

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 - 5	Typical Cross Sections and Details
C Sheets	Quantities and General Information
C.1 - 3	Tabulation Sheets
D Sheets	Mainline Plan and Profile Sheets
* D.1	Plan & Profile Legend & Symbol Information Sheet
* D.2 - 6	Interstate 35
E Sheets	Side Road Plan and Profile Sheets
* E.1	Hoover Street
J Sheets	Traffic Control and Staging Sheets
* J.1	Traffic Control Plan
* J.2	Staging Notes
* J.3	Traffic Control & Staging Legend & Symbol Info. Sheet
* J.4 - 11	Staging and Traffic Control Sheets Stage 1-2
M Sheets	Storm Sewer Sheets
M.1	Storm Sewer Tabulations
V Sheets	Bridge and Culvert Situation Plans
V.1 - 27	Bridge and Culvert Situation Plans
W Sheets	Mainline Cross Sections
W.1	Cross Sections Legend & Symbol Information Sheet
W.2 - 71	Mainline Stage 1 Cross Sections
W.72 - 139	Mainline Stage 2 Cross Sections
X Sheets	Side Road Cross Sections
X.1 - 10	Side Road Cross Sections
	* Color Plan Sheets



Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

INTERSTATE ROAD SYSTEM

WARREN COUNTY

GRADE AND PAVE SOUTHBOUND I-35 FROM NORTH OF IOWA HIGHWAY 92 TO SOUTH OF NORTH RIVER

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

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

For Project Location Map
Refer to Sheet A.2

REVISIONS

TOTAL

205

PROJECT IDENTIFICATION NUMBER

00-91-035-030-05

PROJECT NUMBER

IM-NHS-35-2(427)57--03-91

R.O.W. PROJECT NUMBER



EARTHWORK SUMMARY STAGE ONE		
Cut	653,069	CY
Fill +30%	313,352	CY
Waste	339,717	CY

EARTHWORK SUMMARY STAGE TWO		
Cut	98,016	CY
Fill +30%	7,710	CY
Waste	90,306	CY

Hoover Street		I-35	
101-4		101-4	
04-30-02		04-30-02	
DESIGN DATA RURAL		DESIGN DATA RURAL	
2015 AADT	90 V.P.D.	2015 AADT	22,700 V.P.D.
2035 AADT	103 V.P.D.	2035 AADT	29,800 V.P.D.
20-- DHV	-- V.P.H.	20-- DHV	-- V.P.H.
TRUCKS	10 %	TRUCKS	25 %
Total		Total	
Design ESALs	--	Design ESALs	--

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

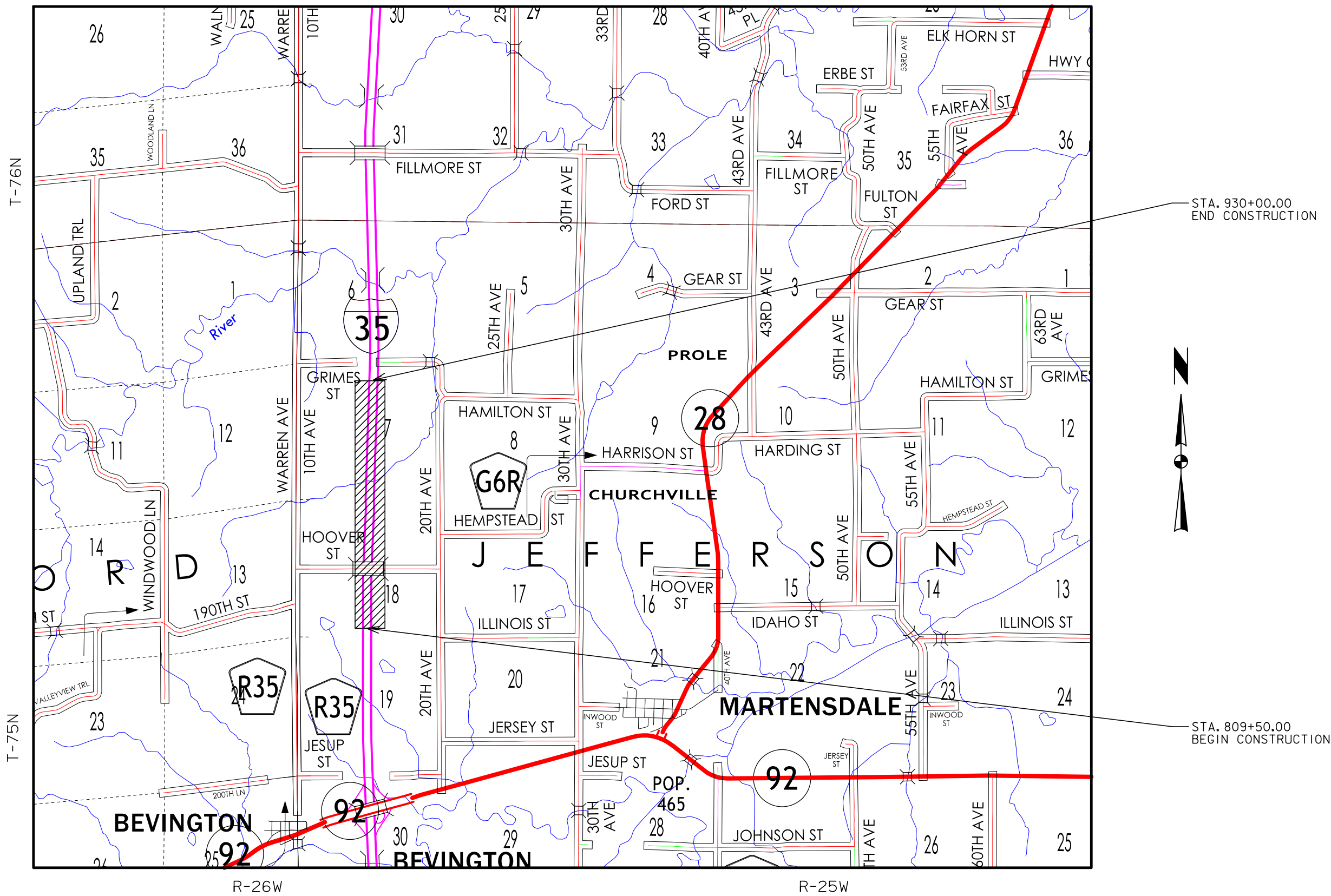
I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

Gabriel A. Nelson, P.E. Date _____

License Number 17382

My License Renewal Date is December 31, 2020

Pages or sheets covered by this seal:
A1-A.2, B.1-B.5, C1-C.3, D.1-D.6, E.1, J.1-J.11, M.1, V.1-V.27, W.1-W.71, W.72-W139, X.1-X.10

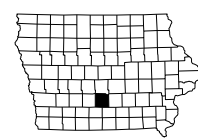


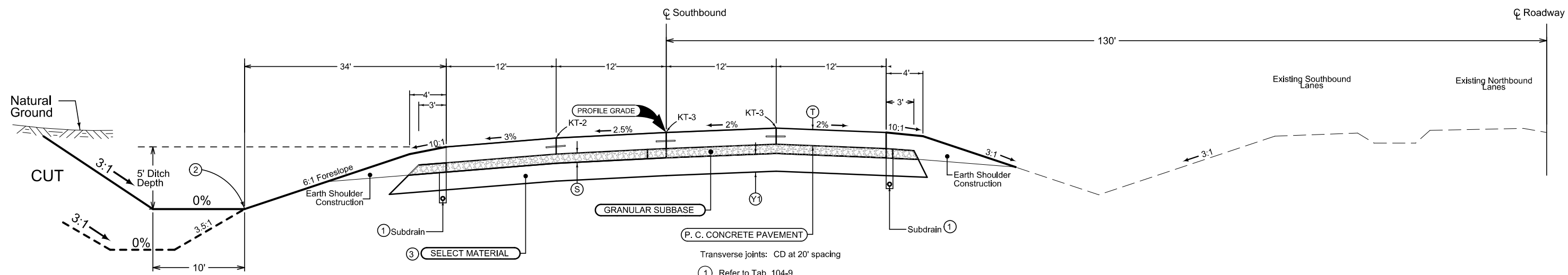
STA. 930+00.00
END CONSTRUCTION



STA. 809+50.00
BEGIN CONSTRUCTION

NOT TO SCALE



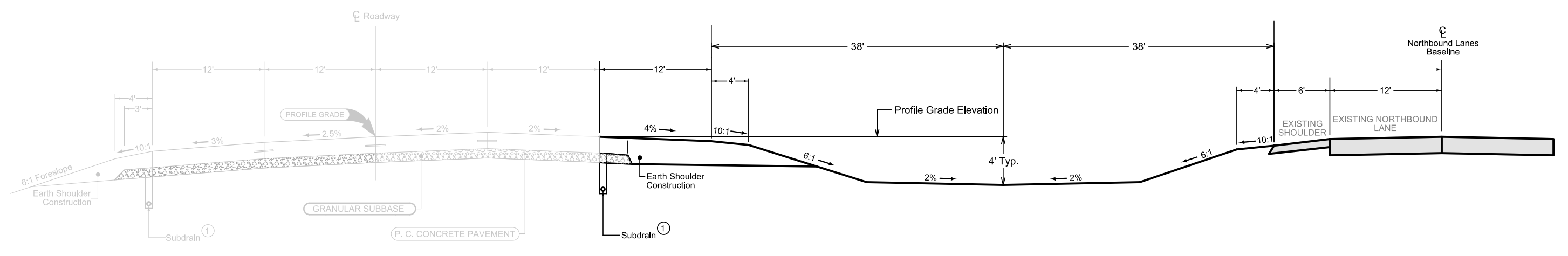


- Transverse joints: CD at 20' spacing
- ① Refer to Tab. 104-9.
 - ② Refer to Project Plan and Cross Sections for Specific Location of Foreslope Change.
 - ③ May Use 12" Select Backfill in Place of Select Material. All Quantities Estimated Based on Select Material.

Normal Selection May Be Modified Appropriately in Areas of Superelevated Curves or Other Locations Specifically Designated by the Engineer.
See Plan and Profile Sheets and Cross Sections for Additional Details of Ditches and Back Slopes.

**TYPICAL CROSS SECTION
SOUTHBOUND LANES
STAGE ONE**

LOCATION		MAINLINE		
ROAD IDENTIFICATION	STATION TO STATION	T Inches	S Inches	Y1 Inches
I-35 SB	809+50 930+00	11.5	6	24

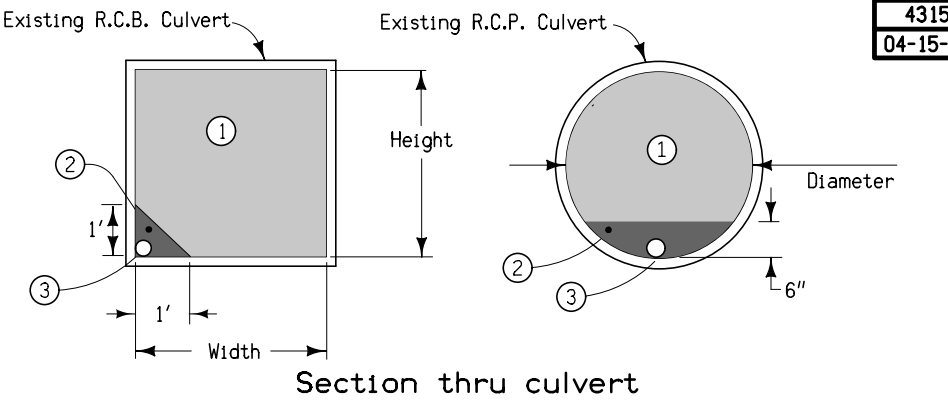
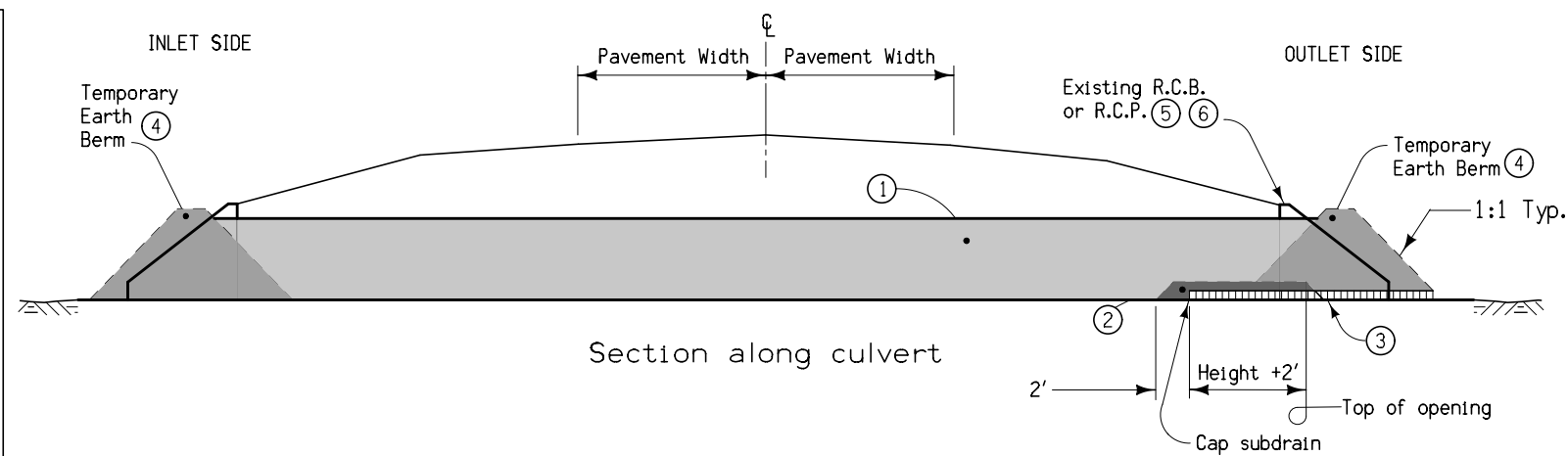
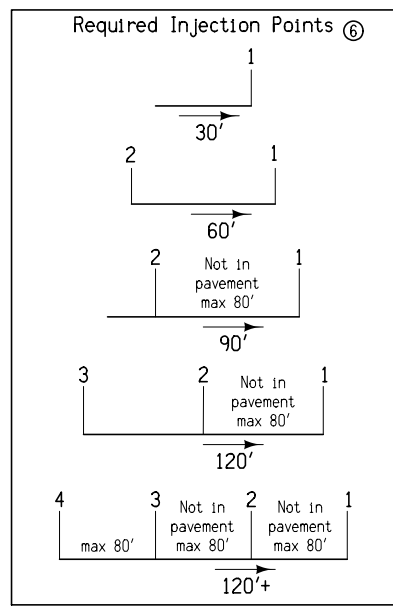


Transverse joints: CD at 20' spacing

① Refer to Tab. 104-9.

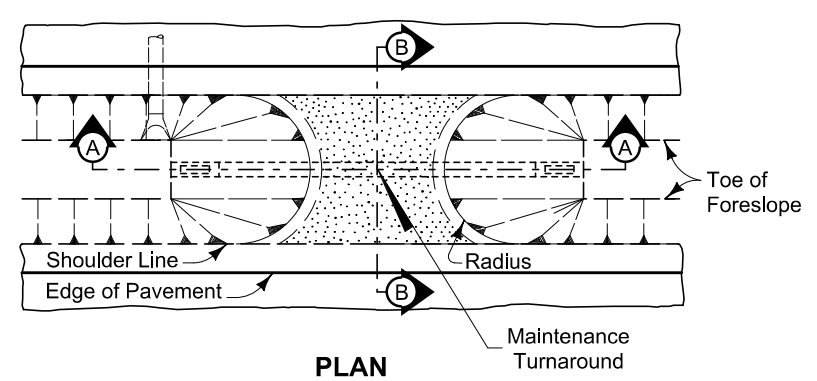
LOCATION	
ROAD IDENTIFICATION	STATION TO STATION
I-35 SB	809+50 930+00

**TYPICAL CROSS SECTION
SOUTHBOUND LANES
STAGE TWO**

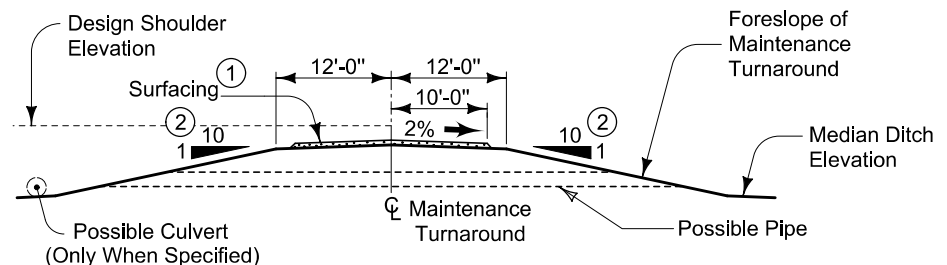


- ① Flowable Mortar.
- ② Granular Backfill.
- ③ 4" subdrain at flowline elevation of culvert shall be extended into the culvert a distance of 2' plus the height of the culvert. Granular Backfill covers subdrain and extends an additional 2'. Subdrain and granular backfill are incidental to flowable mortar.
- ④ Ends of culvert shall be plugged sufficiently to retain flowable mortar. Temporary earth berms are incidental to flowable mortar.
- ⑤ Removal of headwalls may be required.
- ⑥ Outlet shall be filled first. See injection point detail for additional information.

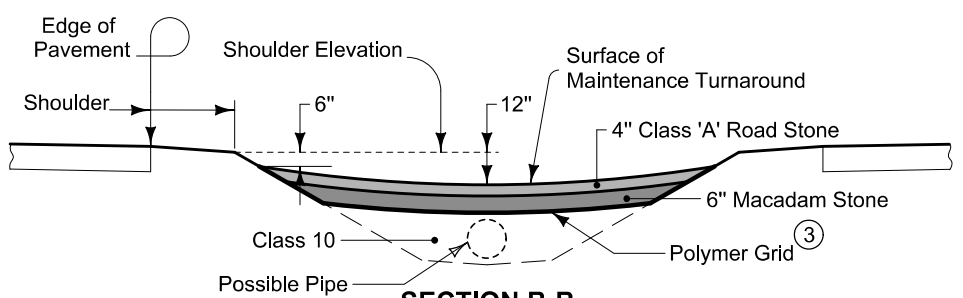
DETAILS OF CULVERT ABANDONMENT WITH FLOWABLE MORTAR
(Rectangular structures less than 8' in either height or width.
Circular structures less than 10' Dia.)



- ① Surfacing quantities based on a 6 inch layer of Macadam Stone base and a 4 inch layer of Class 'A' Road Stone. Apply surfacing as directed by the Engineer.
- ② Construct 8:1 foreslope when drainage pipe is incorporated into the maintenance turnaround.
- ③ Install Polymer Grid between Class 10 and stone material.
- ④ See Standard Road Plan DR-212.



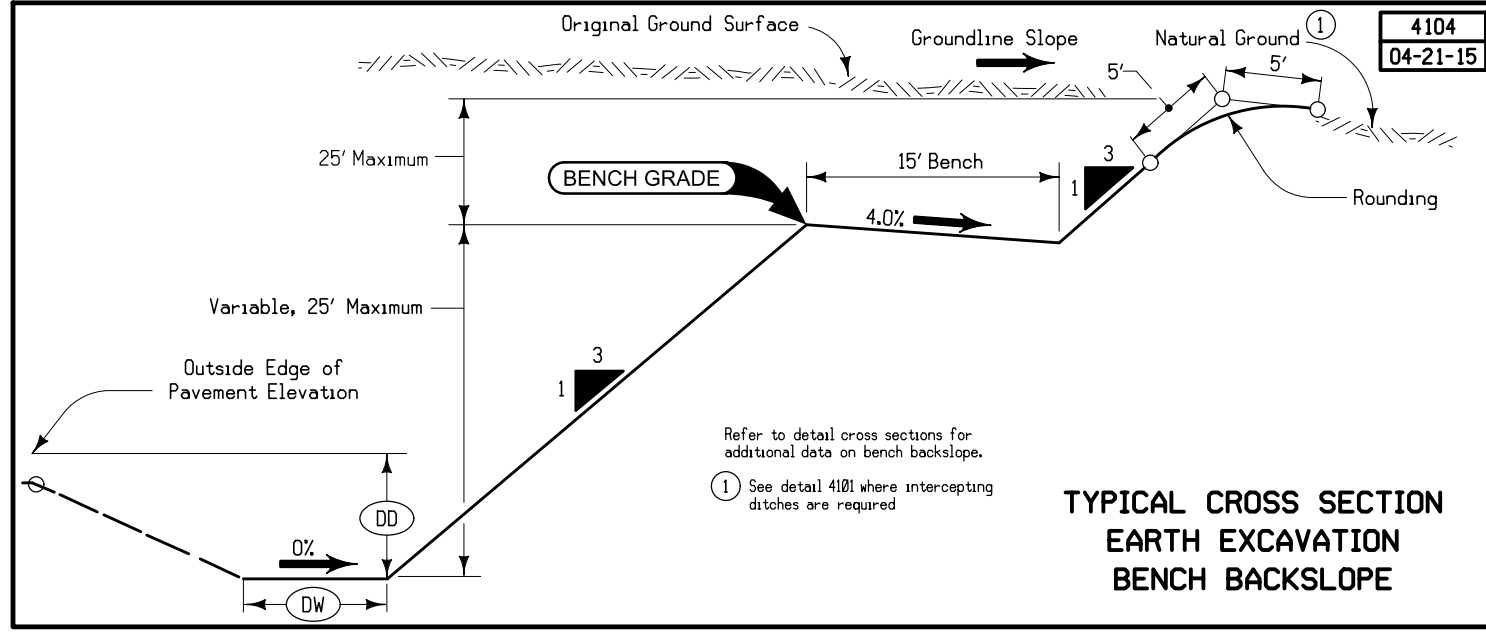
SECTION A-A



SECTION B-B

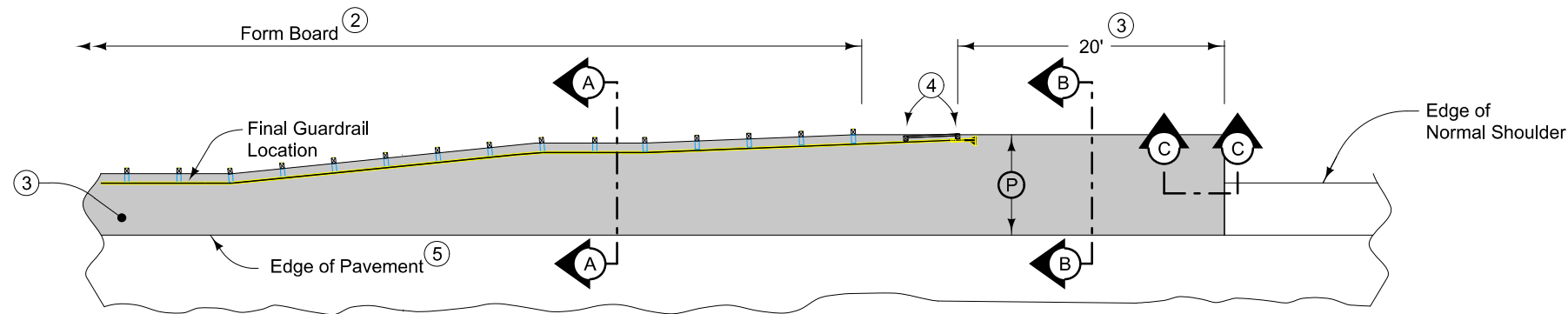
MAINTENANCE TURNAROUND

Location	Class 'A' Road Stone	Macadam Stone	Polymer Grid	Class 10	Pipe Length	Beveled Pipe & Guard ④	Radius	Remarks
Road Identification	Station	TONS	TONS	SY	CY	LF	EACH	FT



Refer to detail cross sections for additional data on bench backslope.
① See detail 4101 where intercepting ditches are required

TYPICAL CROSS SECTION EARTH EXCAVATION BENCH BACKSLOPE



PLAN VIEW

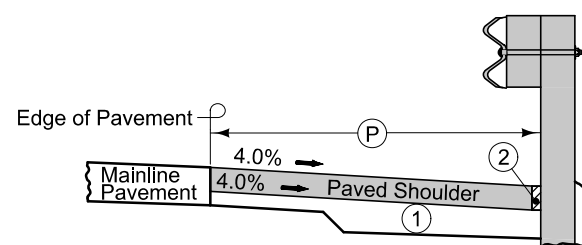
9" HMA Paved Shoulder at guardrail. 8" PCC may be substituted with the following jointing layout:

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

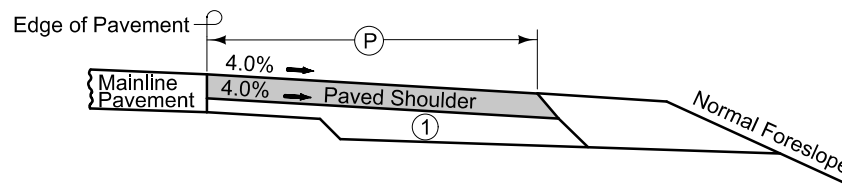
Compaction of HMA is required to face of guardrail post. Hand compaction will be allowed under guardrail. Removal and reinstallation of guardrail will be allowed with no additional payment.

Refer to Tabulation 112-9 for shoulder quantities.

- ① For subgrade treatment, refer to other details in the plan.
- ② PCC option only: When guardrail posts are installed prior to construction of PCC paved shoulder, fasten form board to the face of guardrail posts for the length shown. Refer to note 4 for final 2 posts.
- ③ Continue paved shoulder to existing paved shoulder or 20 feet beyond the center of the first post.
- ④ Shoulder may be notched for final 2 posts or post sleeves may be installed through pavement. Do not drive posts through pavement.
- ⑤ 'KT-1 joint for PCC shoulder.
'B' joint for HMA shoulder.

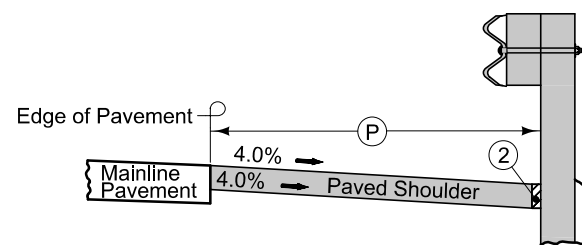


Section A-A

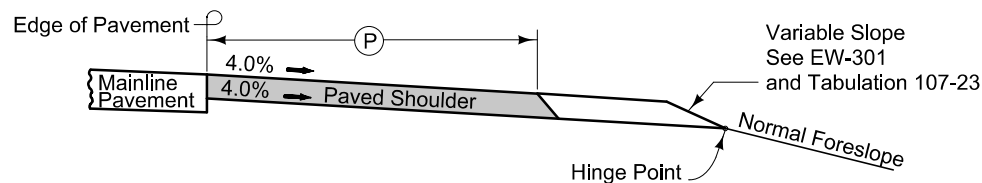


Section B-B

NEW CONSTRUCTION

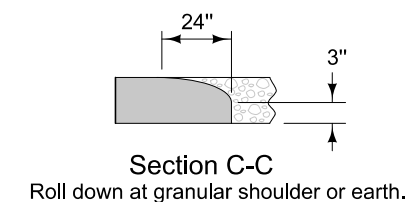


Section A-A



Section B-B

EXISTING SHOULDER



Section C-C
Roll down at granular shoulder or earth.

PAVED SHOULDER AT GUARDRAIL

CULVERT REMOVAL OR ABANDONMENT

Refer to Details 4315 and 4316

110-9
MODIFIED

* Not a bid item

Location Station	Description	Culvert Removal	Fill Material		4" Perforated Subdrain*	Remarks
			Flowable Mortar	Granular Backfill*		
			LF	TON		
811+37.70	LT 24" RCP	8.0				Remove FES RT and D section
811+37.70	RT 18" RCP		4.5			Median drain RT. Remove FES RT
831+37.00	LT 24" RCP	8.0				Remove FES RT and D section
831+37.00	RT 18" RCP		7.9			Median drain RT. Remove FES RT
841+11.37	LT 24" RCP	8.0				Remove FES RT and D section
841+11.37	RT 18" RCP		5.4			Median drain RT. Remove FES RT
850+50.00	LT 24" RCP	8.0				Remove FES RT and D section
859+33.11	18" CMP	18.0				Existing median drain LT
	18" RCP	56.0				Existing median drain, MED (Stage 2)
859+36.10	LT 24" CMP	150.0				Existing ditch letdown
869+29.53	LT 24" RCP	8.0				Remove FES RT and D section
869+34.14	RT 18" RCP		7.1			Median drain RT. Remove FES RT
877+30.20	18" CMP	20.0				Existing median drain LT
	18" RCP	60.0				Existing median drain, MED (Stage 2)
884+29.50	LT 24" RCP	8.0				Remove FES RT and D section
884+29.28	RT 18" RCP		5.1			Median drain RT. Remove FES RT
894+53.34	24" RCP		16.1			
902+78.75	LT 18" RCP	19.0				Existing median drain, MED (Stage 1)
902+78.75	RT 18" RCP	65.0				Existing median drain, MED (Stage 2)
908+50.00	RT 18" RCP		6.1			Median drain RT. Remove FES RT
911+53.00	LT 24" RCP	8.0				Remove FES RT and D section
920+26.47	RT 18" RCP		4.7			Median drain RT. Remove FES RT
920+26.47	LT 24" RCP	8.0				Remove FES RT and D section
924+31.88	36" CMP	109.0				Left ditch letdown
928+22.97	18" CMP	90.0				Existing median drain LT
	18" RCP	68.0				Existing median drain, MED (Stage 2)

REMOVAL OF EXISTING STRUCTURES

110-2
04-16-13

Location	Description	Remarks
877+71.80	4'x4' RCB	Remove headwalls LT
905+57.07	4'x4' RCB	Remove headwalls LT
1822+71.00	2'x2'x168' RCB and flume	Remove
1824+75.00	2'x2'x143' RCB and flume	Remove
1829+25.00	2'x2'x142' RCB and flume	Remove

ACCESS POINTS AND SAFETY RAMPS

Refer to Cross-Sections

102-3
10-15-13

Length of unclassified pipe calculated is based on using Reinforced Concrete Pipe.

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

*Predetermined for access point not constructed with this project.

Location		Type	Length of Opening ①			Pipe Culvert ③			Aprons	Driveway Surface Area		Driveway Surfacing Material	Remarks					
Station	Side	A, B, C, Safety Ramp, or Predetermined*	Case	1 1/2"	3"	W	PR	SR		H	Size			Pipe Length	Lt.	Rt.		
				Dropped Curb	Dropped Curb												FT	FT
1817+00.00	LT	C	1 or 2	LF	LF	15.0		15.0	1.9	15	38.0	27.3	23.0	2			27.126	
1818+80.00	LT	C				30.0		15.0									56.930	See M Sheets for pipe info
1819+75.80	LT	C				16.0		15.0									38.650	See M Sheets for pipe info
1830+81.40	LT	C				15.0		15.0									96.190	

REMOVAL OF PAVEMENT

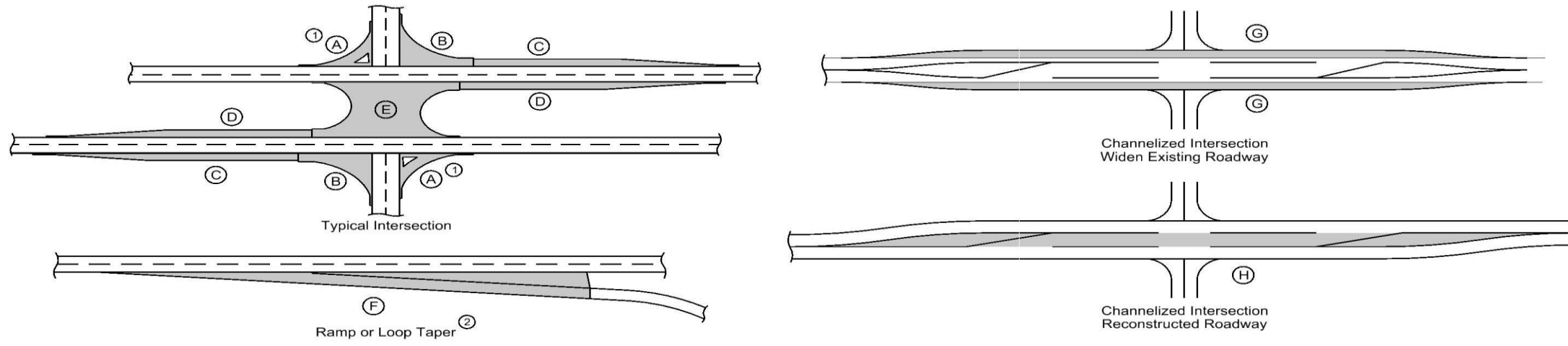
Refer to Tabulation 102-5

110-1
04-16-13

* Not a Bid Item

Begin Station	End Station	Side	Pavement Type	Area	Saw Cut*	Remarks
				SY	LF	
809+50.00	925+03.60	SB	HMA	51349.3		Includes paved shoulders
925+03.60	931+85.20	SB	PCC	2457.4	85.2	
801+66.95	809+50.00	SB	PCC	1819.8	783.0	Existing crossover

PCC PAVEMENT

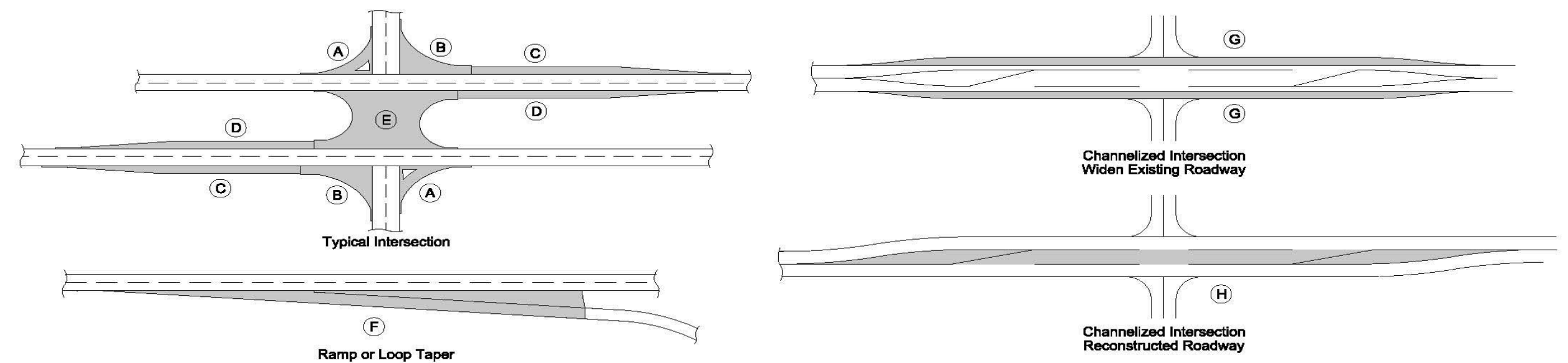


- ① Does not include raised island area or curb. Refer to tabulation 112-4 for quantities.
- ② Refer to PV-410, PV-411, PV-412, and PV-414.
- ③ Quantity includes Pavement Header.

Road Identification	Location		Mainline			Area ③								Total Area By Pavement Thickness		Special Backfill	Modified Subbase	Granular Subbase	Remarks
	Direction of Travel	Station to Station	Width	Length	Area	A ①	B	C	D	E	F ②	G	H	SY					
														10 IN	11 1/2 IN				
I-35	SB	809+50.00 930+00.00	48.0	12050.0	64266.7										64266.7			72300.0	

SELECT TREATMENT

Possible Detail: G 4D Grade Delay S



Moisture control is required for select soils treatment and is incidental to placement of the material.

Road Identification	Location		Mainline								Section Area								Total Area (Mainline + Section)	Select Treatment Thickness Y1	Contractor Furnished Select Treatment	Remarks		
	Direction of Travel	Station to Station	Length	Width	Shoulder Width				Pavement & Subgrade Thickness X	Area	A	B	C	D	E	F	G	H					Area	
					Median Side		Outside																	
					GM	PM	PO	GO																
I-35	SB	809+50.00 930+00.00	12050.0	24.0	3.0	12.0	12.0	3.0	17.5	650700.0											650700.0	24.0	48200.0	

SURVEY SYMBOLS

	IN Storm Sewer Intake		FOB Underground Fiber Optic Co. 2
	FW Wire Fence		TLA Underground Telephone Line Co. 1
	INB Storm Sewer Beehive Intake		ELA Underground Electric Line Co. 1
	PR Electric Riser Pole		FOA Underground Fiber Optic Co. 1
	GP Guard Post (Less Than 4 Posts)		WLA Underground Water Line Co. 1
	SL Speed Limit Sign		STB Storm Sewer Line Co. 2
	SI Sign		SAA Sanitary Sewer Line Co. 1
	TIL Tile Line		ELB Underground Electric Line Co. 2
	GDL Guard Rail Steel		TVA Underground TV Cable Co. 1
	LUM Luminaire		FOC Underground Fiber Optic Co. 3
	UE Utility Elevation		
	WV Water Valve		
	GPR Guard Post (4 or More Posts)		
	FP Filler Pipe		
	OUT Tile Outlet		
	MIS Miscellaneous		
	PPA Power Pole Co. 1		
	AST Above Ground Storage Tank		
	LP L.P. Tank		
	FLg Flag Poles		
	WHD Water Hydrant		
	WEL Well		
	MH Utility Access (Manhole)		
	TPD Telephone Pedestal		
	MM Mile Marker Post		
	FCL Chain Link and Security Fence		
	EB Electrical Box		
	TV Satellite TV Dish		
	UB Utility Box		
	UST Underground Tank		
	GV Gas Valve		
	WHU RV Water Hook Up		
	SEP Septic Tank		
	FHD Fire Hydrants		
	FWD Wood Fence		
	RET Retaining Walls		
	D Centerline Draw or Stream (Down)		
	BNK Stream Bank		
	RIP Rip-Rap		
	EW Edge of Water		
	DU Centerline Draw or Stream (Up)		
	ENT Centerline BL of Entrance		
	ENU Edge Unpaved Entrance & Parking		
	EG Edge of Gravel Road		
	SNP Unpaved Shoulder		
	DIK Centerline of Dike or Dam		

UTILITY LEGEND

This is a POINT 25 Project and is subject to the provisions of IAC 761-115.25.

