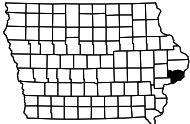


SCOTT COUNTY

SLIDE REPAIR
NHSN-067-1(173)--2R-82

LETTING DATE
01/19/28



PLANS OF PROPOSED IMPROVEMENT ON THE
PRIMARY ROAD SYSTEM
SCOTT COUNTY
SLIDE REPAIR
Slide Repair Approx 1.5 mi
S of I-80 to N of 218th St

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	
..	
PROJECT IDENTIFICATION NUMBER	
24-82-067-030	
PROJECT NUMBER	
NHSN-067-1(173)--2R-82	
R.O.W. PROJECT NUMBER	
NHSN-067-1(174)--2R-82	

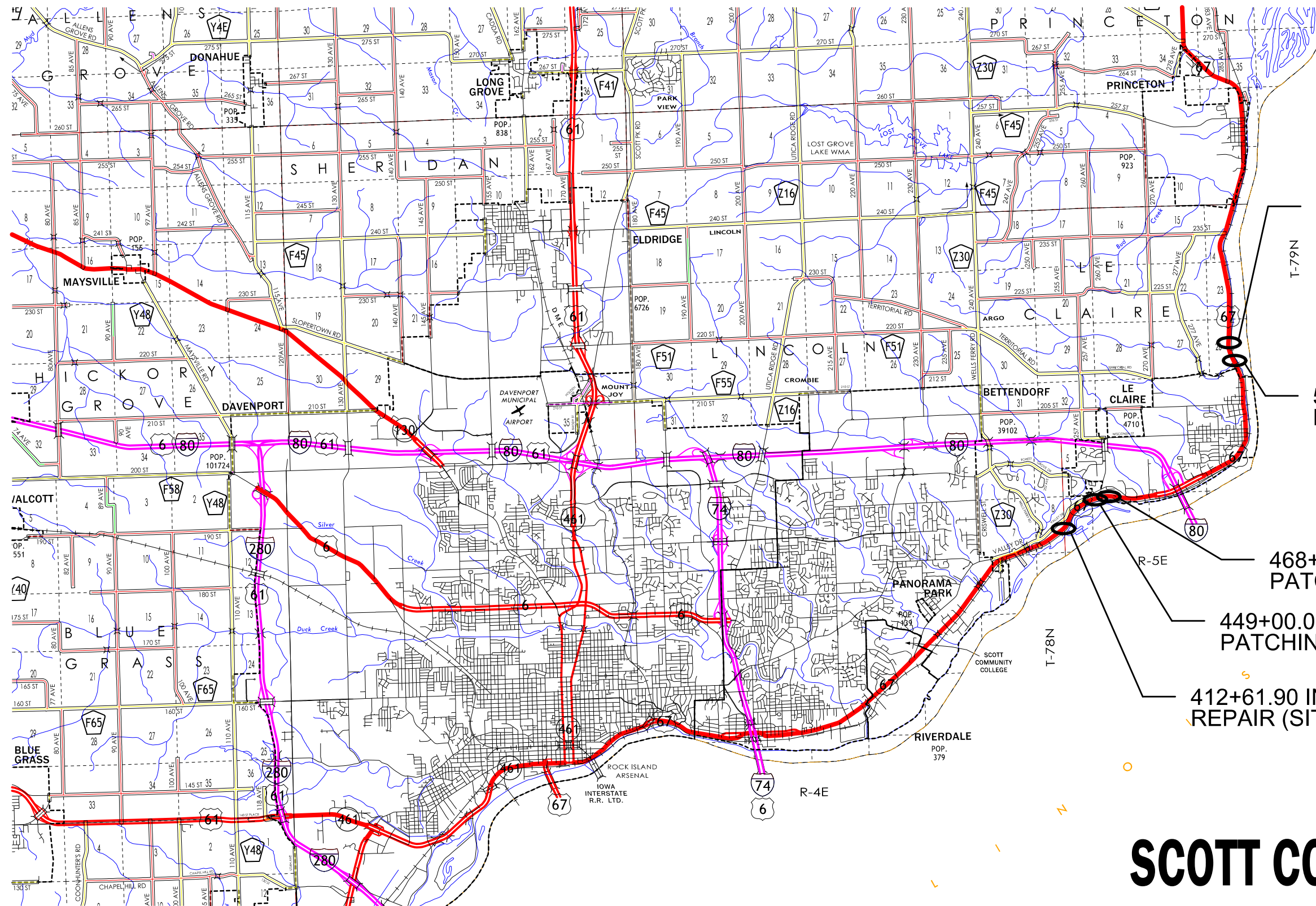
D3/D5 – 07/17/26
P9 – 11/18/26
D09 – 11/02/27

DESIGN DATA RURAL				
2024	AADT	7700	V.P.D.	
20 --	AADT	—	V.P.D.	
20 --	DHV	—	V.P.H.	
TRUCKS		11 %		
Total				
Design ESALs		—		

PRELIMINARY PLANS

Subject to change by final design.

D2 PLAN - Date: 06/30/26



611+30.43 INTAKE/RCP
REPLACE (SITE #5)

596+57.00 INTAKE/PIPE
REPAIR (SITE #4)

468+00.00 SLIDE REPAIR/
PATCHING (SITE #3)

449+00.00 SLIDE REPAIR/
PATCHING (SITE #2)

412+61.90 INTAKE/GUTTER
REPAIR (SITE #1)

SCOTT COUNTY



TO OFFICE: District 6

DATE: January 23, 2025

ATTENTION: Jim Schnoebelen

COUNTY: Scott

FROM: Ahmad Abu Afifeh and Mark Dell

PHASES: NHSN-067-1(173)—2R-82

OFFICE: District 6 & Soil Design

PROJECT: 24-82-067-030

FOLDER: 8206703024

SUBJECT: FY 2028 3R/HSIP Final Concept Statement – D00

Project Location:

US-67 Approx 1.5 mi S of I-80 to N of 218th St



Date of Review

Concept review meeting was held on January 16, 2025, for the major slope instability and drainage issues along US 67. Attendees included: Brad Burger, Nicole Cuva, Gregory Moyle, Mark Dell, Kent Nicholson, Brian Smith

Project Description

This project addresses major slope instability and drainage issues along US 67 in Scott County, Iowa, from 1.2 to 1.5 miles south of the I-80 bridge. Key concerns include sloughing at two slide areas, causing

Scott County

NHSN-067-1(173)—2R-82

January 23, 2025

potential pavement distress, and inadequate drainage from three culverts. The work will stabilize slopes, enhance drainage, and ensure roadway safety and functionality.

The culvert at Station 596+52 is located north of a pond near LeClaire and Territorial Road and serves as a crossing under all lanes of US 67. The structure consists of a 24-inch concrete pipe, 96 feet in length, with an intake in the left ditch connected to a manhole (RA-1) in the right ditch. The culvert needs Cleaning, inspection, before plans completion to ensure proper repair and long-term functionality.

The culvert at Station 611+22 is a corrugated metal pipe (CMP) crossing under all lanes of US 67, with a horizontal size of 60 inches and a length of 70 feet. It includes a 10x6 drop inlet and a 6x6 outlet. Inspection revealed dips in the road caused by loose joints and seepage of fill material around the pipe joints.

The culvert at Station 412+65, 33' LT, features a significant issue with damage around its intake. While the intake box and grate remain intact, the surrounding concrete has collapsed, and the drain trough leading into the intake is broken. This has caused dirt settlement and debris accumulation in the area. Inspection findings raise concerns about potential damage to the pipes underneath, such as cracks or gouges.

This project is scheduled for 7/20/2027 Letting

Need for Project

This project is needed to address slope instability and drainage issues along US 67 in Scott County, Iowa. Two areas of the foreslope are potentially sloughing, causing pavement distress in the northbound lane. Additionally, drainage problems from three culverts are causing material loss, settlement, and deterioration of the roadway. These issues must be resolved to stabilize the slopes, improve drainage, and ensure the safety and functionality of the roadway.

Present Facility

The existing facility is a four-lane, 50-foot-wide pavement on US 67 with a 6-foot outside shoulder along the northbound lane. Steel beam guardrails are installed along the northbound shoulder to address side obstacles.

Traffic Estimates

The 2024 estimated AADT 7,700 (3,850 NB) with 10.52% trucks.

Access Control

As per the Developmental Specifications (DS) involving construction or maintenance of roadways and structures on Chicago, Central, and Pacific Railroad and Cedar River Railroad (collectively CCP) Right-of-way (ROW) and bid item for RR liability insurance providing the contractor the access to railroad ROW during construction.

Crash History

Crash data was not studied for this project.

Feasible Alternative

Feasible Alternative: Installation of Yugoslavian (Yugo) Drains and Storm Sewer Repair

To stabilize slope instability areas, the following measures will be implemented:

- **Guardrail Removal:** Remove the existing guardrail along the northbound lane of US 67 from approximate Stations 447+32 to 453+12 and 466+75 to 469+50.
- **Clearing and Grubbing:** Clear and grub the foreslope as necessary within both sites.
- **Foreslope Regrading:** Regrade the upper portion of the foreslope using Class 10 Embankment to create a continuous flat slope. Ensure that the previously installed pipe piles at Site 1 are completely buried.
- **Yugo Drain Installation:** Install 31 Yugo drains at Site 1 (Stations 447+32 to 453+12) and 18 Yugo drains at Site 2 (Stations 466+75 to 469+50) at 20-foot intervals between the existing pipe piles.
- **Sheet Pile Wall Modifications:** Drill weep holes across the 1961 sheet pile wall (Stations 446+74 to 448+51 Rt. 40) to maintain hydraulic continuity for the Yugo drains. The design of weep holes must be approved by the Engineer.
- **Drain Excavation and Backfill:** Excavate and backfill each Yugo drain individually, monitoring the foreslope for potential instability.
- **Rock Slope Protection:** Remove existing rock slope protection on the lower half of the foreslope at Site 1, salvage it, and replace it after backfilling and installing each Yugo drain outlet.
- **Backfilling Yugo Drains:** Backfill Yugo drains with Erosion Stone up to the regraded foreslope surface or the surface exposed after removing rock slope protection.
- **Drain Dimensions:** Each Yugo drain will have a width of 2 feet, with length and depth varying by cross-section, sloping to the existing ditch bottom.
- **Drain Outlets:** Each Yugo drain will feature a separate DR-306 outlet.
- **Foreslope Coverage:** Cover the regraded foreslope with Engineering Fabric and a 1-foot thick layer of Erosion Stone. The foreslope at both sites will be entirely covered with rock, using either the new Erosion Stone or the salvaged rock slope protection.
- **Roadside Ditch Regrading:** Clean out and regrade the roadside ditch along westbound US 67 (north side) from Station 450+00 to Station 455+25, ensuring positive surface drainage to the drop inlet structure at Station 455+26.6 near the frontage road entrance.
- **Trench Drain Installation:** To improve subsurface drainage, install a trench drain (up to 5 feet deep) along the bottom of the regraded ditch. The drain will be wrapped with Engineering Fabric, backfilled with Granular Backfill, and include a perforated drainage pipe connected to the existing drop inlet structure.

Feasible Alternative: for Culvert at Station 596+52

- **Pipe Replacement:** Remove and replace the existing 24-inch concrete pipe with a new pipe that has watertight joints to prevent soil infiltration and material loss. Consider upsizing the pipe to 30 inches to match the road crossing size if it is feasible and hydraulically appropriate.
- **Cleaning and Inspection:** Engage a contractor to clean out the pipe and perform a televised inspection to evaluate its internal condition and identify any additional issues.
- **Access and Maintenance:** Clear brush and debris around the intake area to improve access for inspection and repair activities. Ensure ongoing maintenance of the intake to prevent future blockages and debris accumulation.
- **Preventive Measures:** Properly seal all pipe joints to mitigate settlement and avoid material seepage. Monitor the repaired sections regularly to ensure long-term functionality and stability.
- **Overall Objective:** These measures aim to restore the structural integrity and drainage functionality of the culvert, address pavement dips caused by deterioration, and prevent future damage.

Feasible Alternative: for Culvert at Station 611+22

- **Concrete Spray-On Liner:** Apply a concrete liner to the interior surface of the pipe for structural reinforcement and to reduce corrosion. Address concerns about the bolted connections between pipe joints to ensure proper application and long-term performance. Perform a hydraulic study to evaluate the impact of the reduced pipe diameter on drainage.
- **Clearing and Inspection:** Remove debris, brush, and other obstructions to allow proper access to the pipe for inspection and repairs. Conduct a detailed televised inspection to evaluate the condition of the internal pipe and identify any additional issues.
- **Coordination and Maintenance:** Coordinate with contractors to ensure thorough cleaning and application of the chosen repair method. Regularly monitor and maintain the pipe to prevent future deterioration and debris accumulation.
- **Objective:** These solutions aim to repair the damaged culvert, restore its structural stability, and ensure adequate drainage while addressing site-specific challenges such as bolted pipe connections and potential hydraulic limitations.

Feasible Alternative: for Culvert at Station 412+65, 33' LT

- **Excavation and Pipe Inspection:** Excavate the area around the damaged intake and drain trough to expose the pipes and assess their condition. Inspect the pipes for cracks, gouges, or other damage caused by settlement or material loss.
- **Concrete Repair:** Replace or patch the broken concrete surrounding the intake to restore structural integrity and prevent further settlement. Ensure proper sealing of the pipe joints to eliminate future material loss.
- **Backfilling and Restoration:** Backfill the repaired area with appropriate material to ensure stability and prevent further settlement. Replace or patch the drain trough leading to the intake as needed.
- **Preventive Measures:** Clean and maintain the intake area regularly to prevent debris accumulation and ensure proper drainage functionality. Implement joint sealing techniques to prevent soil infiltration and ensure long-term durability.
- **Objective:** The proposed solution aims to repair the damaged intake and surrounding area, restore proper drainage functionality, and prevent future issues caused by settlement and material loss.

Cost Estimate

- **Total cost of the project is estimated at \$1,285,612.**
- The total estimated repair cost for the installation of Yugoslavian (Yugo) Drains and Storm Sewer Repair is \$958,432 which includes 40% Contingency.
- The total estimated repair cost for the culvert at Station 596+52 is \$51,300 which includes 20% Contingency. This this estimate does not include the cost to Engage a conetractor to clean out the pipe and perform a televised inspection to evaluate its internal condition and identify any additional issues.
- The total estimated repair cost for the culvert at Station 611+22 is \$240,000 which includes 20% Contingency
- The total estimated repair cost for the culvert at Station 412+65, 33' LT is \$35,880 which includes 20% Contingency

Detour Analysis

At least one lane of traffic in each direction shall be maintained on the US 67 at all times.

Recommendations

It is recommended that the eastbound foreslope be repaired by installing the Yugo drains, as described. In addition, ditch regrading/trench drain installation and storm sewer cleaning/repair shall also be completed.

Construction Sequence

It is anticipated that all work on this project will be awarded to one prime contractor. Ames Road design section will coordinate the plan preparation with assistance from the Soils and preliminary survey section of the Design.

ADA Accommodations

There are no ADA facilities within the limits of this project, and no new facilities will be added to this project.

Funds Programmed

This project is not programmed. It has been identified by District 6 as a candidate for the 2028 Highway Program.

Project Schedule

- D01 Survey Plan and Photogrammetry
- S03 Soils Design Complete
- D00 Predesign Concept
- H00 Cultural Resources Assessment
- H06 SHPO-State Historic Preservation Officer
- TE0 Desktop Review
- U00 Preliminary Utility Review
- W00 Preliminary Wetlands Review
- D06 Final Grade Plans
- L01 Letting – Grade

Special Considerations

- This will not be a traffic-critical project.
- Additional survey of the sliding area is still under contract.
- Topo survey for the culverts and the sliding area is in progress
- final report from the consultant describing the slide should be available for D2 event
- An agreement will be required for work near the railroad.
- Road design section and Ames will produce all design sheets
- Right of Way will not be required for this project.
- Standard survey coverage will be required.
- Wetland mitigation is not required.
- Engage a contractor to clean out the pipe culvert at Station 596+52 and perform a televised inspection to evaluate its internal condition and identify any additional issues.

cc:

T. J. Gustafson
K. D. Nicholson
S. S. Nielsen
J. S. Nelson
R. A. Younie
K. Brink
W. W. Musgrove
W. A. Sorenson
T. M. Miller
T. S. Quam
D. D. Heeren
E. C. Wright
G. Karssen
B. J. Dolan
J. L. Tibodeau
S. M. Neuhaus
A. A. Afifeh
H. W. Holak
G. S. Morrell
A. J. Stanley
Ben Petty

M. J. Purcell
D. L. Maifield
A. A. Welch
M. Nop
S. P. Anderson
D. L. Newell
M. A. Dell
D. E. Sprengeler
M. E. Ross
M. Ortiz-Pagan
J. Bartholomew
M. Buttz
B. P. Struecker
A. F. Buss
M. Wood
S. J. Shea
M. K. Harle
J. Lamping
H. R. Gugler
D. Coon

C. B. Brakke
C. C. Poole
M. A. Swenson
B. D. Hofer

J. W. Laaser-Webb
J. S. Bacon
M. L. Sloppy
K. M. Olson
N. L. Cuva
S. Cook
R. A. Harris
J. S. Omundson
D. L. Alvarez
H. Torres-Cacho
T. M. Storey
A. J. Simonson
R. H. Holub
S. R. Martin

Questions/Comments

Detour signing – by district or contractor?

Will need patching locations from the district.

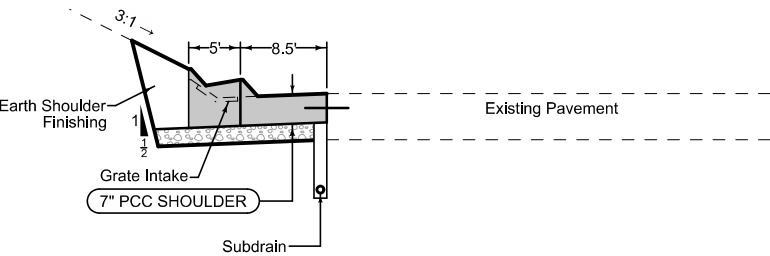
Does Site #1 thru #3 need subdrains replaced or UAC'd?

Does Site #5 need subdrains?

Will patching match existing 14' plus 8' (12' driving lane 10' shoulder) or 12' plus 10'?

District or Pavement Design on pavement thickness and subbase type/thickness?

Site #4: are we keeping the clay pipe? should the new pipe be CMP? How is the new pipe getting connected to the clay pipe?



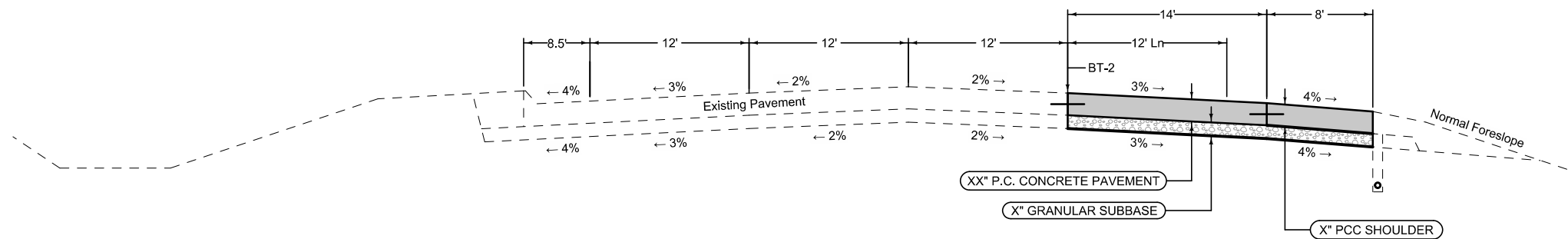
Curbed Shoulder

Shoulder Jointing:
Longitudinal joint not required when distance from back of
curb to nearest joint is less than 15'.

Single pour: L-2
Staged : BT-2
Transverse: C at 17' spacing

2_Curb_ 04-15-25		
STATION TO STATION		Curb Type See PV-102
412+41.90	412+81.90	6" Sloped

US 67
Site #1
Grate Intake/Pipe and
Curb/Gutter Repair



Section shown in the direction of traffic.

