



ditches could be raised to minimize the amount of right of way required. The District Office will also review if any drainage problems currently exist so they can be addressed.

During construction, two lanes of traffic in each direction will be maintained with two exceptions. It will be necessary to close interstate traffic for 20 minute time periods in order to remove the South 12<sup>th</sup> Avenue Bridge and also during the first stage when traffic is reduced to one lane to strengthen the inside shoulder. The shoulder strengthening work will be limited to night work from 9:00 p.m. to 6:00 a.m. Sunday night thru Friday morning.

It was recommended to review stubbing out some pavement on the east end of the project. This will facilitate construction staging on the future project to the east and reduce the amount of temporary “throw away” transition pavement required to tie in the new eastbound lanes to the existing eastbound lanes. The existing one-lane crossover on the west end will be replaced.

The existing digital message sign spanning over the westbound lanes will conflict with the new lanes need to be removed and replaced.

Right of way will be required to construct this project.

No plans are included in this submittal; however, field exam plan with comments may be viewed as a PDF at:

W:\Projects\5008002004\Design\ DesignEvents\D2\D2\_50080307\_ Plan.pdf

This first letting for this project is currently scheduled for December 2015. This project will be broken down into a first year grading project of the eastbound lanes and construction of the eastbound Skunk River Bridge, a second year paving project for the eastbound lanes, and a third year grade and pave project for the westbound lanes and construction of the westbound bridge. The fourth year project will be a median grading project to remove the old eastbound lanes and bridge. The cost estimate for this project, by year, is shown below.

<b>Year</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>Description</b>	<b>EB Grading</b>	<b>EB Paving</b>	<b>WB Grade &amp; Pave</b>	<b>Median Grading</b>
Roadway	\$ 4,921,400	\$6,814,000	\$5,123,600	\$1,151,000
Bridge	\$ 2,549,000		\$2,710,700	\$129,500
<b>Totals</b>	<b>\$ 7,470,400</b>	<b>\$6,814,000</b>	<b>\$7,834,300</b>	<b>\$1,280,500</b>

KKP:

cc:

T. J. Gustafson  
M. J. Kennerly  
D. L. Maifield  
R. Miller  
R. L. Stanley  
T. Crouch  
M. D. Masteller  
M. A. Swenson  
N. L. McDonald  
G. A. Novey  
J. Vortherms  
C. Greenan  
J. Lavine  
B. Young

M. J. Sankey  
D. A. Widick  
T. L. Gettings  
J. P. Rost  
S. C. Marler  
L.C. Funnell  
D. Matulac  
C. B. Brakke  
D. A. Popp  
D. R. Claman  
B. Hofer  
R. Miller  
E. Timm  
L. Powell-Littler

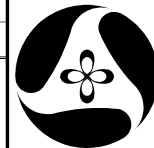
S. J. Gent  
W. Sorenson  
E.C. Wright  
K. D. Nicholson  
E. J. Ranney  
D. R. Tebben  
Y. Jia  
J. W. Smith  
B. Bradley  
J. McCollough  
D. Mulholland  
A. Smyth  
FHWA

RECONSTRUCTION  
IMX-80-5(307)174--02-50

JASPER CO.

LETTING DATE

INDEX OF SHEETS	
No.	DESCRIPTION
<b>A Sheets</b>	<b>Title Sheets</b>
A.1	Title Sheet
A.2	Location Map Sheet
<b>B Sheets</b>	<b>Typical Cross Sections and Details</b>
B.1 - 5	Typical Cross Sections and Details
<b>D Sheets</b>	<b>Mainline Plan and Profile Sheets</b>
* D.1	Plan & Profile Legend & Symbol Information Sheet
* D.2 - 10	Interstate 80
<b>E Sheets</b>	<b>Side Road Plan and Profile Sheets</b>
* E.1 - 3	108th Street
<b>F Sheets</b>	<b>Detour or Temporary Pavement Sheets</b>
* F.1	Detour Plan and Profile Sheets
<b>J Sheets</b>	<b>Traffic Control and Staging Sheets</b>
* J.1	Traffic Control Plan
* J.1	Staging Notes Stage
* J.2	Traffic Control & Staging Legend & Symbol Info. Sheet
* J.3 - 4	Staging Typical
* J.5	Staging and Traffic Control Sheets
<b>T Sheets</b>	<b>Earthwork Quantity Sheets</b>
T.1	Earthwork Quantity Sheets
<b>W Sheets</b>	<b>Mainline Cross Sections</b>
W.1	Cross Sections Legend & Symbol Information Sheet
W.2	Mainline Cross Sections
<b>X Sheets</b>	<b>Side Road Cross Sections</b>
X.1	Side Road Cross Sections
	* Color Plan Sheets



Iowa Department of Transportation

Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

INTERSTATE ROAD SYSTEM

# JASPER COUNTY

## RECONSTRUCTION

I-80 Over the North Skunk River  
2.1 Miles East of IA 224

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

Value Engineering Saves. Refer to Article 1105.15 of the Specifications.

**NO MILEAGE SUMMARY**

For Project Location Map  
Refer to Sheet A.2



DESIGN DATA RURAL			
2015	AADT	30,253	V.P.D.
2035	AADT	40,467	V.P.D.
2035	DHV	4,180	V.P.H.
	TRUCKS	32	%
	Total		
	Design ESALs	--	

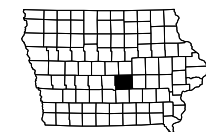
INDEX OF SEALS		
SHEET NO.	NAME	TYPE
A.1	X	Primary Signature Block
X	X	X

**PRELIMINARY PLANS**

Subject to change by final design.

**D2 PLAN - Date: X**

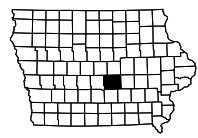
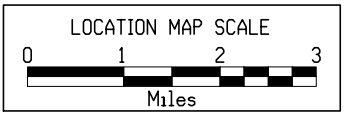
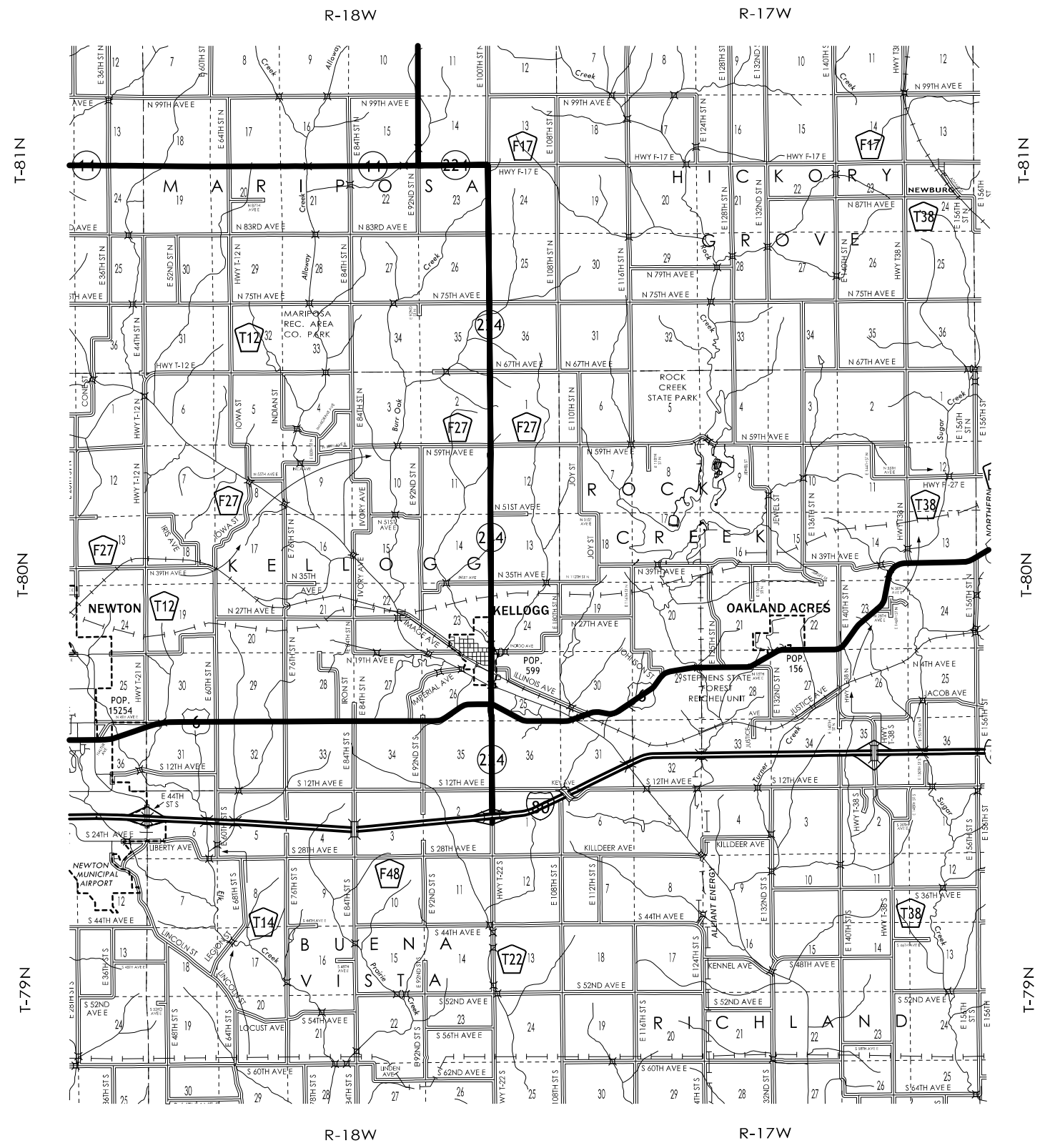
REVISIONS	TOTAL XXX
PROJECT IDENTIFICATION NUMBER	04-50-080-020
PROJECT NUMBER	IMX-80-5(307)174--02-50
R.O.W. PROJECT NUMBER	IMN-080-5(241)176--0E-50





# MILEAGE SUMMARY

Div.	Location	Lin. Ft.	Miles
	STA. XXXX+XX.XX TO STA. XXXX+XX.XX	X,XXX.XX	X.XX
	TOTAL:	X,XXX.XX	X.XX



Last Updated: 6/13/2012		Acceptable Values		Preferred Values	Project Values	Comments
Design Element		Acceptable Design Criteria Based Upon Roadway Type (requires approval according to Section 1C-8)		Preferred Design Criteria Based Upon Roadway Type		
		Roadway Type		Roadway Type		
		Interstates		Interstates		
		Rural	Urban			
design speed (mph)		70	50	75	75	
full depth paved width (ft)	outside lane	12		14', 12' if using full depth paved shoulders	12'	
	inside lane(s)	12		12'	12'	
design lane width (ft)		12		12	12	
auxiliary-lane width (ft) (includes turn lanes)		12		12	NA	
parking-lane width (ft)					NA	
pavement cross-slope (%)		1.5% minimum, 3% maximum		2%. However, when adjacent lanes slope in the same direction, increase slope by 0.5% per lane up to 3%	INSIDE: 2.0%, OUTSIDE: 2.5%, FUTURE INSIDE: 2.0%	
effective shoulder width and type (see Section 3C-4)		See Shoulder Tables		See Shoulder Tables	12' PAVED FULL WIDTH	
shoulder cross-slope (%)		2 to 6% but not less than the adjacent lane		4% unless shoulders will be used for staging or potential future lanes.	INSIDE: 2.0% (FUTURE LANE), OUTSIDE: 3.0%, INSIDE (FUTURE): 2.5%	
foreslope (see Roadway Typical Cross Sections)	adjacent to shoulder	4:1		10:1 for 4' then 6:1	10:1 for 4' then 6:1	
	beyond standard ditch depth and design clearzone	3:1		3.5:1	3.5:1	
	Curbed roadways	not steeper than 3:1		Curbed roadways are not preferred	NA	
normal outside ditch (depth x width) (ft)		--		5 x 10	5 x 10	
normal median ditch depth (ft)		3' minimum		4	4	
normal median width (ft) (if applicable)		36	10	82	82	
Backslope (For cut areas greater than 25 feet, contact the Soils Design Section for assistance with backslope benches.)		2.5:1		3:1	3:1	
bridge width—new (ft)		design lane widths + effective shoulder widths		design lane widths + effective shoulder widths	60'	
bridge width—for Use as Constructed bridges (ft)		design lane widths + 3.5' offset on each side			NA	
transverse slopes	w/ drainage structures	6:1		8:1		
	w/o drainage structures	6:1		10:1		
	at sideroads	6:1		6:1		
Vertical clearance (ft) (above lanes & shoulders) (see Section 8A-2)	Over primary	16		16.5		
	over non-primary	14		16.5 at interchange locations, 15 at all other locations		
	over railroad sign truss	23.3		23.3		
Structural Capacity		Contact Office of Bridges and Structures		--		
Level of Service		B for Rural, C for Urban		--	B	

### Preferred Clear-zone Distances (feet).

design speed	design ADT	FORESLOPES			BACKSLOPES		
		6:1 or flatter	Steeper than 6:1, up to and including 4:1	Steeper than 4:1	Steeper than 4:1*	4:1 or flatter, up to 6:1	6:1 or flatter
40 mph or less	ADT < 750	10	10	**	10	10	10
	750 ≤ ADT < 1500	12	14	**	12	12	12
	1500 ≤ ADT < 6000	14	16	**	14	14	14
	ADT ≥ 6000	16	18	**	16	16	16
45 – 50 mph	ADT < 750	12	14	**	10	10	12
	750 ≤ ADT < 1500	16	20	**	12	14	16
	1500 ≤ ADT < 6000	18	26	**	14	16	18
	ADT ≥ 6000	22	28	**	16	20	22
55 mph	ADT < 750	14	18	**	10	12	12
	750 ≤ ADT < 1500	18	24	**	12	16	18
	1500 ≤ ADT < 6000	22	30	**	16	18	22
	ADT ≥ 6000	24	32	**	18	22	24
60 mph	ADT < 750	18	24	**	12	14	16
	750 ≤ ADT < 1500	24	32	**	14	18	22
	1500 ≤ ADT < 6000	30	40	**	18	22	26
	ADT ≥ 6000	32	44	**	22	26	28
65 – 70 mph	ADT < 750	20	26	**	12	16	16
	750 ≤ ADT < 1500	26	36	**	16	20	22
	1500 ≤ ADT < 6000	32	42	**	20	24	28
	ADT ≥ 6000	34	46	**	24	30	30

### Acceptable Clear-zone Distances (feet).

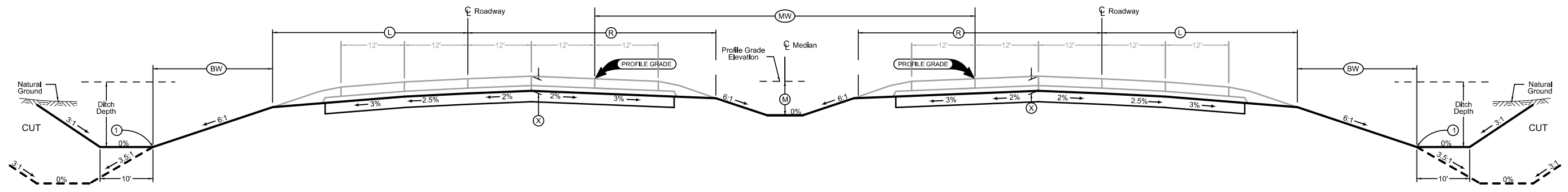
design speed	design ADT	FORESLOPES			BACKSLOPES		
		6:1 or flatter	Steeper than 6:1, up to and including 4:1	Steeper than 4:1	Steeper than 4:1*	4:1 or flatter, up to 6:1	6:1 or flatter
40 mph or less	ADT < 750	7	7	**	7	7	7
	750 ≤ ADT < 1500	10	12	**	10	10	10
	1500 ≤ ADT < 6000	12	14	**	12	12	12
	ADT ≥ 6000	14	16	**	14	14	14
45 – 50 mph	ADT < 750	10	12	**	8	8	10
	750 ≤ ADT < 1500	14	16	**	10	12	14
	1500 ≤ ADT < 6000	16	20	**	12	14	16
	ADT ≥ 6000	20	24	**	14	18	20
55 mph	ADT < 750	12	14	**	8	10	10
	750 ≤ ADT < 1500	16	20	**	10	14	16
	1500 ≤ ADT < 6000	20	24	**	14	16	20
	ADT ≥ 6000	22	26	**	16	20	22
60 mph	ADT < 750	16	20	**	10	12	14
	750 ≤ ADT < 1500	20	26	**	12	16	20
	1500 ≤ ADT < 6000	26	30	**	14	18	24
	ADT ≥ 6000	30	30	**	20	24	26
65 – 70 mph	ADT < 750	18	20	**	10	14	14
	750 ≤ ADT < 1500	24	28	**	12	18	20
	1500 ≤ ADT < 6000	28	30	**	16	22	26
	ADT ≥ 6000	30	30	**	22	26	28

\* Backslopes as steep as 2.5:1 can be considered as part of the clear zone, as long as they are relatively smooth and do not contain any fixed objects. Refer to Section 8A-4 of the Design Manual for information regarding backslopes steeper than 2.5:1.

\*\* Since a vehicle traveling on a slope steeper than 4:1 is likely to be diverted to the bottom of the slope, the width of any slope steeper than 4:1 cannot be counted in the clear zone determination. Refer to Section 8A-2 of the Design Manual for information on providing clear recovery areas at the base of steep slopes.

Last Updated: 6/13/2012		Acceptable Values		Preferred Values	Project Values	Comments
Design Element		Acceptable Design Criteria Based Upon Design Speed (requires approval according to Section 1C-8)		Preferred Design Criteria Based Upon Design Speed		
		Design Speed, mph (Acceptable design speed is equal to posted speed limit and a minimum of 70mph for Interstates)		Design Speed, mph (Preferred design speed is 5mph over posted speed limit and a minimum of 70mph for Interstates)		
Stopping sight distance (ft) (see Section 6D-1)		75	75	75	75	
Minimum horizontal curve radius (ft)	e <sub>max</sub> = 4%	--	--	--		
	e <sub>max</sub> = 6%	2500	2500	2500	3200, 3000	
	e <sub>max</sub> = 8%	2210				
Minimum vertical curve length (ft)		225	225	225	350	
Minimum rate of vertical curvature (K)	crest	312	506	506	516	
	sag	206	206	206	206	
Minimum gradient (%)		0.3% with a curb, 0.0% without a curb		0.5	0.33%	
Maximum gradient (%) on ramps		--		4%	NA	
	Upgrades	--			NA	
	Downgrades	Equal to the maximum upgrade gradient. In special cases, may be 2% greater but in no case greater than			NA	
Maximum gradient (%) on roadways other than ramps		4	3	3	3.6	
Clearzone		See "Acceptable Clear Zone" table in Section 8A-2		See "Preferred Clear Zone" table in Section 8A-2	34	
Curb type		4" Sloped is maximum height for interstate routes		4" Sloped is maximum height for interstate routes, 6" Sloped for all other routes	NA	
		6" Sloped for all other routes				

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Normal section shown may be modified appropriately in areas of superelevated curves or other locations specifically designated by the Engineer.

See Plan & Profiles sheets and cross sections for additional details of ditches and backslopes.

① Refer to project plan and cross sections for specific location of foreslope change.

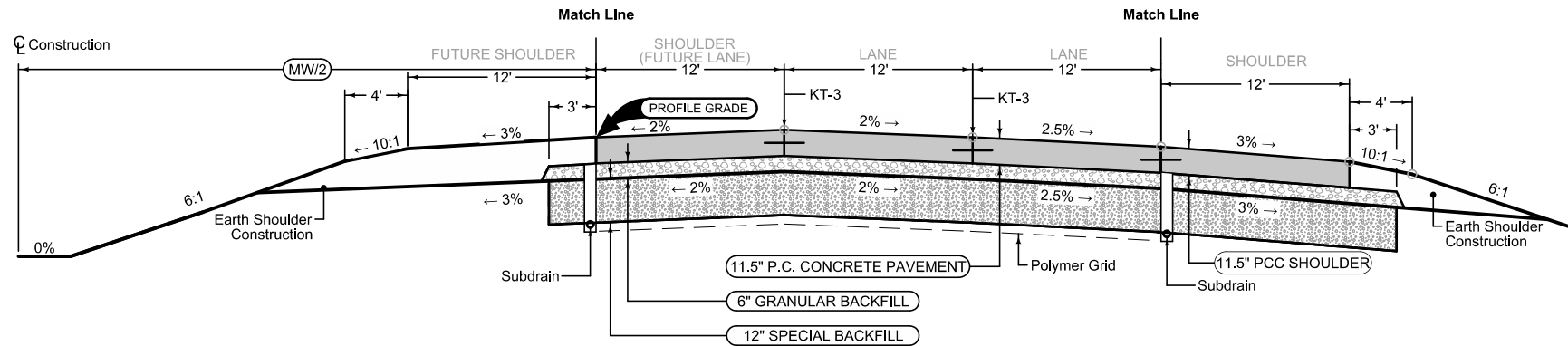
ROAD IDENTIFICATION	LOCATION		DIMENSIONS						
	STATION TO STATION		L Feet	R Feet	X Inches	BW Feet	MW Feet	M Feet	
I-80 EB	1265+00	1275+00	36.92	48.80	17.5	16.51	82	4	
I-80 WB	1275+00	1285+65	36.92	48.80	17.5	16.51	82	4	

TYPICAL CROSS SECTION  
6-LANE GRADING

**Full Depth PCC Shoulder**

Shoulder Jointing:  
Longitudinal joint: L-2 or KT-2  
Transverse joints: CD at 20' spacing

6D_Dprs_P_FullPCC_04-19-11		
Direction of Travel	BEGIN STATION	END STATION



**Full Depth PCC Shoulder**

Shoulder Jointing:  
Longitudinal joint: L-2 or KT-2  
Transverse joints: C at 20' spacing

6D_Dprs_P_FullPCC_04-19-11		
Direction of Travel	BEGIN STATION	END STATION

Refer to Curve and Superelevation Tabulations for additional information.

Section shown in the direction of traffic.

Mainline Jointing:  
Transverse joints: CD at 20' spacing

6DP_Dprs_04-19-11			
Direction of Travel	BEGIN STATION	END STATION	MW Feet

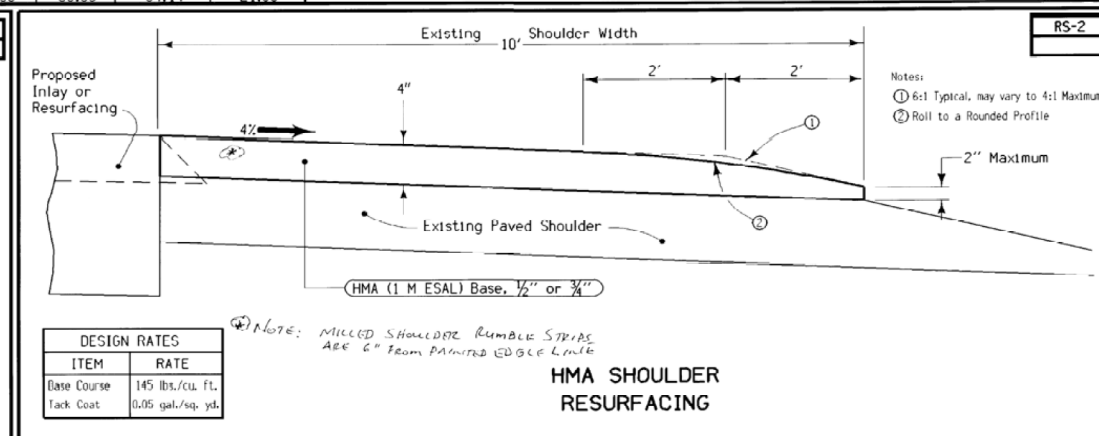
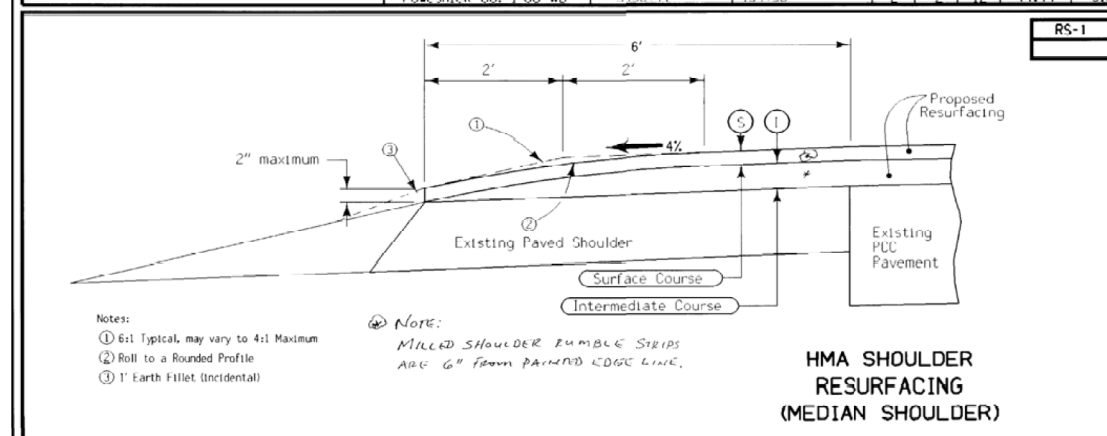
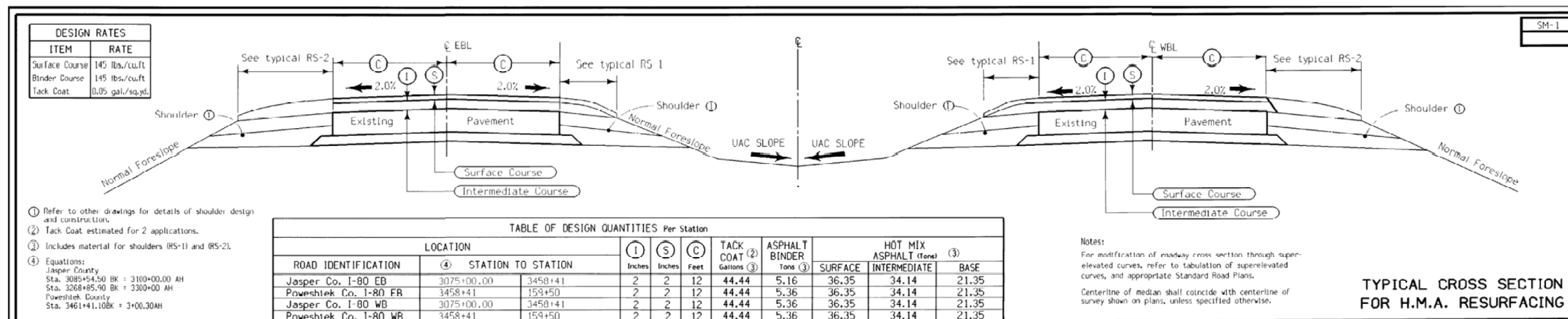
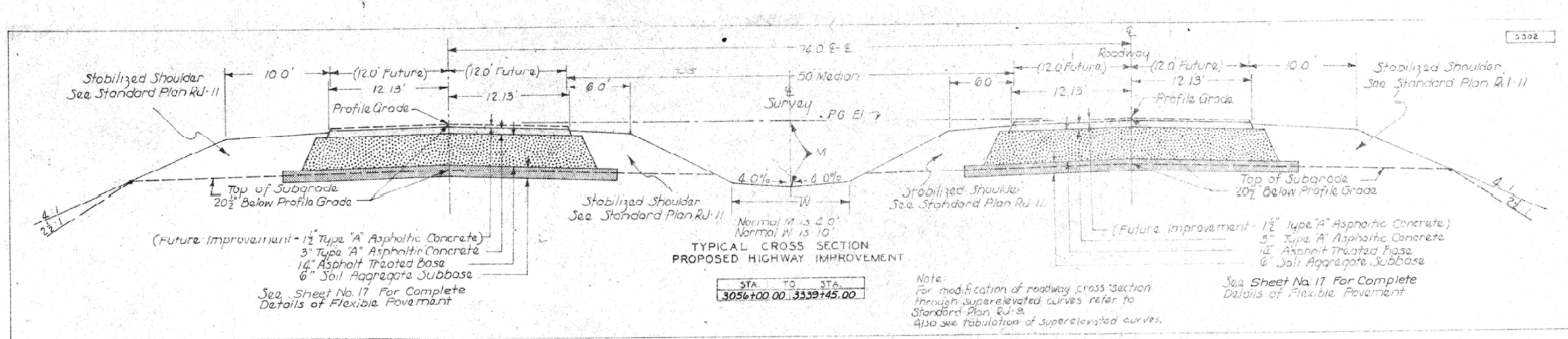
See Tab 100-24 for pavement quantities.  
See Tab 112-9 for shoulder quantities.

**INTERSTATE 80**



# JASPER COUNTY 2011 CONSTRUCTION HISTORY

CO	ROUTE	D I R	BEG. MILE POST	END. MILE POST	T Y P	PROJECT NO.	SUR TYPE	SUR DEP.	BASE TYPE	BASE DEP.	SUB BASE TYPE	SUB BASE DEP.	RE-MOVE TYPE	RE-MOVE DEP.	COARSE AGGREGATE	AGG. TYPE	D U R	REMARKS	RELATIVE INDEXES			
																			IRI	C&P	RPI	PCI 2010
50	I-080	1	174.21	180.64	2004	IMX-080-5 (196) 174--02-50	HMA	2.0	HMA	2.0									0.87	47	44	80
					1984	IR-80-5 (105) 173	RAC	1.5	RAC	1.5			MIL	2.0	FERGUSON		C.LST.					
					1968	I-IG-80-5 (34) 178--04-50	AAC	0.5	AAC	1.5					FERGUSON		C.LST.					
					1962	I-IG-80-5 (20) 183	AAC	3.0	ATB	14.0	SAS	6.0										





### SURVEY SYMBOLS

- PR Electric Riser Pole
- COS Square Bridge Pier Column
- OUT Tile Outlet
- UB Utility Box
- TPD Telephone Pedestal
- GDL Guard Rail Steel
- RET Retaining Walls
- WV Water Valve
- WHU WHU RV Water Hook Up
- LP L.P. Tank
- SEP Septic Tank
- D Centerline Draw or Stream (Down)
- DU Centerline Draw or Stream (Up)
- EG Edge of Gravel Road
- FOA Underground Fiber Optic Co. 1
- WLA Underground Water Line Co. 1
- FOB Underground Fiber Optic Co. 2
- FOC Underground Fiber Optic Co. 3
- ELA Underground Electric Line Co. 1
- EB Electrical Box
- GLA Underground Gas Line Co. 1
- GDL Guard Rail Steel
- SI Sign
- TDC Tree Deciduous
- DIK Centerline of Dike or Dam
- TEV Evergreen Tree
- D Centerline Draw or Stream (Down)
- PPA Power Pole Co. 1
- ENU Edge Unpaved Entrance & Parking
- EG Edge of Gravel Road
- FWD Wood Fence
- WM Wind Mill
- EW Edge of Water
- BNK Stream Bank
- BIN Grain Bin
- BB Billboard

### UTILITY LEGEND

### PLAN VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK		Design Color No.	
Green	(2)		Existing Topographic Features and Labels
Blue	(1)		Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Magenta	(5)		Existing Utilities
SHADING		Design Color No.	
Yellow	(4)		Highlight for Critical Notes or Features
Red	(3)		Delineates Restricted Areas
Lavender	(9)		Temporary Pavement Shading
Gray, Light	(48)		Proposed Pavement Shading
Gray, Med	(80)		Proposed Granular Shading
Gray, Dark	(112)		Proposed Grade and Pave Shading "In conjunction with a paving project"
Brown, Light	(236)		Grading Shading
Tan	(8)		Proposed Sidewalk Shading
Blue, Light	(230)		Proposed Sidewalk Landing Shading
Pink	(11)		Proposed Sidewalk Ramp Shading

### PROFILE VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK		Design Color No.	
Green	(2)		Existing Ground Line Profile
Blue	(1)		Proposed Profile and Annotation
Magenta	(5)		Existing Utilities
Blue, Light	(230)		Proposed Ditch Grades, Left
Black	(0)		Proposed Ditch Grades, Median
Rust	(14)		Proposed Ditch Grades, Right

Reference Point

Station Survey Line

Section Corner

Ground Line Intercept

Saw Cut

Guardrail

Trench Drain

HighTension Cable Guardrail

Sheet Pile

Pavement Removal

Clearing & Grubbing Area

### RIGHT-OF-WAY LEGEND

- Proposed Right-of-Way
- Existing Right of Way
- Existing and Proposed Right-of-Way
- Easement and Existing Right-of-Way
- Easement (Temporary)
- Easement
- Access Control
- Property Line

## PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

(COVERS SHEET SERIES D, E, F, & K)



BUENA VISTA TWP  
T-79N - R-18W  
SECTION 1



3065

3070

3075

3080

(UAC)

Sta. 3072+14.45  
24" X 68.6' Conc Pipe  
D.A. = Median

(EXTEND)

Sta. 3072+58.31  
30" X 181.1' Conc Pipe  
D.A. = Ac  
Skew 20° Ahead Rt.

(EXTEND)

Sta. 3075+75.34  
36" X 237' Conc Pipe  
D.A. = Ac  
Skew 42° Ahead Lt.

Interstate 80 (Westbound)

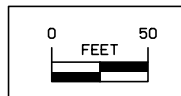
Interstate 80 (Eastbound)

Sta. 3067+60.00  
Begin Temporary Paving

Sta. 3079+00.00  
End Temporary Paving  
Begin Eastbound Paving

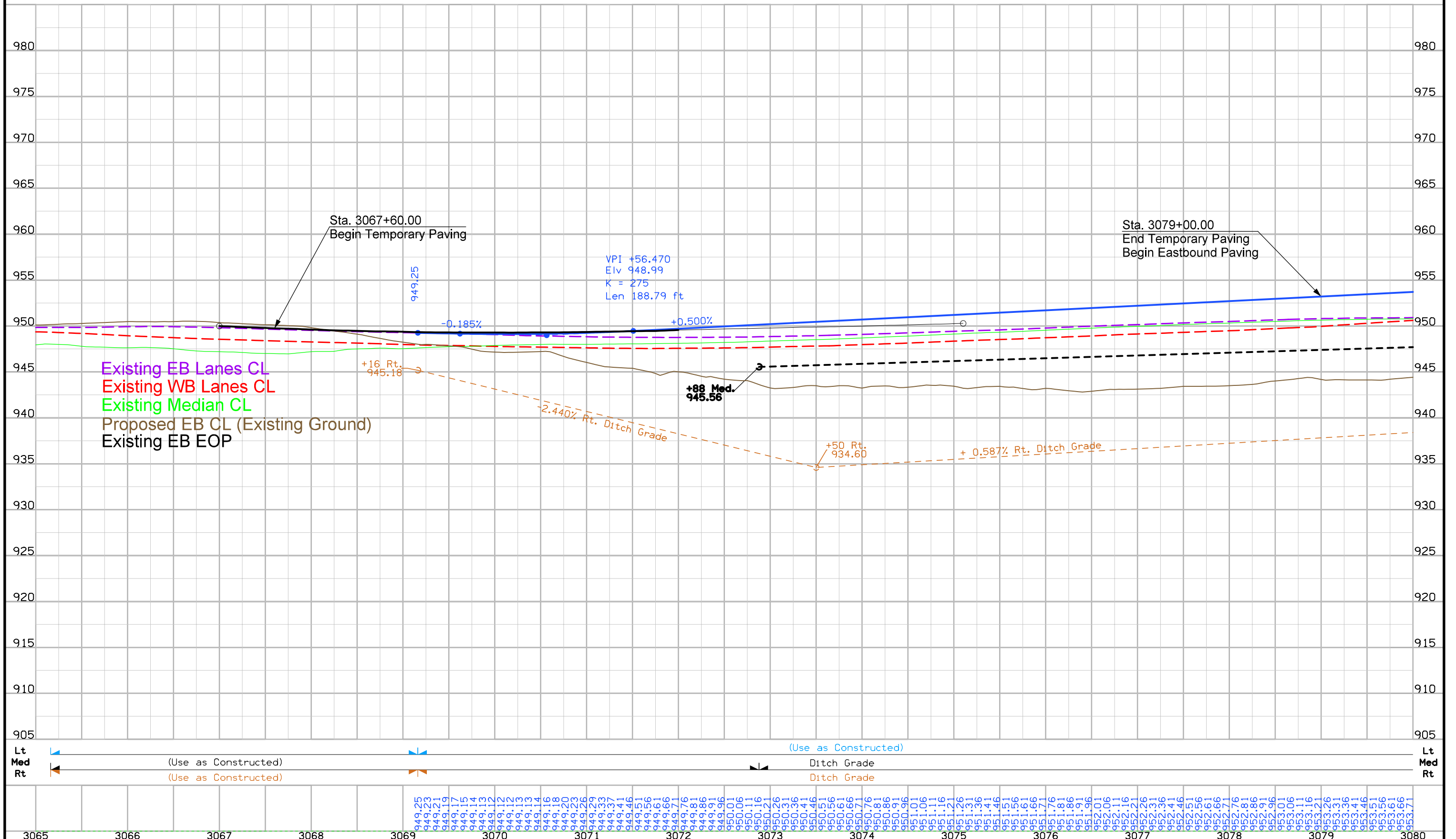
Curve Data

$\Delta = 20^\circ 29' 37.83''$  (LT)  
T = 578.48  
L = 1,144.59  
R = 3,200.00  
E = 51.87  
e = 4.77%



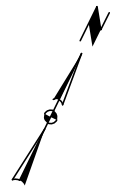
Eastbound Lanes:  
 Total Cut: 4914 CY    Total Fill With Shrink: 31993 CY  
 Class 10 Suit Cut: 4914 CY    Class 10 Suit Fill + 30%: 31993 CY  
 Class 10 Haul From: 27079 CY  
 Total: 31993 CY

Median:  
 Total Cut: 3156 CY    Total Fill With Shrink: 928 CY  
 Class 10 Suit Cut: 3156 CY    Class 10 Suit Fill + 30%: 928 CY  
 Total: 3156 CY    Class 10 Suit Haul to: 2228 CY  
 Total: 3156 CY



Station	Lt	Med	Rt
3065			
3066			
3067			
3068			
3069			
3070			
3071			
3072			
3073			
3074			
3075			
3076			
3077			
3078			
3079			
3080			

BUENA VISTA TWP  
T-79N - R-18W  
SECTION 1



3080

(UAC)  
Sta. 3082+26.23  
24" X 55.3' Conc Pipe  
D.A. = Median

3085

(REMOVE)  
Sta. 3090+90.30  
12" X 287' CMP  
D.A. = Median

3090

Sta. 3092+00.00  
End Temporary Paving  
Begin Eastbound Paving

3095

Sta. 3088+90.00  
Begin Temporary Paving

3090

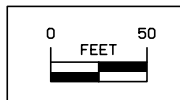
3095

Interstate 80 (Westbound)

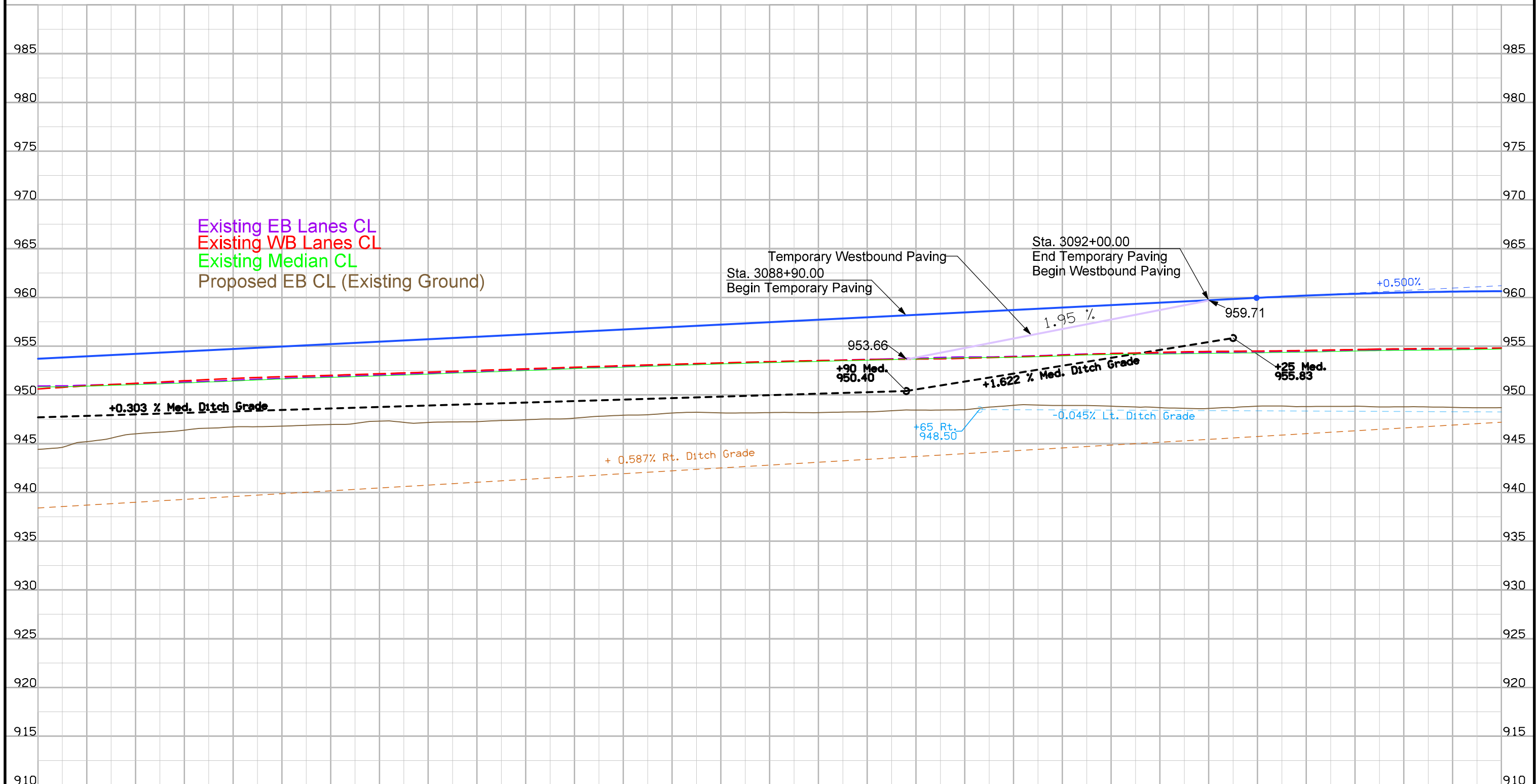
56.4: 1 Taper

Interstate 80 (Existing Eastbound)

Interstate 80 (New Eastbound)



Total Cut: 18009 CY		Total Fill With Shrink: 48318 CY		Total Cut: 468 CY		Total Fill With Shrink: 11322 CY		Total Cut: 3589 CY		Total Fill With Shrink: 6405 CY	
Class 10 Suit Cut: 18009 CY		Class 10 Suit Fill + 30%: 48318 CY		Class 10 Suit Cut: 468 CY		Class 10 Suit Fill + 30%: 11322 CY		Class 10 Suit Cut: 3589 CY		Class 10 Suit Fill + 30%: 6405 CY	
Class 10 Haul From: 30309 CY				Class 10 Haul From: 10854 CY				Class 10 Haul From: 2816 CY			
Total: 48318 CY		Total: 48318 CY		Total: 11322 CY		Total: 11322 CY		Total: 6405 CY		Total: 6405 CY	



Lt	(Use as Constructed)		Ditch Grade		Ditch Grade		4' Median Ditch		Lt
Med									Med
Rt			Ditch Grade						Rt

3080	3081	3082	3083	3084	3085	3086	3087	3088	3089	3090	3091	3092	3093	3094	3095
------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------



BUENA VISTA TWP  
T-79N - R-18W  
SECTION 1

Obliterate Roadbed

RICHLAND TWP  
T-79N - R-17W  
SECTION 6

Remove Guardrail

Remove Guardrail

Remove Barrier

Remove Guardrail

Remove Guardrail

Remove Guardrail

Remove Guardrail

Remove Barrier

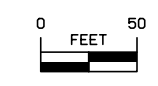
(REMOVE)  
Sta. 3099+89.13  
15" X 73.6' CMP  
D.A. = Ac

(REMOVE)  
Sta. 3104+33.00  
15" CMP Into 24" RCP  
D.A. = Median

Remove Guardrail

Remove Guardrail

Obliterate Roadbed



3095

3100

3105

3110

Interstate 80 (Westbound)

Interstate 80 (Existing Eastbound)

Interstate 80 (New Eastbound)

E 108th St S

E 108th St S

S 12th Ave E

PI Sta 4002+54.40

4005

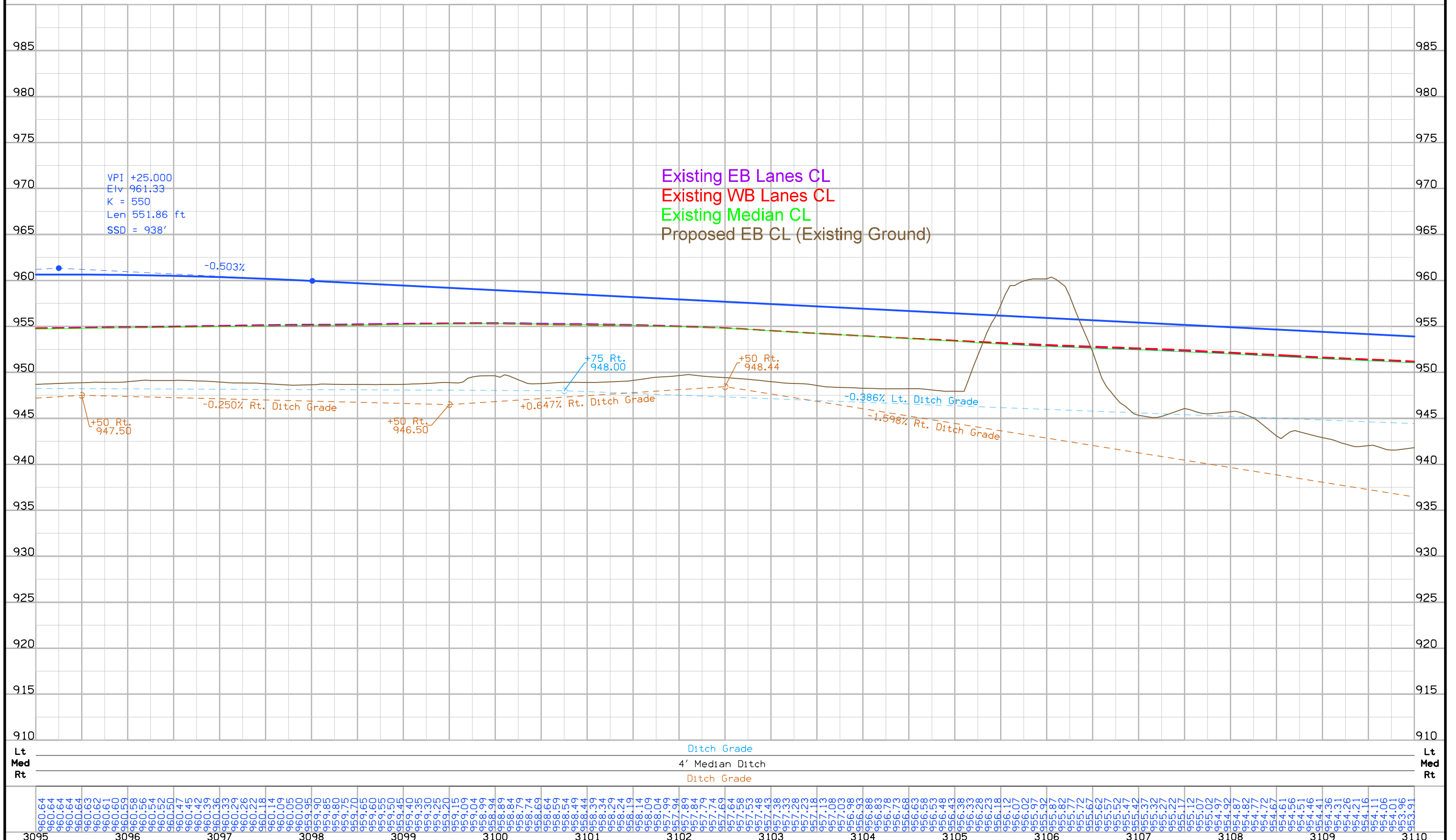
4010

6110

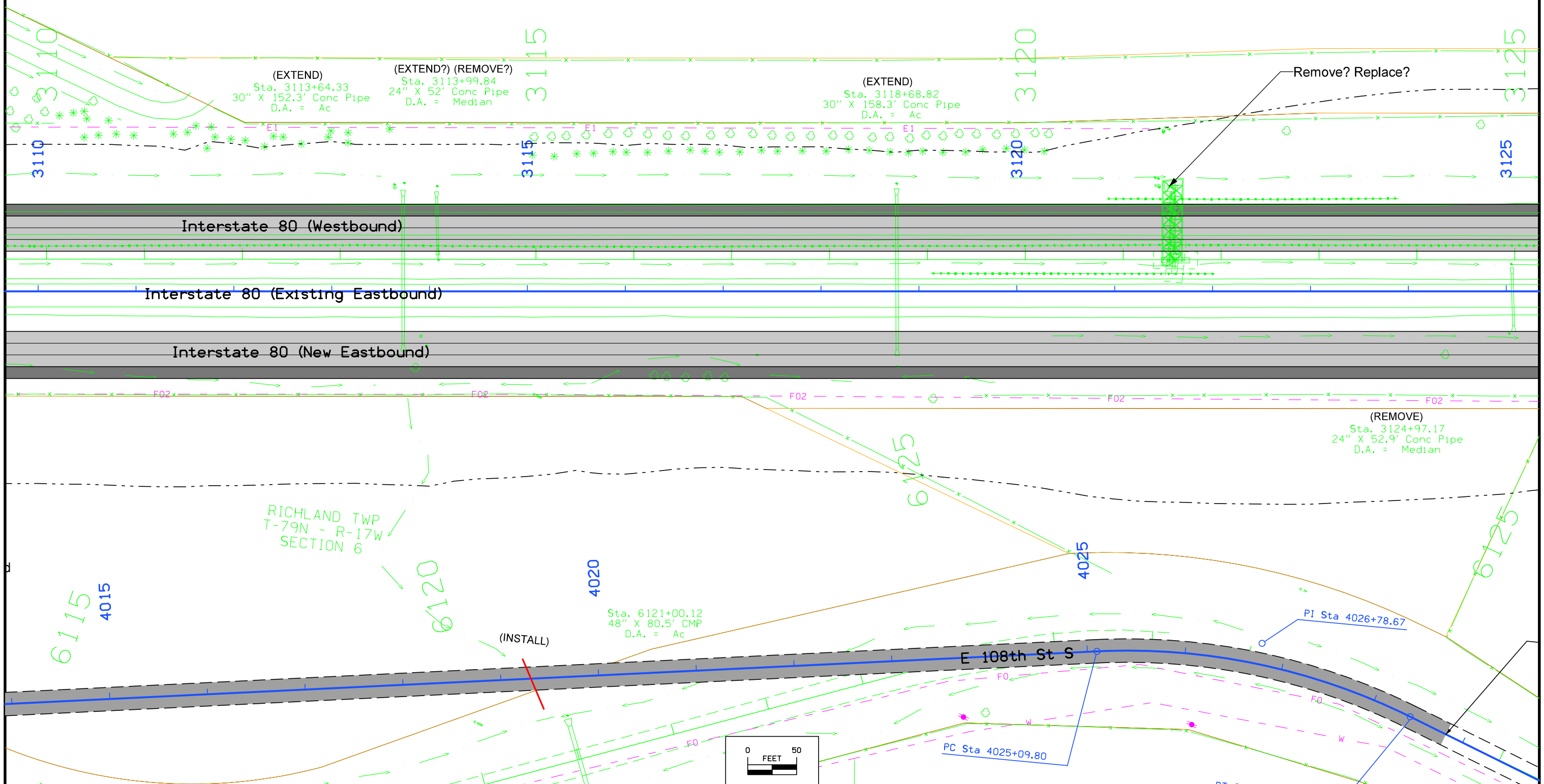
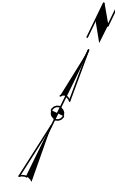
Eastbound Lanes:  
 Total Cut: 17107 CY    Total Fill With Shrink: 52171 CY  
 Class 10 Suit Cut: 17107 CY    Class 10 Suit Fill + 30%: 52171 CY  
 Class 10 Haul From: 35064 CY  
 Total: 52171 CY