- E1 -
MidAmerican Energy Company
Eric Heikes
10510 Douglas Avenue
Urbandale, IA 50322
515-252-6497
echeikes@midamerican.com

- T1 -
CenturyLink
Phil Williams
2103 E University
Des Moines, IA 50317
515-263-7272
Phil.Williams@CenturyLink.com

- W -
Warren Water District
Peggy Crabbs
1204 East 2nd Avenue
Indianola, IA 50125
515-962-1200
peggy@warrenwaterdistrict.com

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
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

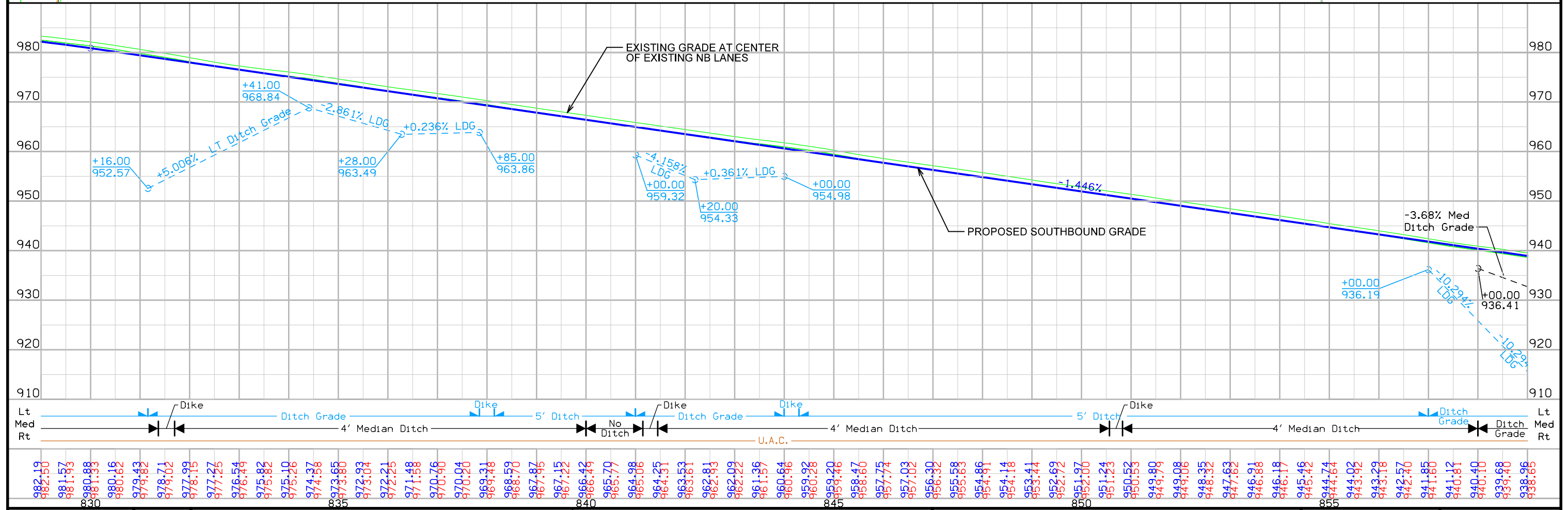
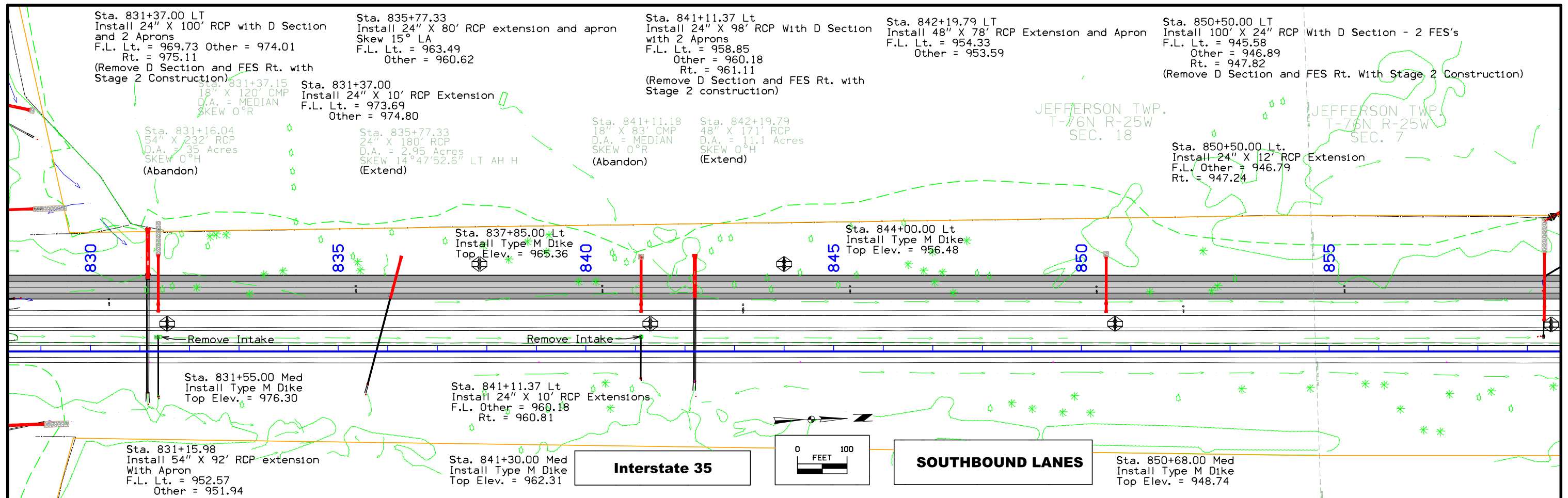
Symbol	Description
	Reference Point
	Station
	Survey Line
	Section Corner
	Ground Line Intercept
	Saw Cut
	Guardrail
	Trench Drain
	HighTension Cable Guardrail
	Sheet Pile
	Pavement Removal
	Clearing & Grubbing Area

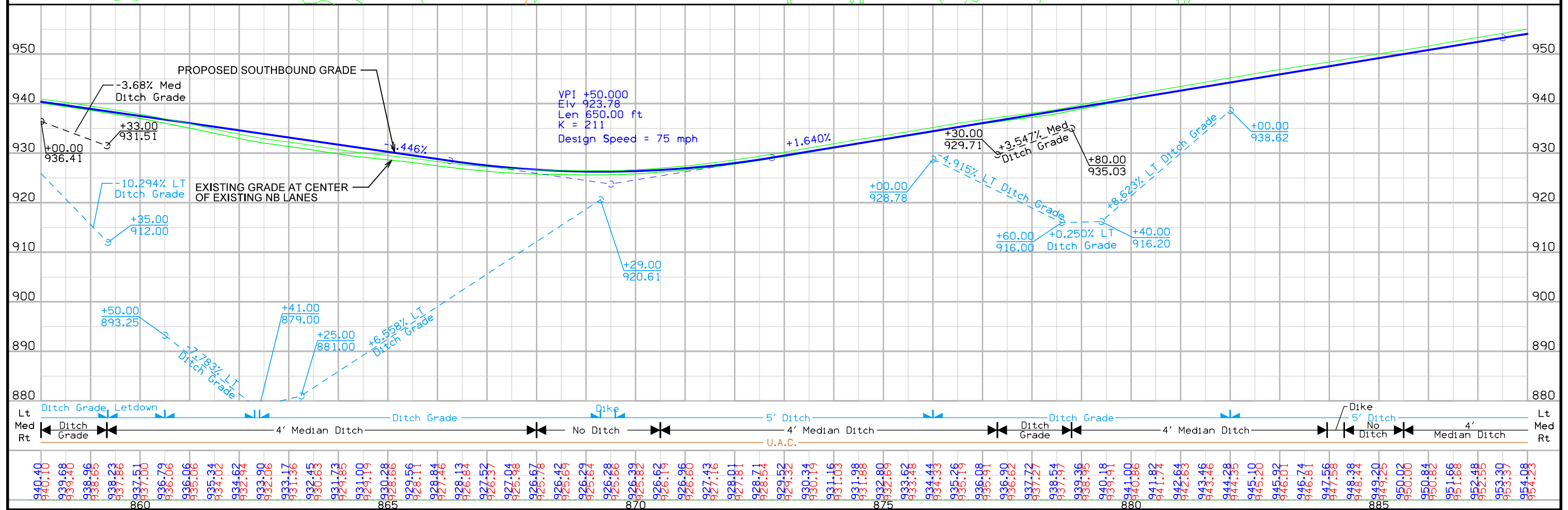
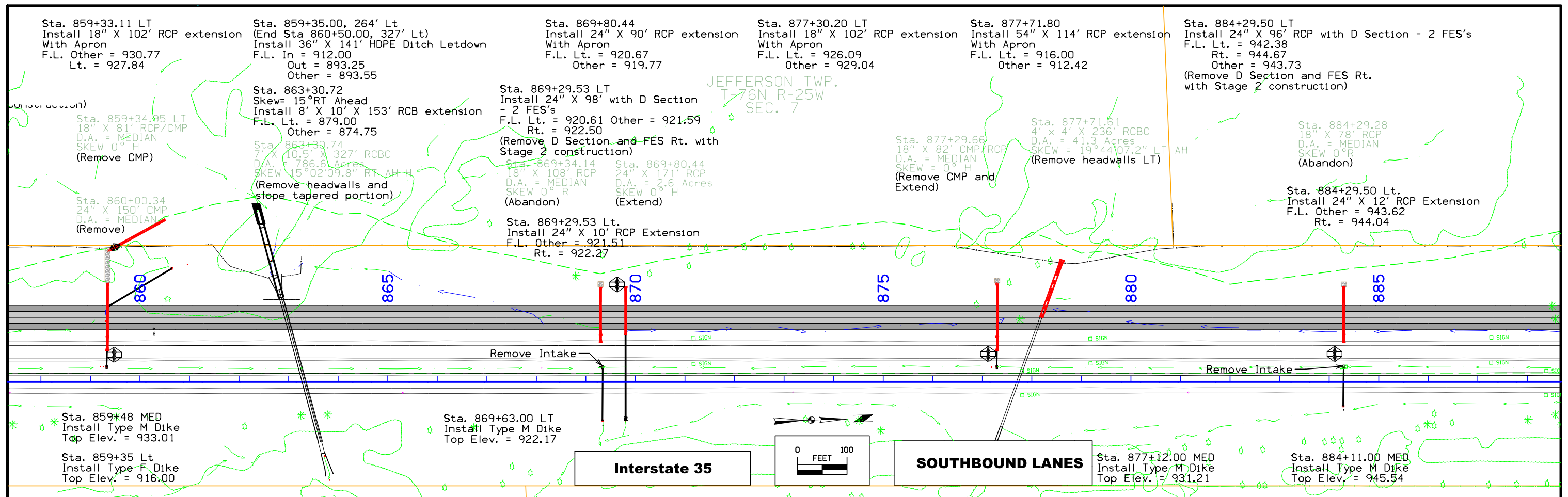
RIGHT-OF-WAY LEGEND

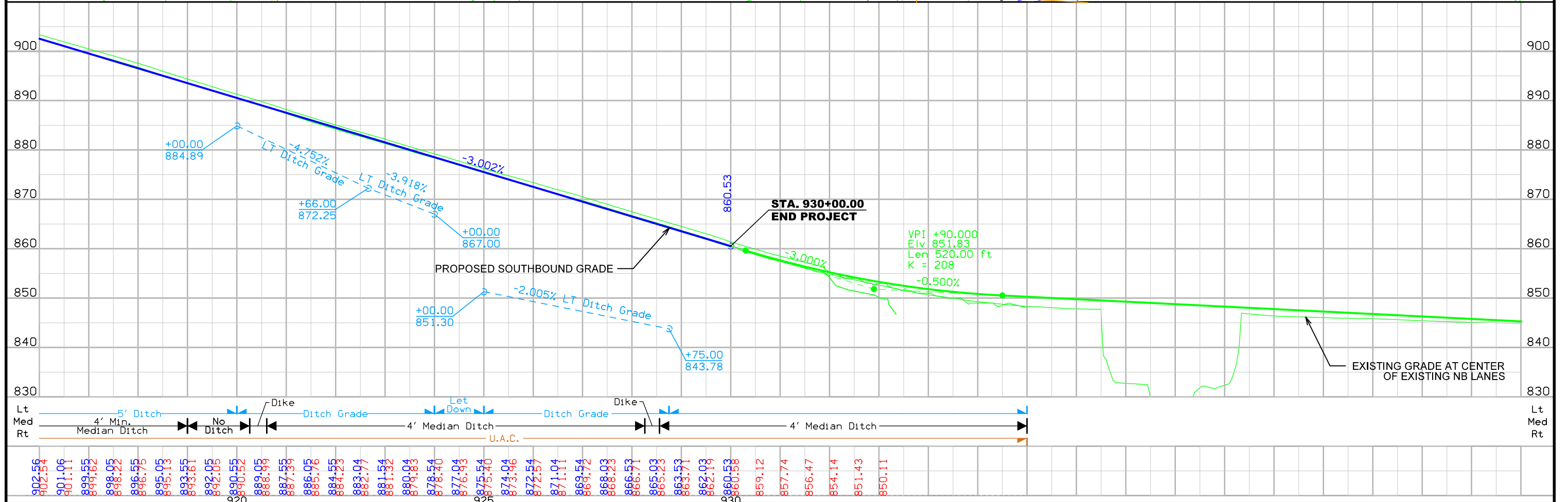
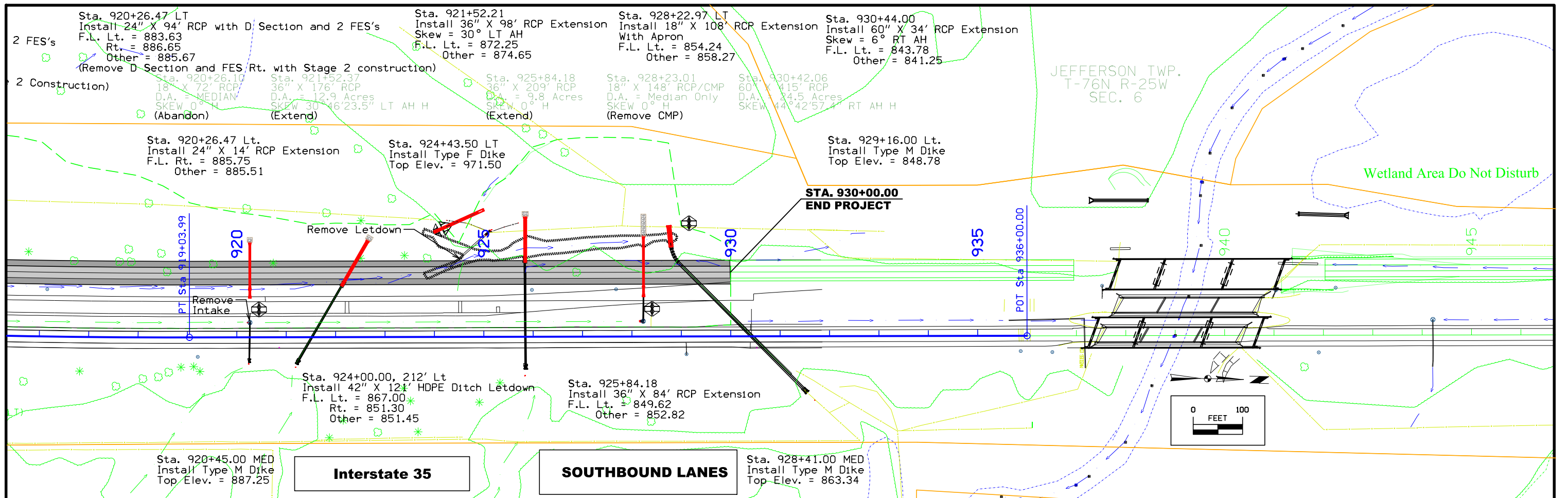
	Proposed Right-of-Way
	Existing Right of Way
	Existing and Proposed Right-of-Way
	Easement and Existing Right-of-Way
	Easement (Temporary)
	Easement
	Access Control
	Property Line

PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

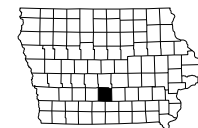
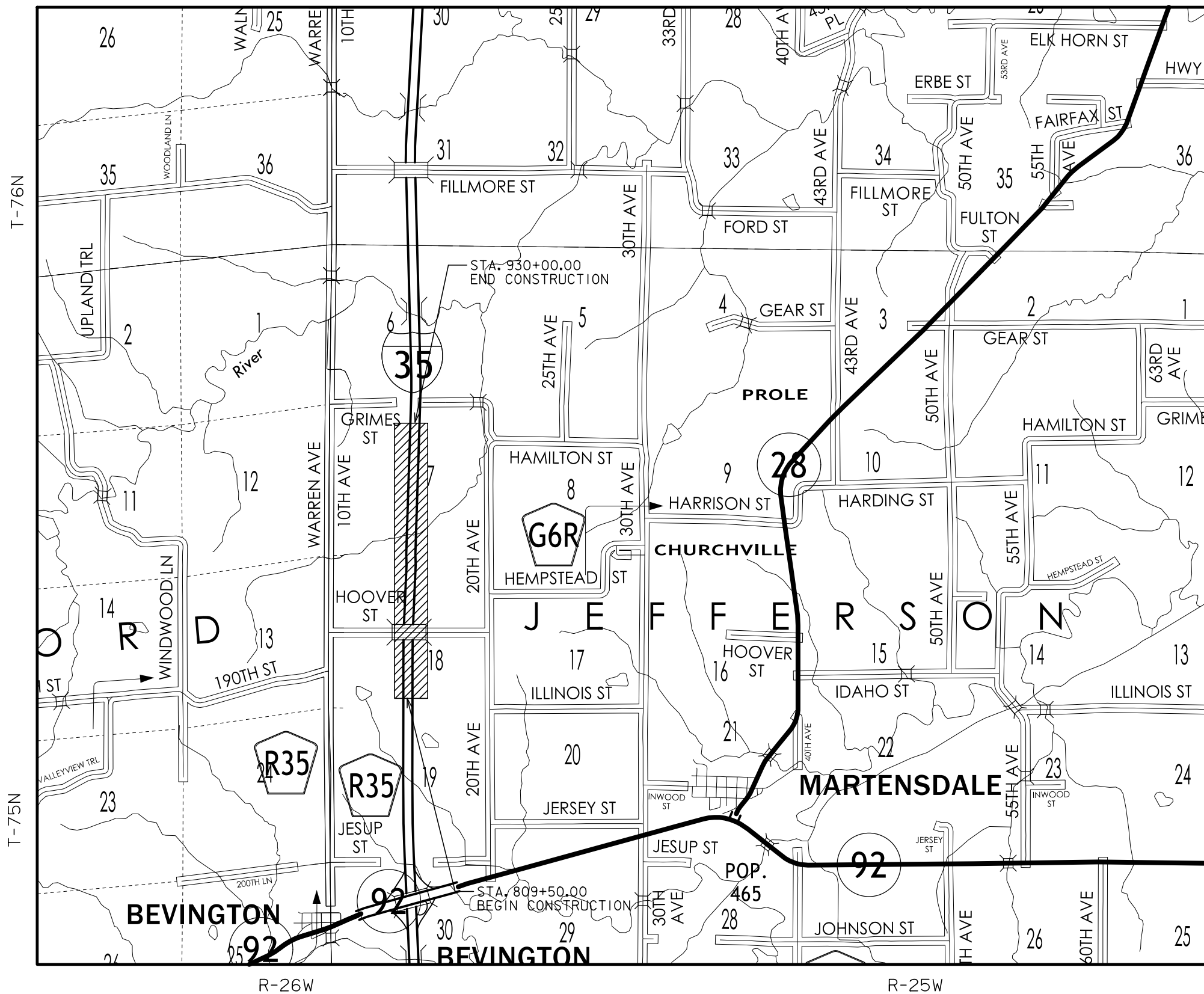
(COVERS SHEET SERIES D, E, F, & K)



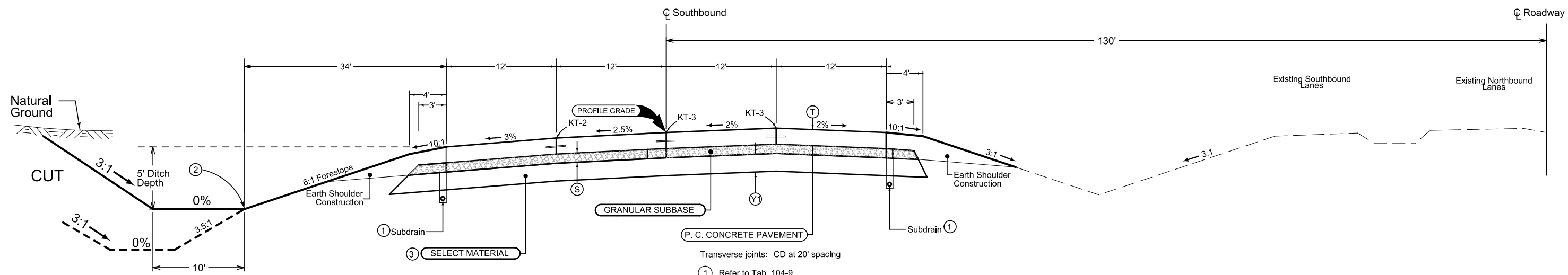




Warren	ROW: IMN-035-2(473)57--0E-91					PIN 00-91-035-030													
	Clanton Creek 2 miles S of IA 92 to IA 5																		
		STATE		COUNTY		CITY			TEMP EASE	BORROW									
PARCEL NO.	OWNER NAME	FEE	EASE	FEE	EASE	FEE	EASE	EXCESS			FEE	T.E.	MITIGATION	OTHER	HOUSE	BUILDING(S)	A/C ONLY	TOTAL ACQ.	
1	Lehigh Clay Properties, LTD - Fee	.85 AC			0.12 AC														
2	Thomas Connor - Fee	3.19 AC			0.06 AC														
3	35 HUB LLC - Fee												0.03 AC						
4	Douglas Gladson - Fee	2.17 AC																	
5	Harlan L. Tomlinson - Fee	1.34 AC																	
6	Joseph L. Keller - Fee	.2 AC																	
7	Randy Rudolf - Fee	.04 AC			0.05 AC								0.01 AC						
7 Parcels	"TOTALS	7.79 AC	0 AC	0 AC	0.23 AC	0 AC	0 AC	0 AC	0.04 AC	0 AC	0 AC	0 AC	0 AC						
		0 SF	0 SF	0 SF	0 SF	0 SF	0 SF	0 SF	0 SF	0 SF			0 SF						



NOT TO SCALE

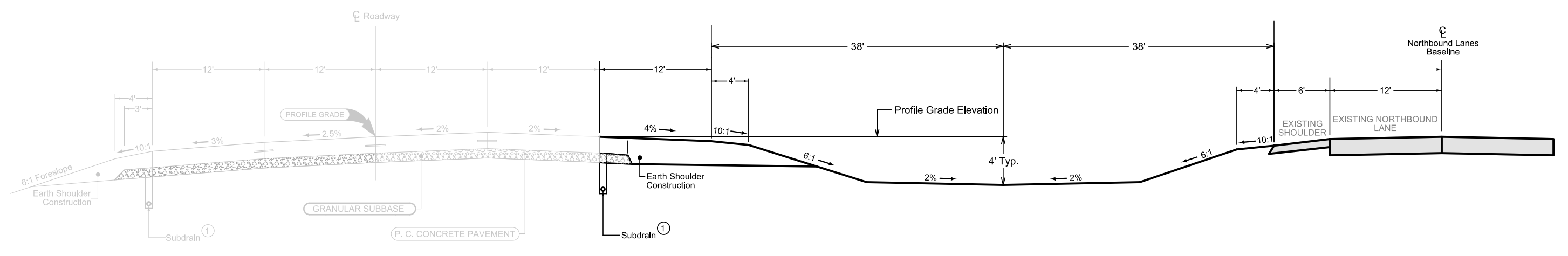


- Transverse joints: CD at 20' spacing
- ① Refer to Tab. 104-9.
 - ② Refer to Project Plan and Cross Sections for Specific Location of Foreslope Change.
 - ③ May Use 12" Select Backfill in Place of Select Material. All Quantities Estimated Based on Select Material.

LOCATION		MAINLINE		
ROAD IDENTIFICATION	STATION TO STATION	T Inches	S Inches	Y1 Inches
I-35 SB	809+50 930+00	11.5	6	24

Normal Selection May Be Modified Appropriately in Areas of Superelevated Curves or Other Locations Specifically Designated by the Engineer.
See Plan and Profile Sheets and Cross Sections for Additional Details of Ditches and Back Slopes.

**TYPICAL CROSS SECTION
SOUTHBOUND LANES
STAGE ONE**

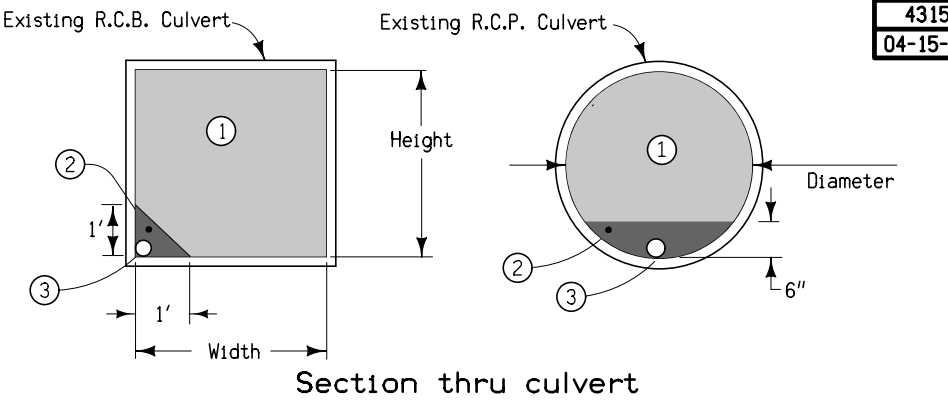
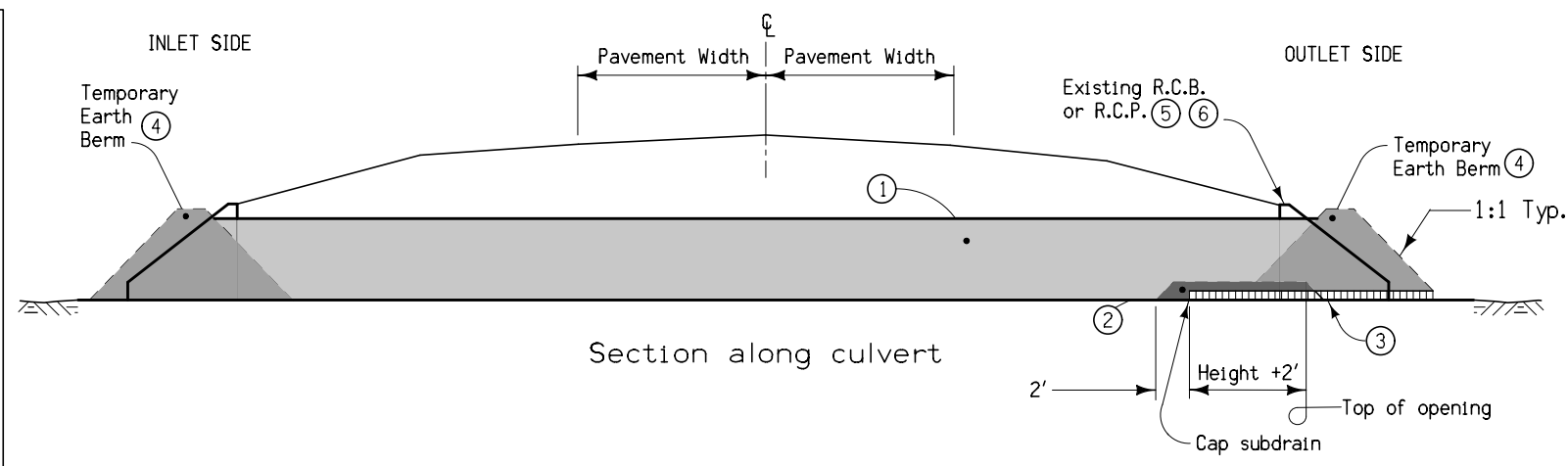
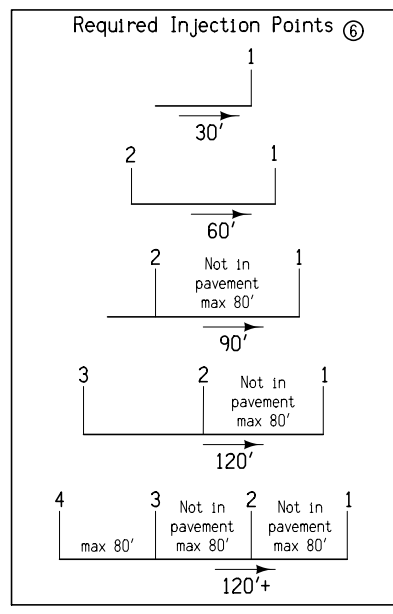


Transverse joints: CD at 20' spacing

① Refer to Tab. 104-9.

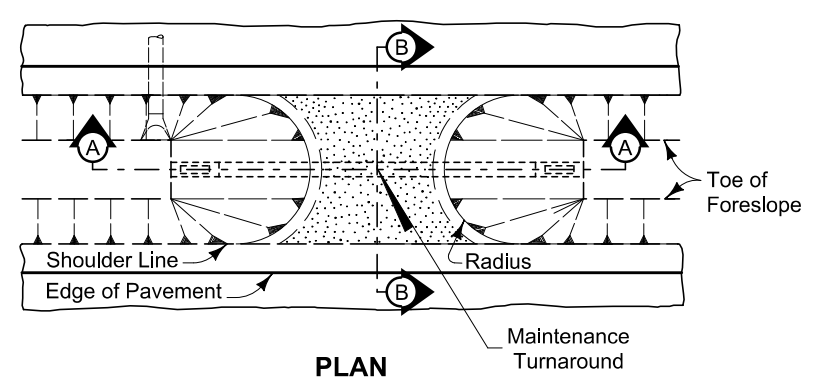
LOCATION	
ROAD IDENTIFICATION	STATION TO STATION
I-35 SB	809+50 930+00

**TYPICAL CROSS SECTION
SOUTHBOUND LANES
STAGE TWO**

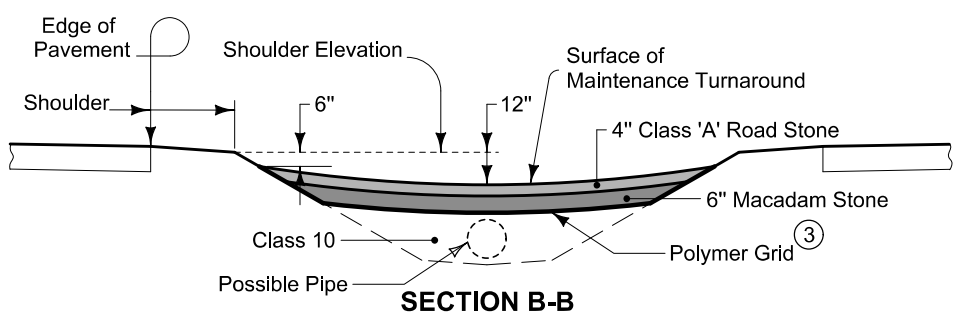
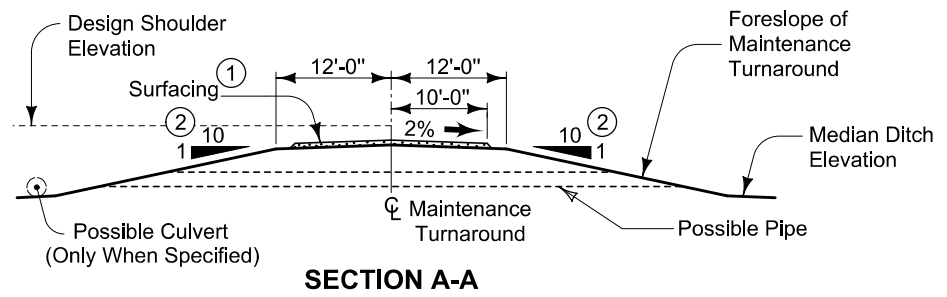


- ① Flowable Mortar.
- ② Granular Backfill.
- ③ 4" subdrain at flowline elevation of culvert shall be extended into the culvert a distance of 2' plus the height of the culvert. Granular Backfill covers subdrain and extends an additional 2'. Subdrain and granular backfill are incidental to flowable mortar.
- ④ Ends of culvert shall be plugged sufficiently to retain flowable mortar. Temporary earth berms are incidental to flowable mortar.
- ⑤ Removal of headwalls may be required.
- ⑥ Outlet shall be filled first. See injection point detail for additional information.

DETAILS OF CULVERT ABANDONMENT WITH FLOWABLE MORTAR
(Rectangular structures less than 8' in either height or width.
Circular structures less than 10' Dia.)

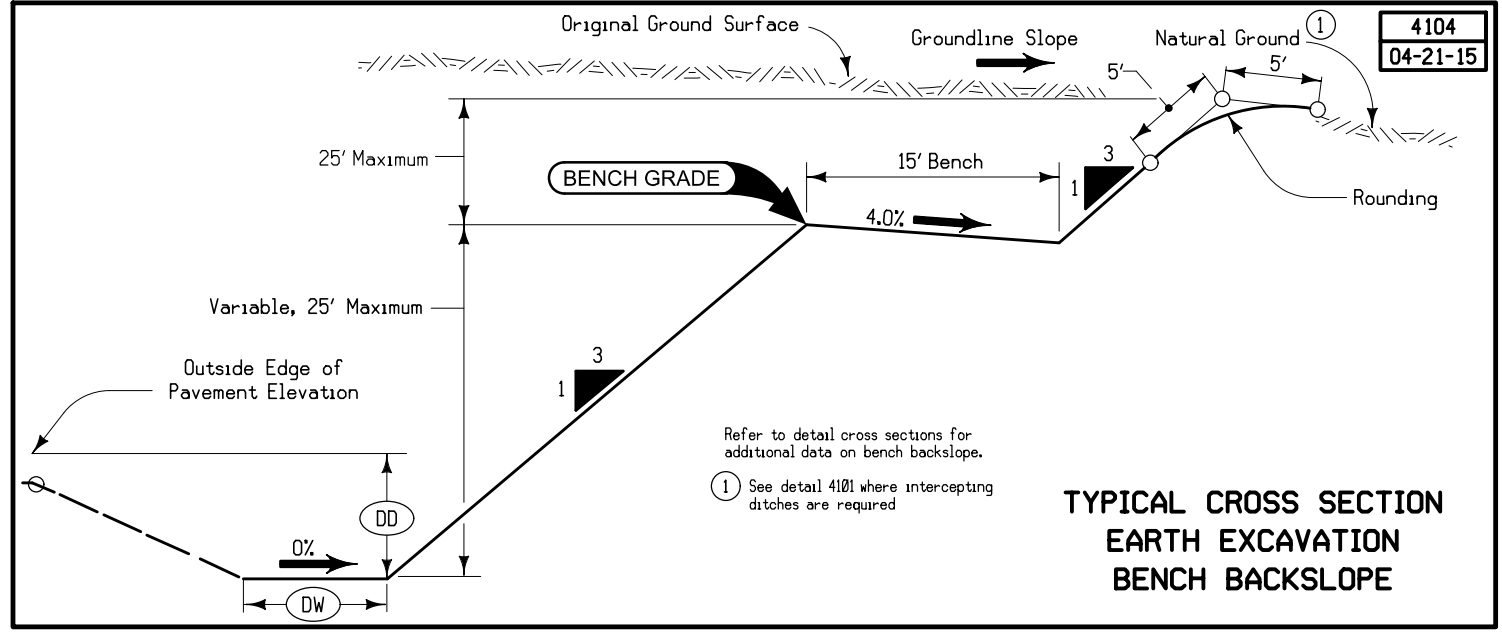


- ① Surfacing quantities based on a 6 inch layer of Macadam Stone base and a 4 inch layer of Class 'A' Road Stone. Apply surfacing as directed by the Engineer.
- ② Construct 8:1 foreslope when drainage pipe is incorporated into the maintenance turnaround.
- ③ Install Polymer Grid between Class 10 and stone material.
- ④ See Standard Road Plan DR-212.



