



PLANS OF PROPOSED IMPROVEMENT ON THE
INTERSTATE ROAD SYSTEM
POTTAWATTAMIE COUNTY
Bridge Replacement - PPCB
Co Rd L19 Interchange
Bridge over I-29

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

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

No.	DESCRIPTION
INDEX OF SHEETS	
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A.2	Location Map Sheet
B Sheets	Typical Cross Sections and Details
B.1 - 4	Typical Cross Sections and Details
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C.1	Access Points and Safety Ramps
D Sheets	Mainline Plan and Profile Sheets
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J.2	511 Travel Restrictions
J.3	Staging Notes
J.4	Traffic Control & Staging Legend & Symbol Info. Sheet
J.5	Staging and Traffic Control Sheets Stage ??
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U Sheets	500 Series, Mod.Stds. and Detail Sheets
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V Sheets	Bridge and Culvert Situation Plans
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X Sheets	Side Road Cross Sections
X.1 - 13	Side Road Cross Sections
Y Sheets	Ramp Cross Sections
Y.1 - 4	Ramp Cross Sections

REVISIONS

TOTAL

43

PROJECT IDENTIFICATION NUMBER

21-78-029-010

PROJECT NUMBER

IMN-029-4(133)66--0E-78

R.O.W. PROJECT NUMBER

IMN-029-4(144)66--0E-78

P9 - Date: 8/5/2026

PRELIMINARY PLANS

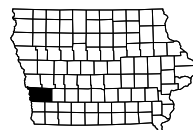
Subject to change by final design.

D5 - Date: 3/6/2026

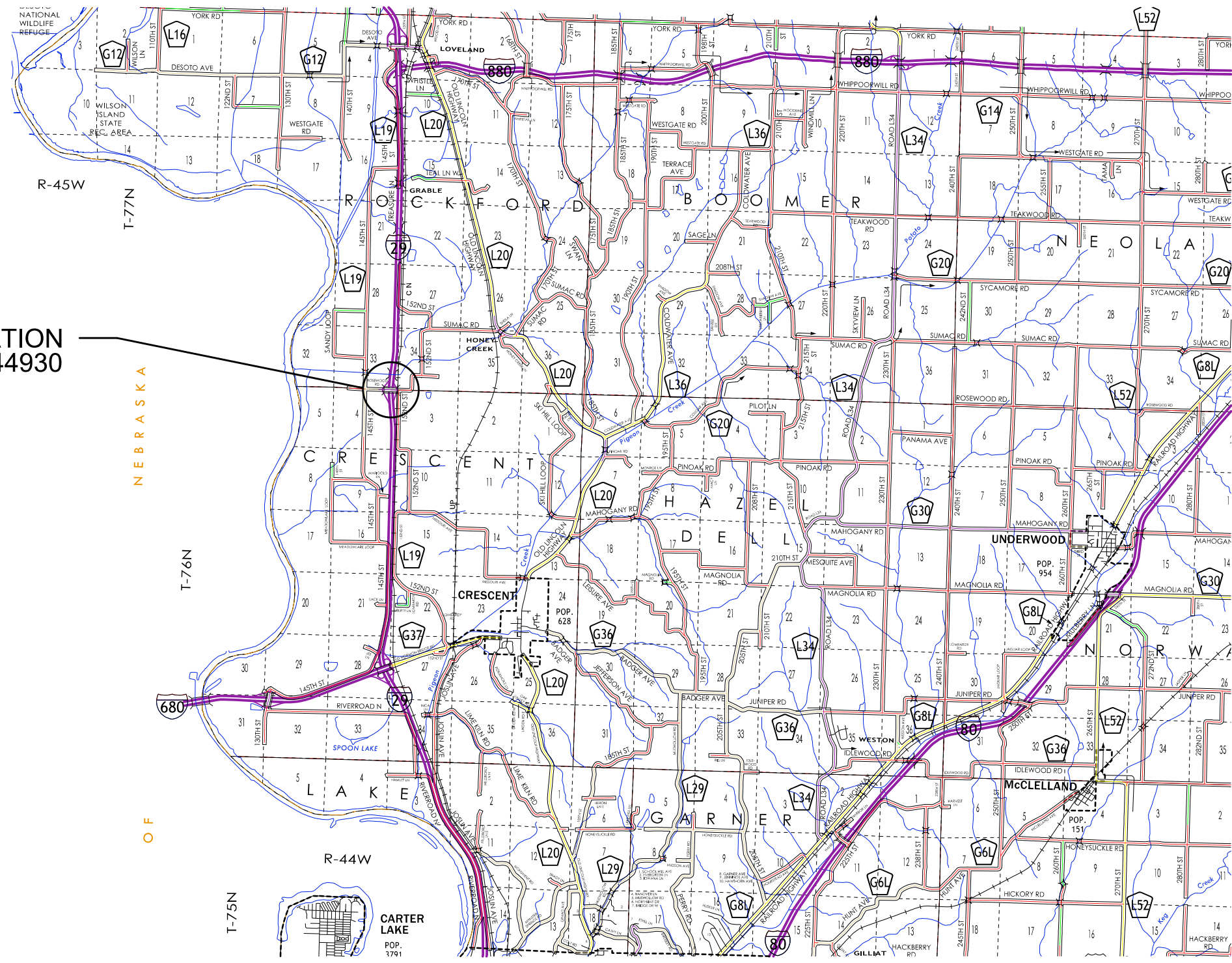
Co. Rd. L19	
DESIGN DATA RURAL	
2016	AADT 230 V.P.D.
20 --	AADT -- V.P.D.
20 --	DHV -- V.P.H.
TRUCKS	-- %
Total	
Design ESALS	--

I-29	
DESIGN DATA RURAL	
2023	AADT 20900 V.P.D.
20 --	AADT -- V.P.D.
20 --	DHV -- V.P.H.
TRUCKS	22 %
Total	
Design ESALS	--

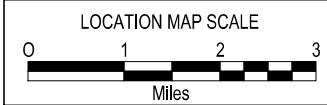
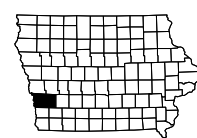
INDEX OF SEALS			
SHEET NO.	NAME	TYPE	BID QUANTITY SHEETS
A.1	X	Primary Signature Block	X
X	X	X	X



PROJECT LOCATION
FHWA #: 44930



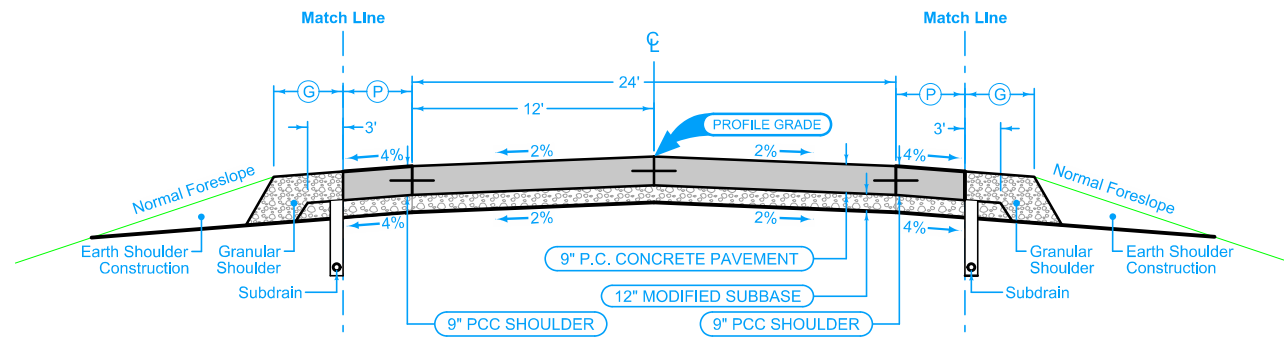
NEBRASKA
OF



Full Depth PCC Combination Shoulder

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

2_C_FullPCC_04-15-25			
STATION TO STATION		(P) Feet	(G) Feet
1578+65.00	1583+23.25	4	0
1585+25.84	1587+10.25	4	4
1592+58.74	1592+85.00	4	6



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

STATION TO STATION	
1578+65.00	1587+80.00
1591+89.00	1592+85.00

Full Depth PCC Combination Shoulder

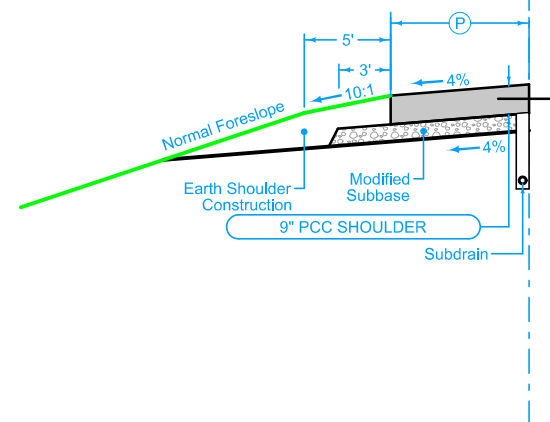
Shoulder Jointing:
 Longitudinal joint: BT-2, or L-2
 Transverse joints: C at 17' spacing

2_C_FullPCC_04-15-25			
STATION TO STATION		(P) Feet	(G) Feet
1578+65.00	1583+39.17	4	0
1585+22.00	1587+10.25	4	4
1592+58.74	1592+85.00	4	6

Paved Shoulder at Guardrail

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

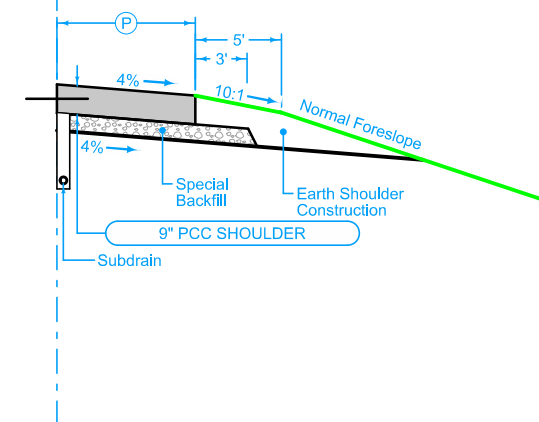
2_P_Guard_04-21-20		
STATION TO STATION		(P) Feet
1587+10.25	1587+80.00	Varies
1591+89.00	1592+58.74	Varies



Paved Shoulder at Guardrail

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

2_P_Guard_04-21-20		
STATION TO STATION		(P) Feet
1587+10.25	1587+80.00	Varies
1591+89.00	1592+58.74	Varies

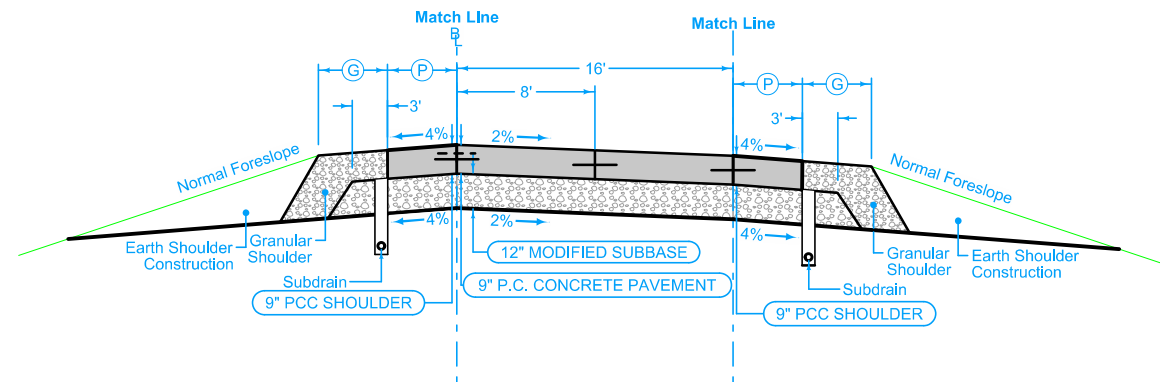


Co Rd L19

Full Depth PCC Combination Shoulder

Shoulder Jointing:
 Longitudinal joint: BT-2, or L-2
 Transverse joints: C at 15' spacing

2_C_FullPCC_04-15-25				
ROADWAY	STATION TO STATION		(P) Feet	(G) Feet
Ramp A	5586+05.29	5587+84.00	6	1.5
Ramp C	3584+30.00	3585+74.94	6	4



Full Depth PCC Combination Shoulder

Shoulder Jointing:
 Longitudinal joint: BT-2, or L-2
 Transverse joints: C at 15' spacing

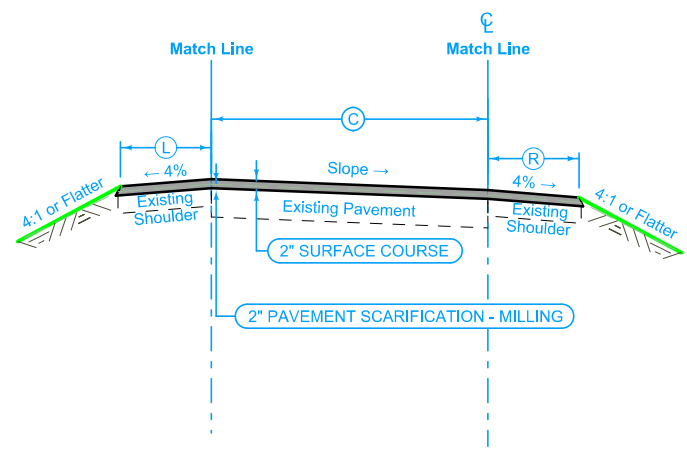
2_C_FullPCC_04-15-25				
ROADWAY	STATION TO STATION		(P) Feet	(G) Feet
Ramp A	5586+05.29	5587+84.00	4	5
Ramp C	3584+30.00	3585+74.94	4	5

Section shown in the direction of traffic.

Ramp Jointing:
 Transverse joints: CD at 15' spacing.
 Longitudinal joints: L-2

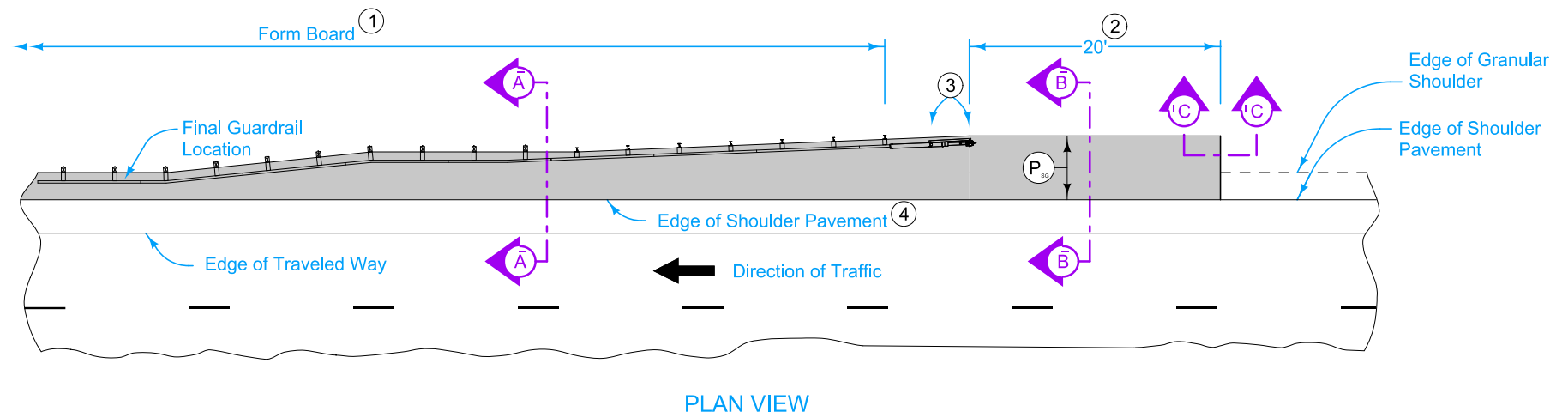
1RP_ Modified		
ROADWAY	BEGIN STATION	END STATION
Ramp A	5586+05.29	5587+84.00
Ramp C	3584+30.00	3585+74.94

Ramps A & C



3R_MillingOverlay_04-19-11					
ROADWAY	STATION TO STATION	C Feet	L Feet	R Feet	Pavement Scarification SY
Ramp C	3195+00.00 3206+75.00	16	6	4	
Ramp B	2590+00.00 2600+50.00	16	4	6	

**Loveland Detour
Ramps**

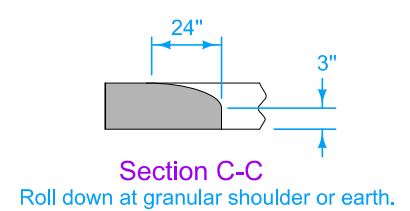
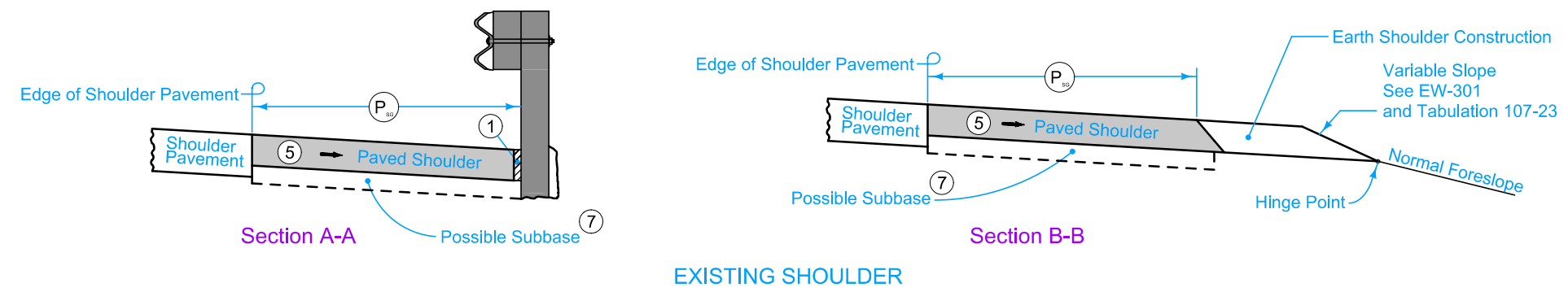
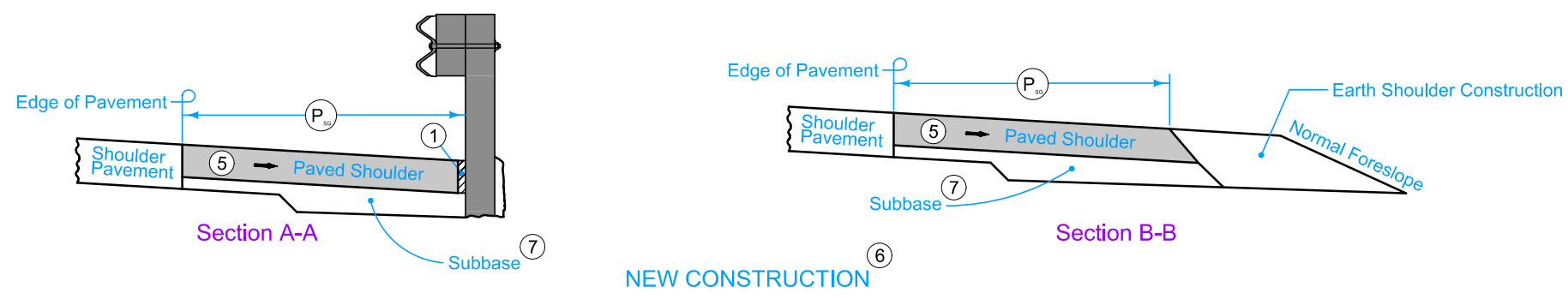


9" PCC may be substituted with the following jointing layout:

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 'BT' (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 partial width paved shoulder as one operation.
- ⑦ Refer to other details in the plan.



