

No.	DESCRIPTION
<b>A Sheets</b>	<b>Title Sheets</b>
* A.1	Title Sheet
A.2	Location Map Sheet
<b>B Sheets</b>	<b>Typical Cross Sections and Details</b>
B.1 - 6	Typical Cross Sections and Details
<b>C Sheets</b>	<b>Quantities and General Information</b>
C.1	Standard Road Plans
<b>D Sheets</b>	<b>Mainline Plan and Profile Sheets</b>
* D.1	Plan & Profile Legend & Symbol Information Sheet
* D.2 - 11	US 30
<b>G Sheets</b>	<b>Survey Sheets</b>
* G.1 - 4	Reference Ties and Bench Marks
G.5	Horizontal Control Tab. & Super for all Alignments
<b>J Sheets</b>	<b>Traffic Control and Staging Sheets</b>
J.1	Traffic Control Plan
J.1	Staging Notes
* J.2	Traffic Control & Staging Legend & Symbol Info. Sheet
* J.3 - 7	Staging and Traffic Control Sheets
<b>L Sheets</b>	<b>Geometric, Staking and Jointing Sheets</b>
L.1	Geometric & Staking "142nd Ave"
<b>R Sheets</b>	<b>Erosion Control Sheets</b>
RC.1 - 4	Est. Quantities, PPP, General Notes and Tabulations
* RR.1	Erosion Control Legend and Symbol Information Sheet
* RR.2 - 11	Drainage Basin and Erosion Control Device Maps
<b>V Sheets</b>	<b>Bridge and Culvert Situation Plans</b>
* V.1 - 3	Bridge Plans, US 30 Over UPRR
* V.4 - 5	Retaining Wall Plans
* V.6 - 7	Bridge Plans, US 30 Over Overflow Ditch
* VW.1	US 30 Pipe Culvert Cross Sections
<b>W Sheets</b>	<b>Mainline Cross Sections</b>
* W.1	Cross Sections Legend & Symbol Information Sheet
* W.2 - 57	Mainline Cross Sections
	* Color Plan Sheets



PLANS OF PROPOSED IMPROVEMENT ON THE

# PRIMARY ROAD SYSTEM CLINTON COUNTY

## Roadway Realignment and Bridge Replacements UP RR 0.6 mi E of Co Rd Y4E

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

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



REVISIONS

TOTAL

113

PROJECT IDENTIFICATION NUMBER

19-23-030-020

PROJECT NUMBER

BRF-030-9(189)--38-23

R.O.W. PROJECT NUMBER

NHSN-030-9(190)--2R-23

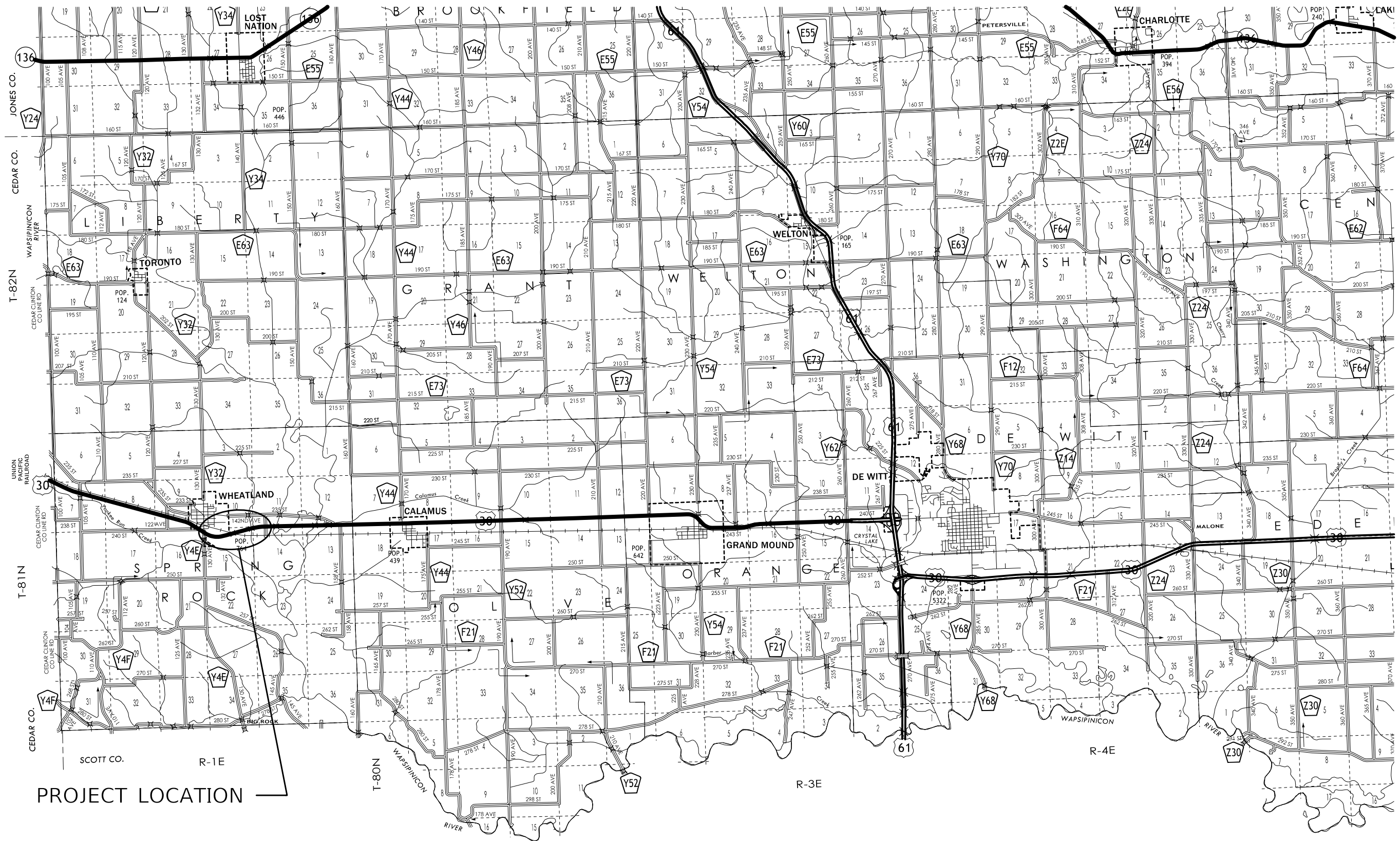
DESIGN DATA RURAL	
2020 AADT	3,100 V.P.D.
2044 AADT	3,800 V.P.D.
20 -- DHV	-- V.P.H.
TRUCKS	20 %
Total Design ESALs	3,200,000

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

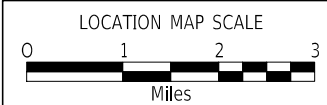
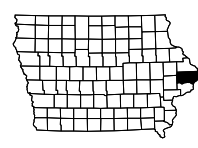
# PRELIMINARY PLANS

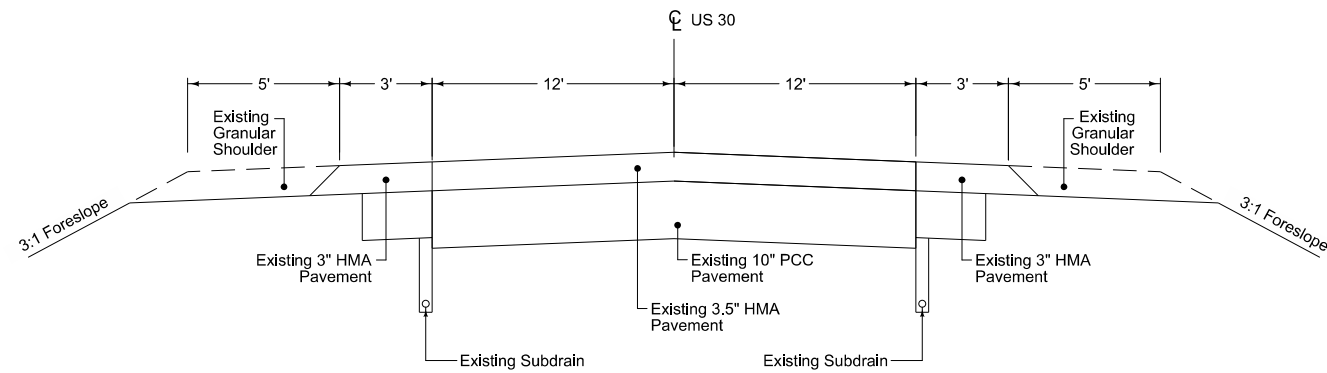
Subject to change by final design.

## D05 - Date: 9-6-2024



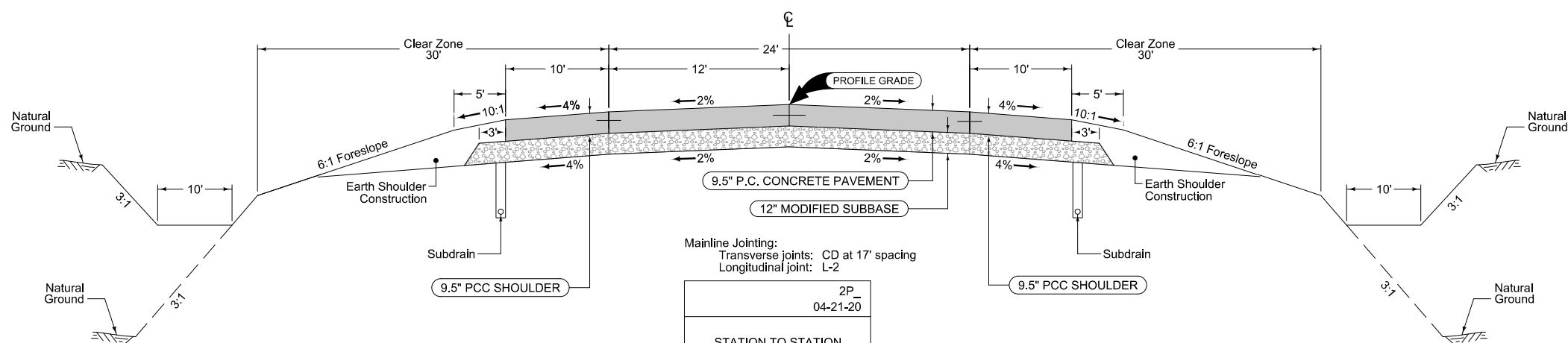
PROJECT LOCATION





EXISTING US 30

US 30



**Full Depth PCC Shoulder**

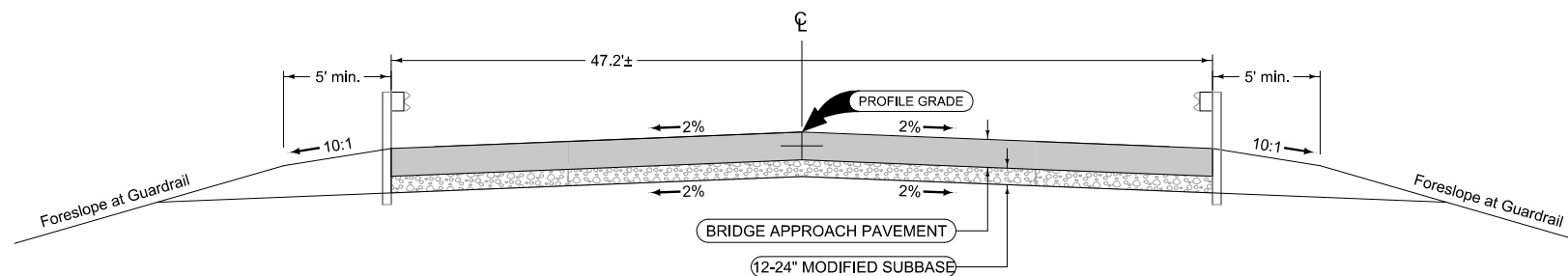
Shoulder Jointing:  
 Longitudinal joint: BT-2, L-2 or KT-2  
 Transverse joints: C at 17' spacing

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

STATION TO STATION	
234+15.00	237+00.19
250+83.53	269+09.02
272+48.02	287+50.00
*287+50.00	*290+00.00

\*Shoulder Construction Only

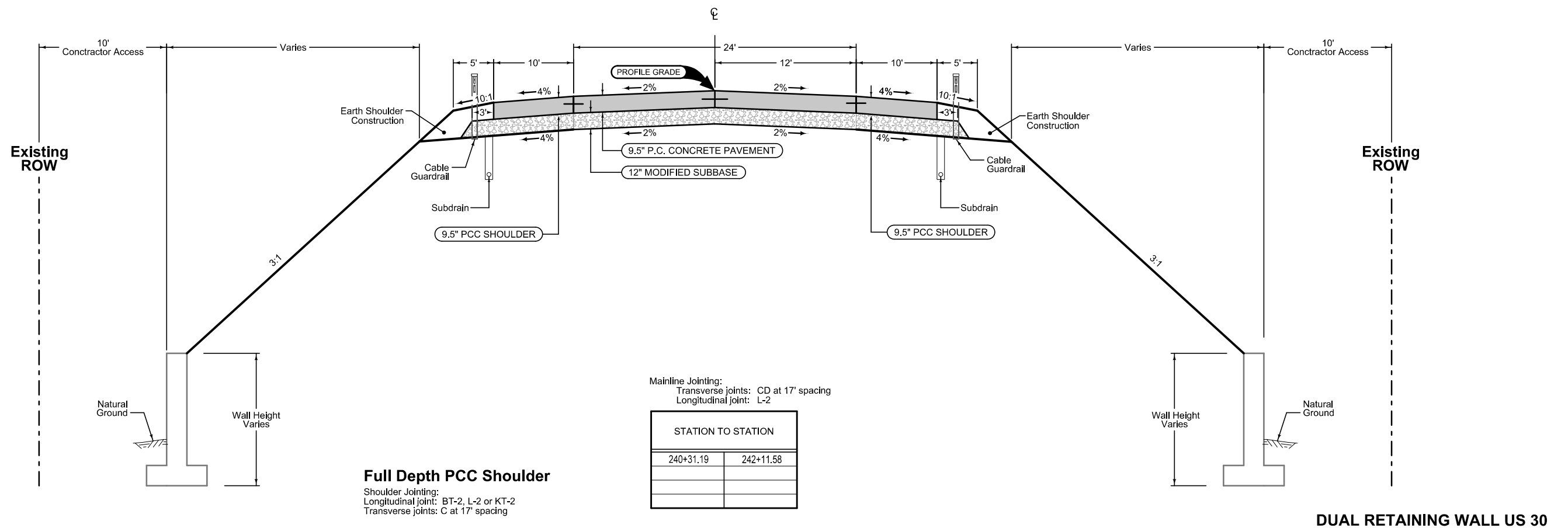
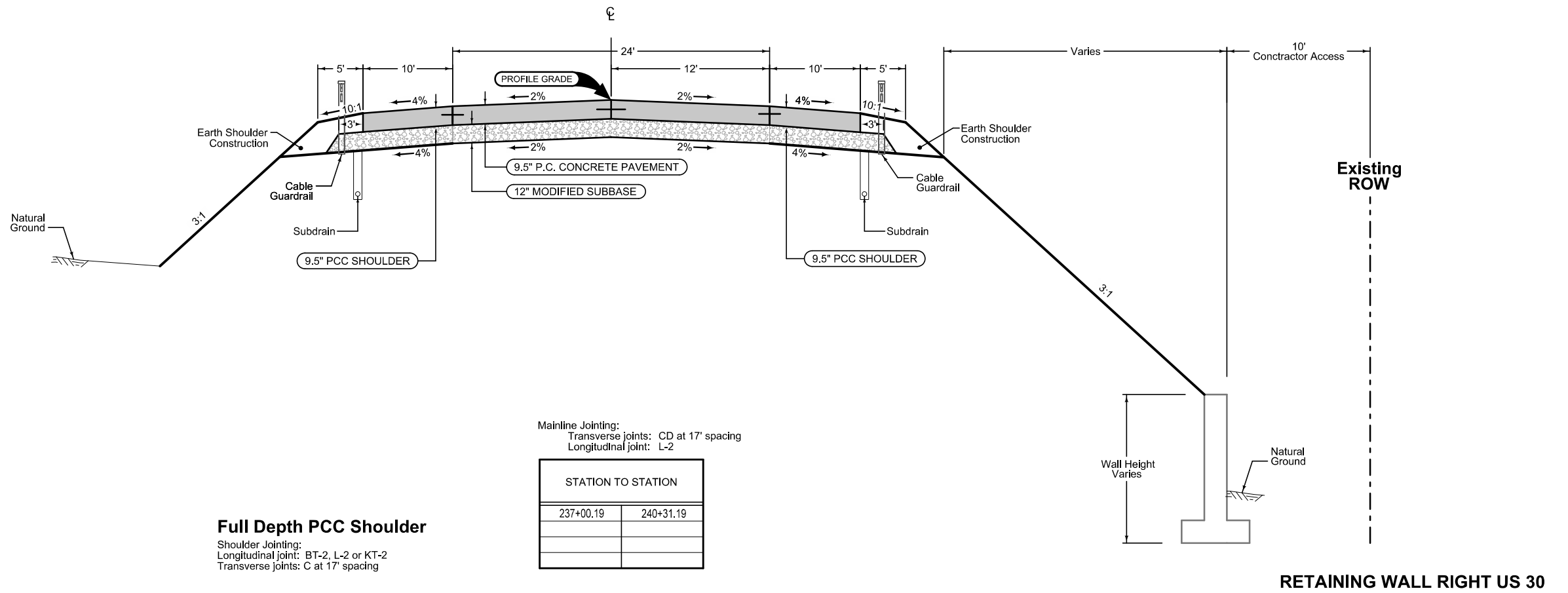
PROPOSED US 30

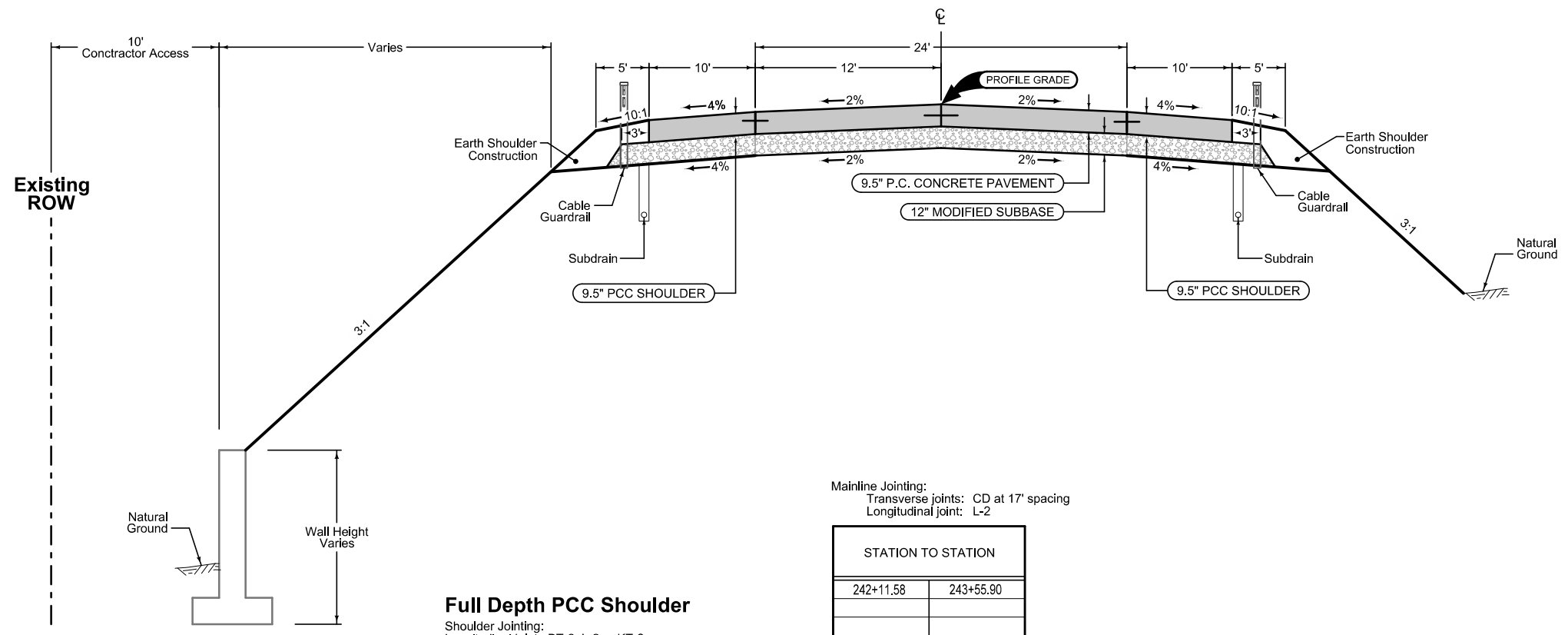


STATION TO STATION	
243+55.90	244+43.23
249+96.77	250+83.53
269+09.02	269+79.02
271+78.02	272+48.02

Refer to Bridge Approach  
 Standard Road Plans for  
 Jointing Information.

BRIDGE APPROACH US 30





**Full Depth PCC Shoulder**

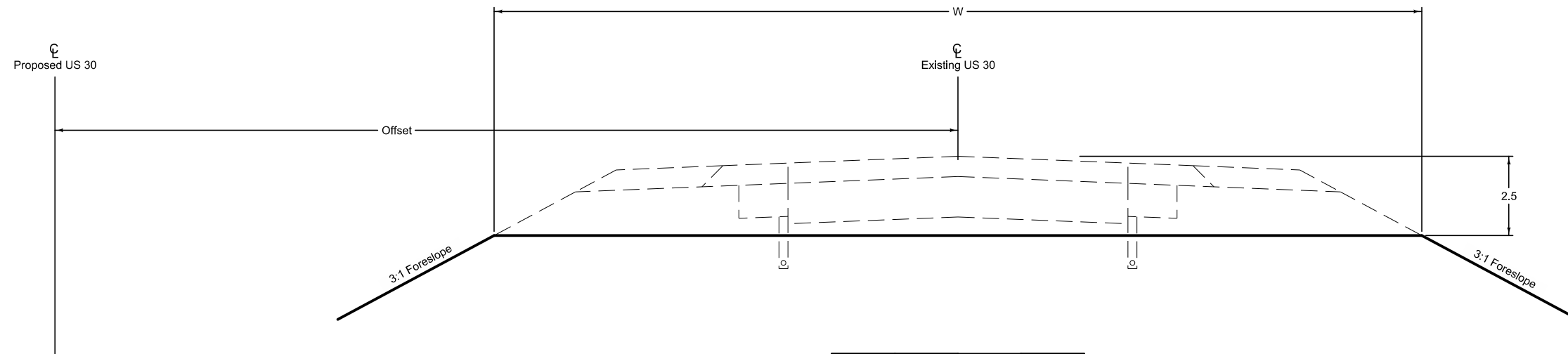
Shoulder Jointing:  
 Longitudinal joint: BT-2, L-2 or KT-2  
 Transverse joints: C at 17' spacing

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

STATION TO STATION	
242+11.58	243+55.90

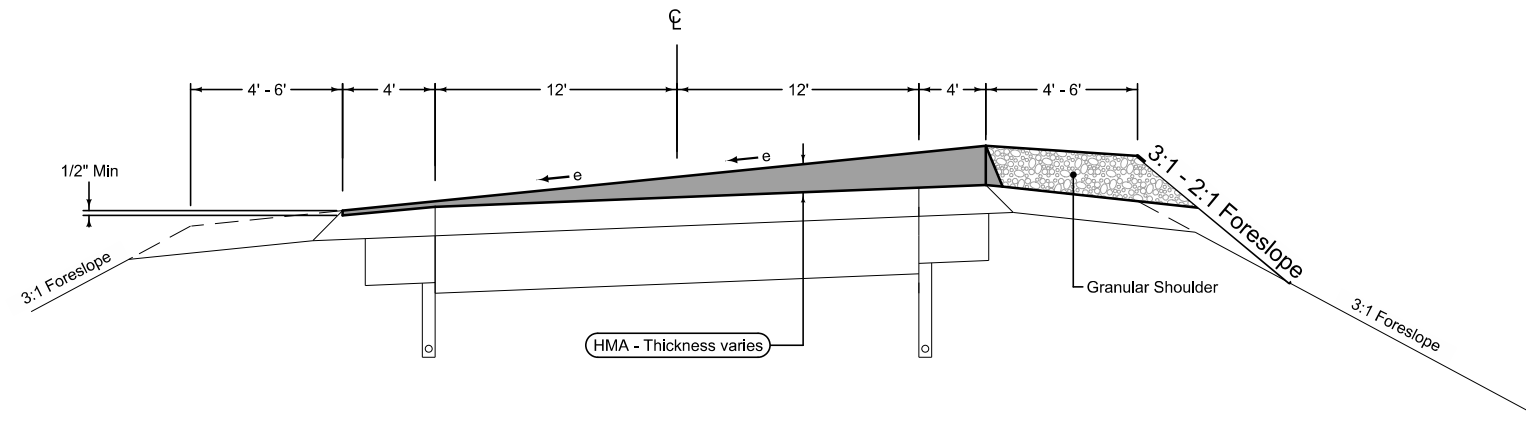
**RETAINING WALL LEFT US 30**

Review Obliteration Limits  
 During Final Design



Station	Offset (Feet)	L/R	W (Feet)
241+00.00	22.0	R	0
244+65.00	44.0	R	54
246+21.00	76.0	R	54
250+57.00	207.0	R	54
276+93.00	72.0	R	54
281+55.00	48.0	R	0

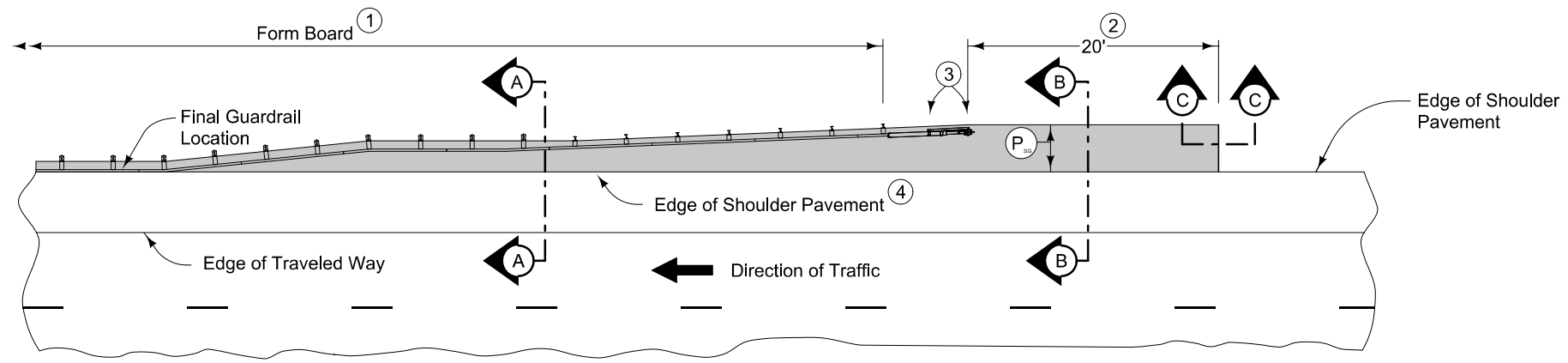
**Obliteration of Existing Roadbed**



Superelevation Key Stations for Overlay		
DESCRIPTION	e	STATION
Existing/start of super correction	3.00%	219+00.00
Super transition/correction	5.20%	220+00.00
End of overlay area	5.20%	234+15.00

STATION TO STATION	
219+00.00	234+15.00

Overlay - Superelevation Correction



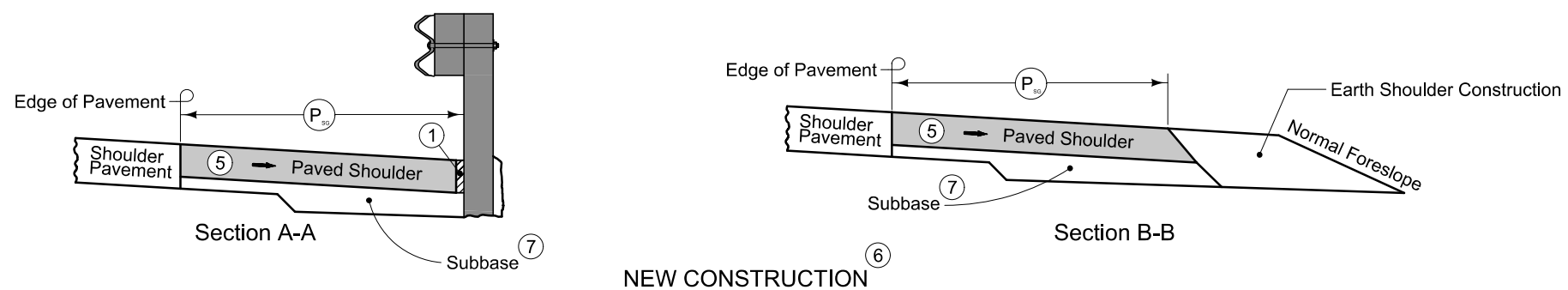
PLAN VIEW

9.5" PCC Paved Shoulder at guardrail. Utilize the following jointing layout:

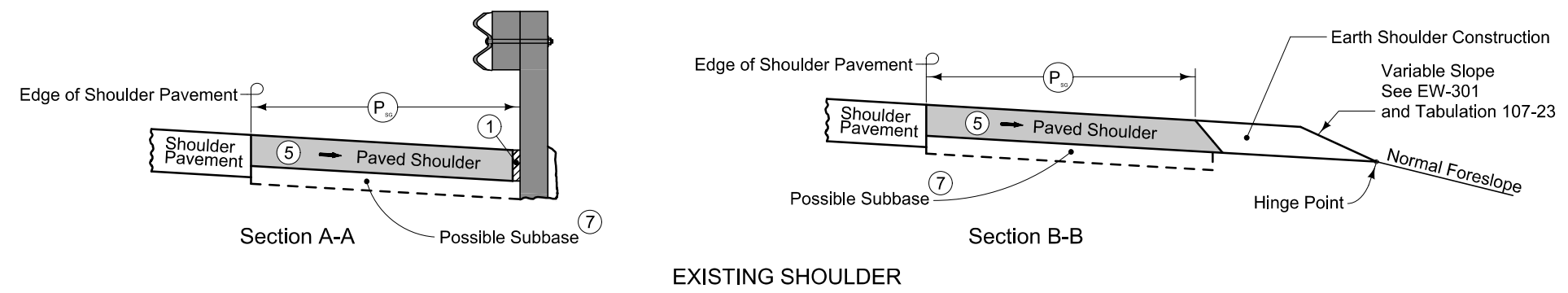
Match mainline pavement joint spacing. When mainline pavement is 8" or greater in thickness, place additional transverse 'C' joints in shoulder at mid-panel of the mainline pavement. Place longitudinal 'C' joint at P/2 from edge of mainline pavement when P is greater than 10' wide. Terminate longitudinal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

Refer to Tabulation 112-9 for shoulder quantities.

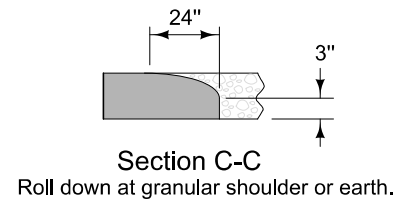
- ① PCC option only: When guardrail posts are installed prior to construction of PCC paved shoulder, fasten form board to the face of guardrail posts for the length shown.
- ② Continue paved shoulder 20 feet beyond the center of the first post.
- ③ Shoulder may be notched for first 2 posts or post sleeves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



NEW CONSTRUCTION

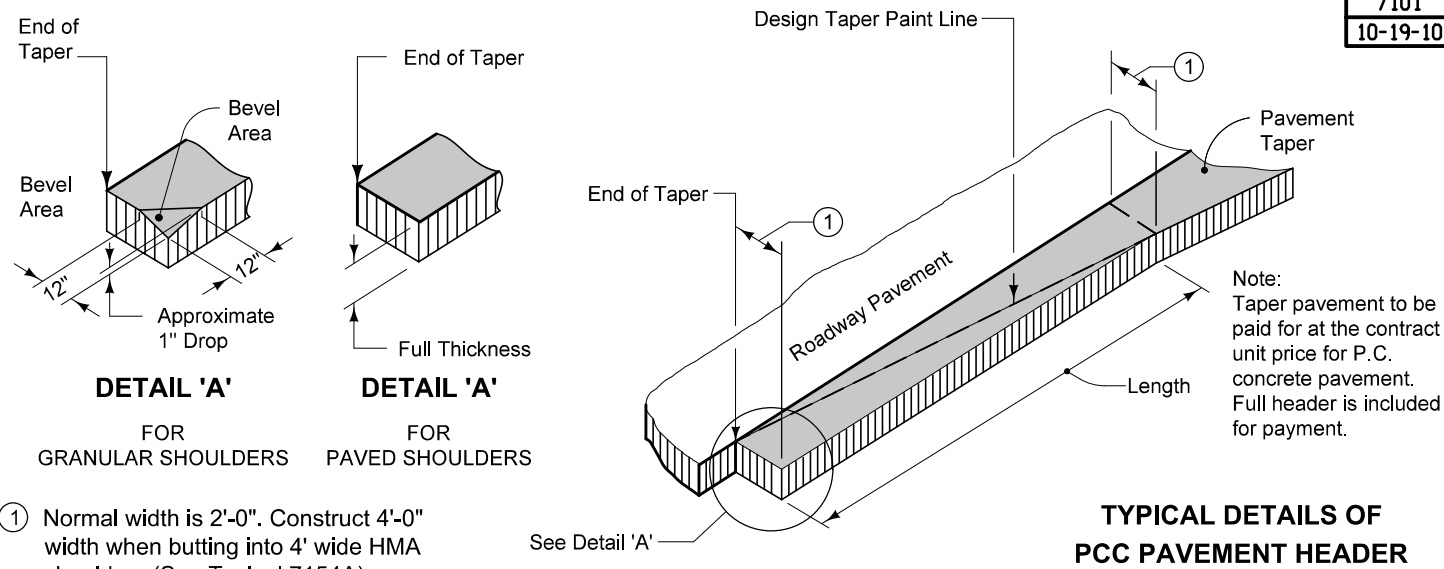


EXISTING SHOULDER



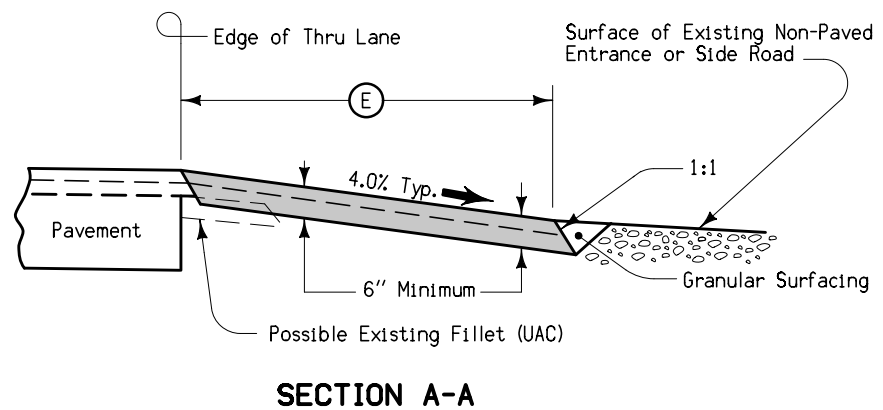
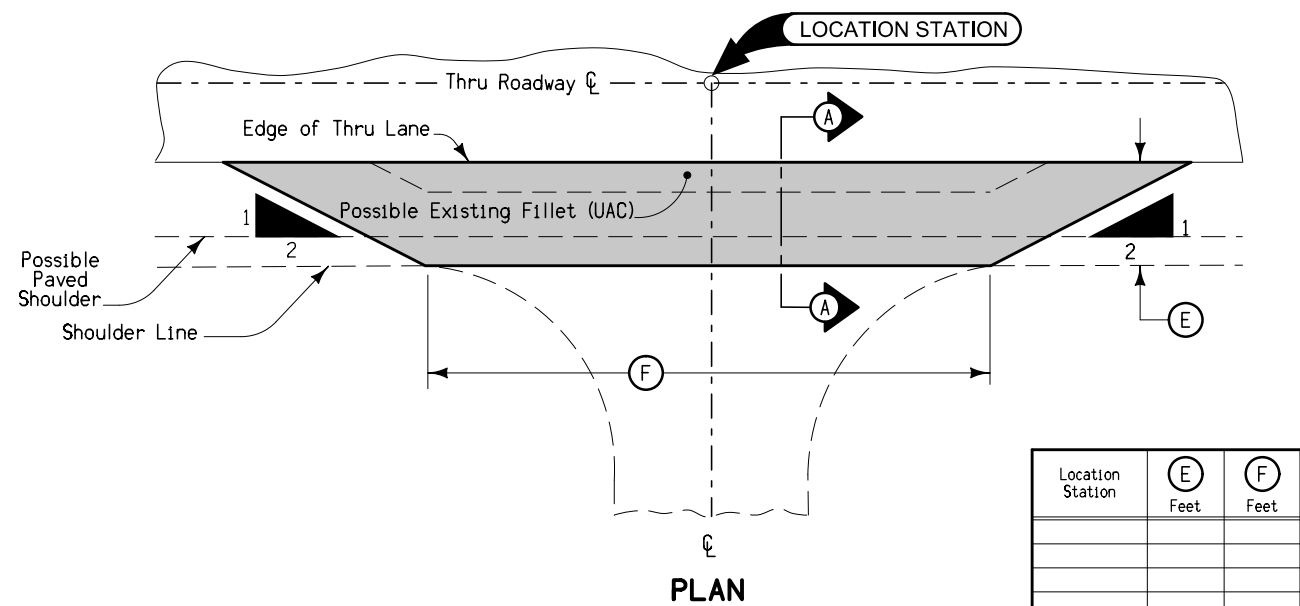
PAVED SHOULDER AT GUARDRAIL  
(ADJACENT TO FULL WIDTH PAVED SHOULDER)

7101  
10-19-10



① Normal width is 2'-0". Construct 4'-0" width when butting into 4' wide HMA shoulders (See Typical 7154A).

7148  
10-21-14



Special shaping of existing surface prior to placement of fillet may be required by the Engineer and is incidental to other work on the project.  
Quantities included with mainline quantities.

**FILLET FOR NON-PAVED ENTRANCES OR SIDE ROADS**



## STANDARDS

The following Standards apply to construction work on this project.

Number	Date	Title
BA-200	04-20-21	Steel Beam Guardrail Components
BA-201	10-18-22	Steel Beam Guardrail Barrier Transition Section (MASH TL-3)
BA-202	10-15-24	Steel Beam Guardrail Bolted End Anchor
BA-205	10-17-23	Steel Beam Guardrail Tangent End Terminal (MASH TL-3)
BA-206	10-19-21	Steel Beam Guardrail Flared End Terminal For Cable Connection
BA-250	04-20-21	Steel Beam Guardrail Installation at Concrete Barrier or Bridge End Post (MASH TL-3)
BA-351	10-19-21	High Tension Cable Guardrail
BA-401	04-20-21	Temporary Barrier Rail (Precast Concrete)
BA-500	04-20-21	Temporary Crash Cushions Sand Barrel
BR-203	10-15-24	Double Reinforced 12 inch Approach
BR-213	10-19-21	Bridge Approach (Abutting Pavement)
DR-201	10-17-23	Concrete Aprons
DR-306	10-17-23	Precast Concrete Headwall for Subdrain Outlets
DR-402	04-16-24	Rock Flume for Bridge End Drain
DR-601	04-18-17	Reinforced Concrete Pipe Culvert
EC-201	04-20-21	Silt Fence
EC-301	10-18-22	Rock Erosion Control (REC)
EC-303	10-19-21	Stabilized Construction Entrance
EC-502	04-21-15	Seeding in Rural Areas
EC-601	10-16-18	Temporary Sediment Control Basin
EW-101	10-17-17	Embankment and Rebuilding Embankments
EW-102	10-20-15	Allowable Placement of Unsuitable Soil in Embankments
EW-202	04-19-16	Bridge Berm Grading without Recoverable Slope (Non-Barnroof Section)
EW-301	04-16-24	Guardrail Grading
EW-403	04-18-17	Temporary Erosion Control Measures
EW-501	10-17-23	Rural Entrance
EW-503	10-20-15	Side Road Grading
PM-110	10-15-24	Line Types
PV-12	04-16-24	Milled Shoulder Rumble Strips
PV-13	04-16-24	Milled Centerline Rumble Strips
PV-101	04-19-22	Joints
PV-102	04-21-20	PCC Curb Details
PV-301	04-21-20	Superelevation Details Two Lane Roadway
SI-173	04-19-16	Object Markers
SI-211	10-18-22	Object Marker and Delineator Placement with Guardrail
SI-881	04-16-19	Special Signs for Workzones
TC-1	10-15-19	Work Not Affecting Traffic (Two-Lane or Multi-Lane)
TC-202	04-18-23	Work Within 15 ft of Traveled Way
TC-213	04-18-23	Lane Closure with Flaggers
TC-217	04-18-23	Lane Closure with Signals and TBR
TC-252	04-21-20	Routes Closed to Traffic

## SURVEY SYMBOLS

<p>⊕ AST, Above Ground Storage Tank</p> <p>BB, Billboard</p> <p>BBB, Bottom of Bridge Beam</p> <p>BCL, Bridge Centerline</p> <p>BD, Bridge Deck</p> <p>BIN, Grain Bin</p> <p>BL, Topo Breakline</p> <p>BLD, Building or Foundation</p> <p>BLS, Bridge Low Steel</p> <p>BM, Bench Mark</p> <p>BNK, Stream Bank</p> <p>BRG, Bridge</p> <p>C, Centerline BL of Road -ML or SR</p> <p>CAV, Cave</p> <p>CEL, Cell Phone Tower</p> <p>CIS, Cistern</p> <p>CON, Concrete or A/C Slab</p> <p>CP, Control Point</p> <p>CRP, Corporation Line</p> <p>CS, Curve Point</p> <p>CI, Back of Curb</p> <p>CUL, Culvert</p> <p>D, Centerline Draw or Stream -Down</p> <p>DAB, Drainage Area Boundary</p> <p>DIK, Centerline of Dike or Dam</p> <p>DTM, Photogrammetry Elv Control Check</p> <p>DU, Centerline Draw or Stream -Up</p> <p>EB, Electrical Box</p> <p>EG, Edge of Gravel Road</p> <p>ENP, Edge Paved Entrance and Park Lot</p> <p>ENT, Centerline BL of Entrance</p> <p>ENU, Edge Unpaved Entrance and Parking</p> <p>EP, Edge of Paved Roads -ML or SR</p> <p>EW, Edge of Water</p> <p>FCL, Chain Link and Security Fence</p> <p>FENO, FENO Monument</p> <p>FHD, Fire Hydrants</p> <p>FLG, Flag Poles</p> <p>FP, Filler Pipe</p> <p>FW, Wire Fence</p> <p>FWD, Wood Fence</p> <p>GDC, Guard Rail Cable</p> <p>GDL, Guard Rail Steel</p> <p>GP, Guard Post -Less Than 4 Posts</p> <p>GPR, Guard Post -4 or More Posts</p> <p>GR, Ground Shot</p> <p>GRV, Grave</p> <p>GU, Gutter In Front of Curb</p> <p>GV, Gas Valve</p> <p>HDG, Hedge Row</p> <p>HS, Hydric Soil -Wetlands</p> <p>HT, Electrical Highline Tower</p> <p>IN, Storm Sewer Intake</p> <p>INB, Storm Sewer Beehive Intake</p> <p>LC, Lot Corner</p> <p>LIN, Miscellaneous Line</p> <p>LP, L.P. Tank</p> <p>LUM, Luminaire</p> <p>MH, Utility Access -Manhole</p> <p>MIS, Miscellaneous</p> <p>MM, Mile Marker Post</p> <p>OUT, Tile Outlet</p> <p>PC, Curve Point</p> <p>PCP, Photo Control Point</p> <p>PCT, Photo Control Target</p> <p>PI, Tangent Point</p> <p>PIP, Pipe Culvert</p> <p>PL, Location of Photo -Wetlands</p> <p>PLG, Location of General Photo</p> <p>POC, Curve Point</p> <p>POST, Spiral Point</p>	<p>PR, Electric Riser Pole</p> <p>PRO, Profile Shot</p> <p>PT, Curve Point</p> <p>REF, Reference Tie Point</p> <p>RET, Retaining Walls</p> <p>RIP, Rip-Rap</p> <p>ROC, Rock Outcropping</p> <p>ROW, Right of Way Mark</p> <p>RR, Centerline of Railroad Tracks</p> <p>RRB, Railroad Signal Box</p> <p>RRF, Railroad Frog</p> <p>RRR, Railroad Rail</p> <p>RRS, Railroad Signal</p> <p>RRW, Railroad Switch</p> <p>RT, Radio Tower</p> <p>S, Soil Sampling Site -Wetlands</p> <p>SBR, Size of Bridge</p> <p>SC, Spiral Point</p> <p>SCR, Section Corner</p> <p>SEP, Septic Tank</p> <p>SF, Silt Fence -Wetlands</p> <p>SG, Staff Gauge -Wetlands</p> <p>SH, Paved Shoulder</p> <p>SHR, Shrub</p> <p>SI, Sign</p> <p>SL, Speed Limit Sign</p> <p>SLN, Section Line</p> <p>SLO, Silo</p> <p>SNK, Sink Hole</p> <p>SNP, Unpaved Shoulder</p> <p>SP, Stream Profile</p> <p>STP, Stump</p> <p>SWK, Sidewalk</p> <p>SWP, Swamp or Marsh</p> <p>TA, Tower Anchor</p> <p>TBO, Telephone Booth</p> <p>TCB, Traffic Signal Box</p> <p>TDC, Tree Deciduous</p> <p>TDL, Traffic Detection Loop</p> <p>TER, Terrace</p> <p>TEV, Evergreen Tree</p> <p>TFR, Tree Fruit</p> <p>TGP, Telegraph Pole</p> <p>TIL, Tile Line</p> <p>TLNL, Tree Line Left</p> <p>TLNR, Tree Line Right</p> <p>TOP, Top of Bridge Pier</p> <p>TPA, Telephone Pole Co. 1</p> <p>TPB, Telephone Pole Co. 2</p> <p>TPC, Telephone Pole Co. 3</p> <p>TR, Telephone Riser Pole</p> <p>TRL, Trail</p> <p>TS, Spiral Point</p> <p>TSB, Telephone Switch Box</p> <p>TSG, Traffic Signal</p> <p>TSL, Traffic Signal and Luminare</p> <p>TV, Satellite TV Dish</p> <p>TVP, TV Pedestal</p> <p>TW, Top of Water</p> <p>UB, Utility Box</p> <p>UE, Utility Elevation</p> <p>UPH, Utility Pot Hole - Quality A</p> <p>UST, Underground Tank</p> <p>UV, Underground Utility Vault</p> <p>VS, Channel Cross Section</p> <p>WC, Wild Card -Misc. Field Shot</p> <p>WEL, Well</p> <p>WHD, Water Hydrant</p> <p>WHU, RV Water Hook Up</p> <p>WM, Wind Mill</p> <p>WND, Wind Turbine</p> <p>WV, Water Valve</p>
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## UTILITY LEGEND

<p>--- E1 --- Eastern Iowa Light &amp; Power Chad Ruden chad.ruden@easterniowa.com</p> <p>--- F02 --- Sprint Mark Klinkenberg mark.klinkenberg2@t-mobile.com</p> <p>--- F0 --- F&amp;B Communications Aaron Horman aaron@fbc-tele.com</p> <p>--- G --- Alliant Energy Mary Montgomery marymontgomery@alliantenergy.com</p> <p>--- 14 --- City of Wheatland Matt Cavey cityguys@fbcom.net</p> <p>--- W --- City of Wheatland Matt Cavey cityguys@fbcom.net</p> <p>--- Electric Transmission Chad Levi clevi@itctransco.com</p>
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## PLAN VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK		Design Color No.	
Green	(2)	<span style="display: inline-block; width: 15px; height: 10px; background-color: green; border: 1px solid black;"></span>	Existing Topographic Features and Labels
Blue	(1)	<span style="display: inline-block; width: 15px; height: 10px; background-color: blue; border: 1px solid black;"></span>	Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Magenta	(5)	<span style="display: inline-block; width: 15px; height: 10px; background-color: magenta; border: 1px solid black;"></span>	Existing Utilities
SHADING		Design Color No.	
Lavender	(9)	<span style="display: inline-block; width: 15px; height: 10px; background-color: lavender; border: 1px solid black;"></span>	Temporary Pavement Shading
Yellow	(4)	<span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; border: 1px solid black;"></span>	Proposed Pavement Shading
Orange	(6)	<span style="display: inline-block; width: 15px; height: 10px; background-color: orange; border: 1px solid black;"></span>	Proposed Granular Shading
Orange	(70)	<span style="display: inline-block; width: 15px; height: 10px; background-color: orange; border: 1px solid black;"></span>	Proposed Shoulder Granular Shading
Yellow	(68)	<span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; border: 1px solid black;"></span>	Proposed Shoulder Paved Full Depth Shading
Yellow	(132)	<span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; border: 1px solid black;"></span>	Proposed Shoulder Paved Partial Depth Shading
Gray, Dark	(112)	<span style="display: inline-block; width: 15px; height: 10px; background-color: gray; border: 1px solid black;"></span>	Proposed Grade and Pave Shading "In conjunction with a paving project"
Brown, Light	(236)	<span style="display: inline-block; width: 15px; height: 10px; background-color: brown; border: 1px solid black;"></span>	Grading Shading
Orange, Light	(134)	<span style="display: inline-block; width: 15px; height: 10px; background-color: orange; border: 1px solid black;"></span>	Proposed Granular Entrance Shading
Yellow	(220)	<span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; border: 1px solid black;"></span>	Proposed Paved Entrance Shading
Tan	(8)	<span style="display: inline-block; width: 15px; height: 10px; background-color: tan; border: 1px solid black;"></span>	Proposed Sidewalk Shading
Blue, Light	(230)	<span style="display: inline-block; width: 15px; height: 10px; background-color: lightblue; border: 1px solid black;"></span>	Proposed Sidewalk Landing Shading
Pink	(11)	<span style="display: inline-block; width: 15px; height: 10px; background-color: pink; border: 1px solid black;"></span>	Proposed Sidewalk Ramp Shading
Green, Light	(225)	<span style="display: inline-block; width: 15px; height: 10px; background-color: lightgreen; border: 1px solid black;"></span>	Existing Pavement Shading
Red	(3)	<span style="display: inline-block; width: 15px; height: 10px; background-color: red; border: 1px solid black;"></span>	Proposed Structure Shading

## PROFILE VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK		Design Color No.	
Green	(2)	<span style="display: inline-block; width: 15px; height: 10px; background-color: green; border: 1px solid black;"></span>	Existing Ground Line Profile
Blue	(1)	<span style="display: inline-block; width: 15px; height: 10px; background-color: blue; border: 1px solid black;"></span>	Proposed Profile and Annotation
Magenta	(5)	<span style="display: inline-block; width: 15px; height: 10px; background-color: magenta; border: 1px solid black;"></span>	Existing Utilities
Blue, Light	(230)	<span style="display: inline-block; width: 15px; height: 10px; background-color: lightblue; border: 1px solid black;"></span>	Proposed Ditch Grades, Left
Black	(0)	<span style="display: inline-block; width: 15px; height: 10px; background-color: black; border: 1px solid black;"></span>	Proposed Ditch Grades, Median
Rust	(14)	<span style="display: inline-block; width: 15px; height: 10px; background-color: brown; border: 1px solid black;"></span>	Proposed Ditch Grades, Right

## SURVEYED UTILITY OWNER SYMBOLS

Sub-Surface Utility Mapping Quality Level is in accordance with CI/ASCE 38-02 Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data.

Remark Abbreviations  
 QLA Quality Level A Highest guideline quality level  
 QLD Quality Level D Lowest guideline quality level

<p>--- E1 --- EL1D, Eastern Iowa Light &amp; Power</p> <p>--- F0 --- FO1D, F&amp;B Communications</p> <p>--- F02 --- FO2D, Sprint</p> <p>--- G --- GL1D, Alliant Energy</p> <p>--- SAN --- SA1D, City of Wheatland</p> <p>--- W --- WL1D, City of Wheatland</p>
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## RIGHT-OF-WAY LEGEND

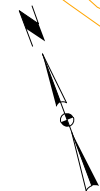
<p>▲ Proposed Right-of-Way</p> <p>△ Existing Right of Way</p> <p>▲△ Existing and Proposed Right-of-Way</p> <p>▲△ Easement and Existing Right-of-Way</p> <p>○ Easement (Temporary)</p> <p>● Easement</p> <p>C/A Access Control</p> <p>⌘ Property Line</p>
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<p>○ Reference Point</p> <p>Station</p> <p>▲ Section Corner</p> <p>--- Ground Line Intercept</p> <p>--- Saw Cut</p> <p>--- Guardrail</p> <p>--- Trench Drain</p> <p>--- HighTension Cable Guardrail</p> <p>--- Sheet Pile</p> <p><span style="display: inline-block; width: 20px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black;"></span> Pavement Removal</p> <p><span style="display: inline-block; width: 20px; height: 10px; background: repeating-linear-gradient(-45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black;"></span> Clearing &amp; Grubbing Area</p> <p><span style="display: inline-block; width: 20px; height: 10px; background: repeating-linear-gradient(-45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black;"></span> Obliterate Roadbed</p>
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# PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

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

SPRING ROCK TWP.  
T-81N R-1E  
SEC. 15



$\Delta = 42^\circ 21' 57.54''$  (LT)  
T = 889.00  
L = 1696.24  
R = 2294.00  
E = 166.24  
e = 5.2%  
L = Varies  
x = Varies

Restricted Area:  
Contractor Shall Stay Within Existing  
ROW and Protect NRCS Land.

Restricted Area:  
Contractor Shall Stay Within Existing  
ROW and Protect NRCS Land.