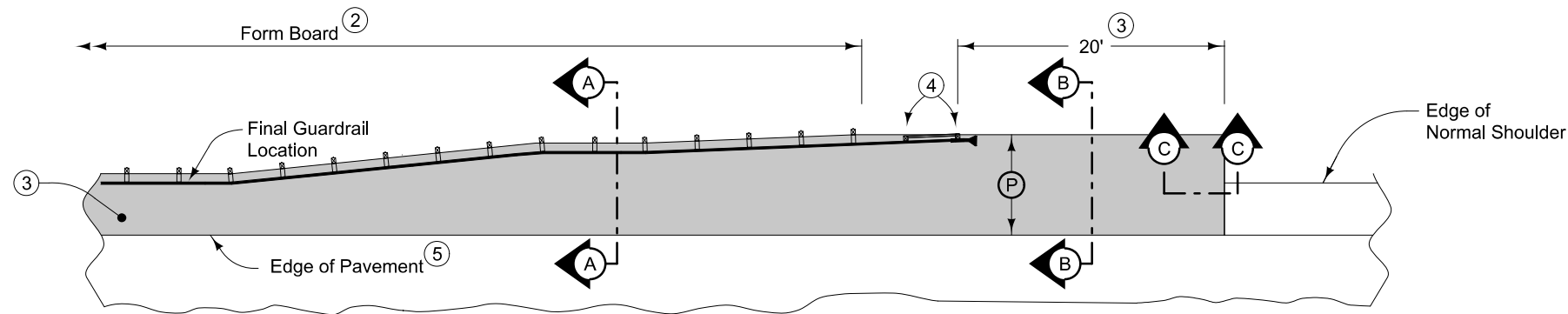
MAINTENANCE TURNAROUND

Location	Class 'A' Road Stone	Macadam Stone	Polymer Grid	Class 10	Pipe Length	Beveled Pipe & Guard ④	Radius	Remarks
Road Identification	Station	TONS	TONS	SY	LF	EACH	FT	



Refer to detail cross sections for additional data on bench backslope.
① See detail 4101 where intercepting ditches are required

TYPICAL CROSS SECTION EARTH EXCAVATION BENCH BACKSLOPE



PLAN VIEW

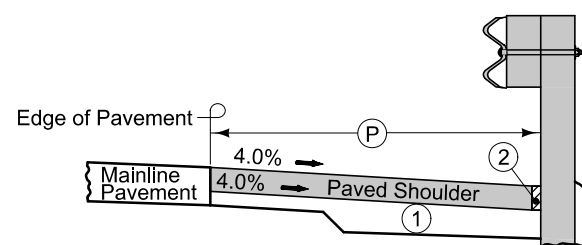
9" HMA Paved Shoulder at guardrail. 8" PCC may be substituted with the following jointing layout:

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

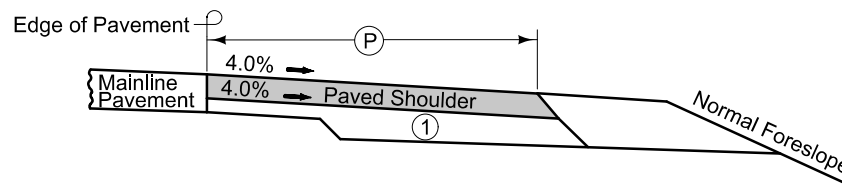
Compaction of HMA is required to face of guardrail post. Hand compaction will be allowed under guardrail. Removal and reinstallation of guardrail will be allowed with no additional payment.

Refer to Tabulation 112-9 for shoulder quantities.

- ① For subgrade treatment, refer to other details in the plan.
- ② PCC option only: When guardrail posts are installed prior to construction of PCC paved shoulder, fasten form board to the face of guardrail posts for the length shown. Refer to note 4 for final 2 posts.
- ③ Continue paved shoulder to existing paved shoulder or 20 feet beyond the center of the first post.
- ④ Shoulder may be notched for final 2 posts or post sleeves may be installed through pavement. Do not drive posts through pavement.
- ⑤ 'KT-1 joint for PCC shoulder.
'B' joint for HMA shoulder.

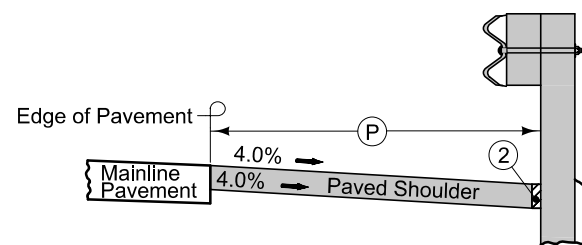


Section A-A

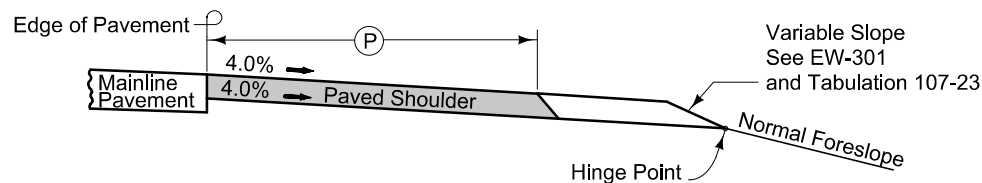


Section B-B

NEW CONSTRUCTION

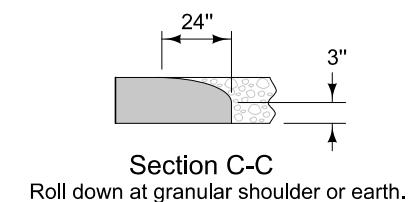


Section A-A



Section B-B

EXISTING SHOULDER



Section C-C
Roll down at granular shoulder or earth.

PAVED SHOULDER AT GUARDRAIL

SURVEY SYMBOLS

- IN Storm Sewer Intake
- FW Wire Fence
- INB Storm Sewer Beehive Intake
- PR Electric Riser Pole
- GP Guard Post (Less Than 4 Posts)
- SL Speed Limit Sign
- SI Sign
- TIL Tile Line
- GDL Guard Rail Steel
- LUM Luminaire
- UE Utility Elevation
- WV Water Valve
- GPR Guard Post (4 or More Posts)
- FP Filler Pipe
- OUT Tile Outlet
- MIS Miscellaneous
- PPA Power Pole Co. 1
- AST Above Ground Storage Tank
- LP L.P. Tank
- FLG Flag Poles
- WHD Water Hydrant
- WEL Well
- MH Utility Access (Manhole)
- TPD Telephone Pedestal
- MM Mile Marker Post
- FCL Chain Link and Security Fence
- EB Electrical Box
- TV Satellite TV Dish
- UB Utility Box
- UST Underground Tank
- GV Gas Valve
- WHU RV Water Hook Up
- SEP Septic Tank
- FHD Fire Hydrants
- FWD Wood Fence
- RET Retaining Walls
- D Centerline Draw or Stream (Down)
- BNK Stream Bank
- RIP Rip-Rap
- EW Edge of Water
- DU Centerline Draw or Stream (Up)
- ENT Centerline BL of Entrance
- ENU Edge Unpaved Entrance & Parking
- EG Edge of Gravel Road
- SNP Unpaved Shoulder
- DIK Centerline of Dike or Dam
- F02 FOB Underground Fiber Optic Co. 2
- T1 TLA Underground Telephone Line Co. 1
- E1 ELA Underground Electric Line Co. 1
- F0 FOA Underground Fiber Optic Co. 1
- W WLA Underground Water Line Co. 1
- STB Storm Sewer Line Co. 2
- San SAA Sanitary Sewer Line Co. 1
- E2 ELB Underground Electric Line Co. 2
- TVA Underground TV Cable Co. 1
- F03 FOC Underground Fiber Optic Co. 3

UTILITY LEGEND

This is a POINT 25 Project and is subject to the provisions of IAC 761-115.25.

- MidAmerican Energy Company
Matt Novy
3500 104th Street
Urbandale, IA 50322
515-252-6730
MDNovy@midamerican.com
- CenturyLink
Phil Williams
2103 E University
Des Moines, IA 50317
515-263-7272
Phil.Williams@CenturyLink.com
- Warren Water District
Stan Ripperger
1204 East 2nd Avenue
Indianola, IA 50125
515-962-1200
sripperger@warrenwaterdistrict.com

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
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

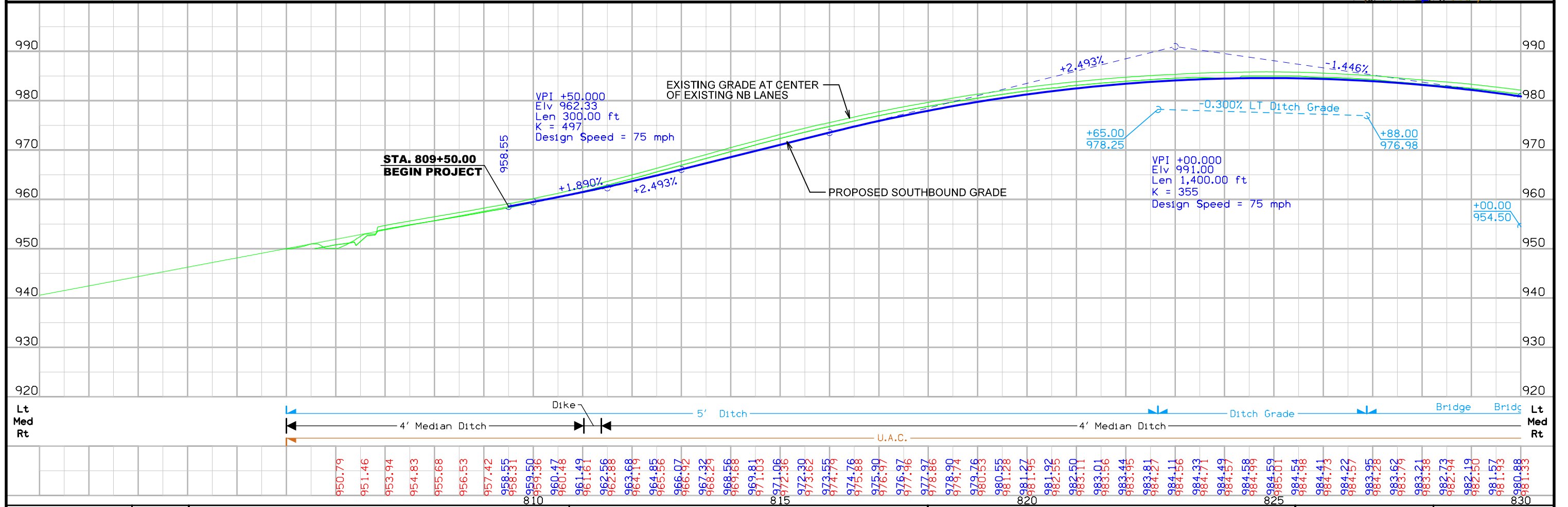
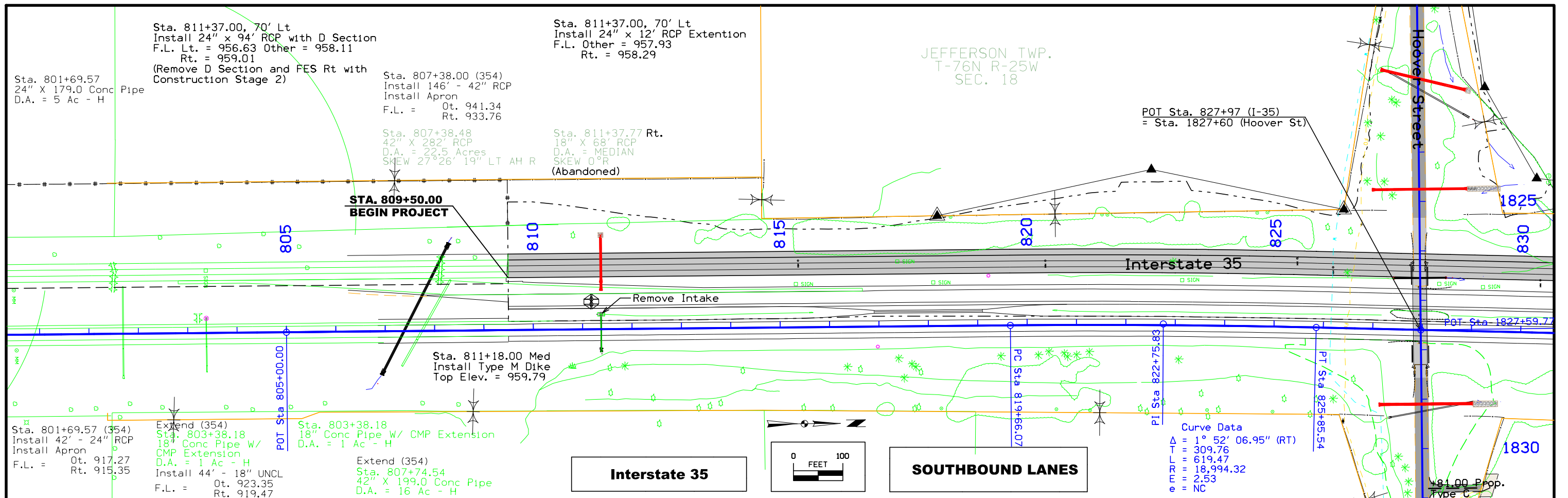
- Reference Point
- Station
- Survey Line
- Section Corner
- Ground Line Intercept
- Saw Cut
- Guardrail
- Trench Drain
- HighTension Cable Guardrail
- Sheet Pile
- Pavement Removal
- Clearing & Grubbing Area

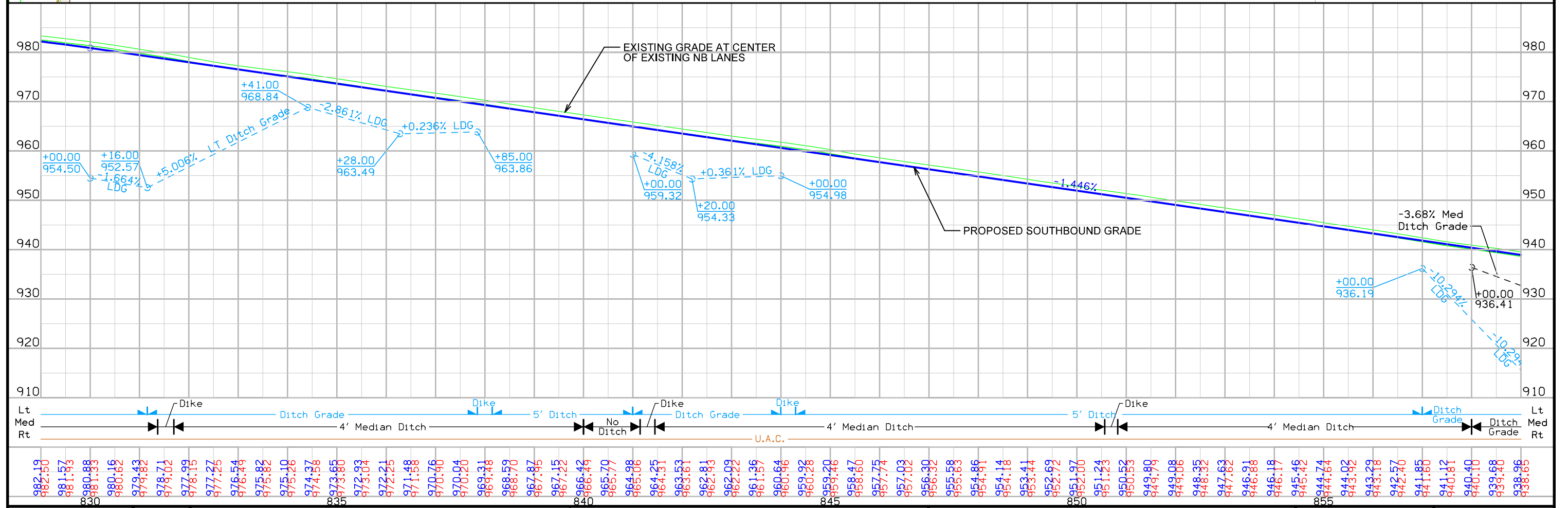
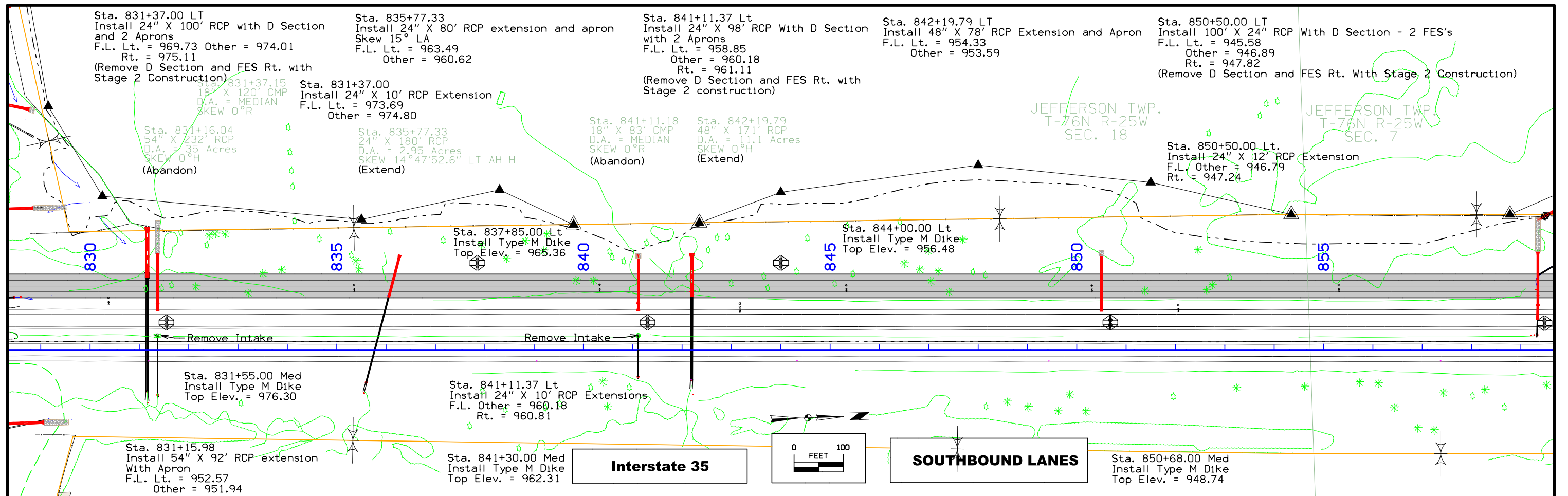
RIGHT-OF-WAY LEGEND

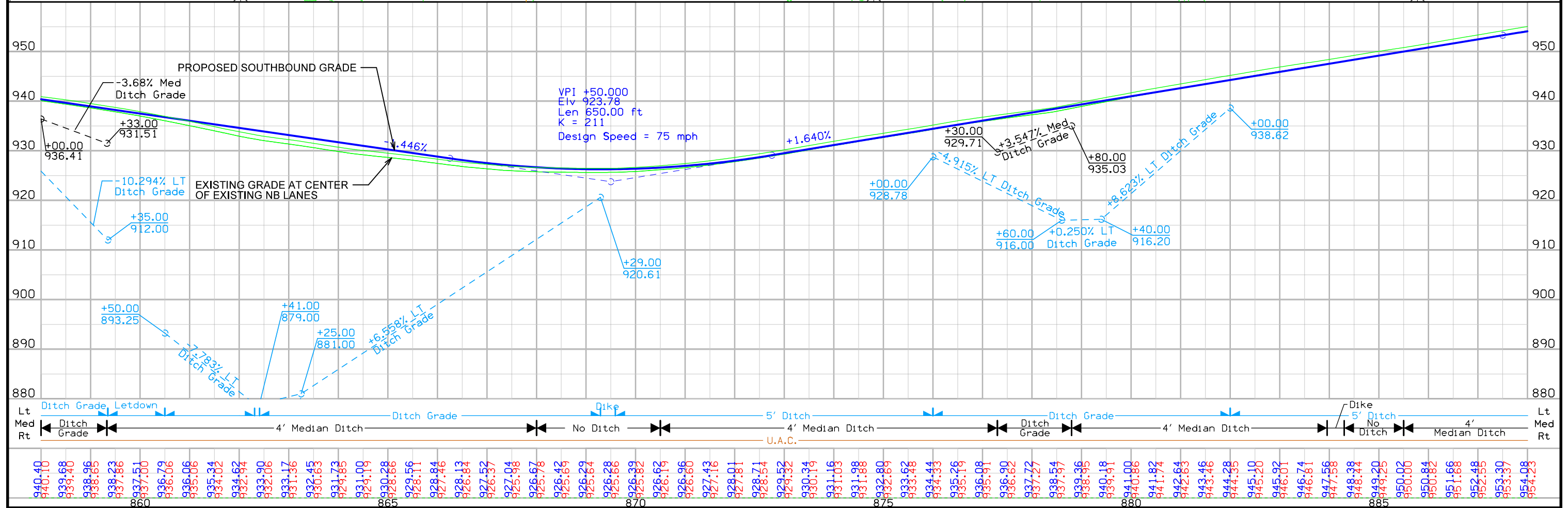
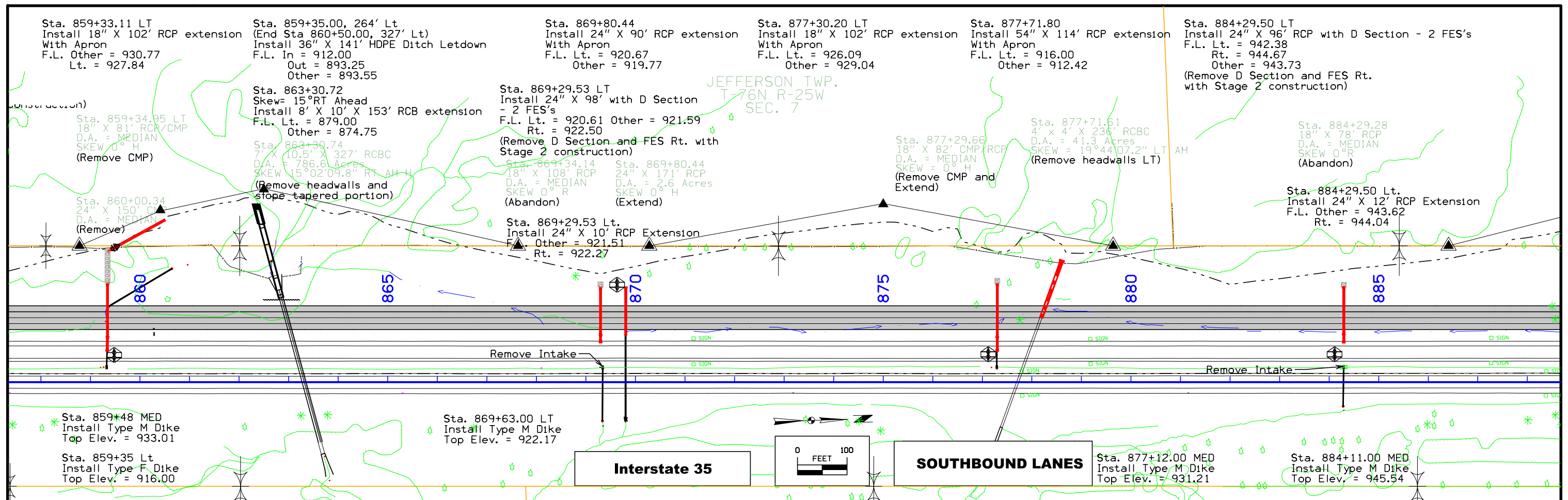
- Proposed Right-of-Way
- Existing Right of Way
- Existing and Proposed Right-of-Way
- Easement and Existing Right-of-Way
- Easement (Temporary)
- Easement
- Access Control
- Property Line

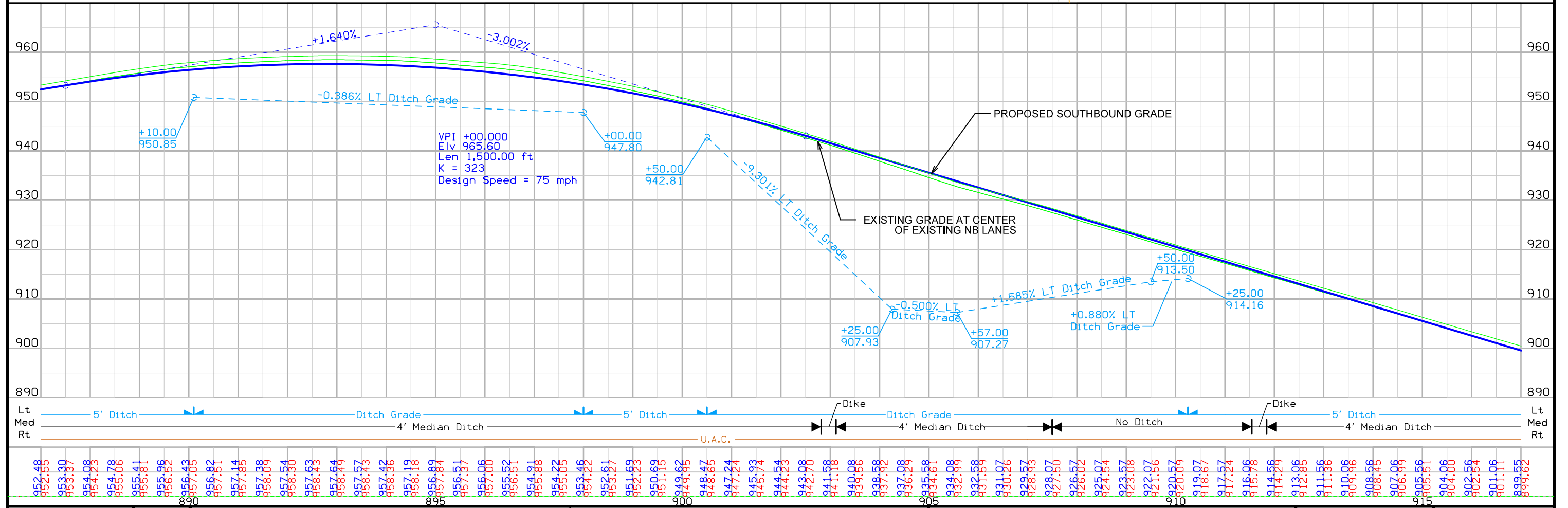
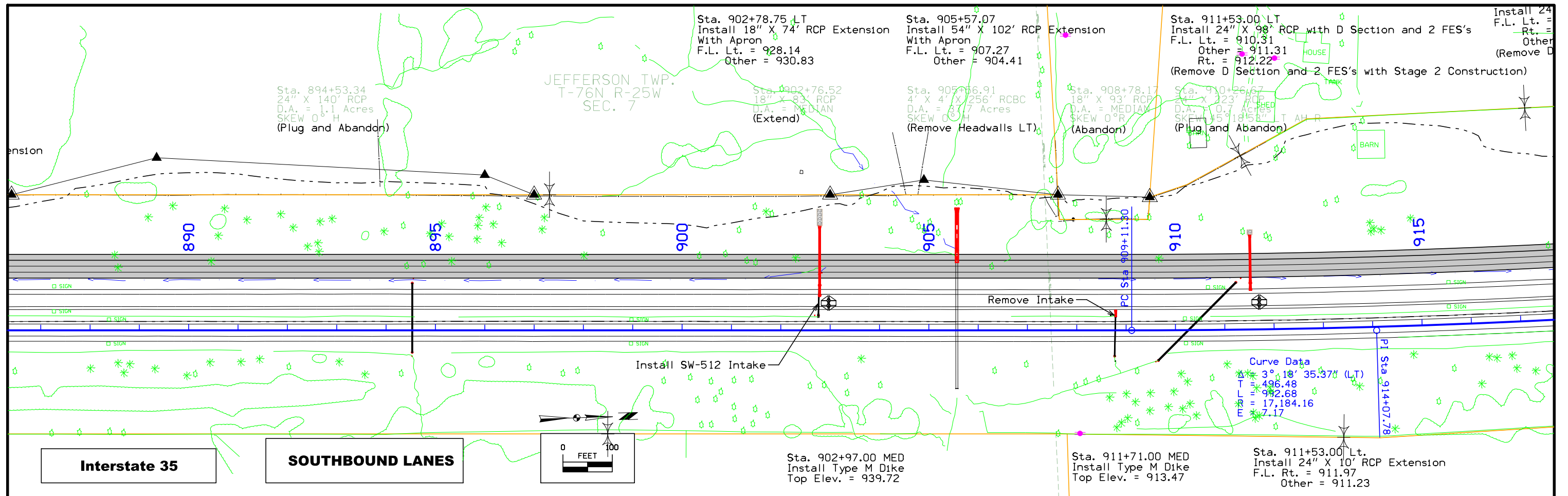
PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

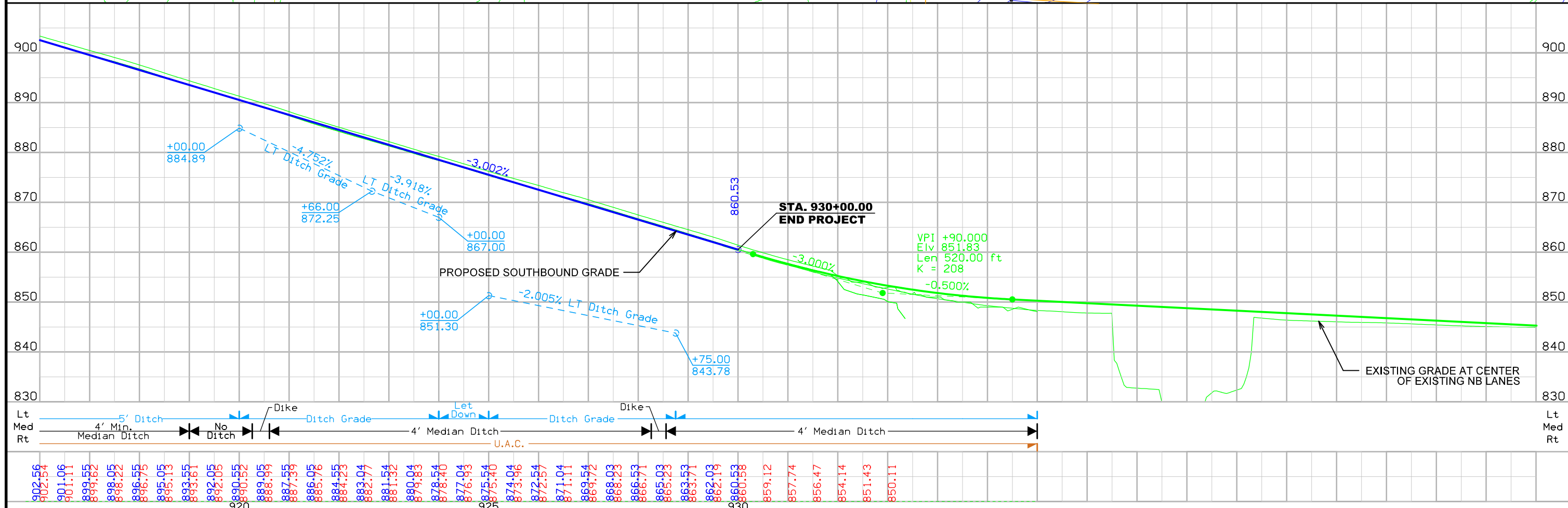
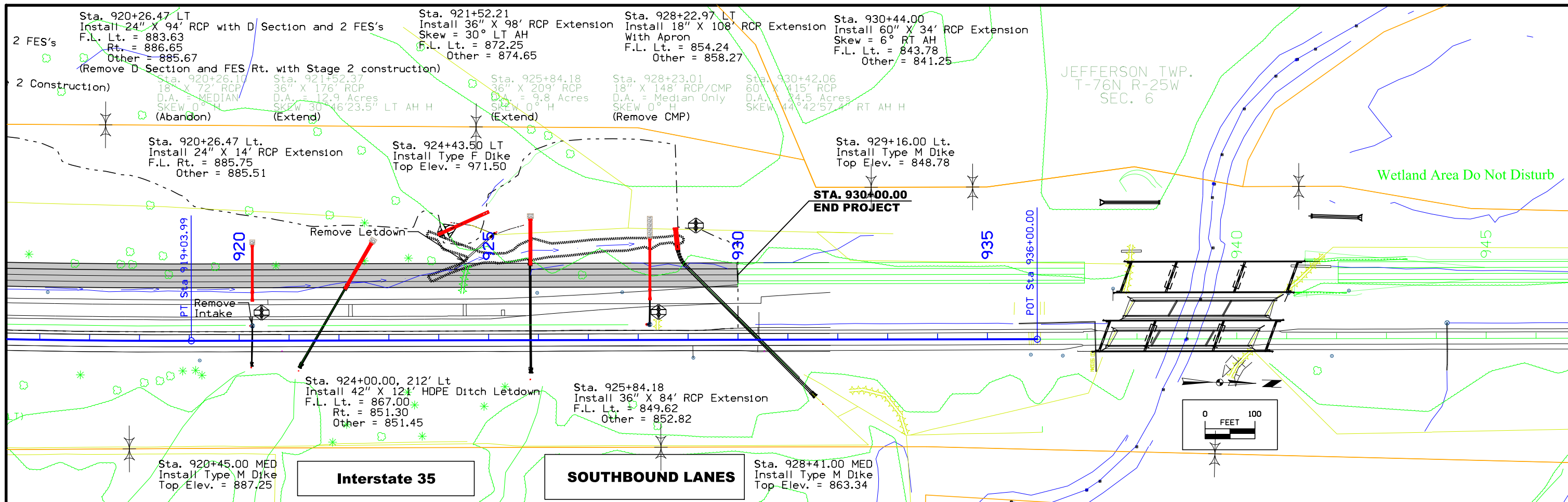
(COVERS SHEET SERIES D, E, F, & K)



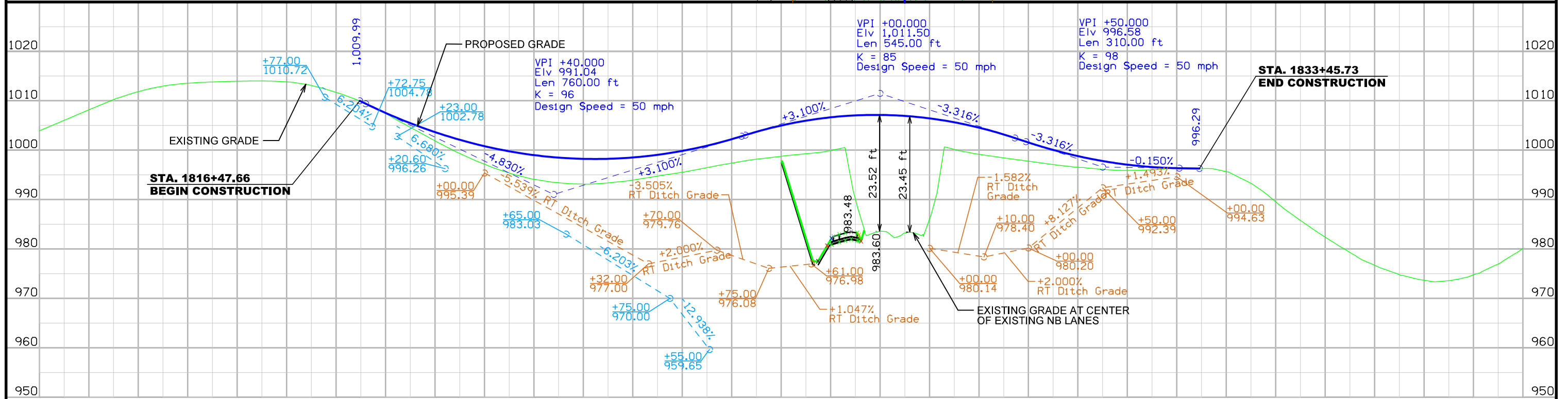
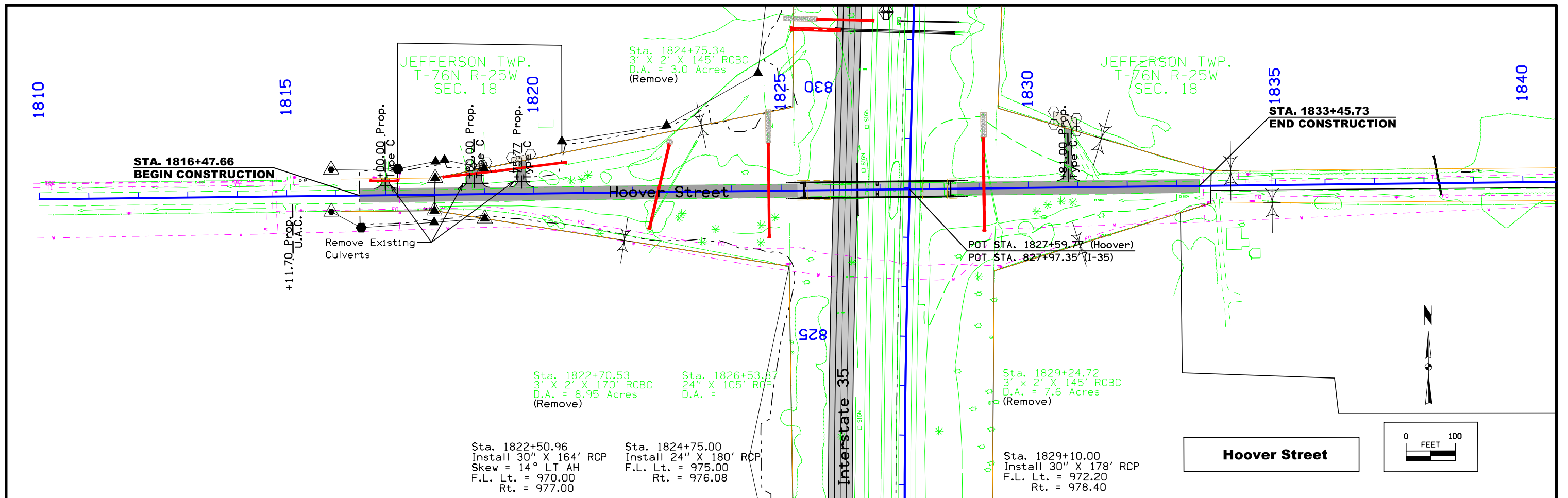








FILE NO.	ENGLISH	DESIGN TEAM	WARREN COUNTY	PROJECT NUMBER	SHEET NUMBER
		Snyder & Associates, Inc.		IM-NHS-35-2(427)57--03-91	D.6



Lt	Med	Rt	DITCH GRADE		ENTRANCE	DITCH GRADE		NO DITCH	BRIDGE	DITCH GRADE		No Ditch	Lt	Med	Rt																																																																											
			5' DITCH			DITCH GRADE				DITCH GRADE																																																																																
1810		1815	1810	1815	1820	1825	1830	1835	1840	1840	1840	1840	1840	1840	1840																																																																											
1,003.93	1,006.04	1,008.16	1,010.24	1,011.84	1,012.95	1,013.56	1,013.80	1,013.96	1,014.01	1,013.82	1,013.10	1,011.70	1,009.88	1,009.89	1,007.54	1,007.42	1,005.47	1,004.63	1,003.65	1,001.89	1,002.10	999.33	997.17	999.77	995.38	999.00	994.11	998.49	993.41	998.24	993.13	998.25	993.36	998.53	993.95	999.06	999.85	999.53	1,000.91	1,002.22	997.38	1,003.72	998.18	1,004.99	998.76	1,005.97	999.28	1,006.65	999.94	1,007.04	996.14	983.60	983.21	1,006.43	986.03	1,005.64	1,000.17	1,004.56	999.17	1,003.18	998.45	1,001.55	997.78	1,000.05	997.10	998.80	996.53	997.81	996.11	997.07	995.90	996.58	996.03	996.36	996.41	996.24	995.66	993.30	998.56	985.78	982.42	979.31	976.72	974.79	973.67	973.57	974.79	976.96	980.11	983.48

Survey Information

General Information

Measurement units for this survey are US survey feet. This survey is for the reconstruction of southbound I-35 from just north of North River to just south of Badger Creek in Warren County. The project includes reconstruction of the Filmore Street overpass.

