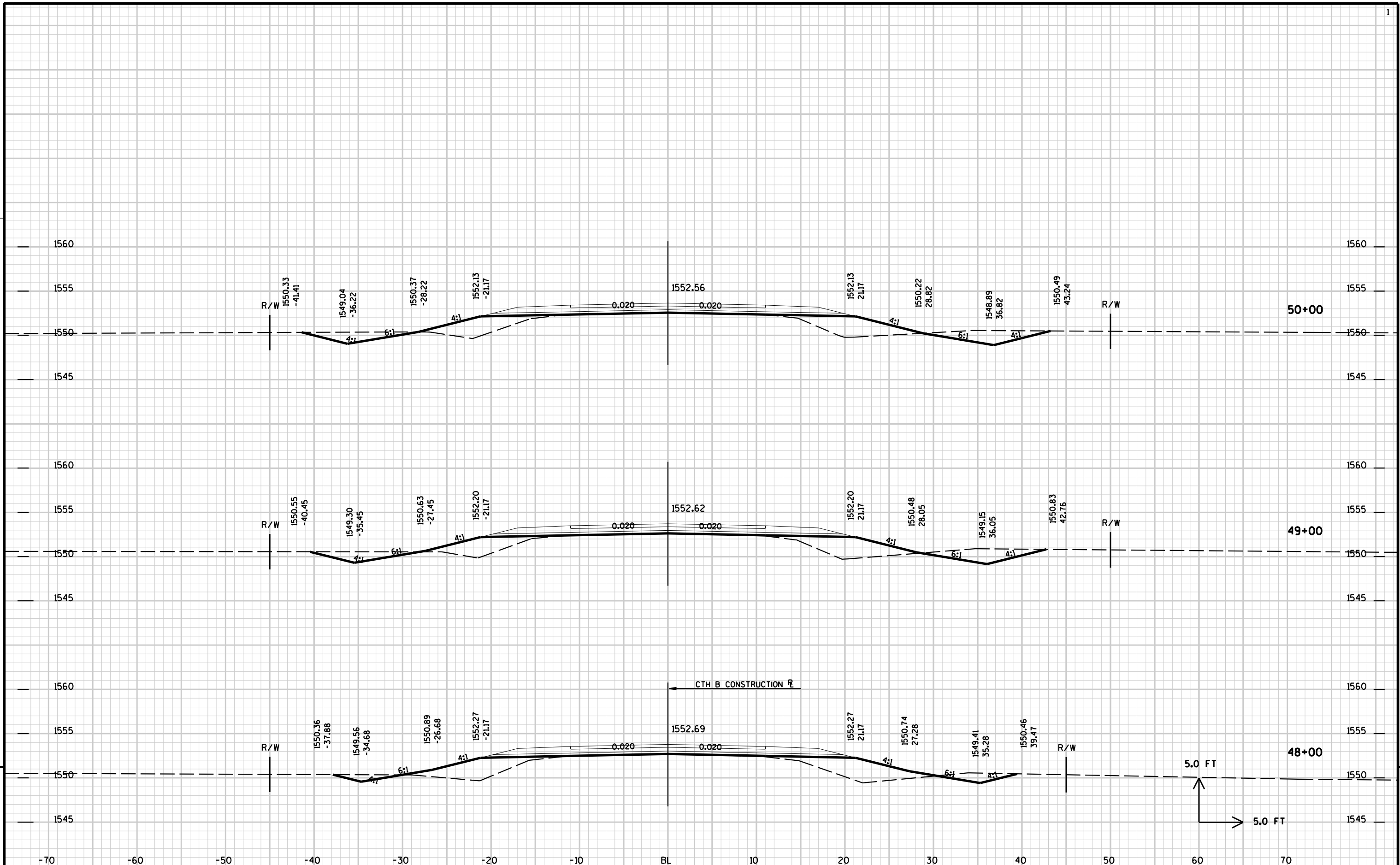


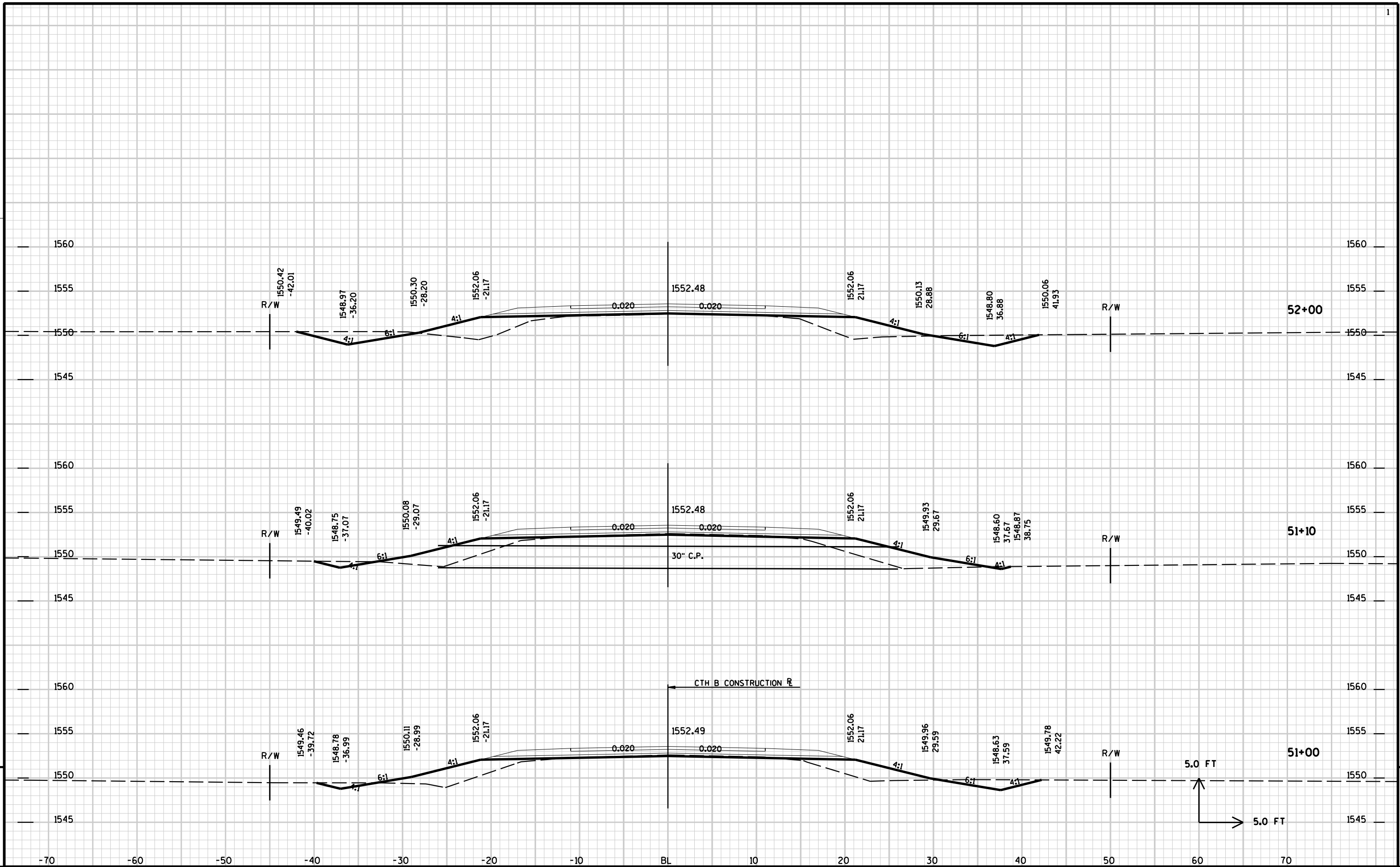
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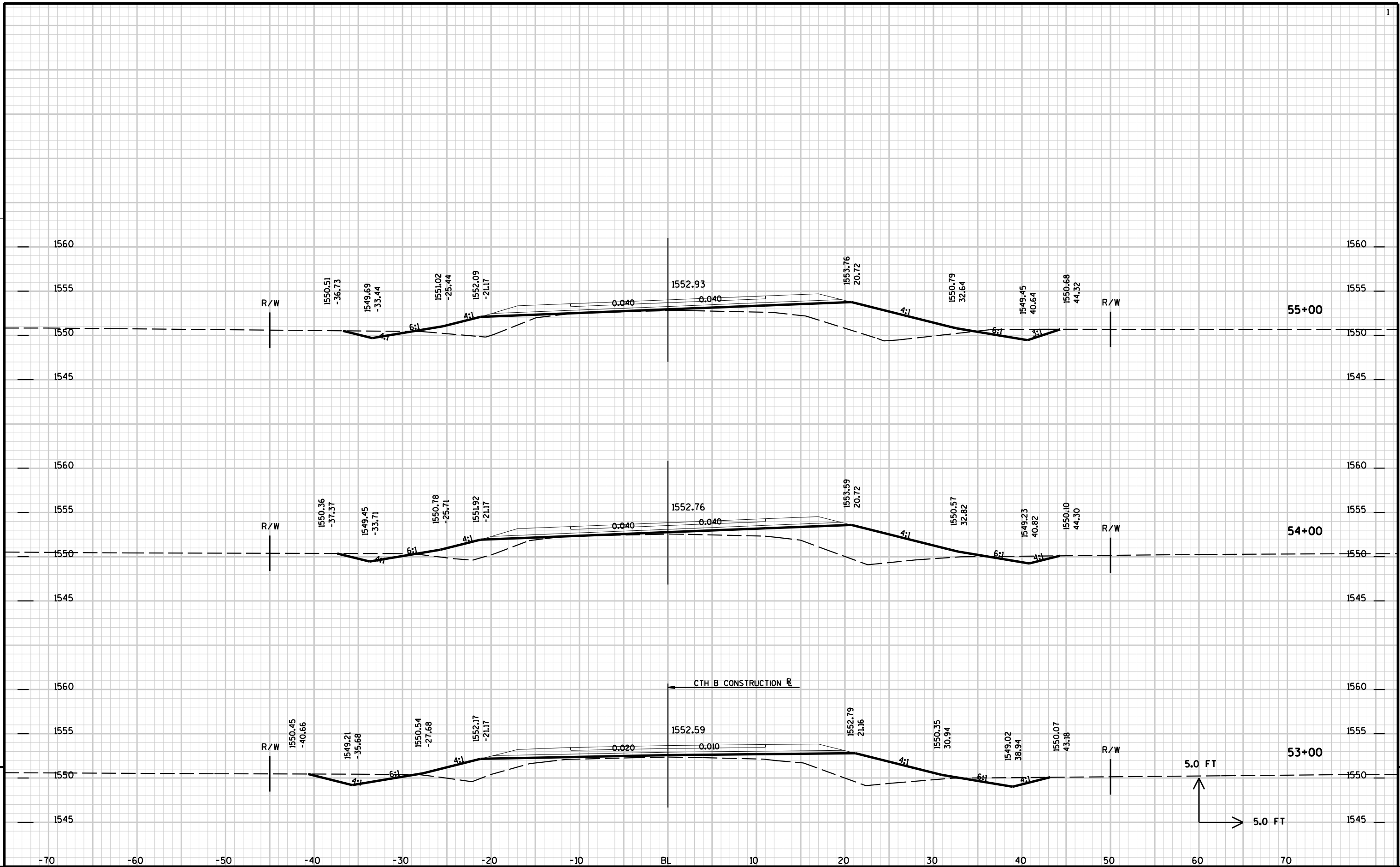
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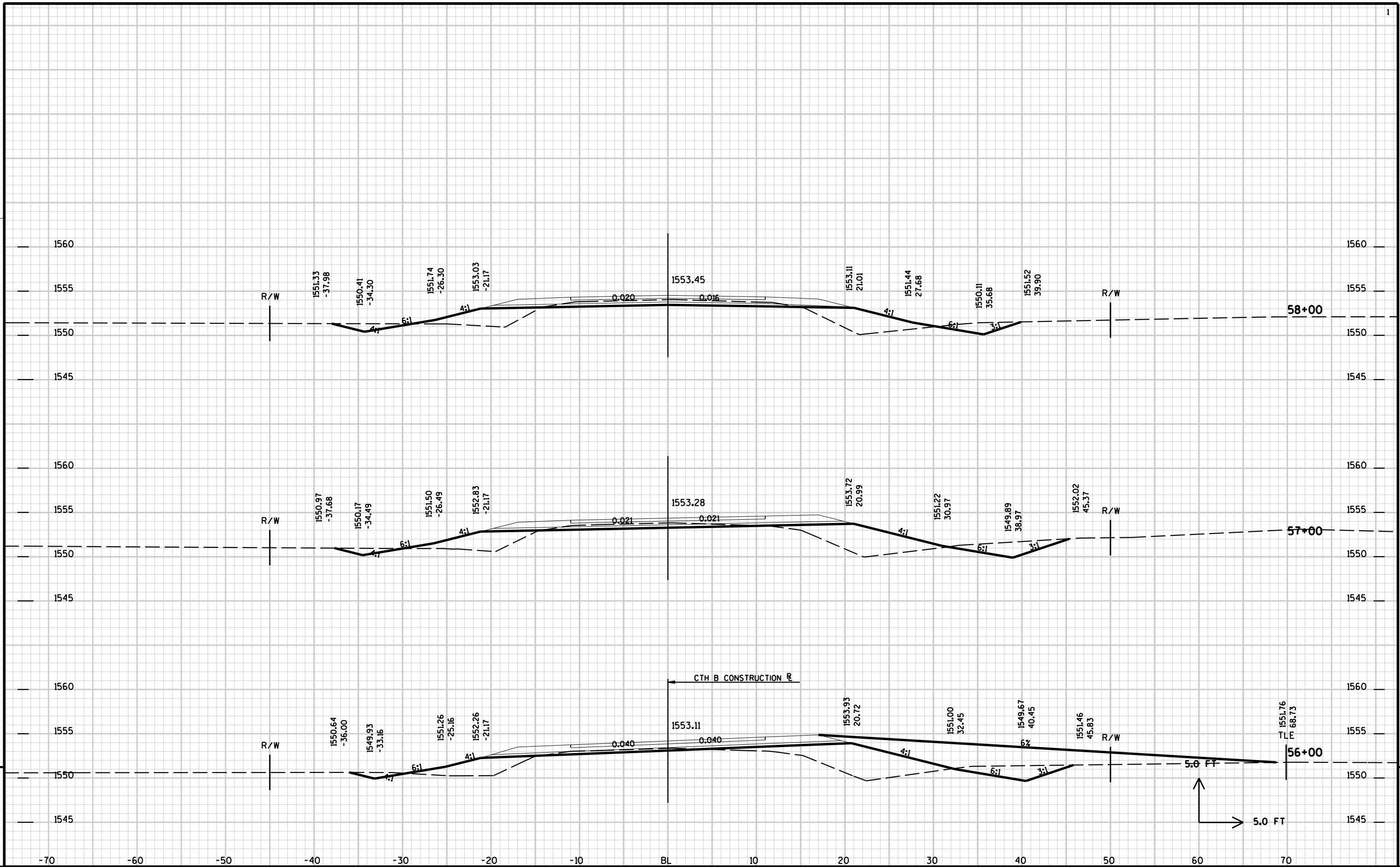