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

ACCESS POINTS AND SAFETY RAMPS

Refer to Cross-Sections

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

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

*Predetermined for access point not constructed with this project.

Line No.	Station	Side	Access Type	Descriptor	Case	Curb Type	Curb Length (1) (LF)	Width (FT)	PR (1) (2) (FT)	SR (2) (FT)	Pipe Culvert (H) (3) (FT)	Pipe Culvert Size (3) (IN)	Culvert Length (3) (LF)	Pipe Culvert Lt. (3) (LF)	Pipe Culvert Rt. (3) (LF)	Culvert Aprons (3) (No.)	Driveway Surface Type	Driveway Surface Area (SY)	Driveway Surfacing Material (TON)	Remarks
1.0	1580+36.50	Right	D		1			35.0									PCC	47.0		

SURVEY SYMBOLS

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

UTILITY LEGEND

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

- FO1D, MCI - Quality D**
- FO2D, Centurylink - Quality D**
- TL1D, AT&T - Quality D**
- EL1D, Iowa DOT - Quality D**

Utility Contact Information:

AT&T
Fiber Distribution
Lenny Vohs
Senior - Project Manager
1425 Oak Street
Kansas City, MO 64106
(816) 275-4014, Cell: (770) 335-8254
lv2121@att.com

MCI/Verizon Business
Fiber Transmission
Thanh (TK) Nguyen
Outside Plant Engineer
2600 Westown Pkwy STE 100
West Des Moines, IA 50266
(515) 783-7177
thanh.nguyen3@verizon.com

MidAmerican Energy Company
Electric Distribution
Scott Behrens
Lead, Electric Distribution Engineering SW Iowa
3003 S. 11th St.
Council Bluffs, IA 51501
(712) 366-5636, Cell: (402) 657-1059
scott.behrens@midamerican.com

PLAN VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK		Design Color No.	
Green	(2)		Existing Topographic Features and Labels
Blue	(1)		Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Magenta	(5)		Existing Utilities
SHADING		Design Color No.	Transparency
Pink, Dark	(13)		Temporary Pavement Shading
Yellow	(4)		Proposed Pavement Shading
Orange	(6)		Proposed Granular Shading
Orange	(70)		Proposed Shoulder Granular Shading
Yellow	(68)		Proposed Shoulder Paved Full Depth Shading
Yellow	(132)		Proposed Shoulder Paved Partial Depth Shading
Brown, Light	(236)		Grading Shading
Orange, Light	(134)		Proposed Granular Entrance Shading
Yellow	(220)		Proposed Paved Entrance Shading
Tan	(8)		Proposed Sidewalk Shading
Blue, Light	(230)		Proposed Sidewalk Landing Shading
Pink	(11)		Proposed Sidewalk Ramp Shading
Red	(3)		Proposed Structure Shading
Red	(3)		Delineates Restricted Areas

PROFILE VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK		Design Color No.	
Green	(10)		Existing Ground Line Profile
Blue	(1)		Proposed Profile and Annotation
Magenta	(5)		Existing Utilities
Blue, Light	(230)		Proposed Ditch Grades, Left
Black	(0)		Proposed Ditch Grades, Median
Rust	(14)		Proposed Ditch Grades, Right

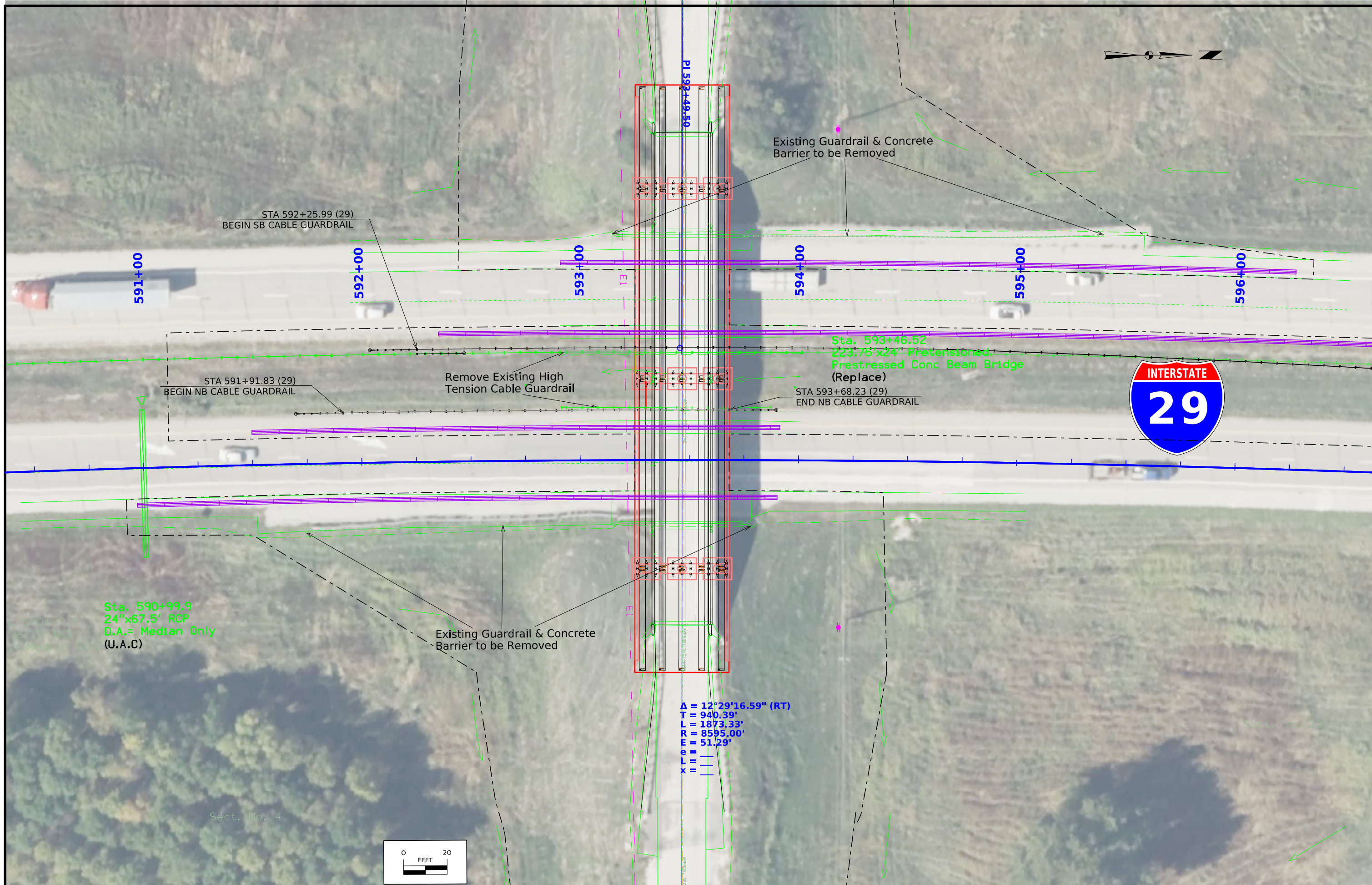
- Reference Point
- Station
- Survey Line
- Section Corner
- Ground Line Intercept
- Saw Cut
- Guardrail
- Trench Drain
- HighTension Cable Guardrail
- Sheet Pile
- Pavement Removal
- Clearing & Grubbing Area

RIGHT-OF-WAY LEGEND

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

PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

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



STA 592+25.99 (29)
BEGIN SB CABLE GUARDRAIL

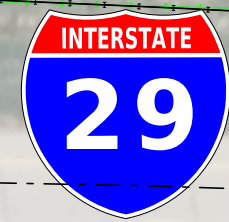
STA 591+91.83 (29)
BEGIN NB CABLE GUARDRAIL

Remove Existing High
Tension Cable Guardrail

Existing Guardrail & Concrete
Barrier to be Removed

Sta. 593+46.52
223.75' x 24' Prestressed
Prestressed Conc Beam Bridge
(Replace)

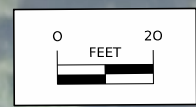
STA 593+68.23 (29)
END NB CABLE GUARDRAIL

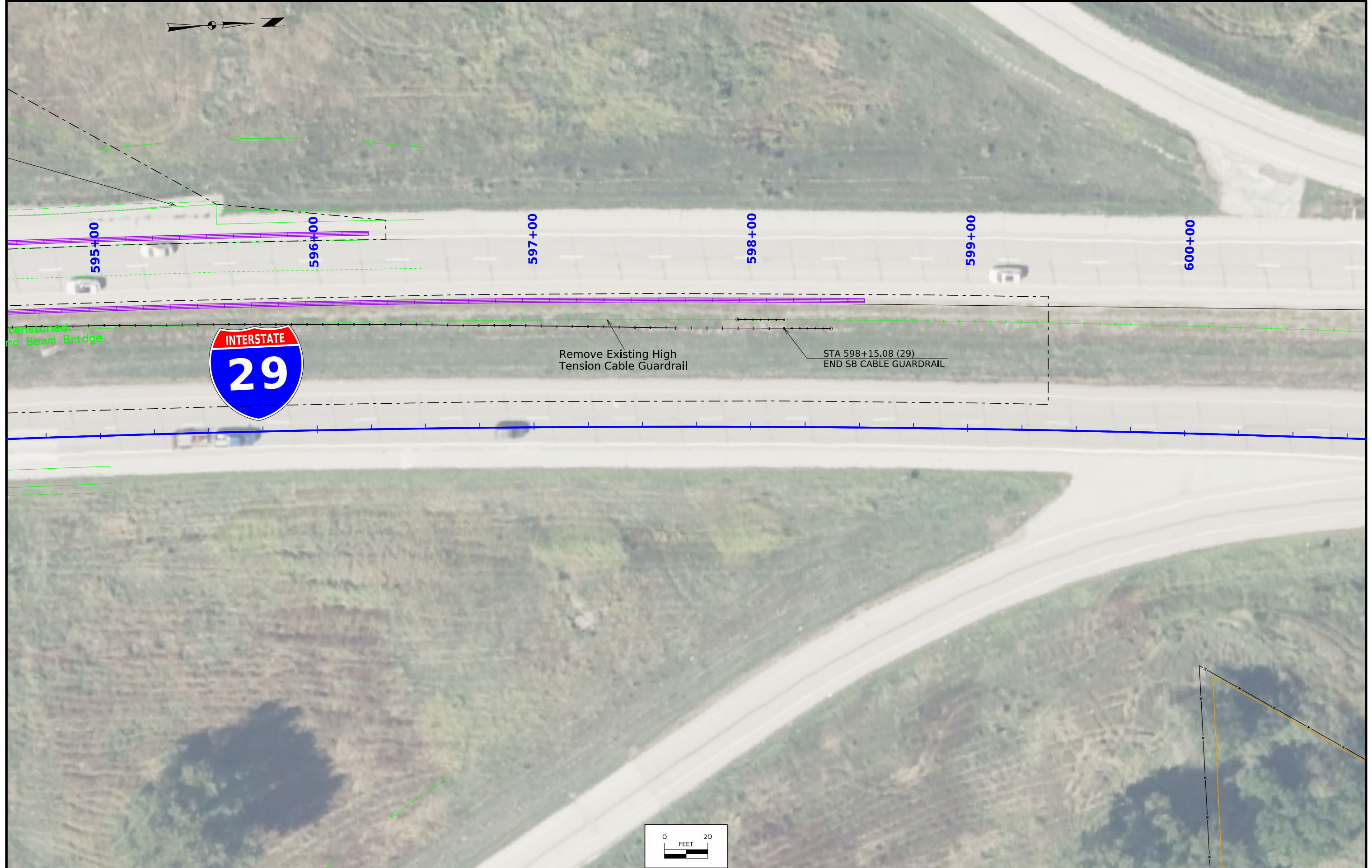
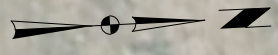


Sta. 590+99.9
24"x67.5' RCP
D.A.= Median Only
(U.A.C)

Existing Guardrail & Concrete
Barrier to be Removed

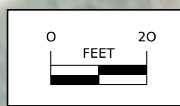
$\Delta = 12^\circ 29' 16.59''$ (RT)
T = 940.39'
L = 1873.33'
R = 8595.00'
E = 51.29'

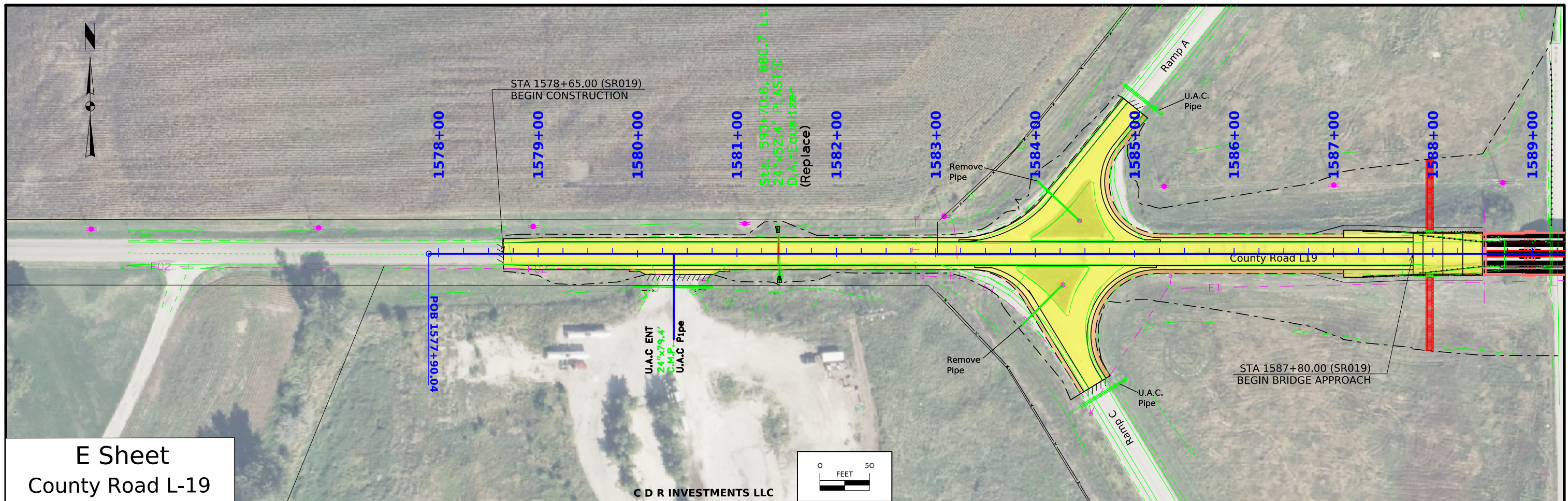




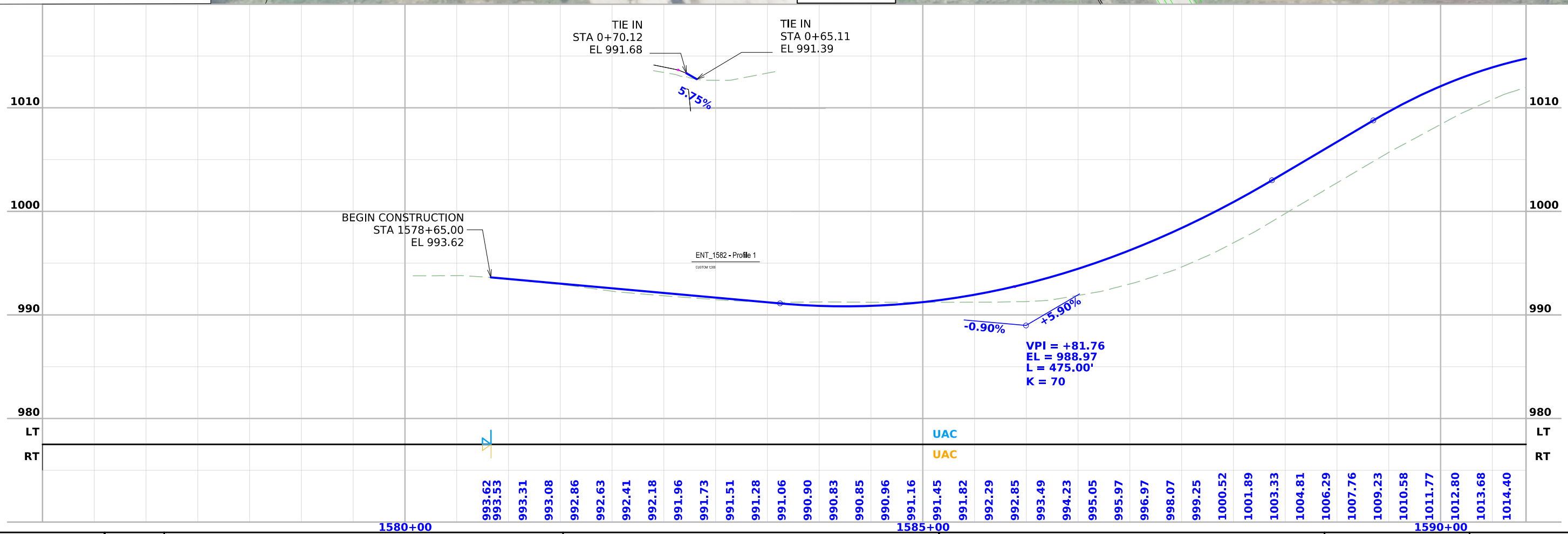
Remove Existing High Tension Cable Guardrail