Sta. 219+00.00  
Begin Project  
Begin Mill & Overlay

220+00

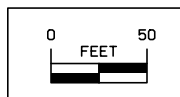
225+00

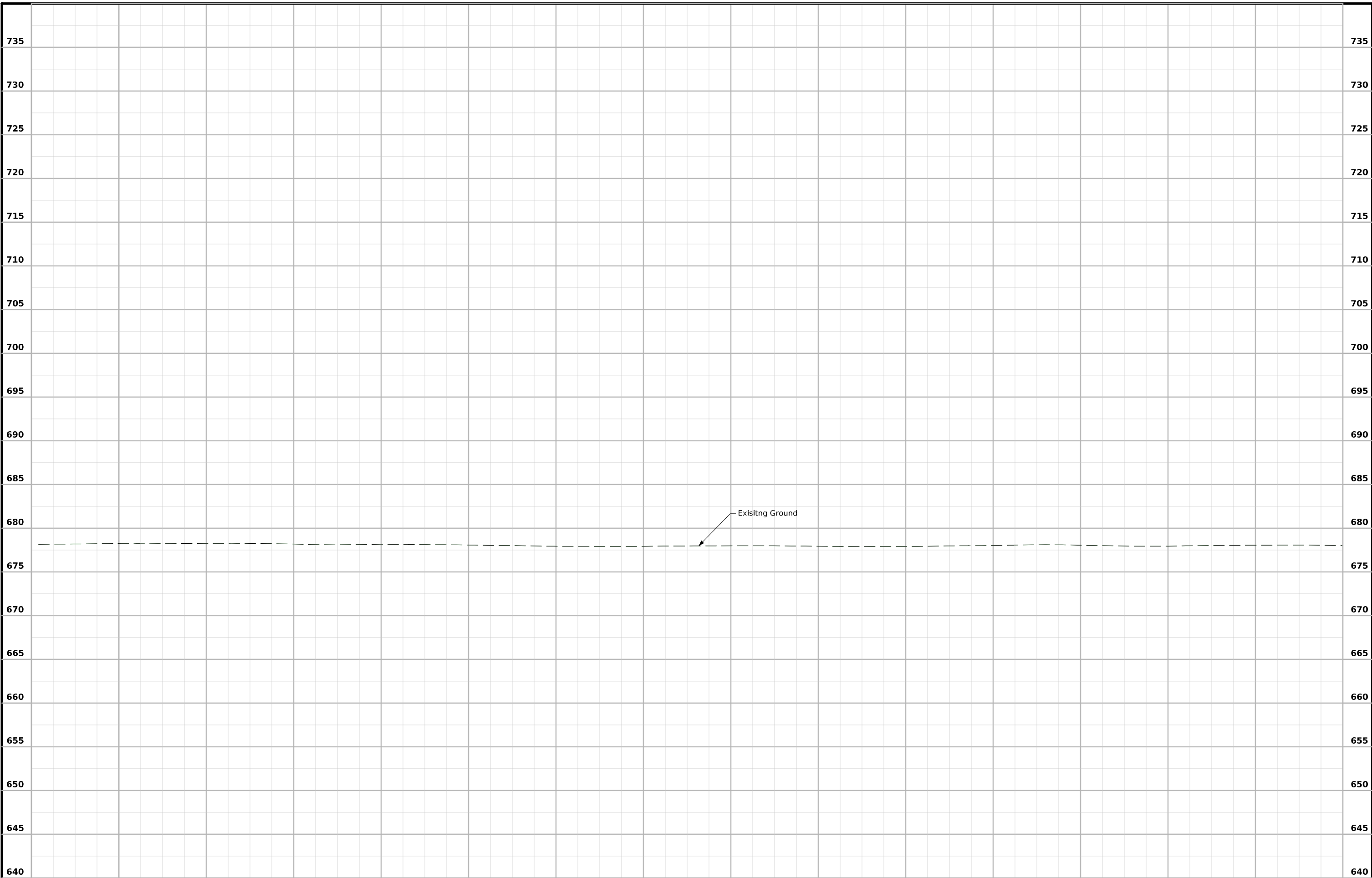
230+00

US30(ML030)

Replace Existing Guardrail Due To Grade  
Raise/Superelevation Correction.

(U.A.C.)  
Sta. 219+44.73  
Skew 34° RT AH  
12'x8'x77' RCB  
D.A.=531 A-R





Existing Ground

217+00	218+00	219+00	220+00	221+00	222+00	223+00	224+00	225+00	226+00	227+00	228+00	229+00	230+00	231+00	232+00
FILE NO.	ENGLISH	DESIGN TEAM	Iowa DOT\Stanley Consultants Inc.				CLINTON COUNTY	PROJECT NUMBER	BRF-030-9(189)--38-23				SHEET NUMBER	D.3	

For Retaining Wall Details  
Refer to Sheets No. V.04-V.05

For Bridge Situation Plans  
Refer to Sheets No. V.01 - V.03

SPRING ROCK TWP.  
T-81N R-1E  
SEC. 15

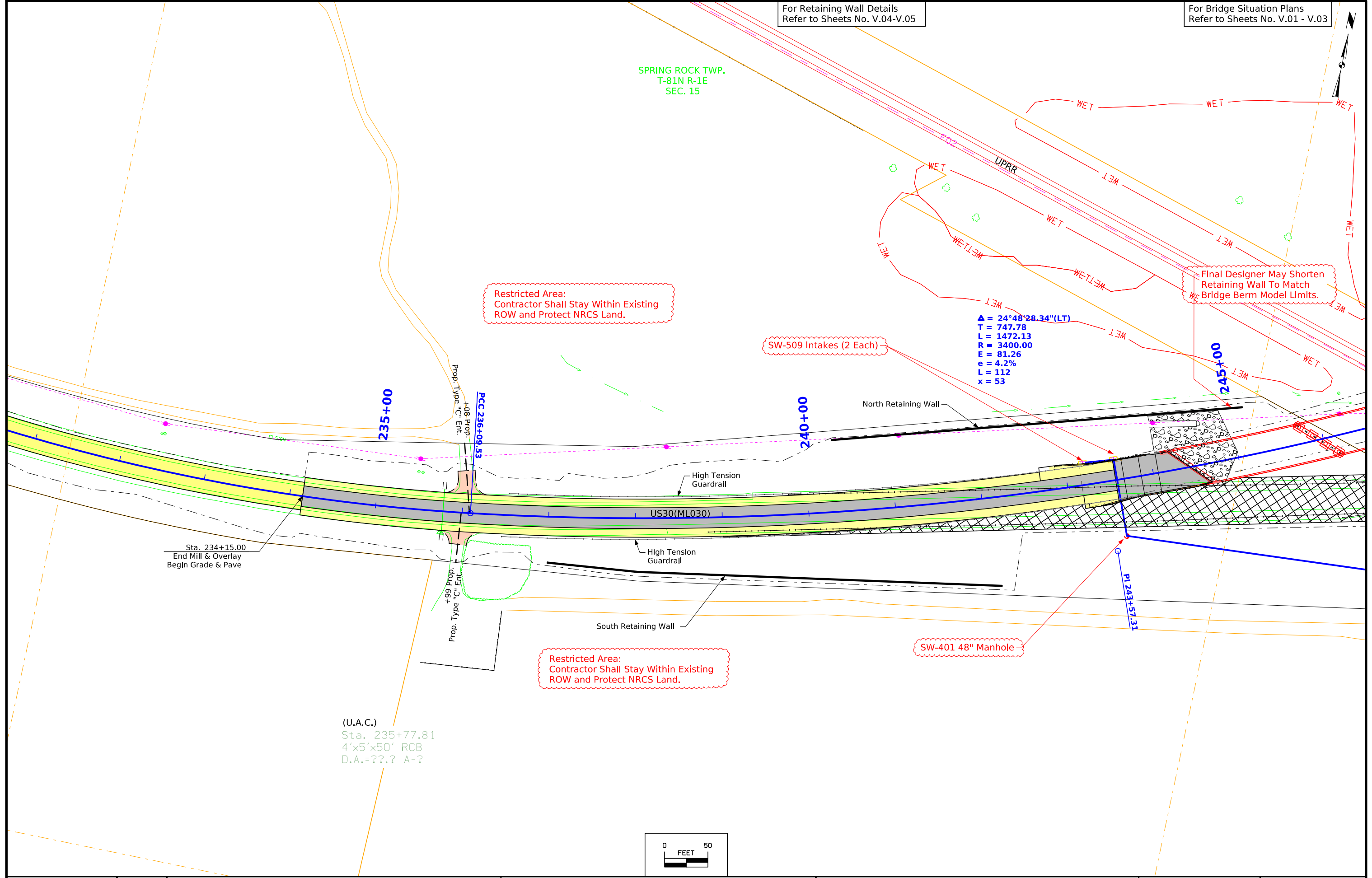
Restricted Area:  
Contractor Shall Stay Within Existing  
ROW and Protect NRCS Land.

Final Designer May Shorten  
Retaining Wall To Match  
Bridge Berm Model Limits.

$\Delta = 24^{\circ}48'28.34''(LT)$   
 $T = 747.78$   
 $L = 1472.13$   
 $R = 3400.00$   
 $E = 81.26$   
 $e = 4.2\%$   
 $L = 112$   
 $x = 53$

SW-509 Intakes (2 Each)

SW-401 48" Manhole

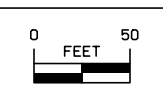


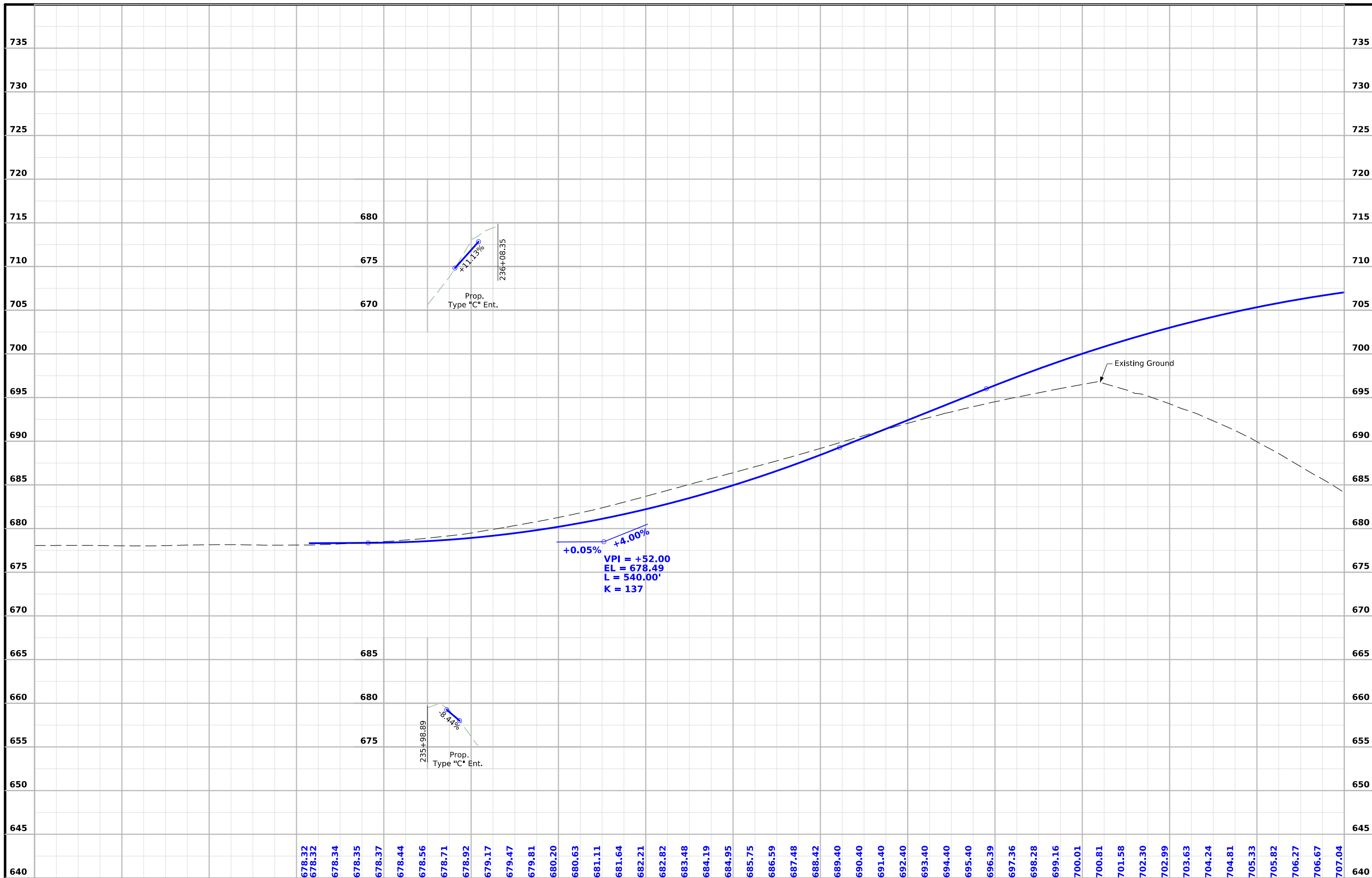
Sta. 234+15.00  
End Mill & Overlay  
Begin Grade & Pave

Prop. Type "C" Ent.  
+08 Prop.  
PCC 236+09.53

Prop. Type "C" Ent.  
+99 Prop.  
PCC 236+09.53

(U.A.C.)  
Sta. 235+77.81  
4'x5'x50' RCB  
D.A.=???.? A-?





231+00	232+00	233+00	234+00	235+00	236+00	237+00	238+00	239+00	240+00	241+00	242+00	243+00	244+00	245+00	246+00
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678.32	678.32	678.34	678.35	678.37	678.44	678.56	678.71	678.92	679.17	679.47	679.81	680.20	680.63	681.11	681.64	682.21	682.82	683.48	684.19	684.95	685.75	686.59	687.48	688.42	689.40	690.40	691.40	692.40	693.40	694.40	695.40	696.39	697.36	698.28	699.16	700.01	700.81	701.58	702.30	702.99	703.63	704.24	704.81	705.33	705.82	706.27	706.67	707.04
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FILE NO.	ENGLISH	DESIGN TEAM	Iowa DOT\Stanley Consultants Inc.	CLINTON COUNTY	PROJECT NUMBER	BRF-030-9(189)--38-23	SHEET NUMBER	D.5
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For Bridge Situation Plans  
Refer to Sheets No. V.01 - V.03

SPRING ROCK TWP.  
T-81N R-1E  
SEC. 15

SPRING ROCK TWP.  
T-81N R-1E  
SEC. 10

**TURTLE EXCLUSION**  
Temporary turtle barrier shall be installed by the contractor surrounding any areas with ground disturbance or construction vehicle traffic and be continuous with no openings or gaps, except at project ends and/or stream crossings. The contractor shall inspect active work areas for the presence of turtles daily. If turtles are present within the construction area, construction activities in the vicinity shall stop and Brock Struecker (515-567-0515) at the Location and Environment Bureau should be notified immediately. Any gaps in daily inspections of the barrier fence shall be repaired immediately by the contractor. If exclusion fencing is not installed prior to April 1, 2025, installation of fencing cannot begin until a visual inspection of the construction area is completed.

**"Restricted Access"**  
1. The Contractor will note the "Restricted Area - No Access" per the included link for the .dgn.  
2. The Contractor shall furnish and install orange safety fence according to Article 4188.03 of the Standard Specifications.  
3. The Contractor shall contact Jeff Bacon (515-233-7819) with the Location and Environment Bureau with questions.

Sta. 255+97.17  
Install 30"x210' 2000D  
Lt. 666.00  
F.L.= Rt. 665.00

(U.A.C.)  
Sta. 247+06.99  
SKEW 46° RT AH  
36"x171' RCP

(U.A.C.)  
Sta. 247+03.17  
SKEW 46° RT AH  
30"x166' CMP

Sta. 247+20.00  
Construct 550'-0" x 44'-0"  
Continuous Welded Plate  
Girder Bridge

250+00

255+00

260+00

US30(ML030)

PC 254+22.92

PT 250+81.66

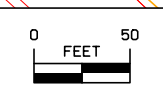
Need to discuss obliteration depth  
vs. environmental considerations.  
Needs more discussion with LEB.

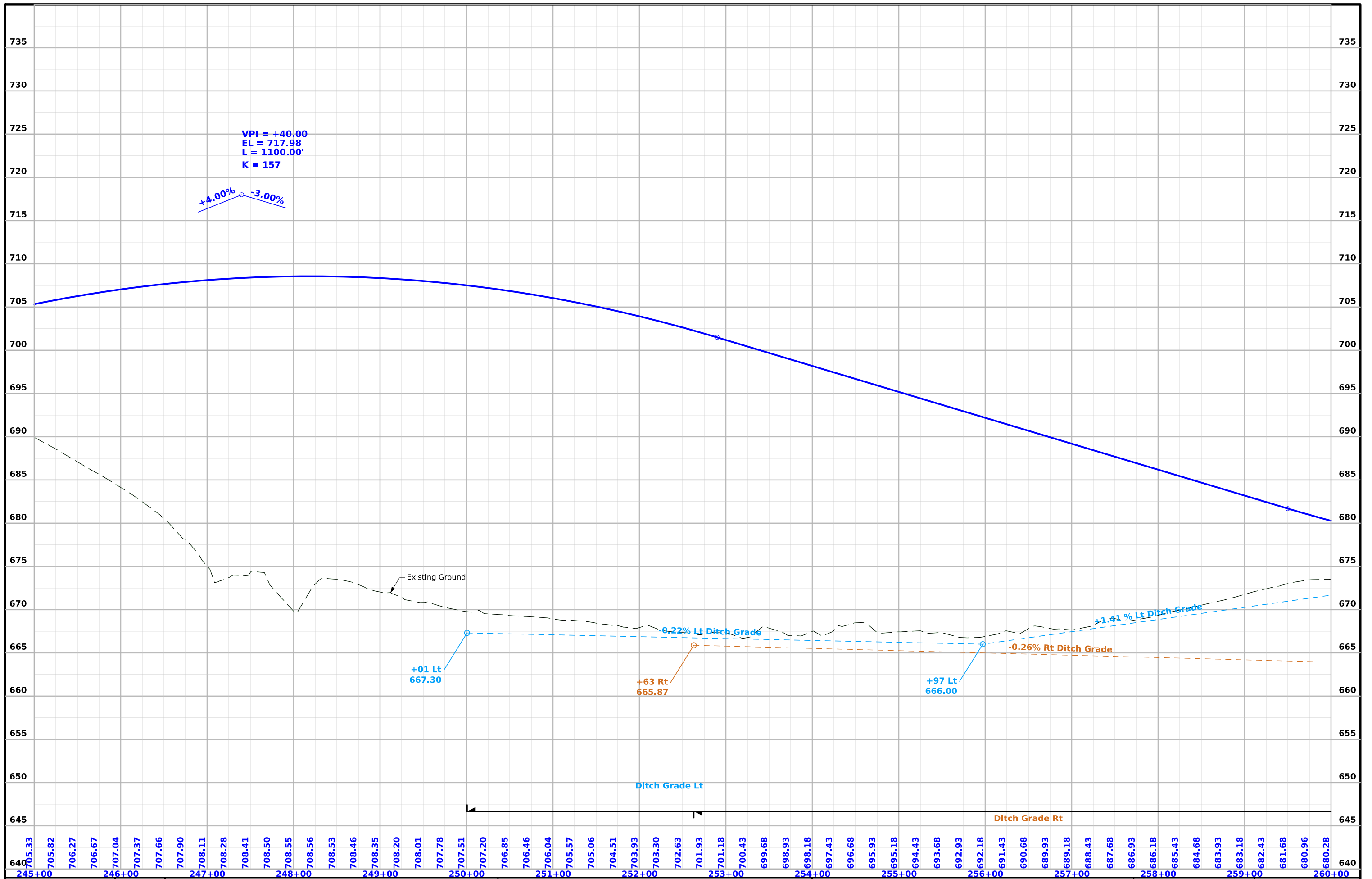
DR-201 24" Apron

Bridge Removal

Existing US 30

(Remove)  
Sta. 246+51.49, 164.36 RT  
24"x70' RCP





FILE NO.	ENGLISH	DESIGN TEAM	Iowa DOT\Stanley Consultants Inc.	CLINTON COUNTY	PROJECT NUMBER	BRF-030-9(189)--38-23	SHEET NUMBER	D.7
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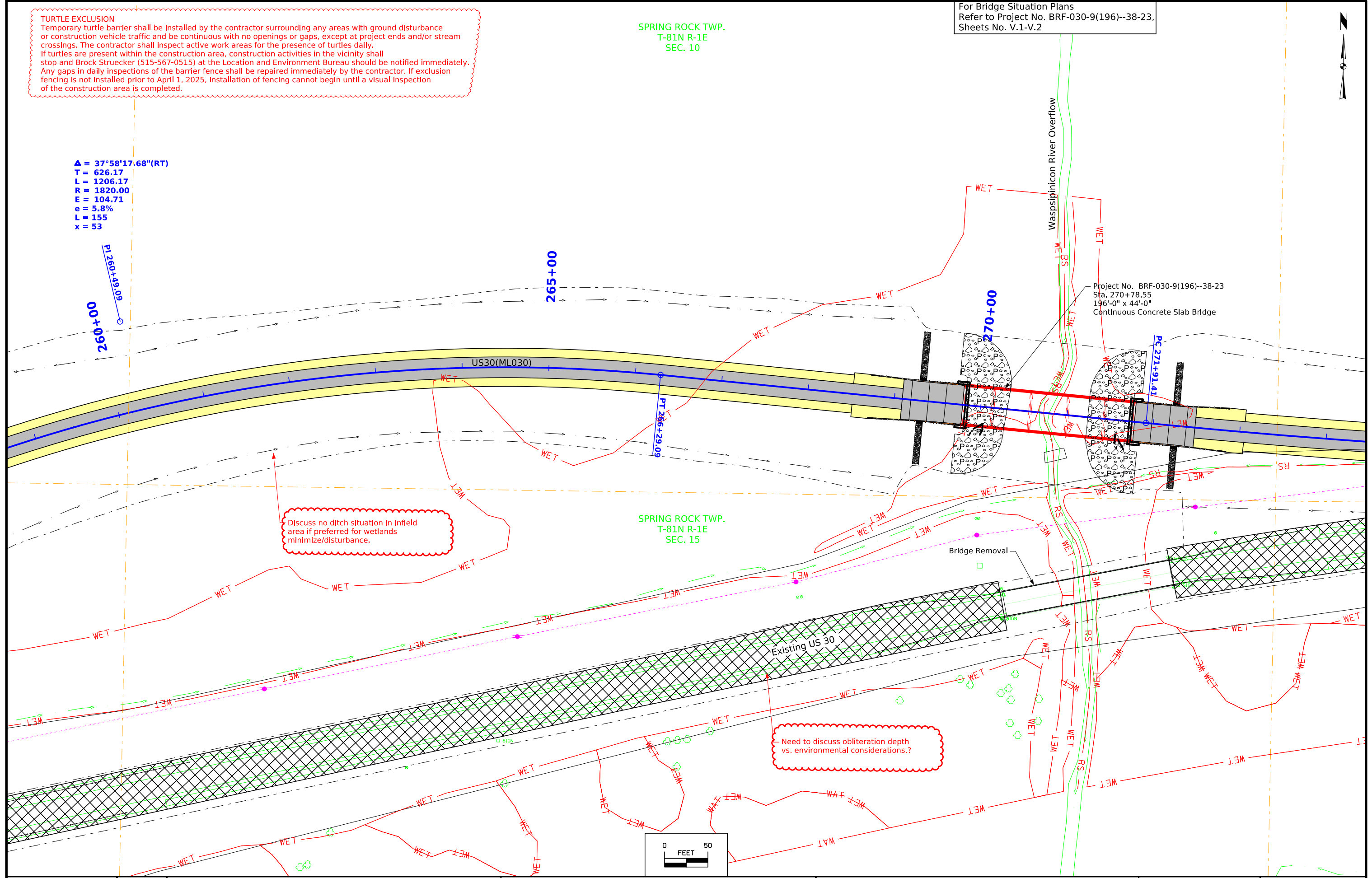
**TURTLE EXCLUSION**  
 Temporary turtle barrier shall be installed by the contractor surrounding any areas with ground disturbance or construction vehicle traffic and be continuous with no openings or gaps, except at project ends and/or stream crossings. The contractor shall inspect active work areas for the presence of turtles daily. If turtles are present within the construction area, construction activities in the vicinity shall stop and Brock Struecker (515-567-0515) at the Location and Environment Bureau should be notified immediately. Any gaps in daily inspections of the barrier fence shall be repaired immediately by the contractor. If exclusion fencing is not installed prior to April 1, 2025, installation of fencing cannot begin until a visual inspection of the construction area is completed.

SPRING ROCK TWP.  
 T-81N R-1E  
 SEC. 10

For Bridge Situation Plans  
 Refer to Project No. BRF-030-9(196)--38-23,  
 Sheets No. V.1-V.2

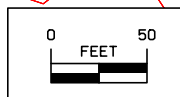


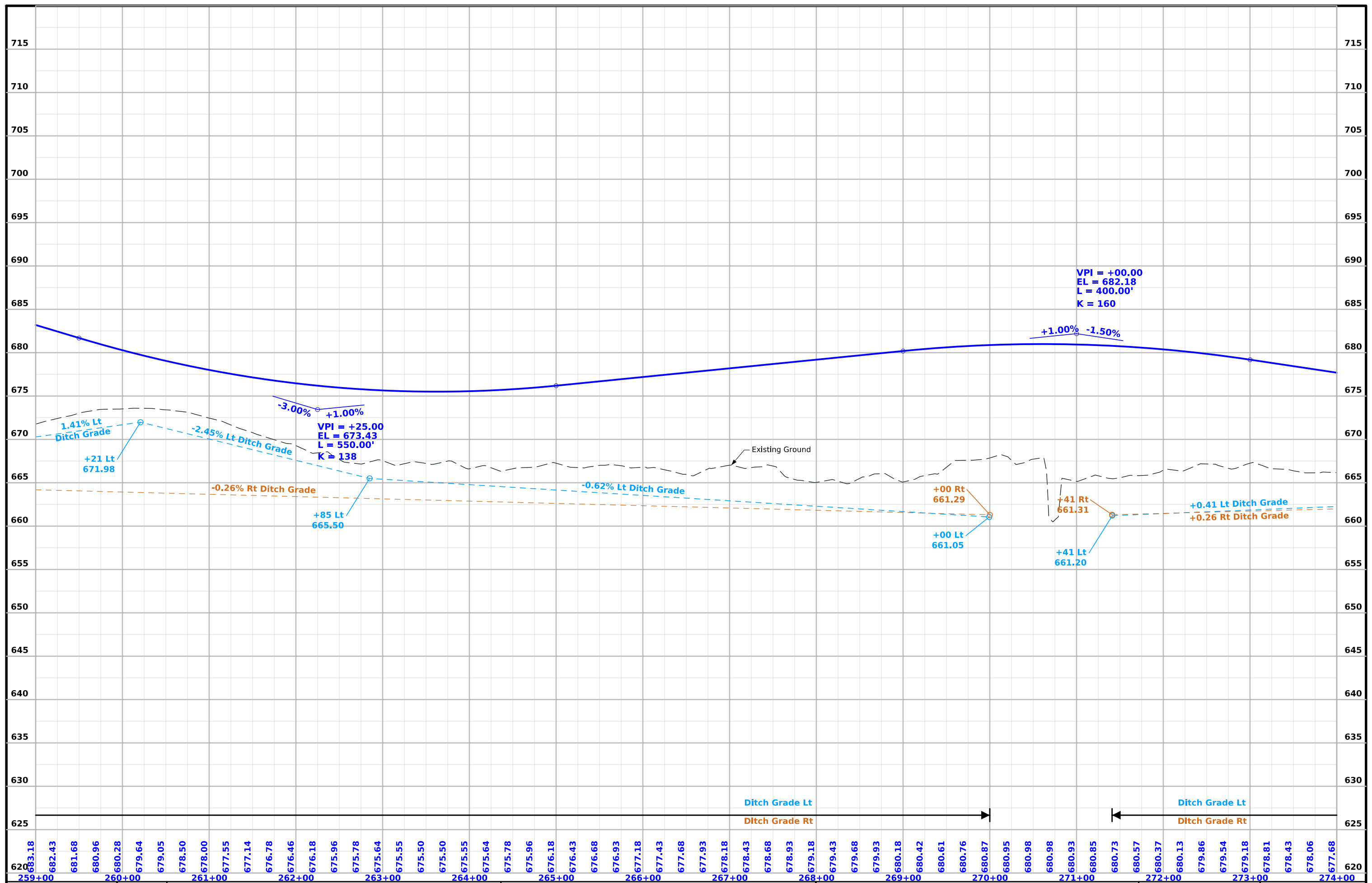
Δ = 37°58'17.68"(RT)  
 T = 626.17  
 L = 1206.17  
 R = 1820.00  
 E = 104.71  
 e = 5.8%  
 L = 155  
 x = 53



Discuss no ditch situation in infield area if preferred for wetlands minimize/disturbance.

Need to discuss obliteration depth vs. environmental considerations?





FILE NO.	ENGLISH	DESIGN TEAM	Iowa DOT\Stanley Consultants Inc.	CLINTON COUNTY	PROJECT NUMBER	BRF-030-9(189)--38-23	SHEET NUMBER	D.9
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Refer to L.1 for 142nd Ave. Intersection

SPRING ROCK TWP.  
T-81N R-1E  
SEC. 11

**TURTLE EXCLUSION**  
Temporary turtle barrier shall be installed by the contractor surrounding any areas with ground disturbance or construction vehicle traffic and be continuous with no openings or gaps, except at project ends and/or stream crossings. The contractor shall inspect active work areas for the presence of turtles daily.  
If turtles are present within the construction area, construction activities in the vicinity shall stop and Brock Struecker (515-567-0515) at the Location and Environment Bureau should be notified immediately.  
Any gaps in daily inspections of the barrier fence shall be repaired immediately by the contractor. If exclusion fencing is not installed prior to April 1, 2025, installation of fencing cannot begin until a visual inspection of the construction area is completed.



Δ = 04°19'37.39"(LT)  
T = 344.92  
L = 689.51  
R = 9130.00  
E = 6.51  
e = N.C  
L = N/A  
x = N/A

275+00

280+00

285+00

142nd Ave

Sta. 287+50.00  
End Grade & Pave  
Continue Shoulder Construction

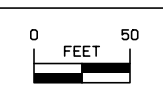
US30(ML030)

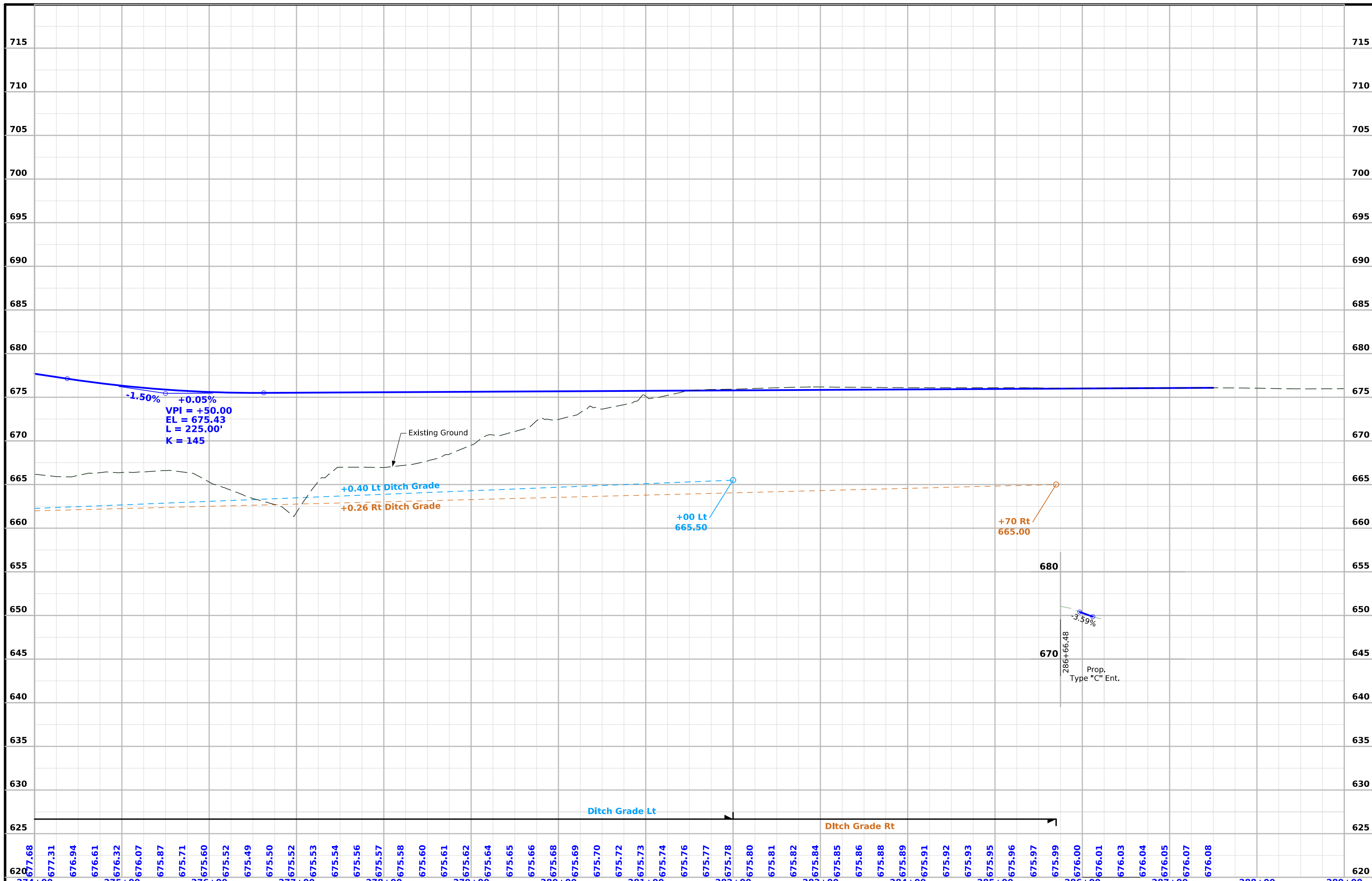
Existing US 30

Continue Full Depth/Full Width  
(10' wide) Shoulder Reconstruction  
From Sta. 287+50 to Sta. 290+00  
To Match Adjacent Project By Others

Does roadway need to be paved or  
just shoulders from 287+50 to 290+00?

SPRING ROCK TWP.  
T-81N R-1E  
SEC. 14





FILE NO.	ENGLISH	DESIGN TEAM	Iowa DOT\Stanley Consultants Inc.	CLINTON COUNTY	PROJECT NUMBER	BRF-030-9(189)--38-23	SHEET NUMBER	D.11
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## Survey Information

**Clinton County**  
**BRF-030-9(186)—38-23**  
**US30 Clinton County Survey**  
**From 130<sup>th</sup> Ave to 158<sup>th</sup> Ave - Wheatland**  
**PIN 18-23-030-030**

### Party Personnel

Jody Budde- PLS  
Wes Shimp- PLS  
Jon Miranda- Geospatial Lead Tech  
Ben Sullivan- Geospatial Lead Tech  
Matt Svec- Party Chief  
Lee Budde- Party Chief  
Aaron Paulsen- Party Chief  
Katerina Wyatt- Assistant Survey Party Chief  
Levi Suhr- Assistant Survey Party Chief  
Jason Flaherty – Assistant Survey Party Chief  
Scott Dillavou – Assistant Survey Party Chief

### Date(s) of Survey

Begin Date 11/17/2021  
End Date 02/28/2022

### General Information

Measurement units for this survey are US survey feet. This survey is for the preliminary design for the section of approximately 3 miles of US Highway 30 beginning in Wheatland at 130<sup>th</sup> Ave east to 158<sup>th</sup> Ave. There were also a total of 15 bridge structures surveyed which included 5 bridges along the UPRR line south of Hwy 30, near Wheatland, IA.

Project datum and control information is provided by Design Survey Office. This project is a Full DTM survey. Project horizontal datum is NAD83 (2011) epoch 2010.00, Iowa RCS Zone 11 (Dubuque-Davenport). Foth established three new FENO monuments to supplement existing project control at a 1.0 mile distribution along the project corridor throughout the project lifecycle and for future corridor area work.

### Vertical Control

Vertical datum for this survey is relative to NAVD88 (computed using Geoid18) for the new FENO marks: FENO 1, FENO 2 and FENO 3. This survey consisted of observing three new FENO 1-meter rod monuments and one existing USGS monument used by

the Iowa DOT previously using minimum 2hr initial static observations along with data from four Iowa RTN CORS sites: Anamosa (IAAN), Maquoketa (IAMQ), Tipton (IATI) and Davenport (IADA).

The published Ellipsoidal heights for the four Iowa RTN stations were held for the vertical adjustment portion of this survey using as-published RTN positions by the Iowa DOT dated August 6, 2021.

Additionally, three nearby Scott County GPS monuments were recovered and observed with published NAVD88 elevations were observed and used that are located within the Hwy 30 project corridor region:

Scott County GPS 601 has a published Elv of: 757.56 usft (Geoid12A)  
Adj Elv: 757.48

Scott County GPS 602 has a published Elv of: 706.44 usft (Geoid12A)  
Adj Elv: 706.49

Scott County GPS 642 has a published Elv of: 640.80 usft (Geoid12A)  
Adj Elv: 640.80

The final vertical adjustment results show standard deviations were less than 0.023 ft. at 95% confidence level (2 sigma) for the new FENO monuments.

### Horizontal Control

The project coordinate system for this survey is NAD83 (2011) Iowa RCS Zone 11 (Dubuque-Davenport), US survey feet. This survey control is relative to IaRTN reference stations. IaRTN Reference Station coordinates are relative to the National Reference Station network datum: NAD83 (2011) for Epoch 2010.00. Coordinates were determined by observing each mark for 120 minutes minimum.

For the January 2022 control survey FOTH added FENO monuments FENO 1, FENO 2 and FENO 3 to supplement an existing DOT control monument recovered along the project corridor, Pt 706. Existing monuments Scott Co GPS 601, 602 and 642 were recovered and observed as part of this survey. The existing DOT concrete monument with brass cap (Pt 706) is on the east end of the project. The as listed adjusted coordinates in this report were the result of combined field observations and adjustment to the four Iowa RTN stations as listed herein.

Four Iowa RTN CORS stations: Anamosa, Maquoketa, Davenport and Tipton were utilized for the horizontal adjustment portion of this survey. The published horizontal geodetic positions for the four Iowa RTN stations were held for the horizontal

## Survey Information

adjustment portion of this survey using as-published RTN positions by the Iowa DOT dated August 6, 2021.

The published horizontal positions of the existing three Scott County GPS Monuments 601, 602 and 642 were also confirmed and held fixed for the final horizontal constrained adjustment of the three new FENOs established by Foth.

The horizontal standard deviation of these adjusted observations was less than 0.015 ft. at 95% confidence level (2 sigma).

PC Sta. 220+30.9 As-built Plans Project No. F-Proj No. 147 (9)  
Survey PC Sta. 220+30.7

PT Sta. 239+21.2 As-built Plans Project No. F-Proj No. 147 (9)  
Survey PT Sta. 239+21.2

PC Sta. 268+98.6 As-built Plans Project No. F-Proj No. 147 (9)  
Survey PC Sta. 268+97.0

PT Sta. 287+08.6 As-built Plans Project No. F-Proj No. 147 (9)  
Survey PT Sta. 287+08.1

### Station Equation

As-built Plans POT Sta 366+23.9 (Back) = POT Sta 341+26.6(Ahead)  
Survey POT Sta 366+23.9 (Back) = POT Sta 341+26.6(Ahead)

END POT Sta. 350+00.0 As-built Plans Project No. F-Proj No. 147 (9)  
Survey POT Sta. 350+00.0

### PROJECT CONTROL COORDINATE LISTING

Point ID	Northing	Easting	Elevation	Description
706	8175524.45	21430991.30	673.72	Existing Concrete Monument with brass disk set flush with the ground. 35.9 feet east of 158th Ave, 62.9 feet south of Hwy 30, 9.6 feet southeast of a utility pole.
FENO 1	8175123.51	21416496.20	676.87	New FENO style monument set flush with the ground. 33.5 feet southwest of centerline of Hwy 30, 147.5 feet east of center of 130th Ave.
FENO 2	8175556.21	21421292.80	674.35	New FENO style monument set flush with the ground. 28.15 feet NW of NW cor of wingwall of NW cor of Hwy 30 bridge over a creek. 37.3 feet south southeast of utility pole. 114.0
FENO 3	8175553.56	21426066.29	667.37	New FENO style monument set flush with the ground. 90.8 feet south of centerline of Hwy 30, 48.15 feet southwest of utility pole.
Scott Co GPS 601	8154639.01	21398578.53	757.48	Existing Berntsen driven rod monument with 2 1/2" aluminum cap with access cover.
Scott Co GPS 602	8154565.39	21415761.26	706.49	Existing Berntsen driven rod monument with 2 1/2" aluminum cap with access cover.
Scott Co GPS 642	8152509.73	21458526.18	640.80	Existing Berntsen driven rod monument with 2 1/2" aluminum cap with access cover.

### Alignment Information

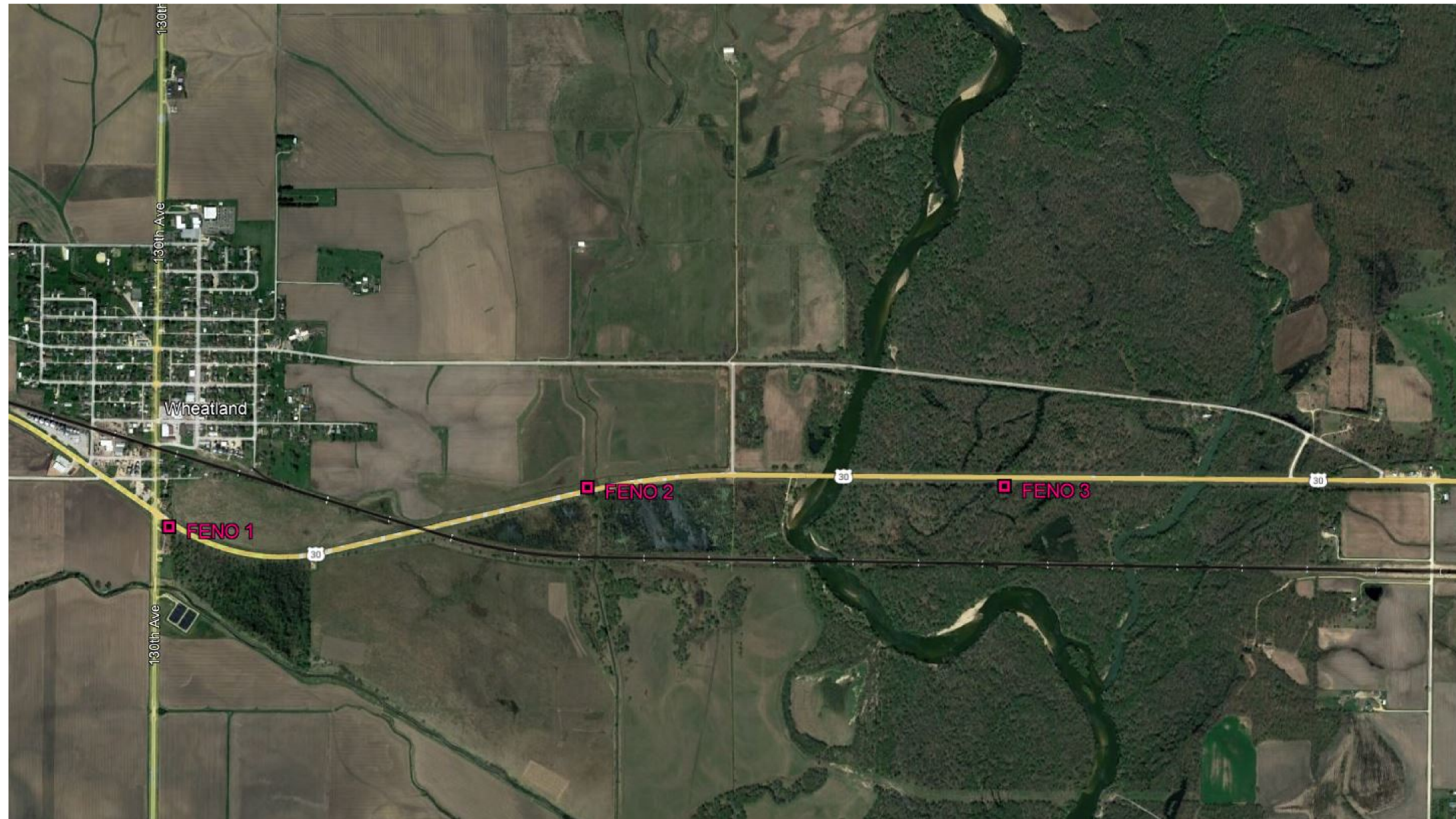
The horizontal alignment for this survey is a retrace of As-built Plans No. F-Proj No. 147 (9). Survey stationing was equated to the plan PT at STA 239+21.2 and run back and ahead throughout the survey.

Mainline (US30) Survey stationing relates to as built plan stationing as follows:

POB POT Sta. 211+54.50 As-built Plans Project No. F-Proj No. 147 (9)  
Survey POT Sta. 211+54.30

## CONTROL POINT VICINITY MAP

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



HORIZ. DATUM: NAD83(2011) EPOCH 2010.00 - Ia. RCS Zone 11  
VERT. DATUM: NAVD88 - Geoid Model G018

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

HORIZONTAL AND VERTICAL PROJECT CONTROL COORDINATE LISTING

HORIZ. DATUM: NAD83(2011) EPOCH 2010.00  
 1a. Regional Coordinate System Zone 11

VERT. DATUM: NAVD88  
 Geoid Model G018  
 Project Control Marks are Bench Marks

Point ID	Northing	Easting	Elevation	Description
706	8175524.45	21430991.30	673.72	Existing Concrete Monument with brass disk set flush with the ground. 35.9 feet east of 158th Ave, 62.9 feet south of Hwy 30, 9.6 feet southeast of a utility pole.
FENO 1	8175123.51	21416496.20	676.87	New FENO style monument set flush with the ground. 33.5 feet southwest of centerline of Hwy 30, 147.5 feet east of center of 130th Ave.
FENO 2	8175556.21	21421292.80	674.35	New FENO style monument set flush with the ground. 28.15 feet NW of NW cor of wingwall of NW cor of Hwy 30 bridge over a creek. 37.3 feet south southeast of utility pole. 114.0 feet west of middle of small creek.
FENO 3	8175553.56	21426066.29	667.37	New FENO style monument set flush with the ground. 90.8 feet south of centerline of Hwy 30, 48.15 feet southwest of utility pole.
Scott Co GPS 601	8154639.01	21398578.53	757.48	Existing Berntsen driven rod monument with 2 1/2" aluminum cap with access cover.
Scott Co GPS 602	8154565.39	21415761.26	706.49	Existing Berntsen driven rod monument with 2 1/2" aluminum cap with access cover.
Scott Co GPS 642	8152509.73	21458526.18	640.80	Existing Berntsen driven rod monument with 2 1/2" aluminum cap with access cover.



**ALIGNMENT COORDINATES**

Name	Location	Point on Tangent			Begin Spiral			Begin Curve			Simple Curve PI or Master PI of SCS			End Curve			End Spiral		
		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates	
			Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)
1	US 30	217+08.153	8175275.64	21416334.66															
2	US 30						219+13.285	8175160.33	21416504.32	228+02.286	8174660.61	21417239.57	236+09.528	8174786.85	21418119.56				
3	US 30						236+09.528	8174786.85	21418119.56	243+57.311	8174893.04	21418859.77	250+81.657	8175300.00	21419487.12				
5	US 30						254+22.920	8175485.72	21419773.42	260+49.091	8175826.50	21420298.74	266+29.086	8175771.93	21420922.52				
7	US 30						271+91.408	8175722.92	21421482.71	275+36.327	8175692.85	21421826.31	278+80.917	8175688.80	21422171.21				
8	US 30	290+00.000	8175675.66	21423290.21															

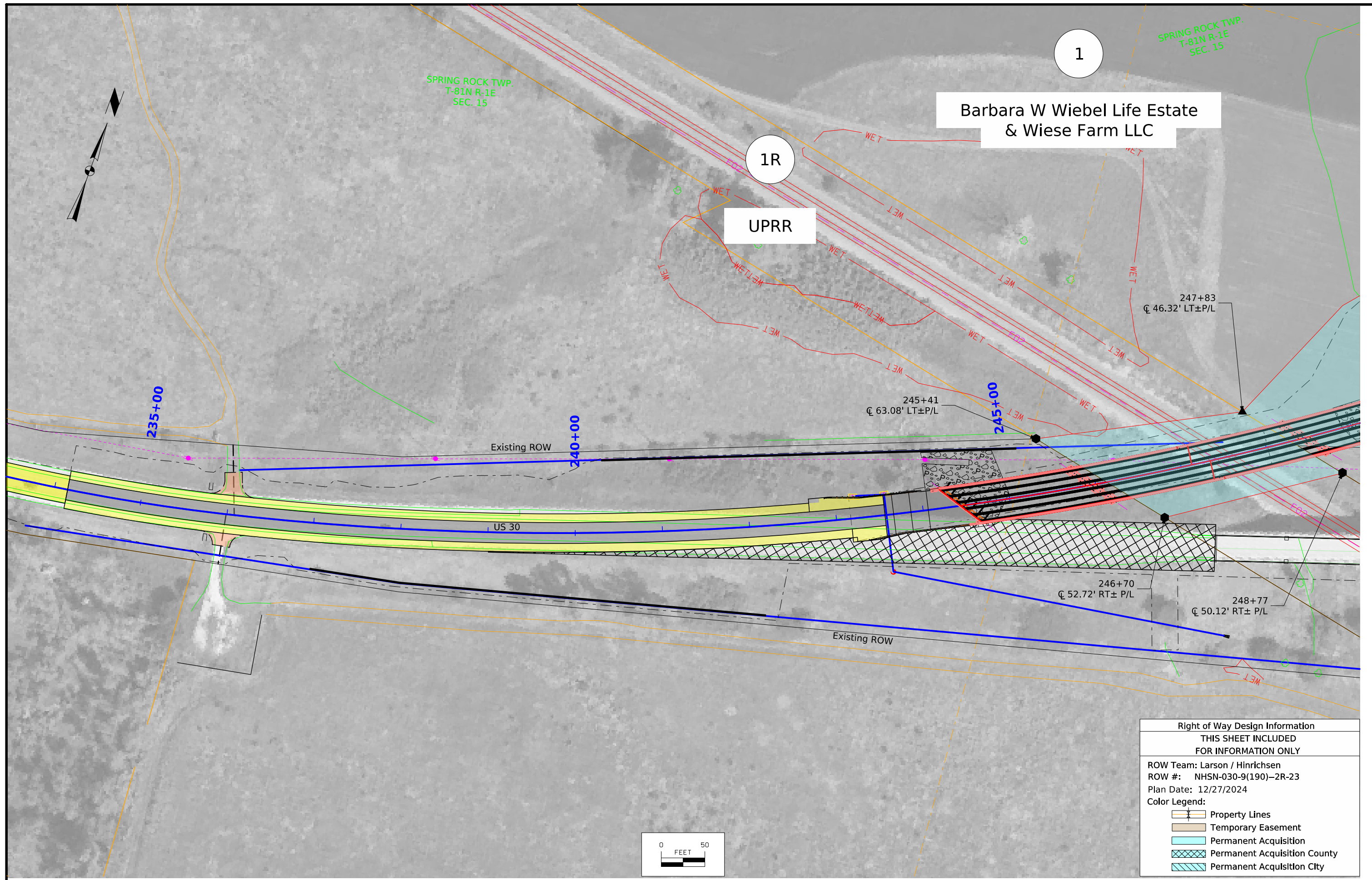
**SPIRAL OR CIRCULAR CURVE DATA**

Name	Location	ΔSCS	Horizontal Alignment Data													Remarks		
			Spiral Data						Curve Data									
			θS	Ls	Ts	Es	Xc	Yc	L.T.	S.T.	ΔC	T	L	R	E			
C1	US 30													42.366°	889.001	1696.243	2294	166.235
C2	US 30													24.808°	747.783	1472.129	3400	81.261
C3	US 30													37.972°	626.171	1206.167	1820	104.705
C4	US 30													4.327°	344.919	689.510	9130	6.513

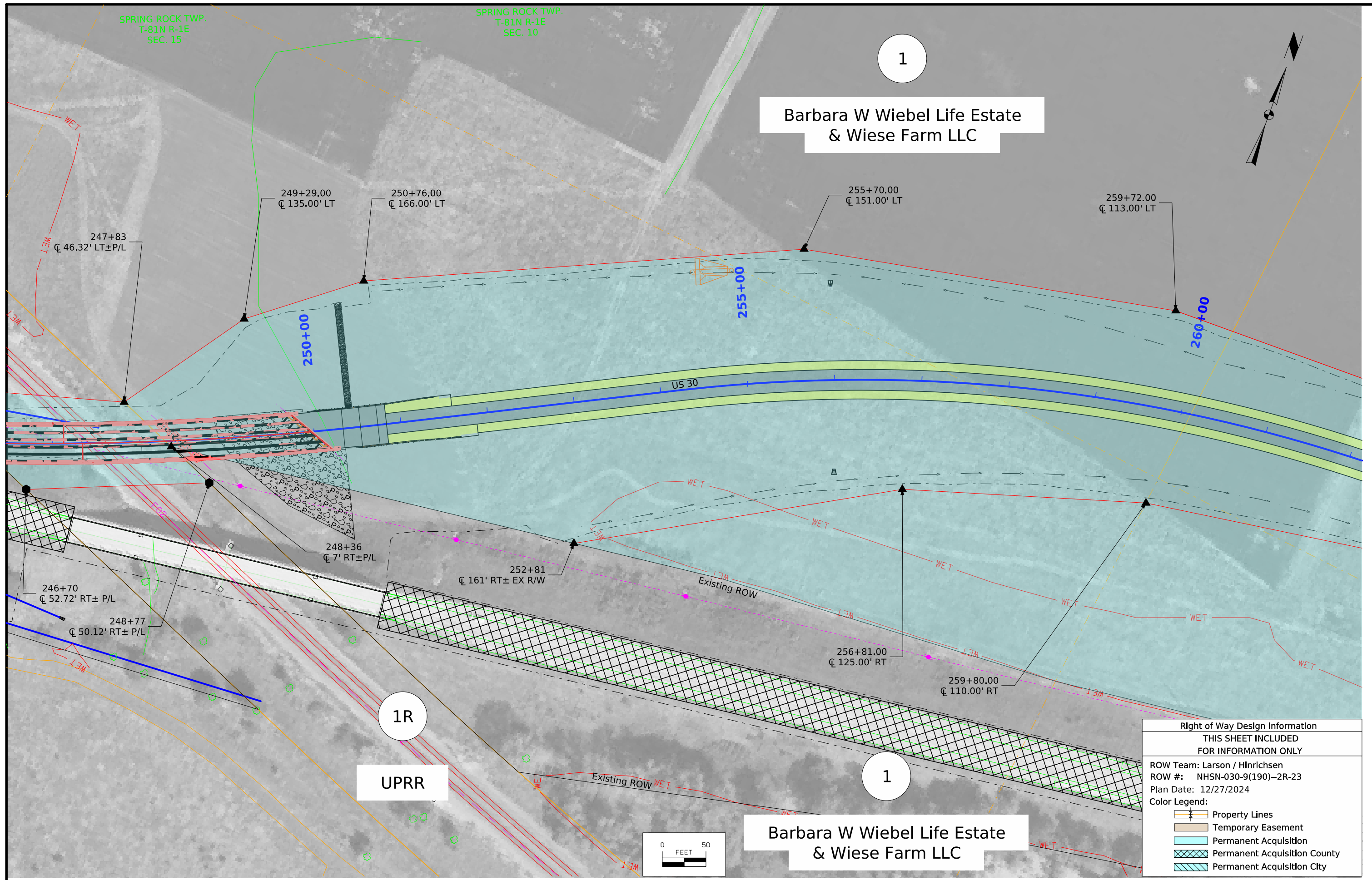
**SUPERELEVATION DATA**

See PV-300 Series

Road Identification	Circular Curve or Spiral Curve Name	Radius FT	Superelevation Data			Standard Road Plan	Section A-A	Section A'-A'	Section B-B	Section C'-C'	Section C-C	Section D-D	Case A	Case B	Case C	Case S	Case T	Case U	Remarks
			e	L	x														
			%	FT	FT														
US 30	C1	2294	5.2	139	53	PV-301					220+00.00								Special transition. See other details.
											236+09.53								Special transition. See other details.
US 30	C2	3400	4.2	112	53	PV-301	252+13.06				250+48.06	250+81.66			250+53.39	250+53.39			Special transition. See other details.
							252+61.42				253+67.42	254+69.42	254+22.92		254+21.32	254+21.32			
US 30	C3	1820	5.8	155	53	PV-301	267+90.59				265+82.59	266+29.09			266+30.69	266+30.69			

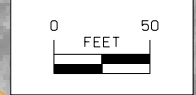


Right of Way Design Information	
THIS SHEET INCLUDED FOR INFORMATION ONLY	
ROW Team: Larson / Hinrichsen	
ROW #: NHSN-030-9(190)-2R-23	
Plan Date: 12/27/2024	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition
	Permanent Acquisition County
	Permanent Acquisition City



Right of Way Design Information	
THIS SHEET INCLUDED FOR INFORMATION ONLY	
ROW Team: Larson / Hinrichsen	
ROW #: NHSN-030-9(190)-2R-23	
Plan Date: 12/27/2024	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition
	Permanent Acquisition County
	Permanent Acquisition City

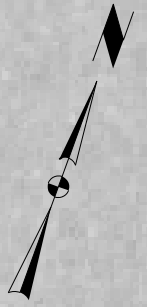
Barbara W Wiebel Life Estate & Wiese Farm LLC



SPRING ROCK TWP.  
T-81N R-1E  
SEC. 10

1

# Barbara W Wiebei Life Estate & Wiese Farm LLC



264+68.00  
C 100.00' LT

266+67.00  
C 108.00' LT

265+00

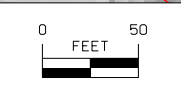
270+00

275+00

SPRING ROCK TWP.  
T-81N R-1E  
SEC. 15

1

# Barbara W Wiebei Life Estate & Wiese Farm LLC

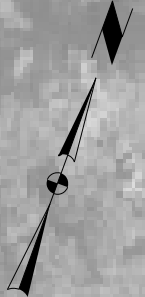


Right of Way Design Information	
THIS SHEET INCLUDED FOR INFORMATION ONLY	
ROW Team: Larson / Hinrichsen	
ROW #: NHSN-030-9(190)--2R-23	
Plan Date: 12/27/2024	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition
	Permanent Acquisition County
	Permanent Acquisition City

SPRING ROCK TWP.  
T-81N R-1E  
SEC. 11

1

Barbara W Wiebel Life Estate  
& Wiese Farm LLC



282+00.00  
C 81.00' LT

282+95  
C 63.67' LT ±EX R/W

280+00

285+00

290+00

US 30

142nd Ave

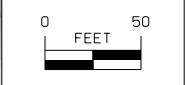
Existing ROW

Existing ROW

1

Barbara W Wiebel Life Estate  
& Wiese Farm LLC

SPRING ROCK TWP.  
T-81N R-1E  
SEC. 14



Right of Way Design Information	
THIS SHEET INCLUDED FOR INFORMATION ONLY	
ROW Team: Larson / Hinrichsen	
ROW #: NHSN-030-9(190)--2R-23	
Plan Date: 12/27/2024	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition
	Permanent Acquisition County
	Permanent Acquisition City

**511 TRAVEL RESTRICTIONS**

Route	Direction	County	Location Description	Feature Crossed	Object Type	Maint. Bridge No., Structure ID, or FHWA No.	Type of Restriction	Existing Measurement	Construction Measurement	Construction Measurement as Signed	Projected As Built Measurement	Remarks
US 30	EB/WB	Clinton	Closed to Traffic During Stage 2. See J sheets for info.									

