LETTING DATE Dec. 15, 2026

Grading

IMX-029-4(148)62--02-78

POTTAWATTAMIE COUNTY

INDEX OF SHEETS	
No.	DESCRIPTION
A Sheets	**Title Sheets**
A.1	Title Sheet
A.2	Location Map Sheet
B Sheets	**Typical Cross Sections and Details**
B.1	Typical Cross Sections and Details
C Sheets	**Quantities and General Information**
C.1	Estimated Project Quantities and Reference Notes
C.2	Standard Road Plans
C.2	Index of Tabulations
C.3	Tabulations
D Sheets	**Mainline Plan and Profile Sheets**
D.1	Plan & Profile Legend & Symbol Information Sheet
D.2	I-29 - Section A1
D.2	I-29 - Section A2
D.2	I-29 - Section B
D.2	I-29 - Section C
J Sheets	**Traffic Control and Staging Sheets**
J.1	Traffic Control Plan and Coordinated Operations
R Sheets	**Erosion Control Sheets**
RC.1 - 10	Est. Quantities, PPP, General Notes and Tabulations
RR.1 - 21	Erosion Control Legend and Symbol Information Sheet
T Sheets	**Earthwork Quantity Sheets**
T.1 - 8	Earthwork Quantity Sheets
U Sheets	**500 Series, Mod.Stds. and Detail Sheets**
U.1 - 2	Foreslope Erosion Countermeasure Revetment Details
W Sheets	**Mainline Cross Sections**
W.1	Cross Sections Legend & Symbol Information Sheet
W.100 - 116	Mainline Section A1 Cross Sections
W.200 - 204	Mainline Section A2 Cross Sections
W.300 - 314	Mainline Section B Cross Sections
W.400 - 439	Mainline Section C Cross Sections

IOWA DOT

PLANS OF PROPOSED IMPROVEMENT ON THE

INTERSTATE ROAD SYSTEM

POTTAWATTAMIE COUNTY

Grading

I-680 to I-880 - Various Locations

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

Value Engineering Saves. Refer to Article 1105.13 of the Specifications.

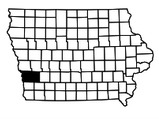
IOWA ONE CALL
1-800-292-8989
www.iowaonecall.com
811 Know what's below. Call before you dig.

REVISIONS

	TOTAL
	137
PROJECT IDENTIFICATION NUMBER	
25-78-029-040	
PROJECT NUMBER	
IMX-029-4(148)62--02-78	
R.O.W. PROJECT NUMBER	

Scan the QR code or click the link below to leave plan quality feedback and help us improve future projects.

Design QR Feedback Link



DESIGN DATA URBAN		
2025	AADT	10450 V.P.D.
20 –	AADT	– V.P.D.
20 –	DHV	– V.P.H.
TRUCKS		7 %
Total Design ESALs		–

INDEX OF SEALS			
SHEET NO.	NAME	TYPE	BID QUANTITY SHEETS
A.1	Kelly C. Bell	Primary Signature Block	C.1
RC.1	Rachel A. Harris	Landscape Design	RC.2-RC.3

ROADWAY DESIGN

LICENSED PROFESSIONAL ENGINEER Kelly C. Bell 17944 IOWA

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.

Signature 08-03-2026 Date

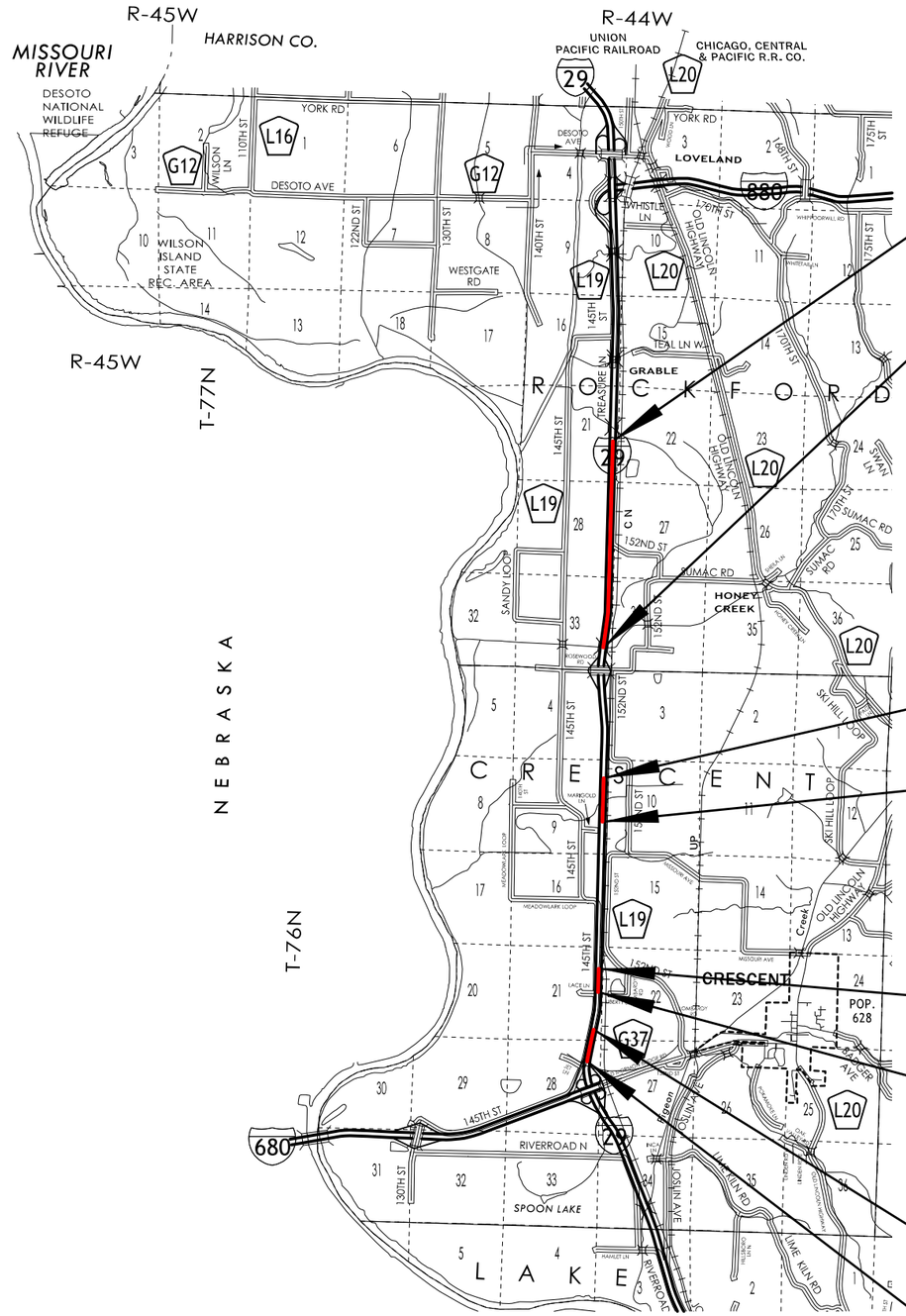
Kelly C. Bell
Printed or Typed Name

My license renewal date is December 31, 20 27

Pages or sheets covered by this seal: A.1-A.2, B.1, C.1-C.3, D.1-D.11, J.1, T.1-T.8, U.1-U.2, W.1, W.100-W.116, W.200-W.204, W.300-W.314, W.400-W.439

FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER A.1

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Ref. Loc. MP 71.16
STA. 678+25.00
END SECTION C CONSTRUCTION

STA. 619+75.00
BEGIN SECTION C CONSTRUCTION

STA 535+75.00
END SECTION B CONSTRUCTION

STA 515+75.00
BEGIN SECTION B CONSTRUCTION

STA 432+00.00
END SECTION A2 CONSTRUCTION

STA 425+50.00
BEGIN SECTION A2 CONSTRUCTION

STA 400+25.00
END SECTION A1 CONSTRUCTION

Ref. Loc. MP 62.17
STA 377+25.00
BEGIN SECTION A1 CONSTRUCTION

LOCATION MAP SCALE
0 1 2 3
Miles

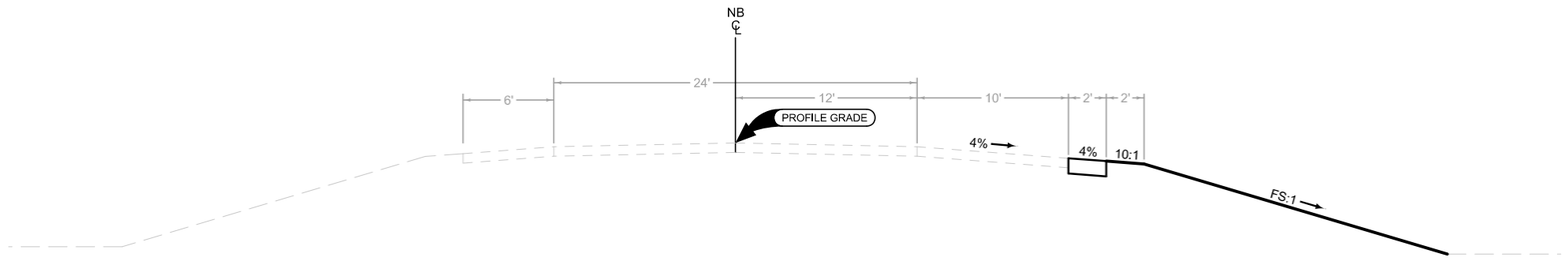


FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER A.2

2:27:53 PM 6/30/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Sheet_Files\SHT_A01_78029148Z06.dgn

LOCATION			DIMENSIONS
ROAD IDENTIFICATION	STATION TO STATION		FS
I-29	377+25.00	400+25.00	4:1
I-29	425+50.00	432+00.00	4:1
I-29	515+75.00	535+75.00	4:1
I-29	619+75.00	678+25.00	4:1

Modified



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

See plan & profile sheets and cross sections for additional details of ditches and backslopes.

1 LANE GRADING

ESTIMATED PROJECT QUANTITIES AND REFERENCE NOTES

Roadway Items : Roadway Items

Item no.	Item Code	Item	Unit	Quantities	Estimate Reference Notes
				Estimated	
				Roadway Items	
1	2101-0850001	CLEARING AND GRUBBING	ACRE	7.3	
2	2102-2713070	EXCAVATION, CLASS 13, ROADWAY AND BORROW	CY	642	Refer to T-Sheets.
3	2102-2713090	EXCAVATION, CLASS 13, WASTE	CY	4,790	Refer to T Sheets.
4	2105-8425005	TOPSOIL, FURNISH AND SPREAD	CY	9,126	Refer to T Sheets.
5	2507-8600020	FORESLOPE EROSION COUNTERMEASURE, MAJOR (DETAIL 570-22)	SY	35,316	Refer to Tab. 100-40 in the C Sheets. Refer to U Sheets.
6	2526-8285040	CONSTRUCTION SURVEY, LOCATION SURVEY	LS	1	
7	2528-8445110	TRAFFIC CONTROL	LS	1	
8	2533-4980005	MOBILIZATION	LS	1	

105-4
10-18-11

STANDARD ROAD PLANS

The following Standard Road Plans apply to construction work on this project.

Number	Date	Title
TC-1	10-15-19	Work Not Affecting Traffic (Two-Lane or Multi-Lane)
TC-402	4-18-23	Work Within 15ft of Traveled Way
TC-418	4-18-23	Lane Closure on Divided Highway
TC-420	10-16-18	Lane Closure at Ramps

111-25
10-18-11

INDEX OF TABULATIONS

Tabulation	Tabulation Title	Sheet No.
C Sheets		
100-40	FORESLOPE EROSION COUNTERMEASURES	C.3
102-5	EXISTING PAVEMENT	C.3
105-4	STANDARD ROAD PLANS	C.2
111-25	INDEX OF TABULATIONS	C.2

EXISTING PAVEMENT

No.	Location					Year	Type	Project Number	Surface		Base		Subbase		Removal		Coarse Aggregate			Reinforcement	Remarks
	County	Route	Dir. of Travel	Begin Ref. Loc. Sign	End Ref. Loc. Sign				Type	Depth IN	Type	Depth IN	Type	Depth IN	Type	Depth IN	Source	Type	Durability Class	Type	
	78	I-29	1	57.7	66.63	2013		IMX-029-4(90)58--02-78	HMA	2	HMA	2									
	78	I-29	1	57.7	66.63	1992		IM-29-4(39)56	PCC	11.5	GSB	9	RAC	4			WEEPING WATER	C.LST.	I		7.9M WIDE
	78	I-29	1	66.8	68.01	2019	O	IMN-029-3(358)56--0E-78	HMA	2	HMA	13.5									Flood Repair
	78	I-29	1	68.01	70.84	2008		IM-29-4(39)58--13-78	HMA	2	HMA	2									
	78	I-29	1	68.01	70.84	1992		IM-29-4(39)56	PCC	11.5	GSB	9	RAC	4			WEEPING WATER	C.LST.	I		7.9M WIDE
	78	I-29	1	70.84	71.68	2012	S	IMX-29-4(92)71--02-78	HMA	2	HMA	2									
	78	I-29	1	70.84	71.68	1992		IM-29-4(39)56	PCC	11.5	GSB	9	RAC	4			WEEPING WATER	C.LST.	I		7.9M WIDE

FORESLOPE EROSION COUNTERMEASURES

Refer to U Sheets

Location				Grid Tied Concrete Block Mat	Grid Tied Mat Anchor Block				Remarks
Road Identification	Begin Station	End Station	Side	SY	LF				
SECTION A1:									
IA 29 NB	377+25.00	400+25.00	OUT	8213	2300				(1)
SECTION A2:									
IA 29 NB	425+50.00	432+00.00	OUT	2513	650				(1)
SECTION B:									
IA-29 NB	515+75.00	535+75.00	OUT	6875	2000				(1)
SECTION C:									
IA-29 NB	619+75.00	678+25.00	OUT	17715	5850				(1)
TOTALS:				**35316**	10800				
REMARKS:	(1) See Tab 107-28 in T Sheets for Earthwork Quantites								

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
- WH Water Hydrant (Rural)
- ST Septic Tank
- C Cistern
- LP L.P. Gas Tank (No Footing)
- UST Underground Storage Tank
- Latrine
- Satellite TV Dish
- WHU Water Hook Up
- RT Radio Tower
- TA Tower Anchor
- Guardrail (Beam or Cable)
- GP Guard Post (one or two)
- Guard Post (over two)
- FP Filler Pipe
- GV Gas Valve
- WV Water Valve
- SL Speed Limit Sign
- MM 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

- G — GL1D, NUSTAR Gas Line Co. 1 - Quality D
- FO — FO1D, MCI Fiber Optic Co. 1 - Quality D

PLAN VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK	Design Color No.		
Green	(2)	Existing Topographic Features and Labels	
Blue	(1)	Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation	
Magenta	(5)	Existing Utilities	
SHADING	**Design Color No.**		**Transparency**
Pink, Dark	(13)	Temporary Pavement Shading	50%
Yellow	(4)	Proposed Pavement Shading	50%
Orange	(6)	Proposed Granular Shading	50%
Orange	(70)	Proposed Shoulder Granular Shading	50%
Yellow	(68)	Proposed Shoulder Paved Full Depth Shading	50%
Yellow	(132)	Proposed Shoulder Paved Partial Depth Shading	50%
Brown, Light	(236)	Proposed Grading Shading	50%
Orange, Light	(134)	Proposed Granular Entrance Shading	50%
Yellow	(220)	Proposed Paved Entrance Shading	50%
Tan	(8)	Proposed Sidewalk Shading	50%
Blue, Light	(230)	Proposed Sidewalk Landing Shading	50%
Pink	(11)	Proposed Sidewalk Ramp Shading	50%
Red	(3)	Proposed Structure Shading	50%
Red	(3)	Delineates Restricted Areas	0%

PROFILE VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

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

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

RIGHT-OF-WAY LEGEND

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

PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

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

FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER D.1

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Crescent TWP.
T-76N R-44W

145th St.

380+00

385+00

390+00

Southbound I-29

INTERSTATE 29

Northbound I-29

STA 377+25.00 (ML029A)
BEGIN SECTION A1 GRADING

PT 376+95.00

Sta. 382+00.1
60"x166.2' RCP
D.A.=Equalizer A-F Plans
UAC

Sta. 386+00.2
24"x78.2' RCP
D.A.=Median Only A-F
UAC

Sect. No. 21

Sect. No. 28

Sect. No. 22

Sect. No. 27

APPROX. SEC.-1/4 LINE

0 50
FEET

Existing ROW Shown
For Information Only

FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER D.2

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Crescent TWP.
T-76N R-44W

Δ = 10°32'58.70" (LT)
T = 529.02'
L = 1055.04'
R = 5730.00'
E = 24.37'
e = ___
L = ___
x = ___

145th St.

395+00

Southbound I-29

INTERSTATE 29

PC 399+43.03

400+00

405+00

STA 400+25.00 (ML029A)
END SECTION A1 GRADING

Northbound I-29

Sta. 402+00.2
24"x73.3' RCP
D.A.=Median Only A-F
UAC

PI 404+72.05

Sect. No. 21

Sect. No. 22

Illinois Central Railroad

0 50
FEET

Existing ROW Shown
For Information Only

FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER D.3	

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Crescent TWP.
T-76N R-44W

Sect. No. 21

145th St.

425+00

430+00

435+00

Southbound I-29

INTERSTATE 29

STA 425+50.00 (ML029A)
BEGIN SECTION A2 GRADING

STA 432+00.00 (ML029A)
END SECTION A2 GRADING

Northbound I-29

APPROX. SECT. LINE

APPROX. SECT. LINE

Sta. 429+50.00
60"x180' RCP
D.A. = 450 AC. Y.F.
UAC

Illinois Central Railroad

Sect. No. 22

0 50
FEET

Existing ROW Shown
For Information Only

FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER D.4	

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Crescent TWP.
T-76N R-44W

Sect. No. 16

515+00

520+00

525+00

Southbound I-29

INTERSTATE 29

Northbound I-29

STA 515+75.00 (ML029B)
BEGIN SECTION B GRADING

FO

Sta. 520+06.28
Skew 30° RT AH
14'x10'x194.9' RCB
D.A.=Equalizer A-F Plans
UAC

Illinois Central Railroad

Sect. No. 15

0 50
FEET

Existing ROW Shown
For Information Only

FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER D.5

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FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER D.7	

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Rockford TWP.
T-77N R-44W

Sect. No. 33

635+00

640+00

645+00

Southbound I-29

INTERSTATE 29

Northbound I-29

Sta. 639+30.15
24"x64.6' RCP
D.A.=Median Only A-F
UAC

Sect. No. 34

Illinois Central Railroad

0 50 FEET

Existing ROW Shown
For Information Only

FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER D.8

10:00:19 AM 7/29/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Sheet_Files\SHT_D02_78029148Z06.dgn

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Rockford TWP.
T-77N R-44W

Sect. No. 28

650+00

655+00

660+00

Southbound I-29

INTERSTATE 29

Northbound I-29

Rockford TWP.
T-76N R-45W
SEC. 27

Illinois Central Railroad

0 50
FEET

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For Information Only

FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER D.9	

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Rockford TWP.
T-77N R-44W

Sect. No. 28

665+00

670+00

675+00

Sta. 673+77.76
30"x162.9' RCP
D.A.=Equalizer A-F Plans
UAC

Southbound I-29

Northbound I-29

Sect. No. 27

Sta. 671+30.83
24"x63.3' RCP
D.A.=Median Only A-F
UAC

Sta. 673+77.21, 137.3 RT.
30"x43' RCP
D.A.=11 A-F
UAC

Illinois Central Railroad

0 50
FEET

Existing ROW Shown
For Information Only

FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER D.10

10:00:24 AM 7/29/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Sheet_Files\SHT_D02_78029148Z06.dgn

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Rockford TWP
T-77N R-44W

Sect. No. 28

675+00

680+00

685+00

690+00

Southbound I-29

INTERSTATE 29

STA 678+25.00 (ML029C)
END SECTION C GRADING

Northbound I-29

APPROX. SEC. LINE

APPROX. SEC. LINE

APPROX. SEC. LINE

APPROX. SEC. LINE

APPROX. SEC. LINE

Sect. No. 27

Illinois Central Railroad

0 50
FEET

Existing ROW Shown
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FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER D.11

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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
None Provided.	

108-23A
08-01-08

TRAFFIC CONTROL PLAN

I 29 traffic shall be maintained at all times.

I-29 from exit 56 to exit 75: no lane closures Friday 2:00 PM through 6:00 PM

LANDSCAPE DESIGN

STATE OF IOWA
Rachel
A. Harris
LA000775
PROFESSIONAL LANDSCAPE ARCHITECT

I hereby certify that the portion of this technical submission described below was prepared by me or under my direct supervision and responsible charge. I am a duly licensed professional landscape architect under the laws of the state of Iowa.

Signature 08-03-2026 Date

Rachel A. Harris
Printed or Typed Name

My license renewal date is June 30, 2028

Pages or sheets covered by this seal: RC.1 - RC.10; RR.1 - RR.21

FILE NO.	ENGLISH	DESIGN TEAM **Harris/Pohlen/McDonald**	**Pottawattamie** COUNTY	PROJECT NUMBER **IMX-029-4(148)62--02-78**	SHEET NUMBER **RC.1**	

2:05:41 PM 5/11/2026 bmcdona pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Roadside\78029148_Signature.dgn

ESTIMATED PROJECT QUANTITIES AND REFERENCE NOTES

Item no.	Item Code	Item	Unit	Quantities Estimated Roadside Items	Estimate Reference Notes
1	2601-2634100	MULCHING	ACRE	8.6	Perform mulching according to Article 2601.03, E, 2, of the Standard Specifications. Anchor mulch into the soil using mulch anchoring equipment with a minimum of two passes. Item is included for areas requiring reshaping and seedbed preparation except where slope protection has been applied. Use mulch that is Certified Noxious Weed Seed Free Mulch as certified by the Iowa Crop Improvement Association or adjacent states Crop Improvement Associations. Mulch Rate: 1 1/2 tons of dry cereal straw or native grass straw per acre.
2	2601-2636015	NATIVE GRASS SEEDING	ACRE	6.6	Refer to pages RR.12 - RR.21 for seeding locations. Seeding and seed bed preparation shall be as described in Section 2601.03, C, 5 of the Standard Specifications. Seed all areas outside eight feet adjacent to outside shoulder along mainline, side roads, and infield areas at interchanges with "Native Grass Seeding". Supply all seed for "Native Grass Seeding" in accordance with Table 2601.03-5 of the Standard Specifications. Apply all forb seed through the native grass drill wildflower or small seed box. Do not mix and apply Forb seed with the native grass seed. Apply cover crop through the cool season or through cover crop seed box. Do not mix and apply cover crop seed with the native grass seed. Remove seed remaining in the drill at the end of each day. At the completion of all seeding, remove remaining seed from the drill by vacuum or other means. Hand broadcast remaining seed on the project. The Engineer will review the limits with the Contractor prior to seeding.
3	2601-2636060	SALT TOLERANT SEEDING	ACRE	2	
4	2601-2642100	STABILIZING CROP - SEEDING AND FERTILIZING	ACRE	6.6	Item is included for disturbed areas. Seed and fertilize all disturbed areas according to Article 2601.03, C, 1, of the Standard Specifications. If permanent seeding cannot be placed due to the restrictive planting dates, stabilizing crop will need to be placed on all disturbed areas as temporary erosion control. When stabilizing crop must be used, place immediately following completions of finished grading. Reseeding of these areas will be required at contractors expense if damage occurs due to contractors negligence during the contract period.
5	2602-0000150	STABILIZED CONSTRUCTION ENTRANCE, EC-303	LF	200	Refer to Standard Road Plan EC-303.

Item no.	Item Code	Item	Unit	Quantities	Estimate Reference Notes
				Estimated	
				Roadside Items	
6	2602-0000312	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 12 IN. DIA.	LF	550	Refer to Standard Road Plan EC-204. Item is included for temporary perimeter sediment control, inlet protection, and water velocity reduction on slopes or ditches at locations to be determined during construction. Verify specific locations with the Engineer prior to beginning placement. Item may be used in addition to, or as a direct replacement for "Perimeter and Slope Sediment Control Device, 20 in. dia." upon Engineer approval.
7	2602-0000320	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 20 IN. DIA.	LF	550	Refer to Tab. 100-19 for locations. Refer to Standard Road Plan EC-204. The tabulation includes estimated locations for placement of "Perimeter and Slope Sediment Control Device, 20 in. dia." to address erosion to be encountered during construction. Verify the specific locations with the Engineer prior to beginning placement. Bid item includes 25% additional quantity for field adjustments and replacements.
8	2602-0000351	REMOVAL OF PERIMETER AND SLOPE OR DITCH CHECK SEDIMENT CONTROL DEVICE	LF	1,100	
9	2602-0010010	MOBILIZATIONS, EROSION CONTROL	EACH	1	
10	2602-0010020	MOBILIZATIONS, EMERGENCY EROSION CONTROL	EACH	1	

281_01
9/28/22

SECTION 404 PERMIT AND CONDITIONS

Construct this project according to the requirements of U.S. Army Corps of Engineers Nationwide, Permit No. 3. A copy of this permit is available from the Iowa DOT website (http://www.envpermits.iowadot.gov/). The U.S. Army Corps of Engineers reserves the right to visit the site without prior notice.

281_03
11/9/23

STORM WATER BEST MANAGEMENT PRACTICES

When the following best management practices are used, they are intended to account for disturbed areas where storage volume cannot be provided: Perimeter and Slope Sediment Control Devices and Seeding.

282_03
9/28/22

TEMPORARY STREAM CROSSING, CAUSEWAY, OR EQUIPMENT PAD

Standard Road Plan EW-401 is listed in Tabulation 105-4; however, it is included for information purposes only since it is an option. No quantities associated with constructing EW-401 are included in any bid items.

111_25
10/20/26

INDEX OF TABULATIONS

Tabulation	Tabulation Title	Sheet No.
111_25	INDEX OF TABULATIONS	RC.5
105_04	STANDARD ROAD PLANS	RC.6
100_19	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE	RC.7
100_34	STORMWATER DRAINAGE BASIN	RC.8
110_12	POLLUTION PREVENTION PLAN	RC.9 - RC.10

STANDARDS

The following Standards apply to construction work on this project.

Number	Date	Title
EC-204	10-19-21	Perimeter, Slope and Ditch Check Sediment Control Devices
EC-303	10-19-21	Stabilized Construction Entrance
EC-502	04-21-15	Seeding in Rural Areas
EW-401	10-20-15	Temporary Stream Crossing, Causeway, or Equipment Pad

PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE

Possible Standards: EC-204

Station From	Station To	Side	Sediment Control Device Type	Diameter Size	Length (LF)	Remarks
381+80.00	382+23.00	Right	Perimeter and Slope	20 inch	70.00	
385+90.00	386+09.00	Right	Perimeter and Slope	20 inch	40.00	
429+40.00	429+81.00	Right	Perimeter and Slope	20 inch	60.00	
520+10.00	520+60.00	Right	Perimeter and Slope	20 inch	80.00	Inlet Protection
531+80.00	532+09.00	Right	Perimeter and Slope	20 inch	40.00	
639+10.00	639+50.00	Right	Perimeter and Slope	20 inch	60.00	Inlet Protection
671+20.00	671+40.00	Right	Perimeter and Slope	20 inch	30.00	Inlet Protection
673+60.00	674+00.00	Right	Perimeter and Slope	20 inch	50.00	Inlet Protection
Total:					**430**	

STORMWATER DRAINAGE BASIN

Refer to EC Standards and 570s Details.

Basin No.	Station From	Station To	Side	Discharge Station	Discharge Direction	Total Disturbed Area (ACRES)	Disturbed Area with Storage Provided (ACRES)	Disturbed Area without Storage Provided (ACRES)	Best Management Practice	Total Storage Volume Provided (CF)	Total Storage Volume Required (CF)	Storage Volume Met	Remarks
1	377+30.00	381+85.00	Right	377+30.00	S	0.3	0.3				1080.0	No	
2	381+85.00	400+24.00	Right	382+00.00	E	1.3	1.3				4680.0	No	
3	425+50.00	432+00.00	Right	429+48.00	E	0.5	0.5				1800.0	No	
4	515+75.00	520+08.00	Right	515+75.00	S	0.3	0.3				1080.0	No	
5	520+08.00	535+75.00	Right	520+32.00	W	1.1	1.1				3960.0	No	
6	619+77.00	678+24.00	Right	619+77.00	S	3.4	3.4				12240.0	No	

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 RESPONSIBILITES

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 perorming 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.

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1/13/23

POLLUTION PREVENTION PLAN

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 Grading in Pottawattamie County.
B. This PPP covers approximately 123.7 acres with an estimated 6.8 acres being disturbed. The portion of the PPP covered by this contract has 6.8 acres disturbed.
C. The PPP is located in an area of Albaton - Luton - Onawa and Ida - Hamburg soil associations. The estimated weighted average runoff coefficient number for this PPP after completion will be 0.44.
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 documented by fieldbook entries and amended PPP site map.
F. Runoff from this work will flow into Honey Creek to the Missouri 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.

POLLUTION PREVENTION PLAN

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
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

110_12
1/13/23

POLLUTION PREVENTION PLAN

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.

Nathan Pohlen
Signature

Nathan J. Pohlen
Print Name

LINE STYLE LEGEND OF LANDSCAPE SHEETS

LINESTYLE	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

Spray Area

Clearing & Grubbing

LINE STYLE LEGEND OF EROSION CONTROL SHEETS

LINESTYLE	Design Element
	Silt Fence
9	Perimeter and Slope Sediment Control Device (9")
12	Perimeter and Slope Sediment Control Device (12")
20	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

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
Black	(0)	Permanent Erosion Control Features
Blaze Orange	(222)	Temporary Erosion Control Features

SHADING	Design Color No.		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	0%

PATTERN LEGEND OF EROSION CONTROL SHEETS

Seeding and Fertilizing

R — Seeding and Fertilizing (Rural)

U — Seeding and Fertilizing (Urban)

N — Native Grass Seeding

ST — Salt Tolerant Seeding

WL — Wetland Grass Seeding

WF — Wildflower Seeding

SOD — Sodding

Turf Reinforcement Mat Type 1

Turf Reinforcement Mat Type 2

Turf Reinforcement Mat Type 3

Turf Reinforcement Mat Type 4

Slope Protection, Wood Excelsior Mat

Transition Mat

Rock Features, Permanent

Rock Features, Temporary

LEGEND AND SYMBOL INFORMATION SHEET

(COVERS SHEET SERIES D & R)

FILE NO.	ENGLISH	DESIGN TEAM Harris/Pohlen/McDonald	Pottawattamie COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER RR.1	

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FILE NO. 98765	ENGLISH	DESIGN TEAM Harris/Pohlen/McDonald	Pottawattamie COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER RR.2	

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145th St.

390+00

395+00

400+00

INTERSTATE 29

Basin 2
1.3 ac.

Illinois Central Railroad

0 50
FEET

FILE NO. 98765	ENGLISH	DESIGN TEAM Harris/Pohlen/McDonald	Pottawattamie COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER RR.3	

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145th St.

425+00

430+00

435+00

INTERSTATE
29

Basin 3
0.5 ac.

3

Illinois Central Railroad

0 50
FEET

FILE NO. 98765	ENGLISH	DESIGN TEAM Harris/Pohlen/McDonald	Pottawattamie COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER RR.4	

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515+00

520+00

525+00

5

INTERSTATE
29

4

Basin 4
0.3 ac.

Basin 5
1.1 ac.

Illinois Central Railroad

0 50
FEET

FILE NO. 98765	ENGLISH	DESIGN TEAM Harris/Pohlen/McDonald	Pottawattamie COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER RR.5	

7:44:14 AM 5/18/2026 bmcdona pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Roadside\78029148_Basins_SHT.dgn

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FILE NO. 98765	ENGLISH	DESIGN TEAM Harris/Pohlen/McDonald	Pottawattamie COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER RR.6	

7:44:16 AM 5/18/2026 bmcdona pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Roadside\78029148_Basins_SHT.dgn

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FILE NO. 98765	ENGLISH	DESIGN TEAM Harris/Pohlen/McDonald	Pottawattamie COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER RR.7	

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635+00

640+00

645+00

INTERSTATE 29

Basin 6
3.4 ac.

Illinois Central Railroad

0 50
FEET

FILE NO. 98765	ENGLISH	DESIGN TEAM Harris/Pohlen/McDonald	Pottawattamie COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER RR.8	

7:44:19 AM 5/18/2026 bmcdona pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Roadside\78029148_Basins_SHT.dgn

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FILE NO. 98765	ENGLISH	DESIGN TEAM Harris/Pohlen/McDonald	Pottawattamie COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER RR.9	

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660+00

665+00

670+00

INTERSTATE 29

Basin 6
3.4 ac.

Illinois Central Railroad

0 50
FEET

FILE NO. 98765	ENGLISH	DESIGN TEAM Harris/Pohlen/McDonald	Pottawattamie COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER RR.10	

7:44:23 AM 5/18/2026 bmcdona pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Roadside\78029148_Basins_SHT.dgn

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675+00

680+00

685+00

INTERSTATE
29

Basin 6
3.4 ac.

Illinois Central Railroad

0 50
FEET

FILE NO. 98765	ENGLISH	DESIGN TEAM Harris/Pohlen/McDonald	Pottawattamie COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER RR.11	

7:44:25 AM 5/18/2026 bmcdona pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Roadside\78029148_Basins_SHT.dgn

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145th St.

375+00

380+00

385+00

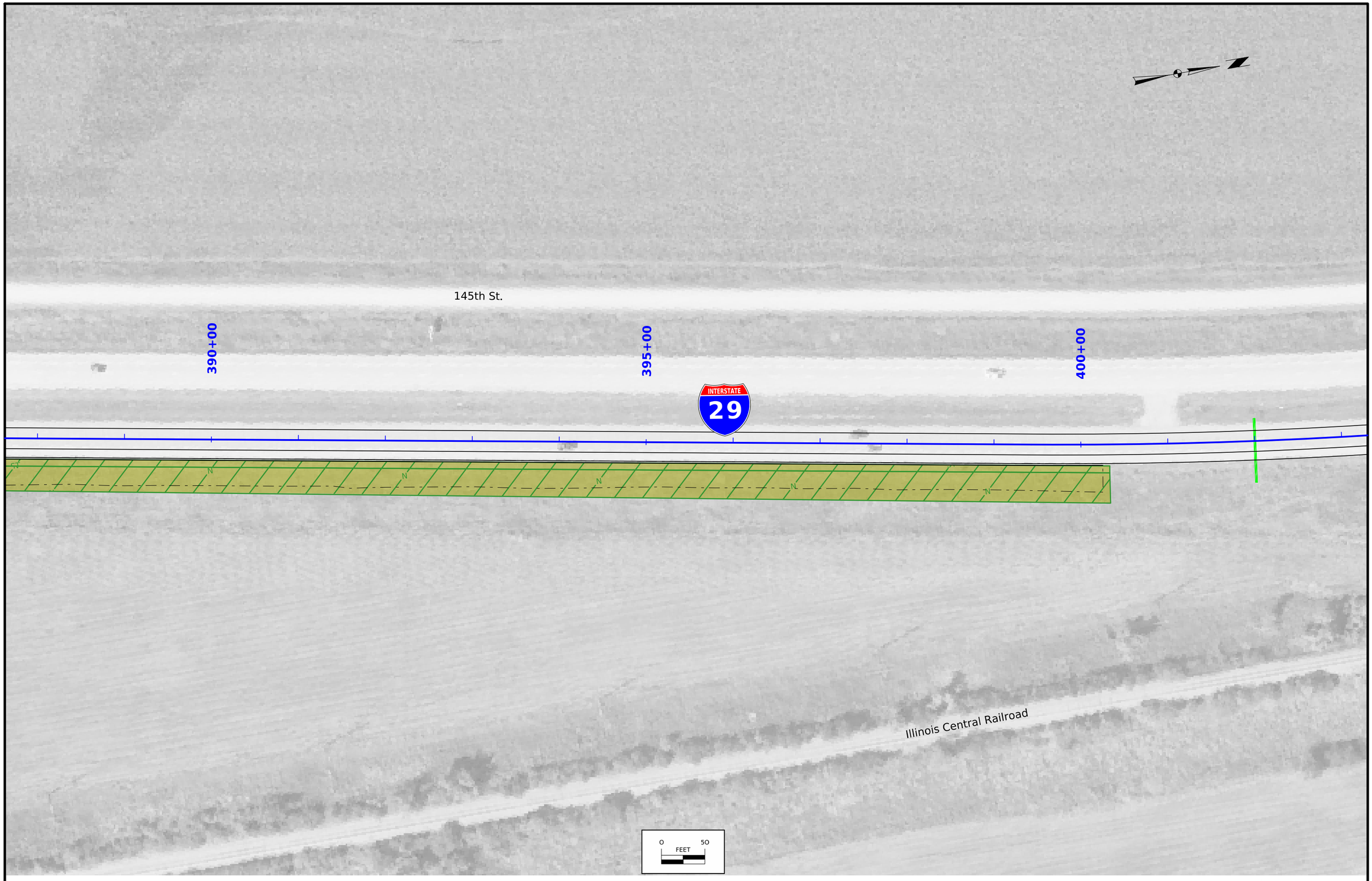
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FILE NO.	ENGLISH	DESIGN TEAM Harris/Pohlen/McDonald	Pottawattamie COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER RR.12	

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FILE NO.	ENGLISH	DESIGN TEAM Harris/Pohlen/McDonald	Pottawattamie COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER RR.13	

8:48:54 AM 5/18/2026 bmcdona pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Roadside\78029148_Siteplan_SHT.dgn

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145th St.

425+00

430+00

435+00

INTERSTATE 29

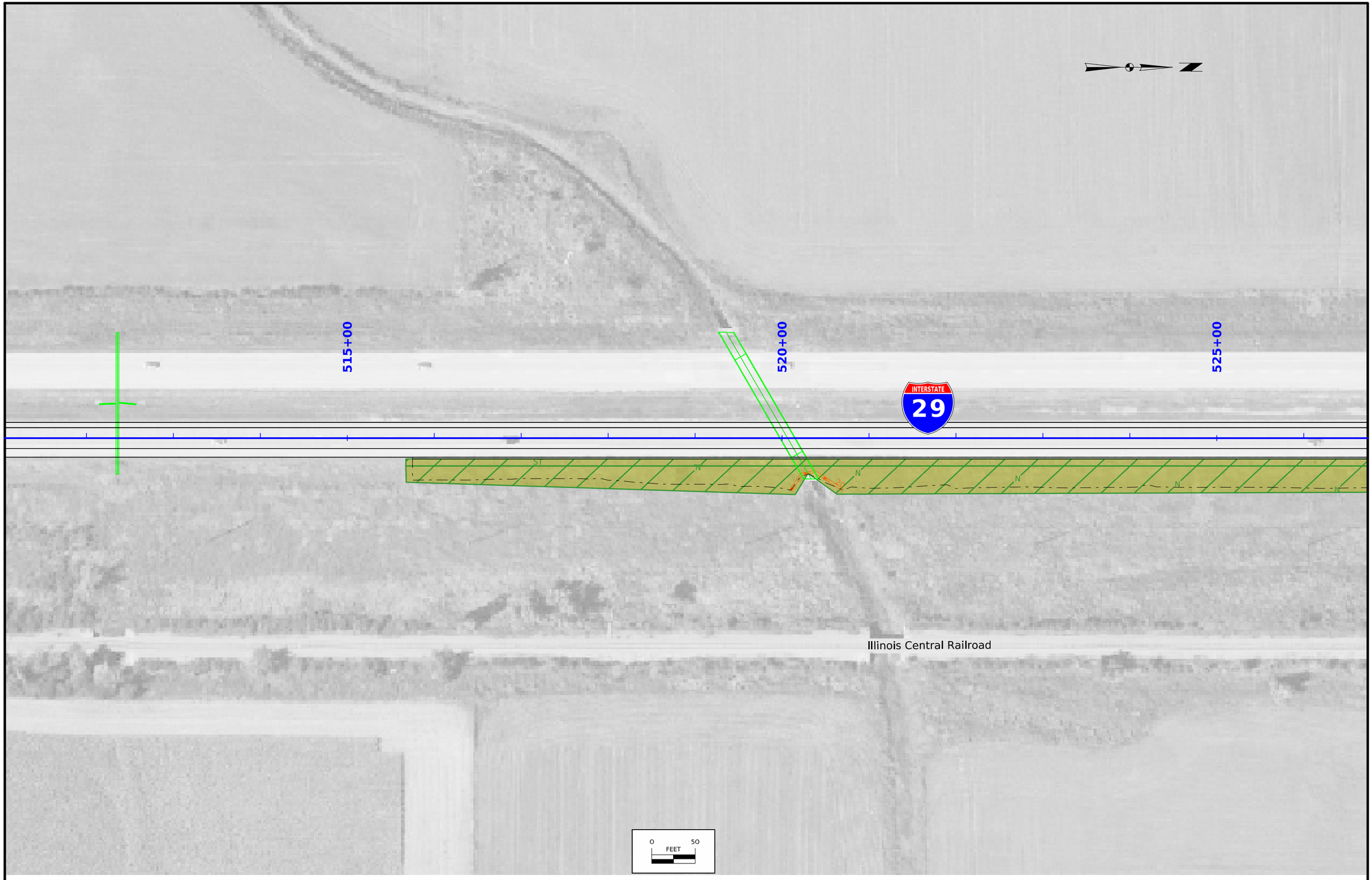
Illinois Central Railroad

0 50 FEET

FILE NO.	ENGLISH	DESIGN TEAM Harris/Pohlen/McDonald	Pottawattamie COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER RR.14	

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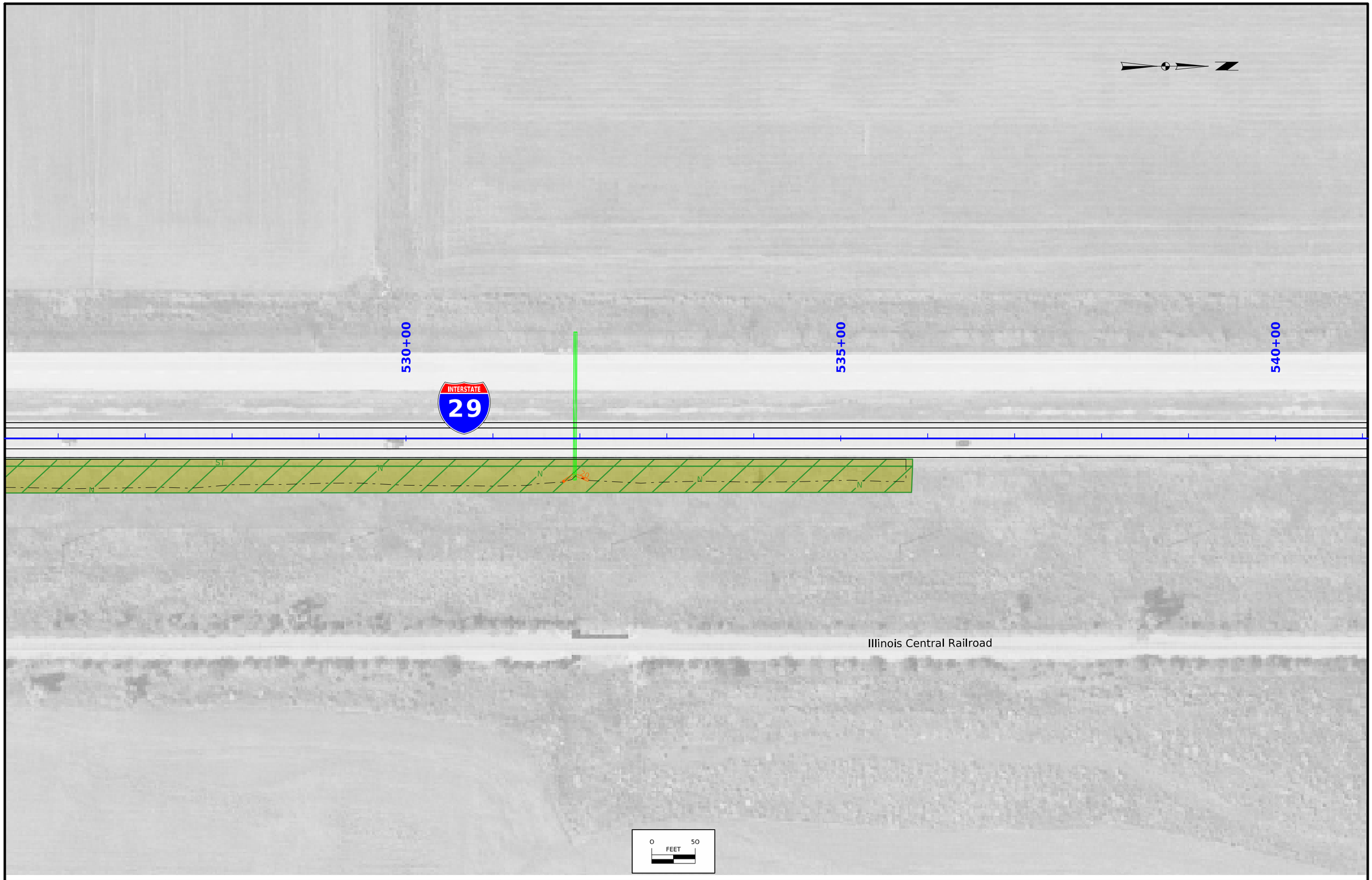
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FILE NO.	ENGLISH	DESIGN TEAM Harris/Pohlen/McDonald	Pottawattamie COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER RR.15	

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FILE NO.	ENGLISH	DESIGN TEAM Harris/Pohlen/McDonald	Pottawattamie COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER RR.16	

8:48:57 AM 5/18/2026 bmcdona pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Roadside\78029148_SitePlan_SHT.dgn

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FILE NO.	ENGLISH	DESIGN TEAM Harris/Pohlen/McDonald	Pottawattamie COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER RR.17	

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635+00

640+00

645+00

INTERSTATE 29

Illinois Central Railroad

0 50
FEET

FILE NO.	ENGLISH	DESIGN TEAM Harris/Pohlen/McDonald	Pottawattamie COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER RR.18	

8:48:59 AM 5/18/2026 bmcdona pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Roadside\78029148_Siteplan_SHT.dgn

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645+00

650+00

655+00

660+00

INTERSTATE 29

Illinois Central Railroad

0 50
FEET

FILE NO.	ENGLISH	DESIGN TEAM Harris/Pohlen/McDonald	Pottawattamie COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER RR.19	

8:49:00 AM 5/18/2026 bmcdona pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Roadside\78029148_Siteplan_SHT.dgn

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660+00

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INTERSTATE 29

Illinois Central Railroad

0 50 FEET

FILE NO.	ENGLISH	DESIGN TEAM Harris/Pohlen/McDonald	Pottawattamie COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER RR.20	

8:49:01 AM 5/18/2026 bmcdona pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Roadside\78029148_Siteplan_SHT.dgn

© 2026 Microsoft Corporation © 2026 Maxar ©CNES (2026) Distribution Airbus DS

675+00

680+00

685+00

INTERSTATE 29

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20

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Illinois Central Railroad

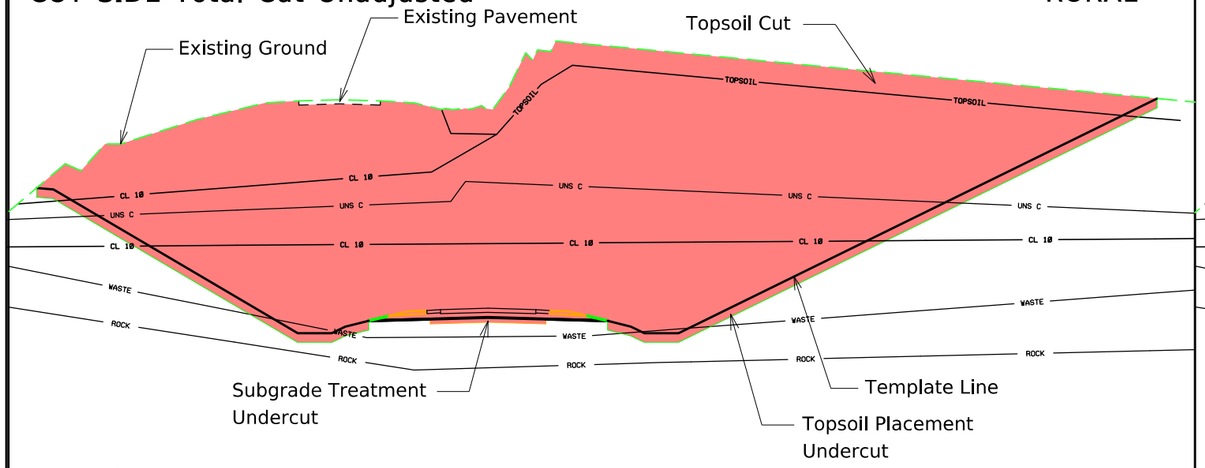
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FEET

FILE NO.	ENGLISH	DESIGN TEAM Harris/Pohlen/McDonald	Pottawattamie COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER RR.21	

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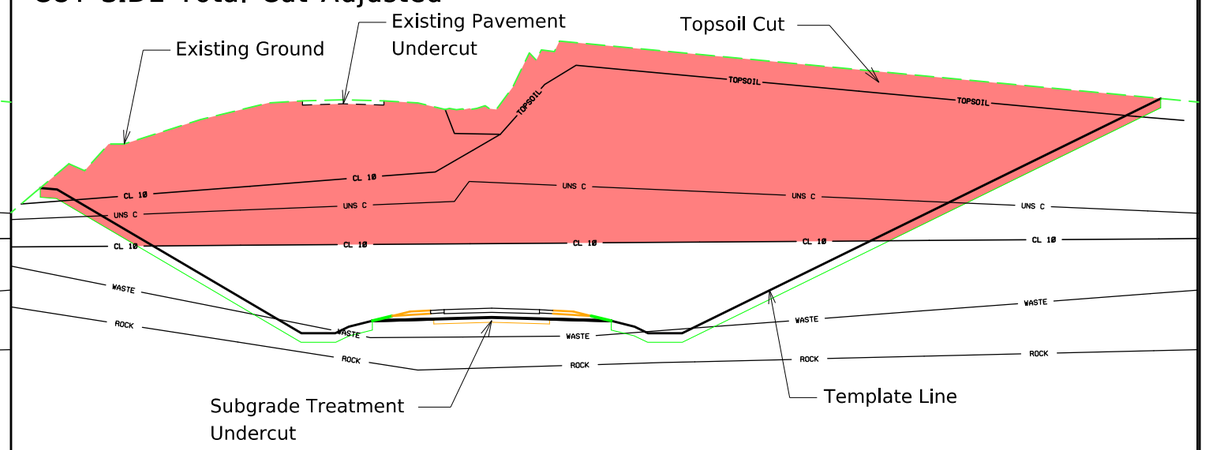
CUT SIDE Total Cut Unadjusted — RURAL



Notes:

1. "Total Cut Unadjusted" Column includes all cut values in the Station Range based on Typical, Topsoil and Subgrade Treatment needs.
2. "Total Cut Unadjusted" does not include and Existing Pavement values inside or outside the cut template as shown on cross sections.
3. Tabulated Plowing and Shaping operations are included in the "Total Cut Unadjusted" values.

