

DITCH IMPROVEMENT  
STPN-117-1(34)--2J-50

LETTING DATE  
01-19-2022

JASPER CO.



**Highway Division**

PLANS OF PROPOSED IMPROVEMENT ON THE

PRIMARY ROAD SYSTEM

**JASPER COUNTY**  
DITCH IMPROVEMENT

South Skunk River north 1000ft.

SCALES: As Noted

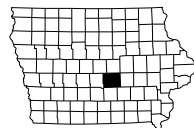
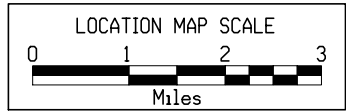
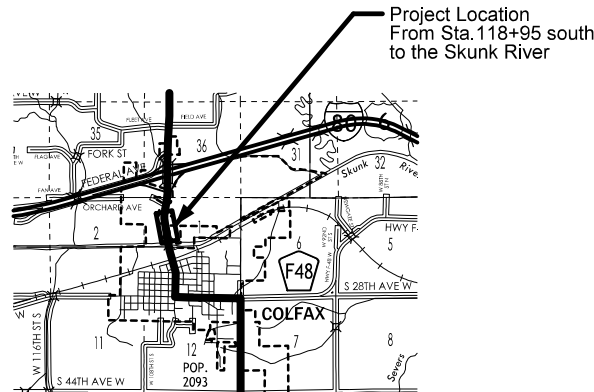
Refer to the Proposal Form for list of applicable specifications.

Value Engineering Saves. Refer to Article 1105.14 of the Specifications.

REVISIONS	TOTAL 29
PROJECT IDENTIFICATION NUMBER	
20-50-117-020	
PROJECT NUMBER	
STPN-117-1(34)--2J-50	
R.O.W. PROJECT NUMBER	
STPN-117-1(35)--2J-50	

INDEX OF SHEETS	
No.	DESCRIPTION
<b>A Sheets</b>	<b>Title Sheets</b>
A.1	Title Sheet/Location Map
<b>D Sheets</b>	<b>Mainline Plan and Profile Sheets</b>
* D.1	Plan & Profile Legend & Symbol Information Sheet
* D.2	IA 117 Plan & Profile
<b>G Sheets</b>	<b>Survey Sheets</b>
G.1	Survey Information
G.2 - 3	Horizontal Control Map & Control Point Coordinates
<b>J Sheets</b>	<b>Traffic Control and Staging Sheets</b>
J.1	Traffic Control Plan
<b>W Sheets</b>	<b>Mainline Cross Sections</b>
W.1 - 22	Cross Section Information * Color Plan Sheets

H Sheets



DESIGN DATA RURAL			
2018	AADT	4,555	V.P.D.
20--	AADT	--	V.P.D.
20--	DHV	--	V.P.H.
	TRUCKS	8	%
Total			
Design	ESALs	1,780,098	

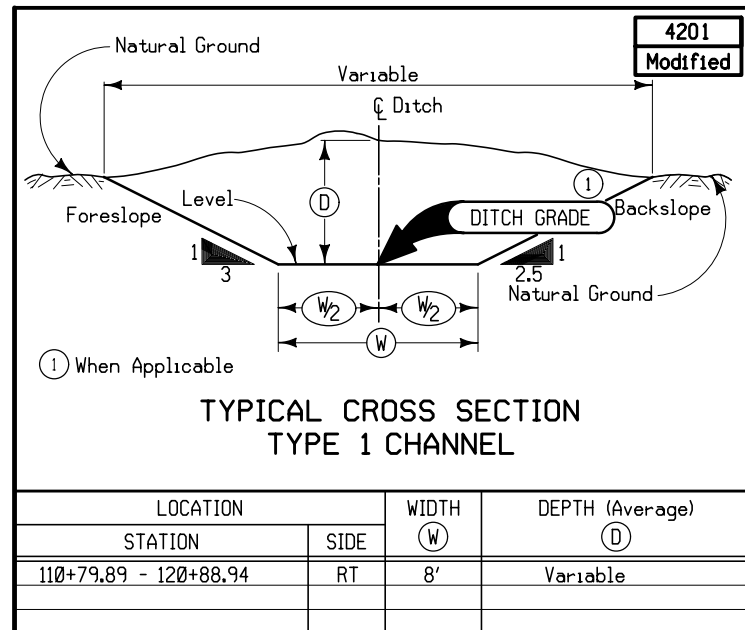
INDEX OF SEALS		
SHEET NO.	NAME	TYPE
A.1	Allison Smyth	Primary Signature Block

D9 PLAN - Date: 11-2-2021

**PRELIMINARY PLANS**

Subject to change by final design.

D5 PLAN - Date: 6-1-2021



### SURVEY SYMBOLS

- EW Edge of Water
- CP Control Point
- WC Wild Card (Misc. Field Shot)
- REF Reference Tie Point
- FW Wire Fence
- D Centerline Draw or Stream (Down)
- CON Concrete or A/C Slab
- BNK Stream Bank
- BL Topo Breakline
- PLG Location of General Photo
- GR Ground Shot
- SOP Size of Pipe or Culvert
- TLNL Tree Line Left
- PRO Profile Shot
- CUL Culvert
- SNP Unpaved Shoulder
- C Centerline BL of Road (ML or SR)
- EP Edge of Paved Roads (ML or SR)
- SBR Size of Bridge
- UE Utility Elevation
- TPD Telephone Pedestal
- SWK Sidewalk
- ENP Edge Paved Entrance & Park Lot
- BLD Building or Foundation
- LIN Miscellaneous Line
- PIP Pipe Culvert
- PPA Power Pole Co. 1
- PR Electric Riser Pole
- SI Sign
- ENT Centerline BL of Entrance
- RET Retaining Walls
- SL Speed Limit Sign
- FCL Chain Link and Security Fence
- EB Electrical Box
- MH Utility Access (Manhole)
- LUM Luminaire
- SHR Shrub
- TDC Tree Deciduous
- OUT Tile Outlet
- WV Water Valve
- SH Paved Shoulder
- FHD Fire Hydrants
- GU Gutter In Front of Curb
- CU Back of Curb
- BRG Bridge
- BD Bridge Deck
- BCL Bridge Centerline
- TIL Tile Line
- F02D Fiber Optic Co. 2 - Quality D
- F01D Fiber Optic Co. 1 - Quality D
- DU Centerline Draw or Stream (Up)
- BLS Bridge Low Steel
- TOP Top of Bridge Pier
- RIP Rip-Rap
- EL1D Electric Line Co. 1 - Quality D
- WL1D Water Line Co. 1 - Quality D
- TLNR Tree Line Right
- MH Utility Access (Manhole)
- ENP Edge Paved Entrance & Park Lot
- GP Guard Post (Less Than 4 Posts)
- MIS Miscellaneous
- FLG Flag Poles
- LC Lot Corner
- BM Bench Mark
- SA1D Sanitary Sewer Co. 1- Quality D
- DIK Center Dike

### UTILITY LEGEND

- E1- MidAmerican Energy Company  
Scot Enger  
3500 104th Street  
Urbandale, IA 50322  
(515) 252-6742  
scot.enger@midamerican.com
- F0- Unite Private Networks  
Clark Lundy  
2320 Wakonda View Dr.  
Des Moines, IA 50321  
(515) 321-3336  
clark.lundy@upnfiber.com
- F02- Centurylink  
Steve Parker  
2103 E. University Ave.  
Des Moines, IA 50317  
(515) 265-0968  
Steven.Parker4@lumen.com
- San- Colfax  
Bob Rhone  
19 East Howard  
Colfax, IA 50054  
(515) 674-3829  
colfaxpublicworks@gmail.com
- TV- Mediacom Communications Corporation  
Paul May  
2205 Ingersoll Ave  
Des Moines, IA 50312  
(515) 246-2252  
pmay@mediacomcc.com
- W- Colfax  
Bob Rhone  
19 East Howard  
Colfax, IA 50054  
(515) 674-3829  
colfaxpublicworks@gmail.com

### 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

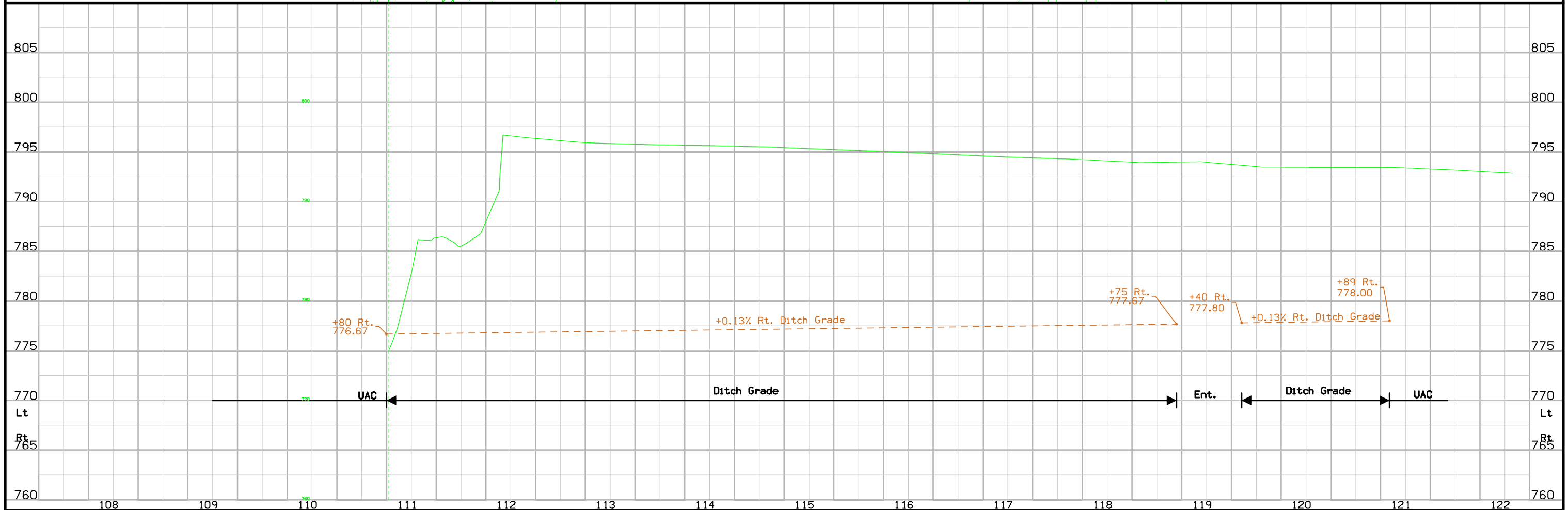
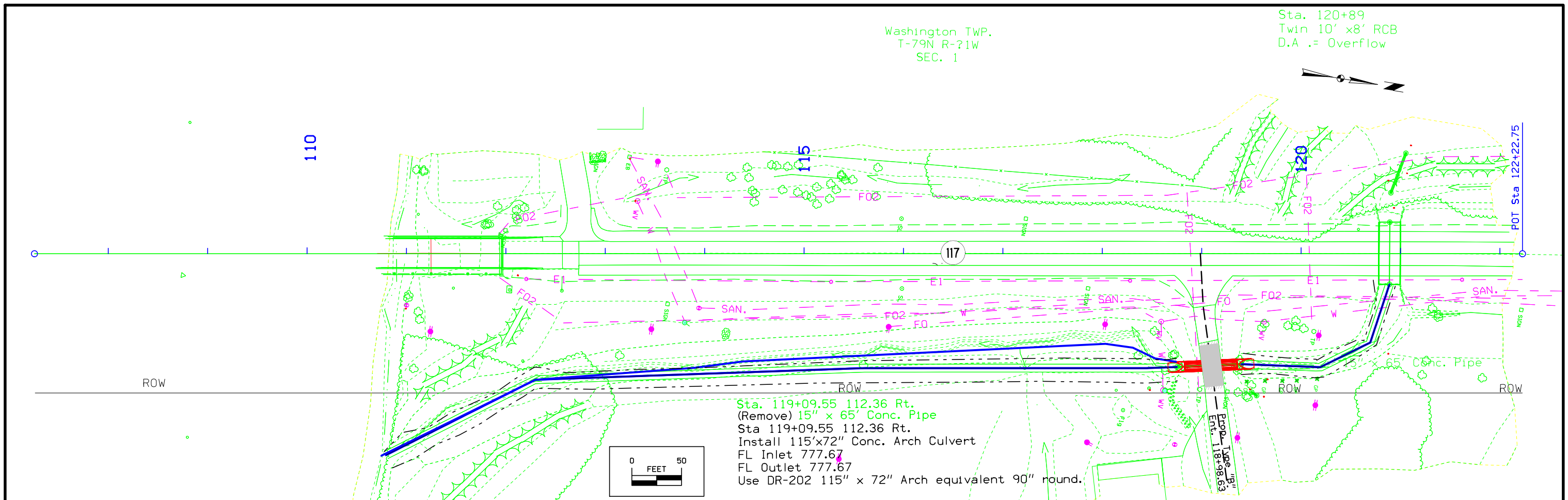
- Proposed Right-of-Way
- Existing Right of Way
- Existing and Proposed Right-of-Way
- Easement and Existing Right-of-Way
- Easement (Temporary)
- Easement
- Access Control
- Property Line

# PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

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

Washington TWP.  
T-79N R-?1W  
SEC. 1

Sta. 120+89  
Twin 10' x 8' RCB  
D.A .= Overflow



## Survey Information

Jasper County  
STPN-117-1(34)--2J-50  
South Skunk River north 1000 ft  
PIN 20-50-117-020  
SAP 686.1

### Party Personnel

Michael Rummelhart- Party Chief

### Date(s) of Survey

Begin Date 10/27/2020  
End Date 12/07/2020

### General Information

Measurement units for this survey are US survey feet. This survey is for Ditch improvement from South Skunk River north 1000 ft. in Colfax. Project datum and control information is provided by Design Survey Office. This project is a full field survey.