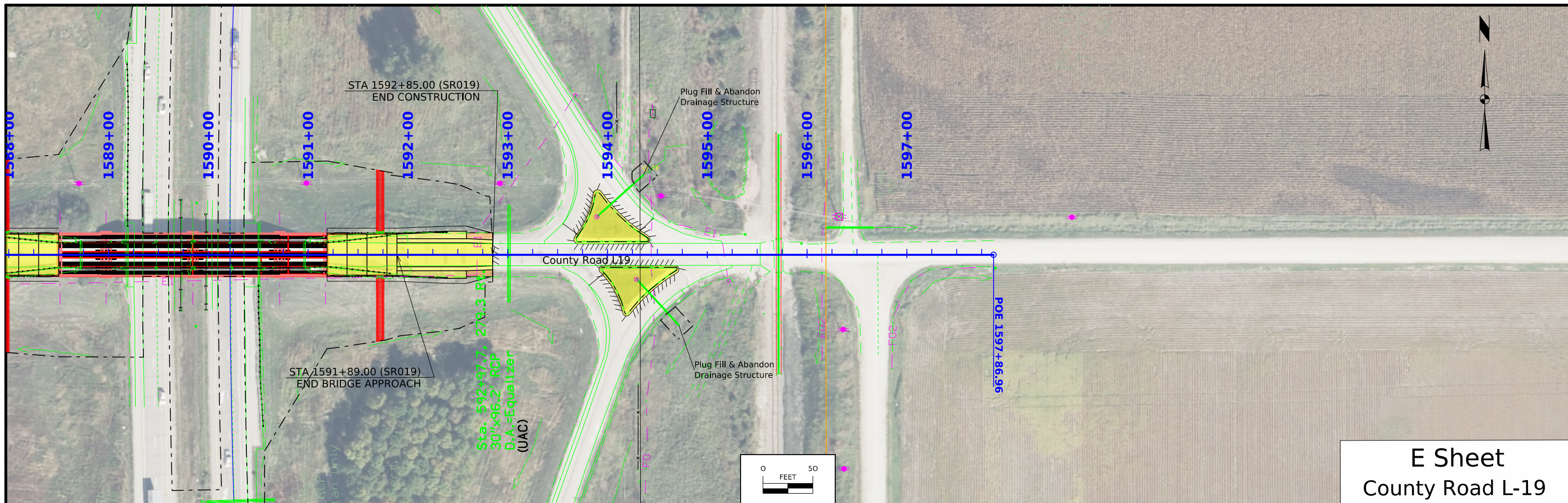
STA 598+15.08 (29)
END SB CABLE GUARDRAIL



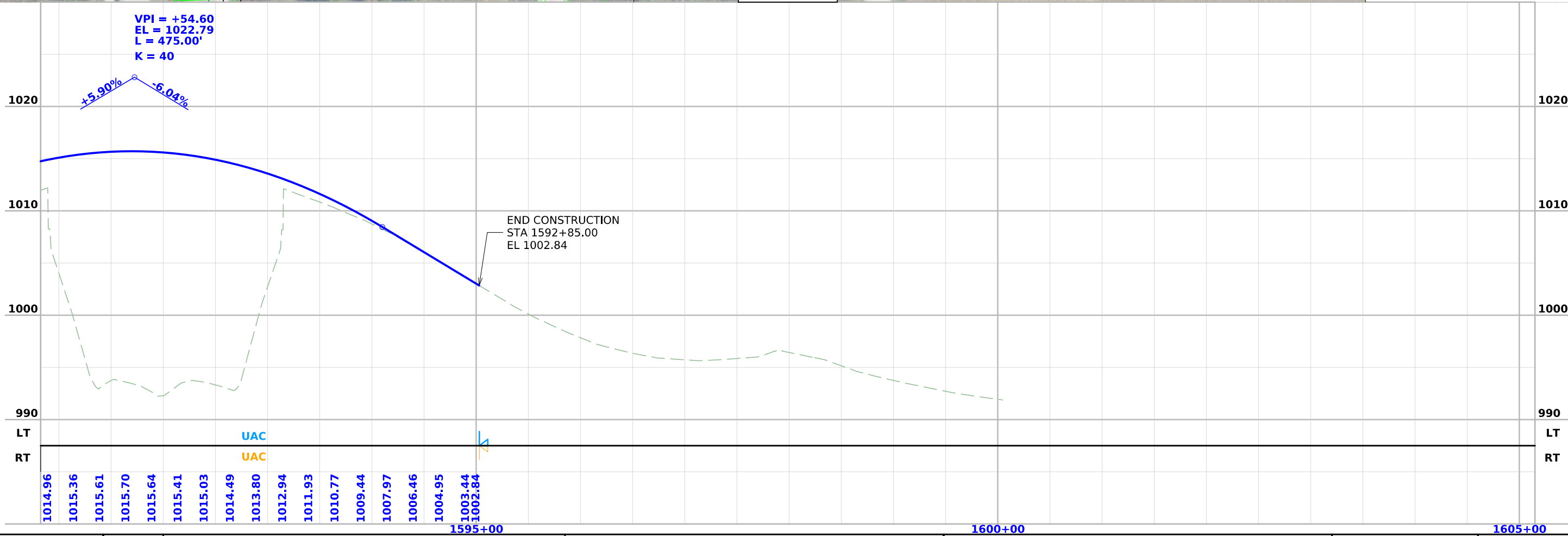


E Sheet
County Road L-19





E Sheet
County Road L-19



Survey Information

SURVEY INDEX

County: Pottawattamie
PIN: 21-78-029-010
Project Number: IMN-029-4(133)66--0E-78
Location: Co Rd L19 Interchange
Type of Work: Bridge Replacement
Project Directory: 7802901021

Survey Personnel

Clayton Henningsen – Survey Party Chief
Jason Arn – Survey Party Chief

Date(s) of Survey

Begin Date 05/04/2025
End Date 06/03/2025

General Information

This survey is for I-29 interchange of Co Rd L19 for bridge replacement. This survey request was for the I-29 corridor only. This project is a Full Field DTM survey.

Utility Information

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

Project Control

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

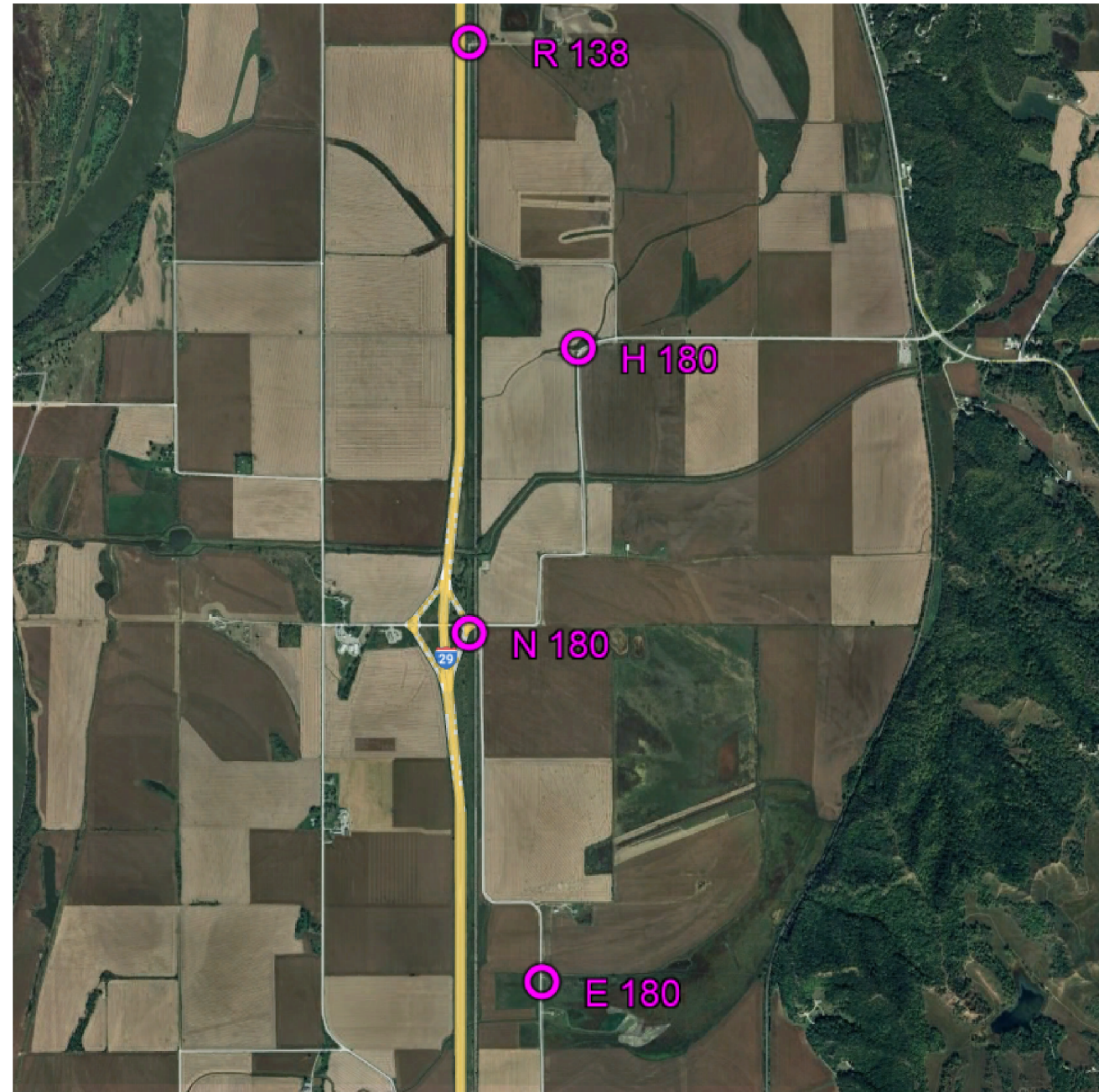
PROJECT DATUM: NAD83(2011) for EPOCH 2010.00 (IaRTN 2019 ADJUSTMENT)
COORDINATE SYSTEM: IOWA REGIONAL COORDINATE SYSTEM ZONE 06
(U.S. SURVEY FOOT)
VERTICAL DATUM: NAVD88
GEOID MODEL: 2018u3

Alignment Information

The horizontal alignment for I-29 this survey has been provided by the District 3 office.

CONTROL POINT VICINITY MAP

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



HORIZ. DATUM: NAD83(2011) for EPOCH 2010.00 (IaRTN 2019 Adjustment) - Iowa RCS Zone 06 (U.S. Survey Foot)

VERT. DATUM: NAVD88 - Geoid Model: 2018u3

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

HORIZONTAL AND VERTICAL PROJECT CONTROL COORDINATE LISTING
 HORIZ. DATUM: NAD83(2011) for EPOCH 2010.00 (IaRTN 2019 Adjustment)
 Ia. Regional Coordinate System Zone 06 (U.S. Survey Foot)
 VERT. DATUM: NAVD88
 Geoid Model: 2018u3

<u>Point Name</u>	<u>Northing</u>	<u>Easting</u>	<u>Elevation</u>	<u>Feature Definition-Description</u>
E180	7019597.28	16455887.54	986.64	CP NGS MONUMENT AS DESCRIBED IN GOOD CONDITION
H180	7031139.68	16456582.34	987.32	CP NGS MONUMENT AS DESCRIBED IN GOOD CONDITION
N180	7025873.11	16454543.57	988.03	CP NGS MONUMENT AS DESCRIBED IN GOOD CONDITION
R138	7036755.93	16454583.75	991.17	CP NGS MONUMENT AS DESCRIBED IN GOOD CONDITION

Pottawattamie IMN-029-4(144)66--0E-78

Project Code 21-78-029-010

Co Rd L19 Interchange

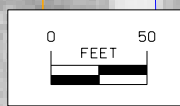
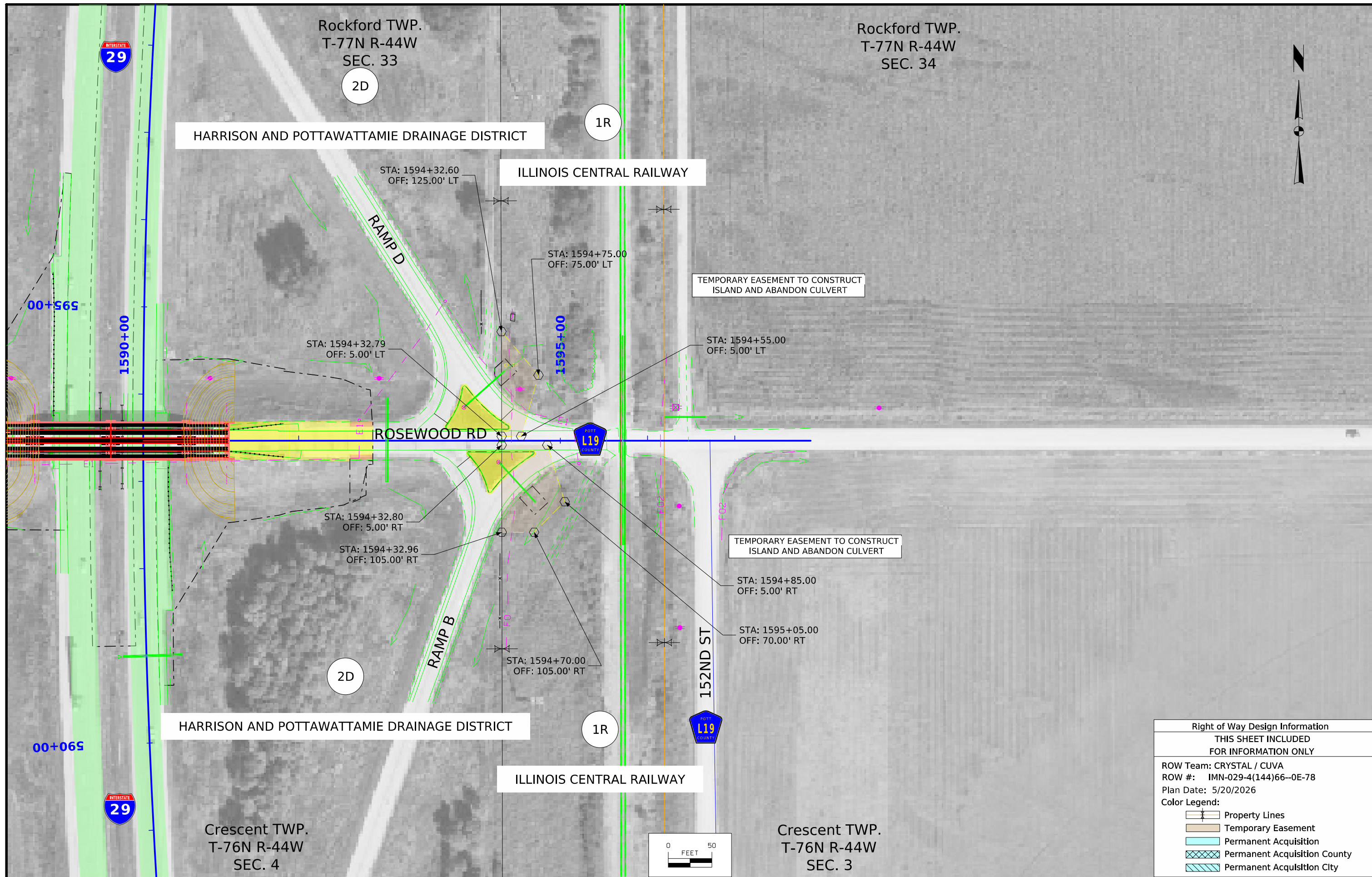
Route I 29

[7802901021](#)

Parcel No	Owner Name	State			County			City			Excess	Temp Ease	Mitigation	Utility Ease	Relocation	TE Only	A/C Only	Total Acq
		Fee	Hwy Ease	Other Ease	Fee	Hwy Ease	Other Ease	Fee	Hwy Ease	Other Ease								
1R	ILLINOIS CENTRAL RAILWAY											0.22 AC				Yes		
2D	HARRISON AND POTTAWATTAMIE DRAINAGE DISTRICT																	

2 Parcels

NO ACCESS RIGHTS ARE TO BE ACQUIRED ON THIS PROJECT.



Right of Way Design Information	
THIS SHEET INCLUDED FOR INFORMATION ONLY	
ROW Team: CRYSTAL / CUVA	
ROW #: IMN-029-4(144)66--0E-78	
Plan Date: 5/20/2026	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition
	Permanent Acquisition County
	Permanent Acquisition City

TRAFFIC CONTROL PLAN

108_23A
8/15/22

I-29

Maintain traffic at all times during construction.
Short-term closures of I-29 will be required for placement of bridge beams.

County Road L19

Road will be closed during construction
Traffic will be maintained by an off-site detour. Refer to J.# for the route.

Loveland Detour Ramps

Traffic will be maintained by an off-site detour.

