

No.	DESCRIPTION
INDEX OF SHEETS	
A Sheets	Title Sheets
* A.1	Title Sheet
* A.2	Location Map Sheet
B Sheets	Typical Cross Sections and Details
* B.1 - 18	Typical Cross Sections and Details
D Sheets	Mainline Plan and Profile Sheets
* D.1	Plan & Profile Legend & Symbol Information Sheet
* D.2 - 11	I-380
E Sheets	Side Road Plan and Profile Sheets
* E.1 - 7	Wright Brothers Blvd
J Sheets	Traffic Control and Staging Sheets
J.1	Traffic Control Plan
J.1	Staging Notes Stage
* J.2	Traffic Control & Staging Legend & Symbol Info. Sheet
* J.3	I-380 Staging Cross-Sections
K Sheets	Interchange Sheets
* K.1 - 2	Wright Brothers Blvd Interchange Layout Sheets
* K.3 - 4	120th Street RAMP Plan and Profile Sheets
* K.5 - 8	Rest Area RAMP Plan and Profile Sheets
* K.9 - 12	Wright Brothers Blvd RAMP Plan and Profile Sheets
* K.13 - 14	US 30 RAMP Plan and Profile Sheets
L Sheets	Geometric, Staking and Jointing Sheets
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U Sheets	500 Series, Mod.Stds. and Detail Sheets
* U.1 - 12	500 Series, Modified Standards and Detail Sheets
W Sheets	Mainline Cross Sections
W.1 - 94	I-380 Cross Sections
X Sheets	Side Road Cross Sections
X.1 - 44	Wright Brothers Blvd Cross Sections
Y Sheets	Ramp Cross Sections
Y.1 - 77	Ramp Cross Sections
	* Color Plan Sheets



PLANS OF PROPOSED IMPROVEMENT ON THE
INTERSTATE ROAD SYSTEM
Johnson \ Linn COUNTY
Unknown Pavement - Grade and New
Johnson Co Line to S of US 30

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

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



Note: Survey information shown in this plan set has not been finalized.

DESIGN DATA RURAL			
2019	AADT	67,700	V.P.D.
2050	AADT	140,600	V.P.D.
2050	DHV	12,270	V.P.H.
	TRUCKS	17	%
	Total		
	Design ESALs	..	

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

PRELIMINARY PLANS

Subject to change by final design.

D2 PLAN - Date: 03-01-2022

REVISIONS		TOTAL
		287
PROJECT IDENTIFICATION NUMBER		
16-52-380-030-03		
PROJECT NUMBER		
IM-380-6(434)12--13-52		
R.O.W. PROJECT NUMBER		
IMN-380-6(433)12-0E-52		

END CONSTRUCTION
Sta. C 237+25
M.P. 16.31

BEGIN CONSTRUCTION
Sta. 1747+00
M.P. 11.05

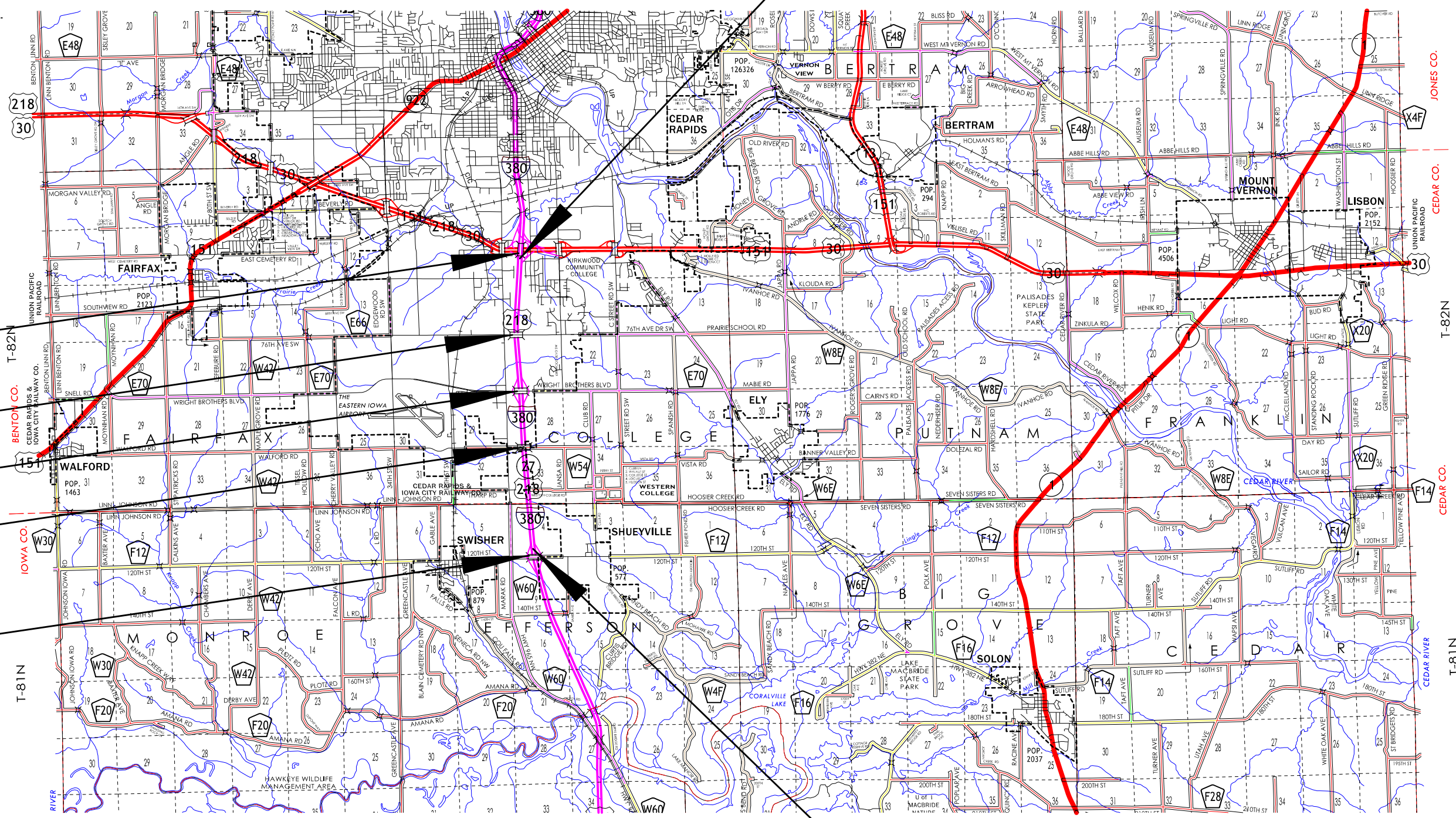
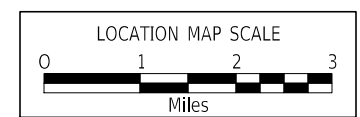
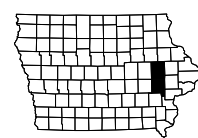
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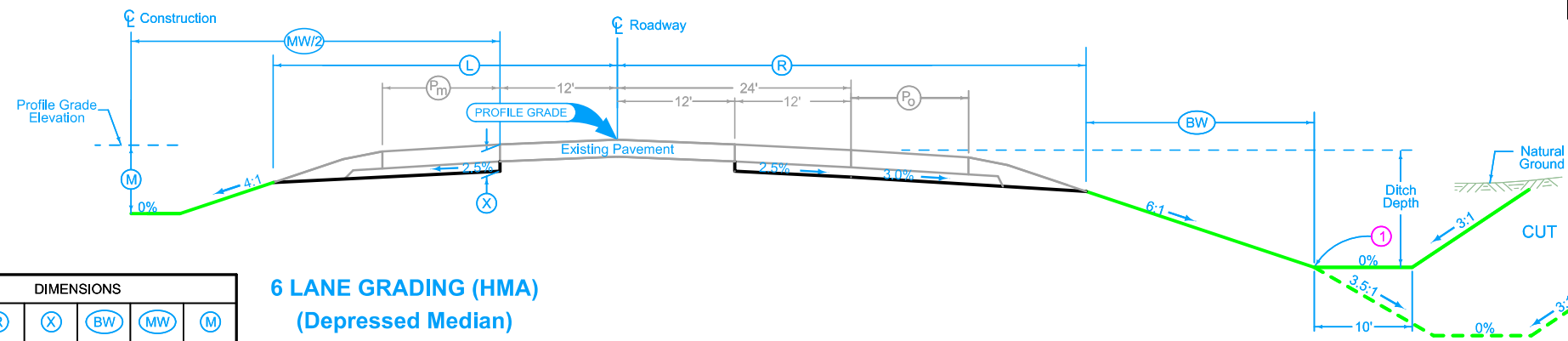
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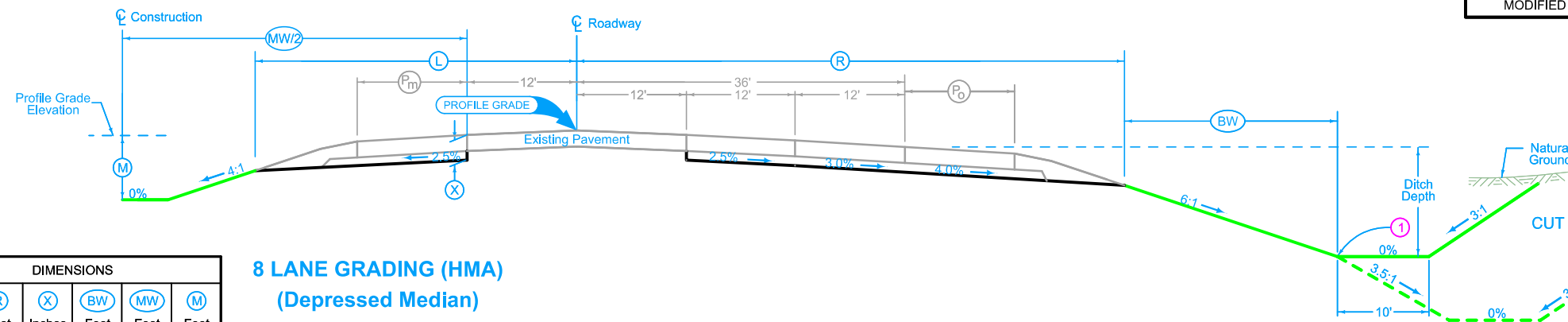
**6 LANE GRADING (HMA)
(Depressed Median)**

LOCATION		DIMENSIONS						
ROAD IDENTIFICATION	STATION TO STATION	L Feet	R Feet	X Inches	BW Feet	MW Feet	M Feet	
I-380 NB	1747+00.00 1787+28.96	41.2	53.8	26	4.2	60	3.5	
I-380 NB	0+00.00 120+00.00	41.2	53.8	26	4.2	60	3.5	
I-380 SB	1747+00.00 1787+28.96	41.2	53.8	26	4.2	60	3.5	
I-380 SB	0+00.00 120+00.00	41.2	53.8	26	4.2	60	3.5	

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

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

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



**8 LANE GRADING (HMA)
(Depressed Median)**

LOCATION		DIMENSIONS						
ROAD IDENTIFICATION	STATION TO STATION	L Feet	R Feet	X Inches	BW Feet	MW Feet	M Feet	
I-380 NB	120+00.00 229+00.00	41.2	67.2	26	4.2	60	3.5	
I-380 SB	120+00.00 229+00.00	41.2	67.2	26	4.2	60	3.5	

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

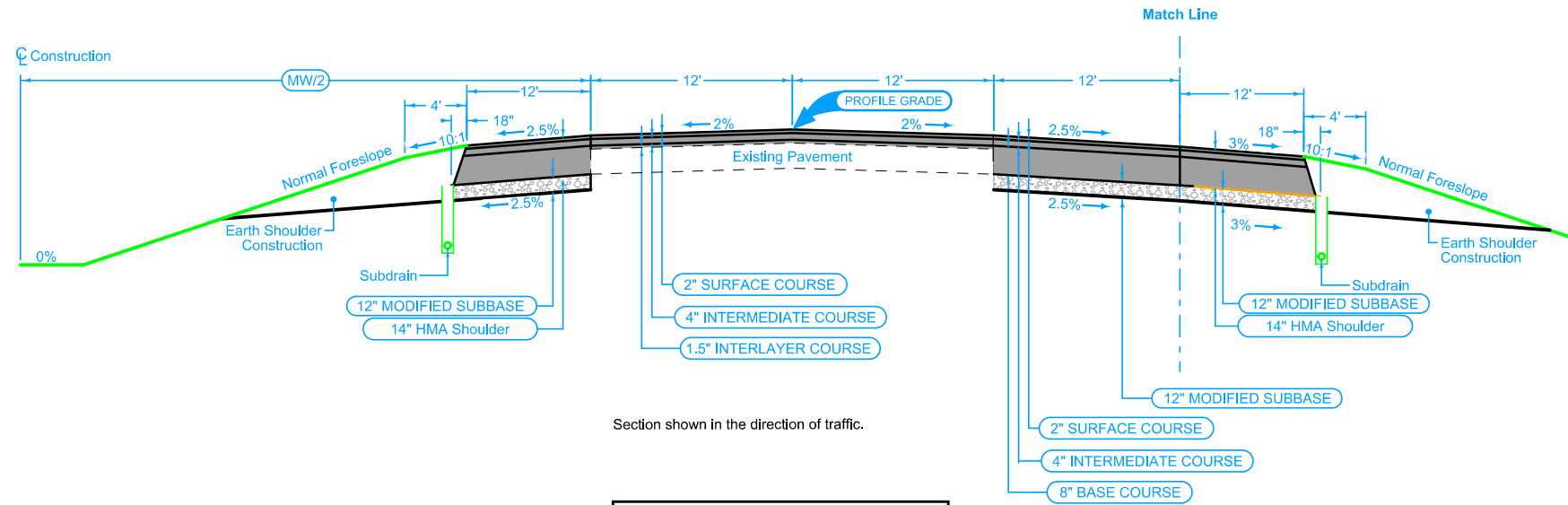
See Plan & Profiles sheets and cross sections for additional details of ditches and backslopes.

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

Full Depth HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B

6D_Dprs_P_FullHMA_MODIFIED		
Direction of Travel	BEGIN STATION	END STATION
Both	1747+00	1787+28.96
Both	0+00	229+00



Section shown in the direction of traffic.

6DP_Dprs_MODIFIED			
Direction of Travel	BEGIN STATION	END STATION	MW Feet
Both	1747+00	1787+28.96	60
Both	0+00	229+00	60

Full Depth HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B

6D_Dprs_P_FullHMA_MODIFIED		
Direction of Travel	BEGIN STATION	END STATION
NB	1747+00	1751+14.85
NB	12+00	35+25.85
NB	54+50	64+00
NB	93+00	117+89.2
NB	226+00	229+00
SB	1747+00	1751+00
SB	8+66.98	32+50
SB	50+00	67+50
SB	94+60.8	120+00
SB	228+10.36	229+00

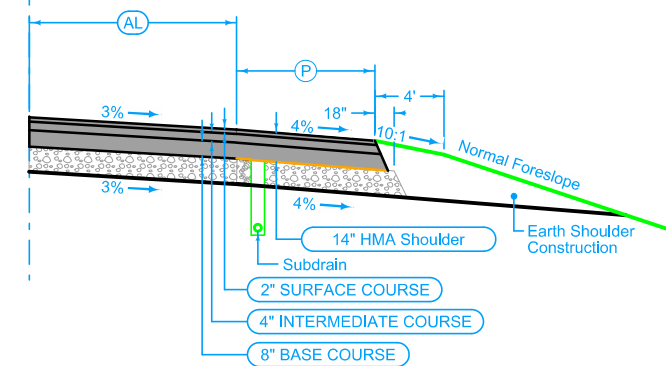
Auxiliary Lane

Longitudinal joint: B

6_AuxLane_HMA_MODIFIED				
Direction of Travel	BEGIN STATION	END STATION	AL Feet	P Feet
NB	1254+25	1787+28.96	12	6
NB	0+00	7+80	12	6
NB	38+36	48+50	12	6
NB	48+50	54+50	12-0	6-12
NB	64+00	67+00	0-12	12-10
NB	67+00	82+00	12	10
NB	82+00	85+00	12-24	10
NB	85+00	89+39.2	24	10
NB	121+00	126+00	24	10
NB	126+00	132+00	24-12	10-12
NB	132+00	156+09.4	12	12
NB	156+09.4	221+79.47	12	0
SB	1755+20	1787+28.96	12	6
SB	0+00	5+56.83	12	6
SB	36+70	47+00	12	6
SB	47+00	50+00	12-0	6-12
SB	67+50	73+50	0-12	12-10
SB	73+50	80+50	12	10
SB	80+50	86+50	12-24	10
SB	86+50	91+50	24	10
SB	123+60	128+00	24	10
SB	128+00	131+00	24-12	10-12
SB	131+00	225+00	12	12

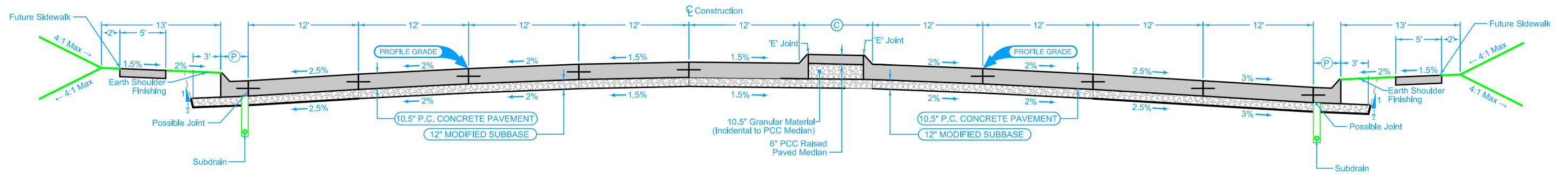
Auxiliary Lane HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B



See Tab 100-25 for pavement quantities.
See Tab 112-9 for shoulder quantities.

INTERSTATE 380 HMA OVERLAY AND WIDENING



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 : KT-2
 Transverse: C at 17' spacing

STATION TO STATION		(P) Feet	Curb Type See PV-102
10+36.56	16+00.00	2.5	6" SLP

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

BEGIN STATION	END STATION	(C) Feet
10+36.56	16+00.00	Var

Curbed Shoulder

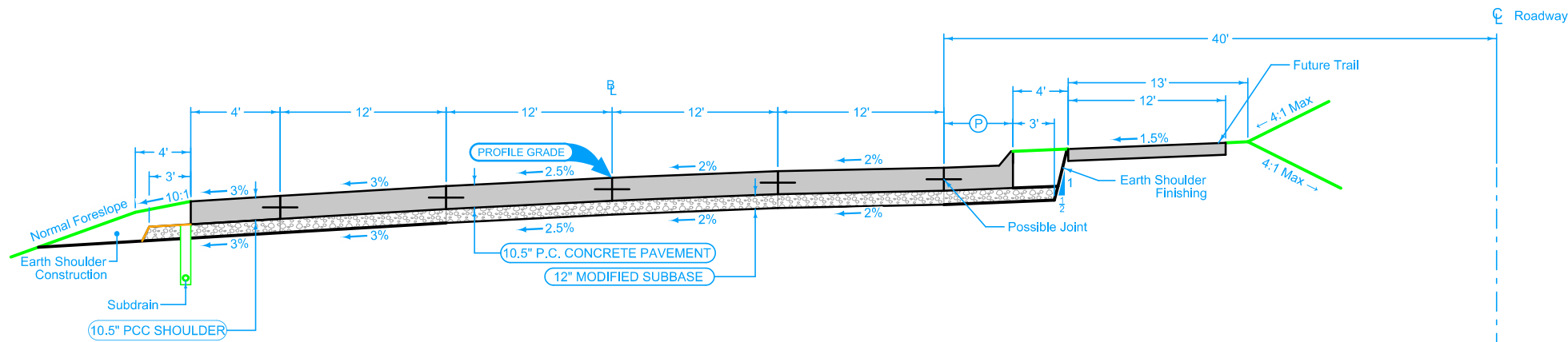
Shoulder Jointing:
 Longitudinal joint not required when distance from back of curb to nearest joint is less than 15':

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

STATION TO STATION		(P) Feet	Curb Type See PV-102
10+36.56	16+00.00	2.5	6" SLP

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

WRIGHT BROTHERS BOULEVARD PCC PAVING



Full Depth PCC Shoulder

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

6D_Closed_P_FullPCC_04-20-21	
BEGIN STATION	END STATION
822+33.48	825+84.14

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

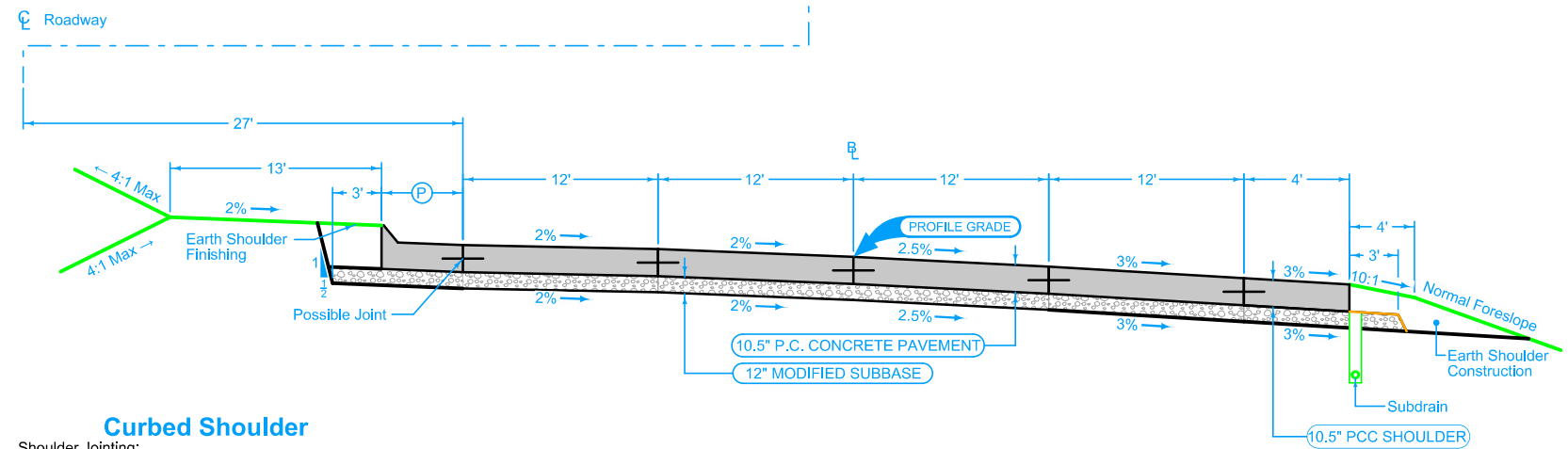
BEGIN STATION	END STATION
822+33.48	825+84.14

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: KT-2
 Transverse: C at 17' spacing

2_Curb_04-21-20			
STATION TO STATION	(P) Feet	Curb Type See PV-102	
822+33.48	825+84.14	2.5	6" SLP



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: KT-2
 Transverse: C at 17' spacing

2_Curb_04-21-20			
STATION TO STATION	(P) Feet	Curb Type See PV-102	
922+34.26	925+80.91	2.5	6" SLP

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

BEGIN STATION	END STATION
922+34.26	925+80.91

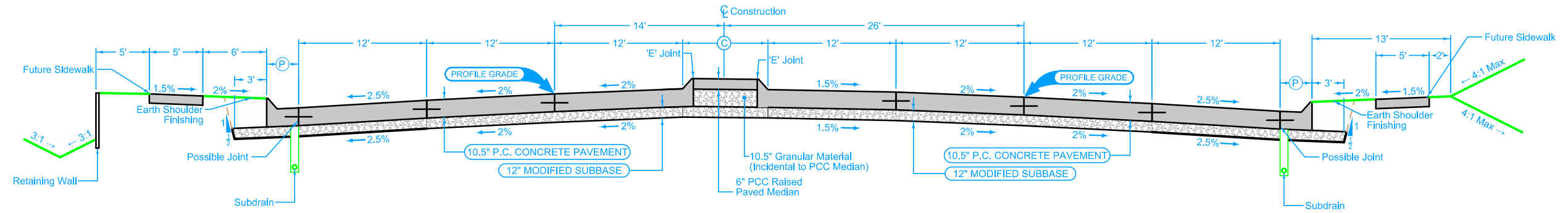
Full Depth PCC Shoulder

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

6D_Closed_P_FullPCC_04-20-21	
BEGIN STATION	END STATION
922+34.26	925+80.91

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

WRIGHT BROTHERS BOULEVARD PCC PAVING



Concrete Barrier 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: KT-2
 Transverse: C at 17' spacing

2_Curb_04-21-20			
STATION TO STATION	(P) Feet	Barrier Size	
32+50.00	36+08.81	3.083	34"

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

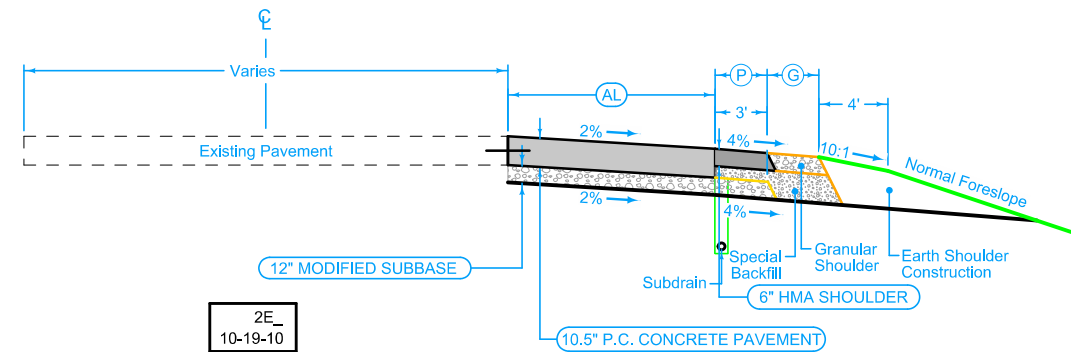
BEGIN STATION	END STATION	(C) Feet
32+50.00	36+08.81	4

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: KT-2
 Transverse: C at 17' spacing

2_Curb_04-21-20			
STATION TO STATION	(P) Feet	Curb Type See PV-102	
32+50.00	36+08.81	2.5	6" SLP



Auxiliary Lane

Longitudinal joint: L or KT
 Transverse joint: Match Mainline

Auxiliary Lane Combination Shoulder

Shoulder Jointing:
 Longitudinal joint: B

2_AuxLane_PCC_10-18-16			2_AL_Shldr_C_04-21-20		
STATION TO STATION	(AL) Feet	(P) Feet	(G) Feet		
36+08.81	39+05.98	12	4	6	
39+05.98	42+05.98	12-0	4	6	

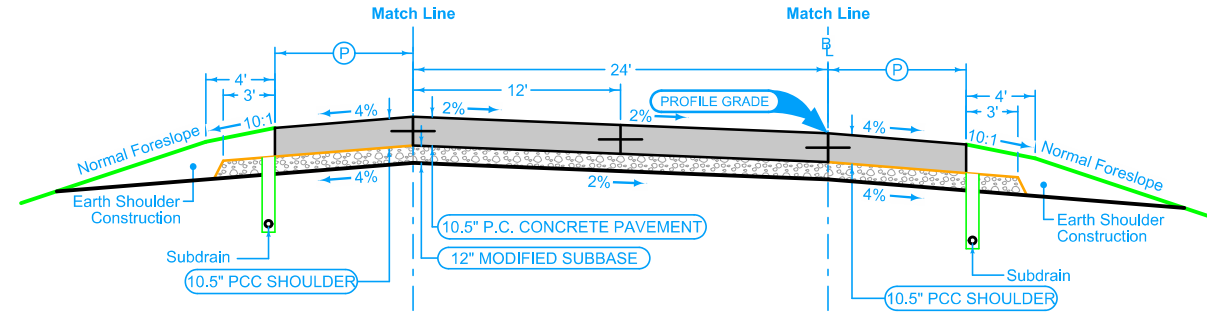
See Tab 100-24 for pavement quantities.
 See Tab 112-9 for shoulder quantities.

WRIGHT BROTHERS BOULEVARD PCC PAVING

Full Depth PCC Shoulder

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

STATION TO STATION		(P) Feet
1113+70.00	1120+01.60	6



Section shown in the direction of traffic.

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

2RP_ 04-20-21	
BEGIN STATION	END STATION
1109+78.54	1120+01.60

Full Depth PCC Shoulder

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

STATION TO STATION		(P) Feet
1113+70.00	1120+01.60	10

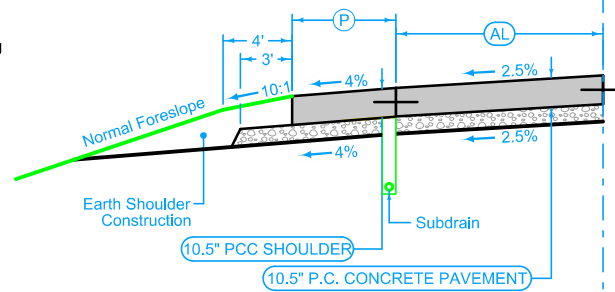
Auxiliary Lane

Longitudinal joint: L-2 or KT-2
 Transverse joint: Match Mainline

2_AuxLane_PCC_ 10-18-16		(AL) Feet	(P) Feet
1109+78.54	1112+50.00	12	6
1112+50.00	1113+70.00	12-0	6

Auxiliary Lane Full Depth Shoulder

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



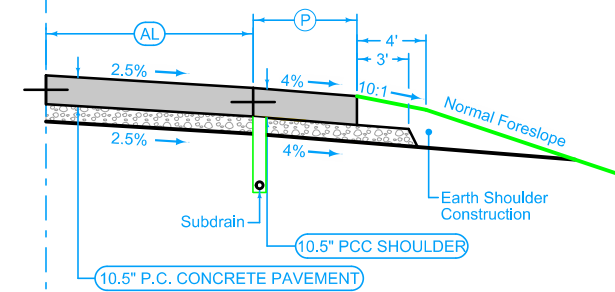
Auxiliary Lane

Longitudinal joint: L-2 or KT-2
 Transverse joint: Match Mainline

2_AuxLane_PCC_ 10-18-16		(AL) Feet	(P) Feet
1109+78.54	1112+50.00	12	10
1112+50.00	1113+70.00	12-0	10

Auxiliary Lane Full Depth Shoulder

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



See Tab 100-24 for pavement quantities.

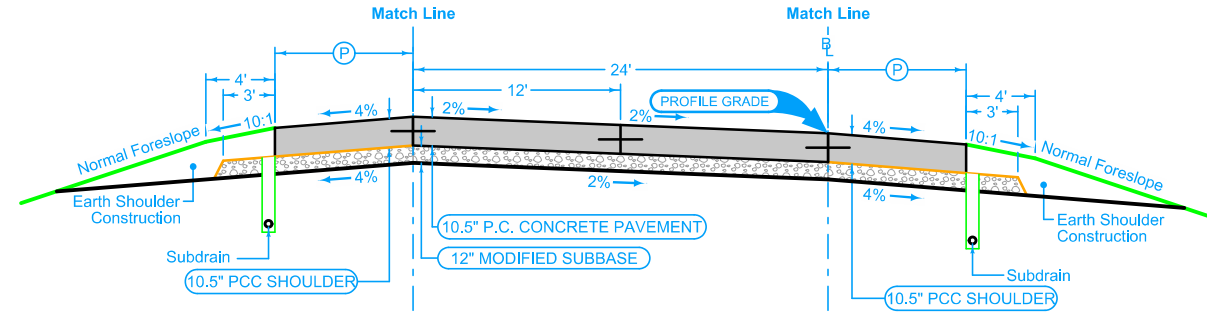
See Tab 112-9 for shoulder quantities.

WRIGHT BROTHER BOULEVARD RAMP A PCC PAVING

Full Depth PCC Shoulder

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

2_P_FullPCC_04-20-21		(P)
STATION TO STATION		Feet
2092+98.40	2099+50.00	6



Full Depth PCC Shoulder

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

2_P_FullPCC_04-20-21		(P)
STATION TO STATION		Feet
2092+98.40	2099+50.00	10

Section shown in the direction of traffic.

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

2RP_04-20-21	
BEGIN STATION	END STATION
2092+98.40	2102+67.63

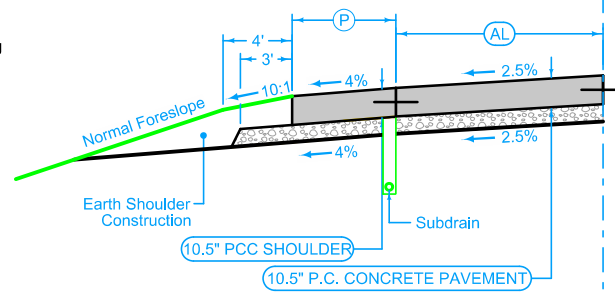
Auxiliary Lane Full Depth Shoulder

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

Auxiliary Lane

Longitudinal joint: L-2 or KT-2
 Transverse joint: Match Mainline

2_AuxLane_PCC_10-18-16		(AL)	(P)
STATION TO STATION		Feet	Feet
2099+50.00	2100+70.00	0-12	6
2100+70.00	2102+67.63	12	6



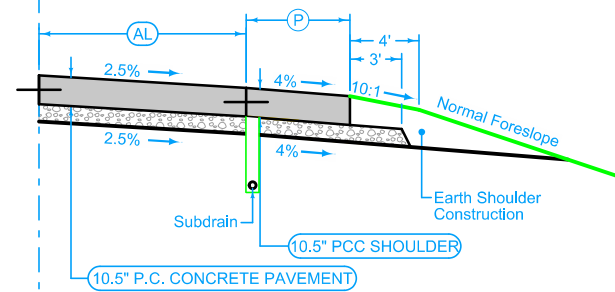
Auxiliary Lane Full Depth Shoulder

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

Auxiliary Lane

Longitudinal joint: L-2 or KT-2
 Transverse joint: Match Mainline

2_AuxLane_PCC_10-18-16		(AL)	(P)
STATION TO STATION		Feet	Feet
2099+50.00	2100+70.00	0-12	10
2100+70.00	2102+67.63	12	10



See Tab 100-24 for pavement quantities.

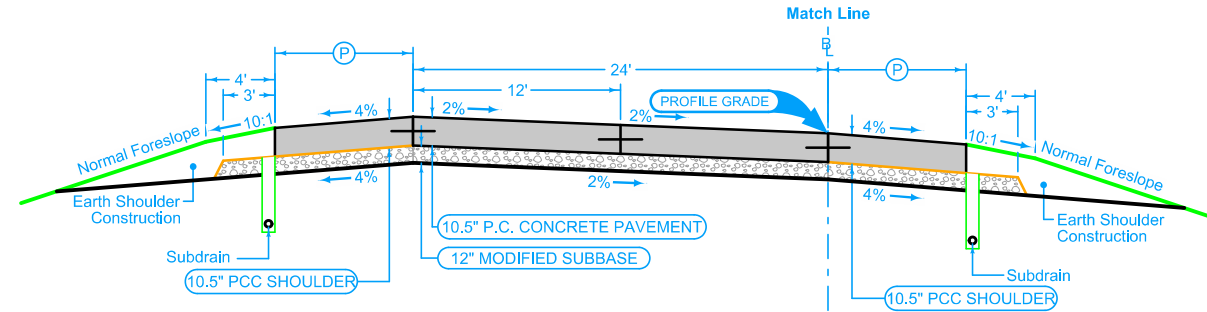
See Tab 112-9 for shoulder quantities.

WRIGHT BROTHER BOULEVARD RAMP B PCC PAVING

Full Depth PCC Shoulder

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

2_P_FullPCC_04-20-21		
STATION TO STATION		(P) Feet
3095+08.34	3103+42.03	6



Section shown in the direction of traffic.

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

2RP_04-20-21	
BEGIN STATION	END STATION
3095+08.34	3103+42.03

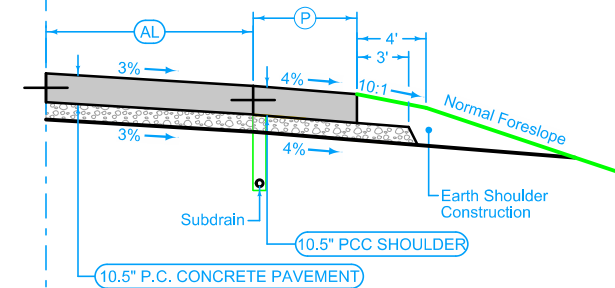
Full Depth PCC Shoulder

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

2_P_FullPCC_04-20-21		
STATION TO STATION		(P) Feet
3095+08.34	3096+75.00	10

Auxiliary Lane Full Depth Shoulder

Longitudinal joint: L or KT
 Transverse joint: Match Mainline
 Shoulder Jointing:
 Longitudinal joint: L-2 or KT-2
 Transverse joints: C at 17' spacing



2_AuxLane_PCC_10-18-16		2_AL_Shldr_FullPCC_04-21-20	
STATION TO STATION		(AL) Feet	(P) Feet
3096+75.00	3101+55.00	0-12	10
3101+55.00	3103+42.03	12	10

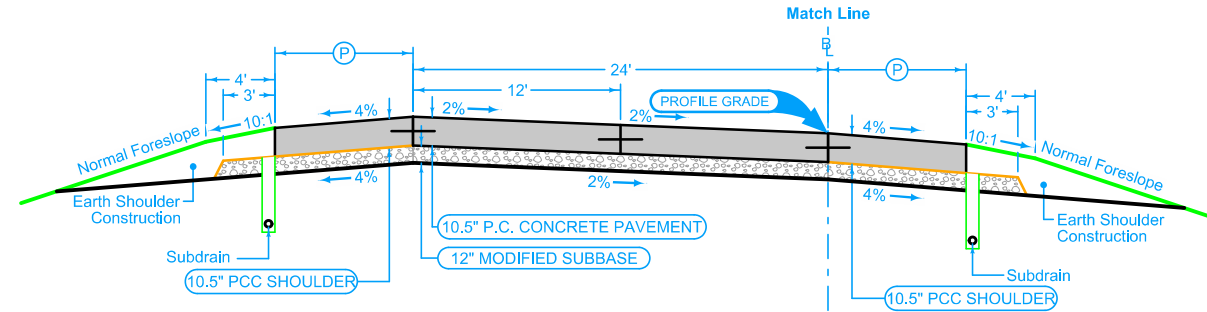
See Tab 100-24 for pavement quantities.
 See Tab 112-9 for shoulder quantities.

WRIGHT BROTHER BOULEVARD RAMP C PCC PAVING

Full Depth PCC Shoulder

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

STATION TO STATION		(P) Feet
4109+29.21	4117+91.66	6



Section shown in the direction of traffic.

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

2RP_ 04-20-21	
BEGIN STATION	END STATION
4109+29.21	4117+91.66

Full Depth PCC Shoulder

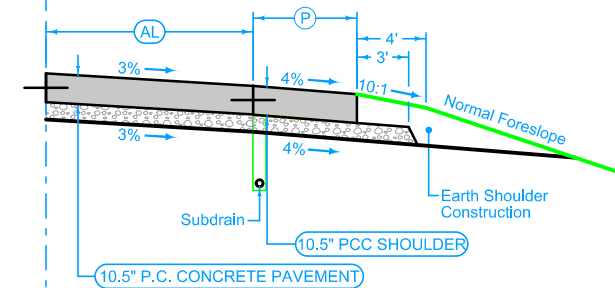
Shoulder Jointing:
 Longitudinal joint: BT-2, L-2 or KT-2
 Transverse joints: C at 17' spacing

STATION TO STATION		(P) Feet
4116+05.00	4117+91.66	10

Auxiliary Lane

Auxiliary Lane Full Depth Shoulder

Longitudinal joint: L or KT
 Transverse joint: Match Mainline
 Shoulder Jointing:
 Longitudinal joint: L-2 or KT-2
 Transverse joints: C at 17' spacing



STATION TO STATION		(AL) Feet	(P) Feet
4109+29.21	4111+25.00	12	10
4111+25.00	4116+05.00	12-0	10

See Tab 100-24 for pavement quantities.

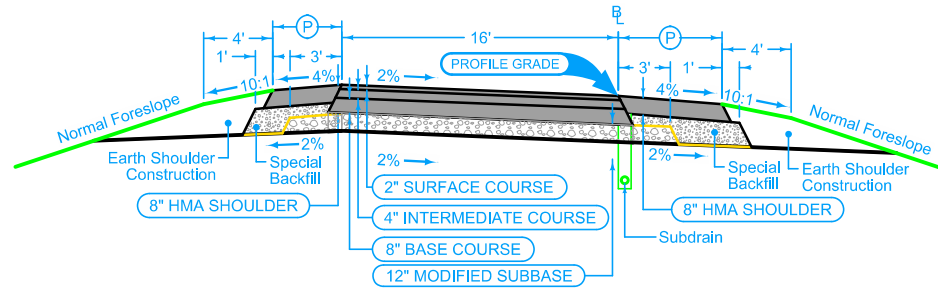
See Tab 112-9 for shoulder quantities.

WRIGHT BROTHER BOULEVARD RAMP D PCC PAVING

HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B

1R_P_HMA_10-19-10		
BEGIN STATION	END STATION	(P) Feet
5744+10.19	5751+01.06	4



Section shown in direction of traffic.

1RH_04-20-21	
BEGIN STATION	END STATION
5744+10.19	5751+01.06

HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B

1R_P_HMA_10-19-10		
BEGIN STATION	END STATION	(P) Feet
5744+10.19	5751+01.06	6

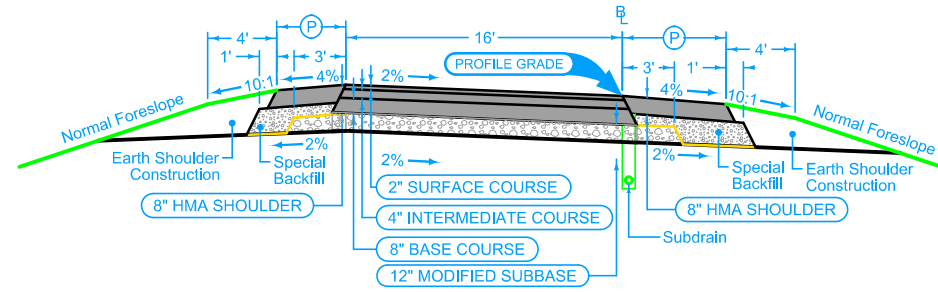
See Tab 100-25 for pavement quantities.
See Tab 112-9 for shoulder quantities.

120TH STREET RAMP A HMA PAVING

HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B

1R_P_HMA_10-19-10		
BEGIN STATION	END STATION	(P) Feet
2745+50.83	2751+02.76	4



Section shown in direction of traffic.

1RH_04-20-21	
BEGIN STATION	END STATION
2745+50.83	2751+02.76

HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B

1R_P_HMA_10-19-10		
BEGIN STATION	END STATION	(P) Feet
2745+50.83	2751+02.76	6

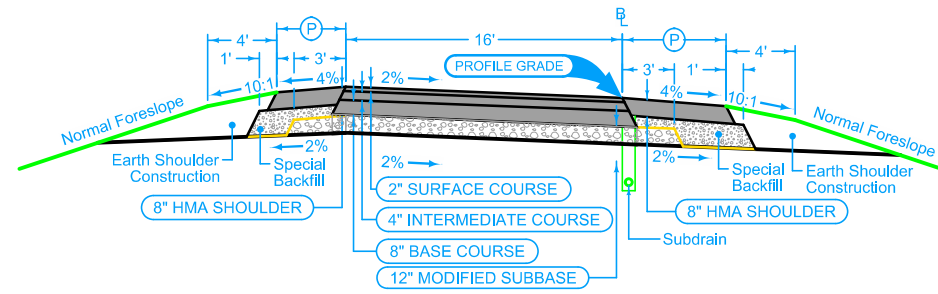
See Tab 100-25 for pavement quantities.
See Tab 112-9 for shoulder quantities.

120TH STREET RAMP D HMA PAVING

HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B

1R_P_HMA_10-19-10		
BEGIN STATION	END STATION	(P) Feet
1027+61.01	1032+56.06	4



Section shown in direction of traffic.

1RH_04-20-21	
BEGIN STATION	END STATION
1027+61.01	1032+56.06

HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B

1R_P_HMA_10-19-10		
BEGIN STATION	END STATION	(P) Feet
1027+61.01	1032+56.06	6

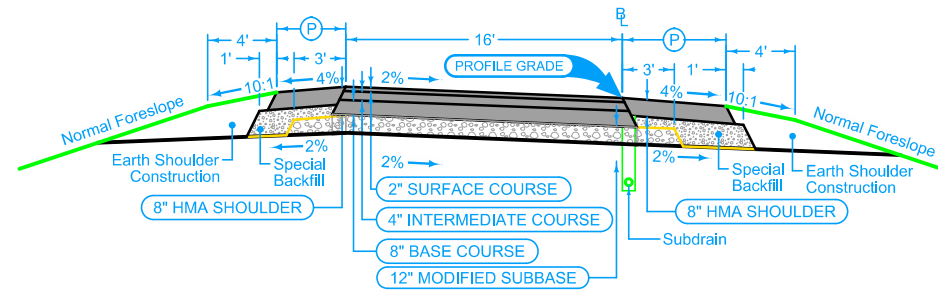
See Tab 100-25 for pavement quantities.
See Tab 112-9 for shoulder quantities.

SB REST AREA RAMP A HMA PAVING

HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B

1R_P_HMA_10-19-10		
BEGIN STATION	END STATION	(P) Feet
2011+68.94	2016+10.42	4



Section shown in direction of traffic.

1RH_04-20-21	
BEGIN STATION	END STATION
2011+68.94	2016+10.42

HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B

1R_P_HMA_10-19-10		
BEGIN STATION	END STATION	(P) Feet
2011+68.94	2016+10.42	6

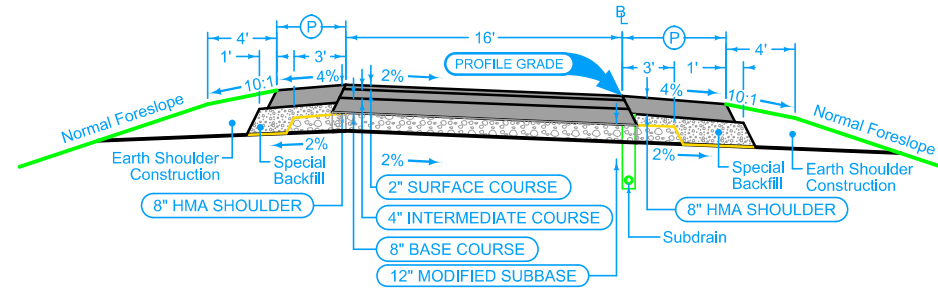
See Tab 100-25 for pavement quantities.
See Tab 112-9 for shoulder quantities.

NB REST AREA RAMP B HMA PAVING

HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B

1R_P_HMA_10-19-10		
BEGIN STATION	END STATION	(P) Feet
3008+70.15	3013+78.96	4



Section shown in direction of traffic.

1RH_04-20-21	
BEGIN STATION	END STATION
3008+70.15	3013+78.96

HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B

1R_P_HMA_10-19-10		
BEGIN STATION	END STATION	(P) Feet
3008+70.15	3013+78.96	6

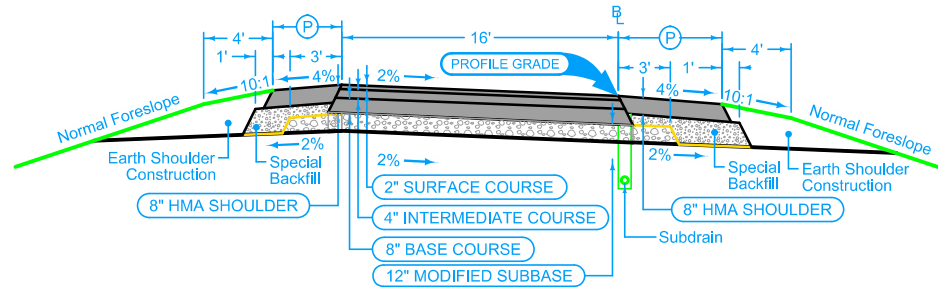
See Tab 100-25 for pavement quantities.
See Tab 112-9 for shoulder quantities.

SB REST AREA RAMP C HMA PAVING

HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B

1R_P_HMA_10-19-10		
BEGIN STATION	END STATION	(P) Feet
4030+28.37	4035+31.07	4



Section shown in direction of traffic.

1RH_04-20-21	
BEGIN STATION	END STATION
4030+28.37	4035+31.07

HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B

1R_P_HMA_10-19-10		
BEGIN STATION	END STATION	(P) Feet
4030+28.37	4035+31.07	6

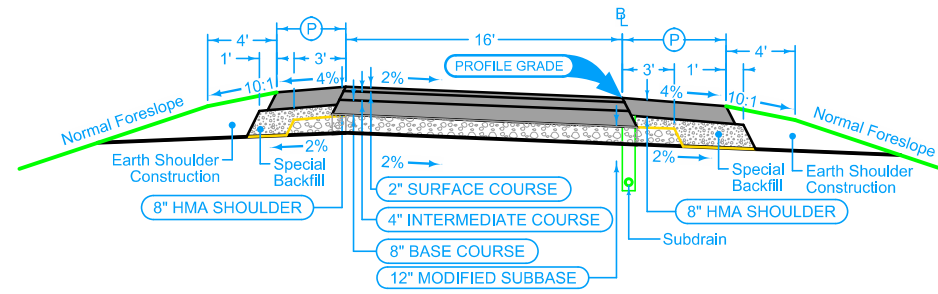
See Tab 100-25 for pavement quantities.
See Tab 112-9 for shoulder quantities.

NB REST AREA RAMP D HMA PAVING

HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B

1R_P_HMA_10-19-10		
BEGIN STATION	END STATION	(P) Feet
2225+23.94	2231+51.41	4



Section shown in direction of traffic.

1RH_04-20-21	
BEGIN STATION	END STATION
2225+23.94	2231+51.41

HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B

1R_P_HMA_10-19-10		
BEGIN STATION	END STATION	(P) Feet
2225+23.94	2231+51.41	6

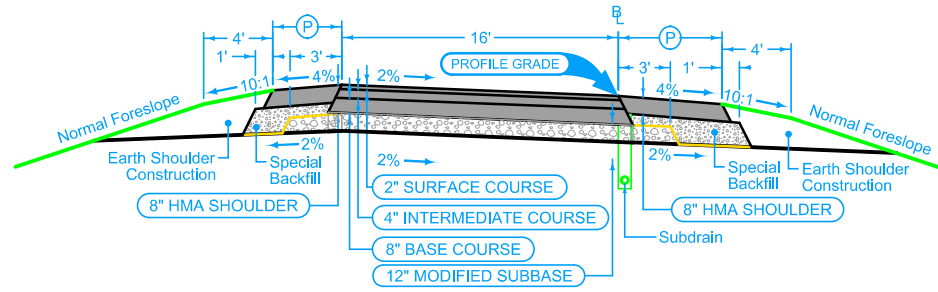
See Tab 100-25 for pavement quantities.
See Tab 112-9 for shoulder quantities.

US 30 RAMP B HMA PAVING

HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B

1R_P_HMA_10-19-10		
BEGIN STATION	END STATION	(P) Feet
3227+33.91	3232+45.44	4



Section shown in direction of traffic.

1RH_04-20-21	
BEGIN STATION	END STATION
3227+33.91	3232+45.44

HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B

1R_P_HMA_10-19-10		
BEGIN STATION	END STATION	(P) Feet
3227+33.91	3232+45.44	6

See Tab 100-25 for pavement quantities.
See Tab 112-9 for shoulder quantities.

US 30 RAMP C HMA PAVING

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

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.	
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

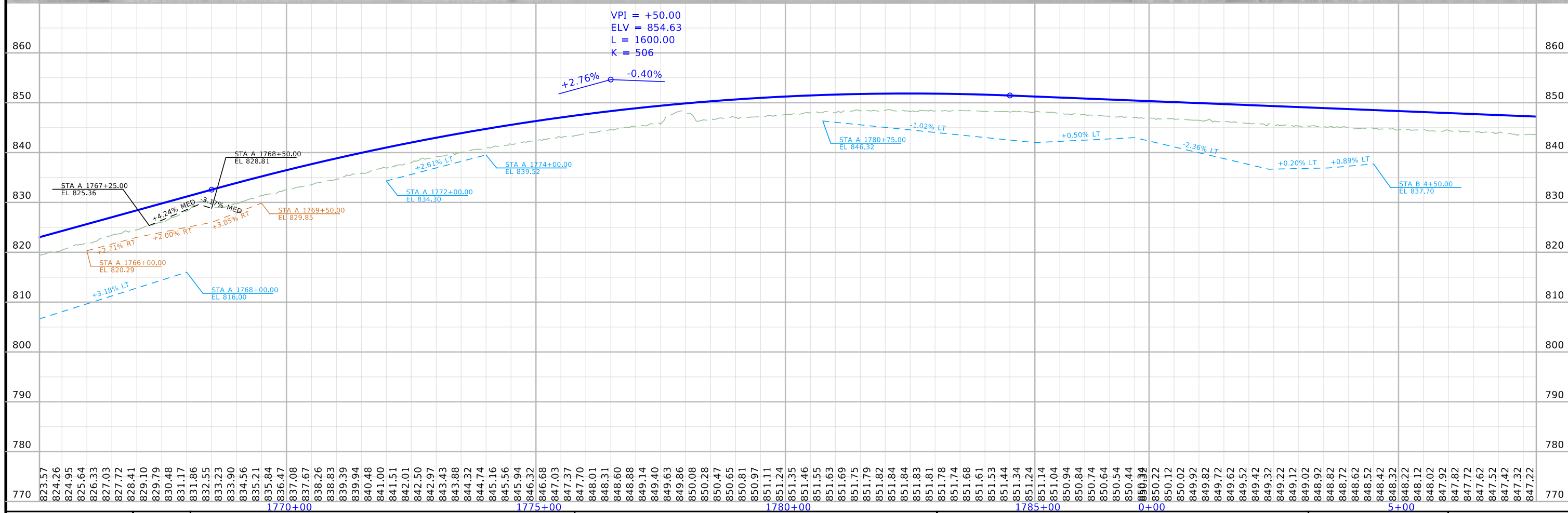
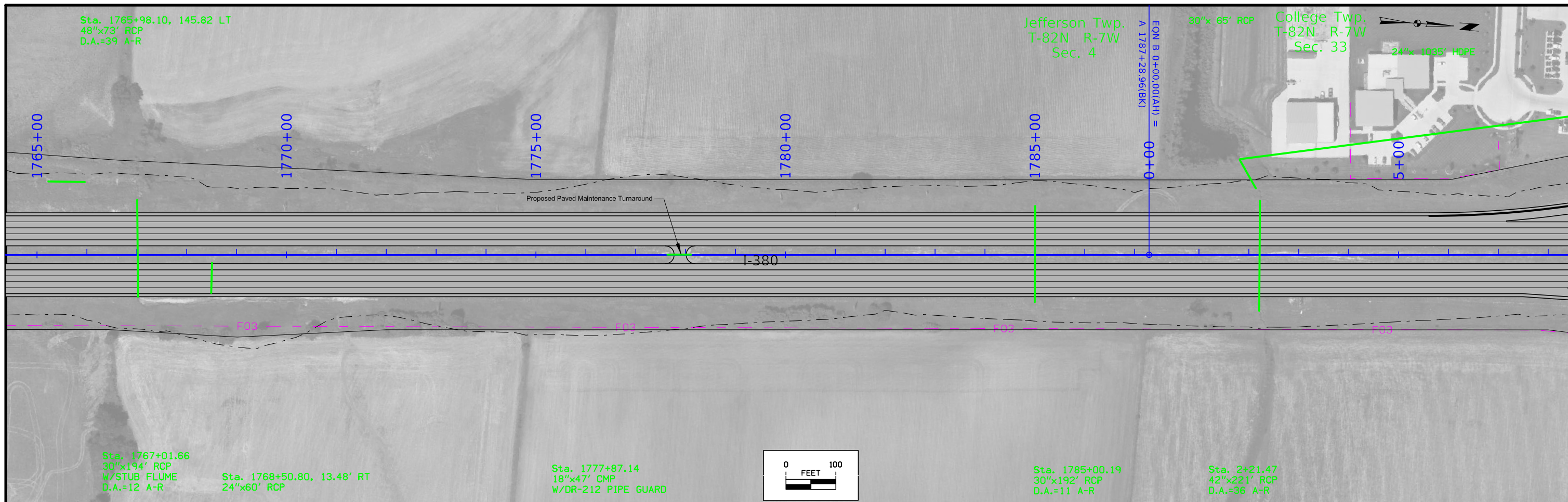
- Reference Point
- Station
- Survey Line
- Section Corner
- Ground Line Intercept
- Saw Cut
- Guardrail
- Trench Drain
- HighTension Cable Guardrail
- Sheet Pile
- Pavement Removal
- Clearing & Grubbing Area

RIGHT-OF-WAY LEGEND

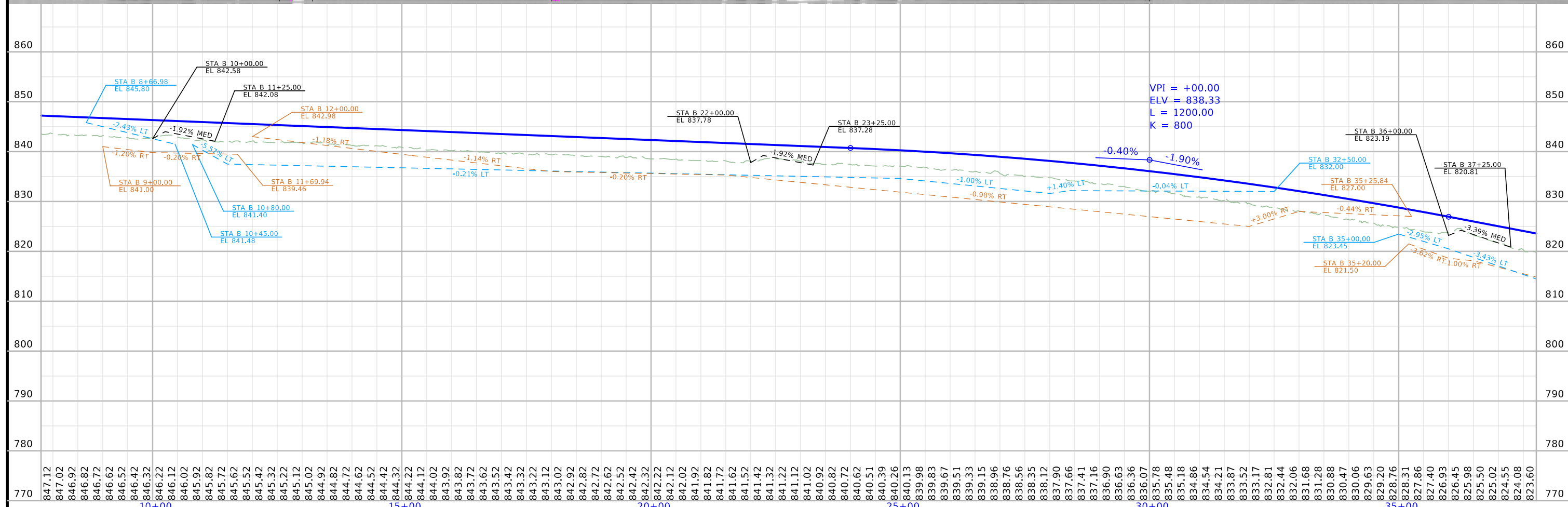
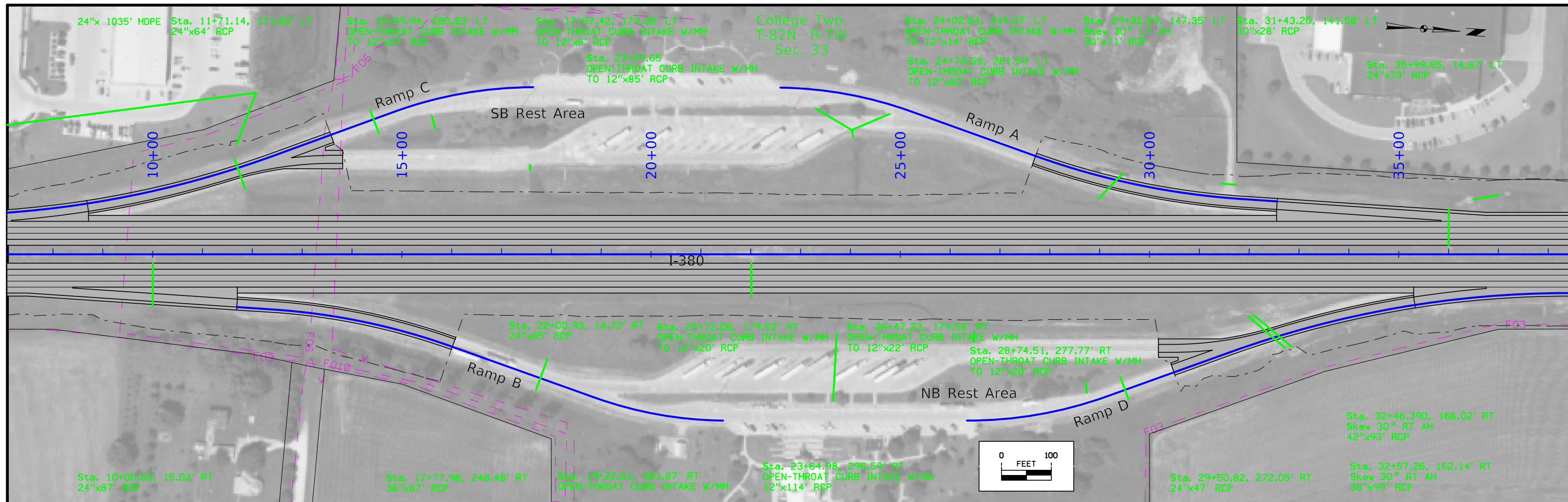
- Proposed Right-of-Way
- Existing Right of Way
- Existing and Proposed Right-of-Way
- Easement and Existing Right-of-Way
- Easement (Temporary)
- Easement
- Access Control
- Property Line

PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

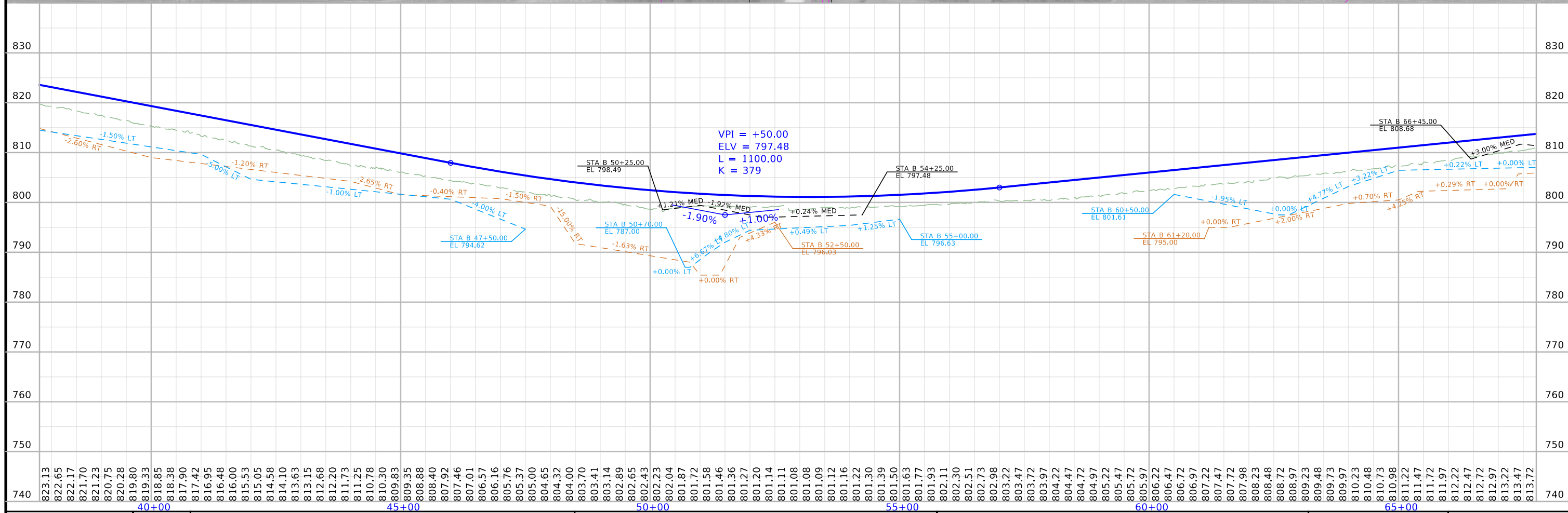
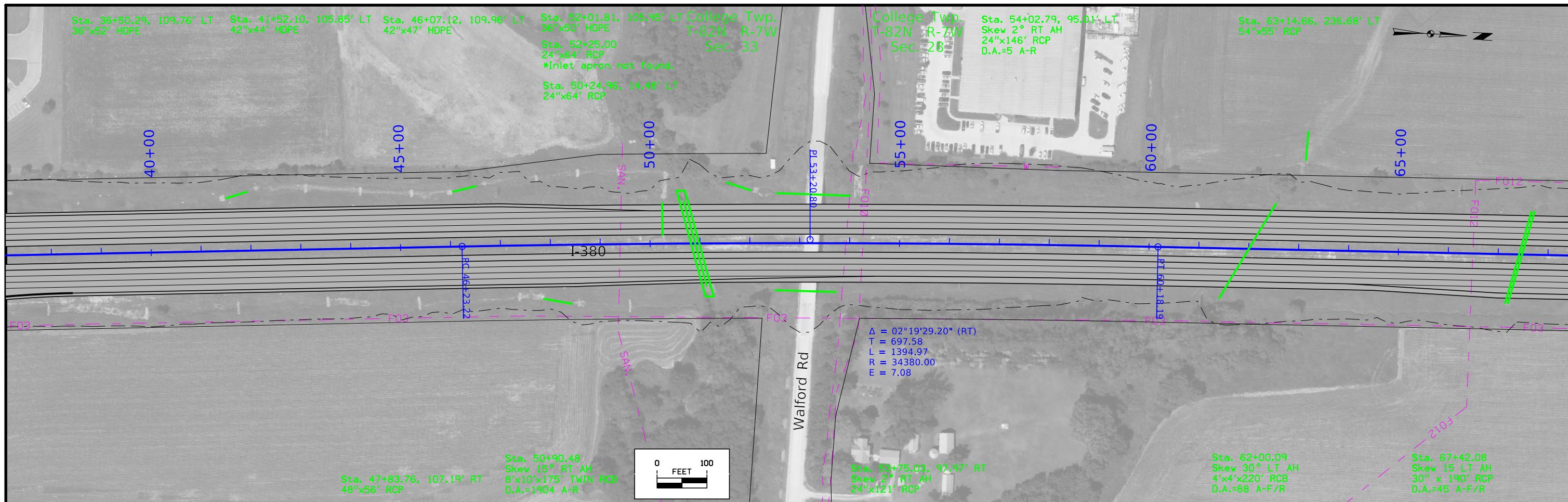
(COVERS SHEET SERIES D, E, F, & K)



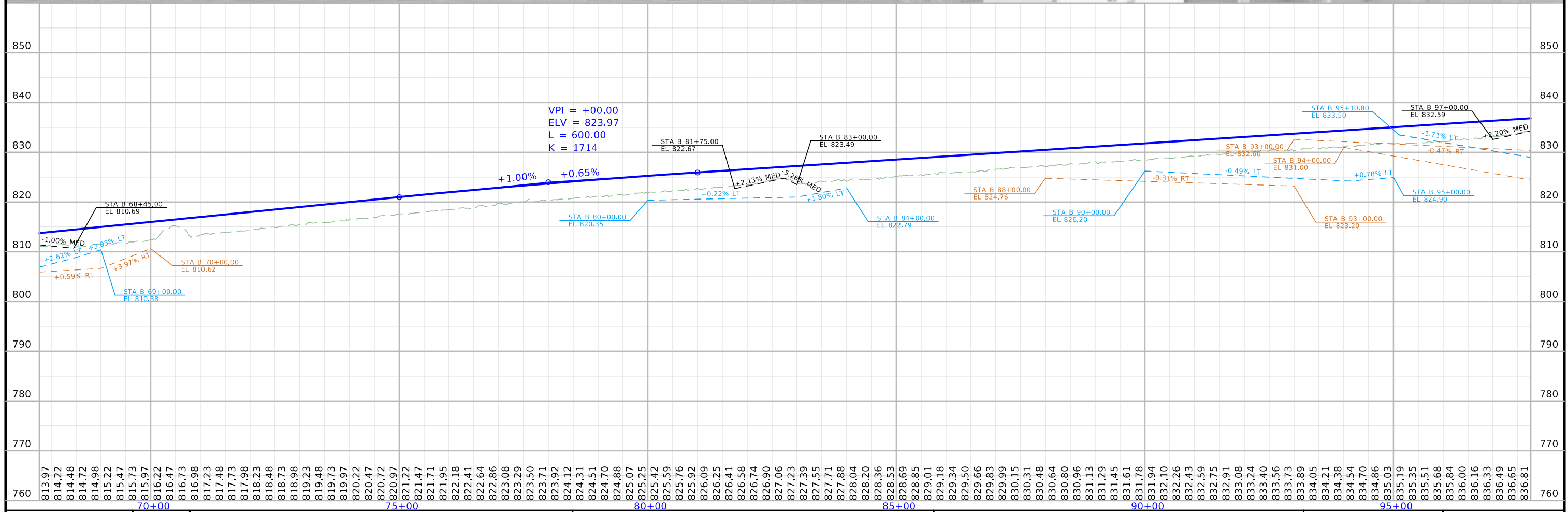
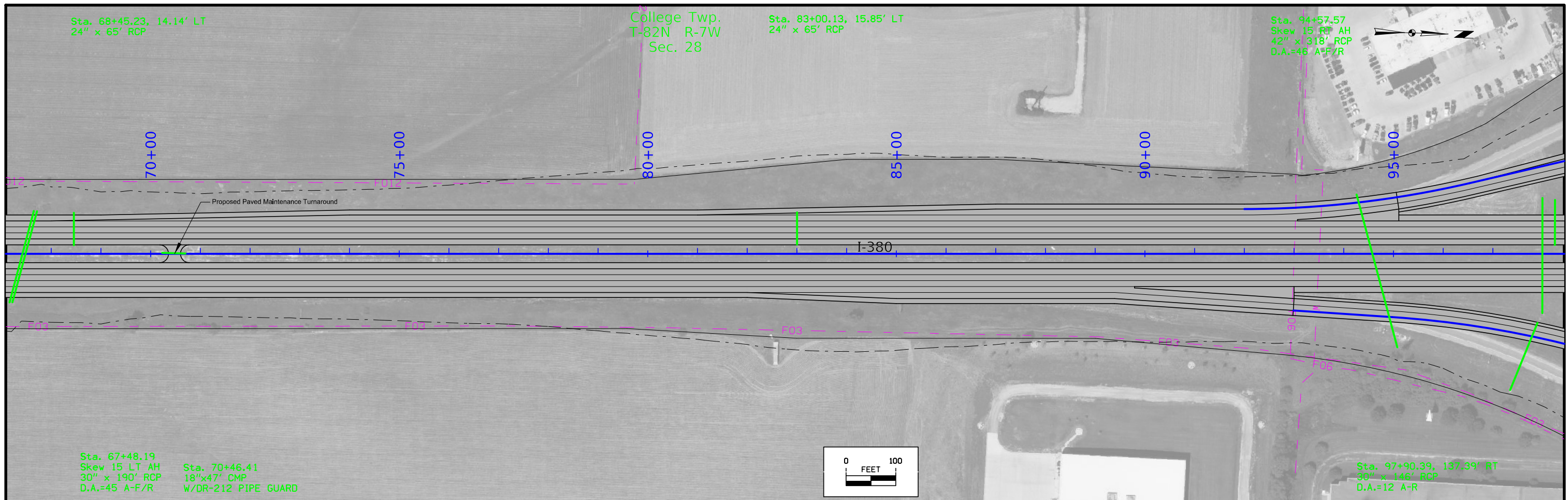
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		Holst \ Schrock \ Dudley		IM-380-6(434)12--13-52	D.3



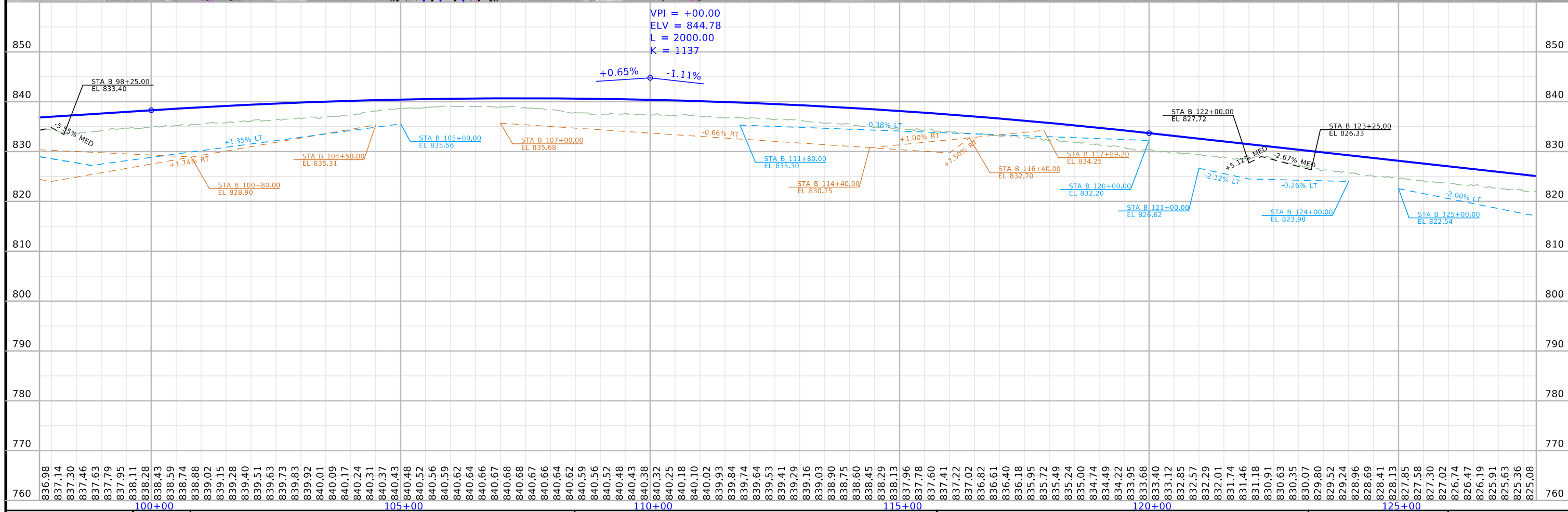
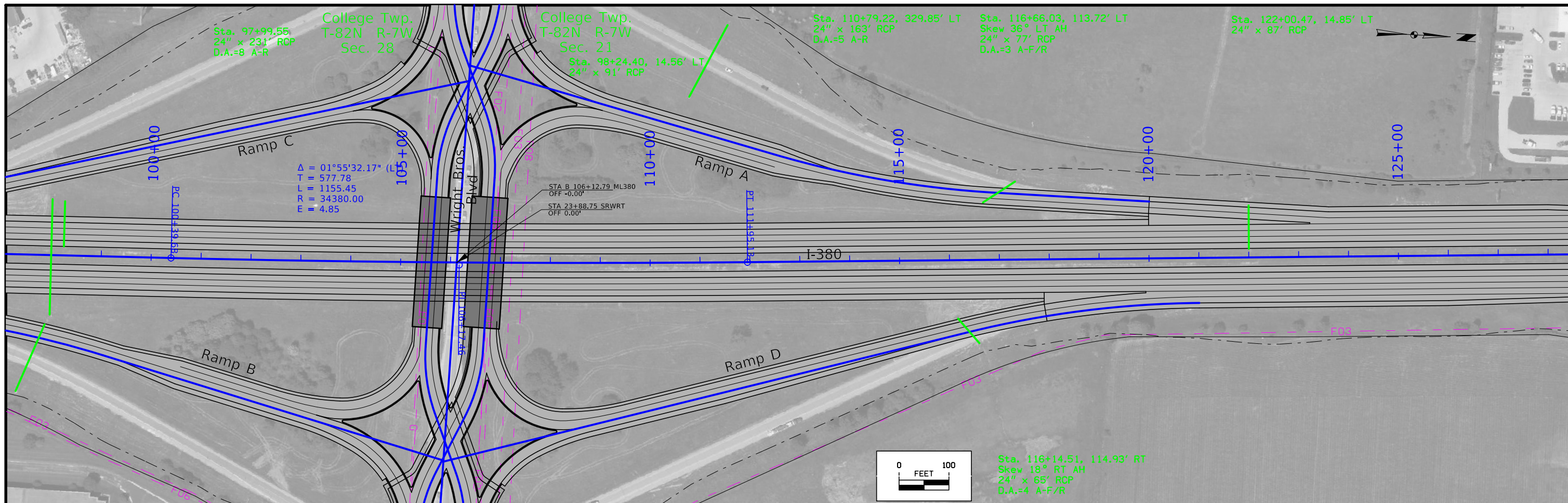
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		Holst \ Schrock \ Dudley		IM-380-6(434)12--13-52	D.4



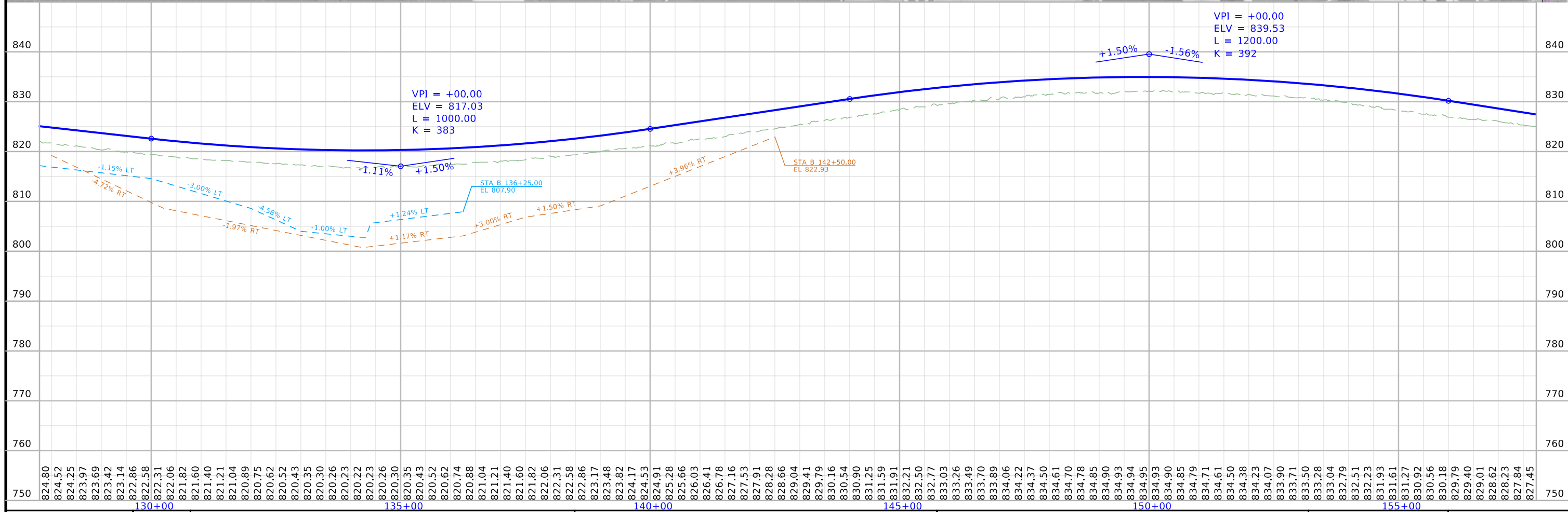
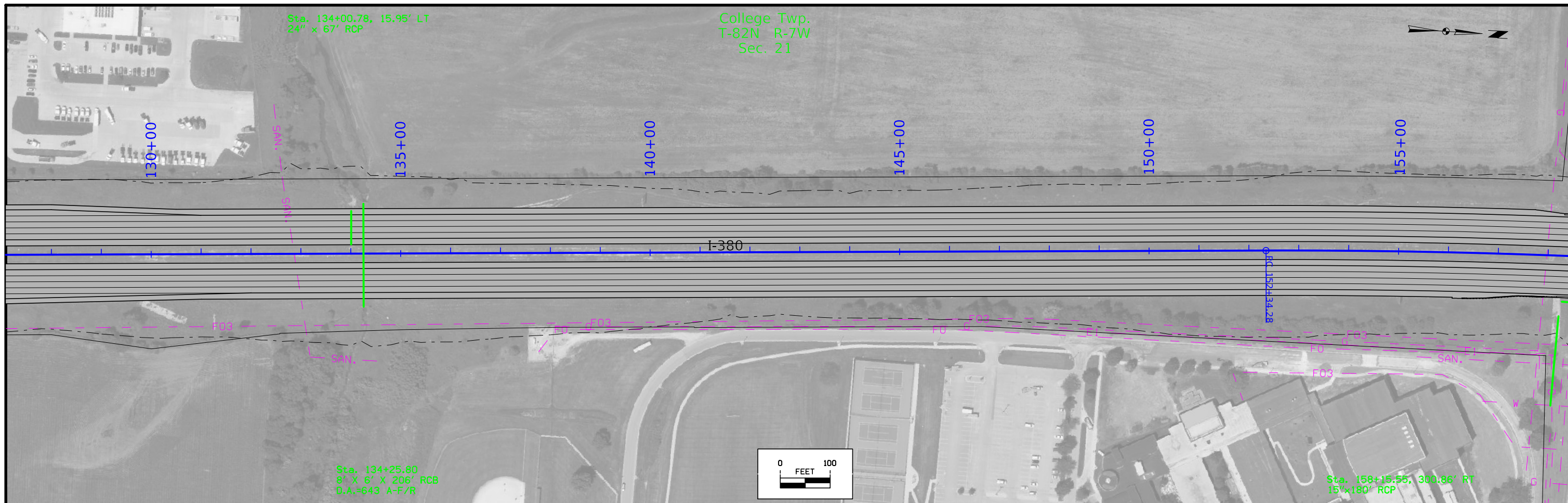
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		Holst \ Schrock \ Dudley		IM-380-6(434)12--13-52	D.5



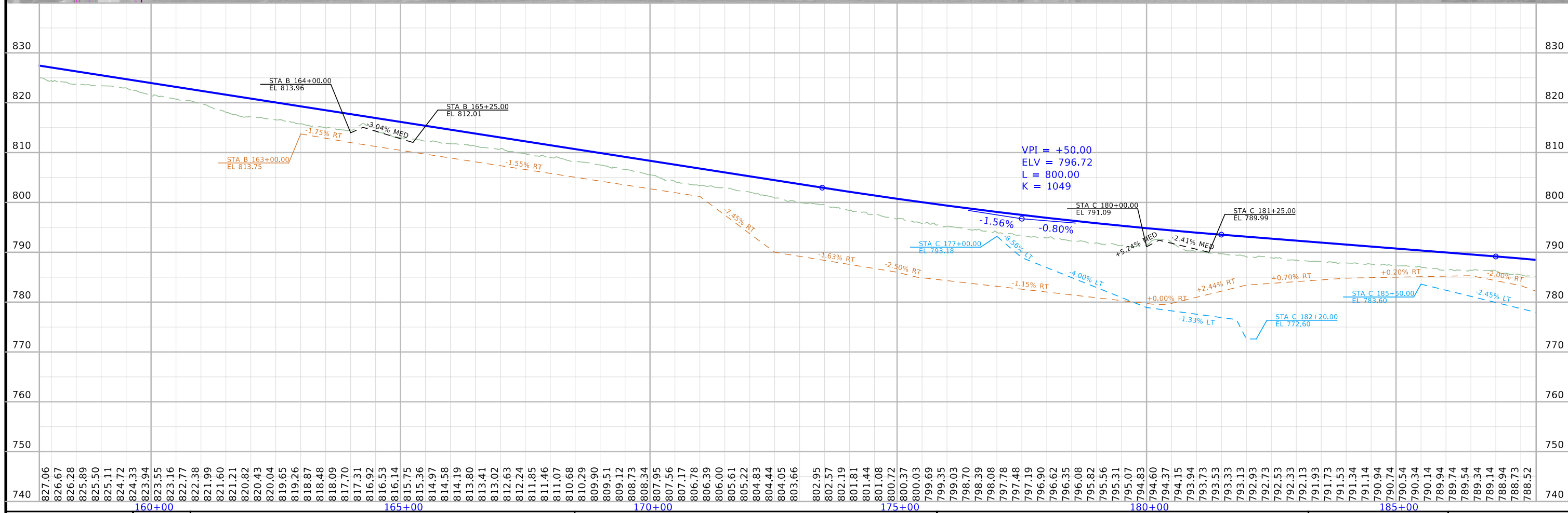
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		Holst \ Schrock \ Dudley		IM-380-6(434)12--13-52	D.6



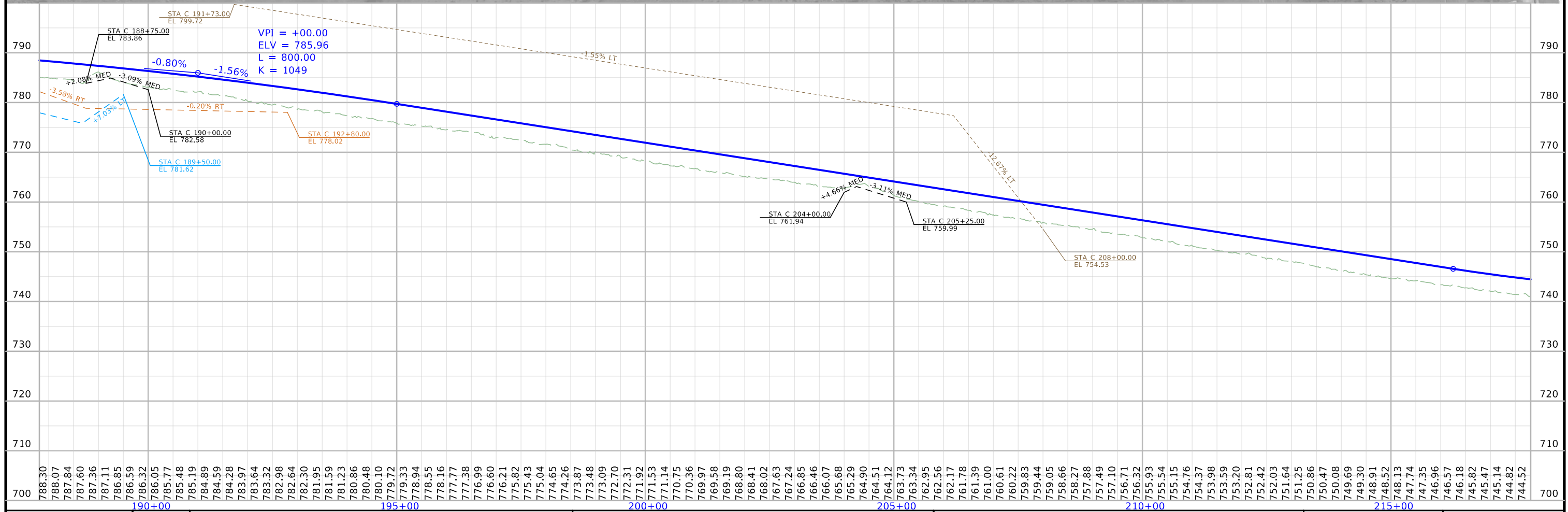
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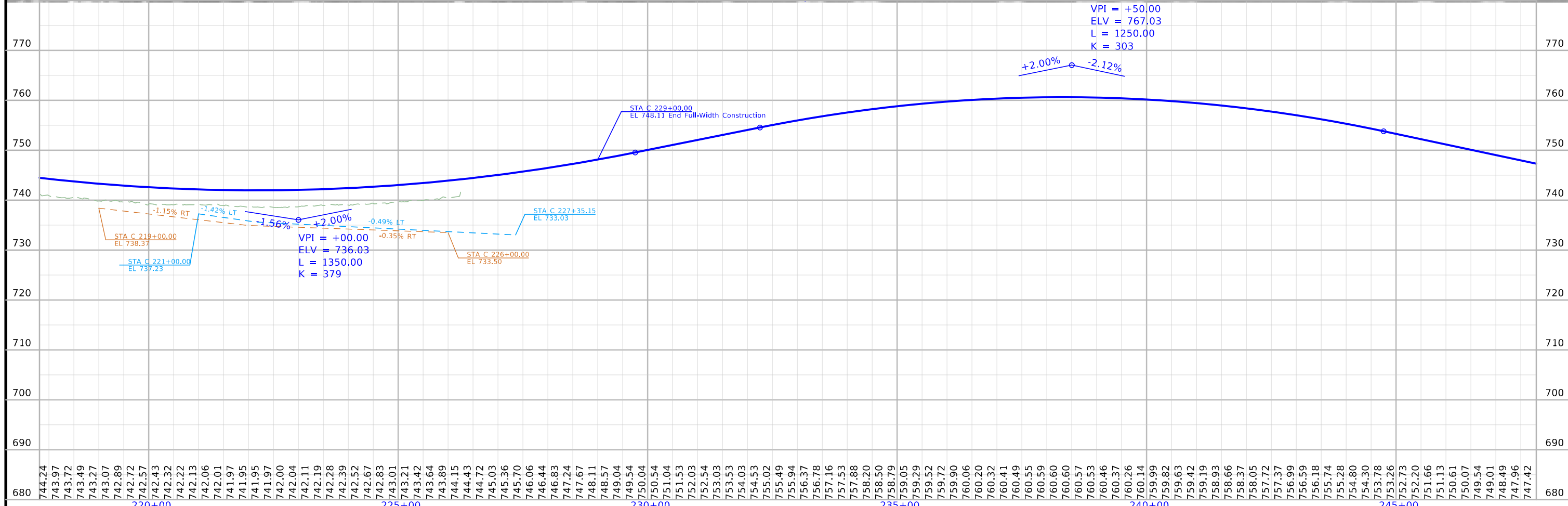
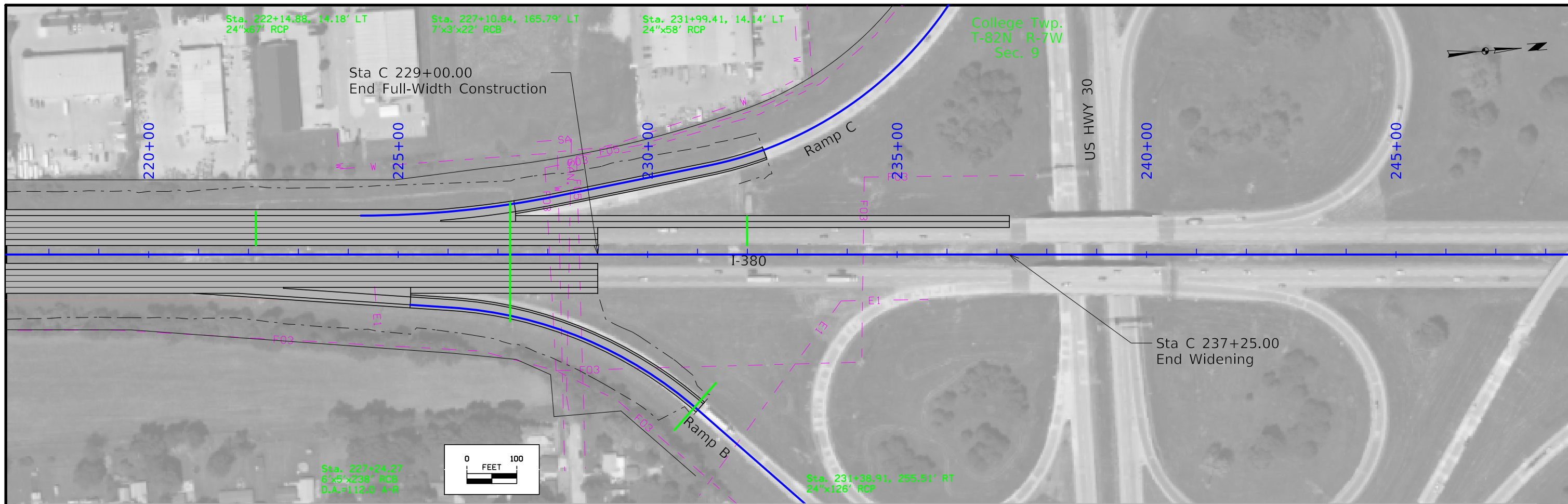
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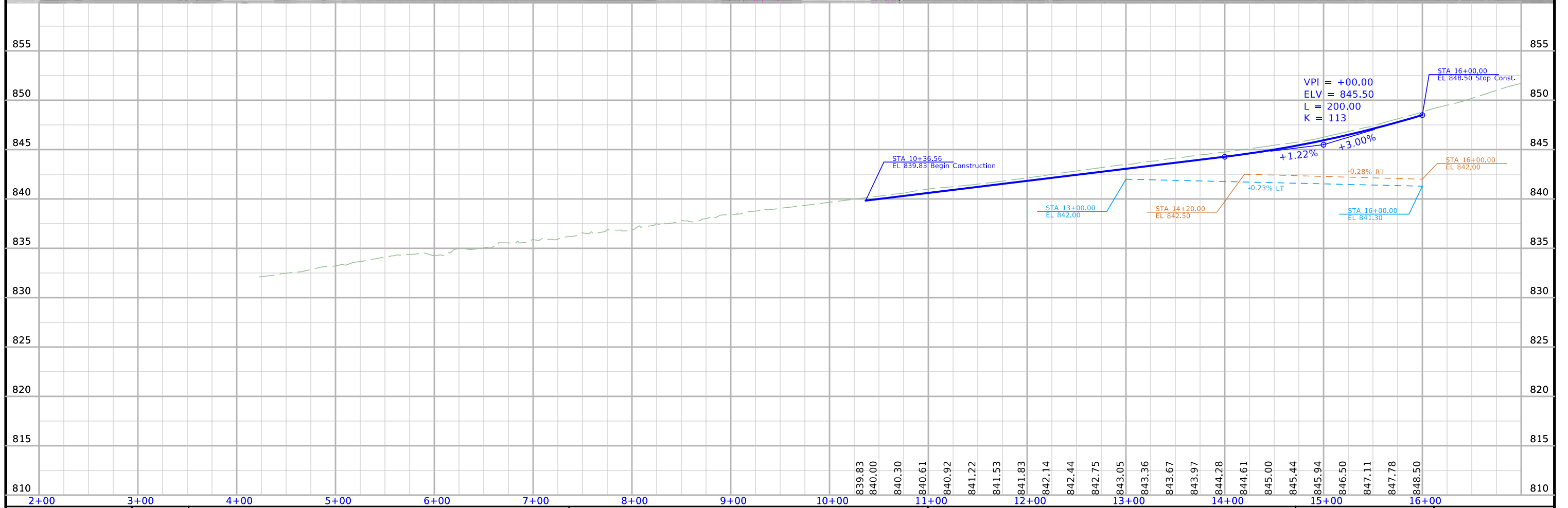
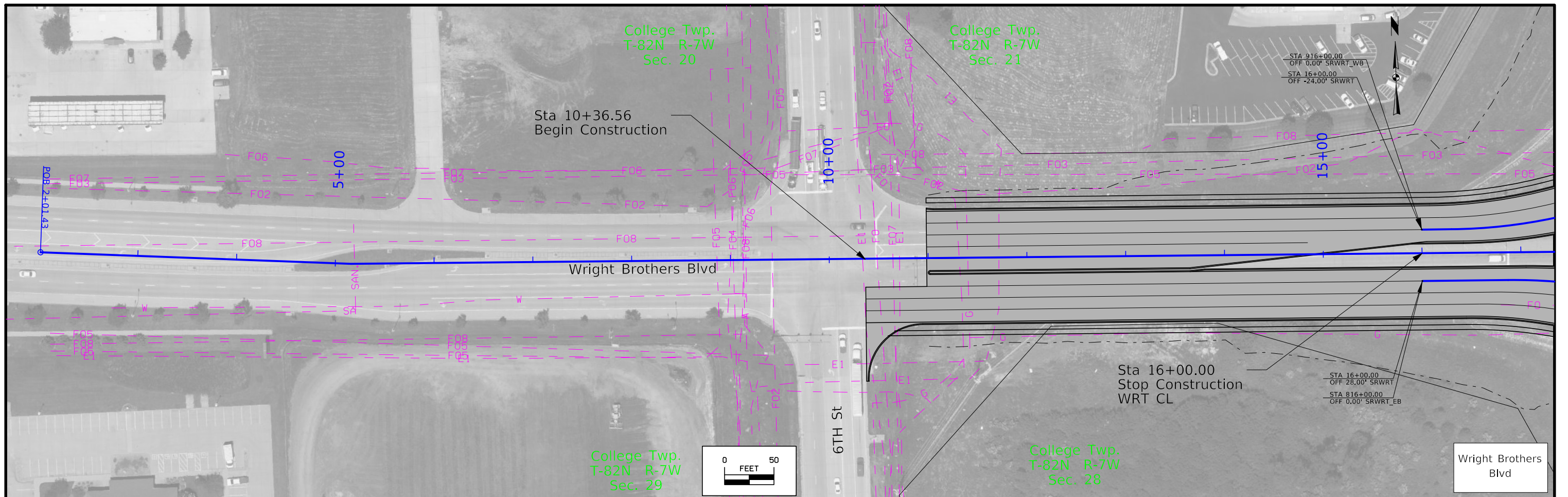
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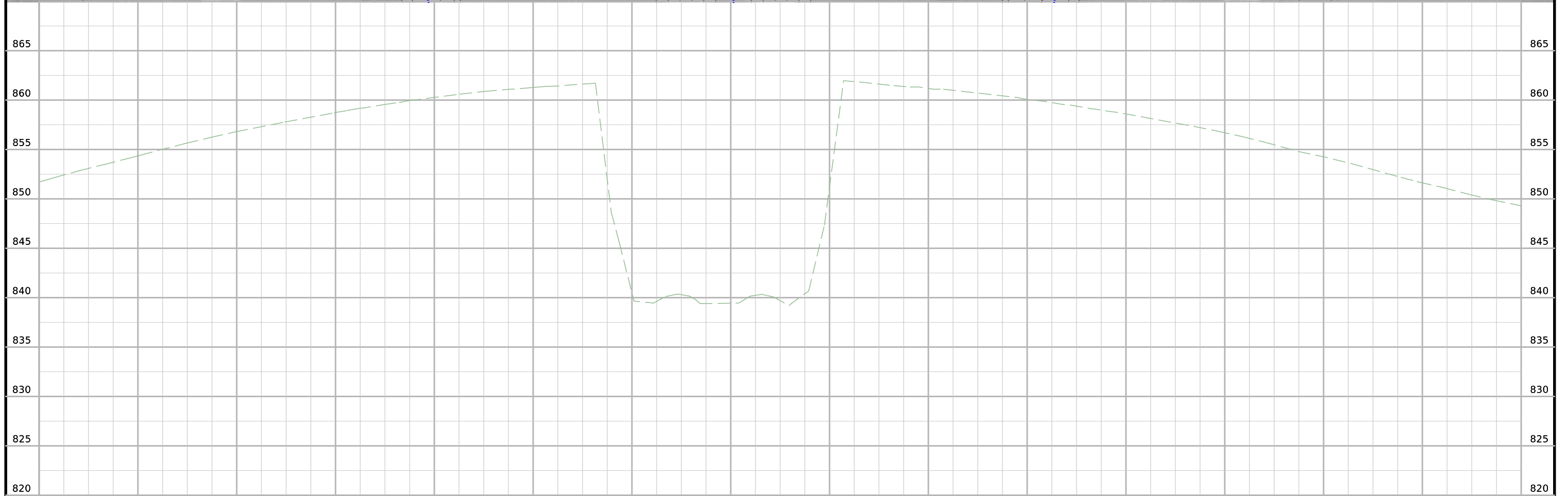
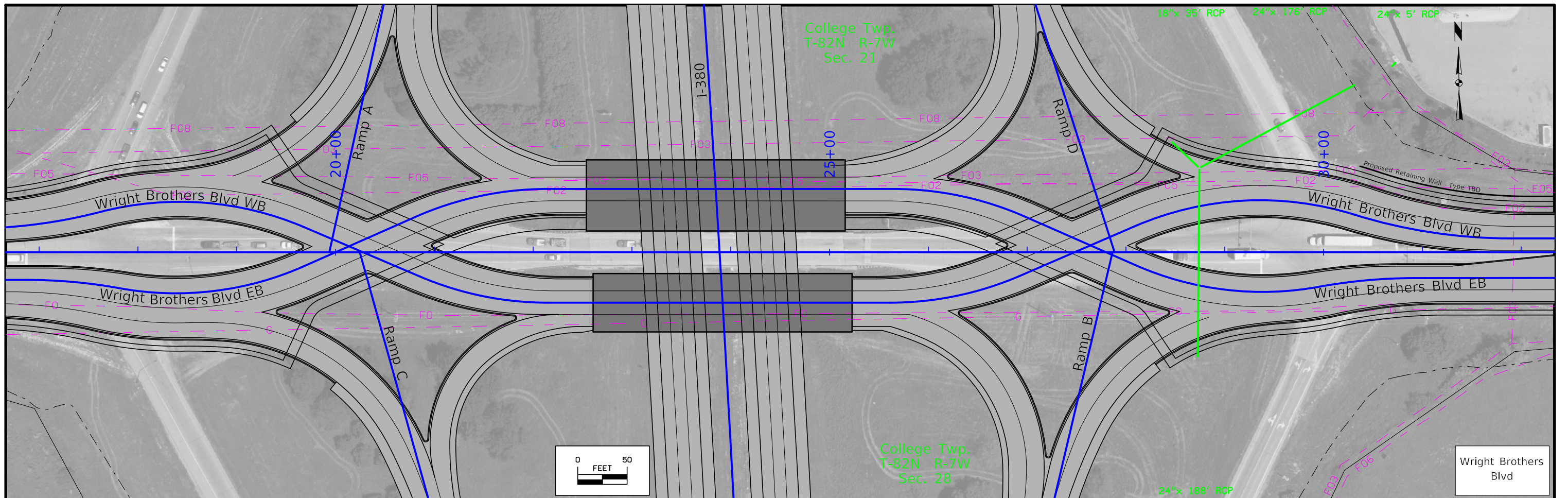
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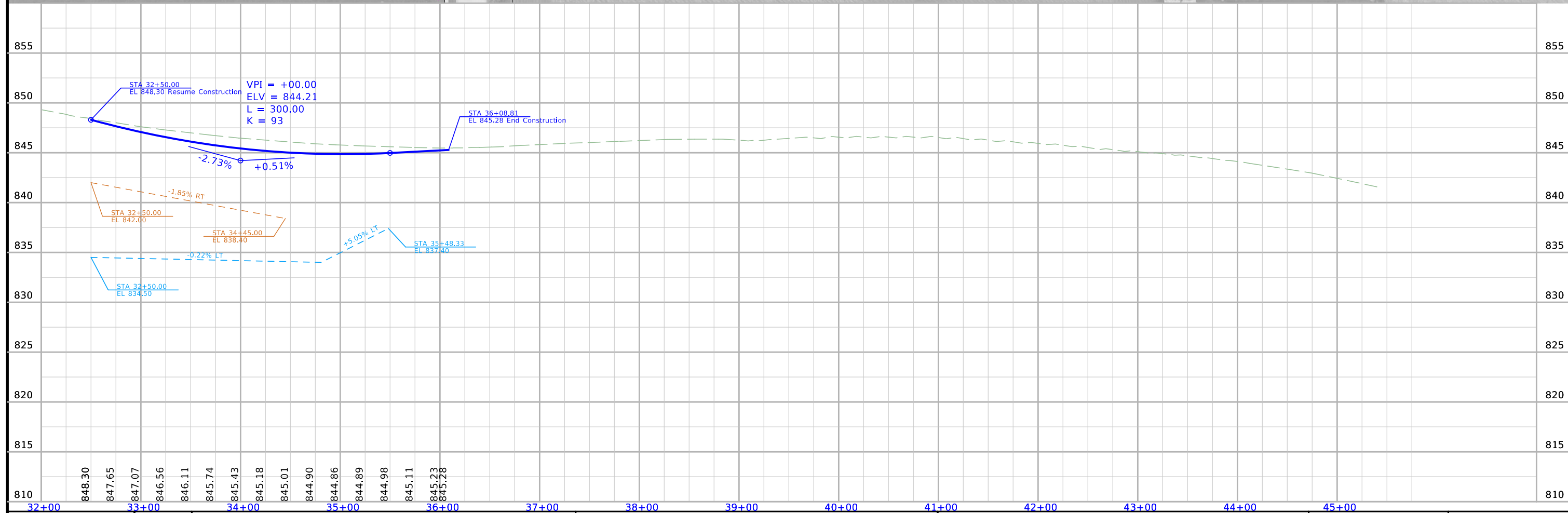
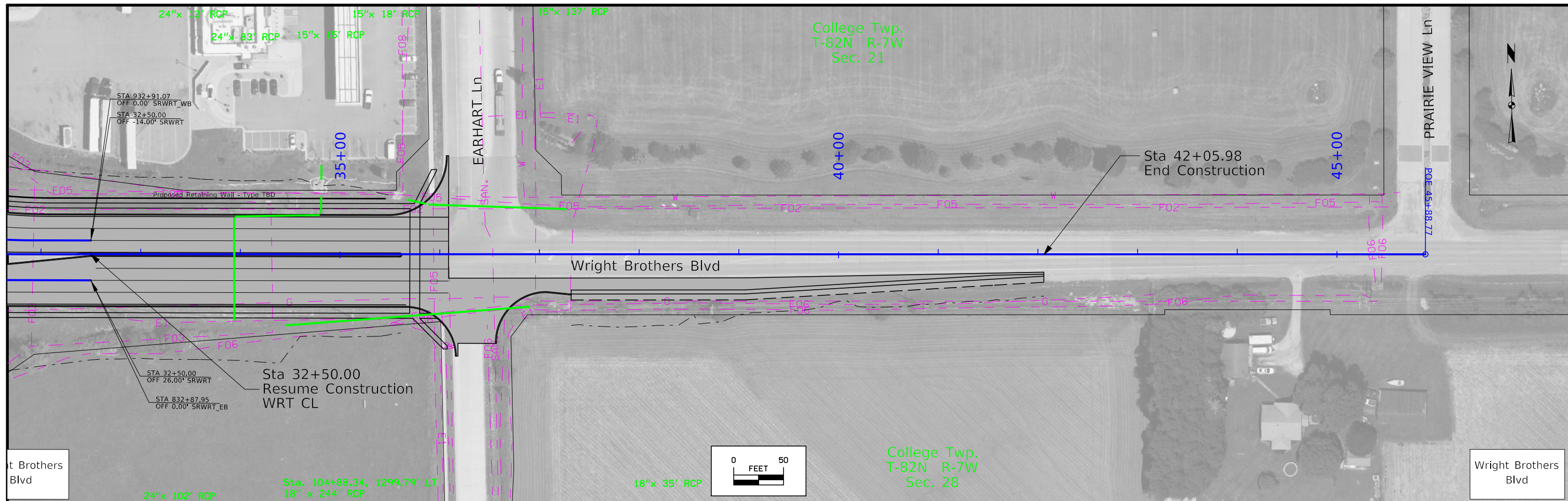
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		Holst \ Schrock \ Dudley		IM-380-6(434)12--13-52	D.11



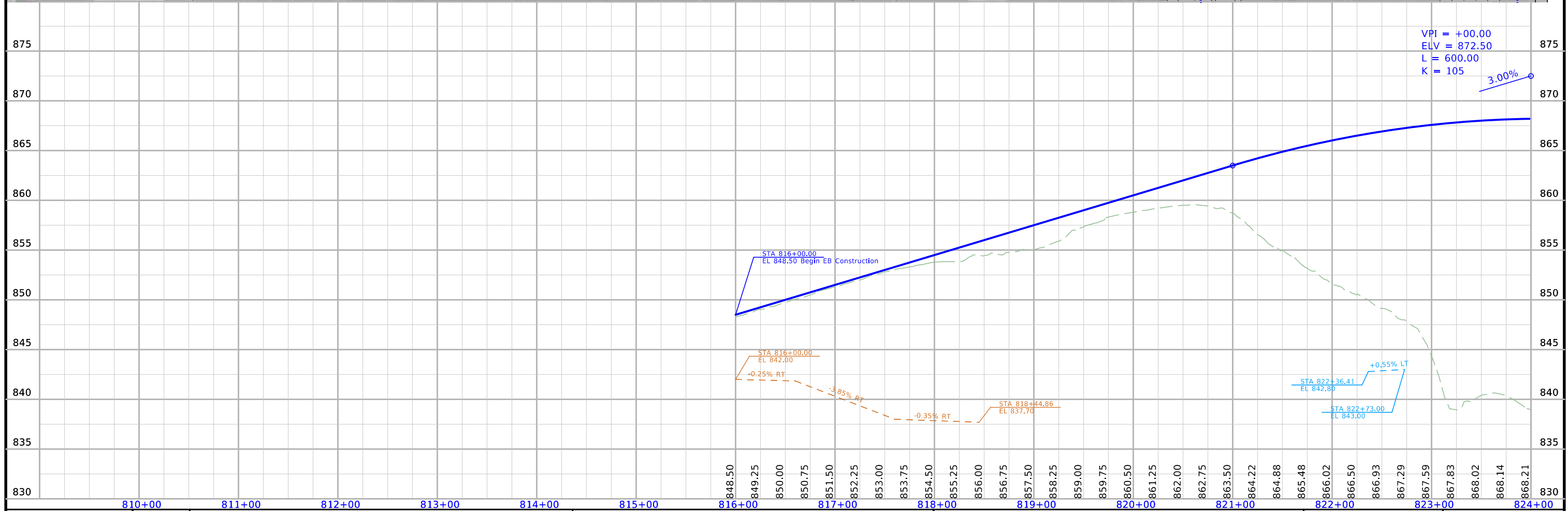
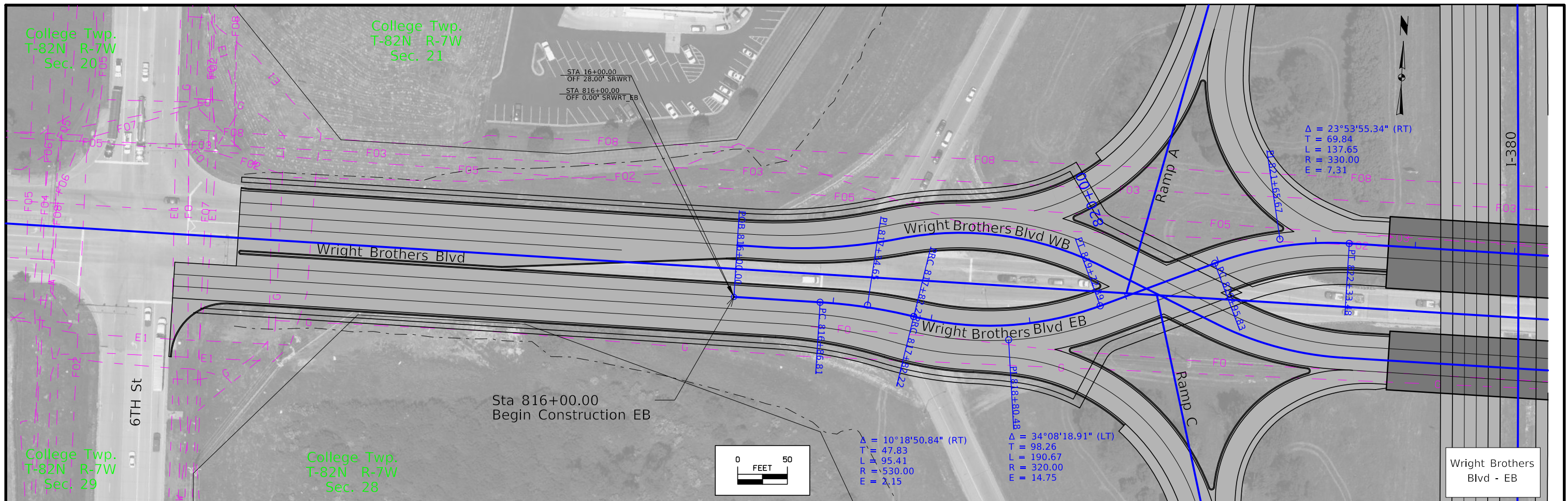
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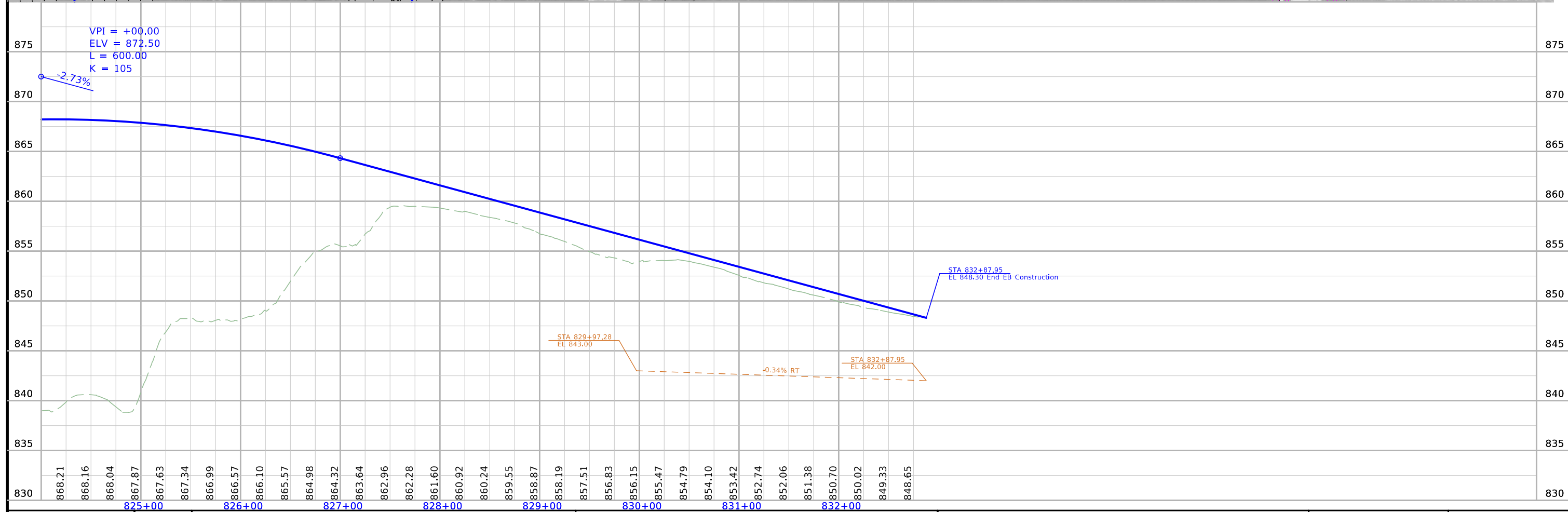
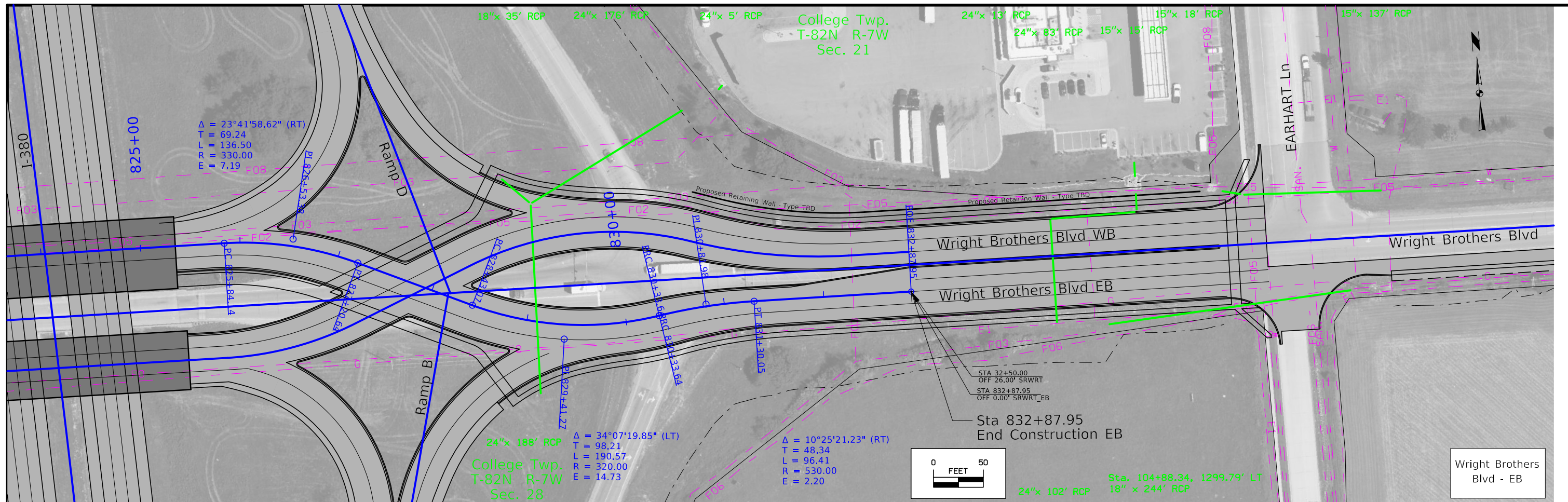
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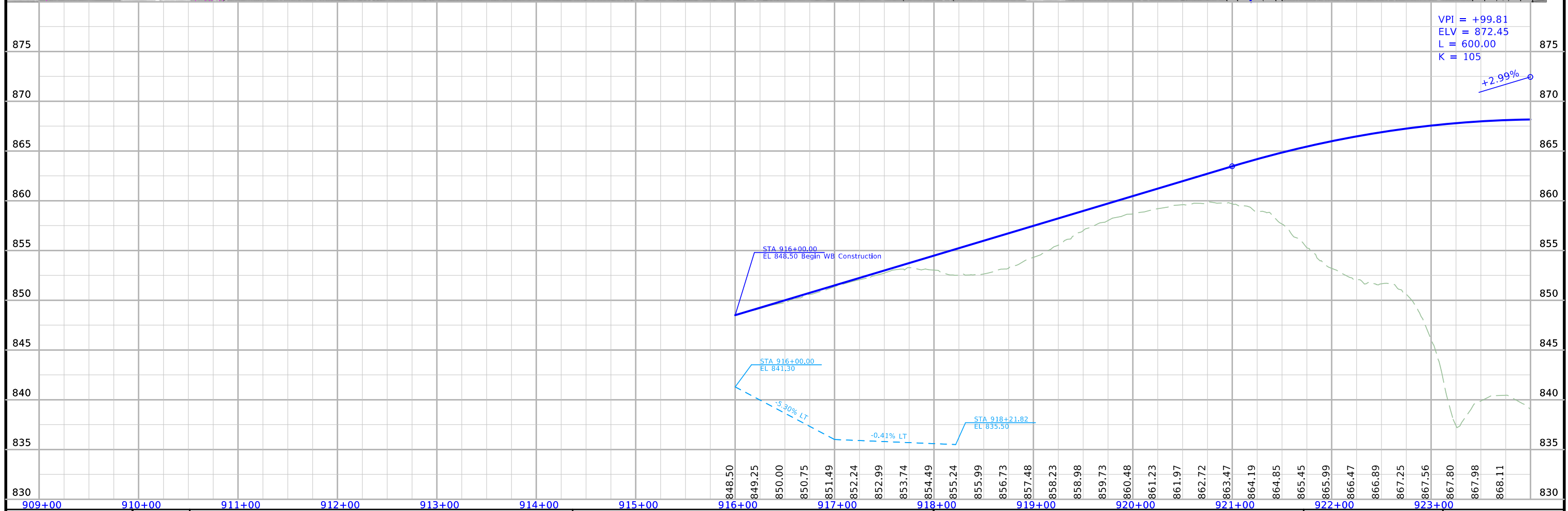
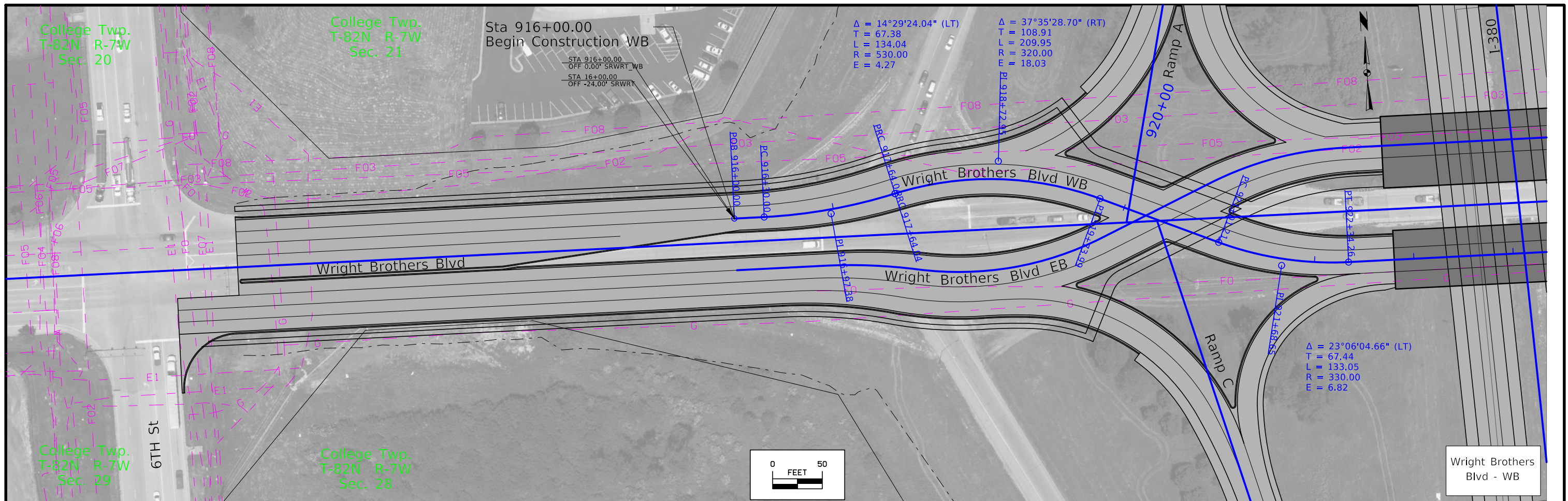
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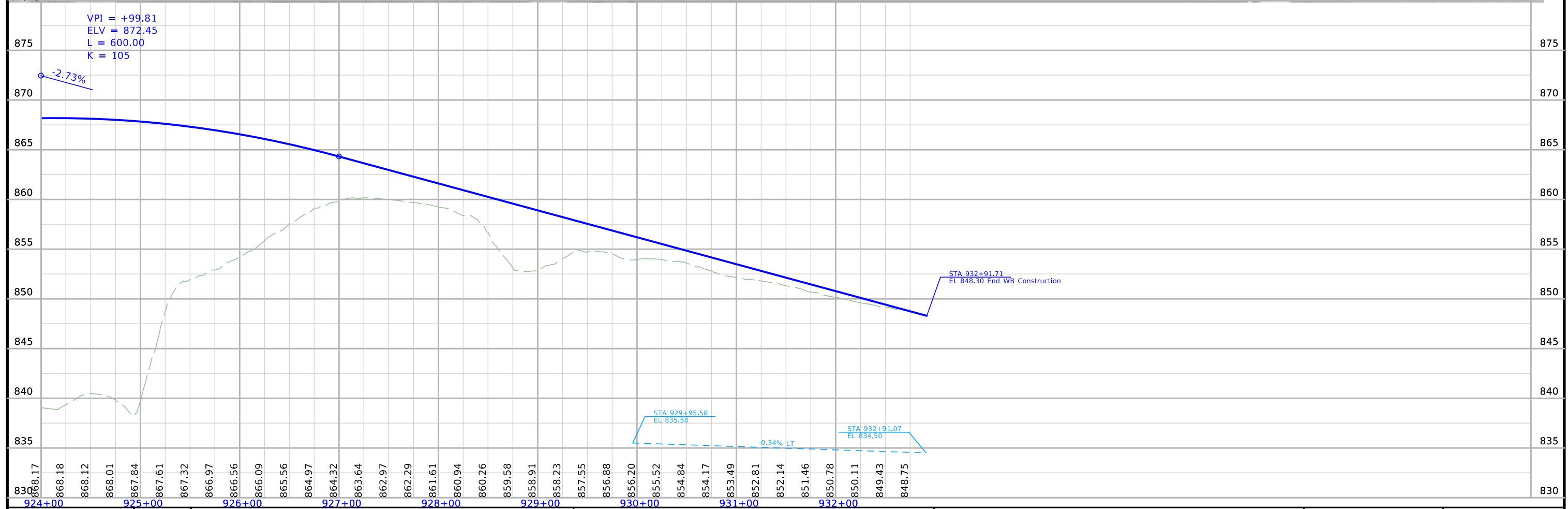
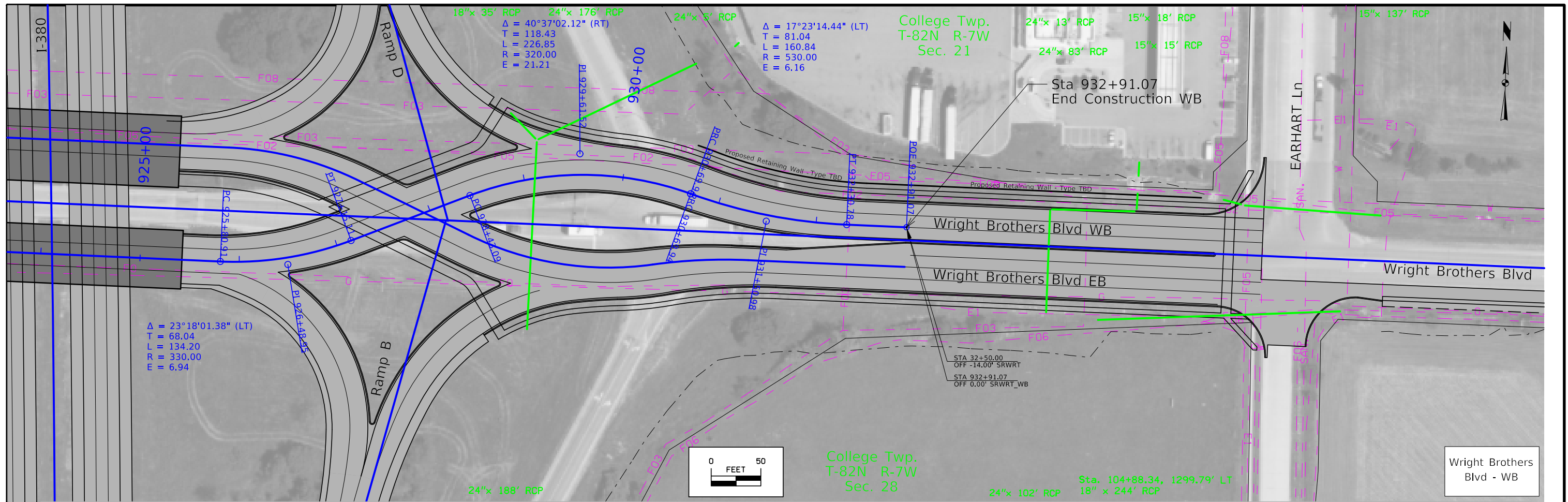
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		Holst \ Schrock \ Dudley		IM-380-6(434)12--13-52	E.4



FILE NO.	ENGLISH	DESIGN TEAM	Holst \ Schrock \ Dudley	Johnson \ Linn COUNTY	PROJECT NUMBER	IM-380-6(434)12--13-52	SHEET NUMBER	E.5
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909+00	910+00	911+00	912+00	913+00	914+00	915+00	916+00	917+00	918+00	919+00	920+00	921+00	922+00	923+00
FILE NO.	ENGLISH	DESIGN TEAM	Holst \ Schrock \ Dudley				Johnson \ Linn COUNTY	PROJECT NUMBER	IM-380-6(434)12--13-52				SHEET NUMBER	E.6



FILE NO.	ENGLISH	DESIGN TEAM	Johnson \ Linn COUNTY	PROJECT NUMBER	SHEET NUMBER
		Holst \ Schrock \ Dudley		IM-380-6(434)12--13-52	E.7

TRAFFIC CONTROL PLAN

Traffic on all through lanes of I-380, 120th St., Wright Brothers Blvd., US 30 and adjacent side roads shall be maintained as indicated on the staging plans at all times except as noted below:

- I-380 under Wright Brothers Blvd. shall utilize a temporary detour using ramps (TC-454) during the placement of bridge beams and removal of the existing bridge over traffic lanes. This detour will be subject to times allowed in Tab 108-23B Traffic Control Closure Tables.

Traffic on all ramps and loops associated with the 120th St. Interchange, NB and SB rest areas, Wright Brothers Blvd. Interchange, and US 30 Interchange shall be maintained at all times except as noted below:

- I-380 SB exit ramp at 120th St. shall be closed for the reconstruction of the ramp.
- I-380 SB entrance ramp at US 30 shall be closed for the reconstruction of the ramp.
- I-380 NB exit ramp at US 30 shall be closed for the reconstruction of the ramp.
- US 30 WB to I-380 SB loop shall be closed for the construction of the add lane and mainline pavement.

Traffic at the Wright Brothers Blvd. intersections of 6th St. SW and the Wright Brothers Blvd. interchange ramps shall be maintained by traffic signals.

Shoulder widths on all routes shall be 2' minimum adjacent to TBR.
Shoulder widths on all routes shall be 3' minimum when TBR is not present.

STAGING NOTES

See Staging Sheets

**CROSS SECTION VIEW COLOR LEGEND
OF TRAFFIC CONTROL AND STAGING SHEETS**

SHADING	Design Color No.	
Green, Light	(225)	Existing Pavement Shading
Gray, Light	(48)	Previously Constructed Pavement Shading
Gray, Med	(80)	Previously Constructed Granular Surface Shading
Blue, Light	(230)	Proposed Pavement Shading
Lavender	(9)	Temporary Pavement Shading
Brown, Med	(237)	Future Proposed Pavement Shading

**CROSS SECTION VIEW PATTERN AND SYMBOL LEGEND
OF TRAFFIC CONTROL AND STAGING SHEETS**

	Pavement Removal		Proposed Granular Shoulder
	Proposed Granular Subbase		Temporary Shoulder
	Proposed Special Backfill		Existing Shoulder Strengthening
	Temporary Barrier Rail		Permanent Barrier Rail
			Channelizing Device

PLAN VIEW COLOR LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS

LINEWORK	Design Color No.	
Green	(2)	Existing Topographic Features and Labels
Magenta	(5)	Pavement Marking Call Outs
Blue	(1)	Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Yellow	(4)	Pavement Markings, Yellow
Off White	(254)	Pavement Markings, White
Violet	(15)	Temporary barrier rail, Unpinned
Flush Orange	(228)	Temporary barrier rail, Pinned

SHADING	Design Color No.	
Green, Light	(225)	Existing Pavement Shading
Gray, Light	(48)	Previously Constructed Pavement Shading
Gray, Med	(80)	Proposed Granular Surface Shading
Gray, Med	(80)	Previously Constructed Granular Surface Shading
Blue, Light	(230)	Proposed Pavement Shading
Lavender	(9)	Temporary Pavement Shading
Brown, Light	(236)	Proposed Grading Limits Shading
Pink, Dark	(13)	Proposed MSE or CIP Wall Shading
Red	(3)	Proposed Bridge Shading and Sign Trusses
Black w/Gray, Light Fill	(0,48)	Previously Constructed Structure

**PLAN VIEW PATTERN AND SYMBOL LEGEND
OF TRAFFIC CONTROL AND STAGING SHEETS**

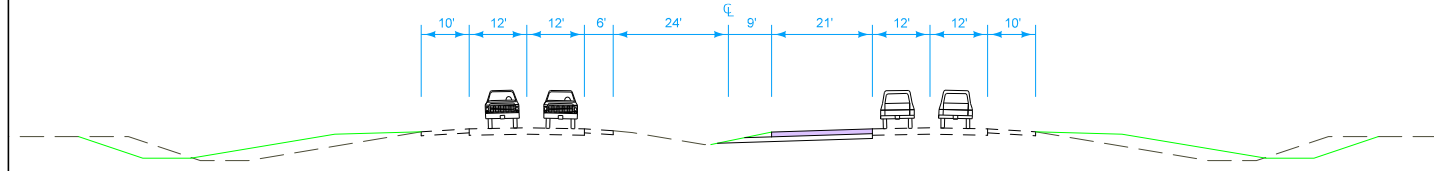
	Channelizing Device		Crash Cushion (Temp or Perm)
	Drum		Traffic Signal
	Temporary Lane Separator		Flagger
	Tubular Marker		Temporary Floodlighting
	Channelizer Marker		Traffic Sign
	Concrete Barrier Marker		Type III Barricade
	Delineator		Type A Warning Light
	Temporary Barrier Rail		Direction of Traffic
	Pavement Removal		Safety Closure
	Sand Barrel Layout		Lane Identification

NOTE: Device spacing according to Standard Road Plans unless specifically dimensioned.

