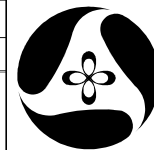


INDEX OF SHEETS	
No.	DESCRIPTION
A Sheets	Title Sheets
A.1	Title Sheet
A.2	Location Map Sheet
B Sheets	Typical Cross Sections and Details
B.1 - 6	Roadway Typical Sections and Details
D Sheets	Mainline Plan and Profile Sheets
* D.1	Plan & Profile Legend & Symbol Information Sheet
* D.2	Interstate I-35 Plan Sheet
* D.3	Interstate I-35 Profile Sheet
* D.4	Interstate I-35 Plan Sheet - Future
E Sheets	Side Road Plan and Profile Sheets
* E.1 - 2	NE 54th Avenue
E.3	NE 54th Avenue Grading
G Sheets	Survey Sheets
G.1 - 2	Survey Control Reference Ties and Bench Marks
G.3 - 4	Horizontal Control Alignment Geometry
J Sheets	Traffic Control and Staging Sheets
* J.1	Traffic Control & Staging Notes
* J.2	Traffic Control & Staging Legend & Symbol Info. Sheet
* J.3	Detour Map
* J.4 - 5	Traffic Control & Staging Sheet - Interstate 35 Stage 1A
* J.6 - 7	Traffic Control & Staging Sheet - Interstate 35 Stage 1B
* J.8	Traffic Control & Staging Sheet - NE 54th Avenue Stage 2
L Sheets	Intersection Geometrics
* L.1	NE 54th Avenue Layout Sheet
V Sheets	Bridge and Culvert Situation Plans
V.1 - 4	Bridge Situation Plans
* V.5 - 8	Culvert Pipe Plats
W Sheets	Mainline Cross Sections
W.1 - 9	Interstate 35 Shoulder Widening
X Sheets	Side Road Cross Sections
X.1 - 35	NE 54th Avenue Widening and Reconstruction * Color Plan Sheets



Iowa Department of Transportation

Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

INTERSTATE ROAD SYSTEM

POLK COUNTY
 PAVEMENT - GRADE AND NEW

NE 54TH AVENUE

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.
 Value Engineering Saves. Refer to Article 1105.15 of the Specifications.
NO MILEAGE SUMMARY



For Project Location Map
 Refer to Sheet A.2

DESIGN DATA URBAN			
2017 AADT	1800	V.P.D.	
2040 AADT	2800	V.P.D.	
2040 DHV	345	V.P.H.	
TRUCKS	8	%	
Total			
Design ESALs	--		

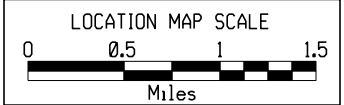
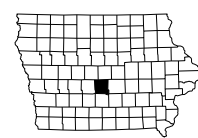
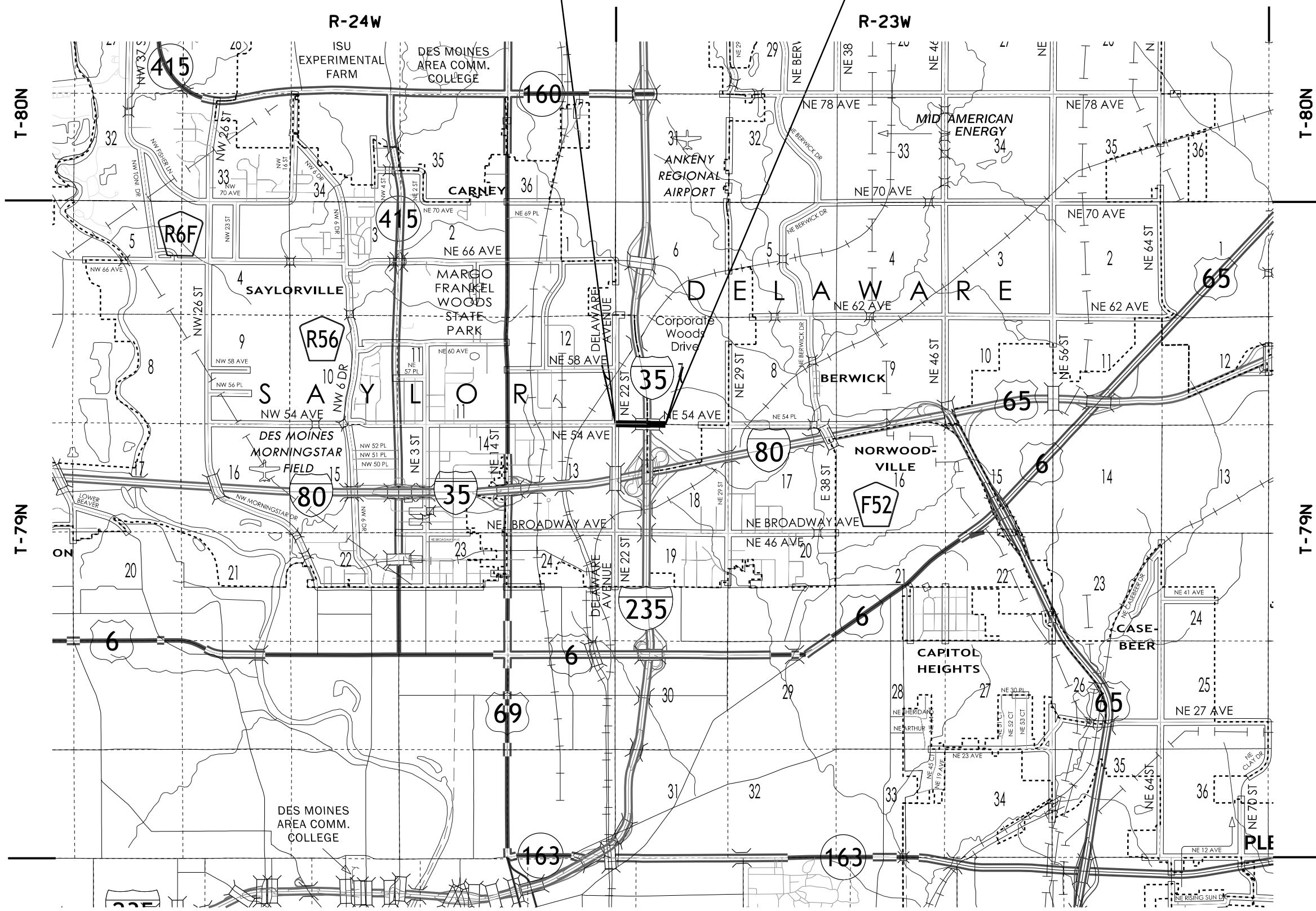
INDEX OF SEALS		
SHEET NO.	NAME	TYPE
A.1	X	Primary Signature Block
X	X	X

PRELIMINARY PLANS
 Subject to change by final design.
FINAL D5 PLAN SUBMITTAL
 Date: January 10, 2014

REVISIONS	TOTAL
PROJECT IDENTIFICATION NUMBER	
10-77-035-010	
PROJECT NUMBER	
IM-035-4(160)87--13-77	
R.O.W. PROJECT NUMBER	

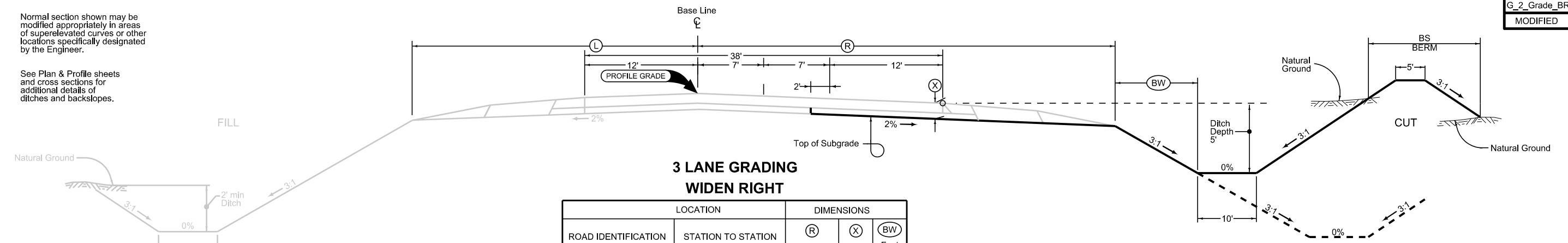
Sta. 2219+40.00
Begin Project

Sta. 2243+00.00
End Project



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.



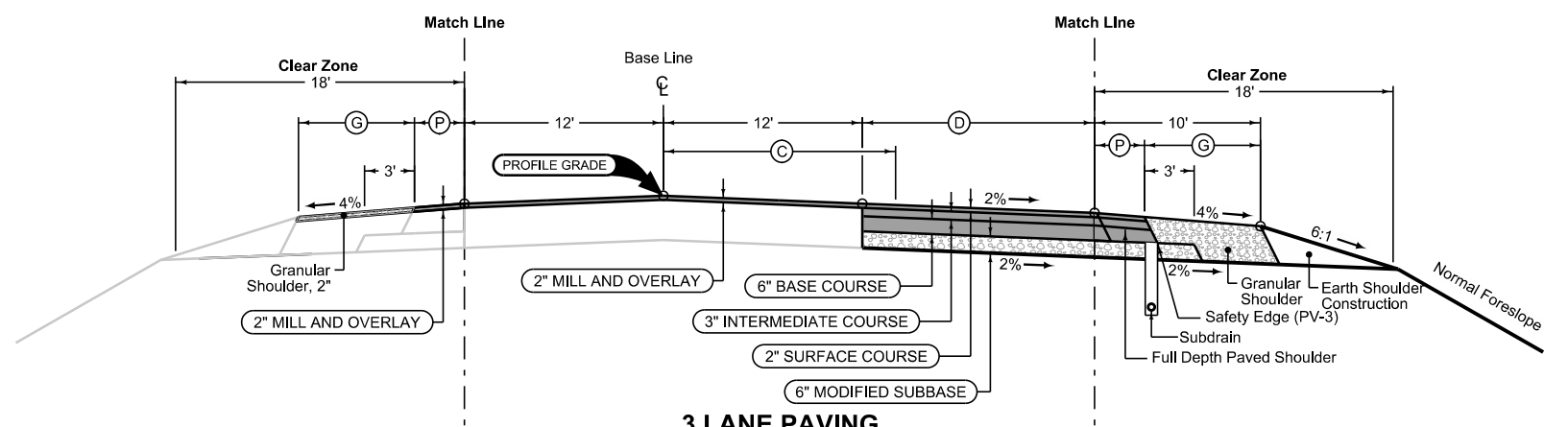
**3 LANE GRADING
WIDEN RIGHT**

ROAD IDENTIFICATION	LOCATION STATION TO STATION	DIMENSIONS		
		(R) Feet	(X) Inches	(BW) Feet
NE 54TH AVENUE	2219+40.00 - 2224+85.20	44.30	17	11.3
NE 54TH AVENUE	2224+85.20 - 2225+50.00	44.30 - 43.92	17	11.3

BACKSLOPE (BS) BERM	
STATION TO STATION	
2223+57.00 TO 2225+50.00	

Combination Shoulder

Direction of Travel	BEGIN STATION	END STATION	2_C_ MODIFIED	
			(P) Feet	(G) Feet
WB	2219+40.00	2220+22.80	6.2-8.3	3.0
WB	2220+22.80	2221+36.48	8.3-6.6	3.0
WB	2221+36.48	2221+90.53	6.6-3.0	3.0
WB	2221+90.53	2225+50.00	3.0	3.0



**3 LANE PAVING
WIDEN RIGHT**

STATION TO STATION	2H_TWLTL_ MODIFIED	
	(C) Feet	(D) Feet
2219+40.00 - 2224+85.20	14.0	14.0
2224+85.20 - 2225+50.00	14.00 - 13.62	14.00 - 13.62

Combination Shoulder

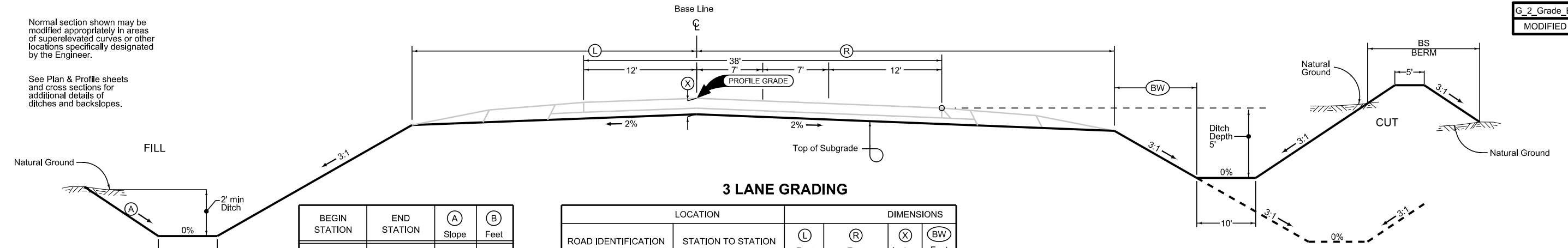
Direction of Travel	BEGIN STATION	END STATION	2_C_ MODIFIED	
			(P) Feet	(G) Feet
EB	2219+40.00	2225+50.00	3.0	7.0

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

NE 54TH AVENUE

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.



3 LANE GRADING

BEGIN STATION	END STATION	(A) Slope	(B) Feet
2225+50.00	2226+75.00	3:1	10.0
2226+75.00	2229+00.00	2.5:1	5.0
2229+00.00	2229+25.00	2.5:1 - 3:1	5.0
2229+25.00	2229+50.00	3:1	5.0 - 10.0
2229+50.00	2230+40.00	3:1	10.0

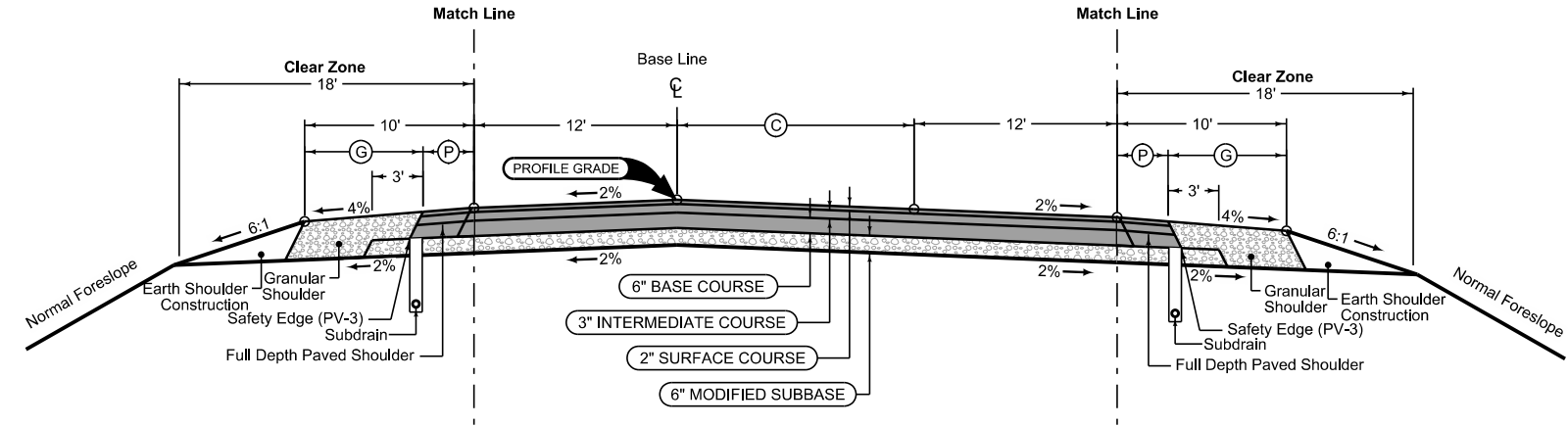
ROAD IDENTIFICATION	STATION TO STATION	DIMENSIONS			
		(L) Feet	(R) Feet	(X) Inches	(BW) Feet
NE 54TH AVENUE	2225+50.00 - 2227+62.60	30.3	43.92 - 37.30	17	11.3
NE 54TH AVENUE	2227+62.60 - 2230+40.00	30.3	37.30 - 30.30	17	11.3

STATION 2224+85.20 TO STATION 2230+40.00
TRANSITION HORIZONTALLY FROM 3 LANE GRADING TO 2 LANE GRADING THROUGH 14' PAVED MEDIAN.

BACKSLOPE (BS) BERM
STATION TO STATION
2225+50.00 TO 2225+75.00
2230+25.00 TO 2230+40.00

Combination Shoulder

2_C_ MODIFIED				
Direction of Travel	BEGIN STATION	END STATION	(P) Feet	(G) Feet
WB	2225+50.00	2230+40.00	3.0	7.0



3 LANE PAVING

2H_TWLTL MODIFIED		
STATION TO STATION	(C) Feet	
2225+50.00 - 2230+40.00	13.62 - 0.00	

Combination Shoulder

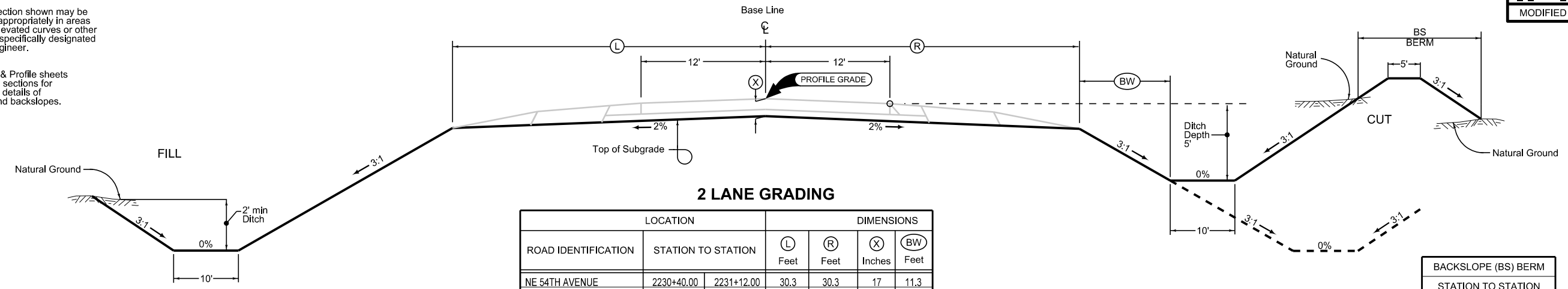
2_C_ MODIFIED				
Direction of Travel	BEGIN STATION	END STATION	(P) Feet	(G) Feet
EB	2225+50.00	2230+40.00	3.0	7.0

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

NE 54TH AVENUE

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

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



LOCATION		DIMENSIONS			
ROAD IDENTIFICATION	STATION TO STATION	L Feet	R Feet	X Inches	BW Feet
NE 54TH AVENUE	2230+40.00 2231+12.00	30.3	30.3	17	11.3
NE 54TH AVENUE	2239+23.00 2242+00.00	30.3	30.3	17	11.3

BACKSLOPE (BS) BERM	
STATION TO STATION	
2230+40.00 TO 2231+25.00	

Combination Shoulder

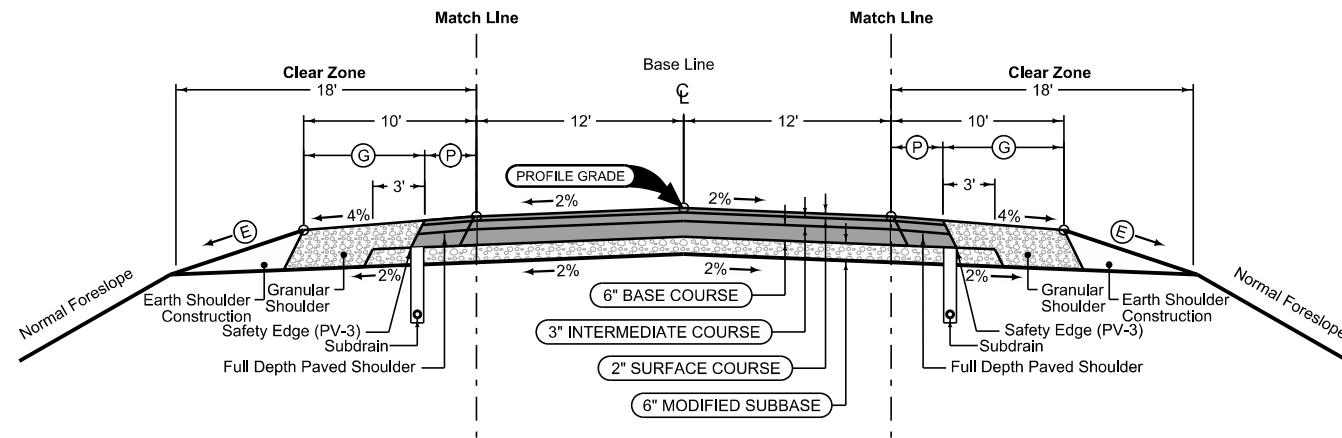
2_C_ MODIFIED				
Direction of Travel	BEGIN STATION	END STATION	P Feet	G Feet
WB	2230+40.00	2230+42.00	3.0	7.0
WB	2240+15.00	2241+00.00	3.0	7.0
WB	2241+00.00	2242+00.00	3.0	7.0 - 4.0

Earth Shoulder Slope

2_C_ MODIFIED			
Direction of Travel	BEGIN STATION	END STATION	E
WB	2230+40.00	2230+42.00	6:1
WB	2240+15.00	2241+75.00	6:1
WB	2241+75.00	2242+00.00	6:1 - 3:1

Paved Shoulder at Guardrail

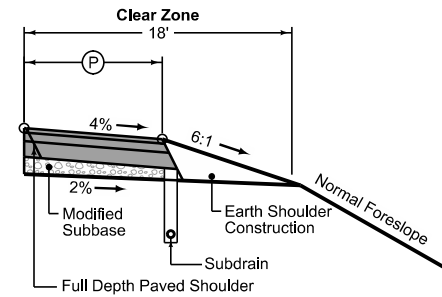
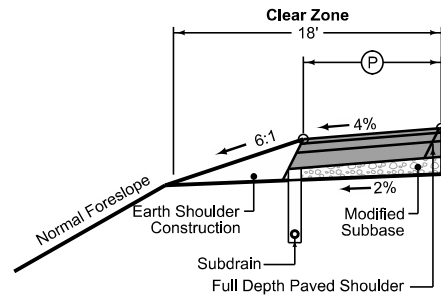
4_P_Guard_ MODIFIED			
Direction of Travel	BEGIN STATION	END STATION	P Feet
WB	2230+42.00	2231+12.00	10.0
WB	2238+53.00	2239+23.00	10.0



2 LANE PAVING

2H_ MODIFIED	
STATION TO STATION	
2230+40.00	2230+42.00
2230+42.00	2231+12.00
2239+23.00	2242+00.00

STATION 2230+42.00 TO STATION 2231+12.00 AND STATION 2238+53.00 TO STATION 2239+23.00. CONSTRUCT P.C.C. APPROACH PAVEMENT.



Combination Shoulder

2_C_ MODIFIED				
Direction of Travel	BEGIN STATION	END STATION	E Feet	G Feet
EB	2230+40.00	2230+42.00	3.0	7.0
EB	2240+15.00	2241+00.00	3.0	7.0
EB	2241+00.00	2242+00.00	3.0	7.0 - 4.0

Earth Shoulder Slope

2_C_ MODIFIED			
Direction of Travel	BEGIN STATION	END STATION	E
EB	2230+40.00	2230+42.00	6:1
EB	2240+15.00	2241+75.00	6:1
EB	2241+75.00	2242+00.00	6:1 - 3:1

Paved Shoulder at Guardrail

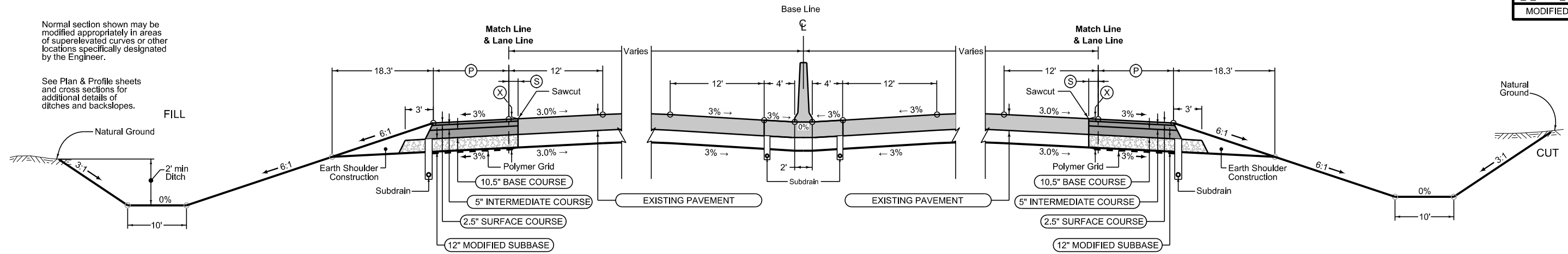
4_P_Guard_ MODIFIED			
Direction of Travel	BEGIN STATION	END STATION	P Feet
EB	2230+42.00	2231+12.00	10.0
EB	2238+53.00	2239+23.00	10.0

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

NE 54TH AVENUE

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.



HMA Shoulder

4_P_Guard_MODIFIED					
Direction of Travel	BEGIN STATION	END STATION	(P) Feet	(S) Feet	(X) Inches
SB	2082+50.00	2083+33.40	12.0	0.0	30
SB	2083+33.40	2083+50.00	12.0	0.0 - 1.0	30
SB	2083+50.00	2085+00.00	12.0	1.0	30
SB	2085+00.00	2085+10.00	12.0	1.0 - 0.0	30
SB	2085+10.00	2088+00.00	12.0	0.0	30

Shoulder Widening Grading and Paving

LOCATION		DIMENSIONS		
ROAD IDENTIFICATION	STATION TO STATION	(R) Feet	(X) Inches	(BW) Feet
INTERSTATE 35	2082+50.00 2088+00.00		30	

Refer to Plan sheet D.02 for Limits of Full Depth Sawcut and Removal of Existing HMA Shoulder Pavement
Refer to the Cross Section Sheets for the Limits of Grading of Foreslope, Ditch and Backslope.

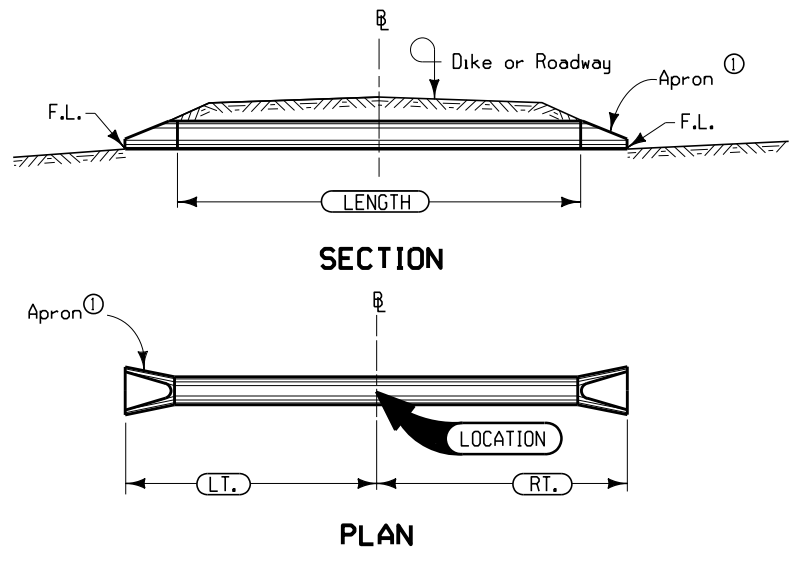
HMA Shoulder

4_P_Guard_MODIFIED					
Direction of Travel	BEGIN STATION	END STATION	(P) Feet	(S) Feet	(X) Inches
NB	2082+50.00	2083+16.67	12.0	0.0	30
NB	2083+16.67	2083+50.00	12.0	0.0 - 1.0	30
NB	2083+50.00	2085+00.00	12.0	1.0	30
NB	2085+00.00	2085+10.00	12.0	1.0 - 0.0	30
NB	2085+10.00	2086+55.00	12.0	0.0	30
NB	2086+55.00	2088+00.00	12.0 - 9.0	0.0	30

See Tab 112-9 for shoulder quantities.

INTERSTATE 35

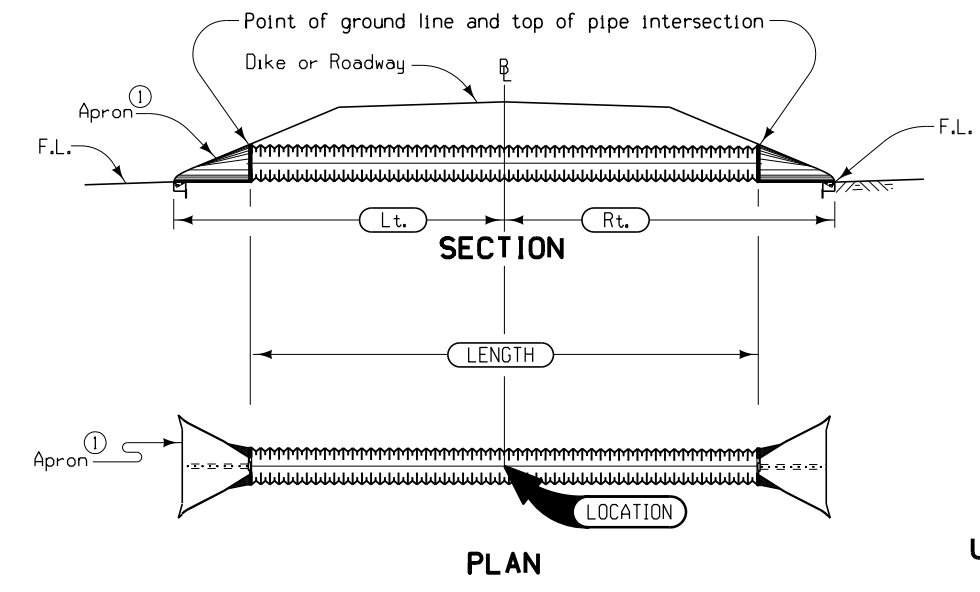
1101
04-30-02



Notes:
 B shall be C of roadway, dike, survey, or other; as detailed on plans.
 Skew angle is the angle which one end of the pipe is ahead (by stationing) of line perpendicular to the B (example skew Rt. ahead 30°).
 Refer to tabular listing and other plans for additional information.
 ① See Standard Road Plan RF-3 For Conc. or RF-5 for Metal.

PIPE CULVERT

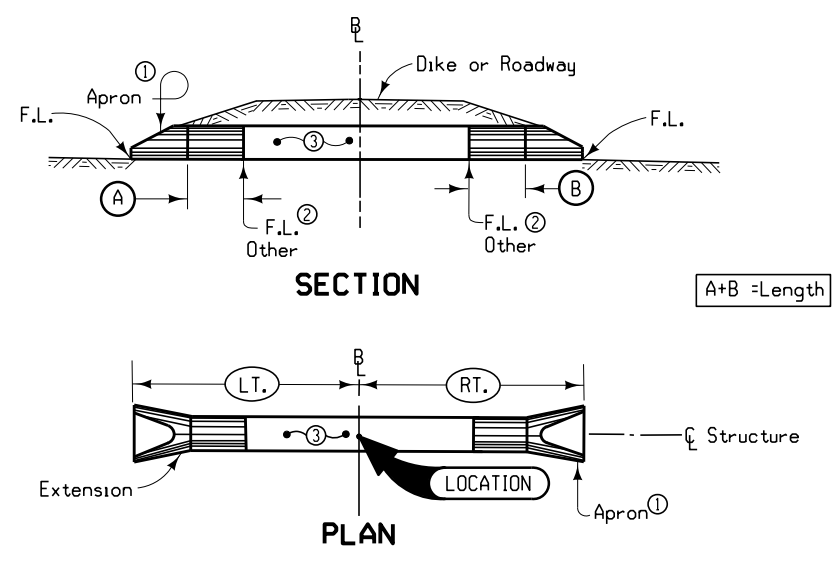
1601
04-21-09



Notes:
 B shall be C of roadway, dike, survey, or other; as detailed on plans.
 Skew angle is the angle which one end of the pipe is ahead (by stationing) of a line perpendicular to the B (example skew Rt. ahead 30 degrees).
 Refer to tabular listings and other plans for additional information.
 ① See Standard Road Plan RF-3 for Concrete or RF-5 for Metal and Polyethylene.
 Special Note:
 Pipe Lengths are calculated based on length of Concrete Pipe.

UNCLASSIFIED PIPE CULVERT

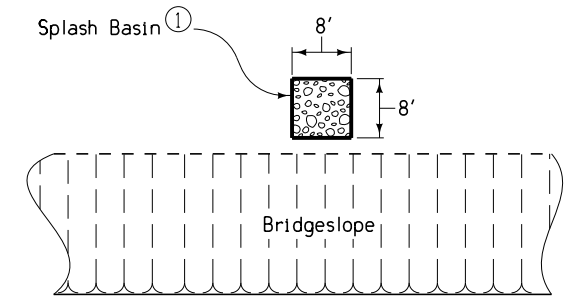
1301
10-03-00



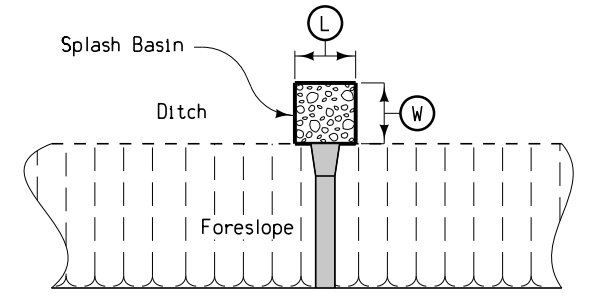
Notes:
 B shall be C of roadway, dike, survey, or other; as detailed on plans.
 Extension shall be on line of existing structure to Lt., Rt. or both as specified. Adaptors may be required, see Standard Road Plan RF-2.
 Refer to tabular listing and other plans for additional information.
 ① See Standard Road Plan RF-3 for concrete, RF-5 for metal.
 ② Optional type "D" section only when specified in tabulation.
 ③ Existing structure.

PIPE EXTENSION

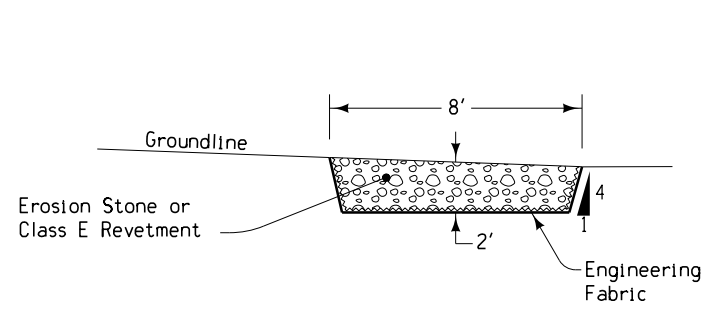
4404
04-20-10



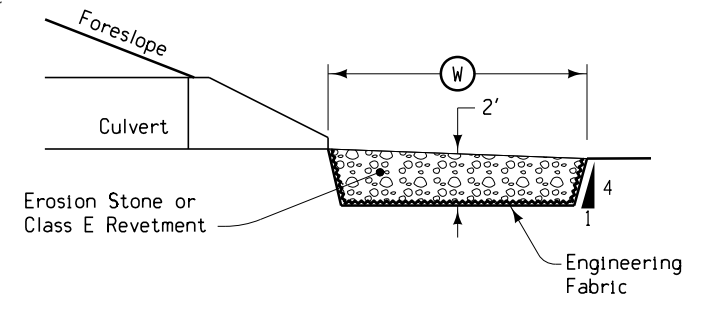
Splash Basin Under Bridge Drain
Plan View



Splash Basin at Culvert Outlet
Plan View



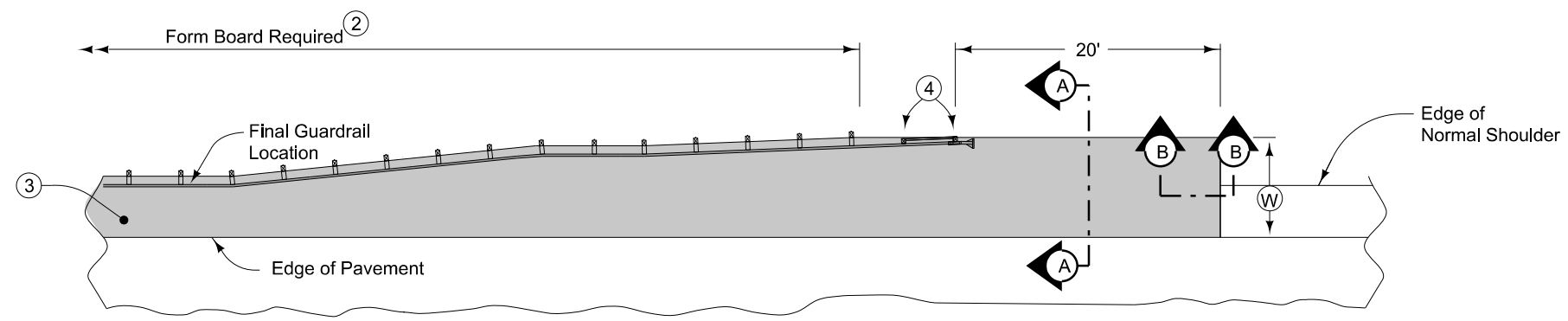
Splash Basin Under Bridge Drain
Typical Section



Splash Basin at Culvert Outlet
Typical Section

① Center splash basin directly under bridge drain.
 Refer to Tabulation 100-23 for additional information.

ROCK SPLASH BASIN



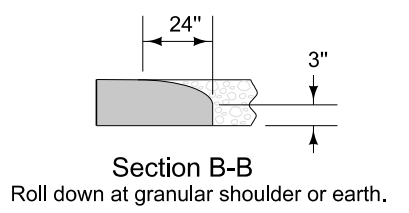
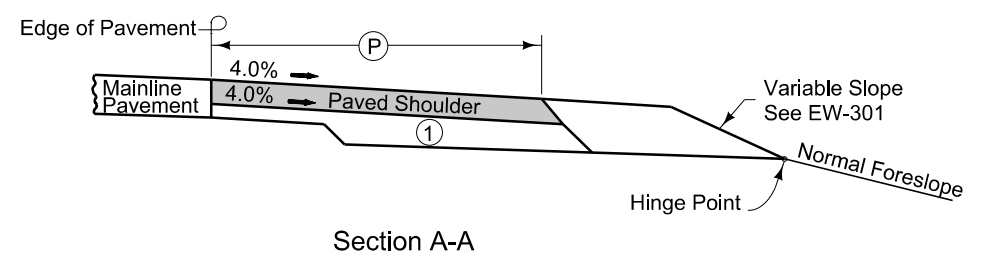
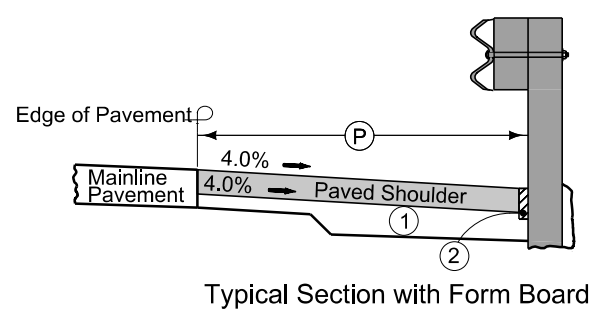
6" HMA Paved Shoulder at guardrail. 7" PCC may be substituted with the following jointing layout:

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

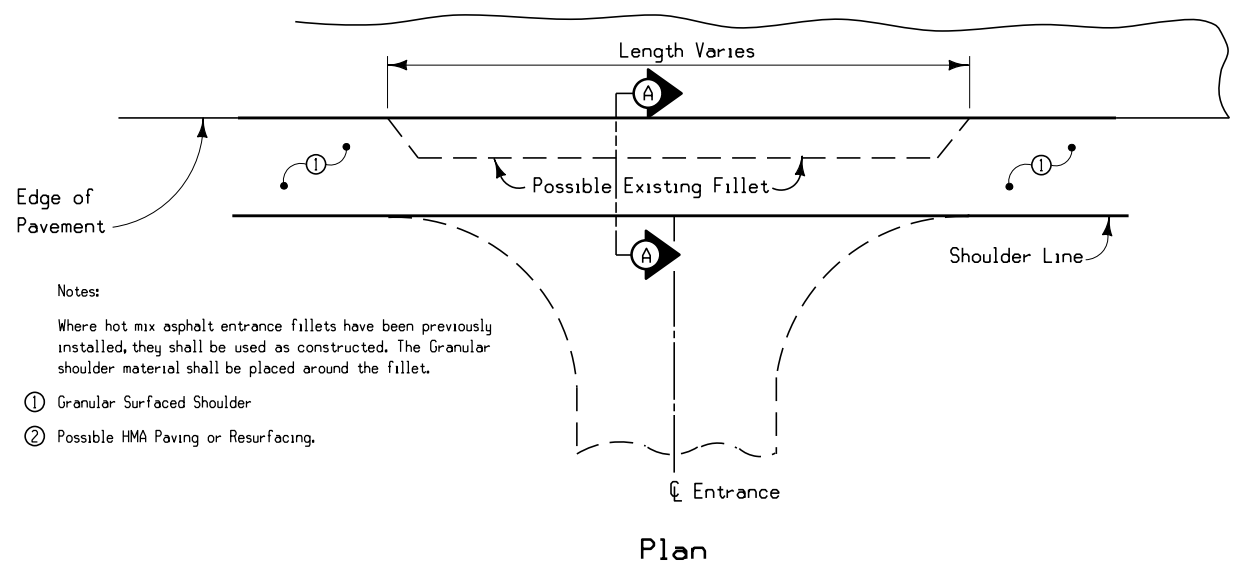
Compaction of HMA is required to face of guardrail post. Hand compaction will be allowed under guardrail. Removal & reinstallation of guardrail will be allowed with no additional payment.

Refer to Shoulder tabulation (112-9) for quantities.

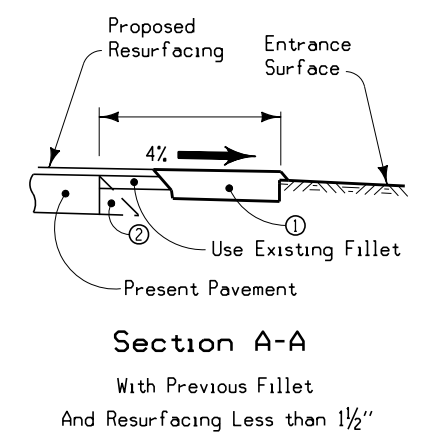
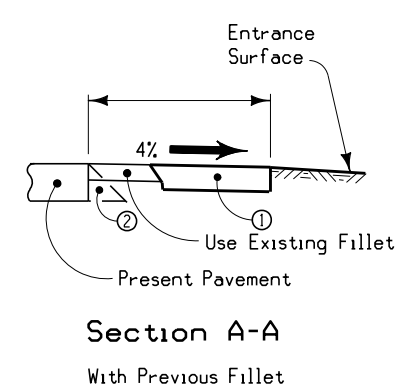
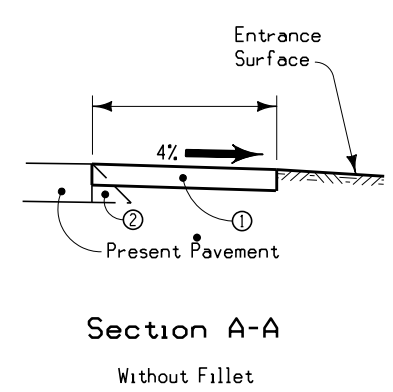
- ① 6" subgrade treatment.
- ② When guardrail posts are installed prior to construction of paved shoulder, nail 1" x 6" untreated form boards along the face of guardrail posts for the length shown. This board is to prevent shoulder material from contacting the sides of the posts and altering the function of the guardrail. Form board not required for final 2 posts.
- ③ Continue paved shoulder to existing paved shoulder or 20' beyond the end of guardrail.
- ④ Shoulder may be notched for final 2 posts or post sleeves may be installed through pavement.