### Vertical Control

Vertical Control was established on monuments on the project designated as points FENO1, and CPO03. These monuments are stable and are expected to hold vertical reasonably well. The vertical datum is NAVD88. Datum was transferred from Iowa RTN reference stations to the project monuments mentioned above by using concurrent 6 hour static measurements and post processing connecting vectors. Geoid 12 B was used in processing.

### Horizontal Control

Horizontal Control was established on monuments on the project designated as points FENO1, and CPO03. The horizontal datum is NAD83(2011) (EPOCH 2010.00). Datum was transferred from the Iowa RTN reference stations to the project monuments mentioned above by using concurrent 6 hour static measurements and post processing connecting vectors. The project coordinate system for this survey is Iowa RCS Zone \*9 (U.S. Survey Feet).

### Alignment Information

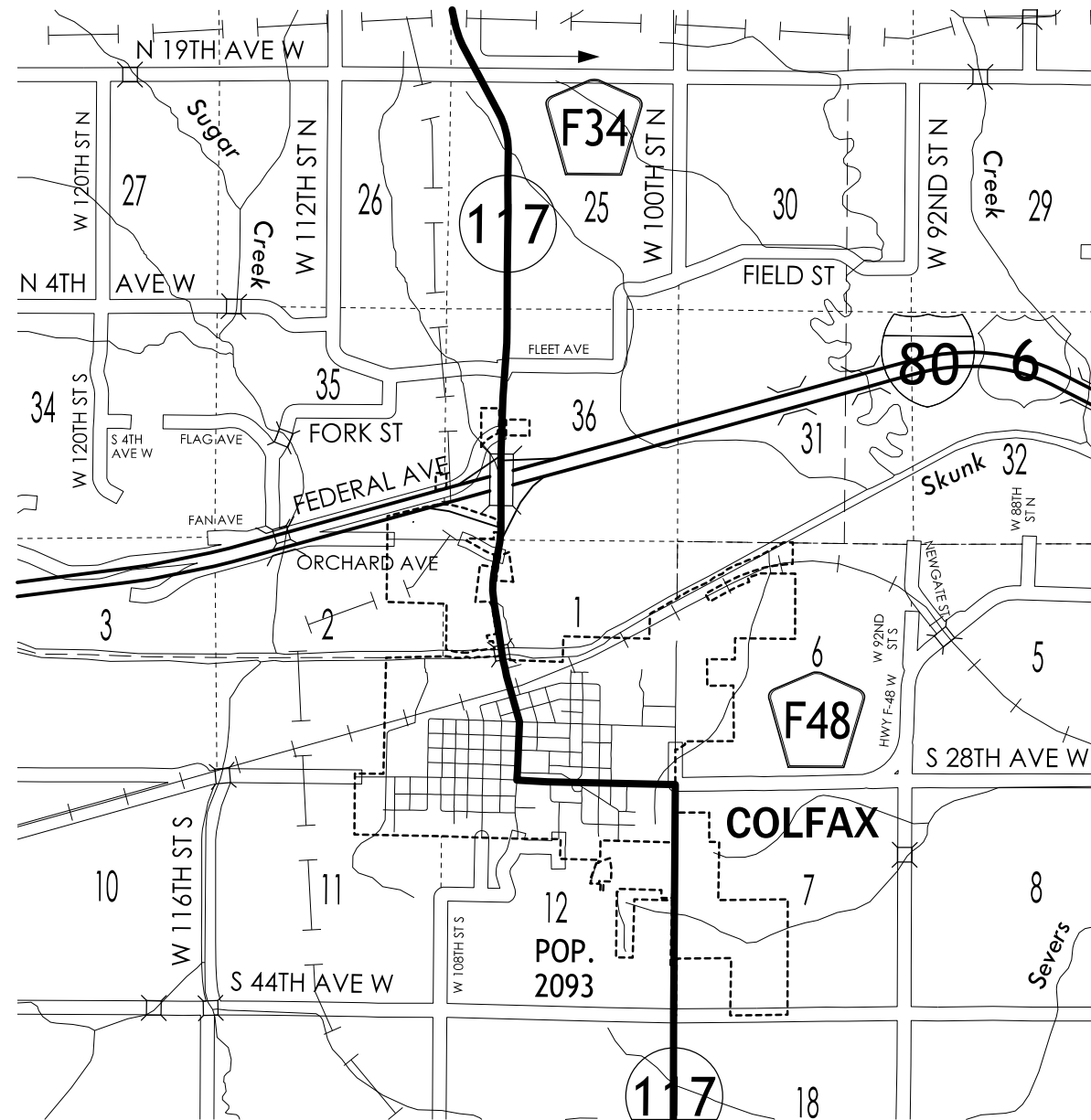
The horizontal alignment for this survey is a retrace of As-built Plans No. FN-117-1(4)—21-50. Survey stationing was equated to the plan at PI Sta. 107+25.79 and was run ahead without equation throughout the survey.

Survey stationing relates to as built plan stationing as follows:

PI Sta. 107+25.79 As-built Plans Project No. FN-117-1(4)—21-50  
= Survey PI Sta. 107+25.79

### CONTROL POINT VICINITY MAP

This map is a guide to the vicinity of the primary project control points  
 Primary control is for use with RTK base stations and for RTN validation.  
 Future surveys will use primary project control to establish temporary control as needed for construction or other surveying applications.



HORIZ. DATUM: NAD83(2011) EPOCH 2010.00

VERT. DATUM: NAVD88

1a. Regional Coordinate System Zone 9

Coordinate listing from next sheet will be used with 1aRTN for monument recovery. No other reference ties are given.

HORIZONTAL AND VERTICAL PROJECT CONTROL COORDINATE LISTING

HORIZ. DATUM: NAD83(2011) EPOCH 2010.00

VERT. DATUM: NAVD88

Ia. Regional Coordinate System Zone 9

Point	Northing	Easting	Elevation	Feature	Description
				Definition	
CPO03	7724312.29	19381996.66	786.40	CP	76' NE of Orchard Ave. _79' NE of Intersection CL Orchard Ave. & Field Entrance _27' SE of Field Entrance _1' S. of Witness Post_ Cast in-place concrete monument with aluminum disk flush with ground
Feno1	7718988.47	19382830.33	849.91	CP	75' NW of Intersection IA Hwy 117 & W. State St. _55' N. of W. State St. _55' W. of IA Hwy 117_41' SW of Power Pole_ Feno Monument 6" deep.

CHA ROW ML A 117



110+59  
±80'±EX R/W

110+59  
±140'

110+79  
±229'

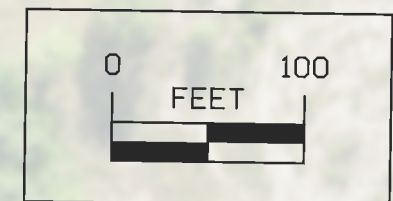
110+96  
±229'

112+38  
±146'

114+75  
±135'±EX R/W

LAKE SCHLOSSER TRUST

WASHINGTON TWP.  
SE 1/4 NW 1/4  
SEC. 1 T79N R21W



<b>Right of Way Design Information</b>	
<b>THIS SHEET INCLUDED FOR INFORMATION ONLY</b>	
ROW Team: ATINKEN/JLARSON	
ROW #: STPN-117-1(35)--2J-50	
Plan Date: 08/23/21	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition



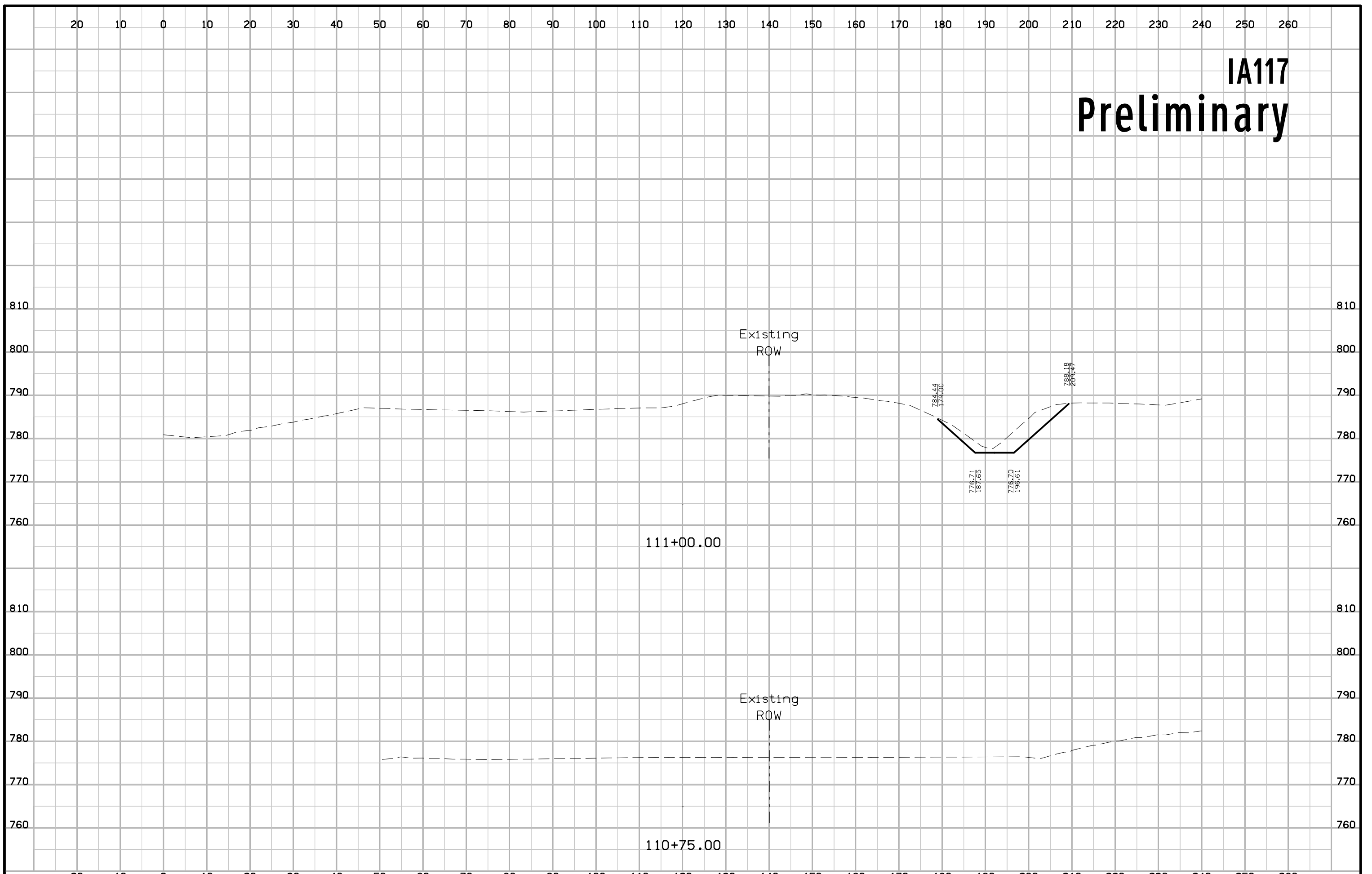
<b>108-23A</b> 08-01-08	<b>TRAFFIC CONTROL PLAN</b>
Traffic shall be maintained at all times on IA 117. A lane closure may be used per TC-213.	