**108-23A**  
08-01-08

**TRAFFIC CONTROL PLAN**

US 30  
 - Maintain US 30 two-lane, two-way traffic during Stage 1 at all times utilizing Standard Road Plans as noted in the Staging Plan.  
 - Close US 30 and utilize detour route during Stage 2.

142nd Avenue  
 - To remain open to traffic for the duration of the project.

Private Entrances  
 - Maintain access to US 30 for the duration of the project.

**108-26A**  
08-01-08

**STAGING NOTES**

US 30

Stage 1 Traffic:  
 - Maintain 2-way traffic on existing US 30 at all times.

Stage 1 Construction:  
 - Grade and Pave US 30 from Sta. 244+20 to Sta. 278+00. Grade US 30 from Sta. 278+00 to Sta. 284+00.

Stage 2 Traffic:  
 - Detour Traffic north on State Hwy 38 to east on State Hwy 64 to south on US 61.  
 Refer to detour sheet J.3 for details.

Stage 2 Construction:  
 - Mill and Overlay US 30 from Sta. 219+00 to Sta. 234+15.  
 - Grade and Pave US 30 from Sta. 234+15 to Sta. 244+20.  
 - Grade and Pave US 30 from Sta. 278+00 to Sta. 287+50.  
 - Obliterate existing US 30.  
 - Pave US 30 shoulder from Sta. 287+50 to Sta. 290+00

**111-01**  
04-17-12

**COORDINATED OPERATIONS**










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

Project	Type of Work
BRF-030-9(205)--38-23	Bridge Replacement
BRF-030-9(186)--38-23	Bridge Replacement
BRF-030-9(196)--38-23	Bridge Replacement
BRF-030-9(198)--38-23	Bridge Replacement

### 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

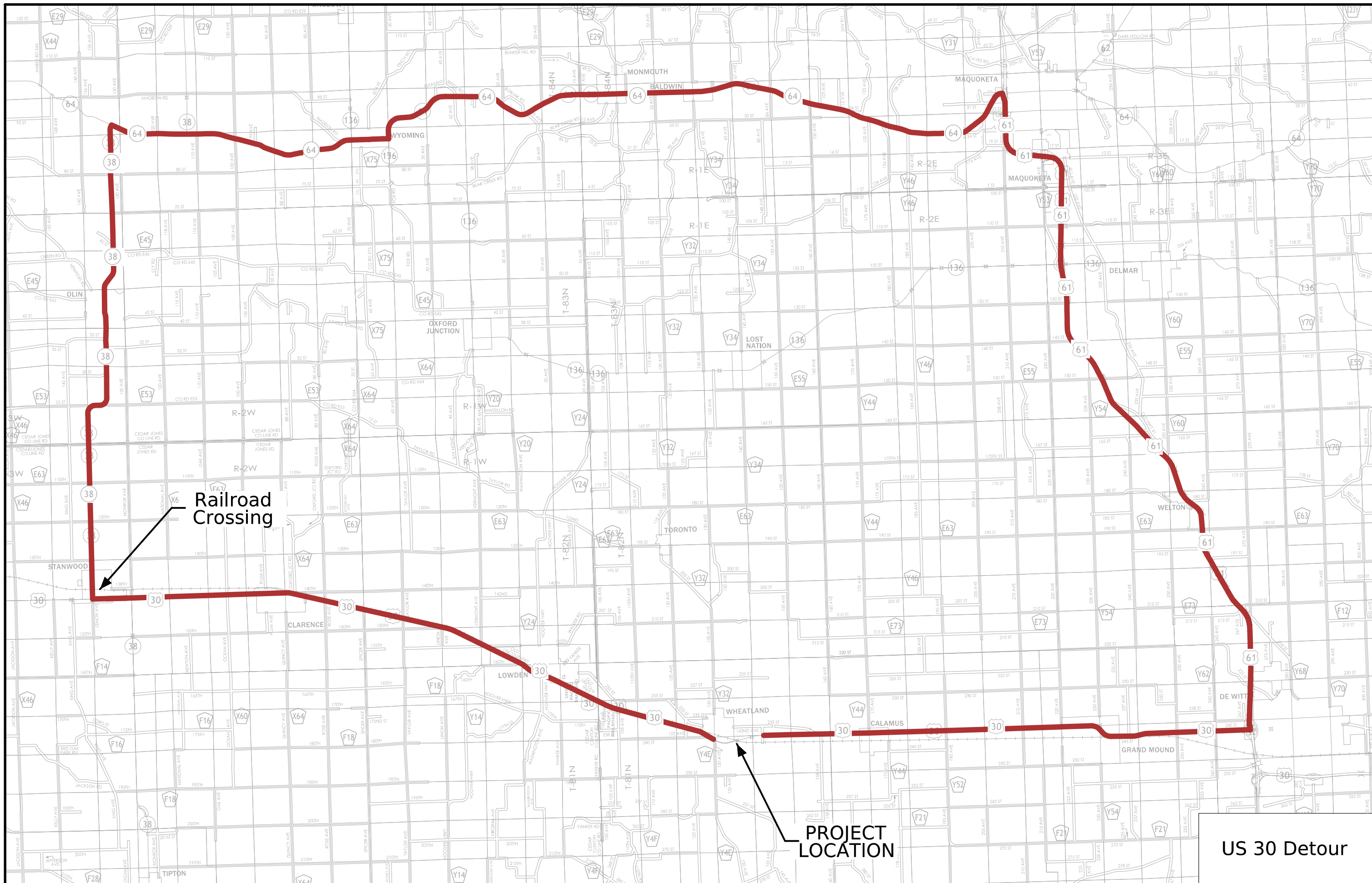
### PLAN VIEW PATTERN AND SYMBOL LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS

	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)

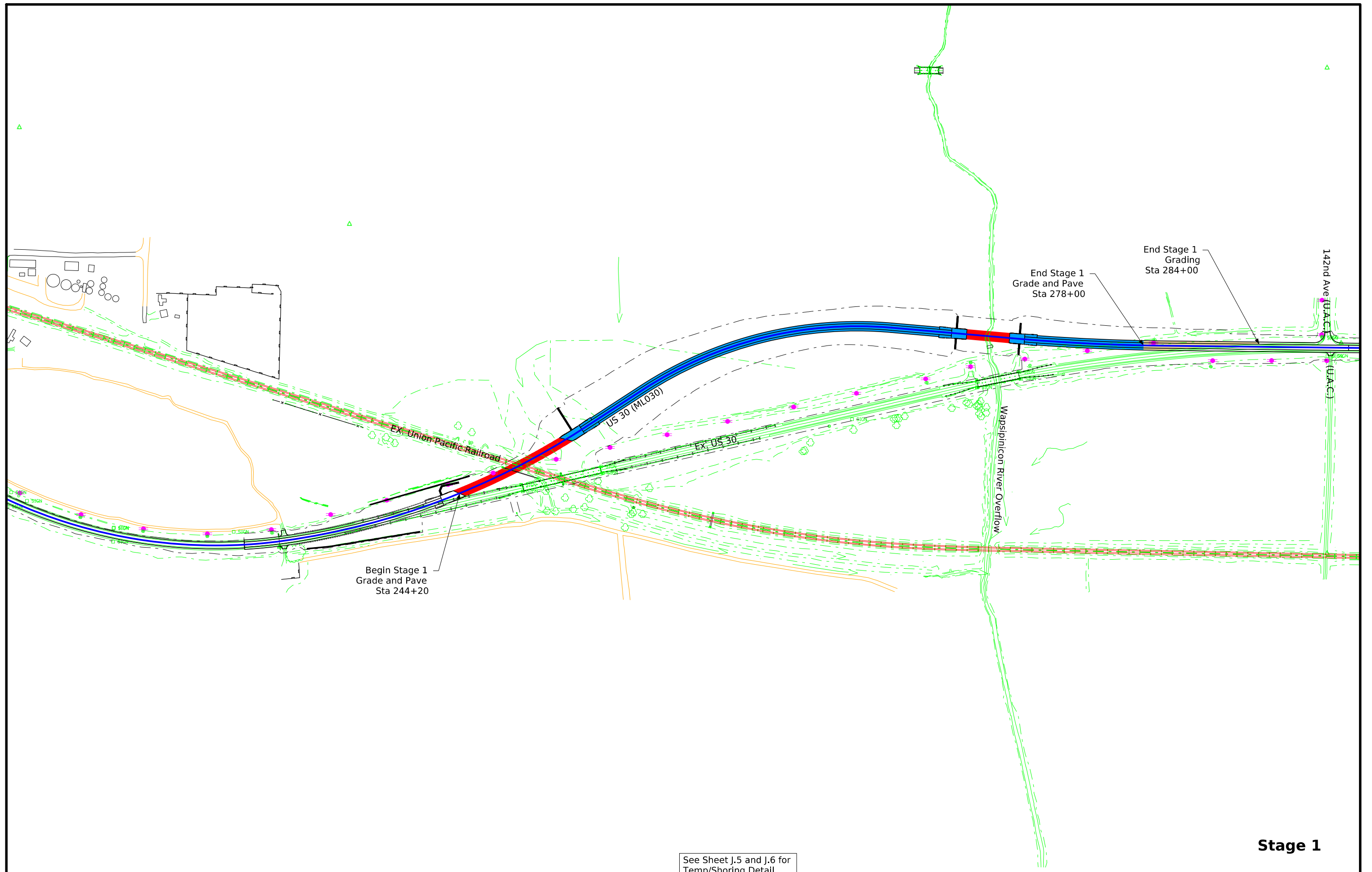


Railroad Crossing

PROJECT LOCATION

US 30 Detour

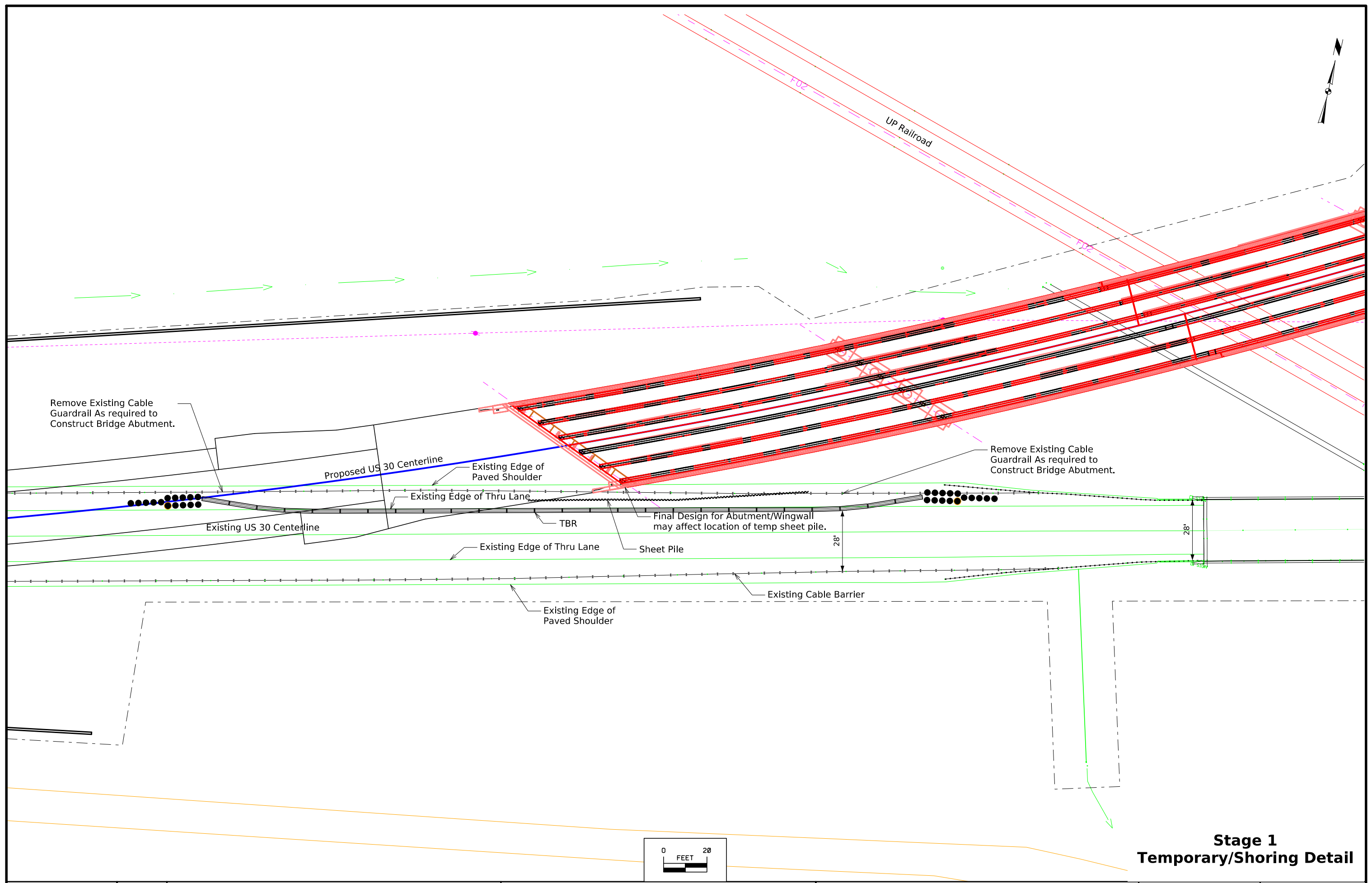




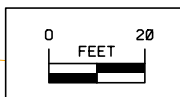
**Stage 1**

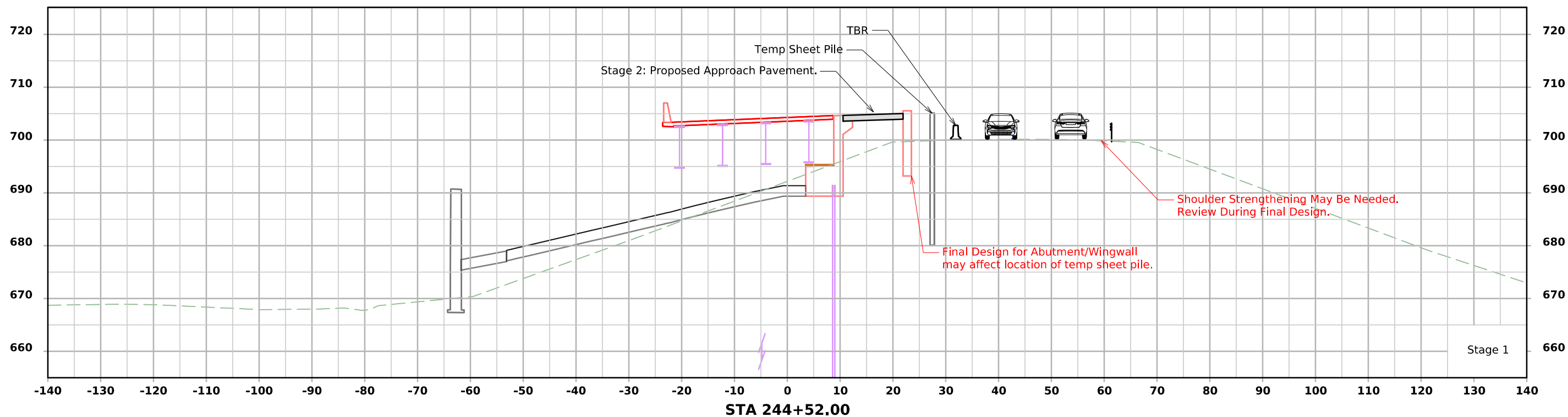
See Sheet J.5 and J.6 for  
Temp/Shoring Detail

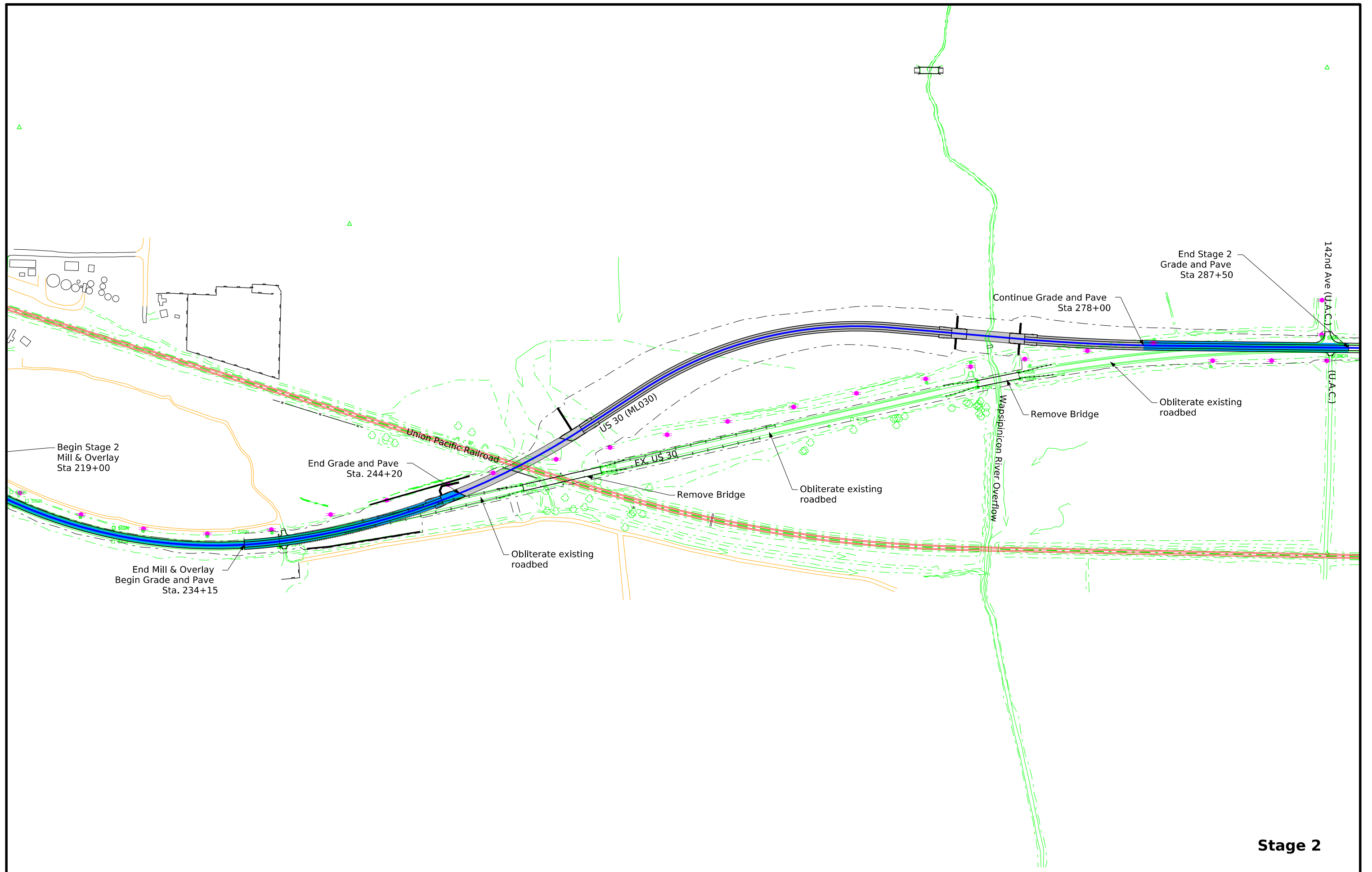
FILE NO.	ENGLISH	DESIGN TEAM <b>Iowa DOT Stanley Consultants Inc.</b>	<b>CLINTON</b> COUNTY	PROJECT NUMBER <b>BRF-030-9(189)--38-23</b>	SHEET NUMBER <b>J.4</b>
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**Stage 1  
Temporary/Shoring Detail**

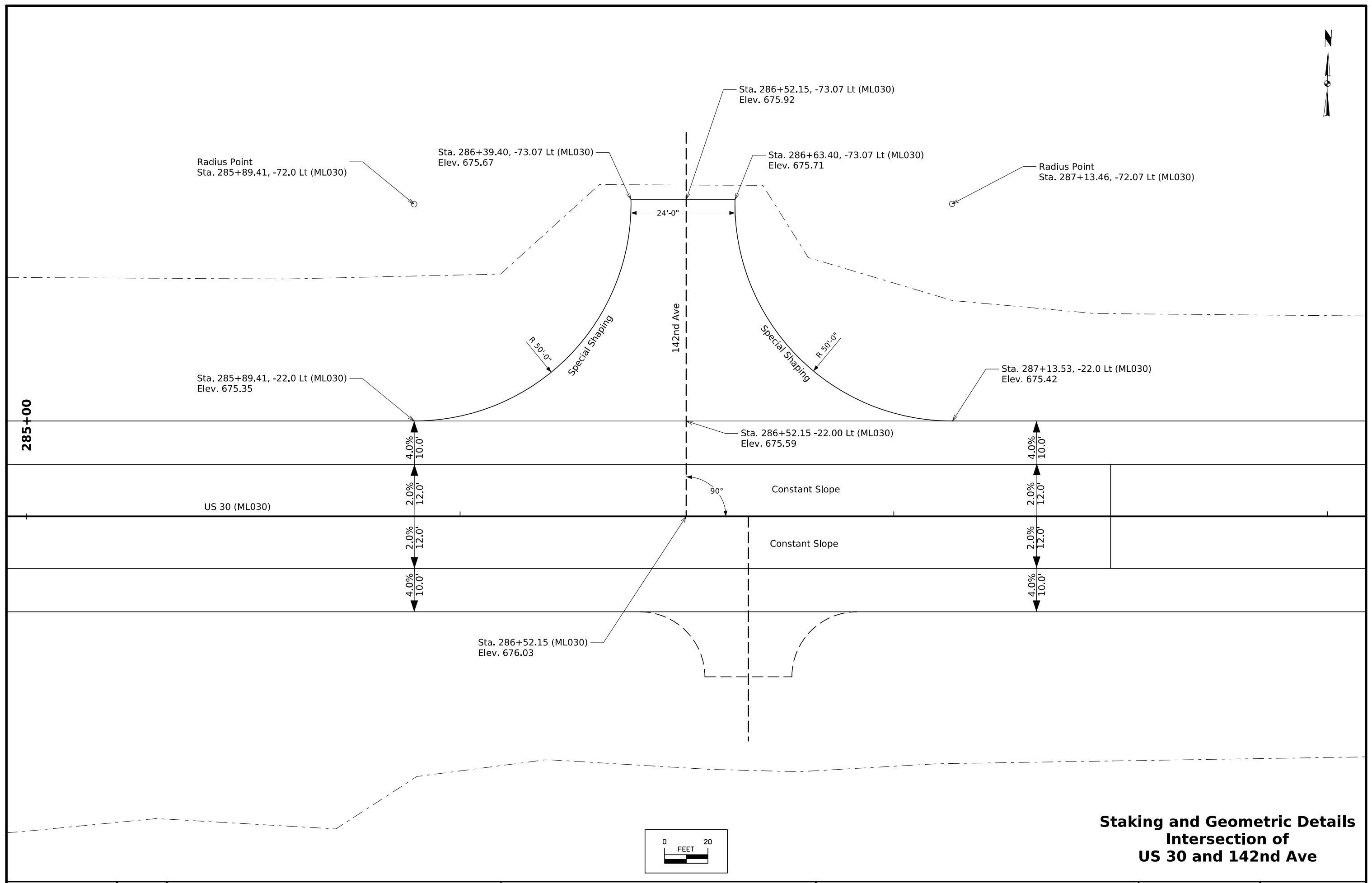




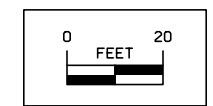


**Stage 2**

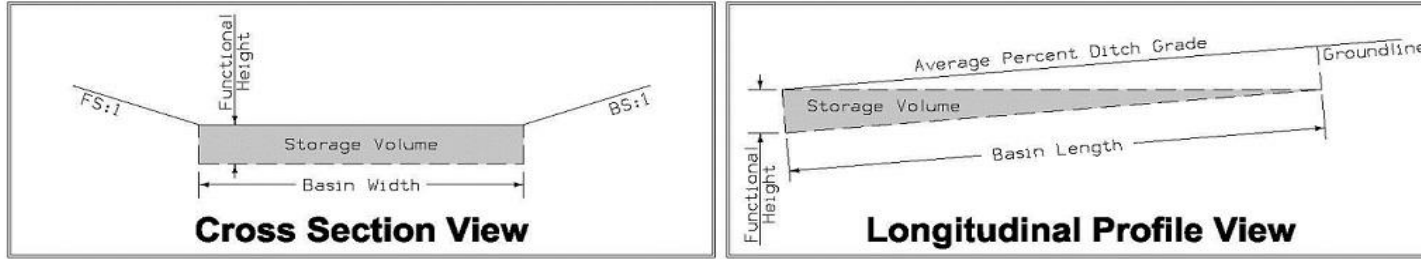
FILE NO.	ENGLISH	DESIGN TEAM <b>Iowa DOT Stanley Consultants Inc.</b>	CLINTON COUNTY	PROJECT NUMBER <b>BRF-030-9(189)--38-23</b>	SHEET NUMBER <b>J.7</b>
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**Staking and Geometric Details  
Intersection of  
US 30 and 142nd Ave**



**SILT BASINS**  
Possible Standard: EW-403



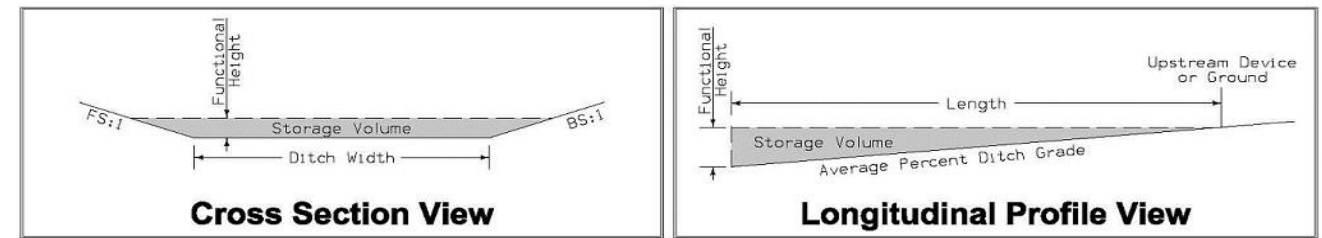
\* The functional height used in the volume equation is 95% of effective height. Effective height is 3 feet as shown in EW-403.  
\* Volume equation:  $(0.5 * Length * (Width * Height + Width * (Height - Length * Avg\%Slope)))$

Basin No.	Location		Bid Items		Stormwater Storage Volume Summary					Remarks
	Station	Side	Installation	Removal	Basin Width	Basin Length	Height	Avg. % Slope	Volume*	
			EACH	EACH	FT	FT	FT		CF	
5	255+60.00	Lt	1	1	10.0	50.0	2.85	0.2%	1400.0	
5	256+30.00	Lt	1	1	10.0	50.0	2.85	0.2%	1400.0	
6	255+60.00	Rt	1	1	10.0	50.0	2.85	0.3%	1387.5	
6	256+30.00	Rt	1	1	10.0	50.0	2.85	0.3%	1387.5	
Totals:			4	4						

**TABULATION OF SILT FENCES**  
Refer to EC-201

Location		Side	Length	Remarks
Begin Station	End Station			
219+00.00	235+60.00	Lt	1660.0	
219+00.00	235+60.00	Rt	1660.0	
228+15.00	235+60.00	Rt	745.0	
233+35.00	235+60.00	Lt	225.0	
235+70.00	235+70.00	Both	60.0	
236+25.00	236+25.00	Both	60.0	
236+50.00	243+00.00	Both	1300.0	
237+25.00	243+50.00	Lt	625.0	
238+00.00	242+00.00	Rt	400.0	
242+20.00	246+00.00	Rt	380.0	
250+75.00	274+25.00	Rt	2350.0	
250+50.00	287+50.00	Rt	3700.0	
251+60.00	268+50.00	Both	1690.0	
251+60.00	268+50.00	Both	1690.0	
251+60.00	258+10.00	Lt	650.0	
251+60.00	269+10.00	Lt	1750.0	
252+90.00	269+10.00	Rt	1620.0	
269+80.00	269+80.00	Both	300.0	
271+80.00	271+80.00	Both	200.0	
272+00.00	285+80.00	Both	1380.0	
272+00.00	274+00.00	Lt	200.0	
272+00.00	286+25.00	Lt	1425.0	
286+75.00	287+50.00	Lt	75.0	
Totals:			24070.0	

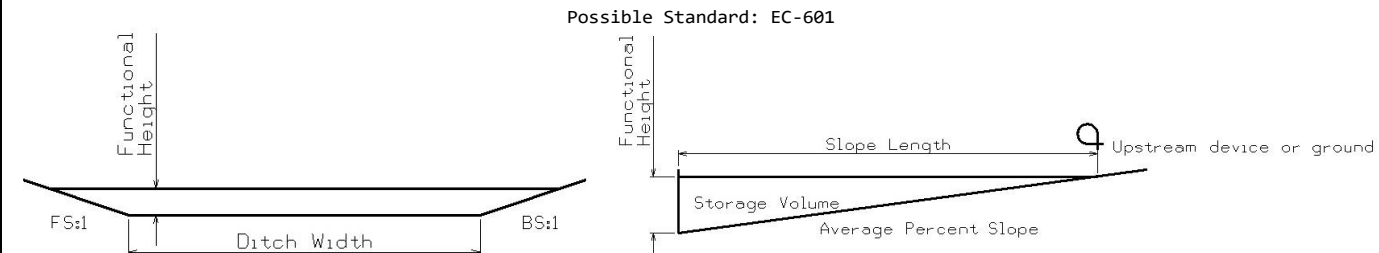
**SILT FENCES FOR DITCH CHECKS**  
Possible Standard: EC-201



\* The functional height used in the volume equation is 85% of effective height. Effective height is 1.58 feet as shown on EC-201.  
\* Volume equation:  $[0.5 * Spacing * (0.5 * H^2 * FS + DW * H + 0.5 * H^2 * BS)]$

Basin No.	Type	Location		Bid Items			Stormwater Storage Volume Summary					Remarks
		Station	Side	Installation	Maintenance	Removal	Foreslope	Backslope	Ditch Width	Avg. % Slope	Volume*	
				LF	LF	LF	FS:1	BS:1	FT	Ditch Grade	CF	
5		252+80.00	Lt	23.0	23.0	23.0	3.0	0.0	10.0	0.2%	2541.3	
5		254+10.00	Lt	23.0	23.0	23.0	3.0	0.0	10.0	0.2%	2541.3	
5		257+60.00	Lt	23.0	23.0	23.0	3.0	0.0	10.0	0.2%	2541.3	
5		259+15.00	Lt	23.0	23.0	23.0	3.0	0.0	10.0	0.2%	2541.3	
6		253+25.00	Rt	23.0	23.0	23.0	3.0	0.0	10.0	0.3%	2541.3	
6		254+50.00	Rt	23.0	23.0	23.0	3.0	0.0	10.0	0.3%	2541.3	
6		257+40.00	Rt	23.0	23.0	23.0	3.0	0.0	10.0	0.3%	2541.3	
6		260+55.00	Rt	23.0	23.0	23.0	3.0	0.0	10.0	0.3%	2541.3	
6		263+70.00	Rt	23.0	23.0	23.0	3.0	0.0	10.0	0.3%	2541.3	
6		264+60.00	Rt	23.0	23.0	23.0	3.0	0.0	10.0	0.3%	2541.3	
6		266+85.00	Rt	23.0	23.0	23.0	3.0	0.0	10.0	0.3%	2541.3	
6		268+80.00	Rt	23.0	23.0	23.0	3.0	0.0	10.0	0.3%	2541.3	
7		263+00.00	Lt	23.0	23.0	23.0	3.0	0.0	10.0	0.3%	2541.3	
7		265+50.00	Rt	23.0	23.0	23.0	3.0	0.0	10.0	0.3%	2541.3	
7		267+50.00	Rt	23.0	23.0	23.0	3.0	0.0	10.0	0.3%	2541.3	
9		273+00.00	Lt	23.0	23.0	23.0	3.0	0.0	10.0	0.5%	2541.3	
9		275+60.00	Lt	23.0	23.0	23.0	3.0	0.0	10.0	0.5%	2541.3	
9		278+80.00	Lt	23.0	23.0	23.0	3.0	0.0	10.0	0.5%	2541.3	
9		271+80.00	Lt	23.0	23.0	23.0	3.0	0.0	10.0	0.5%	2541.3	
10		272+50.00	Rt	23.0	23.0	23.0	3.0	0.0	10.0	0.5%	2541.3	
10		274+30.00	Rt	23.0	23.0	23.0	3.0	0.0	10.0	0.5%	2541.3	
10		276+50.00	Rt	23.0	23.0	23.0	3.0	0.0	10.0	0.5%	2541.3	
10		279+35.00	Rt	23.0	23.0	23.0	3.0	0.0	10.0	0.5%	2541.3	
10		282+50.00	Rt	23.0	23.0	23.0	3.0	0.0	10.0	0.5%	2541.3	
10		271+80.00	Rt	23.0	23.0	23.0	3.0	0.0	10.0	0.5%	2541.3	
11		285+75.00	Rt	23.0	23.0	23.0	3.0	0.0	10.0	0.5%	2541.3	
12		282+15.00	Lt	23.0	23.0	23.0	3.0	0.0	10.0	0.5%	2541.3	
Totals:				621.0	621.0	621.0						

**TEMPORARY SEDIMENT CONTROL BASIN**  
Possible Standard: EC-601



\* The functional height used in the volume equation is 95% of effective height. Effective height is 2.5 feet as shown in EC-601.  
\* Volume equation:  $[(1/4 * (FS * H^2)) + (DW * H) + (1/4 * (BS * H^2))] * (H / Avg\%Slope)$

Basin No.	Location		Bid Items			Stormwater Storage Volume Summary					Remarks
	Station	Side	Installation	Maintenance	Removal	Foreslope	Backslope	Ditch Width	Average % Slope	Volume*	
			Each	Each	Each	FS:1	BS:1	FT		CF	
5	255+50.00	Lt	1	1	1	3.0	3.0	10.00	0.5%	9660	
6	268+50.00	Rt	1	1	1	3.0	3.0	10.00	0.3%	16099	
7	268+50.00	Lt	1	1	1	3.0	3.0	10.00	0.6%	8050	
9	273+00.00	Lt	1	1	1	3.0	3.0	10.00	0.4%	12074	
10	273+00.00	Rt	1	1	1	3.0	3.0	10.00	0.3%	16099	
Totals:			5	5	5						

**ROCK EROSION CONTROL**

Refer to EC-301 and Detail 570-8

Location				Rock Erosion Control (REC)					Material Bid Quantities			Remarks		
Road Identification	Begin Station	End Station	Side Lt./Rt.	L FT	W FT	Type 1	Type 2	Type 3	Type 4	Type 5	Eng. Fabric		Class E Revetment	Erosion Stone
						Rock Ditch Check	Rock Ditch	Rock Flume	Rock Splash Basin	Rock Slope Protection	SY		TON	TON
US 30	255+91.00	256+03.00	Lt.	12	12				1		28.4		15.1	
US 30	255+91.00	256+03.00	Rt.	12	12				1		28.4	15.1		
Totals:									2		56.8	30.2		

**STORMWATER DRAINAGE BASIN AND STORAGE**

Refer to EC Standards and 570s Details.

Drainage Basin Location						Summary of Stormwater Storage							Remarks
Basin No.	Station to Station	Side	Discharge Point		Total Disturbed Area Acres	Disturbed Area with Storage Provided Acres	Disturbed Area without Storage Provided Acres	Best Management Practice	Total Storage Volume Provided	Total Storage Volume Required	Storage Volume Met?		
			Station	Side					CF	CF	Yes/No		
1	219+00.00	236+00.00	Rt	230+00.00	Rt	0.8	0.0	0.8	Vegetated Buffer		0.0	Yes	
2	219+00.00	236+00.00	Lt	230+00.00	Lt	1.5	0.0	1.5	Vegetated Buffer		0.0	Yes	
3	236+00.00	247+37.00	Lt	236+70.00	Lt	2.2	0.0	2.2	Vegetated Buffer		0.0	Yes	
4	236+00.00	247+80.00	Rt	236+70.00	Rt	1.6	0.0	1.6	Vegetated Buffer		0.0	Yes	
5	247+37.00	260+25.00	Lt	245+25.00	Lt	3.4	3.4	0.0	Silt Fence for Ditch Check (EC-201) Silt Basin (EW-403) Temporary Sediment Control Basin (EC-601) Total:	10165.3 2800.0 9659.6 22624.9	12140.0	Yes	
6	247+37.00	270+80.00	Rt	269+80.00	Rt	6.5	6.5	0.0	Silt Fence for Ditch Check (EC-201) Silt Basin (EW-403) Temporary Sediment Control Basin (EC-601) Total:	20330.7 2775.0 16099.3 39205.0	23400.0	Yes	
7	260+25.00	270+80.00	Lt	269+80.00	Lt	1.9	1.9	0.0	Silt Fence for Ditch Check (EC-201) Temporary Sediment Control Basin (EC-601) Total:	7624.0 8049.6 15673.7	6840.0	Yes	
8	250+50.00	270+50.00	Rt	270+50.00	Rt	3.1	0.0	3.1	Vegetated Buffer		0.0	Yes	
9	270+80.00	282+10.00	Lt	271+80.00	Lt	2.2	2.2	0.0	Silt Fence for Ditch Check (EC-201) Temporary Sediment Control Basin (EC-601) Total:	10165.3 12074.5 22239.8	7920.0	Yes	
10	270+80.00	285+60.00	Rt	271+80.00	Rt	3.8	3.8	0.0	Silt Fence for Ditch Check (EC-201) Temporary Sediment Control Basin (EC-601) Total:	15248.0 16099.3 31347.3	13680.0	Yes	
11	285+60.00	286+65.00	Rt	286+65.00	Rt	0.2	0.0	0.2	Vegetated Buffer		0.0	Yes	
12	282+10.00	286+50.00	Lt	286+50.00	Lt	0.7	0.7	0.0	Silt Fence for Ditch Check (EC-201)	2541.3	2459.4	Yes	
13	286+50.00	287+50.00	Lt	287+50.00	Lt	0.2	0.0	0.2	Vegetated Buffer		0.0	Yes	
14	286+65.00	287+50.00	Rt	287+50.00	Lt	0.1	0.0	0.1	Vegetated Buffer		0.0	Yes	

**POLLUTION PREVENTION PLAN**

This project is regulated by the requirements of the Iowa Department of Natural Resources (DNR) National Pollutant Discharge Elimination System (NPDES) General Permit No. 2 OR an Iowa Department of Natural Resources (DNR) National Pollutant Discharge Elimination System (NPDES) individual storm water permit. The Contractor shall carry out the terms and conditions of this permit and the Pollution Prevention Plan (PPP).

This Base PPP includes information on Roles and Responsibilities, Project Site Description, Controls, Maintenance Procedures, Inspection Requirements, Non-Storm Water Controls, Potential Sources of Off Right-of-Way Pollution, and Definitions. This plan references other documents rather than repeating the information contained in the documents. A copy of this Base Pollution Prevention Plan, amended as needed during construction, will be readily available for review.

All contractors shall conduct their operations in a manner that controls pollutants, minimizes erosion, and prevents sediments from entering waters of the state and leaving the highway right-of-way. The Contractor shall be responsible for compliance and implementation of the PPP for their entire contract. This responsibility shall be further shared with subcontractors whose work is a source of potential pollution as defined in this PPP.

**I. ROLES AND RESPONSIBILITIES**

- A. Designer:
  - 1. Prepares Base PPP included in the project plan.
  - 2. Prepares Notice of Intent (NOI) submitted to Iowa DNR.
  - 3. Is signature authority on the Base PPP. If consultant designed, signature from Contracting Authority is also required.
- B. Contractor:
  - 1. Signs a co-permittee certification statement adhering to the requirements of the NPDES permit and this PPP. All co-permittees are legally required under the Clean Water Act and the Iowa Administrative Code to ensure compliance with the terms and conditions of this PPP.
  - 2. Designates a Water Pollution Control Manager (WPCM), who has the duties and responsibilities as defined in Section 2602 of the Standard Specifications.
  - 3. Submits an Erosion Control Implementation Plan (ECIP) and ECIP updates according to Section 2602 of the Standard Specifications.
  - 4. Installs and maintains appropriate controls. This work may be subcontracted as documented through Subcontractor Request Forms (Form 830231).
  - 5. Supervises and implements good housekeeping practices according to Paragraph III, C, 2.
  - 6. Conducts joint required inspections of the site with inspection staff. When Contractor is not mobilized on site, Contractor may delegate this responsibility to a trained or certified subcontractor. Contracting Authority also may waive joint inspection requirement during winter shutdown. In both circumstances, WPCM (or trained or certified delegate from the Contractor) is still responsible to review and sign inspection reports.
  - 7. Complies with training and certification requirements of Section 2602 of the Standard Specifications.
  - 8. Submits amended PPP site map according to Section 2602 of the Standard Specifications.
- C. Subcontractors:
  - 1. Sign a co-permittee certification statement adhering to the requirements of the NPDES permit and this PPP if: responsible for sediment or erosion controls; involved in land disturbing activities; or performing work that is a source of potential pollution as defined in this PPP. Subcontracted work items are identified in Subcontractor Request Forms (Form 830231). All co-permittees are legally required under the Clean Water Act and the Iowa Administrative Code to ensure compliance with the terms and conditions of this PPP.
  - 2. Implement good housekeeping practices according to Paragraph III, C, 2.
- D. RCE/Project Engineer:
  - 1. Is Project Storm Water Manager.
  - 2. On projects where DOT is the Contracting Authority, is current with erosion control training or certification.
  - 3. Takes actions necessary to ensure compliance with storm water requirements including, where appropriate, issuing stop work orders, and directing additional inspections at construction project sites that are experiencing problems with achieving permit compliance.
  - 4. Orders the taking of measures to cease, correct, prevent, or minimize the consequences of non-compliance with the storm water requirements of the Applicable Permit.
  - 5. Supervises all work necessary to meet storm water requirements at the Project, including work performed by contractors and subcontractors.
  - 6. Requires employees, contractors, and subcontractors to take appropriate responsive action to comply with storm water requirements, including requiring any such person to cease or correct a violation of storm water requirements, and to order or recommend such other actions as necessary to meet storm water requirements.
  - 7. Is familiar with the Project PPP and storm water site map.
  - 8. On projects where DOT is Contracting Authority, is responsible for periodically monitoring inspection reports to determine whether deficiencies identified in inspection reports were adequately and timely addressed, and if not, has the authority and responsibility to direct immediate actions to correct the deficiencies.
  - 9. Is the point of contact for the Project for regulatory officials, Inspector, contractors, and subcontractors regarding storm water requirements.
  - 10. Is signature authority on Notice of Discontinuation.
  - 11. Maintains an up-to-date record of contractors, subcontractors, and subcontracted work items through Subcontractor Request Forms (Form 830231).
  - 12. Makes information to determine permit compliance available to the DNR upon their request.
- E. Inspector:
  - 1. Updates PPP through fieldbook entries and storm water site inspection reports if there is a change in design, construction, operation, or maintenance which has a significant effect on the discharge of pollutants from the project.
  - 2. Makes information to determine permit compliance available to the DNR upon their request.
  - 3. Conducts joint required inspections of the site with the contractor/subcontractor.
  - 4. Completes an inspection report after each inspection.
  - 5. Is signature authority on storm water inspection reports.

**II. PROJECT SITE DESCRIPTION**

- A. This Pollution Prevention Plan (PPP) is for the construction of a Roadway Realignment and Bridge Replacement.
- B. This PPP covers approximately 28.0 acres with an estimated 28.0 acres being disturbed. The portion of the PPP covered by this contract has 28.0 acres disturbed.
- C. The PPP is located in an area of one soil association (Sparta - Chelsea - Dickinson). The estimated weighted average runoff coefficient number for this PPP after completion will be 0.26.
- D. Storm Water Site Map is located in the R sheets. Proposed slopes are shown in cross sections, details, or standard road plans. Supplemental information is located in the Tabulations in the C or CE sheets.
- E. The base storm water site map is amended by contract modifications and progress payments (fieldbook entries) of completed erosion control work. Also, due to project phasing, erosion and sediment controls shown on project plans may not be installed until needed, based on site conditions. For example, silt fence ditch checks will typically not be installed until the ditch has been installed. Installed locations may also be modified from tabulation locations by field staff. Installed locations will be

**POLLUTION PREVENTION PLAN**

documented by fieldbook entries and amended PPP site map.  
F. Runoff from this work will flow into the Wapsipinicon River.

**III. CONTROLS**

- A. The Contractor's ECIP specified in Article 2602.03 of the Standard Specifications for accomplishment of storm water controls should clearly describe the intended sequence of major activities, and for each activity define the control measure and the timing during the construction process that the measure will be implemented.
  - B. Preserve vegetation in areas not needed for construction.
  - C. Sections 2601 and 2602 of the Standard Specifications define requirements to implement erosion and sediment control measures. Actual quantities used and installed locations may vary from the Base PPP and amendment of the plan will be documented via fieldbook entries, amended PPP site map, or by contract modification. Additional erosion and sediment control items may be required as determined by the inspector and/or contractor during storm water site inspections. If the work involved is not applicable to any contract items, the work will be paid for according to Article 1109.03 paragraph B of the Standard Specifications.
    - 1. EROSION AND SEDIMENT CONTROLS
      - a. Stabilization Practices
        - 1) Site plans will ensure that existing vegetation or natural buffers are preserved where attainable and disturbed portions of the site will be stabilized.
        - 2) Initialize stabilization of disturbed areas immediately after clearing, grading, excavating, or other earth disturbing activities have:
          - a) Permanently ceased on any portion of the site, or
          - b) Temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days.
        - 3) Staged permanent and/or temporary stabilizing seeding and mulching shall be completed as the disturbed areas are completed. Incomplete areas shall be stabilized according to paragraph III, C, 1, a, 2, b above.
        - 4) Permanent and Temporary Stabilization practices to be used for this project are located in the storm water site map, Estimated Project Quantities (100-0A, 100-1A, or 100-1C), and Estimate Reference Information (100-4A) located in the C or R sheets. Typical drawings detailing construction of the practices to be used on this project are referenced in the Standard Road Plans Tabulation (105-4) in the C or R sheets.
        - 5) Preservation of existing vegetation within right-of-way or easements will act as vegetative buffer strips.
        - 6) Preservation of topsoil: Bid items to be used for this project are located in the Estimated Project Quantities (100-0A, 100-1A, or 100-1C) and Estimate Reference Information (100-4A) located in the C or R sheets. Additional information may be found in the Tabulations in the C or T Tabulation sheets, or is referenced in Section 2105 of the Standard Specifications.
      - b. Structural Practices
        - 1) Structural practices will be implemented to divert flows from exposed soils and detain or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Additionally, structural practices may include: silt basins that provide 3600 cubic feet of storage per acre drained or equivalent sediment controls, outlet structures that withdraw water from surface when discharging basins, and controls to direct storm water to vegetated areas.
        - 2) Structural practices to be used for this project are located in the storm water site map, Estimated Project Quantities (100-0A, 100-1A, or 100-1C), and Estimate Reference Information (100-4A) located in the C or R sheets, as well as all other item specific Tabulations. Typical drawings detailing construction of the devices to be used on this project can be found on the B or R sheets or are referenced in the Standard Road Plans Tabulation (105-4) located in the C or R sheets.
    - c. Storm Water Management
      - Measures shall be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. This may include velocity dissipation devices at discharge locations and along length of outfall channel as necessary to provide a non-erosion velocity flow from structure to water course. If included with this project, these items are located in the storm water site map and Estimated Project Quantities (100-0A, 100-1A, or 100-1C) and Estimate Reference Information (100-4A) located in the C or R sheets, as well as all other item specific Tabulations. Typical drawings detailing construction of the practices to be used on this project are referenced in the Standard Road Plans Tabulation. The installation of these devices may be subject to Section 404 of the Clean Water Act.
  - 2. OTHER CONTROLS
    - Contractor disposal of unused construction materials and construction material wastes shall comply with applicable state and local waste disposal, sanitary sewer, or septic system regulations. In the event of a conflict with other governmental laws, rules and regulations, the more restrictive laws, rules or regulations shall apply.
    - a. Vehicle Entrances and Exits - Construct and maintain entrances and exits to prevent tracking of sediments onto roadways.
    - b. Material Delivery, Storage and Use - Implement practices to prevent discharge of construction materials during delivery, storage, and use.
    - c. Stockpile Management - Install controls to reduce or eliminate pollution of storm water from stockpiles of soil and paving.
    - d. Waste Disposal - Do not discharge any materials, including building materials, into waters of the state, except as authorized by a Section 404 permit.
    - e. Spill Prevention and Control - Implement chemical spill and leak prevention and response procedures to contain and clean up spills and prevent material discharges to the storm drain system and waters of the state.
    - f. Concrete Residuals and Washout Wastes - Waste shall not be discharged to a surface water and is not allowed to adversely affect a water of the state. Designate temporary concrete washout facilities for rinsing out concrete trucks. Provide directions to truck drivers where designated washout facilities are located. Designated washout areas should be located at least 50 feet away from storm drains, streams or other water bodies. Care should be taken to ensure these facilities do not overflow during storm events.
    - g. Concrete Grooving/Grinding Slurry - Do not discharge slurry to a waterbody or storm drain. Slurry may be applied on foreslopes or removed from the project.
    - h. Vehicle and Equipment Storage and Maintenance Areas - Perform on site fueling and maintenance in accordance with all environment laws such as proper storage of onsite fuels and proper disposal of used engine oil or other fluids on site. Employ washing practices that prevent contamination of surface and ground water from wash water. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge.
    - i. Litter Management - Ensure employees properly dispose of litter. Minimize exposure of trash if exposure to precipitation or storm water would result in a discharge of pollutants.
    - j. Dewatering - Properly treat water to remove suspended sediment before it re-enters a waterbody or discharges off-site. Measures are also to be taken to prevent scour erosion at dewatering discharge point.
3. APPROVED STATE OR LOCAL PLANS
  - During the course of this construction, it is possible that situations will arise where unknown materials will be encountered. When such situations are encountered, they will be handled according to all federal, state, and local regulations in effect at the time.

**IV. MAINTENANCE PROCEDURES**



### POLLUTION PREVENTION PLAN

The Contractor is required to maintain all temporary erosion and sediment control measures in proper working order, including cleaning, repairing, or replacing them throughout the contract period. This shall begin when the features have lost 50% of their capacity.

#### V. INSPECTION REQUIREMENTS

- A. Inspections shall be made jointly by the Contractor and the Contracting Authority's inspector at least once every seven calendar days. Storm water site inspections will include:
  1. Date of the inspection.
  2. Summary of the scope of the inspection.
  3. Name and qualifications of the personnel making the inspection.
  5. Review of erosion and sediment control measures within disturbed areas for the effectiveness in preventing impacts to receiving waters.
  6. Major observations related to the implementation of the PPP.
  7. Identification of corrective actions required to maintain or modify erosion and sediment control measures.
- B. Include storm water site inspection reports in the Amended PPP. Incorporate any additional erosion and sediment control measures determined as a result of the inspection. Immediately begin corrective actions on all deficiencies found within 3 calendar days of the inspection and complete within 7 calendar days following the inspection. If it is determined that making the corrections less than 72 hours after the inspection is impracticable, it should be documented why it is impracticable and indicate an estimated date by which the corrections will be made.

#### VI. NON-STORM WATER DISCHARGES

This includes subsurface drains (i.e. longitudinal and standard subdrains) and slope drains. The velocity of the discharge from these features may be controlled by the use of headwalls or blocks, Class A stone, erosion stone or other appropriate materials. This also includes uncontaminated groundwater from dewatering operations, which will be controlled as discussed in Section III of the PPP.

#### VII. POTENTIAL SOURCES OF OFF RIGHT-OF-WAY (ROW) POLLUTION

Silts, sediment, and other forms of pollution may be transported onto highway right-of-way (ROW) as a result of a storm event. Potential sources of pollution located outside highway ROW are beyond the control of this PPP. Pollution within highway ROW will be conveyed and controlled per this PPP.

#### VIII. DEFINITIONS

- A. Base PPP - Initial Pollution Prevention Plan.
- B. Amended PPP - Base PPP amended during construction. May include Plan Revisions or Contract Modifications for new items, storm water site inspection reports, fieldbook entries made by the inspector, amended PPP site map by the Contractor, ECIP, NOI, co-permittee certifications, and Subcontractor Request Forms. Items amending the PPP are stored electronically and are readily available upon request.
- C. Fieldbook Entries - This contains the inspector's daily diary and bid item postings.
- D. Controls - Methods, practices, or measures to minimize or prevent erosion, control sedimentation, control storm water, or minimize contaminants from other types of waste or materials. Also called Best Management Practices (BMPs).
- E. Signature Authority - Representative authorized to sign various storm water documents.

#### CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed or Typed Name

\_\_\_\_\_  
Signature

\_\_\_\_\_

### LINE STYLE LEGEND OF LANDSCAPE SHEETS

LINETYPE	Design Element
-----	Living Snow Fence Single Row
- - - - -	Living Snow Fence Double Row
—————	Mechanical Edge

### CELL LEGEND OF LANDSCAPE SHEETS

CELL	Design Element	Plant Diameter
⊕	Clearing	
⊙	Proposed Shrub	6 FT
⊙	Proposed Understory Tree	12 FT
⊙	Proposed Conifer Tree	18 FT
⊙	Proposed Overstory Tree	30 FT

### PATTERN LEGEND OF LANDSCAPE SHEETS

	Brush Clearing		Spary Area
	Clearing & Grubbing		

### LINE STYLE LEGEND OF EROSION CONTROL SHEETS

LINETYPE	Design Element
	Silt Fence
	Perimeter and Slope Sediment Control Device (9")
	Perimeter and Slope Sediment Control Device (12")
	Perimeter and Slope Sediment Control Device (20")
	Open-Throat Curb Intake Sediment Filter
	Concentrated Flow
	Rock Check and Rock Check Dam
	Sheet Flow

### CELL LEGEND OF EROSION CONTROL SHEETS

CELL	Design Element
	Temporary Sediment Control basin
	Erosion Control for Circular Intake or Manhole Well
	Erosion Control for Rectangular Intake or Manhole Well
	Grate Intake Sediment Filter Bag
	Silt Basin
	Silt Fence Tail
	Stormwater Drainage Basin Discharge Point

### PLAN VIEW COLOR LEGEND OF EROSION CONTROL SHEETS

LINWORK	Design Color No.	Color	Description
Green	(2)		Existing Topographic Features and Labels
Blue	(1)		Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Magenta	(5)		Existing Utilities
Black	(0)		Permanent Erosion Control Features
Blaze Orange	(222)		Temporary Erosion Control Features

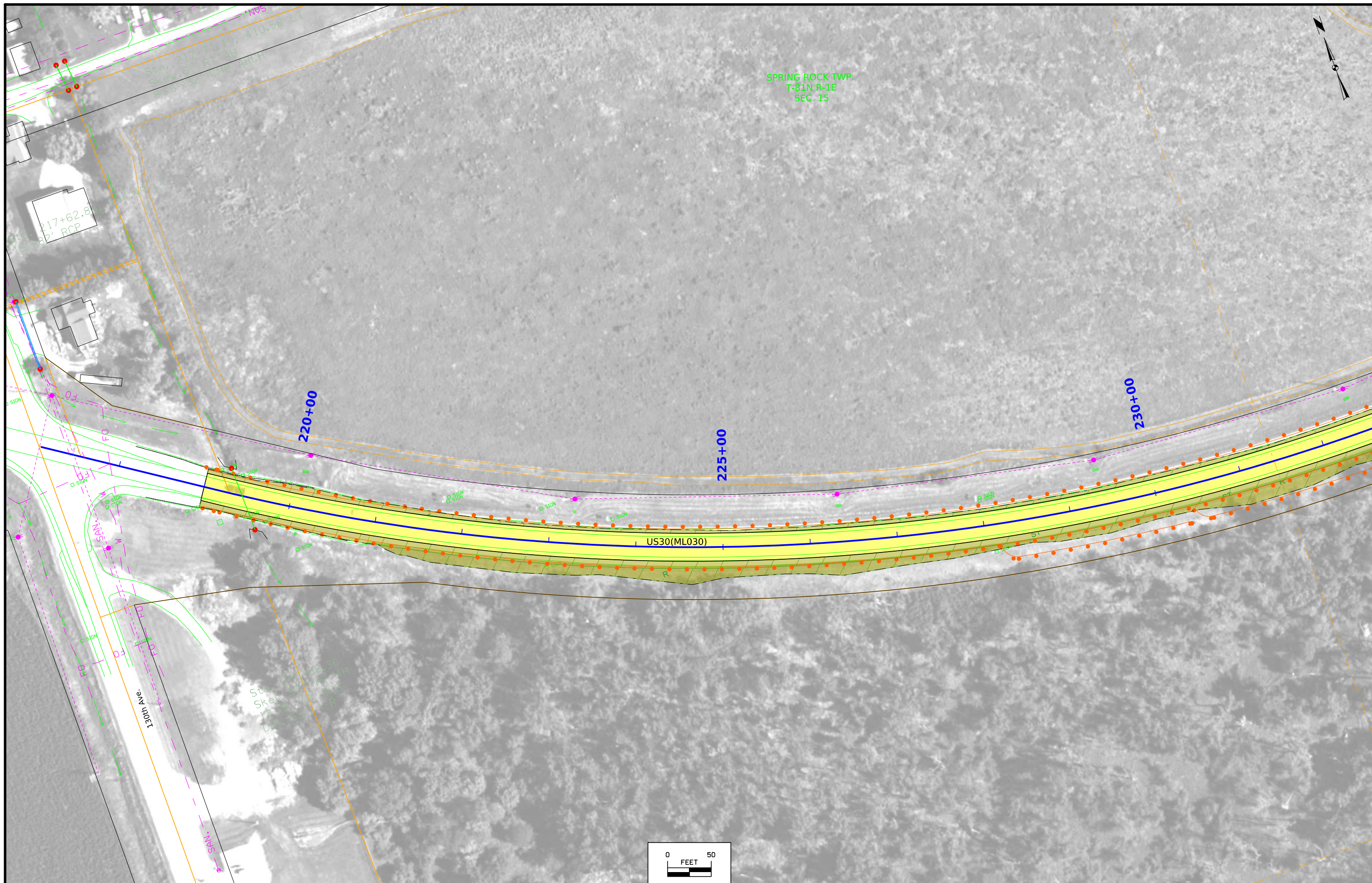
SHADING	Design Color No.	Color	Description	Transparency
Citron	(234)		Mulching, All Types	50%
Light Brown	(238)		Special Ditch Control, Wood Excelsior Mat	0%
Grass Green	(233)		8FT Mow Strip	50%
Red	(3)		Delineates Restricted Areas	

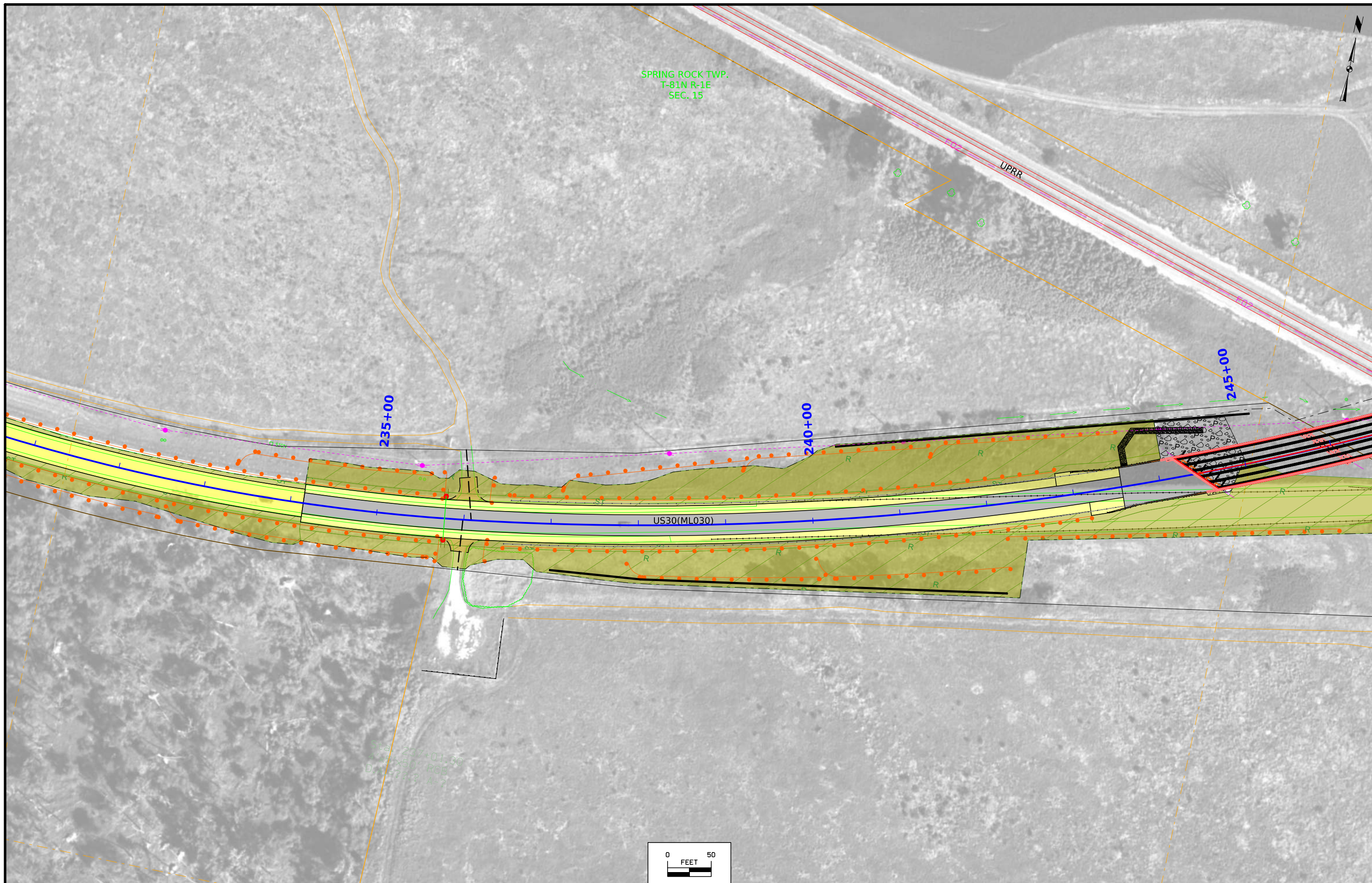
### PATTERN LEGEND OF EROSION CONTROL SHEETS

	Seeding and Fertilizing		Turf Reinforcement Mat Type 1
	Seeding and Fertilizing (Rural)		Turf Reinforcement Mat Type 2
	Seeding and Fertilizing (Urban)		Turf Reinforcement Mat Type 3
	Native Grass Seeding		Turf Reinforcement Mat Type 4
	Salt Tolerant Seeding		Slope Protection, Wood Excelsior Mat
	Wetland Grass Seeding		Transition Mat
	Wildflower Seeding		Rock Features, Permanent
	Sodding		Rock Features, Temporary

## EROSION CONTROL LEGEND AND SYMBOL INFORMATION SHEET

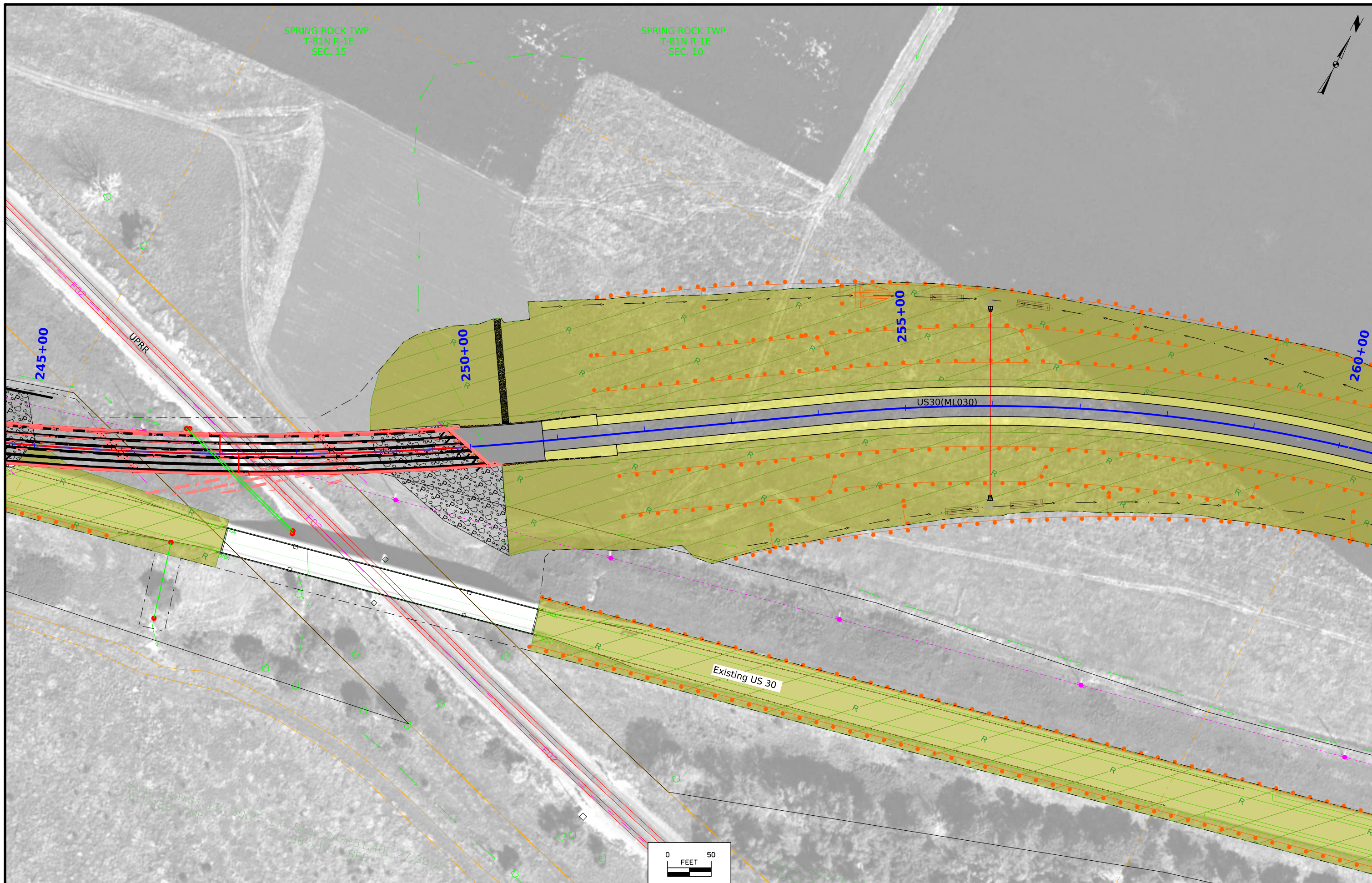
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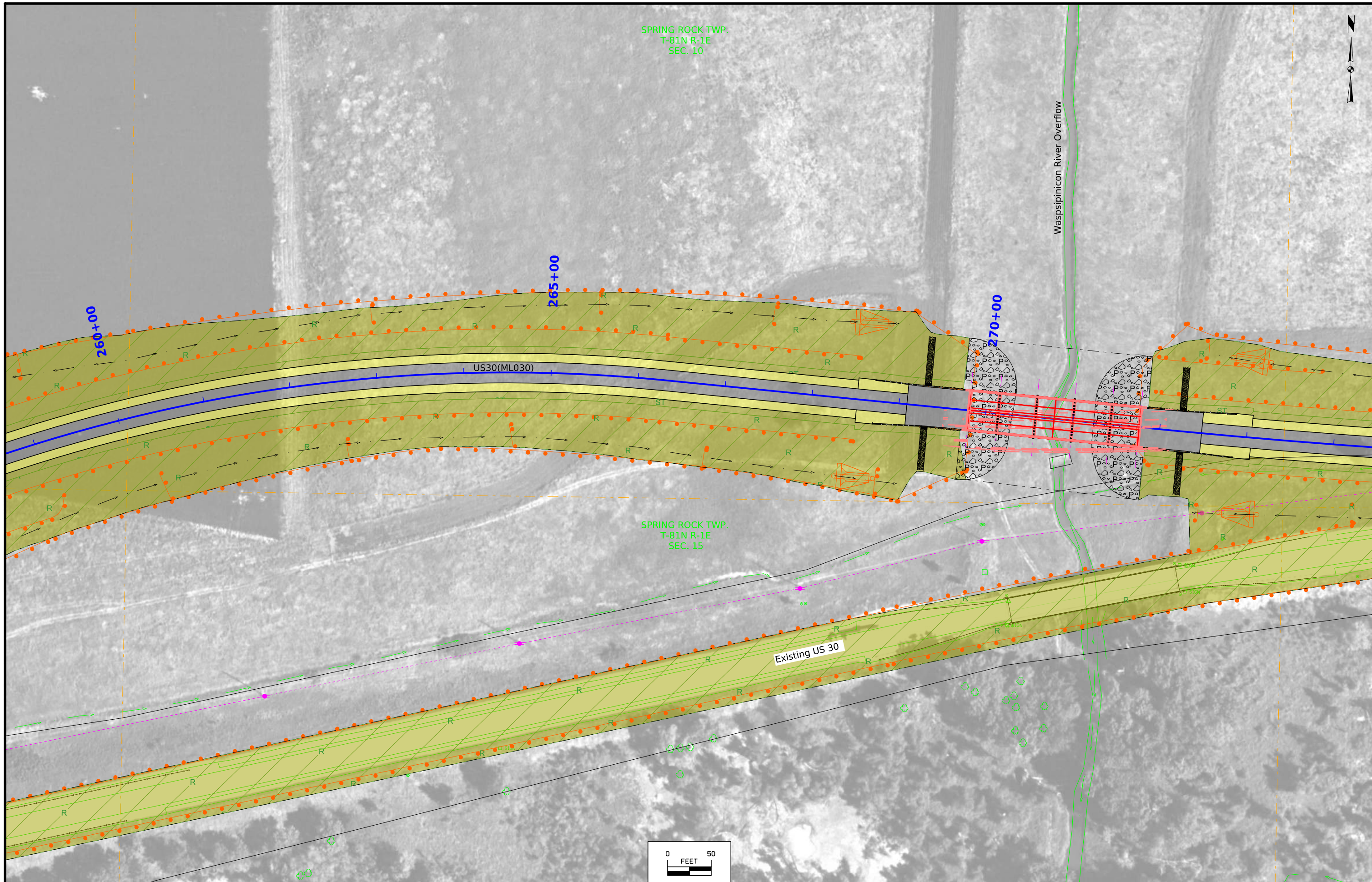


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SPRING ROCK TWP.  
T-81N R-1E  
SEC. 10

SPRING ROCK TWP.  
T-81N R-1E  
SEC. 15

Wapsipinicon River Overflow

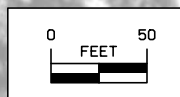
260+00

265+00

270+00

US30(ML030)

Existing US 30

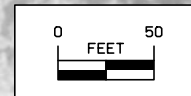


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SPRING ROCK TWP.  
T-81N R-1E  
SEC. 11



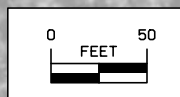
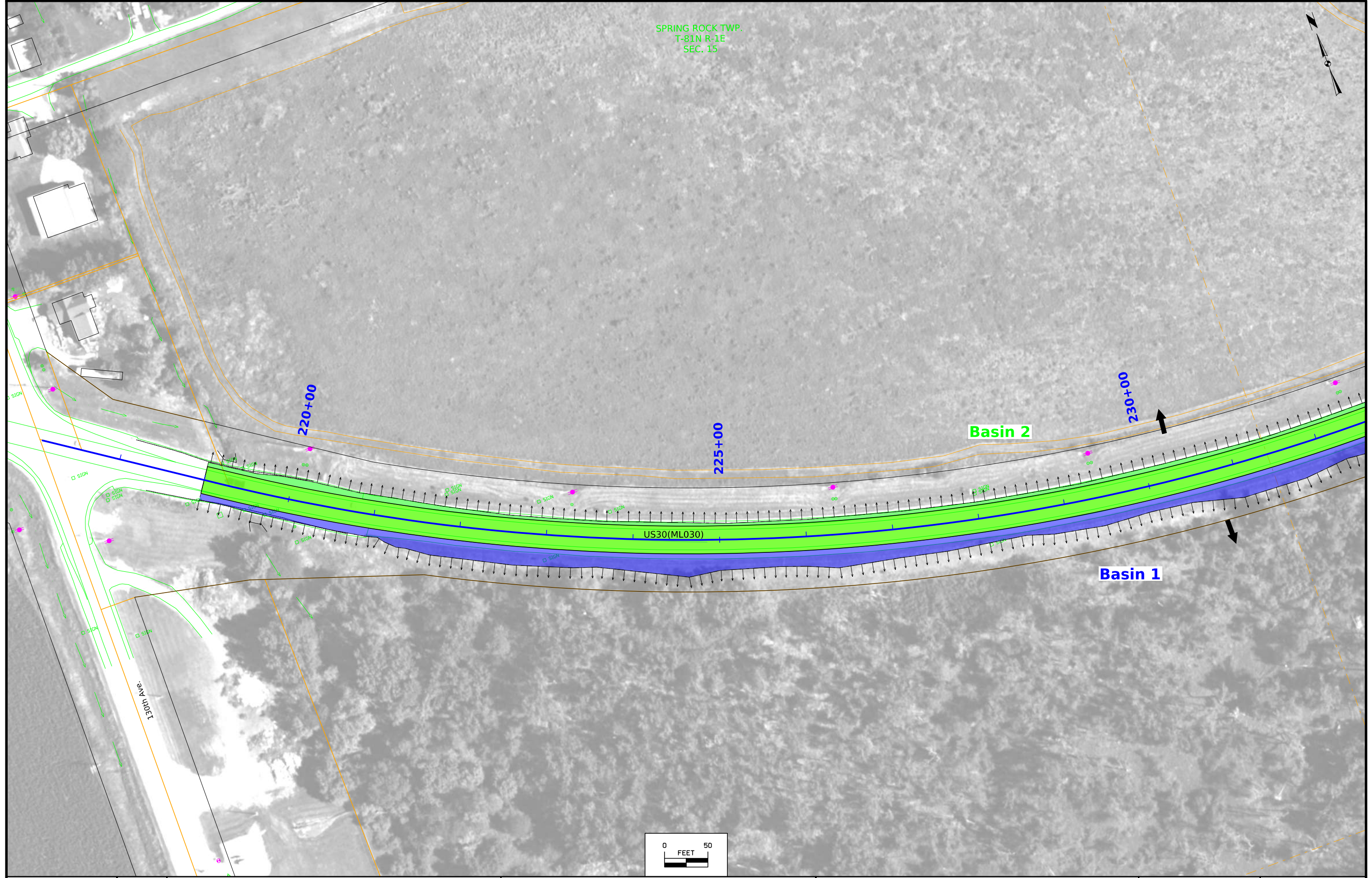
SPRING ROCK TWP.  
T-81N R-1E  
SEC. 14



FILE NO.	ENGLISH	DESIGN TEAM <b>Iowa DOT\Stanley Consultants Inc.</b>	CLINTON COUNTY	PROJECT NUMBER <b>BRF-030-9(189)--38-23</b>	SHEET NUMBER <b>RR.6</b>
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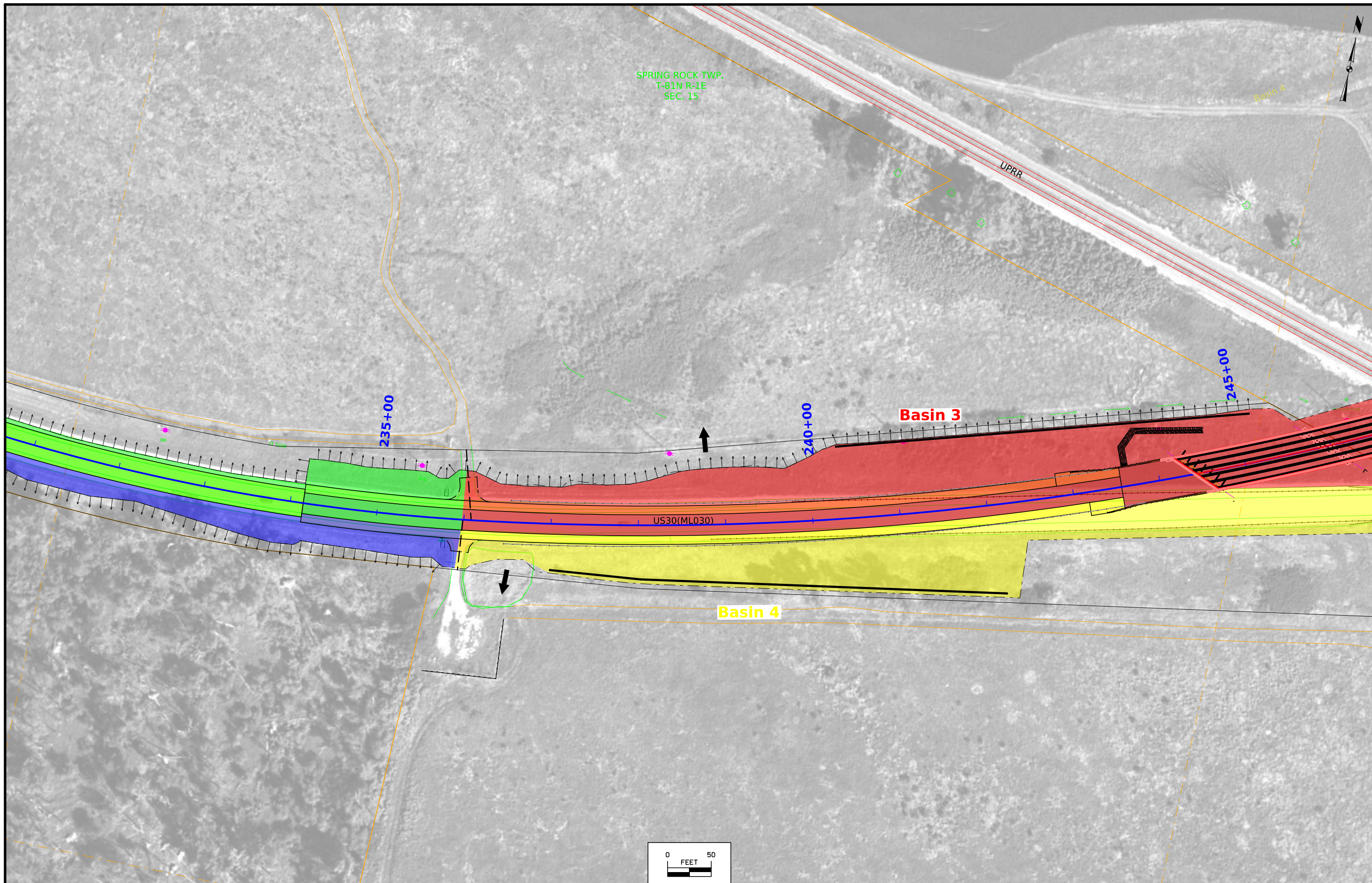
SPRING ROCK TWP.  
T-81N R-1E  
SEC. 15



FILE NO.	ENGLISH	DESIGN TEAM	<b>Iowa DOT Stanley Consultants Inc.</b>	CLINTON COUNTY	PROJECT NUMBER	<b>BRF-030-9(189)--38-23</b>	SHEET NUMBER	<b>RR.7</b>
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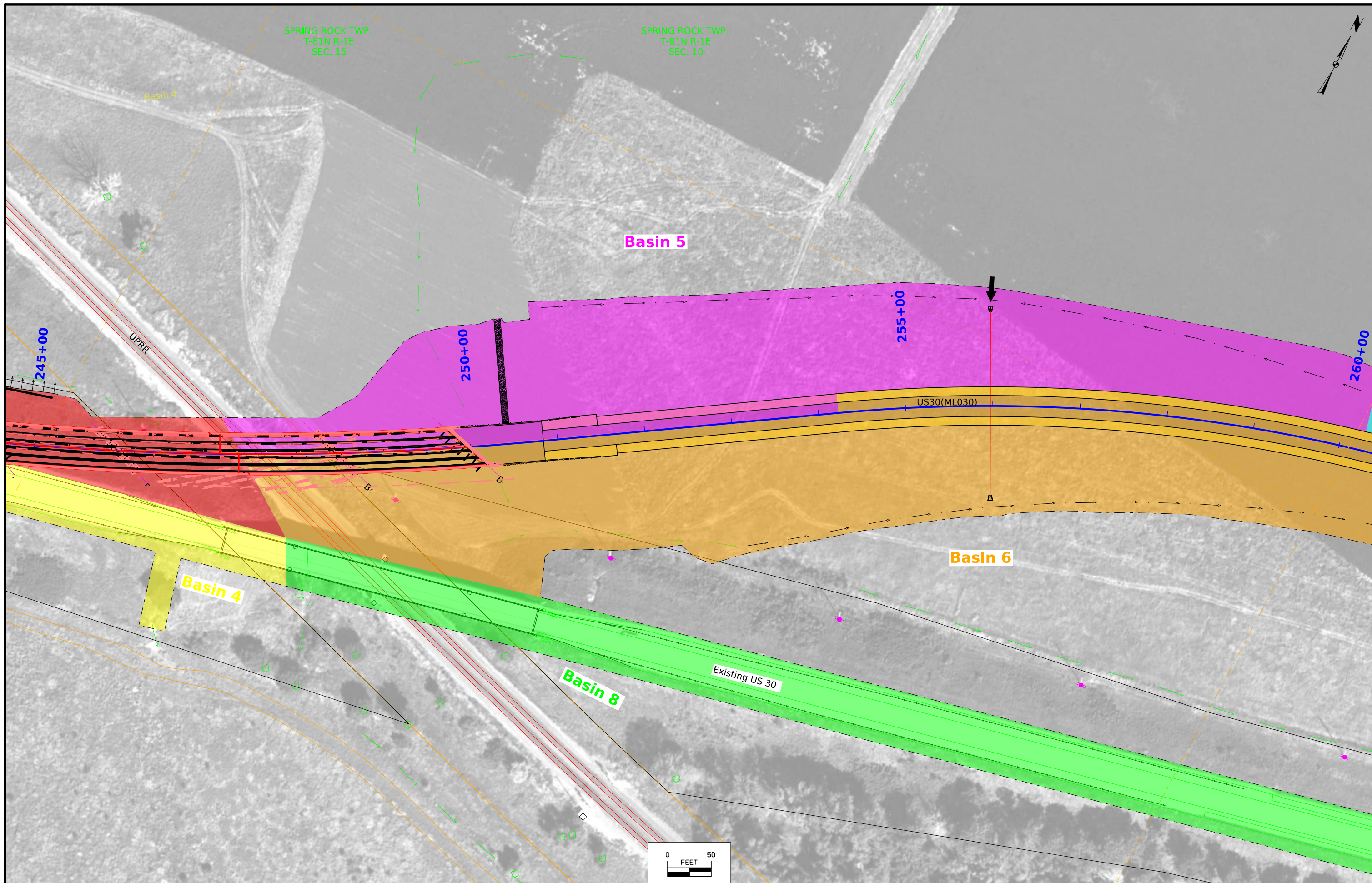
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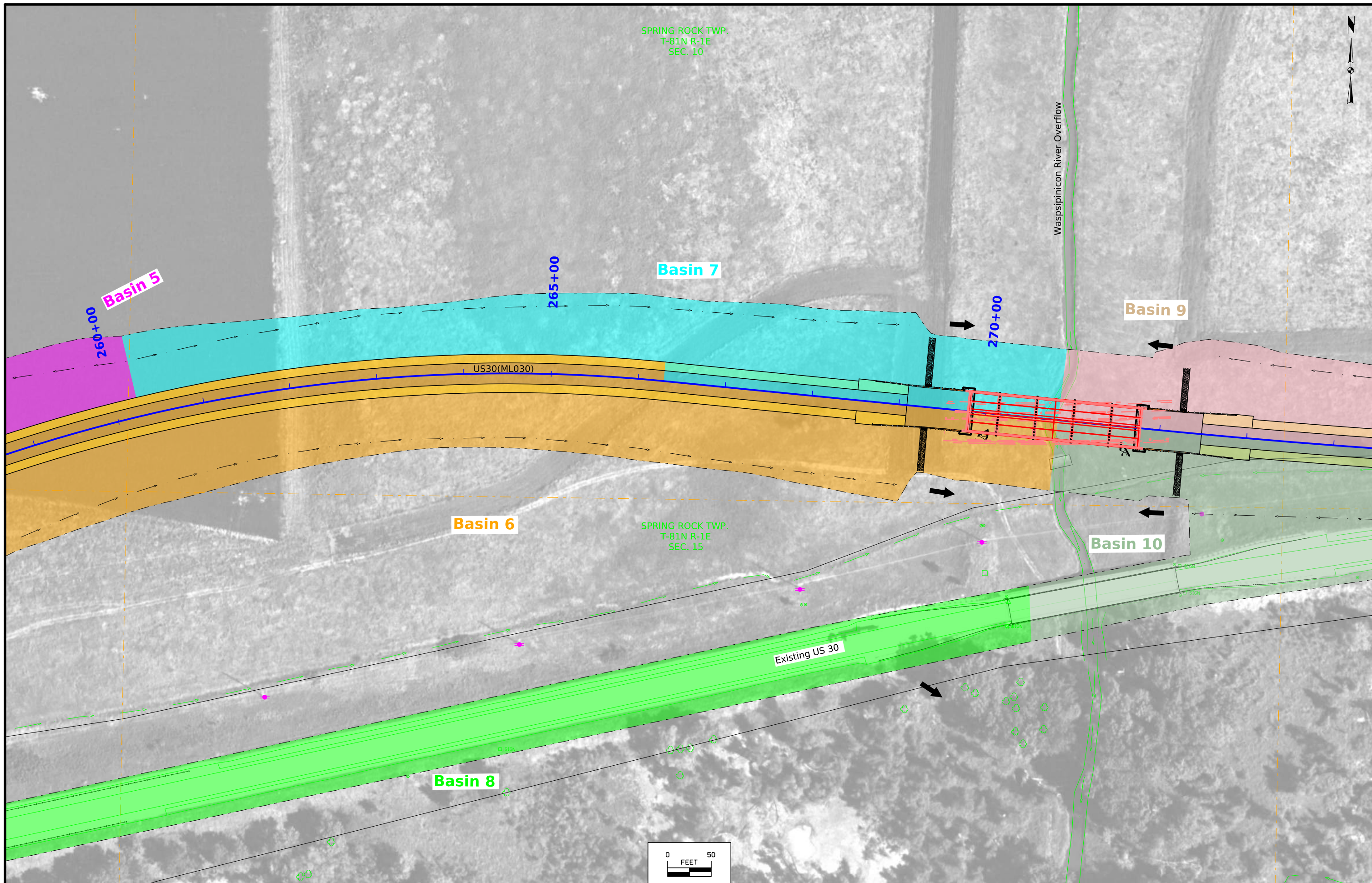




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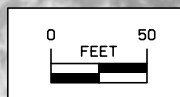




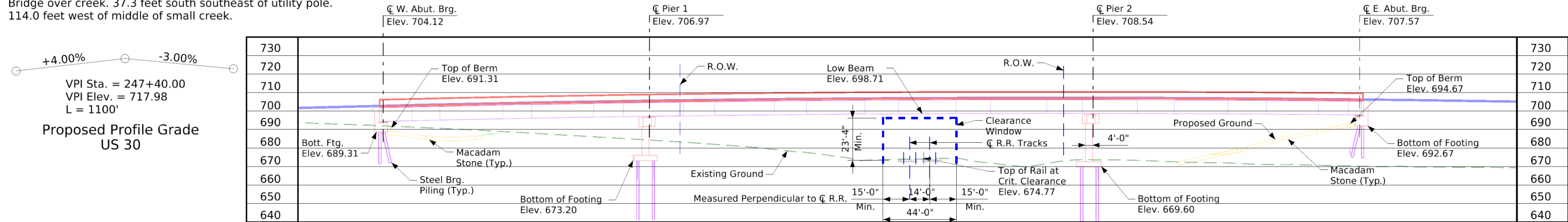
SPRING ROCK TWP.  
T-81N R-1E  
SEC. 11



SPRING ROCK TWP.  
T-81N R-1E  
SEC. 14



BENCH MARK: New FENO Style monument set flush with ground.  
 28.15 feet NW of NW corner of wingwall of NW corner of Hwy 30  
 Bridge over creek. 37.3 feet south southeast of utility pole.  
 114.0 feet west of middle of small creek.



**Longitudinal Section Along US 30**

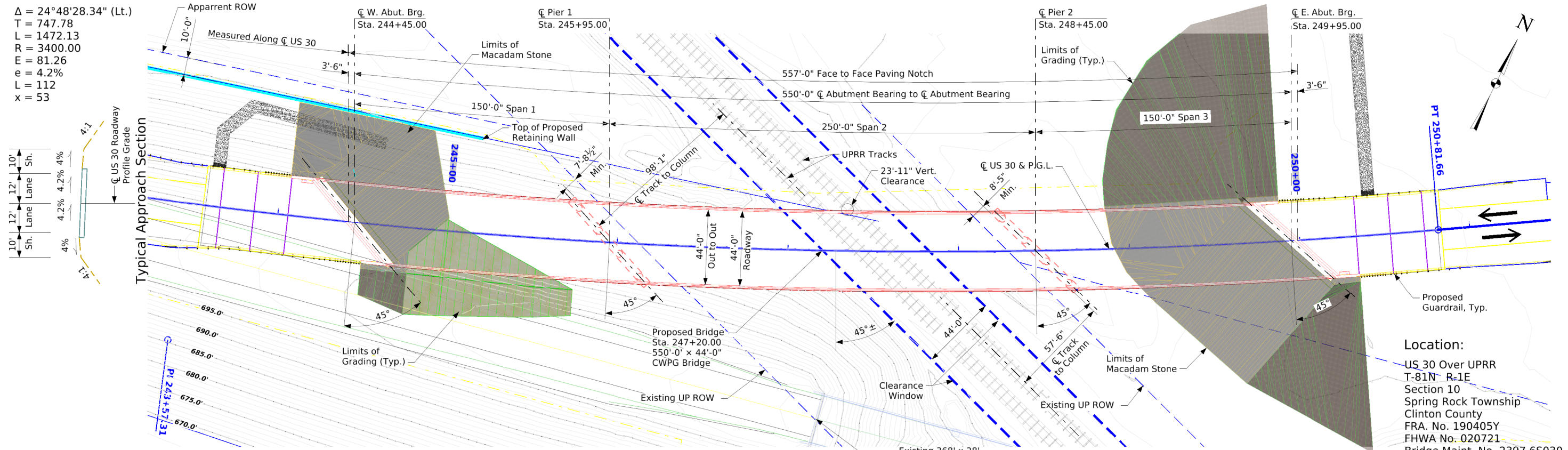
**General Notes:**

This design is for the replacement of the existing  
 368'-0" x 28'-0" continuous I-beam bridge, Clinton County  
 Design No. 1354, FHWA No. 020720, Maint. 2397.65030.

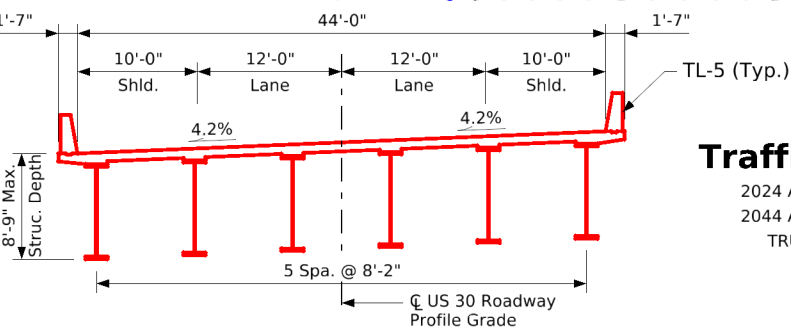
**Minimum Vertical Clearance**

Overhead Station = 247+34.16, 20'-5" Lt.  
 Overhead Elevation = 698.72 (Bot. of Girder)  
 Depth of Superstructure = 8'-9"  
 Underpass Station = N/A  
 Underpass Elevation = 674.77  
 Required Min. Vert. Clearance = 23'-4"  
 Provided Min. Vert. Clearance = 23'-11"

$\Delta = 24^\circ 48' 28.34''$  (Lt.)  
 $T = 747.78$   
 $L = 1472.13$   
 $R = 3400.00$   
 $E = 81.26$   
 $e = 4.2\%$   
 $L = 112$   
 $x = 53$



**Situation Plan**



**Typical Bridge Section**  
(Looking East)

**Traffic Estimate**

2024 AADT	3,100	V.P.D.
2044 AADT	3,800	V.P.D.
TRUCKS	20 %	

**Design Notes:**

- All units are in feet unless noted otherwise.
- TL-5 bridge railing proposed
- Pier Type = Concrete frame piers
- Beam Type = Welded plate girder
- Foundation type to be confirmed during final design.
- Bridge aesthetics to be incorporated during final design.
- Berm slopes to be confirmed during final design.
  - Berm slopes along wing walls are anticipated to exceed 1:2.5 for staging width.
  - Further evaluation of the wing walls & berm slope to be performed during Final Design.

**Utilities Legend:**

E1	-EL1D, Eastern Iowa Light and Power
F0	-FO1D, F&B Communications
F02	-FO2D, Sprint
G	-GL1D, Alliant Energy
SAN.	-SA1D, City of Wheatland
W	-WL1D, City of Wheatland

Utilities shown on this sheet are for information only, see road design sheets for final utility information.

Design For 45° Skew (R.A.), Radius = 3400'

**550'-0" x 44'-0" Continuous Welded Plate Girder Bridge**

150'-0" End Spans      250'-0" Interior Span

**Situation Plan**

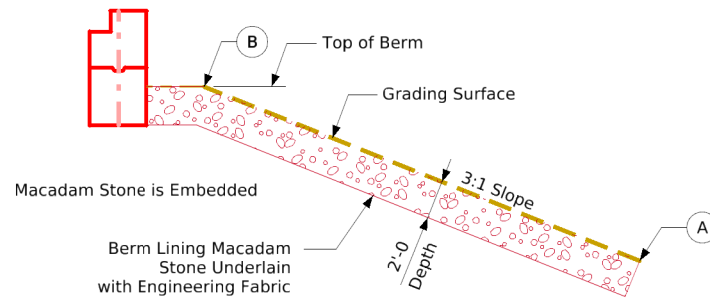
STA. 247+20.00 (US 30)      Turn-in Date: August 2024

**Clinton County**

IOWA DEPARTMENT OF TRANSPORTATION

Design No. 125      Design Sheet No. 1 of 3      FHWA No. 020721

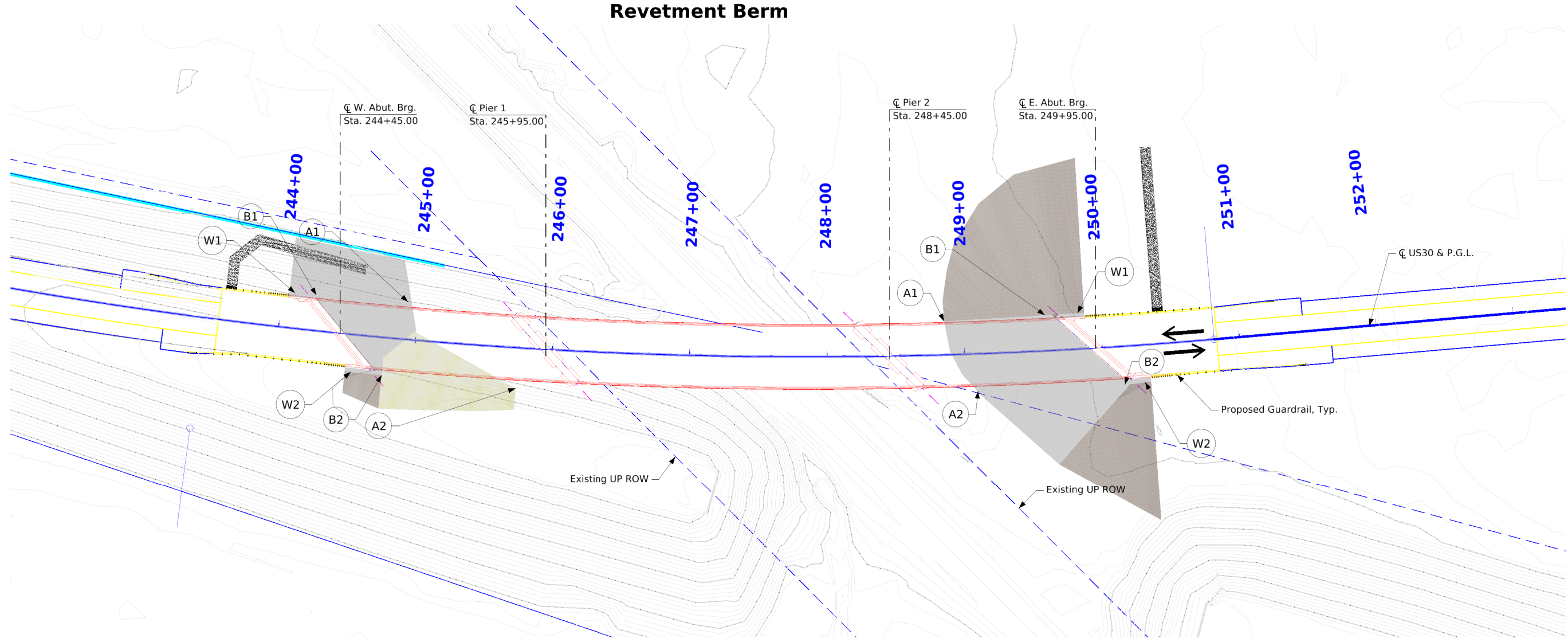
BENCH MARK: New FENO Style monument set flush with ground.  
 28.15 feet NW of NW corner of wingwall of NW corner of Hwy 30  
 Bridge over creek. 37.3 feet south southeast of utility pole.  
 114.0 feet west of middle of small creek.



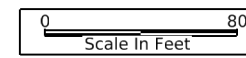
**Section Thru Embedded Revetment Berm**

Points	West Abutment			East Abutment		
	Station	Offset	Elev.	Station	Offset	Elev.
A1	244+96.20	23.63' LT.	681.73	248+86.24	23.63' LT.	671.99
A2	245+75.00	29.00' RT.	696.10	249+06.14	23.63' RT.	672.27
B1	244+25.60	26.96' LT.	691.38	249+65.14	21.77' LT.	694.64
B2	244+72.21	19.74' RT.	691.38	250+16.55	29.58' RT.	694.64
W1	244+05.32	23.44' LT.	702.20	249+88.62	23.66' LT.	706.70
W2	244+51.13	23.51' RT.	705.20	250+34.00	23.73' RT.	708.15

Berm slope elevations reflect the grading surface.



**Site Plan**



Estimated Berm Armoring Quantities			
Location	Macadam Stone (SY)	Engineering Fabric (SY)	Excavation (CY)
Berm Lining - West	645	645	1504
Berm Lining - East	983	983	0
Totals	1628	1628	1504

Excavation quantity calculated from grading surface.

**Utilities Legend:**

- E1 EL1D Eastern Iowa Light and Power
- F0 FO1D F&B Communications
- F02 FO2D Sprint
- G GL1D Alliant Energy
- SAN SA1D City of Wheatland
- W WL1D City of Wheatland

Utilities shown on this sheet are for information only, see road design sheets for final utility information.

**General Notes:**

This design is for the replacement of the existing 368'-0" x 28'-0" continuous I-beam bridge, Clinton County Design No. 1354, FHWA No. 020720, Maint. 2397.65030.

PRELIMINARY

Design For 45° Skew (R.A.), Radius = 3400'

**550'-0" x 44'-0" Continuous Welded Plate Girder Bridge**

150'-0" End Spans 250'-0" Interior Span

**Site Plan**

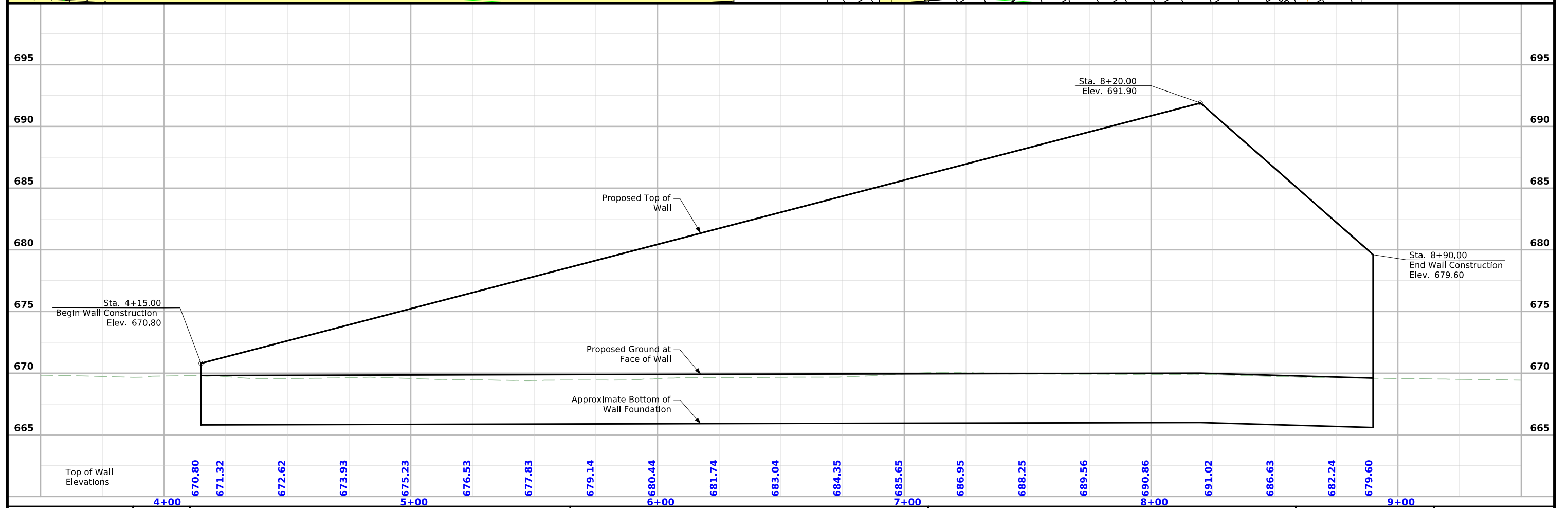
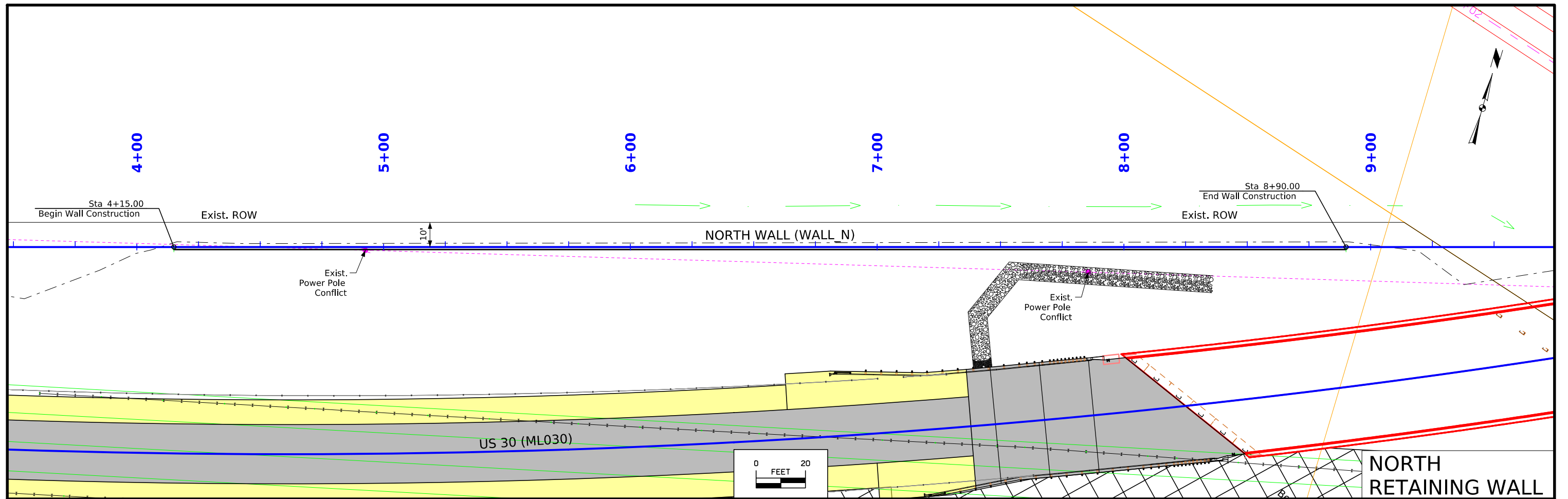
STA. 247+20.00 (US 30) Turn-in Date: August 2024

**Clinton County**

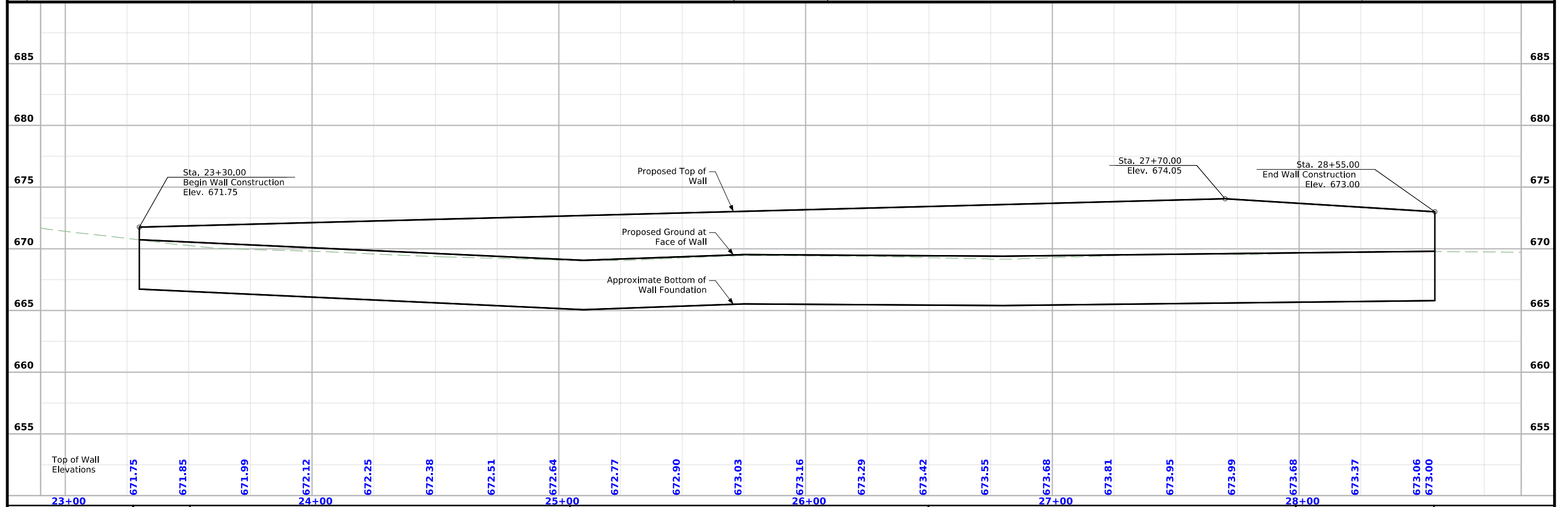
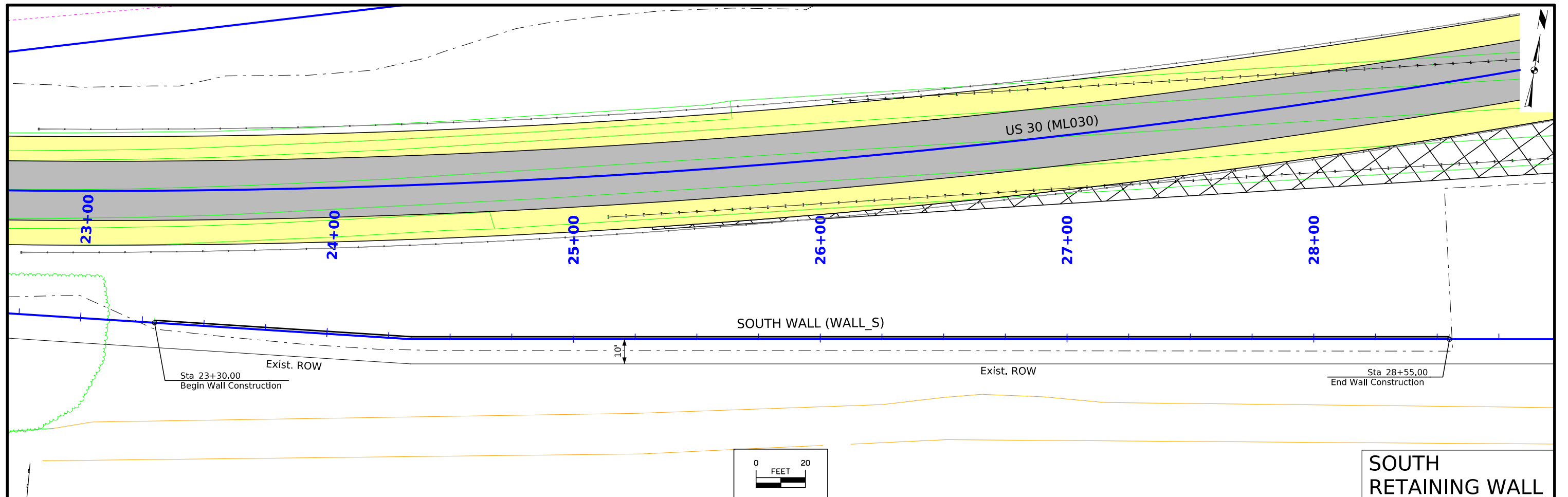
IOWA DEPARTMENT OF TRANSPORTATION

Design No. 125 Design Sheet No. 2 of 3 FHWA No. 020721

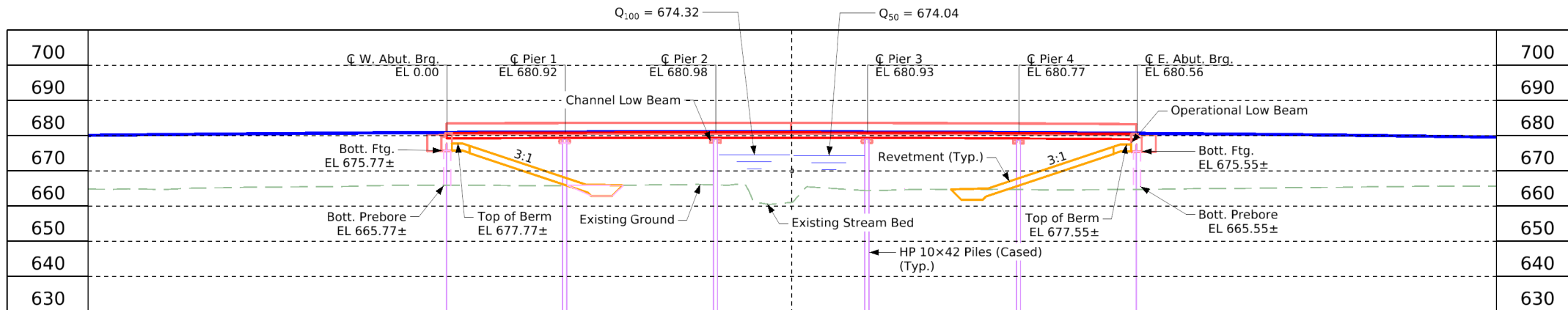








BENCH MARK: New FENO Style monument set flush with ground.  
 28.15 feet NW of NW corner of wingwall of NW corner of Hwy 30  
 Bridge over creek. 37.3 feet south southeast of utility pole.  
 114.0 feet west of middle of small creek.