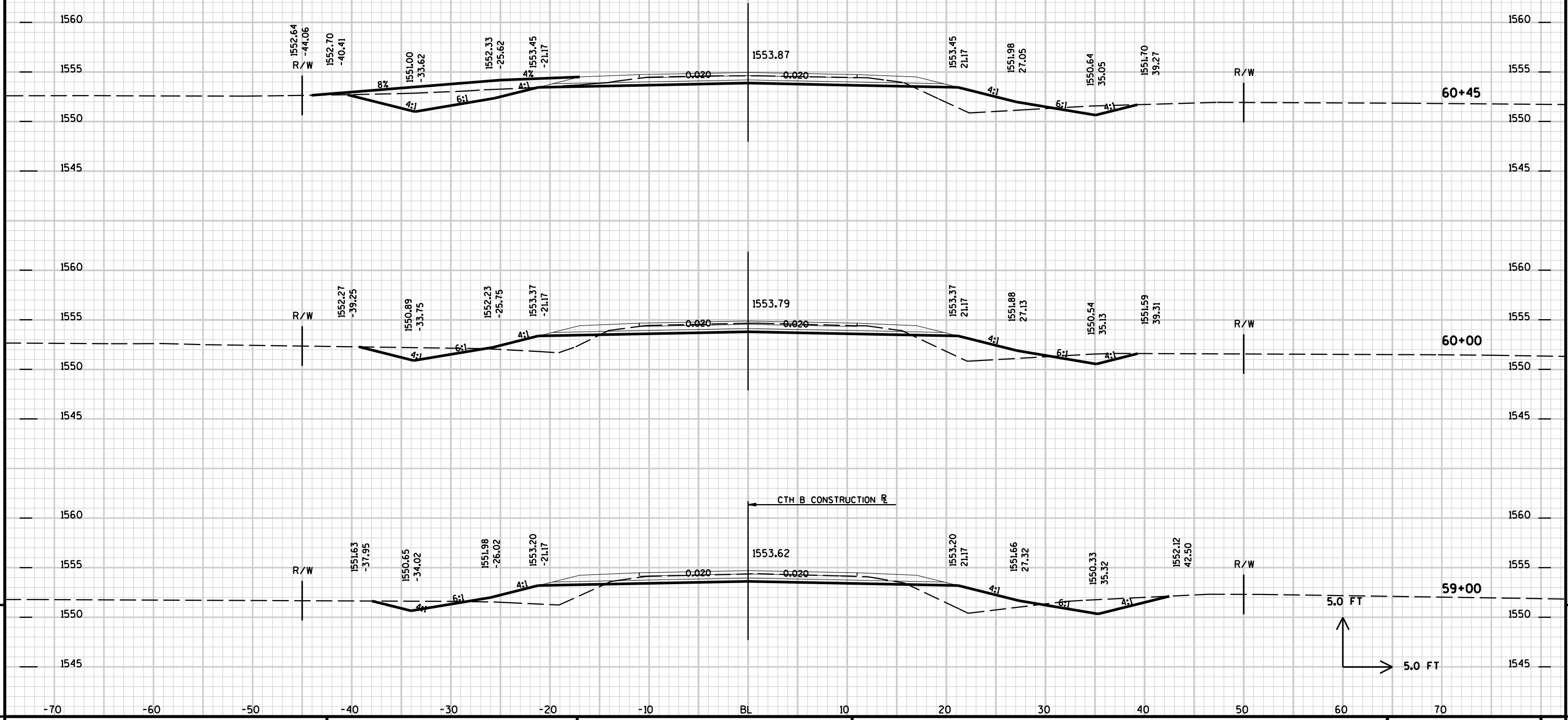


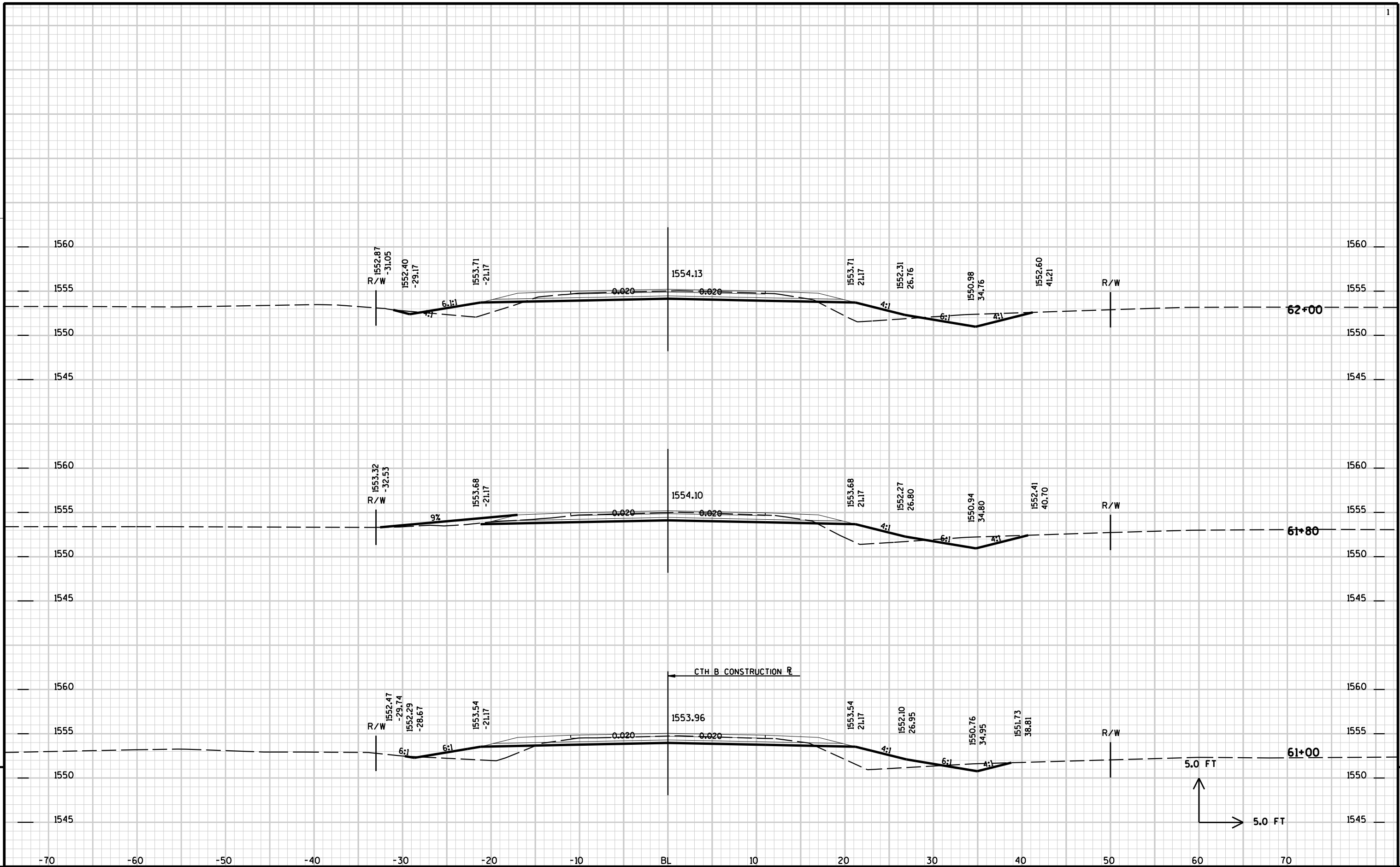


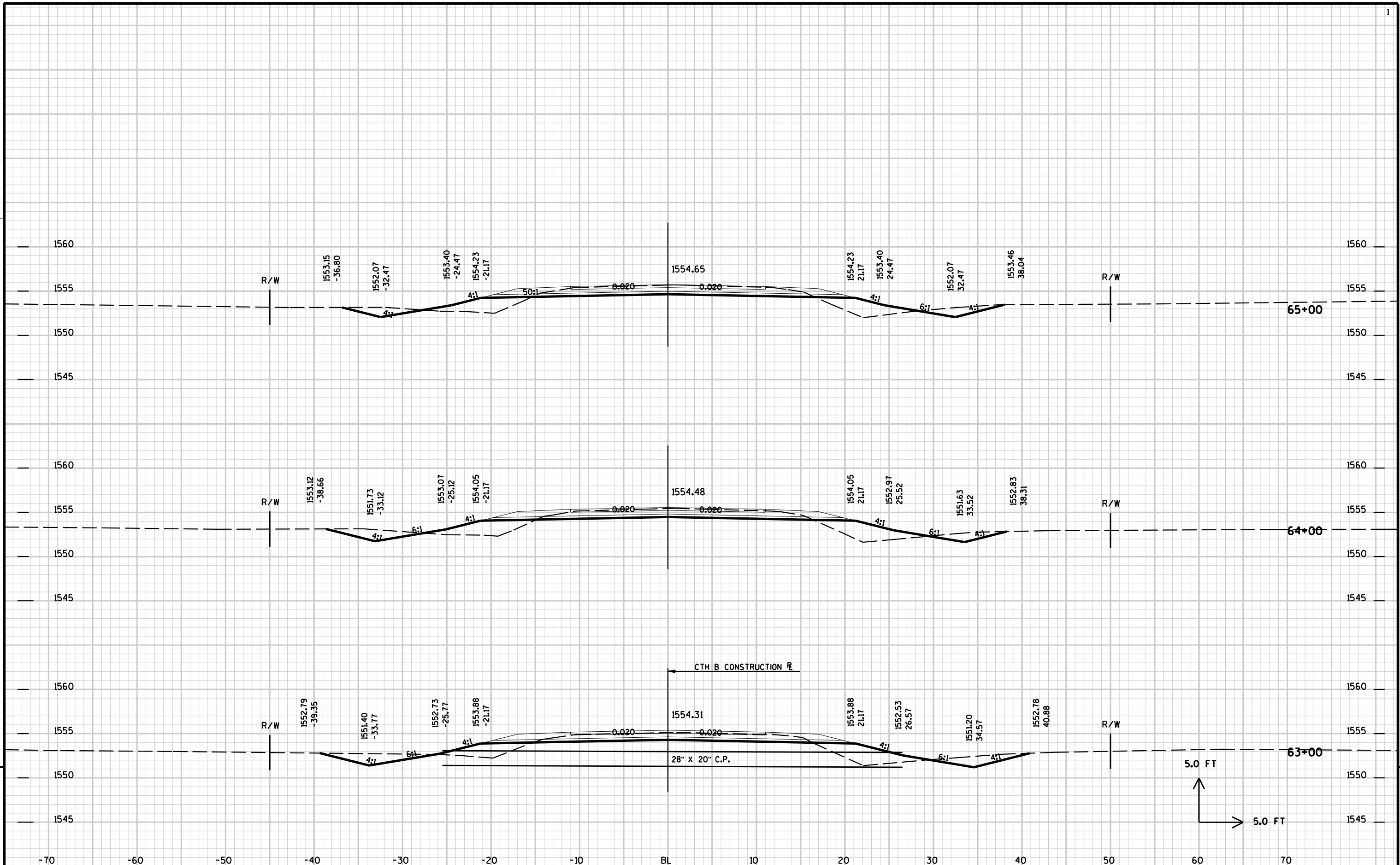






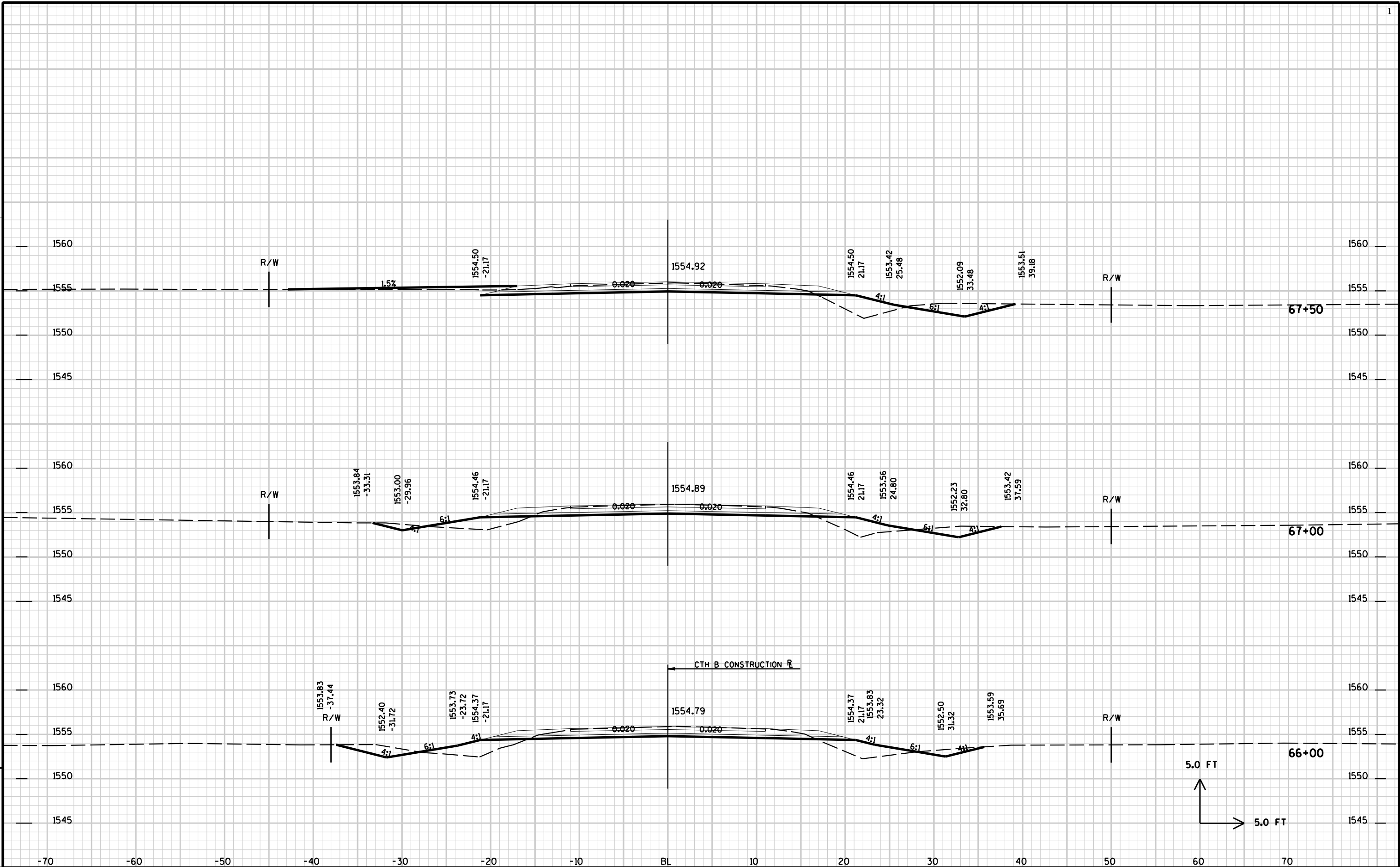


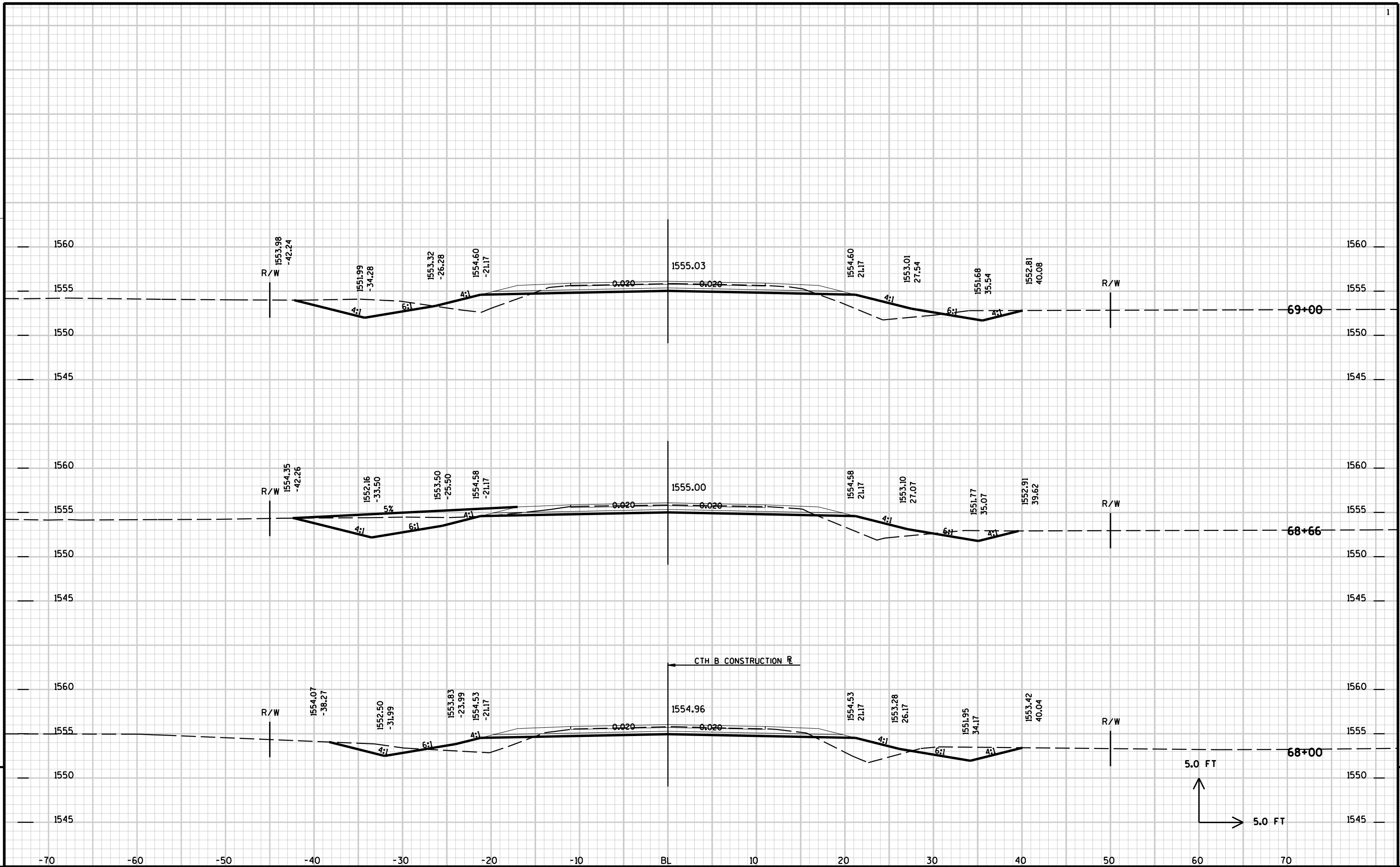




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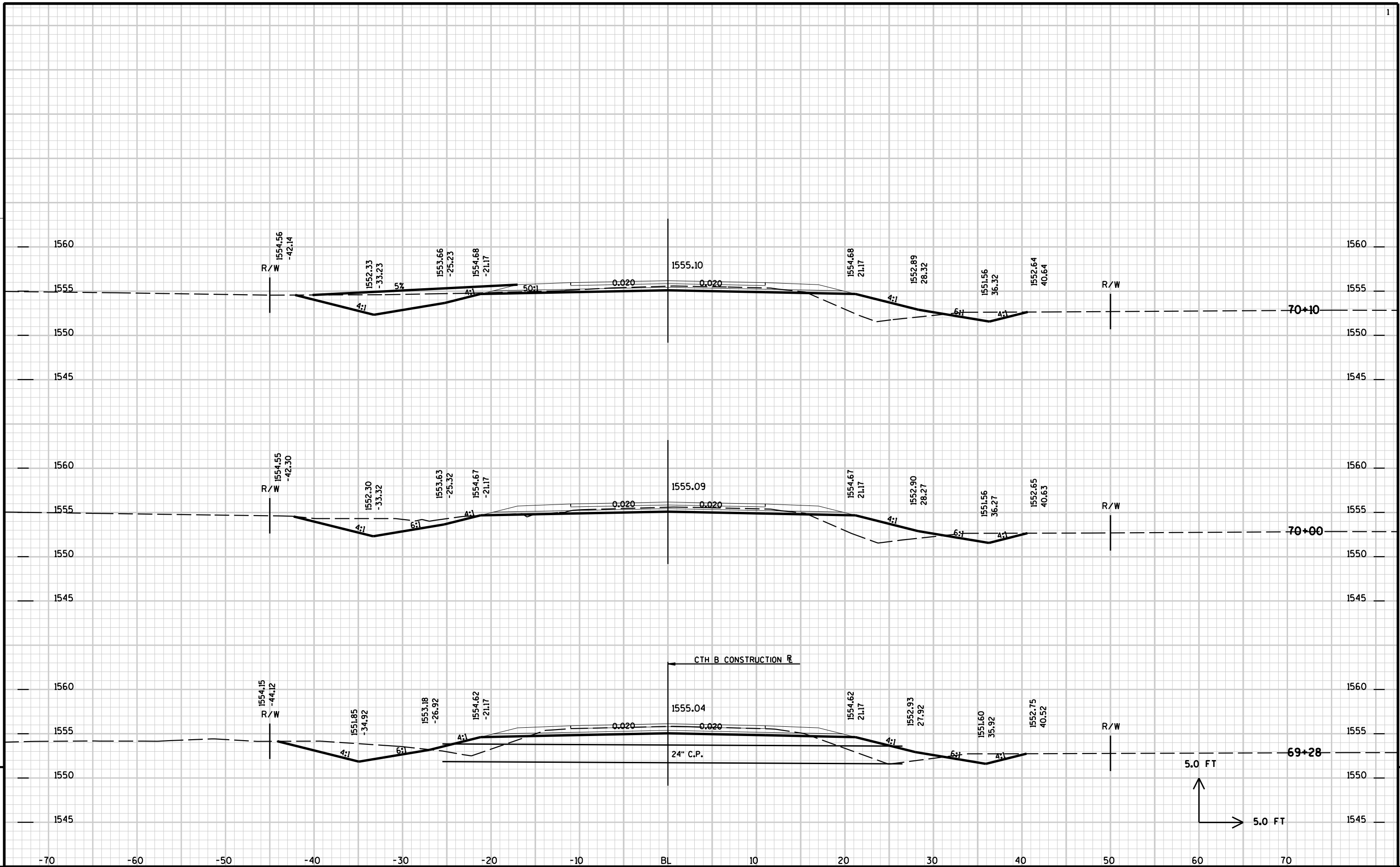