<b>111-01</b> 04-17-12	<b>COORDINATED OPERATIONS</b>
Other work in progress during the same period of time will include the construction of the projects listed. Coordinate operations with those of other contractors working within the same area.	
Project	Type of Work

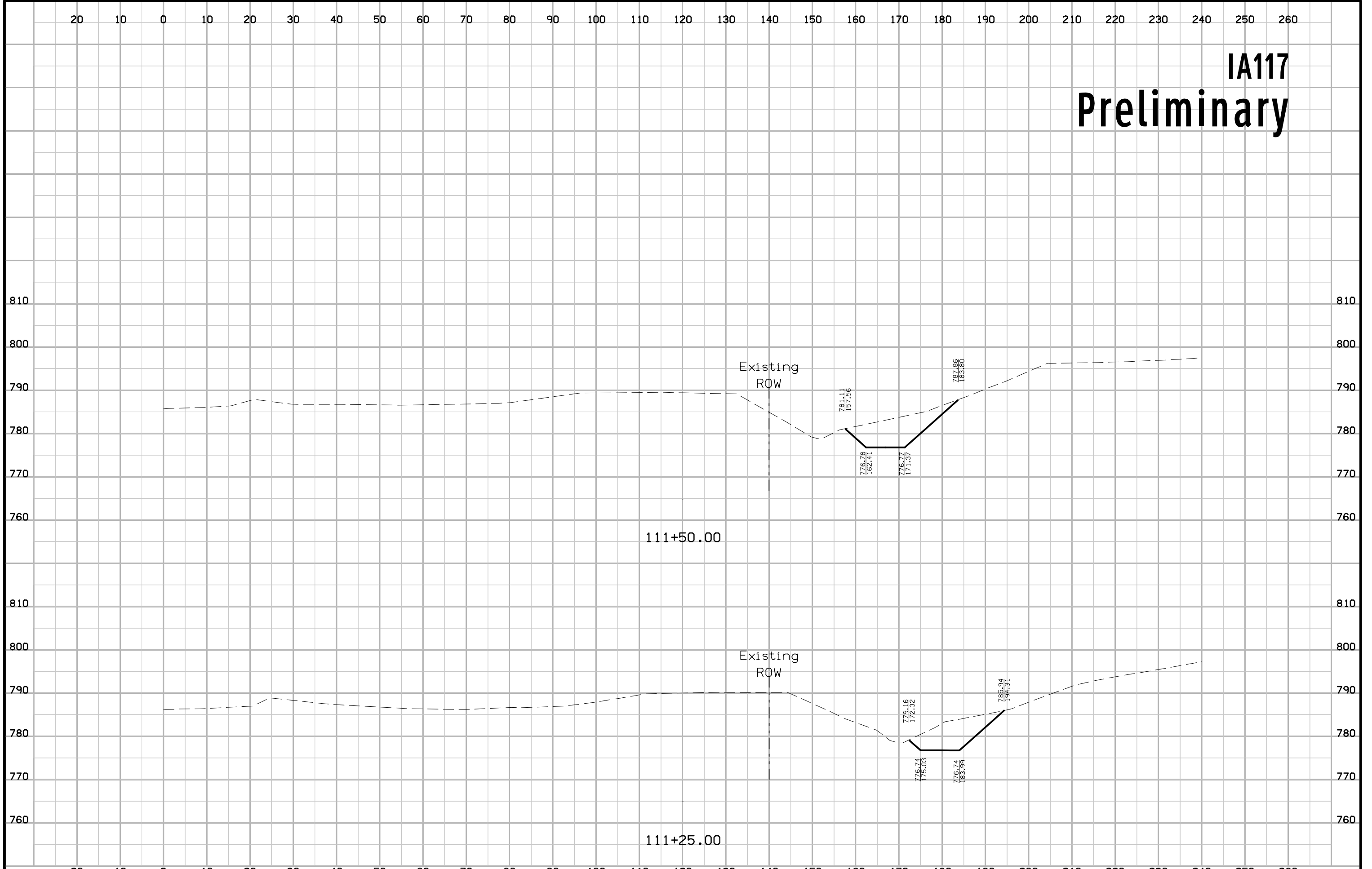
<b>108-25</b> 10-21-14	<b>511 TRAVEL RESTRICTIONS</b>
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Route	Direction	County	Location Description	Feature Crossed	Object Type	Maint. Bridge No., Structure ID, or FHWA No.	Type of Restriction	Existing Measurement	Construction Measurement	Construction Measurement as Signed	Projected As Built Measurement	Remarks
			None expected.									