511 TRAVEL RESTRICTIONS

Line No.	Route	Direction	County	Location Description	Feature Crossed	Object Type	Maint. Bridge No. or Structure ID or FHWA No.	Type of Restriction	Existing Measurement	Construction Measurement	Construction Measurement as Signed	Projected As Built Measurement	Remarks
1.0	Co. Rd. L19	Both	Pottawattamie	Co. Rd. L19 over I-29	I-29	Bridge	FHWA # 44930	Vertical	24'	0'	Closed		Closed

108_26A
8/15/22

STAGING NOTES

Stage 1

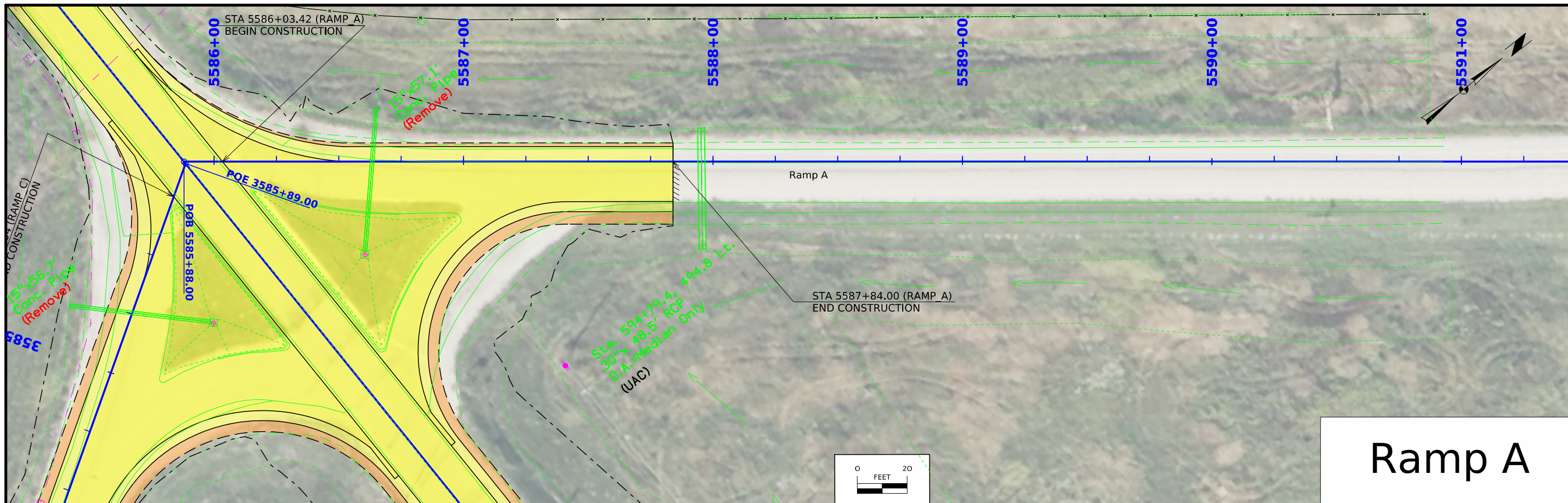
Resurface Loveland detour Ramps.

Stage 2

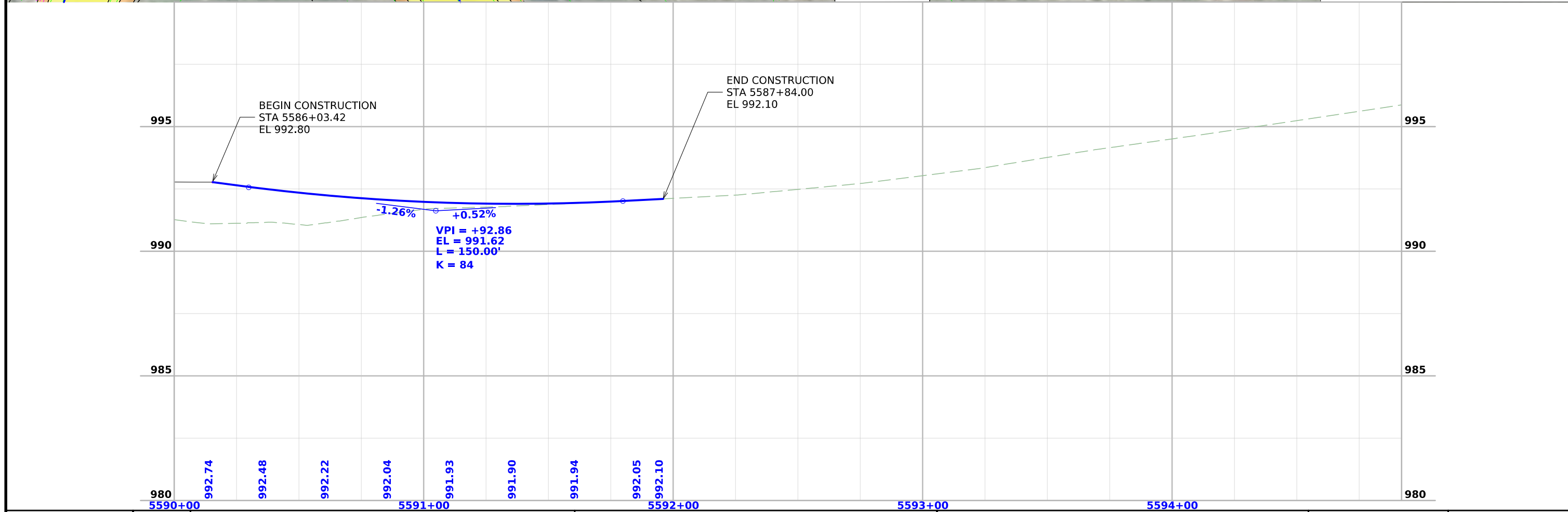
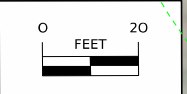
Build the intersection of Ramp A and C.

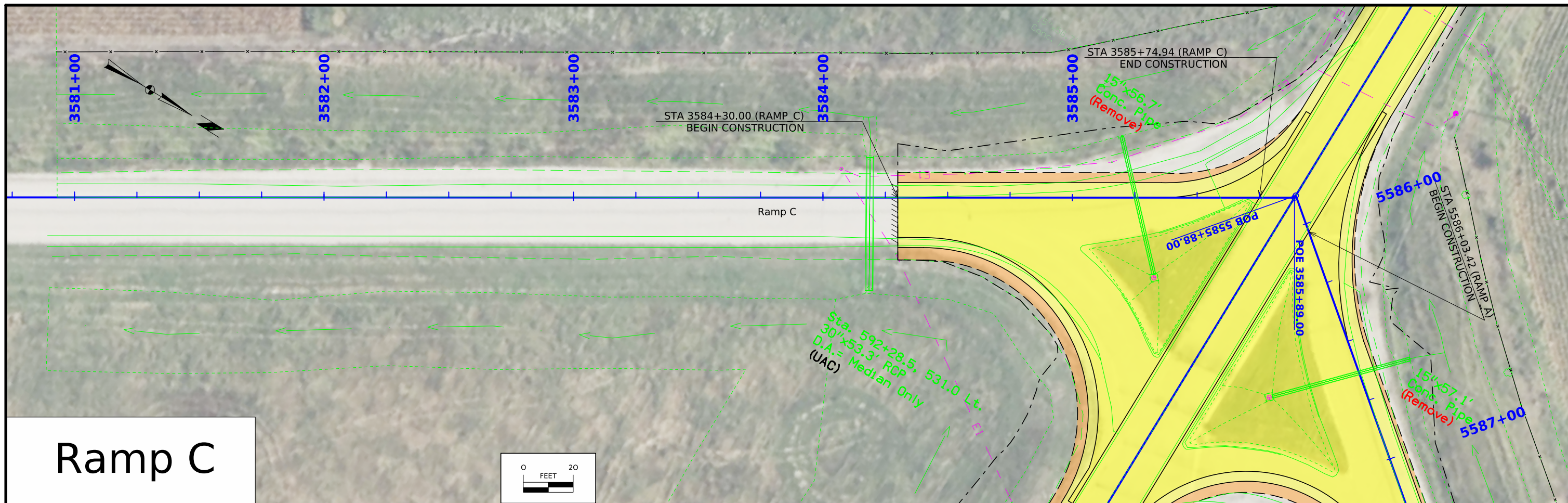
Stage 3

Remove and reconstruct county road bridge over I-29.

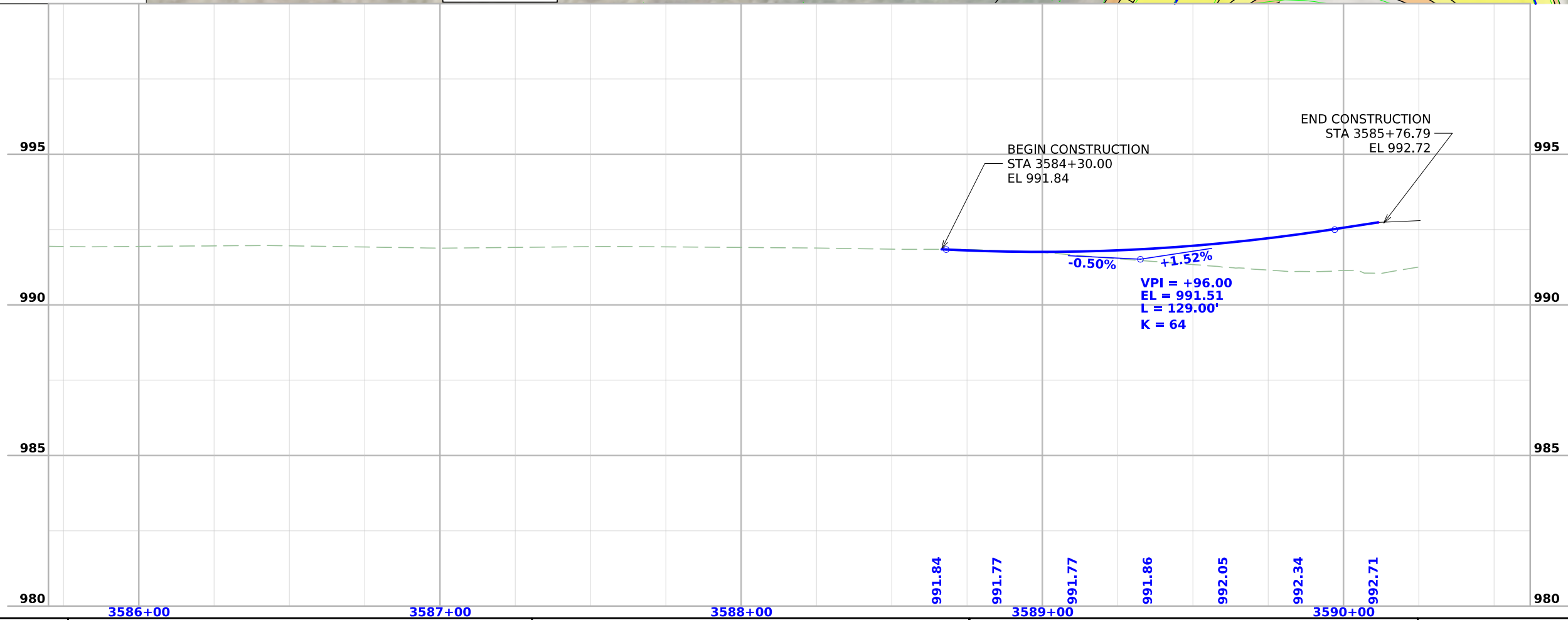
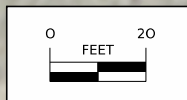


Ramp A

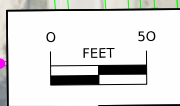
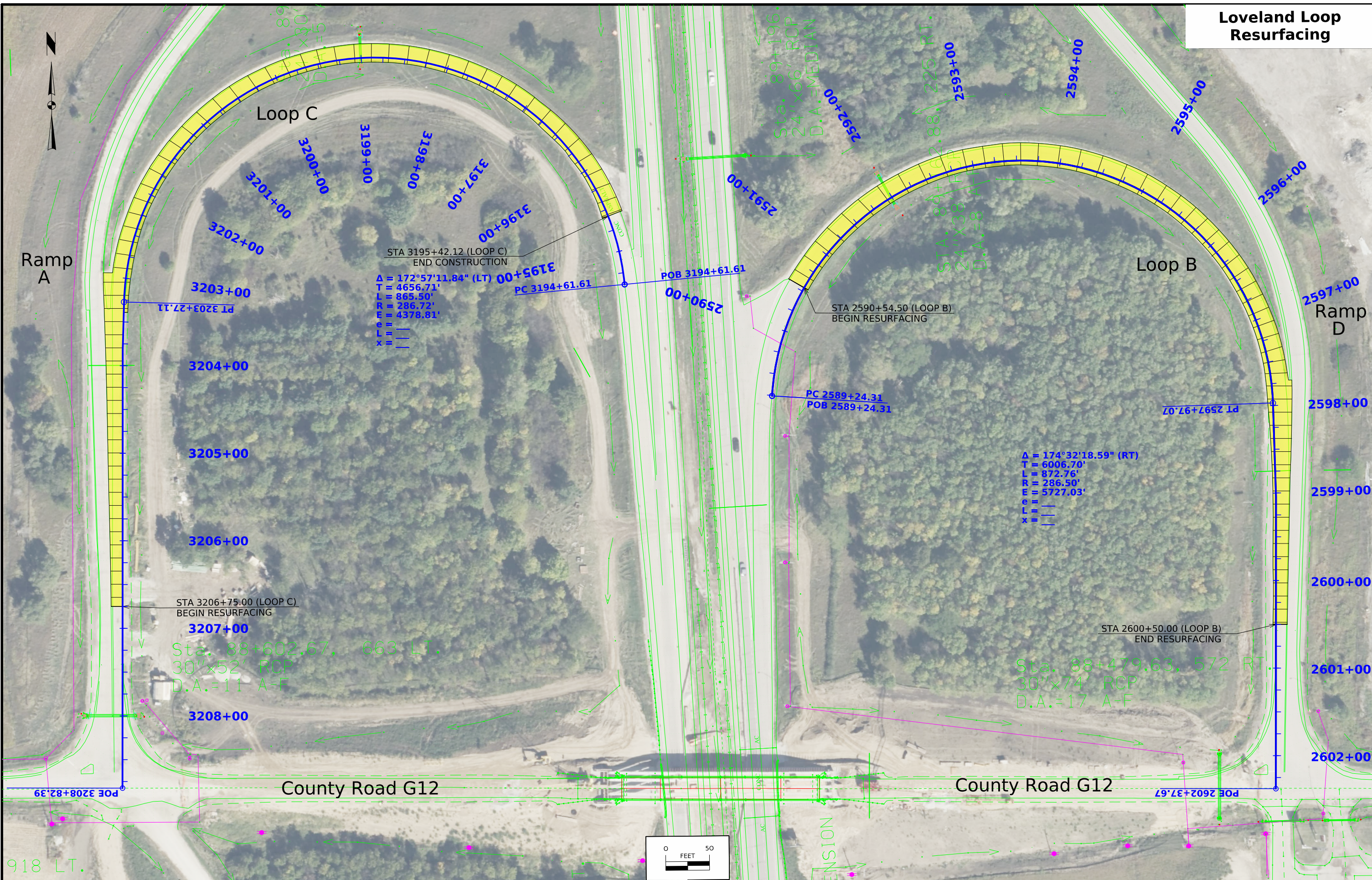


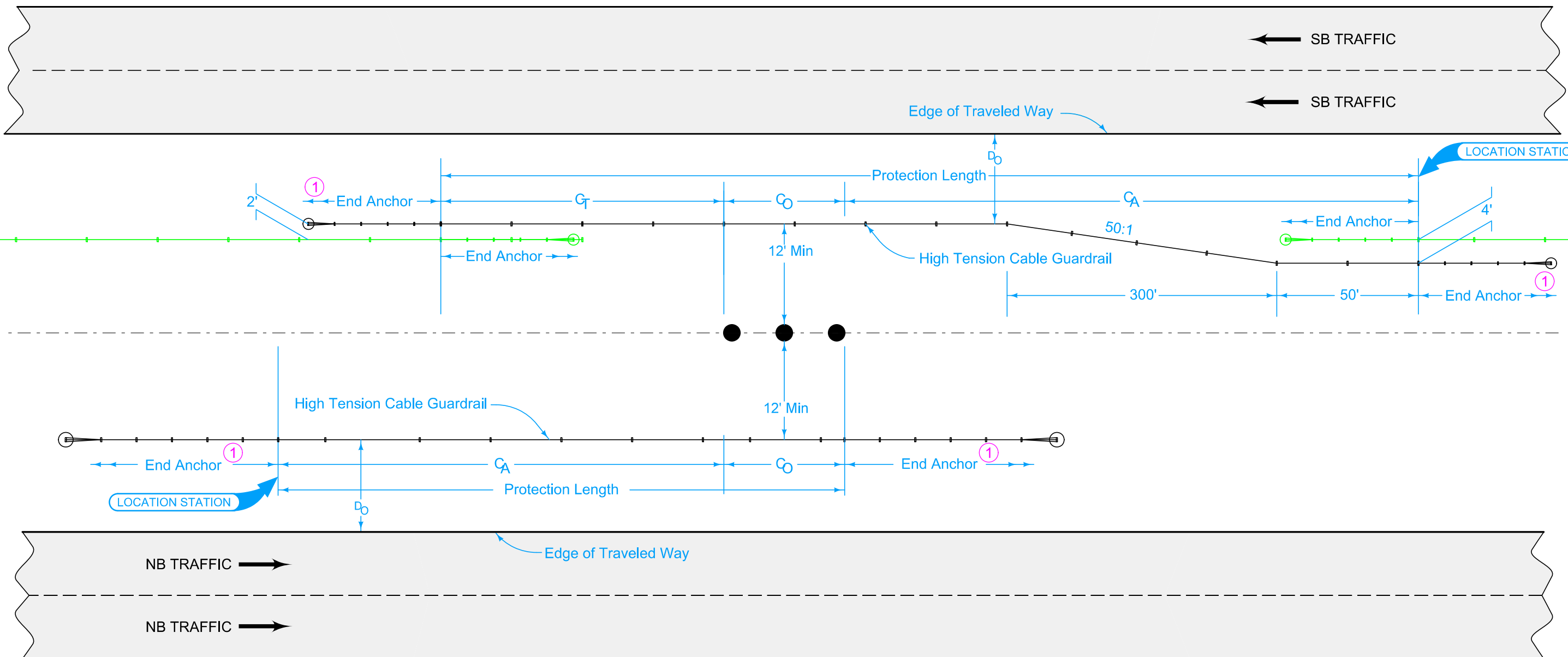


Ramp C



Loveland Loop Resurfacing



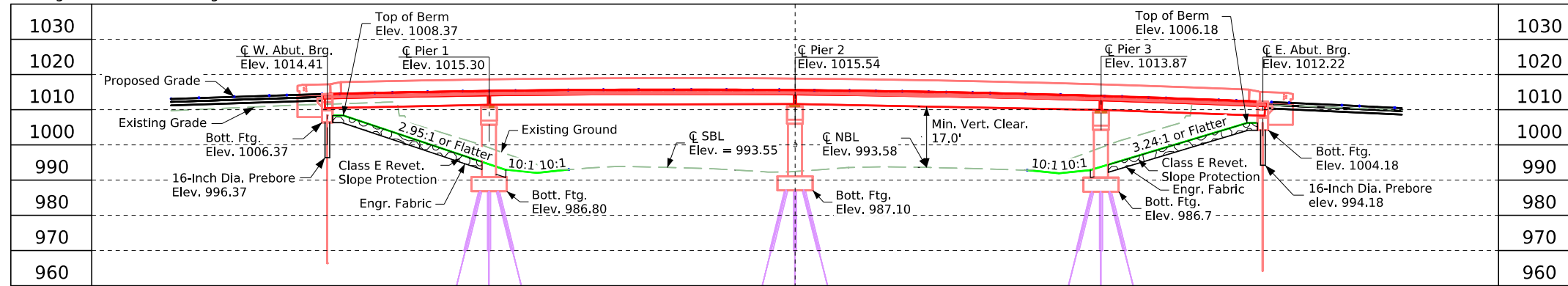


MEDIAN OBJECT PROTECTION

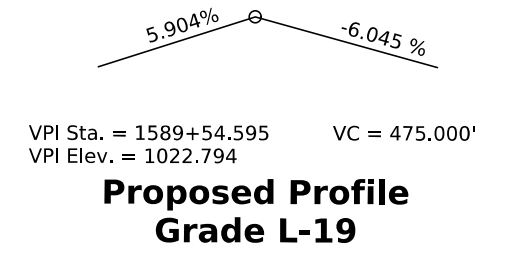
① Length varies depending on High Tension Cable Guardrail system.

