

INDEX OF SHEETS	
No.	DESCRIPTION
A Sheets	Title Sheets
A.1	Title Sheet
A.2	Location Map Sheet
B Sheets	Typical Cross Sections and Details
B.1 - 3	Typical Cross Sections and Details
C Sheets	Quantities and General Information
C.1	Access Points and Safety Ramp Tabulations
D Sheets	Mainline Plan and Profile Sheets
D.1	Plan & Profile Legend & Symbol Information Sheet
D.2	IA 2
F Sheets	Detour or Temporary Pavement Sheets
F.1	Temp Field Access Plan and Profile
G Sheets	Survey Sheets
G.1	Survey Information
G.2	Reference Ties and Bench Marks
G.3	Horizontal Control Tab. & Super for all Alignments
J Sheets	Traffic Control and Staging Sheets
J.1	Traffic Control Plan
J.2	Detour Route
V Sheets	Bridge and Culvert Situation Plans
V.1 - 3	Bridge and Culvert Situation Plans
W Sheets	Mainline Cross Sections
W.1	Cross Sections Legend & Symbol Information Sheet
W.2 - 28	IA 2
X Sheets	Entrance Cross Sections
X.1 - 22	Temp Field Access Cross Sections
X.23	Entrance Cross Sections



PLANS OF PROPOSED IMPROVEMENT ON THE
PRIMARY ROAD SYSTEM
Fremont COUNTY
 Bridge - Unspecified
 W Nishnabotna River Overflow
 1.8 mi W of Co Rd L68

 SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

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



DESIGN DATA RURAL			
2027	AADT	2100	V.P.D.
2047	AADT	2300	V.P.D.
2047	DHV	230	V.P.H.
TRUCKS		10	%
Total			
Design ESALs		--	

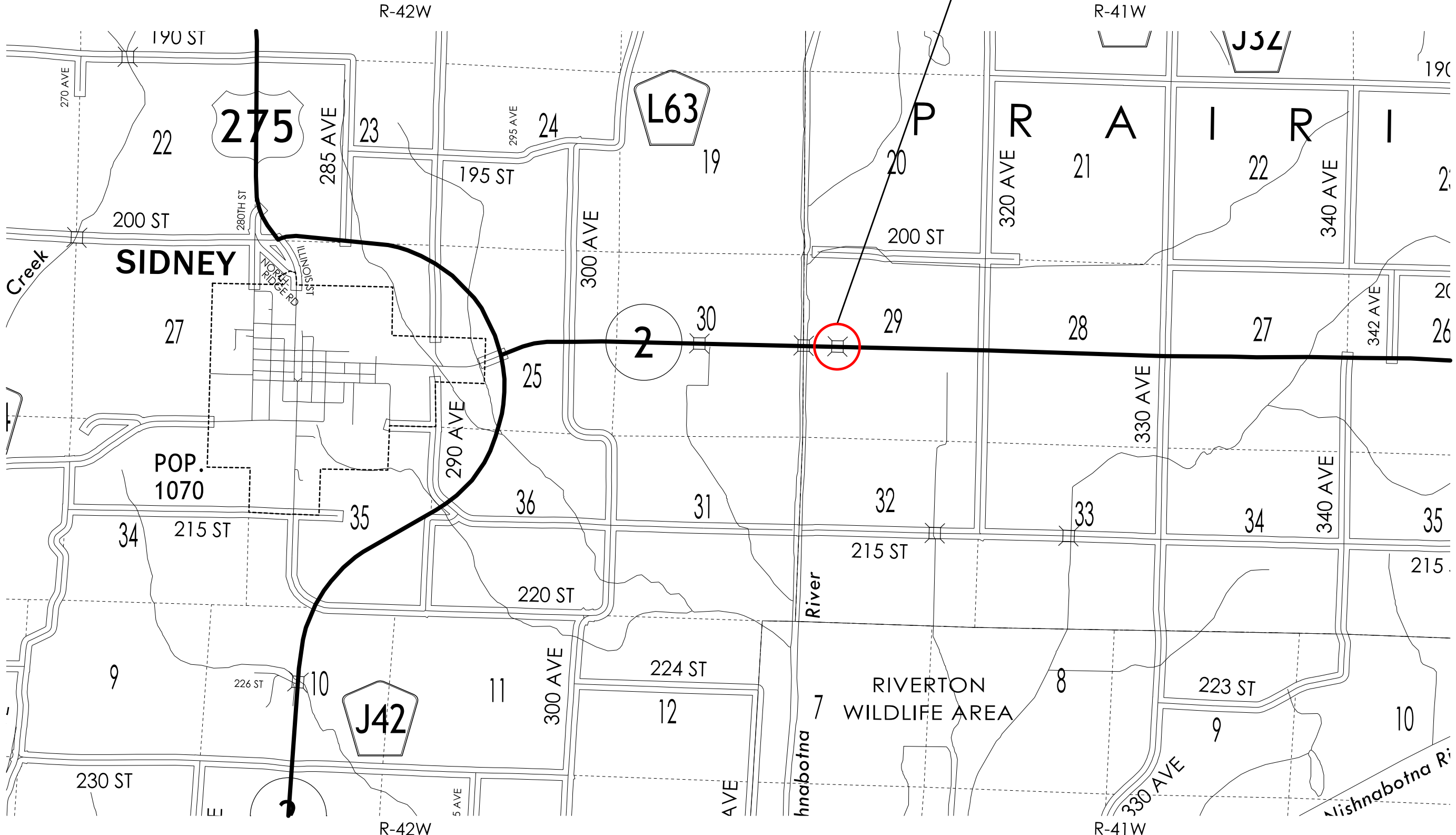
PRELIMINARY PLANS

Subject to change by final design.

D5 PLAN - Date: 02/18/2026

REVISIONS		TOTAL
		--
PROJECT IDENTIFICATION NUMBER		
23-36-002-030		
PROJECT NUMBER		
BRF-002-1(150)--38-36		
R.O.W. PROJECT NUMBER		
STPN-002-1(157)--2J-36		

PROJECT LOCATION
FHWA 025390
REF LOC 18



T-69N

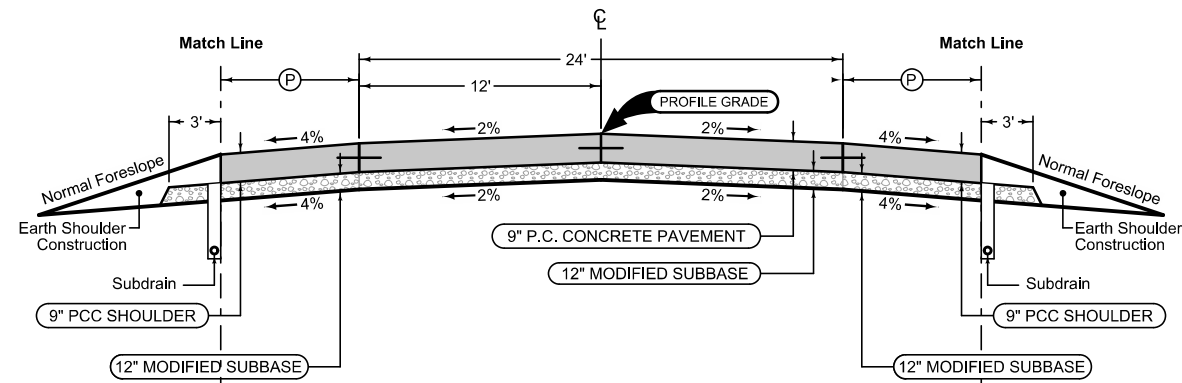


T-69N

Full Depth PCC Shoulder

Shoulder Jointing:
 Longitudinal joint: BT-2, L-2
 Transverse joints: C at 17' spacing

2_P_FullPCC_04-20-21		
STATION TO STATION	(P)	Feet
128+81.00	130+11.51	8
138+83.50	140+96.50	8



Full Depth PCC Shoulder

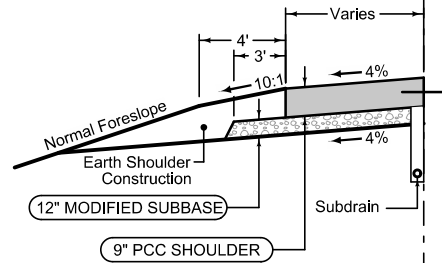
Shoulder Jointing:
 Longitudinal joint: BT-2, L-2
 Transverse joints: C at 17' spacing

2_P_FullPCC_04-20-21		
STATION TO STATION	(P)	Feet
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138+70.98	140+96.50	8

Paved Shoulder at Guardrail

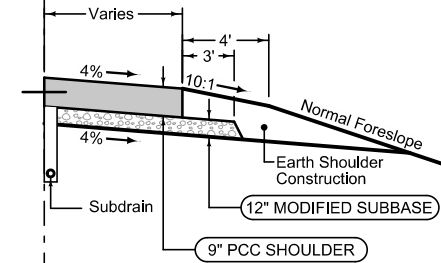
PCC Shoulder Jointing:
 Longitudinal joint: BT-1 or BT-5
 Transverse joints: C at mainline spacing
 HMA Shoulder Jointing:
 Longitudinal joint: B

2_P_Guard_04-21-20		
STATION TO STATION		
130+11.51	130+73.50	
137+96.50	138+83.50	



Mainline Jointing:
 Transverse joints: CD at 17' spacing
 Longitudinal joint: L-2

2P_04-21-20	
STATION TO STATION	
128+81.00	130+73.50
137+96.50	143+39.45



Paved Shoulder at Guardrail

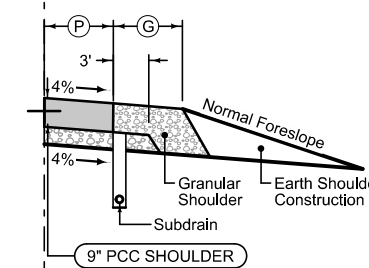
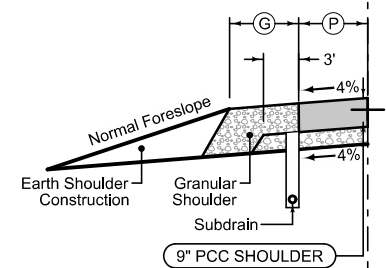
PCC Shoulder Jointing:
 Longitudinal joint: BT-1 or BT-5
 Transverse joints: C at mainline spacing
 HMA Shoulder Jointing:
 Longitudinal joint: B

2_P_Guard_04-21-20		
STATION TO STATION		
129+86.51	130+73.50	
137+96.50	138+70.98	

Full Depth PCC Combination Shoulder

Shoulder Jointing:
 Longitudinal joint: BT-2, or L-2
 Transverse joints: C at 17' spacing

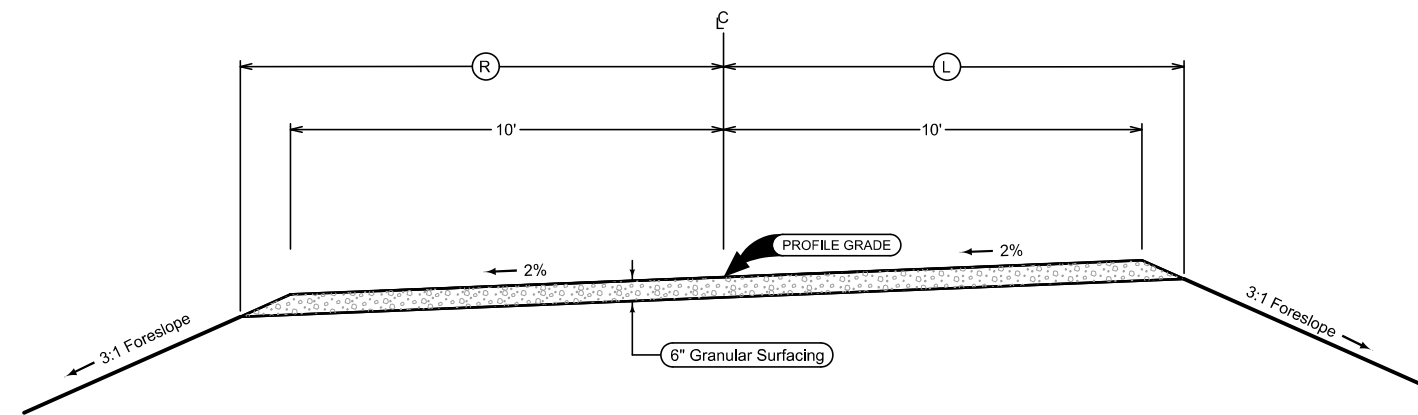
2_C_FullPCC_04-15-25			
STATION TO STATION	(P)	(G)	Feet
140+96.50	143+39.45	4	4



Full Depth PCC Combination Shoulder

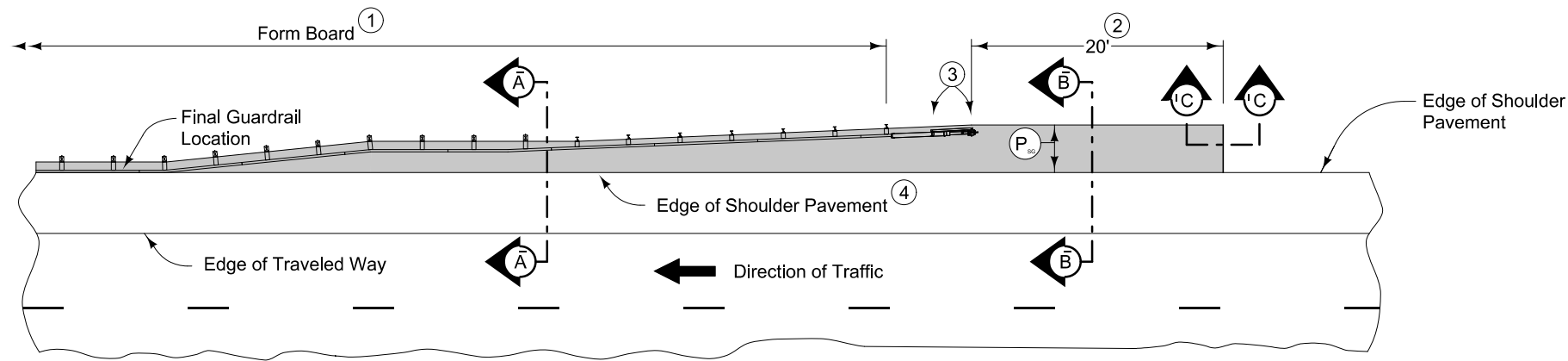
Shoulder Jointing:
 Longitudinal joint: BT-2, or L-2
 Transverse joints: C at 17' spacing

2_C_FullPCC_04-15-25			
STATION TO STATION	(P)	(G)	Feet
140+96.50	143+39.45	4	4



LOCATION	DIMENSIONS	
	(L) Feet	(R) Feet
STATION TO STATION 1300+34.85 1301+96.60	11.6	11.4

**Temp Field Access
GRADING**



PLAN VIEW

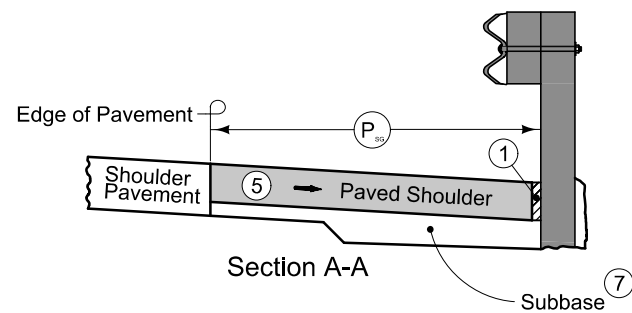
9" PCC Paved Shoulder at guardrail should use the following jointing layout.

Match mainline pavement joint spacing. When mainline pavement is 8" or greater in thickness, place additional transverse 'C' joints in shoulder at mid-panel of the mainline pavement. Place longitudinal 'C' joint at P/2 from edge of mainline pavement when P is greater than 10' wide. Terminate longitudinal joint at transverse joint less than 10' in length.

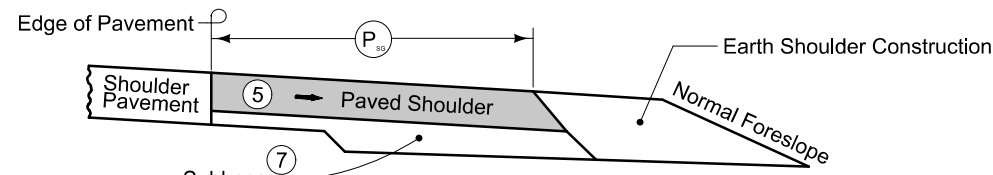
Compaction of HMA is required to face of guardrail post. Hand compaction will be allowed under guardrail. Removal and reinstallation of guardrail will be allowed with no additional payment.

Refer to Tabulation 112-9 for shoulder quantities.

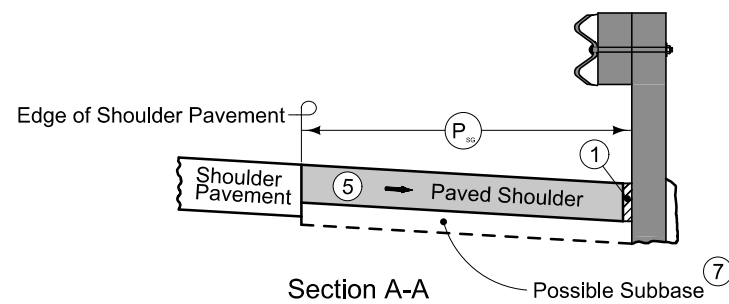
- ① PCC option only: When guardrail posts are installed prior to construction of PCC paved shoulder, fasten form board to the face of guardrail posts for the length shown.
- ② Continue paved shoulder 20 feet beyond the center of the first post.
- ③ Shoulder may be notched for first 2 posts or post sleeves may be installed through pavement. Do not drive posts through pavement.
- ④ 'KT' (per PV-101) joint for PCC shoulder. 'B' (per PV-101) joint for HMA shoulder.
- ⑤ Match shoulder slope.
- ⑥ The Contractor has the option to pave the paved shoulder at guardrail and the full width paved shoulder as one operation.
- ⑦ Refer to other details in the plan.



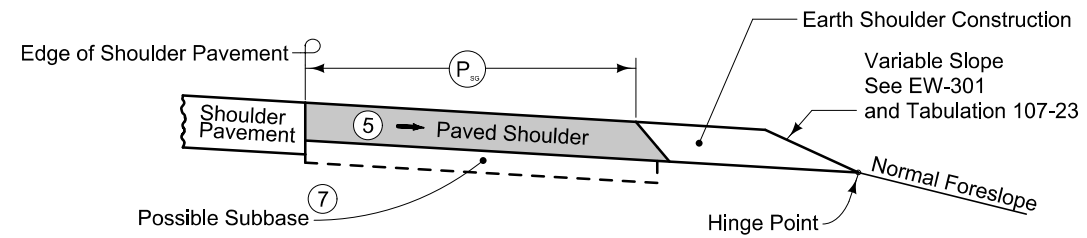
NEW CONSTRUCTION



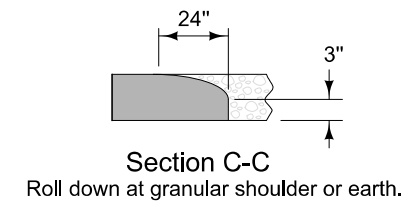
Section B-B



EXISTING SHOULDER



Section B-B



PAVED SHOULDER AT GUARDRAIL (ADJACENT TO FULL WIDTH PAVED SHOULDER)

ACCESS POINTS AND SAFETY RAMPS

Refer to Cross-Sections

Length of Unclassified Pipe calculated is based on using Corrugated Metal Pipe.

- (1) Refer to MI-210.
- (2) Refer to EW-501.
- (3) Refer to EW-501 or EW-502.

*Predetermined for access point not constructed with this project.

Line No.	Station	Side	Access Type	Descriptor	Case	Curb Type	Curb Length (1) (LF)	Width (FT)	PR (1) (2) (FT)	SR (2) (FT)	Pipe Culvert (H) (3) (FT)	Pipe Culvert Size (3) (IN)	Culvert Length (3) (LF)	Pipe Culvert Lt. (3) (LF)	Pipe Culvert Rt. (3) (LF)	Culvert Aprons (3) (No.)	Driveway Surface Type	Driveway Surface Area (SY)	Driveway Surfacing Material (TON)	Remarks	
1.0	129+25.00	Right	D					30.0		30.0											
2.0	129+70.00	Left	D					30.0		30.0											
3.0	146+69.39	Left	D					16.0		30.0											Temp Field Access

SURVEY SYMBOLS

- Interstate Highway Symbol
- U.S. Highway Symbol
- Iowa Highway Symbol
- County Road Highway Symbol
- Evergreen Tree
- Deciduous Tree
- Fruit Tree
- Shrub (Bushes)
- Timber
- Hedge
- Stump
- Swamp
- Rock Outcrop
- Broken Concrete
- Revetment (Rip Rap)
- Cemetery
- Grave
- Cave
- Sink Hole
- Board Fence
- Chain Link or Security Fence
- Wire Fence
- Terrace
- Earth Dam or Dike (Existing)
- Tile Outlet
- Edge of Water
- Existing Drainage
- Right of Way Rail or Lot Corner
- Concrete Monument
- Well
- Windmill
- Beehive Intake
- Existing Intake
- Existing Utility Access (Manhole)
- Fire Hydrant
- Water Hydrant (Rural)
- Septic Tank
- Cistern
- L.P. Gas Tank (No Footing)
- Underground Storage Tank
- Latrine
- Satellite TV Dish
- Water Hook Up
- Radio Tower
- Tower Anchor
- Guardrail (Beam or Cable)
- Guard Post (one or two)
- Guard Post (over two)
- Filler Pipe
- Gas Valve
- Water Valve
- Speed Limit Sign
- Mile Marker Post
- Sign
- Traffic Signal Control Box
- Rail Road Signal Control Box
- Telephone Switch Box
- Electric Box

UTILITY LEGEND

- Windstream Communications Fiber Distribution
Mark Hussman, Construction Manager - CLEC
9850 M ST
Omaha, IA 68127
Mark.Hussman@windstream.com
ph: (402) 827-6355 cell: (402) 677-5874
- Iowa Communications Network Fiber Transmission
Michael Dalen, OSP Engineer
400 East 14th Street
Des Moines, IA 50319
mike.dalen@iowa.gov
ph: (515) 725-4707 cell: (515) 499-1642
- MidAmerican Energy Company Electric Distribution
Scott Behrens, Lead, Electric Distribution Engineering SW Iowa
3003 S. 11th St
Council Bluffs, IA 51501
scott.behrens@midamerican.com
ph: (712) 366-5636 cell: (402) 657-1059

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.	Transparency
Pink, Dark	(13)		Temporary Pavement Shading 50%
Yellow	(4)		Proposed Pavement Shading 50%
Orange	(6)		Proposed Granular Shading 50%
Orange	(70)		Proposed Shoulder Granular Shading 50%
Yellow	(68)		Proposed Shoulder Paved Full Depth Shading 50%
Yellow	(132)		Proposed Shoulder Paved Partial Depth Shading 50%
Brown, Light	(236)		Grading Shading 50%
Orange, Light	(134)		Proposed Granular Entrance Shading 50%
Yellow	(220)		Proposed Paved Entrance Shading 50%
Tan	(8)		Proposed Sidewalk Shading 50%
Blue, Light	(230)		Proposed Sidewalk Landing Shading 50%
Pink	(11)		Proposed Sidewalk Ramp Shading 50%
Red	(3)		Proposed Structure Shading 50%
Red	(3)		Delineates Restricted Areas 0%

PROFILE VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK		Design Color No.	
Green	(10)		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

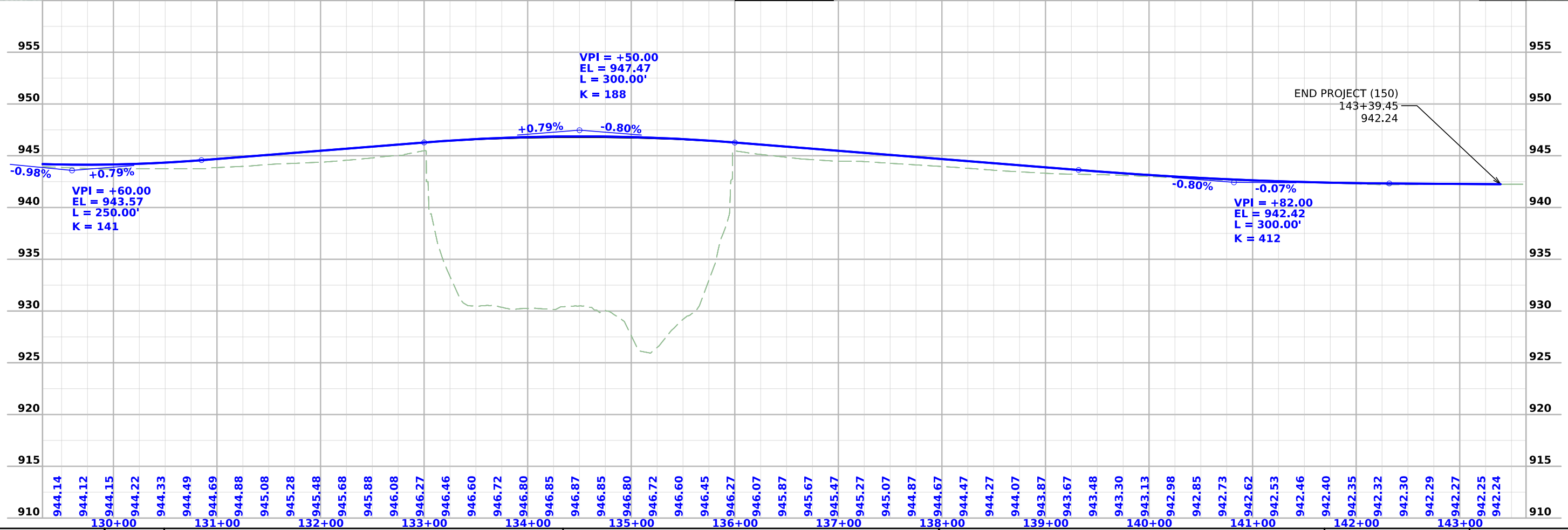
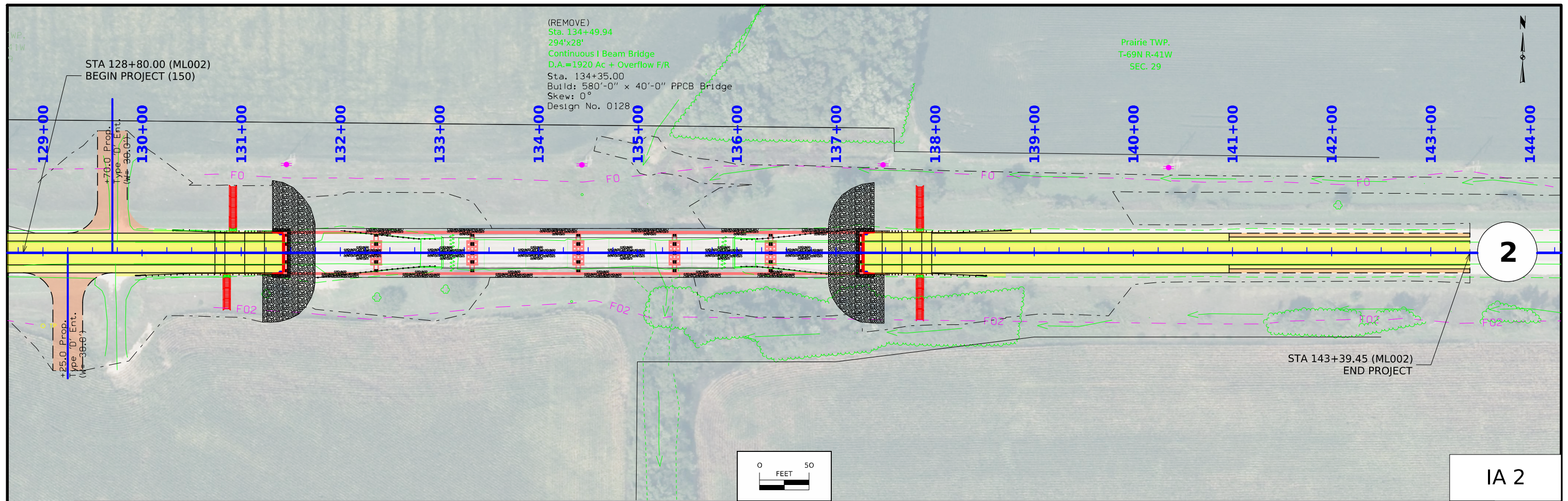
- Reference Point
- Station
- Survey Line
- Section Corner
- Ground Line Intercept
- Saw Cut
- Guardrail
- Trench Drain
- HighTension Cable Guardrail
- Sheet Pile
- Pavement Removal
- Clearing & Grubbing Area