Westbound Lanes:  
 Total Cut: 5198 CY    Total Fill With Shrink: 23233 CY  
 Class 10 Suit Cut: 5198 CY    Class 10 Suit Fill + 30%: 23233 CY  
 Class 10 Haul From: 18035 CY  
 Total: 23233 CY

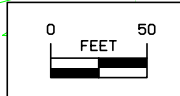
Median:  
 Total Cut: 1293 CY    Total Fill With Shrink: 7375 CY  
 Class 10 Suit Cut: 1293 CY    Class 10 Suit Fill + 30%: 7375 CY  
 Class 10 Haul From: 6082 CY  
 Total: 7375 CY



ROCK CREEK TWP  
T-80N - R-17W  
SECTION 31



RICHLAND TWP  
T-79N - R-17W  
SECTION 6

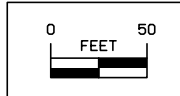
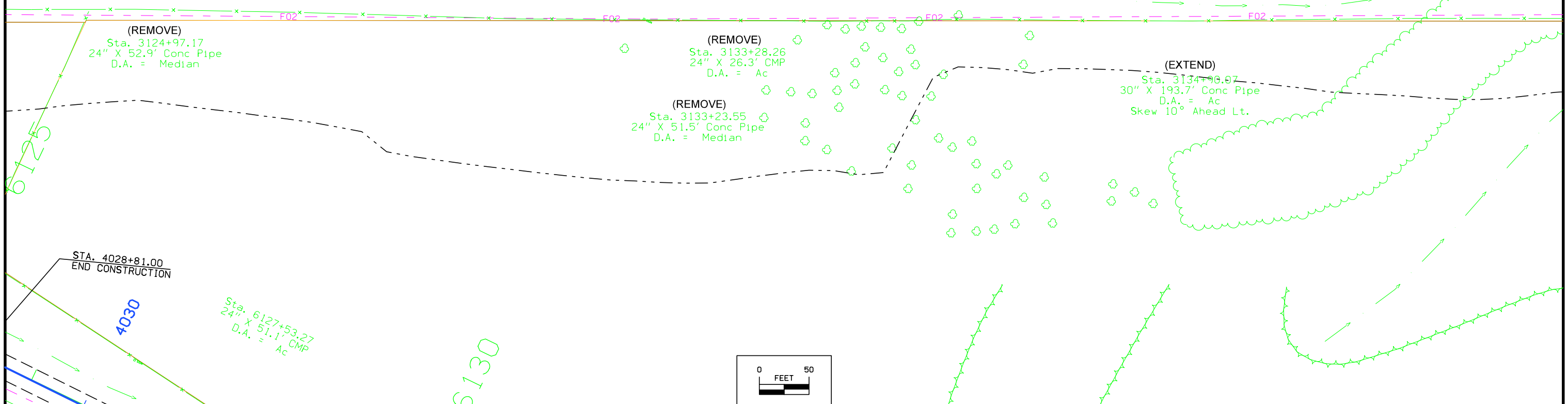
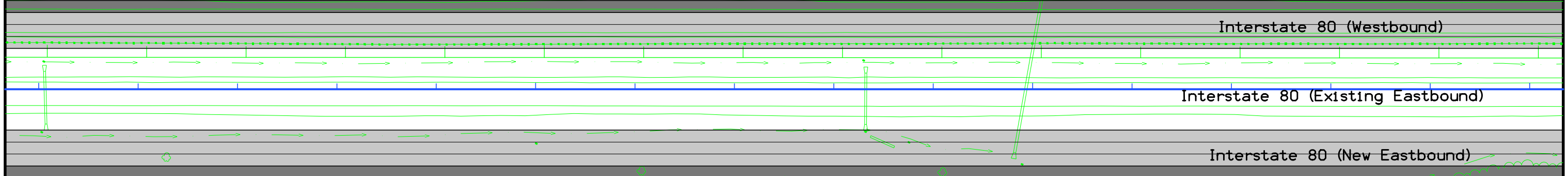
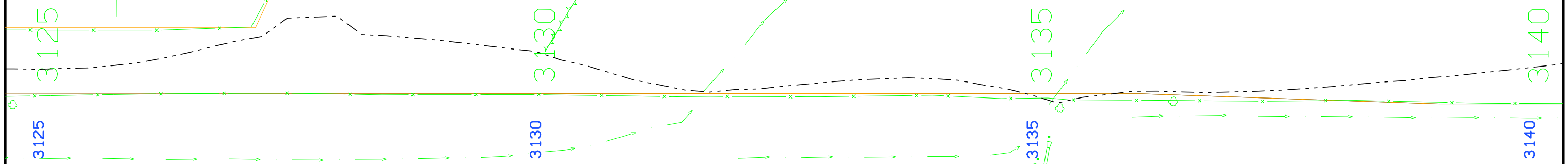
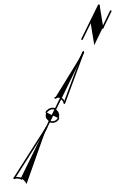








ROCK CREEK TWP  
T-80N - R-17W  
SECTION 31





ROCK CREEK TWP  
T-80N - R-17W  
SECTION 31



3140

(EXTEND?) (REMOVE?)  
Sta. 3144+98.98  
24" X 77.8' Conc Pipe  
D.A. = Median

3145

3150

3155

3140

3145

3150

3155

Remove Cable Guardrail

Remove Guardrail

Interstate 80 (Westbound)

Interstate 80 (Existing Eastbound)

Interstate 80 (New Eastbound)

F02

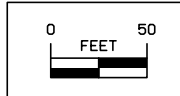
F02

F02

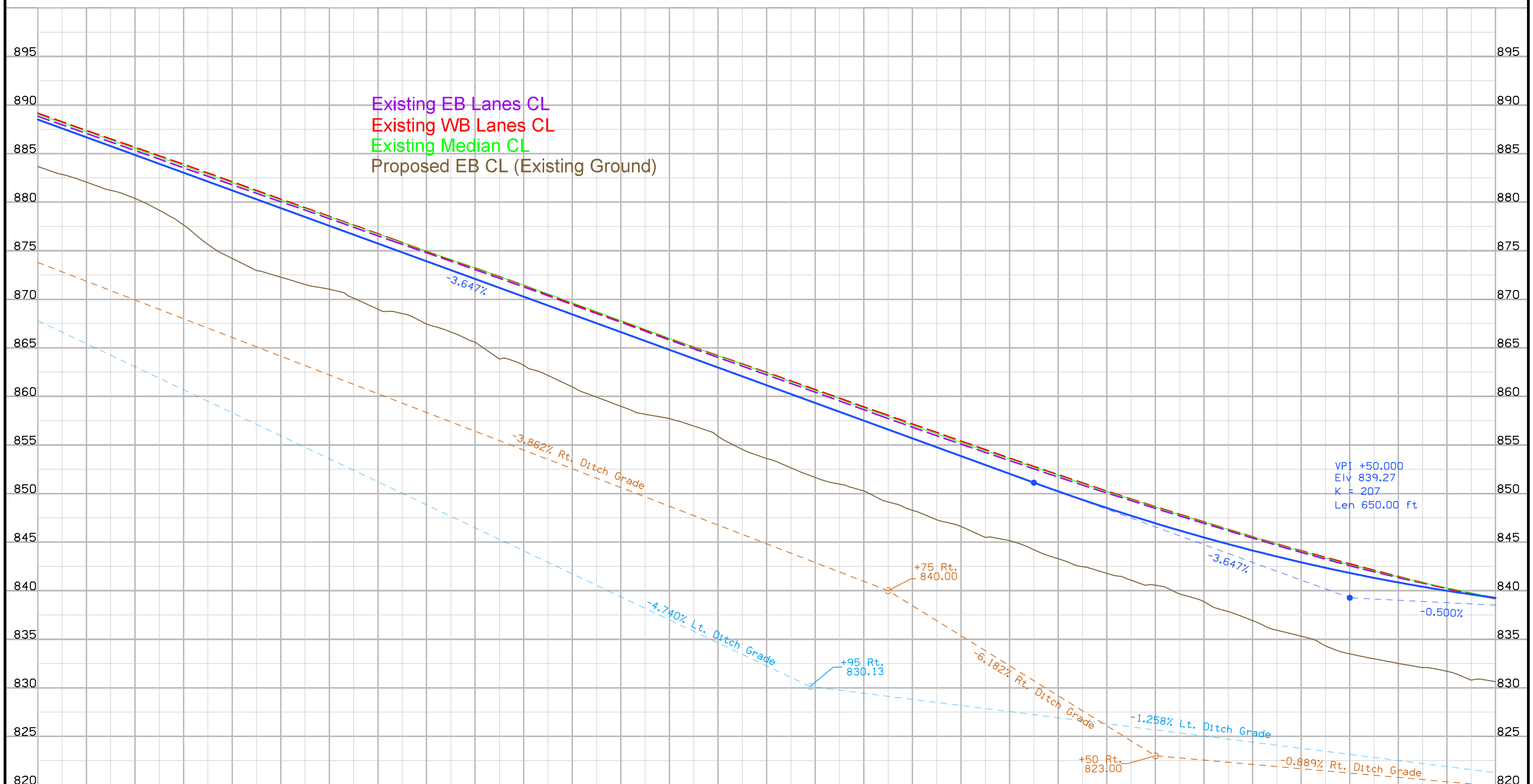
F02

F02

F02

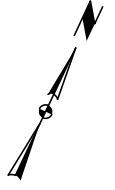


Eastbound Lanes:				Westbound Lanes:				Median:			
Total Cut:	15073 CY	Total Fill With Shrink:	44592 CY	Total Cut:	45709 CY	Total Fill With Shrink:	5106 CY	Total Cut:	11152 CY	Total Fill With Shrink:	1656 CY
Class 10 Suit Cut:	15073 CY	Class 10 Suit Fill + 30%:	44592 CY	Class 10 Suit Cut:	45709 CY	Class 10 Suit Fill + 30%:	5106 CY	Class 10 Suit Cut:	11152 CY	Class 10 Suit Fill + 30%:	1656 CY
Class 10 Haul From:	29519 CY			Class 10 Suit Haul To:	40603 CY			Class 10 Suit Haul To:	9496 CY		
Total:	44592 CY	Total:	44592 CY	Total:	45709 CY	Total:	45709 CY	Total:	11152 CY	Total:	11152 CY



Lt		Ditch Grade		Lt	
Rt		4' Median Ditch		Rt	
		Ditch Grade			
887.78	887.41	886.68	886.32	885.95	885.59
884.49	884.13	883.40	883.03	882.67	882.31
881.58	881.21	880.65	880.29	879.93	879.56
877.20	876.83	876.47	876.10	875.74	875.38
875.01	874.65	874.28	873.92	873.55	873.19
872.82	872.46	872.09	871.73	871.36	871.00
870.63	870.27	869.90	869.54	869.17	868.81
868.45	868.09	867.72	867.35	866.99	866.62
866.26	865.89	865.53	865.16	864.80	864.43
864.07	863.70	863.34	862.97	862.61	862.24
861.52	861.15	860.79	860.42	860.06	859.69
859.33	858.96	858.60	858.23	857.87	857.50
857.14	856.77	856.41	856.04	855.68	855.31
854.59	854.22	853.86	853.49	853.13	852.76
852.40	852.03	851.67	851.30	850.94	850.57
850.22	849.85	849.48	849.11	848.74	848.37
847.66	847.29	846.92	846.55	846.18	845.81
844.64	844.27	843.90	843.53	843.16	842.79
841.62	841.25	840.88	840.51	840.14	839.77
839.76	839.39	839.02	838.65	838.28	837.91
837.94	837.57	837.20	836.83	836.46	836.09
835.27	834.90	834.53	834.16	833.79	833.42
831.76	831.39	831.02	830.65	830.28	829.91
829.40	829.03	828.66	828.29	827.92	827.55
825.26	824.89	824.52	824.15	823.78	823.41
821.46	821.09	820.72	820.35	819.98	819.61
817.96	817.59	817.22	816.85	816.48	816.11
814.70	814.33	813.96	813.59	813.22	812.85
810.84	810.47	810.10	809.73	809.36	808.99
807.33	806.96	806.59	806.22	805.85	805.48
803.17	802.80	802.43	802.06	801.69	801.32
800.40	799.99	799.58	799.17	798.76	798.35
797.94	797.53	797.12	796.71	796.30	795.89
793.58	793.17	792.76	792.35	791.94	791.53
788.42	788.01	787.60	787.19	786.78	786.37
782.66	782.25	781.84	781.43	781.02	780.61
776.26	775.85	775.44	775.03	774.62	774.21
770.26	769.85	769.44	769.03	768.62	768.21
764.56	764.15	763.74	763.33	762.92	762.51
759.26	758.85	758.44	758.03	757.62	757.21
754.36	753.95	753.54	753.13	752.72	752.31
750.76	750.35	749.94	749.53	749.12	748.71
747.46	747.05	746.64	746.23	745.82	745.41
744.46	744.05	743.64	743.23	742.82	742.41
741.76	741.35	740.94	740.53	740.12	739.71
738.36	737.95	737.54	737.13	736.72	736.31
733.26	732.85	732.44	732.03	731.62	731.21
728.46	728.05	727.64	727.23	726.82	726.41
723.86	723.45	723.04	722.63	722.22	721.81
719.46	719.05	718.64	718.23	717.82	717.41
715.26	714.85	714.44	714.03	713.62	713.21
711.26	710.85	710.44	710.03	709.62	709.21
707.46	707.05	706.64	706.23	705.82	705.41
703.86	703.45	703.04	702.63	702.22	701.81
700.46	700.05	699.64	699.23	698.82	698.41
700.46	700.05	699.64	699.23	698.82	698.41

ROCK CREEK TWP  
T-80N - R-17W  
SECTION 31



North Skunk River

Remove Guardrail

3155

3160

3165

3170

(REMOVE)  
Sta. 3156+14.24  
18" X 74.3' CMP  
D.A. = Median

Wetland Area

Replace Bridge

3160

(UAC?)  
Sta. 3159+44.57  
24" X 58' CMP w/ Gate Valve  
D.A. = Ac

3165

(REMOVE)  
Sta. 3165+72.38  
18" X 54.4' CMP  
D.A. = Median

PC Sta 3166+18.67

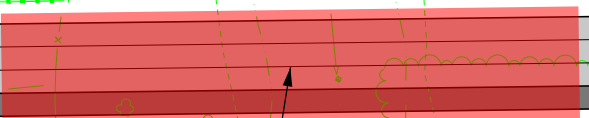
(EXTEND?) (REMOVE?)  
Sta. 3168+46.78  
24" X 72.6' Conc Pipe  
D.A. = Median

Interstate 80 (Westbound)

Interstate 80 (Existing Eastbound)

Interstate 80 (New Eastbound)

Remove Bridge



Sta. 3156+25.00  
End Paving

Proposed Bridge

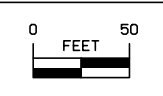
Remove Guardrail

Sta. 3159+25.00  
Resume Paving

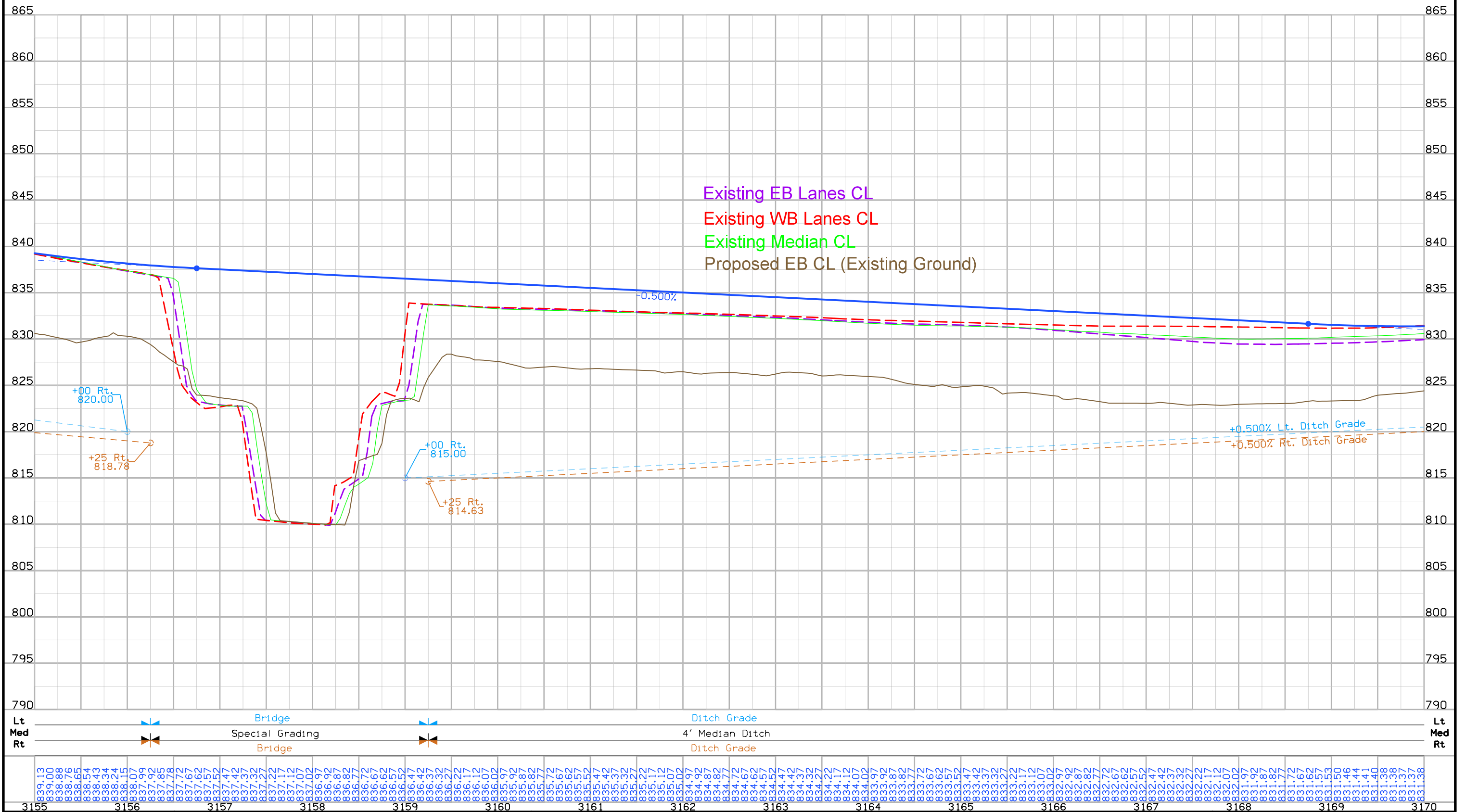
Median Crossing with pipe  
at 3166+00. Replace?

Wetland Area

Curve Data  
 $\Delta = 25^\circ 16' 07.86''$  (RT)  
T = 672.47  
L = 1,323.07  
R = 3,000.00  
E = 74.45  
e = 5.08%



Eastbound Lanes:				Westbound Lanes:				Median:			
Total Cut:	503 CY	Total Fill With Shrink:	5931 CY	Total Cut:	943 CY	Total Fill With Shrink:	729 CY	Total Cut:	600 CY	Total Fill With Shrink:	133 CY
Class 10 Suit Cut:	503 CY	Class 10 Suit Fill + 30%:	5931 CY	Class 10 Suit Cut:	943 CY	Class 10 Suit Fill + 30%:	729 CY	Class 10 Suit Cut:	600 CY	Class 10 Suit Fill + 30%:	133 CY
Class 10 Haul From:	5428 CY			Class 10 Suit Haul To:	214 CY			Class 10 Haul From:	467 CY		
Total:	5931 CY	Total:	5931 CY	Total:	943 CY	Total:	943 CY	Total:	600 CY	Total:	600 CY
Total Cut:	8251 CY	Total Fill With Shrink:	37088 CY	Total Cut:	8743 CY	Total Fill With Shrink:	11181 CY	Total Cut:	2612 CY	Total Fill With Shrink:	3693 CY
Class 10 Suit Cut:	8251 CY	Class 10 Suit Fill + 30%:	37088 CY	Class 10 Suit Cut:	8743 CY	Class 10 Suit Fill + 30%:	11181 CY	Class 10 Suit Cut:	2612 CY	Class 10 Suit Fill + 30%:	3693 CY
Class 10 Haul From:	28837 CY			Class 10 Suit Haul From:	2438 CY			Class 10 Haul From:	1531 CY		
Total:	37088 CY	Total:	37088 CY	Total:	11181 CY	Total:	11181 CY	Total:	3693 CY	Total:	3693 CY



Lt	Med	Rt
	Bridge	Ditch Grade
	Special Grading	4' Median Ditch
	Bridge	Ditch Grade



ROCK CREEK TWP  
T-80N - R-17W  
SECTION 32



(EXTEND?)  
Sta. 3180+40.92  
8' X 5' X 167.5' RCB  
D.A. = Ac

Wetland Area

(EXTEND?) (REMOVE?)  
Sta. 3173+96.78  
24" X 65.8' Conc Pipe  
D.A. = Median

Sta. 3184+25.00  
End Westbound Paving  
Begin Temporary Paving

PI Sta 3172+91.14

3175

3180

3185

3175

3180

3185

Interstate 80 (Westbound)

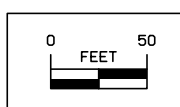
Interstate 80 (Existing Eastbound)

Interstate 80 (New Eastbound)

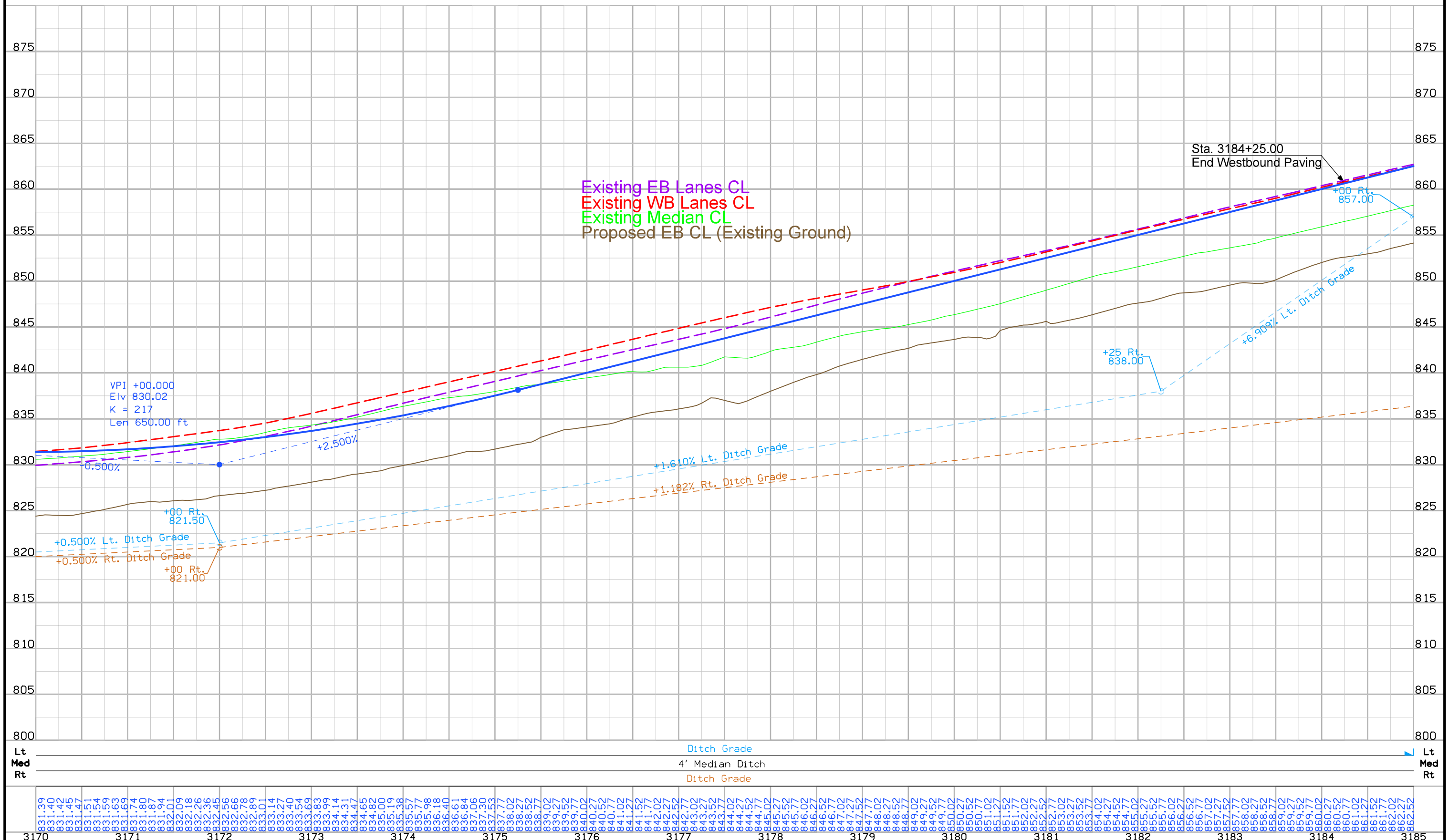
(INSTALL)

Sta. 3182+84.52  
Begin Temporary Paving  
See PV-502

Curve Data  
 $\Delta = 25^\circ 16' 07.86''$  (RT)  
T = 672.47  
L = 1,323.07  
R = 3,000.00  
E = 74.45  
e = 5.08%



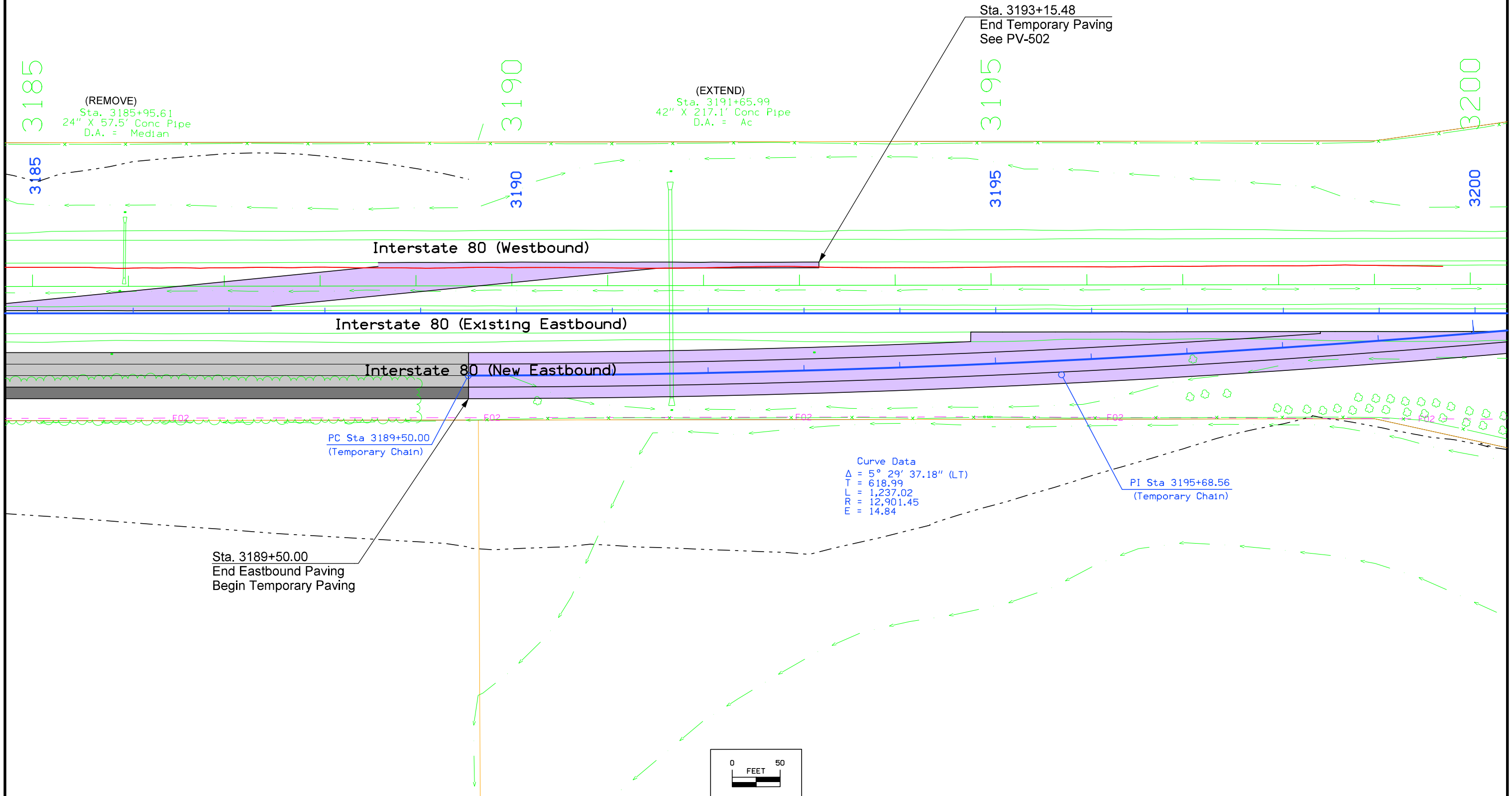
Eastbound Lanes:				Westbound Lanes:				Median:			
Total Cut:	6394 CY	Total Fill With Shrink:	47117 CY	Total Cut:	19068 CY	Total Fill With Shrink:	3267 CY	Total Cut:	9562 CY	Total Fill With Shrink:	1983 CY
Class 10 Suit Cut:	6394 CY	Class 10 Suit Fill + 30%:	47117 CY	Class 10 Suit Cut:	19068 CY	Class 10 Suit Fill + 30%:	3267 CY	Class 10 Suit Cut:	9562 CY	Class 10 Suit Fill + 30%:	1983 CY
Class 10 Haul From:	40723 CY			Class 10 Suit Haul To:	15801 CY			Class 10 Suit Haul To:	7579 CY		
Total:	47117 CY	Total:	47117 CY	Total:	19068 CY	Total:	19068 CY	Total:	9562 CY	Total:	9562 CY



3170	3171	3172	3173	3174	3175	3176	3177	3178	3179	3180	3181	3182	3183	3184	3185				
ENGLISH IOWA DOT DESIGN TEAM JIA\MILLER\SMYTH					JASPER COUNTY					PROJECT NUMBER IMX-80-5(307)174--02-50					SHEET NUMBER D.17				



ROCK CREEK TWP  
T-80N - R-17W  
SECTION 32



3185

3190

3195

3200

3185

3190

3195

3200

Interstate 80 (Westbound)

Interstate 80 (Existing Eastbound)

Interstate 80 (New Eastbound)

PC Sta 3189+50.00  
(Temporary Chain)

Curve Data  
 $\Delta = 5^\circ 29' 37.18''$  (LT)  
T = 618.99  
L = 1,237.02  
R = 12,901.45  
E = 14.84

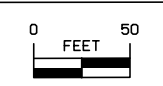
PI Sta 3195+68.56  
(Temporary Chain)

Sta. 3189+50.00  
End Eastbound Paving  
Begin Temporary Paving

Sta. 3193+15.48  
End Temporary Paving  
See PV-502

(REMOVE)  
Sta. 3185+95.61  
24" X 57.5' Conc Pipe  
D.A. = Median

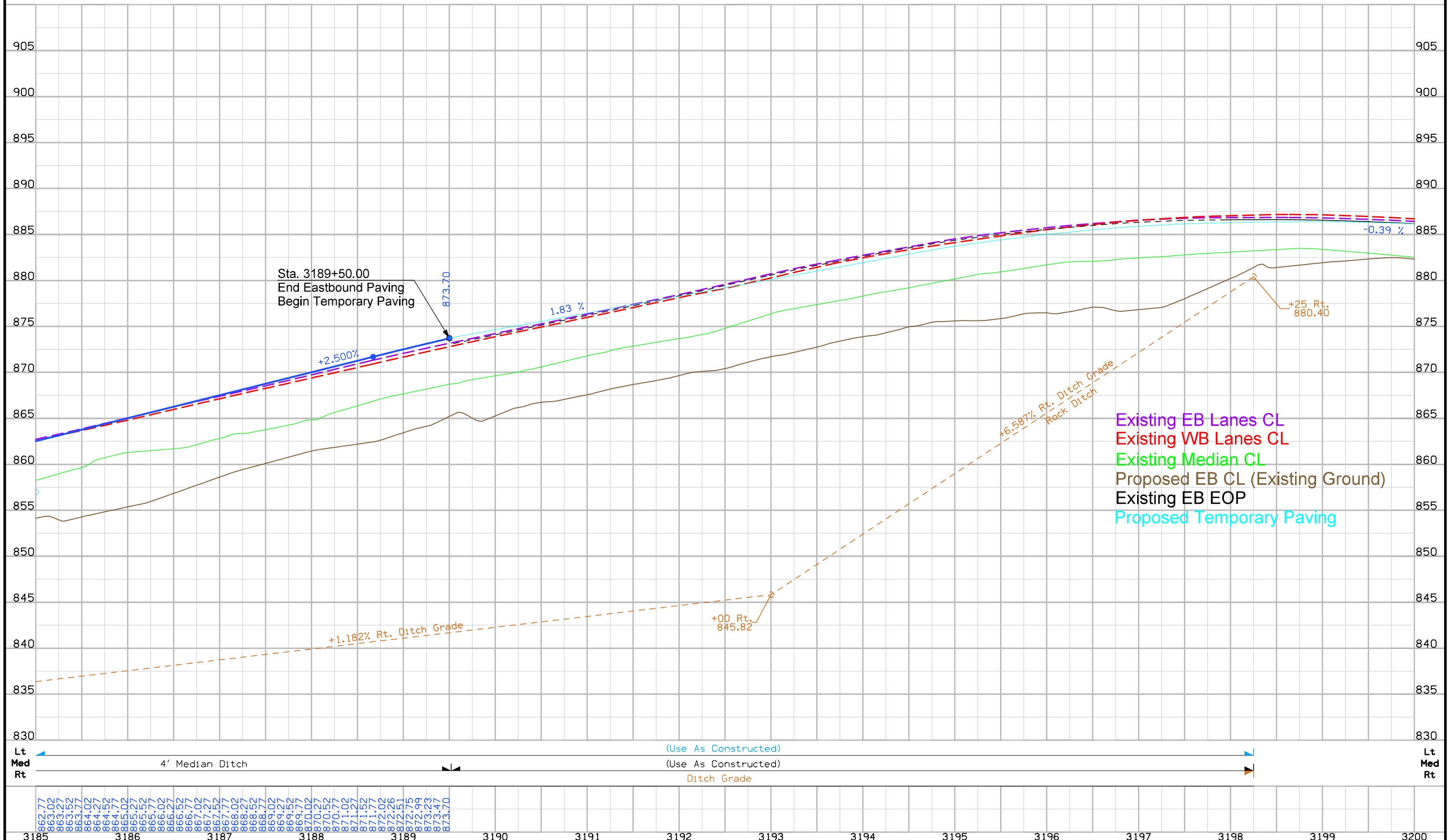
(EXTEND)  
Sta. 3191+65.99  
42" X 217.1' Conc Pipe  
D.A. = Ac



Eastbound Lanes:  
 Class 10 Total Cut: 13233 CY  
 Class 10 Suit Cut: 13233 CY  
 Class 10 Haul From: 6119 CY  
 Total: 74352 CY  
 Total Fill With Shrink: 74352 CY  
 Class 10 Suit Fill + 30%: 74352 CY  
 Total: 74352 CY

Westbound Lanes:  
 Class 10 Total Cut: 5408 CY  
 Class 10 Suit Cut: 5408 CY  
 Total: 5408 CY  
 Total Fill With Shrink: 779 CY  
 Class 10 Suit Fill + 30%: 779 CY  
 Class 10 Suit Haul to: 4629 CY  
 Total: 5408 CY

Median:  
 Class 10 Total Cut: 4586 CY  
 Class 10 Suit Cut: 4586 CY  
 Total: 4586 CY  
 Total Fill With Shrink: 798 CY  
 Class 10 Suit Fill + 30%: 798 CY  
 Class 10 Suit Haul To: 3788 CY  
 Total: 4586 CY



ROCK CREEK TWP  
T-80N - R-17W  
SECTION 32



(UAC)  
Sta. 3210+25.17  
24" X 108' Conc Pipe  
D.A. = Ac

3200

3205

3210

3215

3200

PT Sta 3201+86.88  
(Temporary Chain)

Sta. 3202+00.00 (ML080) =  
Sta. 3202+04.91 (SUR080)

3205

3210

POT Sta 3213+17.06

Interstate 80 (Westbound)

Interstate 80 (Eastbound)

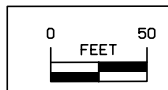
F02

F02

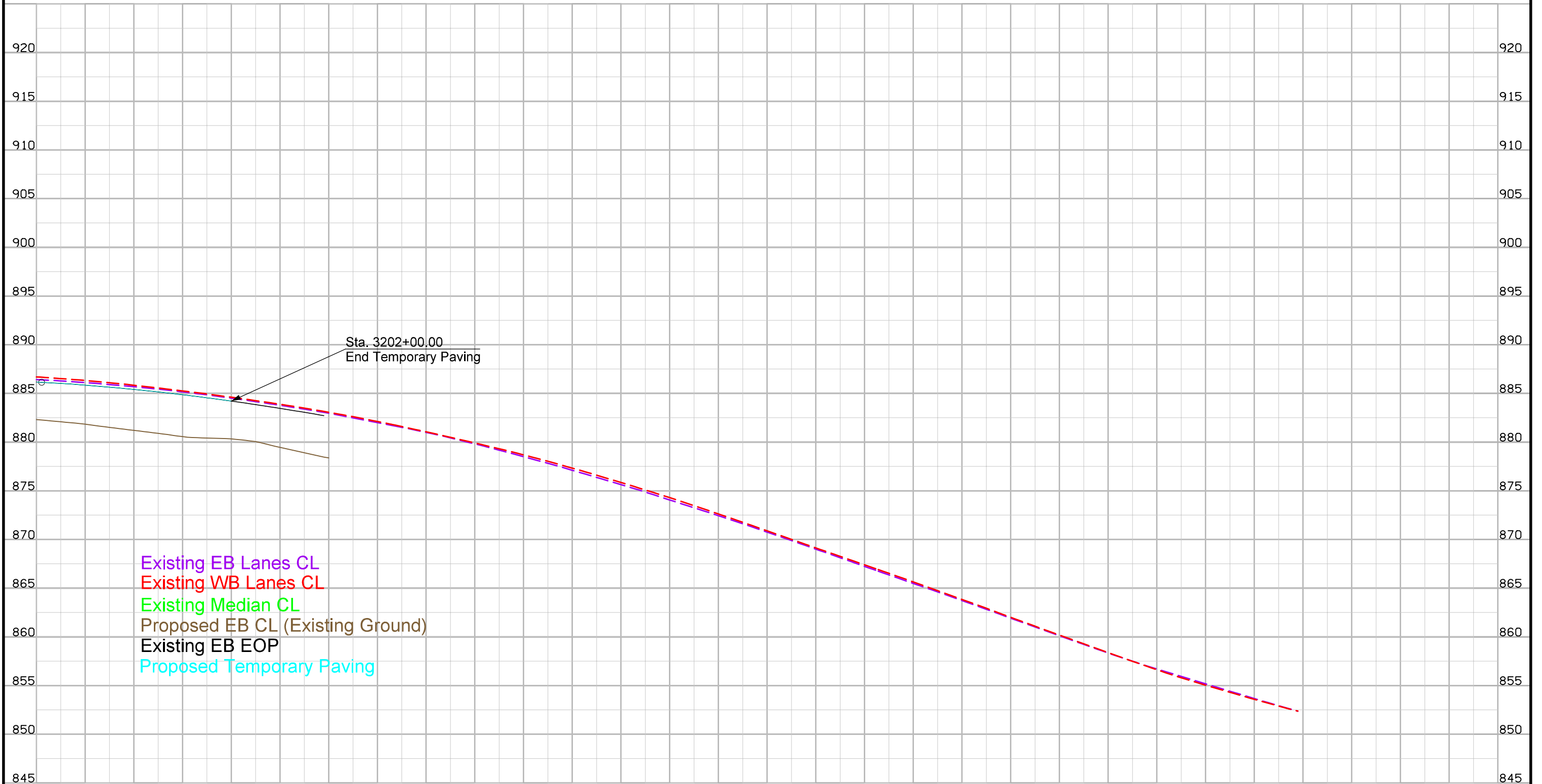
F02

F02

Sta. 3202+00.00  
End Temporary Paving

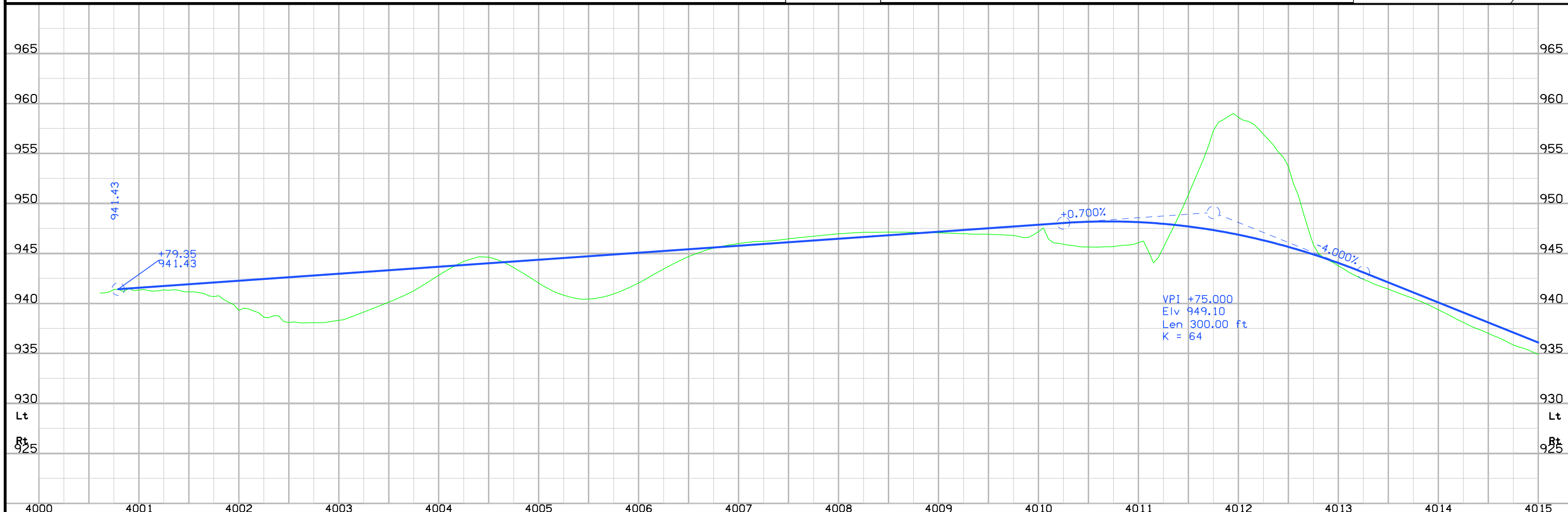
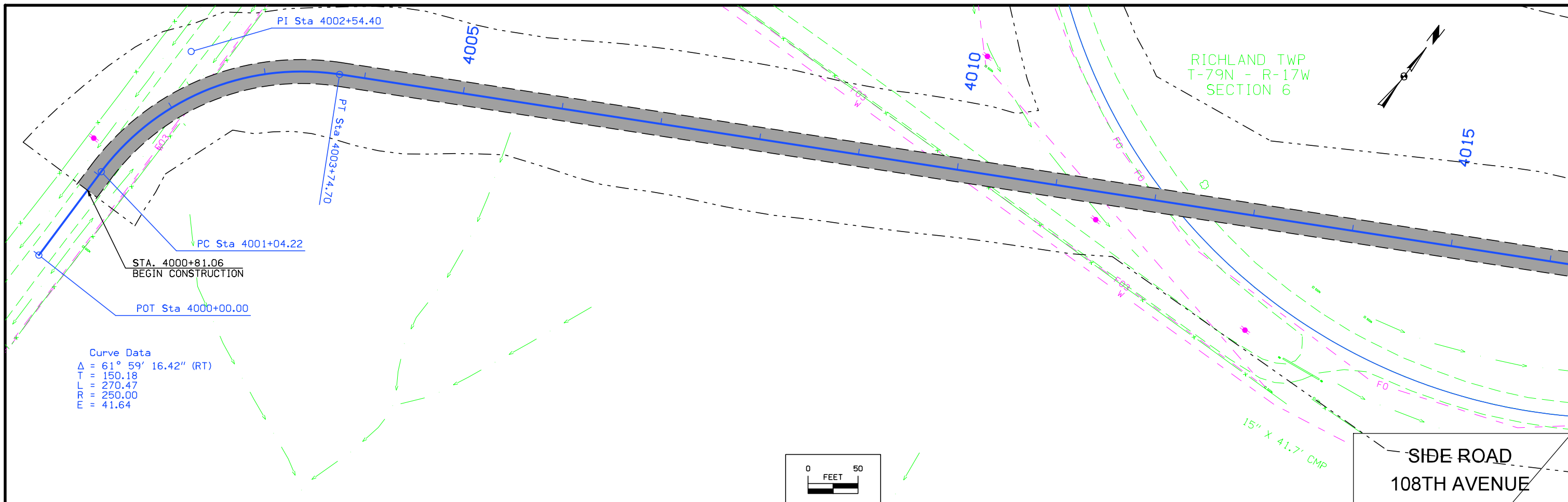


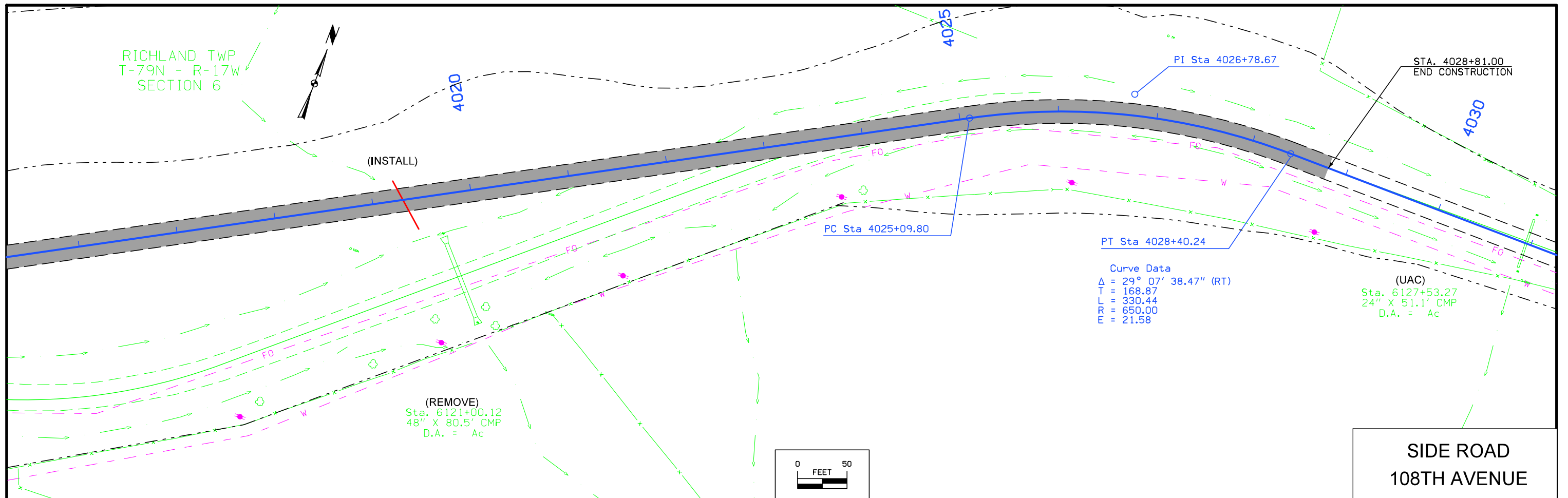
	Eastbound Lanes:		
Total Cut:	5152 CY	Total Fill With Shrink:	153 CY
Class 10 Suit Cut:	5152 CY	Class 10 Suit Fill + 30%:	153 CY
		Class 10 Suit Haul to:	4999 CY
Total:	5152 CY	Total:	5152 CY