MODIFIED
MODIFICATIONS: Southbound Cable Layout
HIGH TENSION CABLE GUARDRAIL
BA-351

Control Point: N180 Northing 7025873.11, Easting 16454543.57, Elev. 988.03, CP NGS Monument as Described in Good Condition



BRG TSL Longitudinal Section Along Approach Roadway



Minimum Vertical Clearance

Overhead Station = 1590+21.75, Offset 19.33' Lt.
 Overhead Elevation = 1014.73
 Depth of Superstructure = 3.96'
 Deck Thickness = 8.5 in.
 Estimated Haunch = 3 in.
 Beam Depth = 3.0 ft.
 Underpass Station = 593+66.00, Offset 0.0' (Centerline NBL Survey)
 Underpass Elevation = 993.70
 Minimum Vertical Clearance = 17.0'

Utilities Note:

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

General Utility Symbols:

E1 - Electric Line - Power Poles

Traffic Estimate

Co. Rd. L-19		I-29	
2016 AADT	230 V.P.D.	2023 AADT	20,900 V.P.D.
20?? AADT	?? V.P.D.	20?? AADT	?? V.P.D.
20?? DHV	?? V.P.H.	20?? DHV	?? V.P.H.
TRUCKS	?? %	TRUCKS	22 %
Total Design ESALs	???	Total Design ESALs	???

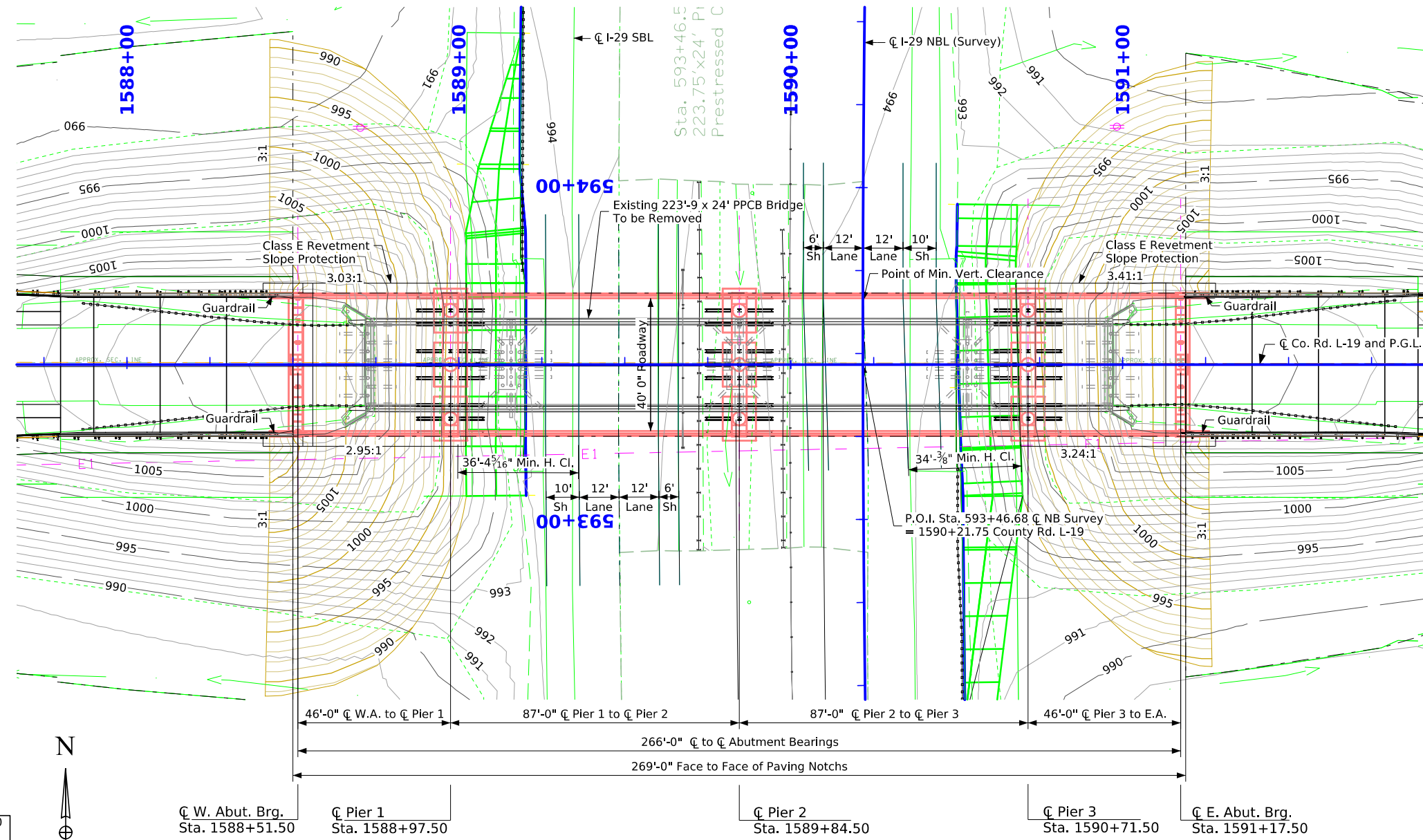
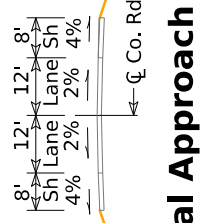
Curve Data

I-29 NBL (Survey)
 $\Delta = 12^\circ 29' 16.59''$ (Rt.)
 T = 940.39'
 L = 8595.00'
 E = 51.29'
 e =
 L =
 x =

Location

Co. Rd. L-19 over Interstate 29
 T-76N & 77N R-44W
 Section 4 & 33
 Crescent and Rockford Townships
 Pottawattamie County
 FHWA No. 044931
 Bridge Maint. No. 7866.30029
 Latitude 41.419353°
 Longitude -95.900689°
 Preliminary

Typical Approach Section



Situation Plan

Design For 0 Degree Skew
**266'-0"x40'-0" Prestressed
 Prestressed Concrete Beam Bridge**
 46'-0" End Spans 2@ 87'-0" Interior Span
Situation Plan
 STA. 1589+84.50 (Co. Rd. L-19) Turn-in Date: Jan 2026
Pottawattamie County
 IOWA DEPARTMENT OF TRANSPORTATION
 Design No. 0226 Design Sheet No. 1 of 2 FHWA No. 044931

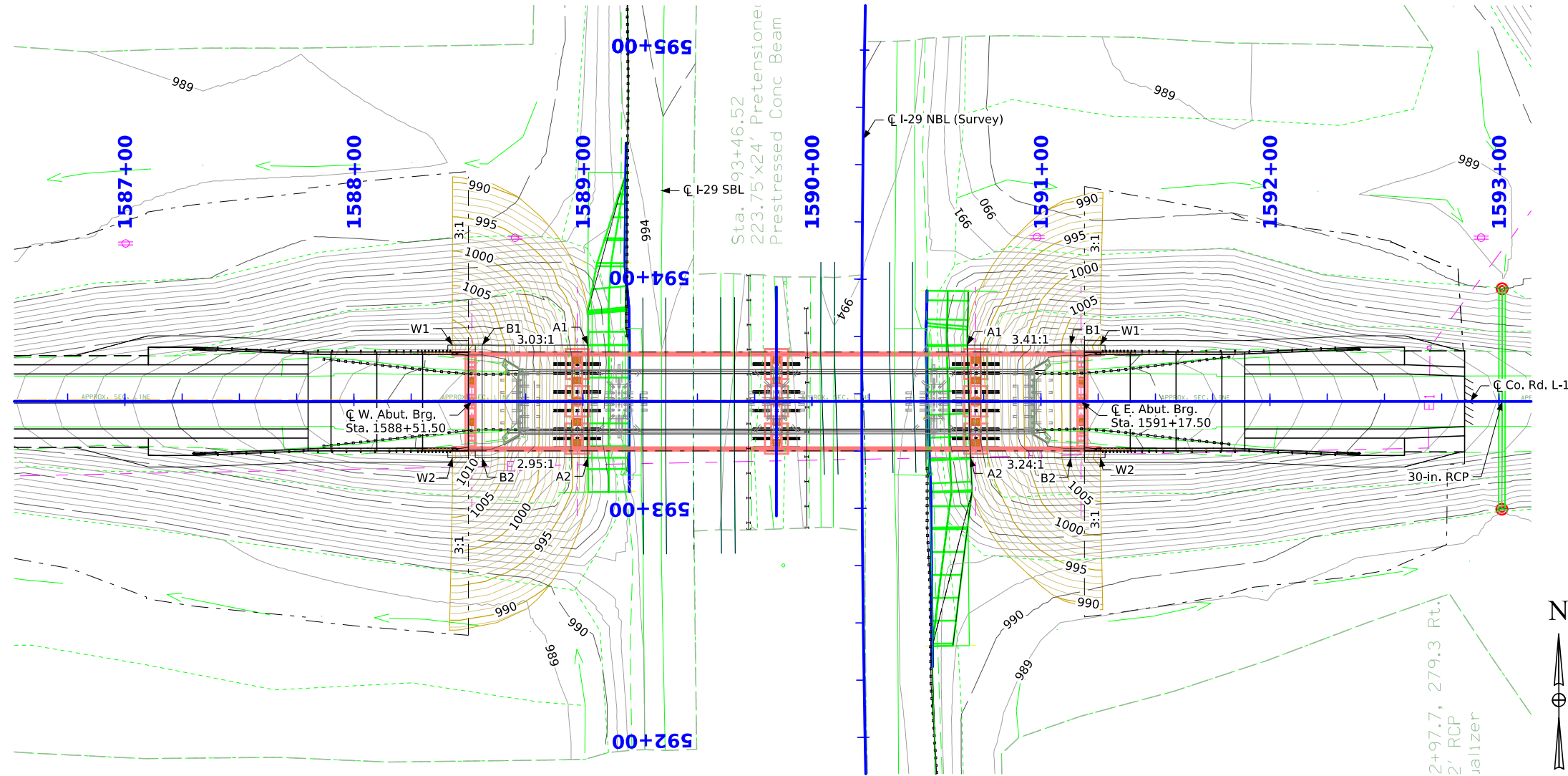
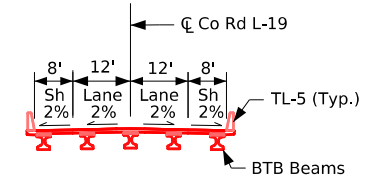
Control Point: N180 Northing 7025873.11, Easting 16454543.57, Elev. 988.03, CP NGS Monument as Described in Good Condition

- Notes:
- EW-211 proposed for the berm grading
 - There are foundation conflicts between the existing Pier 2 and the proposed Pier 2 within the median. There are potential piling conflicts at depths between existing Pier 1 and Pier 3 creosote piling and proposed piling.
 - There are potential project conflicts with electric utilities.

- Design Notes: (to be removed during final design)
- The bridge is anticipated to be closed to traffic during construction. Traffic will be maintained by an off-site detour.
 - Mainline Minimum Clear Zone = 34'
 - Preliminary indication is that the haunch will be within limits. See email from Logan Grothus dated 3-11-25 in project directory correspondence folder.
 - Along grade vs. horizontal check, <0.5 inch
 - TL-5 barrier rail is ADE preference.
 - Frame piers are shown with column width 4'-0 and 4'-6 pier cap utilized for Horiz. Clearance calculations. With the assumed pier width, Piers 1 and 3 are beyond the preferred clear zone.
 - Pier 2 is within the acceptable clear zone and collision requirements shall be evaluated during final design.
 - The B01 TSL shall be routed to the MTB.
 - Similar to the CBIS project bridges, Utilize Class E revetment for the bridge berm slope protection due to Pott County highly erodible soils and being within the Mo River 100-year floodplain. Final Design effort to modify standard slope protection details shall be considered.
 - Final design shall consider the potential need for temporary shoring to accommodate median pier construction and include in the final plans if necessary. It will be a final design task to consider any extent and plan details. Temporary shoring is not shown on the TS&L.
 - An Iowa DNR Flood Plain Permit is not required, due to a "Small Project" exemption.
 - A Sovereign Lands permit is not required due to the project being outside the Mo R channel Ordinary High Water.

Berm Slope Location Table						
Points	West Abutment			East Abutment		
	Station	Offset	Elev.	Station	Offset	Elev.
A1	1589+02.22	24.58' Lt.	993.12	1590+67.84	24.58' Lt.	993.01
A2	1589+02.16	24.58' Rt.	992.74	1590+69.26	24.58' Rt.	992.67
B1	1588+56.00	24.58' Lt.	1008.37	1591+13.00	24.58' Lt.	1006.18
B2	1588+56.00	24.58' Rt.	1008.37	1591+13.00	24.58' Rt.	1006.18
W1	1588+43.00	24.58' Lt.	1013.66	1591+26.00	24.58' Lt.	1011.34
W2	1588+43.00	24.58' Rt.	1013.66	1591+26.00	24.58' Rt.	1011.34

Berm slope elevations reflect the grading surface.

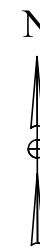


Hydraulic Data

Site is located within the Missouri River Flood Plain Pottawattamie County F.I.S., Dated April 16, 2013 F.I.S. Datum NAVD is the same as the Project Datum. Zone AE, FM 1915C0225E Dated February 4, 2005 F.I.S. Base Flood Stage Est. = 996.14 ft.

Hydraulic modeling was not performed for the project.