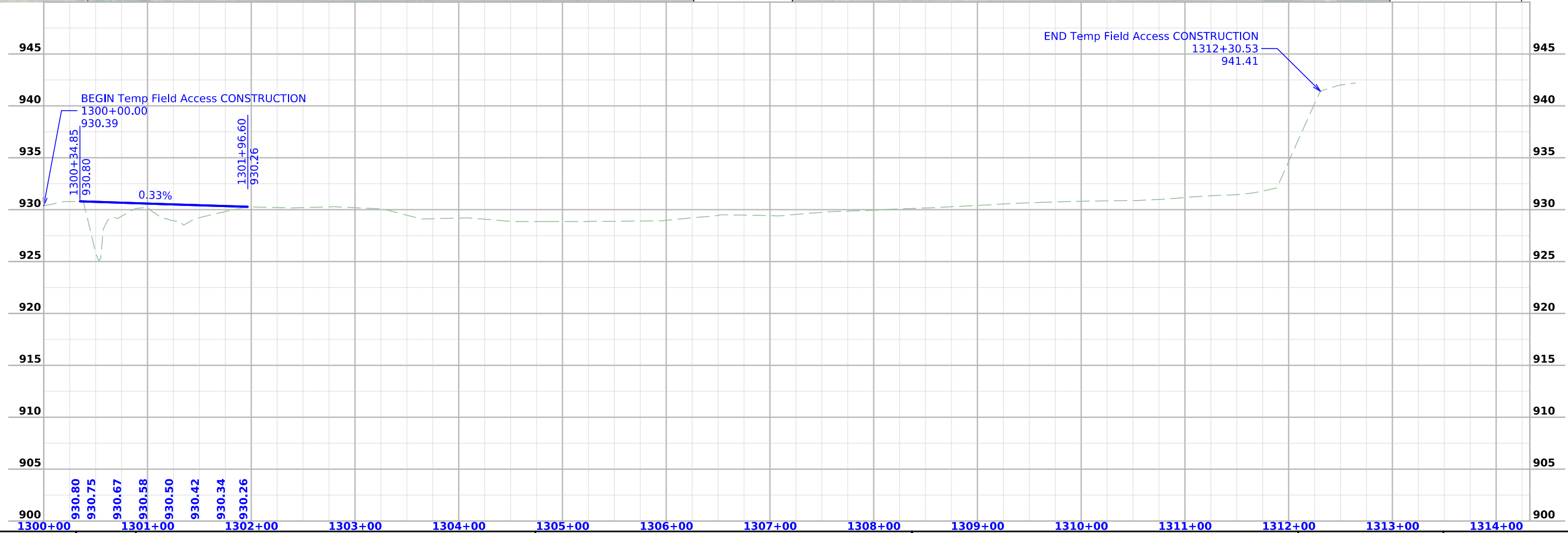
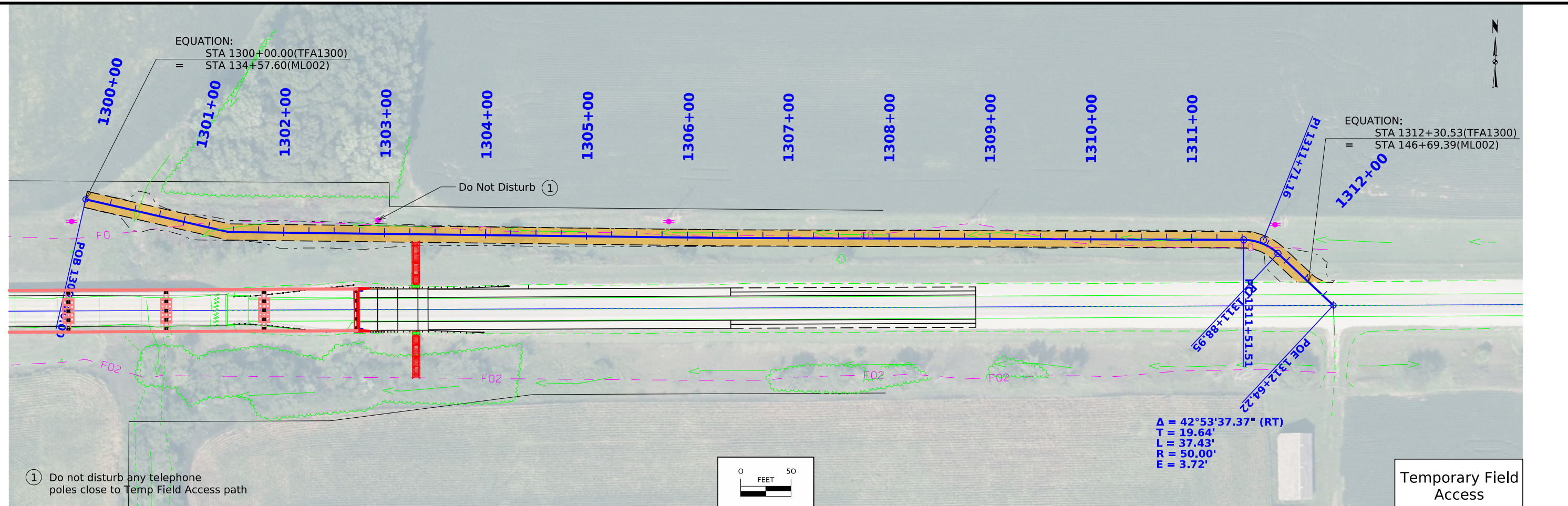
RIGHT-OF-WAY LEGEND

- Proposed Right-of-Way Symbol
- Proposed Right-of-Way Line
- Existing Right of Way
- Existing and Proposed Right-of-Way
- Easement and Existing Right-of-Way
- Easement (Temporary) Symbol
- Easement (Temporary) Line
- Easement
- C/A Access Control
- Property Line Symbol
- Property Line

PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

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





Survey Information

SURVEY INDEX

County: Fremont

PIN: 23-36-002-030

Project Number: BRF-002-1(150)--38-36

Location: 1.8 miles west of secondary road L-68

Type of Work: Overflow Bridge Replacement

Project Directory: 3600203023

Survey Personnel

Paul Harry – Survey Party Chief

Bob Fredrickson – Assistant Survey Party Chief

Date(s) of Survey

Begin Date 06/12/2025

End Date 07/03/2025

General Information

This survey is for Hwy 2 overflow bridge replacement east of the West Nishnabotna river. This project is a Full Field DTM survey.

Utility Information

For logging data and other utility details see Utility Survey and Ownership Report in the Utility folder of the PrelimSurvey project directory.

Project Control

Coordinates were determined for primary project control points by conducting concurrent six-hour static observations. Post processing is constrained to nearby Iowa Real Time Network reference stations. For additional details of the control survey, contact the Preliminary Survey department.

PROJECT DATUM: NAD83(2011) for EPOCH 2010.00 (IaRTN 2019 ADJUSTMENT)

COORDINATE SYSTEM: IOWA REGIONAL COORDINATE SYSTEM ZONE 06

(U.S. SURVEY FOOT)

VERTICAL DATUM: NAVD88

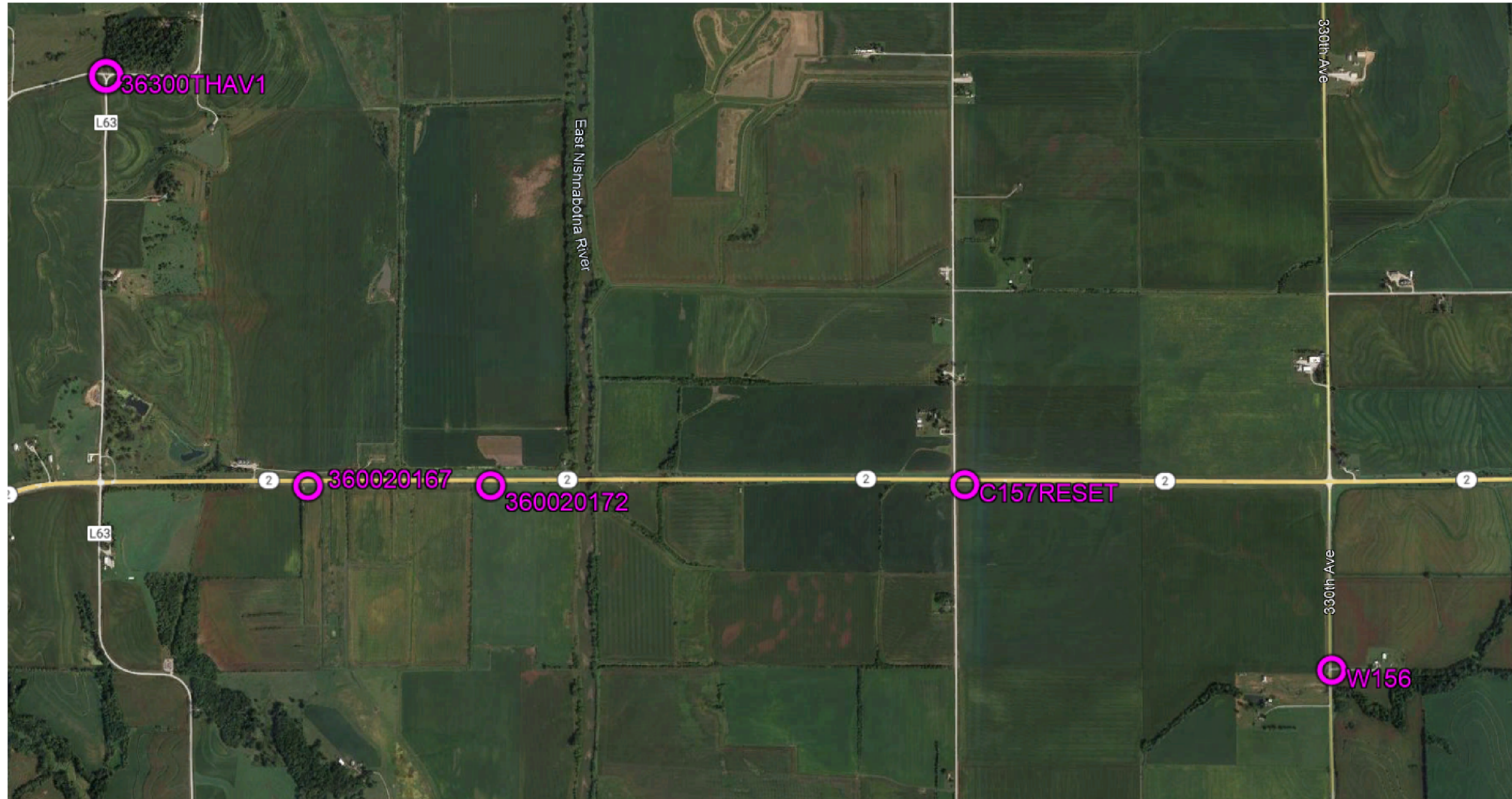
GEOID MODEL: 2018u2

Alignment Information

The horizontal alignment for Hwy 2 this survey was provided by the District 4 ROW Office.

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) for EPOCH 2010.00 (IaRTN 2019 Adjustment) - Iowa RCS Zone 06 (U.S. Survey Foot)

VERT. DATUM: NAVD88 - Geoid Model: 2018u2

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

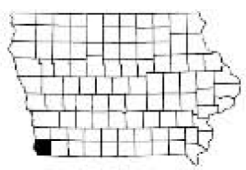
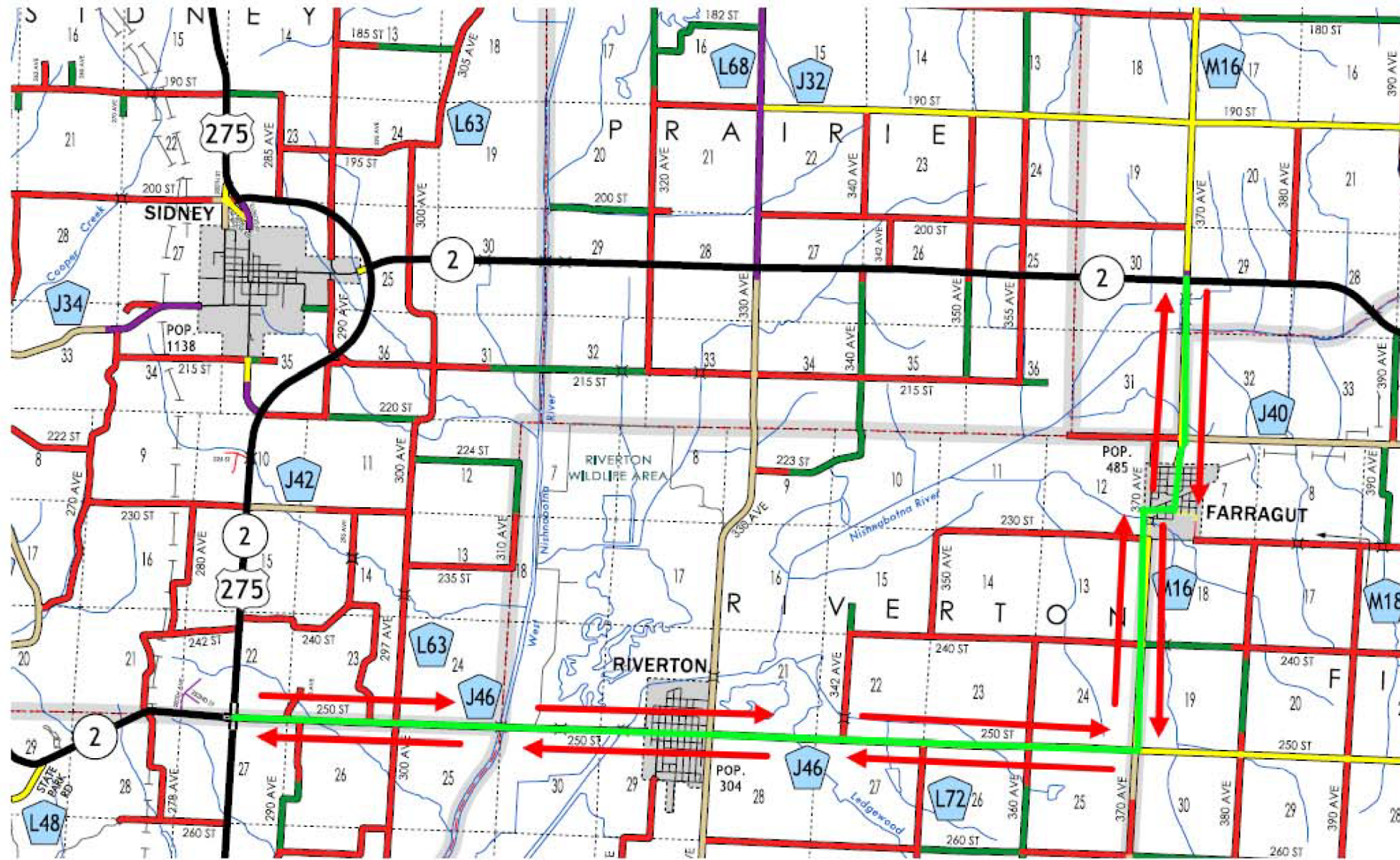
HORIZONTAL AND VERTICAL PROJECT CONTROL COORDINATE LISTING
 HORIZ. DATUM: NAD83(2011) for EPOCH 2010.00 (IaRTN 2019 Adjustment)
 Ia. Regional Coordinate System Zone 06 (U.S. Survey Foot)
 VERT. DATUM: NAVD88
 Geoid Model: 2018u2

Point Name	Northing	Easting	Elevation	Feature Definition-Description
36300THAV1	6788029.61	16531764.67	1081.29	CP SET FENO MON IN CENTER ISLAND AT INTERSECTION OF 300TH AVE AND 195TH ST
360020167	6782278.32	16534635.17	930.69	CP SET FENO MON 0.9 MILES EAST OF HWY 275 ALONG HWY 2 NEAR FIELD INT
360020172	6782275.30	16537199.23	931.52	CP SET FENO MON 1.4MILES EAST OF HWY 275 ALONG HWY 2 NEAR FIELD INT
C157RESET	6782309.95	16543865.00	942.62	CP FND NGS 3RD ORDER VERTICAL MARK AS DESCRIBED
W156	6779713.72	16549056.54	964.08	CP FND NGS 2ND ORDER CLASS 0 VERTICAL MARK AS DESCRIBED

108-23A
08-01-08

TRAFFIC CONTROL PLAN

Traffic on IA 2 will be maintained at all times via an off-site detour.
Refer to sheet J.2 for detour route.



Fremont County
 West Nishnabotna River 1.7 mi E of E Jct US 275
 BRF-002-1(143)--38-36
 PIN: 21-36-002-010

DETOUR



CROSS SECTION VIEW COLOR LEGEND

Design Color No.	Feature	Design Color No.	Feature
Aggregate			
(64)	Choke Stone	(8)	Behind Curb Cut
(42)	Engineering Fabric	(6)	Granular
(8)	Flooded Backfill	(13)	Granular Back Fill
(92)	Macadam Stone	(48)	Rock Undercut
(20)	Modified	(8)	Shoulder Earth Fill
(12)	Plowing Shaping	(2)	Side Slopes
(14)	Porous Backfill	(226)	Side Slopes Dressing
(8)	Revetment Class A	Substrata	
(6)	Revetment Class B	(128)	Boulder
(62)	Revetment Class C	(209)	Boulder Removed
(188)	Revetment Class D	(48)	Broken Weathered
(28)	Revetment Class E	(210)	Broken Weathered Removed
(12)	Shoulder Special Backfill	(3)	Core Out
(12)	Special Backfill	(115)	Core Out Remove Only
(20)	Subbase	(195)	Core Out Remove and Replace
(20)	Subbase Lower	(203)	Existing Pavement
(20)	Subbase Upper	(184)	Existing Pavement Remove Only
(118)	Subgrade Treatment	(200)	Existing Pavement Remove and Replace
Asphalt			
(207)	HMA Base Course	(6)	Loam
(207)	HMA Interim Course	(211)	Loam Removed
(207)	HMA Surface Course	(80)	Rock
Bridge			
(0)	Bridge	(212)	Rock Removed
Concrete			
(0)	Barrier Concrete	(4)	Select Sand
(0)	Barrier Concrete Footing	(214)	Select Sand Removed
(0)	Curb Gutter	(3)	Shale
(48)	Flowable Mortar	(215)	Shale Removed
(0)	Median Concrete	(10)	Topsoil
(0)	PCC Pavement	(2)	Topsoil Remove Only
(0)	Sidewalk	(4)	Topsoil Remove and Replace
Unsuitable / Waste			
(0)	Existing Pavement	(3)	Unsuitable Type A
Shoulder			
(209)	Shoulder HMA	(216)	Unsuitable Type A Removed
(0)	Shoulder PCC	(13)	Unsuitable Type B
(6)	Shoulder Granular	(217)	Unsuitable Type B Removed
Structural			
(112)	Noise Wall	(11)	Unsuitable Type C
(112)	Noise Wall Footing	(218)	Unsuitable Type C Removed
(112)	Retaining Wall Back	(3)	Waste
(112)	Retaining Wall Back Excavate	(219)	Waste Removed
(112)	Retaining Wall Face		
(112)	Retaining Wall Front Excavate		
(112)	Retaining Wall Front Footing		
(112)	Retaining Wall MSE Gutter		
(112)	Retaining Wall Reinforced Earth		

NOTES:

Text

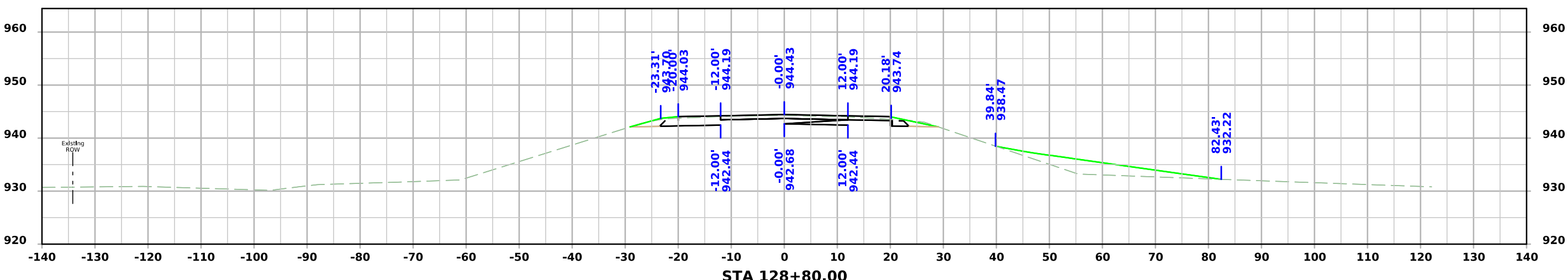
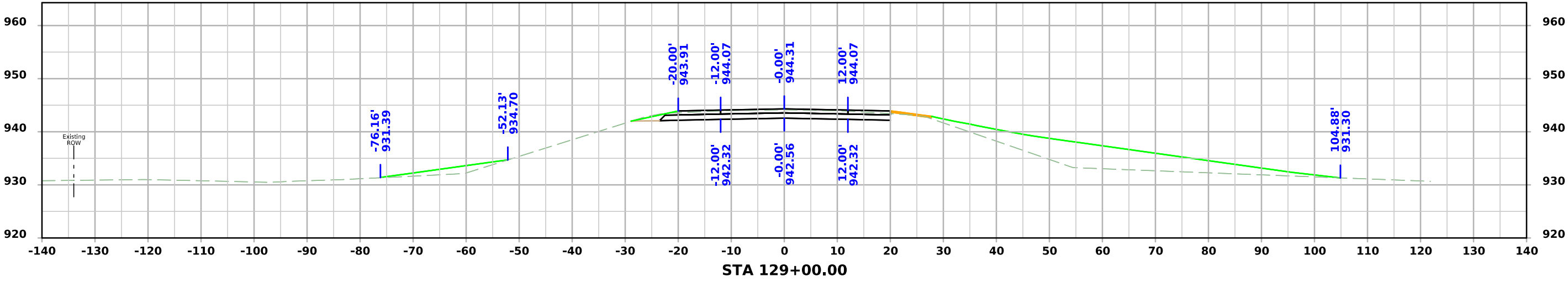
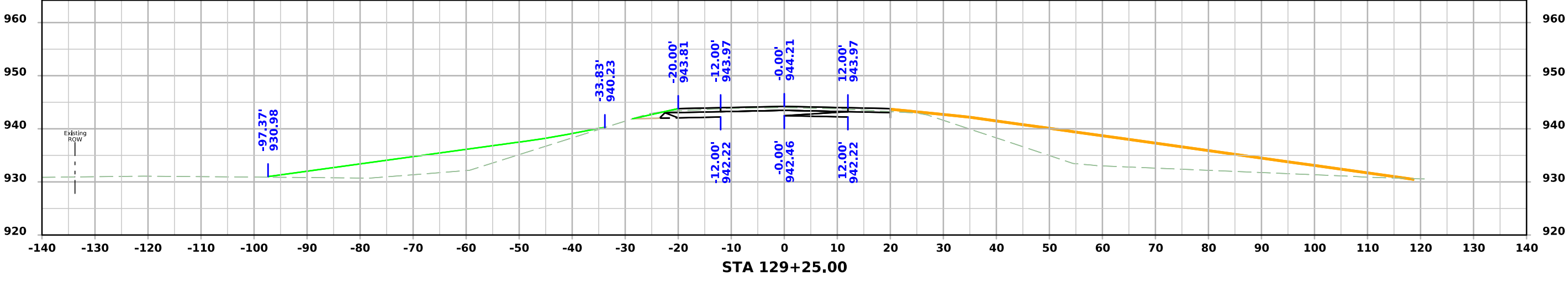
NOTES:

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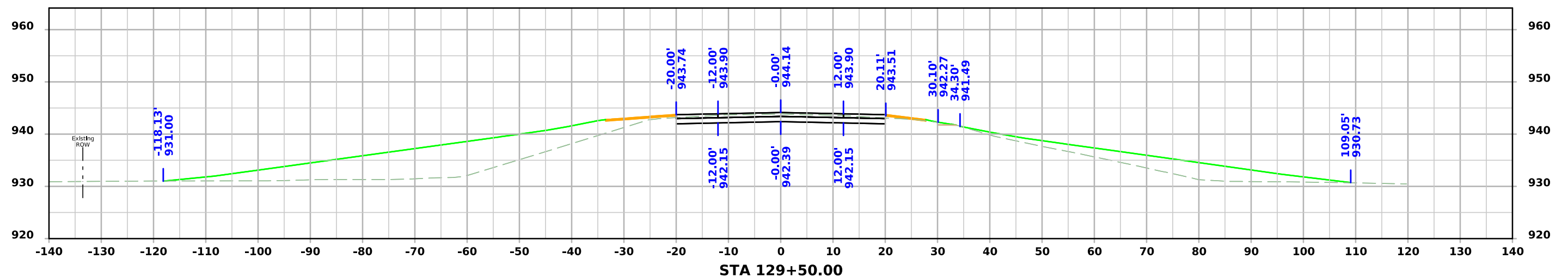
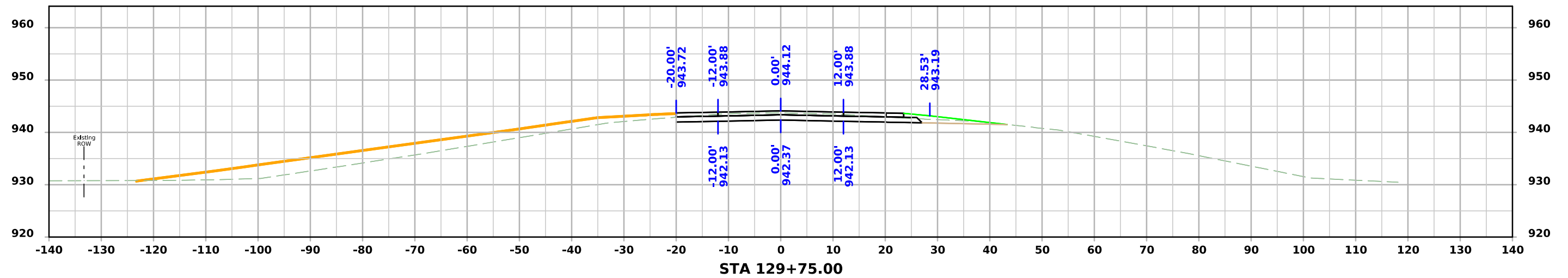
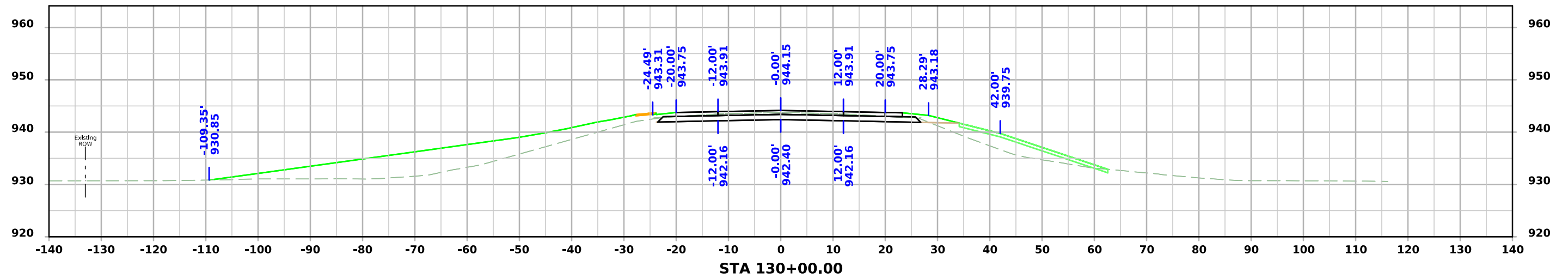
CROSS SECTIONS LEGEND AND INFORMATION SHEET

(COVERS SHEET SERIES W, X, Y, & Z)

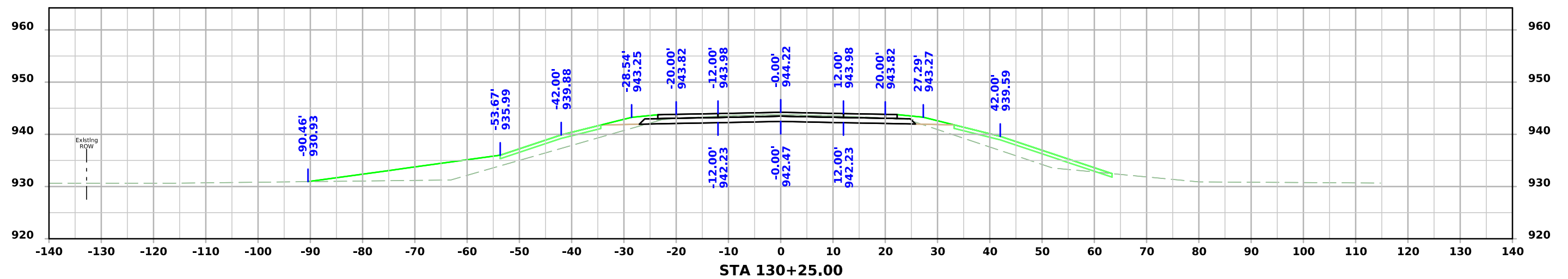
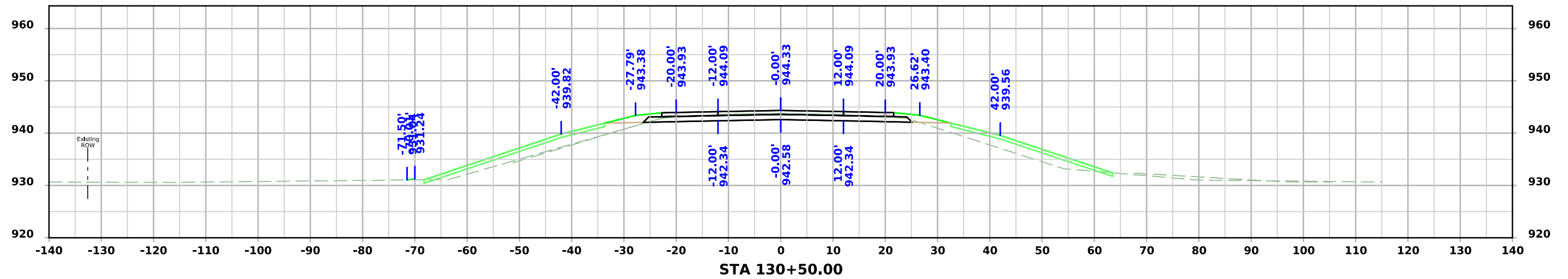
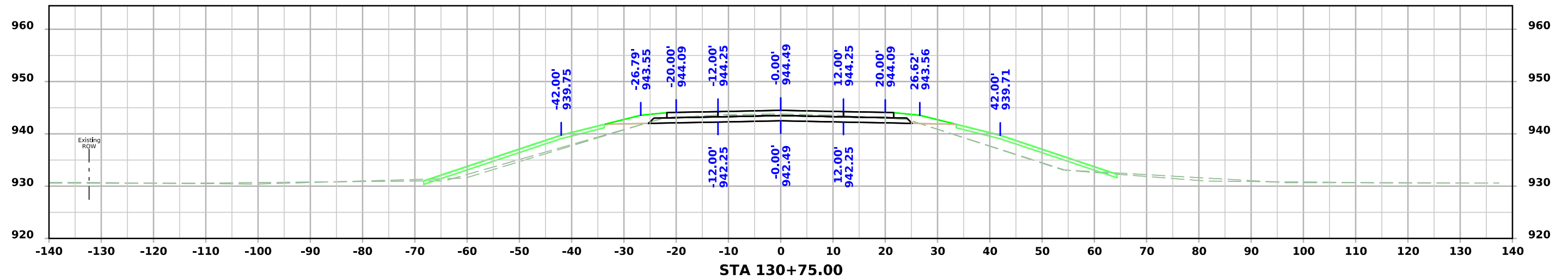
ML - IA 2



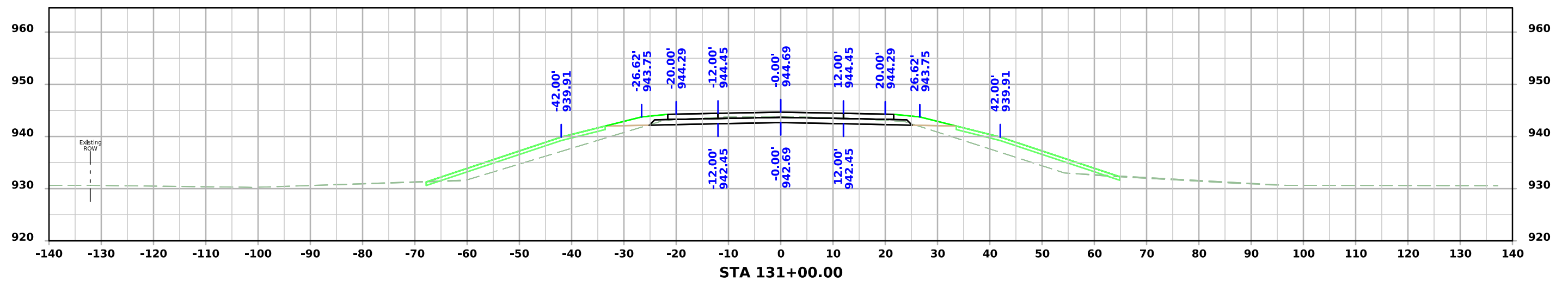
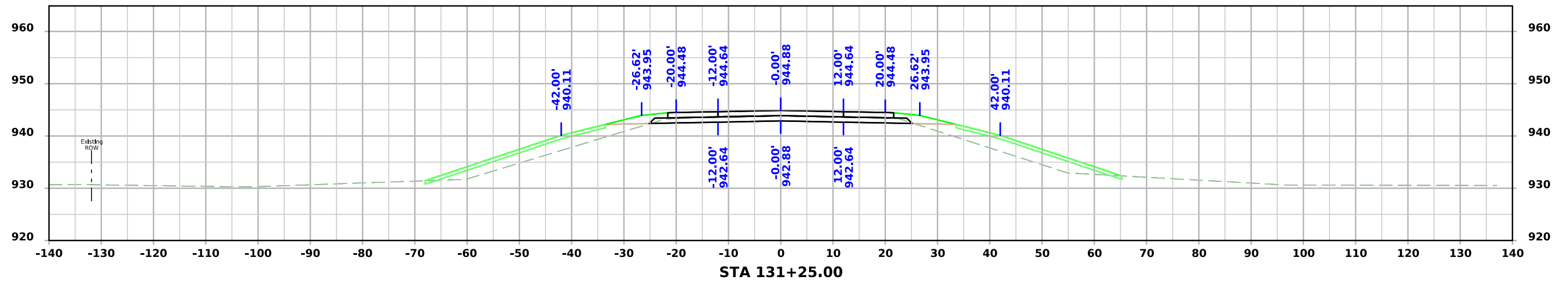
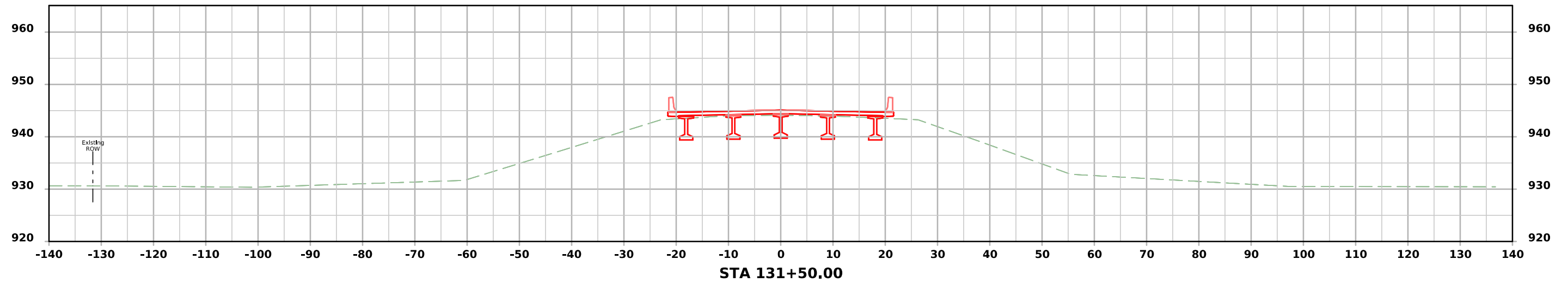
ML - IA 2