+1.00%      -1.50%

VPI Sta. = 271+00.00  
 VPI Elev. = 682.18  
 L = 400'

Proposed Profile Grade  
 US 30

**Hydraulic Data**

RIDB: Not Applicable  
 Drainage Area = 6.7 sq. mi.  
 Stream Slope (HGL) = 14.3 ft./mi.  
 Avg. Low Water Stage = 662.5

Operational Low Beam = 677.59 ft.  
 Channel Low Beam = 677.11 ft.

Q<sub>50</sub> = 8,260 cfs  
 Stage = 674.04  
 Operational Freeboard = 3.55 ft.  
 Avg. Bridge Velocity = 6.0 fps

Q<sub>100</sub> = 8,703 cfs  
 Stage = 674.32  
 Operational Freeboard = 3.27 ft.  
 Backwater = 0.48 ft.  
 Avg. Bridge Velocity = 6.1 fps

Q<sub>200</sub> = 10,942 cfs  
 Calculated Design Scour = 642.1

Q<sub>500</sub> = 11,480 cfs  
 Check Scour = 641.3

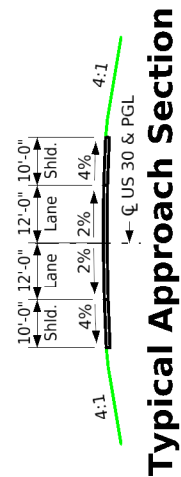
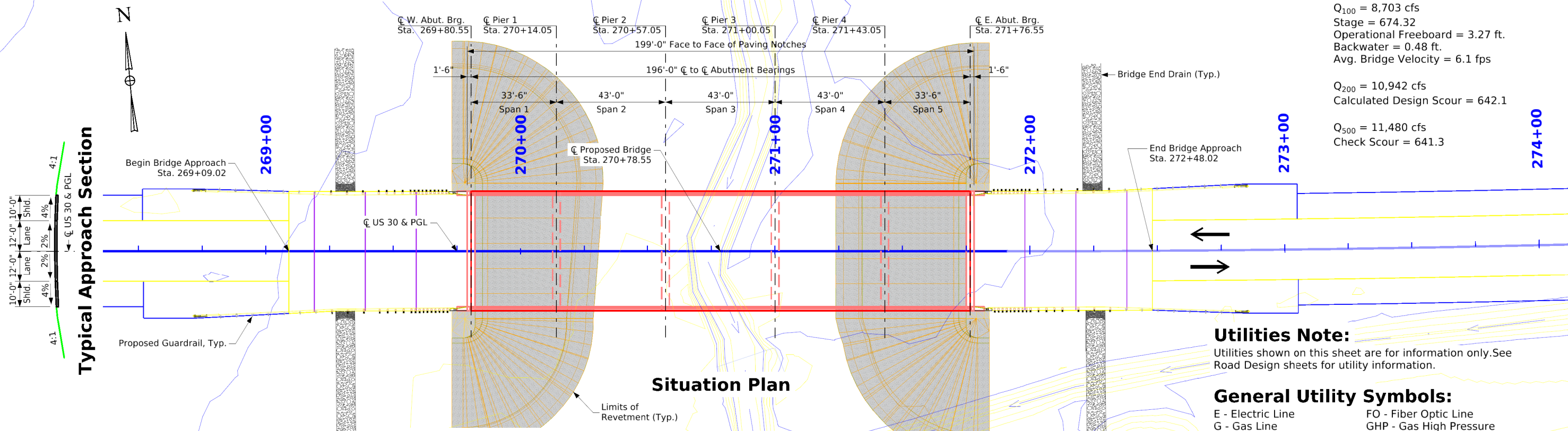
**Plan Notes:**

- Top of bridge slab crown 0.03' below profile grade to account for parabolic crown.
- Class E Revetment stone is embedded.
- The Bridge will be designed to withstand the applicable effects of ice and the horizontal stream loads and uplift forces associated with the Q<sub>100</sub>.

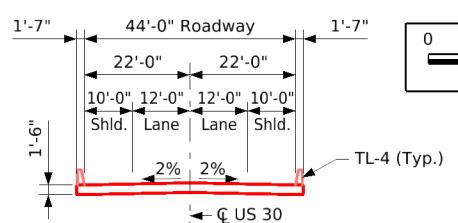
**Longitudinal Section Along CL US30**

**General Notes:**

This design is for the replacement of the existing 194'-0" x 28'-0" Continuous Concrete Slab Bridge, Clinton Design No. 254, FHWA No. 20730, Maint. No. 2397.9S030.



**Typical Bridge Section**



**Traffic Estimate**

2024 AADT	3,100	V.P.D.	
2044 AADT	3,800	V.P.D.	
TRUCKS			20 %

**Location**

US 30 over Overflow Ditch  
 T-81N R-1E  
 Section 10  
 Spring Rock Township  
 Clinton County  
 FHWA No. 020731  
 Bridge Maint. No. 2397.9S030  
 Latitude 41.829747°  
 Longitude -90.822478°

**Hydraulic Design**

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

*Mark D. Werner*      8/16/2024  
 Signature      Date

Mark D. Werner  
 Printed or Typed Name

My license renewal date is December 31,      2025

Pages or sheets covered by this seal:      V.1

**Utilities Note:**

Utilities shown on this sheet are for information only. See Road Design sheets for utility information.

**General Utility Symbols:**

- E - Electric Line
- G - Gas Line
- SAN. - Sanitary Sewer
- T - Telephone Line
- W - Water Line
- FO - Fiber Optic Line
- GHP - Gas High Pressure
- ST S - Storm Sewer
- TV - TV
- Power Poles

Design For 0 Degree

**196'-0" x 44'-0" Continuous Concrete Slab Bridge**

33'-6" End Spans      43'-0" Interior Spans

**Situation Plan**

STA. 270+78.55 (US 30)      Turn-in Date: August 2024

**Clinton County**

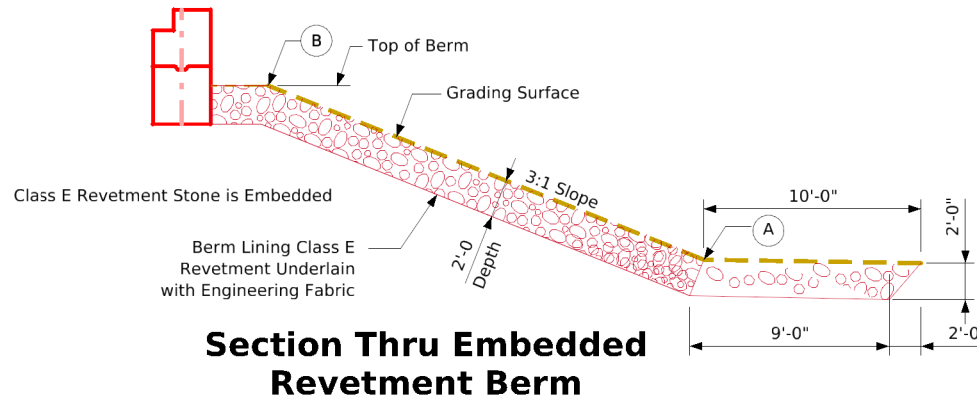
IOWA DEPARTMENT OF TRANSPORTATION

Design No. TBD      Design Sheet No. 1 of 2      FHWA No. 020731

BENCH MARK: New FENO Style monument set flush with ground.  
 28.15 feet NW of NW corner of wingwall of NW corner of Hwy 30  
 Bridge over creek. 37.3 feet south southeast of utility pole.  
 114.0 feet west of middle of small creek.

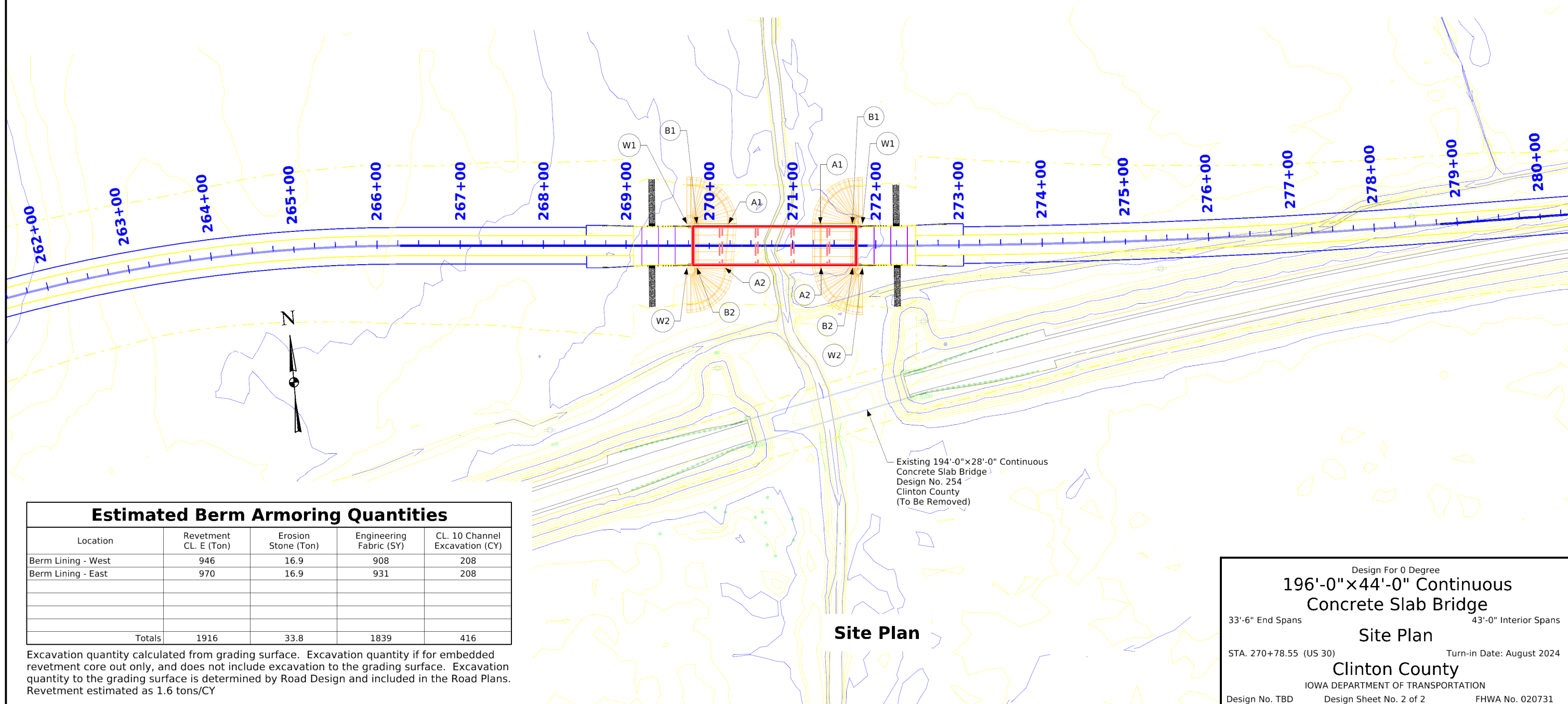
**Design Notes:**

1. All units in feet unless otherwise noted.
2. TL-4 bridge railing proposed.
3. Pier type - fully encased pile bent piers.
4. Bridge aesthetics to be incorporated during final design.
5. Berm slopes to be confirmed during final design.



Points	West Abutment			East Abutment		
	Station	Offset	Elev.	Station	Offset	Elev.
A1	270+22.13	26.58' LT.	665.42	271+34.41	26.58' LT.	665.00
A2	270+17.98	26.58' RT.	666.78	271+34.41	26.58' RT.	665.00
B1	269+85.05	26.58' LT.	677.77	271+72.05	26.58' LT.	677.55
B2	269+85.05	26.58' RT.	677.77	271+72.05	26.58' RT.	677.55
W1	269+73.05	26.58' LT.	680.32	271+84.05	26.58' LT.	680.10
W2	269+73.05	26.58' RT.	680.32	271+84.05	26.58' RT.	680.10

Berm slope elevations reflect the grading surface.

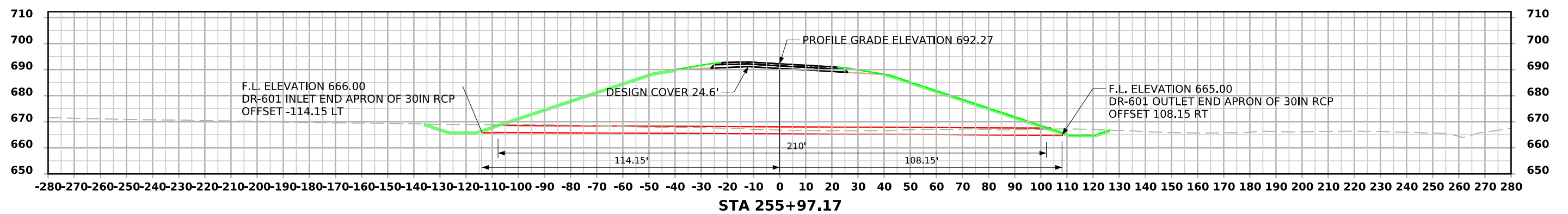


**Estimated Berm Armoring Quantities**

Location	Revetment CL. E (Ton)	Erosion Stone (Ton)	Engineering Fabric (SY)	CL. 10 Channel Excavation (CY)
Berm Lining - West	946	16.9	908	208
Berm Lining - East	970	16.9	931	208
Totals	1916	33.8	1839	416

Excavation quantity calculated from grading surface. Excavation quantity if for embedded revetment core out only, and does not include excavation to the grading surface. Excavation quantity to the grading surface is determined by Road Design and included in the Road Plans. Revetment estimated as 1.6 tons/CY

Design For 0 Degree  
**196'-0" x 44'-0" Continuous Concrete Slab Bridge**  
 33'-6" End Spans      43'-0" Interior Spans  
 STA. 270+78.55 (US 30)      Turn-in Date: August 2024  
**Clinton County**  
 IOWA DEPARTMENT OF TRANSPORTATION  
 Design No. TBD      Design Sheet No. 2 of 2      FHWA No. 020731



## CROSS SECTION VIEW COLOR LEGEND

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

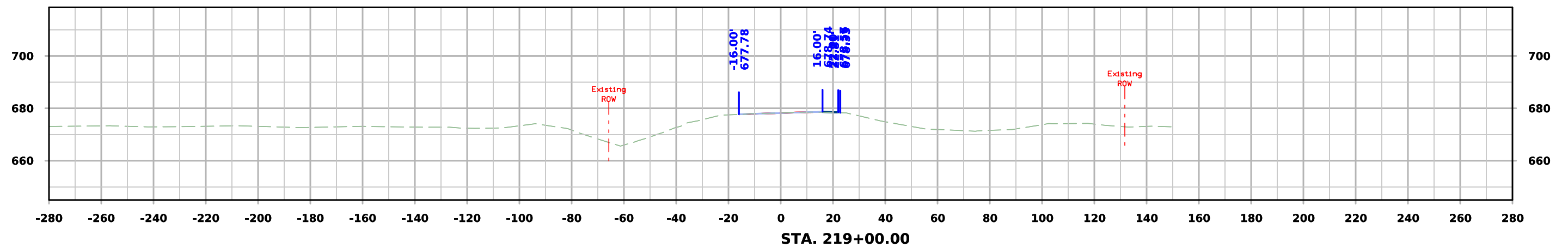
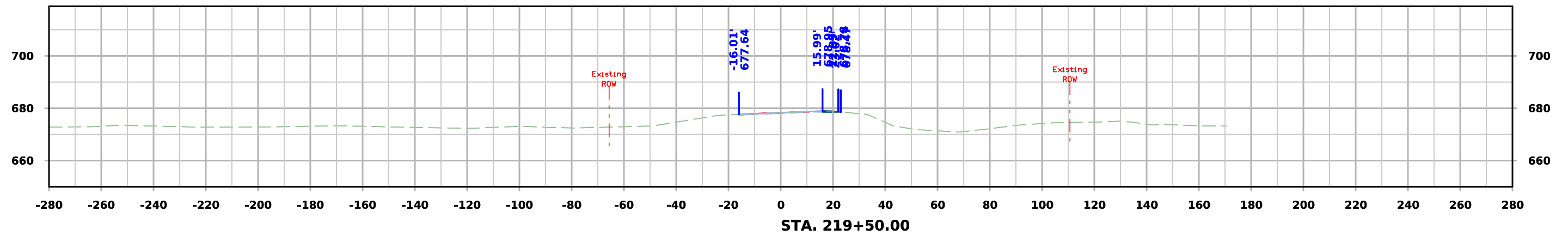
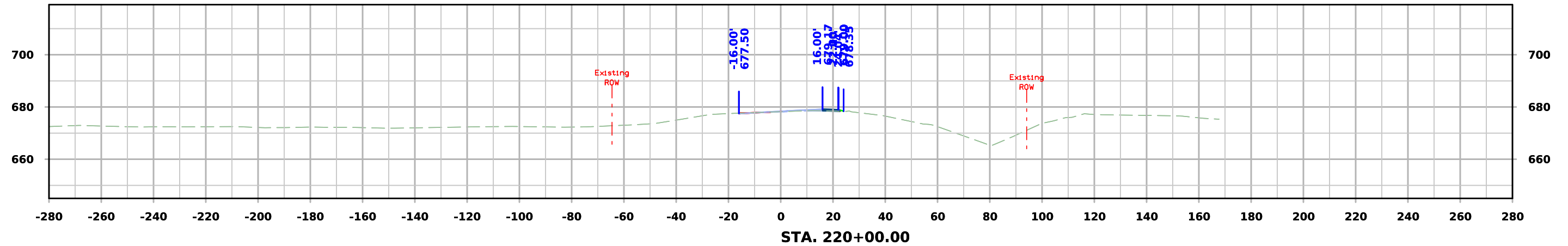
NOTES:

NOTES:

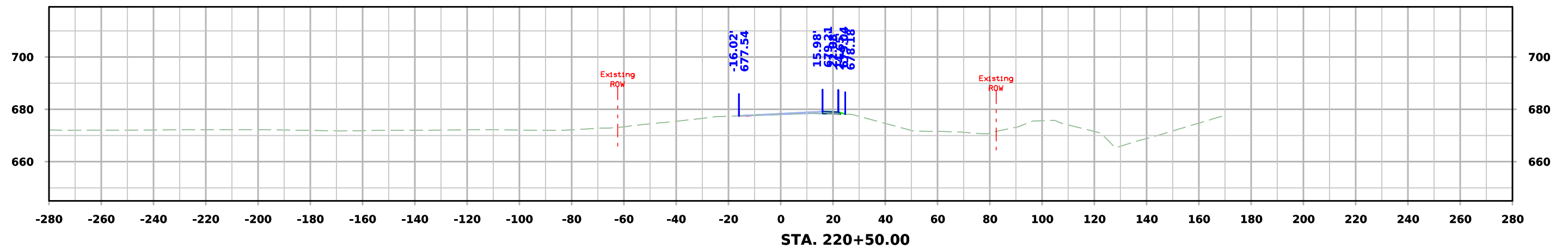
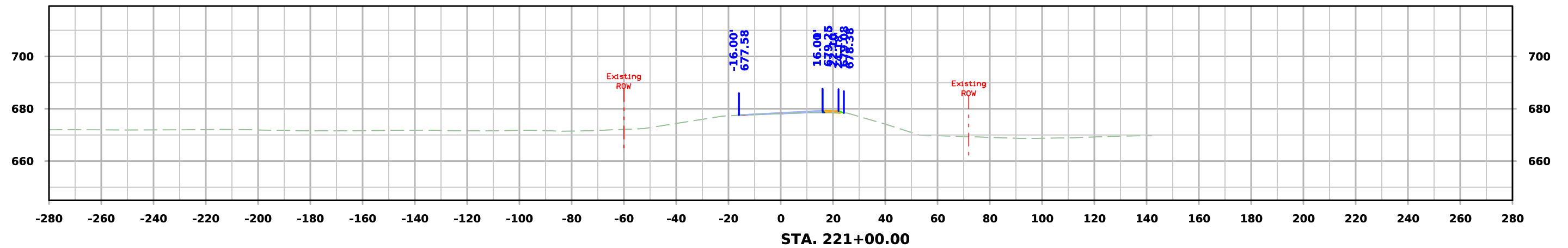
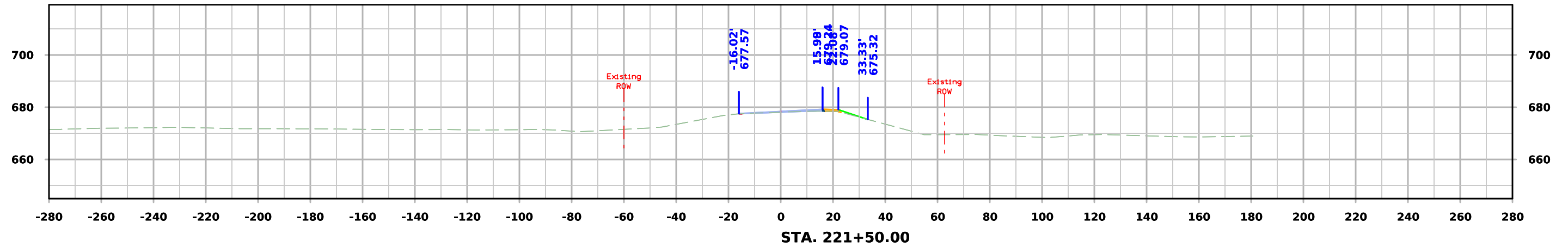
## CROSS SECTIONS LEGEND AND INFORMATION SHEET

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

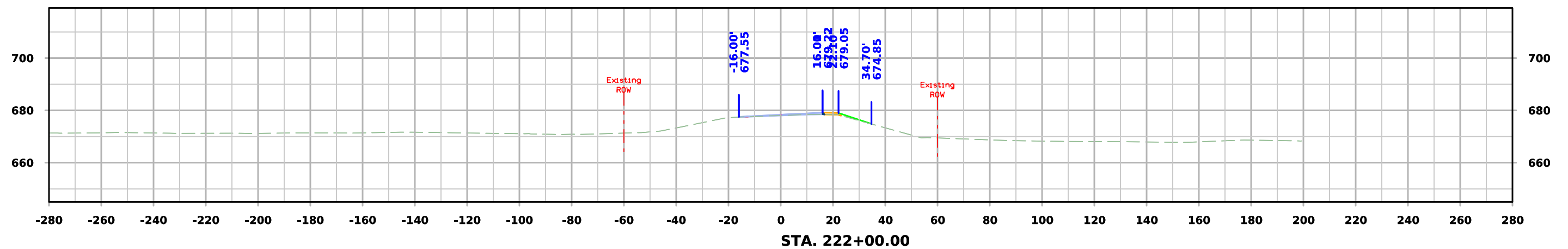
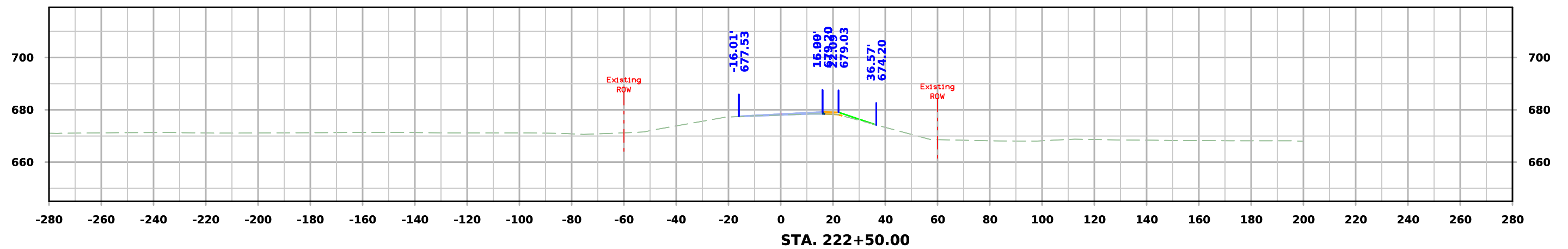
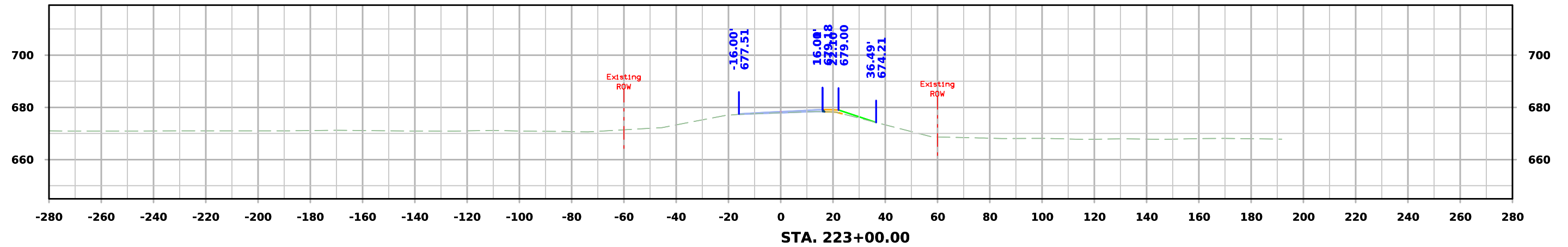
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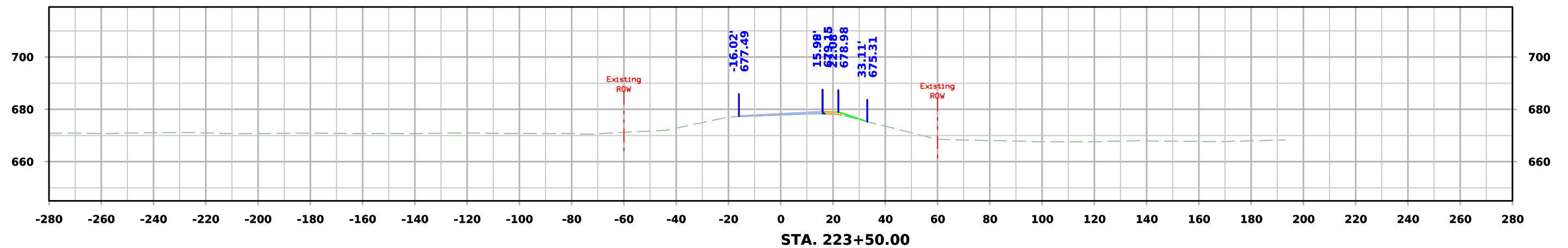
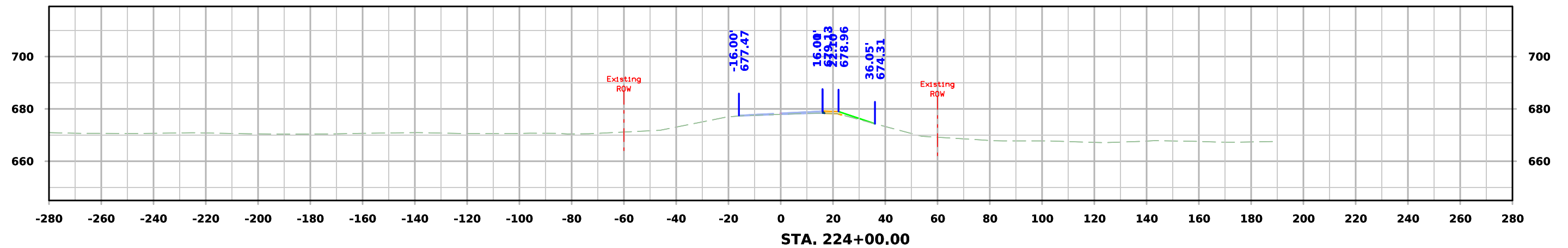
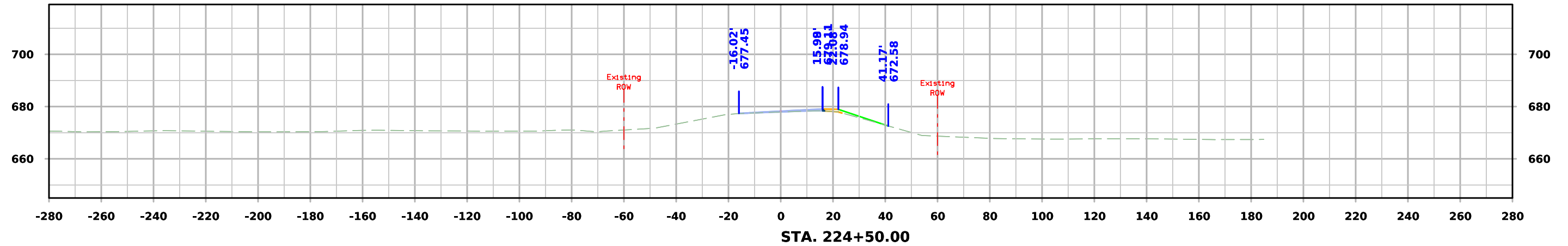


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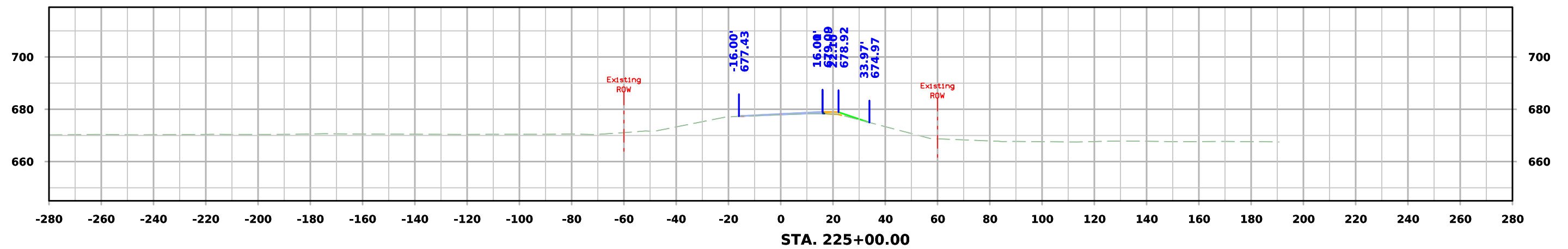
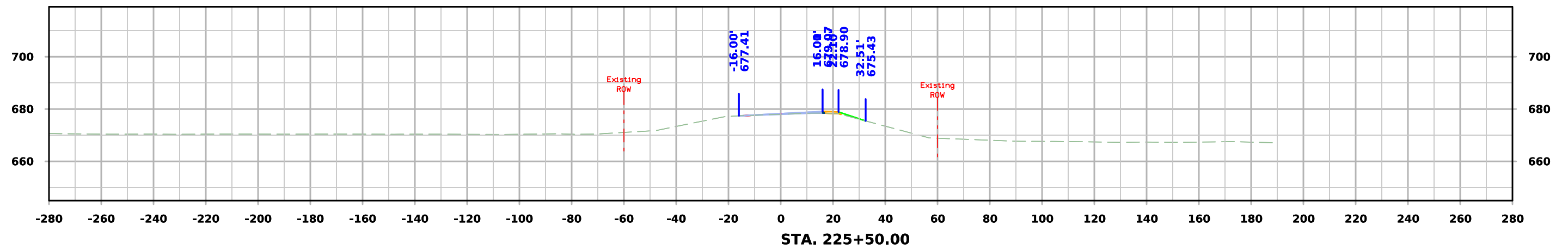
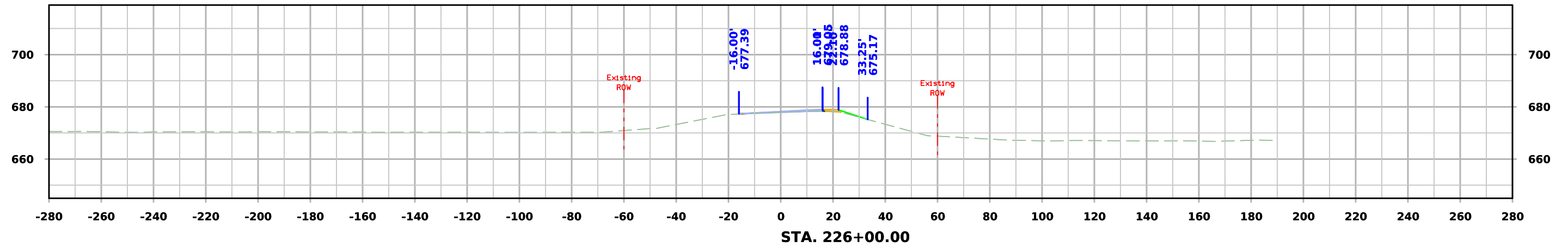




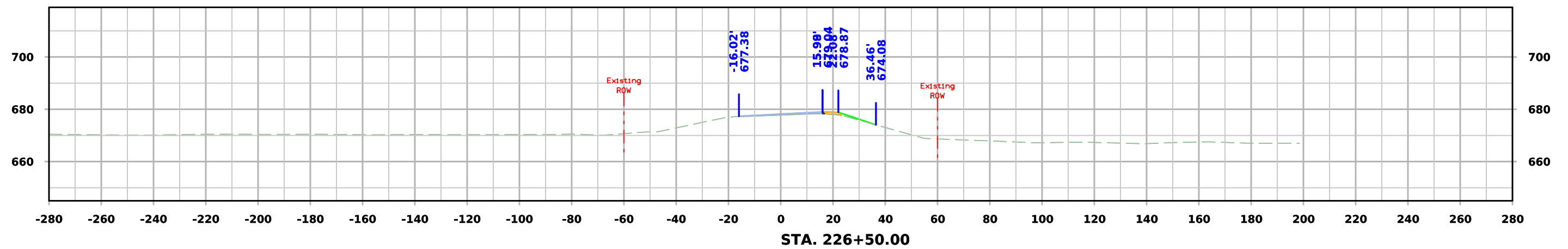
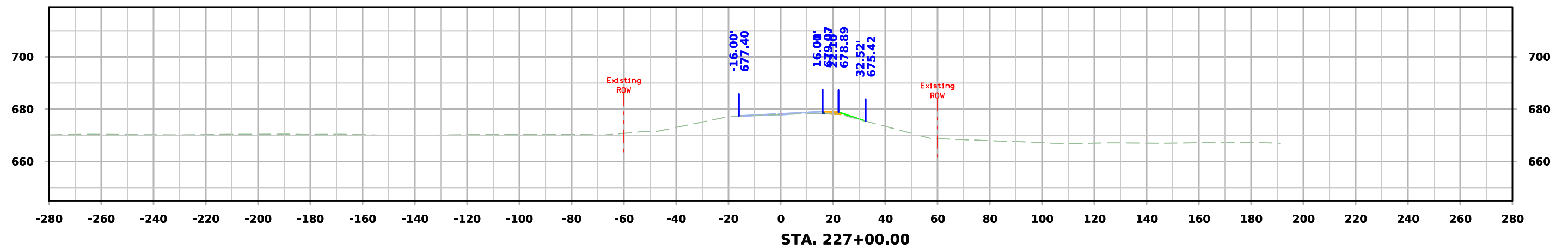
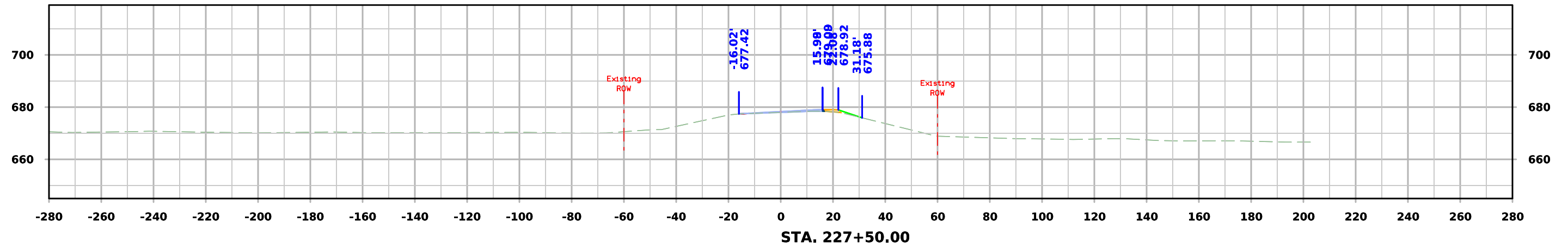
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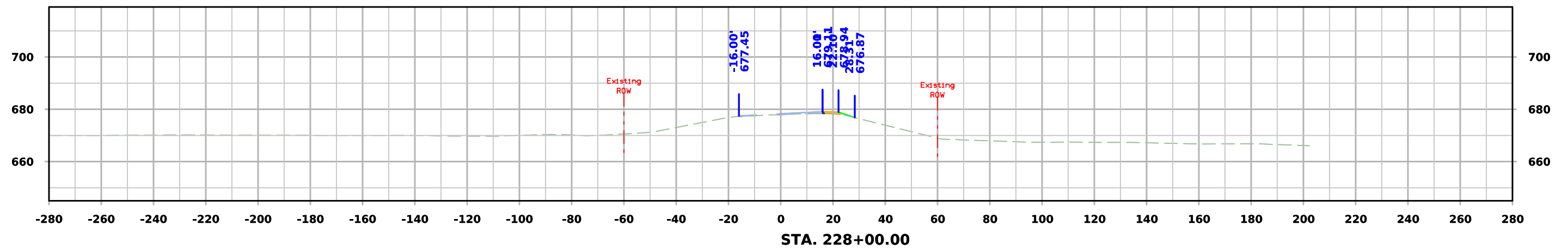
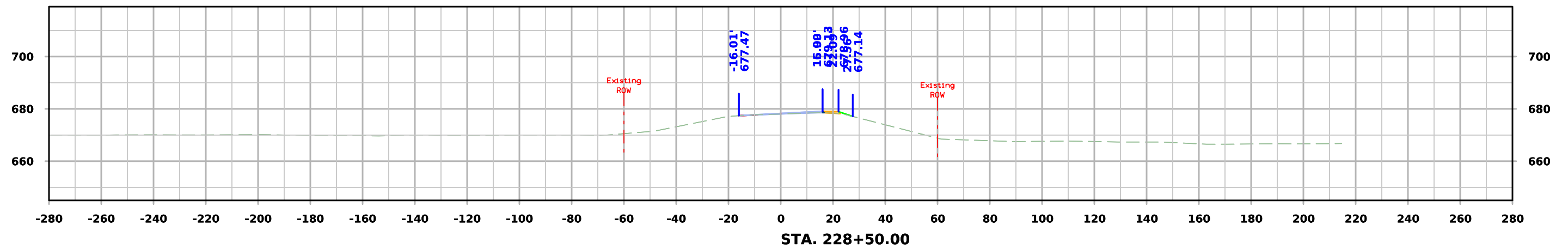
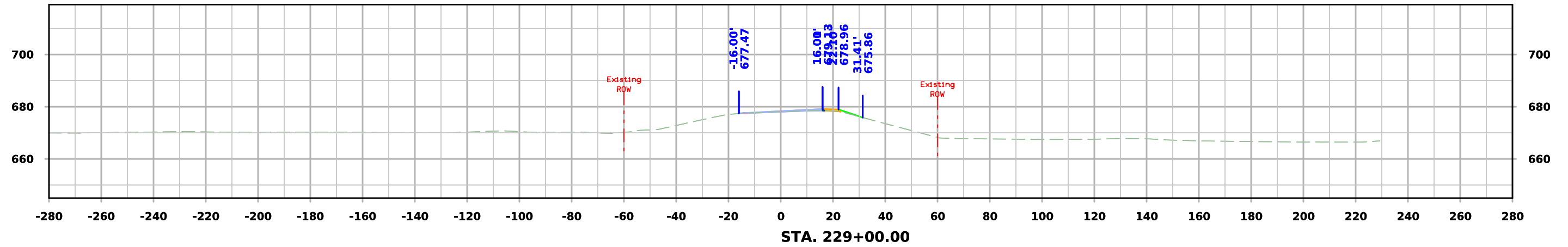
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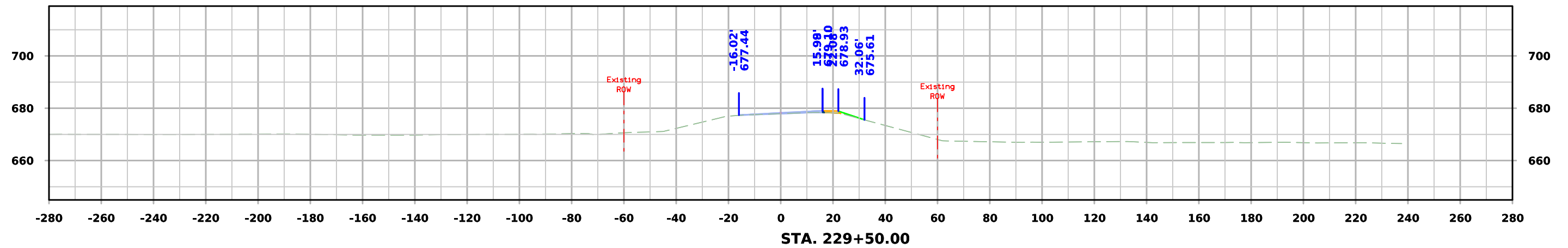
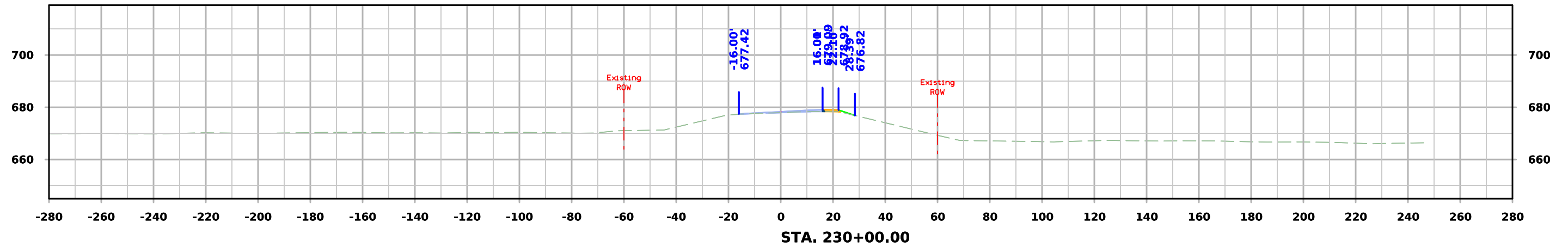
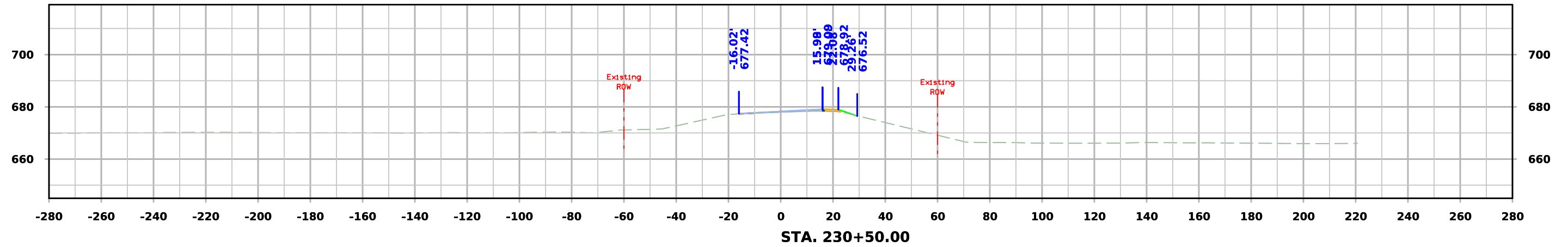
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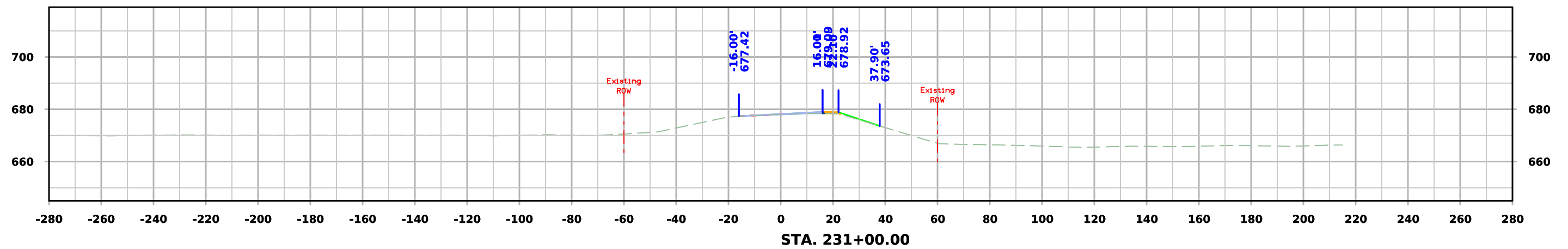
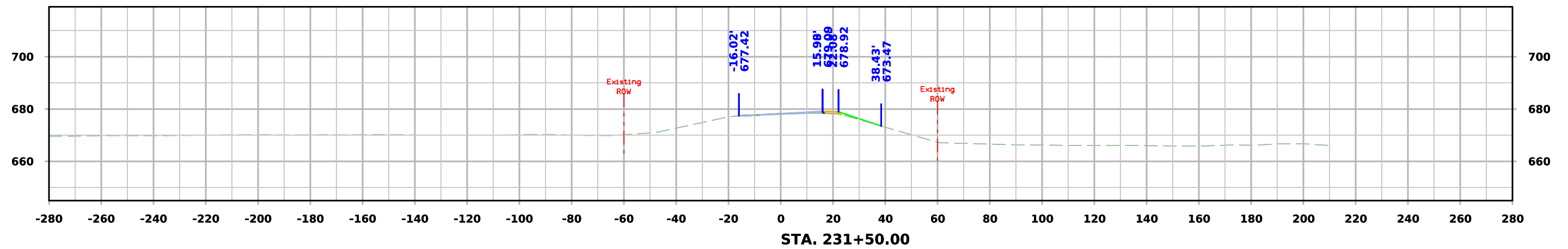
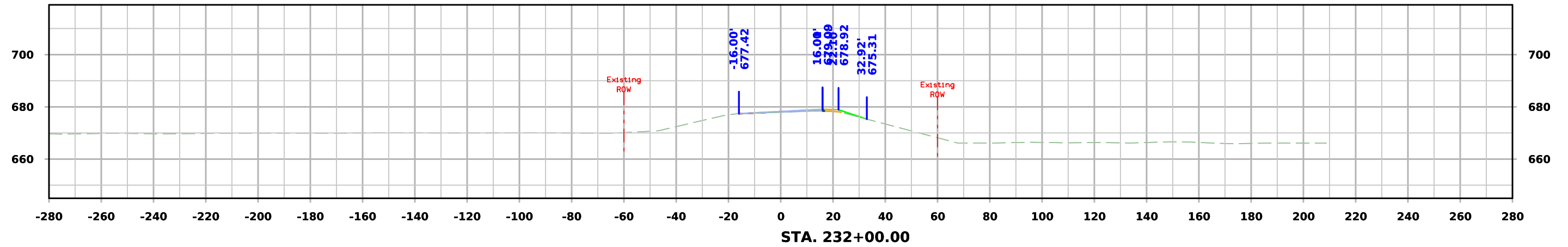
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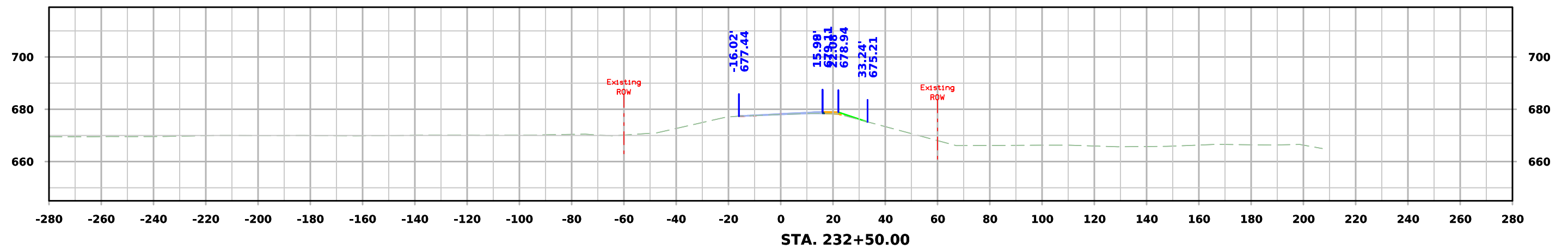
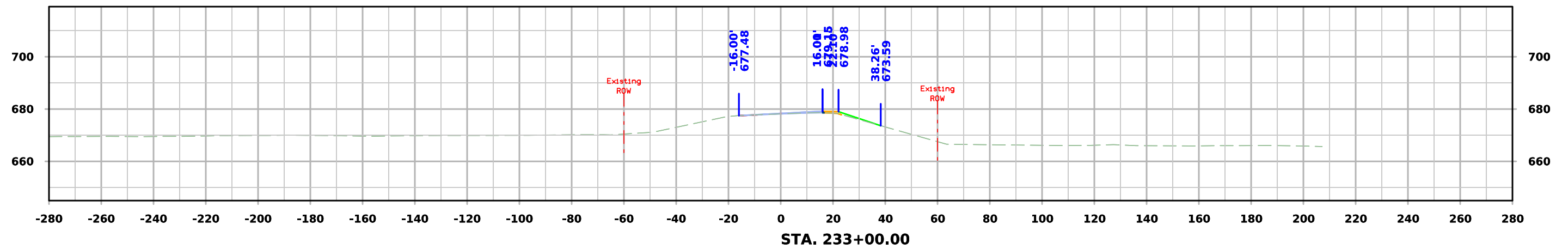
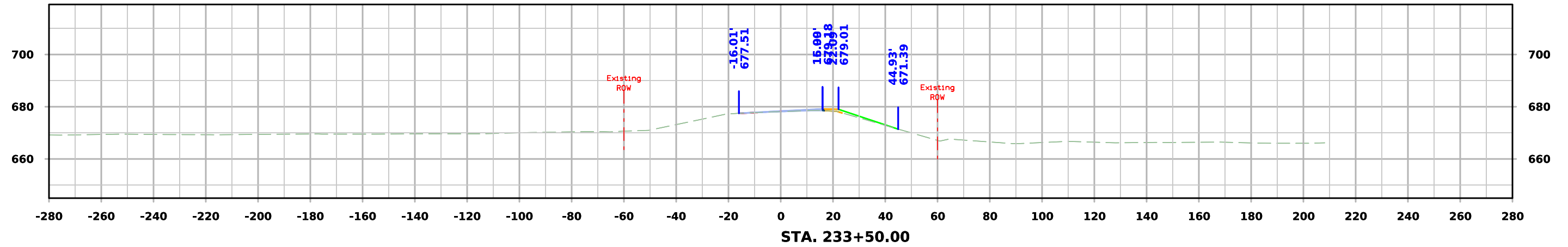
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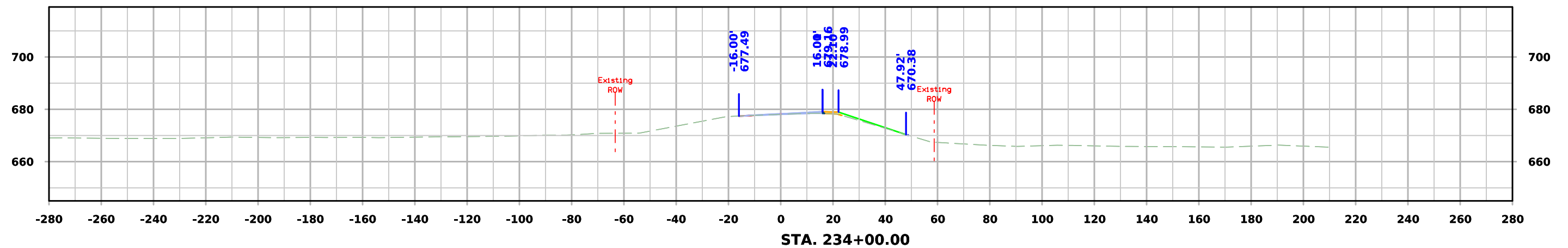
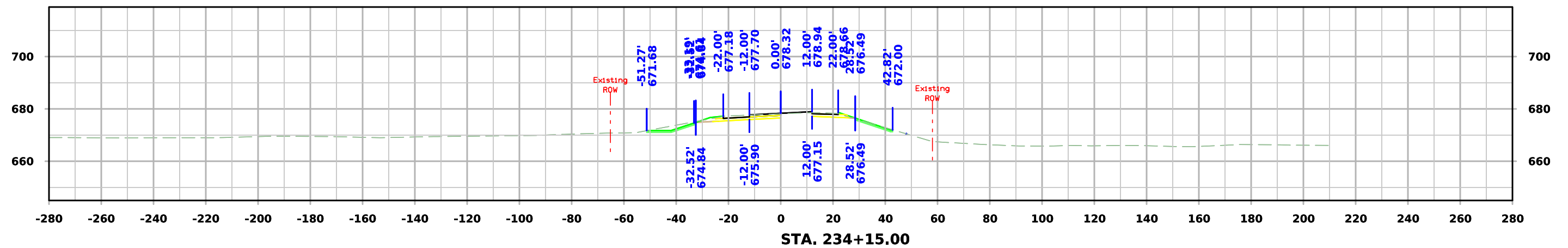
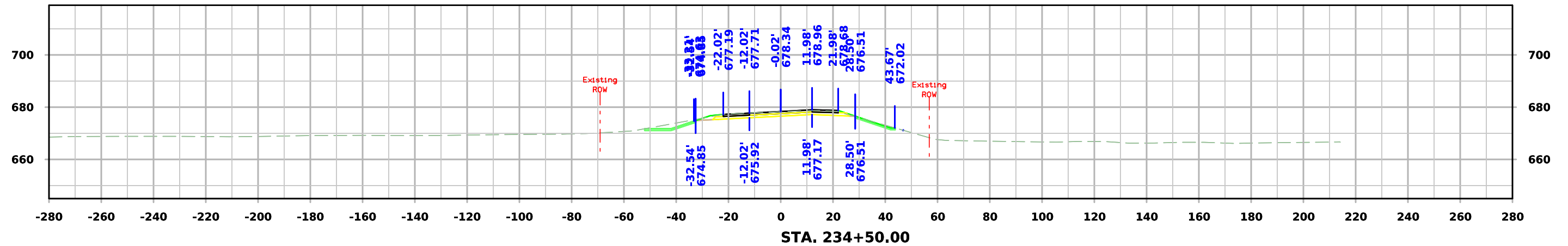
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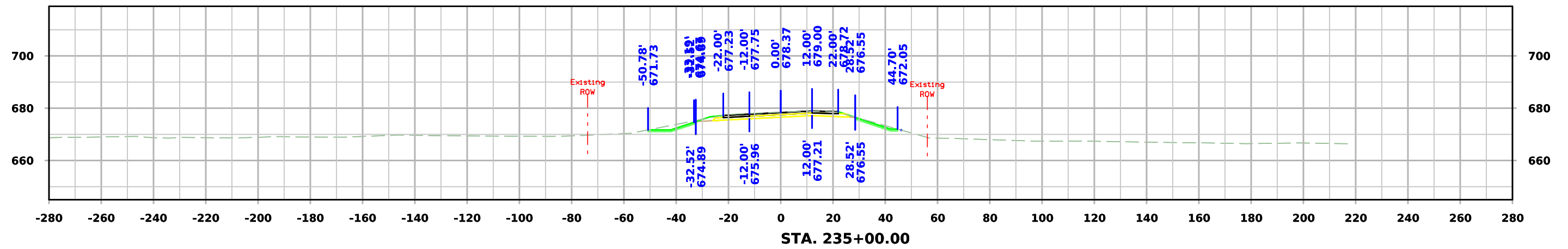
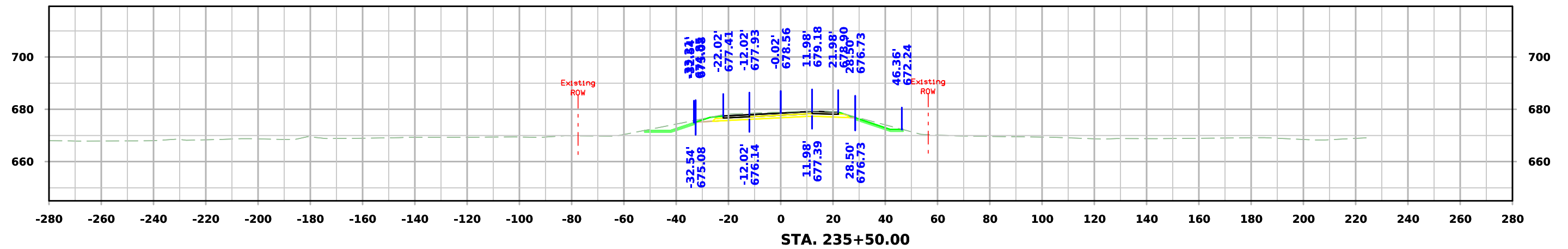
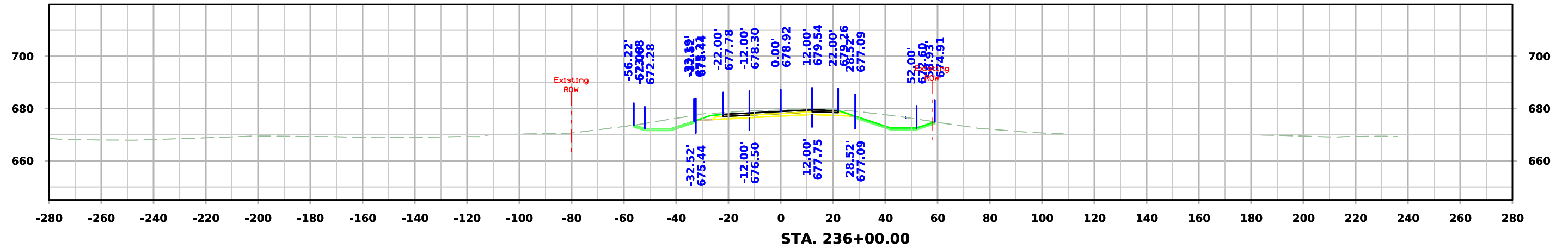