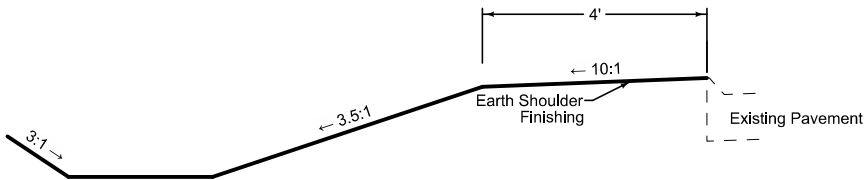
Mainline Jointing:
Transverse joints: CD at 17' spacing
Longitudinal joint: L-2

Full Depth PCC Shoulder

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

Direction of Travel	STATION TO STATION	
	BEGIN STATION	END STATION
NB	449+00.00	449+50.00
NB	468+00.00	469+00.00

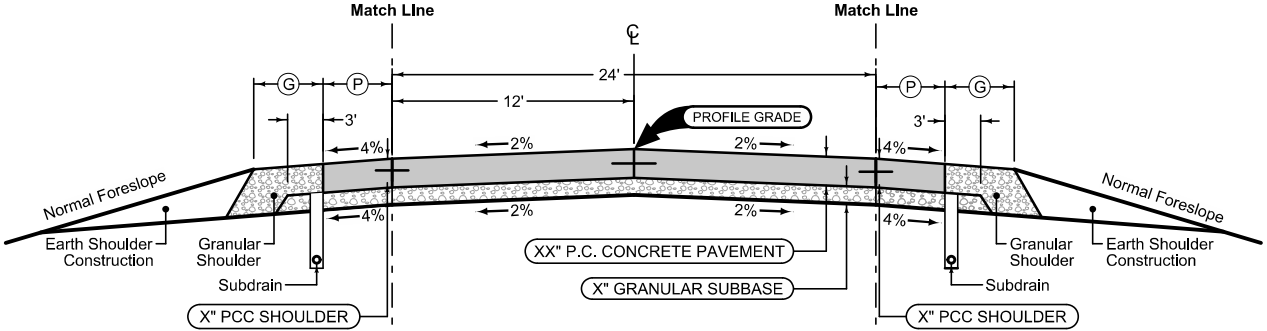
STATION TO STATION	
449+00.00	449+50.00
468+00.00	469+00.00



Ditch Regrading

STATION TO STATION	
449+50.00	455+19.41
469+00.00	470+73.39

US 67
Site #2 & #3
Ditch Reshaping,
Patching and
Slide Repair



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) Feet	(G) Feet
610+90.00	611+70.00	6	4

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

2P_04-21-20	
STATION TO STATION	
610+90.00	611+70.00

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) Feet	(G) Feet
610+90.00	611+70.00	6	4

US 67
Site #5
RCB Replacement

SURVEY SYMBOLS

	Interstate Highway Symbol		Septic Tank
	U.S. Highway Symbol		Cistern
	Iowa Highway Symbol		L.P. Gas Tank (No Footing)
	County Road Highway Symbol		Underground Storage Tank
	Evergreen Tree		Latrine
	Deciduous Tree		Satellite TV Dish
	Fruit Tree		Water Hook Up
	Shrub (Bushes)		Radio Tower
	Timber		Tower Anchor
	Hedge		Guardrail (Beam or Cable)
	Stump		Guard Post (one or two)
	Swamp		Guard Post (over two)
	Rock Outcrop		Filler Pipe
	Broken Concrete		Gas Valve
	Revetment (Rip Rap)		Water Valve
	Cemetery		Speed Limit Sign
	Grave		Mile Marker Post
	Cave		Sign
	Sink Hole		Traffic Signal Control Box
	Board Fence		Rail Road Signal Control Box
	Chain Link or Security Fence		Telephone Switch Box
	Wire Fence		Electric Box
	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)		

UTILITY LEGEND

	MidAmerican Energy Company Gas Distribution Derek Johnson 515-901-8274 derek.johnson@midamerican.com
	MidAmerican Energy Company Electric Distribution Derek Johnson 515-901-8274 derek.johnson@midamerican.com
	Mediacom Communications Corporation Fiber Transmission Carl Norton 319-594-6201 EIA_Construction@mediacomcc.com
	Iowa American Water Company Lucke Jarrek Lucke Jarrek.lucke@amwater.com
	Lumen Centurylink Fiber Transmission Steve Parker Steven.Parker4@lumen.com 5073581978
	City of Le Claire Storm Sewer Mark Dale 563-529-8203 mdale@leclaireiowa.gov

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

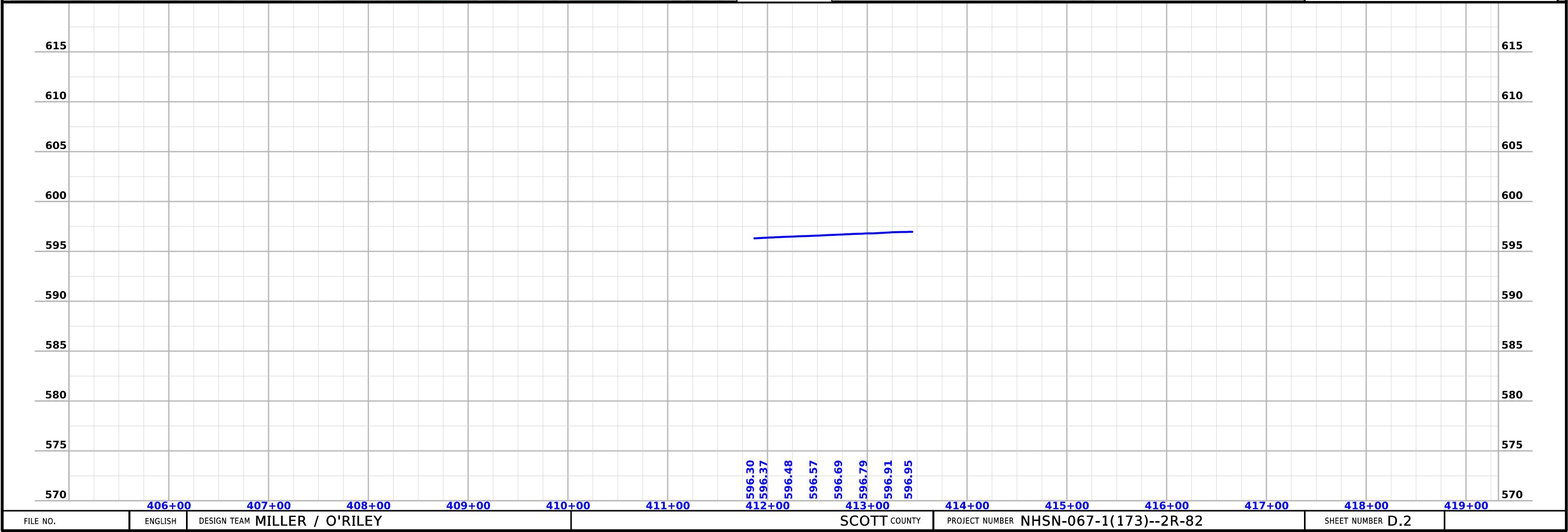
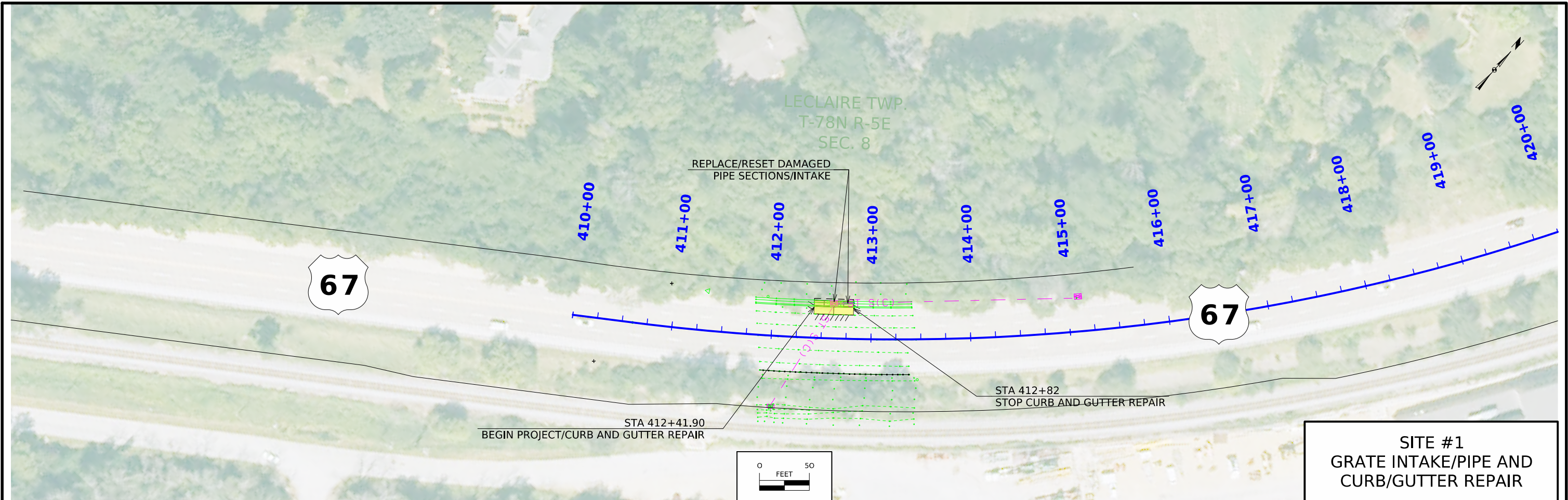
	Reference Point		Survey Line
	Station		Section Corner
	Ground Line Intercept		Saw Cut
	Guardrail		Trench Drain
	HighTension Cable Guardrail		Sheet Pile
	Pavement Removal		Clearing & Grubbing Area

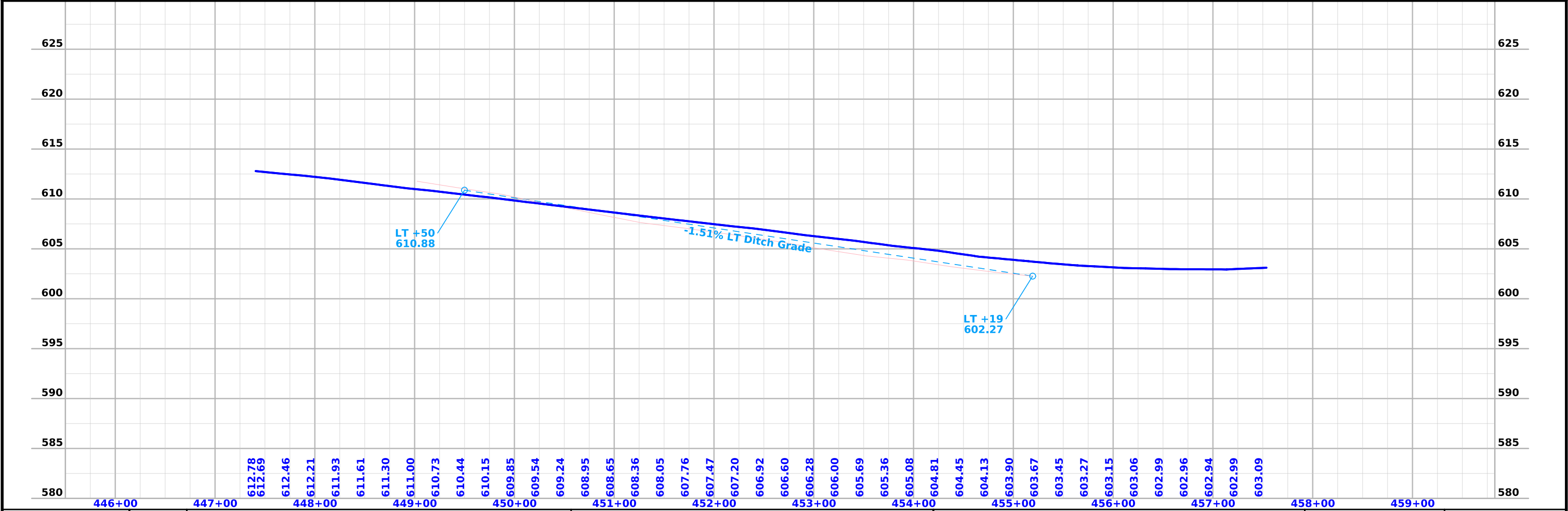
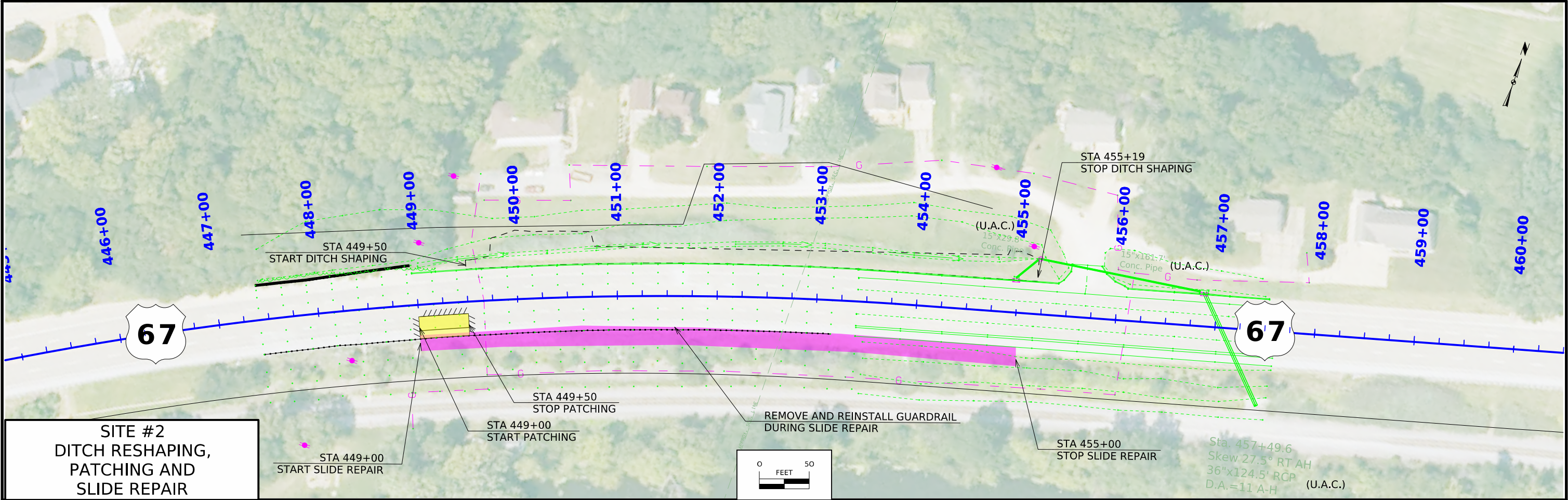
RIGHT-OF-WAY LEGEND

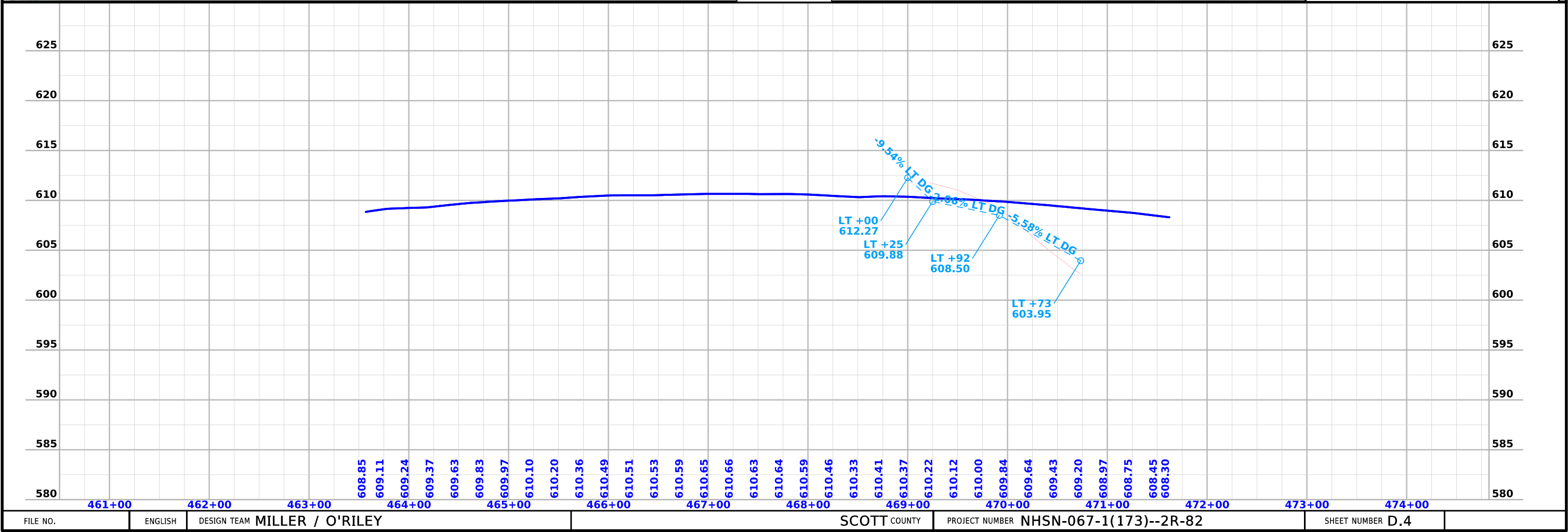
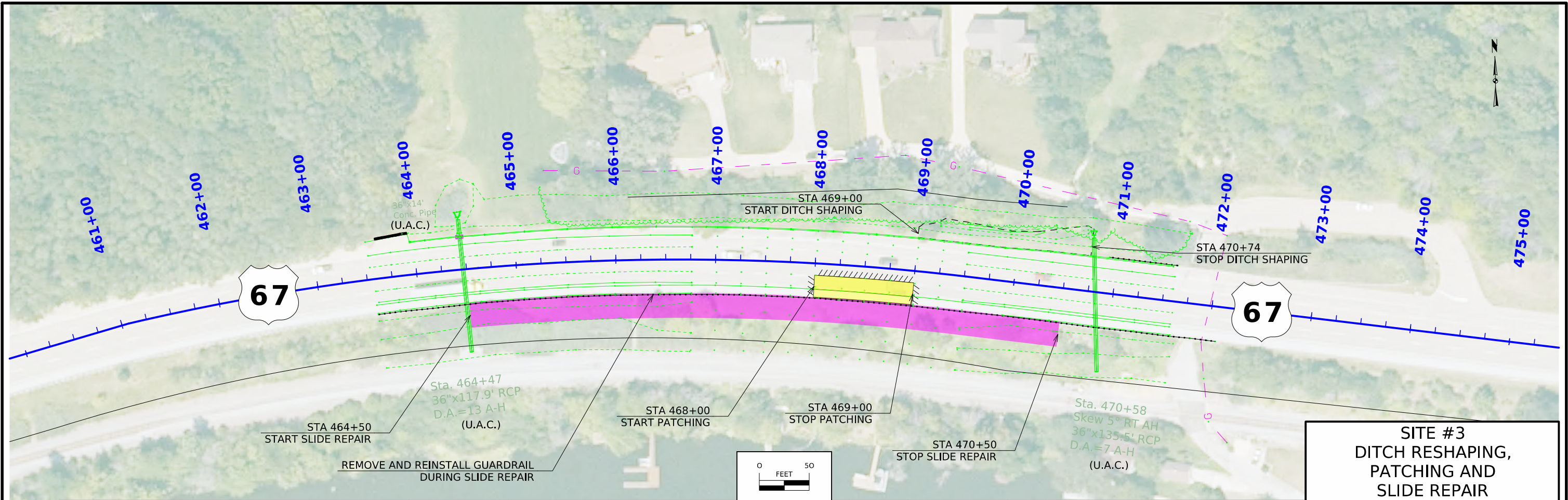
	Proposed Right-of-Way Symbol
	Proposed Right-of-Way Line
	Existing Right of Way
	Existing and Proposed Right-of-Way
	Easement and Existing Right-of-Way
	Easement (Temporary) Symbol
	Easement (Temporary) Line
	Easement
	C/A Access Control
	Property Line Symbol
	Property Line

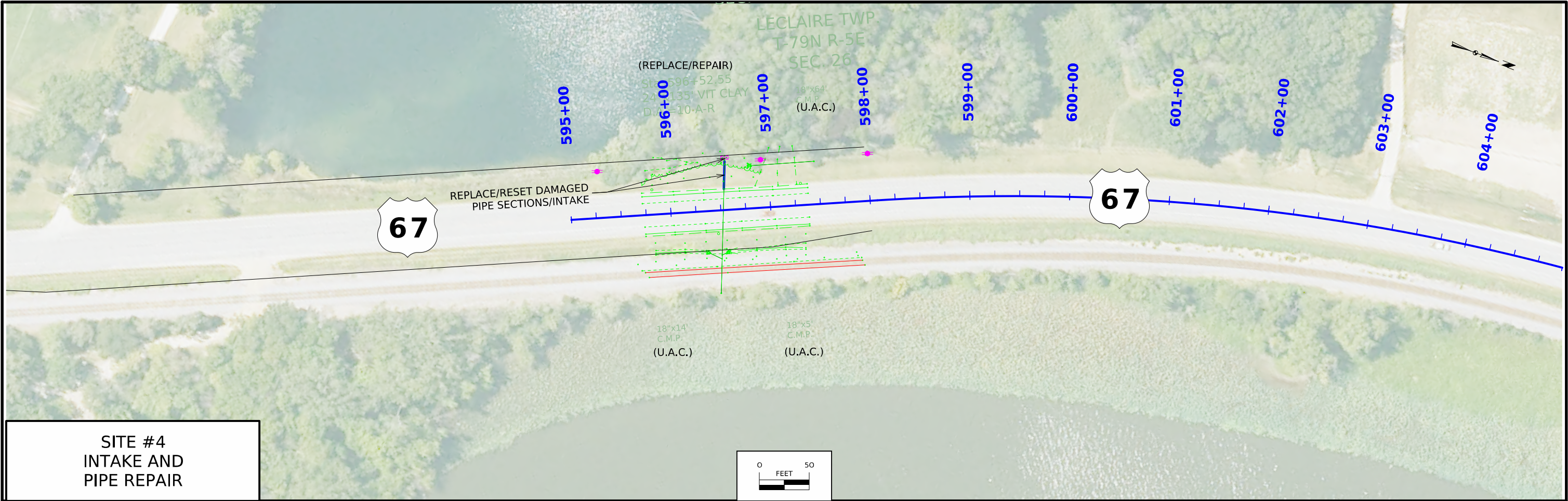
PLAN AND PROFILE
LEGEND AND SYMBOL
INFORMATION SHEET

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

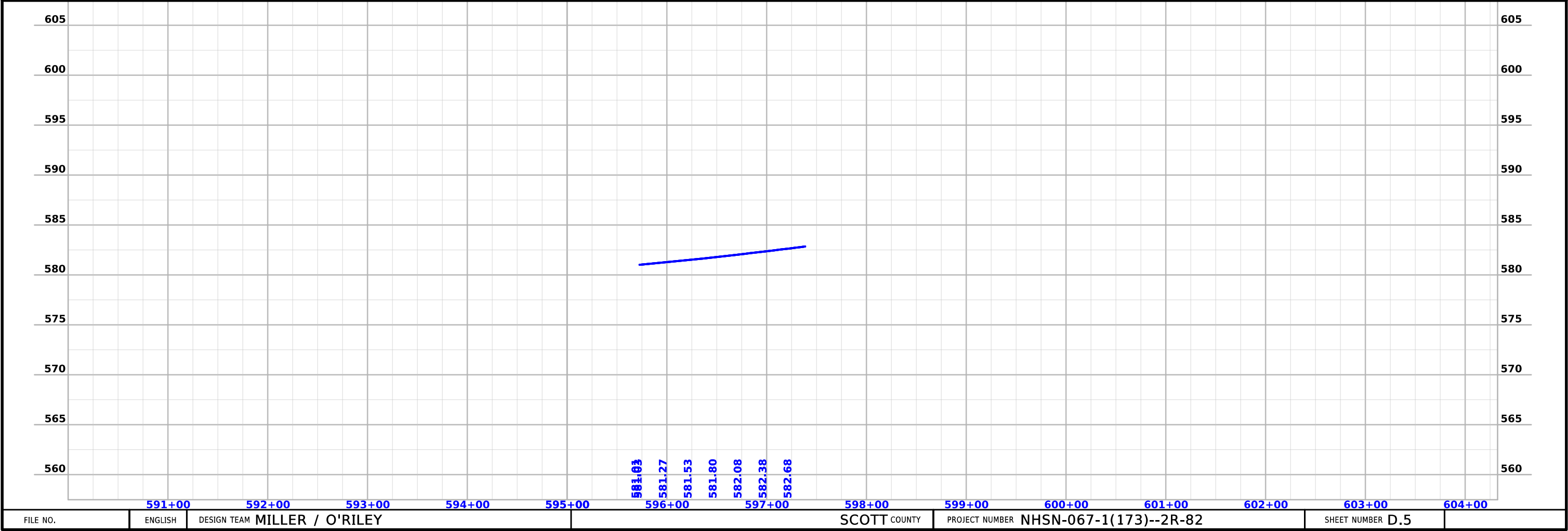
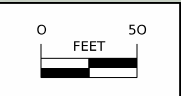