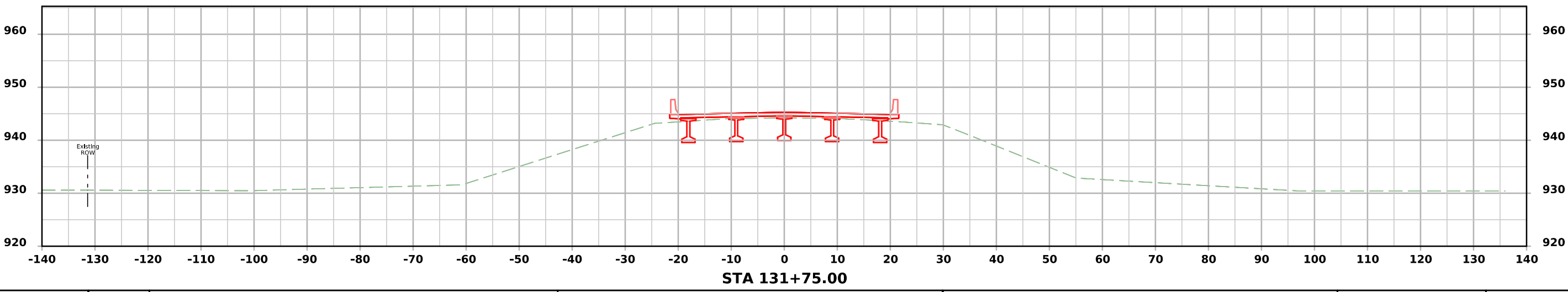
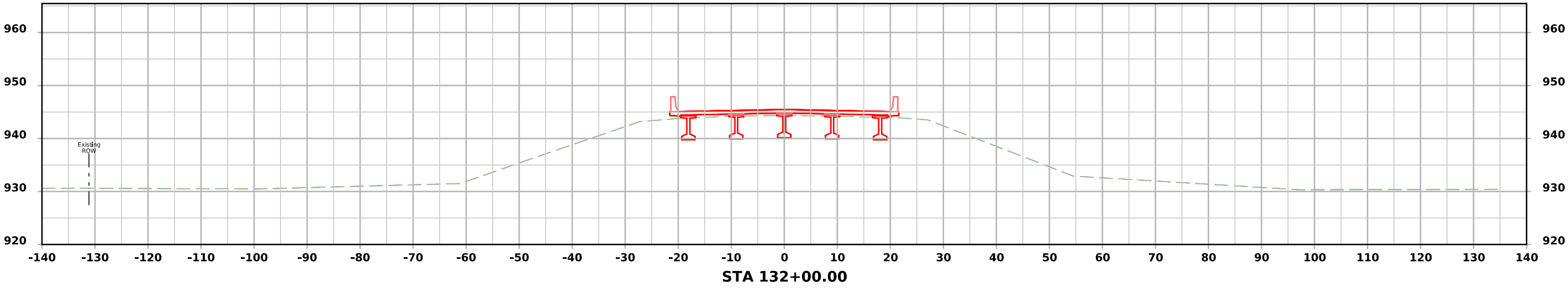
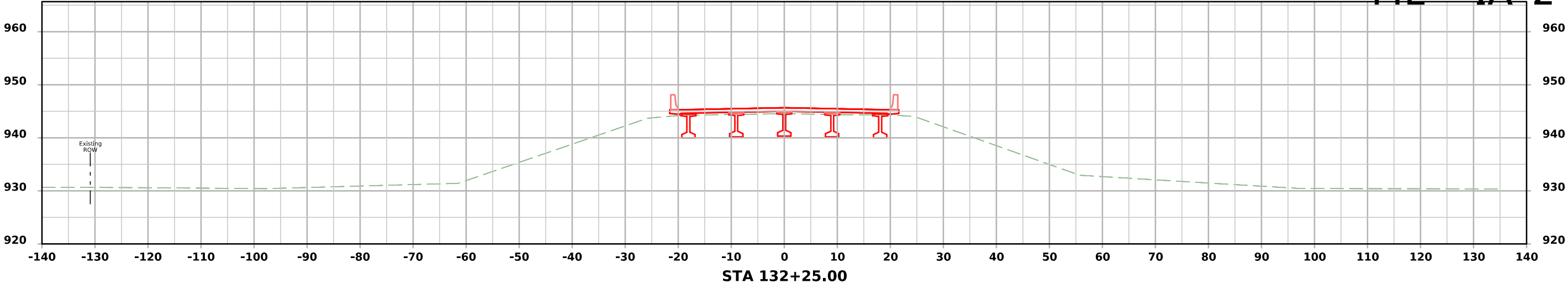
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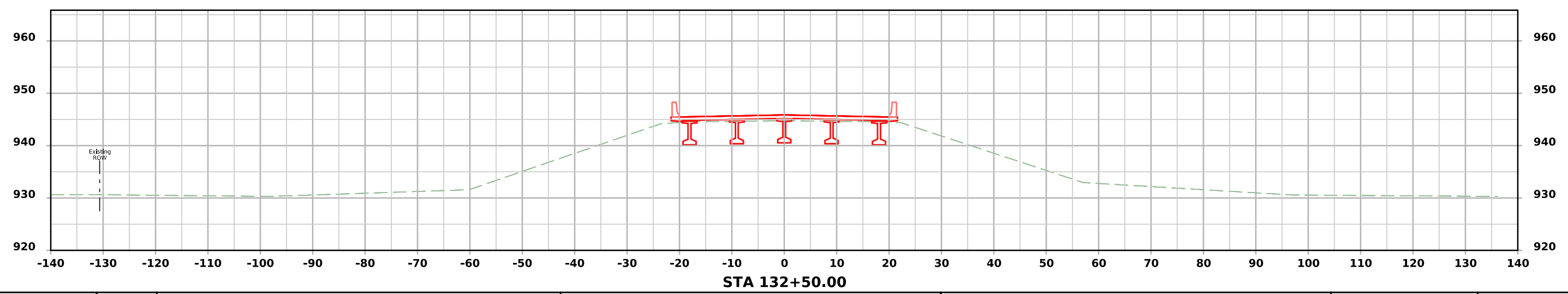
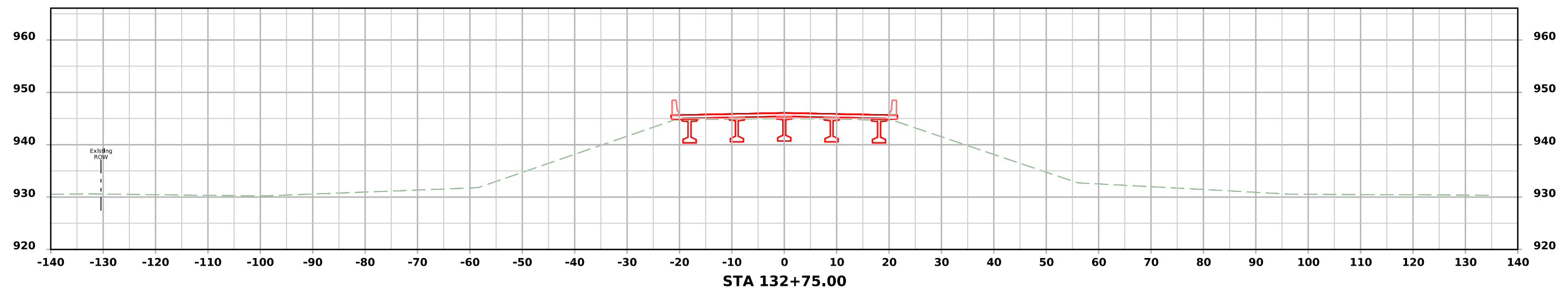
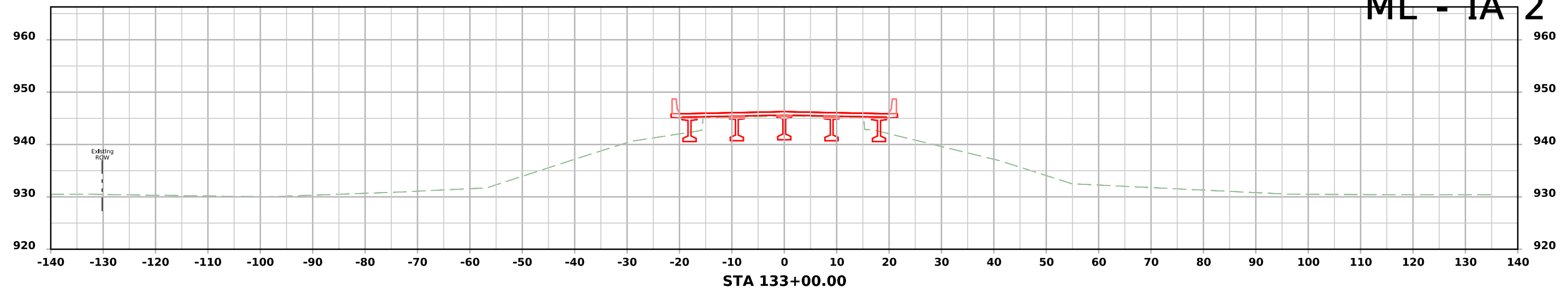
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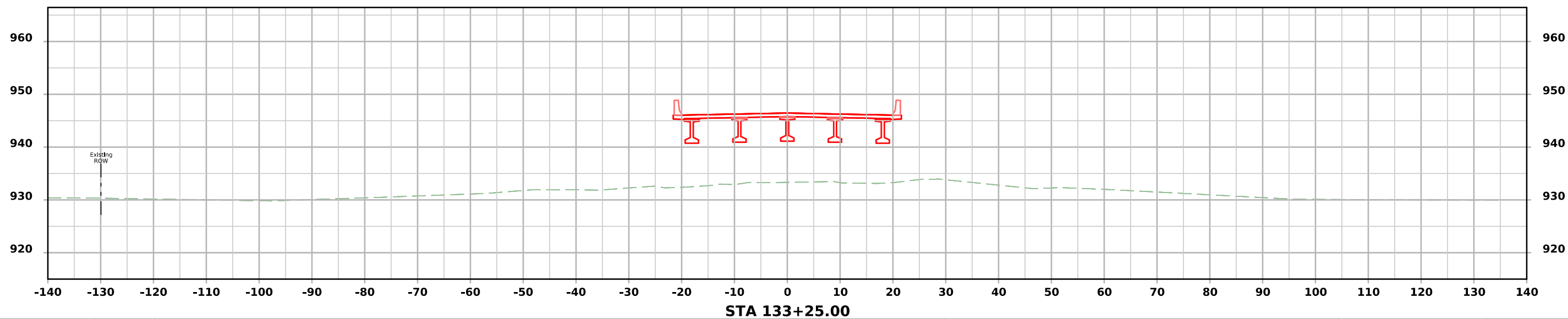
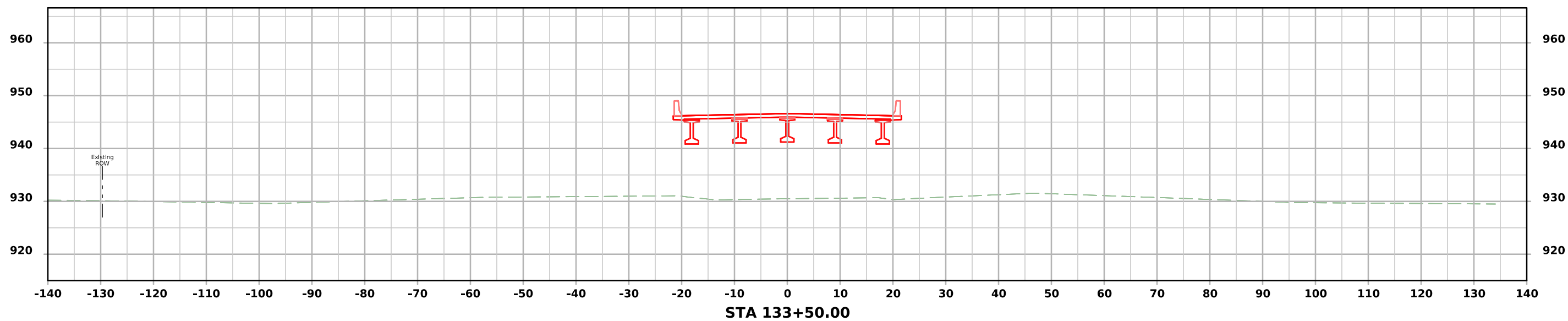
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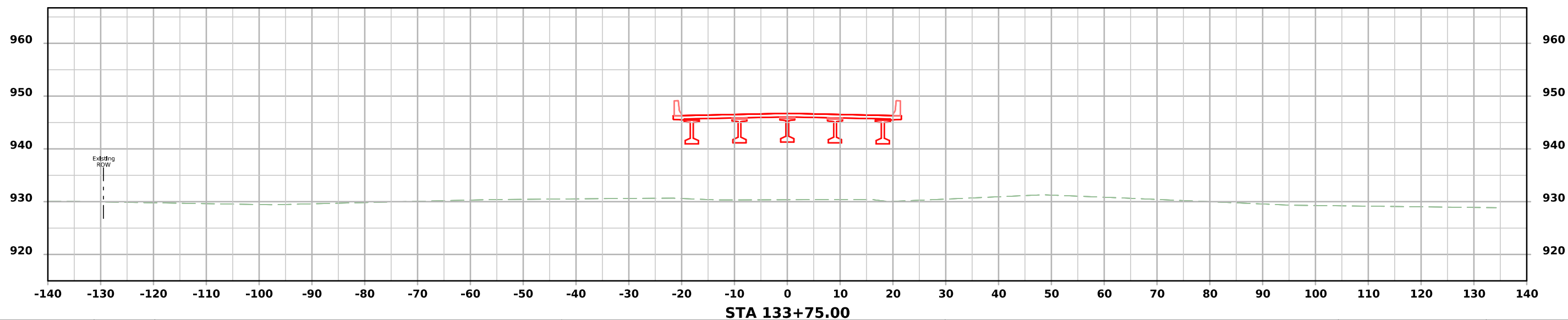
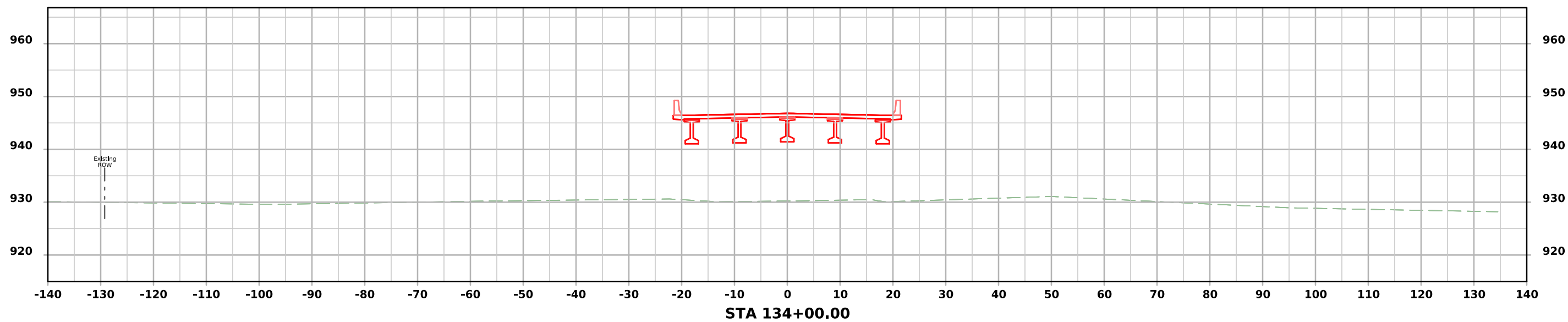
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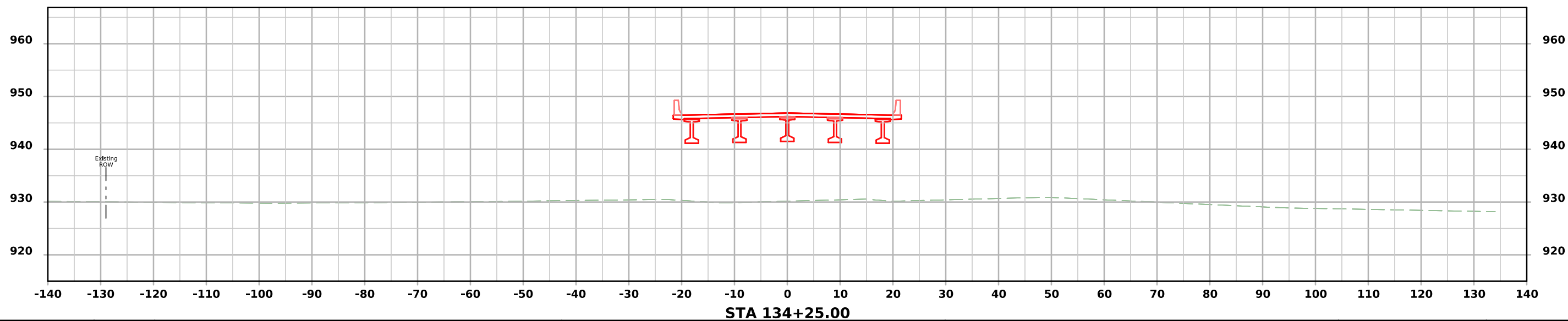
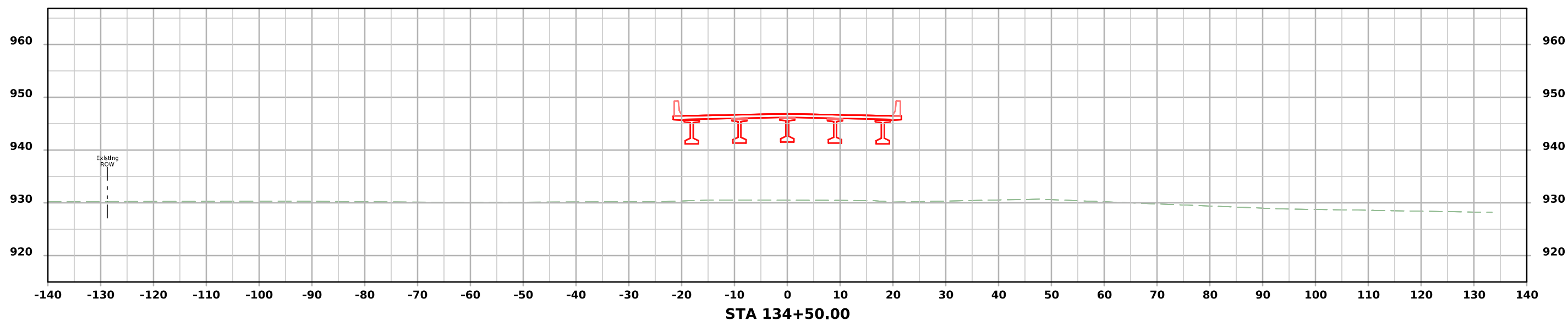
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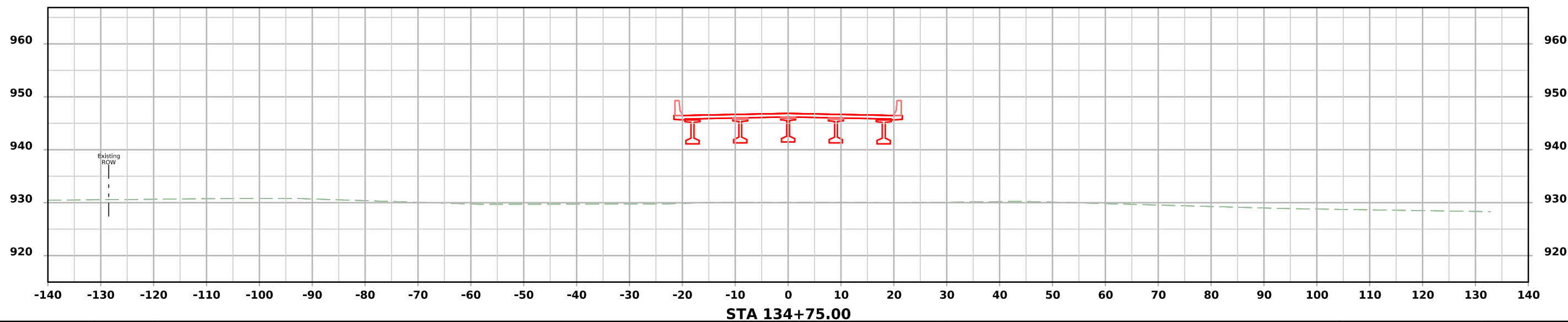
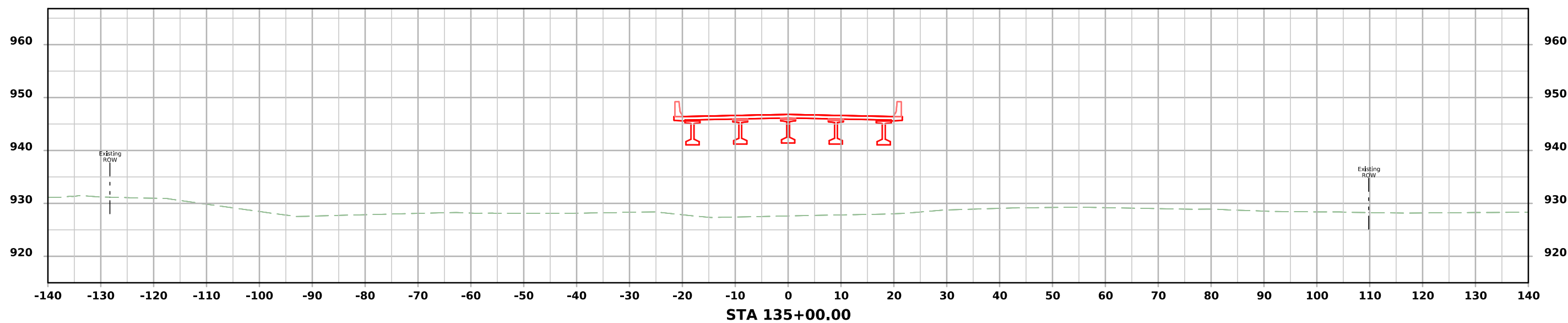
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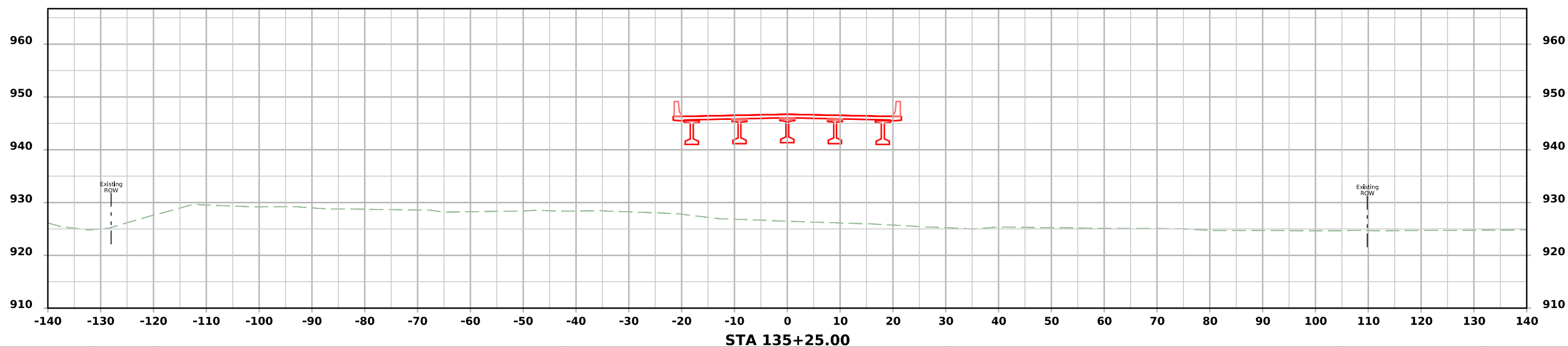
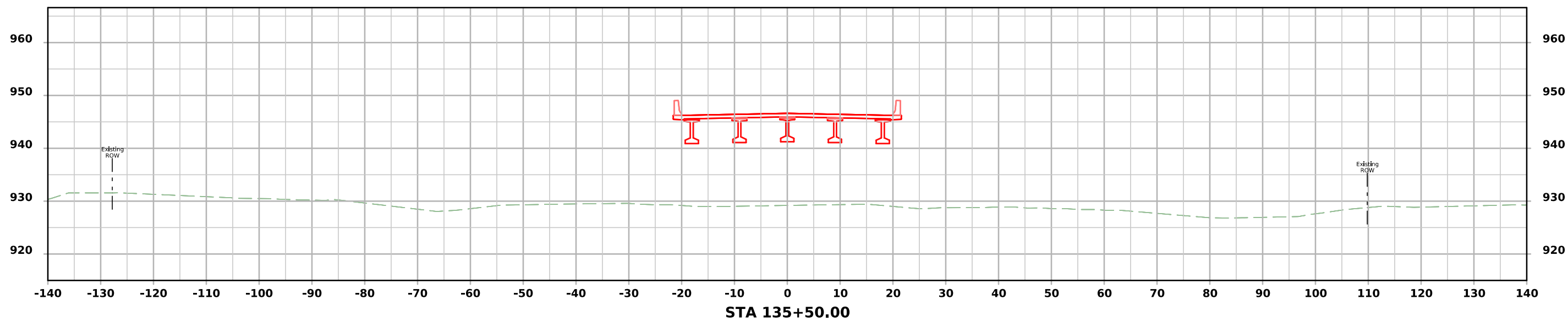
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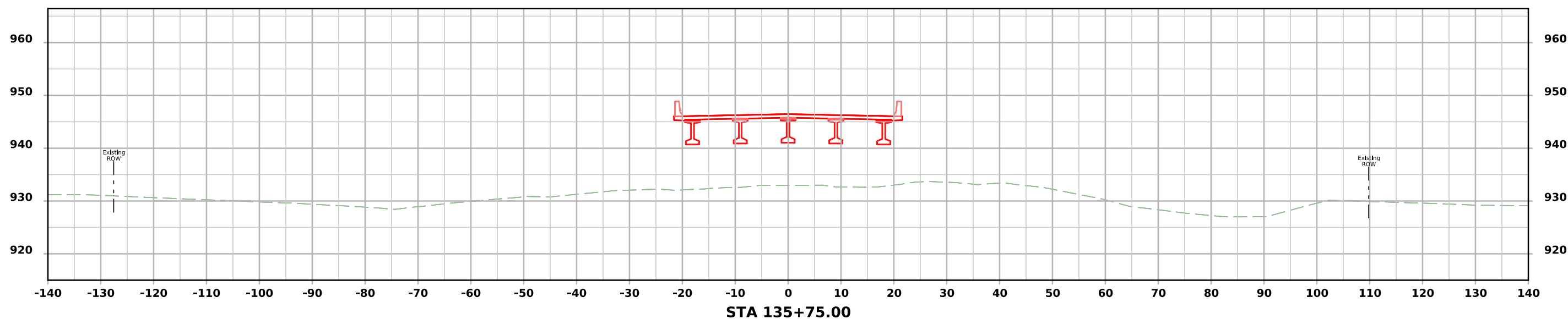
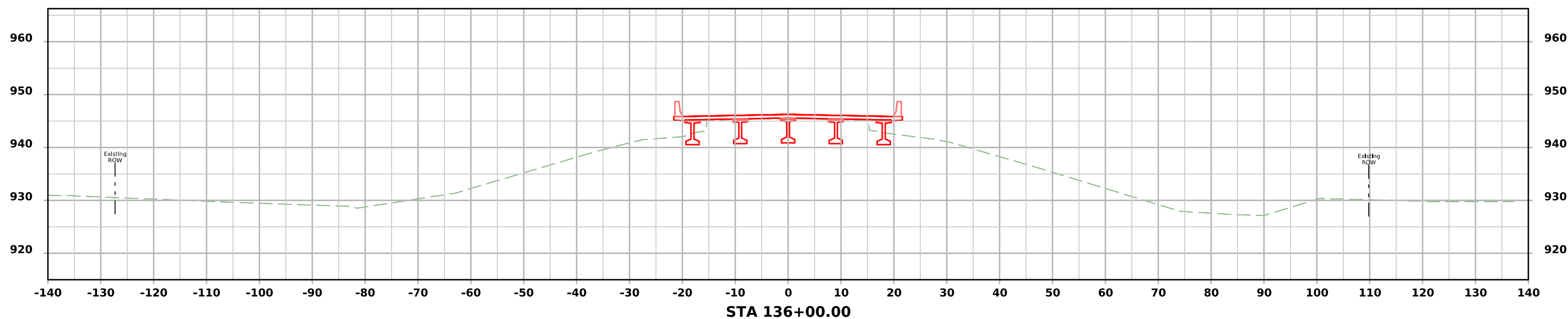
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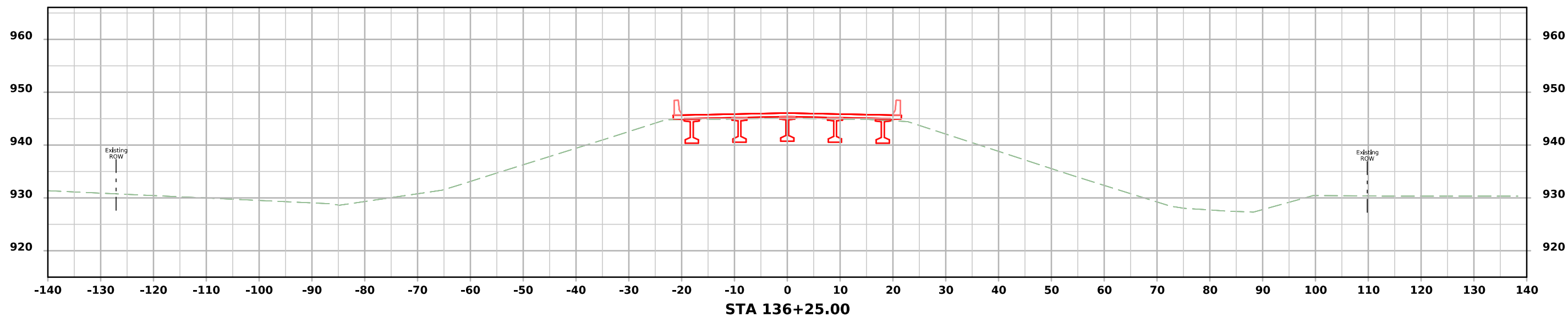
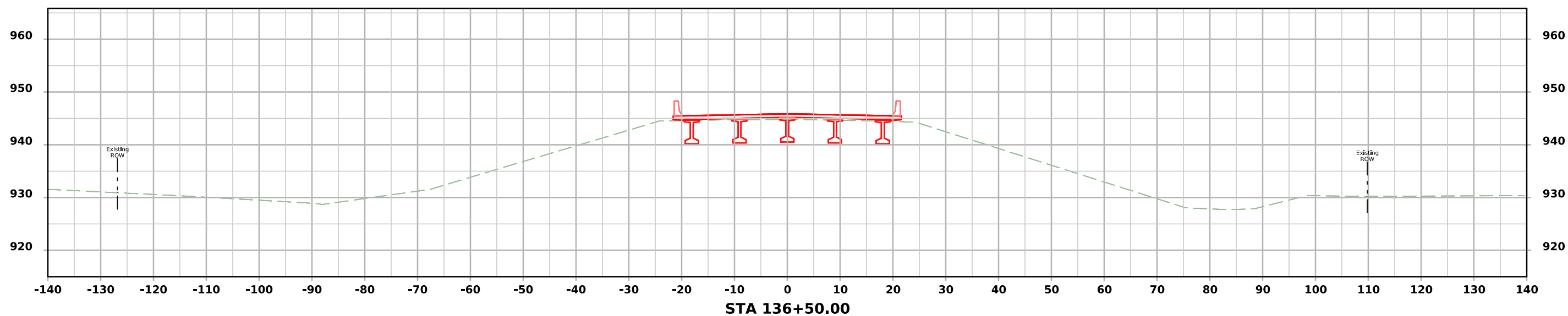
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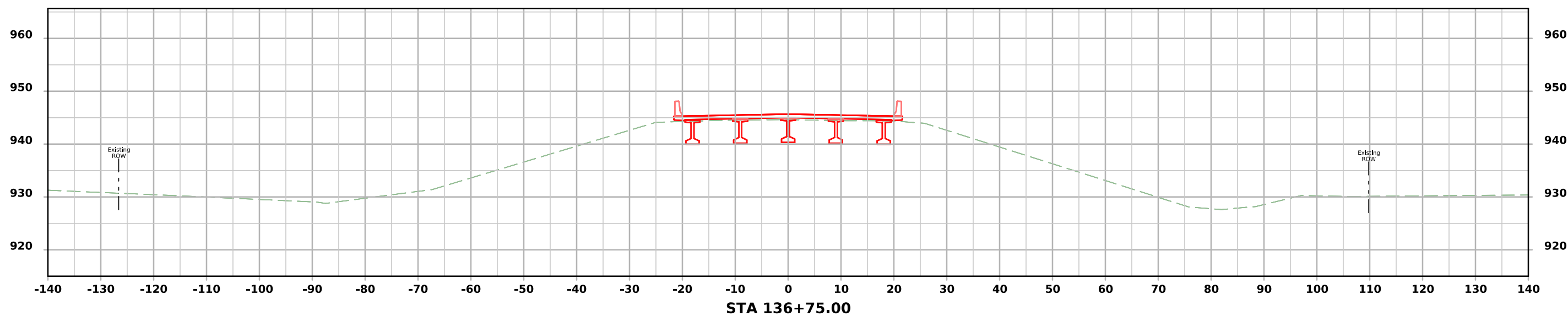
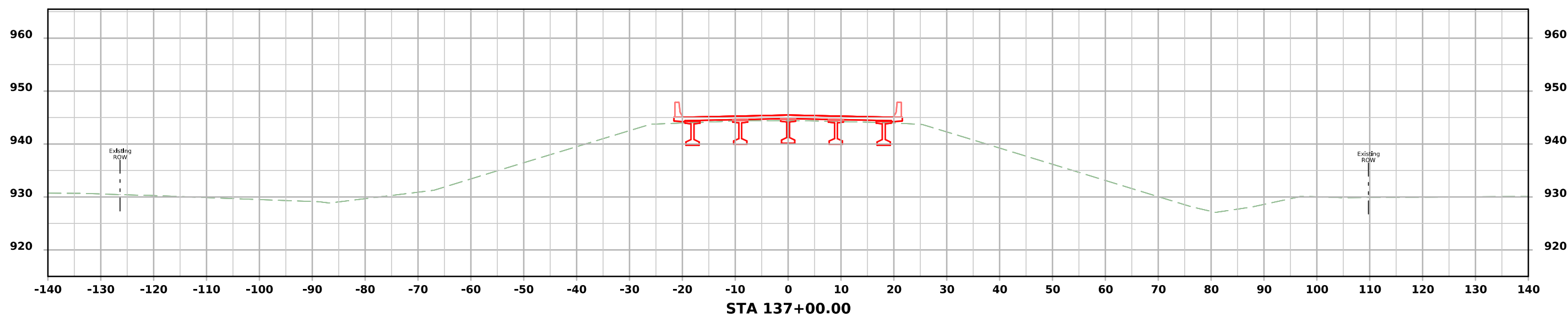
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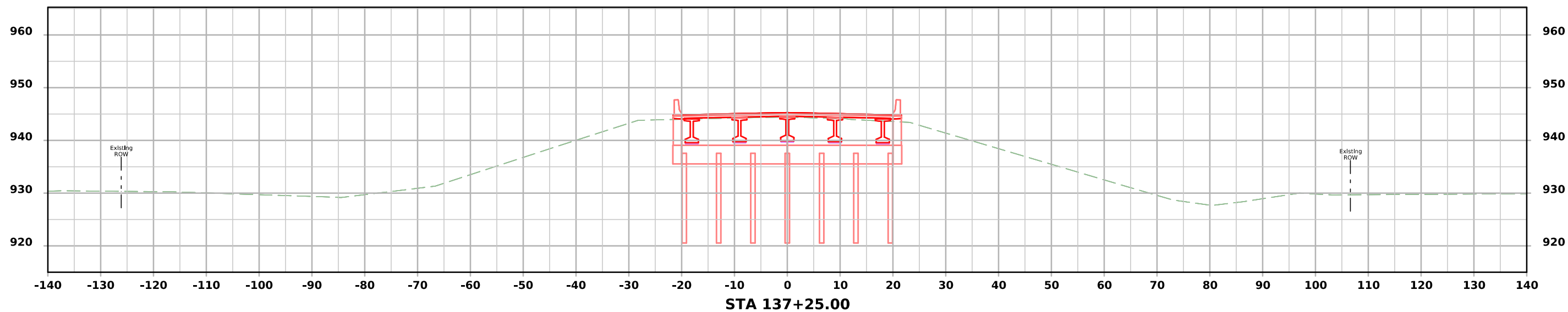
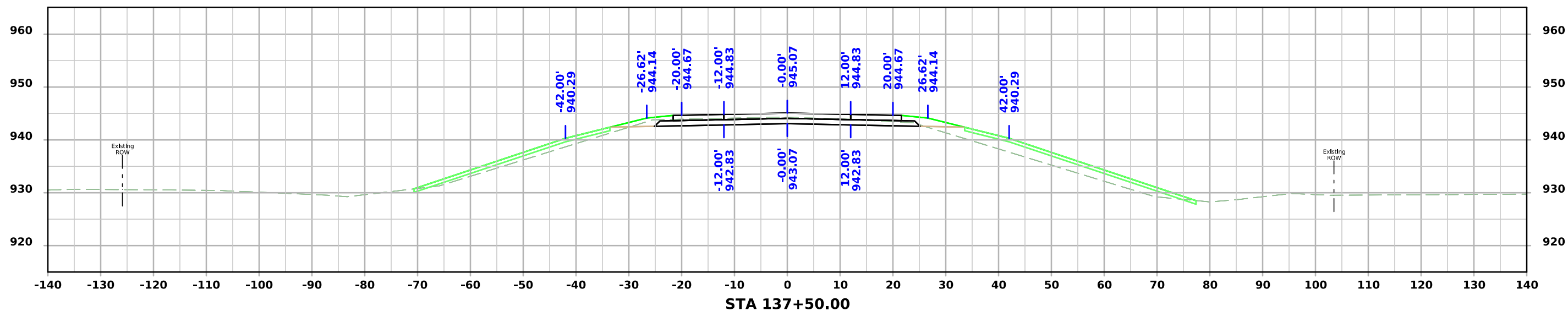