Site Plan



Scale in Feet
0 30

Preliminary

Design For 0 Degree Skew

**266'-0"x40'-0" Prestensioned
Prestressed Concrete Beam Bridge**

46'-0" End Spans 2@ 87'-0" Interior Span

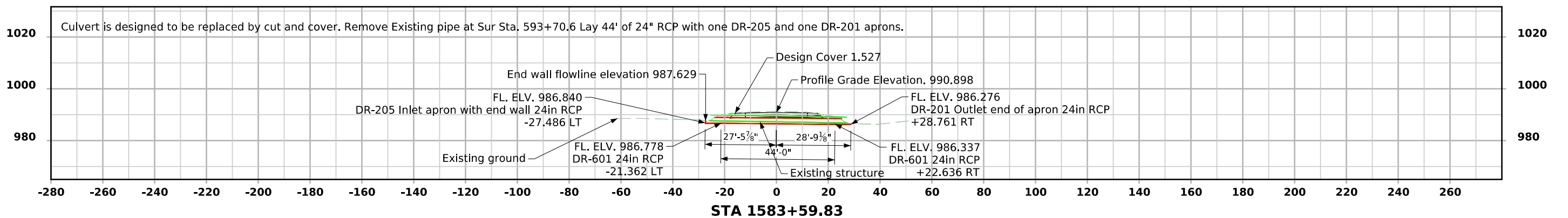
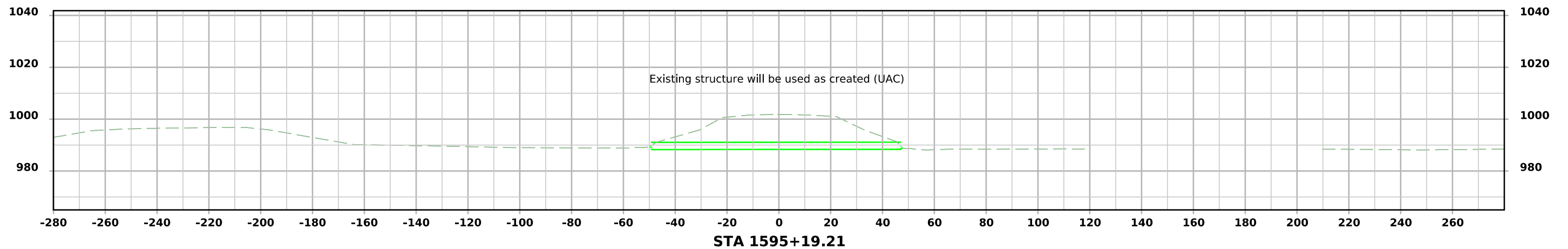
Situation Plan - Site

STA. 1589+84.50 (Co. Rd. L-19) Turn-in Date: Jan 2026

Pottawattamie County

IOWA DEPARTMENT OF TRANSPORTATION

Design No. 0226 Design Sheet No. 2 of 2 FHWA No. 044931



CROSS SECTION VIEW COLOR LEGEND

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

NOTES:

Text

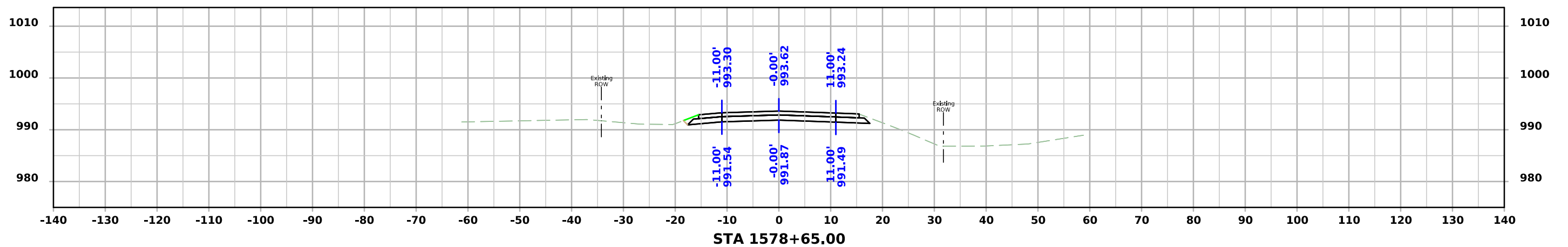
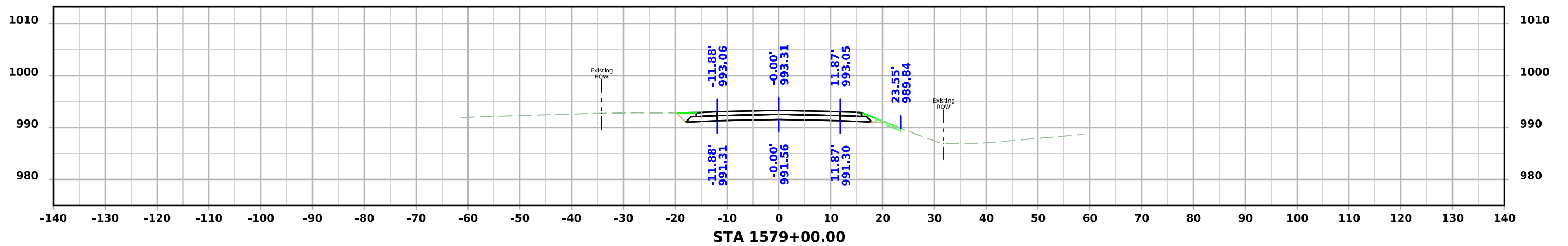
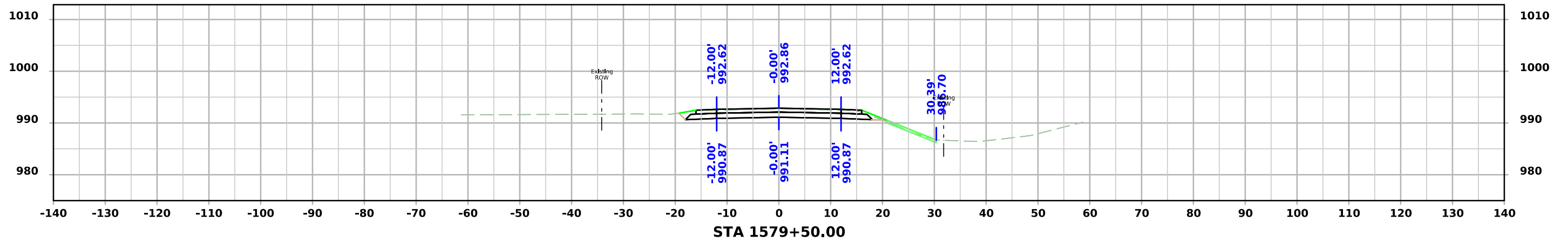
NOTES:

Text

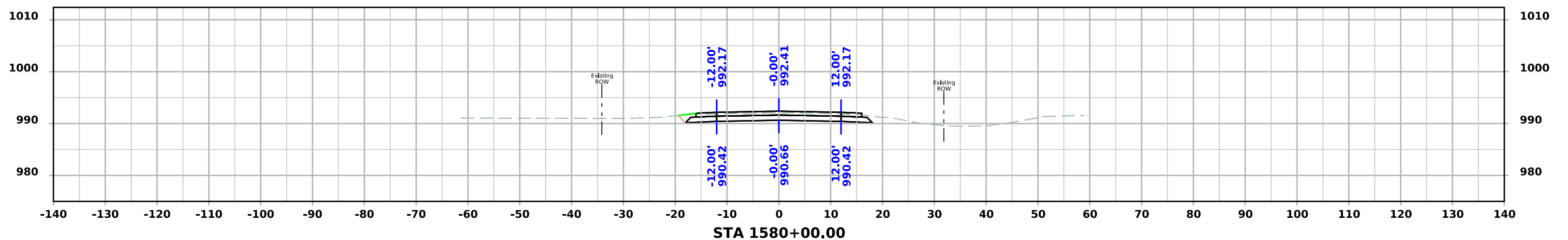
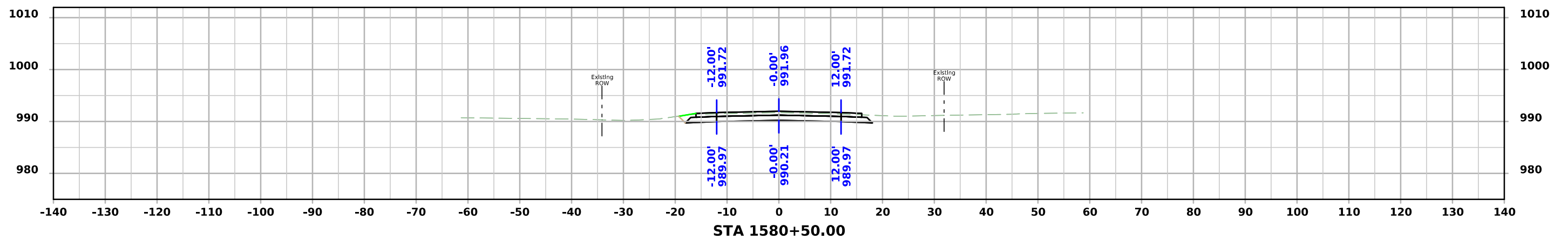
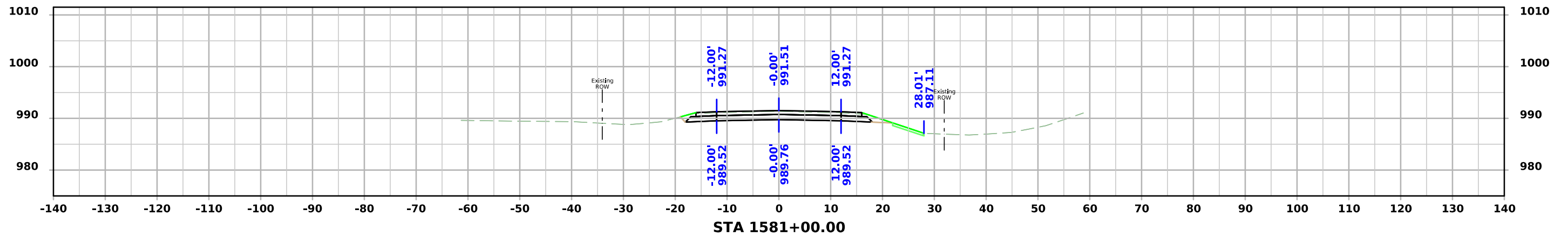
CROSS SECTIONS LEGEND AND INFORMATION SHEET

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

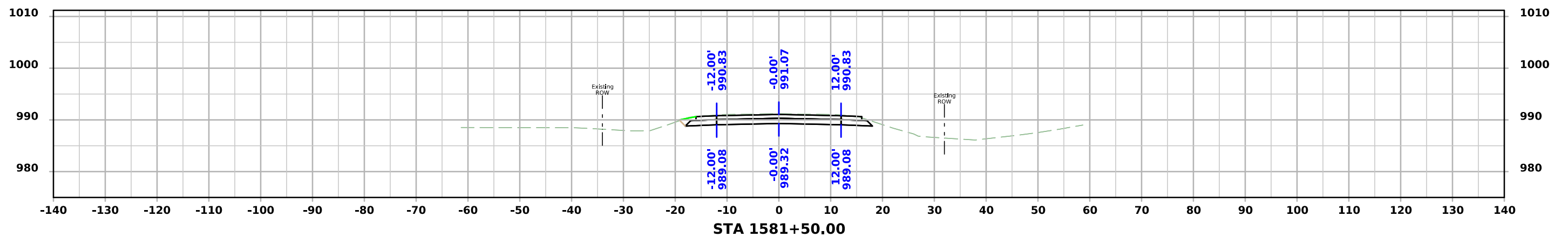
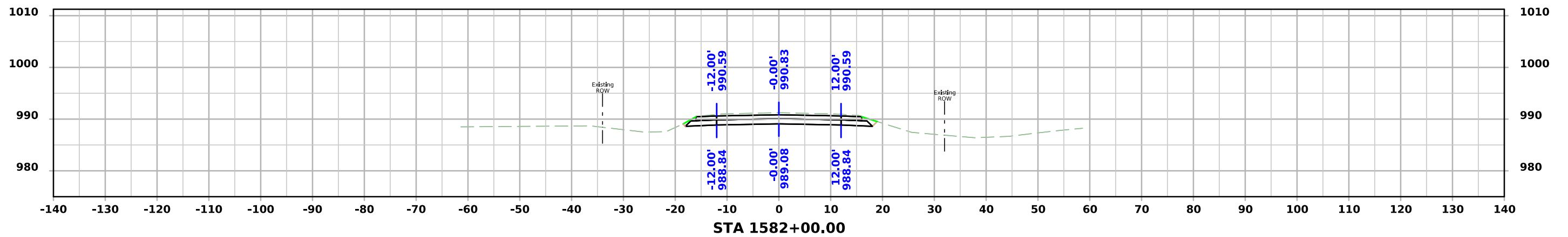
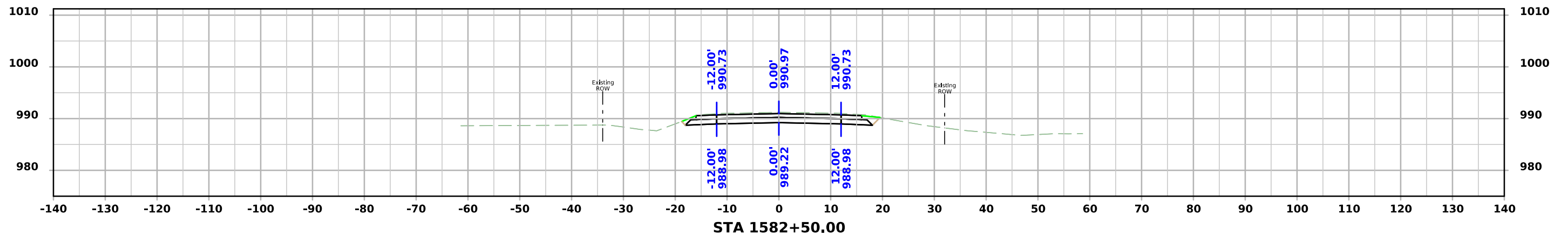
SR - Co. Rd. L19