Lt Med Rt	Lt Med Rt
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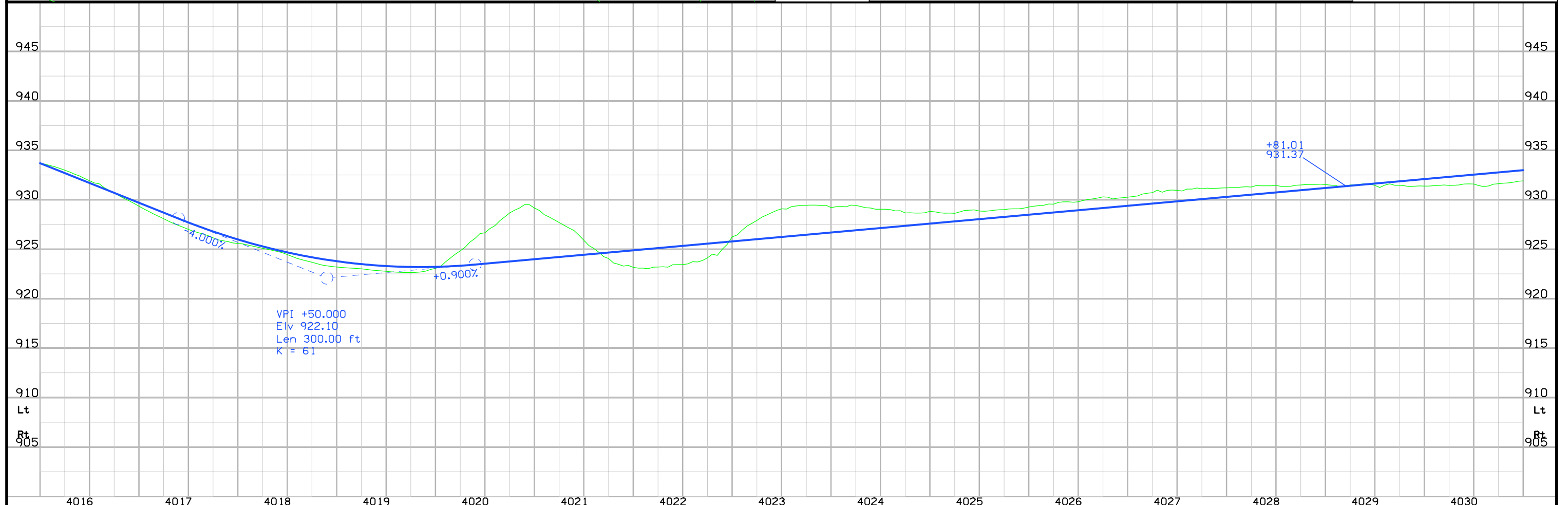
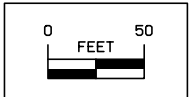




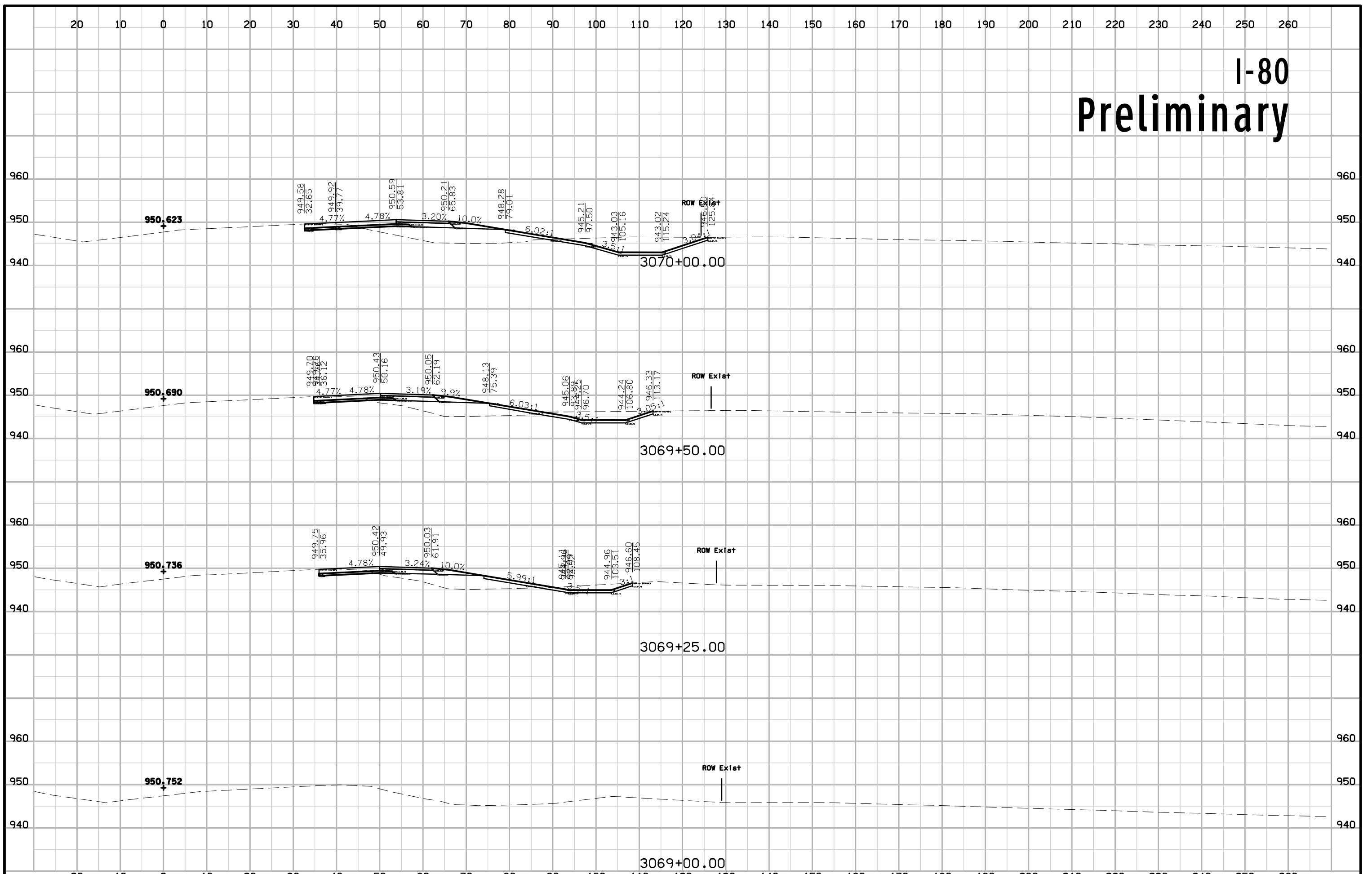
Curve Data  
 $\Delta = 29^\circ 07' 38.47''$  (RT)  
 T = 168.87  
 L = 330.44  
 R = 650.00  
 E = 21.58

(UAC)  
 Sta. 6127+53.27  
 24" X 51.1' CMP  
 D.A. = Ac

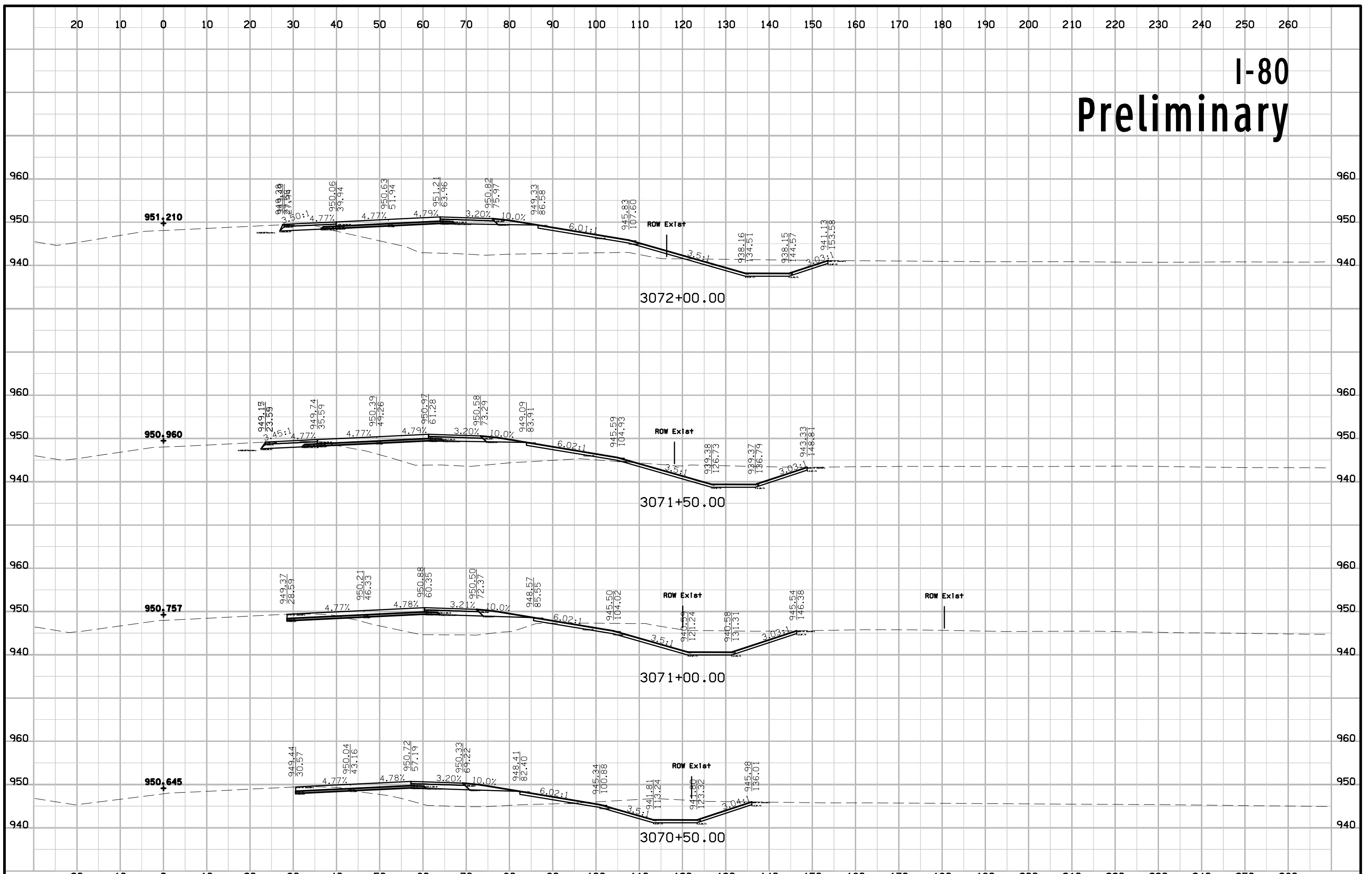
(REMOVE)  
 Sta. 6121+00.12  
 48" X 80.5' CMP  
 D.A. = Ac



# I-80 Preliminary

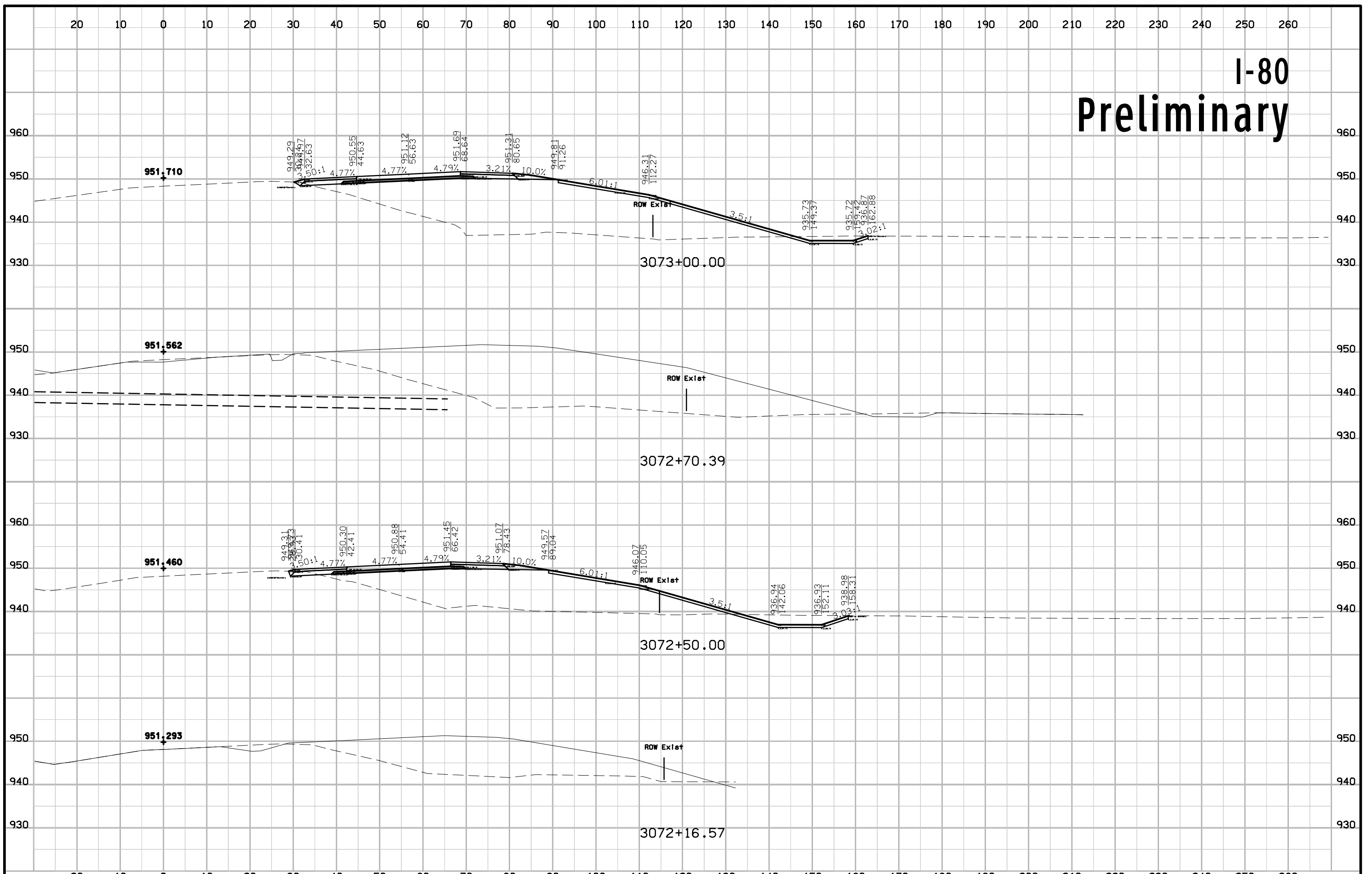


# I-80 Preliminary

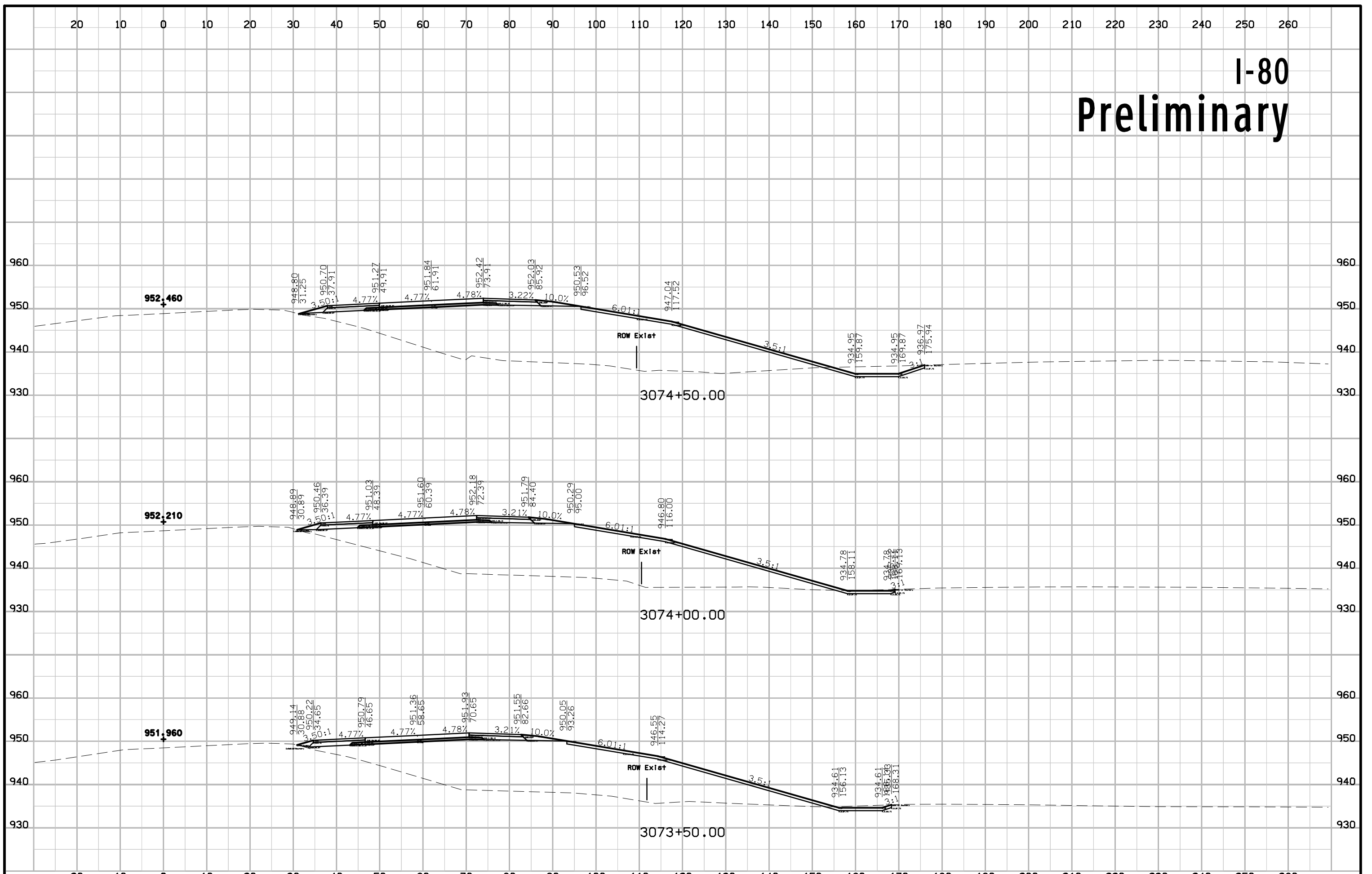




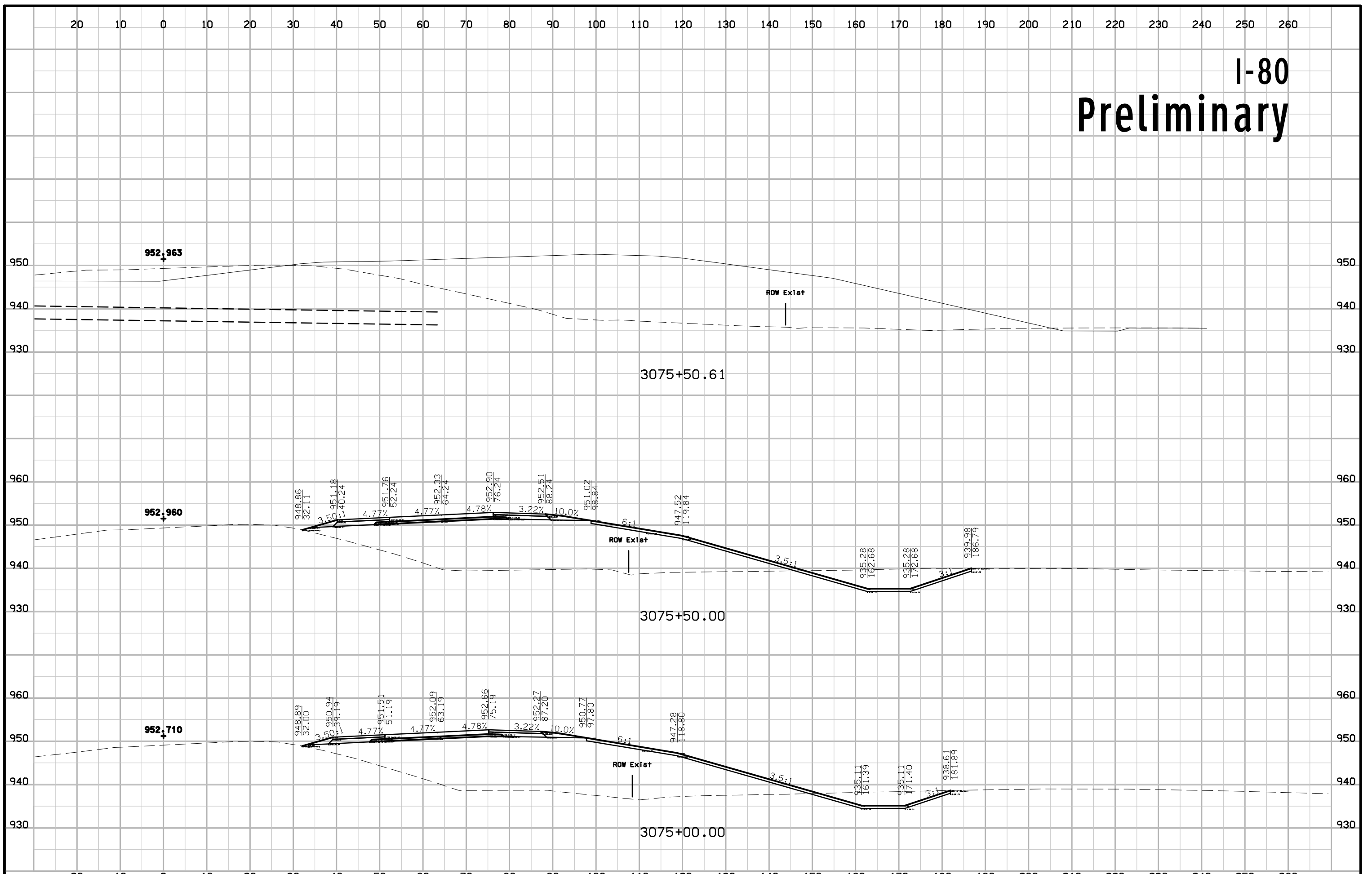
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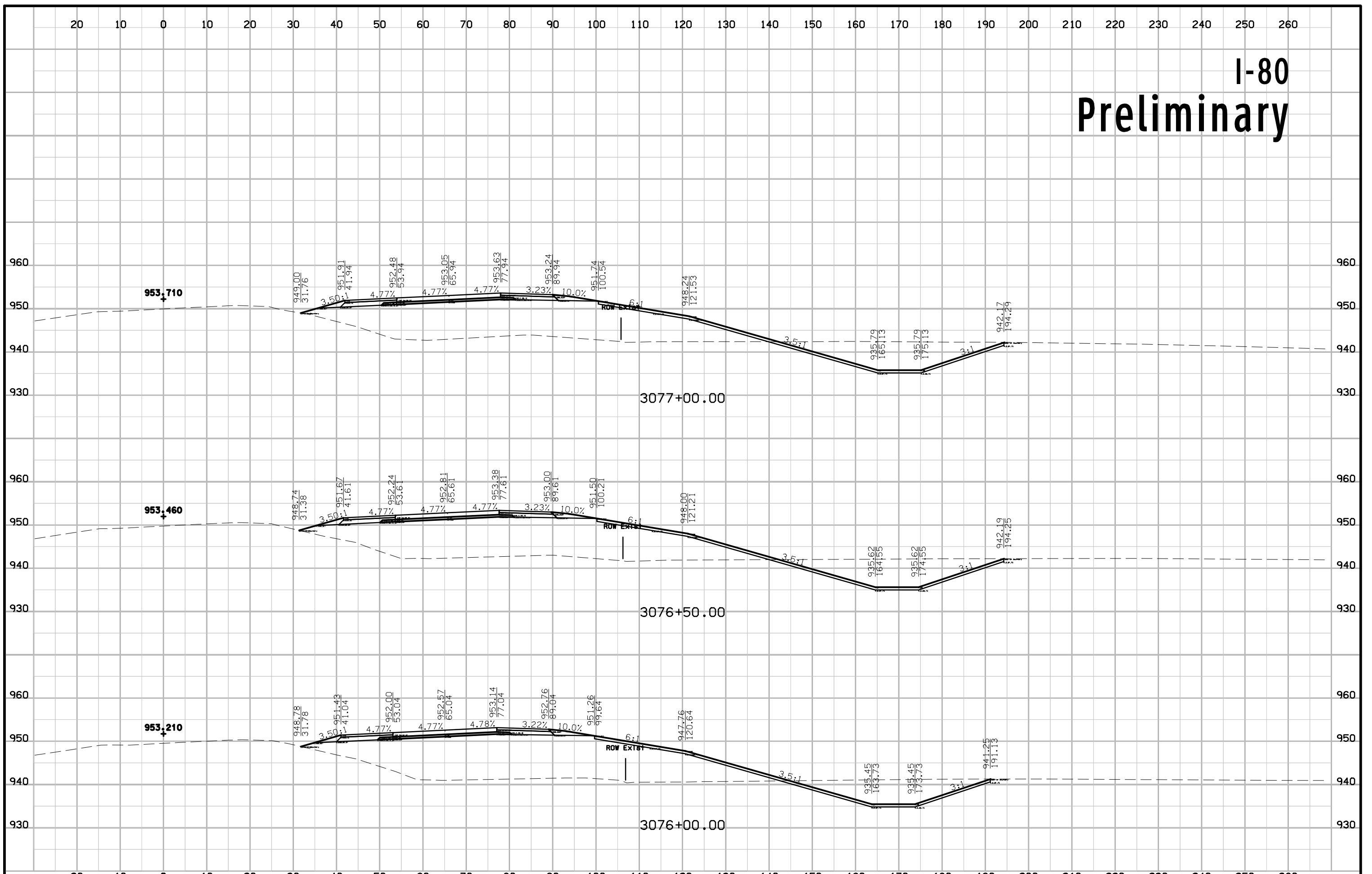
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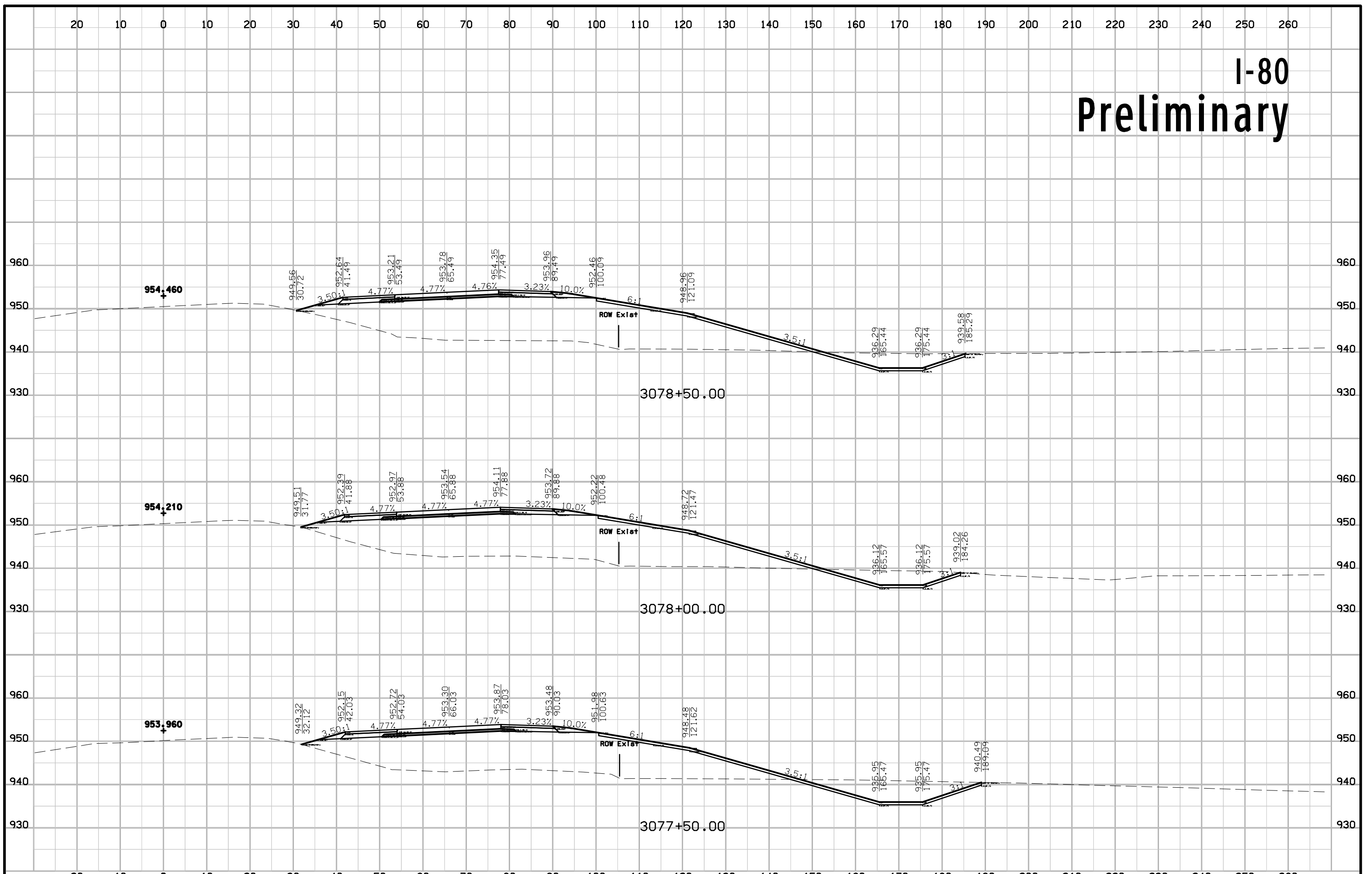
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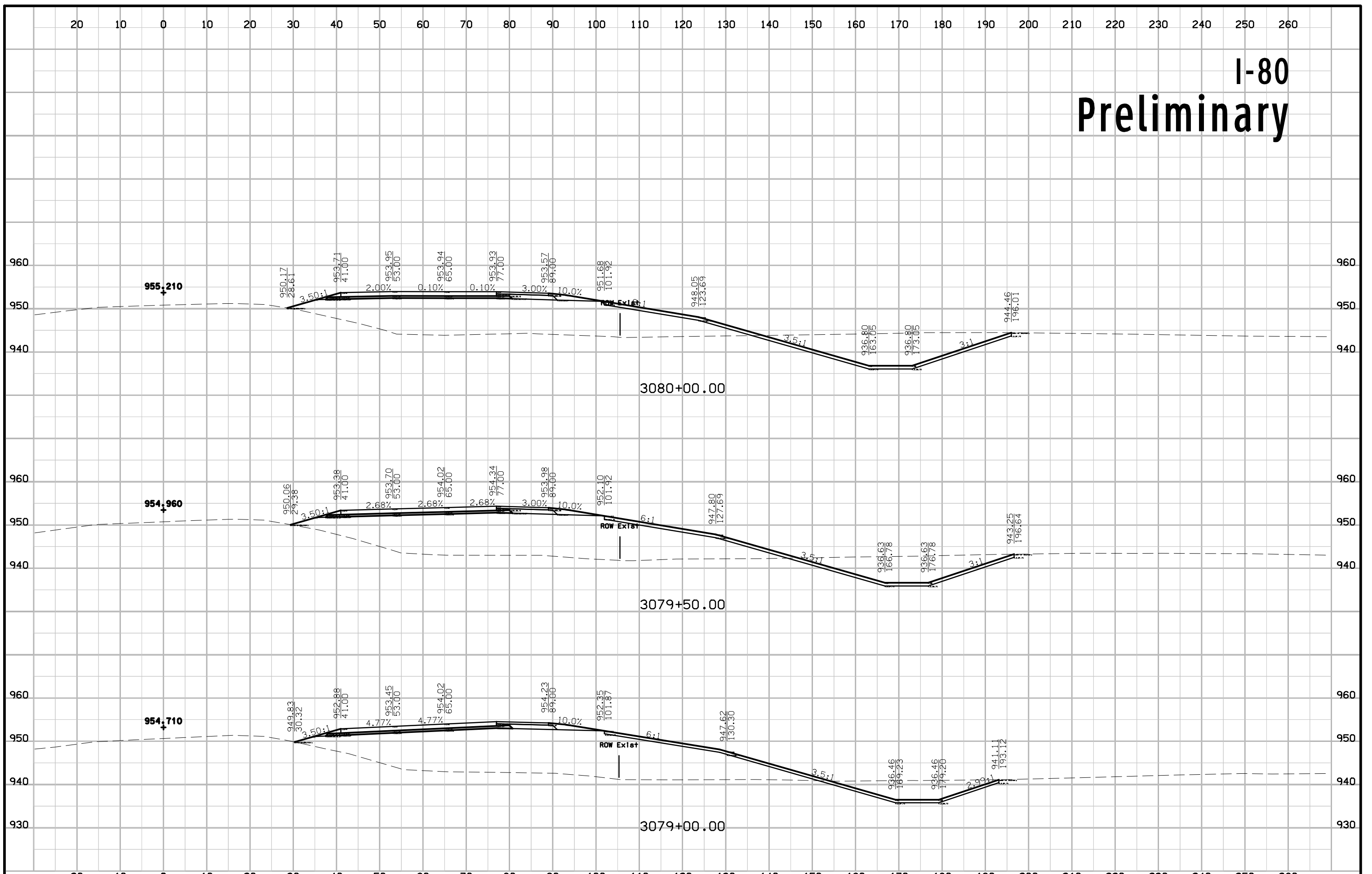
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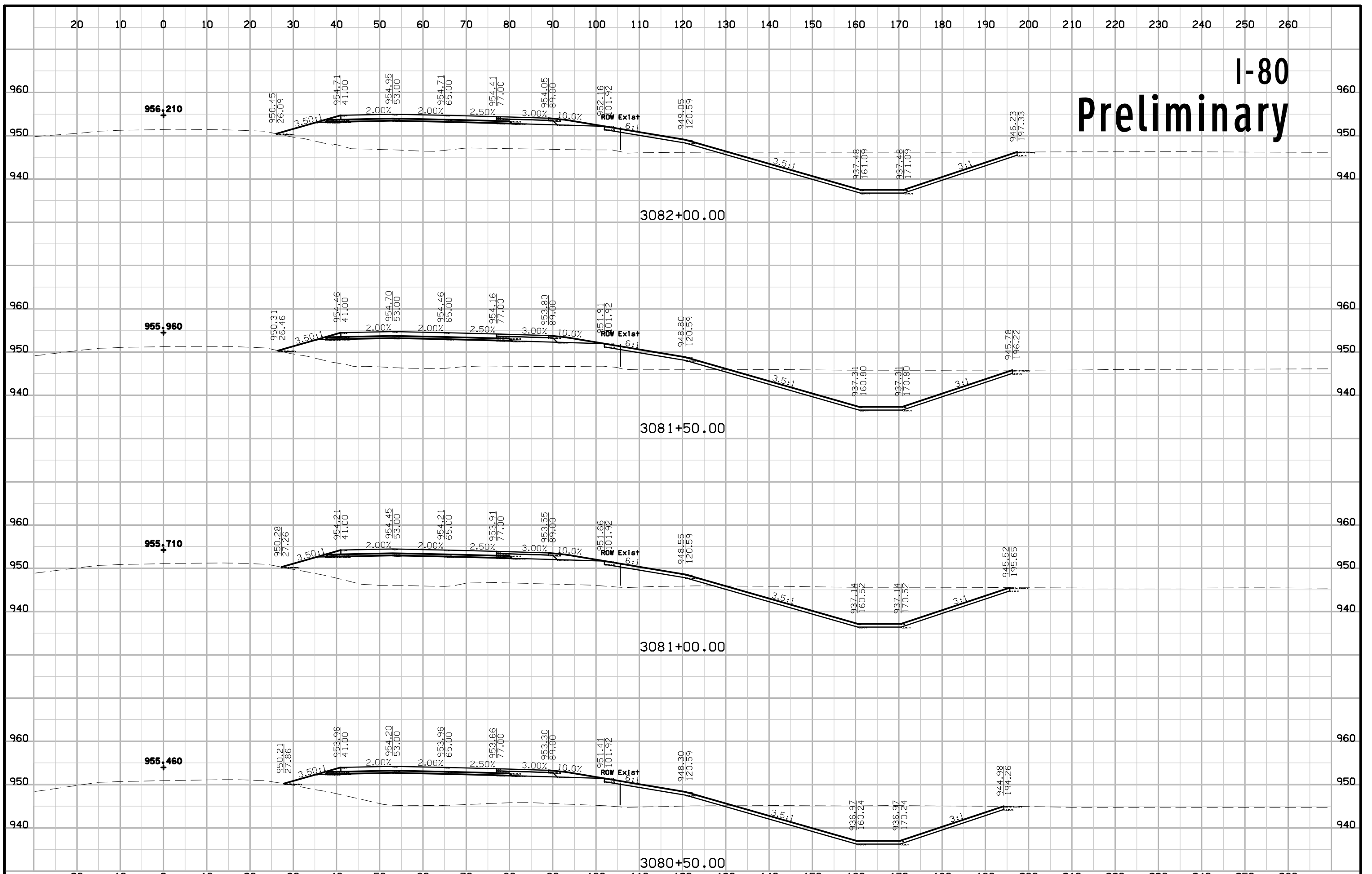
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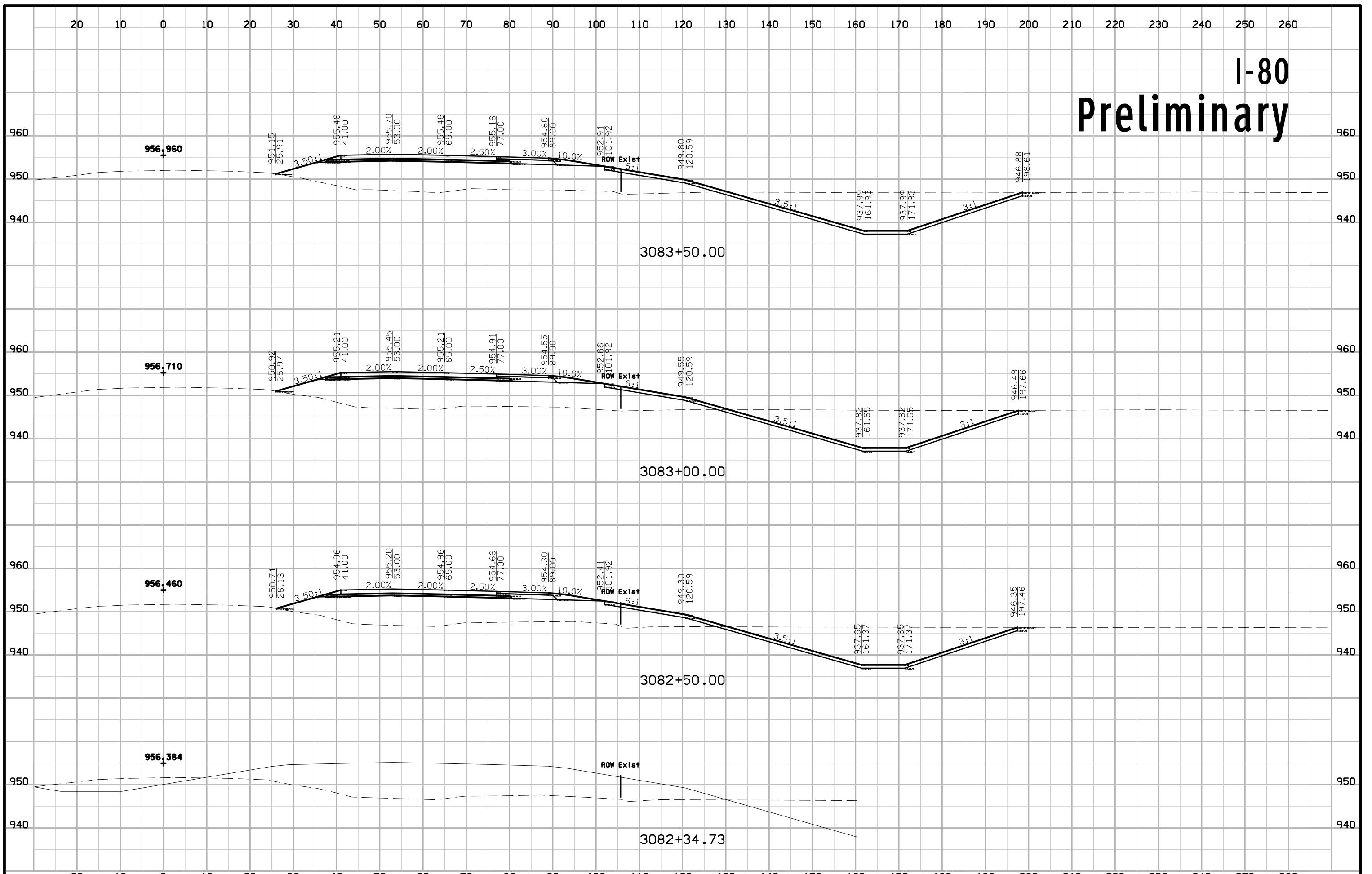
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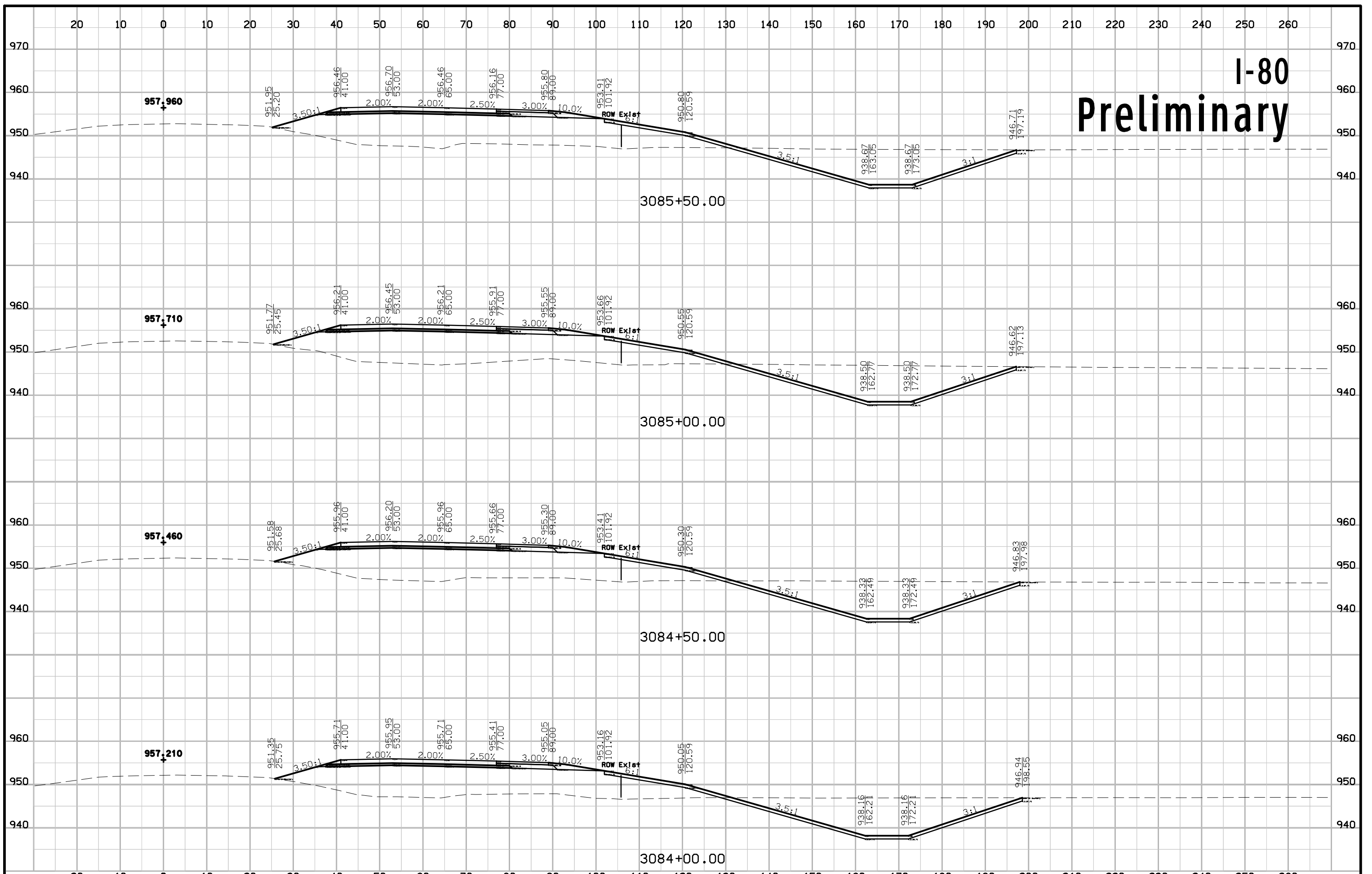


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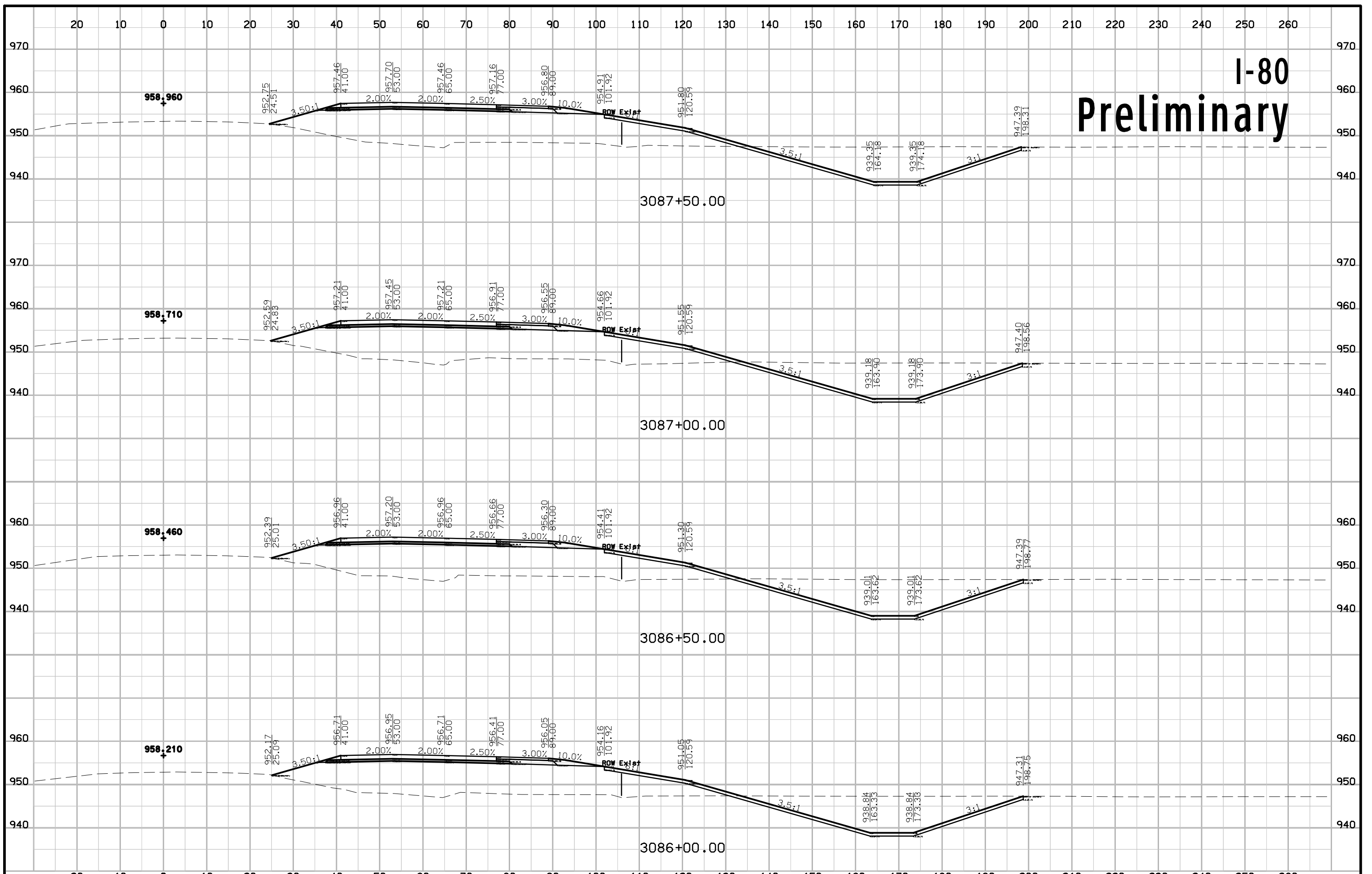