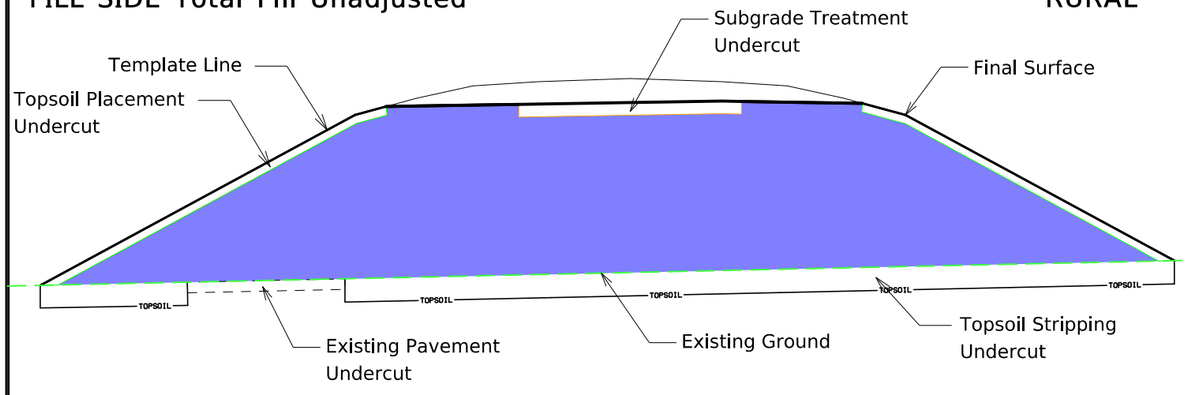
CUT SIDE Total Cut Adjusted



Notes:

1. "Total Cut Adjusted" Column includes all cut values usable as Class 10 material.
2. "Total Cut Adjusted" does not include and Existing Pavement , Existing Topsoil, or material to be wasted.

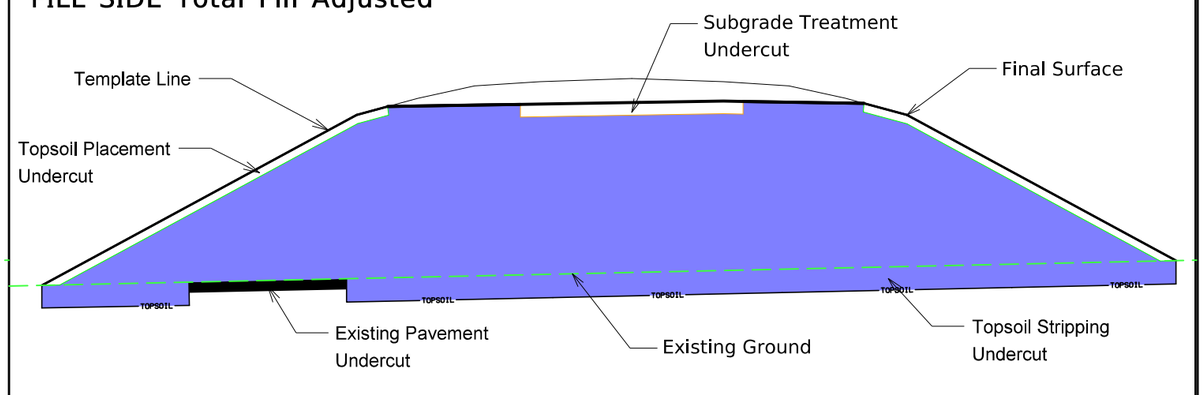
FILL SIDE Total Fill Unadjusted — RURAL



Notes:

1. "Total Fill Unadjusted" Column includes all Class 10, 12, and 13 fill. This excludes the topsoil, subgrade treatment, subbase, new pavement, and shoulder fill needs in that station range.
2. "Total Fill Unadjusted" Column does not include adjustments for additional fill from cuts such as existing pavement removed, plowing and shaping operations, entrances, dikes, or topsoil stripping.

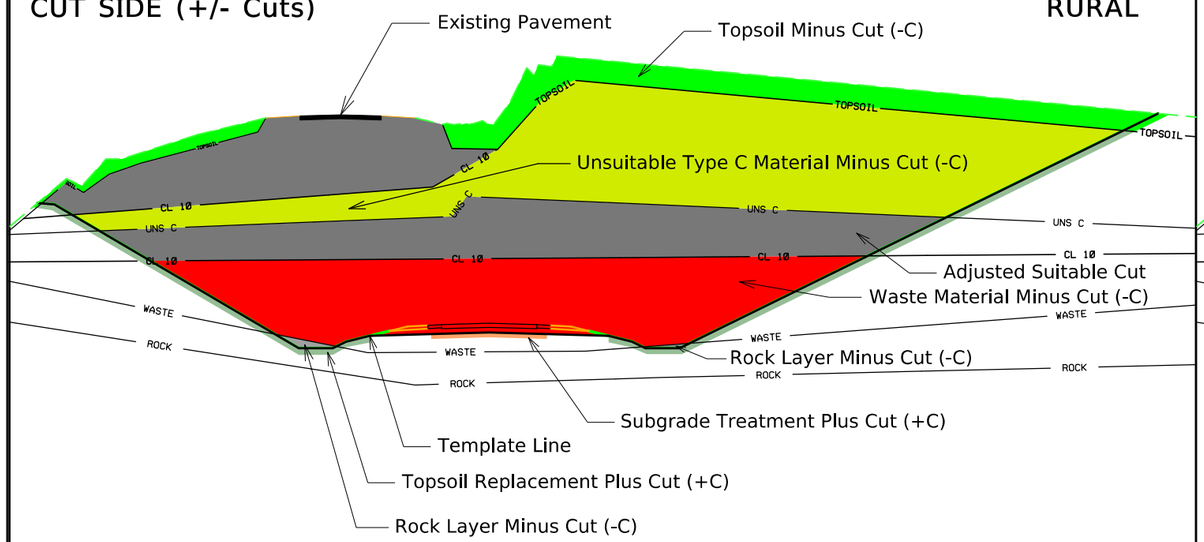
FILL SIDE Total Fill Adjusted



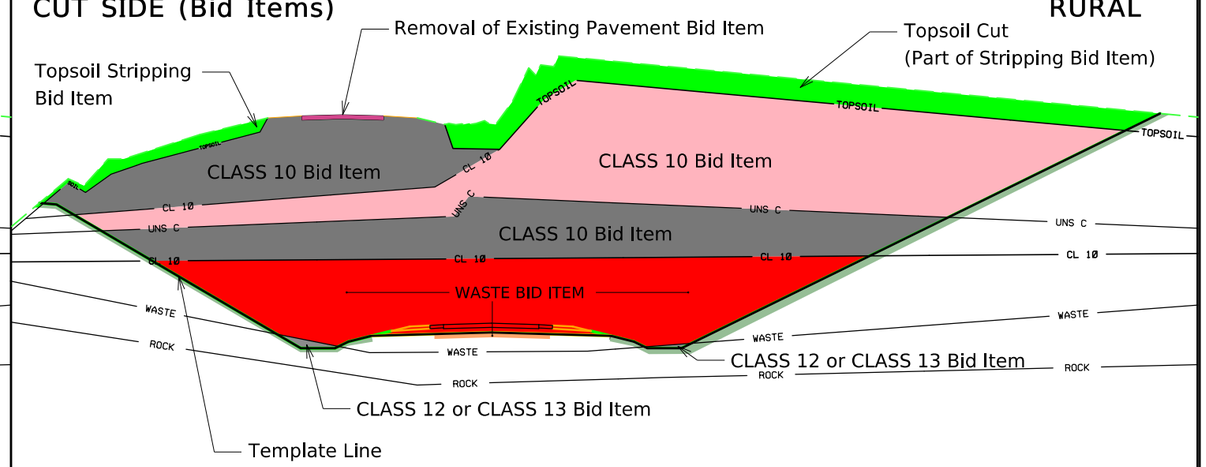
Notes:

1. "Total Fill Adjusted" Column includes all Class 10, 12, and 13 fill and adjustments for additional fill from cuts such as existing pavement, plowing and shaping operations, entrances, dikes, and topsoil stripping.
2. The available area to place unsuitable materials in the T Sheet tabulation does not include the undercut values from the topsoil stripping, existing pavement, or plowing and shaping

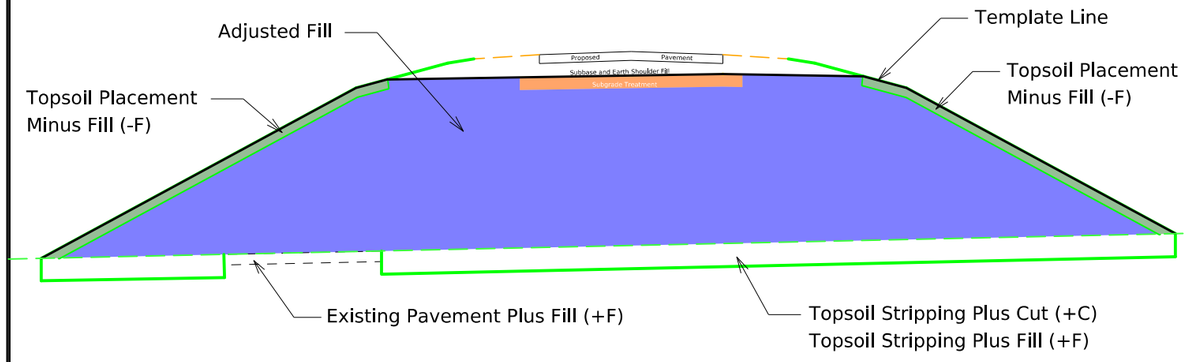
CUT SIDE (+/- Cuts) — RURAL



CUT SIDE (Bid Items) — RURAL



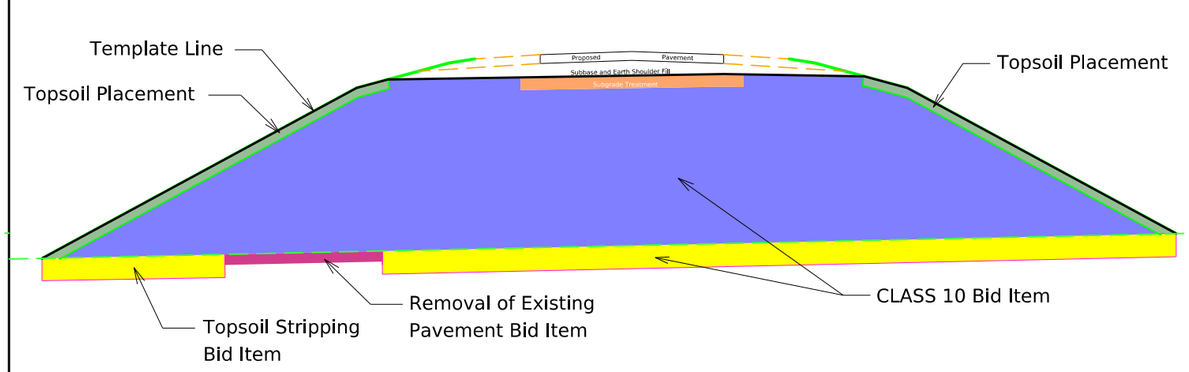
FILL SIDE (+/- Fills) — RURAL



Notes:

1. "Add Quantity +C" columns are additional cut encountered that is not Typical, Topsoil, or Subgrade Treatment Based. (Entrance, Dike, Etc.)
2. "-C" columns are either soil types or Class 10, 12, or 13 designated material that is encountered in the cut station range that is paid for by other bid items.
3. The "(SoilType) Cut" columns are soil types encountered in the cut that are paid by either Class 10, 12, or 13.
4. The "Adjusted Clas (10,12 or 13)" columns are the sum of all various soil types encountered in that station range, that are paid by Class 10, 12, or 13 bid items.
5. Refer to Standard Road Plan EW-102 for placement of unsuitable soil types.

FILL SIDE (Bid Items) — RURAL



Notes:

1. Refer to Standard Road Plan EW-102 for placement of unsuitable soil types.

FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER T.2

12:21:12 PM 7/2/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Sheet_Files\LGD_78029148Z06.dgn

Refer to Standard Road Plans EW-101 and EW-102.

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut			Fill				Checks (EW-102)		Topsoil									
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
			[2]		[4]	[5] x 1.3	[3] - [6]					[11] x 1.4	[10] - [12]									
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink									
ML029A_1																						
377+25.00	4	4	4	0	0	1	3	0	0	0	20	28	-28									
377+50.00	6	6	6	2	2	3	3	0	0	0	42	59	-59									
378+00.00	6	6	6	3	3	5	2	0	0	0	45	63	-63									
378+50.00	7	7	7	2	2	3	4	0	0	0	48	67	-67									
379+00.00	11	11	11	0	0	1	11	0	0	0	50	70	-70									
379+50.00	20	20	20	0	0	0	20	0	0	0	50	71	-71									
380+00.00	36	36	36	0	0	0	36	0	0	0	51	71	-71									
380+50.00	47	47	47	0	0	0	47	0	0	0	51	71	-71									
381+00.00	51	51	51	0	0	0	51	0	0	0	53	74	-74									
381+50.00	39	39	39	0	0	0	39	0	0	0	39	55	-55									
382+00.00	35	35	35	0	0	0	35	0	0	0	40	56	-56									
382+50.00	48	48	48	0	0	0	48	0	0	0	52	73	-73									
383+00.00	44	44	44	0	0	0	45	0	0	0	52	72	-72									
383+50.00	37	37	37	0	0	0	37	0	0	0	53	74	-74									
384+00.00	37	37	37	0	0	0	37	0	0	0	51	71	-71									
384+50.00	42	42	42	0	0	0	42	0	0	0	49	68	-68									
385+00.00	45	45	45	0	0	0	45	0	0	0	47	65	-65									
385+50.00	39	39	39	0	0	0	39	0	0	0	38	54	-54									
386+00.00	40	40	40	0	0	0	40	0	0	0	38	54	-54									
386+50.00	45	45	45	0	0	0	45	0	0	0	46	64	-64									
387+00.00	40	40	40	0	0	0	40	0	0	0	46	65	-65									
387+50.00	32	32	32	0	0	0	32	0	0	0	46	64	-64									
388+00.00	31	31	31	0	0	0	32	0	0	0	45	63	-63									
388+50.00	34	34	34	0	0	0	34	0	0	0	45	63	-63									
389+00.00	33	33	33	0	0	0	33	0	0	0	46	64	-64									
389+50.00	34	34	34	0	0	0	34	0	0	0	45	63	-63									
390+00.00	36	36	36	0	0	0	36	0	0	0	45	63	-63									
390+50.00	36	36	36	0	0	0	36	0	0	0	45	63	-63									
391+00.00	32	32	32	0	0	0	32	0	0	0	46	64	-64									
391+50.00	32	32	32	0	0	0	32	0	0	0	46	65	-65									
392+00.00	35	35	35	0	0	0	35	0	0	0	45	64	-64									
392+50.00	38	38	38	0	0	0	38	0	0	0	44	62	-62									
393+00.00	37	37	37	0	0	0	38	0	0	0	45	63	-63									
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395+50.00	29	29	29	0	0	0	29	0	0	0	43	60	-60									
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398+00.00	29	29	29	0	0	0	29	0	0	0	44	62	-62									
398+50.00	30	30	30	0	0	0	30	0	0	0	44	61	-61									
399+00.00	32	32	32	0	0	0	32	0	0	0	44	62	-62									
399+50.00	27	27	27	0	0	0	27	0	0	0	46	64	-64									
400+00.00	11	11	11	0	0	0	11	0	0	0	24	33	-33									
400+25.00																						
ML029A_1																						
Totals:	1,480	1,480	1,480	9	9	12	1,471	0	0	0	2,098	2,939	-2,939									

FILE NO.		DESIGN TEAM Flattery\Bell\Schinstock\Schmitz	Pottawattamie COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER T.3	

Refer to Standard Road Plans EW-101 and EW-102.

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

	Cut			Fill				Checks (EW-102)		Topsoil										
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
			[2]		[4]	[5] x 1.3	[3] - [6]					[11] x 1.4	[10] - [12]									
Station	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink									
ML029A_2																						
425+50.00	35	35	35	0	0	0	35	0	0	0	48	67	-67									
426+00.00	33	33	33	0	0	0	33	0	0	0	49	69	-69									
426+50.00	30	30	30	0	0	0	30	0	0	0	50	70	-70									
427+00.00	29	29	29	0	0	0	29	0	0	0	52	72	-72									
427+50.00	35	35	35	0	0	0	35	0	0	0	53	74	-74									
428+00.00	27	27	27	1	1	1	27	0	0	0	53	74	-74									
428+50.00	20	20	20	1	1	1	19	0	0	0	52	73	-73									
429+00.00	24	24	24	0	0	0	24	0	0	0	44	62	-62									
429+50.00	25	25	25	0	0	0	25	0	0	0	43	60	-60									
430+00.00	26	26	26	1	1	1	25	0	0	0	51	71	-71									
430+50.00	28	28	28	1	1	1	27	0	0	0	55	76	-76									
431+00.00	30	30	30	0	0	0	30	0	0	0	54	75	-75									
431+50.00	33	33	33	0	0	0	33	0	0	0	49	68	-68									
432+00.00																						
ML029A_2																						
Totals:	375	375	375	3	3	4	372	0	0	0	652	913	-913									

FILE NO.		DESIGN TEAM Flattery\Bell\Schinstock\Schmitz	Pottawattamie COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER T.4	

Refer to Standard Road Plans EW-101 and EW-102.

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut			Fill				Checks (EW-102)		Topsoil									
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
			[2]		[4]	[5] x 1.3	[3] - [6]					[11] x 1.4	[10] - [12]									
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink									
ML029B																						
515+75.00	8	8	8	0	0	0	8	0	0	0	19	26	-26									
516+00.00	15	15	15	0	0	1	14	0	0	0	37	52	-52									
516+50.00	20	20	20	0	0	1	20	0	0	0	36	50	-50									
517+00.00	20	20	20	0	0	0	20	0	0	0	35	49	-49									
517+50.00	25	25	25	0	0	0	25	0	0	0	36	51	-51									
518+00.00	29	29	29	0	0	0	29	0	0	0	41	57	-57									
518+50.00	27	27	27	0	0	0	27	0	0	0	44	62	-62									
519+00.00	35	35	35	0	0	0	35	0	0	0	47	66	-66									
519+50.00	45	45	45	0	0	0	45	0	0	0	50	71	-71									
520+00.00	50	50	50	0	0	0	50	0	0	0	47	66	-66									
520+50.00	29	29	29	10	10	13	17	0	0	0	47	66	-66									
521+00.00	16	16	16	10	10	13	3	0	0	0	51	71	-71									
521+50.00	18	18	18	0	0	0	18	0	0	0	51	71	-71									
522+00.00	22	22	22	0	0	0	22	0	0	0	51	72	-72									
522+50.00	29	29	29	0	0	0	29	0	0	0	50	71	-71									
523+00.00	28	28	28	0	0	0	28	0	0	0	51	71	-71									
523+50.00	31	31	31	0	0	0	31	0	0	0	51	71	-71									
524+00.00	36	36	36	0	0	0	36	0	0	0	50	70	-70									
524+50.00	43	43	43	0	0	0	43	0	0	0	50	70	-70									
525+00.00	43	43	43	0	0	0	43	0	0	0	50	70	-70									
525+50.00	36	36	36	0	0	0	36	0	0	0	51	71	-71									
526+00.00	35	35	35	0	0	0	35	0	0	0	51	72	-72									
526+50.00	35	35	35	0	0	0	35	0	0	0	51	71	-71									
527+00.00	32	32	32	0	0	0	32	0	0	0	51	71	-71									
527+50.00	33	33	33	0	0	0	34	0	0	0	48	68	-68									
528+00.00	41	41	41	0	0	0	41	0	0	0	45	63	-63									
528+50.00	42	42	42	0	0	0	42	0	0	0	44	62	-62									
529+00.00	36	36	36	0	0	0	36	0	0	0	43	60	-60									
529+50.00	34	34	34	0	0	0	35	0	0	0	44	62	-62									
530+00.00	29	29	29	0	0	0	29	0	0	0	47	65	-65									
530+50.00	18	18	18	1	1	1	17	0	0	0	47	67	-67									
531+00.00	22	22	22	1	1	1	22	0	0	0	46	64	-64									
531+50.00	31	31	31	0	0	0	31	0	0	0	38	54	-54									
532+00.00	29	29	29	0	0	0	29	0	0	0	37	52	-52									
532+50.00	20	20	20	2	2	2	18	0	0	0	41	57	-57									
533+00.00	13	13	13	3	3	4	9	0	0	0	40	56	-56									
533+50.00	13	13	13	3	3	3	10	0	0	0	40	56	-56									
534+00.00	12	12	12	4	4	6	6	0	0	0	40	56	-56									
534+50.00	13	13	13	4	4	5	9	0	0	0	39	54	-54									
535+00.00	13	13	13	3	3	4	9	0	0	0	38	54	-54									
535+50.00	5	5	5	2	2	3	3	0	0	0	20	28	-28									
535+75.00																						
ML029B																						
Totals:	1,109	1,109	1,109	42	42	55	1,057	0	0	0	1,795	2,514	-2,514									

FILE NO.		DESIGN TEAM Flattery\Bell\Schinstock\Schmitz	Pottawattamie COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER T.5	

Refer to Standard Road Plans EW-101 and EW-102.

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut			Fill				Checks (EW-102)		Topsoil									
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
			[2]		[4]	[5] x 1.3	[3] - [6]					[11] x 1.4	[10] - [12]									
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink									
ML029C																						
619+75.00	5	5	5	1	1	1	4	0	0	0	21	29	-29									
620+00.00	12	12	12	0	0	0	12	0	0	0	41	57	-57									
620+50.00	14	14	14	0	0	1	13	0	0	0	40	56	-56									
621+00.00	12	12	12	3	3	5	8	0	0	0	40	56	-56									
621+50.00	11	11	11	10	10	13	-2	0	0	0	42	59	-59									
622+00.00	9	9	9	16	16	21	-13	0	0	0	43	61	-61									
622+50.00	8	8	8	22	22	29	-21	0	0	0	43	61	-61									
623+00.00	8	8	8	26	26	34	-26	0	0	0	43	61	-61									
623+50.00	7	7	7	28	28	37	-30	0	0	0	42	59	-59									
624+00.00	7	7	7	27	27	35	-29	0	0	0	41	57	-57									
624+50.00	8	8	8	22	22	28	-21	0	0	0	40	56	-56									
625+00.00	8	8	8	21	21	28	-19	0	0	0	40	56	-56									
625+50.00	9	9	9	20	20	26	-18	0	0	0	41	58	-58									
626+00.00	9	9	9	18	18	24	-15	0	0	0	43	60	-60									
626+50.00	9	9	9	18	18	24	-15	0	0	0	43	60	-60									
627+00.00	8	8	8	19	19	25	-17	0	0	0	43	60	-60									
627+50.00	8	8	8	19	19	25	-17	0	0	0	43	60	-60									
628+00.00	8	8	8	19	19	24	-17	0	0	0	43	60	-60									
628+50.00	6	6	6	23	23	31	-25	0	0	0	44	62	-62									
629+00.00	6	6	6	27	27	35	-29	0	0	0	45	64	-64									
629+50.00	6	6	6	29	29	37	-31	0	0	0	46	65	-65									
630+00.00	6	6	6	19	19	24	-18	0	0	0	44	62	-62									
630+50.00	8	8	8	4	4	5	3	0	0	0	42	59	-59									
631+00.00	9	9	9	0	0	0	9	0	0	0	40	56	-56									
631+50.00	16	16	16	0	0	0	16	0	0	0	39	55	-55									
632+00.00	17	17	17	0	0	0	17	0	0	0	39	55	-55									
632+50.00	9	9	9	0	0	1	8	0	0	0	40	56	-56									
633+00.00	7	7	7	1	1	1	6	0	0	0	40	56	-56									
633+50.00	9	9	9	1	1	1	8	0	0	0	40	56	-56									
634+00.00	13	13	13	0	0	0	13	0	0	0	40	56	-56									
634+50.00	19	19	19	0	0	0	19	0	0	0	39	55	-55									
635+00.00	20	20	20	0	0	0	20	0	0	0	38	54	-54									
635+50.00	16	16	16	0	0	0	16	0	0	0	39	54	-54									
636+00.00	14	14	14	0	0	0	14	0	0	0	40	56	-56									
636+50.00	14	14	14	0	0	0	14	0	0	0	40	56	-56									
637+00.00	17	17	17	0	0	0	17	0	0	0	39	55	-55									
637+50.00	16	16	16	0	0	0	16	0	0	0	38	54	-54									
638+00.00	14	14	14	0	0	0	14	0	0	0	37	52	-52									
638+50.00	14	14	14	1	1	2	12	0	0	0	37	52	-52									
639+00.00	9	9	9	6	6	8	1	0	0	0	38	54	-54									
639+50.00	7	7	7	7	7	9	-3	0	0	0	38	53	-53									
640+00.00	9	9	9	2	2	3	6	0	0	0	38	53	-53									
640+50.00	12	12	12	1	1	1	11	0	0	0	38	53	-53									
641+00.00	14	14	14	1	1	2	13	0	0	0	39	54	-54									
641+50.00	13	13	13	1	1	2	12	0	0	0	39	55	-55									
642+00.00	13	13	13	1	1	1	12	0	0	0	39	54	-54									
642+50.00	12	12	12	1	1	2	11	0	0	0	38	53	-53									
643+00.00	13	13	13	1	1	1	11	0	0	0	38	54	-54									
643+50.00	17	17	17	0	0	0	17	0	0	0	39	55	-55									
644+00.00	18	18	18	0	0	0	18	0	0	0	40	56	-56									
644+50.00	14	14	14	0	0	1	13	0	0	0	40	56	-56									
645+00.00	12	12	12	0	0	1	12	0	0	0	40	56	-56									
645+50.00	15	15	15	0	0	0	15	0	0	0	40	56	-56									
646+00.00	15	15	15	2	2	3	12	0	0	0	39	55	-55									
646+50.00	19	19	19	2	2	3	17	0	0	0	37	53	-53									
647+00.00	22	22	22	0	0	0	22	0	0	0	37	52	-52									
647+50.00	19	19	19	0	0	0	19	0	0	0	39	54	-54									
648+00.00	18	18	18	0	0	0	18	0	0	0	40	55	-55									
648+50.00	17	17	17	0	0	0	17	0	0	0	40	56	-56									
649+00.00	14	14	14	4	4	6	9	0	0	0	41	57	-57									
649+50.00	11	11	11	4	4	6	6	0	0	0	40	57	-57									
650+00.00	11	11	11	1	1	2	9	0	0	0	40	57	-57									
650+50.00	11	11	11	2	2	3	8	0	0	0	41	58	-58									
651+00.00	16	16	16	1	1	2	14	0	0	0	42	58	-58									
651+50.00	19	19	19	0	0	0	20	0	0	0	43	60	-60									
652+00.00	21	21	21	0	0	0	21	0	0	0	46	64	-64									
652+50.00	21	21	21	0	0	0	21	0	0	0	46	65	-65									
653+00.00																						
Subtotals:	826	826	826	436	436	570	257	0	0	0	2,693	3,774	-3,774									

FILE NO.		DESIGN TEAM Flattery\Bell\Schinstock\Schmitz	Pottawattamie COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER T.6	

Refer to Standard Road Plans EW-101 and EW-102.

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut			Fill				Checks (EW-102)		Topsoil									
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
			[2]		[4]	[5] x 1.3	[3] - [6]					[11] x 1.4	[10] - [12]									
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink									
653+00.00	24	24	24	0	0	0	24	0	0	0	45	62	-62									
653+50.00	30	30	30	0	0	0	31	0	0	0	45	63	-63									
654+00.00	39	39	39	0	0	0	39	0	0	0	46	65	-65									
654+50.00	41	41	41	0	0	0	41	0	0	0	47	65	-65									
655+00.00	38	38	38	0	0	0	38	0	0	0	47	66	-66									
655+50.00	35	35	35	0	0	0	35	0	0	0	47	66	-66									
656+00.00	29	29	29	0	0	0	29	0	0	0	47	66	-66									
656+50.00	32	32	32	0	0	0	33	0	0	0	47	66	-66									
657+00.00	36	36	36	0	0	0	36	0	0	0	48	67	-67									
657+50.00	32	32	32	0	0	0	32	0	0	0	47	67	-67									
658+00.00	36	36	36	0	0	0	36	0	0	0	47	66	-66									
658+50.00	37	37	37	0	0	0	37	0	0	0	47	66	-66									
659+00.00	39	39	39	0	0	0	39	0	0	0	47	66	-66									
659+50.00	42	42	42	0	0	0	42	0	0	0	46	65	-65									
660+00.00	44	44	44	0	0	0	44	0	0	0	46	65	-65									
660+50.00	41	41	41	0	0	0	41	0	0	0	46	65	-65									
661+00.00	37	37	37	0	0	0	37	0	0	0	46	65	-65									
661+50.00	40	40	40	0	0	0	40	0	0	0	45	64	-64									
662+00.00	40	40	40	0	0	0	40	0	0	0	44	61	-61									
662+50.00	38	38	38	0	0	0	38	0	0	0	41	58	-58									
663+00.00	31	31	31	0	0	0	31	0	0	0	39	55	-55									
663+50.00	30	30	30	0	0	0	30	0	0	0	36	51	-51									
664+00.00	35	35	35	0	0	0	35	0	0	0	33	47	-47									
664+50.00	32	32	32	0	0	0	32	0	0	0	31	44	-44									
665+00.00	28	28	28	0	0	0	28	0	0	0	31	43	-43									
665+50.00	30	30	30	0	0	0	31	0	0	0	31	43	-43									
666+00.00	33	33	33	0	0	0	33	0	0	0	31	44	-44									
666+50.00	36	36	36	0	0	0	36	0	0	0	32	45	-45									
667+00.00	35	35	35	0	0	0	35	0	0	0	33	46	-46									
667+50.00	35	35	35	0	0	0	35	0	0	0	33	47	-47									
668+00.00	38	38	38	0	0	0	38	0	0	0	34	48	-48									
668+50.00	37	37	37	0	0	0	37	0	0	0	33	47	-47									
669+00.00	31	31	31	0	0	0	31	0	0	0	31	44	-44									
669+50.00	30	30	30	0	0	0	30	0	0	0	29	41	-41									
670+00.00	31	31	31	0	0	0	32	0	0	0	29	40	-40									
670+50.00	29	29	29	0	0	0	29	0	0	0	30	41	-41									
671+00.00	28	28	28	0	0	0	28	0	0	0	29	40	-40									
671+50.00	27	27	27	0	0	0	28	0	0	0	28	40	-40									
672+00.00	26	26	26	0	0	0	26	0	0	0	29	41	-41									
672+50.00	23	23	23	0	0	0	23	0	0	0	30	43	-43									
673+00.00	25	25	25	0	0	0	25	0	0	0	33	46	-46									
673+50.00	30	30	30	0	0	0	30	0	0	0	34	48	-48									
674+00.00	29	29	29	0	0	0	30	0	0	0	33	46	-46									
674+50.00	29	29	29	0	0	0	29	0	0	0	30	42	-42									
675+00.00	30	30	30	0	0	0	30	0	0	0	29	41	-41									
675+50.00	29	29	29	0	0	0	29	0	0	0	31	43	-43									
676+00.00	26	26	26	0	0	0	26	0	0	0	32	44	-44									
676+50.00	24	24	24	0	0	0	25	0	0	0	31	43	-43									
677+00.00	23	23	23	0	0	0	23	0	0	0	30	42	-42									
677+50.00	22	22	22	0	0	0	22	0	0	0	29	41	-41									
678+00.00	11	11	11	0	0	0	11	0	0	0	14	20	-20									
678+25.00																						
ML029C																						
Totals:	2,457	2,457	2,457	437	437	571	1,890	0	0	0	4,575	6,410	-6,410									

FILE NO.		DESIGN TEAM Flattery\Bell\Schinstock\Schmitz	Pottawattamie COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER T.7	

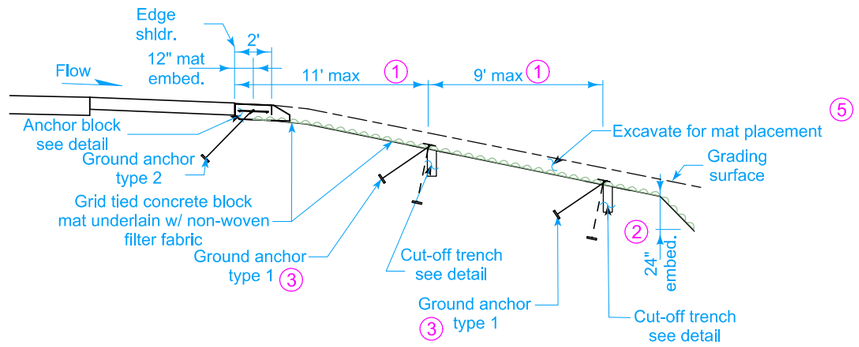
Refer to Standard Road Plans EW-101 and EW-102.

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

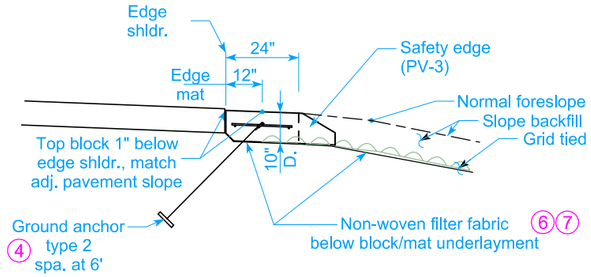
107-28
04-21-15

Station	Cut			Fill				Checks (EW-102)		Topsoil										
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
			[2]		[4]	[5] x 1.3	[3] - [6]					[11] x 1.4	[10] - [12]									
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink									
Summary:																						
ML029A_1	1,480	1,480	1,480	9	9	12	1,471	0	0	0	2,098	2,939	-2,939									
ML029A_2	375	375	375	3	3	4	372	0	0	0	652	913	-913									
ML029B	1,109	1,109	1,109	42	42	55	1,057	0	0	0	1,795	2,514	-2,514									
ML029C	2,457	2,457	2,457	437	437	571	1,890	0	0	0	4,575	6,410	-6,410									
Project Totals:	5,421	5,421	5,421	491	491	642	4,790	0	0	0	9,120	12,776	-12,776									
BID ITEMS:																						
				EXCAVATION, CLASS 13, ROADWAY AND BORROW																		
						642	**CY**															
						[6]																
				EXCAVATION, CLASS 13, WASTE																		
						4,790	**CY**															
						[7]																
				TOPSOIL, FURNISH AND SPREAD																		
				12,776 ÷ 1.4		**9,126**	**CY**															
						[13] ÷ 1.4																

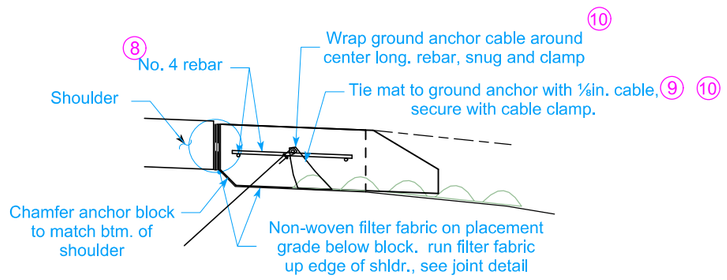
FILE NO.		DESIGN TEAM **Flattery\Bell\Schinstock\Schmitz**	**Pottawattamie** COUNTY	PROJECT NUMBER **IMX-029-4(148)62--02-78**	SHEET NUMBER **T.8**	



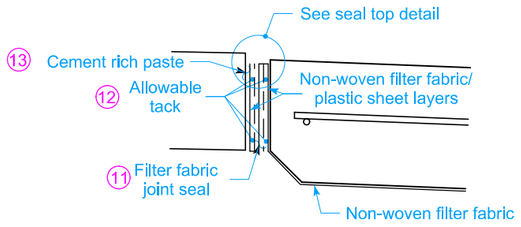
FORESLOPE LINING TYPICAL SECTION



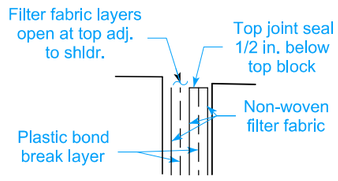
ANCHOR BLOCK TYPICAL SECTION



ANCHOR BLOCK DETAIL



JOINT DETAIL



JOINT SEAL TOP DETAIL

Measurement will be in square yards of slope covered, as measured along the slope.

Payment includes all materials, tools, and labor required to construct "Foreslope Erosion Countermeasure" as detailed.

(1) Dimension along grade, adjust to place anchor between blocks

(2) Embed. two feet of mat on all exposed edges at 1:1 slope. backfill trench with well compacted excavated material.

(3) Type 1 ground anchor, spa. at 3'. adjacent to cut-off trench install at 45 deg. to horz., otherwise install perp. to slope or at angle per mat manuf. recommmendation. Mat shall be fastened to anchor with a steel top bearing 'X' plate, 12 inch cross, 0.11 inch thick steel. Plate shall be Zinc Plastisol coated or approved equal.

(4) Type 2 anchor, install at 45 deg. to horz. as shown.

(5) Excavate 10 in. for mat placement as required. place 10 in. backfill over mat using excavated material or topsoil if required per regetation requirements.

(6) Non-woven filter fabric on placement grade below block and mat underlayment. fabric shall be continuous over placement width. underlayment seams shall be overlapped 2 foot minimum. underlayment shall be continuous across mat seams, with edge of overlap extending 2 feet minimum from edge of mat seam, otherwise a 4 foot wide section of underlayment shall be placed centered on the seam.

(7) If pins are used to secure form for anchor block, pins shall be placed through holes between geogrid fibers. patch hole through underlayment with a portland cement mortar mix or approved equal.

(8) Three (3) no. 4 reinforcing bar longitudinal along block. spa. as shown, place at midpoint of depth. place no. 4 bar transverse spa. at 36 in., 2 in. clr. all reinforcing bars epoxy coated.

(9) Run cable through and diagonally under geogrid for one block width, loop up and over rebar. wrap cable in sperical manner, under geogrid then over rebar, along length of anchor block, amplitude approx. 1 ft. }. snug cable to minimize loose cable without displacing rebar. anchor cable ends with cable clamp.

(10) Cable clamp does not need to develop rated cable strength. intent of clamp is to hold cable snug in advance of concrete placement.

(11) Fold filter fabric in serpintine manner as shown, three layers thick. fabric shall be folded to create layers. place plastic bond break layer between fabric layers. layers adj. to shldr. open at top.

(12) Allowable tack (adhesive) to facilitate placement between outer fabric layers and plastic. allowable duct tape (or equal) strip placed at top to hold outer layer against shldr. after application of paste.

(13) In advance of block concrete placement spread thin layer of cement rich paste, or approved adhesive, full face of shldr. press joint seal sandwich into paste/adhesive.

MODIFIED

ROAD DESIGN DETAIL

REVISION	
NEW	10-19-21

570-22M

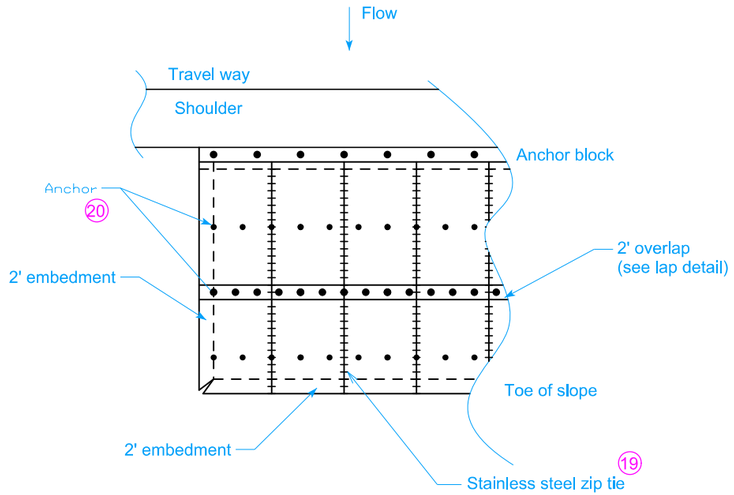
SHEET 1 of 2

REVISIONS: Type 1 ground anchor spacing changed from 4' to 3'.

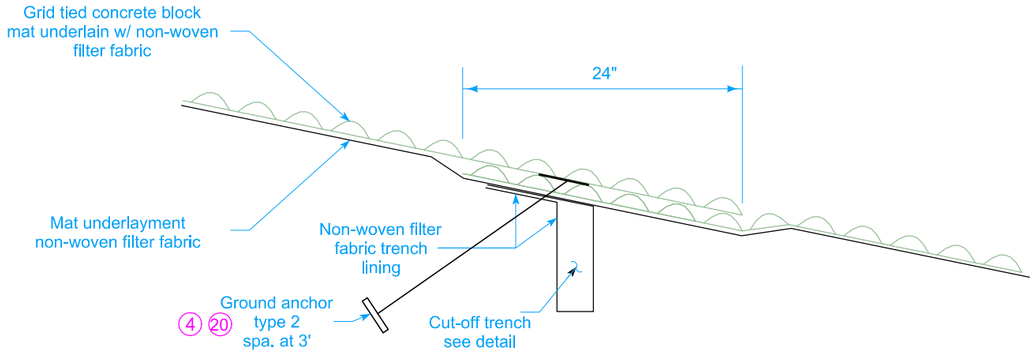
FORESLOPE EROSION COUNTERMEASURE REVETMENT DETAILS (MAJOR OVERTOPPING)

FILE NO.	ENGLISH	DESIGN TEAM **Flattery/Bell/Schinstock/Schmitz**	**POTTAWATTAMIE** COUNTY	PROJECT NUMBER **IMX-029-4(148)62--02-78**	SHEET NUMBER **U.1**

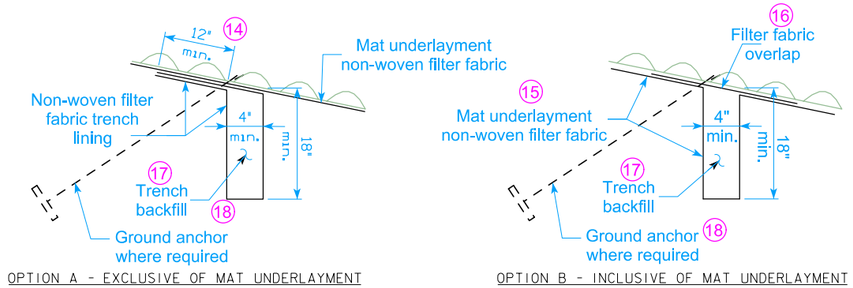
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PLAN



LAP DETAIL



CUT-OFF TRENCH DETAIL

(14) Fold trench lining fabric with termination toward direction of flow, 12 in. lap min. lap section shall not be pinned/staked to underlying ground except within 3 in. of edge trench.

(15) Embed mat underlayment fabric into trench, 18 in. min. depth as shown. mat underlayment may be continuous around trench sides and btm. or only sides when located at underlayment seam.

(16) Non-woven filter fabric overlap, 24 in. min. width, place over mat underlayment, center on trench.

(17) Backfill trench with well compacted excavated material.

(18) Where trench is installed adjacent to ground anchor, place anchor through mat at edge of first block upstream of edge trench.

(19) For mat seams parallel to the flow direction (longitudinal seams) abutting sections of mat shall be joined using stainless steel zip ties spaced at 12 inch centers.

(20) Mat shall be fastened to anchor with a steel top bearing 'X' plate, 12 inch cross, 0.11 inch thick steel. Plate shall be Zinc Plastisol coated or approved equal.

MODIFIED

ROAD DESIGN DETAIL

REVISION

NEW	10-19-21

570-22M

SHEET 2 of 2

REVISIONS: Type 1 ground anchor spacing changed from 4' to 3'.