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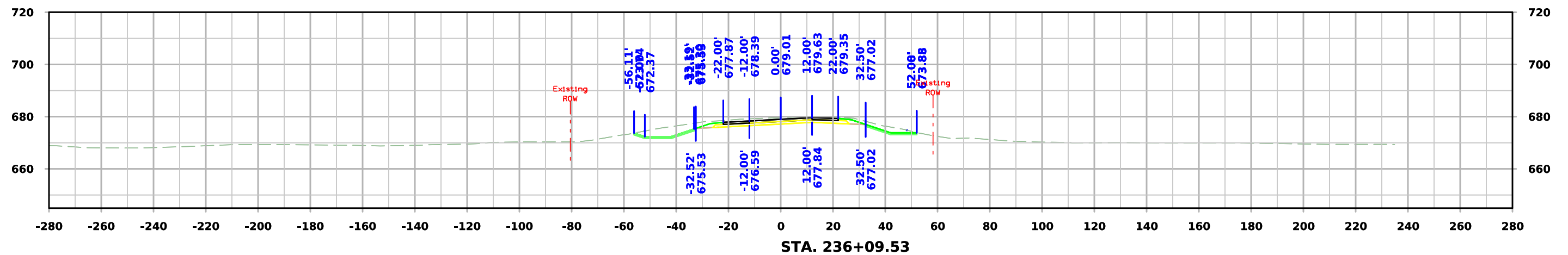
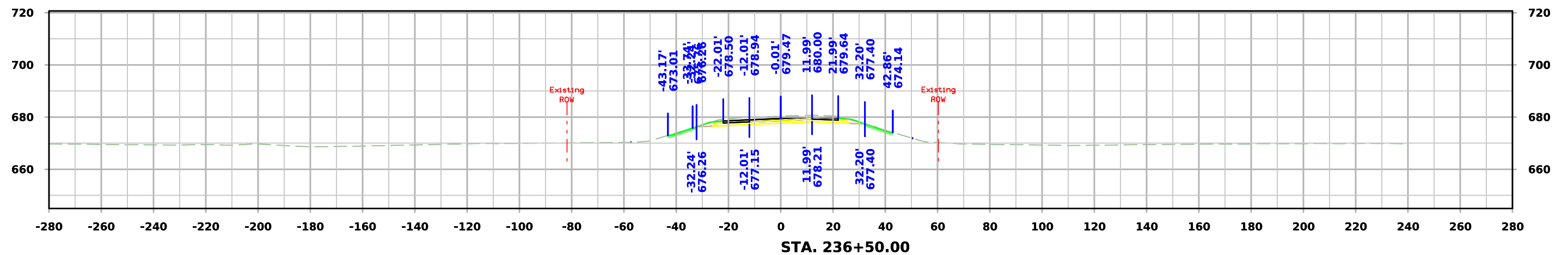
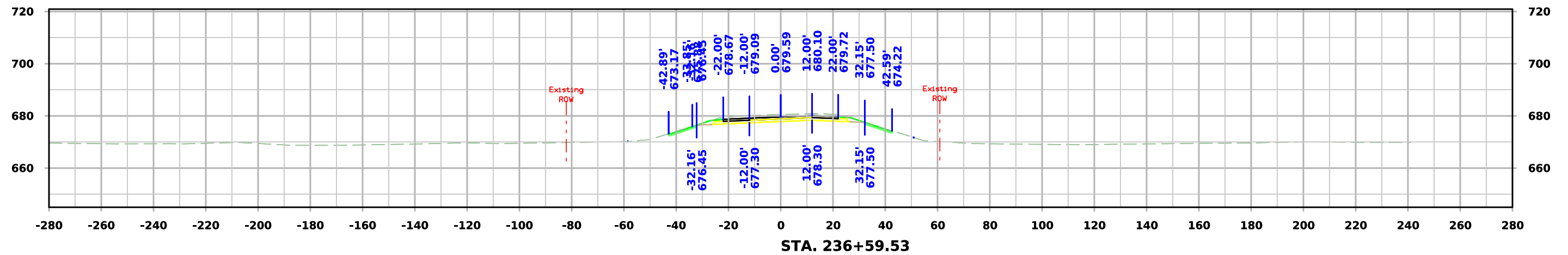




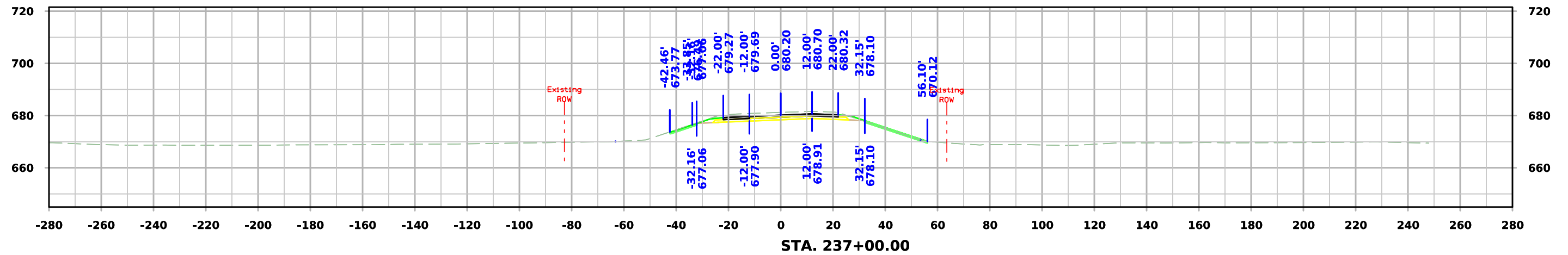
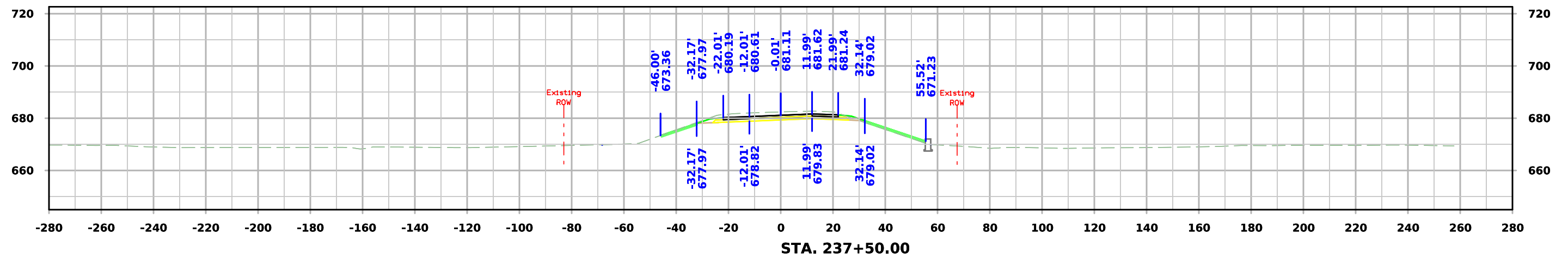
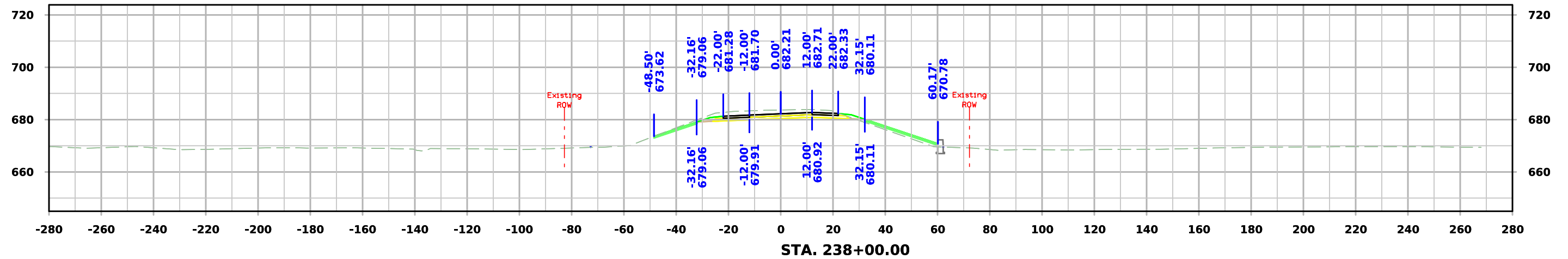
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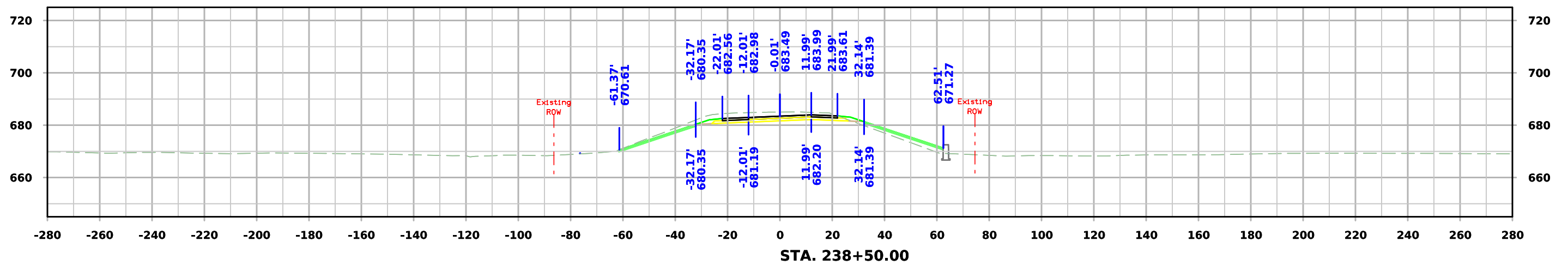
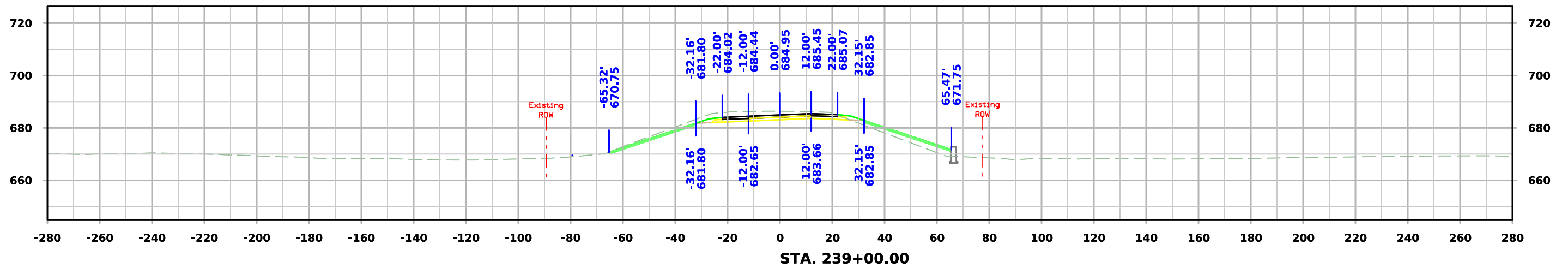
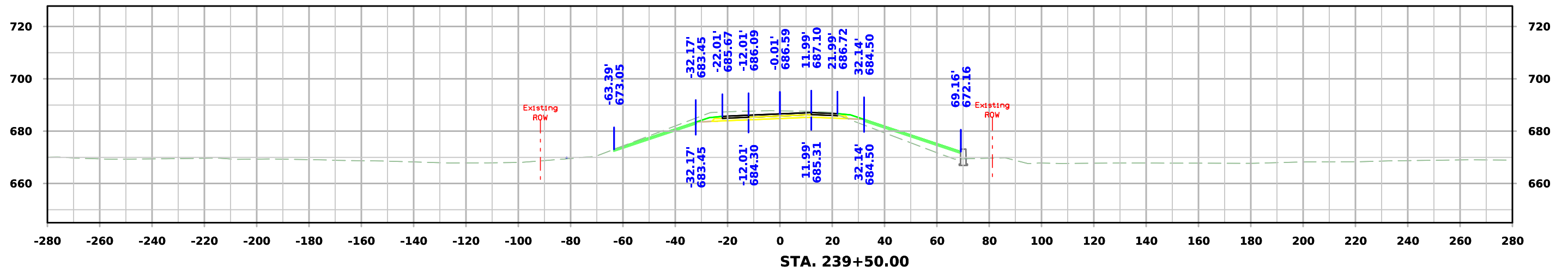
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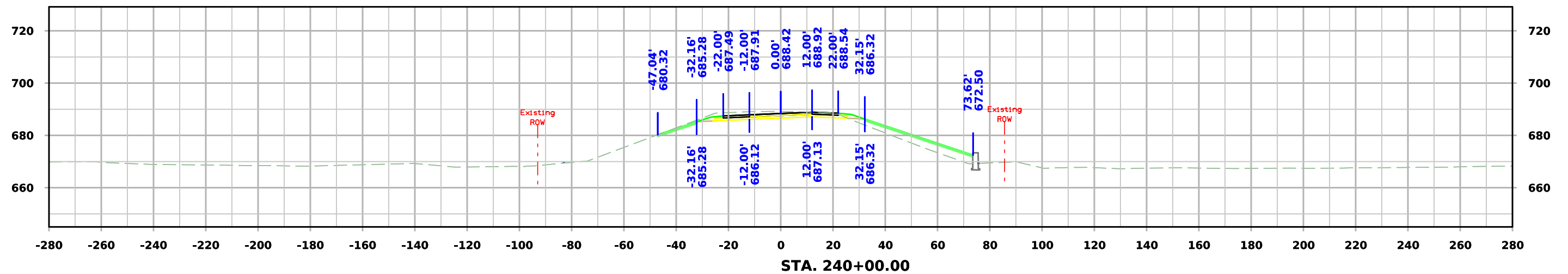
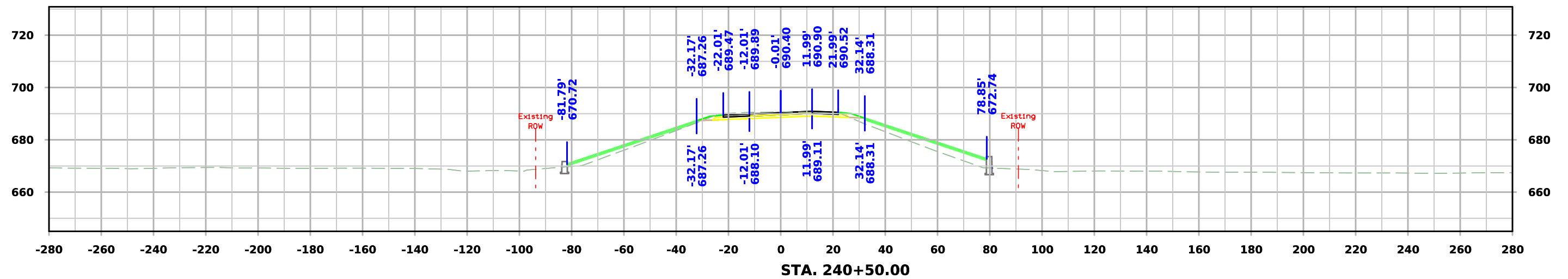
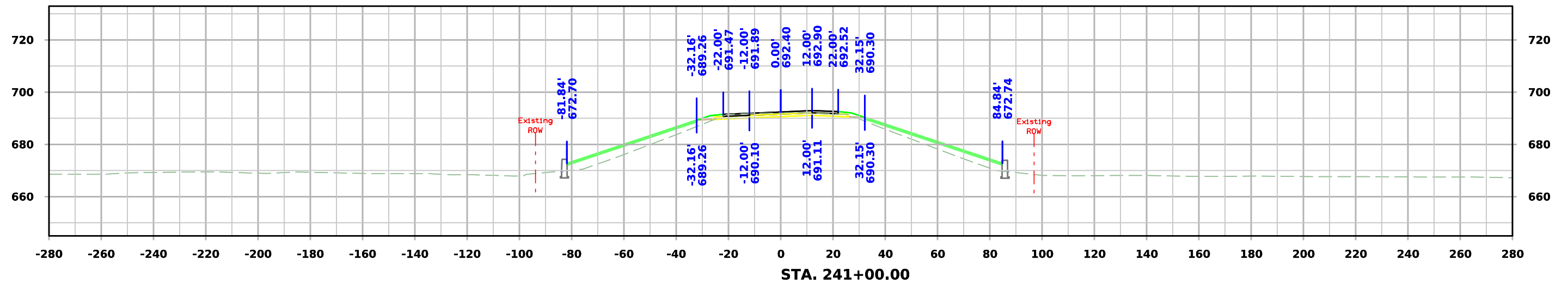
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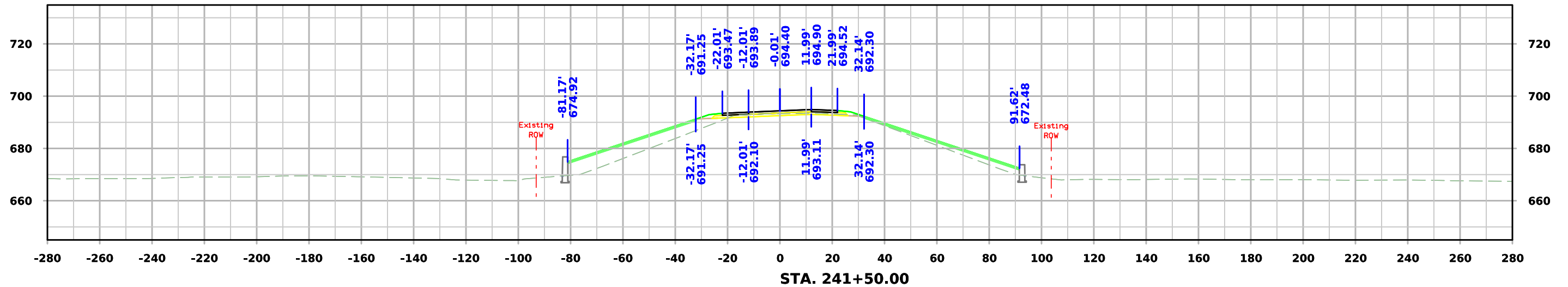
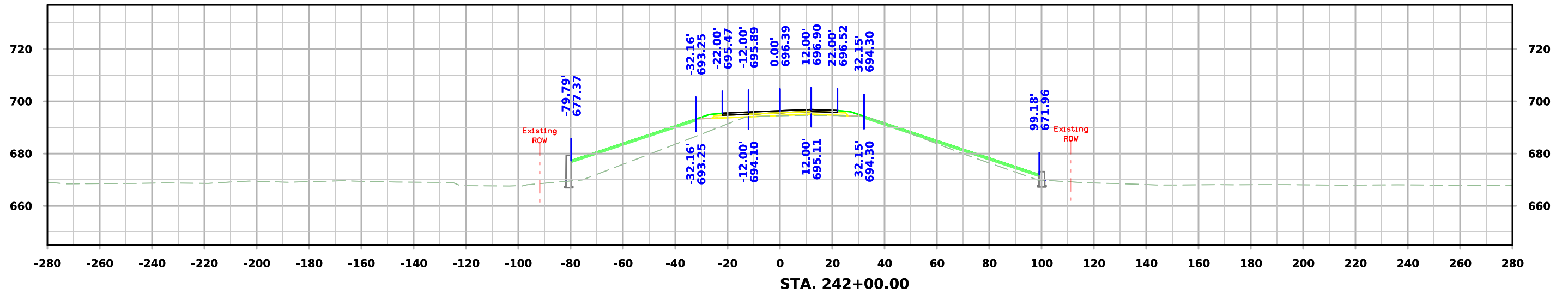
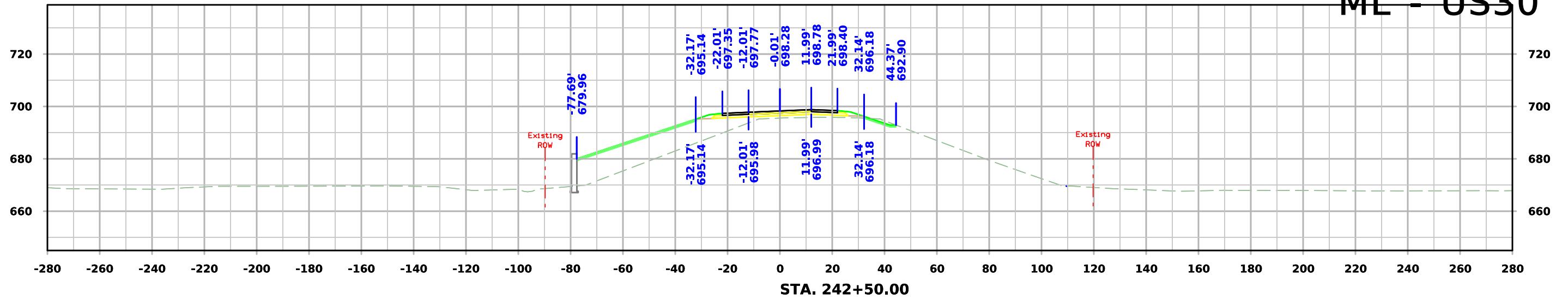
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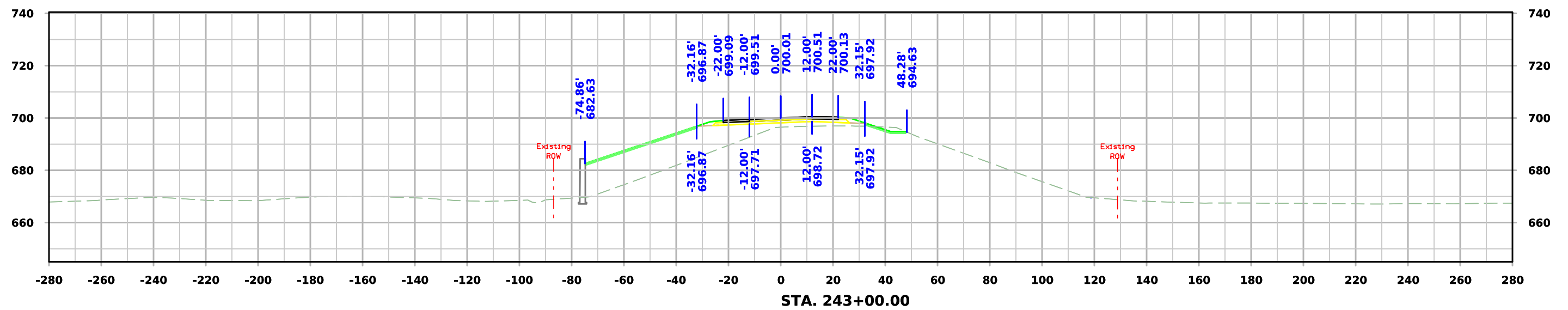
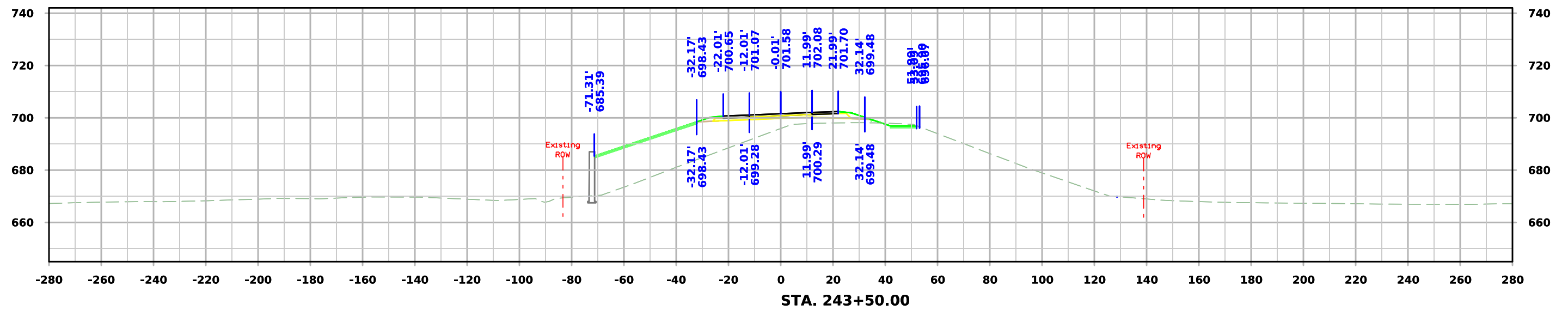
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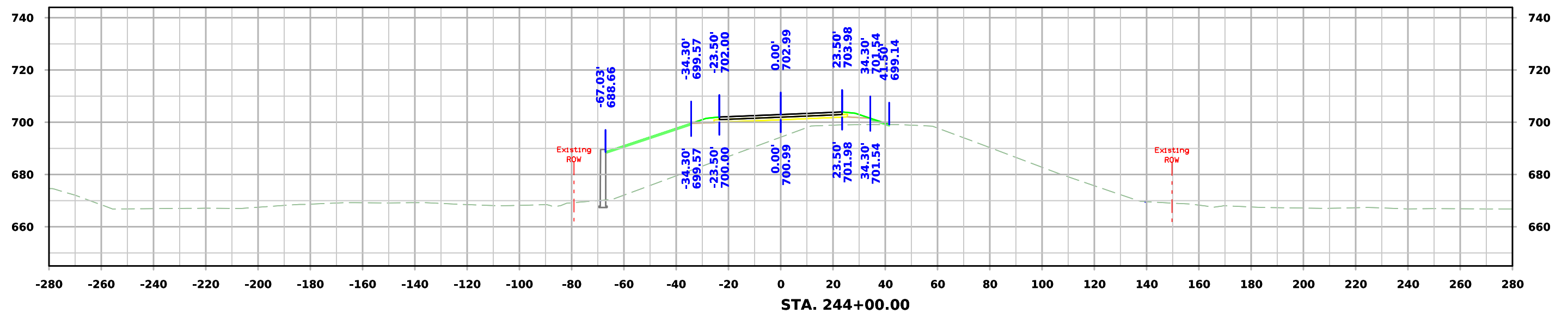
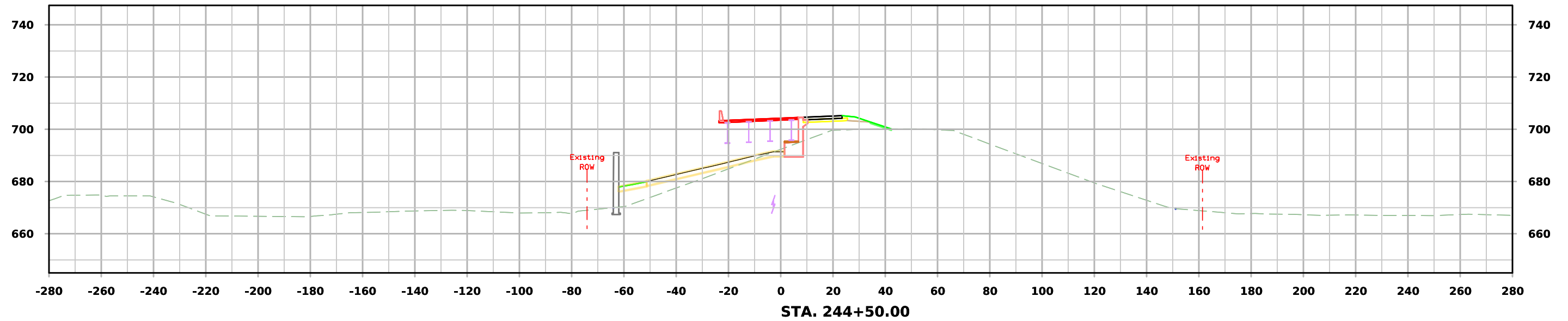
# ML - US30



# ML - US30

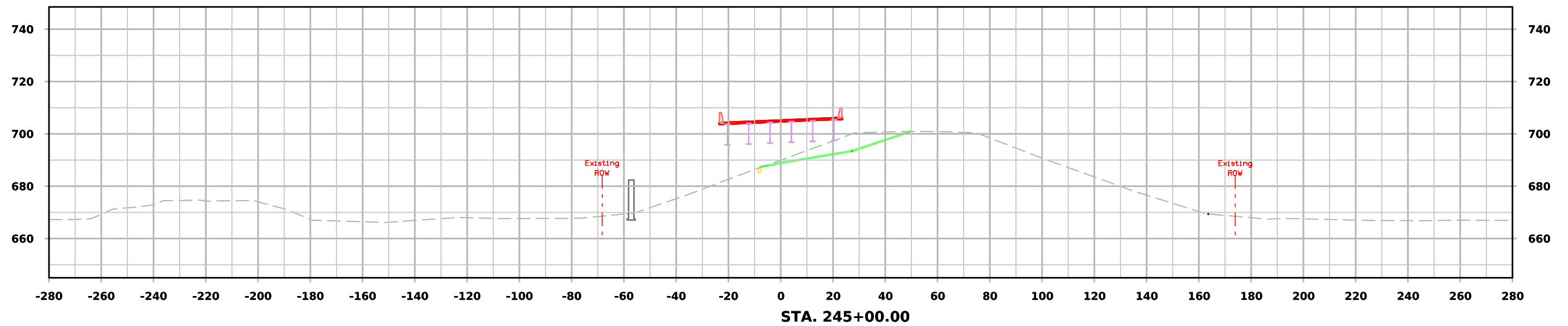
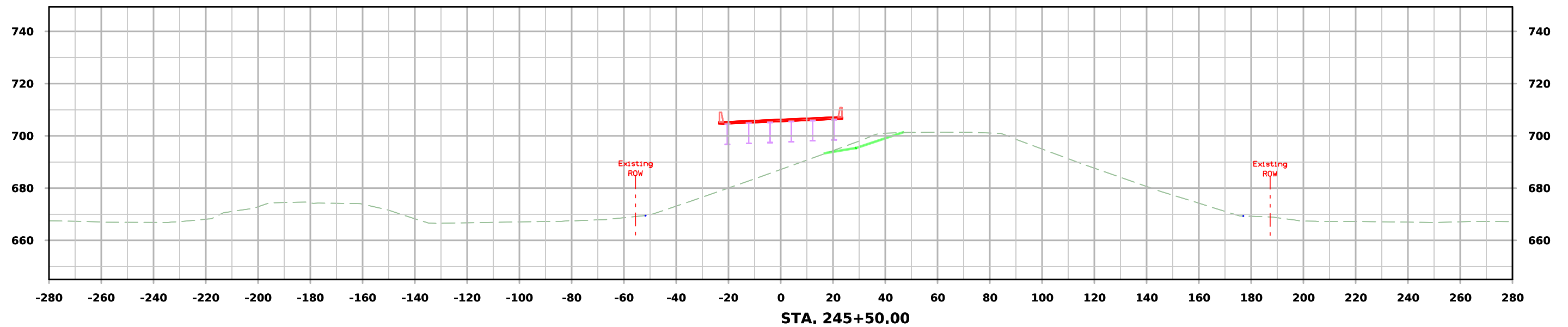


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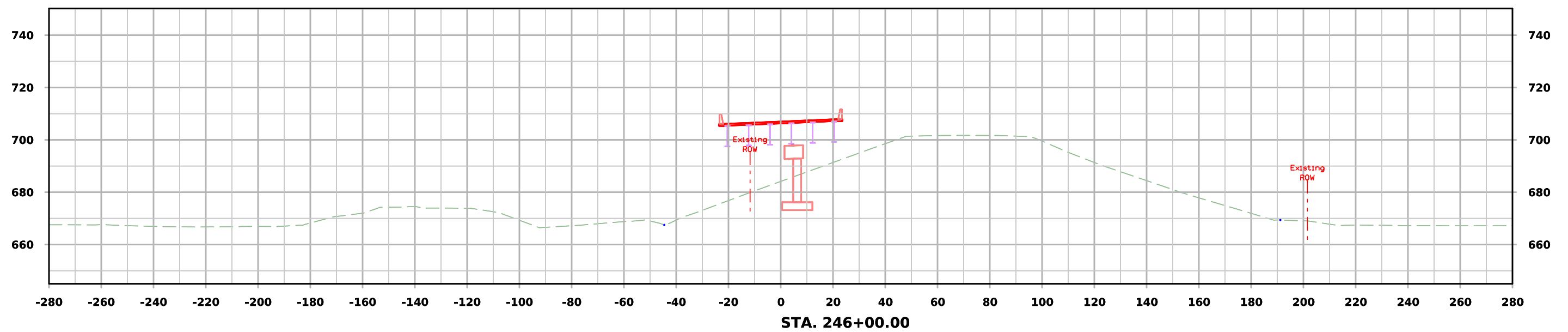
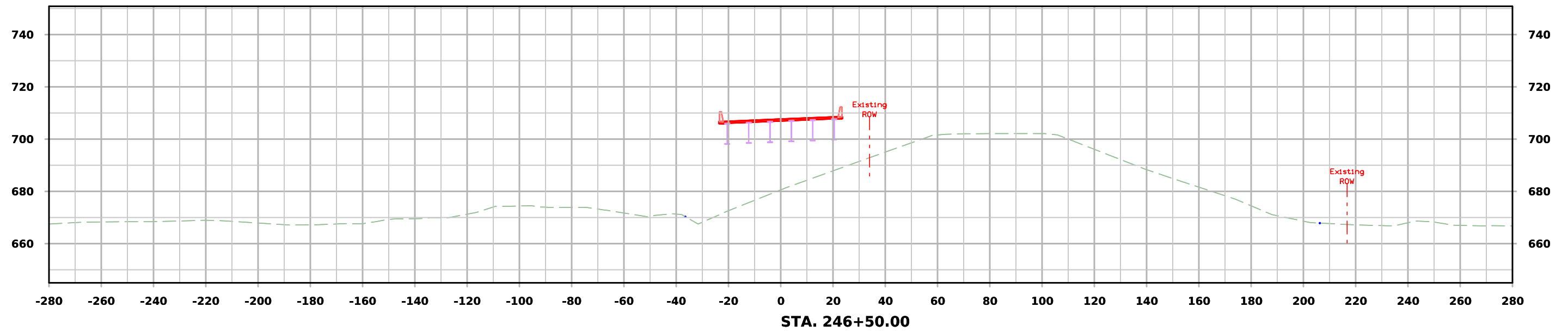




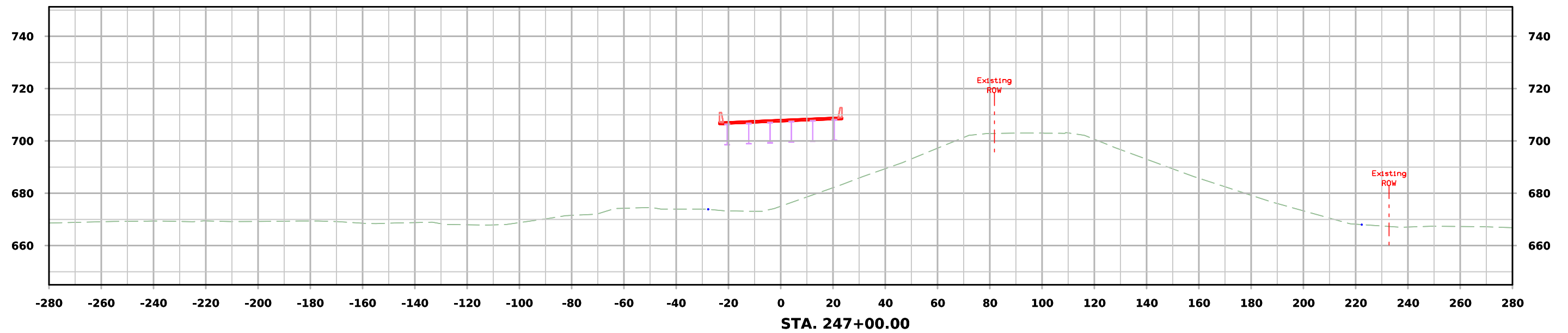
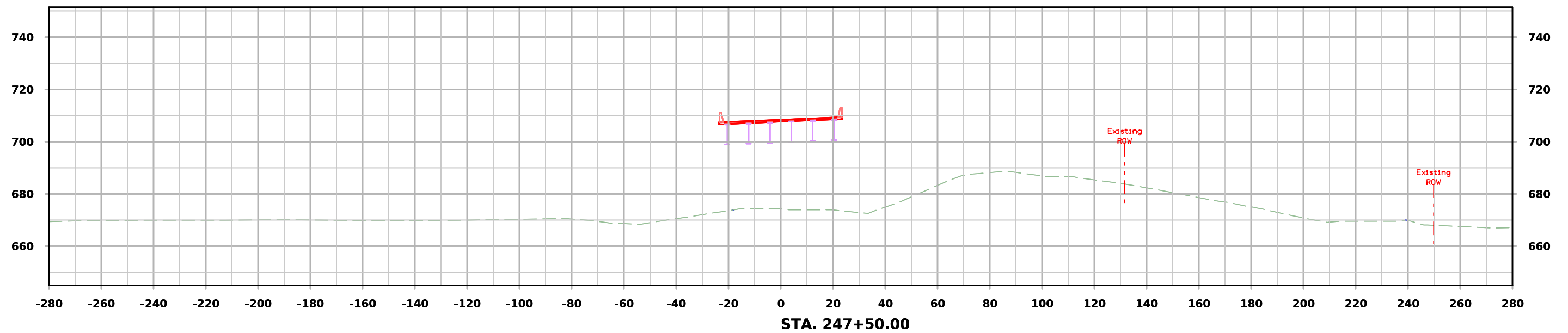
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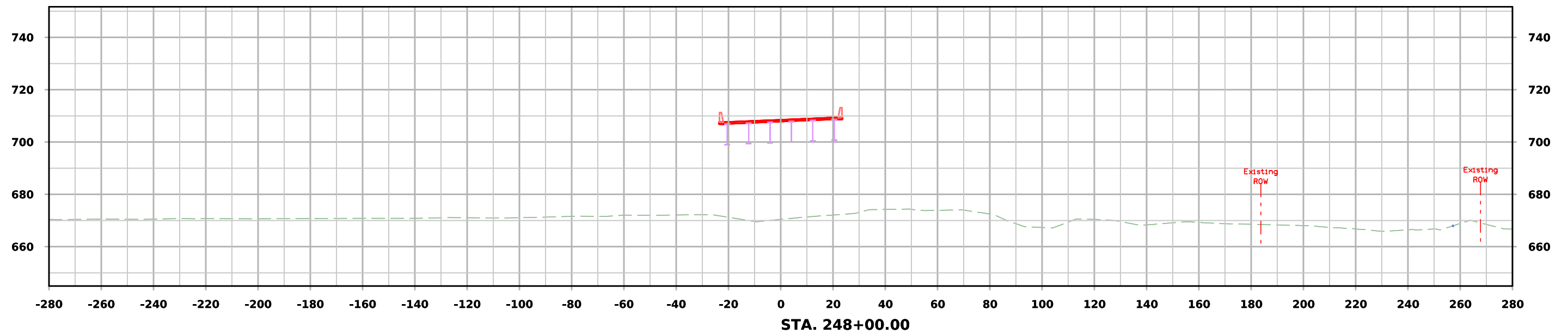
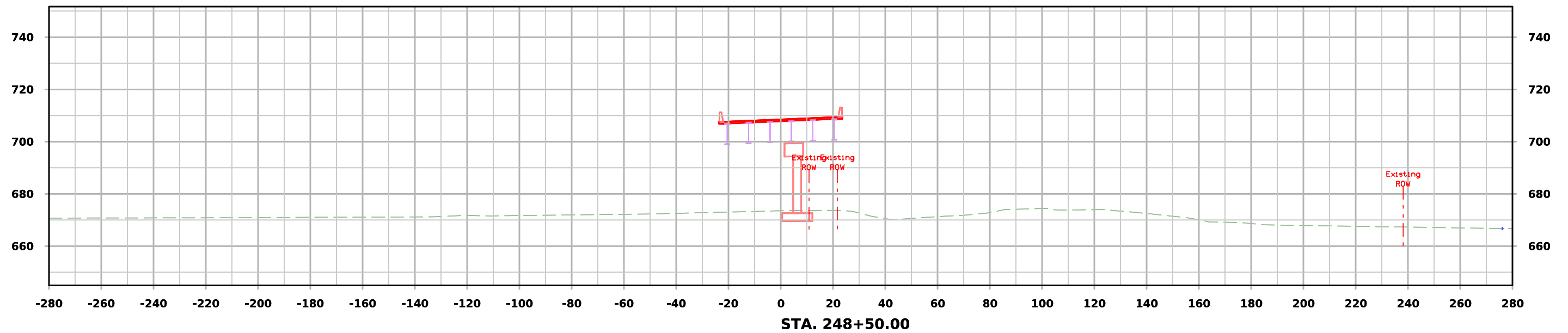
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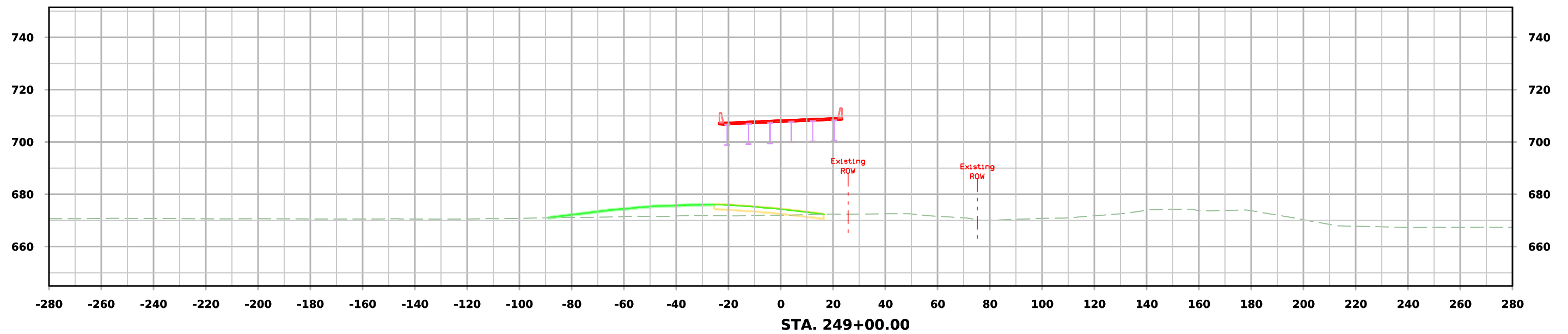
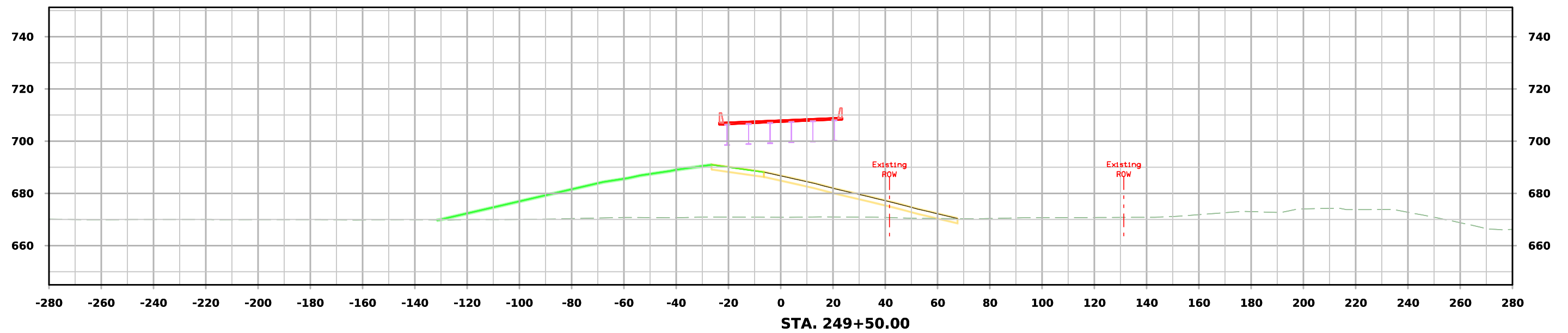
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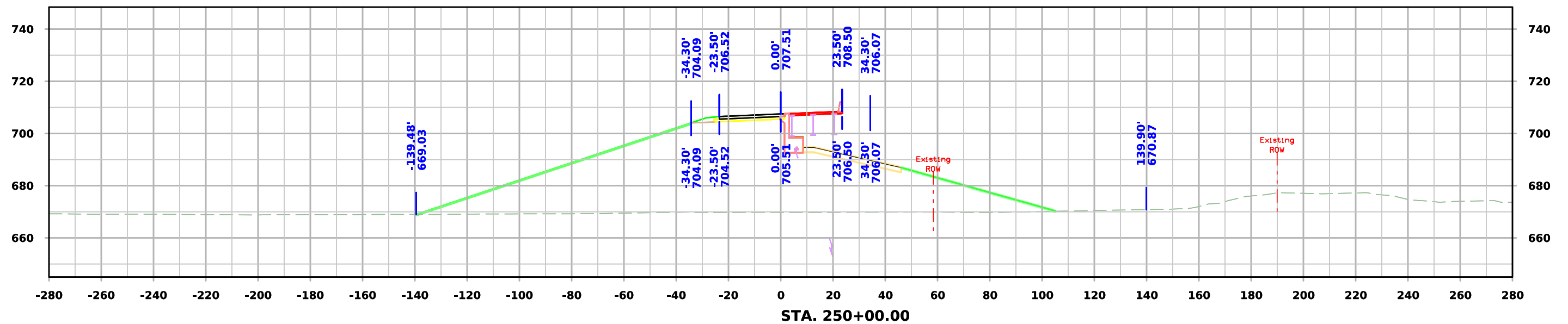
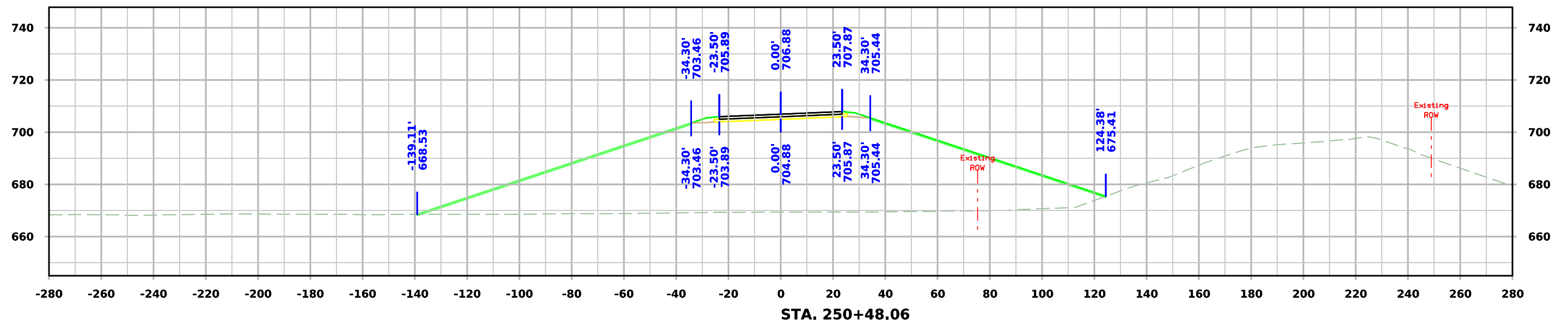
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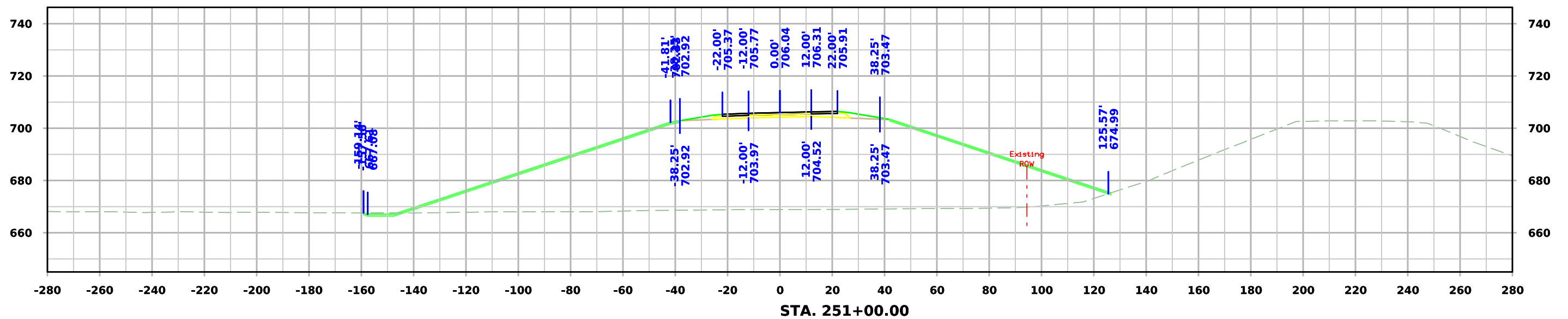
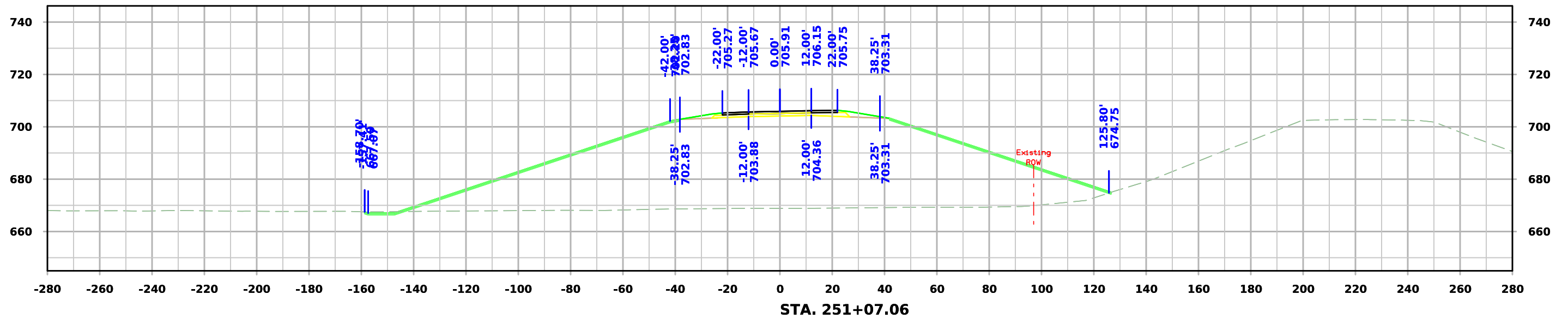
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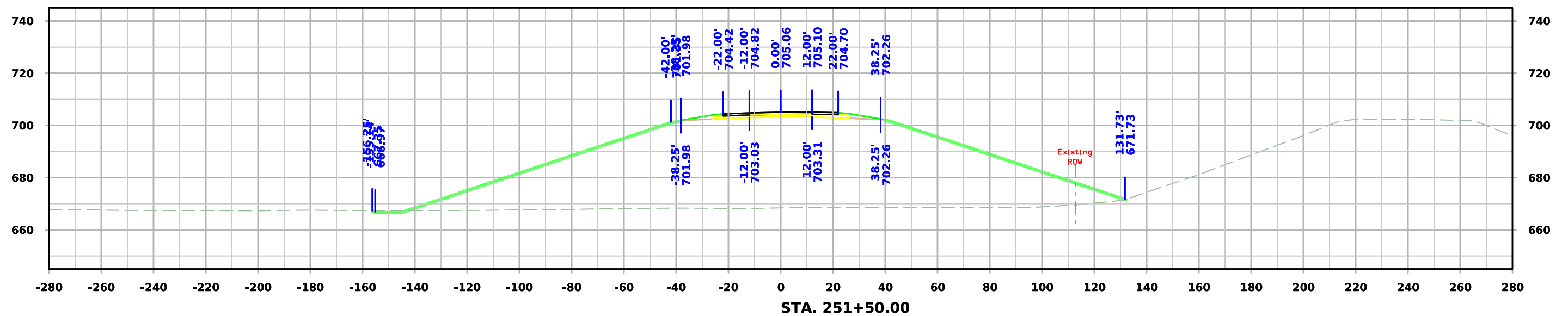
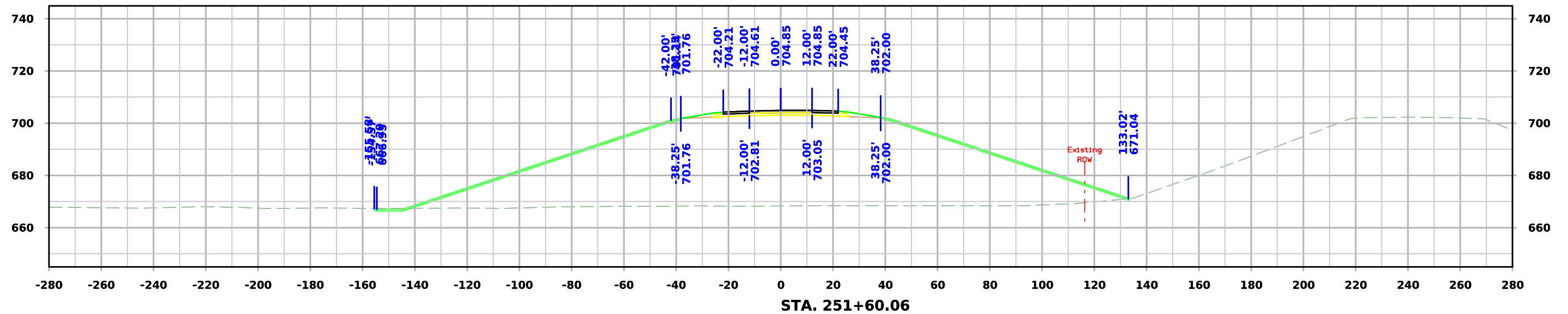
# ML - US30