Vertical Control

Vertical datum for this survey is relative to NAVD88, Geoid 12a. See SAP # 635 for additional information.

A digital level loop was run from BM #555 (Originating from IM-035-2(354)56—13-91) through project benchmarks and control points and returned to BM #555. The loop error met 3rd Order accuracy and the error was distributed proportionately among the project bench marks.

Horizontal Control

The following control information was provided by the Iowa Department of Transportation. The project coordinate system is Modified Iowa State Plane South Zone (U.S. Survey Feet) scaled around Pt. G070 at 513358.35 N, 1563703.57 E, 945.42 (Height). IARTN datum is adjusted to NAD83(2011) (Epoch 2010.00).

1/Combined Scale Factor of project (State plane grid modified to ground)= 1.000086224.

Alignment Information

The I-35 alignment for this survey is a retrace of As-built Plans No. I-35-2(93)43—01-91, 853 (5), 853 (10), & IN-ING-853-(8). Survey stationing was equated to the plan at PI Sta. 1281+39.80 and run back and ahead without equation throughout the survey.

Equations are as follows:

PI Sta. 676+17.05 This Survey
= PI Sta. 675+72.9 As-built Plans Project No. I-35-2(93)43—01-91

PI Sta. 761+59.44 This Survey
= PI Sta. 761+17.2 As-built Plans Project No. 853 (5)

PI Sta. 822+75.84 This Survey
= PI Sta. 822+37.0 As-built Plans Project No. 853 (5)

PI Sta. 914+07.78 This Survey
= PI Sta. 913+82.0 As-built Plans Project No. 853 (5)

PI Sta. 994+55.30 This Survey
= PI Sta. 994+35.4 As-built Plans Project No. 853 (5)

PI Sta. 1052+33.22 This Survey
= PI Sta. 1052+17.7 As-built Plans Project No. 853 (5)

PI Sta. 1095+41.49 This Survey
= PI Sta. 1095+30.7 As-built Plans Project No. 853 (5)

PI Sta. 1135+92.05 This Survey
= PI Sta. 1135+85.0 As-built Plans Project No. 853 (5)

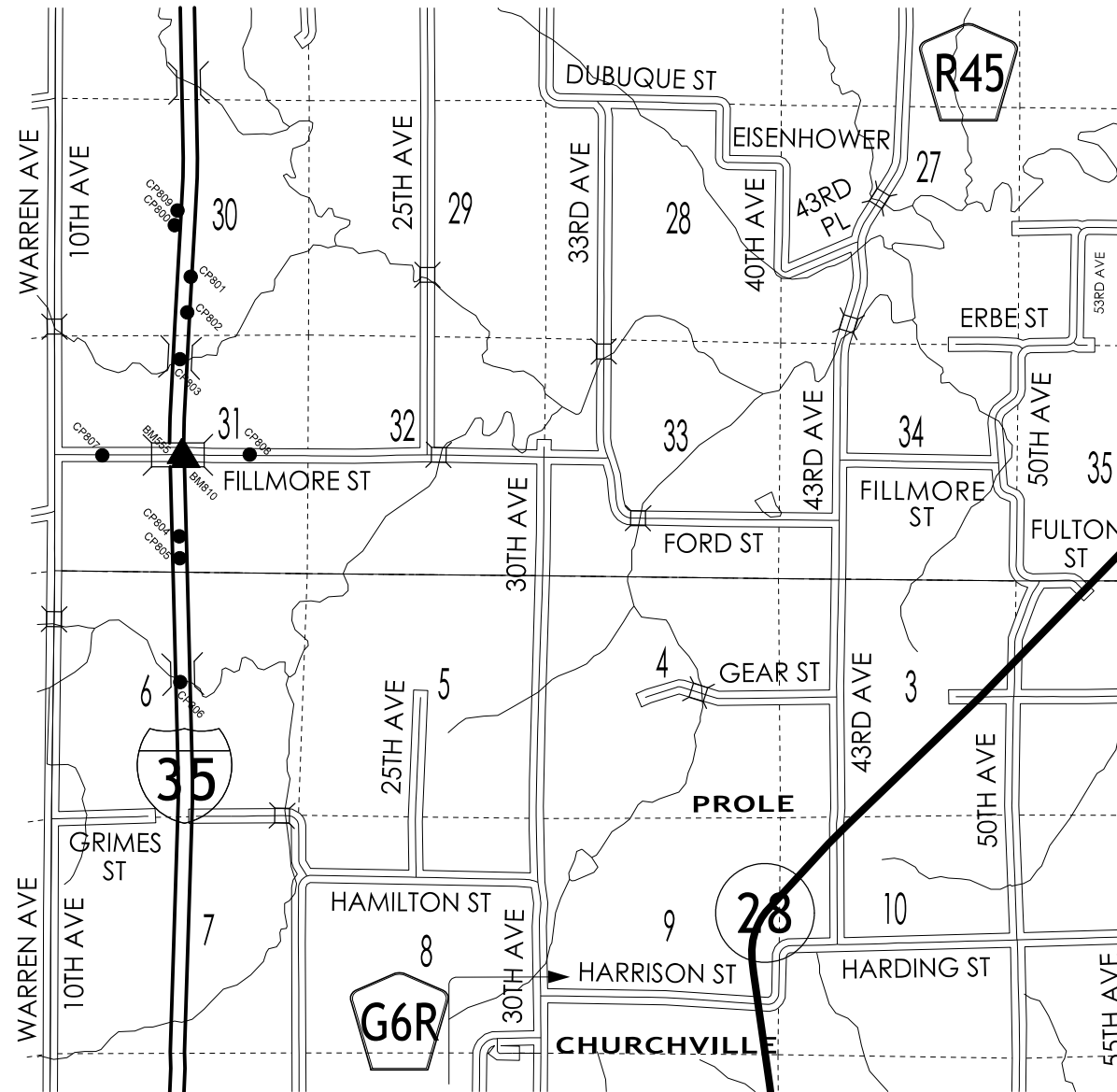
PI Sta. 1281+39.80 This Survey
= PI Sta. 1281+39.80 As-built Plans Project No. 853 (10)

PI Sta. 1410+94.02 This Survey
= PI Sta. 171+42.4 As-built Plans Project No. IN-ING-853-(8)

PI Sta. 1548+04.27 This Survey(PI#114)
= PI Sta. 308+52.8 As-built Plans Project No. IN-ING-853-(8)

CONTROL POINT VICINITY MAP

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



HORIZ. DATUM: NAD83(2011) EPOCH 2010.00
 VERT. DATUM: NAVD88

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

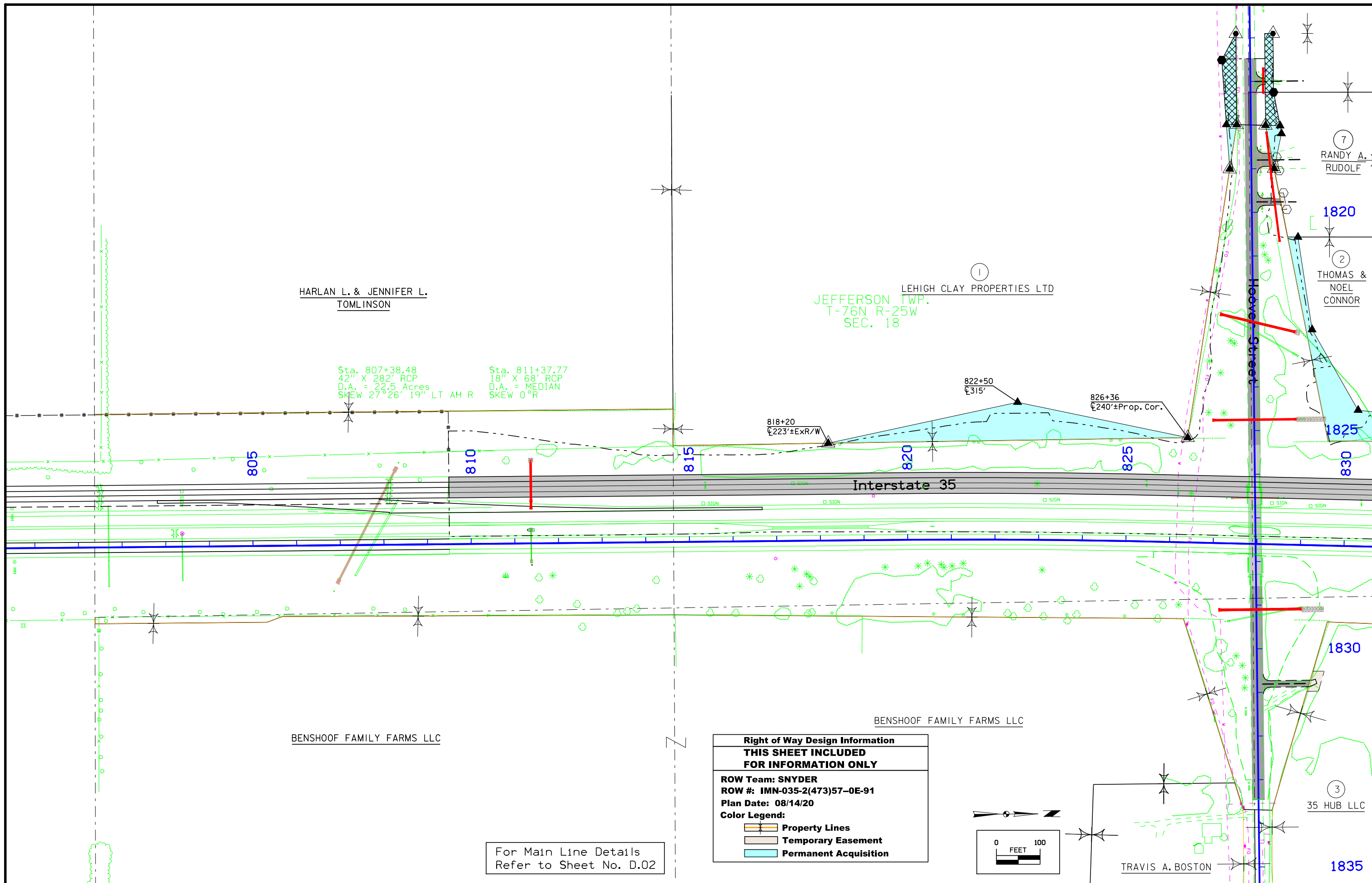
HORIZONTAL AND VERTICAL PROJECT CONTROL COORDINATE LISTING

HORIZ. DATUM: NAD83(2011) EPOCH 2010.00

VERT. DATUM: NAVD88

Point Name	Northing	Easting	Elevation	Feature Definition	Description
BM555	521994.466	1563558.775	933.72	BM	FND CUT X SE COR BRIDGE FILLMORE STREET
CP800	527126.198	1563403.920	916.72	CP	FND 1/2IN ALUM DOT CAP
CP801	525978.963	1563762.813	920.08	CP	FND 5/8IN DOT RPC
CP802	525180.414	1563686.069	869.38	CP	SET CUT X TOP HEADWALL
CP803	524134.956	1563525.386	859.29	CP	SET CUT X NORTH SIDE INTAKE IN MEDIAN
CP804	520185.425	1563505.782	864.82	CP	SET CUT X NORTH SIDE INTAKE IN MEDIAN
CP805	519698.098	1563518.047	852.20	CP	SET CUT X NORTH SIDE INTAKE IN MEDIAN
CP806	516934.984	1563527.831	852.04	CP	FND CUT X TOP OF HEADWALL
CP807	521991.175	1561789.547	946.06	CP	SET 1/2IN REBAR WITH RPC
CP808	522007.840	1565079.244	894.42	CP	SET 1/2IN REBAR WITH RPC
CP809	527456.939	1563467.090	886.35	CP	SET CUT X TOP 72IN RCP
BM810	521908.710	1563647.668	909.36	BM	FND RR SPIKE IN POWER POLE

PLACE COORDINATE TABLE HERE



HARLAN L. & JENNIFER L.
TOMLINSON

LEHIGH CLAY PROPERTIES LTD
JEFFERSON TWP.
T-76N R-25W
SEC. 18

Sta. 807+38.48
42" X 282' RCP
D.A. = 22.5 Acres
SKEW 27°26'19" LT AH R

Sta. 811+37.77
18" X 68' RCP
D.A. = MEDIAN
SKEW 0°R

818+20
±223'±ExR/W

822+50
±315'

826+36
±240'±Prop. Cor.

Interstate 35

BENSHOOF FAMILY FARMS LLC

BENSHOOF FAMILY FARMS LLC

7
RANDY A.
RUDOLF

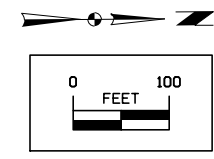
2
THOMAS &
NOEL
CONNOR

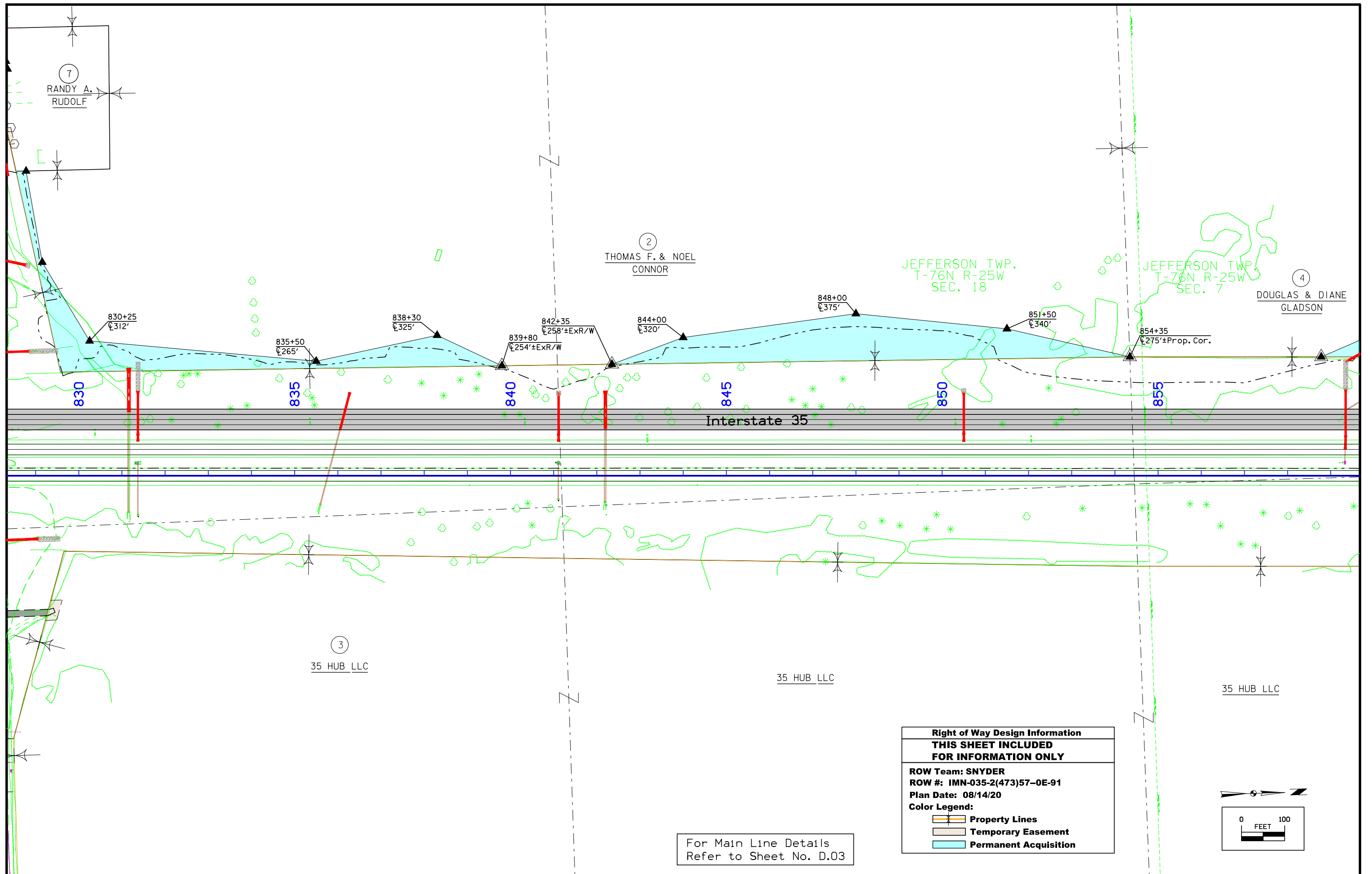
3
35 HUB LLC

TRAVIS A. BOSTON

For Main Line Details
Refer to Sheet No. D.02

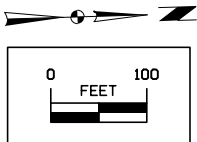
Right of Way Design Information	
THIS SHEET INCLUDED FOR INFORMATION ONLY	
ROW Team: SNYDER	
ROW #: IMN-035-2(473)57-0E-91	
Plan Date: 08/14/20	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition

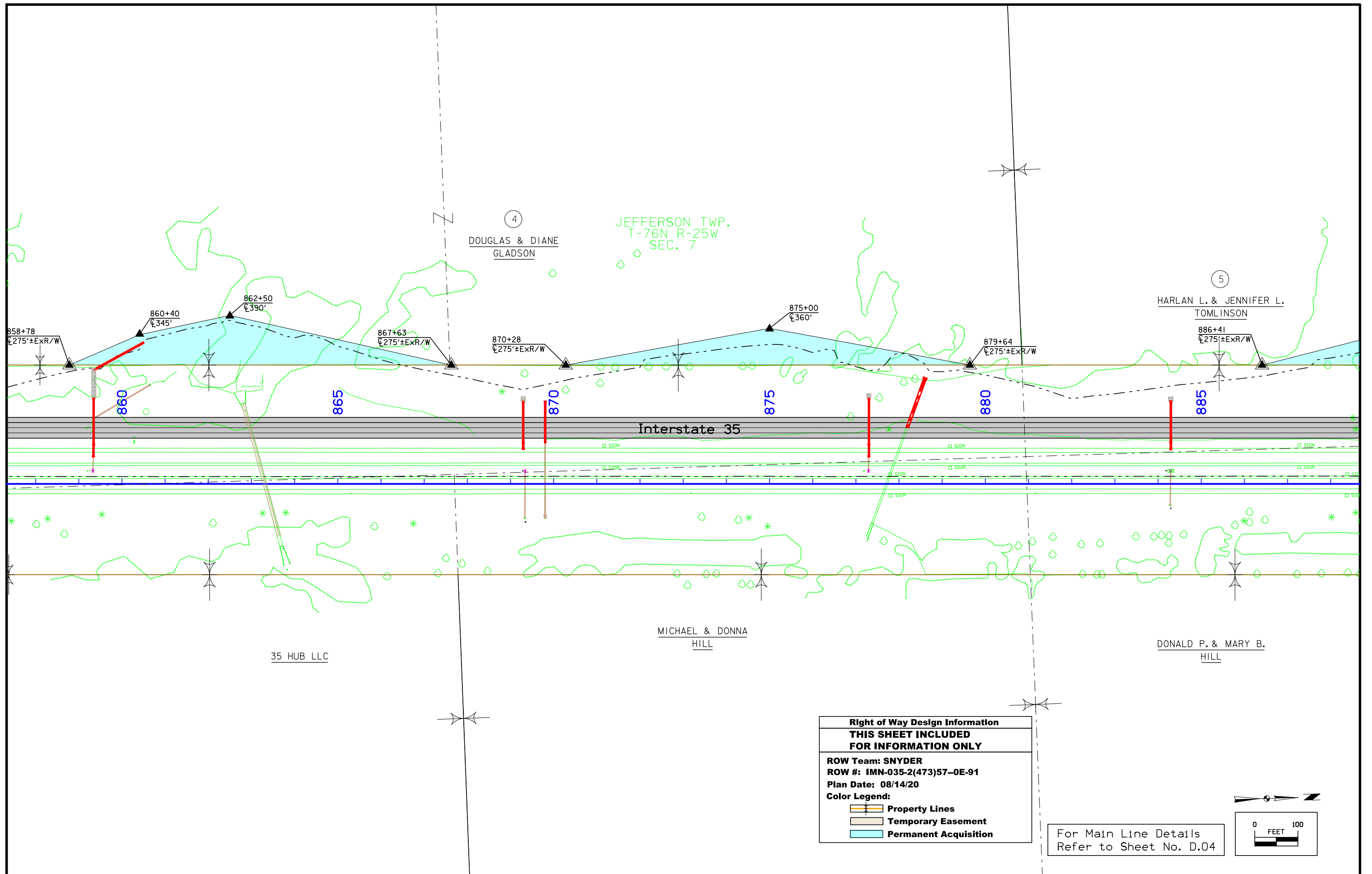




For Main Line Details
Refer to Sheet No. D.03

Right of Way Design Information	
THIS SHEET INCLUDED FOR INFORMATION ONLY	
ROW Team: SNYDER	
ROW #: IMN-035-2(473)57-0E-91	
Plan Date: 08/14/20	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition





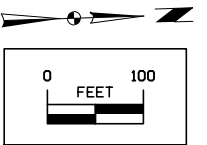
**Right of Way Design Information
THIS SHEET INCLUDED
FOR INFORMATION ONLY**

ROW Team: SNYDER
ROW #: IMN-035-2(473)57-0E-91
Plan Date: 08/14/20

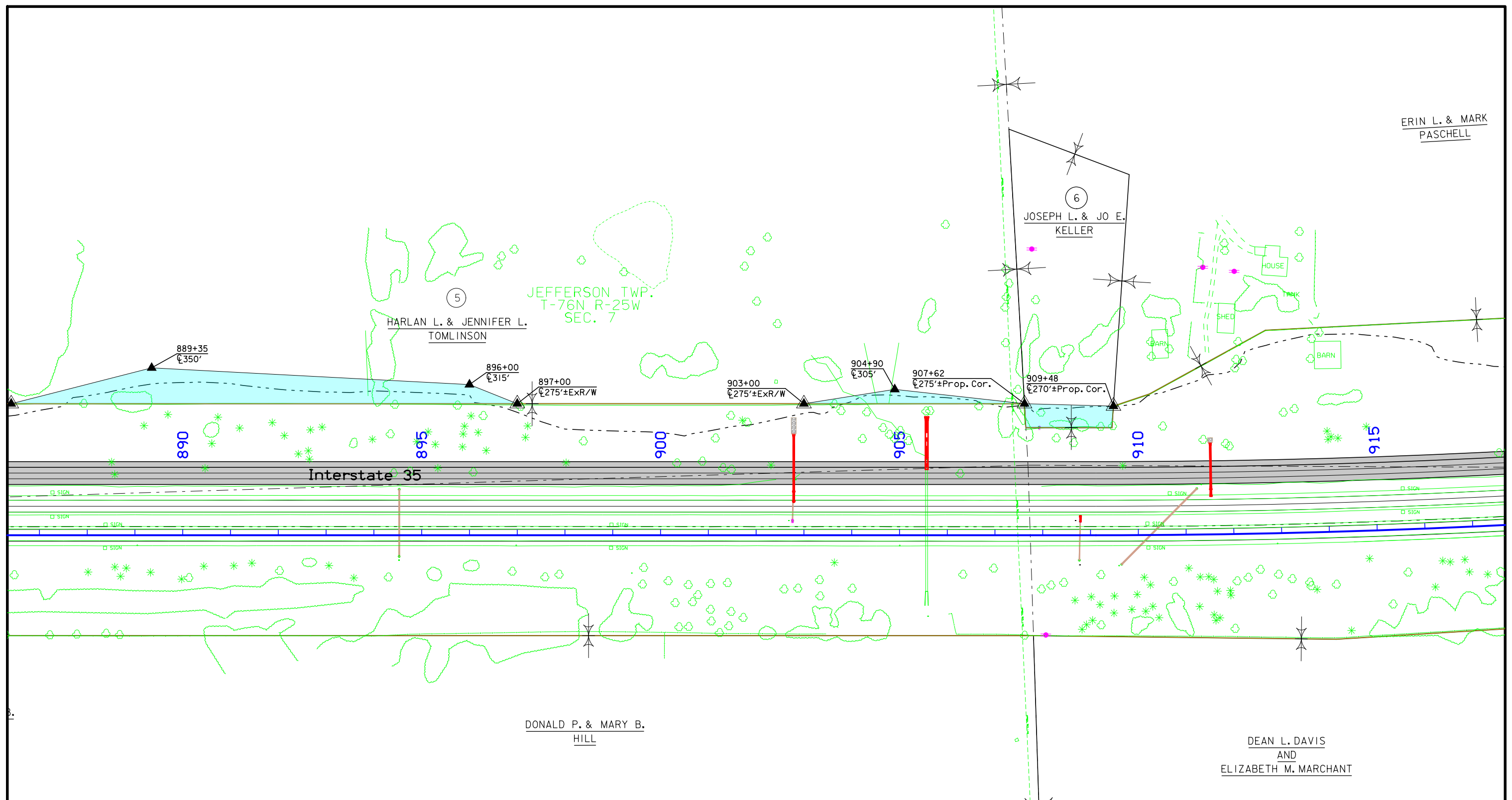
Color Legend:

- Property Lines
- Temporary Easement
- Permanent Acquisition

For Main Line Details
Refer to Sheet No. D.04



ERIN L. & MARK
PASCHELL



Interstate 35

JEFFERSON TWP.
T-76N R-25W
SEC. 7

HARLAN L. & JENNIFER L.
TOMLINSON

JOSEPH L. & JO E.
KELLER

DONALD P. & MARY B.
HILL

DEAN L. DAVIS
AND
ELIZABETH M. MARCHANT

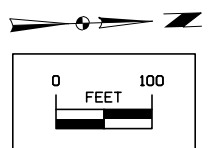
For Main Line Details
Refer to Sheet No. D.05

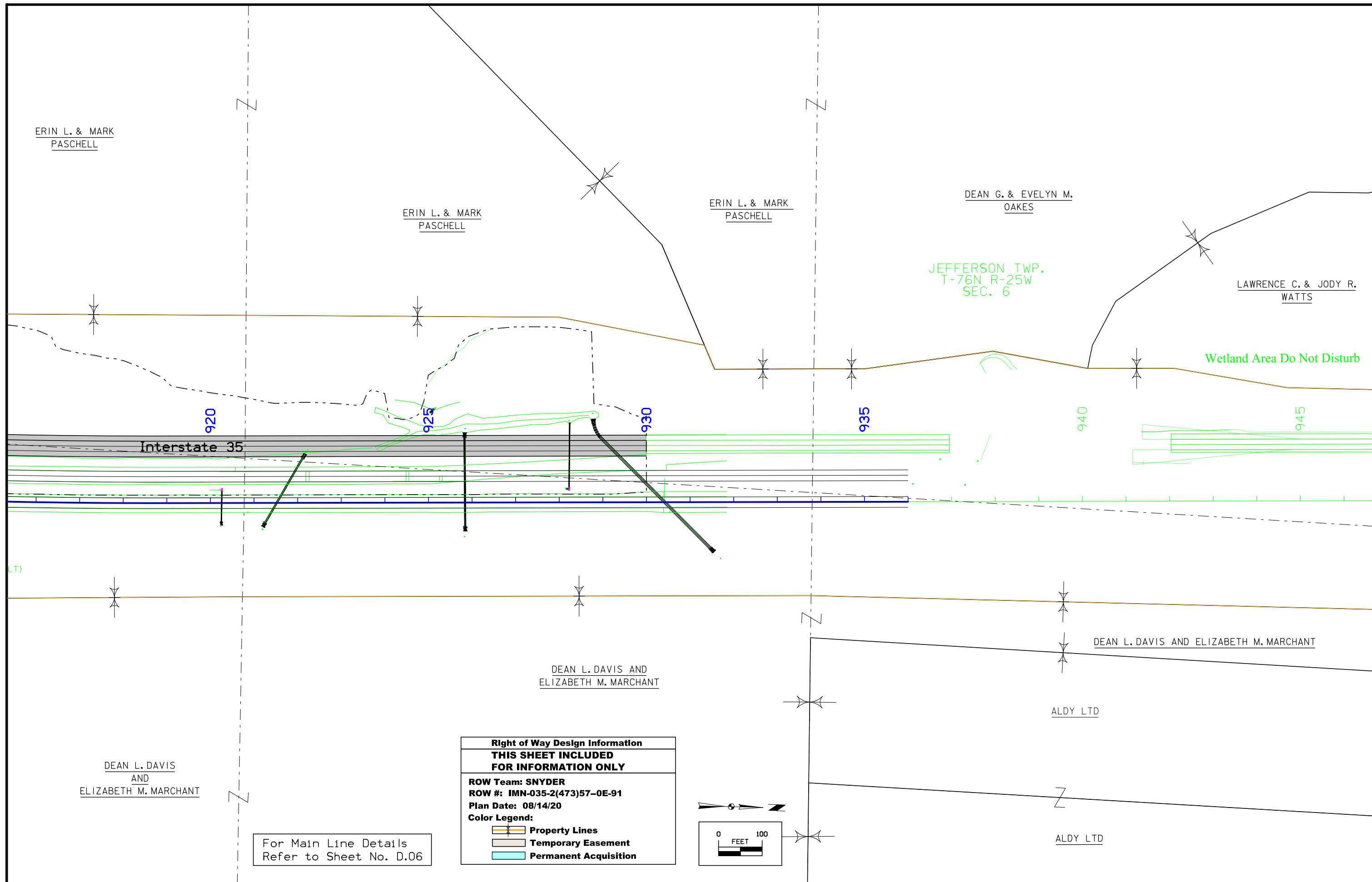
Right of Way Design Information
THIS SHEET INCLUDED
FOR INFORMATION ONLY

ROW Team: SNYDER
 ROW #: IMN-035-2(473)57--0E-91
 Plan Date: 08/14/20

Color Legend:

- Property Lines
- Temporary Easement
- Permanent Acquisition





ERIN L. & MARK
PASCHELL

ERIN L. & MARK
PASCHELL

ERIN L. & MARK
PASCHELL

DEAN G. & EVELYN M.
OAKES

LAWRENCE C. & JODY R.
WATTS

JEFFERSON TWP.
T-76N R-25W
SEC. 6

Wetland Area Do Not Disturb

Interstate 35

920

925

930

935

940

945

LT)

DEAN L. DAVIS AND
ELIZABETH M. MARCHANT

DEAN L. DAVIS AND ELIZABETH M. MARCHANT

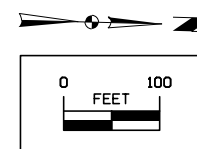
ALDY LTD

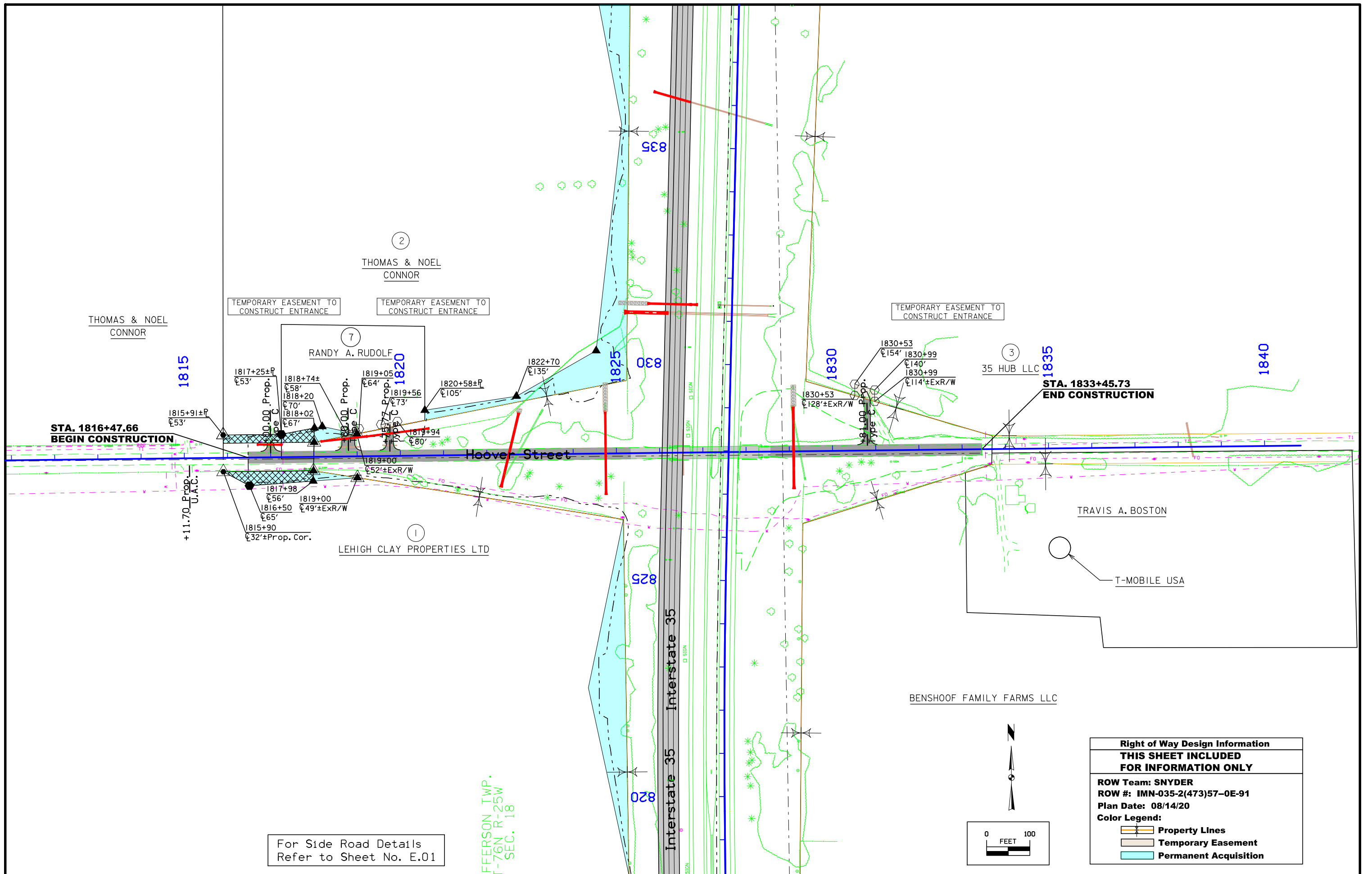
ALDY LTD

DEAN L. DAVIS
AND
ELIZABETH M. MARCHANT

For Main Line Details
Refer to Sheet No. D.06

Right of Way Design Information	
THIS SHEET INCLUDED FOR INFORMATION ONLY	
ROW Team: SNYDER	
ROW #: IMN-035-2(473)57-0E-91	
Plan Date: 08/14/20	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition





For Side Road Details
Refer to Sheet No. E.01










FFERSON TWP.
T-76N R-25W
SEC. 18

Right of Way Design Information	
THIS SHEET INCLUDED FOR INFORMATION ONLY	
ROW Team: SNYDER	
ROW #: IMN-035-2(473)57-0E-91	
Plan Date: 08/14/20	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition

**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)	Detour Pavement Shading
Brown, Med	(237)	Future Proposed Pavement Shading
Pink, Lavender(5)		Shoulder Strengthening 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
Pink, Lavender(5)		Shoulder Strengthening Shading
Black w/Gray, Light Fill	(0,48)	Previously Constructed Structure

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

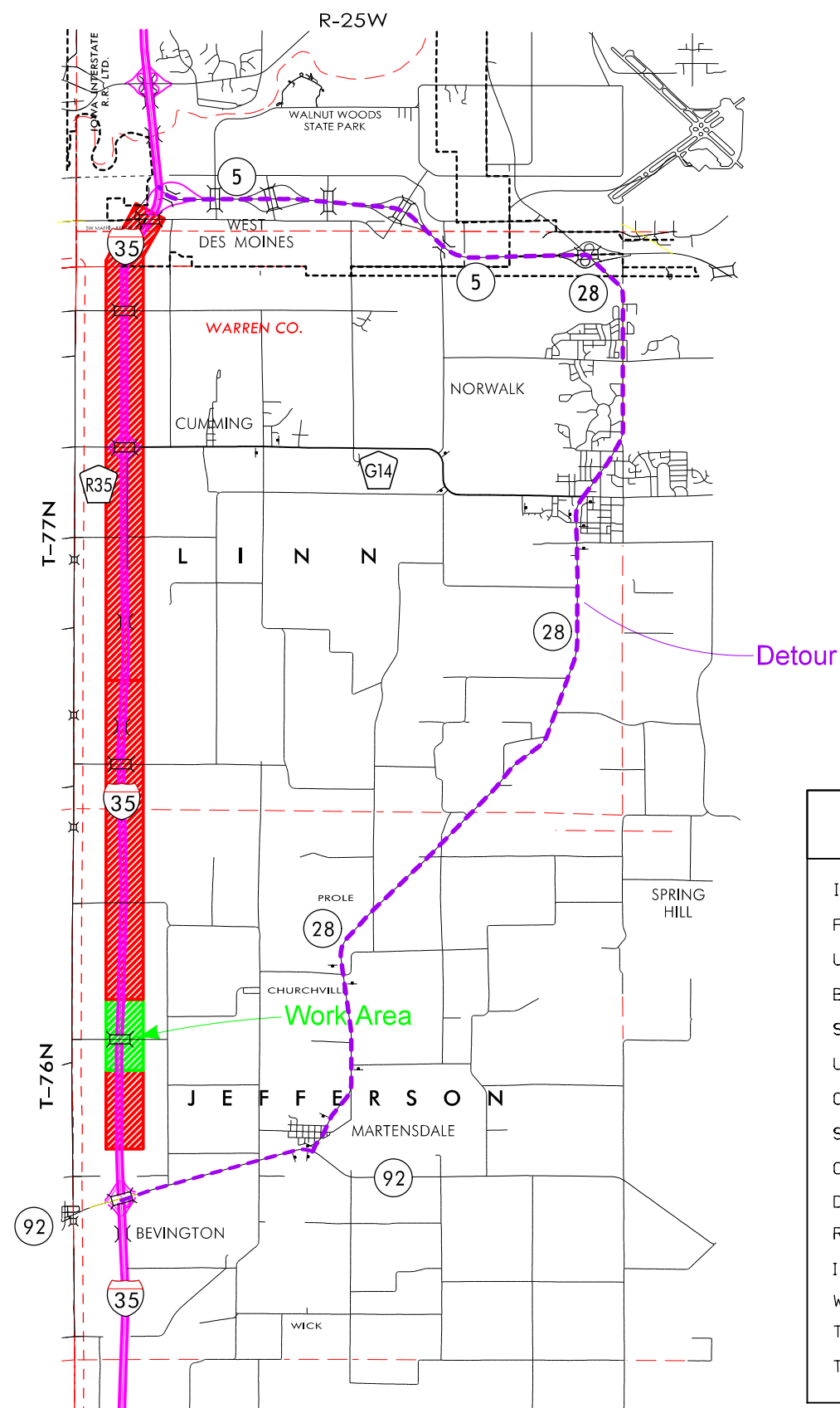
	Channelizing Device		Crash Cushion
	Drum		Traffic Signal
	Temporary Lane Separator		Flagger
	Tubular Marker		Temporary Floodlighting
	Channelizer Marker		Traffic Sign
	Concrete Barrier Marker		Type III Barricade
	Delineator		Type A Warning Light
	Temporary Barrier Rail		Direction of Traffic
	Pavement Removal		Safety Closure
	Arrow Board		

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 ROUTE



Not to Scale

NOTES:

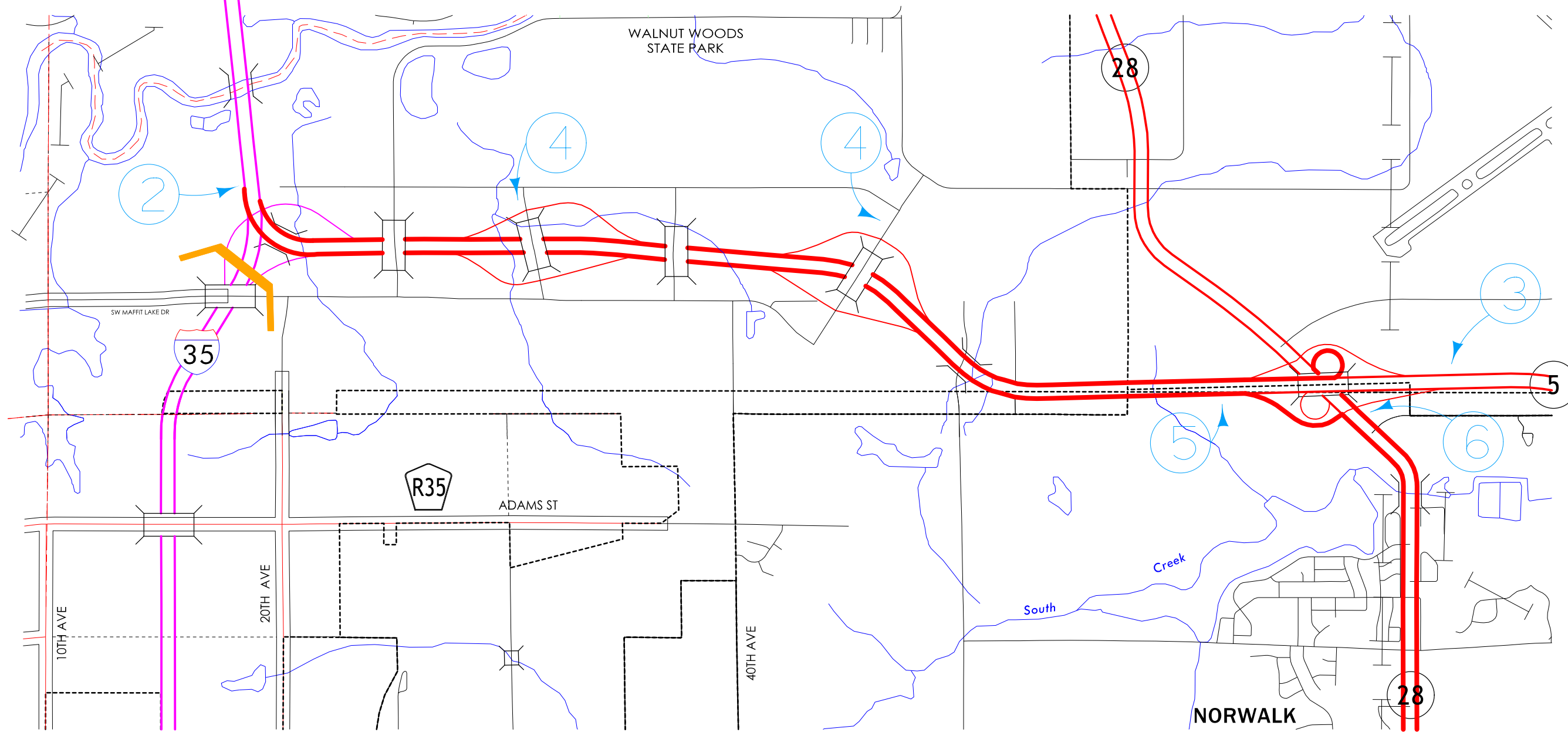
- A. Detour route is for removal of existing Hoover Street bridge and setting of beams.
- B. Maintain a min. of 400' spacing between existing signs and detour signs.
- C. Place CMS one week prior to closure. Include date/time of closure.
- D. Refer to standard road plan TC-454 for traffic control and signage on interstate during closure.

LEGEND

INTERSTATE ROUTE	
FREEWAY OR EXPRESSWAY ROUTE	
U.S. NUMBERED ROUTE	
BUSINESS ROUTE	
STATE NUMBERED ROUTE	
UNSIGNED ROUTE	
COUNTY NUMBERED ROUTE	
SECONDARY ROAD OR ADJOINING CITY STREET	
CITY STREET OR COUNTY ROAD	
DETOUR ROUTE	
ROAD CLOSURE	
I-35 CLOSED	
WORK AREA	
TYPE III BARRICADE	
TRAFFIC SIGN	

CHANGEABLE MESSAGE SIGNS

(4 Miles Before Closure)



1 I-35 CLOSED AHEAD FOLLOW DETOUR

3 I-35 SB CLOSED AHEAD FOLLOW IA 28 SOUTH

5 I-35 DETOUR FOLLOW IA 28 SOUTH

2 I-35 CLOSED EXIT NOW

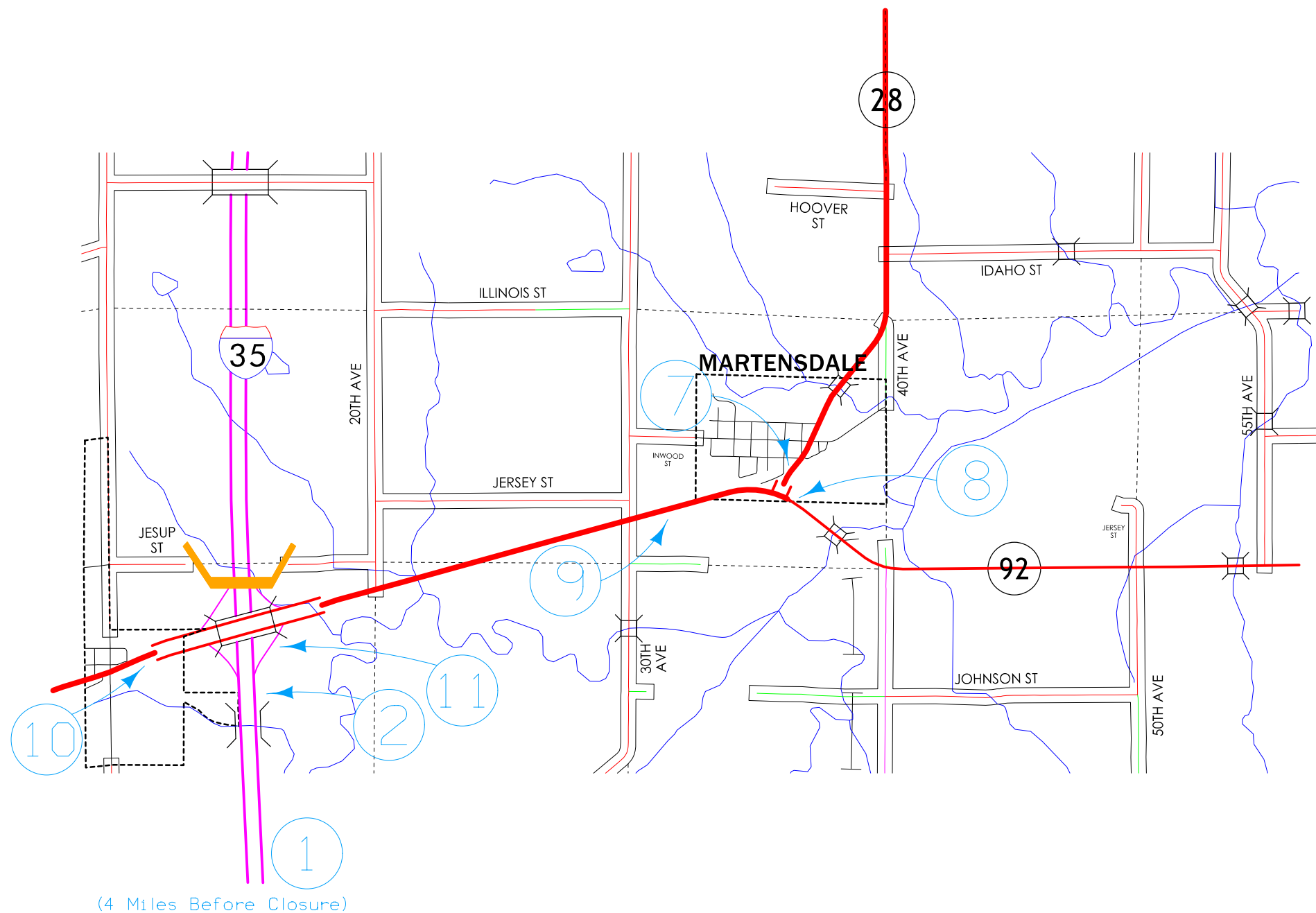
4 I-35 SB CLOSED FOLLOW IA 5 SOUTH

6 I-35 DETOUR FOLLOW IA 5 NORTH

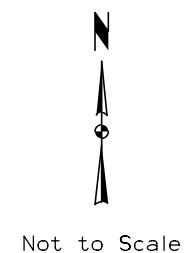


Not to Scale

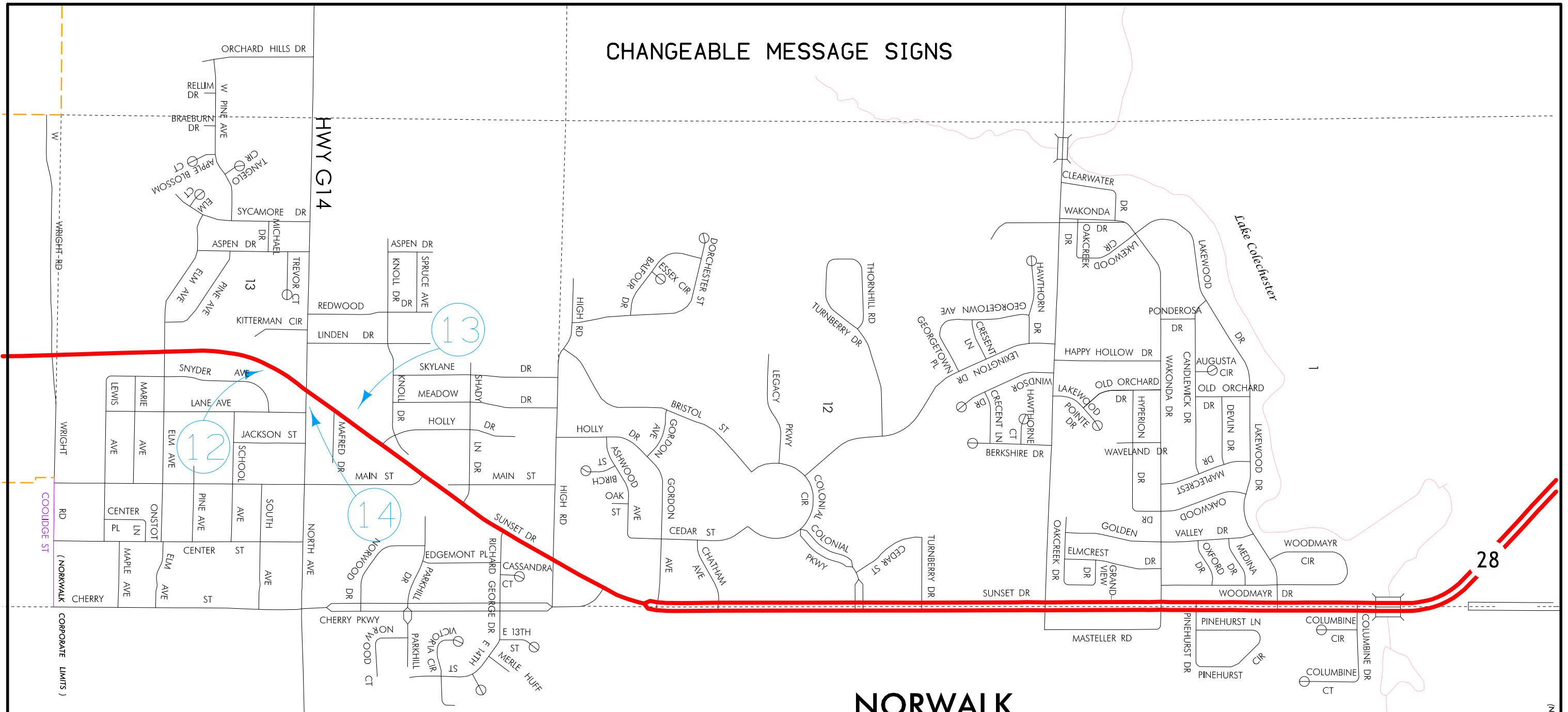
CHANGEABLE MESSAGE SIGNS



- | | | | | | | | | | | | |
|---|-------------------------|------------------|---|----------------------------|---------------------------|---|-------------------|--------------------------|---|----------------|---------------|
| ① | I-35
CLOSED
AHEAD | FOLLOW
DETOUR | ⑦ | I-35
DETOUR | TURN
RIGHT
ON IA 92 | ⑨ | I-35
DETOUR | TURN
LEFT
ON IA 28 | ⑪ | I-35
DETOUR | KEEP
RIGHT |
| ② | I-35
CLOSED | EXIT
NOW | ⑧ | I-35 NB
CLOSED
AHEAD | TURN
RIGHT
ON IA 28 | ⑩ | I-35 NB
CLOSED | FOLLOW
IA 92
EAST | | | |

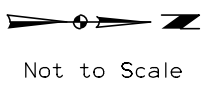


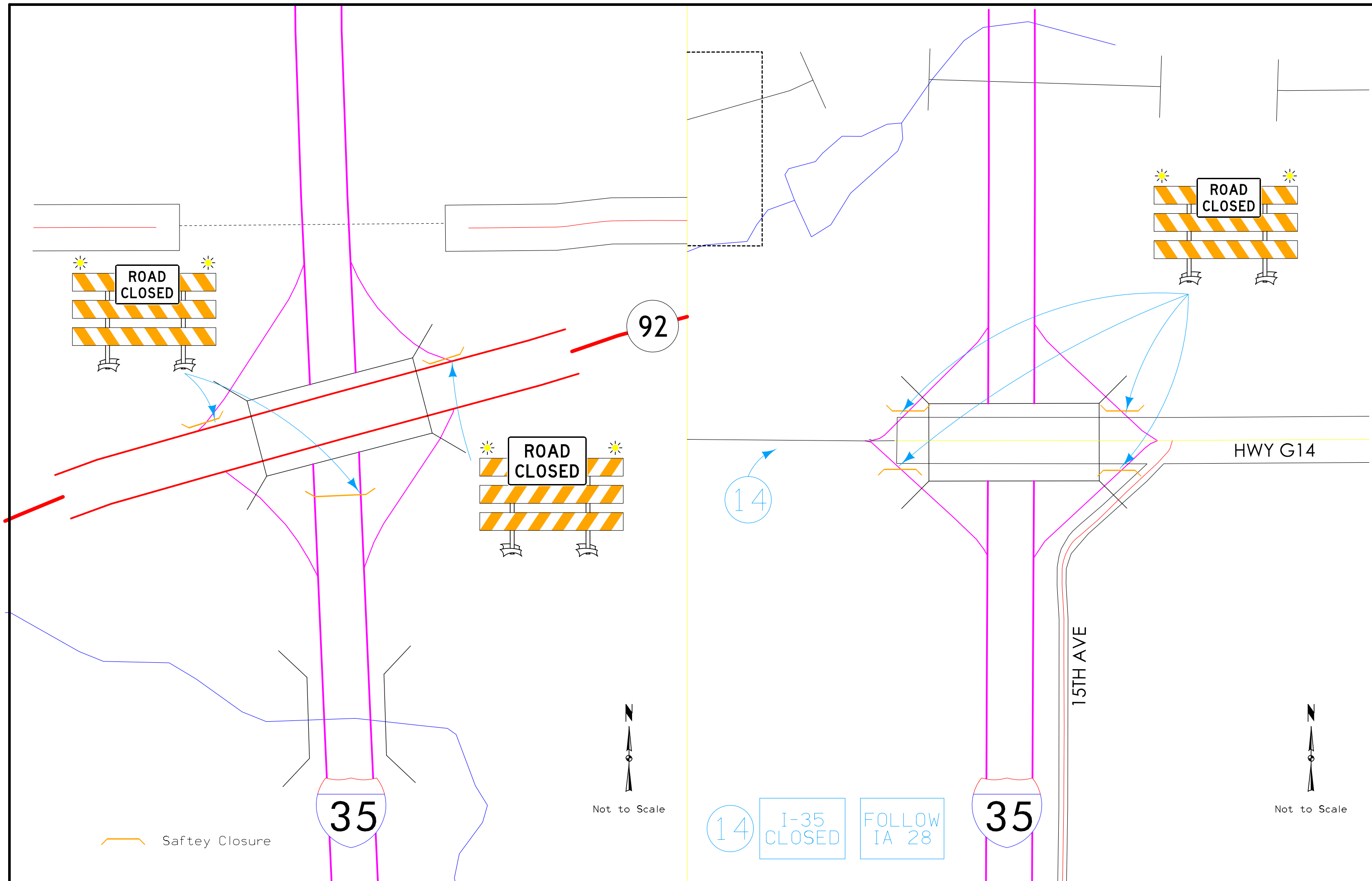
CHANGEABLE MESSAGE SIGNS



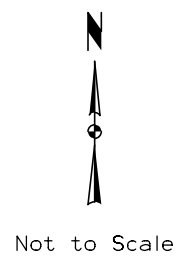
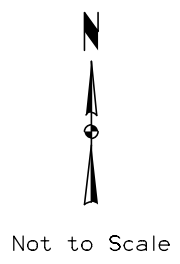
NORWALK

- 12
I-35
DETOUR
CONTINUE
TO
IA 5
- 14
I-35
CLOSED
FOLLOW
IA 28
- 13
I-35
DETOUR
CONTINUE
TO
IA 92

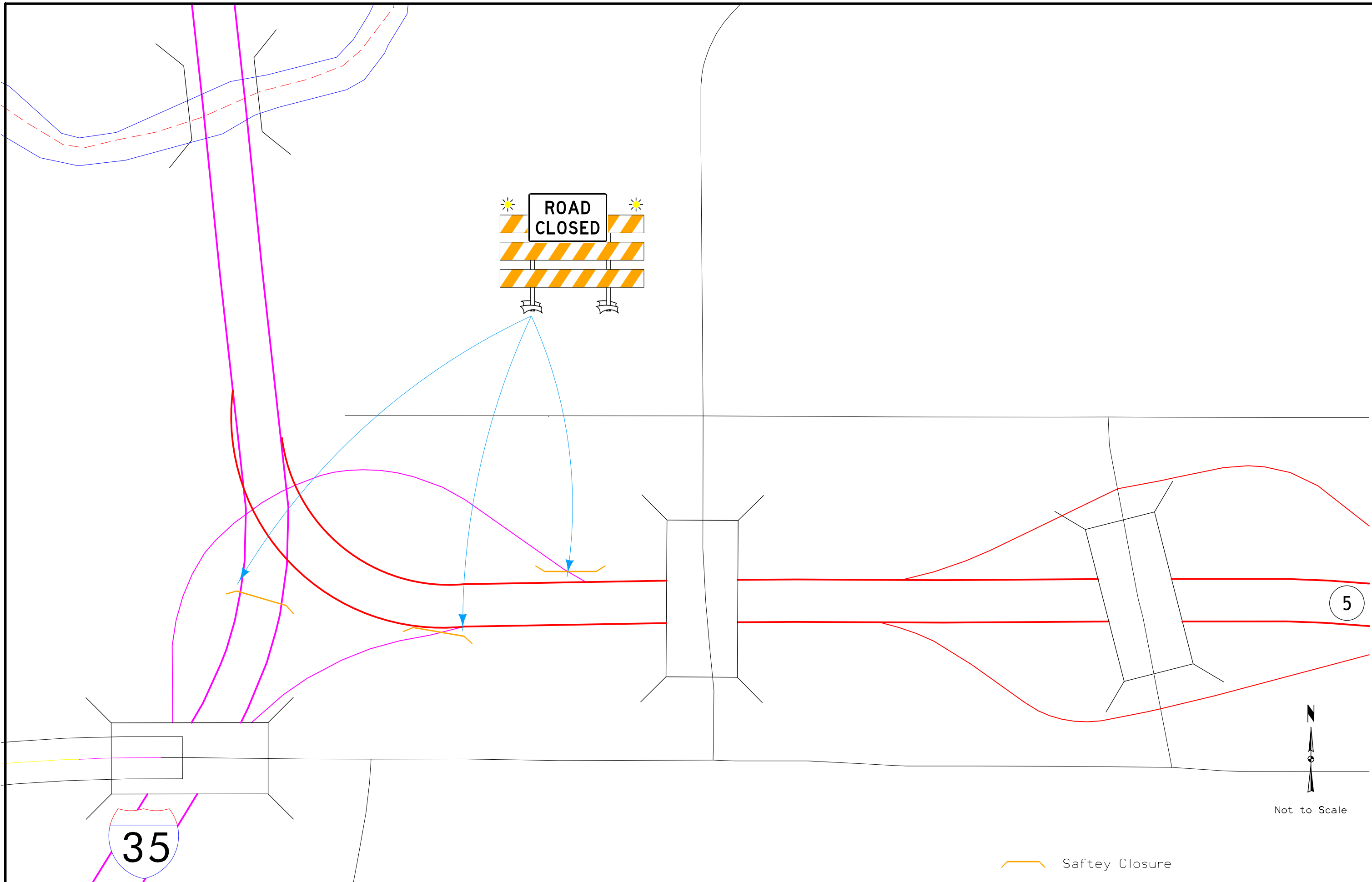




— Safety Closure



14 I-35 CLOSED FOLLOW IA 28

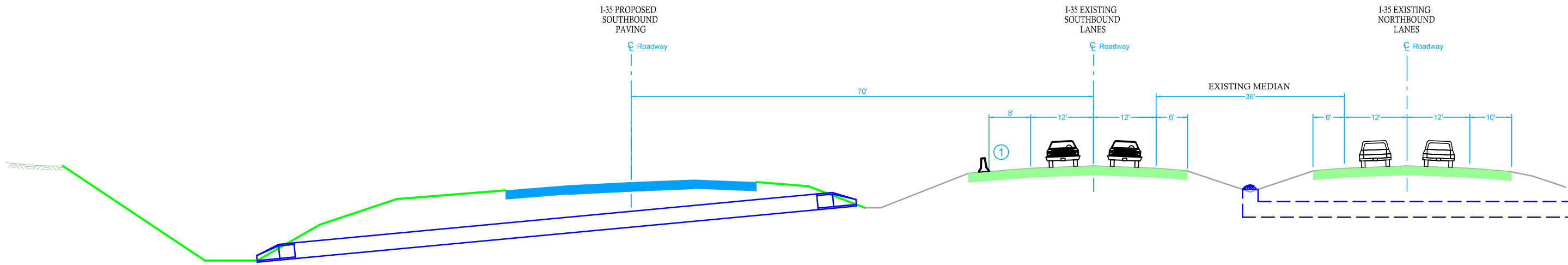


35

5

Safety Closure

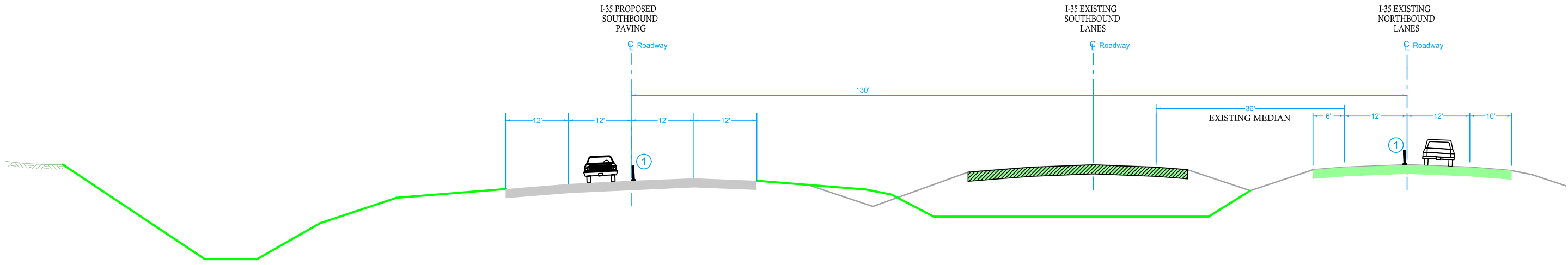
I-35
STAGE 1



STAGE 1 CONSTRUCTION
STA. 809+50 to STA. 930+00
Proposed Southbound Paving Construction
Traffic On Existing Lanes

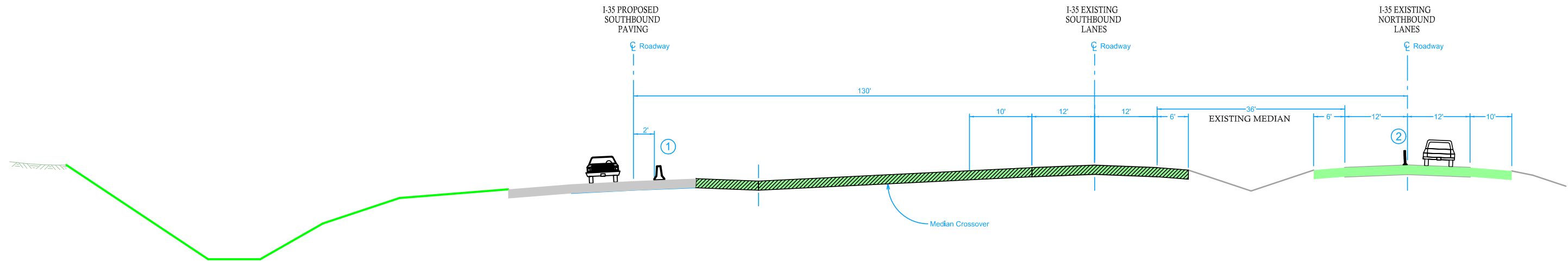
- Notes:
① Temporary Barrier Rail

I-35
STAGE 2



STAGE 2 CONSTRUCTION
STA. 809+50 to STA. 927+63
Removal of Existing Southbound Pavement
Traffic On Newly Constructed and Existing Lanes

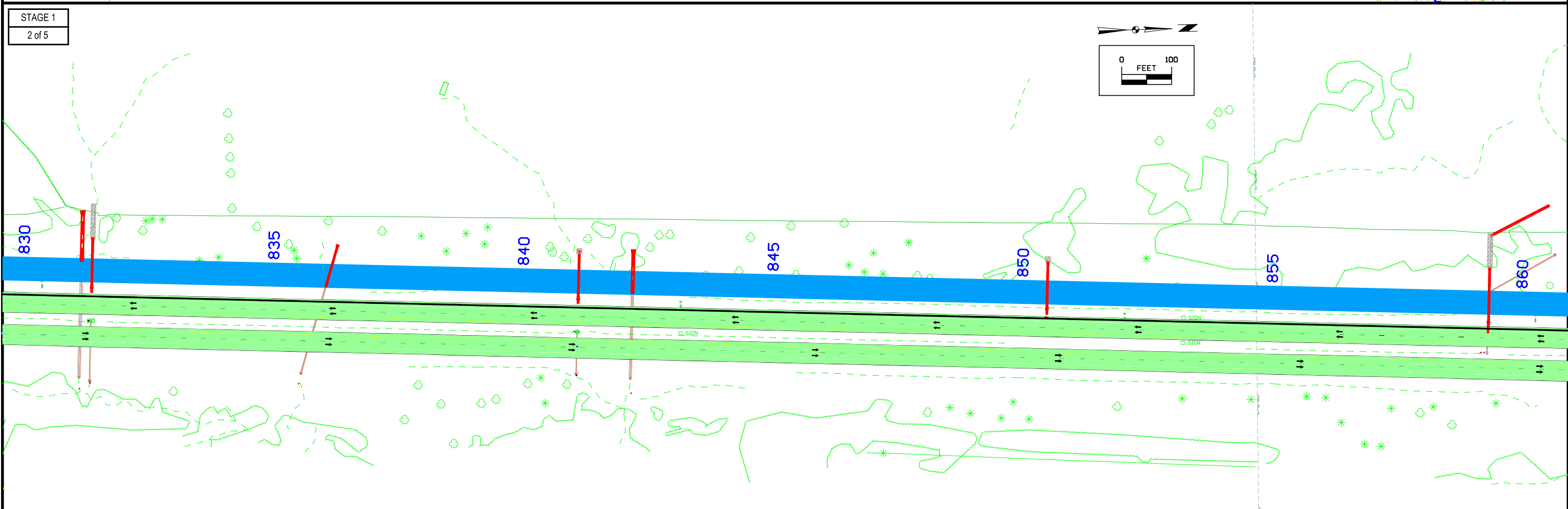
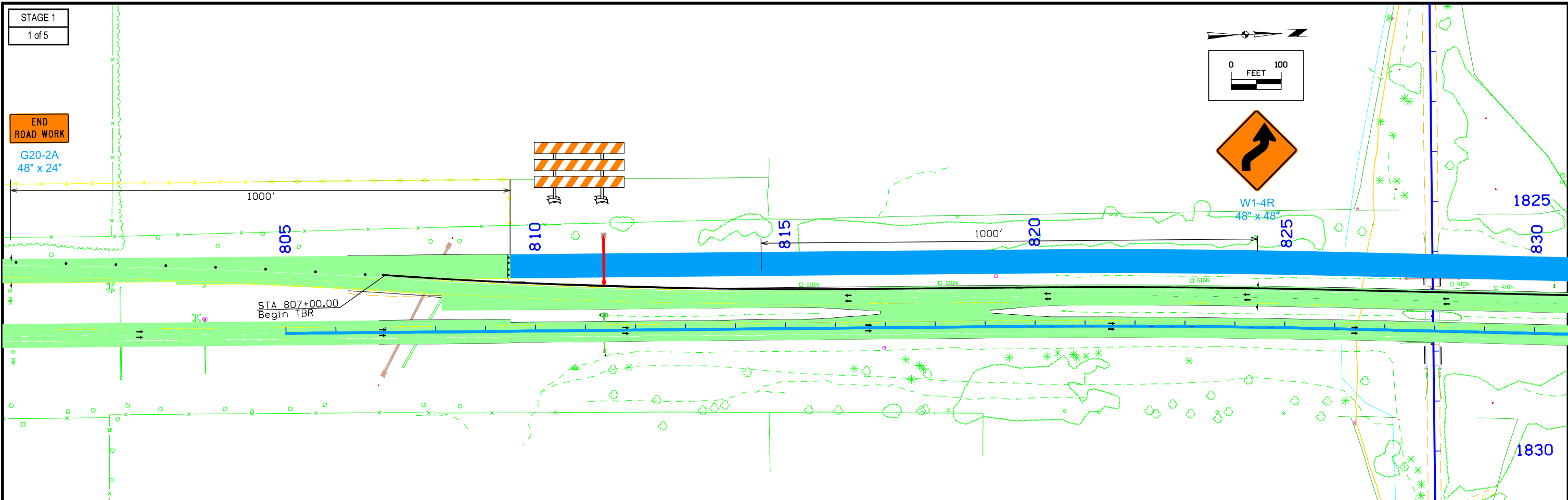
- Notes:
① 42" Channelizer



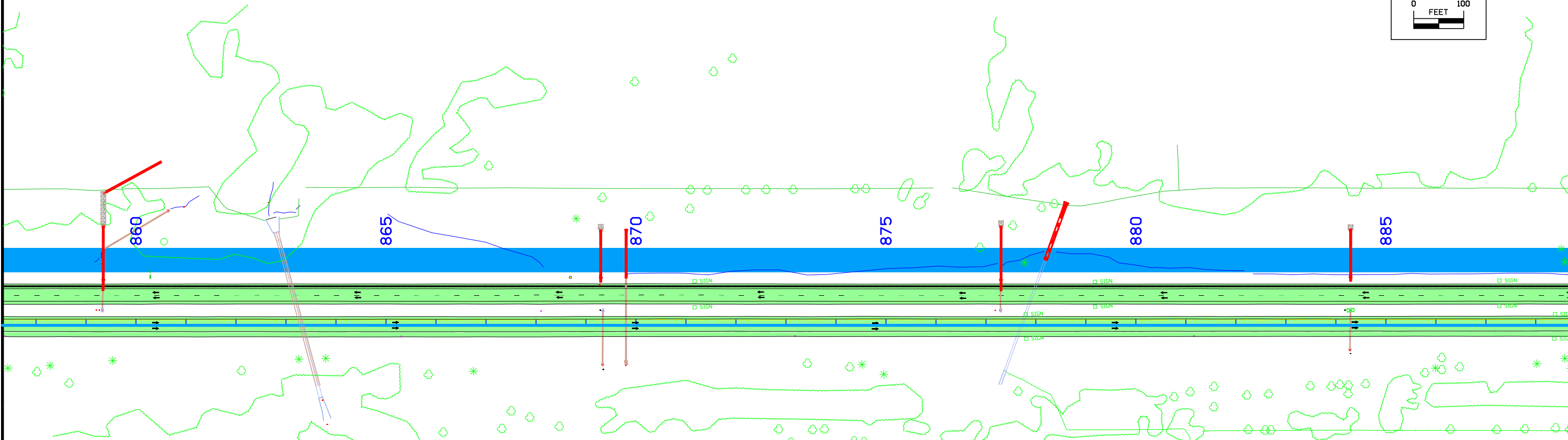
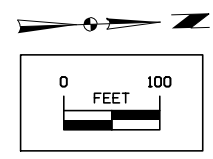
STAGE 2 CONSTRUCTION
 STA. 801+66.95 to 809+50.00 and 927+63 to 938+00
 Removal of Existing Median Crossovers
 Traffic On Newly Constructed and Existing Lanes