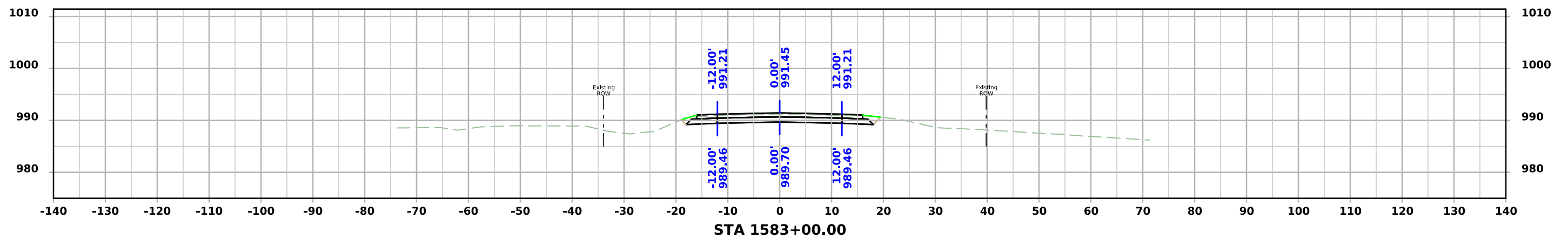
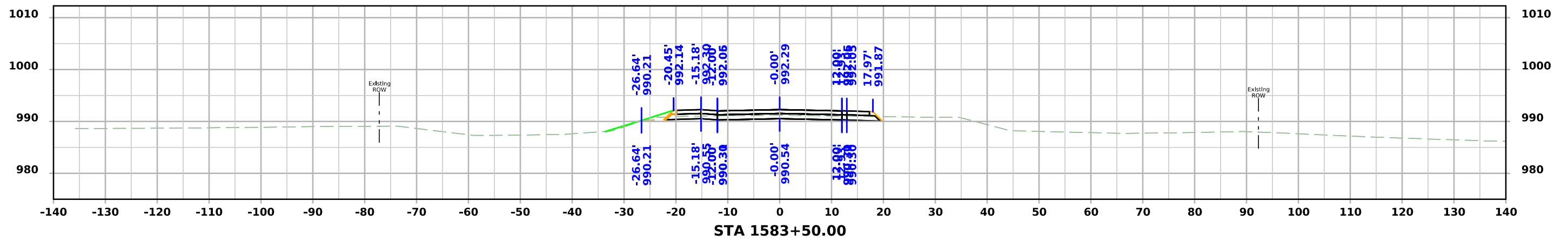
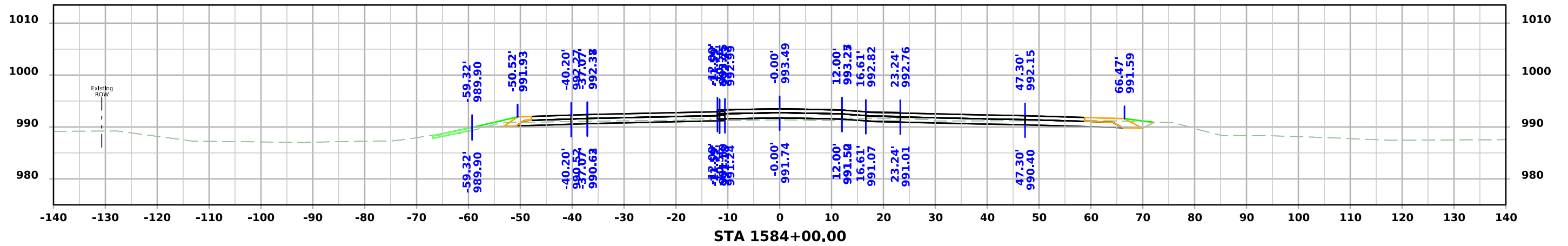
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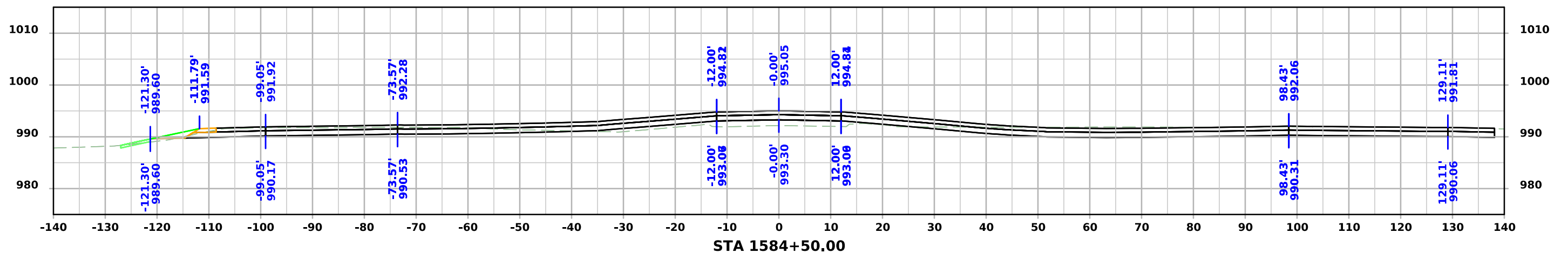
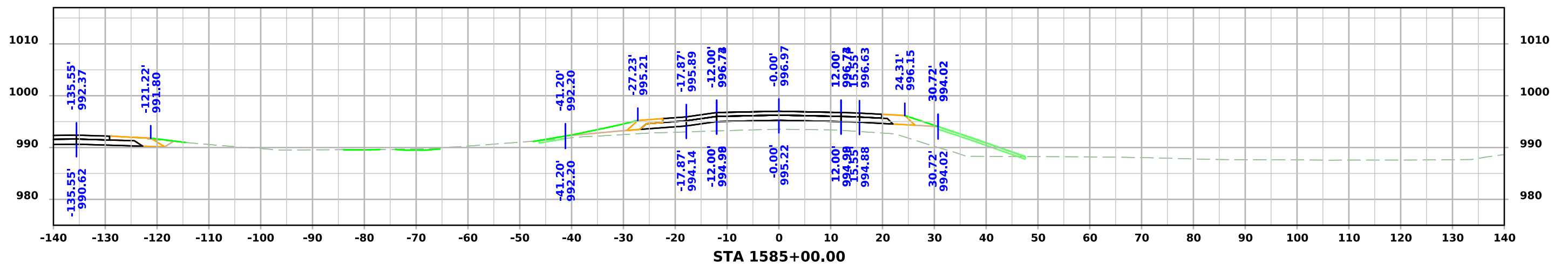
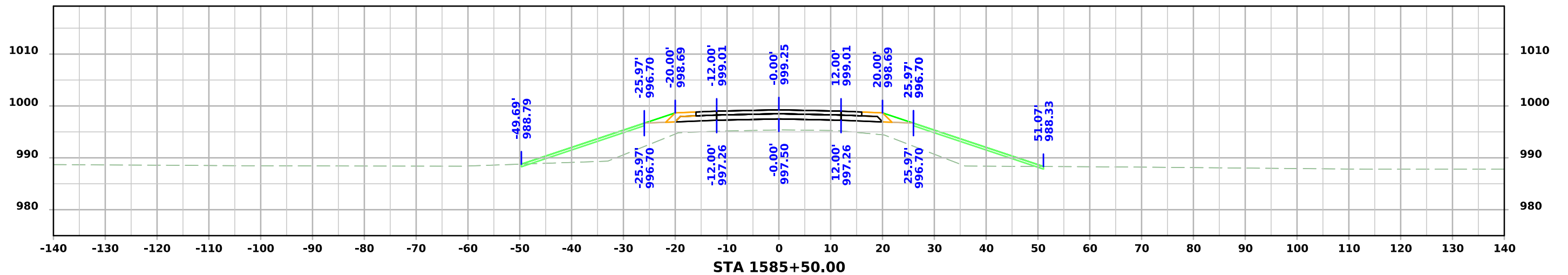
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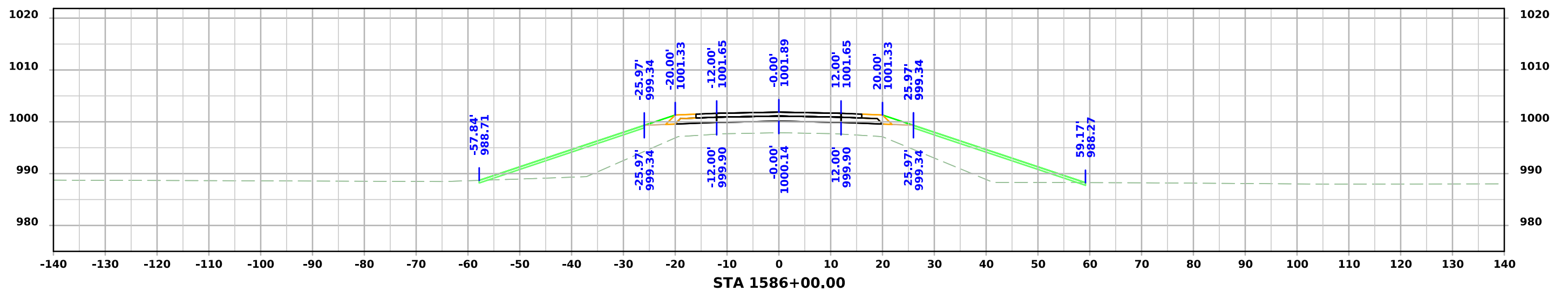
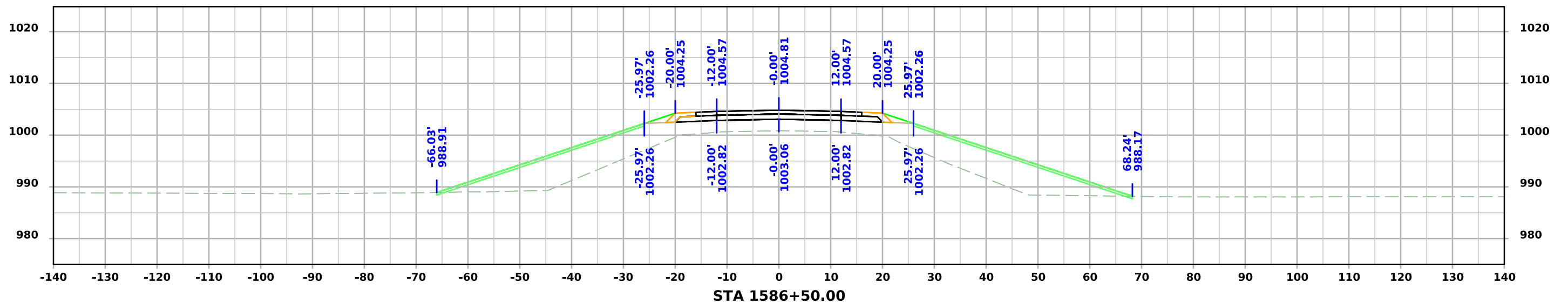
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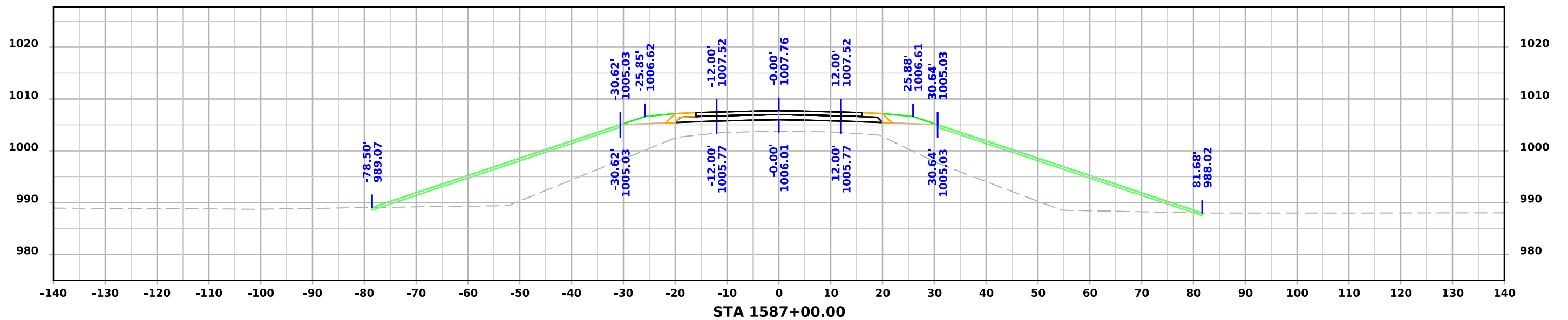
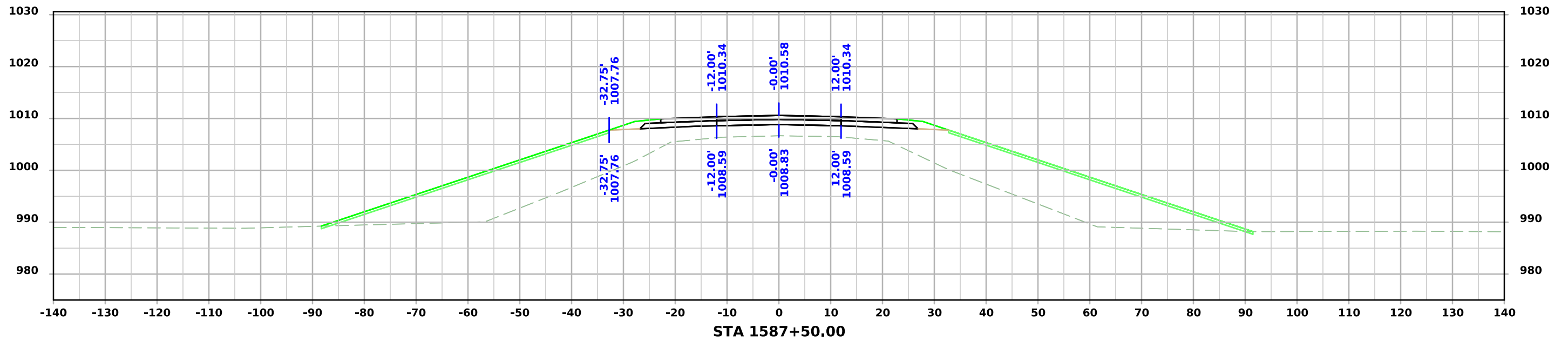
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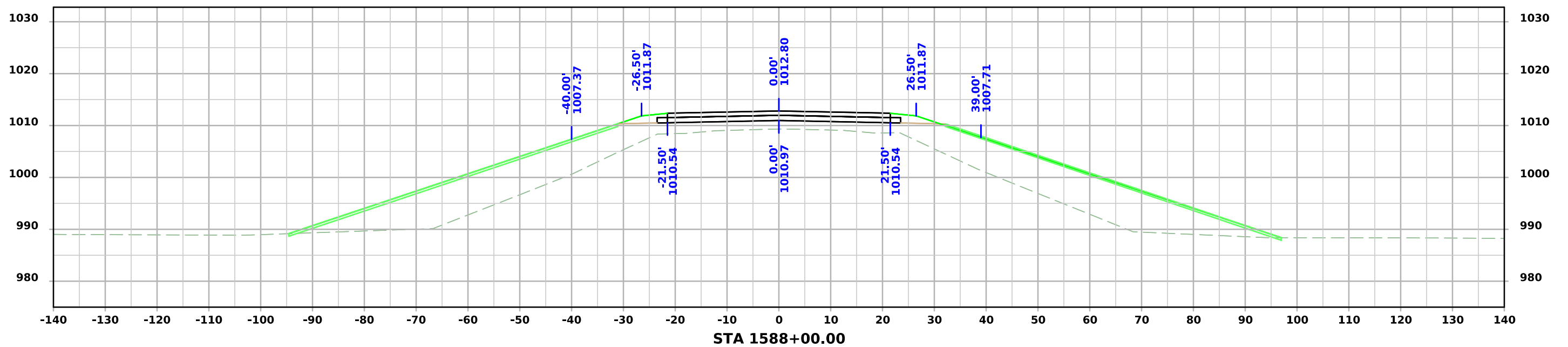
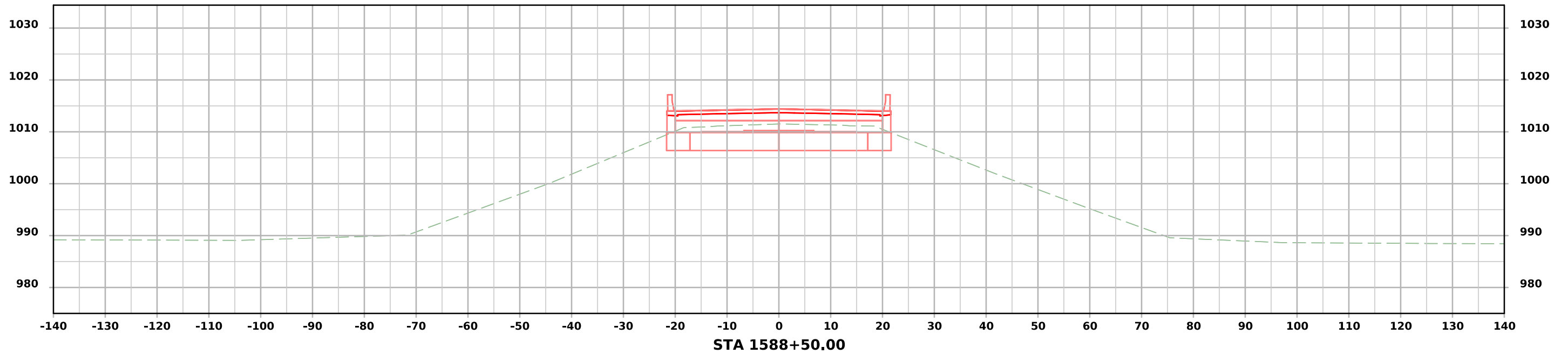
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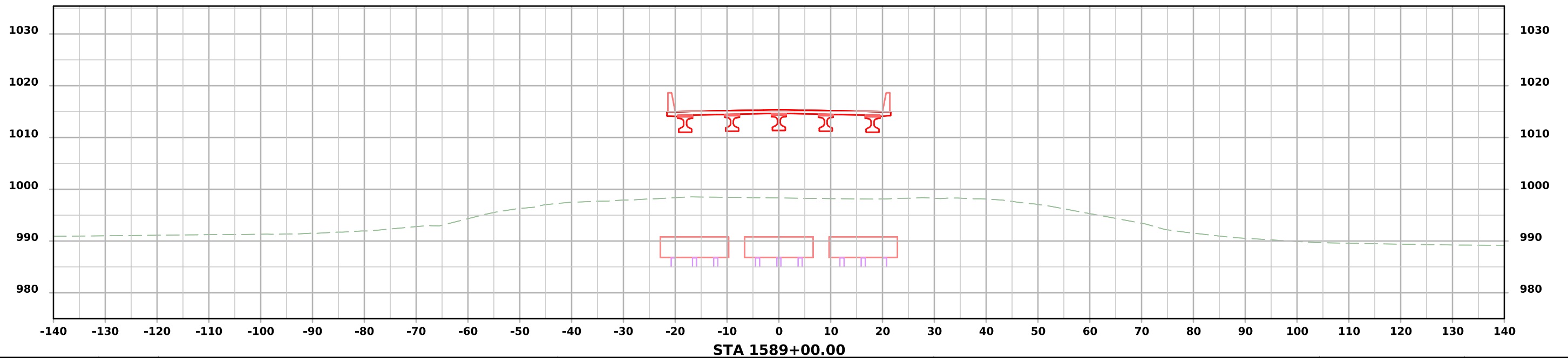
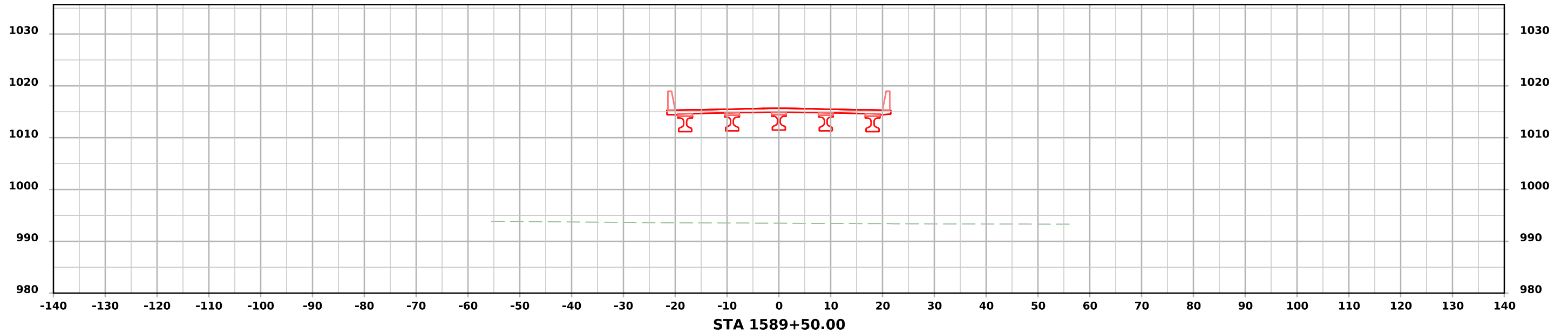
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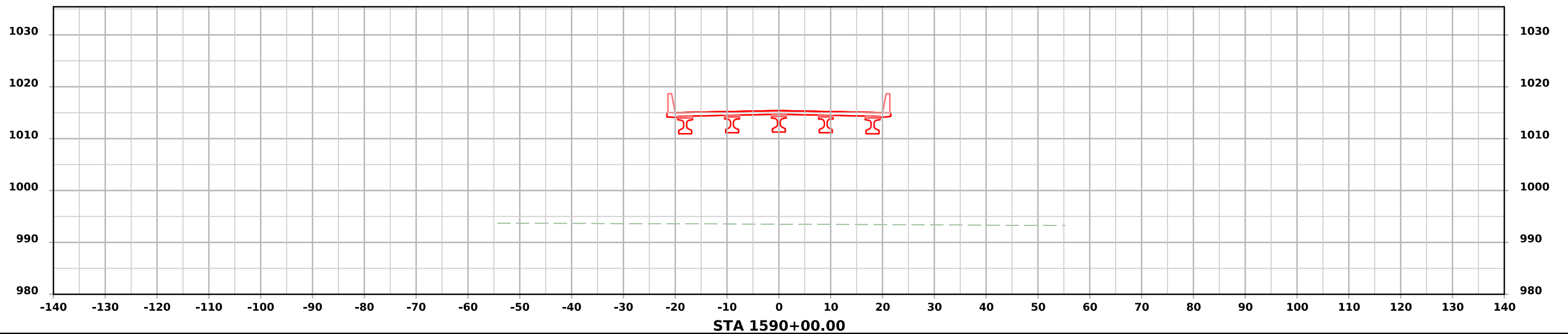