# ML - US30

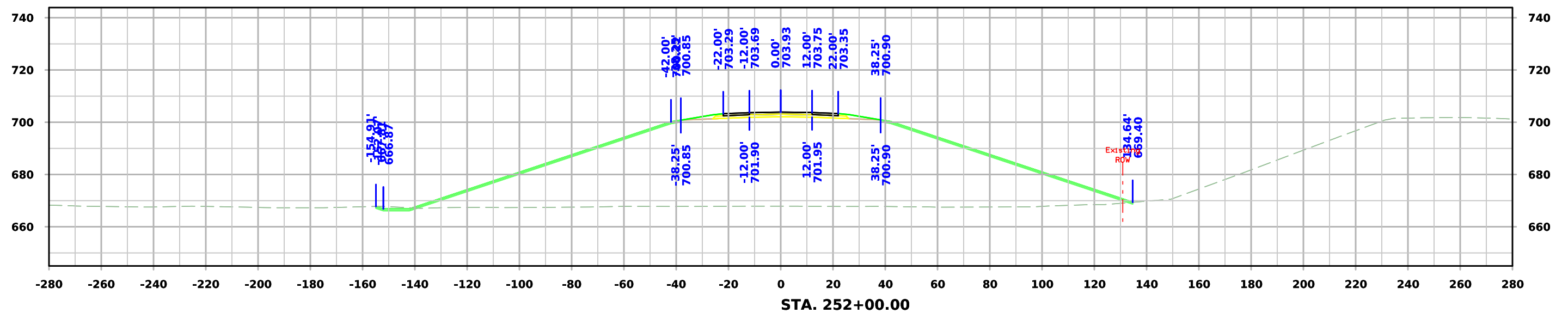
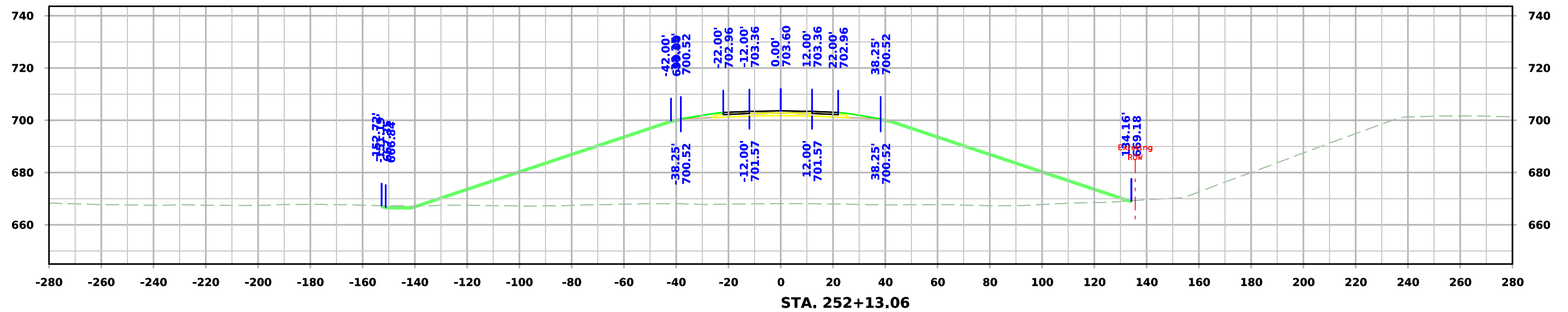


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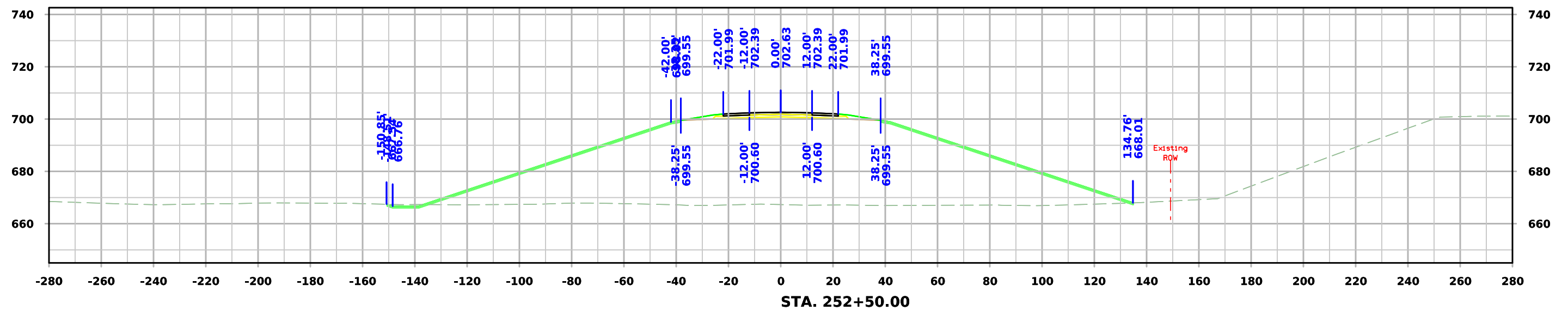
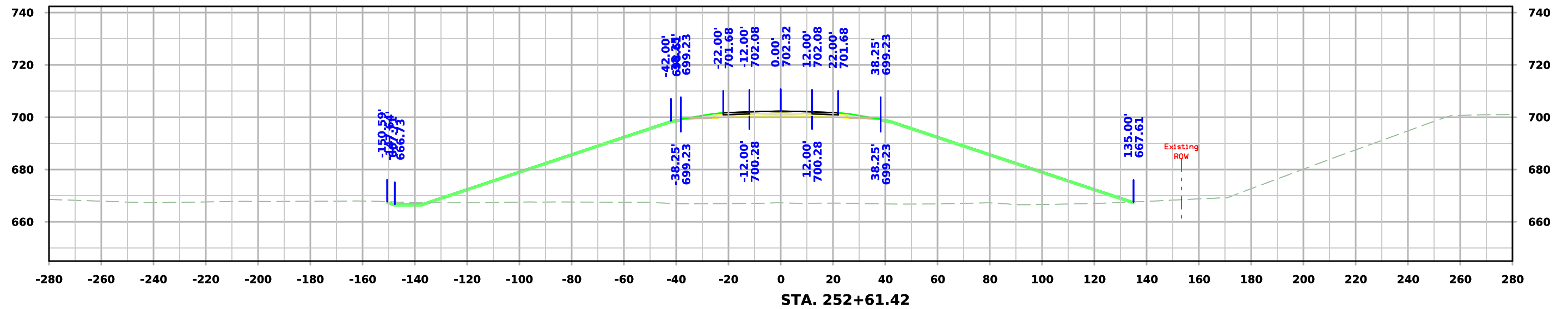




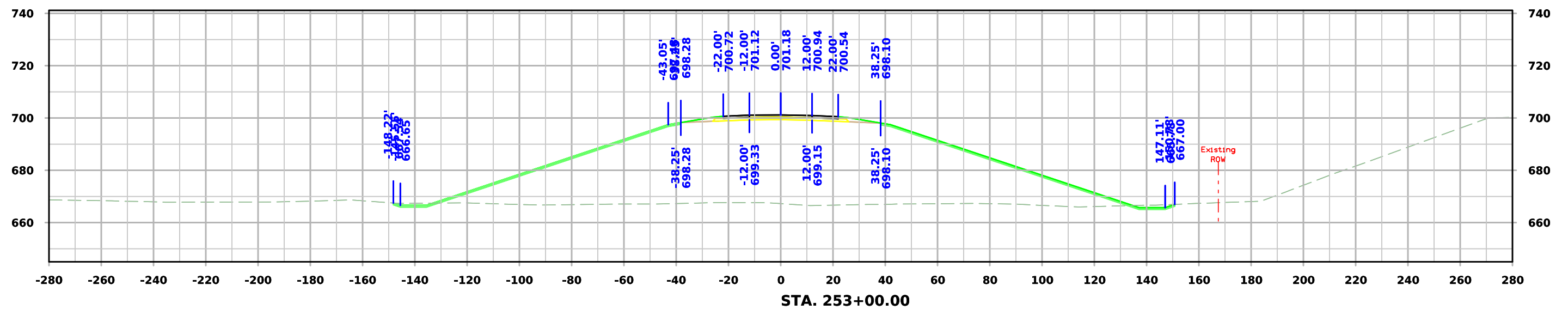
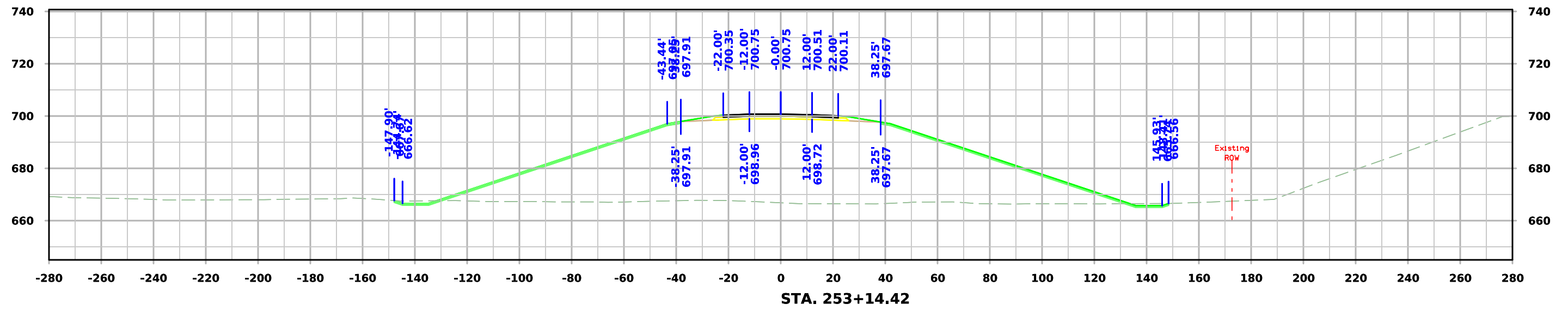
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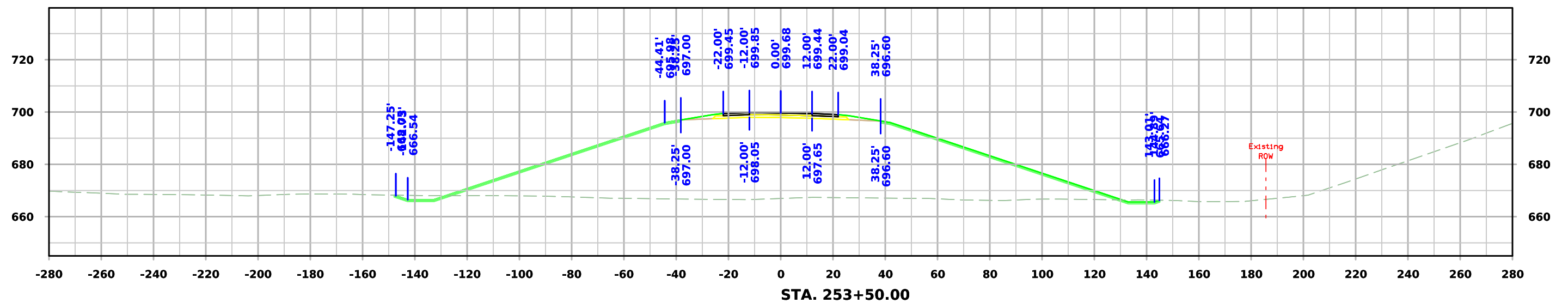
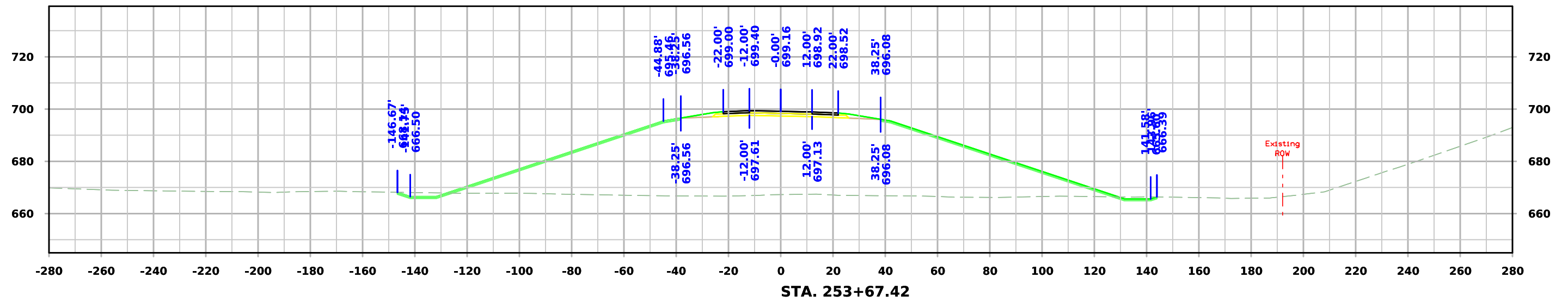
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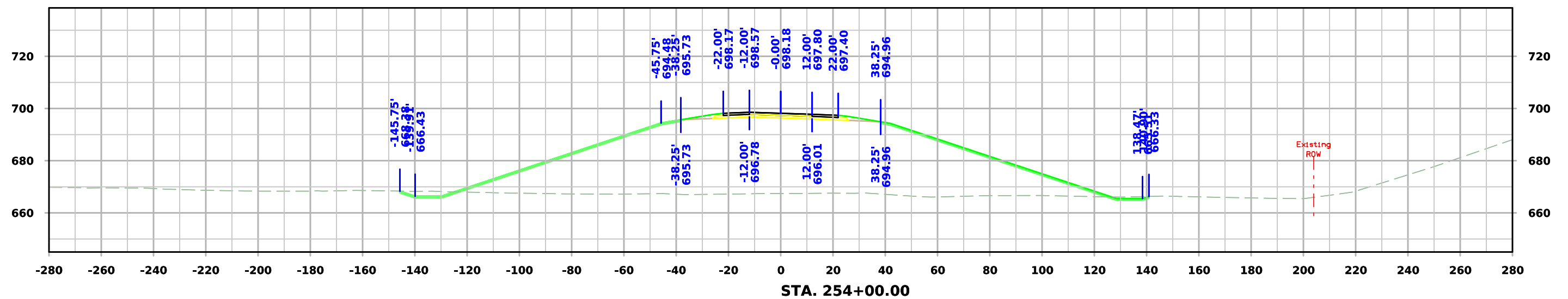
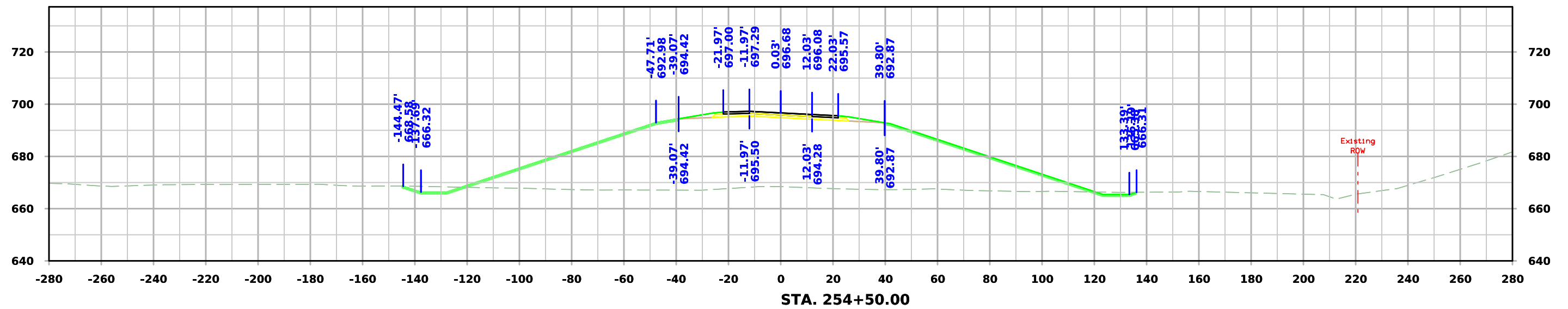
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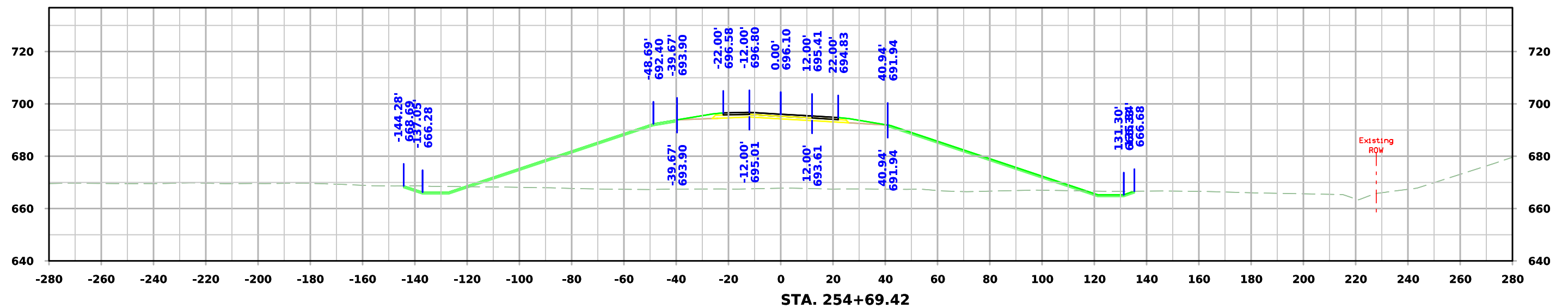
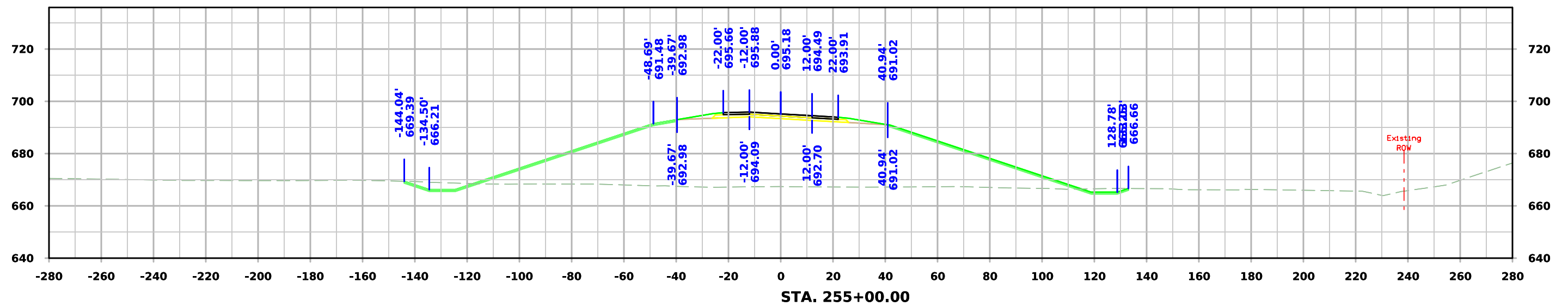
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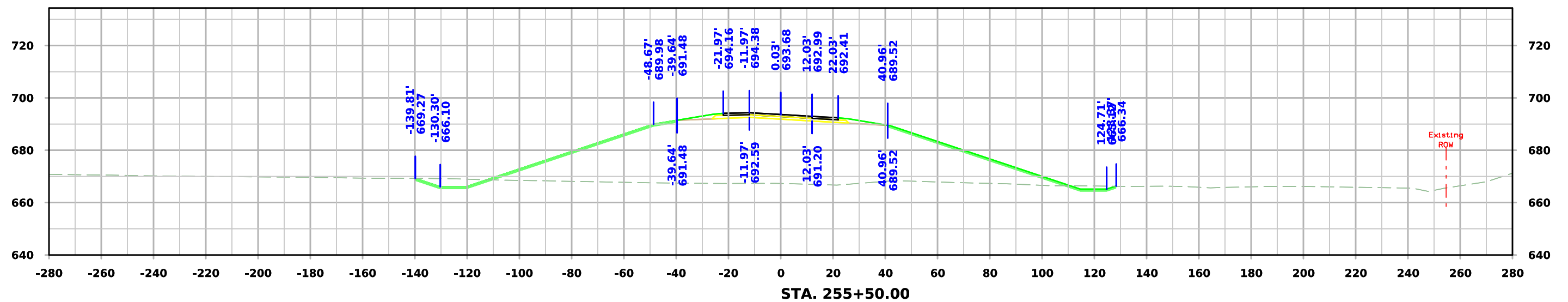
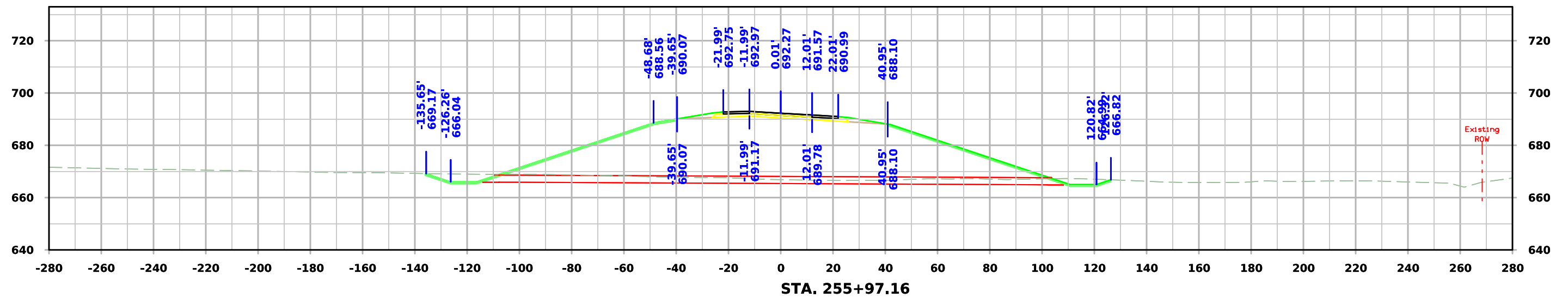
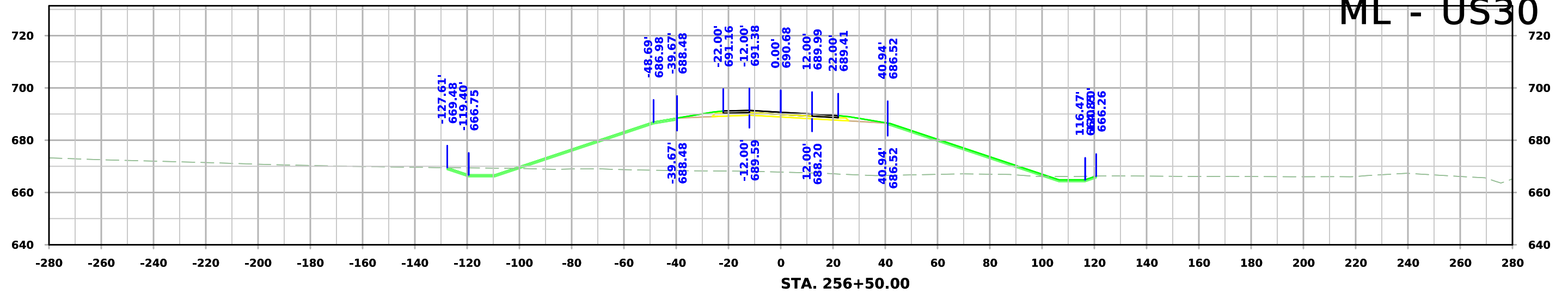
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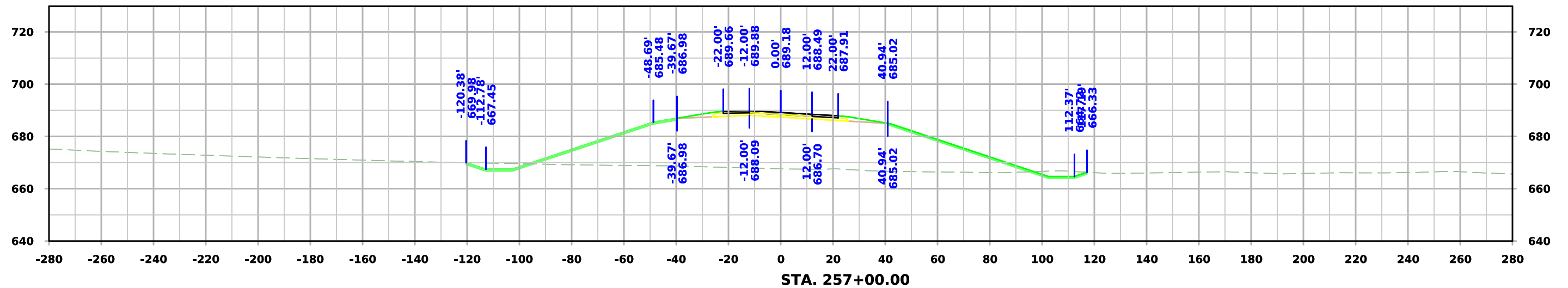
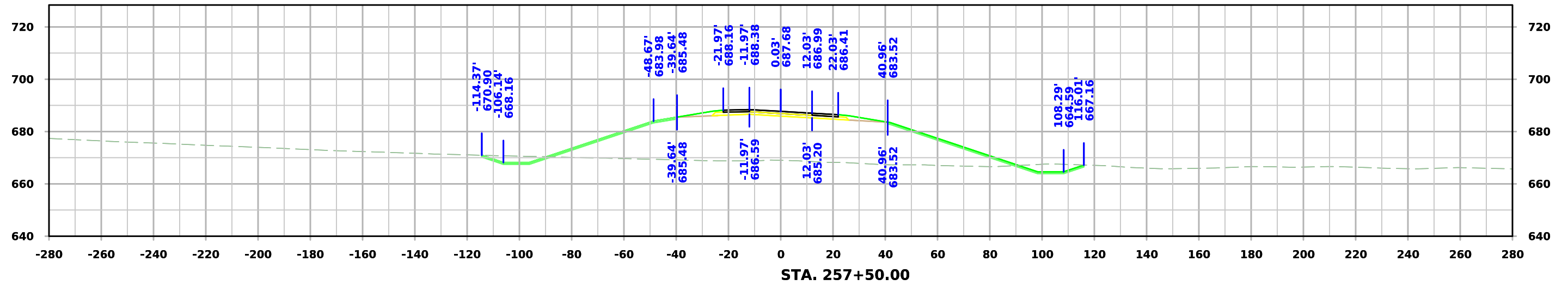
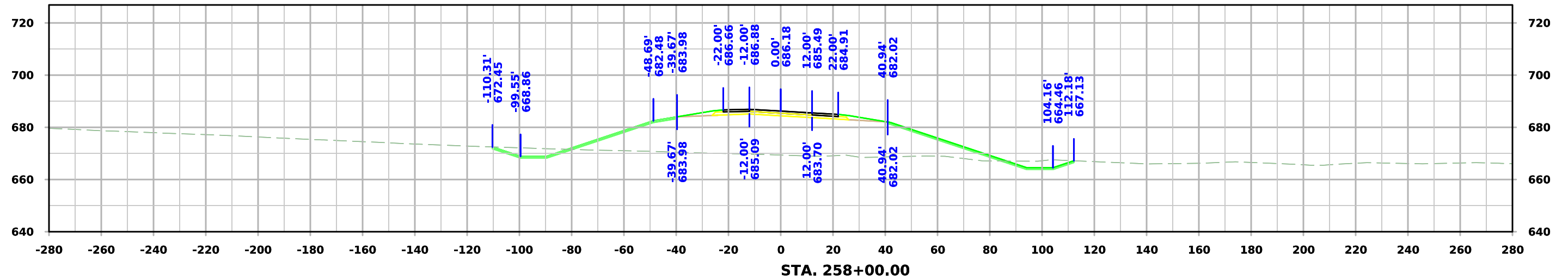
# ML - US30



# ML - US30

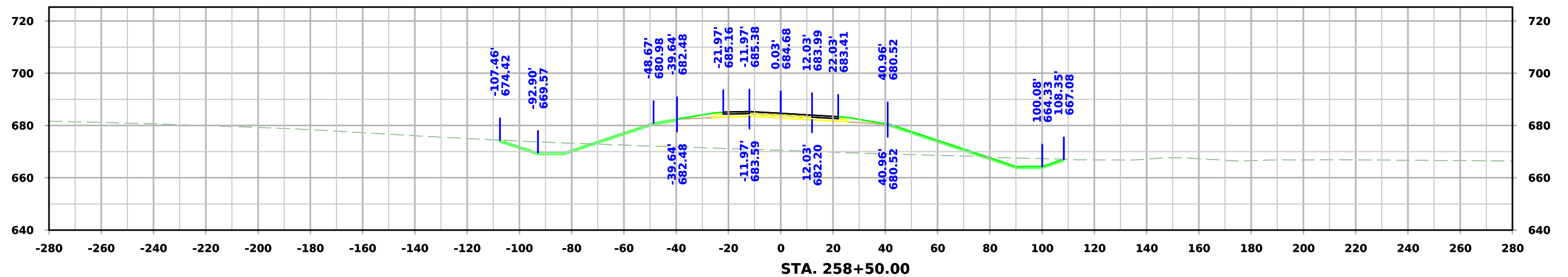
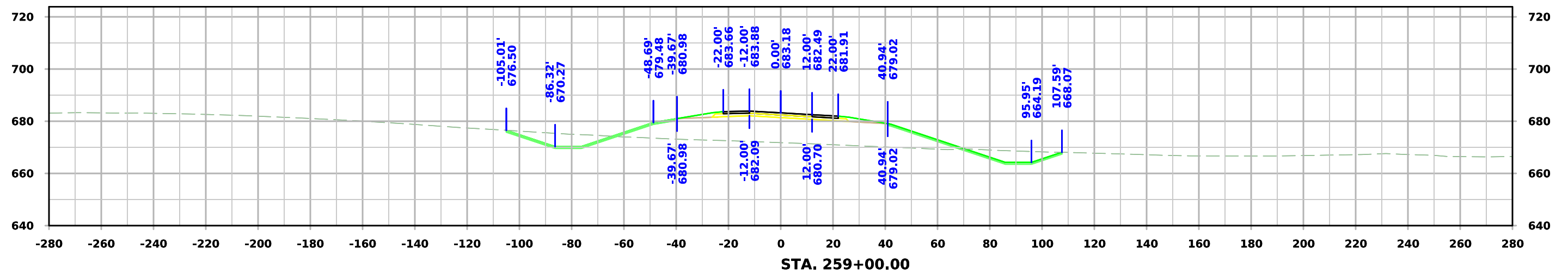
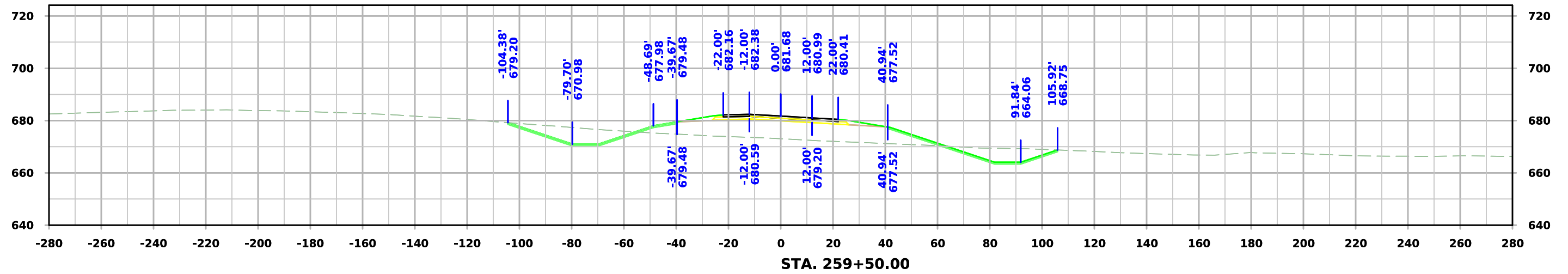


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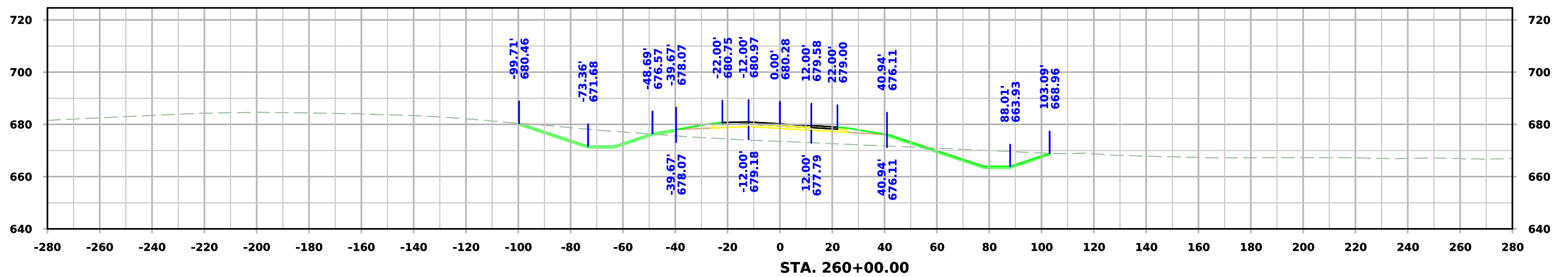
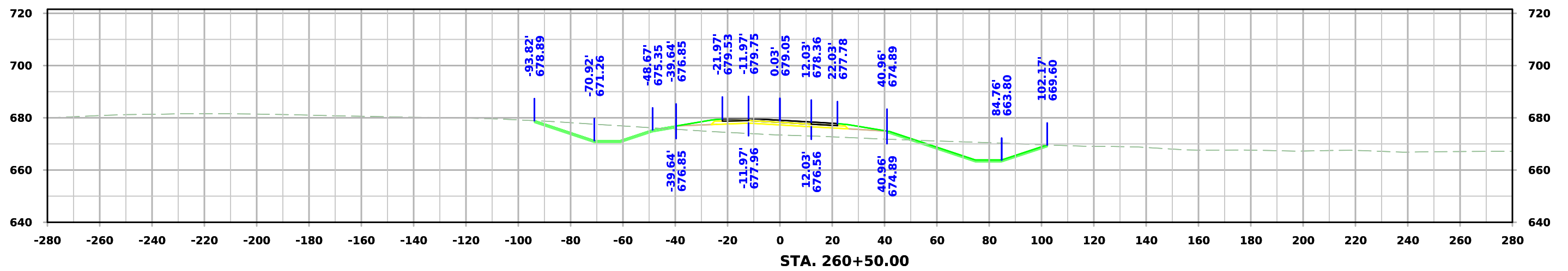
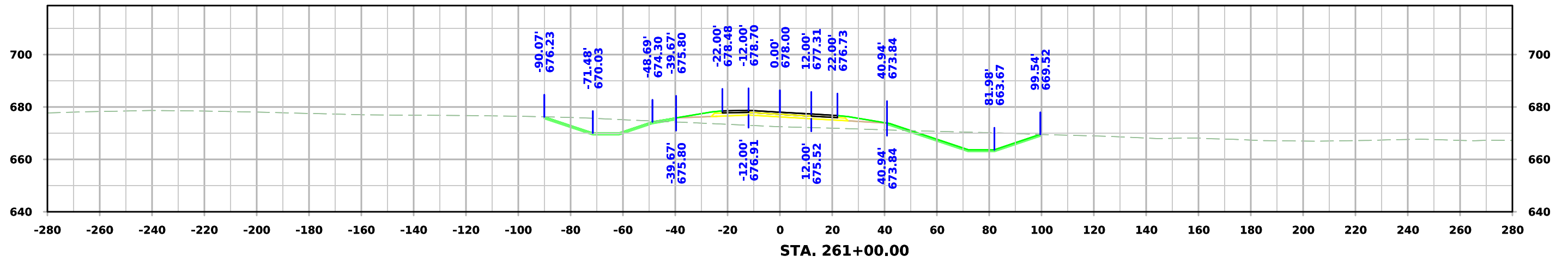




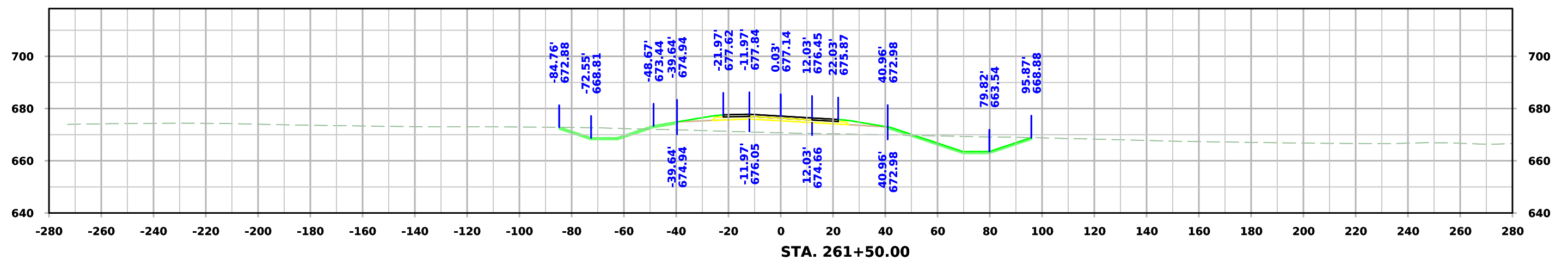
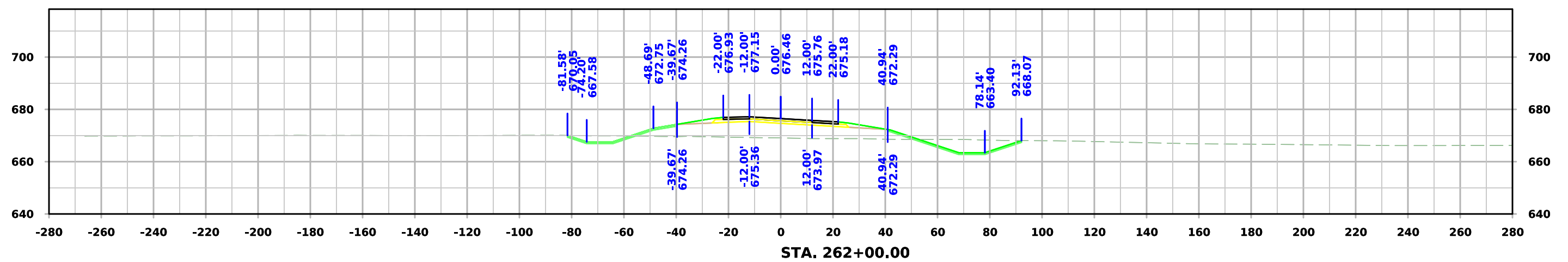
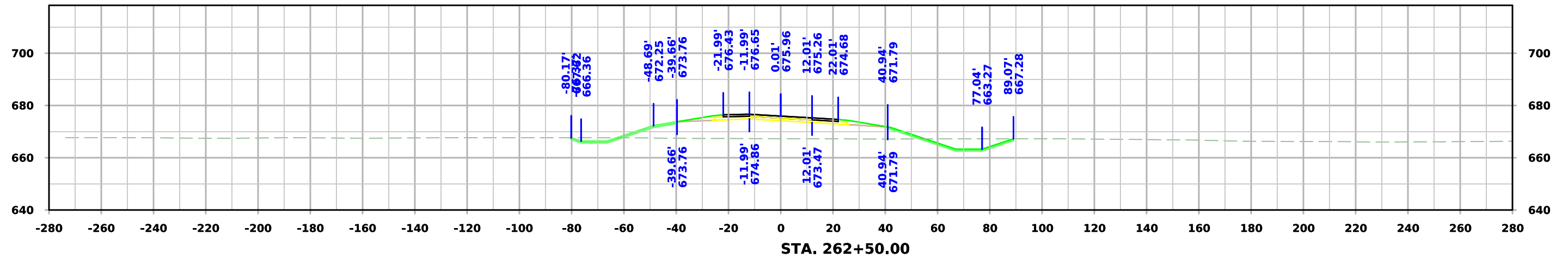
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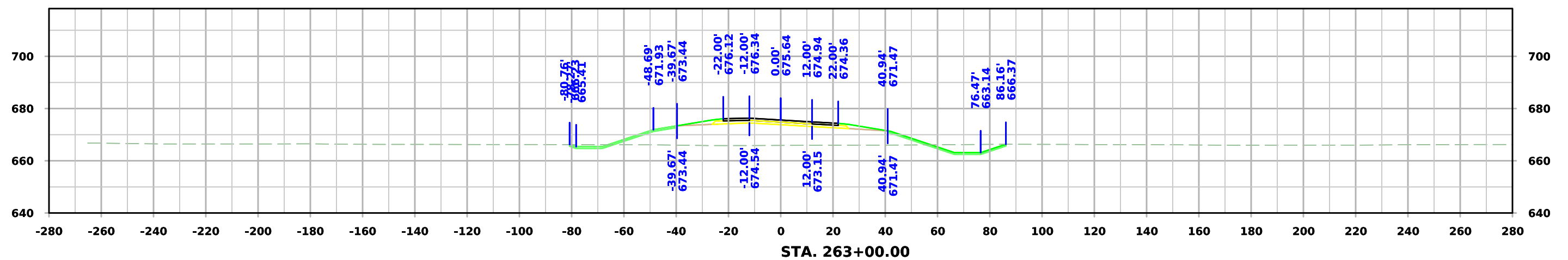
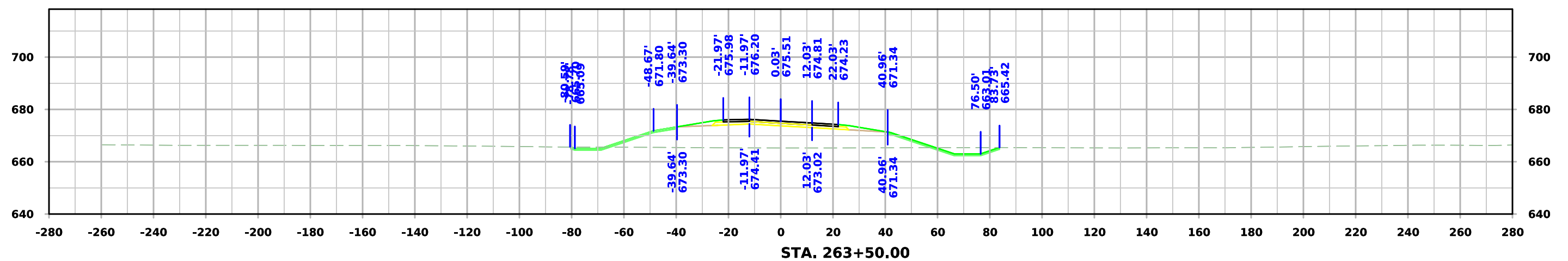
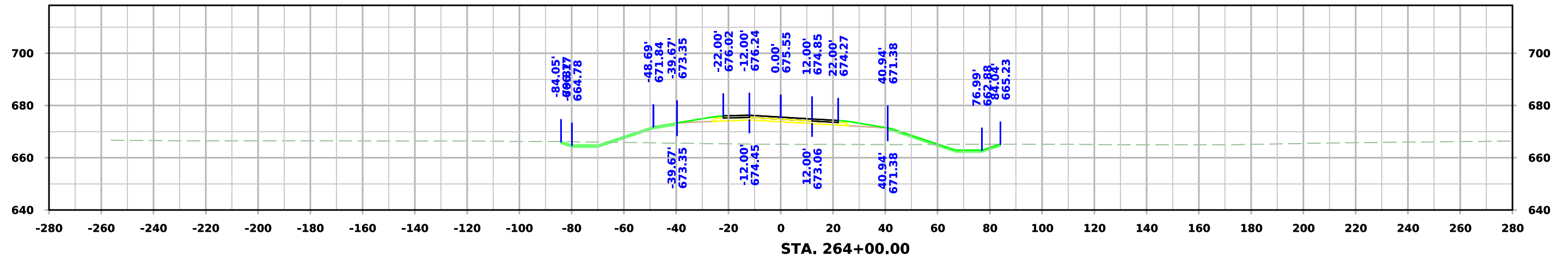
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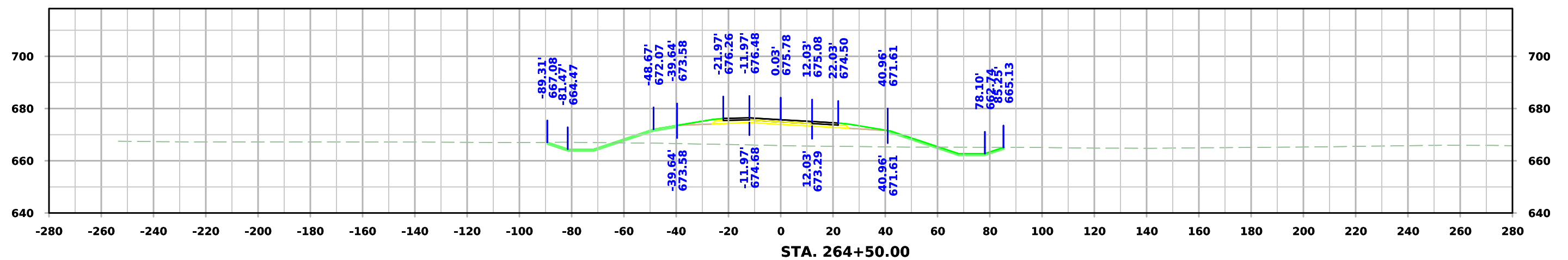
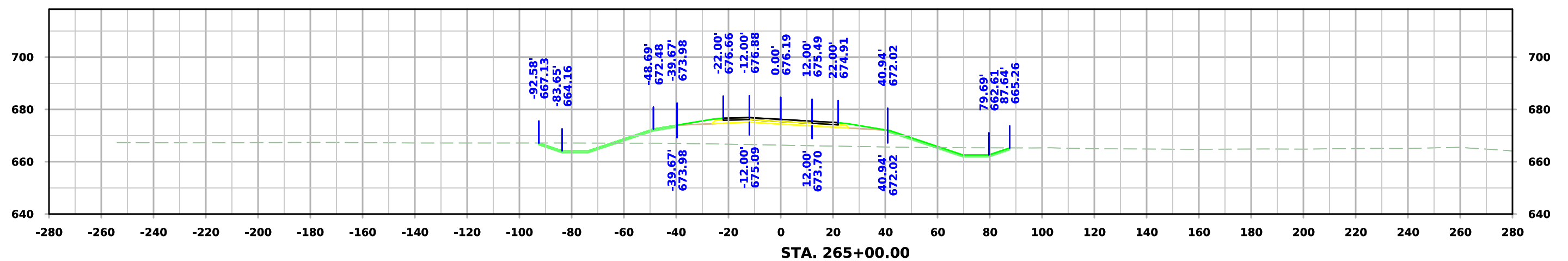
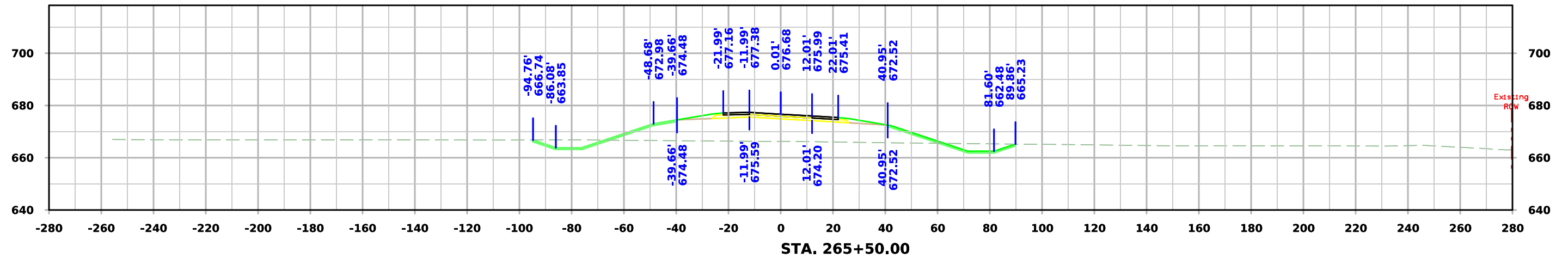
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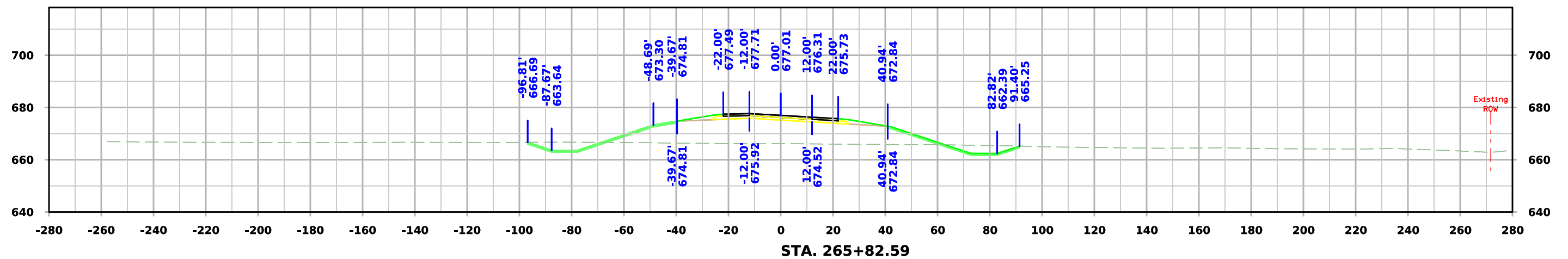
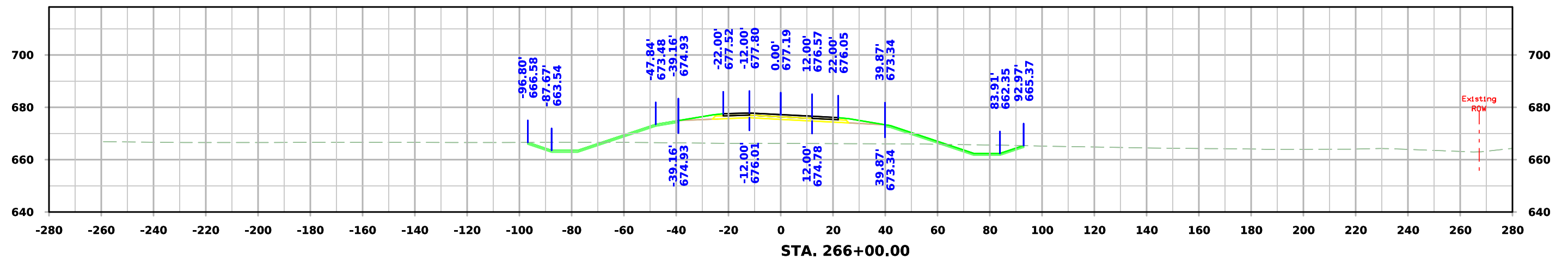
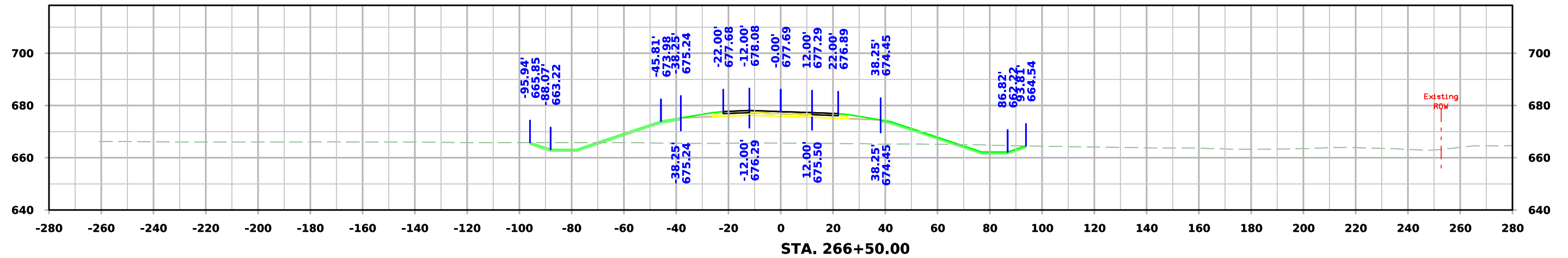
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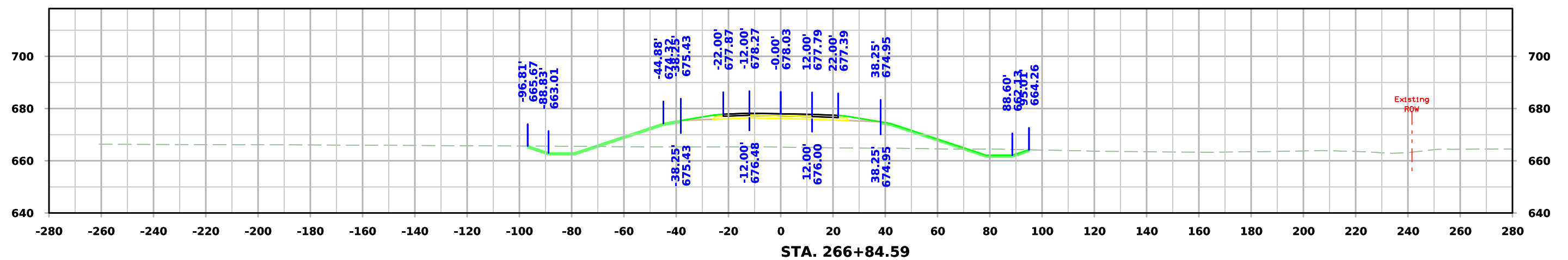
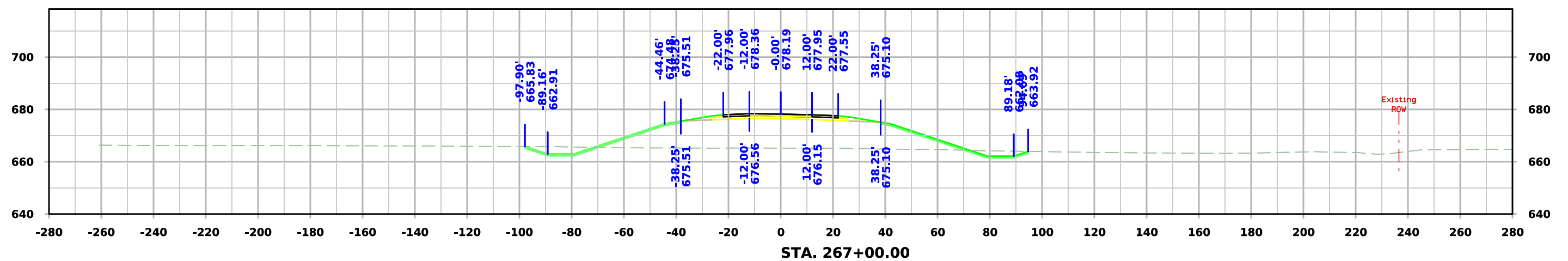
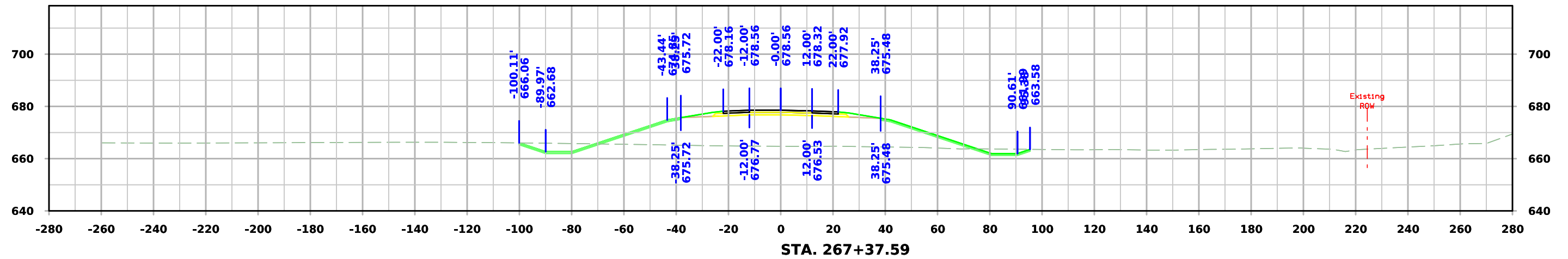
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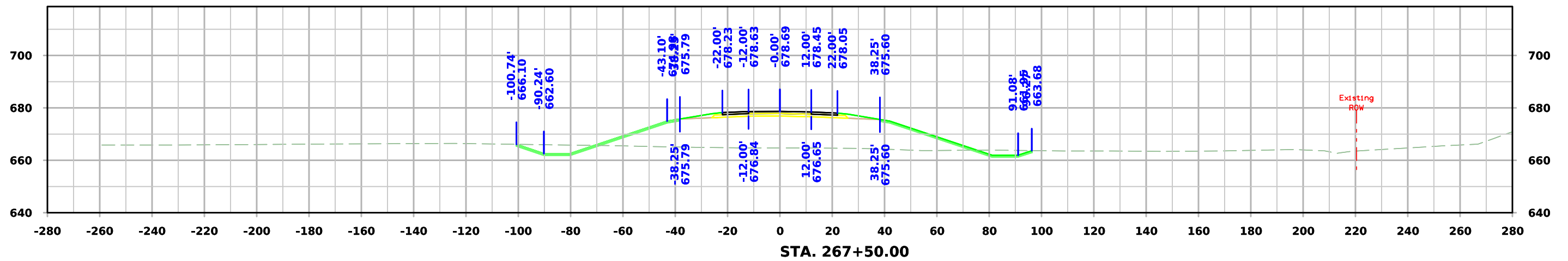
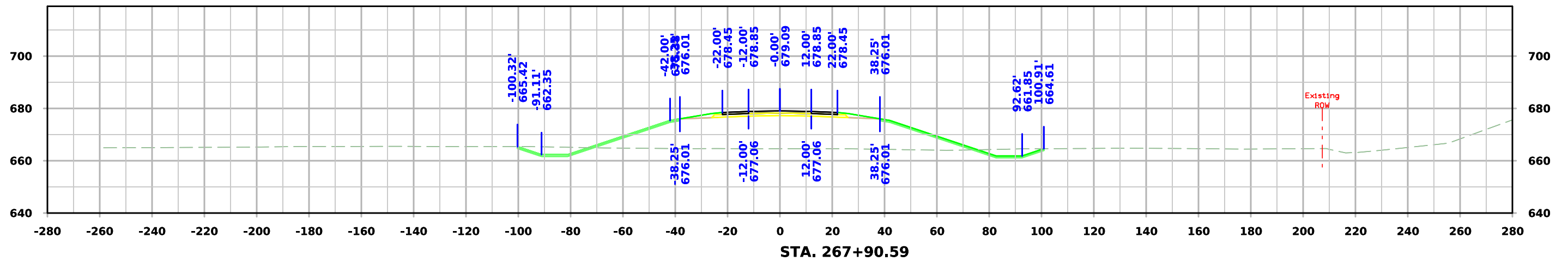
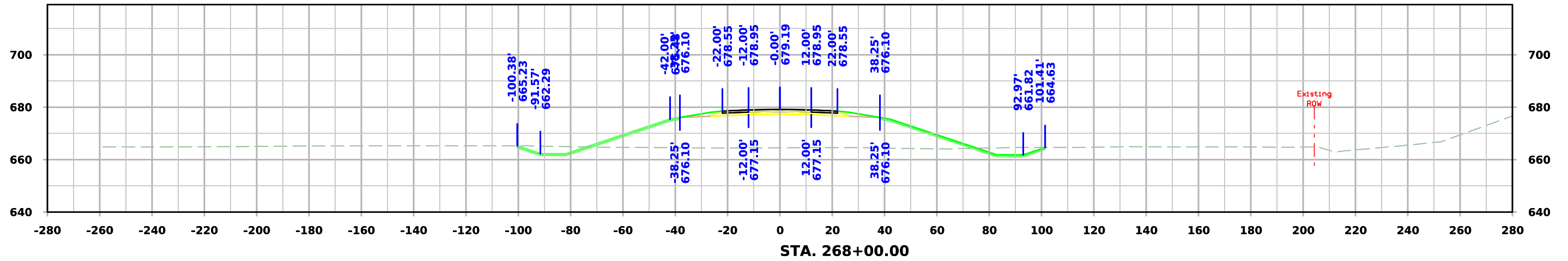
# ML - US30