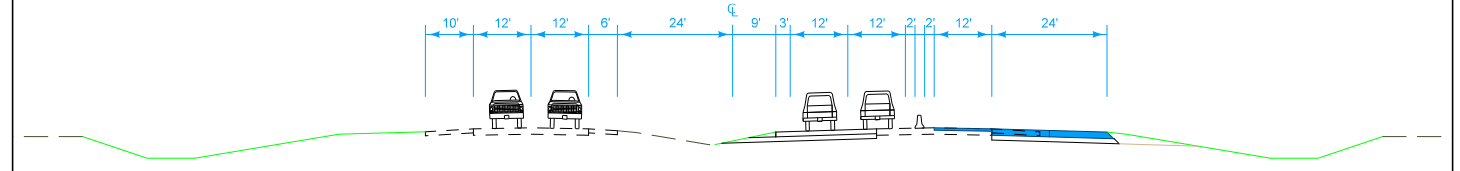
**TRAFFIC CONTROL
AND
STAGING
LEGEND AND SYMBOL
INFORMATION SHEET**

(COVERS SHEET SERIES J)

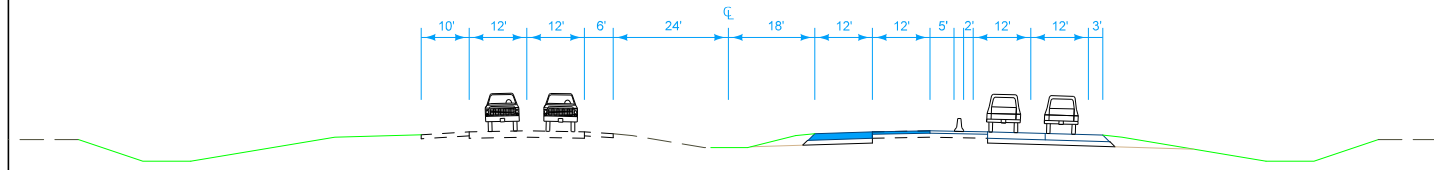
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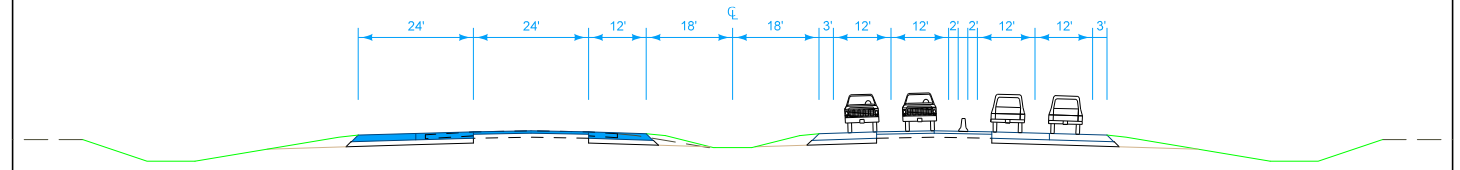
Stage 2



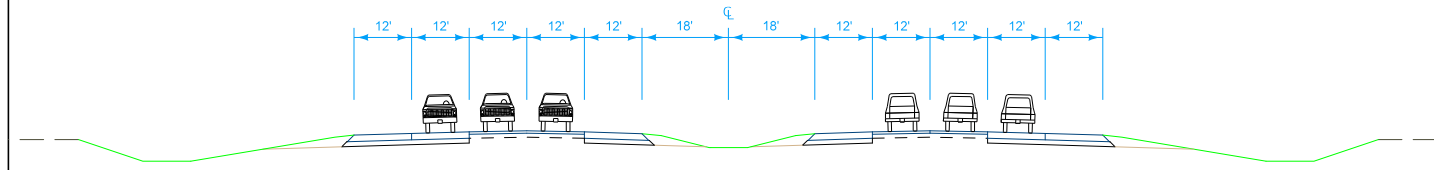
Stage 3



Stage 4

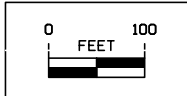
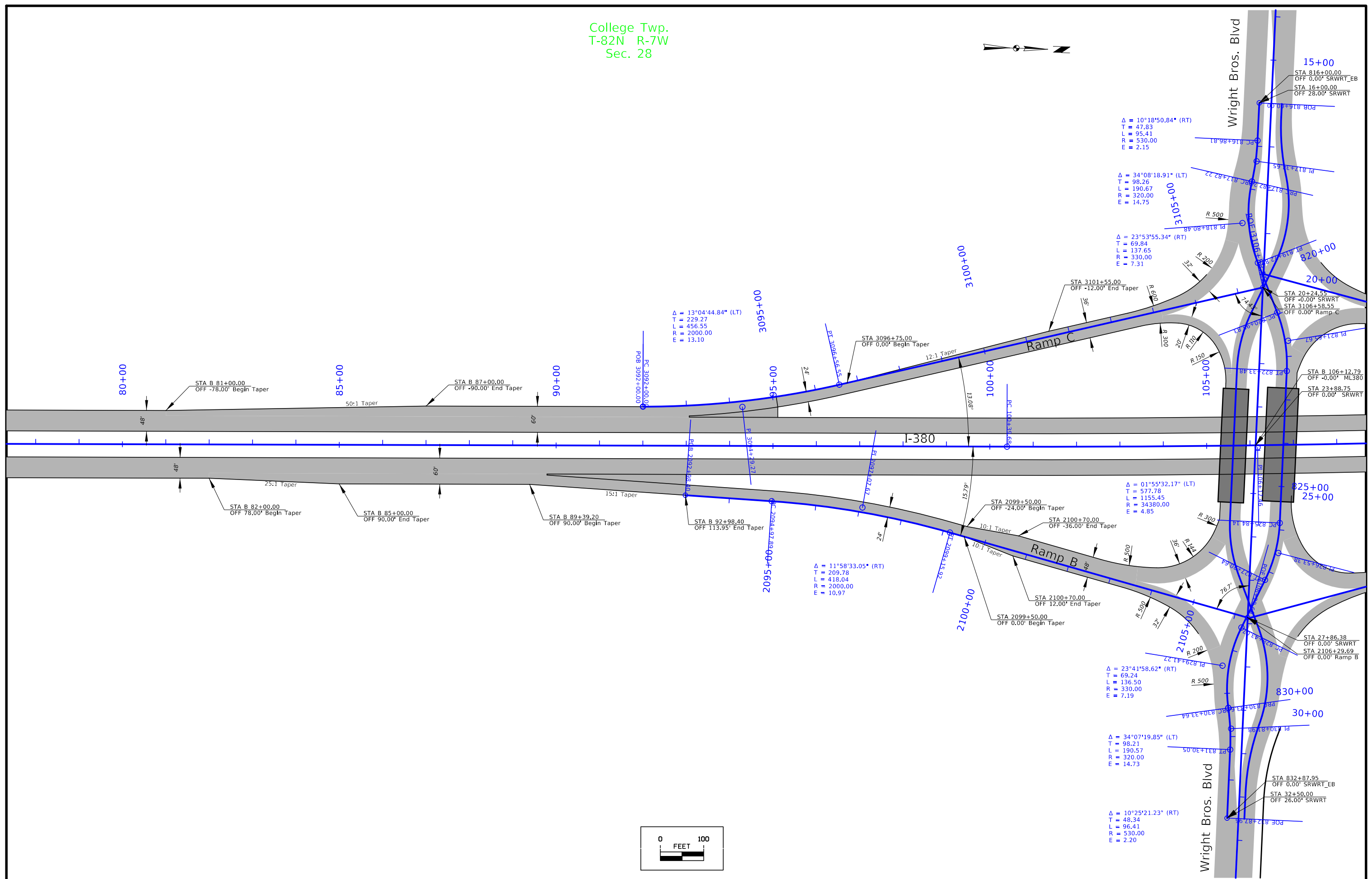
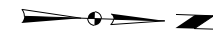


Stage 5



I-380 Staging

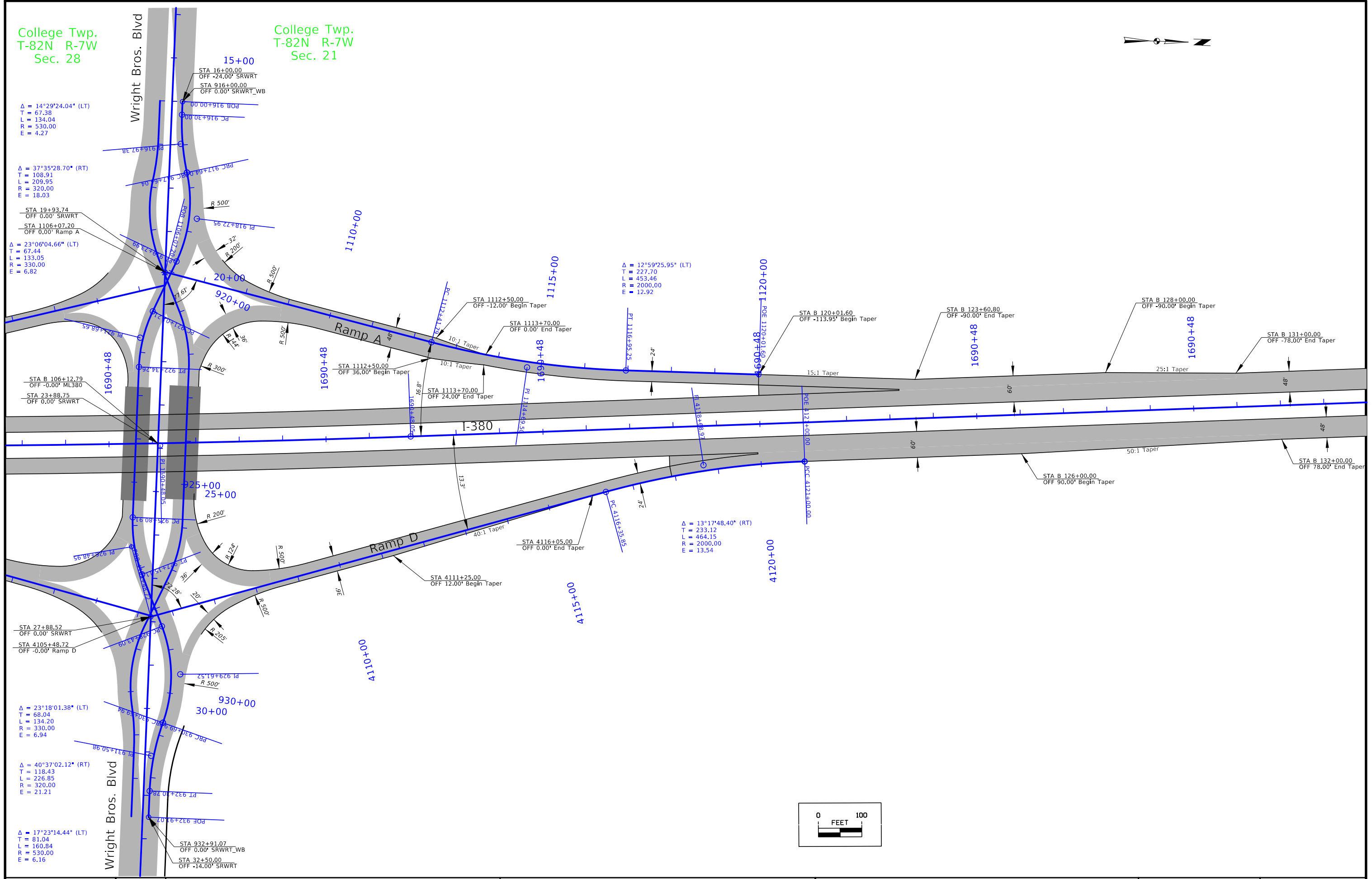
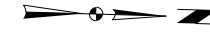
College Twp.
T-82N R-7W
Sec. 28



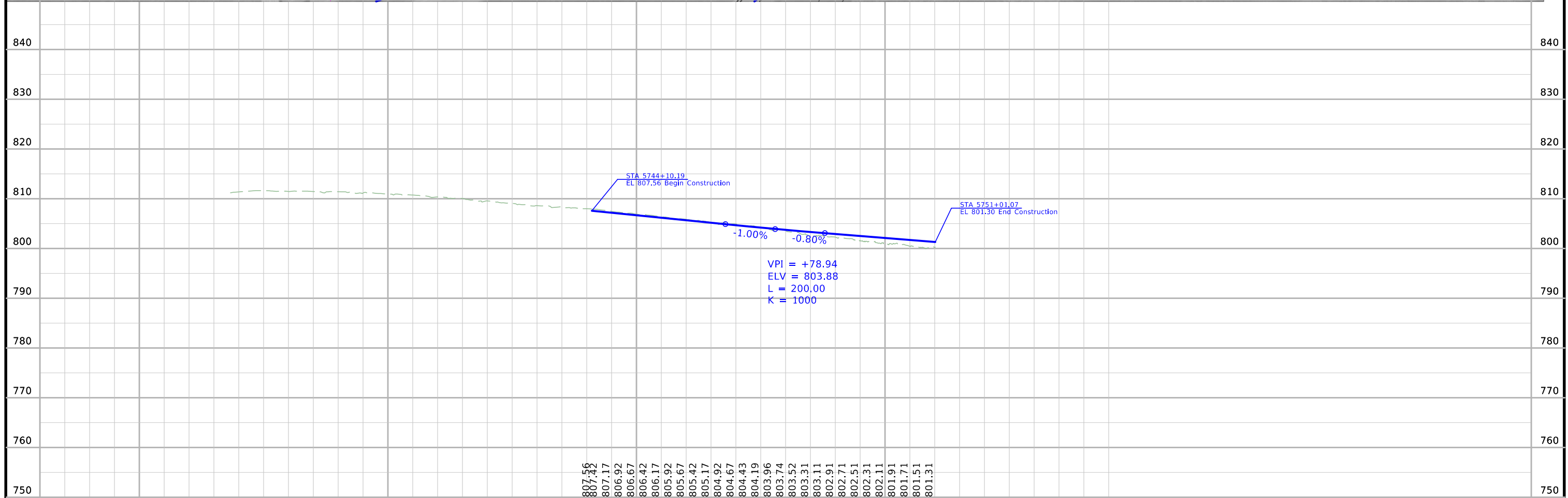
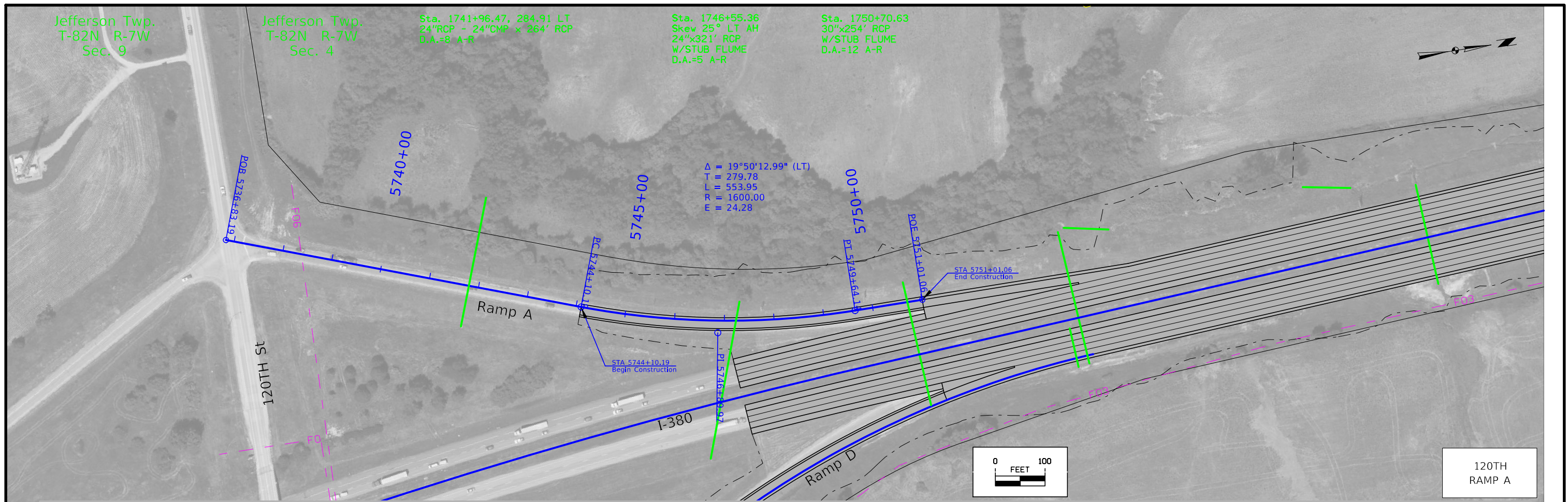
FILE NO.	ENGLISH	DESIGN TEAM Holst \ Schrock \ Dudley	Johnson \ Linn COUNTY	PROJECT NUMBER IM-380-6(434)12--13-52	SHEET NUMBER K.1
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T-82N R-7W
Sec. 28

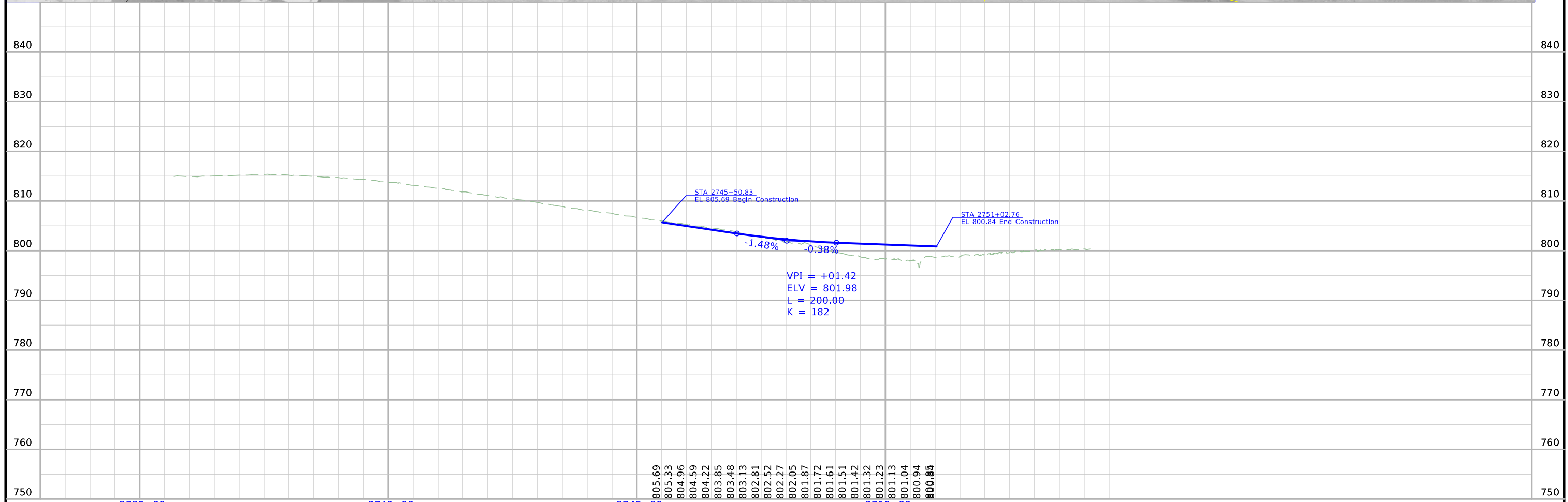
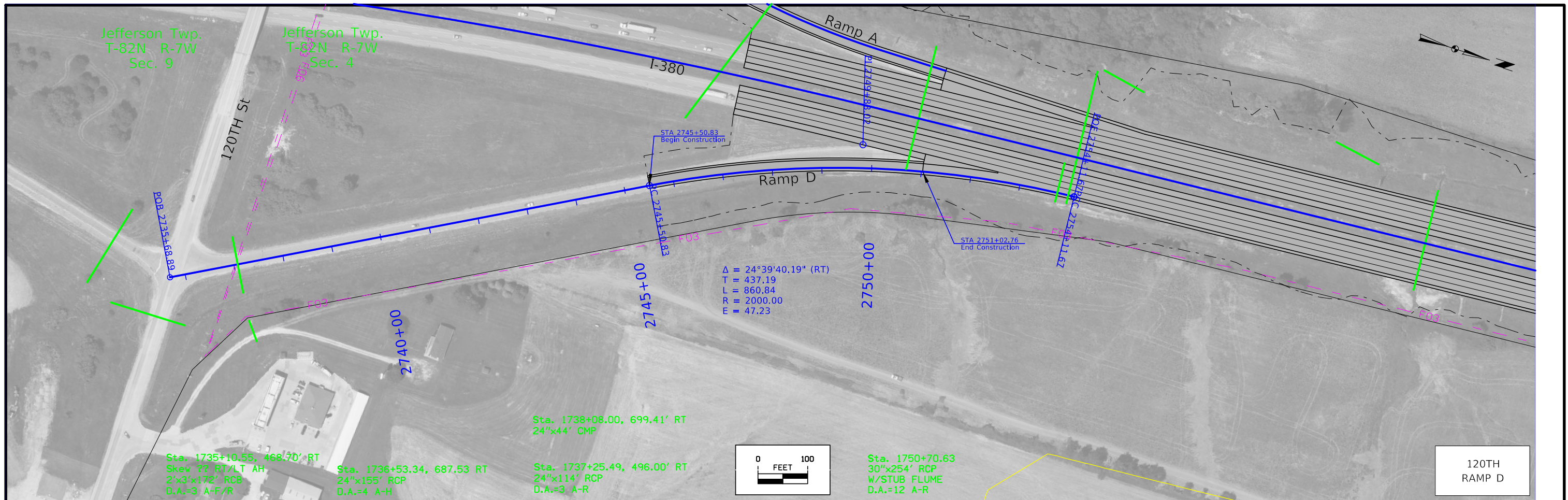
College Twp.
T-82N R-7W
Sec. 21



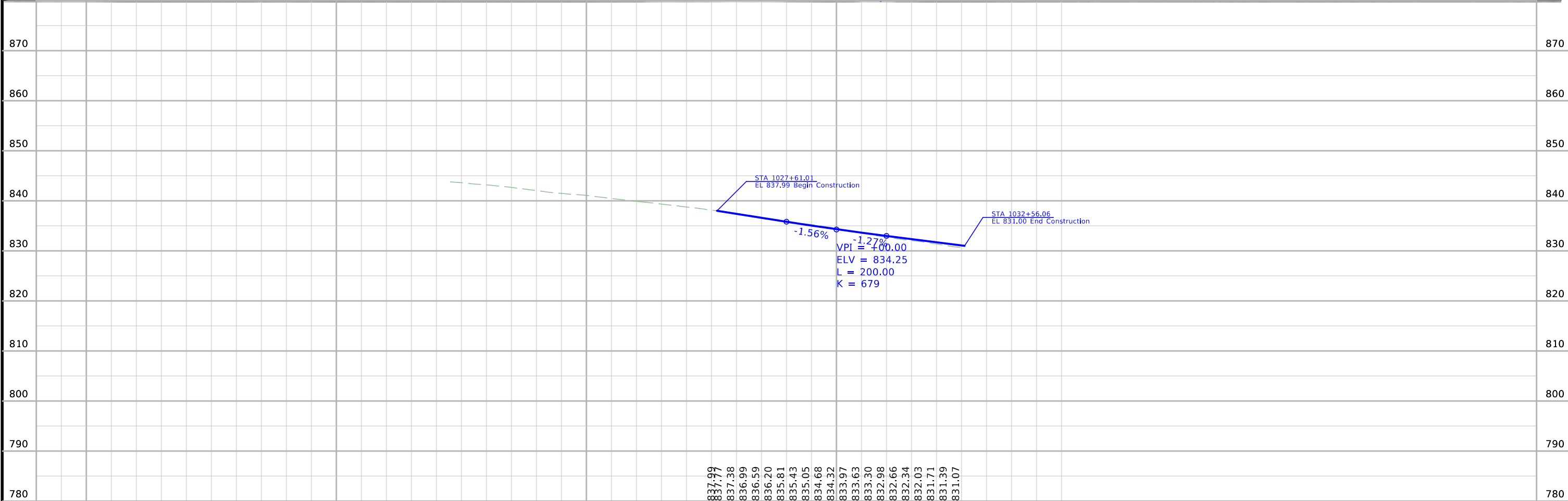
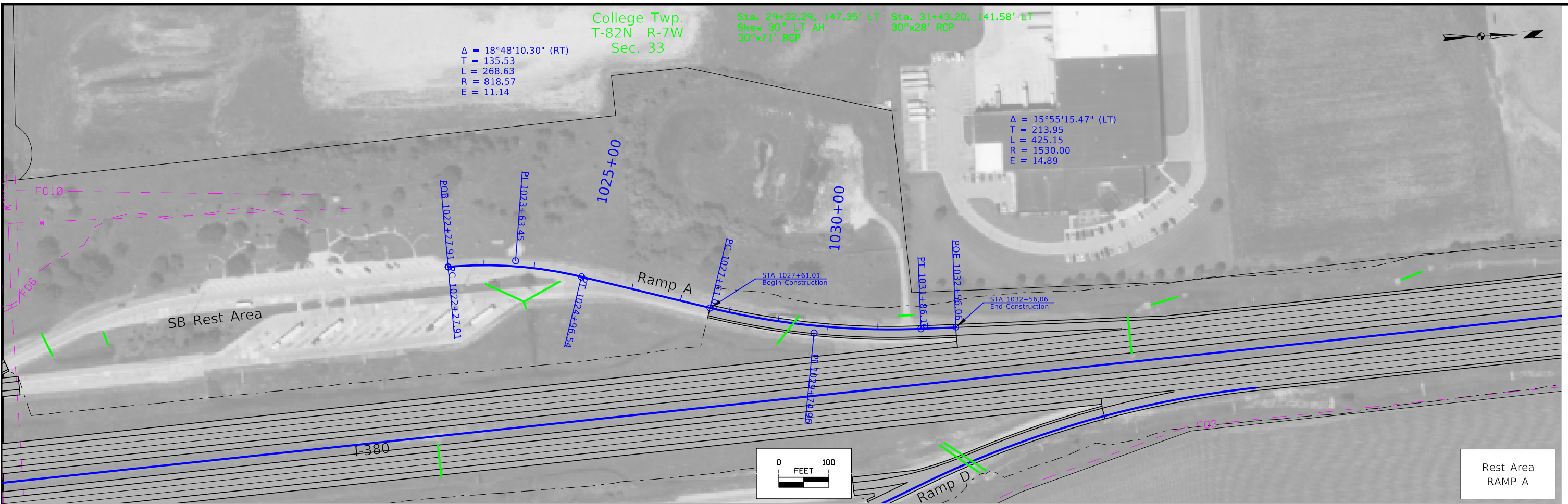
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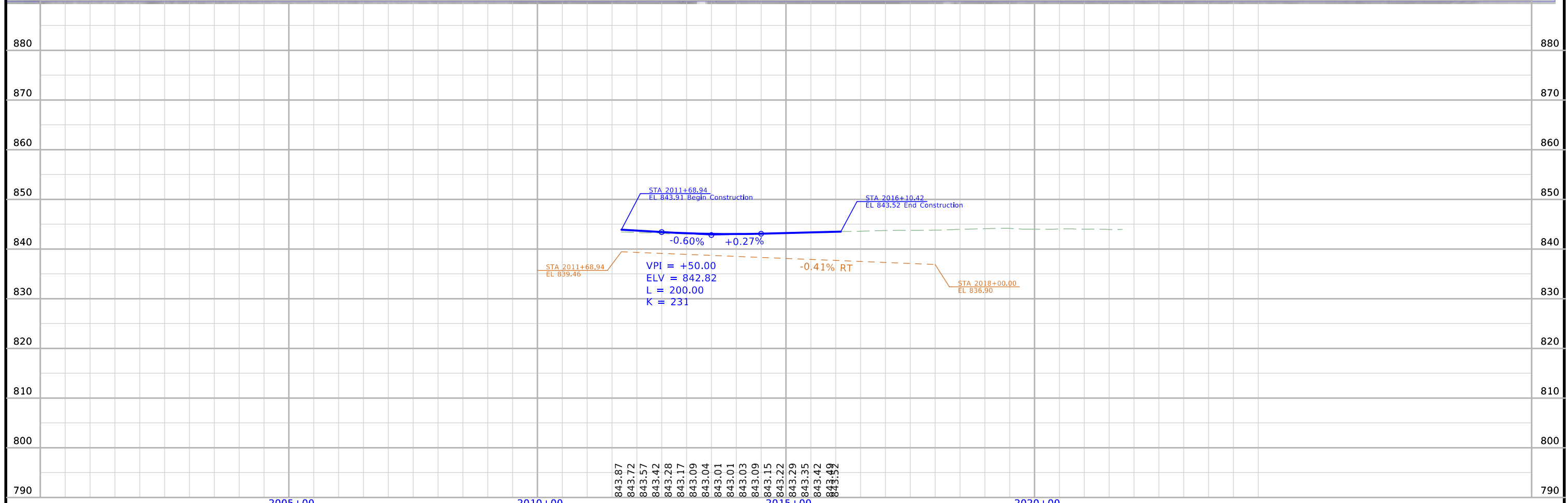
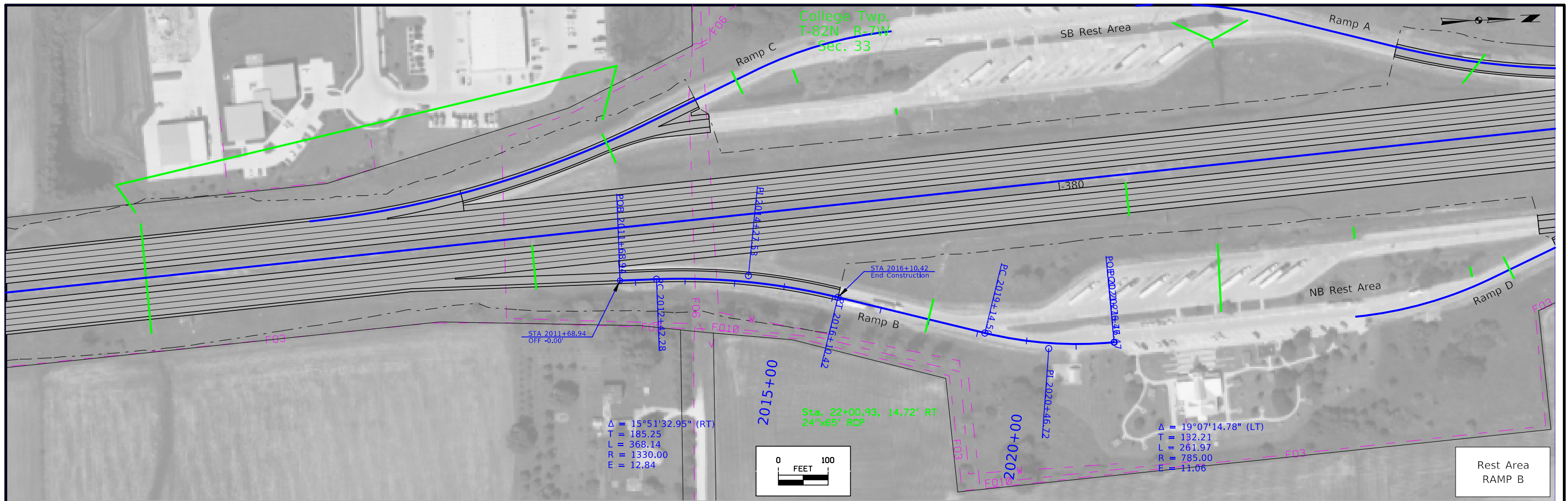
FILE NO.	ENGLISH	DESIGN TEAM	Johnson \ Linn COUNTY	PROJECT NUMBER	SHEET NUMBER
		Holst \ Schrock \ Dudley		IM-380-6(434)12--13-52	K.3



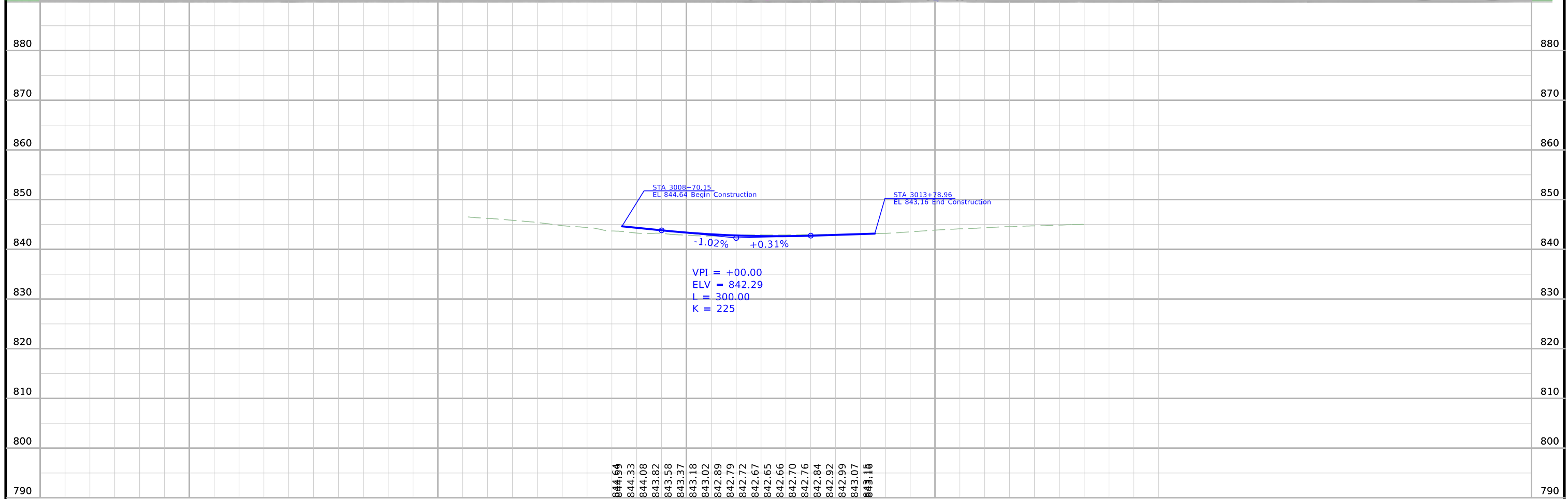
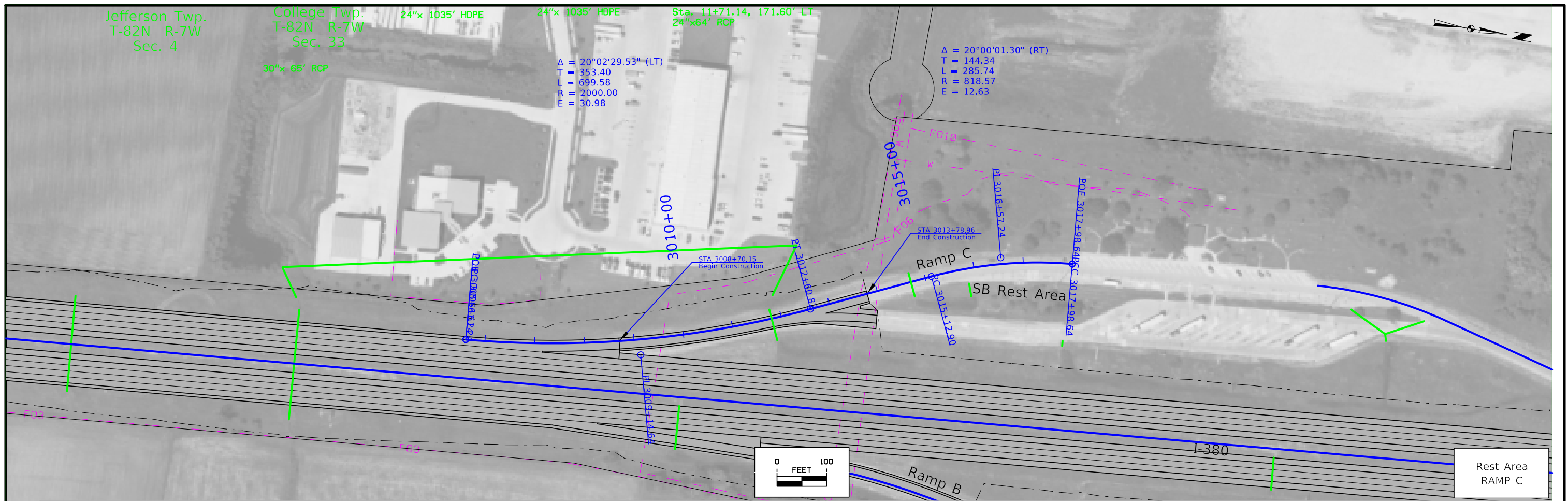
FILE NO.	ENGLISH	DESIGN TEAM	Johnson \ Linn COUNTY	PROJECT NUMBER	SHEET NUMBER
		Holst \ Schrock \ Dudley	IM-380-6(434)12--13-52	K.4	



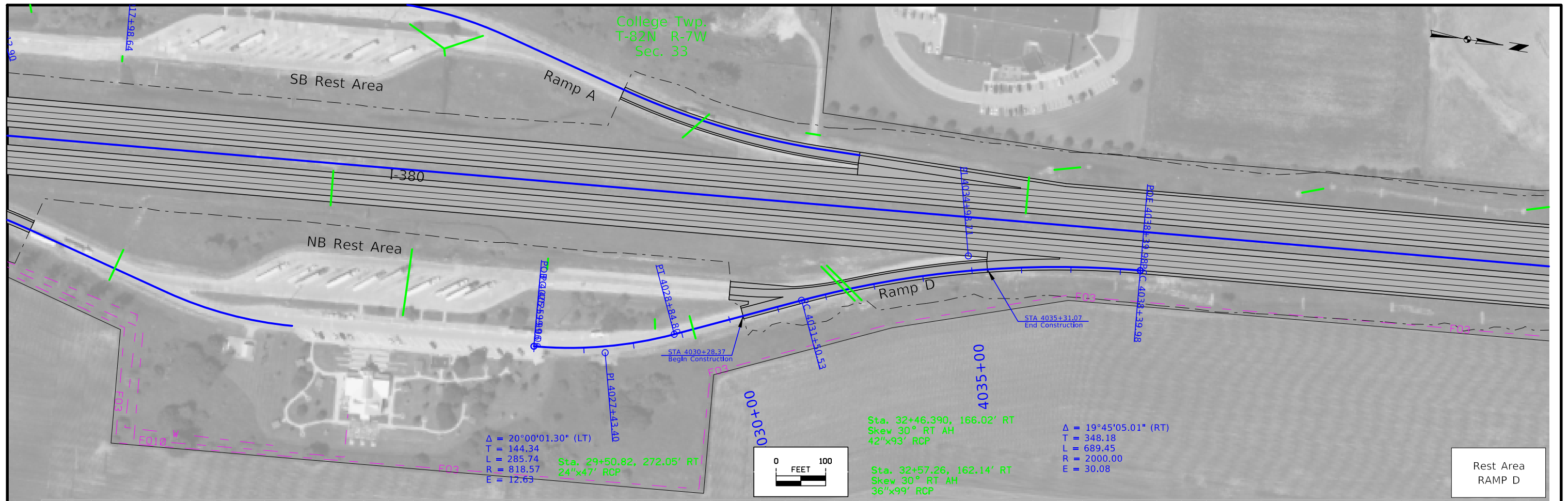
FILE NO.	ENGLISH	DESIGN TEAM	Johnson \ Linn COUNTY	PROJECT NUMBER	SHEET NUMBER
		Holst \ Schrock \ Dudley		IM-380-6(434)12--13-52	K.5



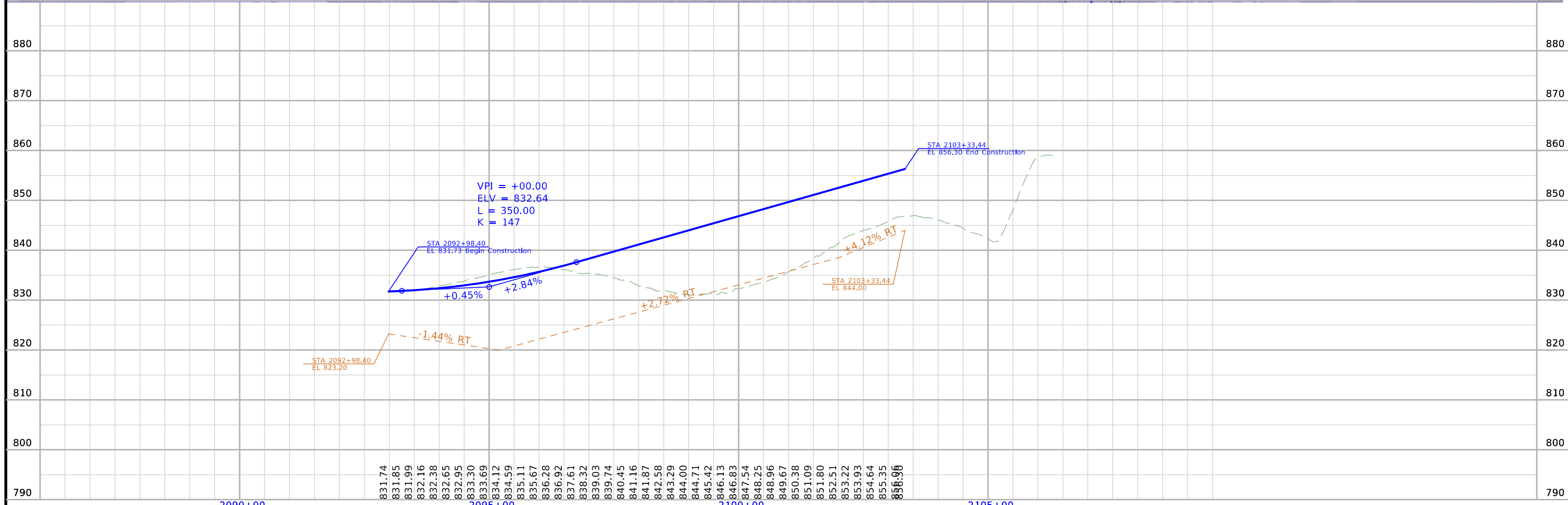
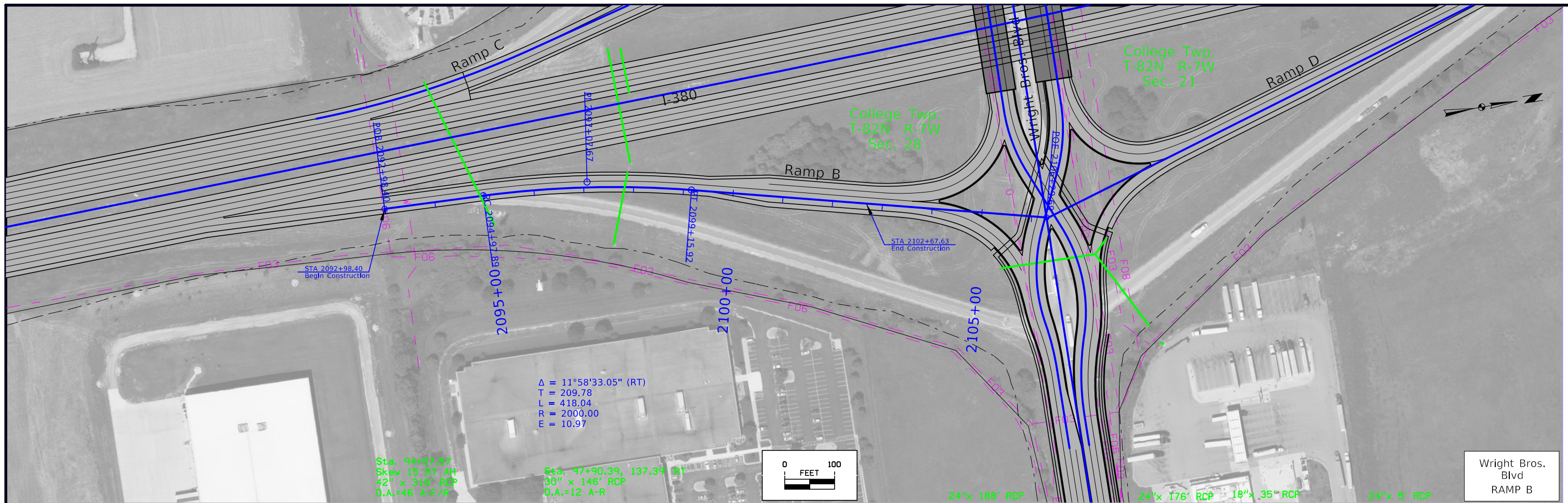
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		Holst \ Schrock \ Dudley		IM-380-6(434)12--13-52	K.6



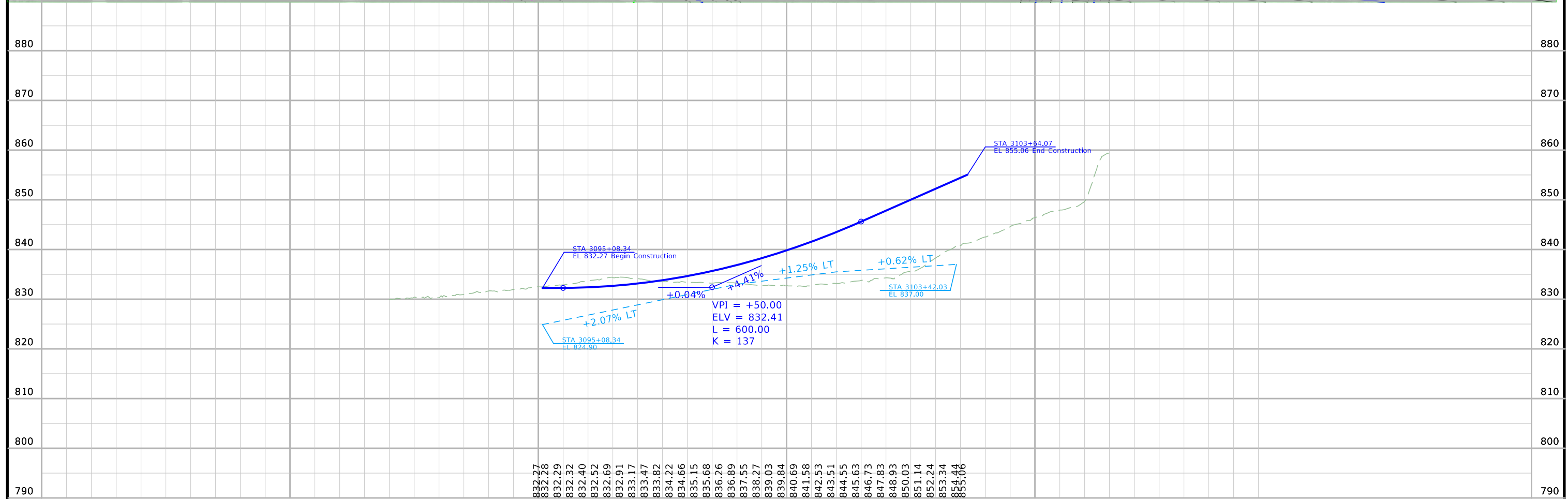
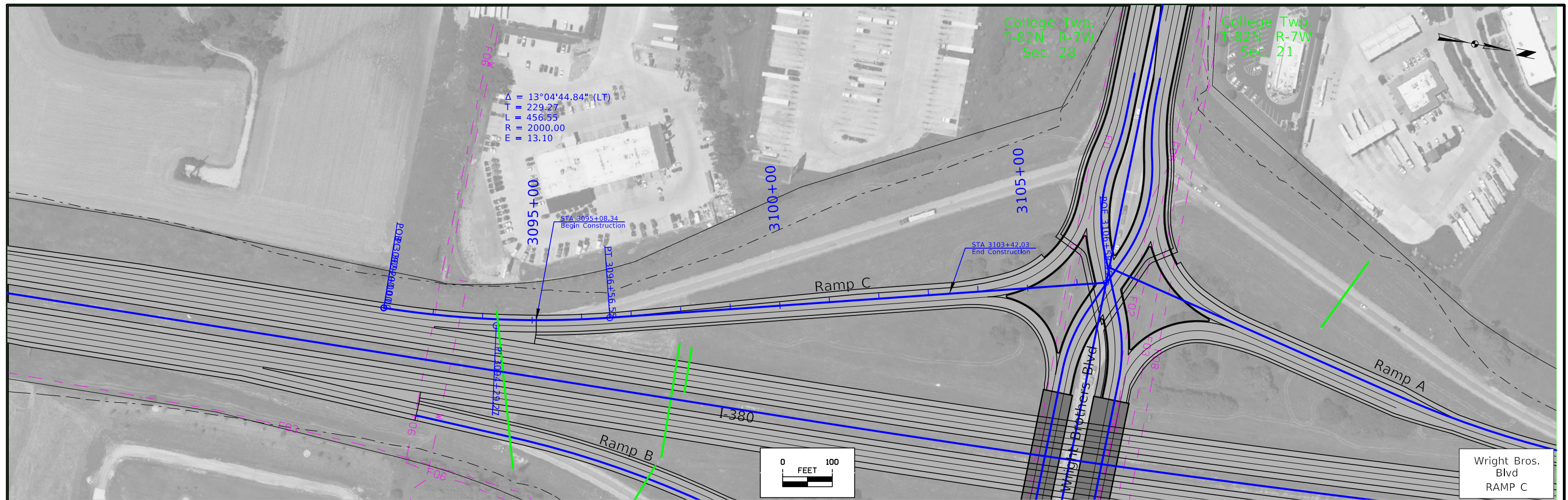
FILE NO.	ENGLISH	DESIGN TEAM Holst \ Schrock \ Dudley	Johnson \ Linn COUNTY	PROJECT NUMBER IM-380-6(434)12--13-52	SHEET NUMBER K.7
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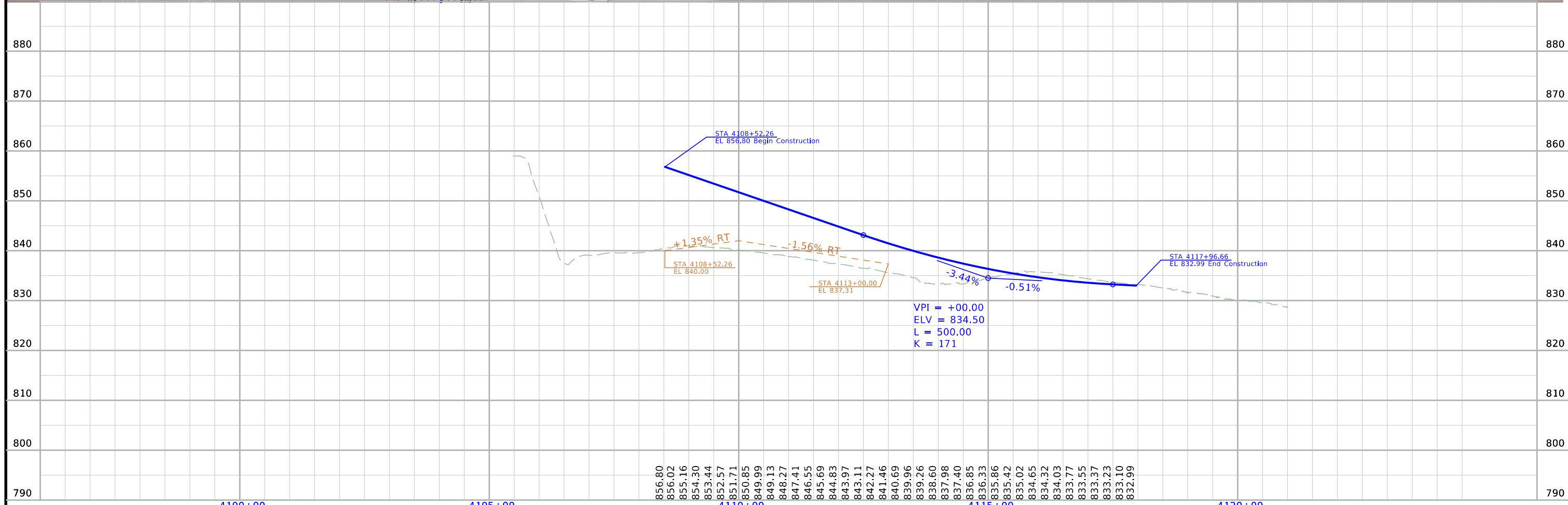
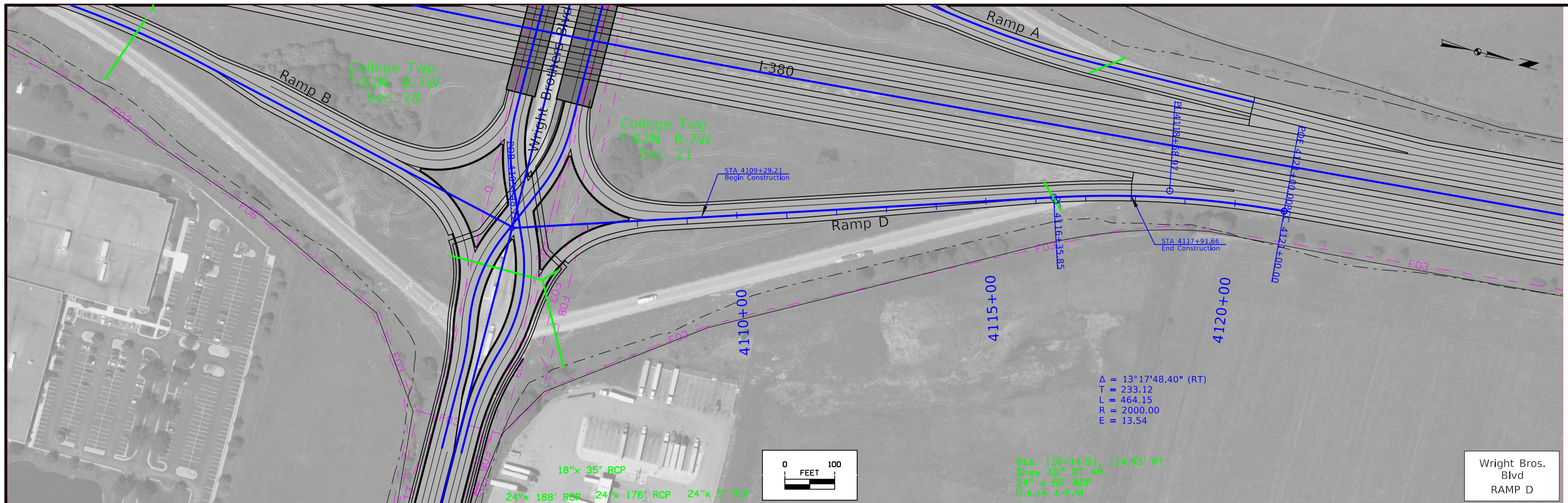
FILE NO.	ENGLISH	DESIGN TEAM	Johnson \ Linn COUNTY	PROJECT NUMBER	SHEET NUMBER
		Holst \ Schrock \ Dudley		IM-380-6(434)12--13-52	K.8



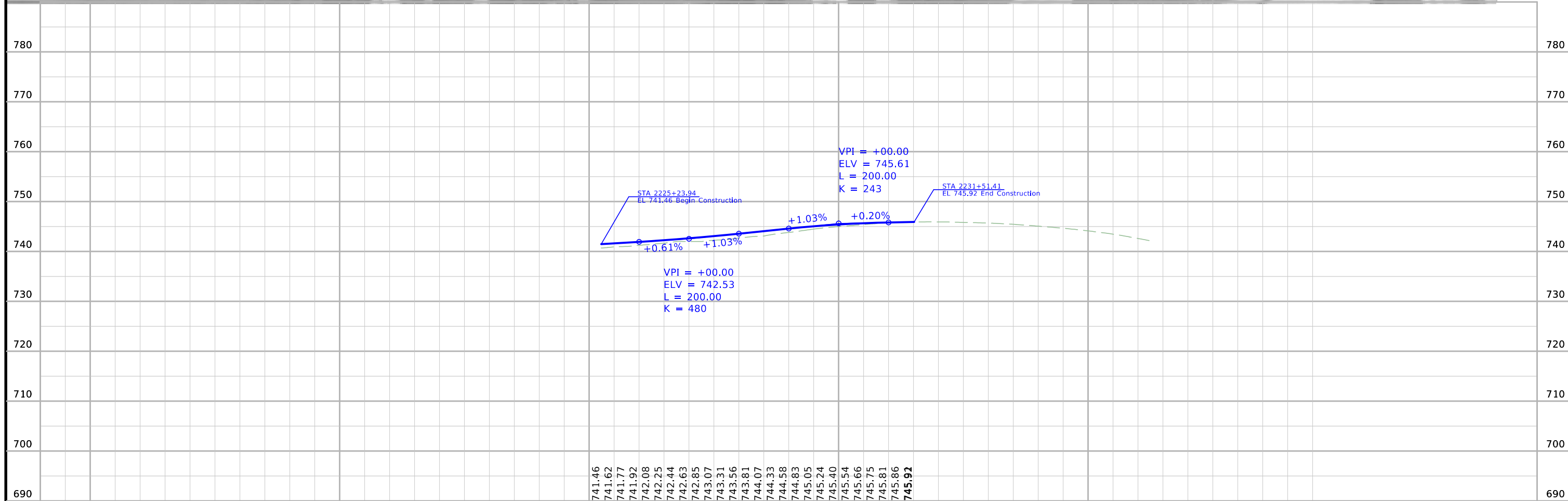
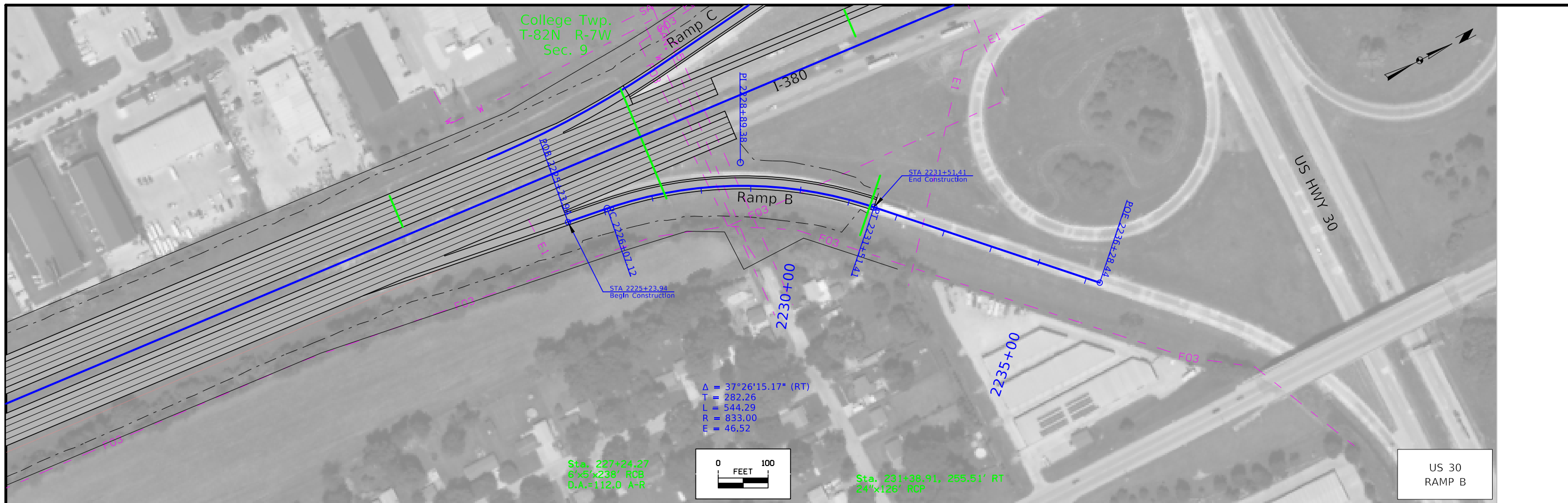
FILE NO.	ENGLISH	DESIGN TEAM	Johnson \ Linn COUNTY	PROJECT NUMBER	SHEET NUMBER
		Holst \ Schrock \ Dudley		IM-380-6(434)12--13-52	K.10



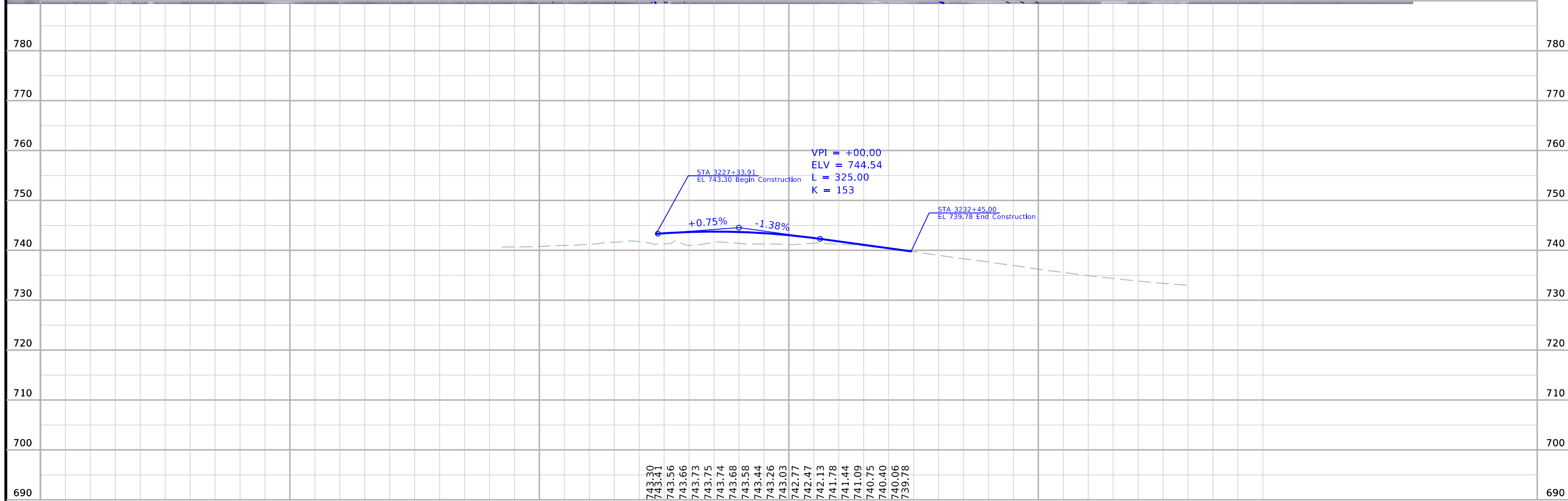
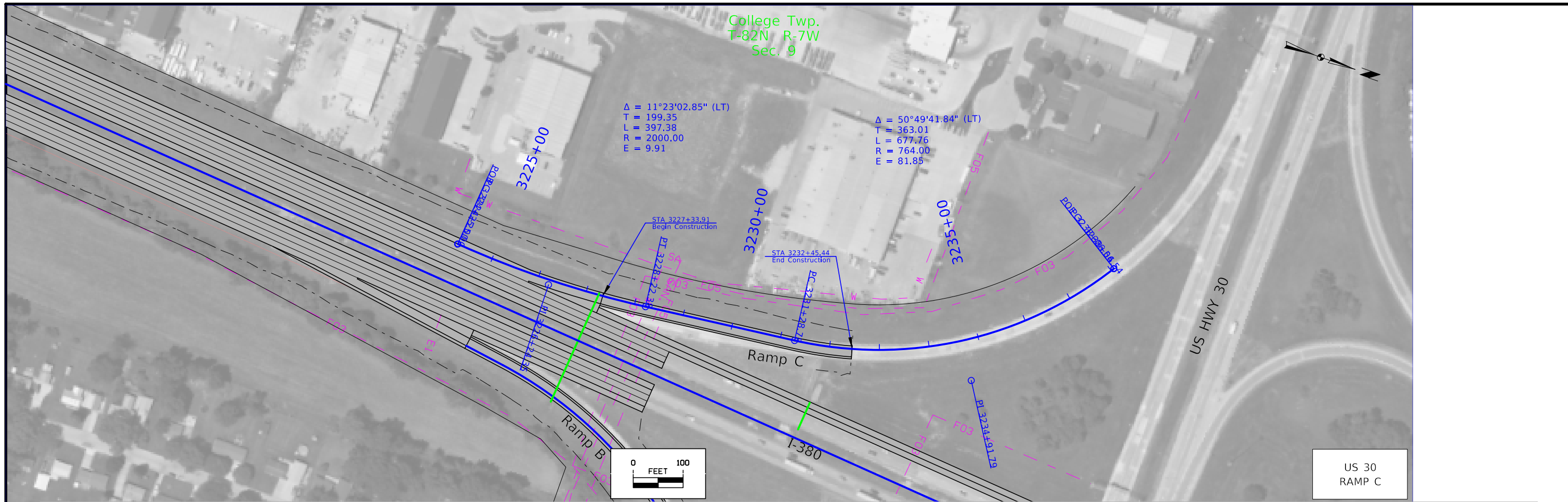
3085+00	3090+00	3095+00	3100+00	3105+00
FILE NO.	ENGLISH	DESIGN TEAM	Johnson \ Linn COUNTY	PROJECT NUMBER
		Holst \ Schrock \ Dudley		IM-380-6(434)12--13-52
				SHEET NUMBER
				K.11



FILE NO.	ENGLISH	DESIGN TEAM	Johnson \ Linn COUNTY	PROJECT NUMBER	SHEET NUMBER
		Holst \ Schrock \ Dudley		IM-380-6(434)12--13-52	K.12



FILE NO.	ENGLISH	DESIGN TEAM	Johnson \ Linn COUNTY	PROJECT NUMBER	SHEET NUMBER
2215+00		Holst \ Schrock \ Dudley	IM-380-6(434)12--13-52	K.13	



FILE NO.	ENGLISH	DESIGN TEAM	Johnson \ Linn COUNTY	PROJECT NUMBER	SHEET NUMBER
		Holst \ Schrock \ Dudley		IM-380-6(434)12--13-52	K.14

College Twp.
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Sec. 20

College Twp.
T-82N R-7W
Sec. 21



8+00

9+00

10+00

11+00

12+00

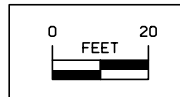
13+00

14+00

Wright Brothers Blvd

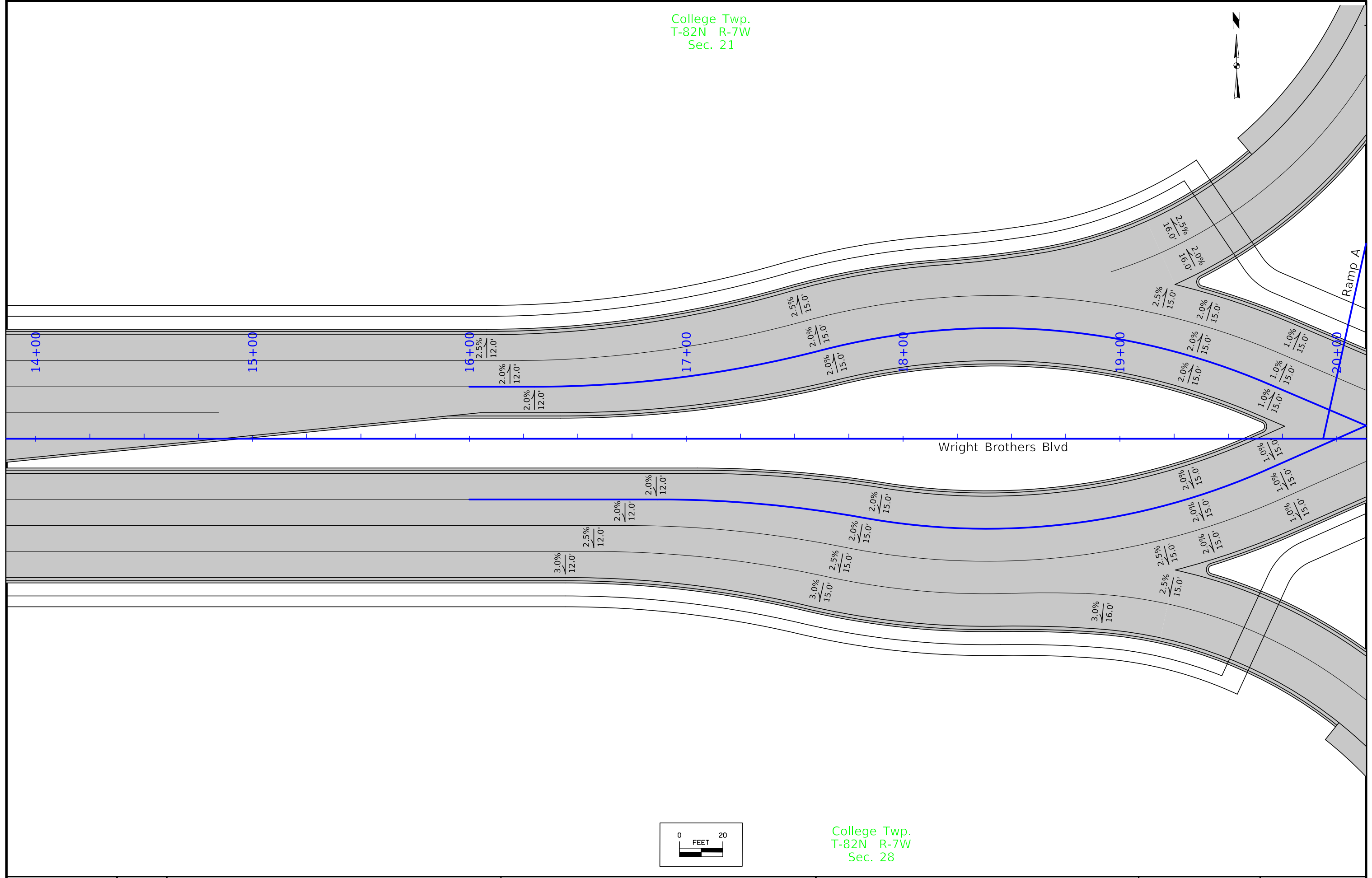
2.5%	12.0'
2.0%	12.0'
2.0%	12.0'
1.5%	12.0'
1.5%	12.0'
2.0%	12.0'
2.0%	12.0'
2.5%	12.0'
3.0%	12.0'

College Twp.
T-82N R-7W
Sec. 29



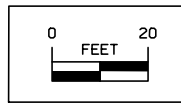
College Twp.
T-82N R-7W
Sec. 28

College Twp.
T-82N R-7W
Sec. 21



Wright Brothers Blvd

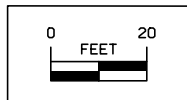
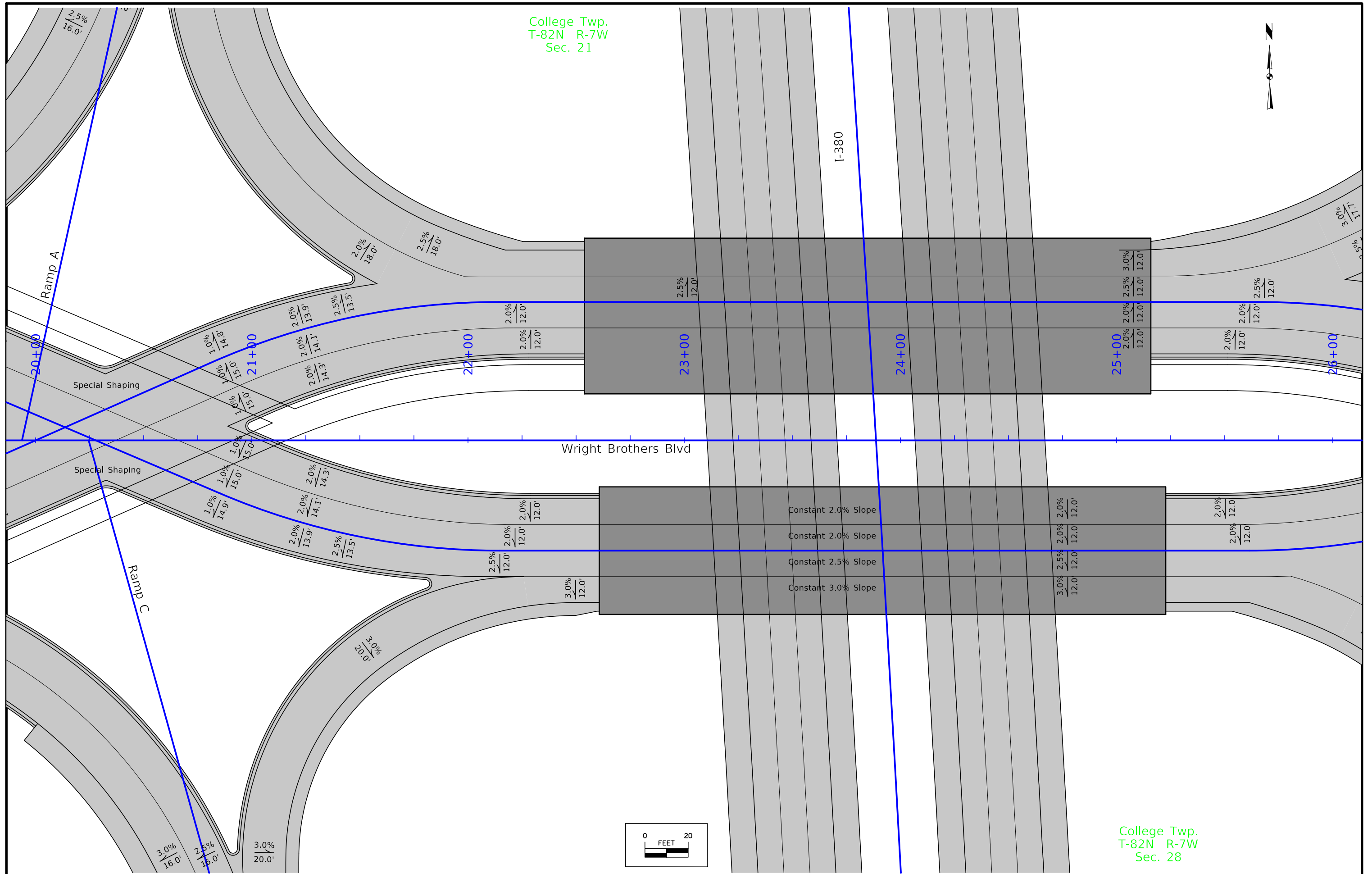
Ramp A



College Twp.
T-82N R-7W
Sec. 28

FILE NO.	ENGLISH	DESIGN TEAM	COUNTY	PROJECT NUMBER	SHEET NUMBER	L.2
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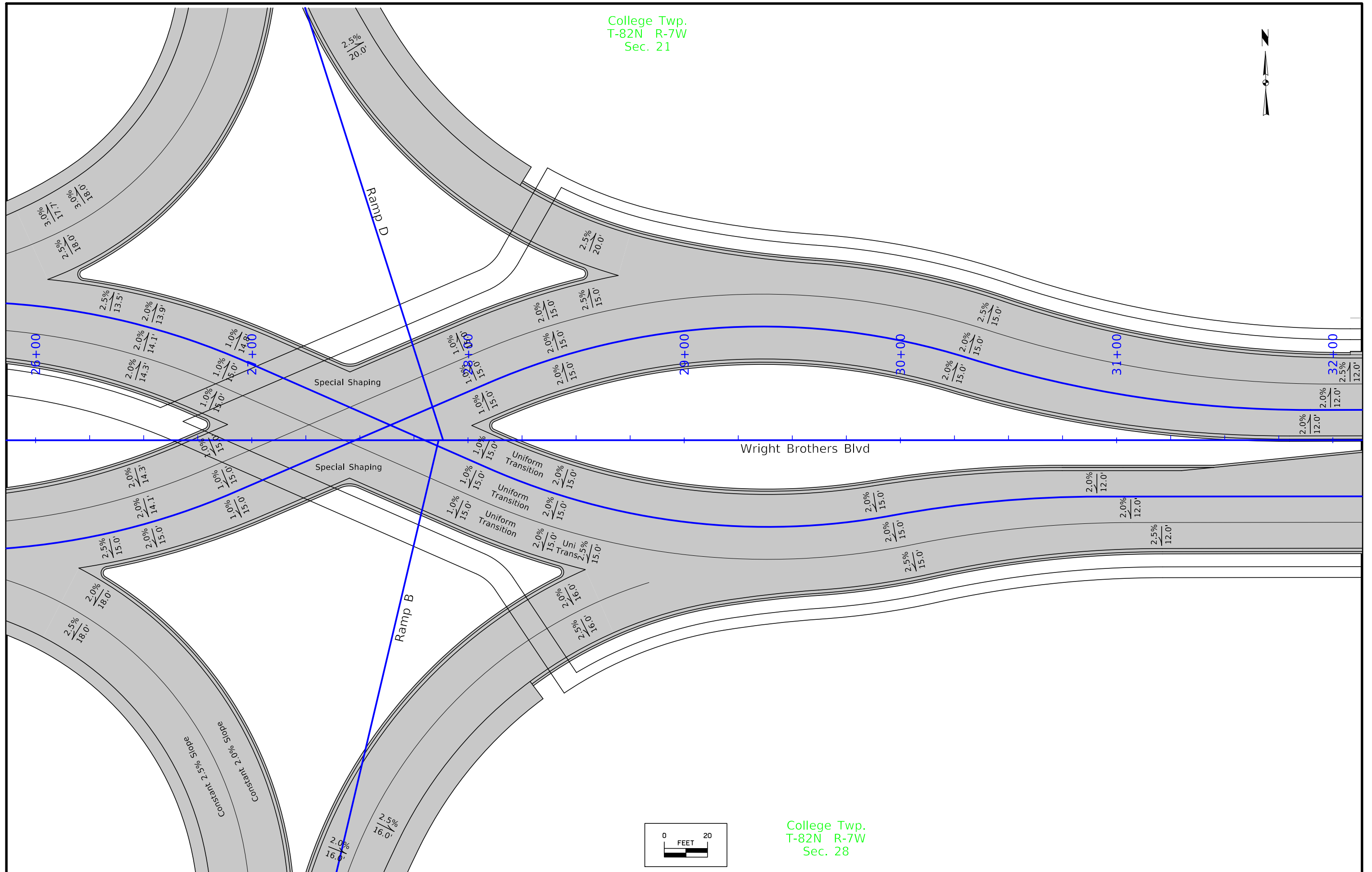
College Twp.
T-82N R-7W
Sec. 21



College Twp.
T-82N R-7W
Sec. 28

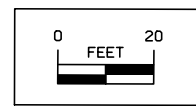
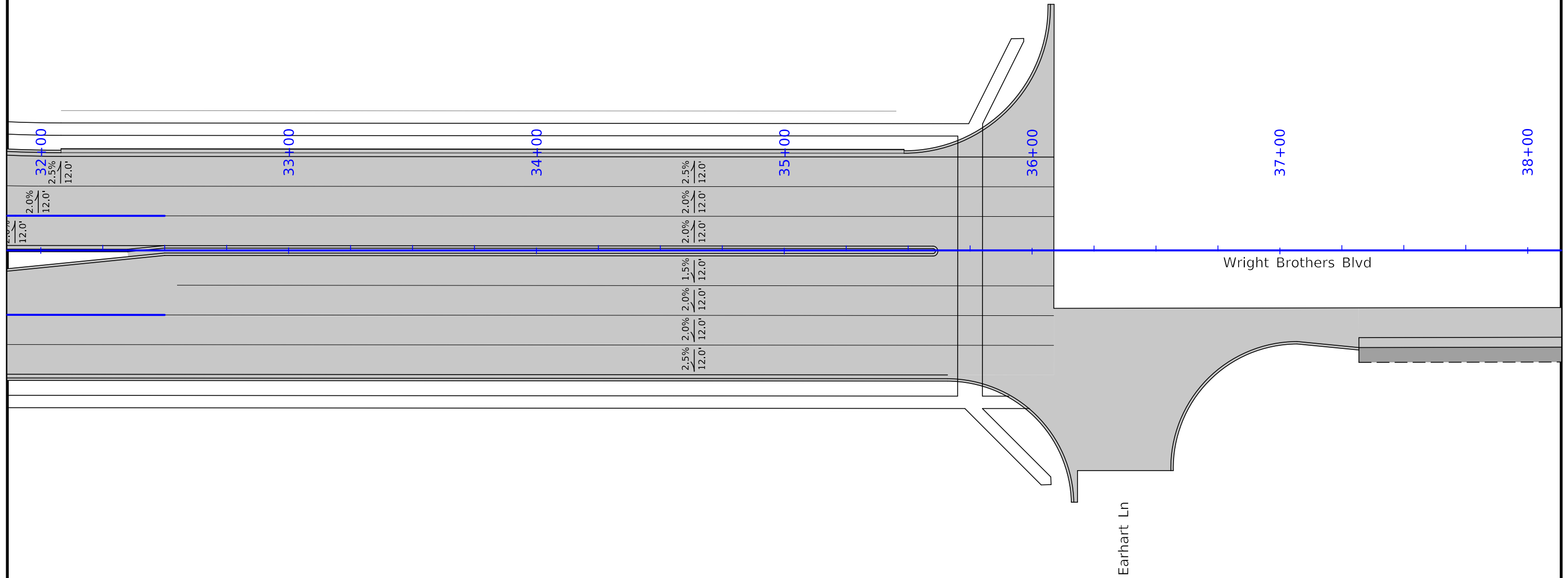
FILE NO.	ENGLISH	DESIGN TEAM	COUNTY	PROJECT NUMBER	SHEET NUMBER	L.3
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College Twp.
T-82N R-7W
Sec. 21



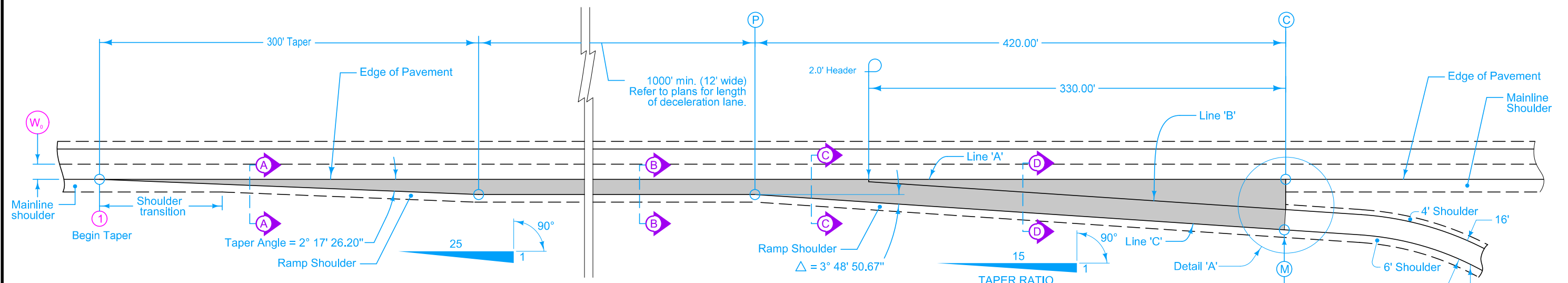
College Twp.
T-82N R-7W
Sec. 28

College Twp.
T-82N R-7W
Sec. 21

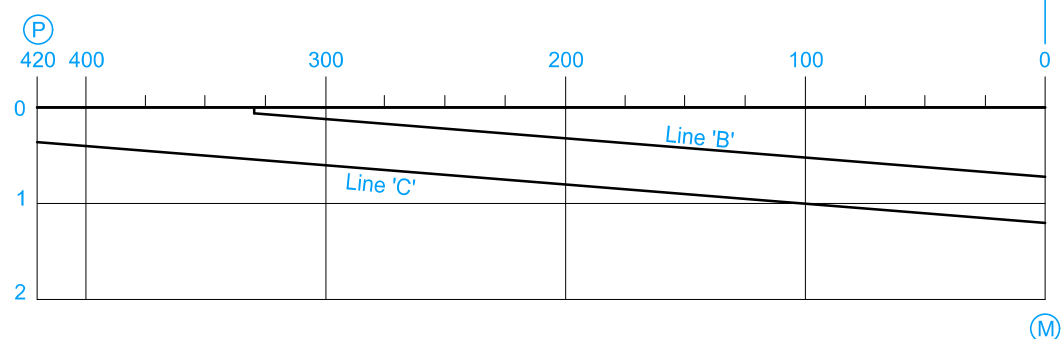


College Twp.
T-82N R-7W
Sec. 28

FILE NO.	ENGLISH	DESIGN TEAM	COUNTY	PROJECT NUMBER	SHEET NUMBER	L.5
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PLAN

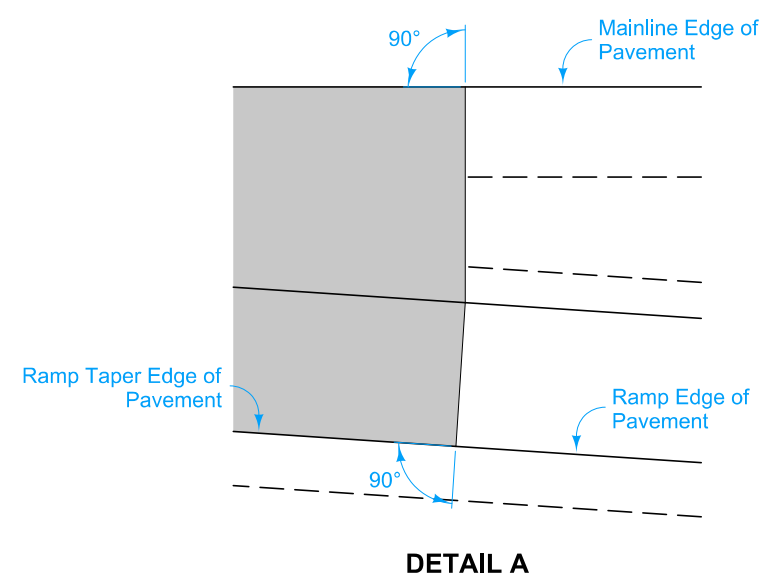


Note: The algebraic difference between the profile grade for ramp base line at (M) and relative profile grade of mainline at (C) is 0.20%

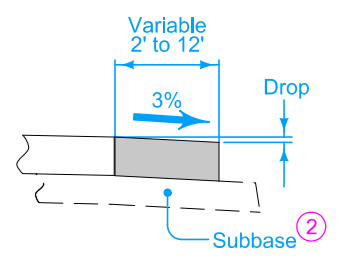
PROFILE

TABLE OF OFFSETS AND DROPS FOR 16' RAMP TAPER

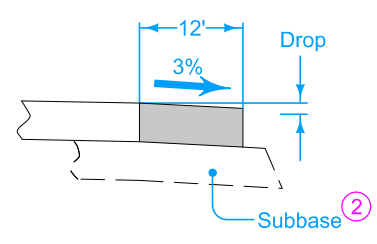
DISTANCE (Ft.)	420	400	375	350	330	325	300	275	250	225	200	175	150	125	100	75	50	25	0
OFFSET (Ft.)	12.00	13.37	15.04	16.70	18.04	18.37	20.04	21.70	23.37	25.04	26.70	28.37	30.04	31.70	33.37	35.04	36.70	38.37	40.00
DROP (Ft.)	0.36	0.40	0.45	0.50	0.54	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10	1.15	1.20



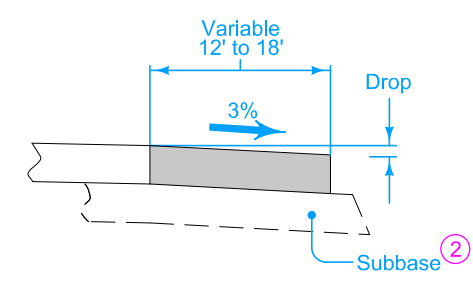
DETAIL A



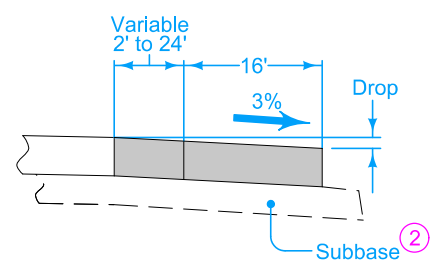
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

TABLE OF SHOULDER TRANSITION LENGTHS WITH 6' SHOULDER ON RAMP

W _o	Shoulder Width beyond Edge of Mainline Pavement		
	8'	10'	12'
12'	NA	100'	150'

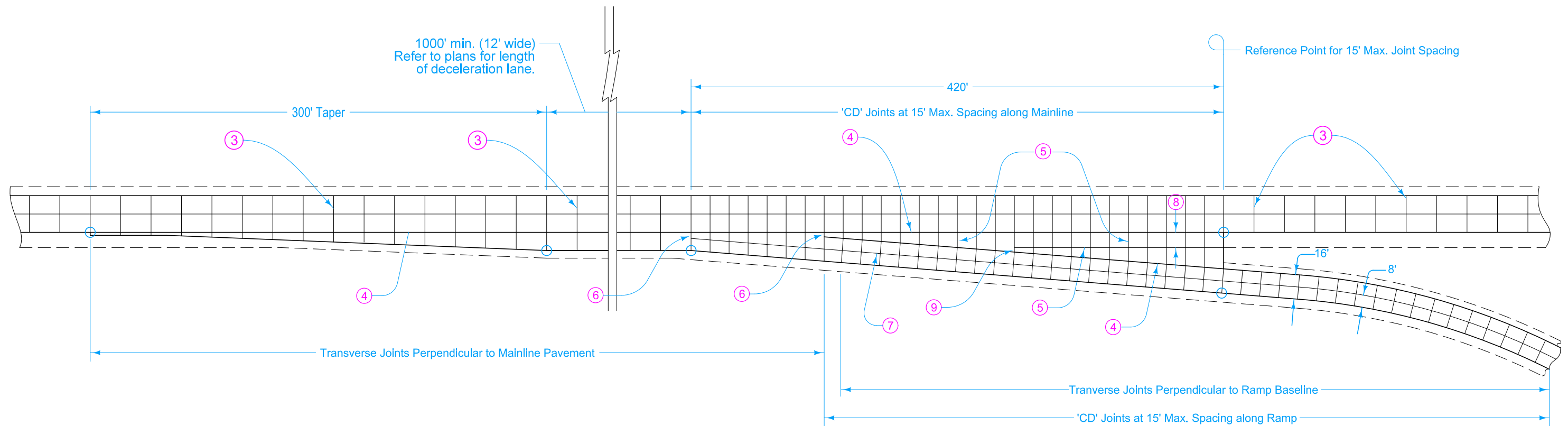
NOTE: W_o is the width of the outside lane to the Edge of Pavement.

- Construct ramp exit pavement the same thickness as mainline pavement.
- For joint detail, see PV-101.
- ① For header construction detail at the end of taper, see Typical 7101 or Typical 7102.
- ② Construct subbase for ramp exit pavement the same thickness as mainline subbase.

ROAD DESIGN DETAIL	REVISION	
	2	04-21-20
	533-01	
SHEET 1 of 2		

REVISIONS: Removed MODIFIED from the detail.

**PARALLEL DECELERATION TAPER
FOR 16' RAMP
(60 MPH DESIGN SPEED)**



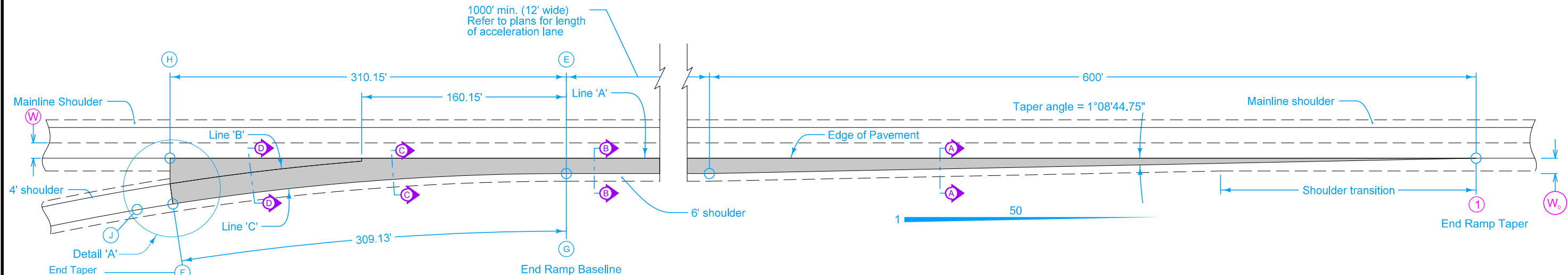
16' EXIT RAMP WITH PARALLEL DECELERATION LANE

- ③ 'CD' Joints at 17' spacing.
- ④ 'BT-2' or 'KT-2' Joint.
- ⑤ 'C' Joint.
- ⑥ 'B' Joint. 2' minimum, 4' maximum.
- ⑦ 'L-2' Joint.
- ⑧ 10' minimum or equal to mainline shoulder width.
- ⑨ 'B' or 'C' Joint. 2' minimum. 4' maximum.

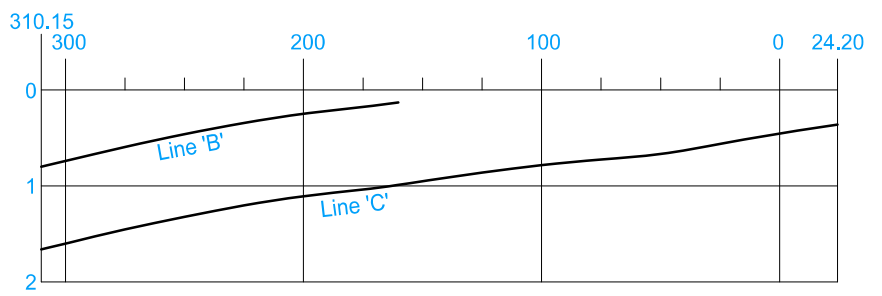
ROAD DESIGN DETAIL	REVISION	
	2	04-21-20
533-01		SHEET 2 of 2

REVISIONS: Removed MODIFIED from the detail.

**PARALLEL DECELERATION TAPER
FOR 16' RAMP
(60 MPH DESIGN SPEED)**

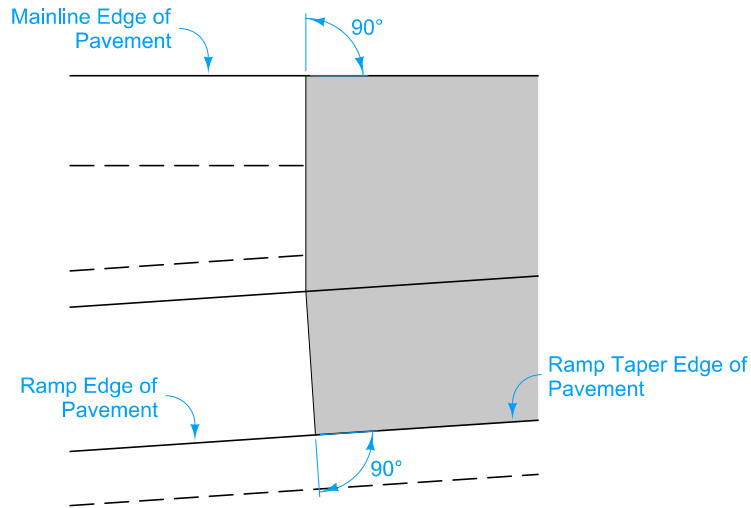


Pt. 'G' to Pt. 'J'
 $\Delta = 8^\circ 51' 20.88''$
 $T = 164.23'$
 $L = 327.73'$
 $E = 6.73'$
 $R = 2000.00'$



NOTE: The algebraic difference between ramp profile grade at point (F) and relative profile grade of mainline at point (H) is 0.62%

W ₆	Shoulder Width beyond Edge of Mainline Pavement		
	8'	10'	12'
12'	NA	100'	150'



DETAIL A

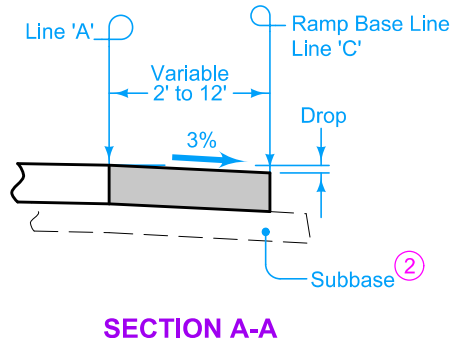
Construct ramp exit pavement the same thickness as mainline pavement.

For joint detail, see PV-101.

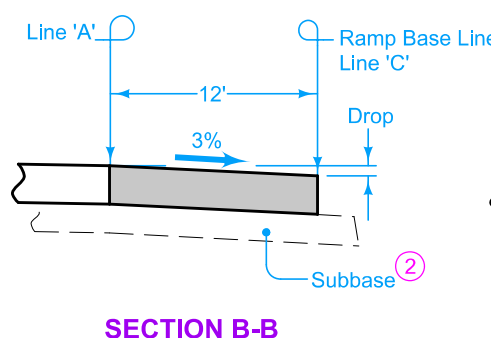
① For header construction detail at the end of taper, see Typical 7101 or Typical 7102.

② Construct subbase for ramp exit pavement the same thickness as mainline subbase.

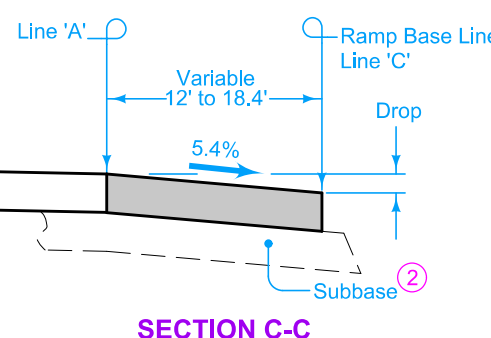
		DISTANCE FROM POINT (E) ALONG LINE 'A' (Ft.)																		
		310.15	300	275	250	225	204	200	175	160.15	150	125	100	75	50	25	0	24.2		
From Line 'A' To Line 'B'	OFFSET (Ft.)	20.00	18.45	14.84	11.56	8.60	6.30	5.95	3.61	2.37										
	SLOPE (%)	← Constant 4.0% Slope →										4.11	4.92	5.40						
	DROP (Ft.)	0.80	0.74	0.59	0.46	0.34	0.25	0.24	0.18	0.13										
From Line 'B' To Line 'C'	OFFSET (Ft.)	← Constant 16' Offset →																		
	SLOPE (%)	← Constant 5.4% Slope →																		
	DROP (Ft.)	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86									
From Line 'A' To Line 'C'	OFFSET (Ft.)										17.63	15.91	14.50	13.41	12.63	12.16	12.00	12.00		
	SLOPE (%)										5.40	5.40	5.40	5.40	5.40	4.59	3.78	3.00		
	DROP (Ft.)	1.66	1.60	1.45	1.32	1.20	1.11	1.10	1.04	0.99	0.95	0.86	0.78	0.72	0.68	0.56	0.45	0.36		
DISTANCE FROM POINT (G) ALONG LINE 'C' (Ft.)		309.13	298.73	273.67	248.66	223.68	202.73	198.74	173.83	159.04	150.14	125.08	100.04	75.02	50.01	25.00	0.00			



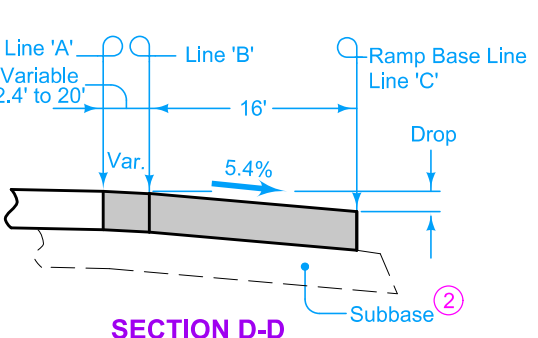
SECTION A-A



SECTION B-B

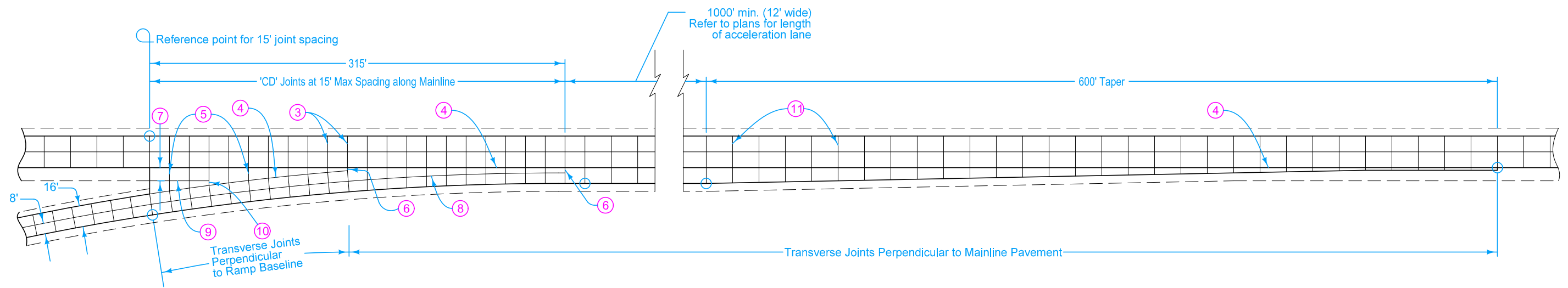


SECTION C-C



SECTION D-D

ROAD DESIGN DETAIL	REVISION	
	3	04-20-21
	533-02	
SHEET 1 of 2		
REVISIONS: Added Point J and Ramp Profile note.		
PARALLEL ACCELERATION TAPER FOR 16' RAMP (60 MPH DESIGN SPEED)		



- ③ 'CD ' Joints at 15' spacing.
- ④ 'BT-2' or 'KT-2' Joint.
- ⑤ 'C' Joint.
- ⑥ 'B' Joint. 2' minimum, 4' maximum.
- ⑦ 10' minimum or equal to mainline shoulder width.
- ⑧ 'L-2' Joint.
- ⑨ 'C' Joint parallel to mainline pavement.
- ⑩ 'B' or 'C' Joint. 2' minimum, 4' maximum.
- ⑪ 'CD ' Joints at 17' spacing.

		REVISION	
		3	04-20-21
ROAD DESIGN DETAIL		533-02	
		SHEET 2 of 2	

REVISIONS: Added Point J and Ramp Profile note.

**PARALLEL ACCELERATION TAPER
FOR 16' RAMP
(60 MPH DESIGN SPEED)**

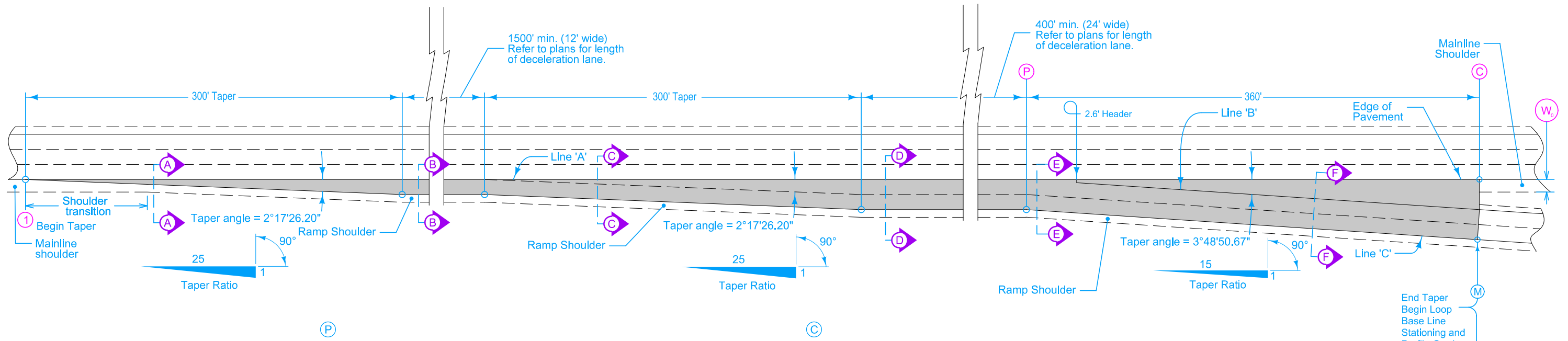
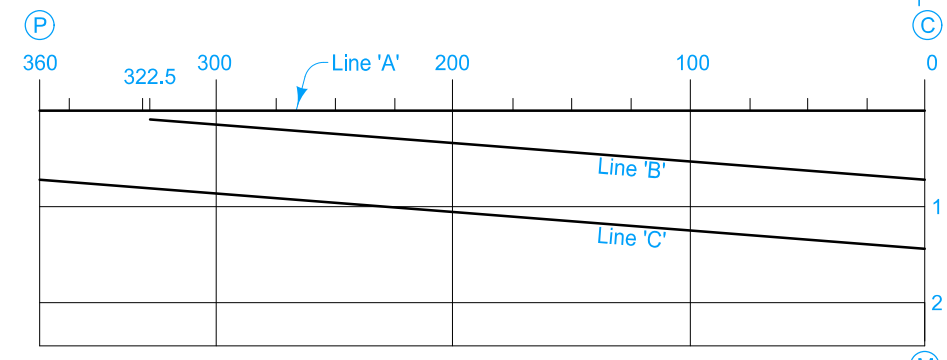
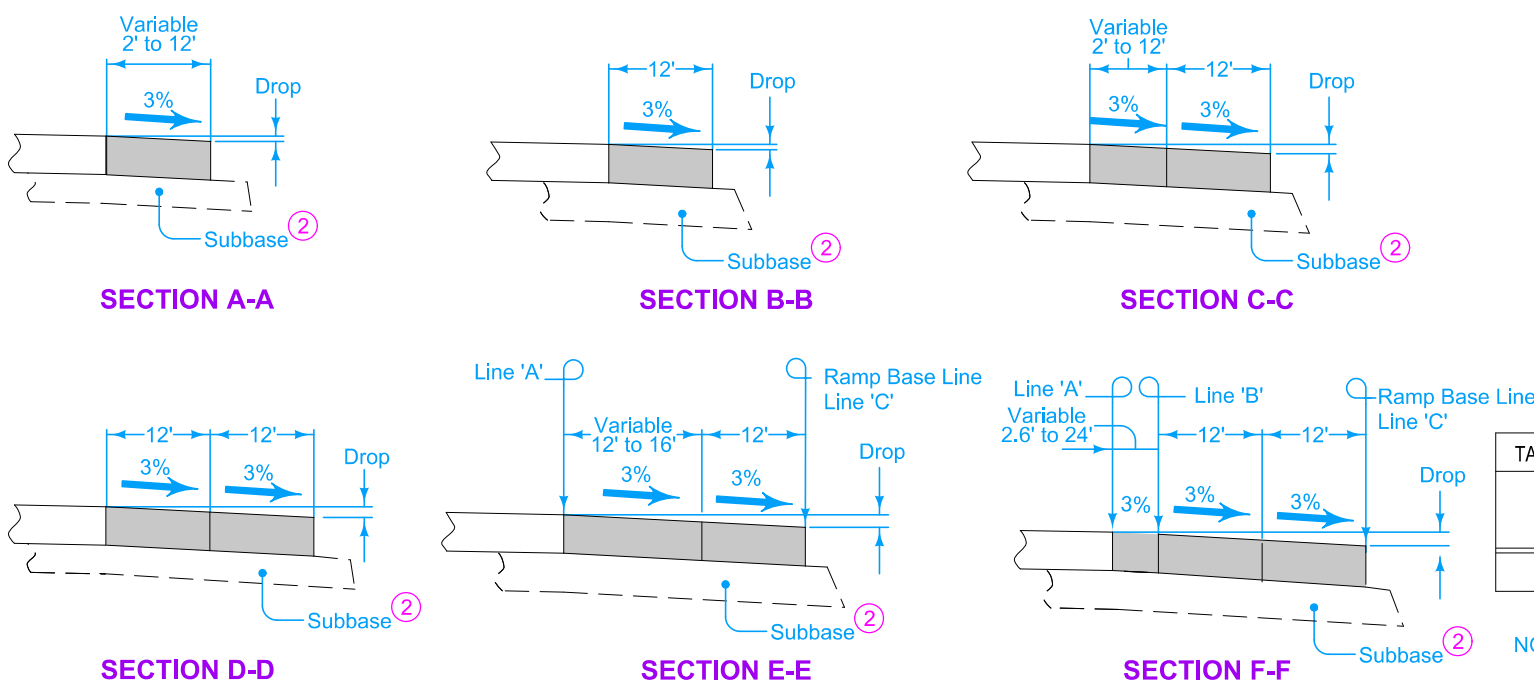


TABLE OF OFFSETS AND DROPS FOR 24' RAMP TAPER

DISTANCE FROM POINT (P) ALONG LINE 'A' (Ft.)		360	350	325	322.5	300	275	250	225	200	175	150	125	100	75	50	25	0
From Line 'A' To Line 'B'	OFFSET (Ft.)				2.5	4.00	5.67	7.33	9.00	10.67	12.33	14.00	15.67	17.33	19.00	20.67	22.33	24.00
	SLOPE (%)	Constant 3.0% Slope																
	DROP (Ft.)				0.08	0.12	0.17	0.22	0.27	0.32	0.37	0.42	0.47	0.52	0.57	0.62	0.67	0.72
From Line 'B' To Line 'C'	OFFSET (Ft.)	Constant 24' Offset																
	SLOPE (%)	Constant 3.0% Slope																
	DROP (Ft.)				0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
From Line 'A' To Line 'C'	OFFSET (Ft.)	24.00	24.72	26.39														
	SLOPE (%)	3.00	3.00	3.00														
	DROP (Ft.)	0.72	0.74	0.79	0.80	0.84	0.89	0.94	0.99	1.04	1.09	1.14	1.19	1.24	1.29	1.34	1.39	1.44



Note: The algebraic difference between the profile grade for ramp base line at (M) and relative profile grade of mainline at (C) is 0.20%.



- Construct ramp exit pavement the same thickness as mainline pavement.
- For joint detail, see PV-101.
- (1) For header construction detail at the end of taper See Typical 7101 or Typical 7102.
- (2) Construct subbase for ramp exit pavement the same thickness as mainline subbase.

TABLE OF SHOULDER TRANSITION LENGTHS WITH 6' SHOULDER ON RAMP

W _o	Shoulder Width beyond Edge of Mainline Pavement		
	8'	10'	12'
12'	NA	100'	150'

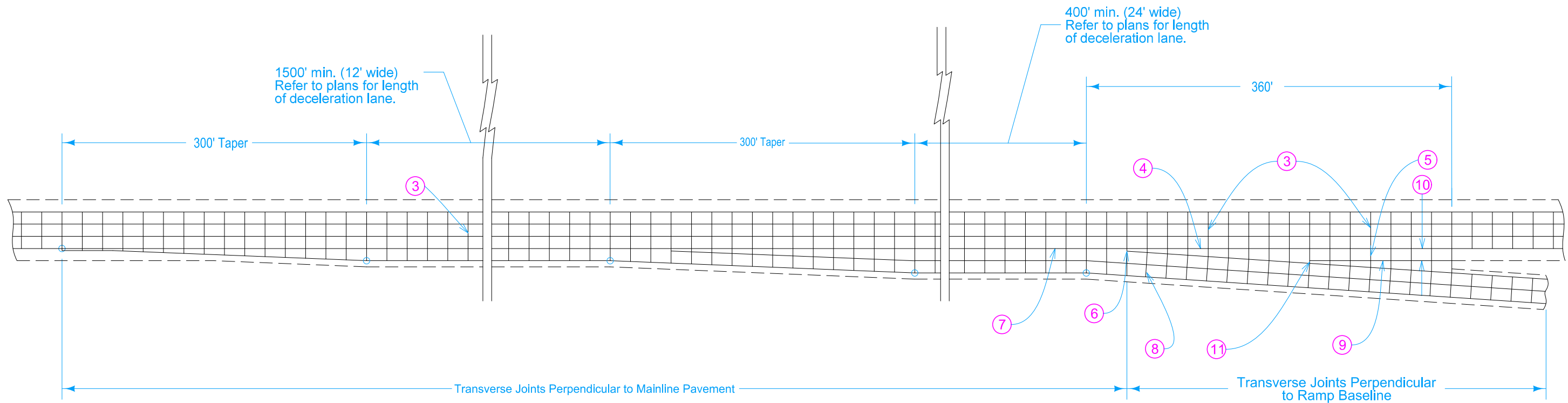
NOTE: W_o is the width of the outside lane to the Edge of Pavement.

PROFILE

ROAD DESIGN DETAIL	REVISION
	3 04-20-21
	533-04
SHEET 1 of 2	

REVISIONS: Added End Taper note.

PARALLEL DECELERATION TAPER FOR 24' RAMP (60 MPH DESIGN SPEED)

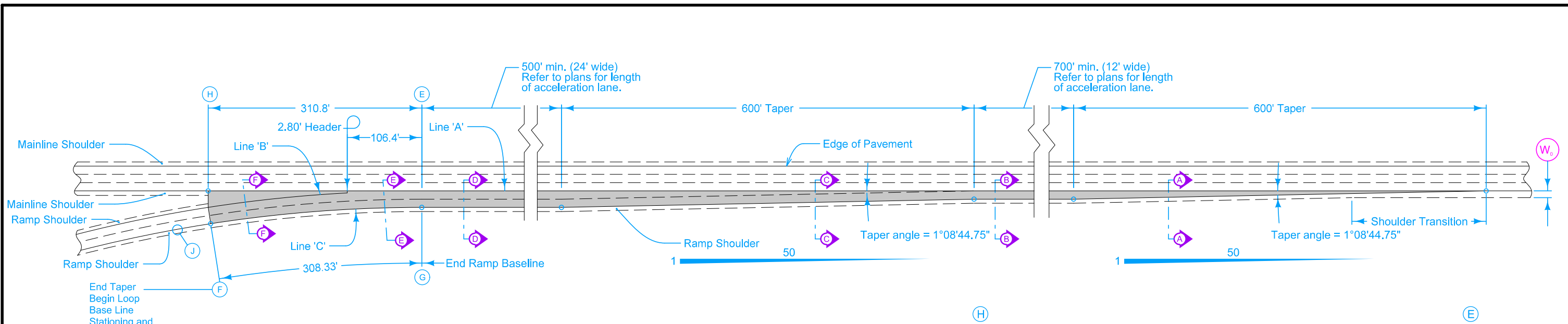


24' EXIT RAMP WITH PARALLEL DECELERATION LANE

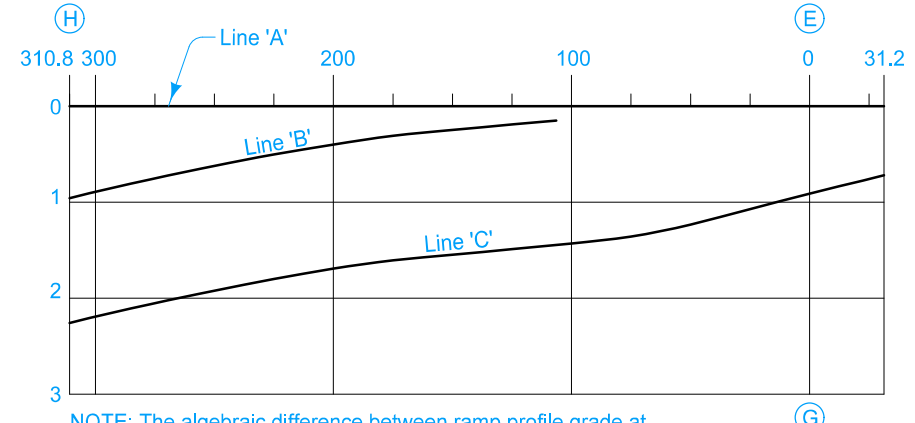
- ③ 'CD' Joints at 17' spacing.
- ④ 'BT-2' or 'KT-2' Joint.
- ⑤ 'C' Joint.
- ⑥ 'B' Joint. 2' minimum, 4' maximum.
- ⑦ 'L-2' Joint.
- ⑧ Construct transverse joints on the exit ramp taper perpendicular to the ramp baseline where the gore area is 4 feet or greater.
- ⑨ 'C' Joint parallel to mainline pavement.
- ⑩ 10' minimum or equal to mainline shoulder width.
- ⑪ 'B' or 'C' Joint. 2' minimum, 4' maximum.

ROAD DESIGN DETAIL	REVISION	
	3	04-20-21
	533-04	
SHEET 2 of 2		
REVISIONS: Added End Taper note.		

**PARALLEL DECELERATION TAPER
FOR 24' RAMP
(60 MPH DESIGN SPEED)**

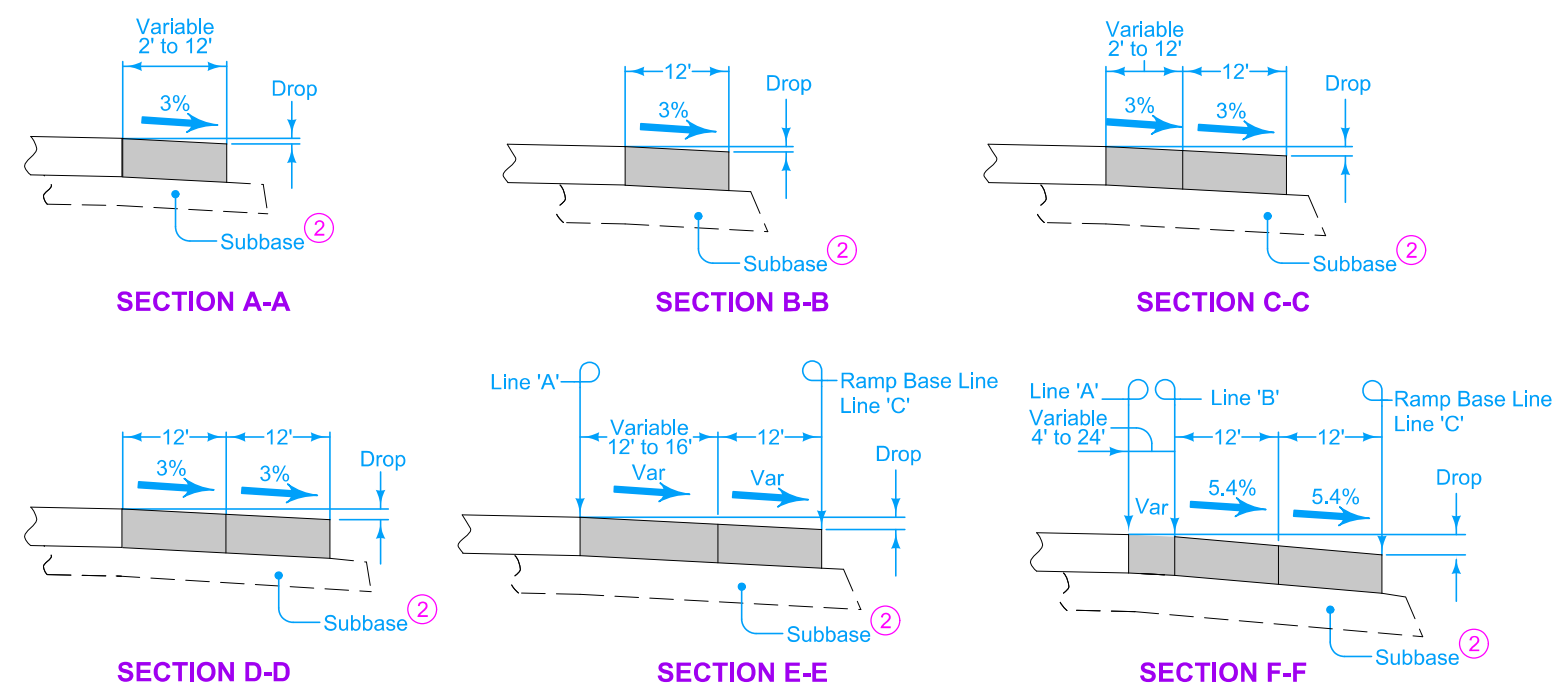


Pt. 'G' to Pt. 'J'
 $\Delta = 09^\circ 31' 13.98''$
 $T = 166.55'$
 $L = 332.33'$
 $E = 6.92'$
 $R = 2000.00'$



NOTE: The algebraic difference between ramp profile grade at point (F) and relative profile grade of mainline at point (H) is 0.61%

DISTANCE FROM POINT (H) ALONG LINE 'A' (Ft.)	310.8	300	275	250	225	200	175	150	125	106.4	100	75	65	50	25	0	25	31.2	
From Line 'A' To Line 'B'	OFFSET (Ft.)	24.00	22.36	18.77	15.50	12.55	9.91	7.58	5.57	3.86	2.80								
	SLOPE (%)	Constant 4.0% Slope										4.51	5.02	5.40					
	DROP (Ft.)	0.96	0.89	0.75	0.62	0.50	0.40	0.30	0.25	0.19	0.15								
From Line 'B' To Line 'C'	OFFSET (Ft.)	Constant 24' Offset																	
	SLOPE (%)	Constant 5.4% Slope																	
	DROP (Ft.)	Constant 1.30' Drop																	
From Line 'A' To Line 'C'	OFFSET (Ft.)											26.50	25.41	25.06	24.63	24.16	24.00	24.00	
	SLOPE (%)											5.40	5.40	5.40	5.04	4.41	3.78	3.15	3.00
	DROP (Ft.)	2.26	2.19	2.05	1.92	1.80	1.69	1.60	1.55	1.49	1.45	1.43	1.37	1.35	1.24	1.07	0.91	0.76	0.72
DISTANCE FROM POINT (F) ALONG LINE 'C' (Ft.)		308.30	297.54	272.58	247.67	202.79	197.95	173.14	148.36	123.60	105.21	100.04	75.02	65.01	50.01	25.00	0.00		



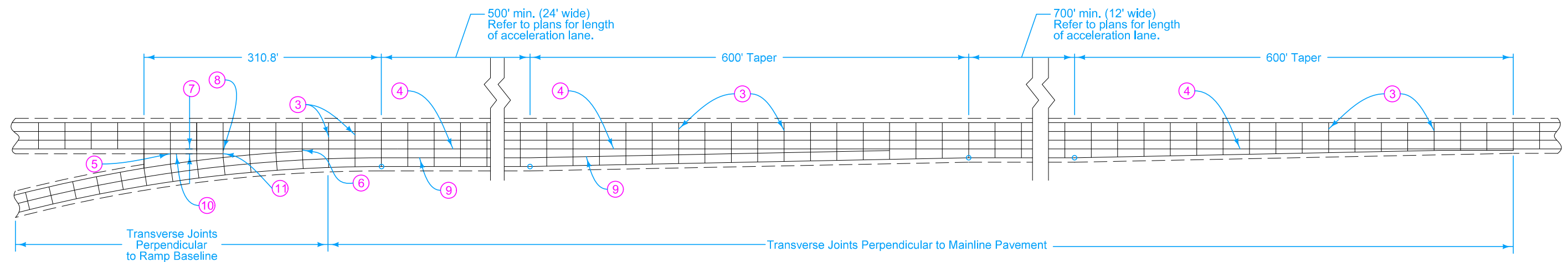
- Construct ramp entrance pavement the same thickness as mainline pavement.
- For joint detail, see PV-101.
- ① For header construction detail at the end of taper See Typical 7101 or Typical 7102.
- ② Construct subbase for ramp entrance pavement the same thickness as mainline subbase.

(W ₀)	Shoulder Width beyond Edge of Mainline Pavement		
	8'	10'	12'
12'	NA	200'	300'

NOTE: W₀ is the width of the outside lane to the Edge of Pavement.

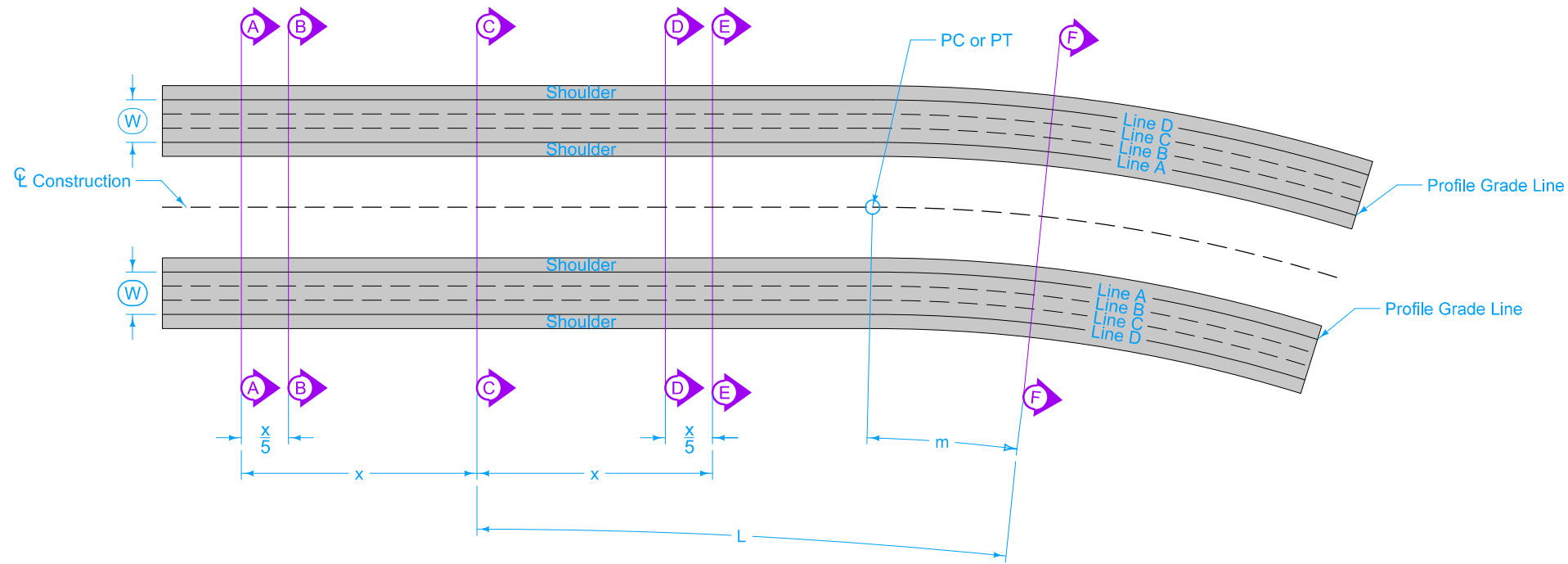
ROAD DESIGN DETAIL	REVISION	
	3	04-20-21
	533-05	
SHEET 1 of 2		
REVISIONS: Added Point J and Ramp Profile note.		

**PARALLEL ACCELERATION TAPER
FOR 24' RAMP
(60 MPH DESIGN SPEED)**

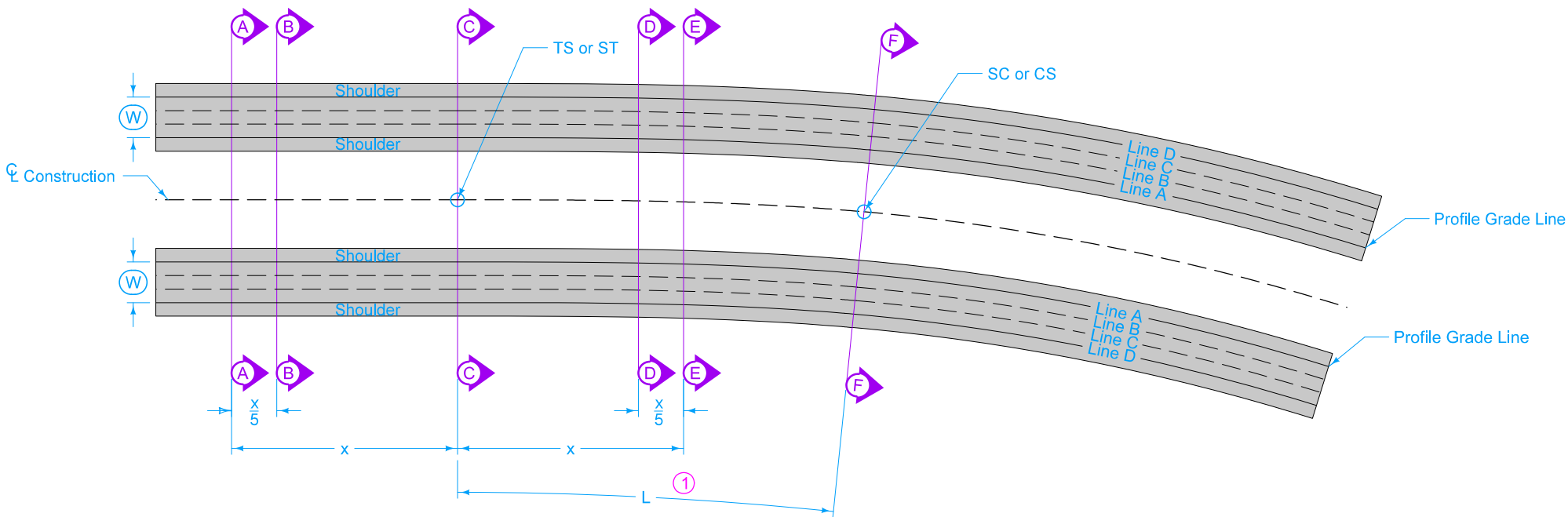


- ③ 'CD' Joints at 17' spacing.
- ④ 'BT-2' or 'KT-2' Joint.
- ⑤ 'C' Joint.
- ⑥ 'B' Joint, 2' minimum, 4' maximum.
- ⑦ 10' minimum or equal to mainline shoulder width.
- ⑧ Construct transverse joints through the gore perpendicular to mainline pavement.
- ⑨ 'L-2' Joint.
- ⑩ 'C' Joint parallel to mainline pavement.
- ⑪ 'B' or 'C' Joint, 2' minimum, 4' maximum.

		REVISION	
		3	04-20-21
ROAD DESIGN DETAIL		533-05	
		SHEET 2 of 2	
REVISIONS: Added Point J and Ramp Profile note.			
PARALLEL ACCELERATION TAPER FOR 24' RAMP (60 MPH DESIGN SPEED)			



TRANSITION DETAILS - TANGENT TO CURVE



TRANSITION DETAILS - SPIRAL CURVE

Refer to specific curve data contained in project plans for tangent runout length (x), runoff length (L) and full superlevation (e).

When spiral curve transitions are not required:
 Place 70% of full superlevation at the PC and PT.
 Place 30% of the runoff length within the curve.

Unless otherwise specified, all lengths are measured along the centerline of construction.

Superelevations on this standard are shown for curves to the right. Curves to the left are a mirror image of what is shown.

Smooth curves should be established at the time of construction at sections A-F along the profile edges of lines A-D.

Axis of rotation coincides with profile grade location.