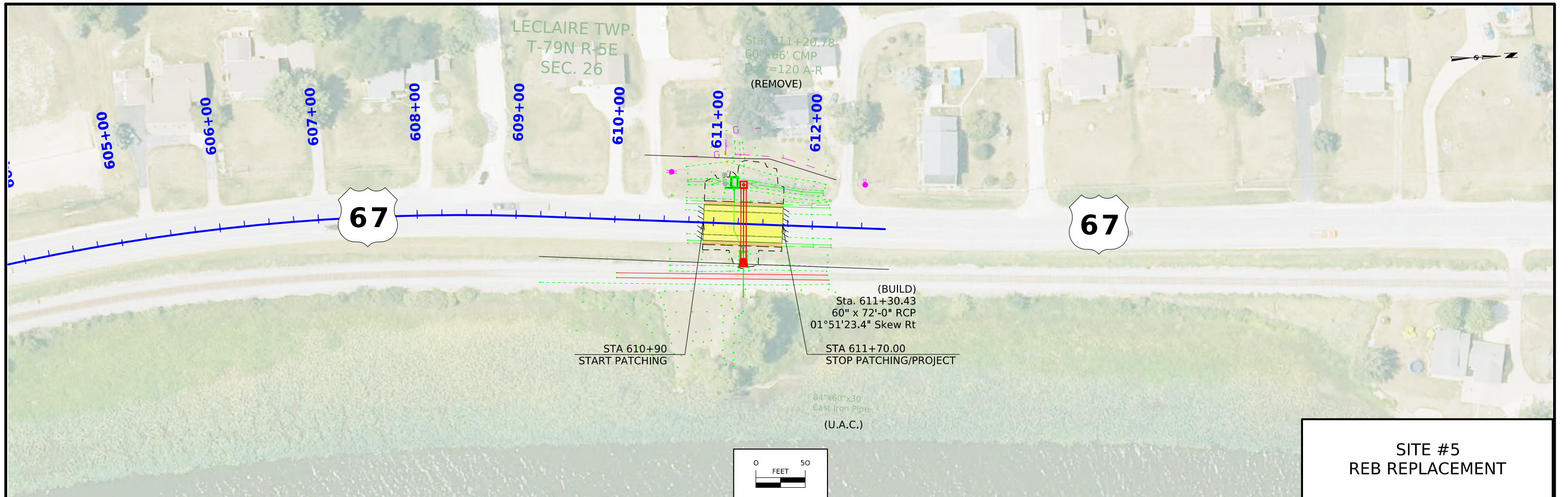




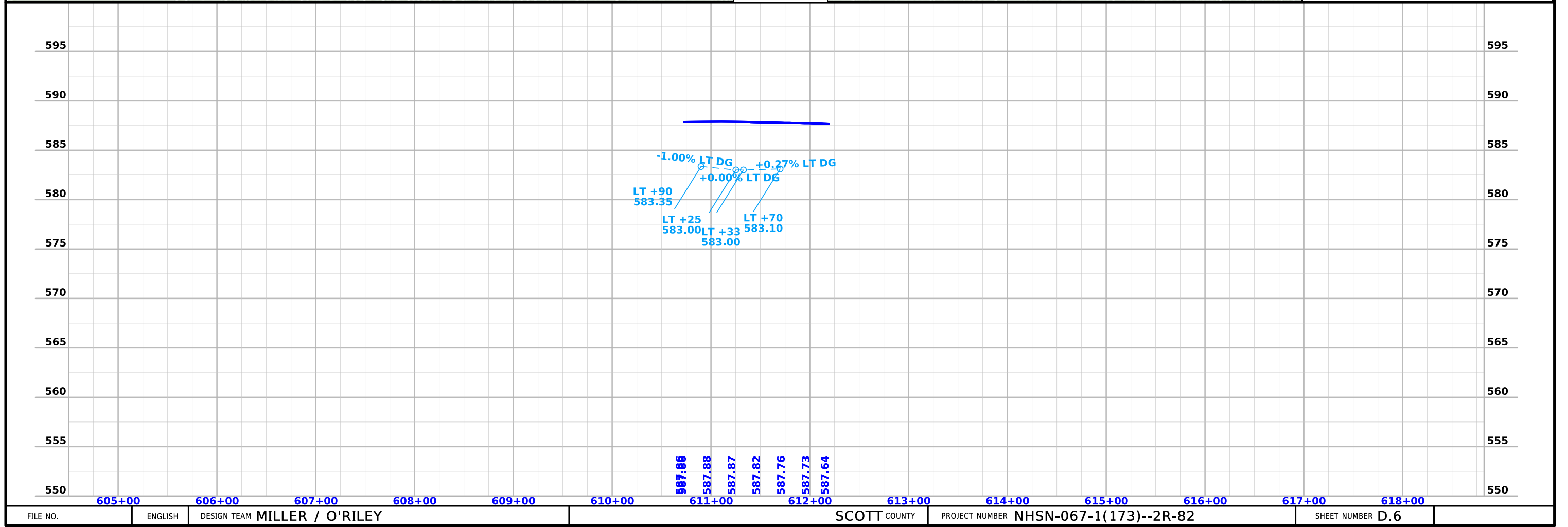


SITE #4
INTAKE AND
PIPE REPAIR





SITE #5
REB REPLACEMENT



TRAFFIC CONTROL PLAN		108_23A 8/15/22
US 67		
- Sites 1 through 3 will maintain traffic at least one lane, both northbound and southbound, at all times during construction.		
- Sites 4 through 5 will utilize a detour during construction.		

STAGING NOTES		108_26A 8/15/22
Stage 1		
Traffic: US 67 - Utilize TC-423 to get traffic head-to-head in existing SB lanes.		
Construction: Site #2 Patching and Slide Repair Site #3 Patching and Slide Repair		
Stage 2		
Traffic: US 67 - SB traffic to utilize tC-419 to close outside land and shoulder.		
Construction: Site #1 Site #2 Ditch Reshaping Site #3 Ditch Reshaping		

511 TRAVEL RESTRICTIONS

Line No.	Route	Direction	County	Location Description	Feature Crossed	Object Type	Maint. Bridge No. or Structure ID or FHWA No.	Type of Restriction	Existing Measurement	Construction Measurement	Construction Measurement as Signed	Projected As Built Measurement	Remarks
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111_01
10/14/22

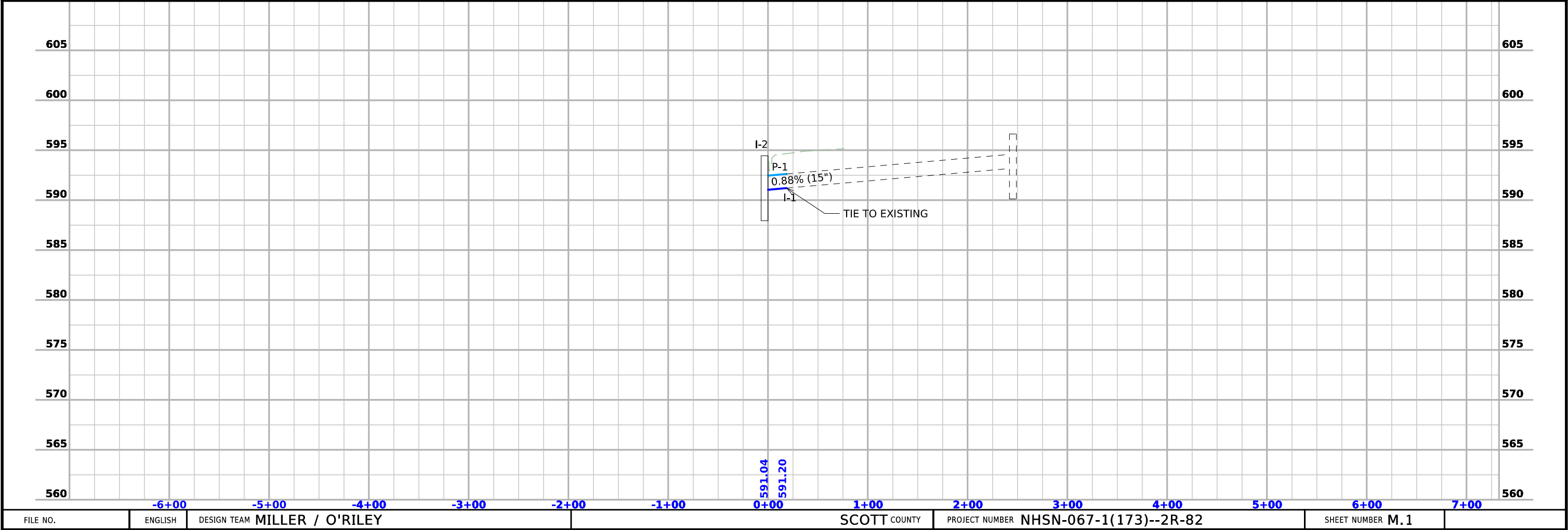
COORDINATED OPERATIONS

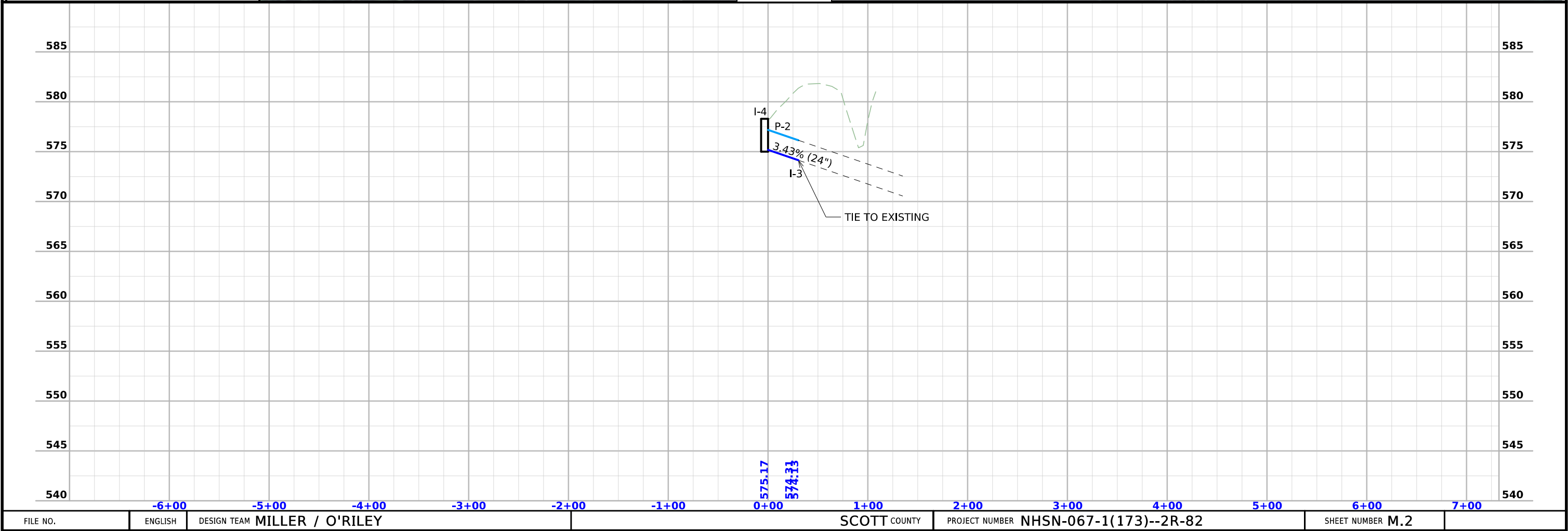
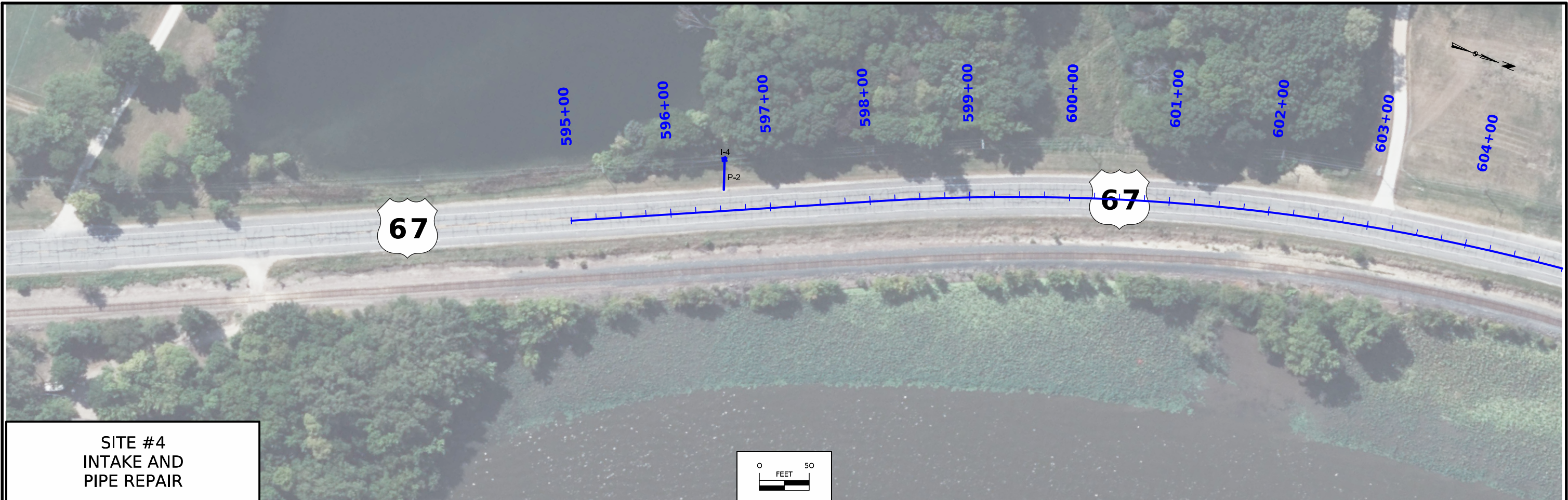
Other work in progress during the same period of time will include the construction of the projects listed. Coordinate operations with those of other contractors working within the same area.

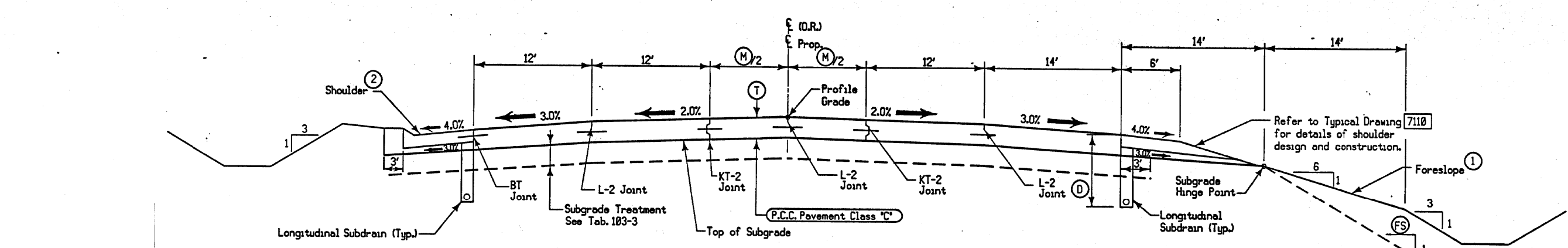
Project	Type of Work



Site 4 and 5 Detour





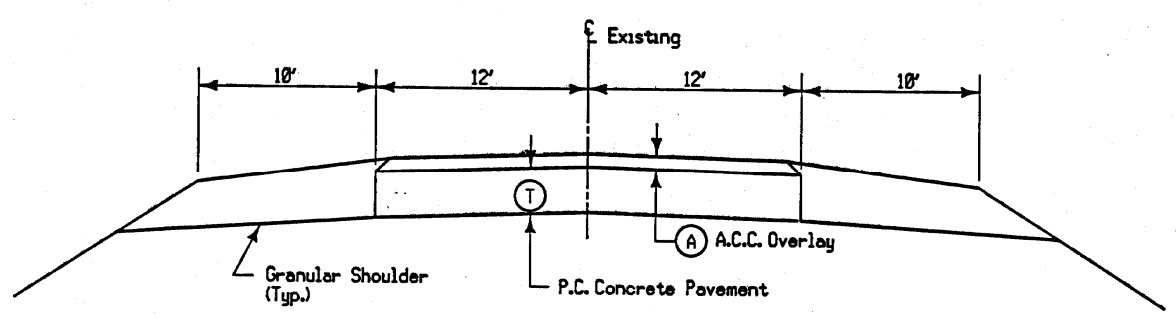


- ① See Plan & Profile Sheets for Foreslope (FS) Variations.
- ② See Typical Drawings 7110, 7127, and 10347
- ③ Refer to Tab. 104-9.

TYPICAL CROSS SECTION - GRADING & P.C.C. PAVING
PROPOSED HIGHWAY IMPROVEMENT

LOCATION			H Feet	T Inches
ROAD IDENTIFICATION	STATION TO STATION			
U.S. 67	388+25 (O.R.)	396+72.13 (O.R.)	16-0	10.5
U.S. 67	396+72.13 (O.R.)	487+63.35 (O.R.)	0	10.5
U.S. 67	487+63.35 (O.R.)	493+32.41 (O.R.)	0-16	10.5
U.S. 67	493+32.41 (O.R.)	511+89.31 (O.R.)	16	10.5
U.S. 67	511+89.31 (O.R.)	518+09.08 (O.R.)	16-5.67	10.5
U.S. 67	518+09.08 (O.R.)	519+12 (O.R.)	5.67-8	10.5

NOTE:
Normal Sections shown may be appropriately modified
in areas of superelevated curves, intersections, or other
locations specifically designated by the engineer.
For Joint Details, see Std. Rd. Plan RH-50 and RH-51.
For additional Jointing Details and locations see "L" Sheets.



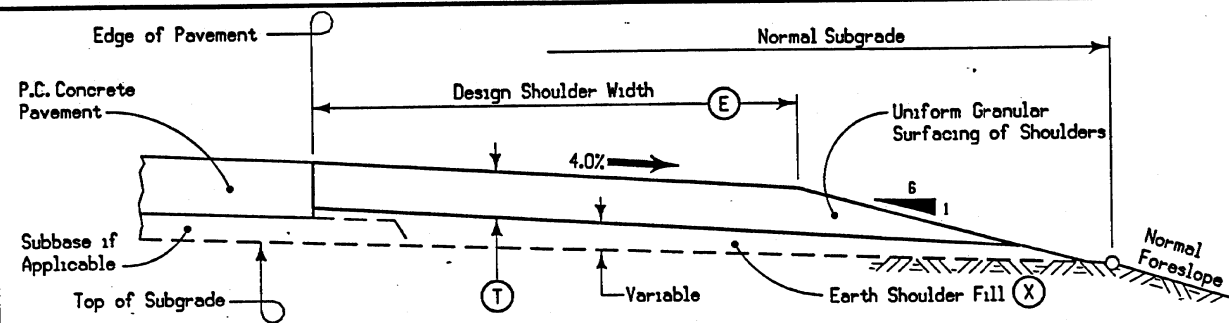
TYPICAL CROSS SECTION
EXISTING PAVEMENT

LOCATION			(T)	(A)
ROAD IDENTIFICATION	STATION TO STATION		Inches	Inches
U.S. 67	388+25	446+88	10	0
U.S. 67	446+88	459+78	10	3 (1)
U.S. 67	459+78	466+76	10	0
U.S. 67	466+76	485+06	10	3 (1)
U.S. 67	485+06	519+12	10	0

NOTE: COURSE AGGREGATE SOURCE - PRINCETON, 02-80-5, CO. 82
① ASSUMED THICKNESS.

AS-BUILTS
(FOR INFORMATION ONLY)

STATE OF IOWA	FHWA REGION 7	FISCAL YEAR	SCOTT COUNTY	PROJECT NUMBER F-67-1(72)--20-82	SHEET NUMBER B.01	TOTAL SHEETS
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**TYPICAL SECTION
TYPE 'A' GRANULAR SHOULDER
Adjacent to PCC Pavement**

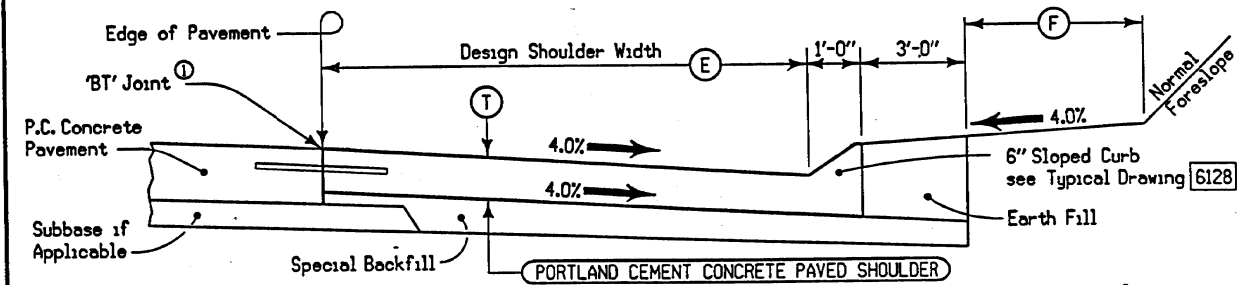
Notes:

Earth Shoulder fill requires approximately ① cubic yards of excavation, including 60% for shrinkage, per station per side.