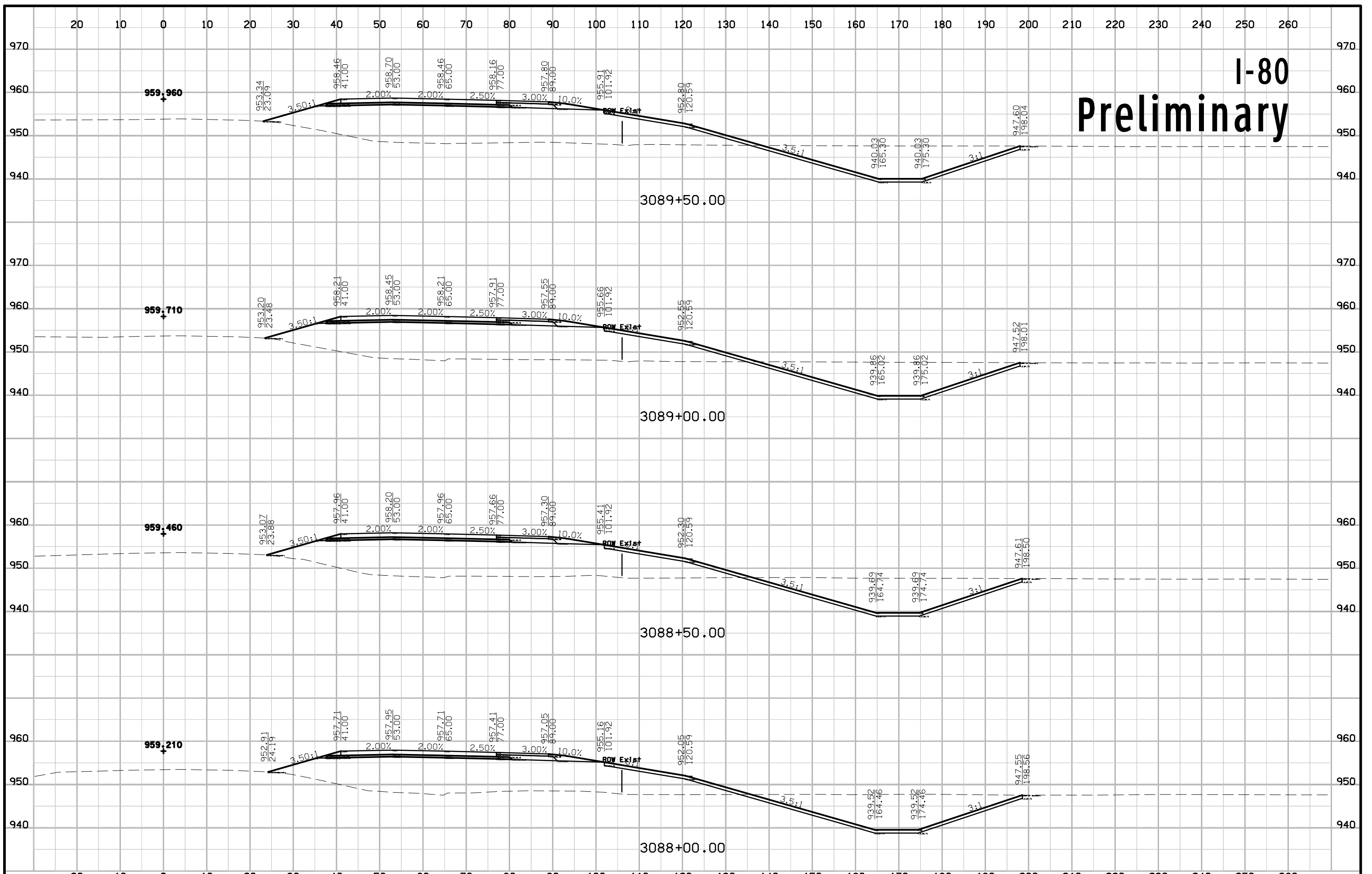
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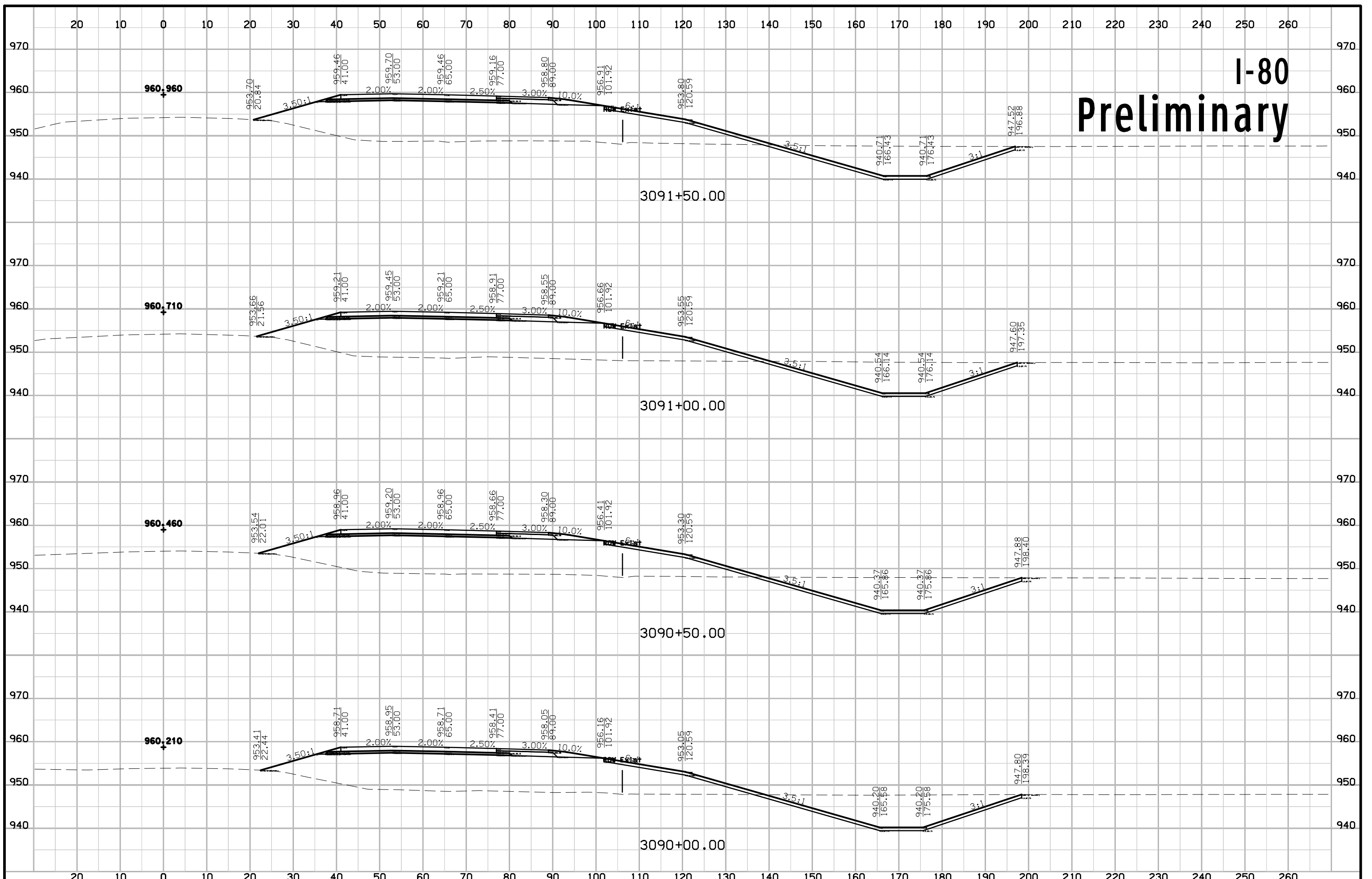
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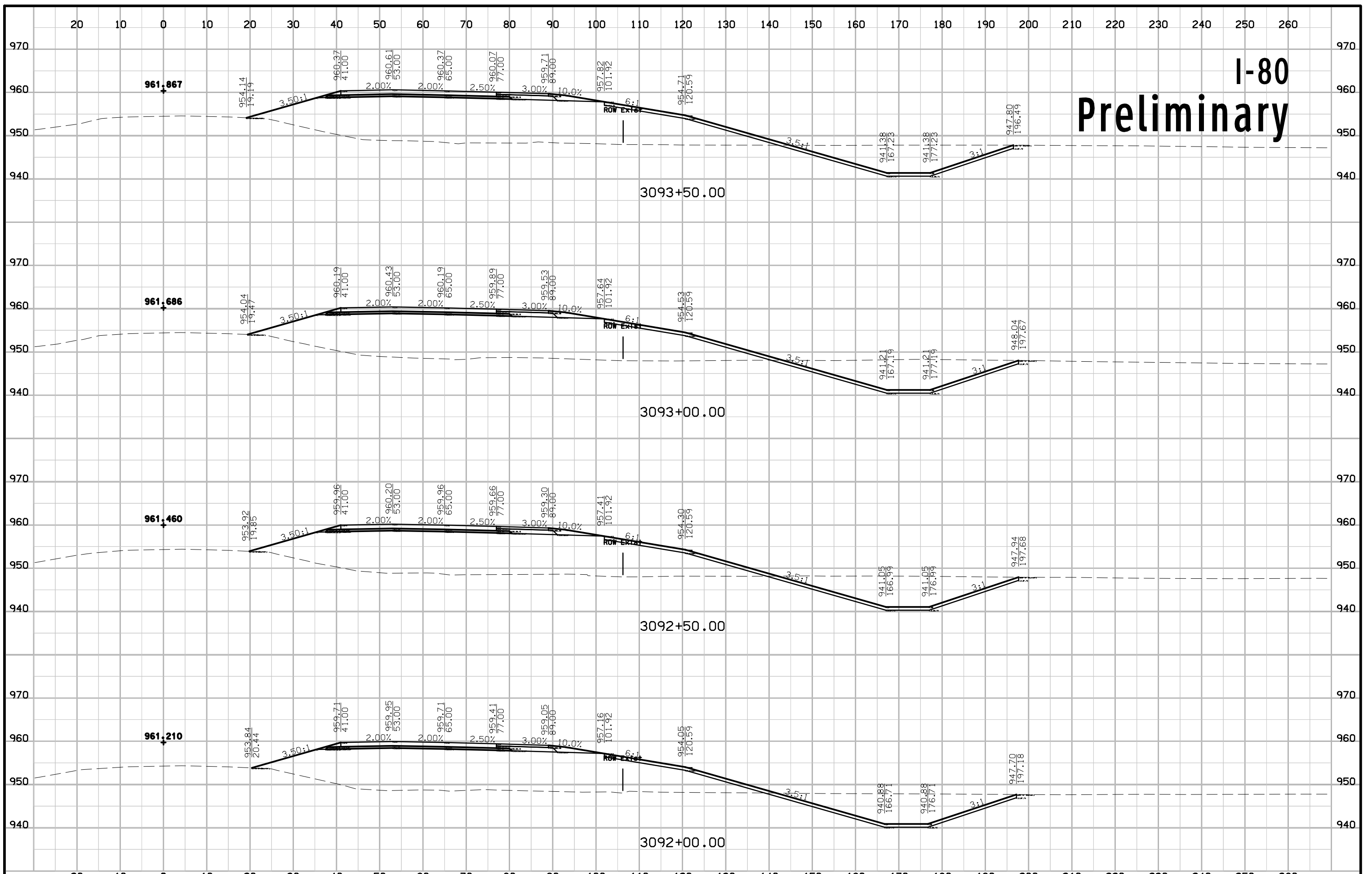
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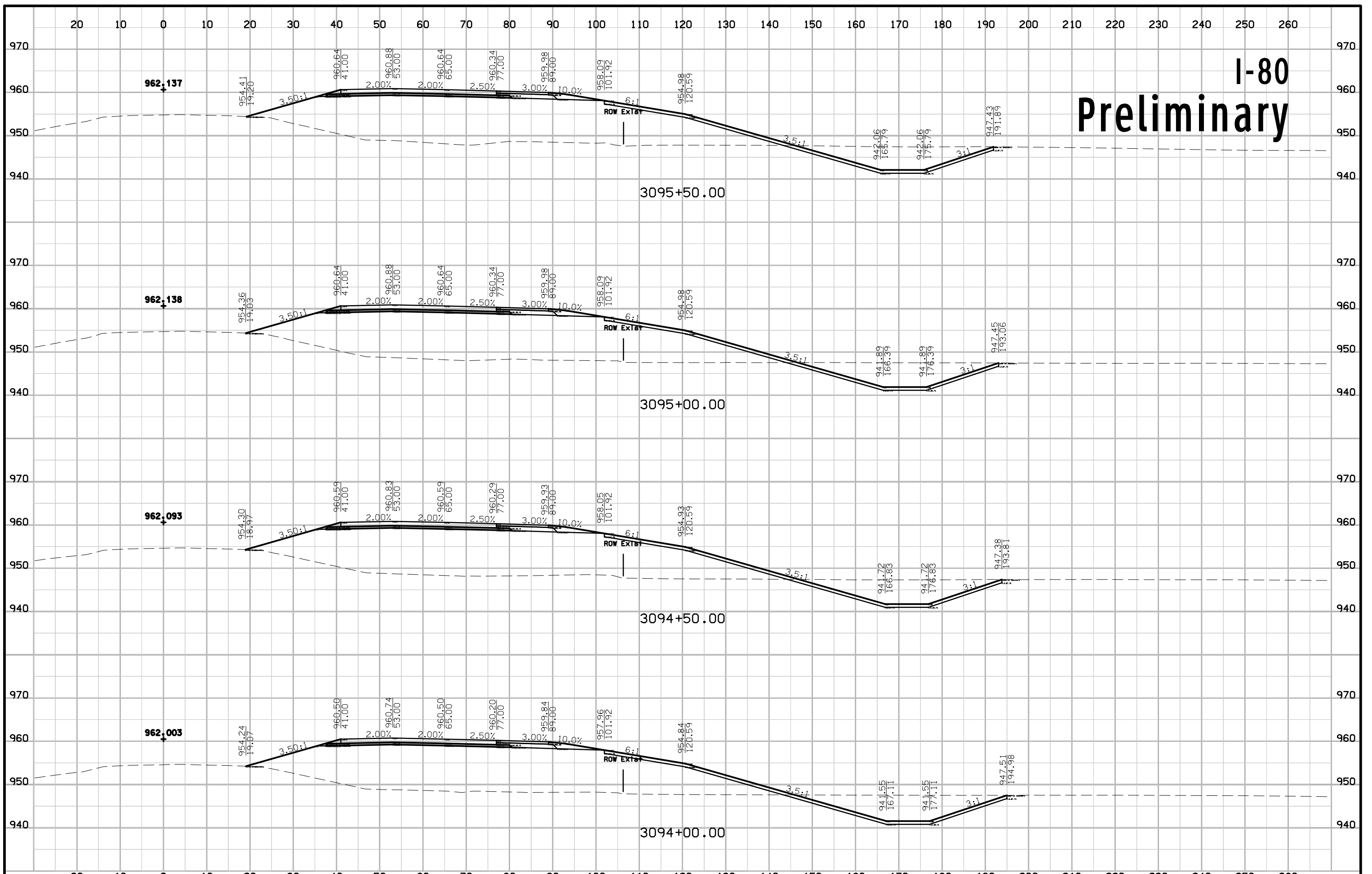
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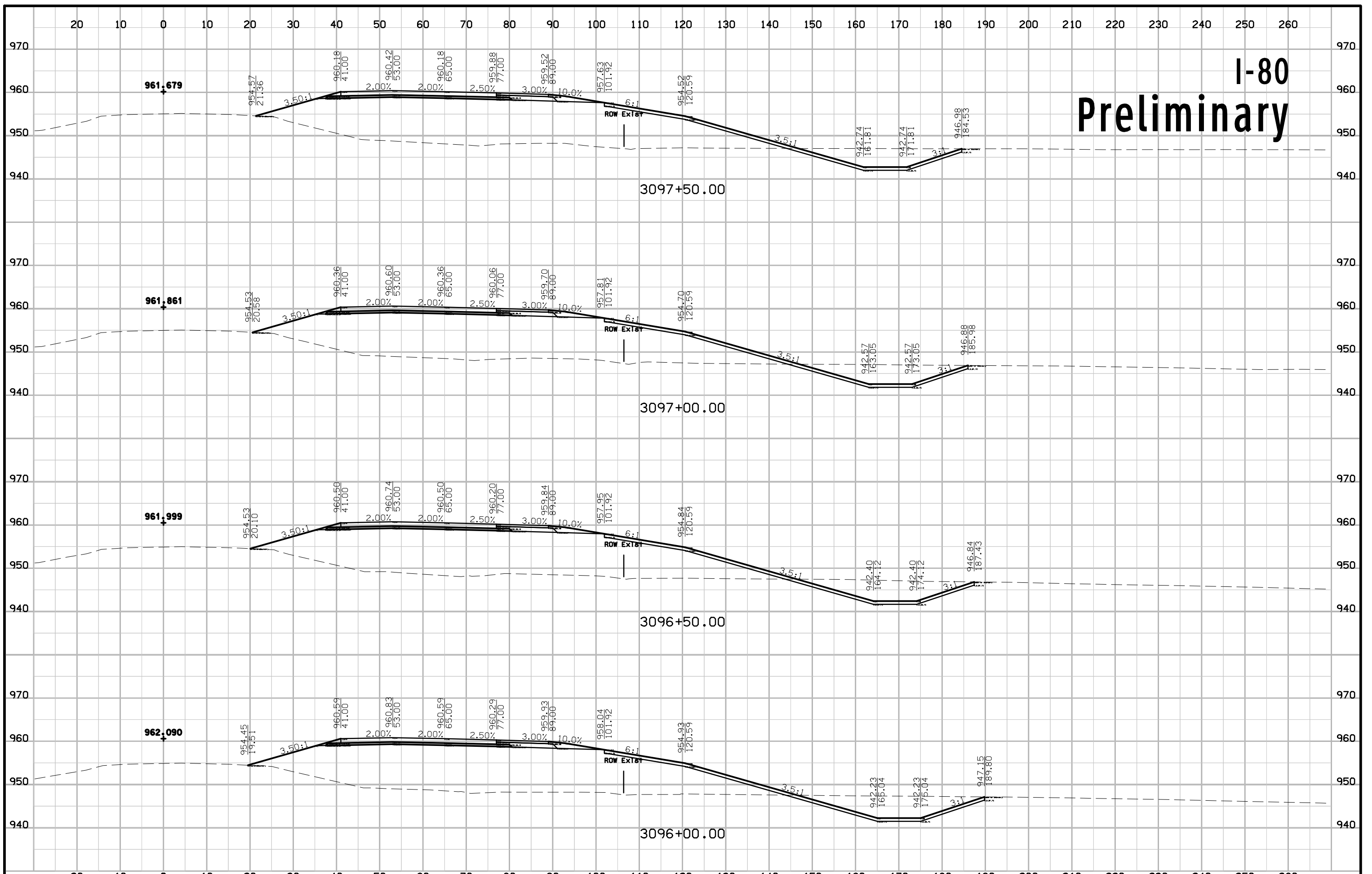
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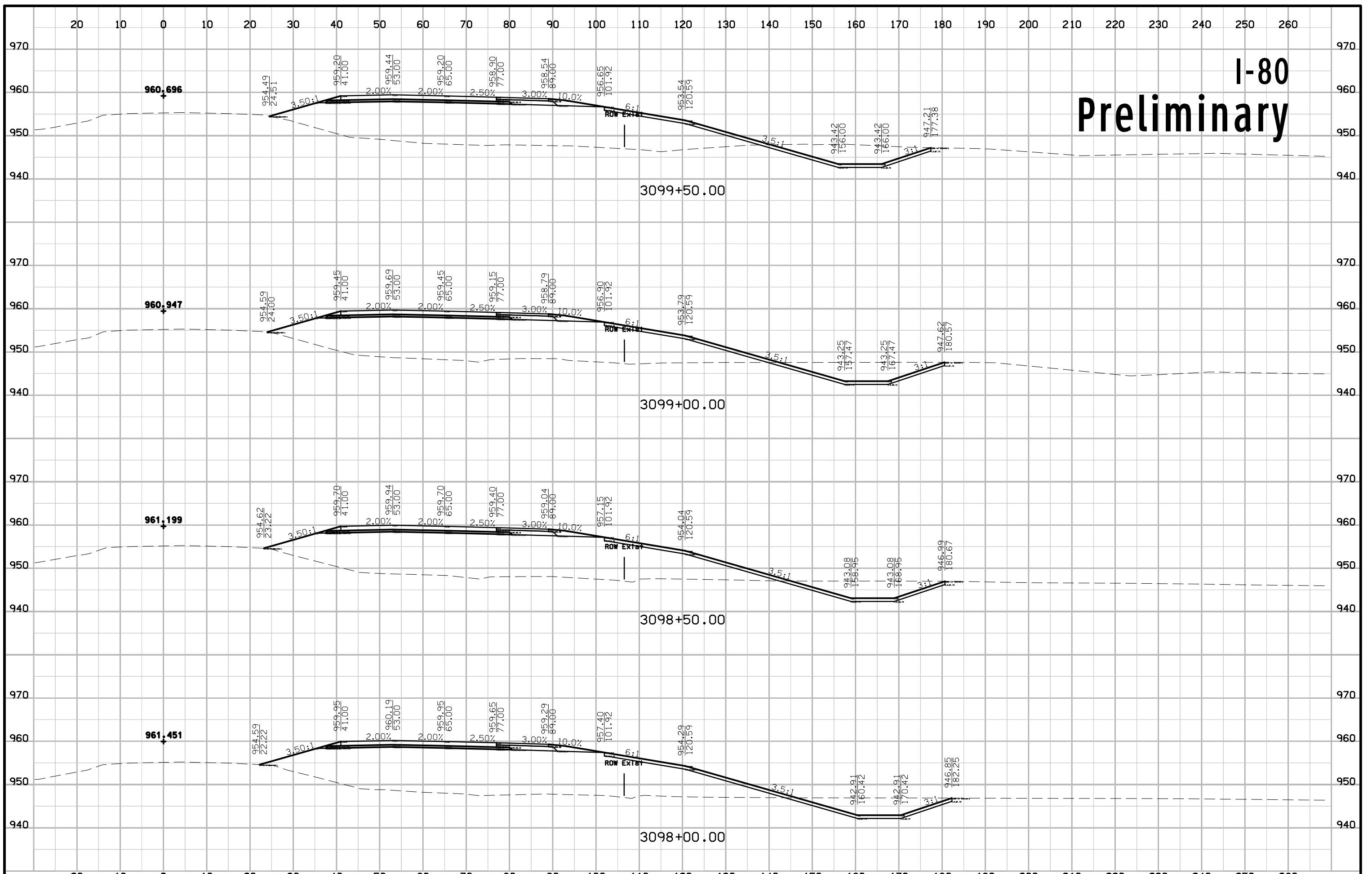
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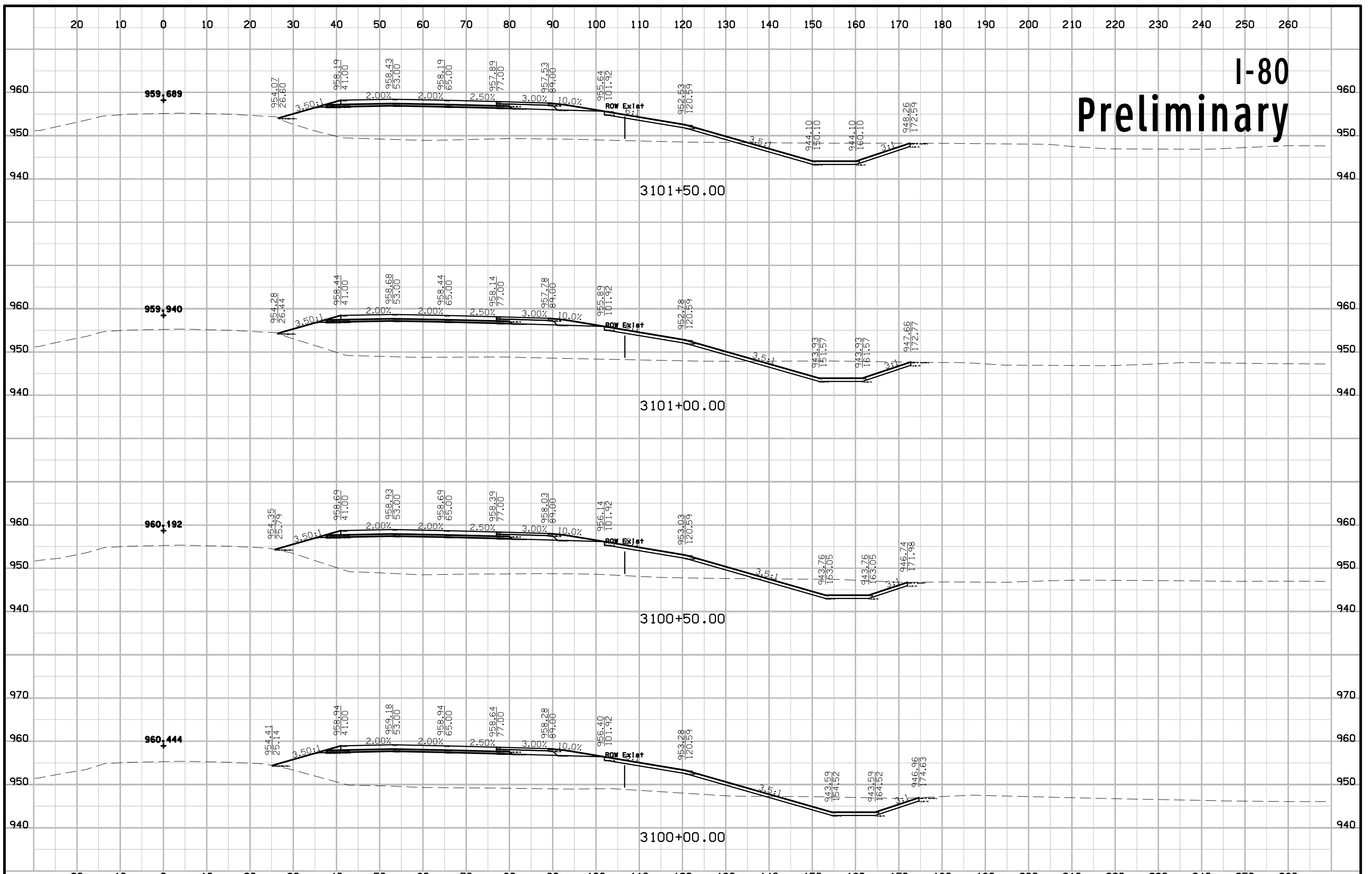


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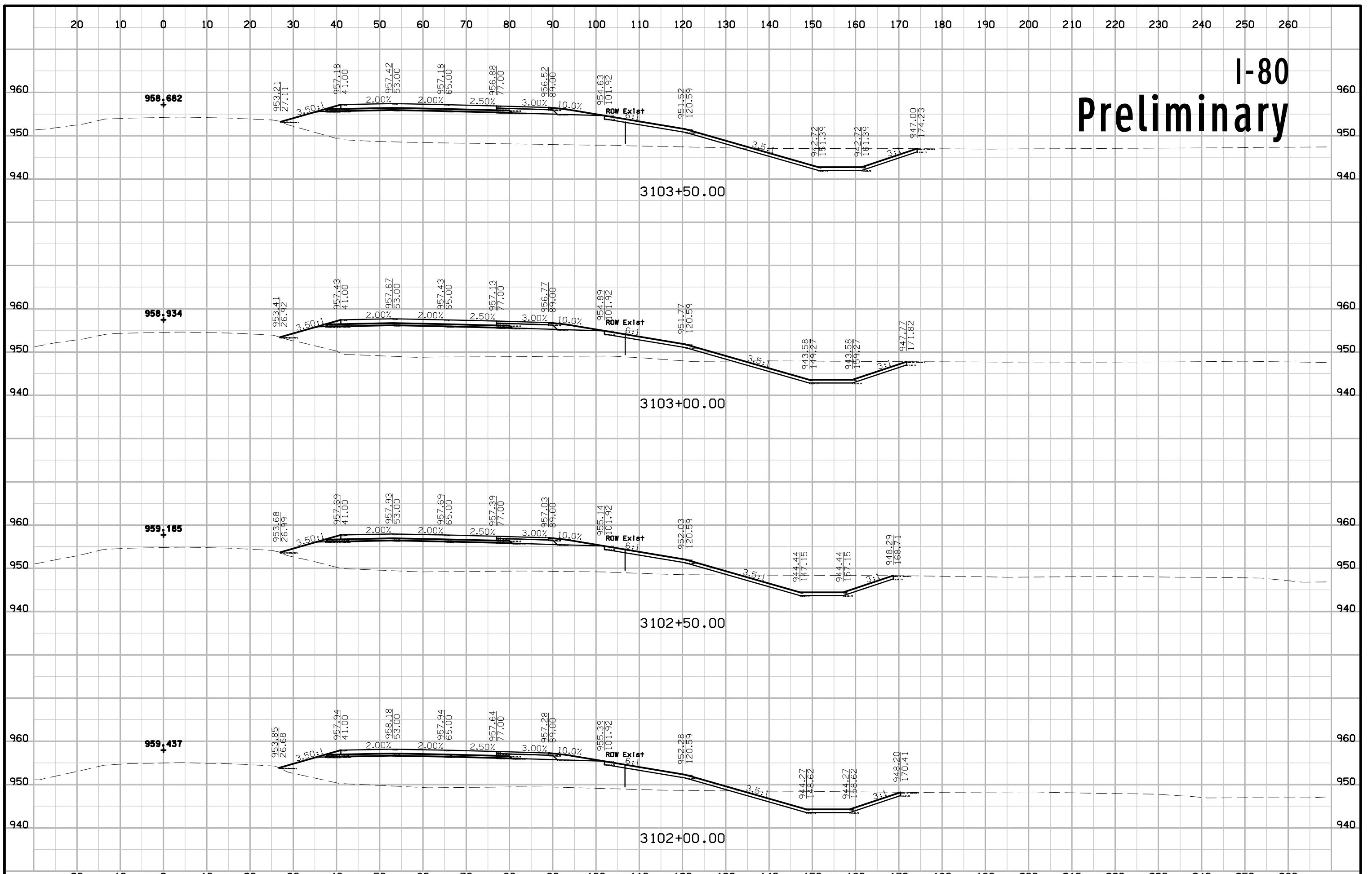




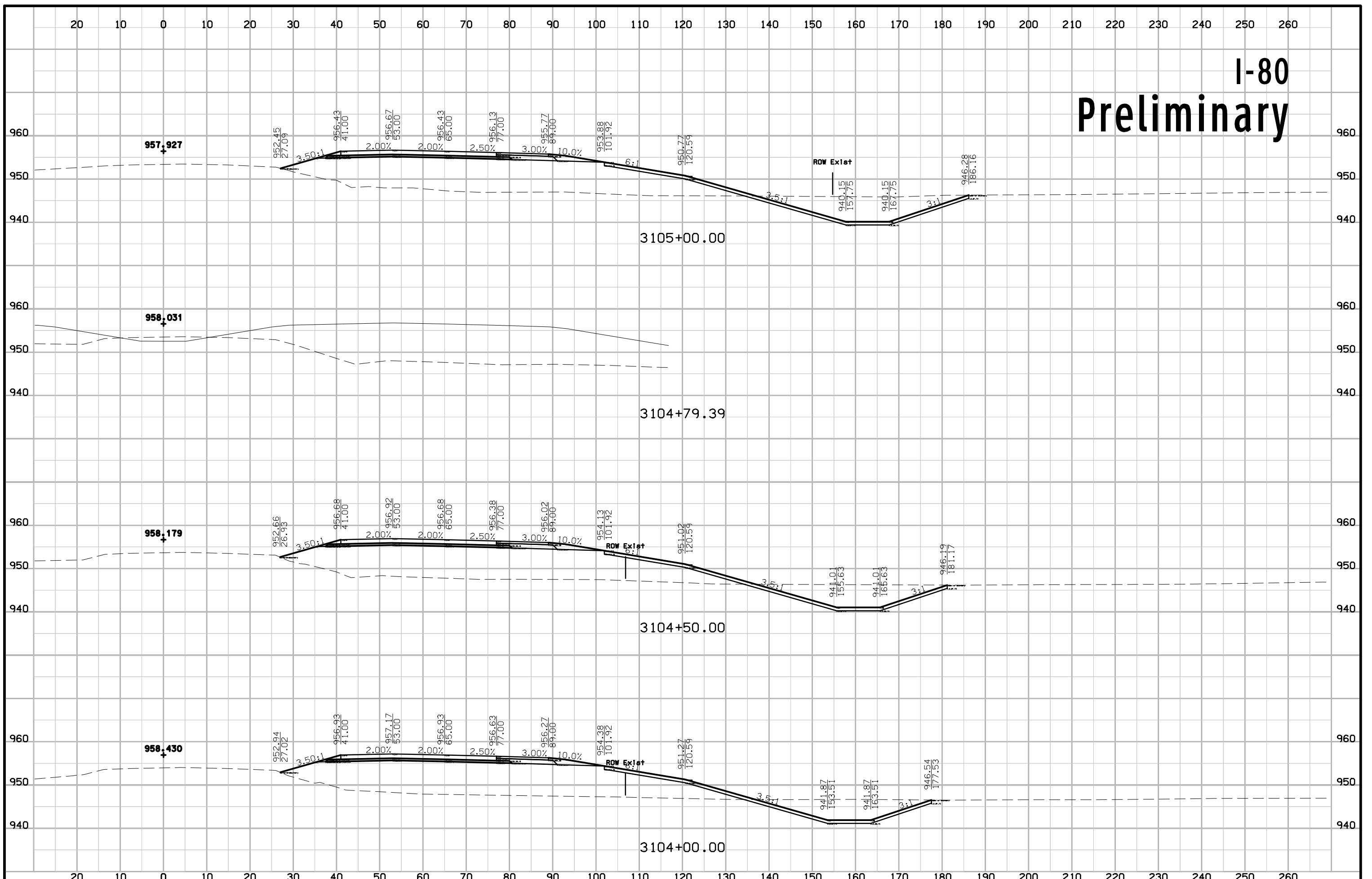
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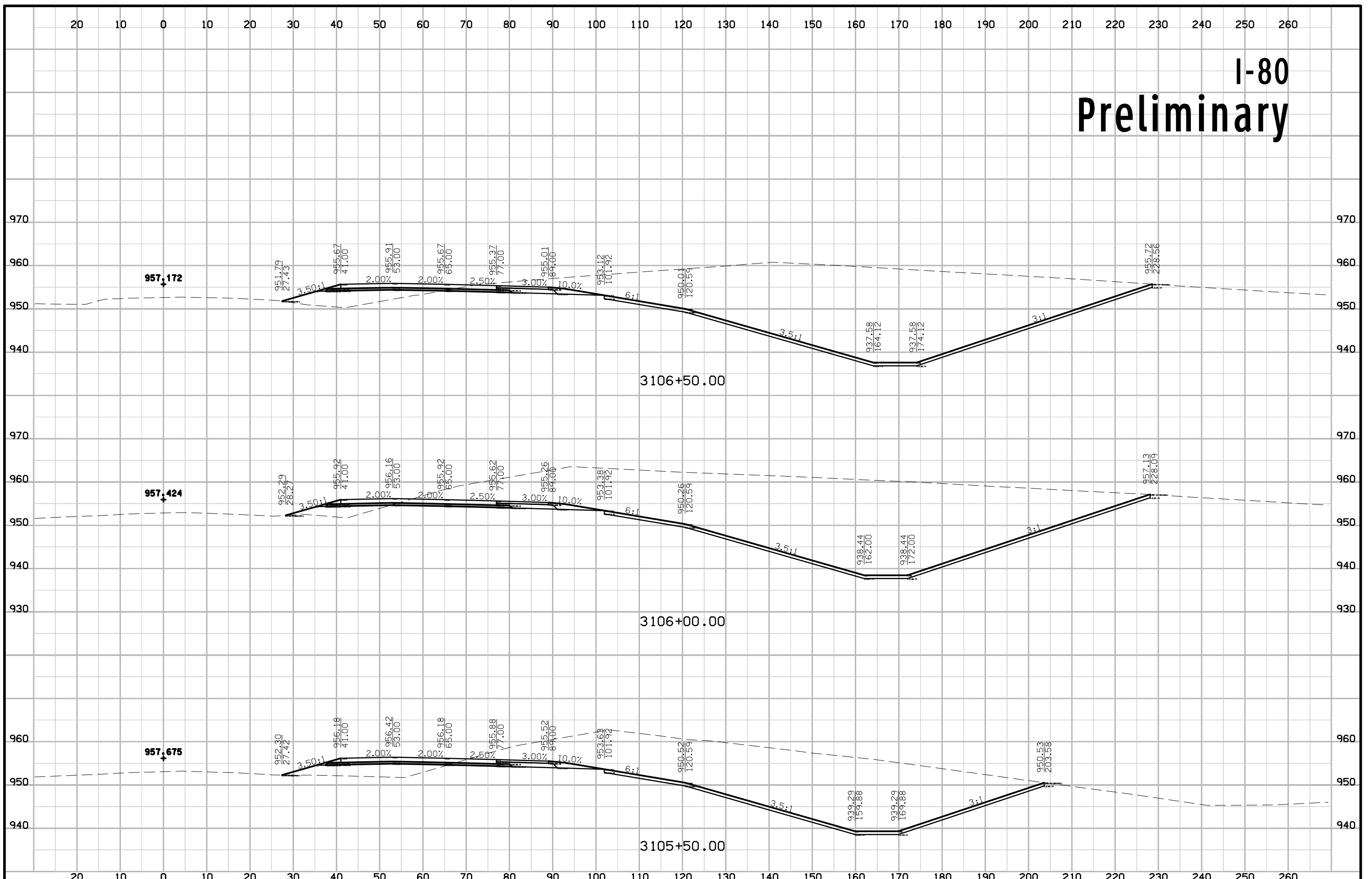
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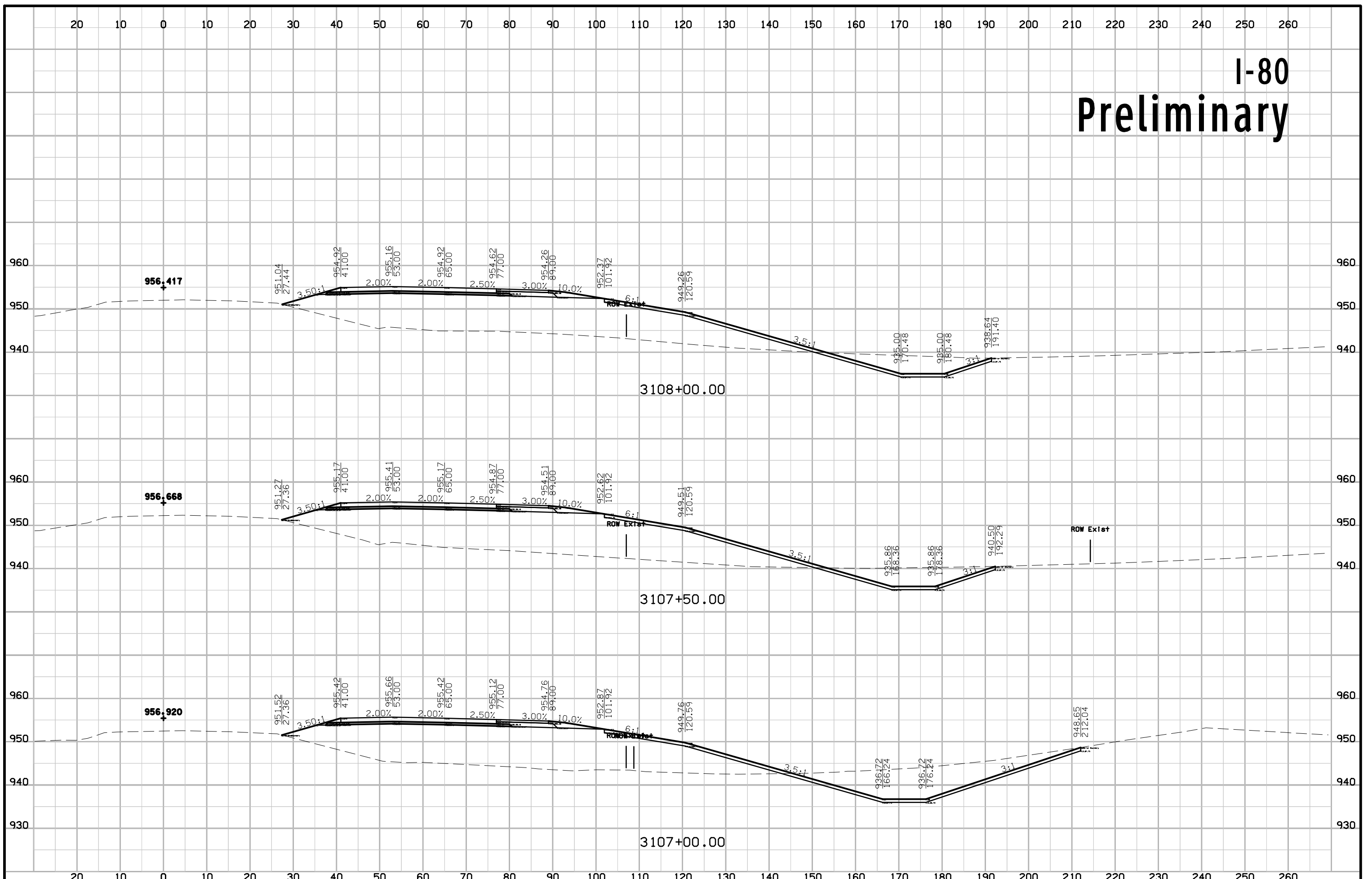
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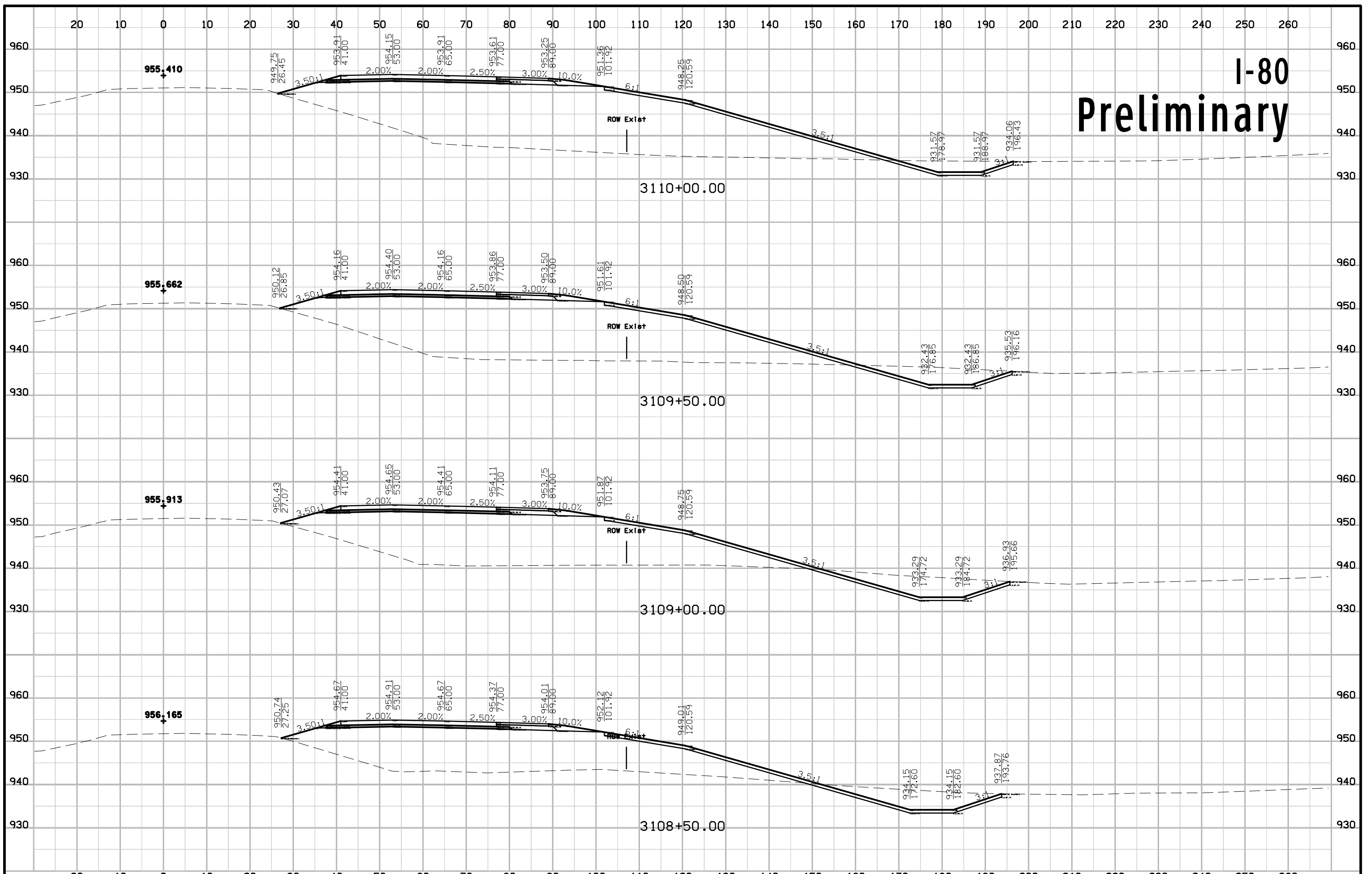
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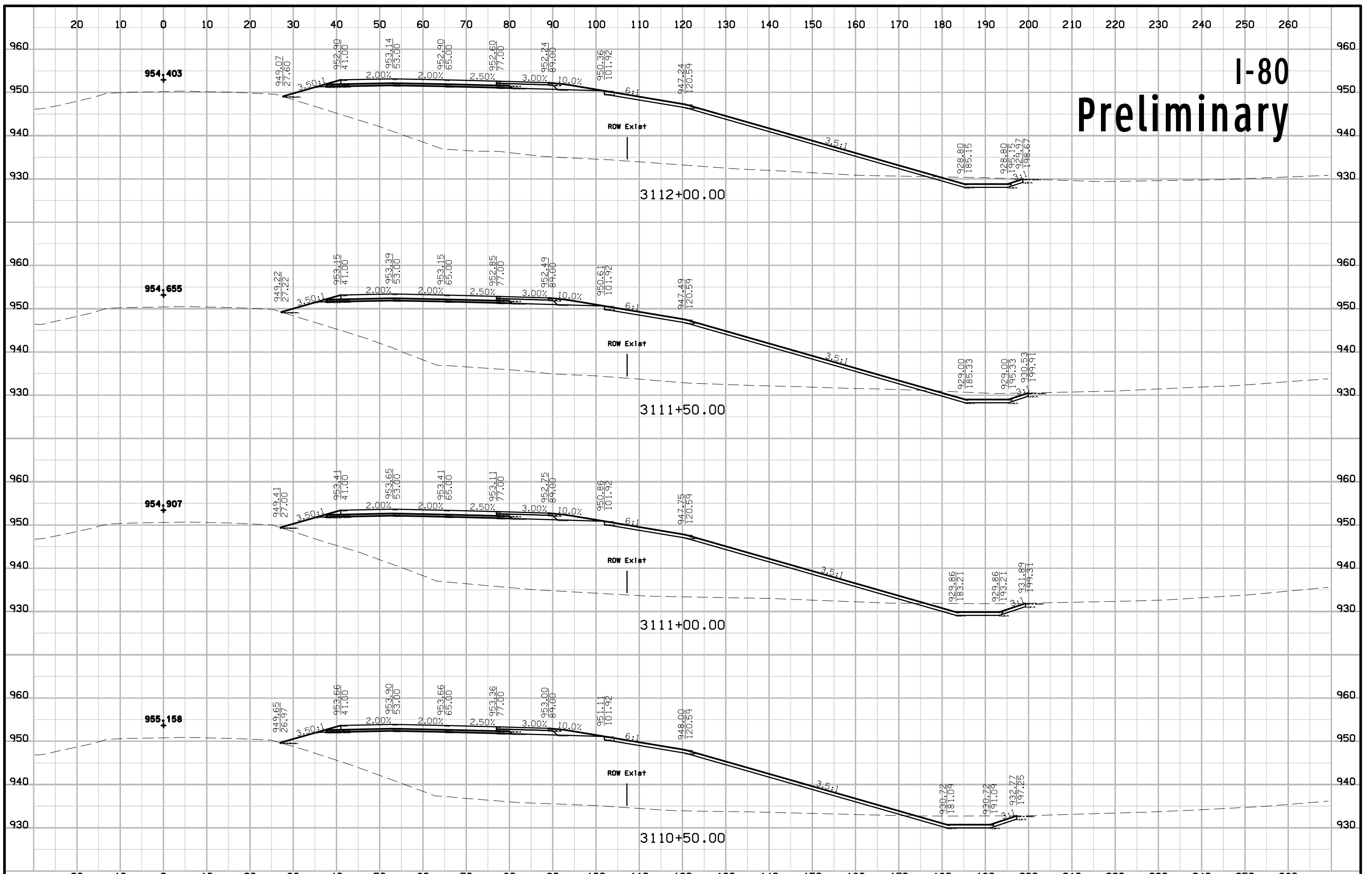
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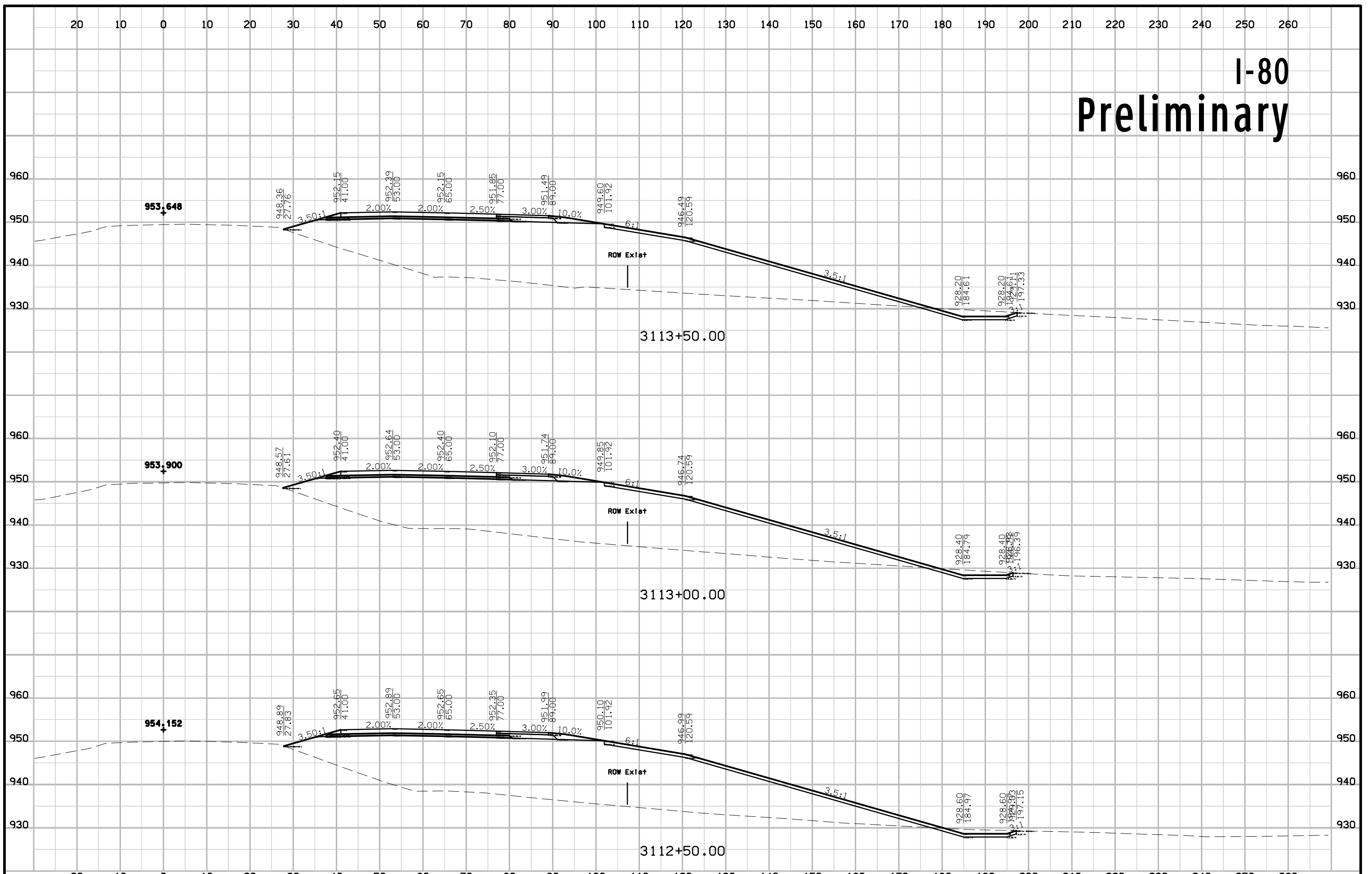
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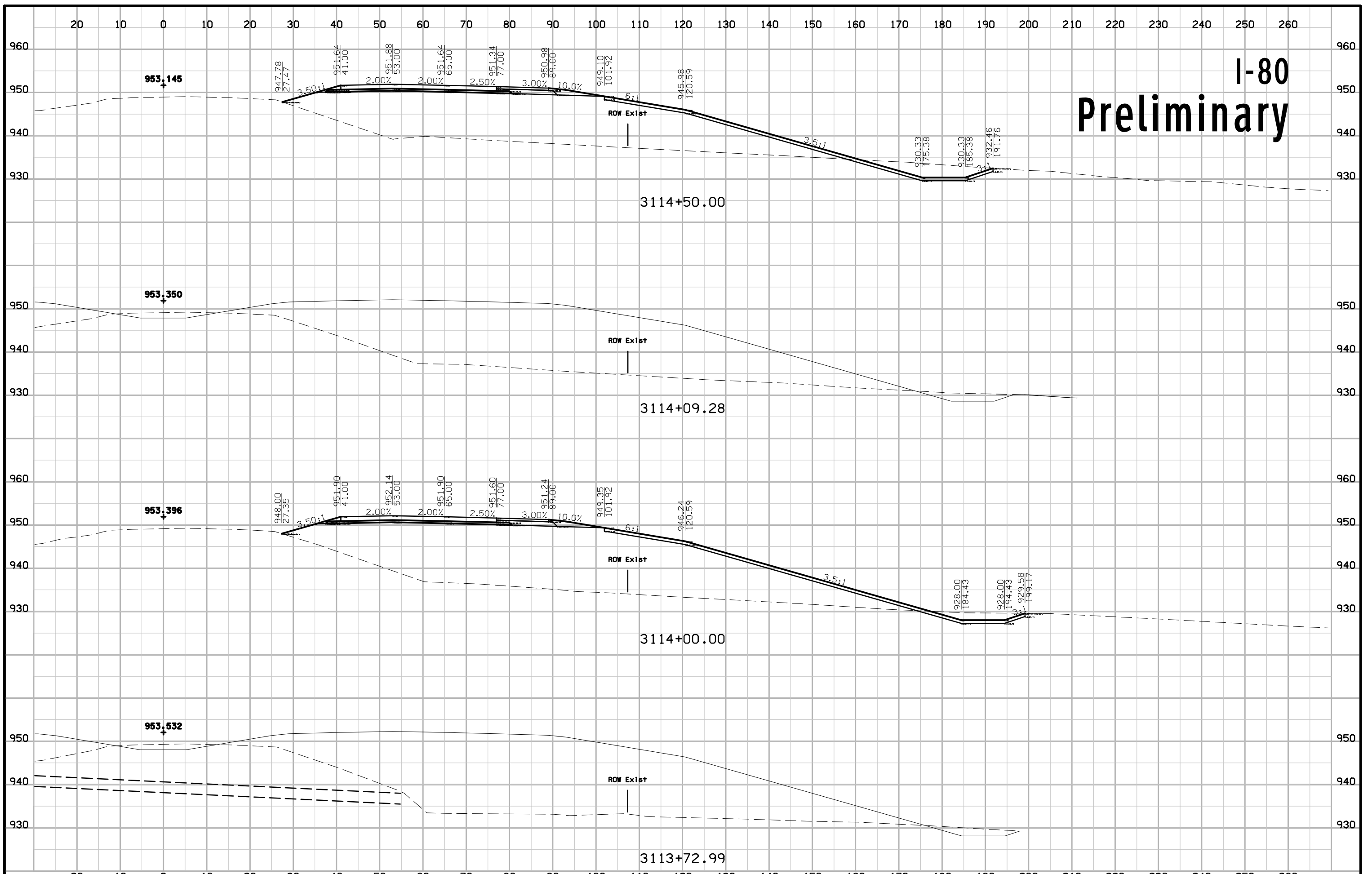