PAVED SHOULDER AT GUARDRAIL



- Notes:
- Where hot mix asphalt entrance fillets have been previously installed, they shall be used as constructed. The Granular shoulder material shall be placed around the fillet.
- ① Granular Surfaced Shoulder
 - ② Possible HMA Paving or Resurfacing.



GRANULAR SHOULDER CONSTRUCTION THRU ENTRANCES

SURVEY SYMBOLS

	LUM Luminaire		UV Underground Utility Vault
	SI Sign		E1 ELA Underground Electric Line Co. 1
	ROW Right of Way Rail		E2 ELB Underground Electric Line Co. 2
	PPA Power Pole Co. 1		E3 ELC Underground Electric Line Co. 3
	PRA Power Riser Co. 1		W WLA Underground Water Line Co. 1
	TEV Evergreen Tree		T1 TLA Underground Telephone Line Co. 1
	SHR Shrub		T2 TLB Underground Telephone Line Co. 2
	TDC Tree Deciduous		T3 TLC Underground Telephone Line Co. 3
	SWAMP		G GLA Underground Gas Line Co. 1
	LP L.P. Tank		F0 FOA Underground Fiber Optic Co. 1
	OUT Tile Outlet		F02 FOB Underground Fiber Optic Co. 2
	TSG Traffic Signal		S1.S STA Storm Sewer Co. 1
	IN Storm Sewer Intake		S1.S.2 STB Storm Sewer Co. 2
	INB Storm Sewer Intake Beehive		
	MH Utility Access (Manhole)		
	BB Billboard		
	MIS Miscellaneous		
	FLG Flagpole		
	MM Mile Marker Post		
	SL Speed Limit Sign		
	TPD Telephone Pedestal		
	TCB Utilities		
	EB Electrical Box		
	WV Water Valve		
	FHYD Fire Hydrant		
	UB Utility Box		
	TVP TV Pedestal		
	TLN Tree Line		
	TIL Tile Line		
	FCL Chain Link and Security Fence		
	FW Wire Fence		
	FWD Wood Fence		
	DU Centerline Draw or Stream (Up)		
	D Centerline Draw or Stream (Down)		
	DIK Centerline of Dike or Dam		
	EW Edge of Water		
	BNK Stream Bank		
	GDL Guard Rail Steel		
	RIP Rip-Rap		
	RR Centerline of Railroad Tracks		

UTILITY LEGEND

	E1 MidAmerican Utilities
	E2 Polk County Transportation
	E3 Iowa DOT Transportation and Lighting
	W Des Moines Water Works
	T1 CenturyLink
	F0 CenturyLink
	F02 Windstream
	G MidAmerican
	S1.S Private
	S1.S.2 Polk County

PLAN VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK	Design Color No.	Description
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.	Description	
Yellow	(4)	Highlight for Critical Notes or Features
Red	(3)	Delineates Restricted Areas
Lavender	(9)	Temporary Pavement Shading
Cyan	(71)	Proposed Pavement Milling and Overlay Shading
Gray, Light	(48)	Proposed Pavement Shading
Gray, Med	(80)	Proposed Granular Shading
Gray, Dark	(112)	Proposed Grade and Pave Shading "In conjunction with a paving project"
Brown, Light	(236)	Grading Shading
Tan	(8)	Proposed Sidewalk Shading
Blue, Light	(230)	Proposed Sidewalk Landing Shading
Pink	(11)	Proposed Sidewalk Ramp Shading

PROFILE VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK	Design Color No.	Description
Green	(2)	Existing Ground Line Profile
Blue	(1)	Proposed Profile and Annotation
Magenta	(5)	Existing Utilities
Blue, Light	(230)	Proposed Ditch Grades, Left
Black	(0)	Proposed Ditch Grades, Median
Rust	(14)	Proposed Ditch Grades, Right

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

Proposed Borrow Elements	
	Aquisition Outline
	Conceptual Outline

RIGHT-OF-WAY LEGEND

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

PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

(COVERS SHEET SERIES D & E)

DELAWARE TWP.
T-79N R-23W
SEC. 7

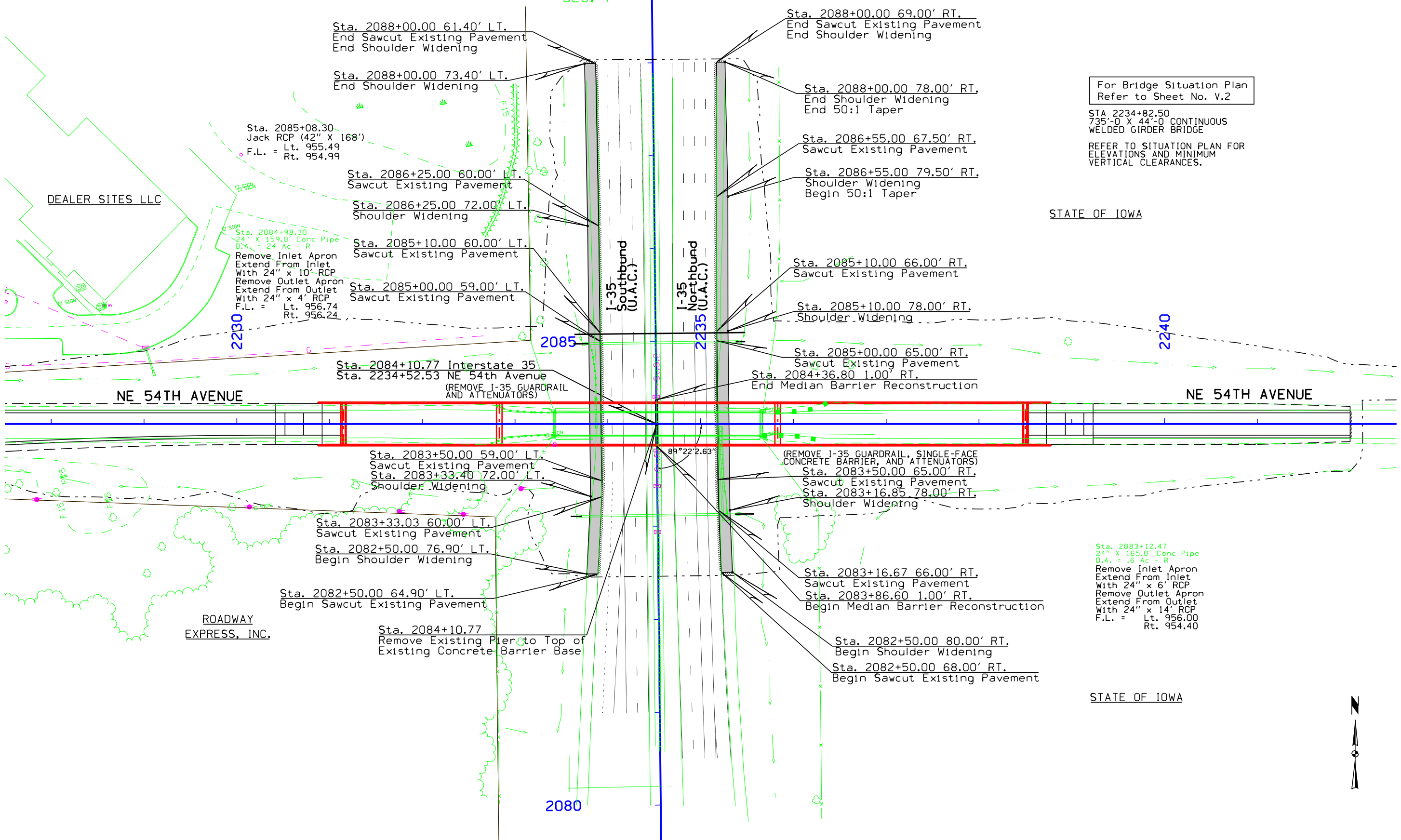
For Bridge Situation Plan
Refer to Sheet No. V.2

STA 2234+82.50
735'-0" X 44'-0" CONTINUOUS
WELDED GIRDER BRIDGE

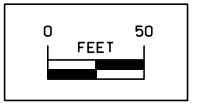
REFER TO SITUATION PLAN FOR
ELEVATIONS AND MINIMUM
VERTICAL CLEARANCES.

STATE OF IOWA

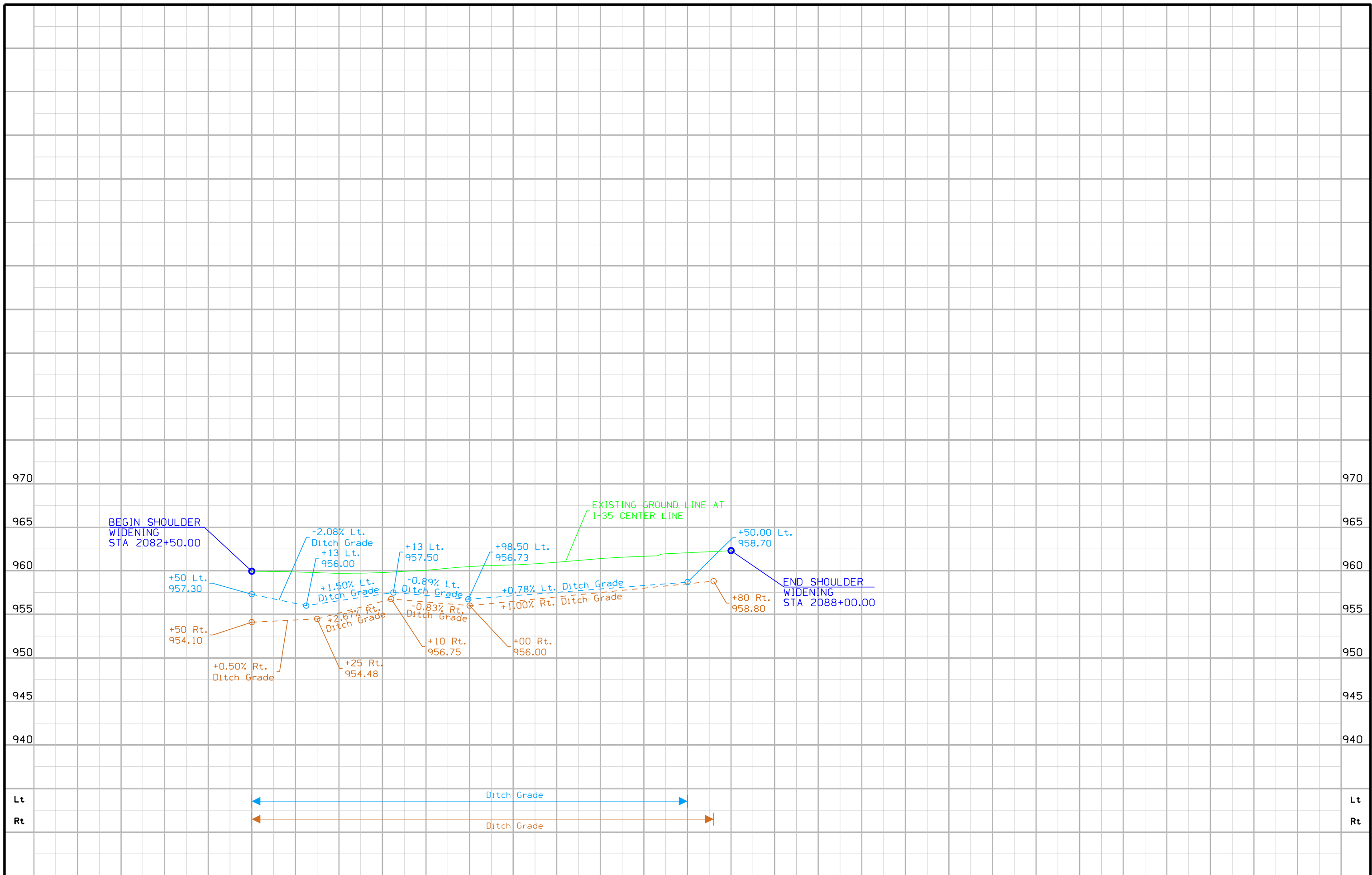
STATE OF IOWA

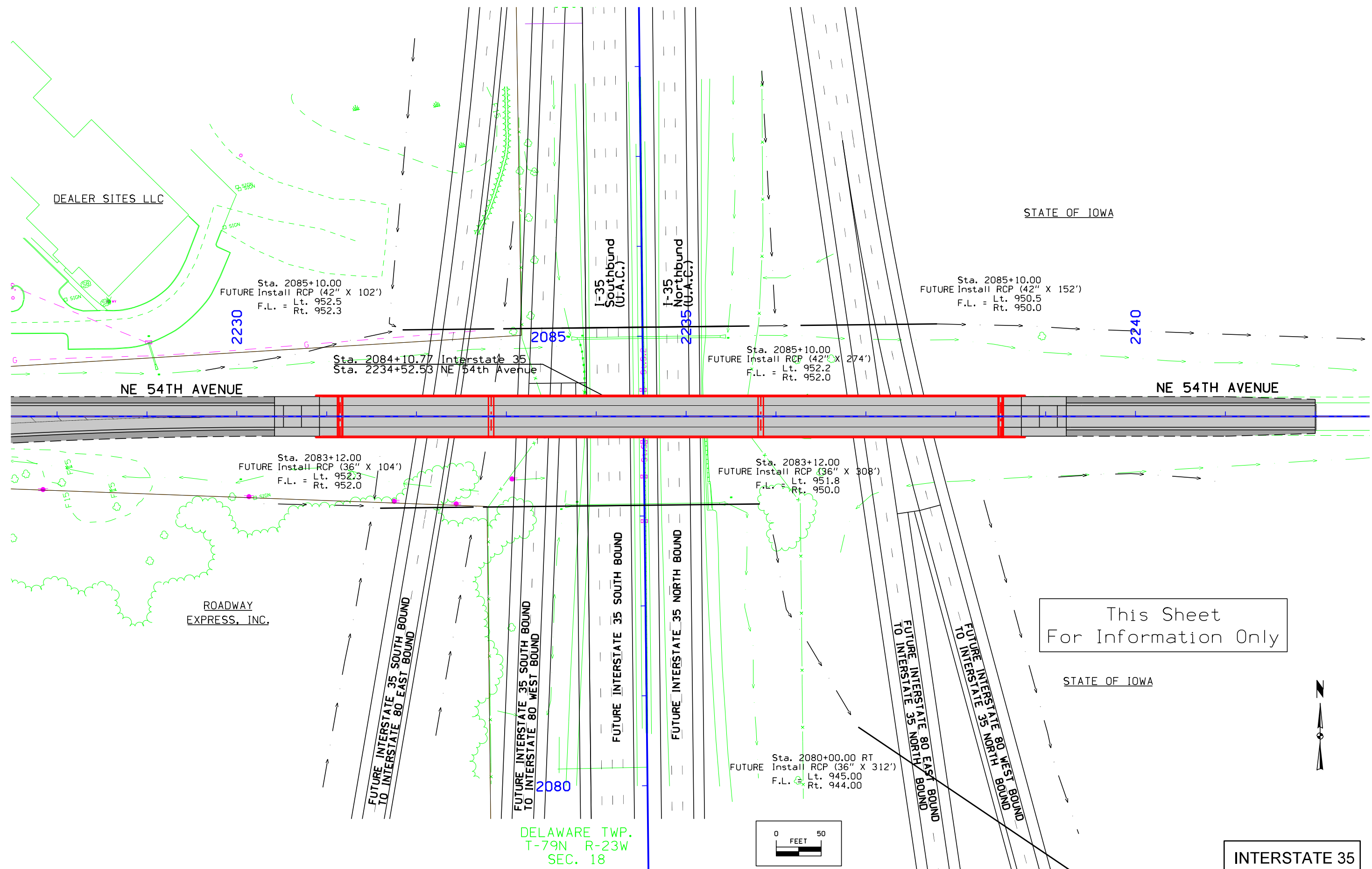


DELAWARE TWP.
T-79N R-23W
SEC. 18



INTERSTATE 35



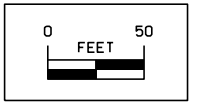


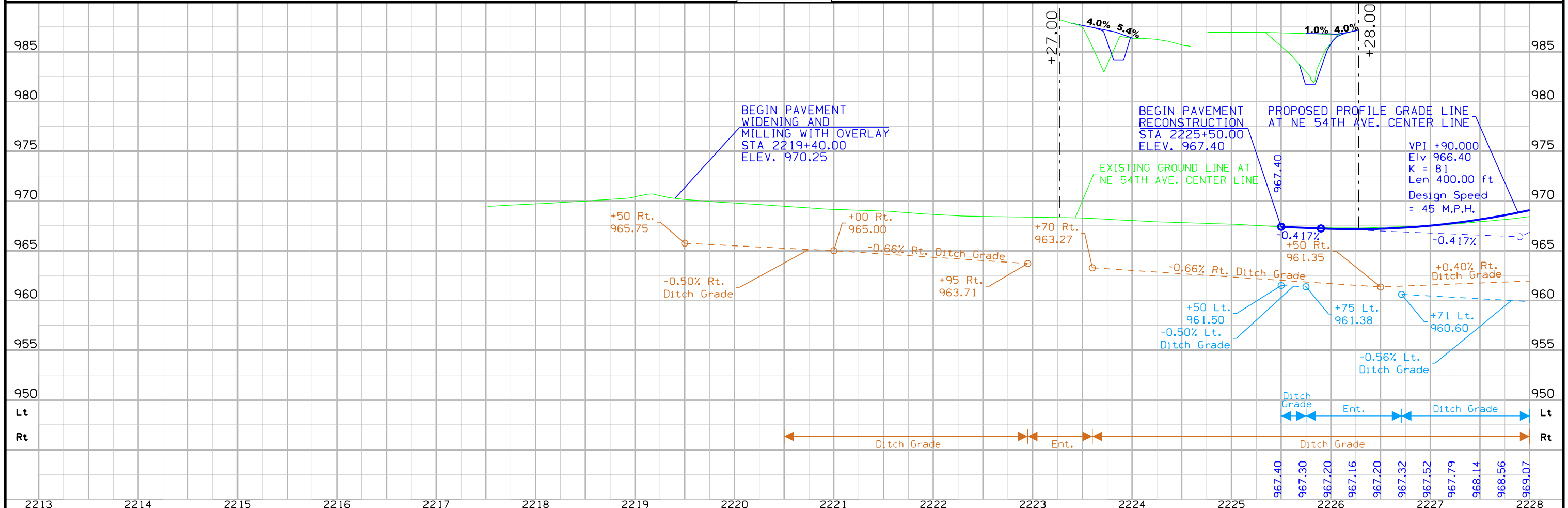
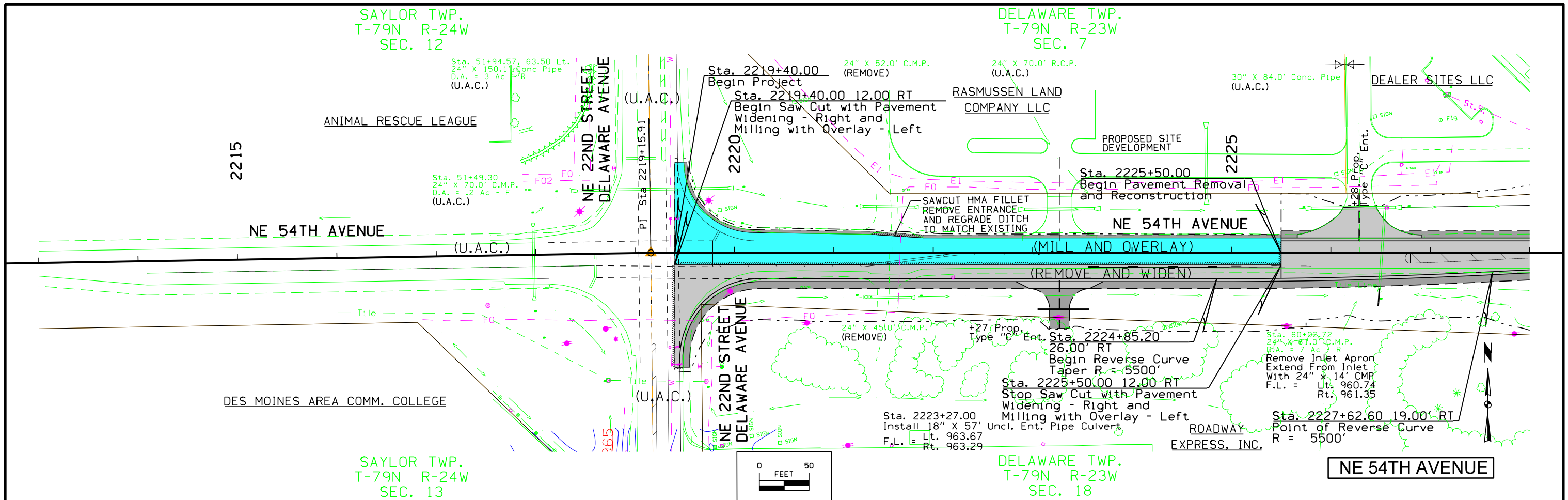
STATE OF IOWA

This Sheet
For Information Only

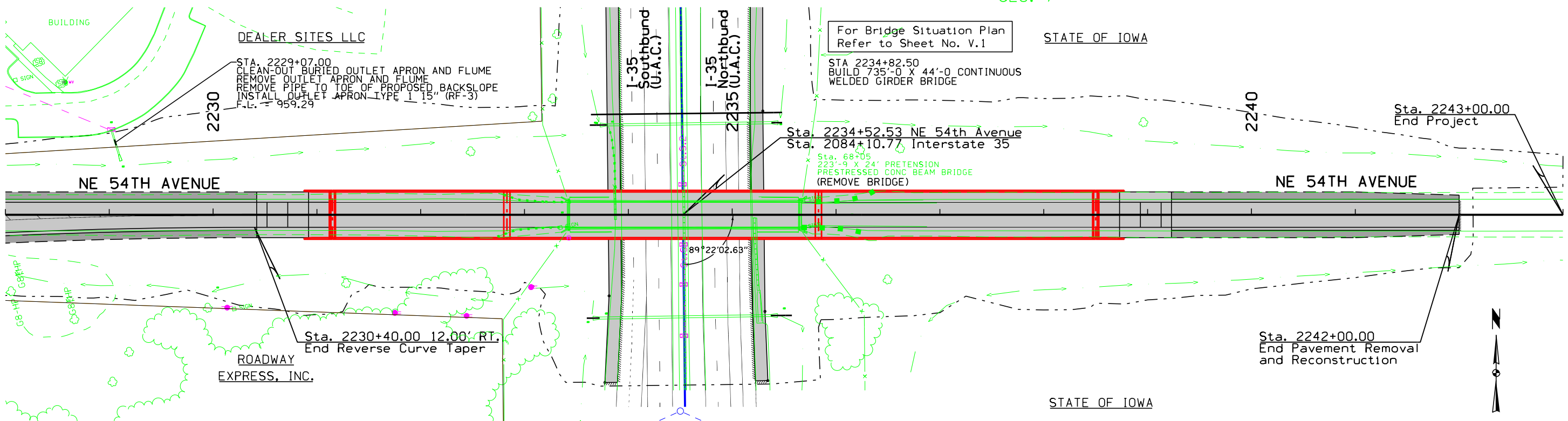
STATE OF IOWA

INTERSTATE 35

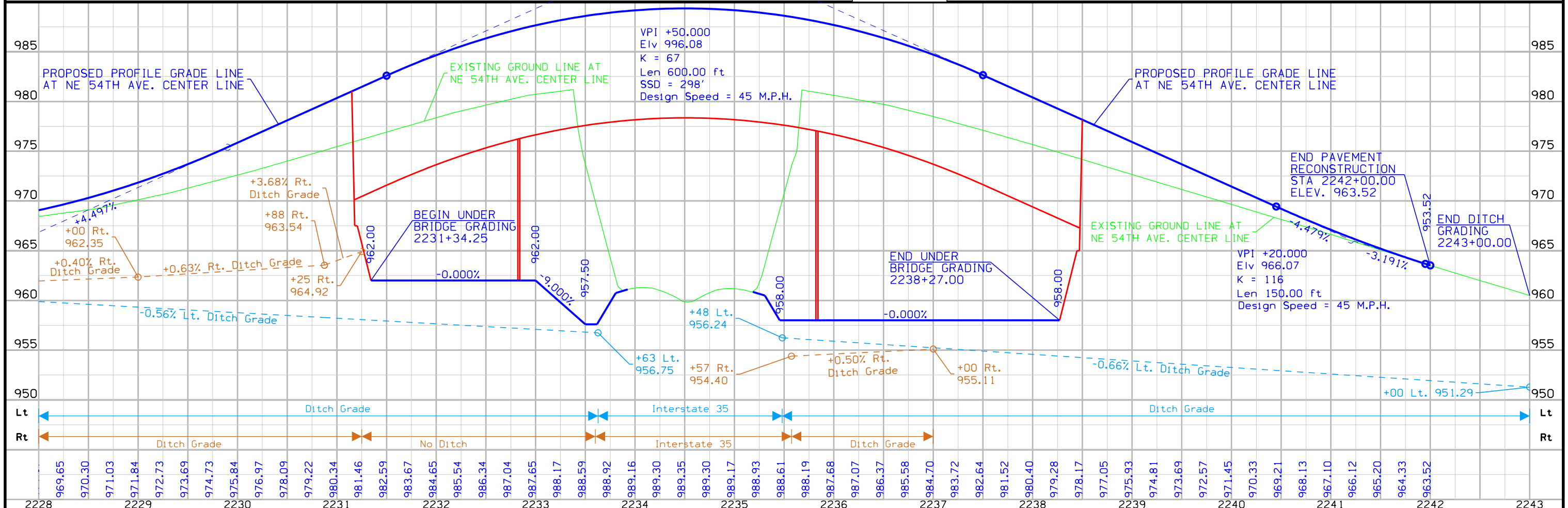




DELAWARE TWP.
T-79N R-23W
SEC. 7

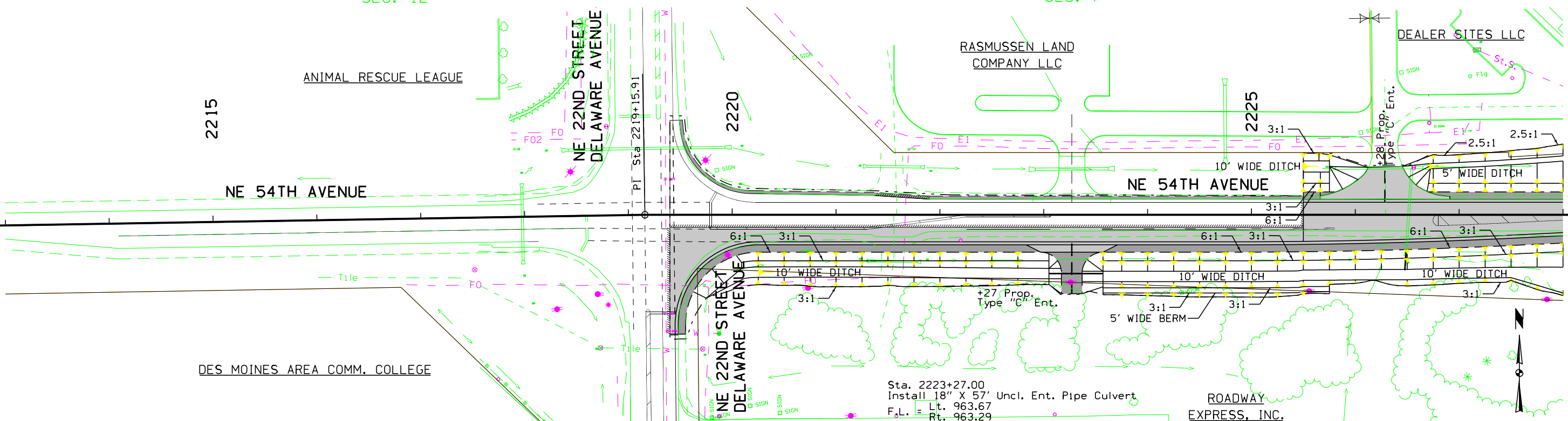


DELAWARE TWP.
T-79N R-23W
SEC. 18



SAYLOR TWP.
T-79N R-24W
SEC. 12

DELAWARE TWP.
T-79N R-23W
SEC. 7

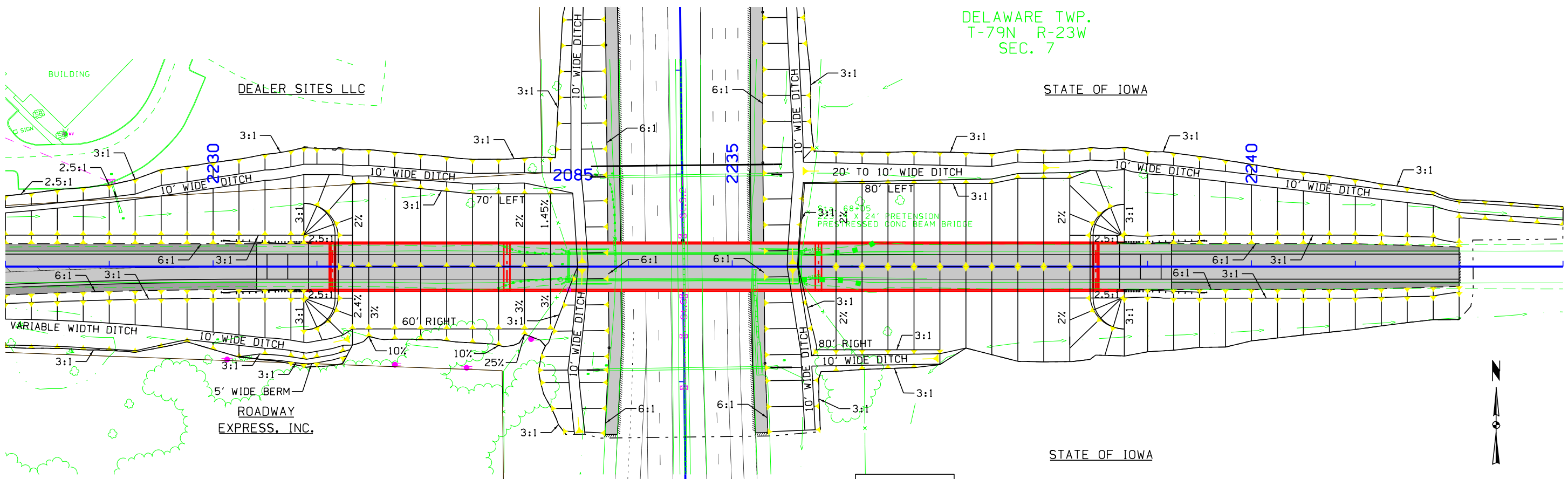


Sta. 2223+27.00
Install 18" X 57' Uncl. Ent. Pipe Culvert
F.L. Lt. 963.67
Rt. 963.29

ROADWAY
EXPRESS, INC.

SAYLOR TWP.
T-79N R-24W
SEC. 13

DELAWARE TWP.
T-79N R-23W
SEC. 18



DELAWARE TWP.
T-79N R-23W
SEC. 7

STATE OF IOWA

STATE OF IOWA

DELAWARE TWP.
T-79N R-23W
SEC. 18

Survey Information

General Information

Measurement units for this survey are US survey feet. This survey is for proposed bridge improvements at intersection NE 54th. Ave at I-35.

Vertical Control

This survey is relative to NAVD 88 vertical datum. A three wire level was run thru this project from the 2000/2001 survey Project # IM-35-3(146)86--13-77. A three wire level loop was run originating @ BM 722. A three wire level loop was then was run east along NE 54th Ave, then returned back to BM # 722. Additional three level loops were also run. Additional benchmarks were placed throughout this project using a GNSS Base-Rover setup at Pt. 24. A minimum of three observations were collected with 1 hour or greater time span between each observation. The local error of these observations relative was less than 0.04 ft. at 95% confidence level.

Vertical Equations to the Project Datum Bench Marks and Other Benches along this Survey are as Follows:

BM # 800 this survey Elev. = 984.04 (NAVD 88 English).
 = BM # 800 2000/2001 Survey Proj. # IM-35-3(146)86--13-77
 Elev. = 984.04

Horizontal Control

A 2000-2001 GPS network for Project IM-35-3(146)86--13-77 was used. Datum is NAD83 (1996) Iowa State Plane South Zone (US Survey Feet.). The project coordinates are scaled about control Pt. G030- 609616.47N, 1618959.90E, 945.43EL.
 1/Combined Scale Factor of project= 1.000062537

Alignment Information

Mainline Alignment (I-35)

From 2001/2002 I-35 Realignment, Project # IM-35-4(101)—13-77
 The mainline alignment for this survey is a retrace of Project # IM-35-4(101)—13-77. The mainline alignment was created in centerline of median. Stationing was obtained at PI Sta. 2001+60.36 and carried ahead to PI Sta. 3100+53.44 without equation. The following PI points were used to create this CL alignment.

PI 2001+60.36 Project # IM-35-4(101)—13-77 (not found or set)
 PI 3100+53.44 Project # IM-35-4(101)—13-77 (not found or set)

This Mainline survey relates to the mainline plan stationing as follows:

PI Sta. 2001+60.36 this survey
 =PI Sta. 2001+60.36 Project # IM-35-4(101)—13-77

PI Sta. 2100+53.74 this survey
 =PI Sta. 3100+53.44 Project # IM-35-4(101)—13-77

NE 54th Ave Alignment

The NE 54th Ave alignment for this survey is a retrace of Polk County Plans Project # STP-S-77(65)—5E-77 and RFMX-2820(1)—56-77. Stationing was obtained at PI Sta. 81+53.82, and was backed up to PI Sta. 26+29.24, and carried ahead to PI Sta. 107+93.83. The following PI points were used to create this CL alignment.

PI 26+29.45 Polk County Plans Project # RFMX-2820(1)—56-77 (Fd. RR Spike)
 PI 52+67.51 Polk County Plans Project # STP-S-77(65)—5E-77 (Fd. Hinge Nail)
 PI Sta 81+53.82 Polk County Plans Project # STP-S-77(65)—5E-77(Fd. PK Nail)
 PI Sta 107+94 Back = PI STA 55+26.4 Ahead Polk County Plans Project # STP-S-77(65)—5E-77(Fd. PK Nail)

This NE 54th Ave survey relates to the mainline plan stationing as follows:

PI Sta. 26+29.24 this survey
 =PI Sta. 26+29.45 Project # Polk County Plans Project # RFMX-2820(1)—56-77

PI Sta. 52+67.33 this survey
 =PI Sta. 52+67.51 Project # Polk County Plans Project # STP-S-77(65)—5E-77

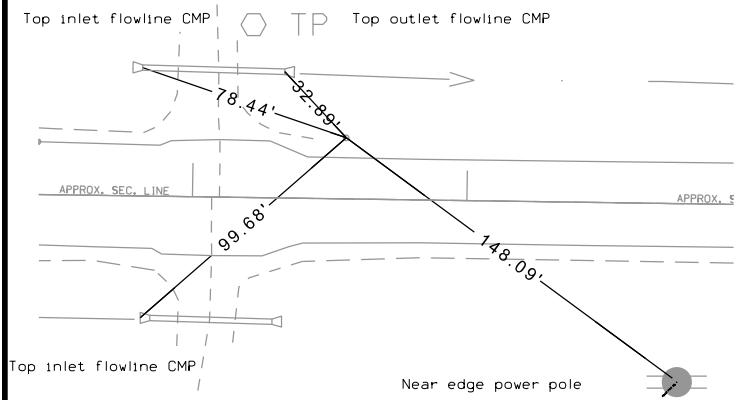
PI Sta. 81+53.82 this survey
 =PI Sta. 81+53.82 Project # Polk County Plans Project # STP-S-77(65)—5E-77

PI Sta. 107+93.83 this survey
 =PI Sta. 107+94 Back = PI Sta 55+26.4 Ahead Project # Polk County Plans Project # STP-S-77(65)—5E-77

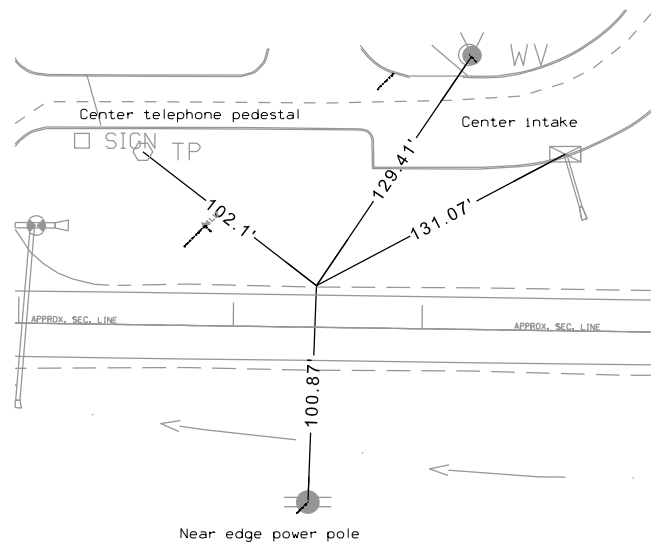
VERTICAL CONTROL

Point	North	East	Elevation	Station	Offset	Feature	Description
500	604247.666	1618127.606	966.467	51+85.49	88.799	BM	CUT X CONC PAD
800	604300.036	1619859.158	984.036	69+17.60	12.848	BM	FD IHC BM SE WING BIDGE

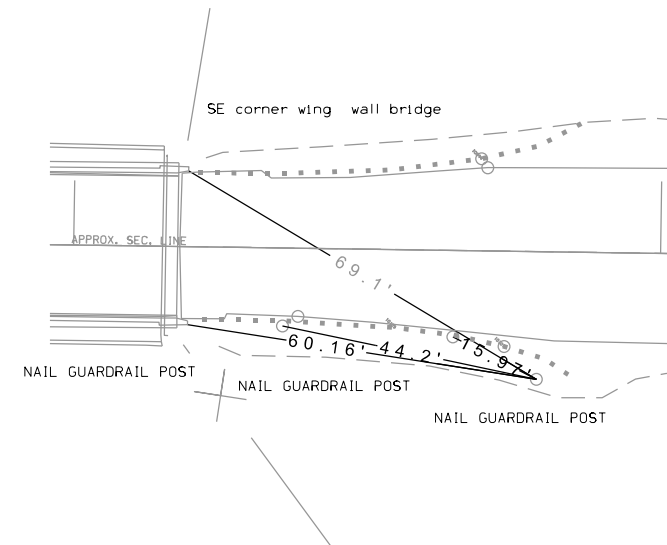
CP Sta. 2084+46.78, 1247.93 Lt.
 CP No. 300, Set Iron Pin
 N=604354.732, E=1618497.901



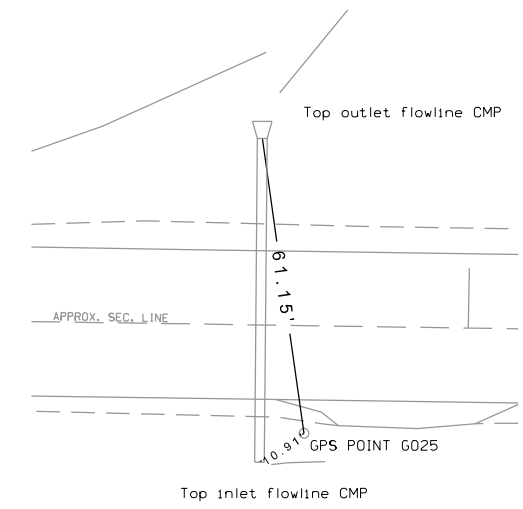
CP Sta. 2084+37.47, 665.21 Lt.
 CP No. 301, Set Iron Pin
 N=604343.466, E=1619080.586
 Center water valve

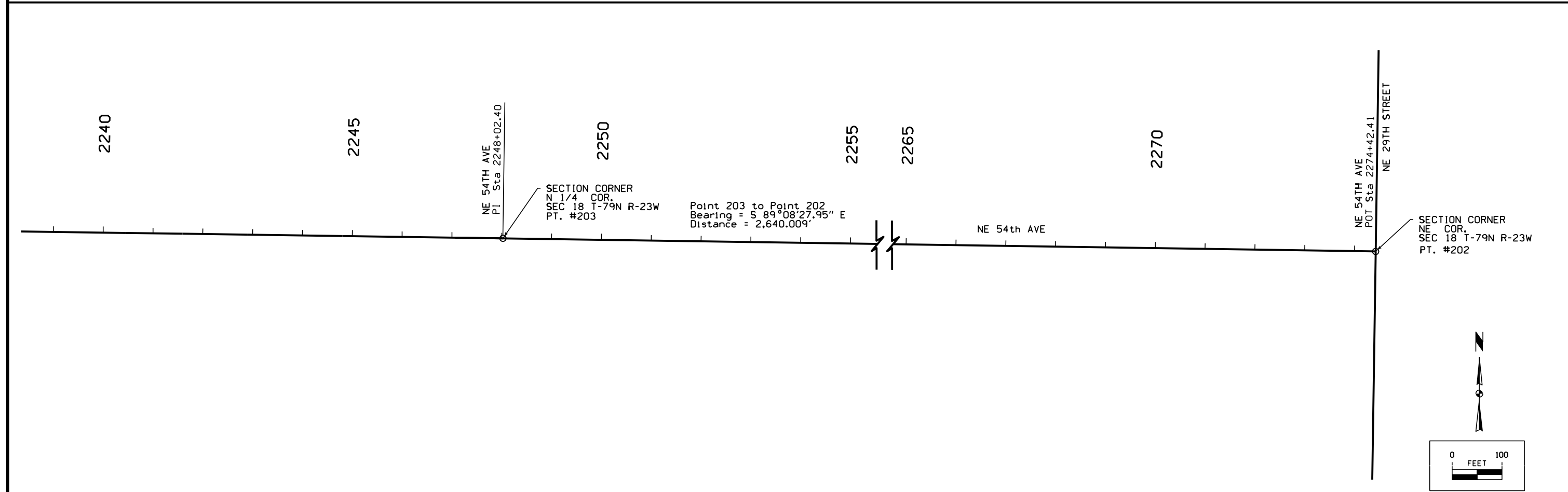
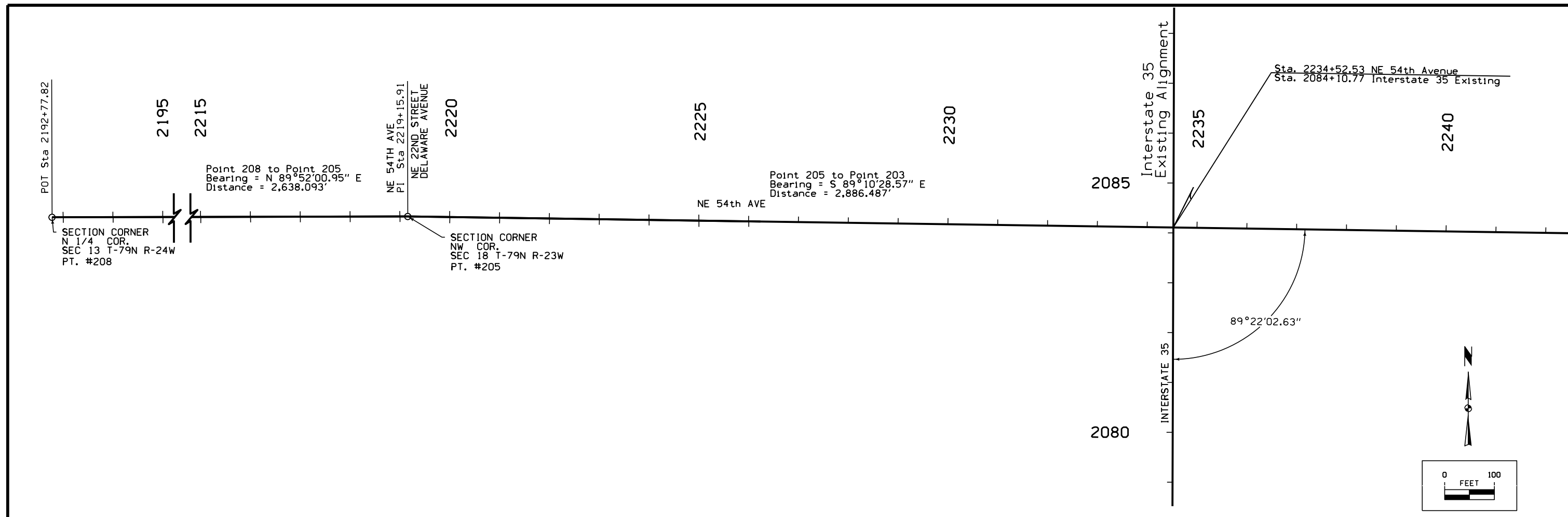