LOCATION			E Feet	T Inches	SIDE	X Cu. Yds.
ROAD IDENTIFICATION	STATION TO STATION					
U.S. 67	388+25	502+65	6	6	RT.	20.9
U.S. 67	502+65	505+29.93	4	6	RT.	17.8
U.S. 67	506+46.79	519+12	6	6	RT.	20.9
U.S. 67	388+25	388+50	8	6	LT.	23.8
U.S. 67	515+25	519+12	6	6	LT.	20.9
SIDE ROAD						
Canal Shore Drive	1503+85.67	1504+68	6	6	BOTH	20.9
Valley Drive	2491+22	2491+76	7	6	RT.	22.4

See Standard Road Plan RH-370 for construction requirements.

7110
07-16-91

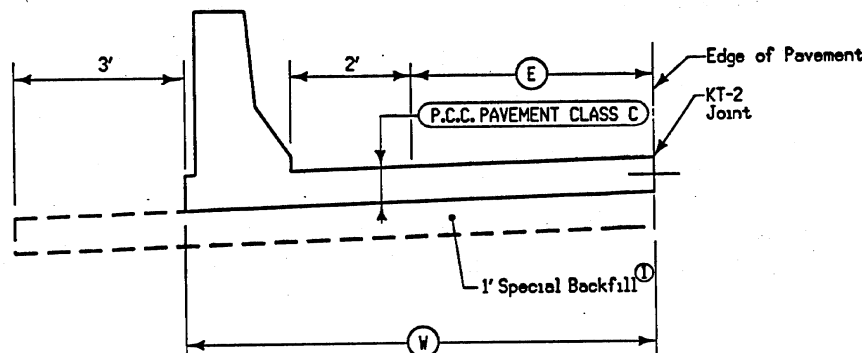


**TYPICAL SECTION
PCC PAVED SHOULDER WITH SLOPED CURB**

Notes:

- See Standard Road Plan RH-51.
- Per Station Per Side.
- See Tab. 103-3.
- Varies, See Cross Sections.
- See Tab. 103-3.

LOCATION			DIMENSIONS			QUANTITIES ②		
ROAD IDENTIFICATION	STATION TO STATION		SIDE	T Inches	E Feet	F Feet	SURFACE ③ Sq. Yds.	VOLUME Cu. Yds.
U.S. 67	396+10	404+90	LT.	7	8	④	100.00	20.49
U.S. 67	411+45	451+00	LT.	7	8	④	100.00	20.49
U.S. 67	451+00	460+10	LT.	10.5	8	④	100.00	30.22
U.S. 67	463+60	470+23.75	LT.	10.5	8	④	100.00	30.22
U.S. 67	470+23.75	474+21.05	LT.	10.5	10	④	122.22	36.70
U.S. 67	474+23.31	483+80	LT.	10.5	8	④	100.00	30.22
U.S. 67	488+40	493+69.80	LT.	10.5	8	④	100.00	30.22
U.S. 67	495+11.83	497+60	LT.	10.5	4	④	55.56	17.23
U.S. 67	497+60	505+23.51	LT.	10.5	8	④	100.00	30.22
U.S. 67	506+26.13	506+60	LT.	7	4	④	11.85	11.85
U.S. 67	510+75	515+25	LT.	7	6	④	16.17	16.17

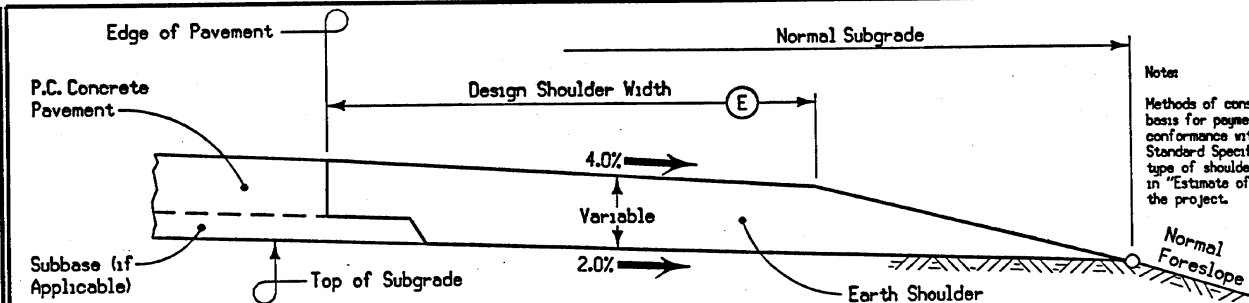


**TYPICAL SECTION
REINFORCED PAVED SHOULDER**

NOTE: Refer to Std. Road Plans RE-44F(1) & RE-44F(2).

LOCATION				(E)	(W)
ROAD IDENTIFICATION	STATION TO STATION		SIDE	Feet	Feet
U.S. 67	388+50.00	395+00.00	LT.	8	11.67
U.S. 67	404+90.00	410+35.00	LT.	8	11.67
U.S. 67	461+20.00	462+50.00	LT.	8	11.67
U.S. 67	484+90.00	487+30.00	LT.	8	11.67
U.S. 67	506+60.00	508+91.00	LT.	4	7.67
U.S. 67	508+91.00	509+65.00	LT.	6	9.67

① INCLUDED IN TAB 103-3



**TYPICAL SECTION
EARTH SHOULDER
Adjacent to
PCC Pavement**

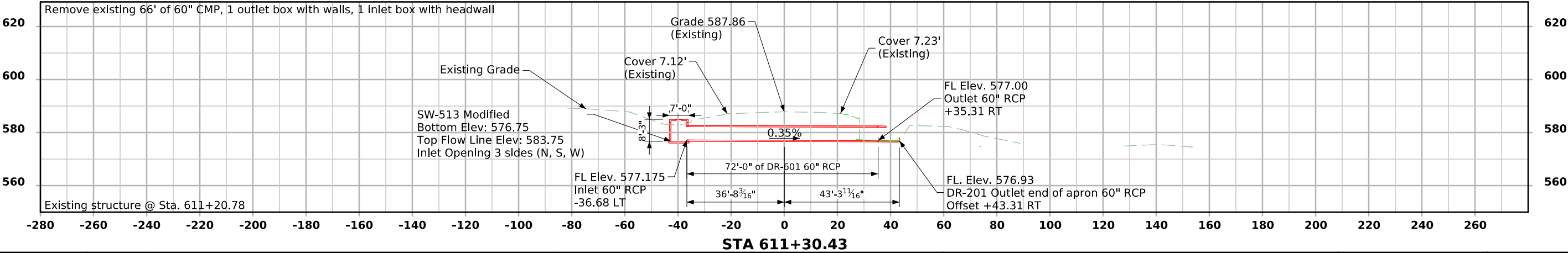
① Includes 50% for Shrinkage

DESIGN QUANTITY RATE Earth Shoulder Material Per Shoulder Per Station	
E	CU. YDS. ①
2'	13.4
4'	15.2

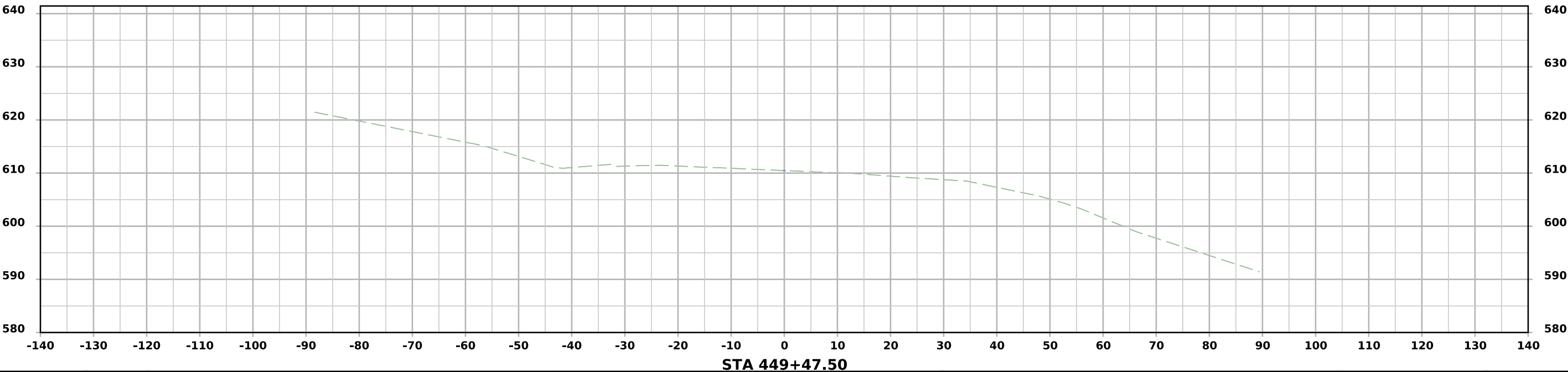
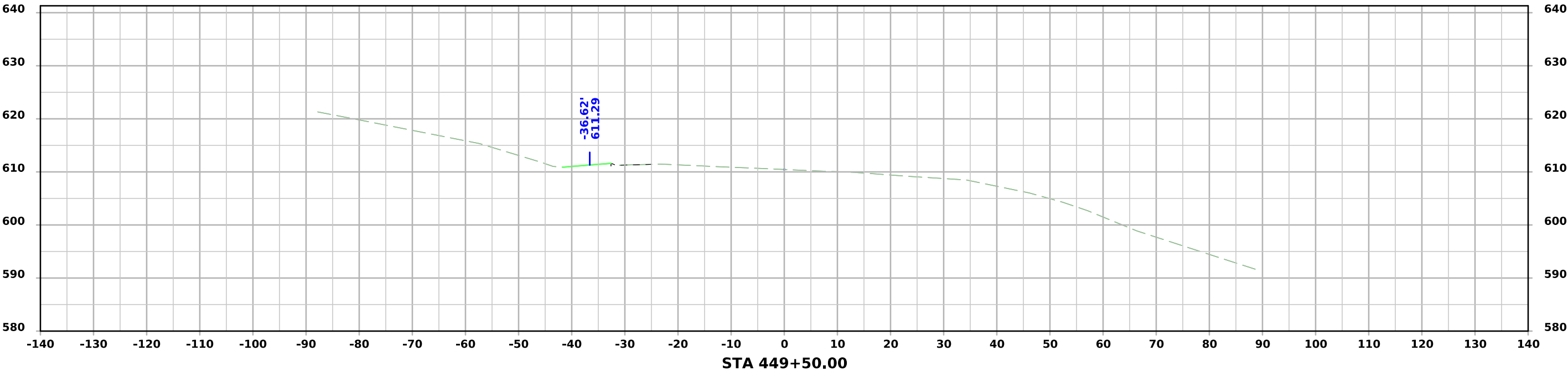
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07-16-91

**AS-BUILTS
(FOR INFORMATION ONLY)**

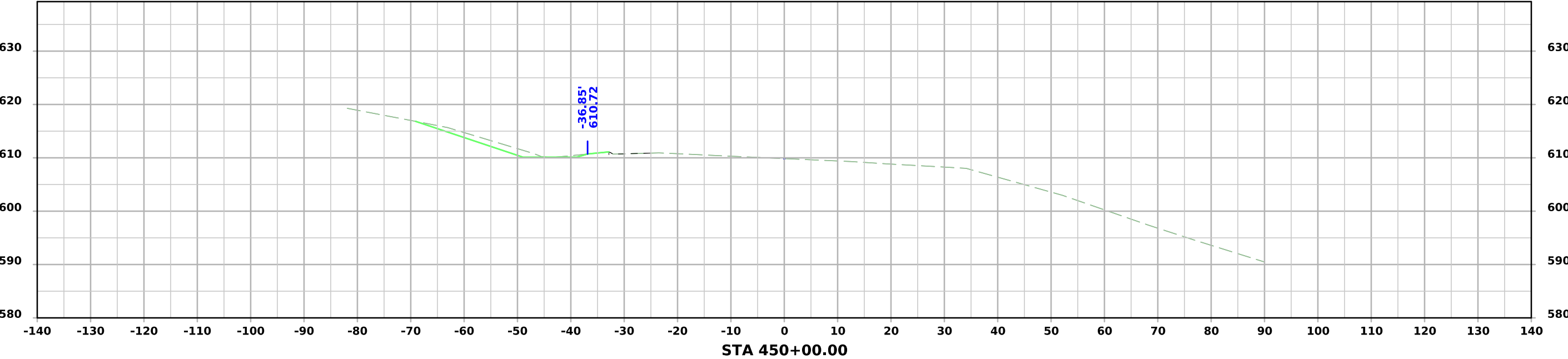
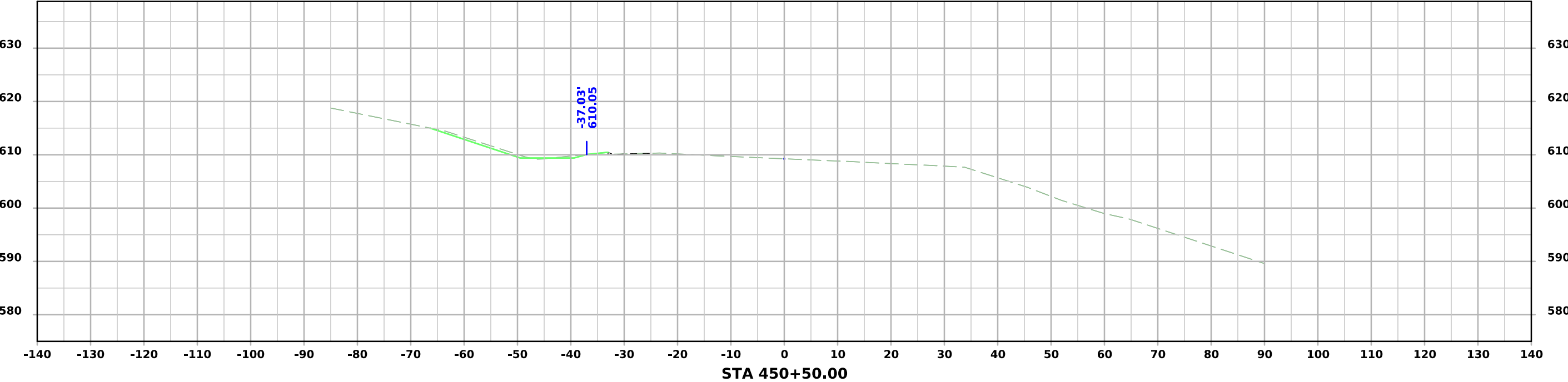
STATE OF IOWA	FHWA REGION 7	FISCAL YEAR	SCOTT COUNTY	PROJECT NUMBER F-67-1(72)--20-82	SHEET NUMBER B.03	TOTAL SHEETS
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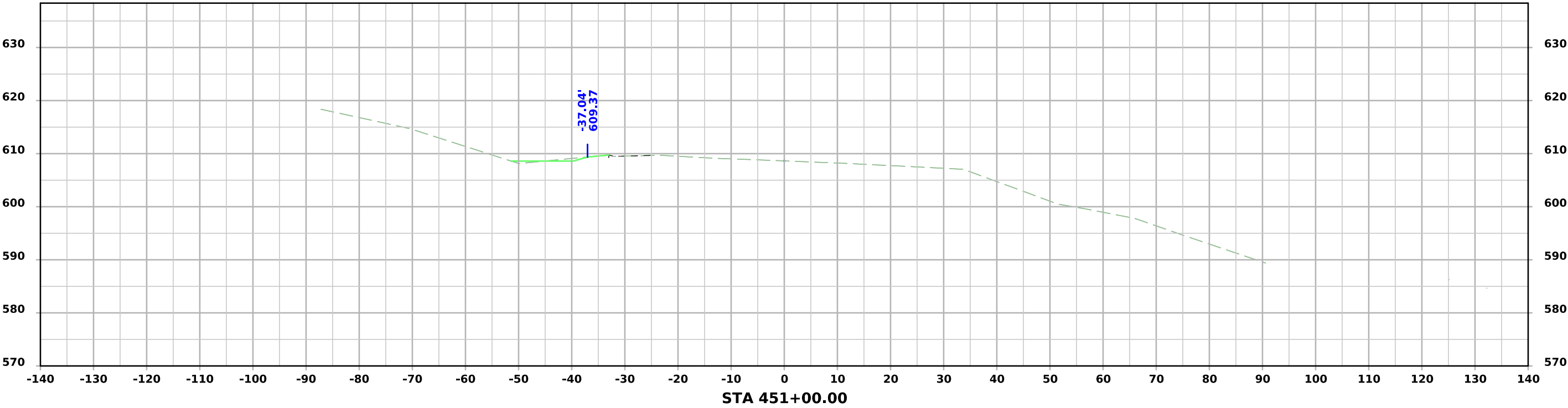
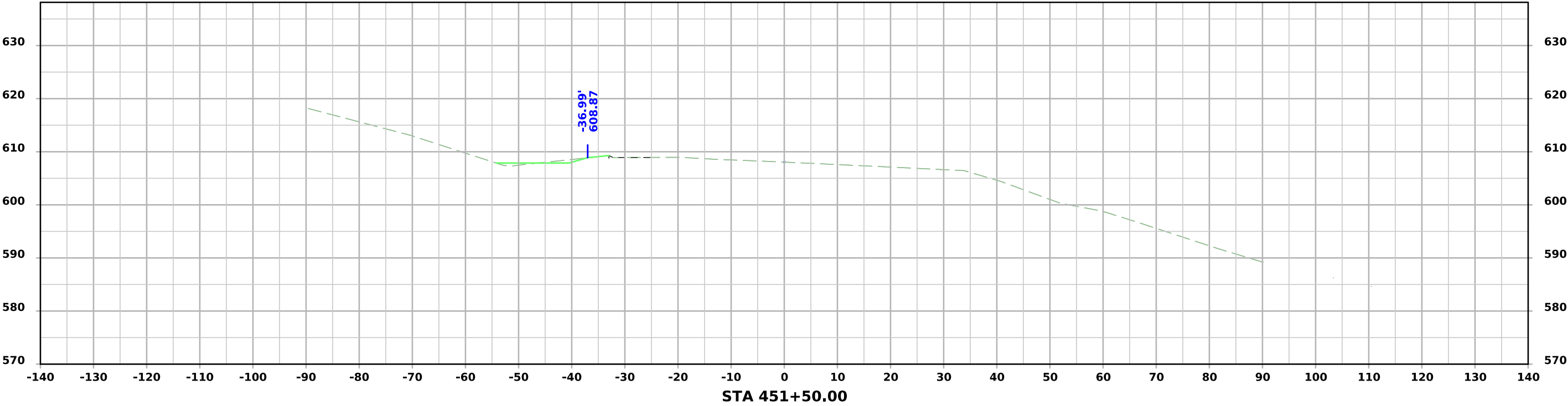
US 67 Site #2