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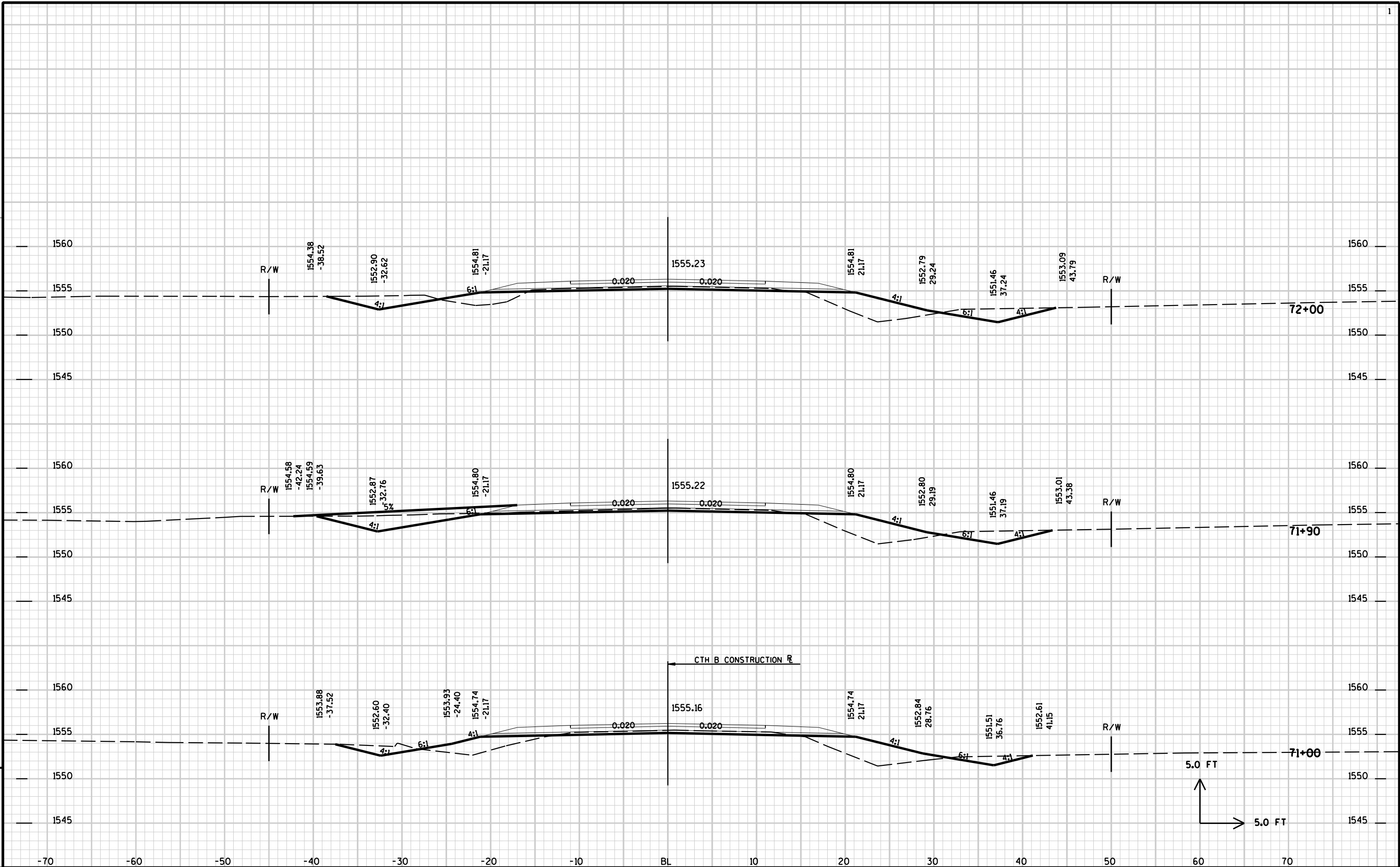
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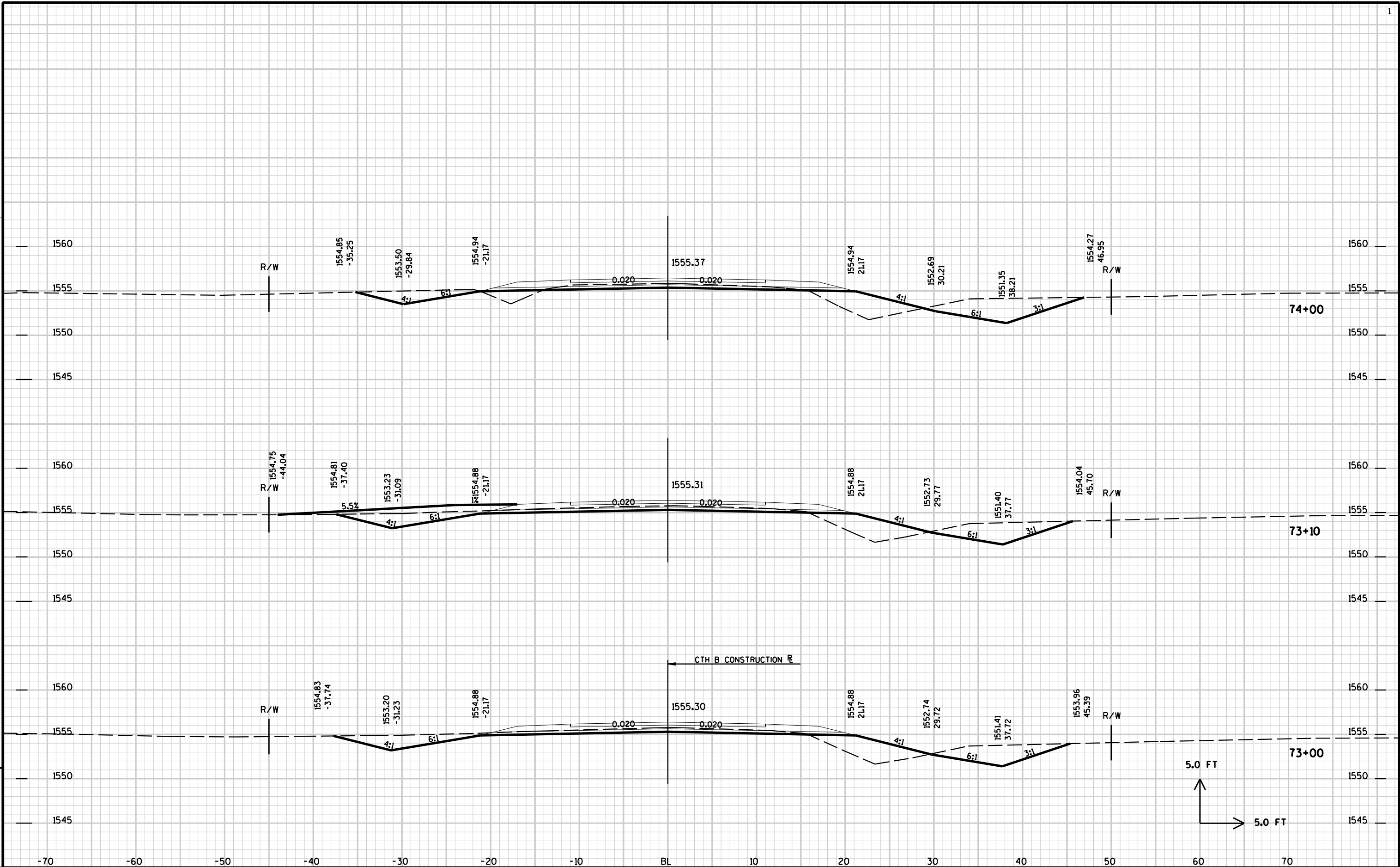
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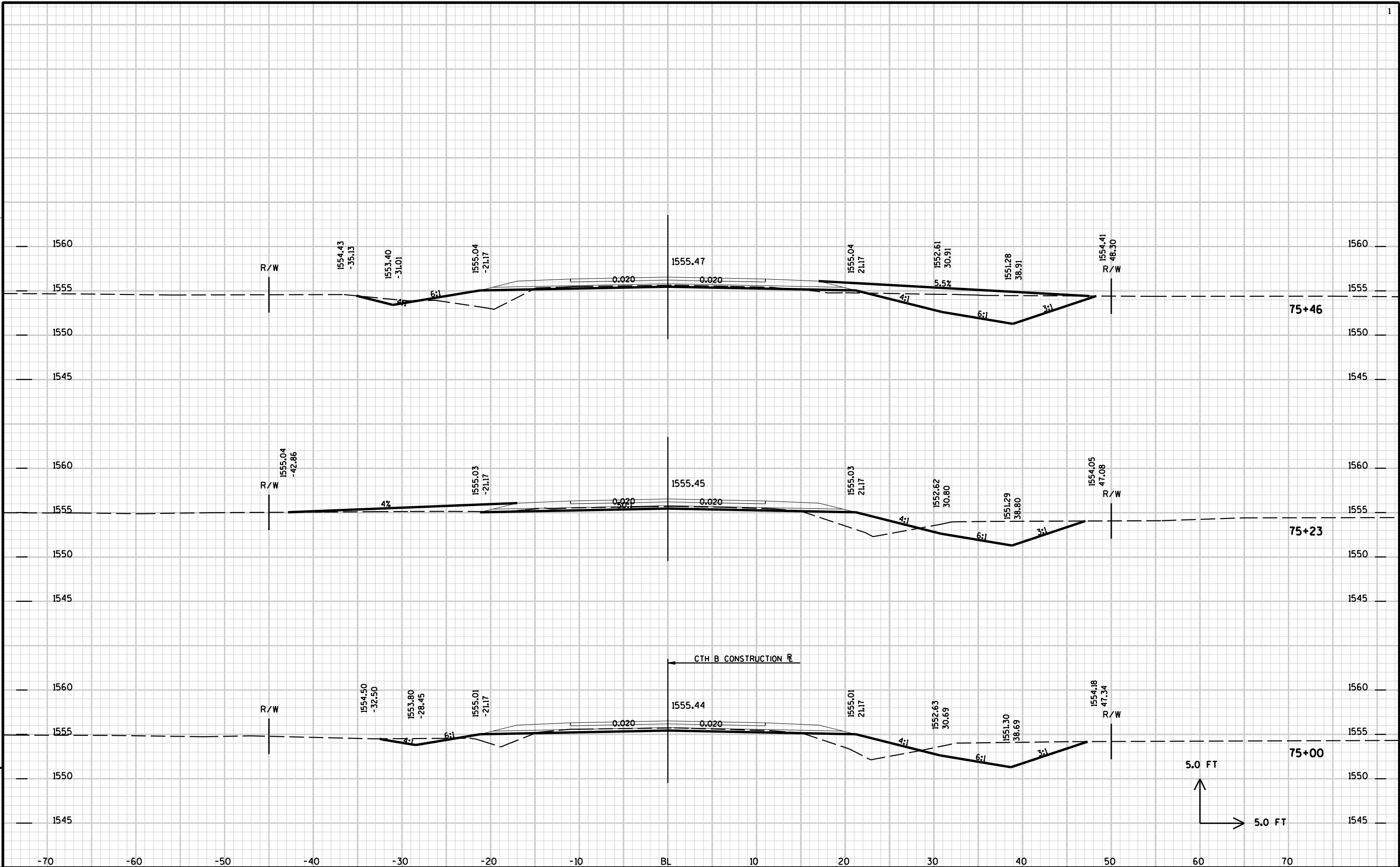