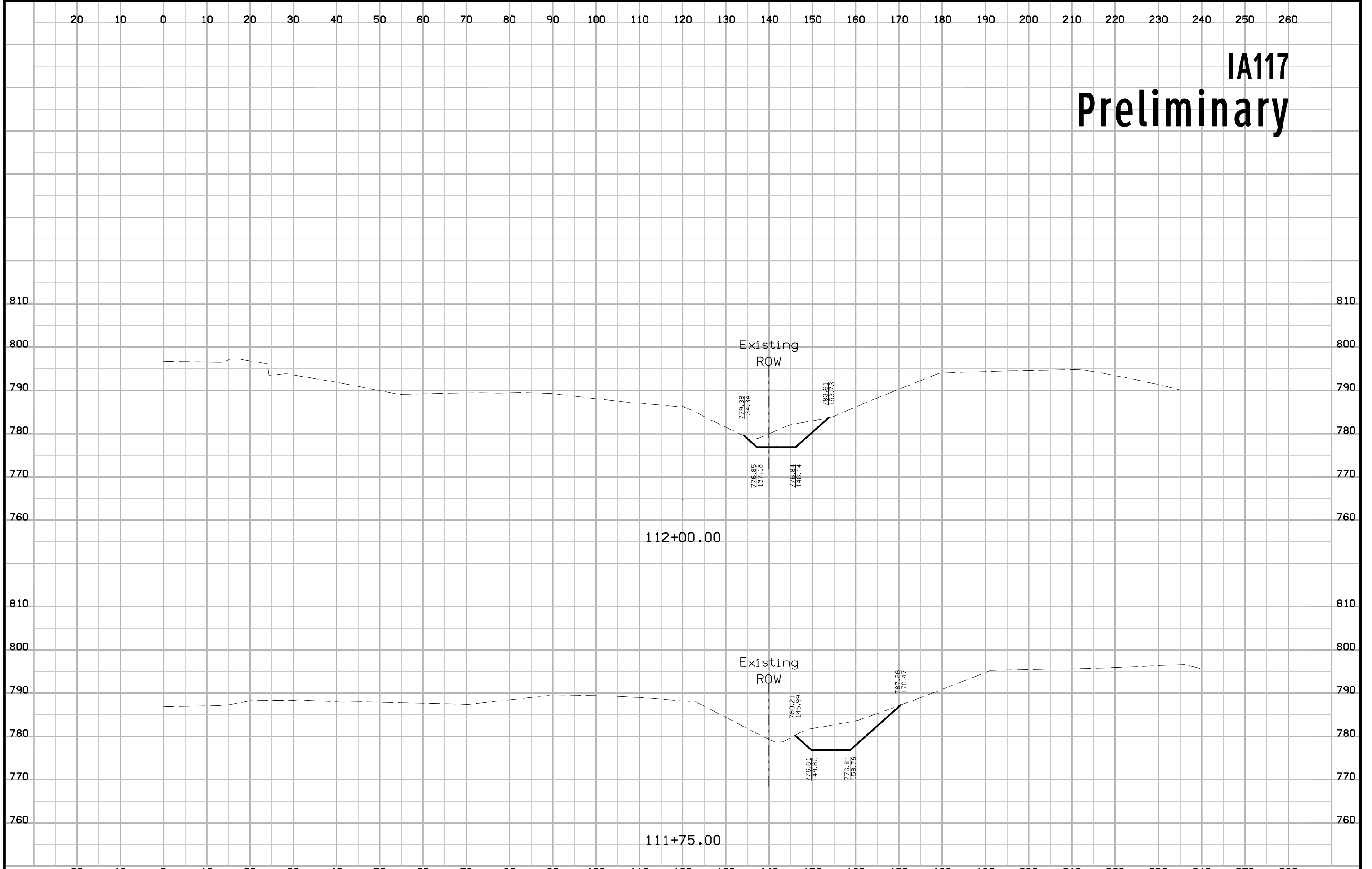
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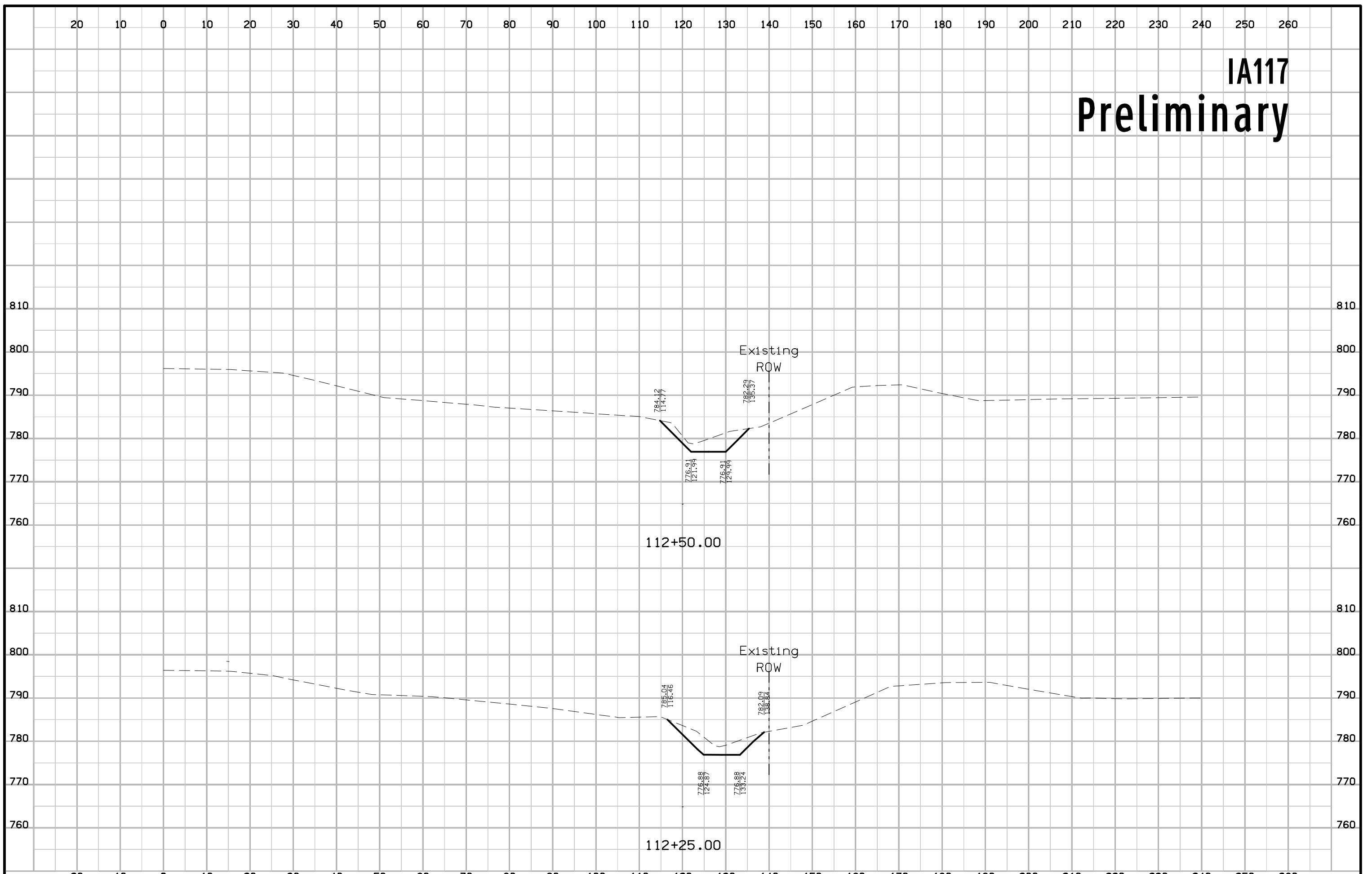
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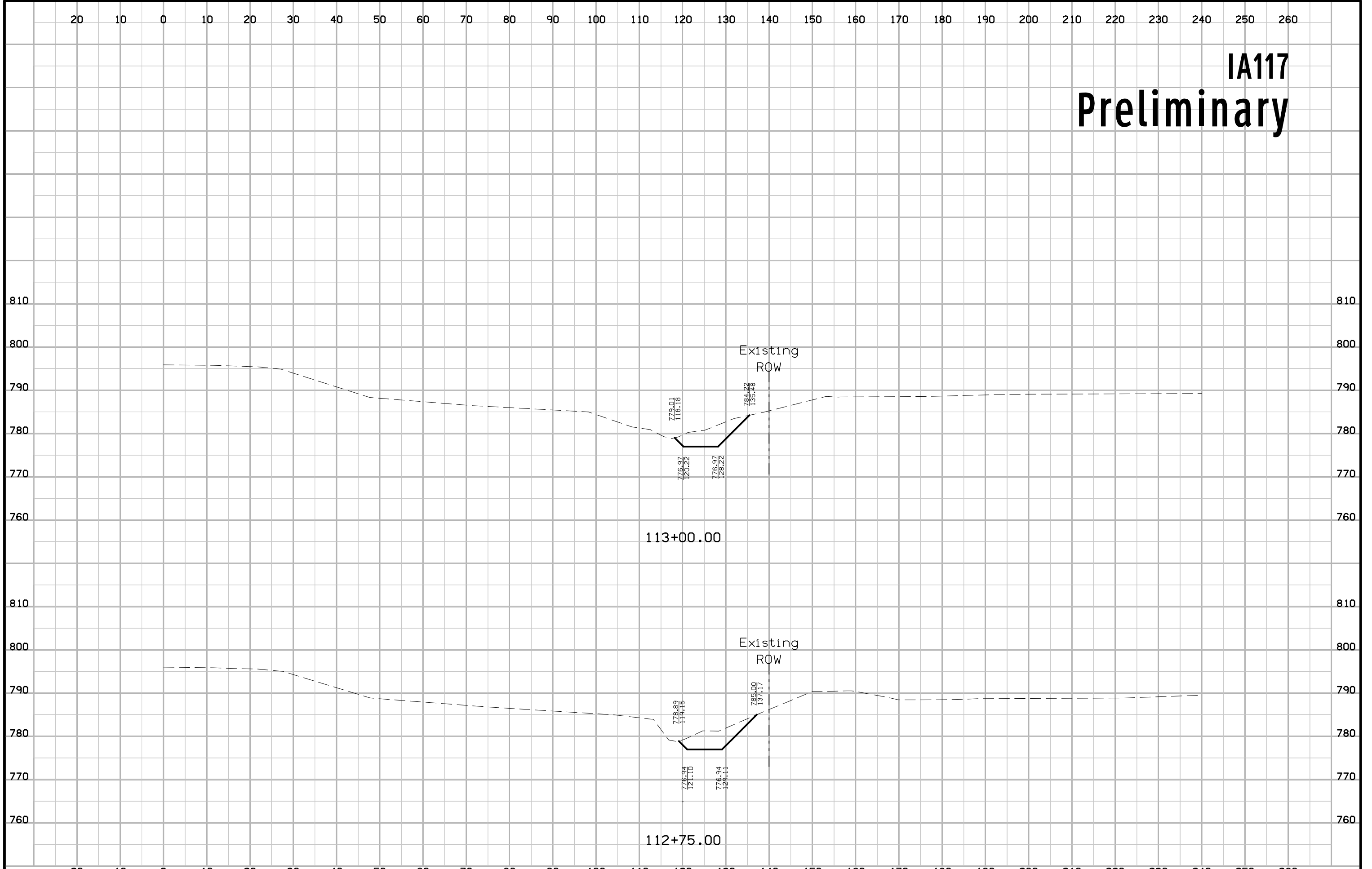
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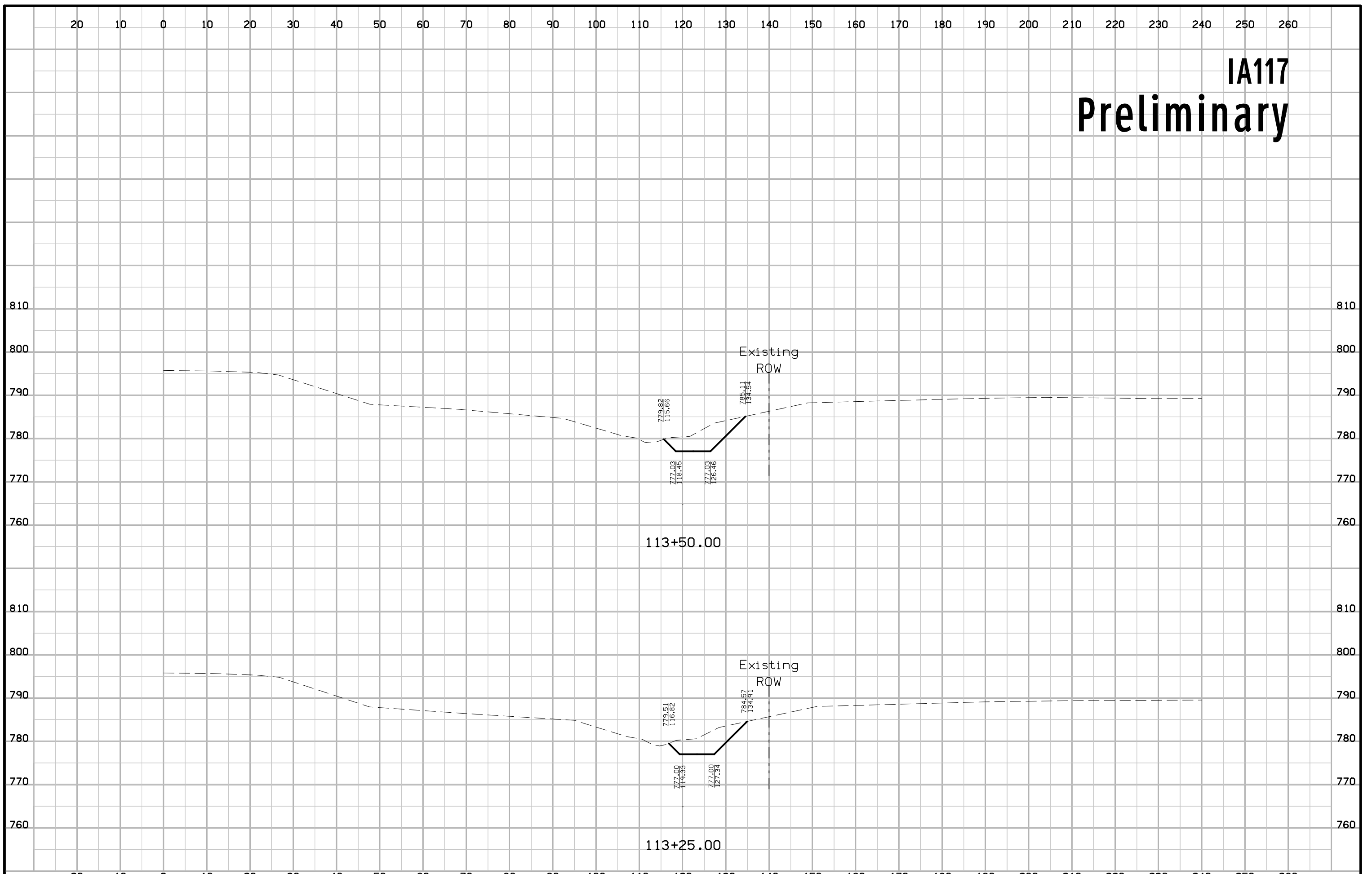
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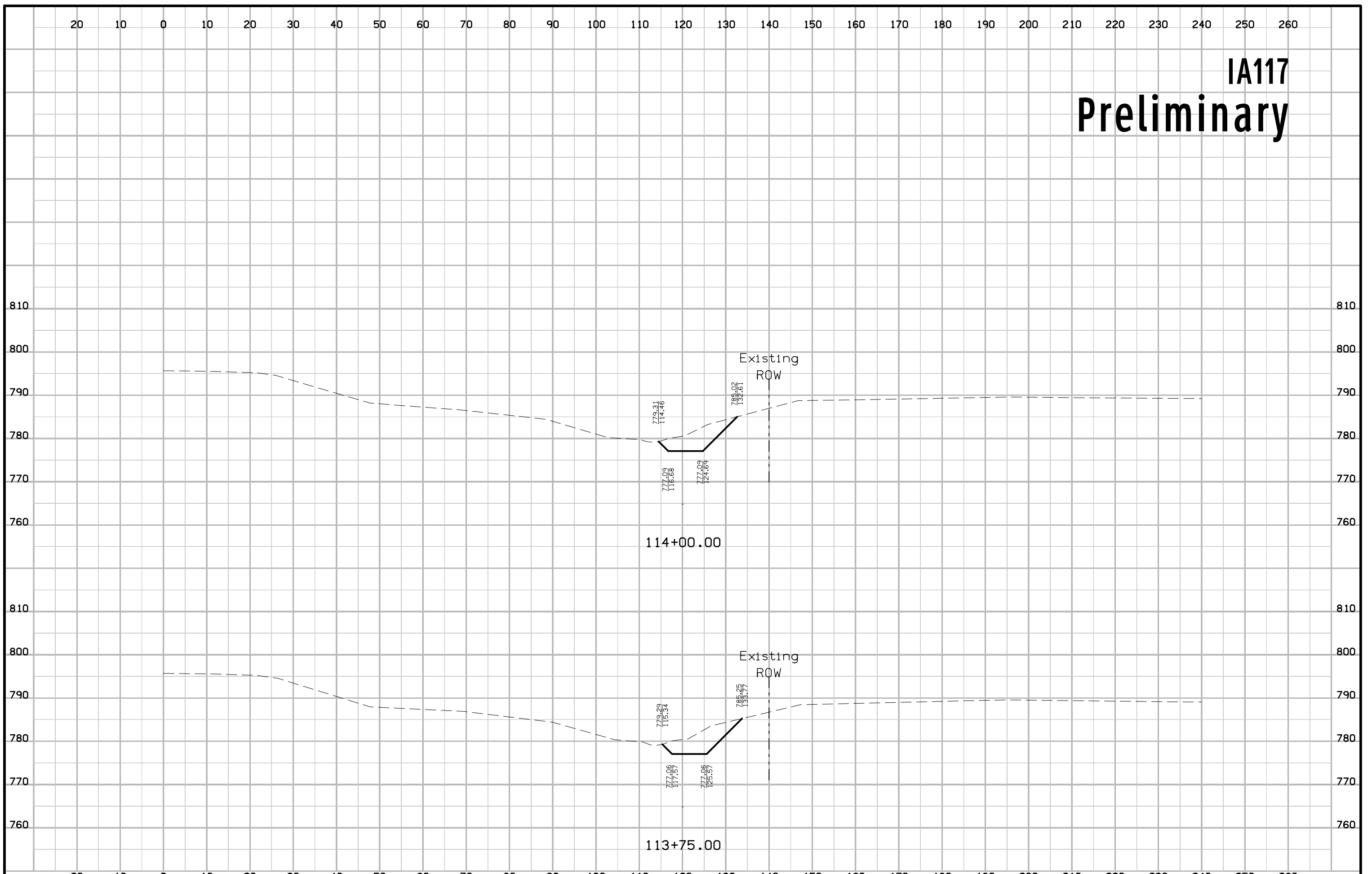
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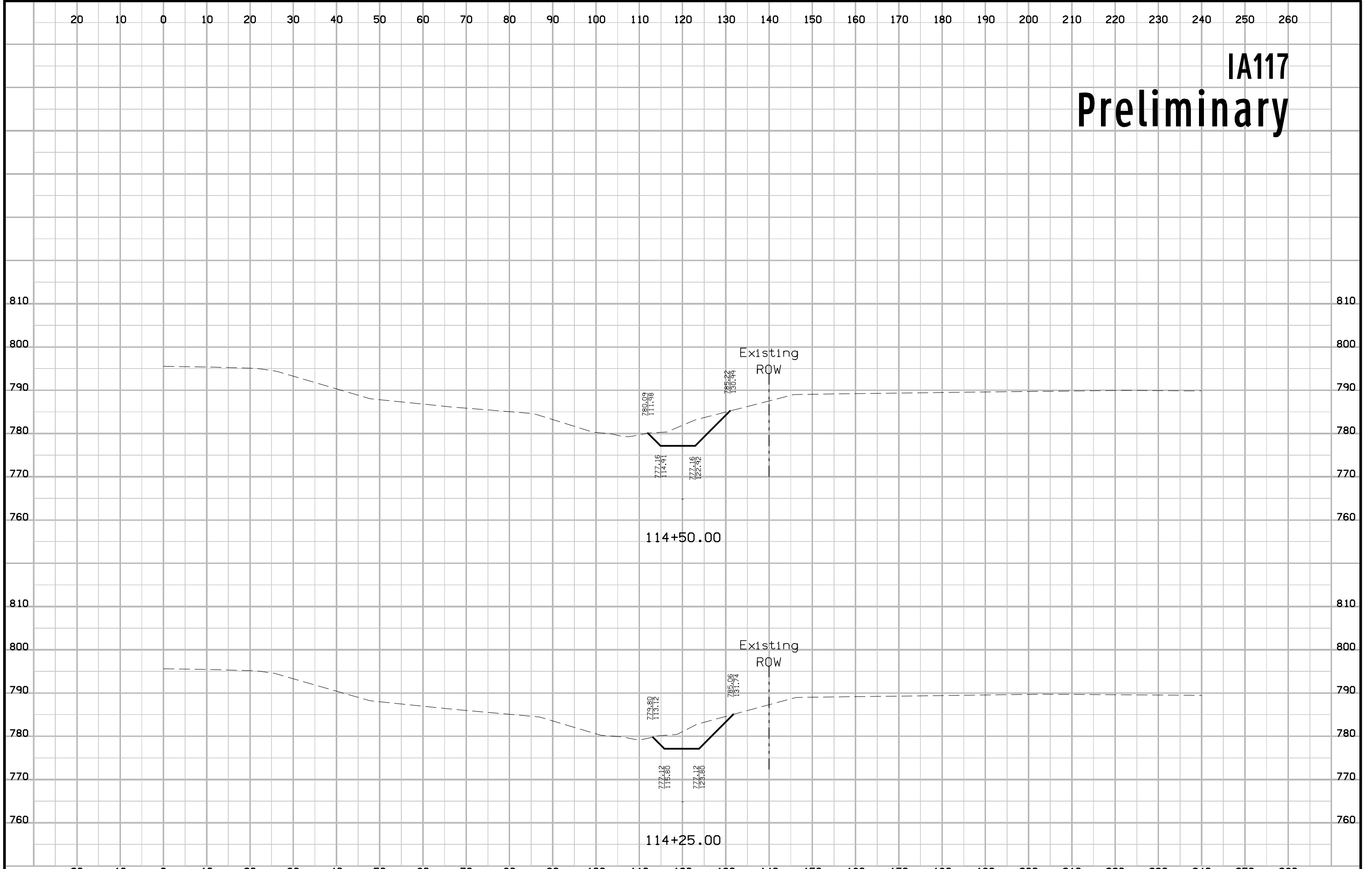