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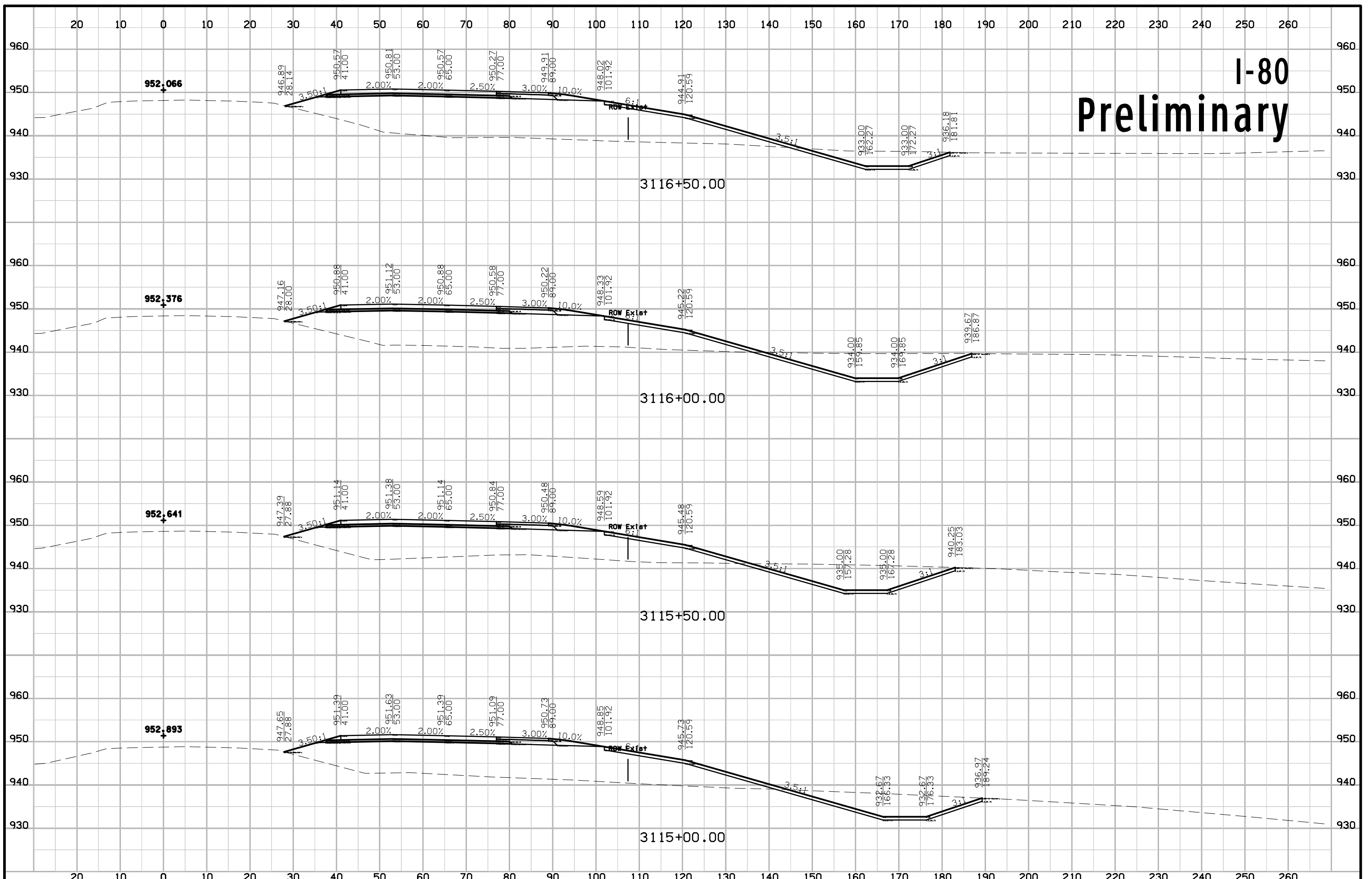




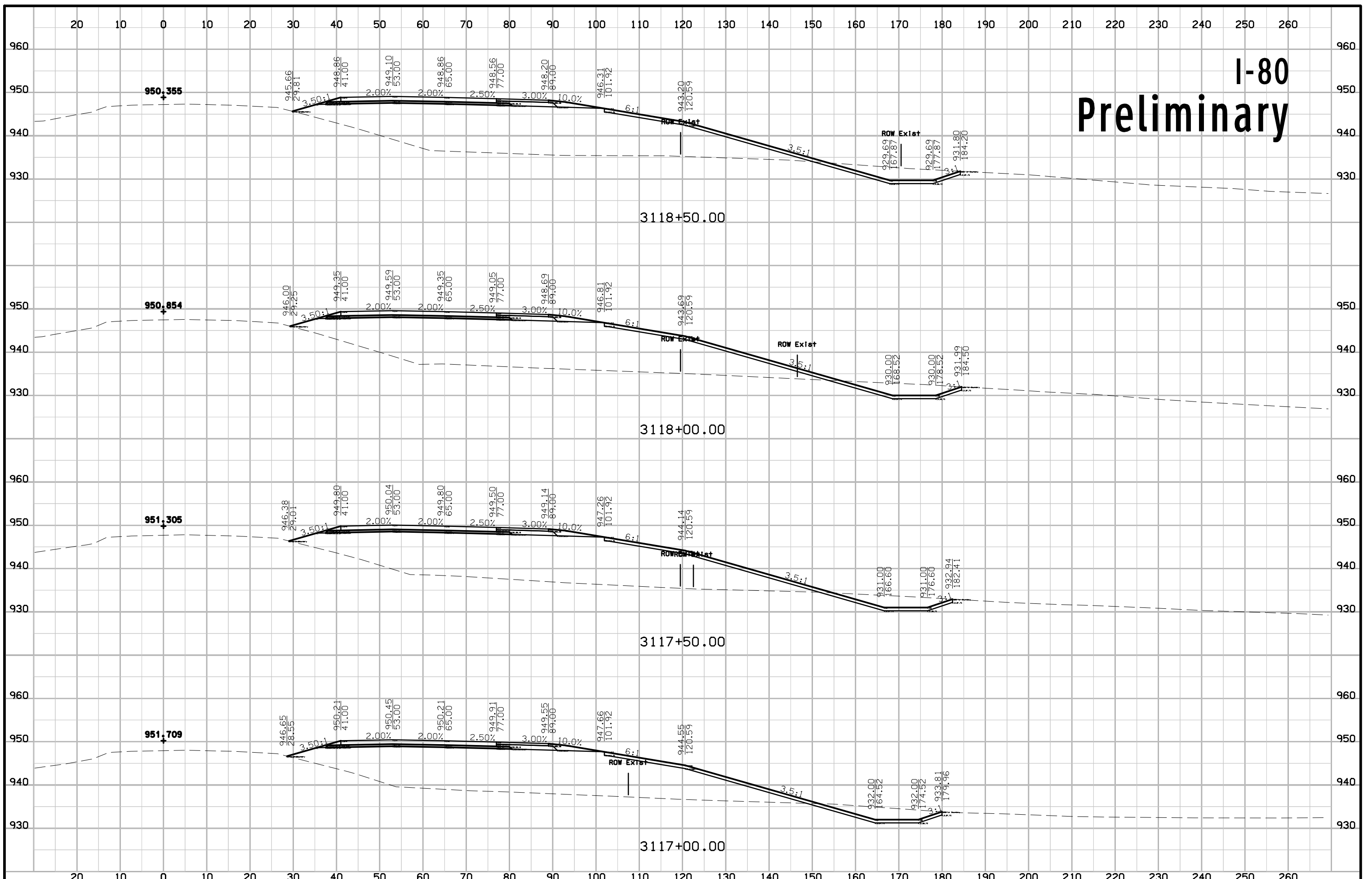
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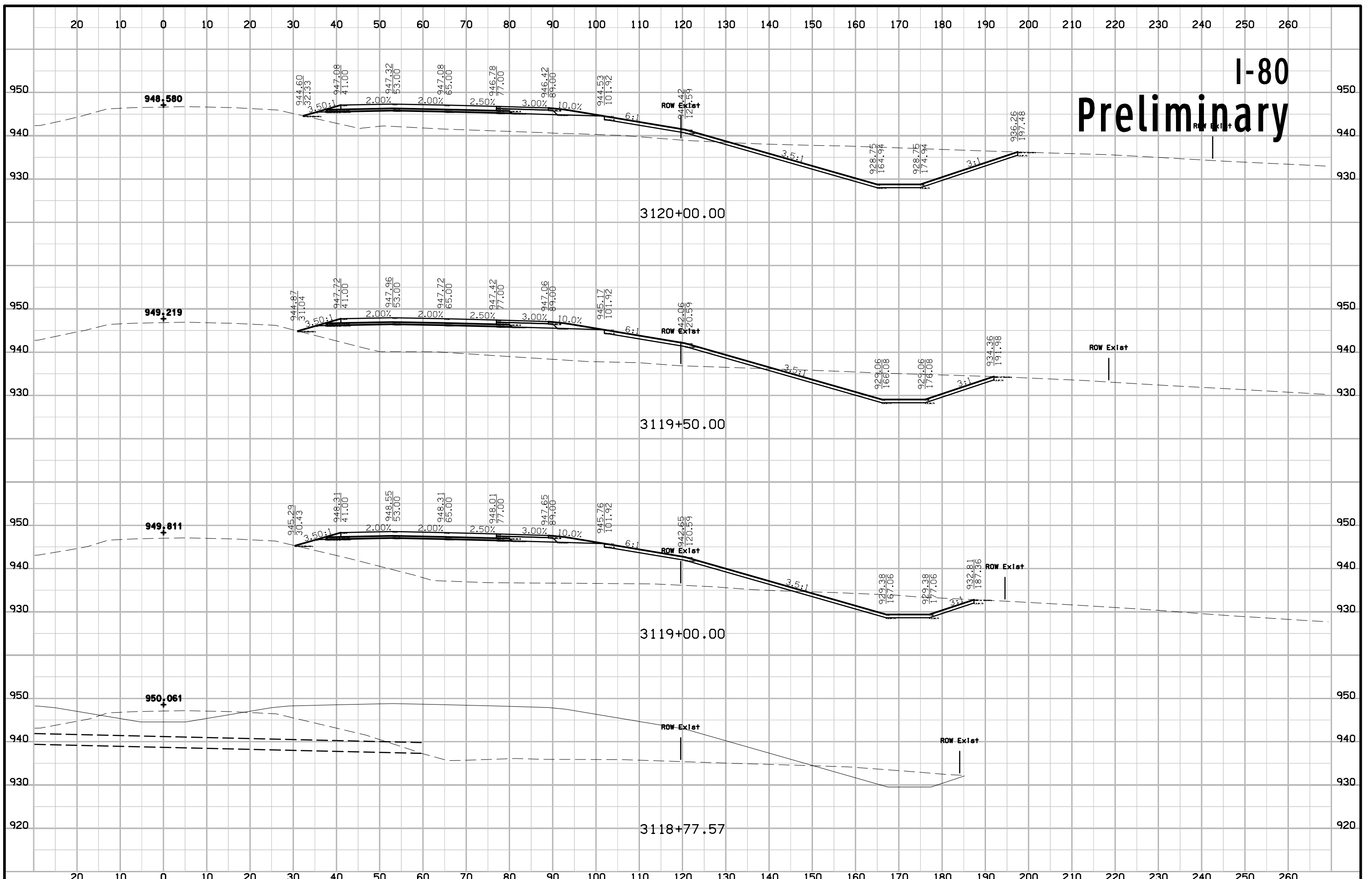
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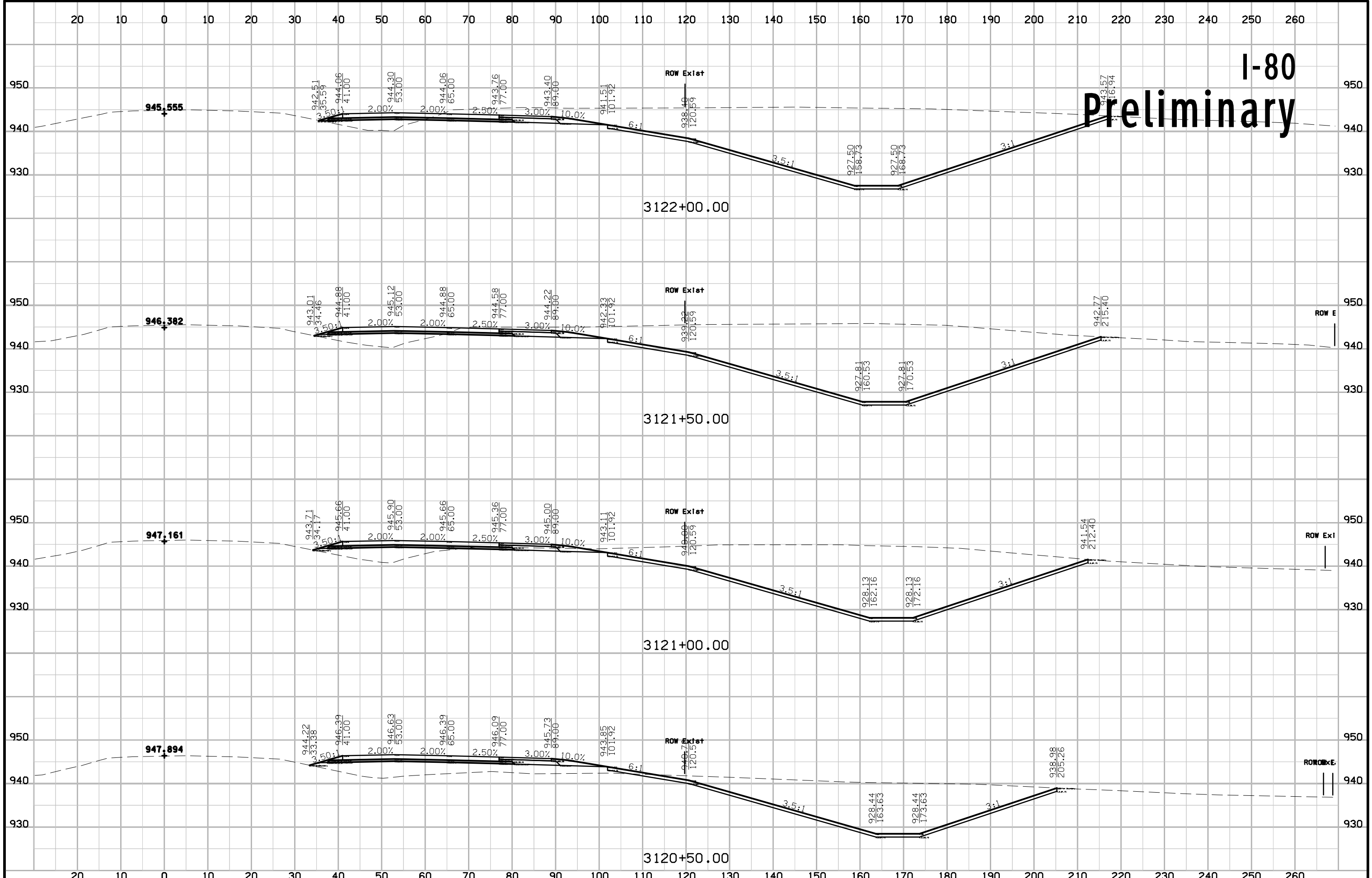


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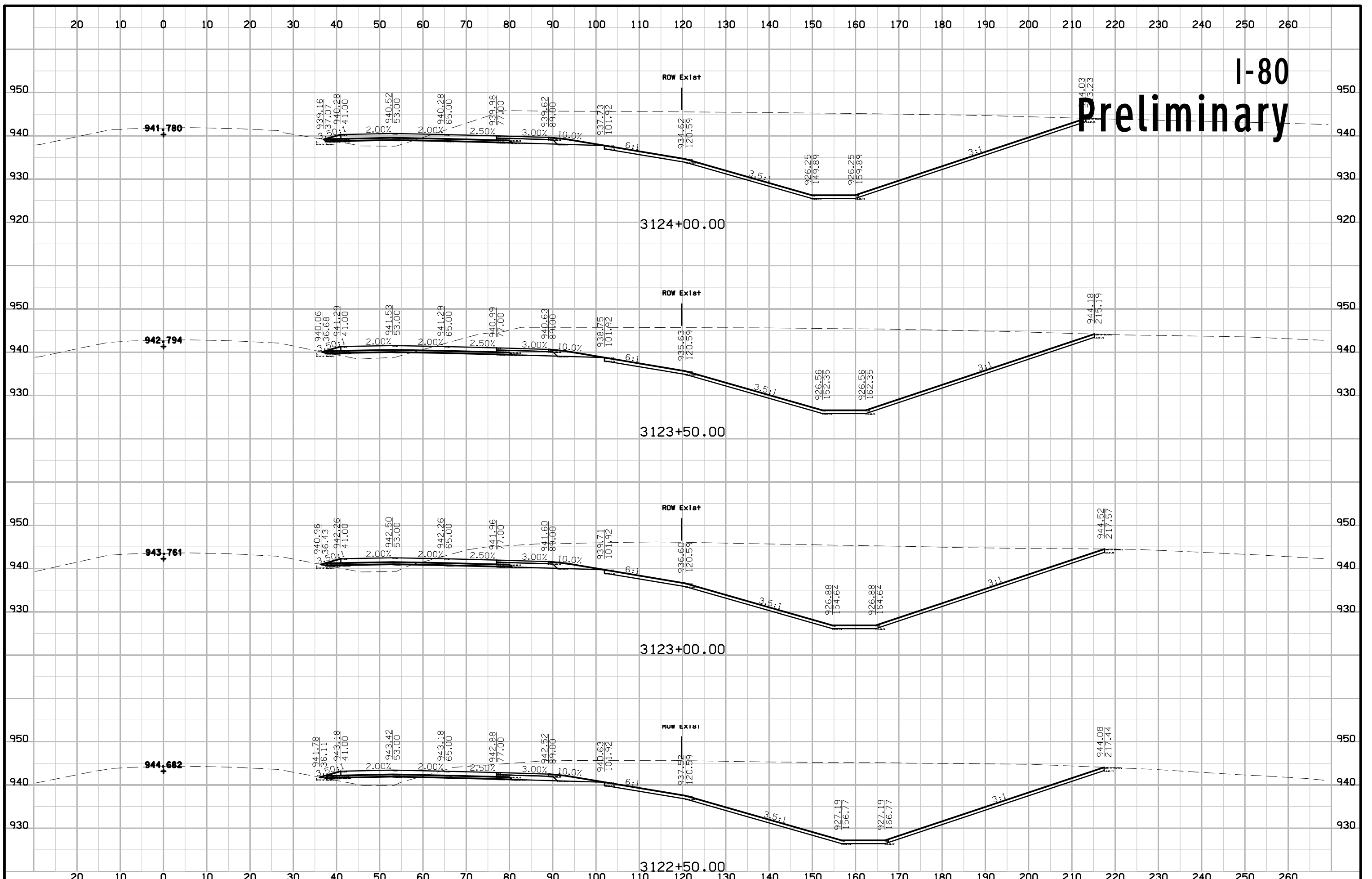


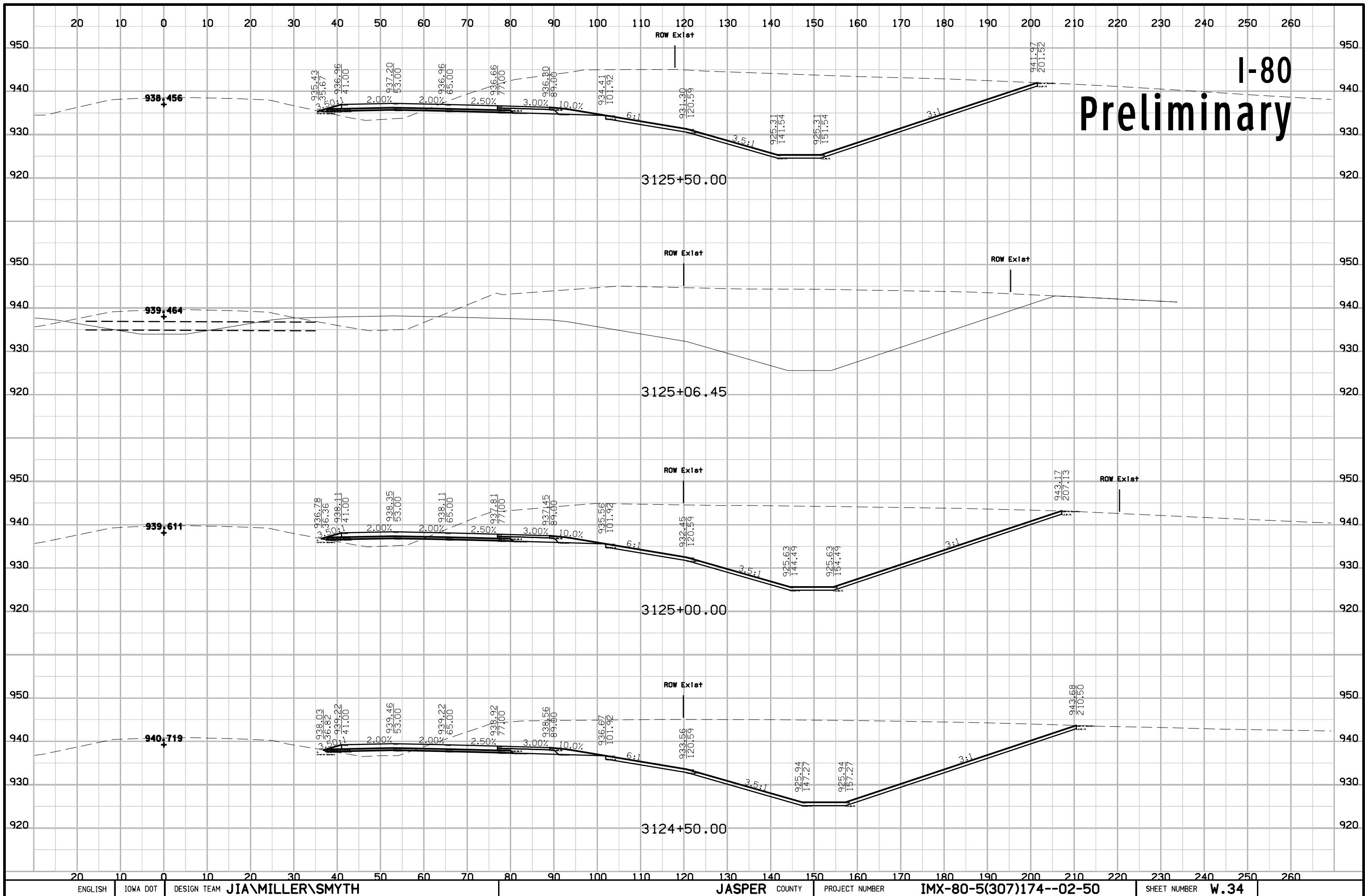
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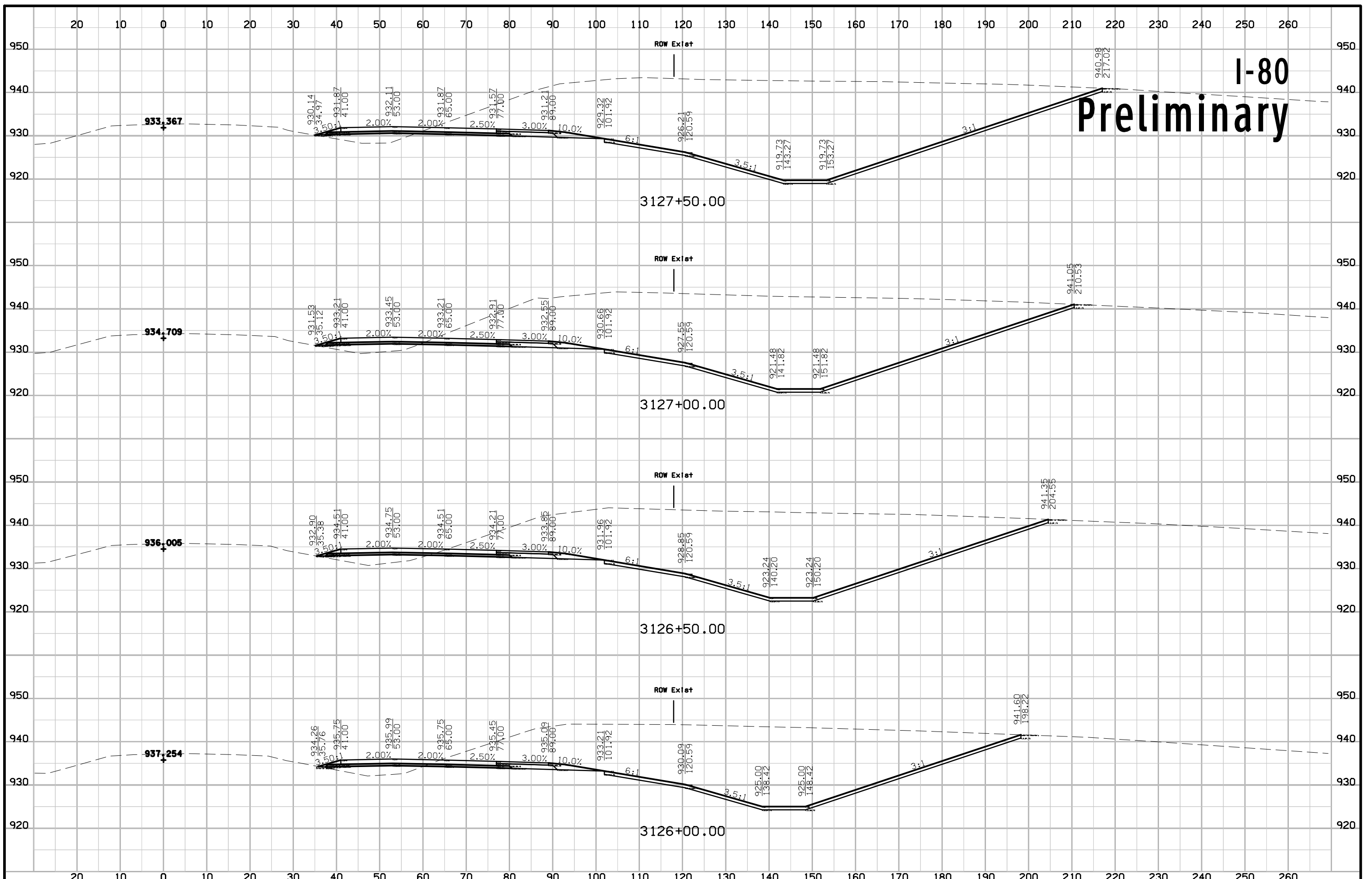


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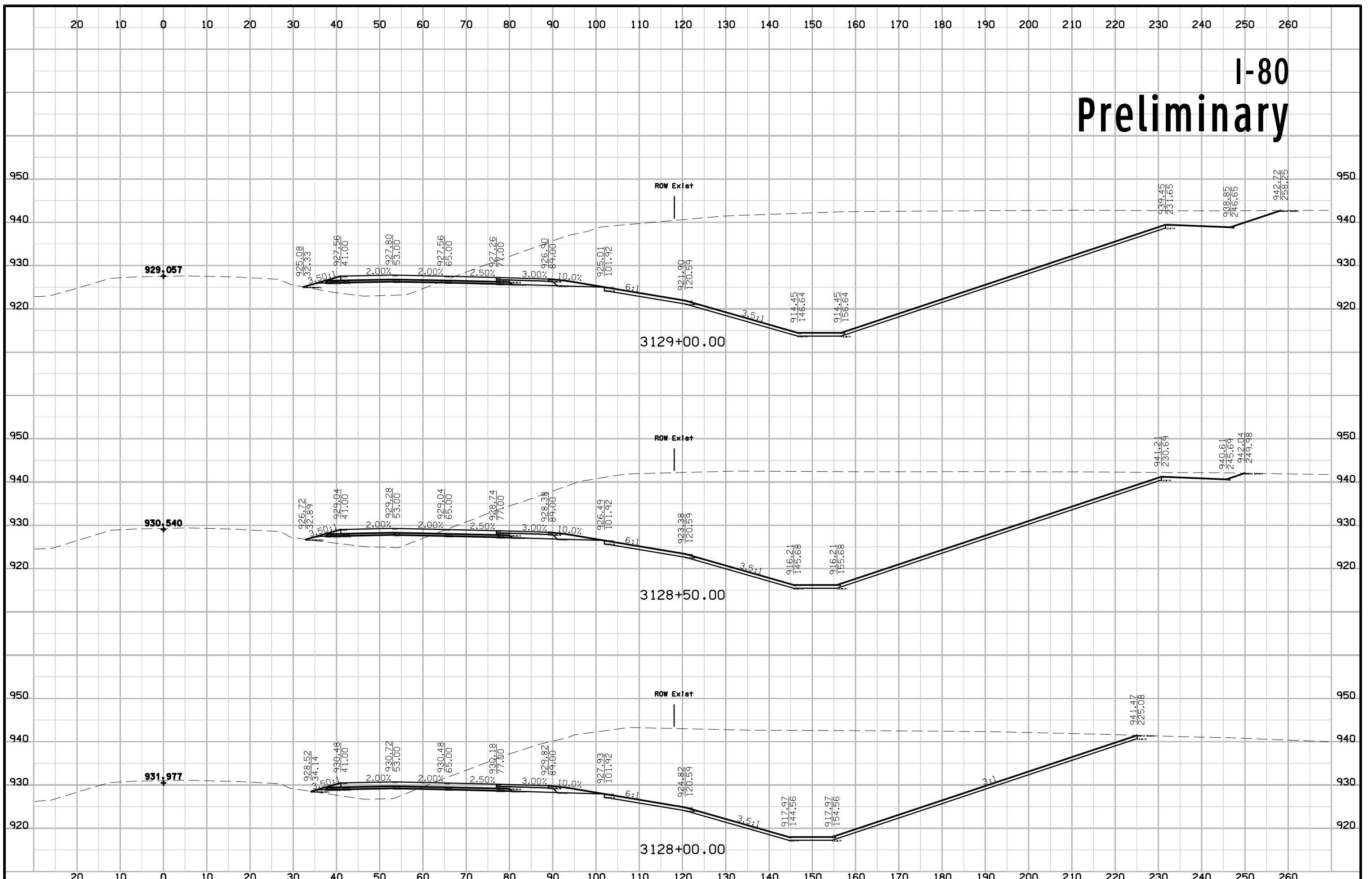


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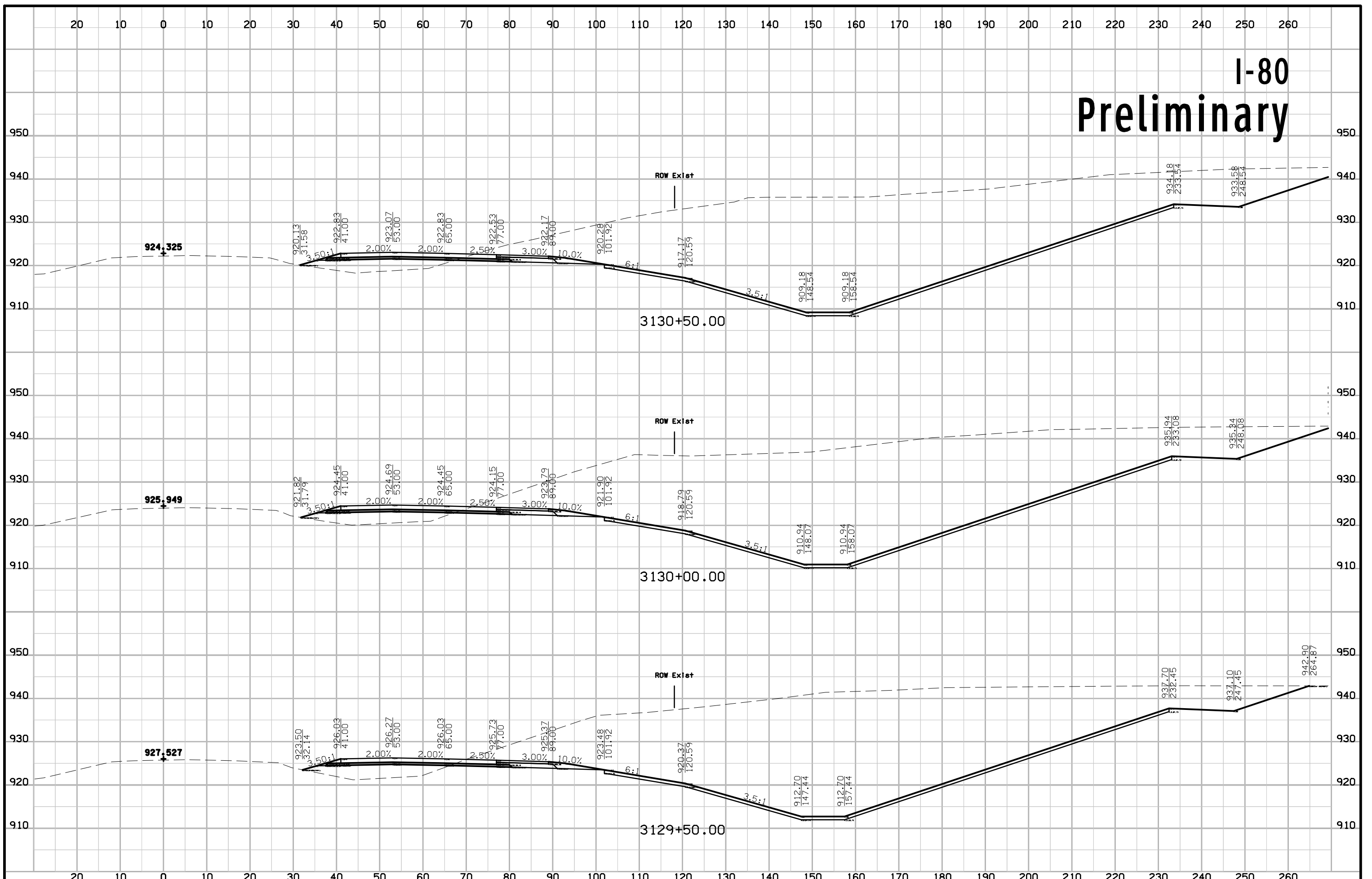