CP Sta. 2083+87.08, 174.98 Rt
 CP No. 24, Found Rebar
 N=604290.24, E=1619920.59



CP Sta. 2083+64.30, 2162.23 Rt.
 CP No. 25, Found Rebar
 N=604260.78, E=1621907.76





ALIGNMENT COORDINATES

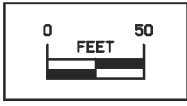
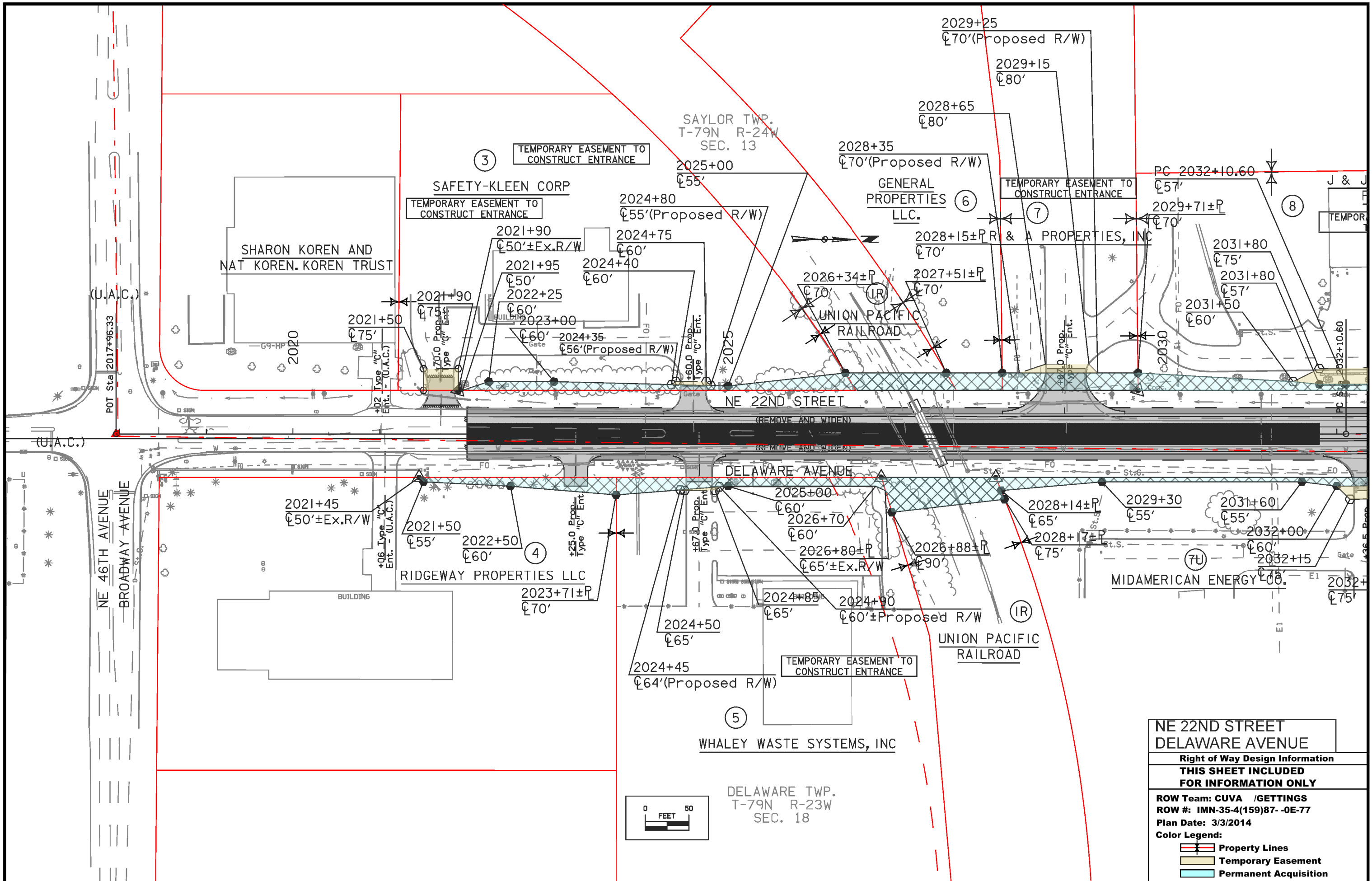
101-16
10-20-09

Name	Location	Point on Tangent			Begin Spiral			Begin Curve			Simple Curve PI or Master PI of SCS			End Curve			End Spiral		
		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates	
			Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)
INTERSTATE 35																			
110		2001+60.36	596,064.16	1,619,717.94															
111		2100+53.74	605,957.48	1,619,751.23															
NE 54TH AVENUE																			
208		2192+77.82	604,330.53	1,615,571.16															
205		2219+15.91	604,336.66	1,618,209.25															
203		2248+02.40	604,295.07	1,621,095.43															
202		2274+42.41	604,255.50	1,623,735.15															

SPIRAL OR CIRCULAR CURVE DATA

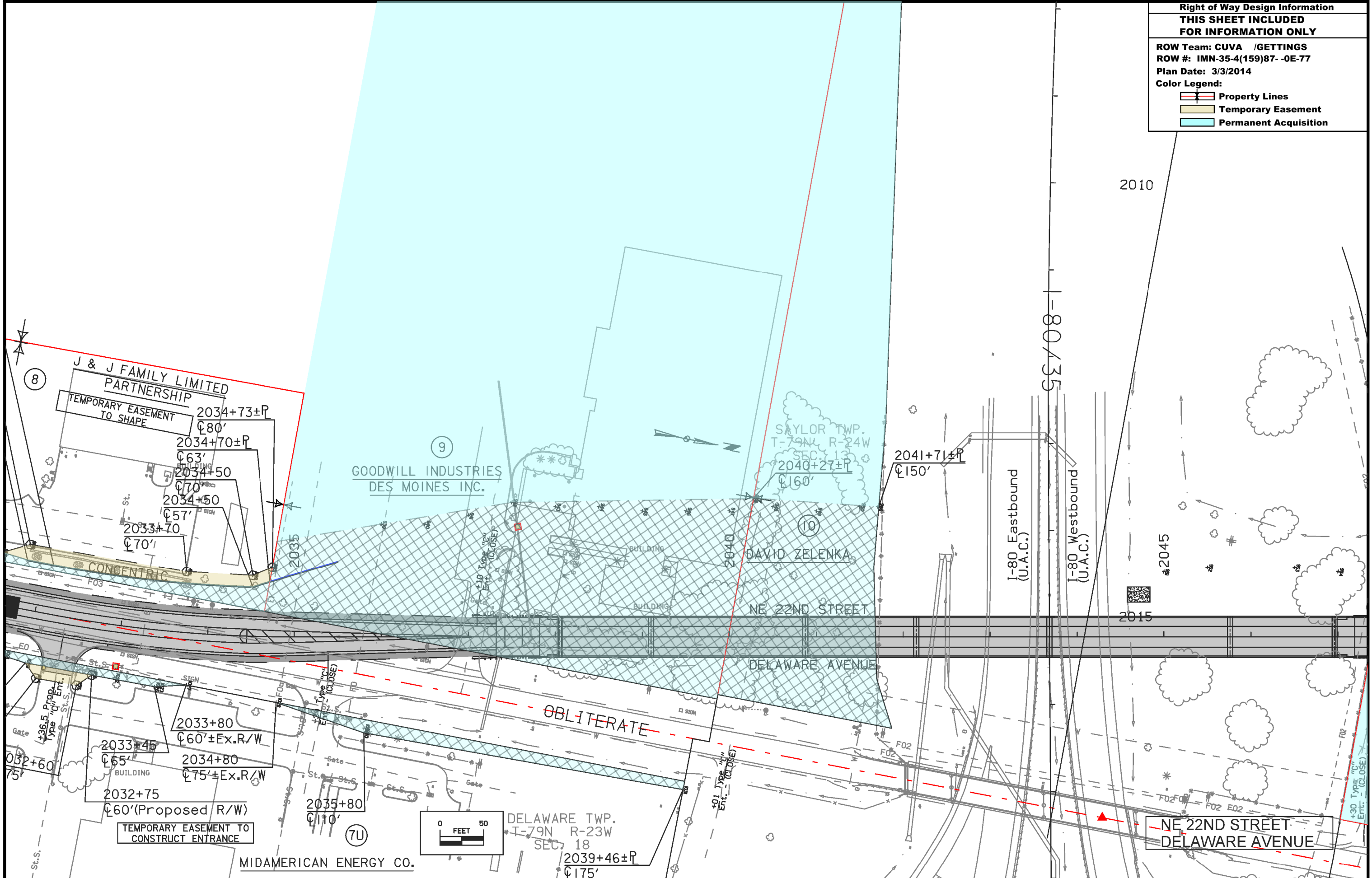
101-17
04-19-11

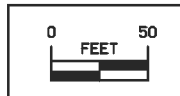
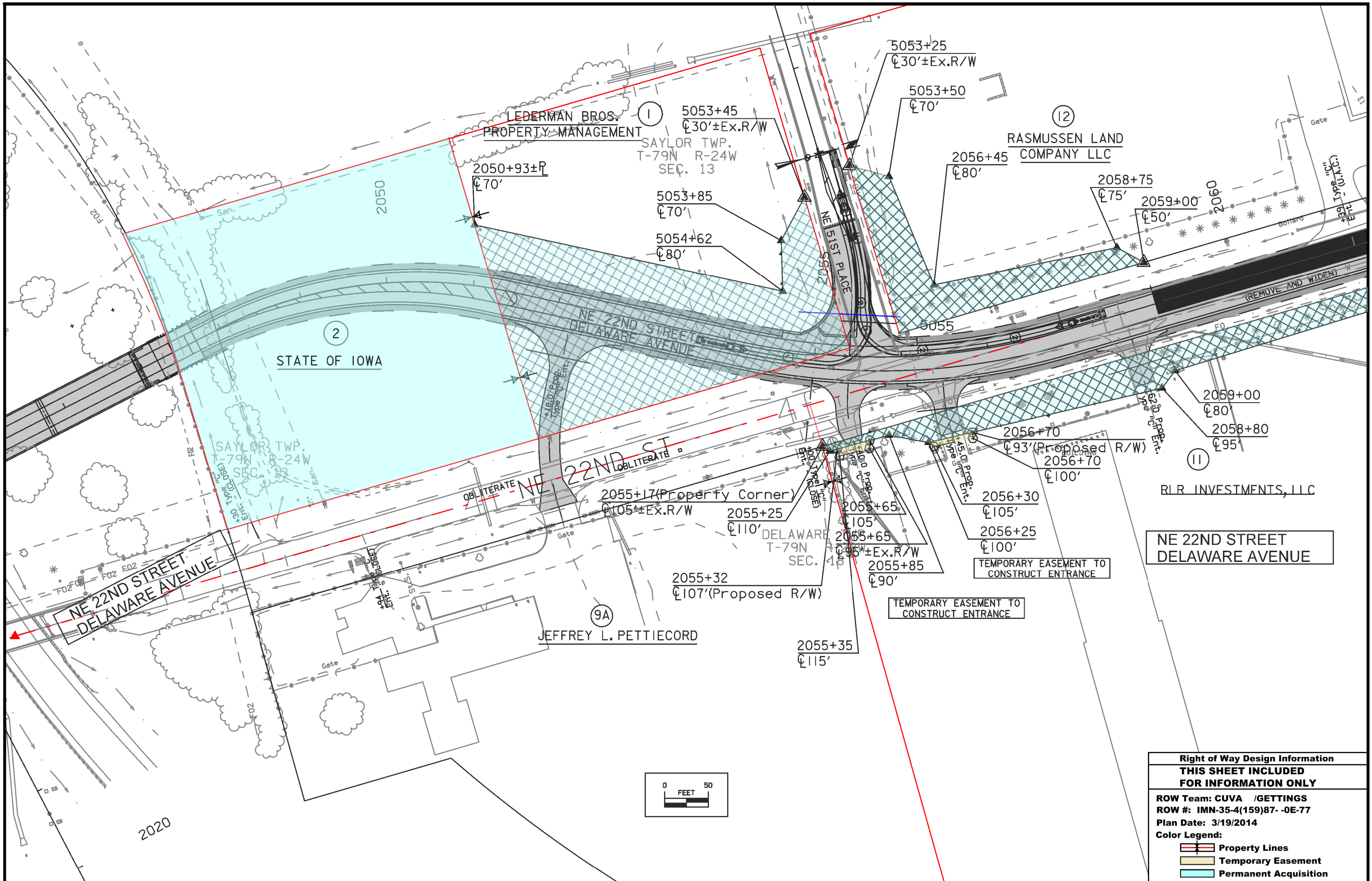
Name	Location	Δ_{scs}	Horizontal Alignment Data														Remarks		
			Spiral Data				Curve Data												
			θ_s	L_s	T_s	E_s	X_c	Y_c	L.T.	S.T.	Δ_c	T	L	R	E				



NE 22ND STREET DELAWARE AVENUE	
Right of Way Design Information	
THIS SHEET INCLUDED FOR INFORMATION ONLY	
ROW Team: CUVA /GETTINGS	
ROW #: IMN-35-4(159)87-0E-77	
Plan Date: 3/3/2014	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition

Right of Way Design Information
THIS SHEET INCLUDED FOR INFORMATION ONLY
 ROW Team: CUVA /GETTINGS
 ROW #: IMN-35-4(159)87- -0E-77
 Plan Date: 3/3/2014
 Color Legend:
 [Red Line] Property Lines
 [Yellow Area] Temporary Easement
 [Cyan Area] Permanent Acquisition





Right of Way Design Information	
THIS SHEET INCLUDED FOR INFORMATION ONLY	
ROW Team: CUVA /GETTINGS	
ROW #: IMN-35-4(159)87-0E-77	
Plan Date: 3/19/2014	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition

SAYLOR TWP.
T-79N R-24W
SEC. 13

50

5702

DES MOINES AREA
COMMUNITY COLLEGE

D/E FOUR WAY I.C.

NE 154TH AVENUE
PI Sta 2071+73.90

Sta 52+67.33

NE 22ND STREET

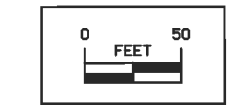
DELAWARE AVENUE

ROADWAY EXPRESS, INC.

NE 22ND STREET
DELAWARE AVENUE

LEDERMAN BROS PROPERTY
MANAGEMENT COMPANY, LLC

DELAWARE TWP.
T-79N R-23W
SEC. 18



TEMPORARY EASEMENT
TO SHAPE

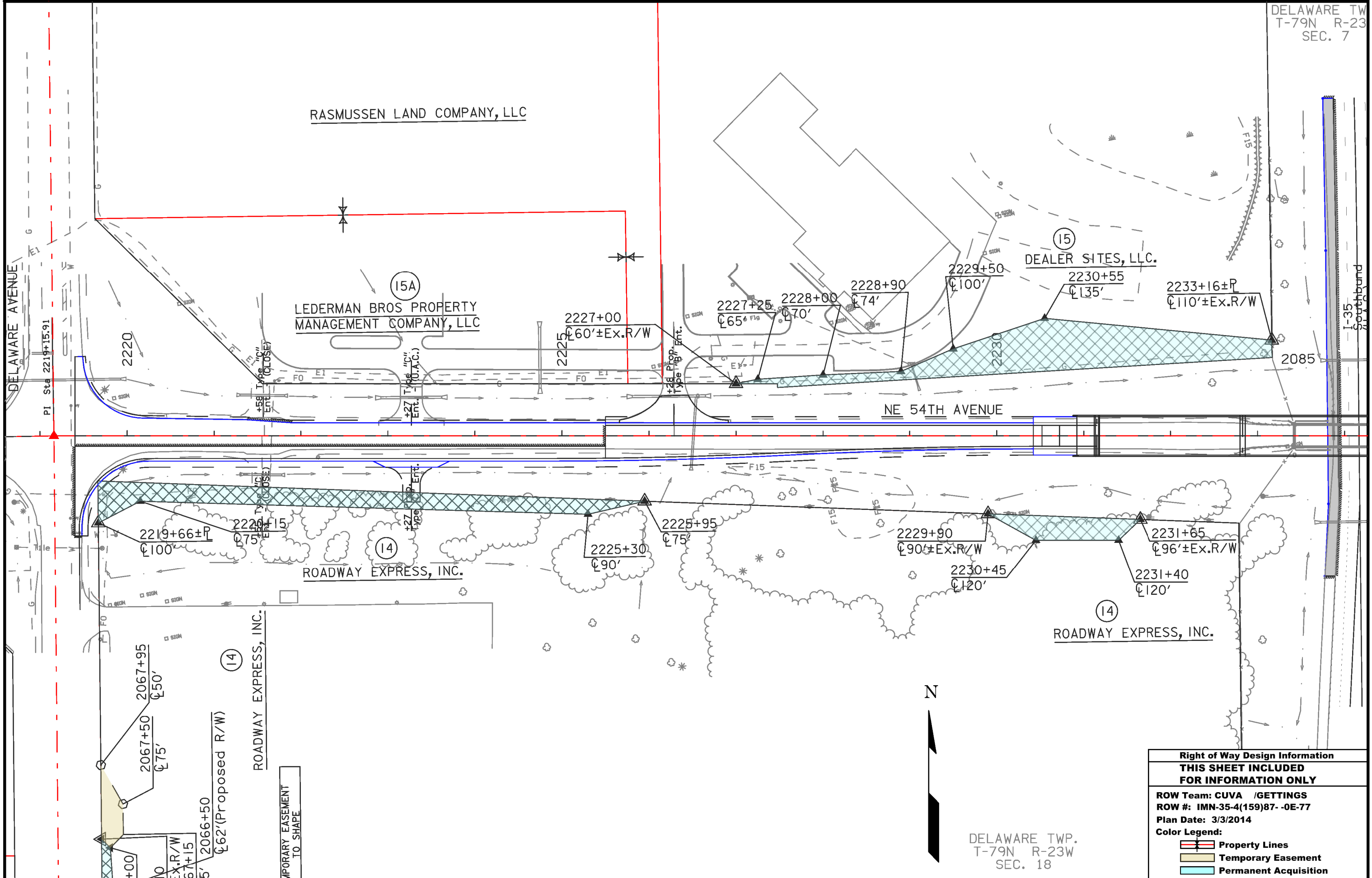
TEMPORARY EASEMENT TO
CONSTRUCT ENTRANCE

TEMPORARY EASEMENT TO
CONSTRUCT ENTRANCE

Right of Way Design Information
THIS SHEET INCLUDED
FOR INFORMATION ONLY

ROW Team: CUVA /GETTINGS
ROW #: IMN-35-4(159)87--0E-77
Plan Date: 3/3/2014

- Color Legend:**
- Property Lines
 - Temporary Easement
 - Permanent Acquisition



Right of Way Design Information
THIS SHEET INCLUDED FOR INFORMATION ONLY

ROW Team: CUVA /GETTINGS
 ROW #: IMN-35-4(159)87-0E-77
 Plan Date: 3/3/2014

Color Legend:

- Property Lines
- Temporary Easement
- Permanent Acquisition

DELAWARE TWP.
T-79N R-23W
SEC. 18



**NE 22ND STREET
DELAWARE AVENUE**

**Right of Way Design Information
THIS SHEET INCLUDED
FOR INFORMATION ONLY**




**ROW Team: CUVA /GETTINGS
ROW #: IMN-35-4(159)87-0E-77
Plan Date: 3/3/2014
Color Legend:**

- Property Lines
- Temporary Easement
- Permanent Acquisition

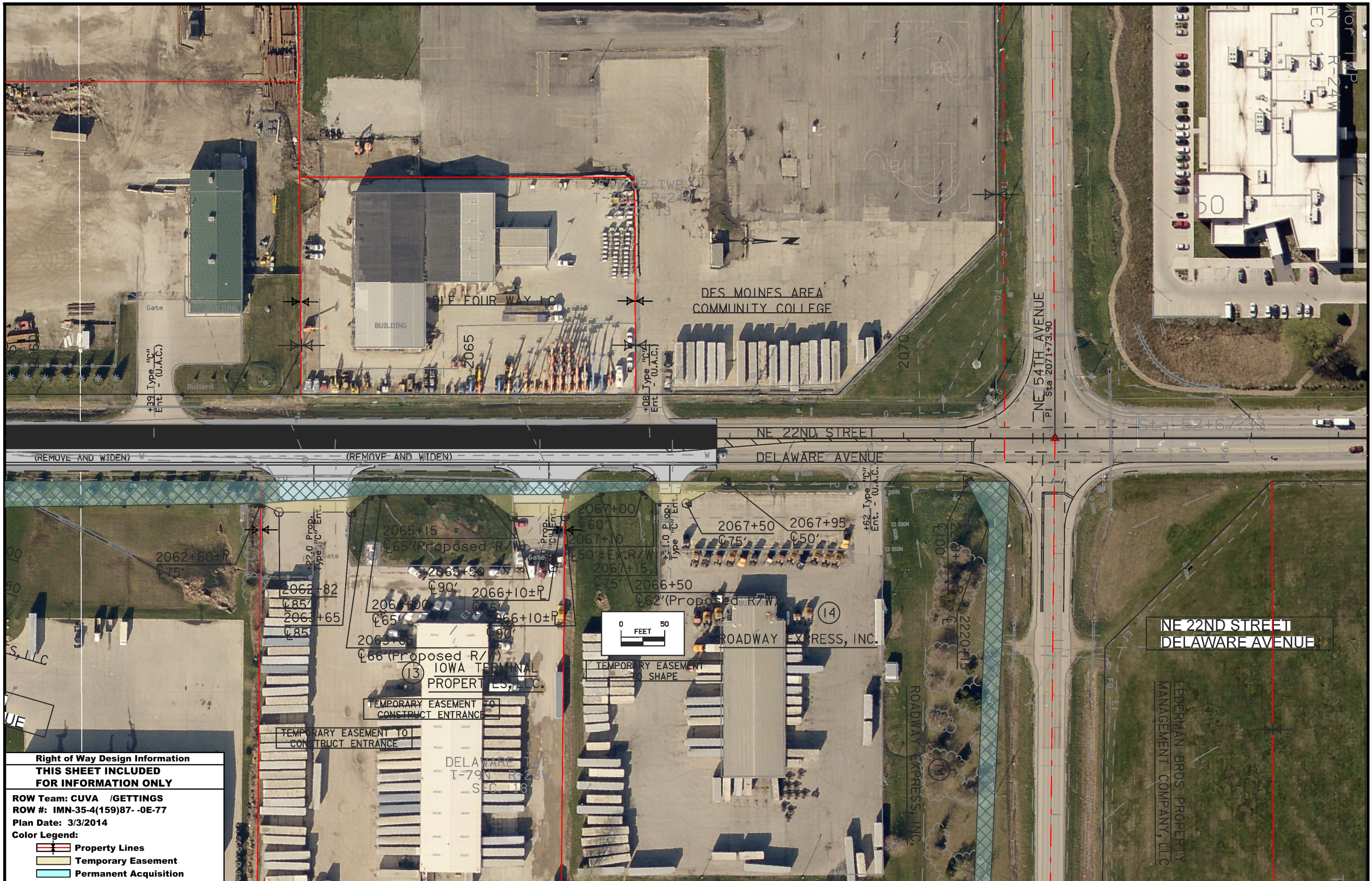


Right of Way Design Information
THIS SHEET INCLUDED
FOR INFORMATION ONLY

ROW Team: CUVA /GETTINGS
ROW #: IMN-35-4(159)87- -0E-77
Plan Date: 3/3/2014

Color Legend:
 Property Lines
 Temporary Easement
 Permanent Acquisition





Right of Way Design Information
THIS SHEET INCLUDED
FOR INFORMATION ONLY

ROW Team: CUVA /GETTINGS
 ROW #: IMN-35-4(159)87--0E-77
 Plan Date: 3/3/2014

Color Legend:

- Property Lines
- Temporary Easement
- Permanent Acquisition

DELAWARE TWP.
T-79N R-23W
SEC. 7



Right of Way Design Information
THIS SHEET INCLUDED FOR INFORMATION ONLY

ROW Team: CUVA /GETTINGS
 ROW #: IMN-35-4(159)87- -0E-77
 Plan Date: 3/3/2014

Color Legend:

- Property Lines
- Temporary Easement
- Permanent Acquisition

STAGING NOTES

STAGING NOTES

Stage 1A:

Traffic:

- Maintain two-way traffic on I-35.
- Close through traffic on NE 54th Avenue from Station 2219+40 to 2243+00.
- Maintain local access to businesses north of NE 54th Ave and west of I-35.
- Temporary night lane closures will be required for "SB" traffic on I-35 during shoulder reconstruction.
- Lane shifts will be required for "NB" traffic on I-35 during shoulder reconstruction.
- Temporary night closures will be required on I-35 during bridge demolition.

Construction:

- Construct the proposed NE 54th Avenue bridge superstructure and substructure over I-35, except the median pier.
- Remove the existing I-35 guardrail, concrete barrier, attenuators, and shoulders.
- Extend the existing I-35 pipe culverts and construct the proposed I-35 pipe culvert.
- Grade and pave the proposed I-35 outside shoulders.
- Grade proposed I-35 foreslopes and ditches.

Stage 1B:

Traffic:

- Maintain two-way traffic on I-35.
- Close through traffic on NE 54th Avenue from Station 2219+40 to 2243+00.
- Detour NE 54th Avenue traffic per detour plan shown on Sheet J.3.
- Maintain local access to businesses north of Ne 54th Ave and west of I-35.
- Temporary night lane closures will be required for traffic on I-35 during median bridge pier demolition and median barrier reconstruction.

Construction:

- Remove the existing NE 54th Avenue bridge pier in the I-35 median.
- Remove the existing I-35 median barrier.
- Construct the proposed I-35 median barrier.

Stage 2:

Traffic:

- Maintain two-way traffic on I-35.
- Close through traffic on NE 54th Avenue from Station 2219+40 to 2243+00.
- Detour NE 54th Avenue traffic per detour plan shown on Sheet J.3.
- Maintain local access to businesses north of NE 54th Ave and west of I-35.
- Temporary night closures will be required on I-35 during bridge girder erection.










Construction:

- Construct the proposed NE 54th Avenue bridge over I-35.
- Construct proposed NE 54th Avenue.

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

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

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

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

PLAN VIEW COLOR LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS

LINEWORK	Design Color No.	
Green	(2)	Existing Topographic Features and Labels
Magenta	(5)	Pavement Marking Call Outs
Blue	(1)	Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Yellow	(4)	Pavement Markings, Yellow
Off White	(254)	Pavement Markings, White

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

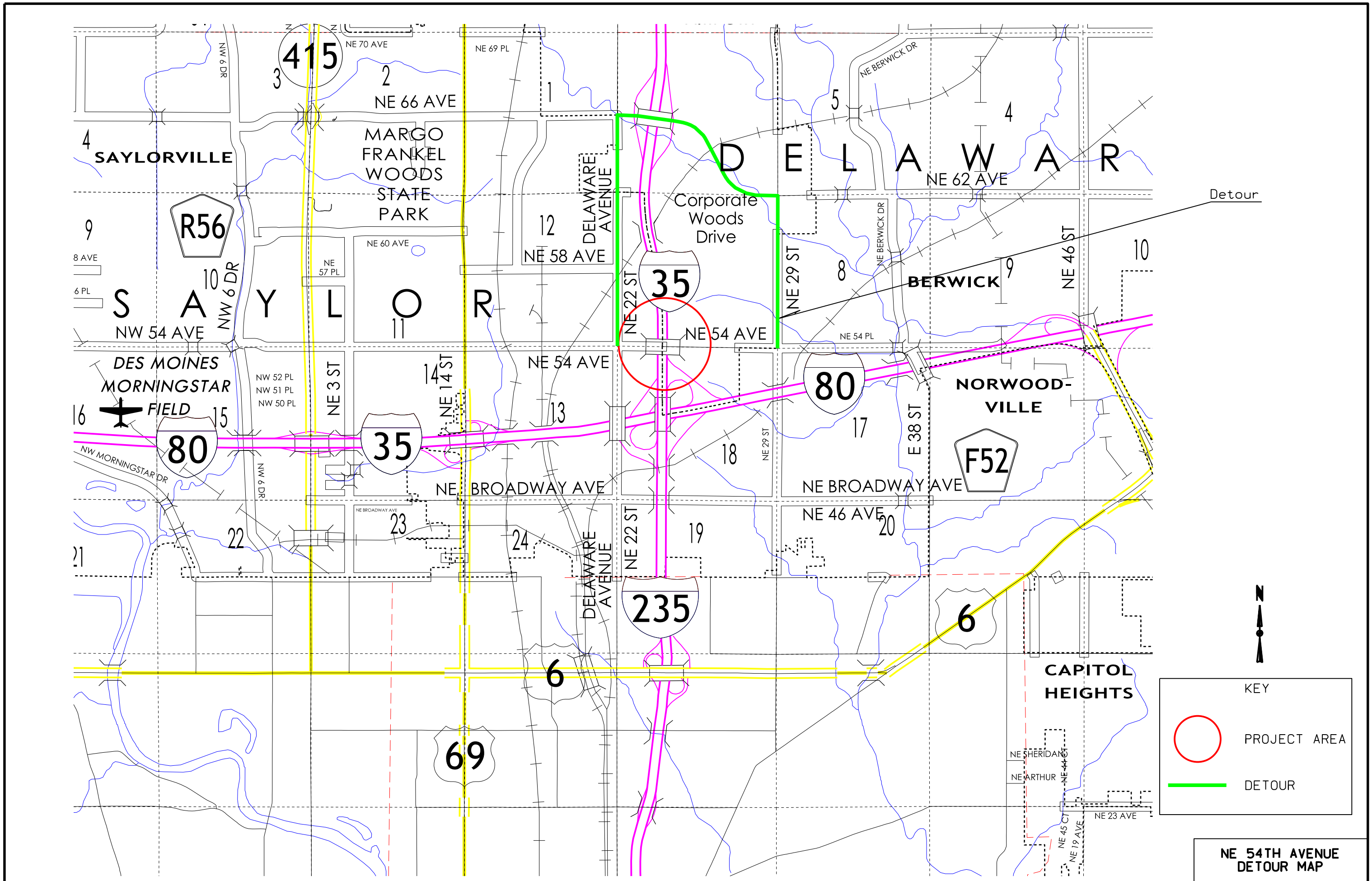
**PLAN VIEW PATTERN AND SYMBOL LEGEND
OF TRAFFIC CONTROL AND STAGING SHEETS**

●	Channelizing Device	■	Crash Cushion
✕	Drum	○→	Traffic Signal
■	Temporary Lane Separator	♯	Flagger
◆	Tubular Marker	⊙	Temporary Floodlighting
♦	Channelizer Marker	⊥	Traffic Sign
△	Concrete Barrier Marker	⊥	Type III Barricade
<	Delineator	☀	Type A Warning Light
▬	Temporary Barrier Rail	←	Direction of Traffic
▨	Pavement Removal	⌒	Safety Closure

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

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

(COVERS SHEET SERIES J)

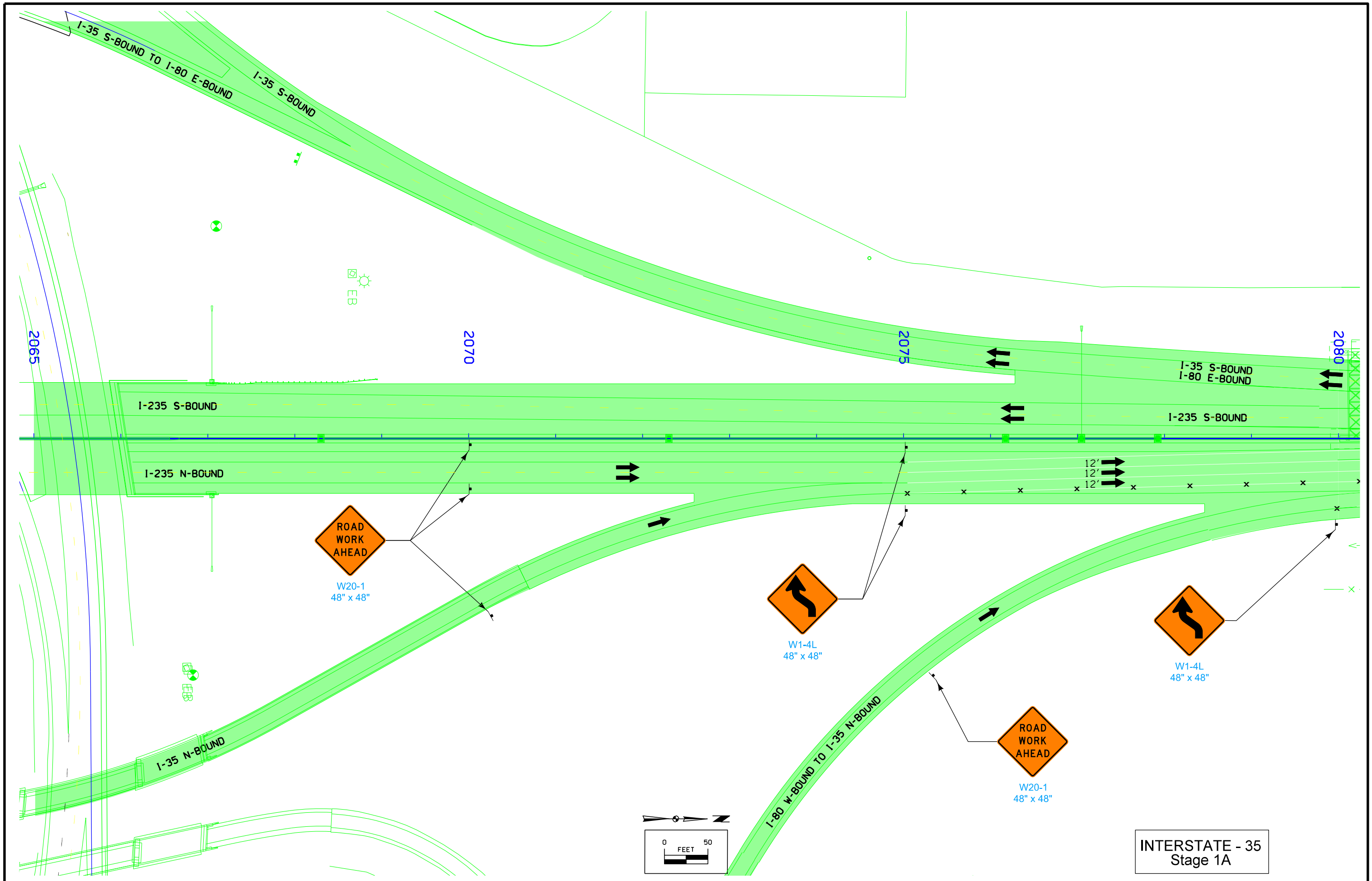


Detour

KEY

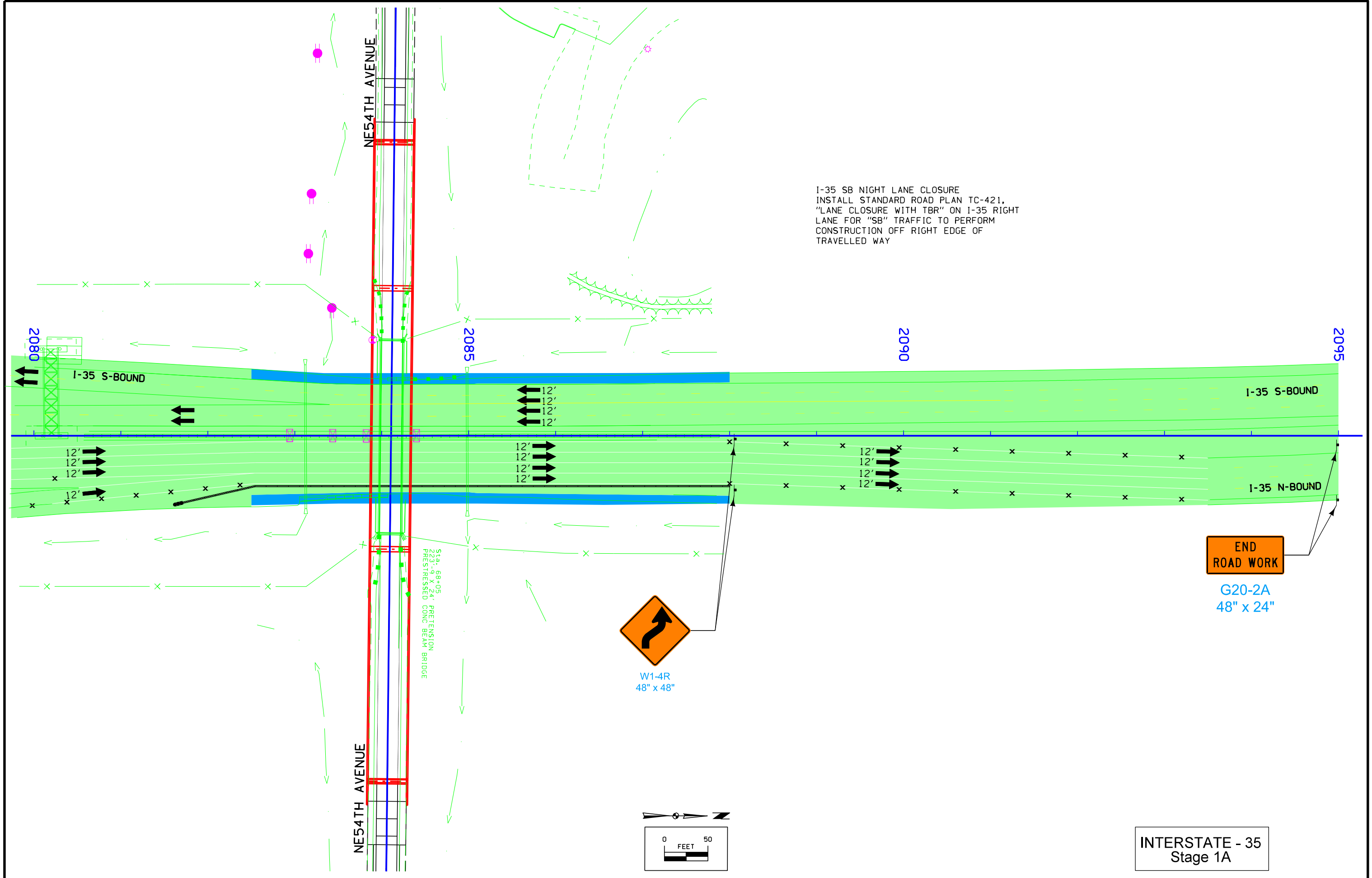
- PROJECT AREA
- DETOUR

**NE 54TH AVENUE
DETOUR MAP**



INTERSTATE - 35
Stage 1A

I-35 SB NIGHT LANE CLOSURE
 INSTALL STANDARD ROAD PLAN TC-421,
 "LANE CLOSURE WITH TBR" ON I-35 RIGHT
 LANE FOR "SB" TRAFFIC TO PERFORM
 CONSTRUCTION OFF RIGHT EDGE OF
 TRAVELLED WAY

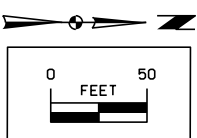


END
 ROAD WORK

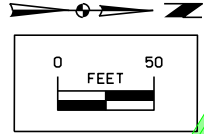
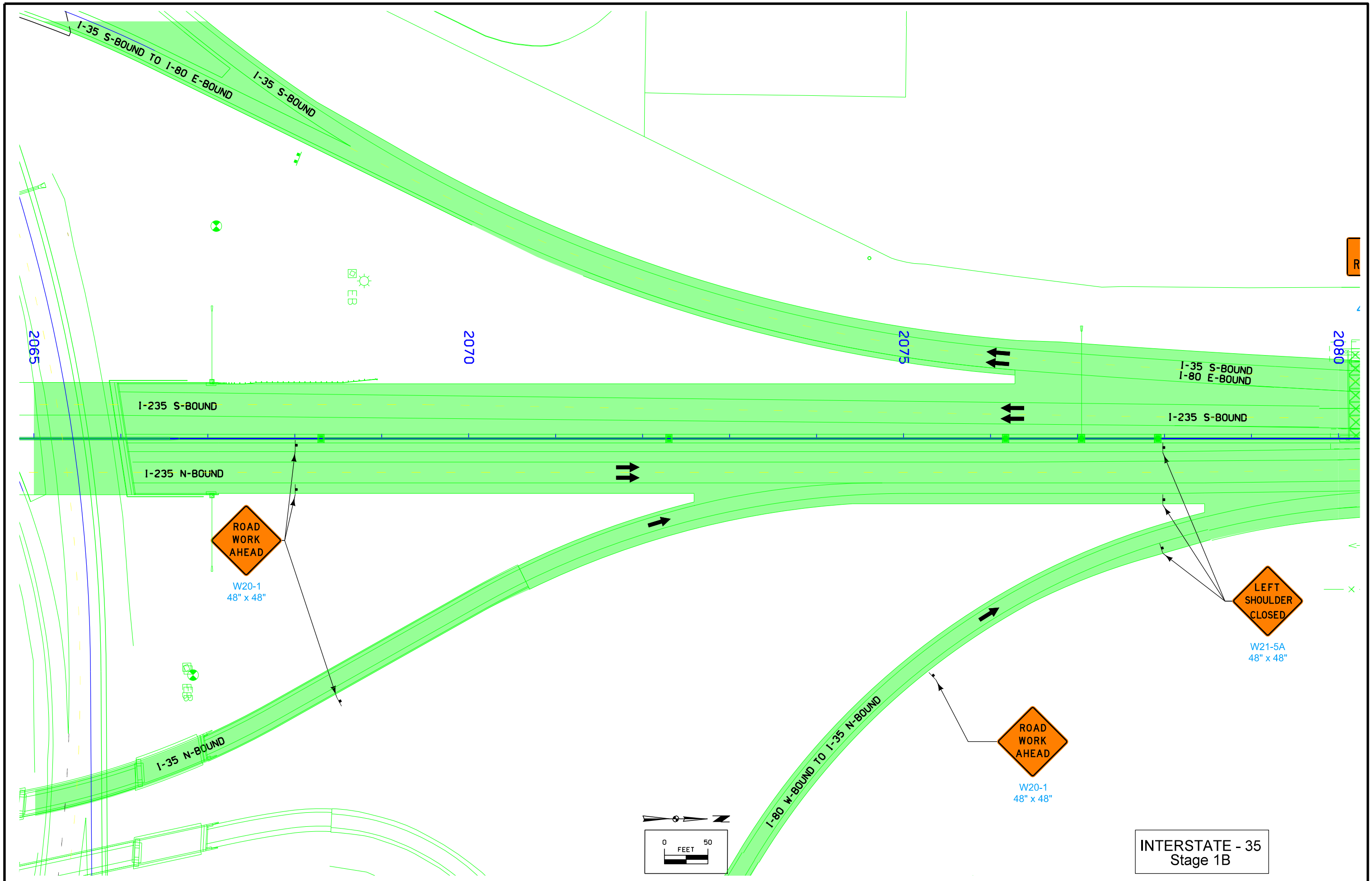
G20-2A
 48" x 24"



W1-4R
 48" x 48"



INTERSTATE - 35
 Stage 1A



INTERSTATE - 35
Stage 1B

I-35 SB NIGHT LANE CLOSURES
 INSTALL STANDARD ROAD PLAN TC-418,
 "LANE CLOSURE ON DIVIDED HIGHWAY"
 ON I-35 LEFT LANES FOR "NB" AND "SB"
 TRAFFIC TO REMOVE EXISTING MEDIAN
 PIER AND RECONSTRUCTION OF
 MEDIAN BARRIER.