FORESLOPE EROSION COUNTERMEASURE REVETMENT DETAILS (MAJOR OVERTOPPING)

FILE NO.	ENGLISH	DESIGN TEAM **Flattery/Bell/Schinstock/Schmitz**	**POTTAWATTAMIE** COUNTY	PROJECT NUMBER **IMX-029-4(148)62--02-78**	SHEET NUMBER **U.2**

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CROSS SECTION VIEW COLOR LEGEND

Design Color No.	Feature
Aggregate	
(64)	Choke Stone
(42)	Engineering Fabric
(8)	Flooded Backfill
(92)	Macadam Stone
(20)	Modified
(12)	Plowing Shaping
(14)	Porous Backfill
(8)	Revetment Class A
(6)	Revetment Class B
(62)	Revetment Class C
(188)	Revetment Class D
(28)	Revetment Class E
(12)	Shoulder Special Backfill
(12)	Special Backfill
(20)	Subbase
(20)	Subbase Lower
(20)	Subbase Upper
(118)	Subgrade Treatment
Asphalt	
(207)	HMA Base Course
(207)	HMA Interim Course
(207)	HMA Surface Course
Bridge	
(0)	Bridge
Concrete	
(0)	Barrier Concrete
(0)	Barrier Concrete Footing
(0)	Curb Gutter
(48)	Flowable Mortar
(0)	Median Concrete
(0)	PCC Pavement
(0)	Sidewalk
Existing	
(0)	Existing Pavement
Shoulder	
(209)	Shoulder HMA
(0)	Shoulder PCC
(6)	Shoulder Granular
Structural	
(112)	Noise Wall
(112)	Noise Wall Footing
(112)	Retaining Wall Back
(112)	Retaining Wall Back Excavate
(112)	Retaining Wall Face
(112)	Retaining Wall Front Excavate
(112)	Retaining Wall Front Footing
(112)	Retaining Wall MSE Gutter
(112)	Retaining Wall Reinforced Earth

Design Color No.	Feature
Grading	
(8)	Behind Curb Cut
(6)	Granular
(13)	Granular Back Fill
(48)	Rock Undercut
(8)	Shoulder Earth Fill
(2)	Side Slopes
(226)	Side Slopes Dressing
Substrata	
(128)	Boulder
(209)	Boulder Removed
(48)	Broken Weathered
(210)	Broken Weathered Removed
(3)	Core Out
(115)	Core Out Remove Only
(195)	Core Out Remove and Replace
(203)	Existing Pavement
(184)	Existing Pavement Remove Only
(200)	Existing Pavement Remove and Replace
(6)	Loam
(211)	Loam Removed
(80)	Rock
(212)	Rock Removed
(4)	Select Sand
(214)	Select Sand Removed
(3)	Shale
(215)	Shale Removed
(10)	Topsoil
(2)	Topsoil Remove Only
(4)	Topsoil Remove and Replace
Unsuitable / Waste	
(3)	Unsuitable Type A
(216)	Unsuitable Type A Removed
(13)	Unsuitable Type B
(217)	Unsuitable Type B Removed
(11)	Unsuitable Type C
(218)	Unsuitable Type C Removed
(3)	Waste
(219)	Waste Removed

NOTES:

Text

NOTES:

Text

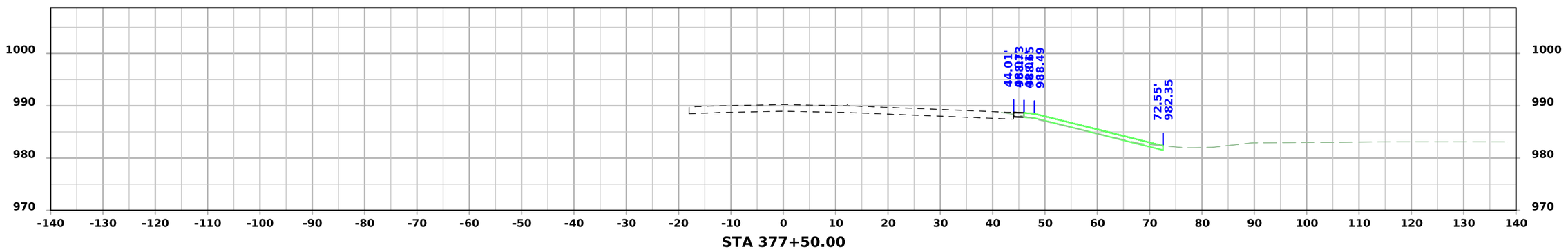
CROSS SECTIONS
LEGEND AND INFORMATION SHEET

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

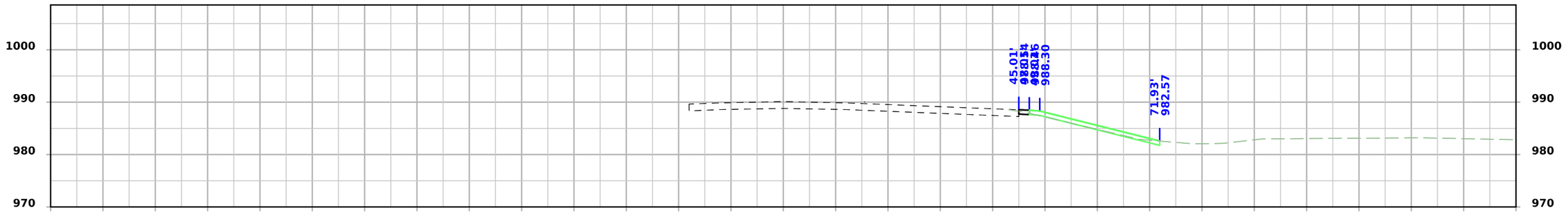
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.1

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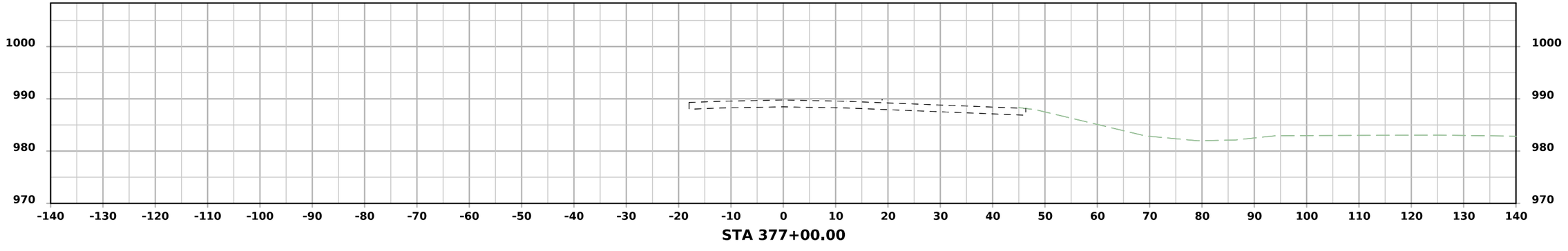
I-29 - Section A1



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STA 377+25.00

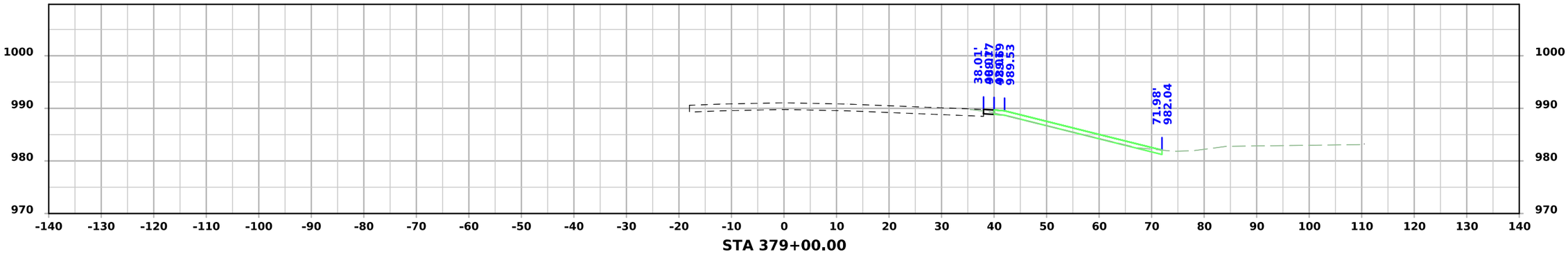


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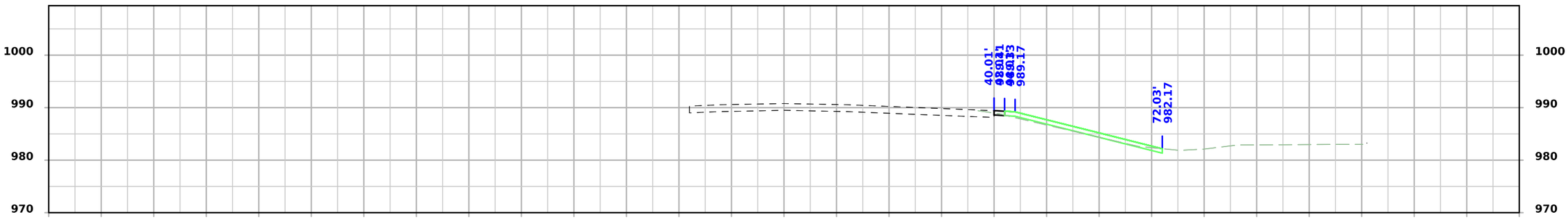
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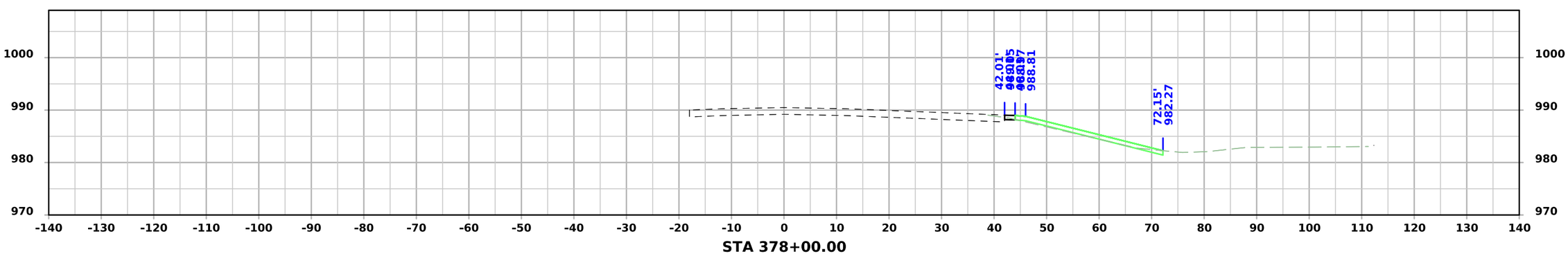
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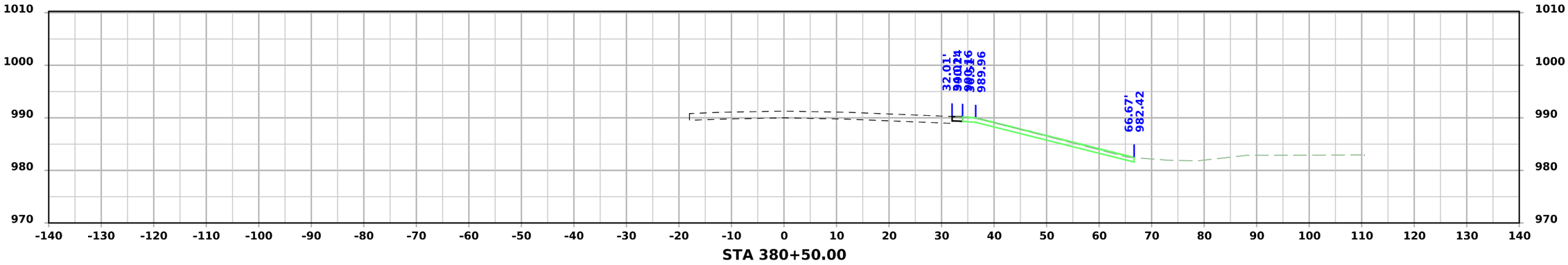


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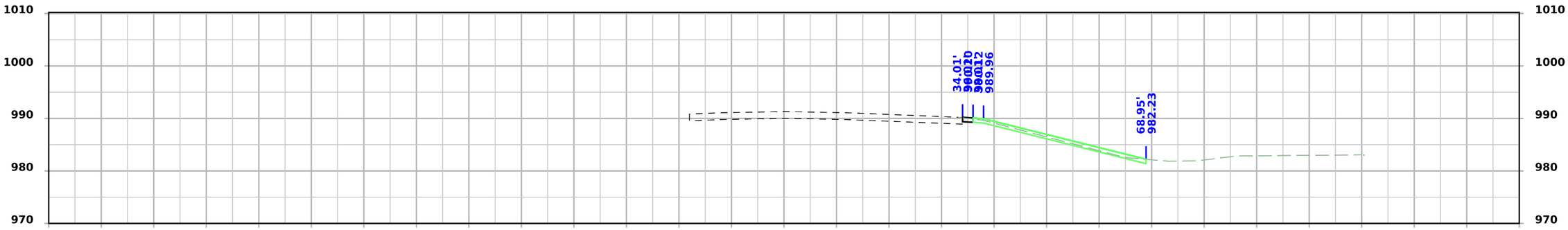
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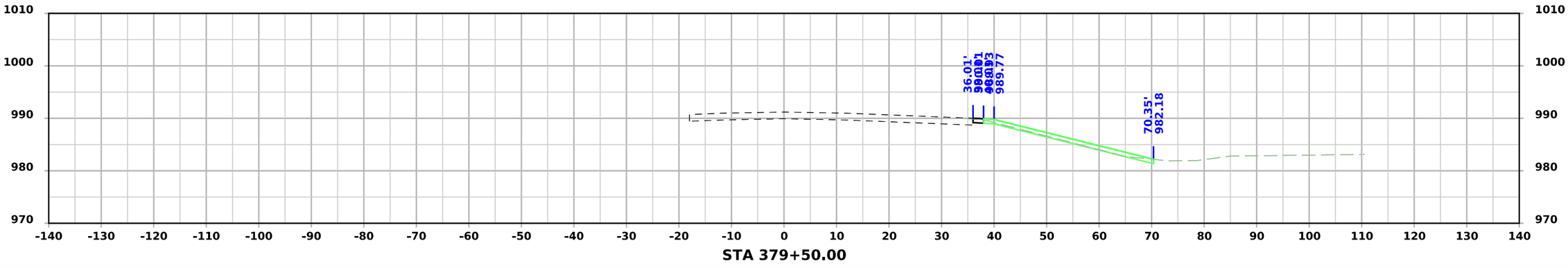
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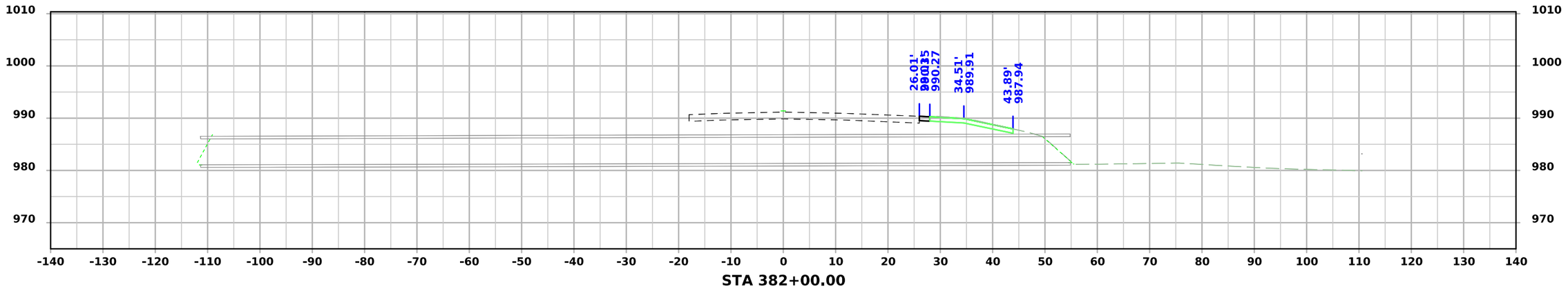


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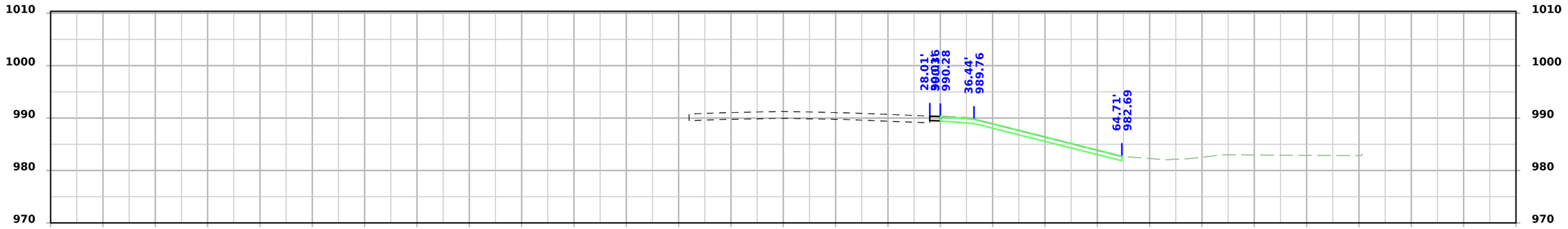
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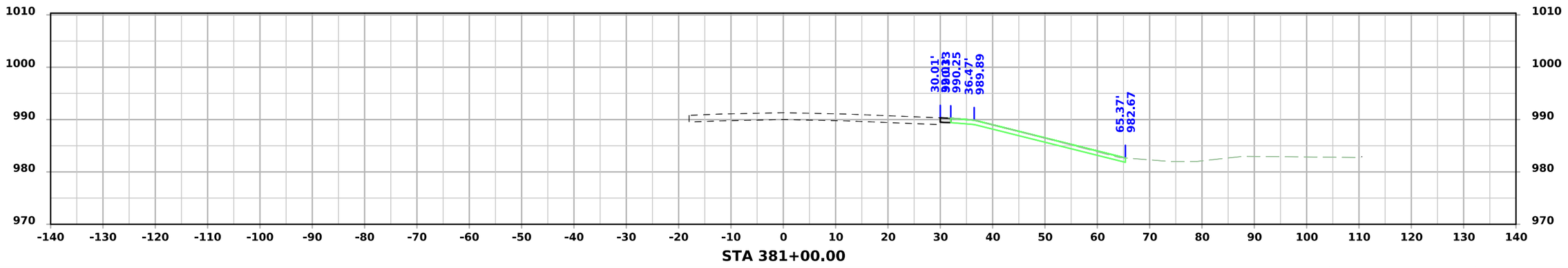
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STA 381+50.00

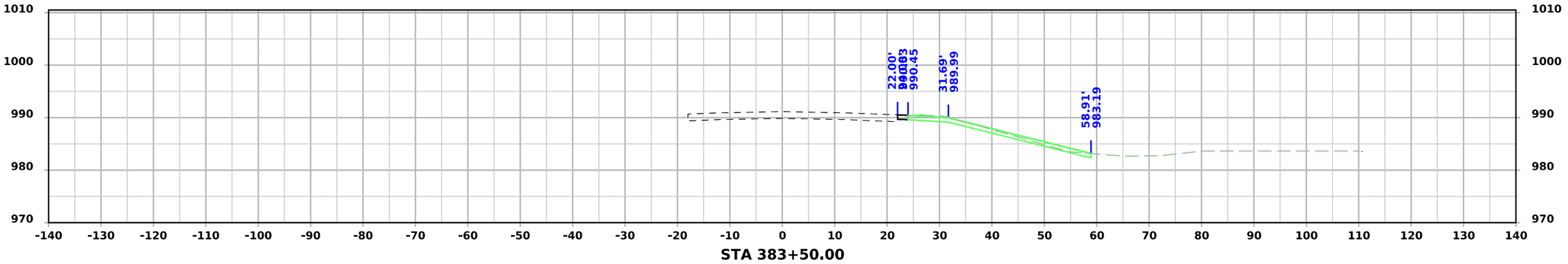


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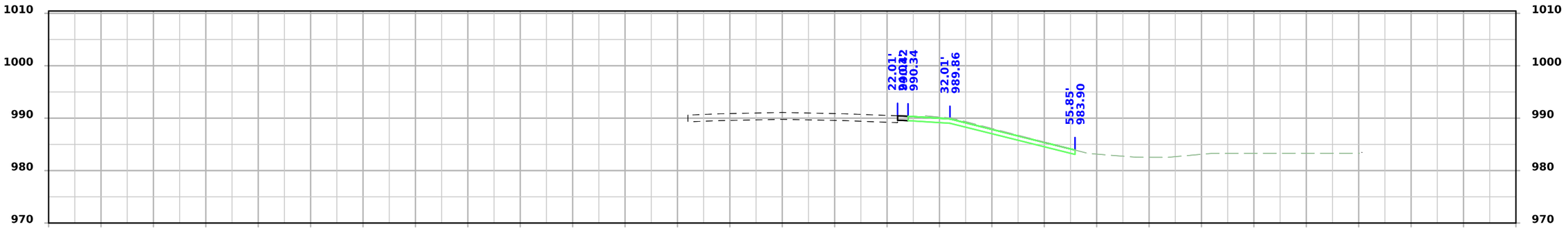
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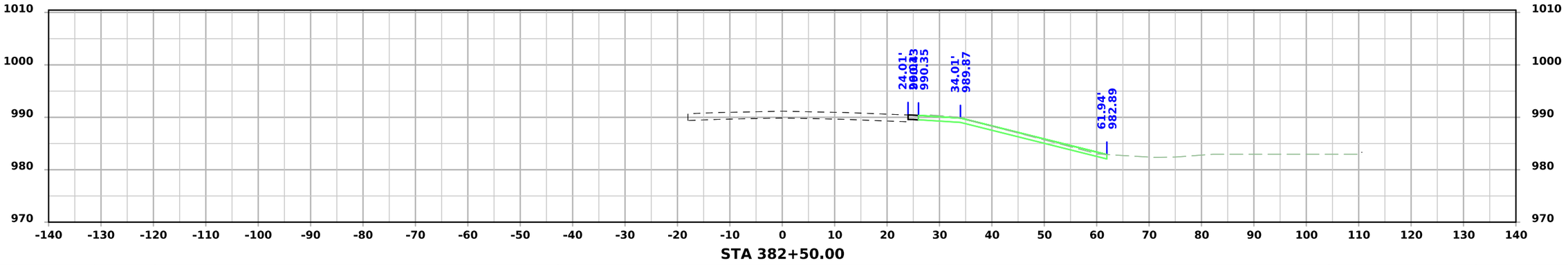
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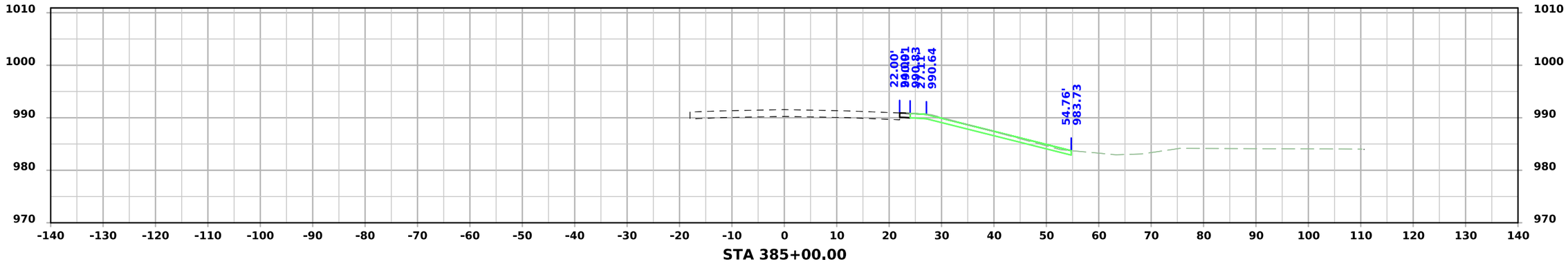


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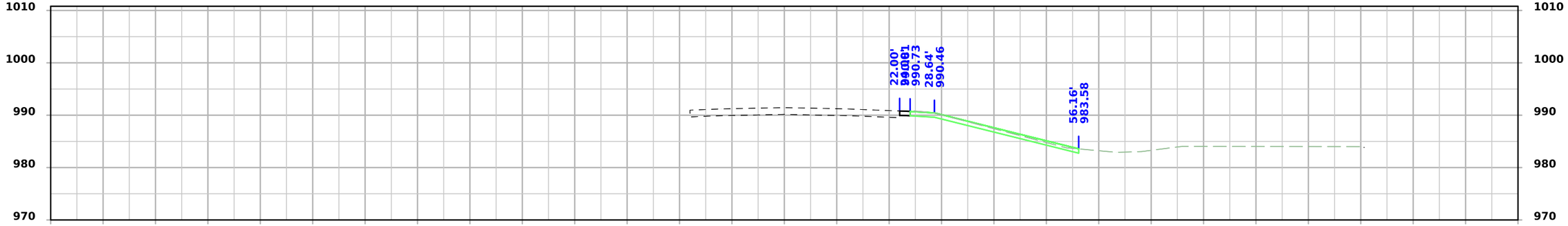
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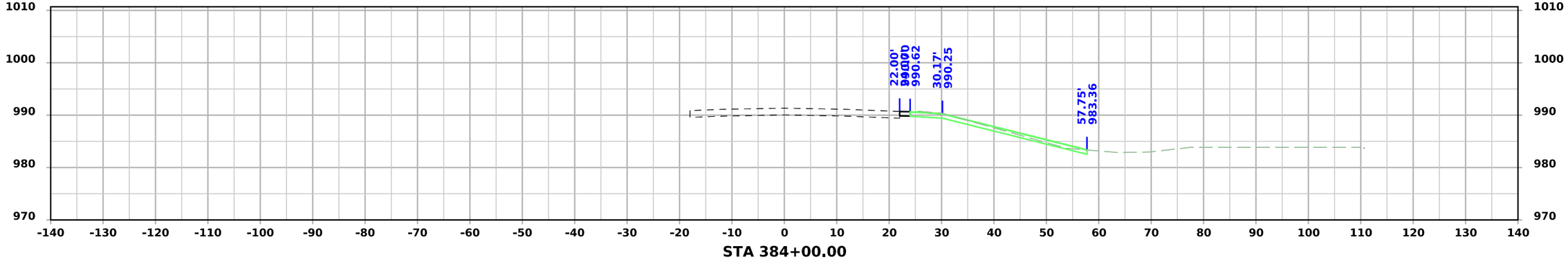
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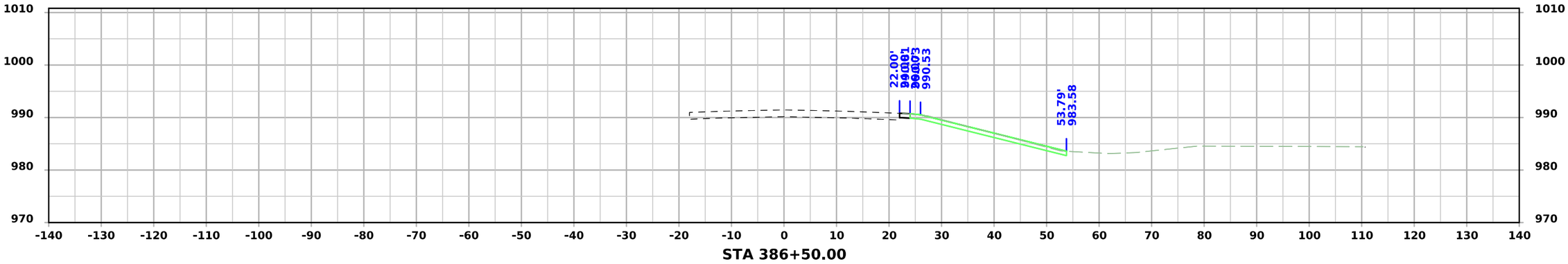


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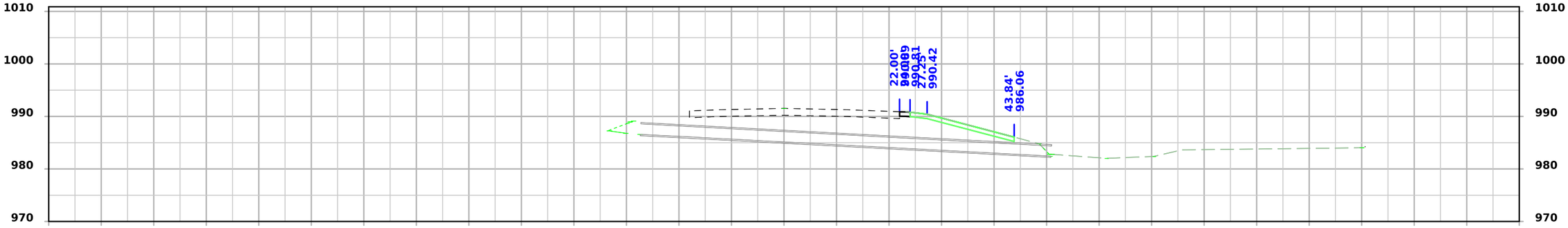
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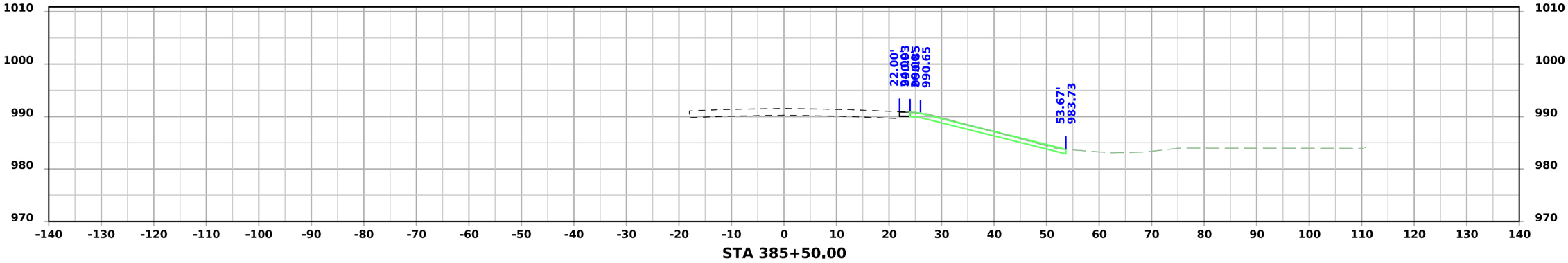
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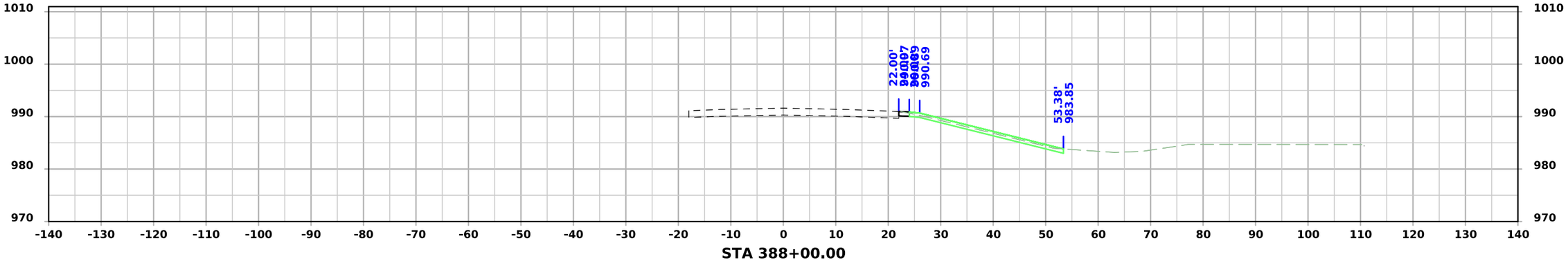


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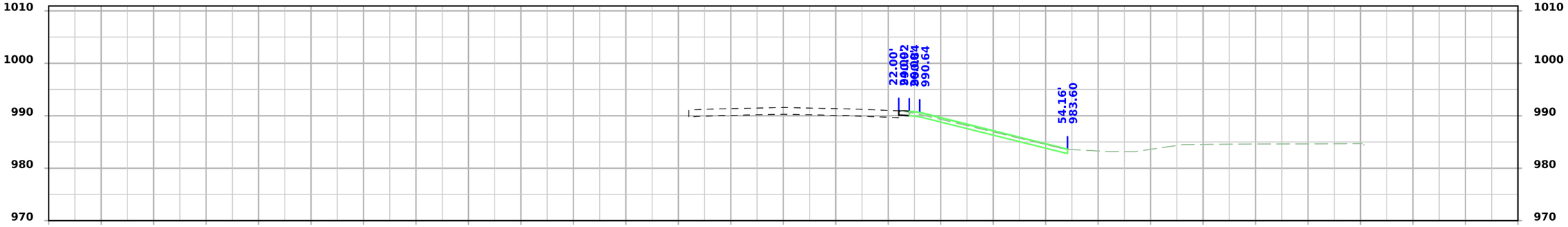
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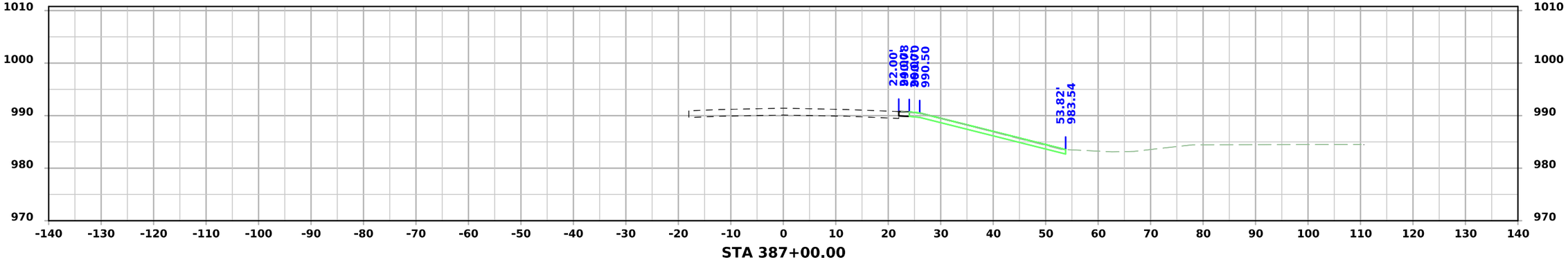
I-29 - Section A1



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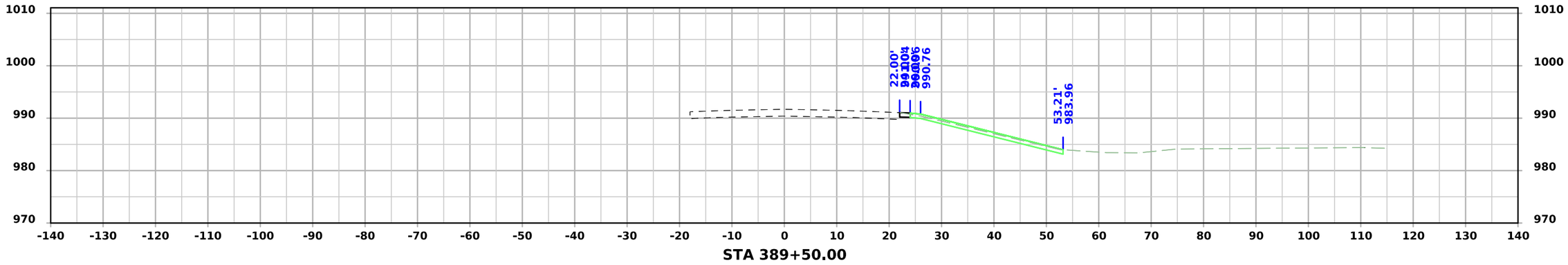


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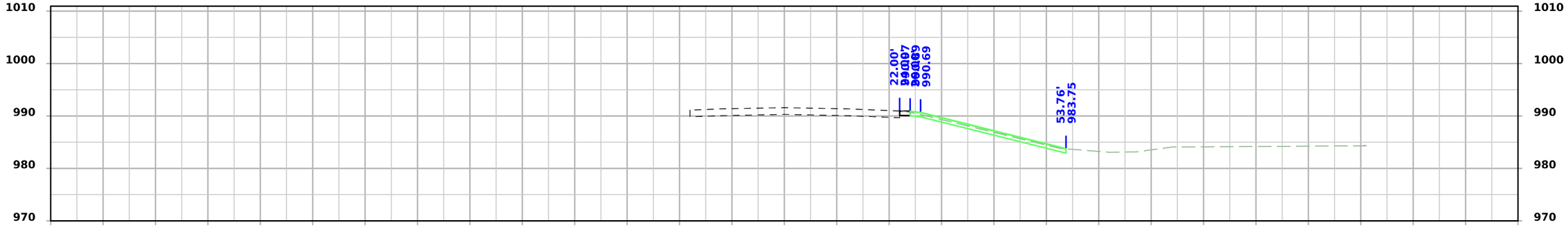
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.107

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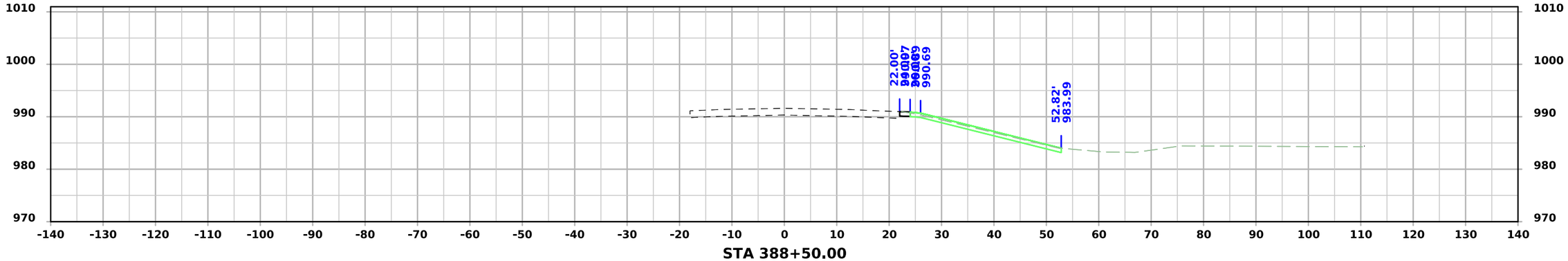
I-29 - Section A1



STA 389+50.00



STA 389+00.00

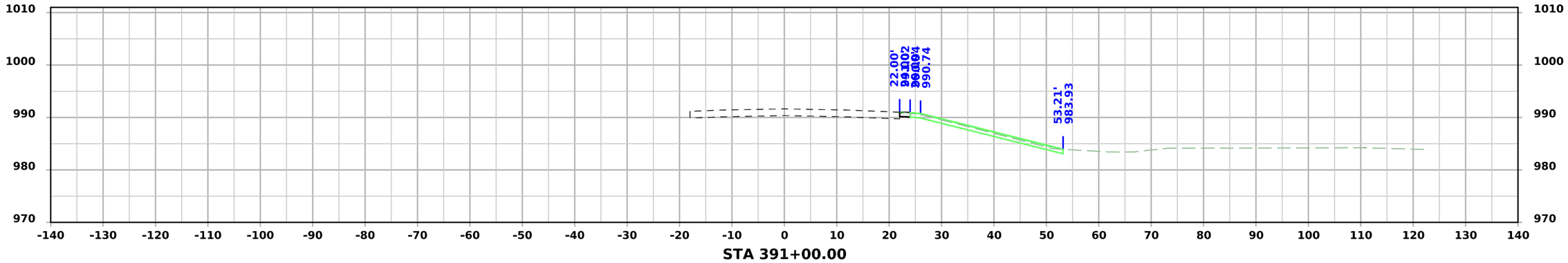


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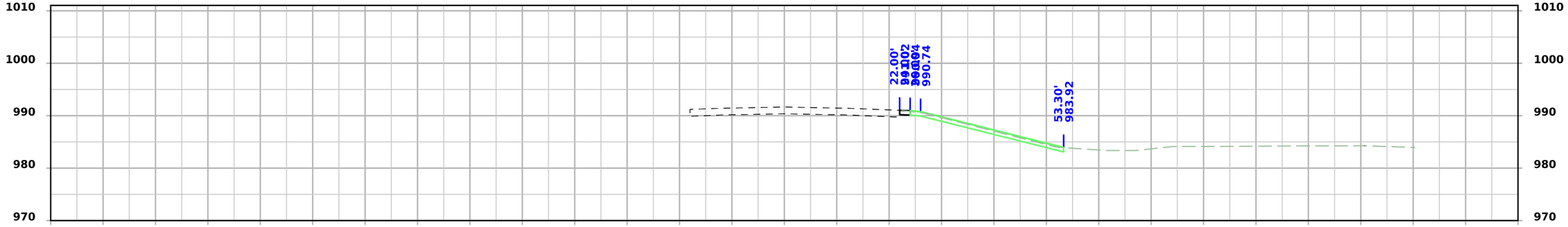
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.108

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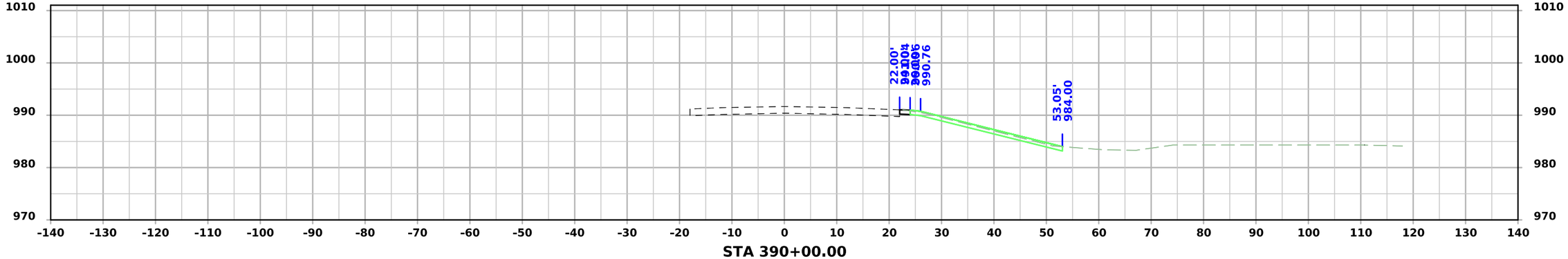
I-29 - Section A1



STA 391+00.00



STA 390+50.00

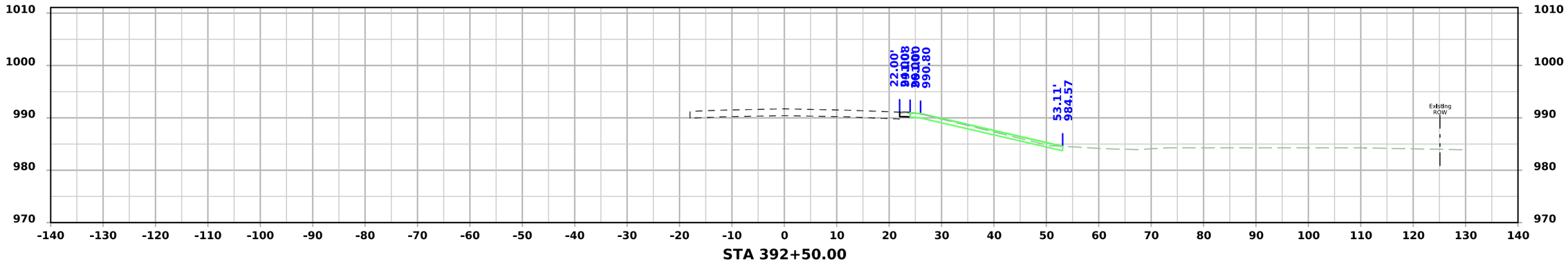


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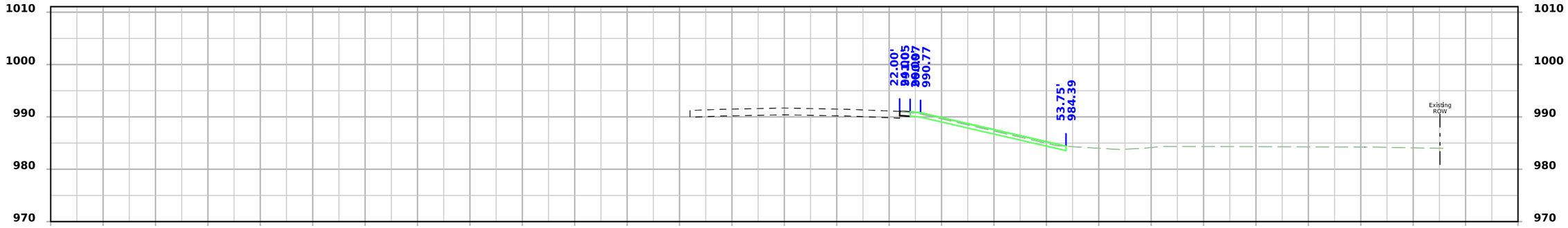
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.109

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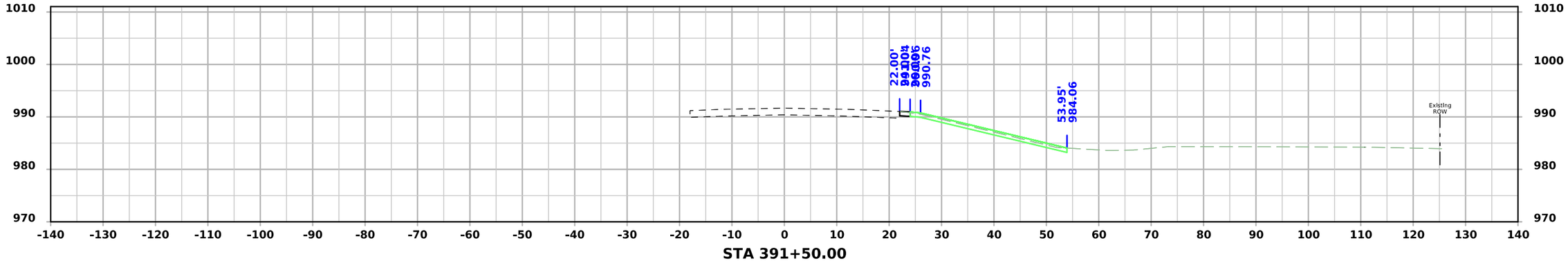
I-29 - Section A1



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STA 392+00.00

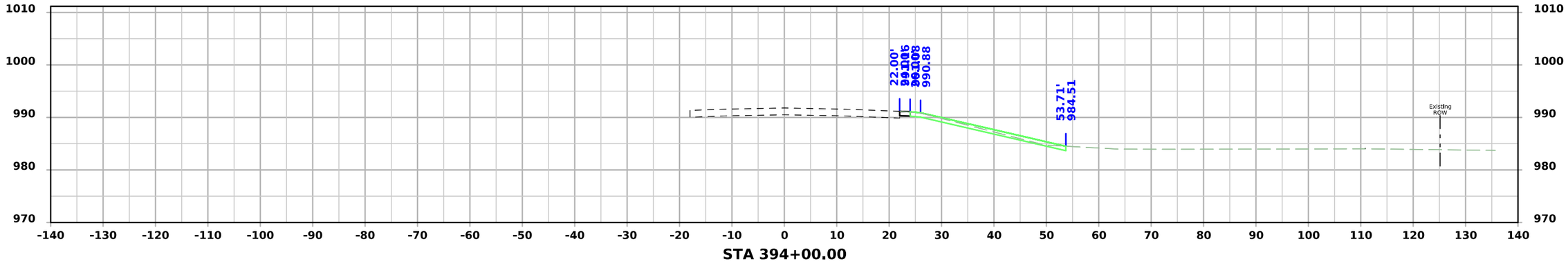


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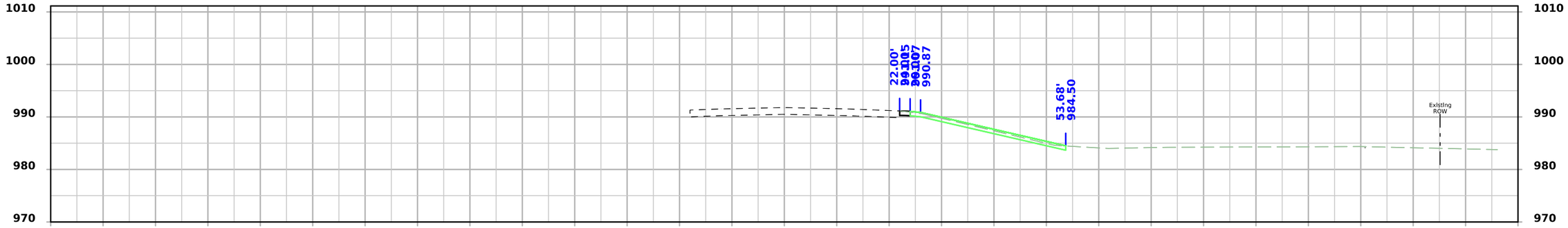
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.110

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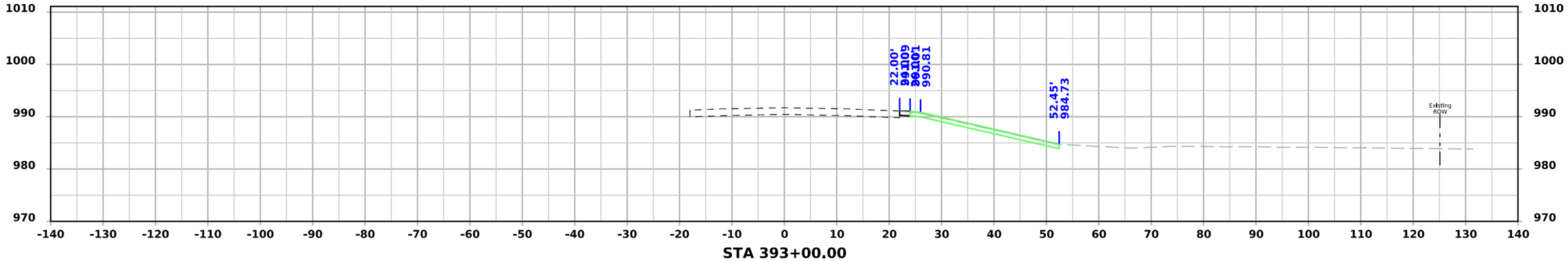
I-29 - Section A1



STA 394+00.00



STA 393+50.00

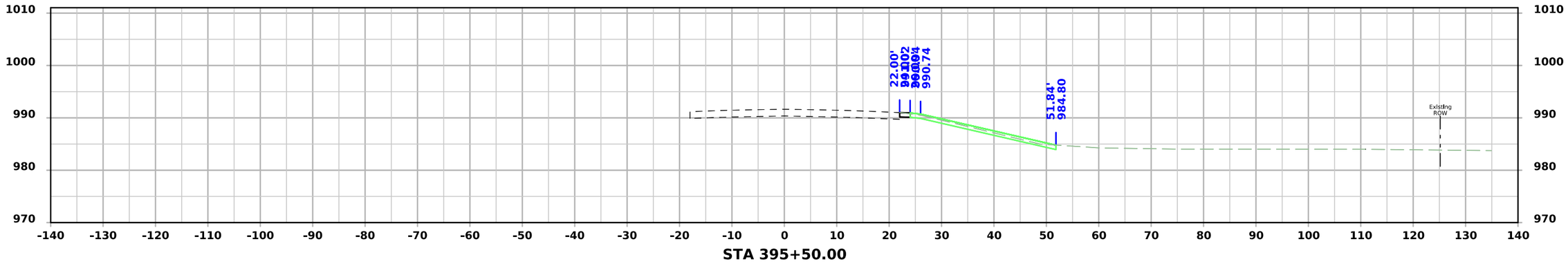


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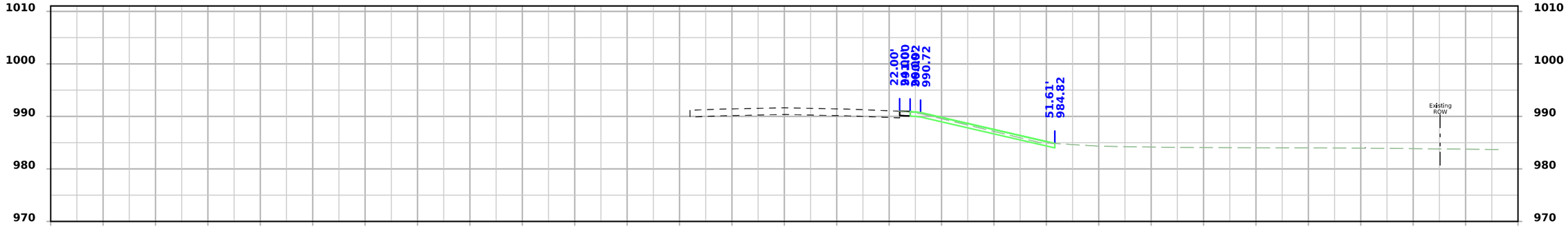
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.111

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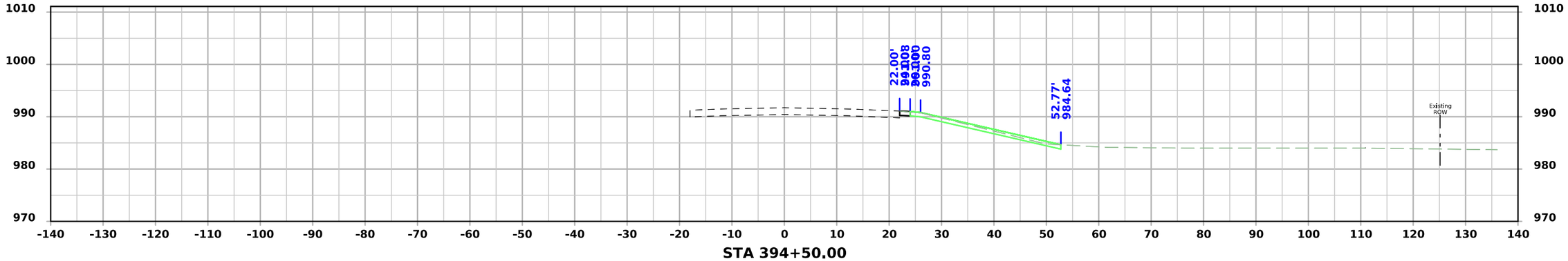
I-29 - Section A1



STA 395+50.00



STA 395+00.00

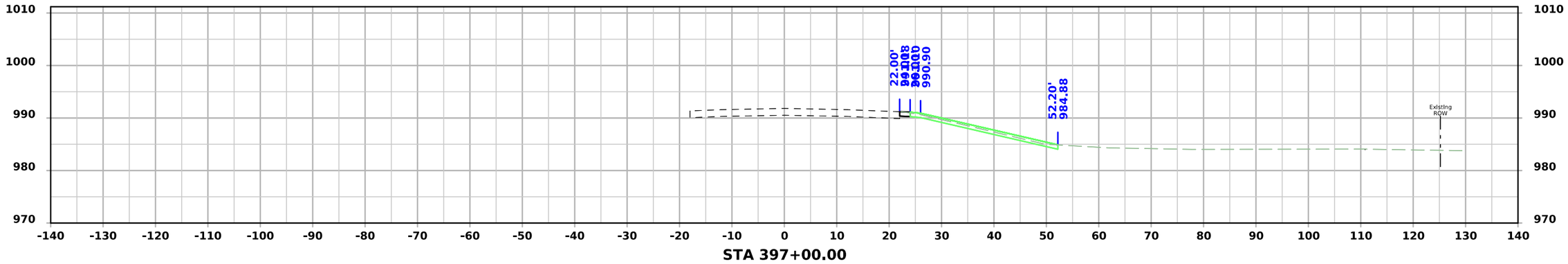


STA 394+50.00

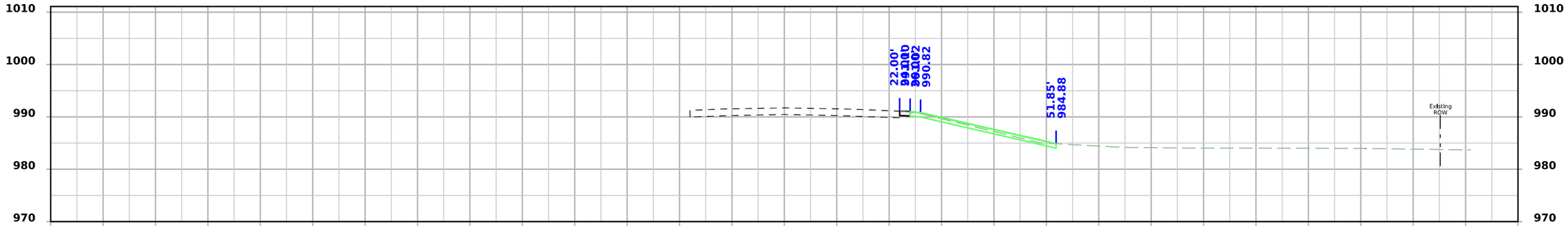
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.112

1:30:56 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W100_78029148Z06.dgn