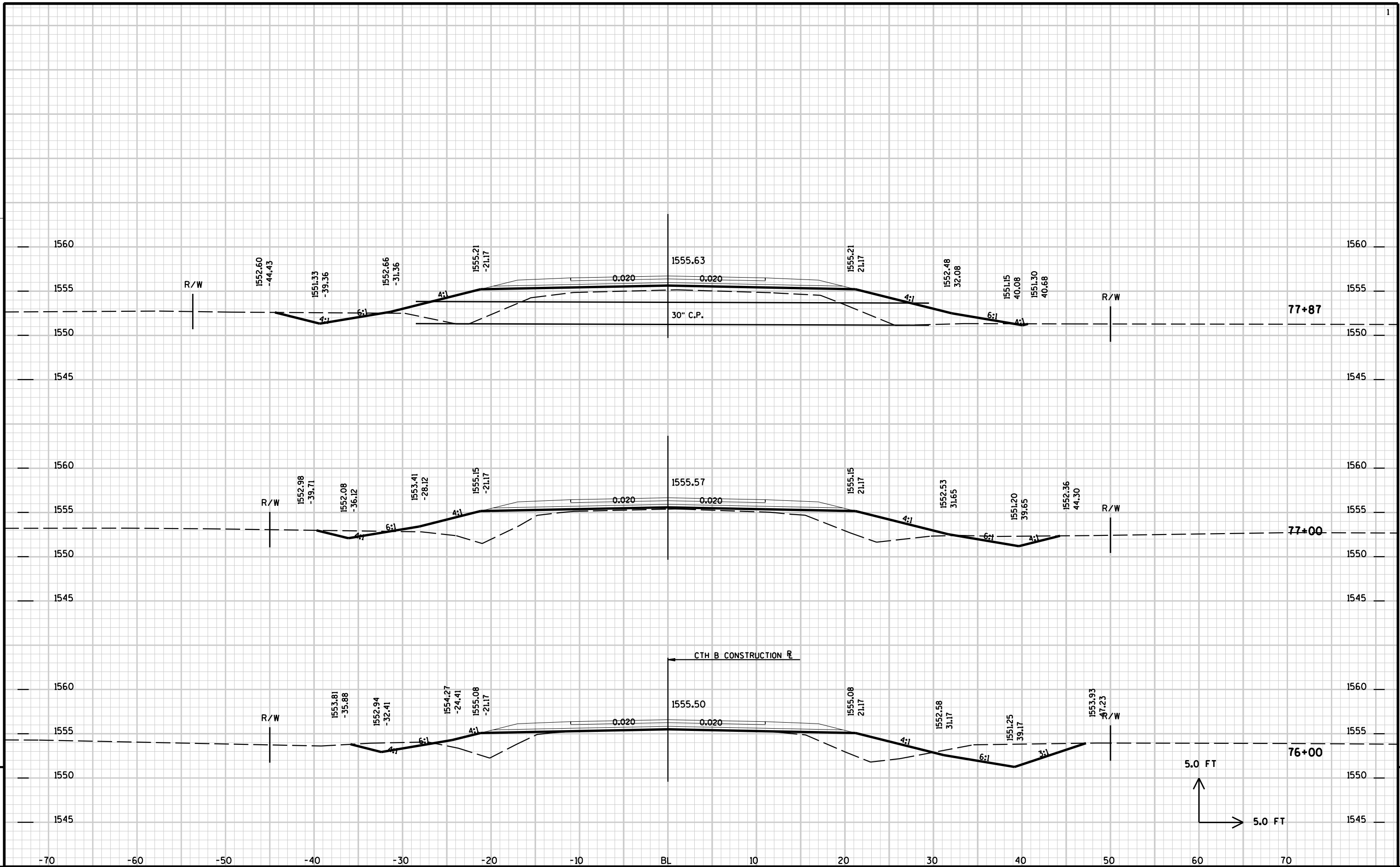
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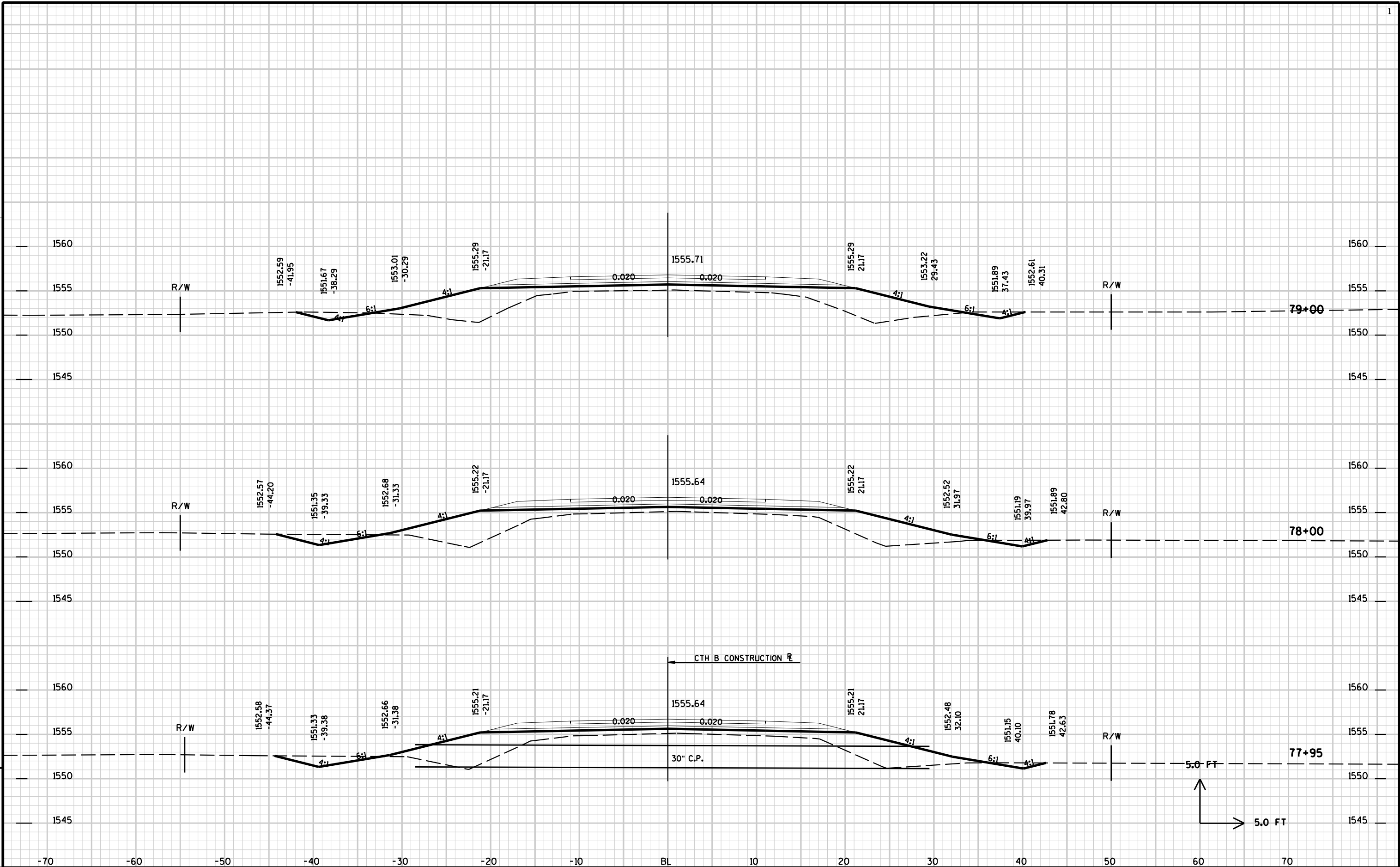
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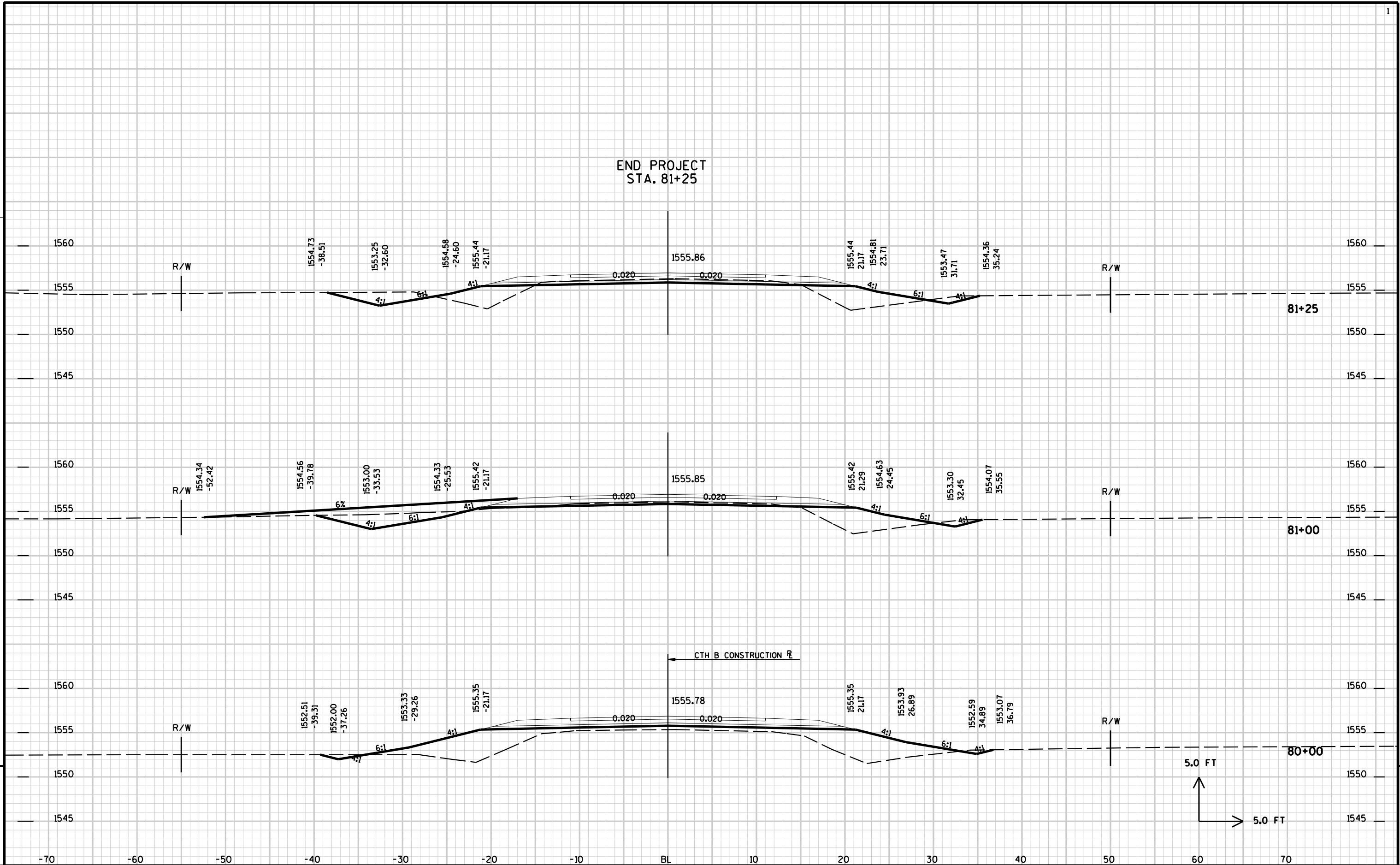