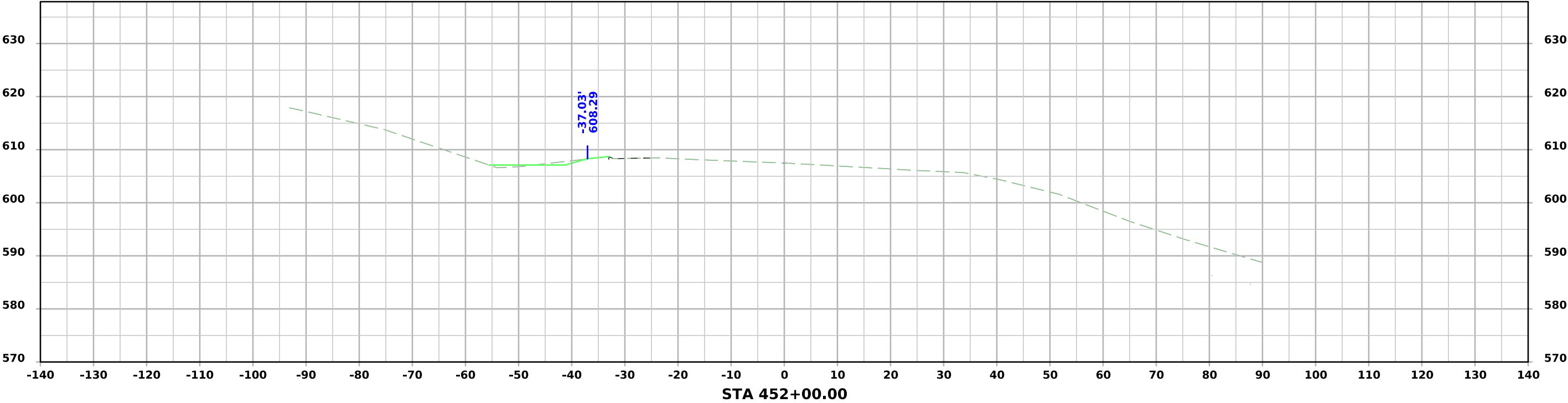
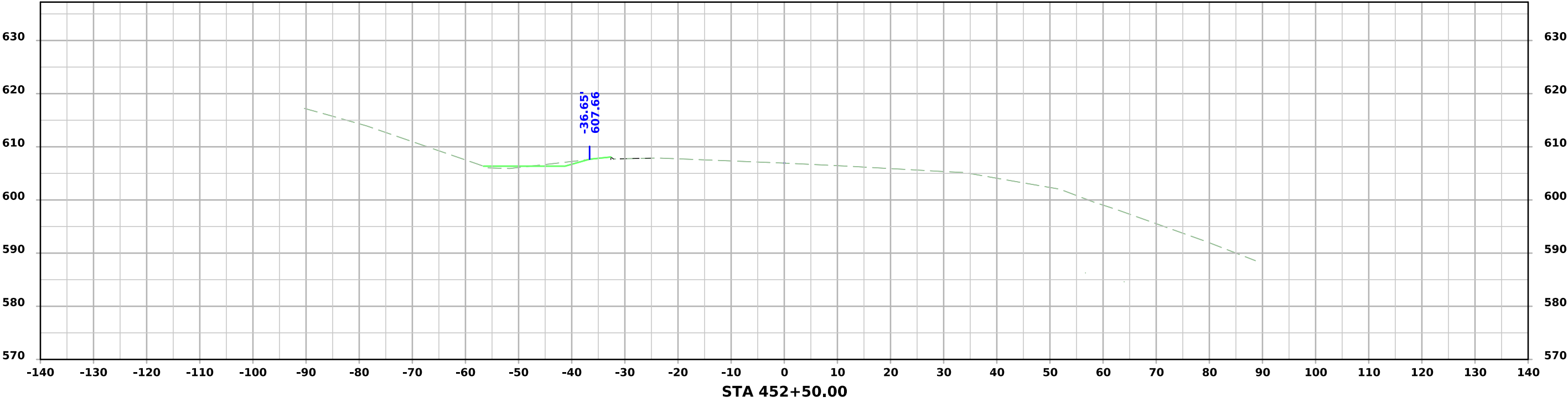
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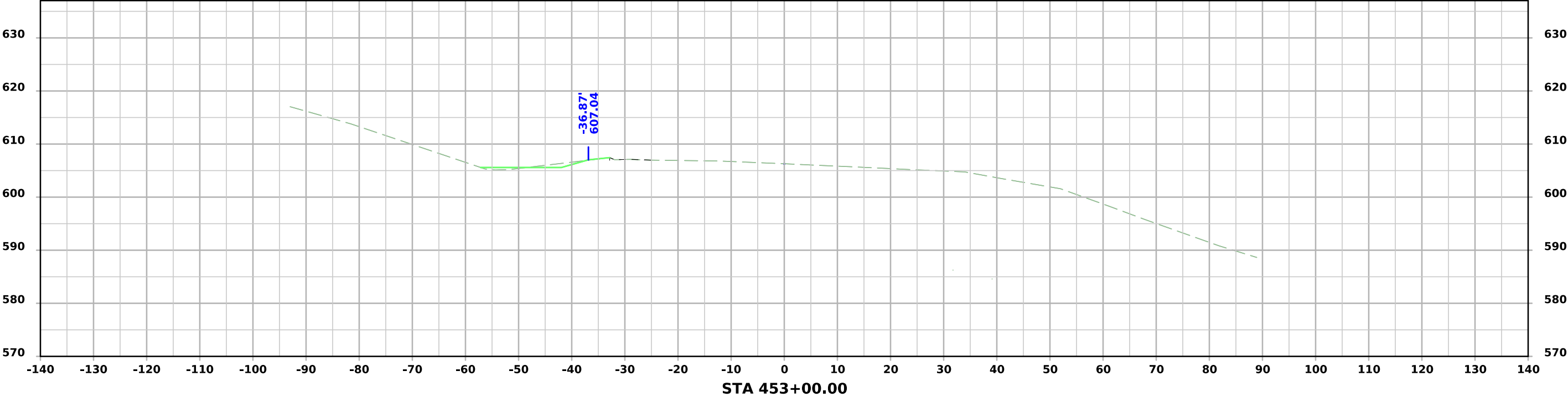
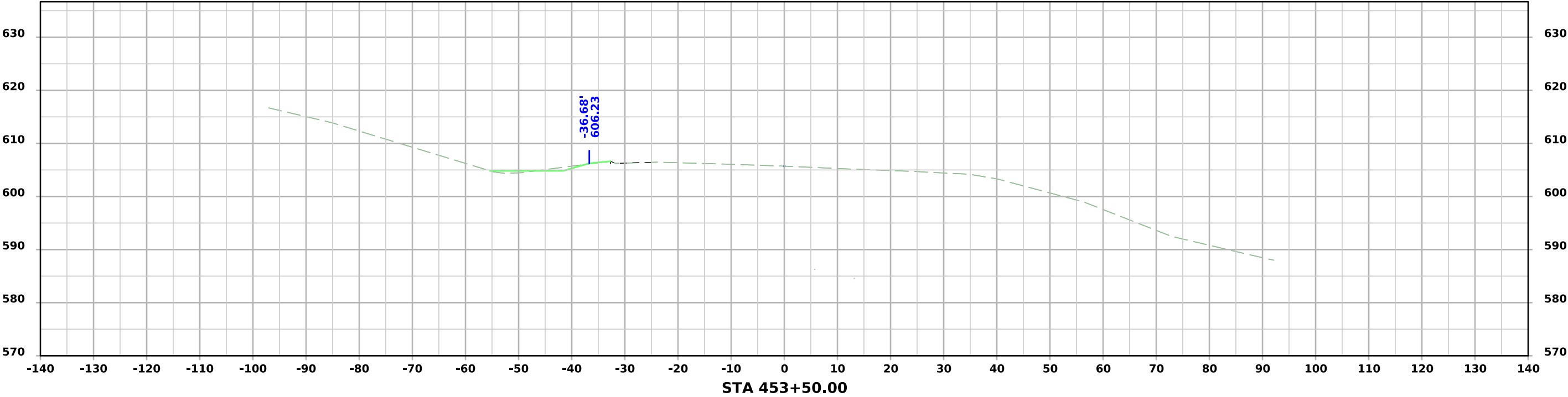
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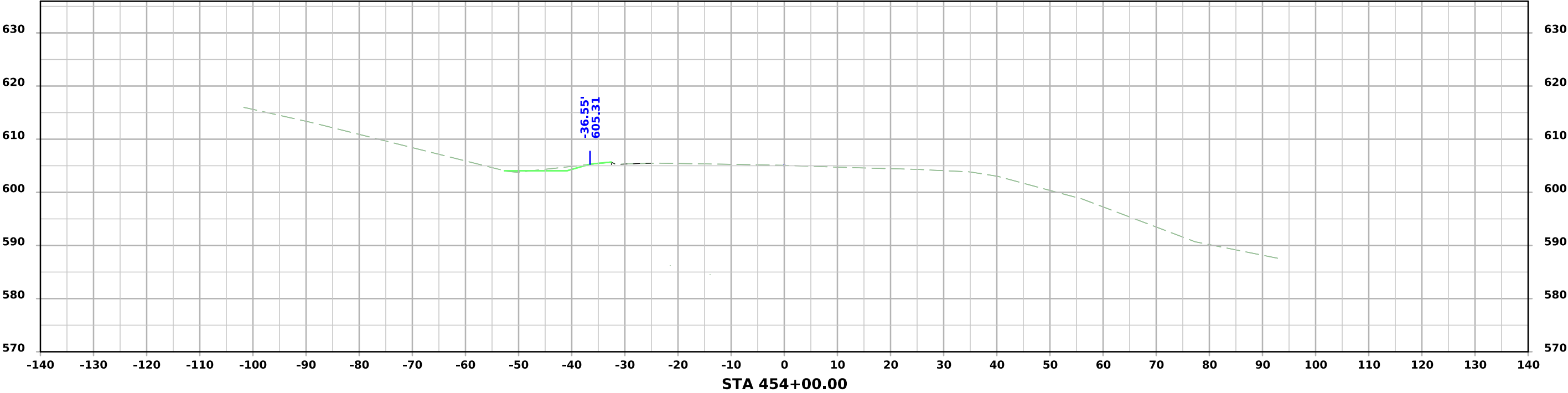
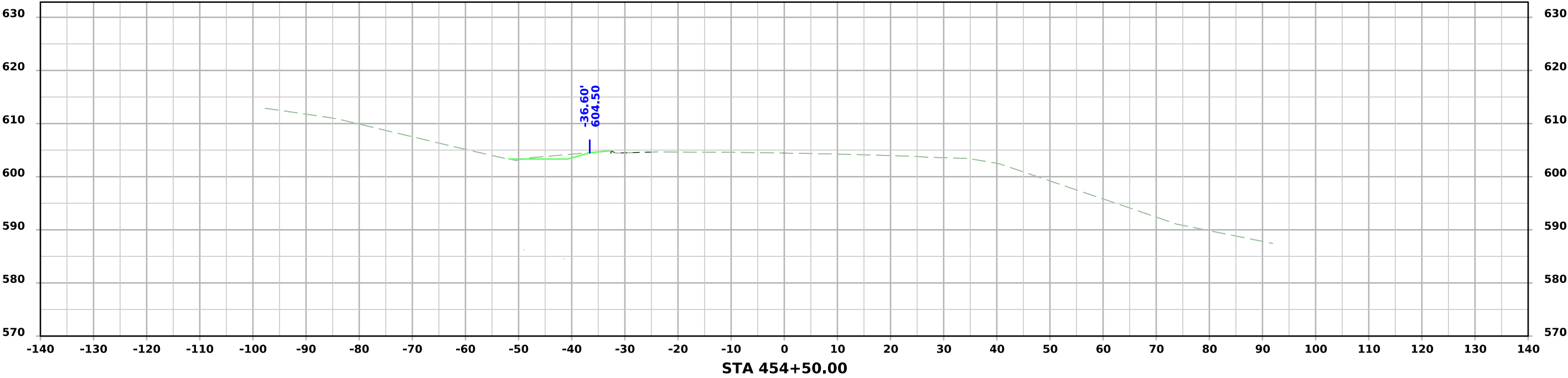
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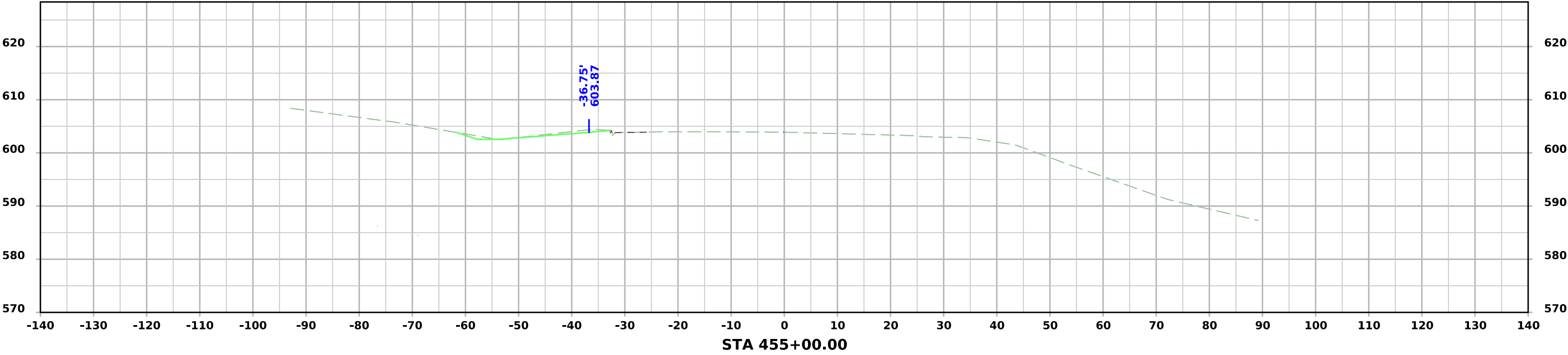
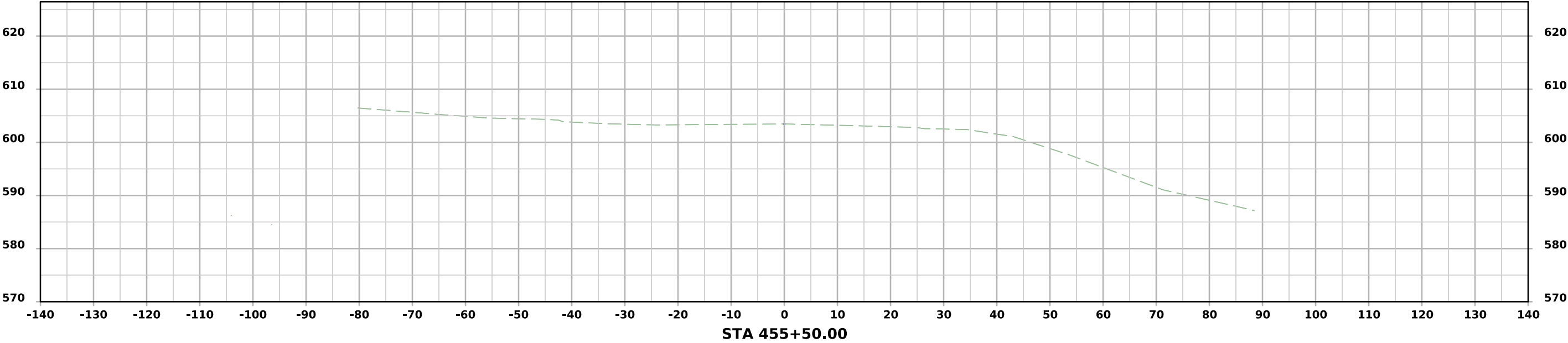
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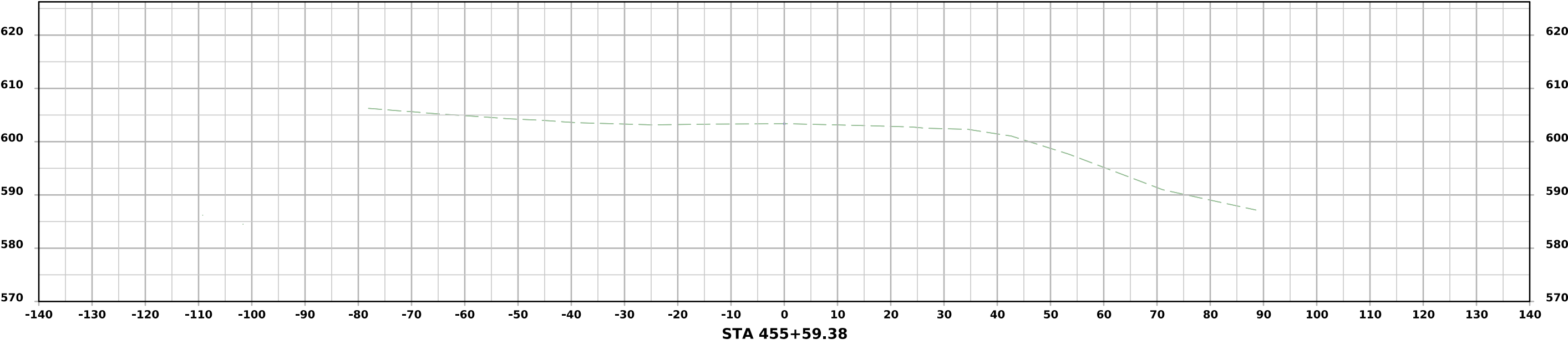
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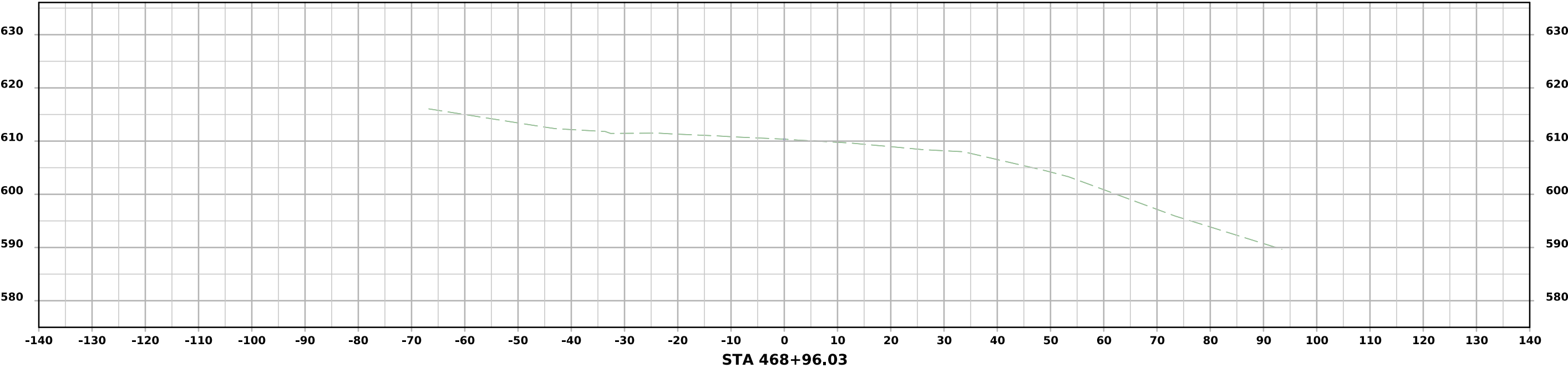
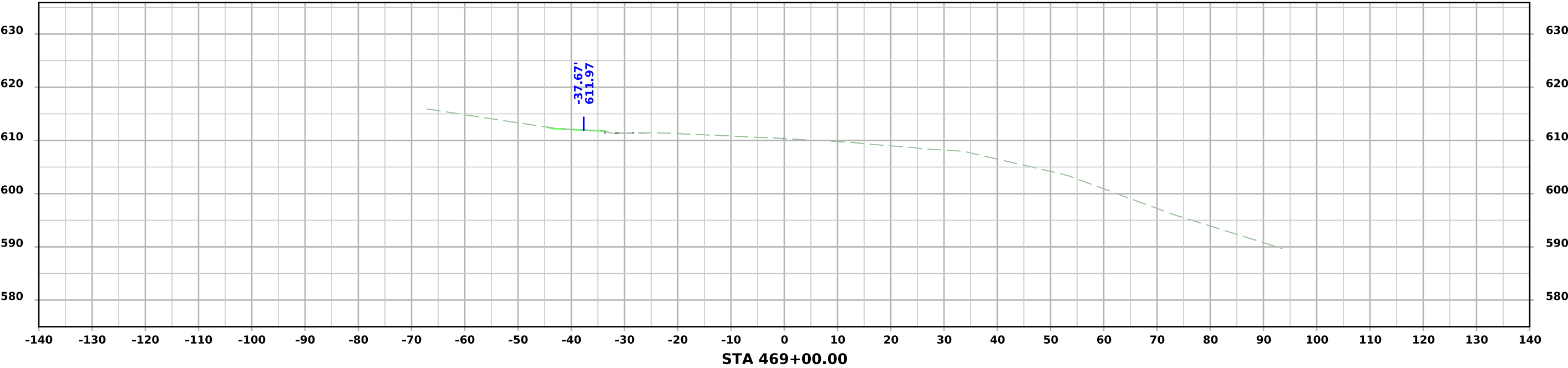
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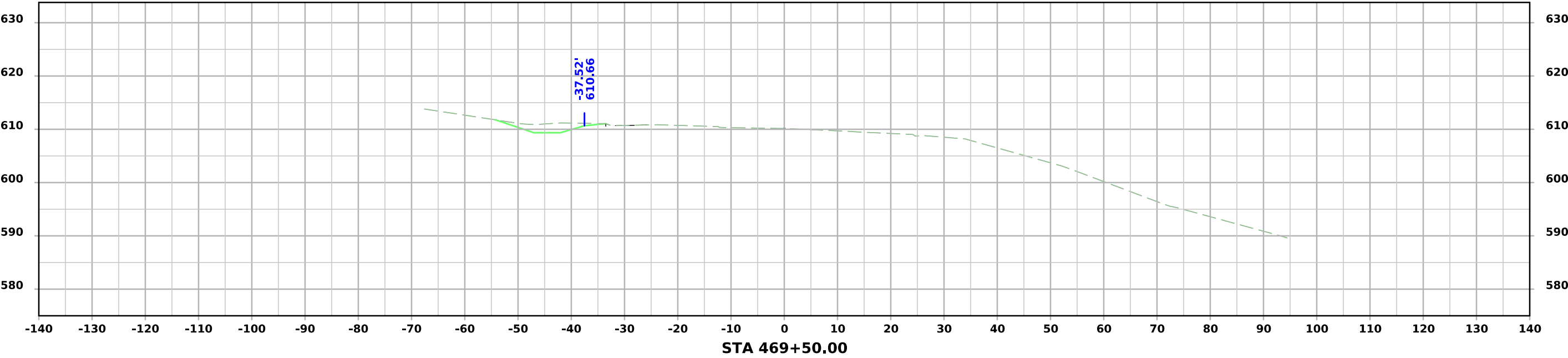
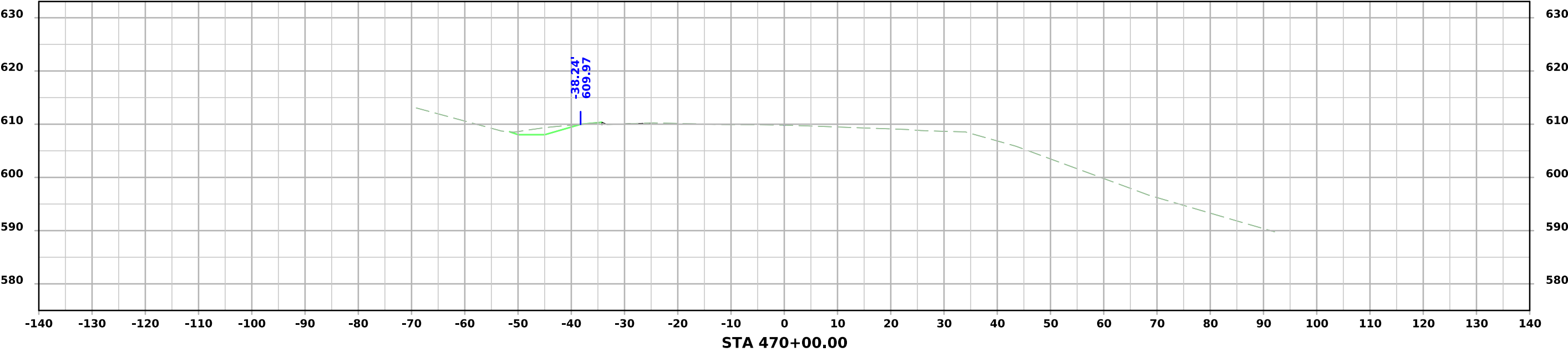