Notes:

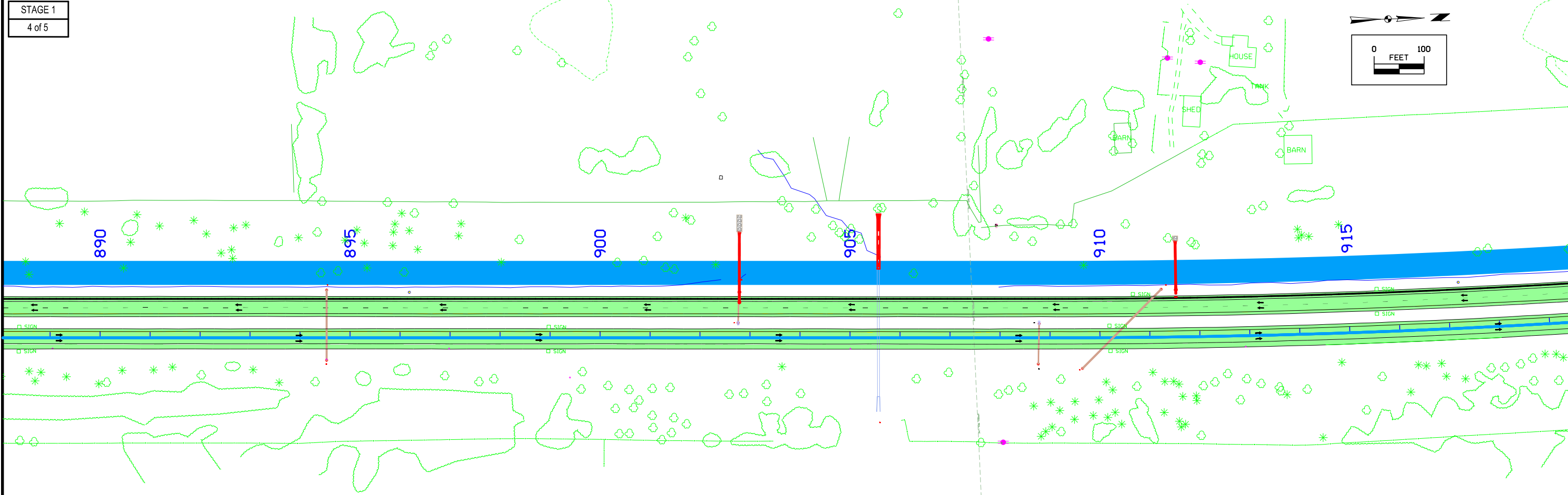
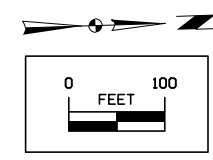
- ① Temporary Barrier Rail
- ② 42" Channelizer



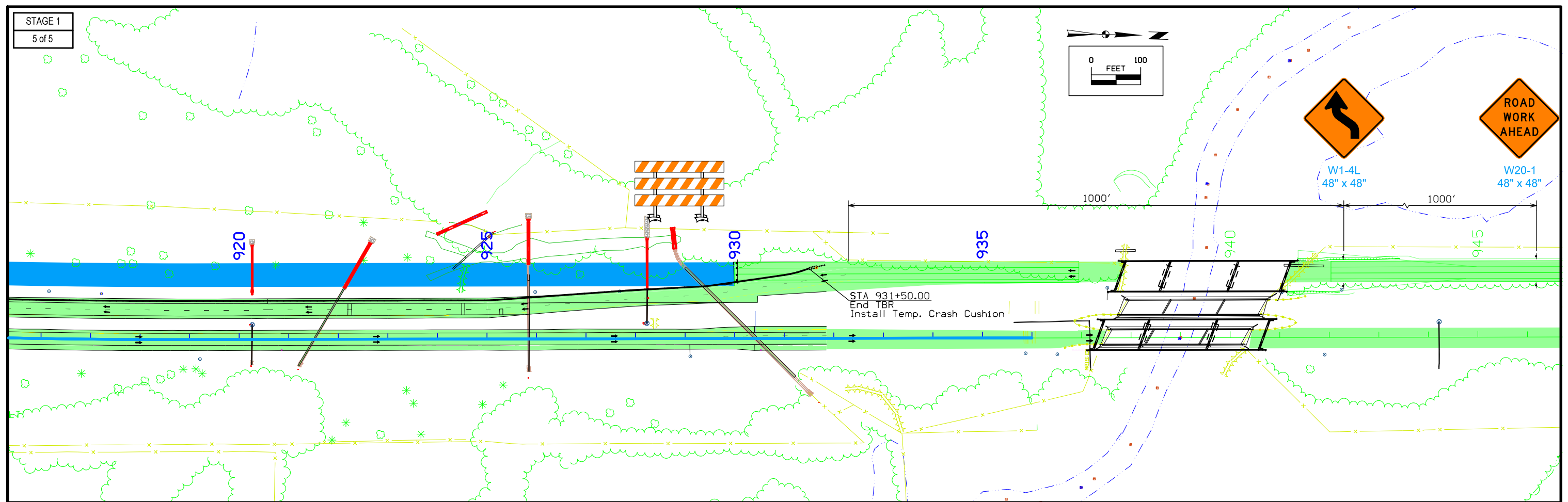
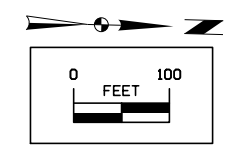
STAGE 1
3 of 5

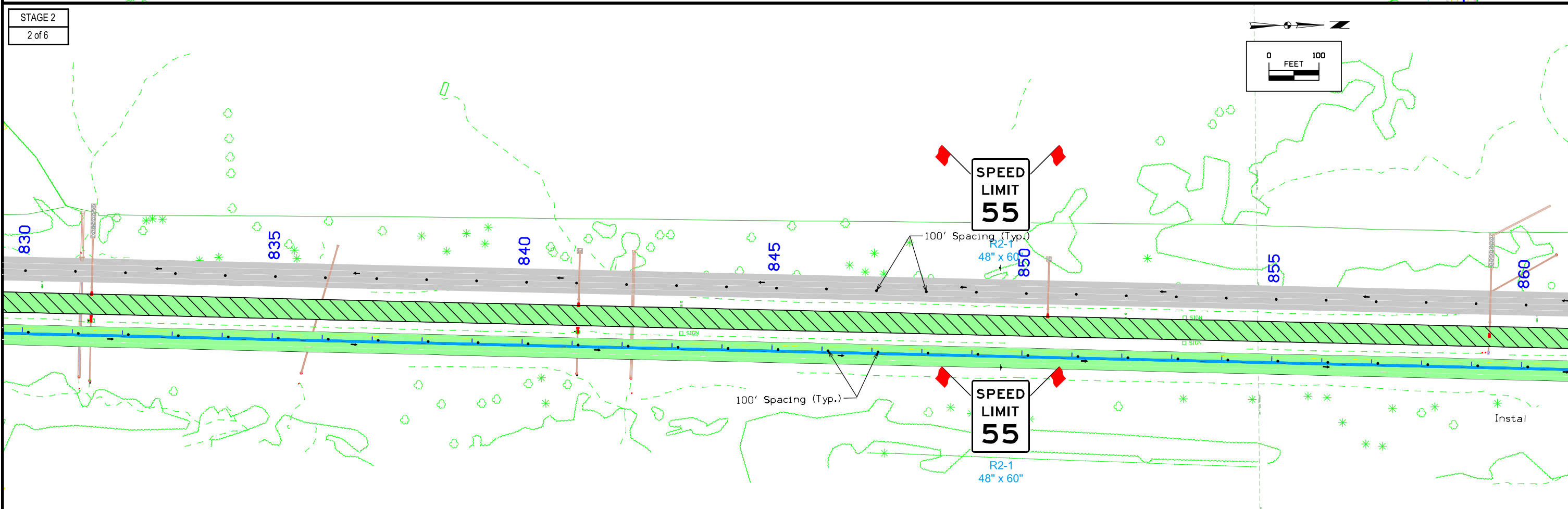
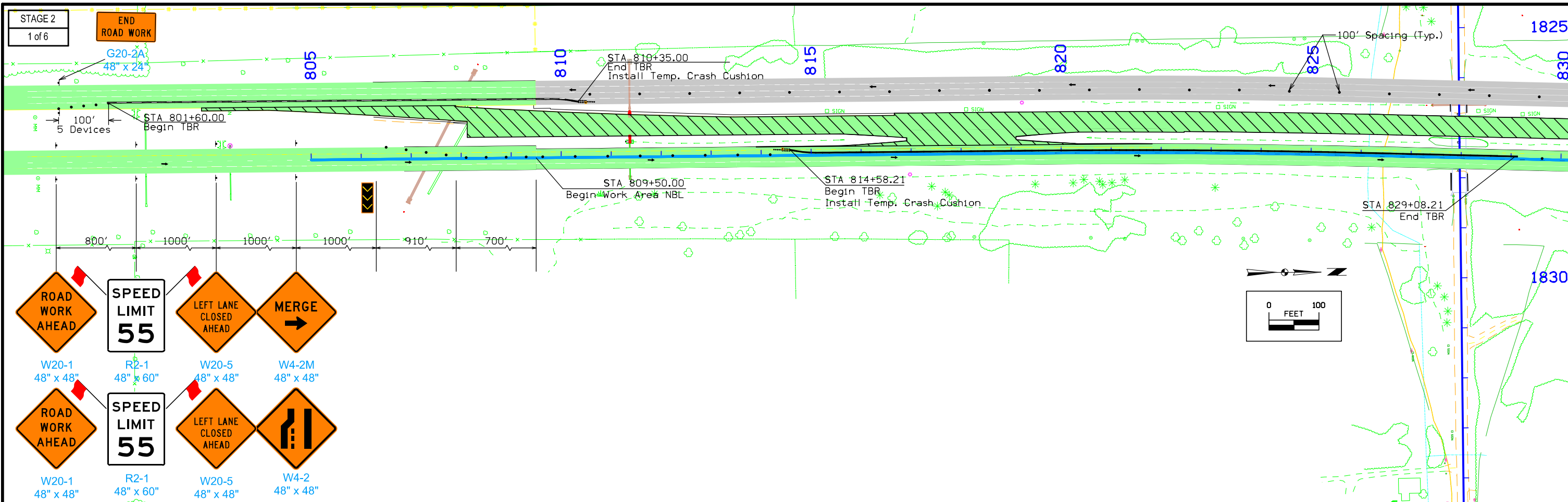


STAGE 1
4 of 5

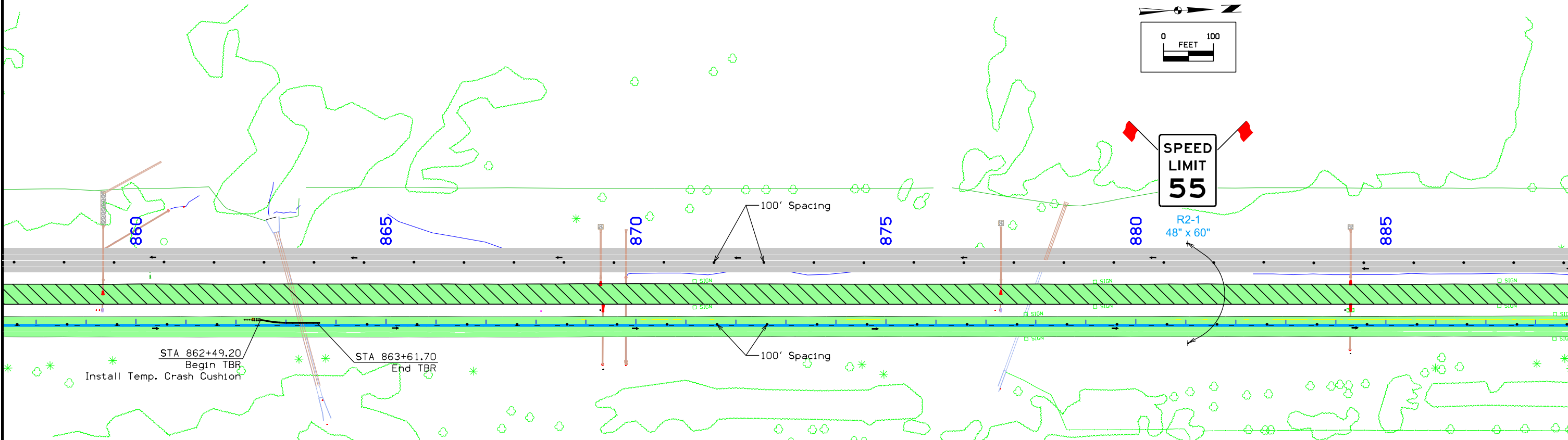


STAGE 1
5 of 5

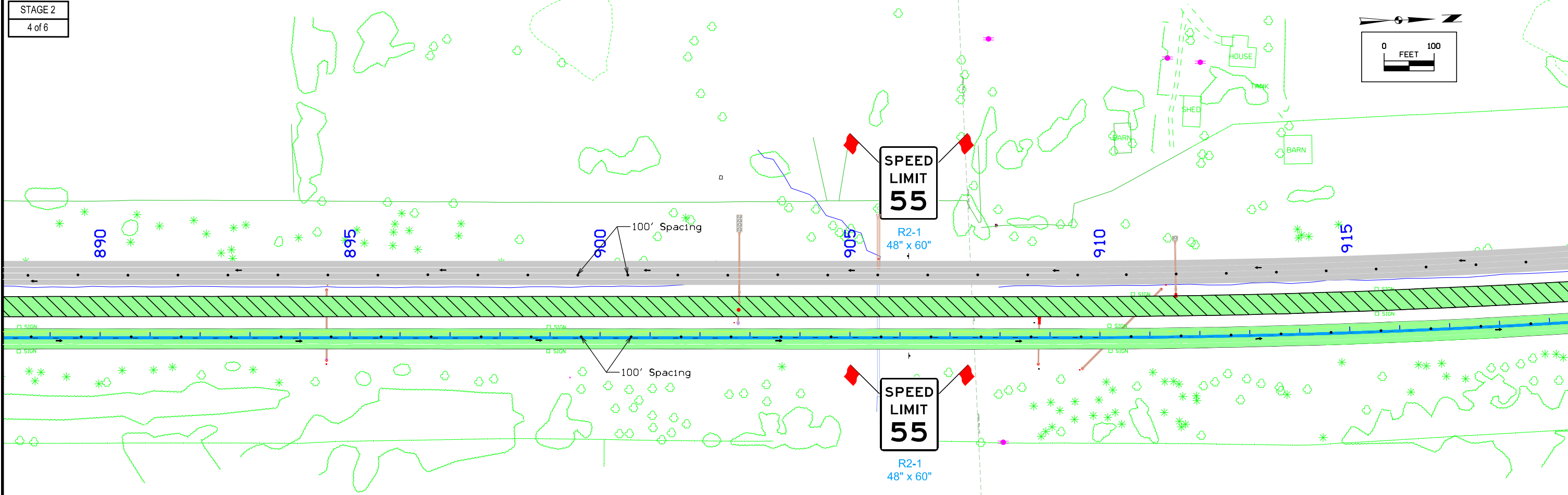


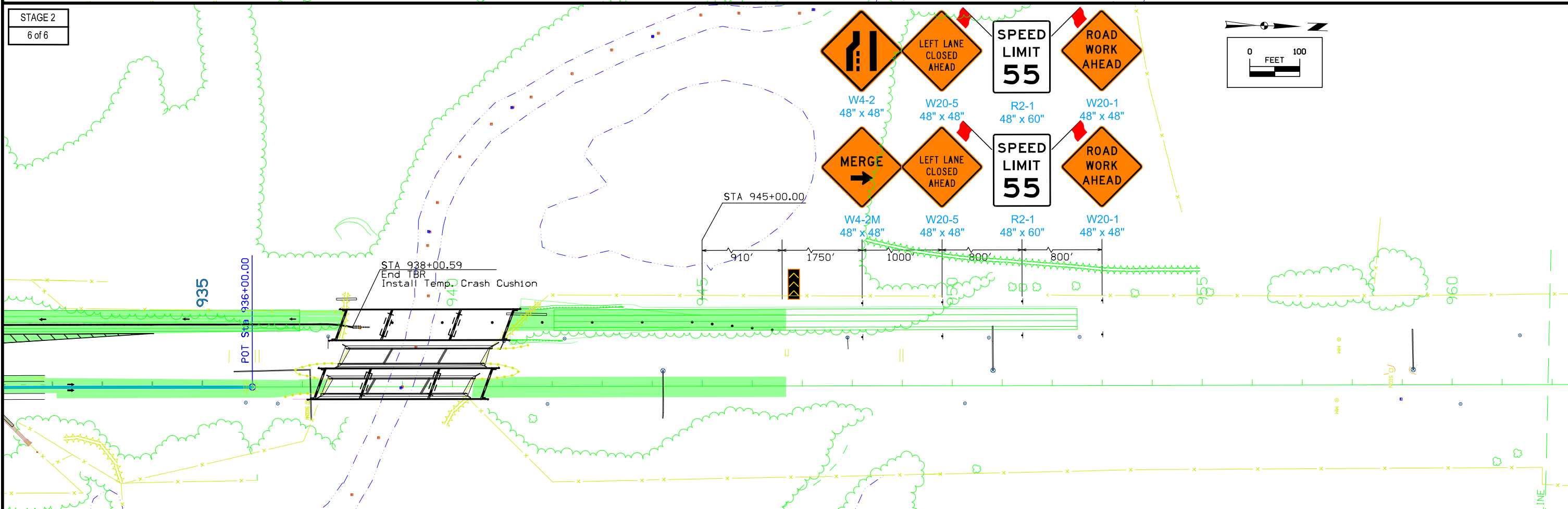
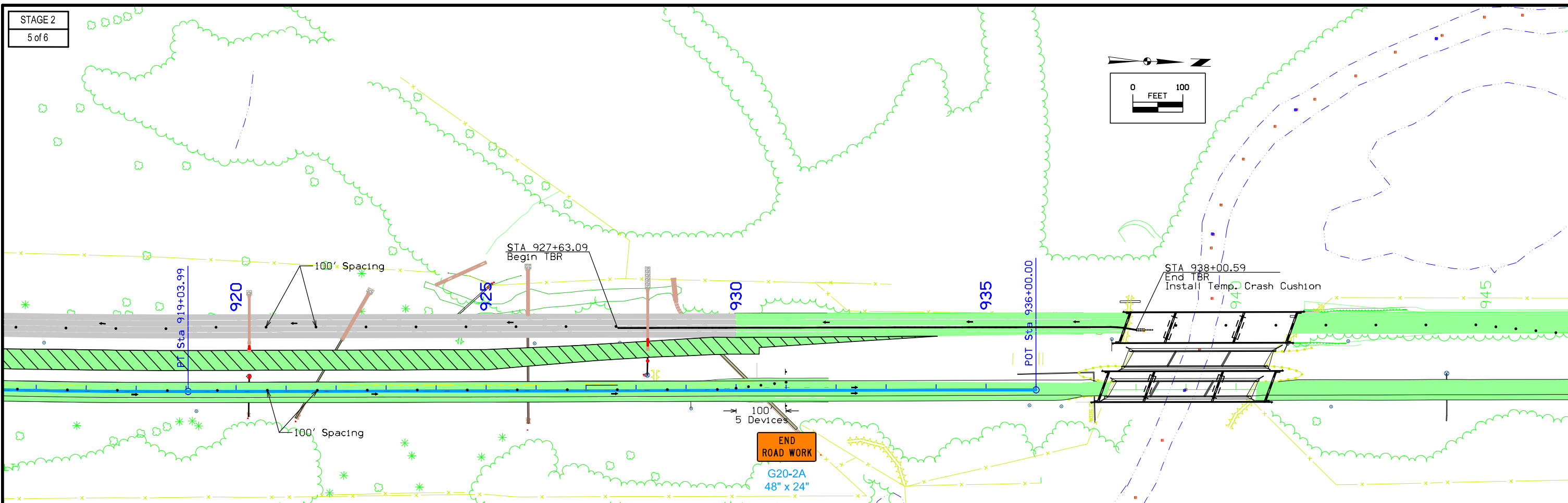


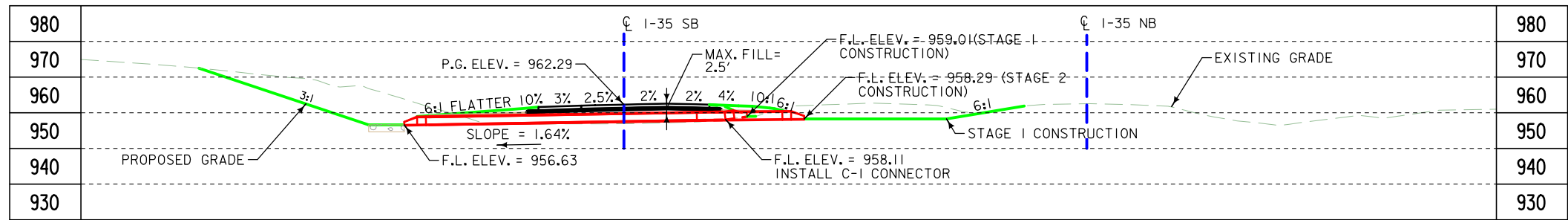
STAGE 2
3 of 6



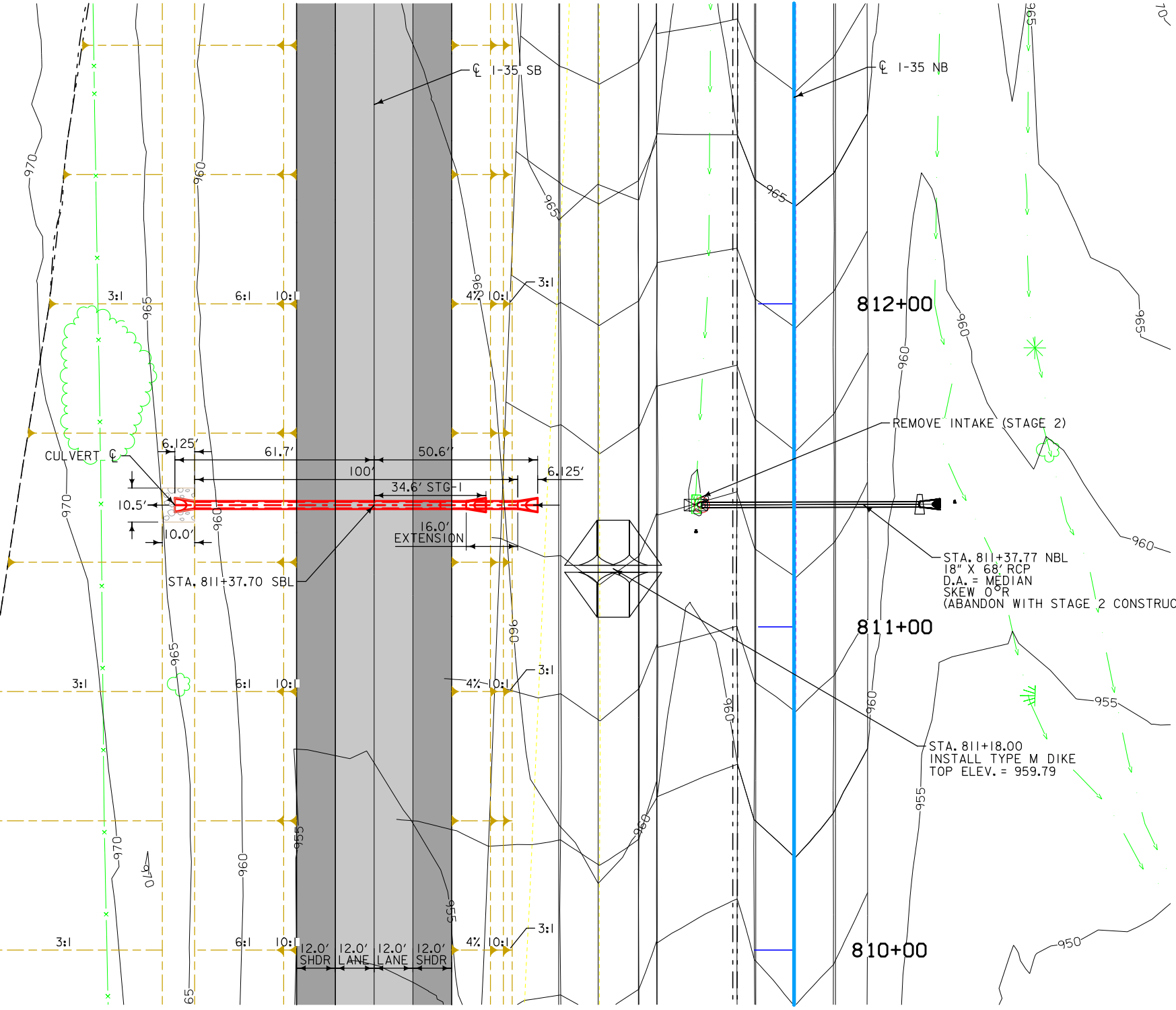
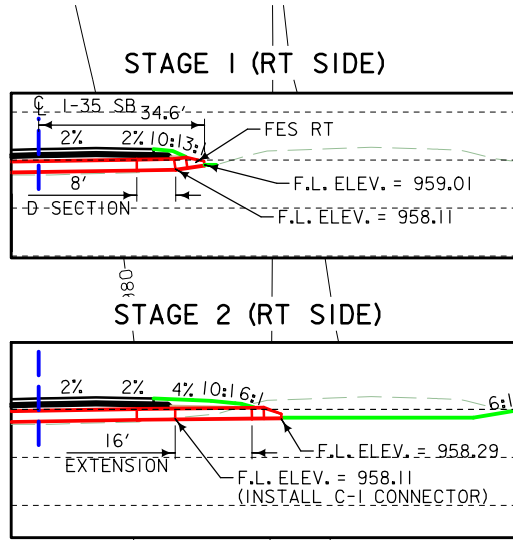
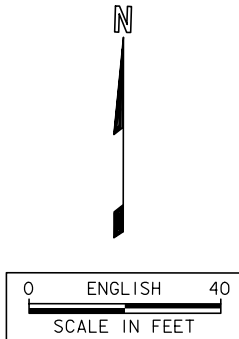
STAGE 2
4 of 6







LONGITUDINAL SECTION ALONG ϕ CULVERT



PLAT PLAN

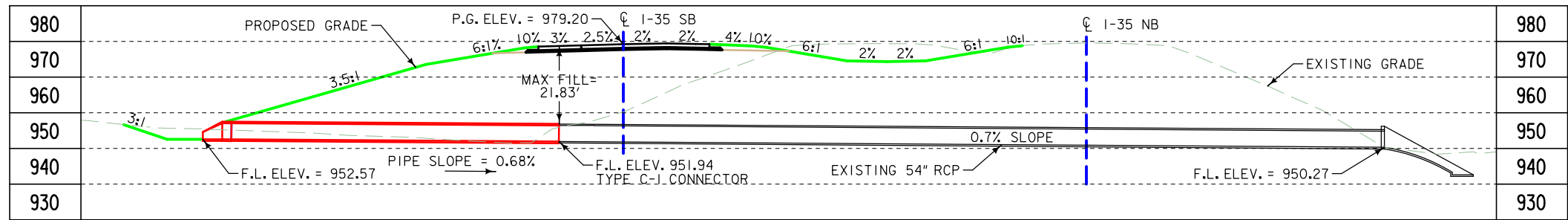
STAGING NOTES
 STAGE 1:
 INSTALL 84 LF OF 24" RCP WITH D SECTION AND 2 FES.
 STAGE 2:
 REMOVE FES RT AND CUT BEVEL OFF D SECTION. INSTALL 16 LF RCP AND REINSTALL FES. ABANDON EXISTING MEDIAN DRAIN UNDER NBL.
 SLOPE LINES SHOWN FOR STAGE I CONSTRUCTION ONLY.

UTILITIES LEGEND:
 REFER TO D.I

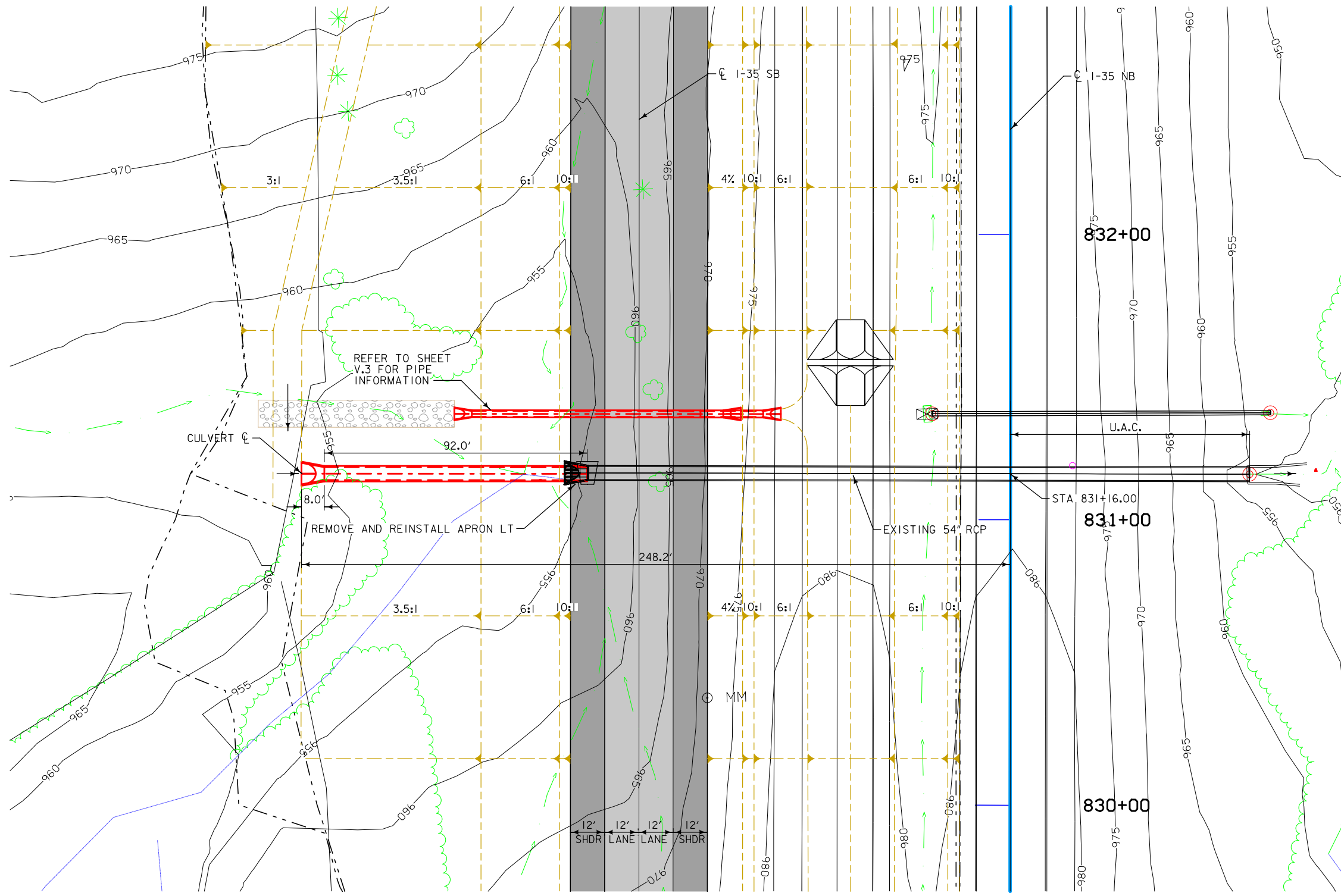
HYDRAULIC DATA
 DRAINAGE AREA = 4.02 ACRES ROLLING
 DESIGN DISCHARGE, Q_{50} = 12.57 CFS

LOCATION
 I-35
 T-76N R-25W
 SECTION 18
 JEFFERSON TOWNSHIP
 WARREN COUNTY

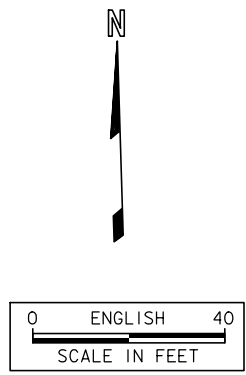
DESIGN FOR 0° SKEW
24" X 100'
REINFORCED CONCRETE PIPE
 PLAT PLAN
 STATION 811+37.70 SBL 02/20/2020
WARREN COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. ___ OF 2 FILE NO. ___ DESIGN NO. ___



LONGITUDINAL SECTION ALONG ϕ CULVERT



PLAT PLAN

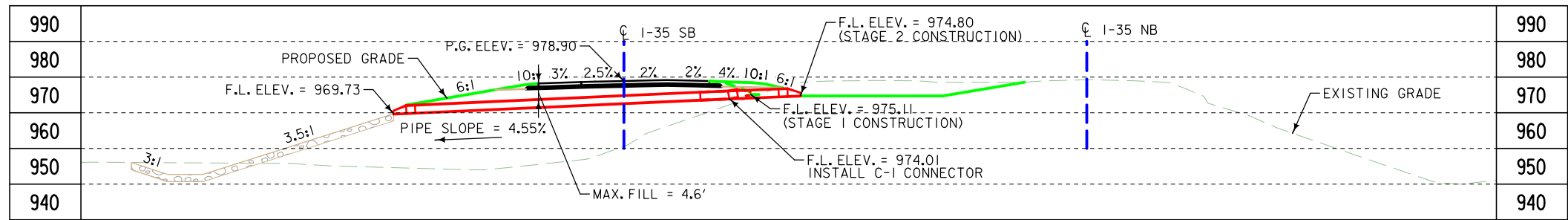


UTILITIES LEGEND:
REFER TO D.I

HYDRAULIC DATA
DRAINAGE AREA = 32.37 ACRES HILLY
DESIGN DISCHARGE, $Q_{50} = 81.8$ CFS

LOCATION
I-35
T-76N R-25W
SECTION 18
JEFFERSON TOWNSHIP
WARREN COUNTY

DESIGN FOR 0° SKEW
54" X 92'
3000D REINFORCED CONCRETE
PIPE EXTENSION
PLAT PLAN
 STATION 831+16.00 02/20/2020
WARREN COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. ___ OF ___ FILE NO. ___ DESIGN NO. ___



LONGITUDINAL SECTION ALONG CL CULVERT



STAGING NOTES

STAGE 1:
 INSTALL 88' LF OF 24" RCP WITH D SECTION AND 2 FES.

STAGE 2:
 REMOVE FES RT AND CUT OFF D SECTION BEVEL. INSTALL C-1 CONNECTOR AND 14 LF RCP, AND REINSTALL FES. ABANDON EXISTING MEDIAN DRAIN UNDER NBL.

SLOPE LINES SHOWN FOR STAGE 1 CONSTRUCTION ONLY.