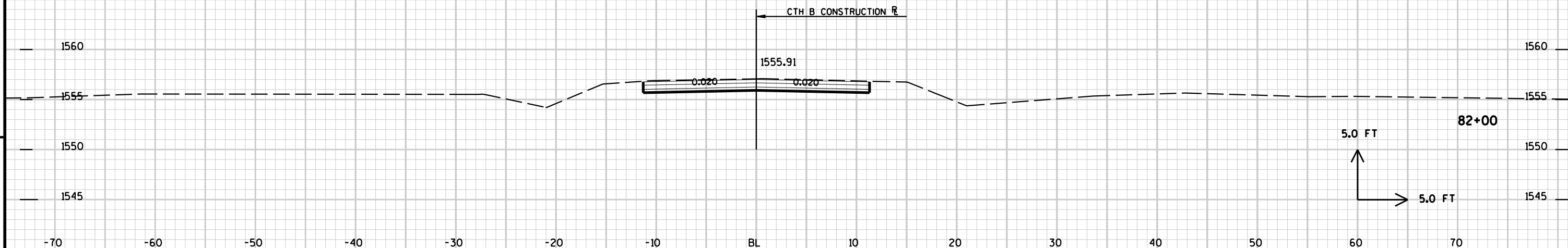






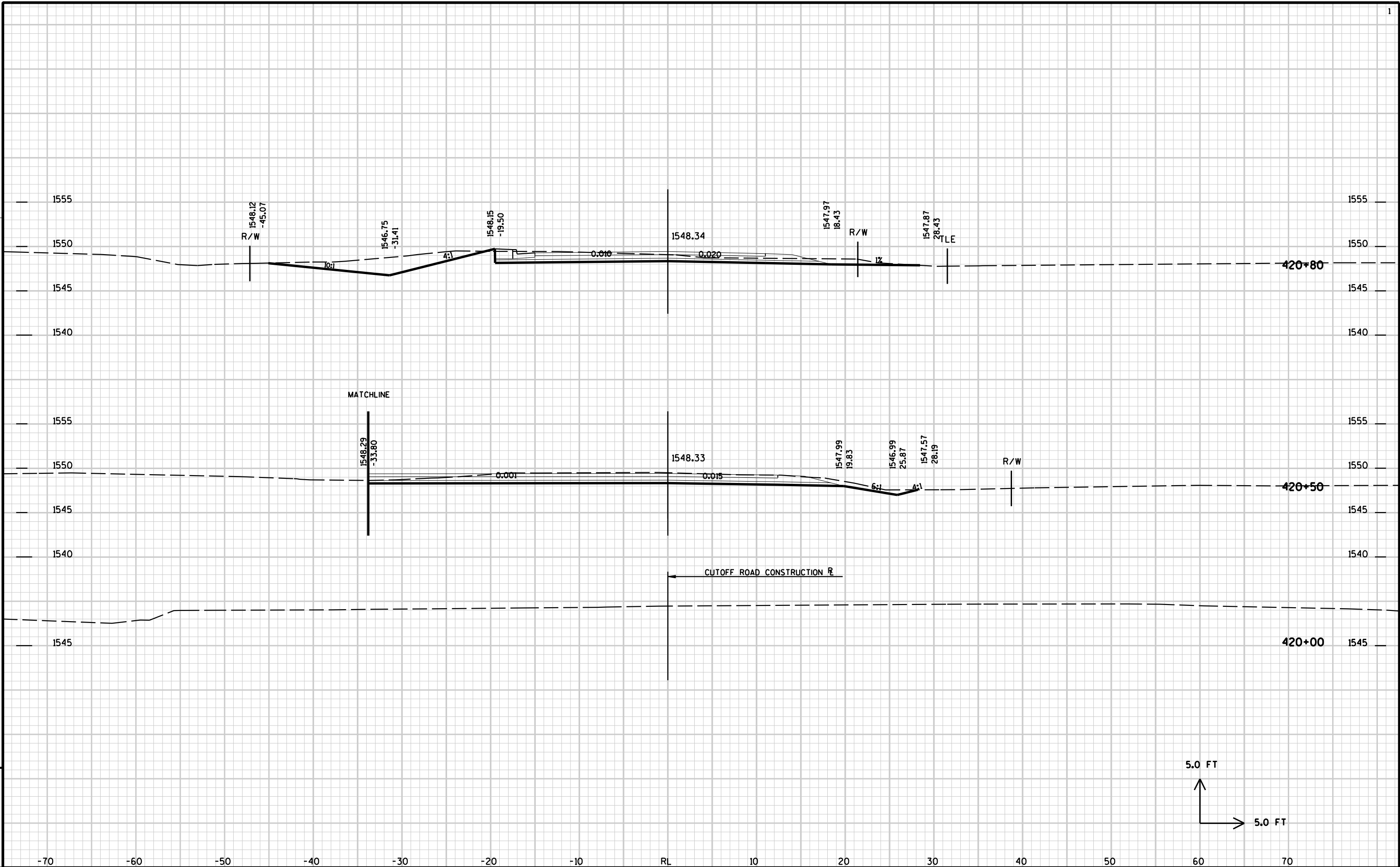


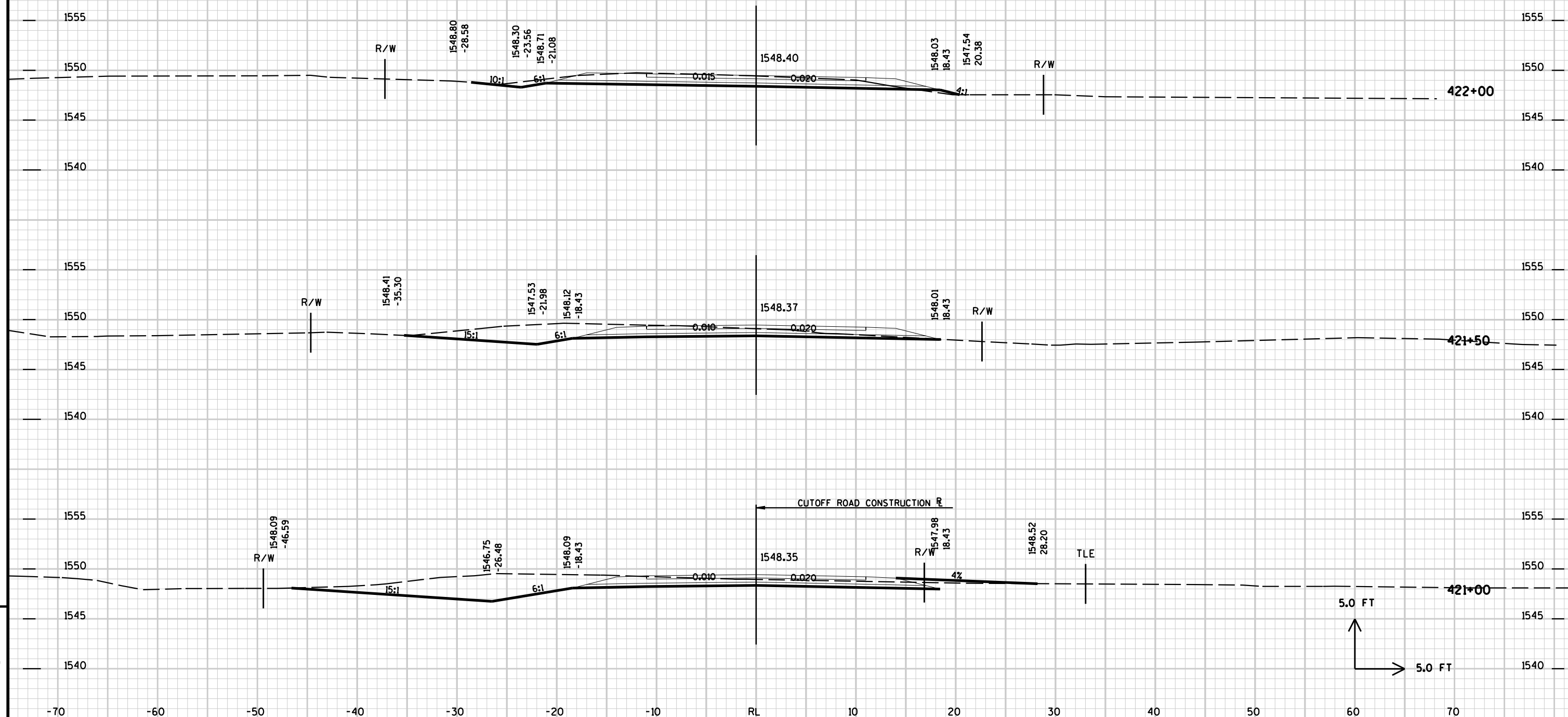




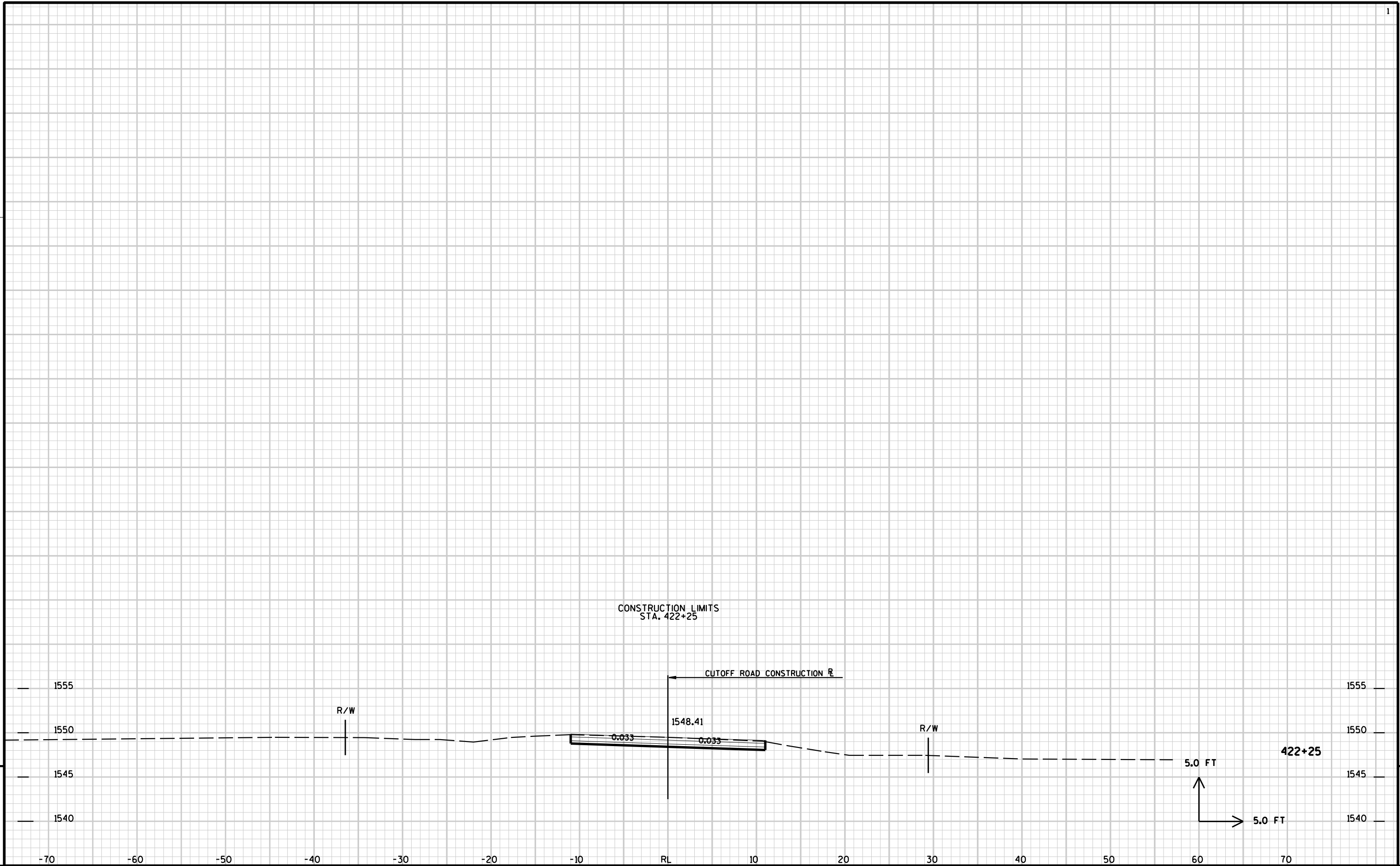
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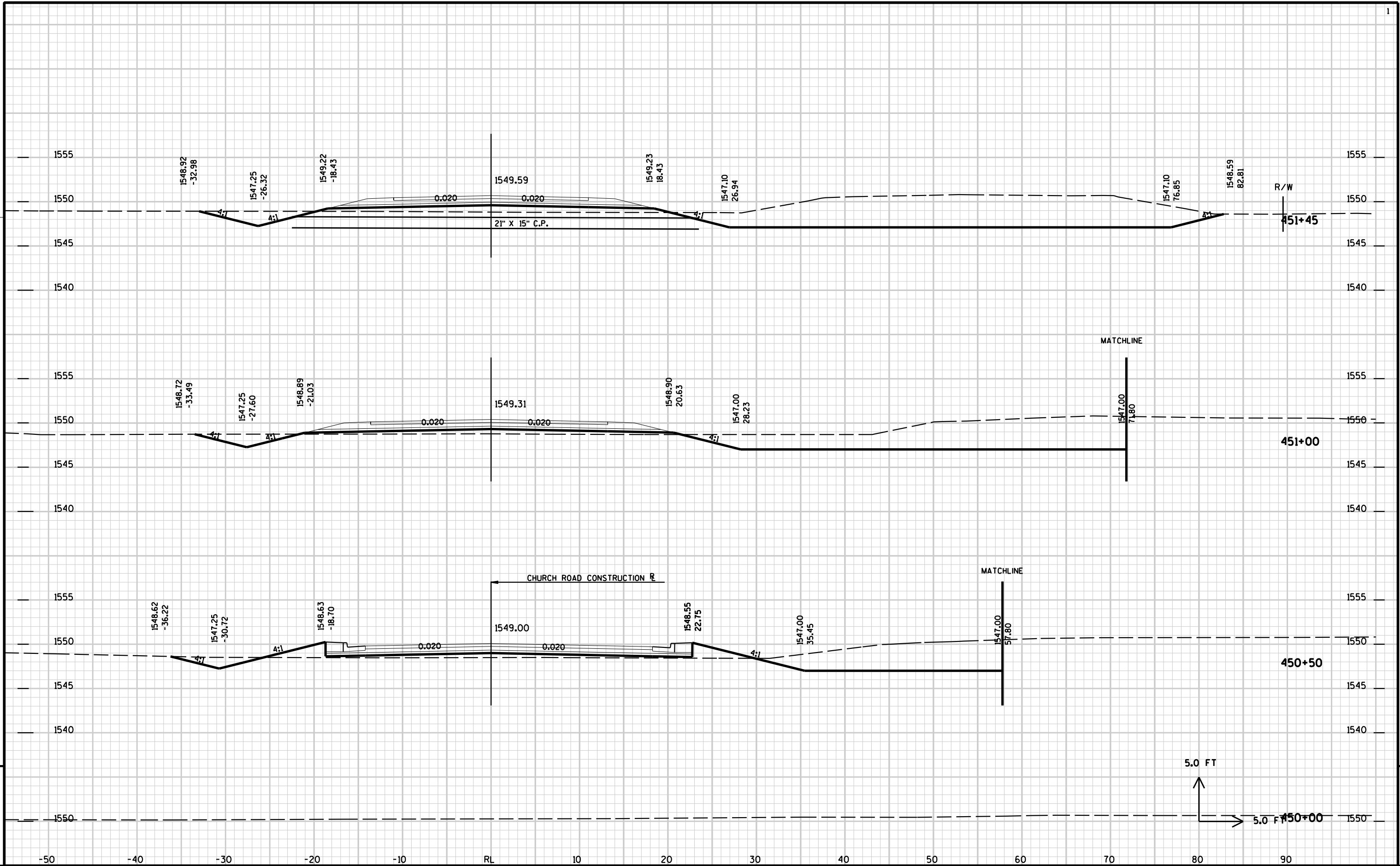