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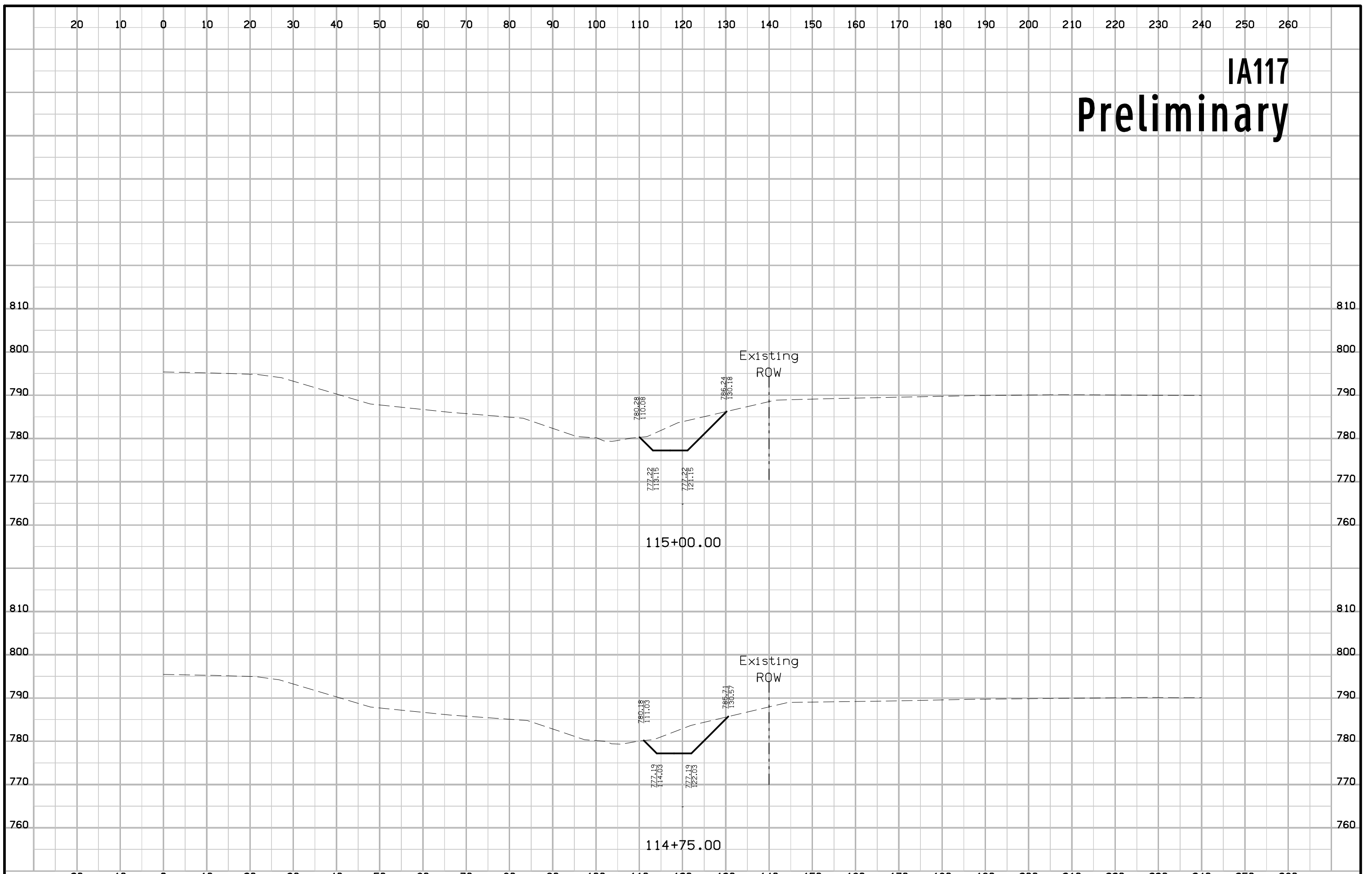