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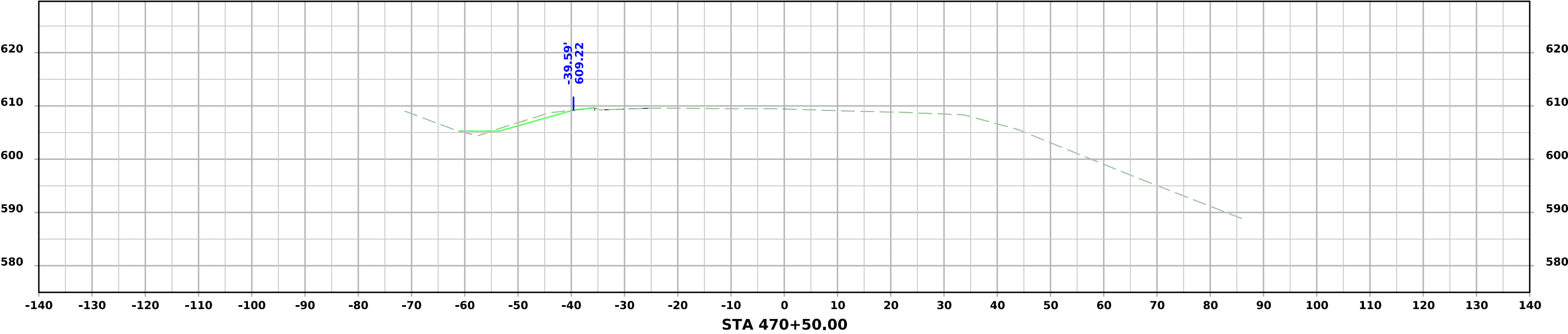
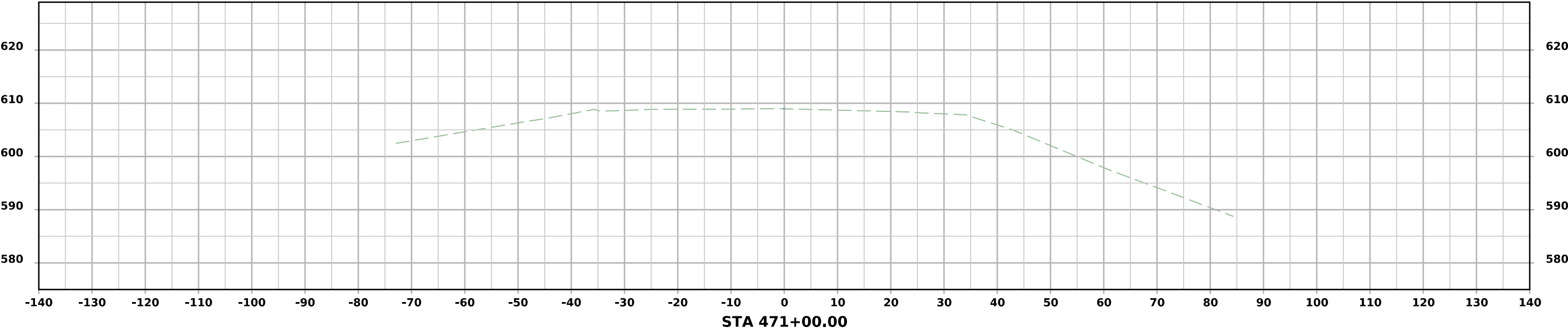
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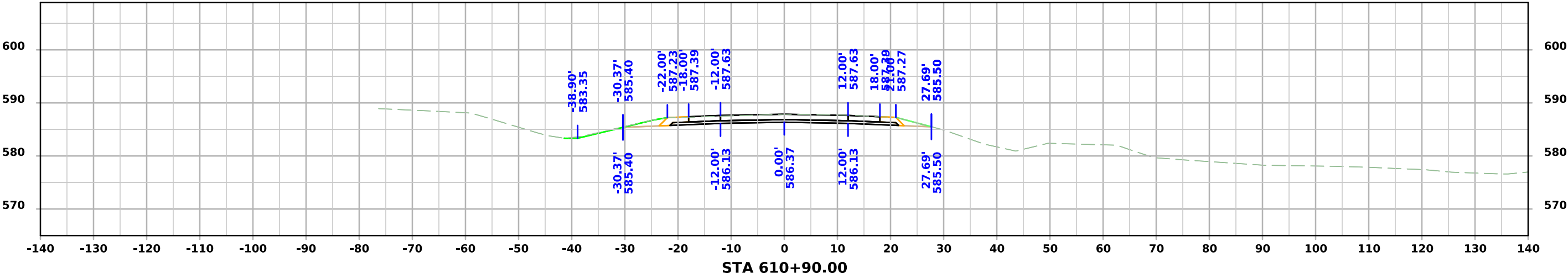
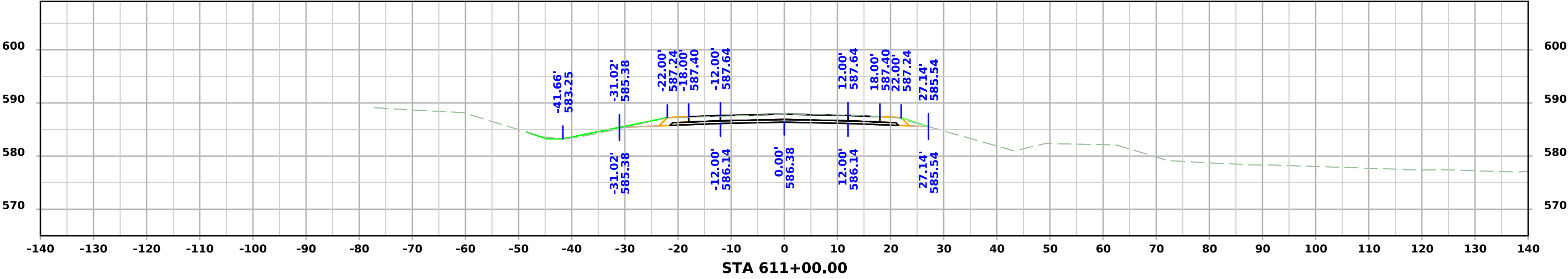
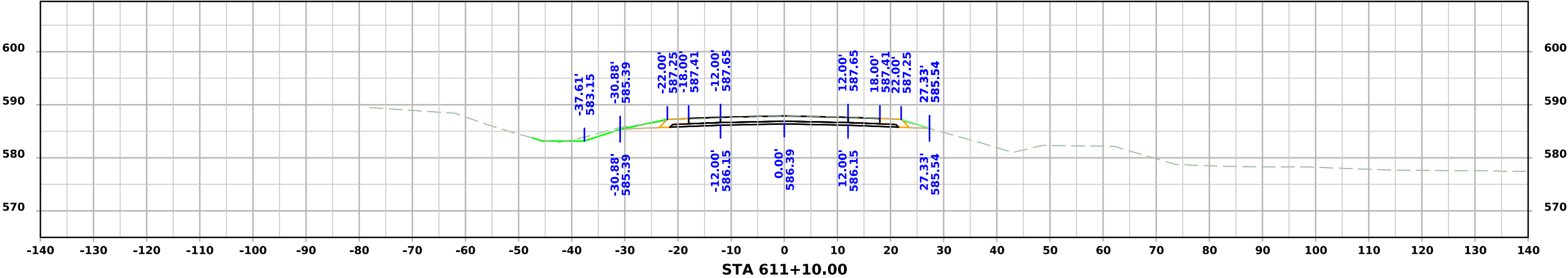
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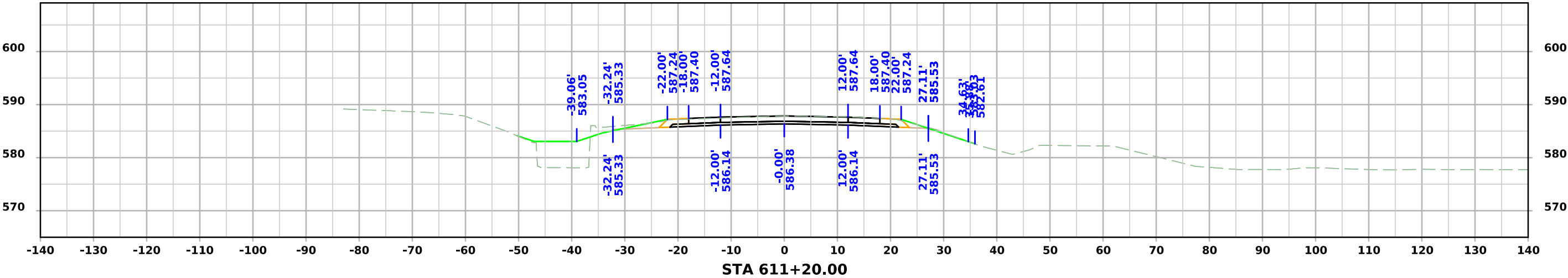
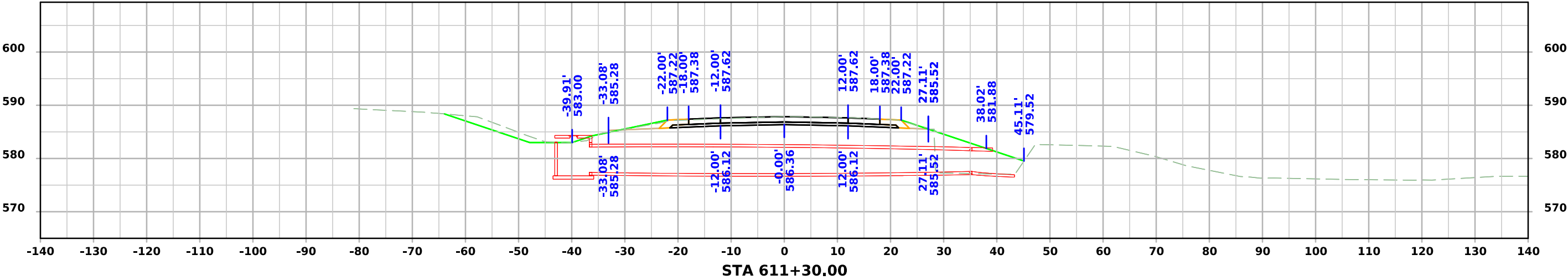
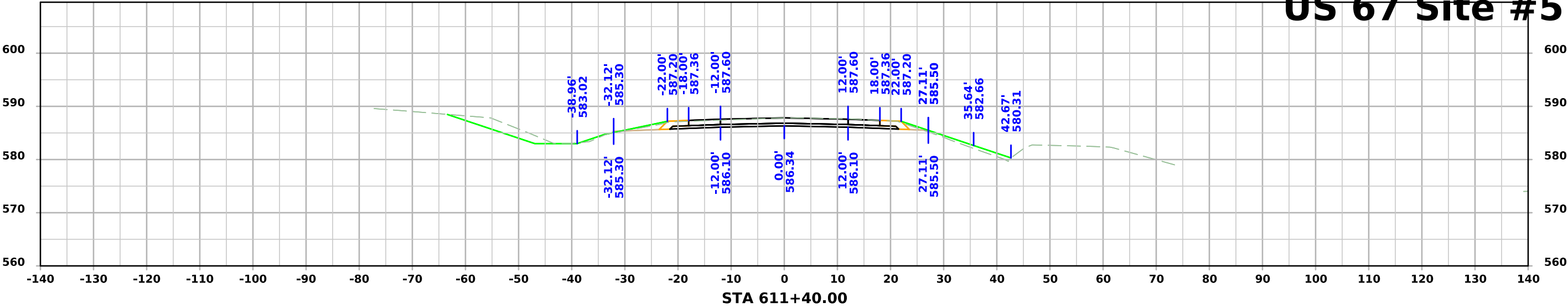
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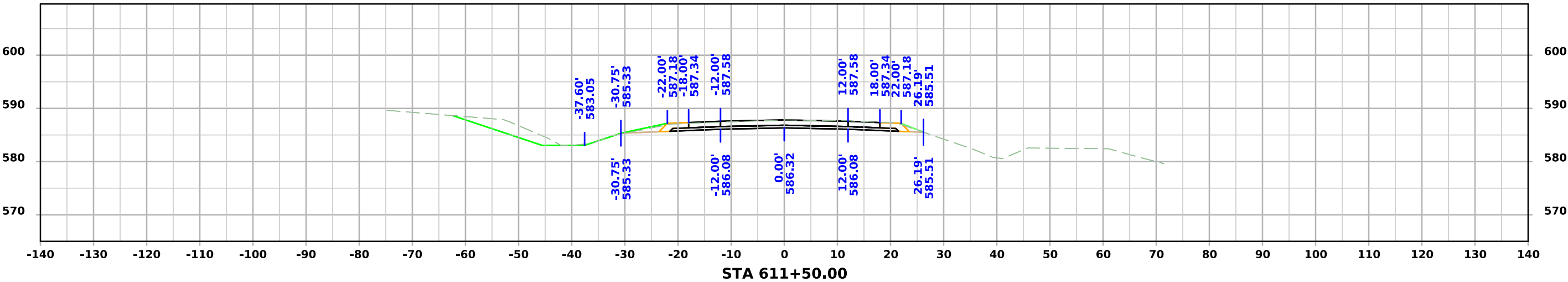
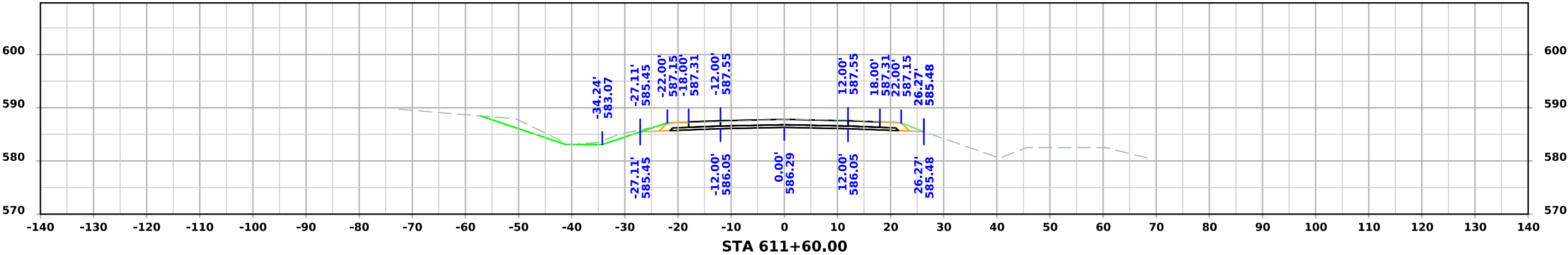
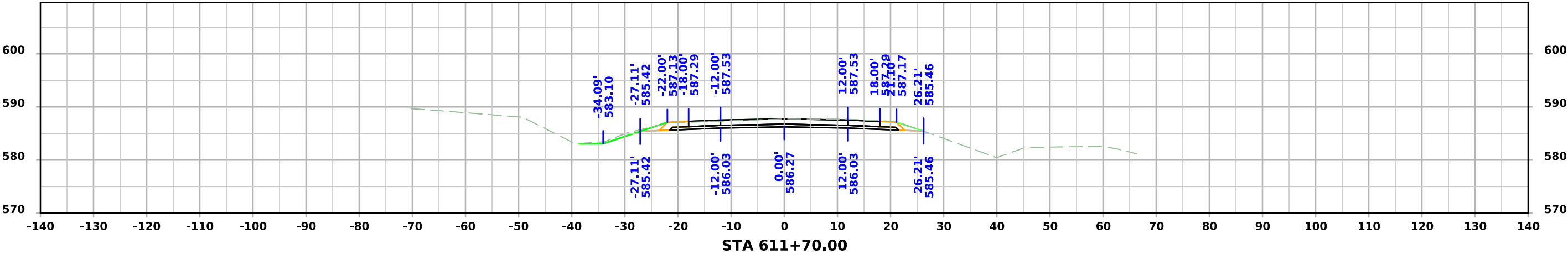
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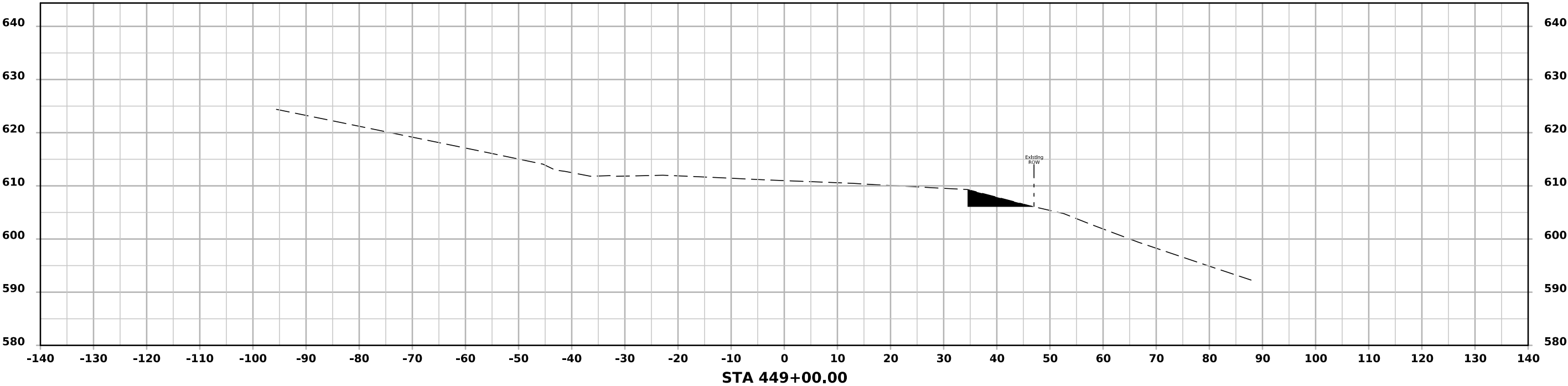
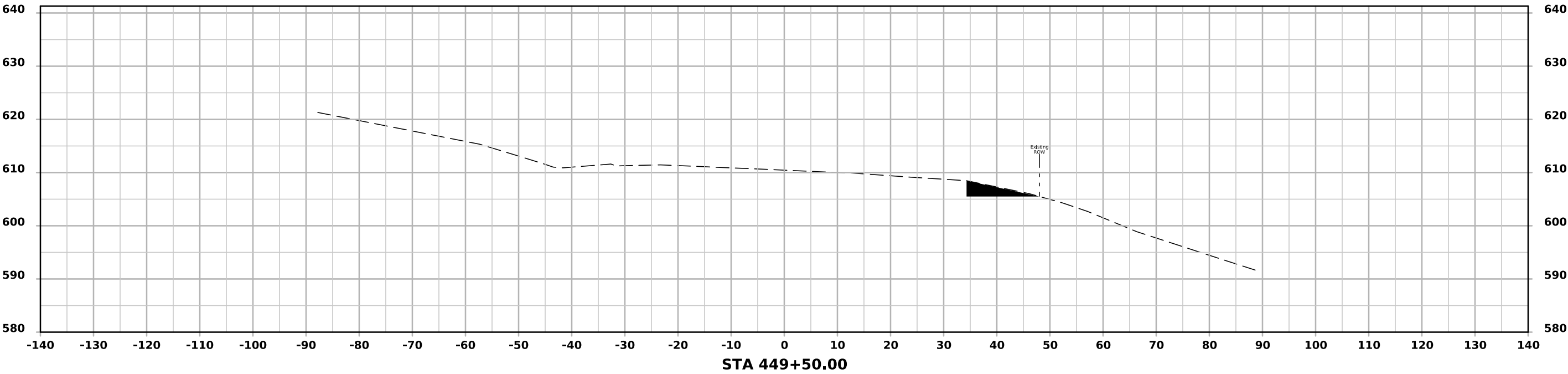
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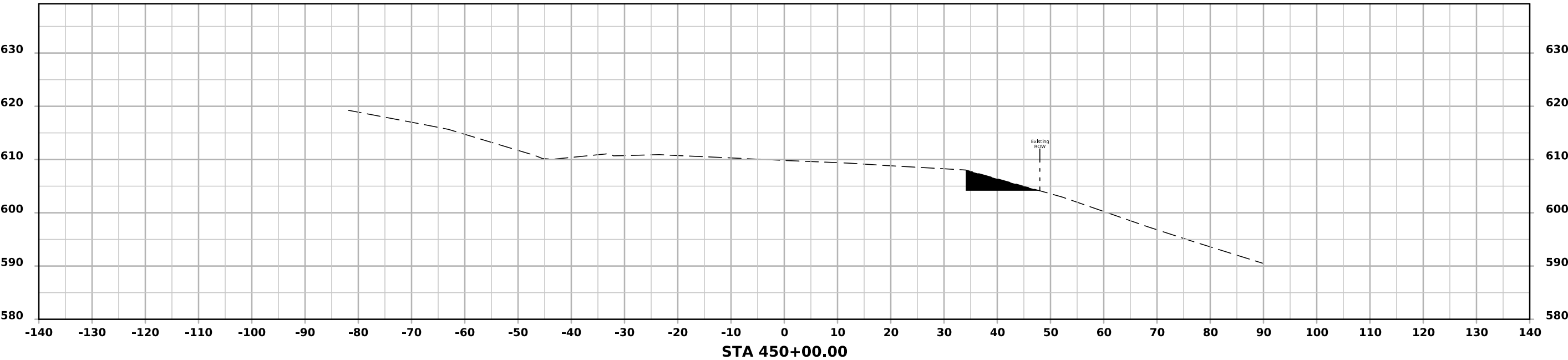