# ML - US30

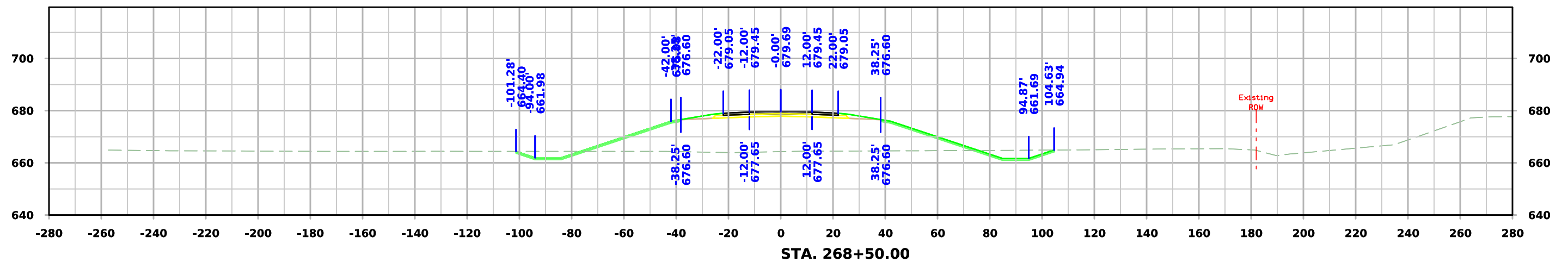
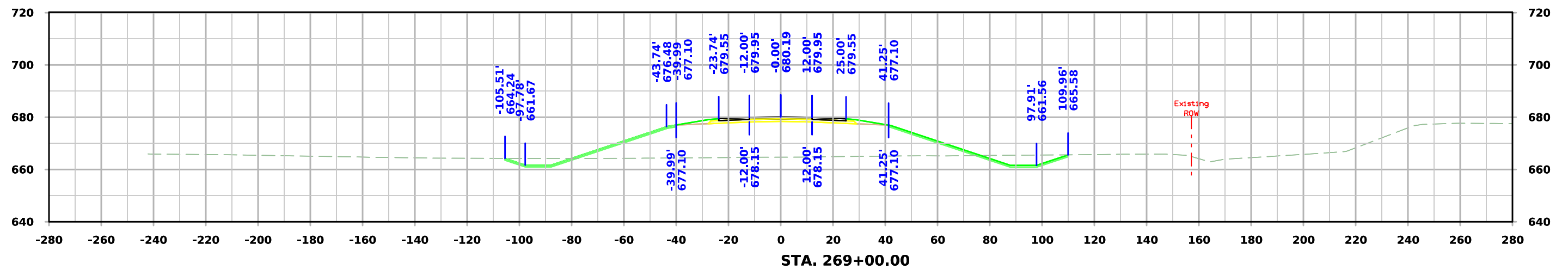
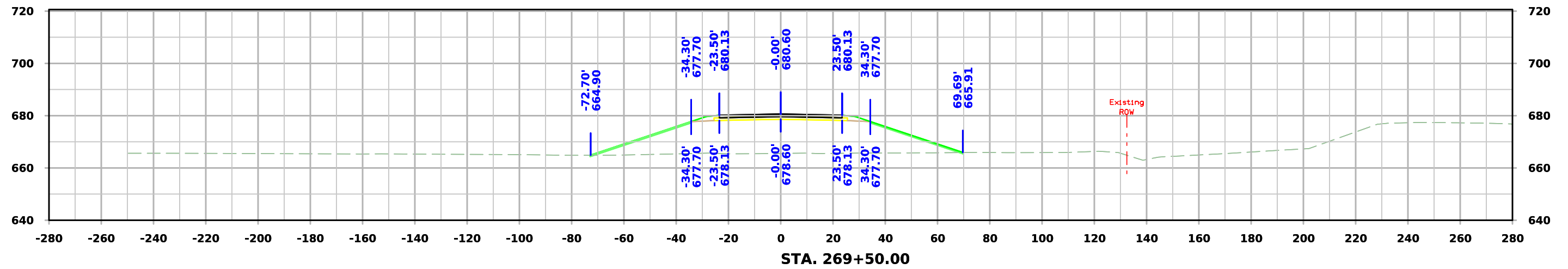


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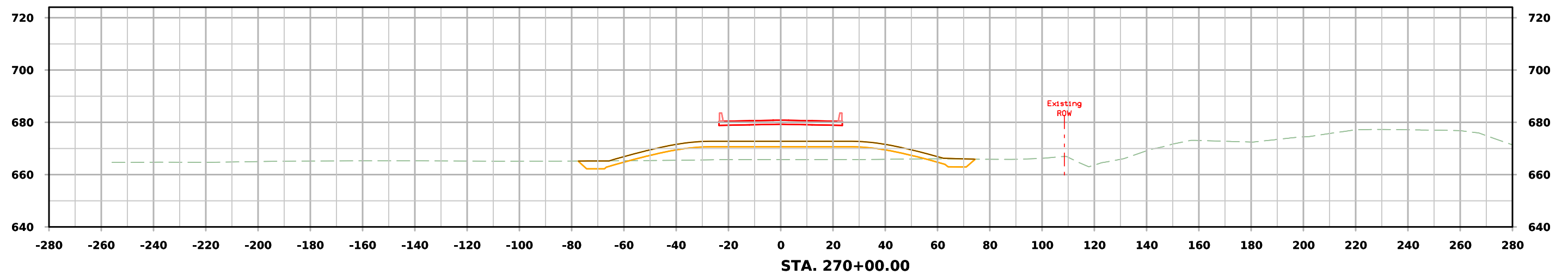
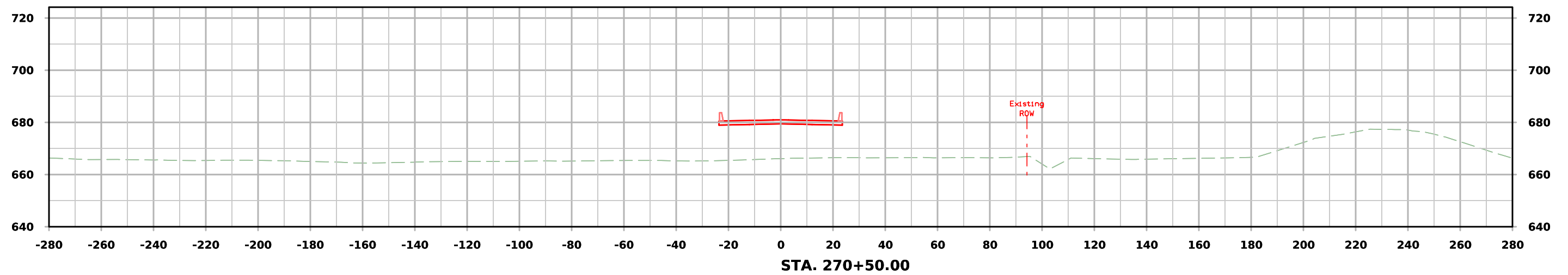
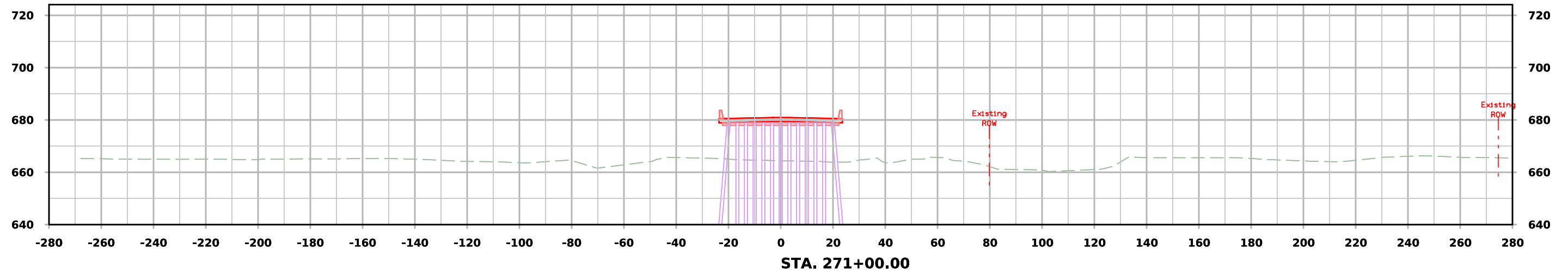




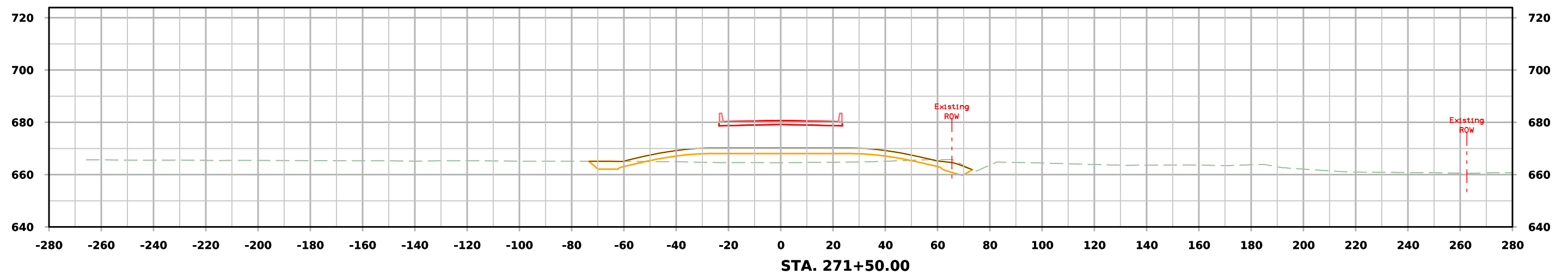
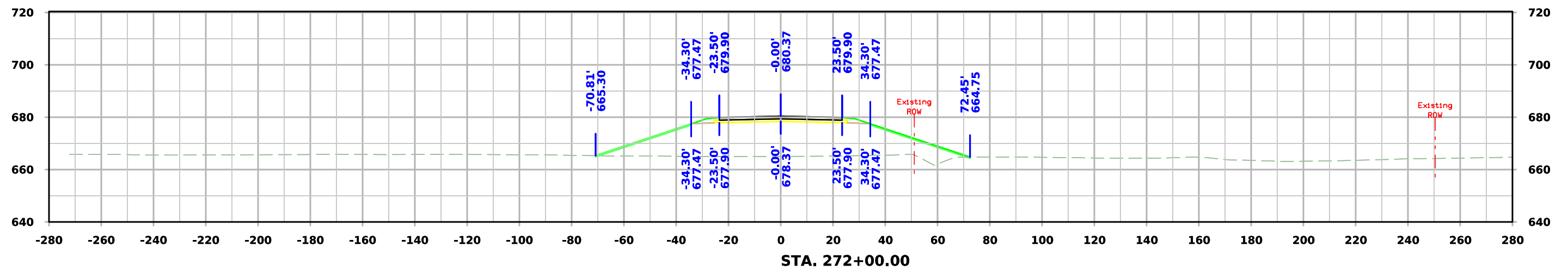
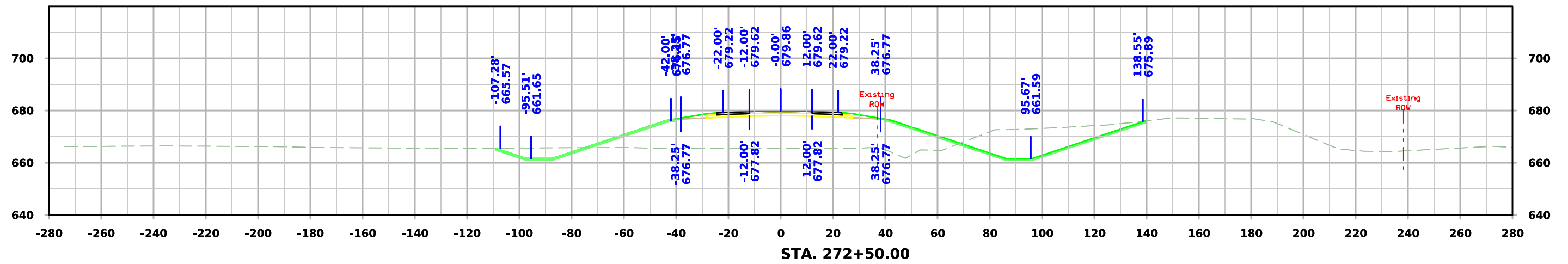
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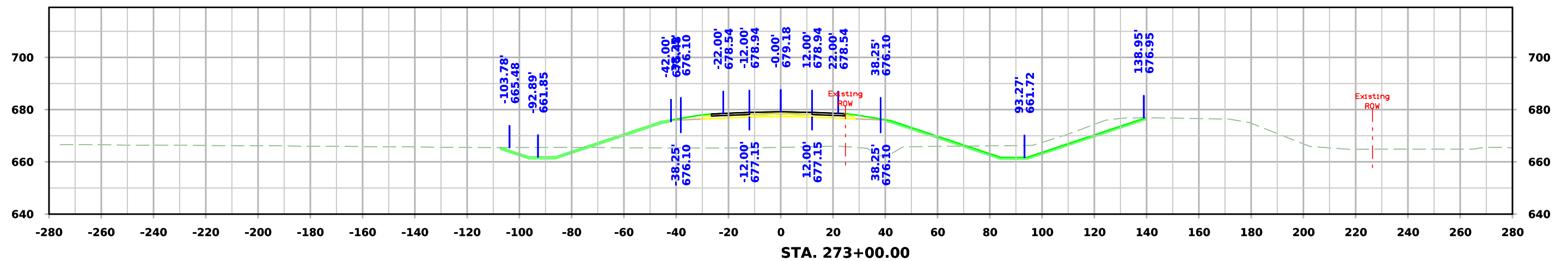
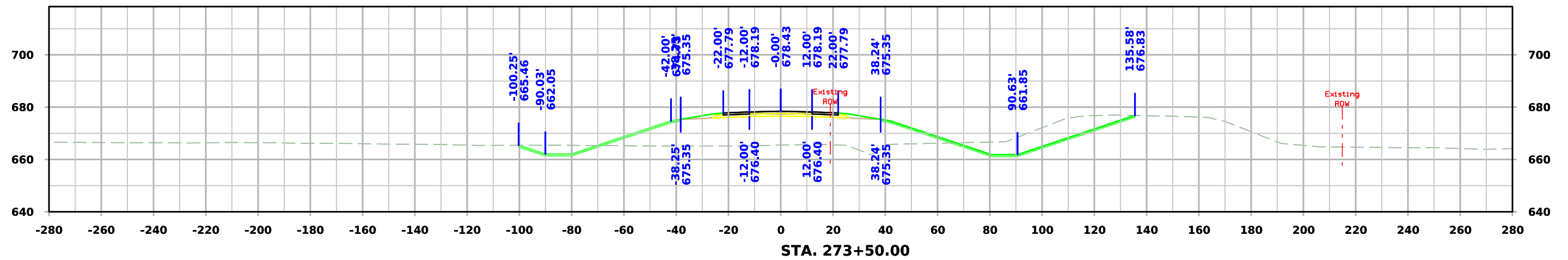
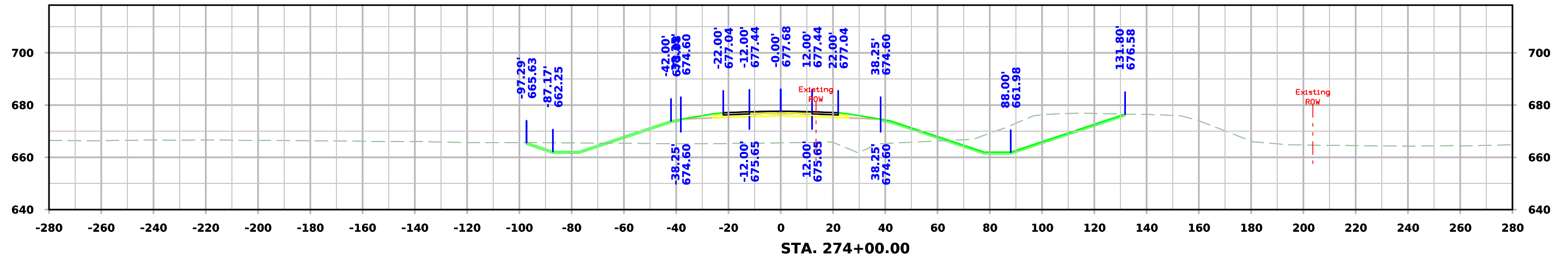
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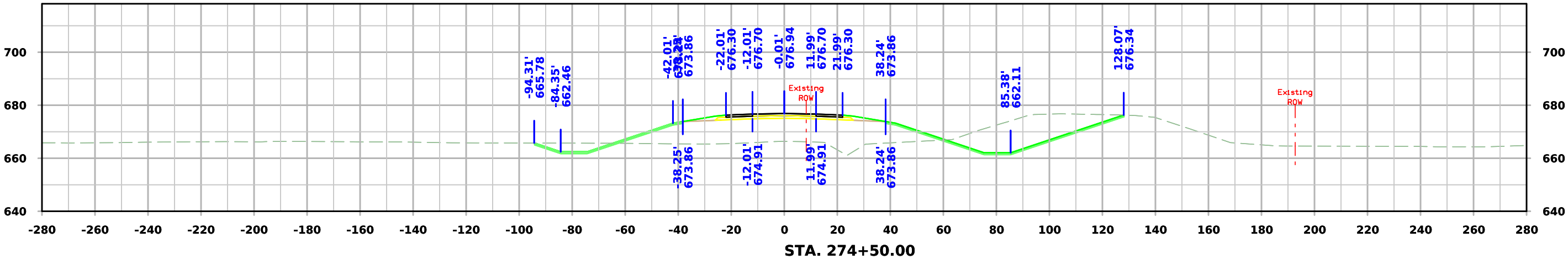
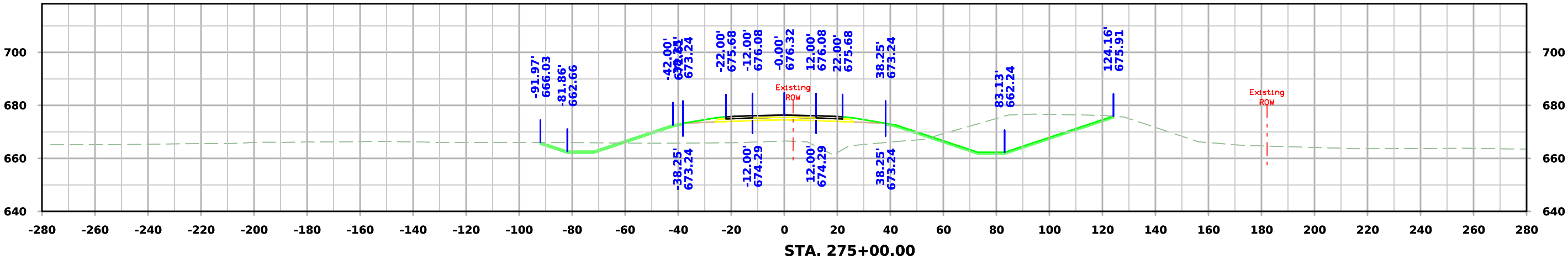
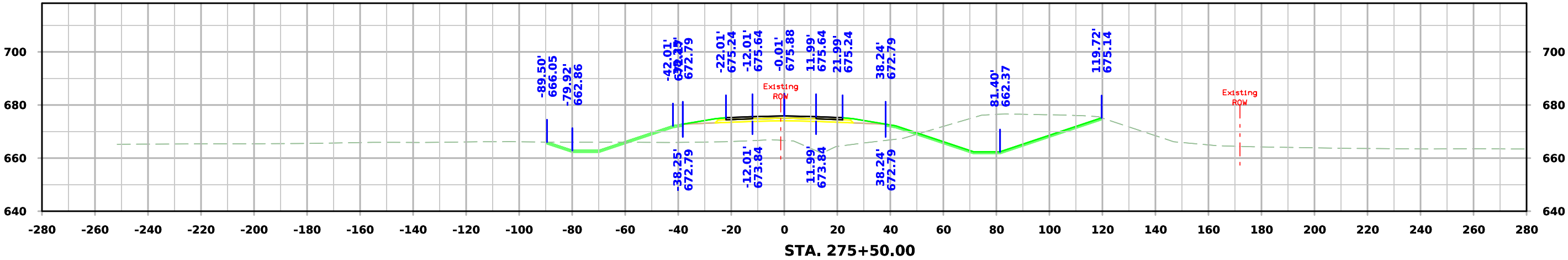
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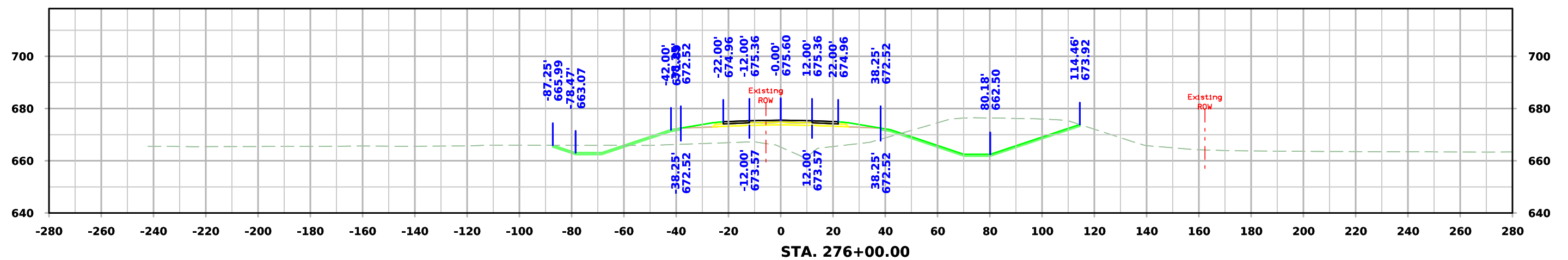
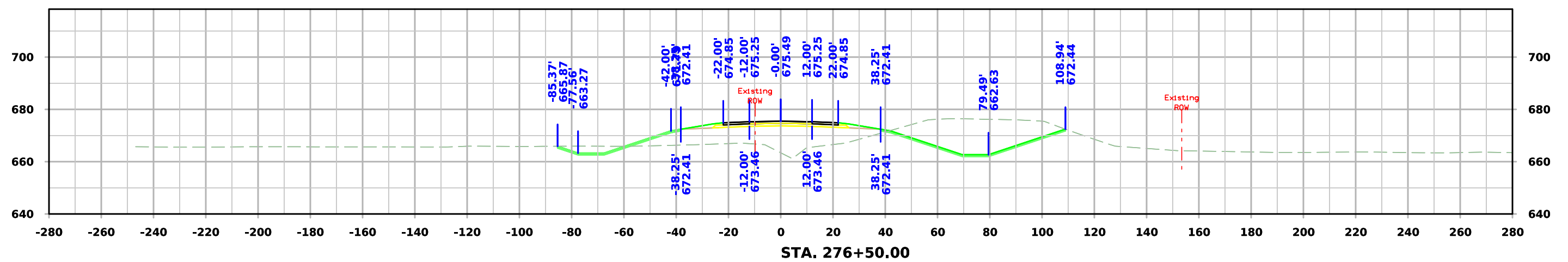
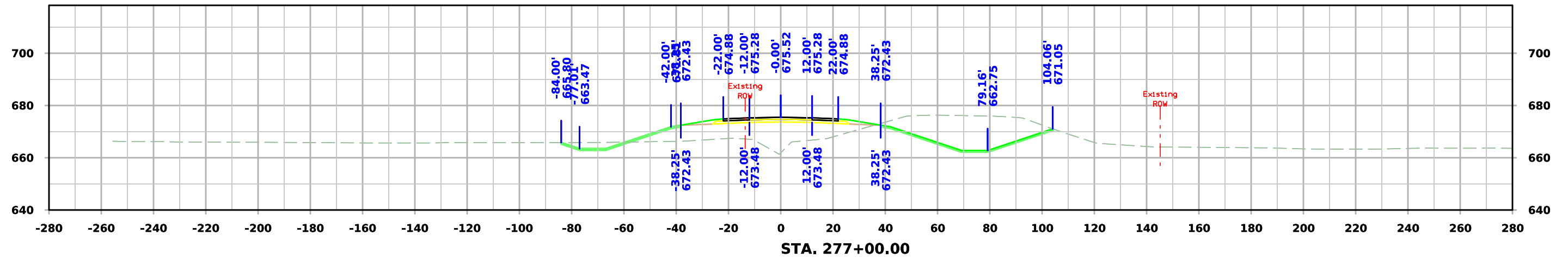
# ML - US30



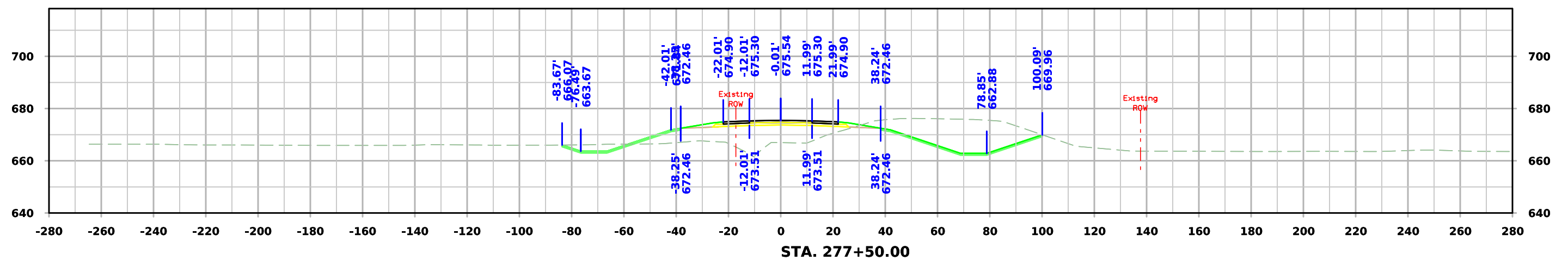
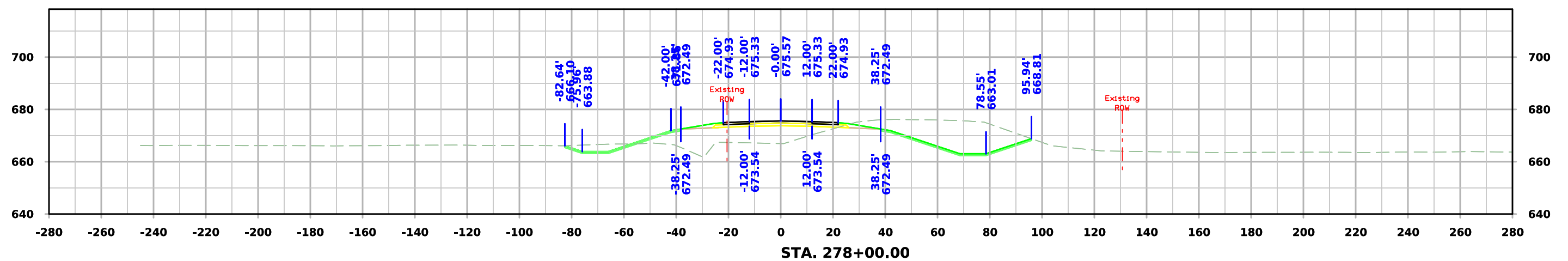
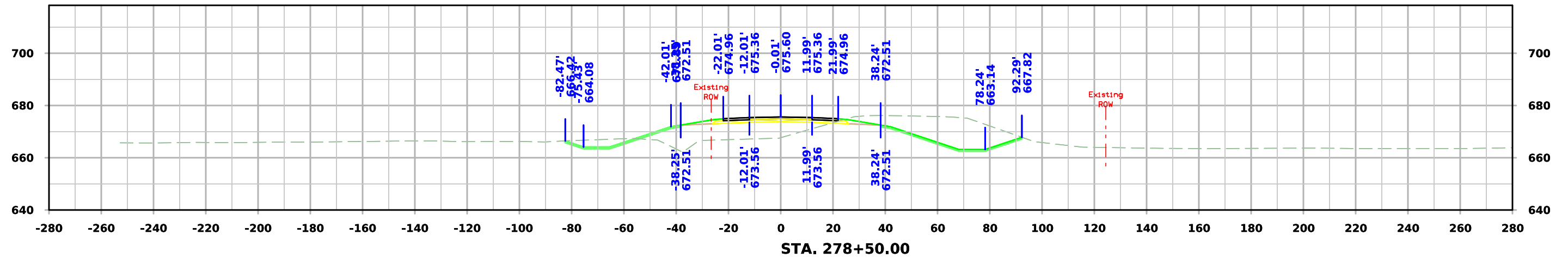
# ML - US30



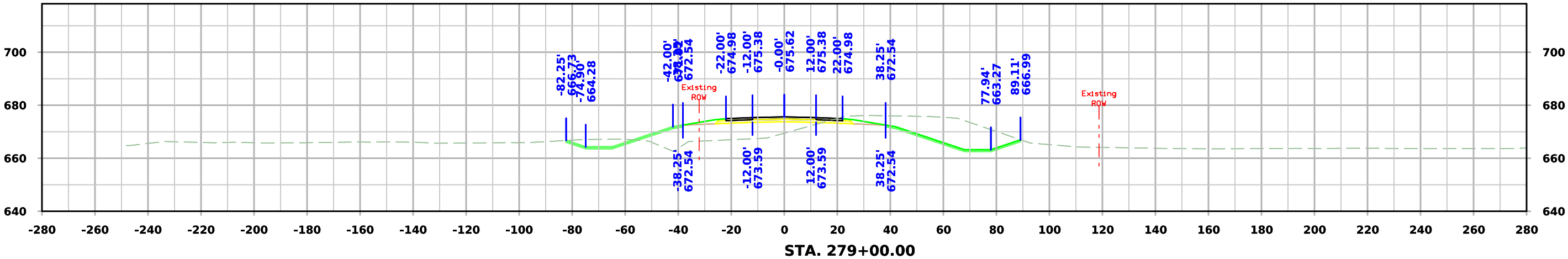
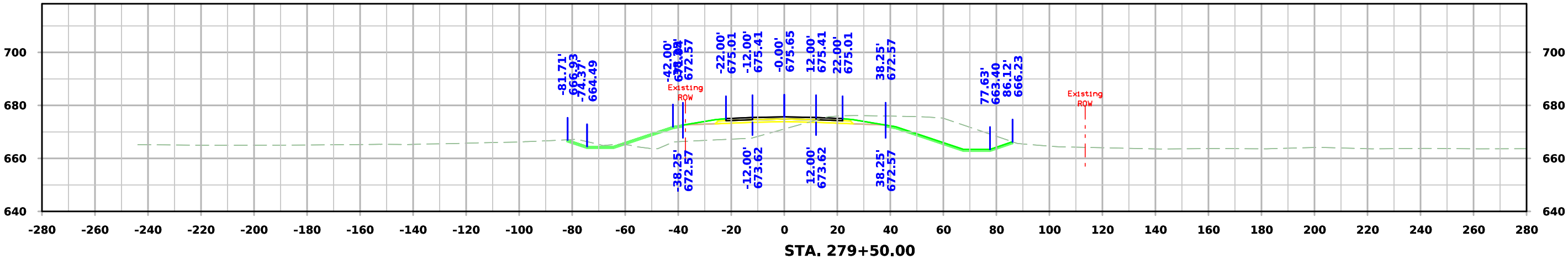
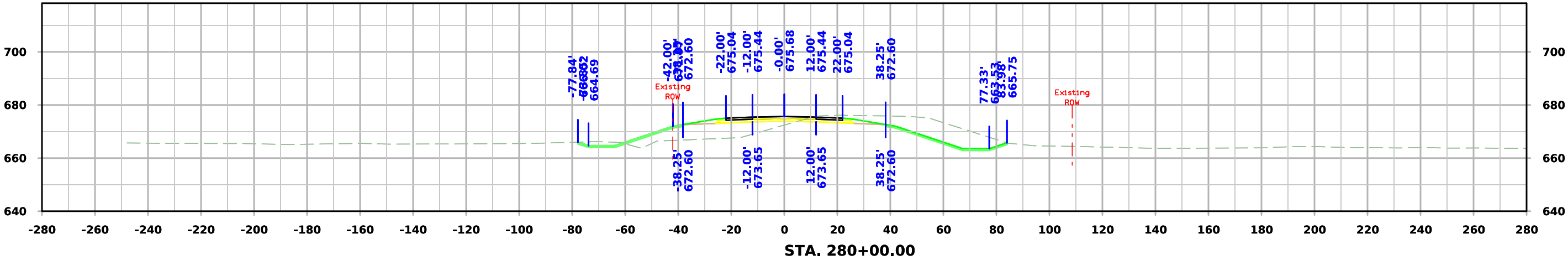
# ML - US30



# ML - US30

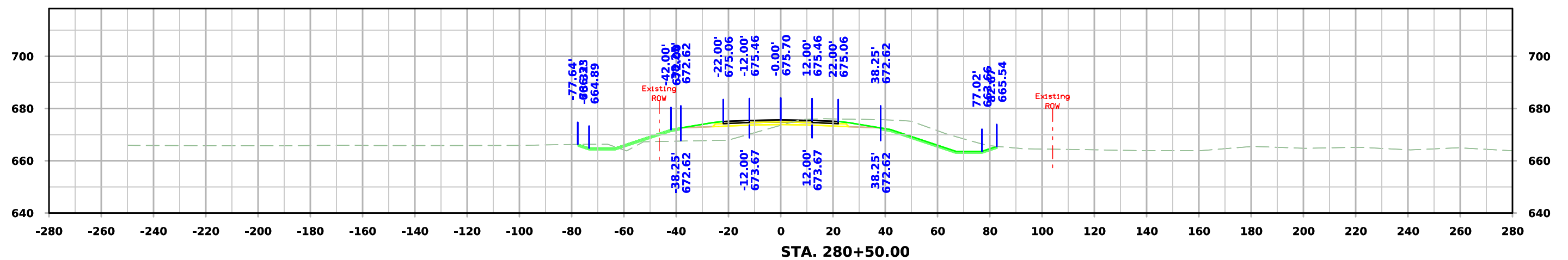
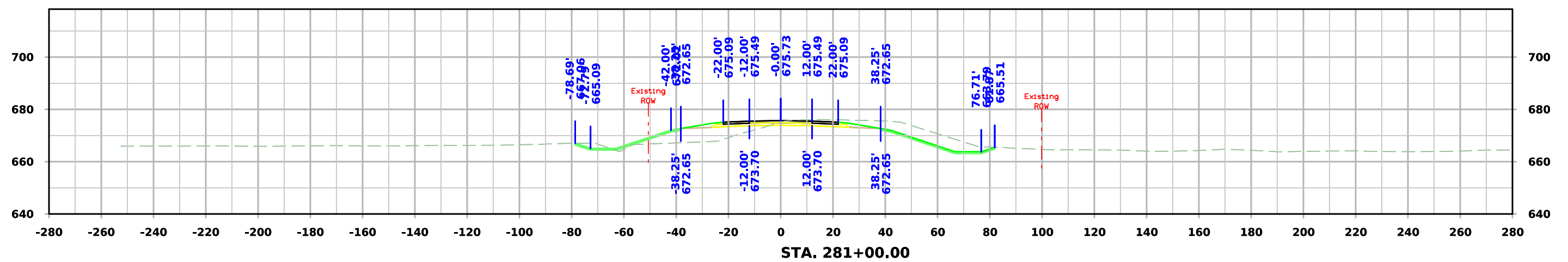
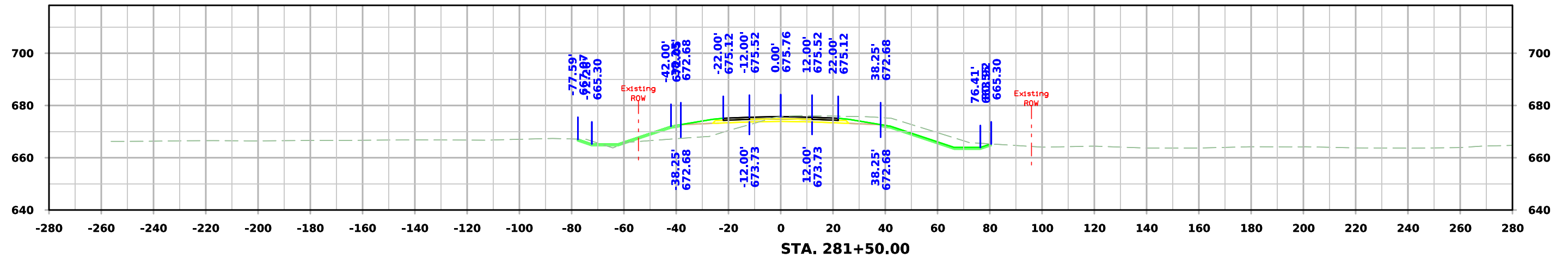


# ML - US30

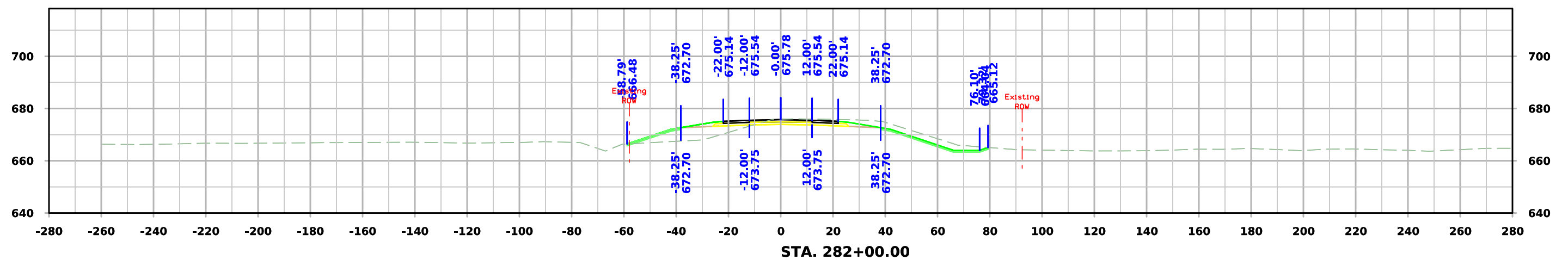
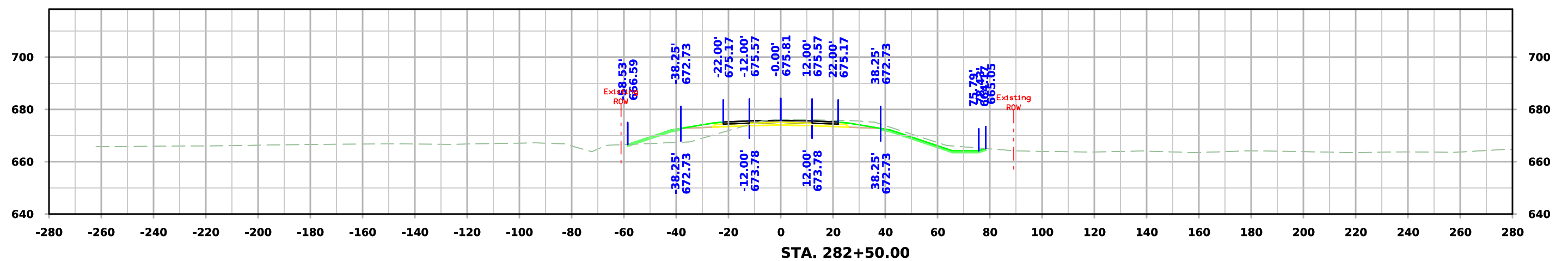
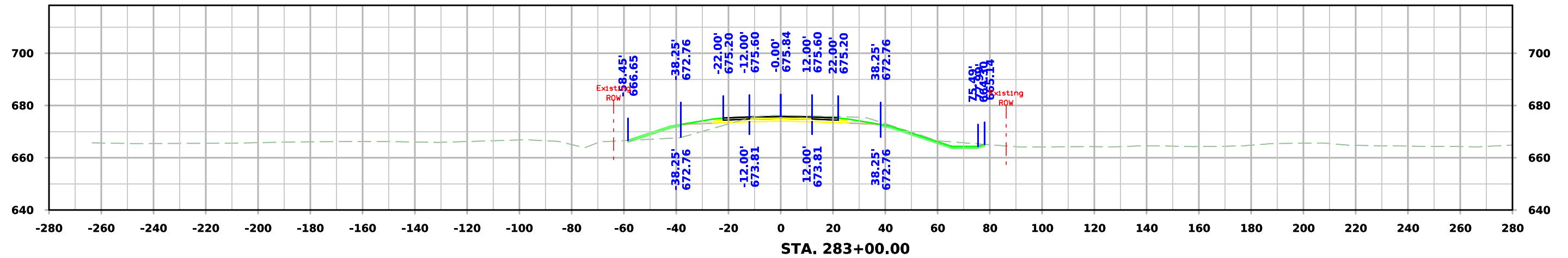




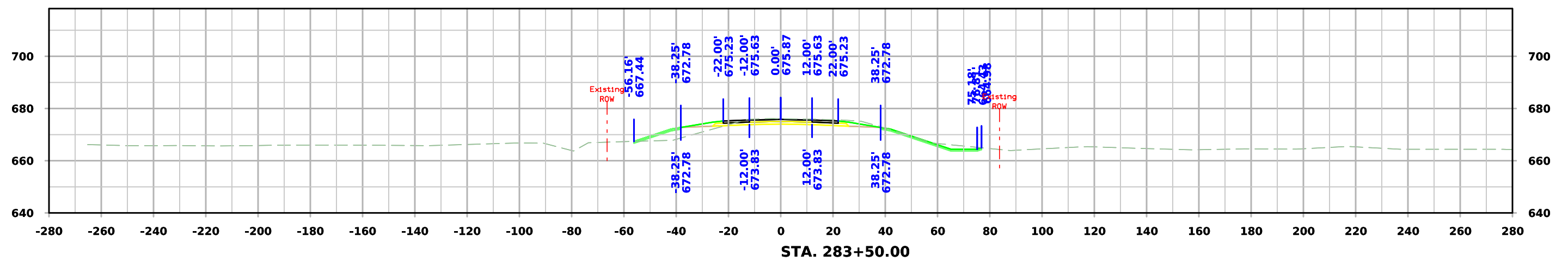
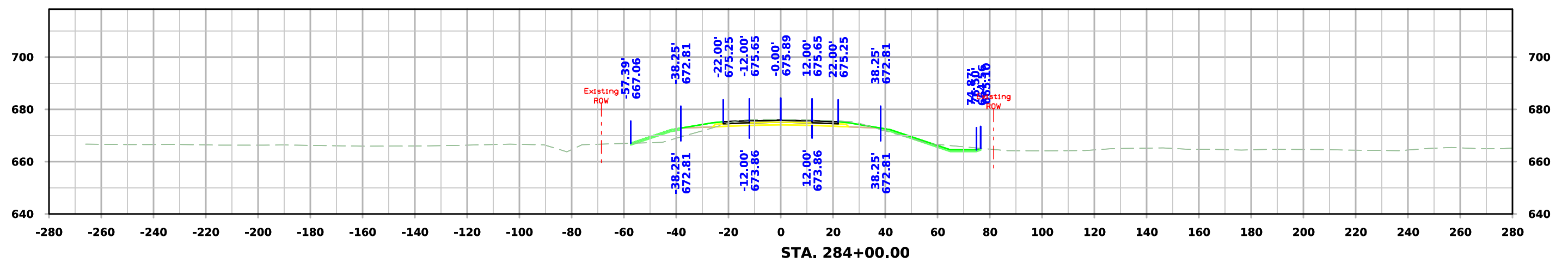
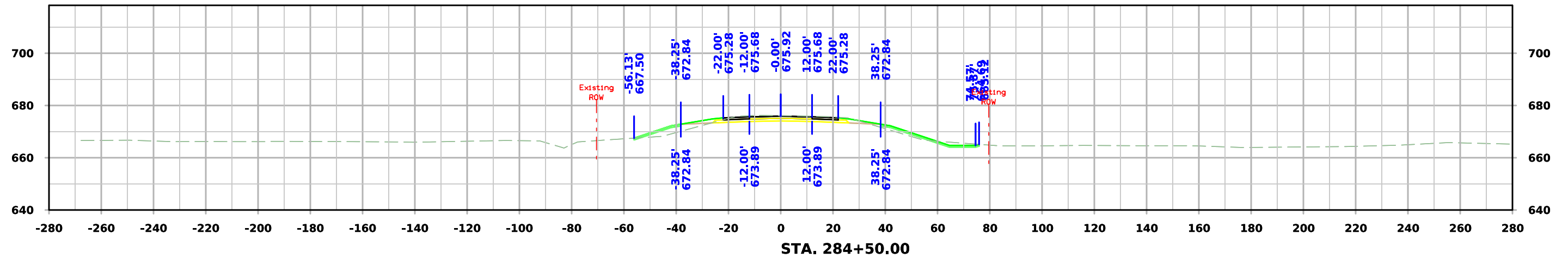
# ML - US30



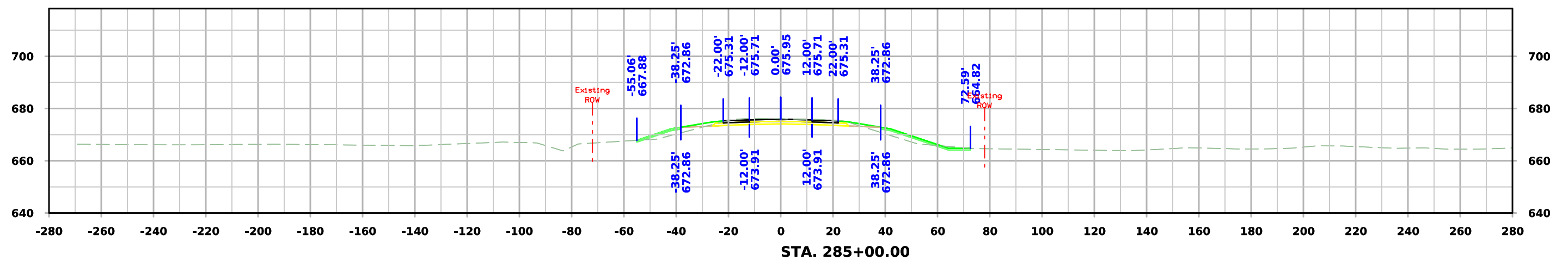
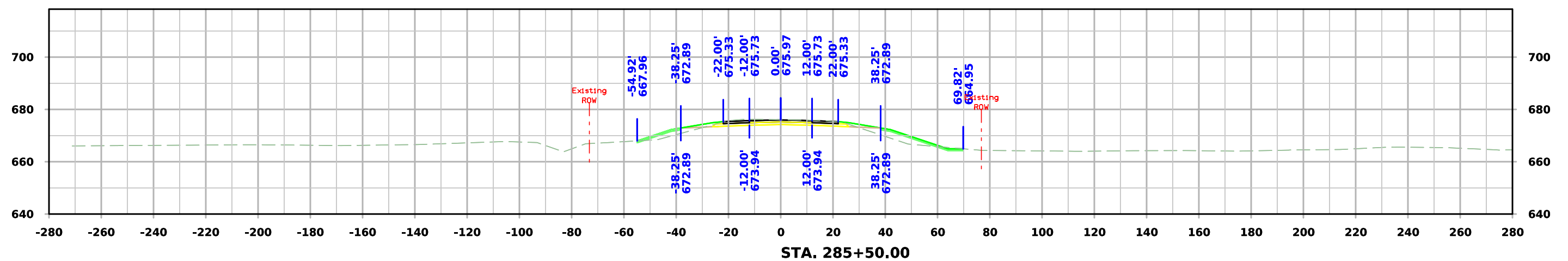
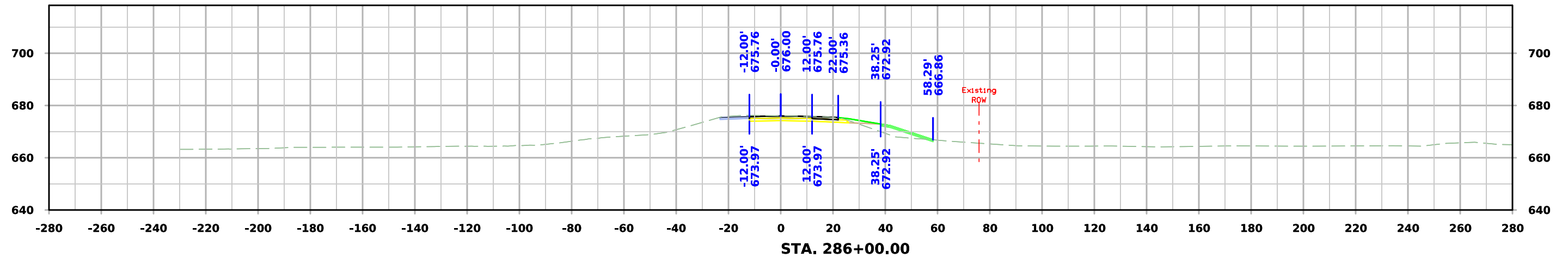
# ML - US30



# ML - US30



# ML - US30



# ML - US30