UTILITIES LEGEND:

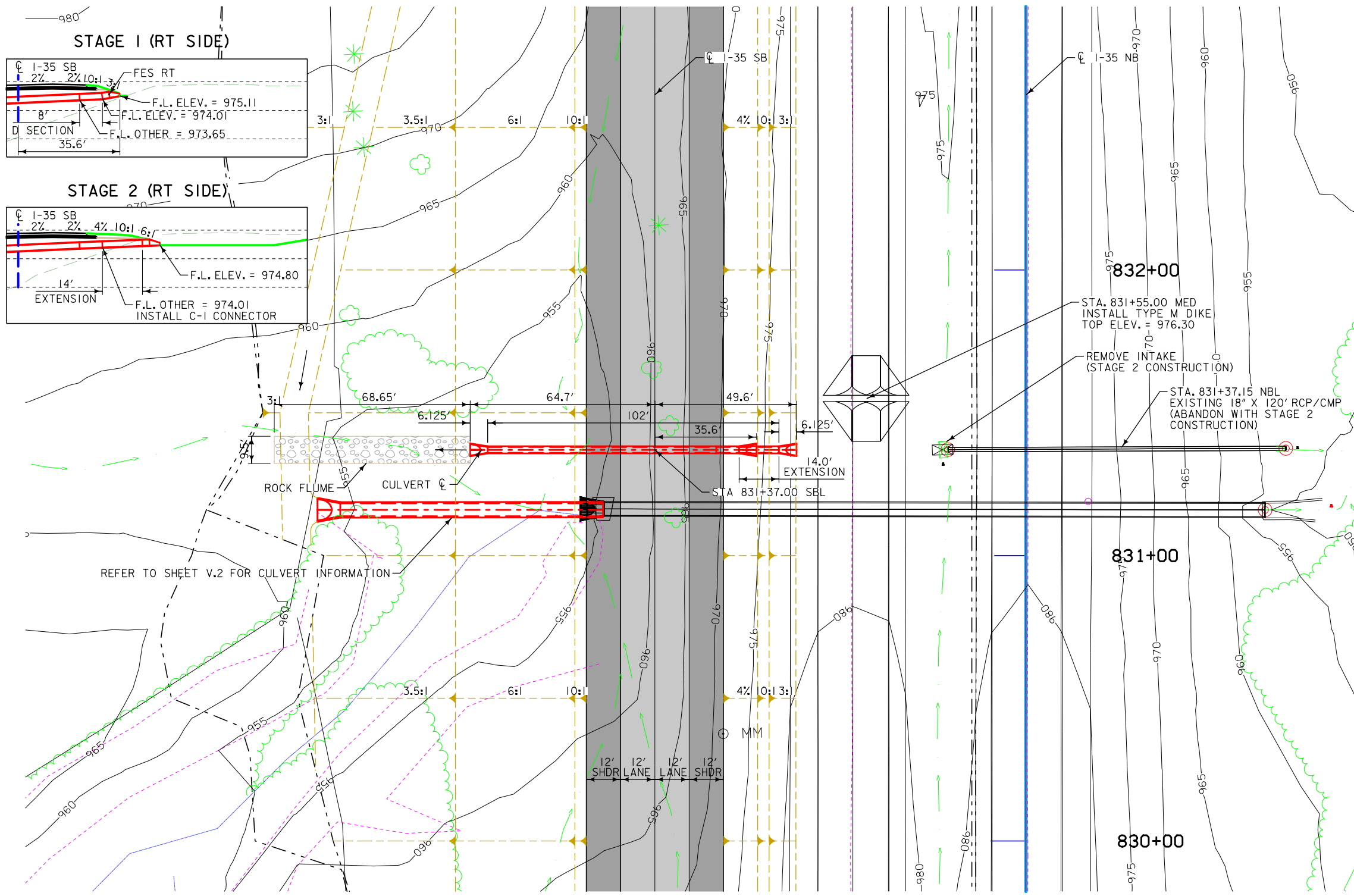
REFER TO D.1

HYDRAULIC DATA

DRAINAGE AREA = 1.94 ACRES ROLLING
 DESIGN DISCHARGE, $Q_{50} = 7.23$ CFS

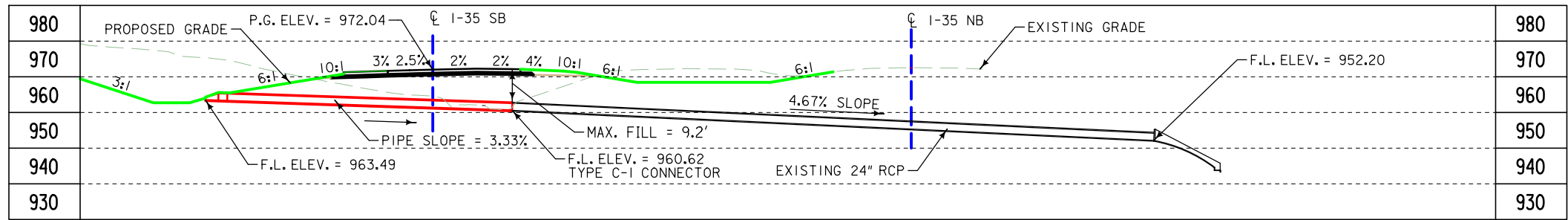
LOCATION

I-35
 T-76N R-25W
 SECTION 18
 JEFFERSON TOWNSHIP
 WARREN COUNTY

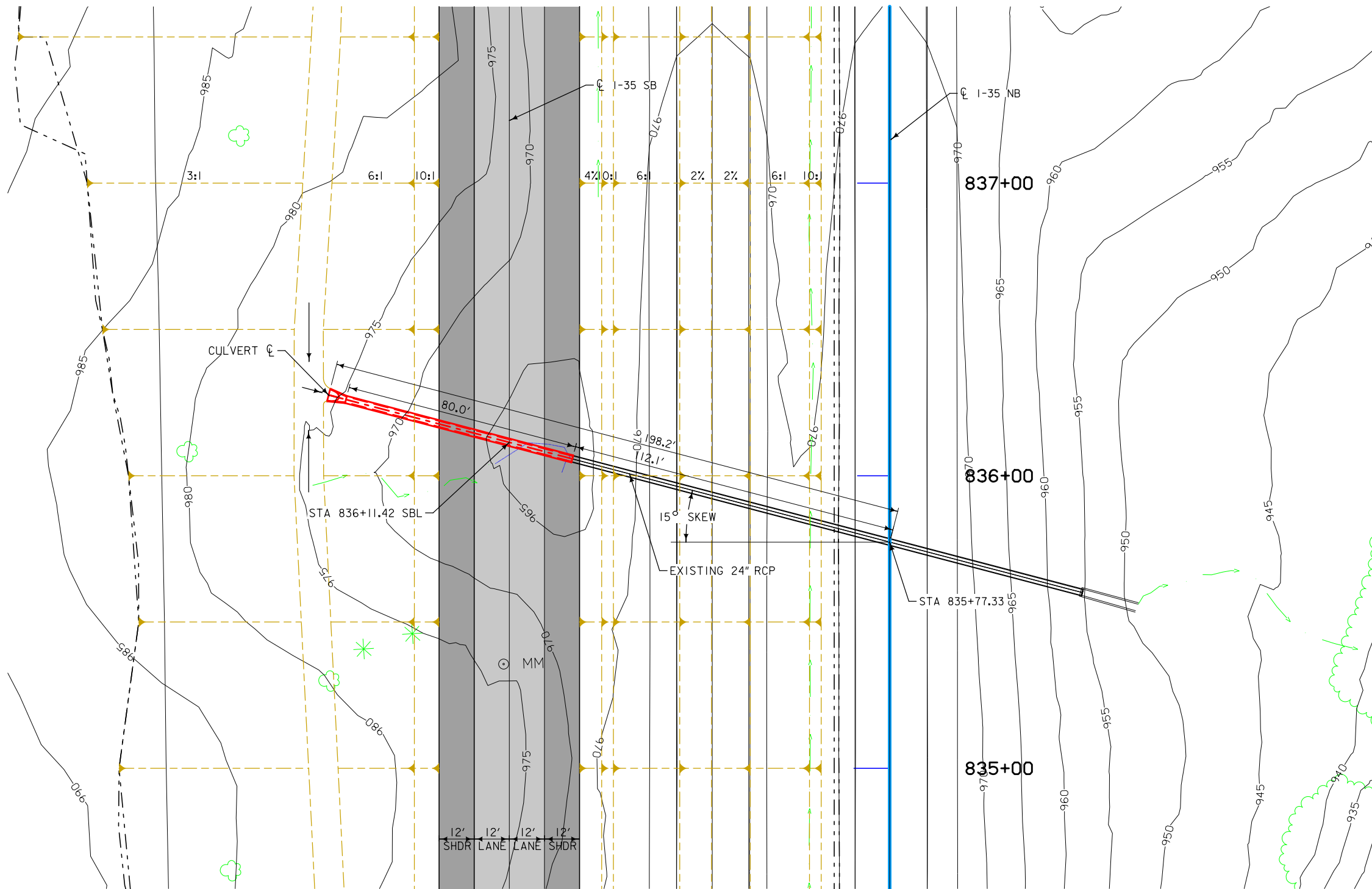


PLAT PLAN

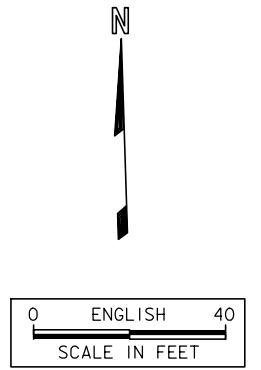
DESIGN FOR 0° SKEW
24" X 102'
REINFORCED CONCRETE PIPE
 PLAT PLAN
 STATION 831+37.00 SBL 02/20/2020
WARREN COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. ? OF ? FILE NO. ? DESIGN NO. ?



LONGITUDINAL SECTION ALONG CL CULVERT



PLAT PLAN

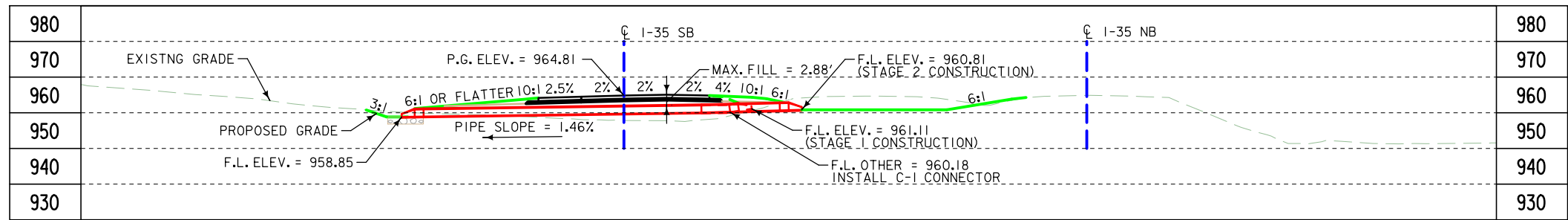


UTILITIES LEGEND:
REFER TO D.1

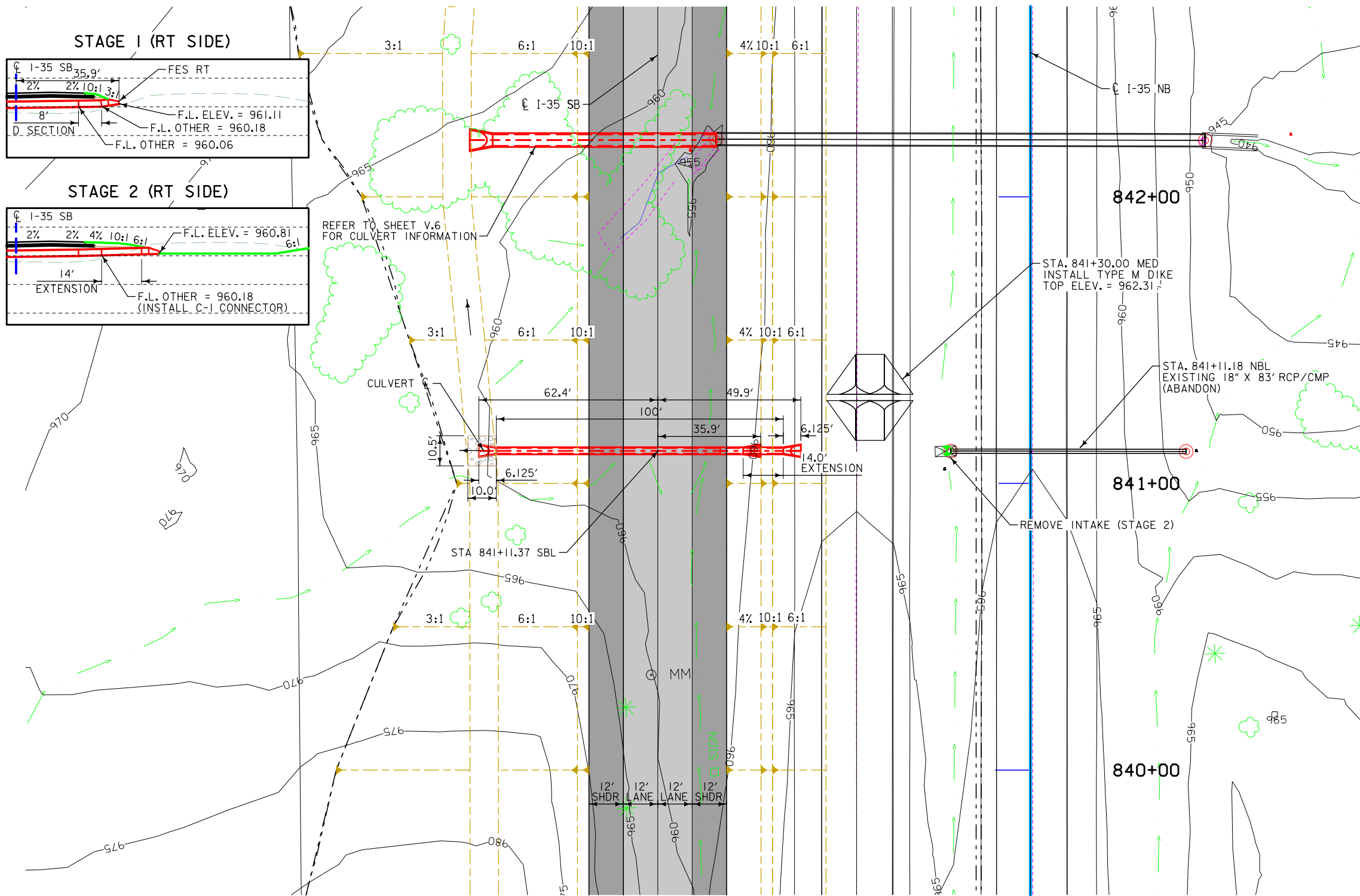
HYDRAULIC DATA
DRAINAGE AREA = 2.95 ACRES HILLY
DESIGN DISCHARGE, $Q_{50} = 13.2$ CFS

LOCATION
1-35
T-76N R-25W
SECTION 18
JEFFERSON TOWNSHIP
WARREN COUNTY

DESIGN FOR 15° SKEW LT. AHEAD
24" X 80'
REINFORCED CONCRETE
PIPE EXTENSION
PLAT PLAN
 STATION 835+77.33 02/20/2020
WARREN COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. ____ OF ____ FILE NO. ____ DESIGN NO. ____



LONGITUDINAL SECTION ALONG \bar{C} CULVERT



STAGING NOTES

STAGE 1:
 INSTALL 86 LF OF 24" RCP WITH D SECTION AND 2 FES.

STAGE 2
 REMOVE FES RT AND CUT OFF D SECTION BEVEL. INSTALL 14 LF RCP AND REINSTALL FES. ABANDON EXISTING MEDIAN DRAIN UNDER NBL.

SLOPE LINES SHOWN FOR STAGE 1 CONSTRUCTION ONLY.

UTILITIES LEGEND:

REFER TO D.I

HYDRAULIC DATA

DRAINAGE AREA = 2.91 ACRES ROLLING
 DESIGN DISCHARGE, Q_{50} = 9.84 CFS

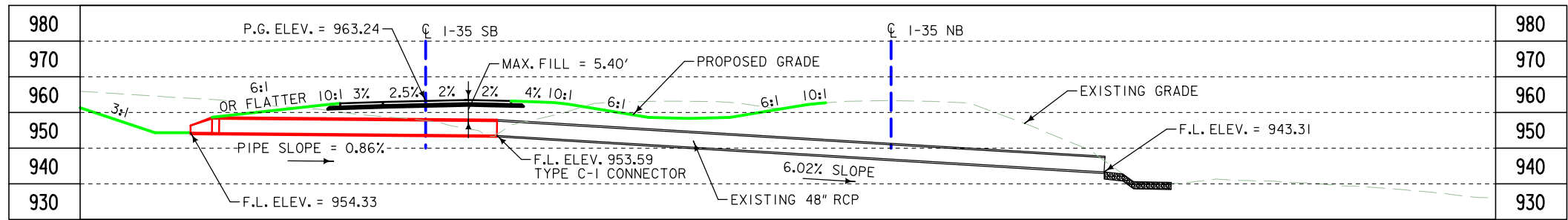
LOCATION

I-35
 T-76N R-25W
 SECTION 18
 JEFFERSON TOWNSHIP
 WARREN COUNTY

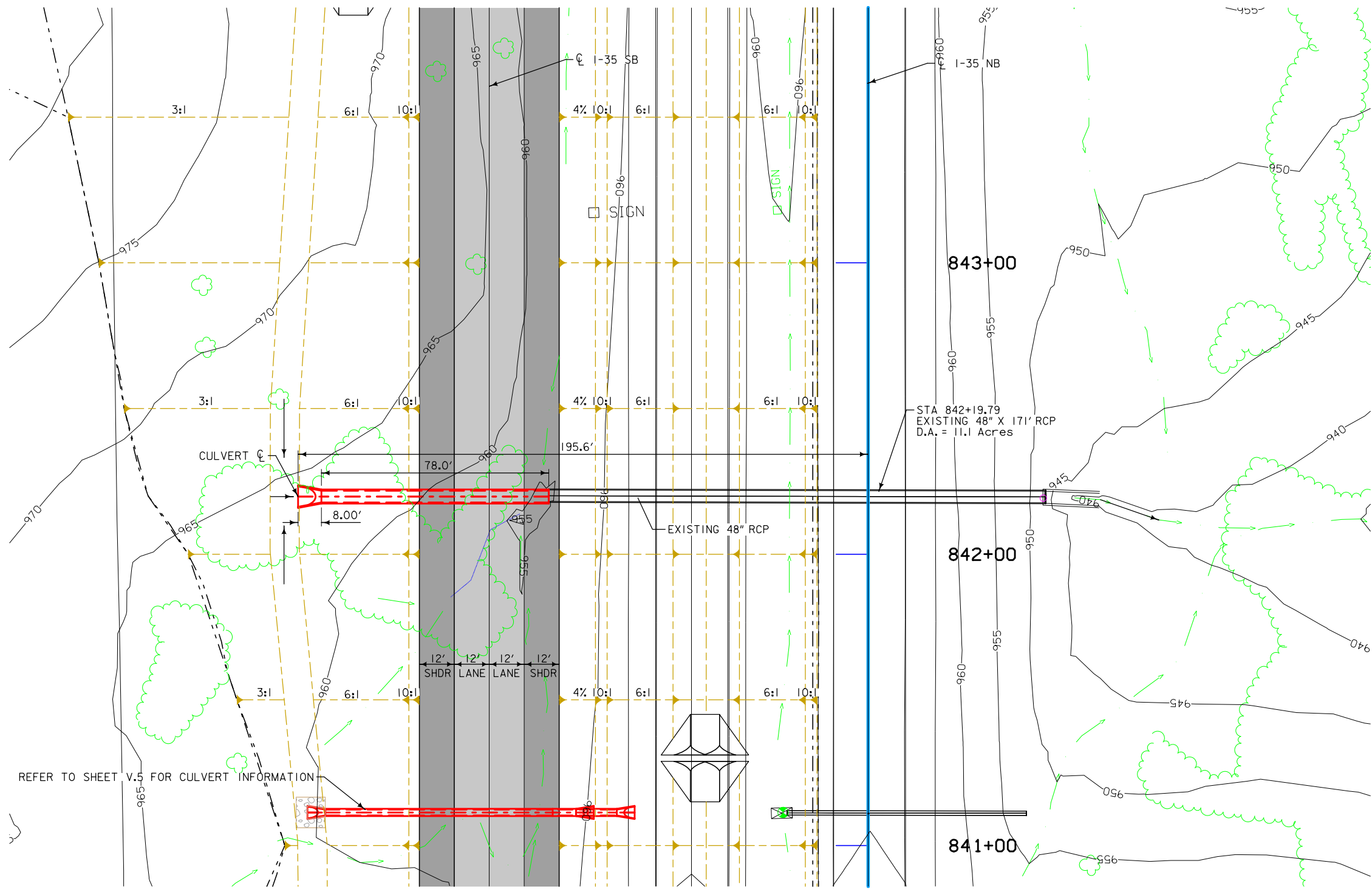
DESIGN FOR 0° SKEW
24" X 100'
REINFORCED CONCRETE PIPE

PLAT PLAN
 STATION 841+11.37 SBL 02/20/2020
WARREN COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. ___ OF ___ FILE NO. ___ DESIGN NO. ___

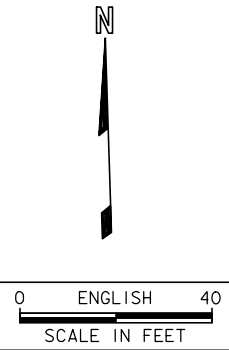
PLAT PLAN



LONGITUDINAL SECTION ALONG CULVERT



PLAT PLAN

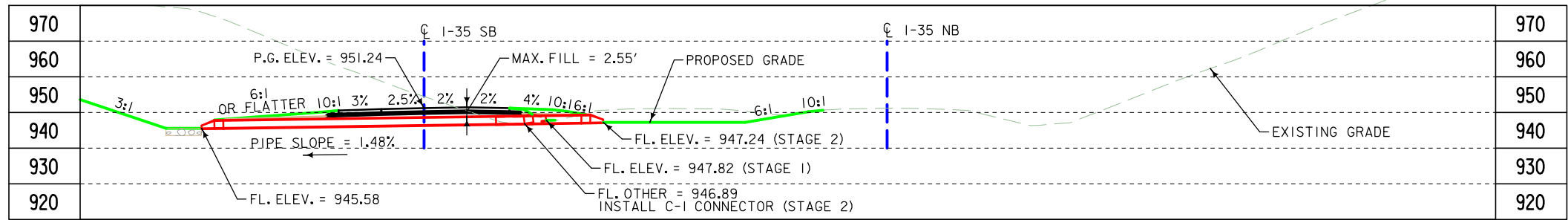


UTILITIES LEGEND:
REFER TO D.I

HYDRAULIC DATA
DRAINAGE AREA = 11.3 ACRES HILLY
DESIGN DISCHARGE, $Q_{50} = 36.8$ CFS

LOCATION
I-35
T-76N R-25W
SECTION 18
JEFFERSON TOWNSHIP
WARREN COUNTY

DESIGN FOR 0° SKEW
48" X 78'
REINFORCED CONCRETE
PIPE EXTENSION
PLAT PLAN
 STATION 842+19.79 02/20/2020
WARREN COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. ___ OF ___ FILE NO. ___ DESIGN NO. ___



LONGITUDINAL SECTION ALONG \bar{C} CULVERT



STAGING NOTES

- STAGE 1:
INSTALL 84' LF OF 24" RCP WITH D SECTION AND 2 FES.
- STAGE 2:
REMOVE FES RT AND CUT OFF D SECTION BEVEL. INSTALL 16 LF RCP AND REINSTALL FES. ABAONDON EXISTING MEDIAN DRAIN UNDER NBL.

UTILITIES LEGEND

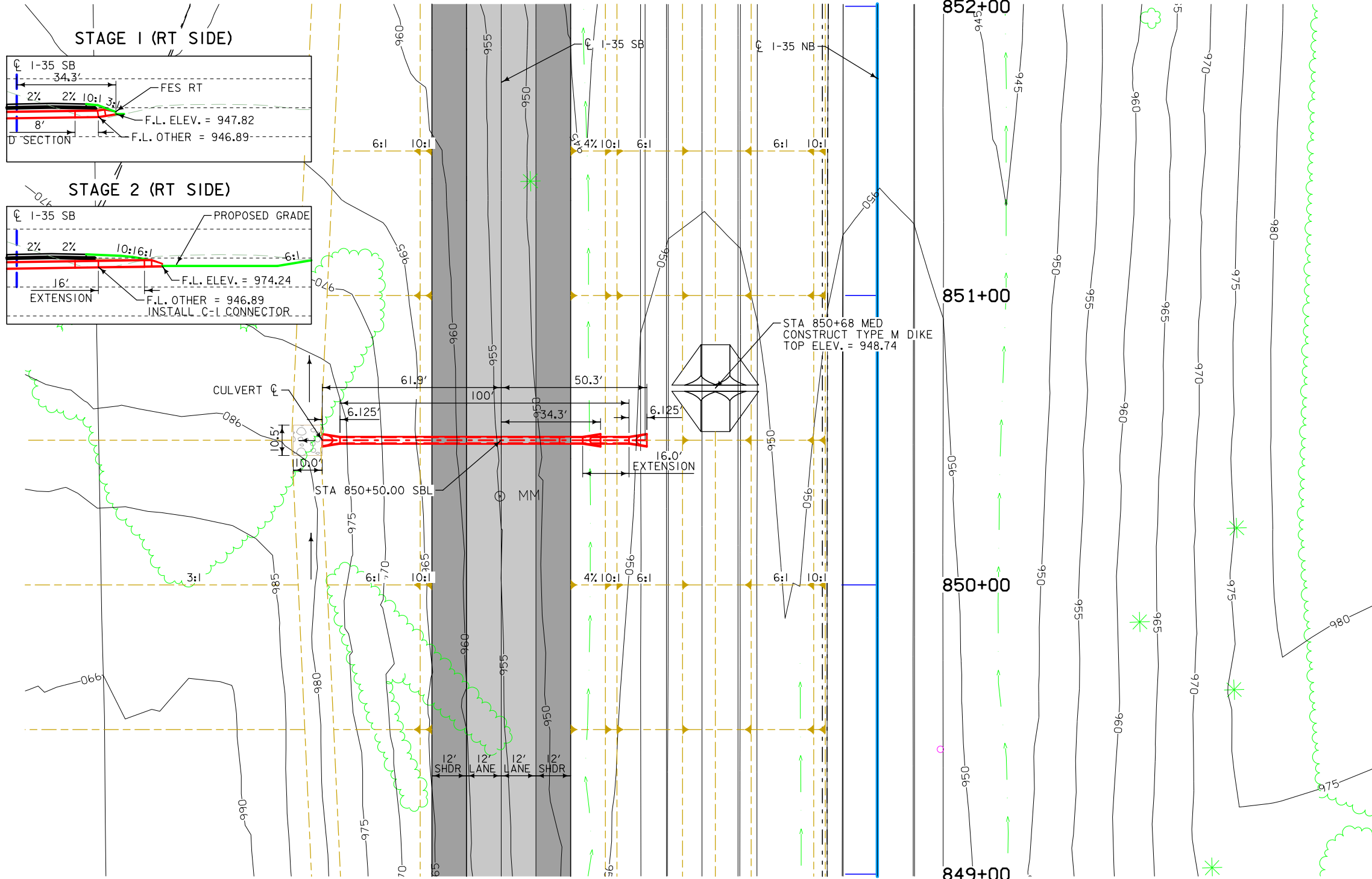
REFER TO D.1

HYDRAULIC DATA

DRAINAGE AREA = 2.80 ACRES ROLLING
DESIGN DISCHARGE, Q_{50} = 9.55 CFS

LOCATION

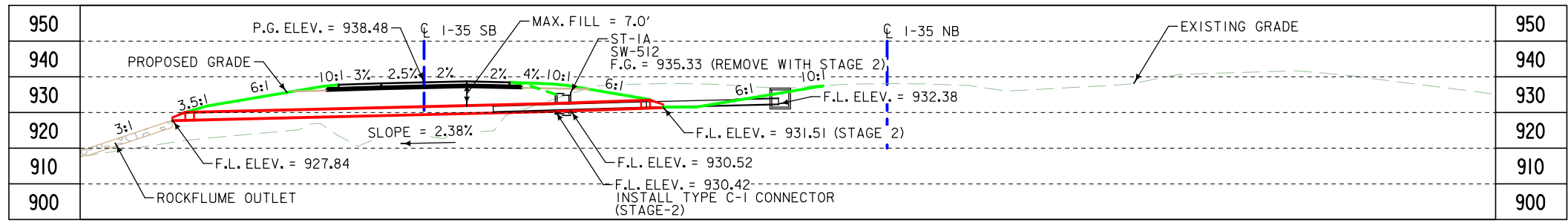
I-35
T-76N R-25
SECTION 18
JEFFERSON TOWNSHIP
WARREN COUNTY



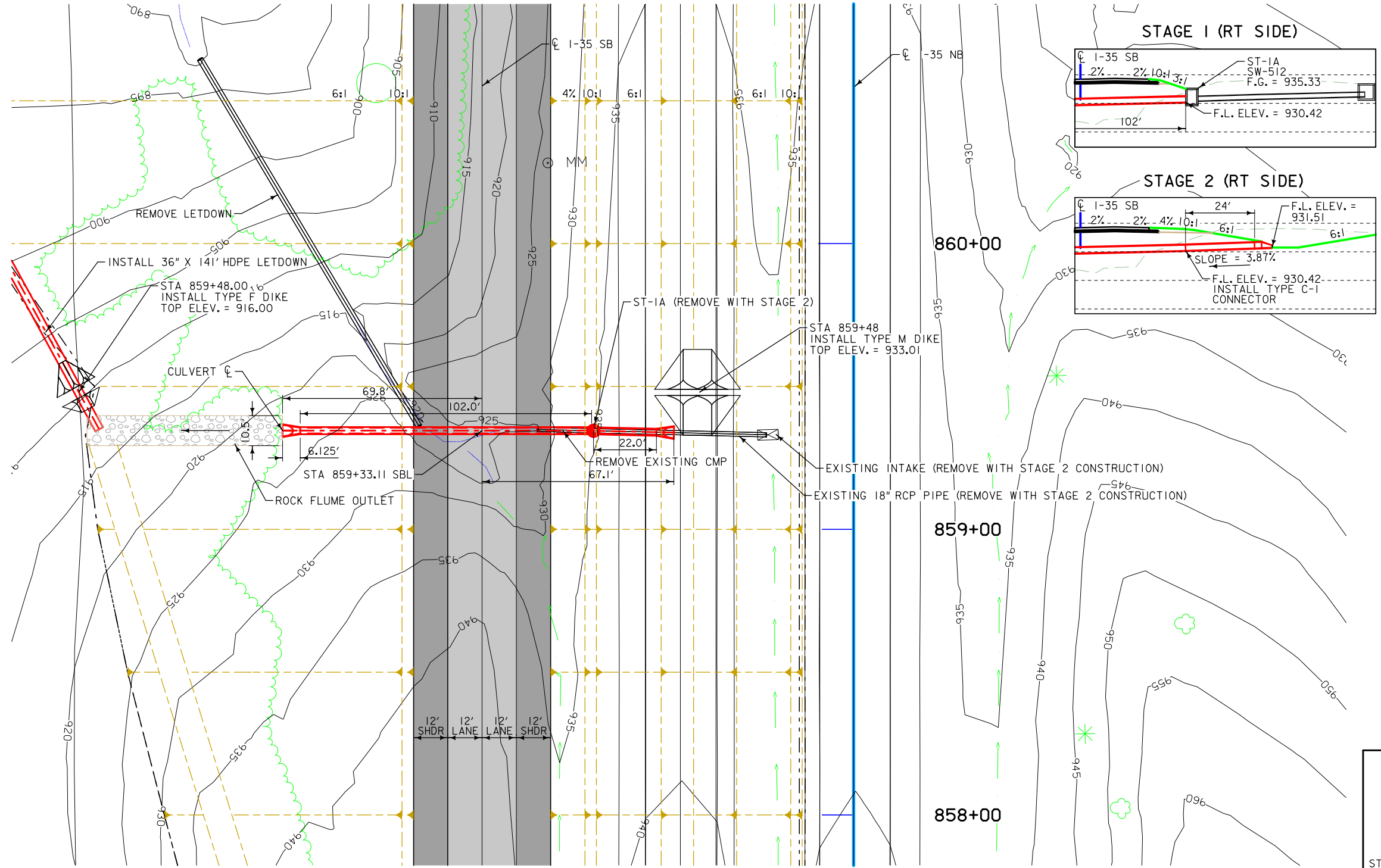
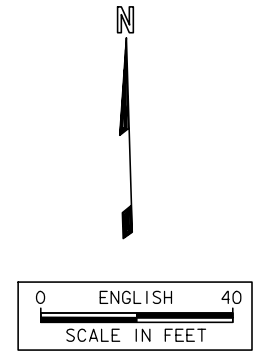
PLAT PLAN

DESIGN FOR 0° SKEW
24" X 100'
REINFORCED CONCRETE PIPE

PLAT PLAN
STATION 850+50.00 SBL 02/21/2020
WARREN COUNTY
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
DESIGN SHEET NO. ___ OF ___ FILE NO. ___ DESIGN NO. ___



LONGITUDINAL SECTION ALONG \bar{C} CULVERT



PLAT PLAN

STAGING NOTES

STAGE 1:
REMOVE EXISTING CMP. INSTALL STRUCTURE ST-1A AND 102 LF OF 24" RCP

STAGE 2:
REMOVE STRUCTURE ST-1A AND 18" RCP. INSTALL 22 LF OF 24" RCP EXTENSION AND FES RT.

UTILITIES LEGEND:

REFER TO D.I

HYDRAULIC DATA

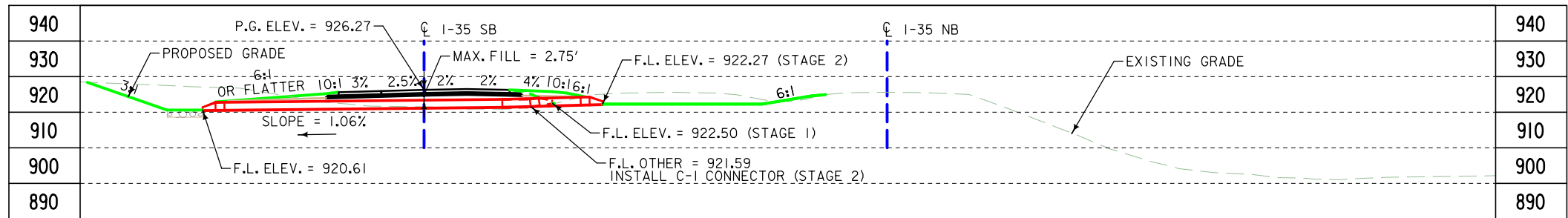
DRAINAGE AREA = 5.2 ACRES ROLLING
DESIGN DISCHARGE, Q_{50} = 15.29 CFS

LOCATION

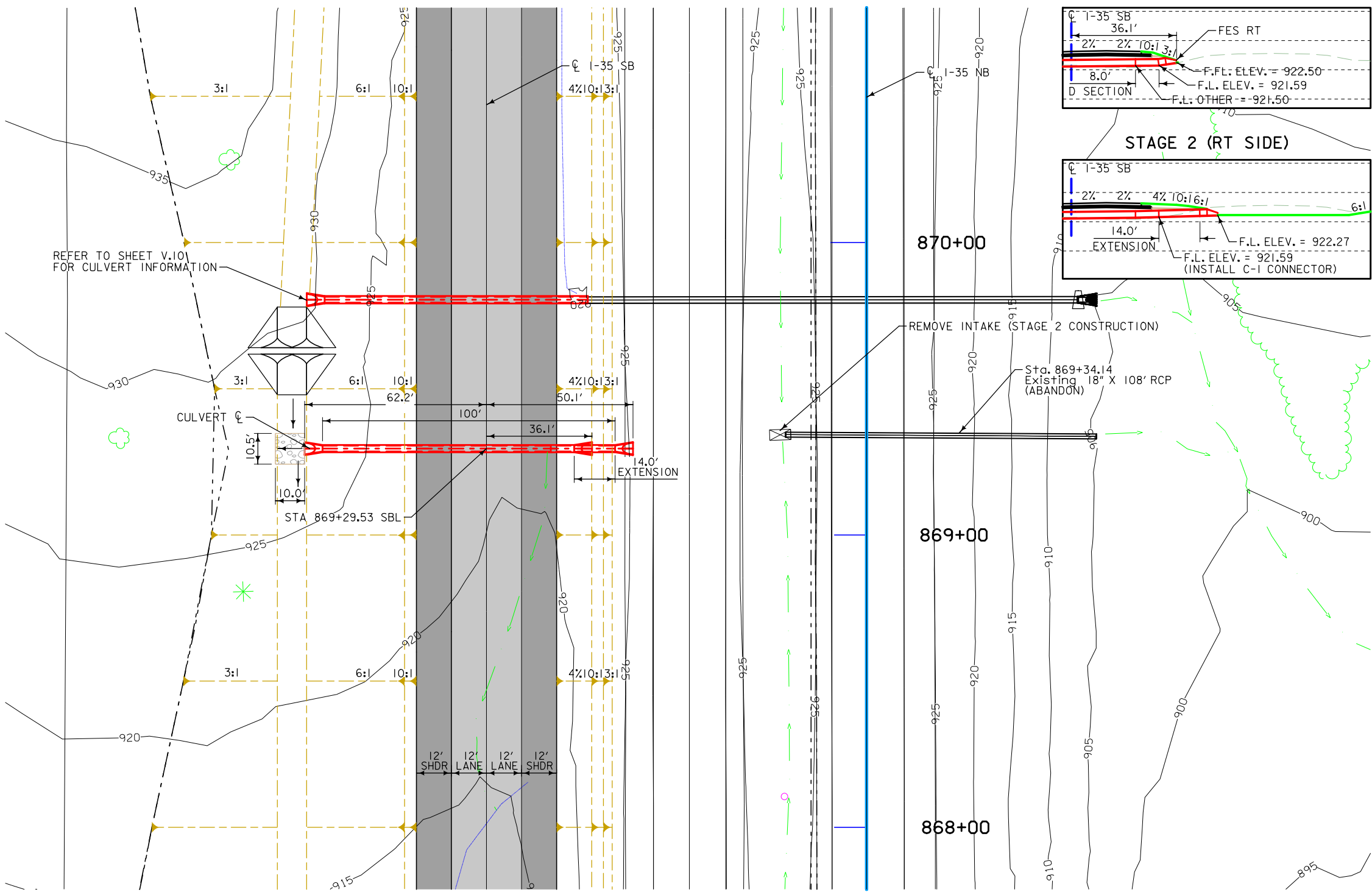
1-35
T-76N R-25
SECTION 7
JEFFERSON TOWNSHIP
WARREN COUNTY

DESIGN FOR 0° SKEW
24" X 124'
REINFORCED CONCRETE PIPE

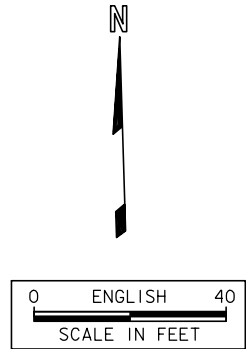
PLAT PLAN
STATION 859+33.11 SBL 02/20/2020
WARREN COUNTY
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
DESIGN SHEET NO. _____ OF _____ FILE NO. _____ DESIGN NO. _____



LONGITUDINAL SECTION ALONG CULVERT



PLAT PLAN



STAGING NOTES

STAGE 1:
INSTALL 86 LF OF 24" RCP WITH D SECTION AND 2 FES.