END
 ROAD WORK

G20-2A
 48" x 24"

LEFT
 SHOULDER
 CLOSED

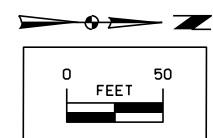
W21-5A
 48" x 48"

ROAD
 WORK
 AHEAD

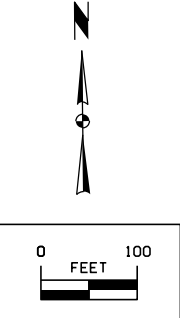
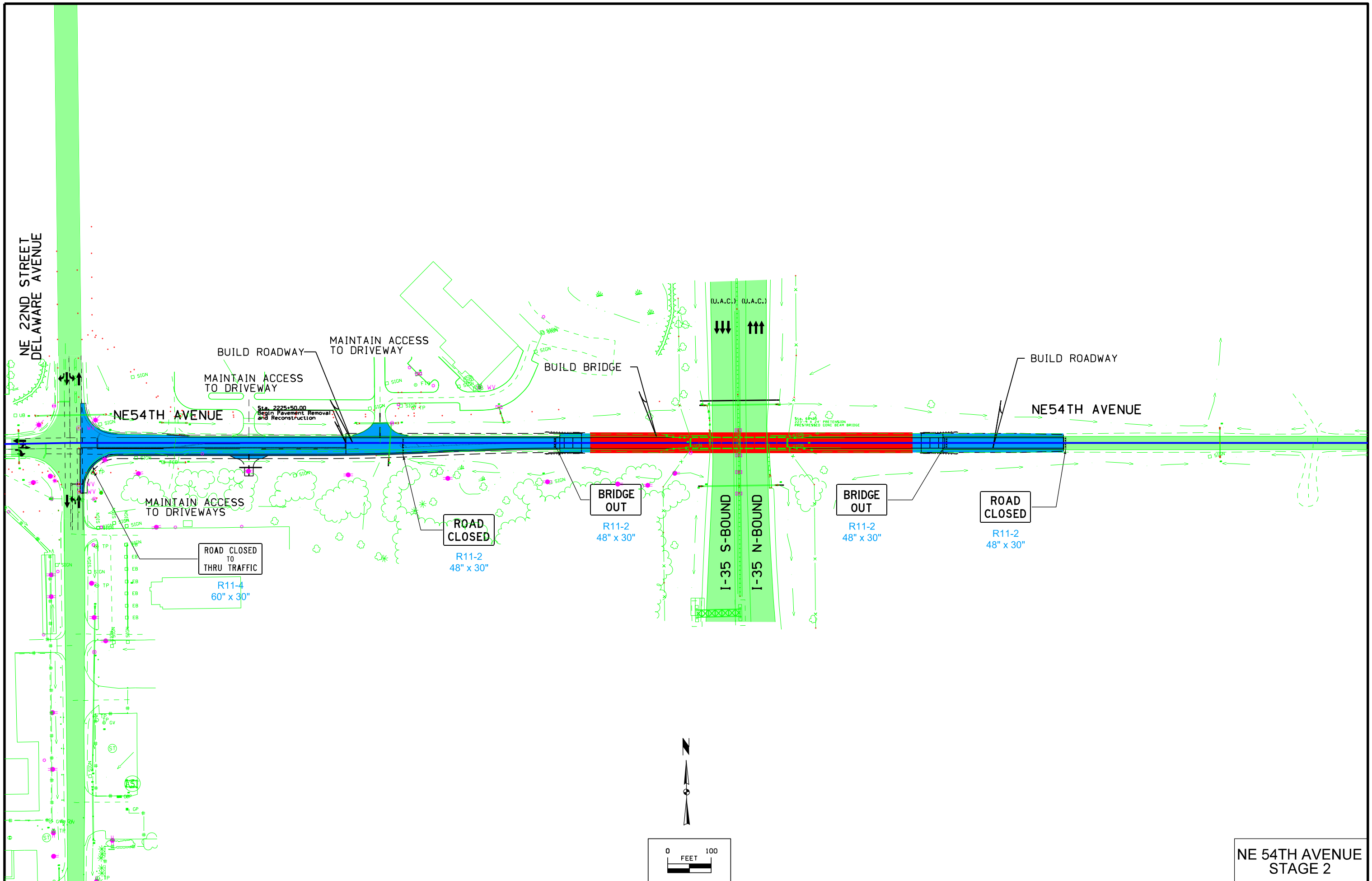
W20-1
 48" x 48"
 STA. 2100+00 LT & RT

END
 ROAD WORK

G20-2A
 48" x 24"



INTERSTATE - 35
 Stage 1B

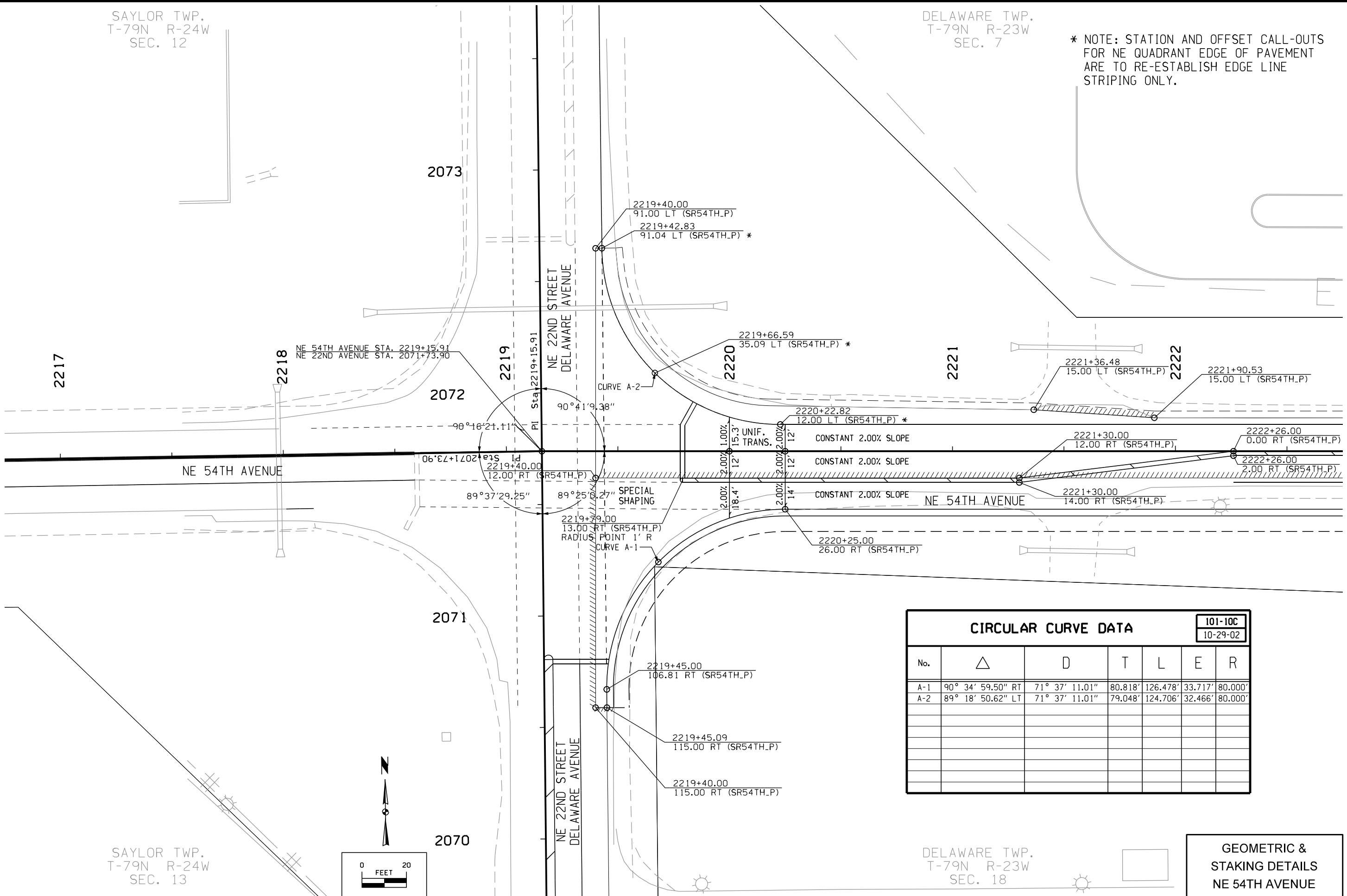


NE 54TH AVENUE
STAGE 2

SAYLOR TWP.
T-79N R-24W
SEC. 12

DELAWARE TWP.
T-79N R-23W
SEC. 7

* NOTE: STATION AND OFFSET CALL-OUTS FOR NE QUADRANT EDGE OF PAVEMENT ARE TO RE-ESTABLISH EDGE LINE STRIPING ONLY.

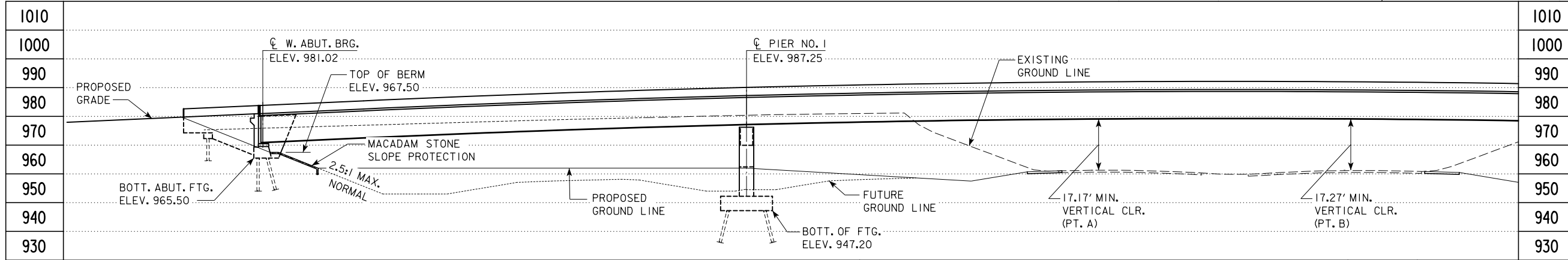


CIRCULAR CURVE DATA						101-10C 10-29-02
No.	Δ	D	T	L	E	R
A-1	90° 34' 59.50" RT	71° 37' 11.01"	80.818'	126.478'	33.717'	80.000'
A-2	89° 18' 50.62" LT	71° 37' 11.01"	79.048'	124.706'	32.466'	80.000'

GEOMETRIC &
STAKING DETAILS
NE 54TH AVENUE

SAYLOR TWP.
T-79N R-24W
SEC. 13

DELAWARE TWP.
T-79N R-23W
SEC. 18

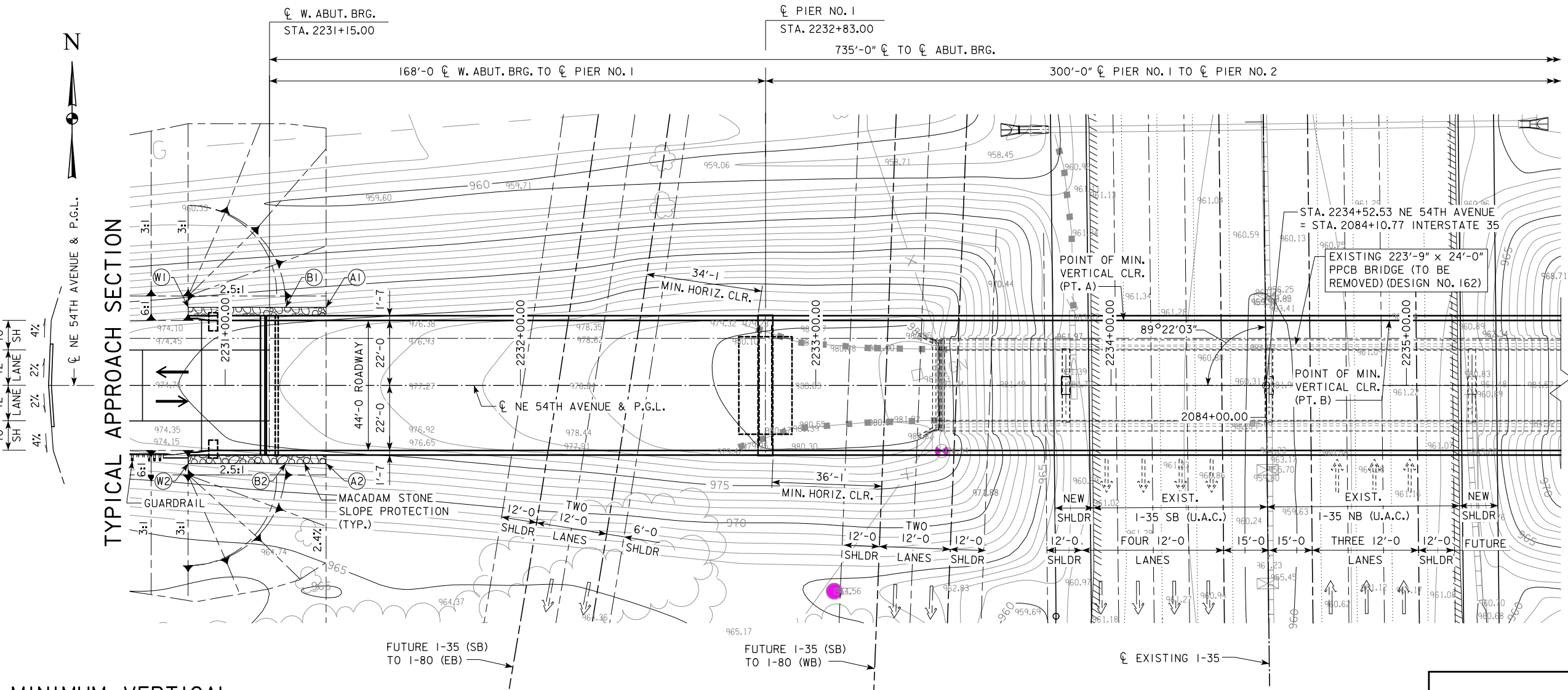
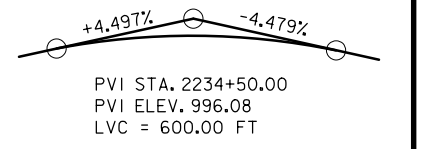


LOCATION
 NE 54TH AVE. OVER I-35
 T-79N R-23W
 SECTION 7
 DELAWARE TOWNSHIP
 POLK COUNTY
 FHWA NO. ?
 BRIDGE MAINT. NO. ?
 LATITUDE 41.658631°
 LONGITUDE -93.575536°

UTILITIES LEGEND:
 NO KNOWN UTILITIES

TRAFFIC ESTIMATE

2007 AADT	1800	V.P.D.
2040 AADT	2800	V.P.D.
2040 DHV	345	V.P.H.
TRUCKS	8	%
TOTAL DESIGN ESALs		



PROPOSED PROFILE GRADE ON NE 54TH AVE.

MINIMUM VERTICAL CLEARANCE (PT. B)

OVERHEAD STATION = 2234+94.29, 22.00' LT.
 OVERHEAD ELEVATION = 988.77
 UNDERPASS STATION = 2084+32.30, 42.00 RT
 UNDERPASS ELEVATION = 961.25'
 DEPTH OF SUPERSTRUCTURE (SLAB, HAUNCH, WPG) = 10.25
 MINIMUM VERTICAL CLEARANCE = 17.27'

MINIMUM VERTICAL CLEARANCE (PT. A)

OVERHEAD STATION = 2234+04.28, 22.00' LT.
 OVERHEAD ELEVATION = 988.75
 UNDERPASS STATION = 2084+33.30, 48.00' LT.
 UNDERPASS ELEVATION = 961.33
 DEPTH OF SUPERSTRUCTURE (SLAB, HAUNCH & WPG) = 10.25'
 MINIMUM VERTICAL CLEARANCE = 17.17'

NOTES:

- ALL UNITS IN FEET UNLESS NOTED OTHERWISE.
- TOP OF BRIDGE DECK CROWN IS 0.03' BELOW PROFILE GRADE.
- PROFILE GRADE ELEVATIONS ARE SHOWN
- TL-4 BRIDGE RAILING PROPOSED.
- NON-STANDARD ABUTMENT WING WALL.
- PIER TYPE I-235 AESTHETIC.
- AESTHETIC TREATMENTS TO BE ESTABLISHED BY IOWA DOT
- AESTHETICS BRIDGE SPECIALIST.
- ALL DIMENSIONS ARE IN THE HORIZONTAL PLANE UNLESS NOTED OTHERWISE.

PRELIMINARY

DESIGN FOR 0° SKEW

735'-0" X 44'-0" CONTINUOUS WELDED GIRDER BRIDGE

168'-0", 300'-0", 267'-0" SPANS

SITUATION PLAN

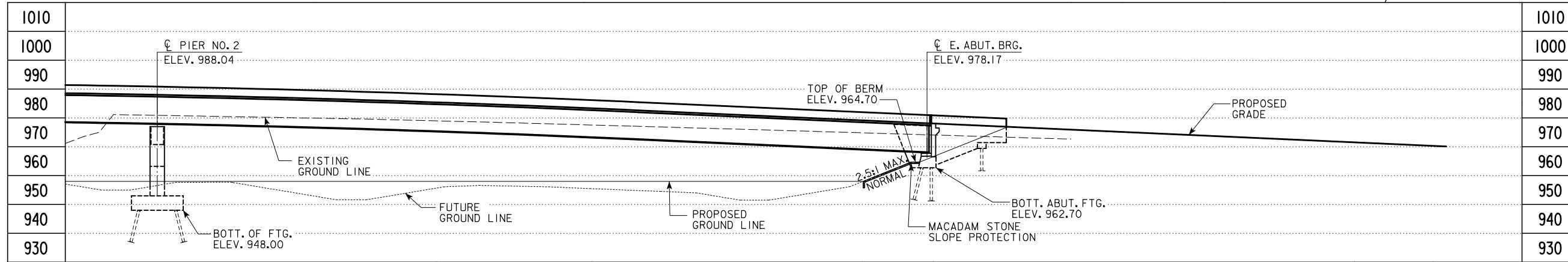
STATION 2234+82.50 (CL NE 54TH AVE.) DECEMBER 2013

POLK COUNTY

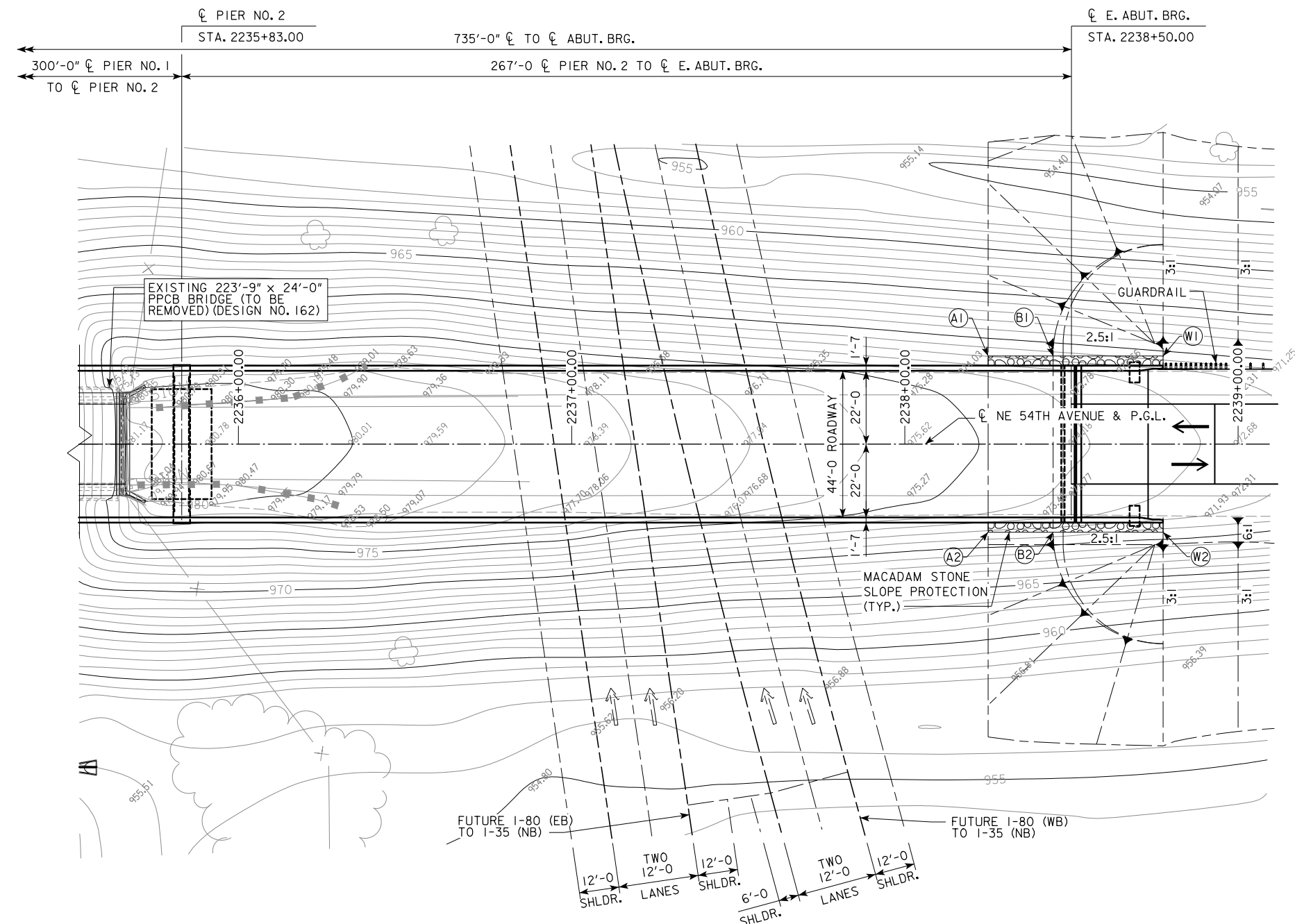
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DESIGN SHEET NO. 1 OF 4 FILE NO. X DESIGN NO. X





LONGITUDINAL SECTION



SITUATION PLAN

POINTS	WEST ABUTMENT			EAST ABUTMENT		
	STATION	OFFSET	ELEV.	STATION	OFFSET	ELEV.
A1	2231+35.50	26.58' LT.	961.50	2238+25.75	26.58' LT.	957.50
A2	2231+32.68	26.58' RT.	962.63	2238+25.75	26.58' RT.	957.50
B1	2231+20.50	26.58' LT.	967.50	2238+44.50	26.58' LT.	964.70
B2	2231+20.50	26.58' RT.	967.50	2238+44.50	26.58' RT.	964.70
W1	2230+87.50	26.58' LT.	979.19	2238+75.00	26.58' LT.	976.46
W2	2230+87.50	26.58' RT.	979.19	2238+75.00	26.58' RT.	976.46

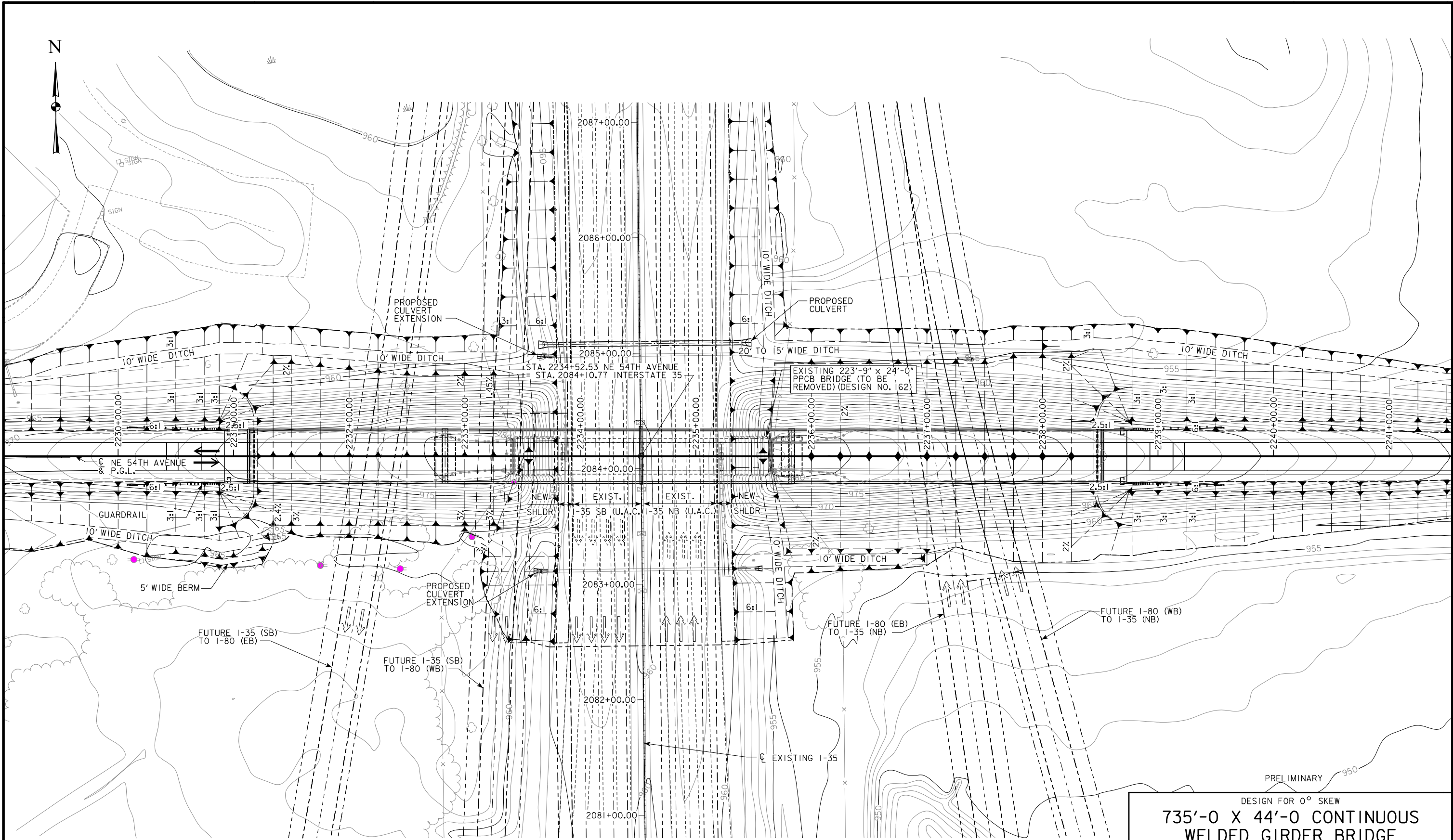
BERM SLOPE ELEVATIONS REFLECT THE GRADING SURFACE

PRELIMINARY

DESIGN FOR 0° SKEW
735'-0" X 44'-0" CONTINUOUS WELDED GIRDER BRIDGE
 168'-0", 300'-0", 267'-0" SPANS
SITUATION PLAN
 STATION 2234+82.50 (CL NE 54TH AVE.) DECEMBER 2013
POLK COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 2 OF 4 FILE NO. X DESIGN NO. X



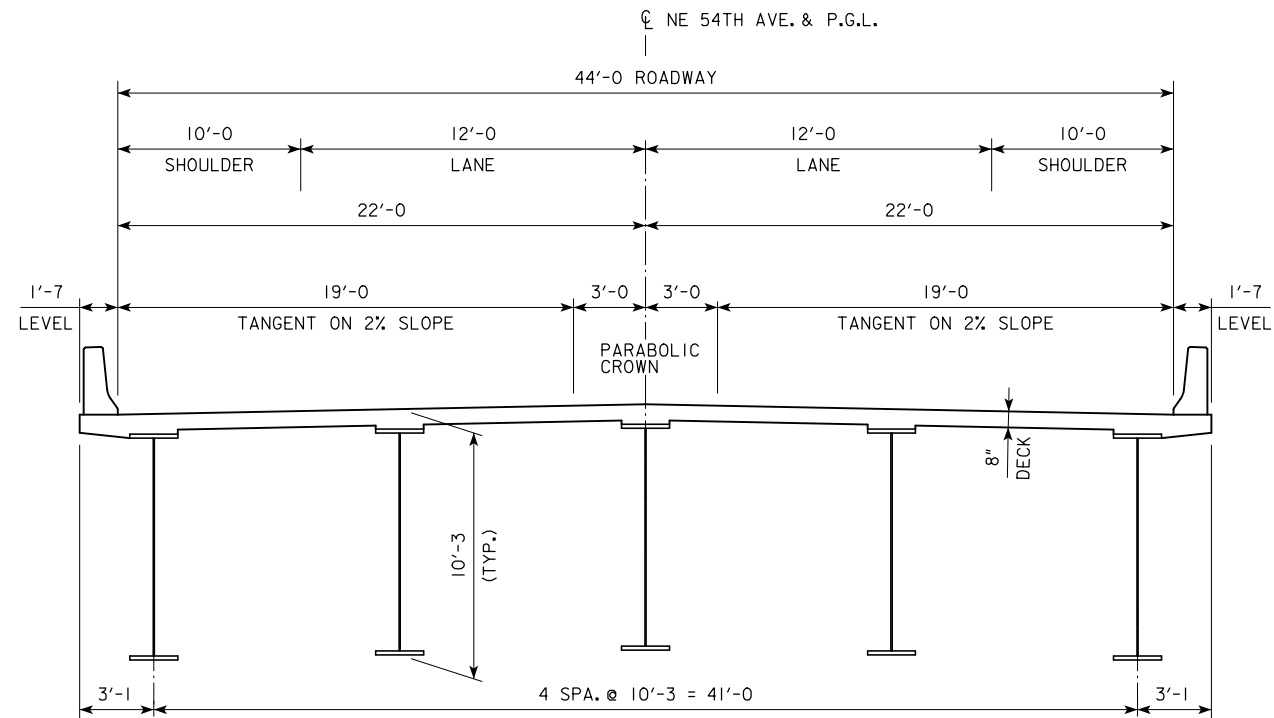
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SITE PLAN

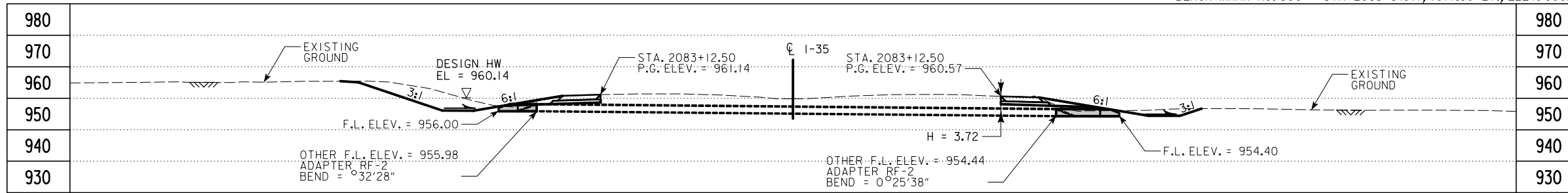


DESIGN FOR 0° SKEW
735'-0 X 44'-0 CONTINUOUS WELDED GIRDER BRIDGE
 168'-0, 300'-0, 267'-0 SPANS
SITUATION PLAN - SITE
 STATION 2234+82.50 (C NE 54TH AVE.) DECEMBER 2013
POLK COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 3 OF 4 FILE NO. X DESIGN NO. X

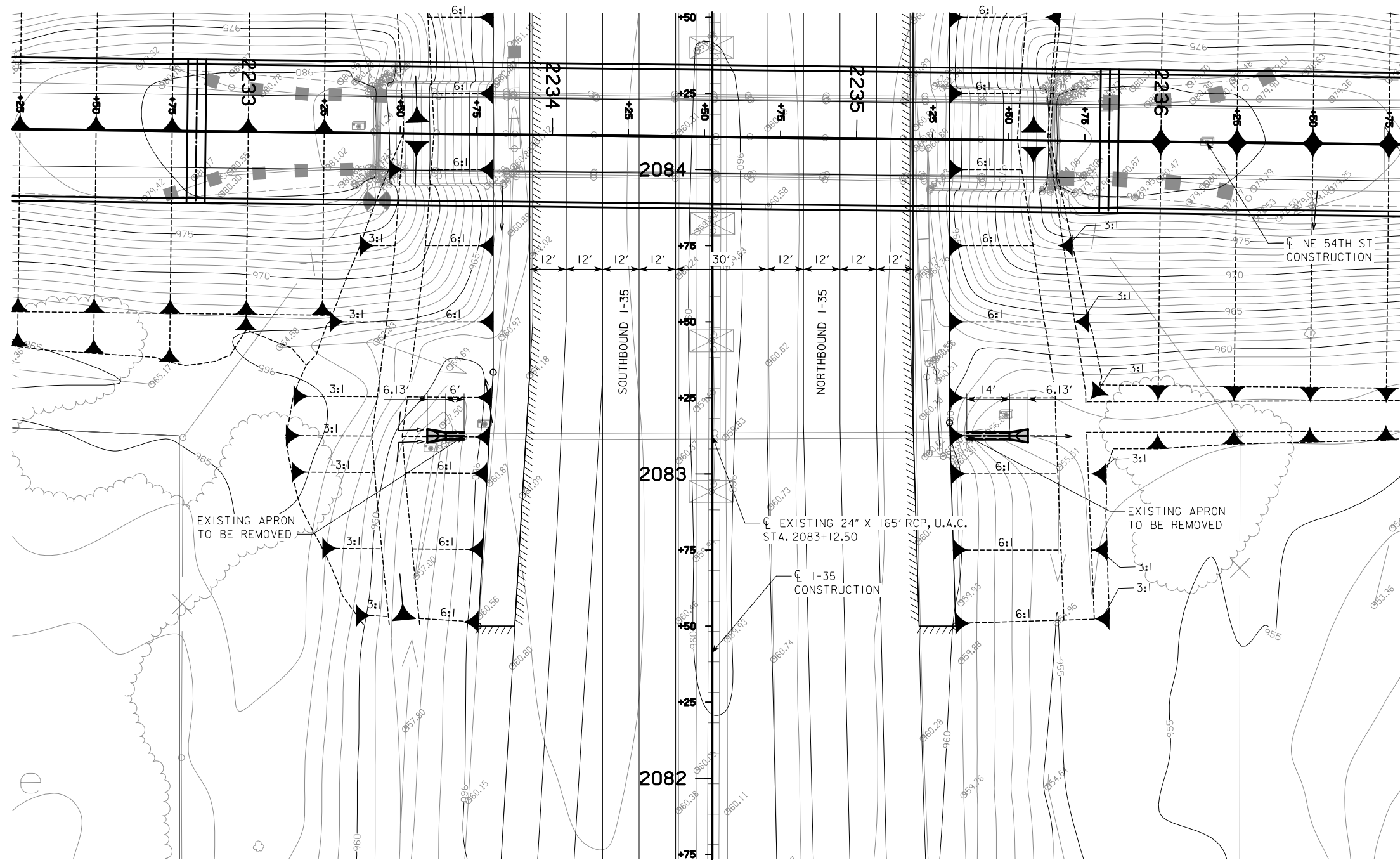


TYPICAL SECTION

PRELIMINARY
 DESIGN FOR 0° SKEW
**735'-0 X 44'-0 CONTINUOUS
 WELDED GIRDER BRIDGE**
 168'-0, 300'-0, 267'-0 SPANS
SITUATION PLAN - MISC.
 STATION 2234+82.50 (☉ NE 54TH AVE.) DECEMBER 2013
POLK COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 4 OF 4 FILE NO. X DESIGN NO. X



LONGITUDINAL SECTION AT CULVERT INVERTS



PLAT PLAN



TRAFFIC ESTIMATE

2008 AADT	71600	V.P.D.
2040 AADT	132500	V.P.D.
2040 DHV	13305	V.P.H.
TRUCKS	13	%
TOTAL DESIGN ESALS	--	

LOCATION

I-35
 T-79 N R-23 W
 SECTION 18
 DELAWARE TOWNSHIP
 POLK COUNTY
 LATITUDE 41.65836113
 LONGITUDE 93.57564611

HYDRAULIC DATA

DRAINAGE AREA = 0.7 ACRES - ROLLING
 $Q_{50} = 3.7$ CFS
 HW ELEV. = 957.42

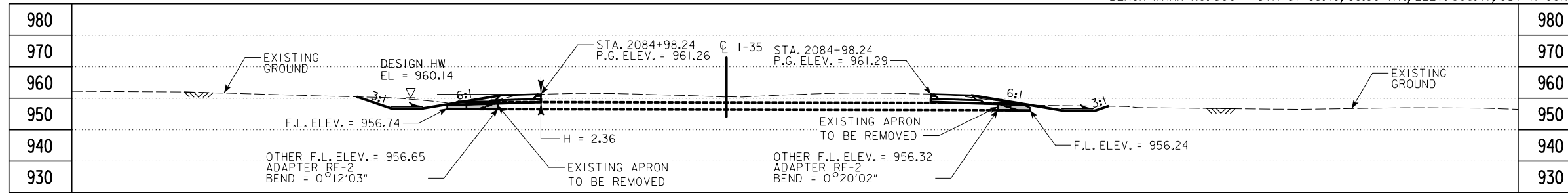
PRELIMINARY

DESIGN FOR 0° SKEW
24 in. x 6 ft. Ext. Left
24 in. x 14 ft. Ext. Right
REINFORCED CONCRETE PIPE
PLAT PLAN

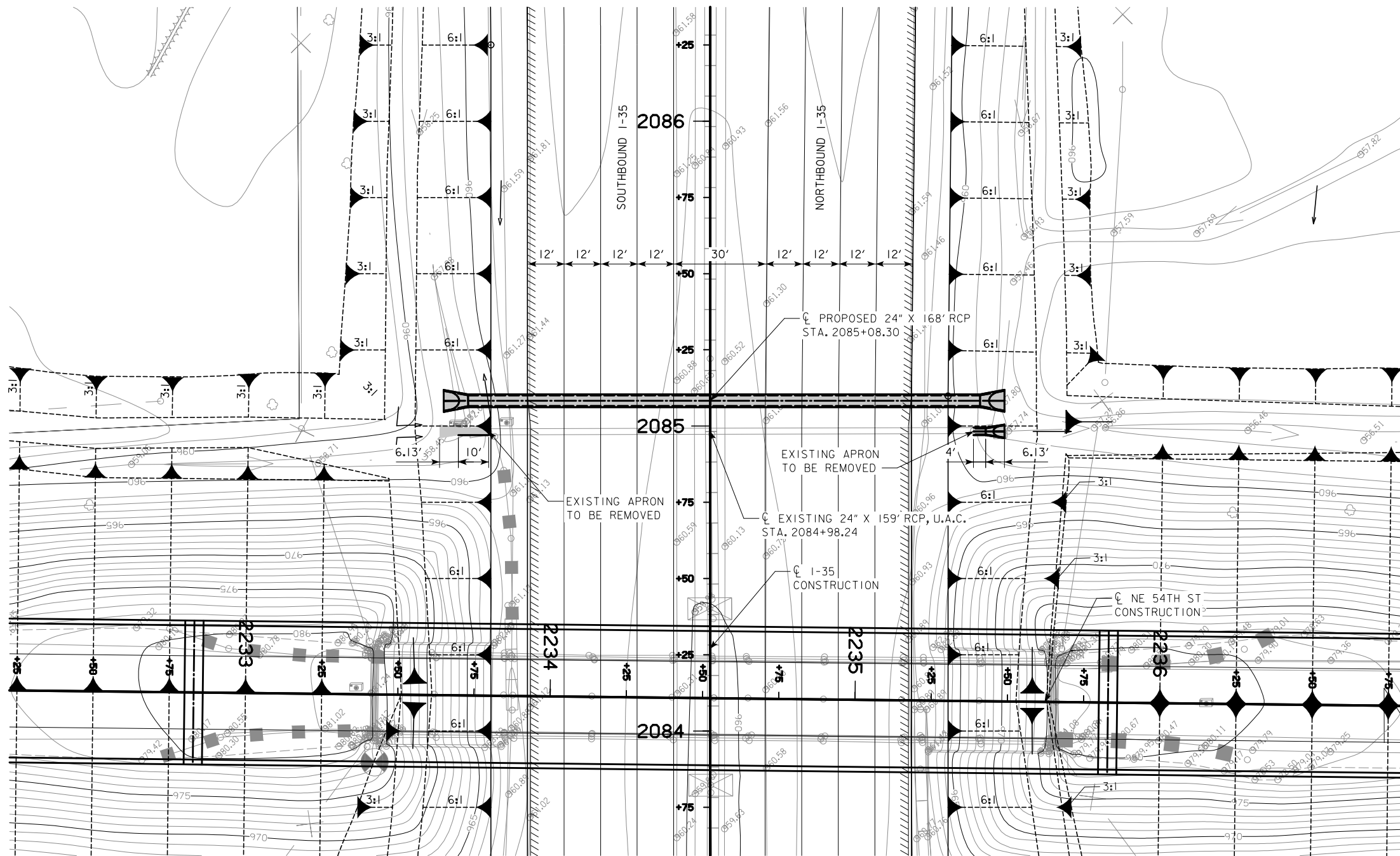
STATION 2083+12.50 (CL I-35) December 2013

POLK COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 1 OF 1 FILE NO. DESIGN NO.