$m = 30\%$ of Runoff Length (L)

$\textcircled{W} = 36'$ Regardless of Pavement Width

$g = \text{Normal Cross Slope (2.5\%)}$

$L = \text{Distance to Change Cross Slope from 0\% to } e$

$e = \text{Superelevation Rate}$

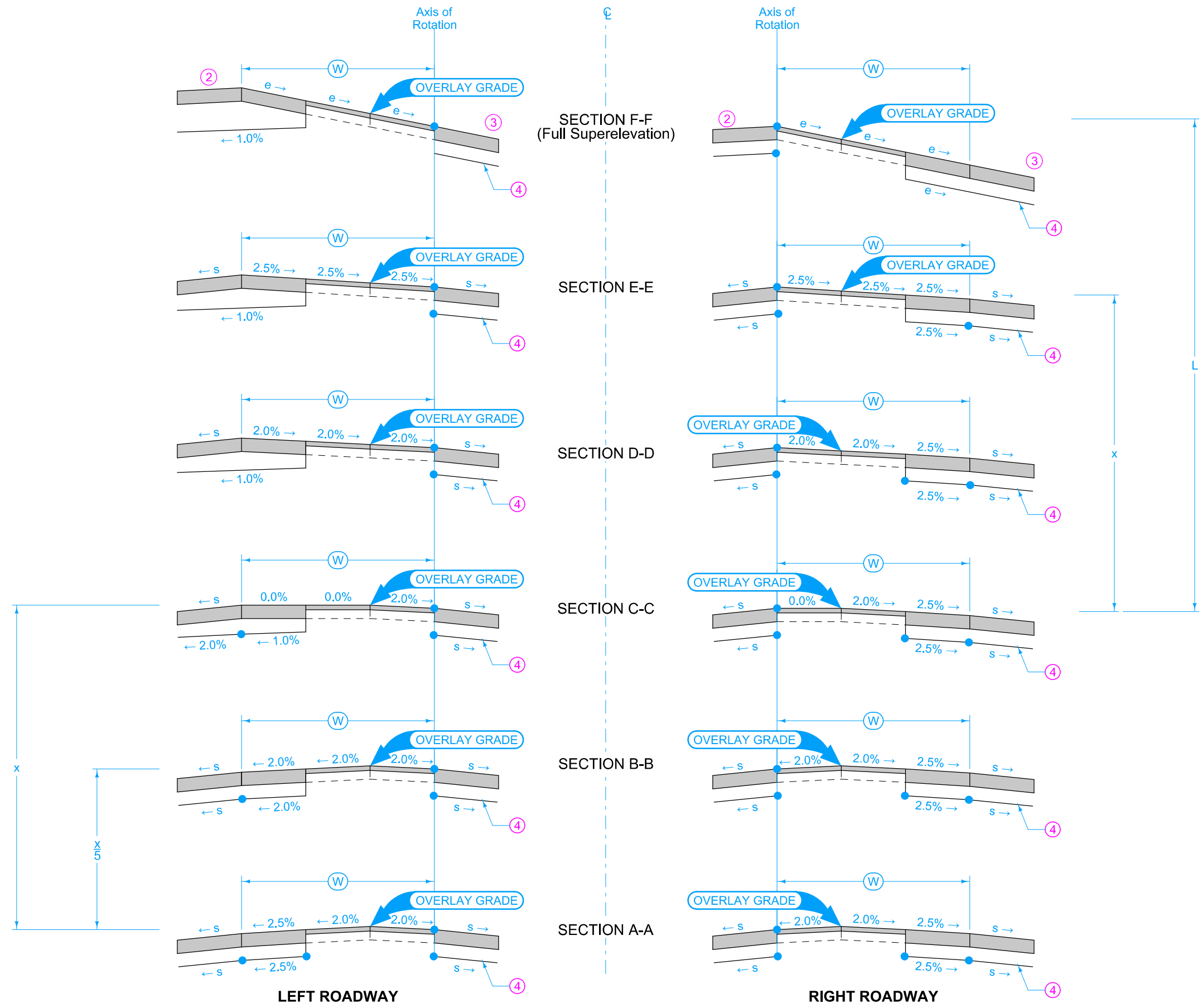
$x = \text{Distance to Change Cross Slope from 0\% to 2.5\%}$

$s = \text{Normal Shoulder Slope}$

① Spiral curve length coincides with runoff length (L)

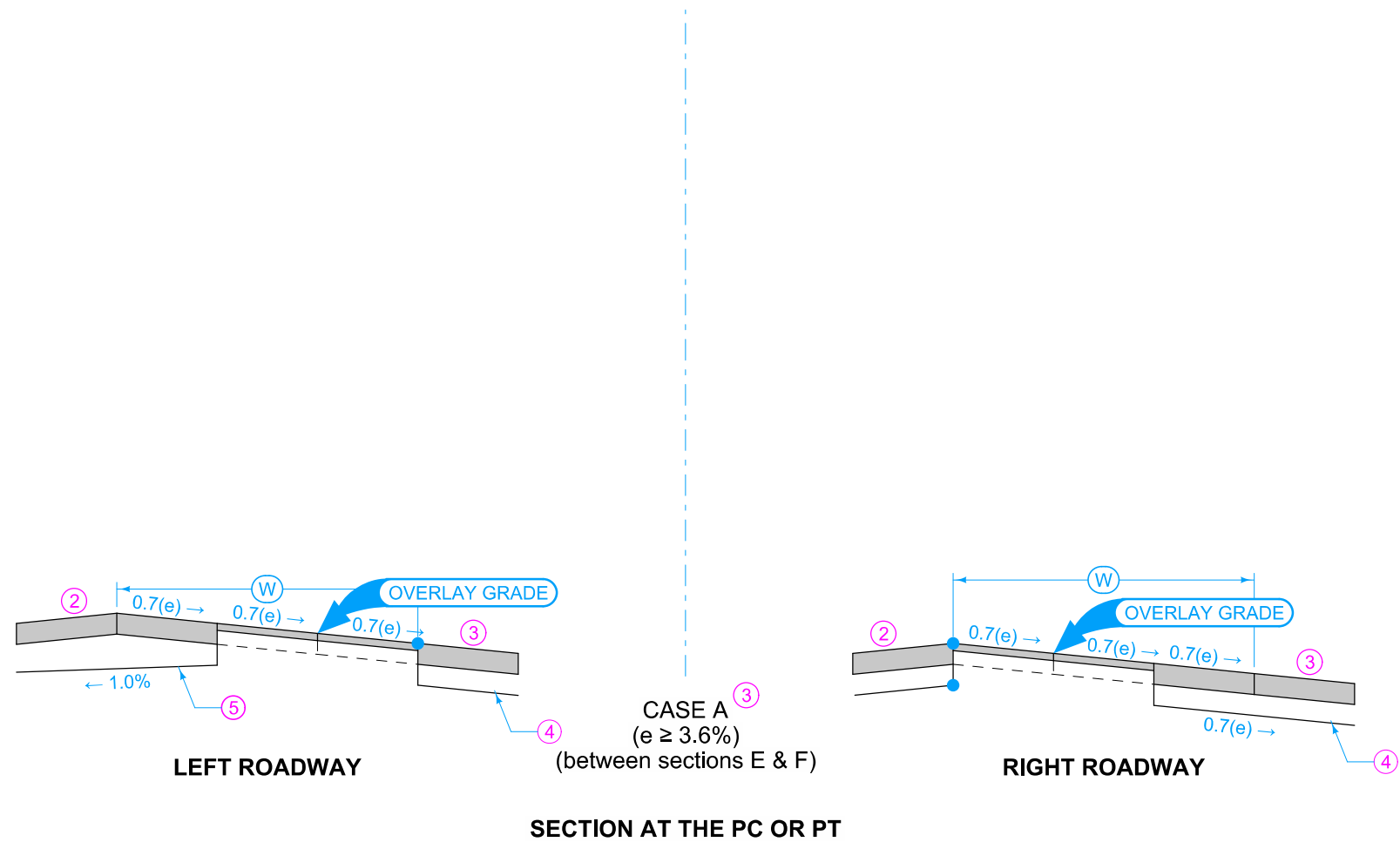
Possible Tabulation:
101-18

MODIFIED	REVISION	
	2	04-21-20
STANDARD ROAD PLAN		PV-304
		SHEET 1 of 4
MODIFICATIONS: None		
SUPERELEVATION DETAILS SIX LANE ROADWAY DEPRESSED MEDIAN OVERLAY AND WIDEN		



- ② High Side Shoulder: Maintain normal shoulder cross slope (s), until the cross slope break with the adjacent pavement reaches 8.0%. Maintain 8% breakover until superelevation rate reaches 7%. If superelevation rate exceeds 7.0%, maintain a 1% shoulder cross slope away from the adjacent pavement.
- ③ Low Side Shoulder: Maintain normal shoulder cross slope (s) until the adjacent pavement slope equals s, then slope the shoulder at the same cross slope as the adjacent pavement.
- ④ Subgrade Surface: Subgrade surface cross slope parallel to pavement surface cross slope.

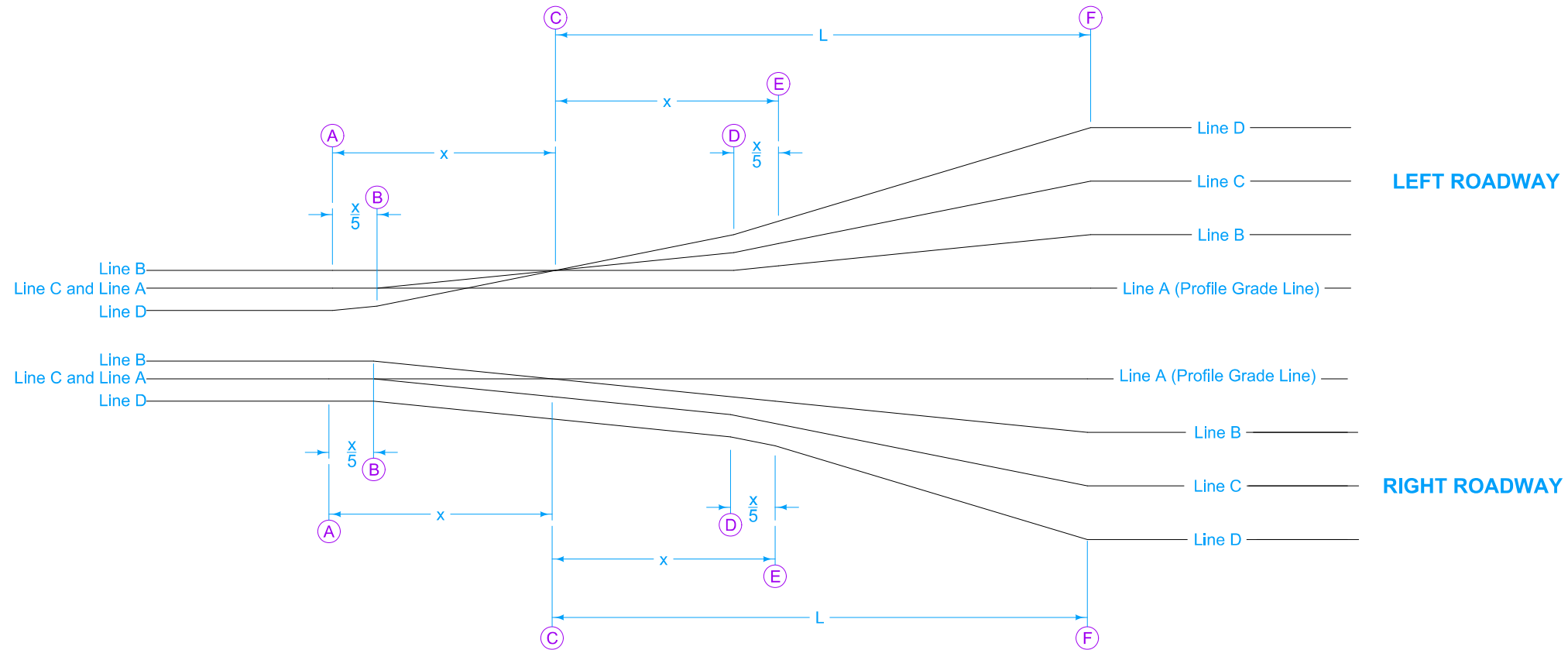
MODIFIED	REVISION	
	2	04-21-20
STANDARD ROAD PLAN		PV-304
		SHEET 2 of 4
MODIFICATIONS: Profile Location Subgrade Slope		
SUPERELEVATION DETAILS		
SIX LANE ROADWAY		
DEPRESSED MEDIAN		
OVERLAY AND WIDEN		



- ② High Side Shoulder: Maintain normal shoulder cross slope (s), until the cross slope break with the adjacent pavement reaches 8.0%. Maintain 8% breakover until superelevation rate reaches 7%. If superelevation rate exceeds 7.0%, maintain a 1% shoulder cross slope away from the adjacent pavement.
- ③ Low Side Shoulder: Maintain normal shoulder cross slope (s) until the adjacent pavement slope equals s, then slope the shoulder at the same cross slope as the adjacent pavement.
- ④ Subgrade Surface: Subgrade surface cross slope parallel to pavement surface cross slope.
- ⑤ Subgrade Surface: Subgrade surface cross slope a minimum of 1% away from existing pavement

MODIFIED	REVISION	
	2	04-21-20
STANDARD ROAD PLAN	PV-304	
MODIFICATIONS: Profile Location Subgrade Slope		
SUPERELEVATION DETAILS SIX LANE ROADWAY DEPRESSED MEDIAN OVERLAY AND WIDEN		

TABLE OF OFFSETS AND DROPS FOR LEFT ROADWAY							
Location of Cross Sections		(A)	(B)	(C)	(D)	(E)	(F)
From Line A To Line B	Offset (Ft.)	12	12	12	12	12	12
	Slope (%)	2.0	2.0	2.0	2.0	2.5	e
	Drop (Ft.)	0.24	0.24	0.24	0.24	0.30	12(e)
From Line B To Line C	Offset (Ft.)	12	12	12	12	12	12
	Slope (%)	-2.0	-2.0	0.0	2.0	2.5	e
	Drop (Ft.)	-0.24	-0.24	0.0	0.24	0.30	12(e)
From Line C To Line D	Offset (Ft.)	12	12	12	12	12	12
	Slope (%)	-2.5	-2.0	0.0	2.0	2.5	e
	Drop (Ft.)	-0.30	-0.24	0.0	0.24	0.30	12(e)
From Line A To Line D	Offset (Ft.)	36	36	36	36	36	36
	Drop (Ft.)	-0.30	-0.24	0.24	0.72	0.90	36(e)

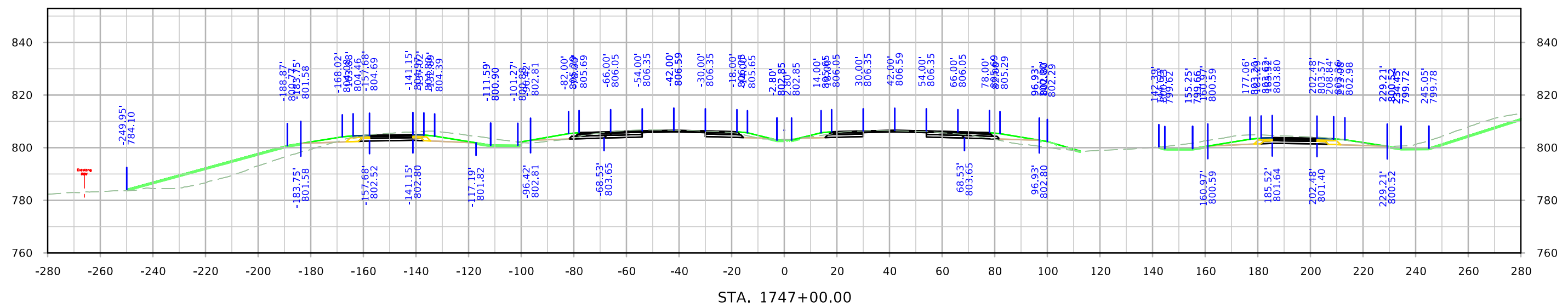
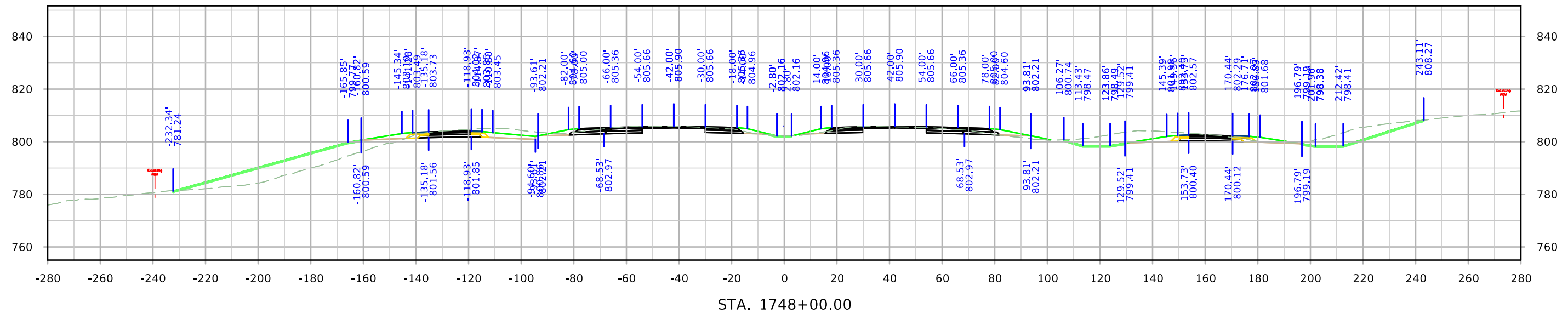


DIAGRAMMATIC PROFILES OF THE PAVEMENT EDGE LINES

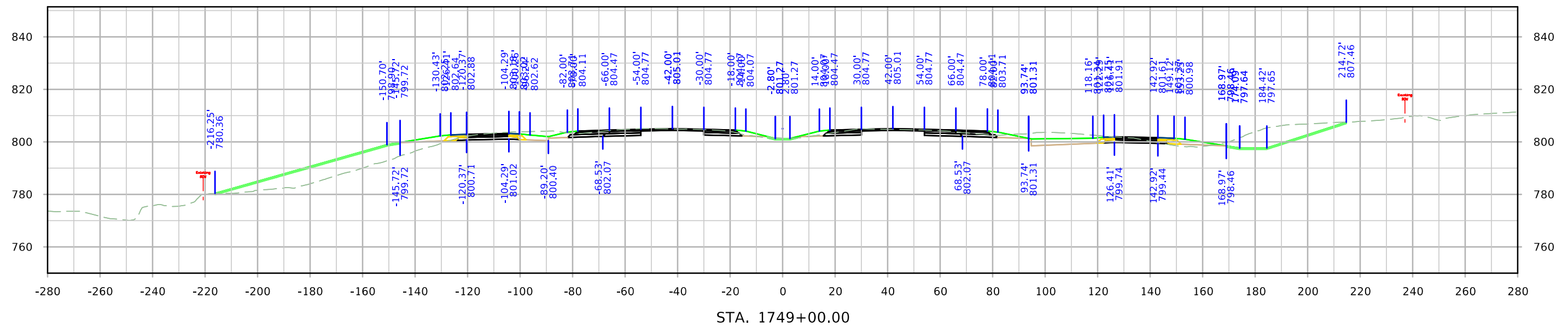
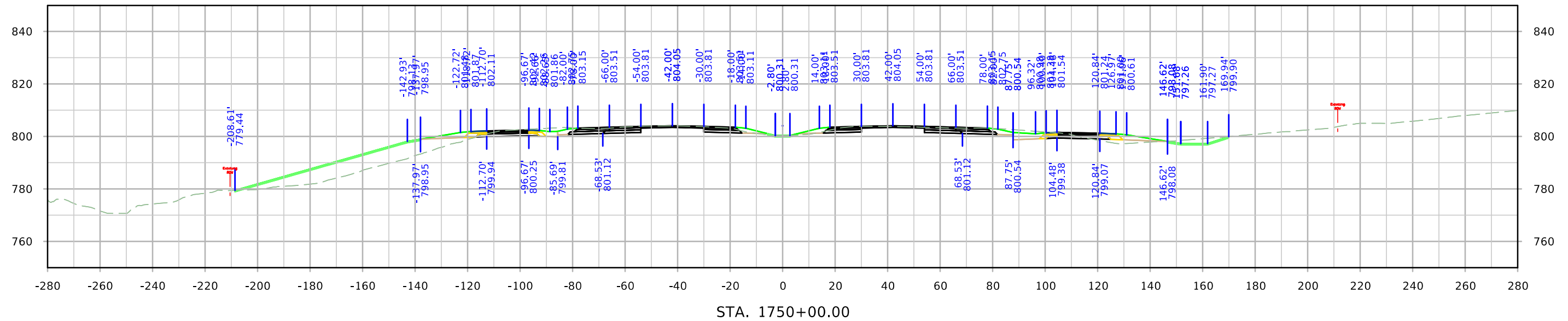
TABLE OF OFFSETS AND DROPS FOR RIGHT ROADWAY							
Location of Cross Sections		(A)	(B)	(C)	(D)	(E)	(F)
From Line A To Line B	Offset (Ft.)	12	12	12	12	12	12
	Slope (%)	2.0	2.0	0.0	-2.0	-2.5	-e
	Drop (Ft.)	0.24	0.24	0.0	-0.24	-0.30	-12(e)
From Line B To Line C	Offset (Ft.)	12	12	12	12	12	12
	Slope (%)	-2.0	-2.0	-2.0	-2.0	-2.5	-e
	Drop (Ft.)	-0.24	-0.24	-0.24	-0.24	-0.30	-12(e)
From Line C To Line D	Offset (Ft.)	12	12	12	12	12	12
	Slope (%)	-2.5	-2.5	-2.5	-2.5	-2.5	-e
	Drop (Ft.)	-0.30	-0.30	-0.30	-0.30	-0.30	-12(e)
From Line A To Line D	Offset (Ft.)	36	36	36	36	36	36
	Slope (%)						
	Drop (Ft.)	-0.30	-0.30	-0.54	-0.78	-0.90	-36(e)

MODIFIED	REVISION	
	2	04-21-20
STANDARD ROAD PLAN	PV-304	
MODIFICATIONS: None		
SUPERELEVATION DETAILS		
SIX LANE ROADWAY		
DEPRESSED MEDIAN		
OVERLAY AND WIDEN		

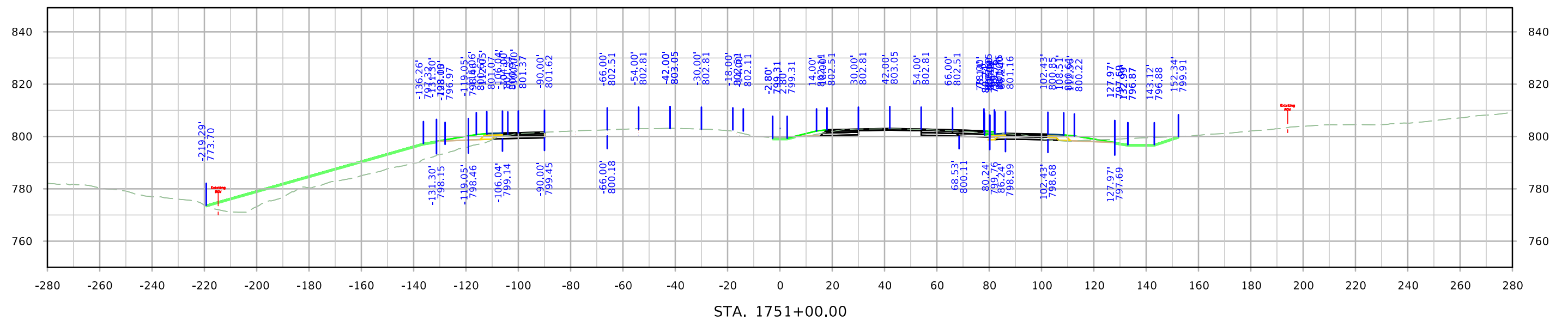
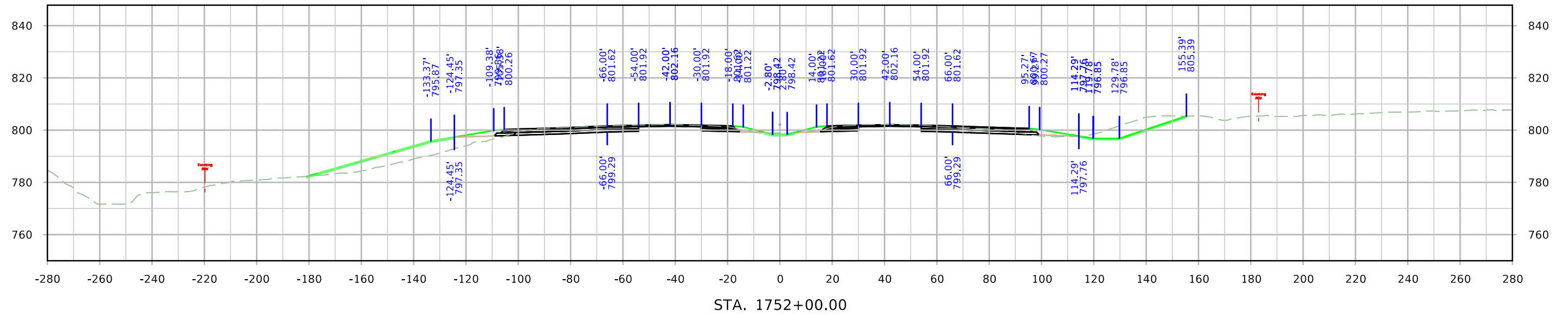
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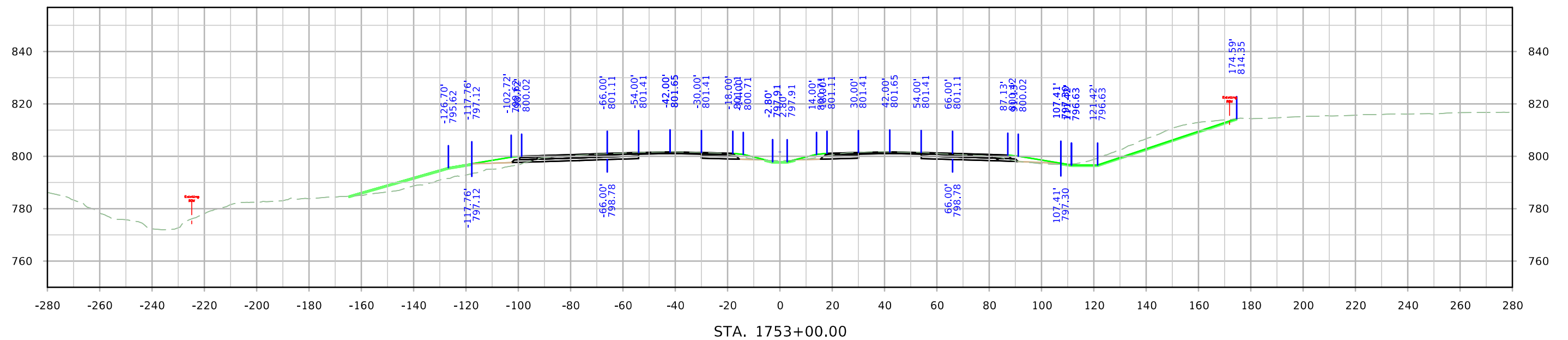
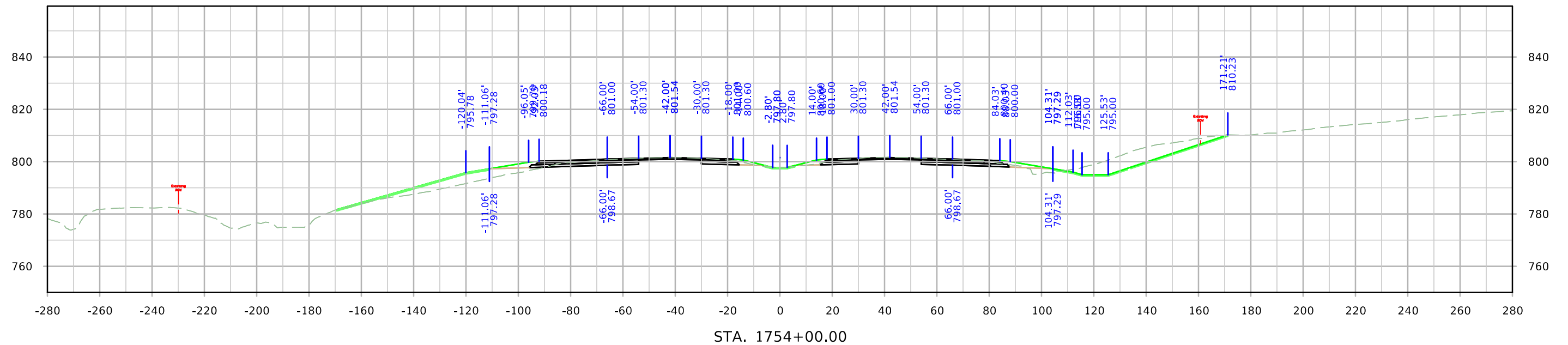
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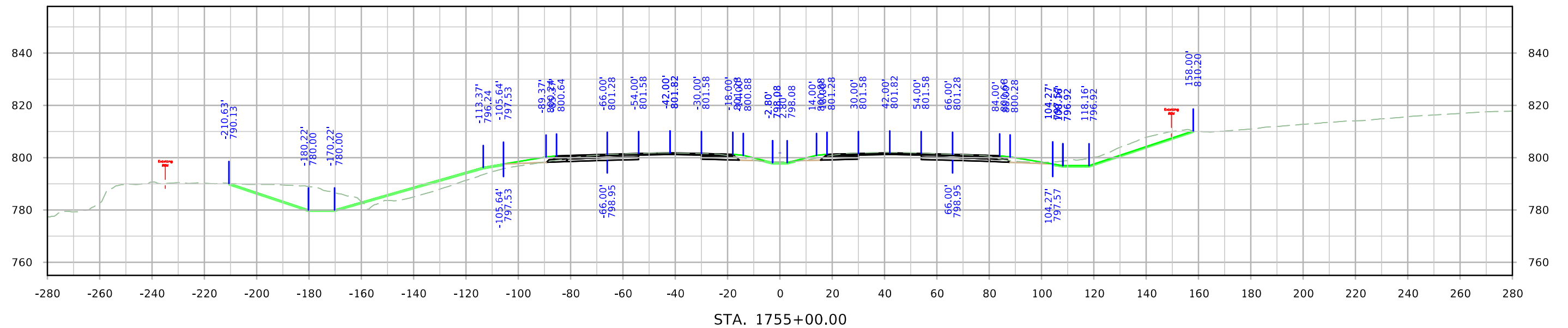
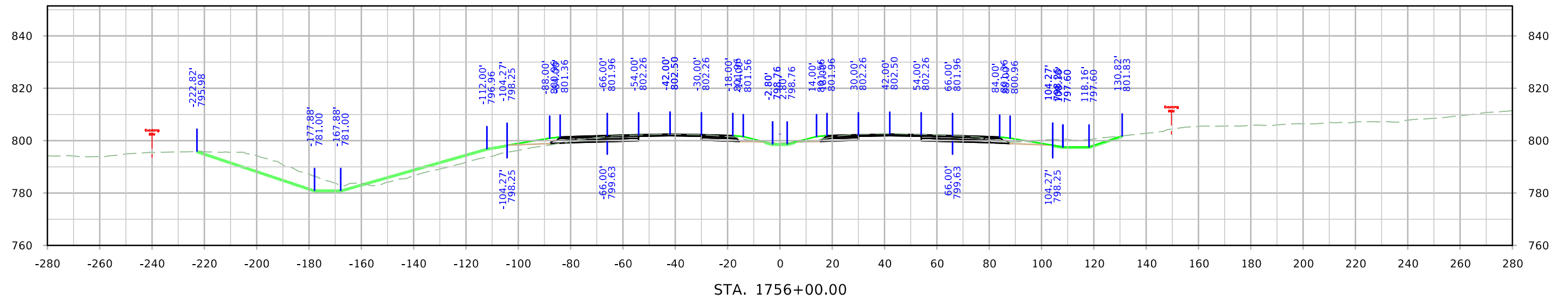
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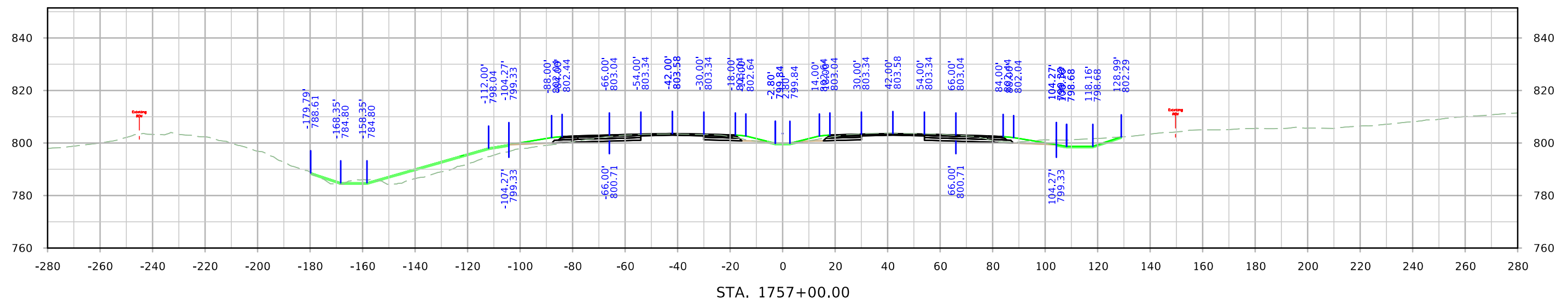
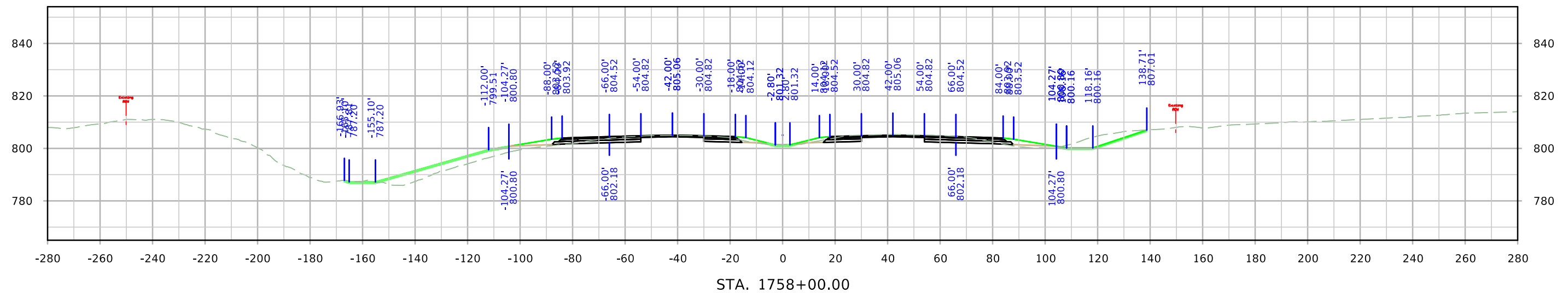
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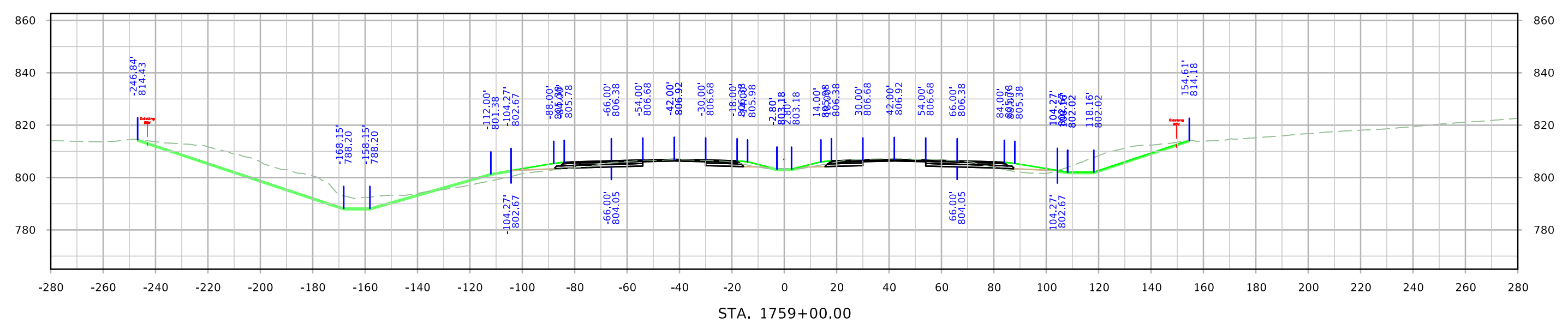
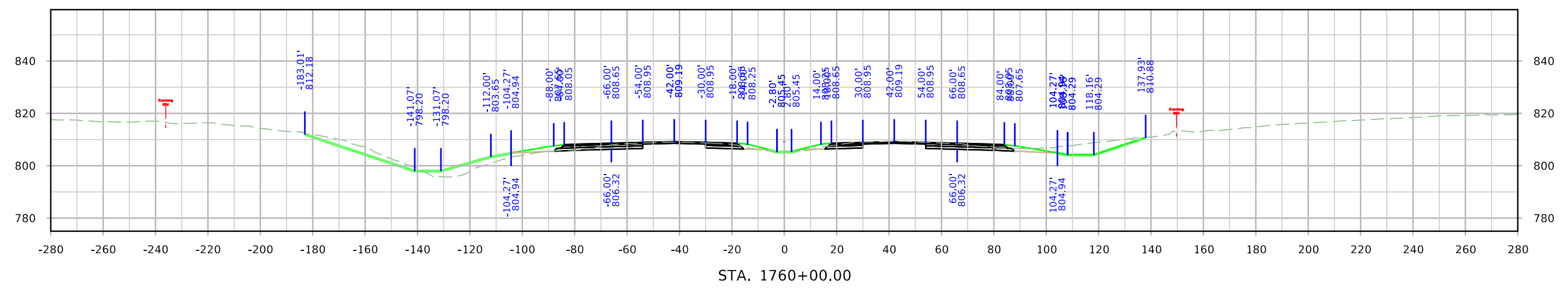
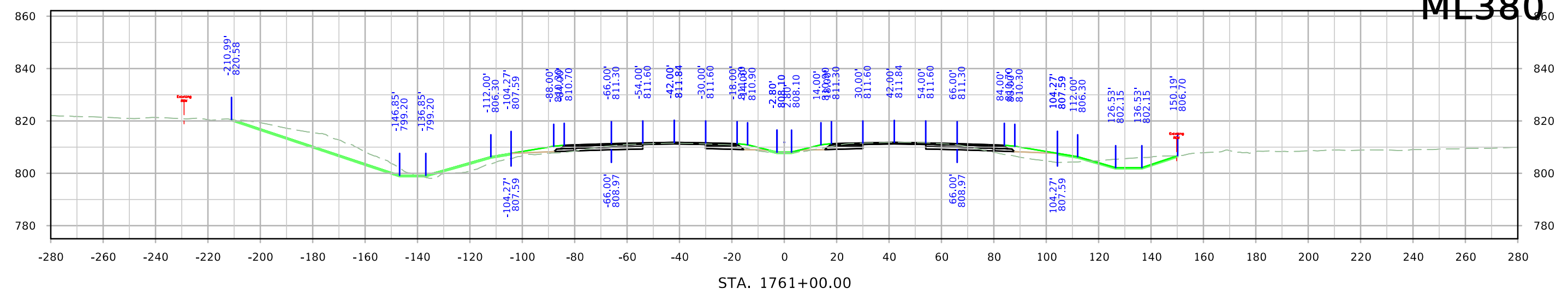
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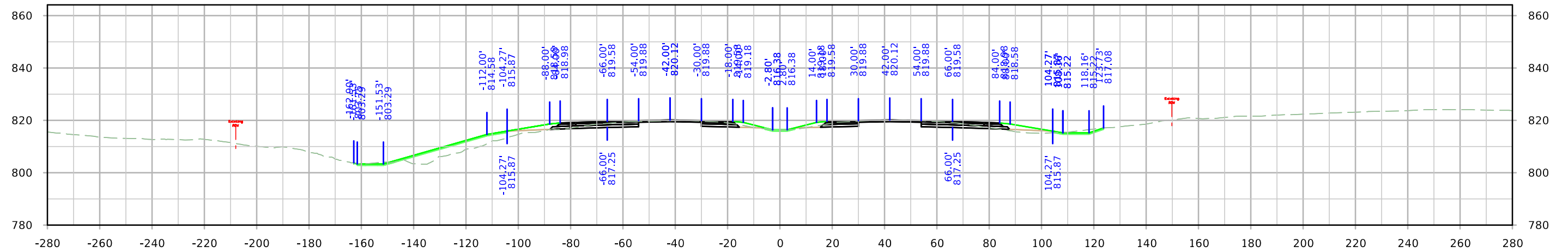
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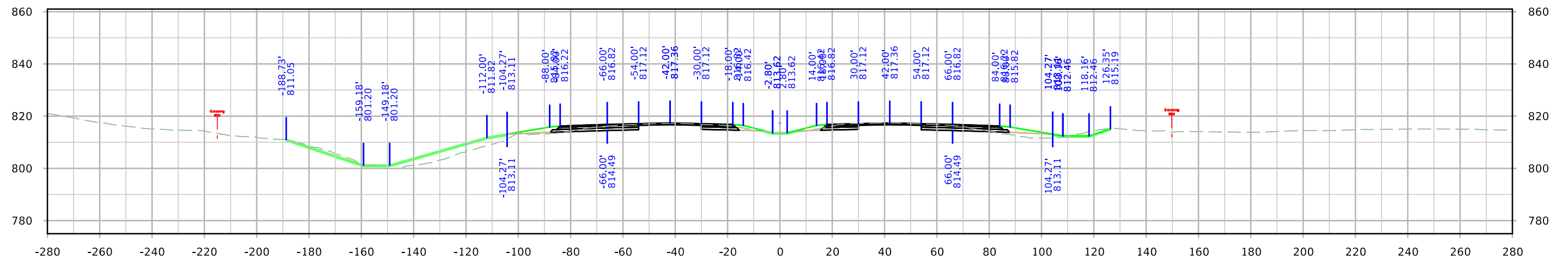
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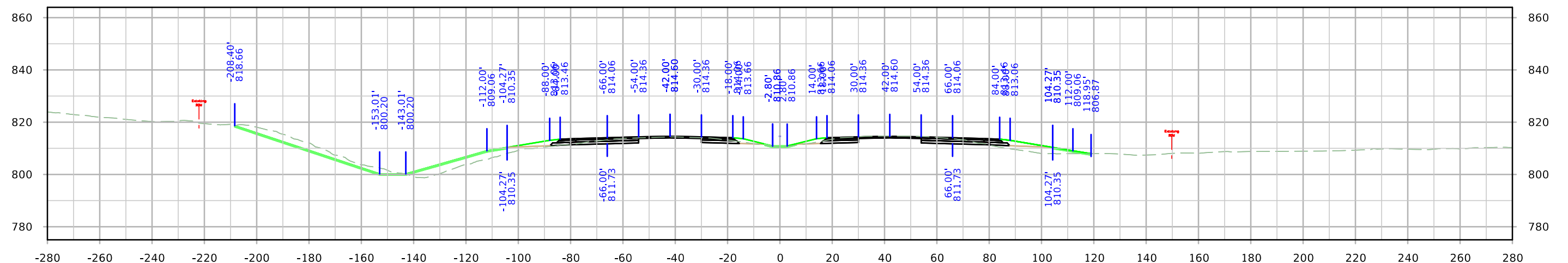
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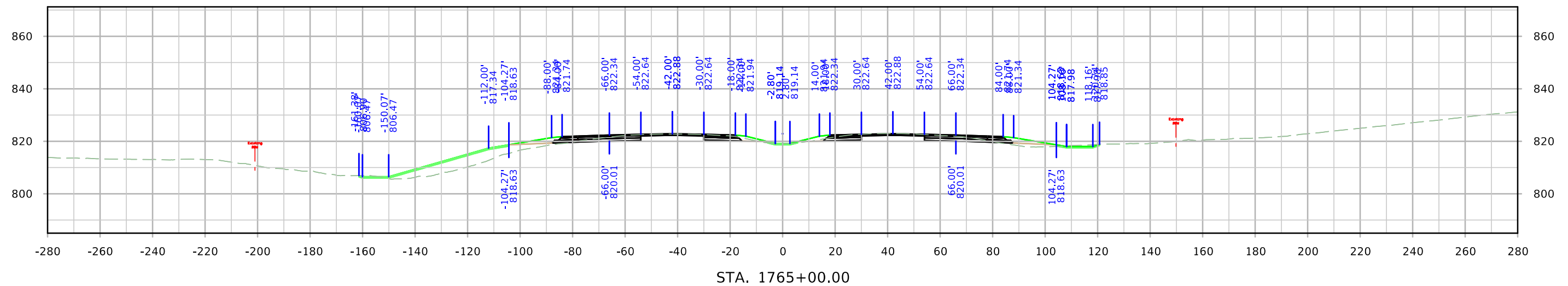
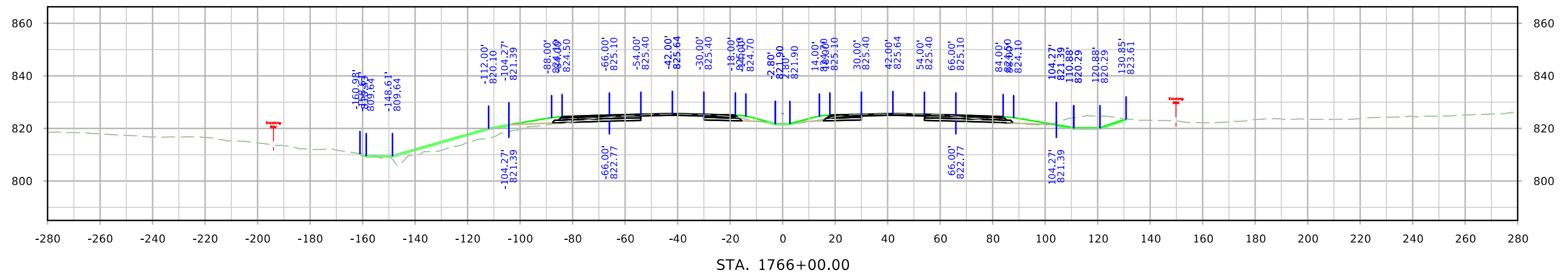
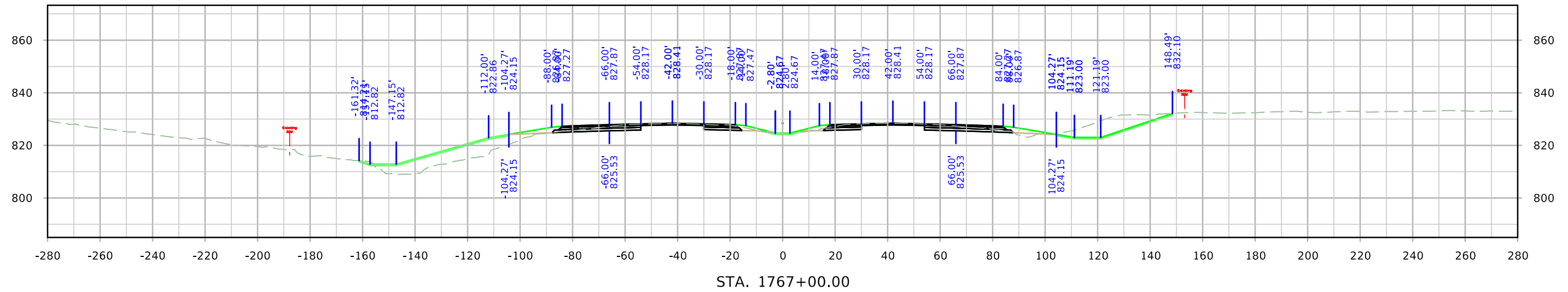


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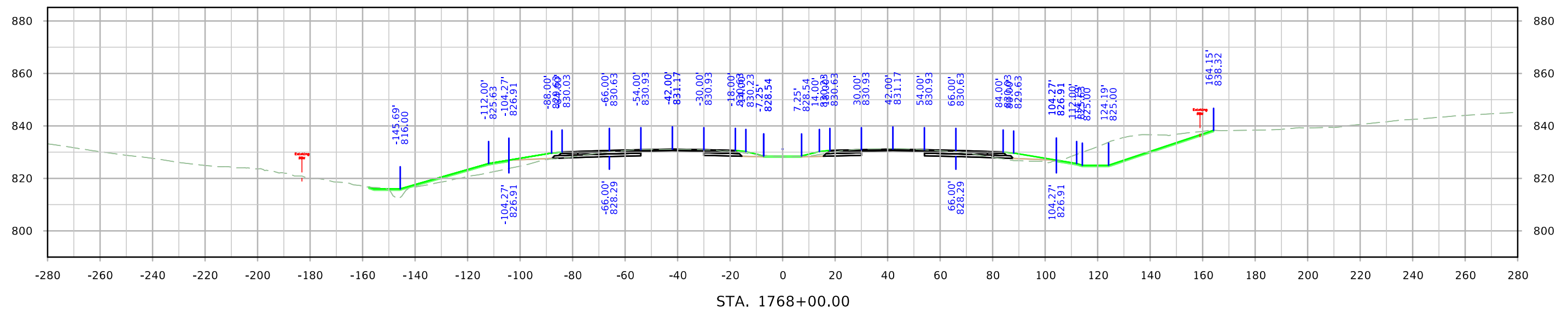
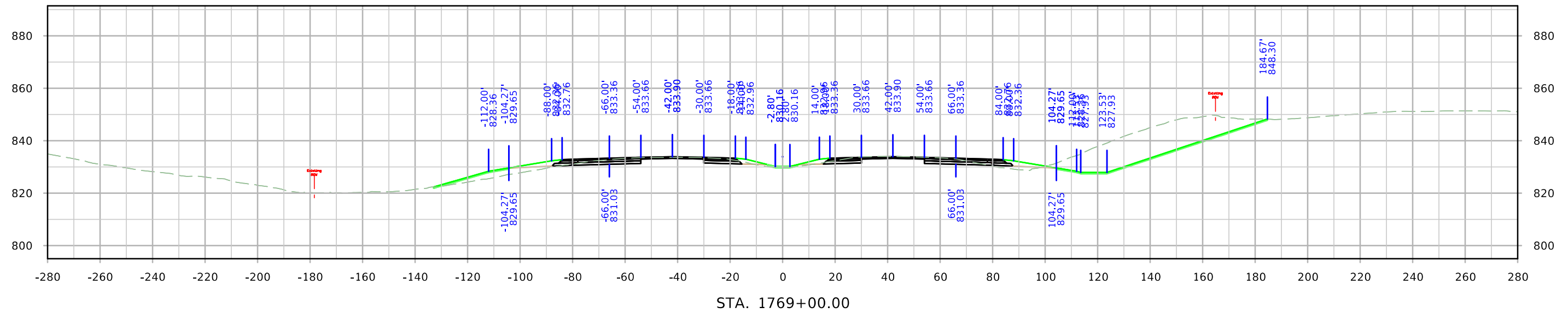


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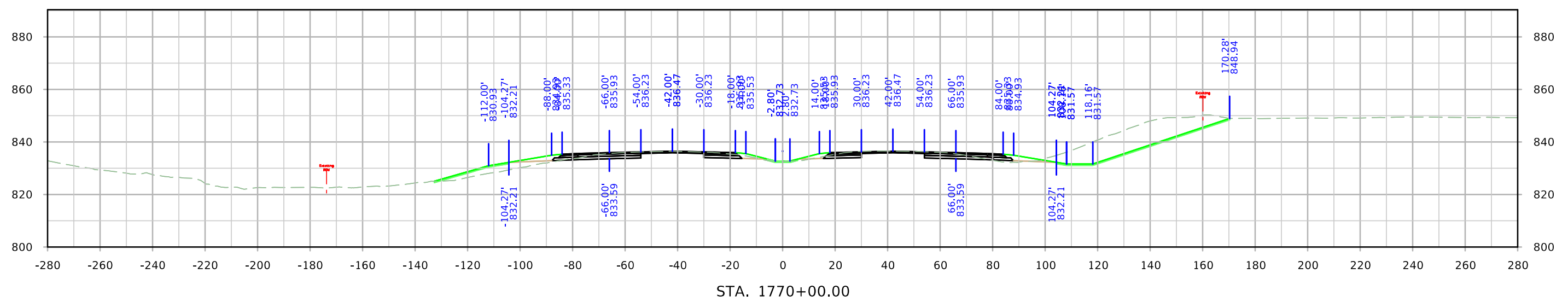
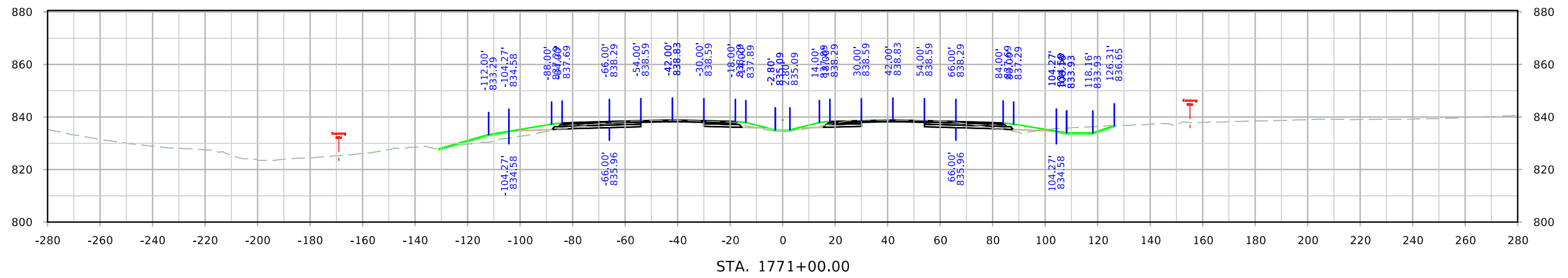
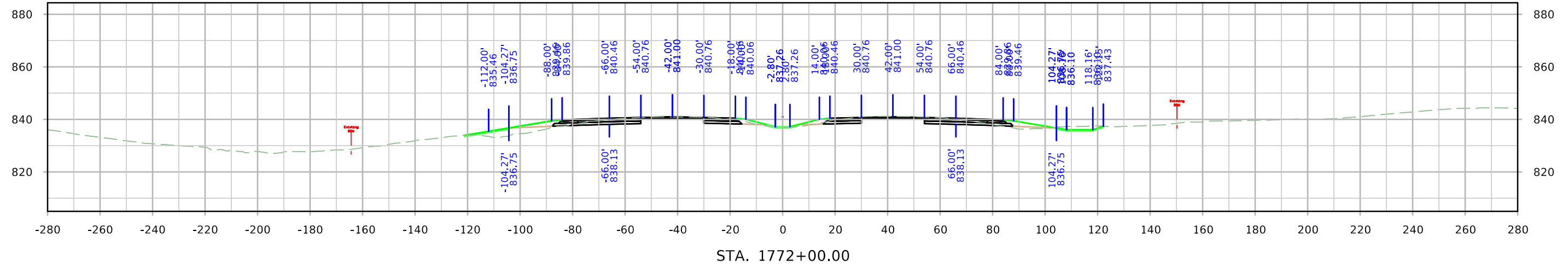
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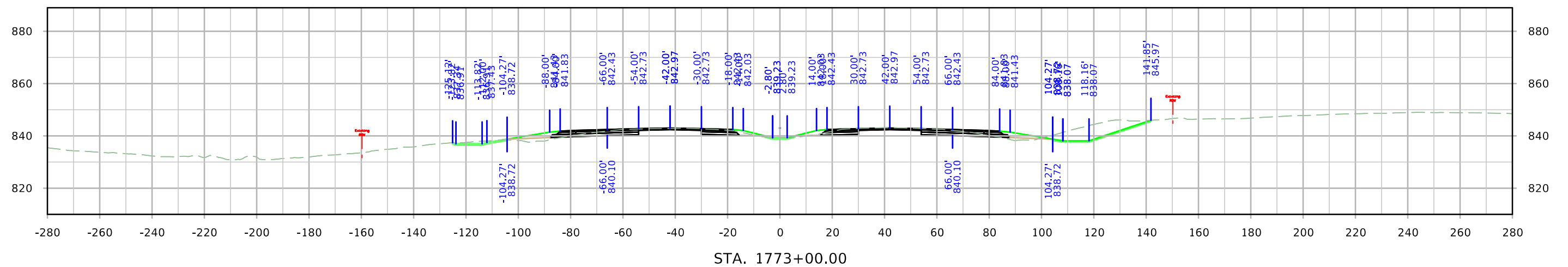
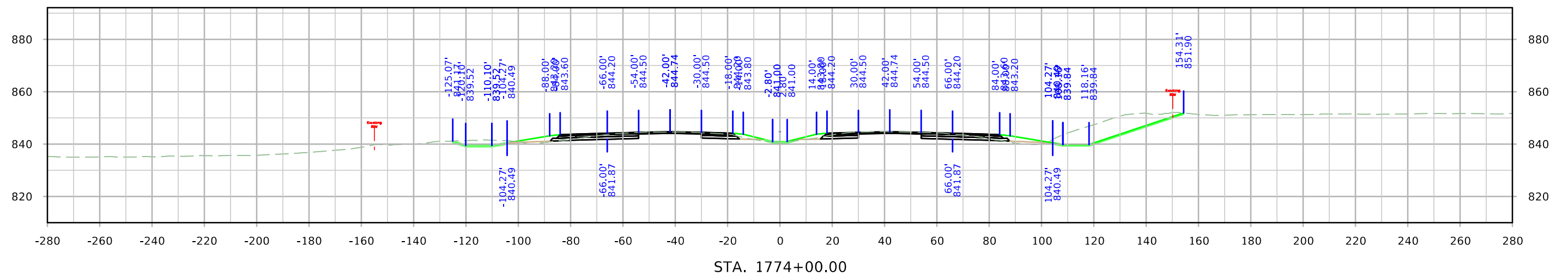
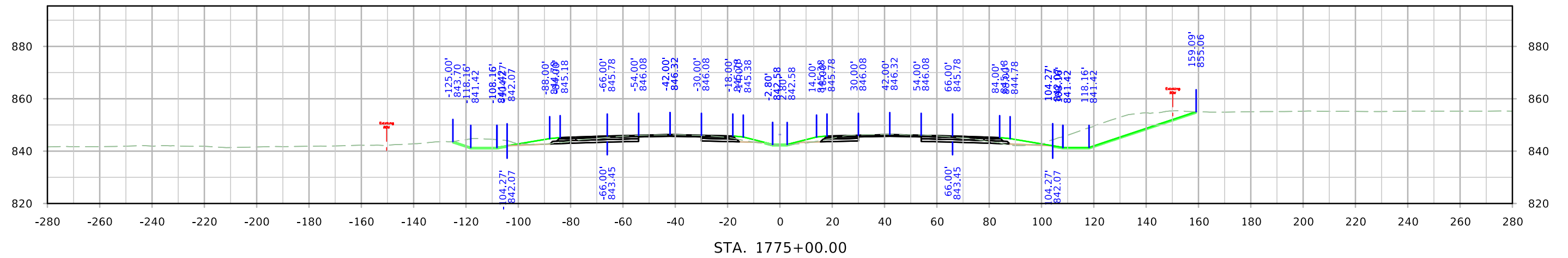
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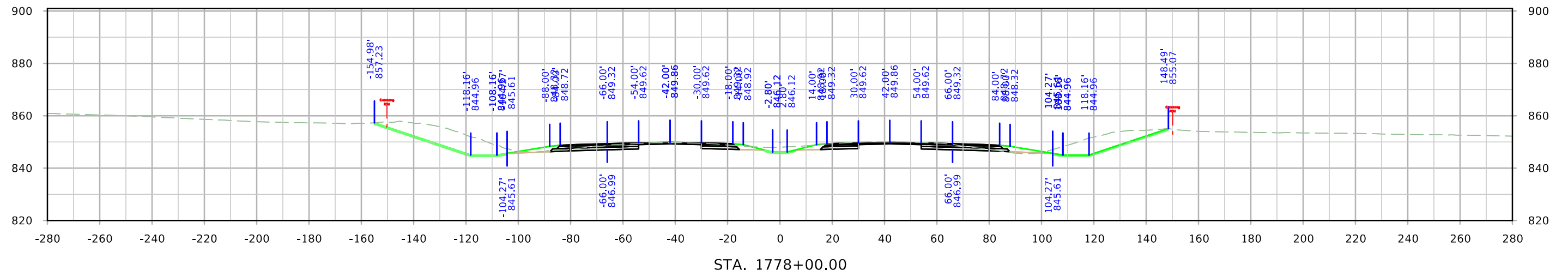
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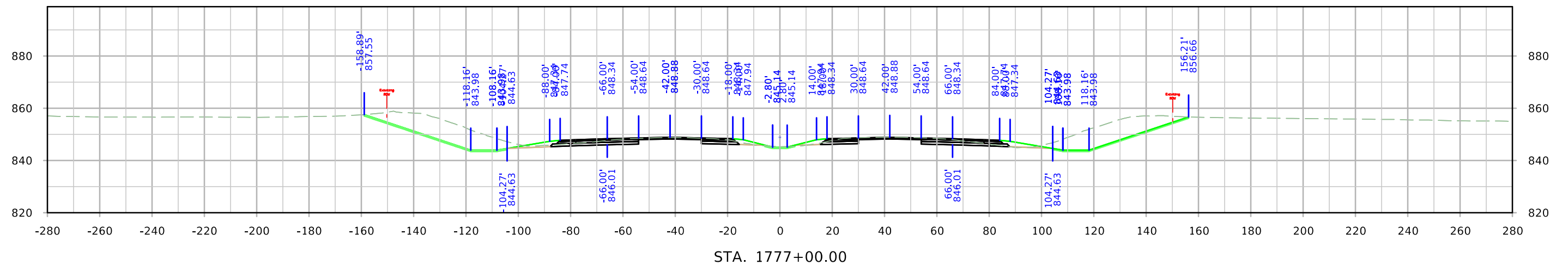
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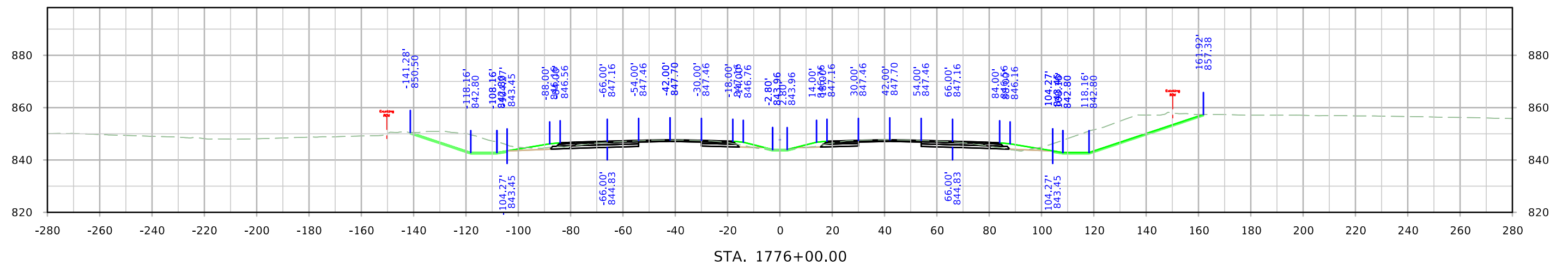
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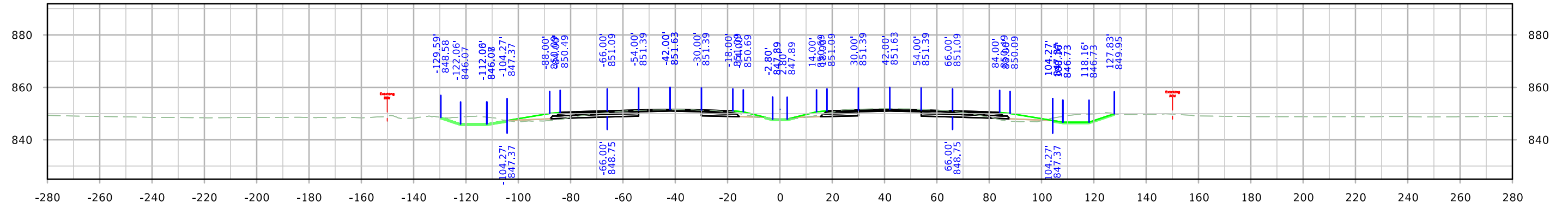


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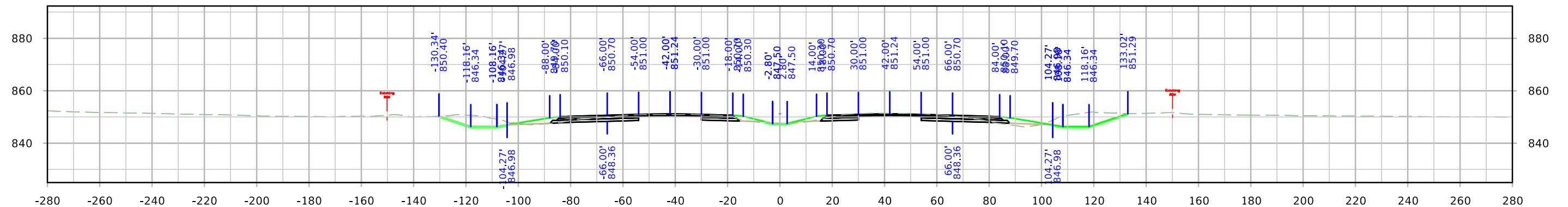


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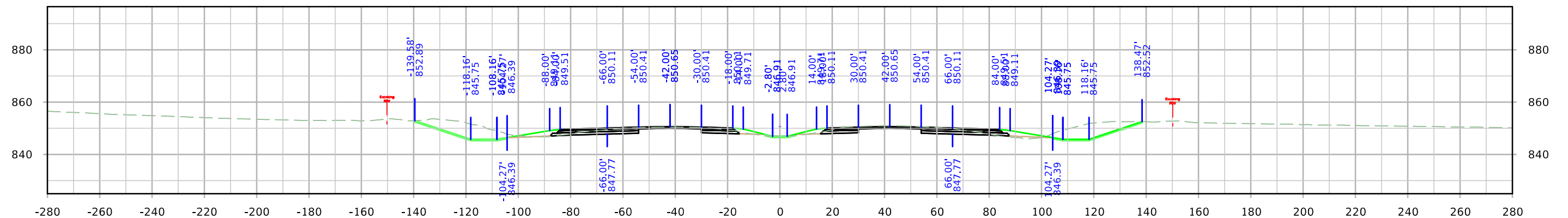
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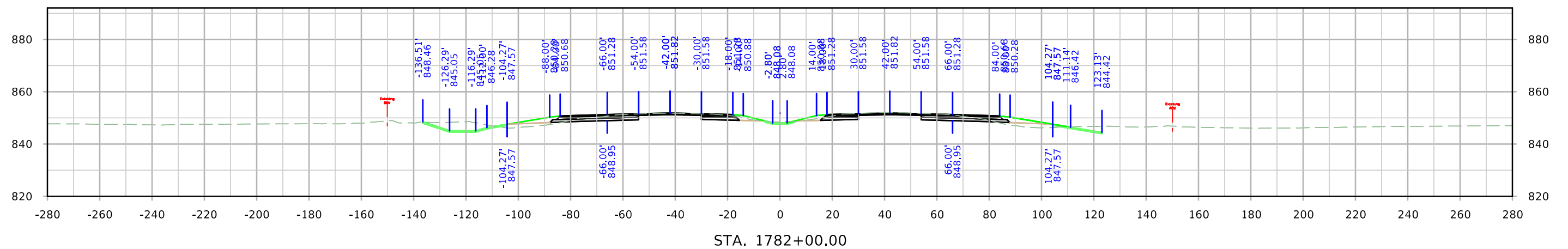
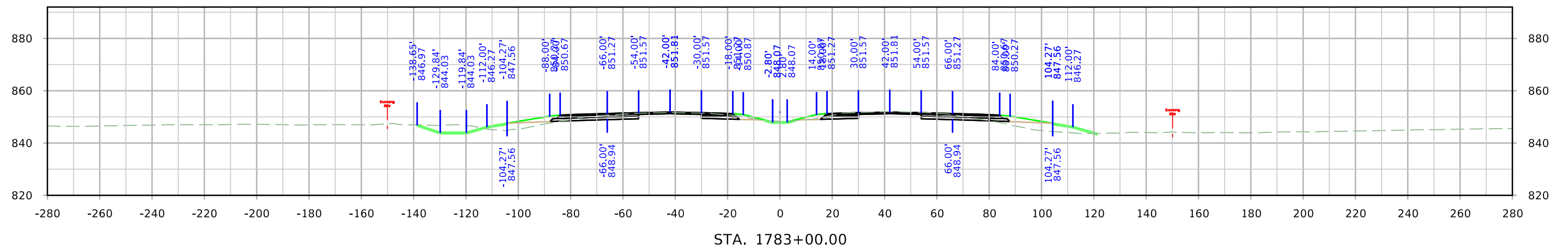
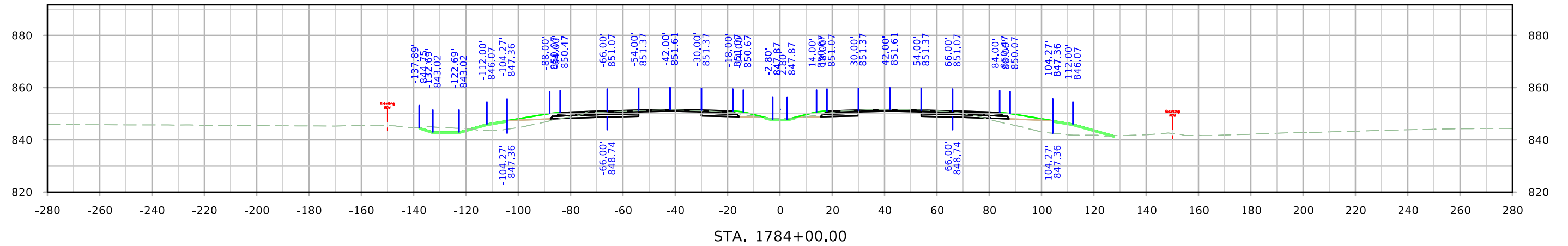


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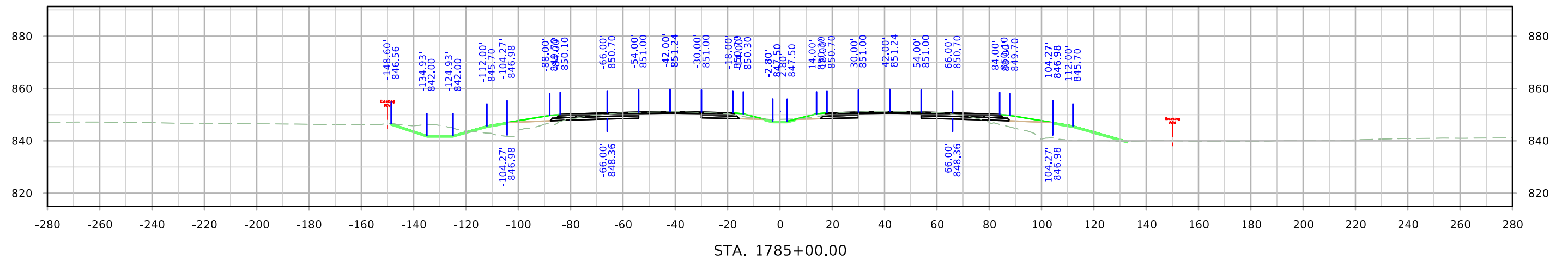
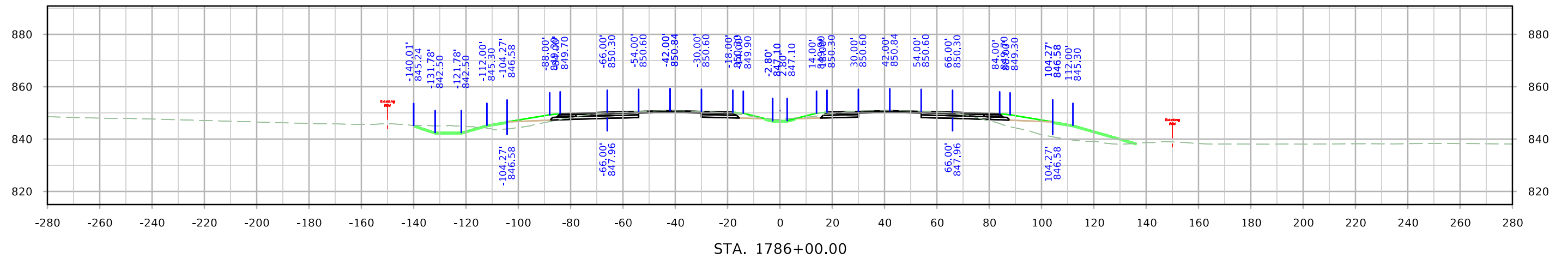
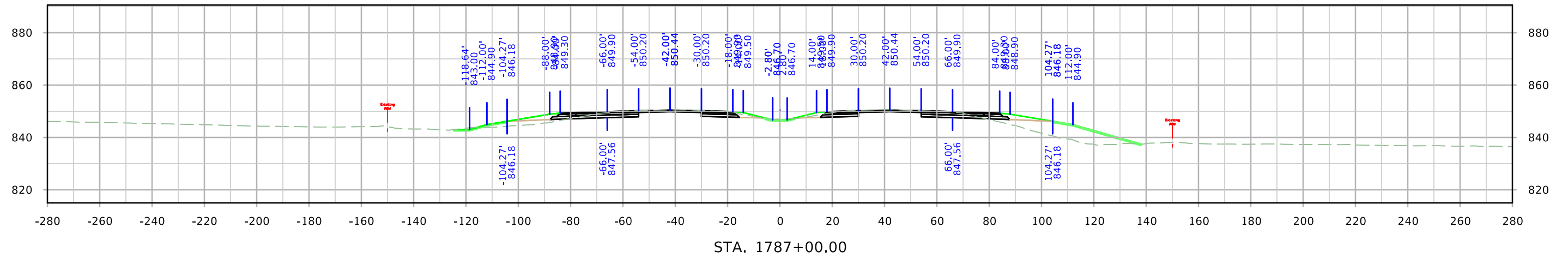


STA. 1779+00.00

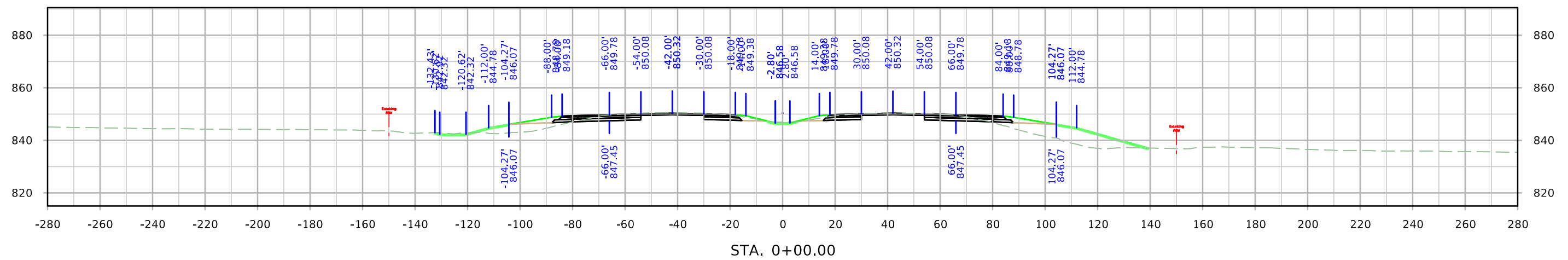
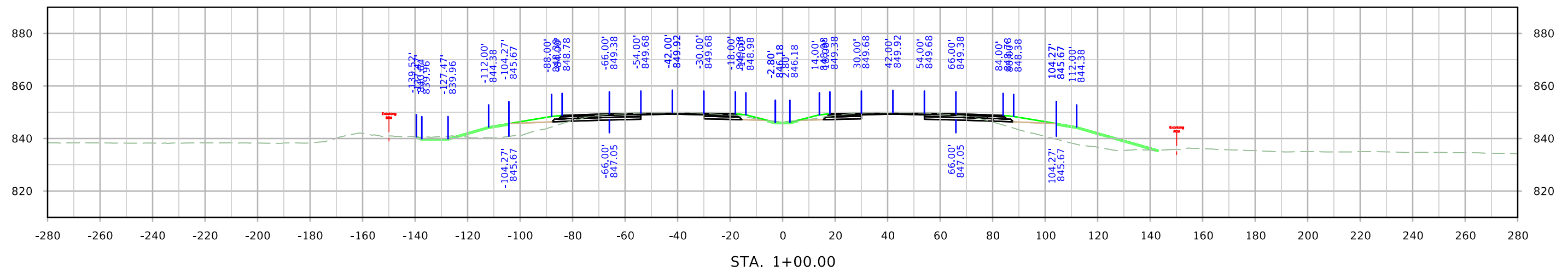
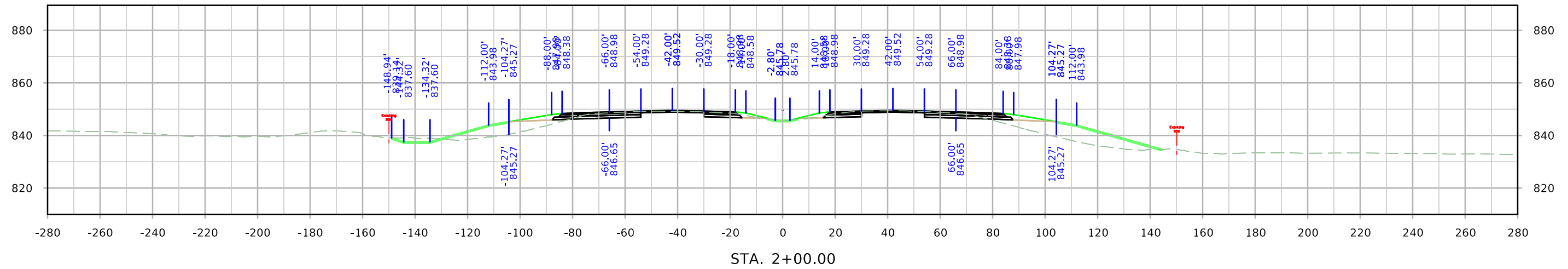
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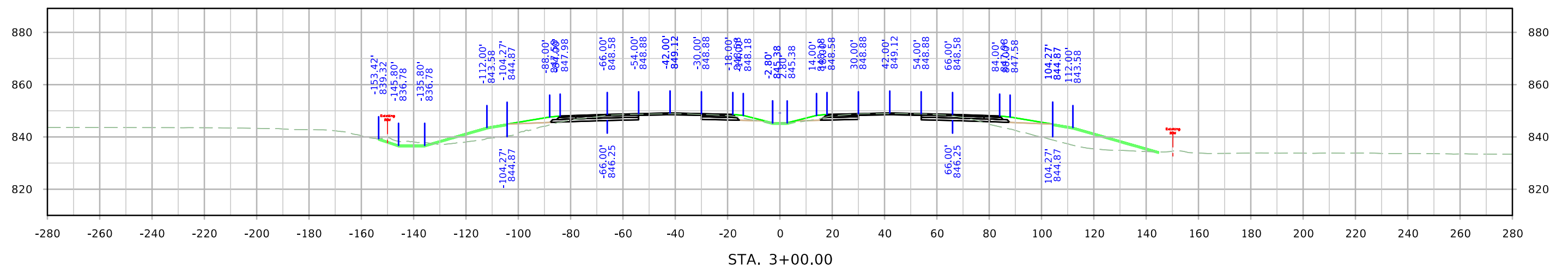
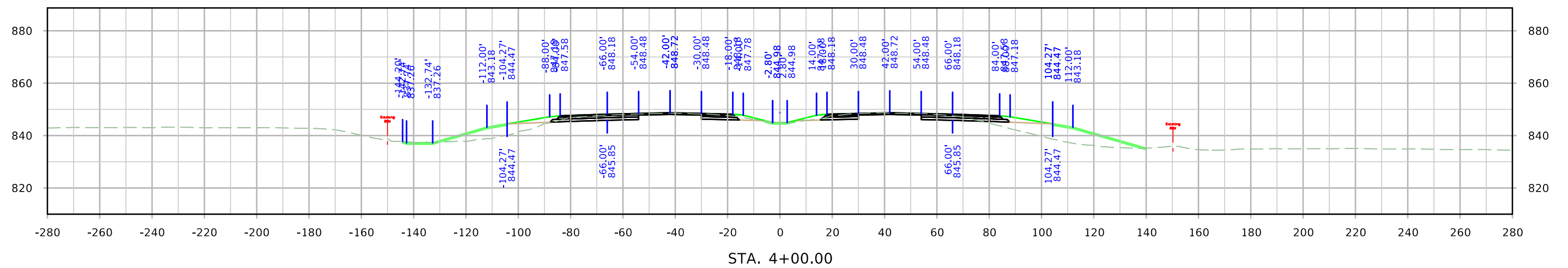
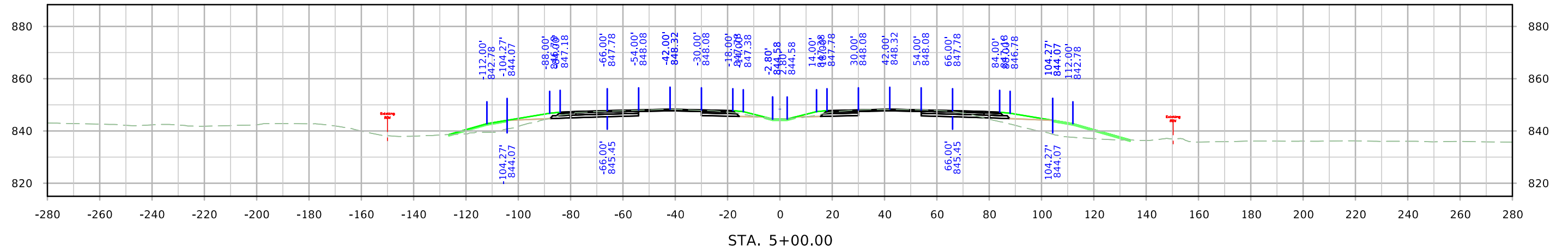
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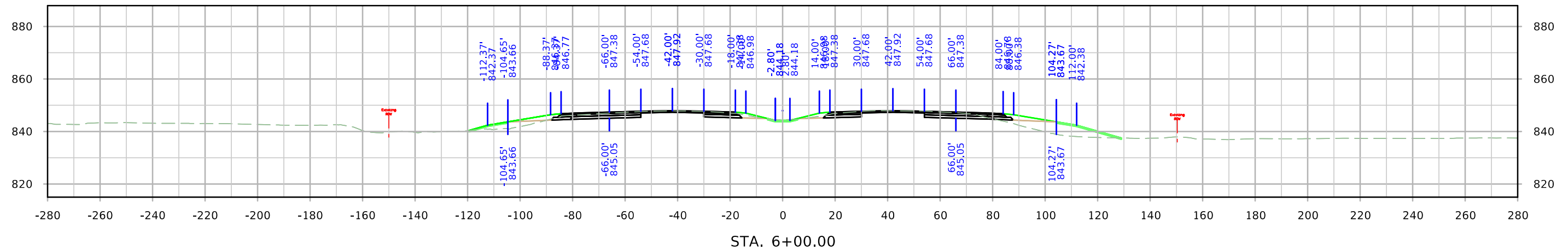
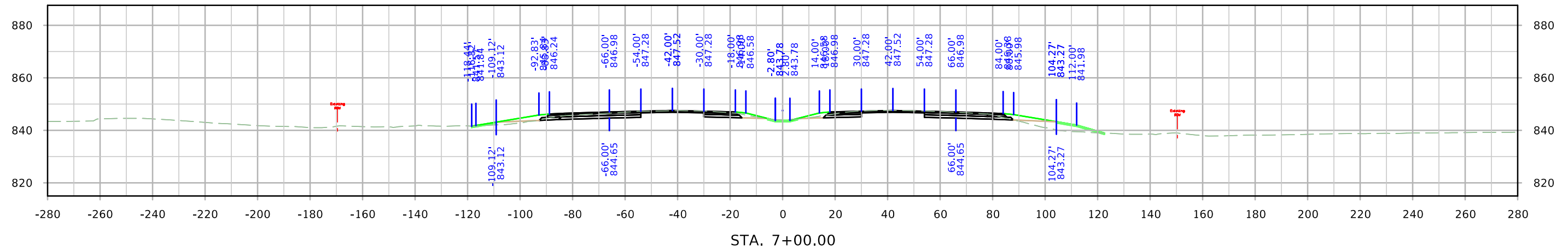
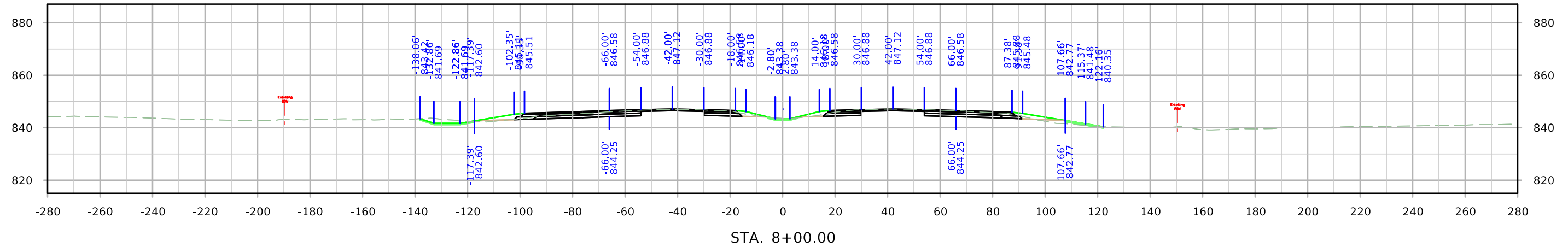
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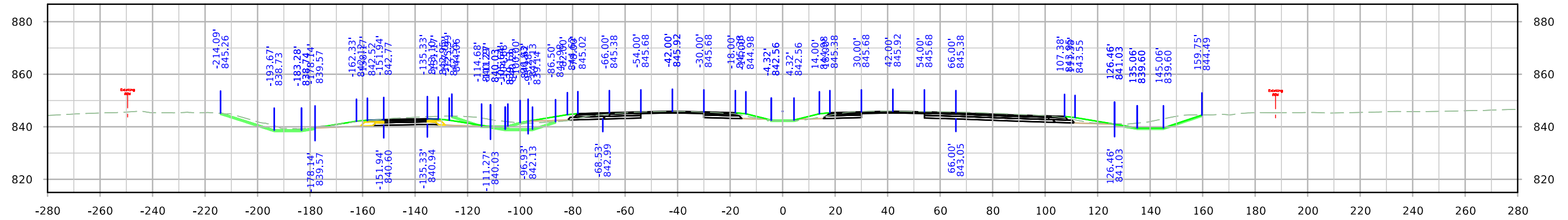
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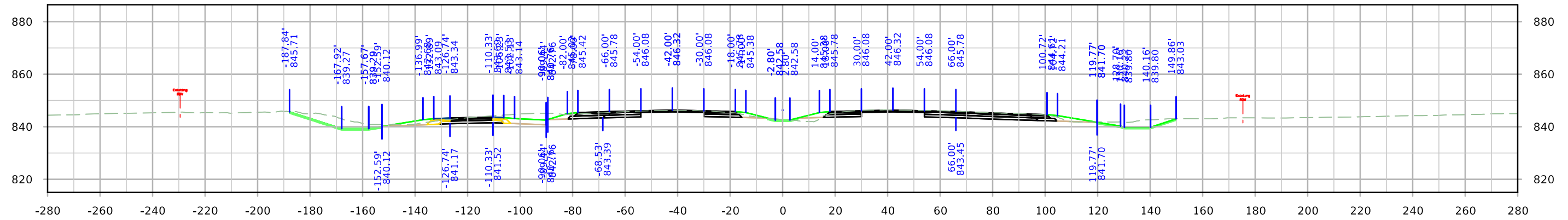
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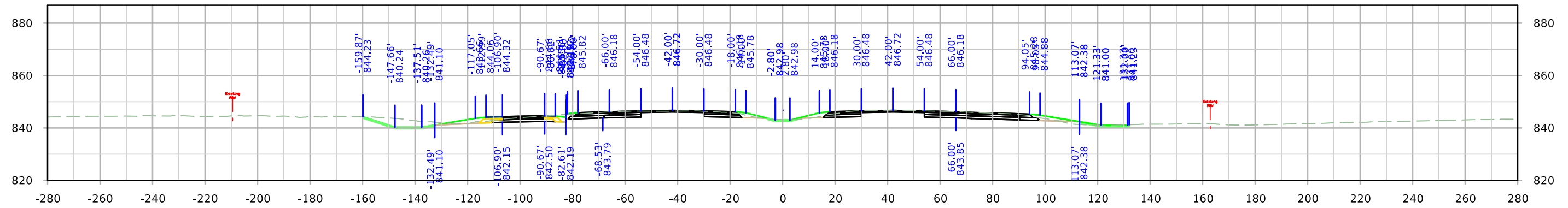
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STA. 11+00.00

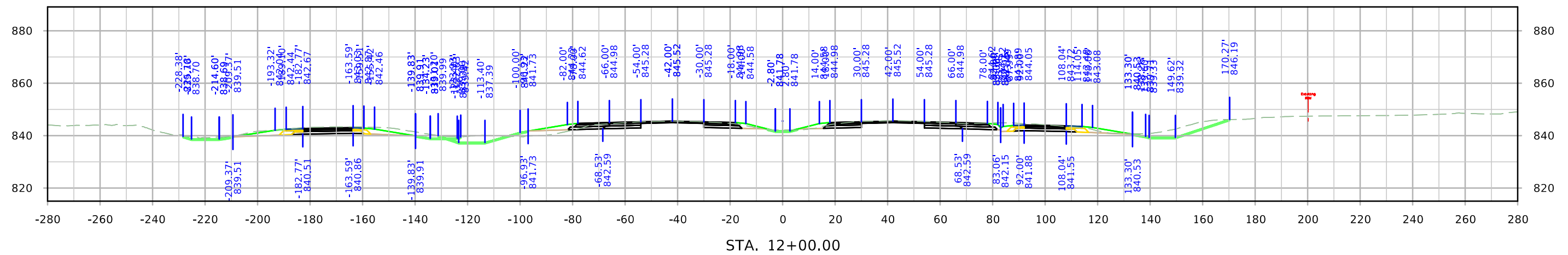
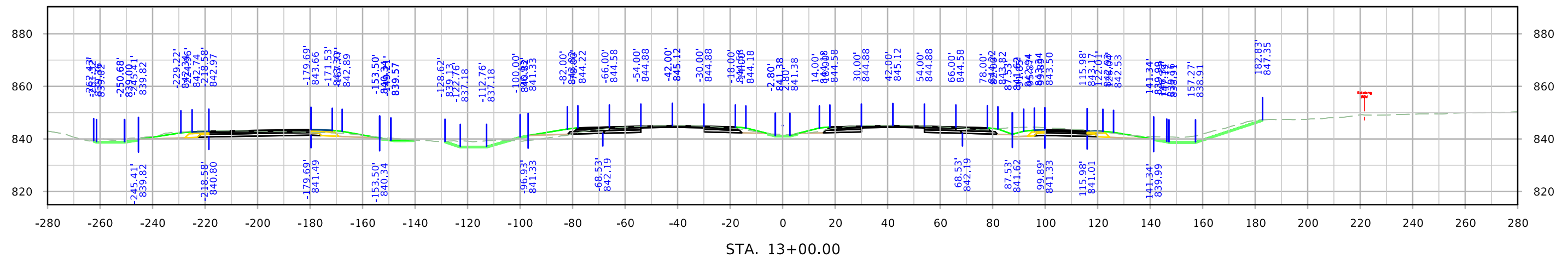
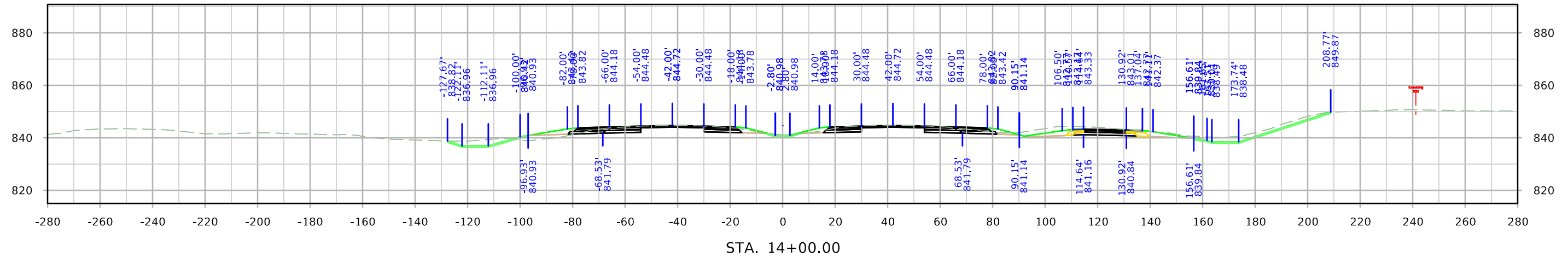


STA. 10+00.00

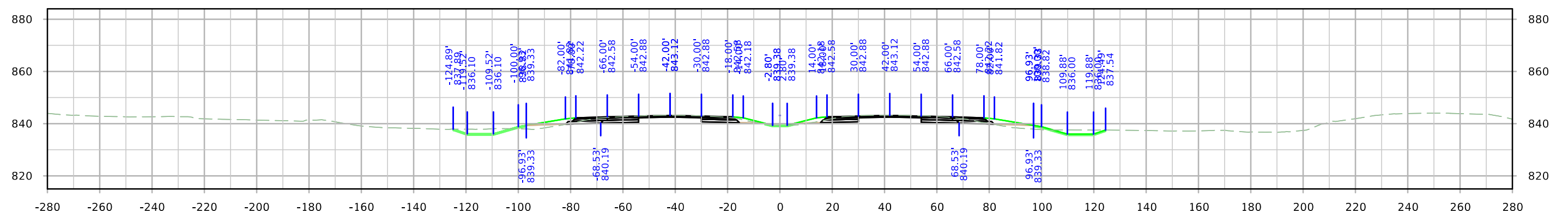
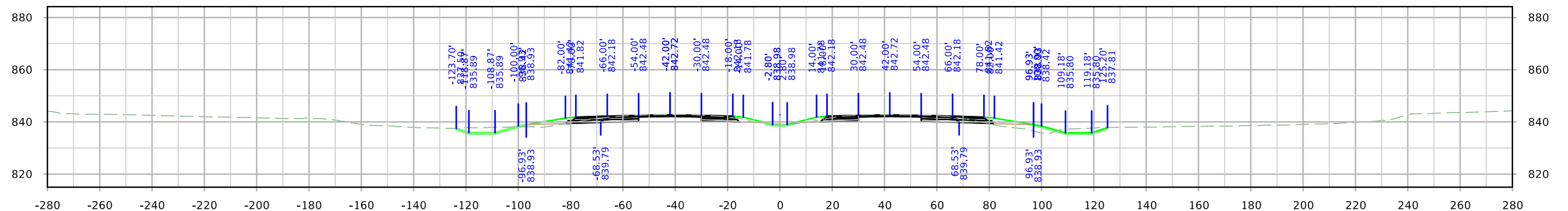
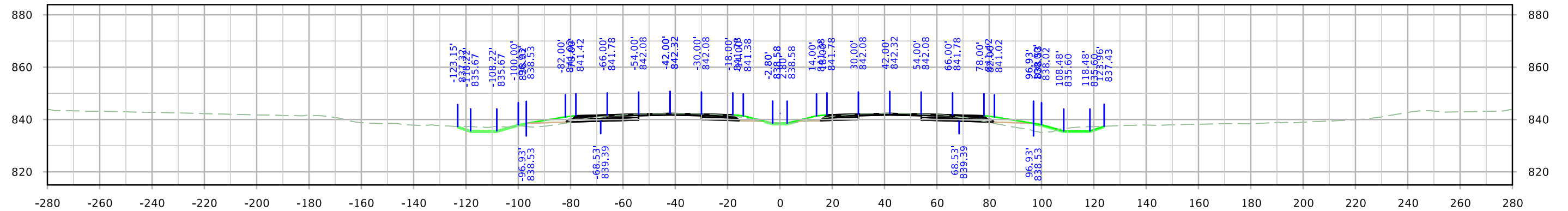


STA. 9+00.00

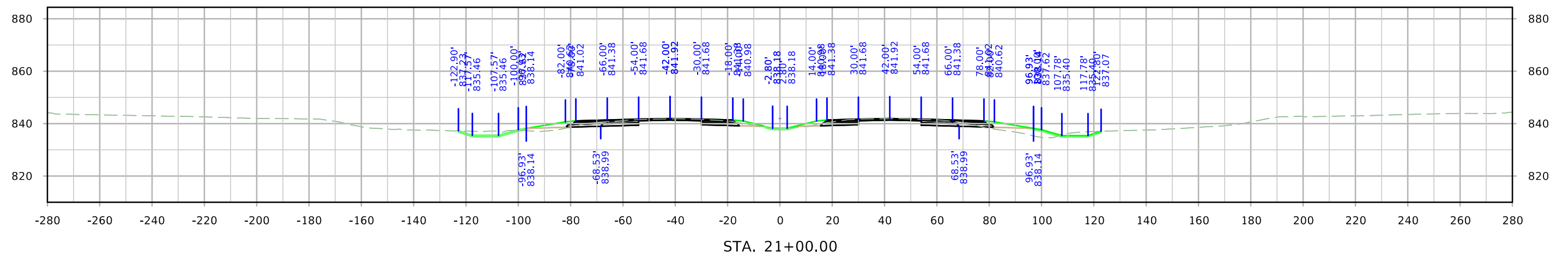
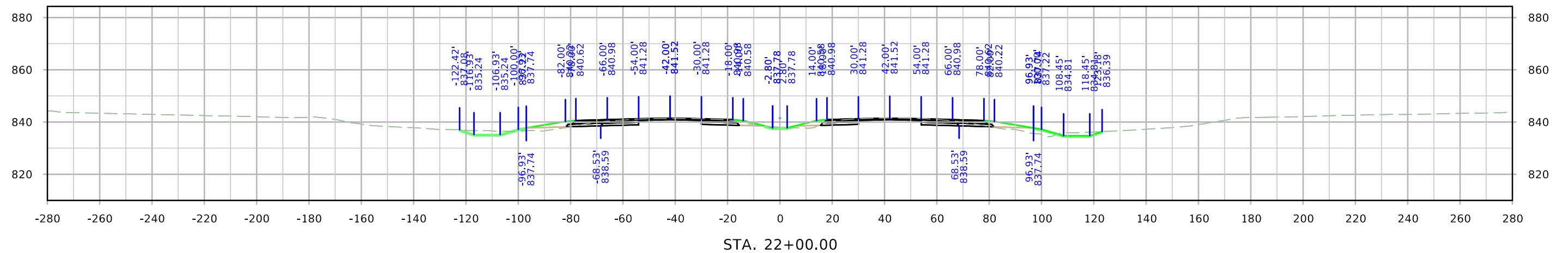
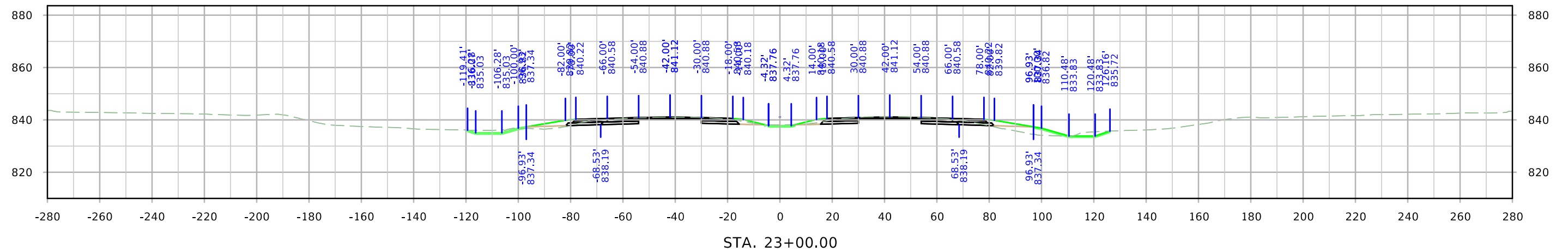
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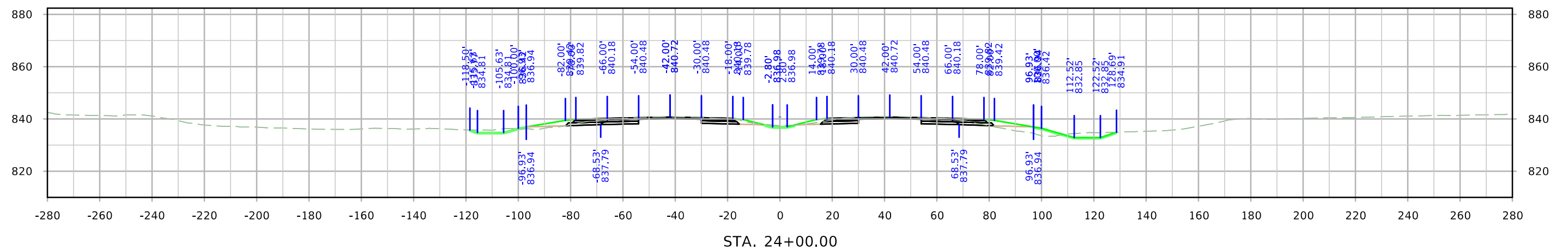
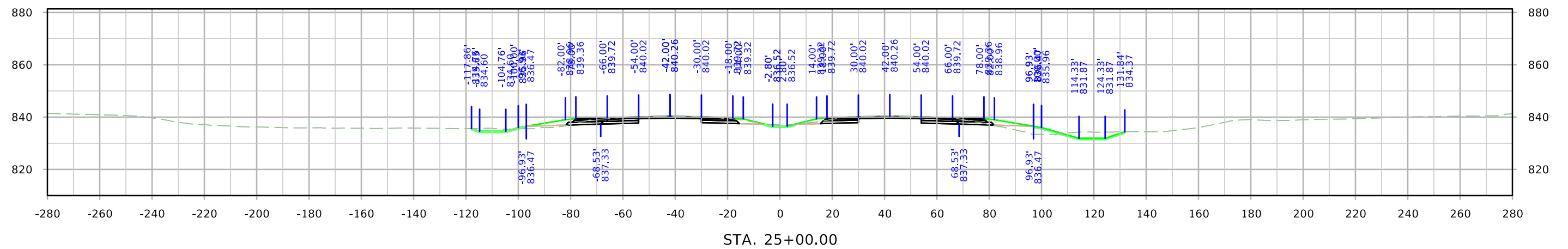
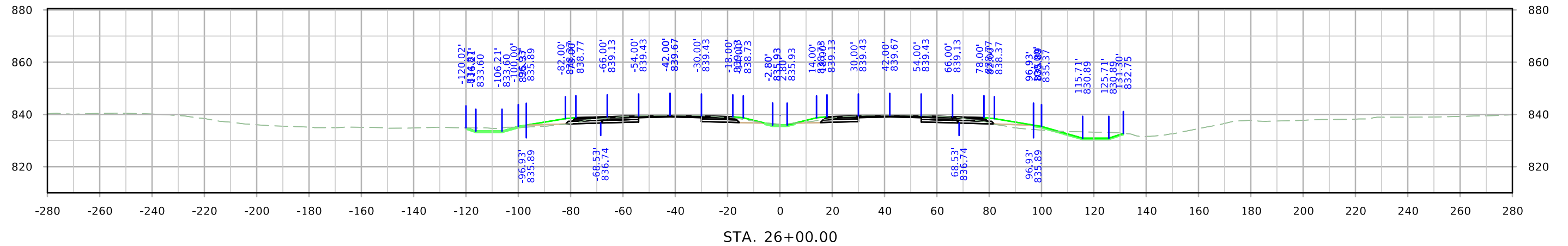
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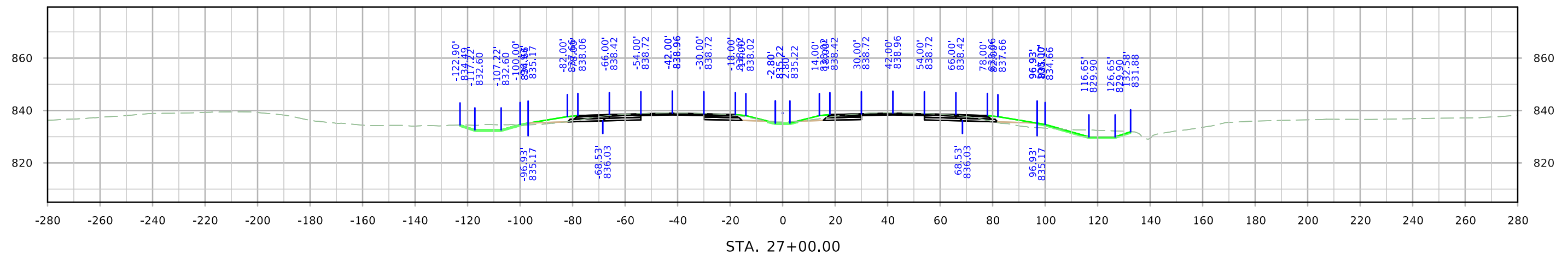
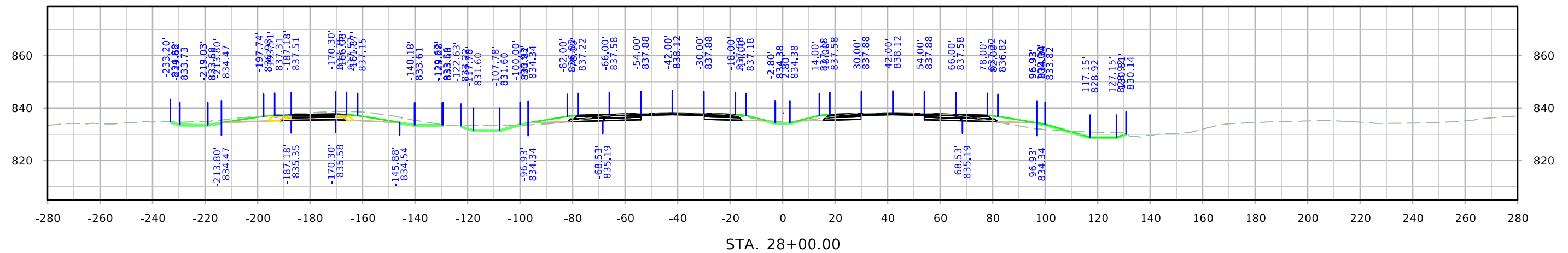
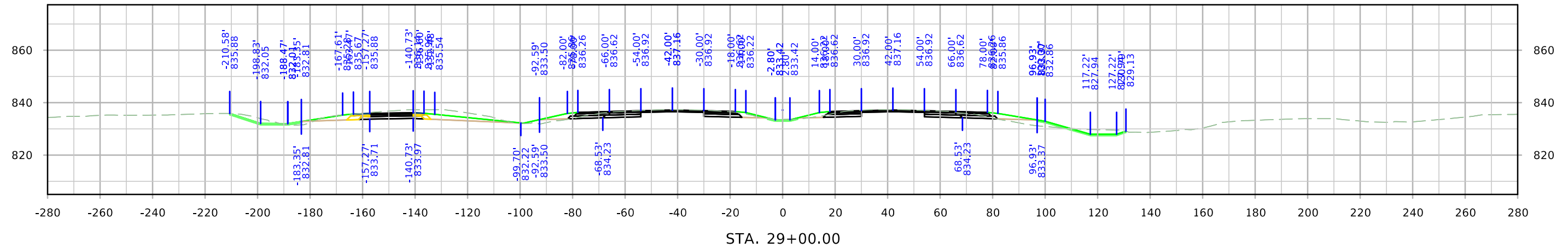
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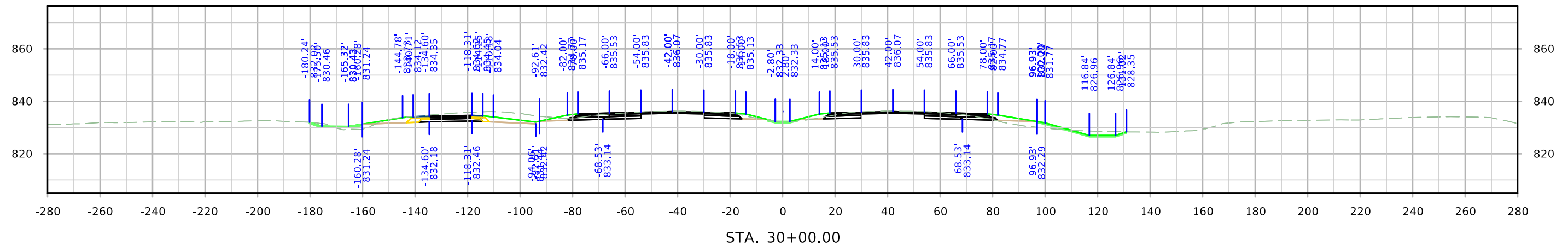
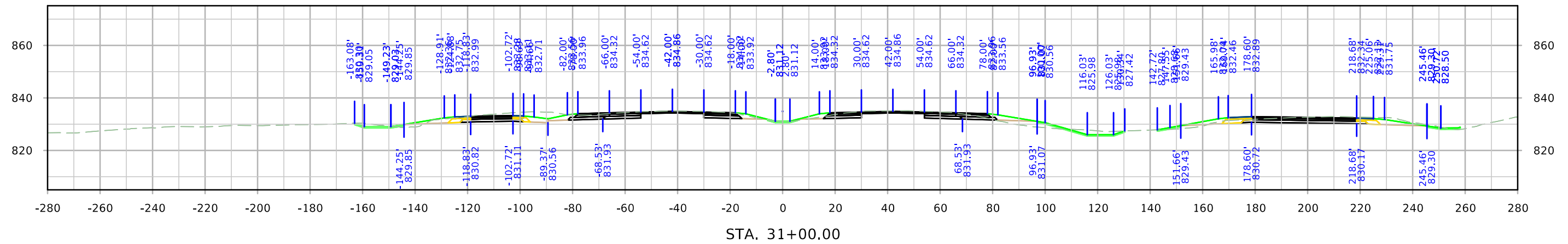
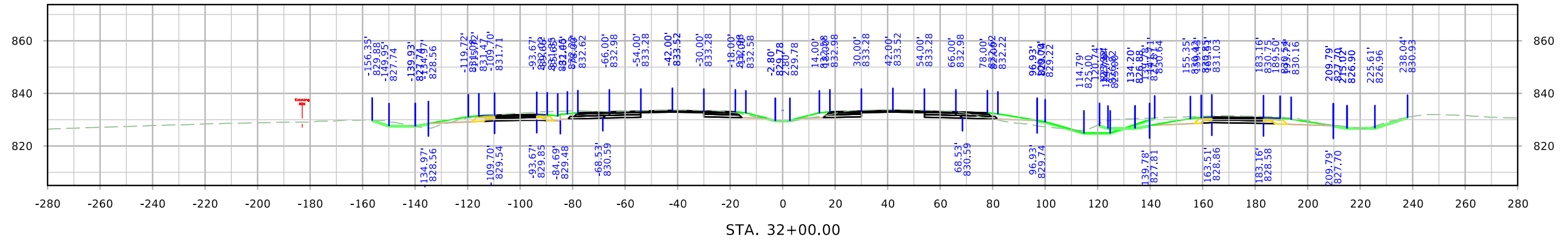
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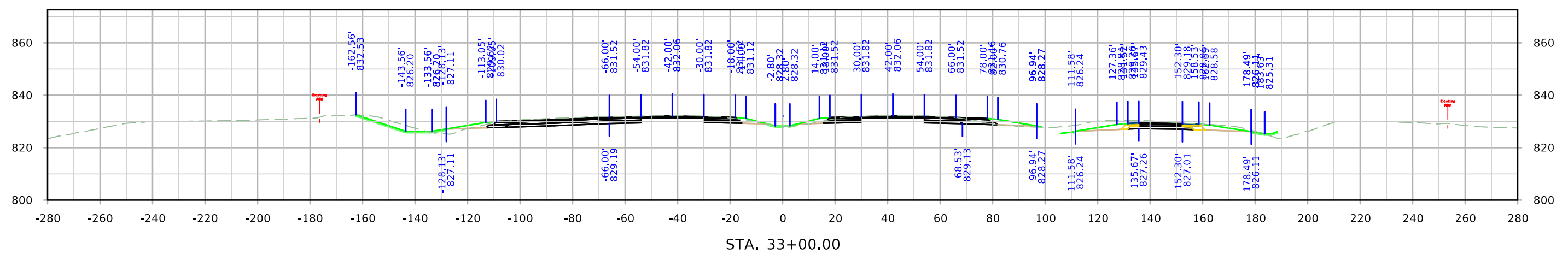
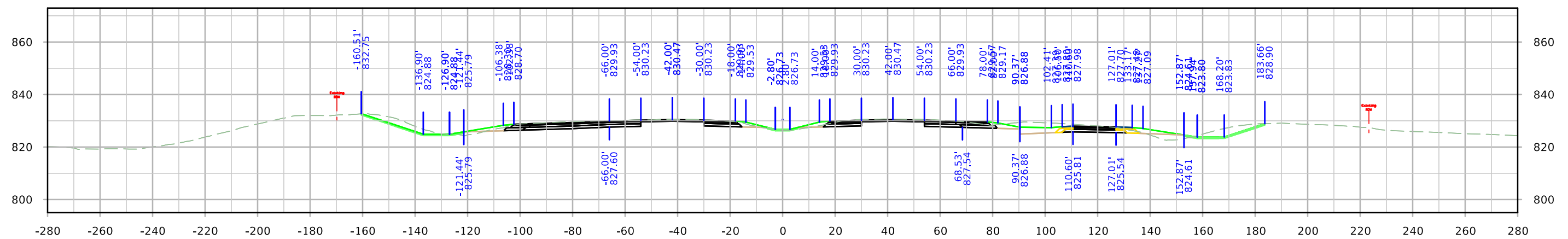
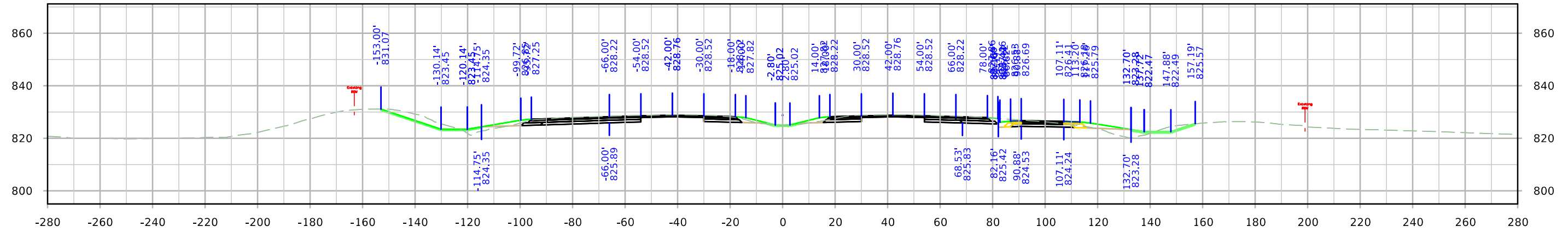
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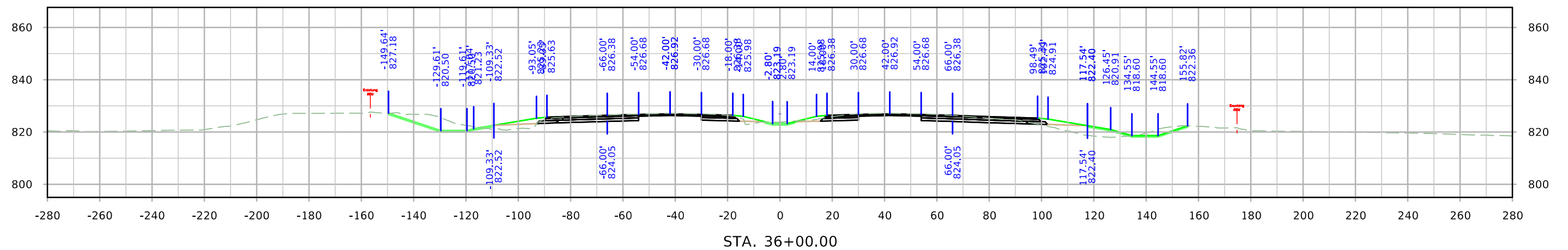
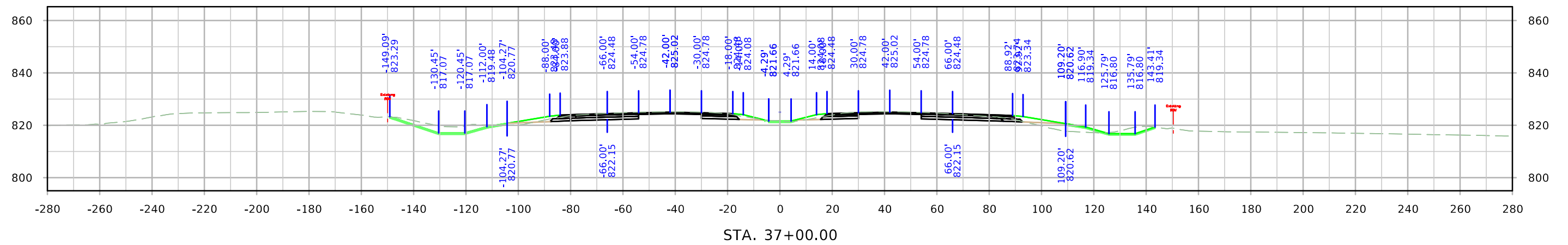
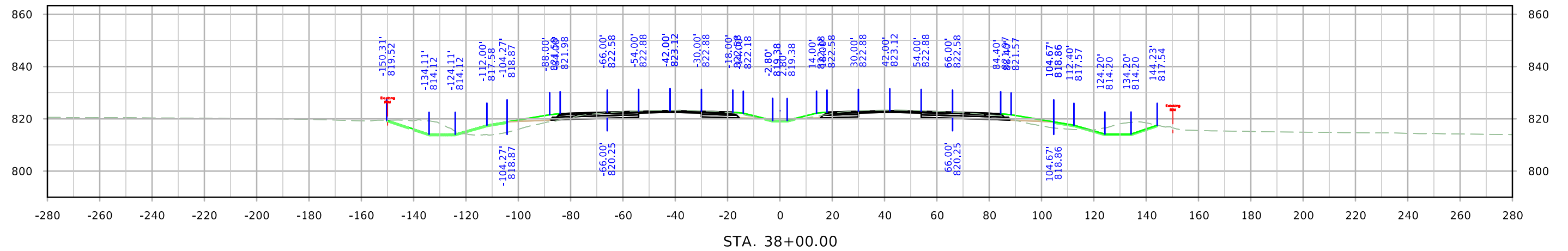
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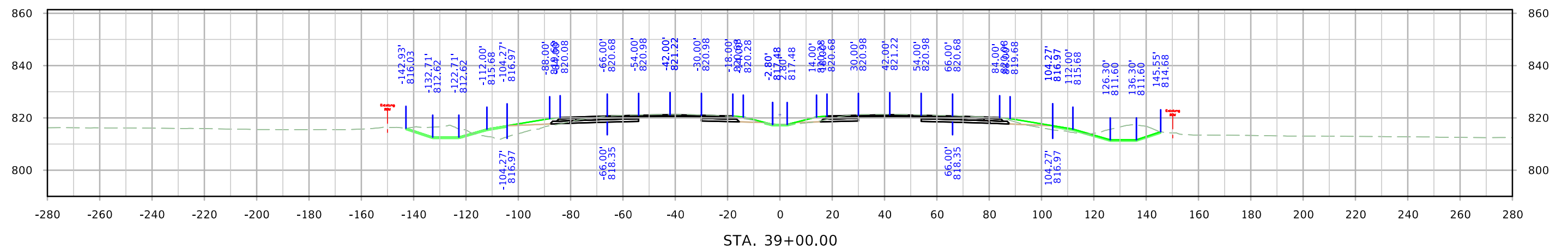
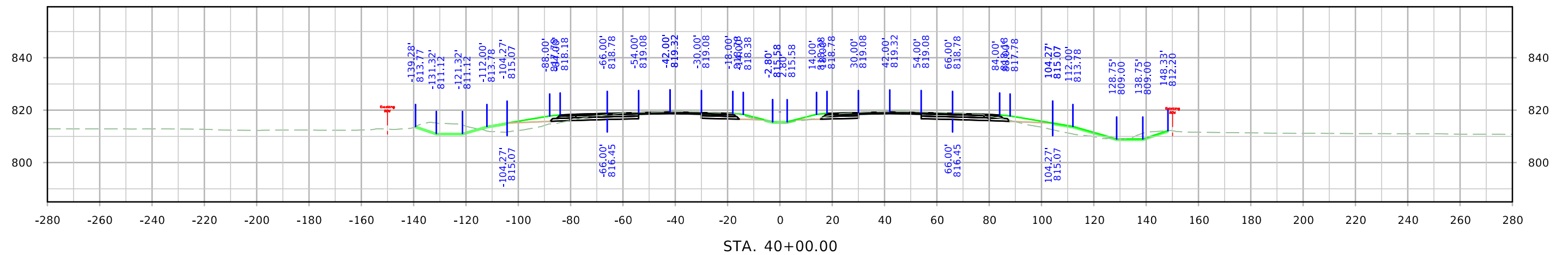
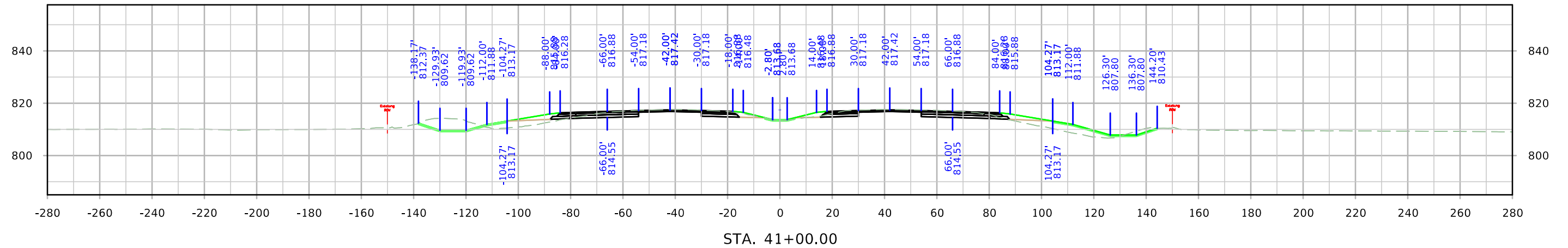
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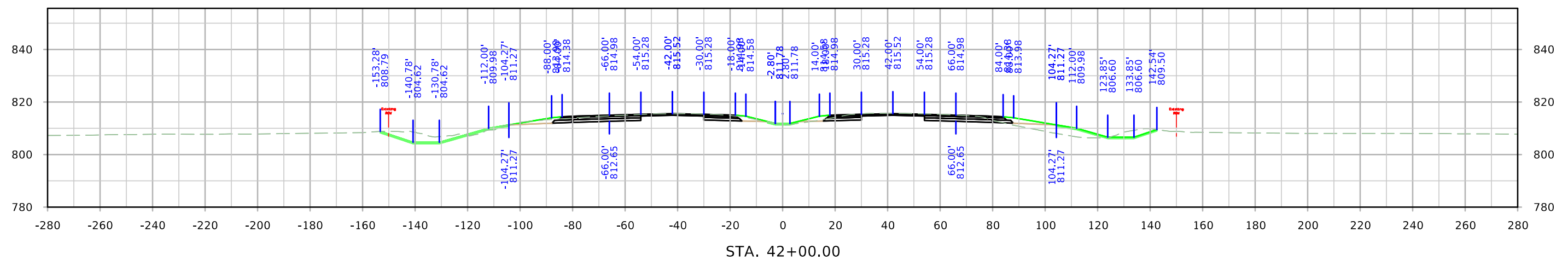
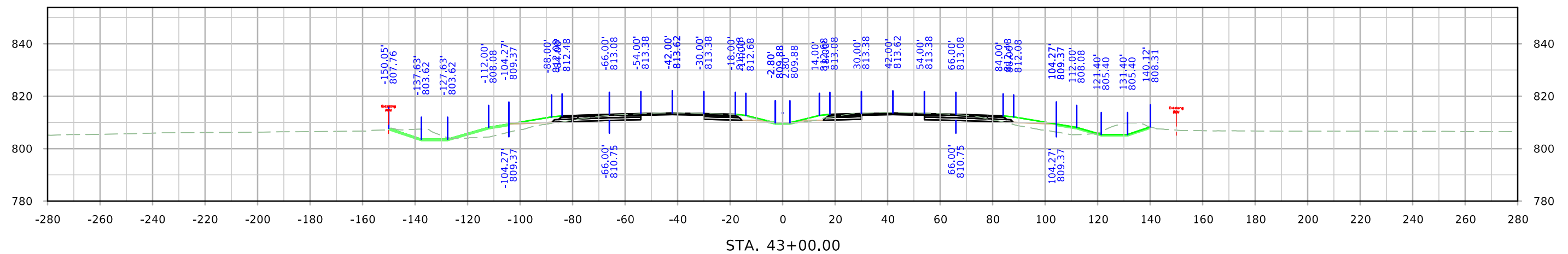
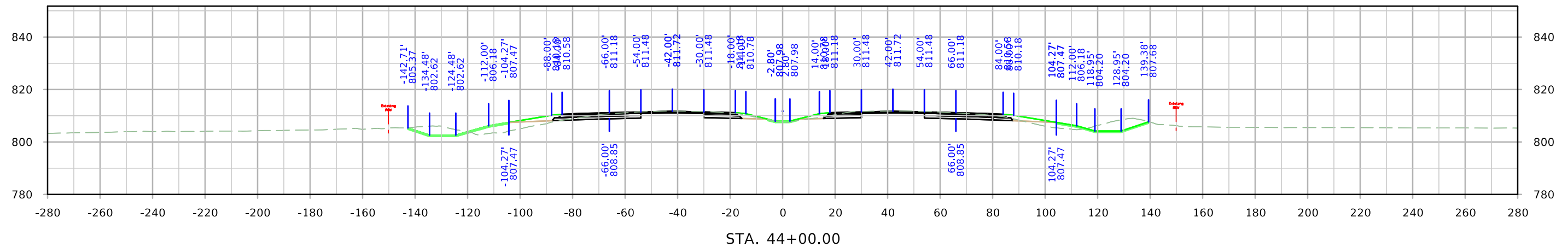
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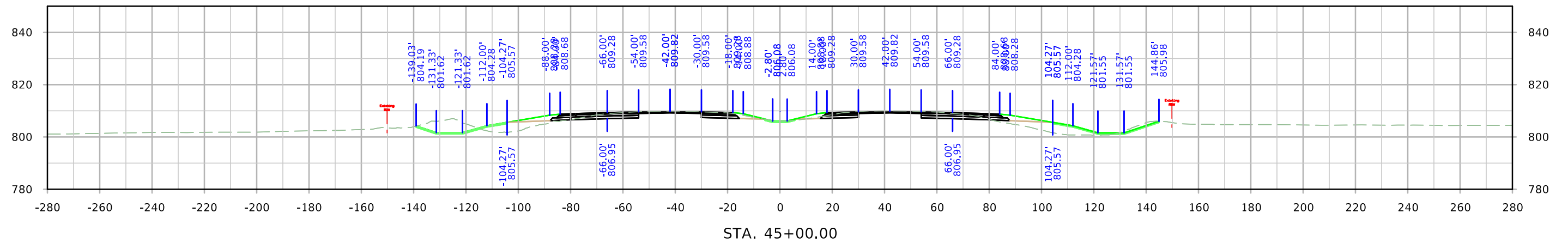
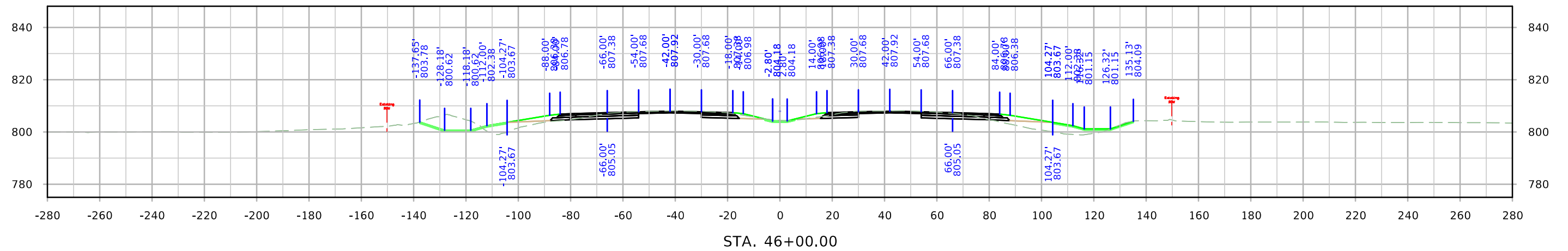
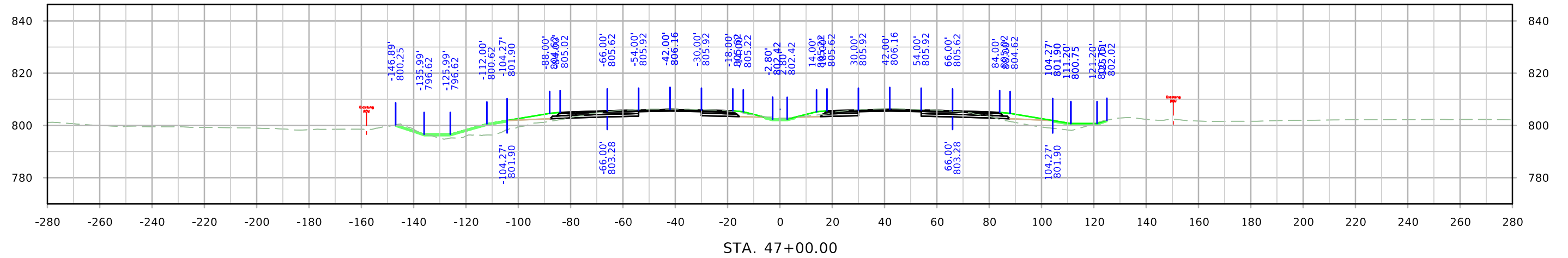
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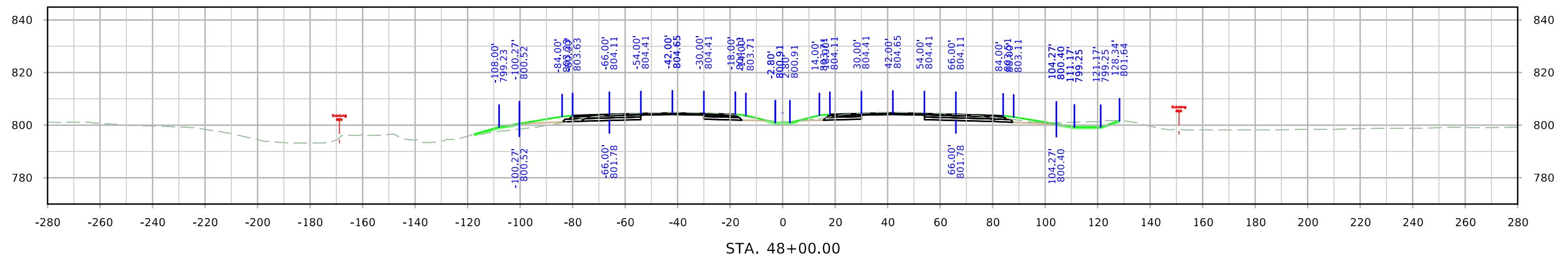
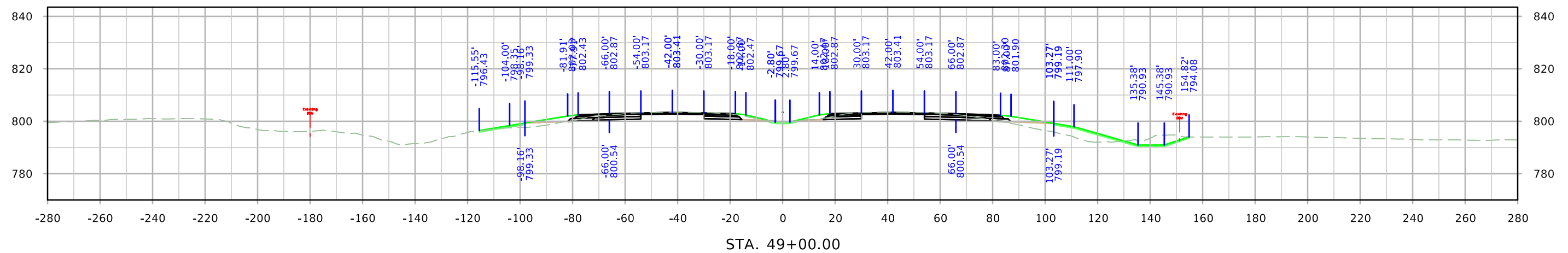
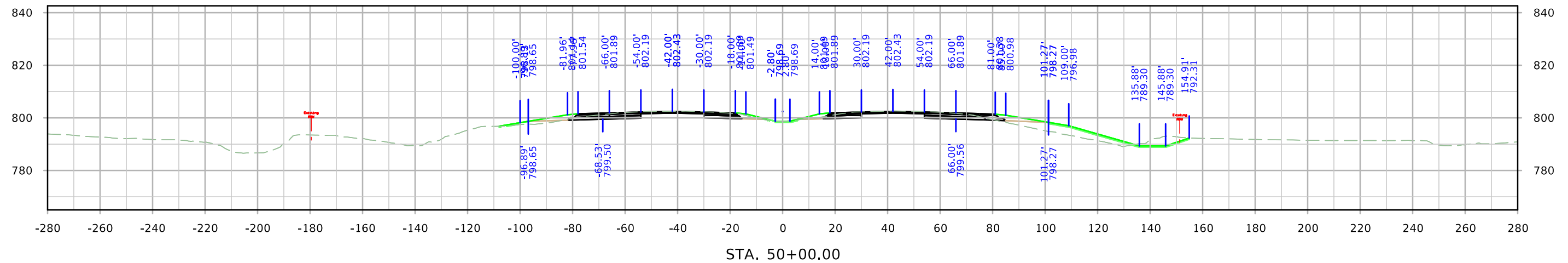
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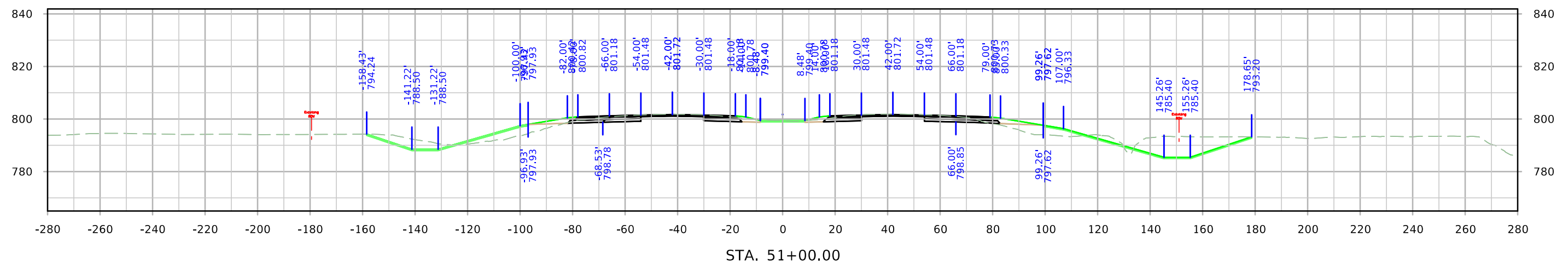
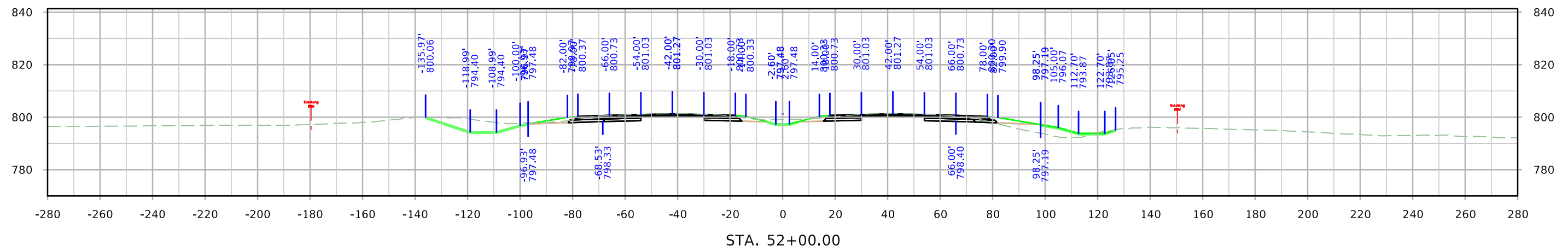
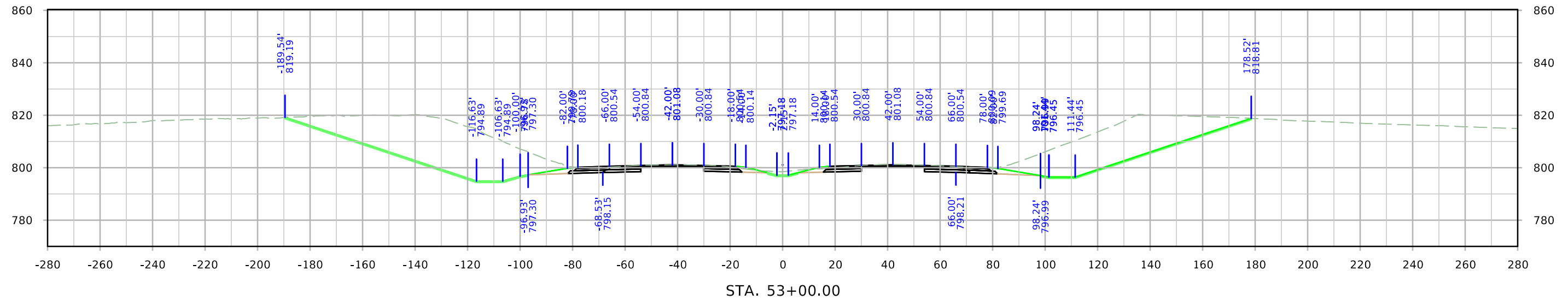
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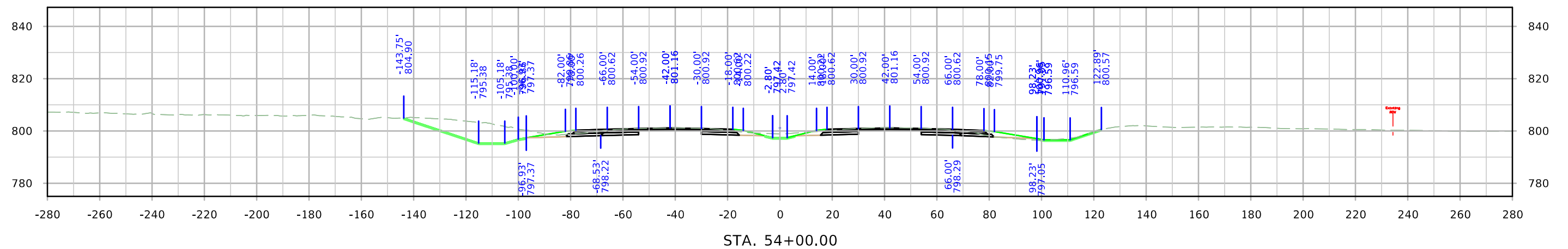
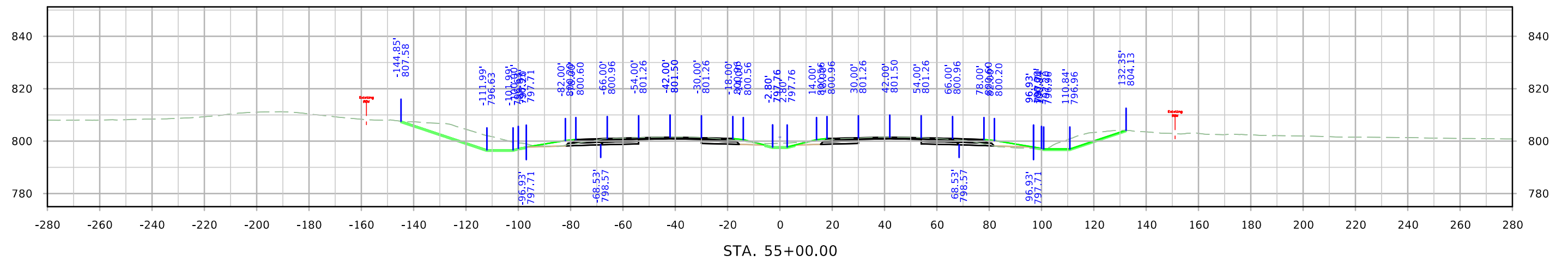
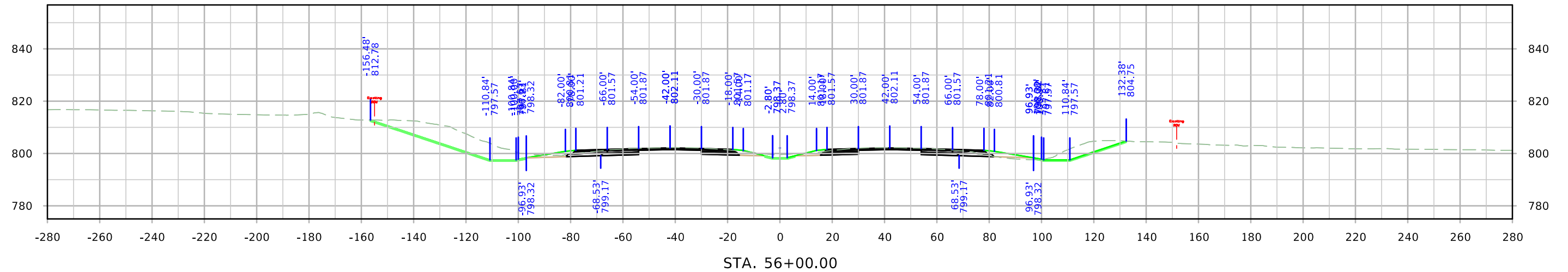
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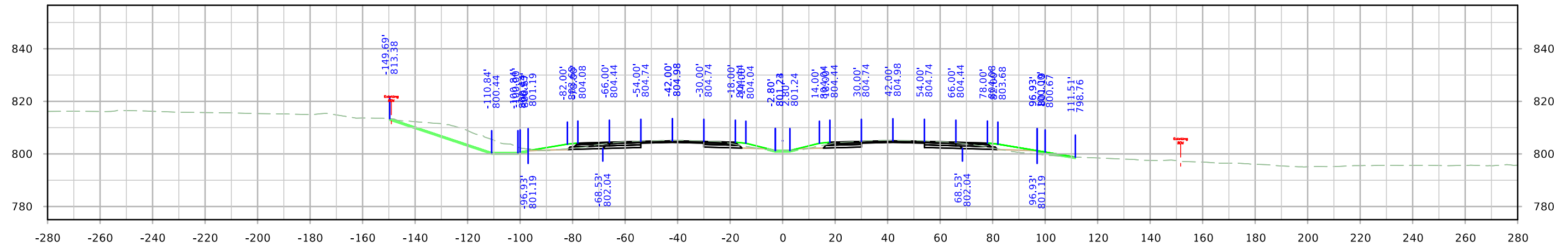
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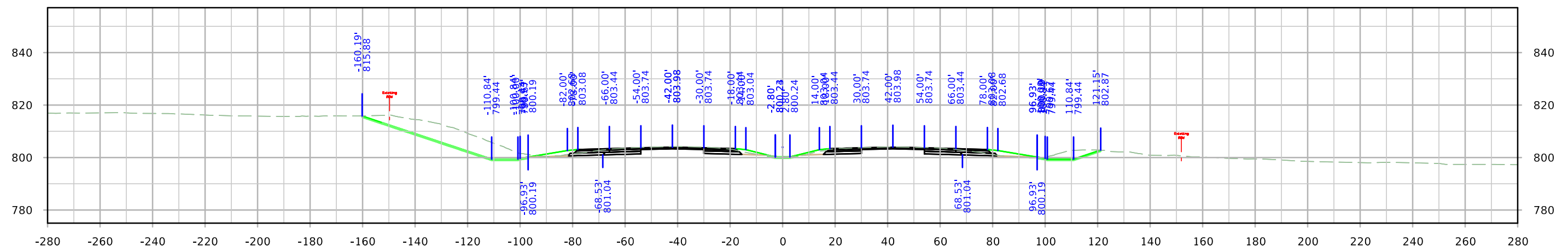
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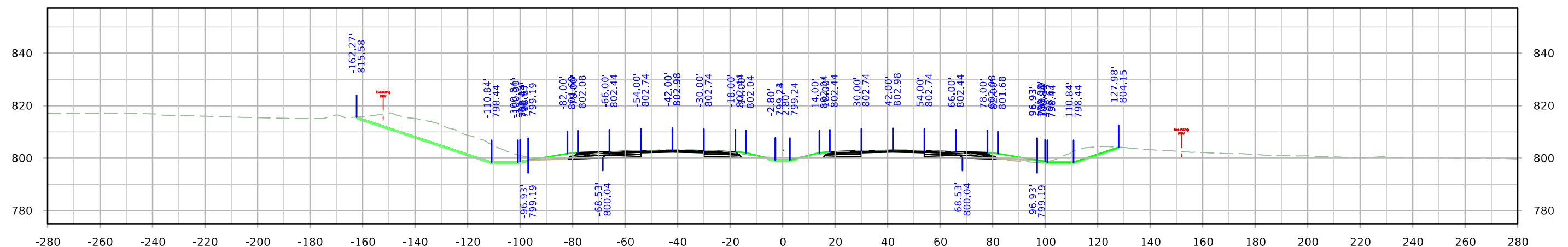
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STA. 59+00.00