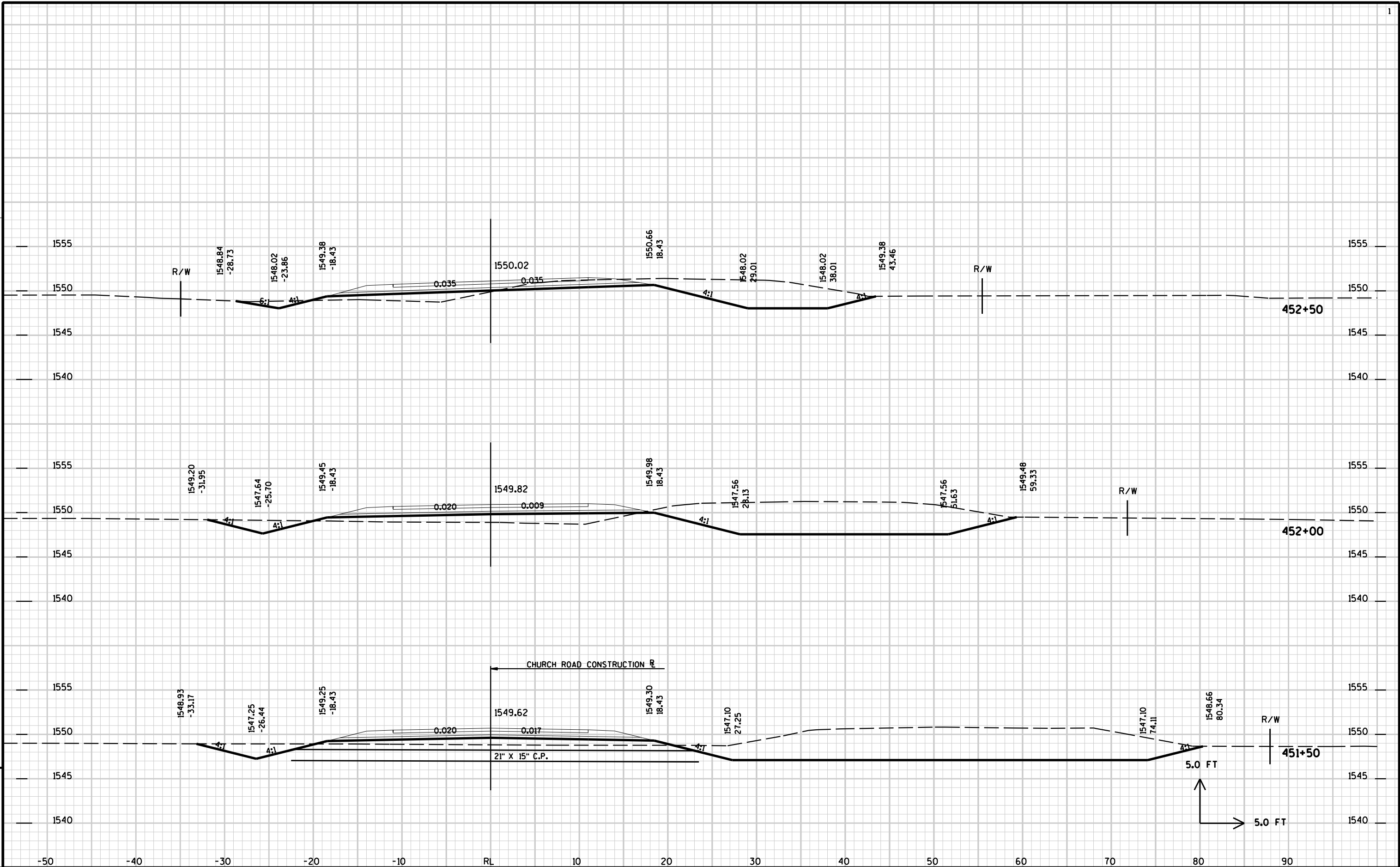


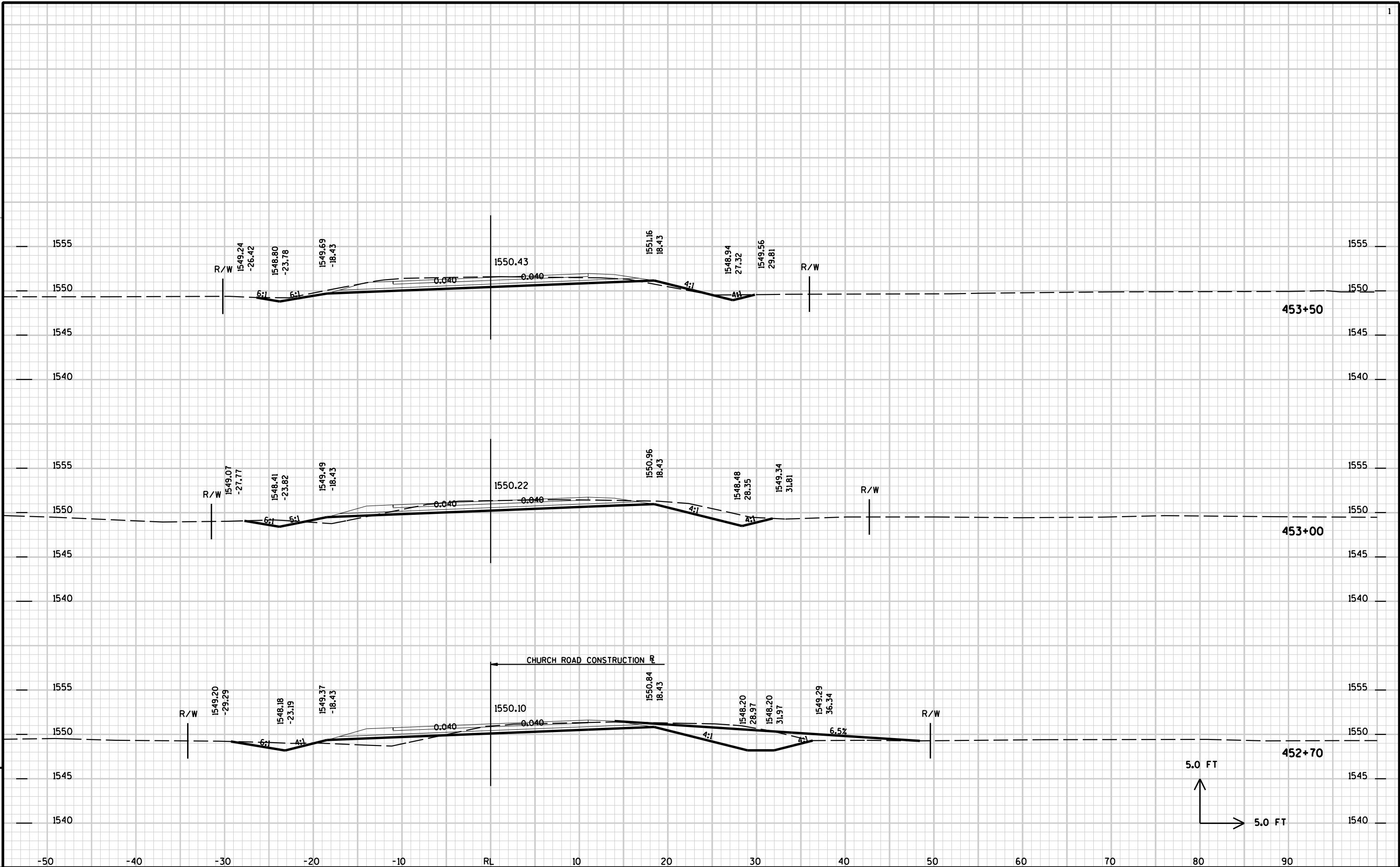
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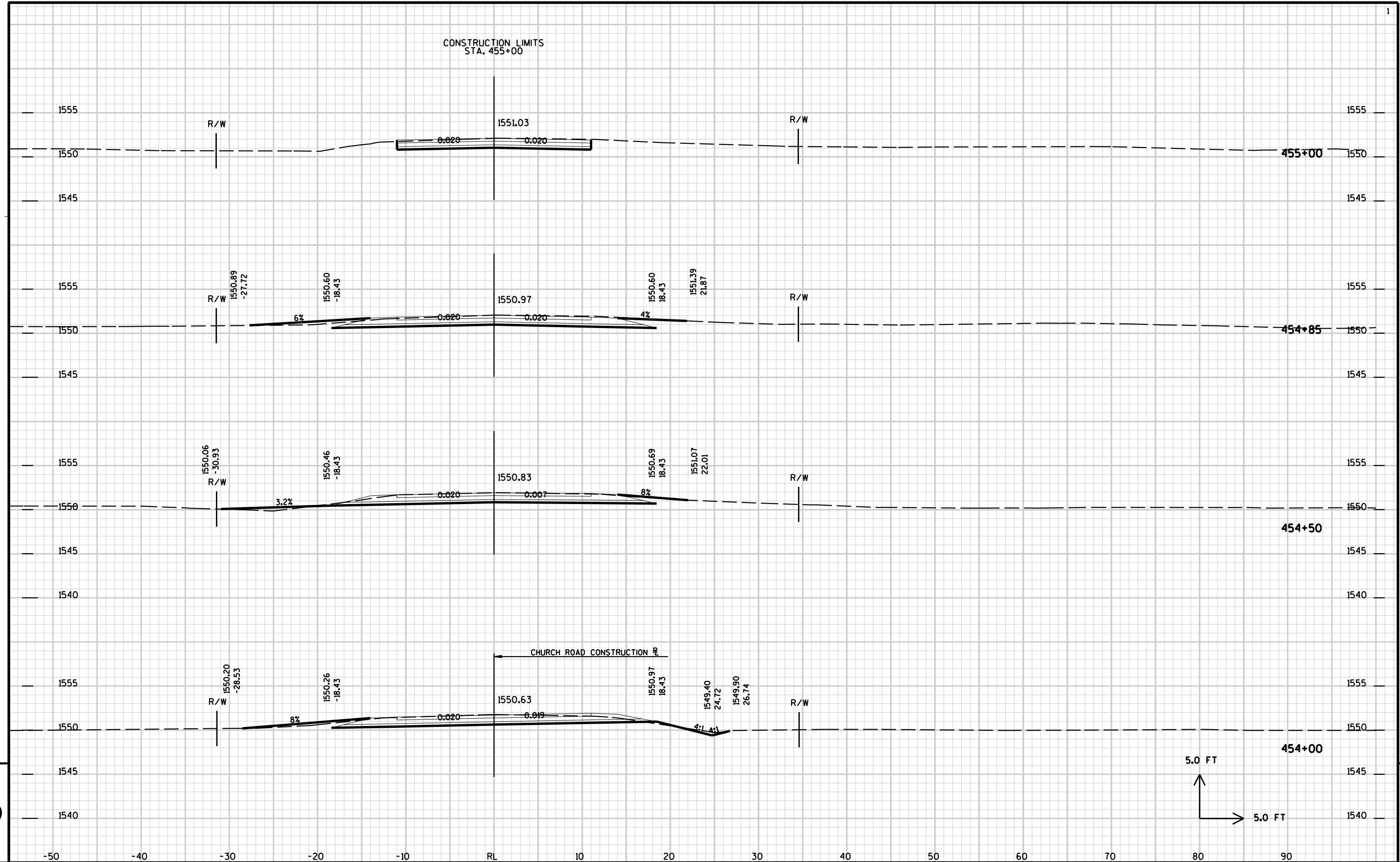