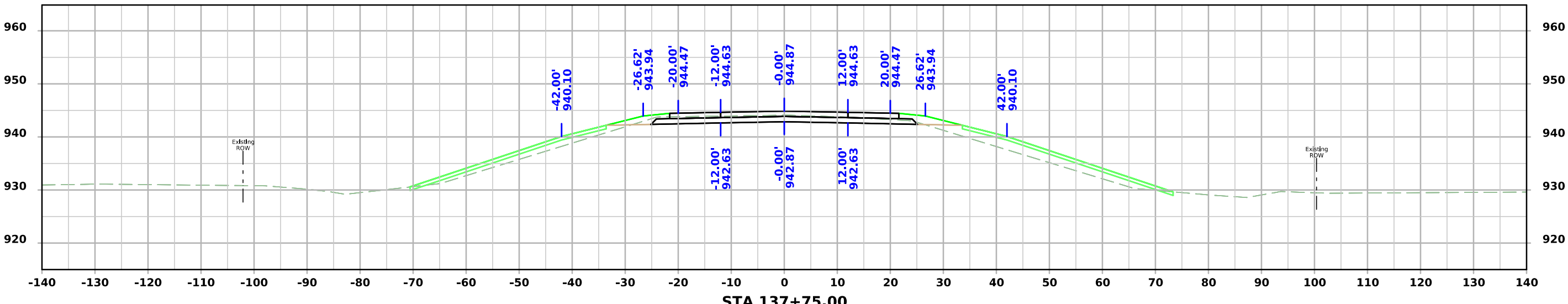
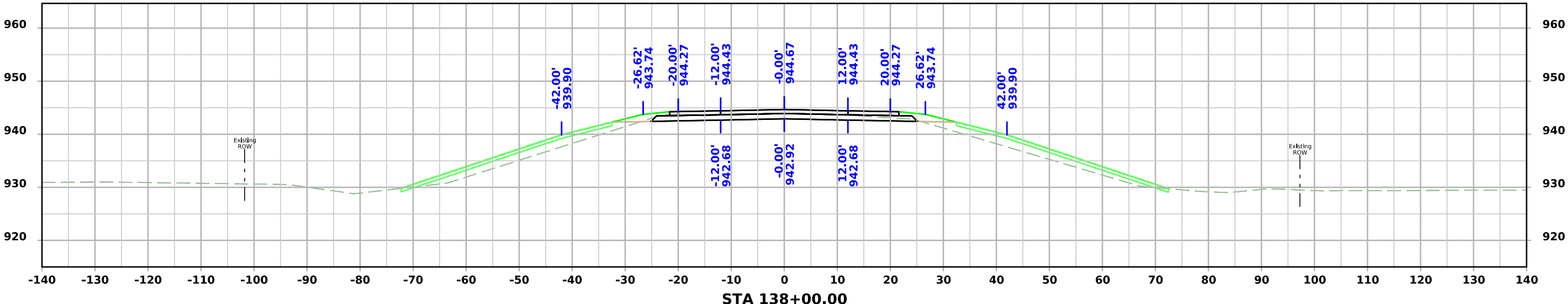
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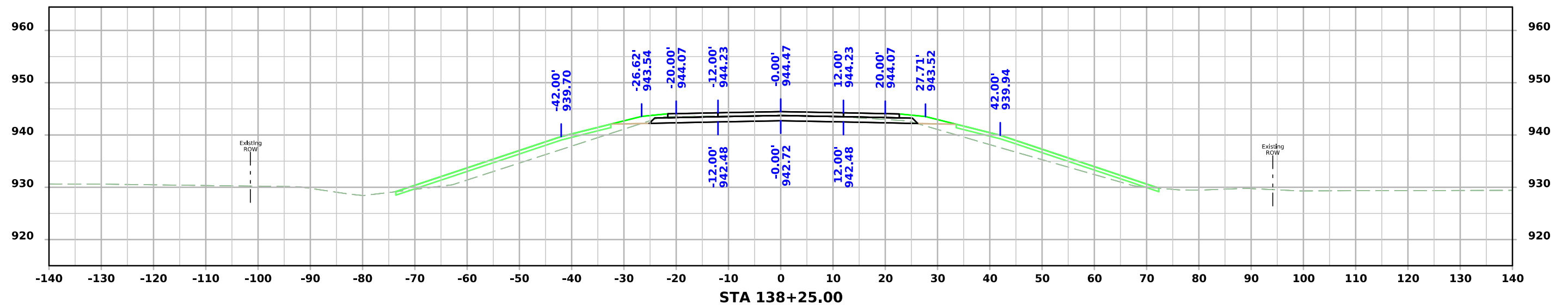
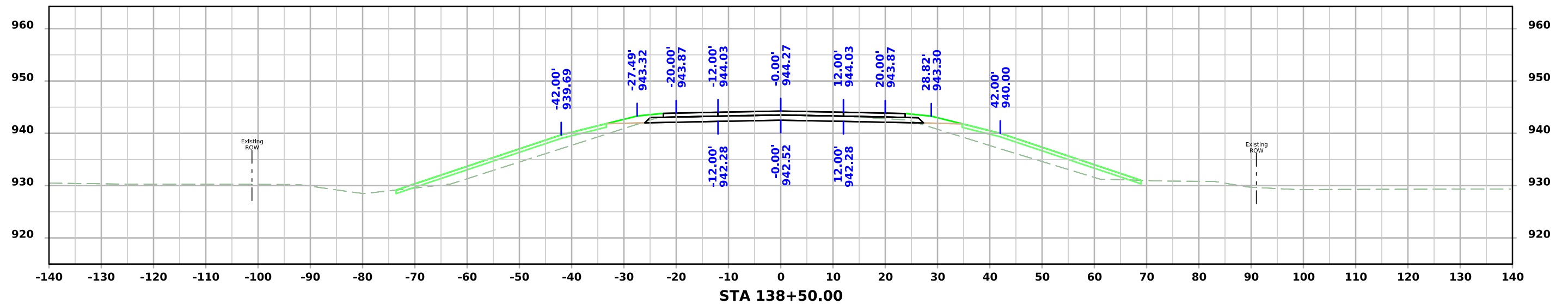


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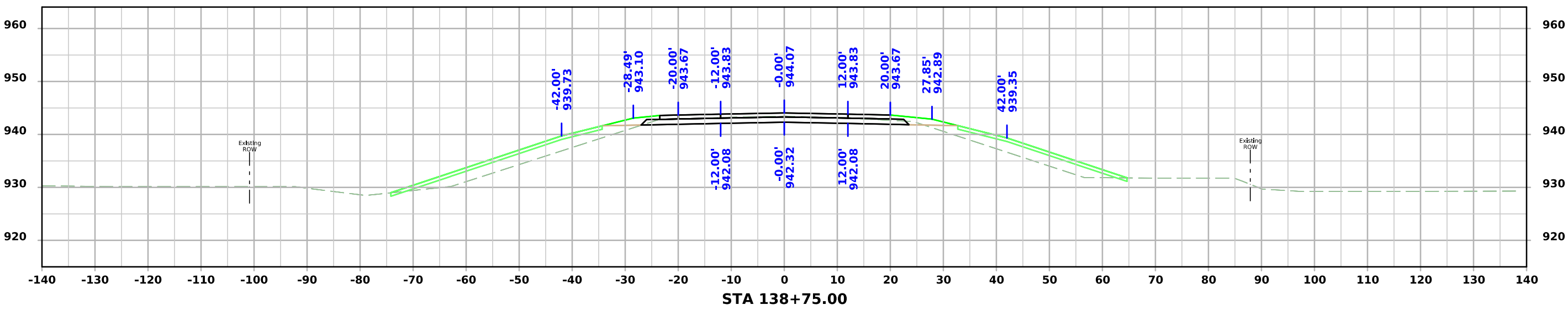
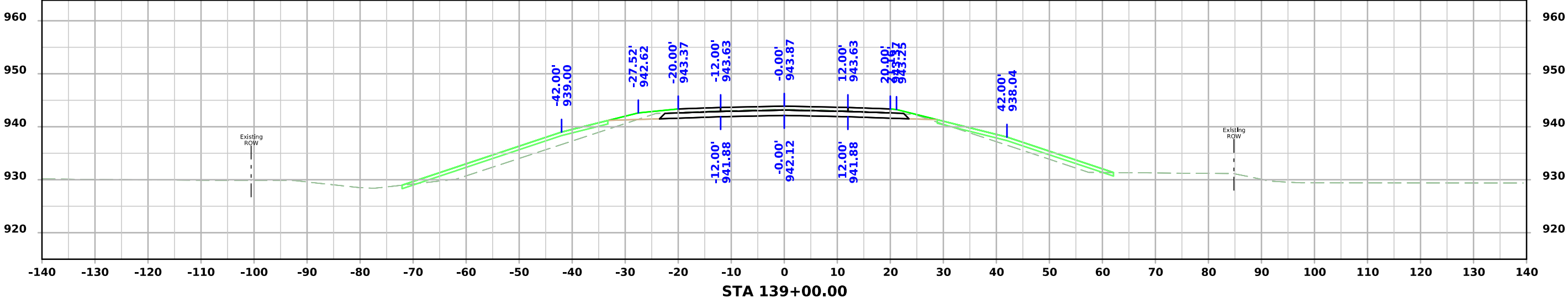




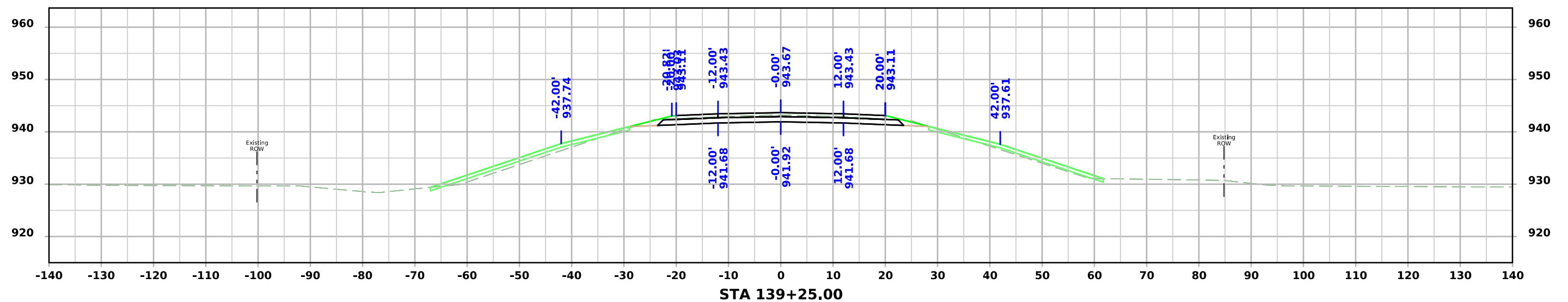
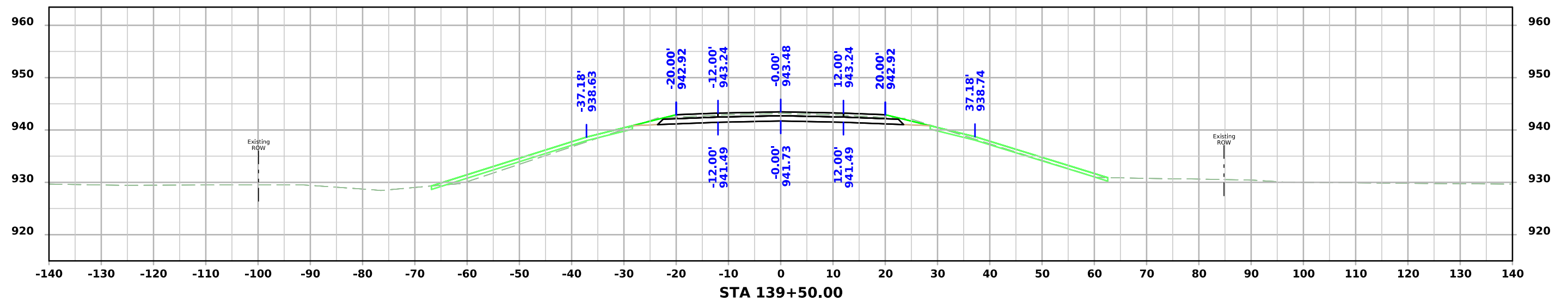