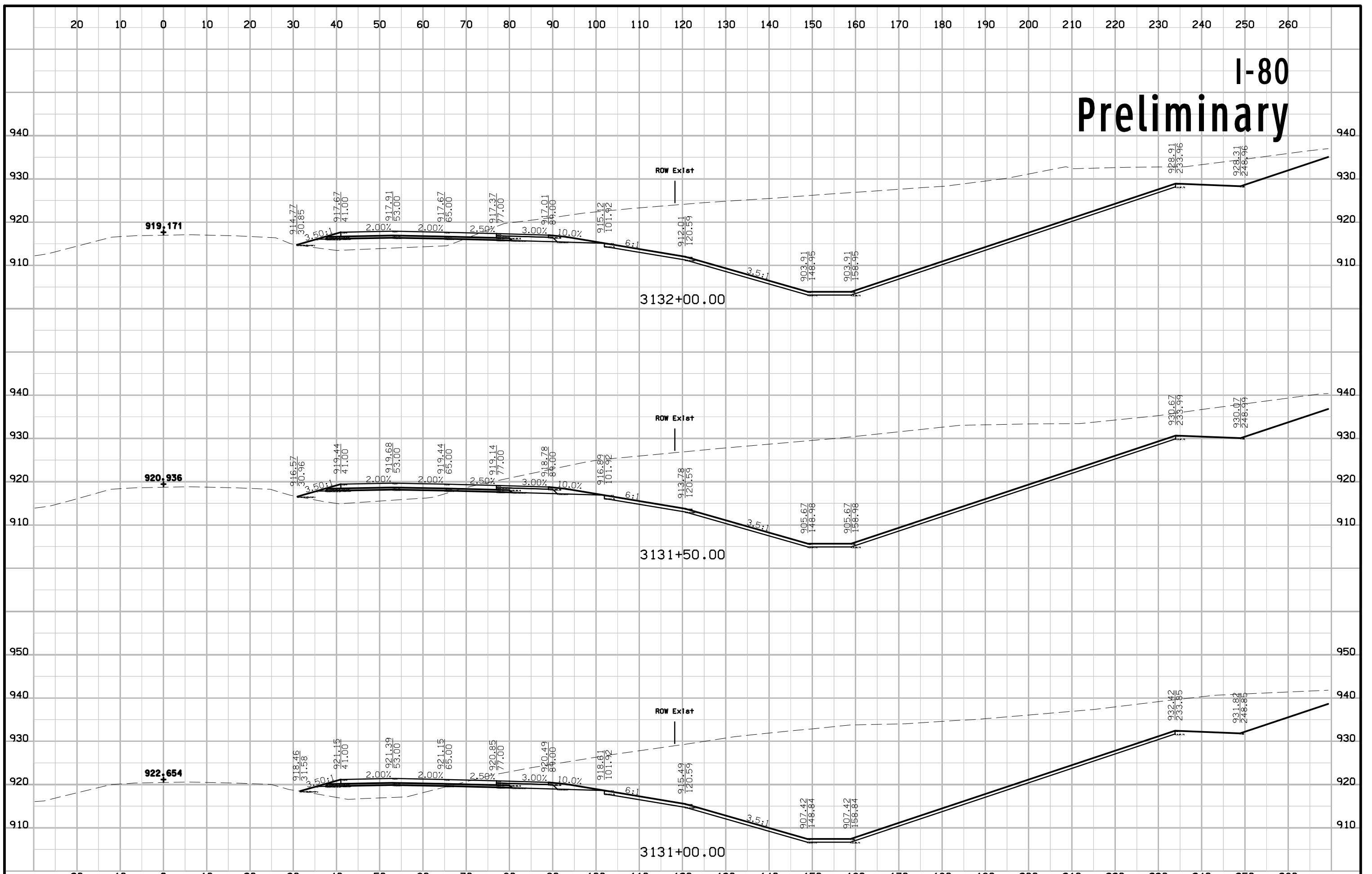
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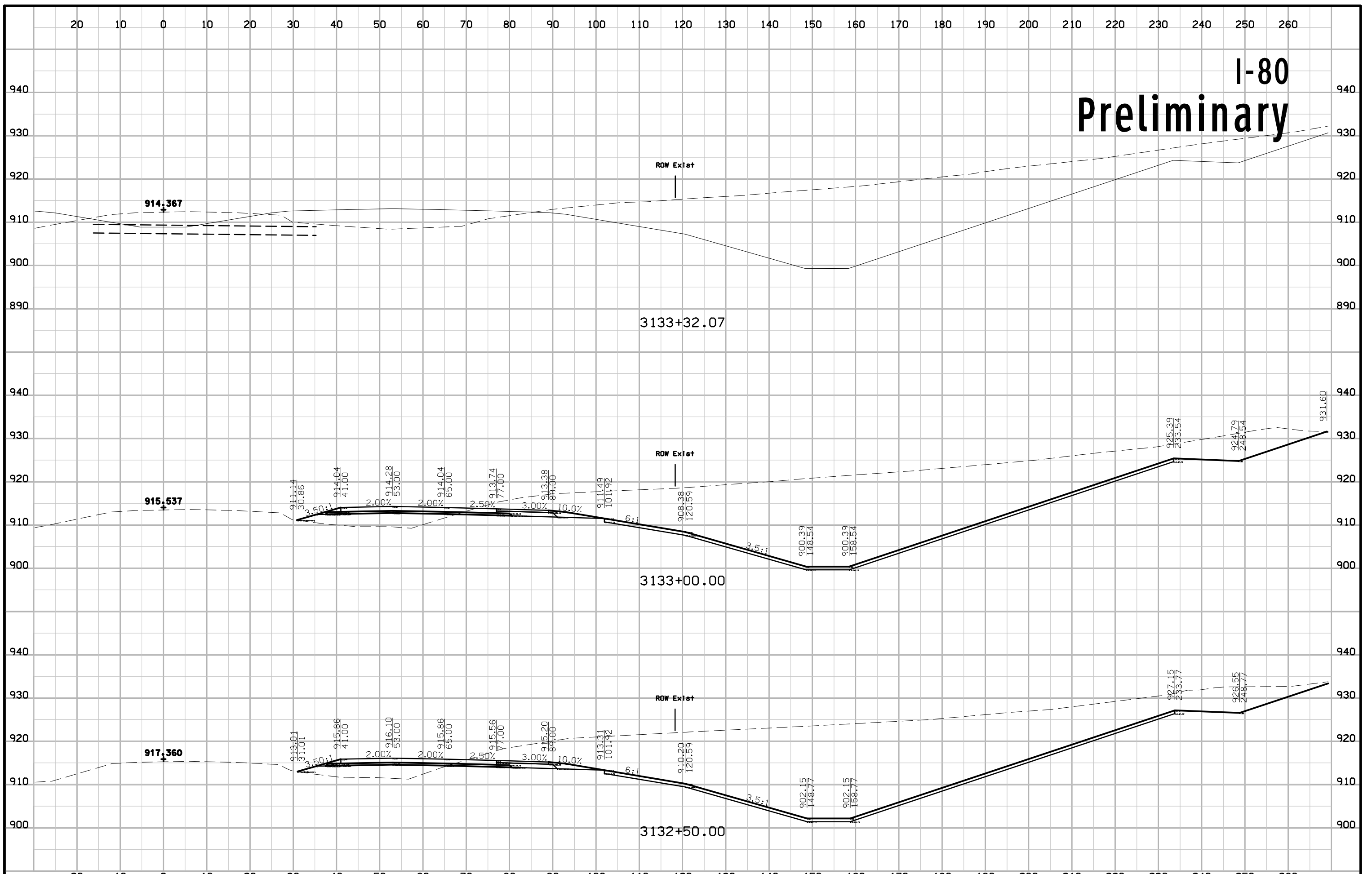
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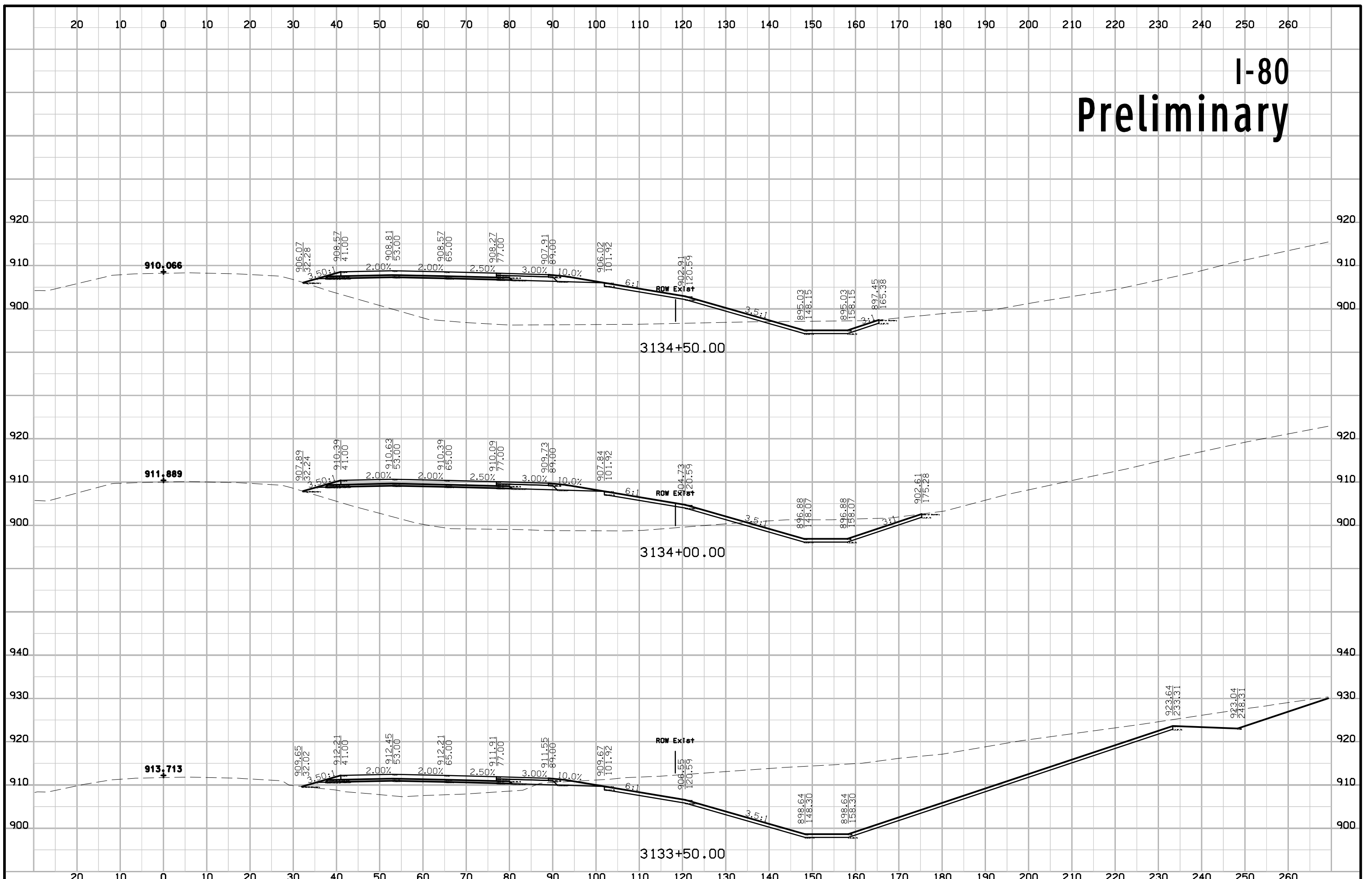
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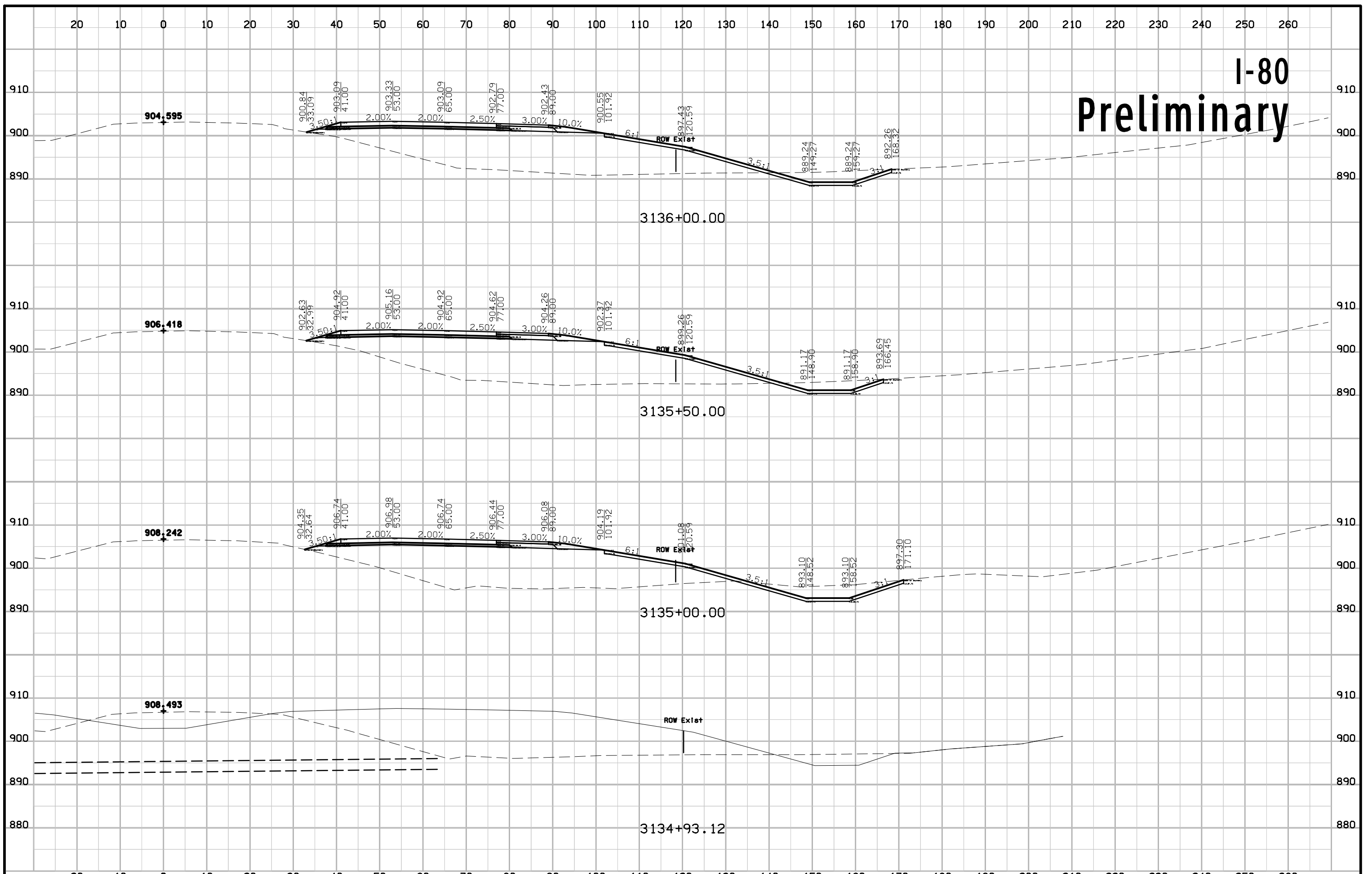
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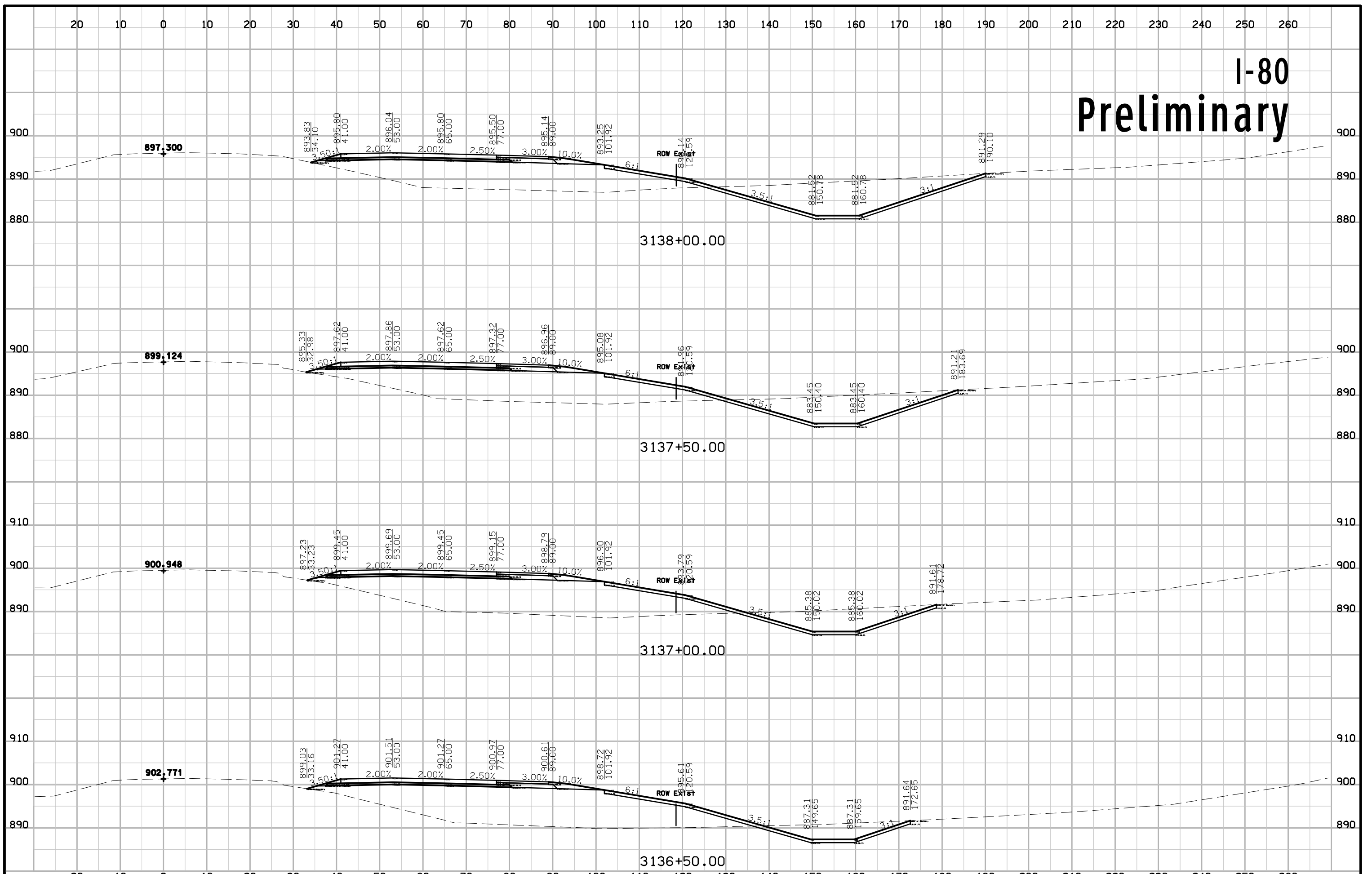
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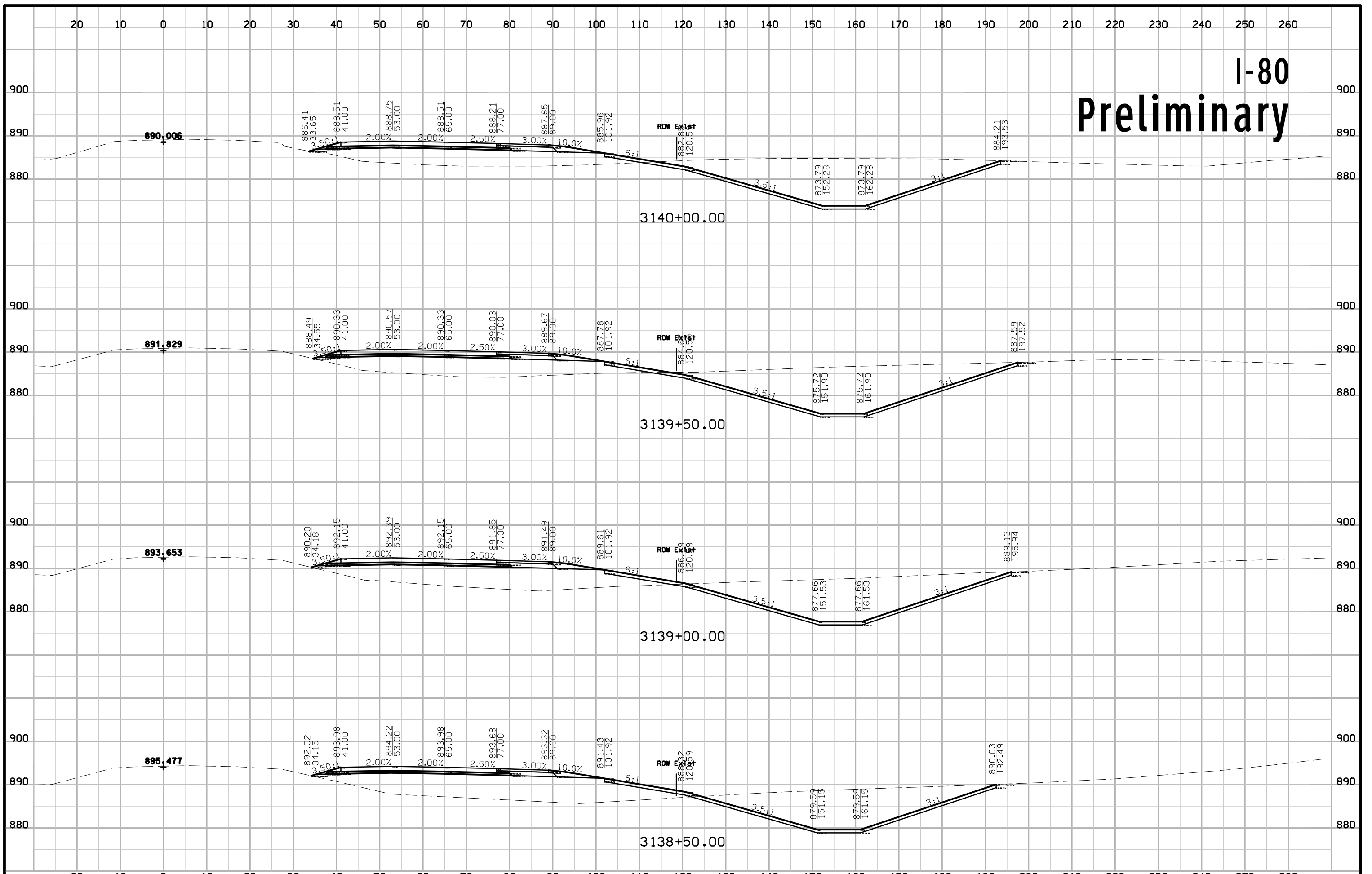
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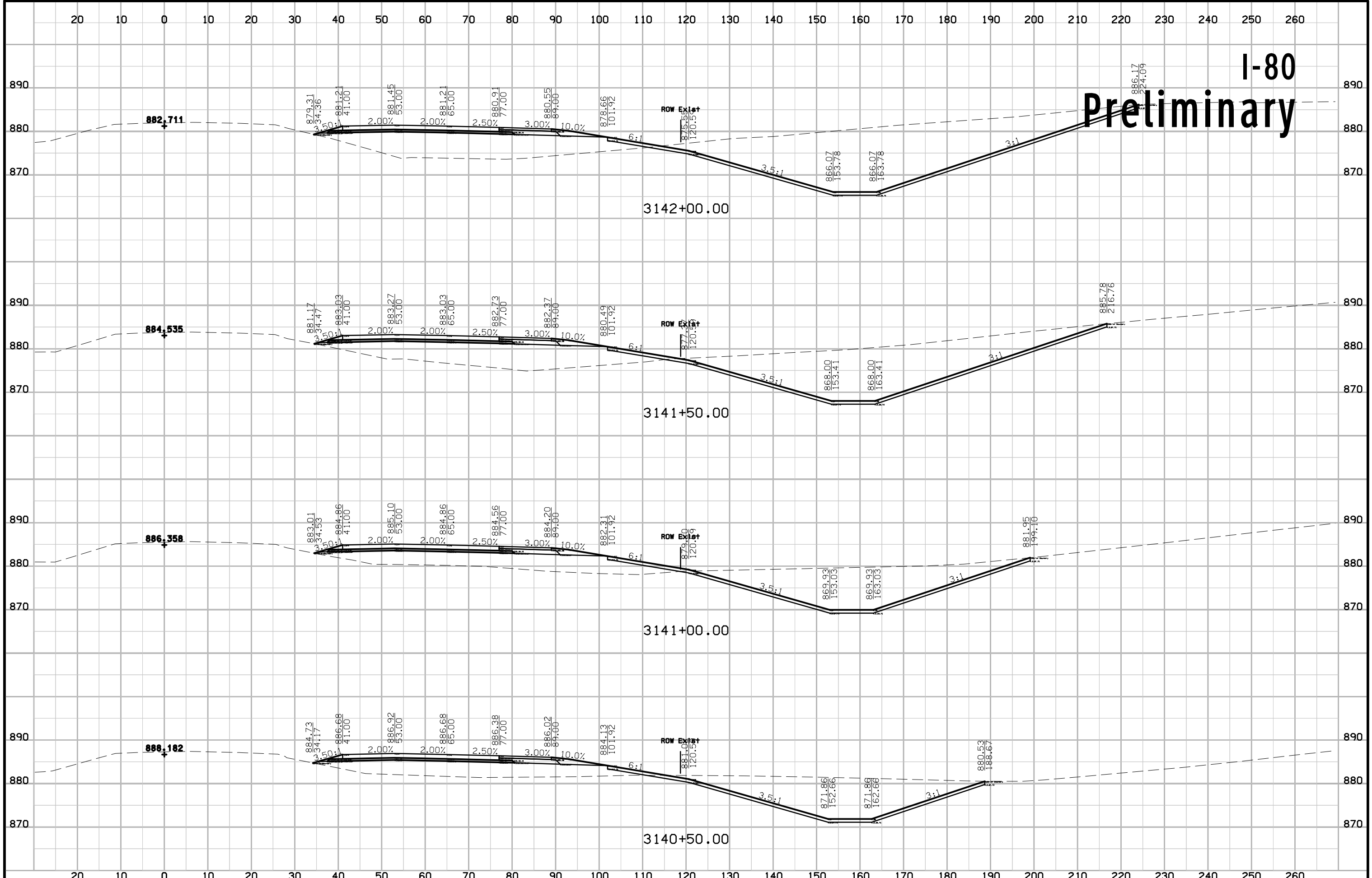
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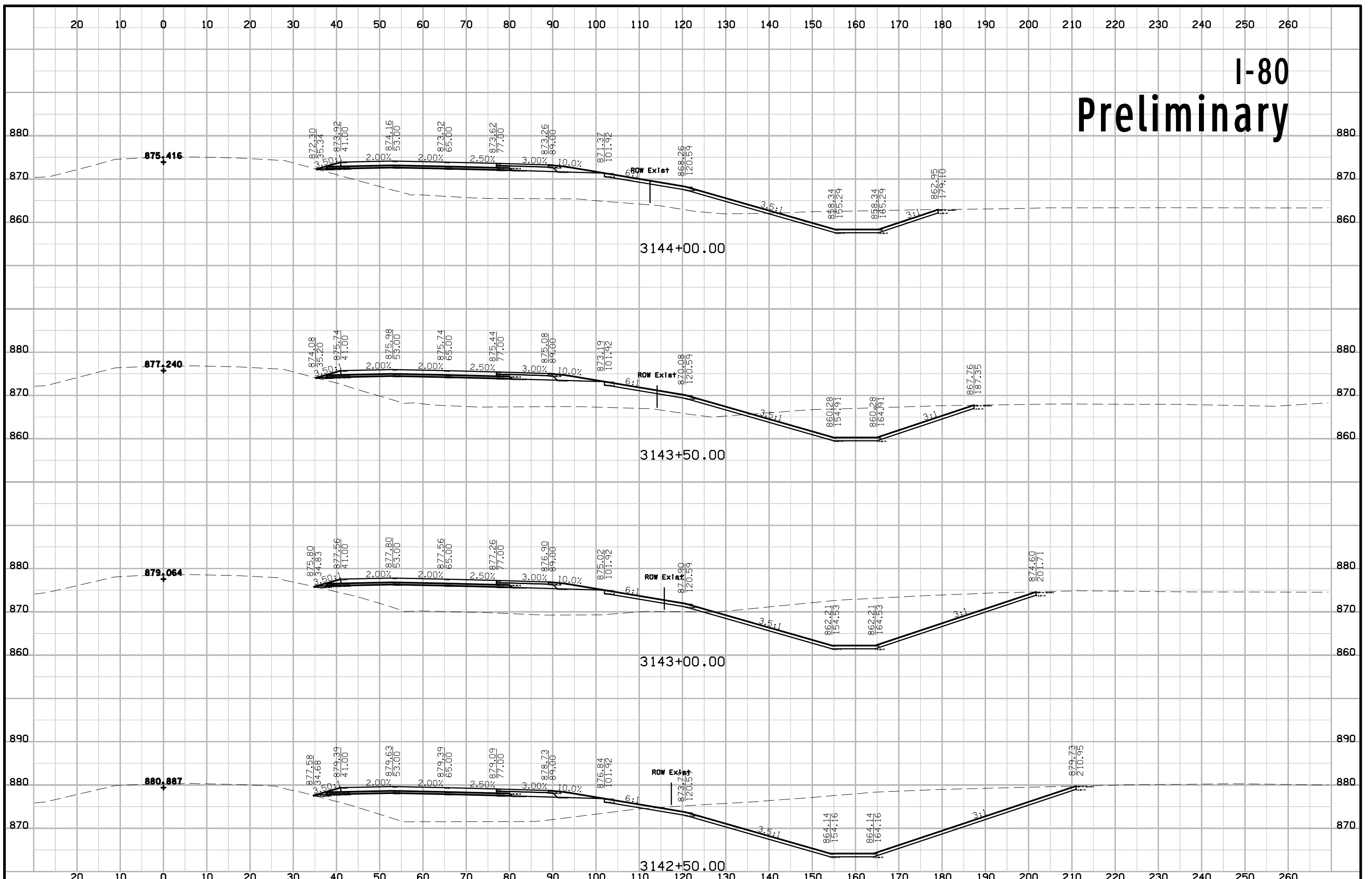


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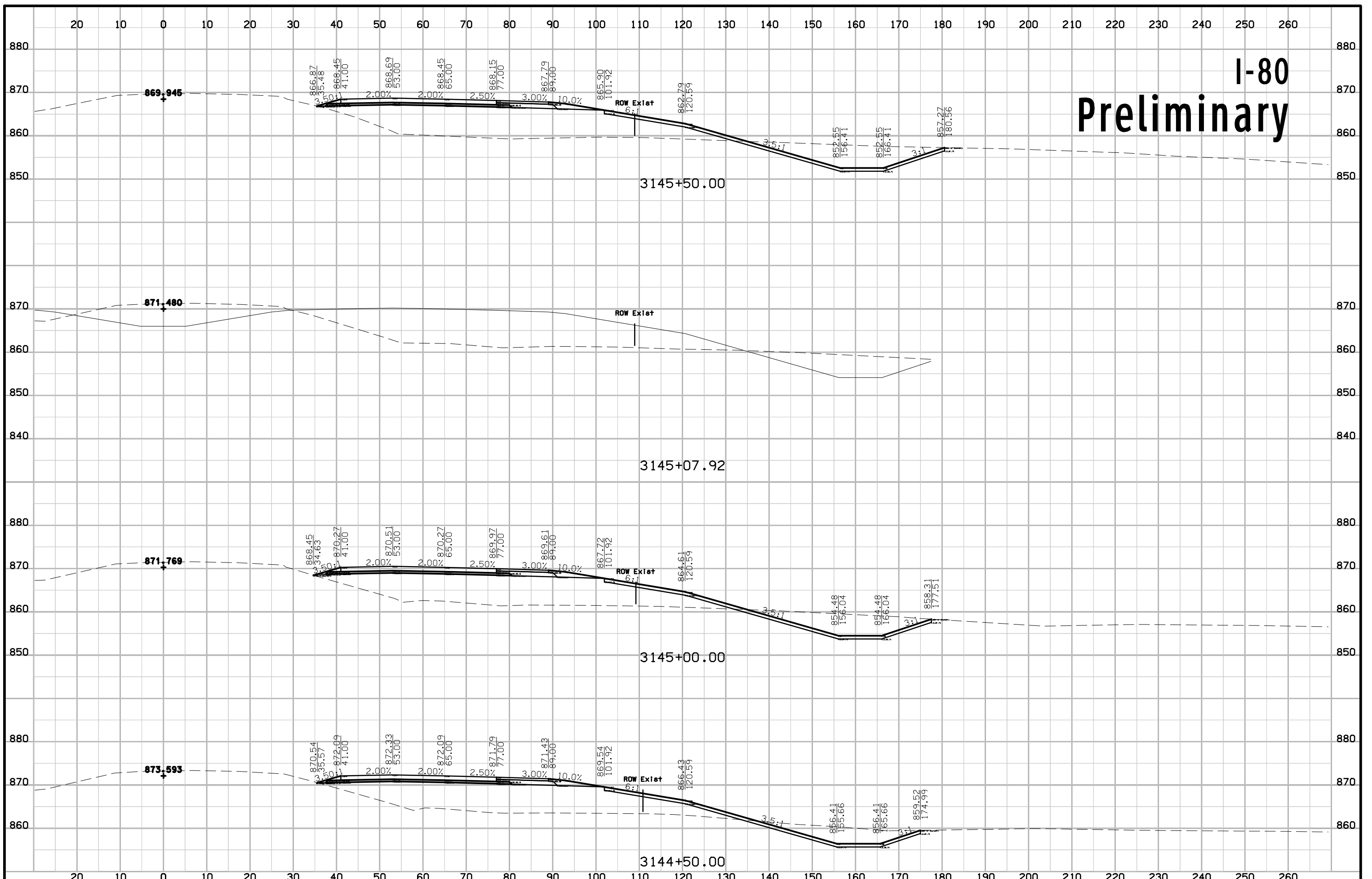
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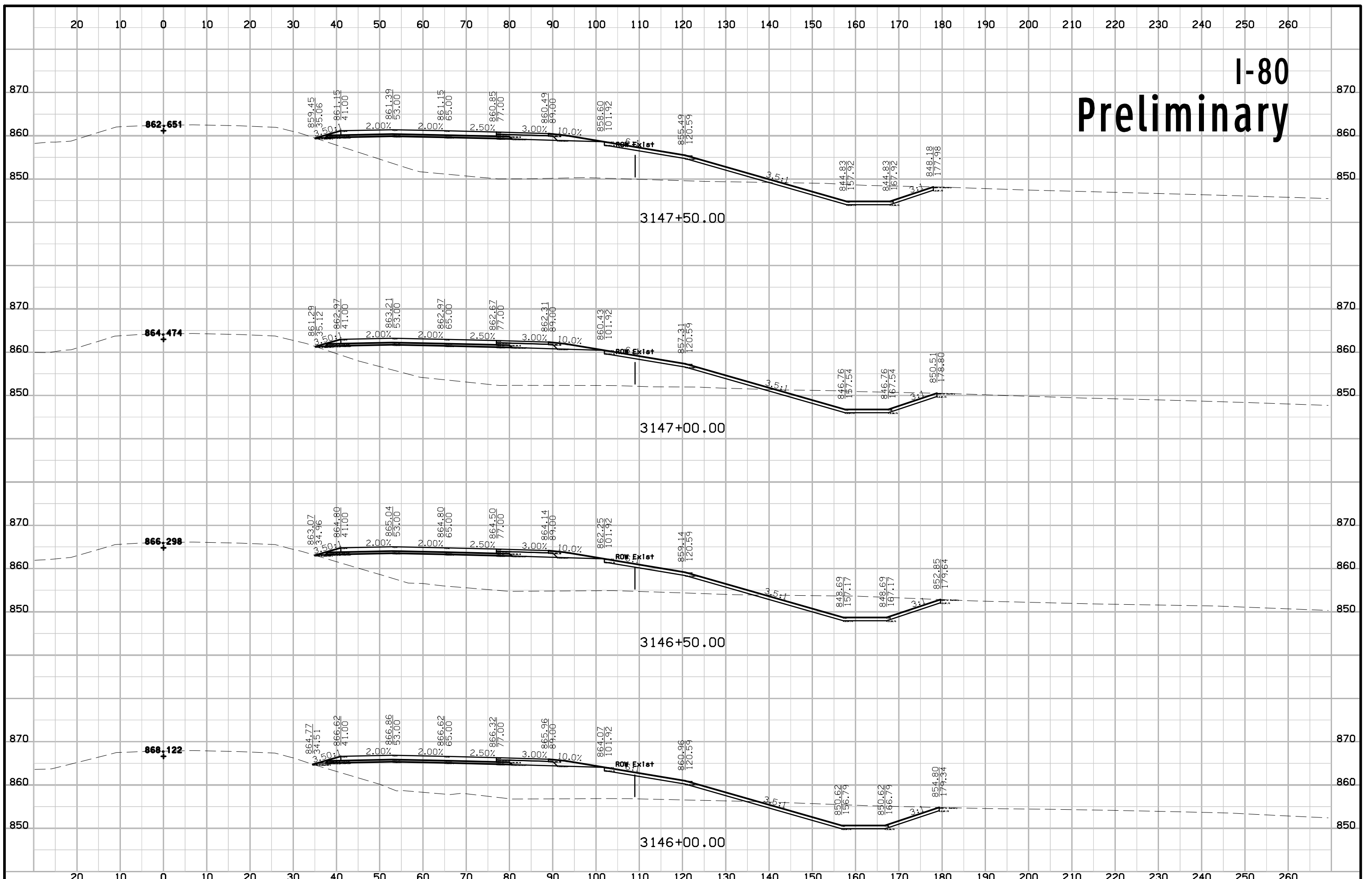
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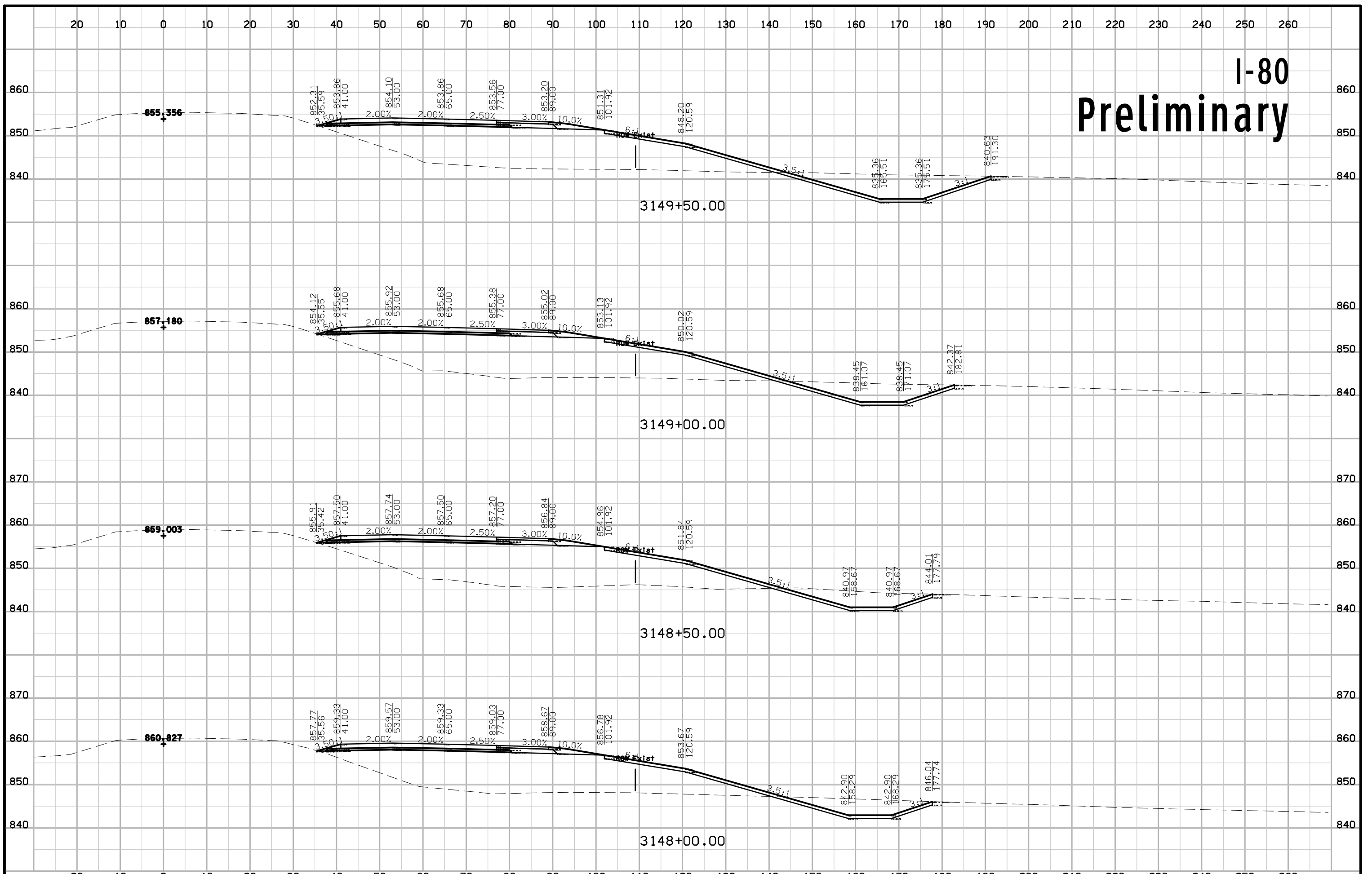
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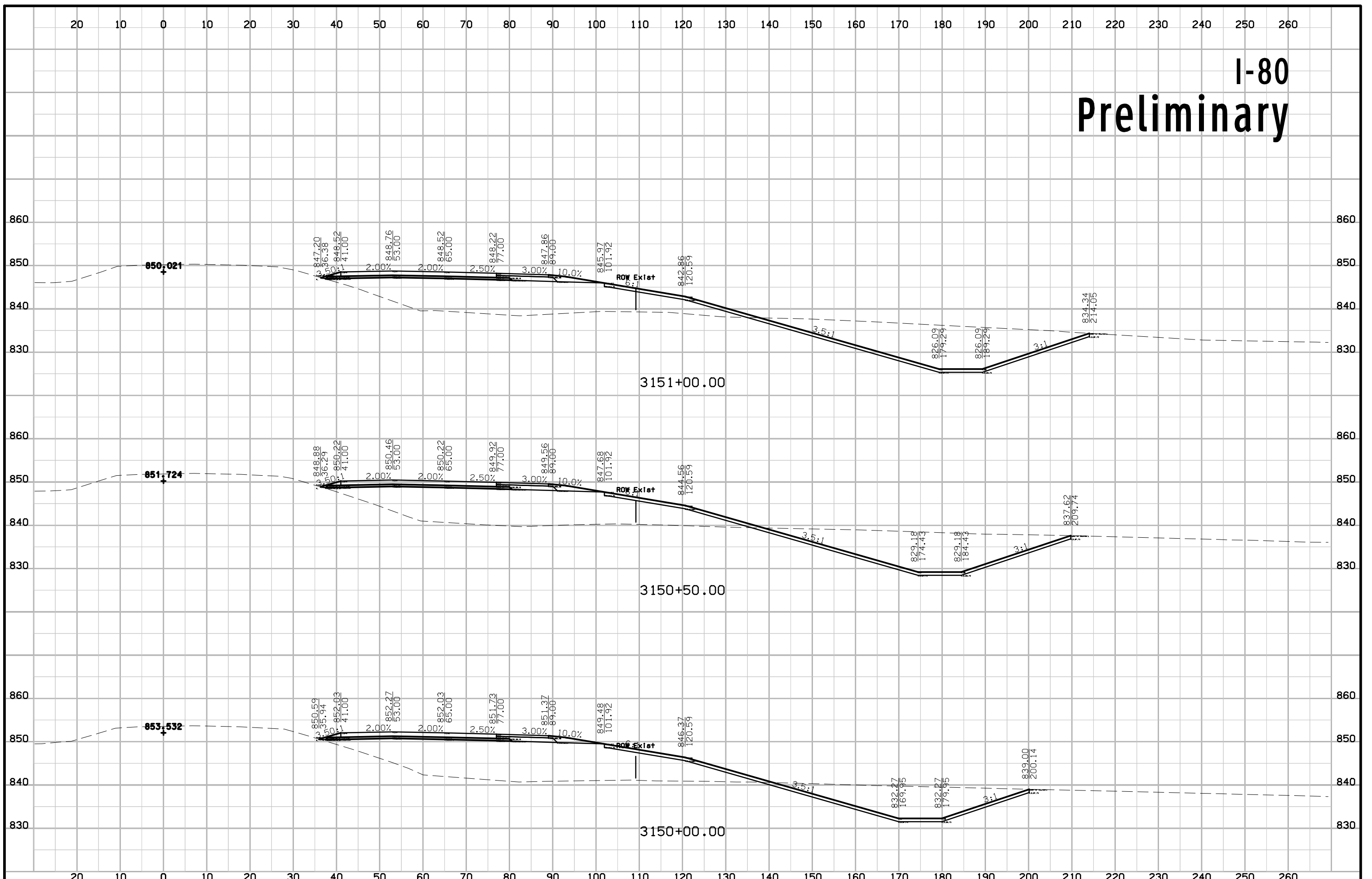
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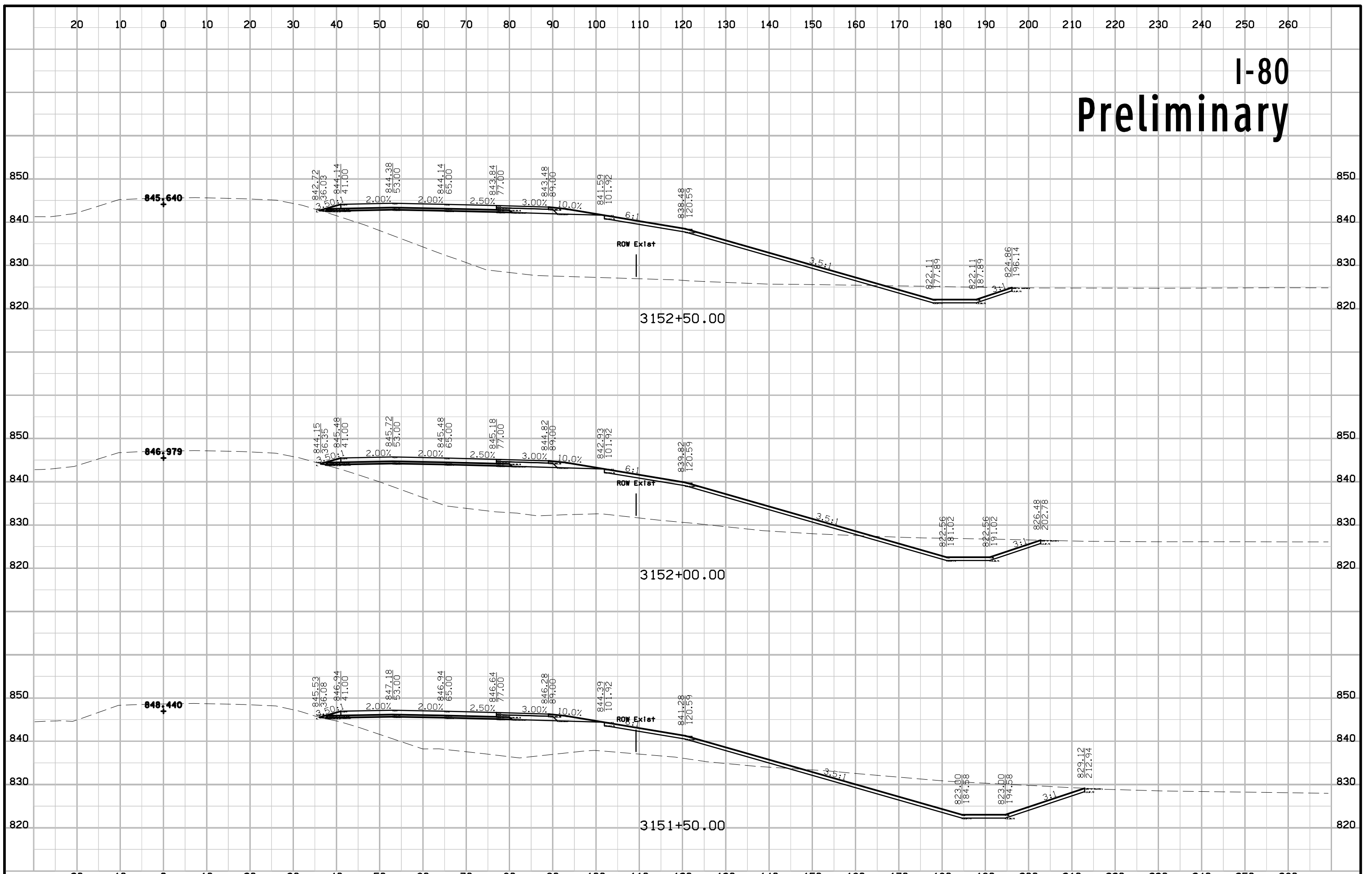
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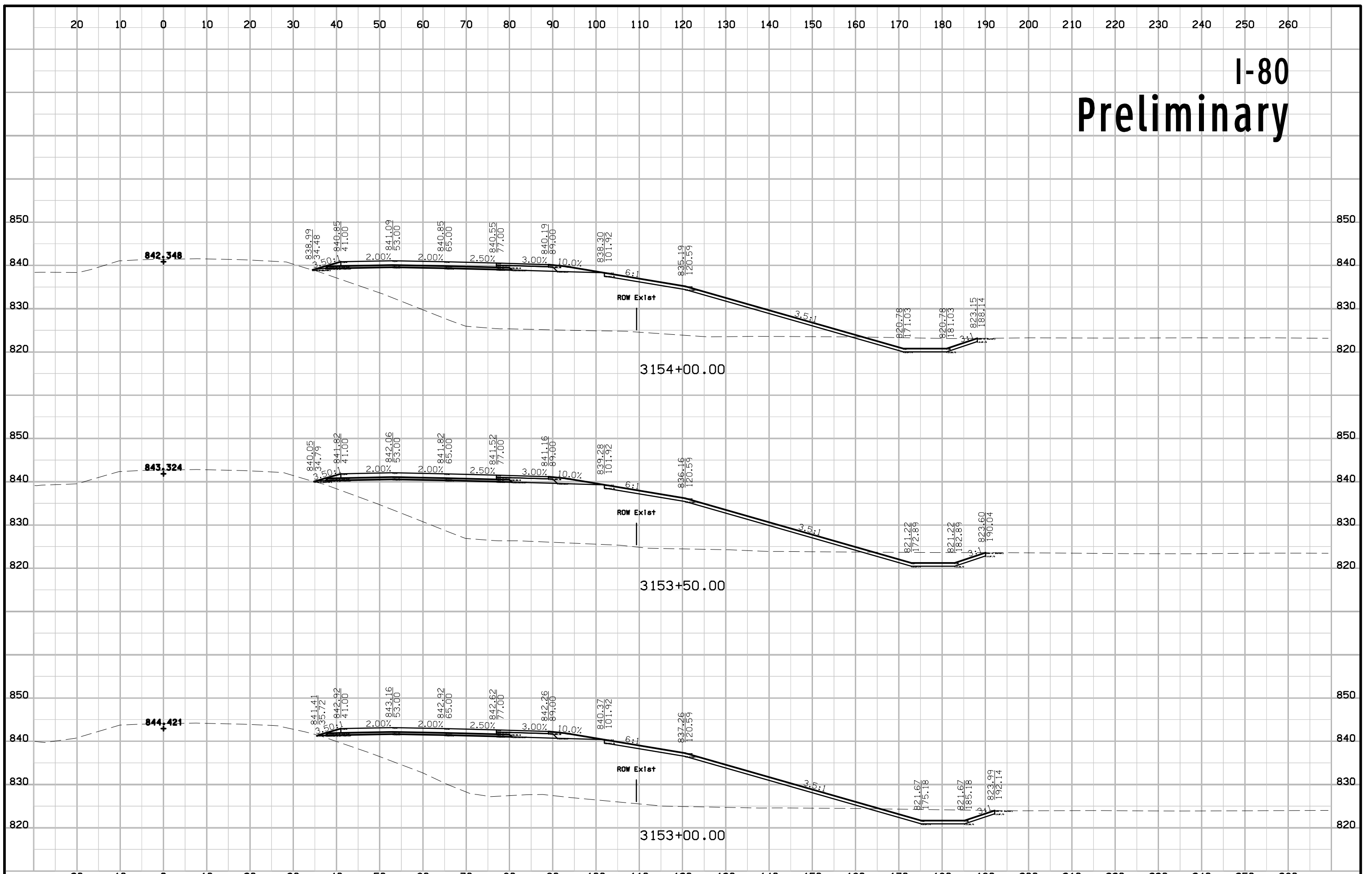
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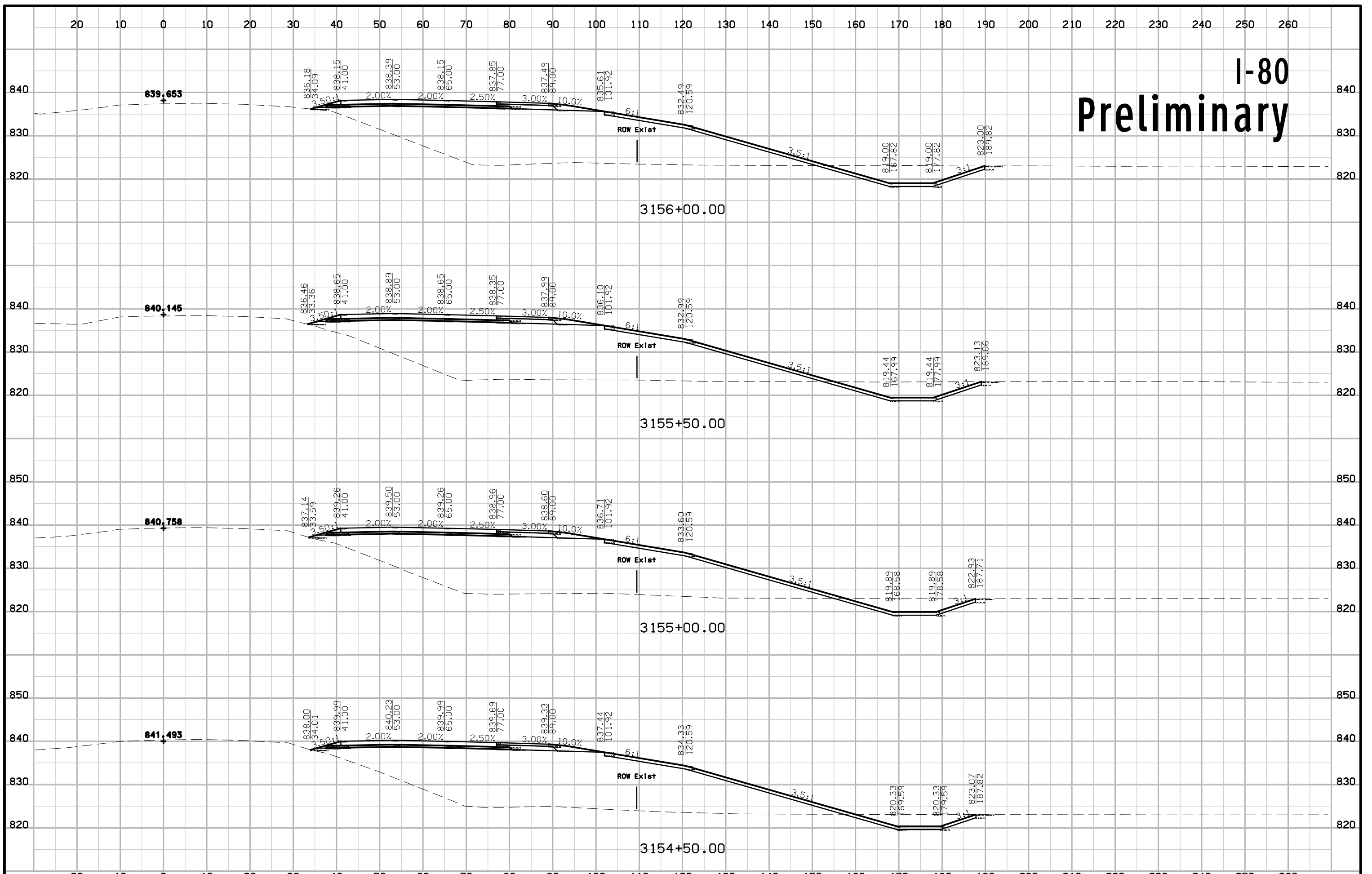


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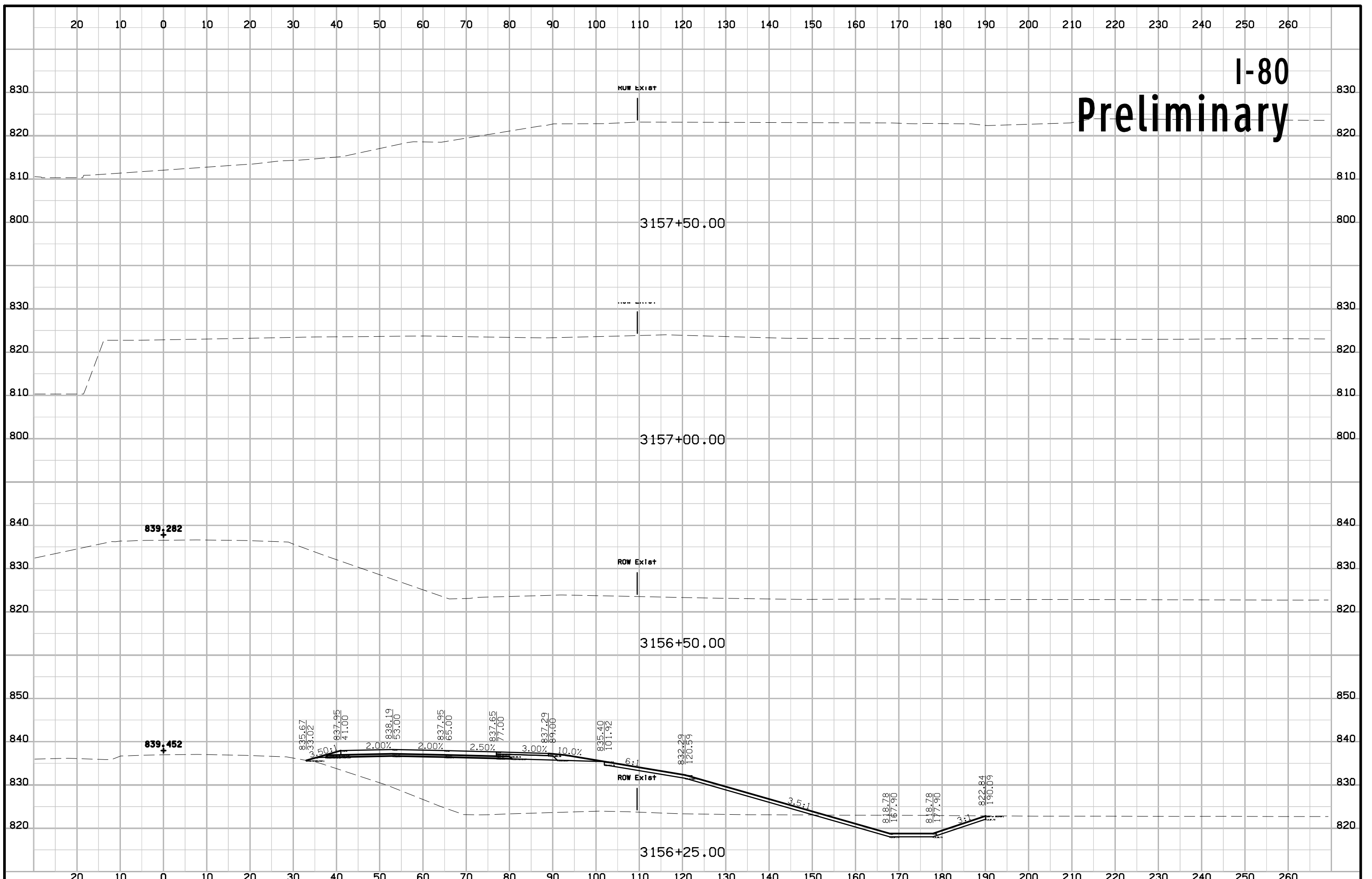