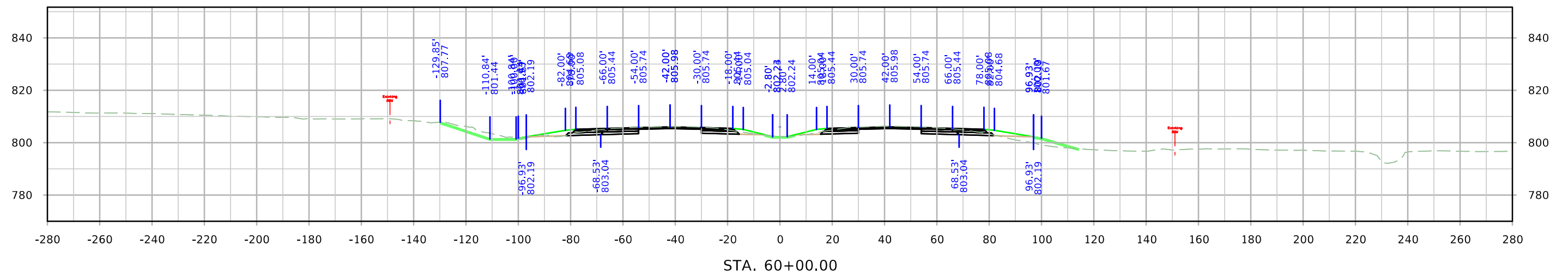
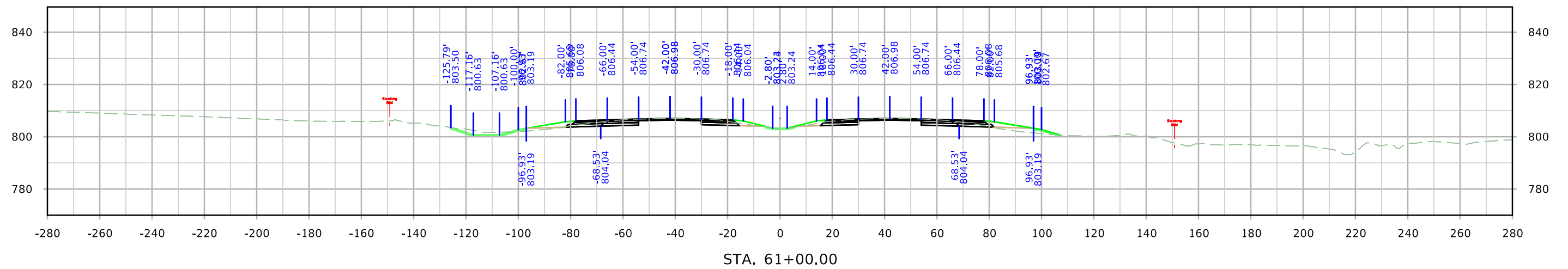
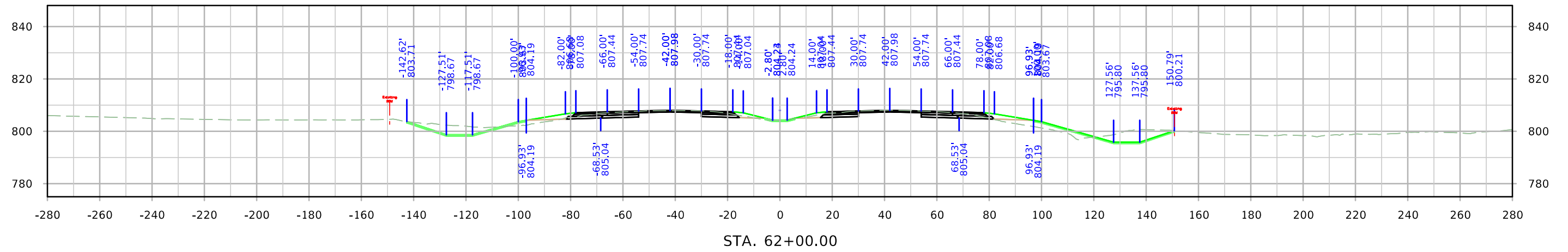


STA. 58+00.00

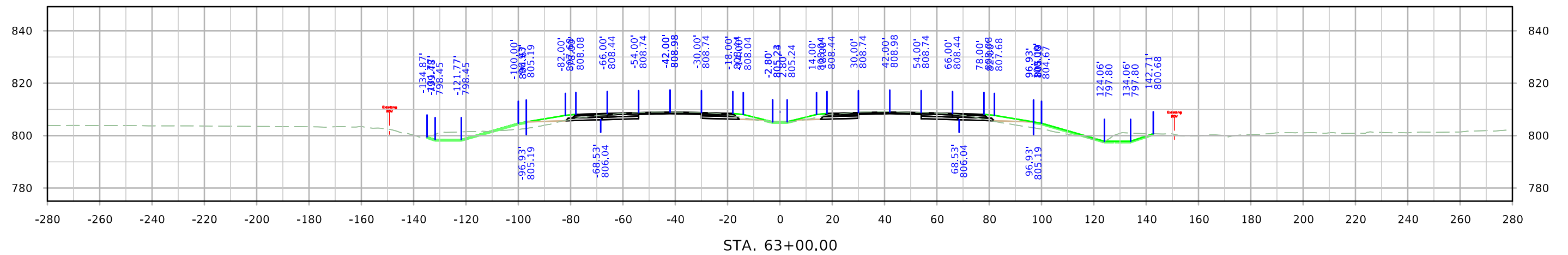
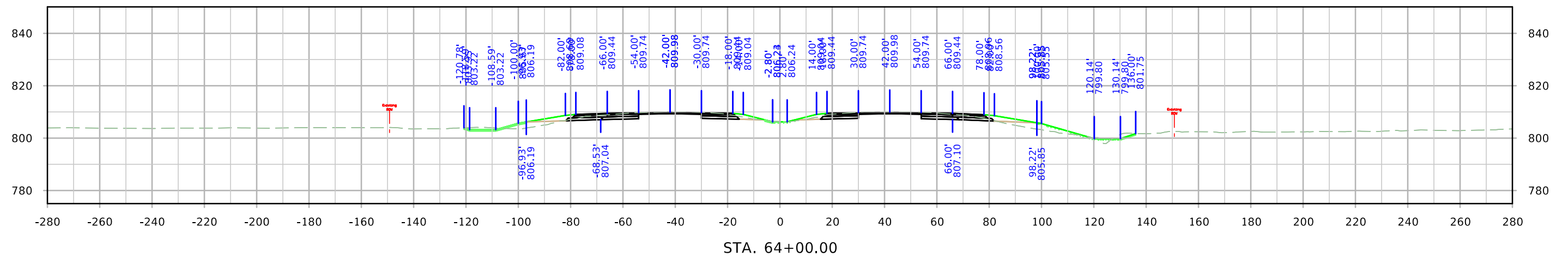
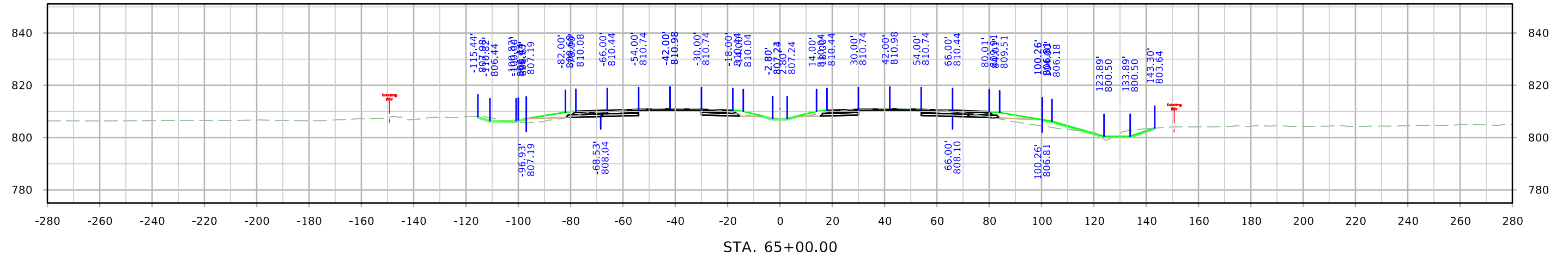


STA. 57+00.00

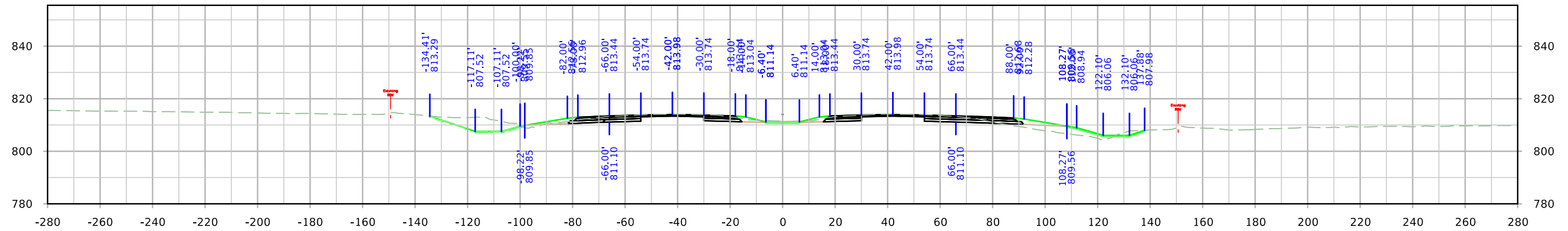
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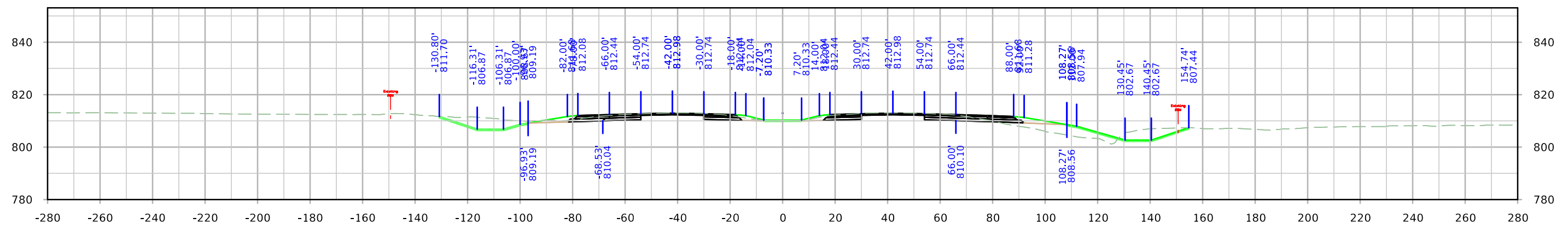
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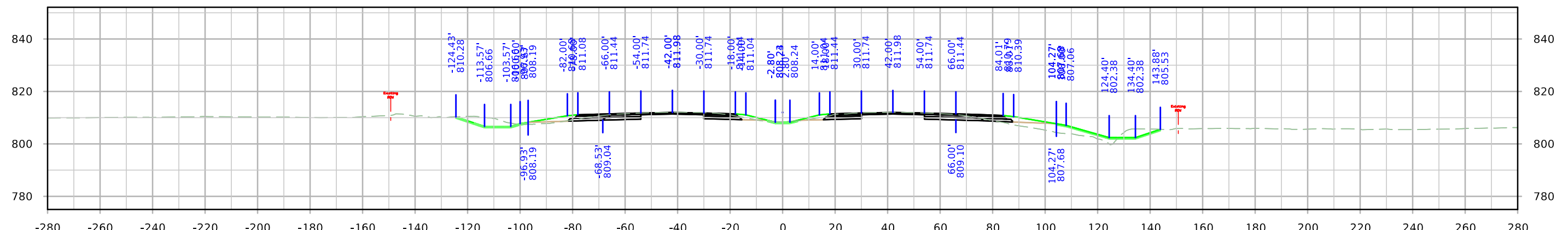
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STA. 68+00.00

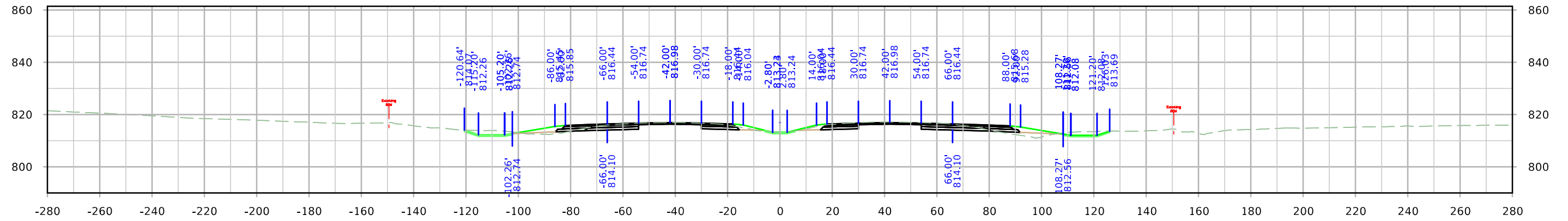


STA. 67+00.00

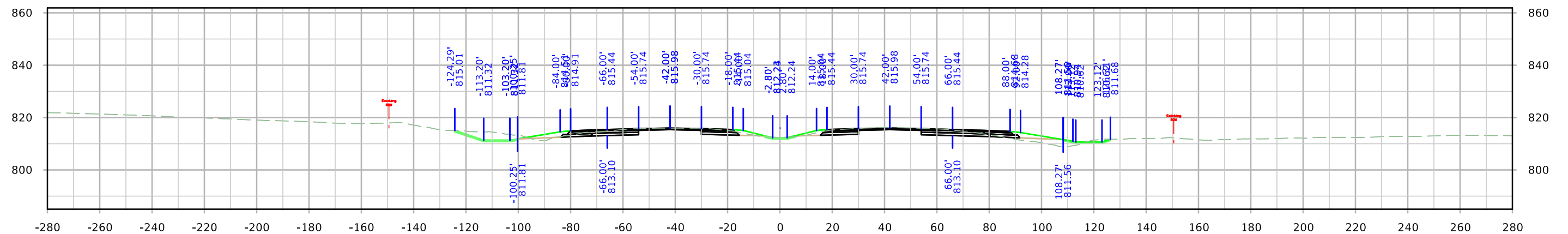


STA. 66+00.00

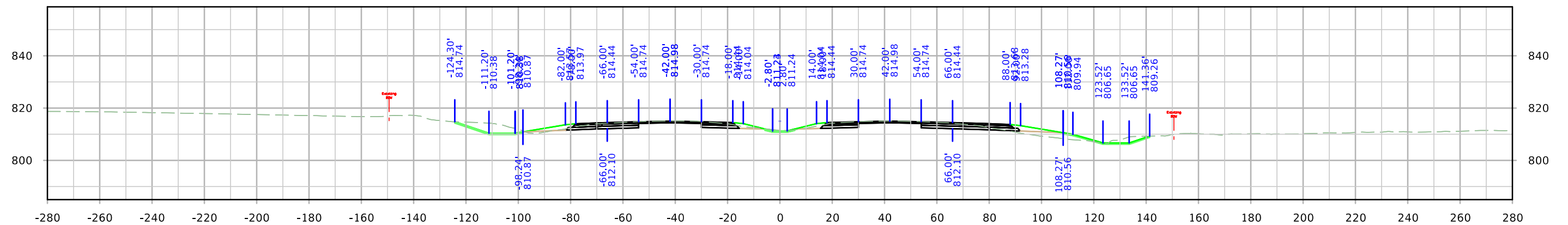
ML380



STA. 71+00.00

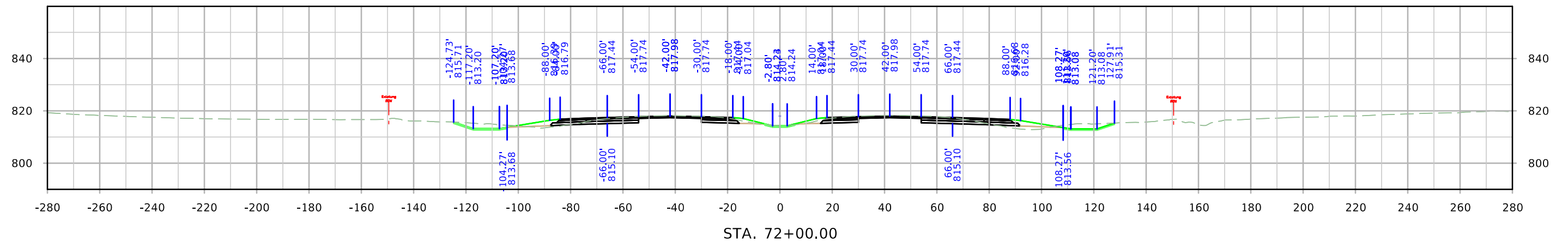
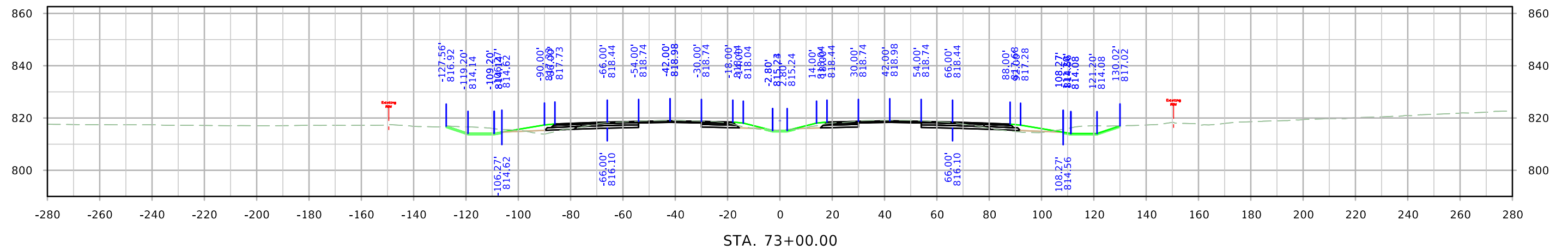
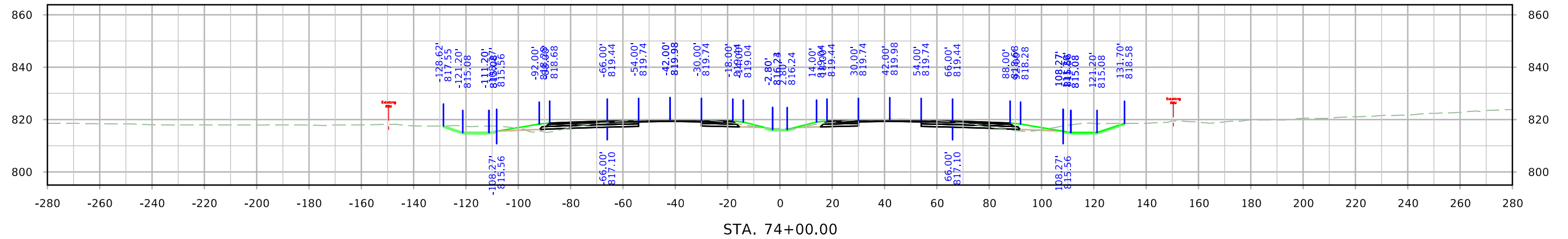


STA. 70+00.00

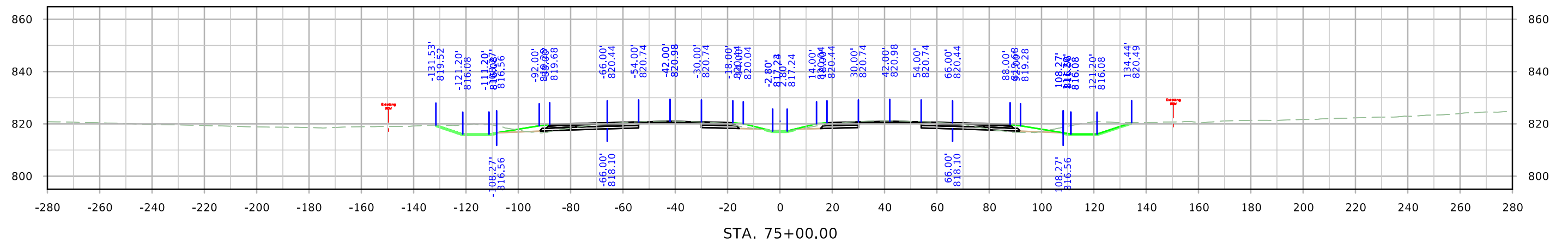
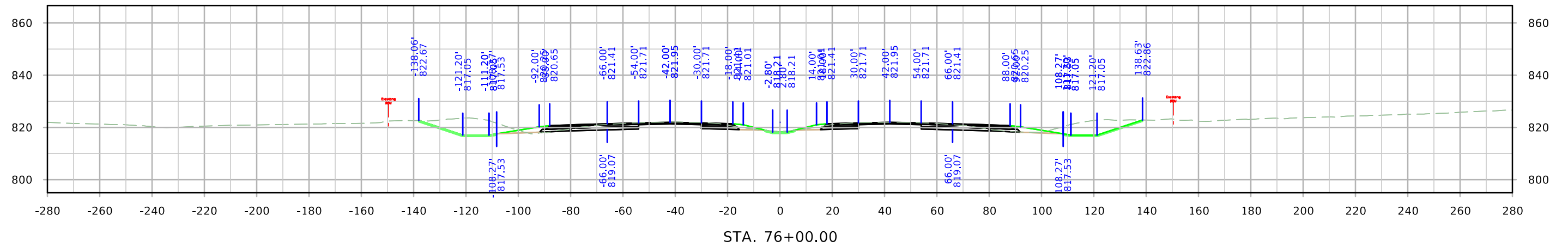
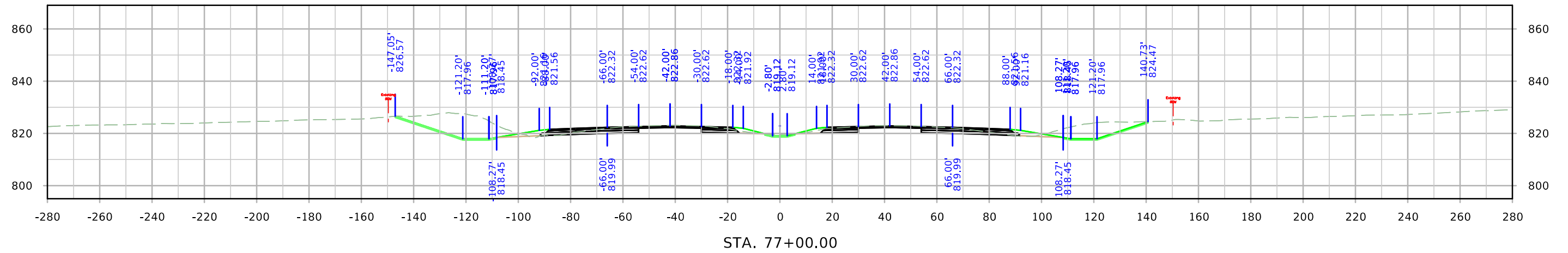


STA. 69+00.00

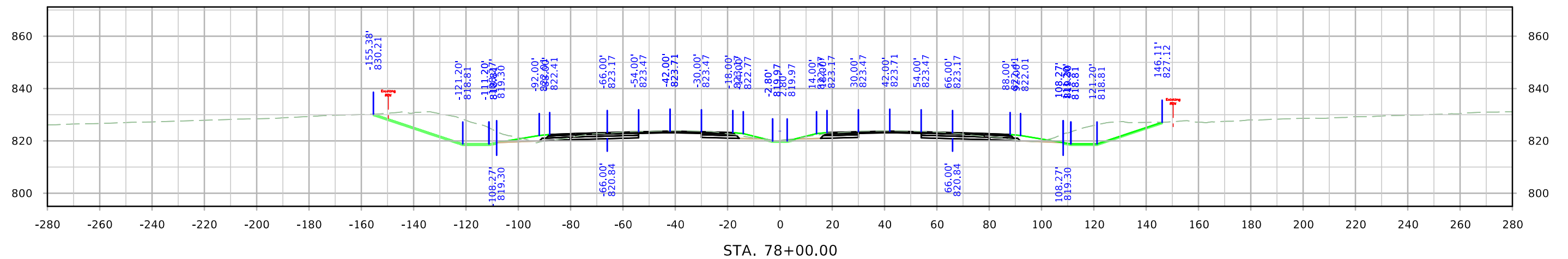
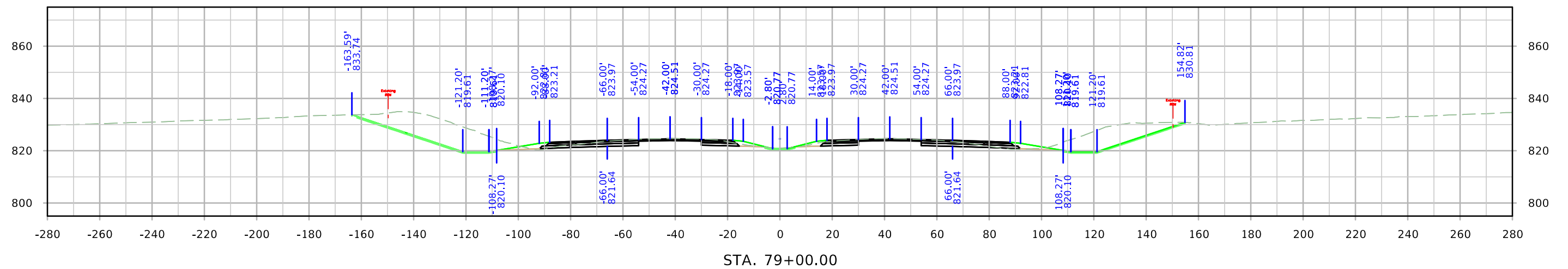
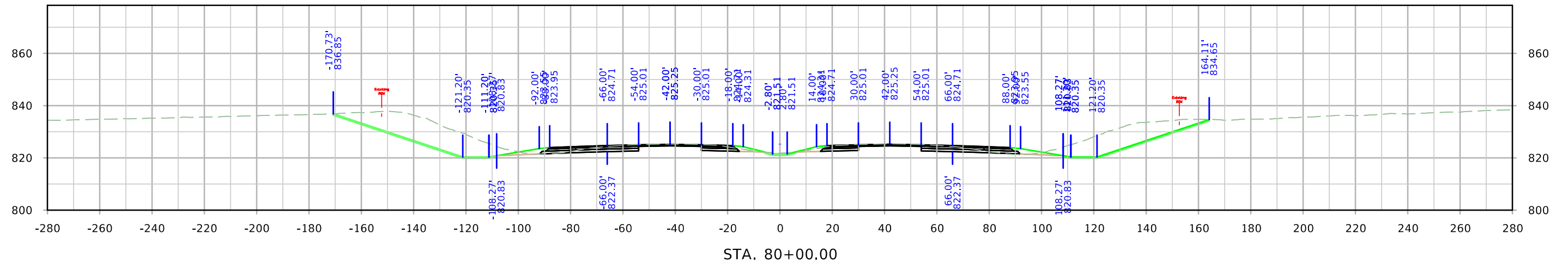
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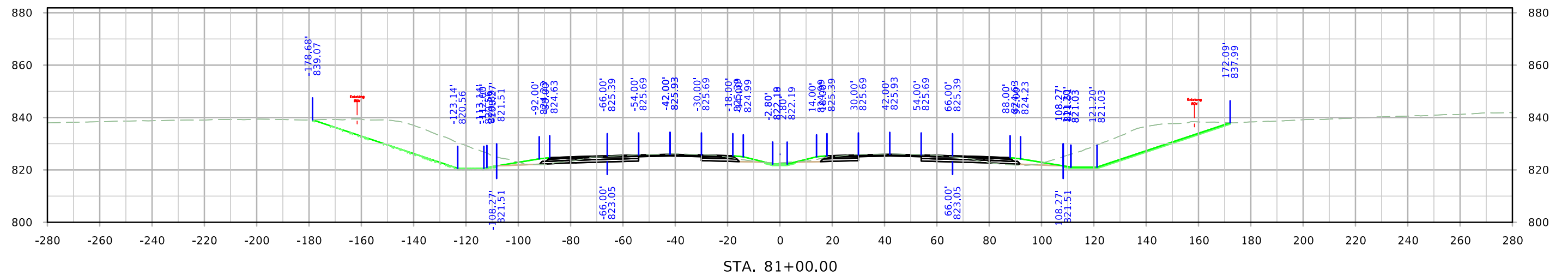
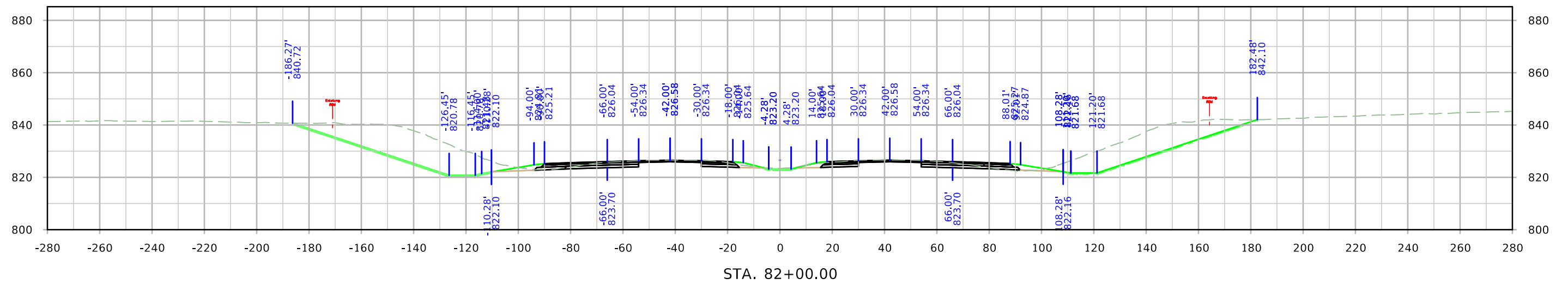
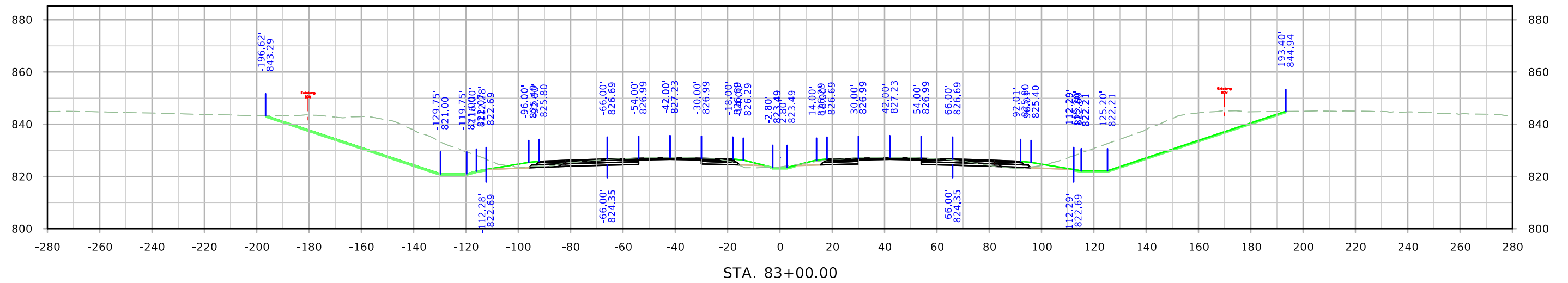
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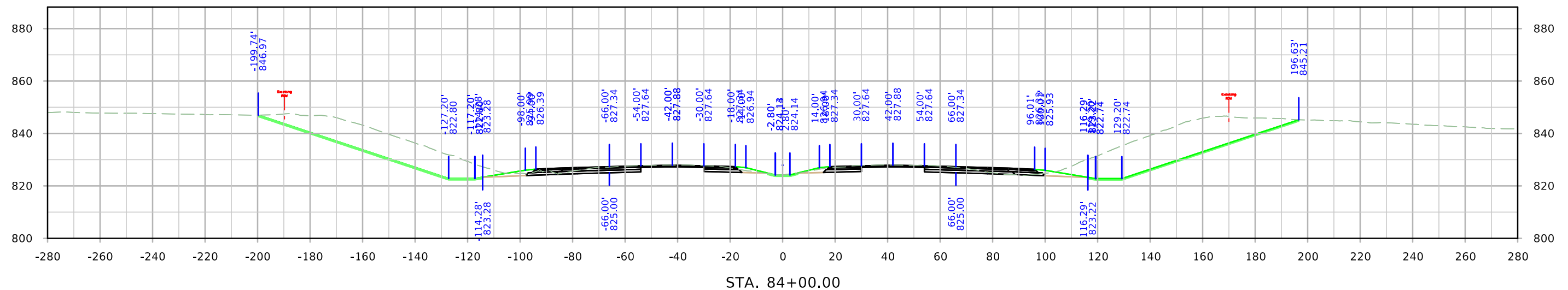
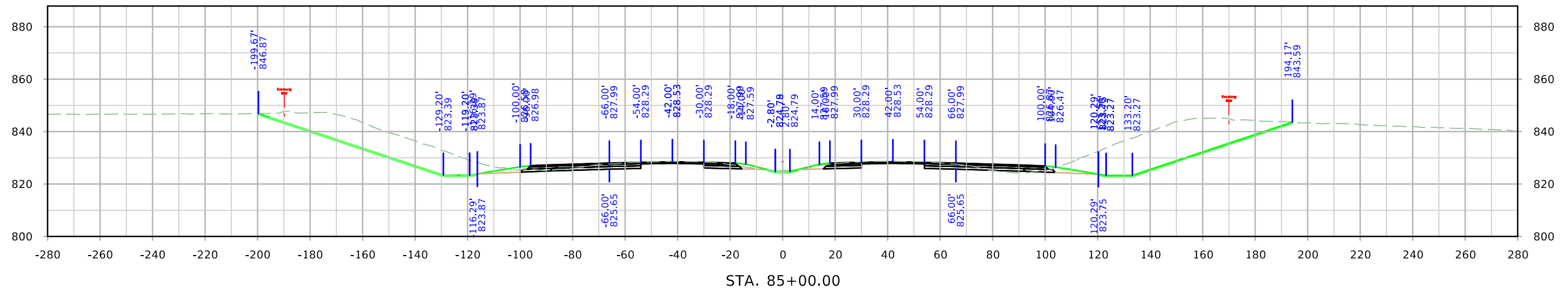
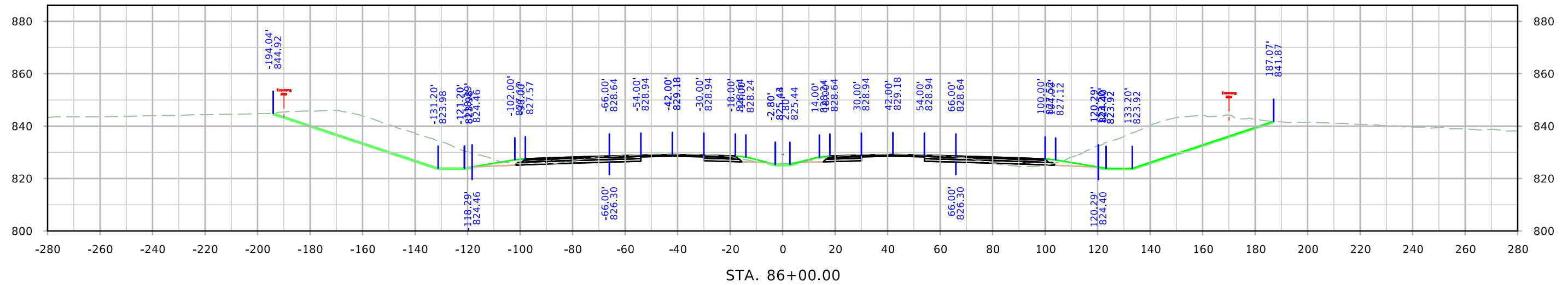
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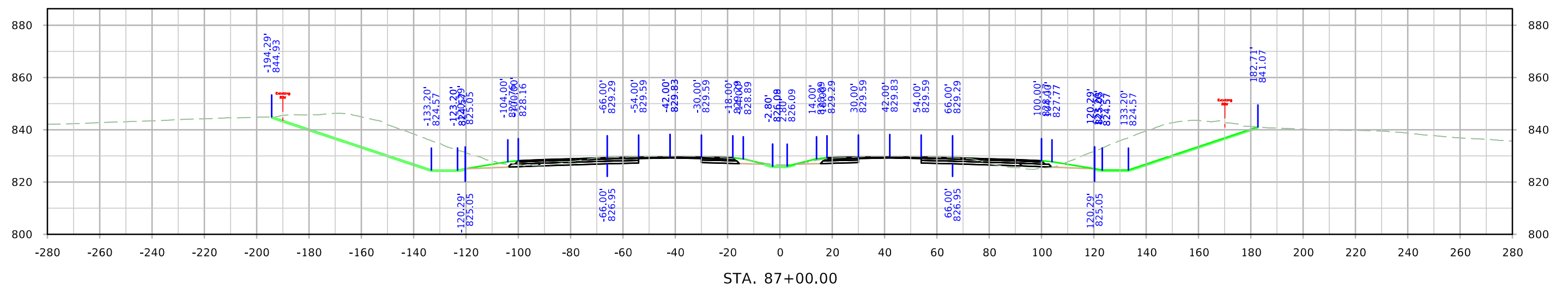
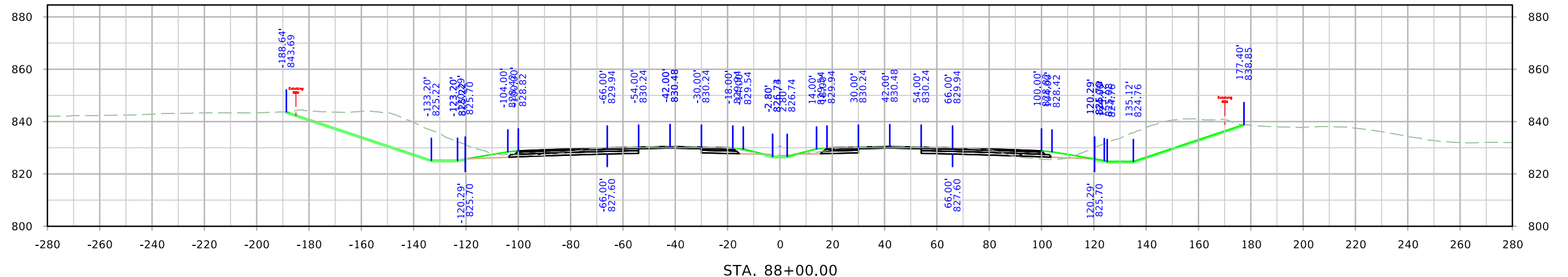
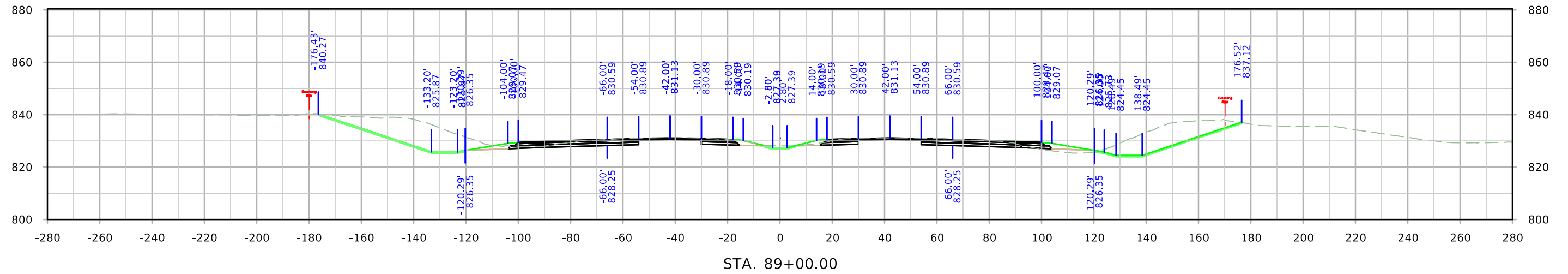
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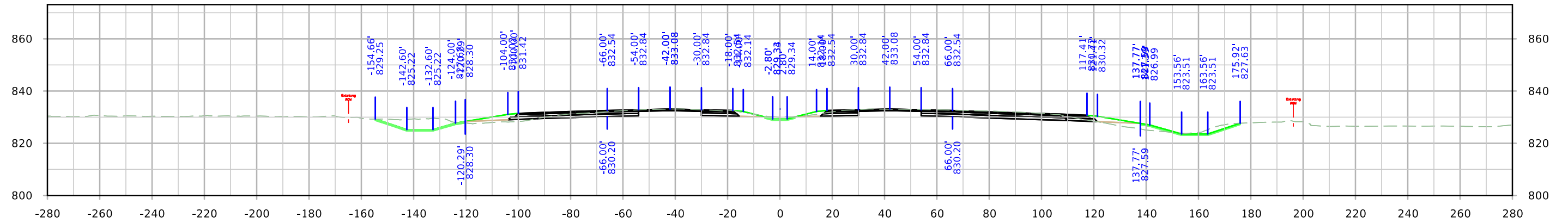
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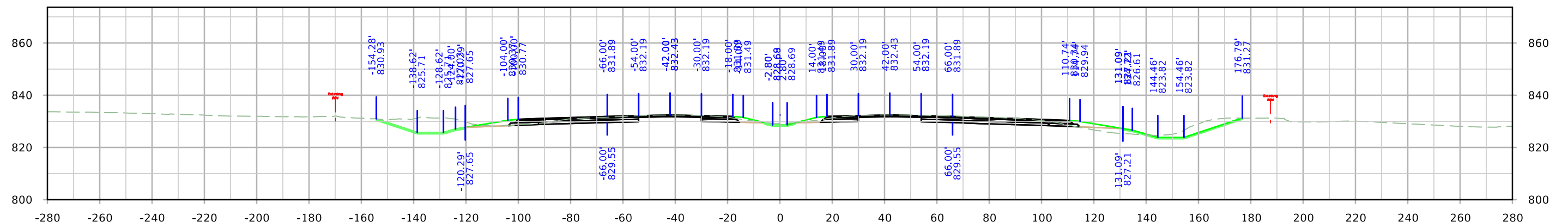
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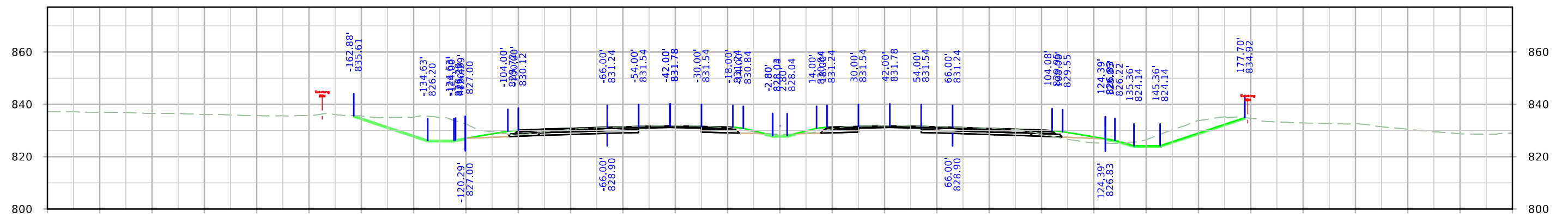
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STA. 92+00.00

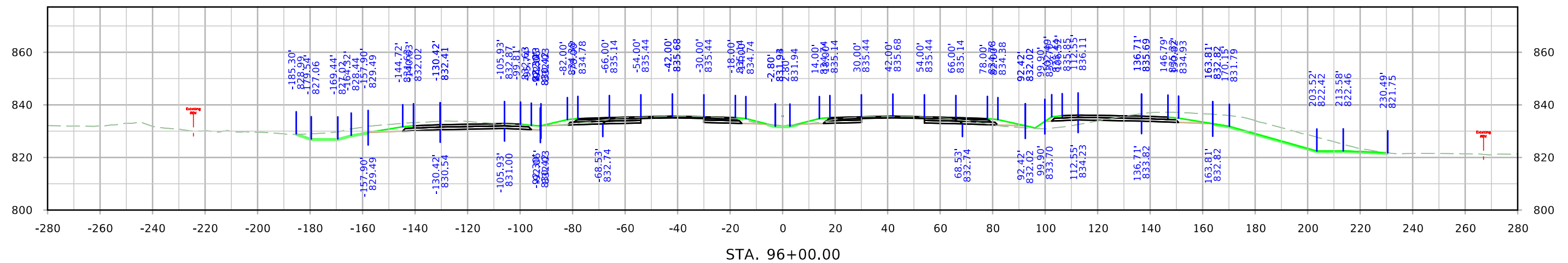
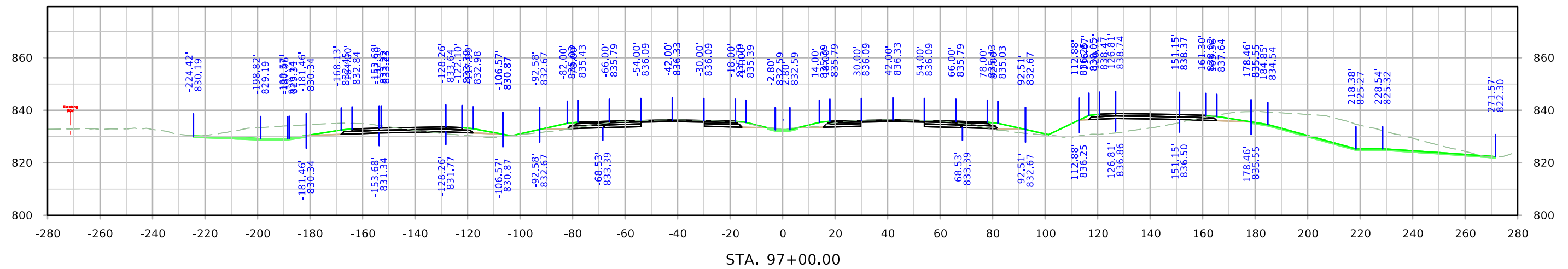
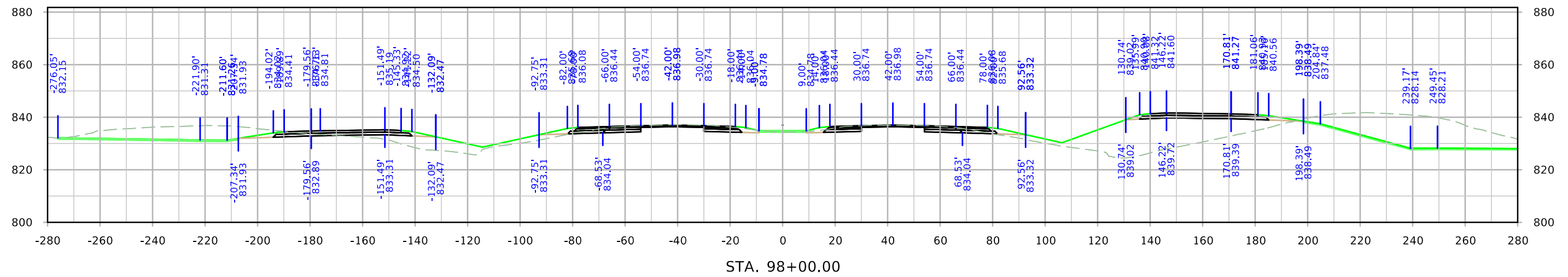


STA. 91+00.00

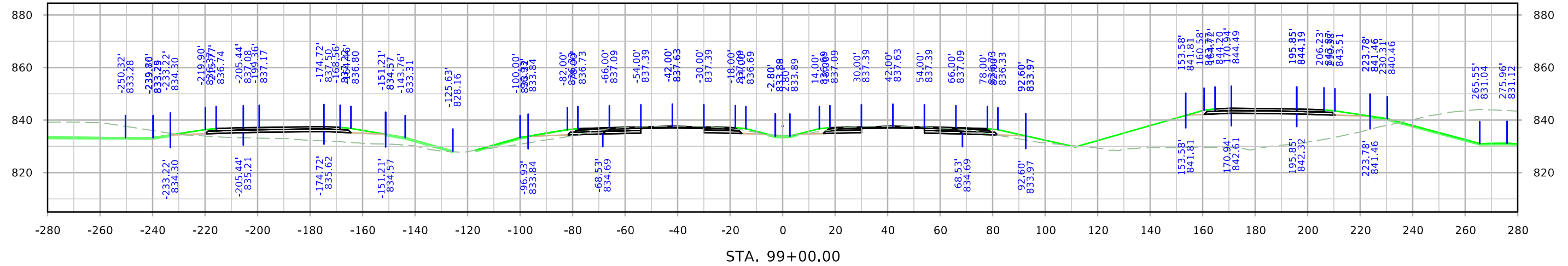
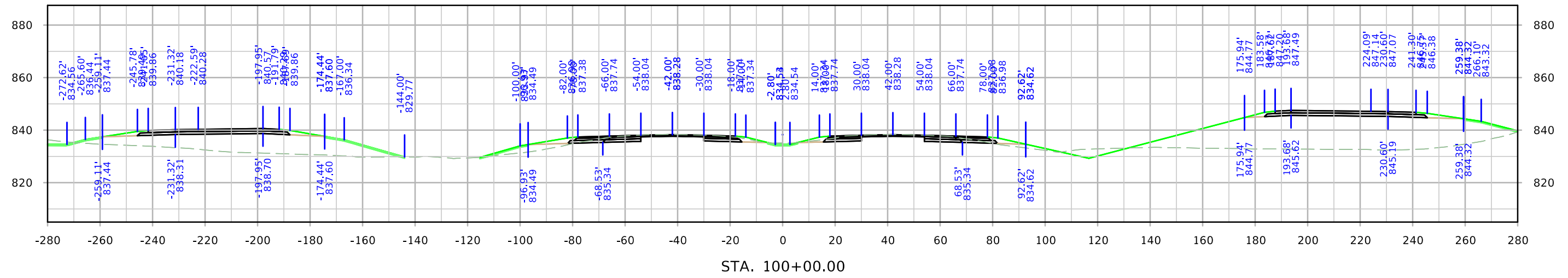
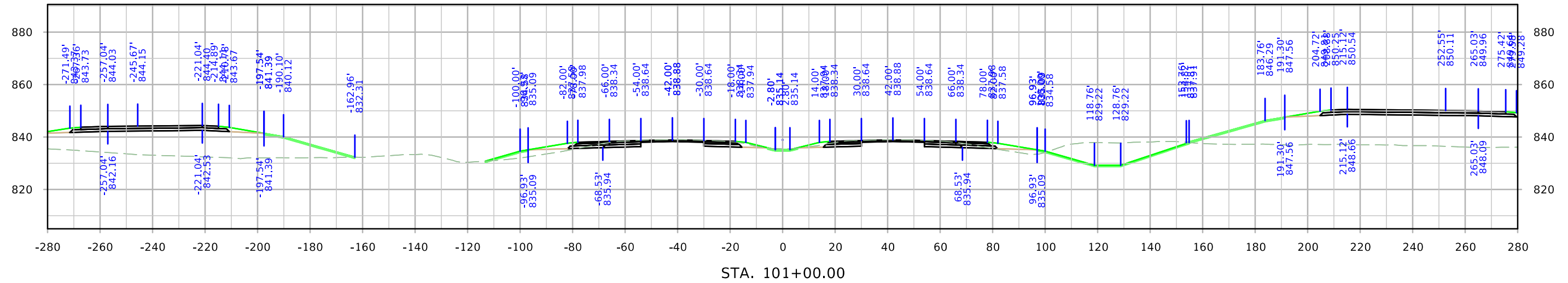


STA. 90+00.00

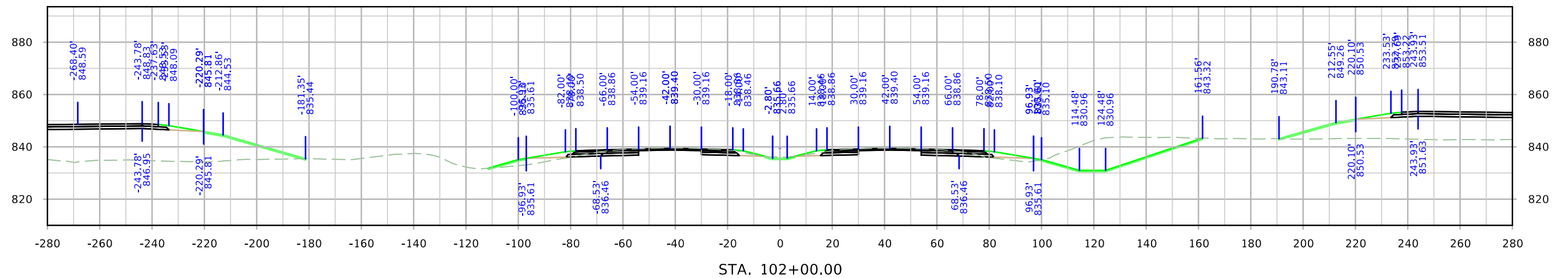
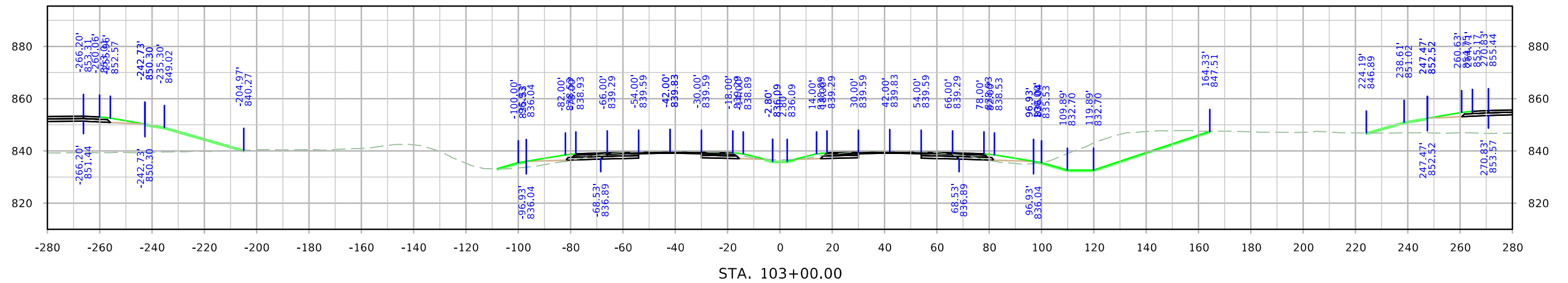
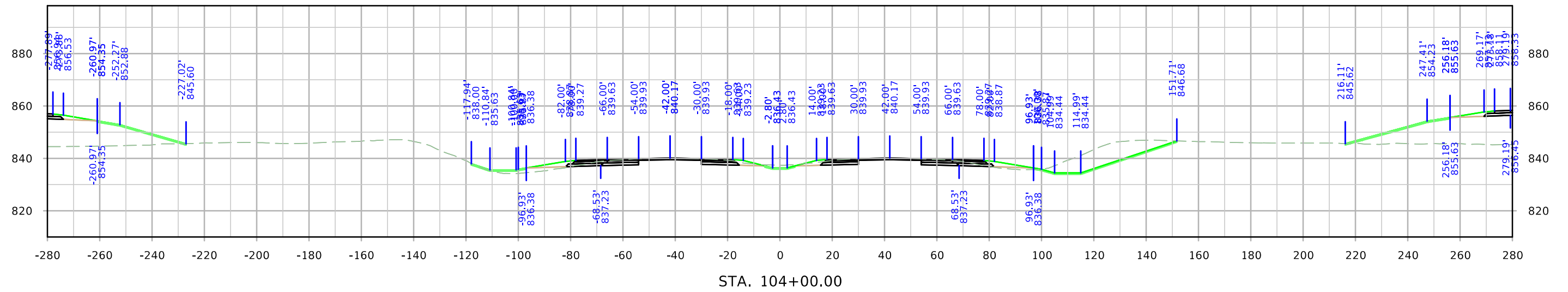
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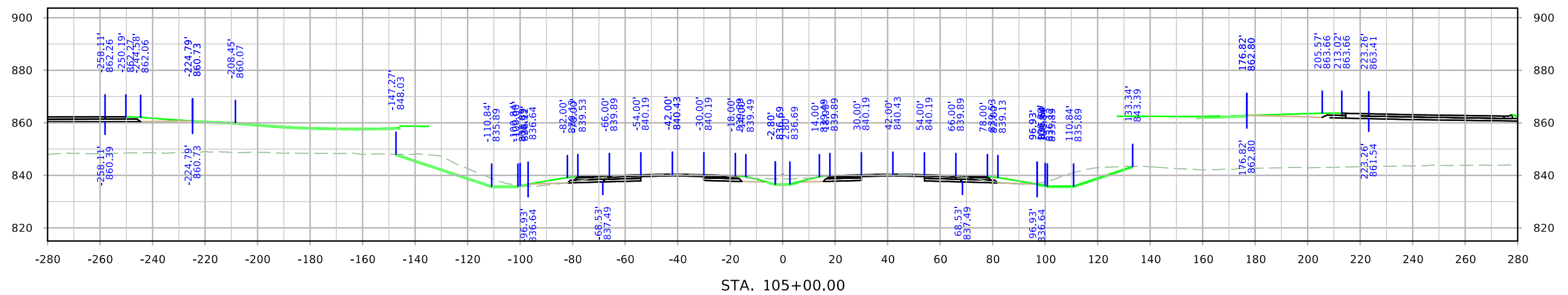
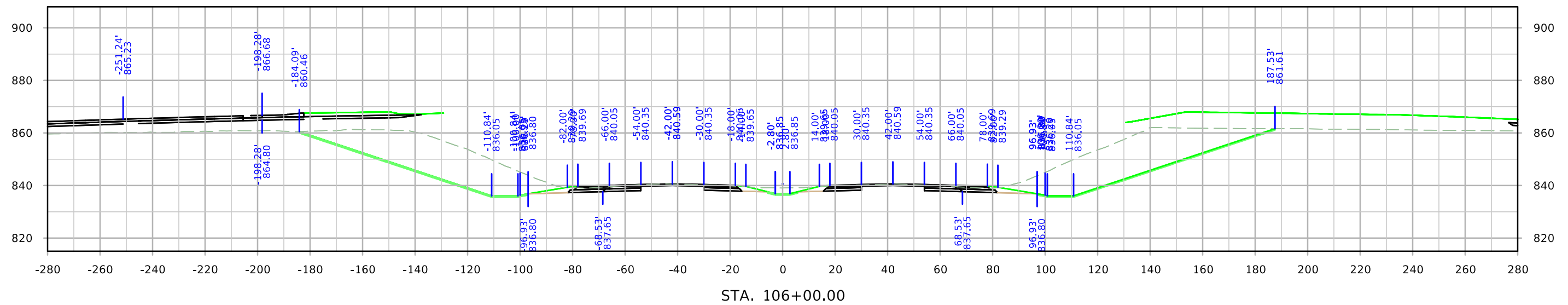
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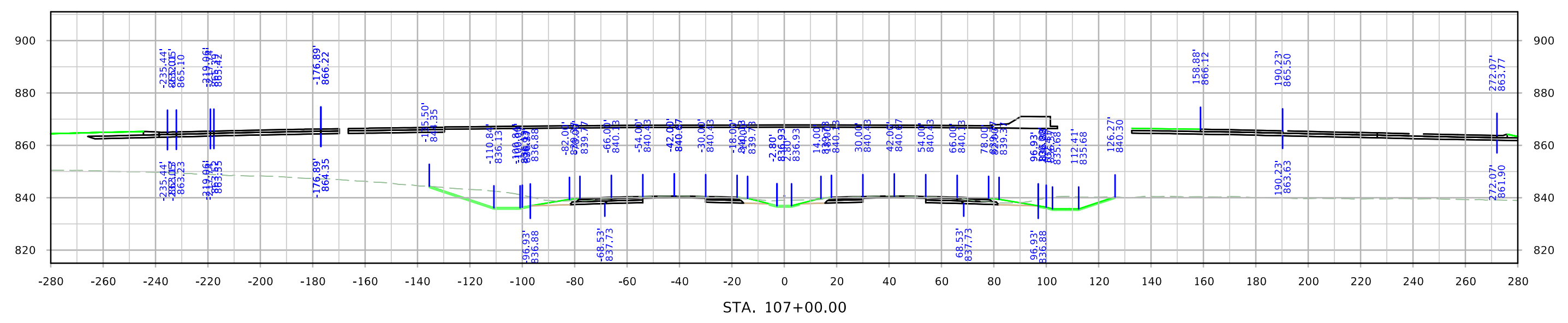
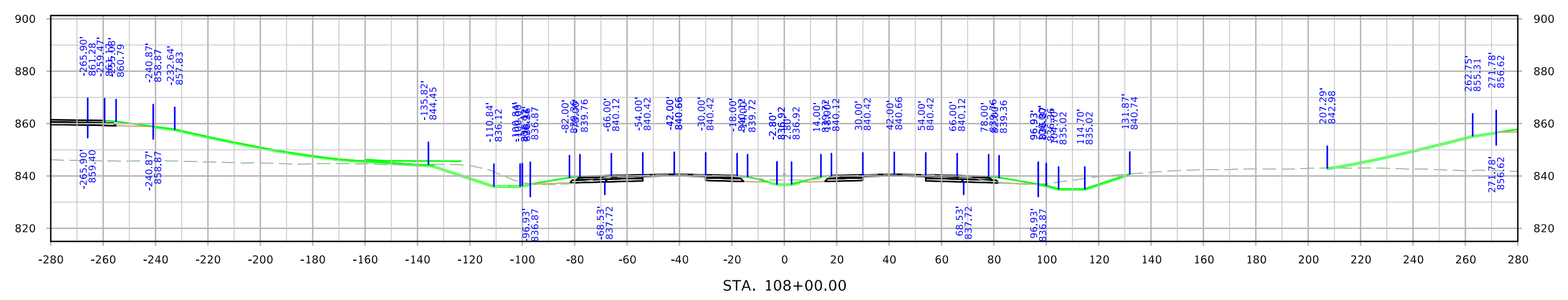
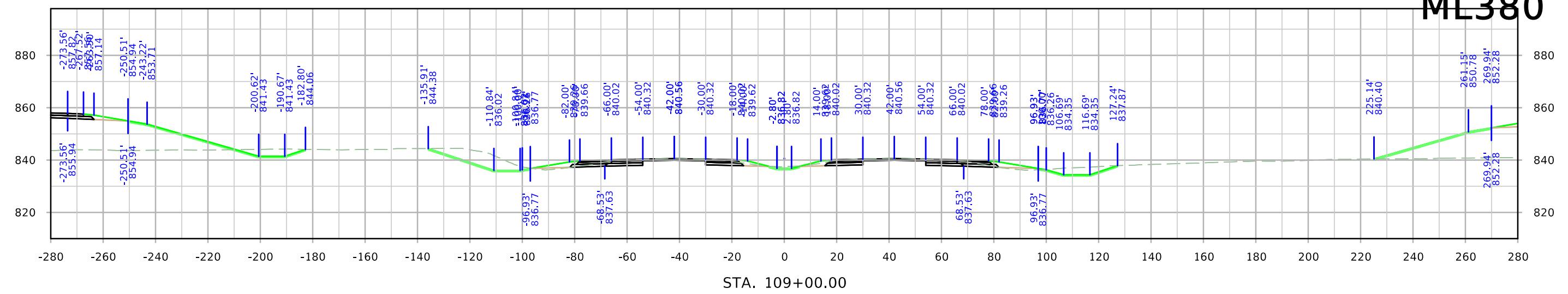
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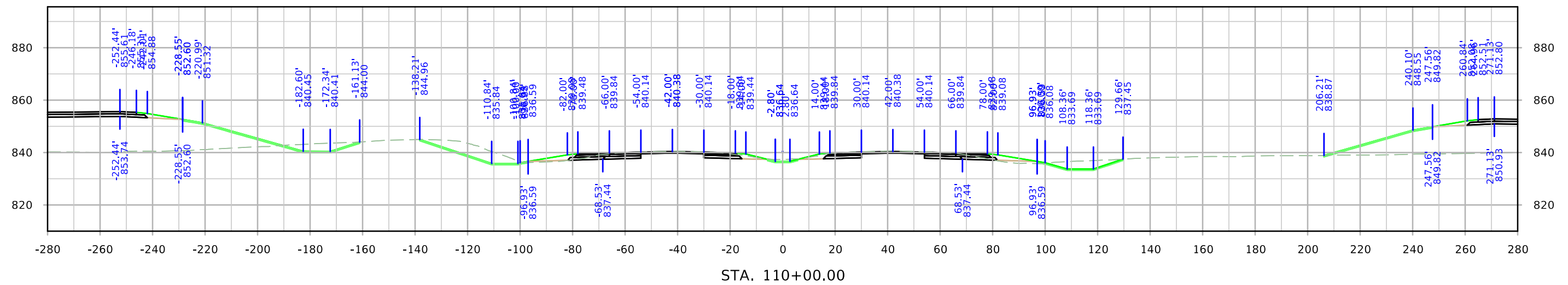
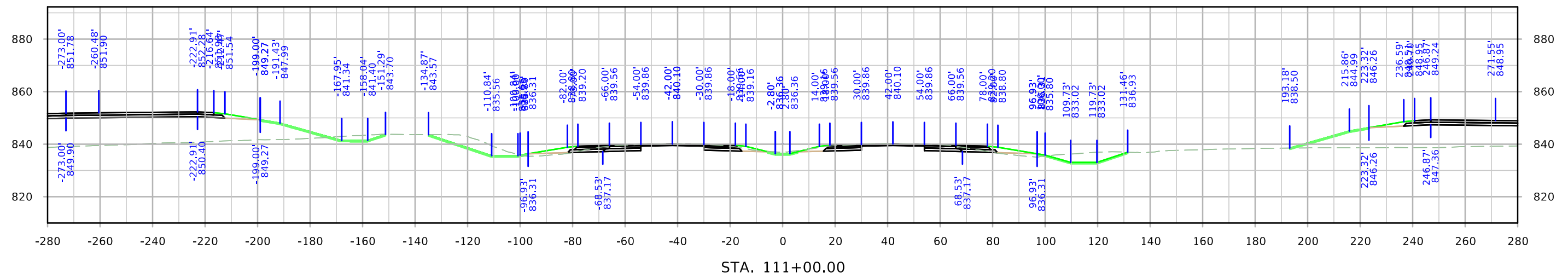
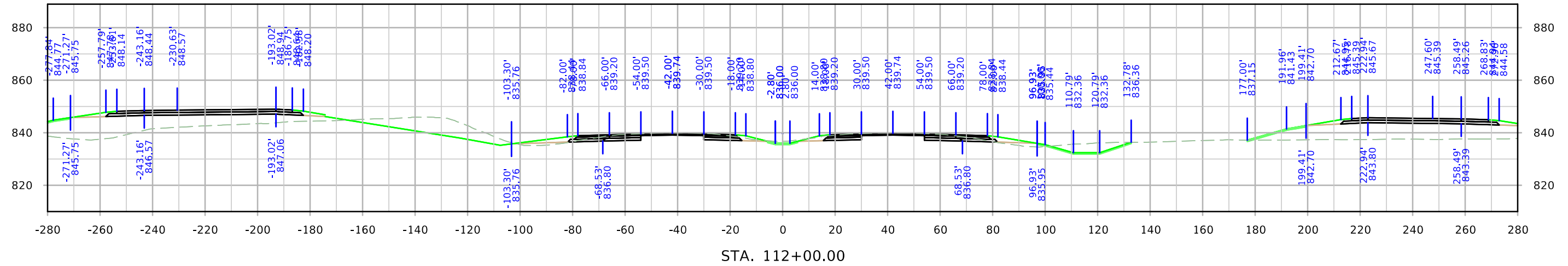
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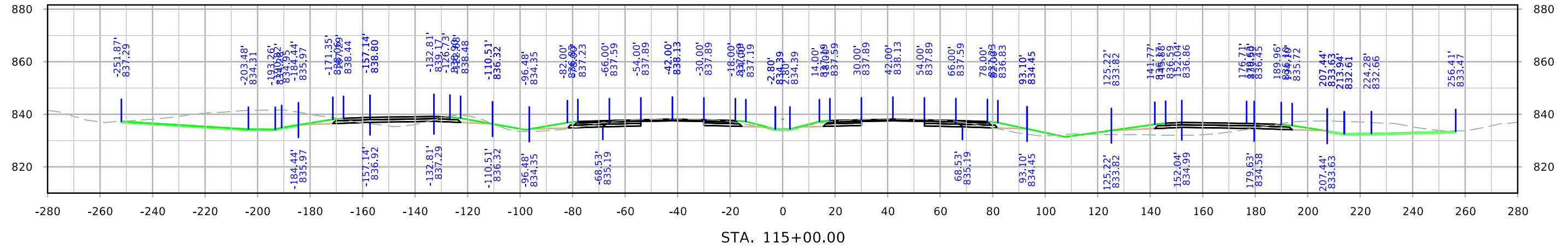
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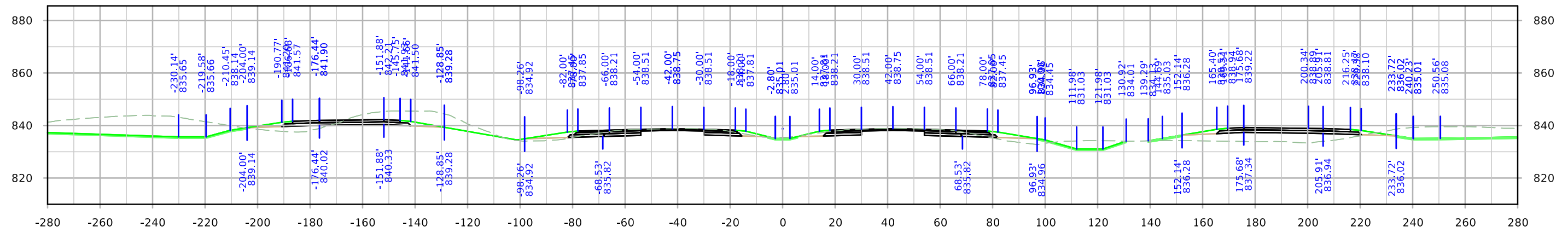
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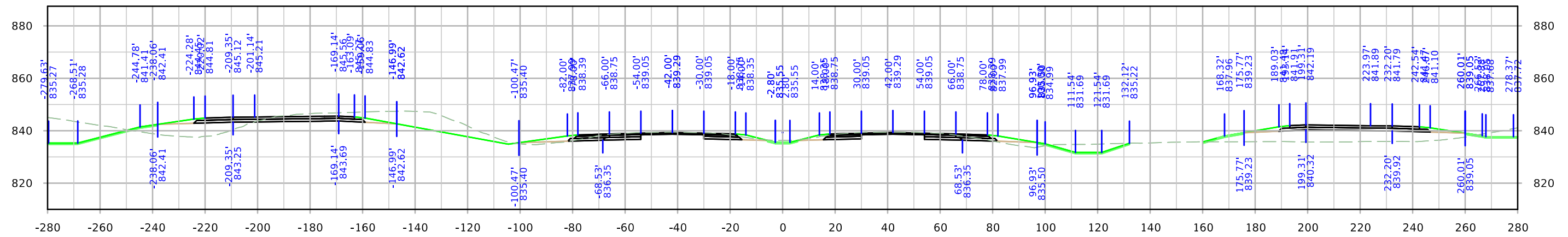
ML380



STA. 115+00.00

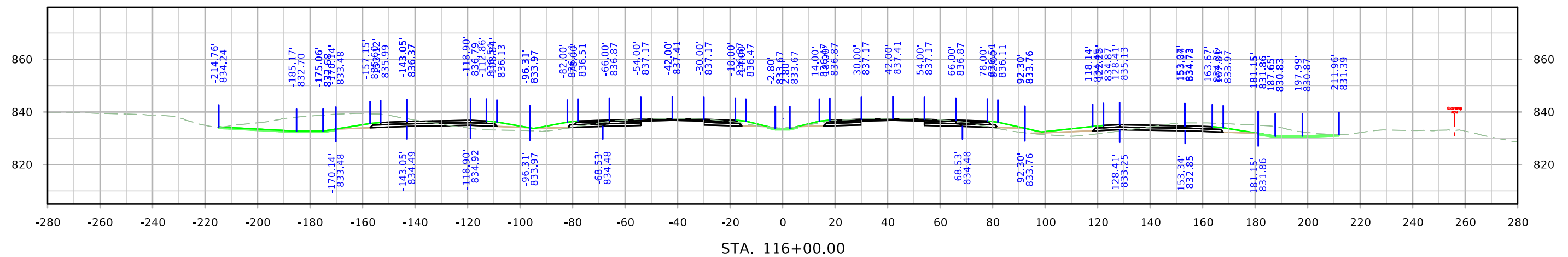
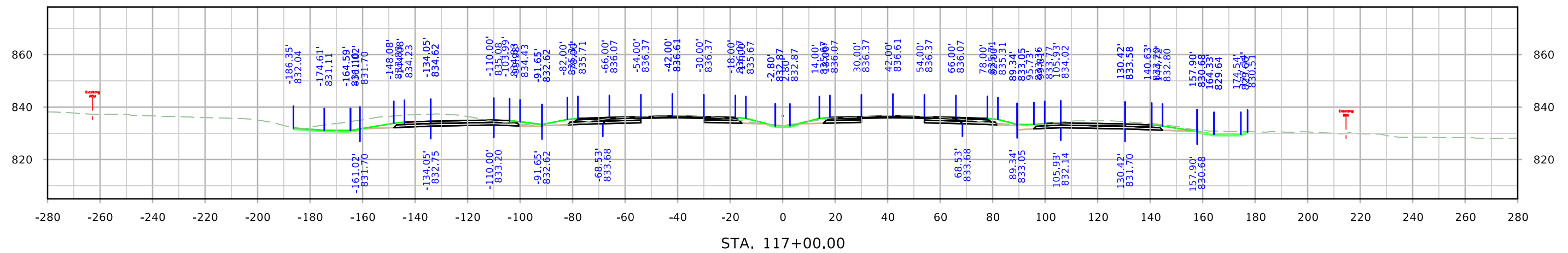
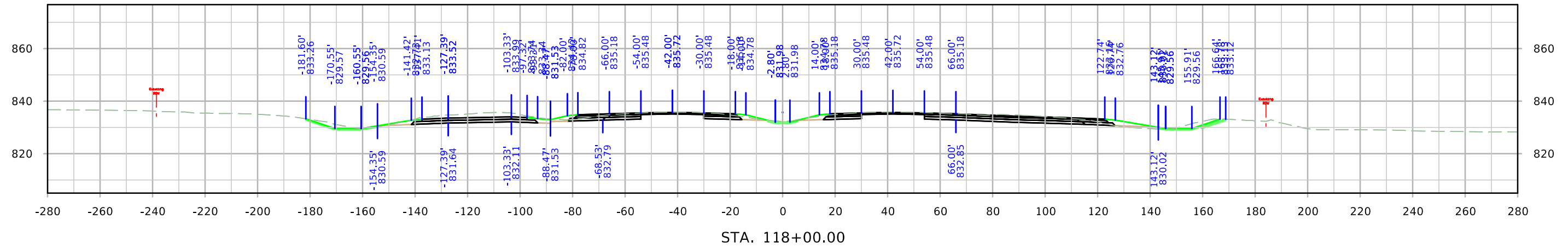


STA. 114+00.00

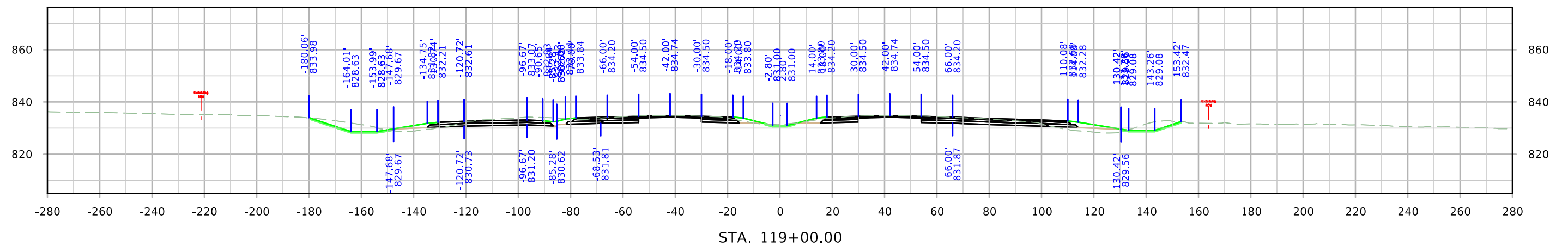
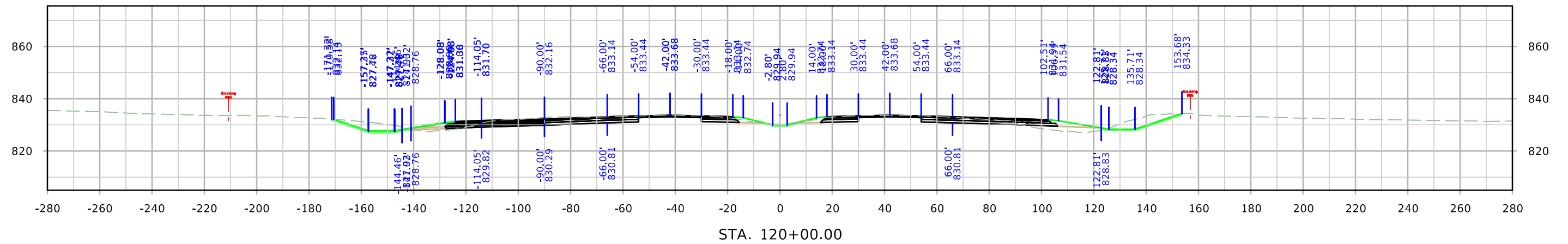
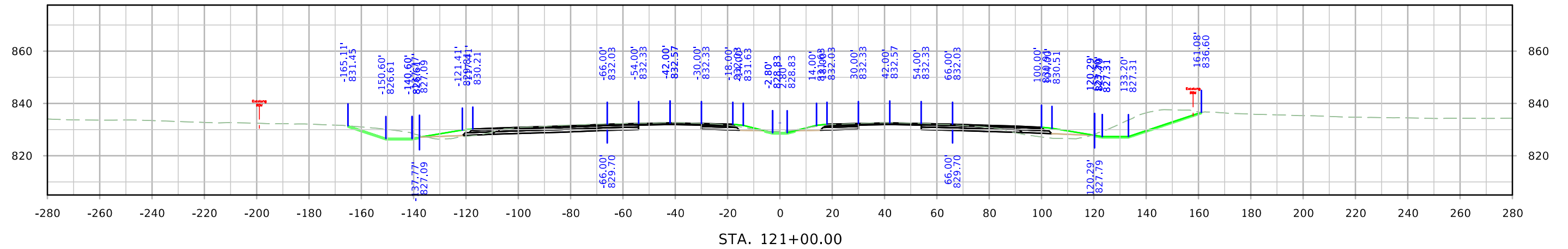


STA. 113+00.00

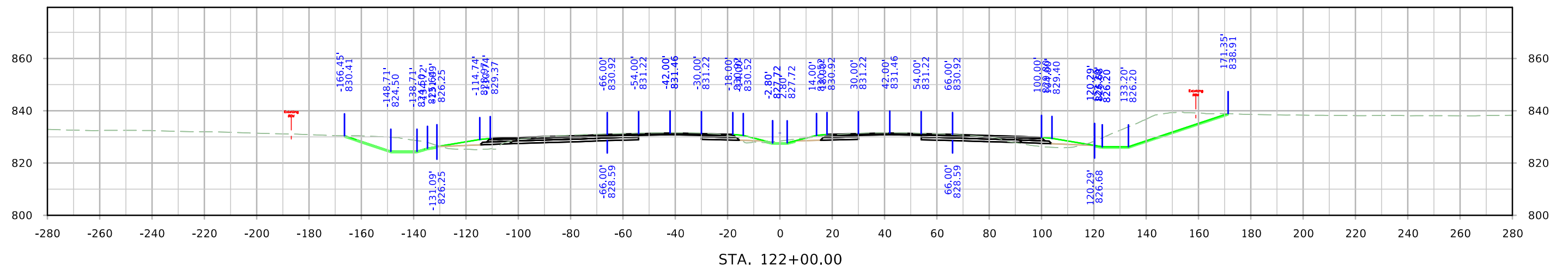
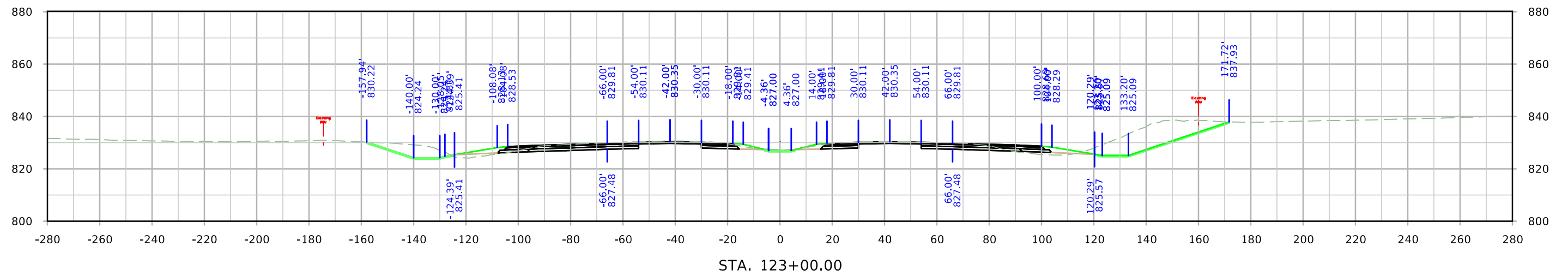
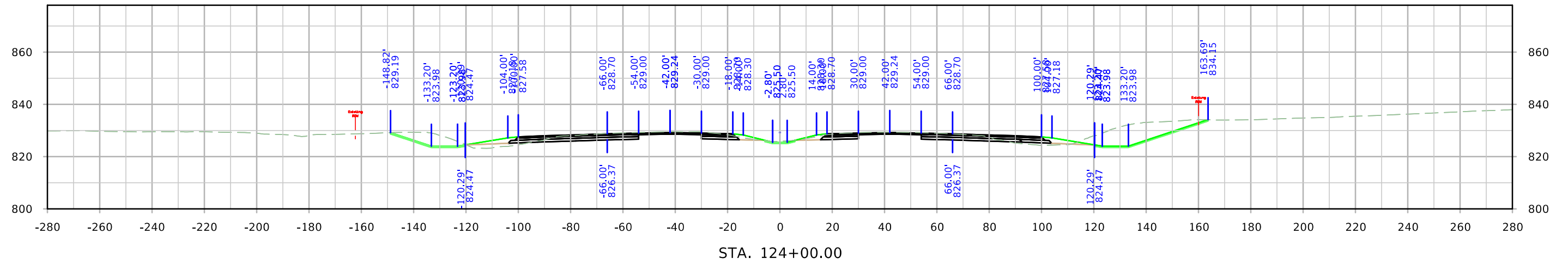
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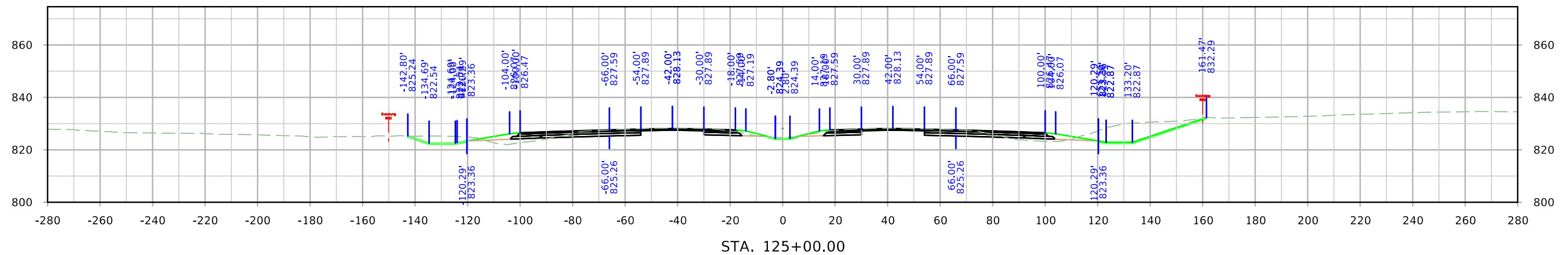
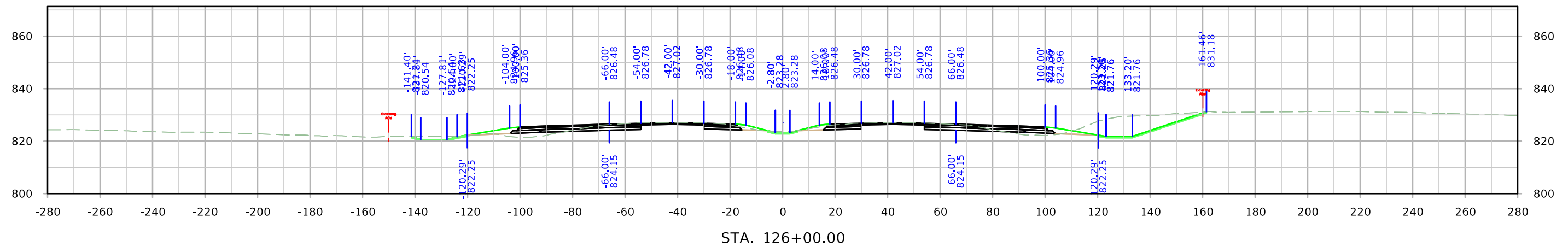
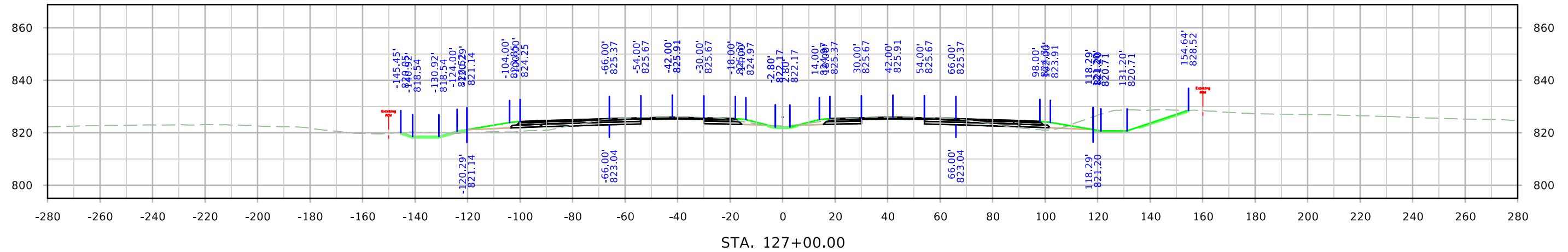
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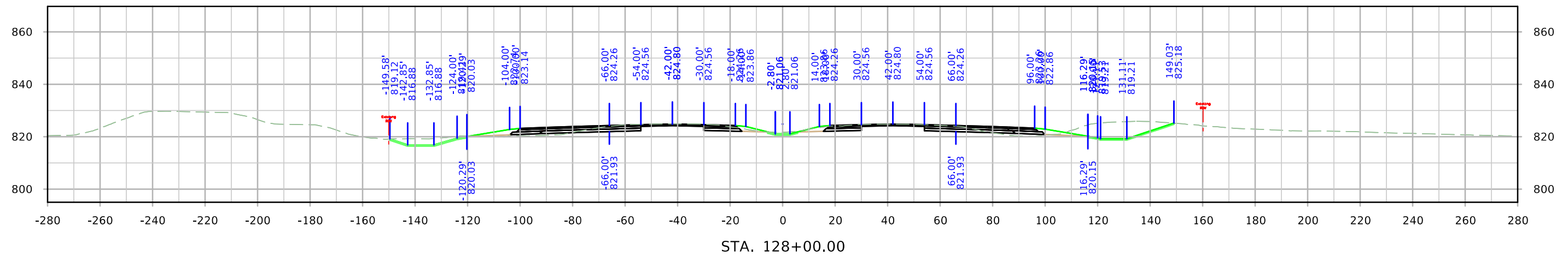
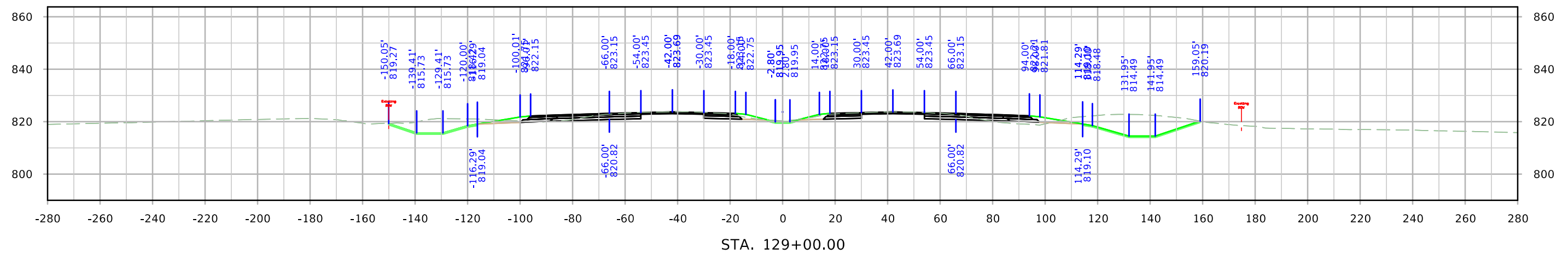
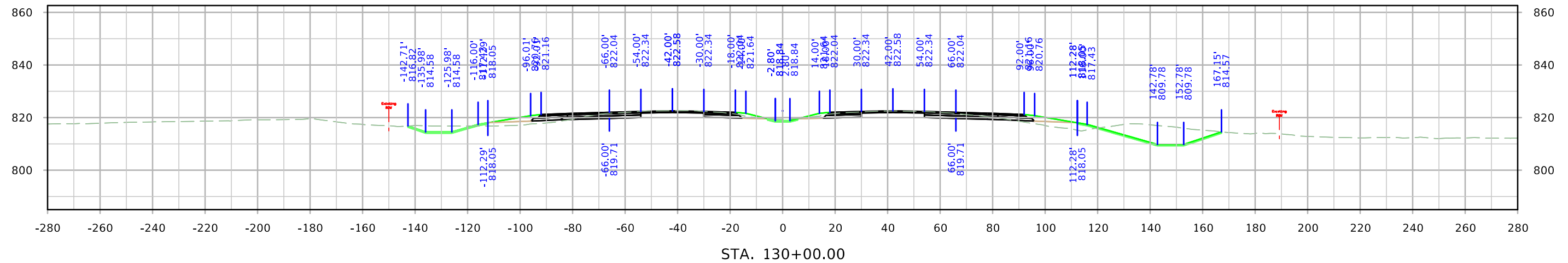
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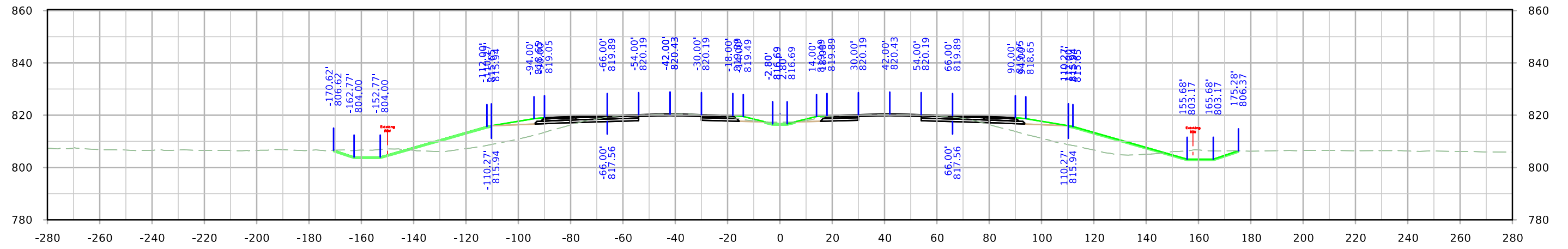
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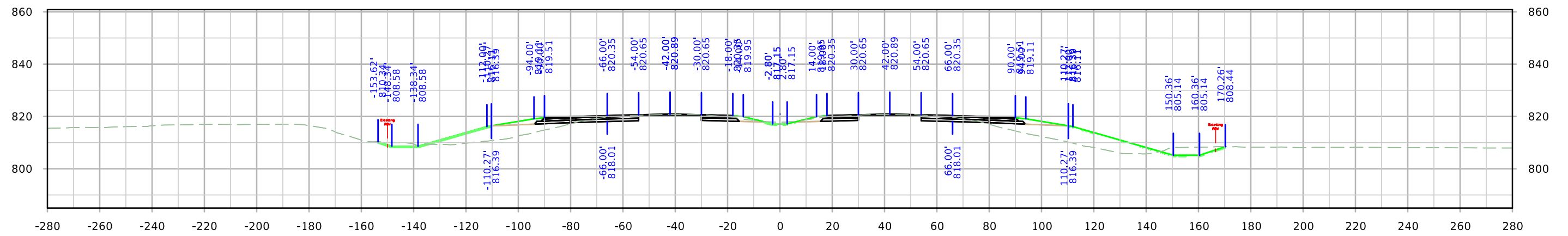
ML380



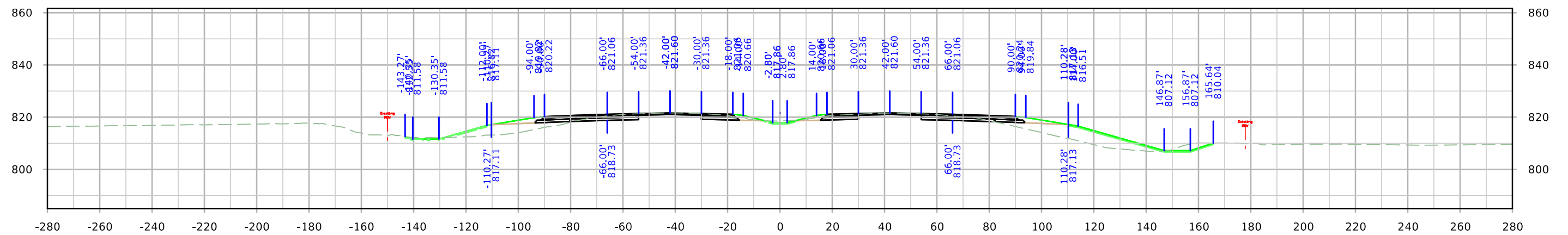
ML380



STA. 133+00.00

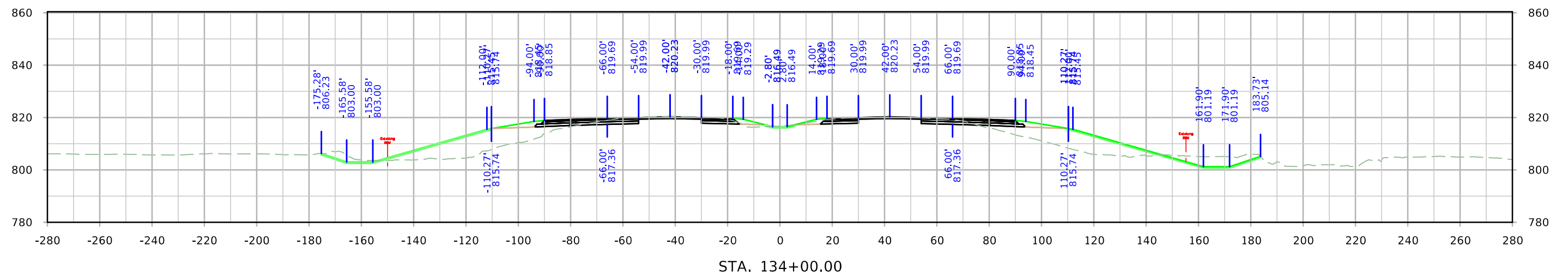
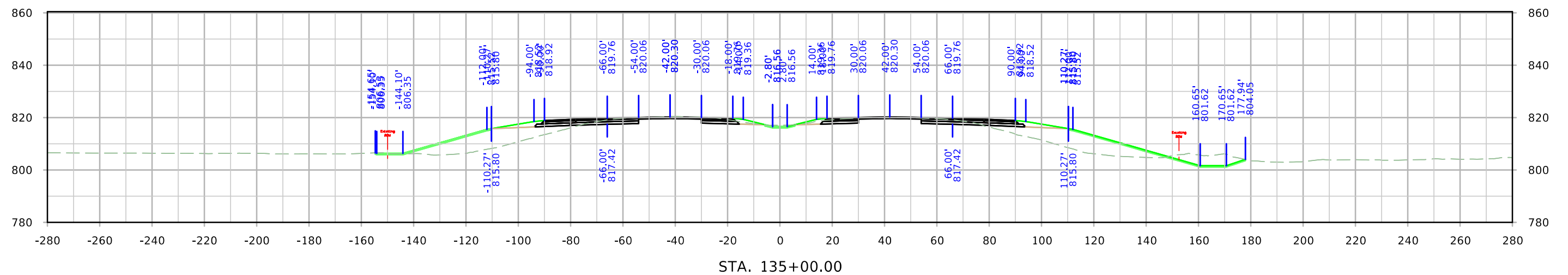
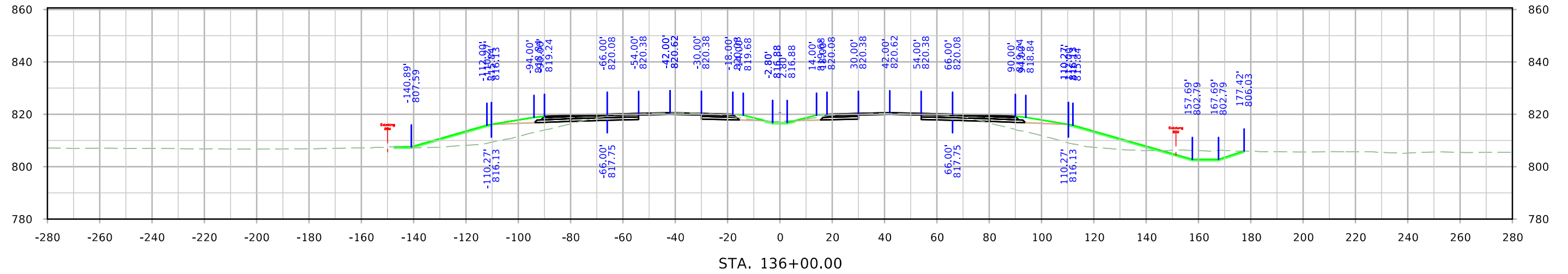


STA. 132+00.00

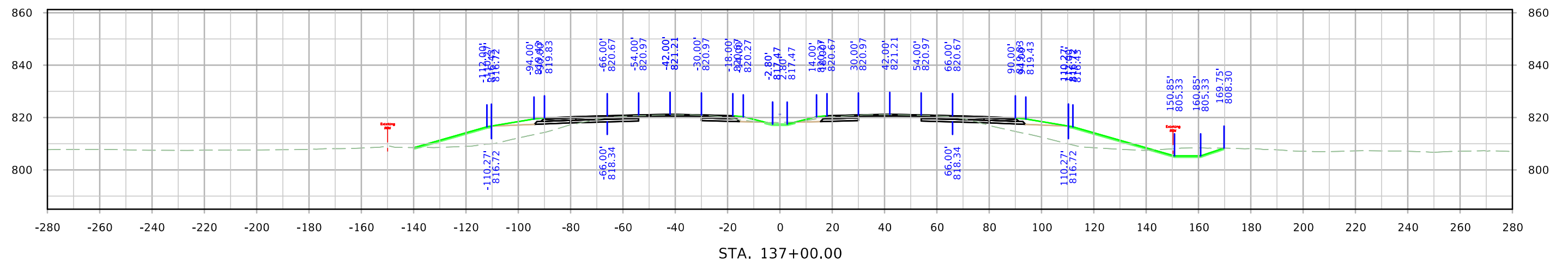
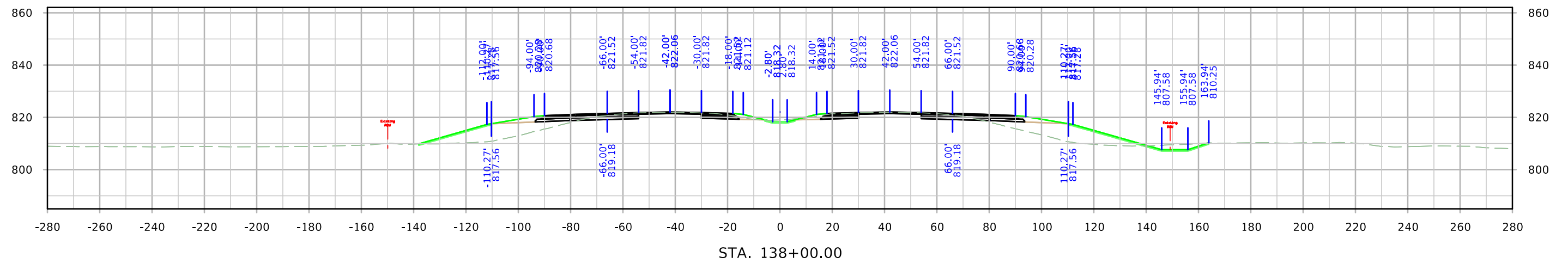
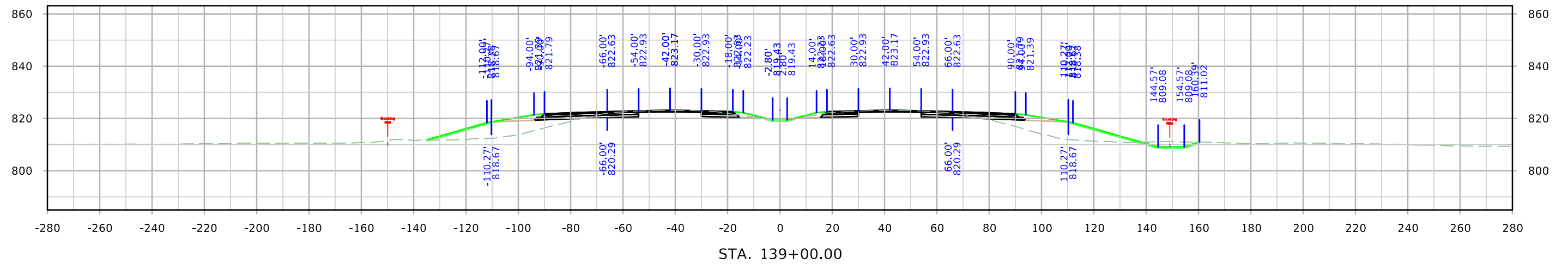


STA. 131+00.00

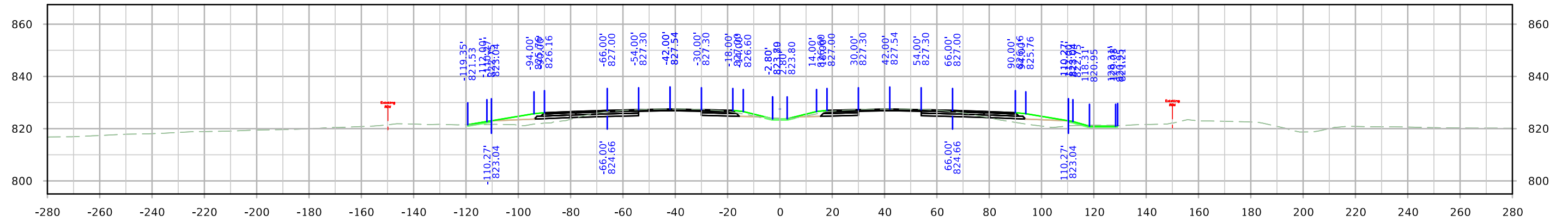
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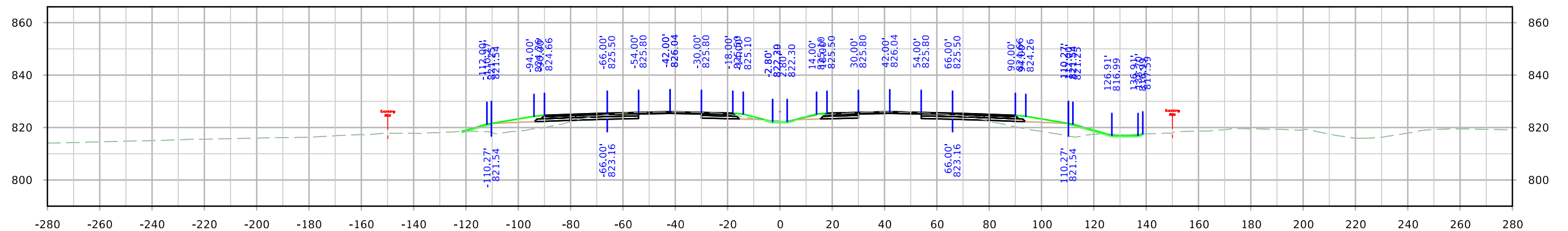
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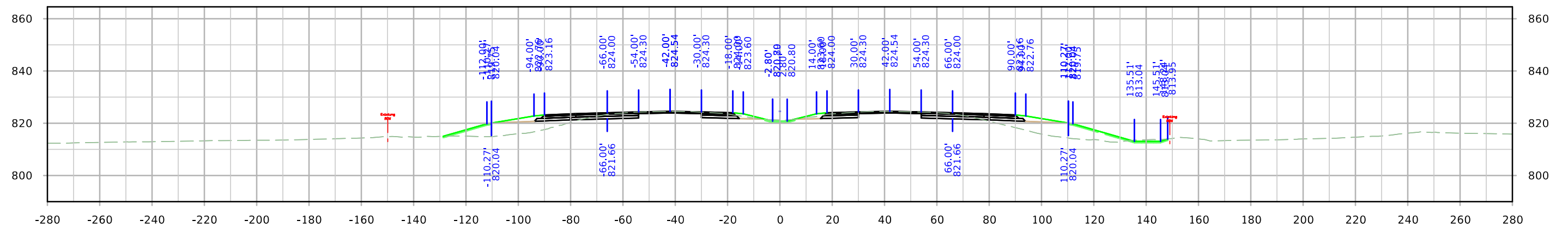
ML380



STA. 142+00.00

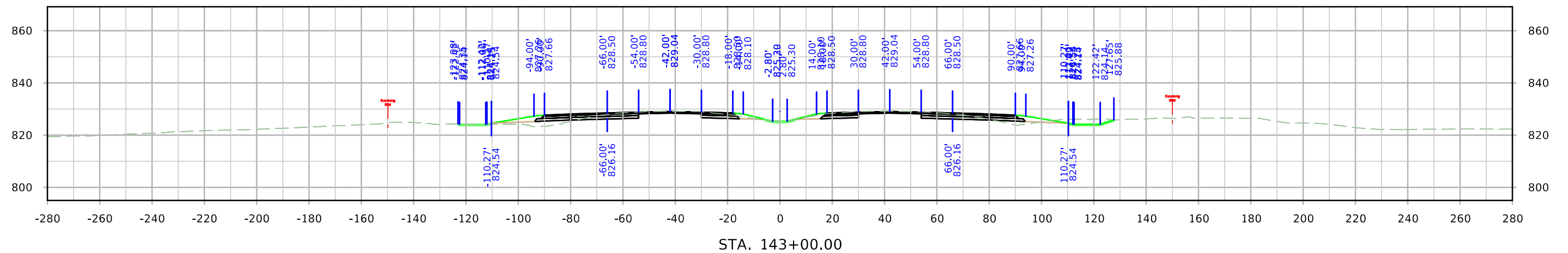
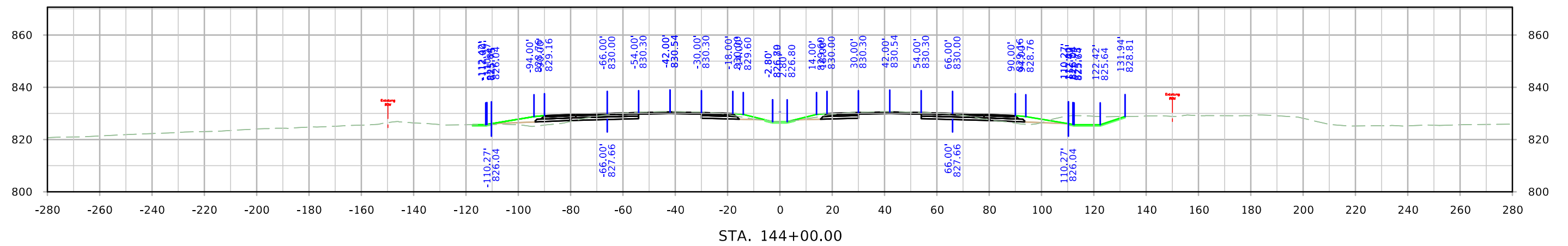
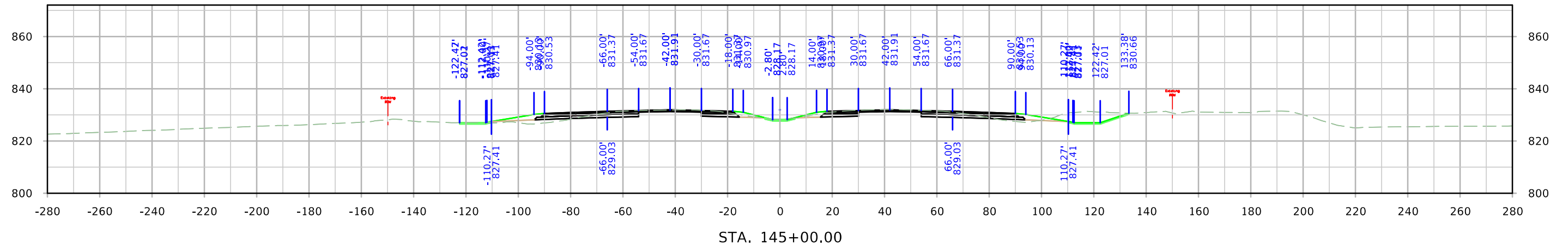


STA. 141+00.00

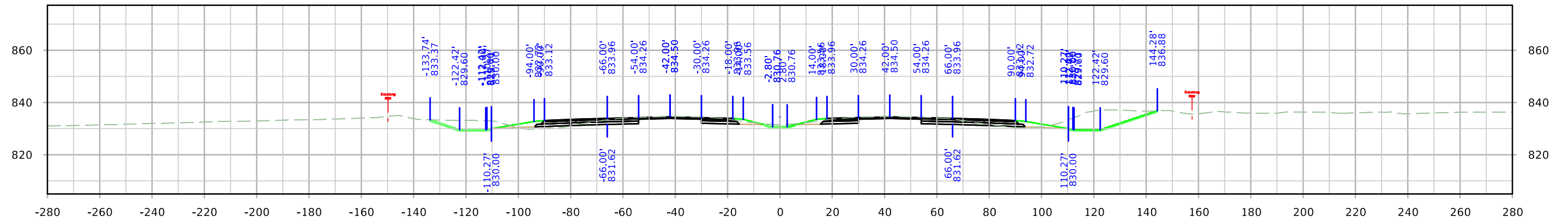


STA. 140+00.00

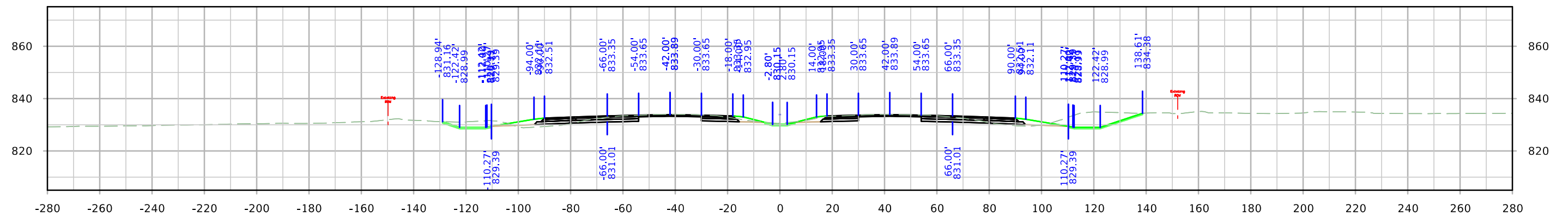
ML380



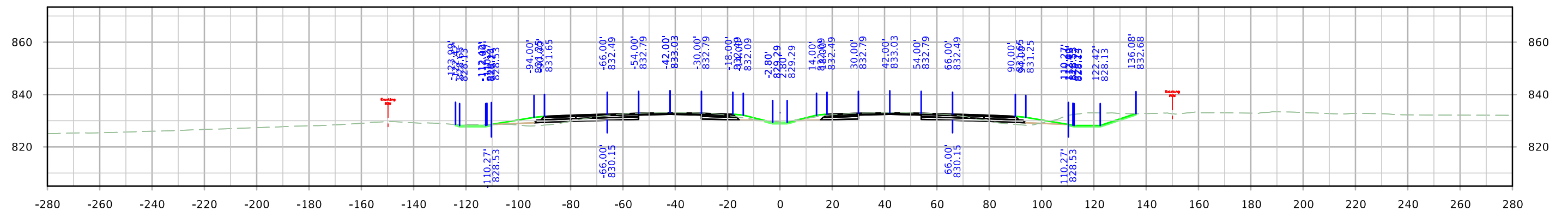
ML380



STA. 148+00.00

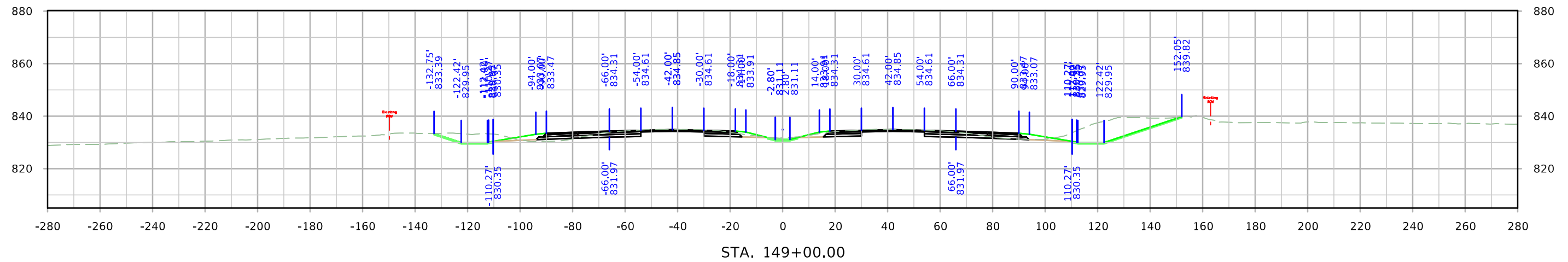
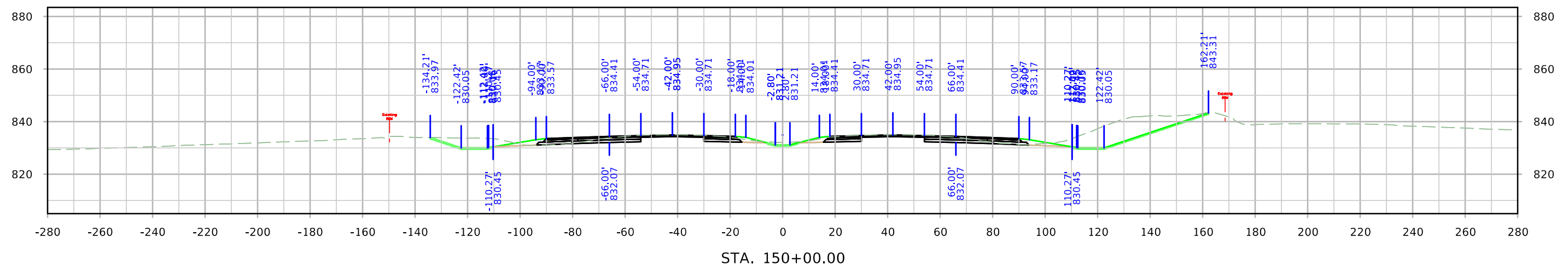
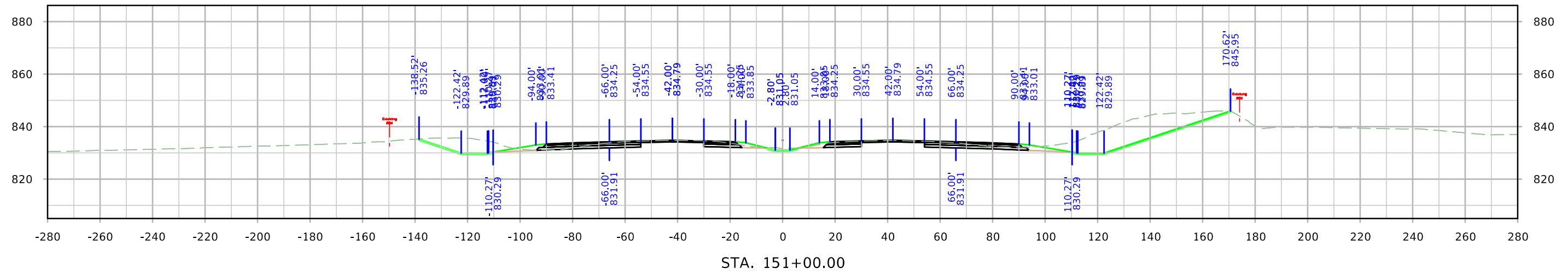