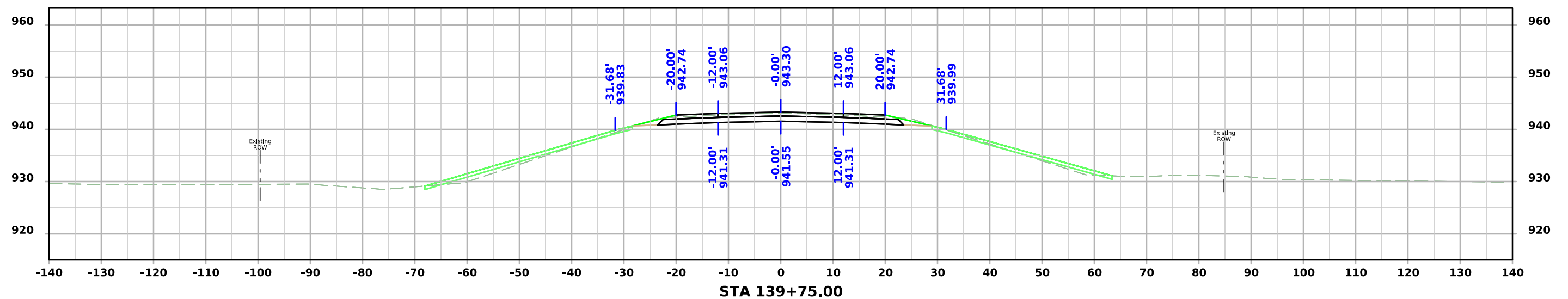
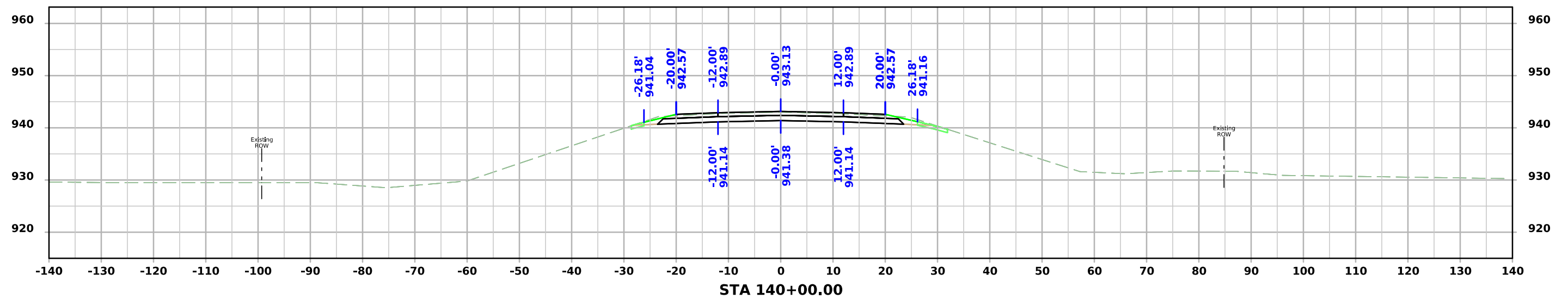
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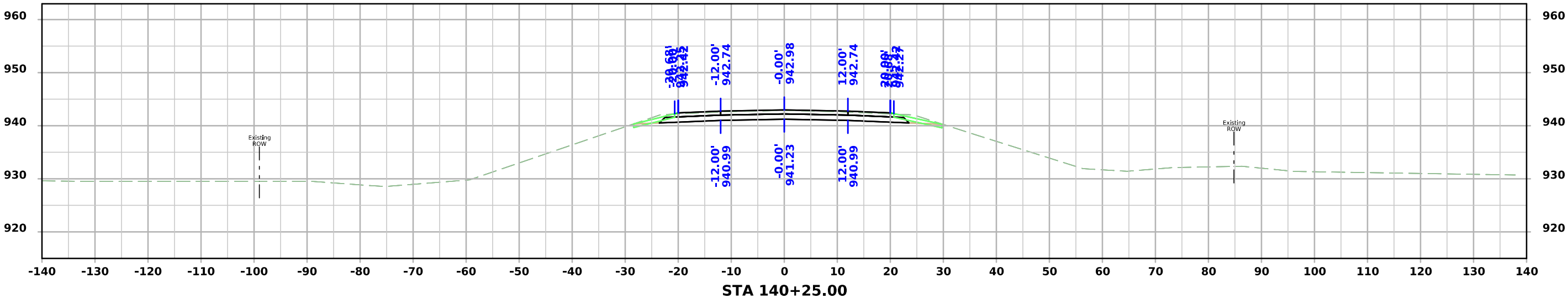
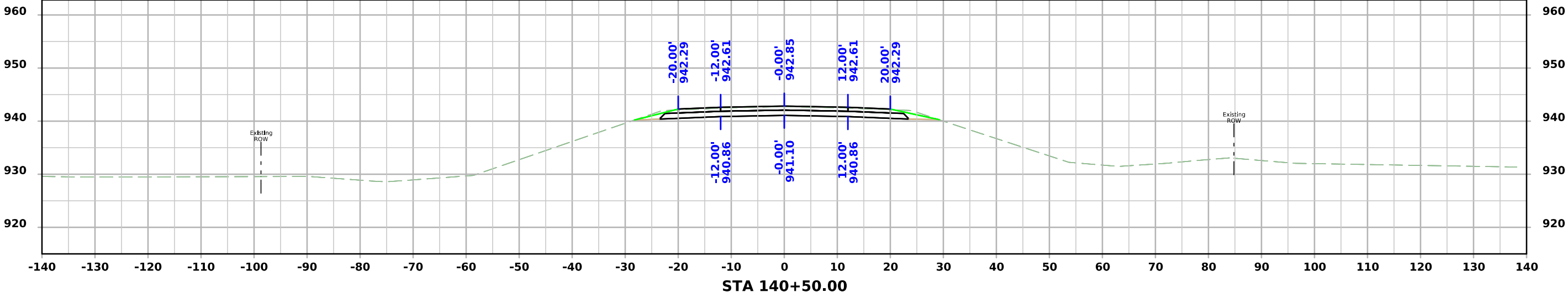
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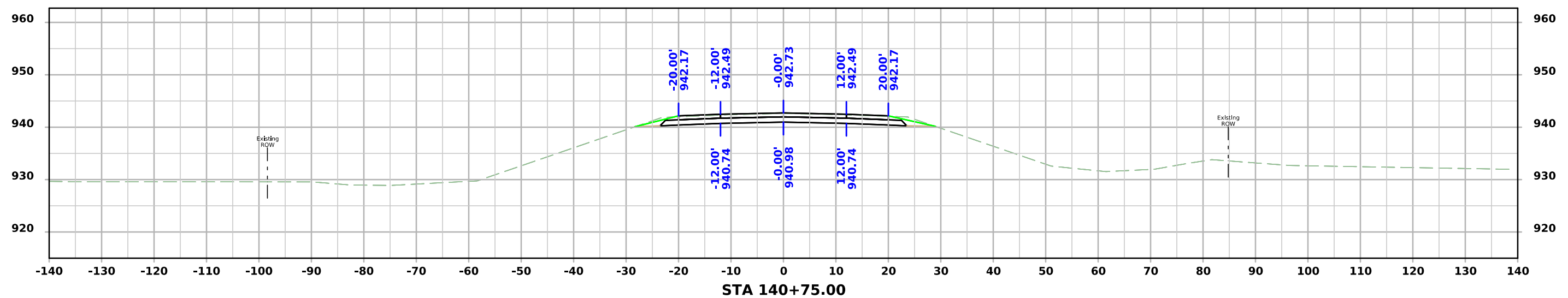
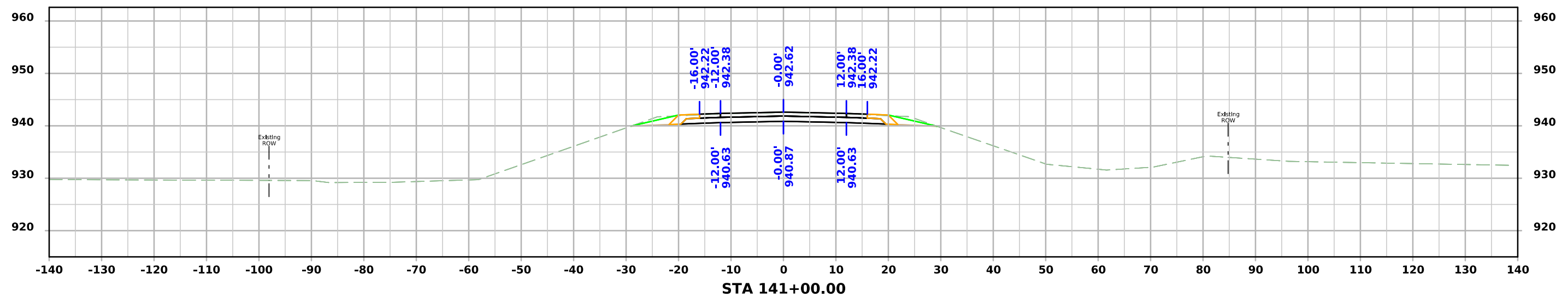
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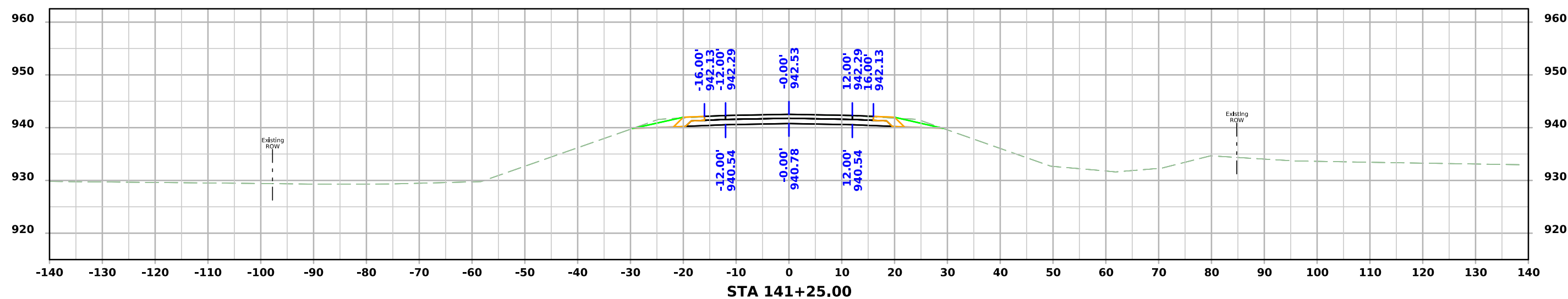
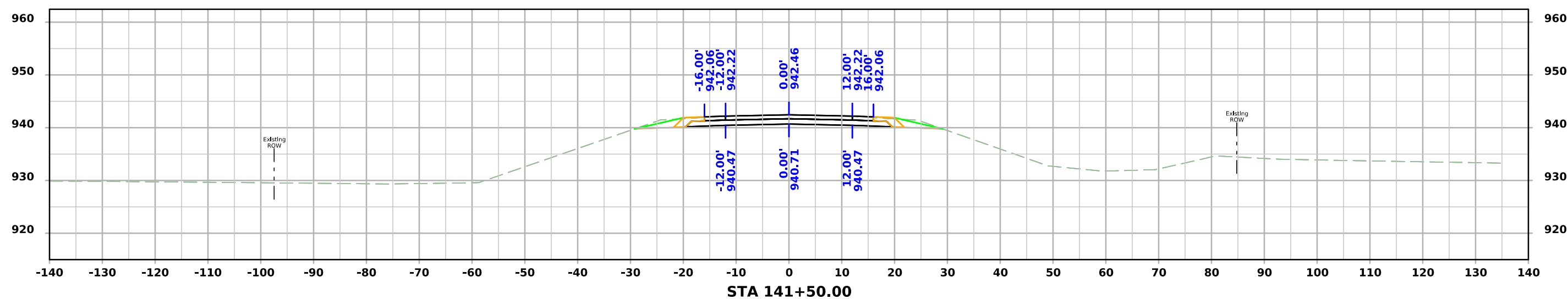
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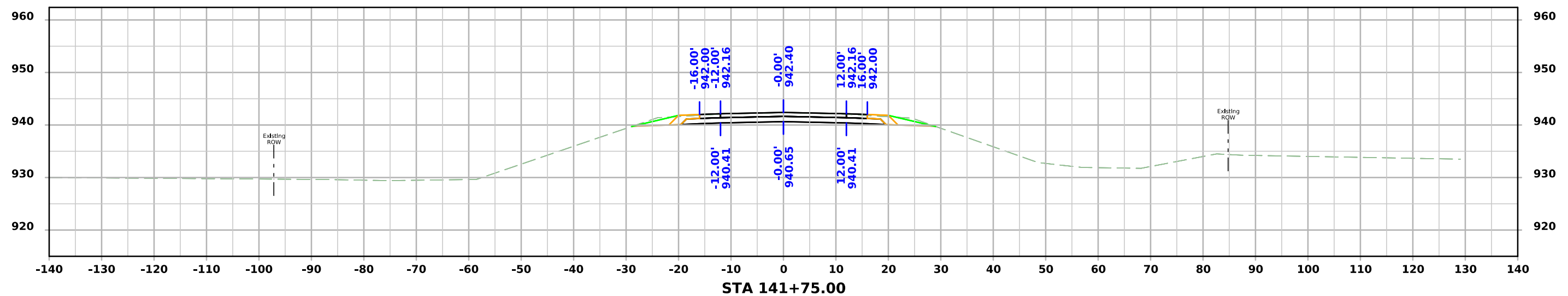
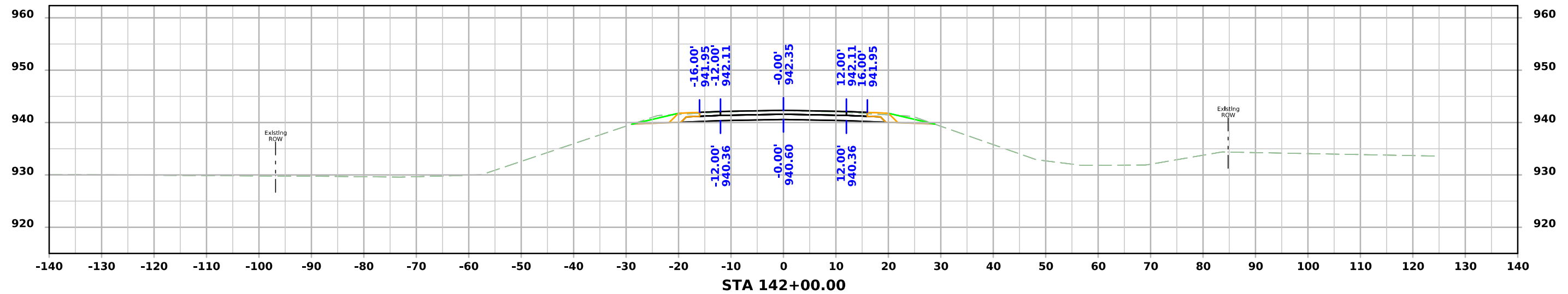
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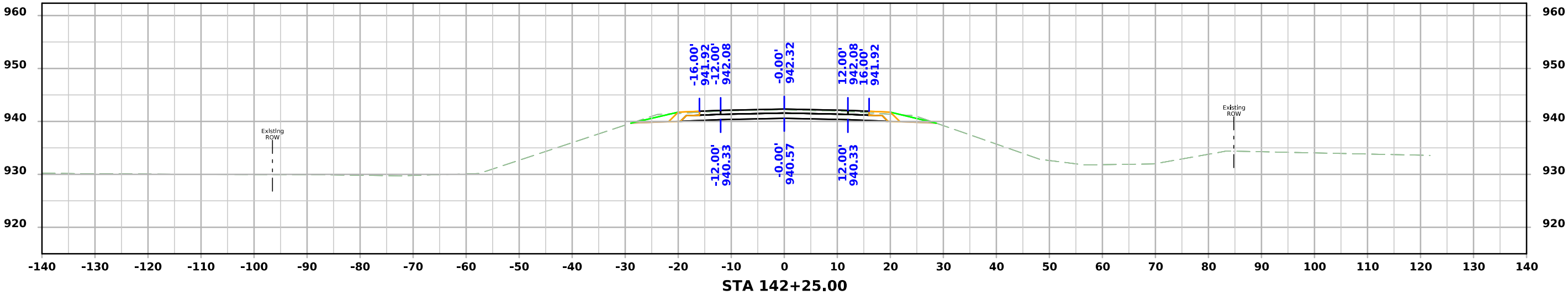
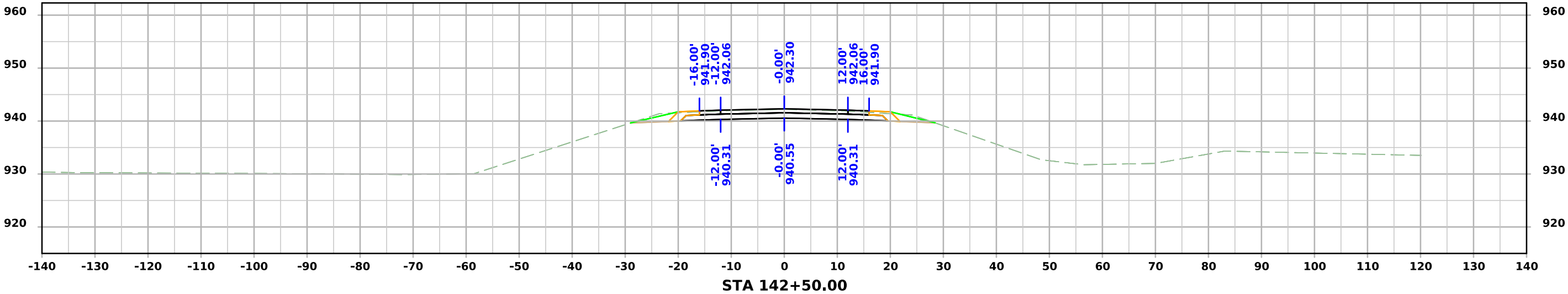
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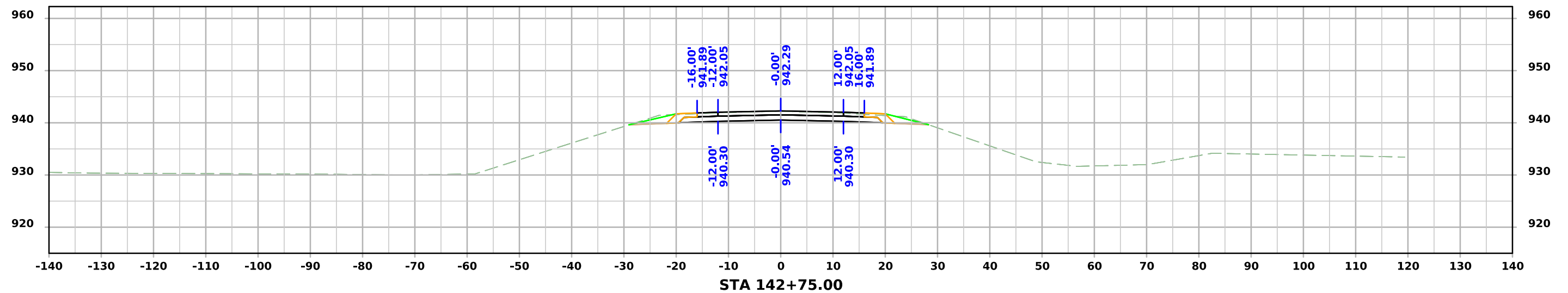
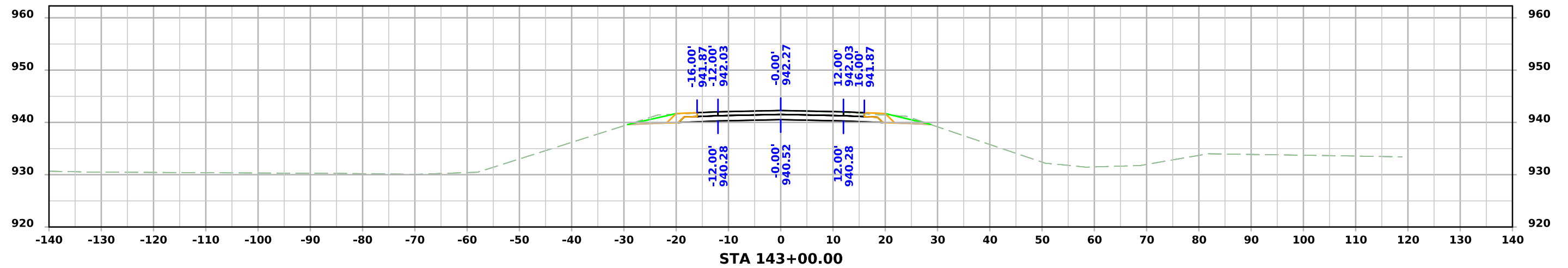
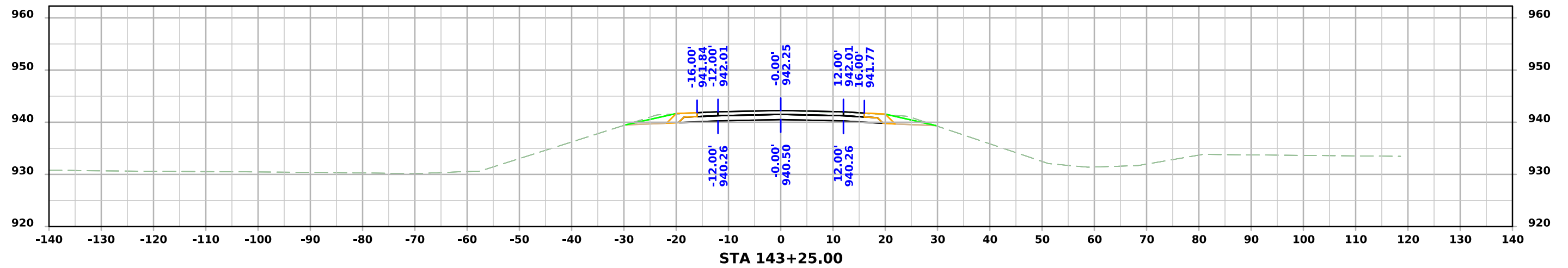
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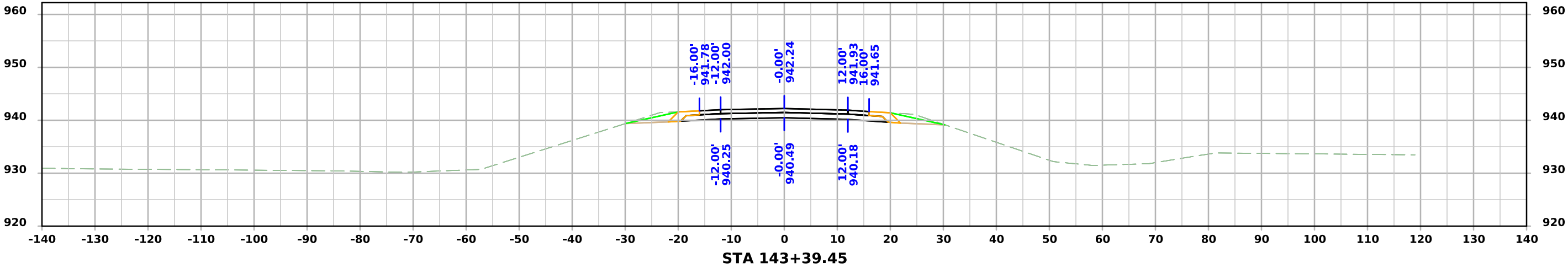
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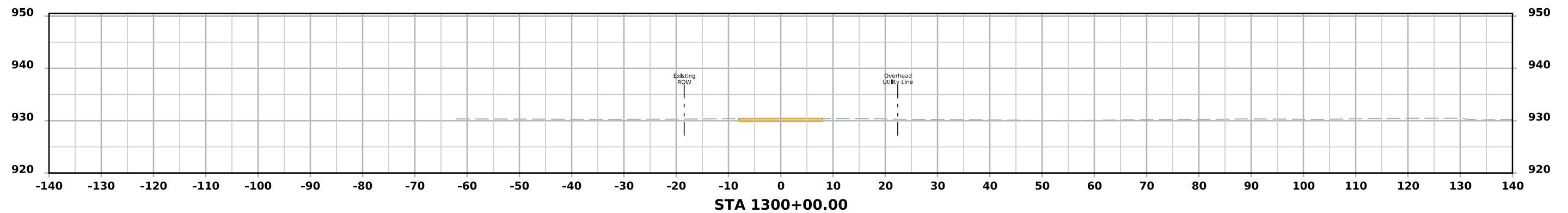
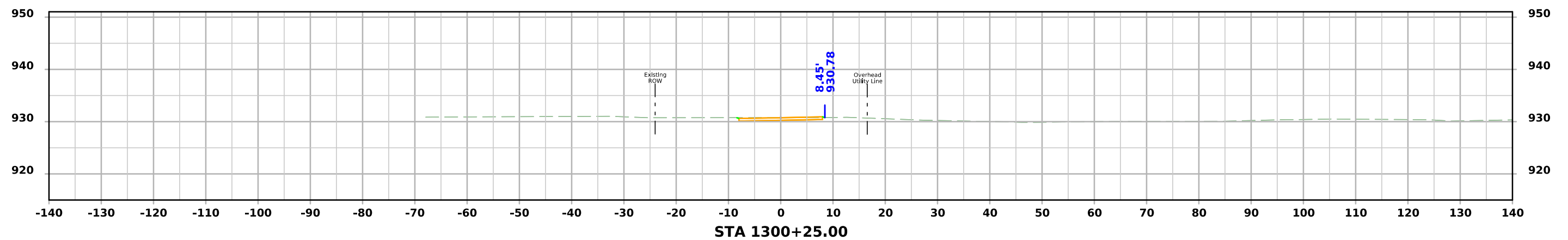
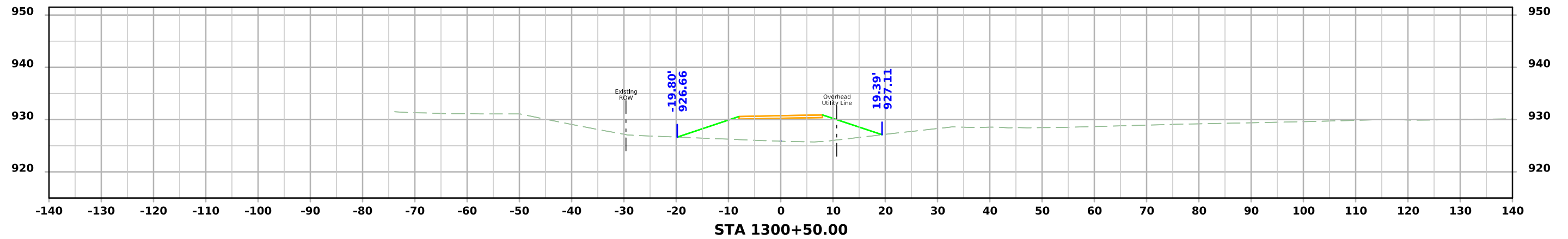
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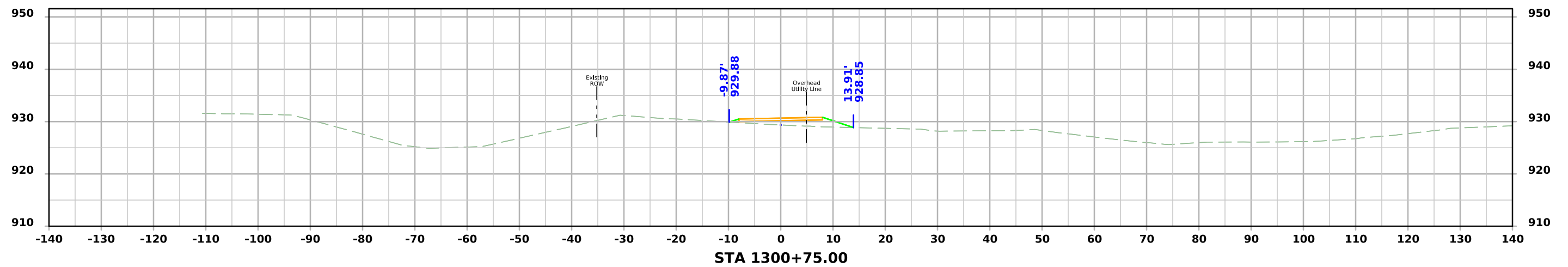
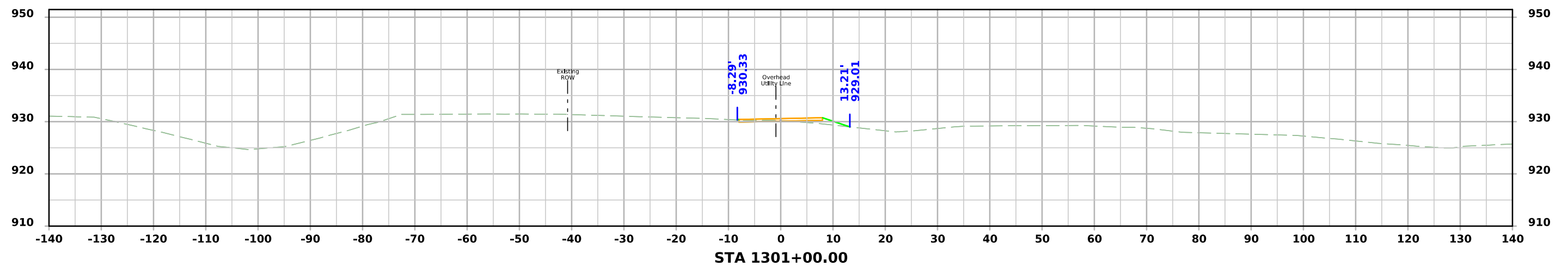
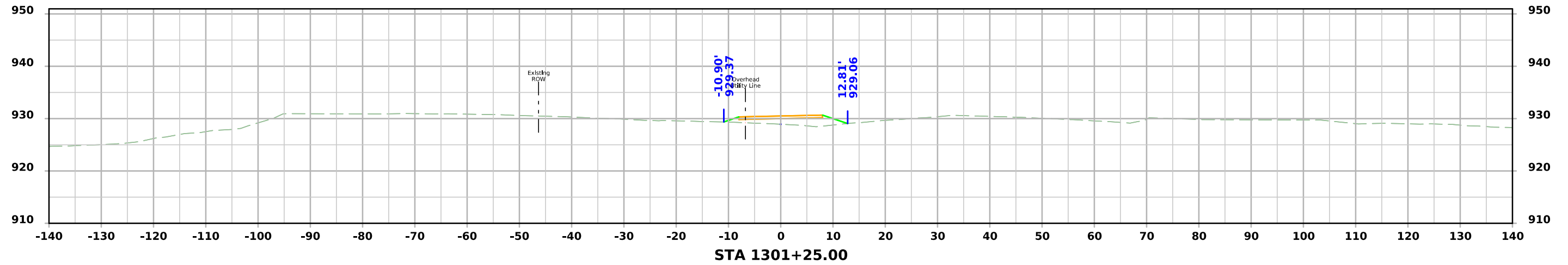
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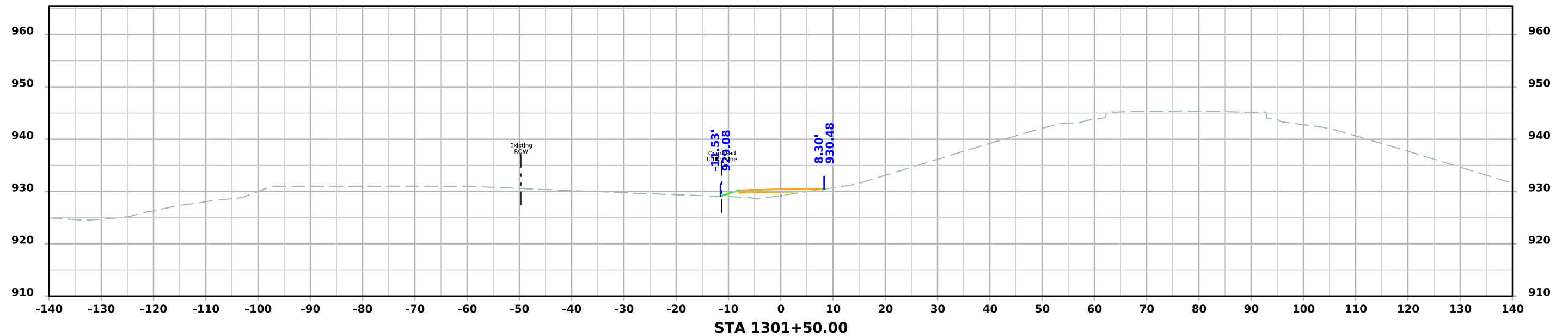