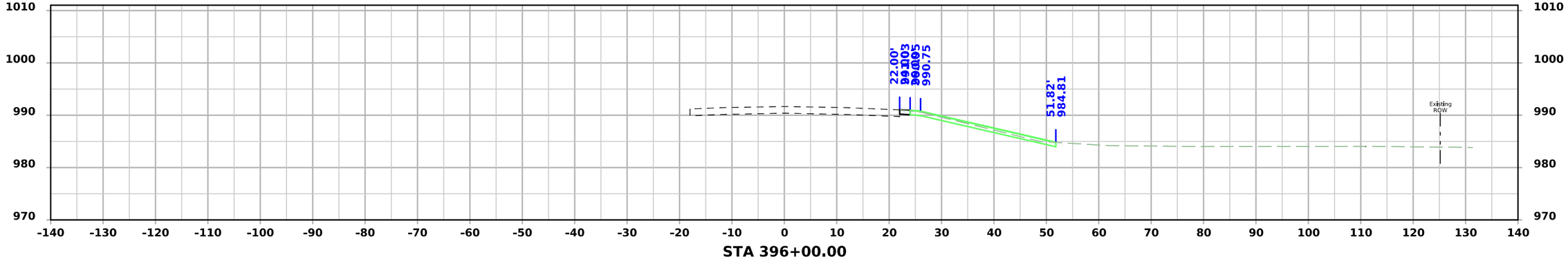
I-29 - Section A1



STA 397+00.00



STA 396+50.00

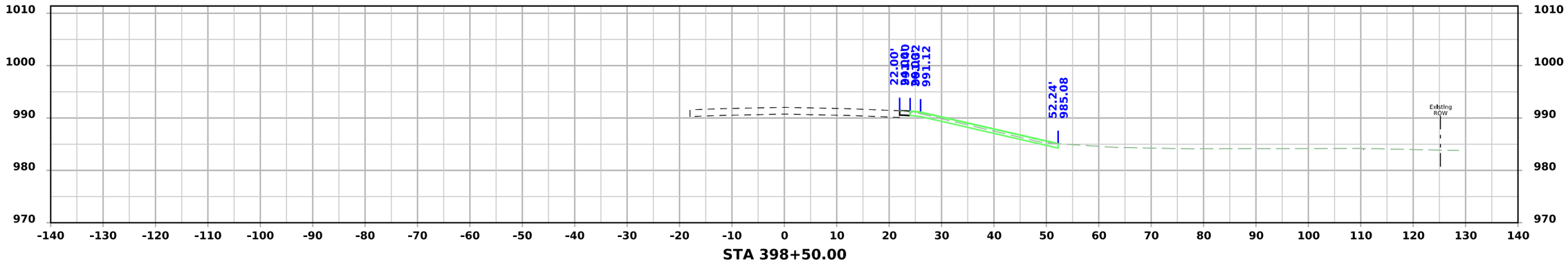


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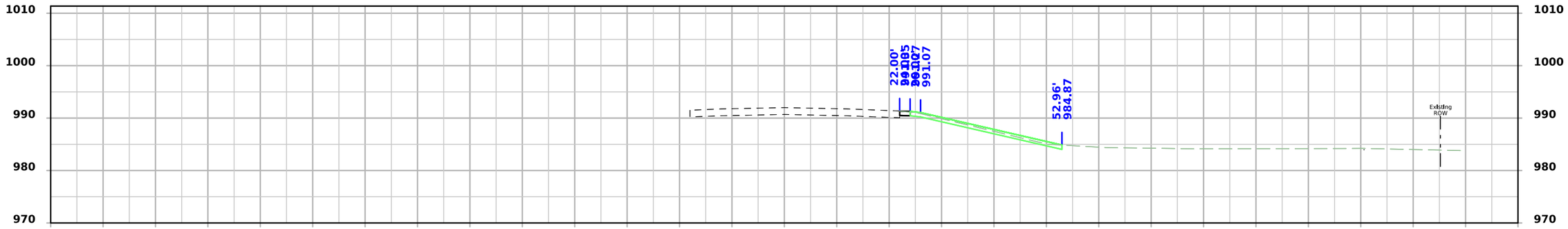
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.113

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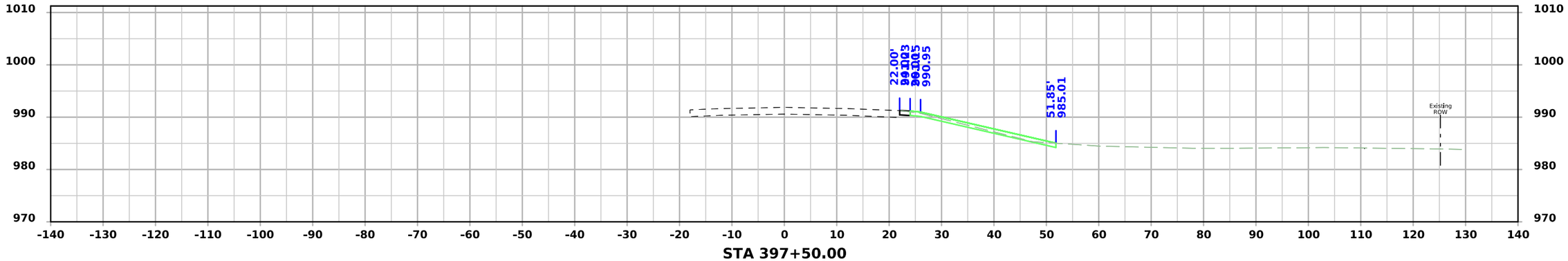
I-29 - Section A1



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STA 398+00.00

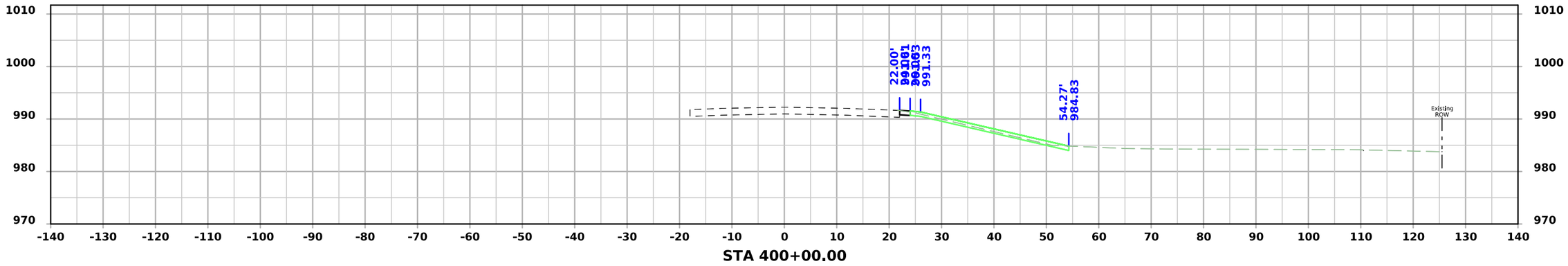


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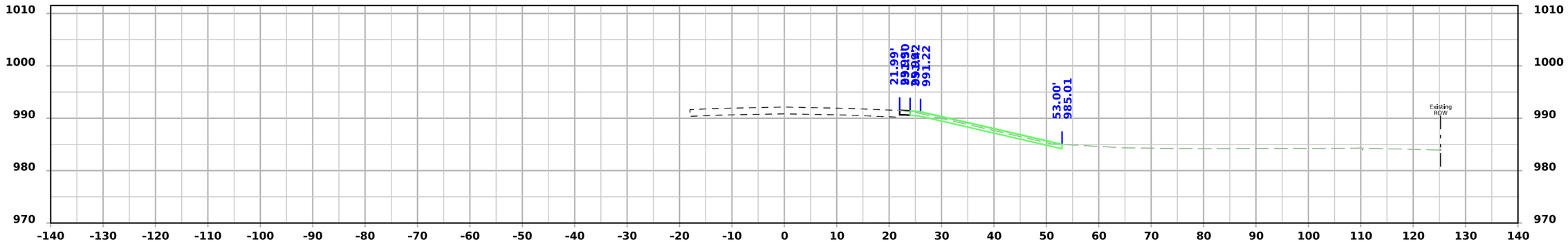
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.114

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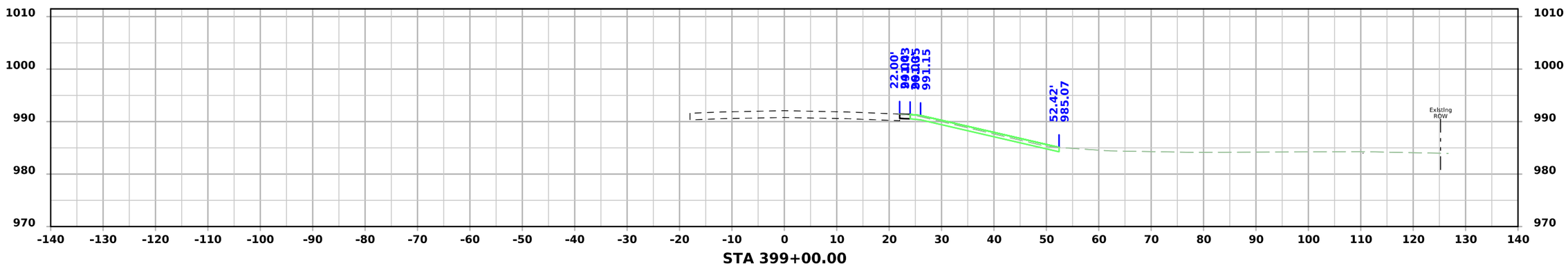
I-29 - Section A1



STA 400+00.00



STA 399+50.00

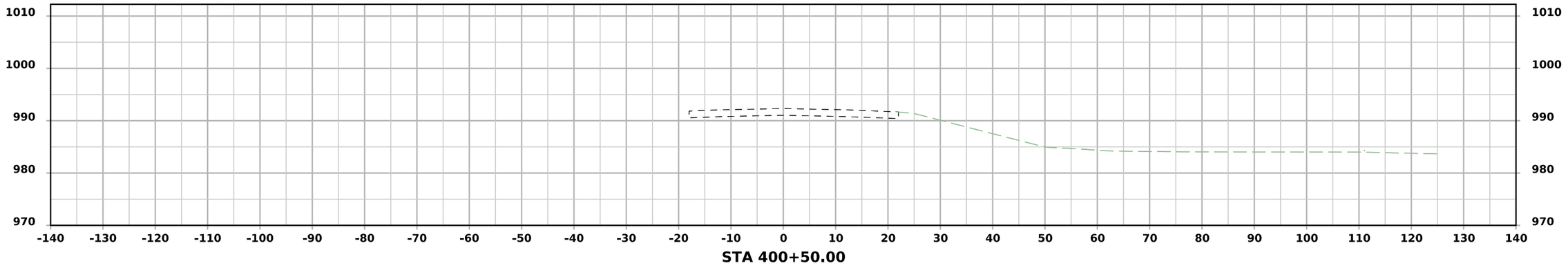


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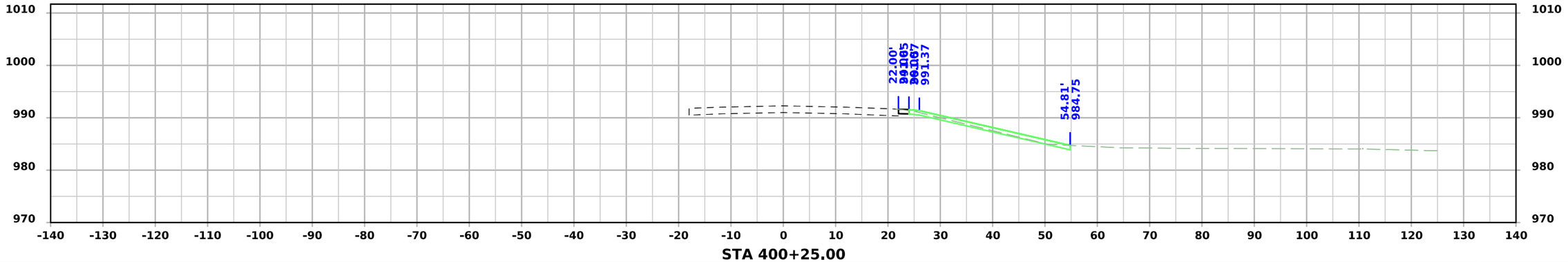
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.115

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I-29 - Section A1



STA 400+50.00

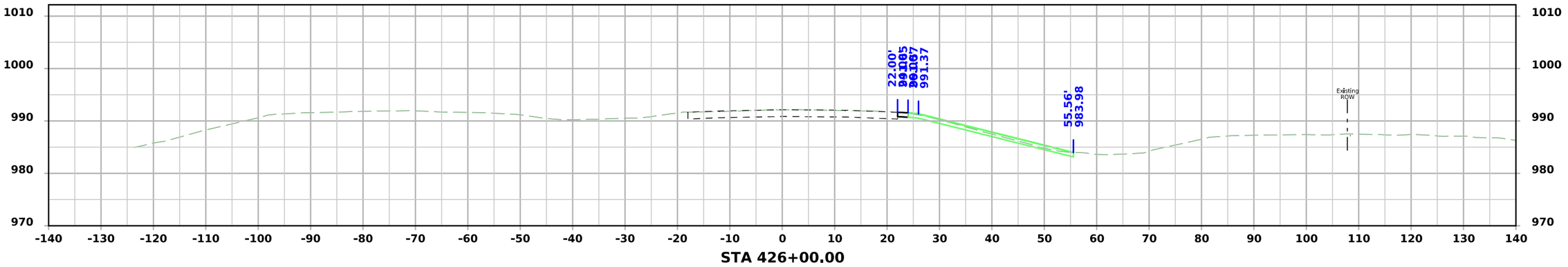


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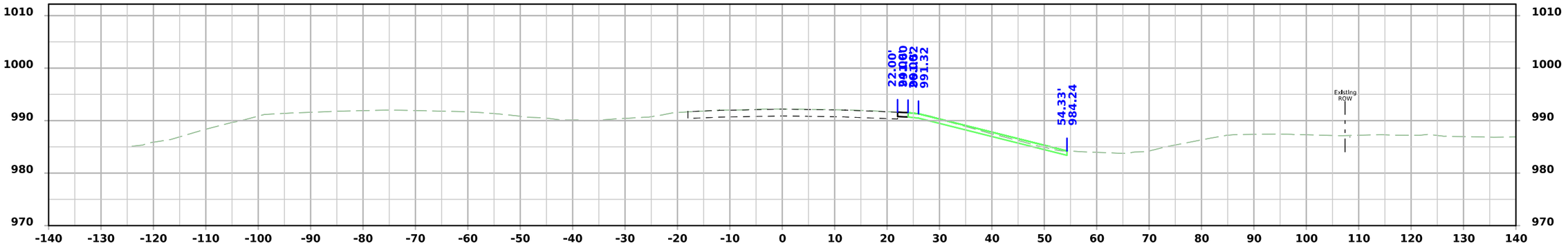
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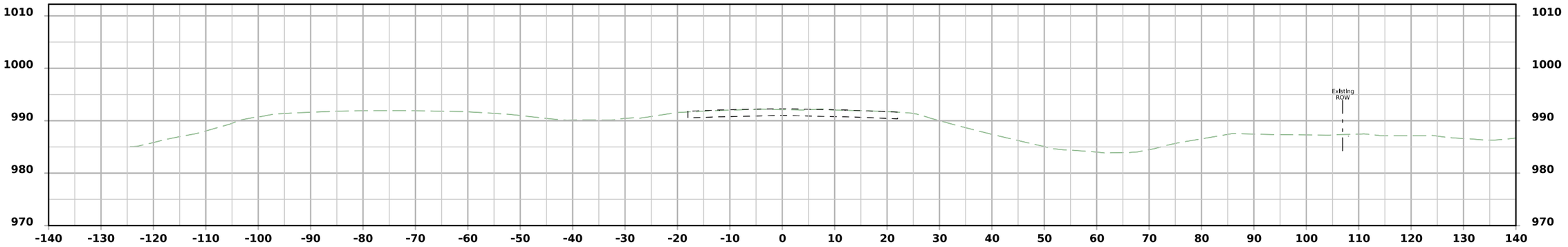
I-29 - Section A2



STA 426+00.00



STA 425+50.00

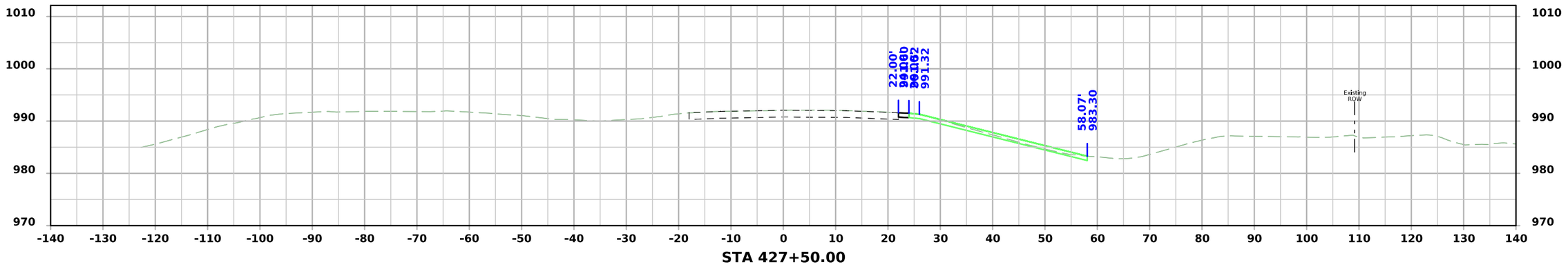


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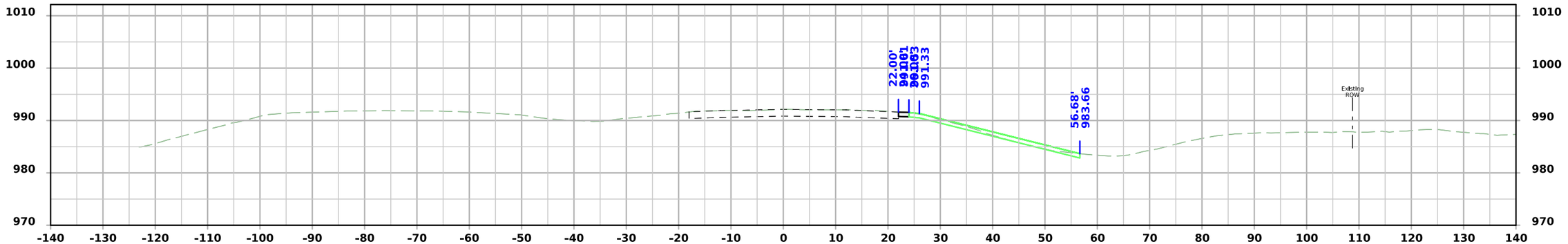
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1:49:29 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W200_78029148Z06.dgn

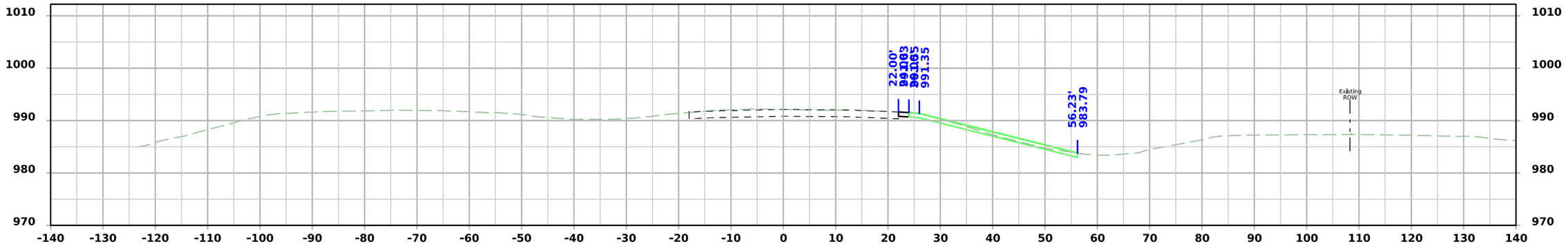
I-29 - Section A2



STA 427+50.00



STA 427+00.00

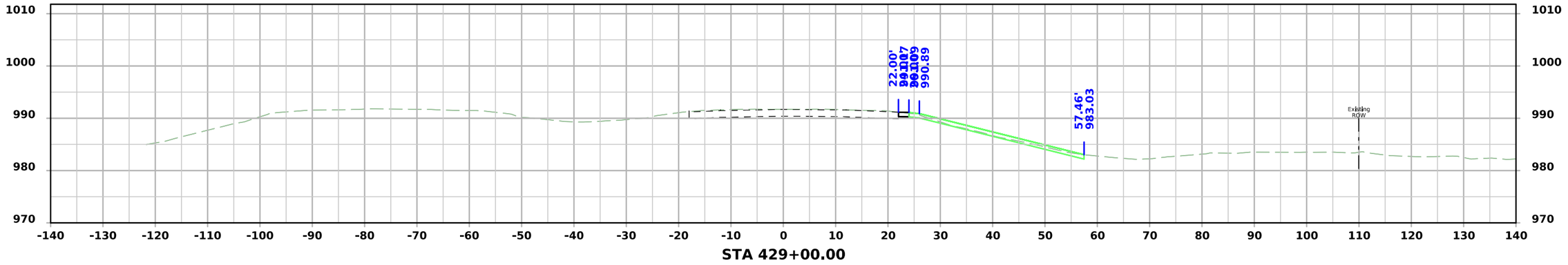


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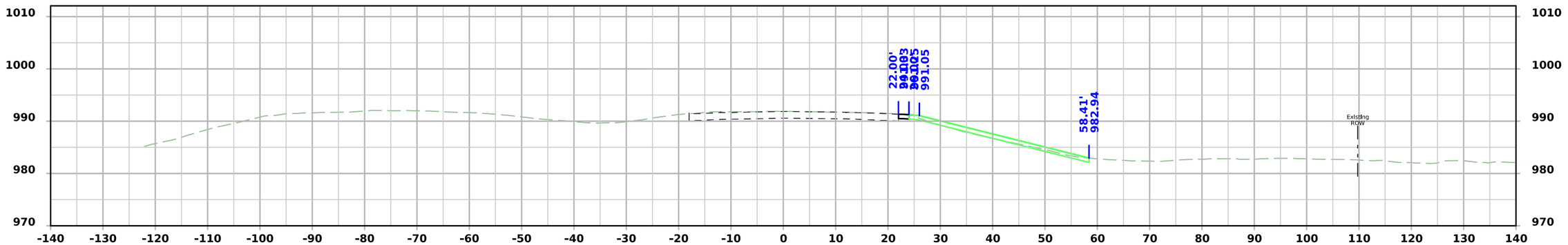
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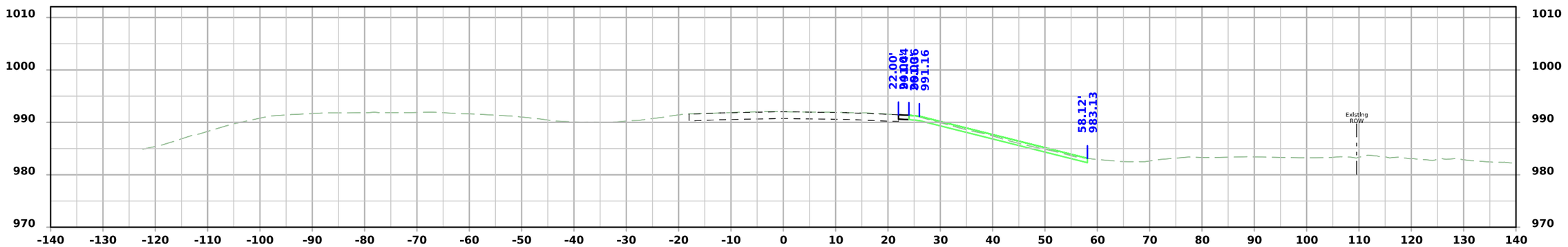
I-29 - Section A2



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STA 428+50.00

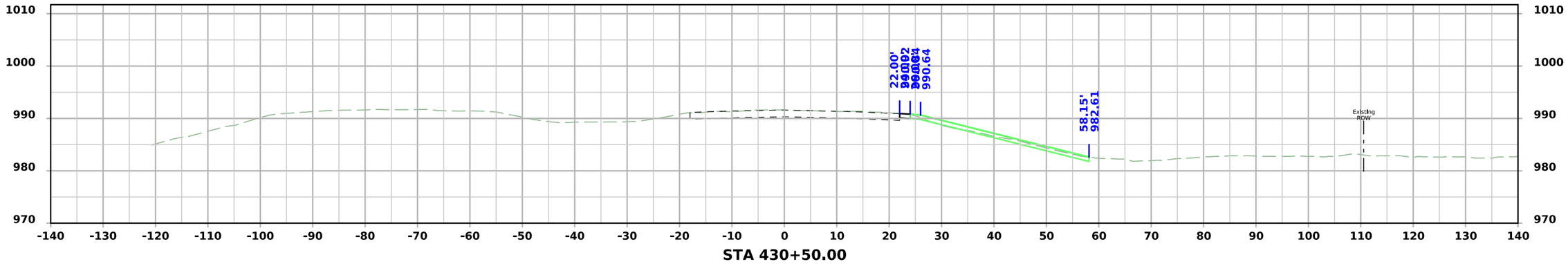


STA 428+00.00

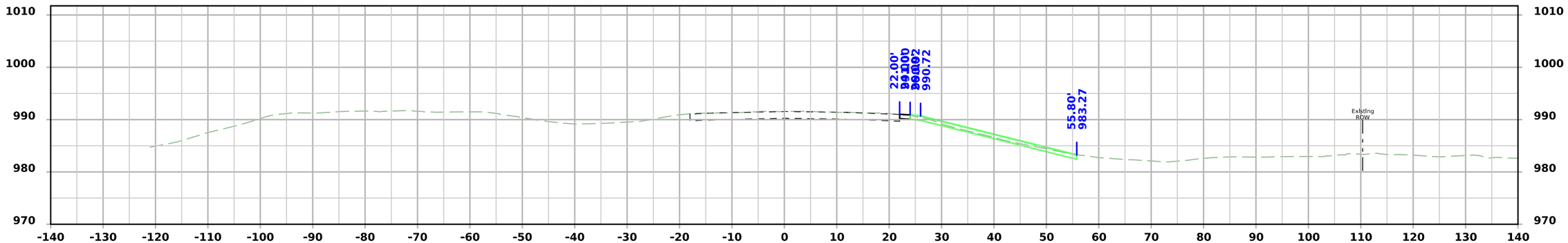
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.202	

1:49:30 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W200_78029148Z06.dgn

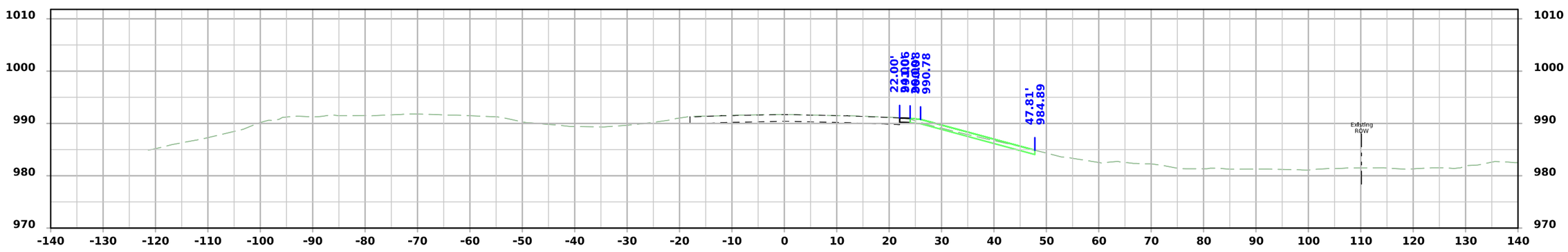
I-29 - Section A2



STA 430+50.00



STA 430+00.00

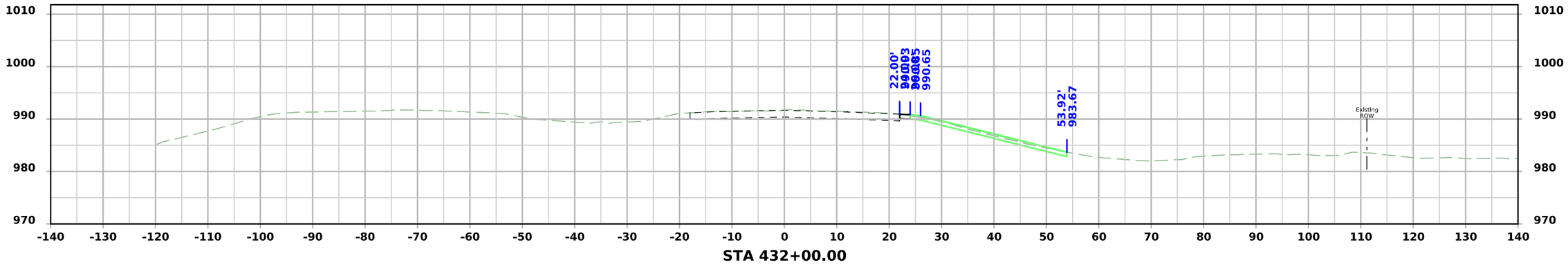


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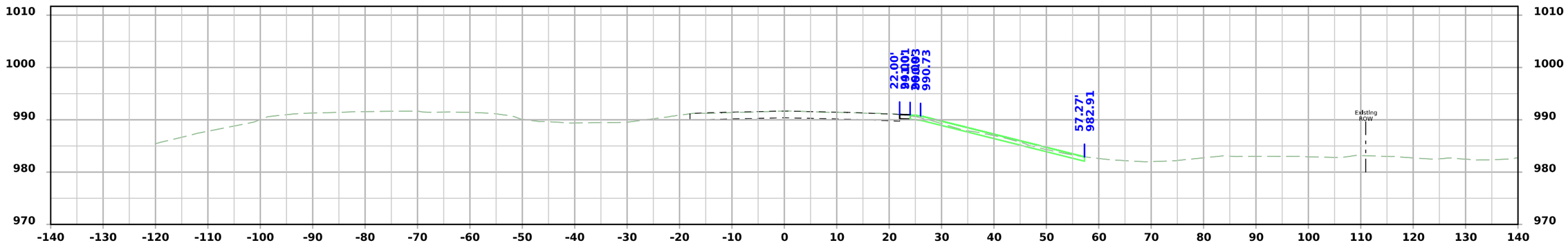
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.203

1:49:31 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W200_78029148Z06.dgn

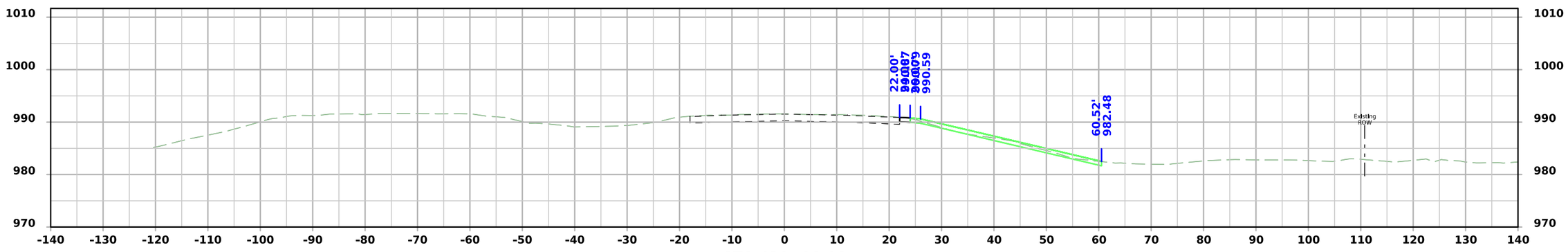
I-29 - Section A2



STA 432+00.00



STA 431+50.00

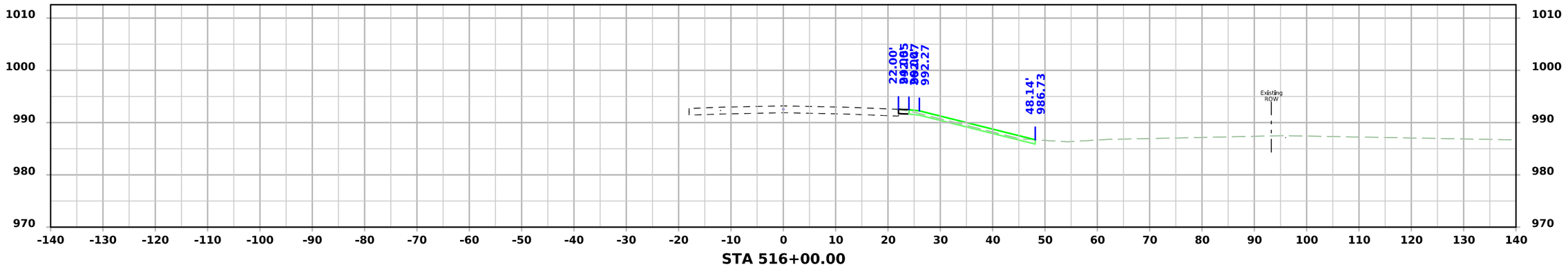


STA 431+00.00

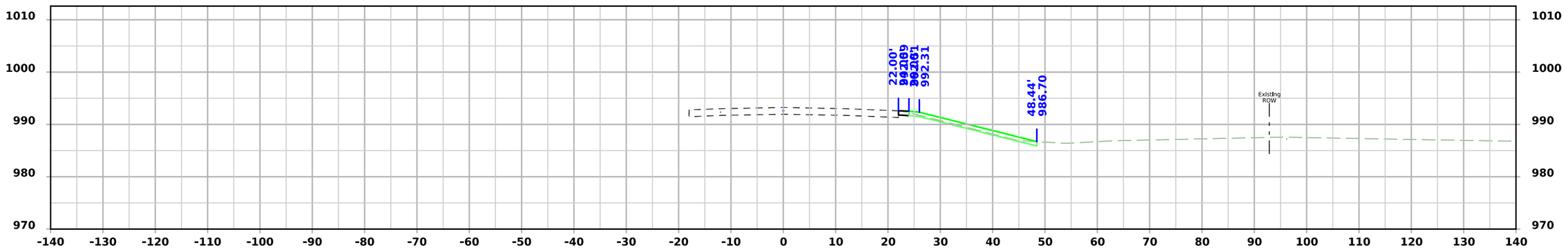
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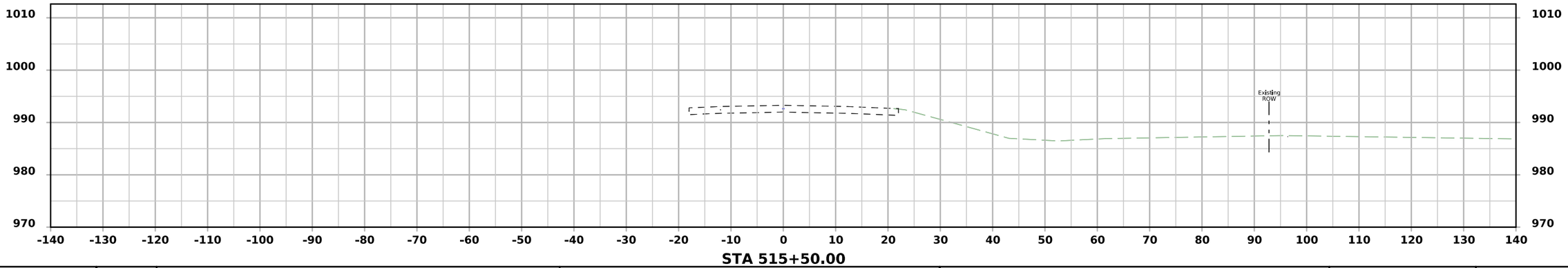
I-29 - Section B



STA 516+00.00



STA 515+75.00

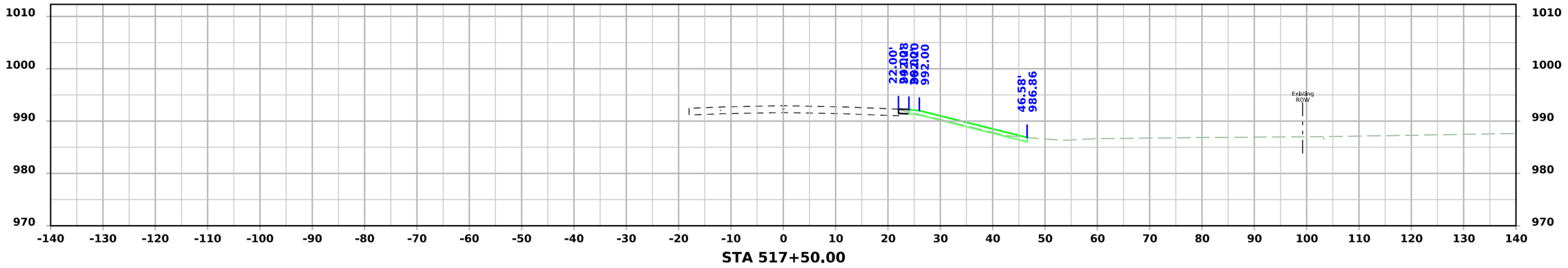


STA 515+50.00

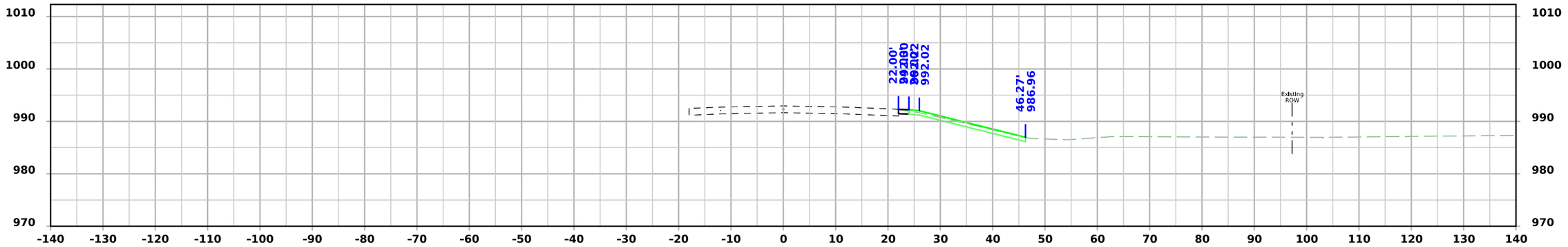
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.300

1:58:51 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W300_78029148Z06.dgn

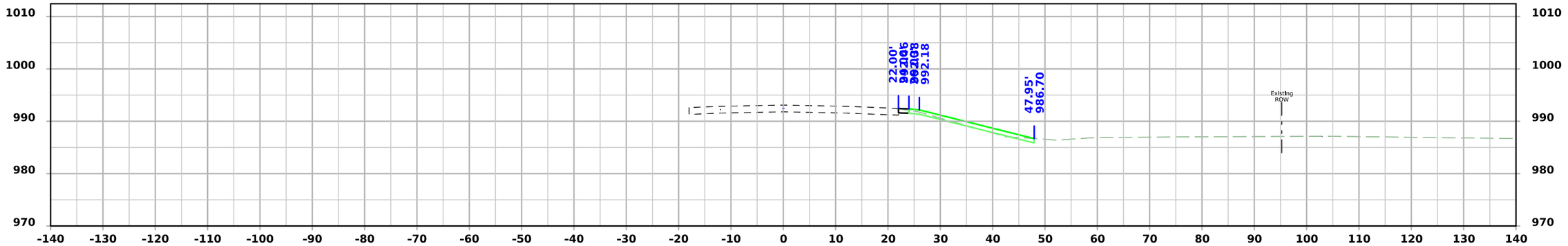
I-29 - Section B



STA 517+50.00



STA 517+00.00

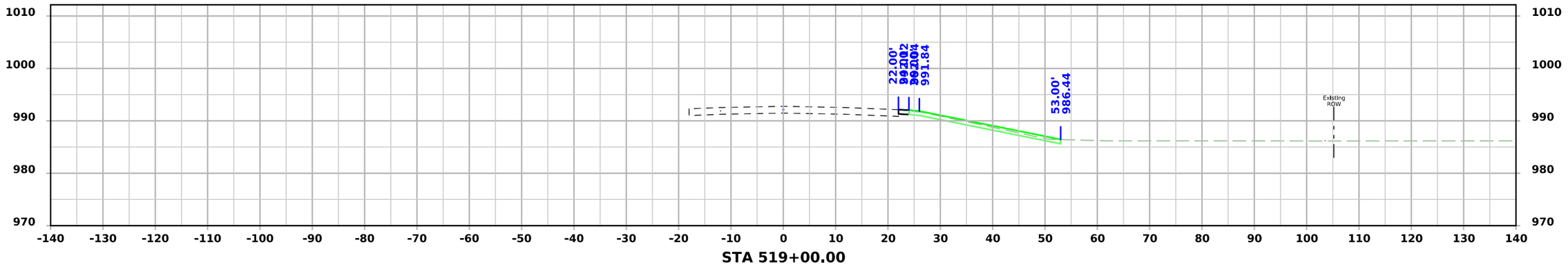


STA 516+50.00

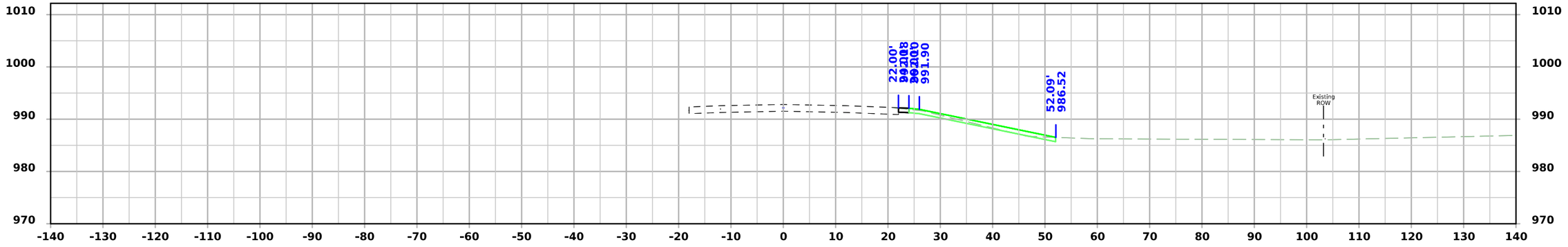
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.301

1:58:52 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W300_78029148Z06.dgn

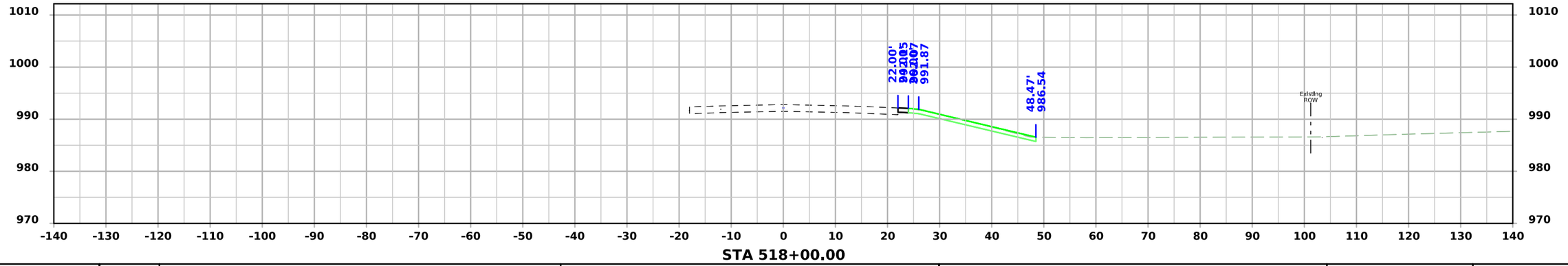
I-29 - Section B



STA 519+00.00



STA 518+50.00

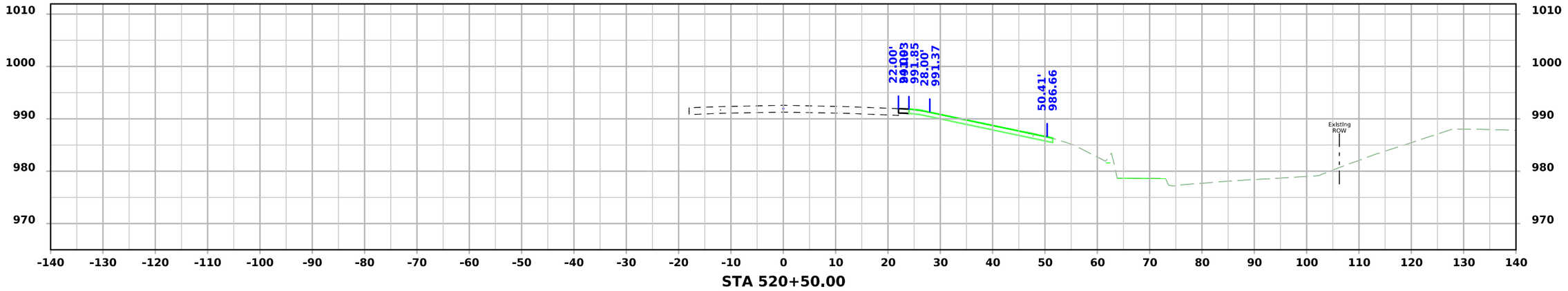


STA 518+00.00

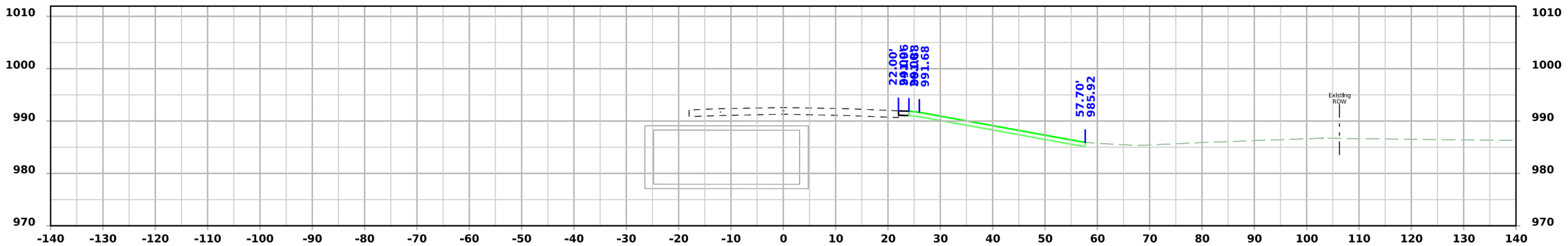
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.302	

1:58:53 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W300_78029148Z06.dgn

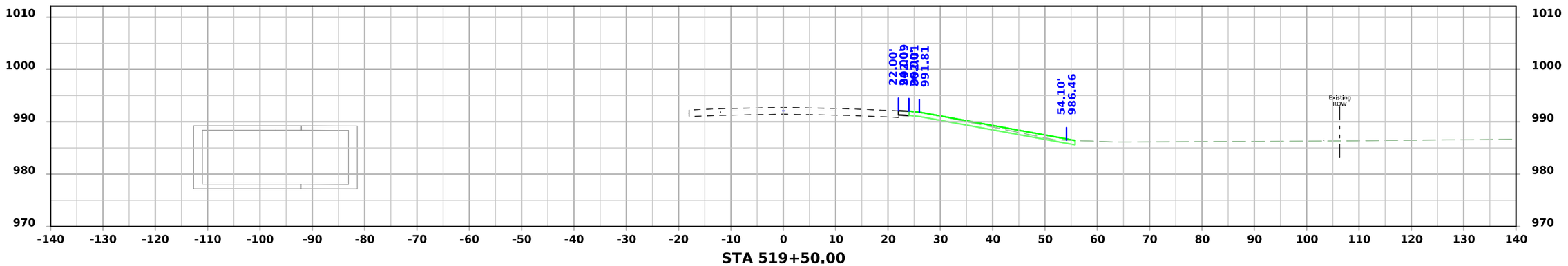
I-29 - Section B



STA 520+50.00



STA 520+00.00

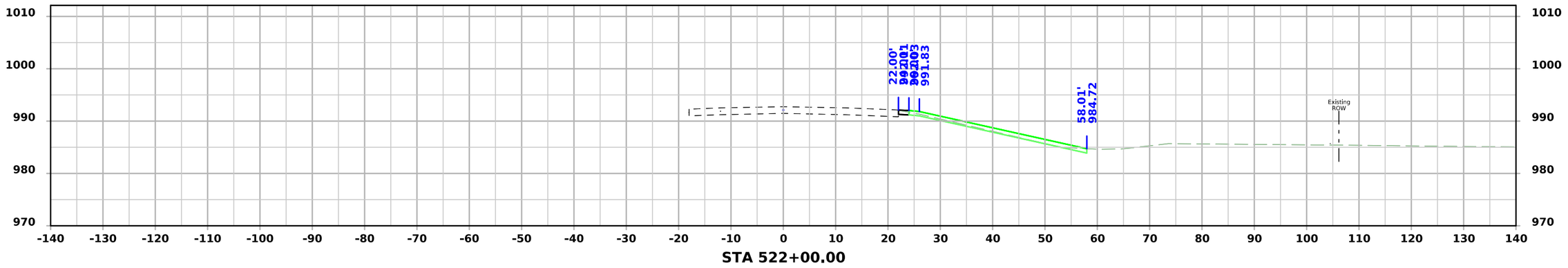


STA 519+50.00

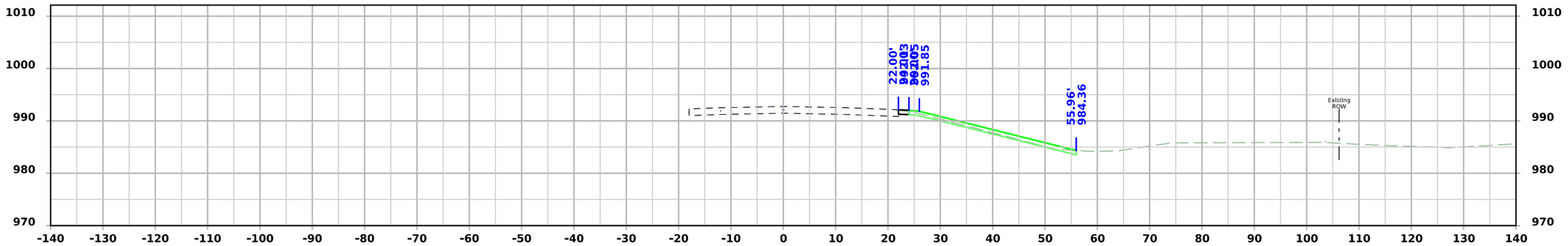
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.303

1:58:54 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W300_78029148Z06.dgn