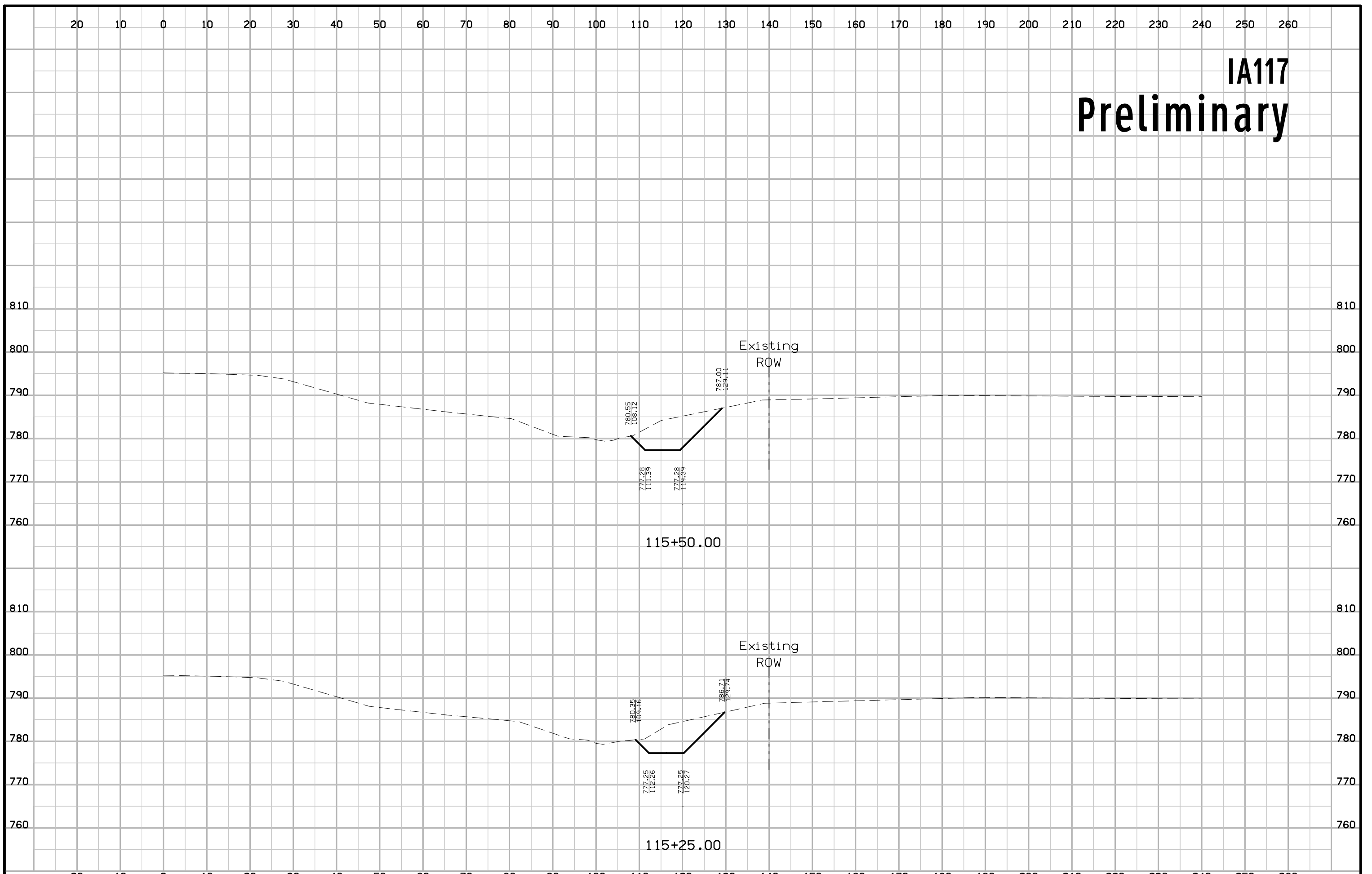
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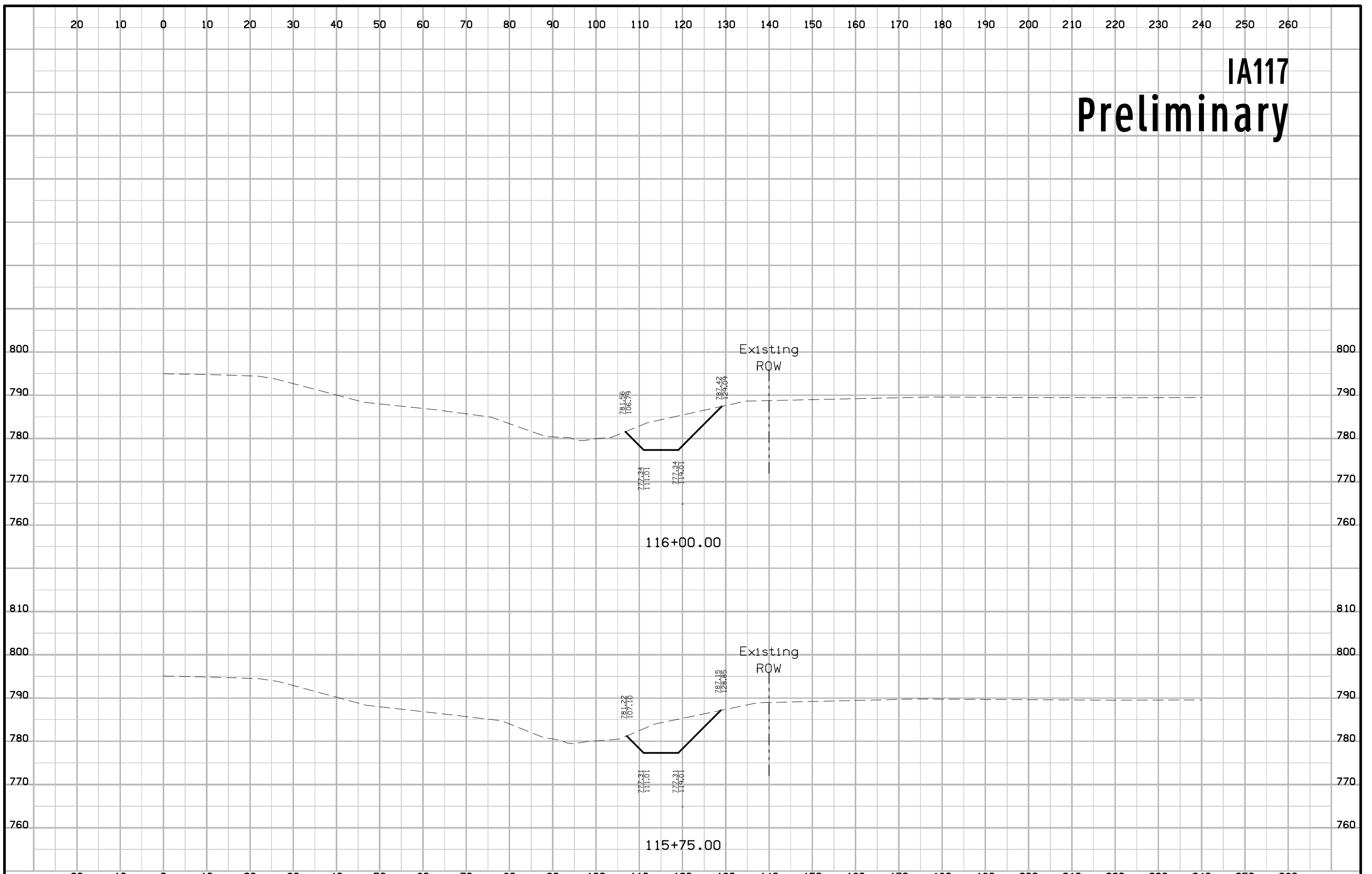
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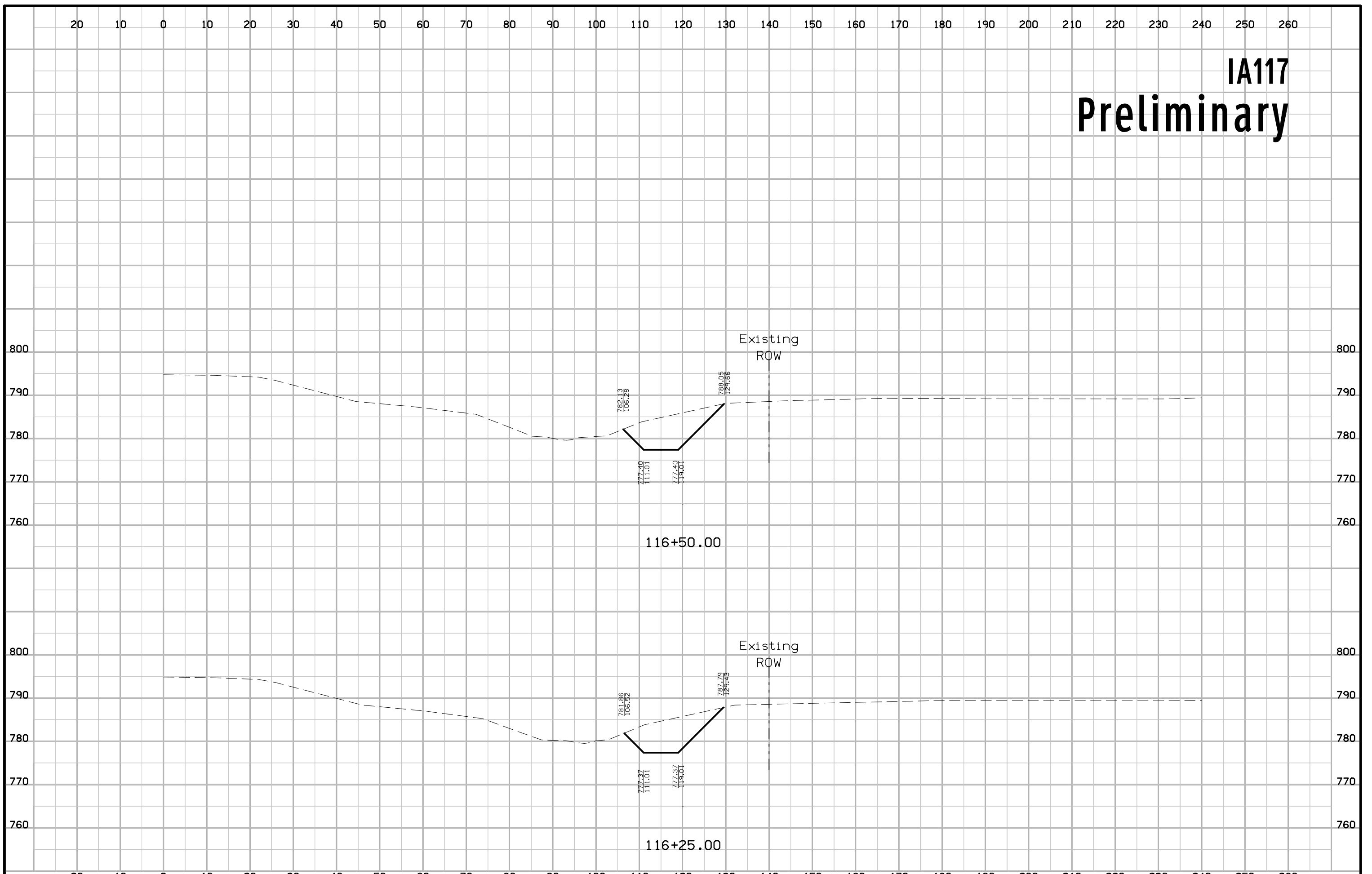
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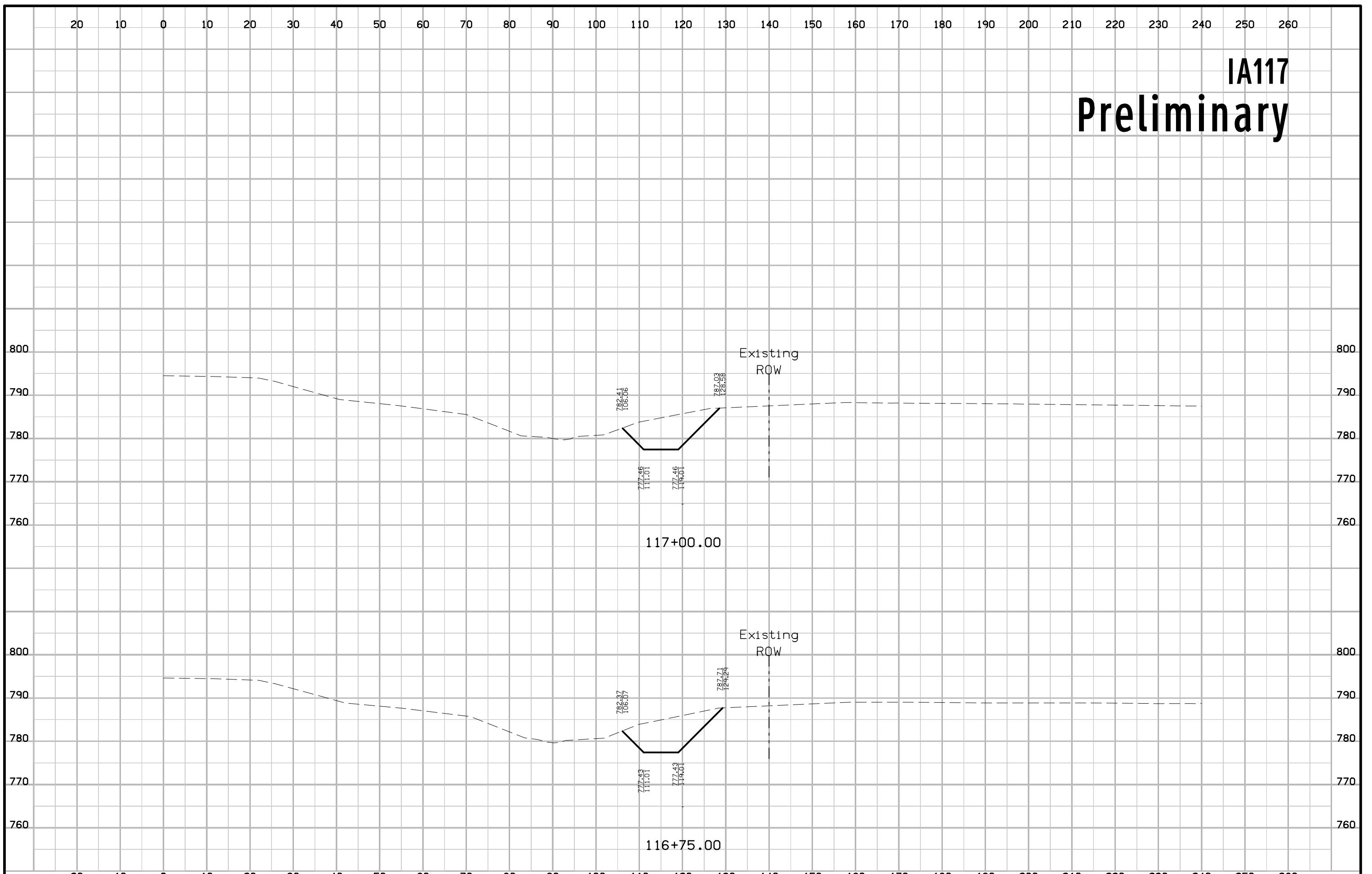
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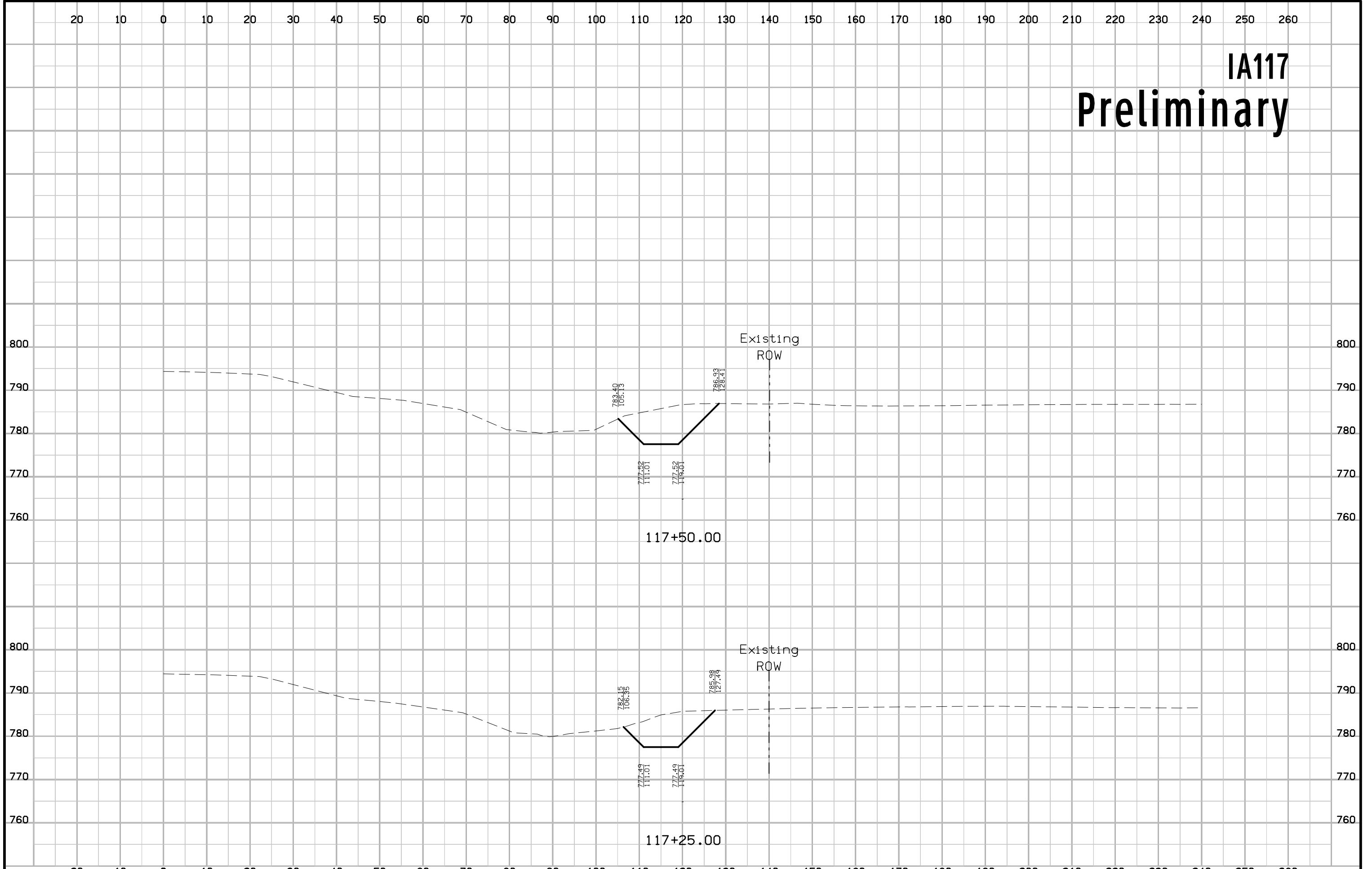
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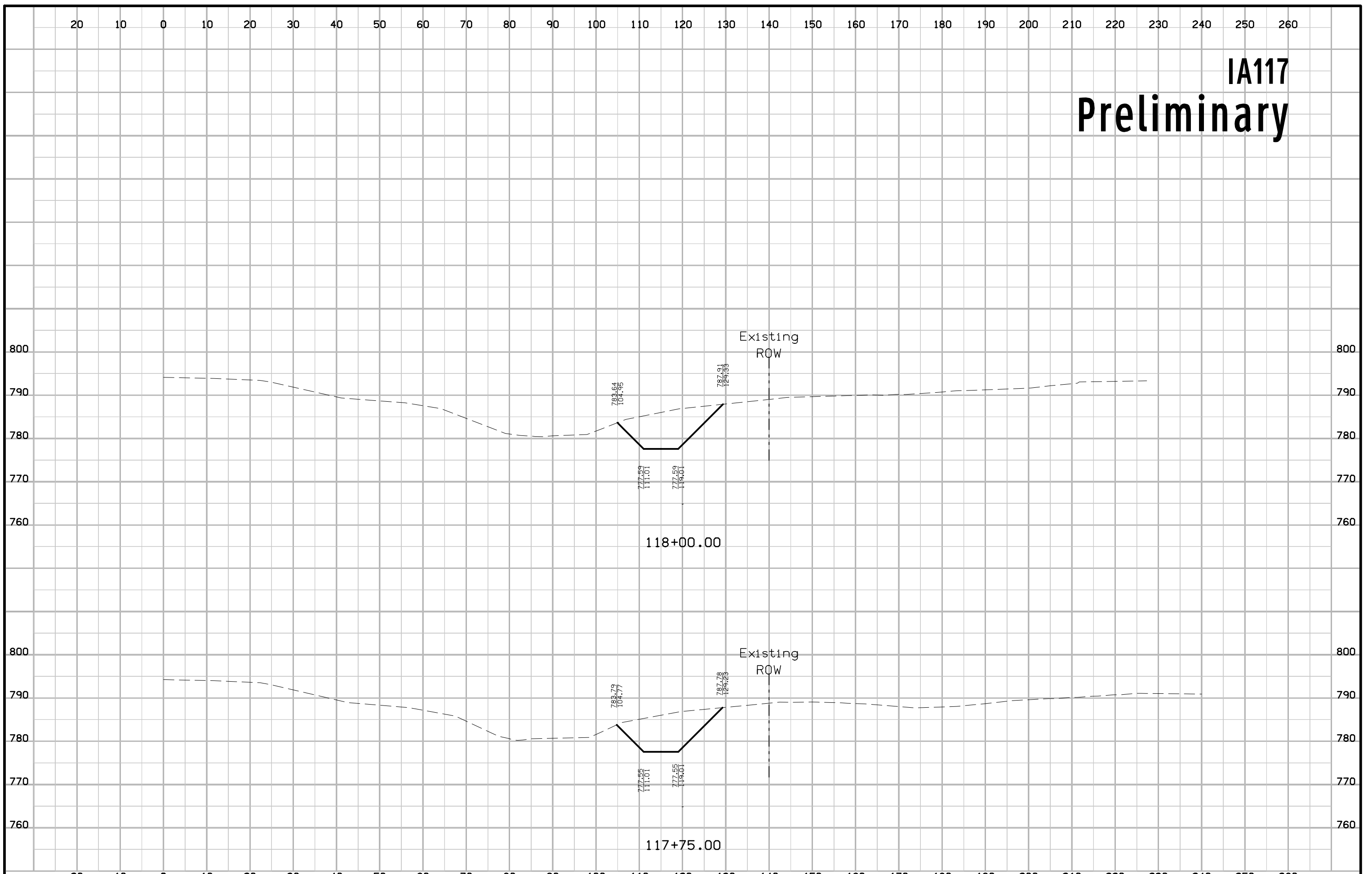
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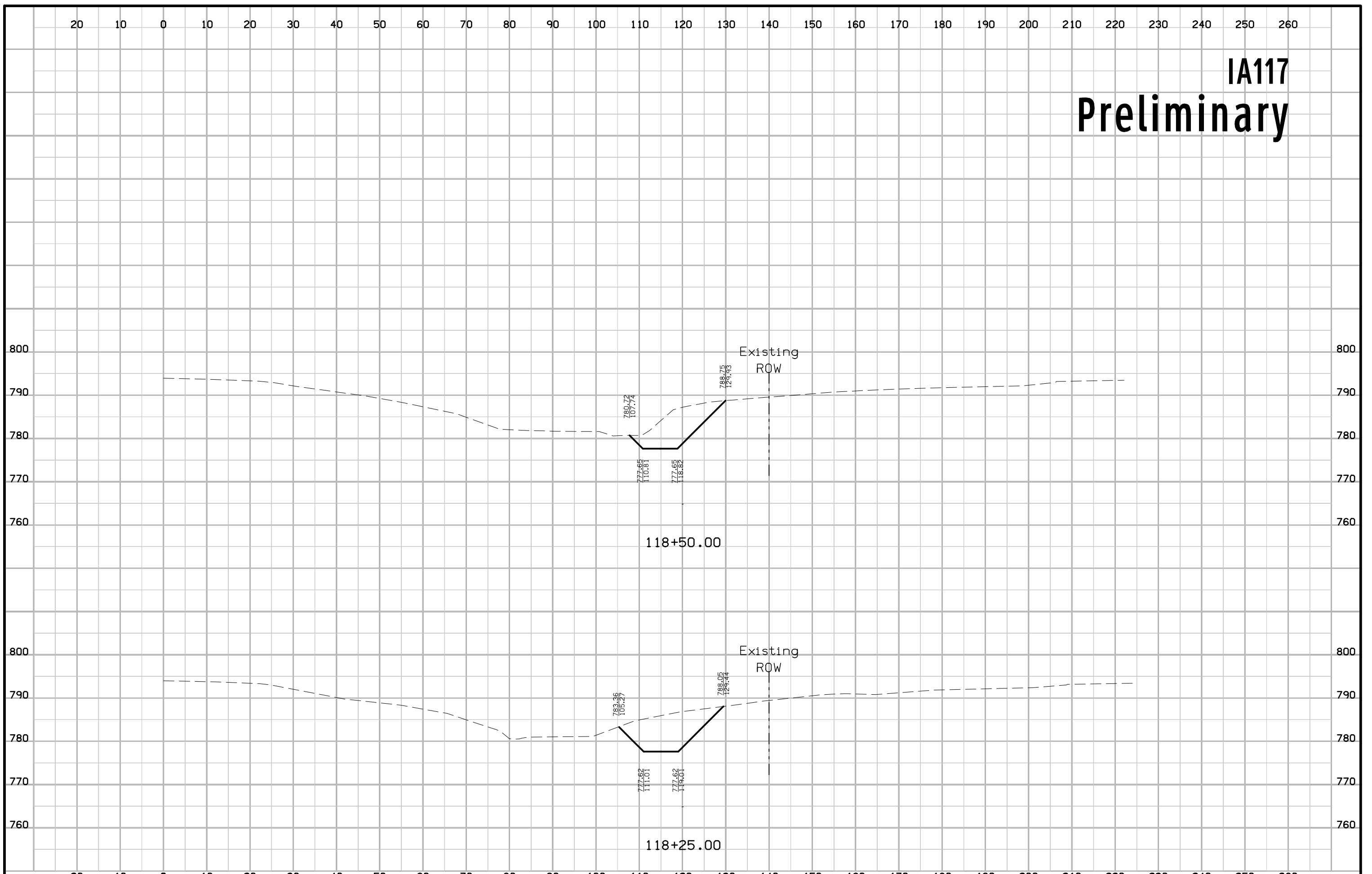