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PROJECT NO: 9360-02-70

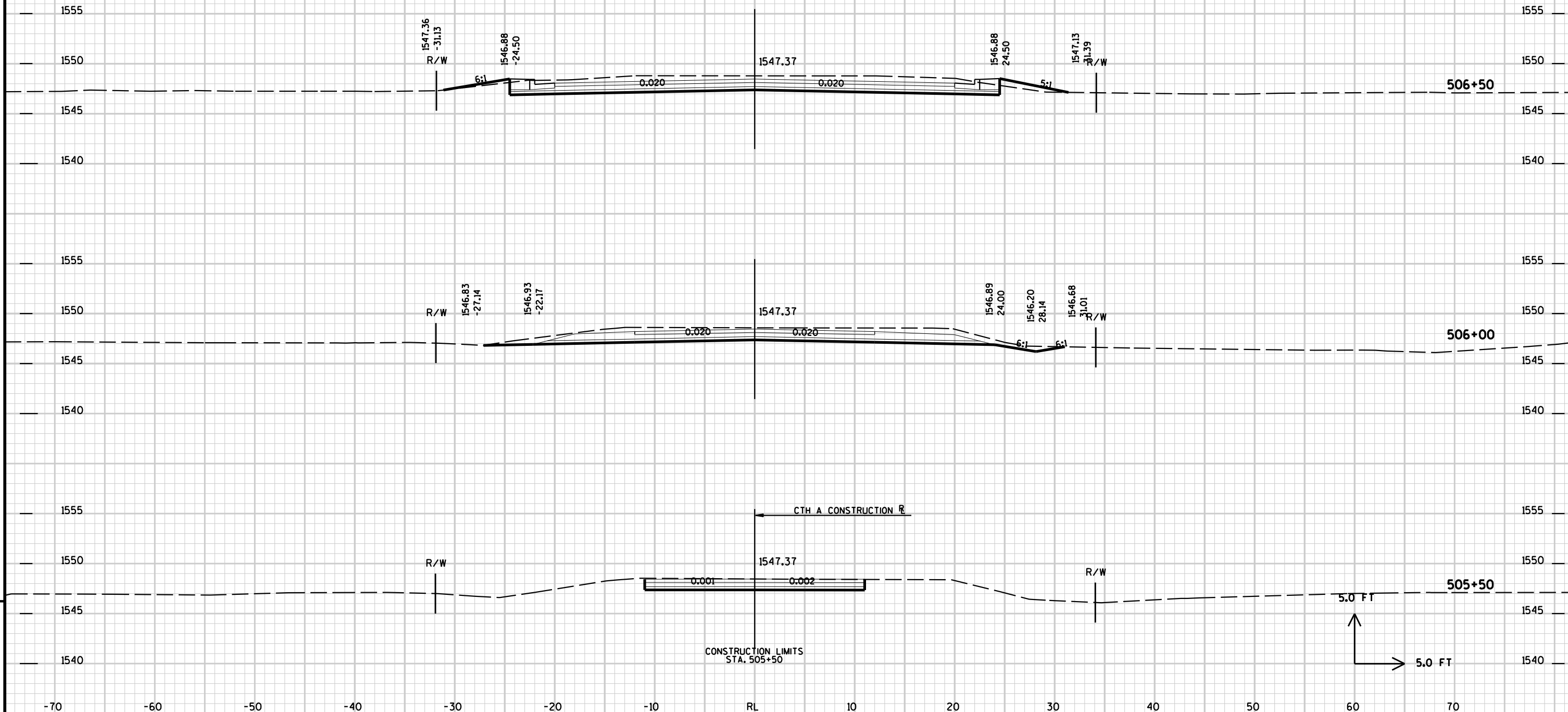
HWY: CTH B

COUNTY: LANGLADE

CROSS SECTIONS - CHURCH ROAD

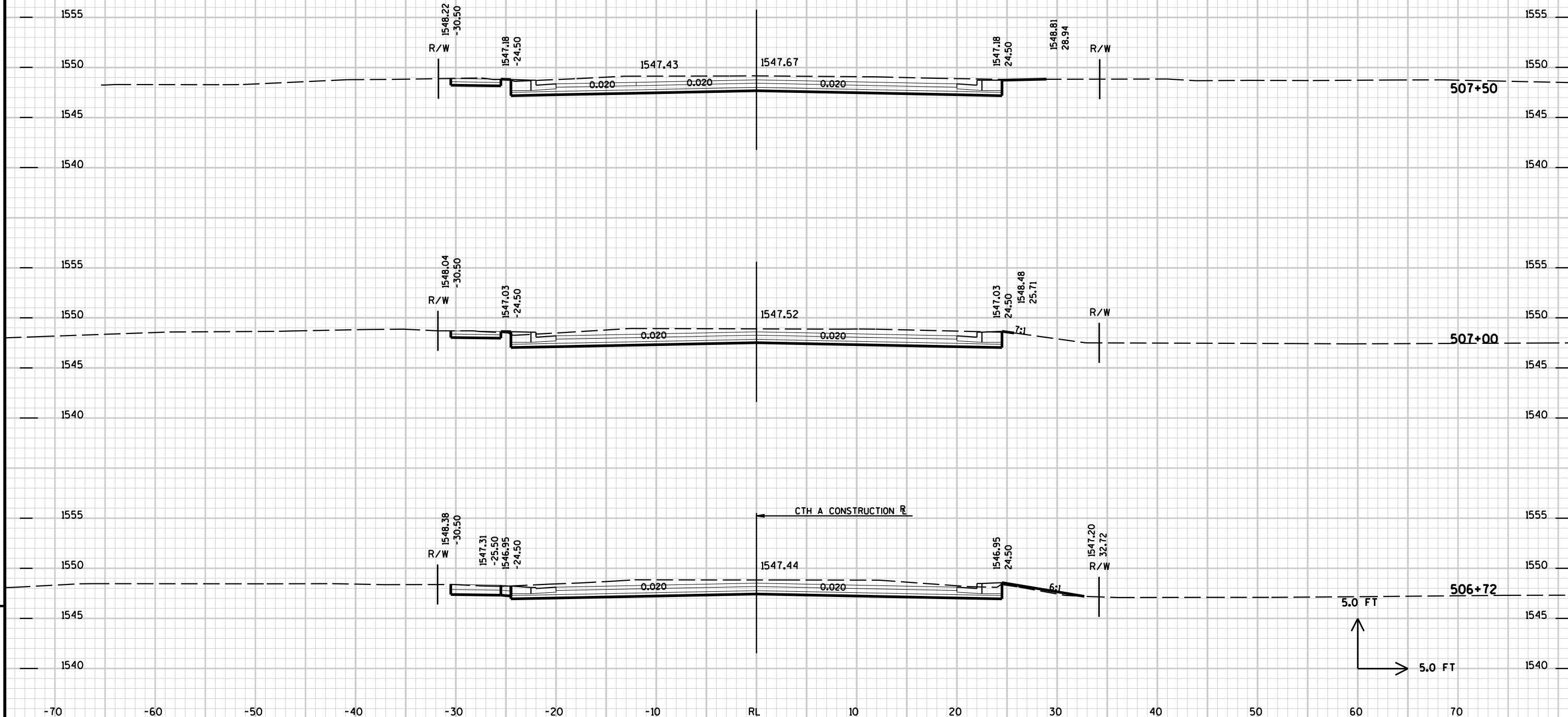
SHEET

E



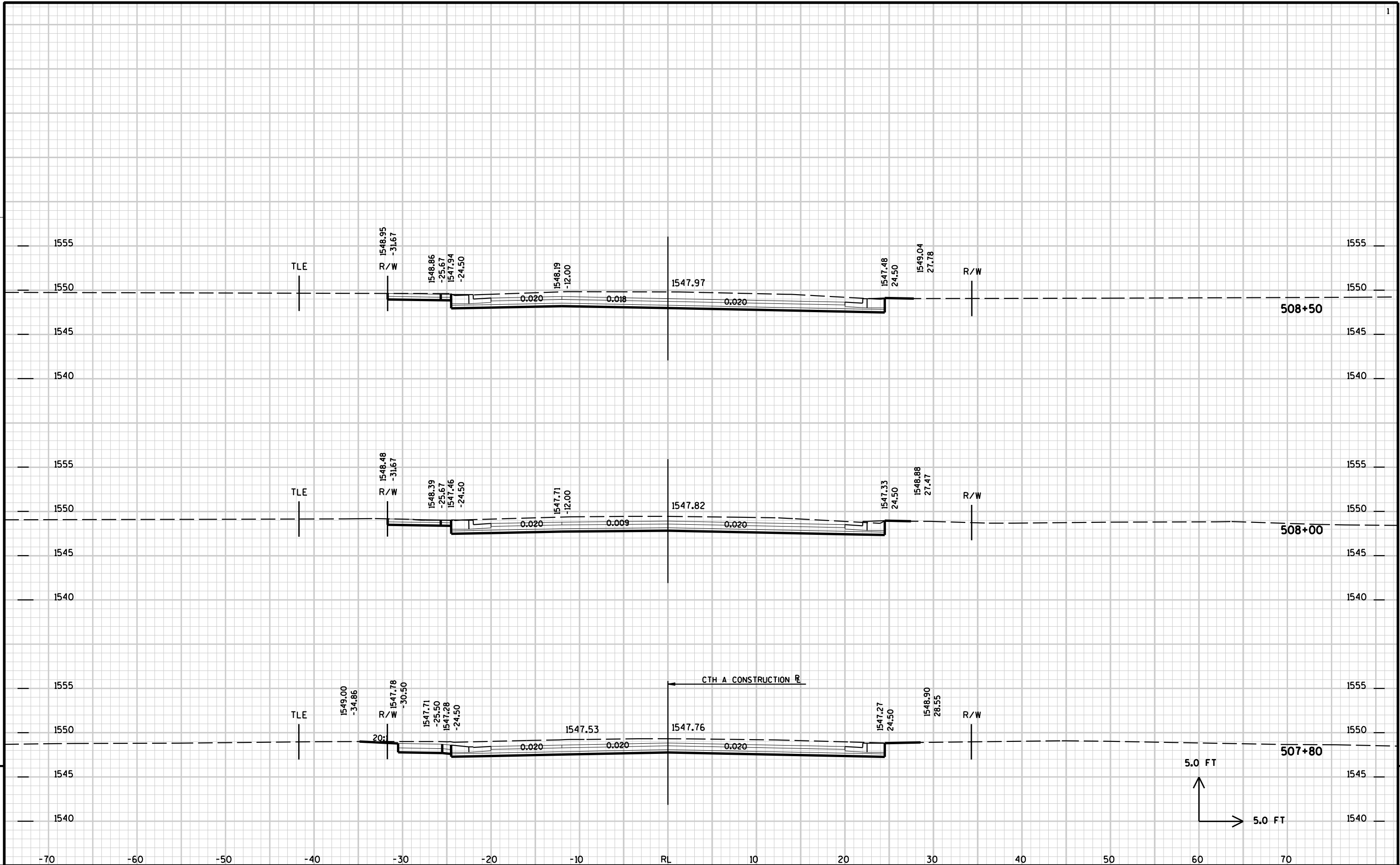
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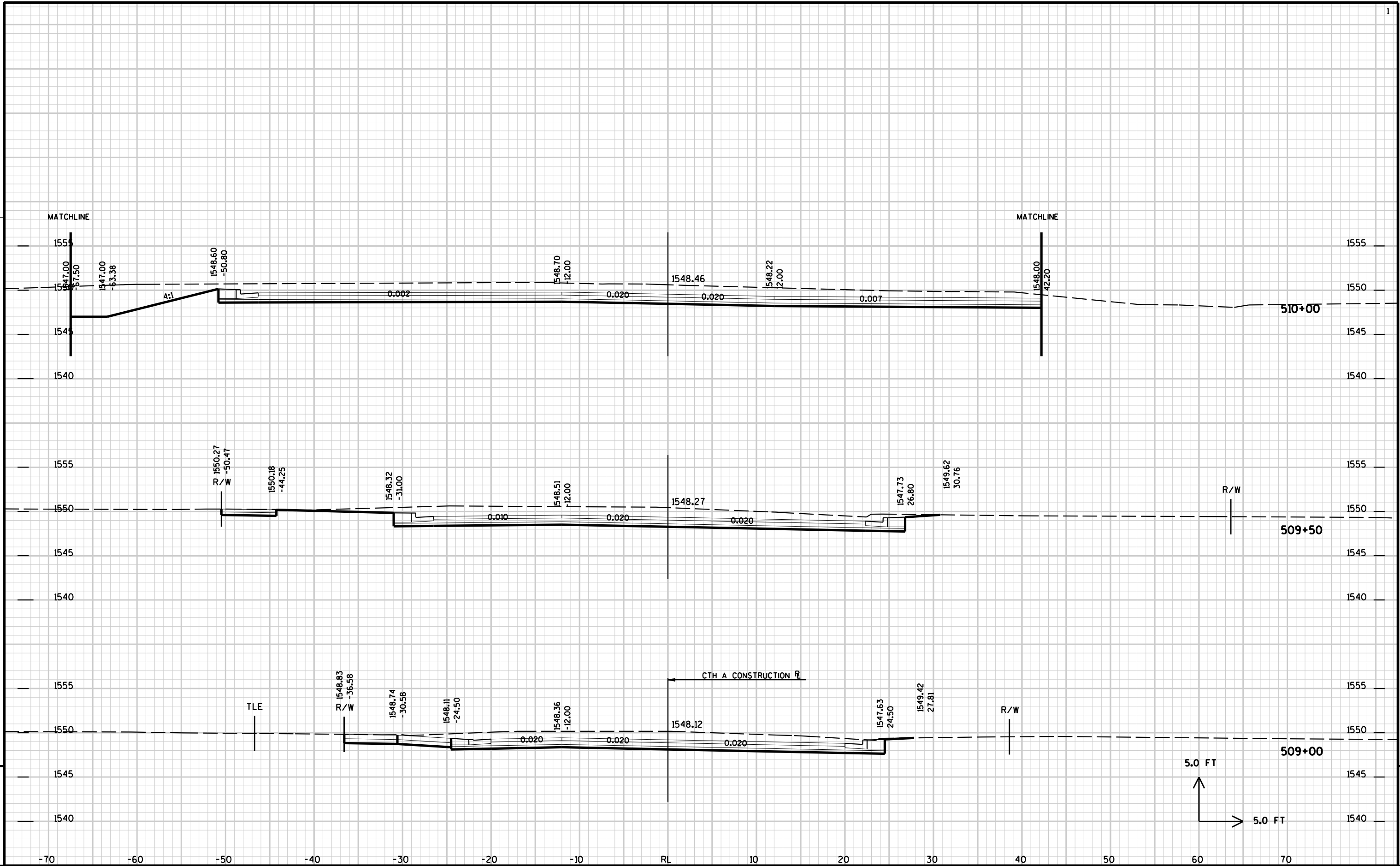
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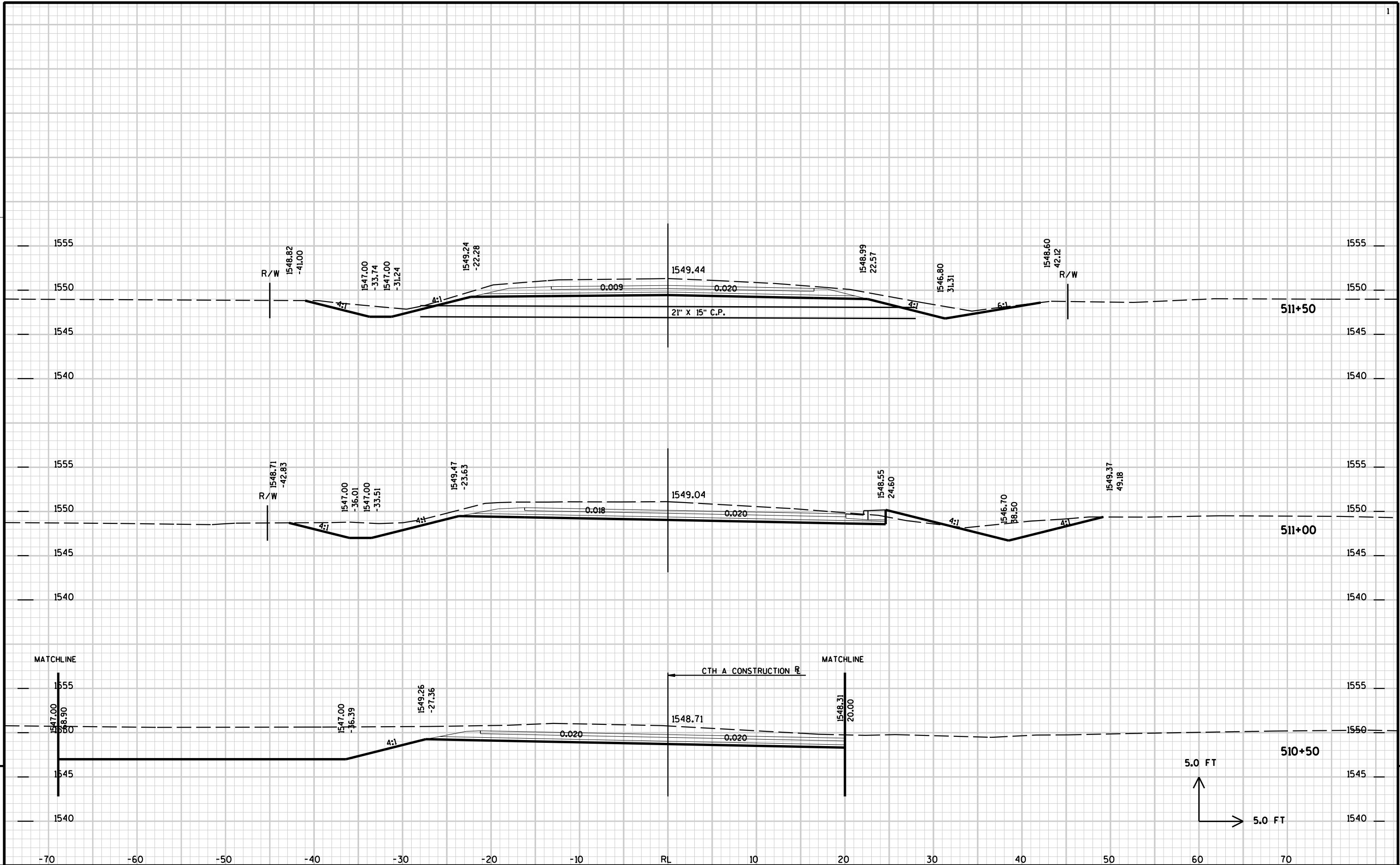