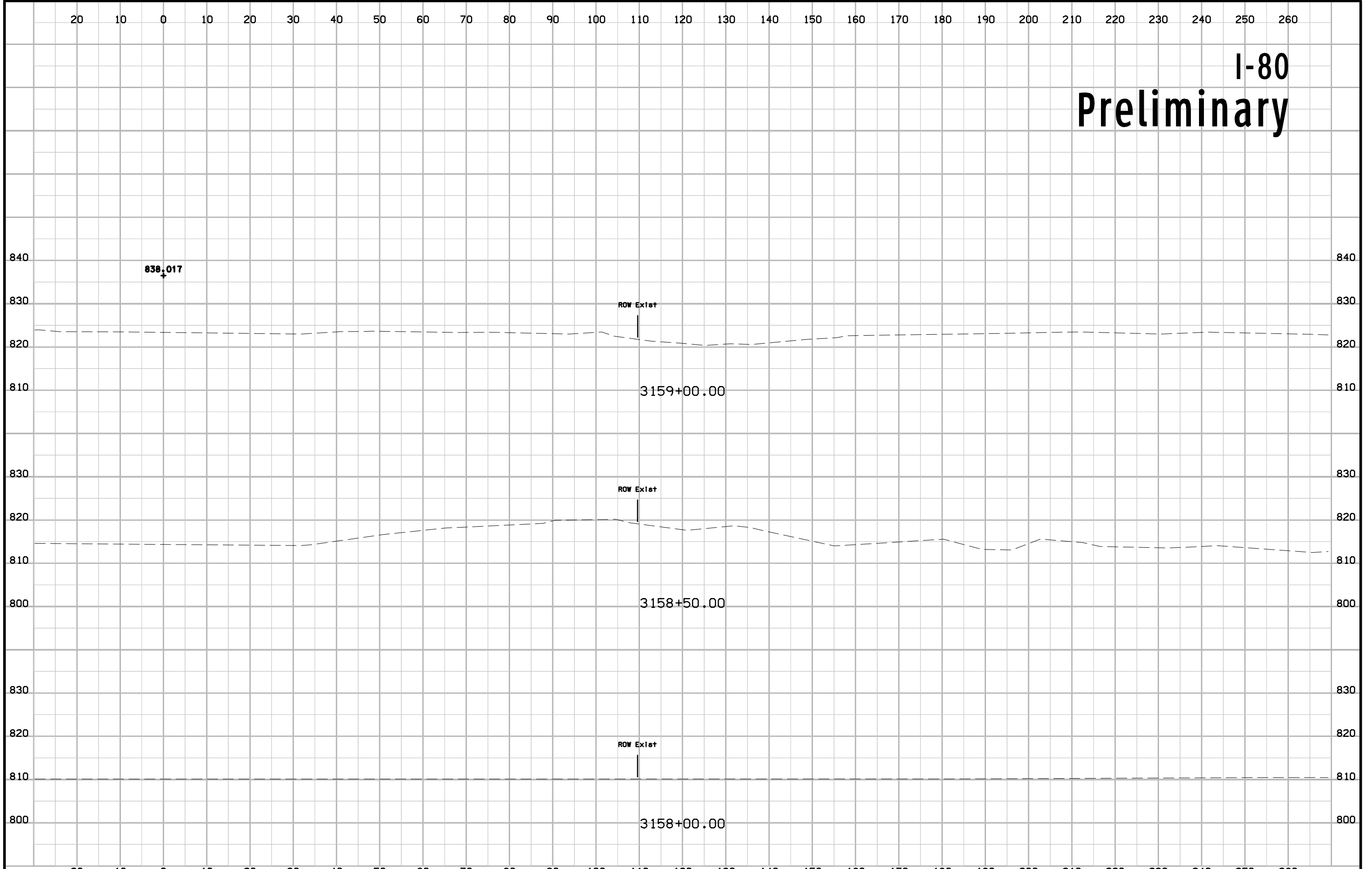
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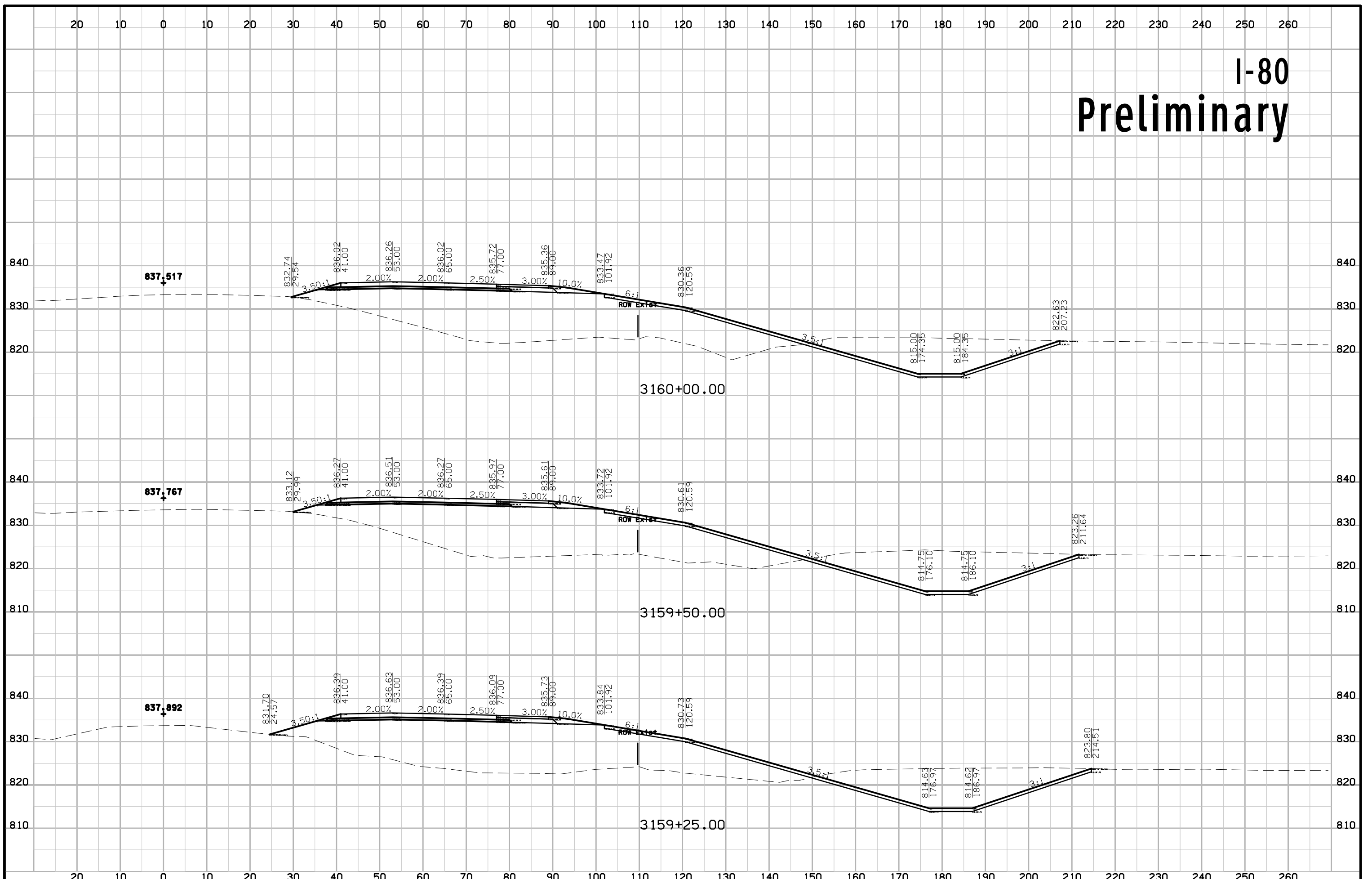
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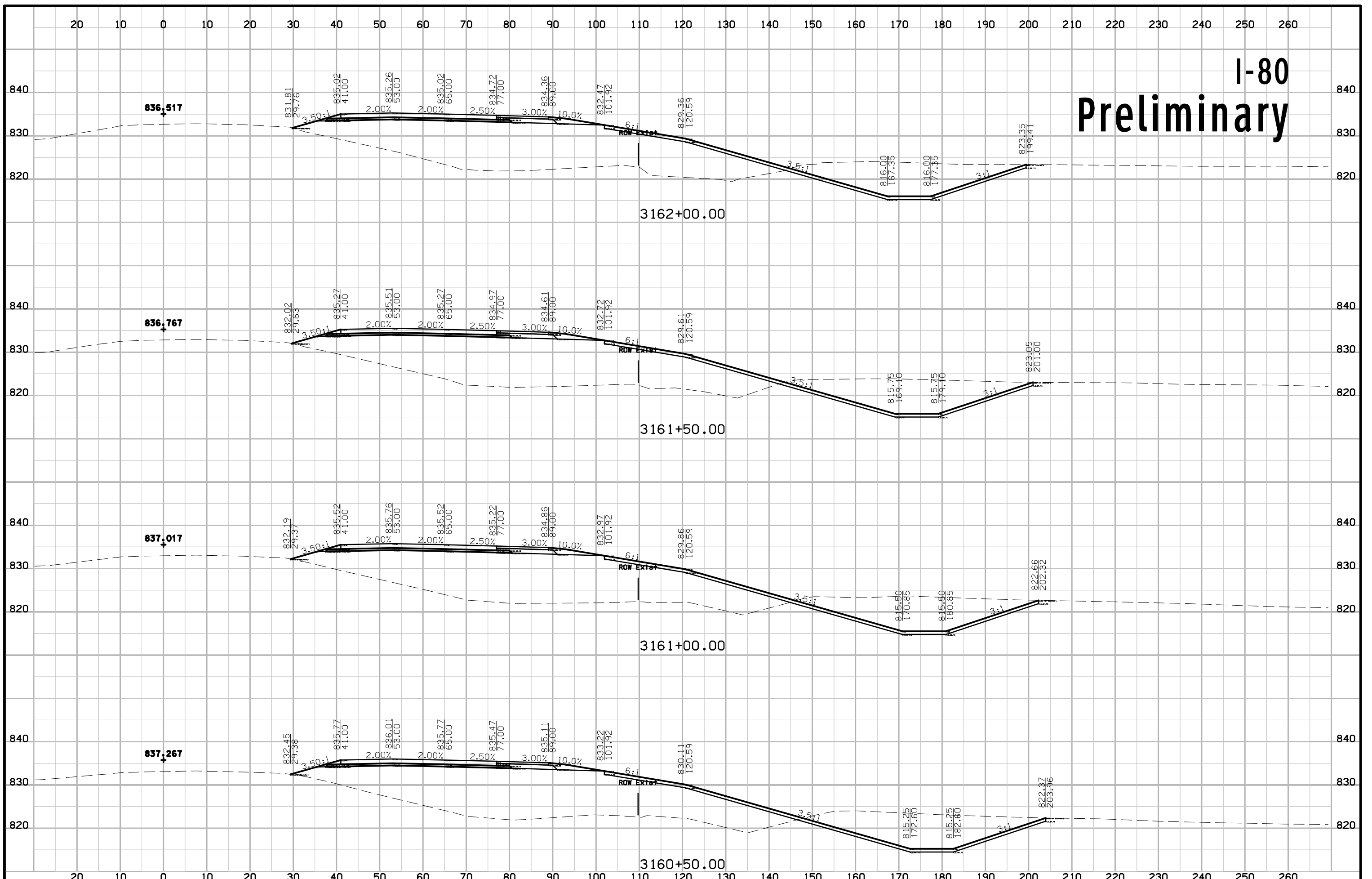
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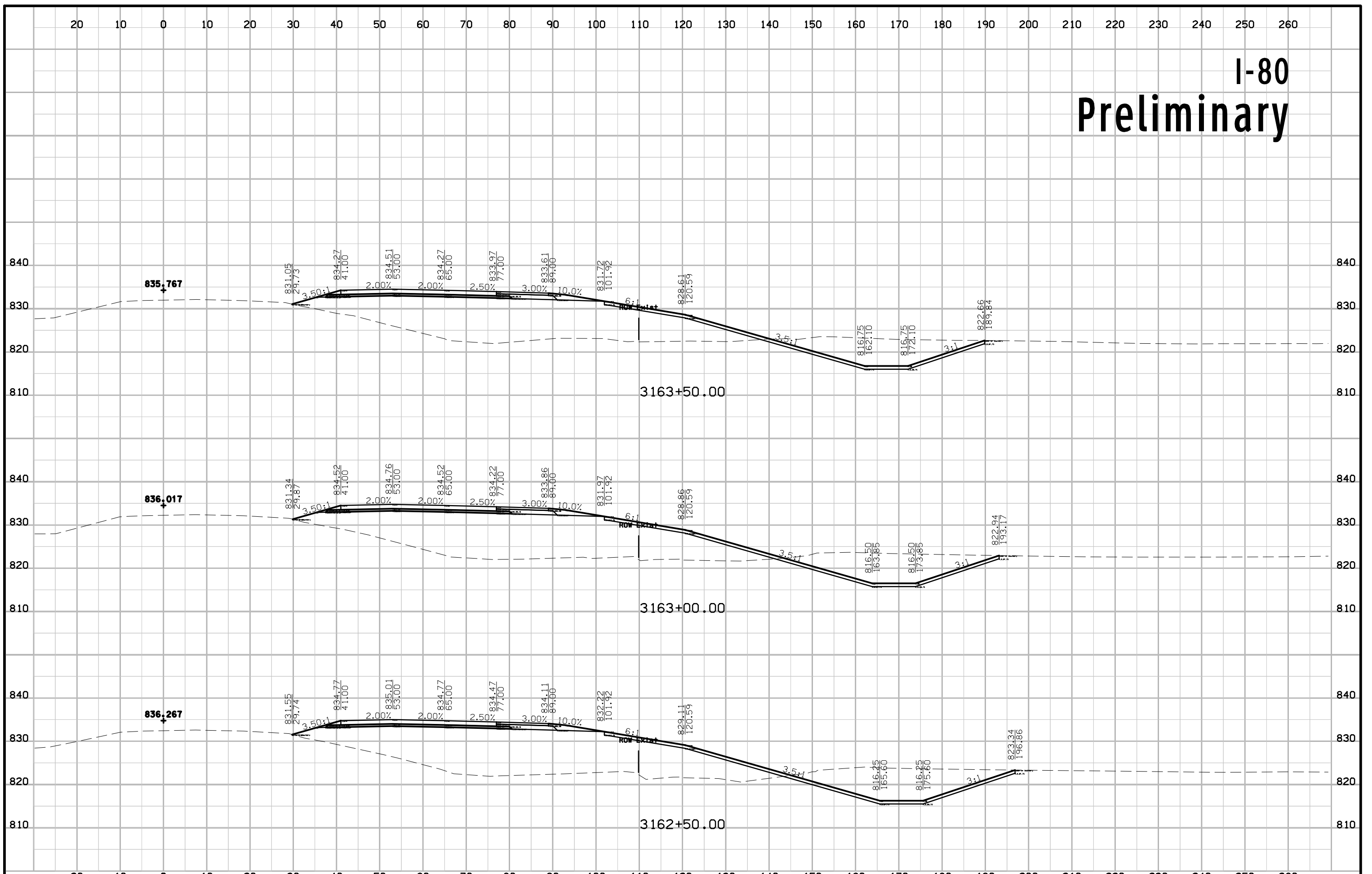
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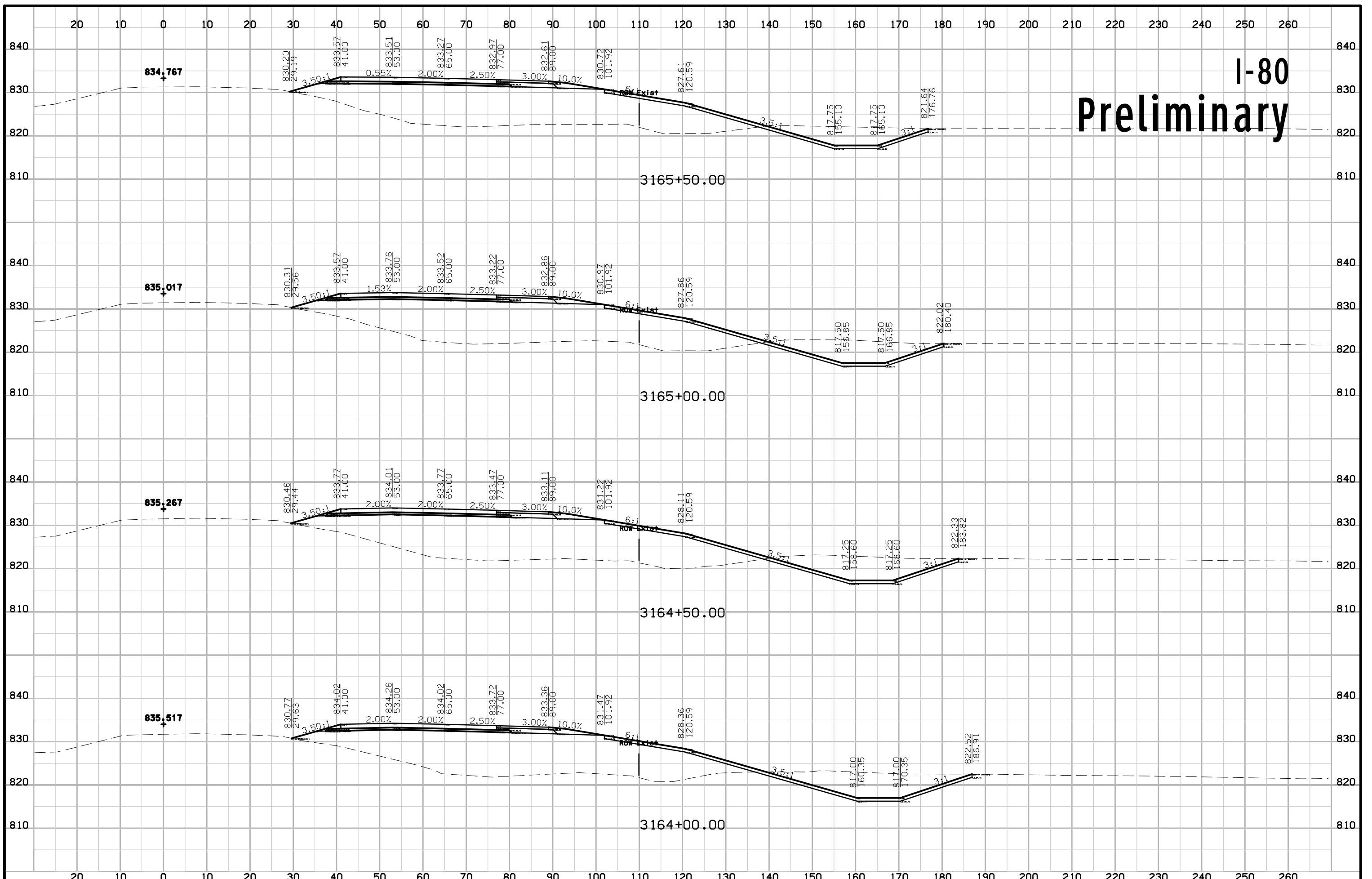
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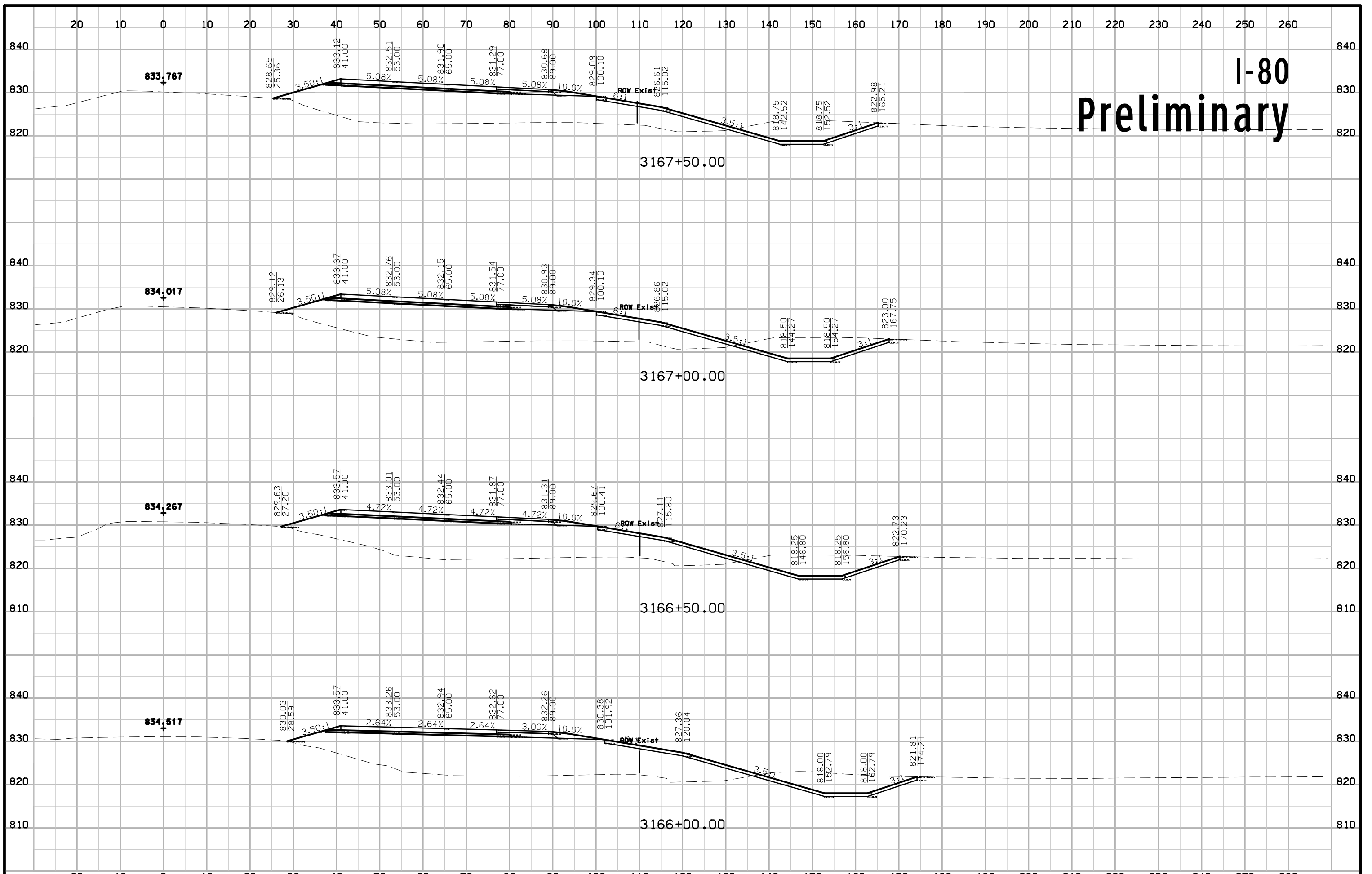
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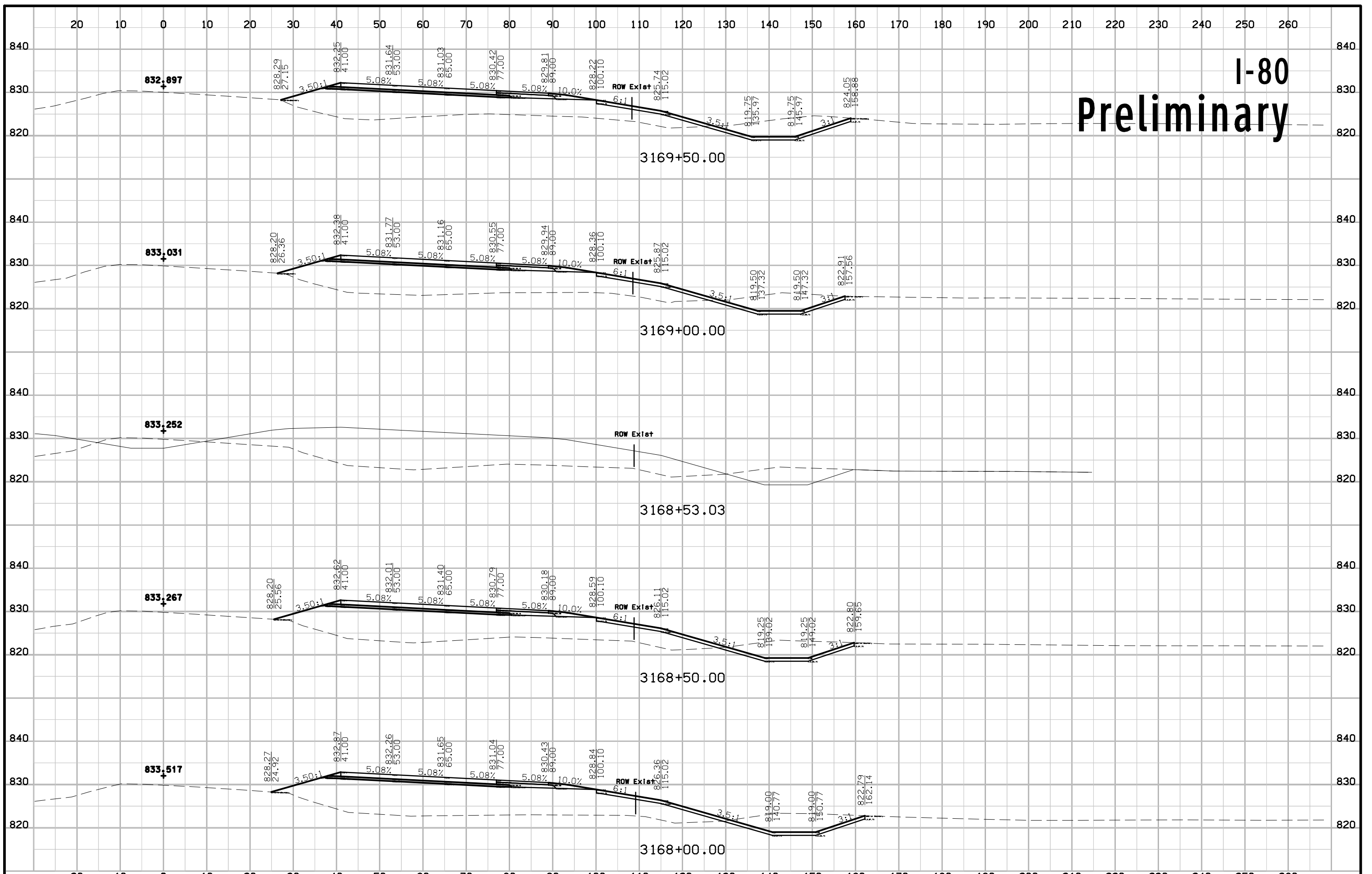


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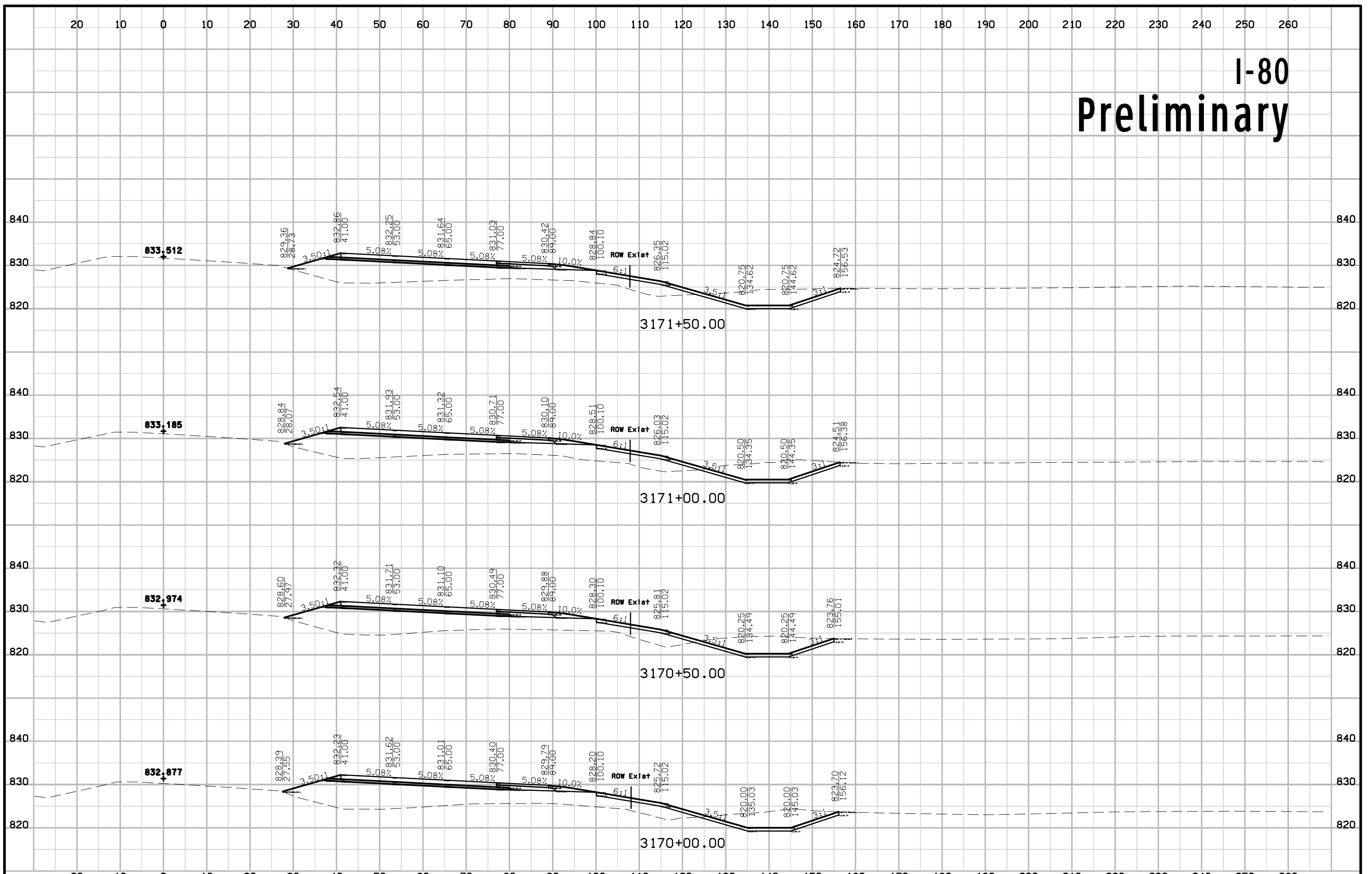




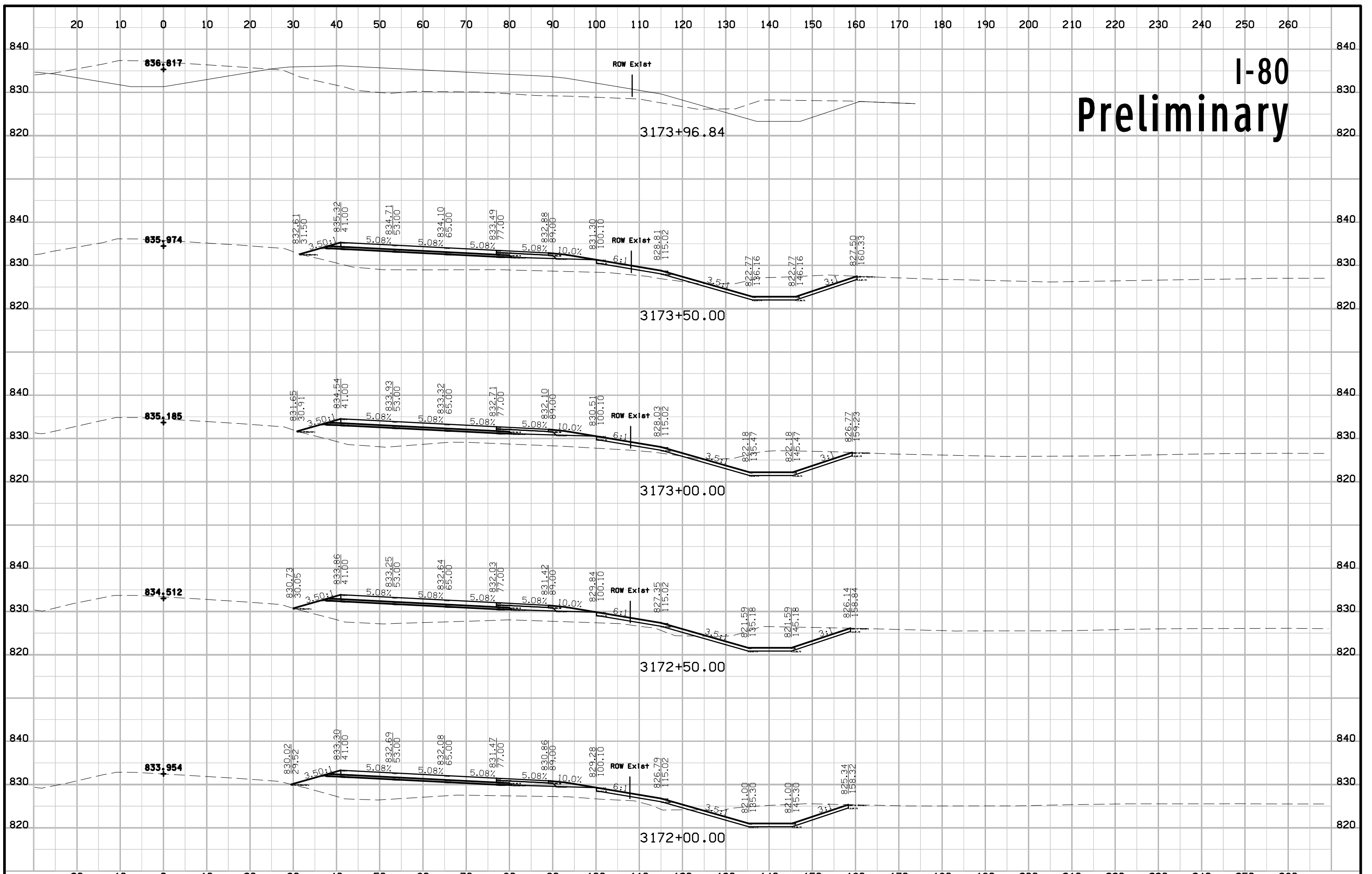
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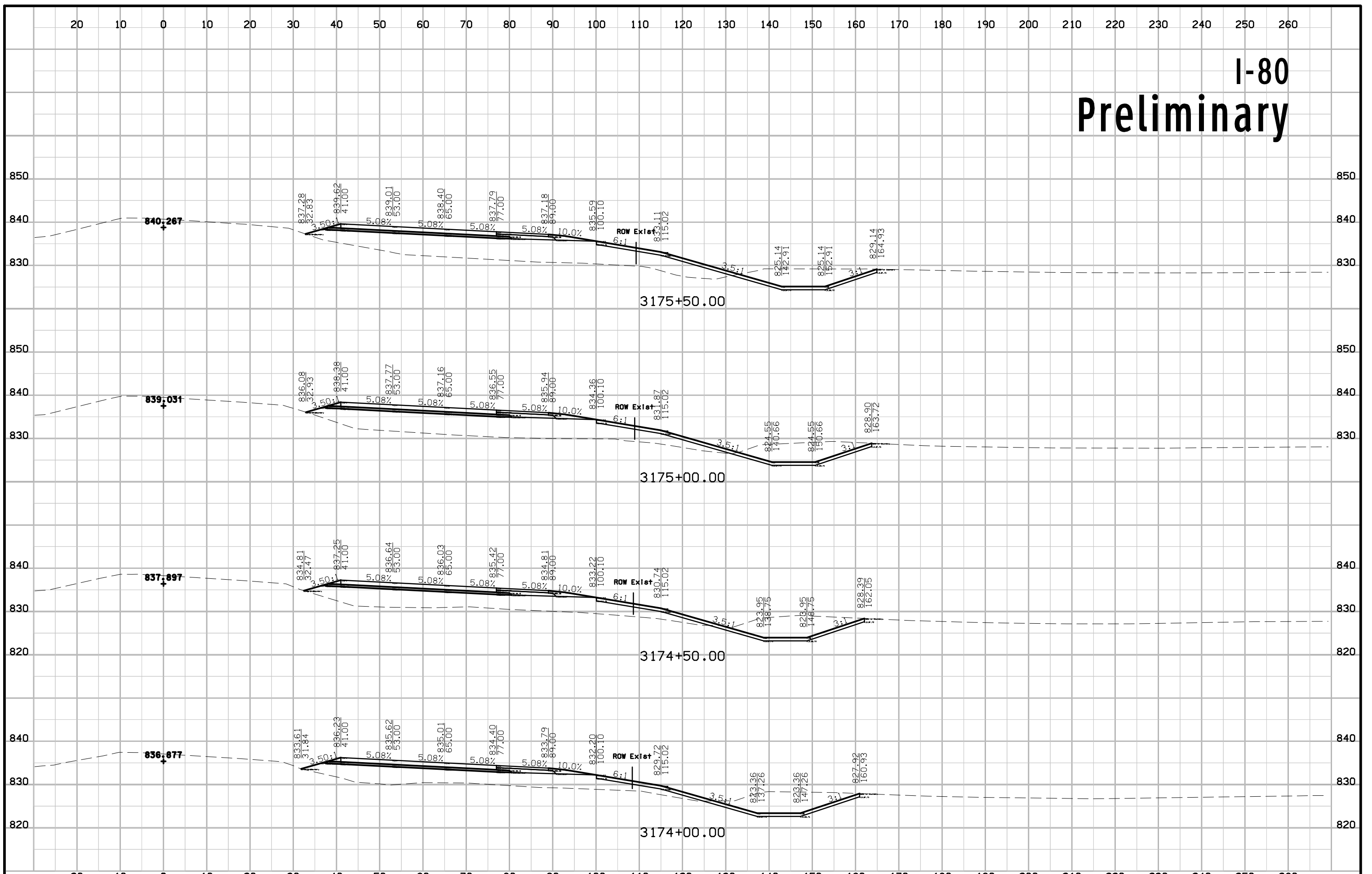
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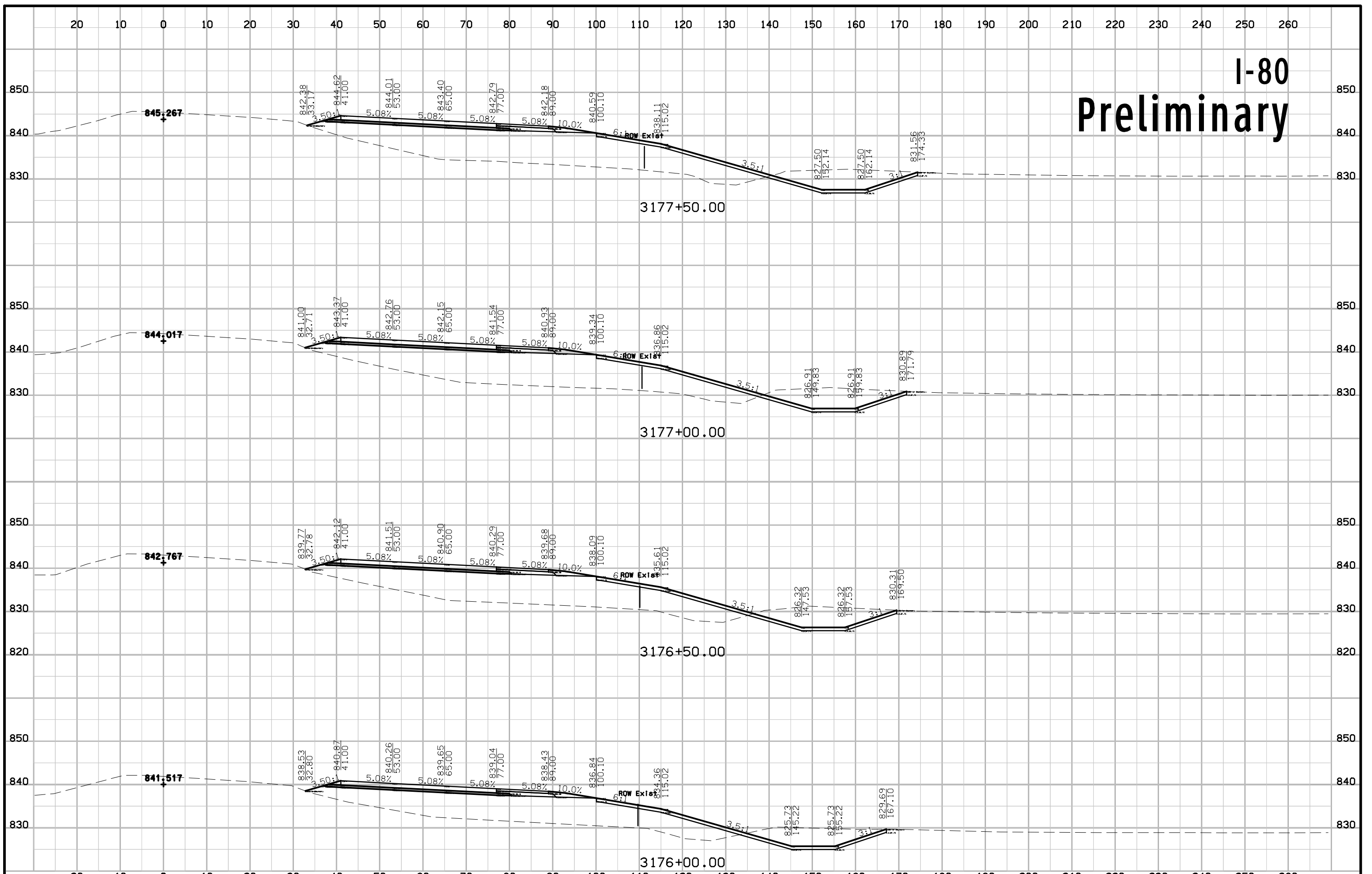
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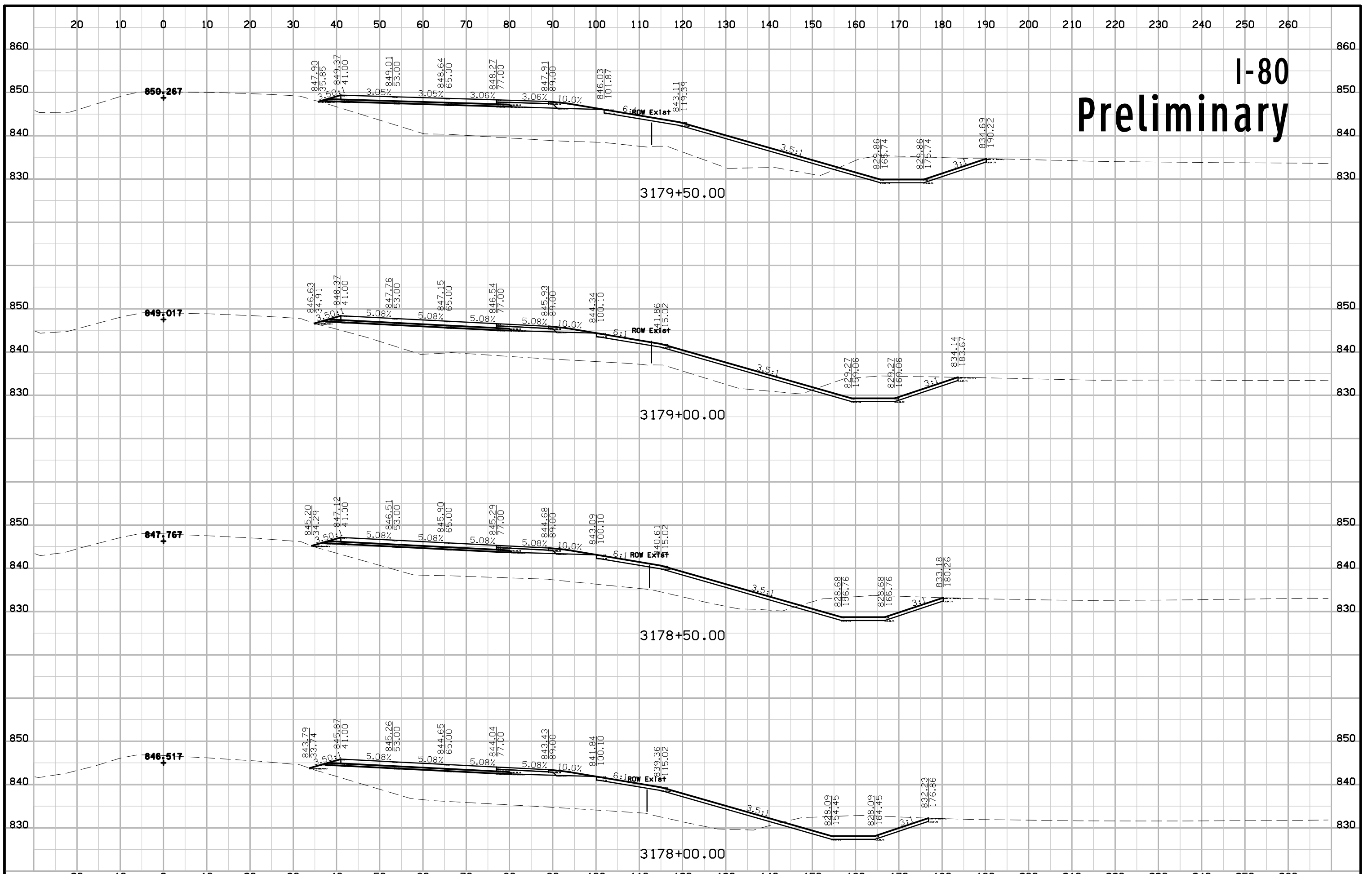
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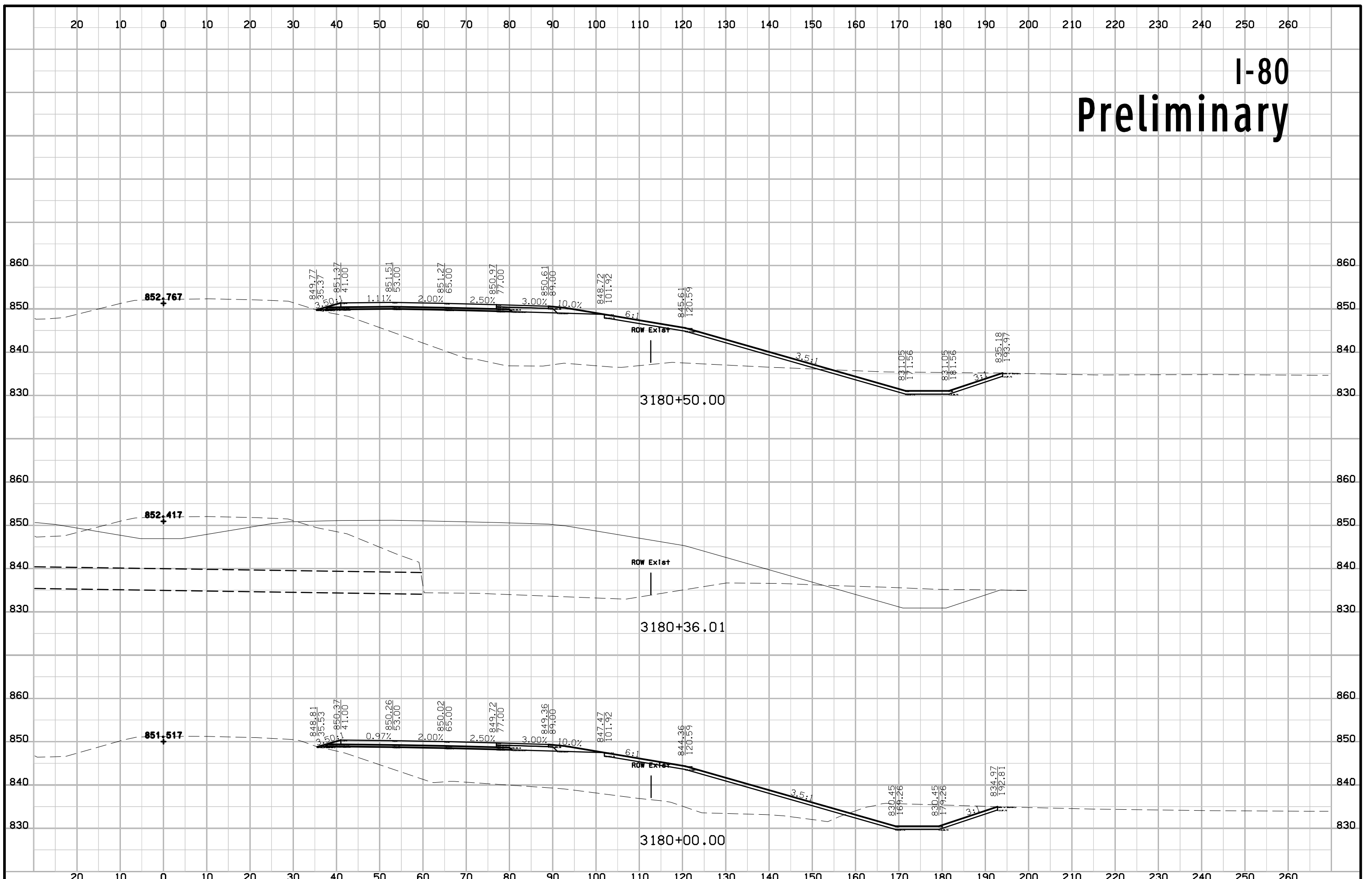
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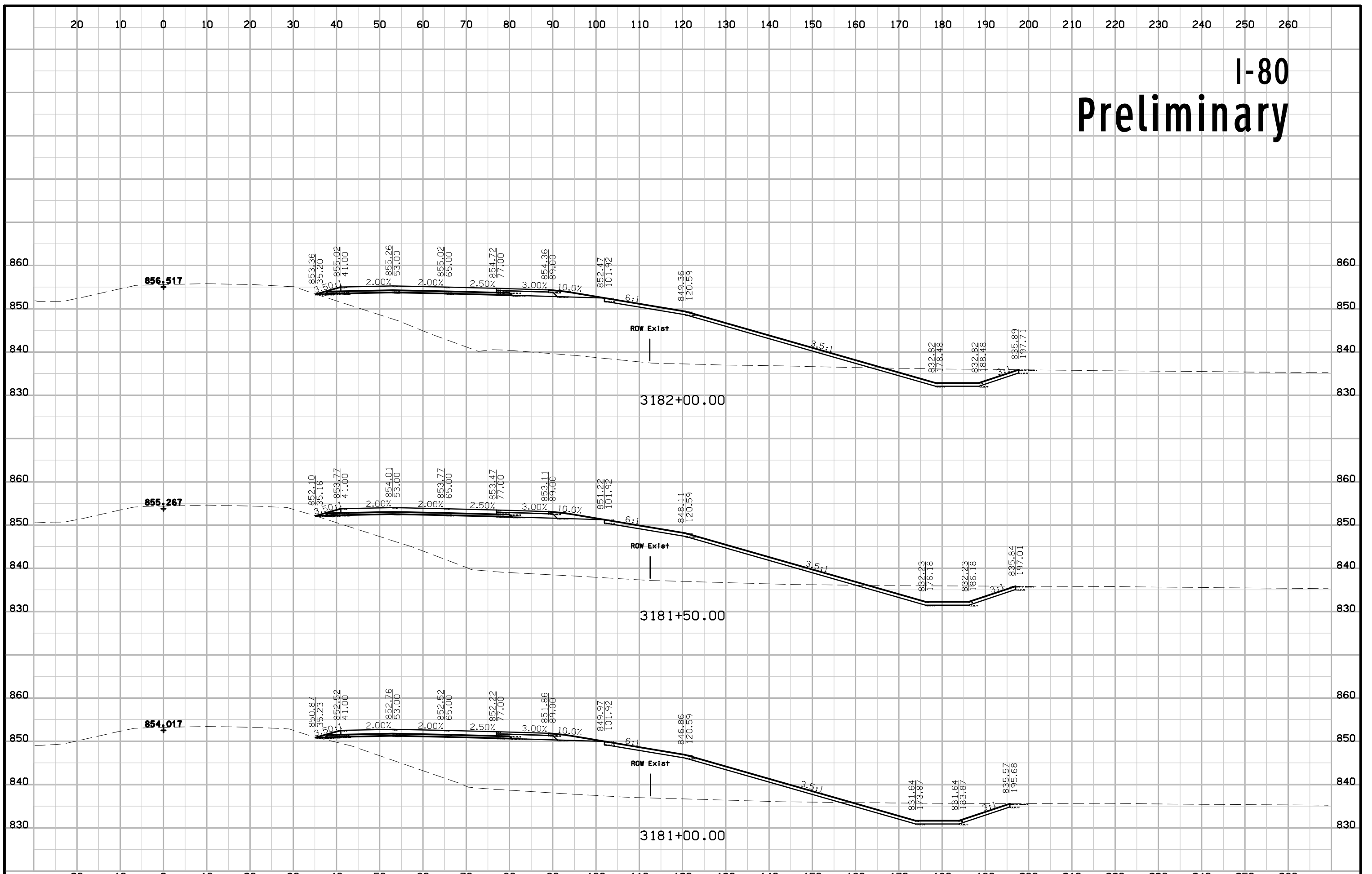
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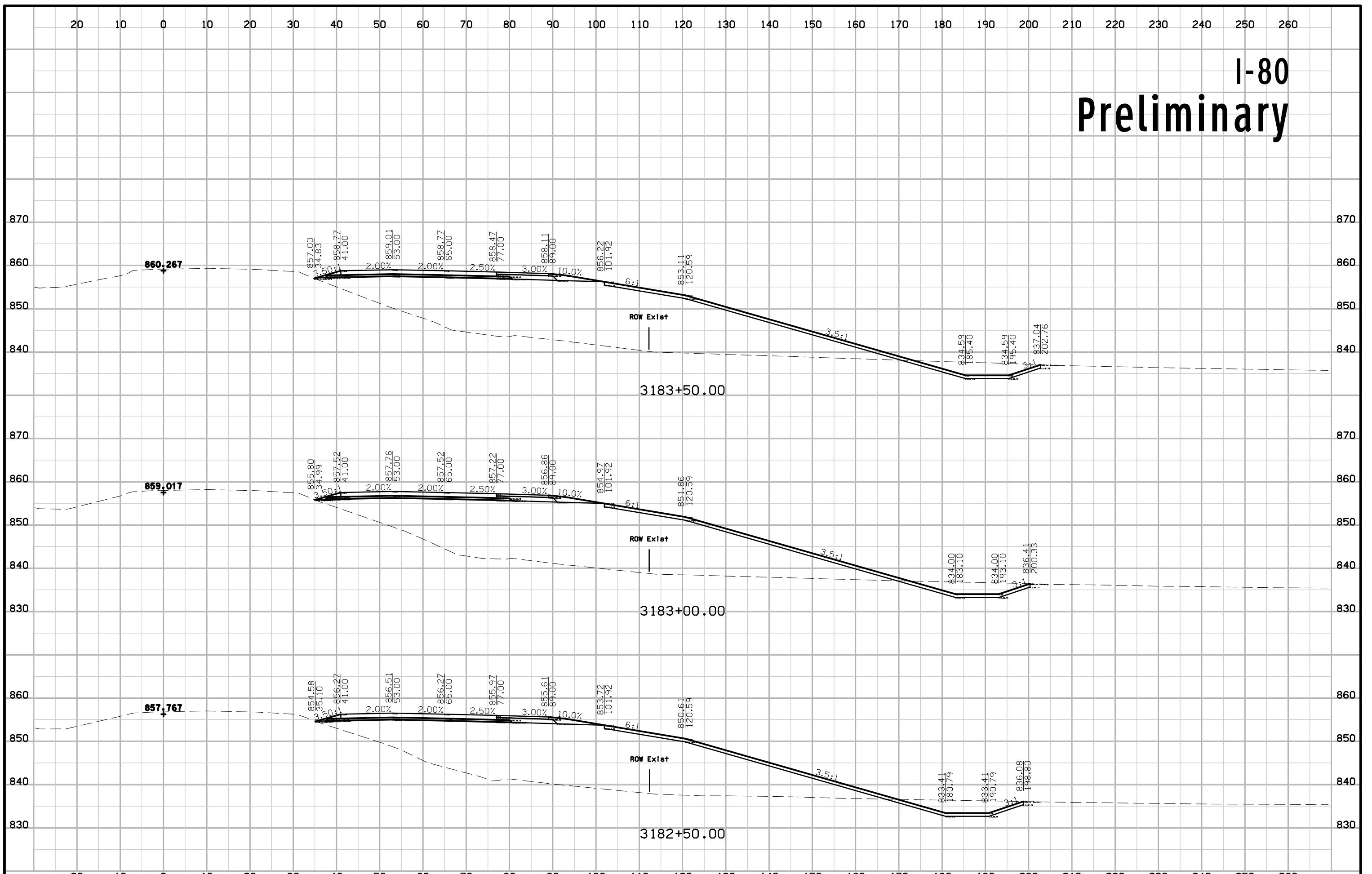