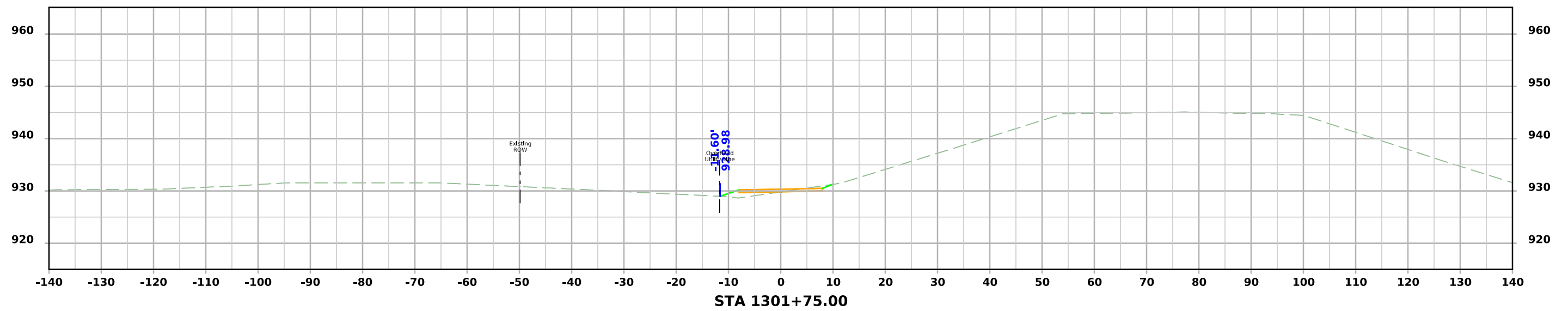
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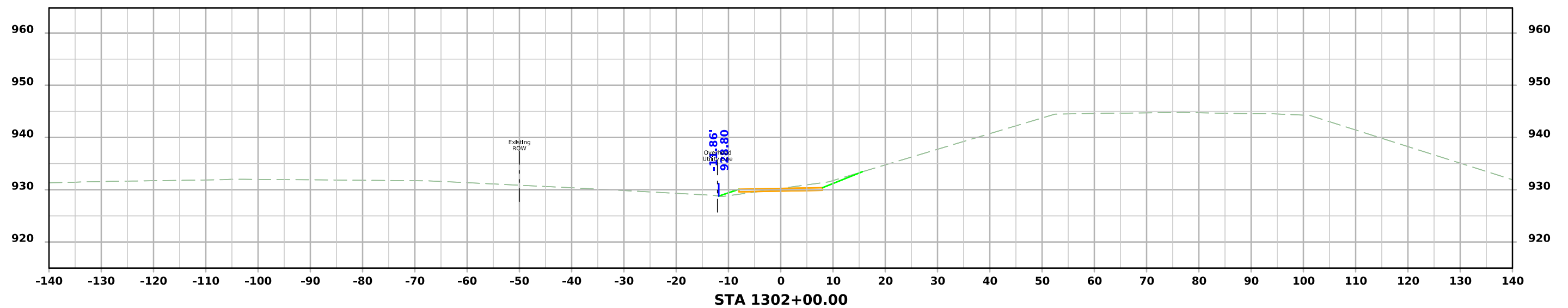
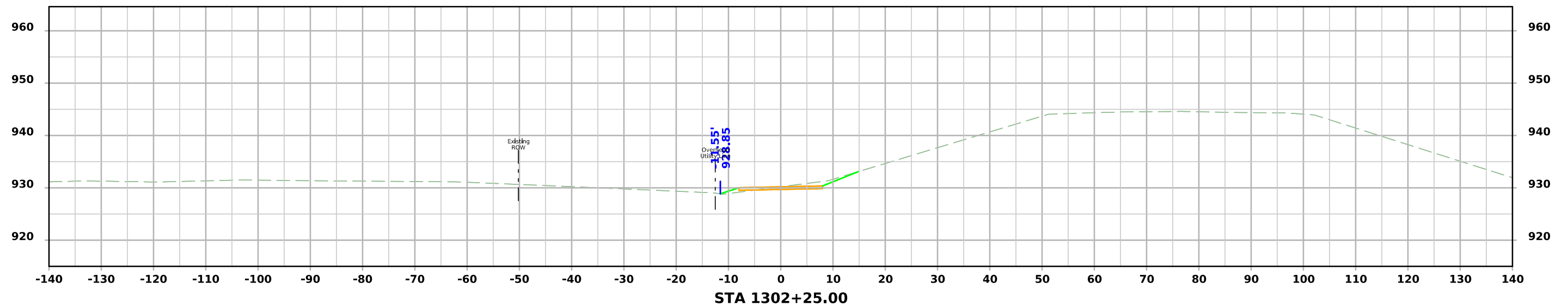
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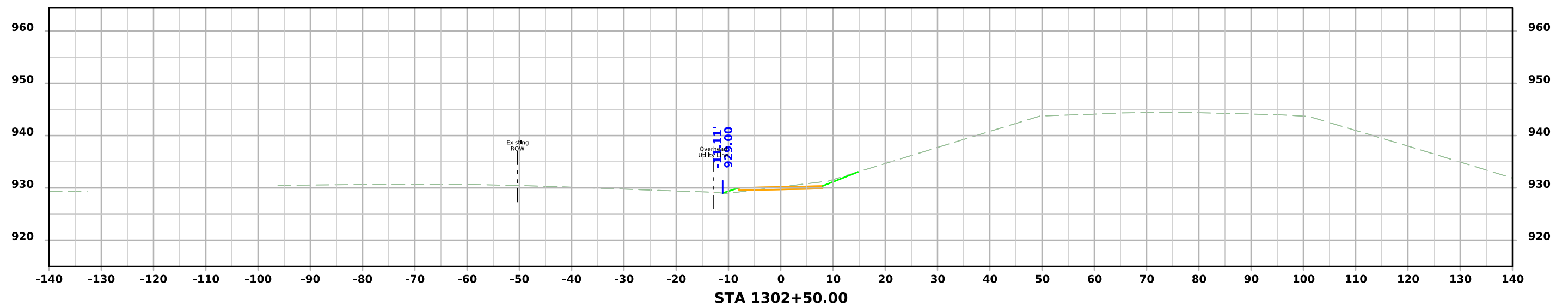
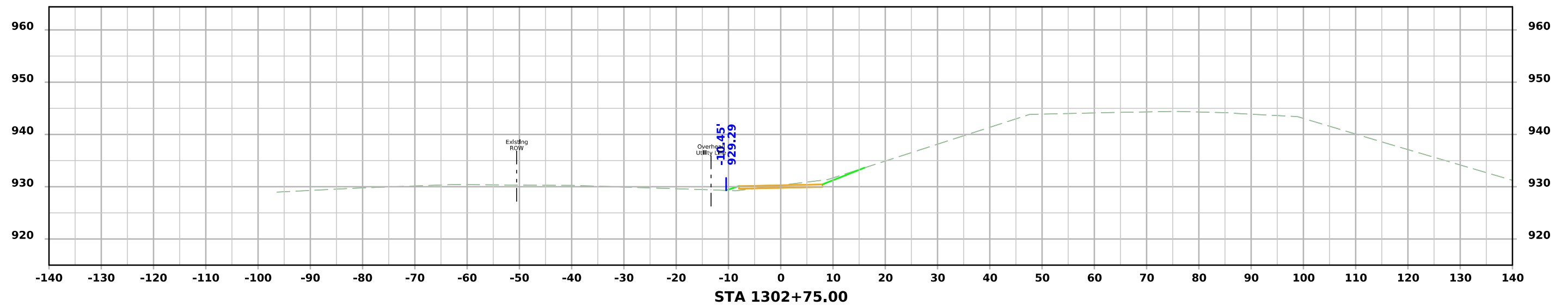
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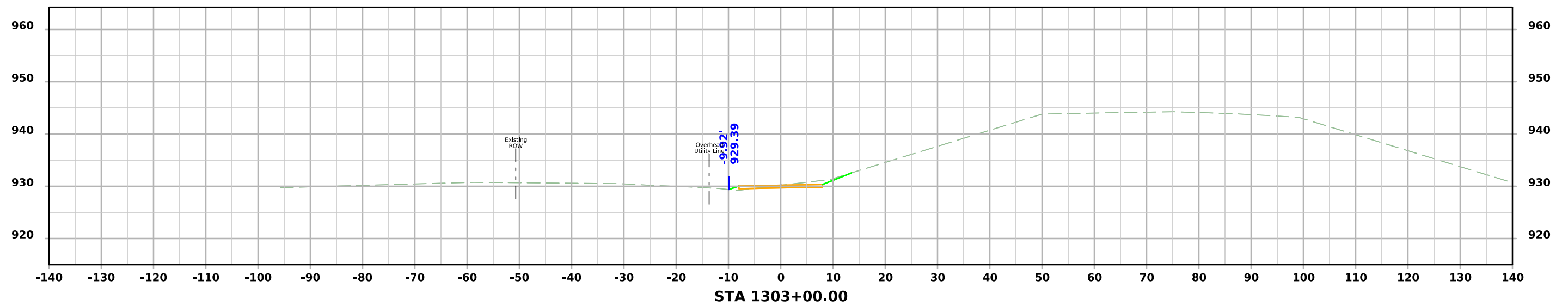
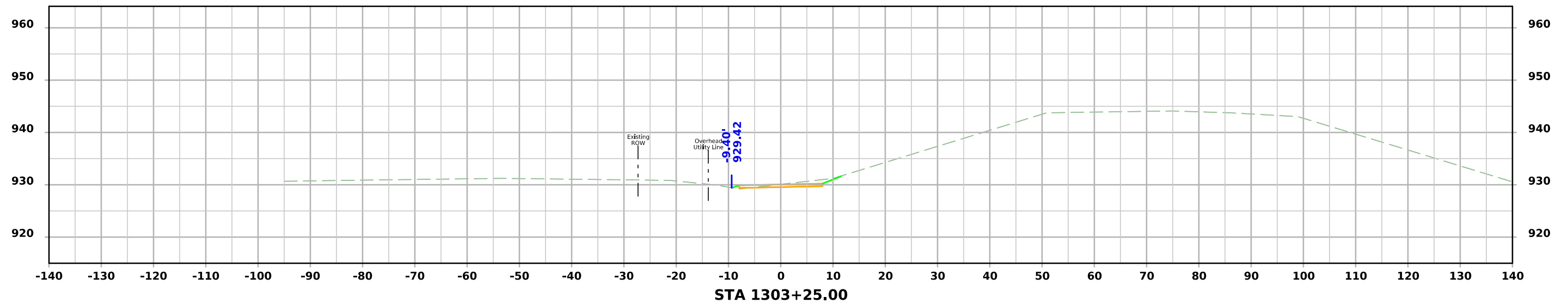
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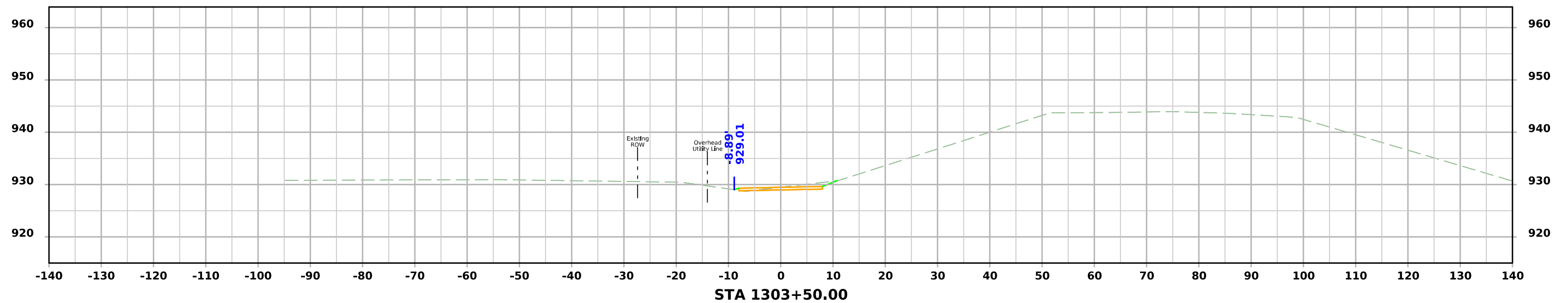
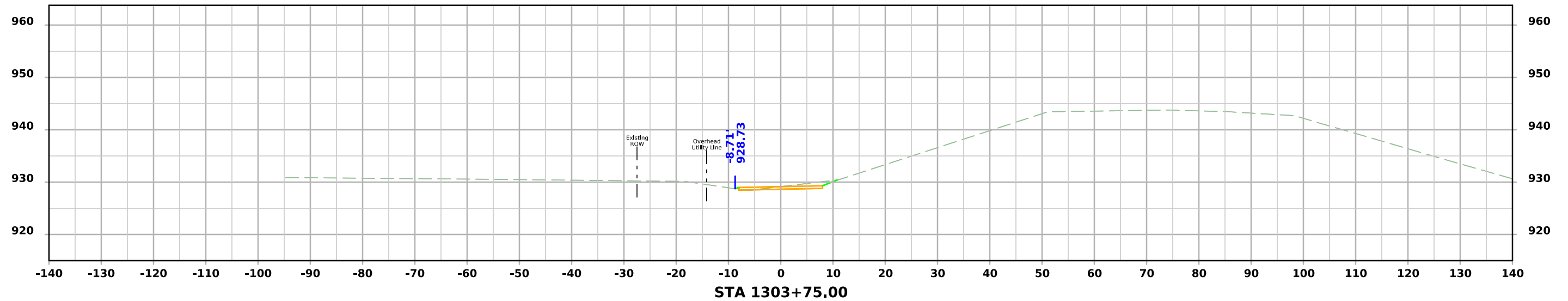
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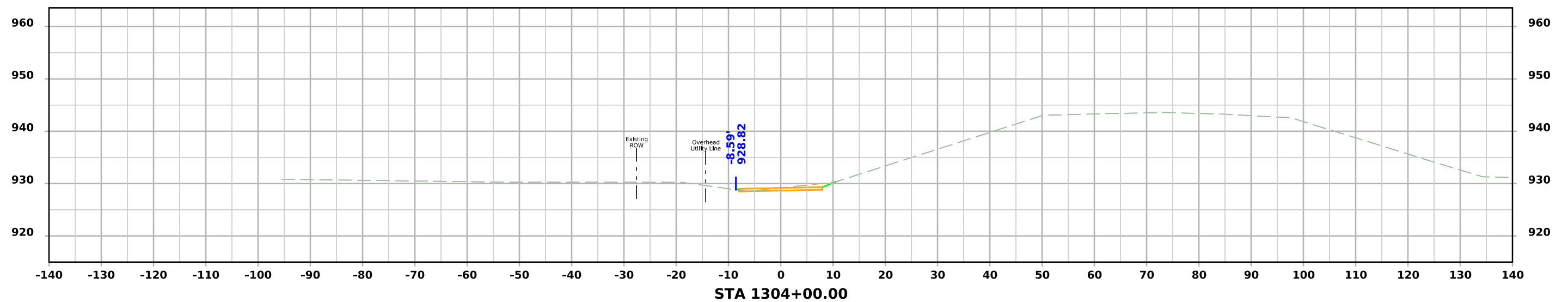
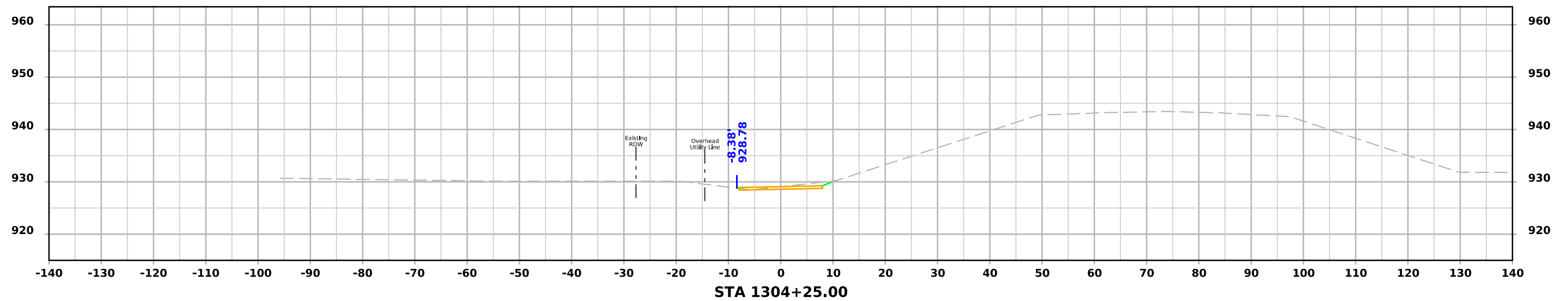
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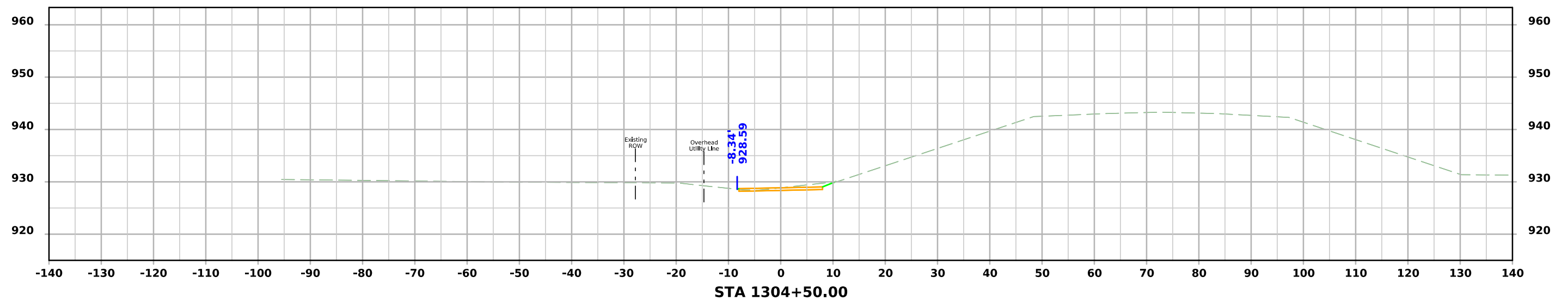
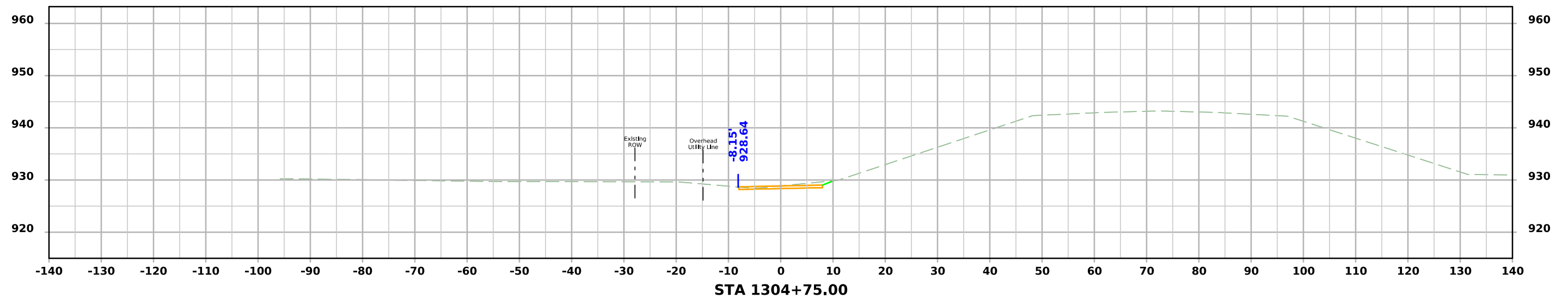
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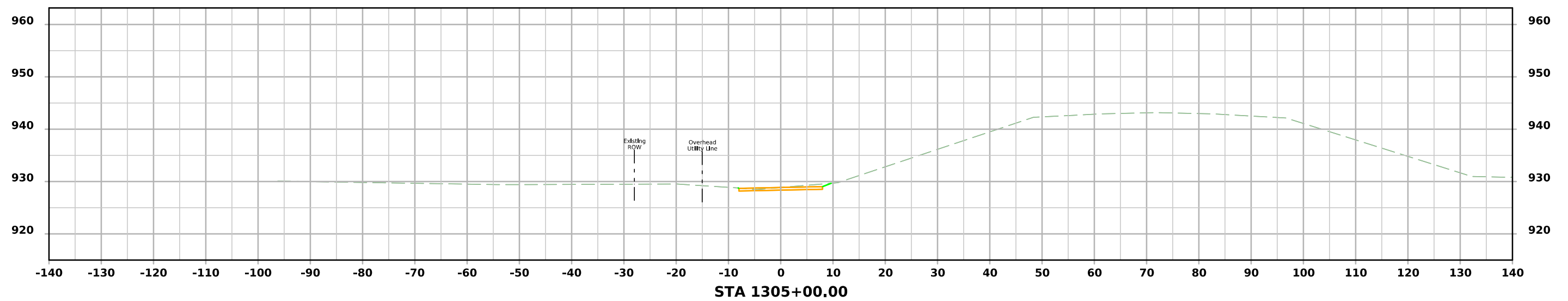
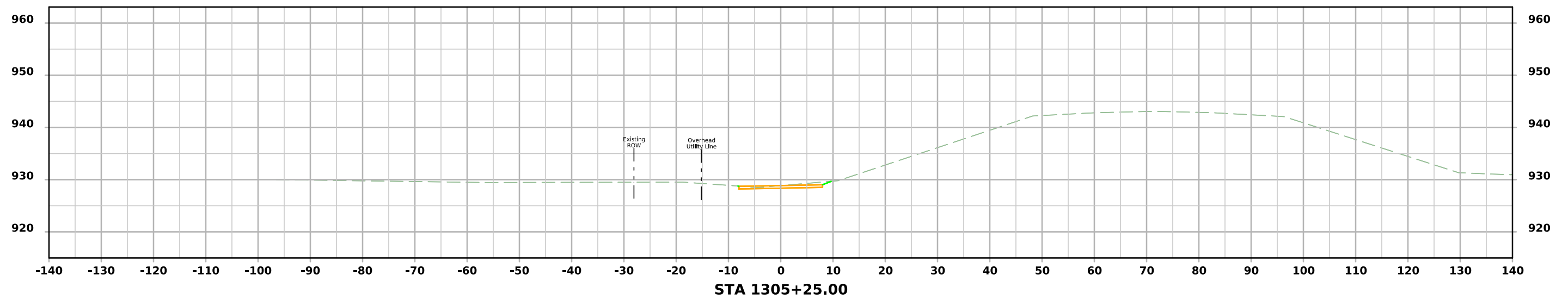
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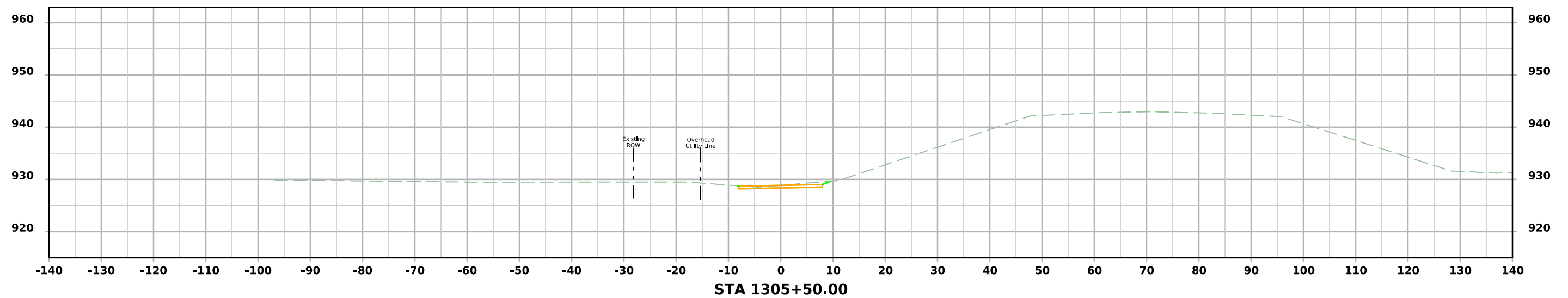
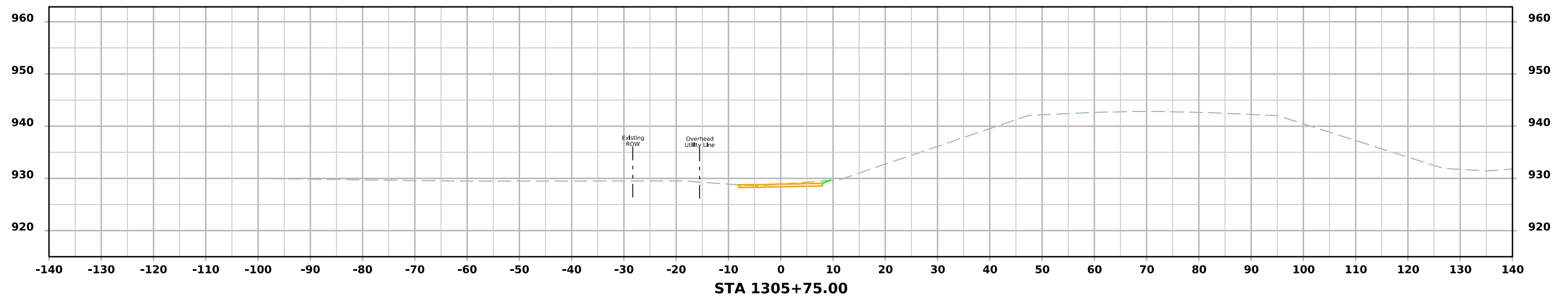
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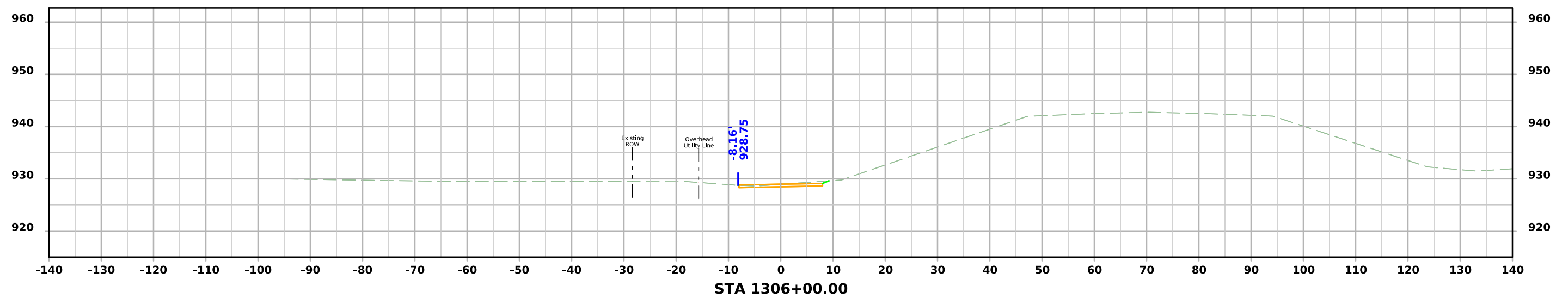
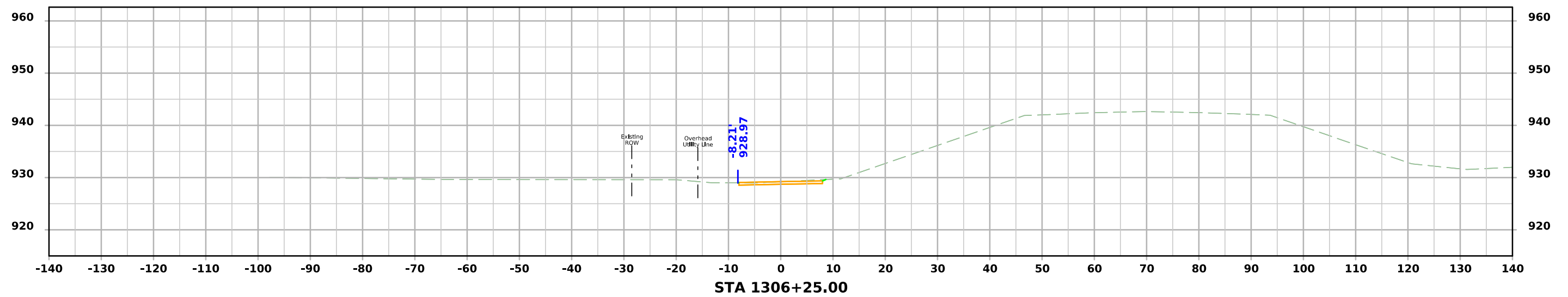
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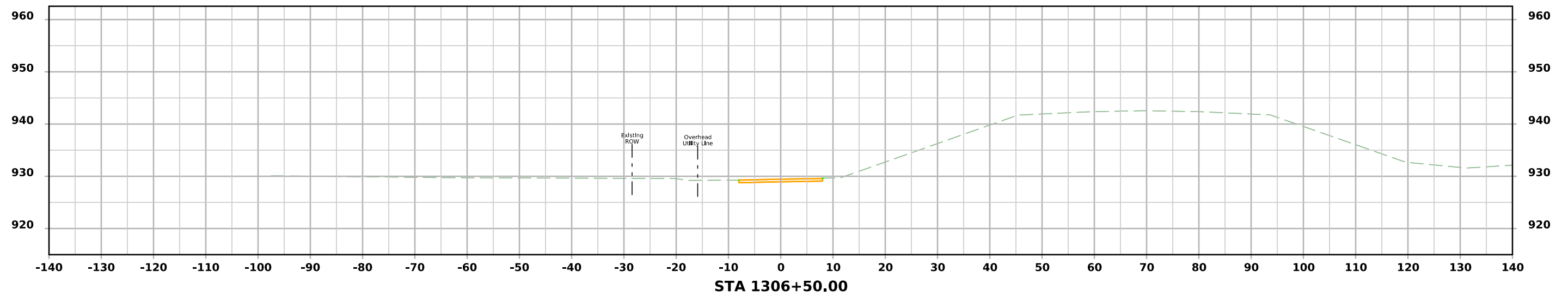
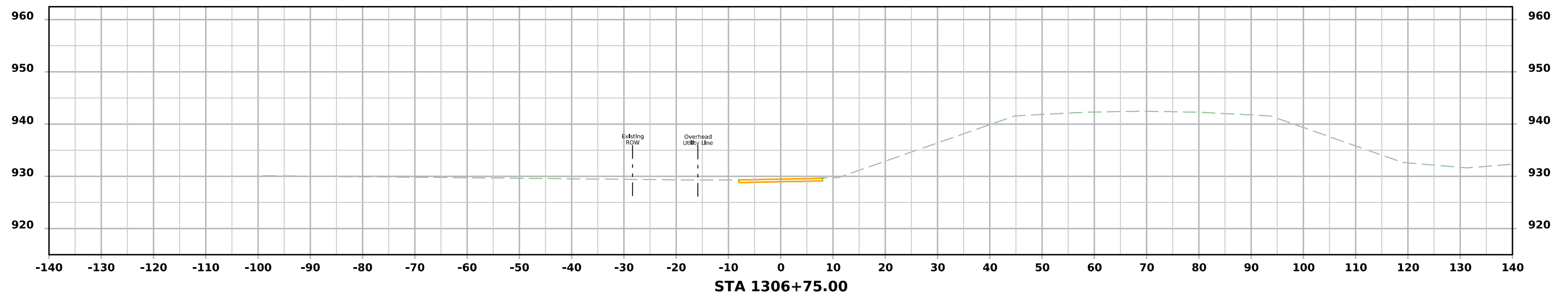