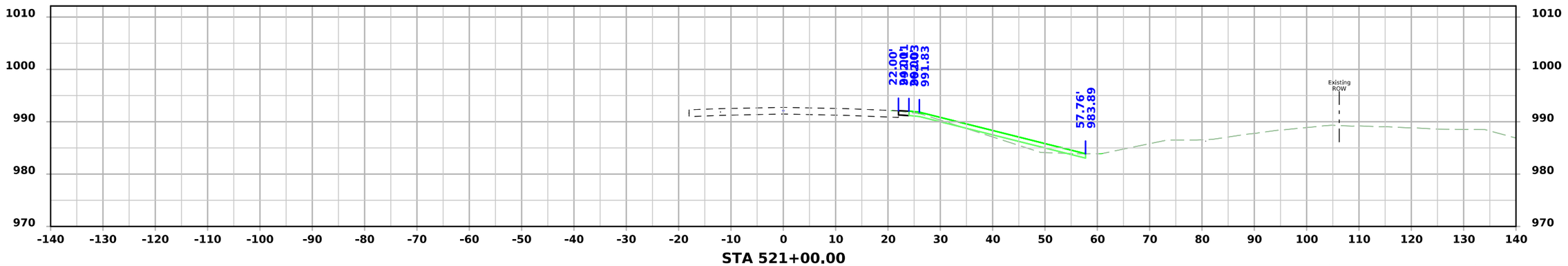
I-29 - Section B



STA 522+00.00



STA 521+50.00

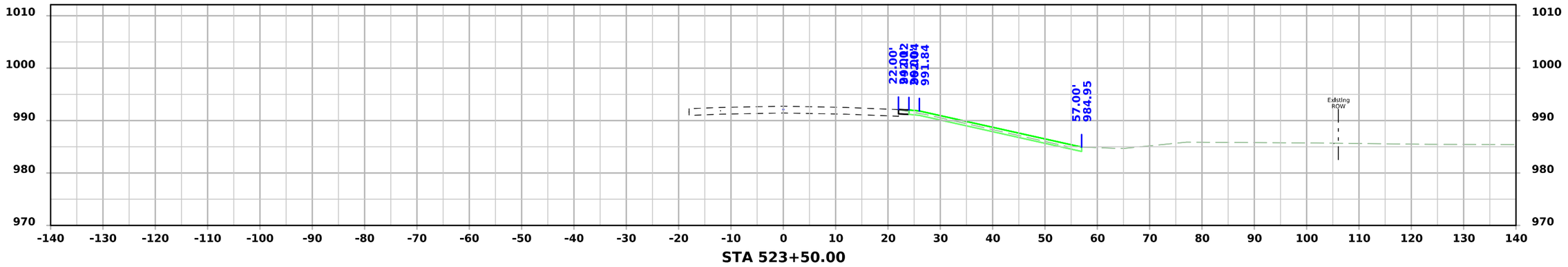


STA 521+00.00

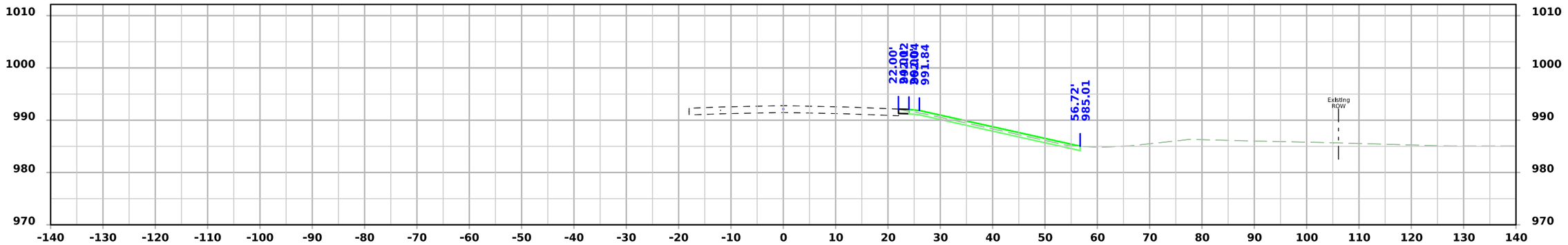
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.304

1:58:55 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W300_78029148Z06.dgn

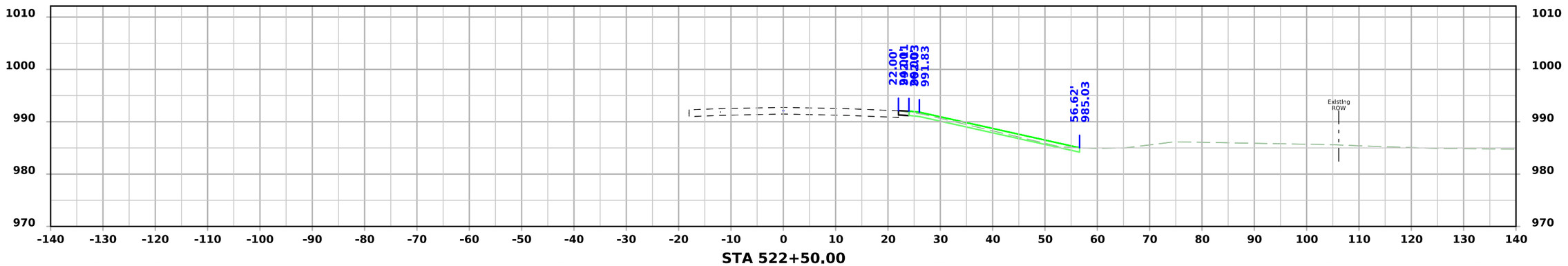
I-29 - Section B



STA 523+50.00



STA 523+00.00

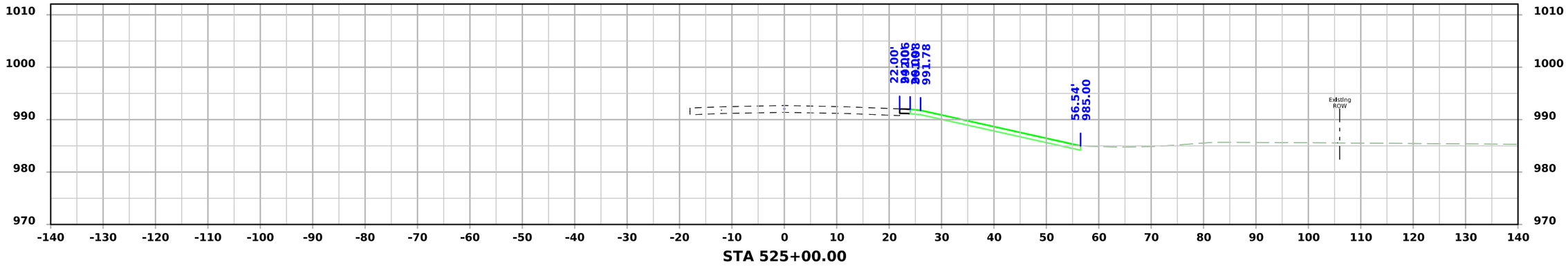


STA 522+50.00

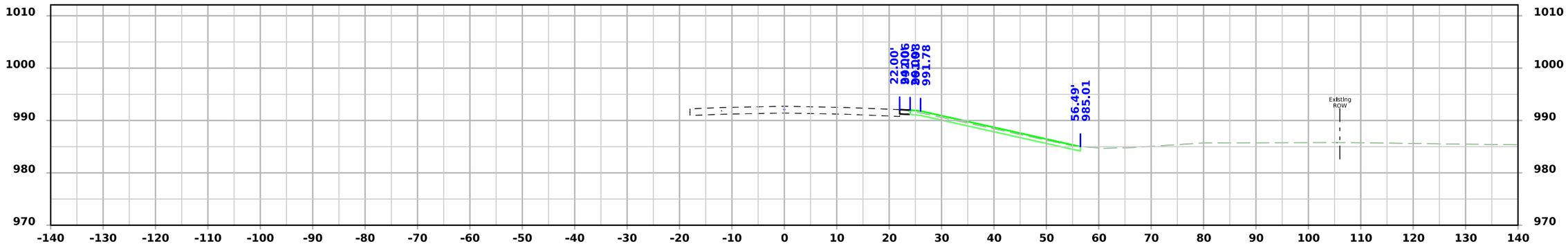
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.305

1:58:55 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W300_78029148Z06.dgn

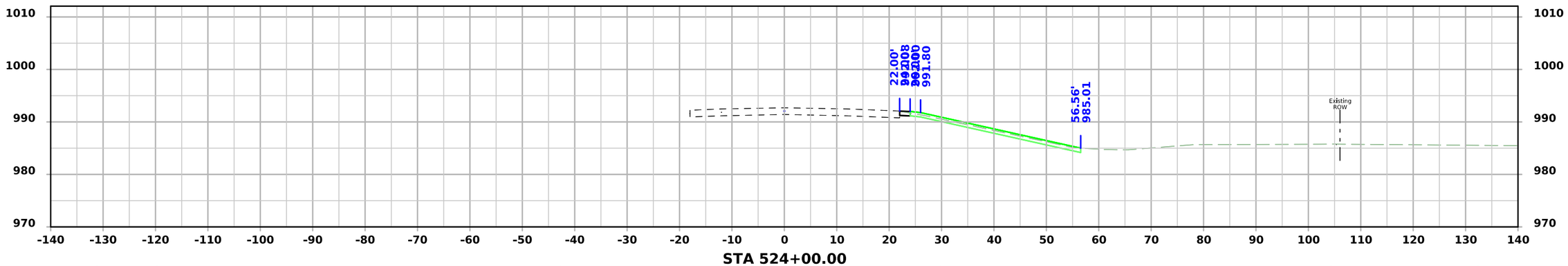
I-29 - Section B



STA 525+00.00



STA 524+50.00

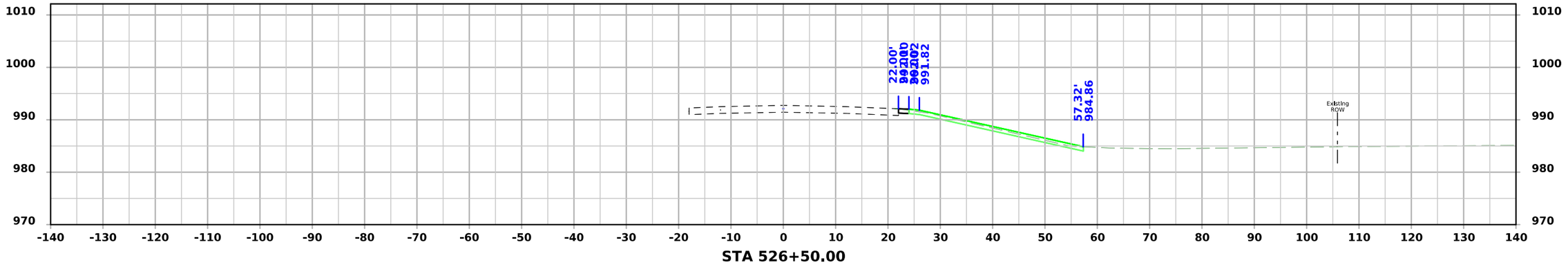


STA 524+00.00

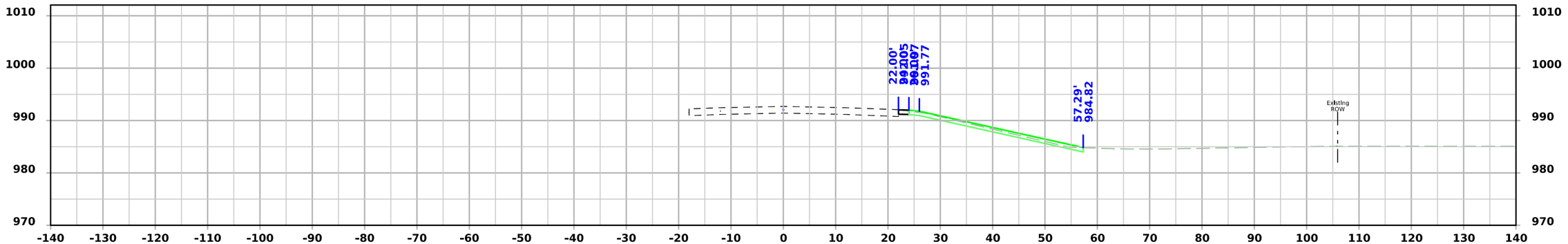
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.306

1:58:56 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W300_78029148Z06.dgn

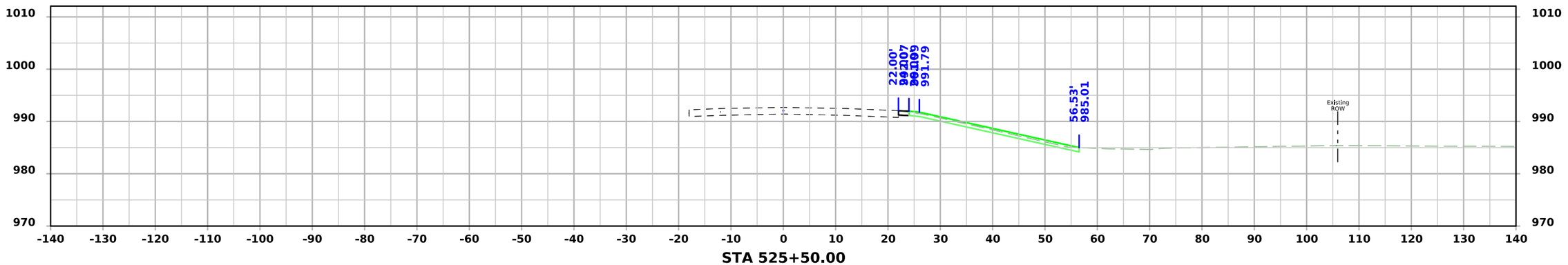
I-29 - Section B



STA 526+50.00



STA 526+00.00

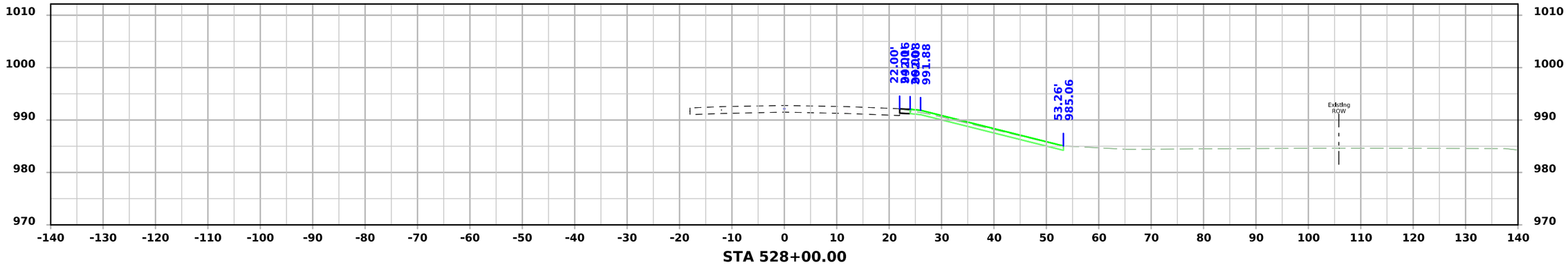


STA 525+50.00

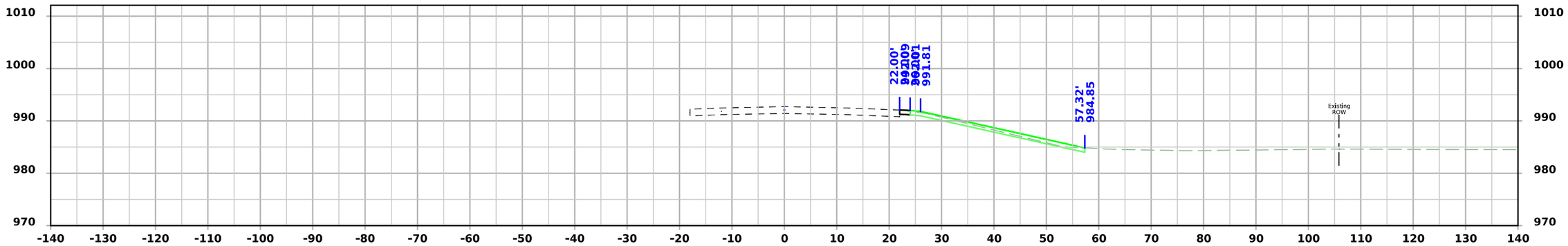
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.307	

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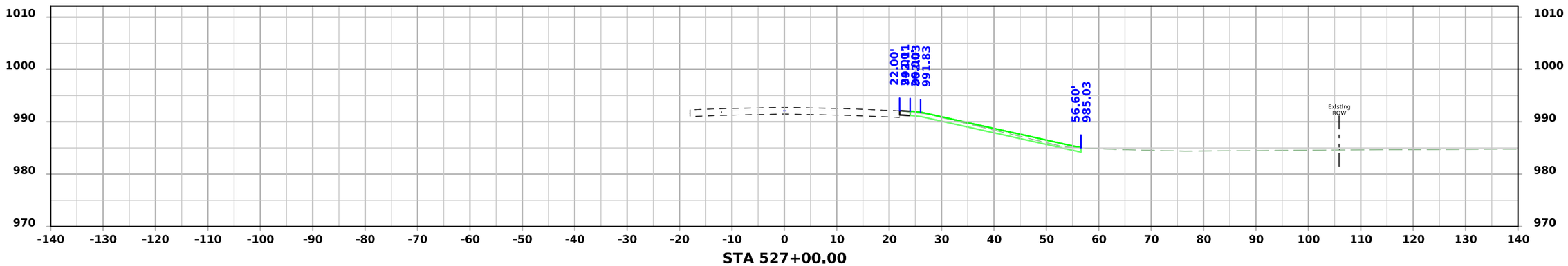
I-29 - Section B



STA 528+00.00



STA 527+50.00

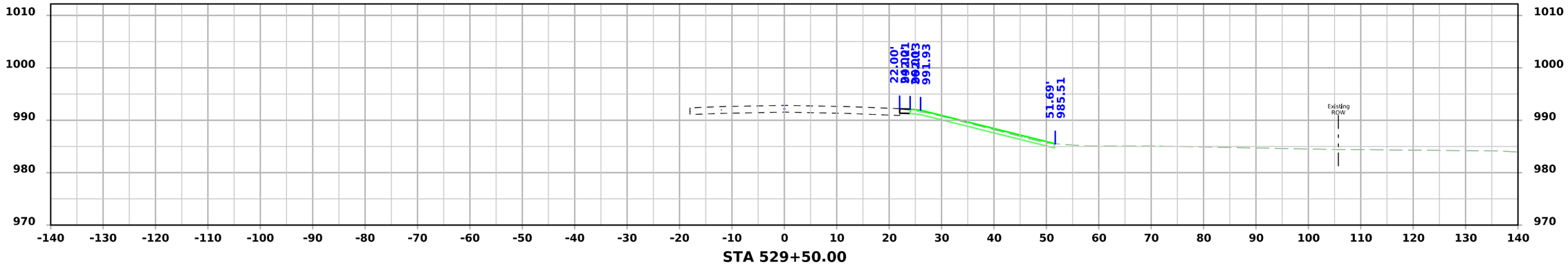


STA 527+00.00

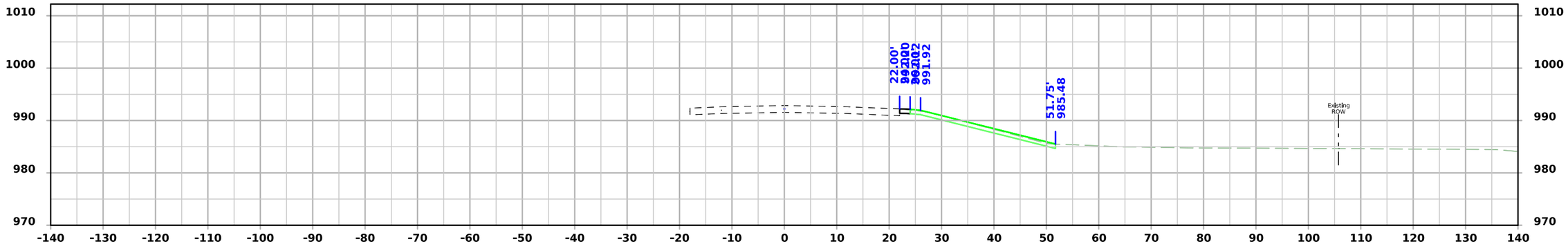
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.308

1:58:58 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W300_78029148Z06.dgn

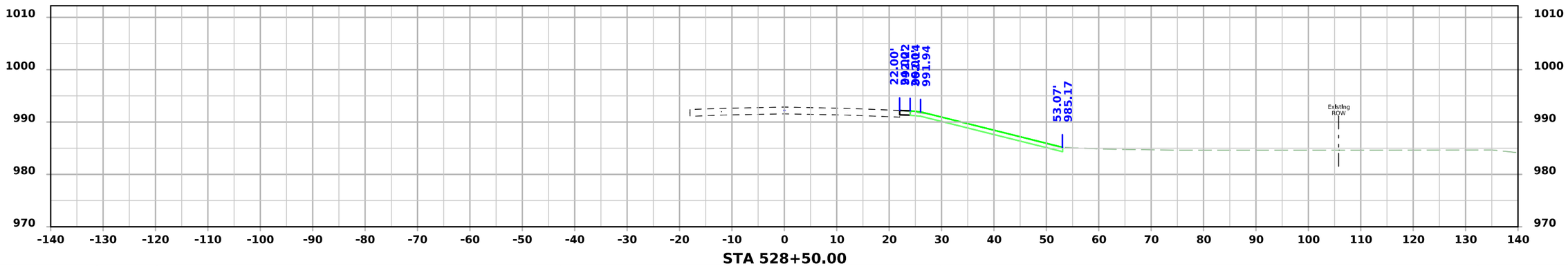
I-29 - Section B



STA 529+50.00



STA 529+00.00

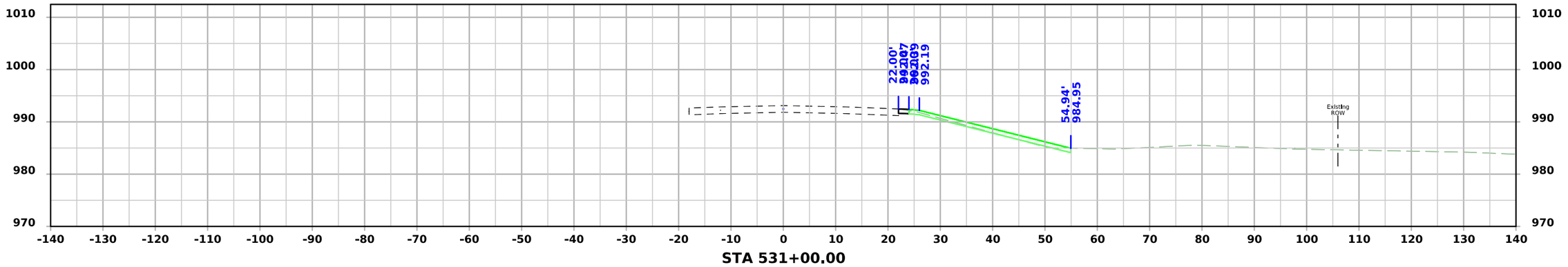


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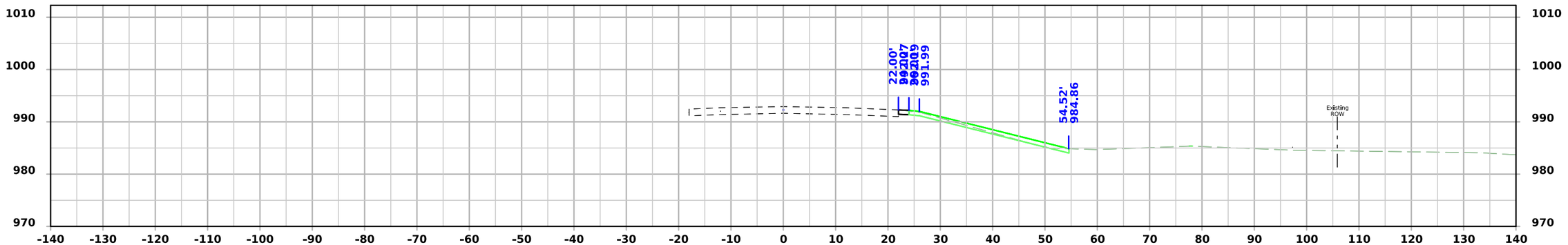
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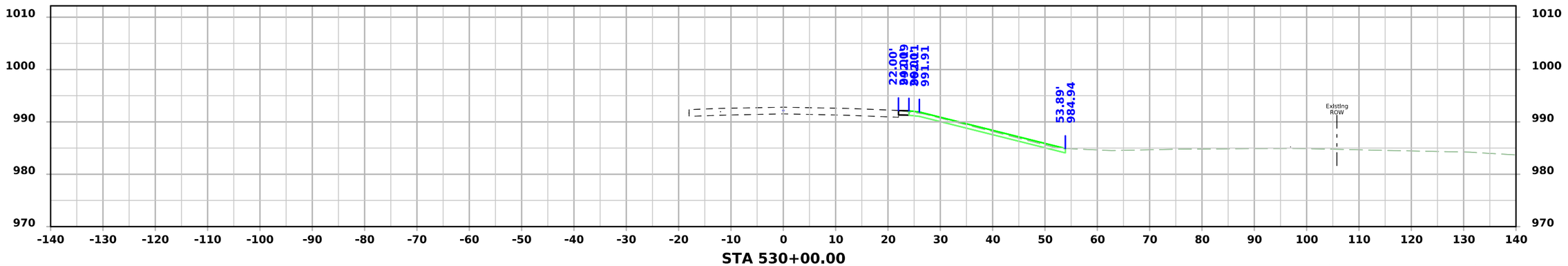
I-29 - Section B



STA 531+00.00



STA 530+50.00

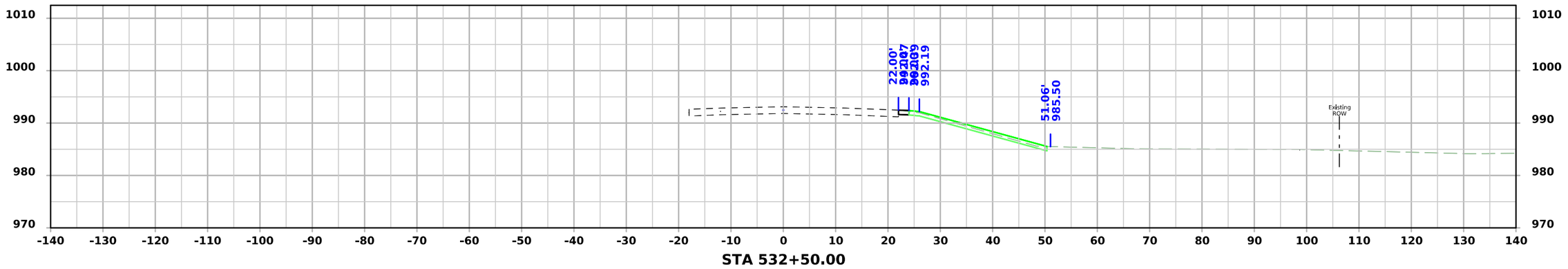


STA 530+00.00

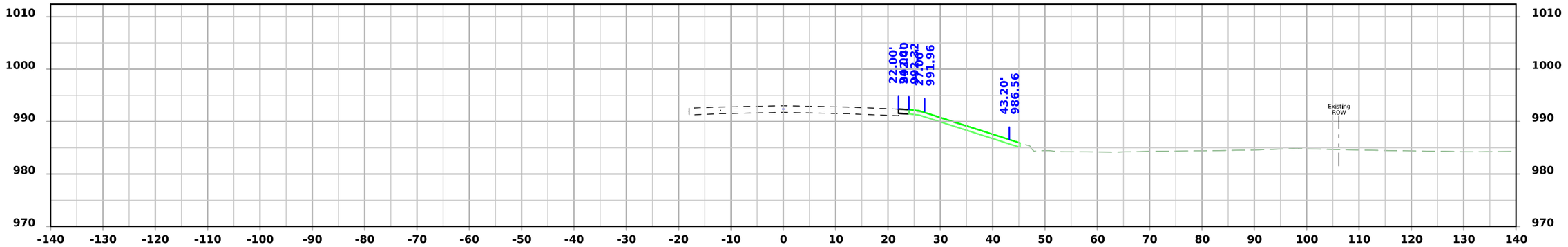
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.310

1:58:59 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W300_78029148Z06.dgn

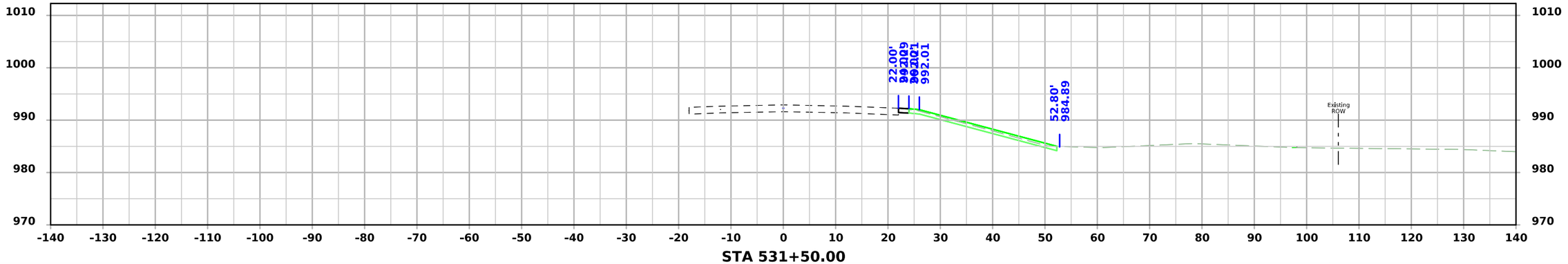
I-29 - Section B



STA 532+50.00



STA 532+00.00

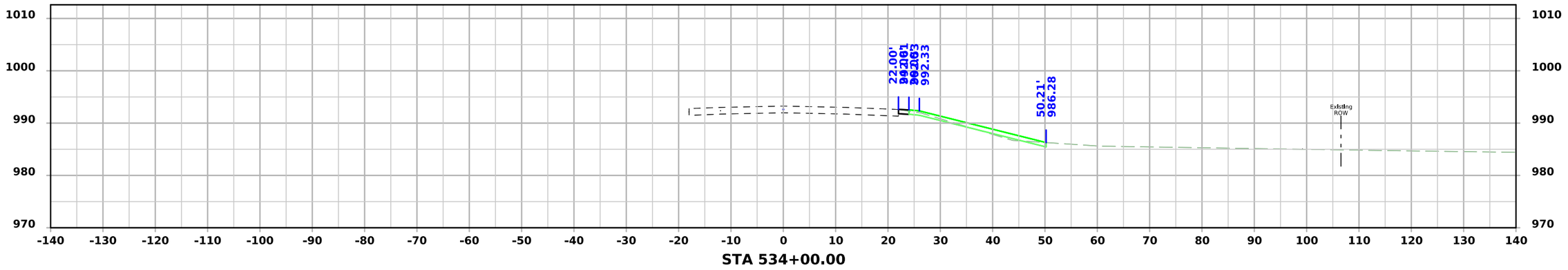


STA 531+50.00

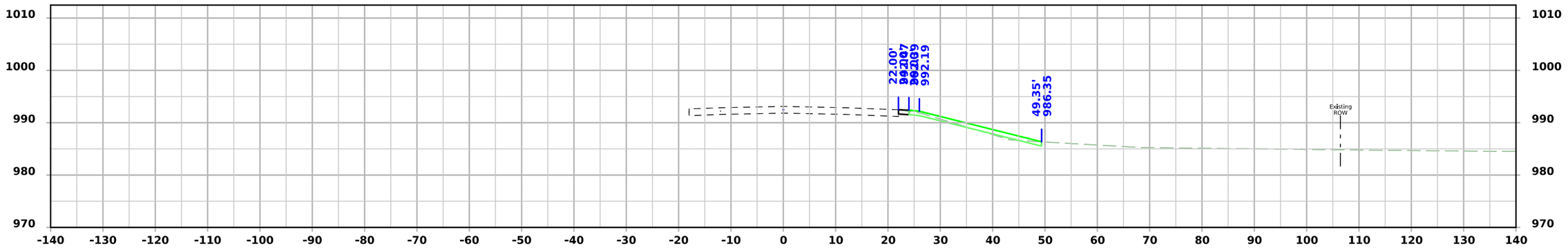
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.311

1:59:00 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W300_78029148Z06.dgn

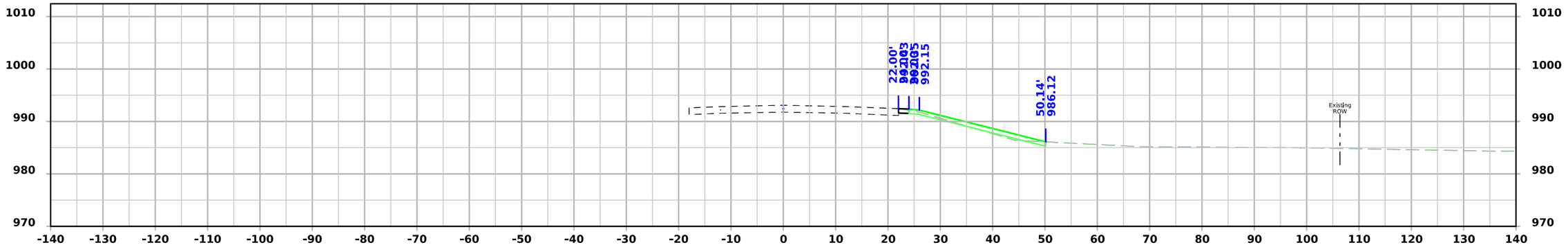
I-29 - Section B



STA 534+00.00



STA 533+50.00

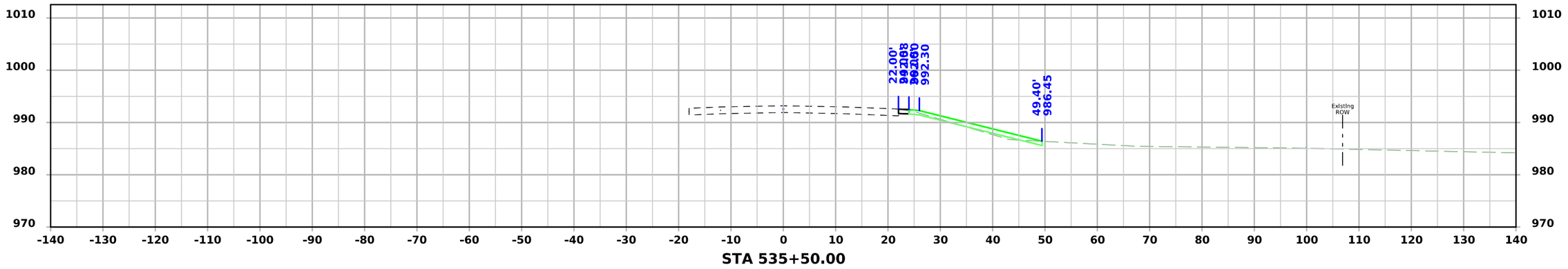


STA 533+00.00

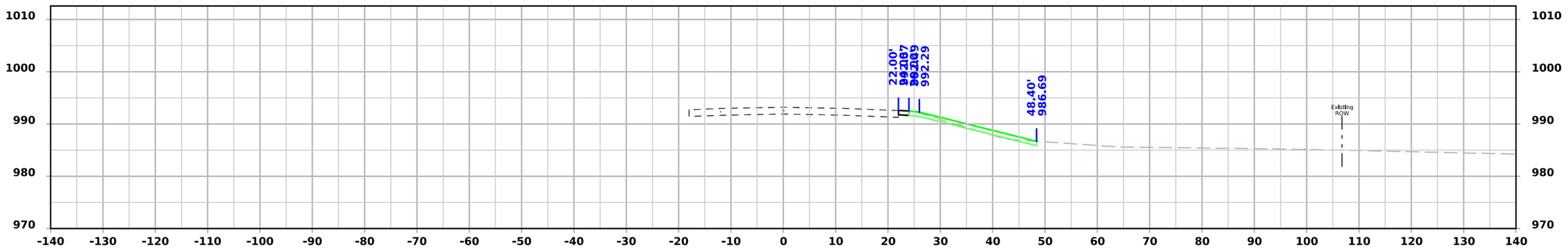
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.312

1:59:01 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W300_78029148Z06.dgn

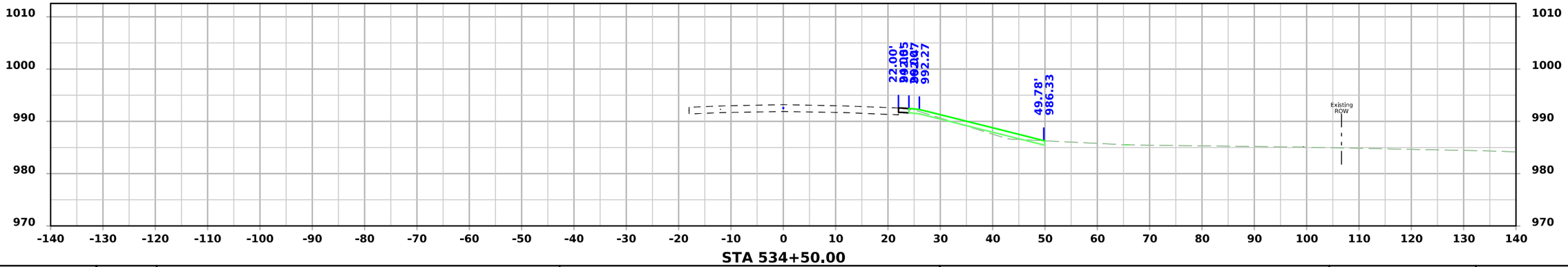
I-29 - Section B



STA 535+50.00



STA 535+00.00

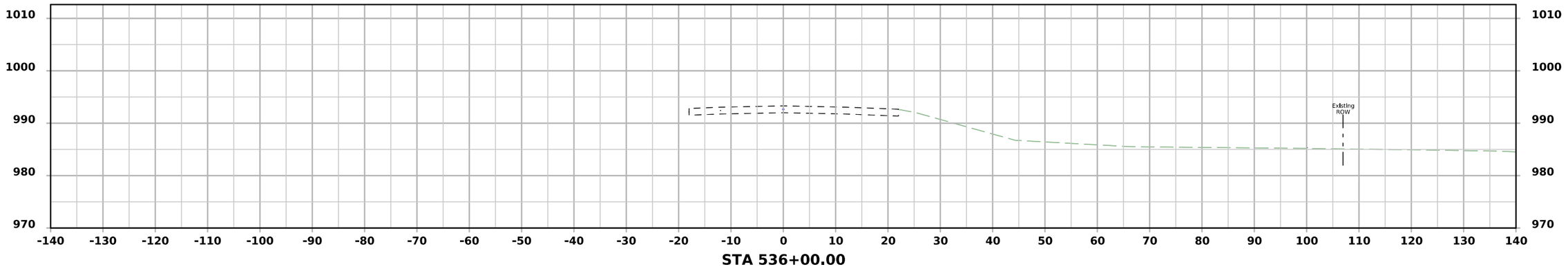


STA 534+50.00

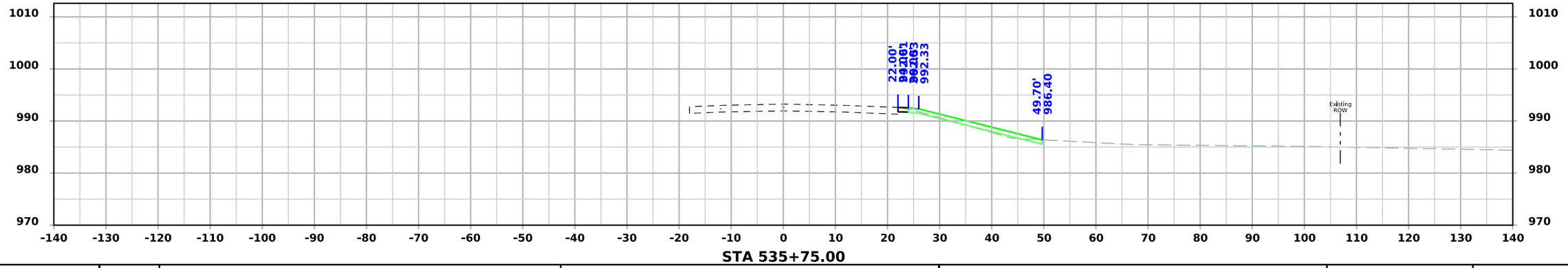
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.313

1:59:01 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W300_78029148Z06.dgn

I-29 - Section B



STA 536+00.00

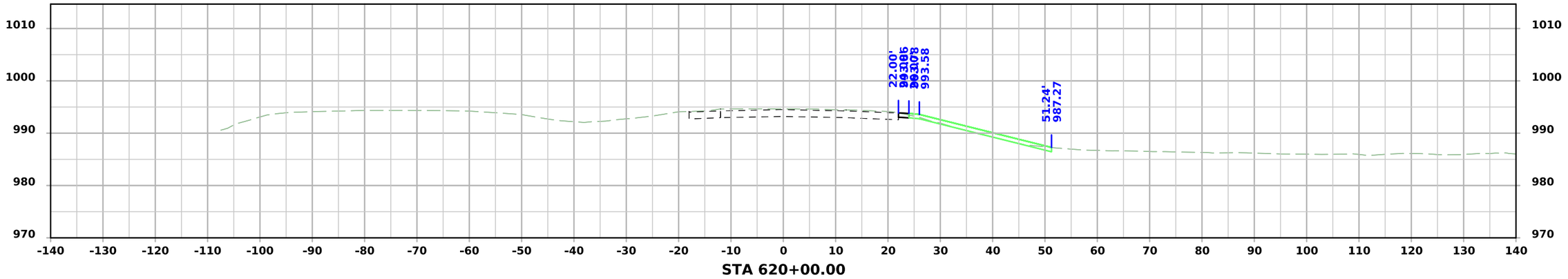


STA 535+75.00

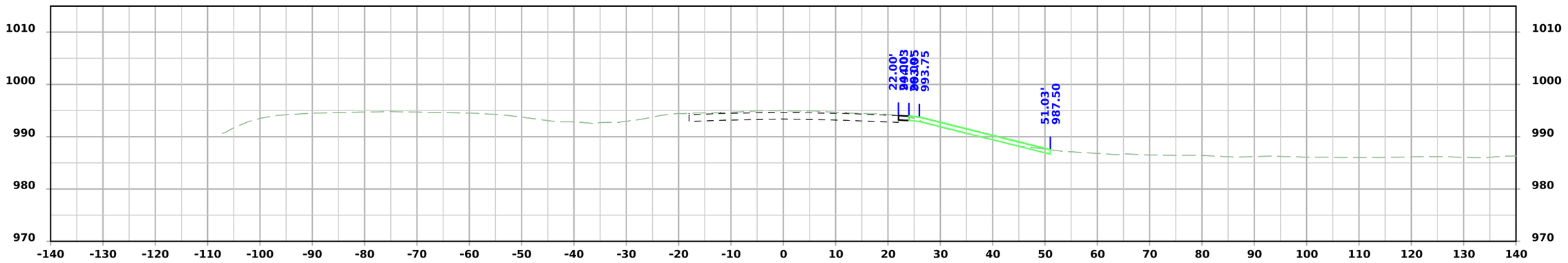
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.314

1:59:02 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W300_78029148Z06.dgn

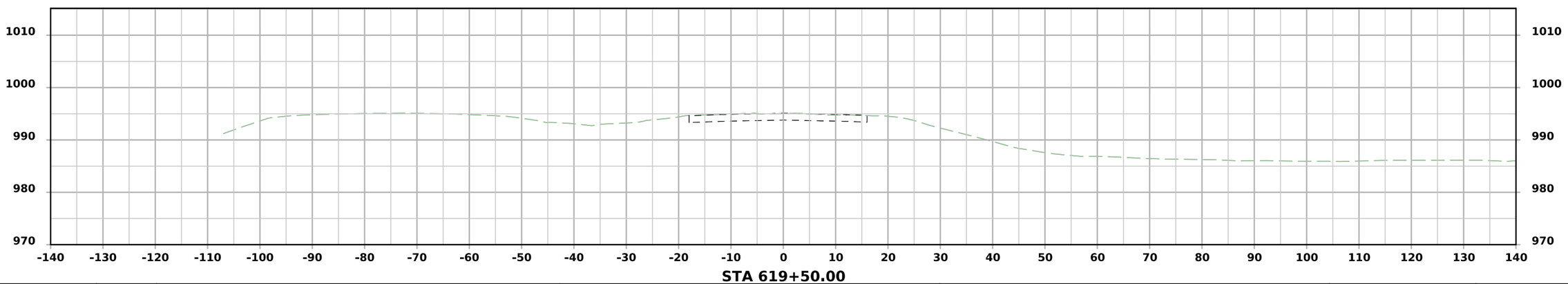
I-29 - Section C



STA 620+00.00



STA 619+75.00

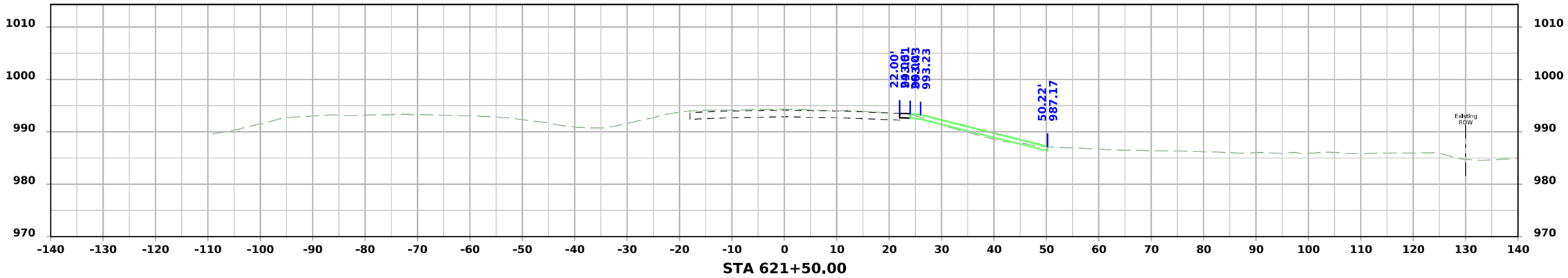


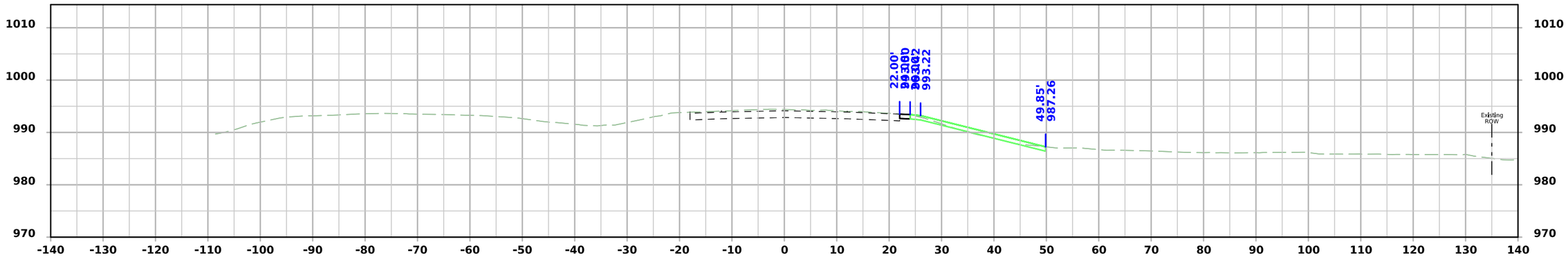
STA 619+50.00

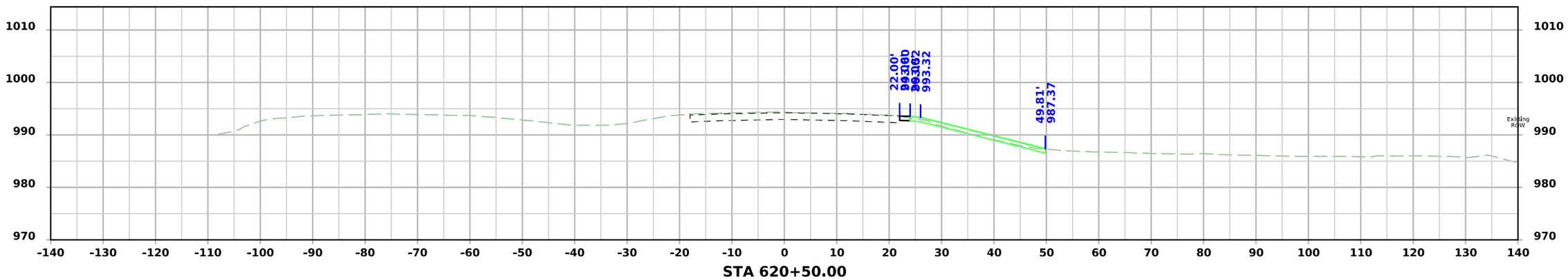
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.400

2:17:43 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

I-29 - Section C



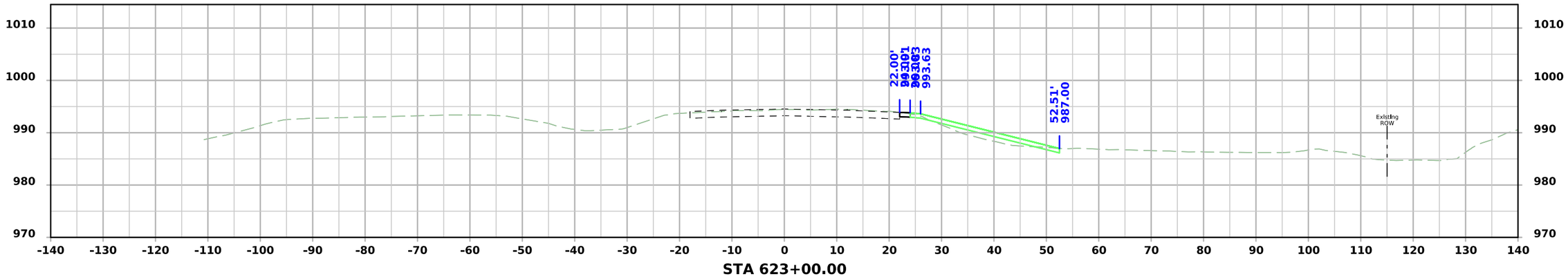




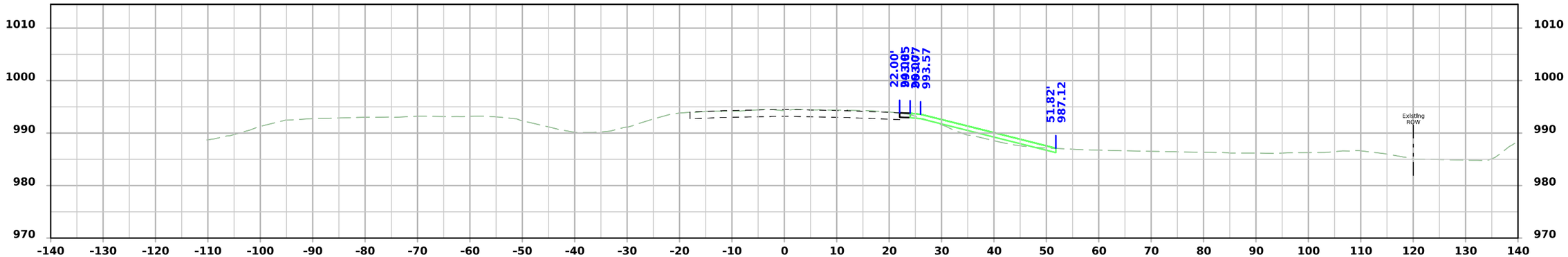
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.401