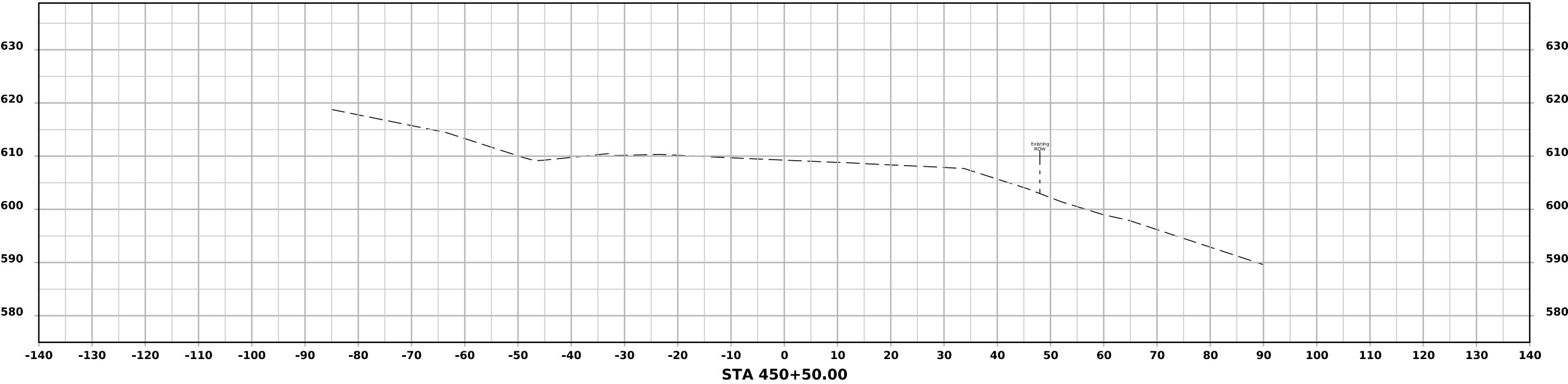
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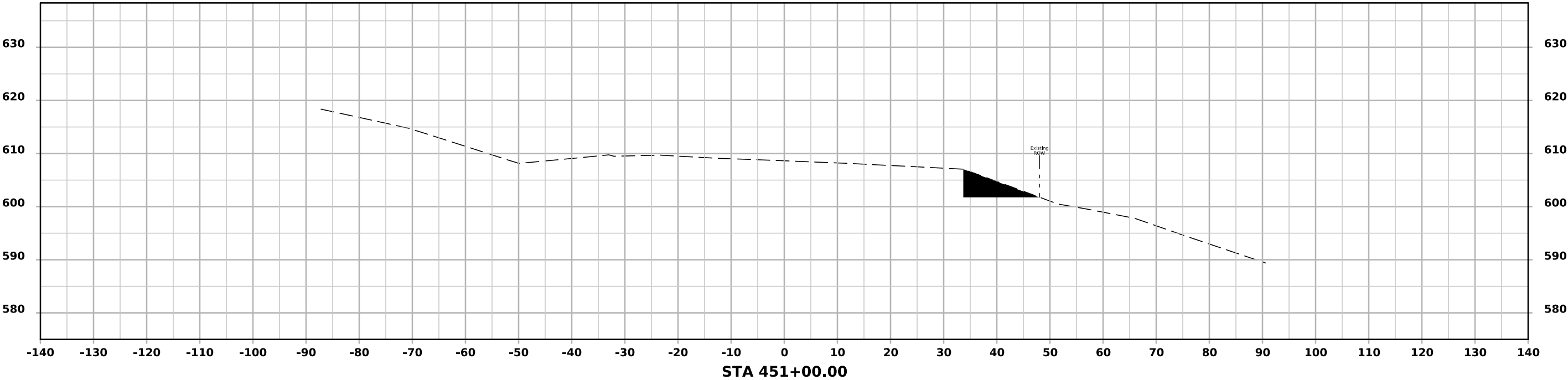
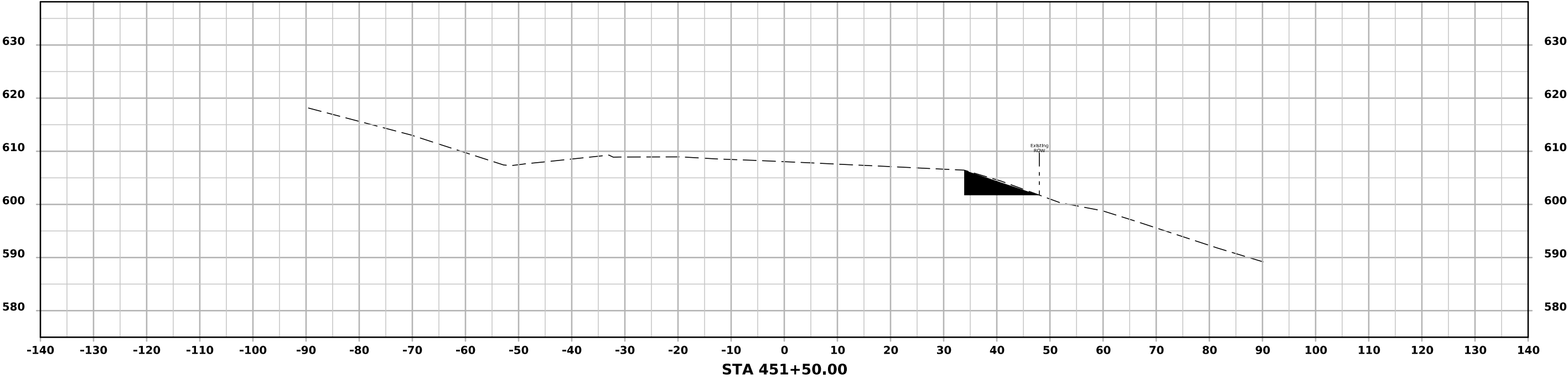
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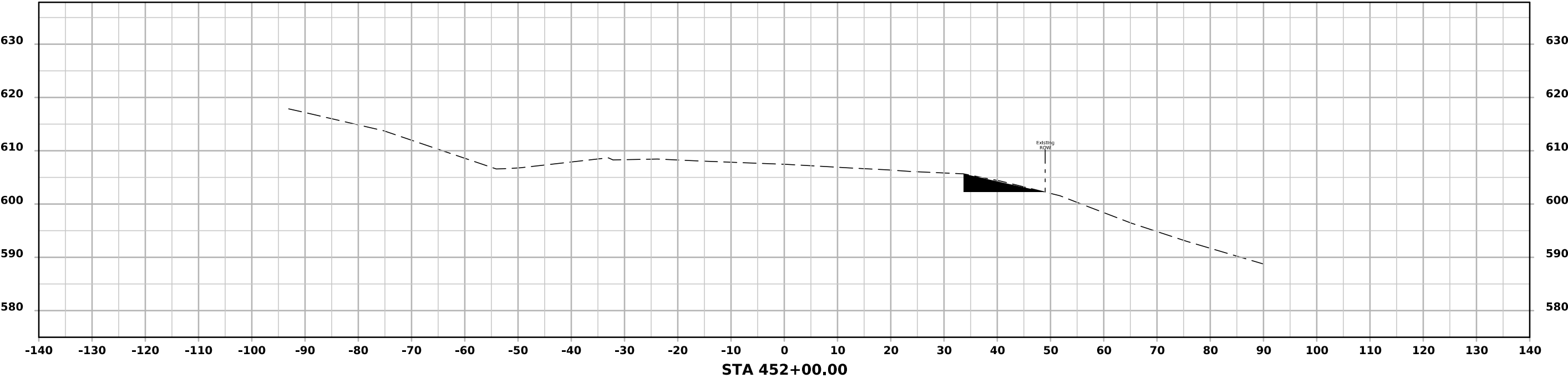
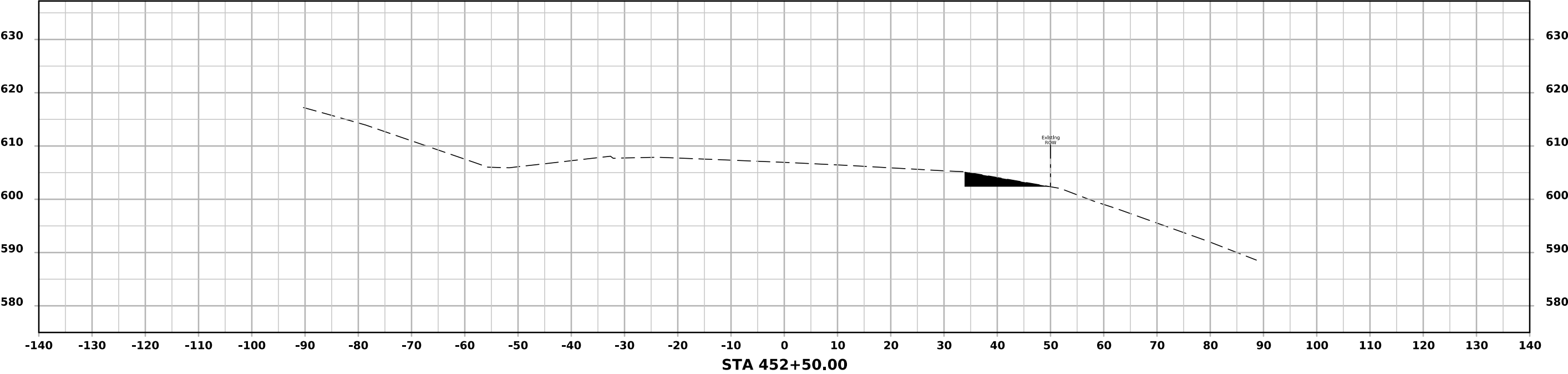
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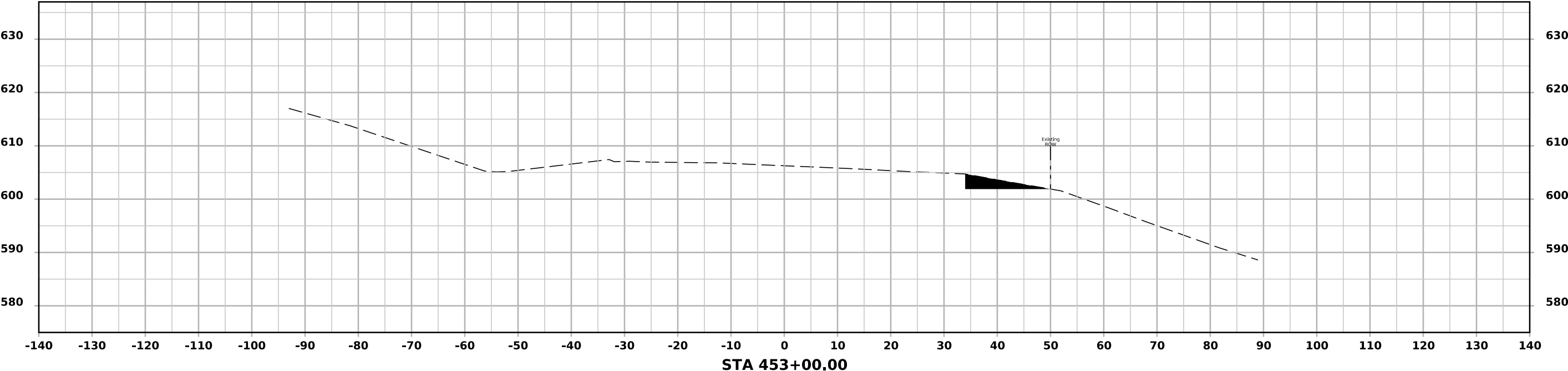
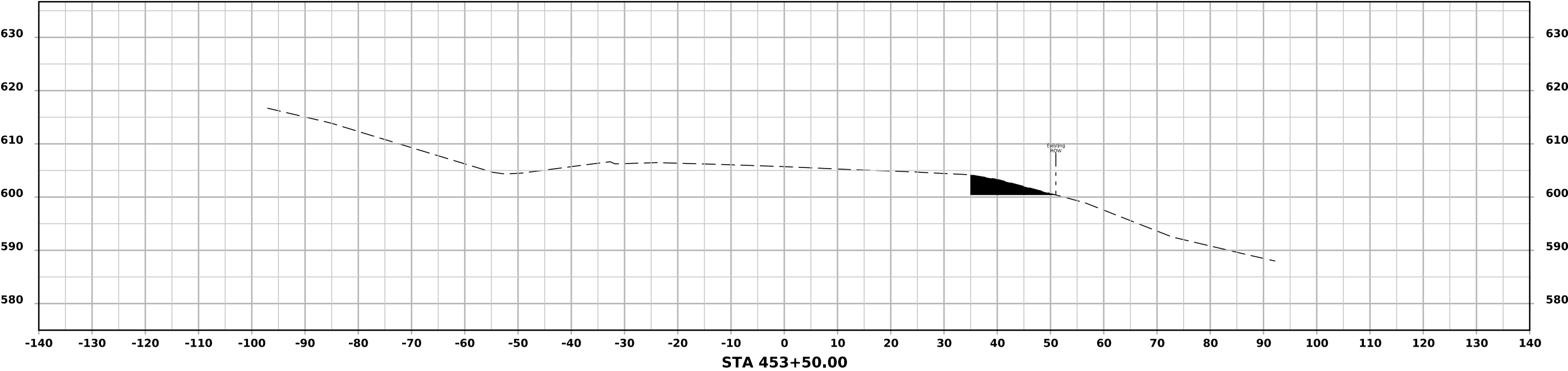
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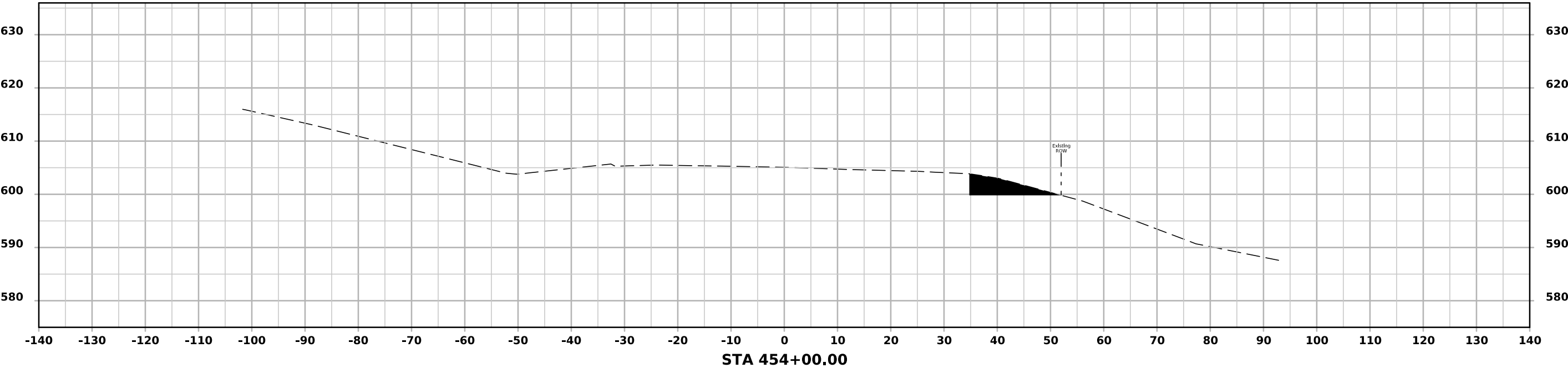
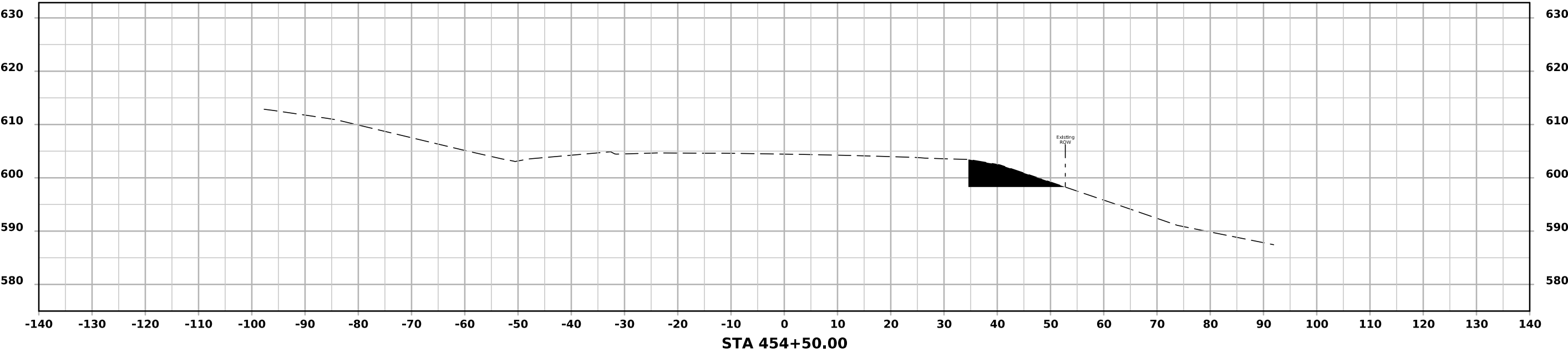
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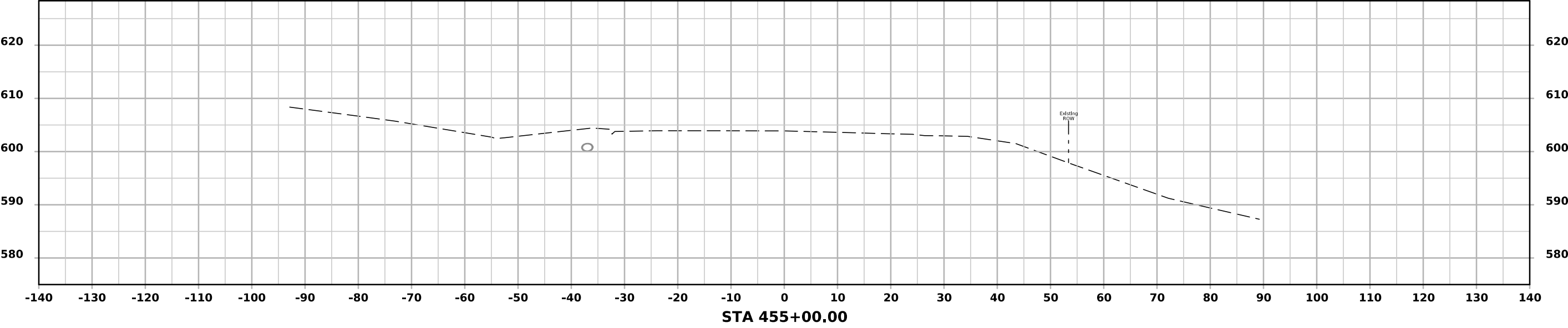
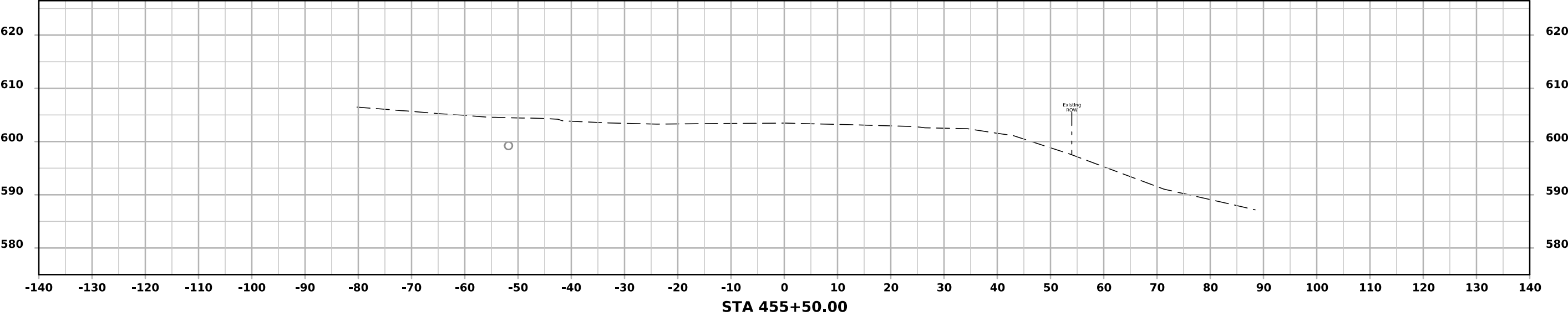
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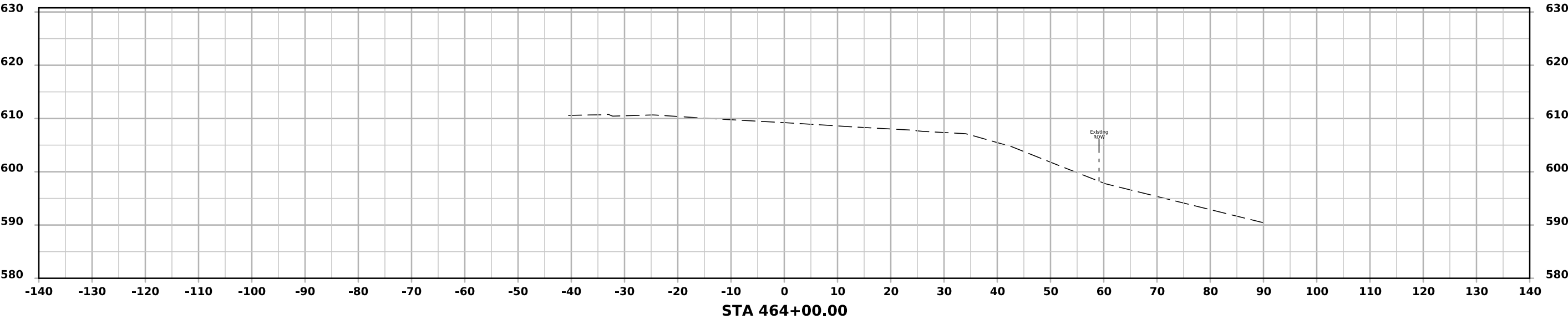
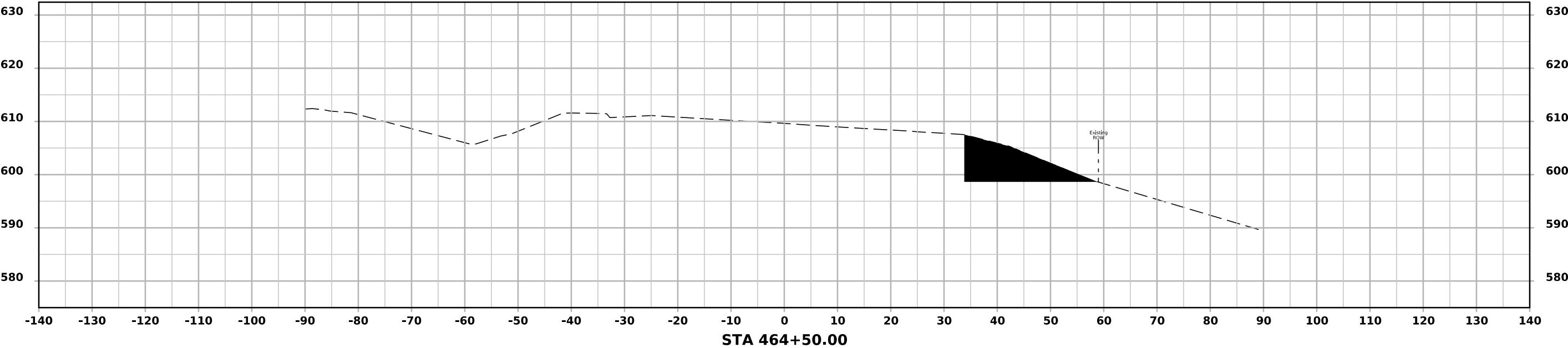