LONGITUDINAL SECTION AT CULVERT INVERTS



PLAT PLAN



TRAFFIC ESTIMATE

2008 AADT	71600	V.P.D.
2040 AADT	132500	V.P.D.
2040 DHV	13305	V.P.H.
TRUCKS	13	%
TOTAL DESIGN ESALS	--	

LOCATION

I-35
T-79 N R-23 W
SECTION 7
DELAWARE TOWNSHIP
POLK COUNTY
LATITUDE 41.65887087
LONGITUDE 93.57564441

HYDRAULIC DATA

DRAINAGE AREA = 24.0 ACRES - ROLLING
Q₅₀ = 19.5 CFS
HW ELEV. = 960.14

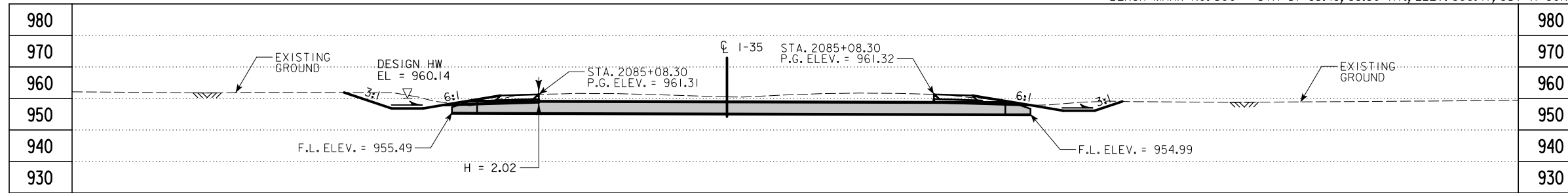
PRELIMINARY

DESIGN FOR 0° SKEW
24 in. x 10 ft. Ext. Left
24 in. x 4 ft. Ext. Right
REINFORCED CONCRETE PIPE
PLAT PLAN

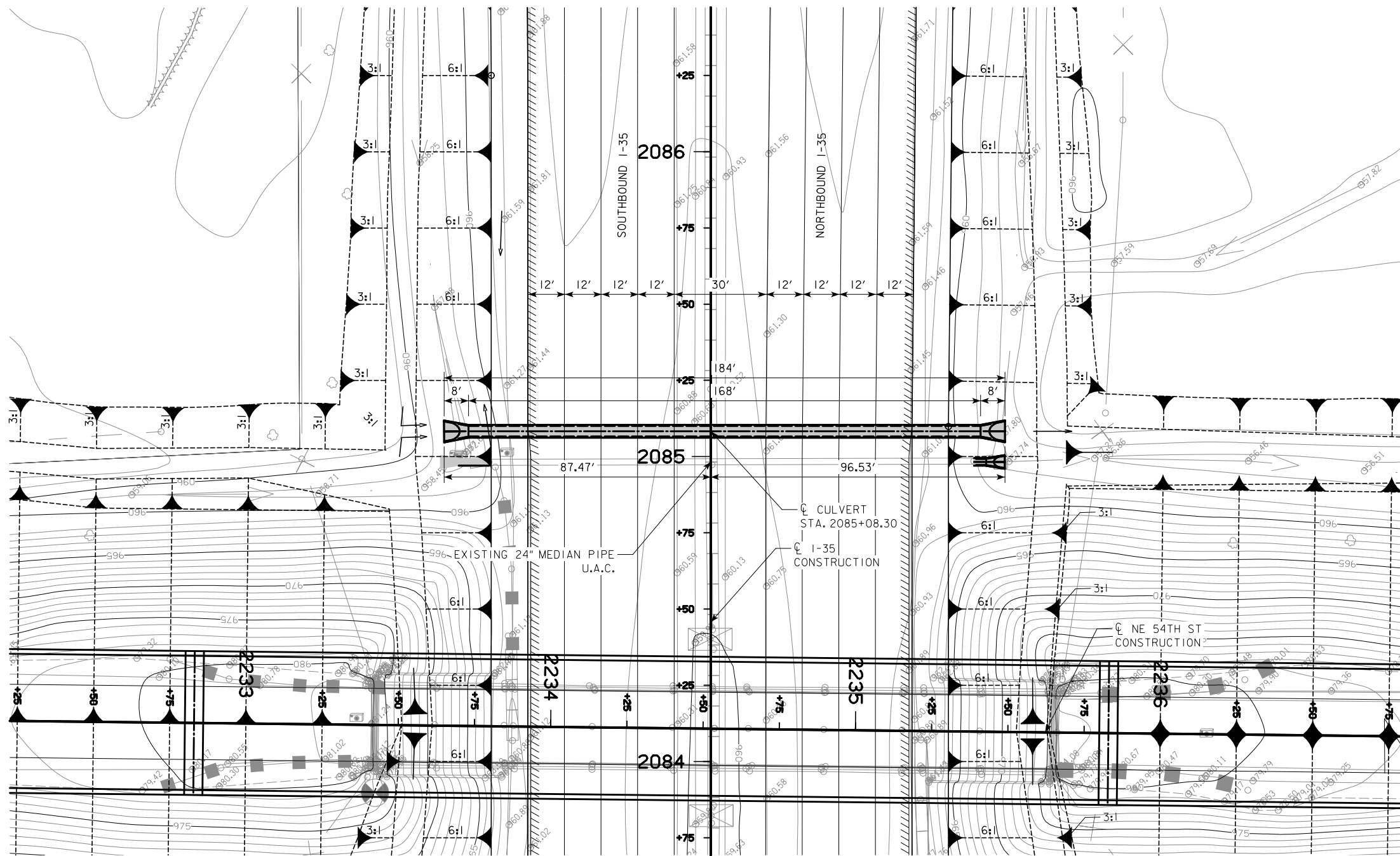
STATION 2084+98.24 (CL I-35) DECEMBER 2013

POLK COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
DESIGN SHEET NO. 1 OF 1 FILE NO. DESIGN NO.



LONGITUDINAL SECTION AT CULVERT INVERTS



PLAT PLAN



TRAFFIC ESTIMATE

2008 AADT	71600	V.P.D.
2040 AADT	132500	V.P.D.
2040 DHV	13305	V.P.H.
TRUCKS	13	%
TOTAL DESIGN ESALS	--	

LOCATION

I-35
 T-79 N R-23 W
 SECTION 7
 DELAWARE TOWNSHIP
 POLK COUNTY
 LATITUDE 41.65889847
 LONGITUDE 93.57564432

HYDRAULIC DATA

DRAINAGE AREA = 24.0 ACRES - ROLLING
 $Q_{50} = 31.5$ CFS
 HW ELEV. = 960.14

PRELIMINARY

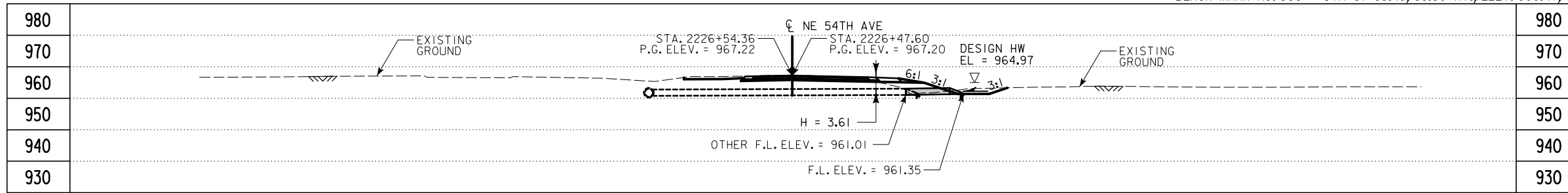
DESIGN FOR 0° SKEW
42 in. x 168 ft.
REINFORCED CONCRETE PIPE

PLAT PLAN

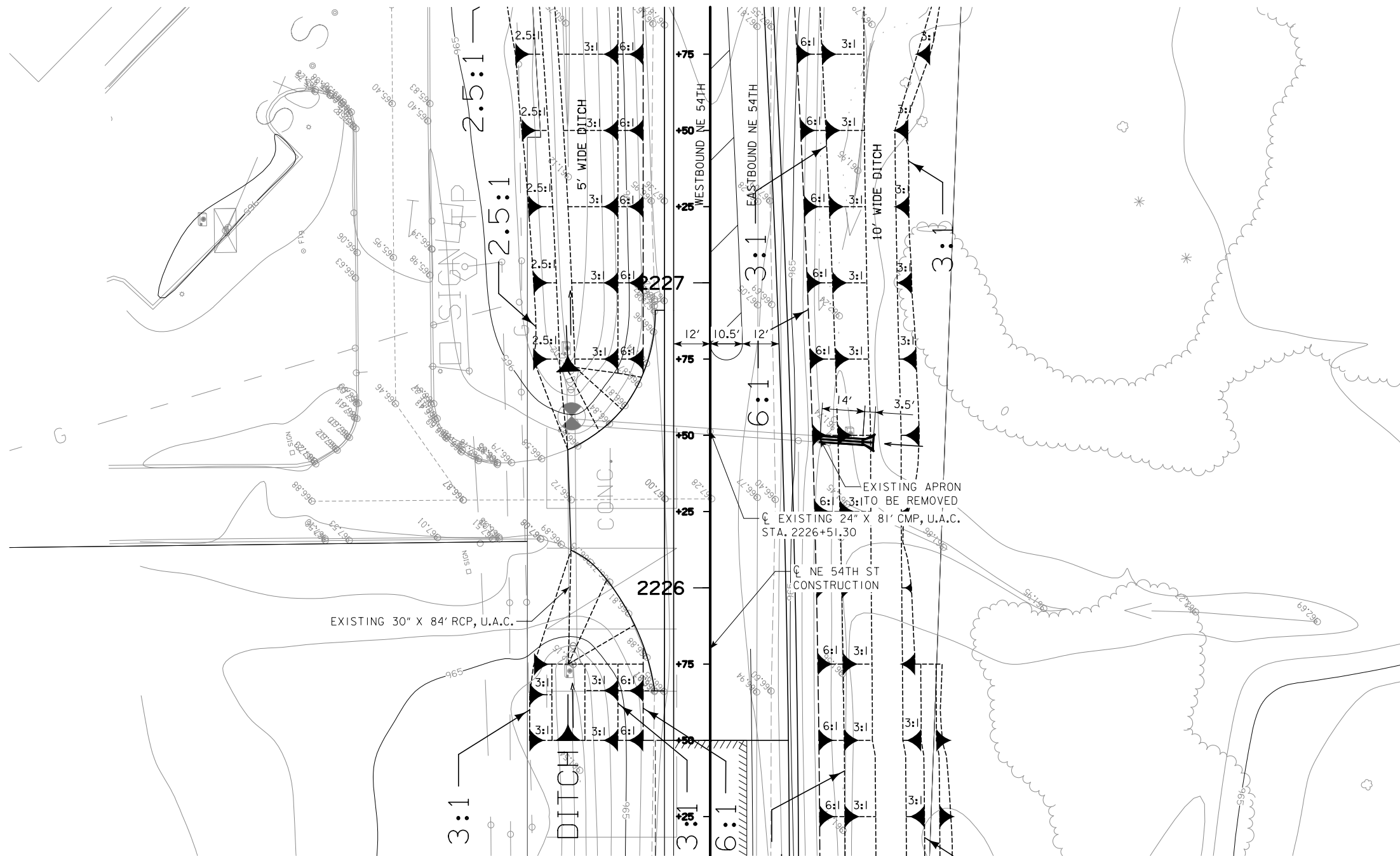
STATION 2085+08.30 (I-35) DECEMBER 2013

POLK COUNTY

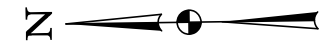
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 1 OF 1 FILE NO. DESIGN NO.



LONGITUDINAL SECTION AT CULVERT INVERTS



PLAT PLAN



TRAFFIC ESTIMATE

2017 AADT	1800	V.P.D.
2040 AADT	2800	V.P.D.
2040 DHV	345	V.P.H.
TRUCKS	8	%
TOTAL DESIGN ESALS	--	

LOCATION

NE 54TH AVE
 T-79 N R-23 W
 SECTION 7
 DELAWARE TOWNSHIP
 POLK COUNTY
 LATITUDE 41.658660534
 LONGITUDE 93.578577046

HYDRAULIC DATA

DRAINAGE AREA = 7.0 ACRES - ROLLING
 $Q_{50} = 20.5$ CFS
 HW ELEV. = 964.97

PRELIMINARY

DESIGN FOR 4° SKEW

24 in. x 14 ft. Ext. Right
 CORRUGATED METAL PIPE
 PLAT PLAN

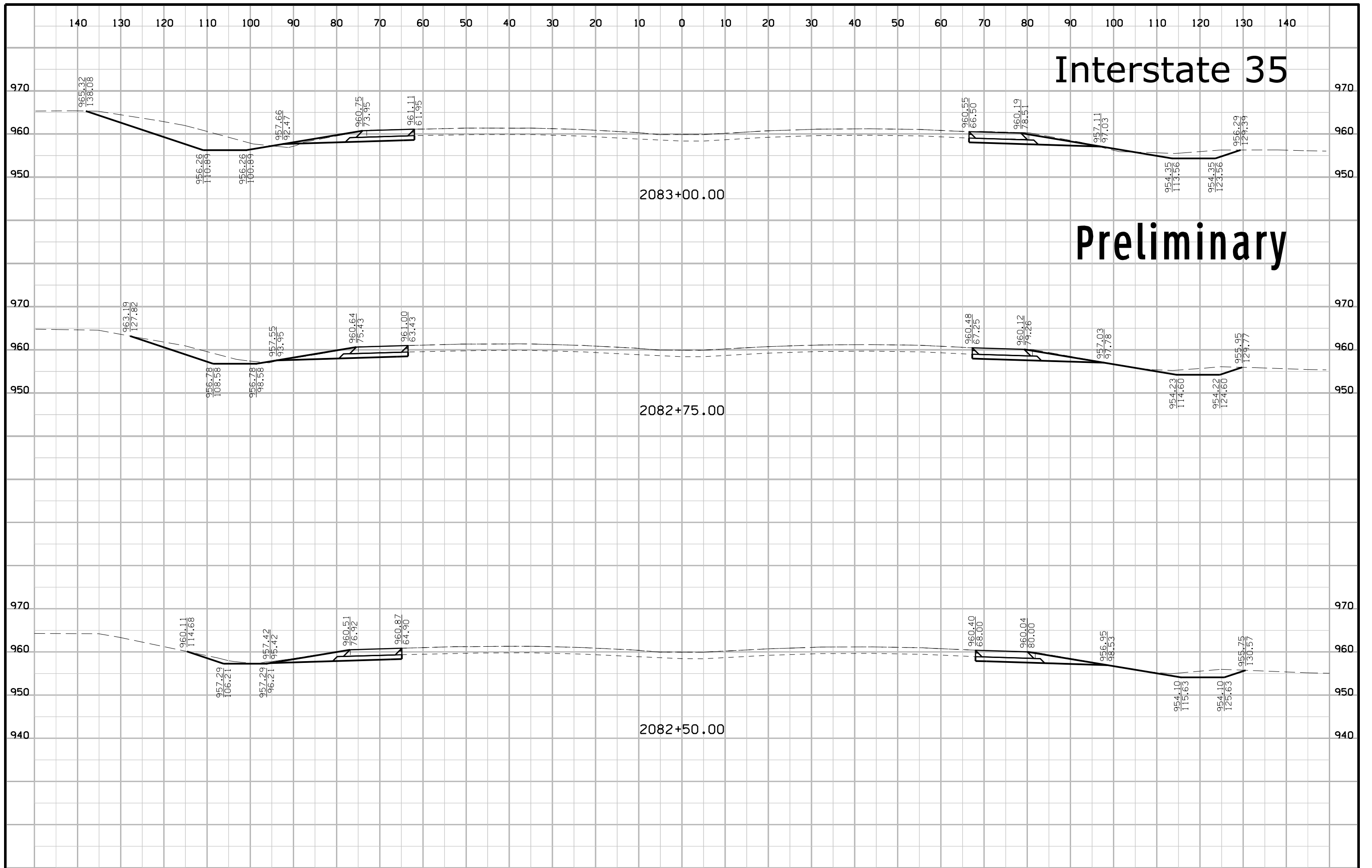
STATION 2226+51.30 (C NE 54TH AVE) DECEMBER 2013

POLK COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 1 OF 1 FILE NO. _____ DESIGN NO. _____