2:17:44 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

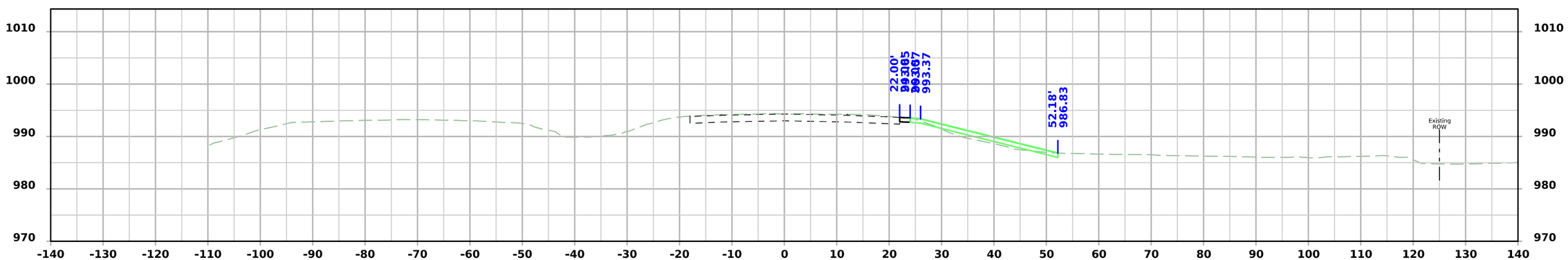
I-29 - Section C



STA 623+00.00



STA 622+50.00

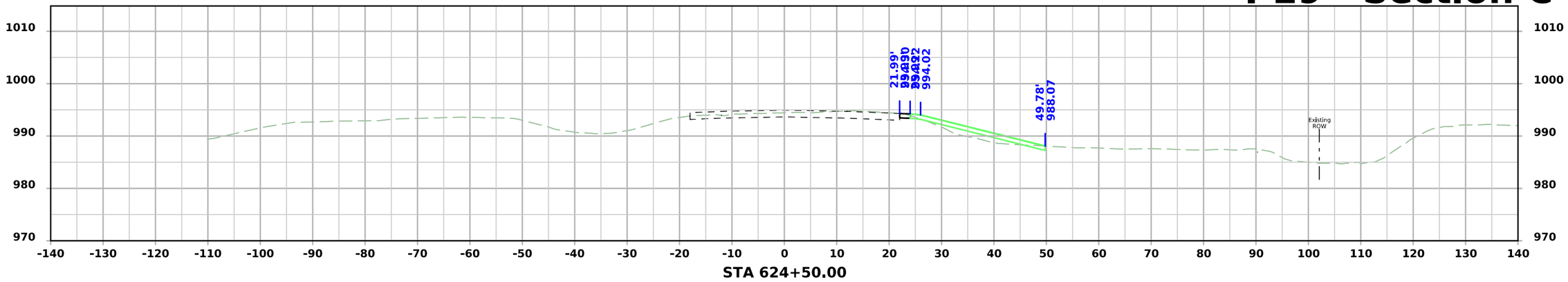


STA 622+00.00

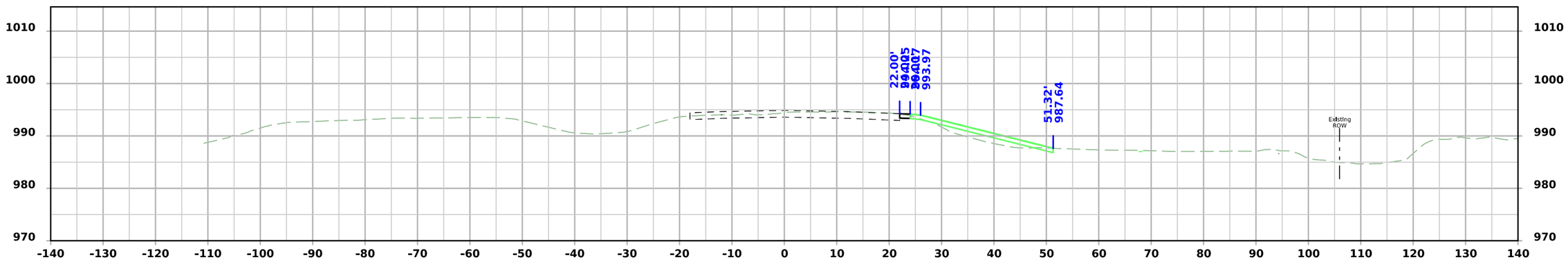
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.402

2:17:45 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

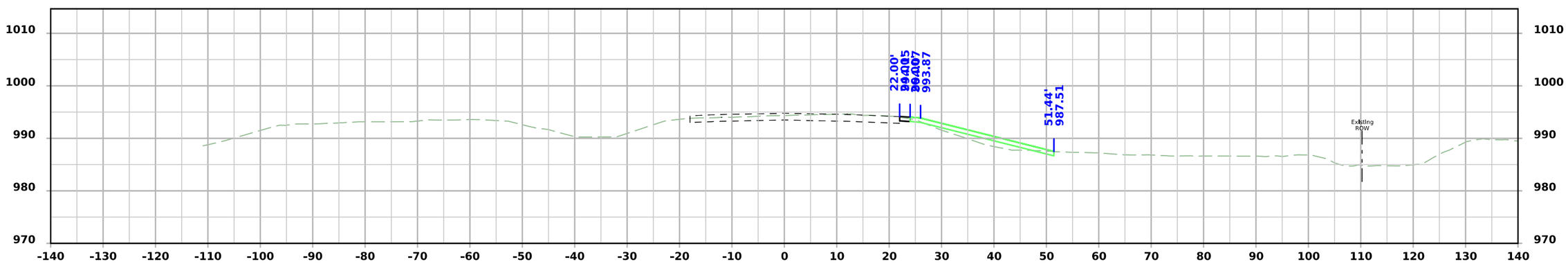
I-29 - Section C



STA 624+50.00



STA 624+00.00

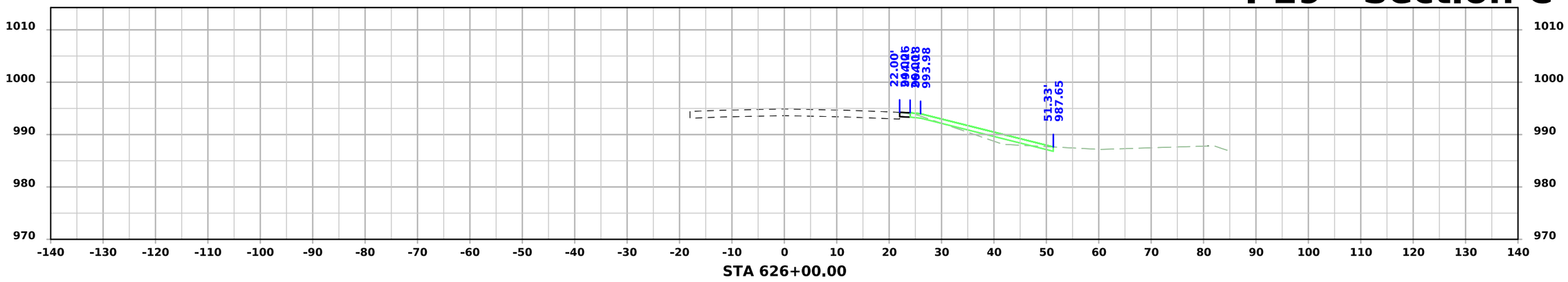


STA 623+50.00

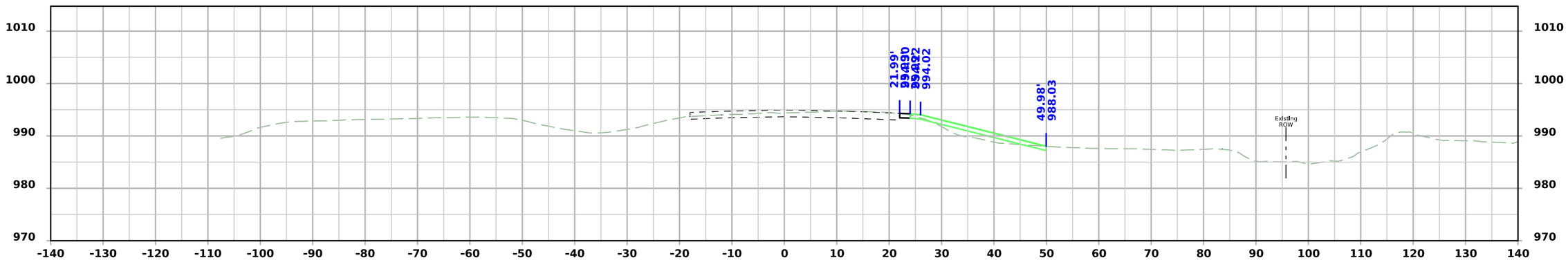
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.403

2:17:46 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

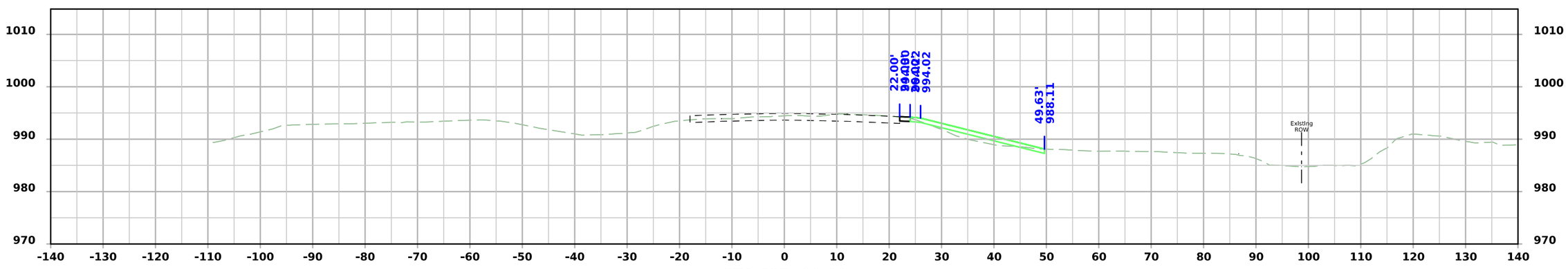
I-29 - Section C



STA 626+00.00



STA 625+50.00

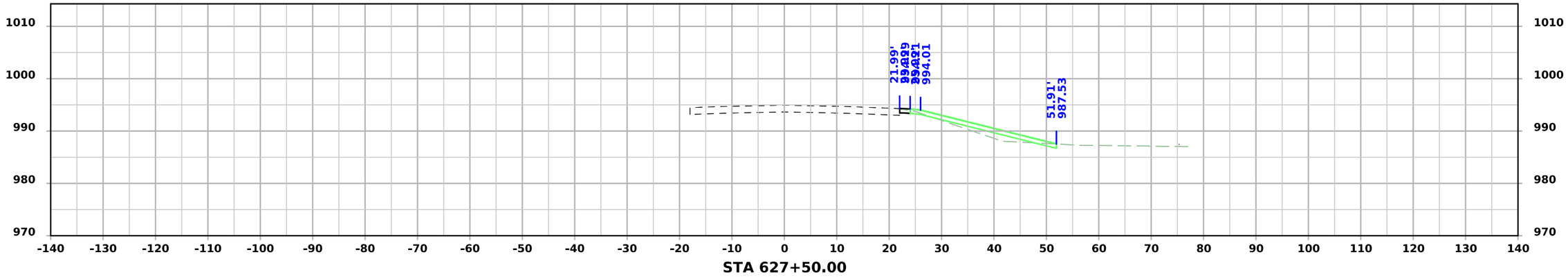


STA 625+00.00

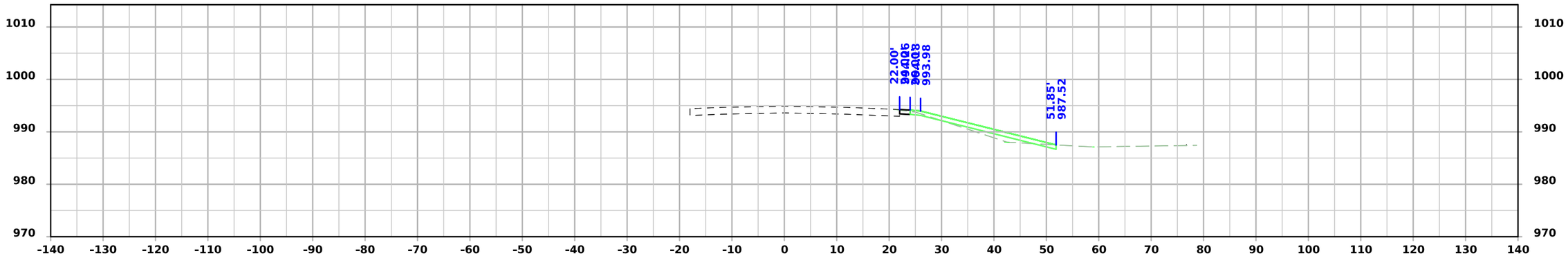
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.404

2:17:47 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

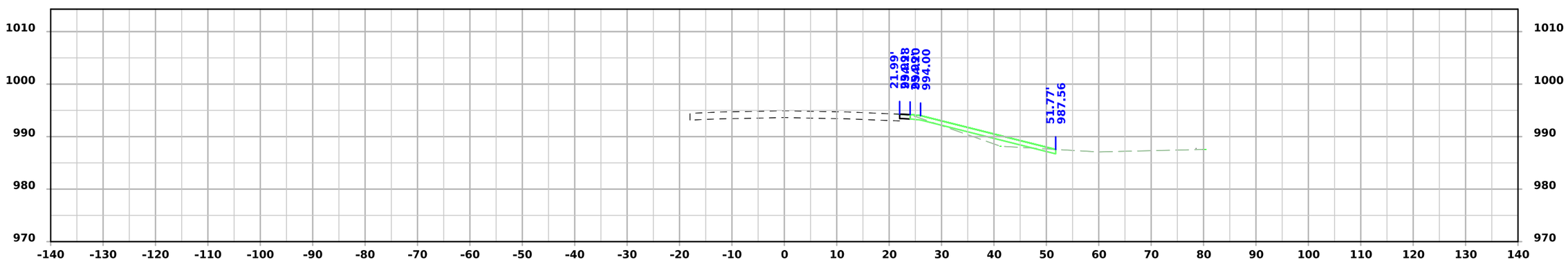
I-29 - Section C



STA 627+50.00



STA 627+00.00

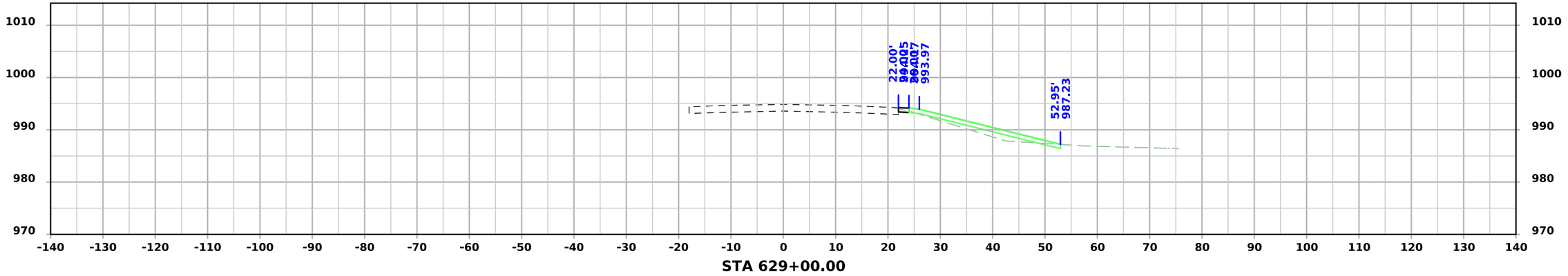


STA 626+50.00

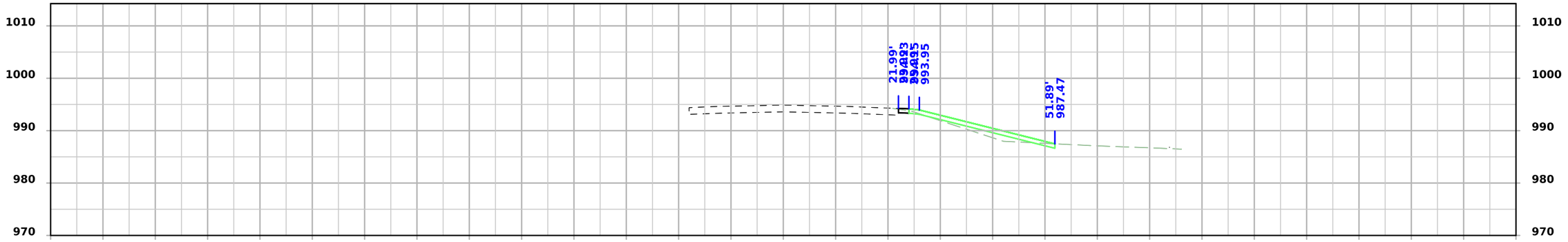
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.405

2:17:47 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

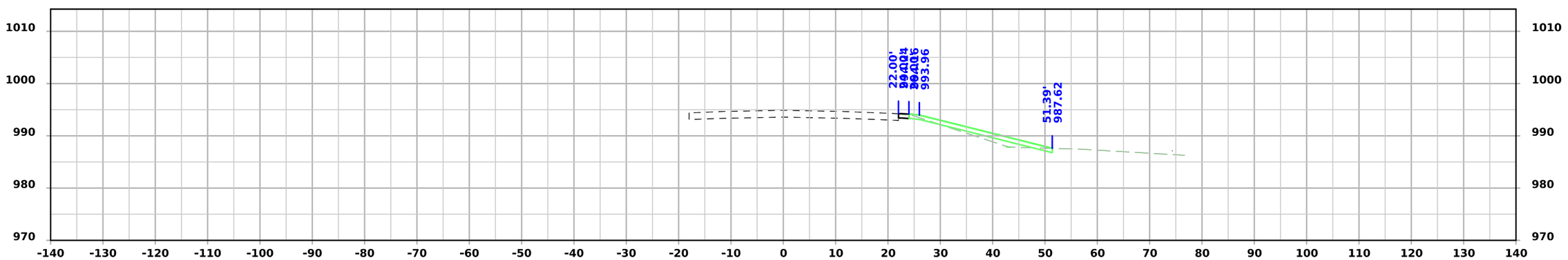
I-29 - Section C



STA 629+00.00



STA 628+50.00

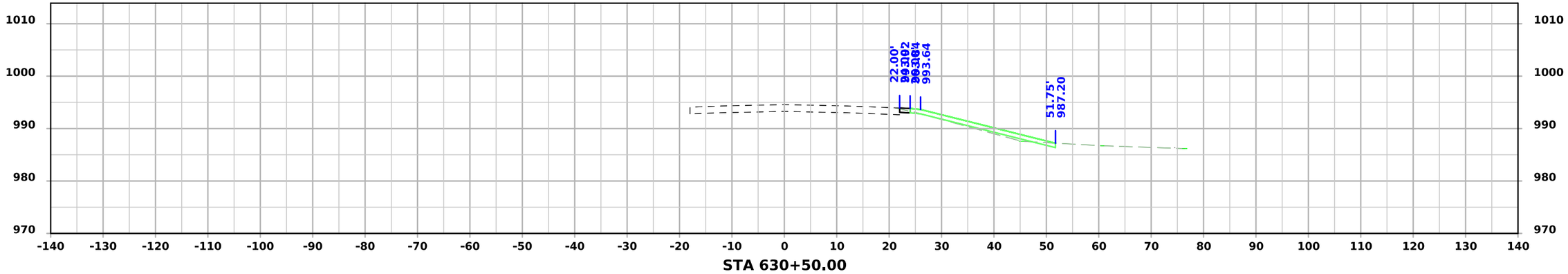


STA 628+00.00

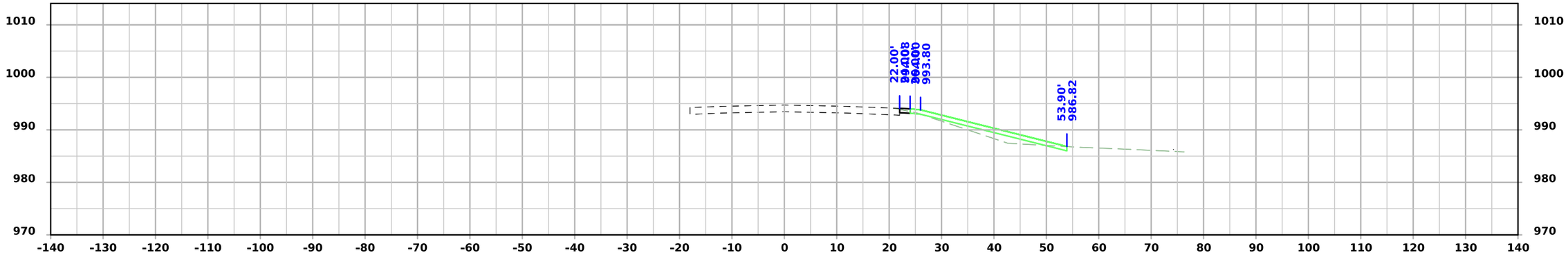
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.406

2:17:48 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

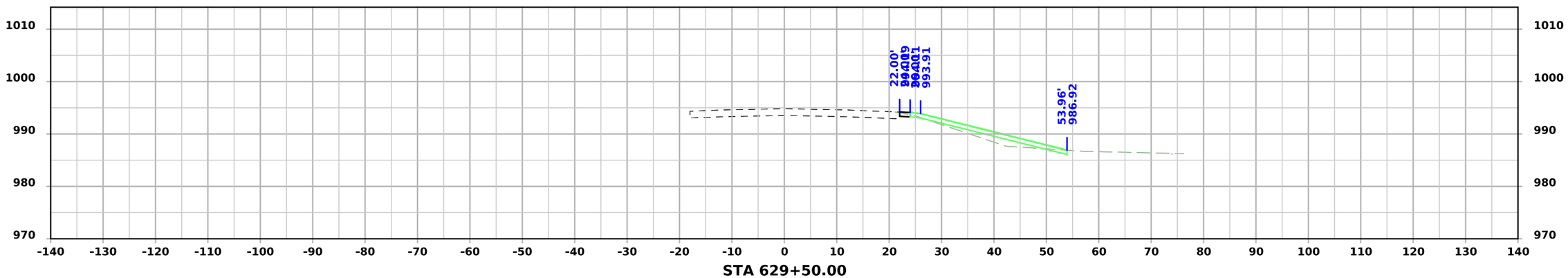
I-29 - Section C



STA 630+50.00



STA 630+00.00

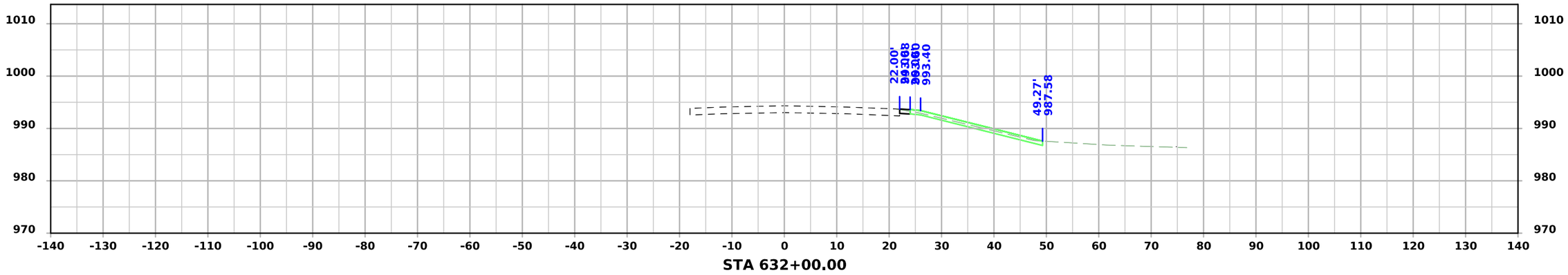


STA 629+50.00

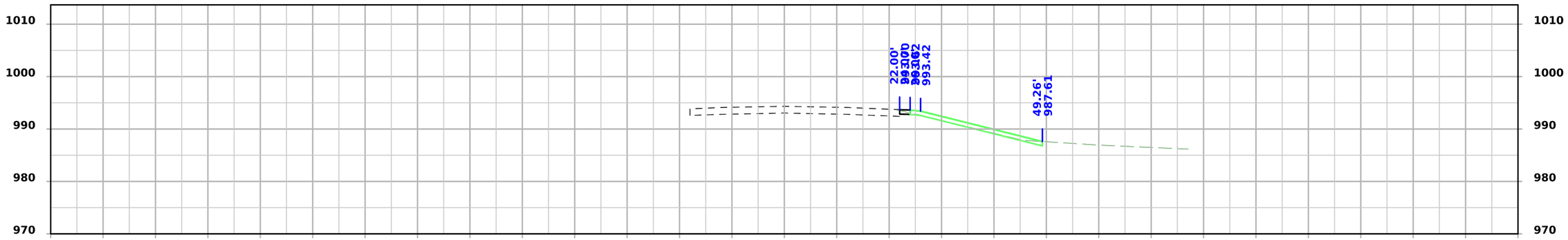
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.407

2:17:49 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

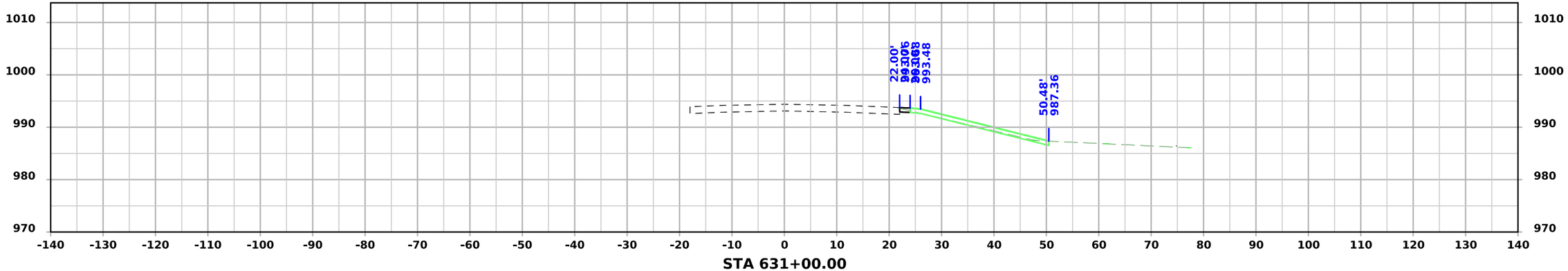
I-29 - Section C



STA 632+00.00



STA 631+50.00

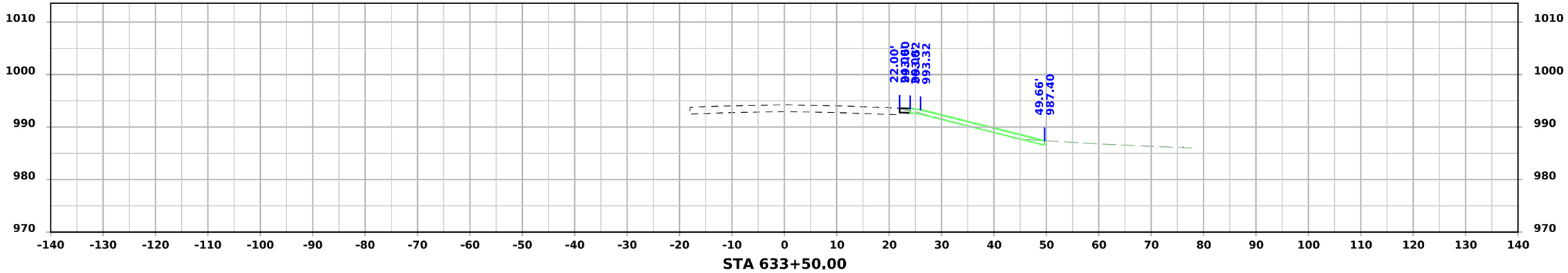


STA 631+00.00

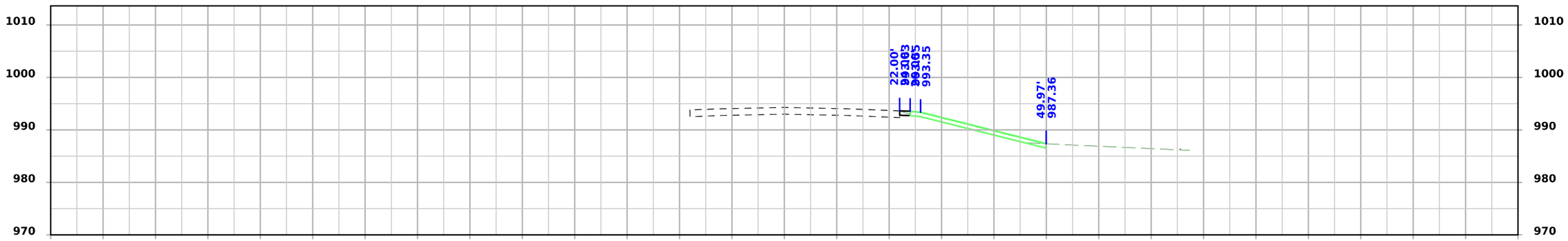
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2:17:50 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

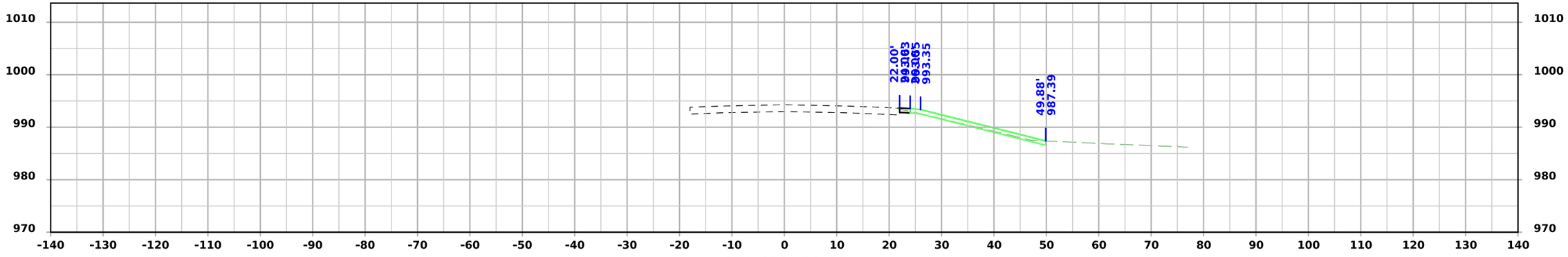
I-29 - Section C



STA 633+50.00



STA 633+00.00

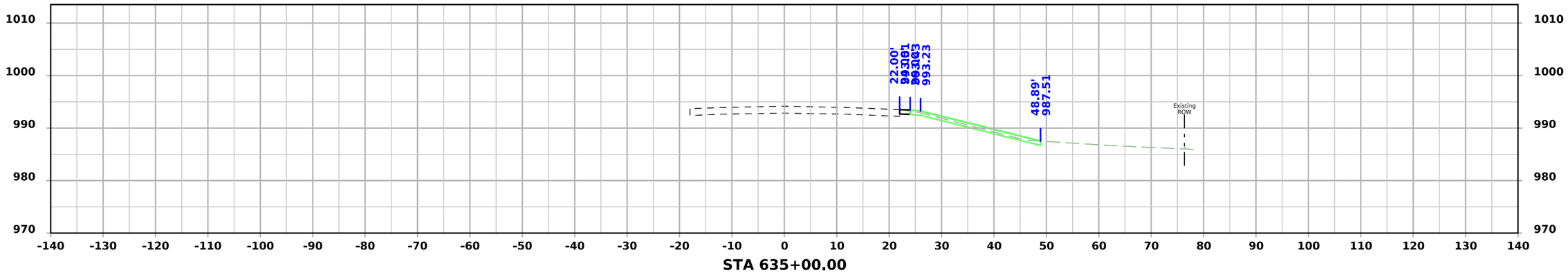


STA 632+50.00

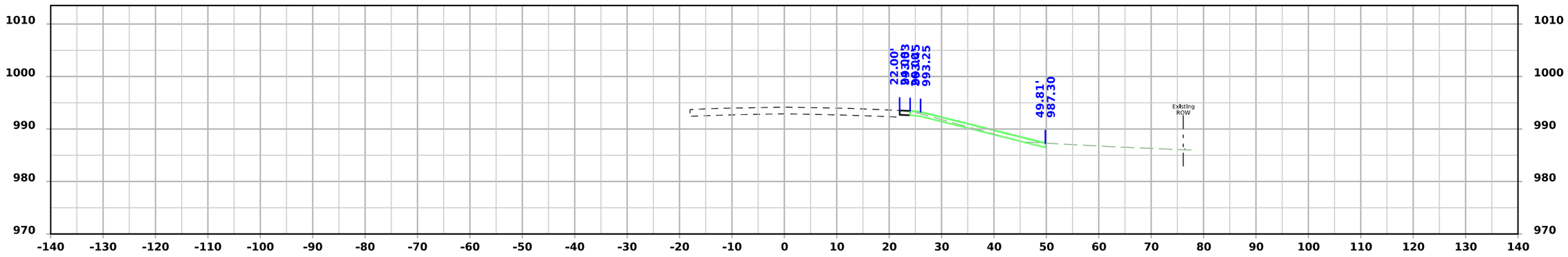
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.409

2:17:50 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

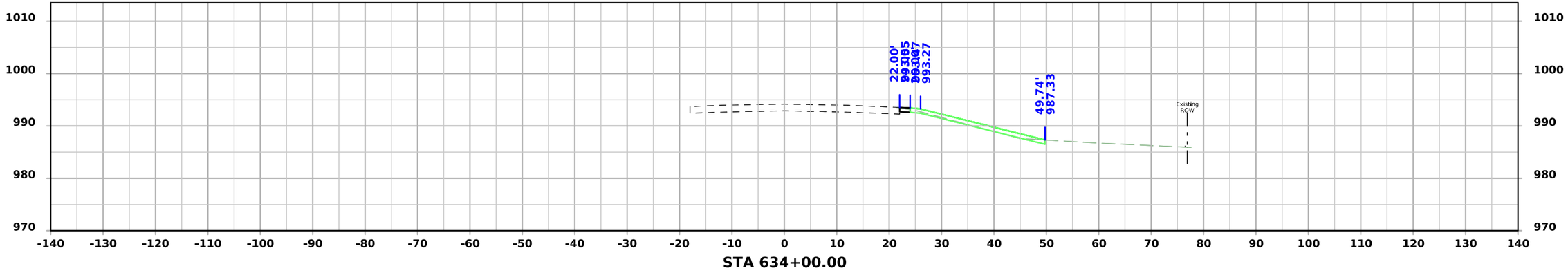
I-29 - Section C



STA 635+00.00



STA 634+50.00

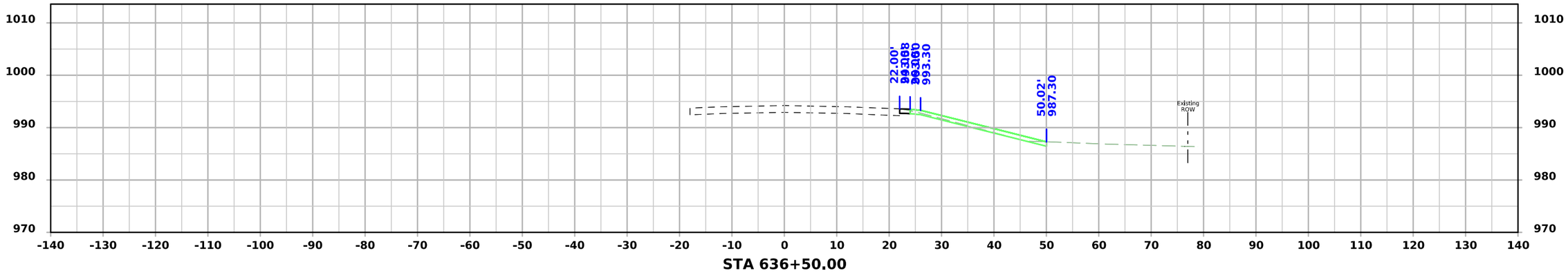


STA 634+00.00

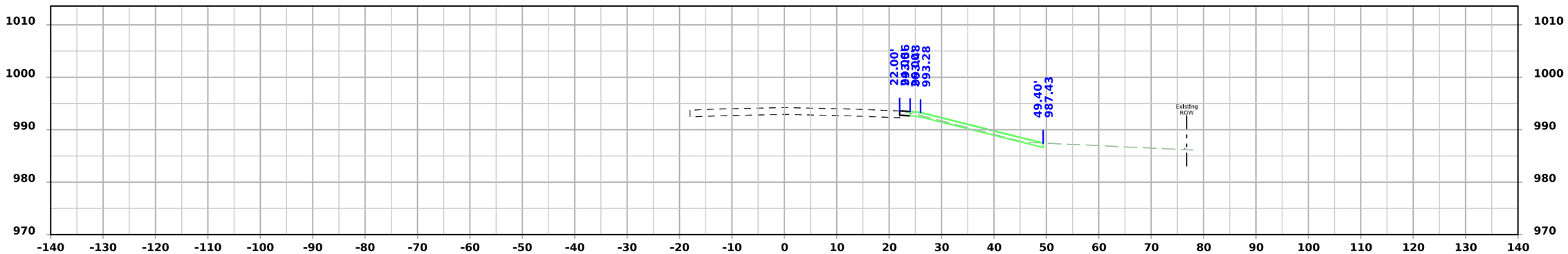
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.410

2:17:51 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

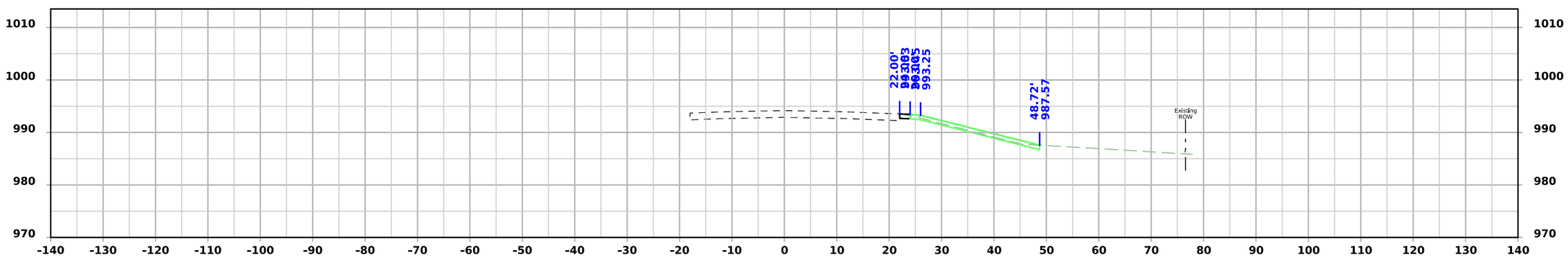
I-29 - Section C



STA 636+50.00



STA 636+00.00

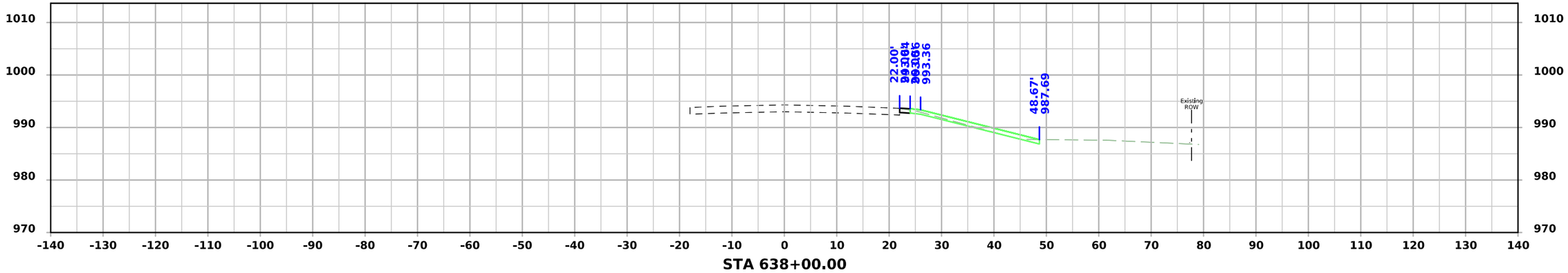


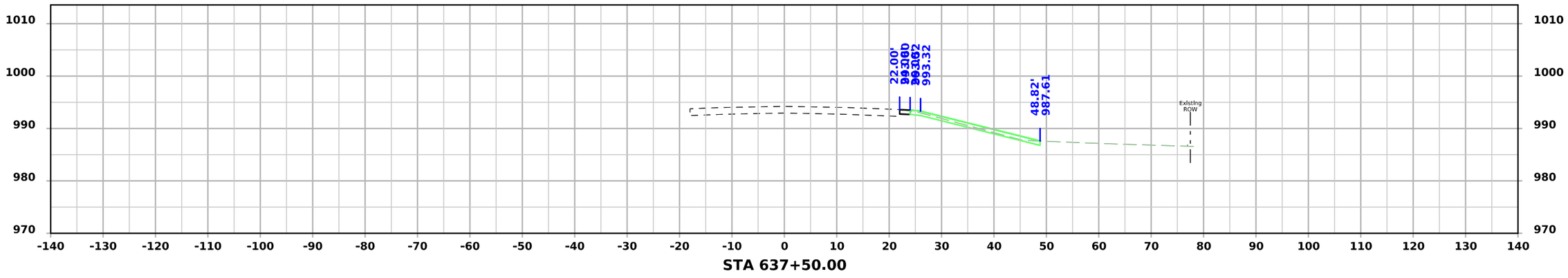
STA 635+50.00

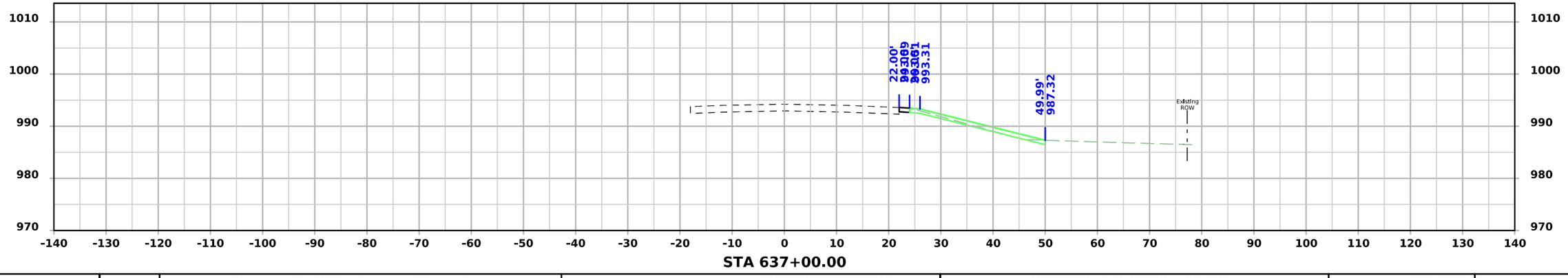
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.411

2:17:52 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

I-29 - Section C



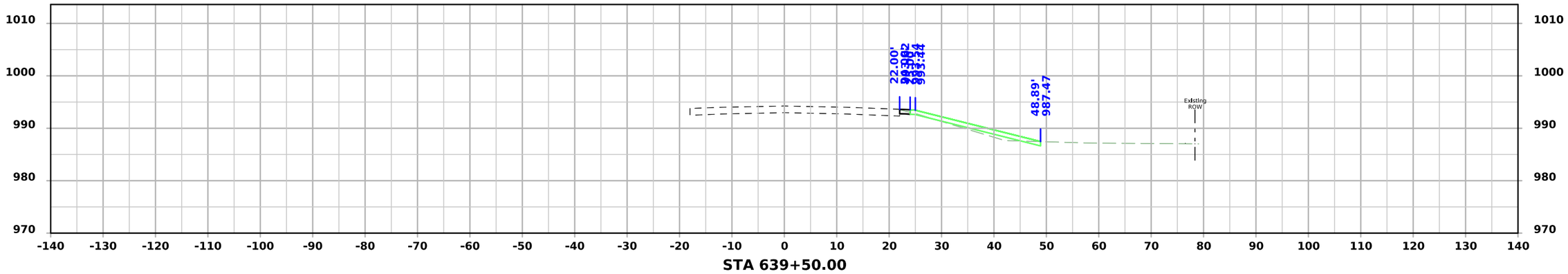




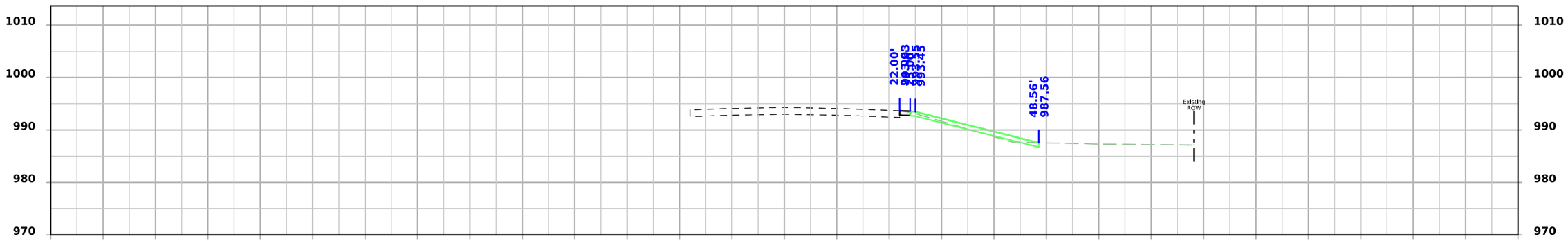
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.412

2:17:53 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

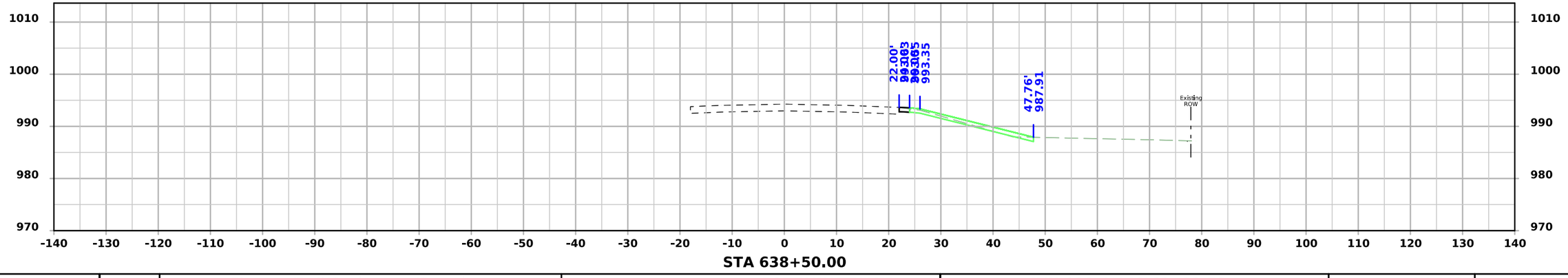
I-29 - Section C



STA 639+50.00



STA 639+00.00

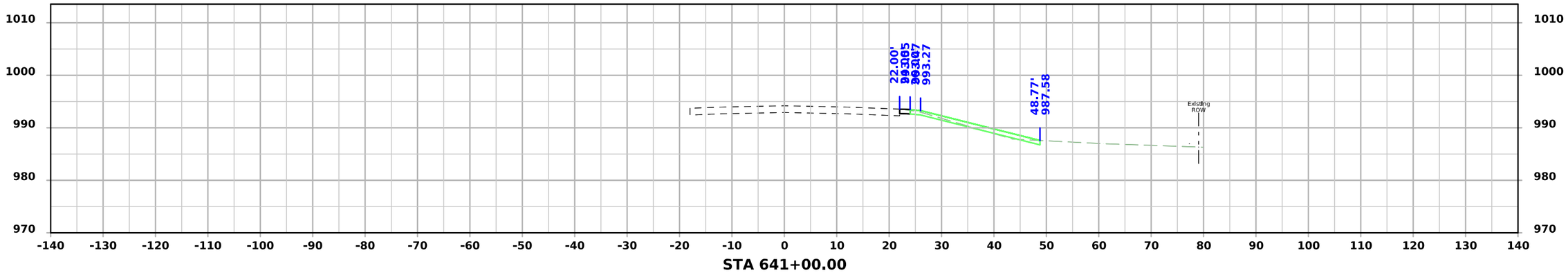


STA 638+50.00

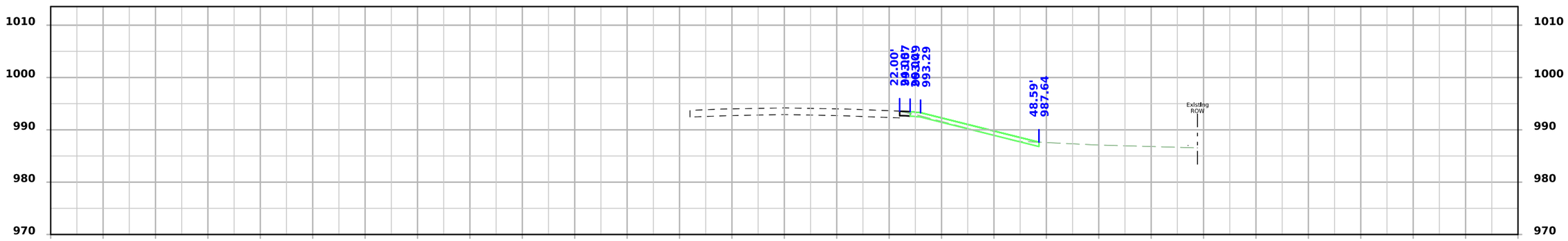
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.413

2:17:54 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

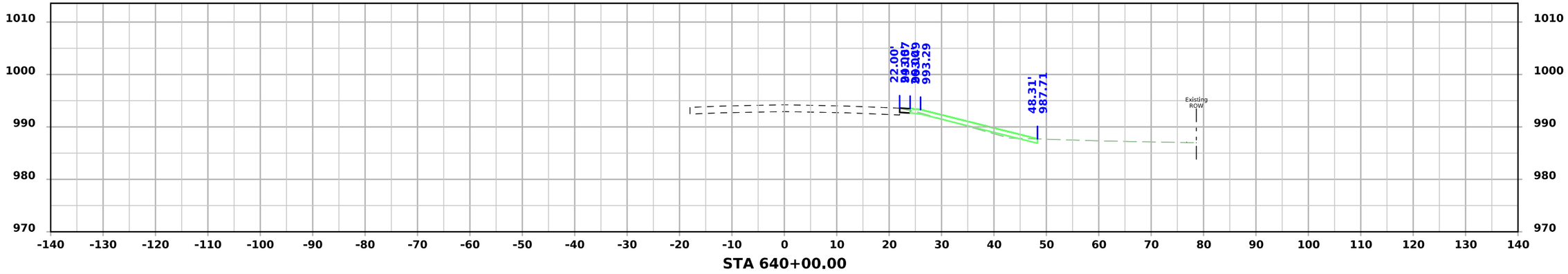
I-29 - Section C



STA 641+00.00



STA 640+50.00

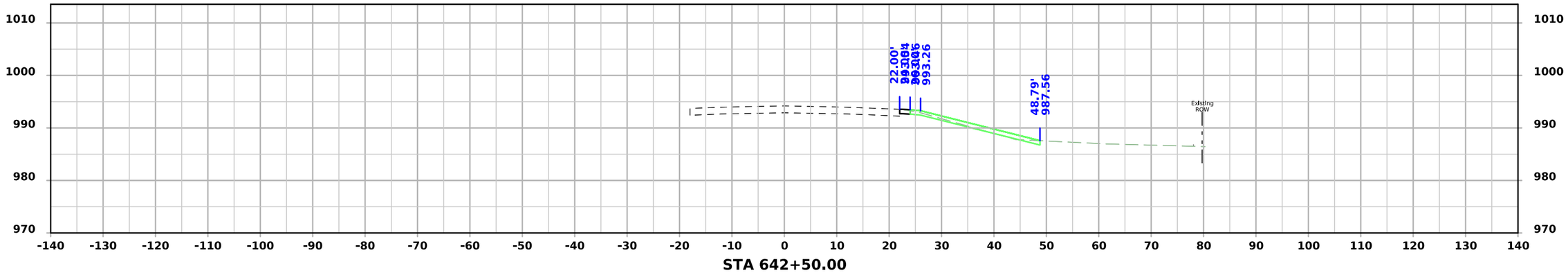


STA 640+00.00

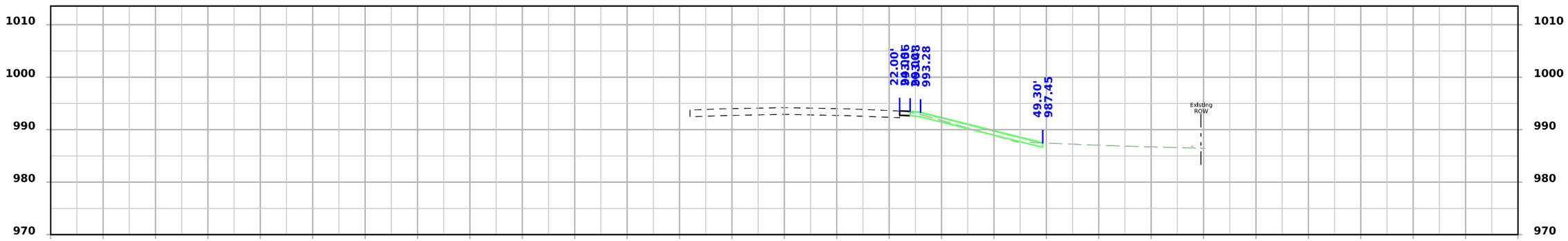
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.414