STA. 147+00.00

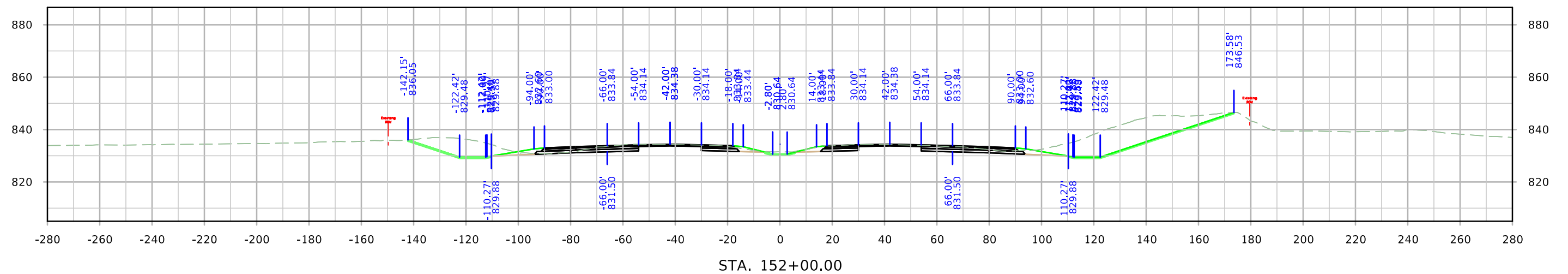
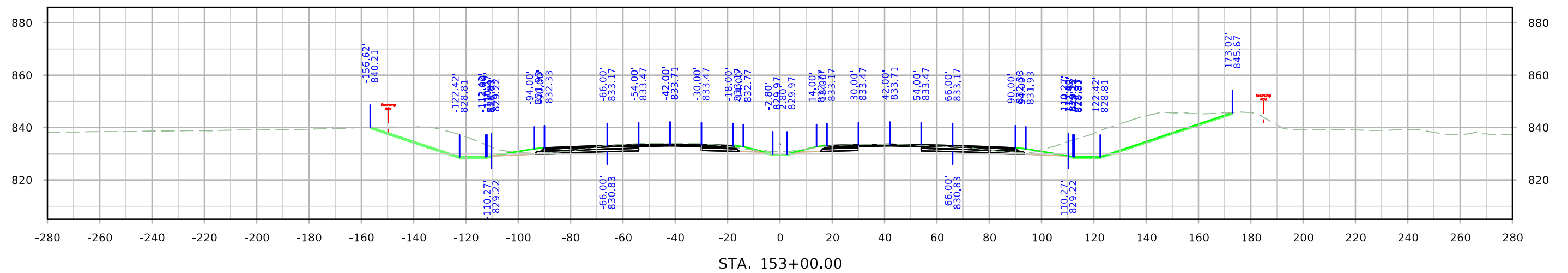
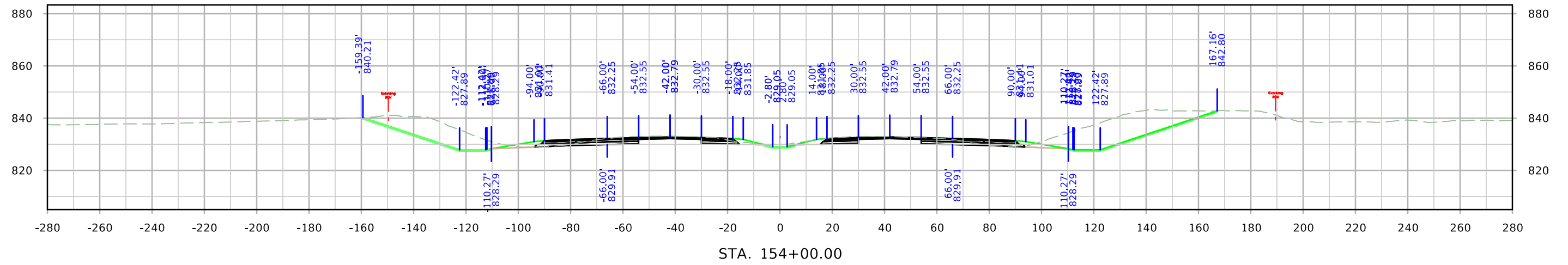


STA. 146+00.00

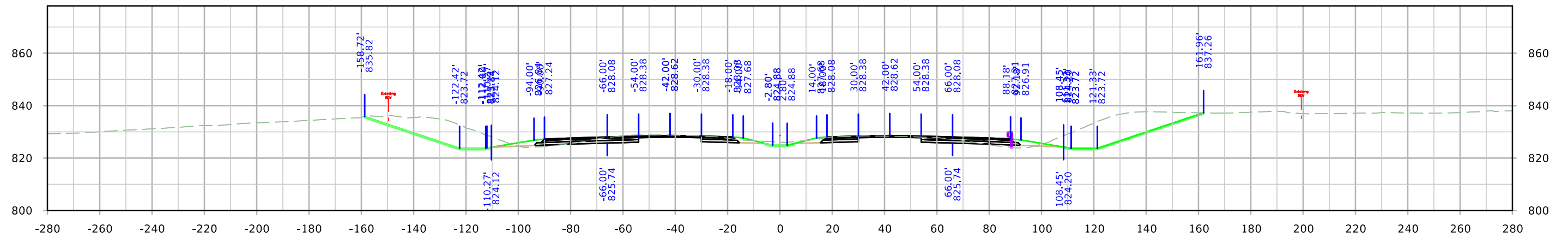
ML380



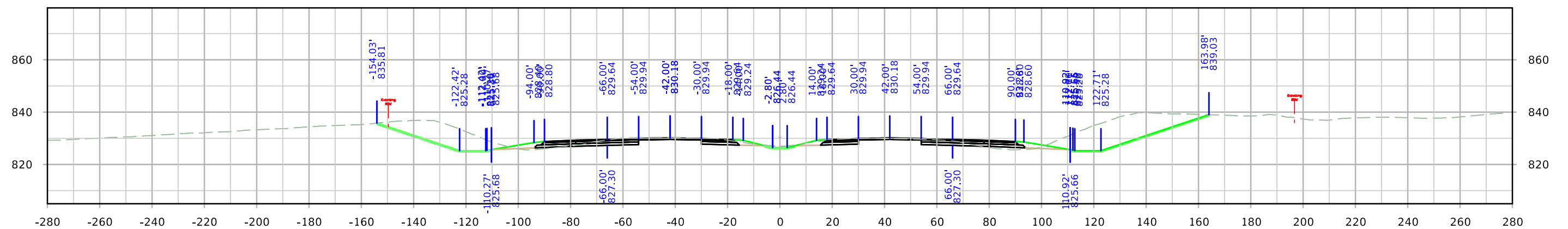
ML380



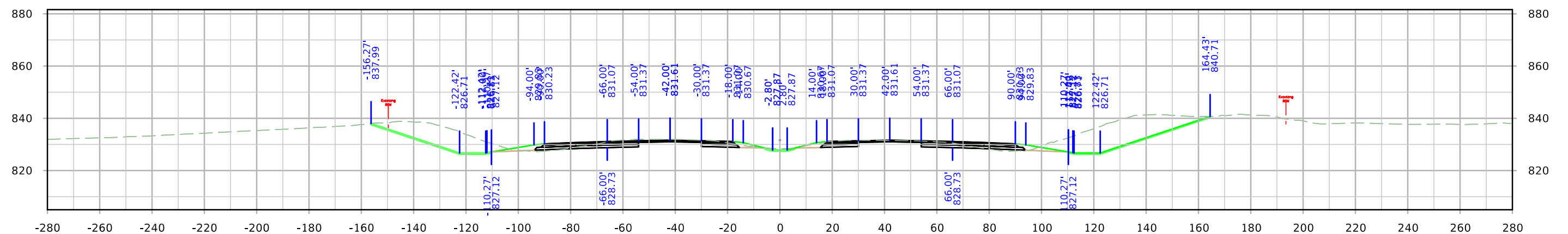
ML380



STA. 157+00.00

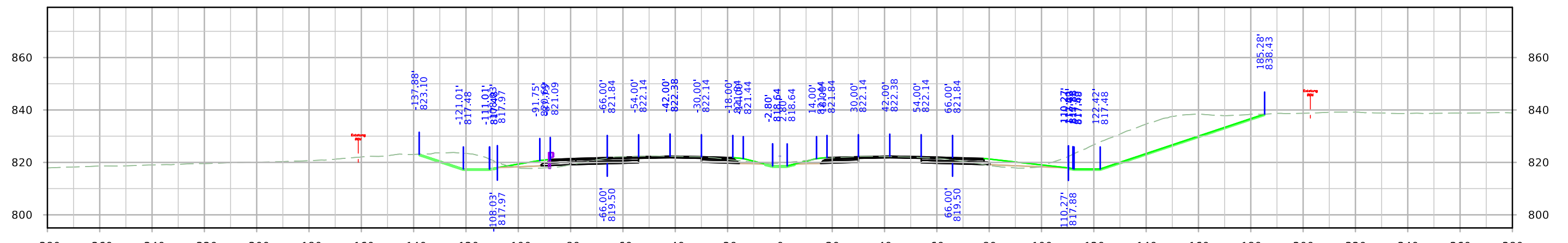
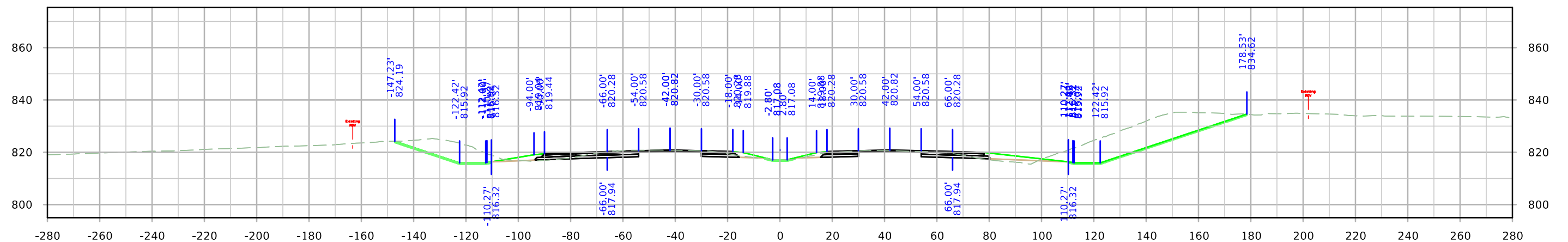
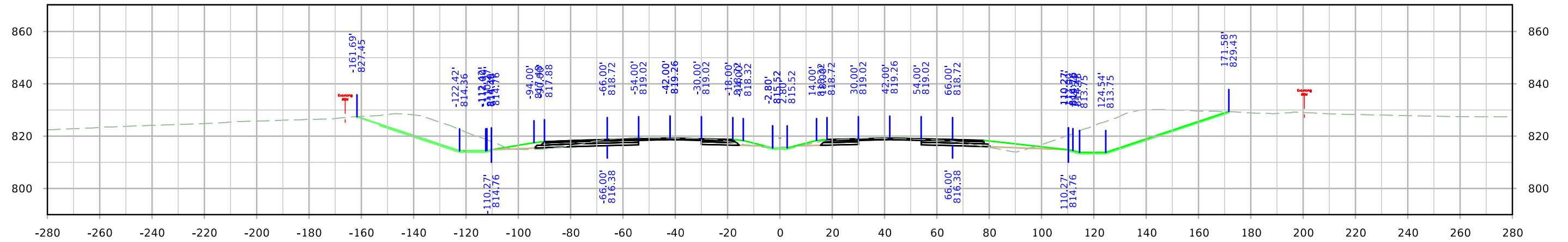


STA. 156+00.00

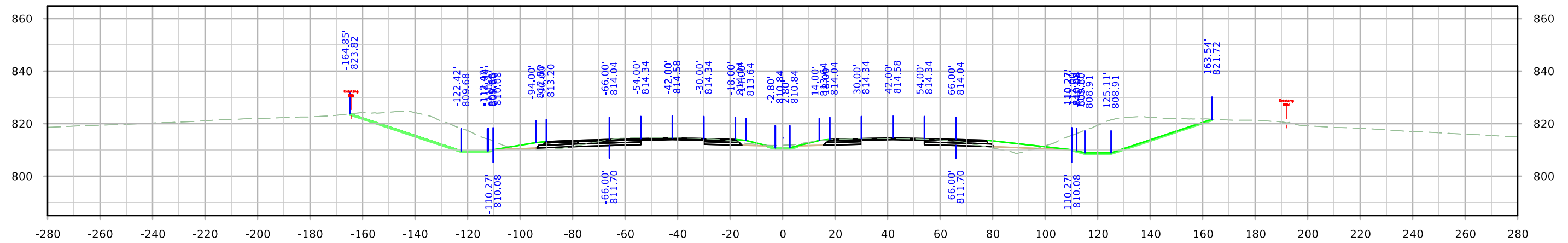


STA. 155+00.00

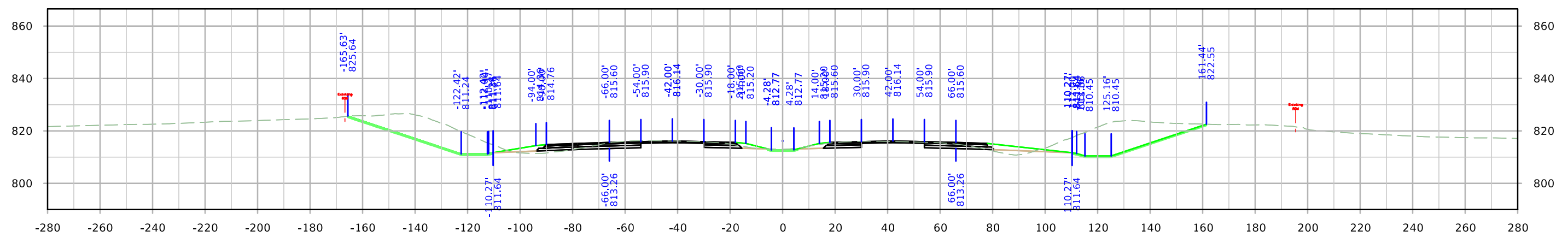
ML380



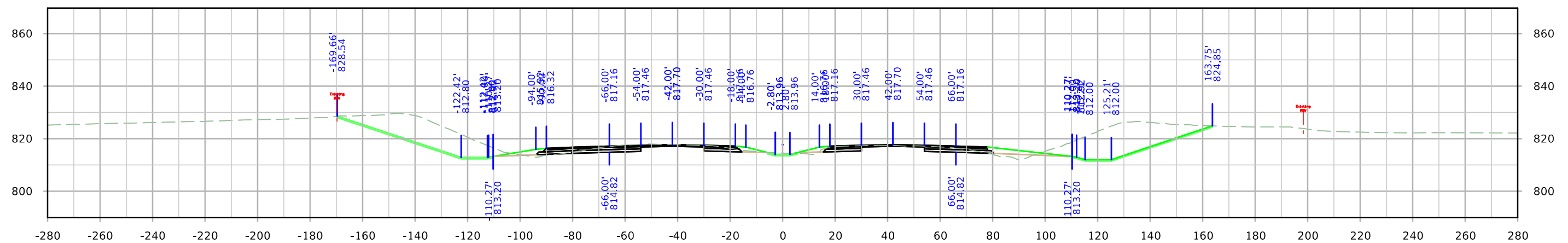
ML380



STA. 166+00.00

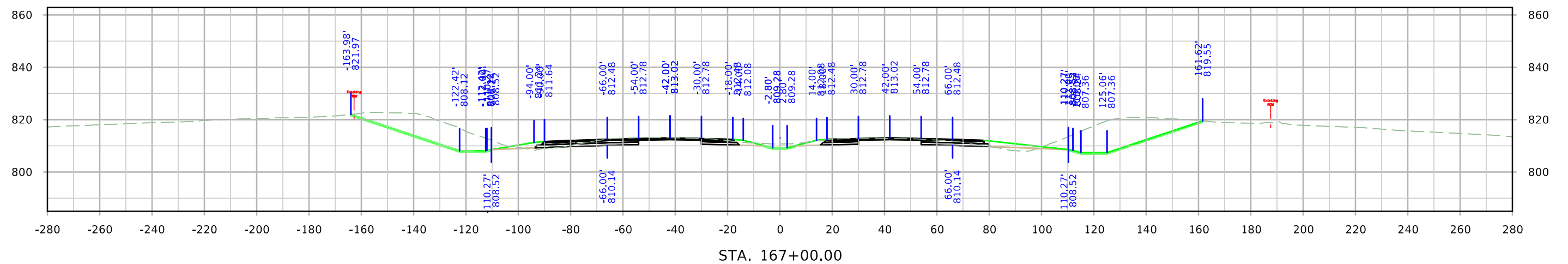
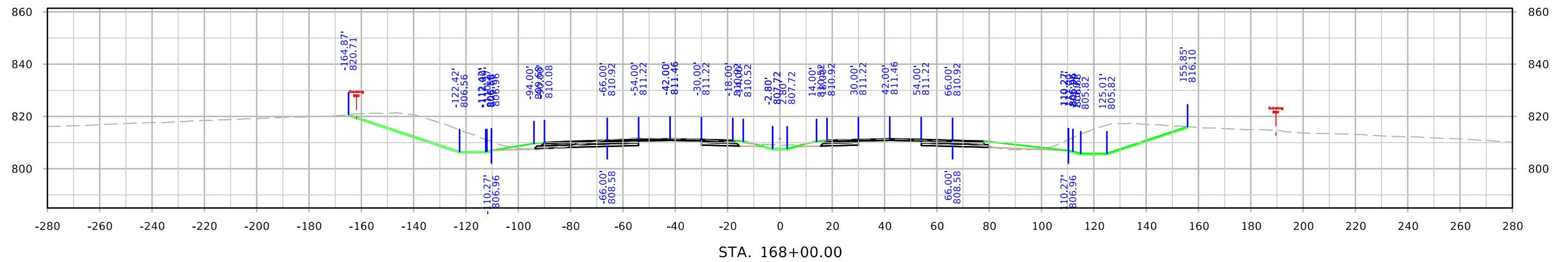
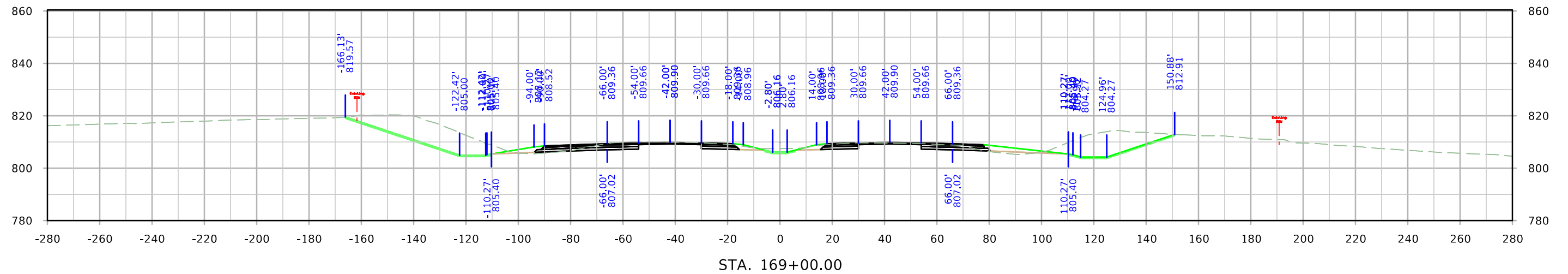


STA. 165+00.00

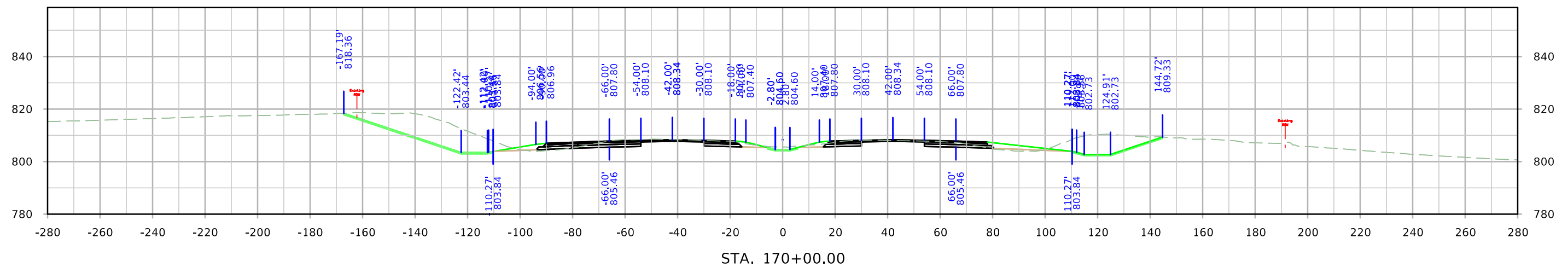
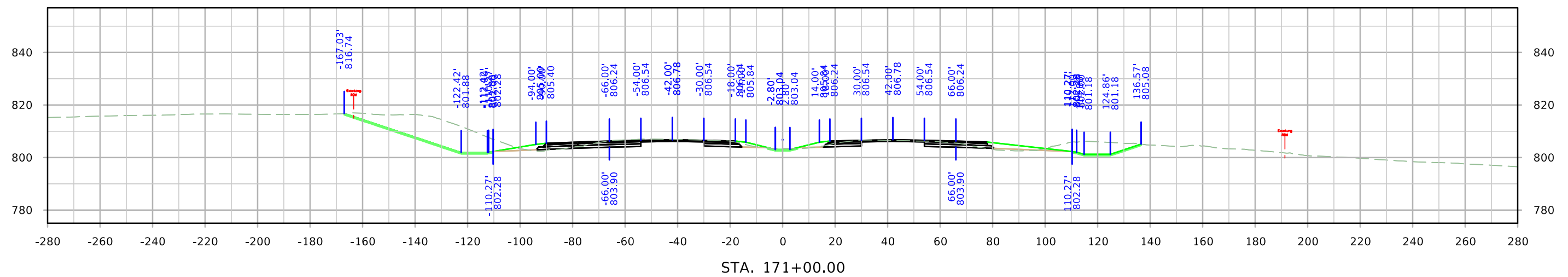
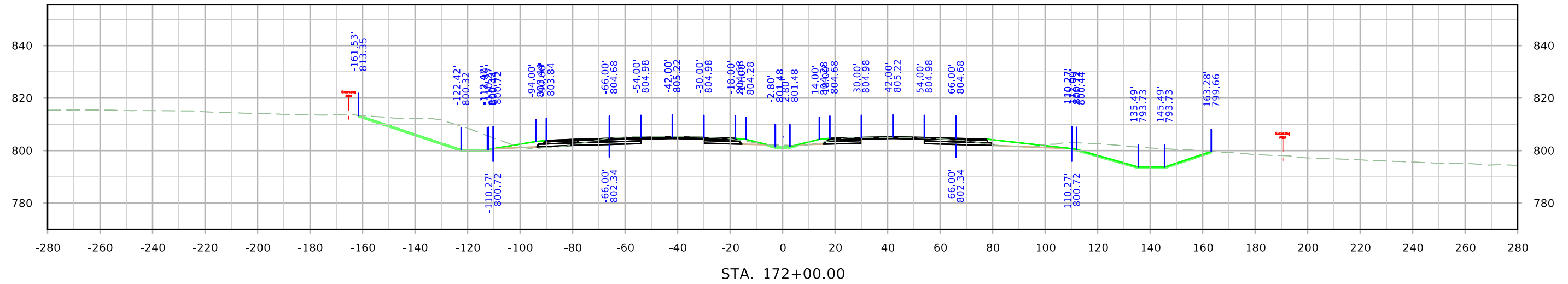


STA. 164+00.00

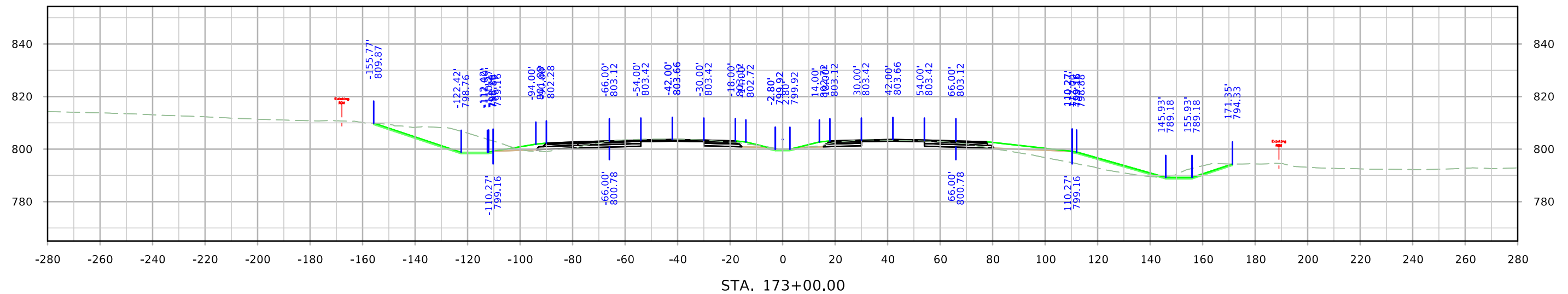
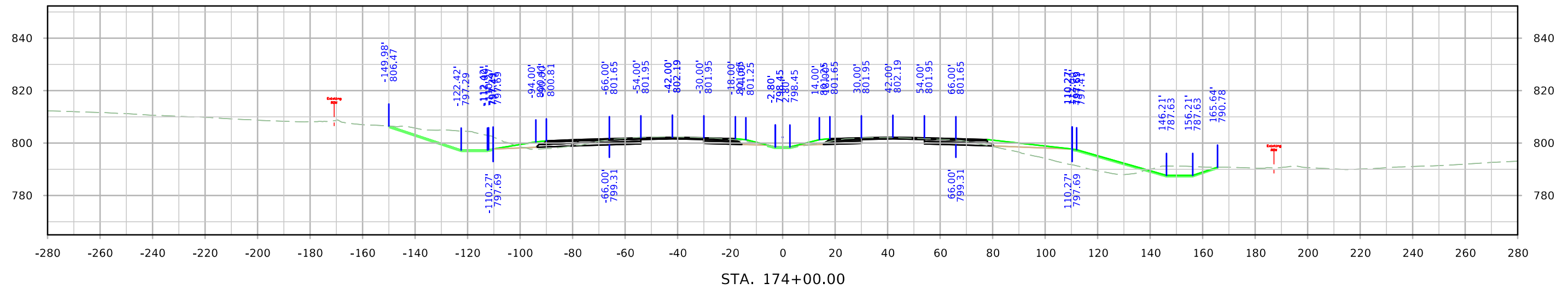
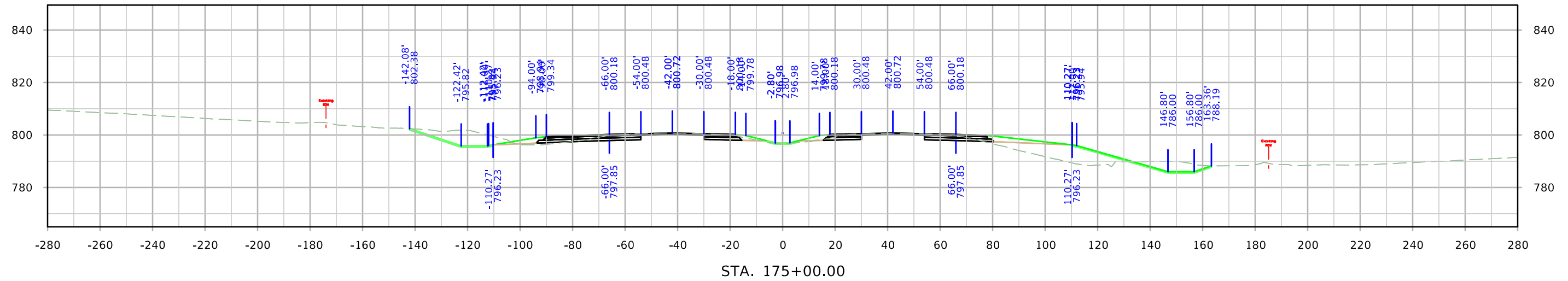
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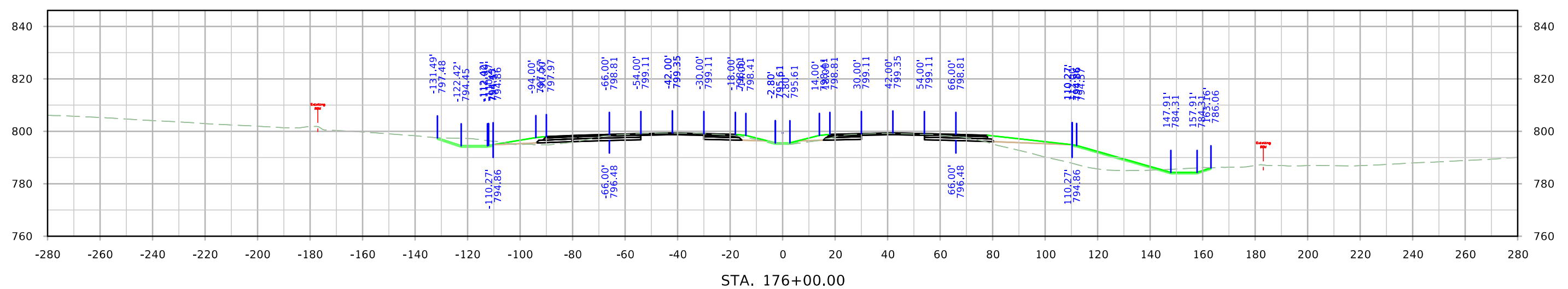
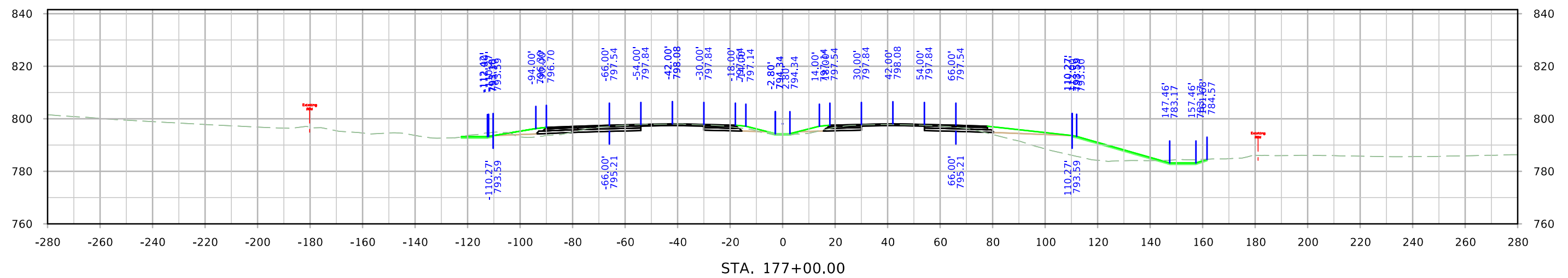
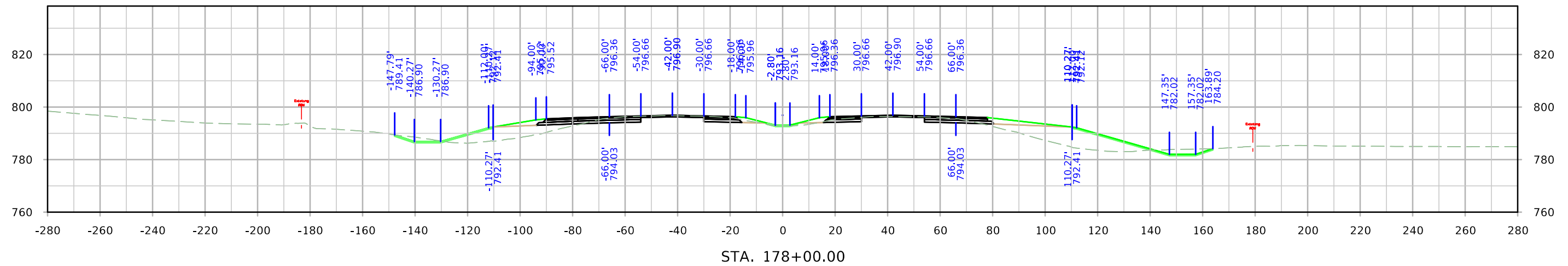
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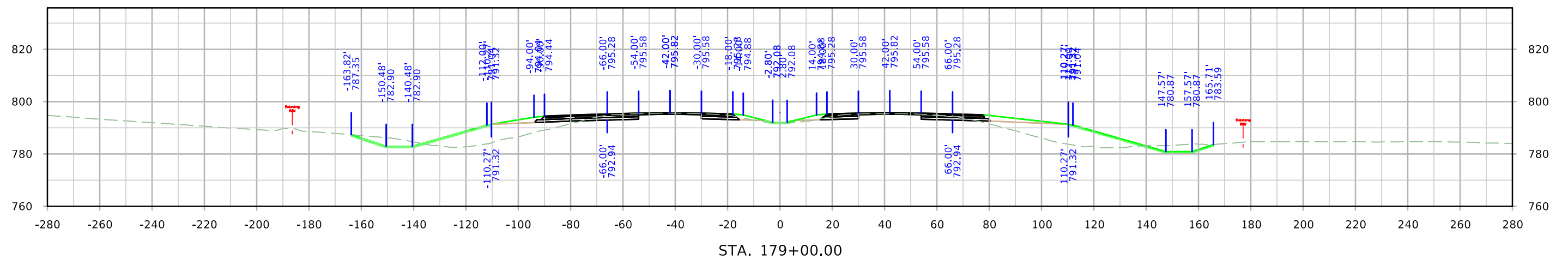
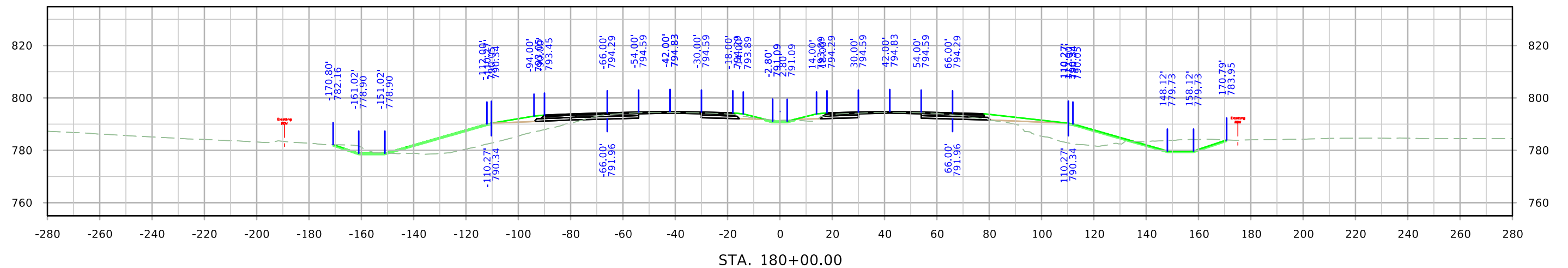
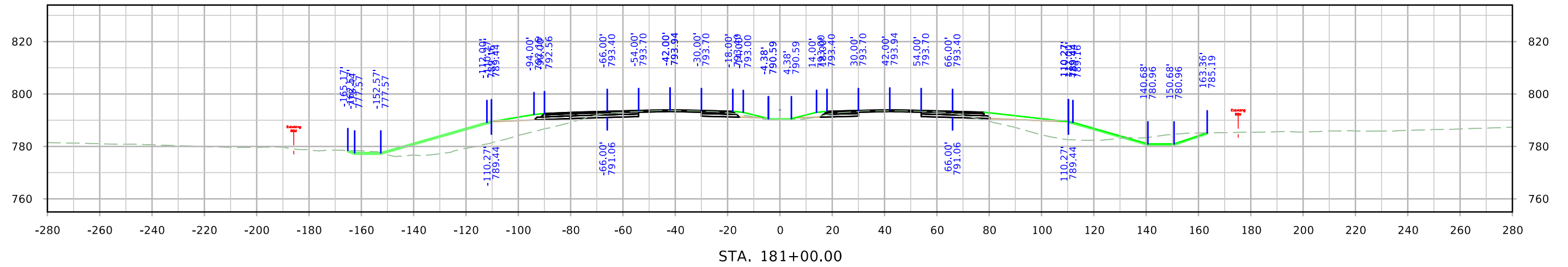
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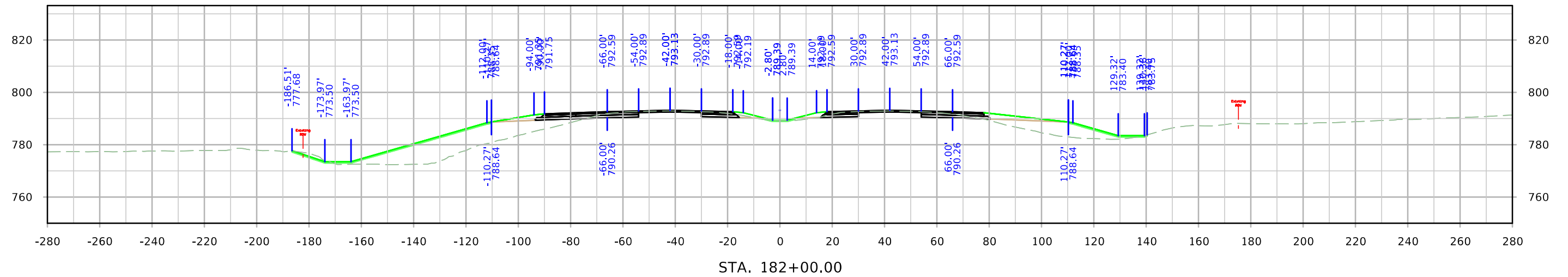
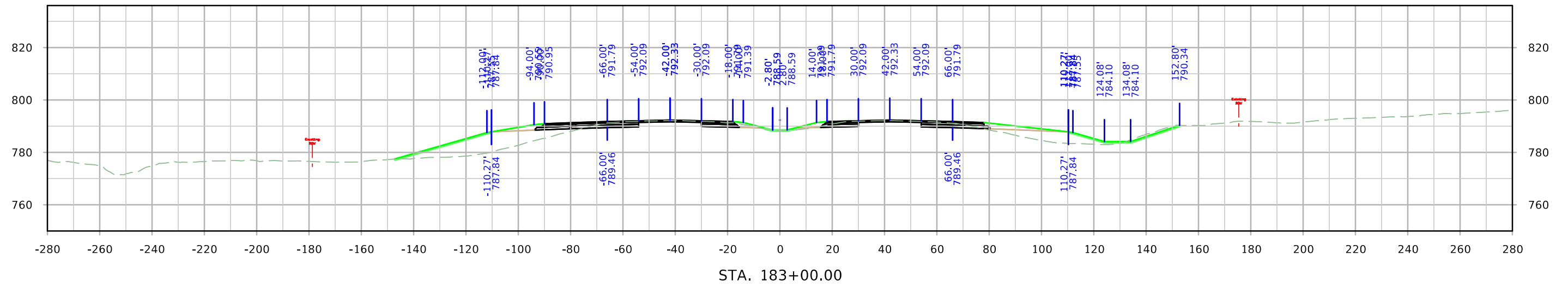
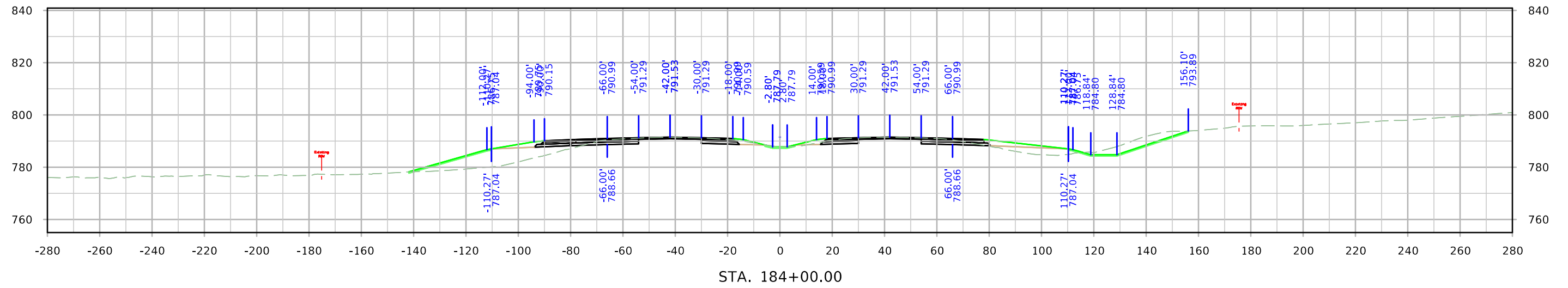
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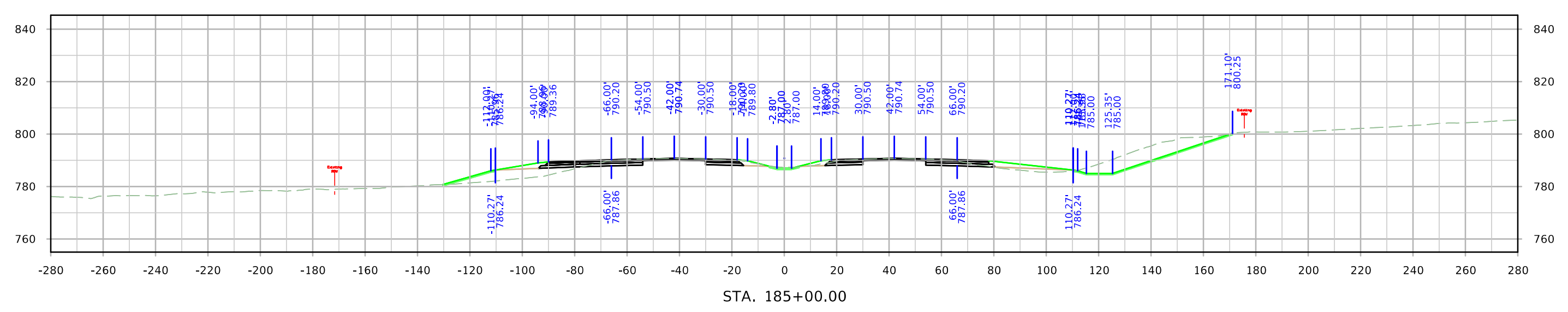
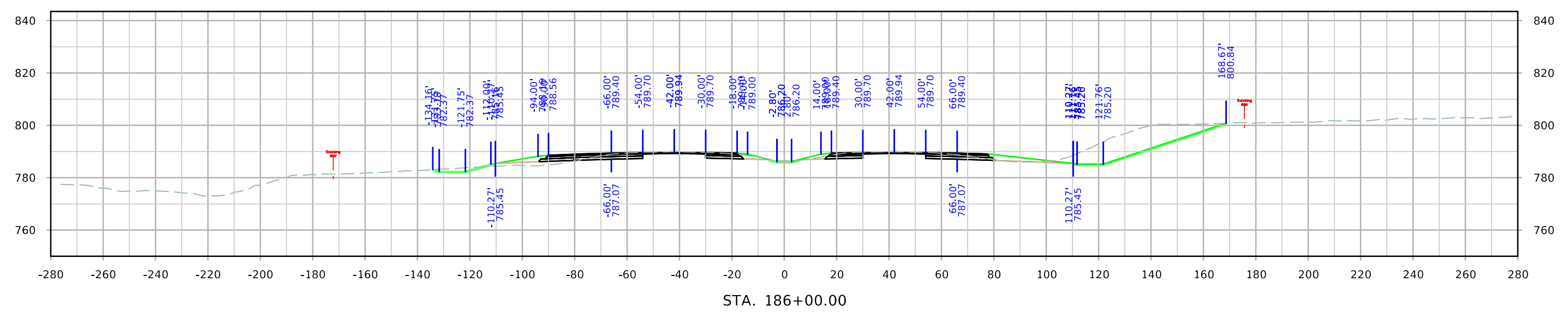
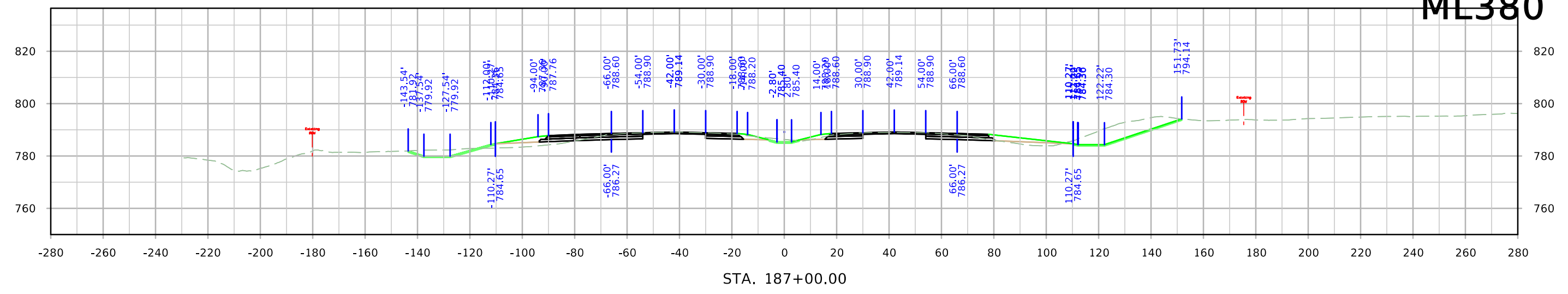
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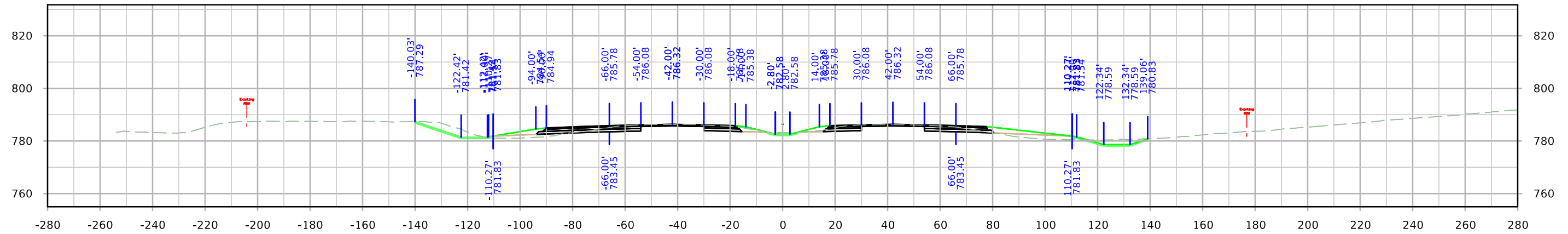
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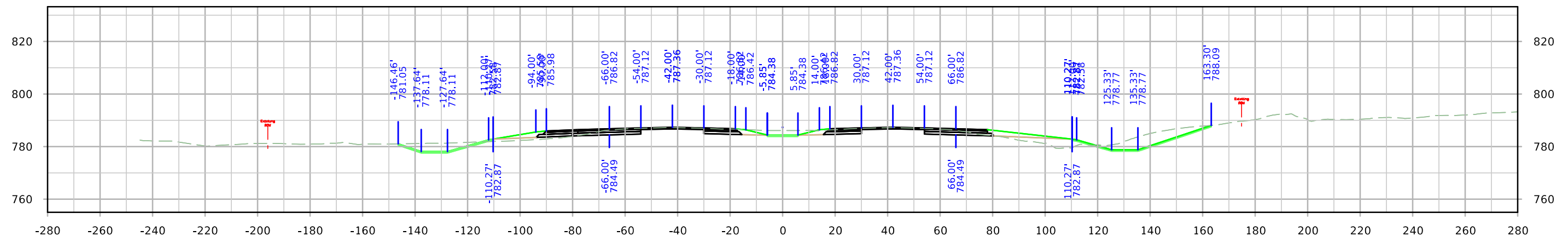
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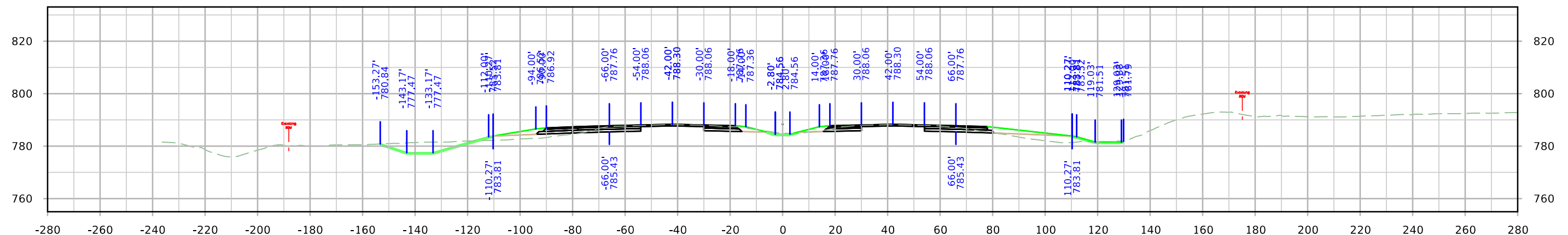
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STA. 190+00.00

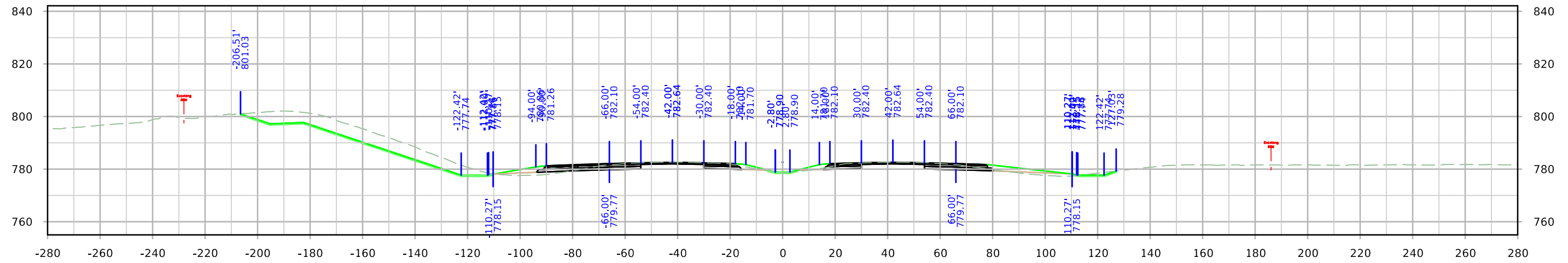


STA. 189+00.00

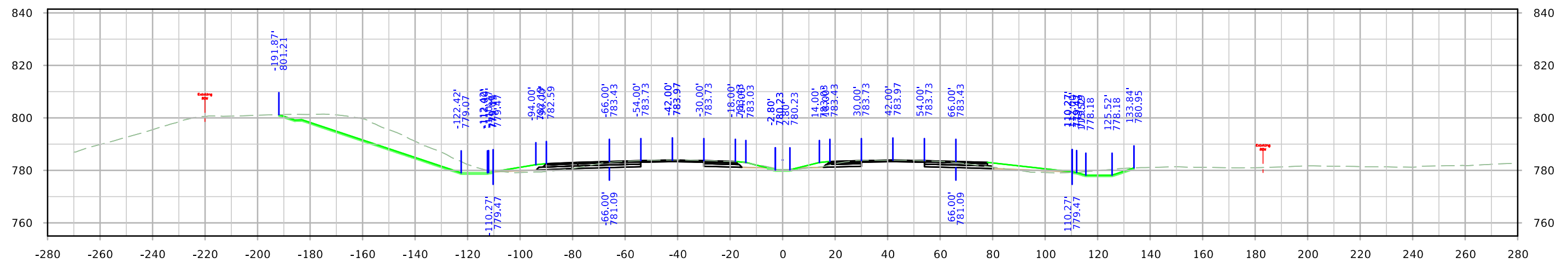


STA. 188+00.00

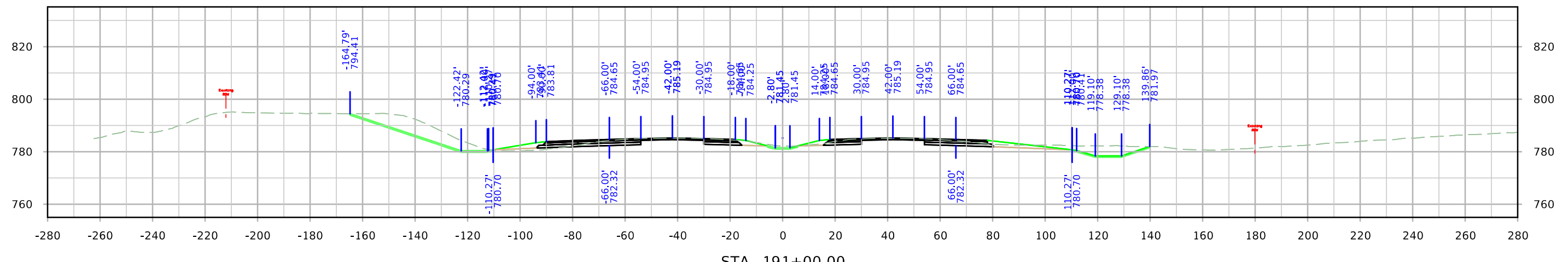
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STA. 193+00.00

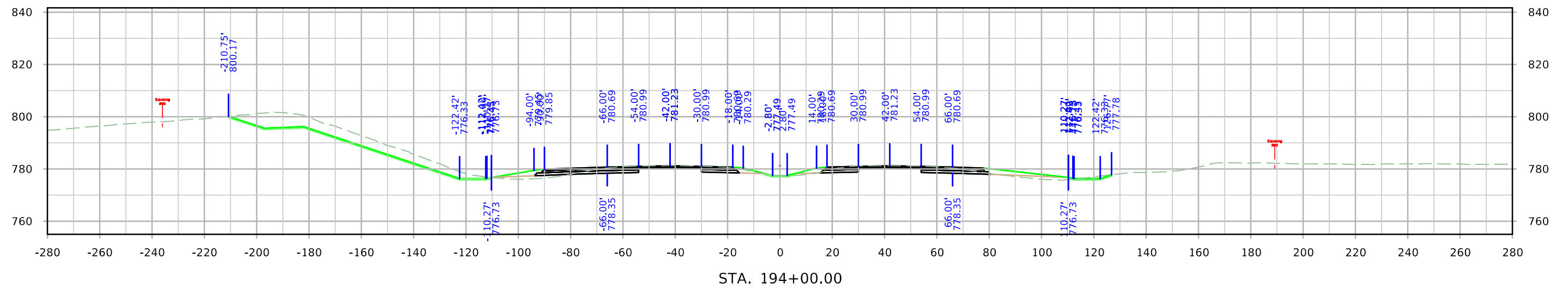
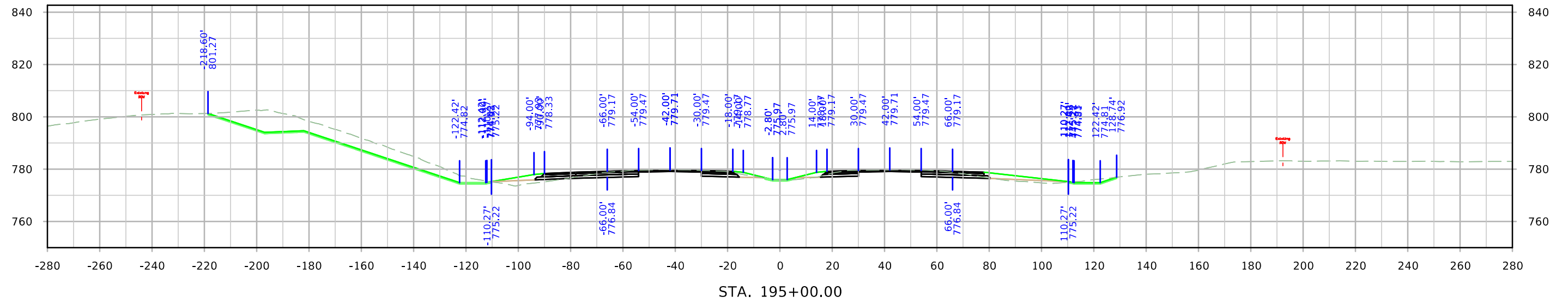


STA. 192+00.00

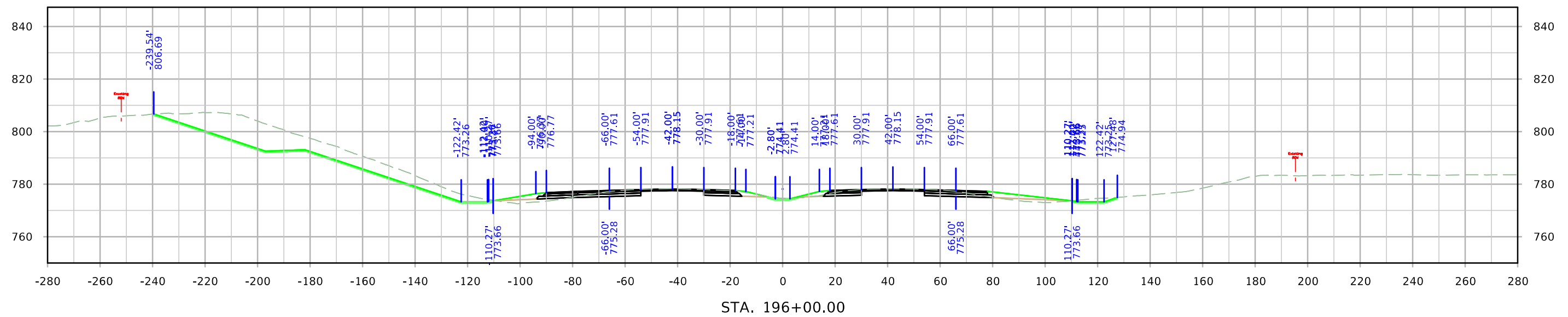
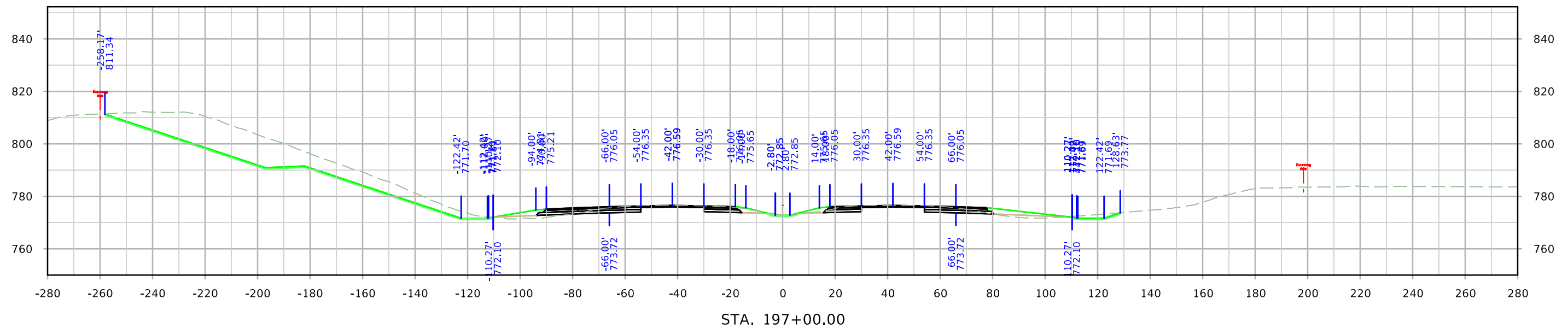


STA. 191+00.00

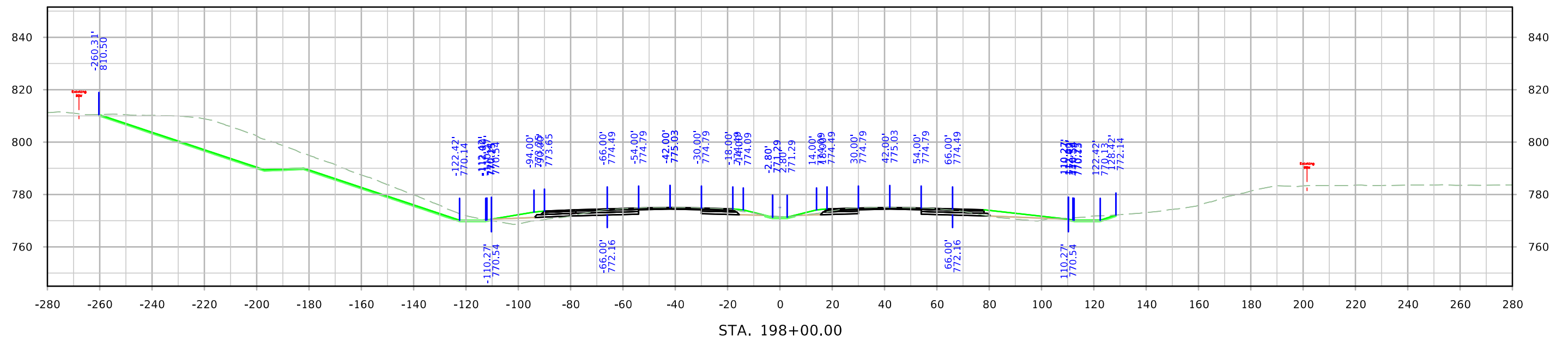
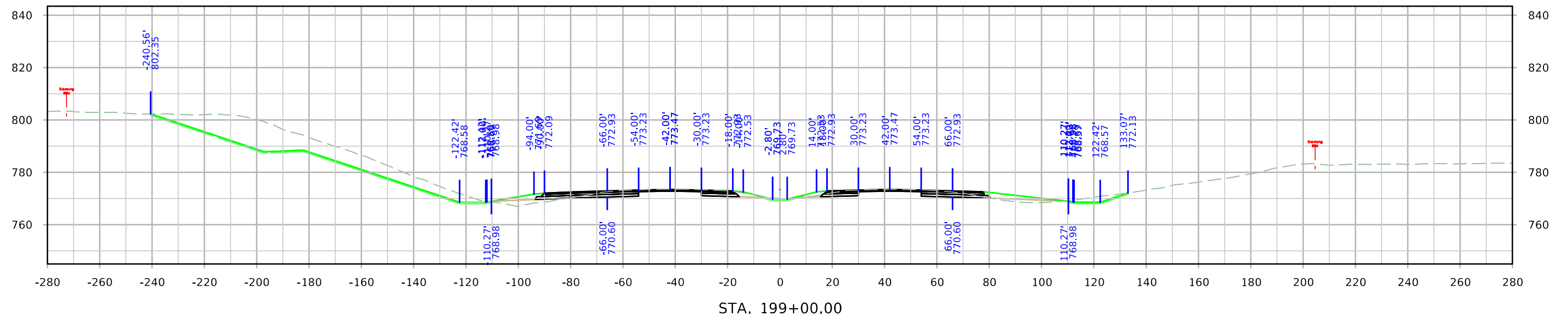
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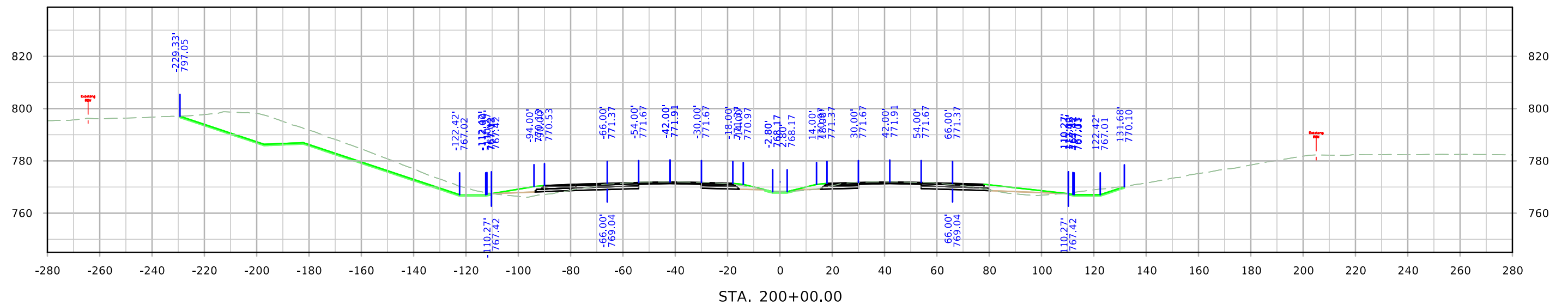
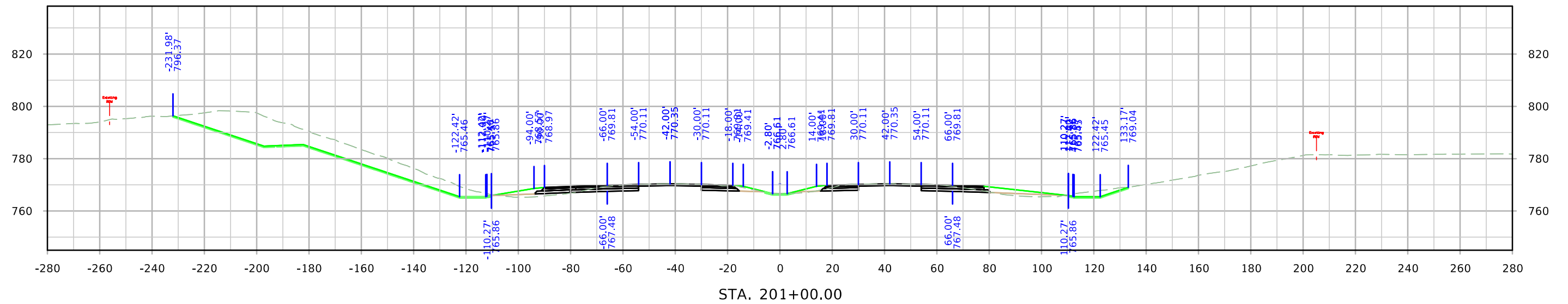
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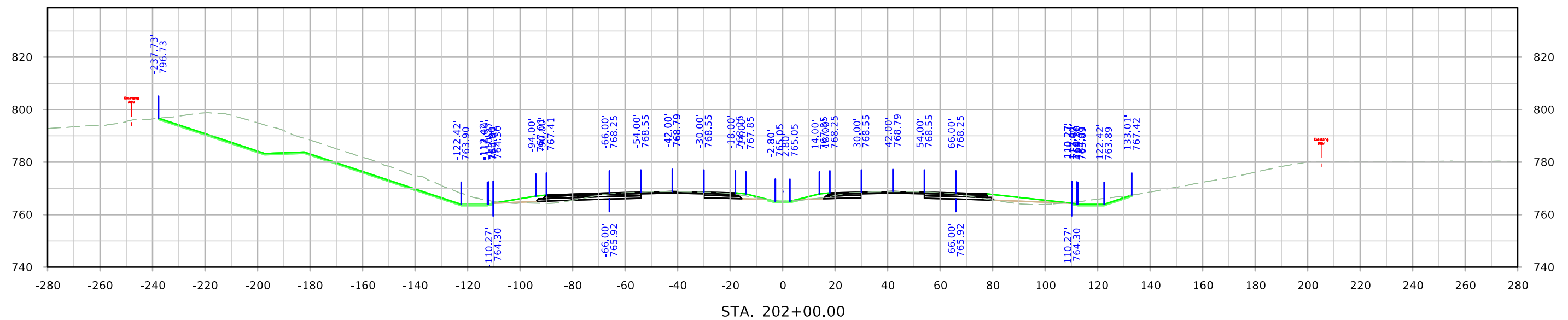
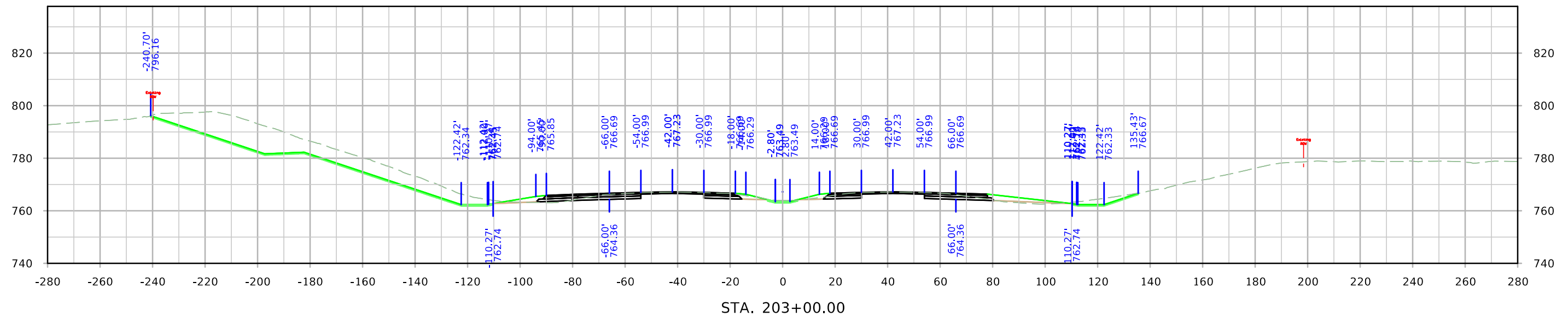
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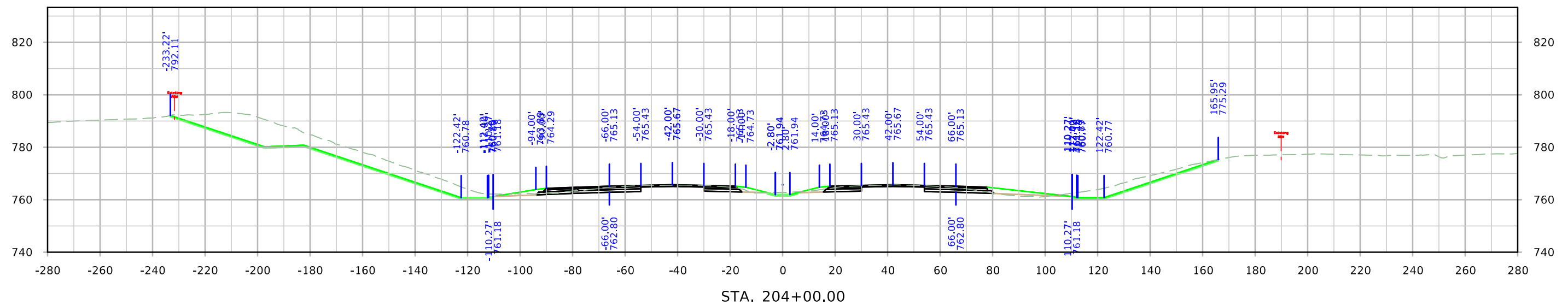
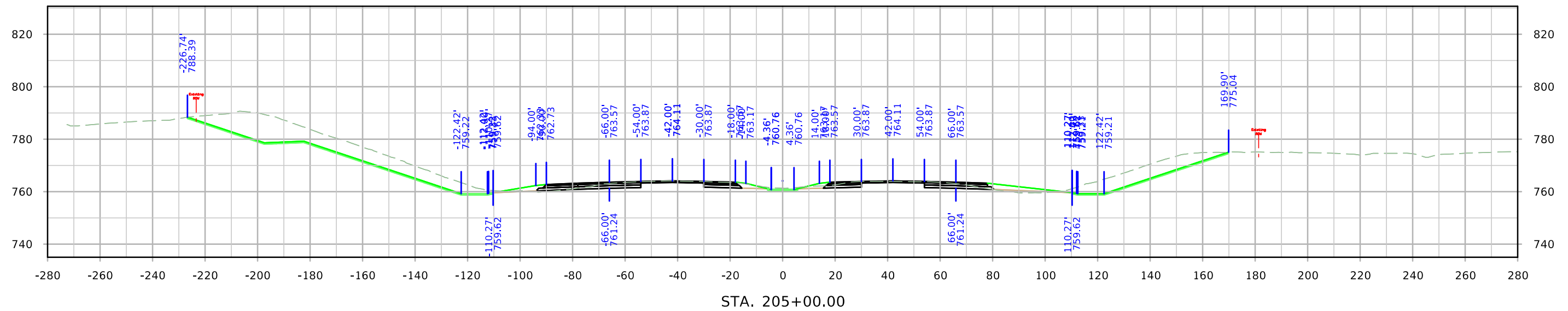
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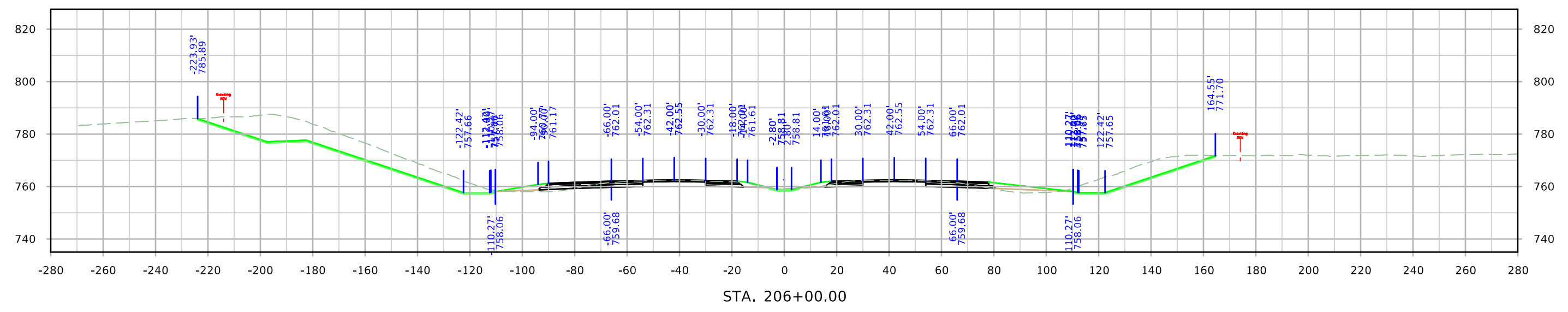
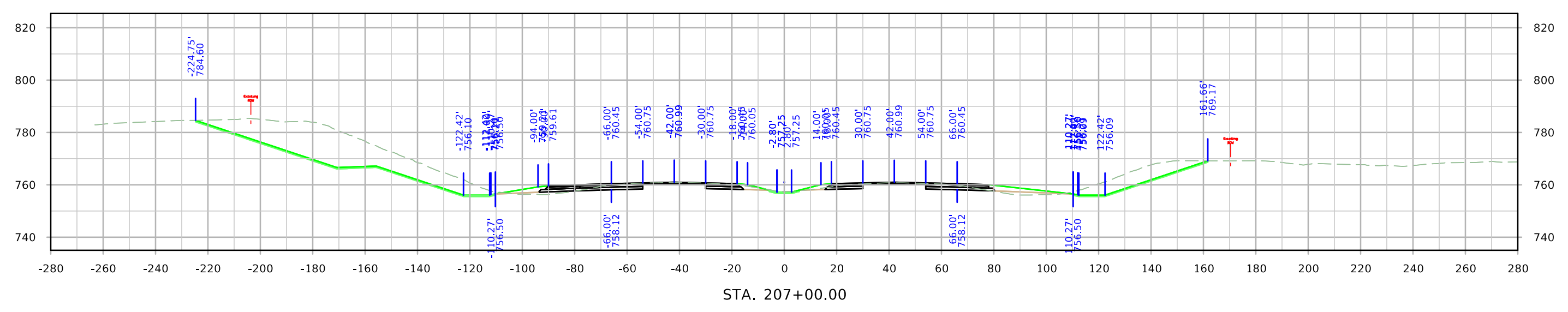
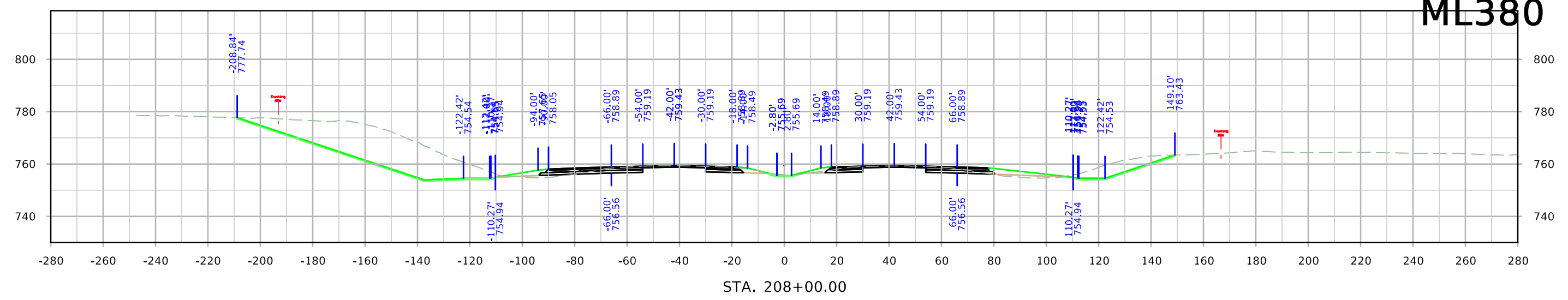
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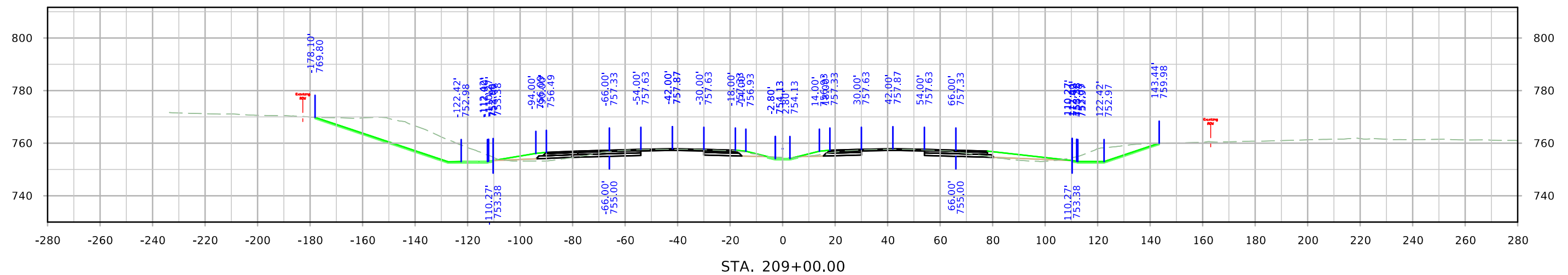
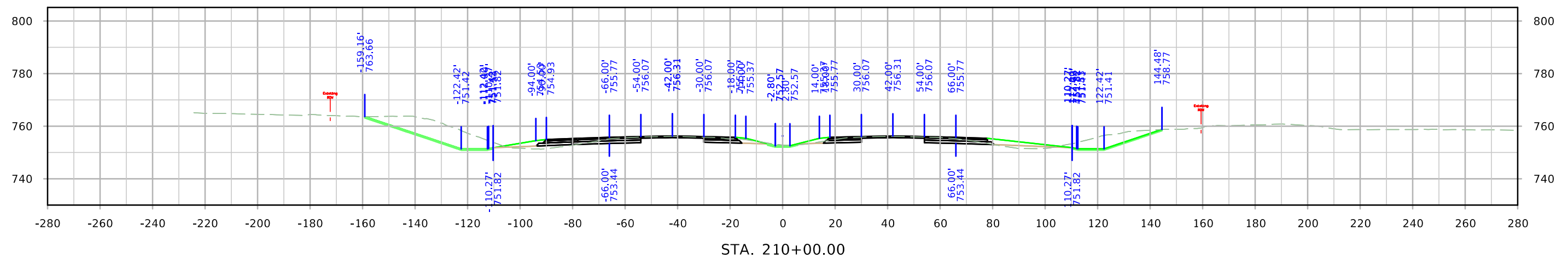
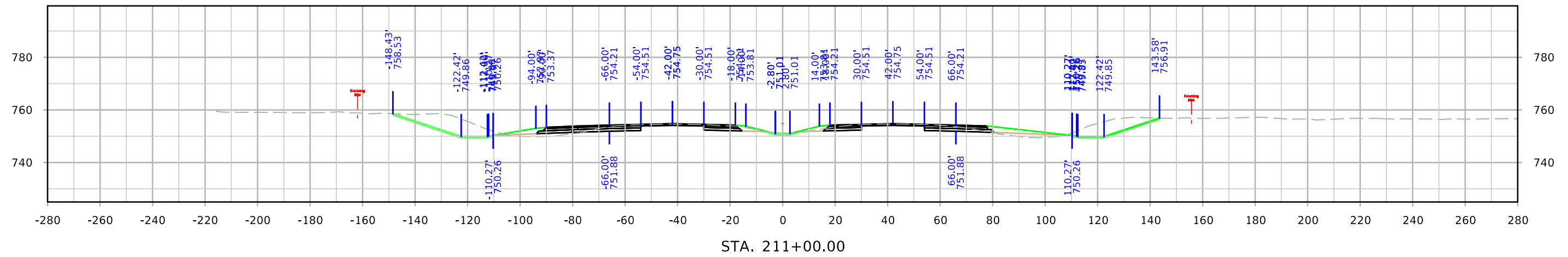
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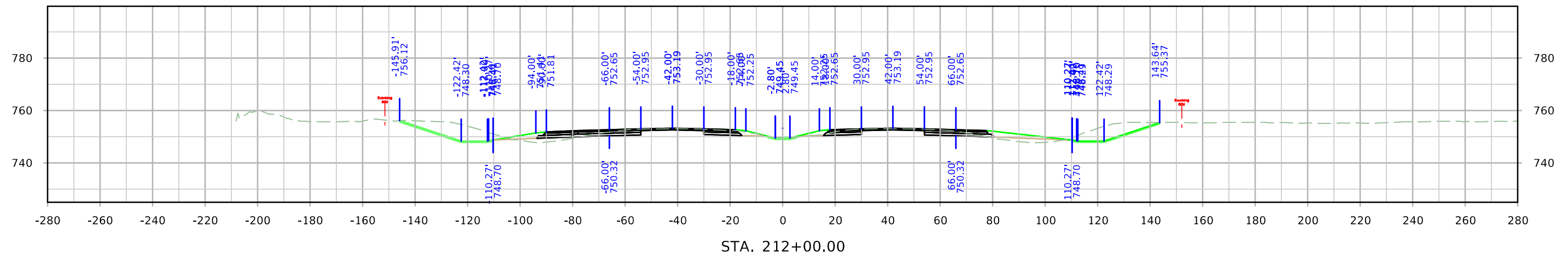
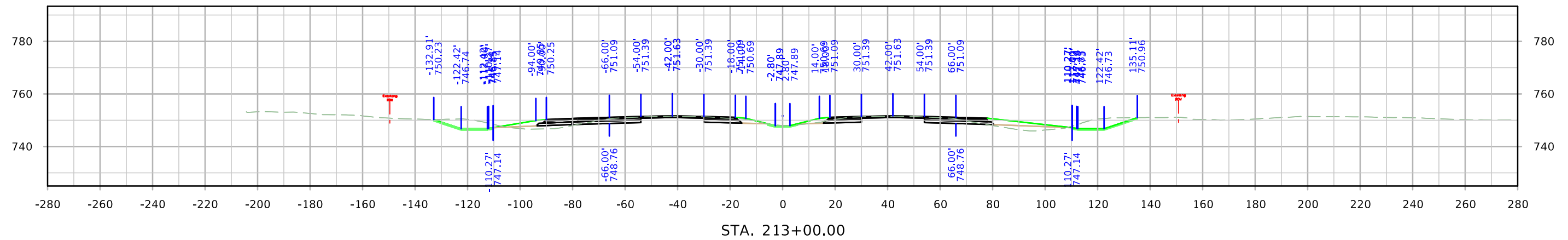
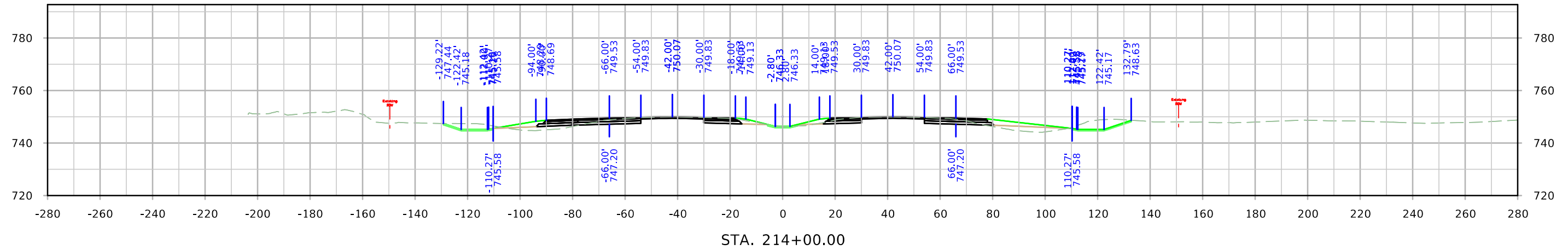
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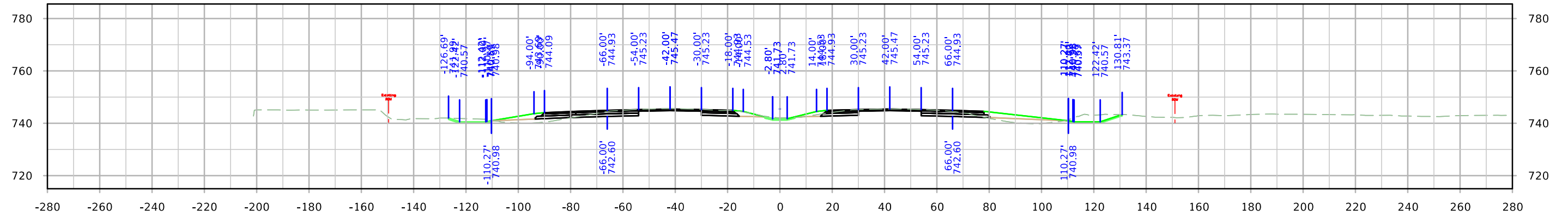
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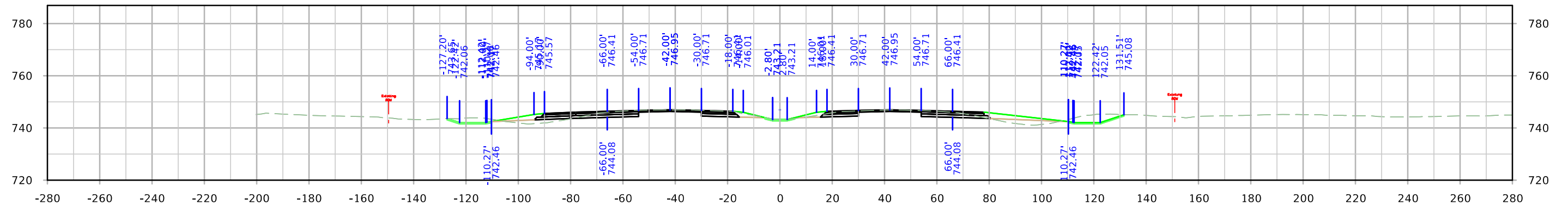
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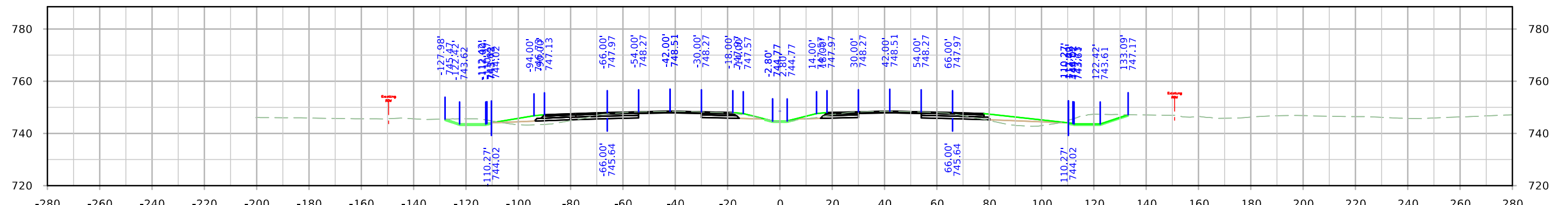
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STA. 217+00.00

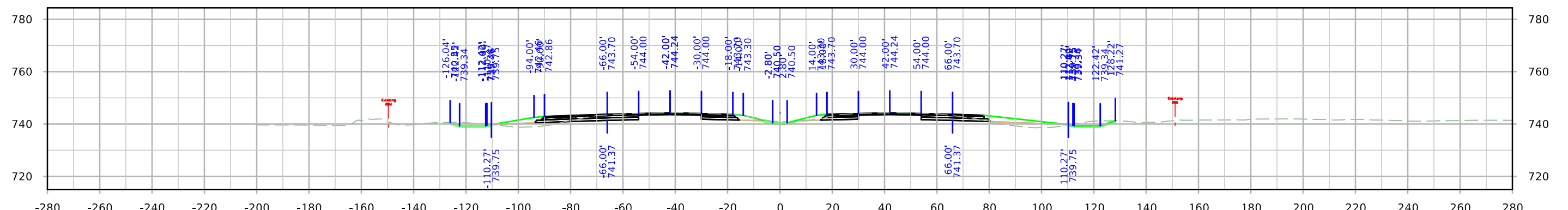
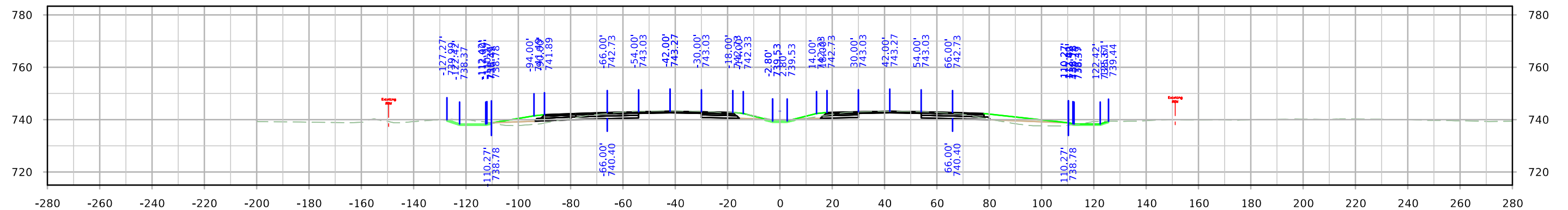
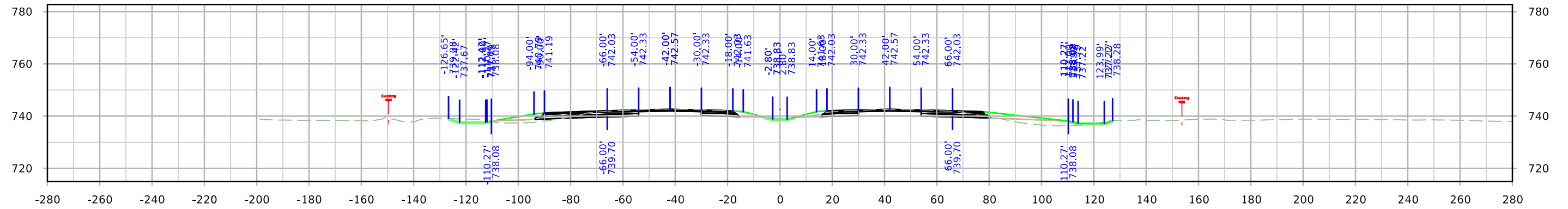


STA. 216+00.00

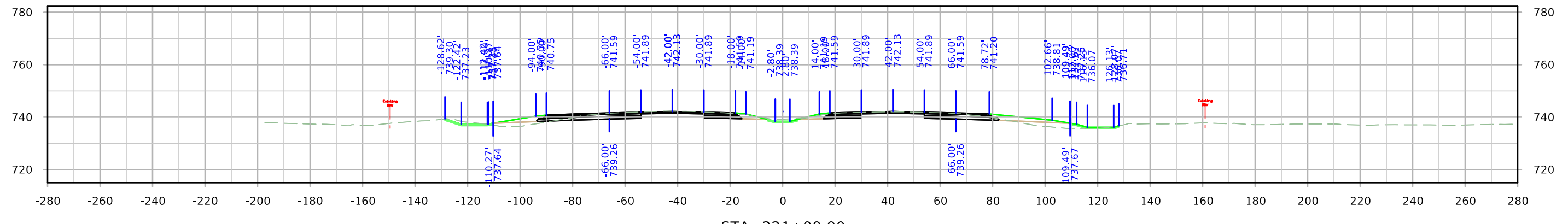
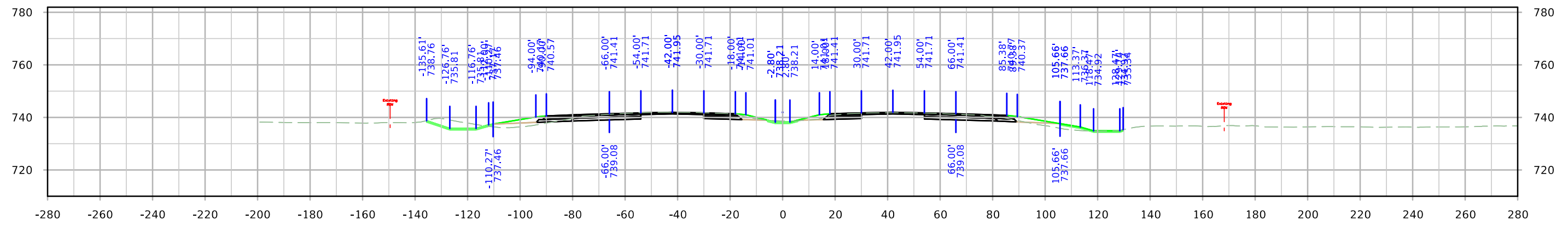
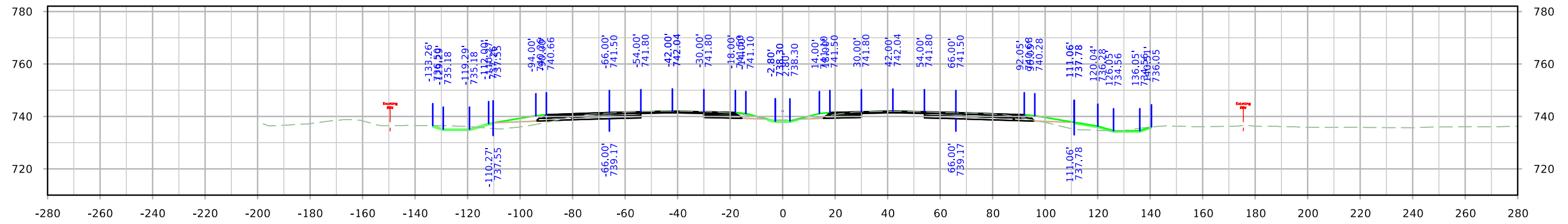


STA. 215+00.00

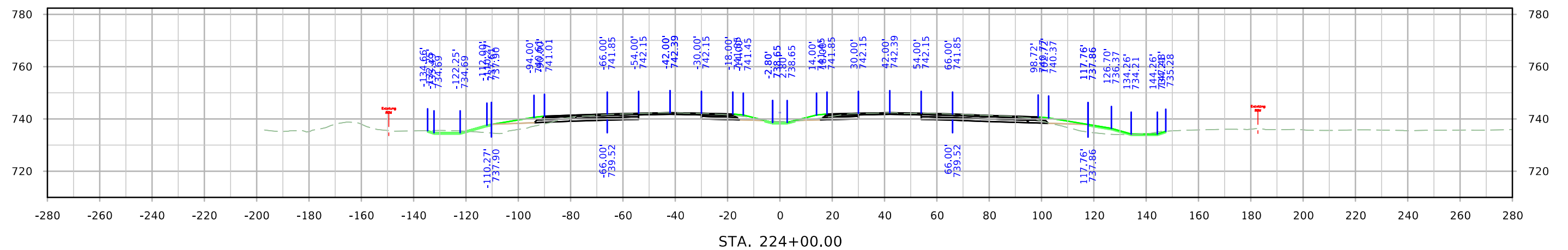
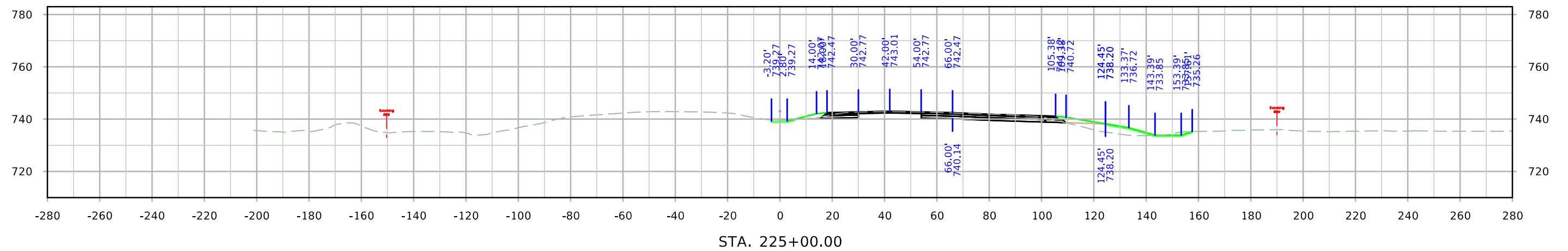
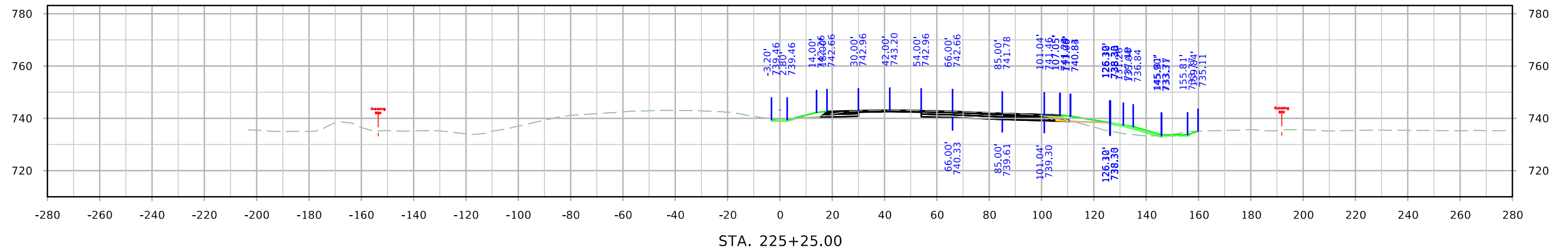
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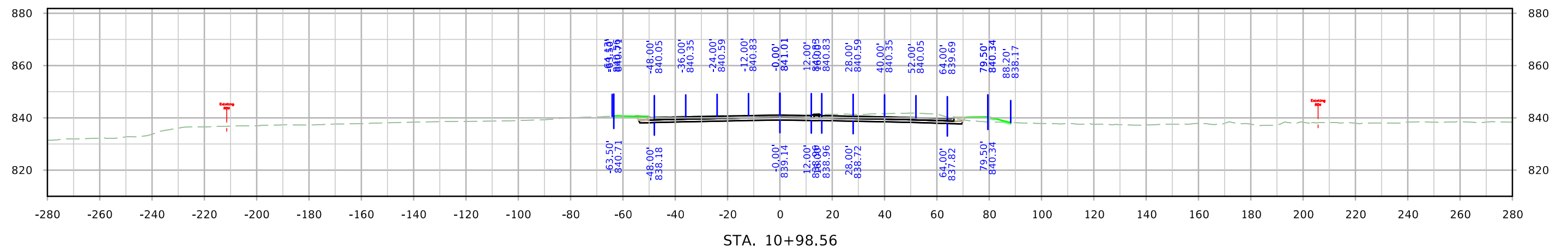
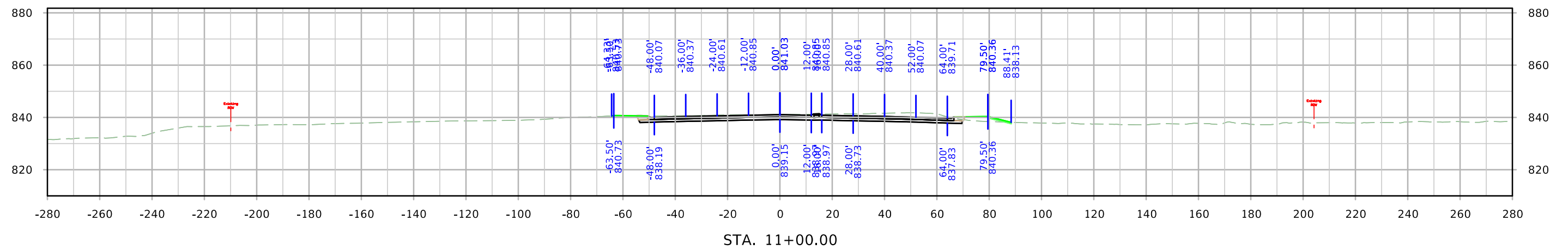
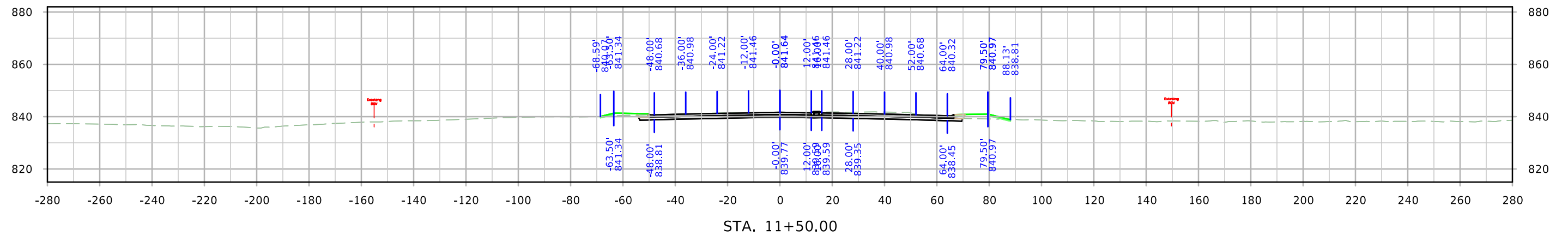
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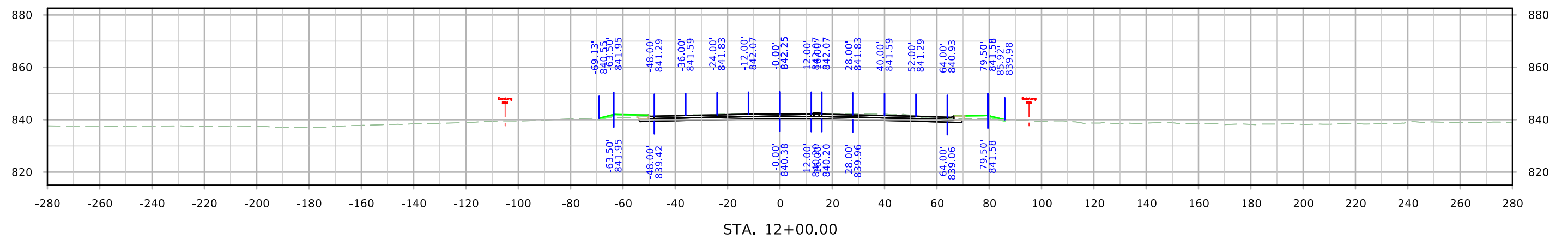
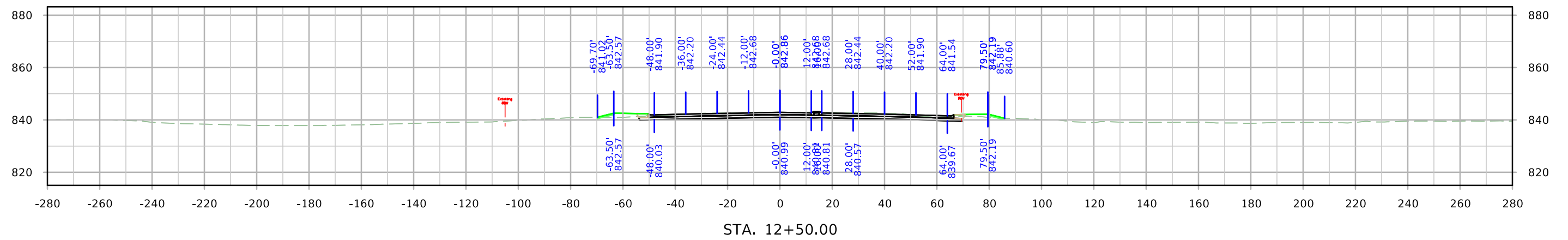
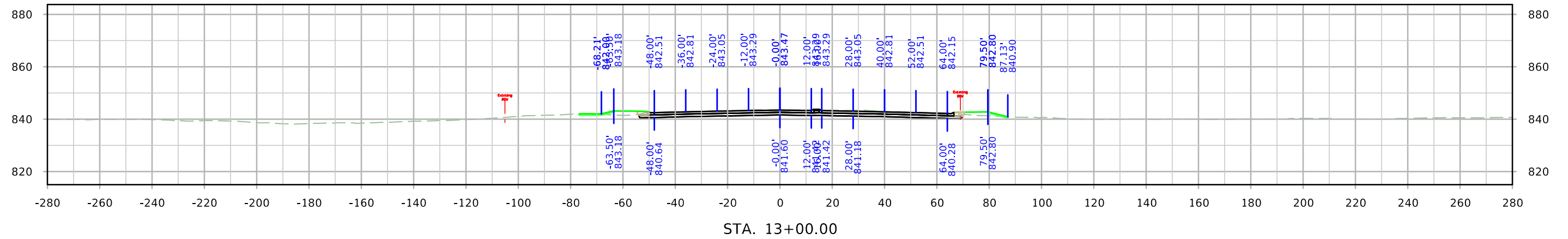
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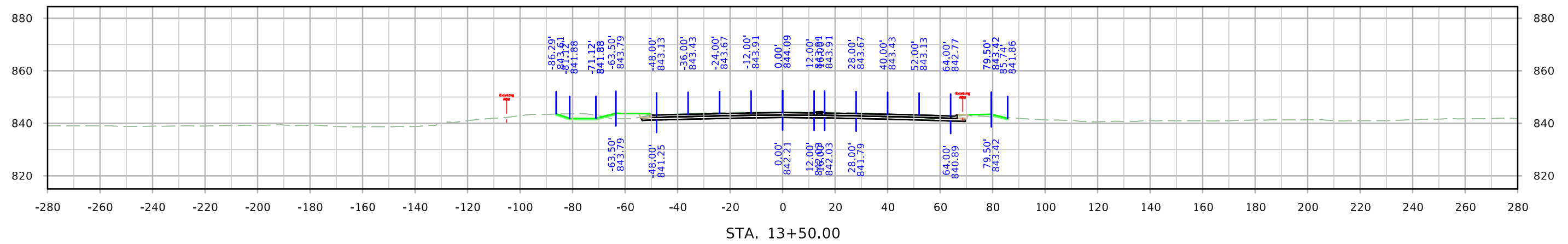
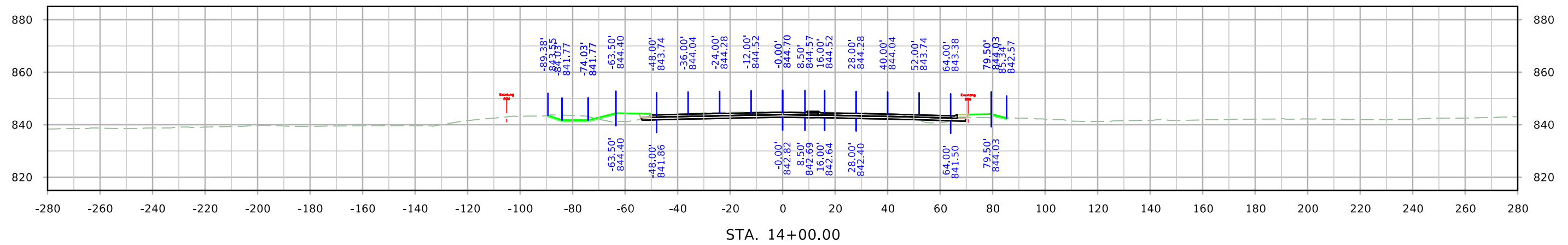
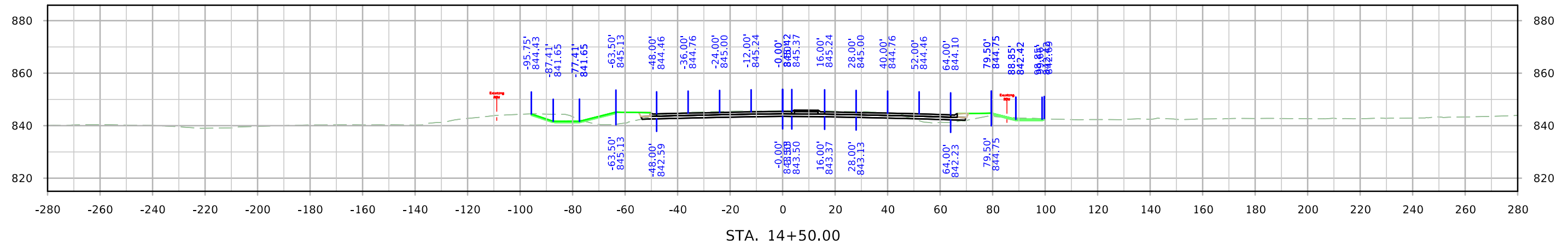
SRWRT



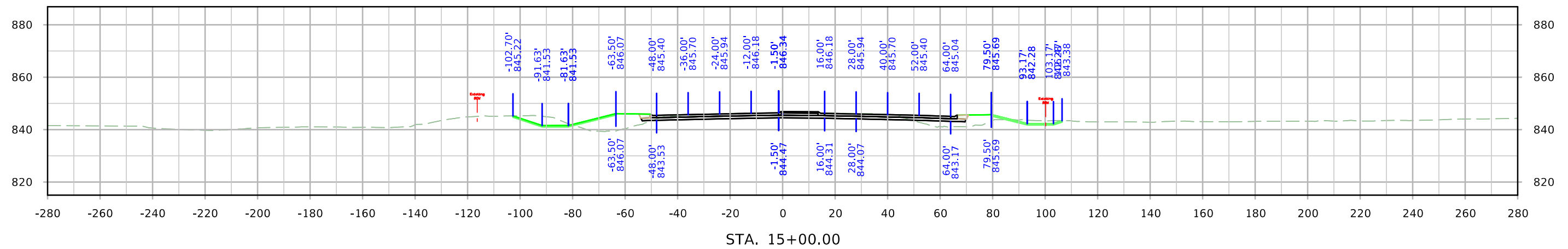
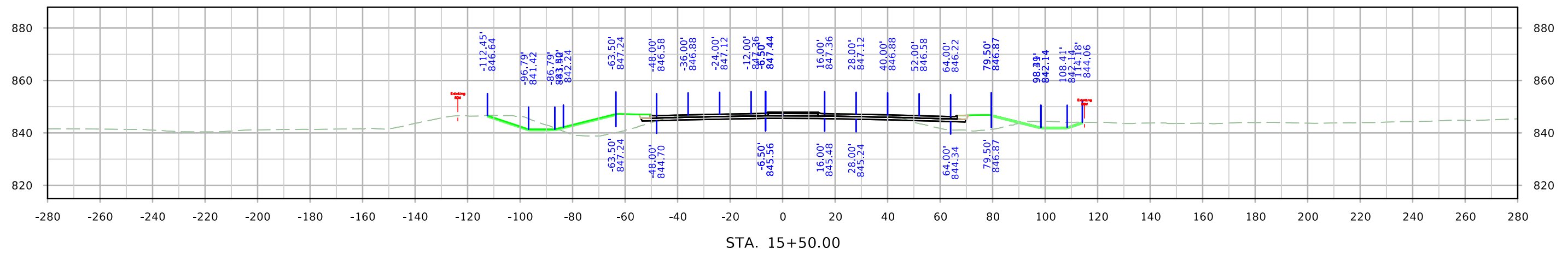
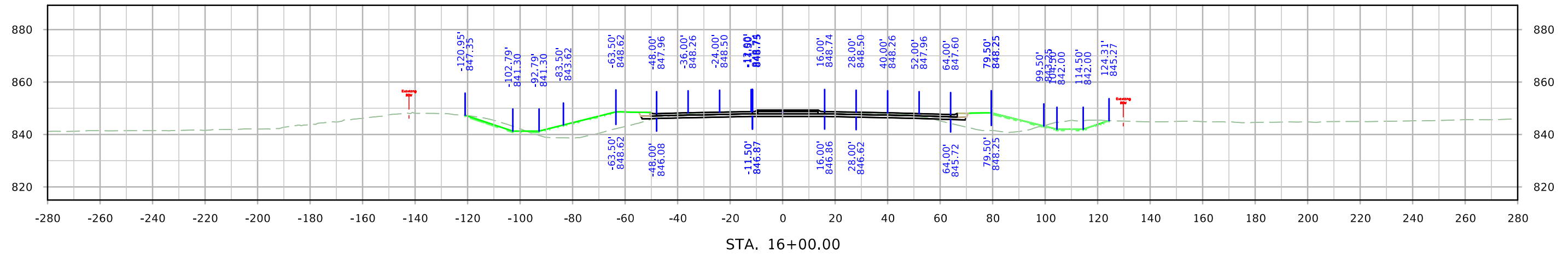
SRWRT



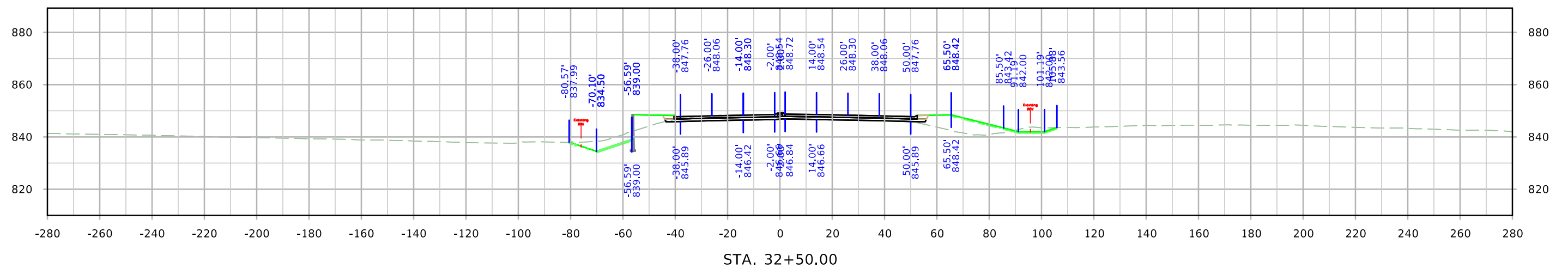
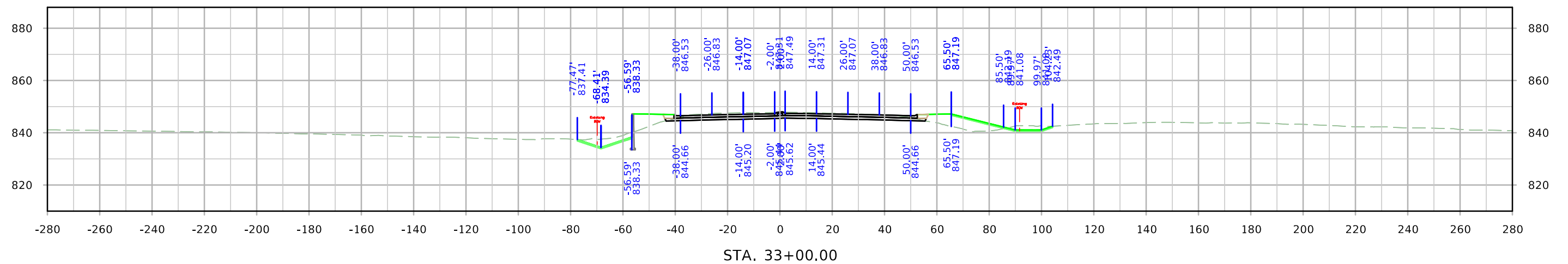
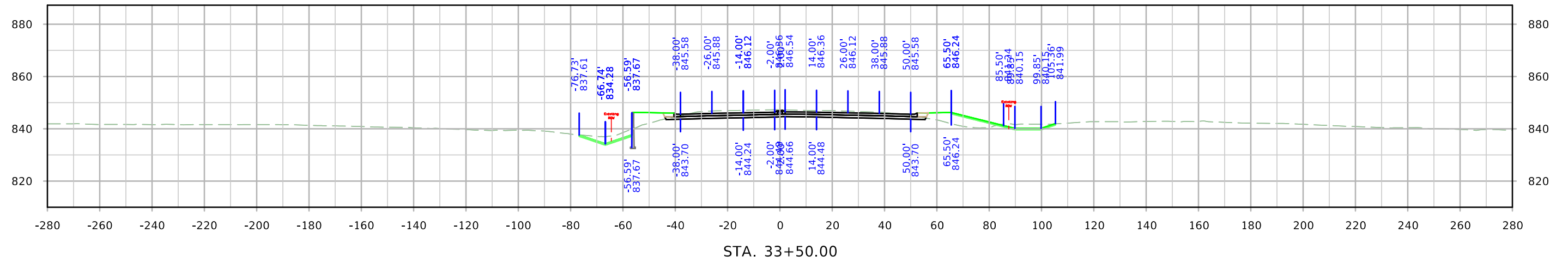
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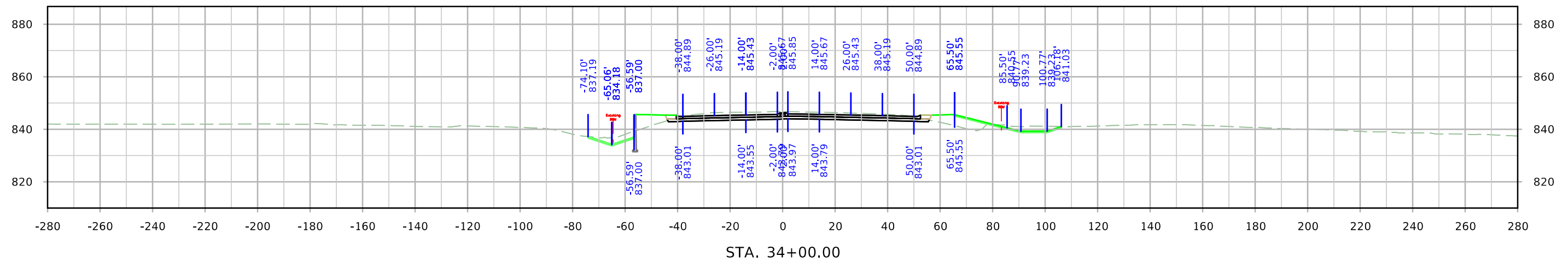
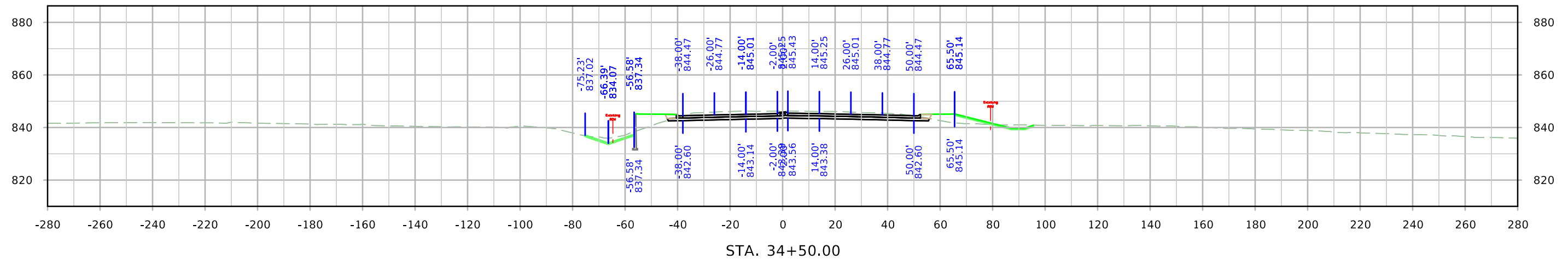
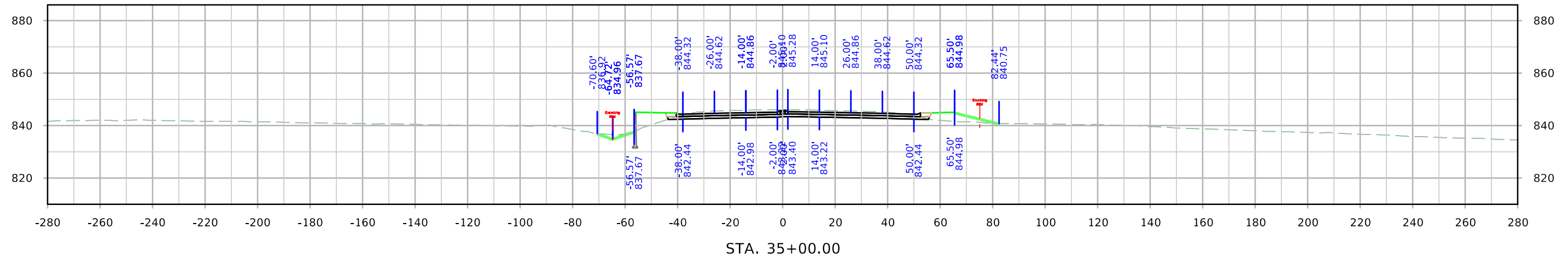
SRWRT



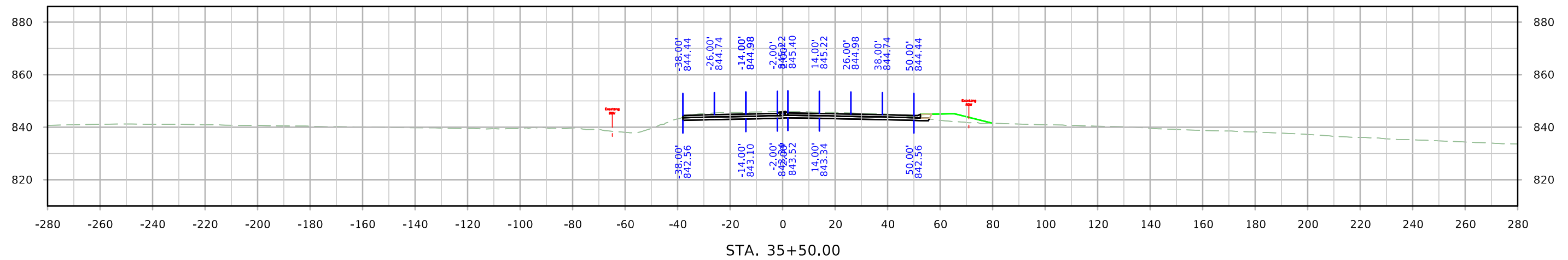
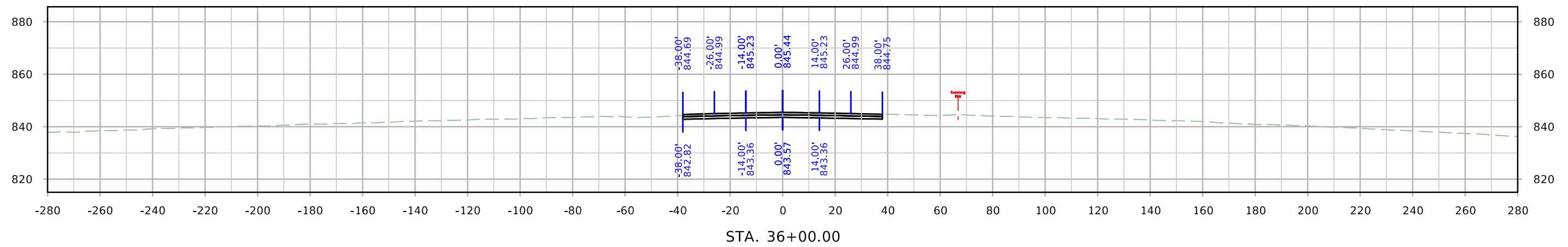
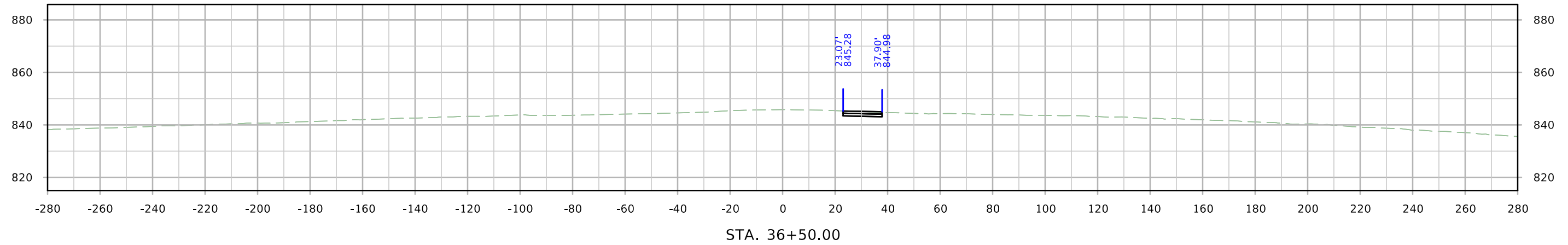
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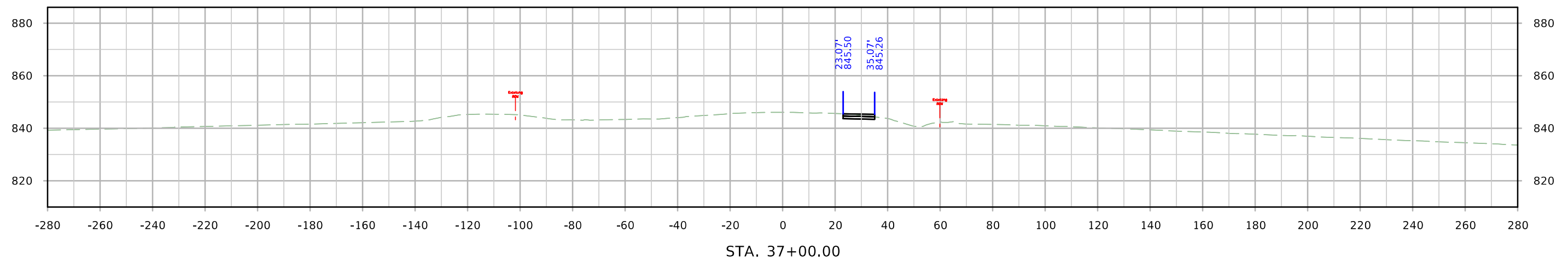
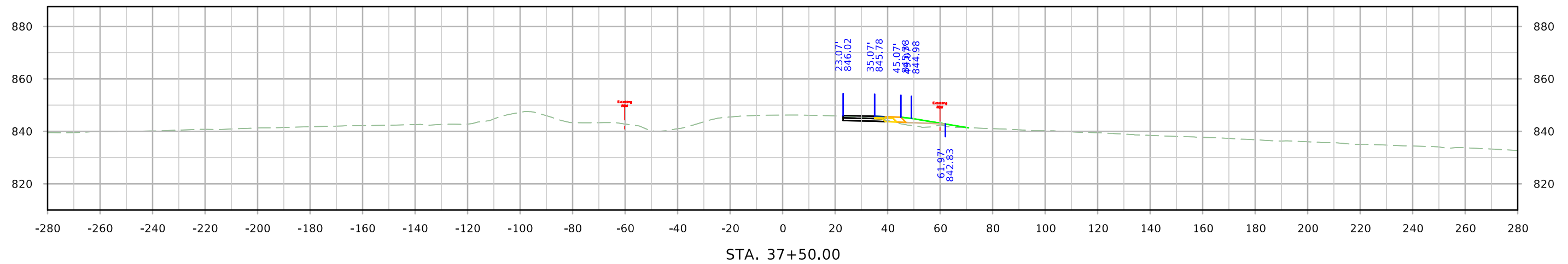
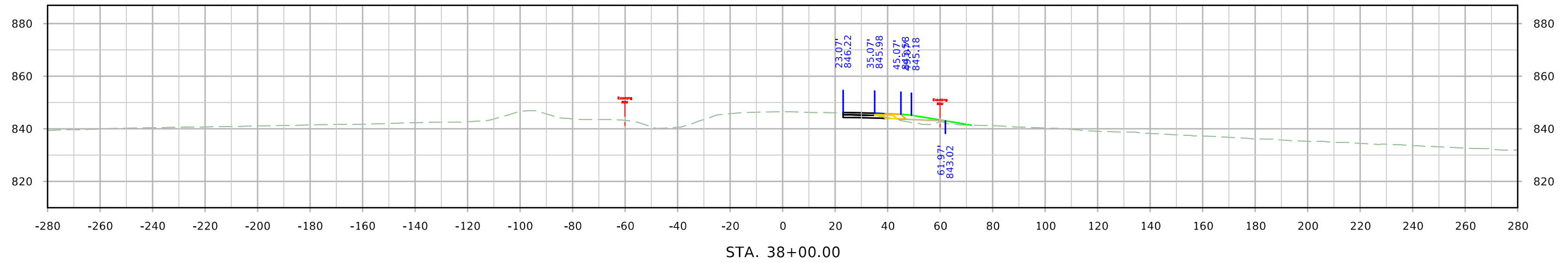
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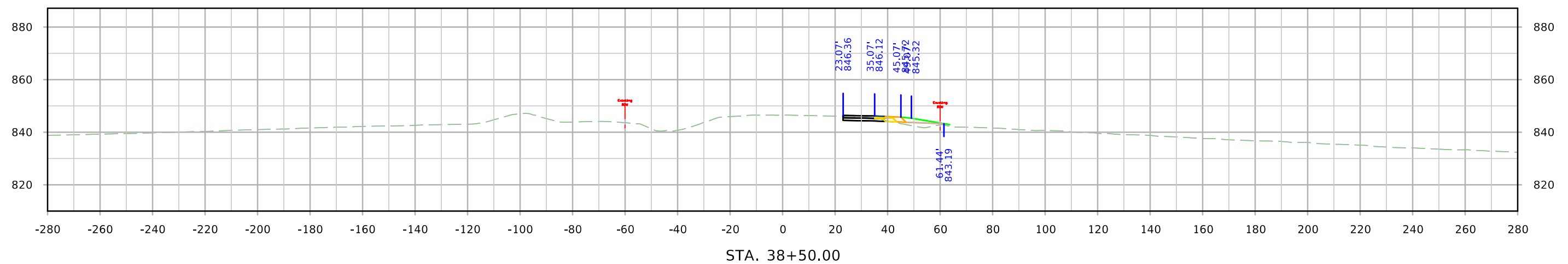
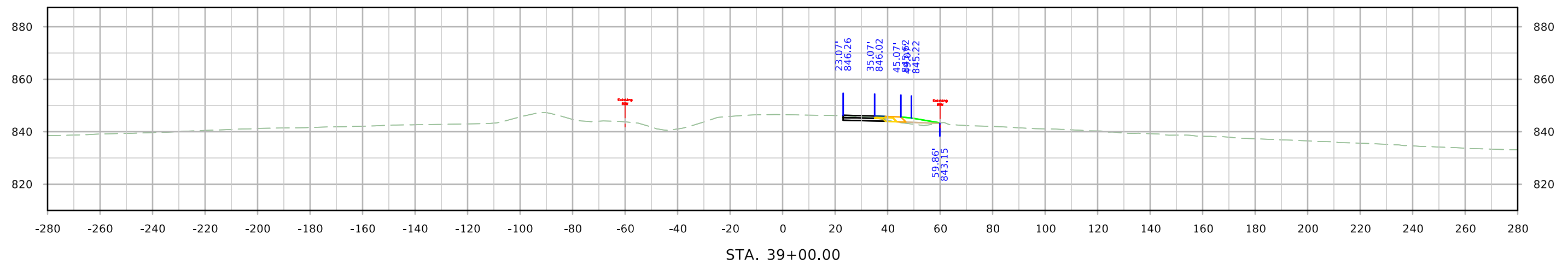
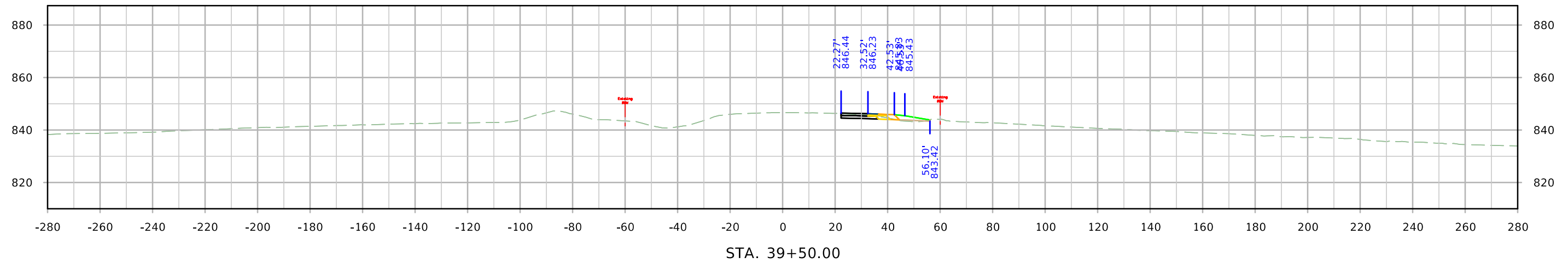
SRWRT