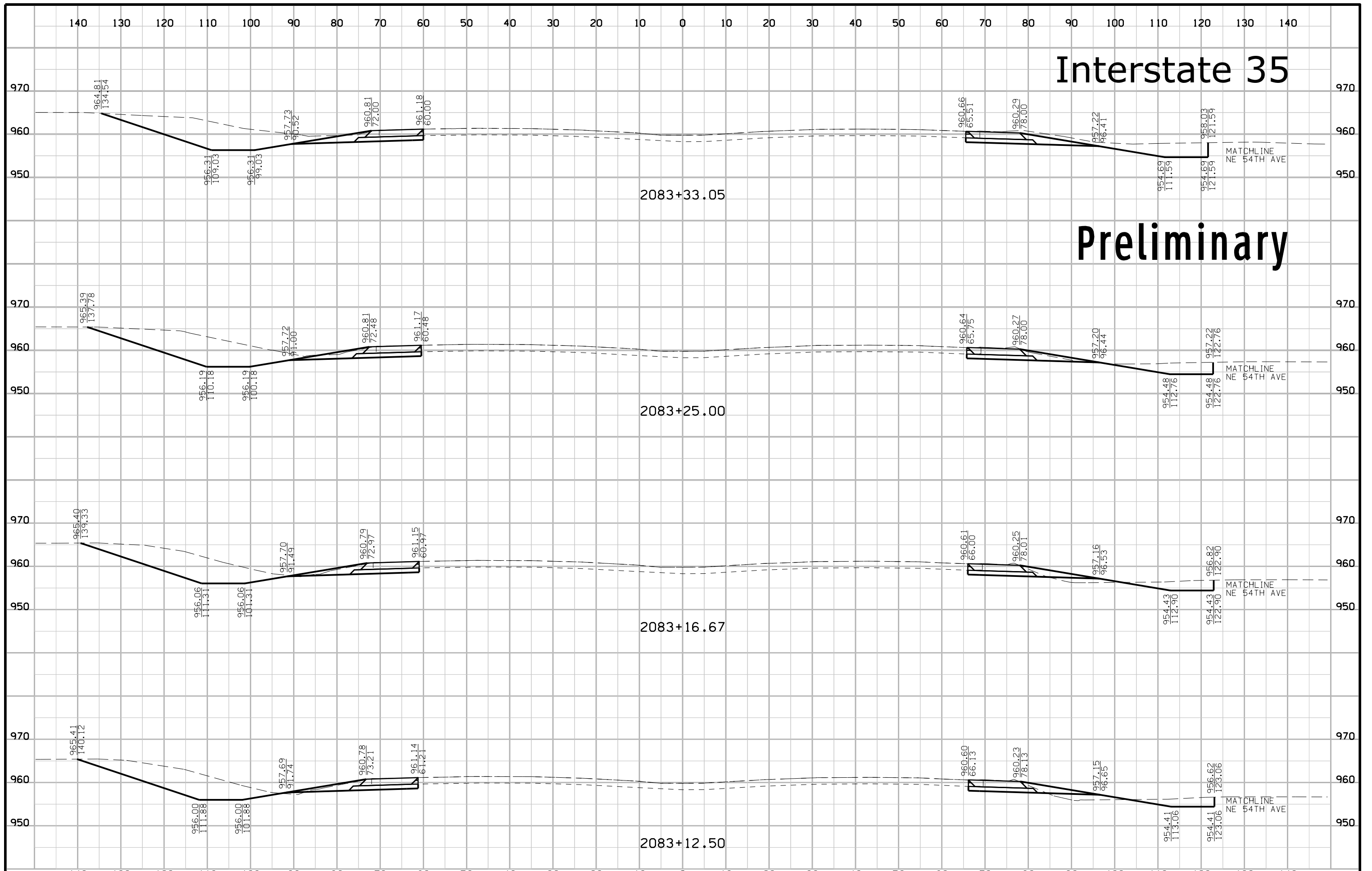
Interstate 35

Preliminary

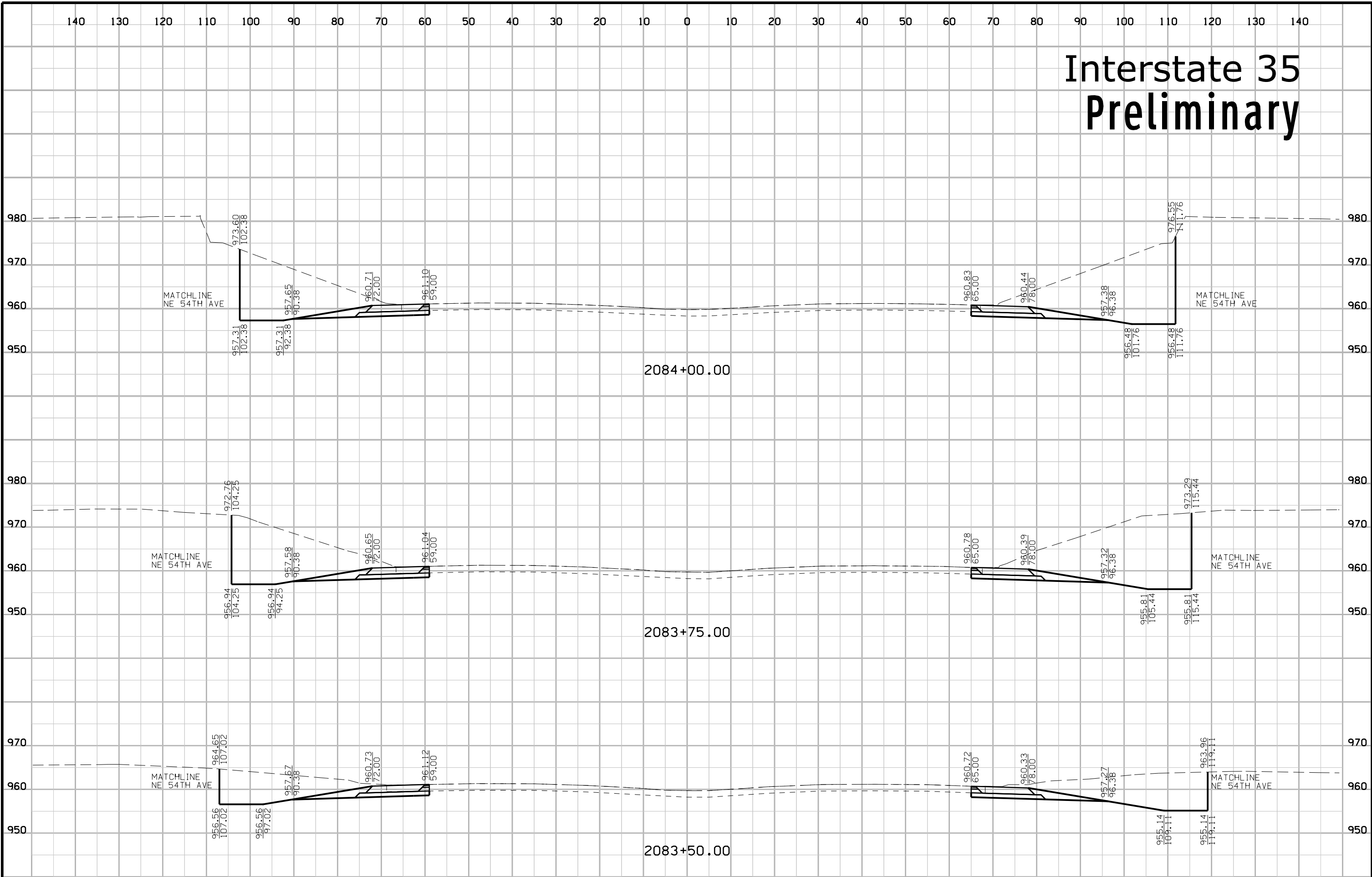


Interstate 35

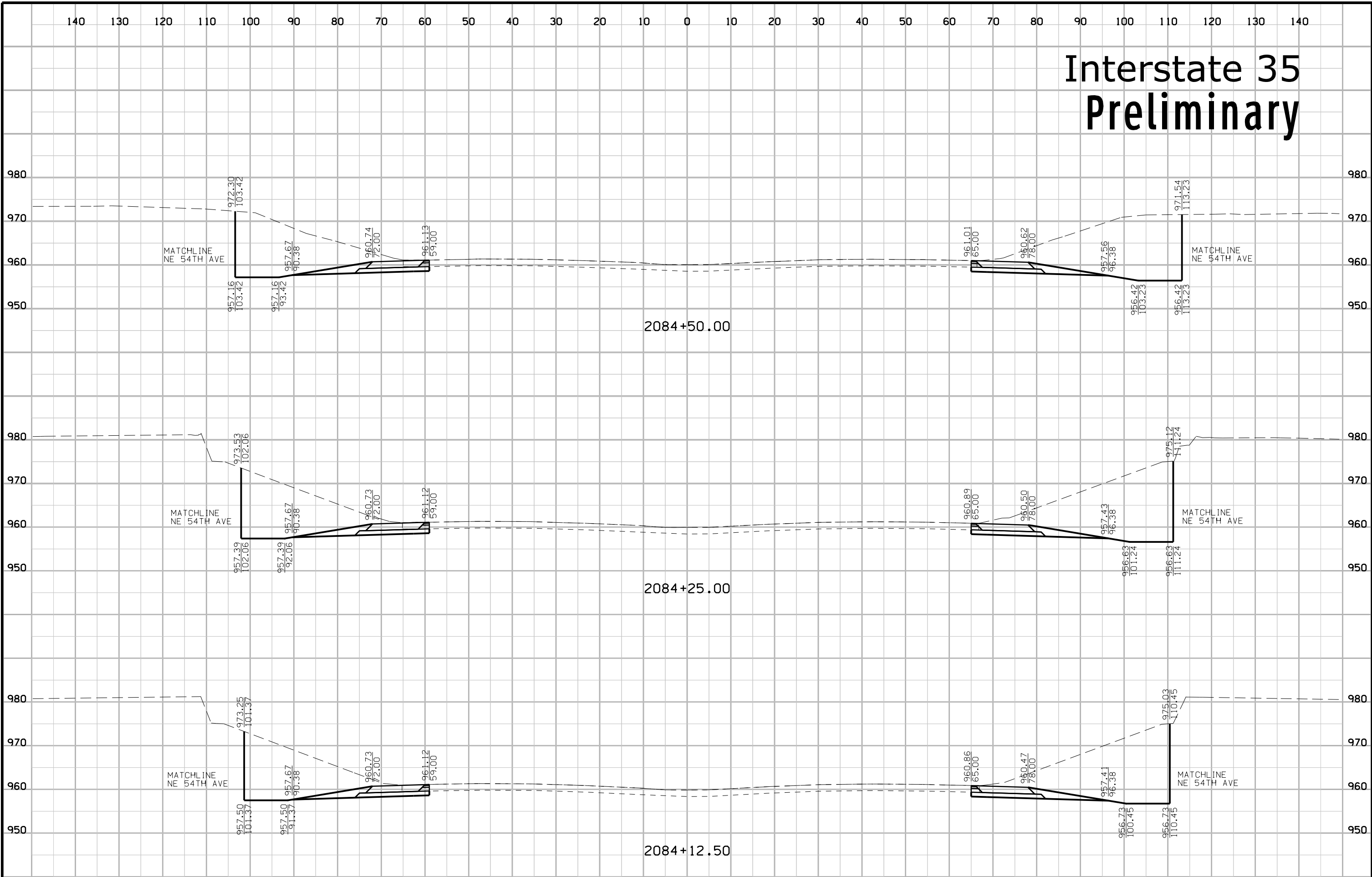
Preliminary



Interstate 35 Preliminary

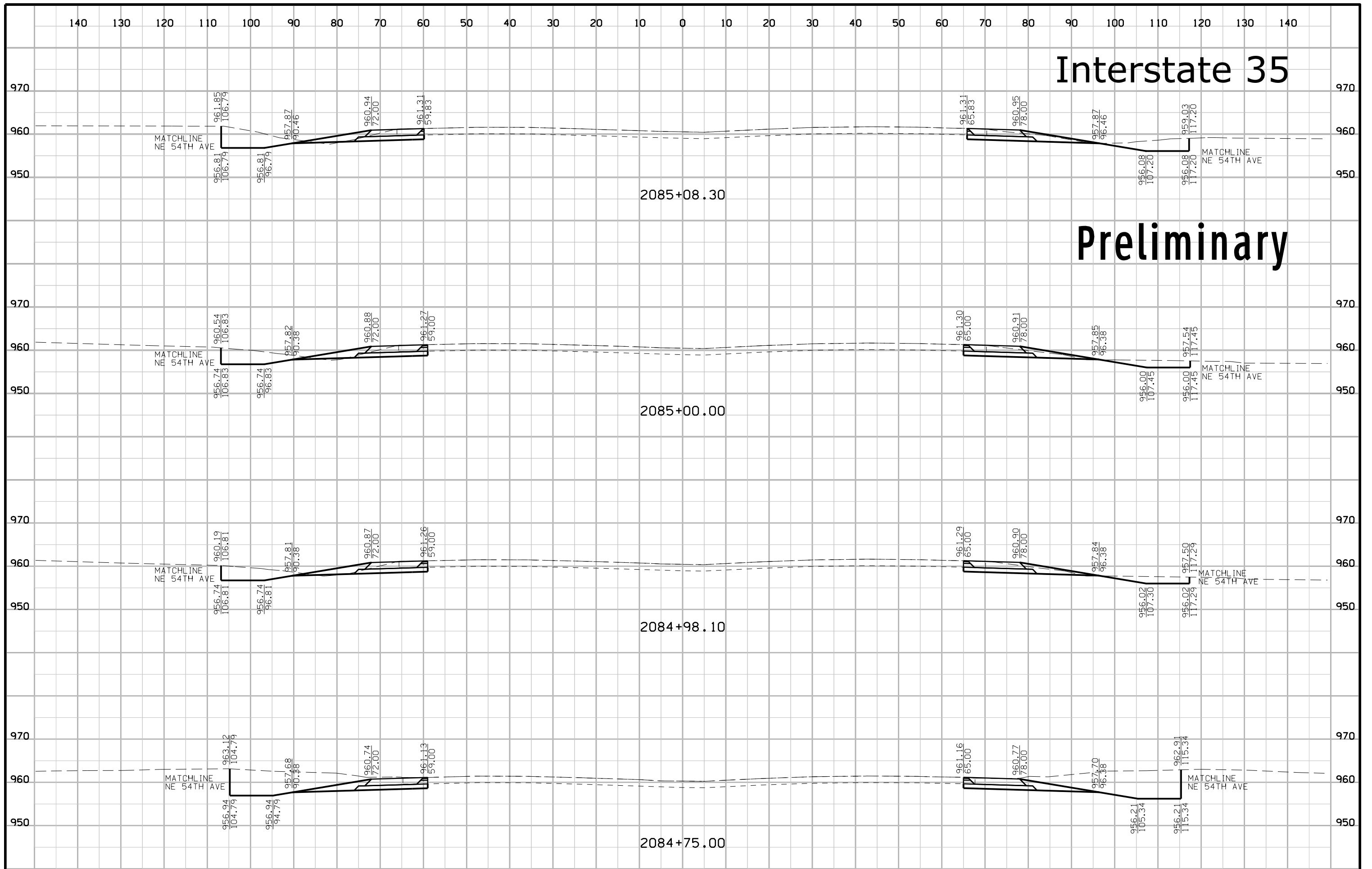


Interstate 35 Preliminary



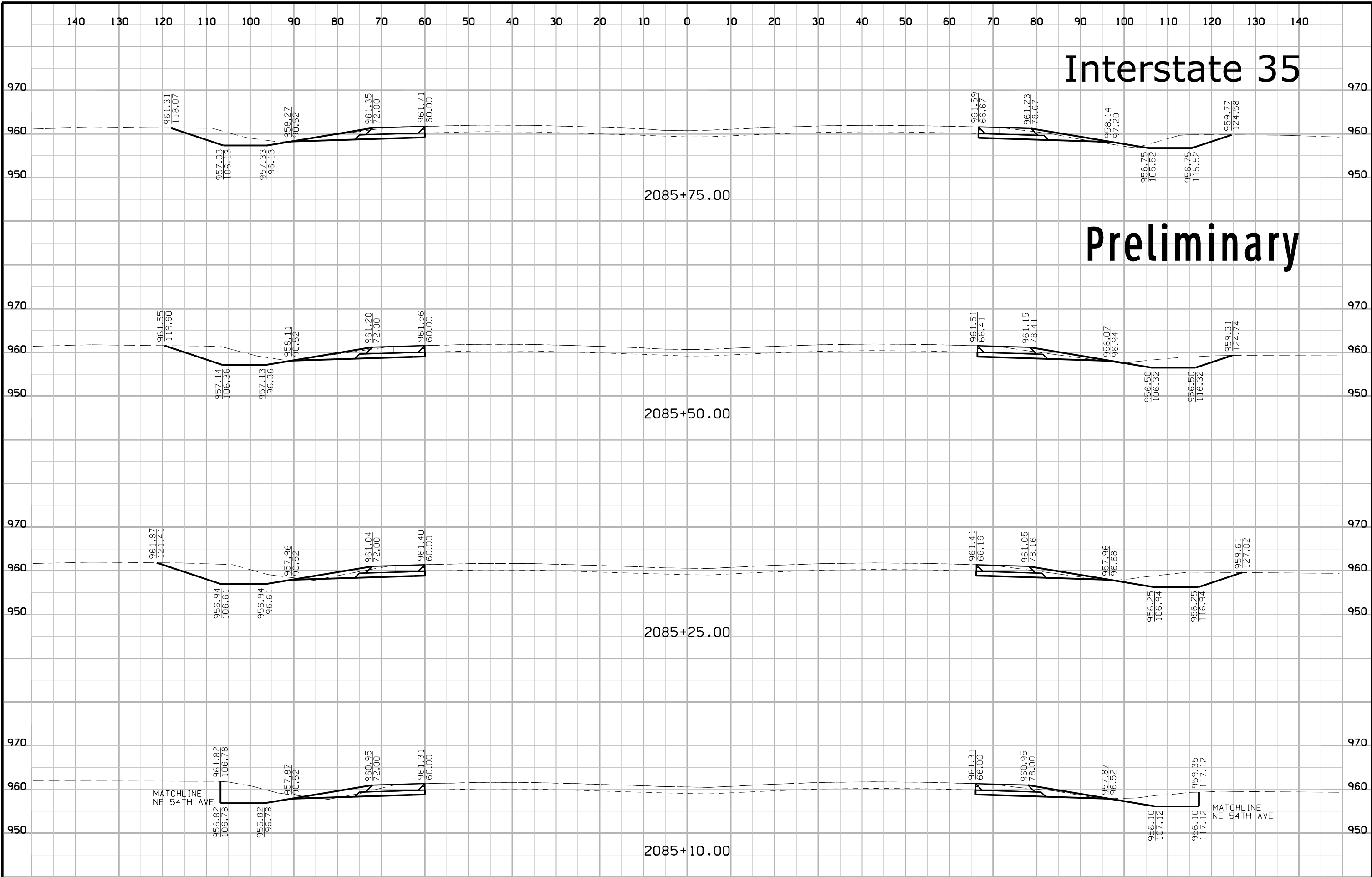
Interstate 35

Preliminary



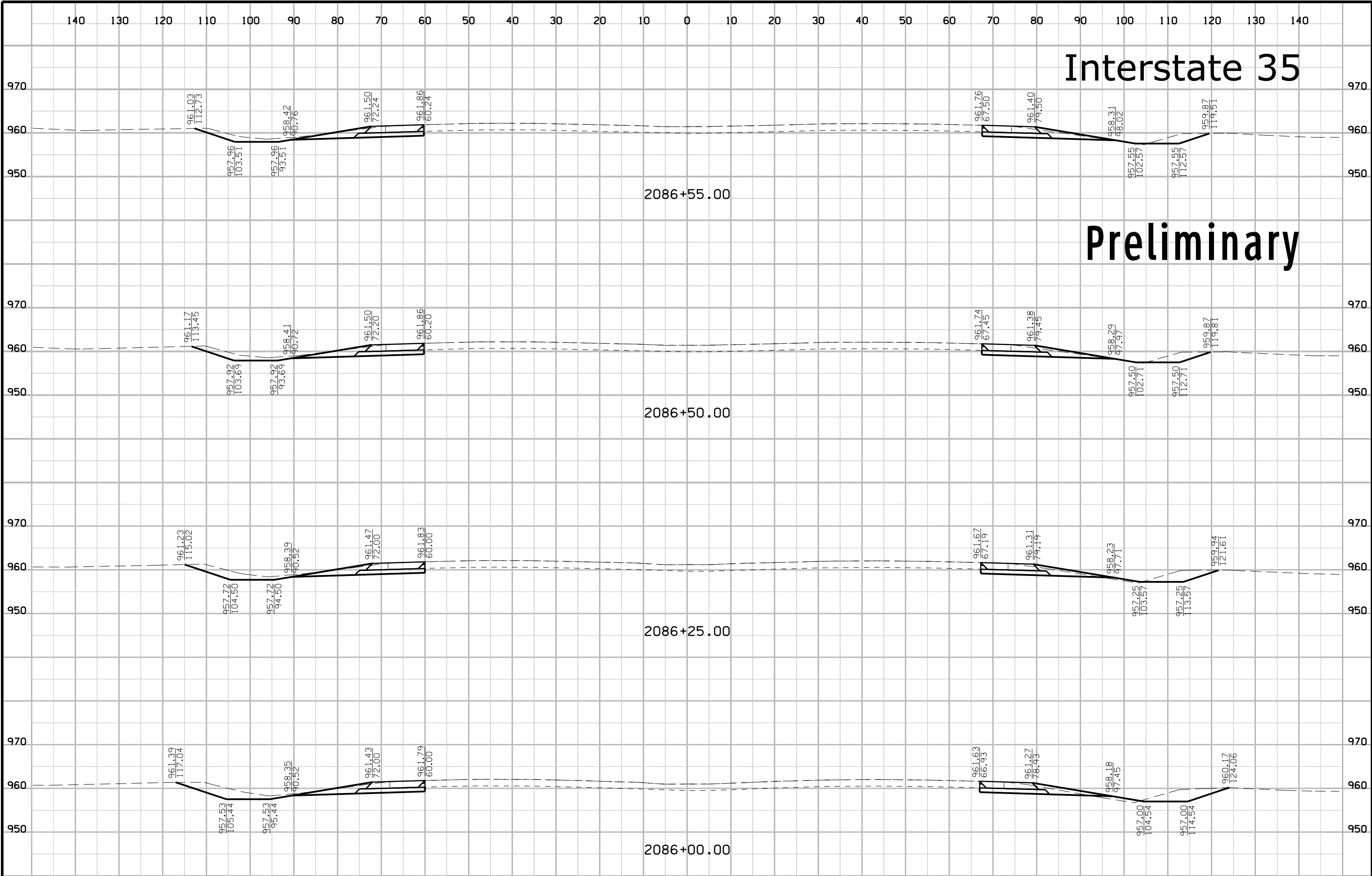
Interstate 35

Preliminary



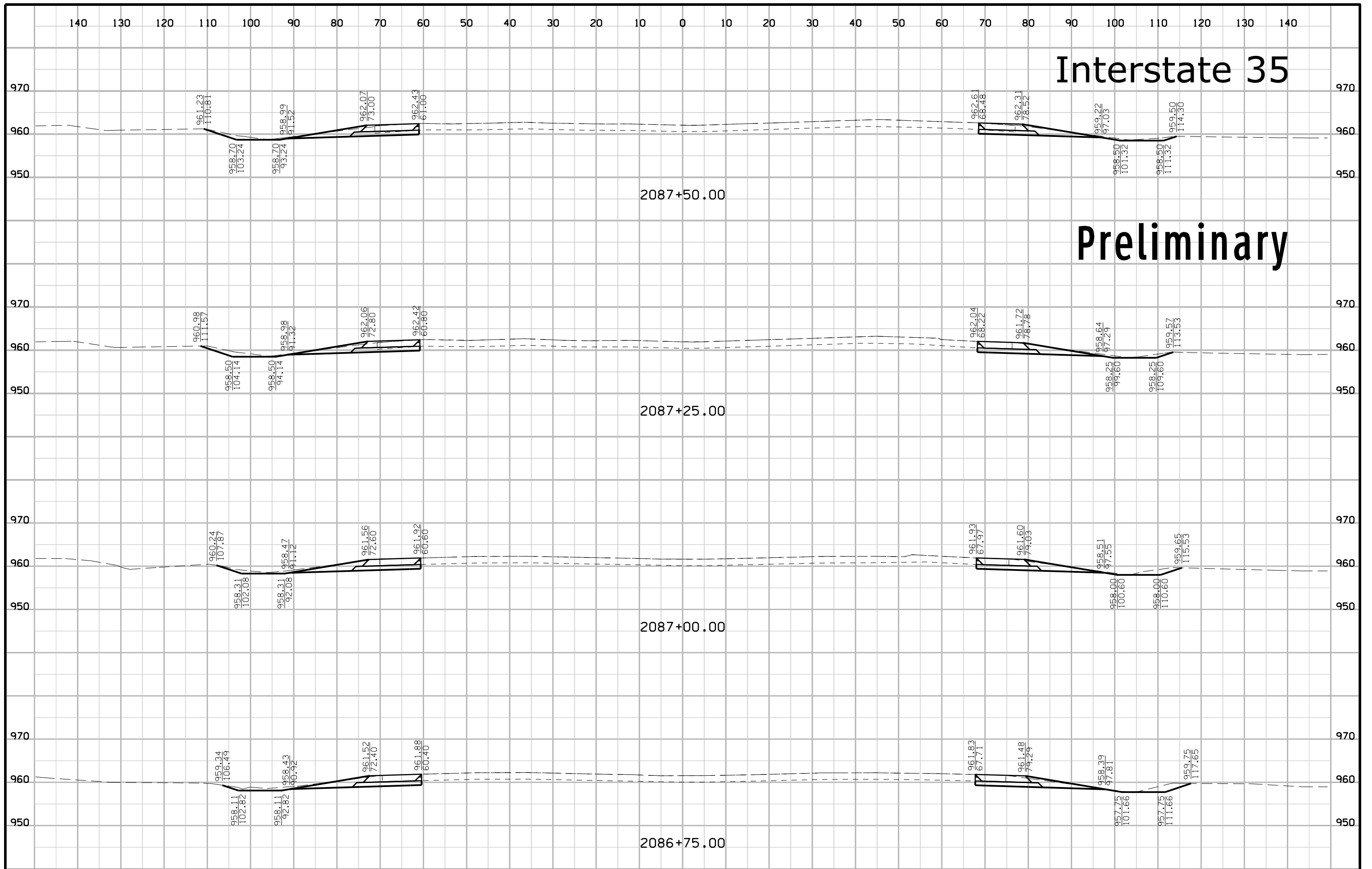
Interstate 35

Preliminary



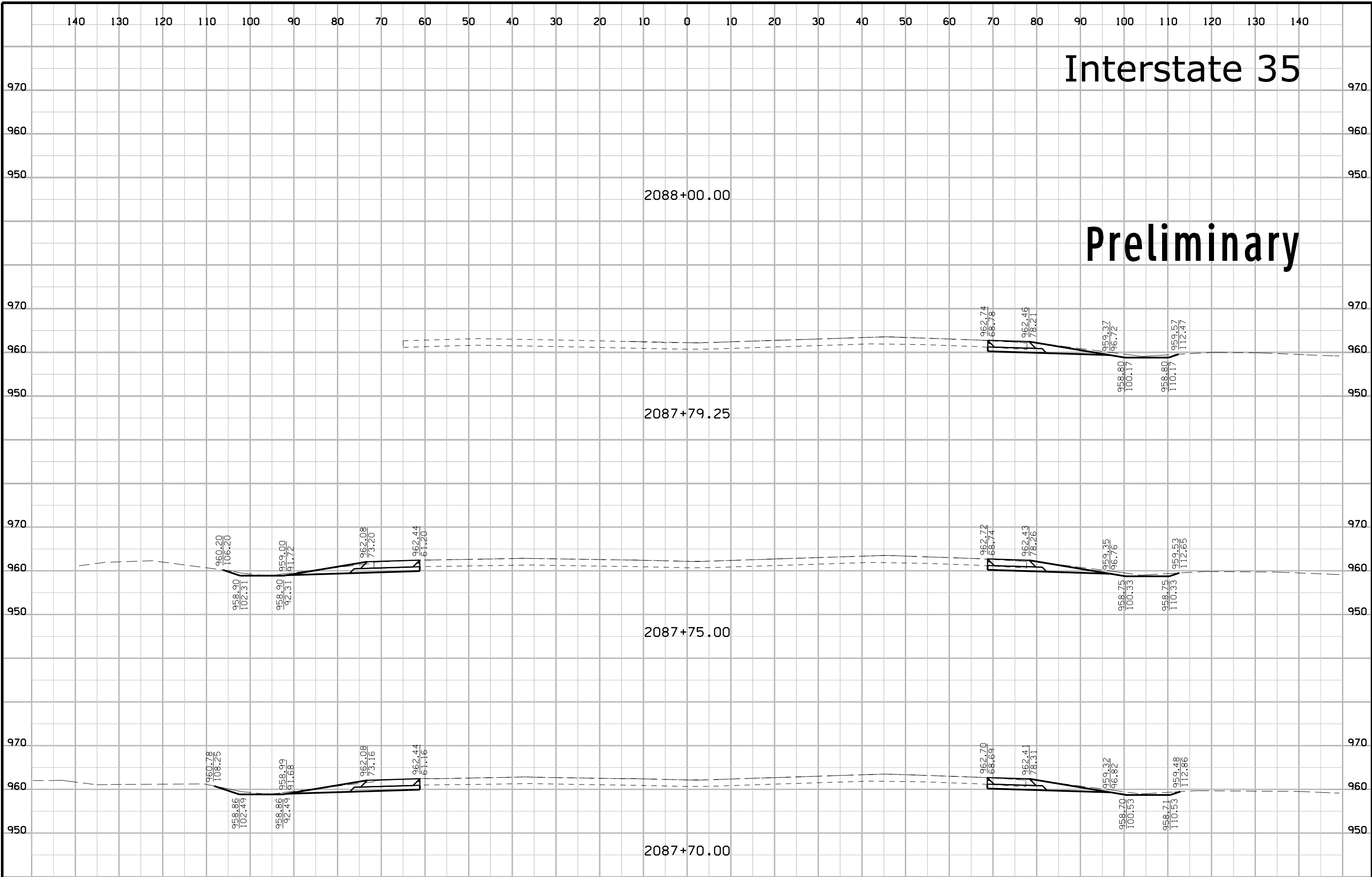
Interstate 35

Preliminary

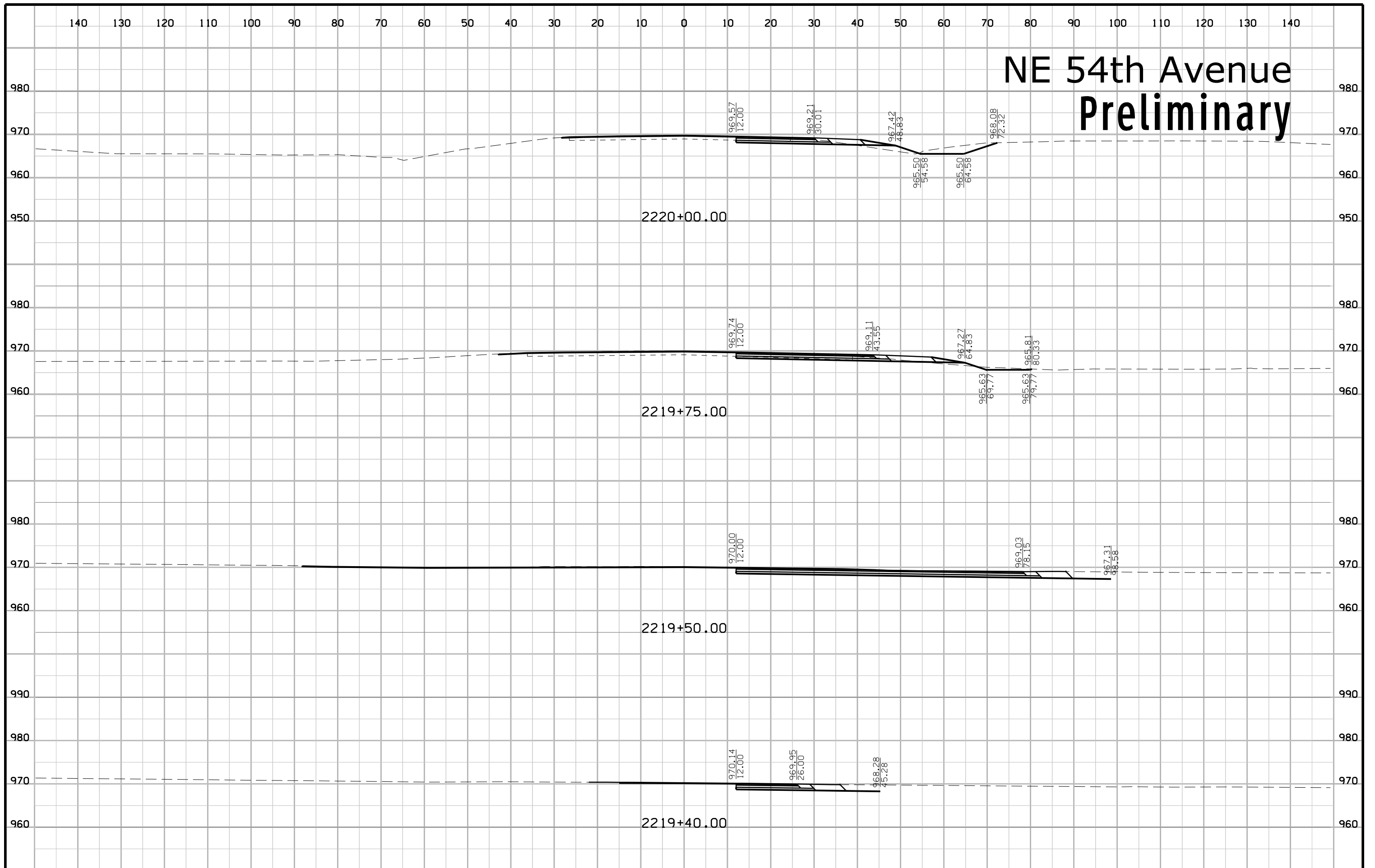


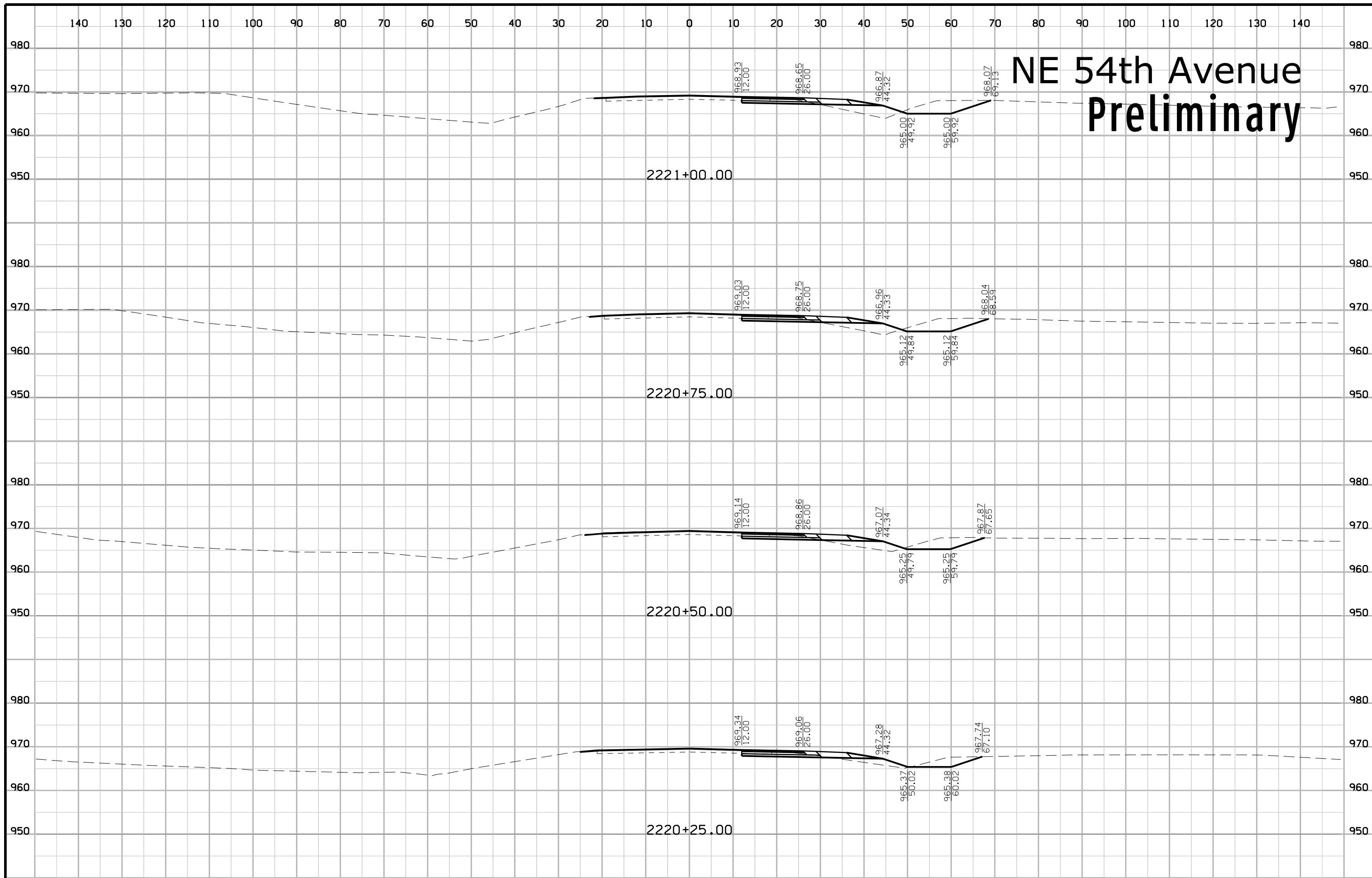
Interstate 35

Preliminary

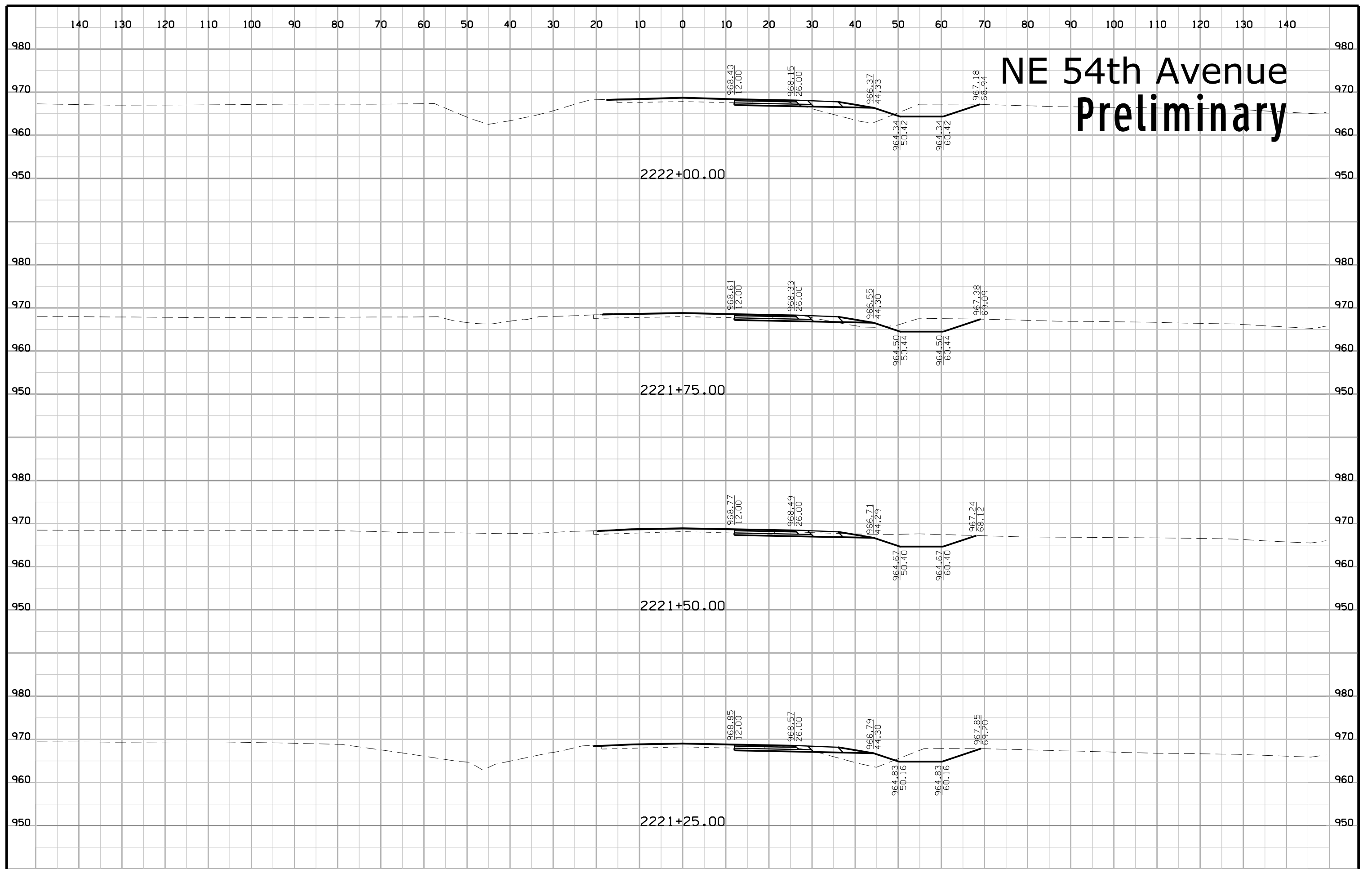


NE 54th Avenue Preliminary

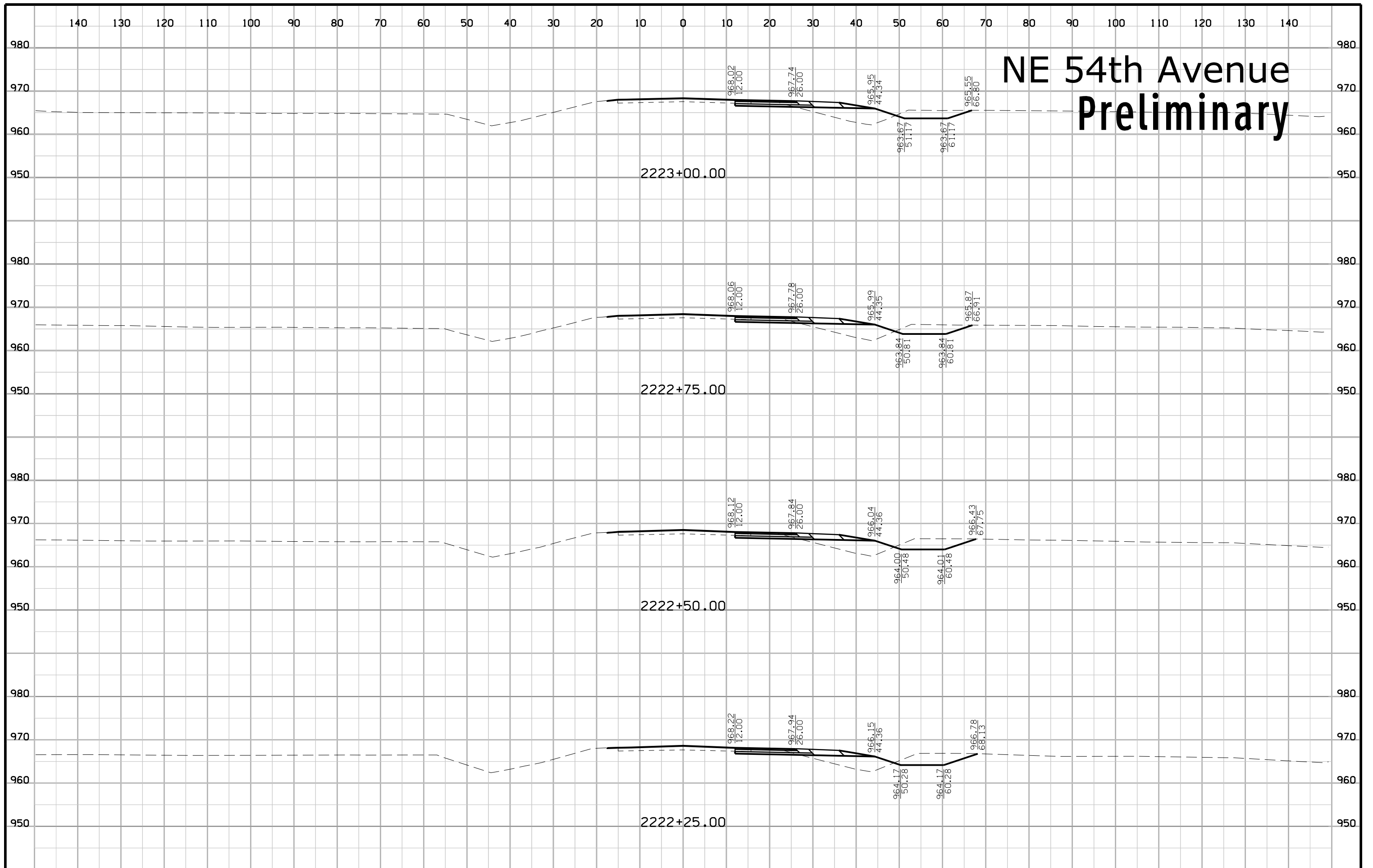




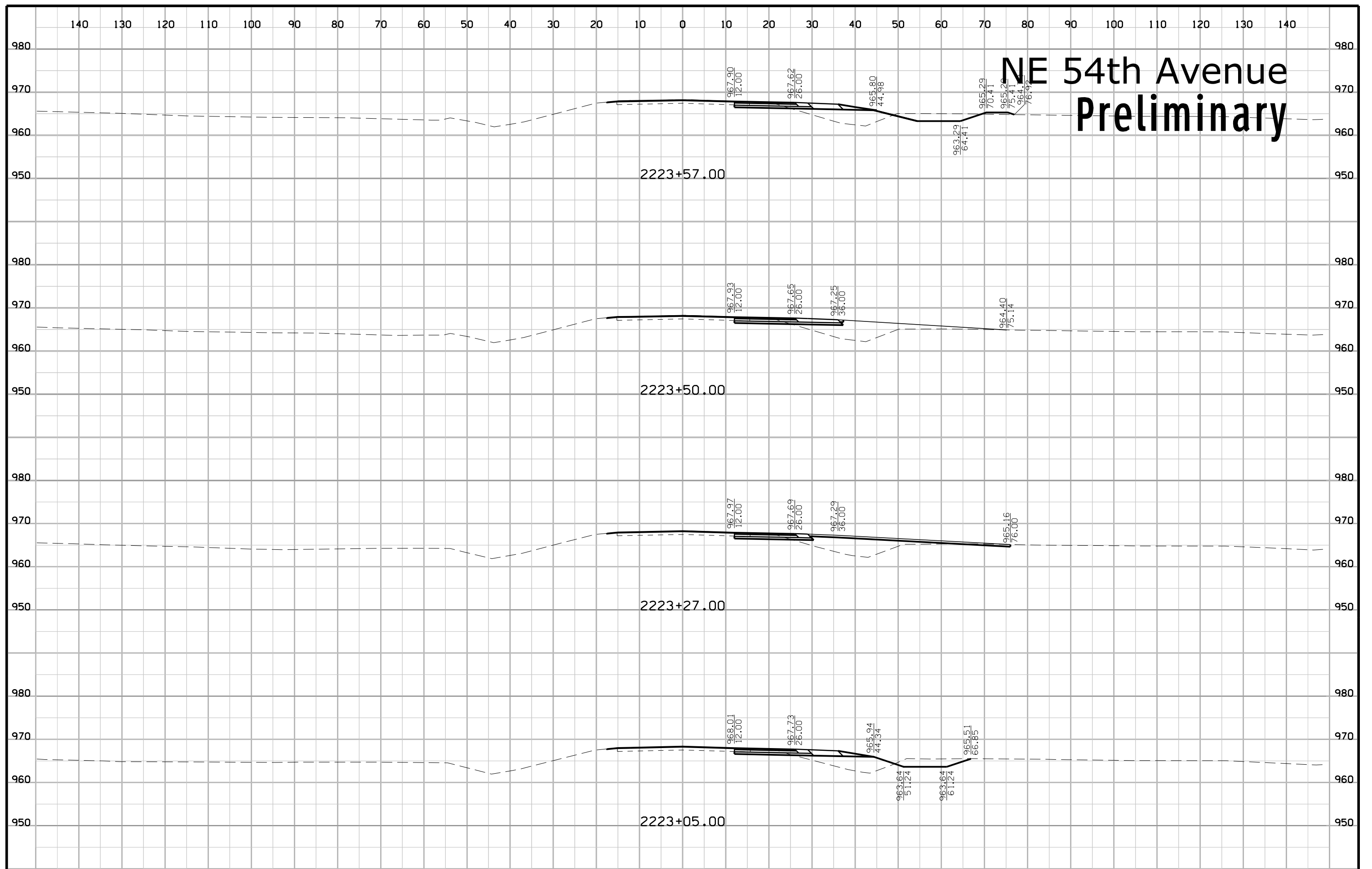
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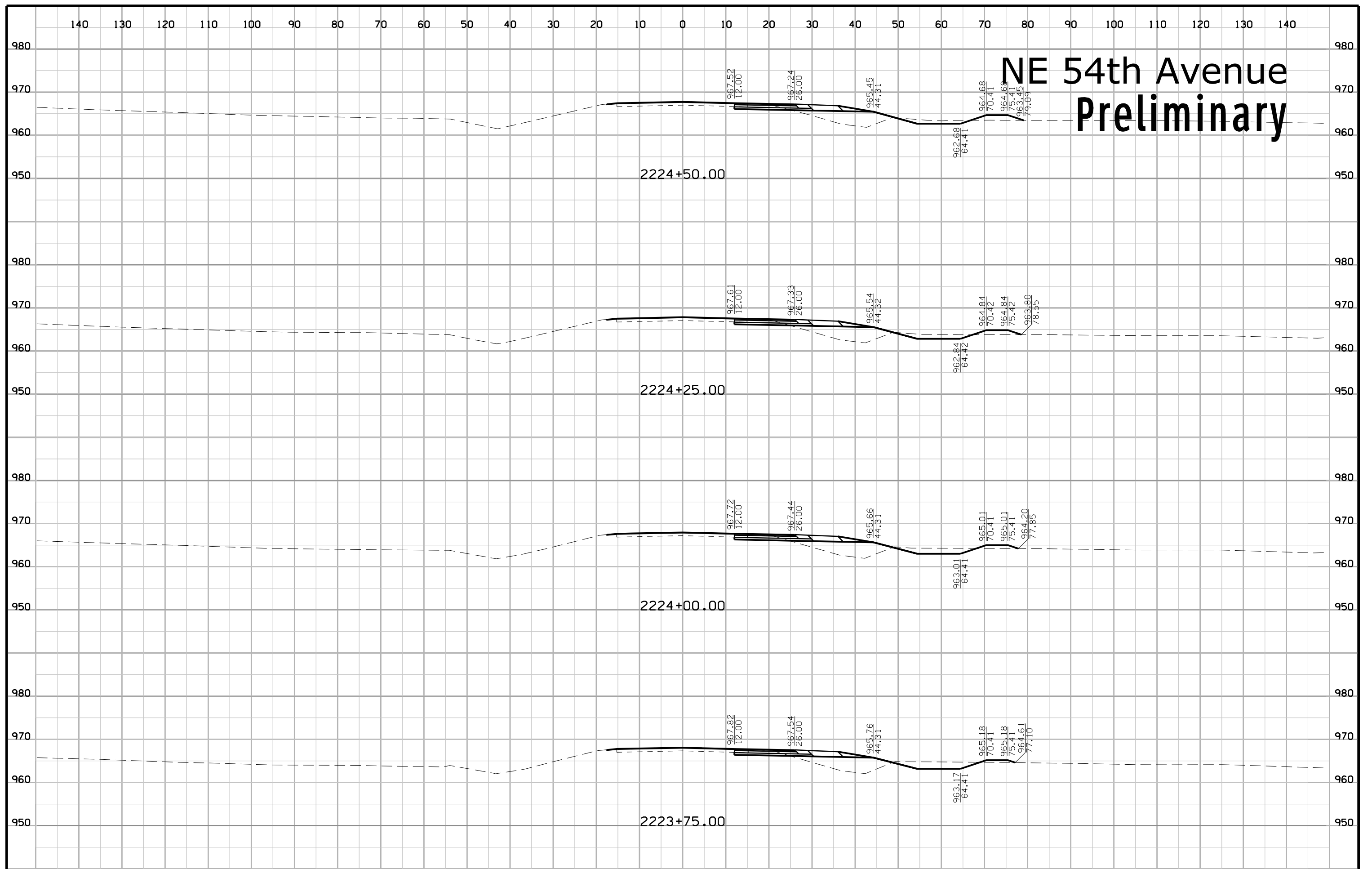
NE 54th Avenue Preliminary



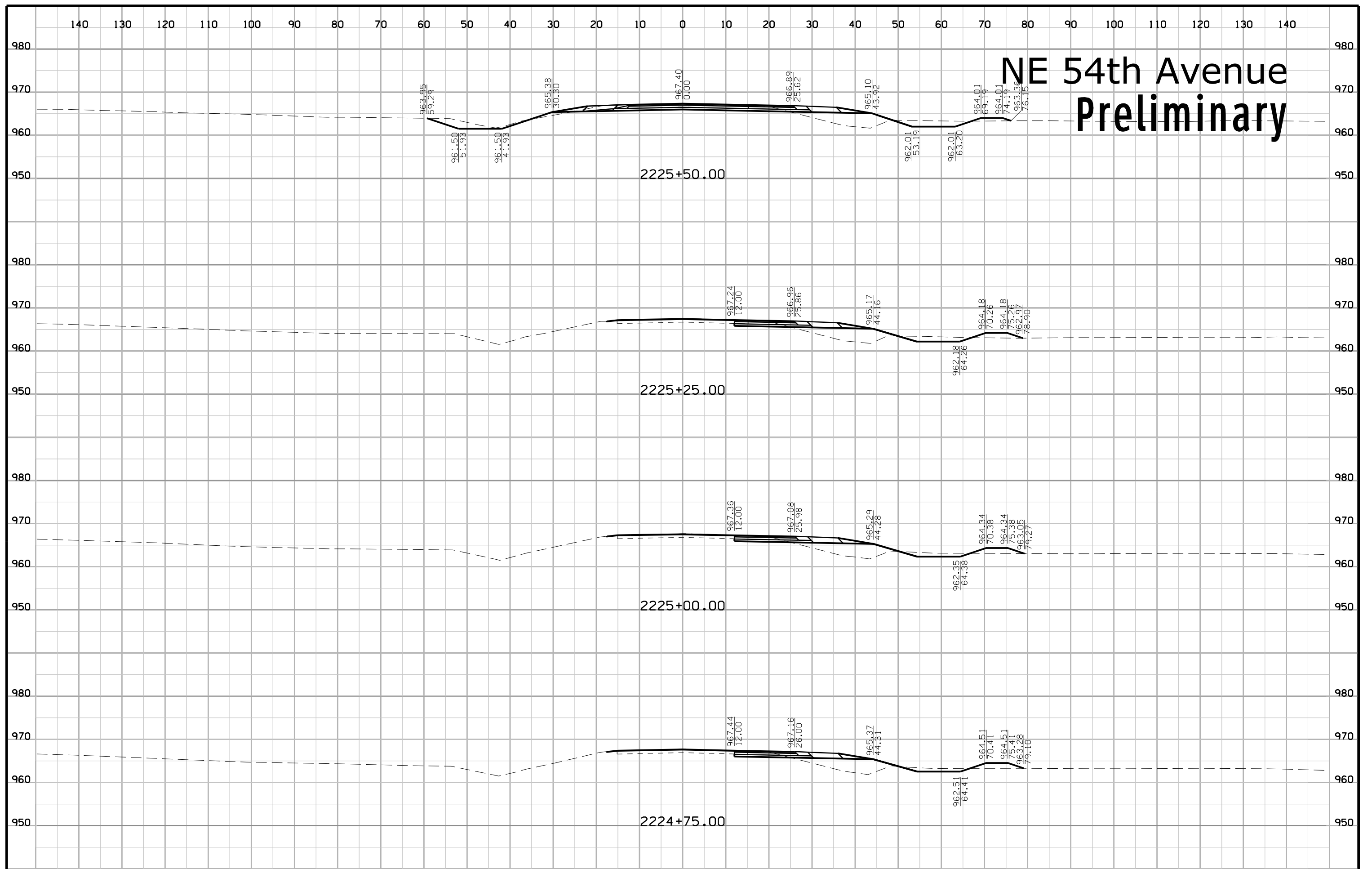
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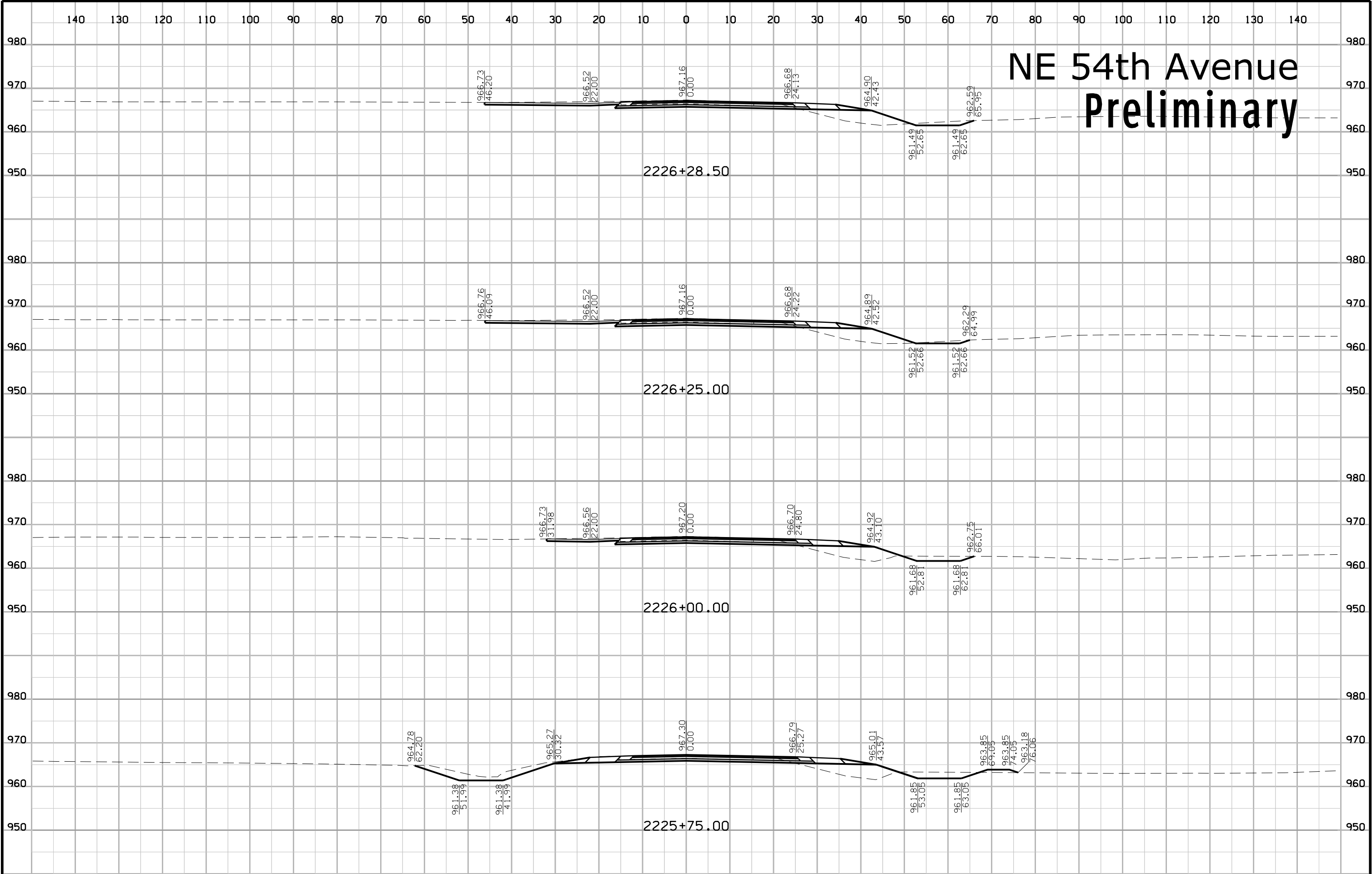
NE 54th Avenue Preliminary