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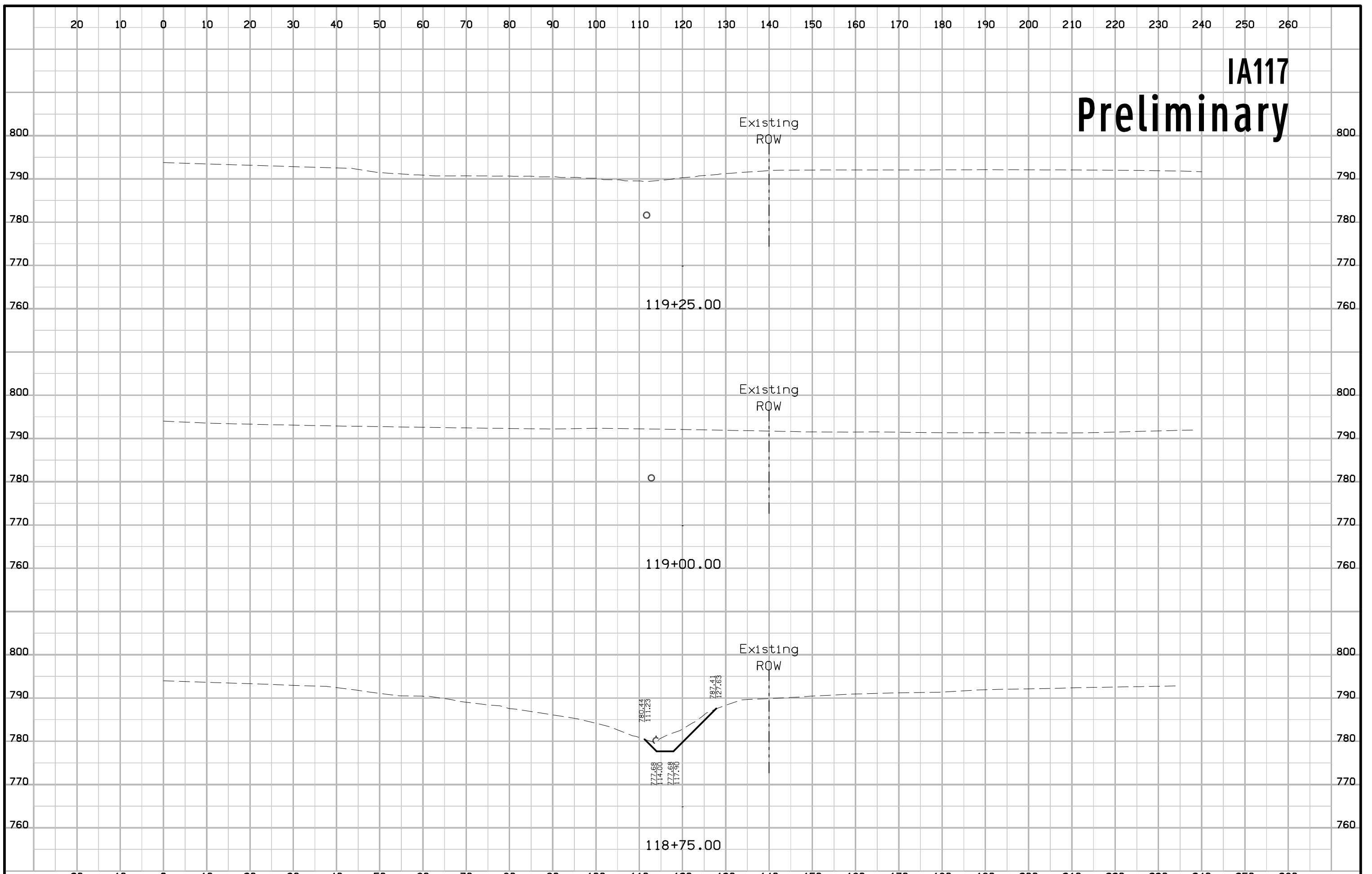