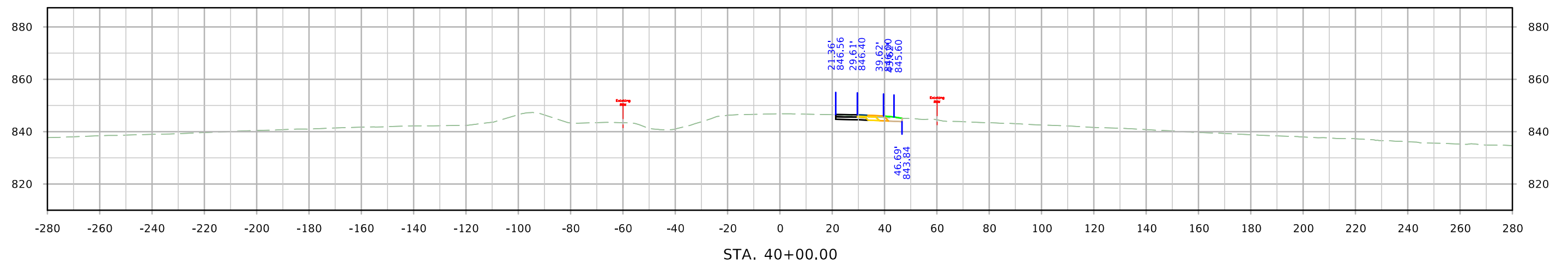
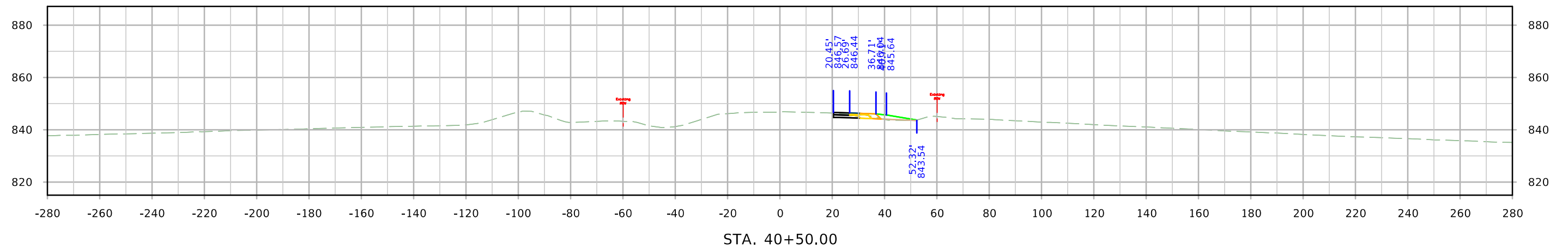
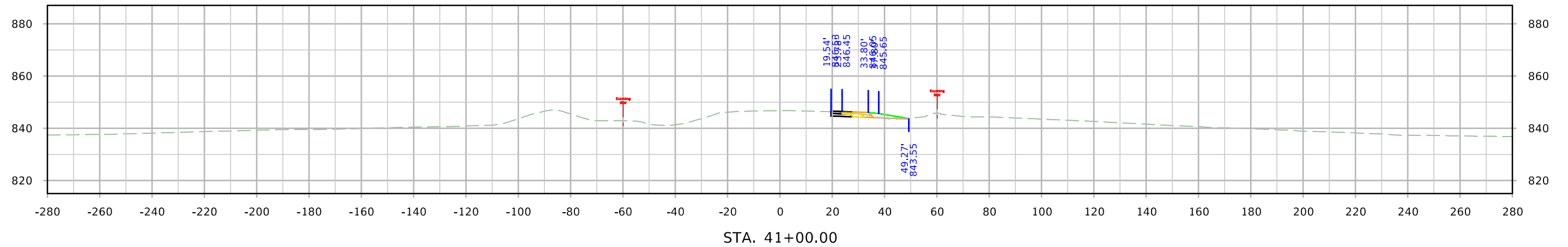
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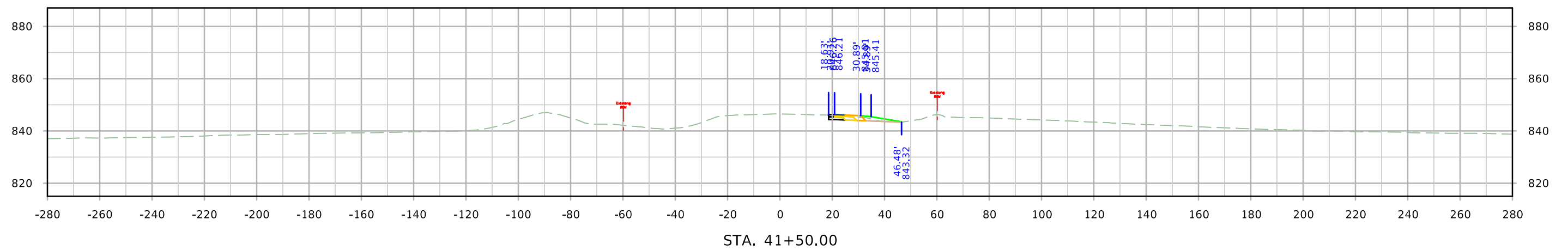
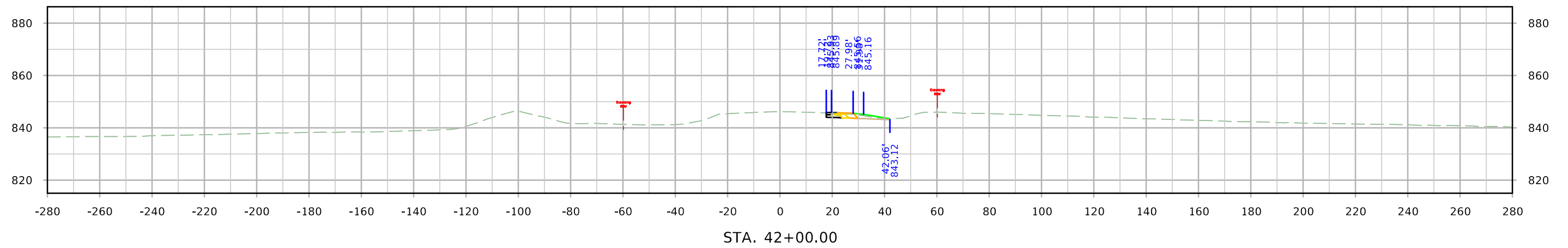
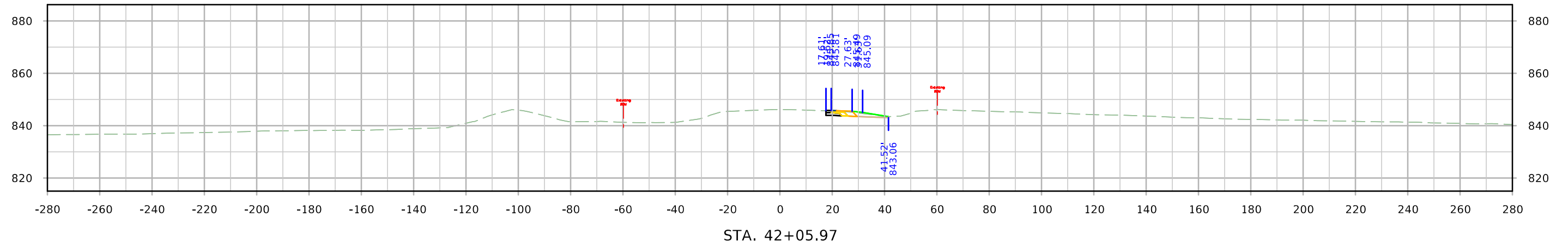
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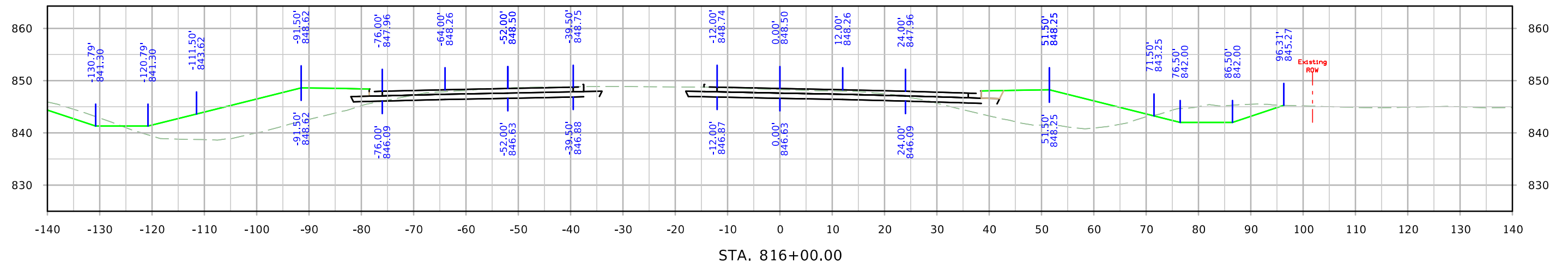
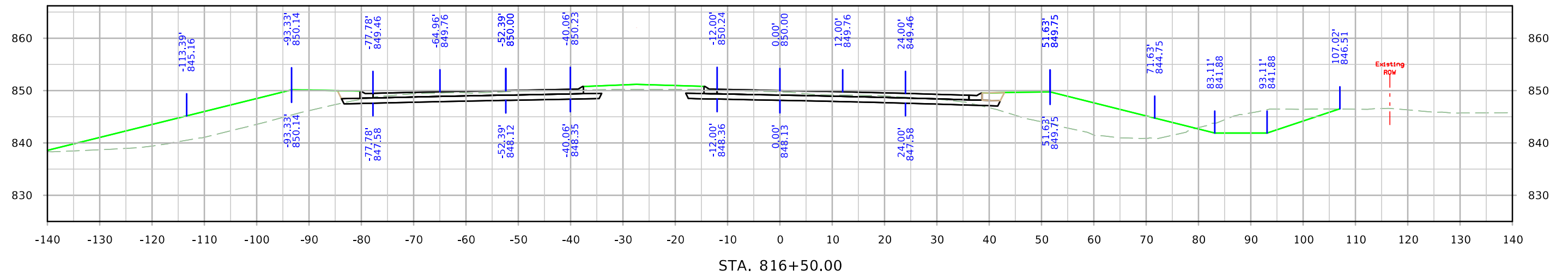
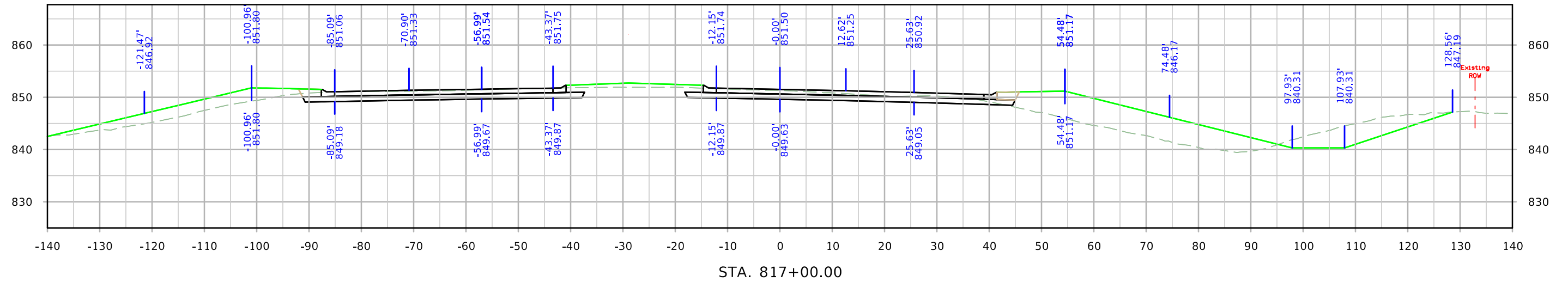
SRWRT



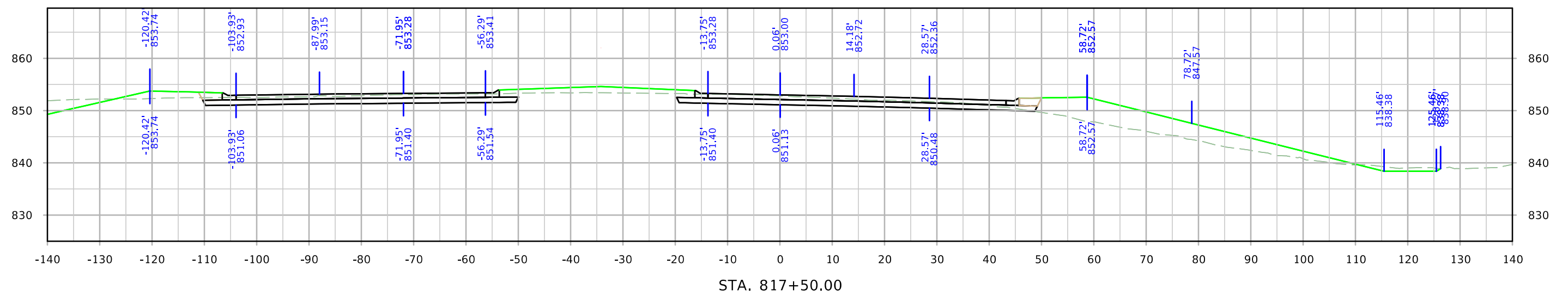
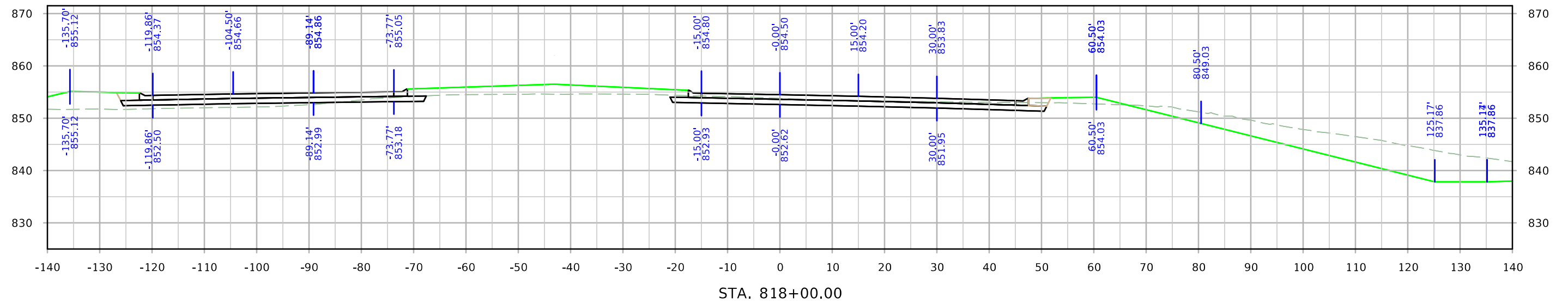
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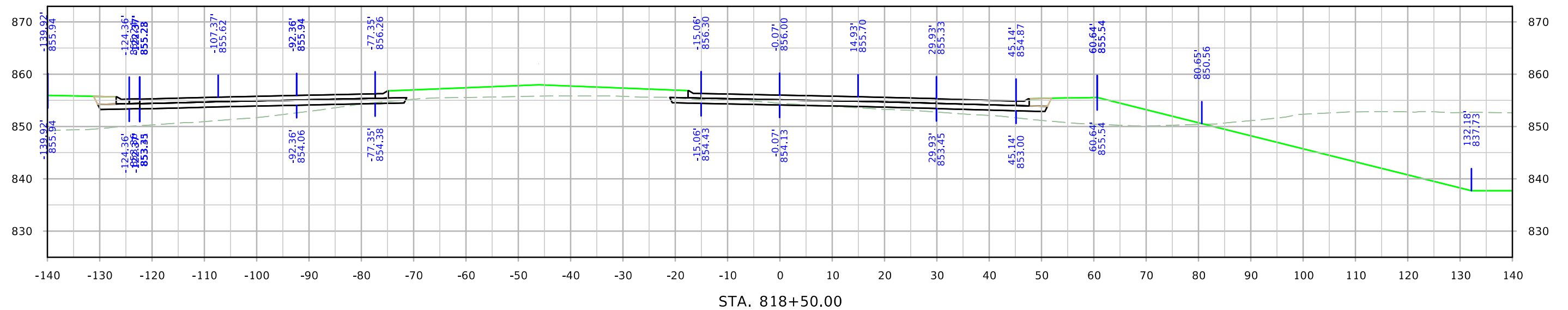
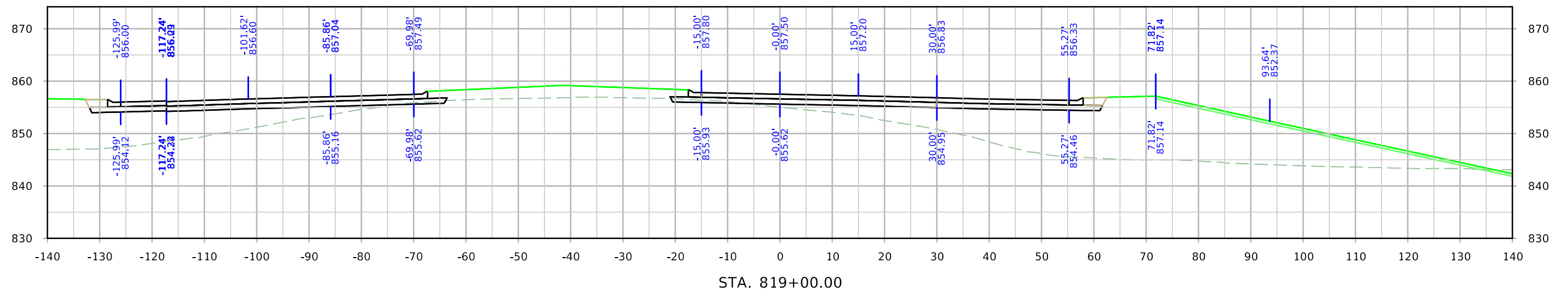
SRWRT_EB



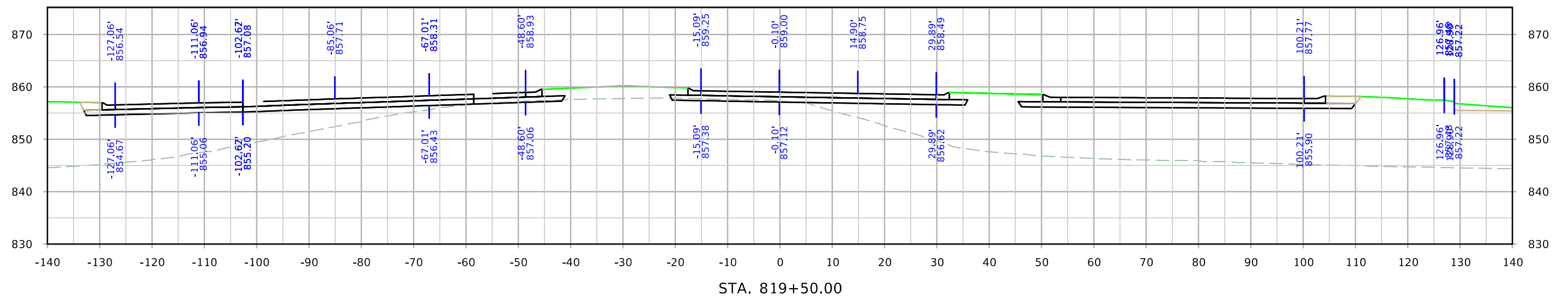
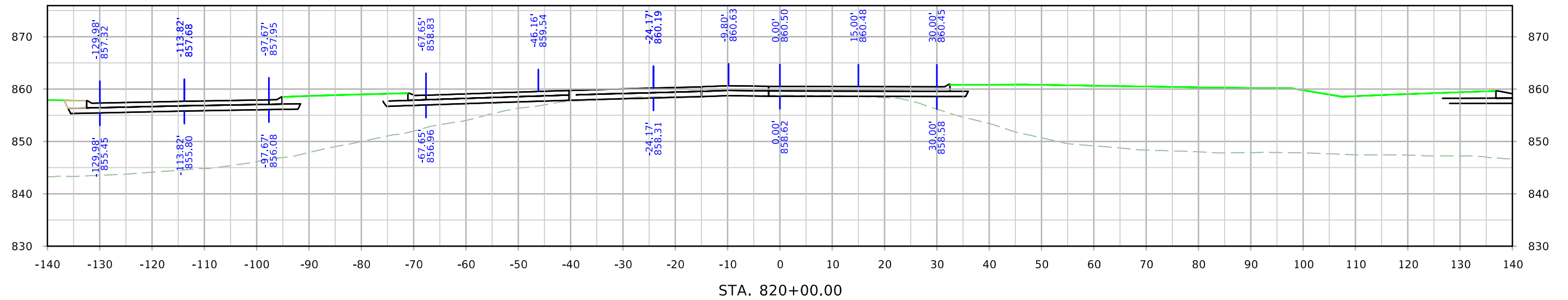
SRWRT_EB