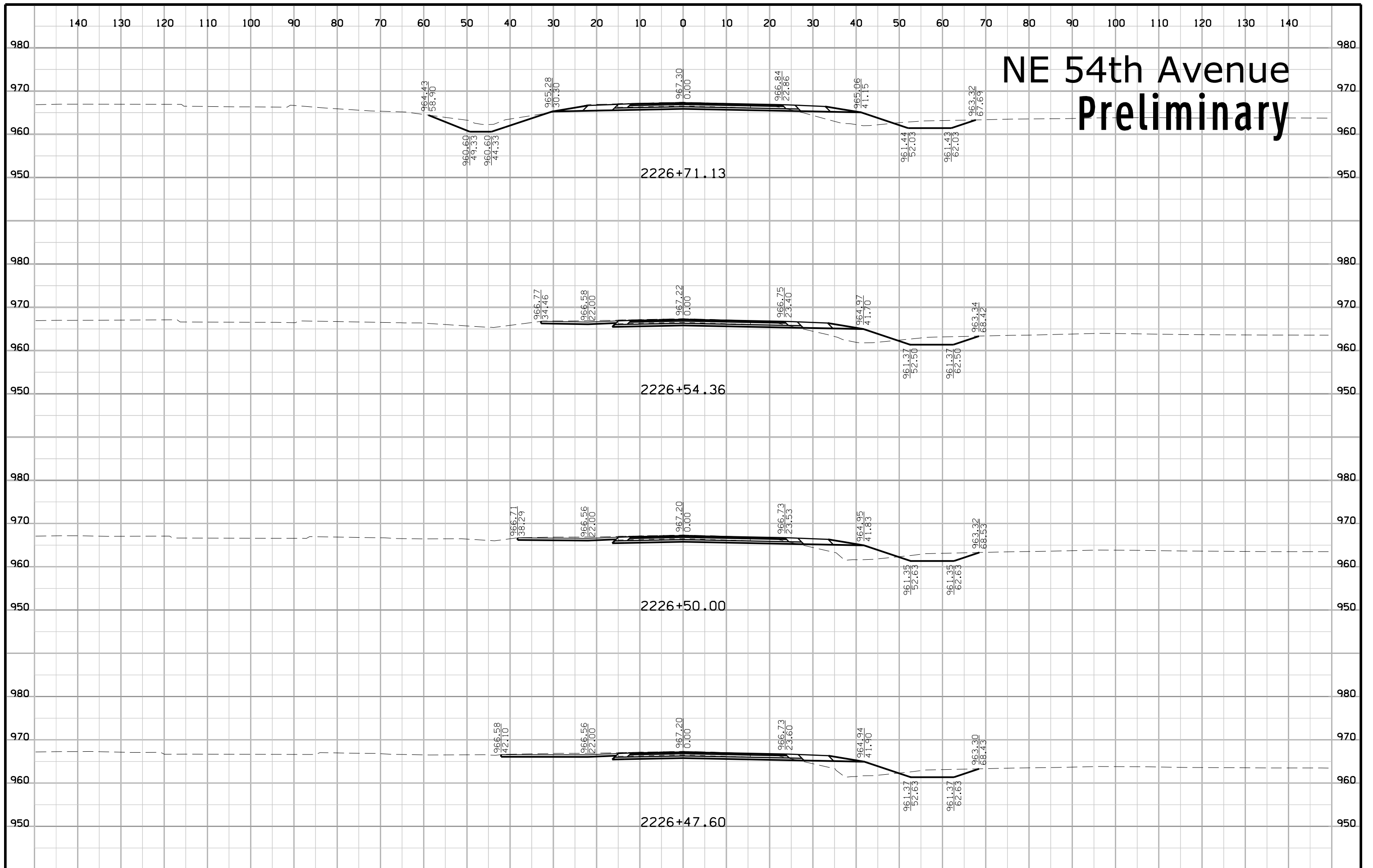
NE 54th Avenue Preliminary



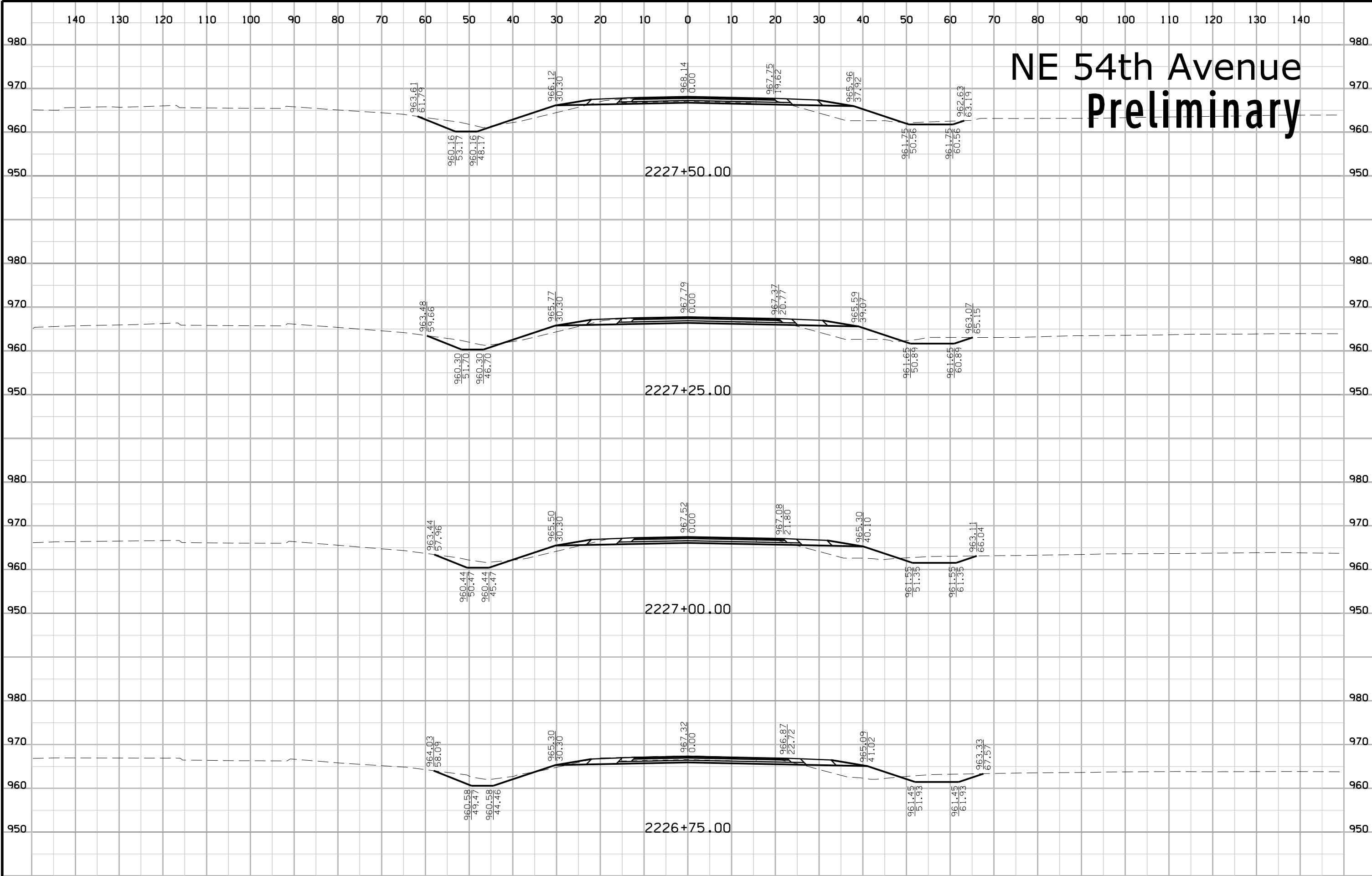
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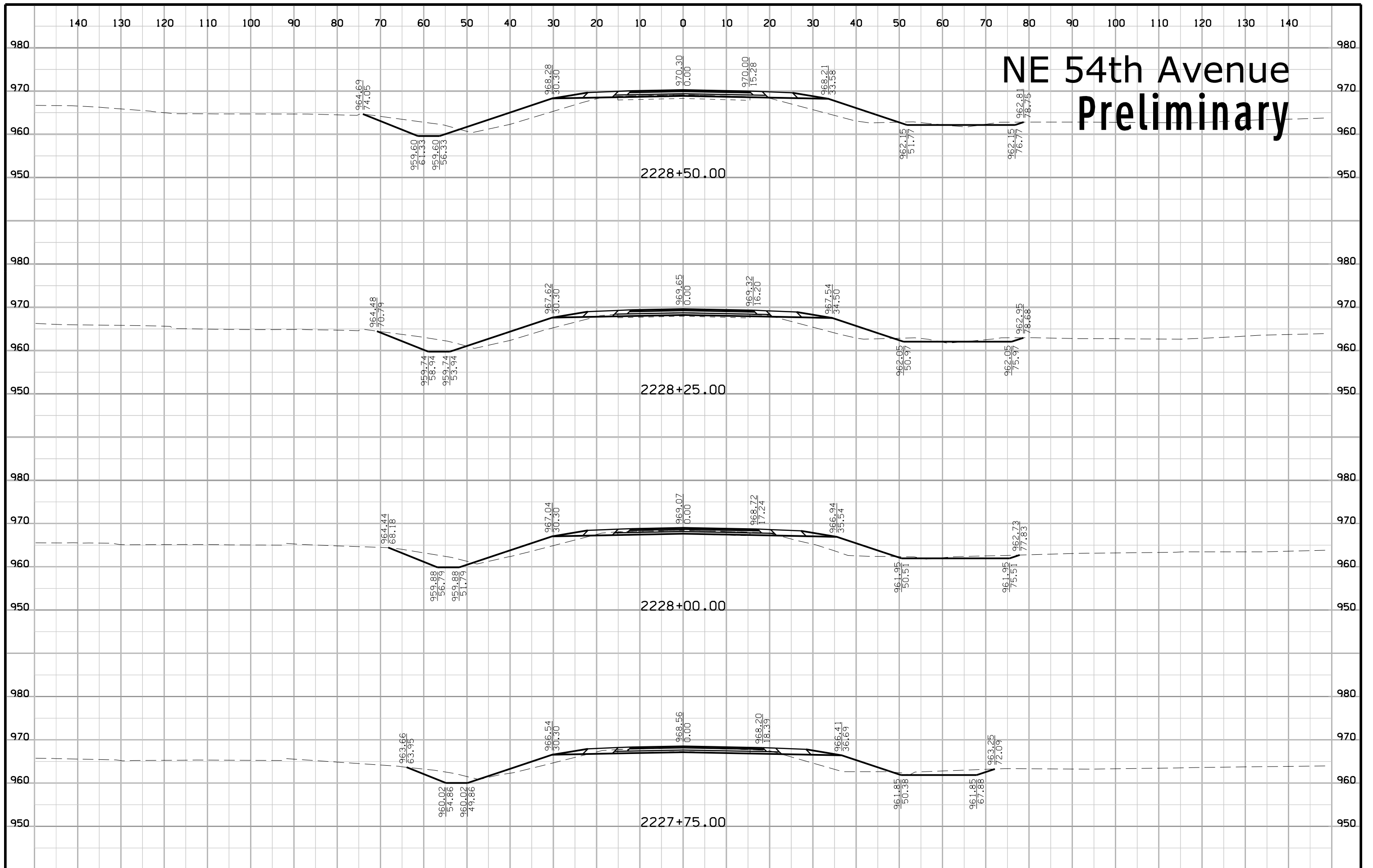
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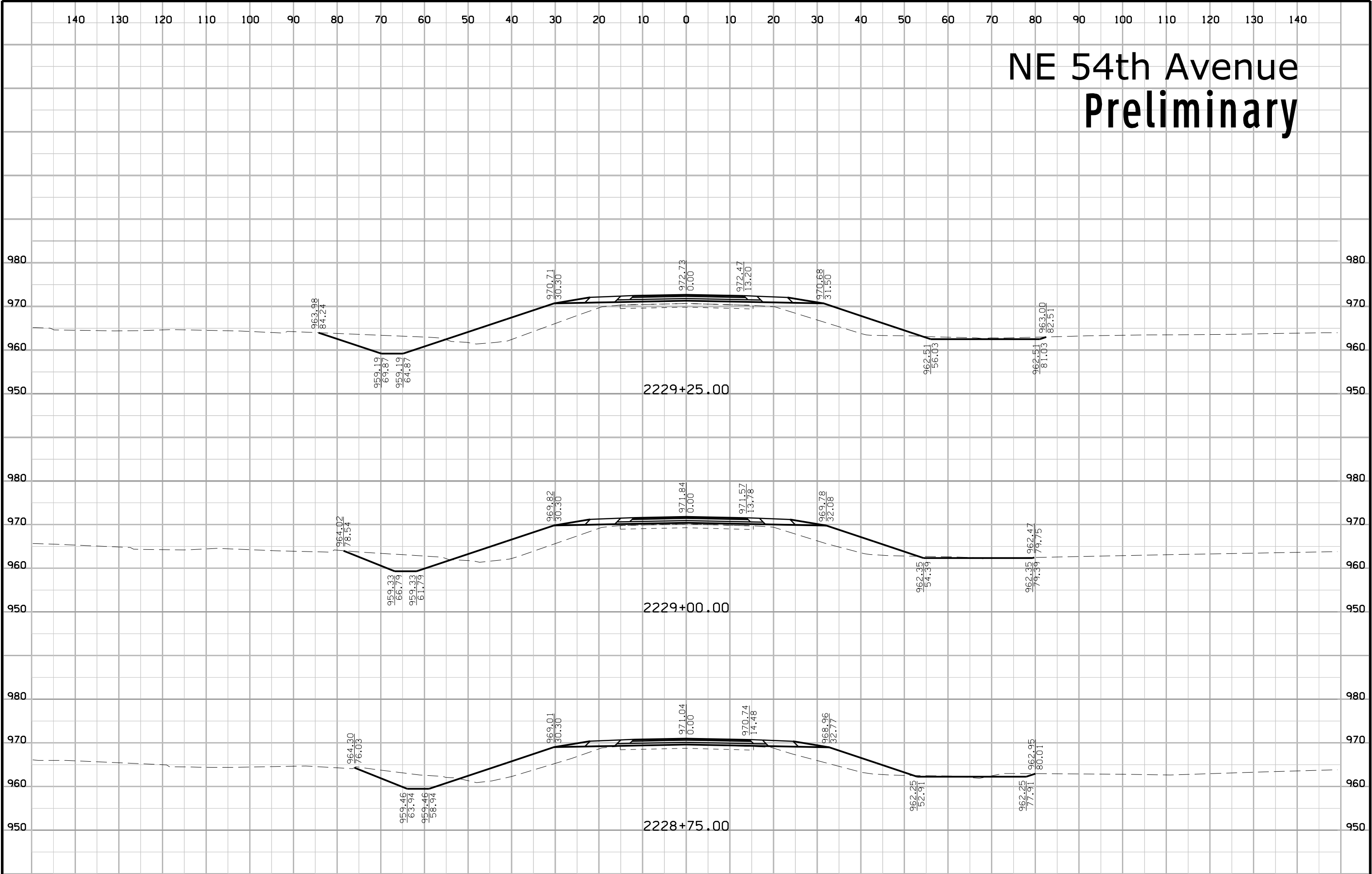
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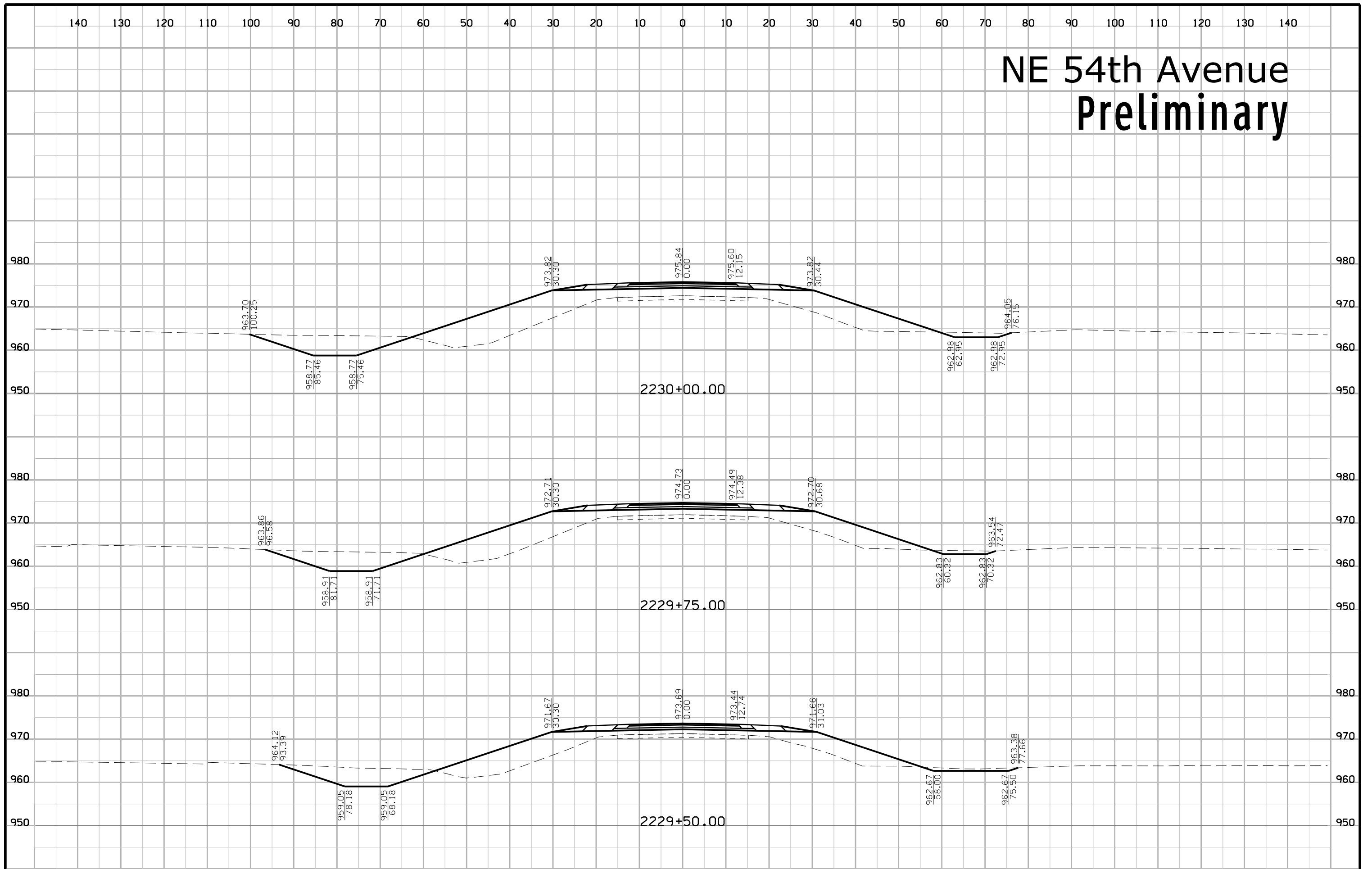
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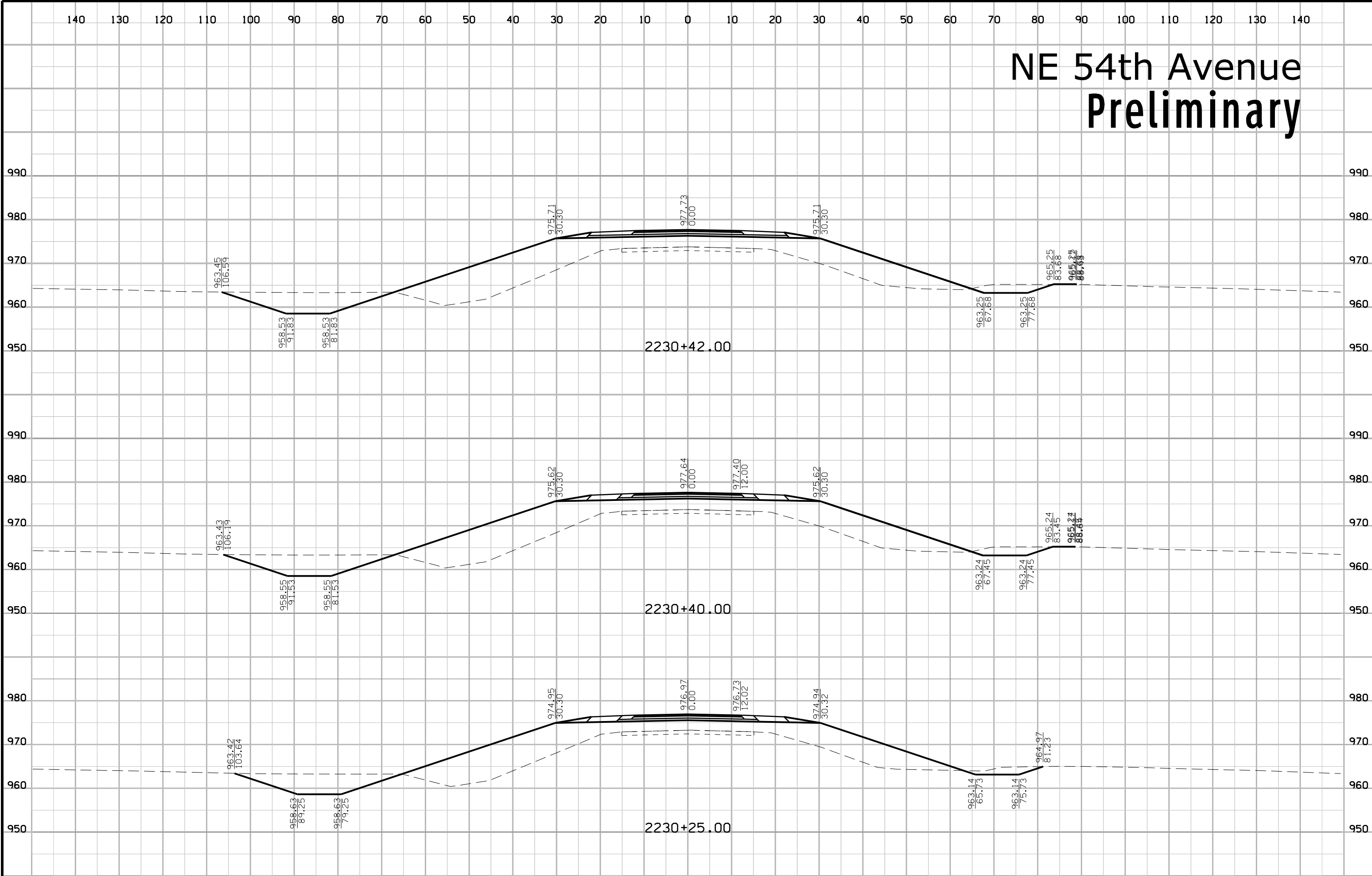
NE 54th Avenue Preliminary



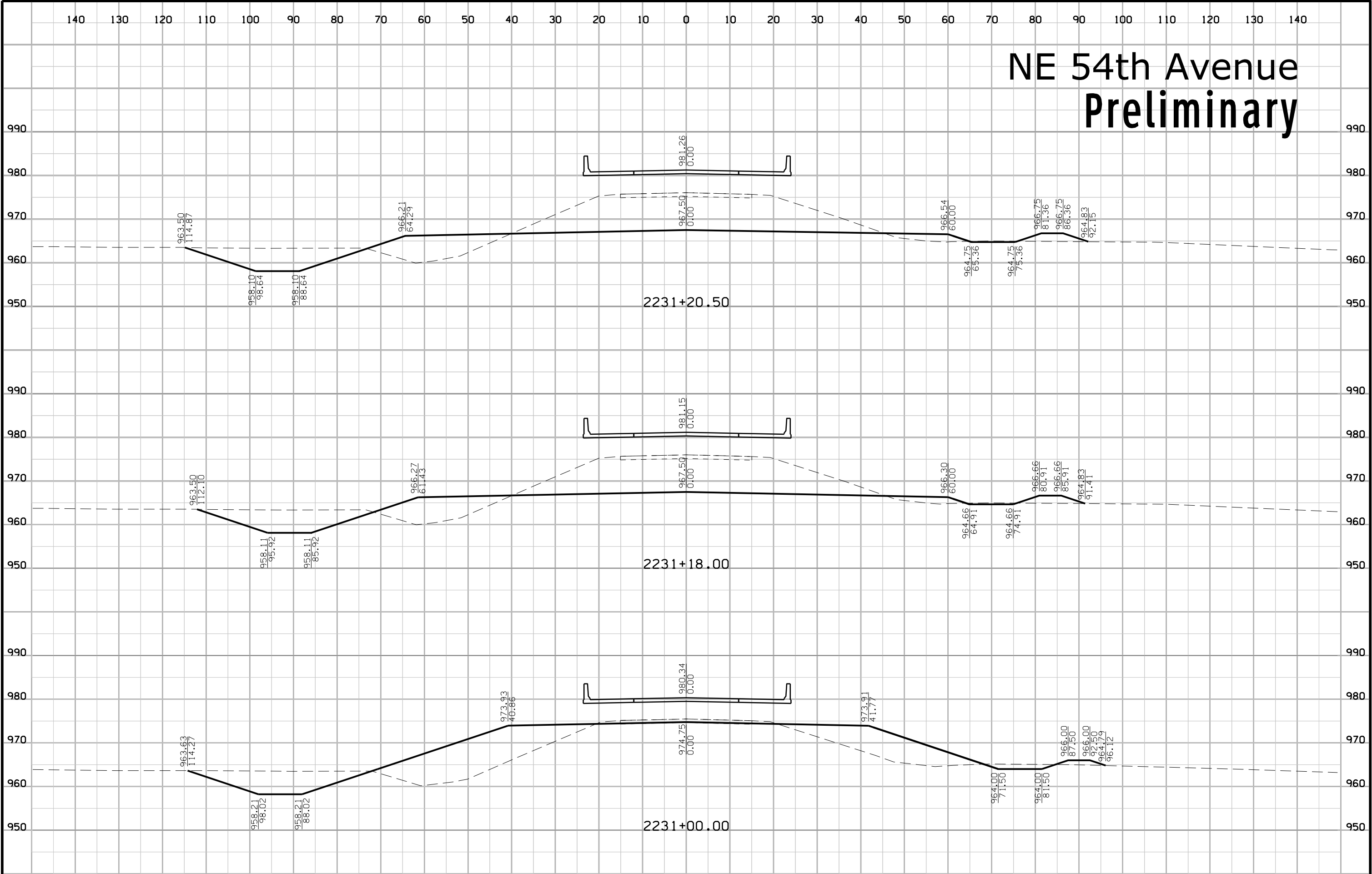
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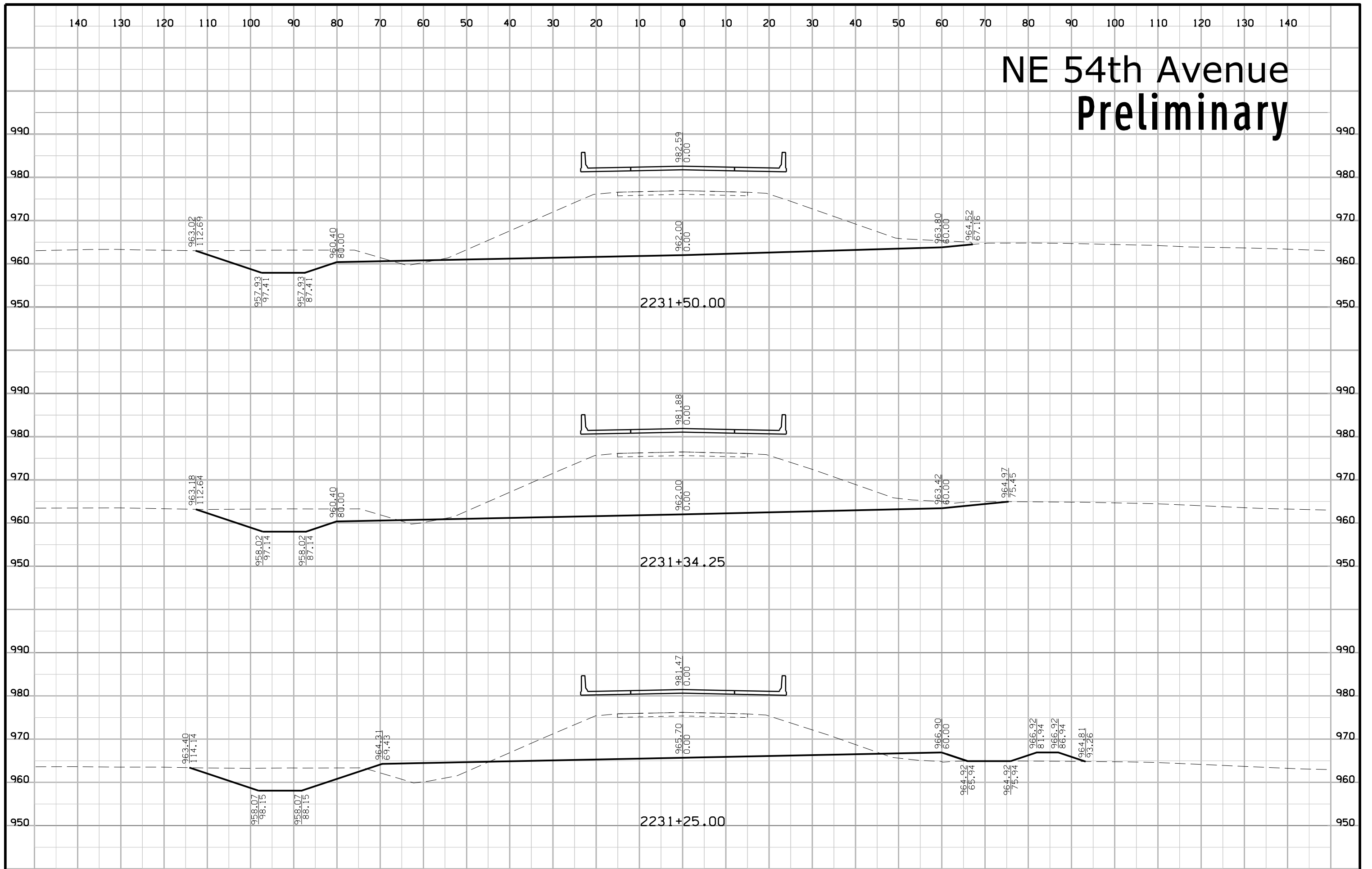
NE 54th Avenue Preliminary