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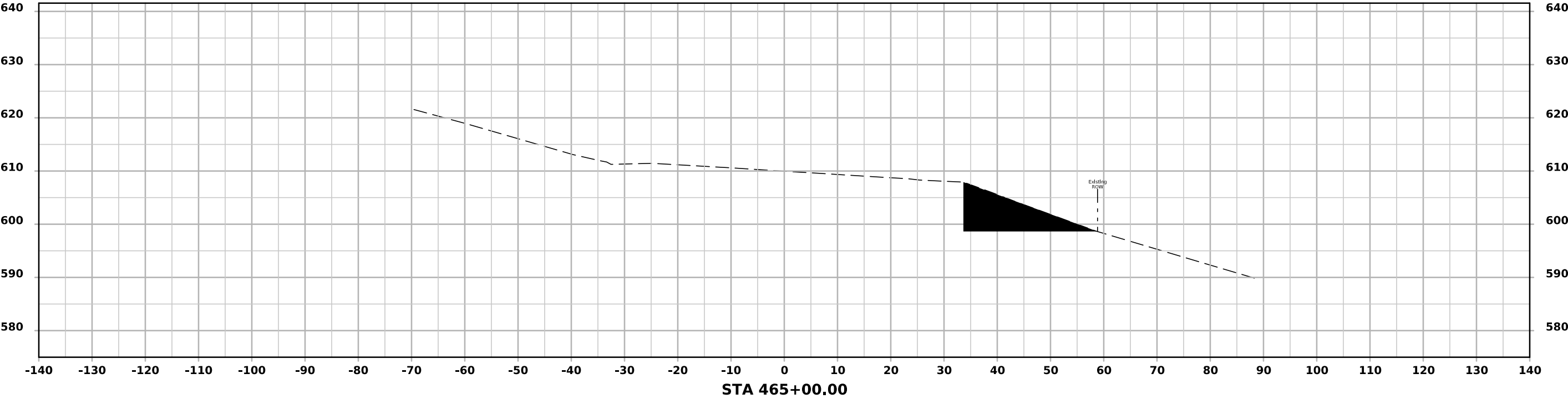
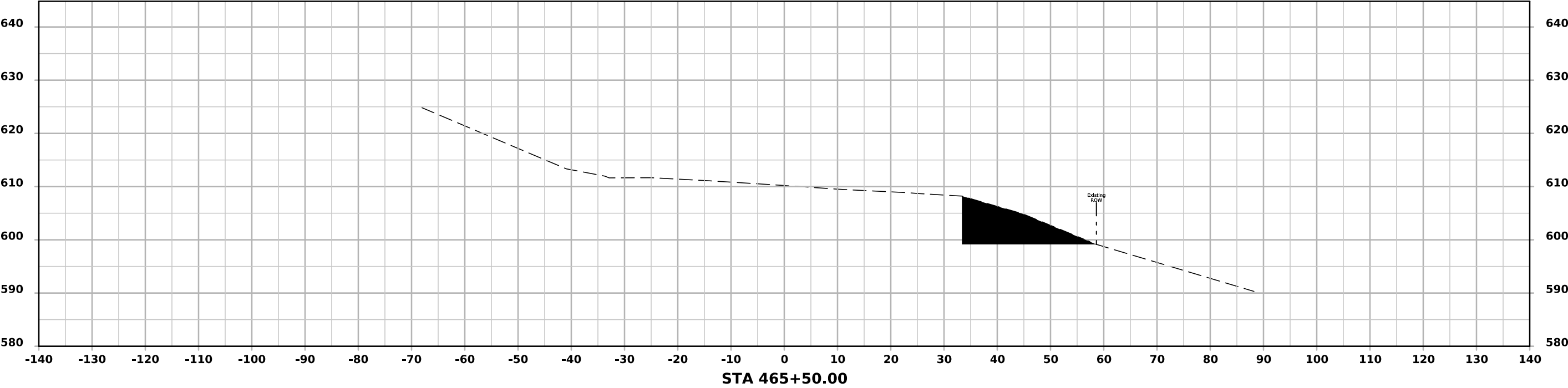
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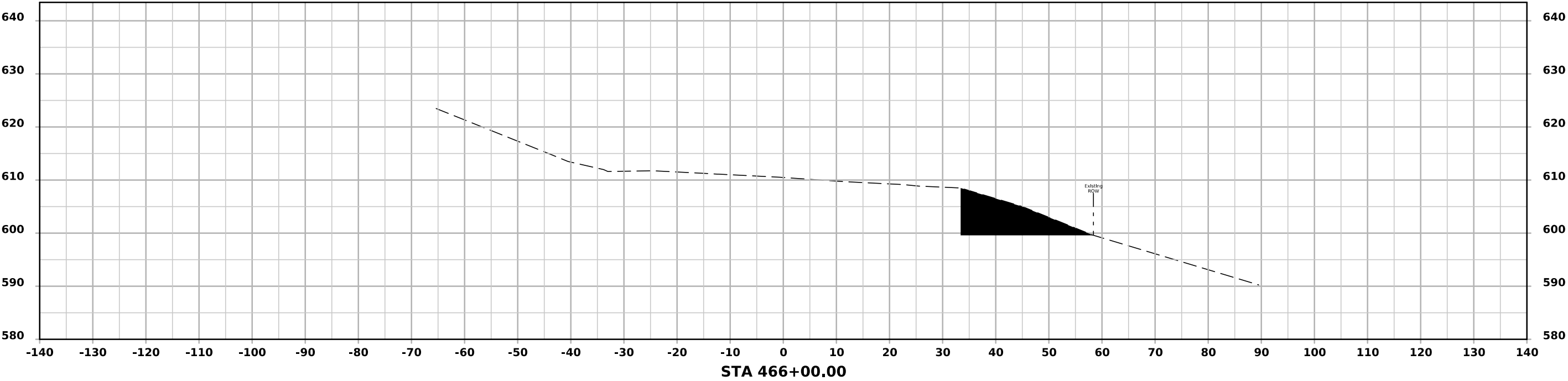
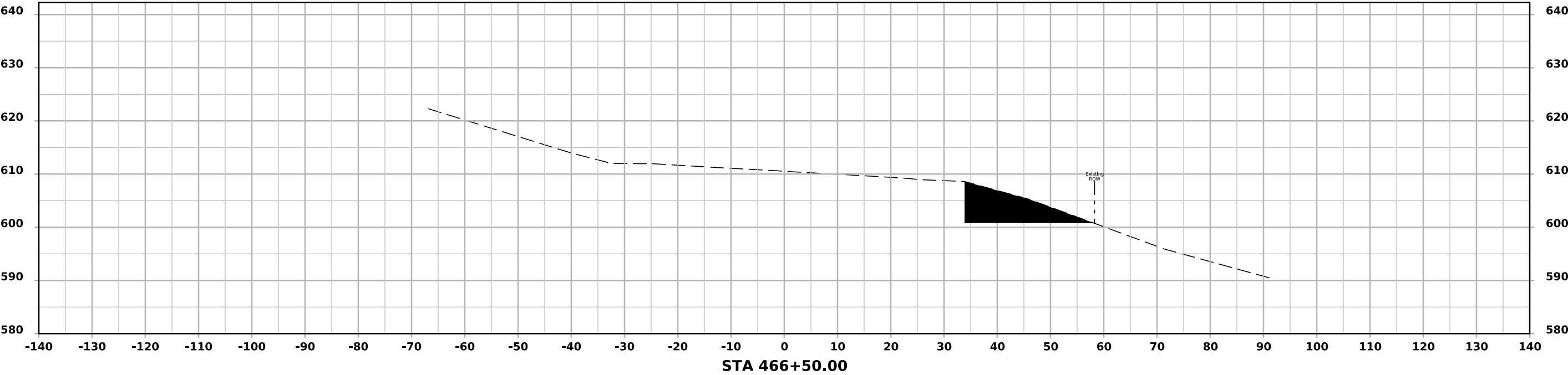
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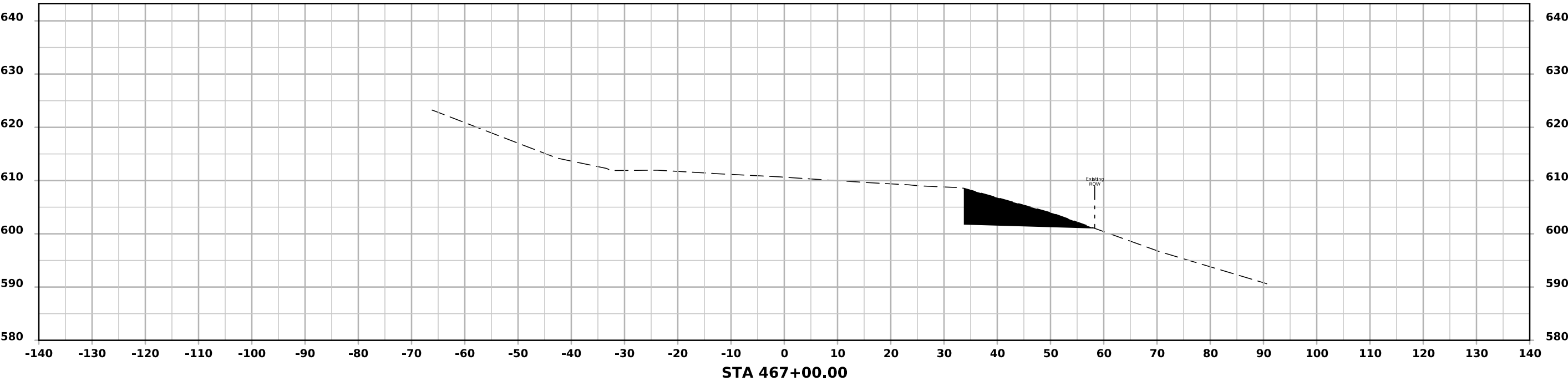
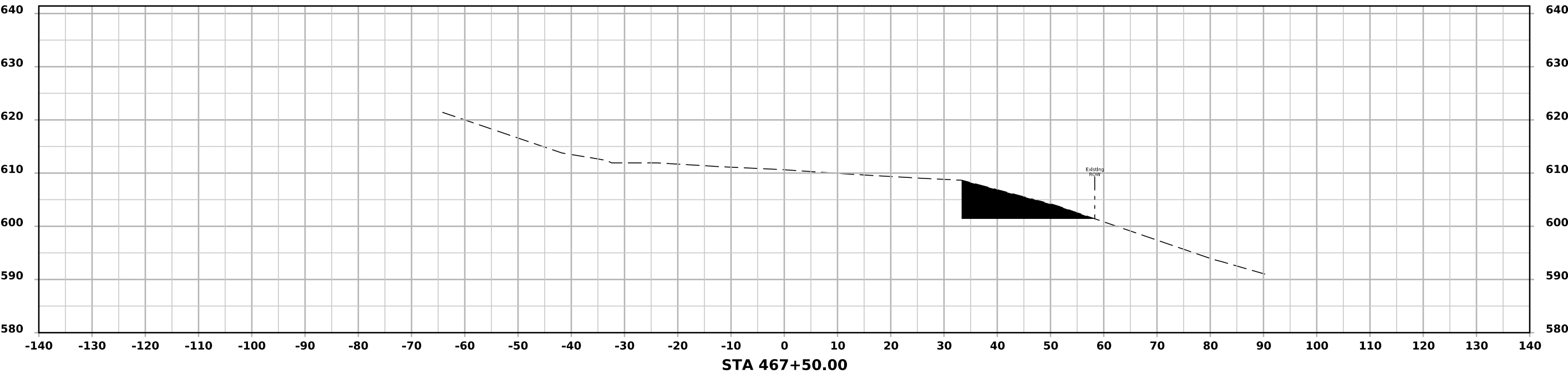
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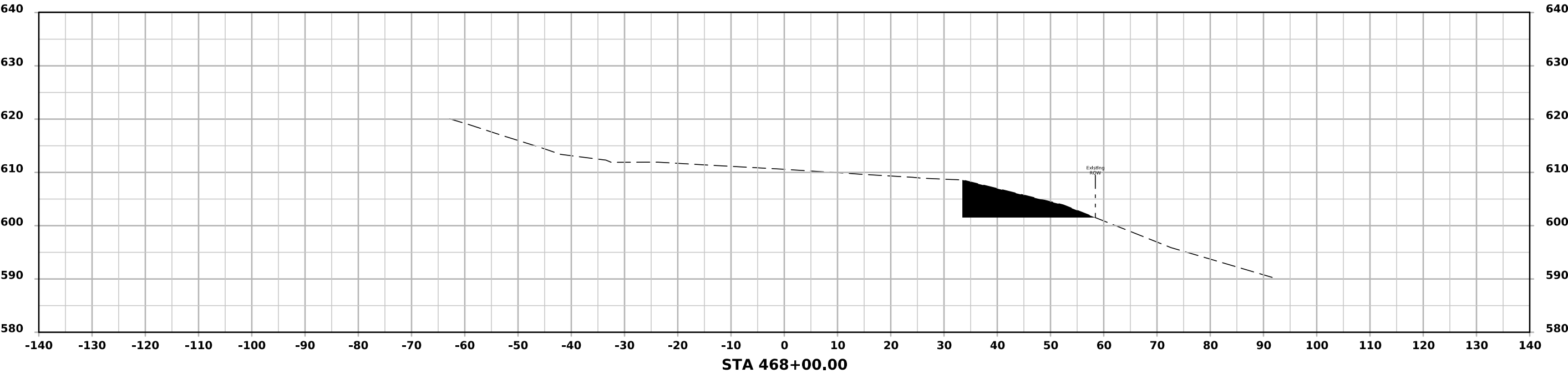
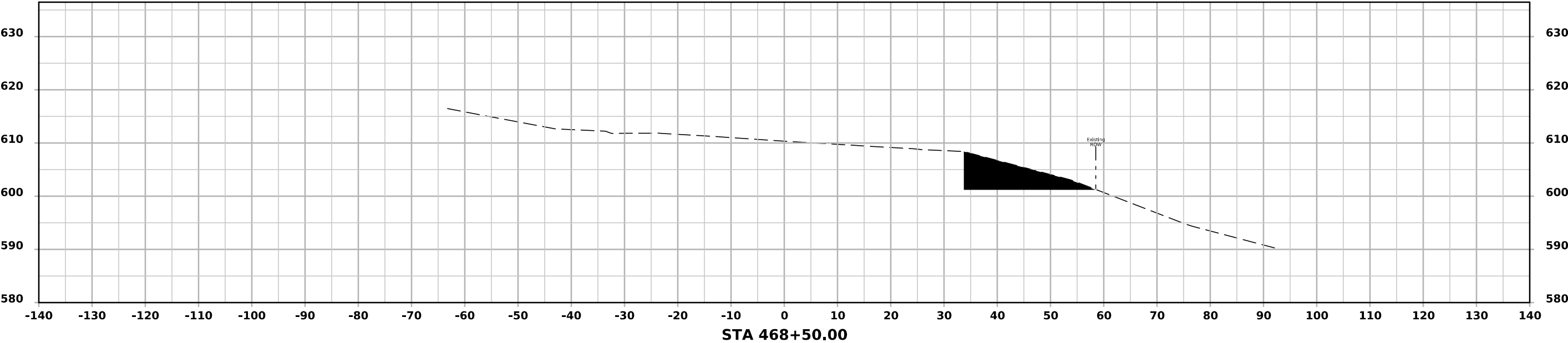
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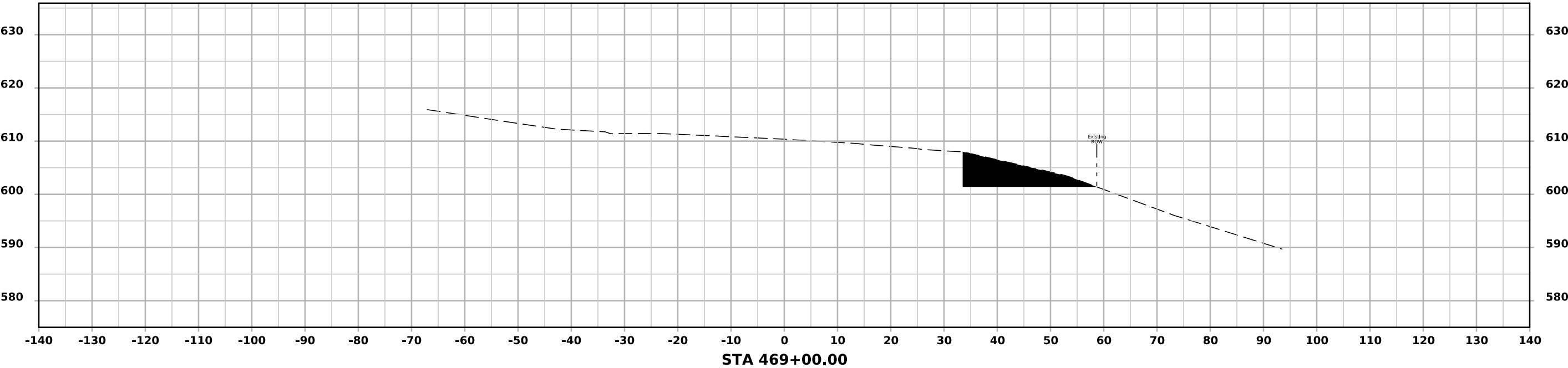
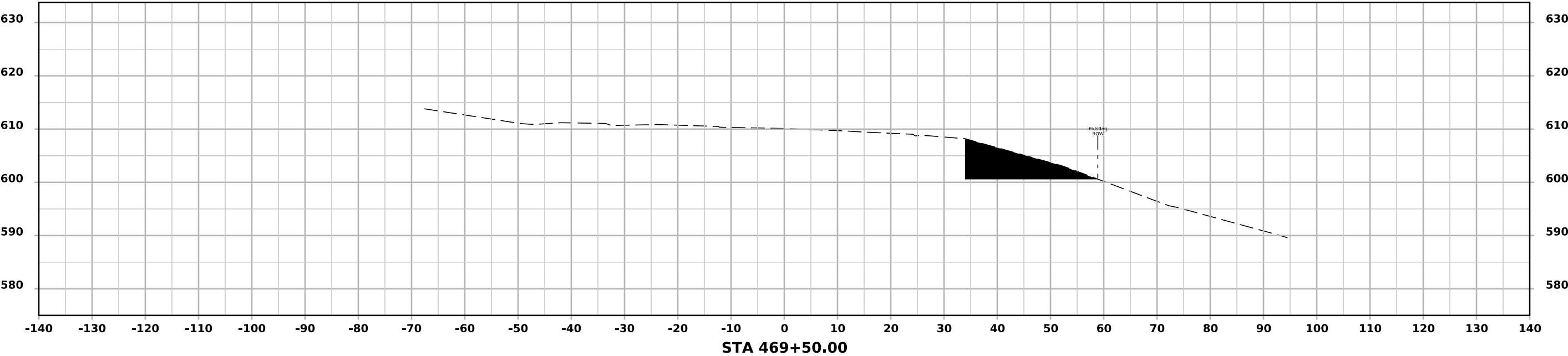
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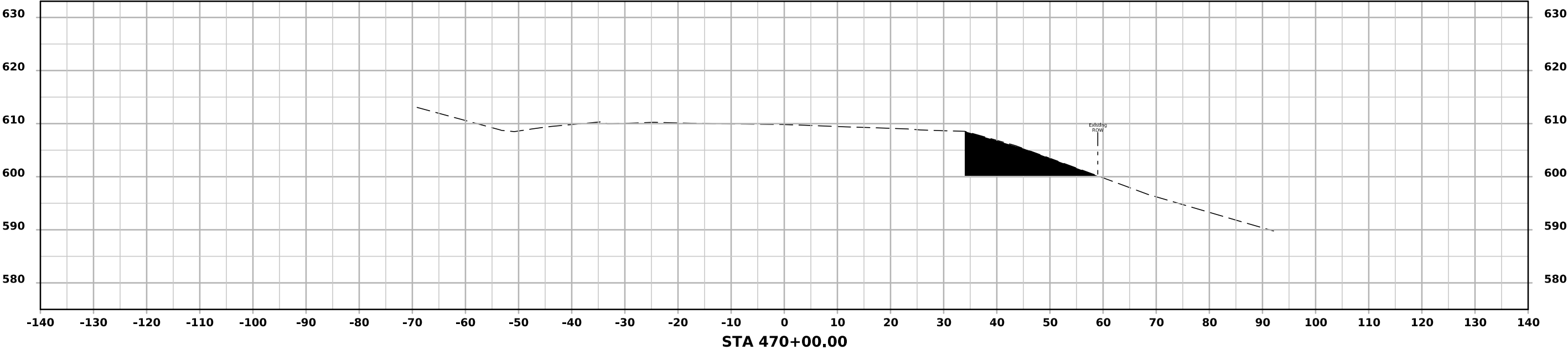
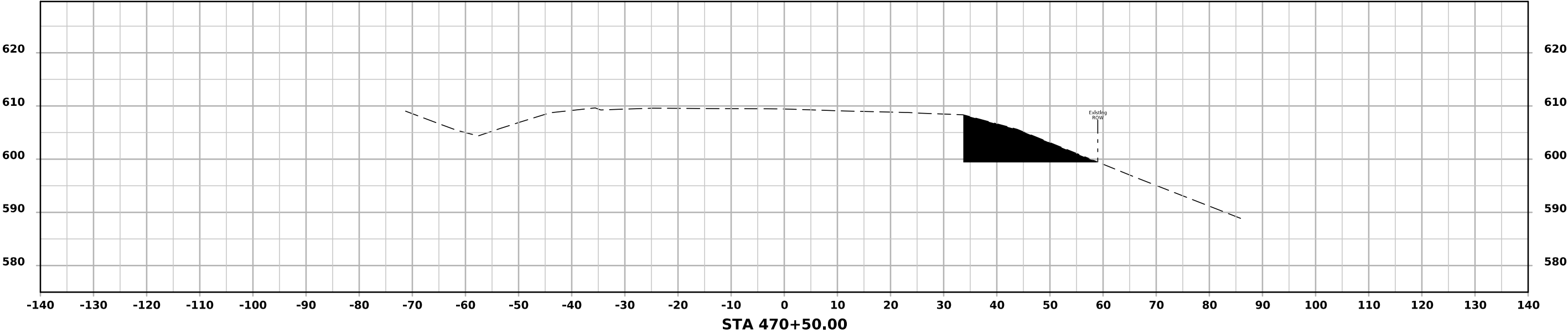
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US 67



US 67



US 67