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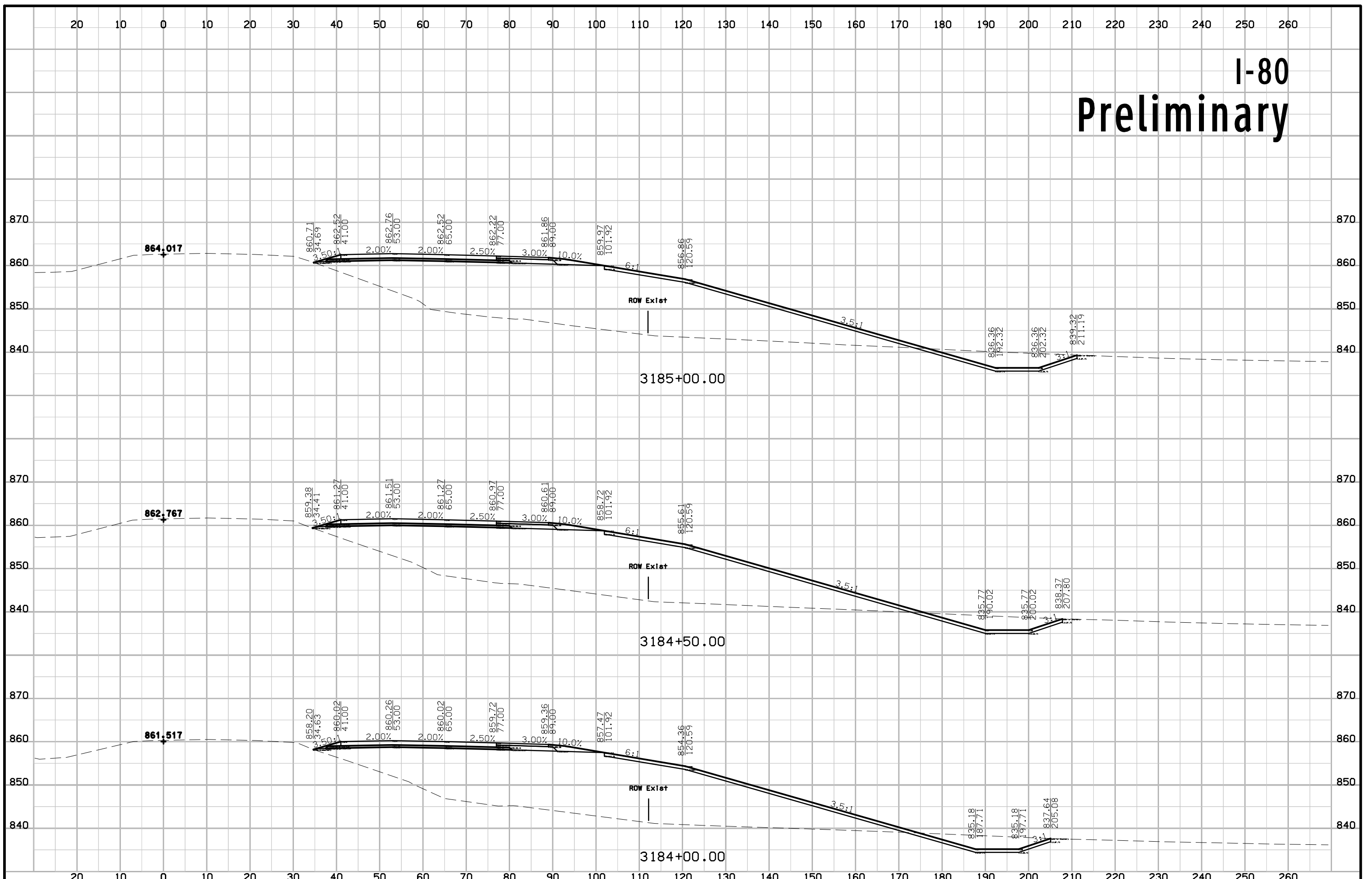




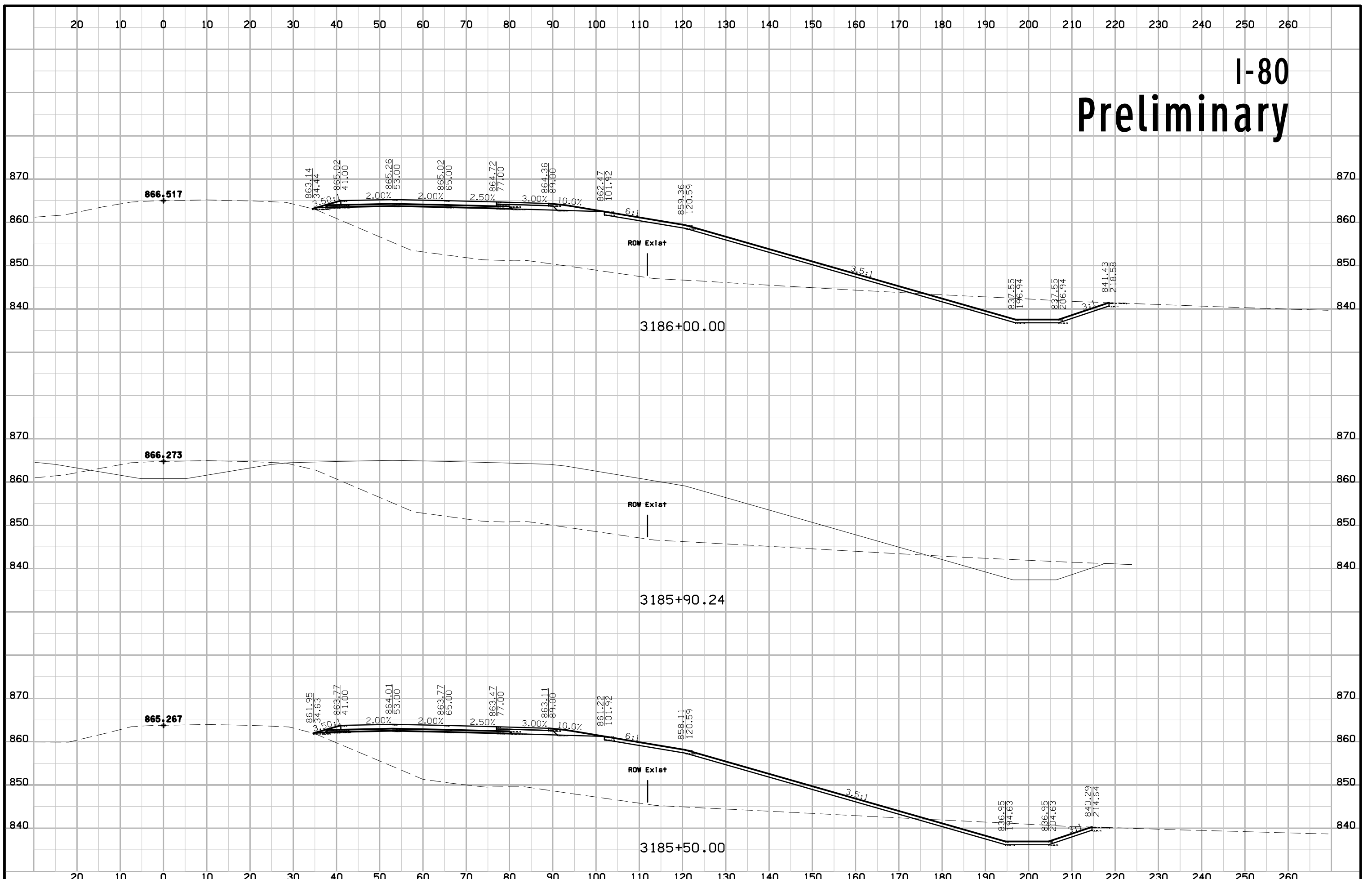
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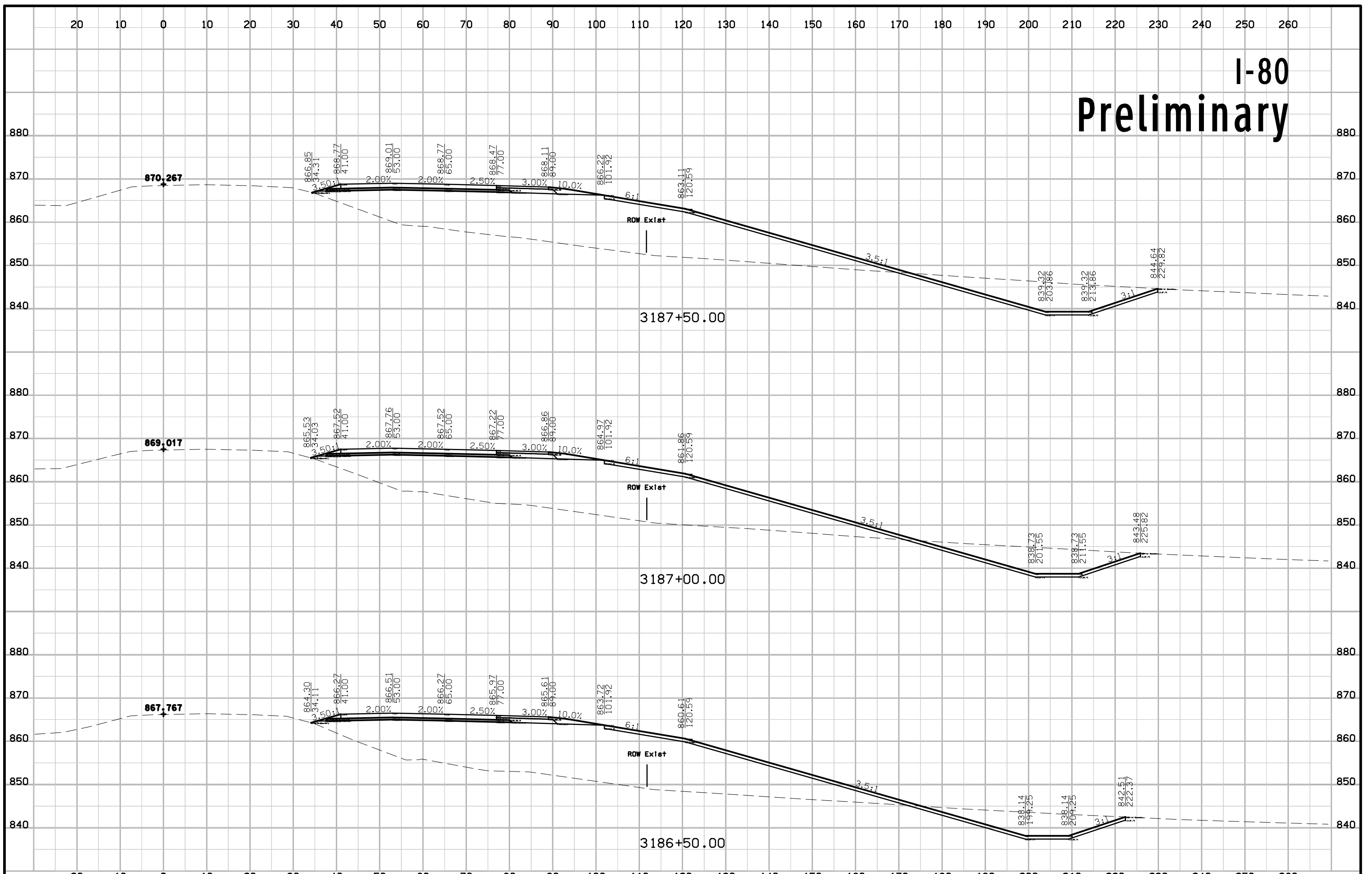
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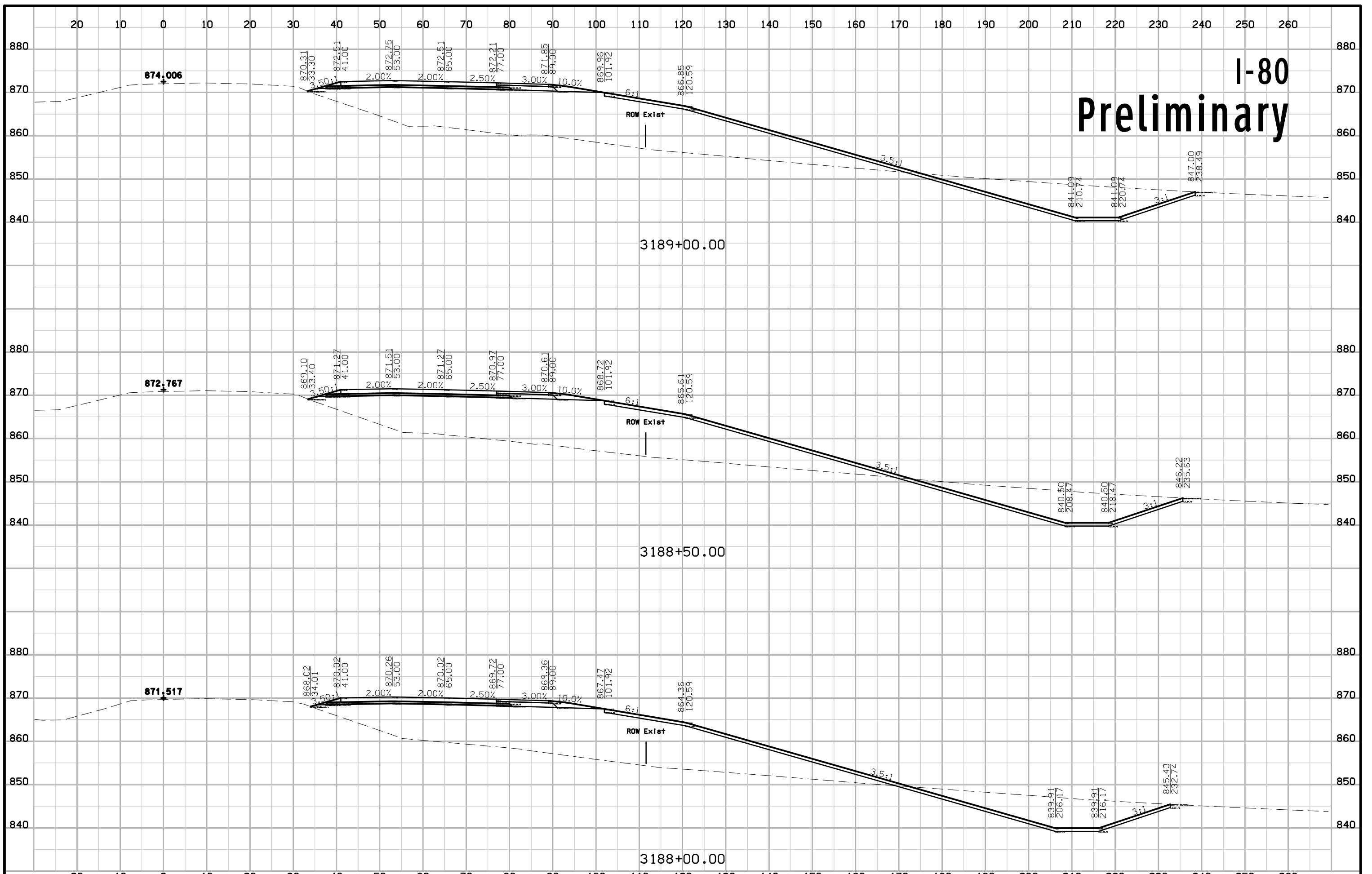
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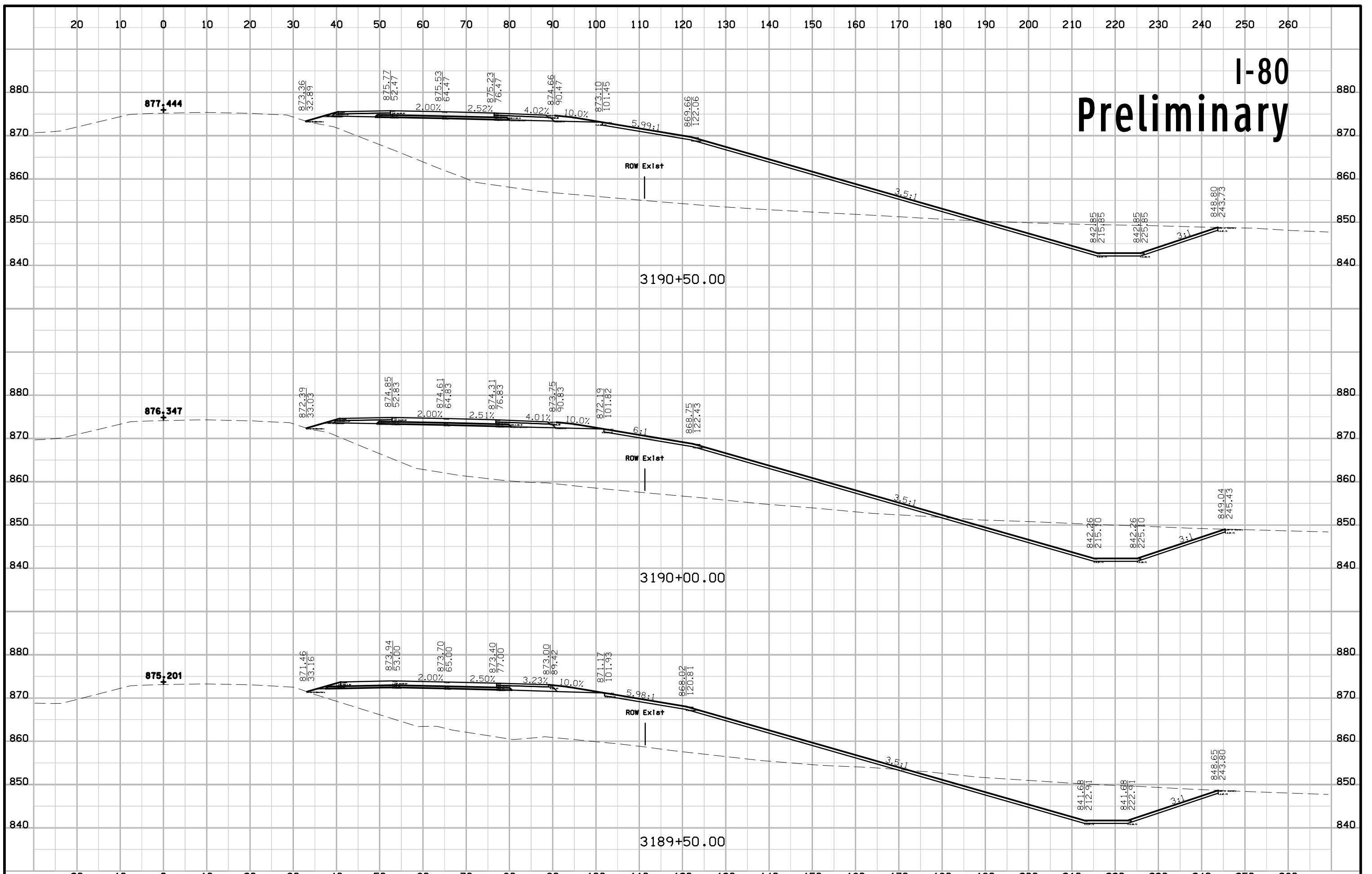
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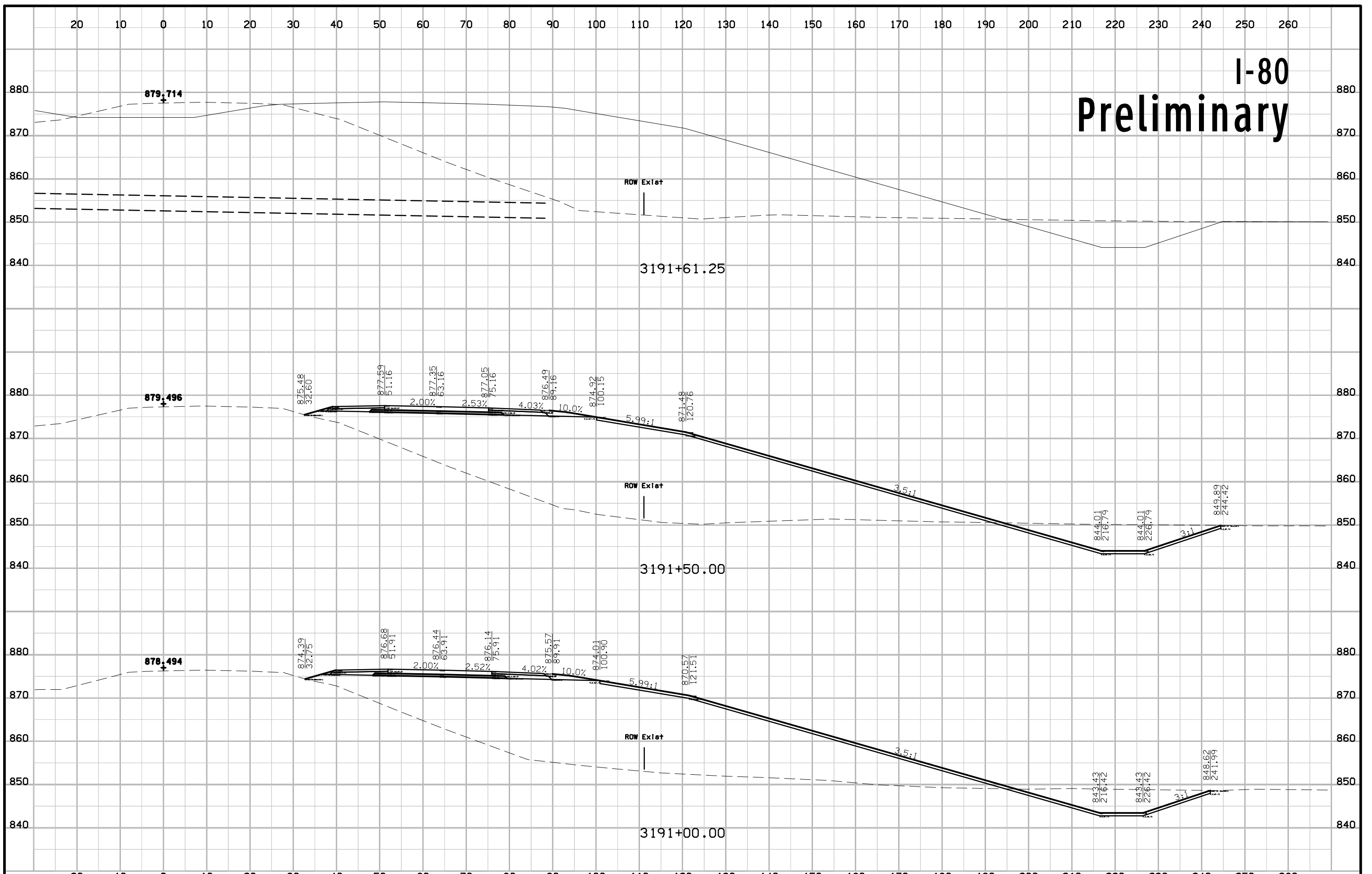
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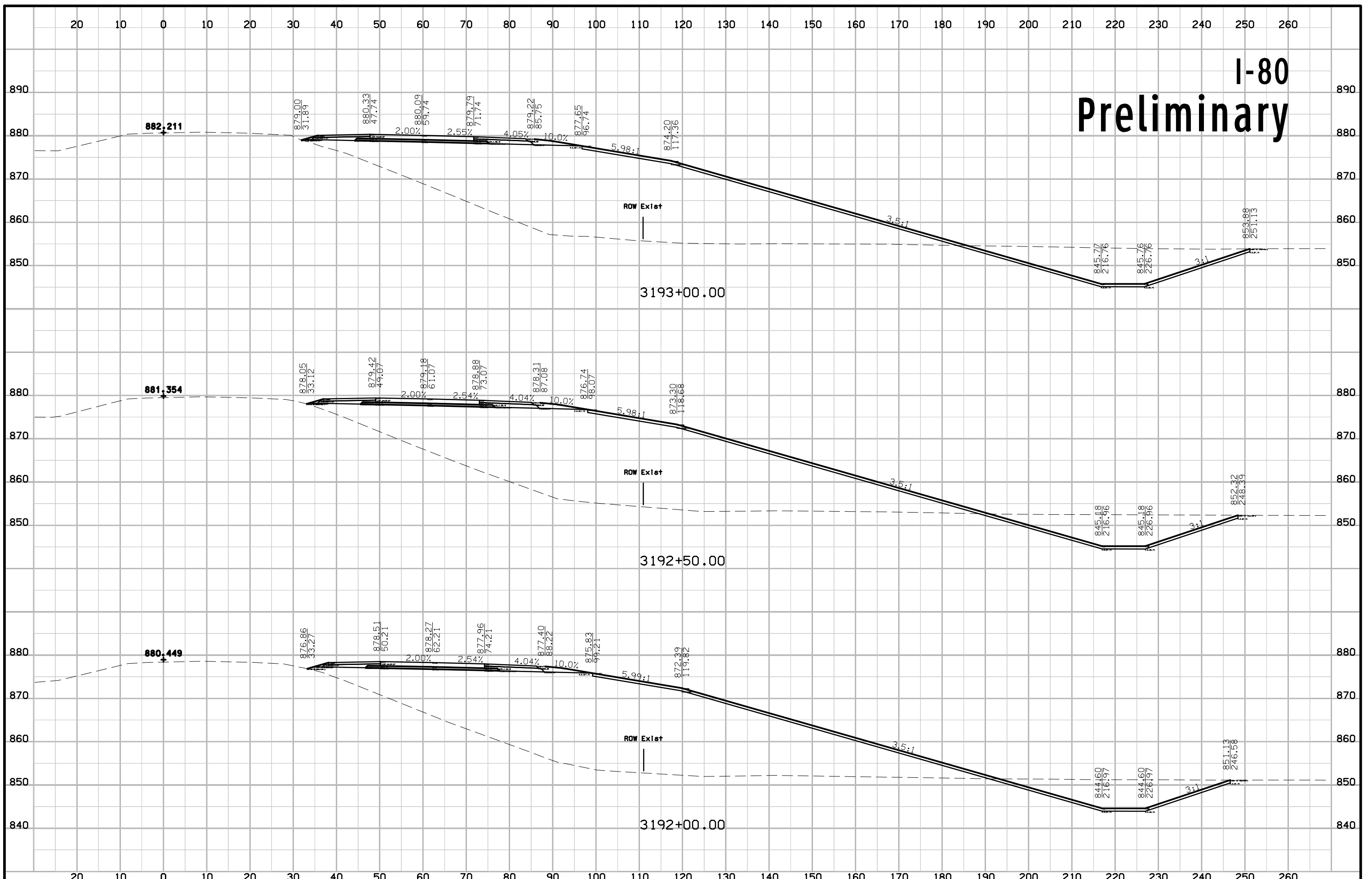
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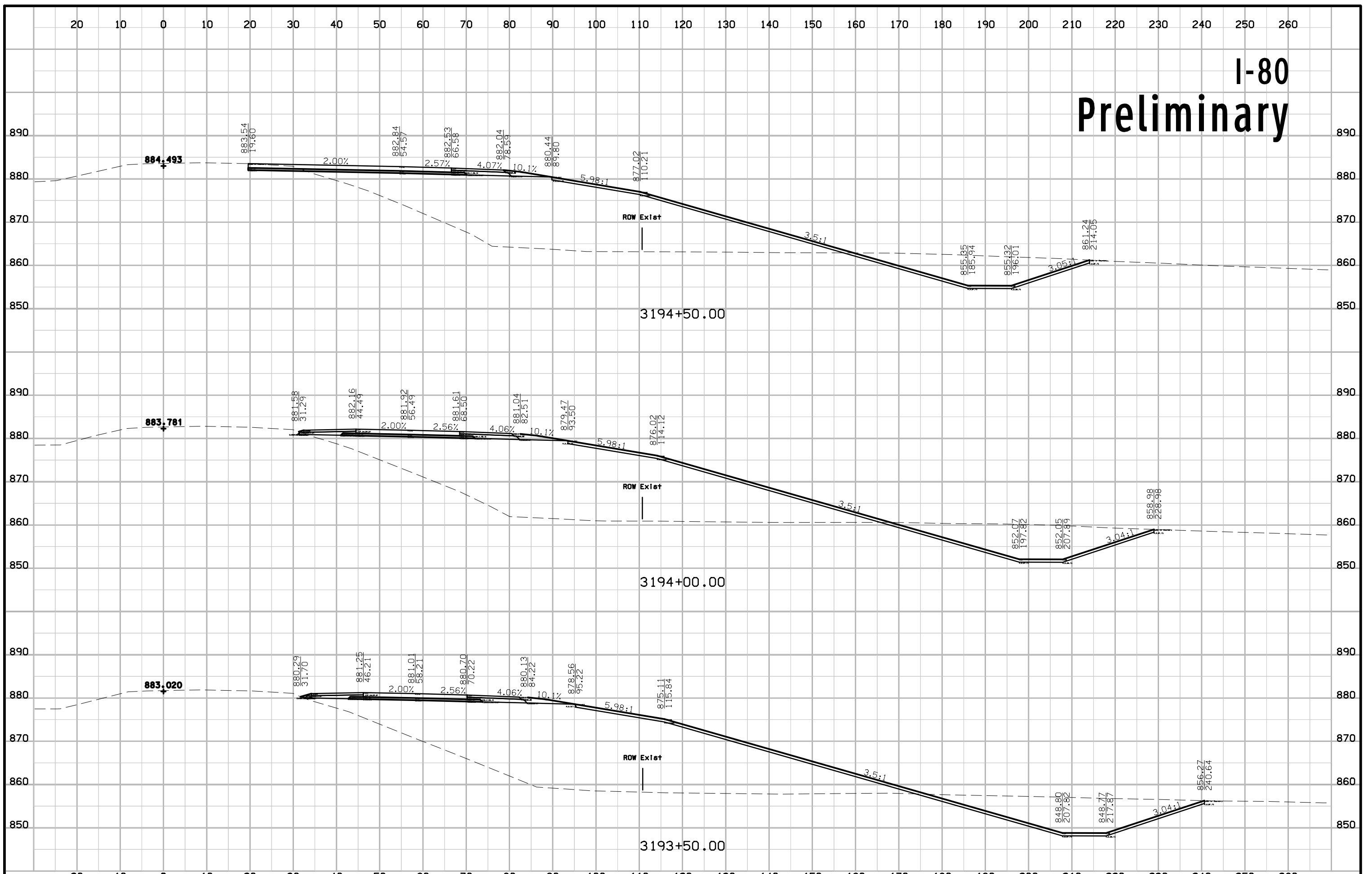


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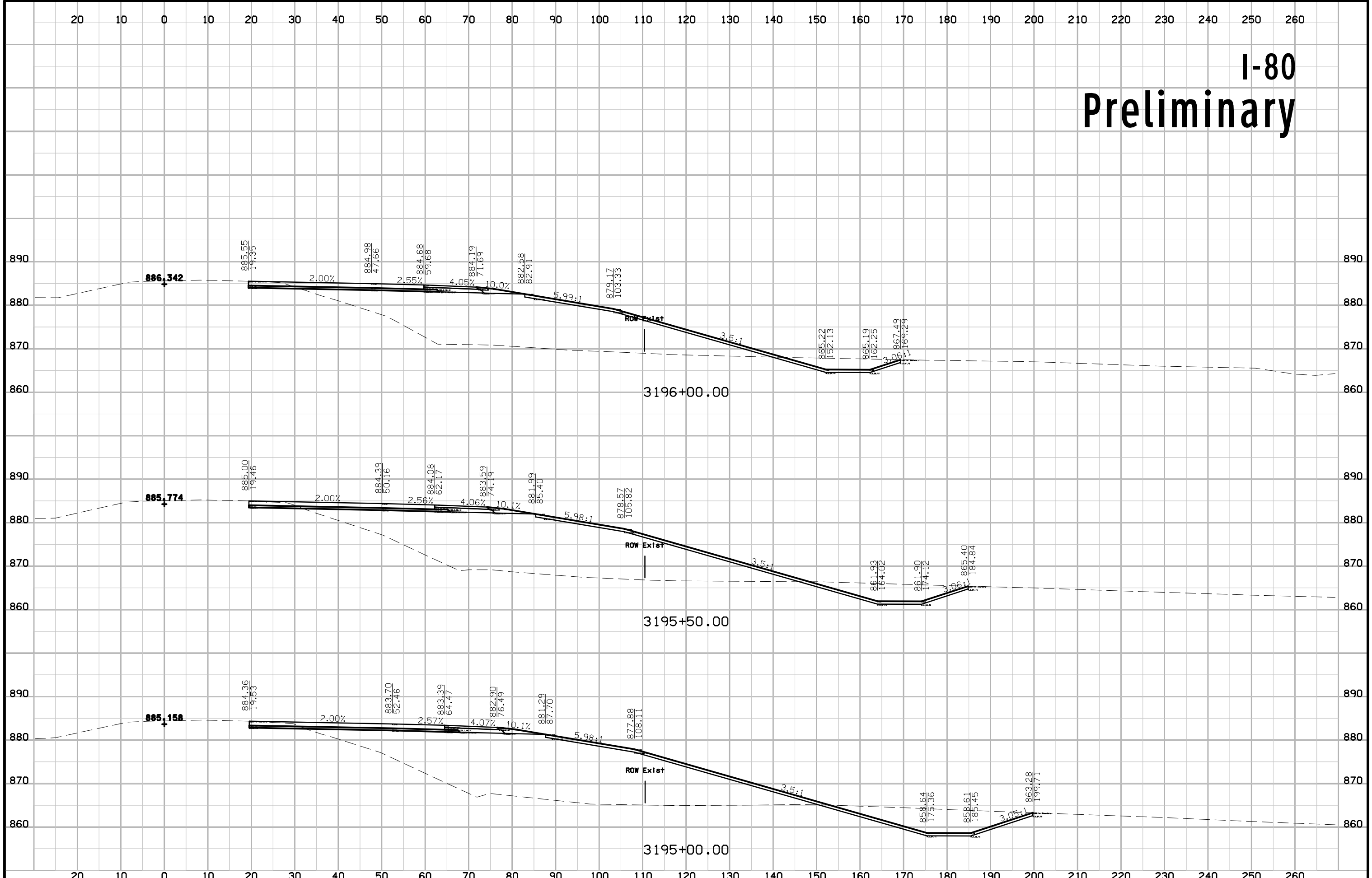




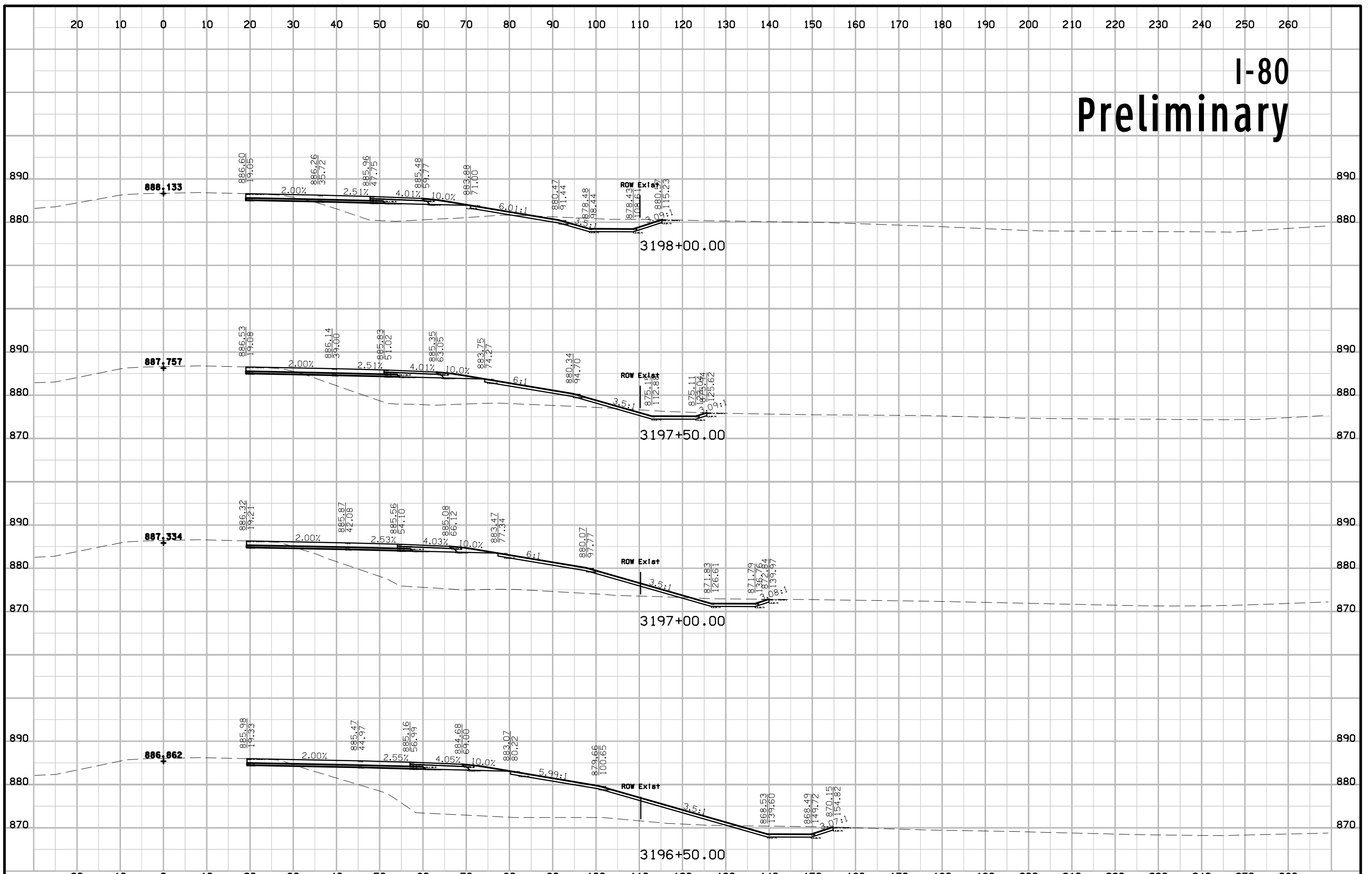
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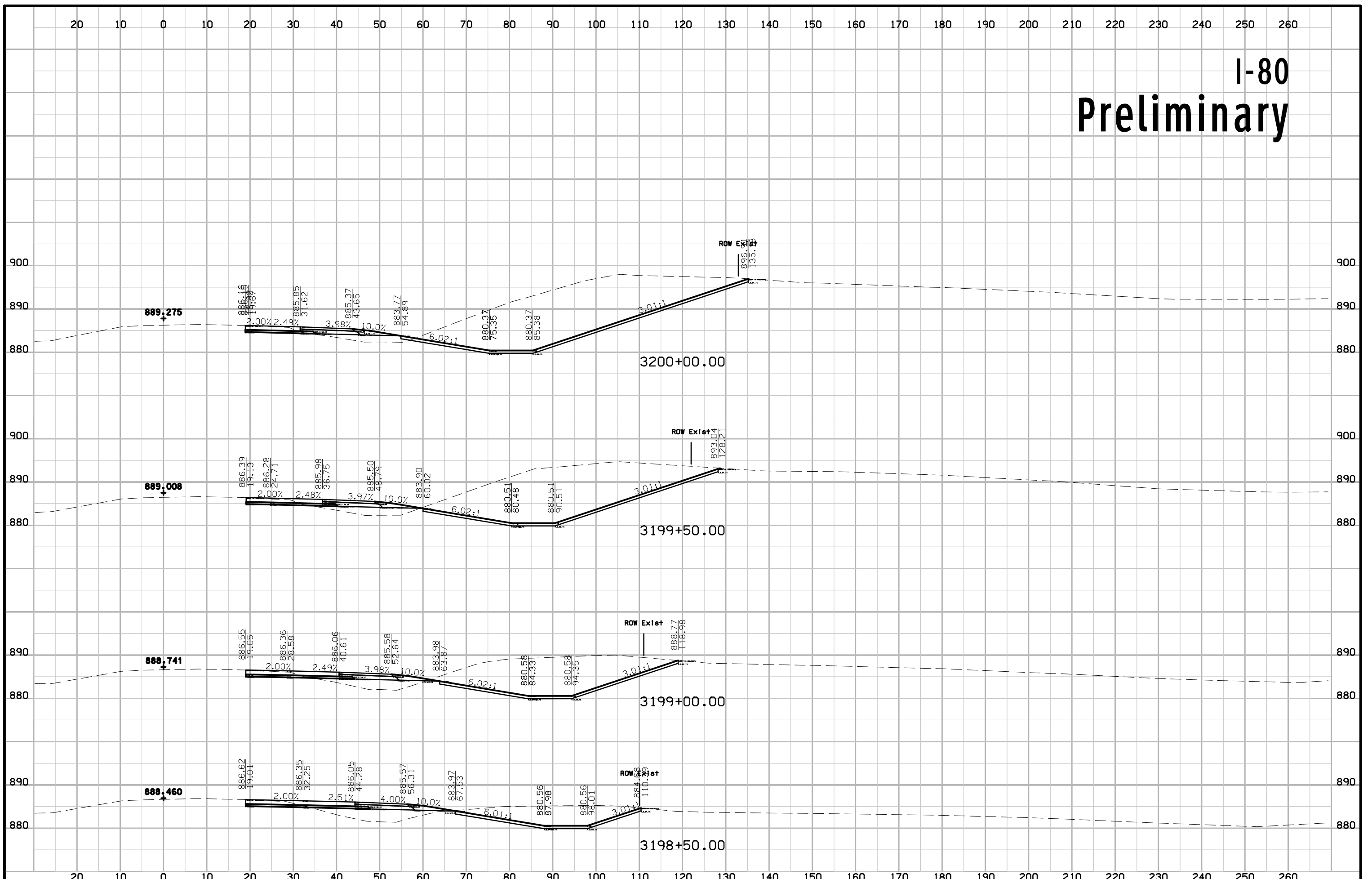
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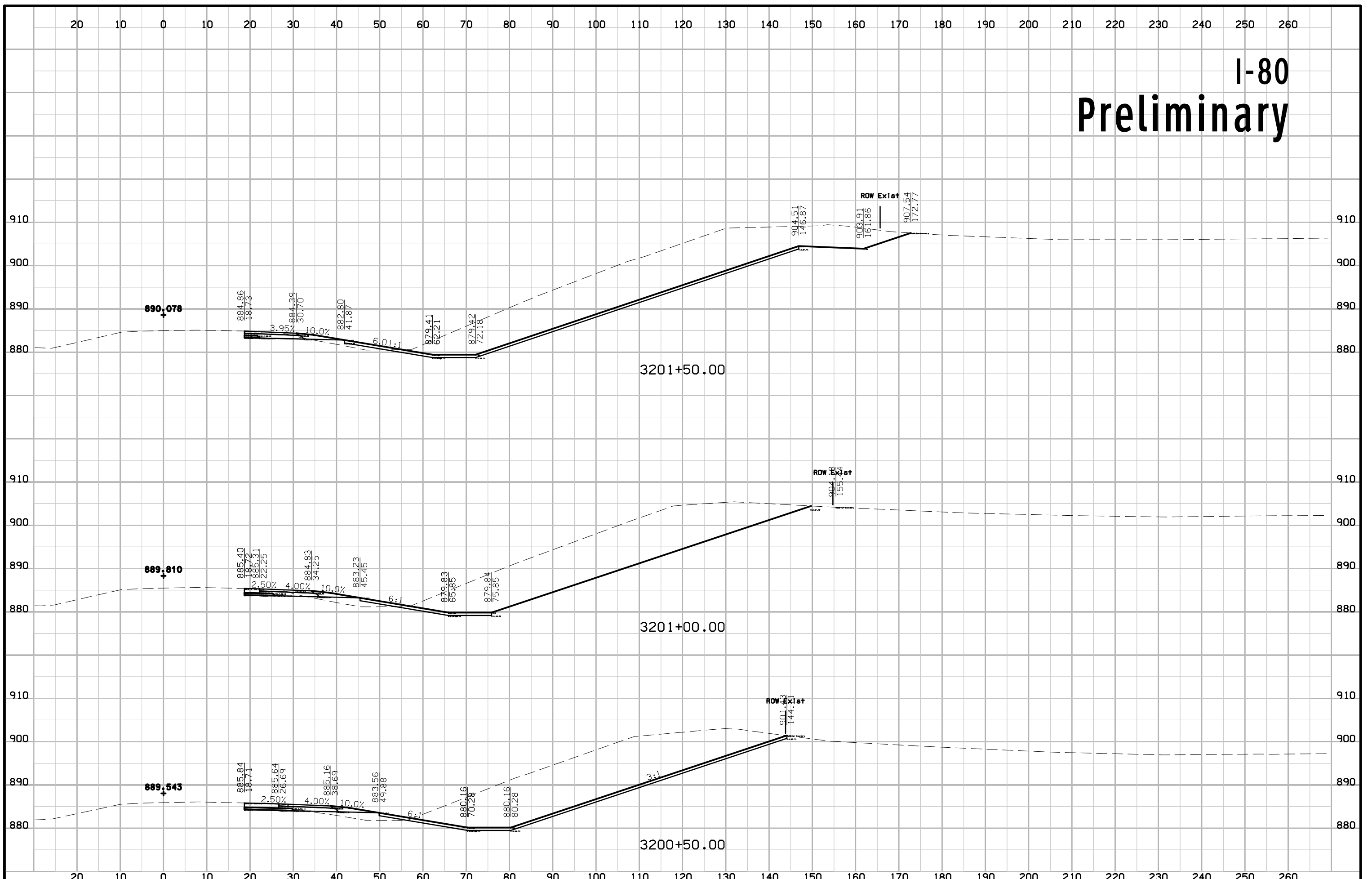
# I-80 Preliminary



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