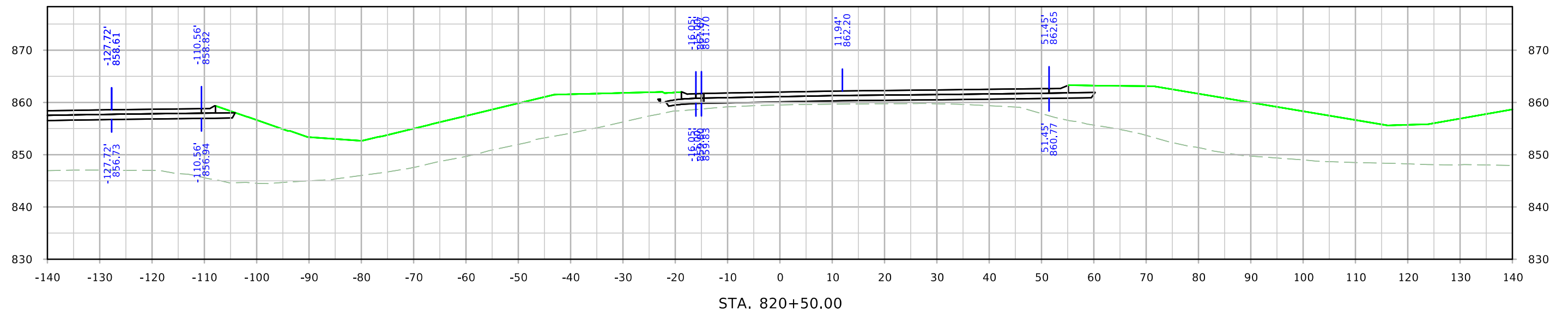
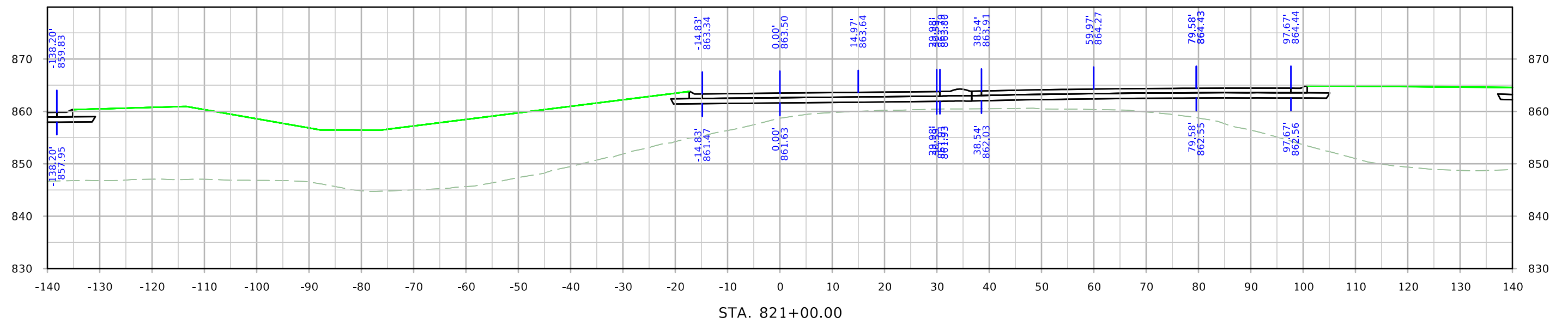
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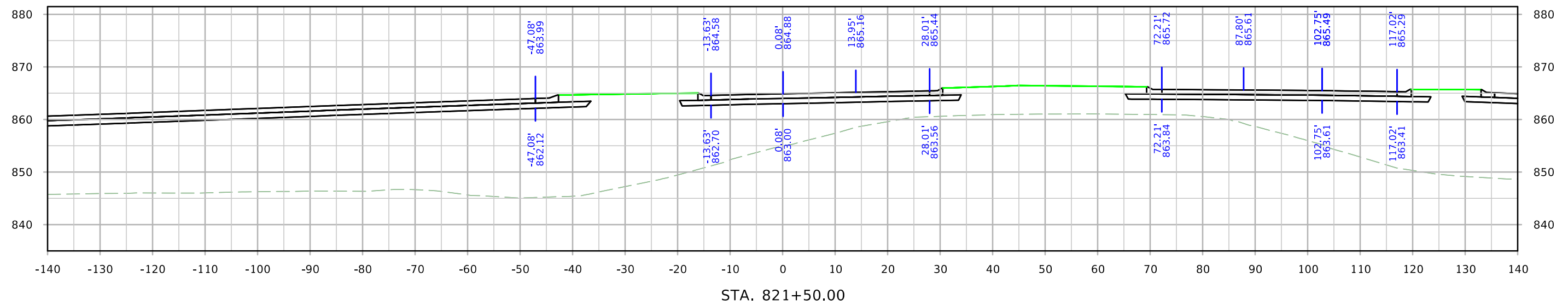
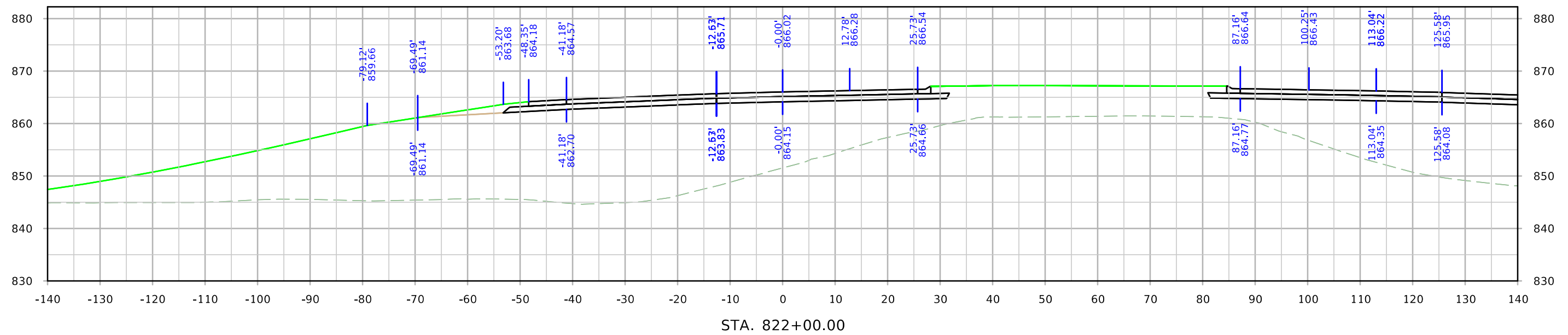
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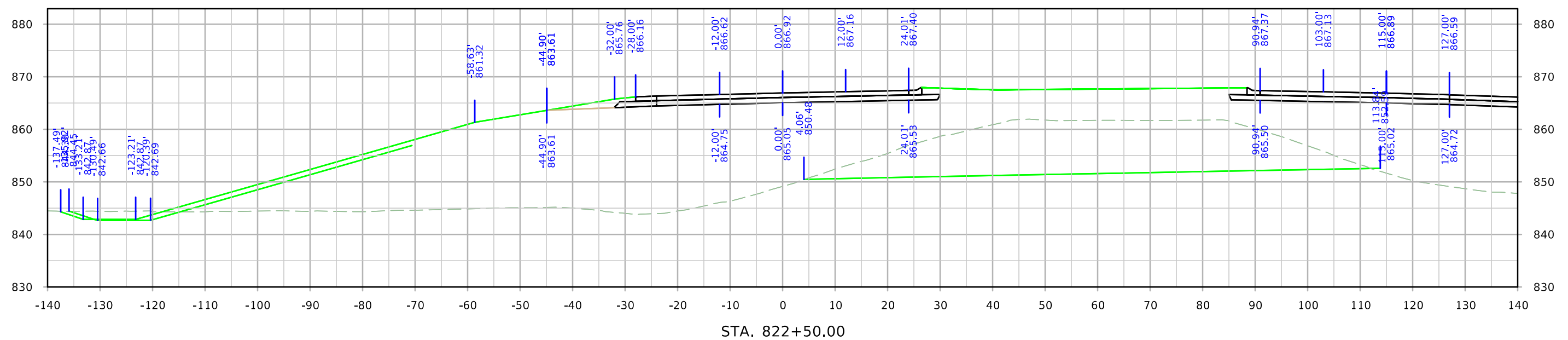
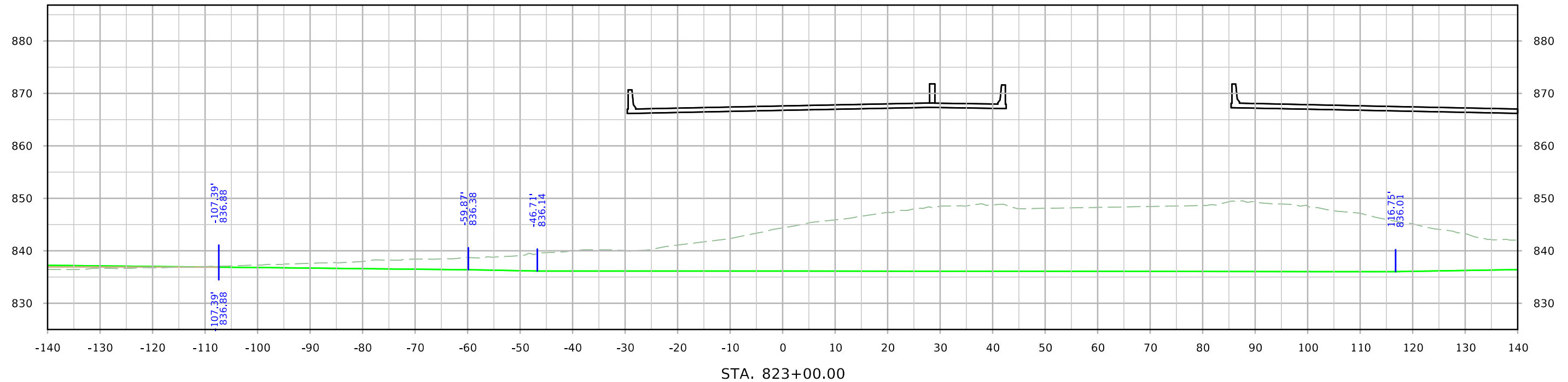
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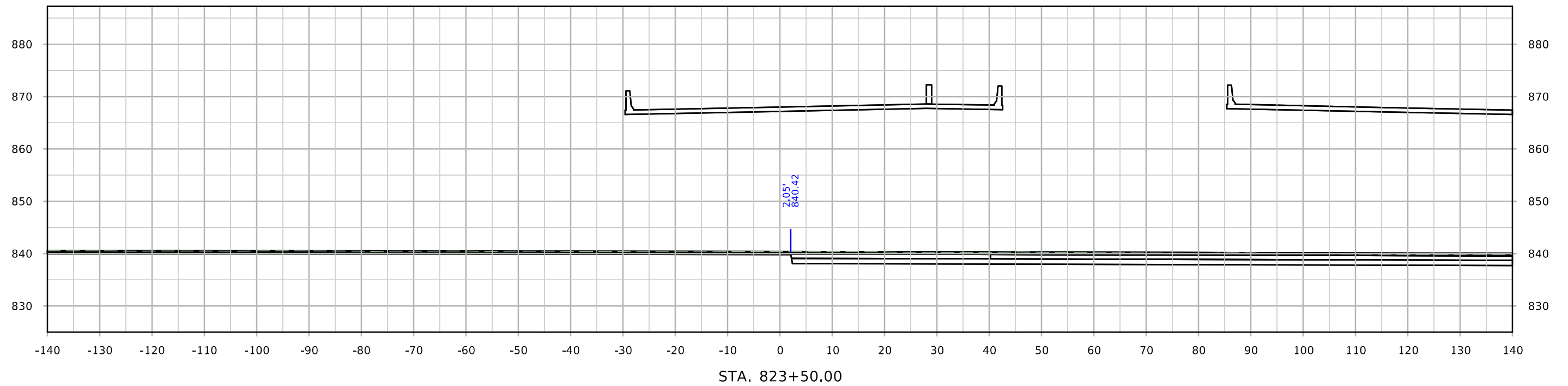
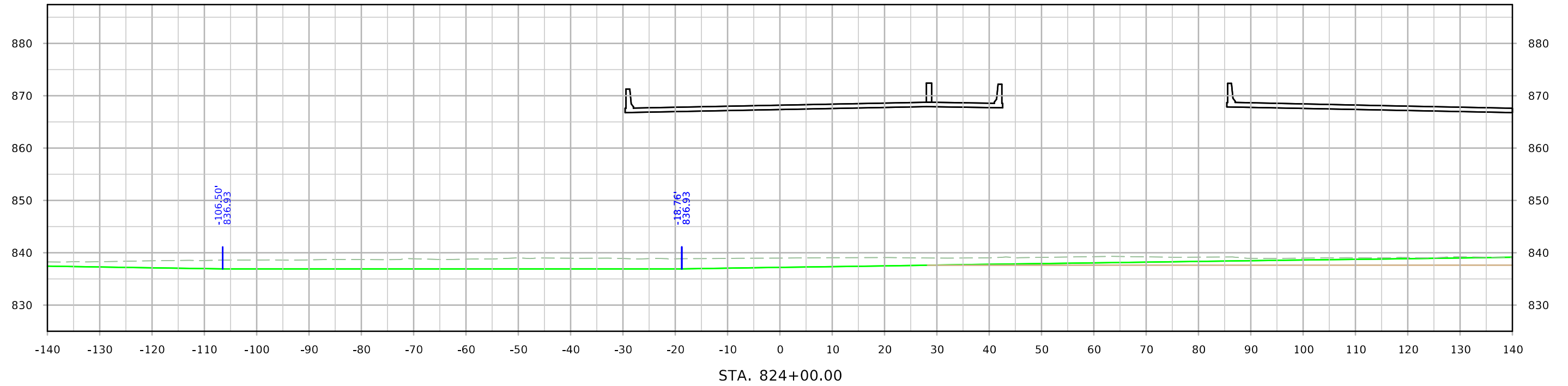
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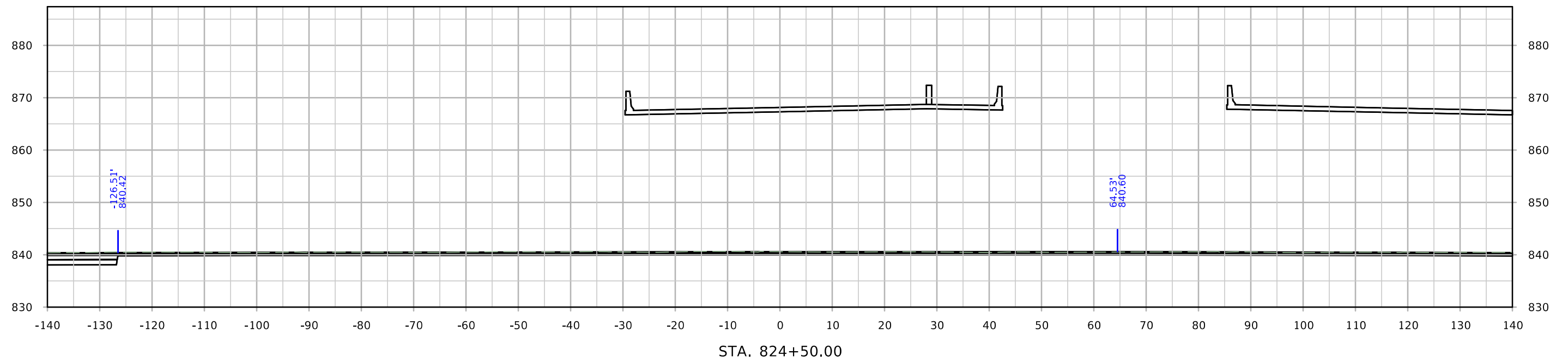
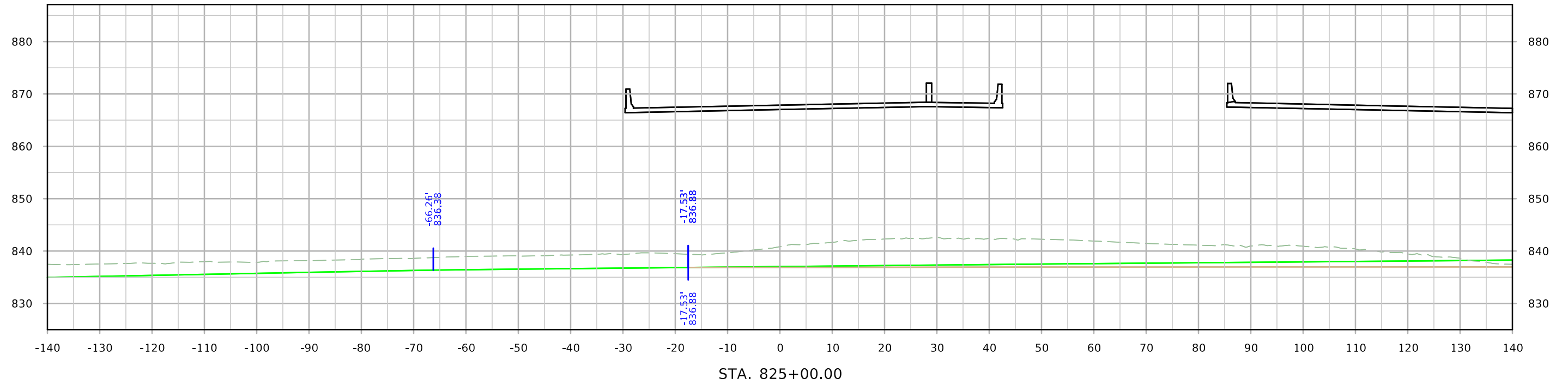
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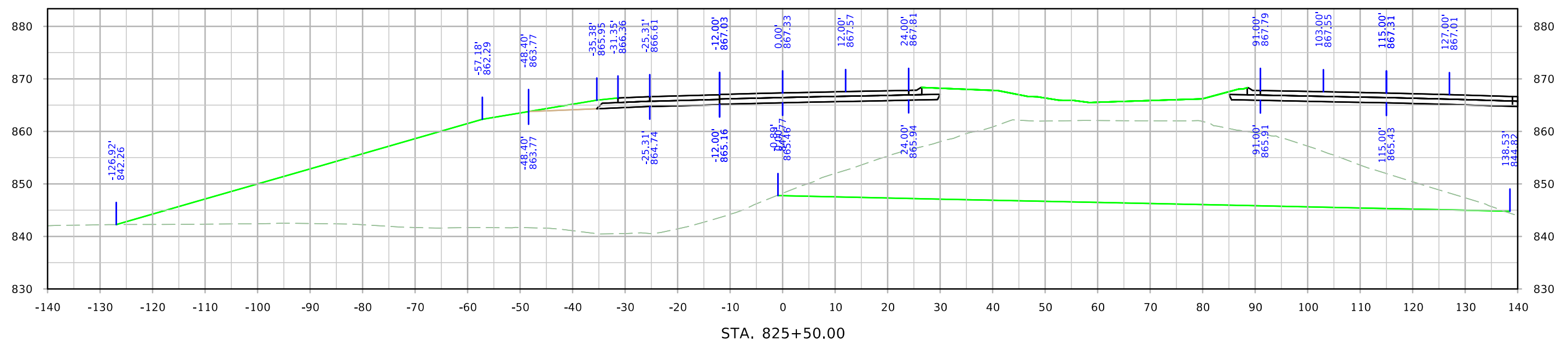
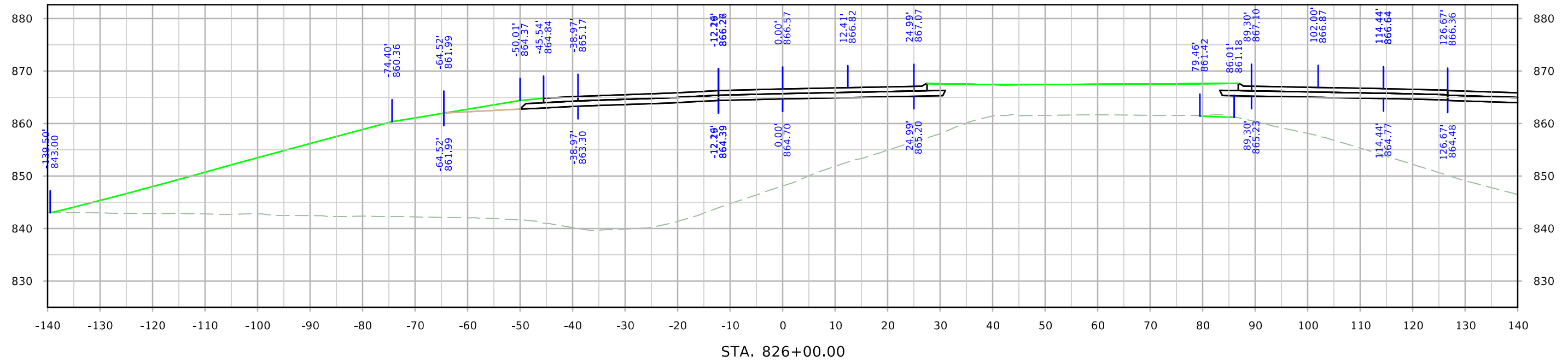
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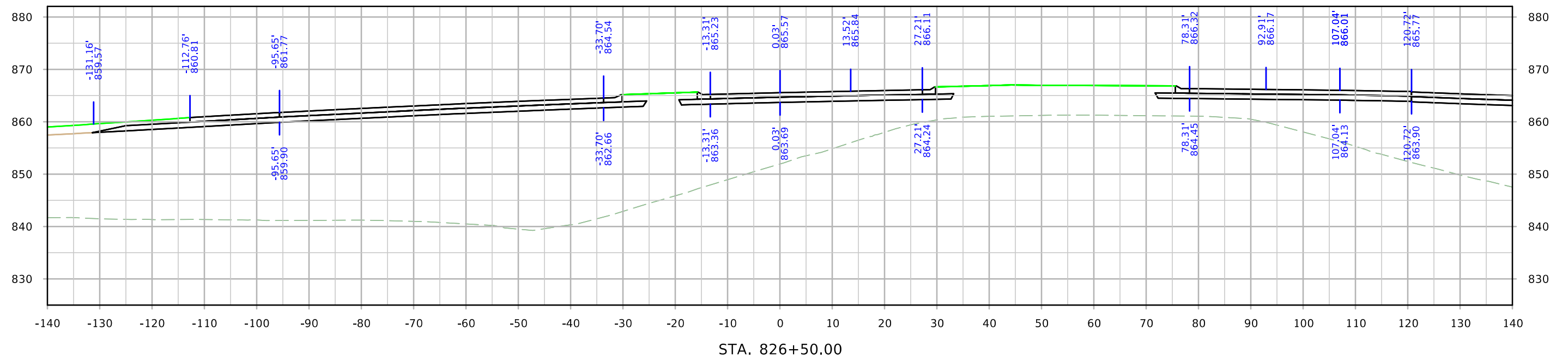
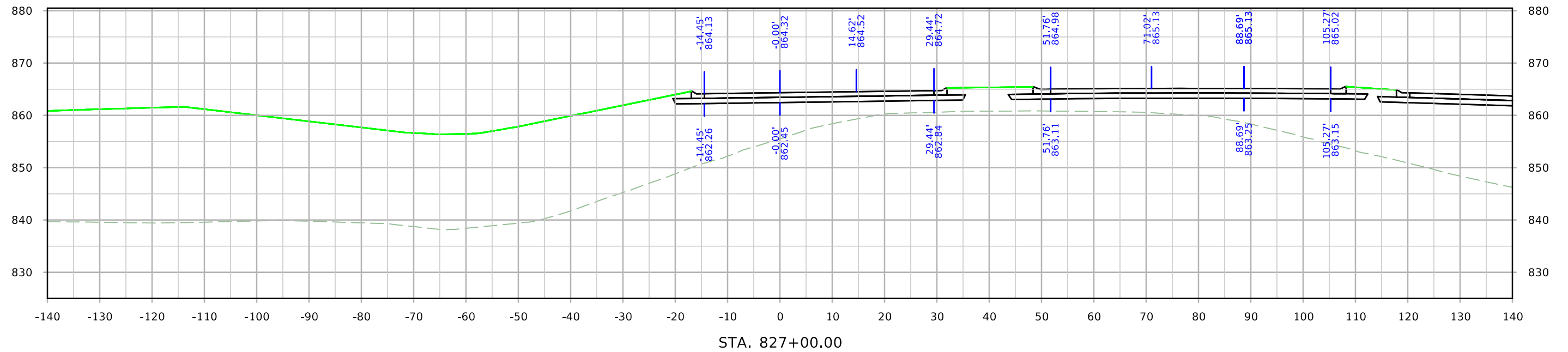
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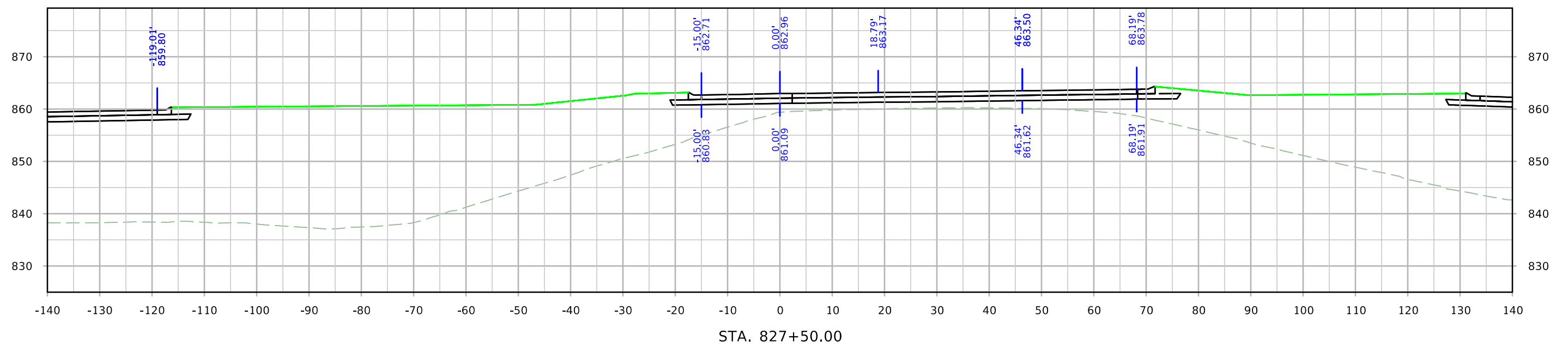
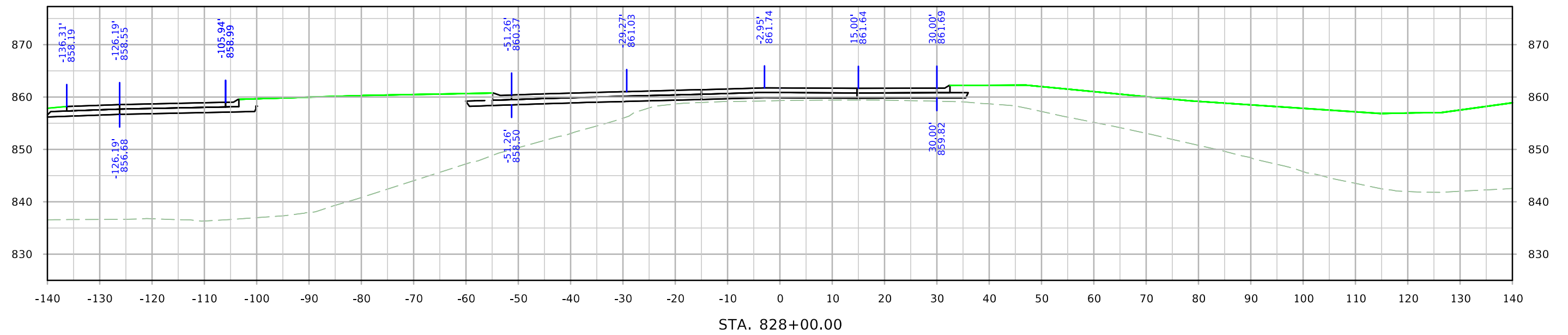
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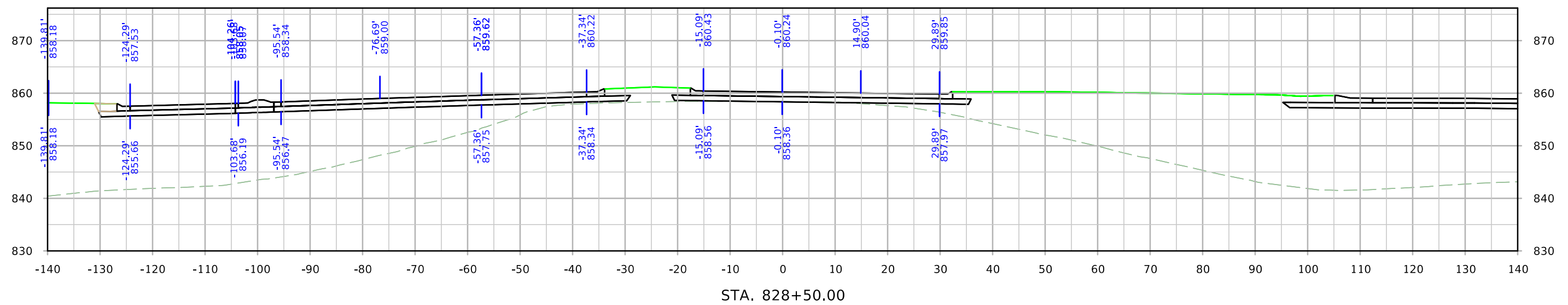
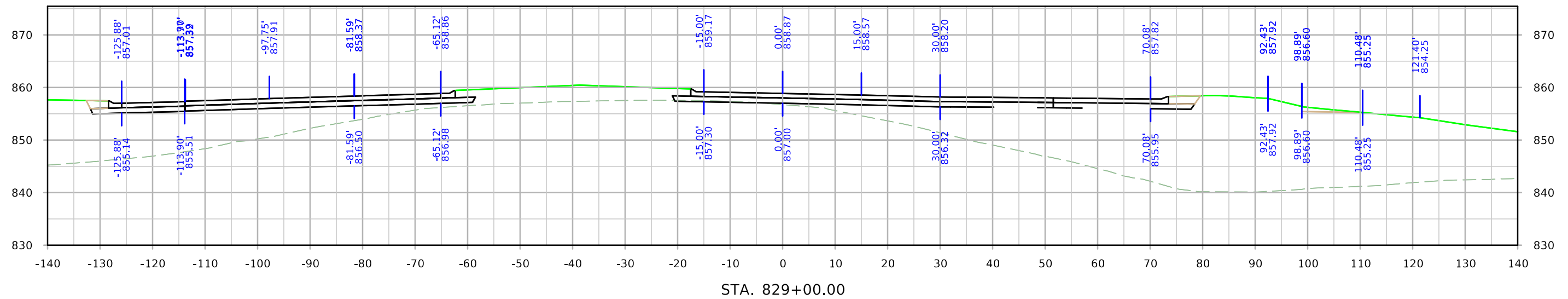
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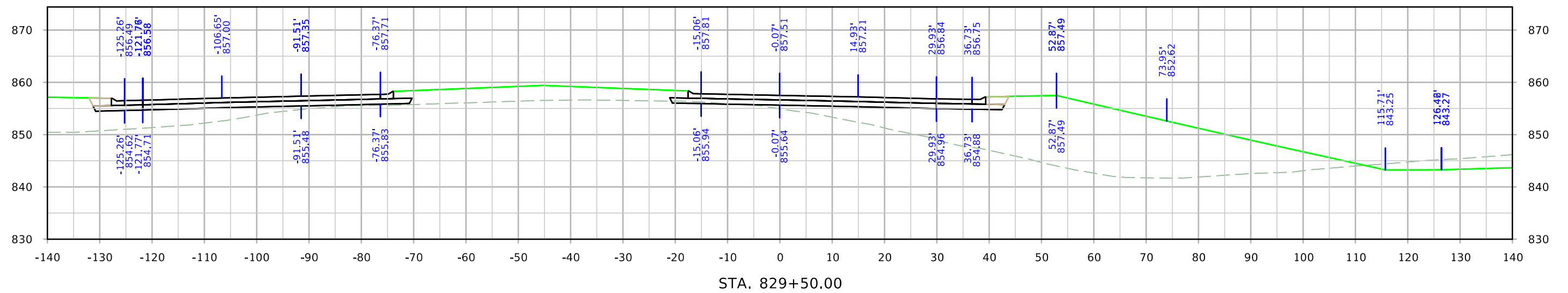
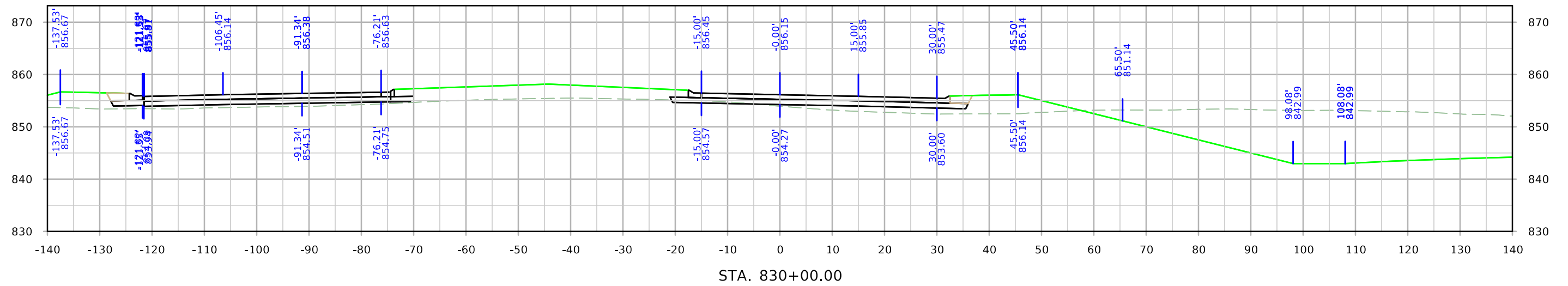
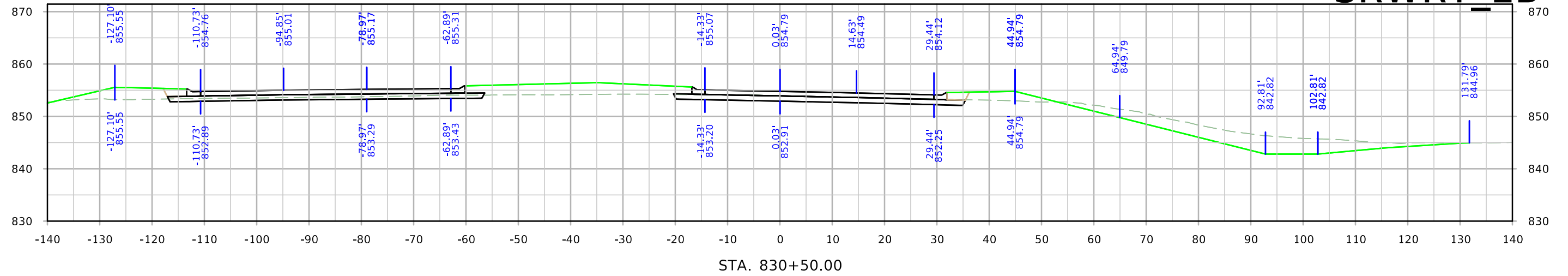
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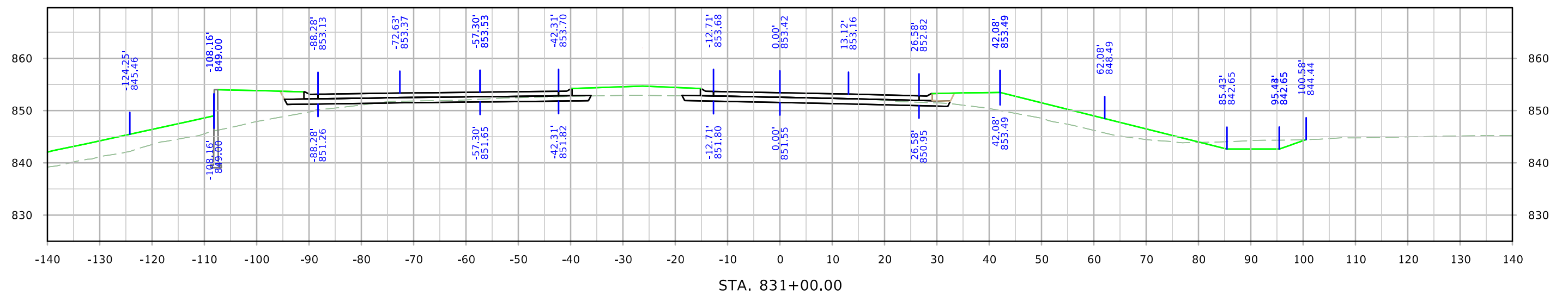
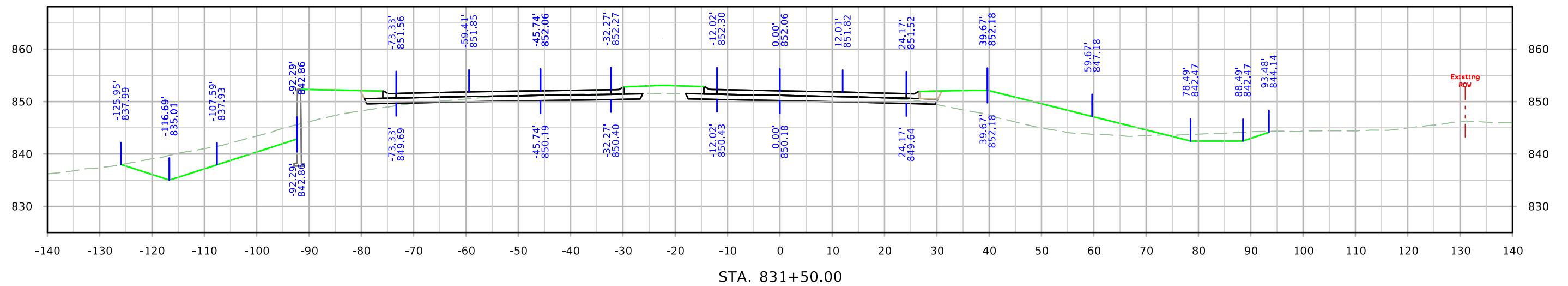
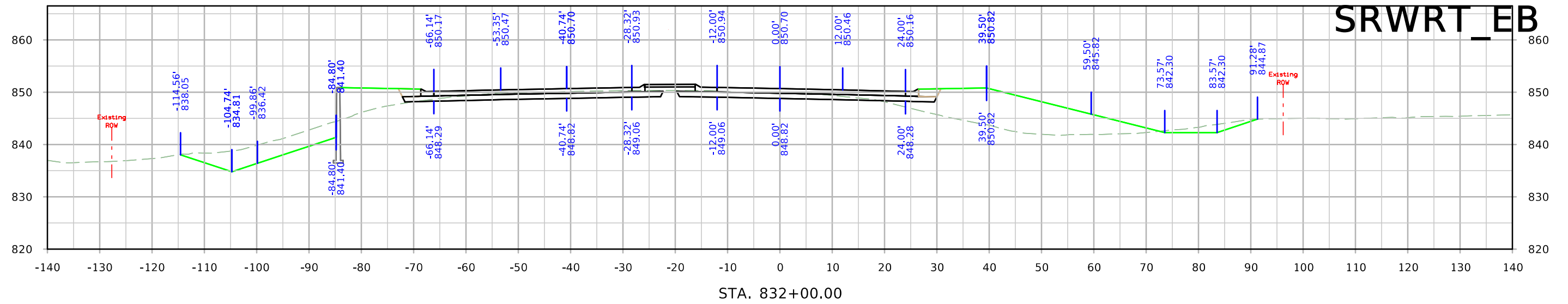
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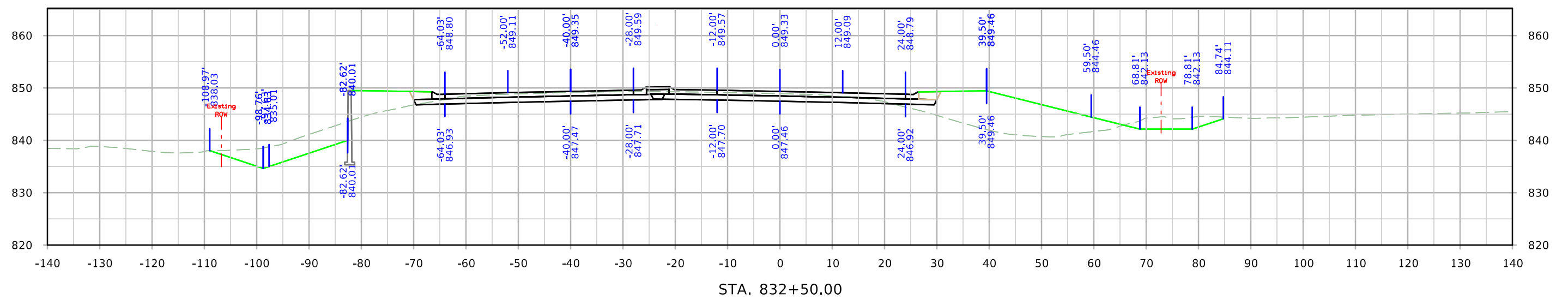
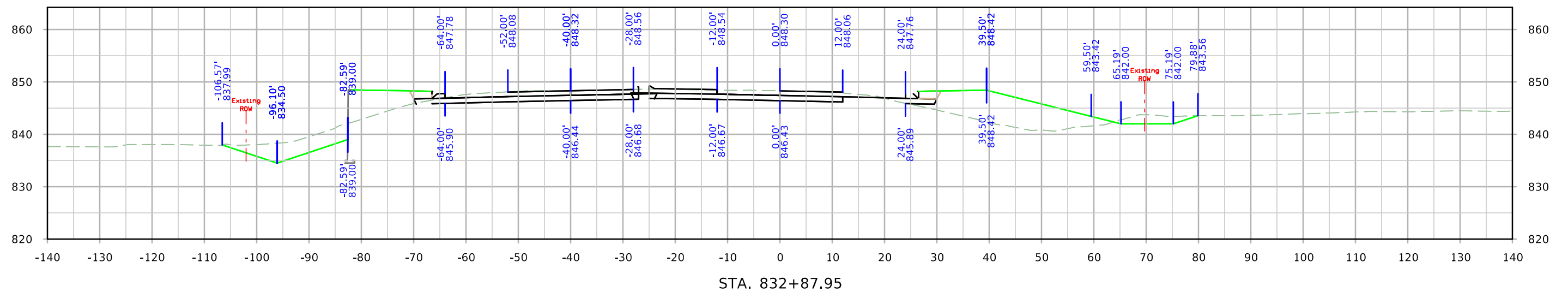
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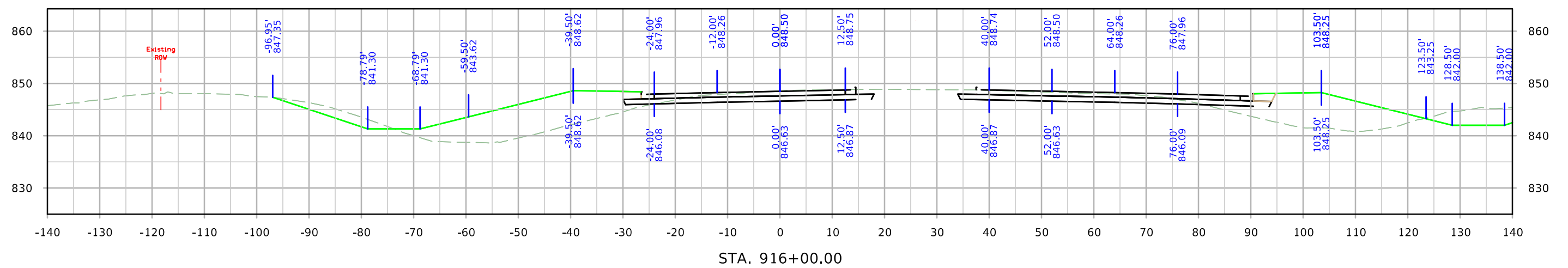
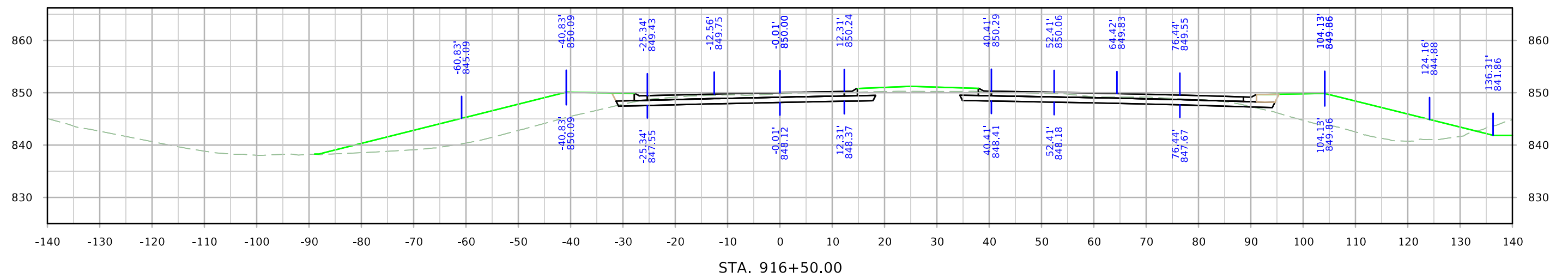
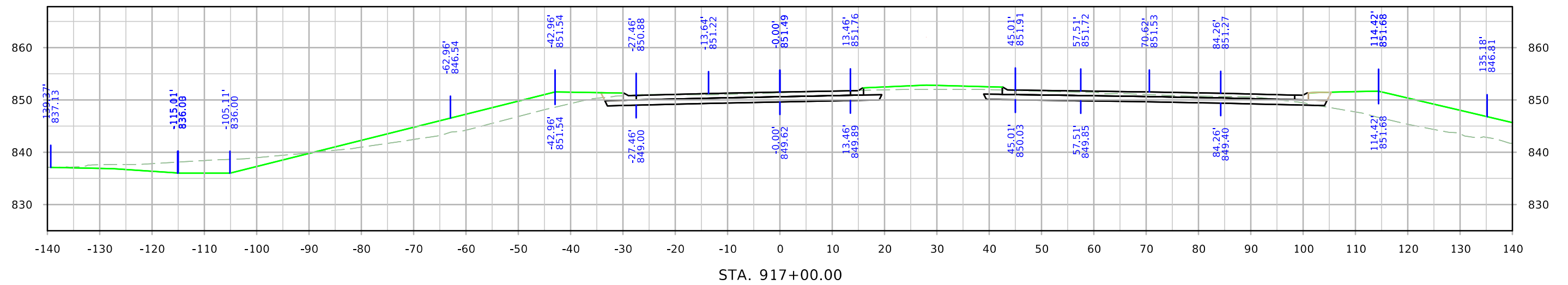
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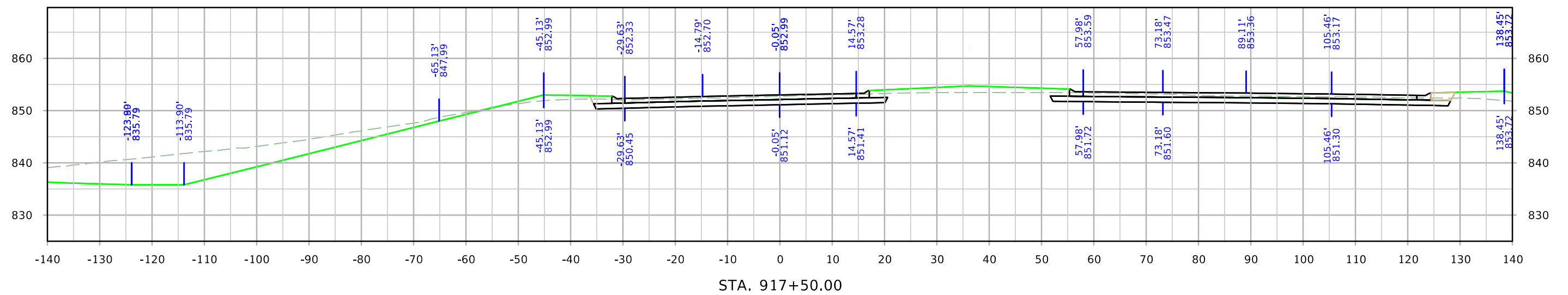
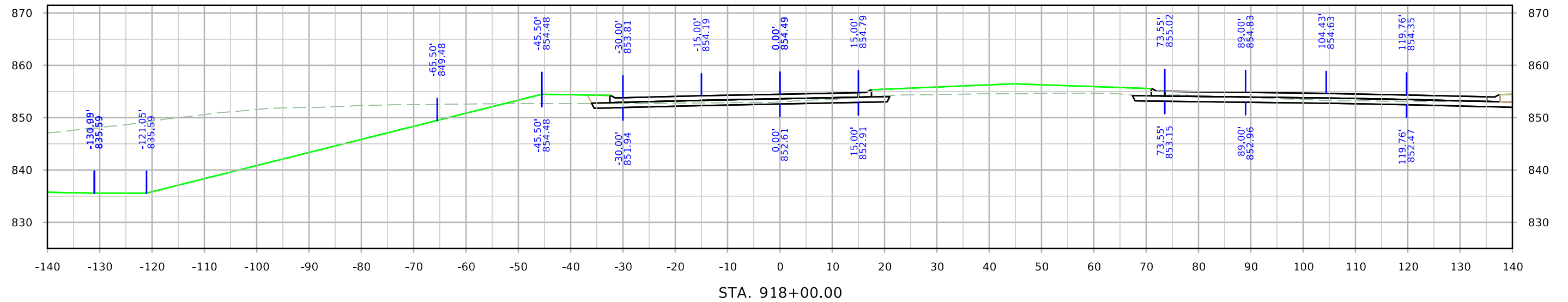
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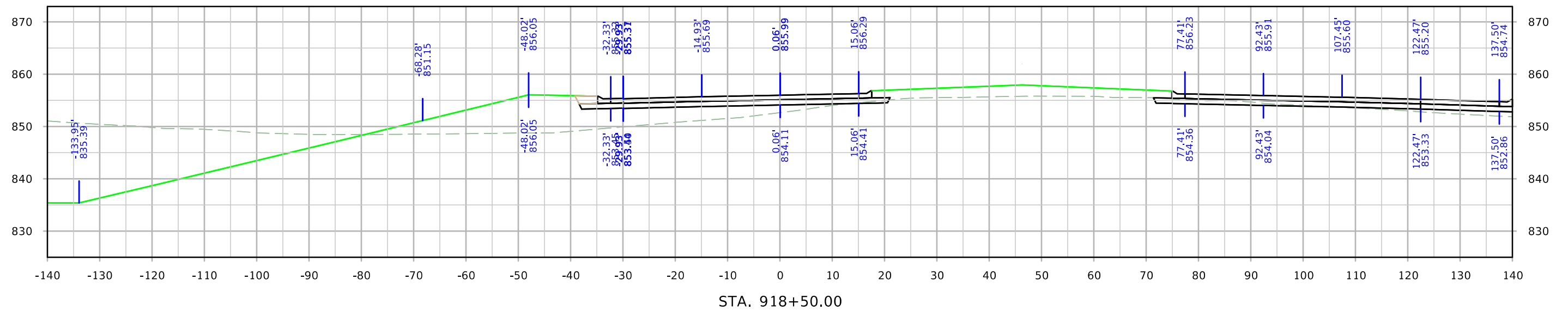
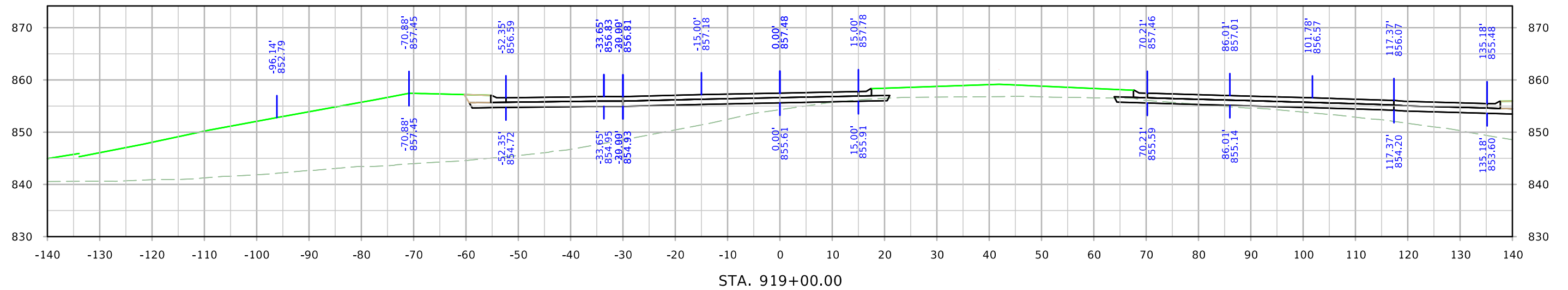
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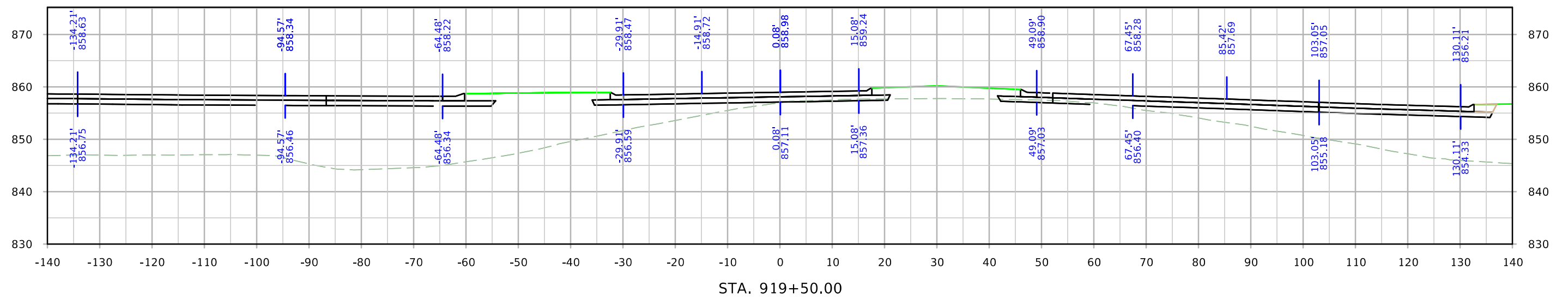
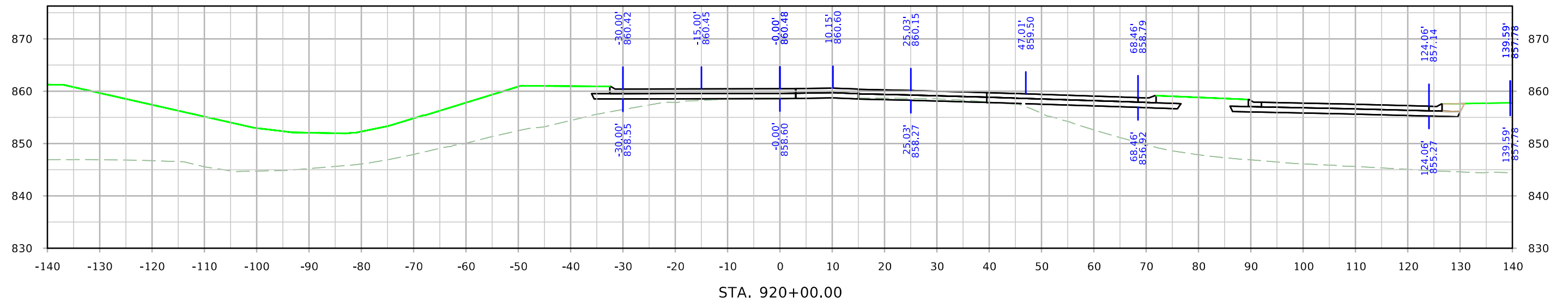
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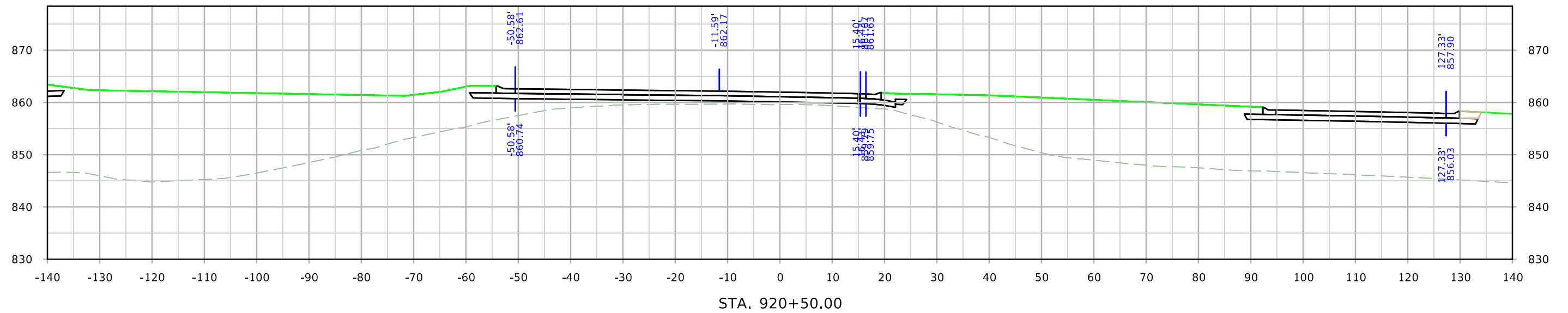
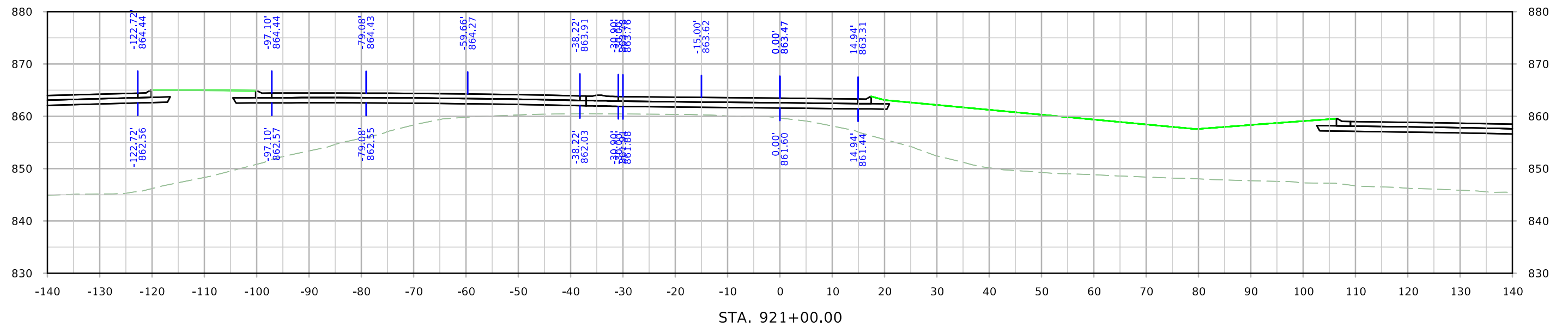
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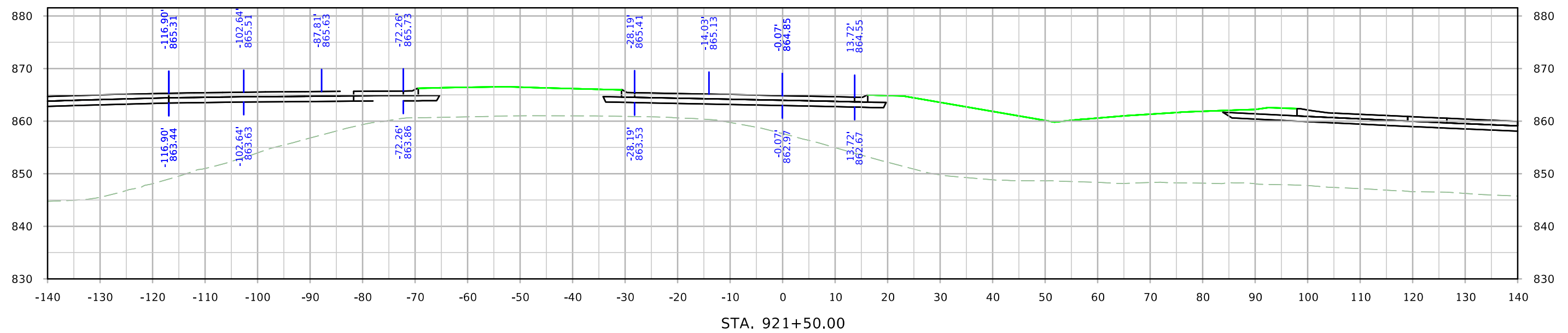
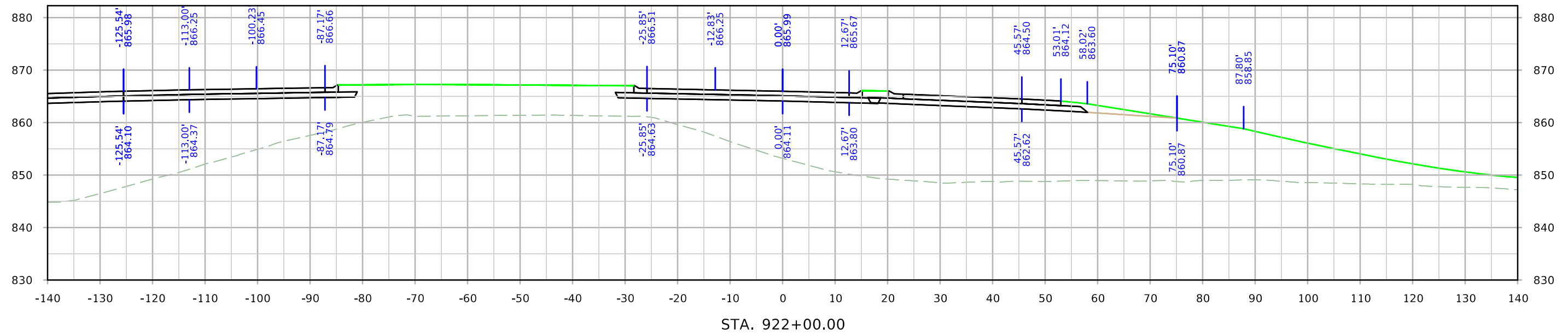
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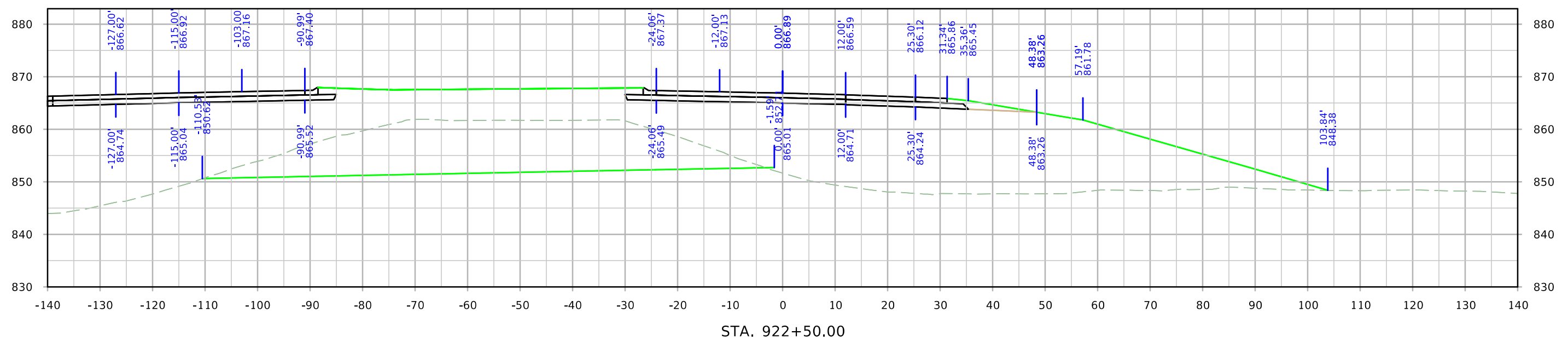
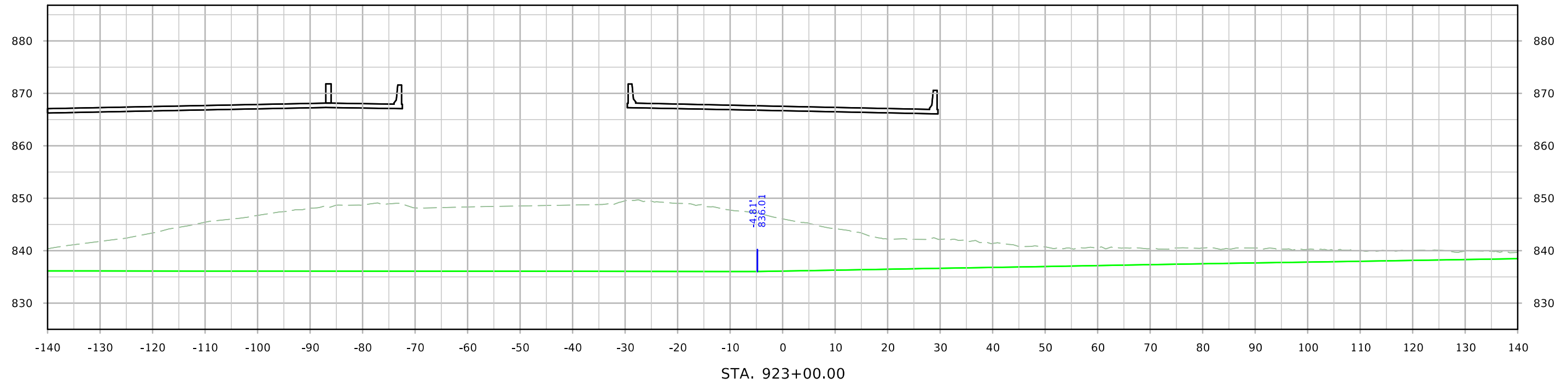
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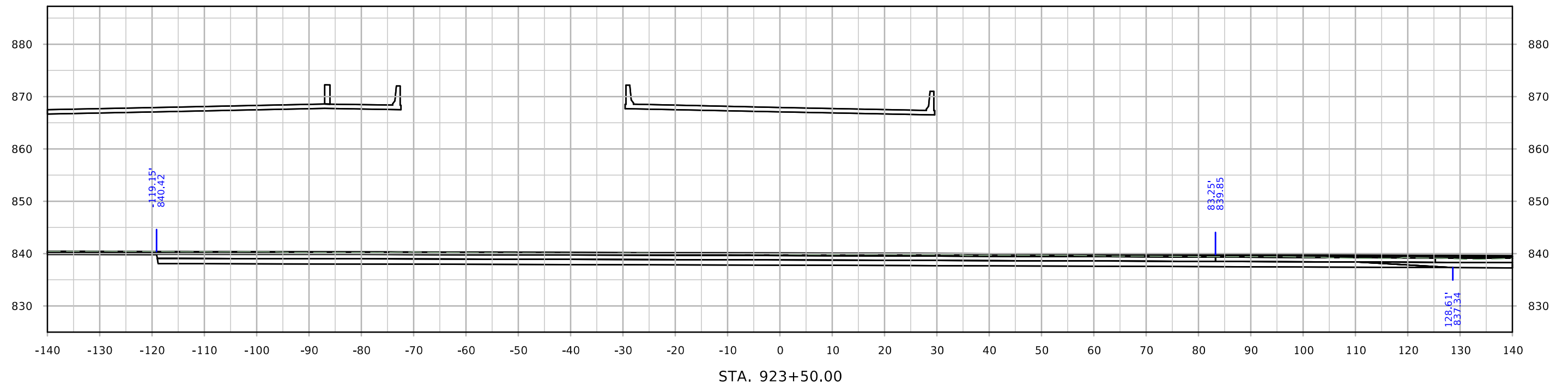
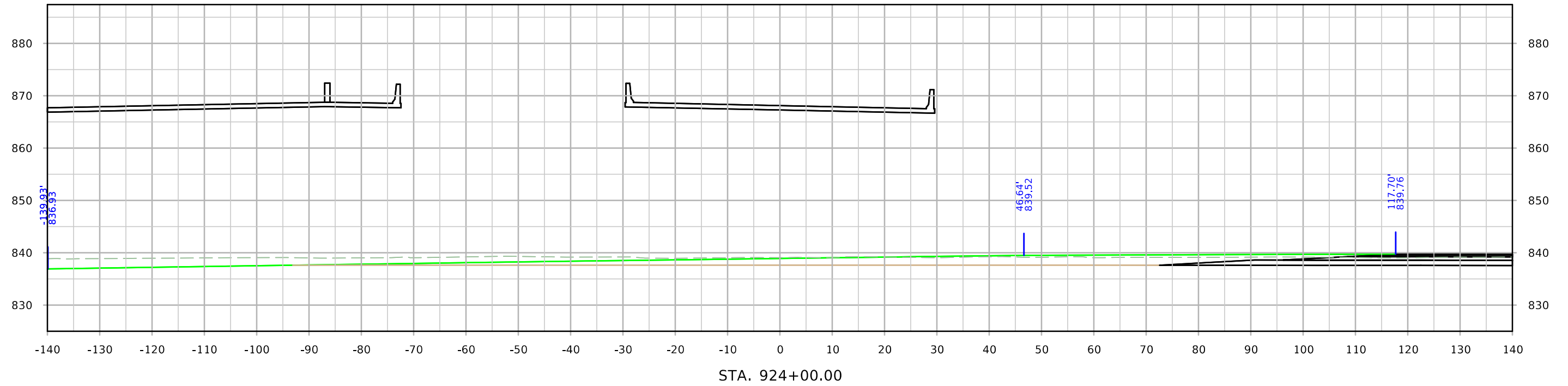
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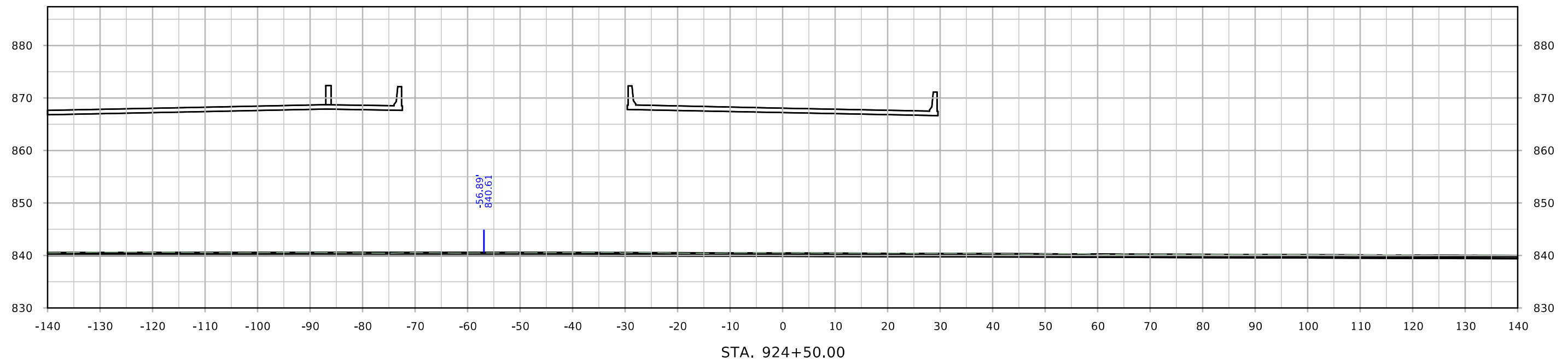
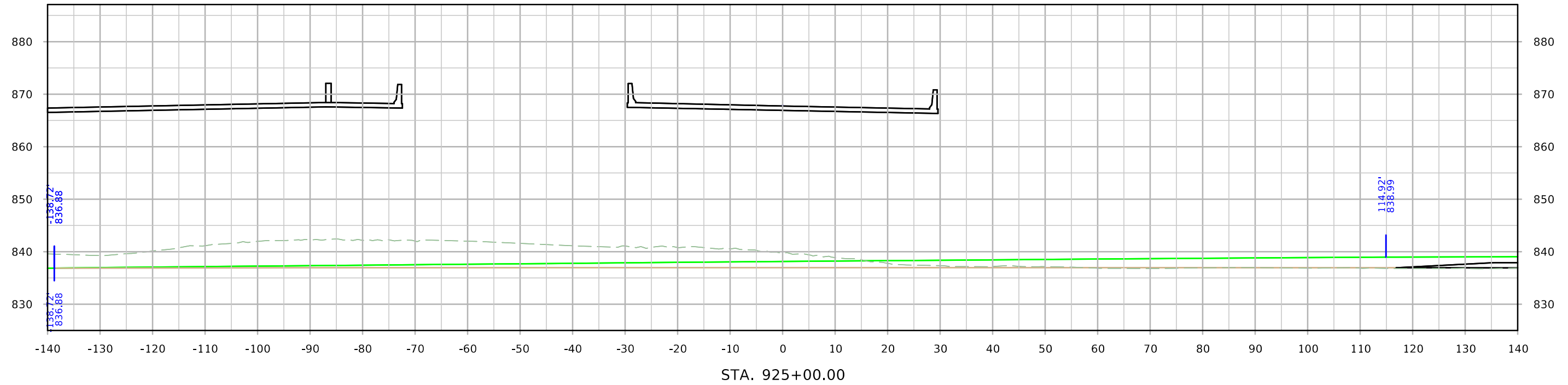
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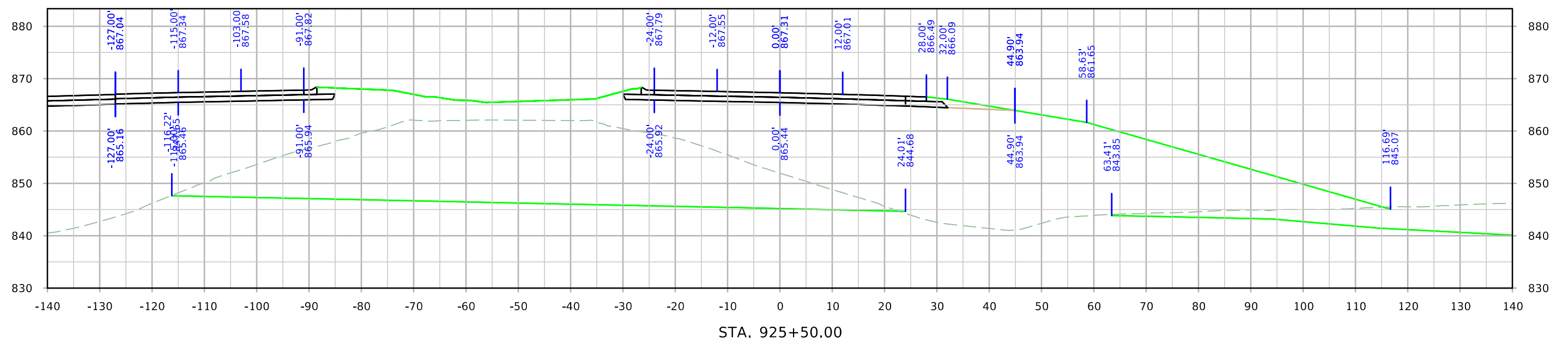
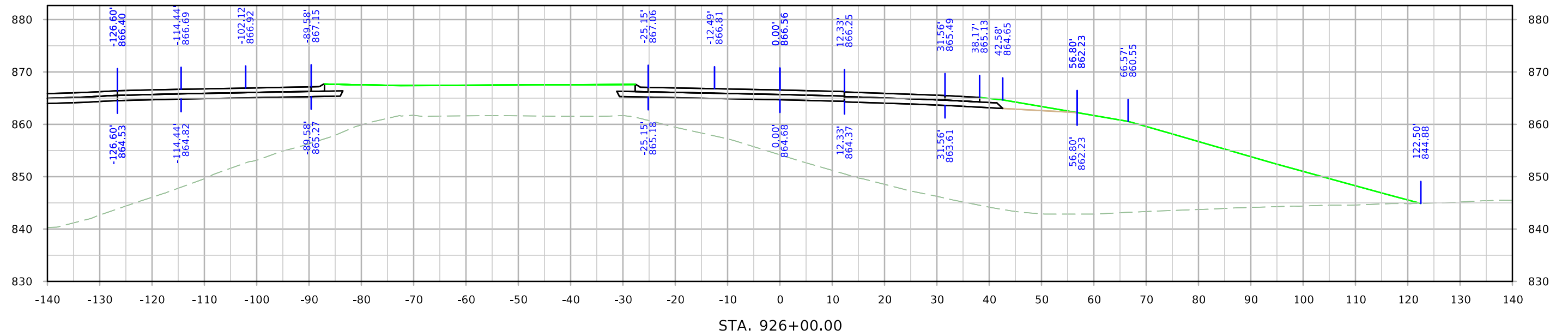
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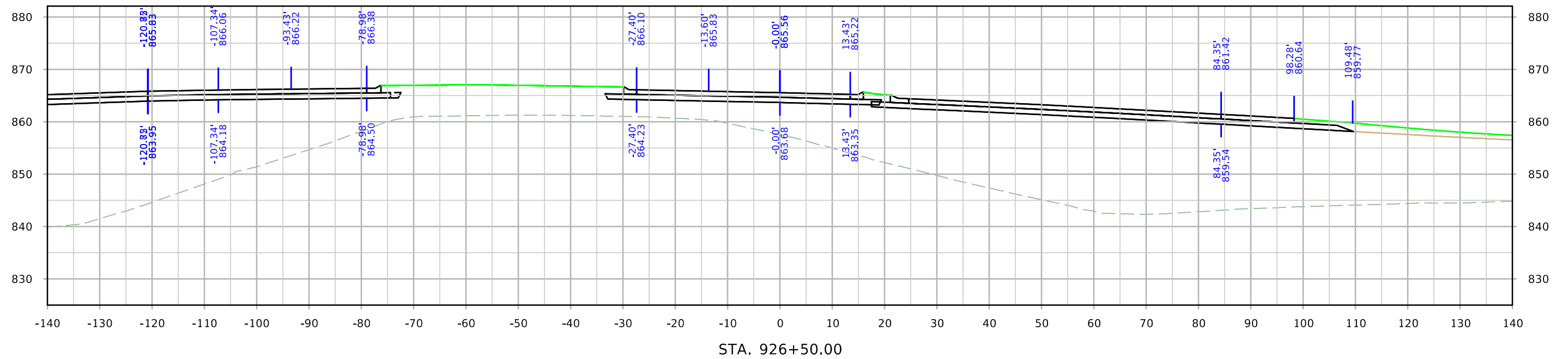
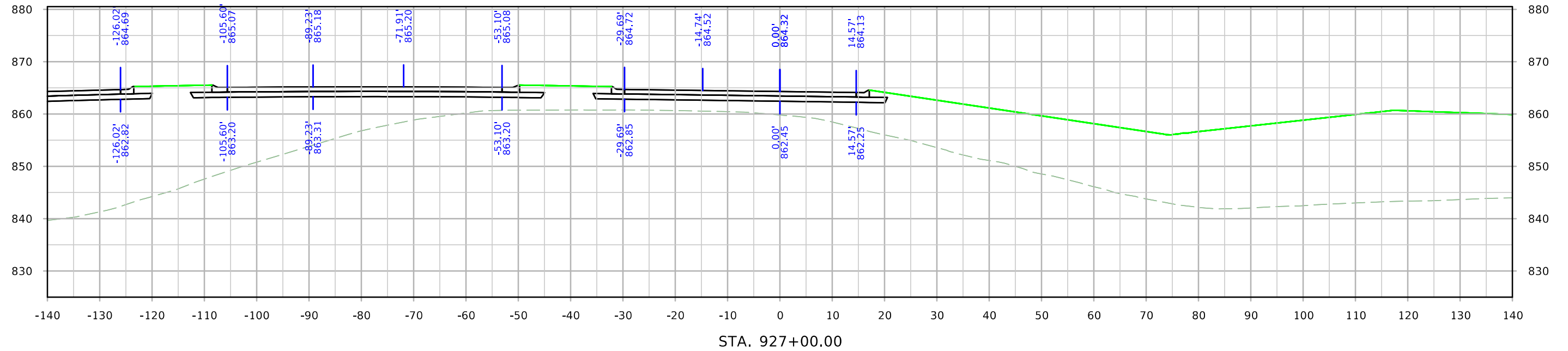
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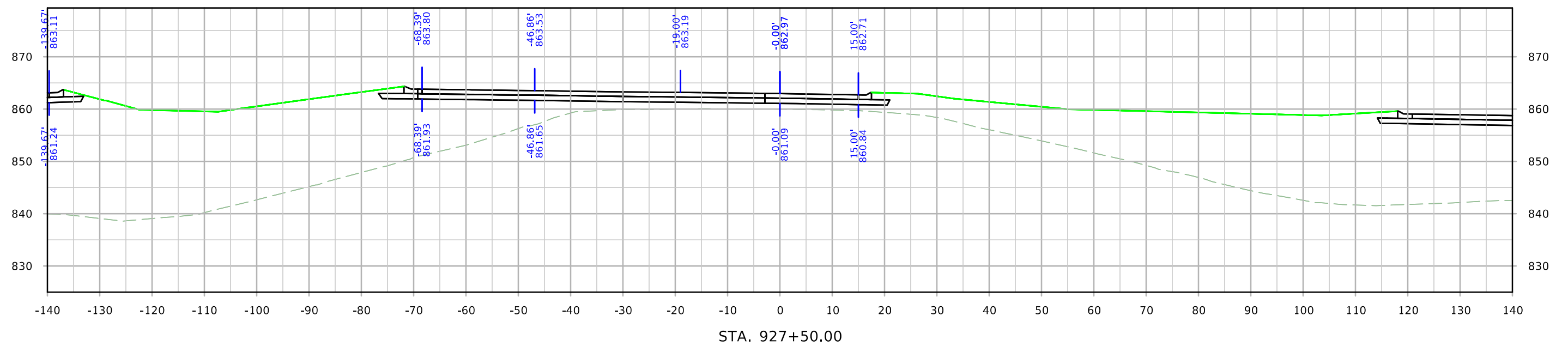
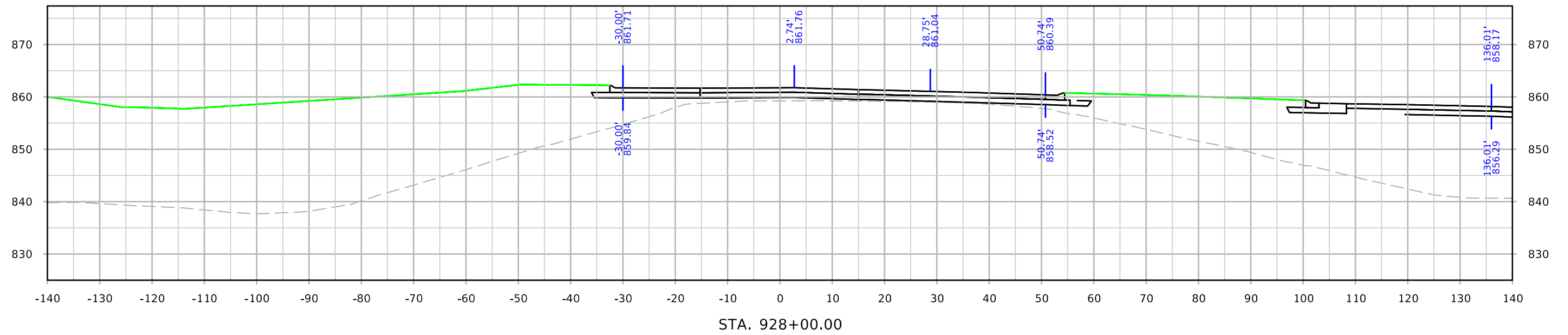
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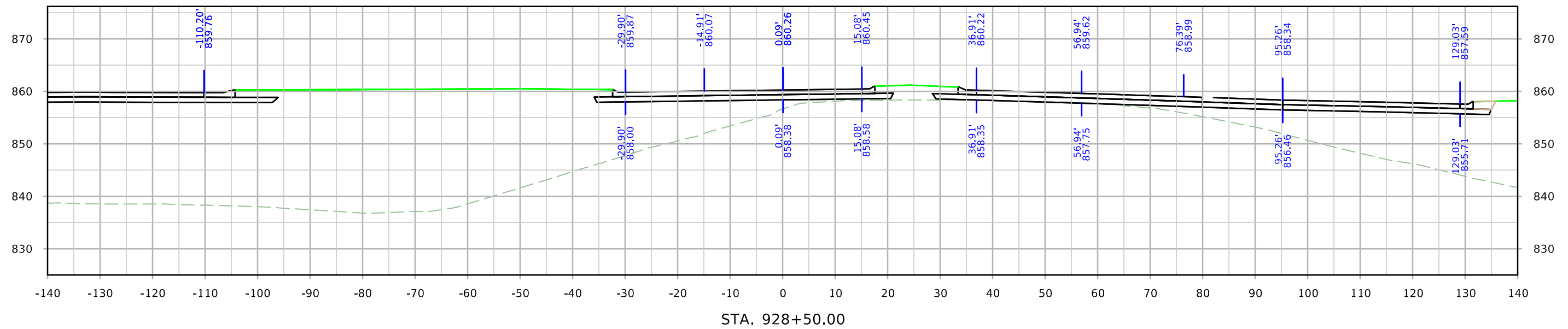
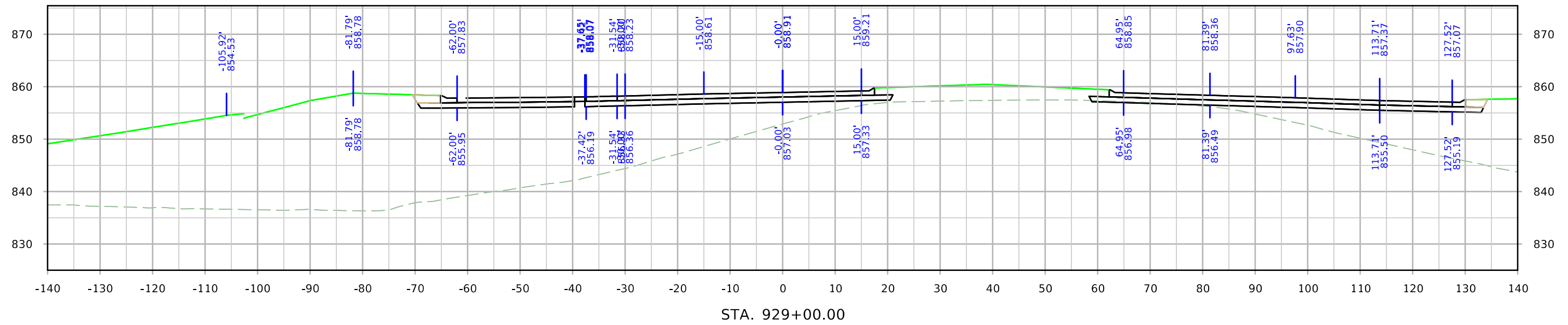
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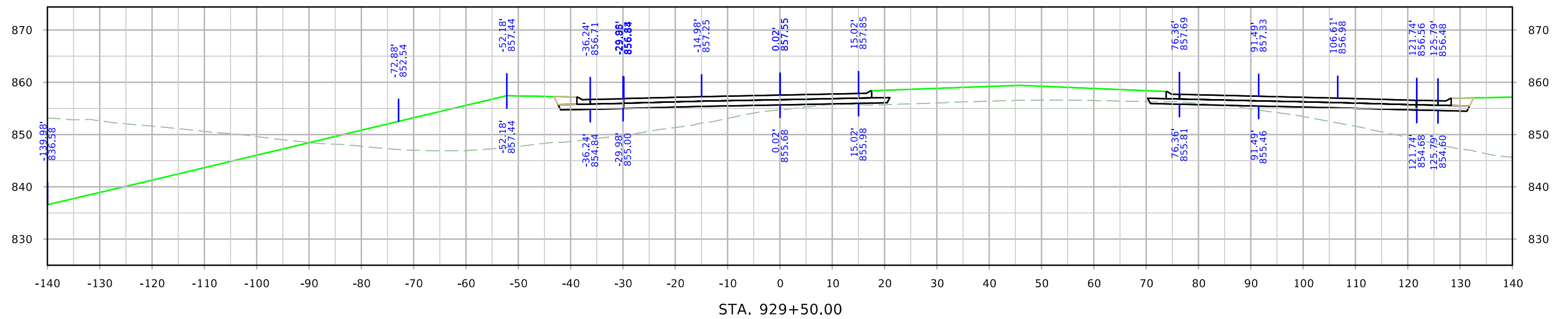
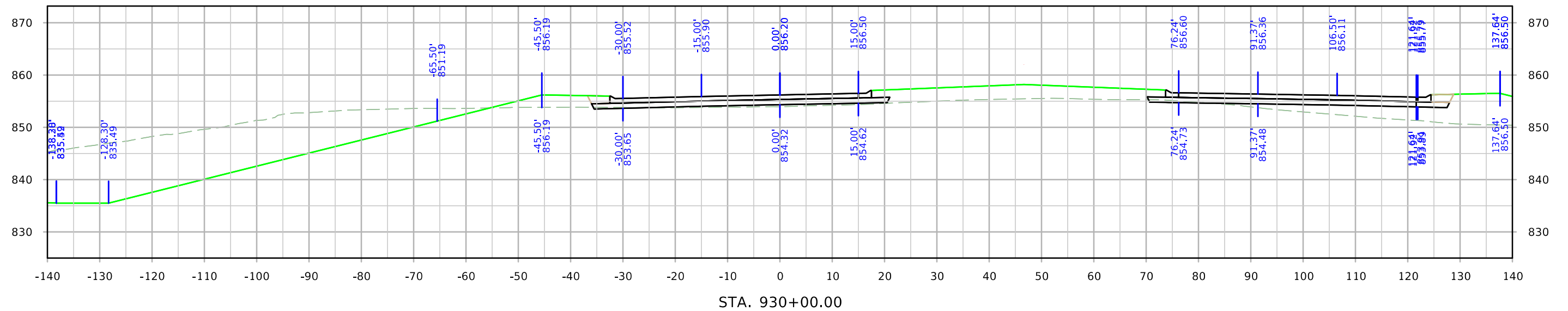
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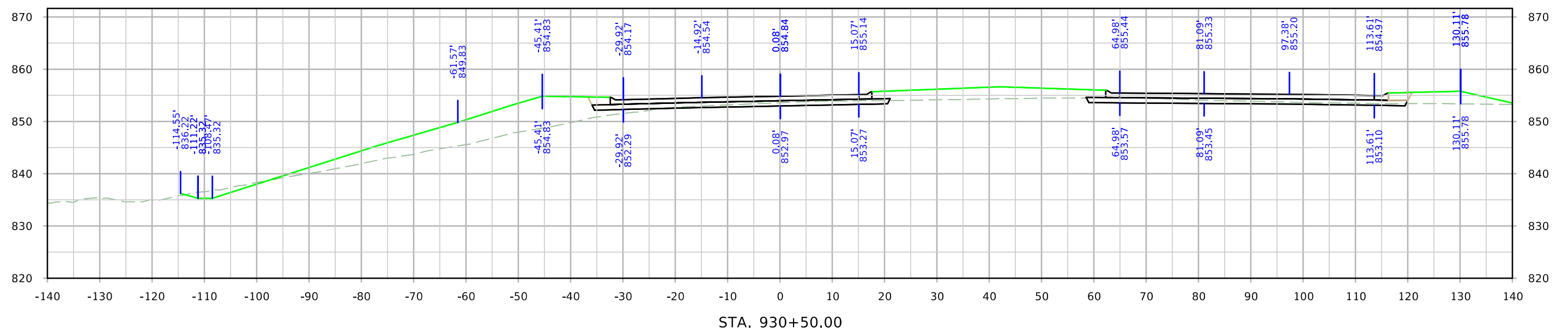
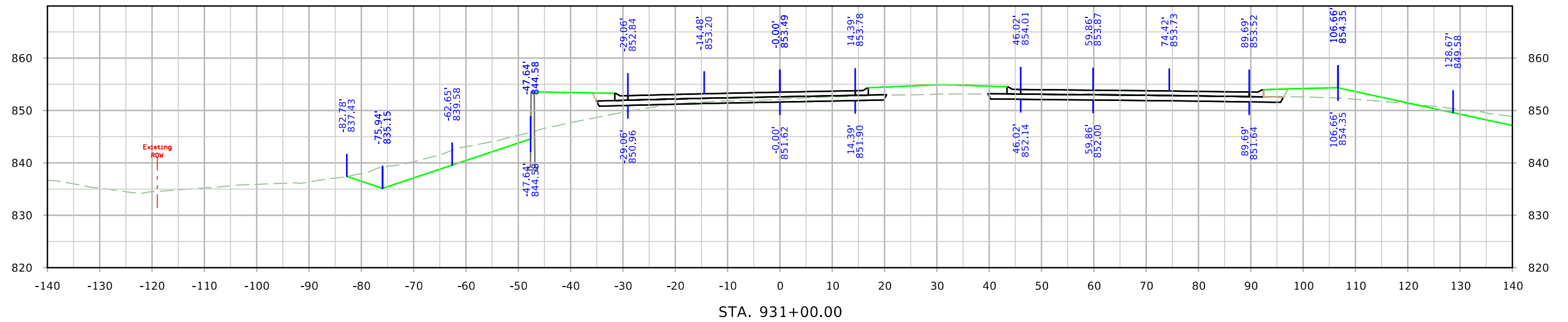
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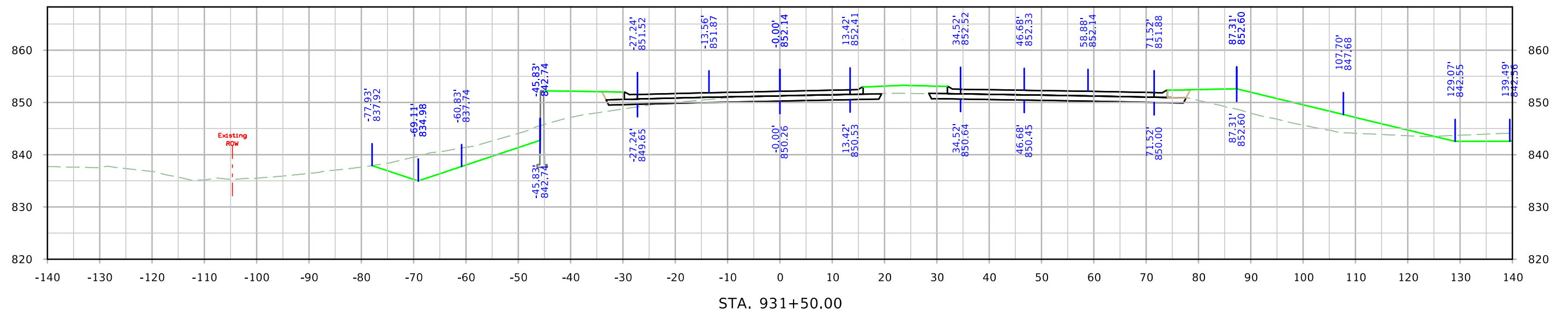
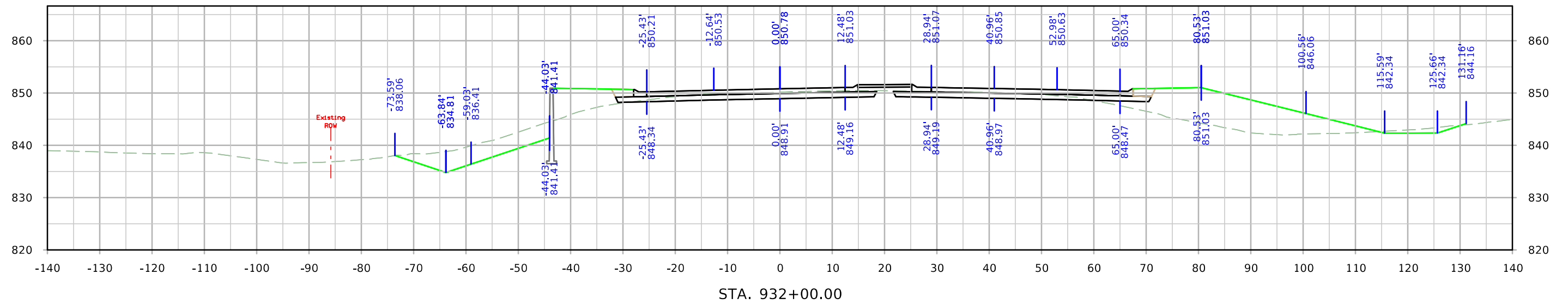
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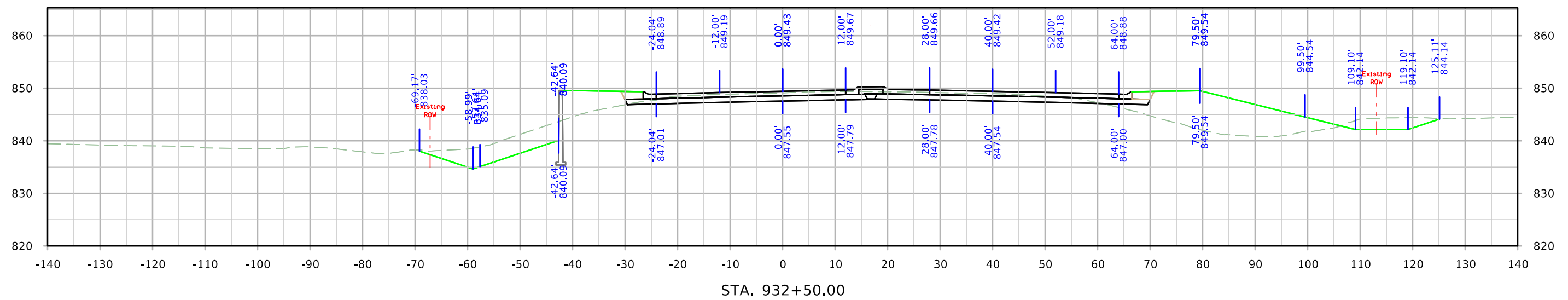
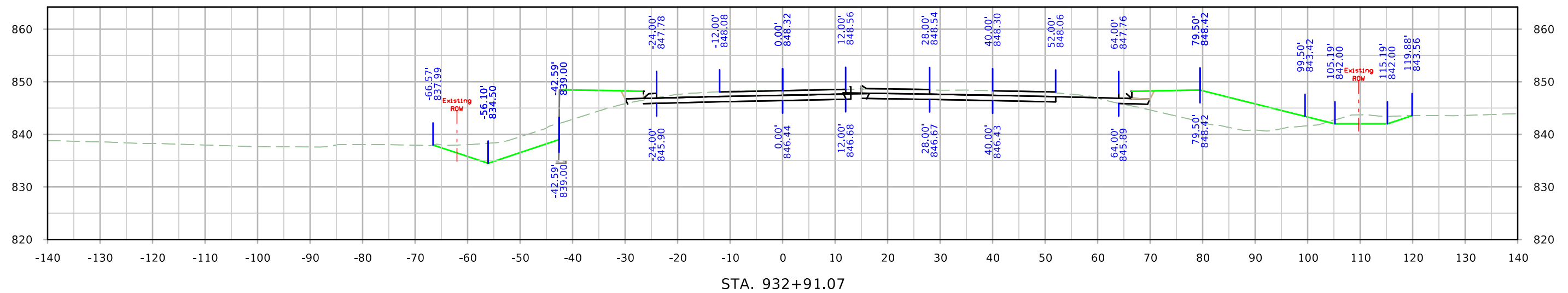
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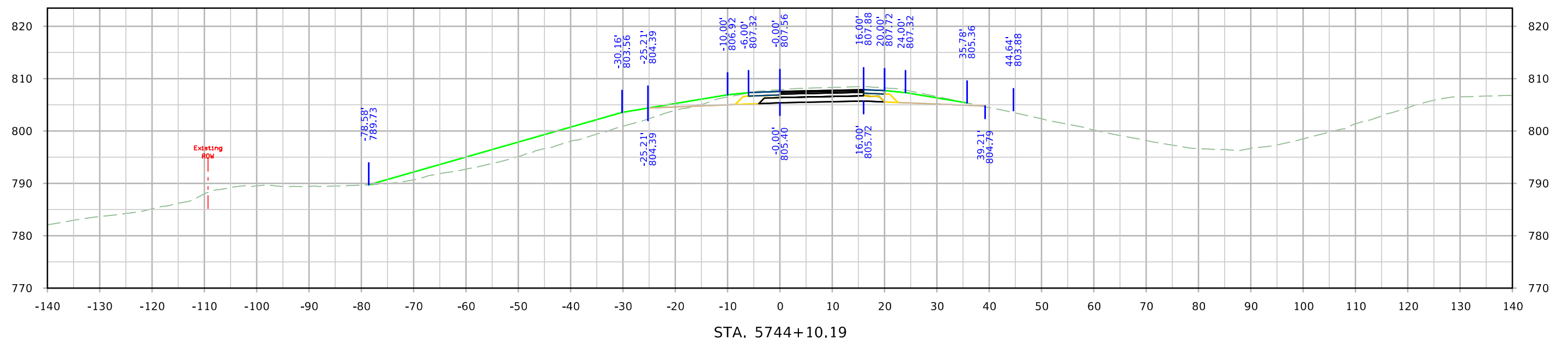
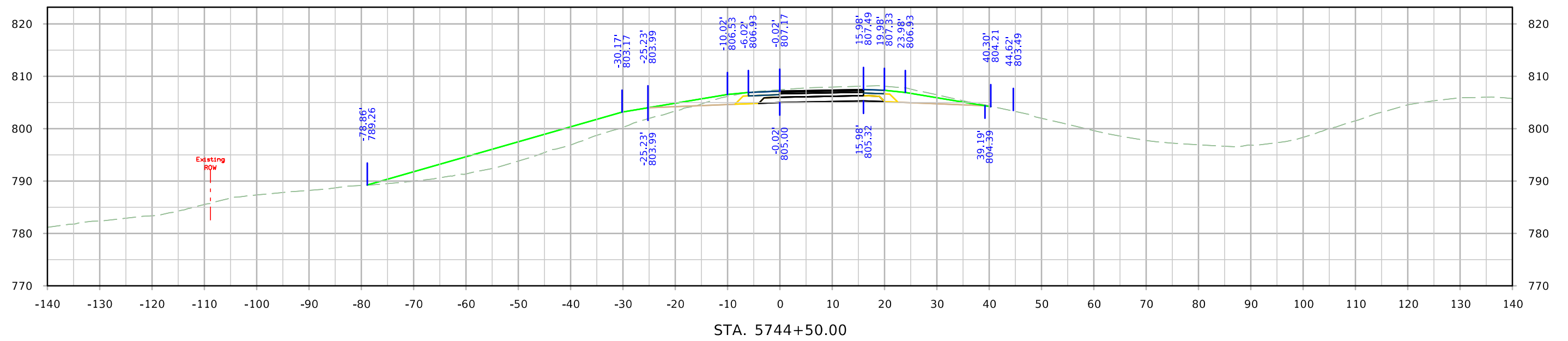
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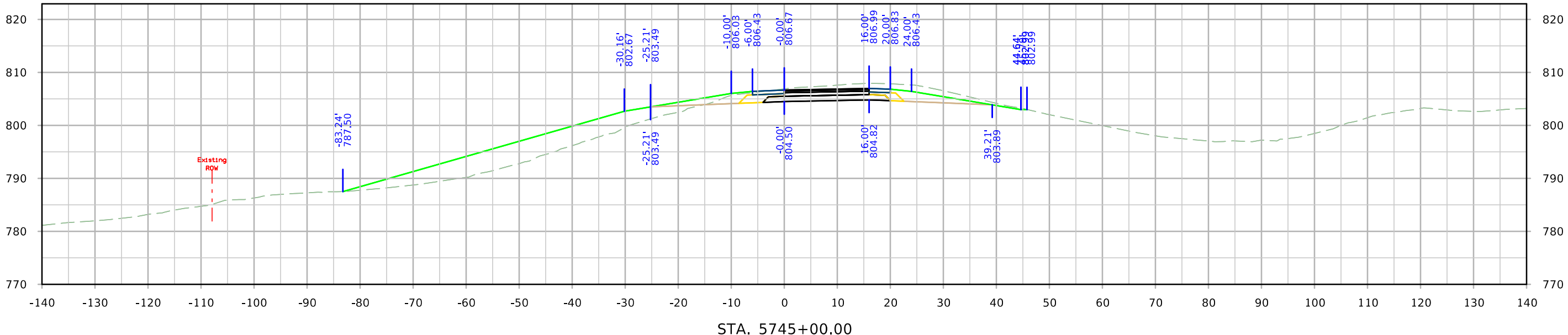
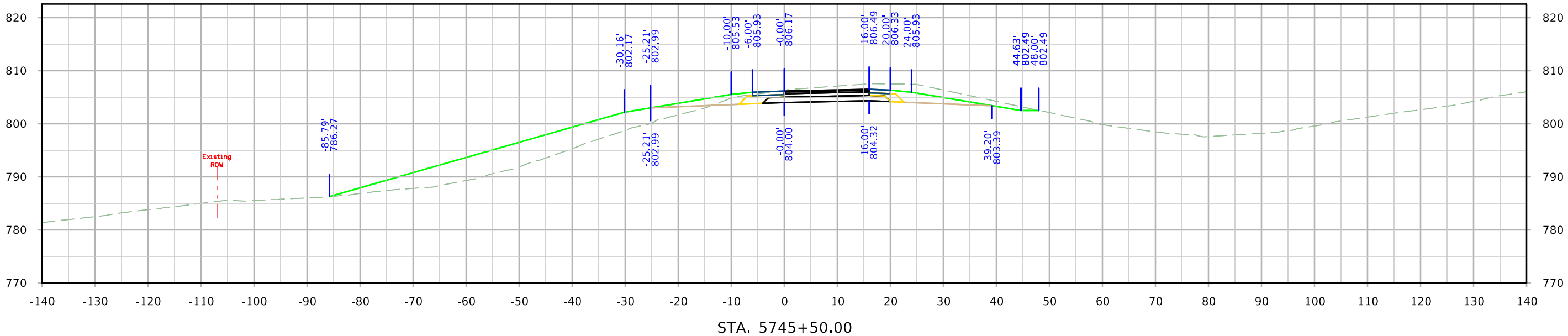
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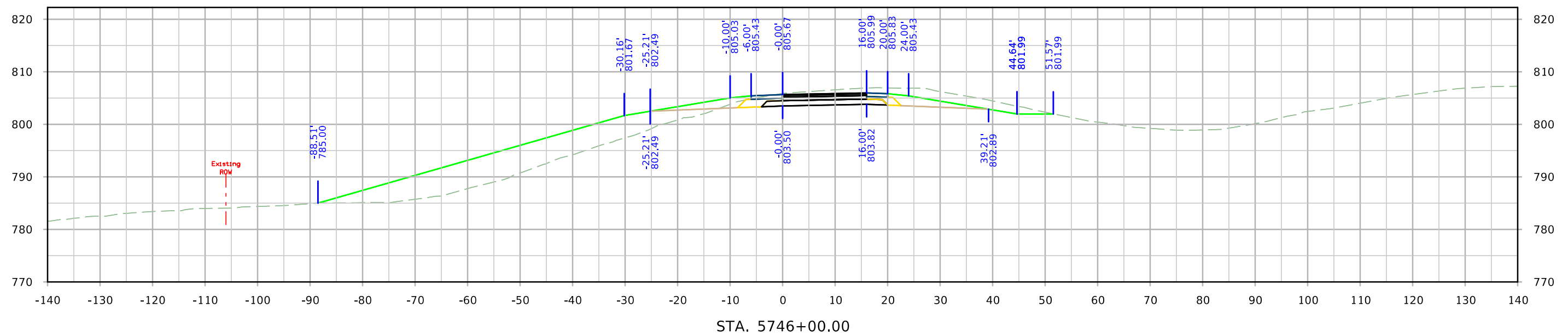
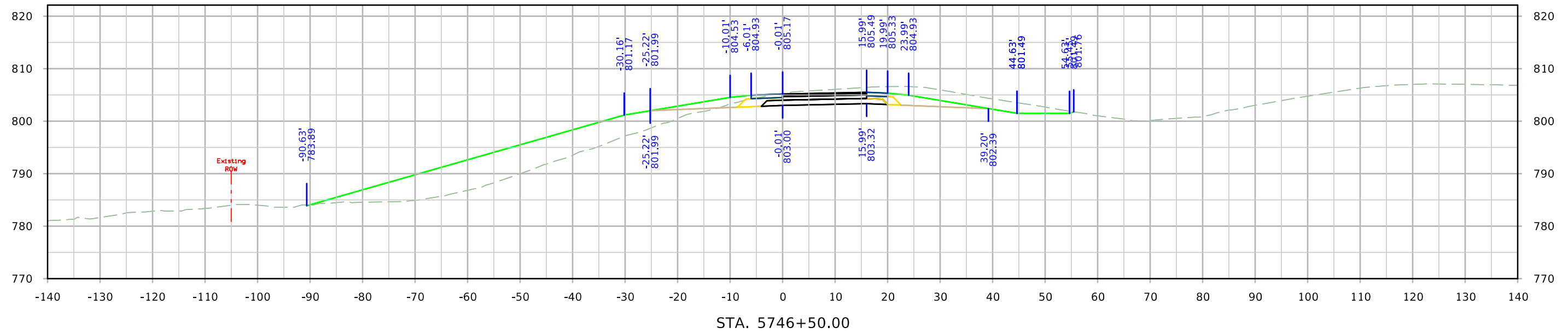
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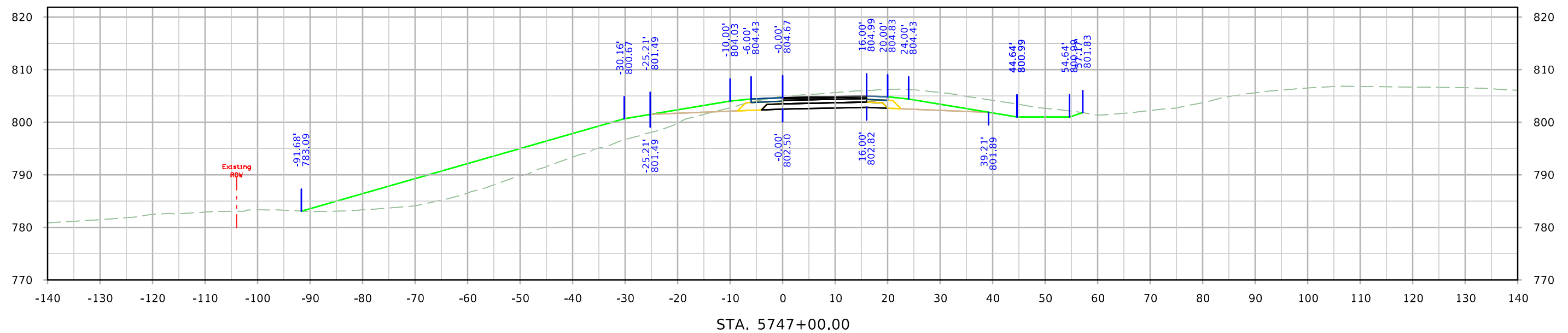
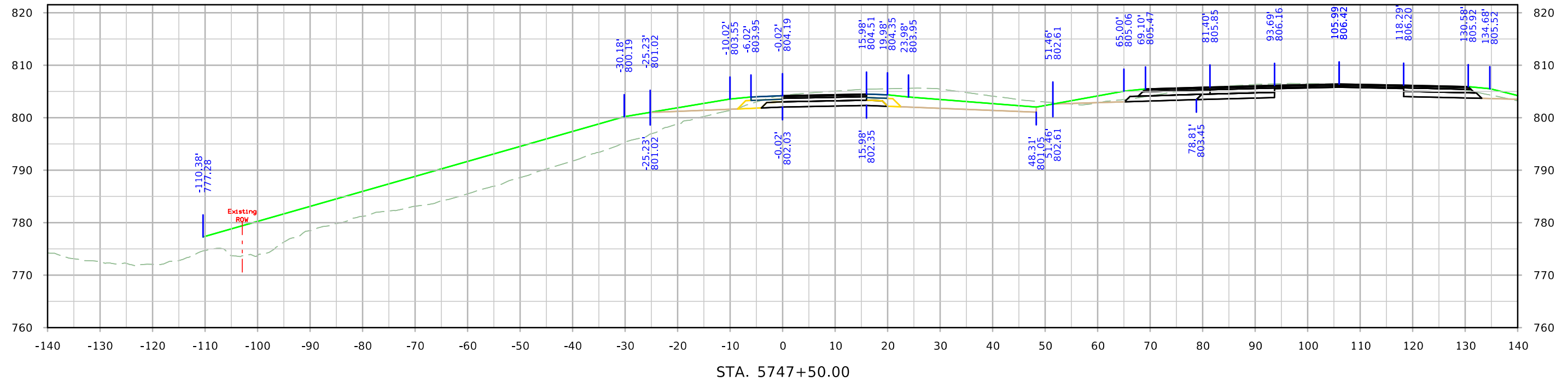
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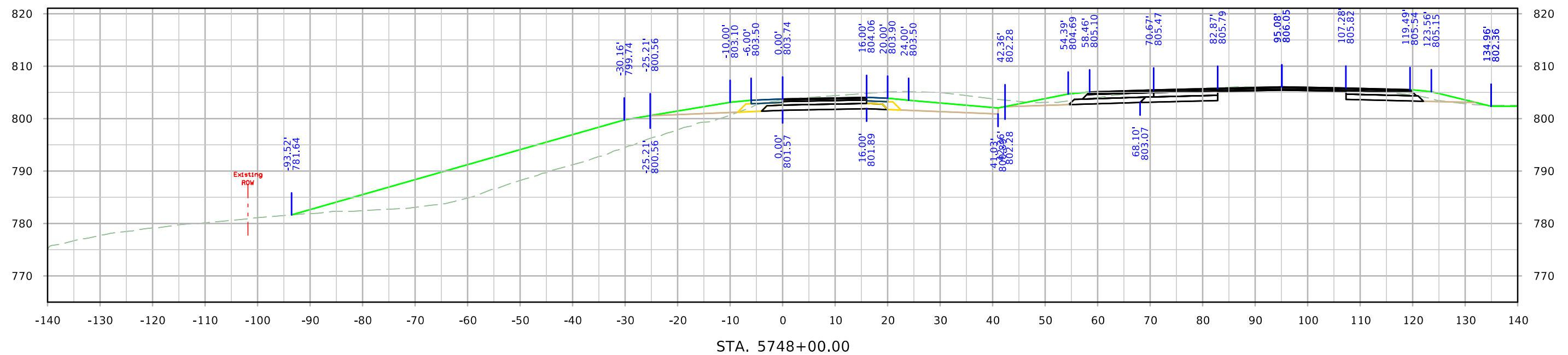
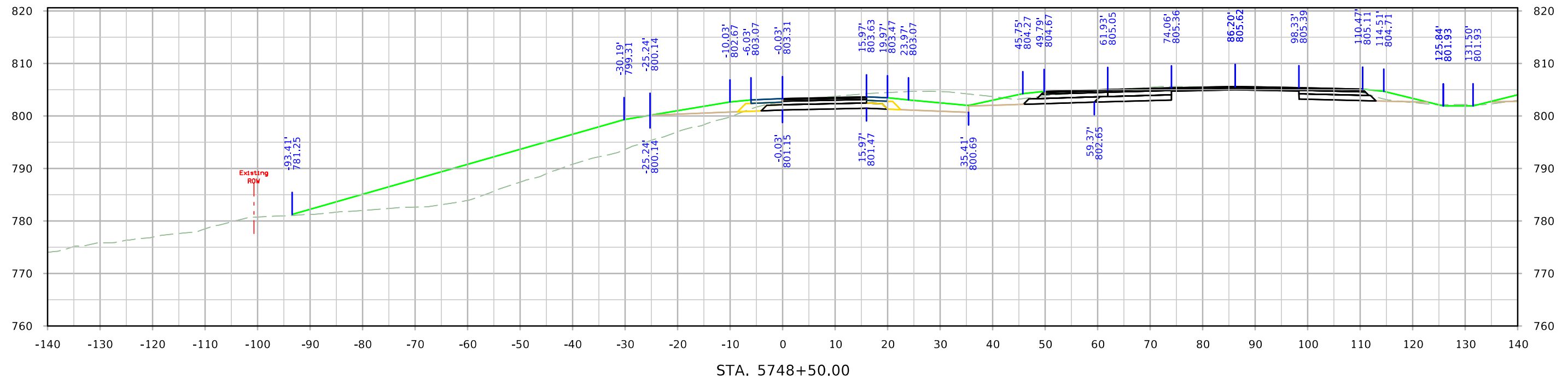
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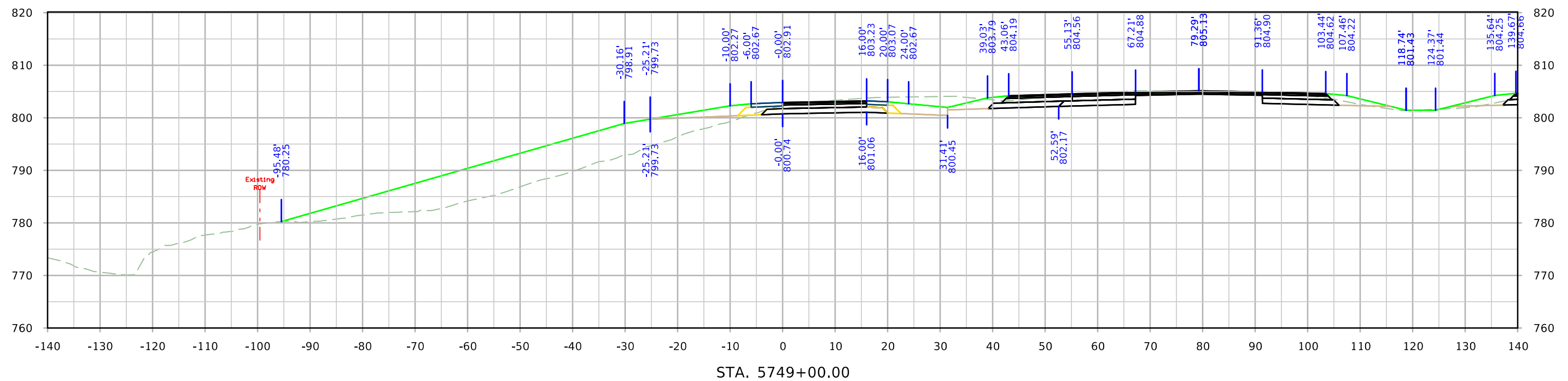
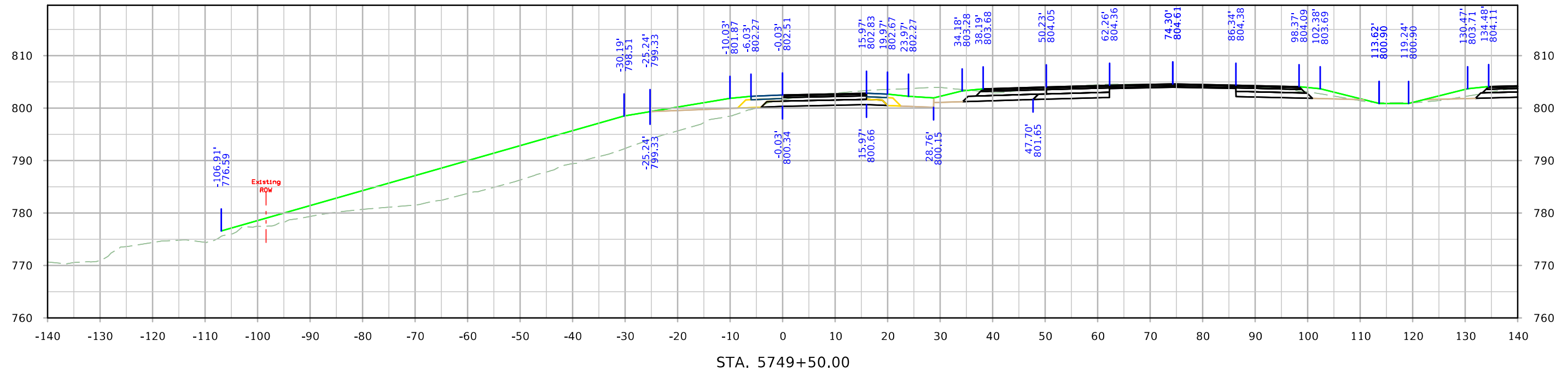
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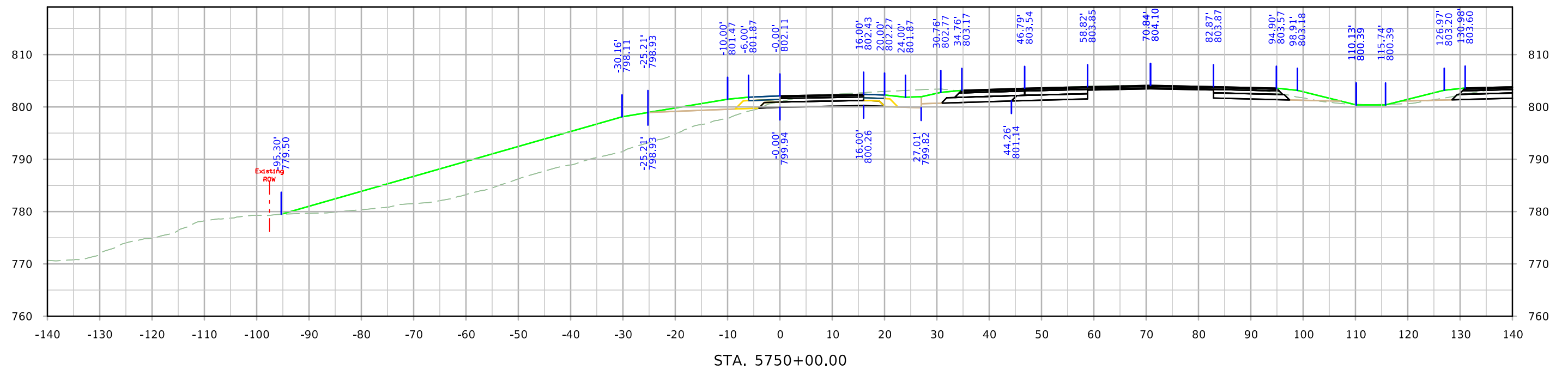
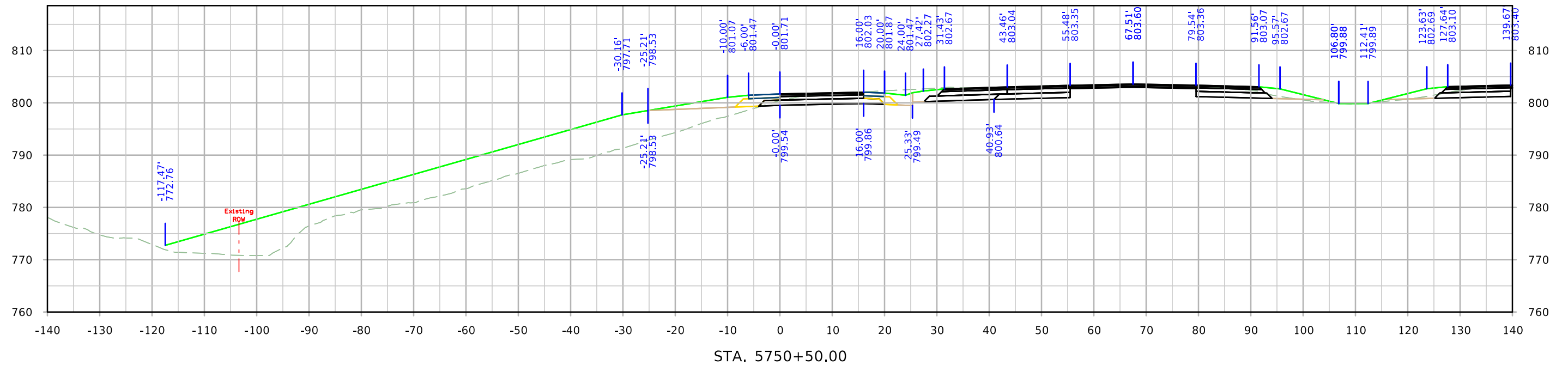
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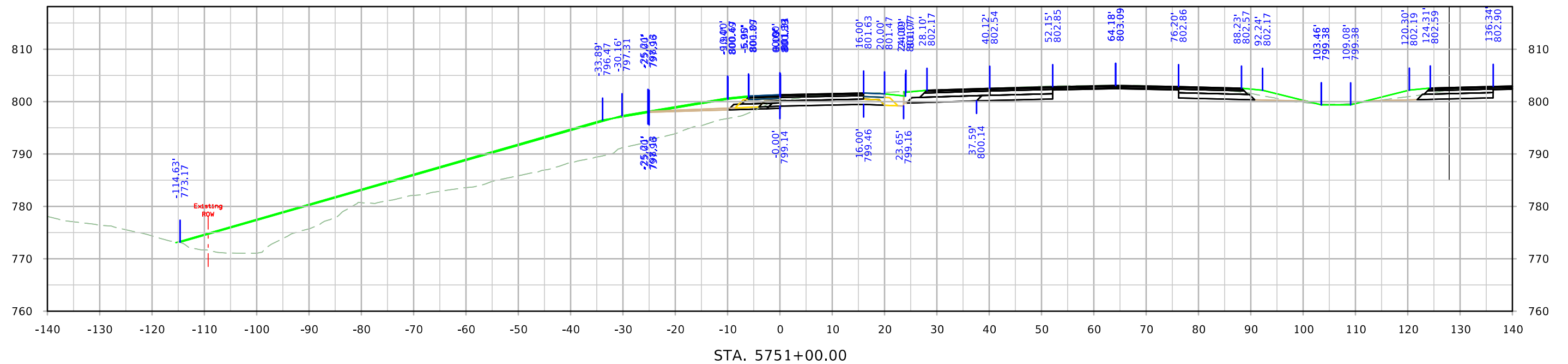
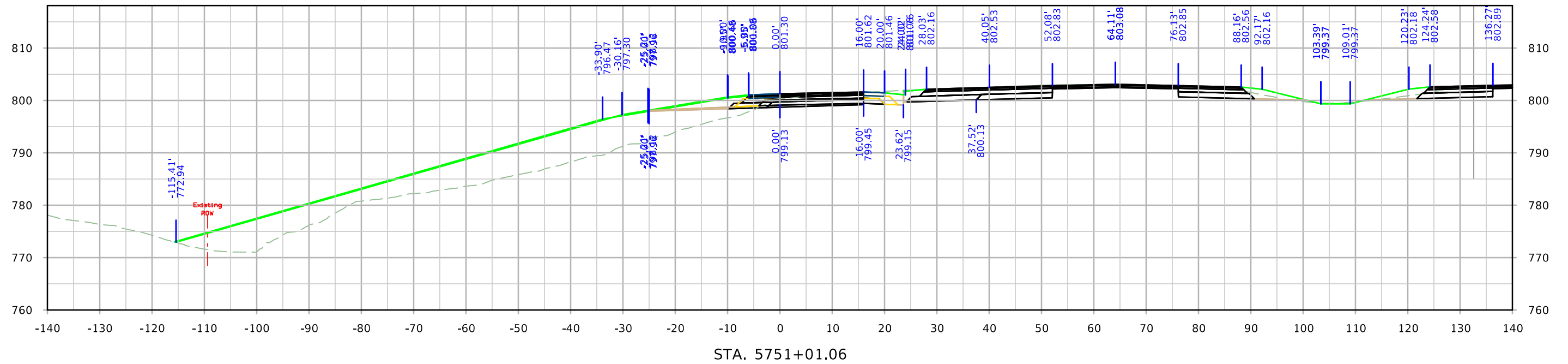
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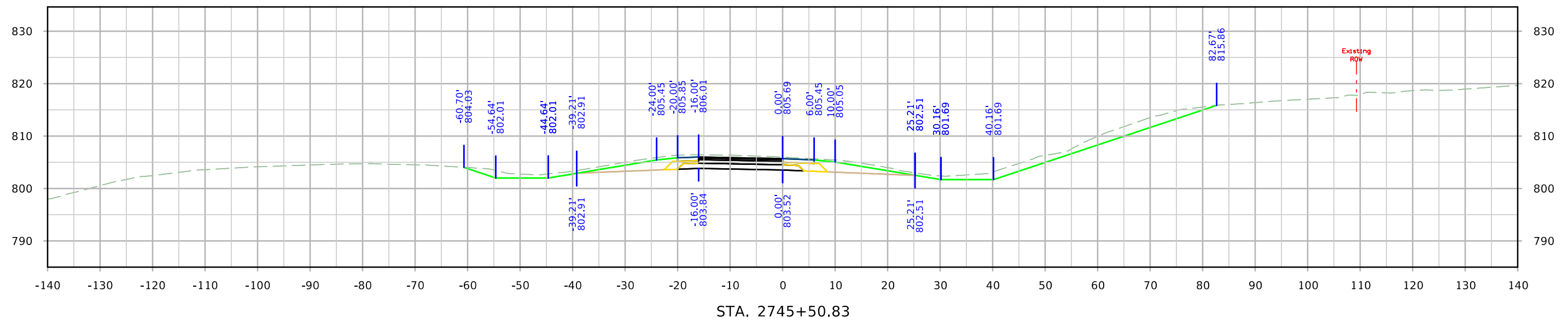
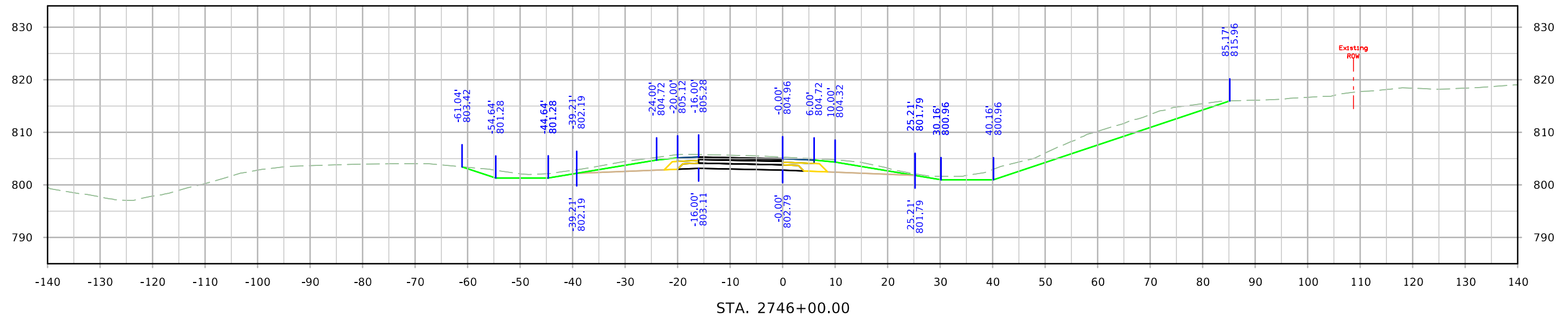
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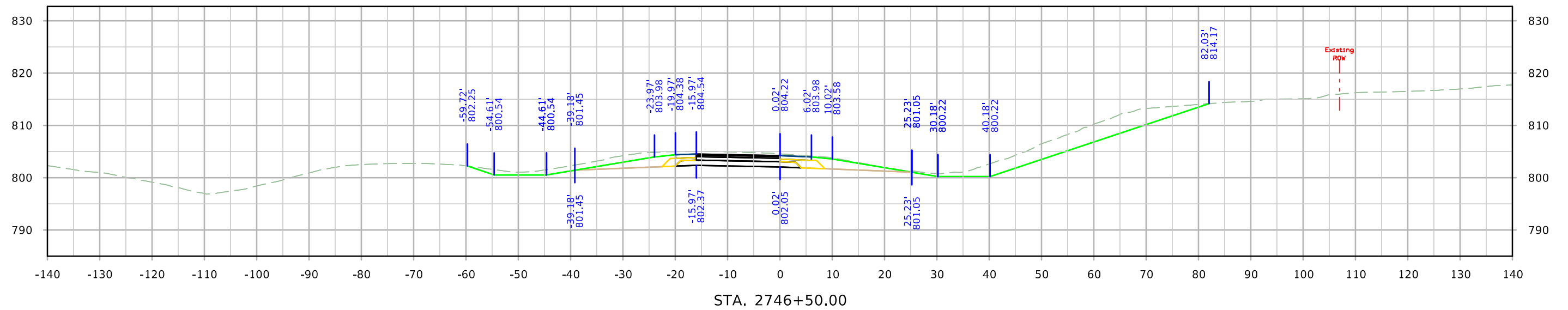
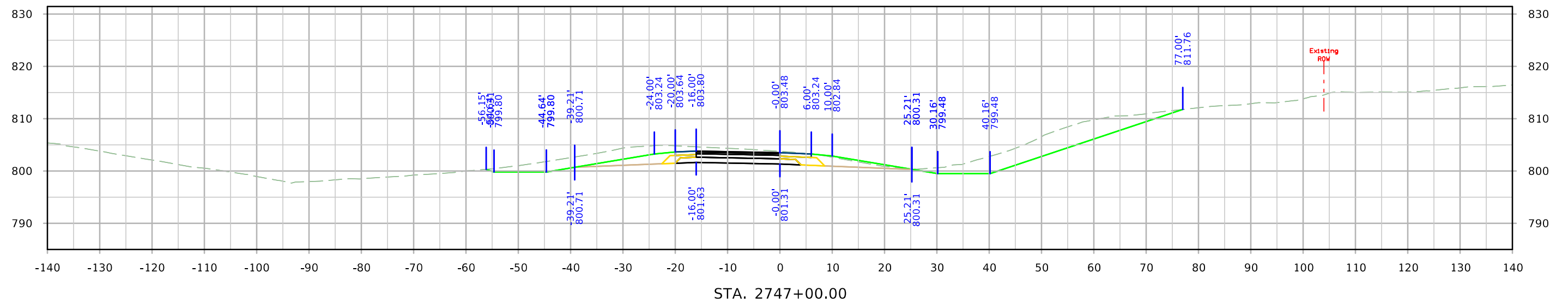
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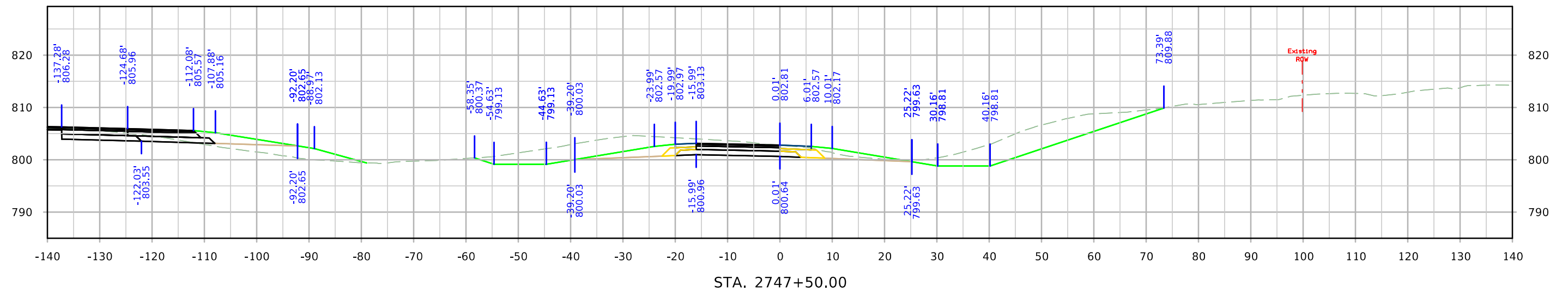
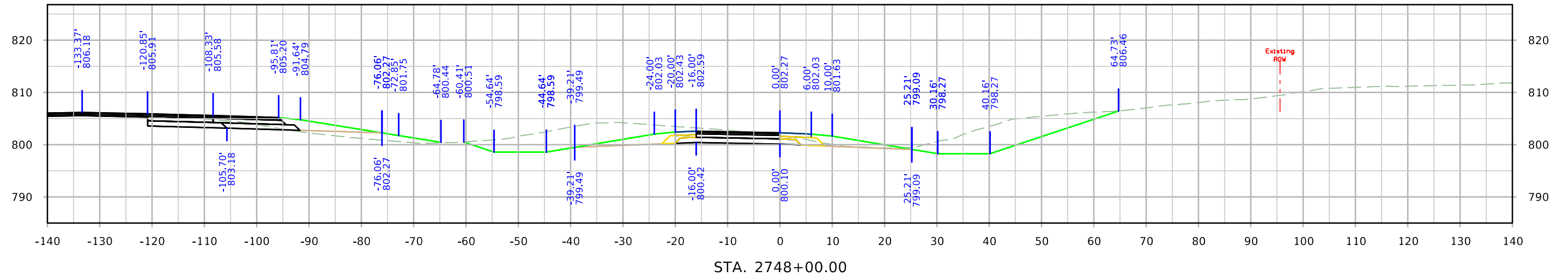
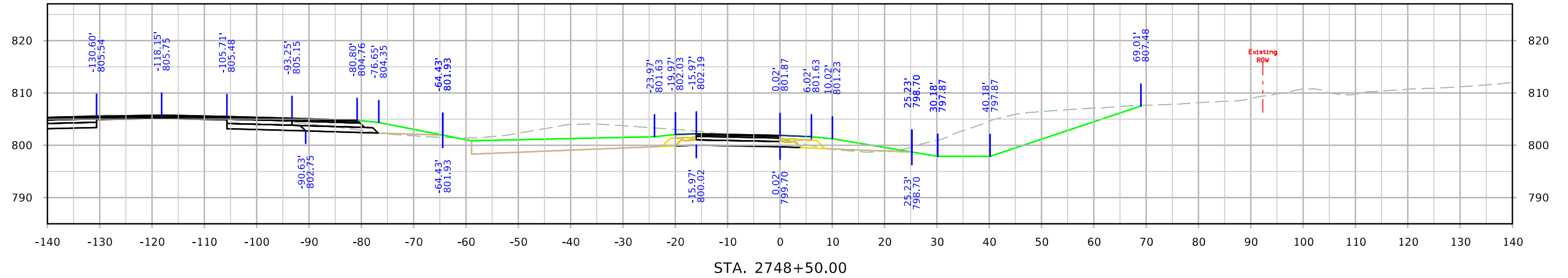
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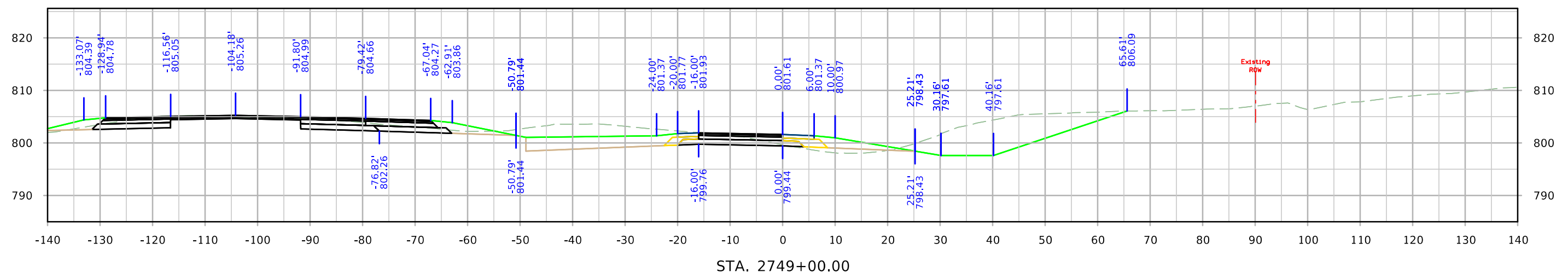
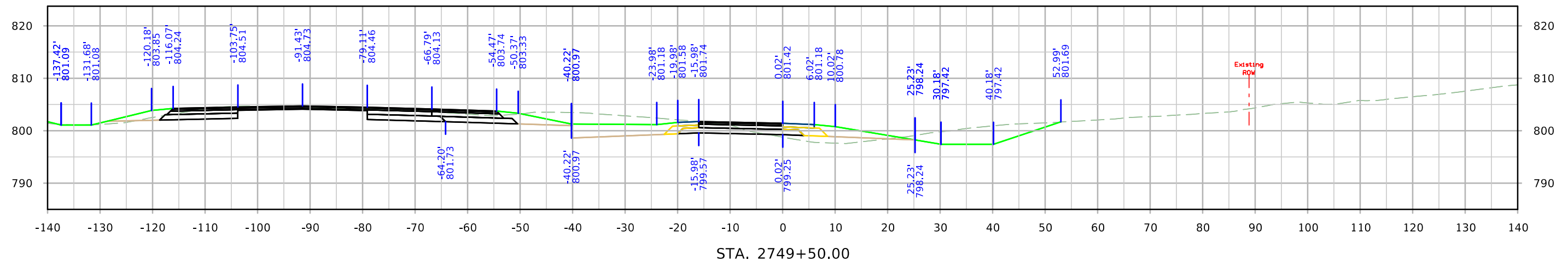
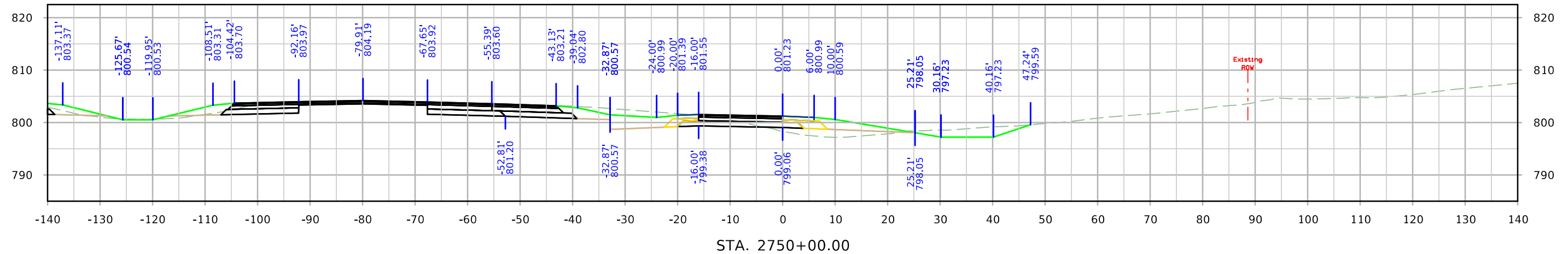
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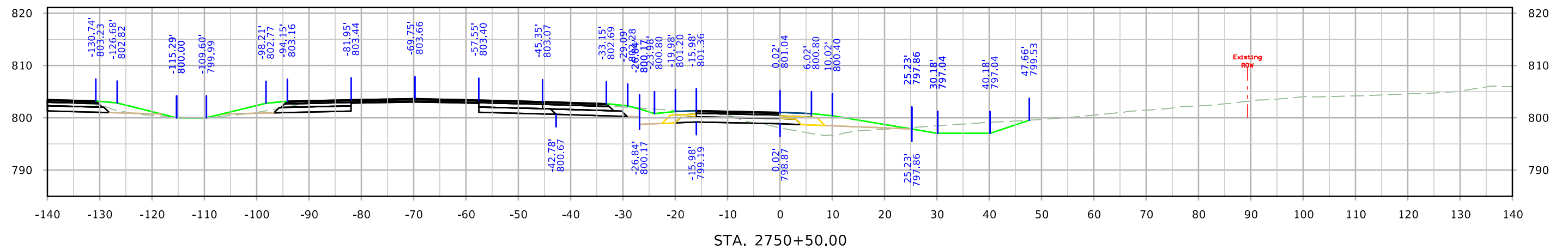
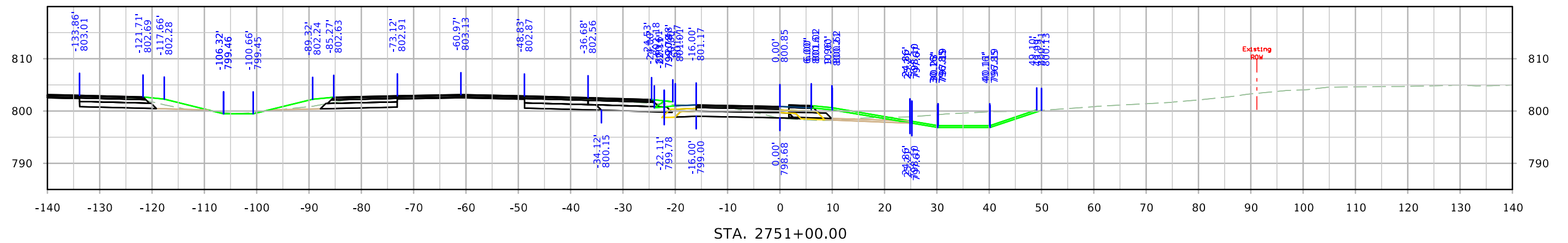
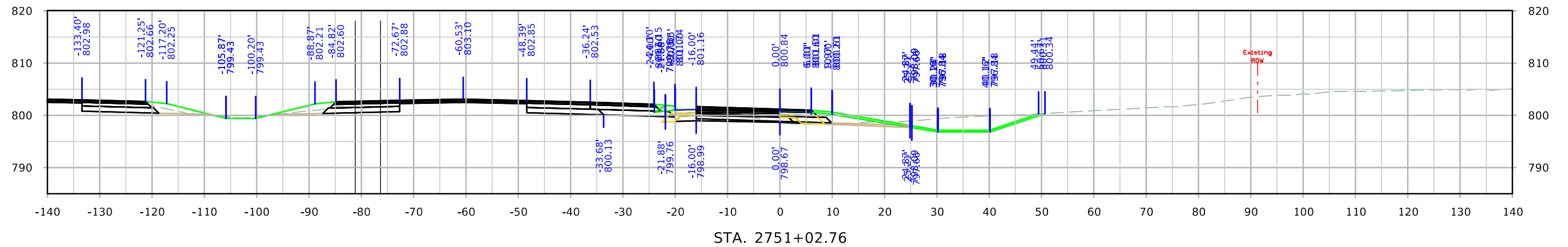
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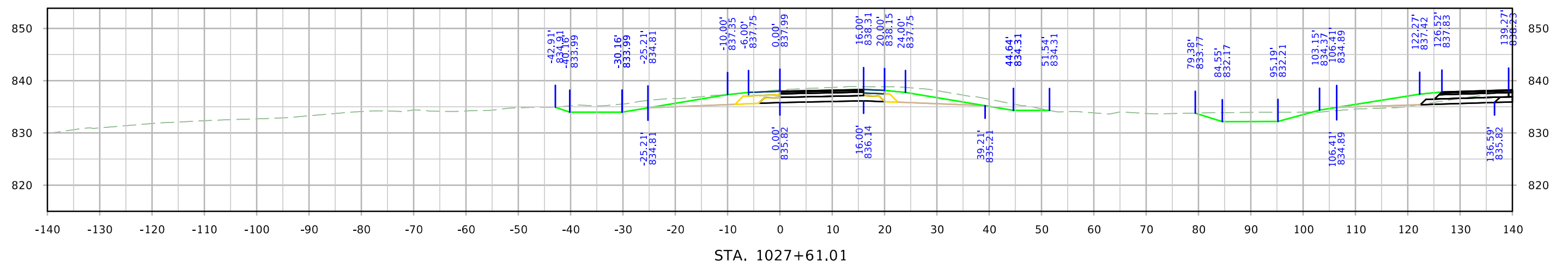
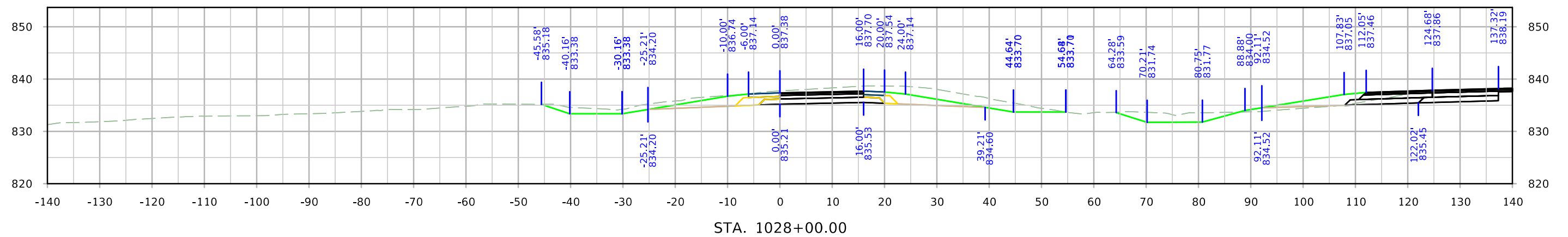
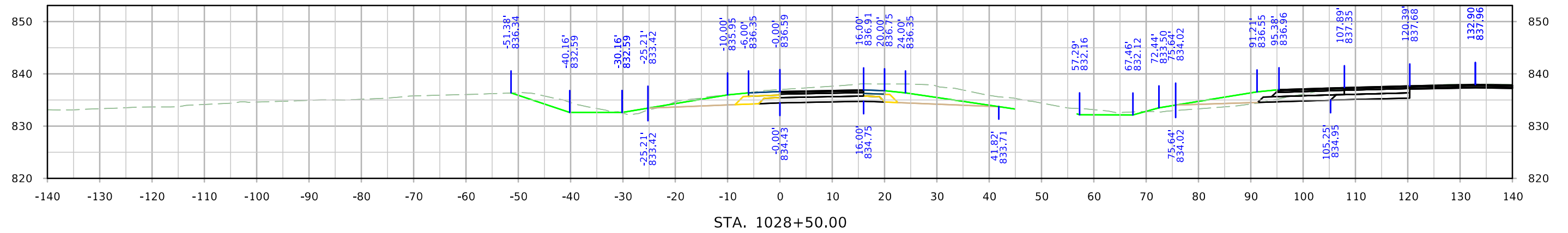
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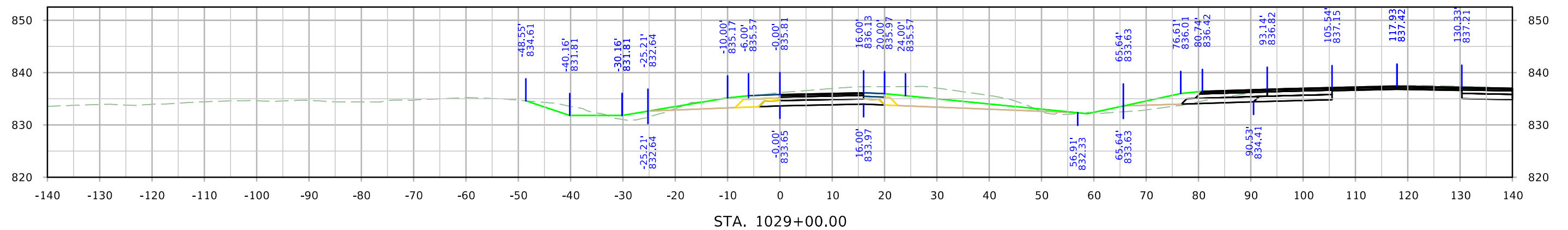
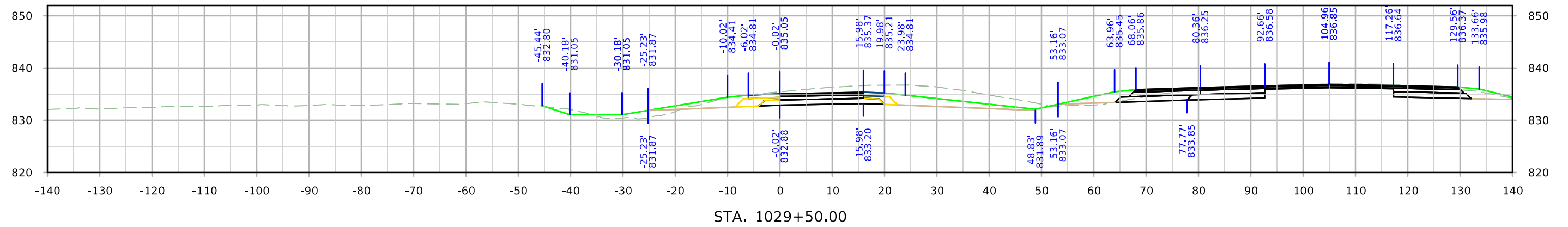
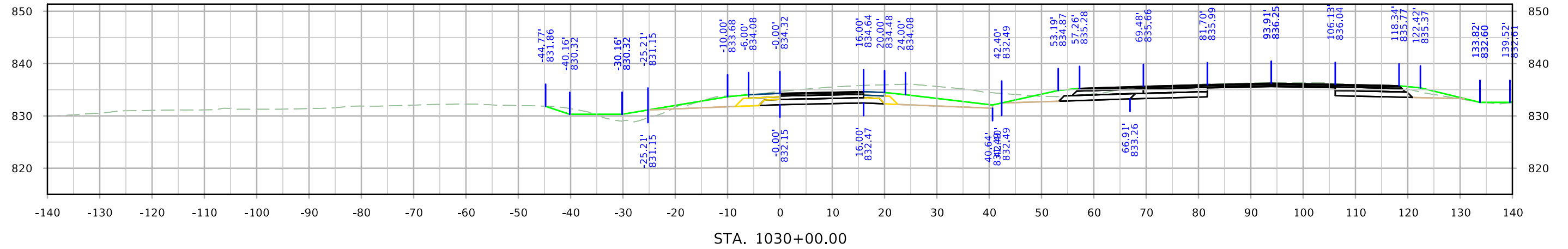
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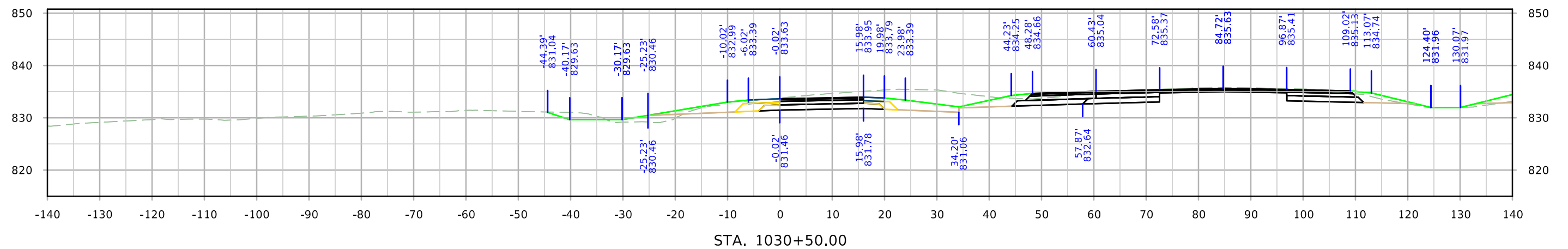
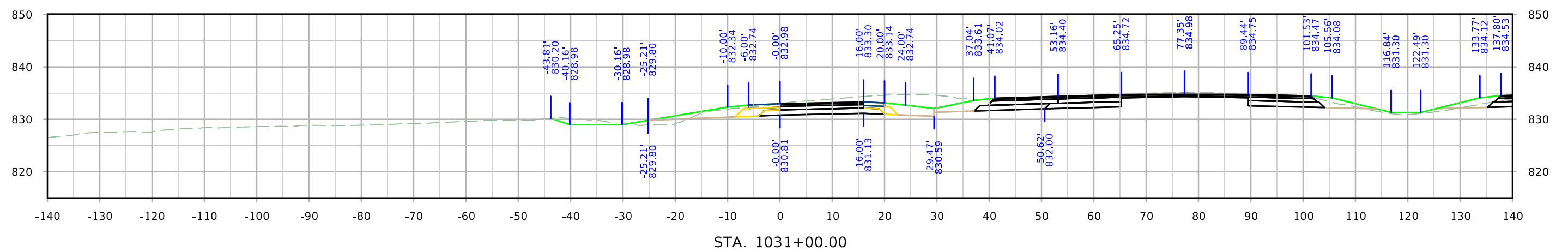
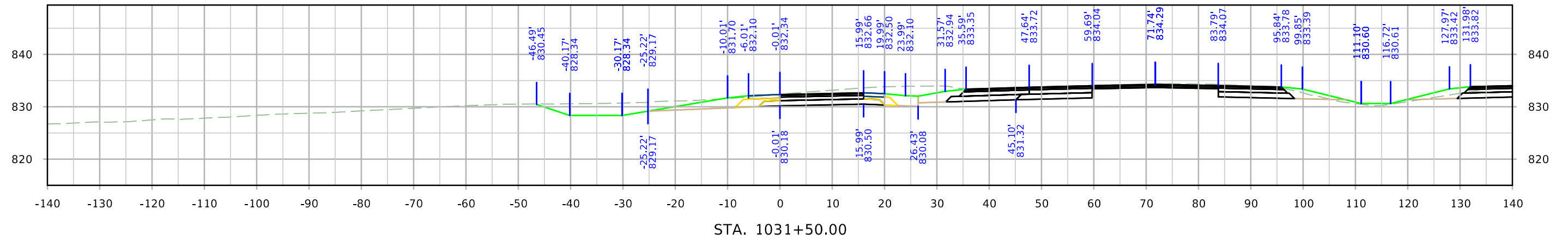
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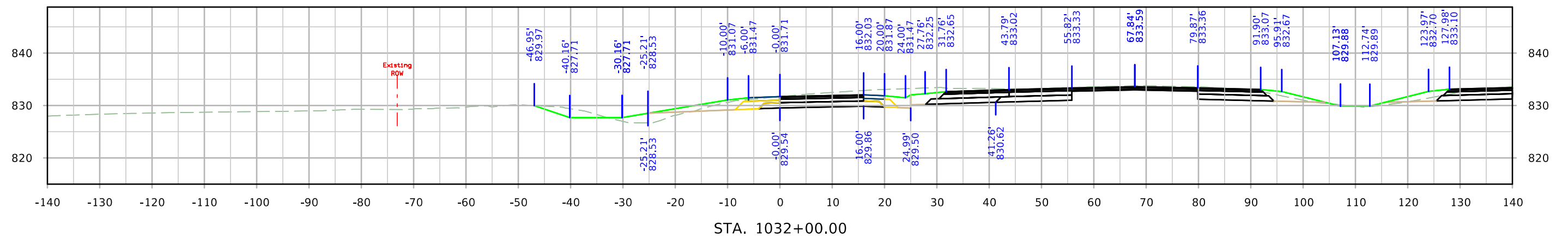
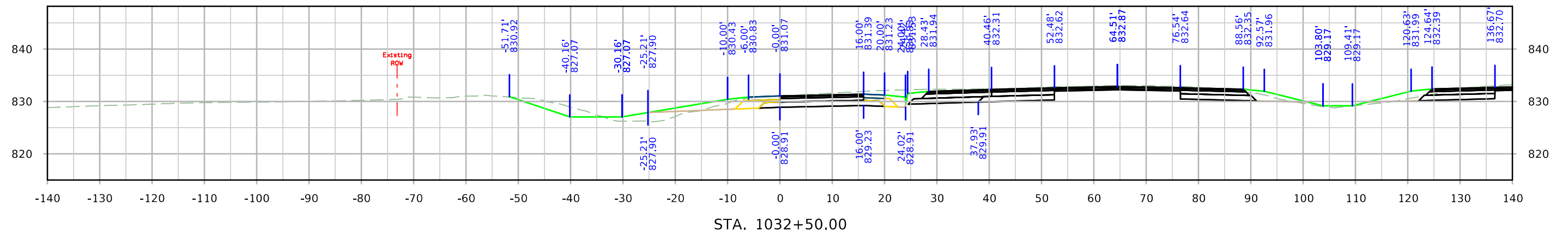
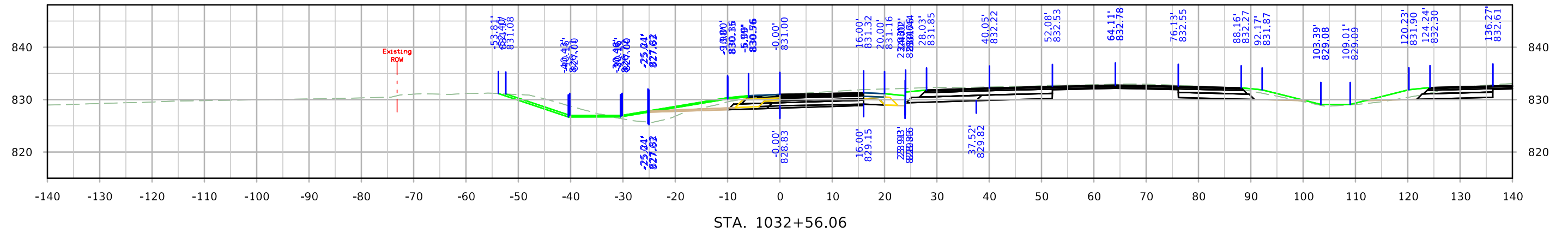
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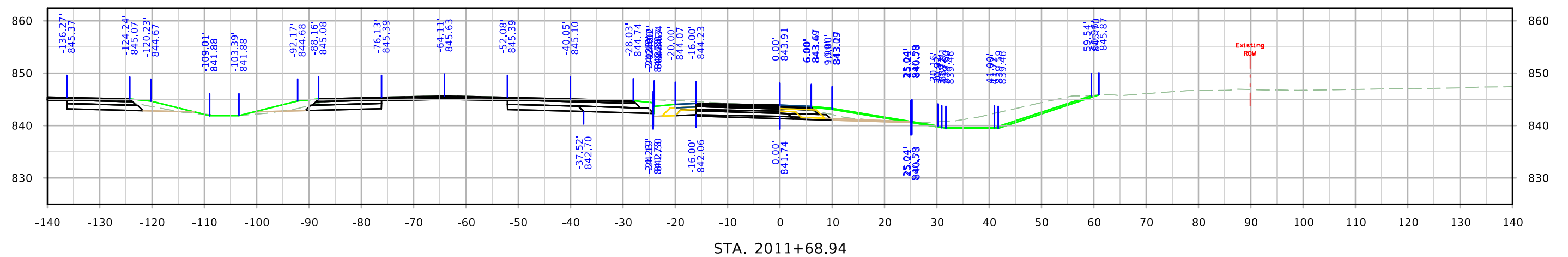
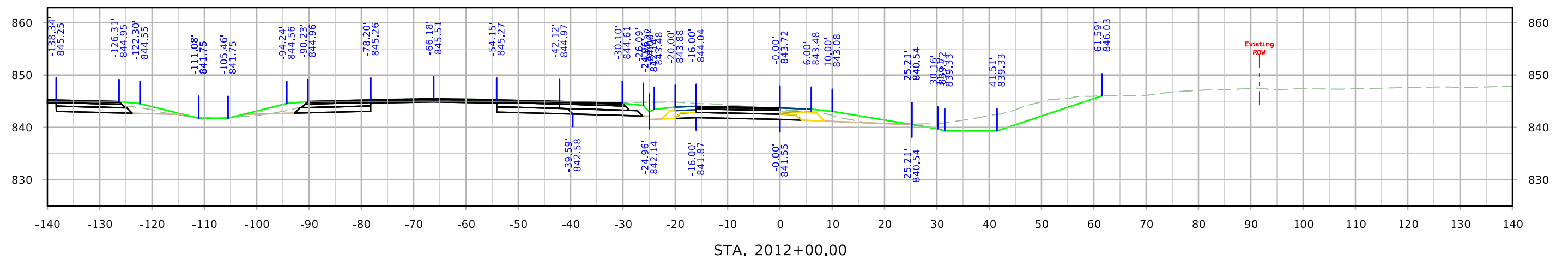
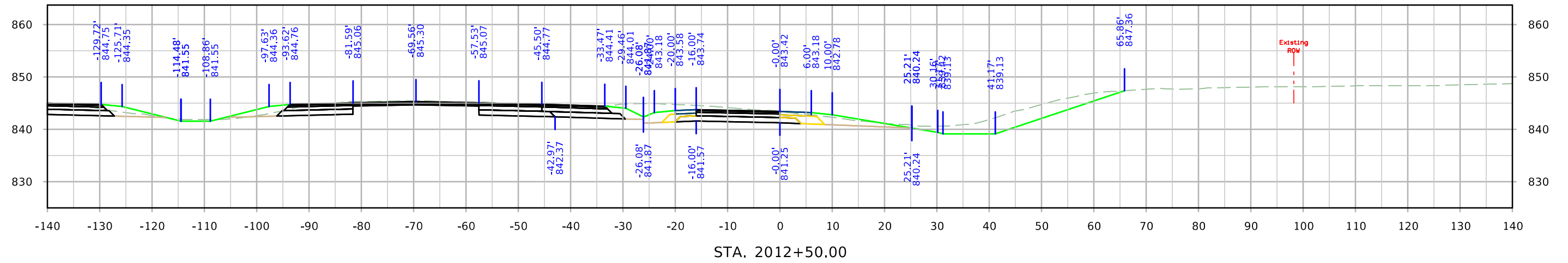
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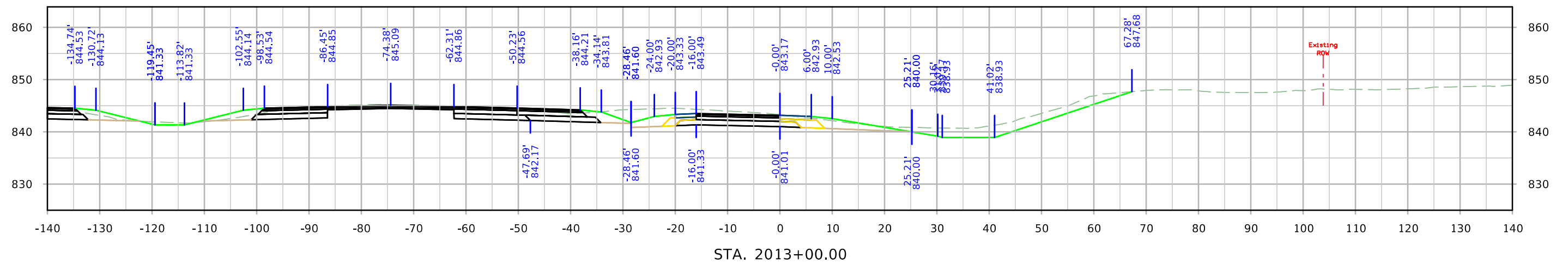
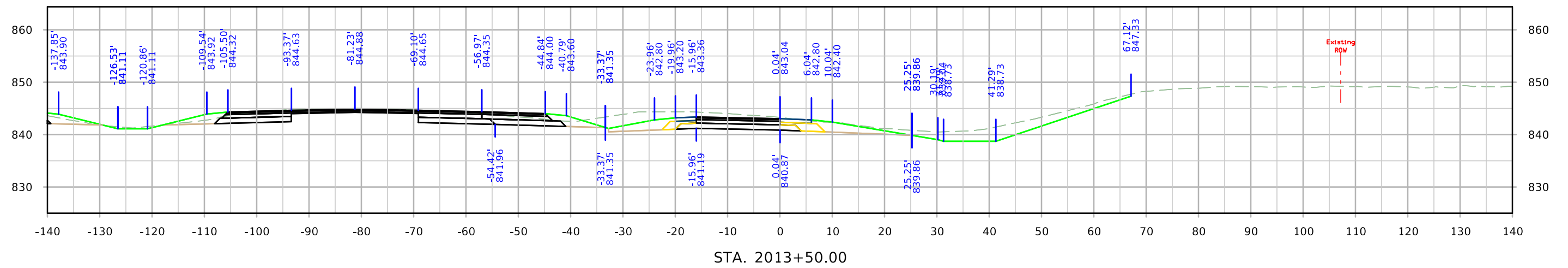
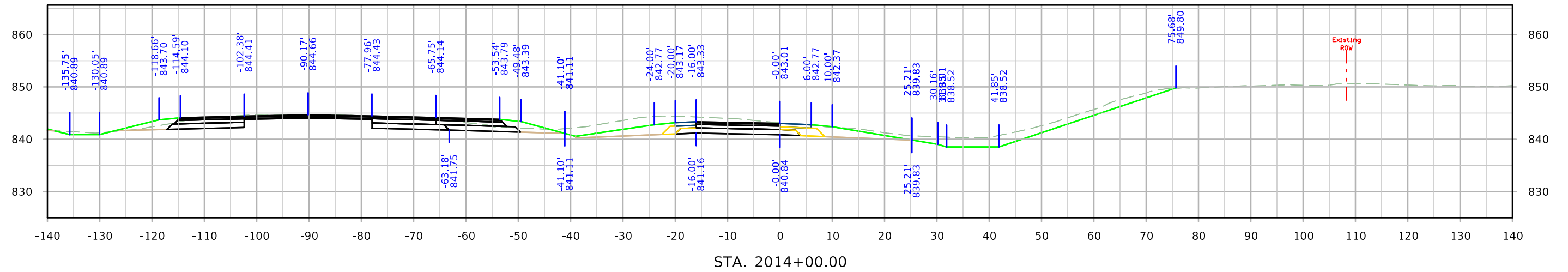
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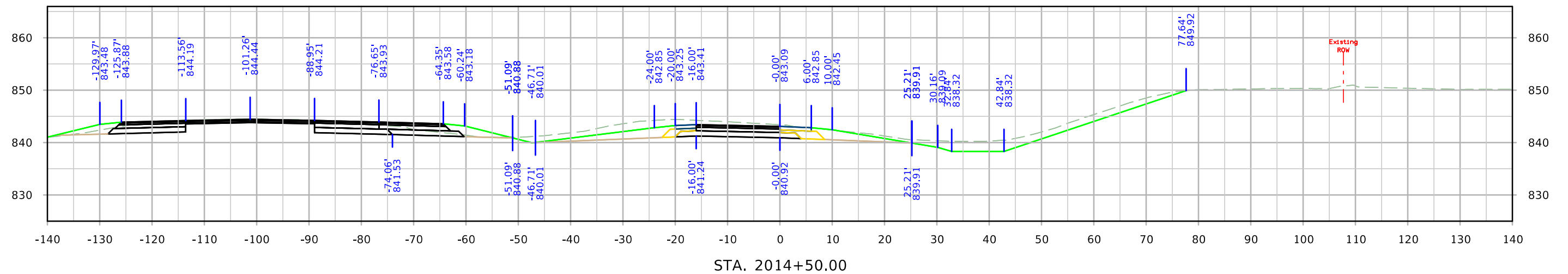
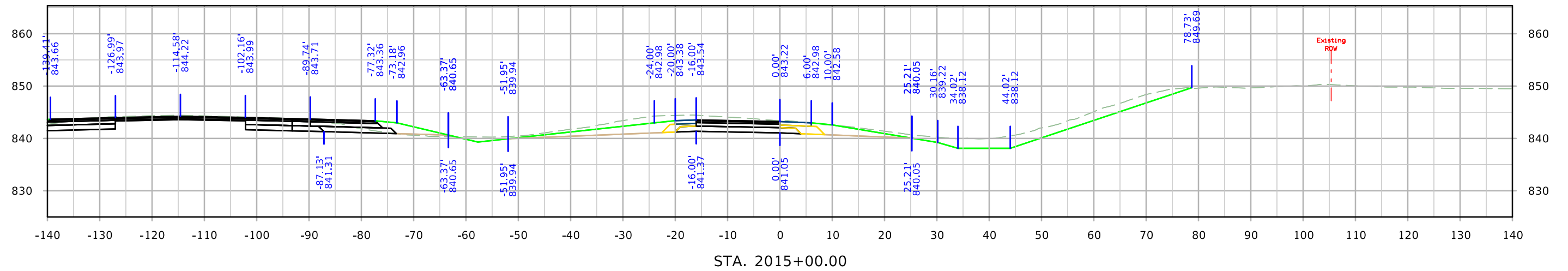
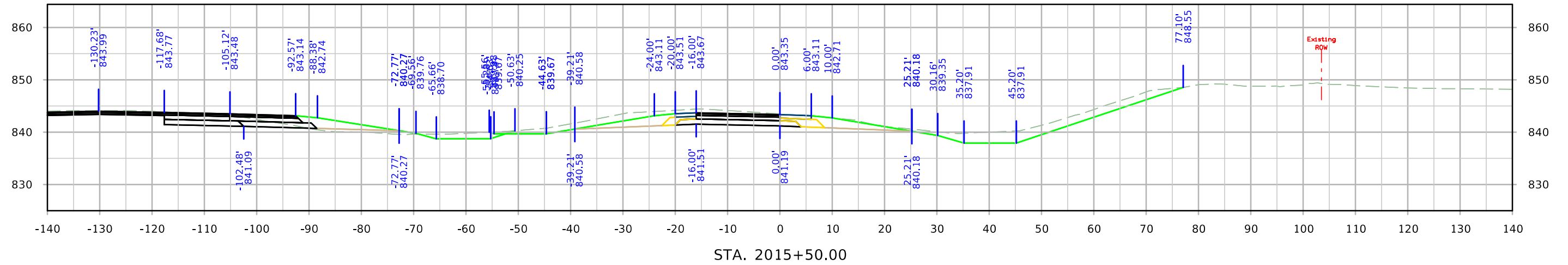
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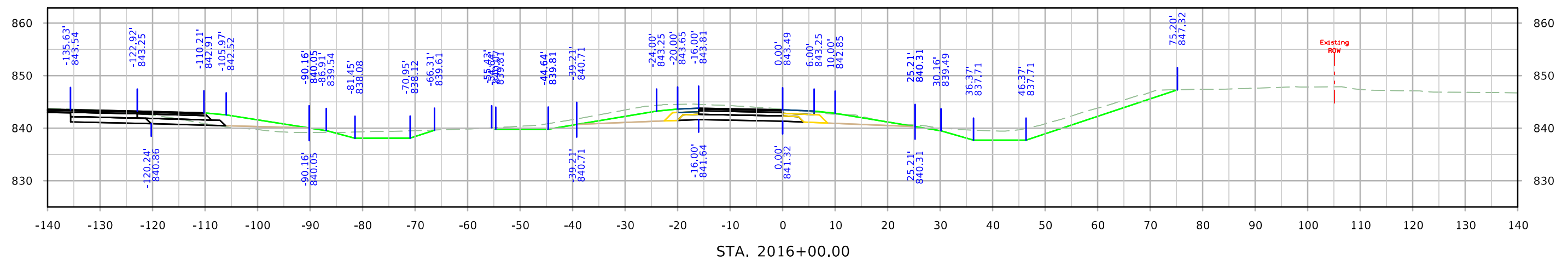
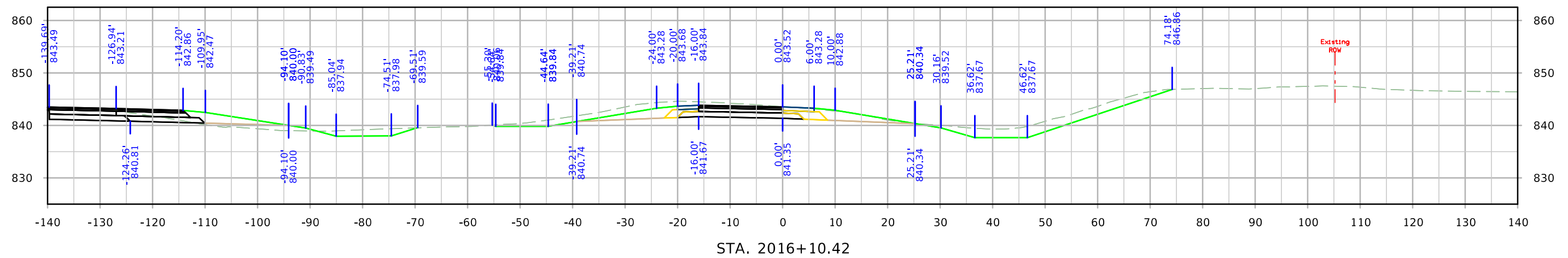
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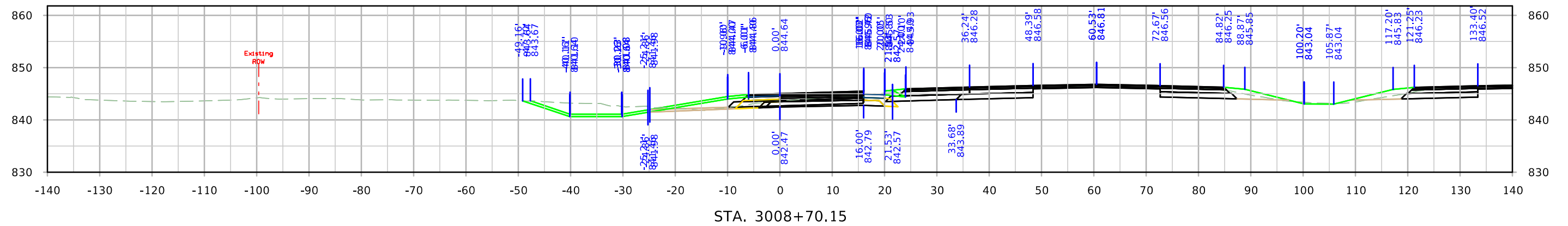
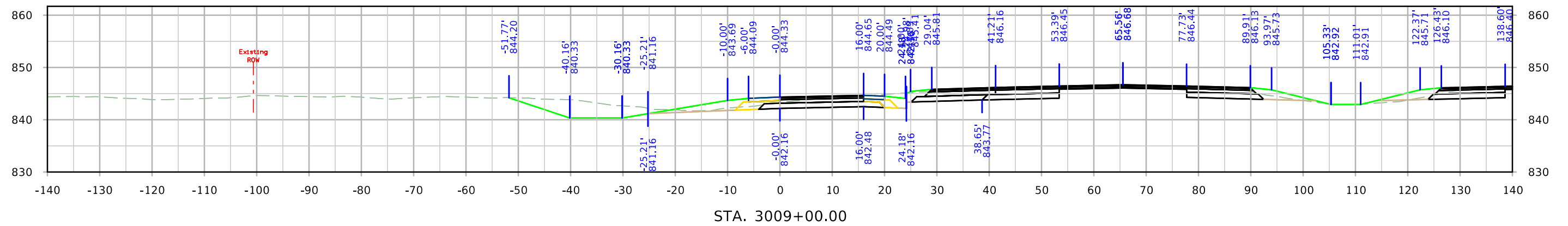
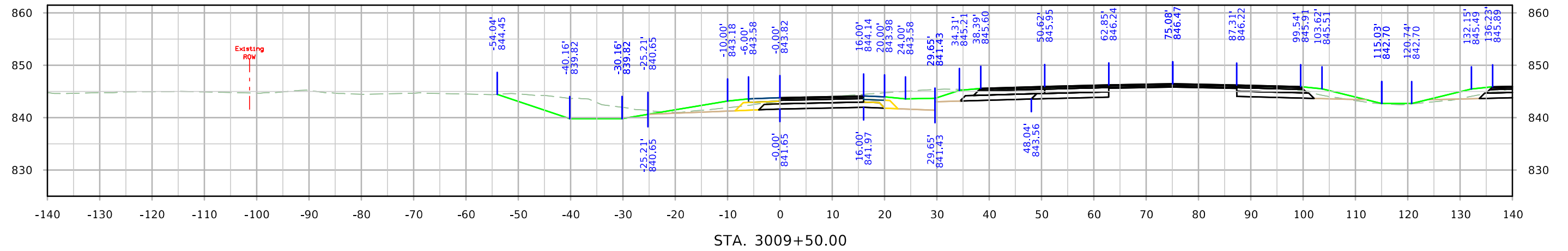
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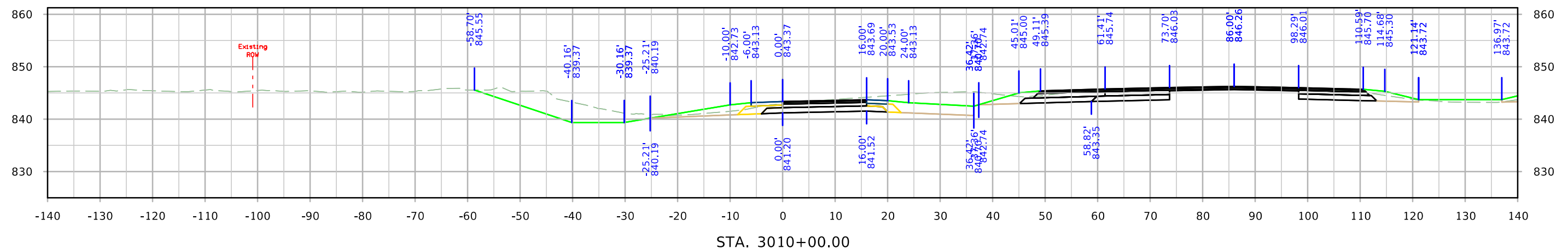
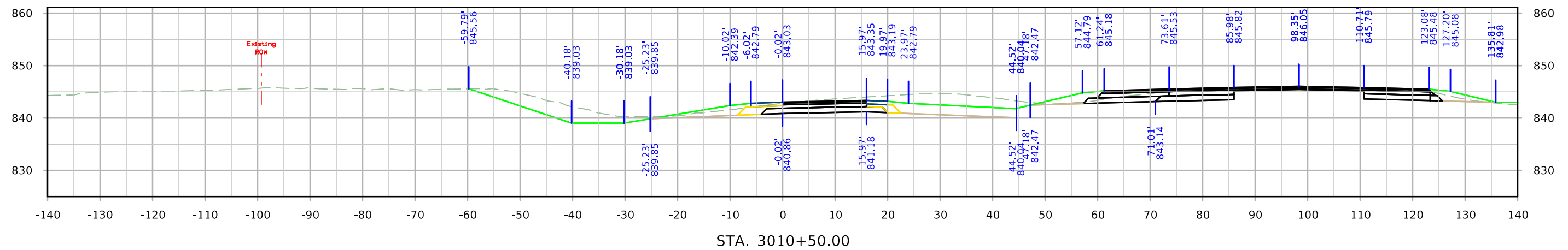
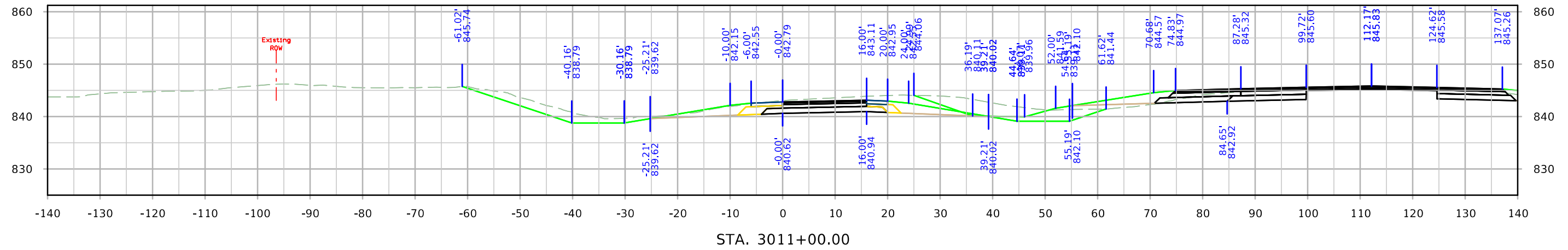
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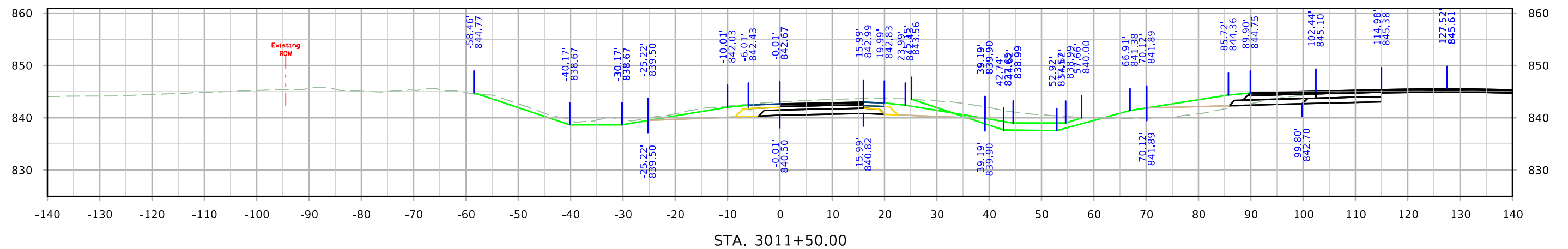
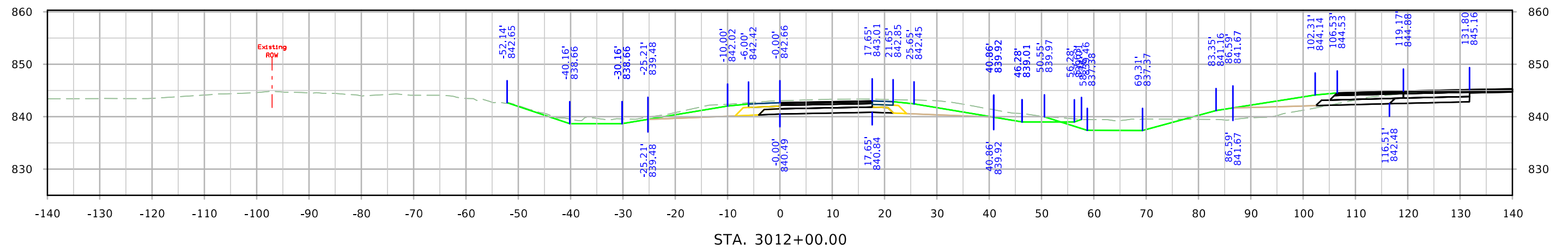
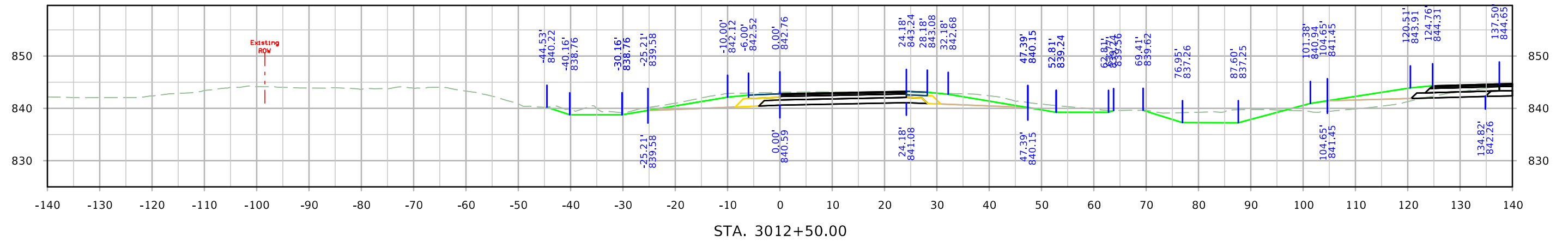
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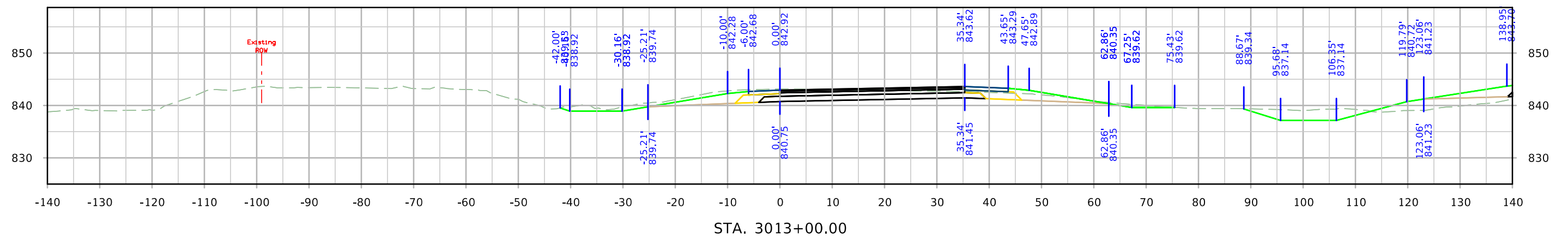
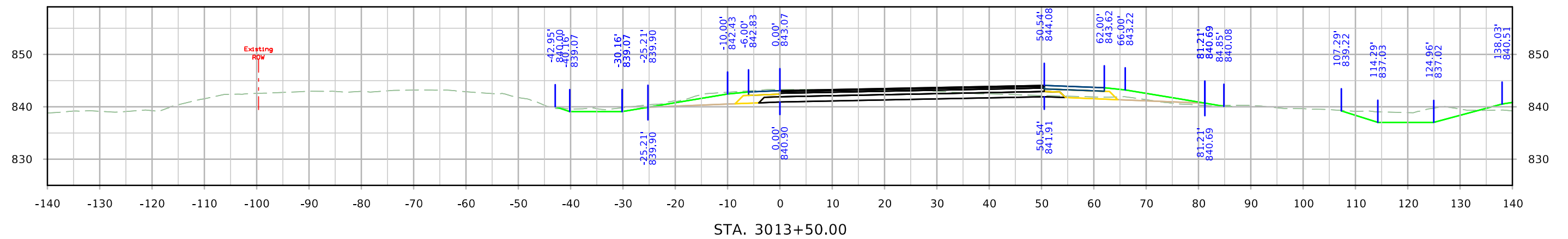
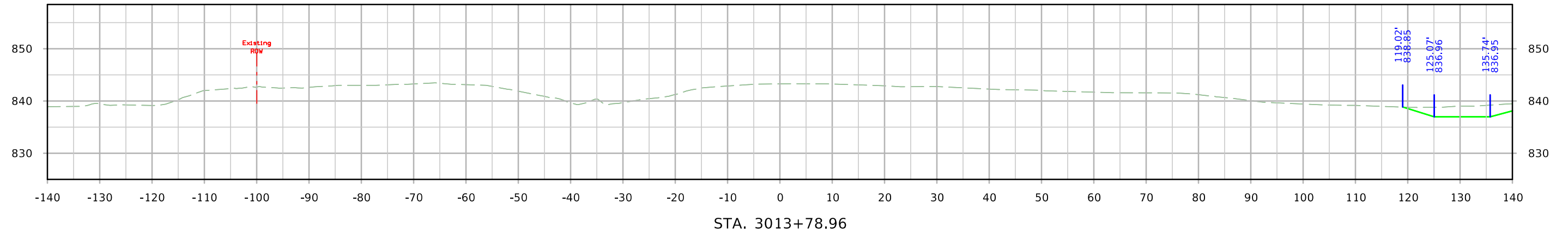
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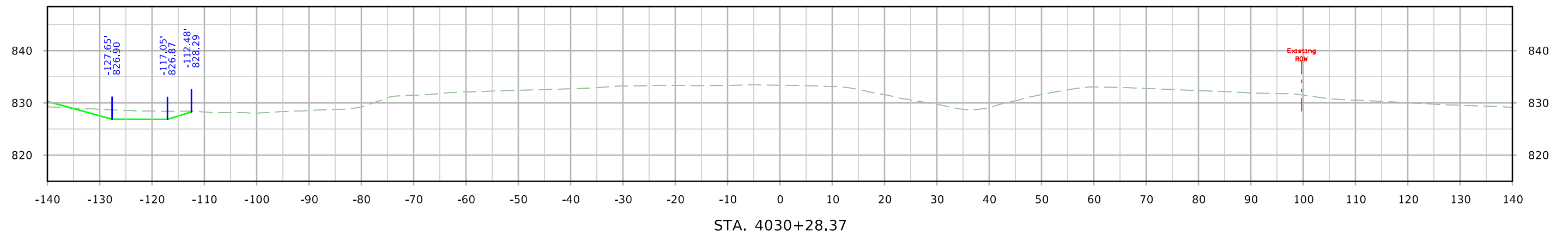
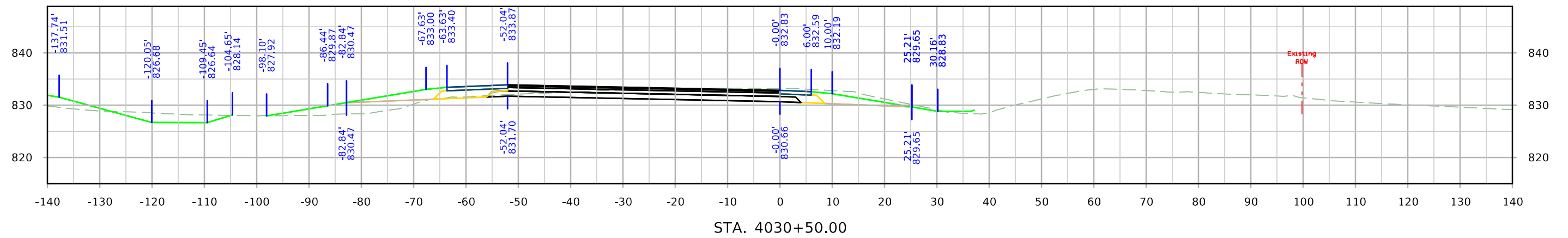
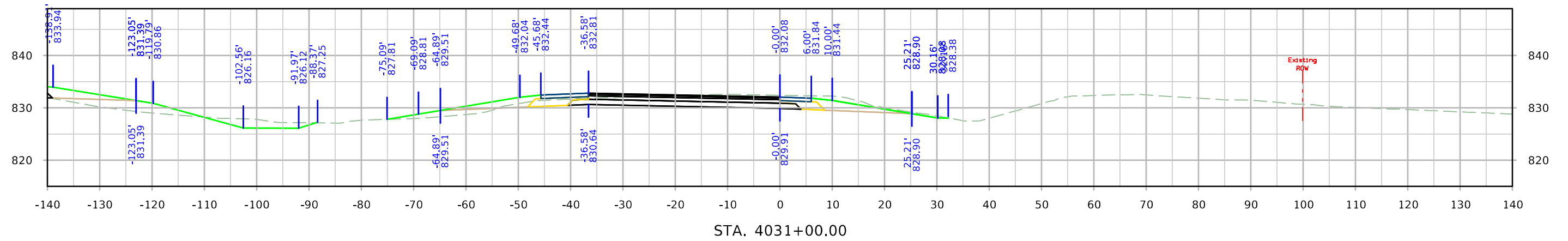
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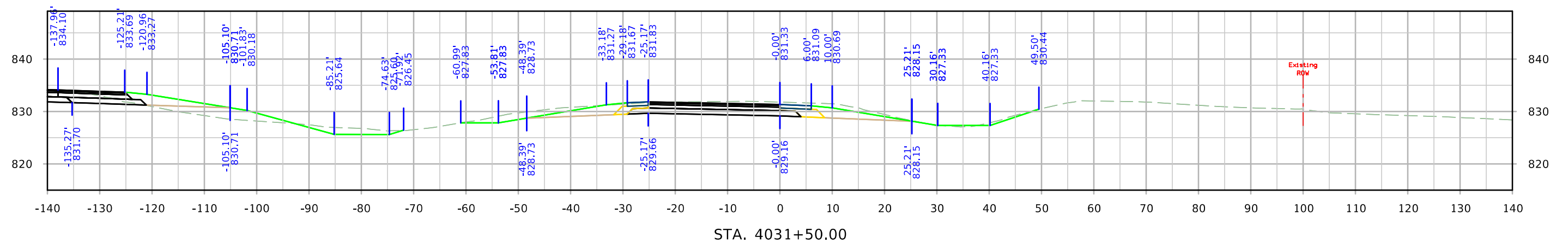
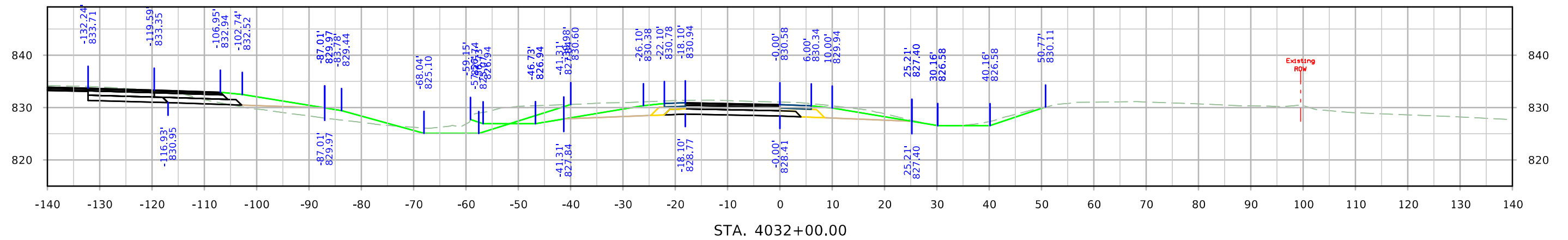
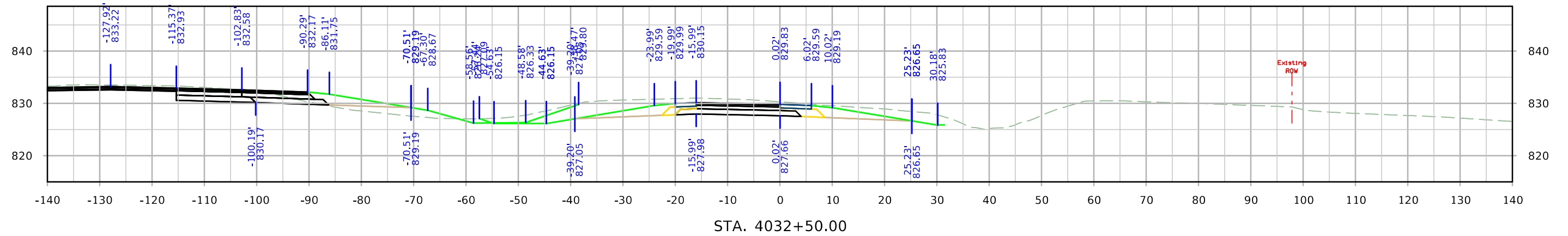
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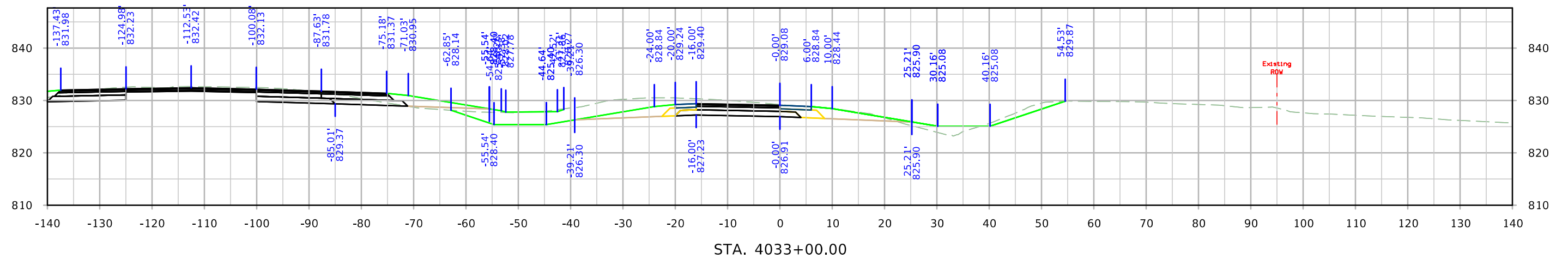
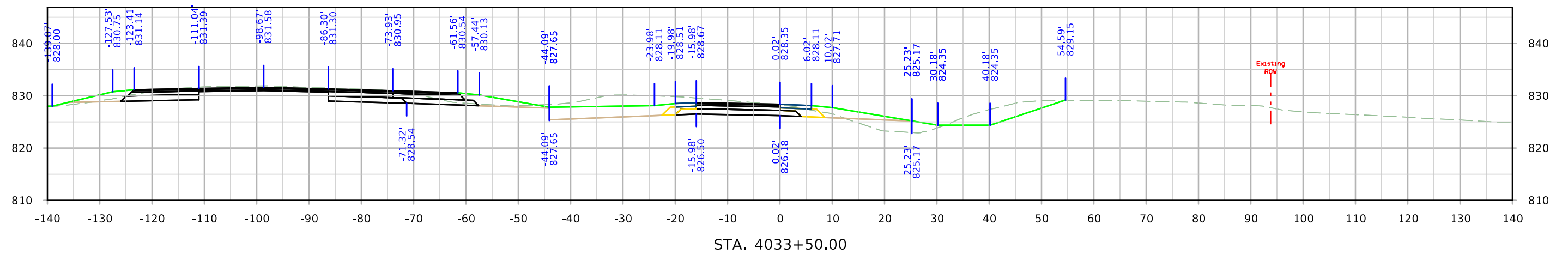
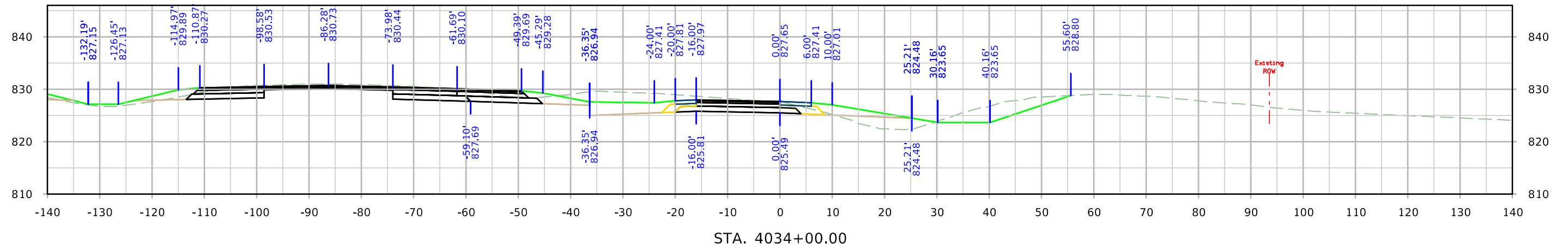
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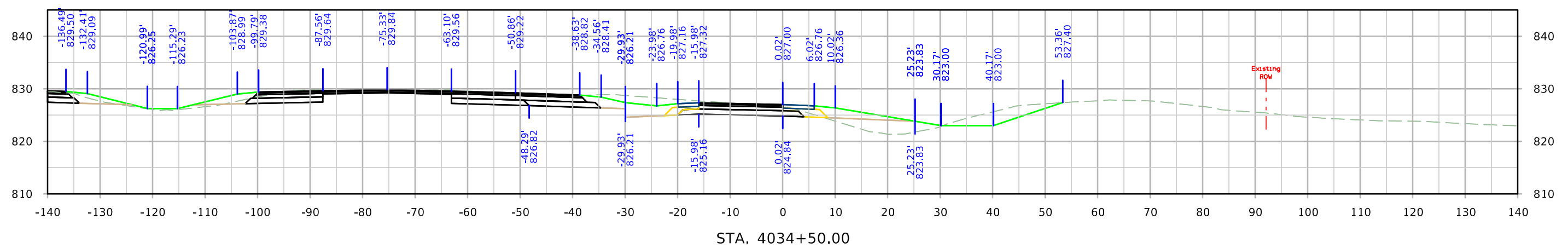
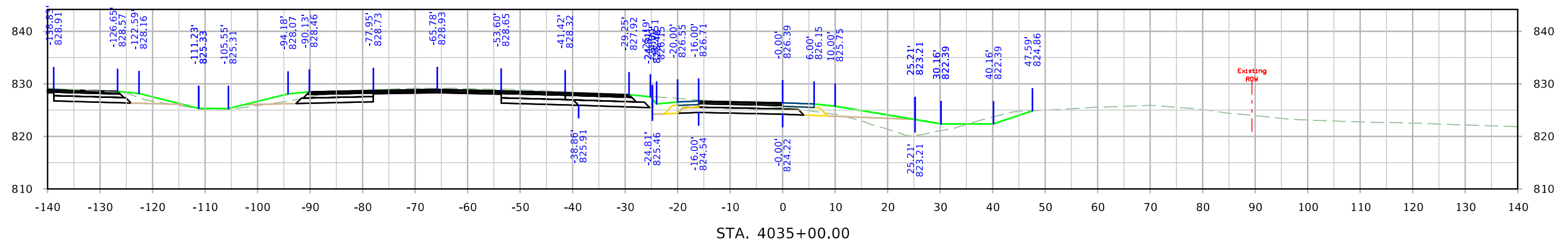
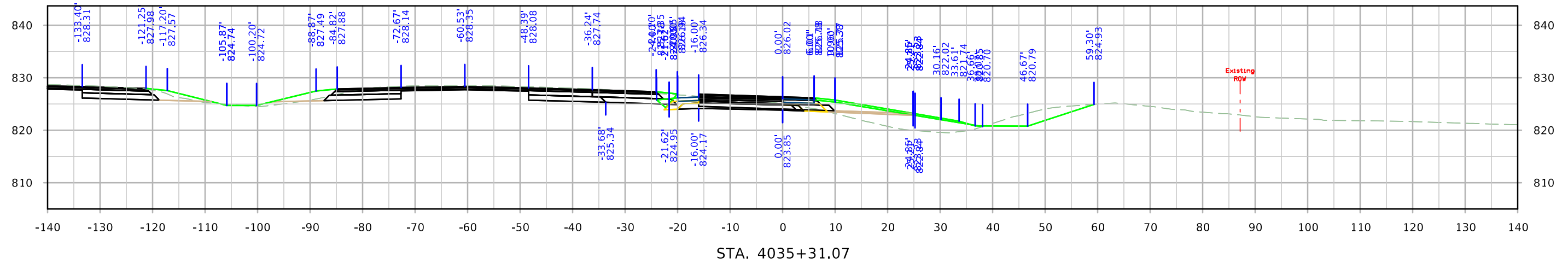
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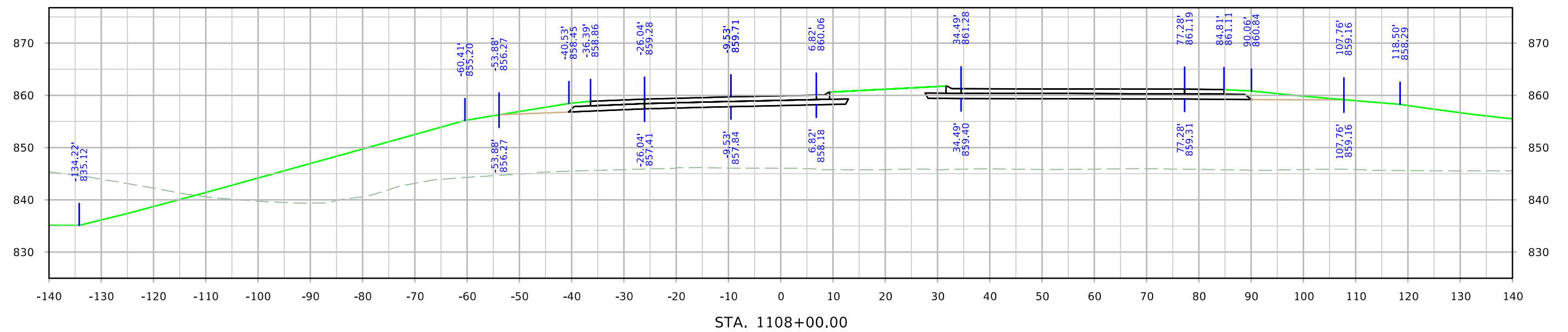
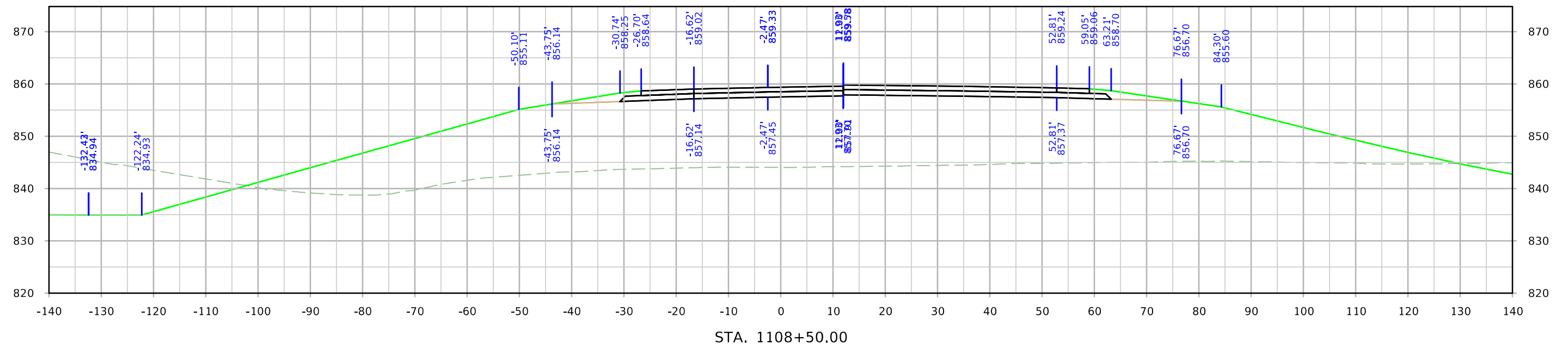
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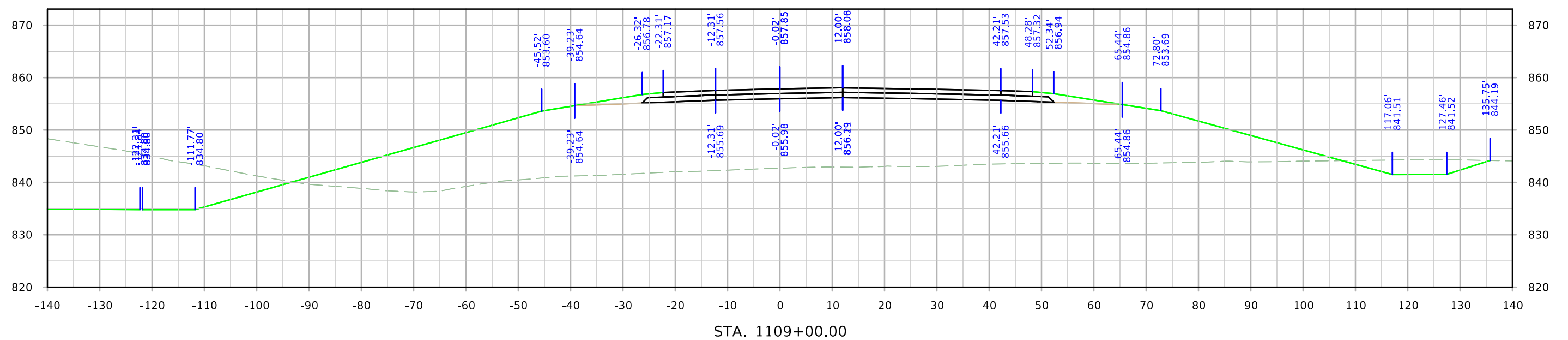
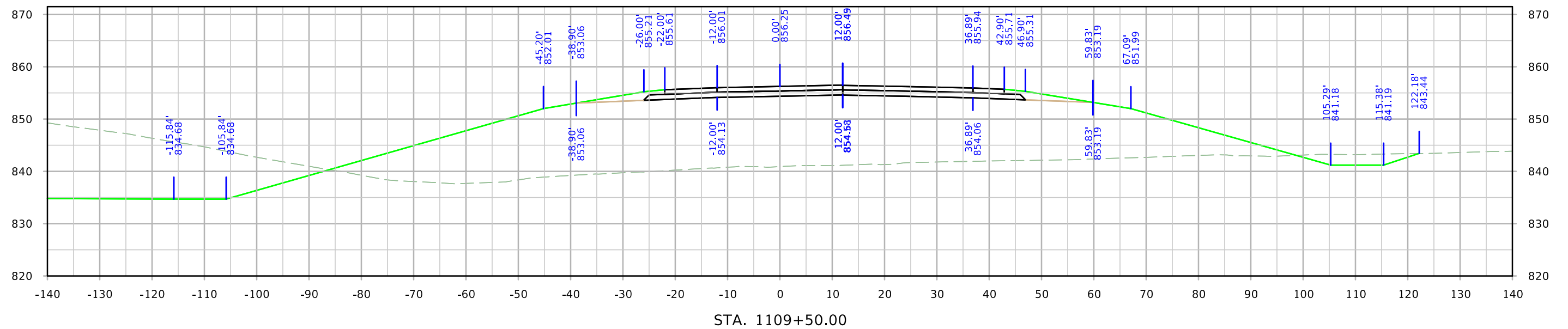
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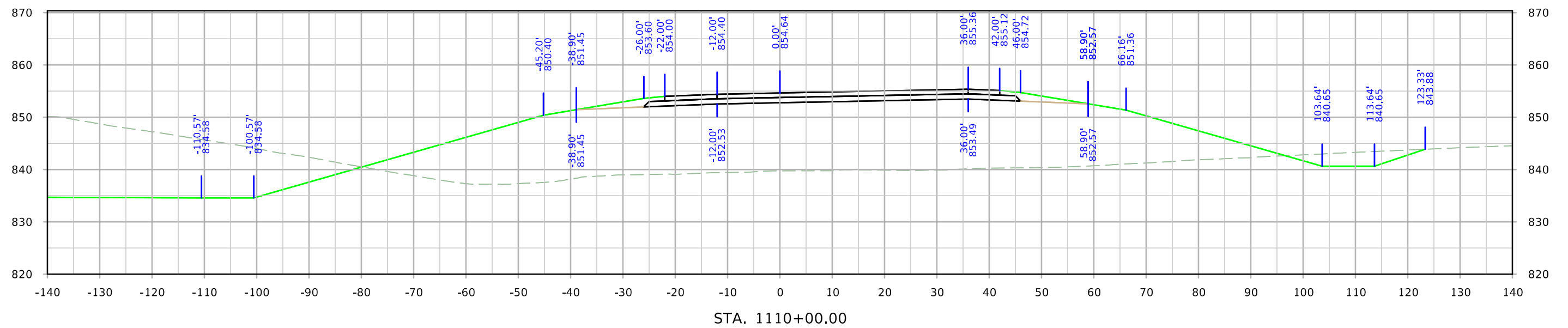
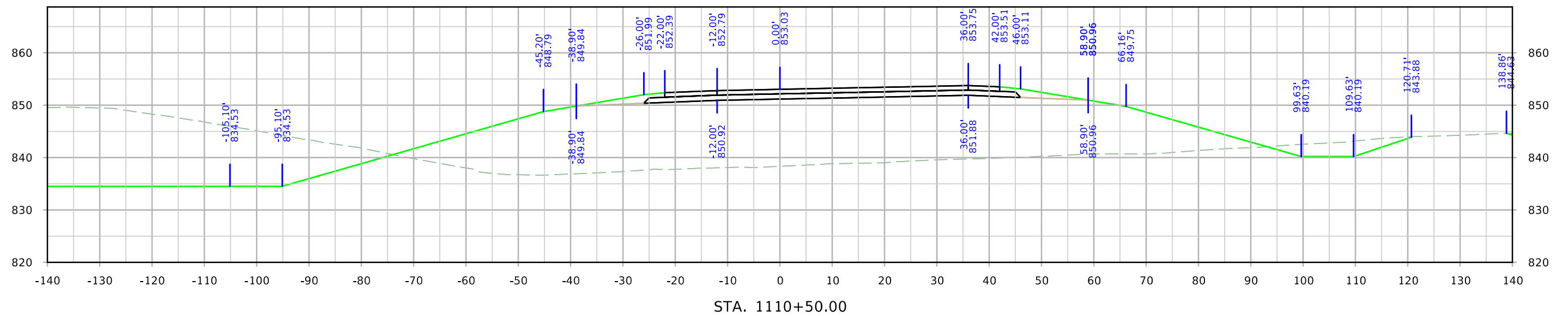
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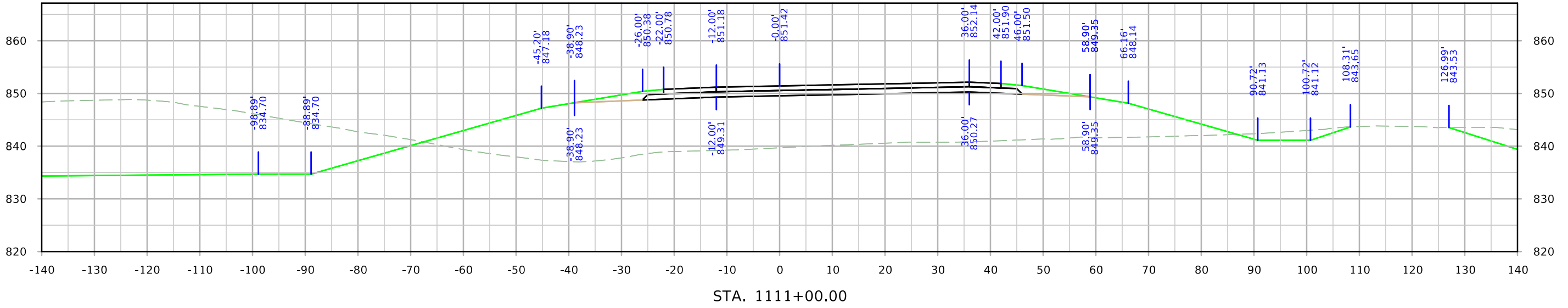
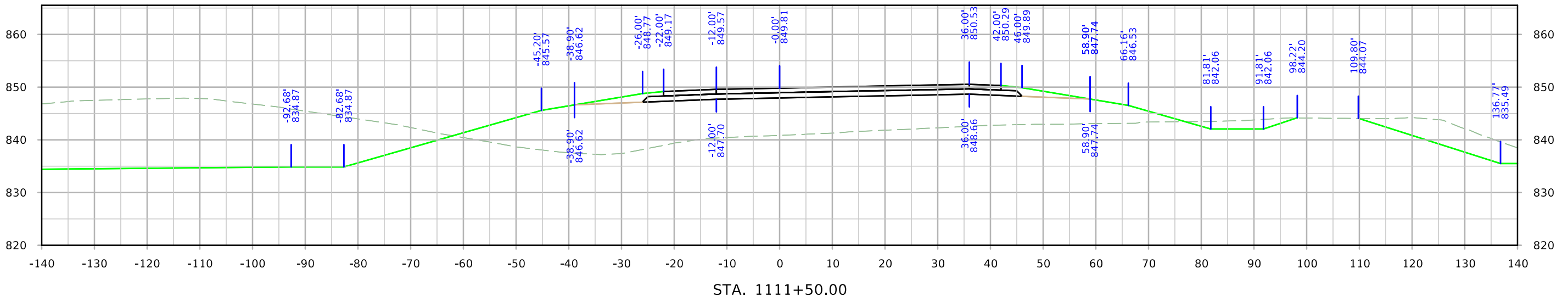
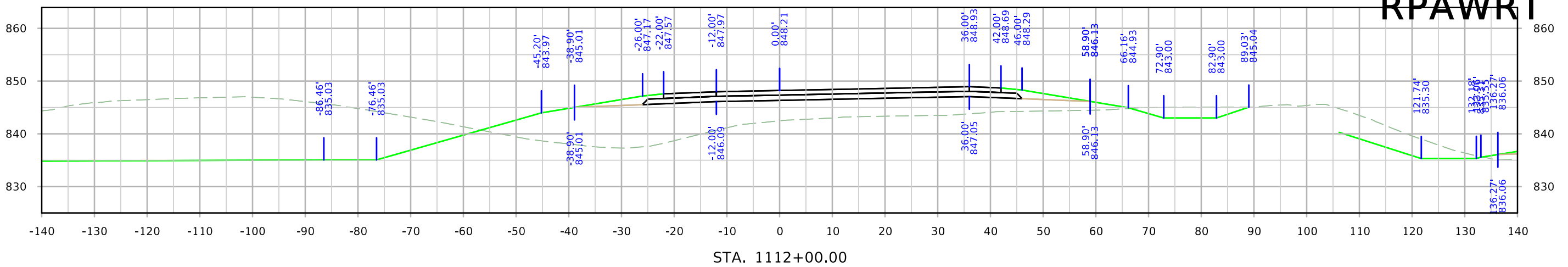
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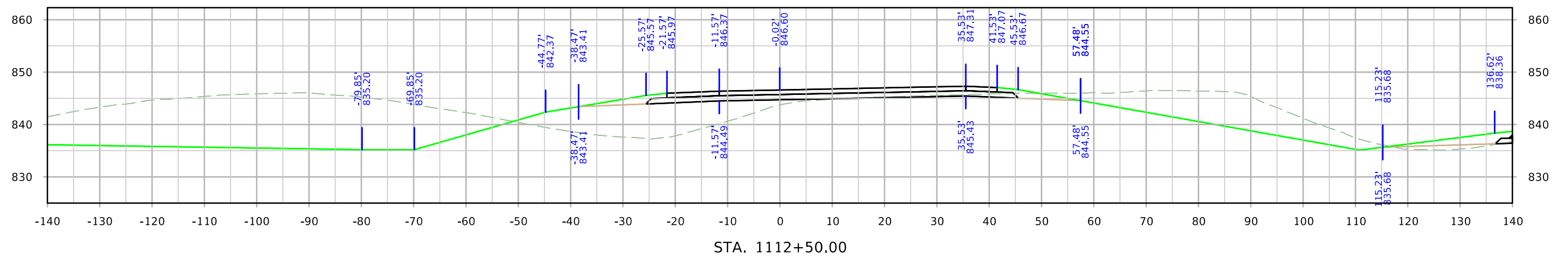
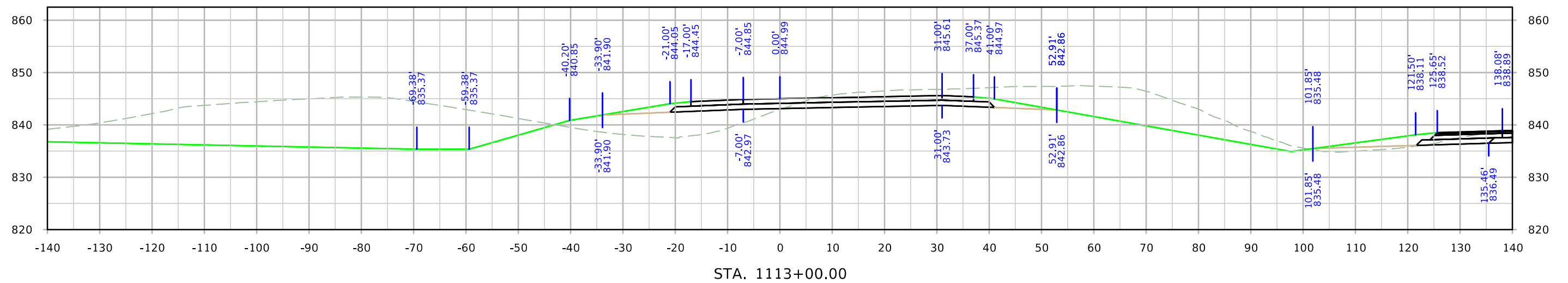
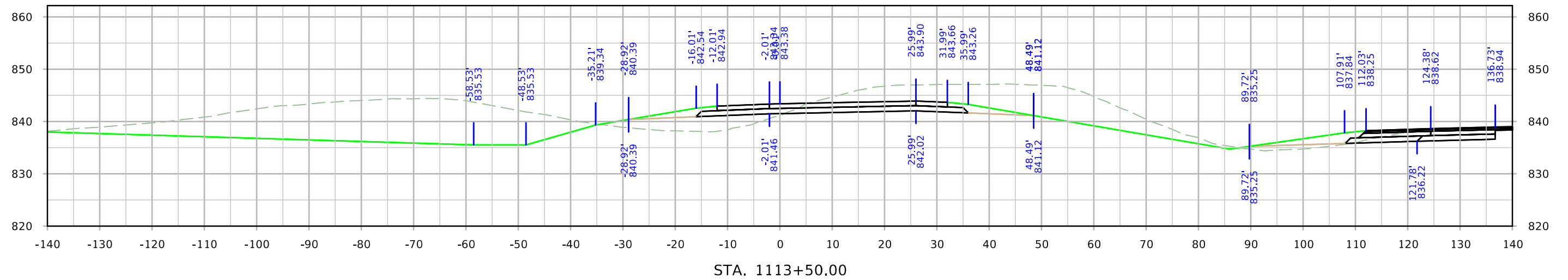
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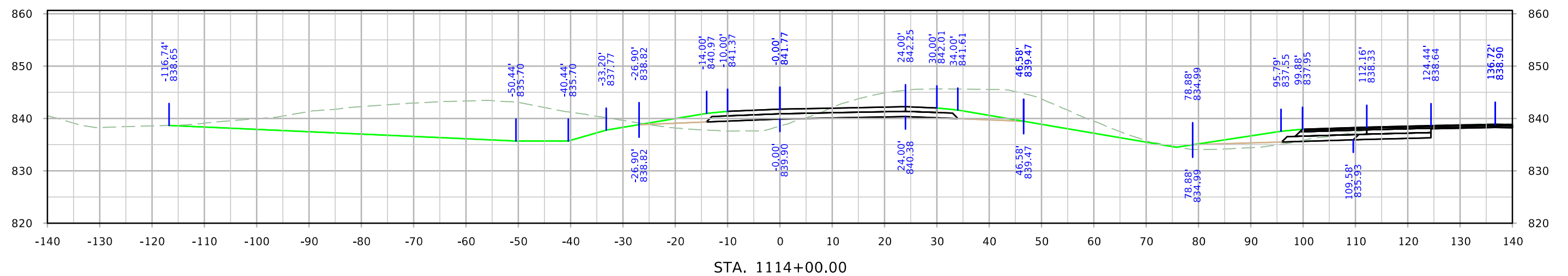
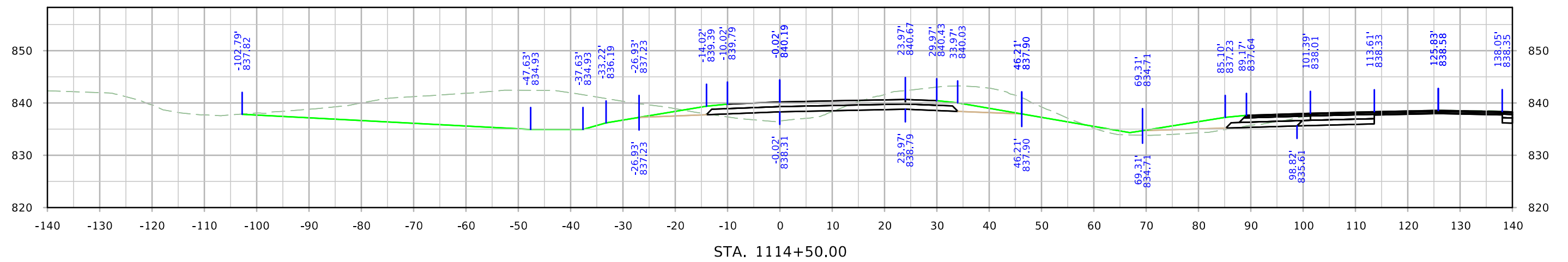
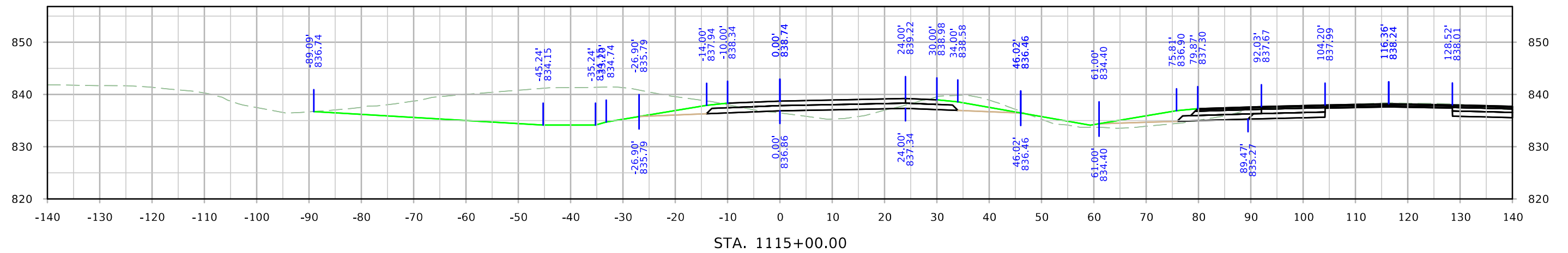
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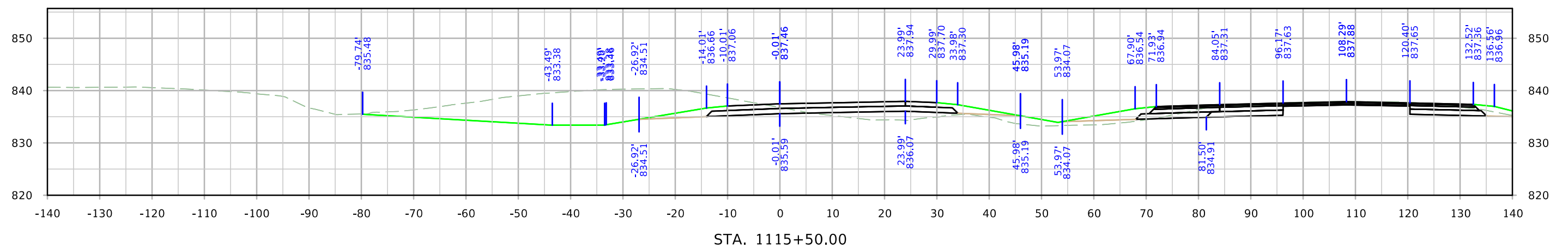
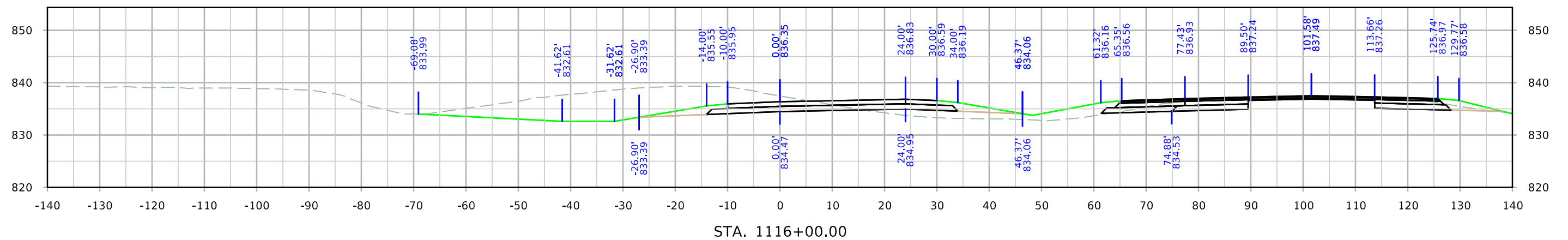
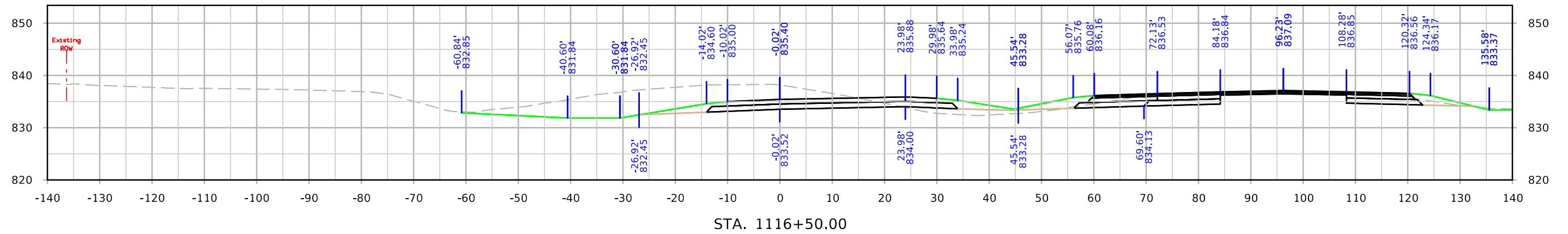
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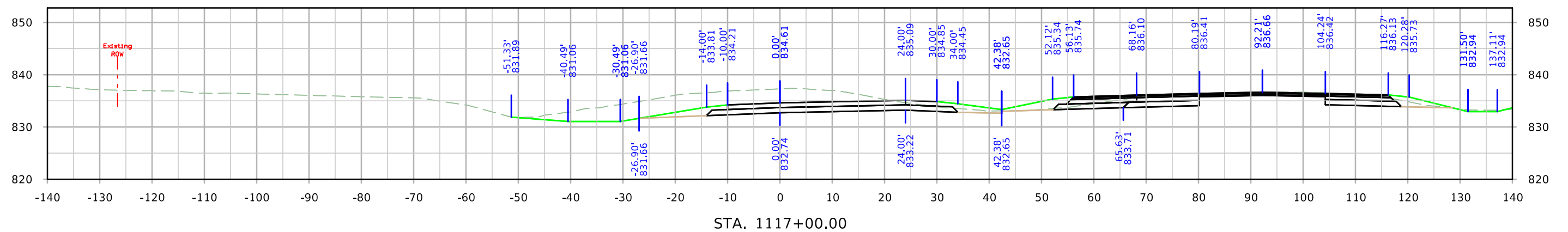
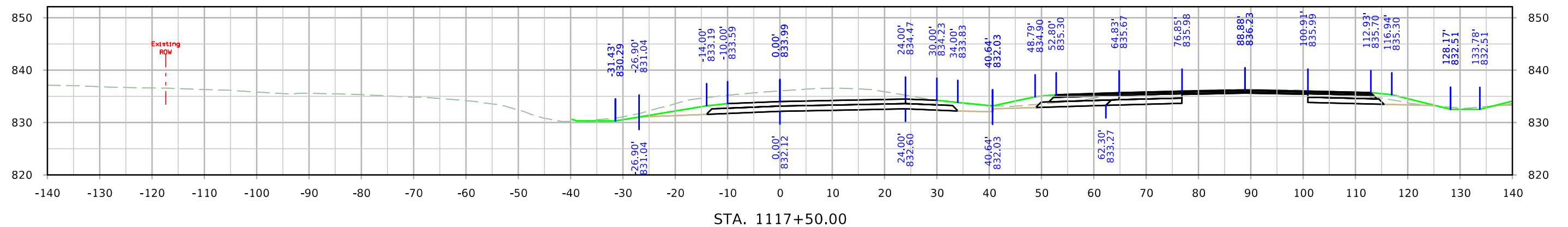
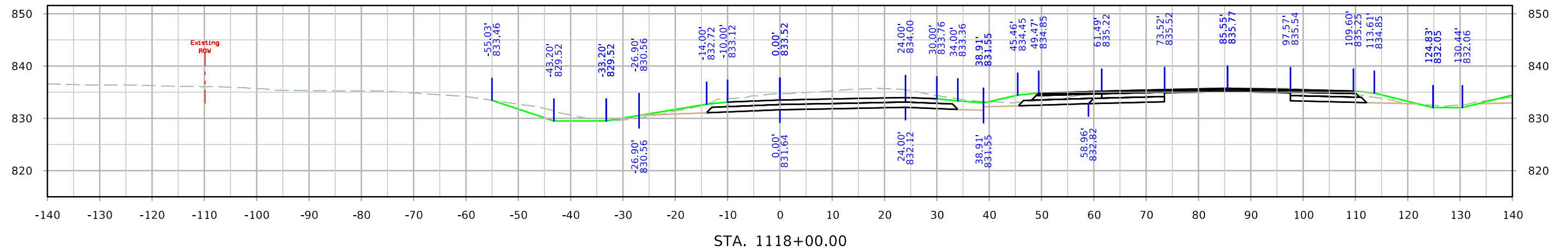
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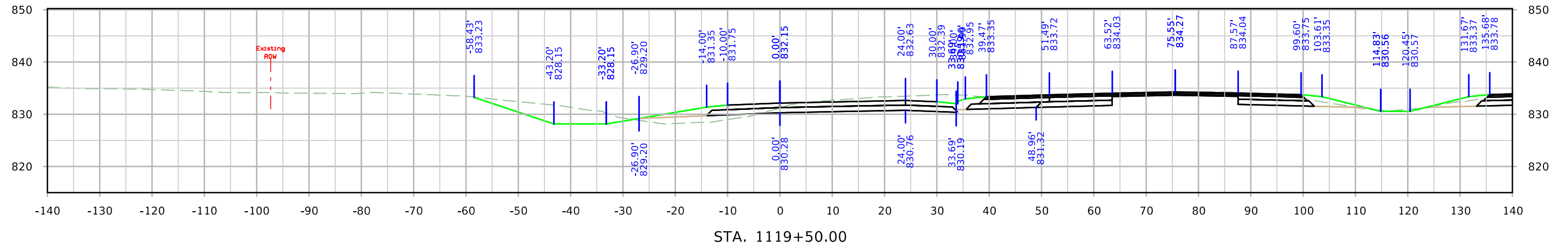
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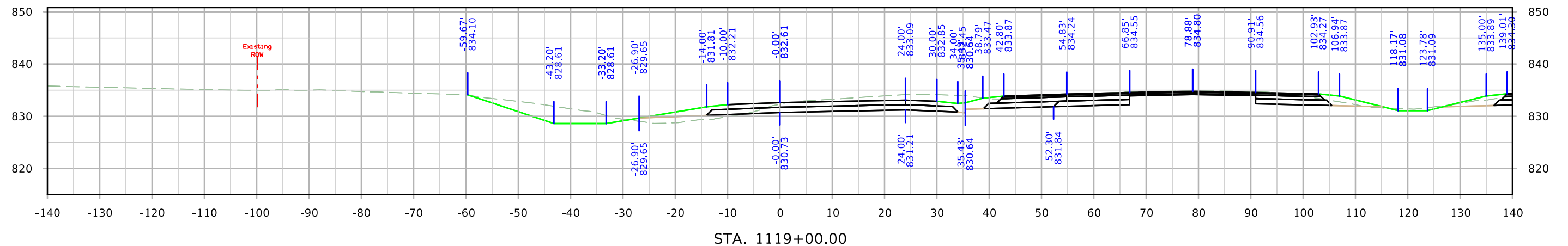
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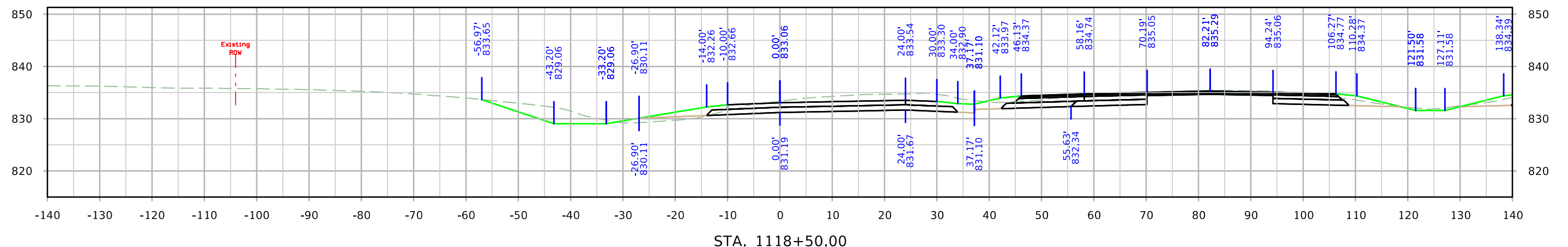
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STA. 1119+50.00

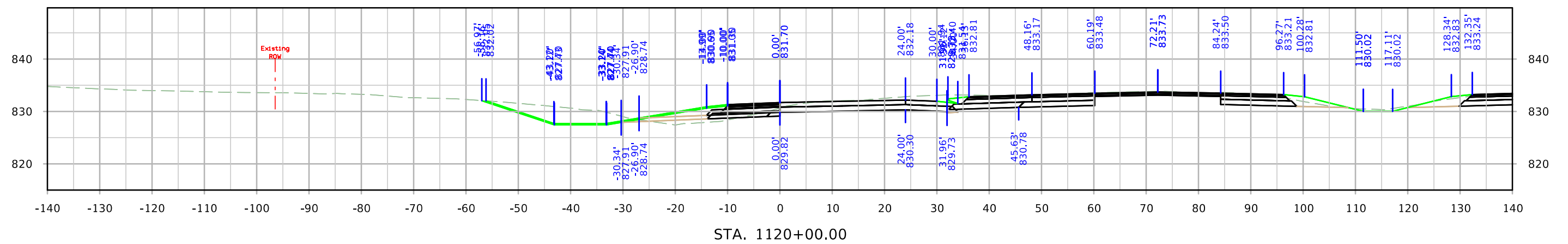
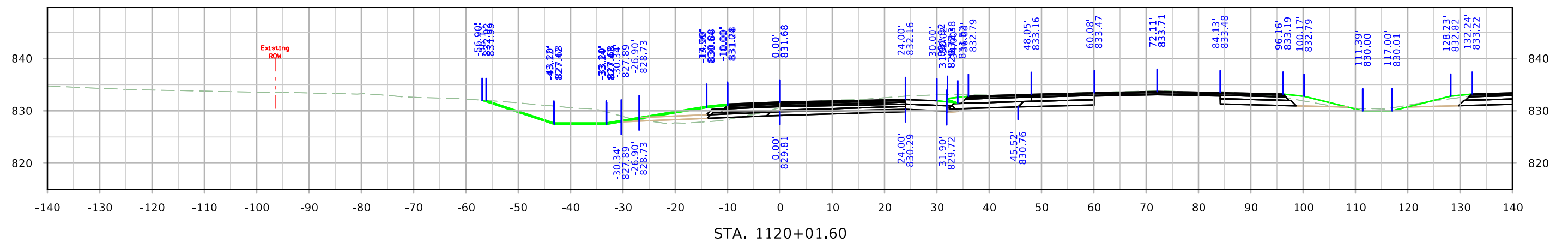


STA. 1119+00.00

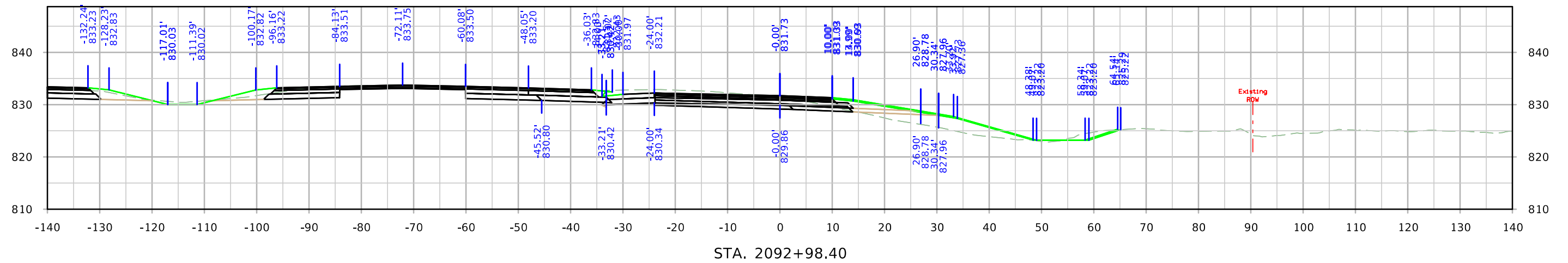
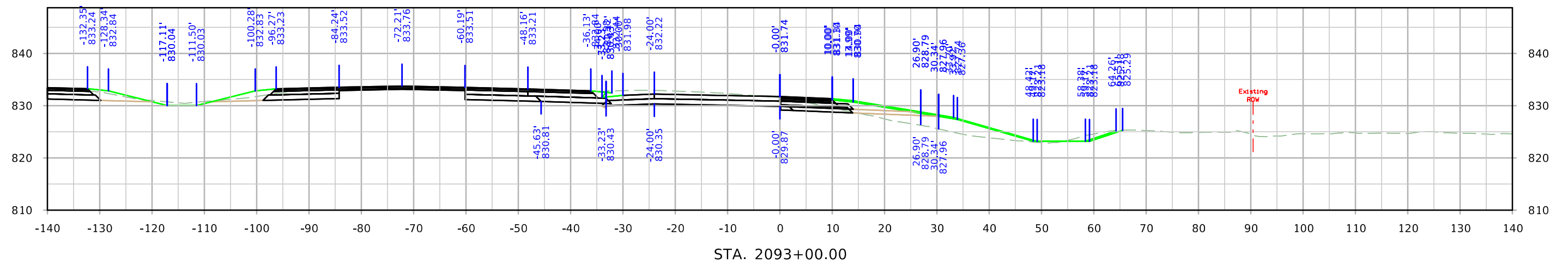
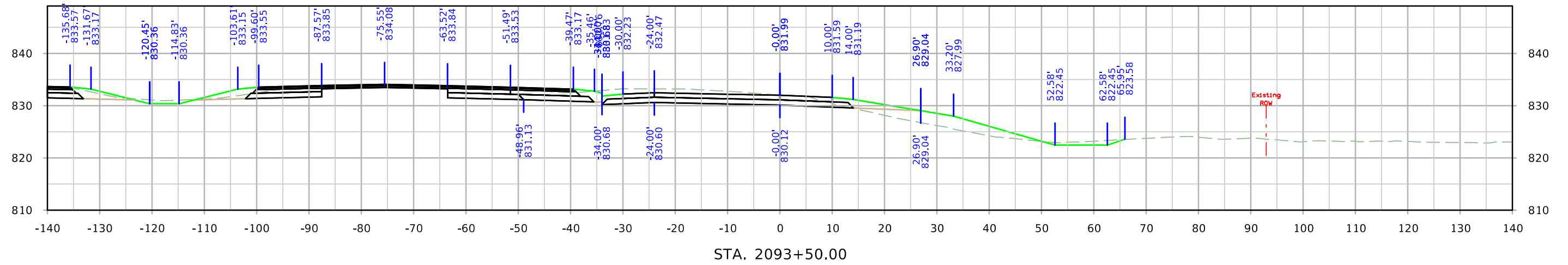