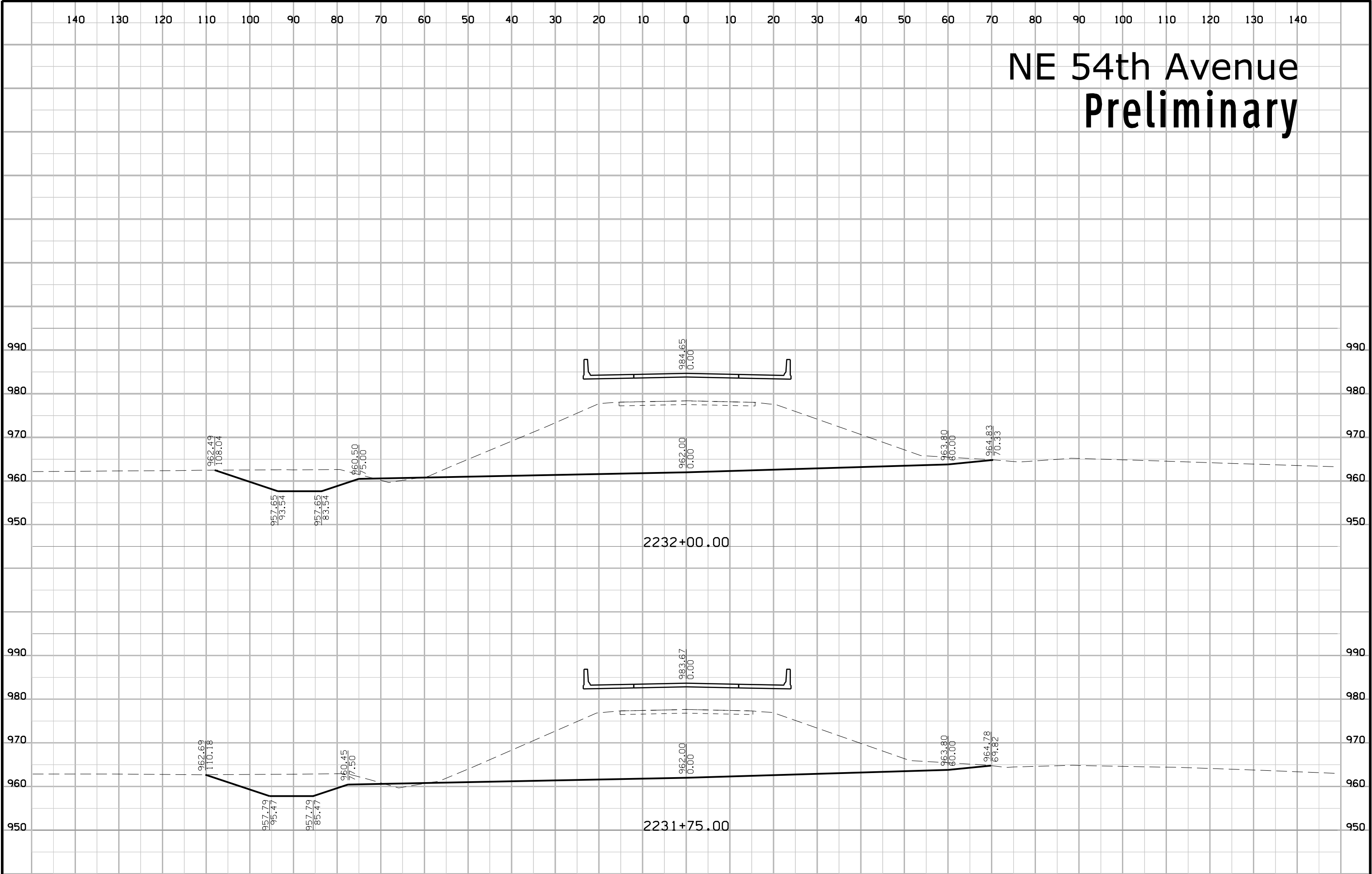
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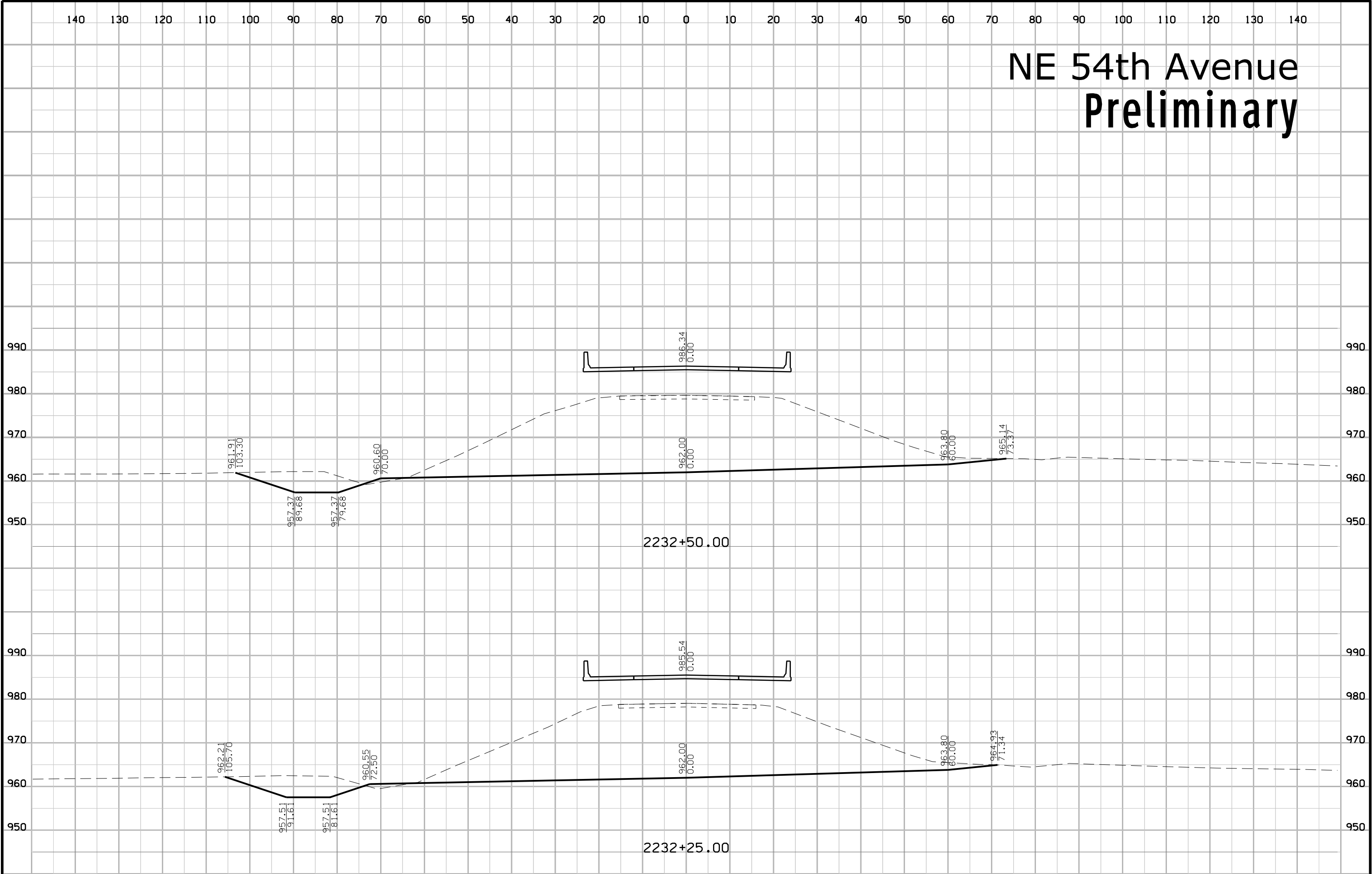
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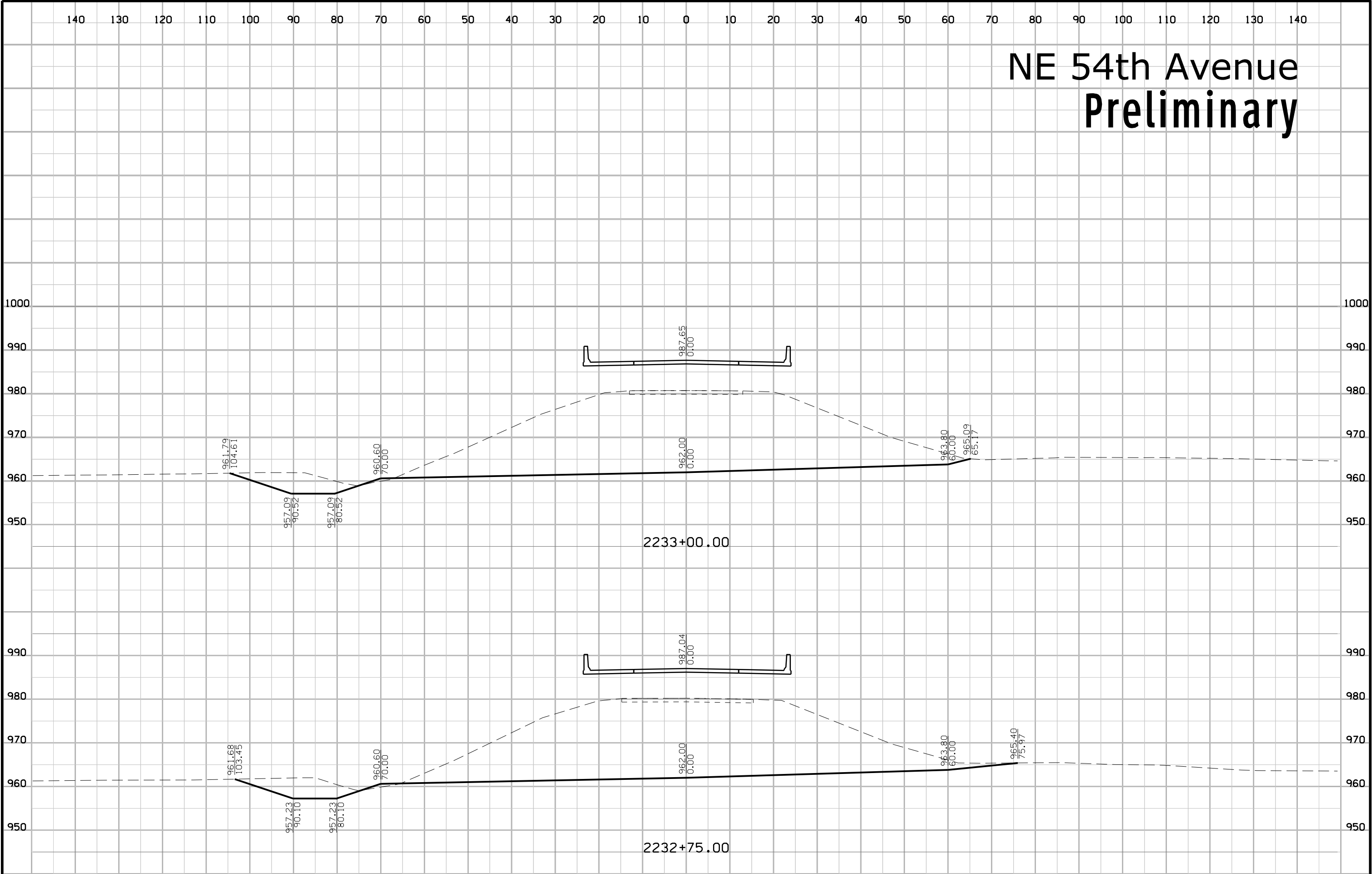
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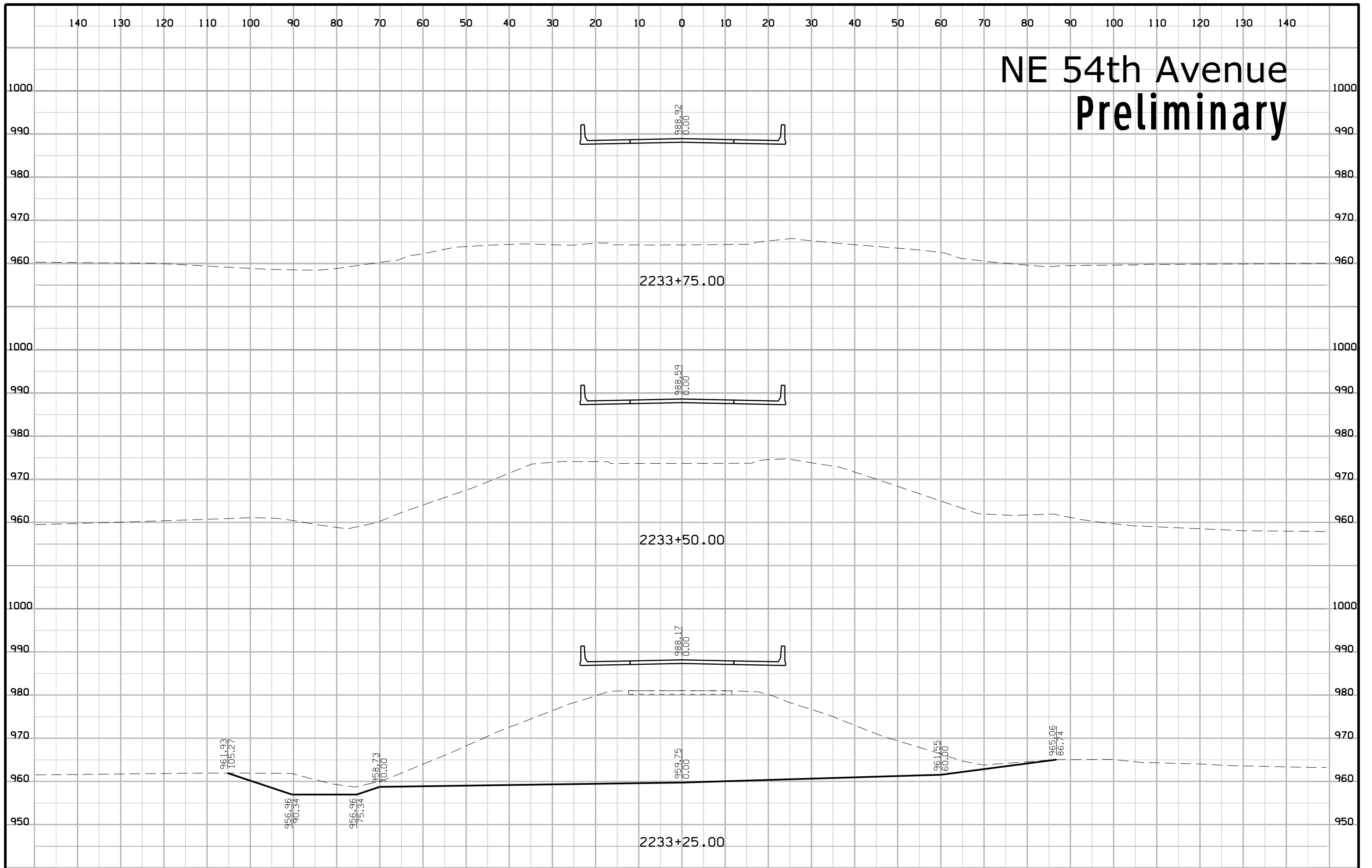
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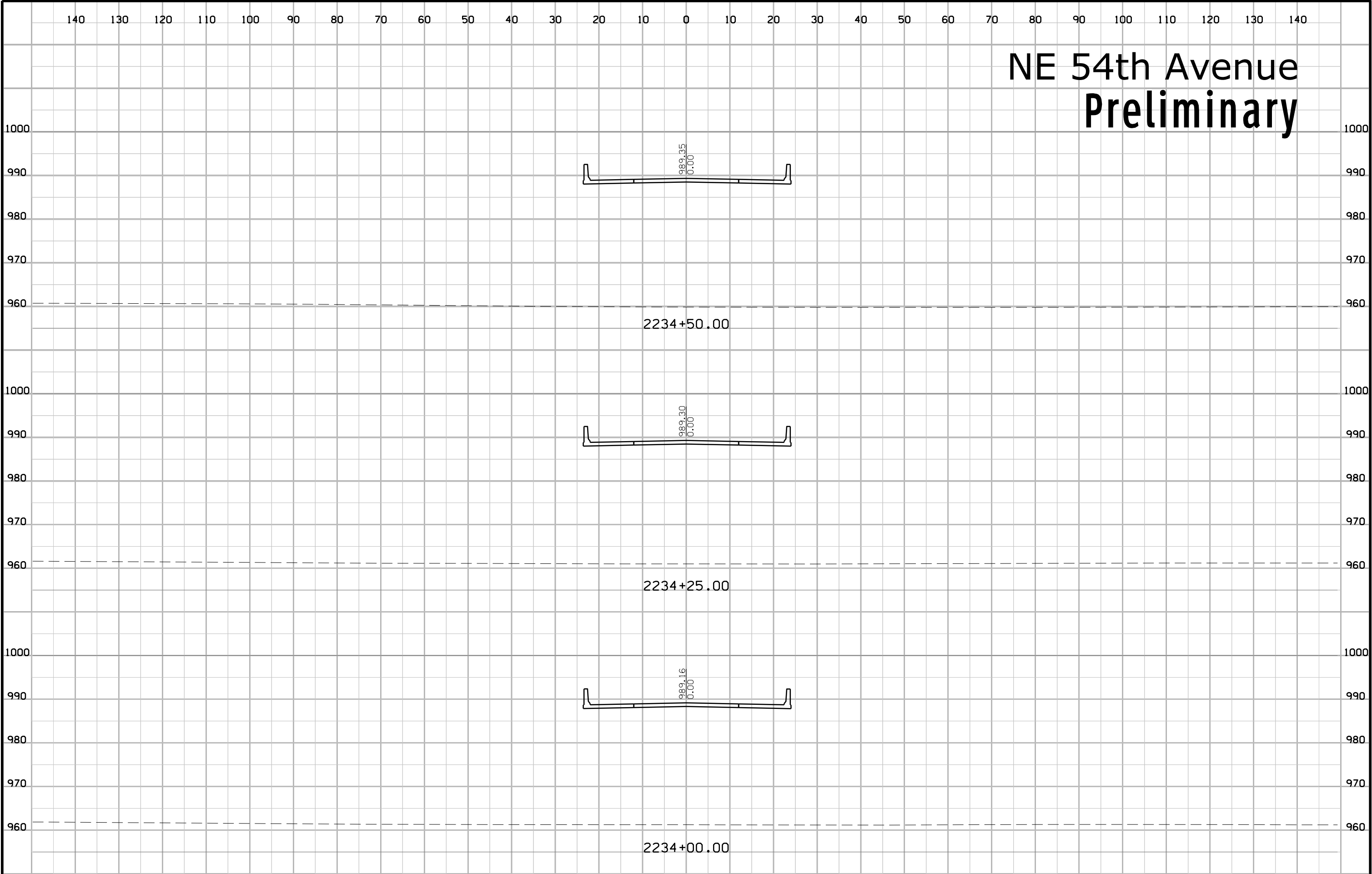
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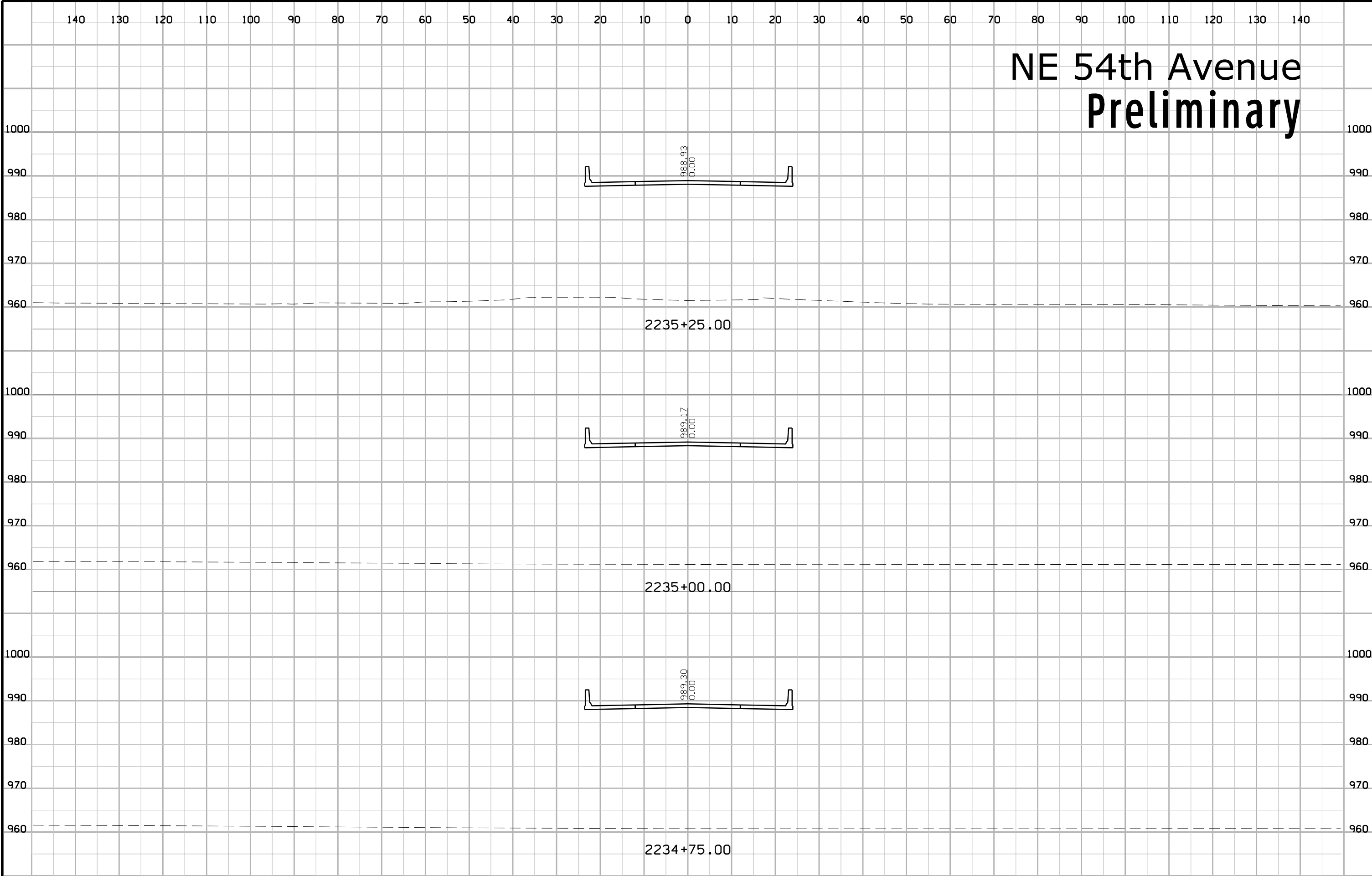
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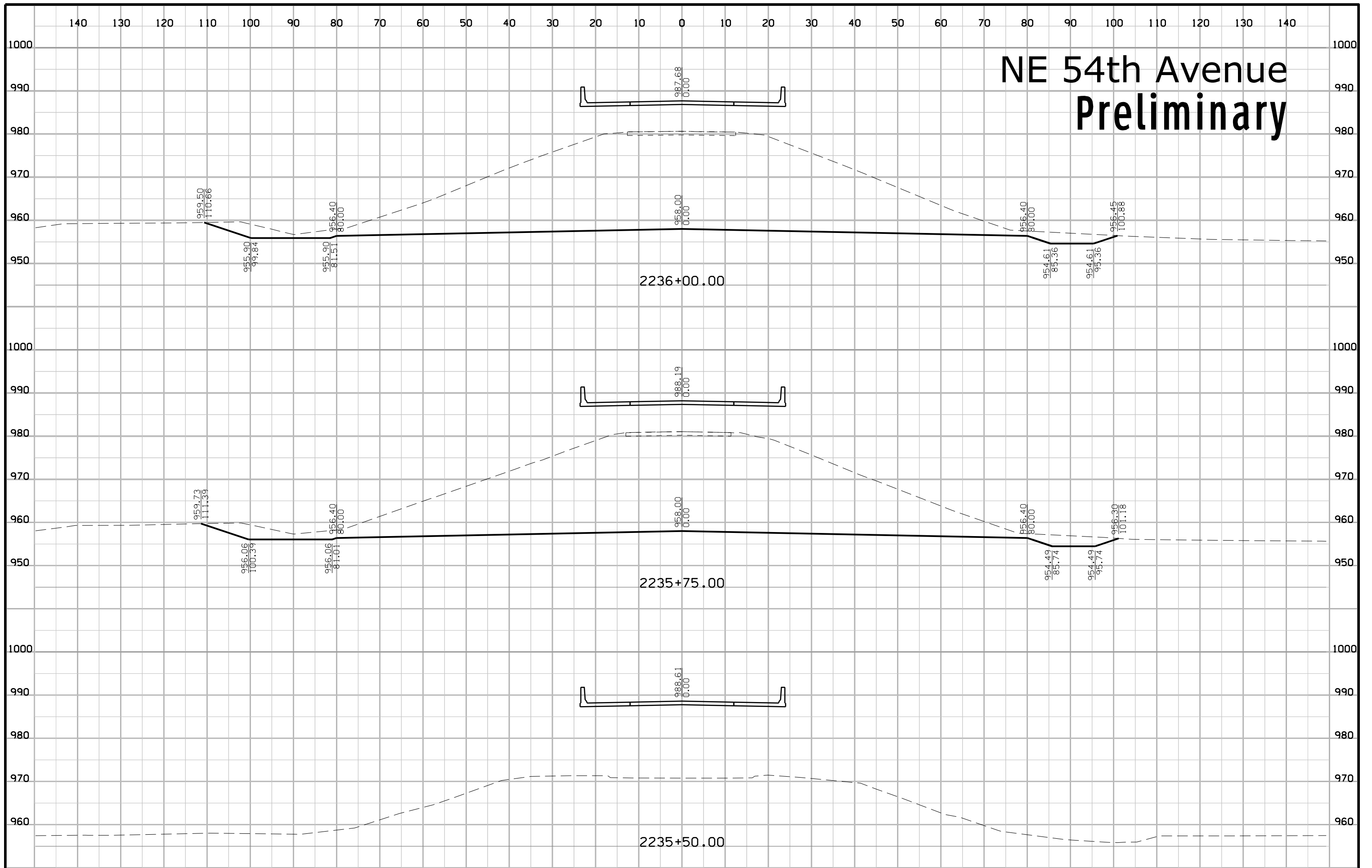
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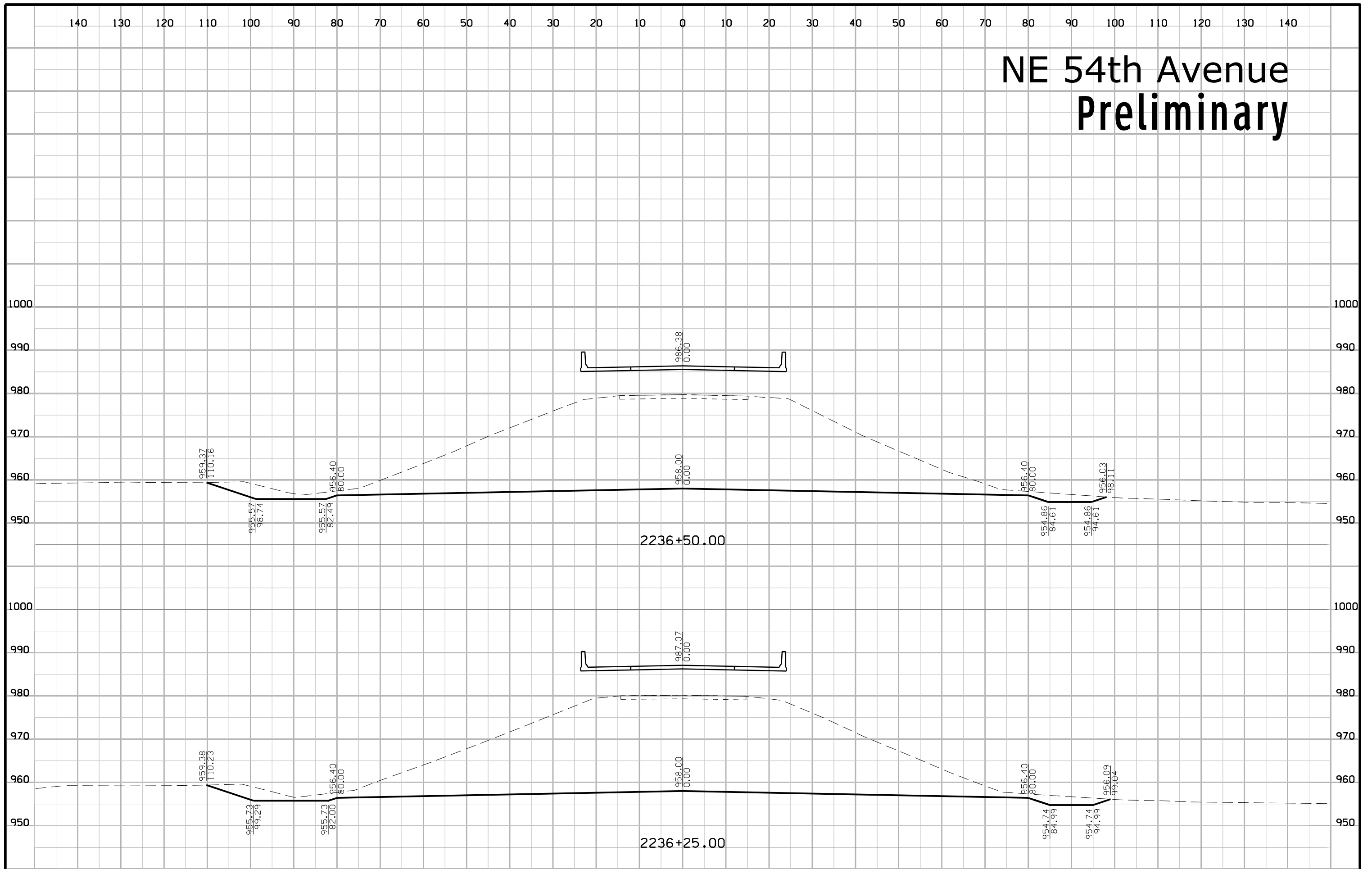
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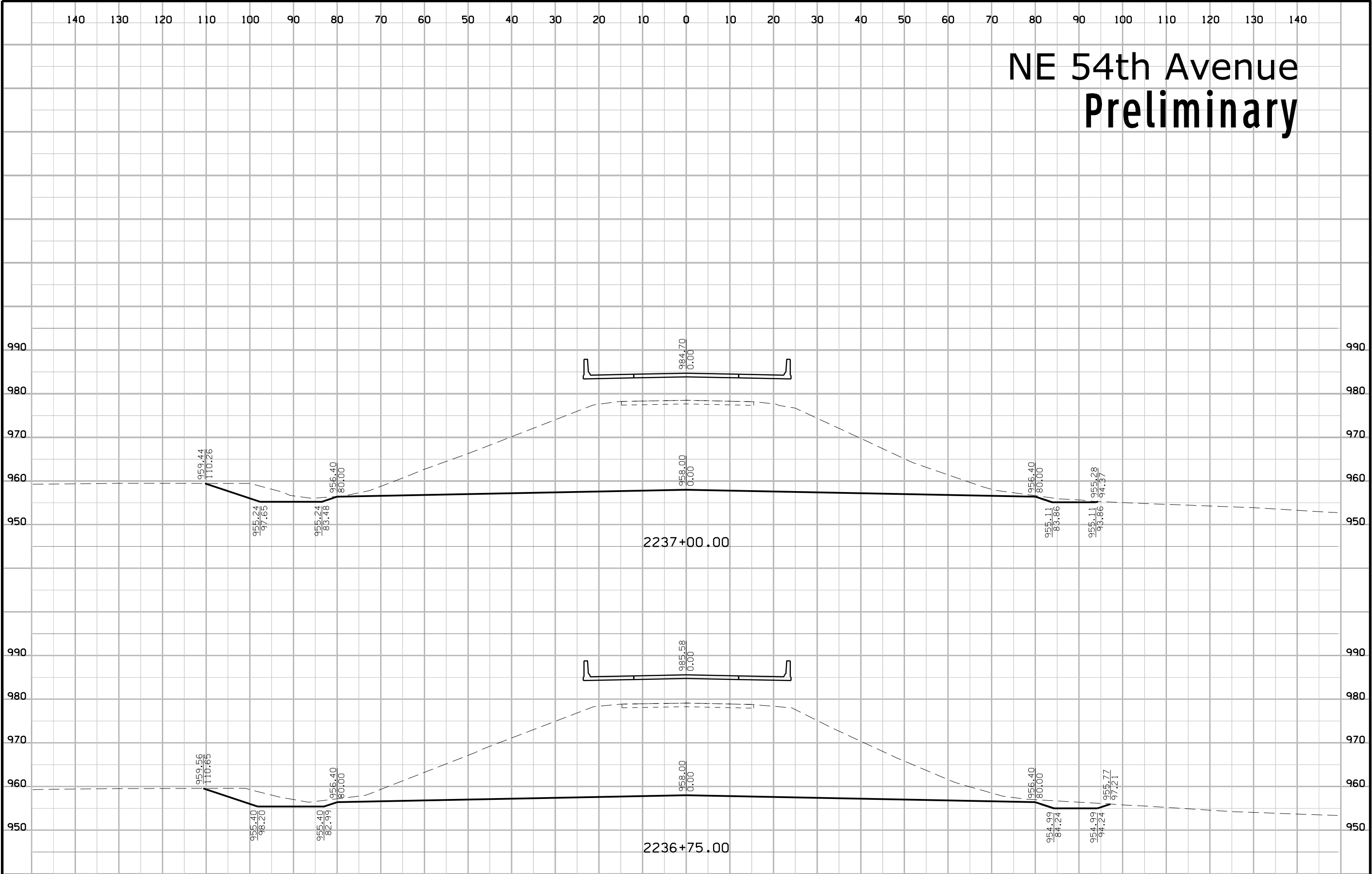
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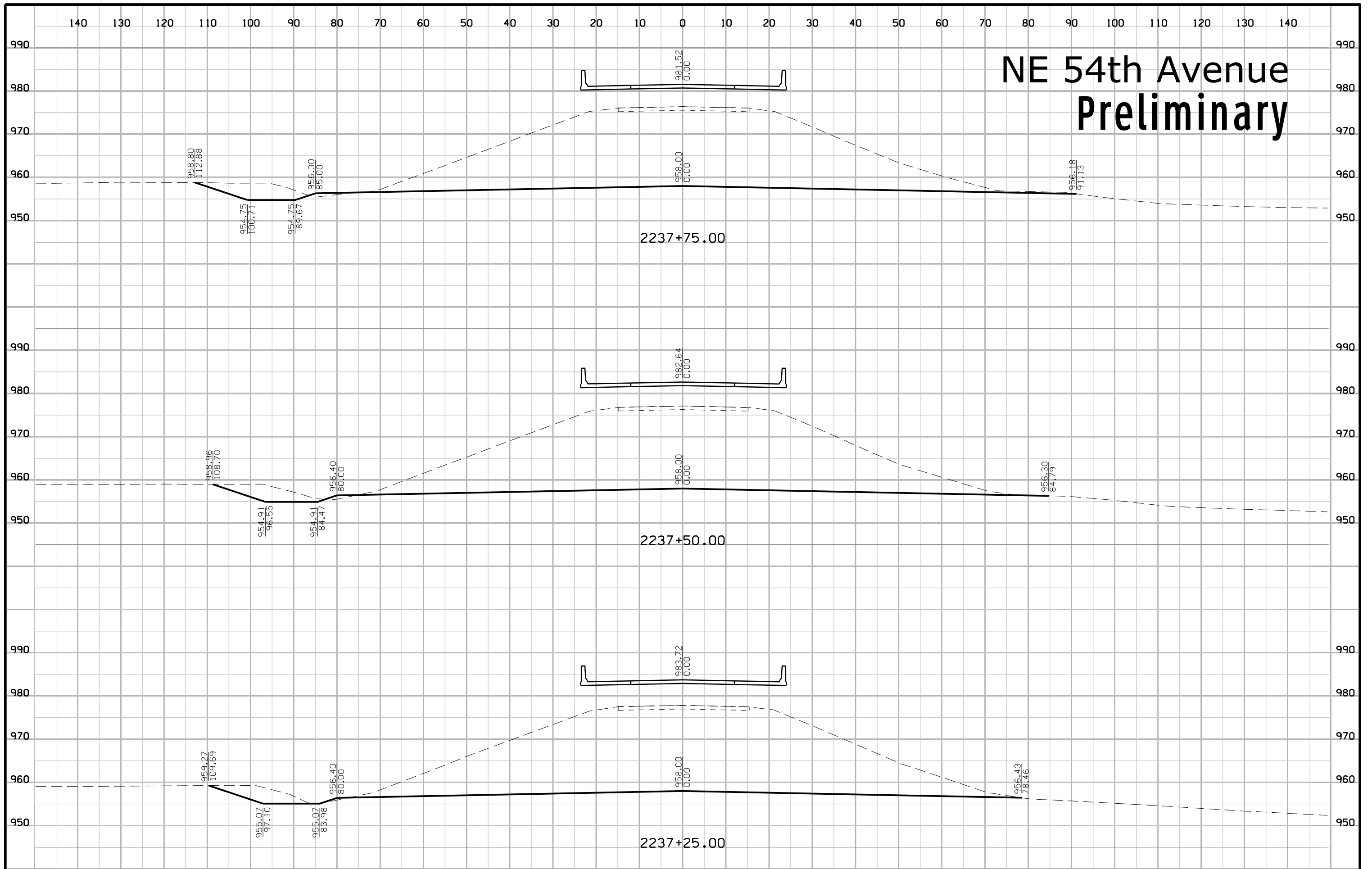
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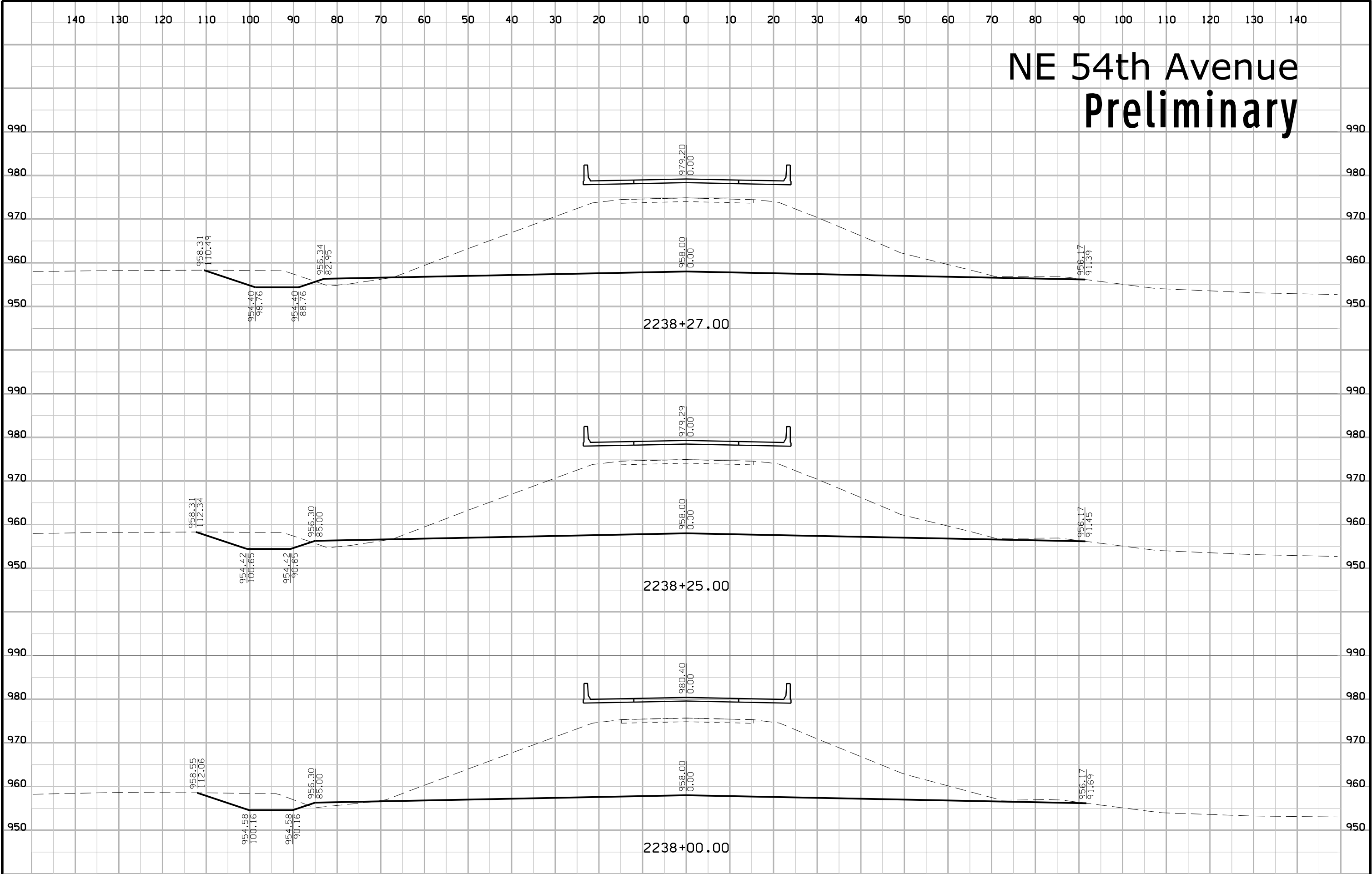
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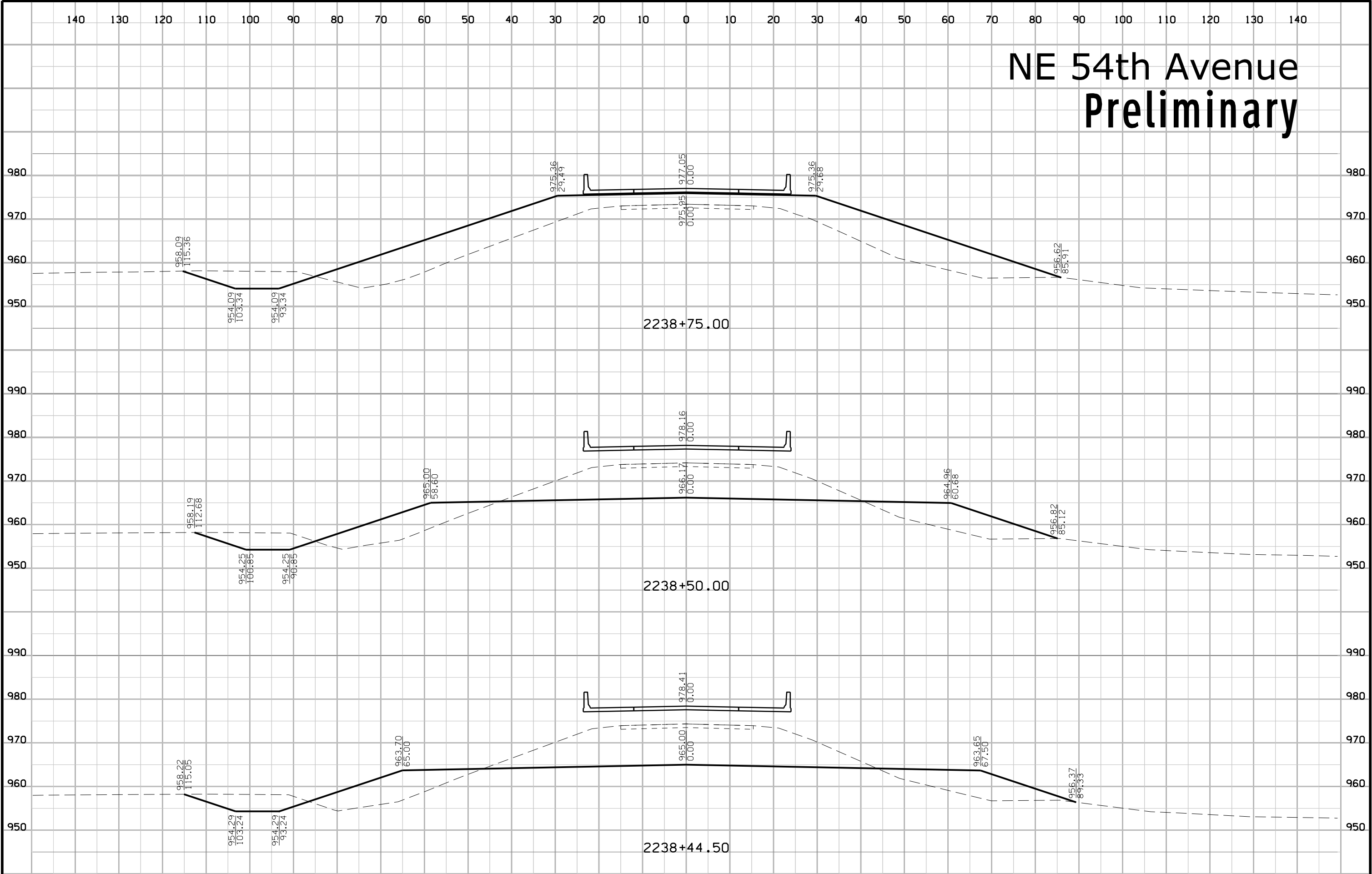
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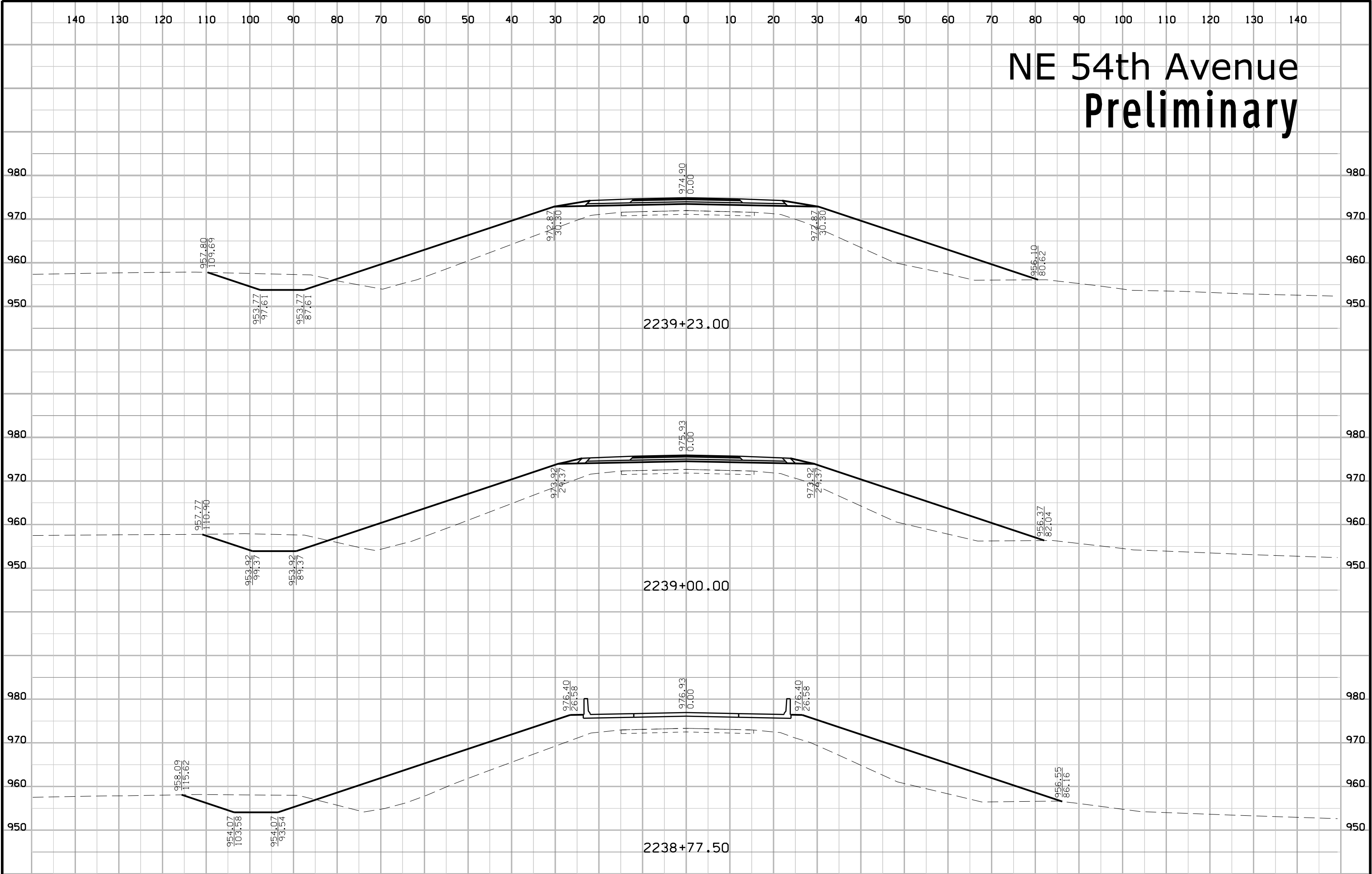
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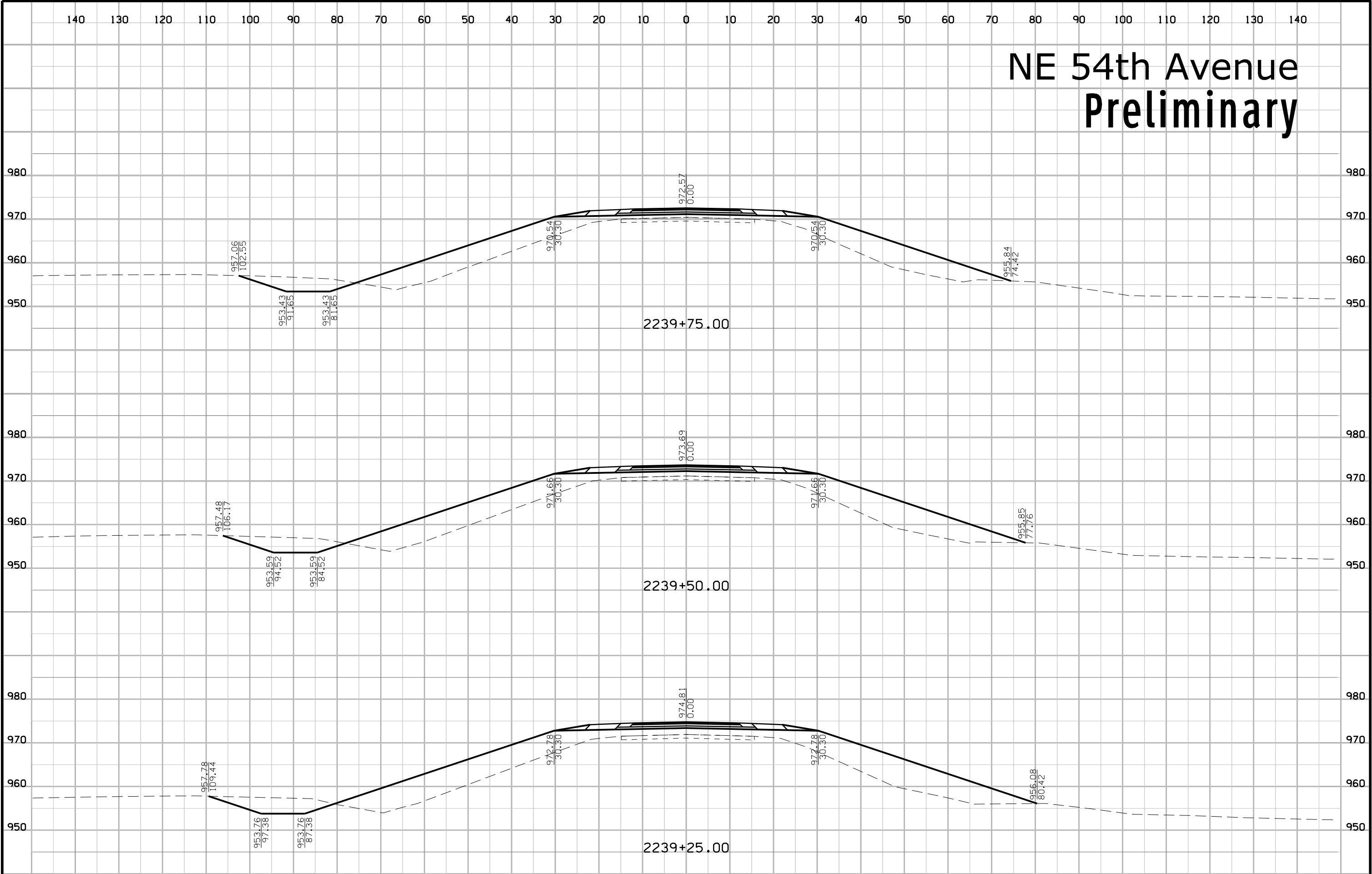
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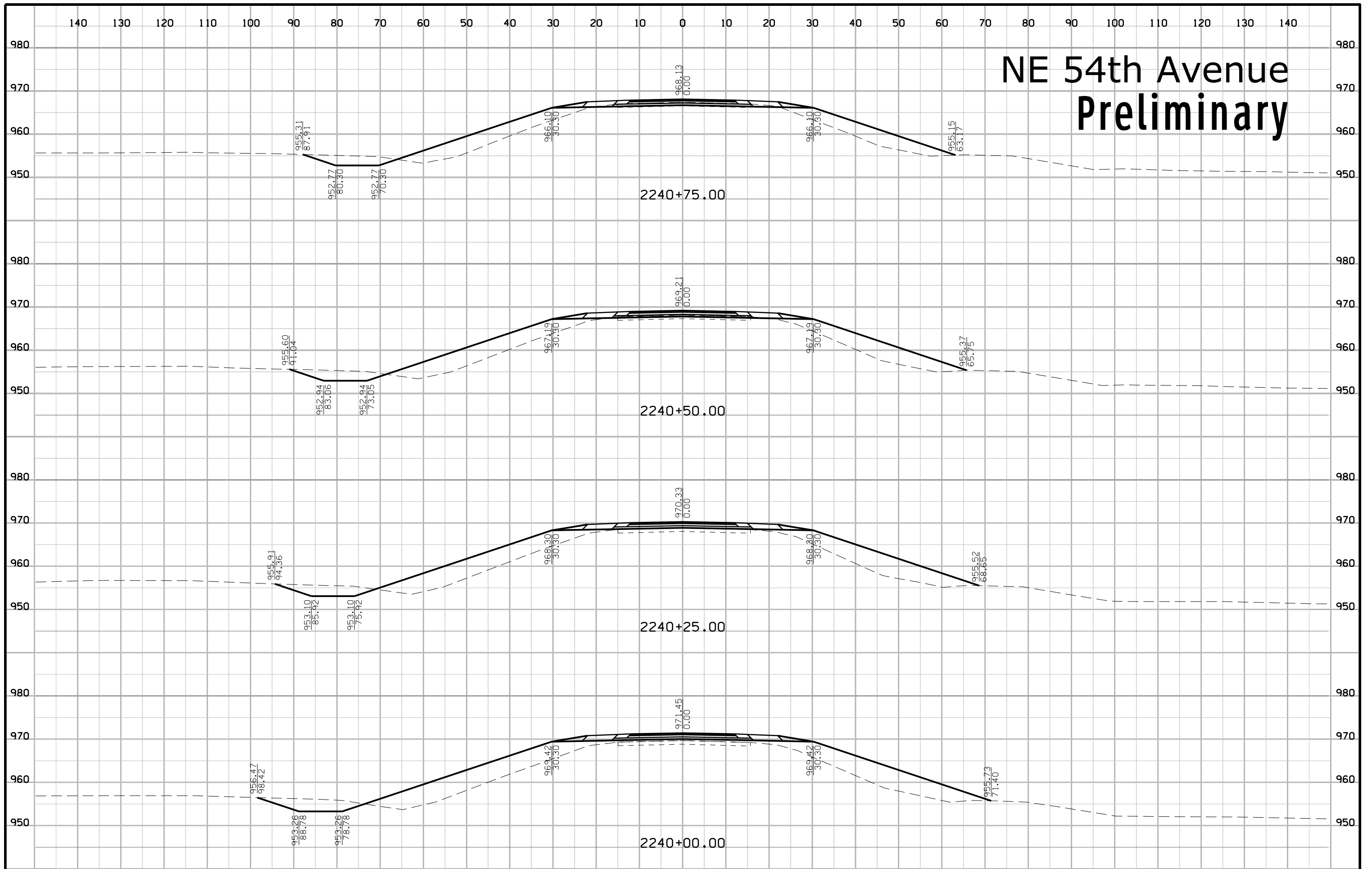
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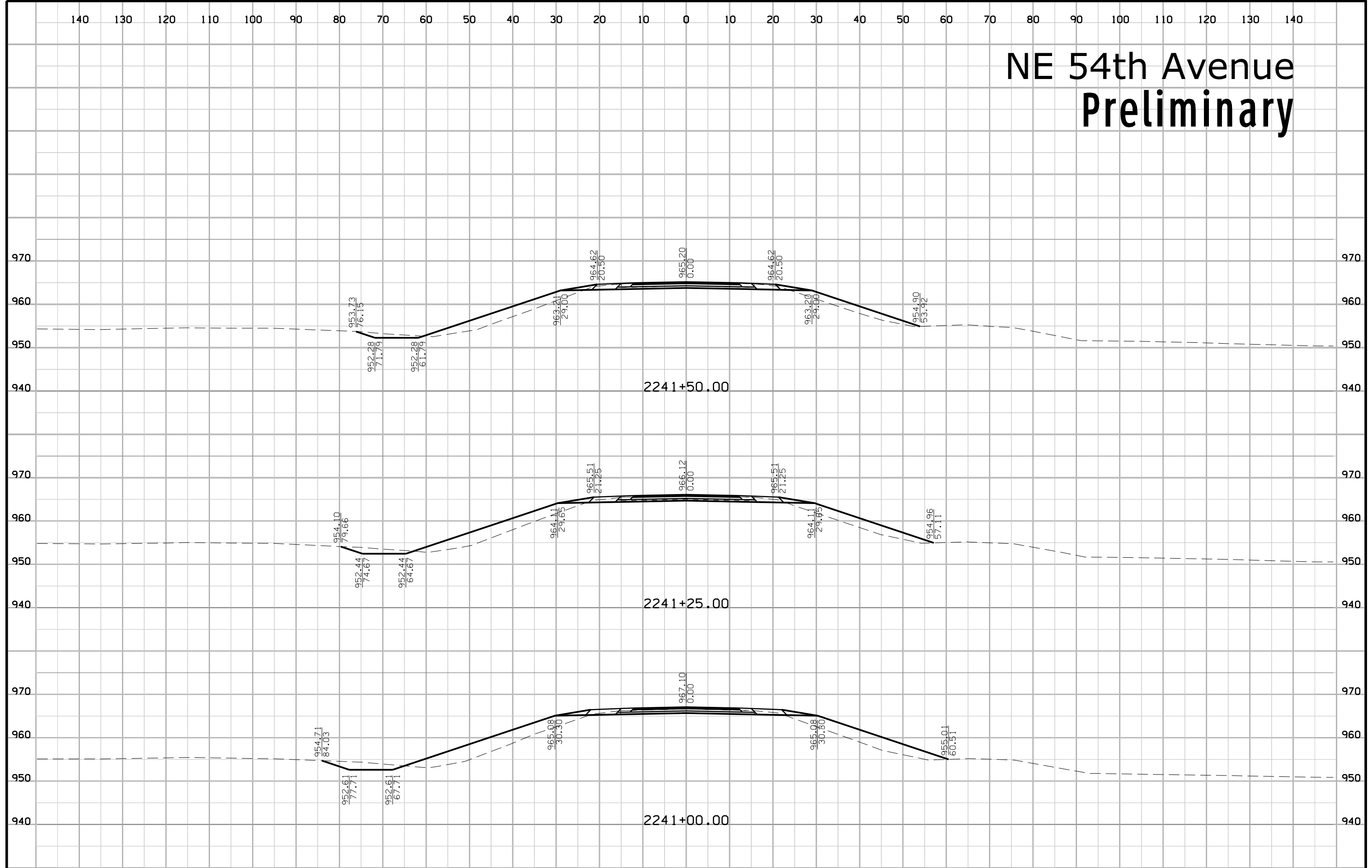
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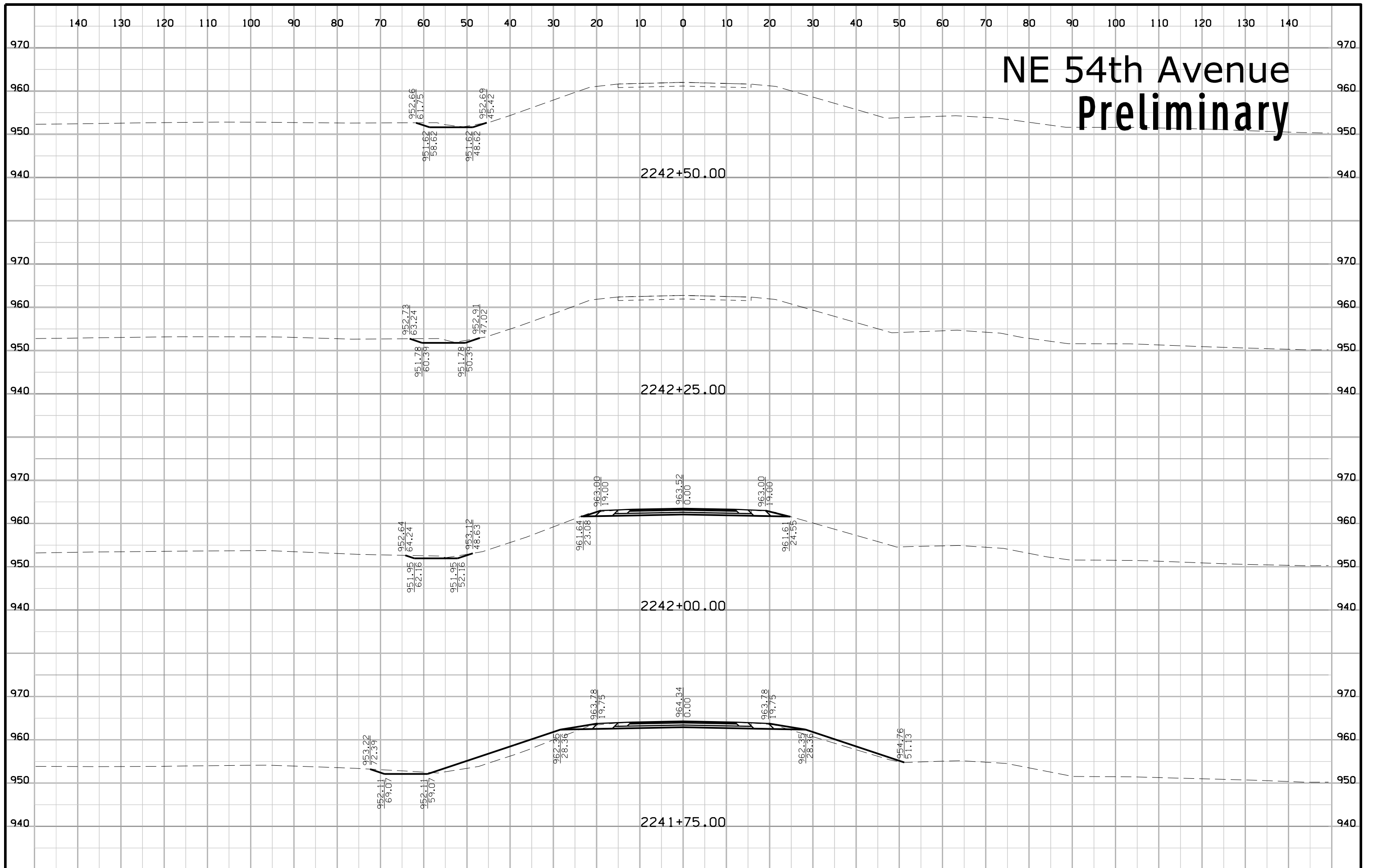
NE 54th Avenue Preliminary



NE 54th Avenue Preliminary



NE 54th Avenue Preliminary



NE 54th Avenue Preliminary