2:17:55 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

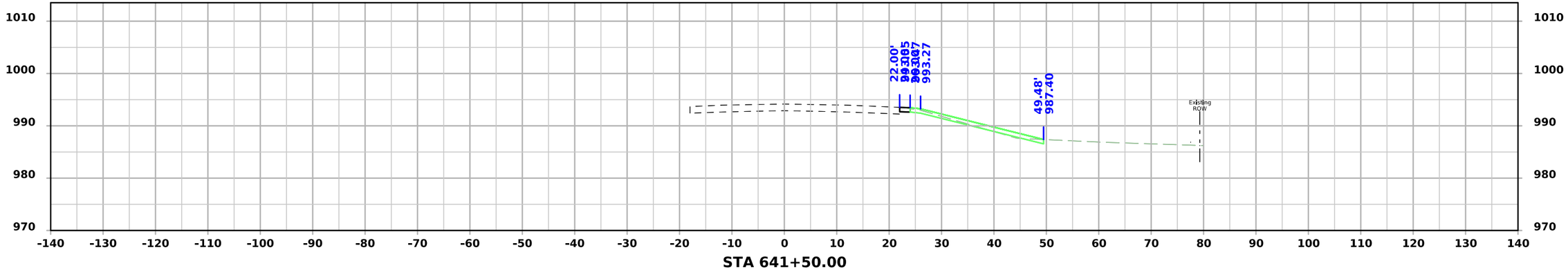
I-29 - Section C



STA 642+50.00



STA 642+00.00

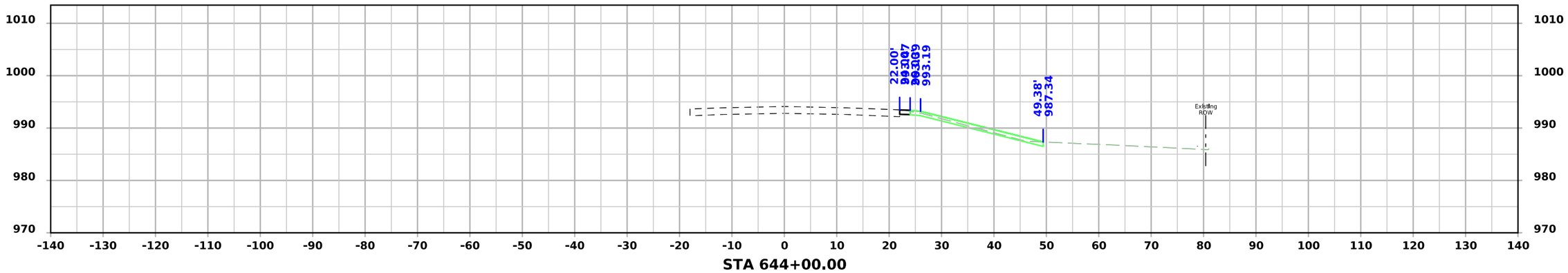


STA 641+50.00

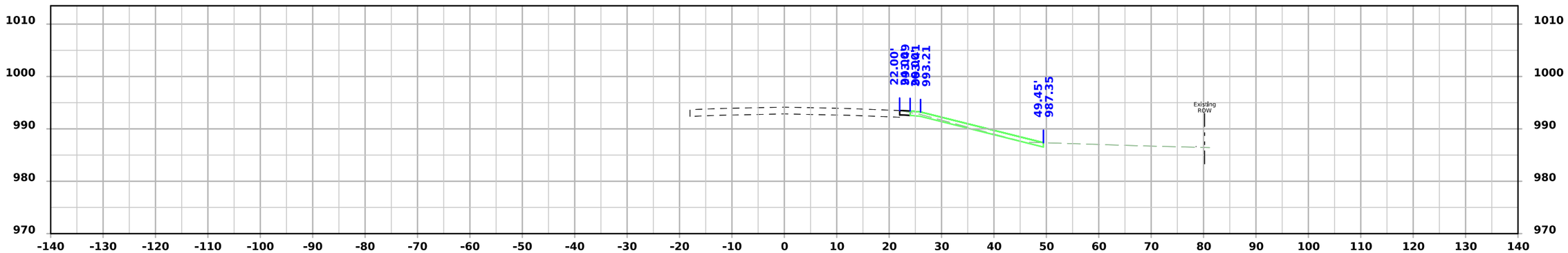
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.415

2:17:55 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

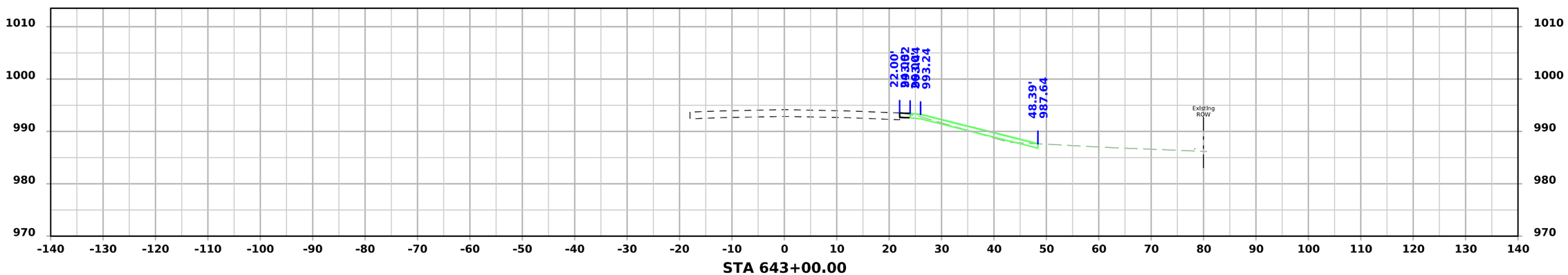
I-29 - Section C



STA 644+00.00



STA 643+50.00

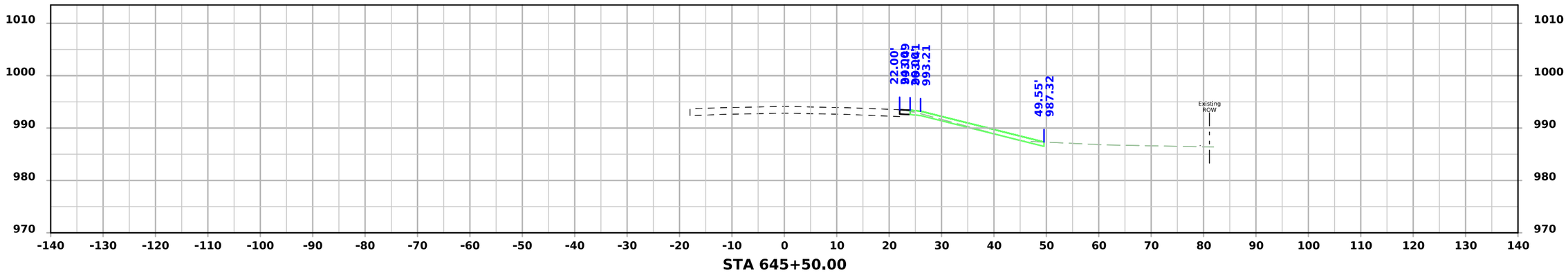


STA 643+00.00

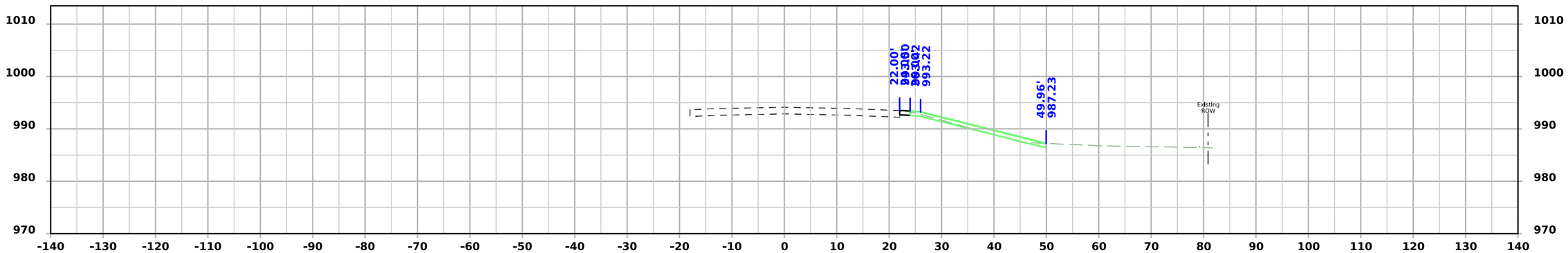
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.416

2:17:56 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

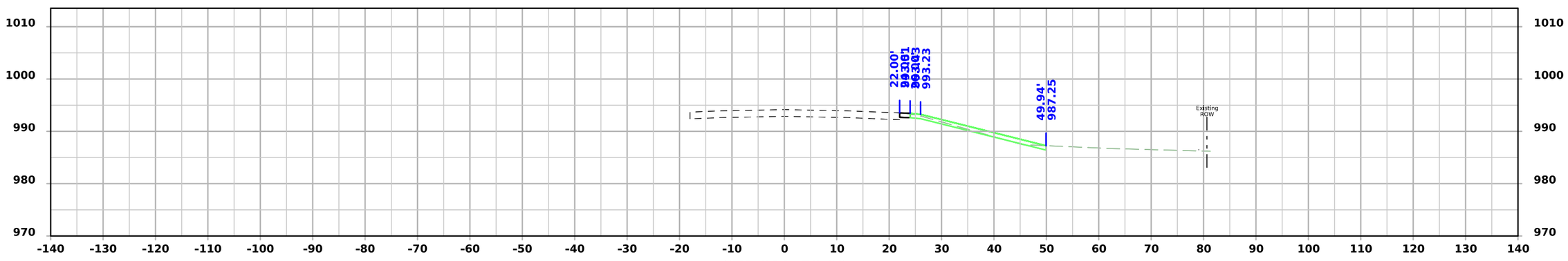
I-29 - Section C



STA 645+50.00



STA 645+00.00

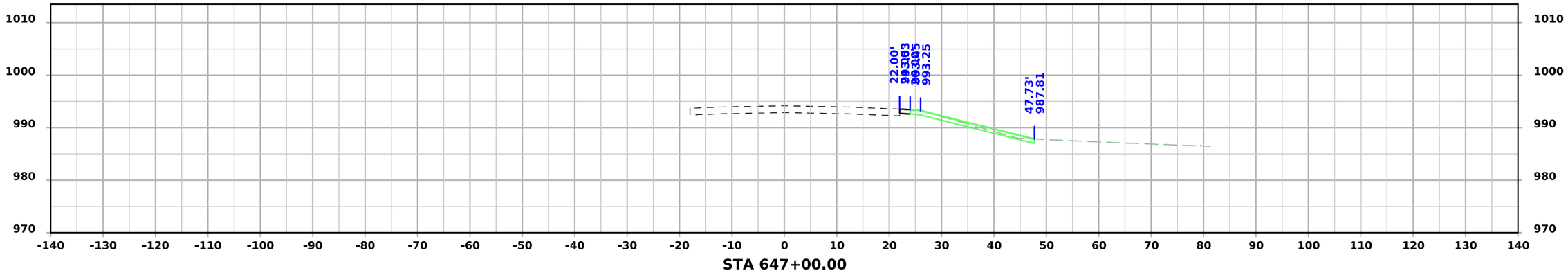


STA 644+50.00

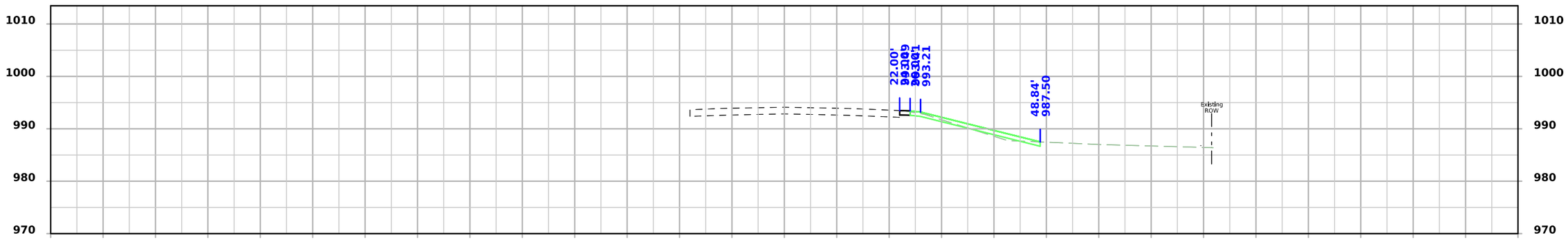
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.417

2:17:57 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

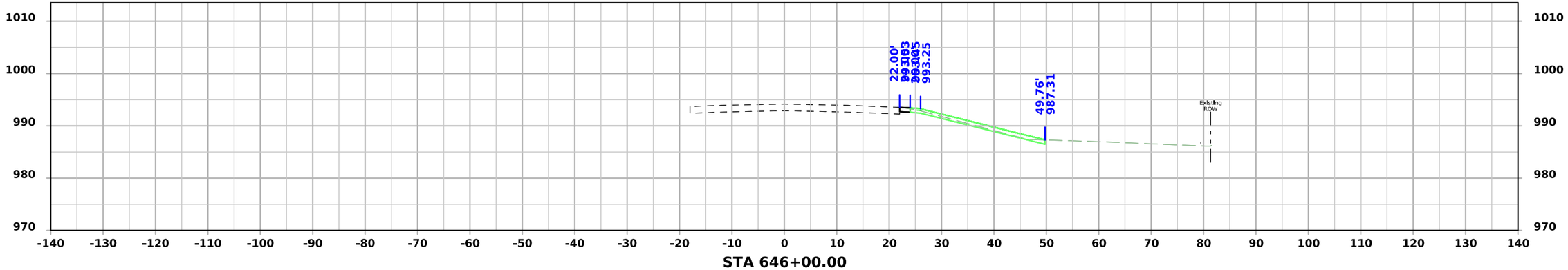
I-29 - Section C



STA 647+00.00



STA 646+50.00

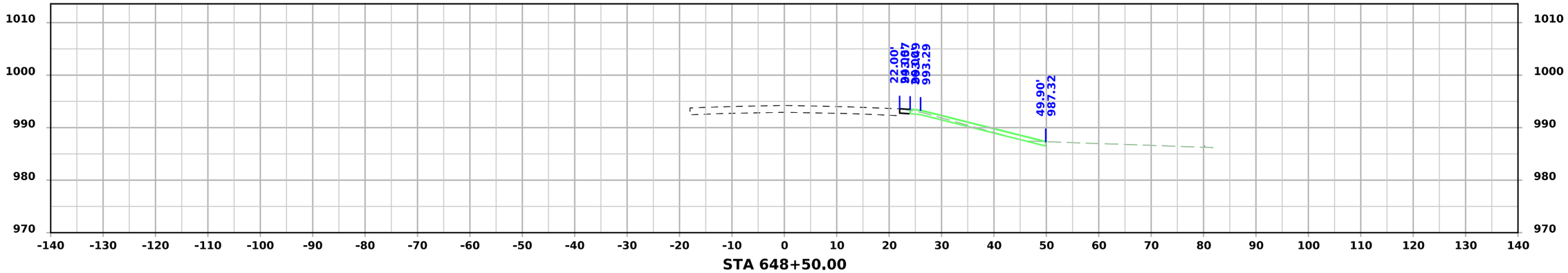


STA 646+00.00

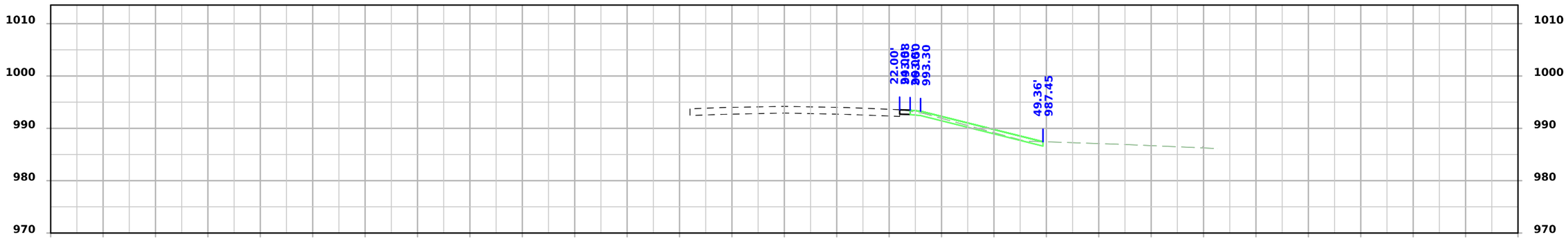
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.418

2:17:58 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

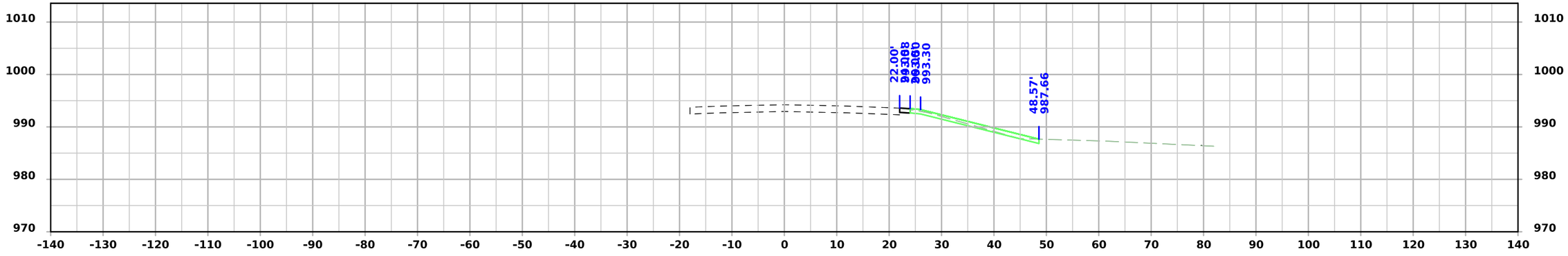
I-29 - Section C



STA 648+50.00



STA 648+00.00

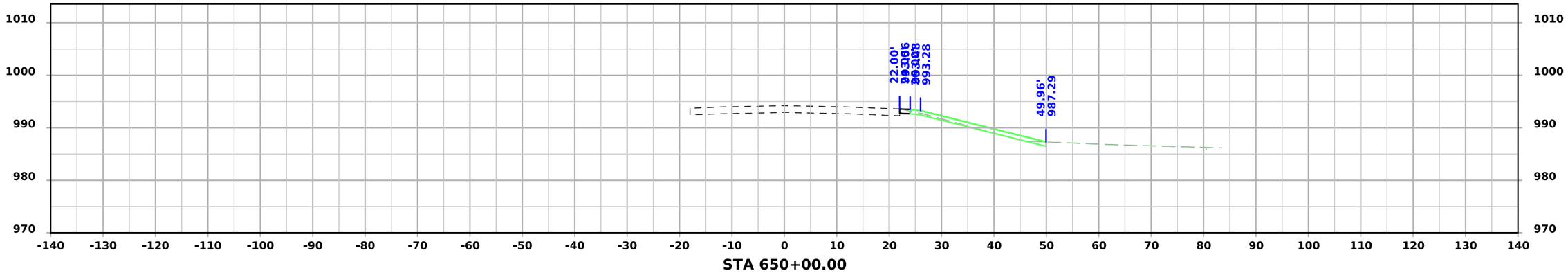


STA 647+50.00

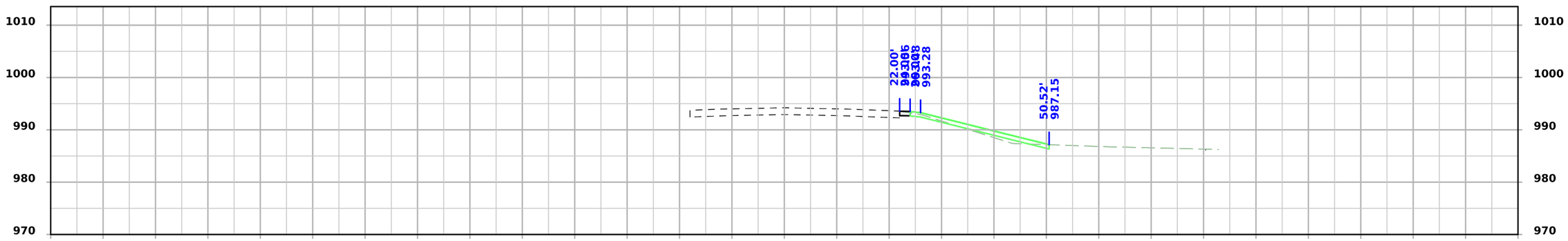
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.419

2:17:58 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

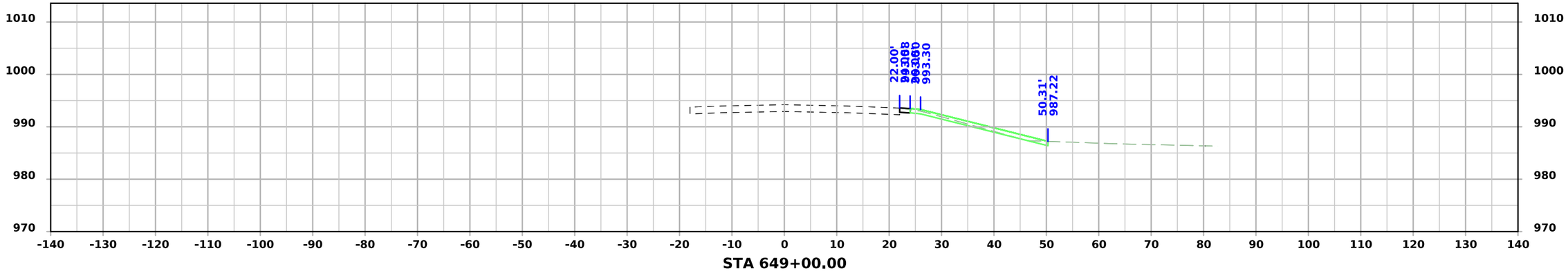
I-29 - Section C



STA 650+00.00



STA 649+50.00

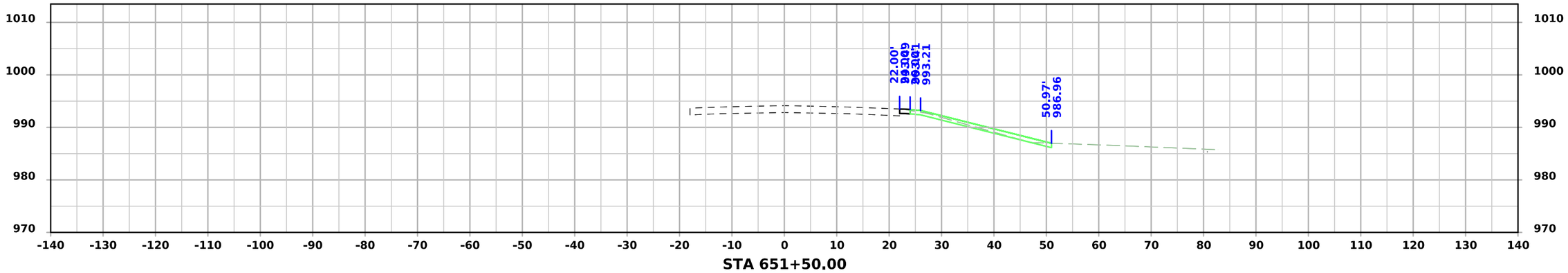


STA 649+00.00

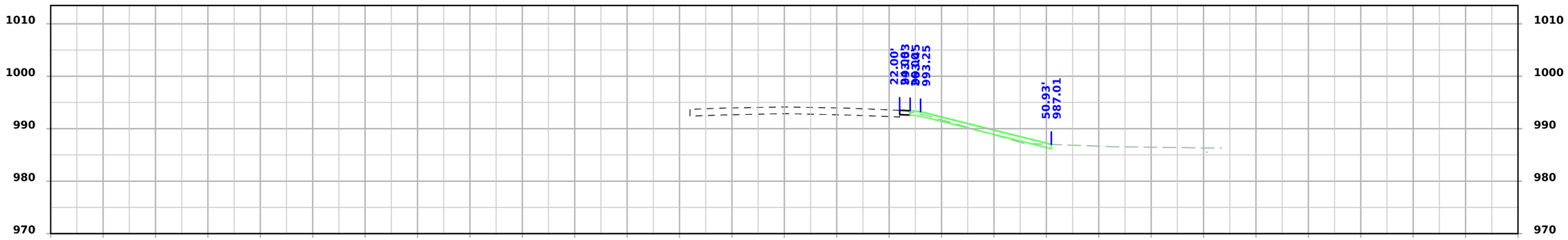
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.420

2:17:59 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

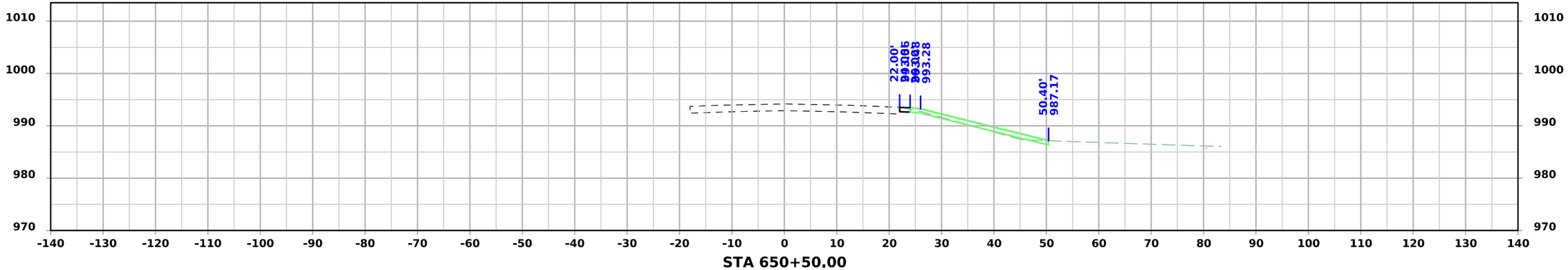
I-29 - Section C



STA 651+50.00



STA 651+00.00

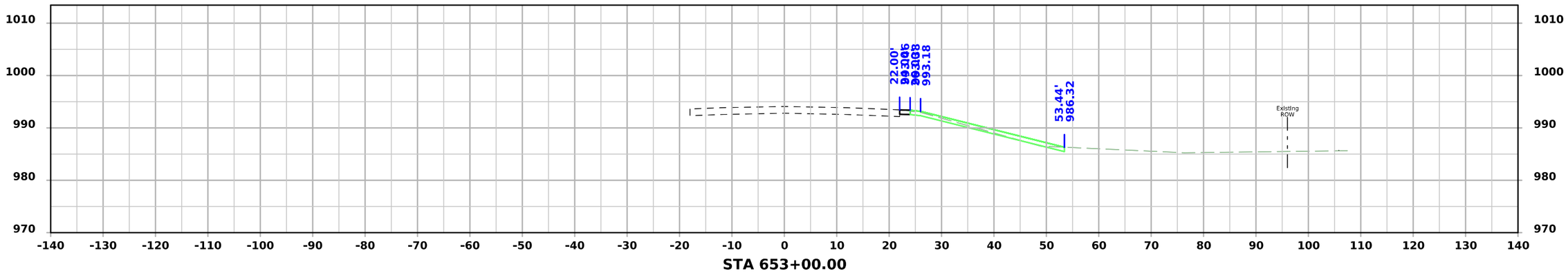


STA 650+50.00

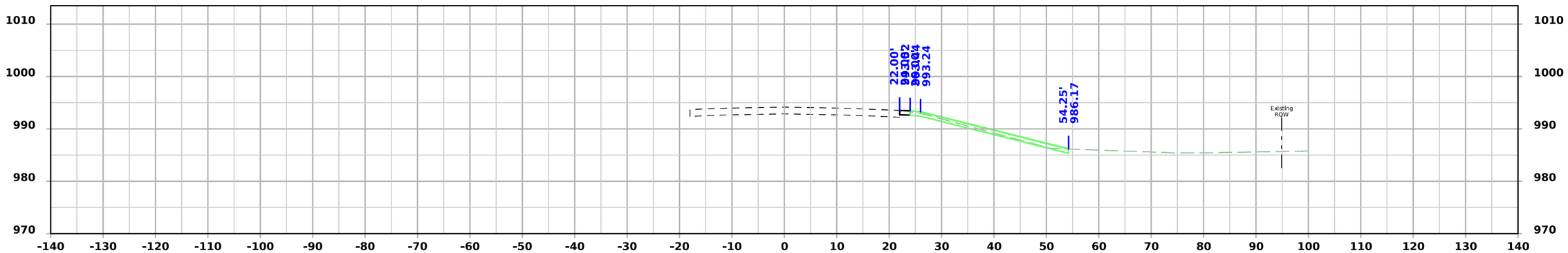
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.421

2:18:00 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

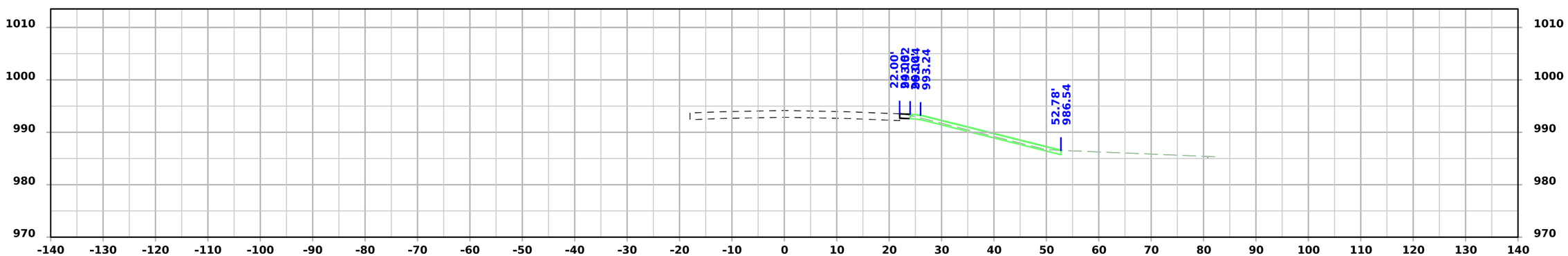
I-29 - Section C



STA 653+00.00



STA 652+50.00

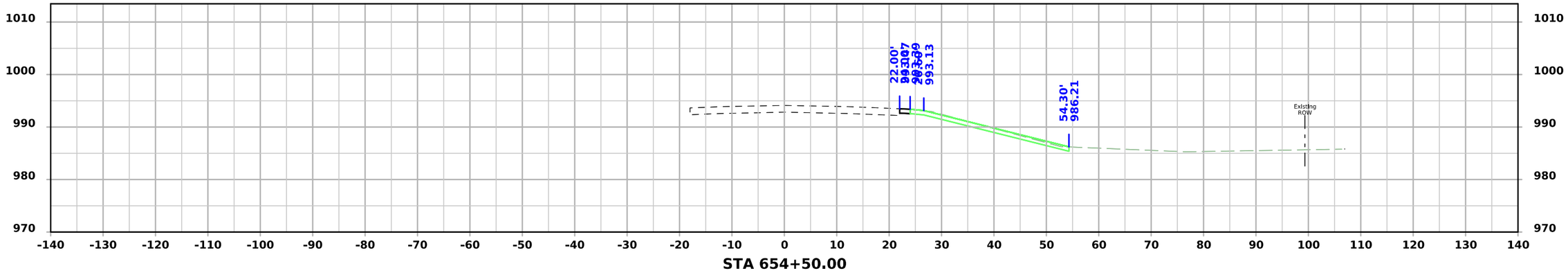


STA 652+00.00

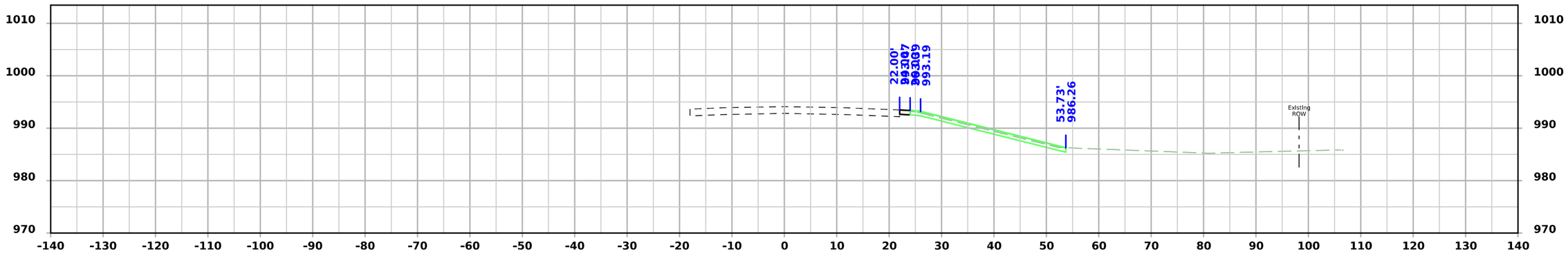
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.422

2:18:01 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

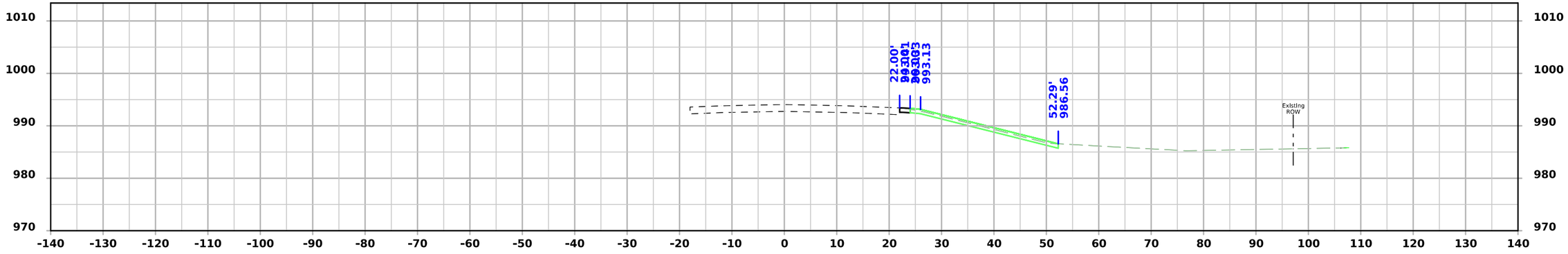
I-29 - Section C



STA 654+50.00



STA 654+00.00

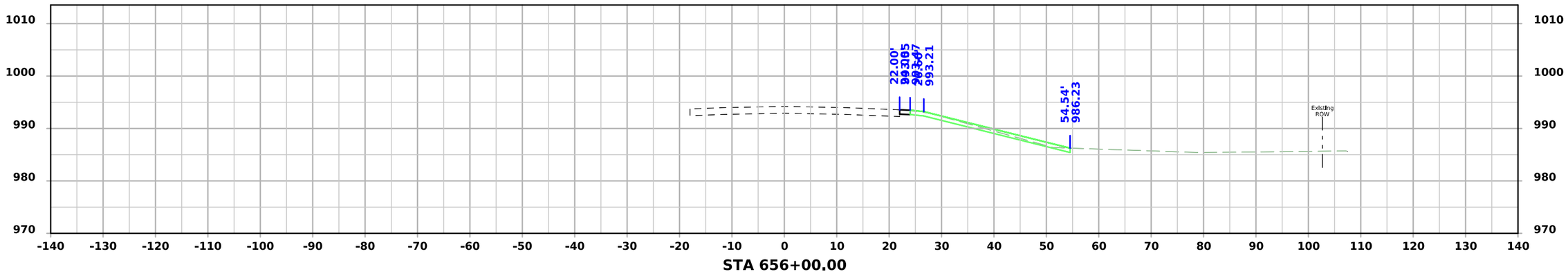


STA 653+50.00

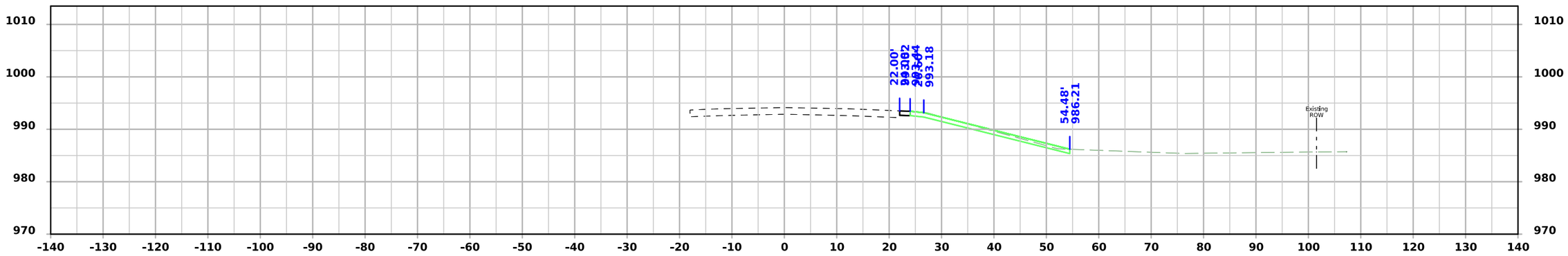
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.423

2:18:02 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

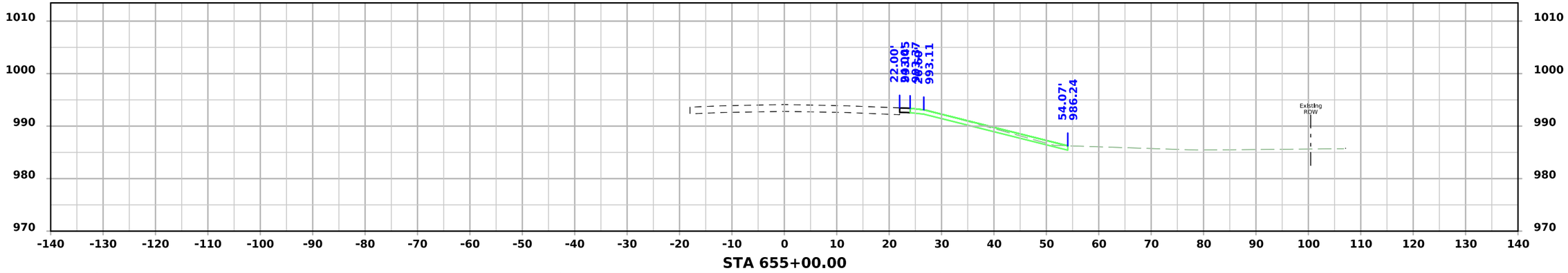
I-29 - Section C



STA 656+00.00



STA 655+50.00

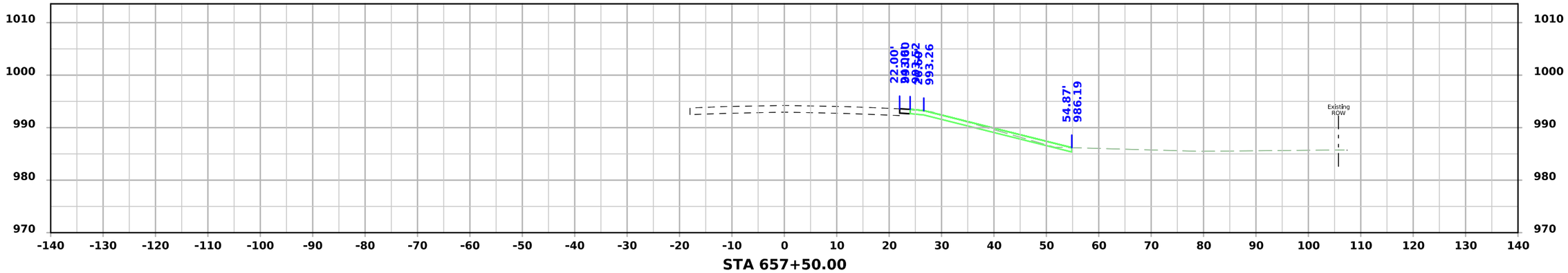


STA 655+00.00

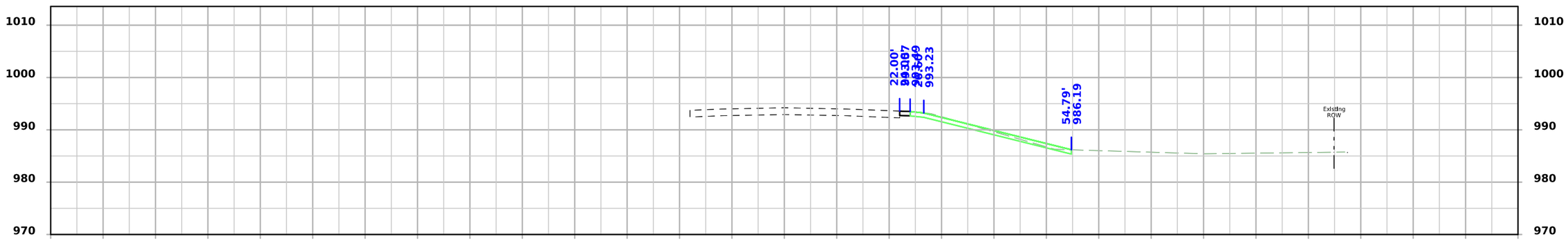
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.424

2:18:02 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

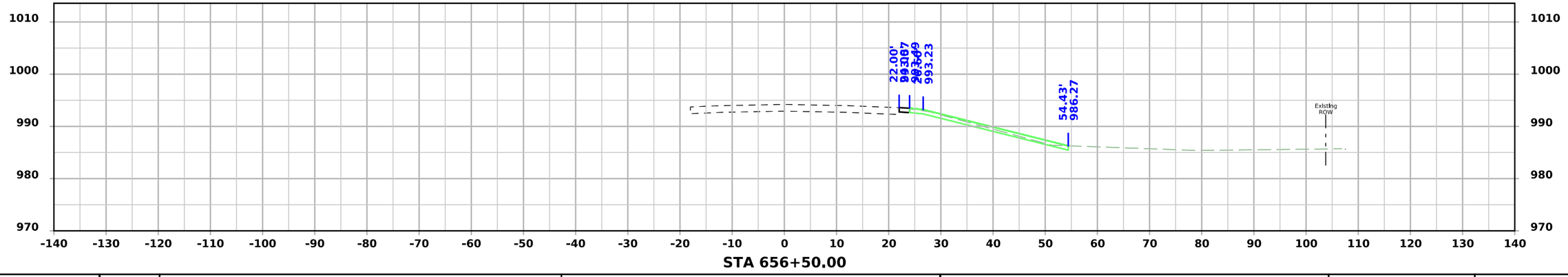
I-29 - Section C



STA 657+50.00



STA 657+00.00

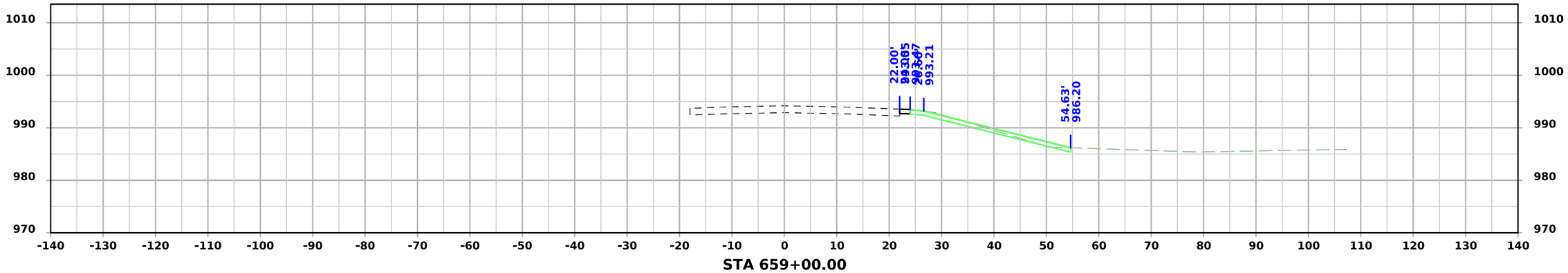


STA 656+50.00

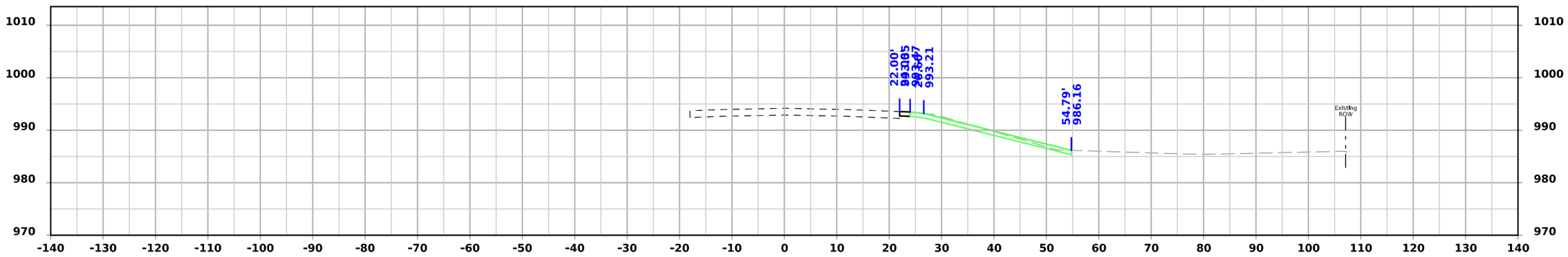
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.425

2:18:03 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

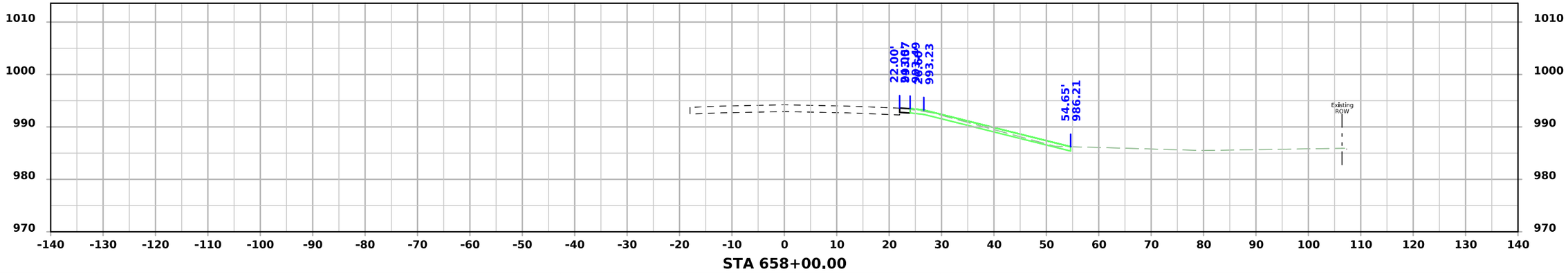
I-29 - Section C



STA 659+00.00



STA 658+50.00

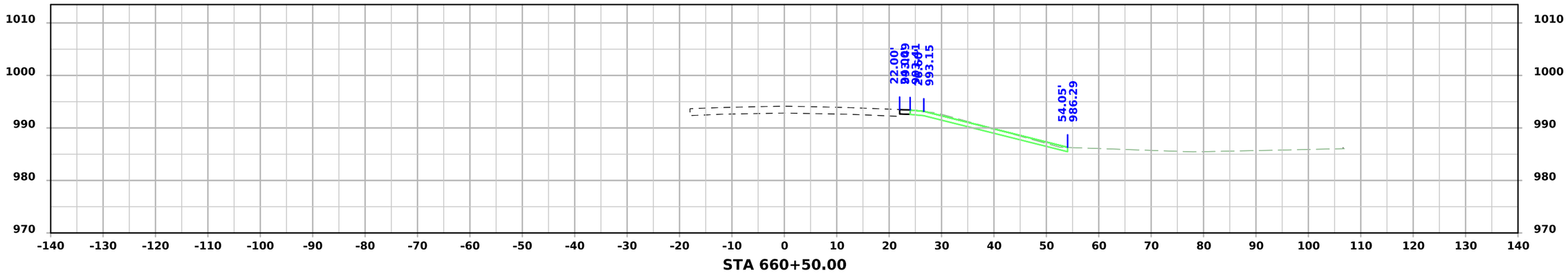


STA 658+00.00

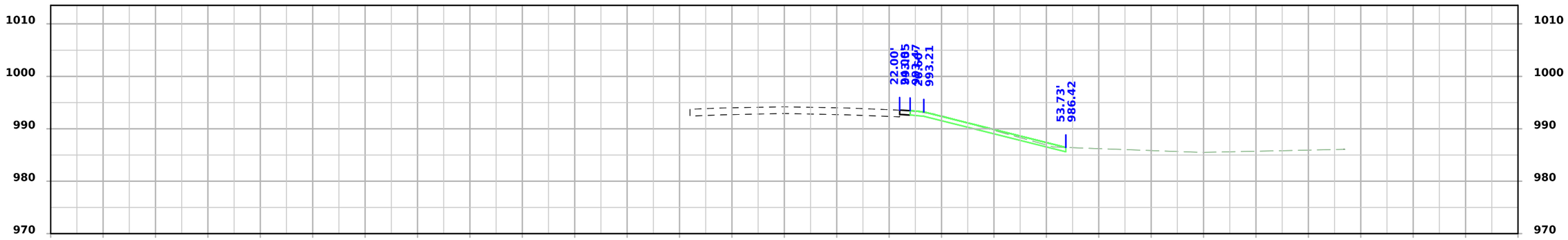
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.426