STA. 1118+50.00

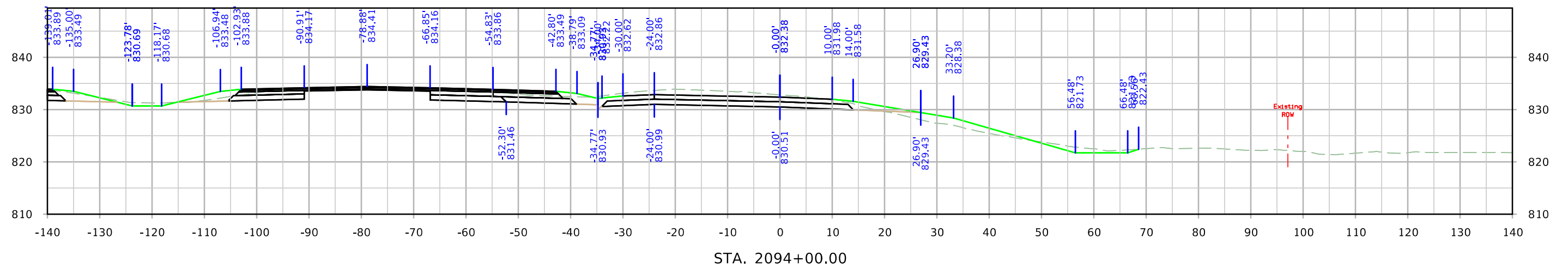
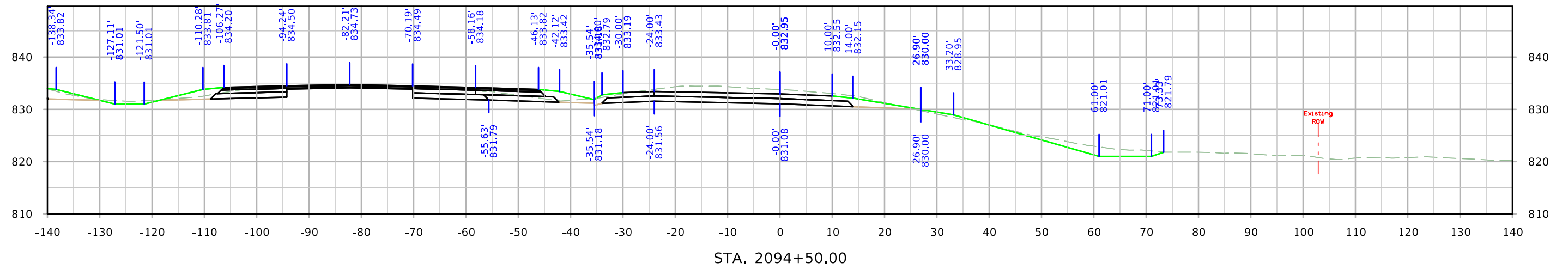
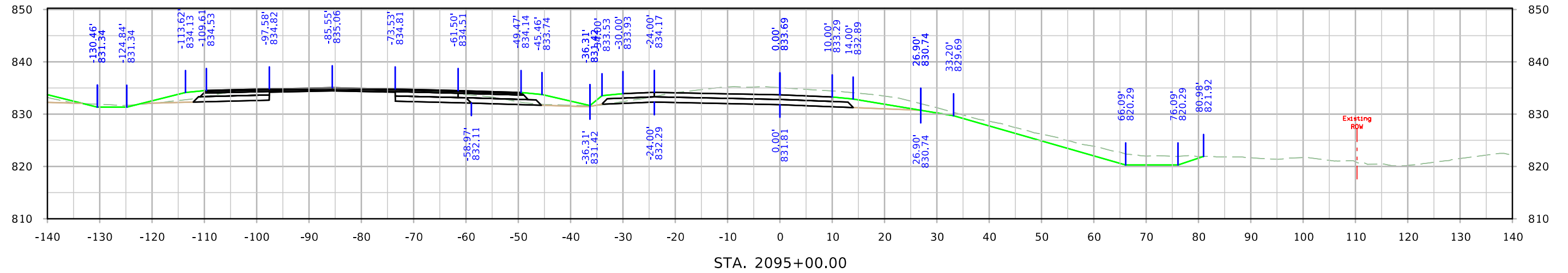
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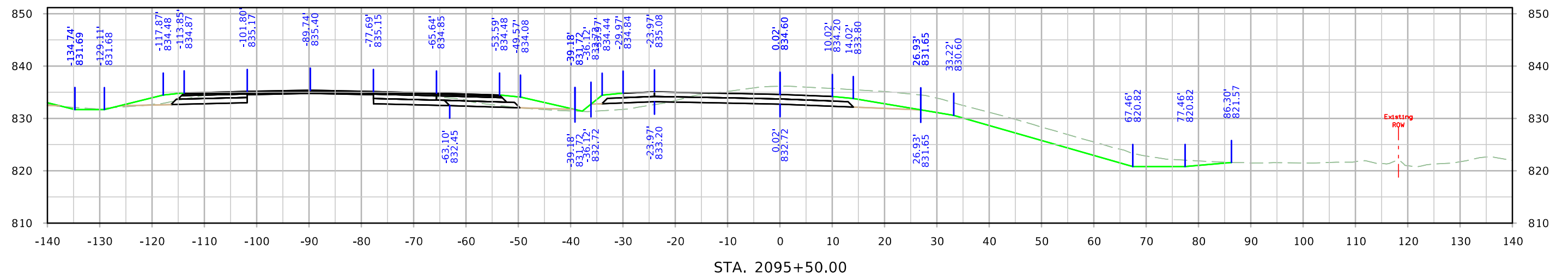
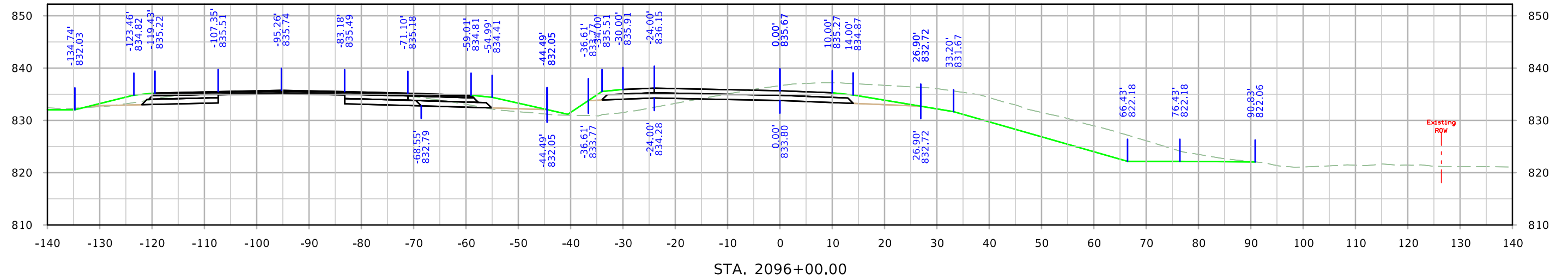
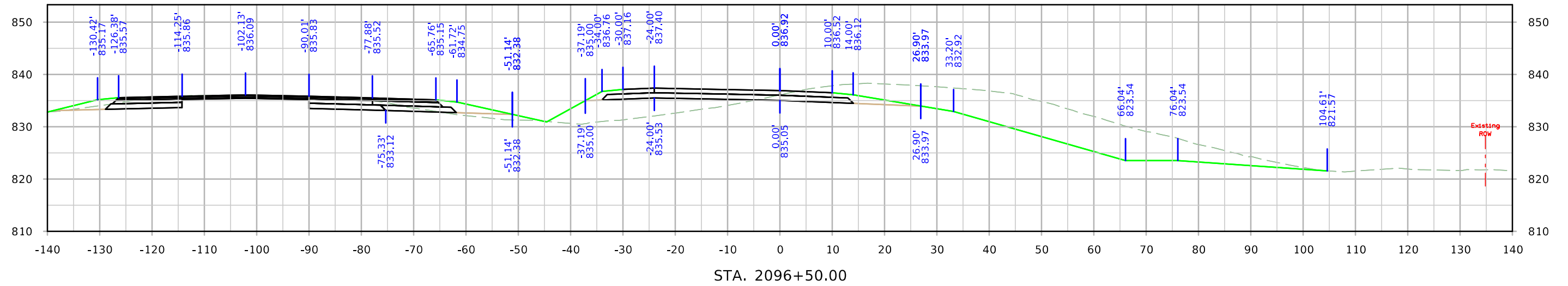
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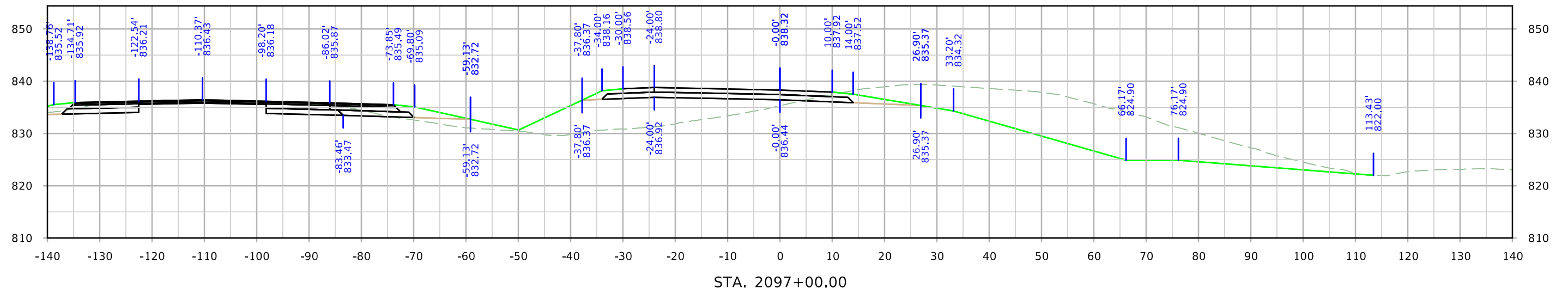
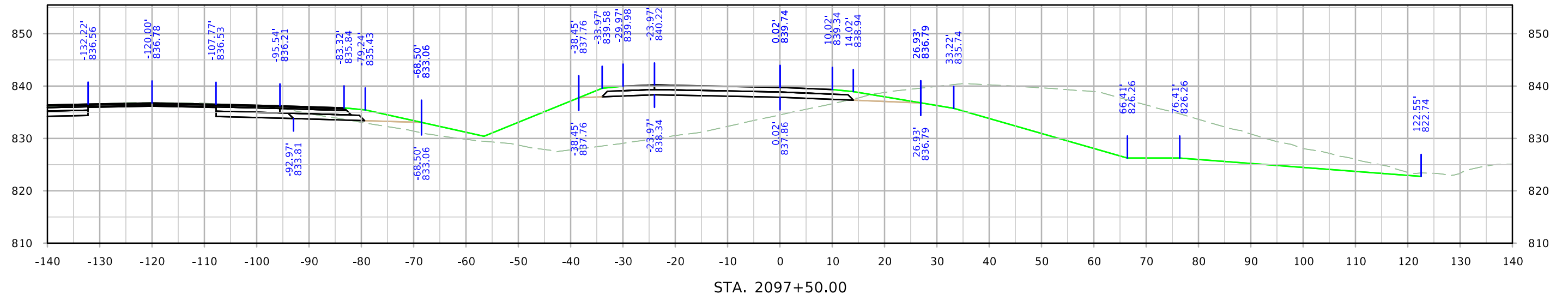
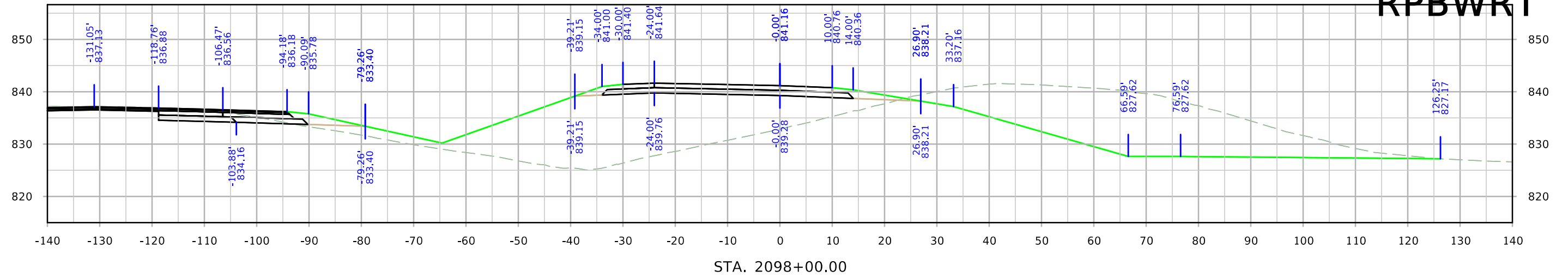
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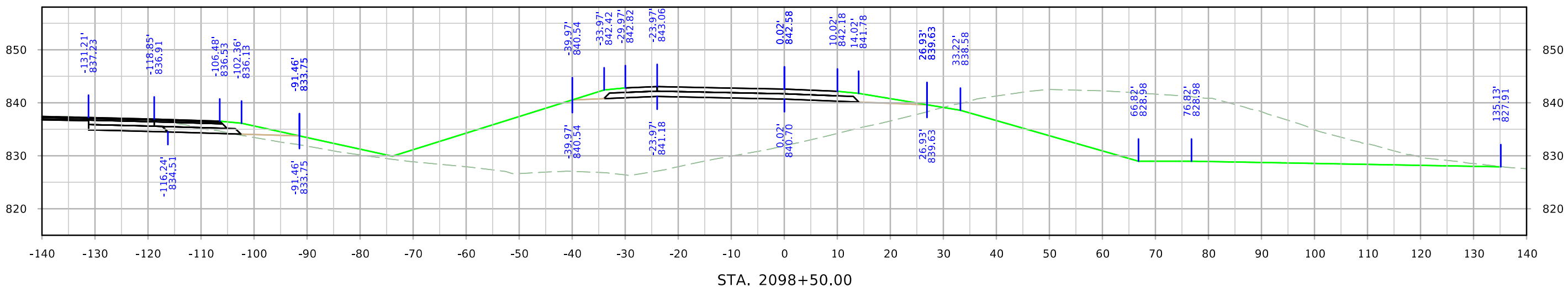
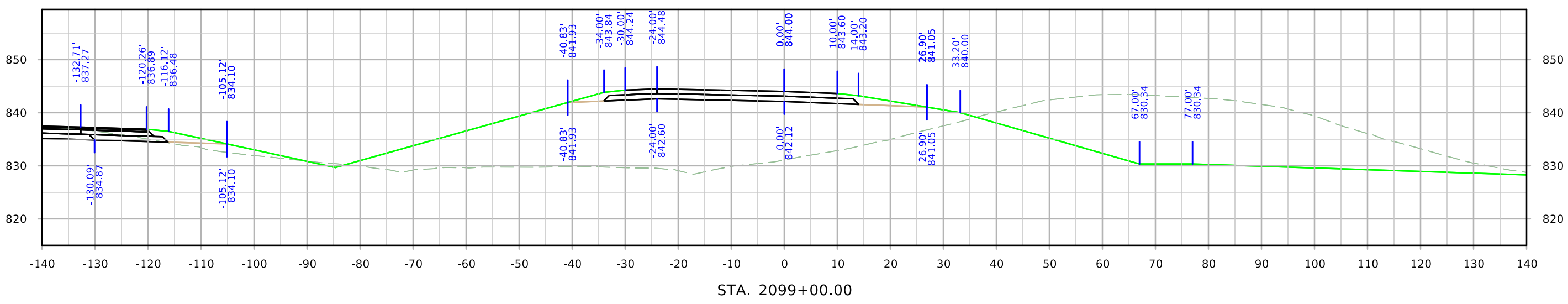
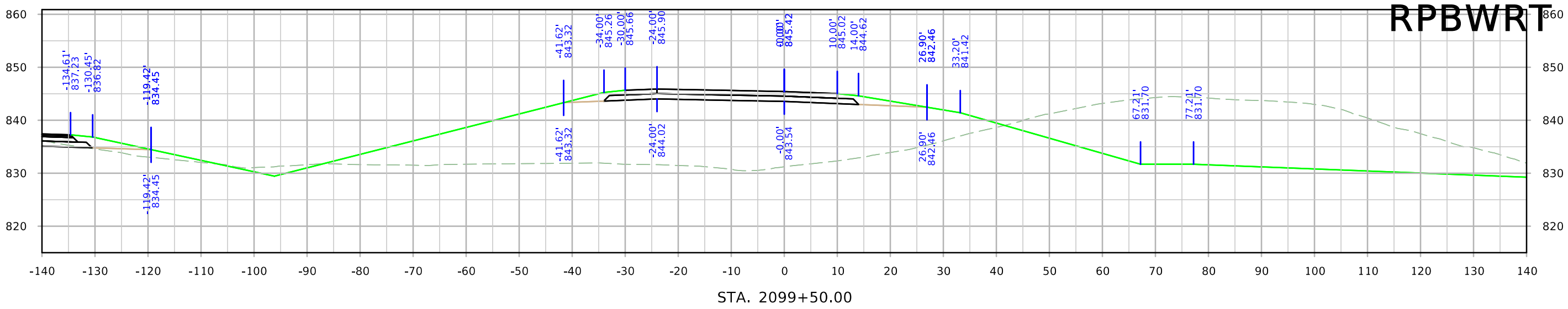


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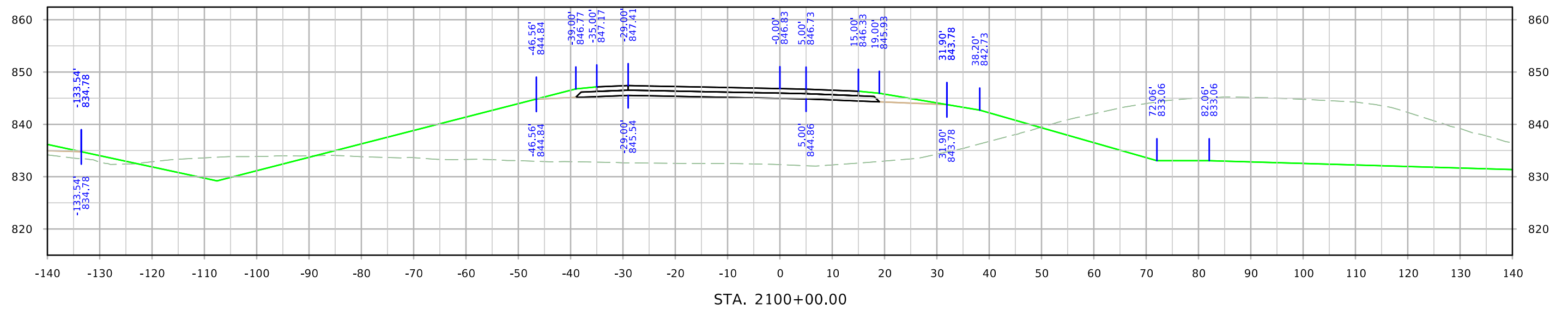
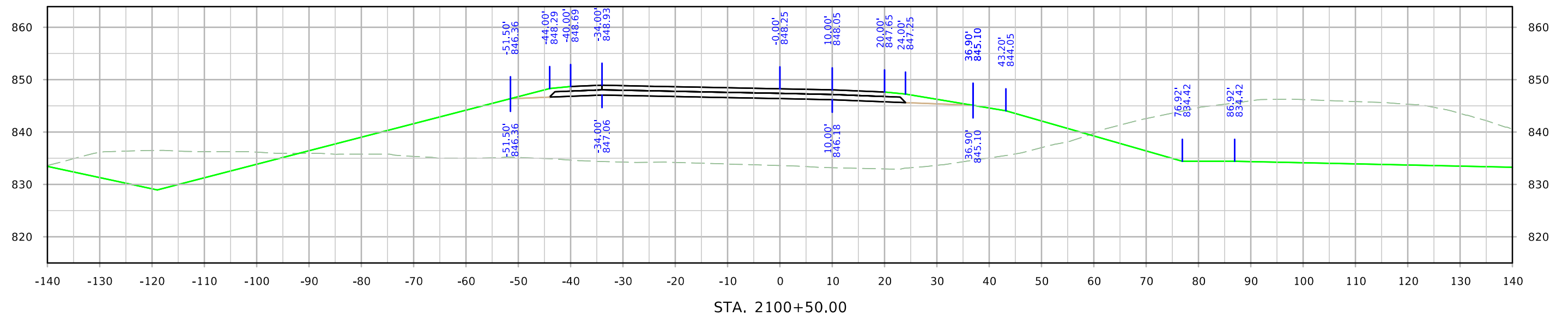


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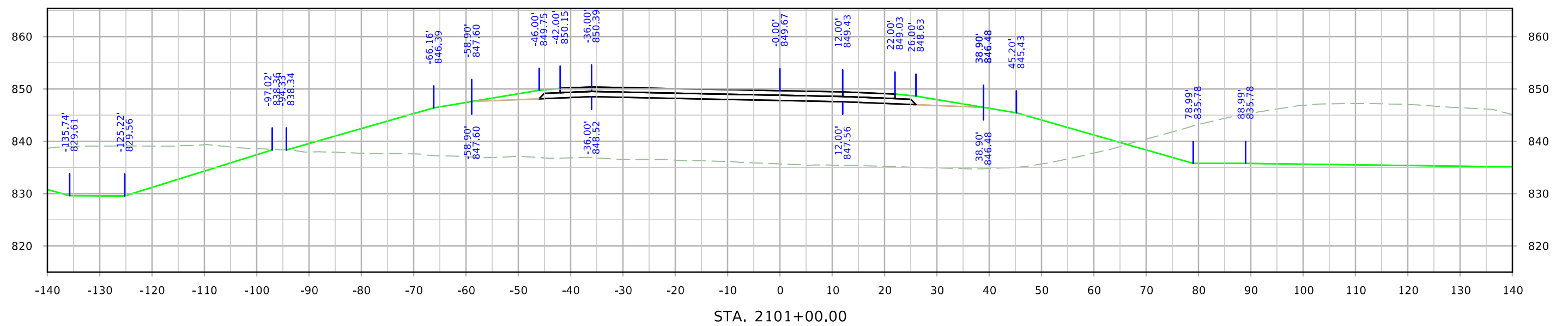
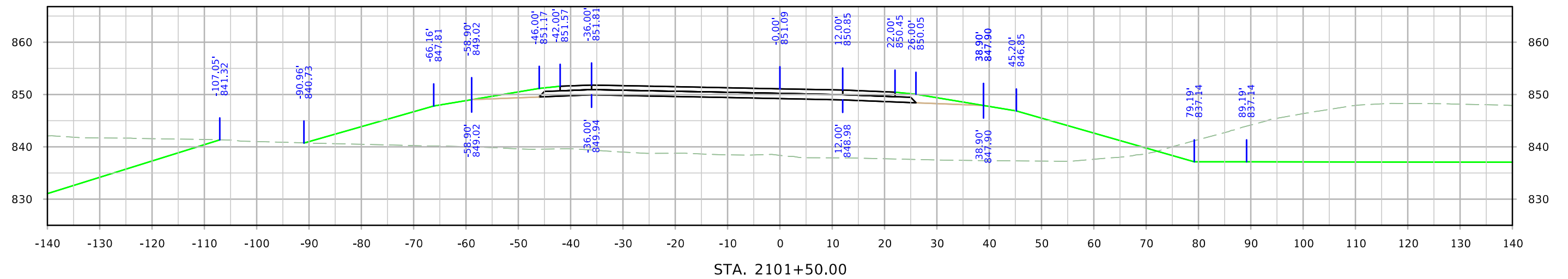




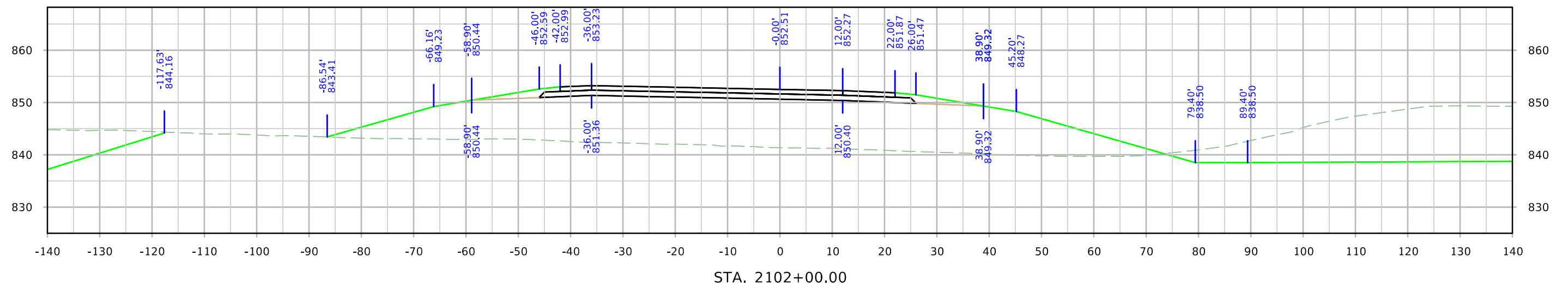
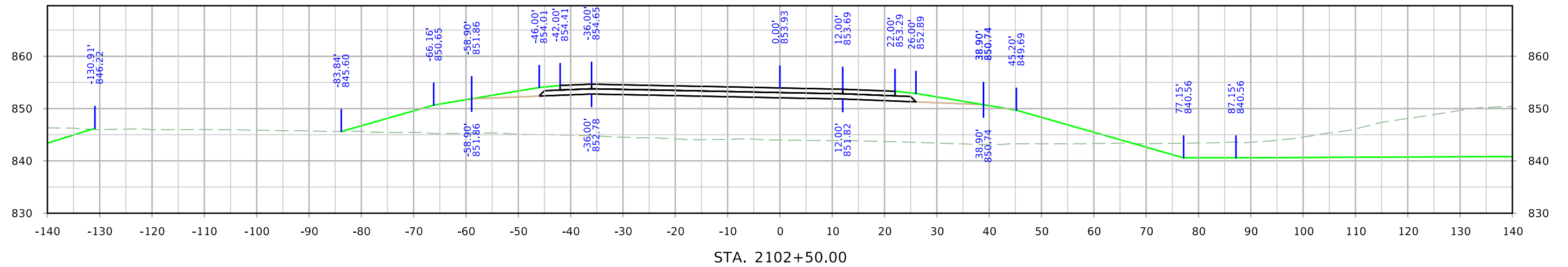
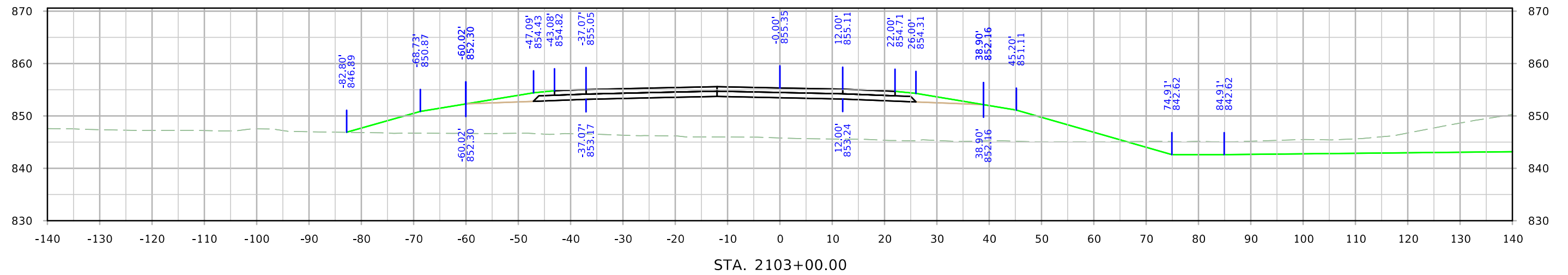
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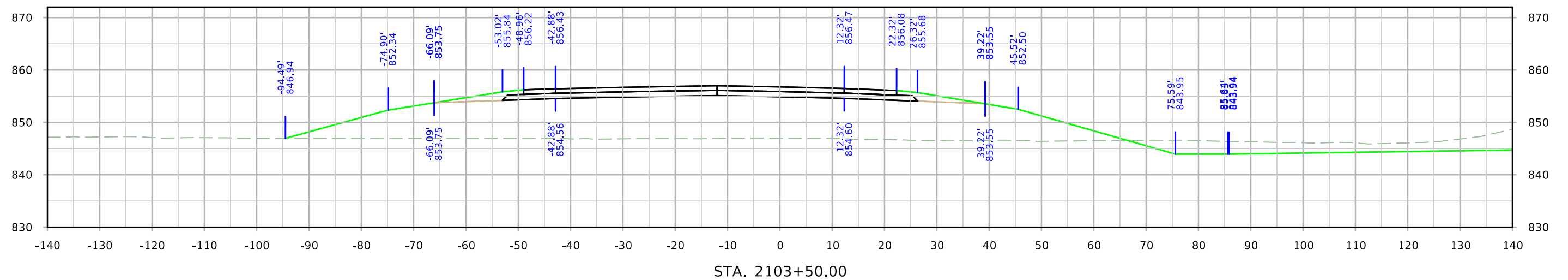
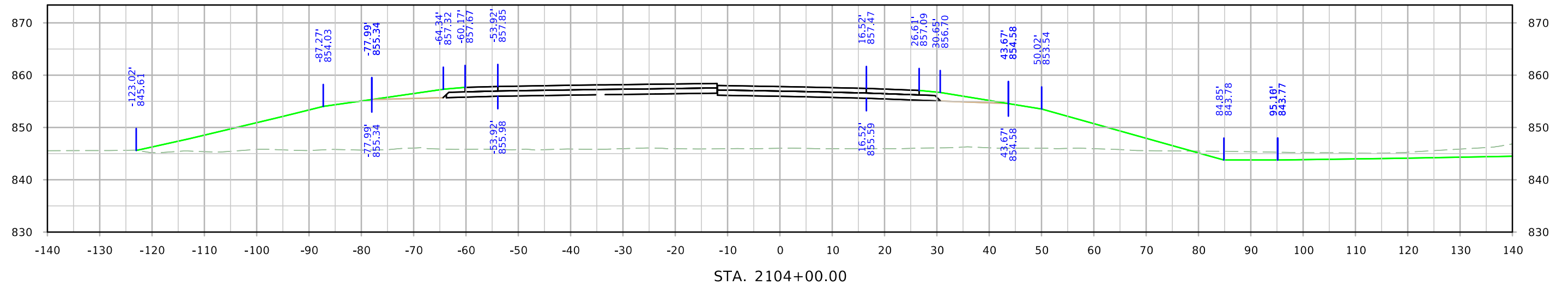
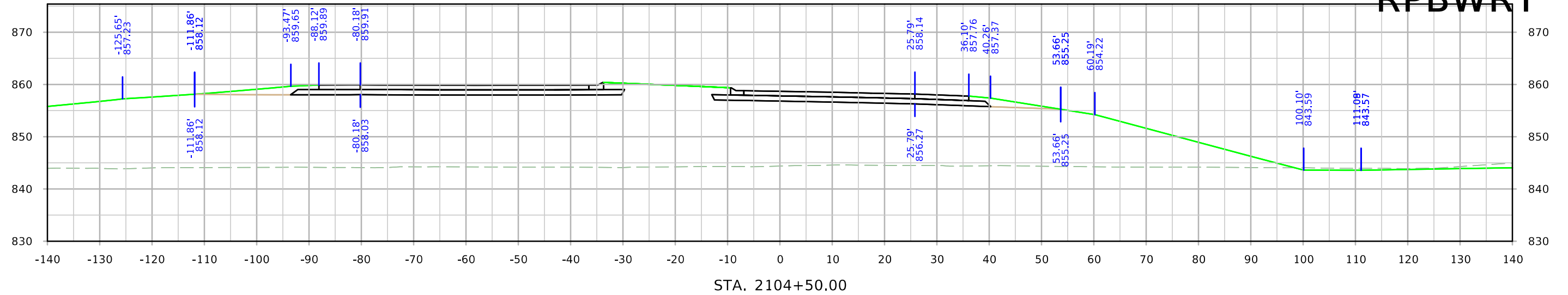
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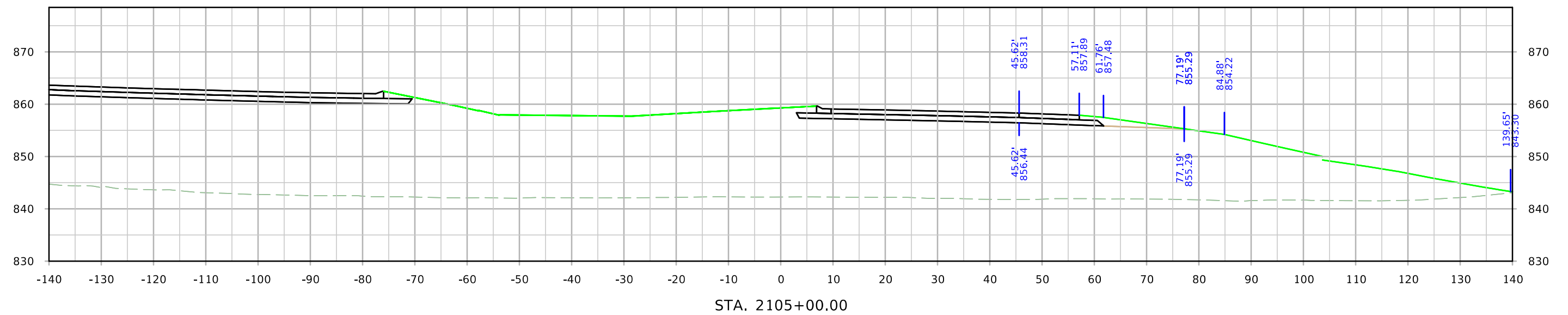


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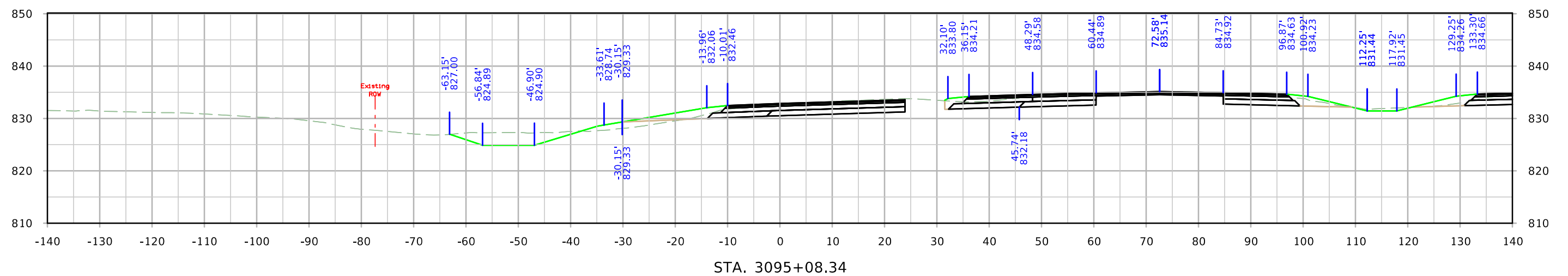
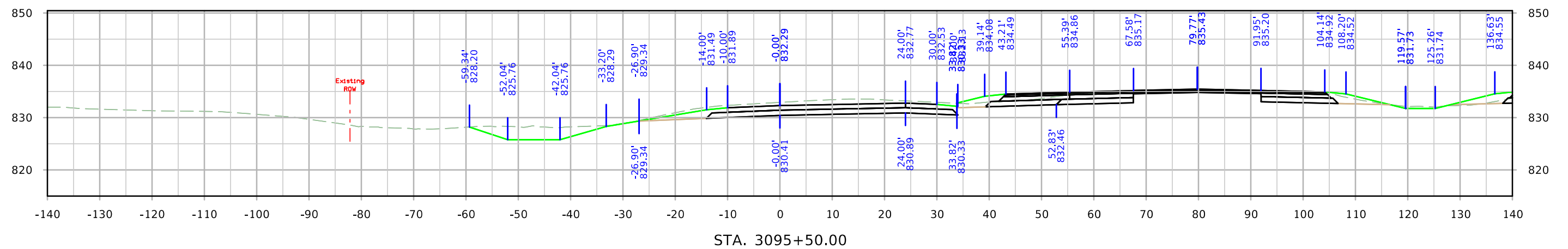
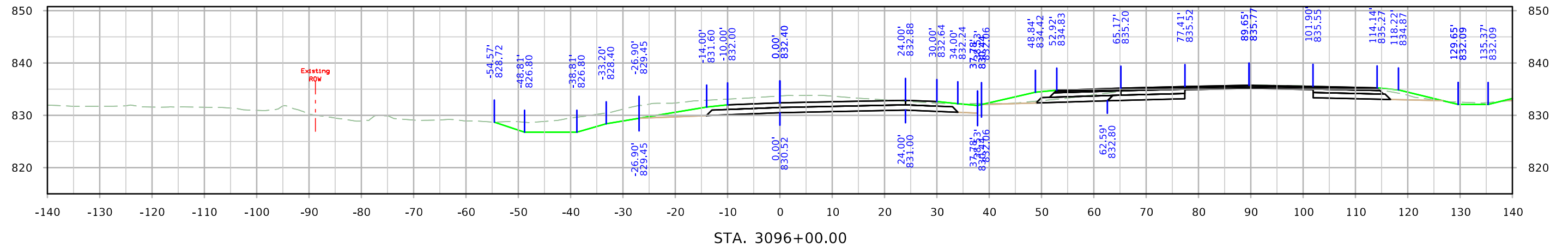


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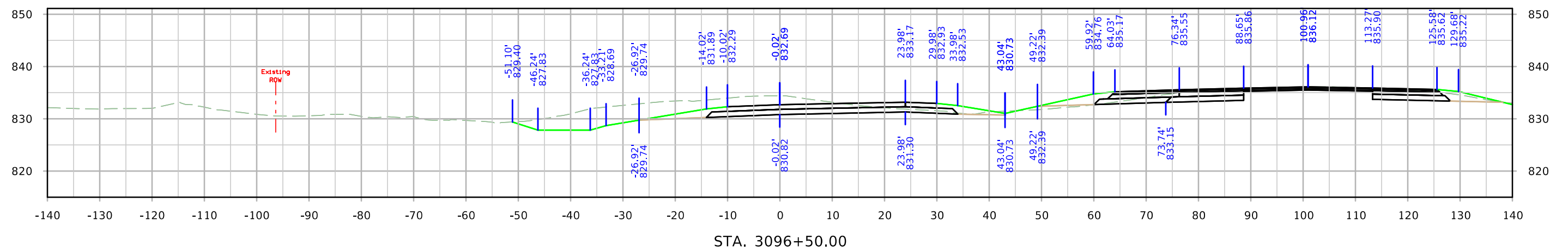
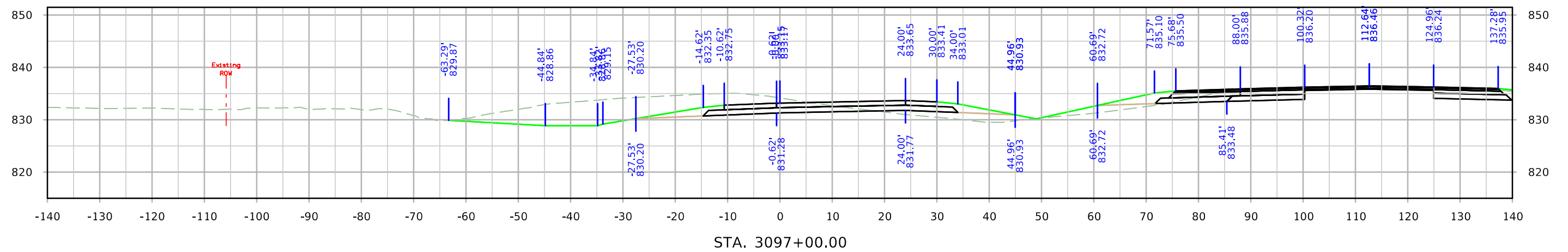
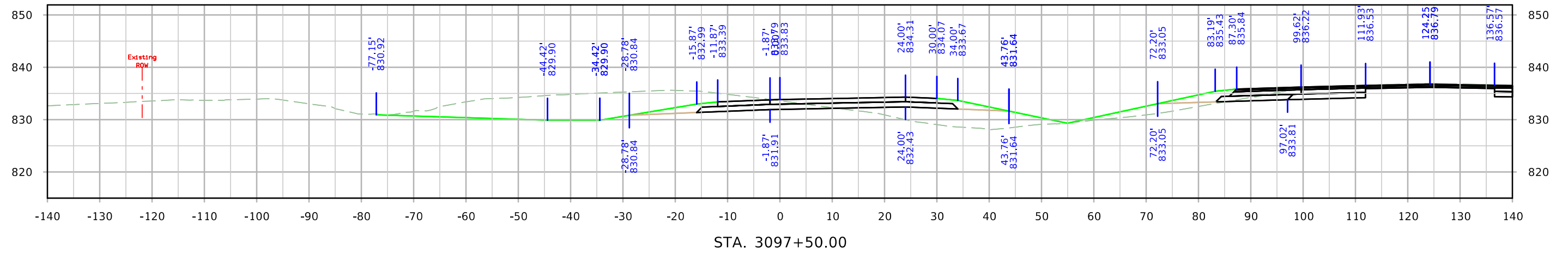




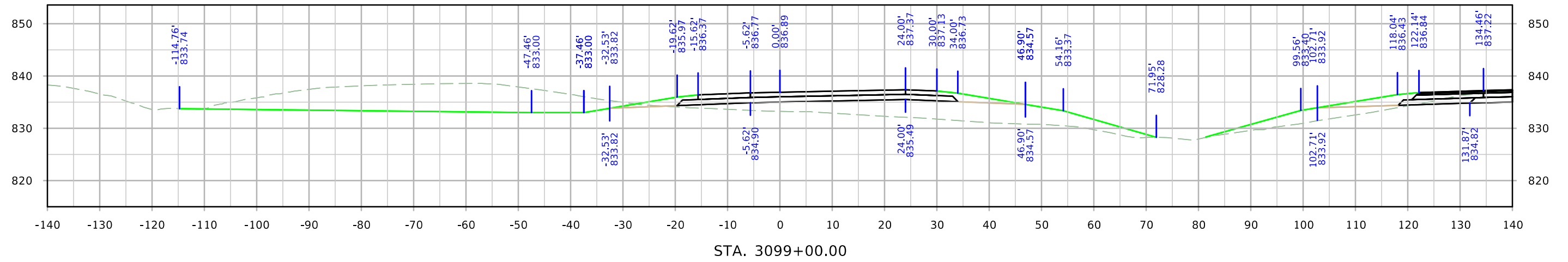
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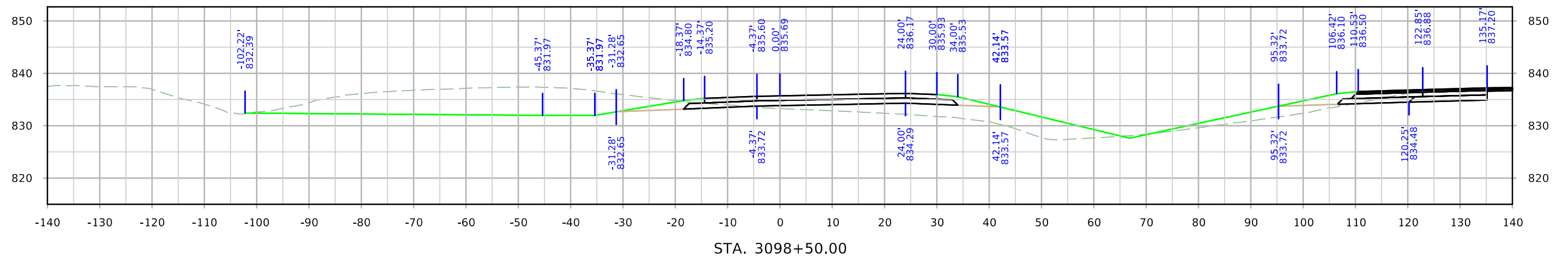
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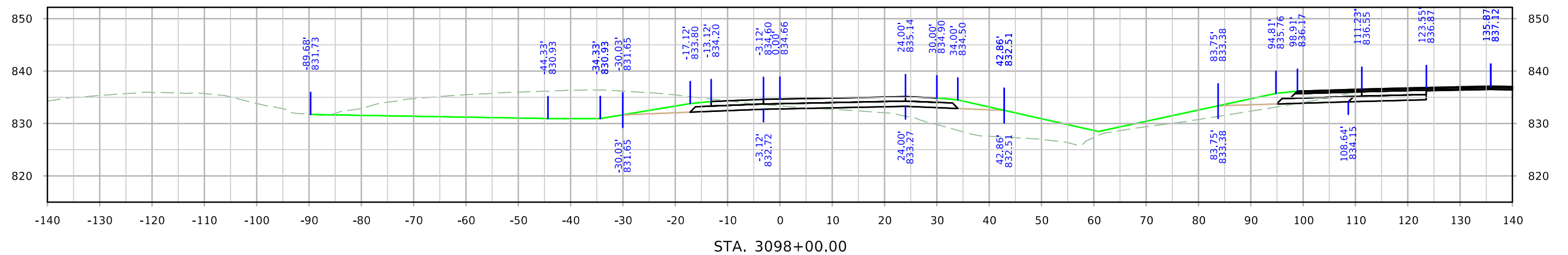
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STA. 3099+00.00

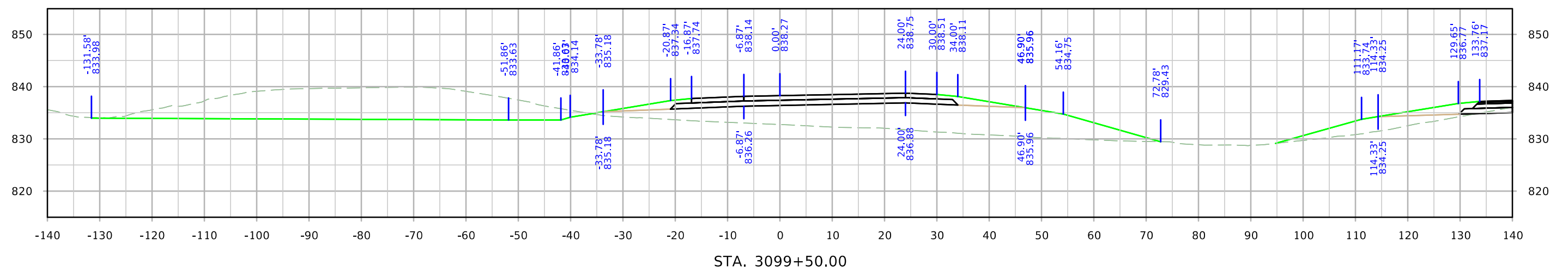
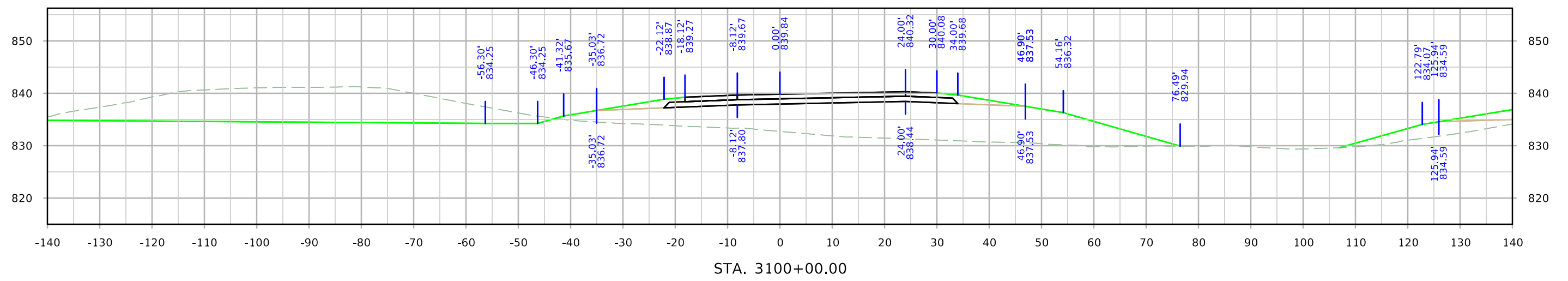
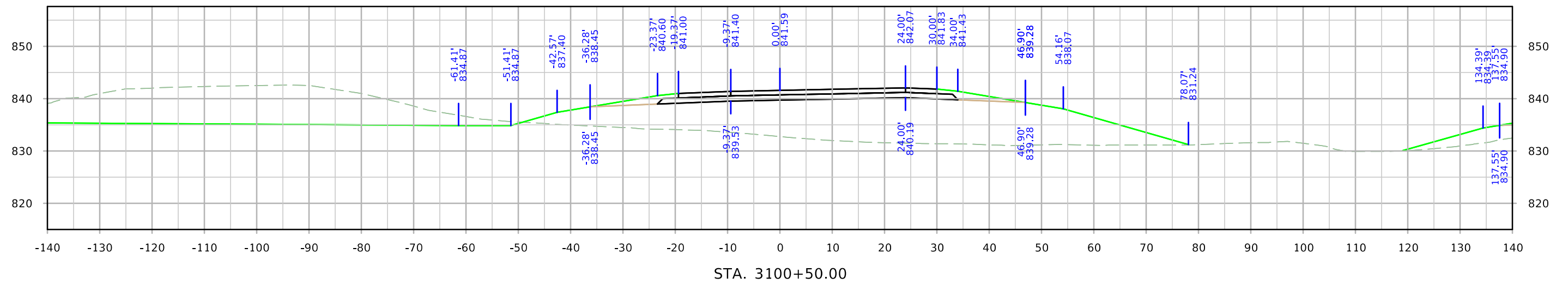


STA. 3098+50.00

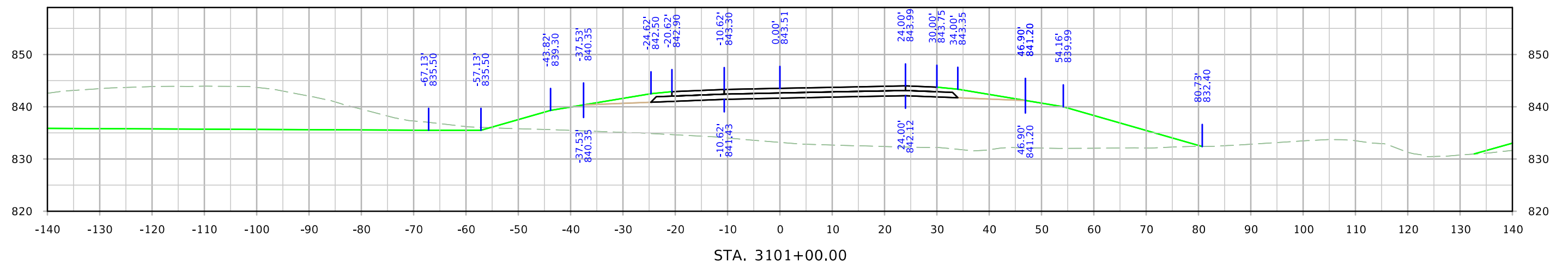
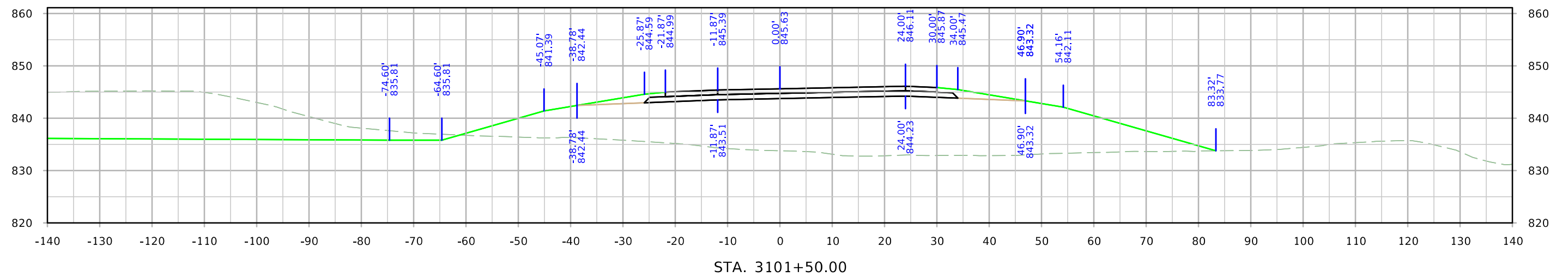
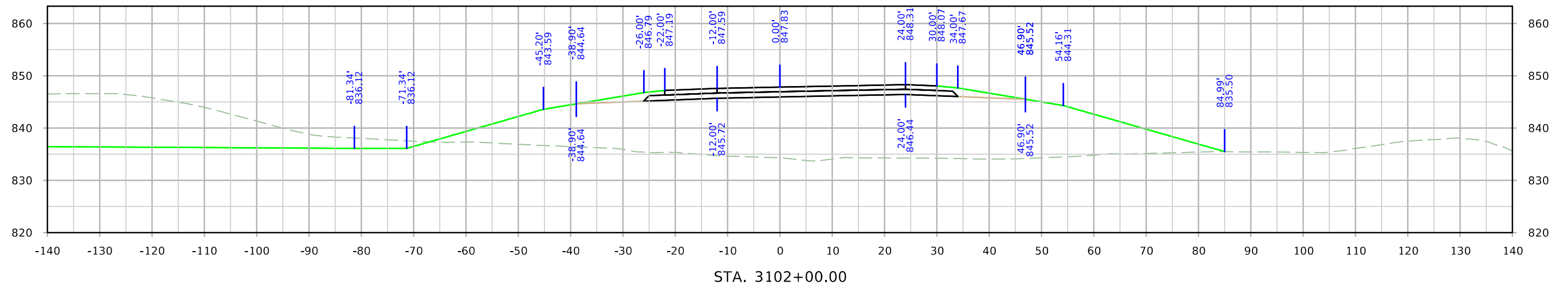


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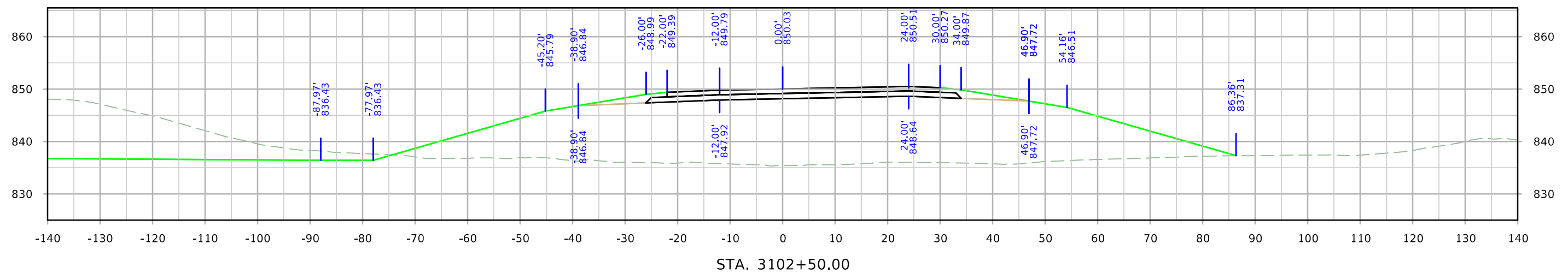
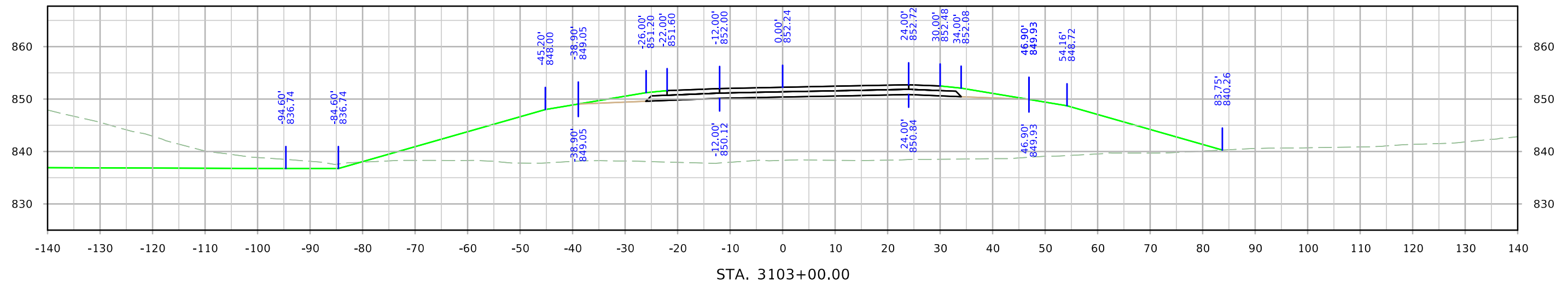
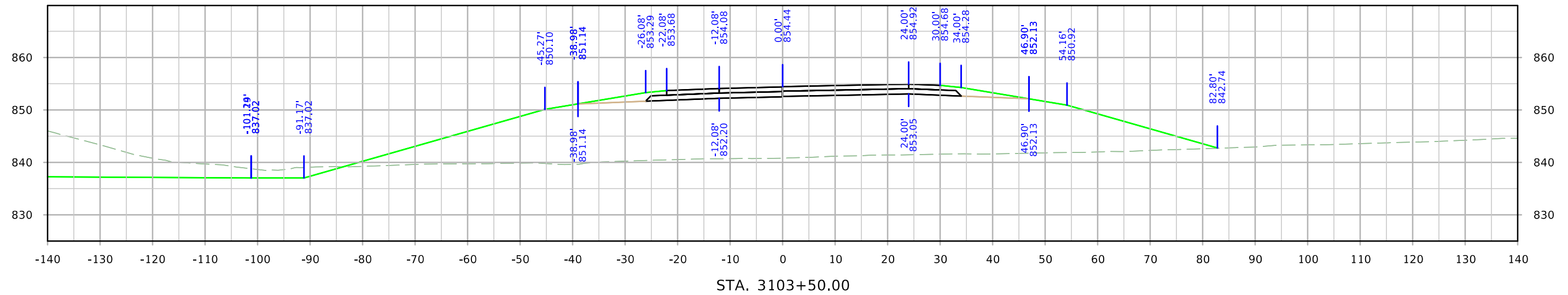
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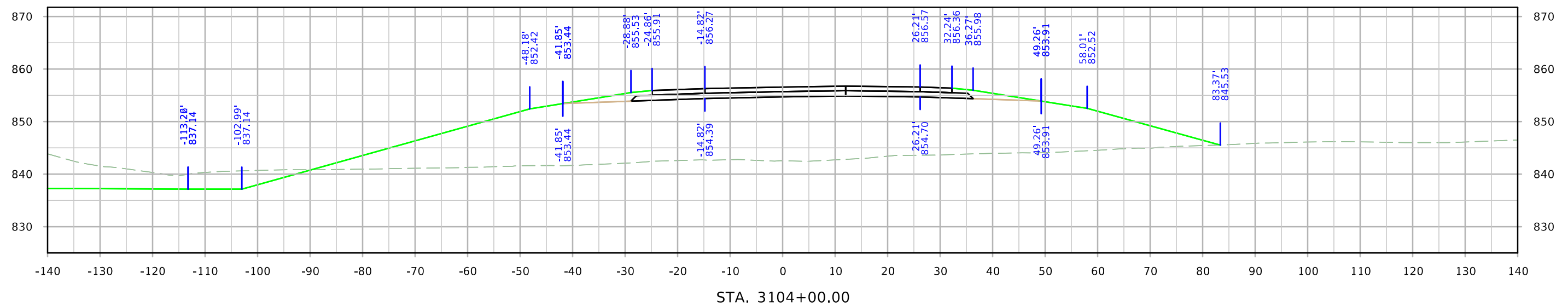
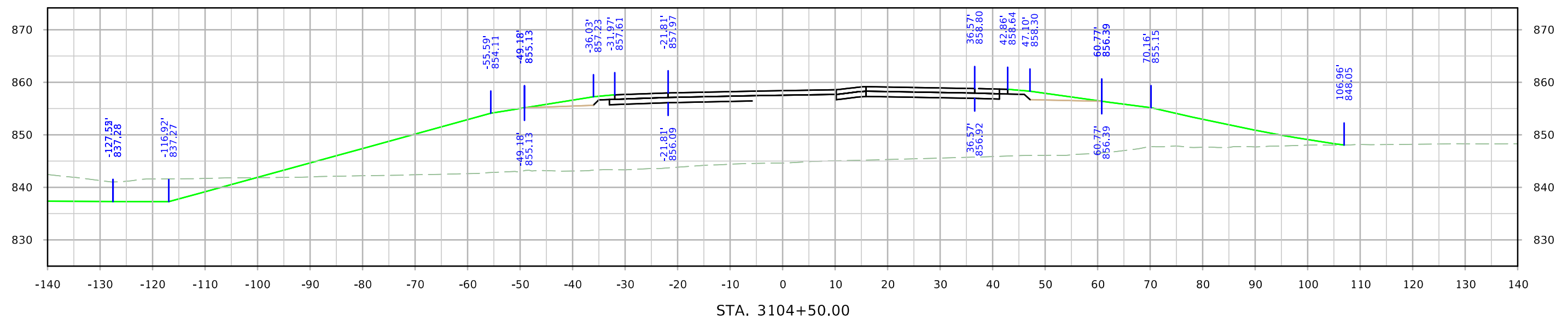
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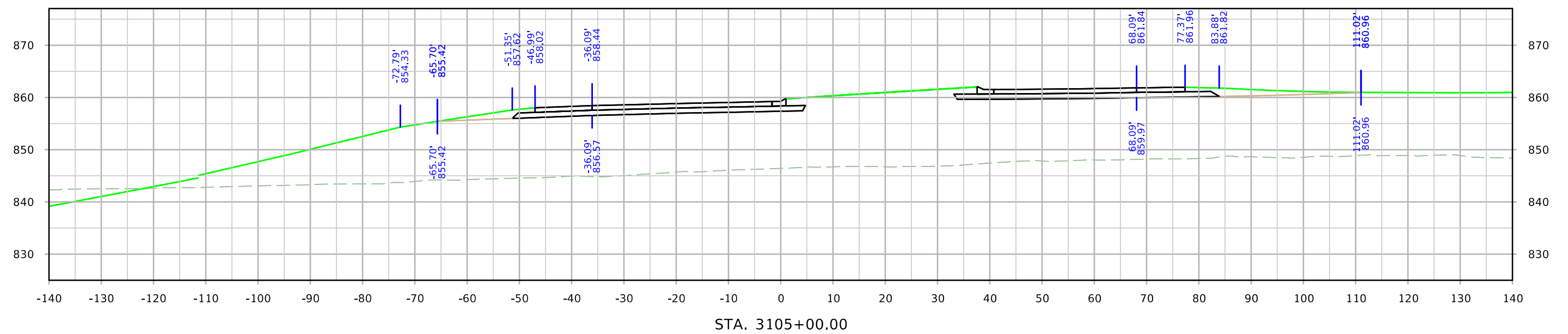
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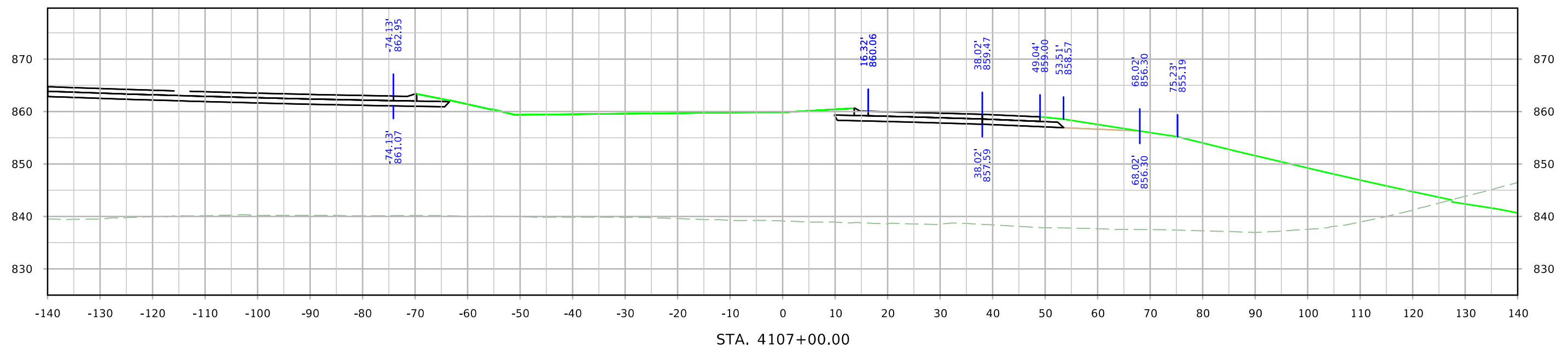
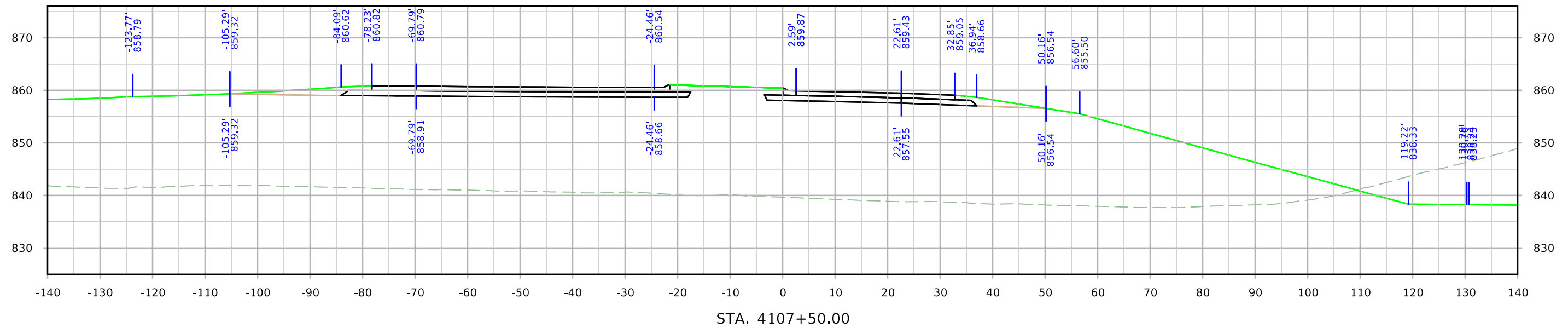
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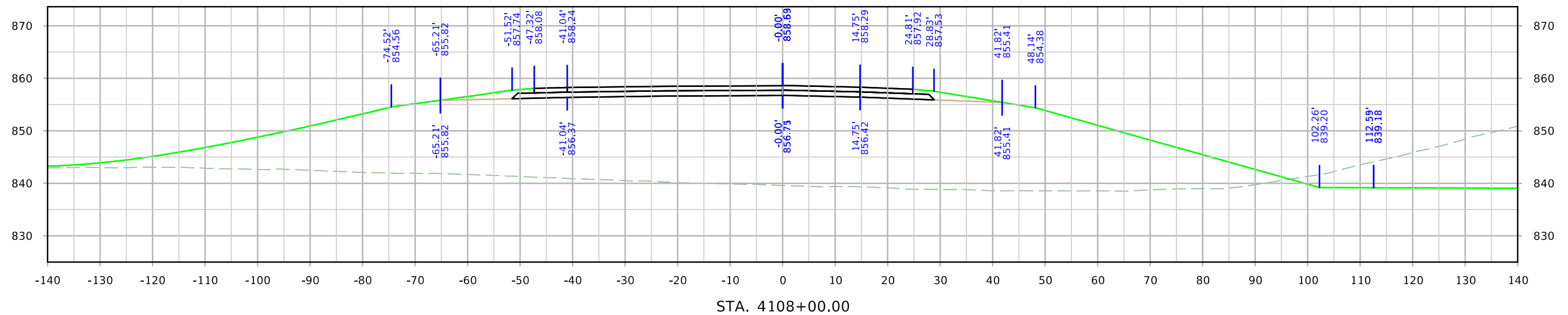
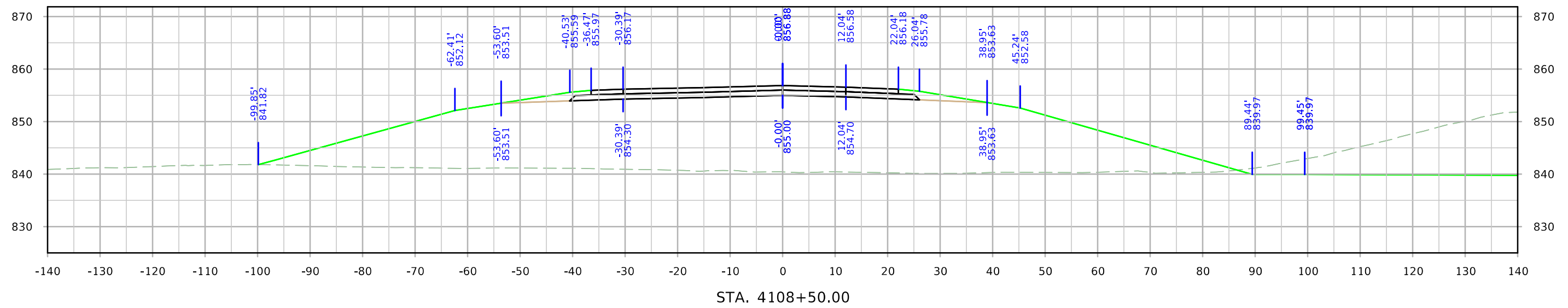
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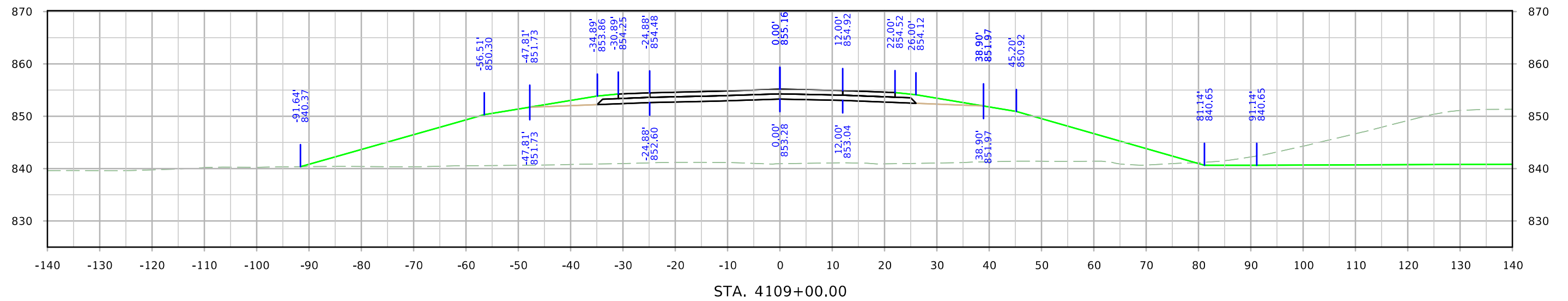
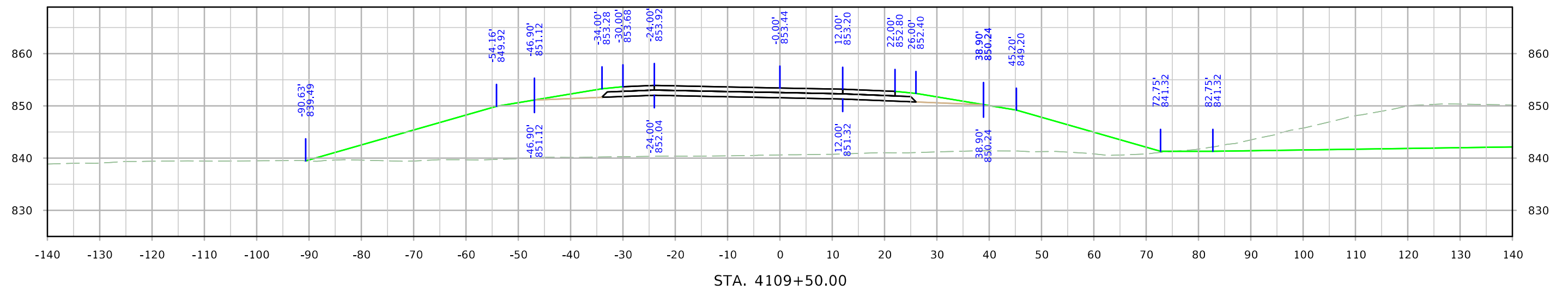
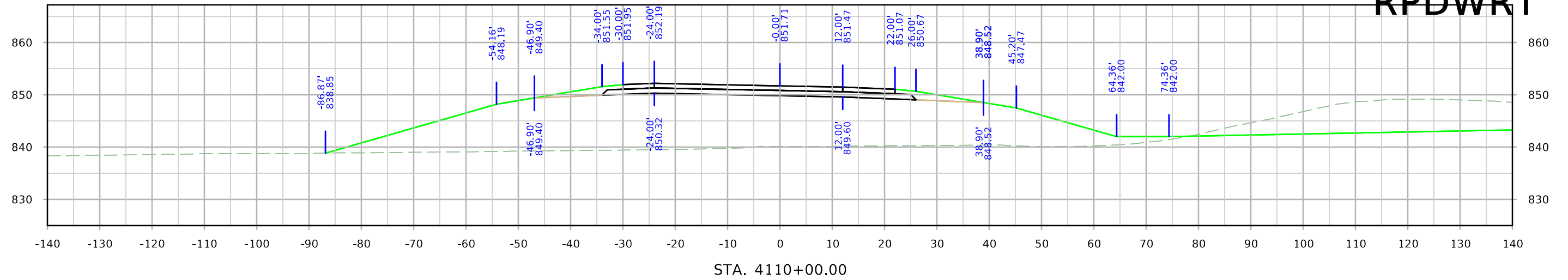
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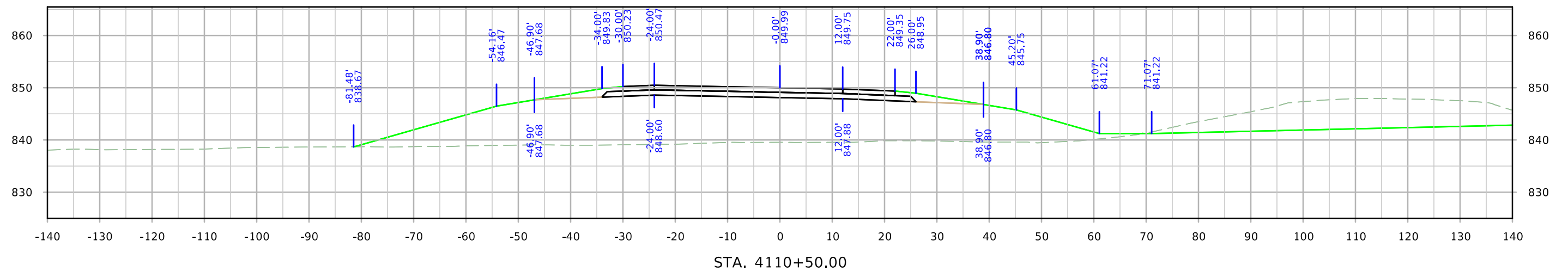
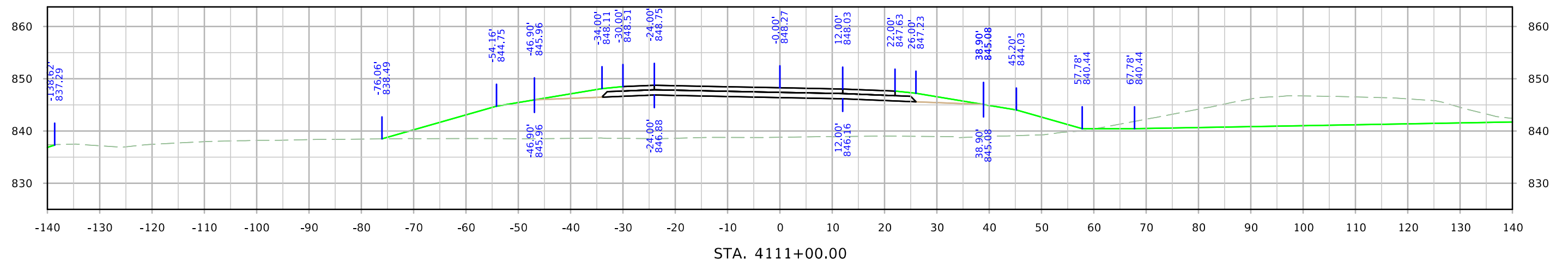
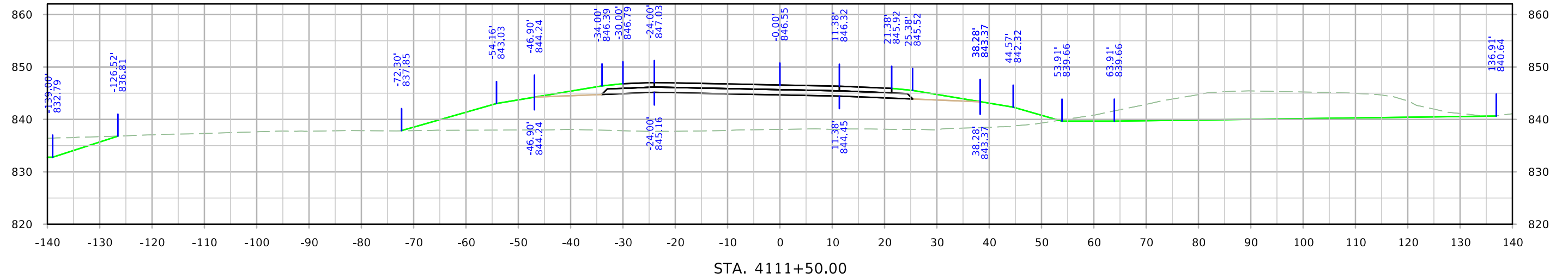
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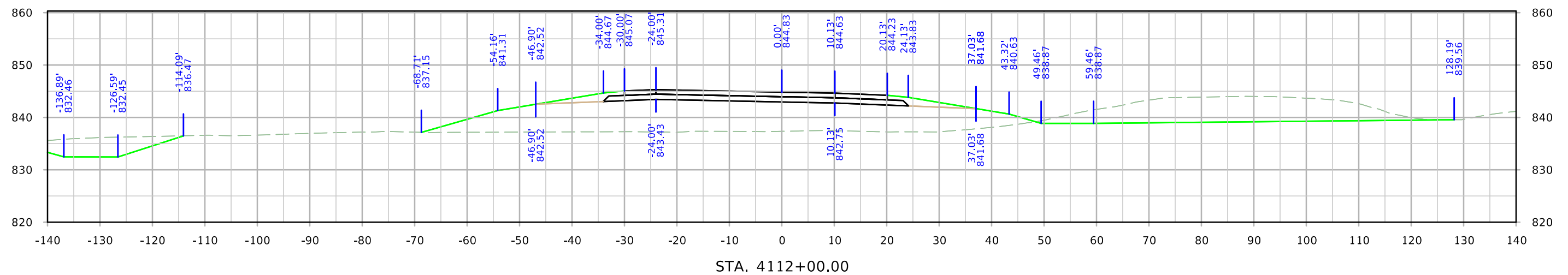
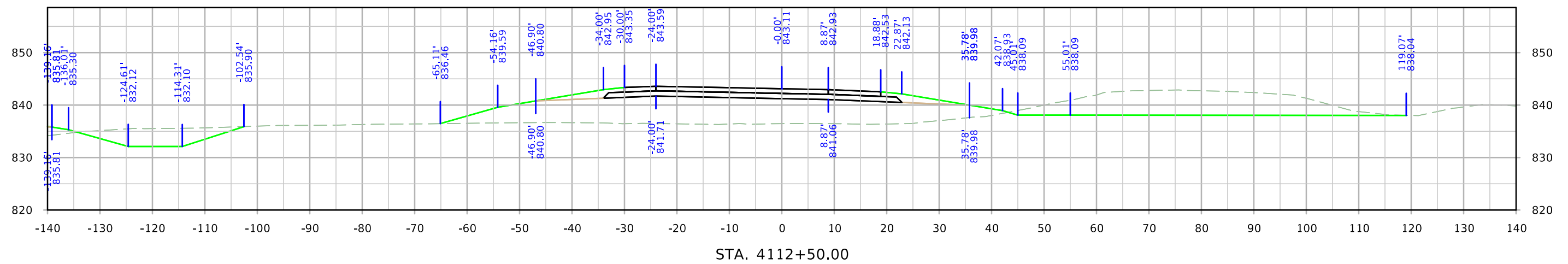
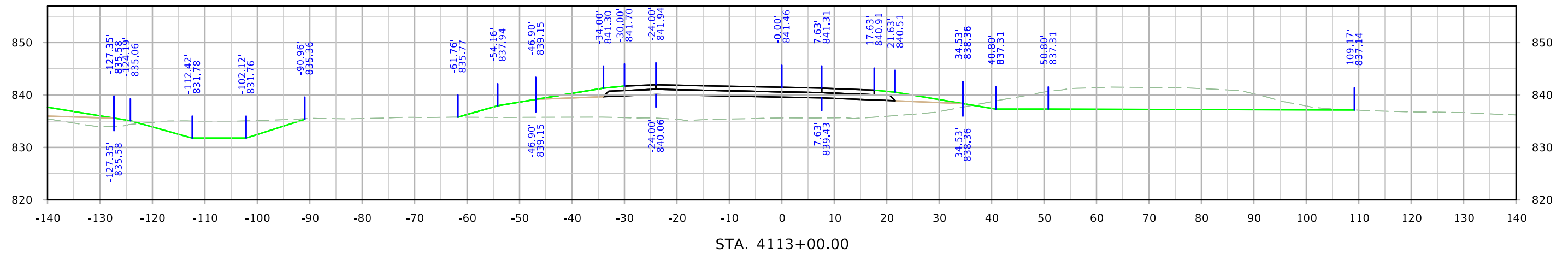
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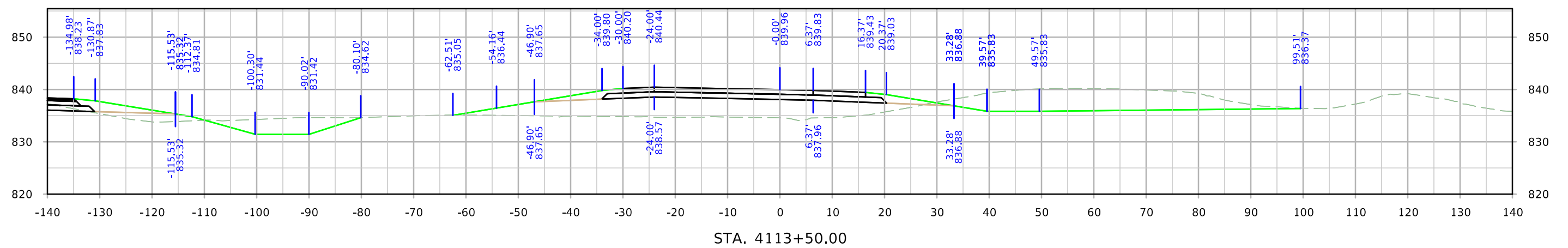
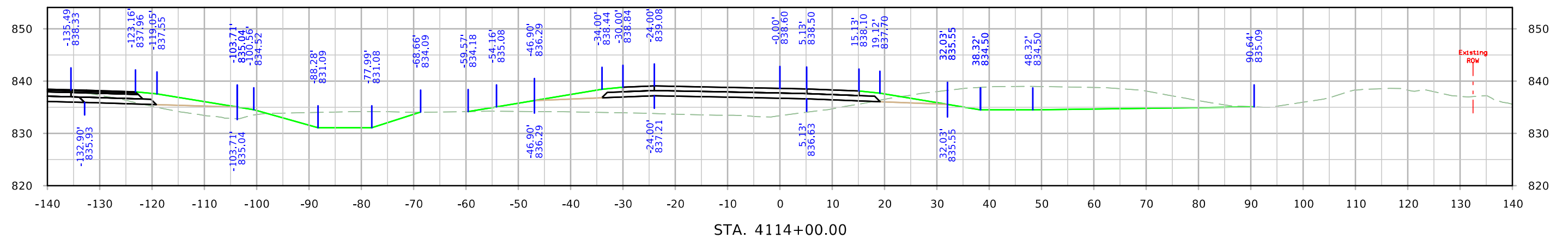
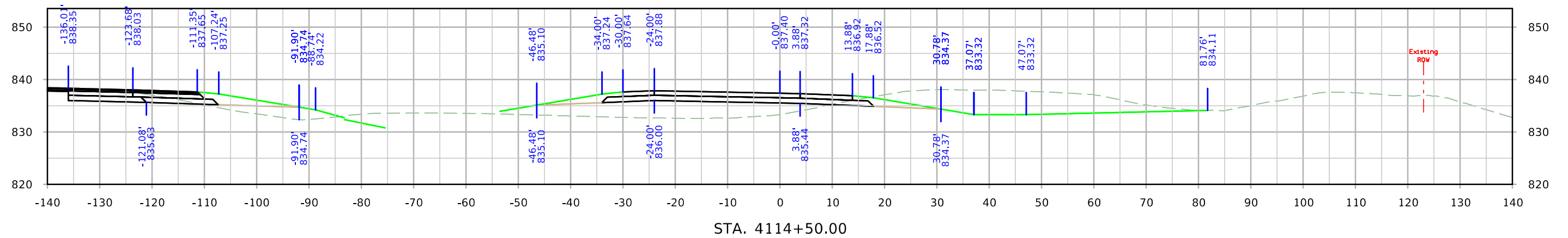
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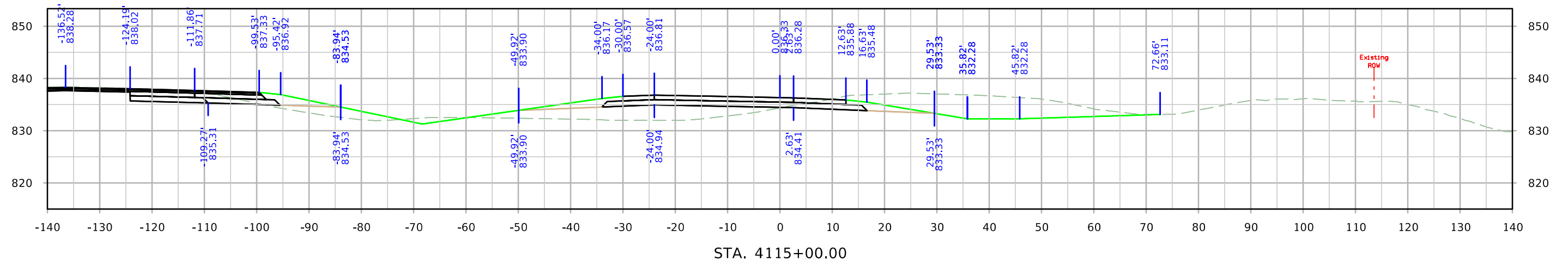
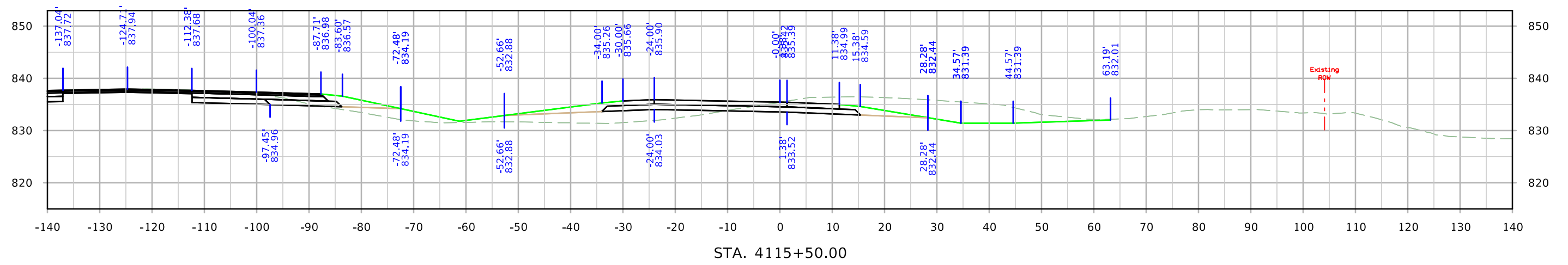
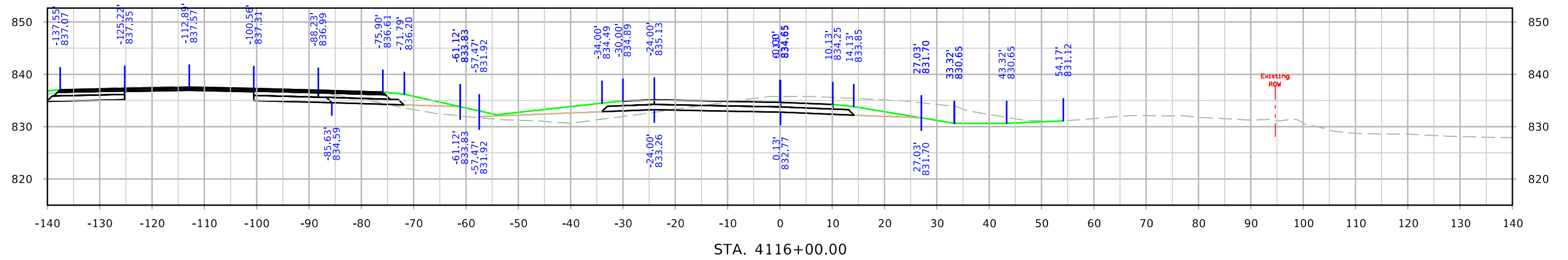
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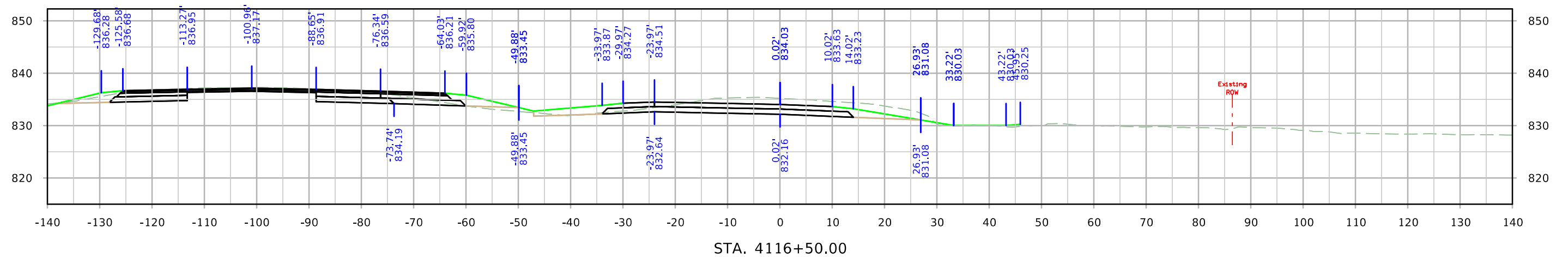
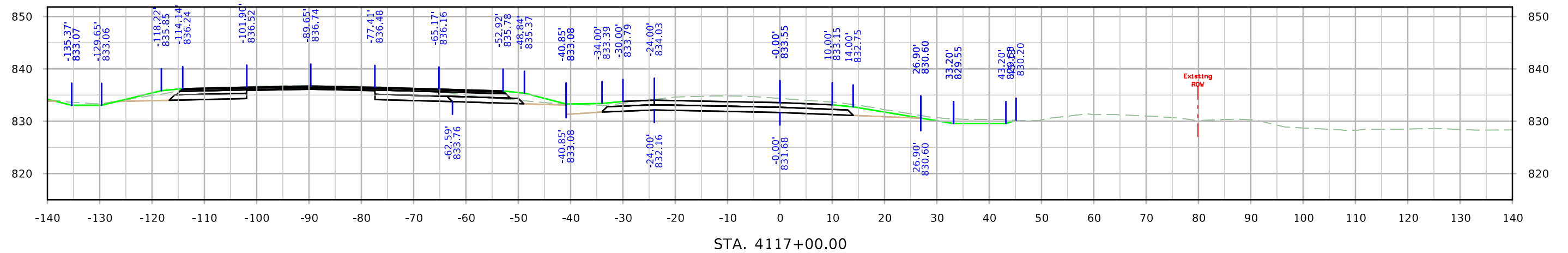
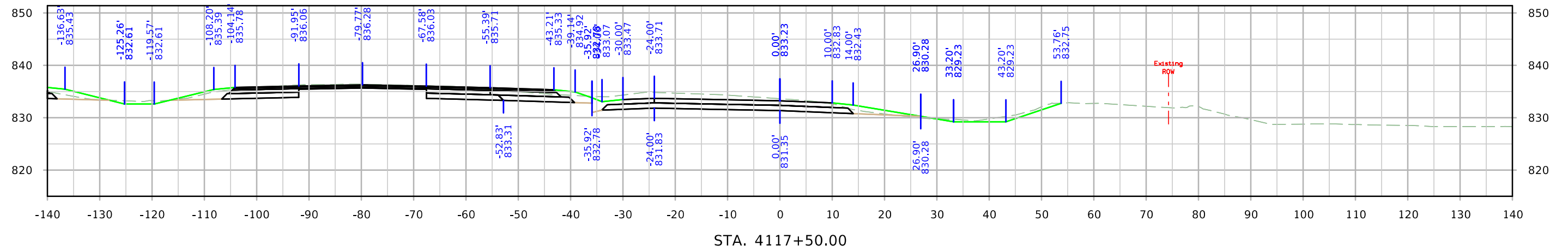
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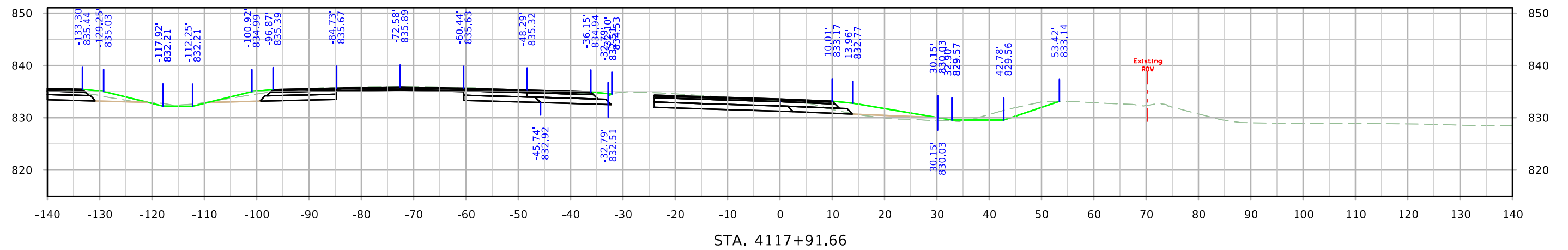
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RPDWRT

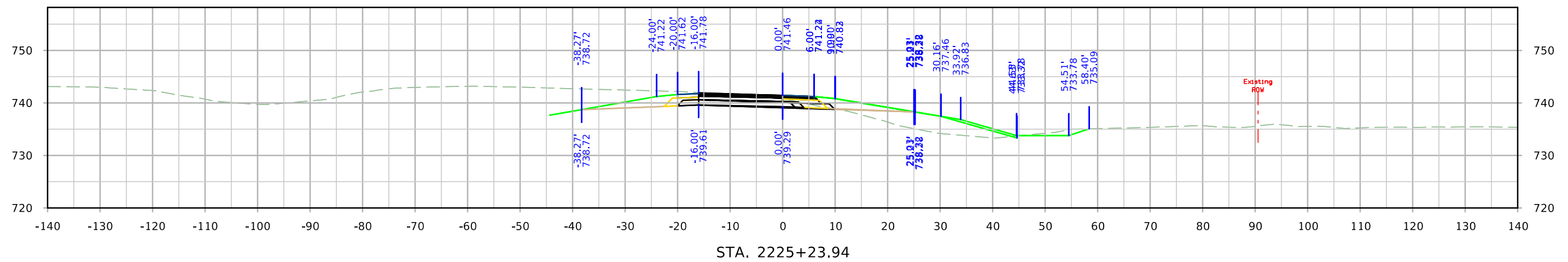
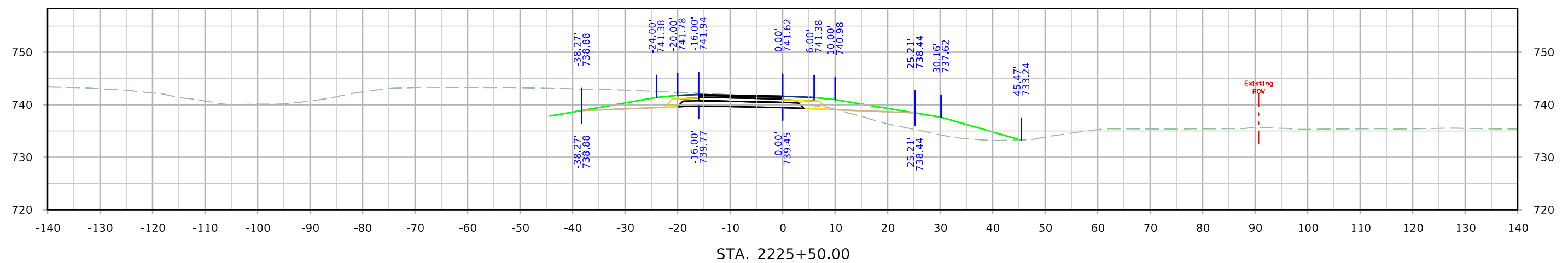
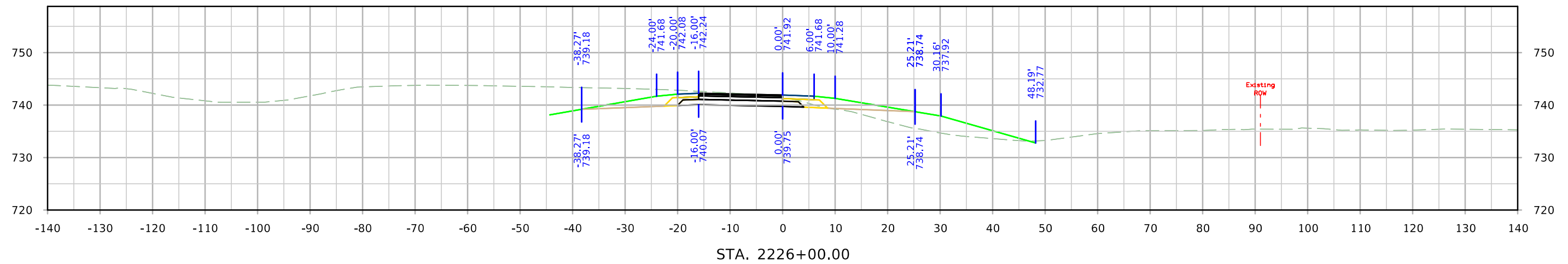


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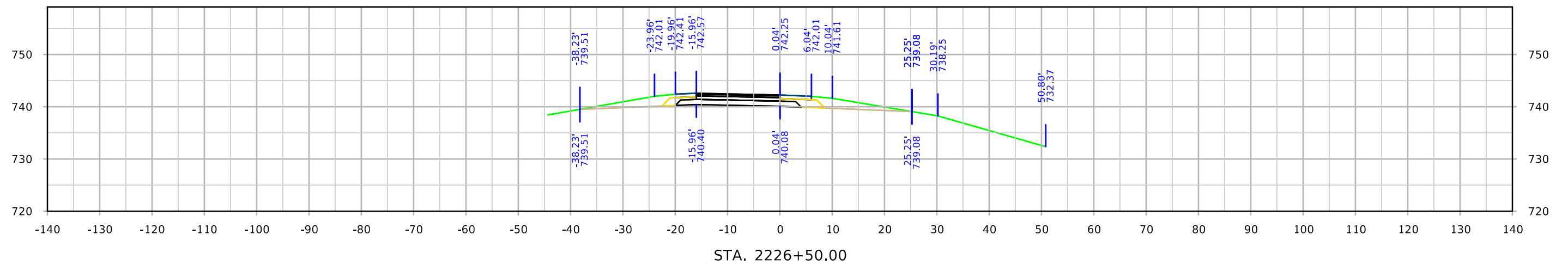
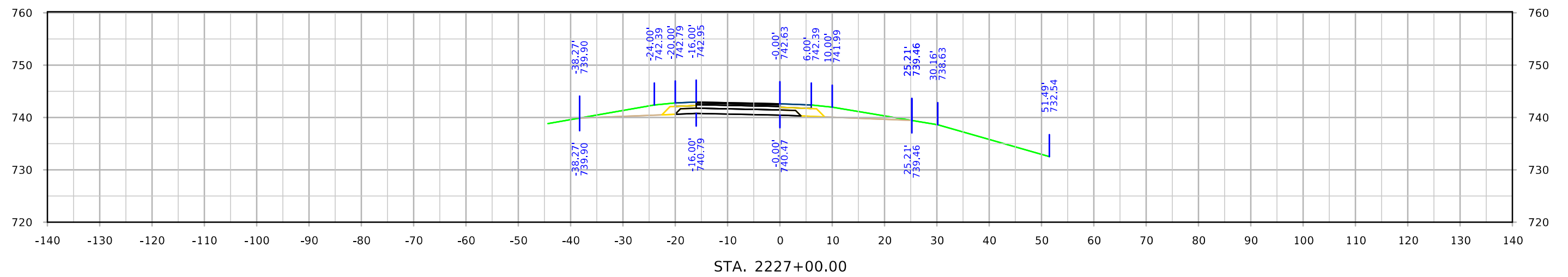
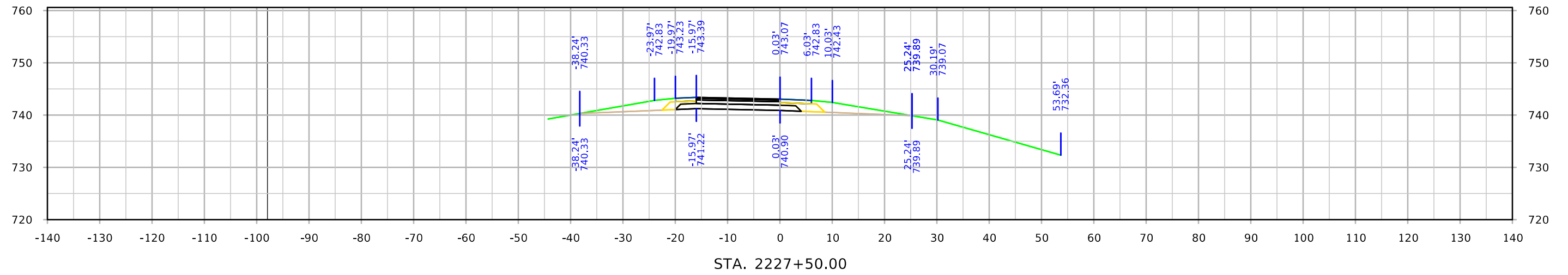


STA. 4117+91.66

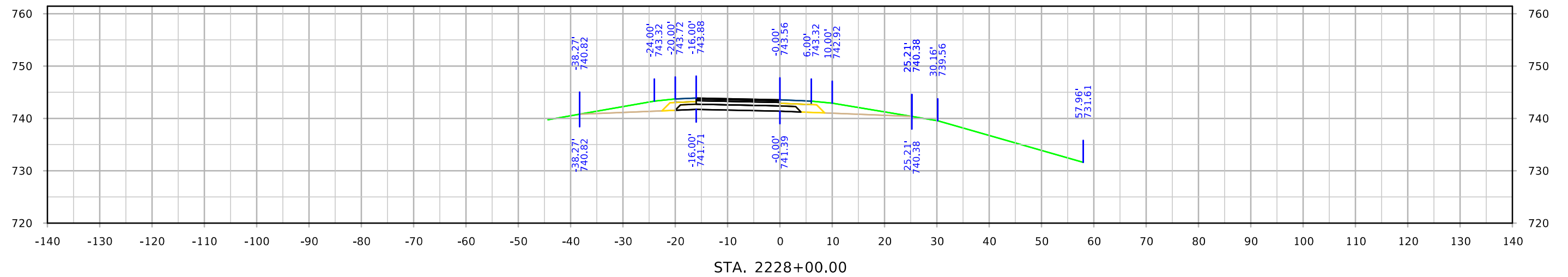
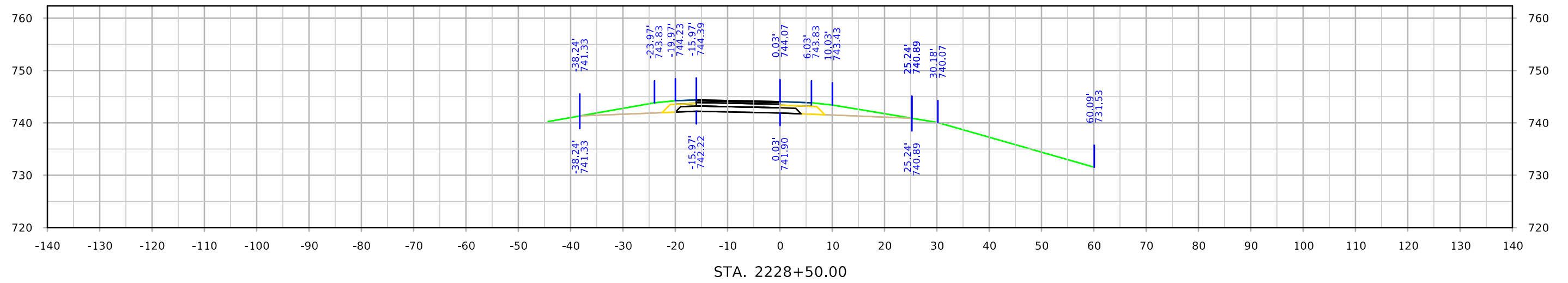
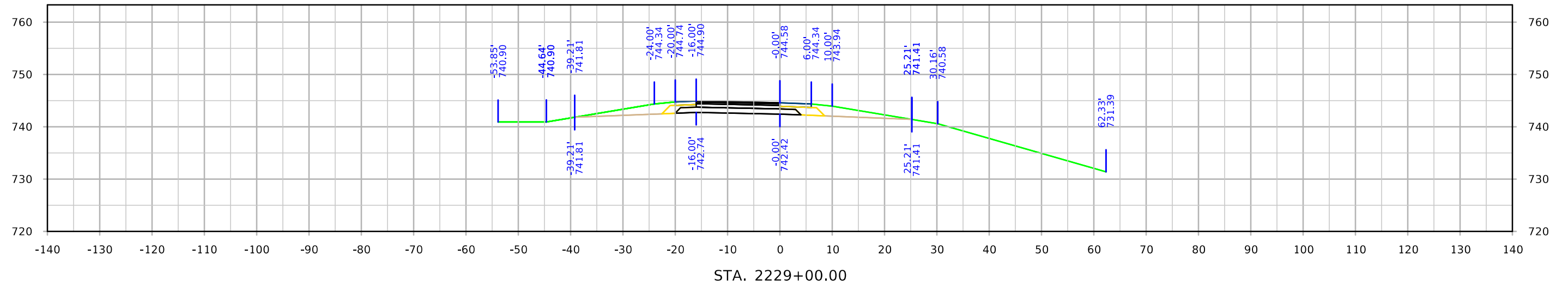
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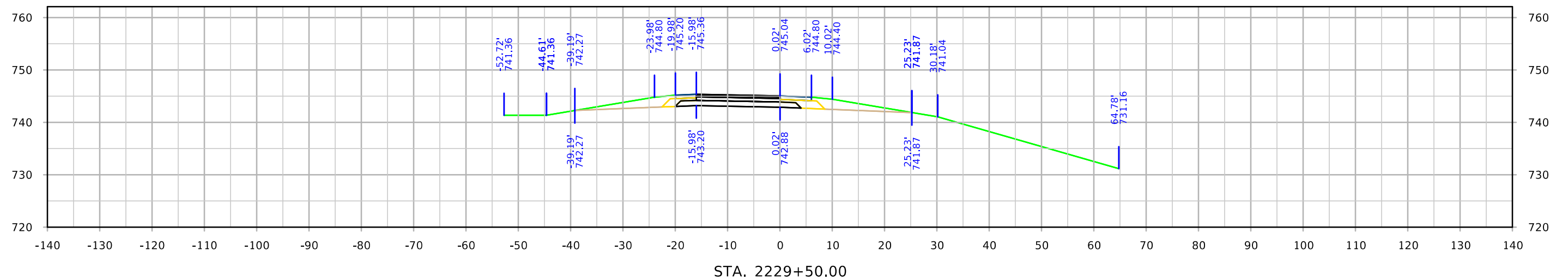
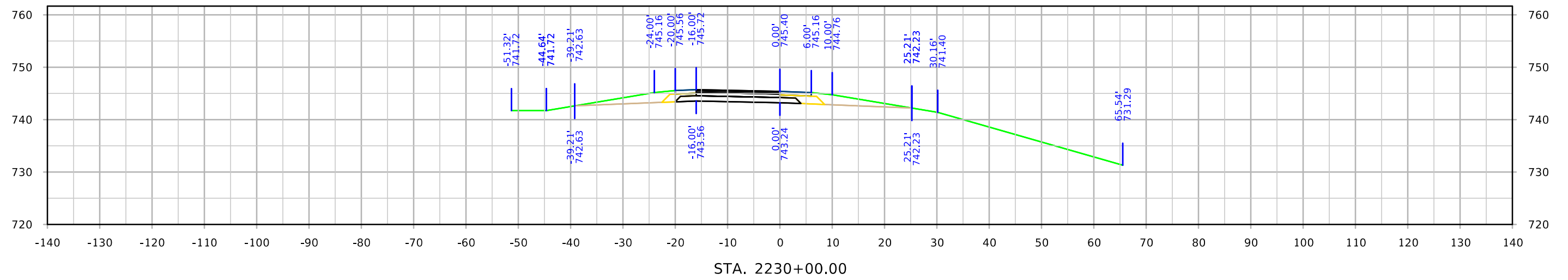
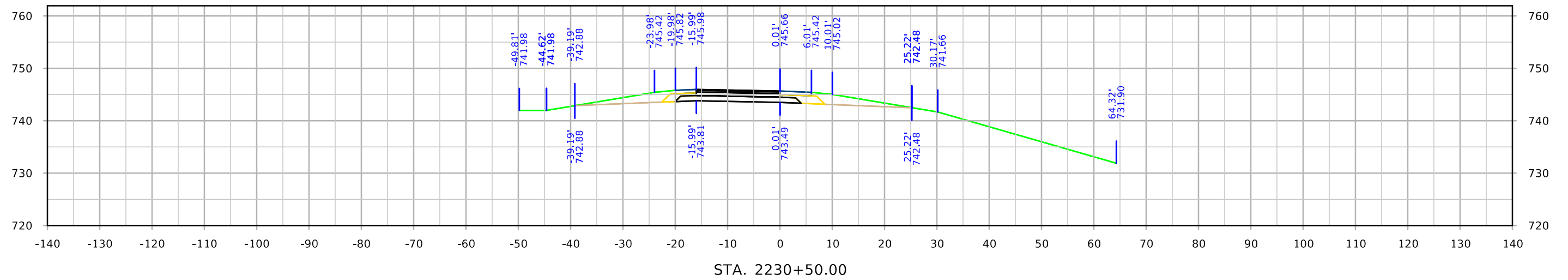
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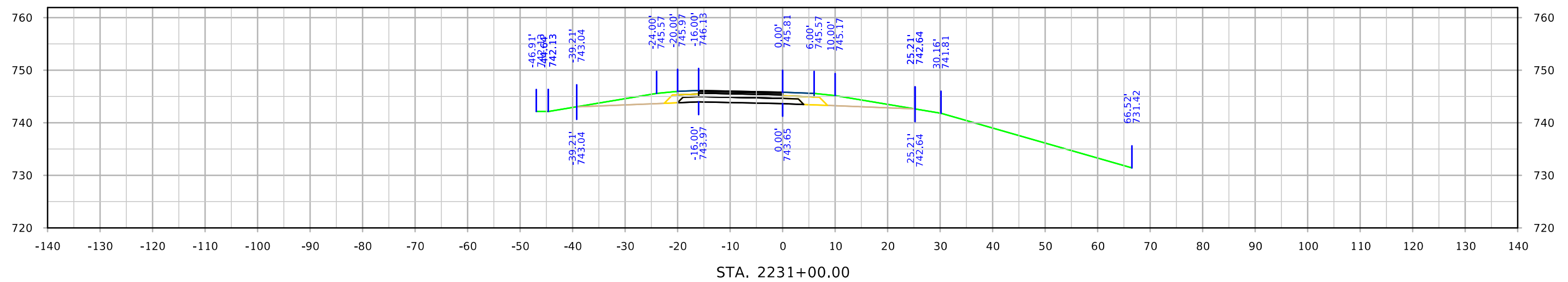
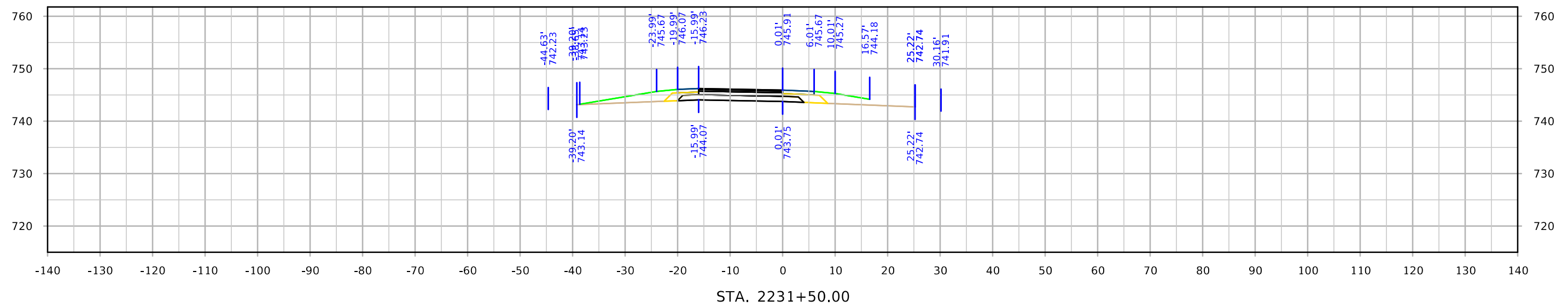
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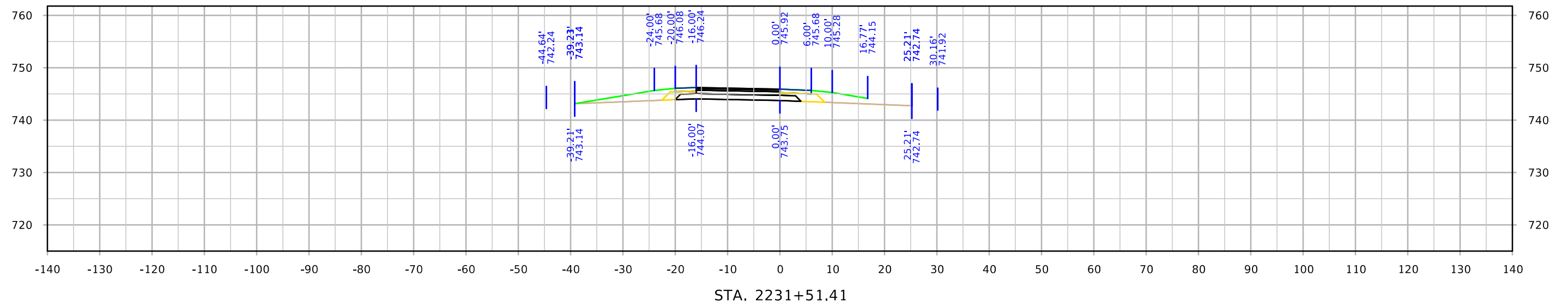
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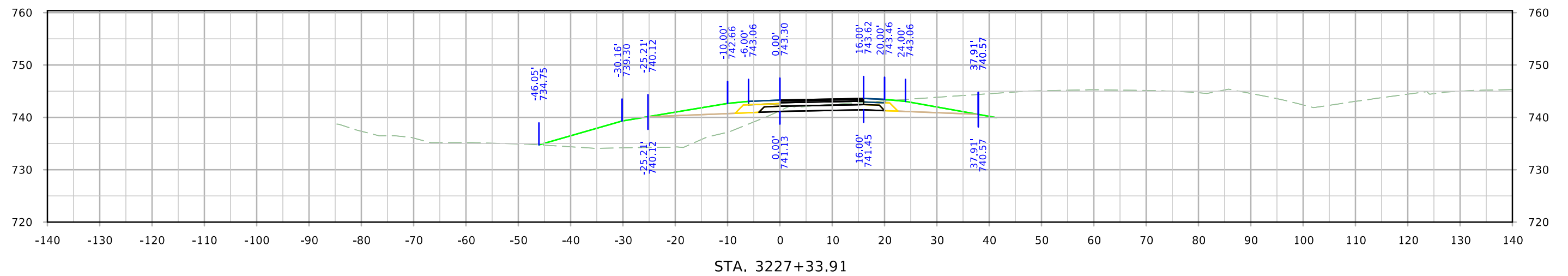
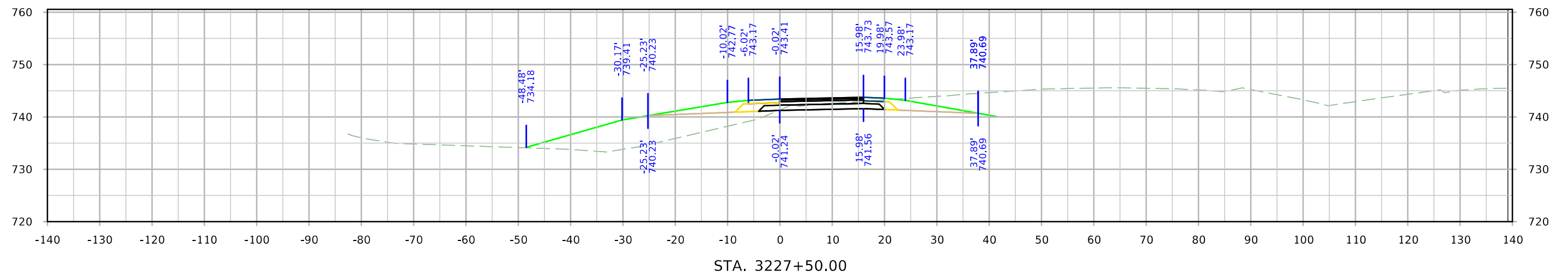
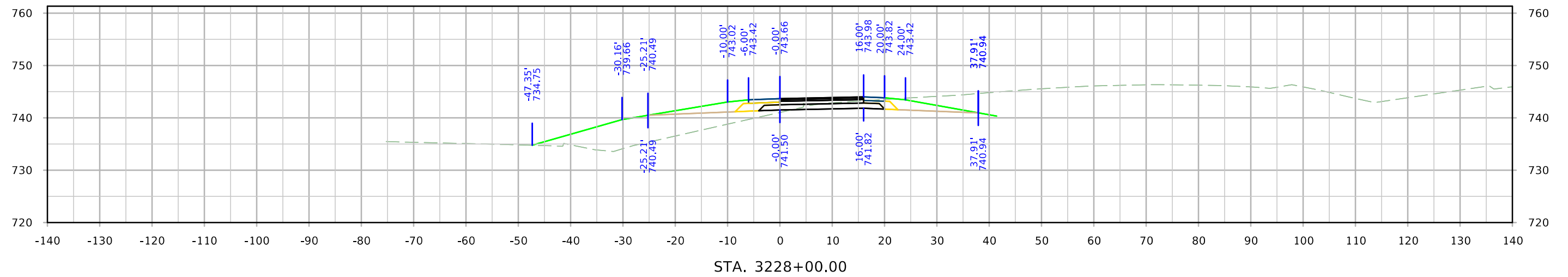
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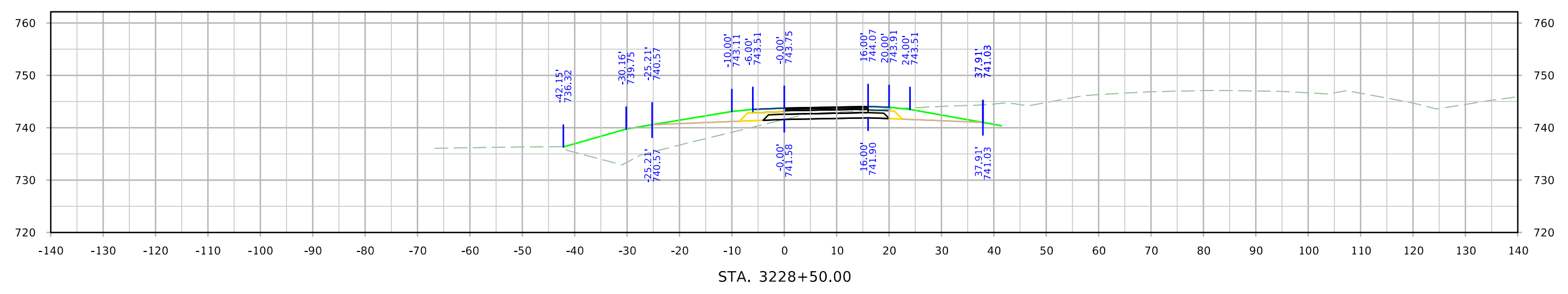
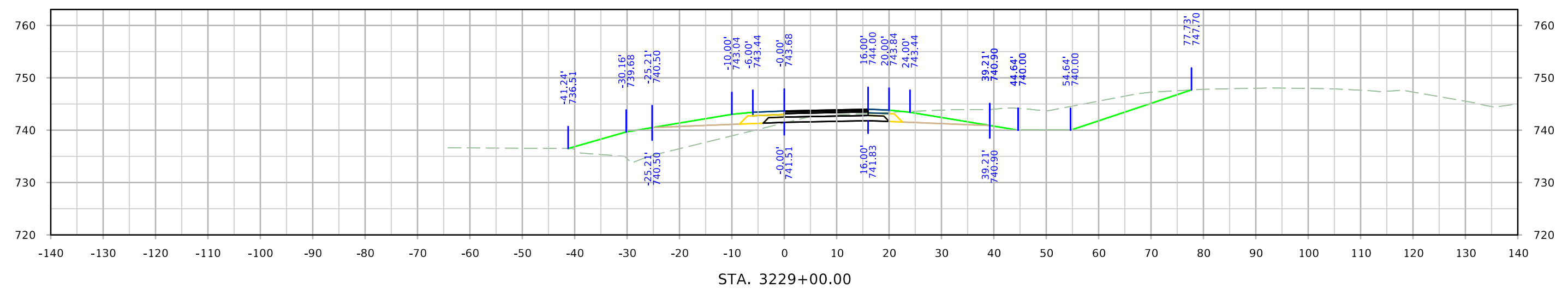
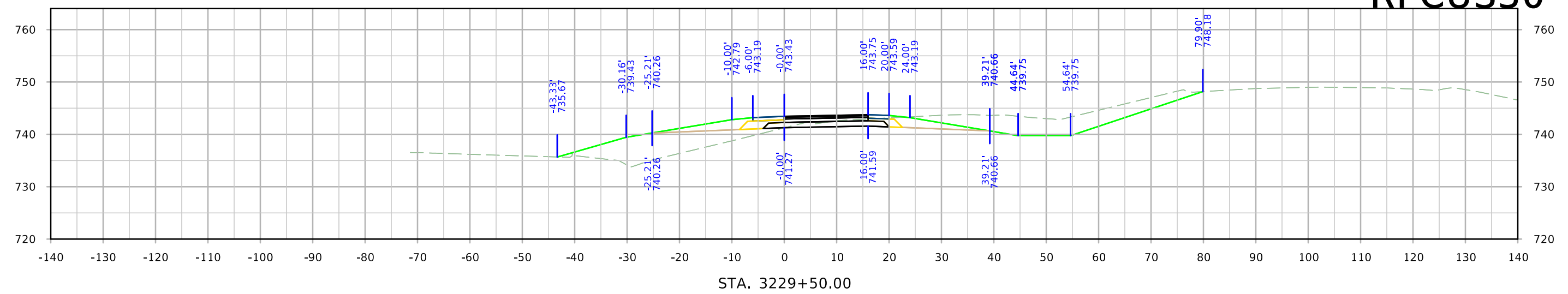
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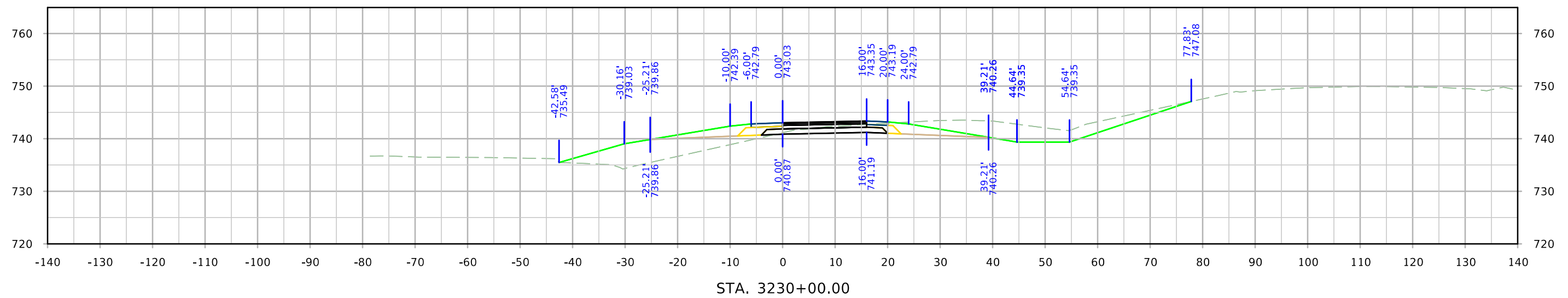
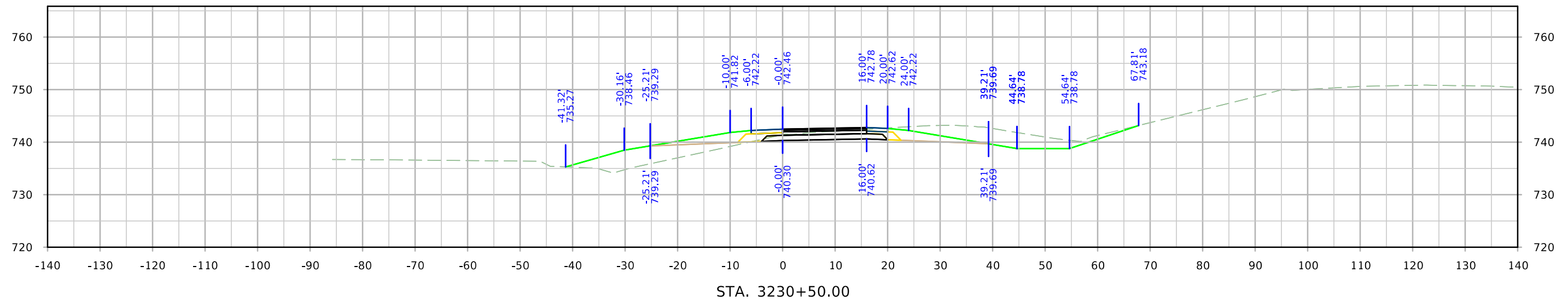
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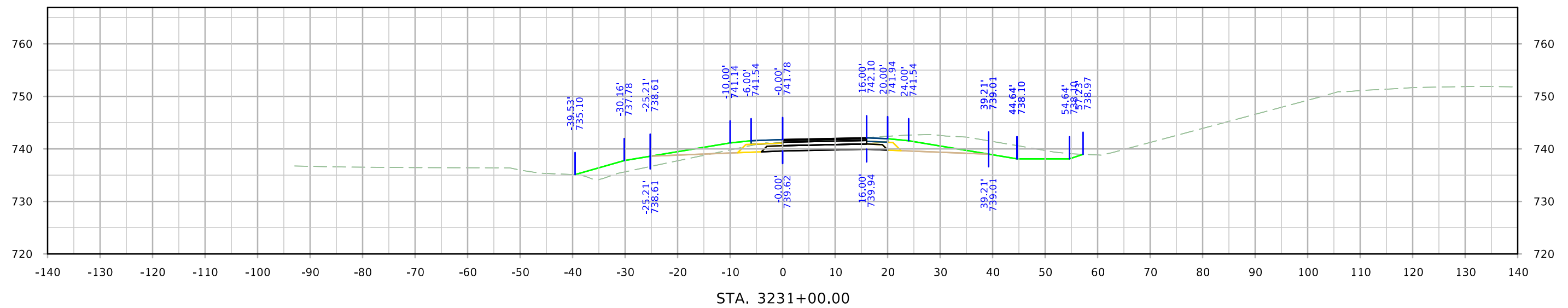
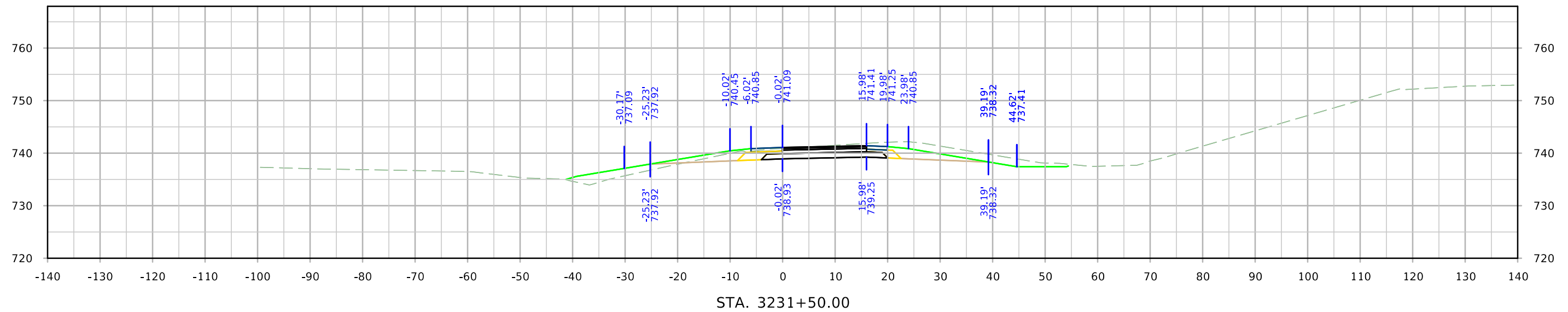
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RPCUS30



RPCUS30



RPCUS30