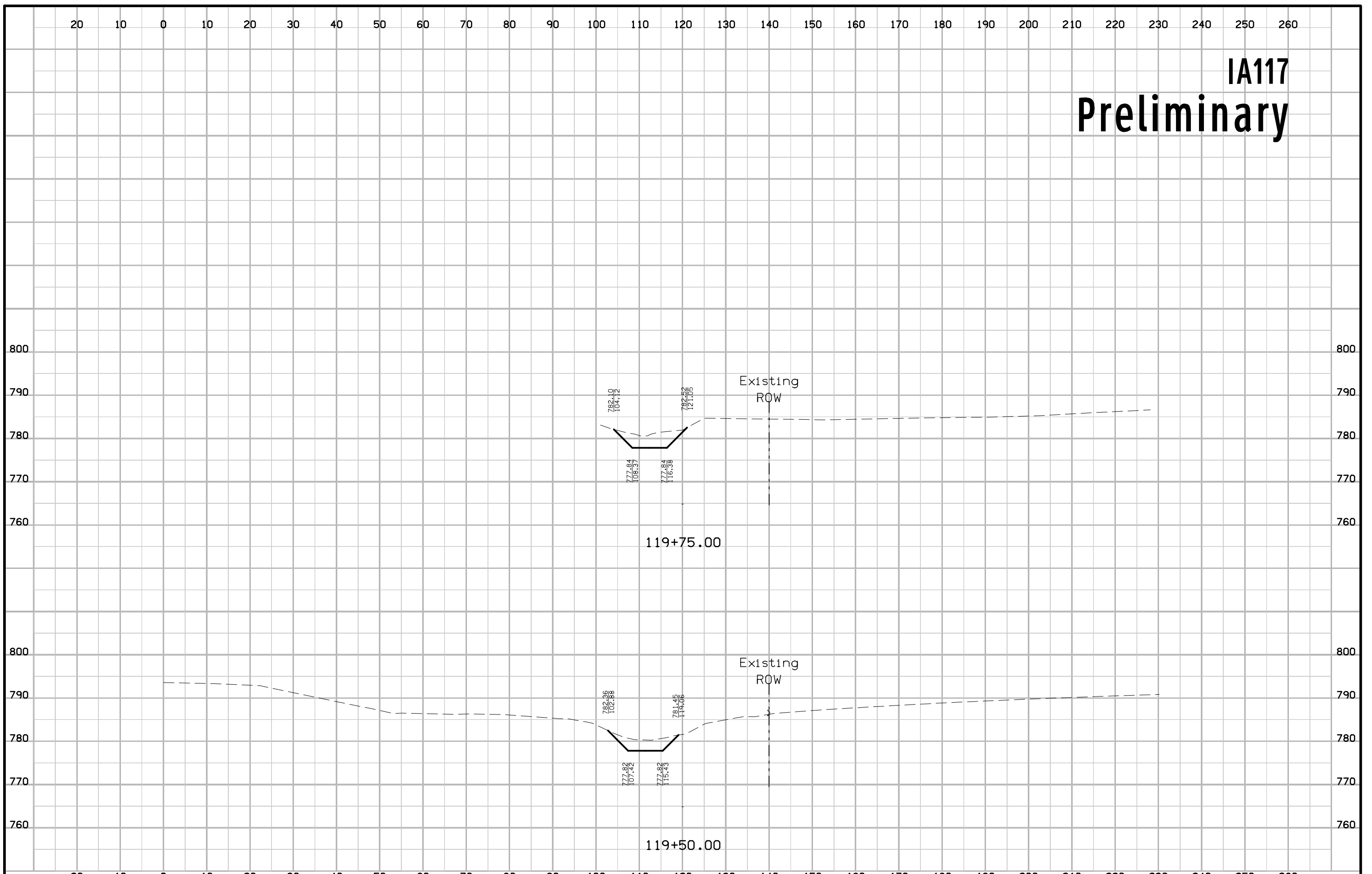
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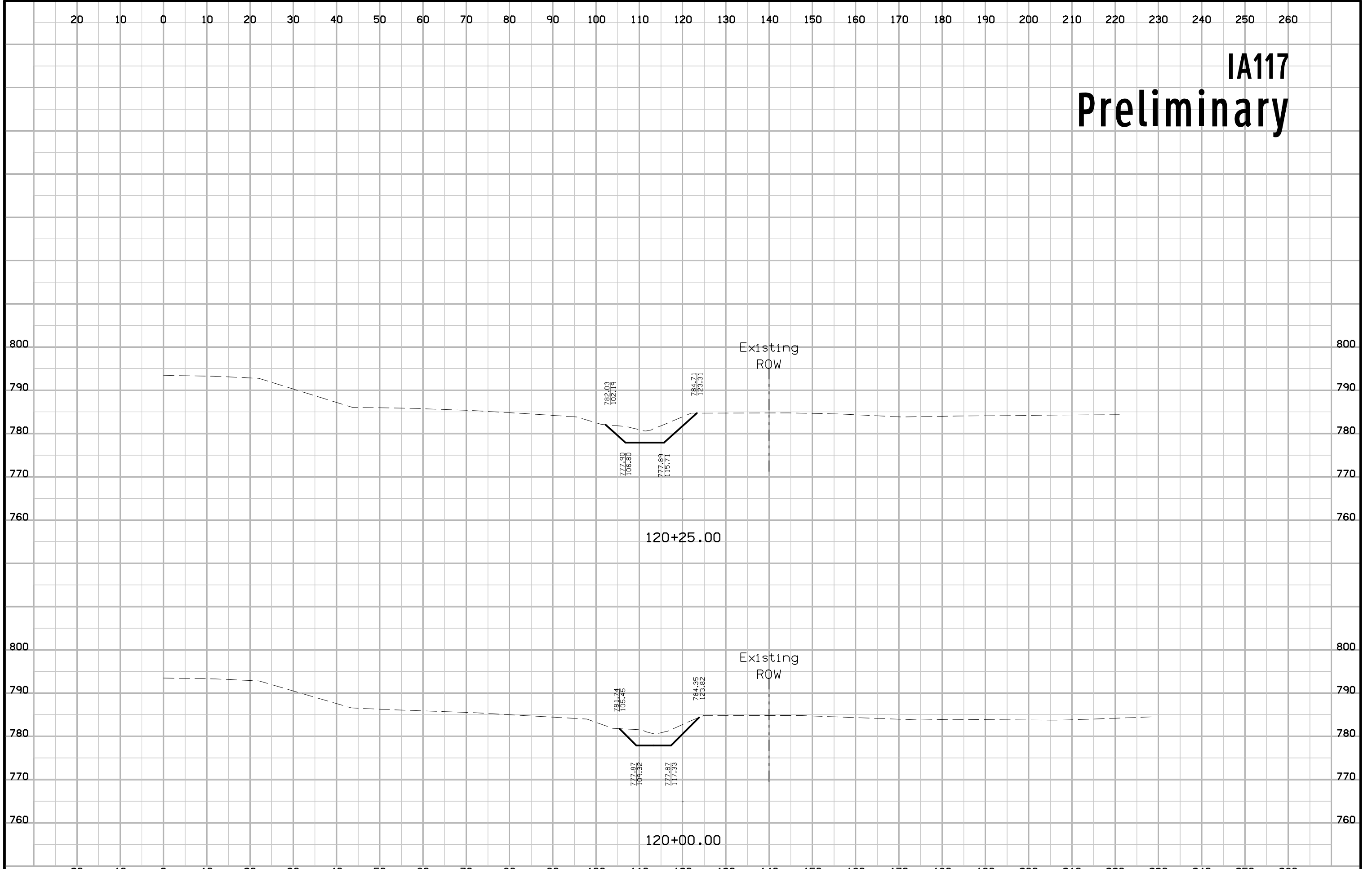
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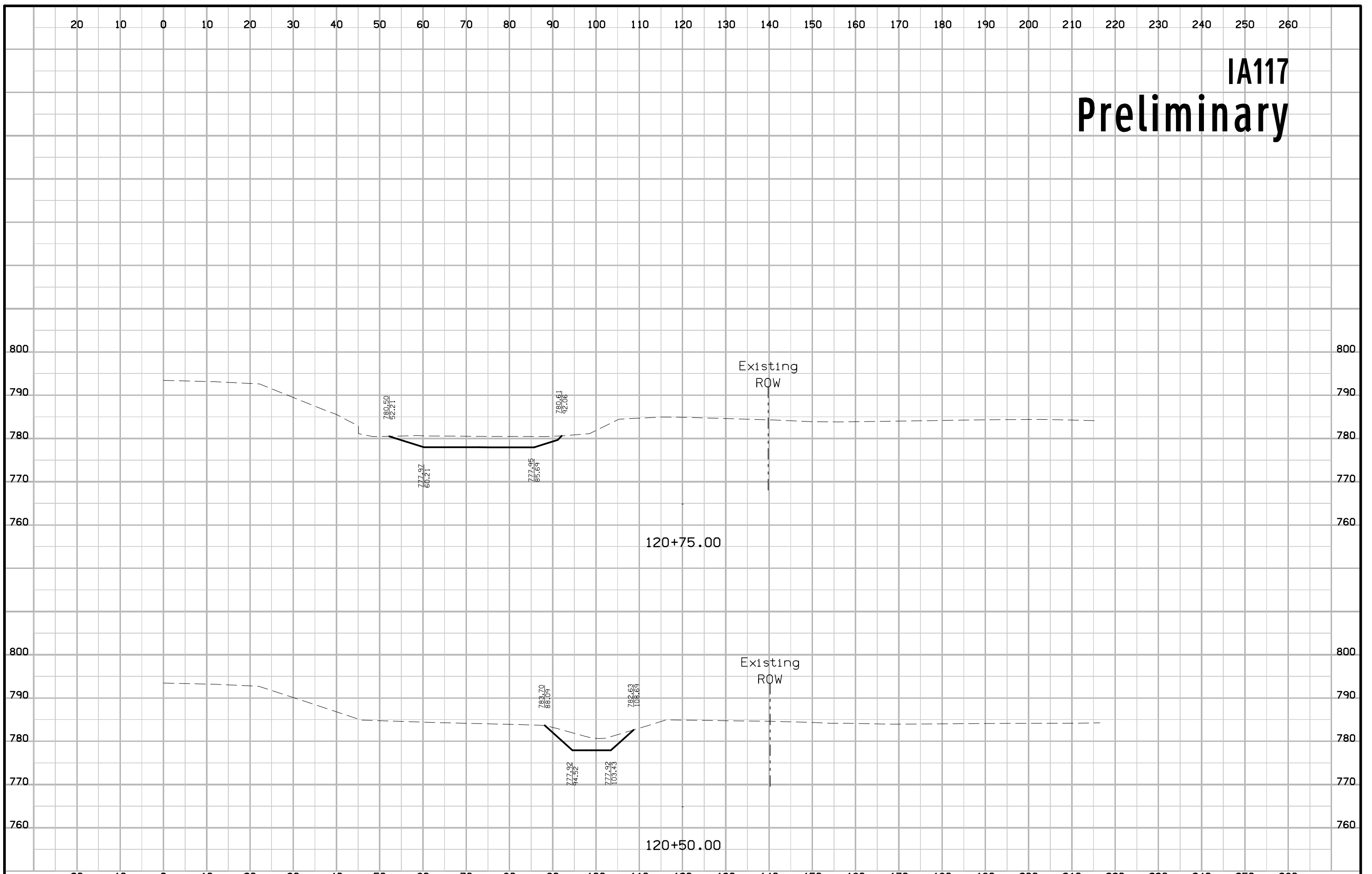
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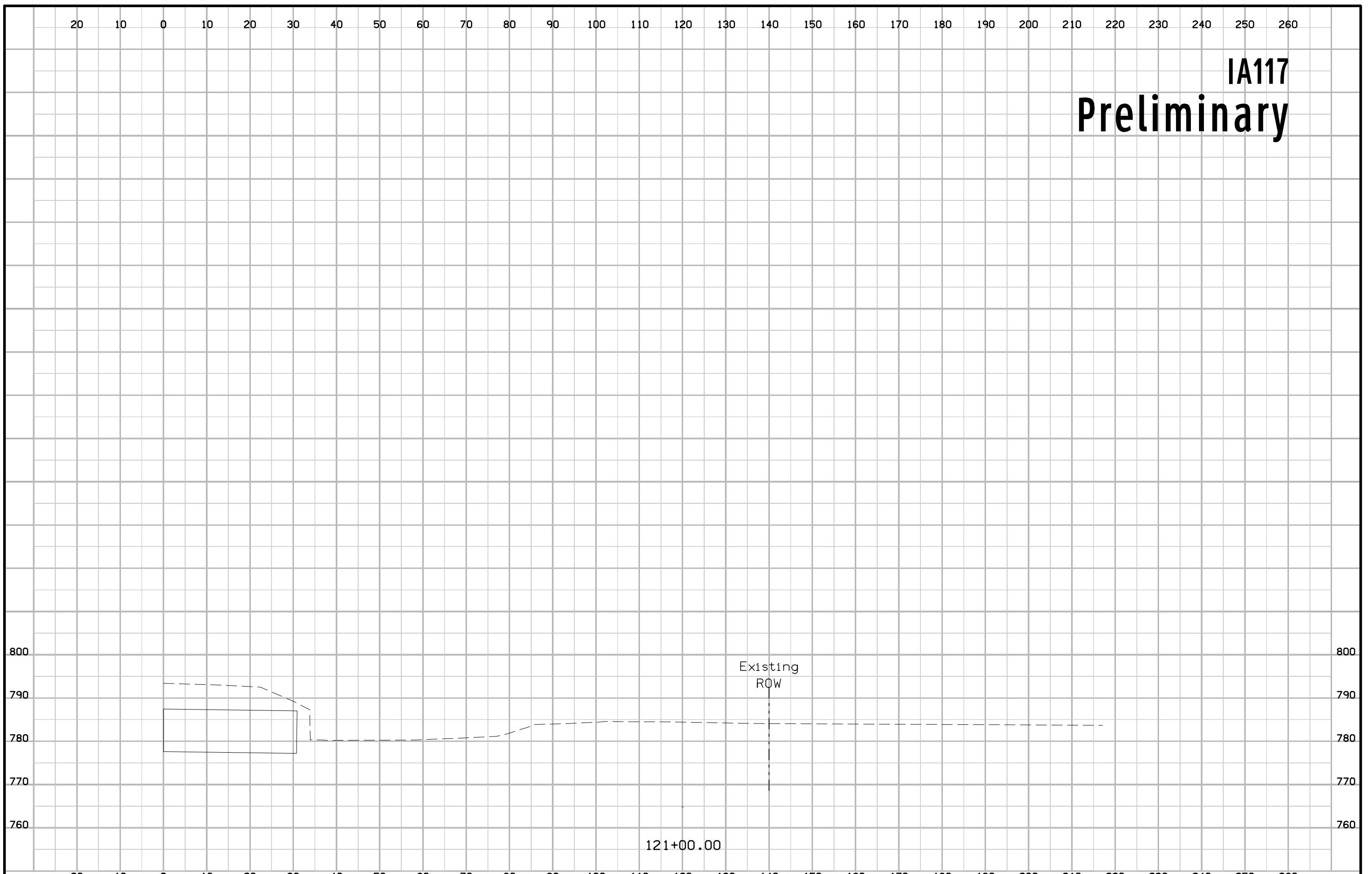
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# IA117 Preliminary



# IA117 Preliminary



121+00.00

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