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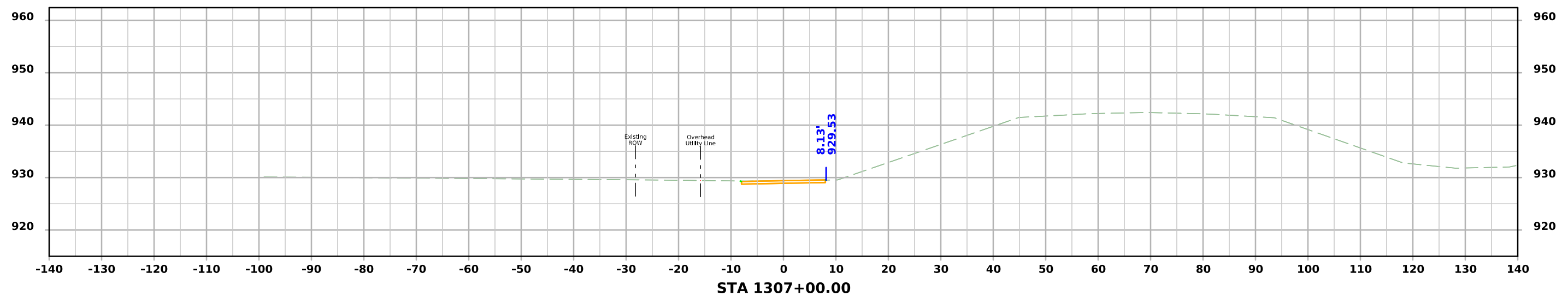
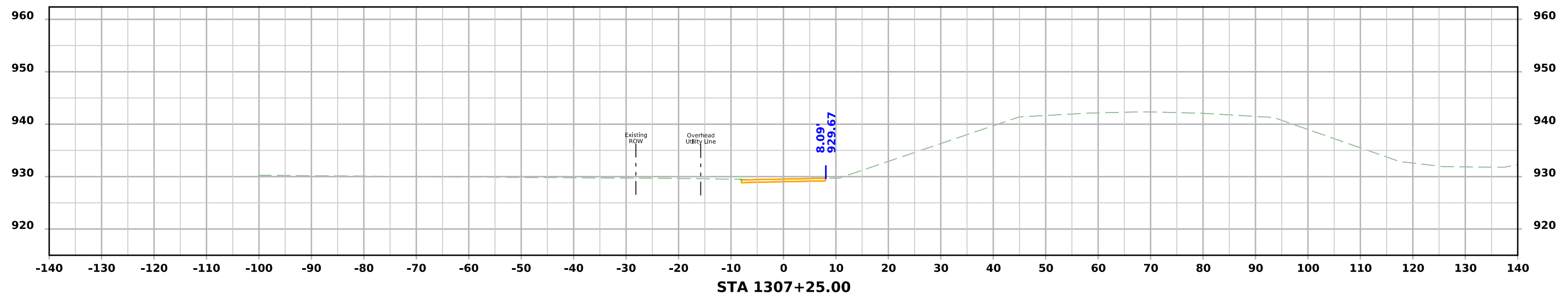
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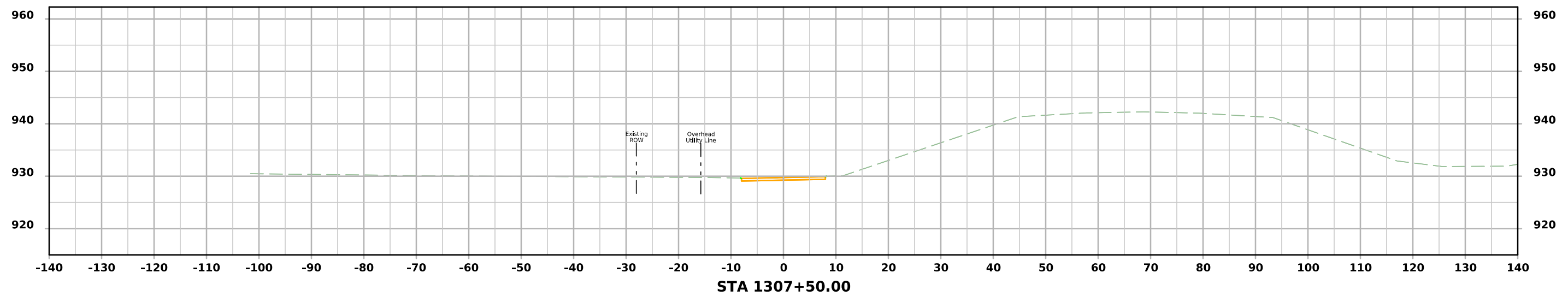
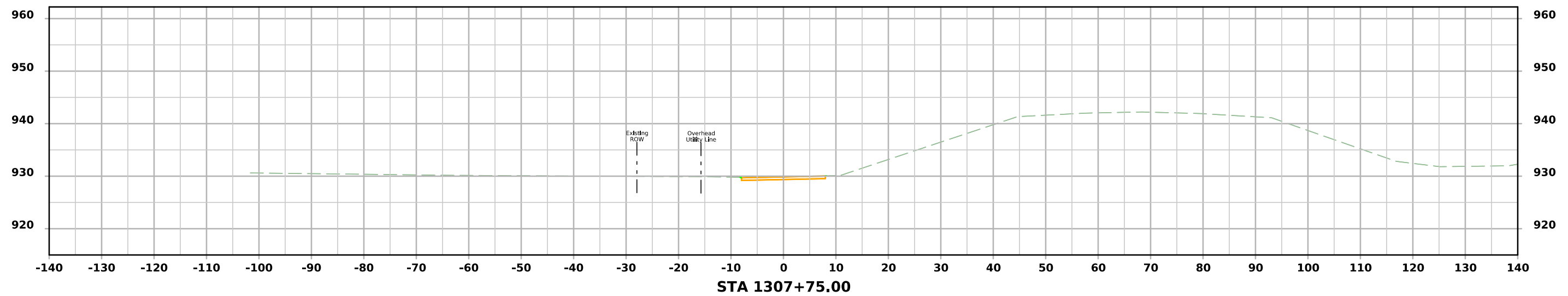
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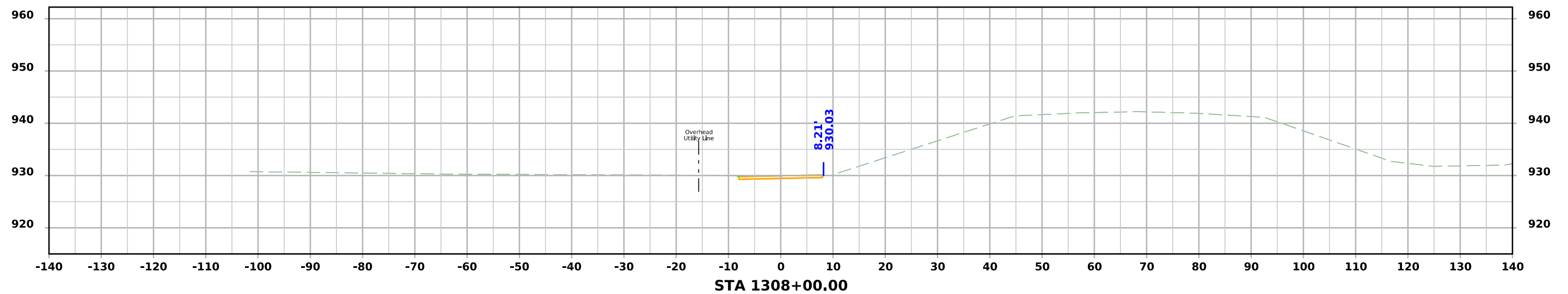
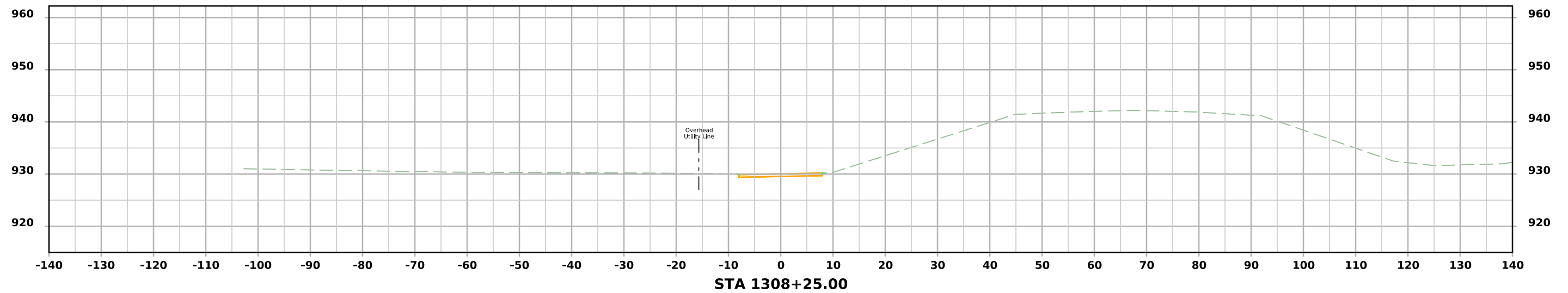
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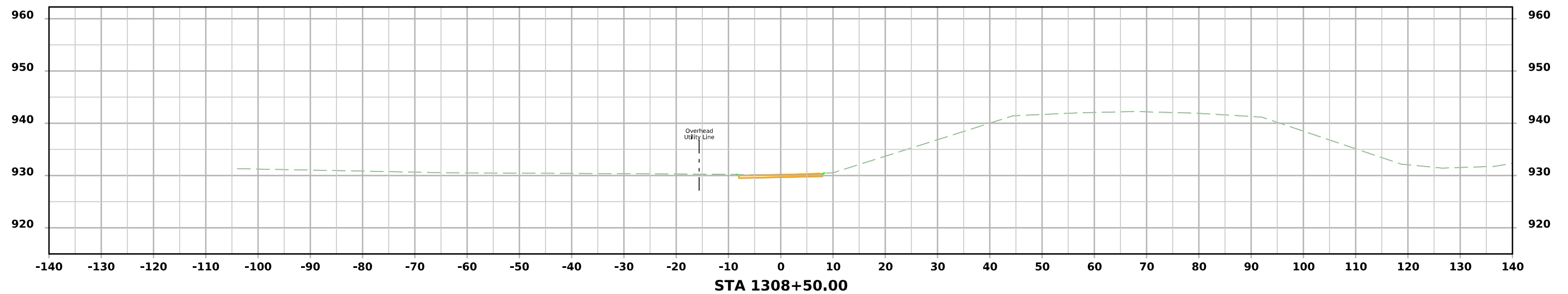
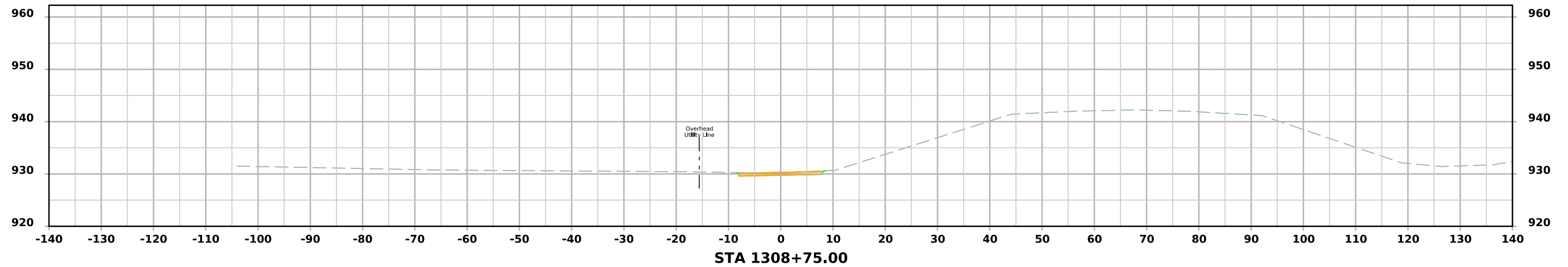
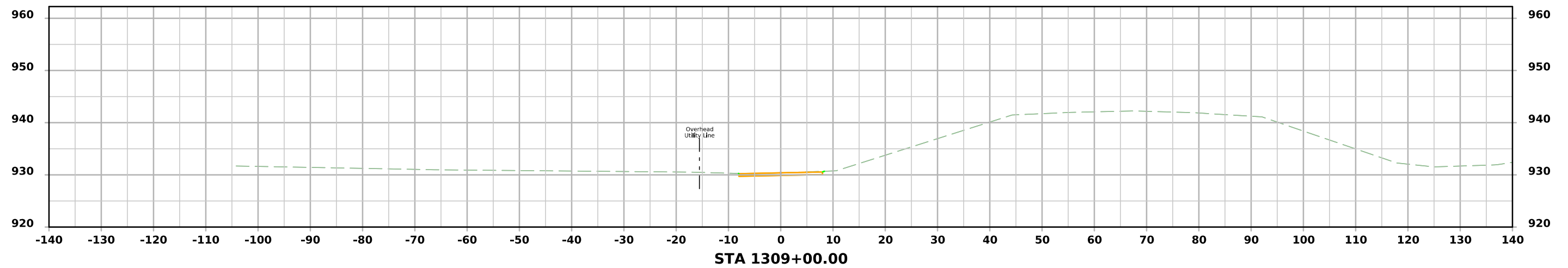
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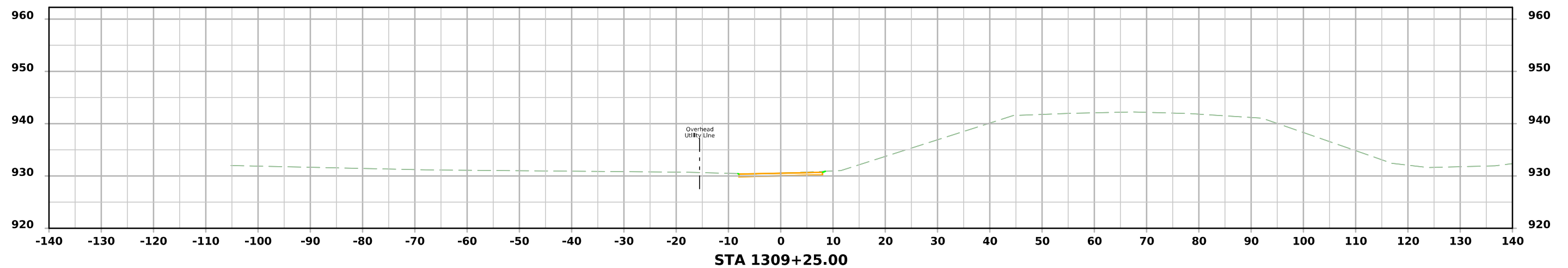
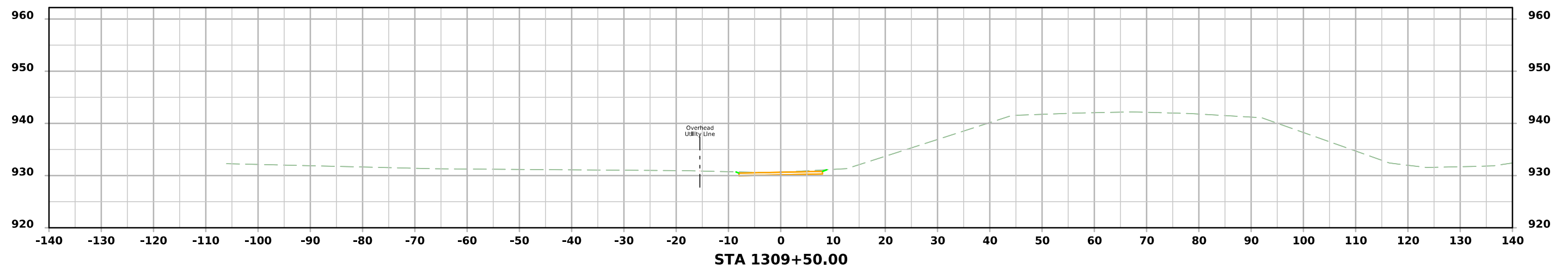
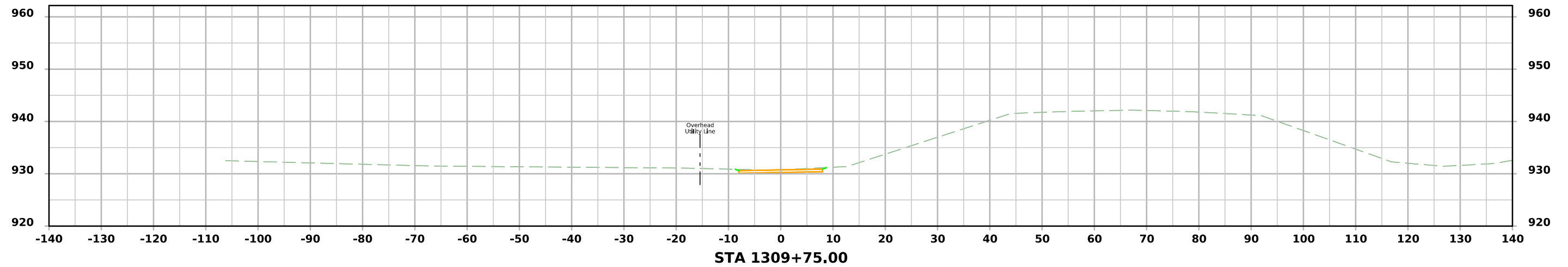
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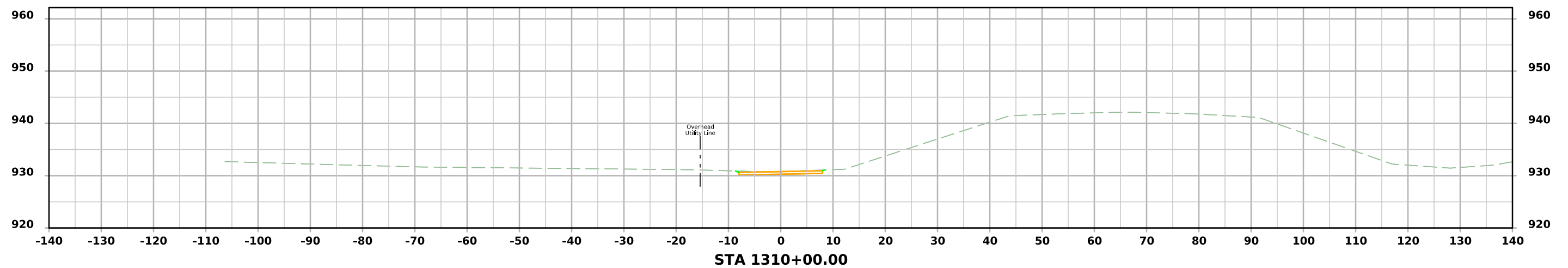
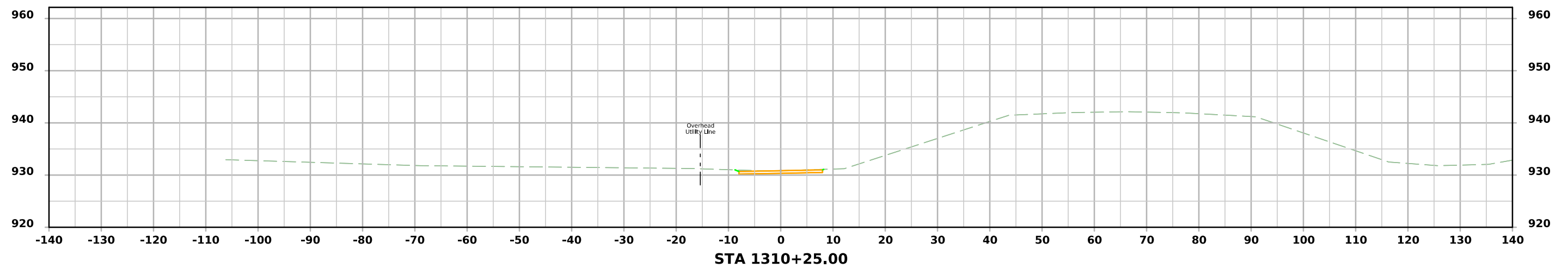
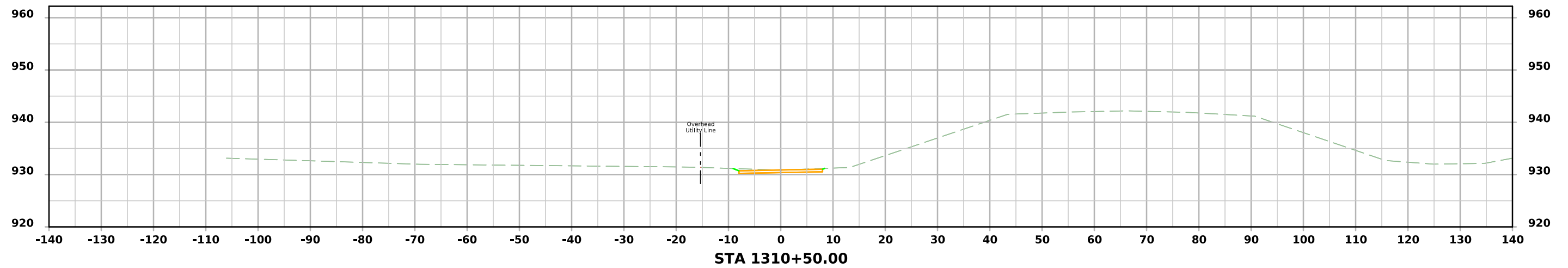
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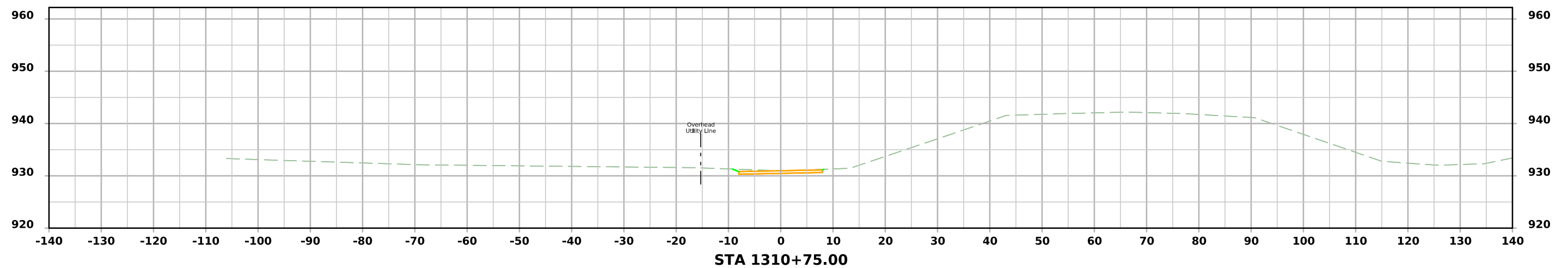
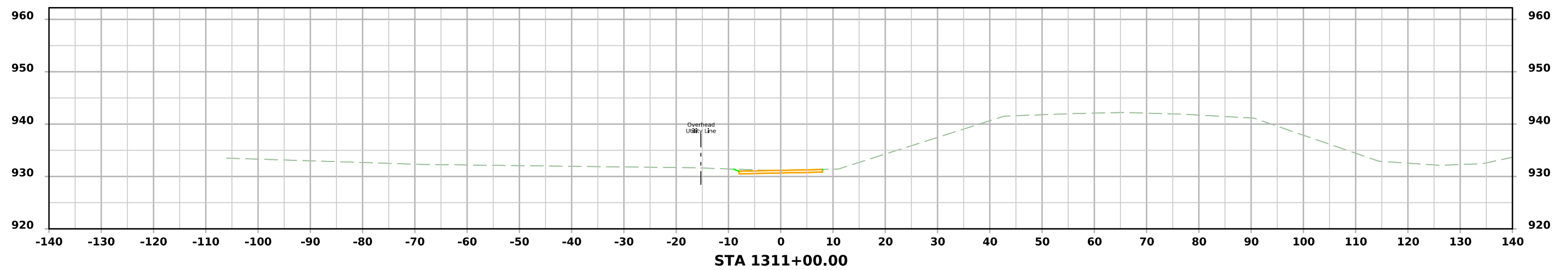
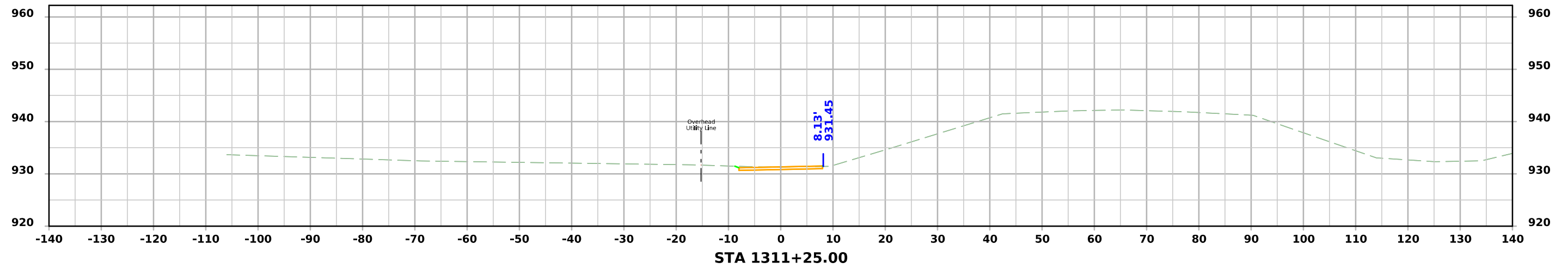
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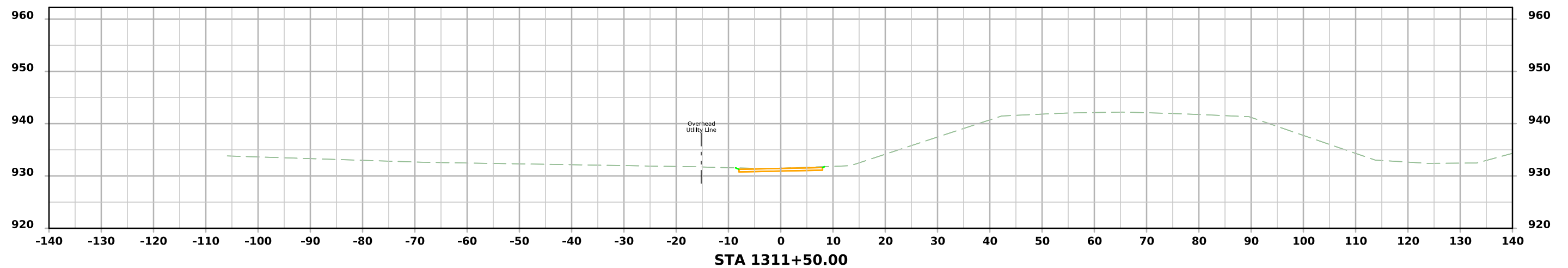
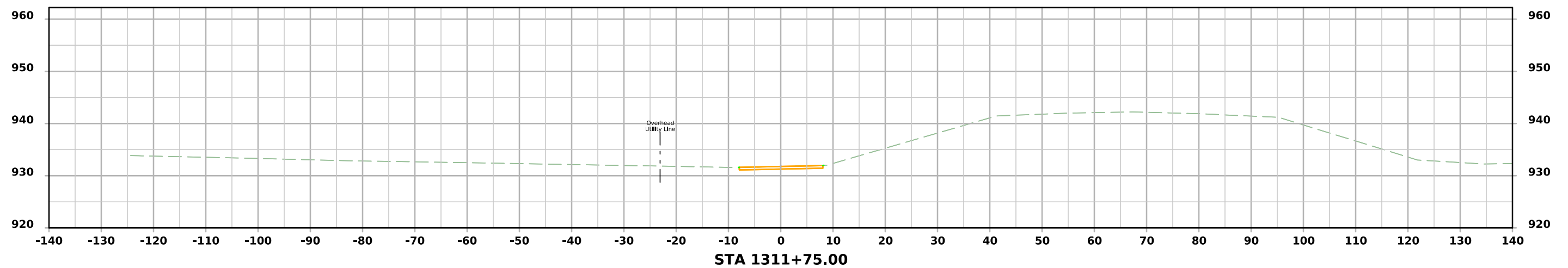
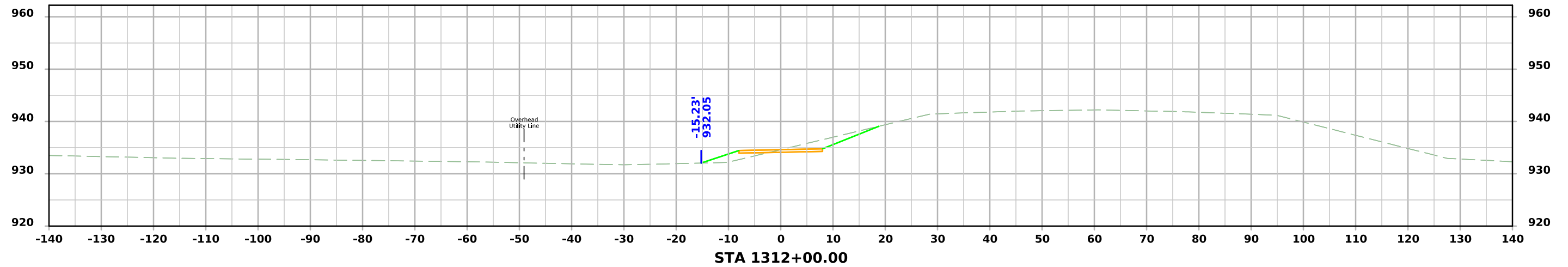
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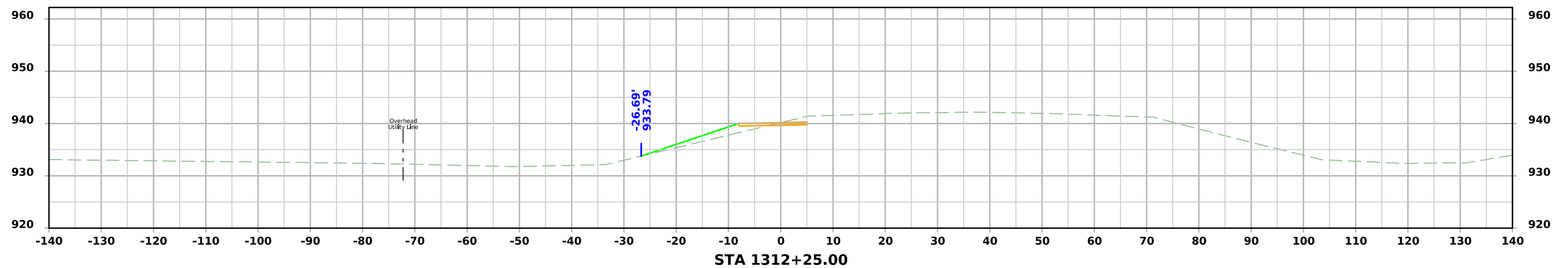
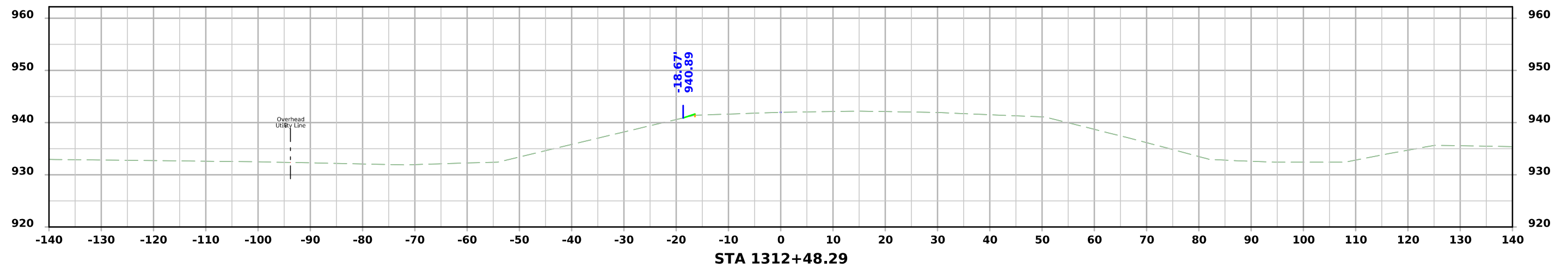
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