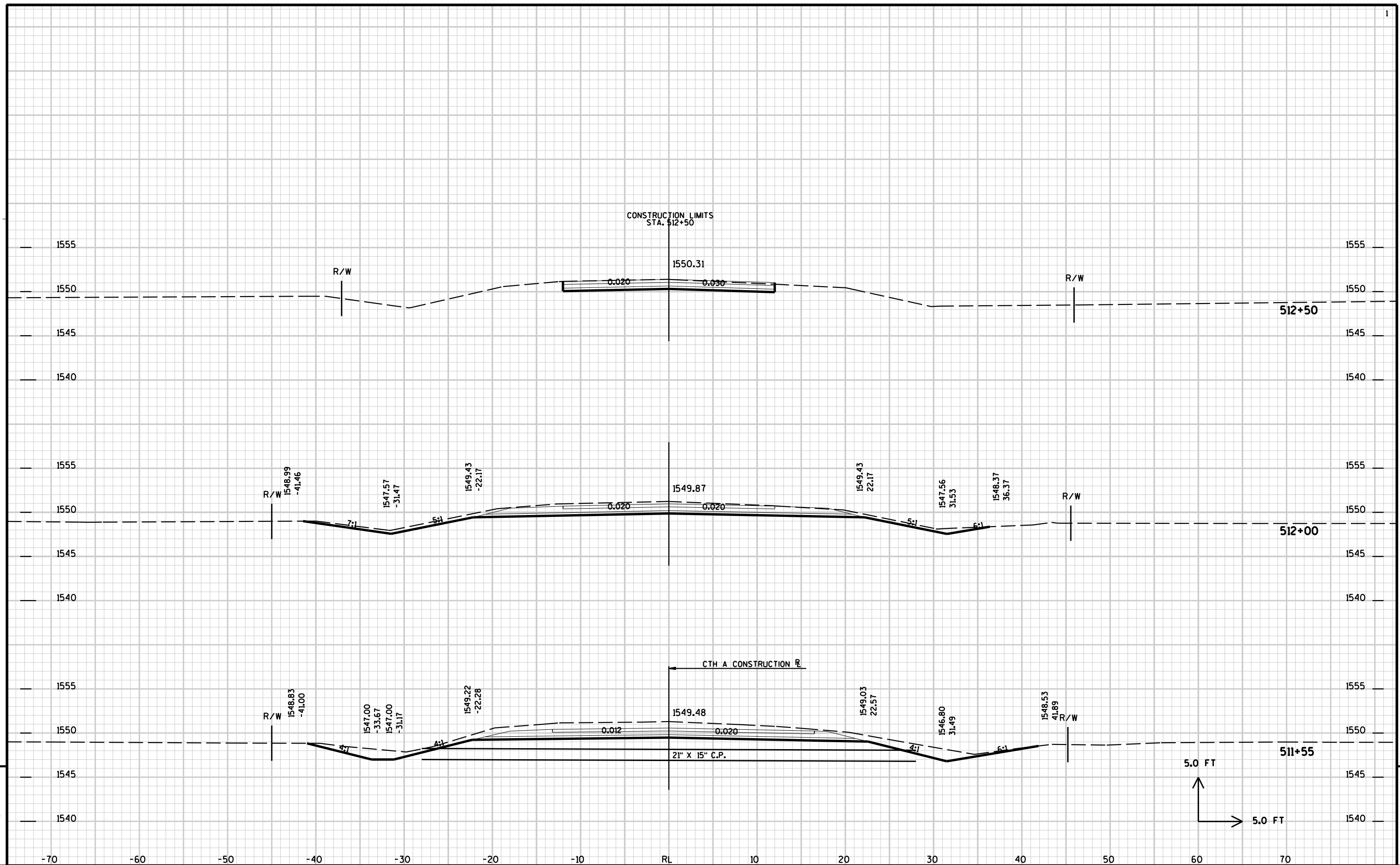
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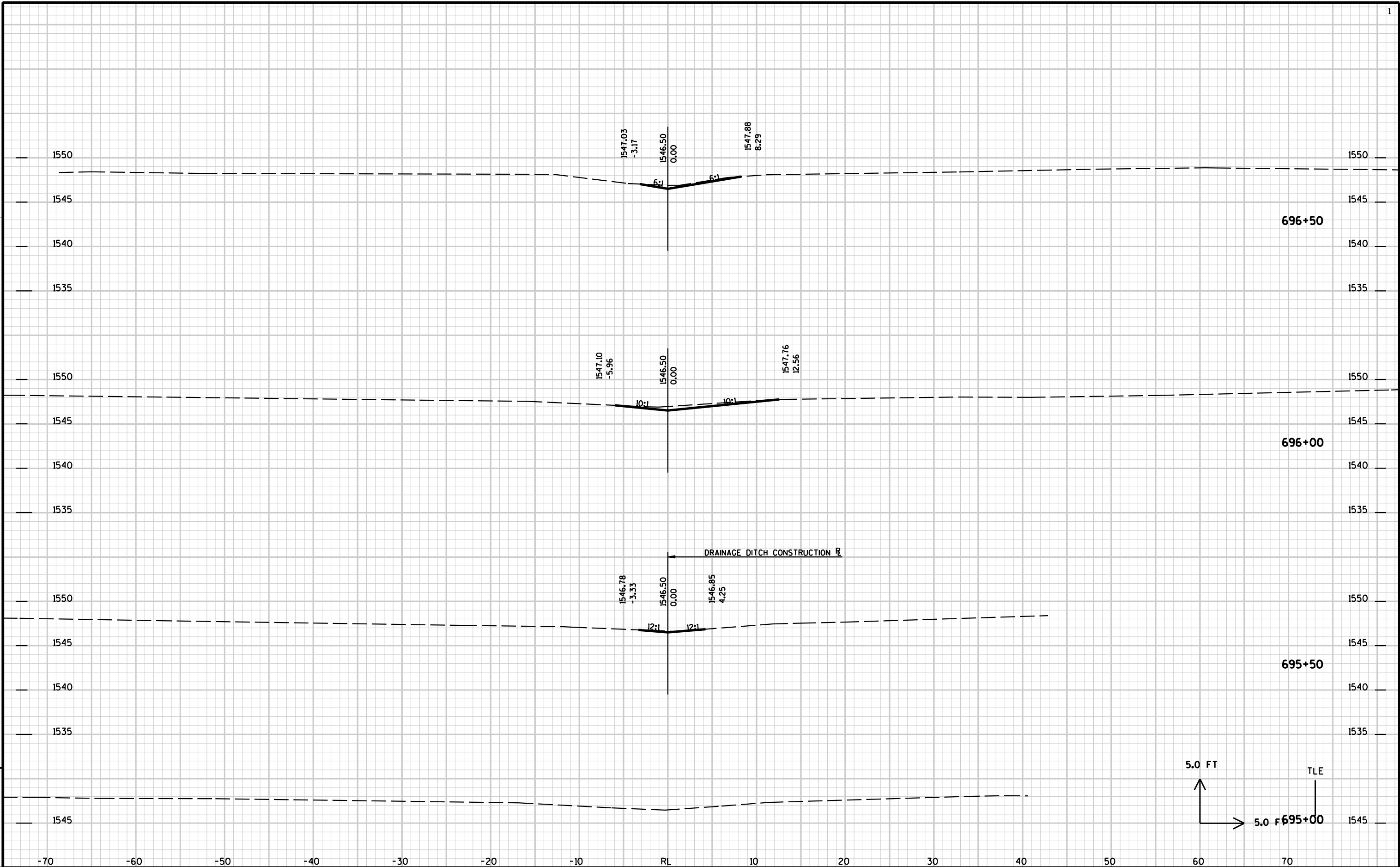


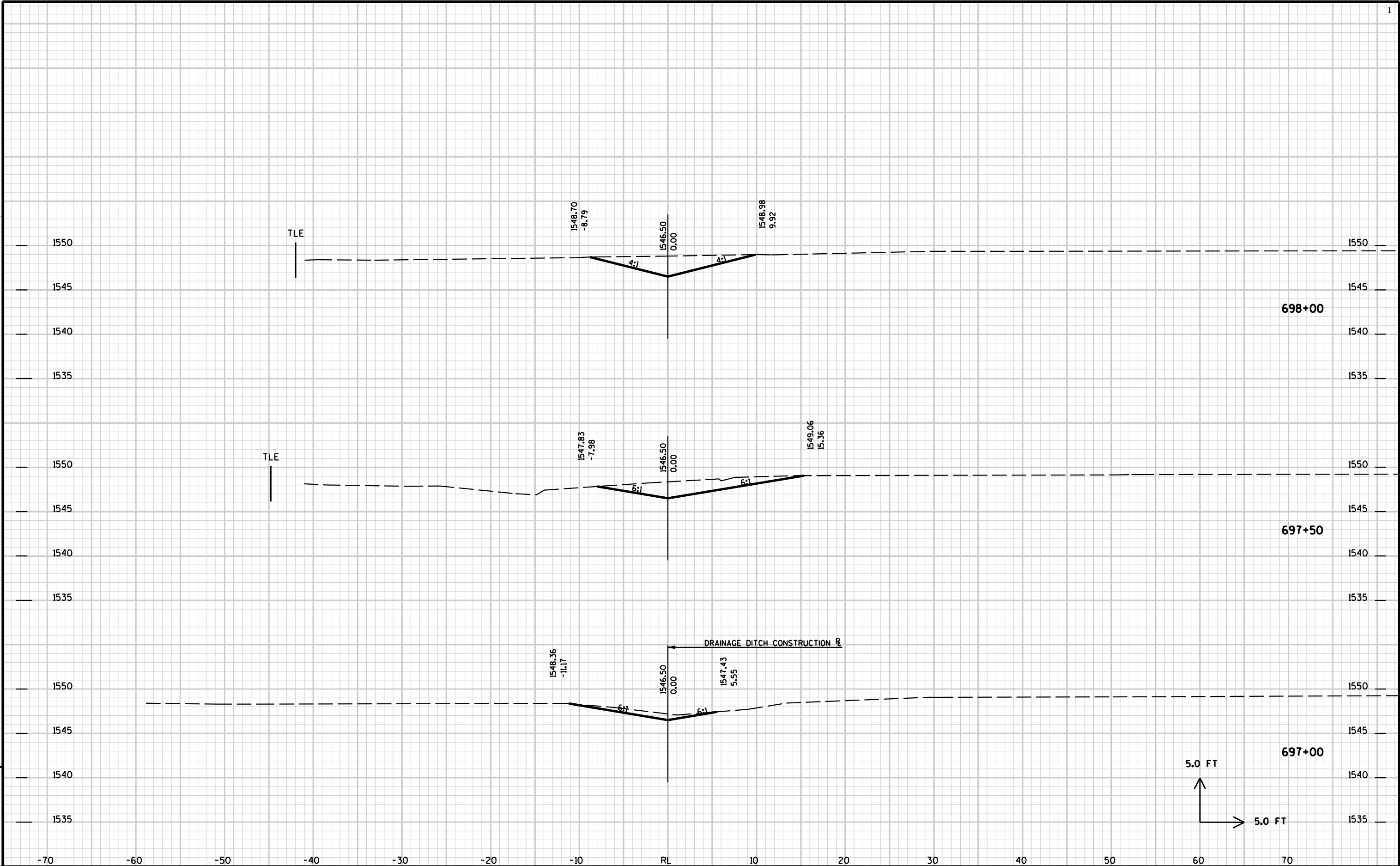


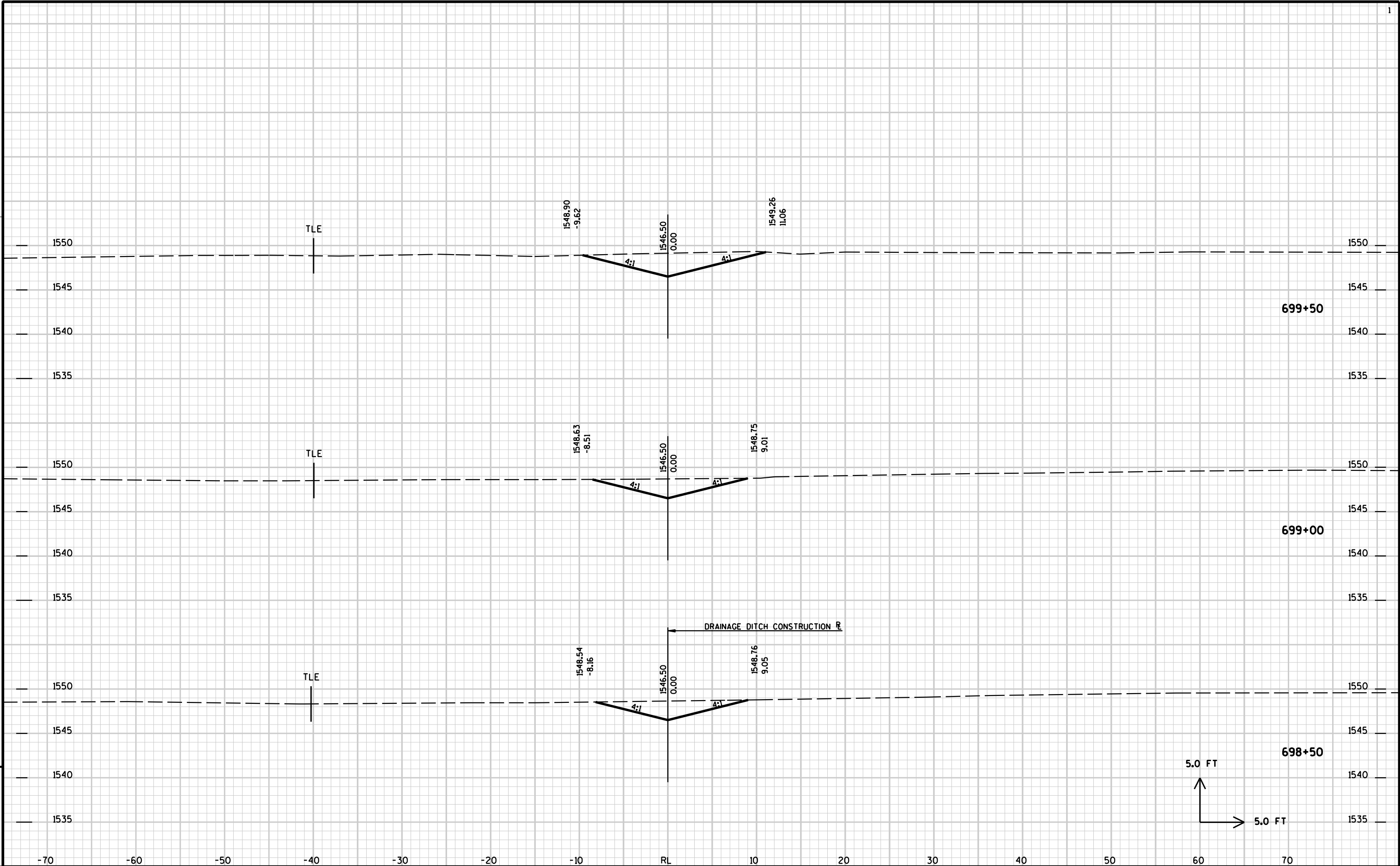


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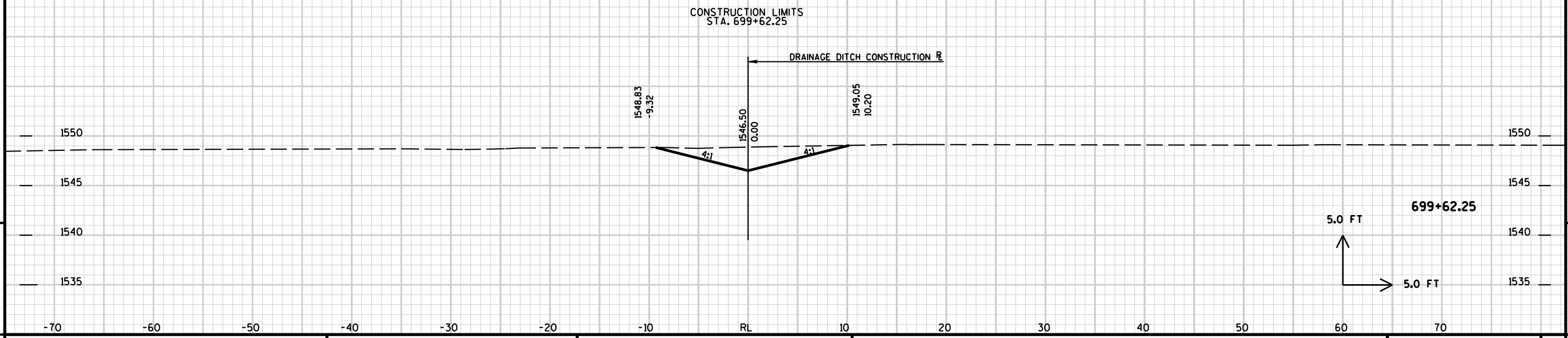






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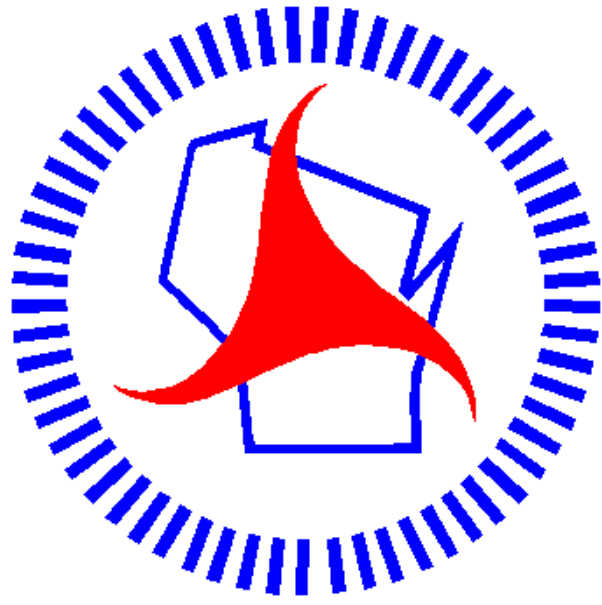
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Notes



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