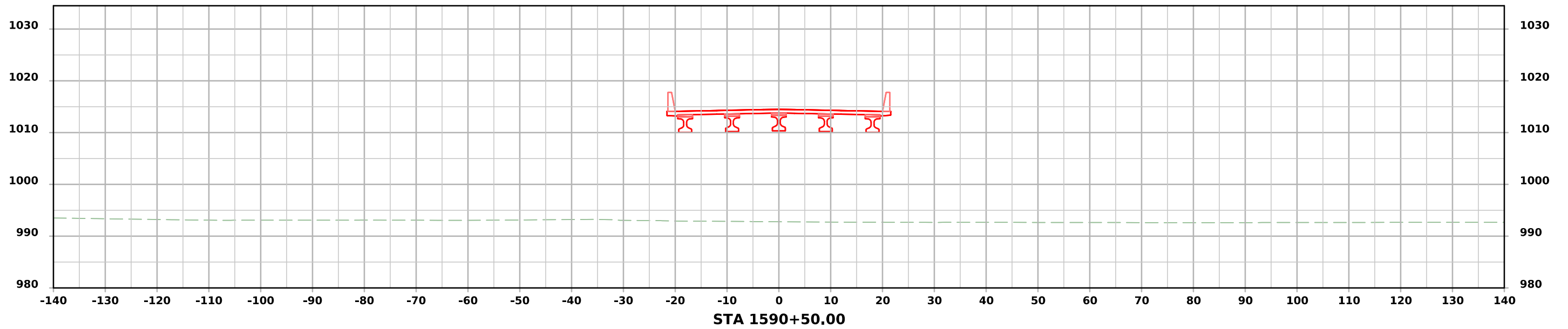
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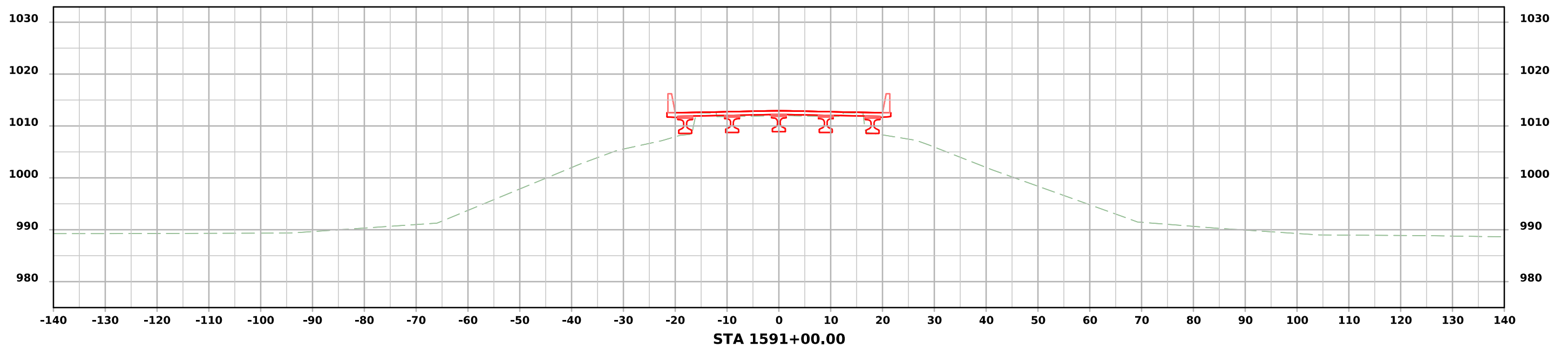
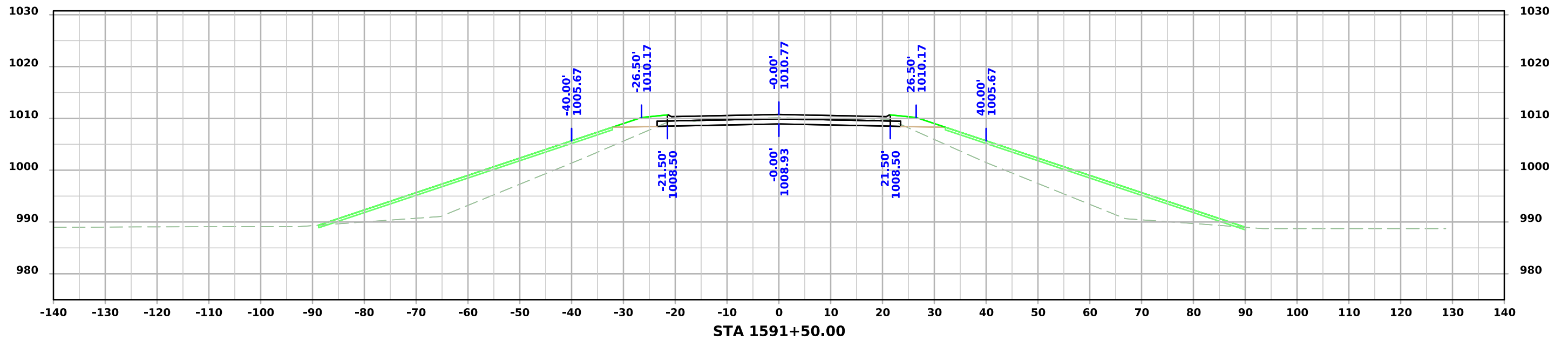
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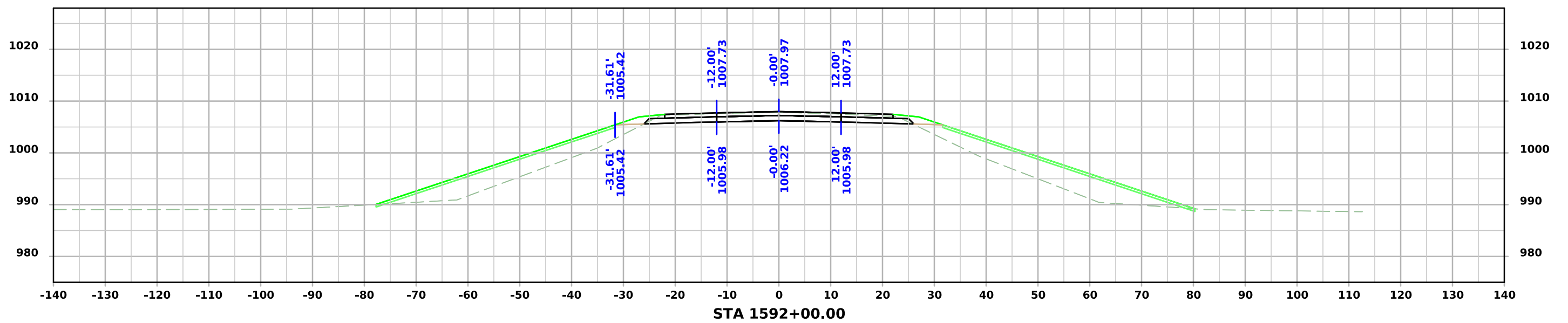
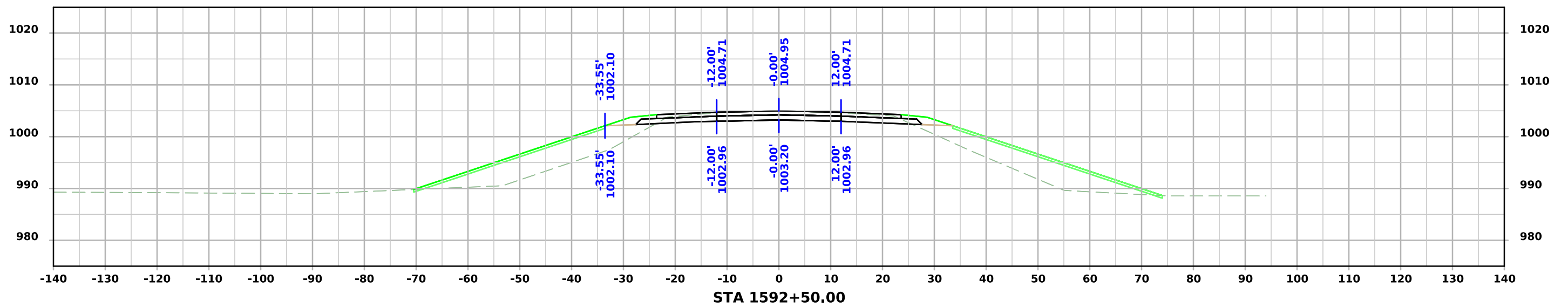
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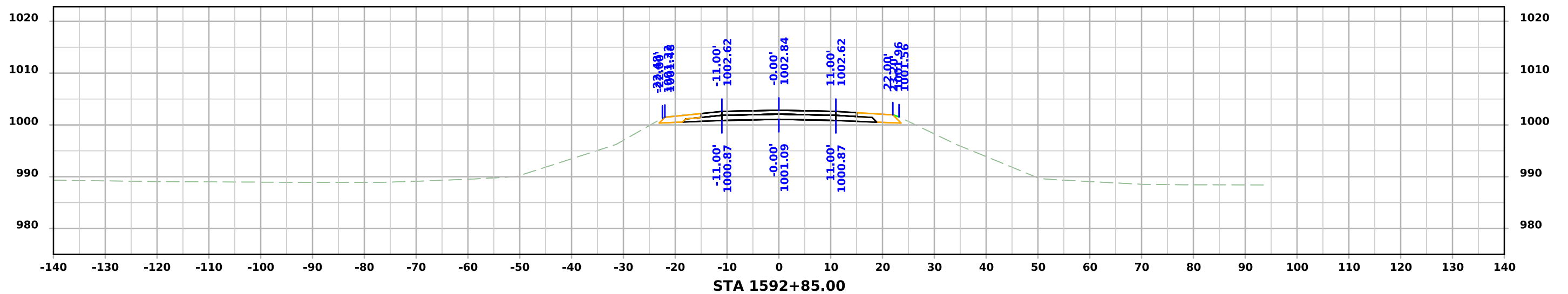
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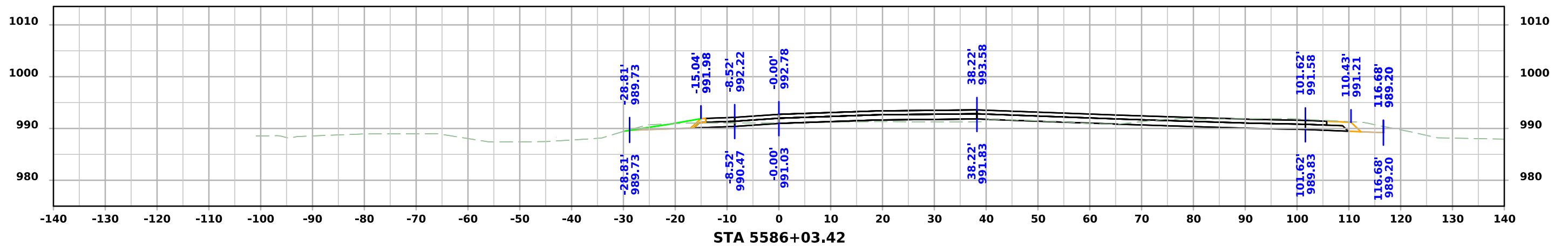
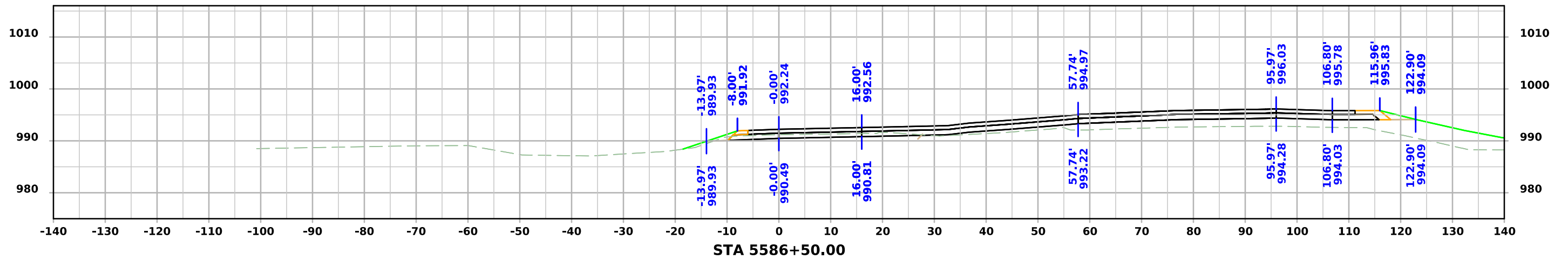
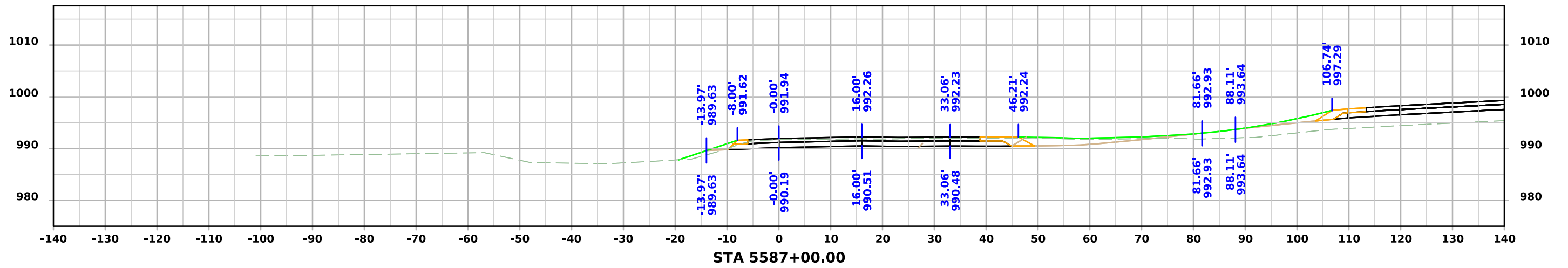
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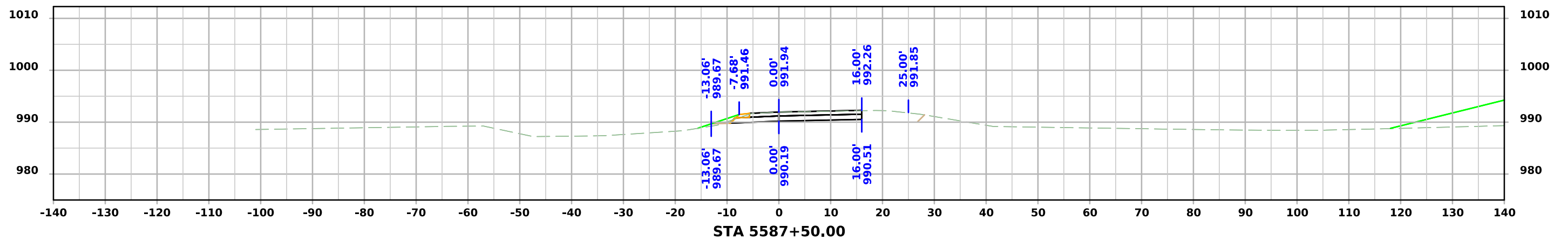
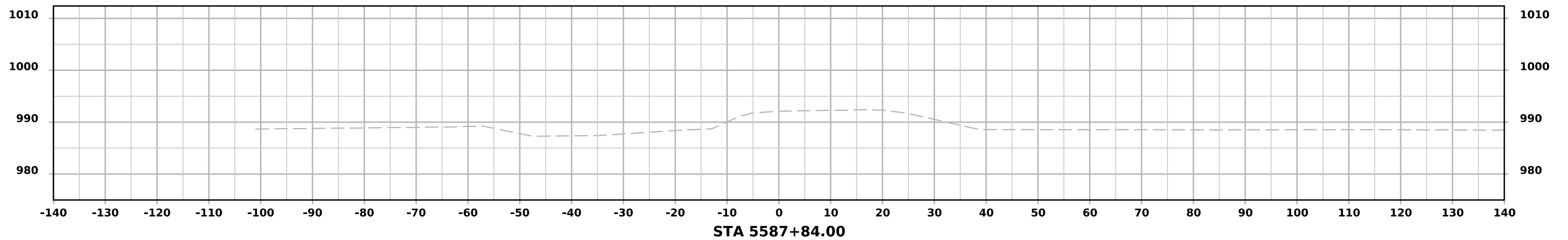
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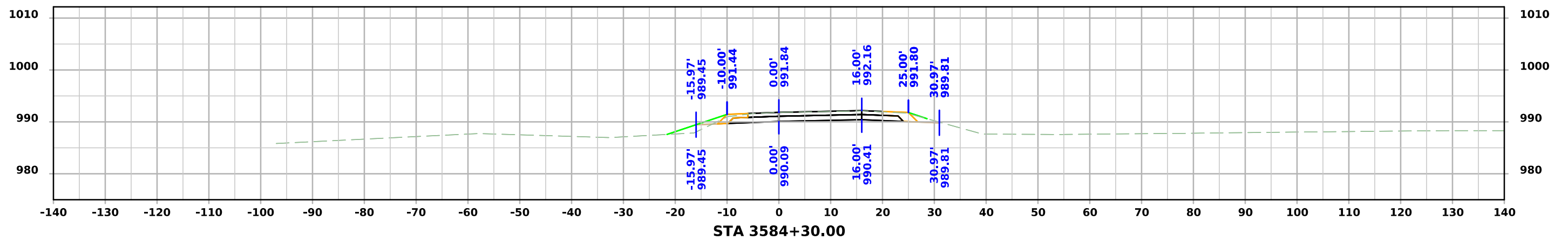
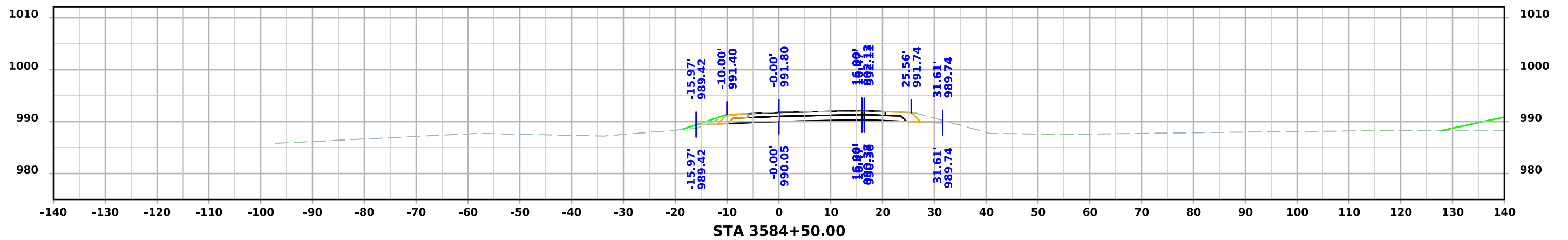
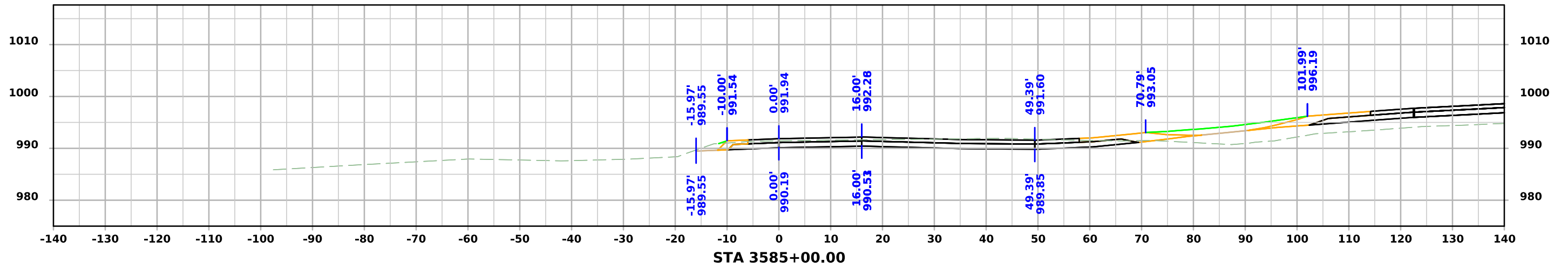
RAMP A



RAMP A



RAMP C



RAMP C