2:18:04 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

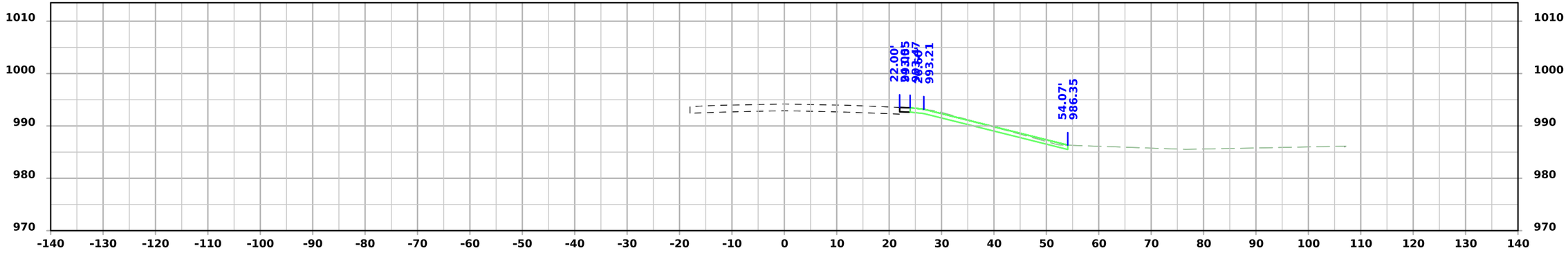
I-29 - Section C



STA 660+50.00



STA 660+00.00

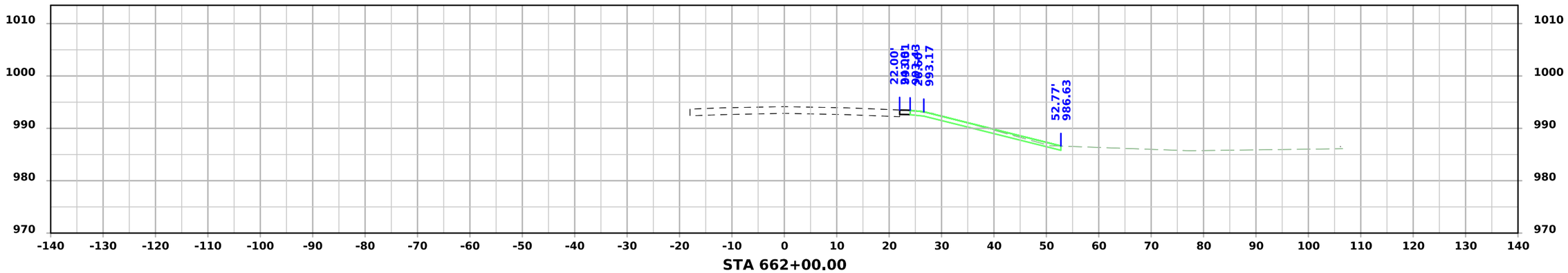


STA 659+50.00

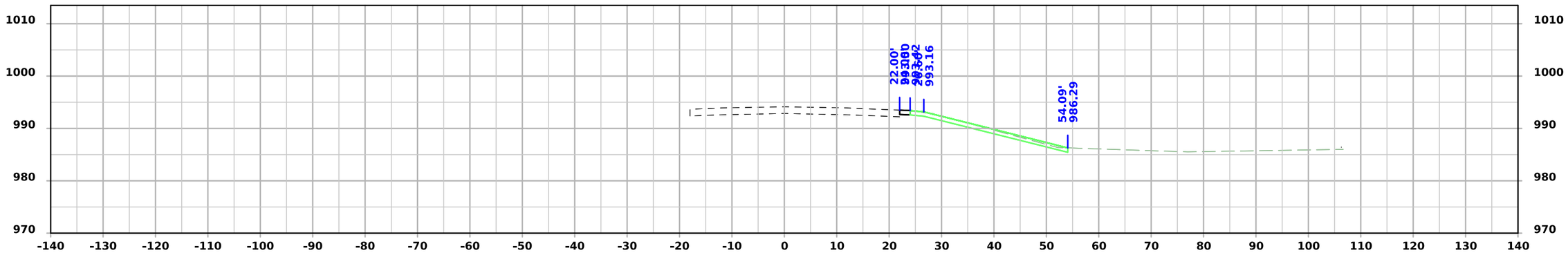
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.427

2:18:05 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

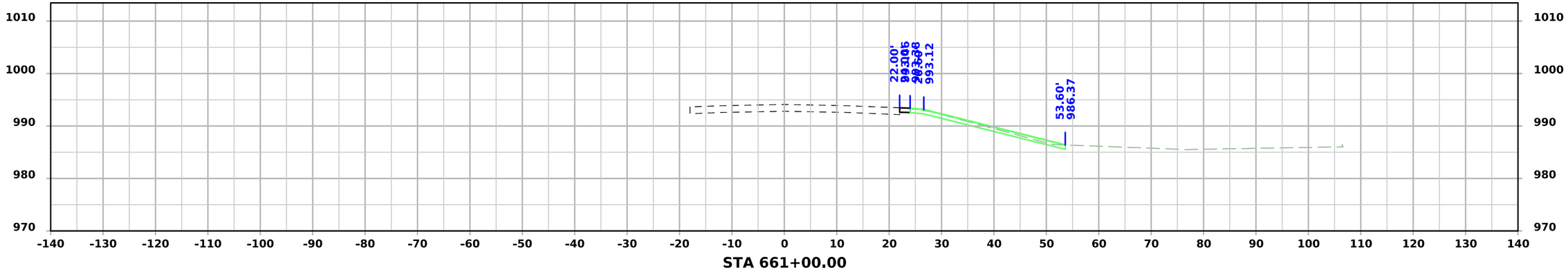
I-29 - Section C



STA 662+00.00



STA 661+50.00

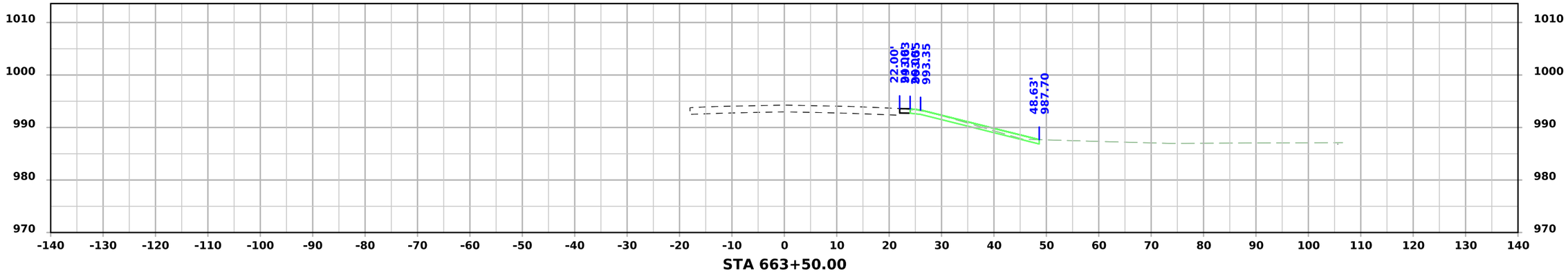


STA 661+00.00

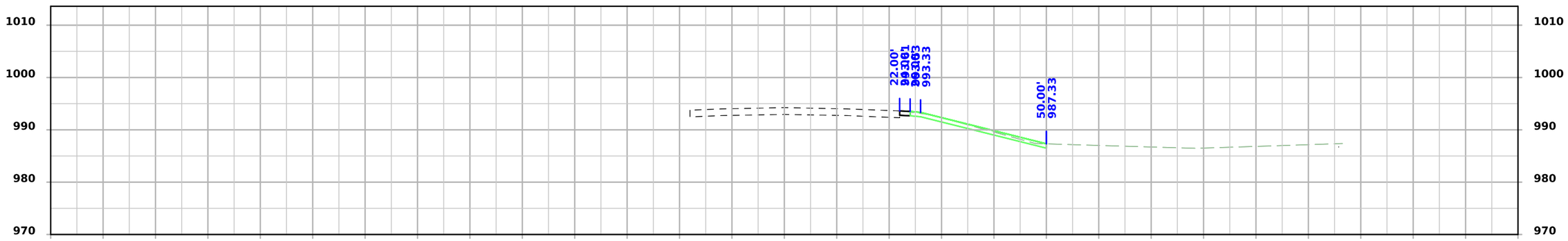
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.428

2:18:06 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

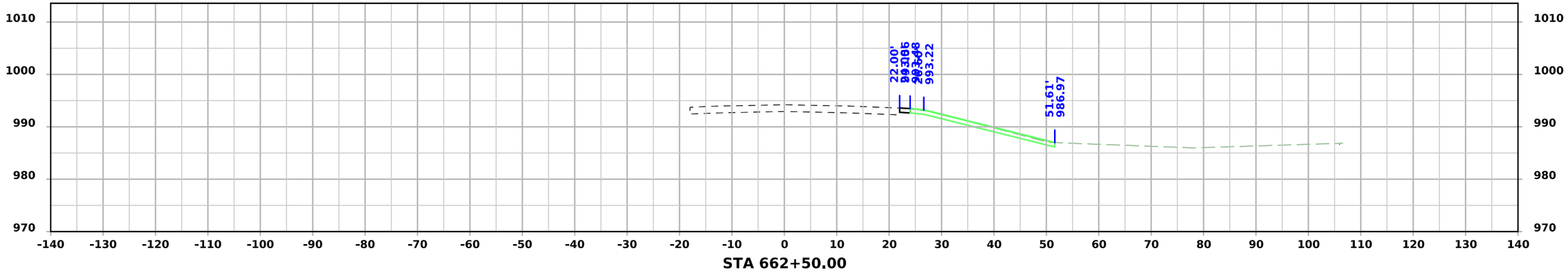
I-29 - Section C



STA 663+50.00



STA 663+00.00

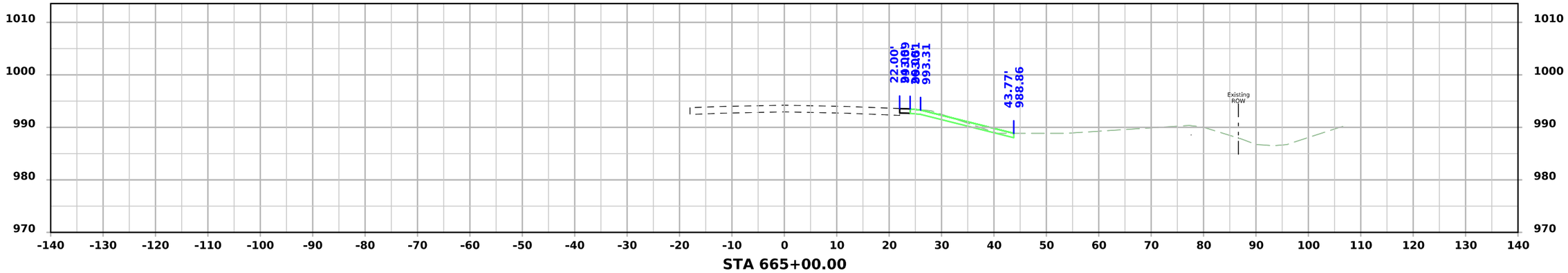


STA 662+50.00

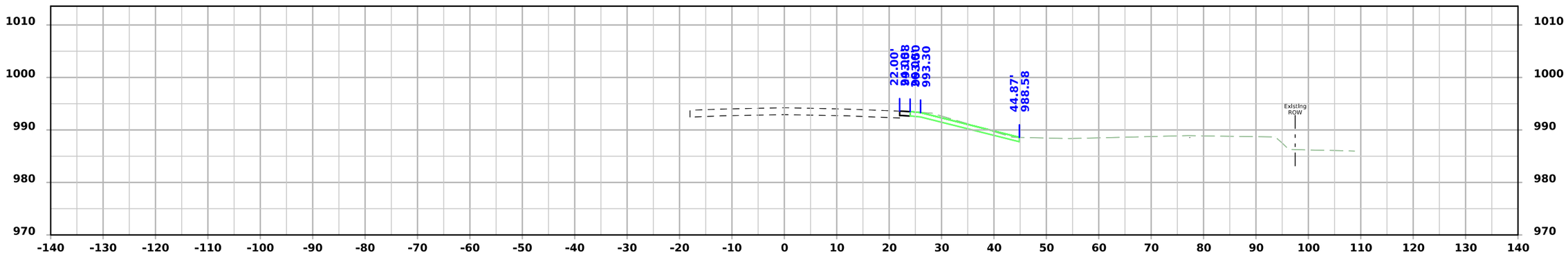
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.429

2:18:06 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

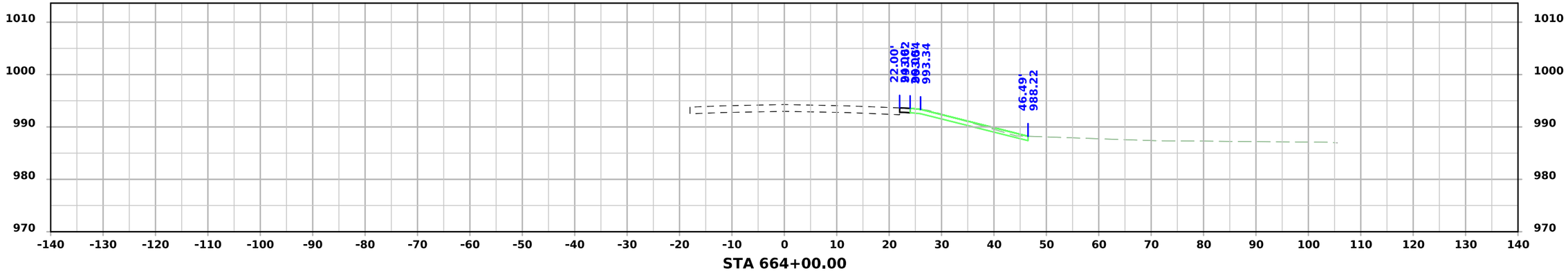
I-29 - Section C



STA 665+00.00



STA 664+50.00

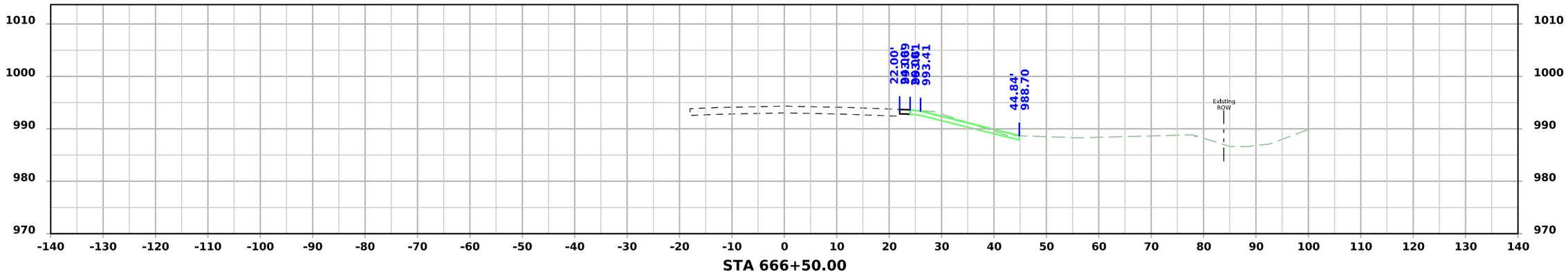


STA 664+00.00

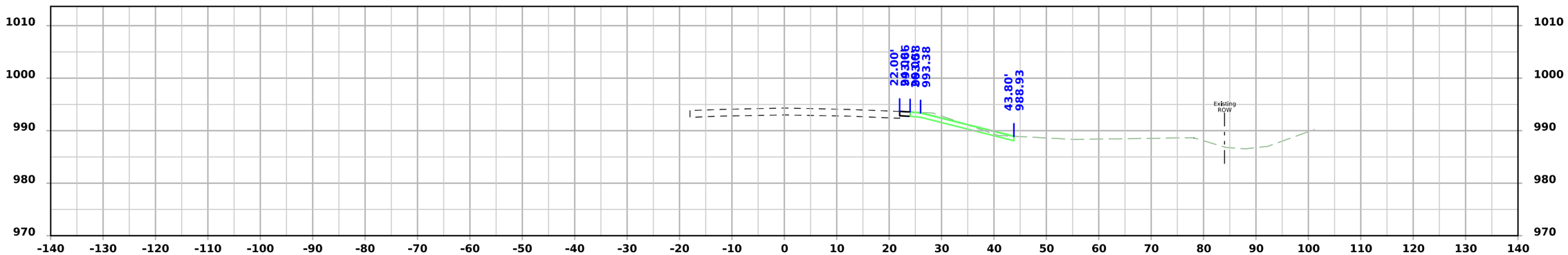
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.430

2:18:07 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

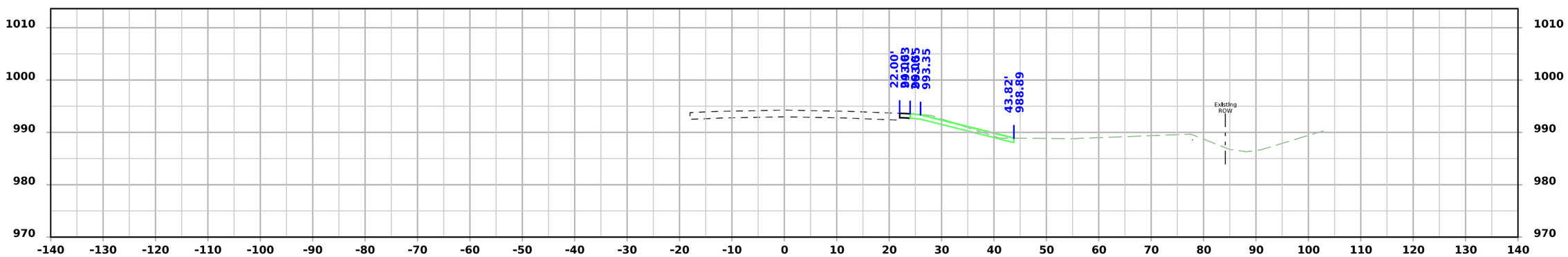
I-29 - Section C



STA 666+50.00



STA 666+00.00

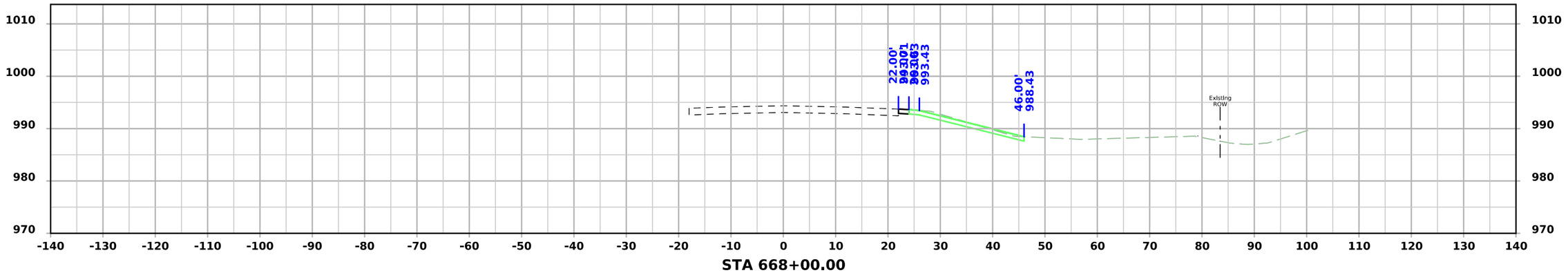


STA 665+50.00

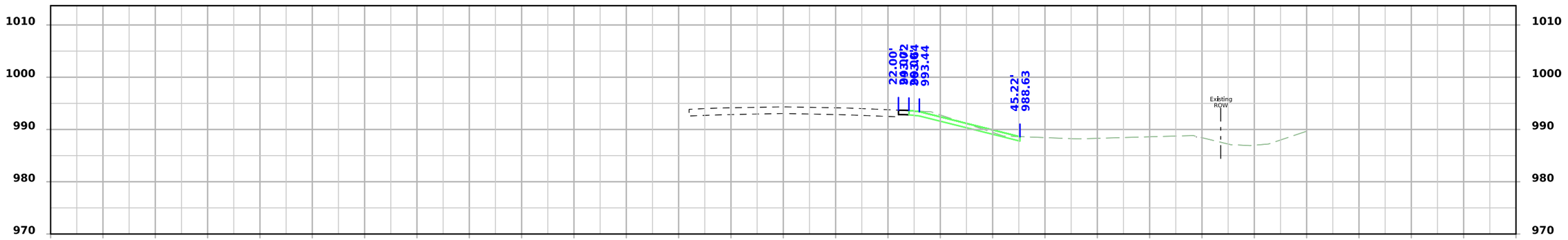
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.431

2:18:08 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

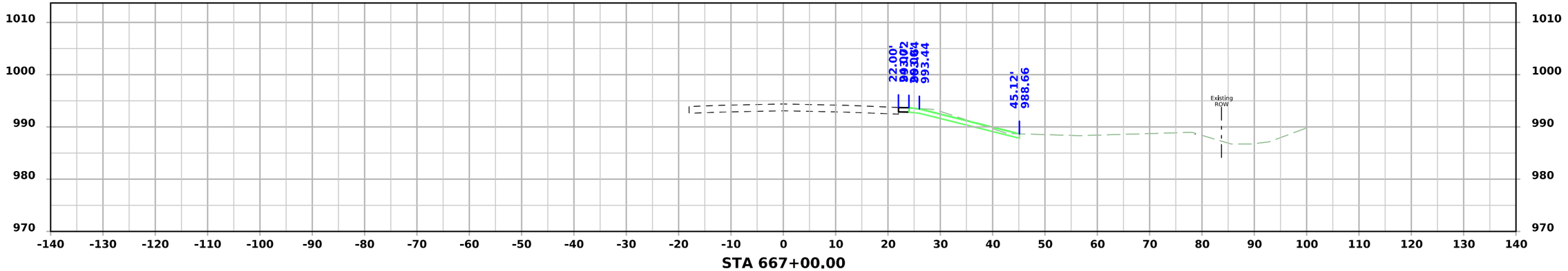
I-29 - Section C



STA 668+00.00



STA 667+50.00

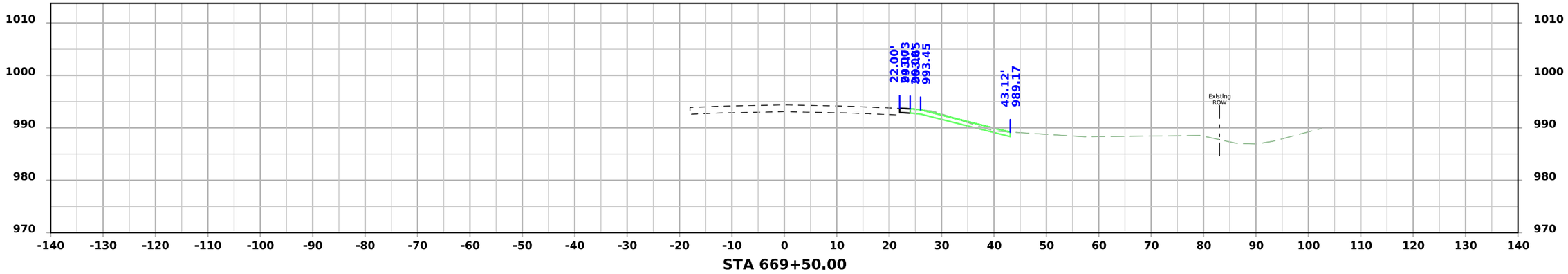


STA 667+00.00

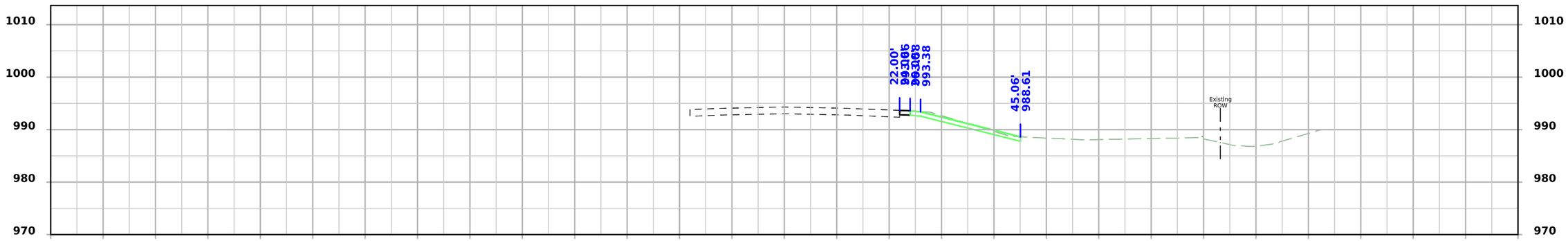
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.432

2:18:09 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

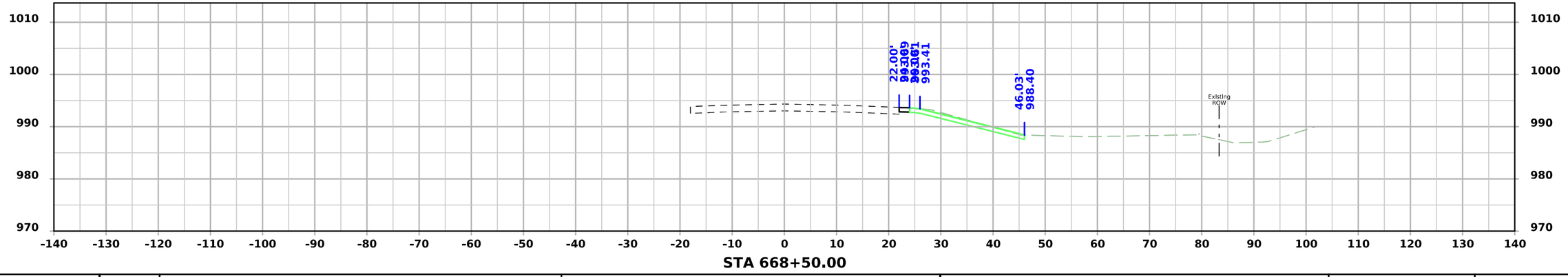
I-29 - Section C



STA 669+50.00



STA 669+00.00

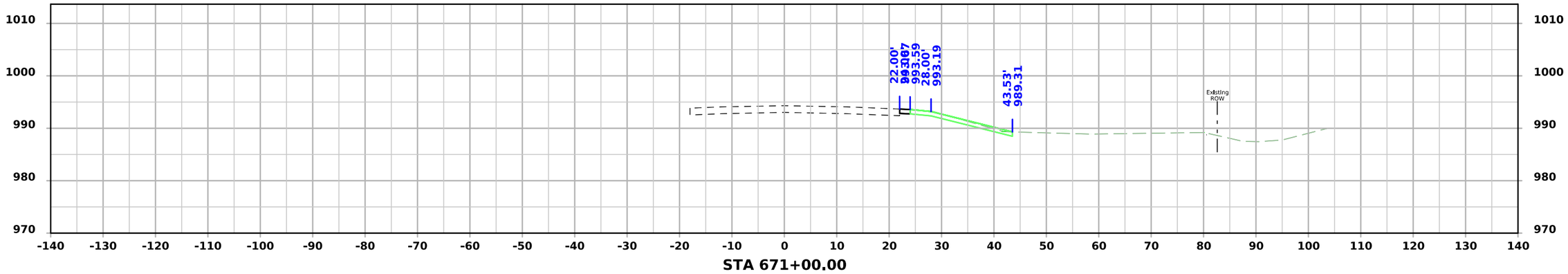


STA 668+50.00

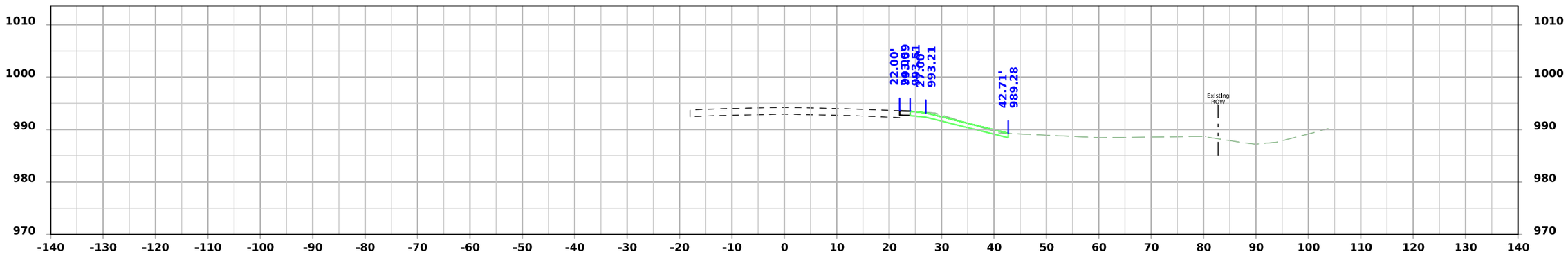
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.433

2:18:10 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

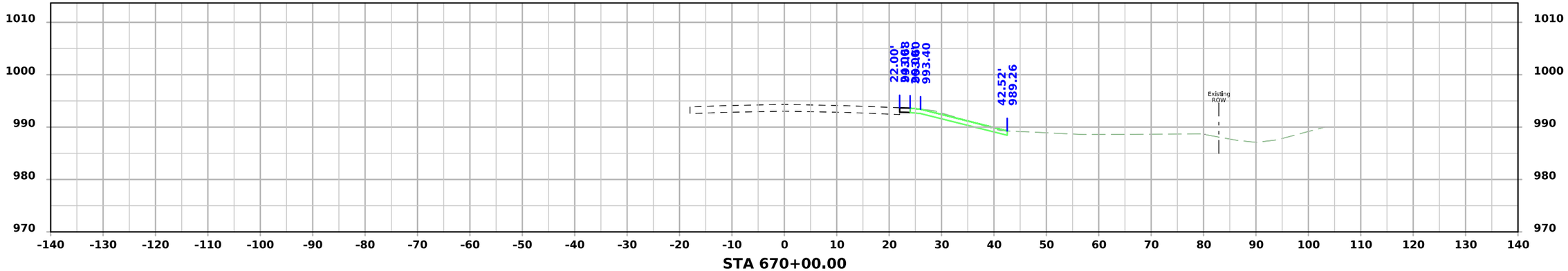
I-29 - Section C



STA 671+00.00



STA 670+50.00

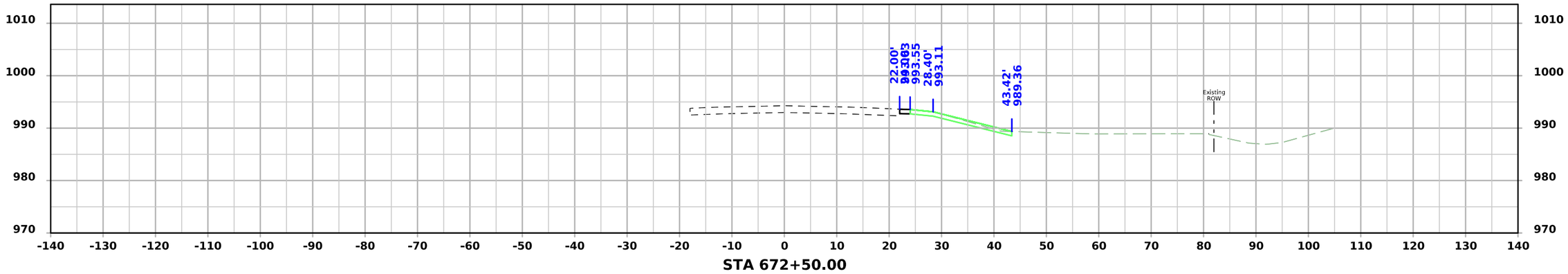


STA 670+00.00

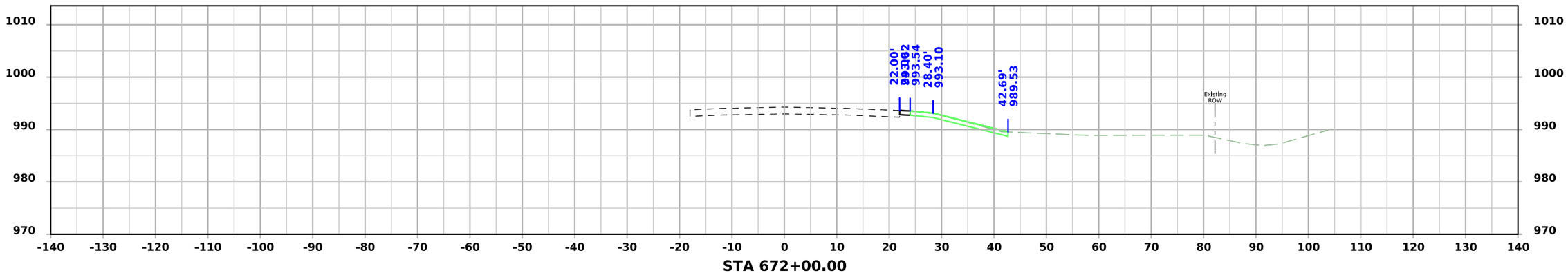
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.434

2:18:10 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

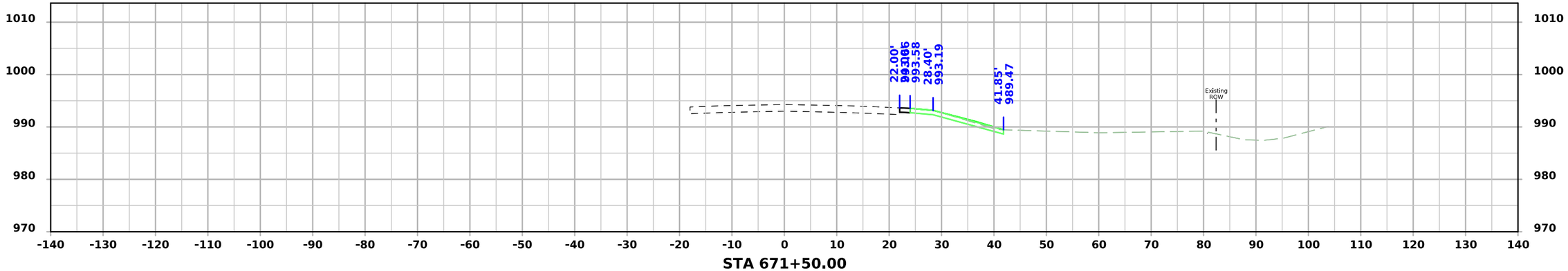
I-29 - Section C



STA 672+50.00



STA 672+00.00

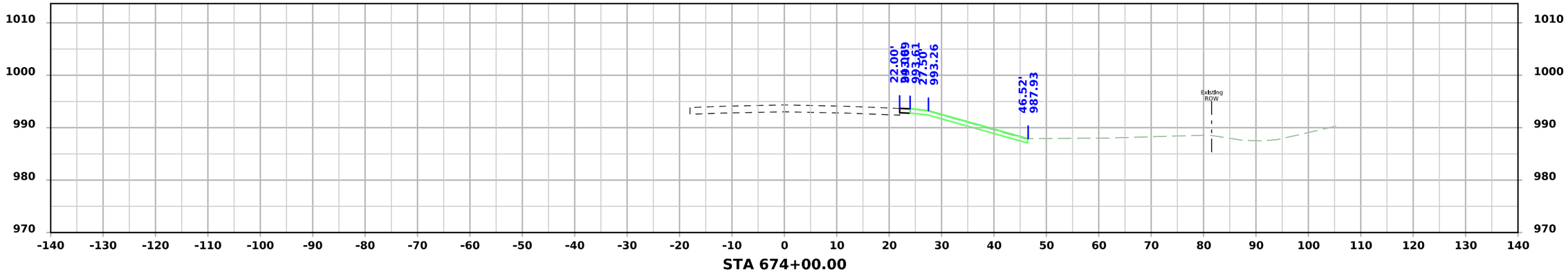


STA 671+50.00

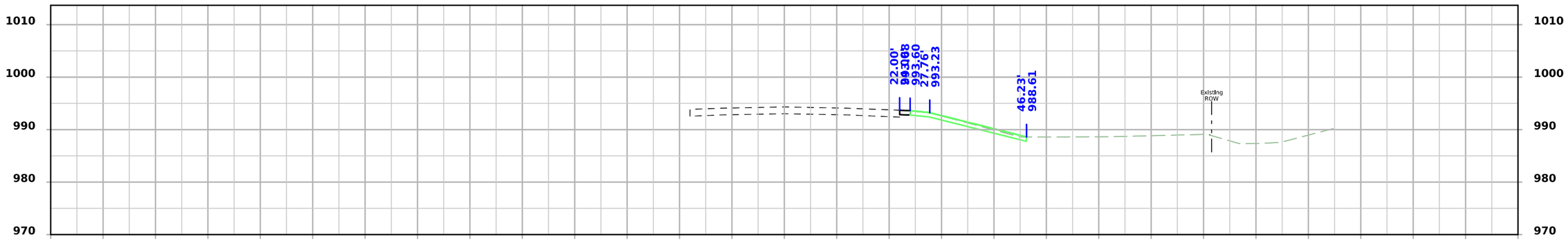
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.435

2:18:11 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

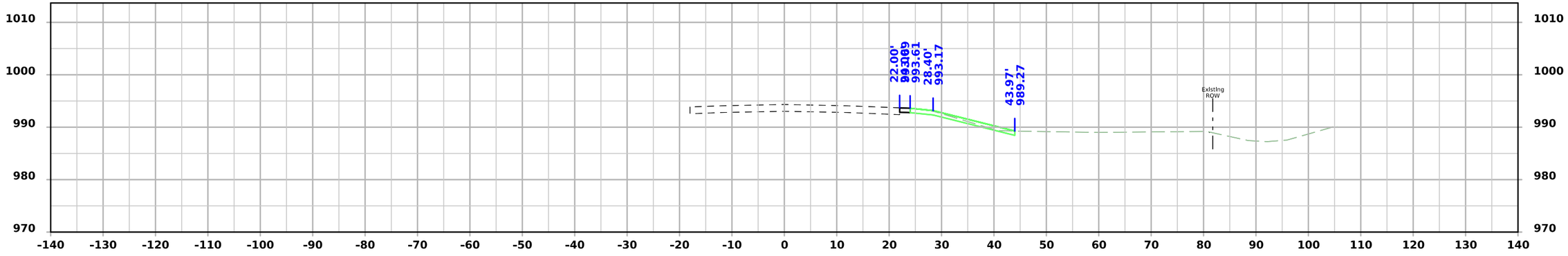
I-29 - Section C



STA 674+00.00



STA 673+50.00

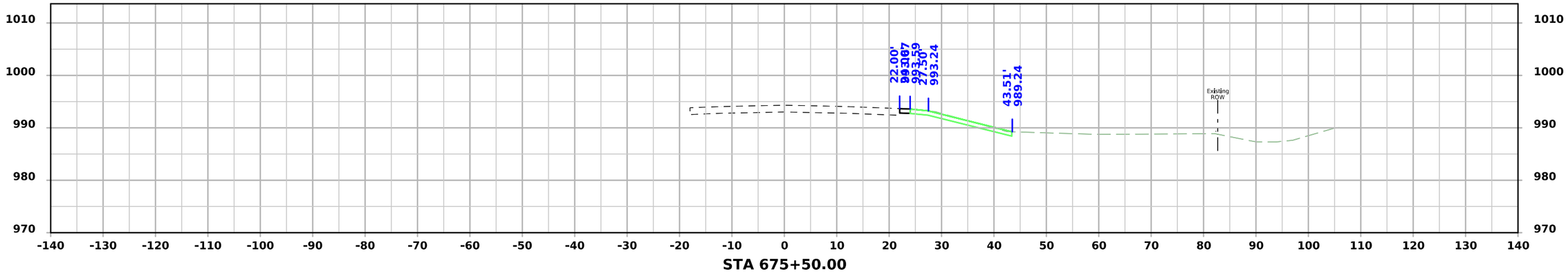


STA 673+00.00

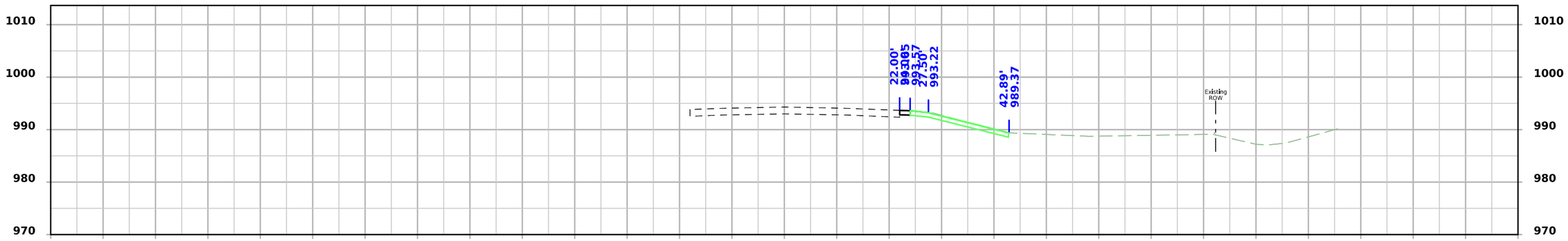
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.436

2:18:12 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

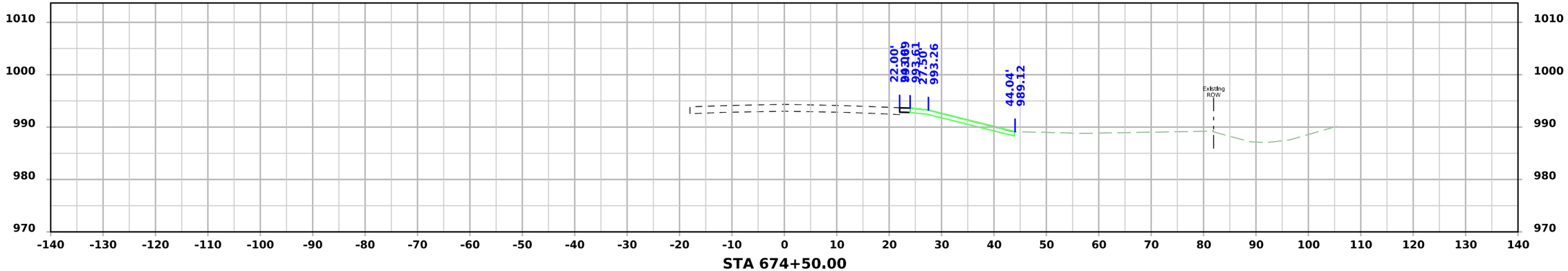
I-29 - Section C



STA 675+50.00



STA 675+00.00

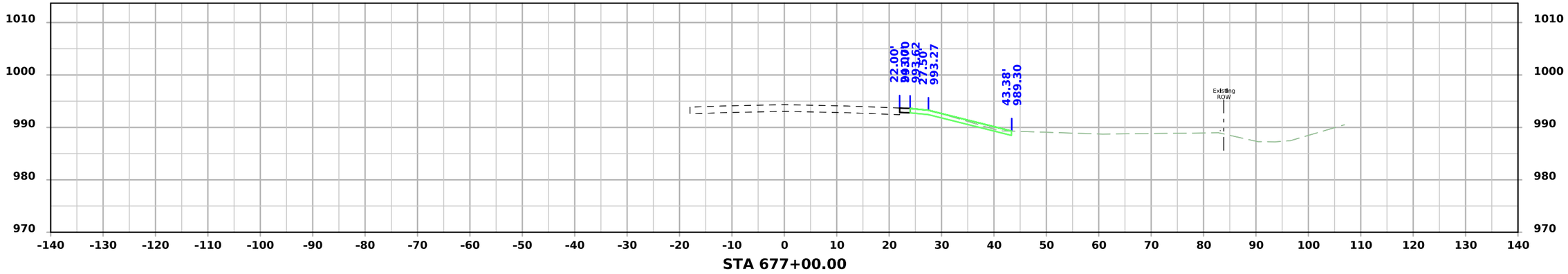


STA 674+50.00

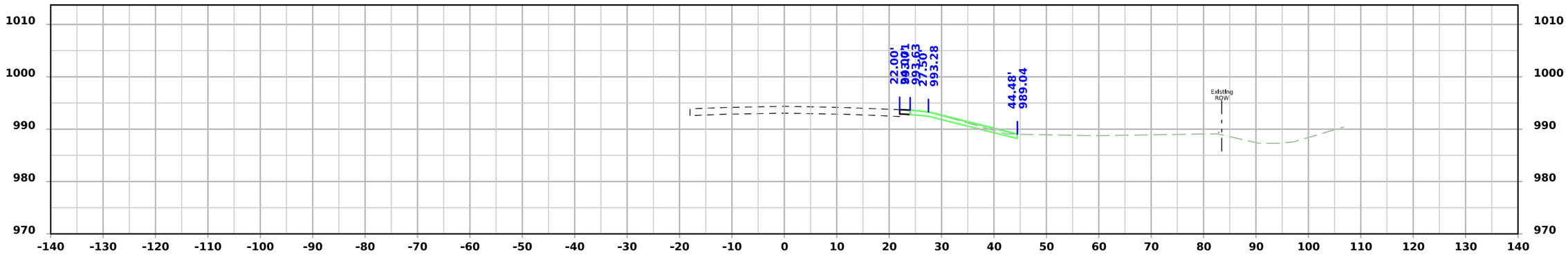
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.437

2:18:13 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

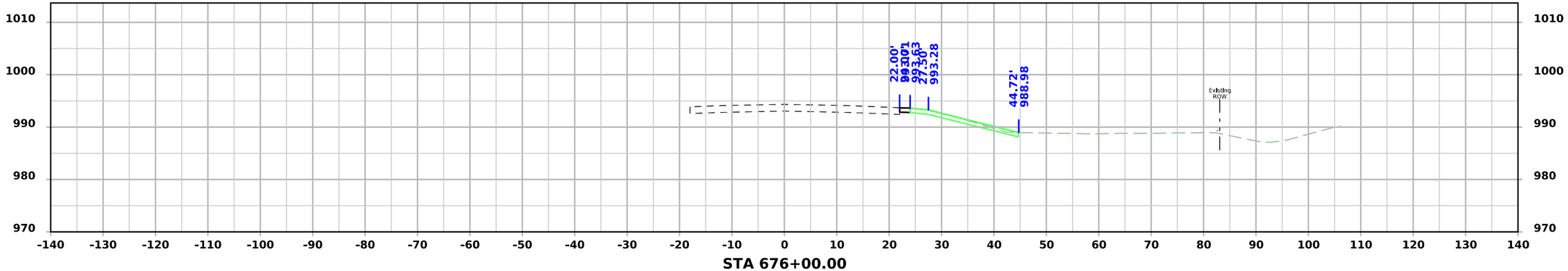
I-29 - Section C



STA 677+00.00



STA 676+50.00

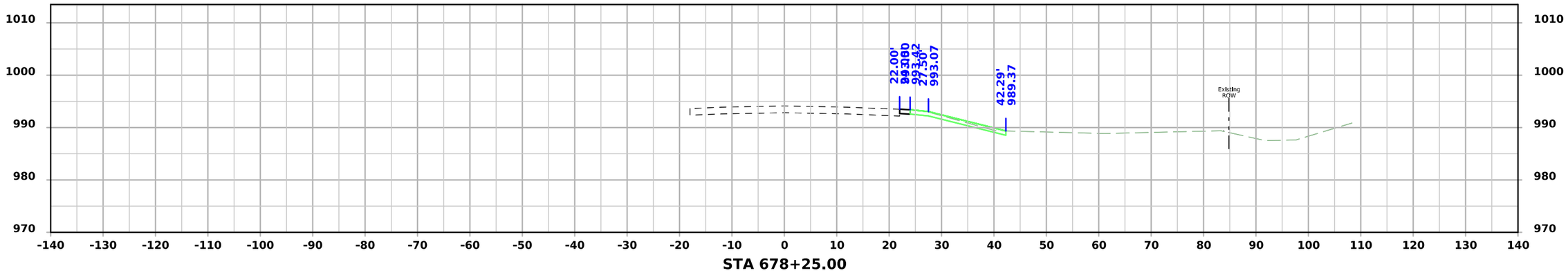


STA 676+00.00

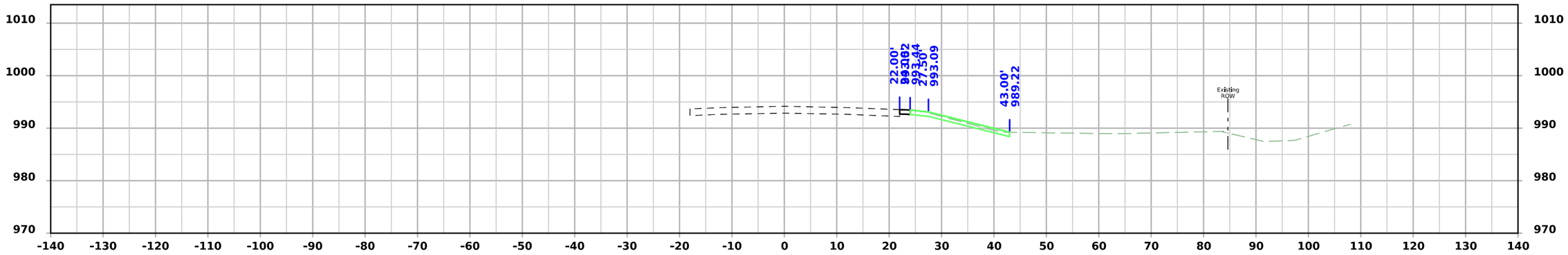
FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.438

2:18:14 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn

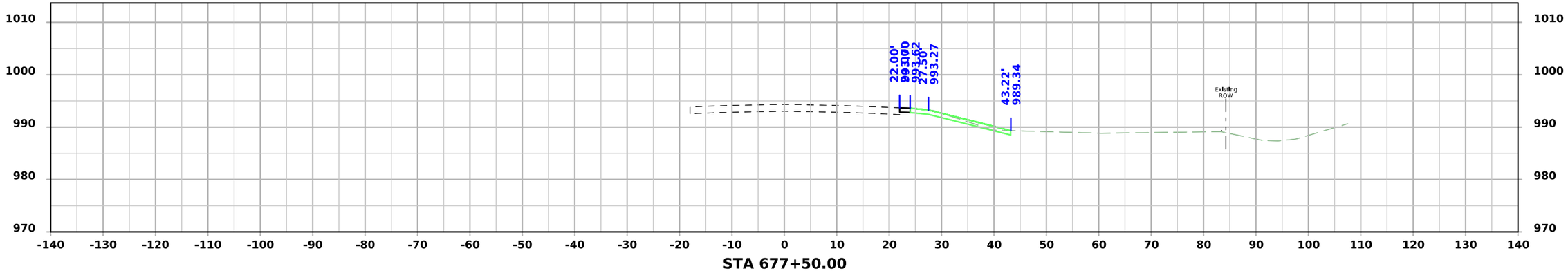
I-29 - Section C



STA 678+25.00



STA 678+00.00



STA 677+50.00

FILE NO.	ENGLISH	DESIGN TEAM Flattery/Bell/Schinstock/Schmitz	POTTAWATTAMIE COUNTY	PROJECT NUMBER IMX-029-4(148)62--02-78	SHEET NUMBER W.439

2:18:14 PM 7/31/2026 rschmi2 pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7802904025\Design\IMX-029-4(148)62--02-78_Grading\CADD_Files\Cross_Sections\SHT_W400_78029148Z06.dgn