STAGE 2:
REMOVE FES RT AND CUT OFF D SECTION BEVEL. INSTALL 14 LF RCP AND REINSTALL FES. ABANDON EXISTING MEDIAN DRAIN UNDER NBL.

SLOPE LINES SHOWN FOR STAGE 1 CONSTRUCTION ONLY.

UTILITIES LEGEND:

REFER TO D.1

HYDRAULIC DATA

DRAINAGE AREA = 5.36 ACRES ROLLING
DESIGN DISCHARGE, $Q_{50} = 15.65$ CFS

LOCATION

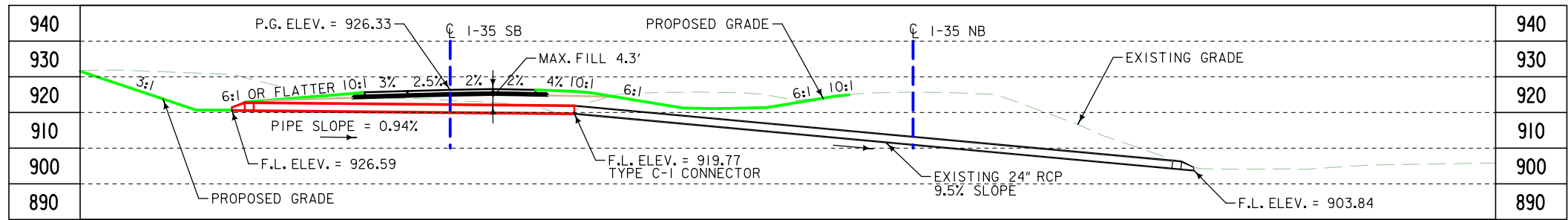
I-35
T-76N R-25
SECTION 7
JEFFERSON TOWNSHIP
WARREN COUNTY

DESIGN FOR 0° SKEW
24" X 100'
REINFORCED CONCRETE PIPE

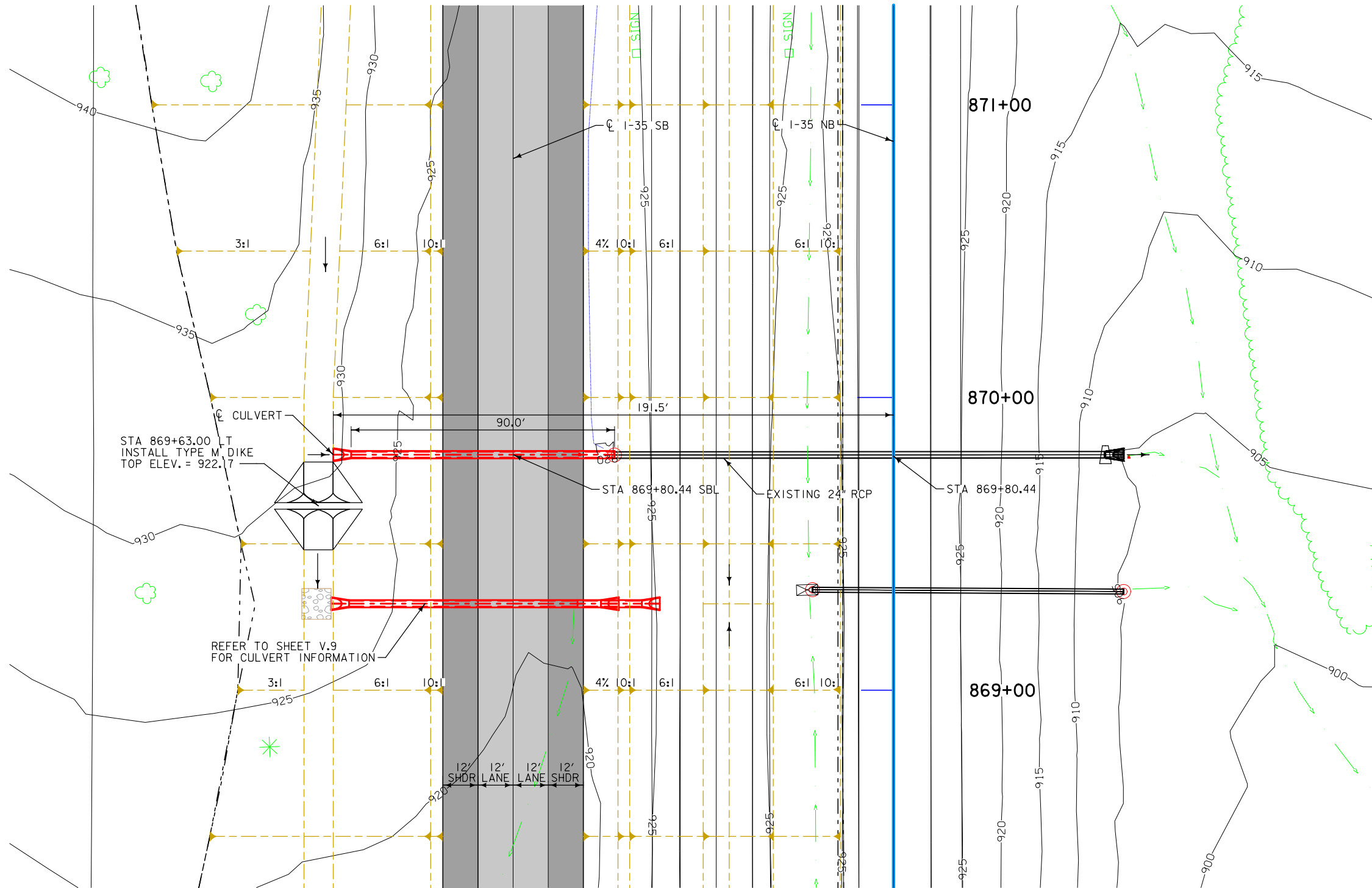
PLAT PLAN

STATION 869+29.53 SBL 02/21/2020

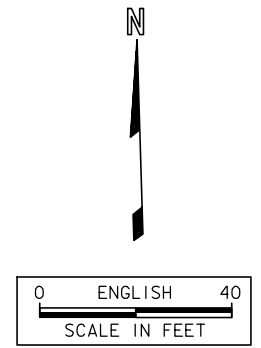
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
DESIGN SHEET NO. ___ OF ___ FILE NO. ___ DESIGN NO. ___



LONGITUDINAL SECTION ALONG ϕ CULVERT



PLAT PLAN

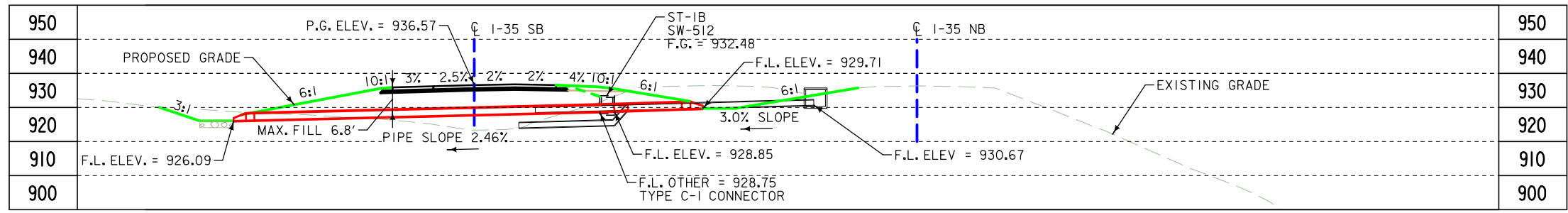


UTILITIES LEGEND:
REFER TO D.1

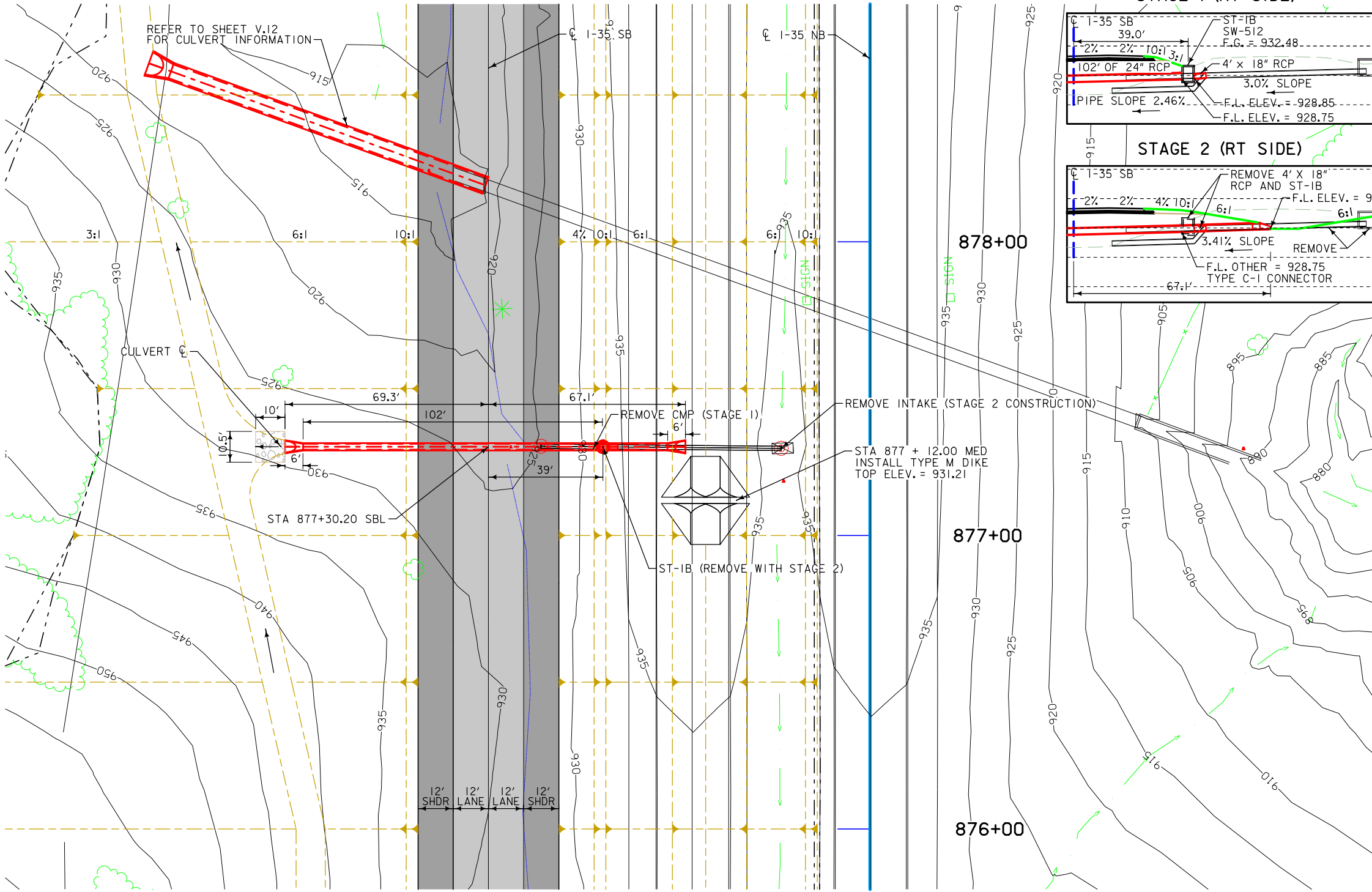
HYDRAULIC DATA
DRAINAGE AREA = 2.80 ACRES
DESIGN DISCHARGE, Q_{50} = 12.7 CFS

LOCATION
I-35
T-76N R-25W
SECTION 7
JEFFERSON TOWNSHIP
WARREN COUNTY

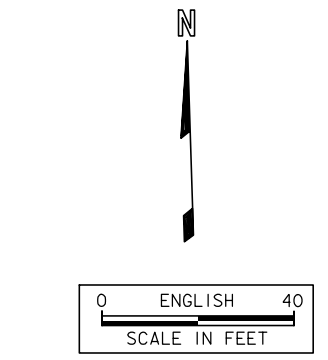
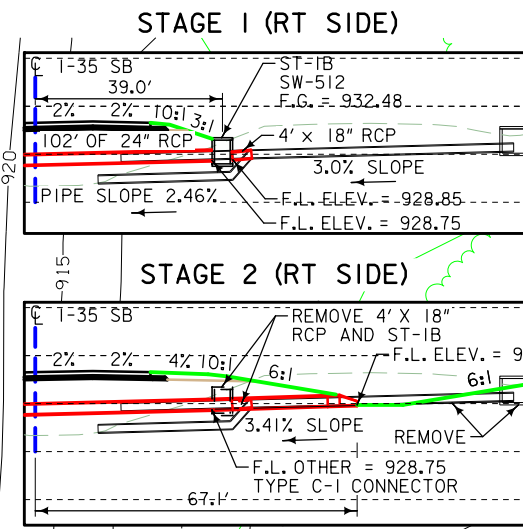
DESIGN FOR 0° SKEW
24" X 90'
REINFORCED CONCRETE
PIPE EXTENSION
PLAT PLAN
 STATION 869+80.44 02/20/2020
WARREN COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. ___ OF ___ FILE NO. ___ DESIGN NO. ___



LONGITUDINAL SECTION ALONG CULVERT



PLAT PLAN



STAGING NOTES

STAGE 1:
REMOVE EXISTING 18" CMP. EXTEND 18" RCP 4', INSTALL STRUCTURE ST-IB AND 102 LF OF 24" RCP AND FES LT.

STAGE 2:
REMOVE STRUCTURE ST-IB AND 18" RCP. EXTEND 22 LF OF 24" RCP, INSTALL C-1 CONNECTOR AND FES RT.

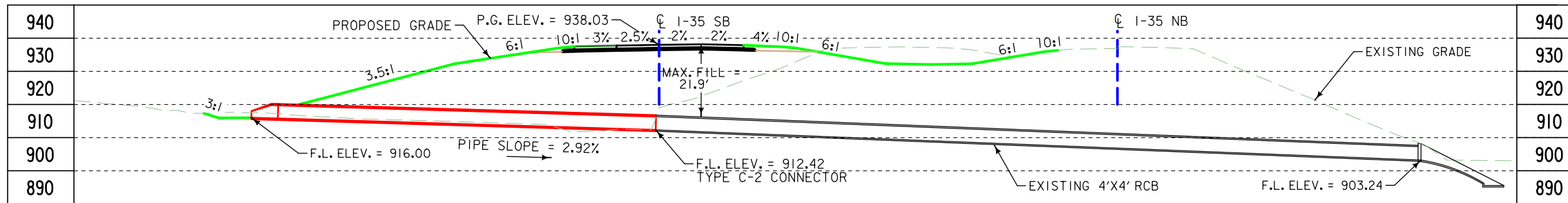
UTILITIES LEGEND:
REFER TO D.I

HYDRAULIC DATA
DRAINAGE AREA = 2.1 ACRES
DESIGN DISCHARGE, $Q_{50} = 7.65$ ROLLING CFS

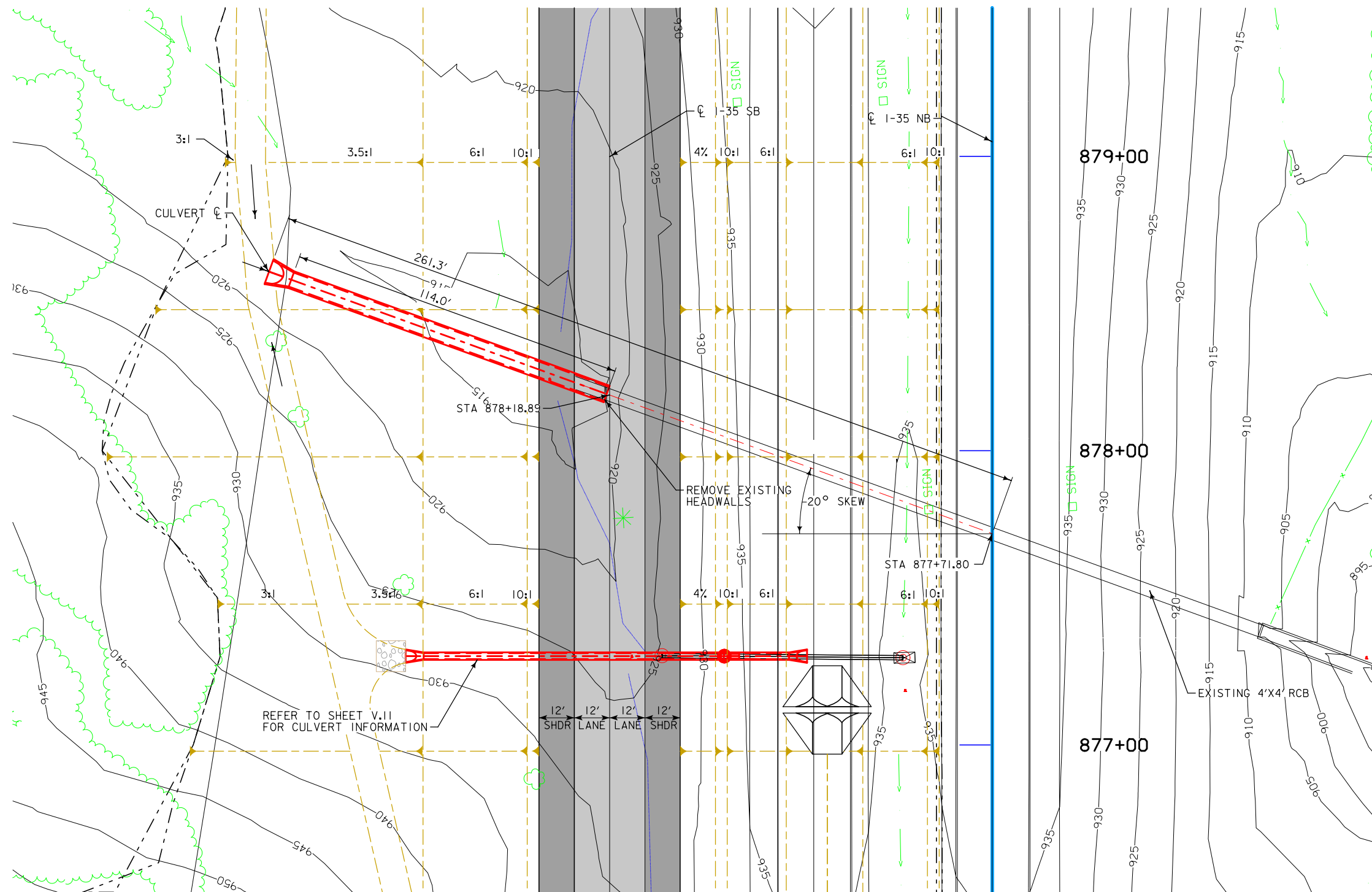
LOCATION
1-35
T-76N R-25
SECTION 7
JEFFERSON TOWNSHIP
WARREN COUNTY

DESIGN FOR 0° SKEW
24" X 124'
REINFORCED CONCRETE PIPE

PLAT PLAN
STATION 877+30.20 SBL 04/03/2020
WARREN COUNTY
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
DESIGN SHEET NO. ___ OF ___ FILE NO. ___ DESIGN NO. ___



LONGITUDINAL SECTION ALONG ϕ CULVERT



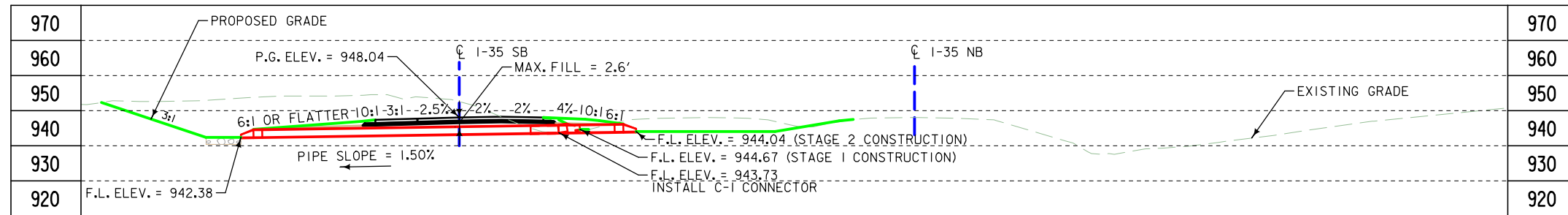
PLAT PLAN

UTILITIES LEGEND:
REFER TO D.I

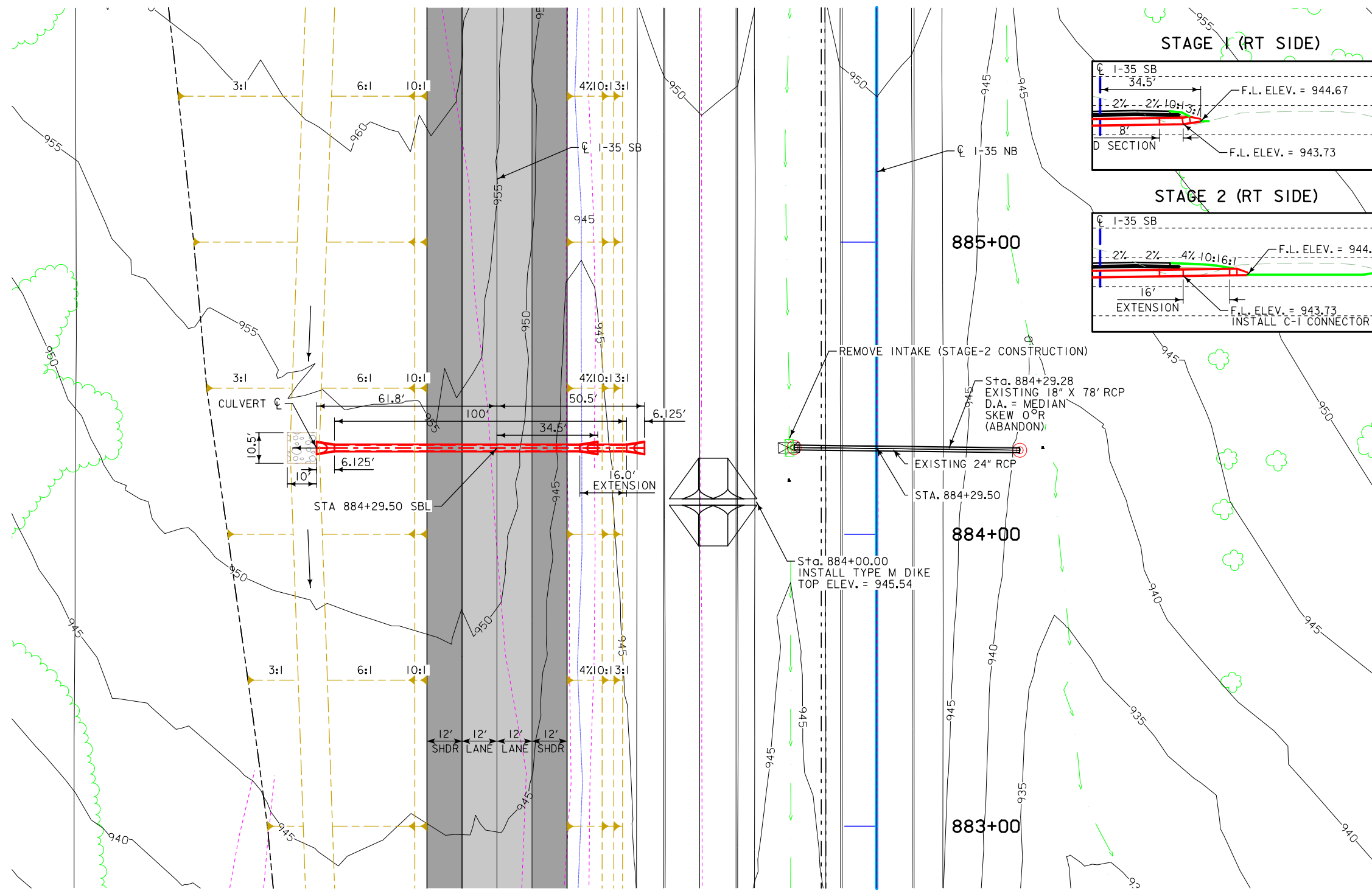
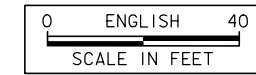
HYDRAULIC DATA
DRAINAGE AREA = 46.0 ACRES HILLY
DESIGN DISCHARGE, Q_{50} = 106.9 CFS

LOCATION
I-35
T-76N R-25W
SECTION 7
JEFFERSON TOWNSHIP
WARREN COUNTY

DESIGN FOR 20° SKEW LT. AHEAD
54" X 114'
REINFORCED CONCRETE
PIPE EXTENSION
PLAT PLAN
STATION 877+71.80 02/21/2020
WARREN COUNTY
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
DESIGN SHEET NO. ? OF ? FILE NO. ? DESIGN NO. ?



LONGITUDINAL SECTION ALONG ϕ CULVERT



PLAT PLAN

STAGING NOTES

STAGE 1:
 INSTALL 84 LF OF 18" RCP WITH D SECTION, AND 2 FES.

STAGE 2:
 REMOVE FES RT AND CUT OFF D SECTION BEVEL. INSTALL 16 LF RCP AND REINSTALL FES. ABAONDON EXISTING MEDIAN DRAIN UNDER NBL.

SLOPE LINES SHOWN FOR STAGE 1 CONSTRUCTION ONLY.

UTILITIES LEGEND:

REFER TO D.I

HYDRAULIC DATA

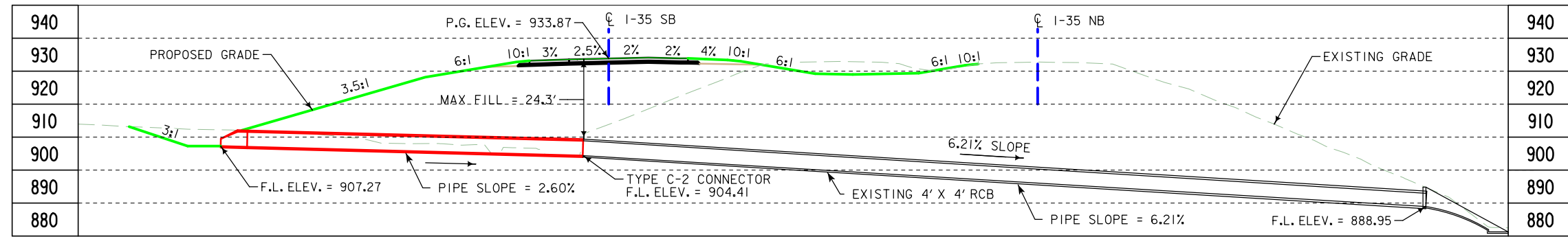
DRAINAGE AREA = 2.54 ACRES ROLLING
 DESIGN DISCHARGE, Q_{50} = 8.87 CFS

LOCATION

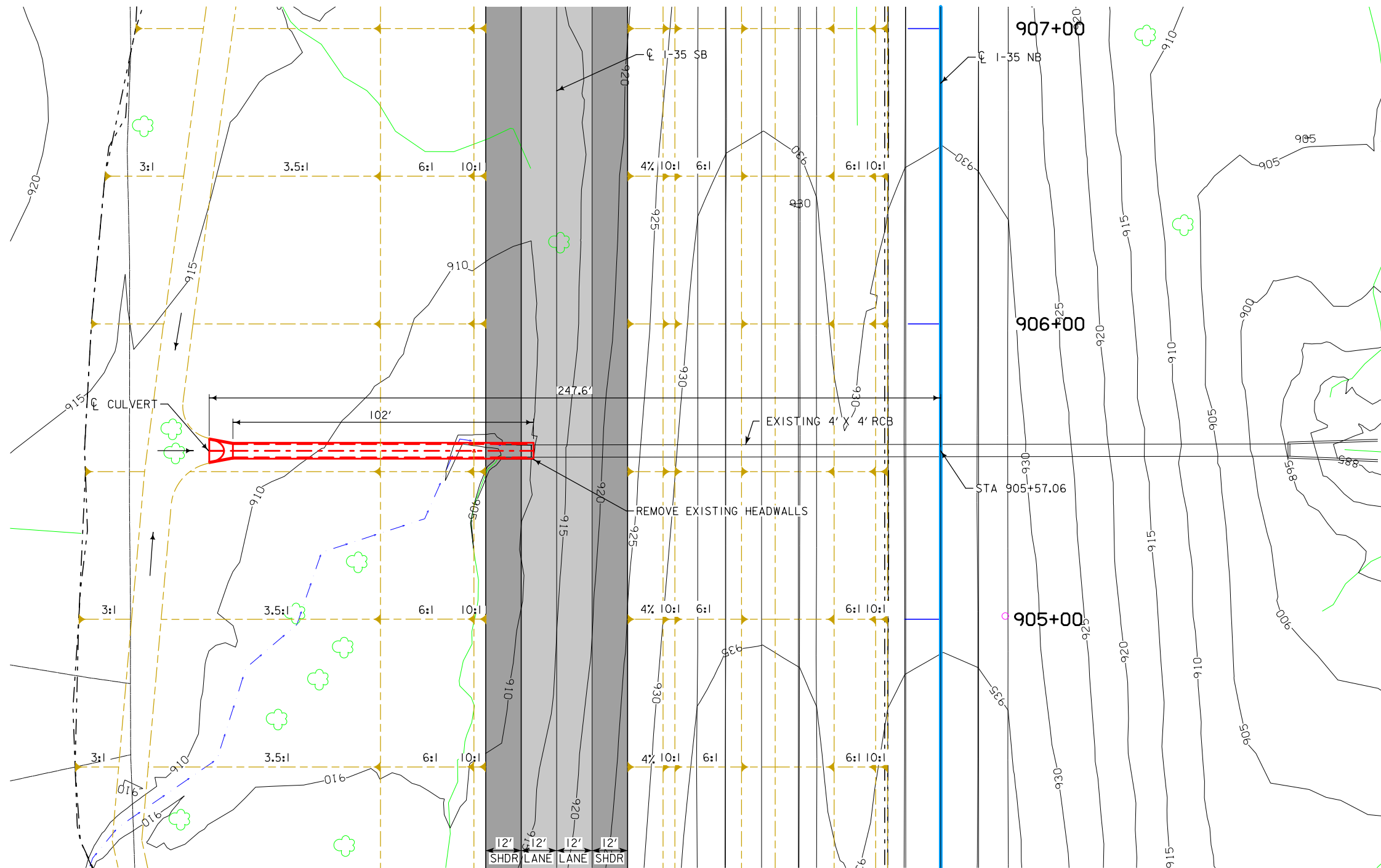
I-35
 T-76N R-25W
 SECTION 7
 JEFFERSON TOWNSHIP
 WARREN COUNTY

DESIGN FOR 0° SKEW
24" X 100'
REINFORCED CONCRETE PIPE

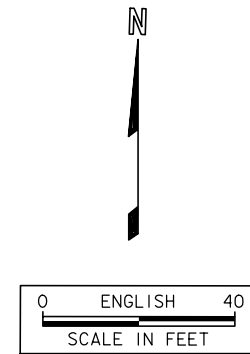
PLAT PLAN
 STATION 884+29.50 SBL 02/21/2020
WARREN COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. _____ OF _____ FILE NO. _____ DESIGN NO. _____



LONGITUDINAL SECTION ALONG \bar{C} CULVERT



PLAT PLAN

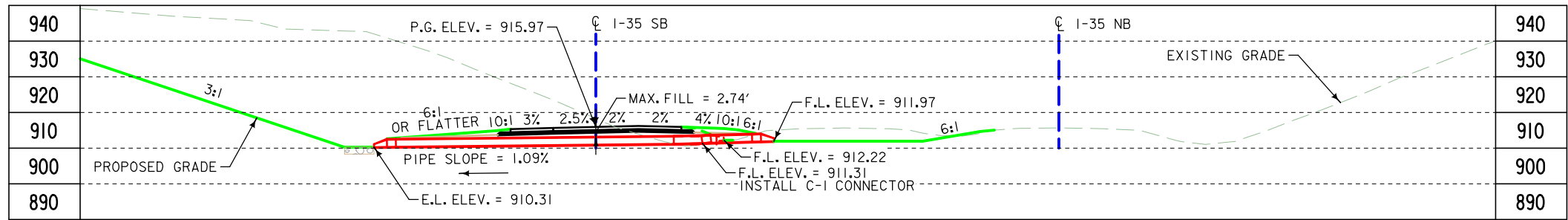


UTILITIES LEGEND:
 REFER TO D.1

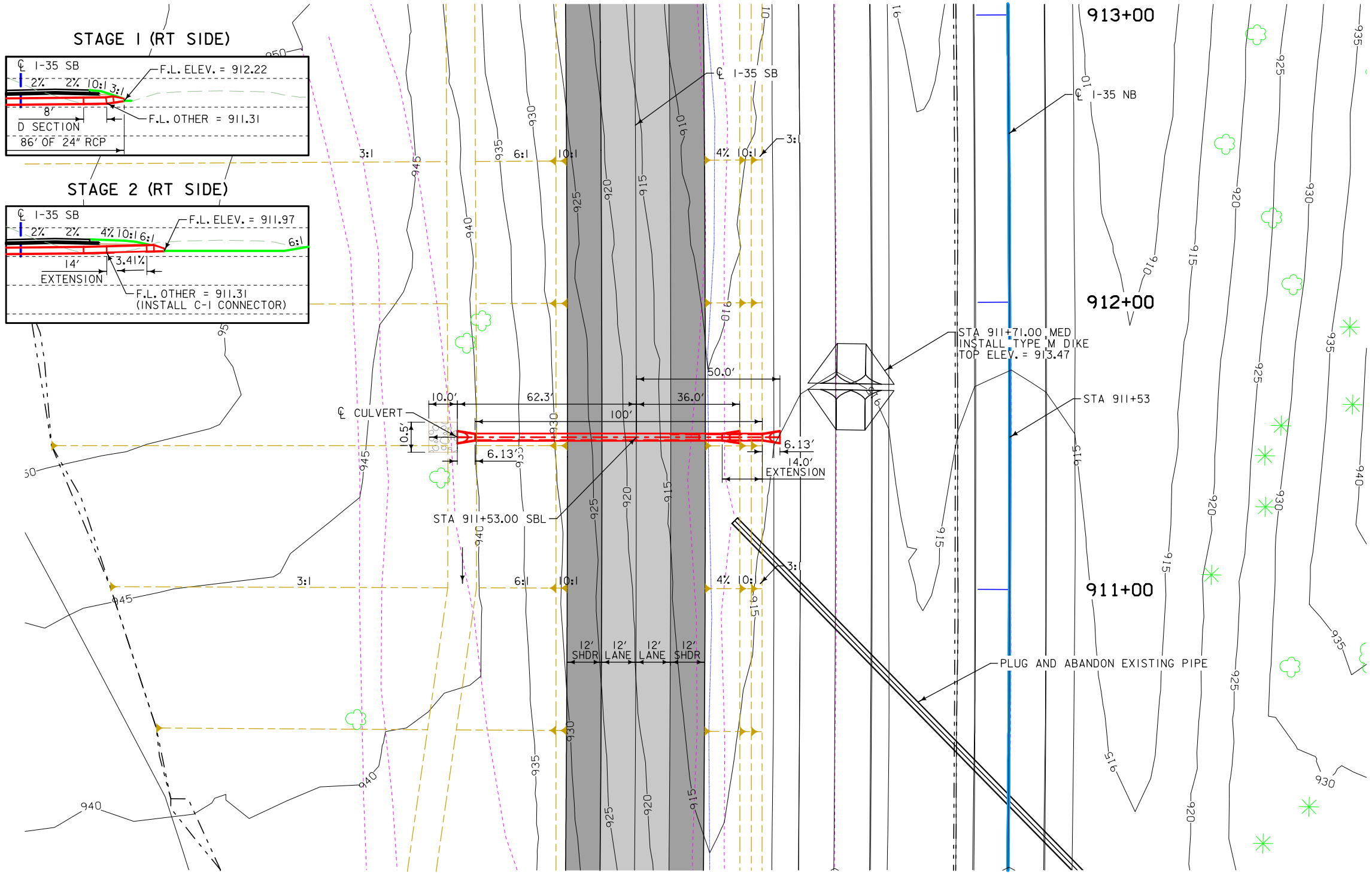
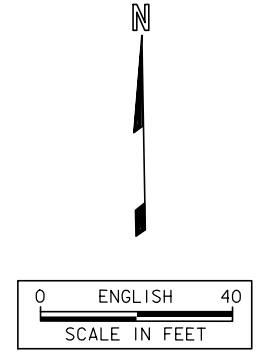
HYDRAULIC DATA
 DRAINAGE AREA = 43.7 ACRES HILLY
 DESIGN DISCHARGE, Q_{50} = 102.9 CFS

LOCATION
 I-35
 T-76N R-25W
 SECTION 7
 JEFFERSON TOWNSHIP
 WARREN COUNTY

DESIGN FOR 0° SKEW
54" X 102'
REINFORCED CONCRETE
PIPE EXTENSION
PLAT PLAN
 STATION 905+57.06 02/20/2020
WARREN COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. ___ OF ? FILE NO. ? DESIGN NO. ?



LONGITUDINAL SECTION ALONG CULVERT



PLAT PLAN

STAGING NOTES

STAGE 1:
INSTALL 86 LF OF 24" RCP WITH D SECTION AND 2 FES.

STAGE 2:
REMOVE FES RT AND CUT OFF D SECTION BEVEL. INSTALL 14 LF RCP AND REINSTALL FES. ABAOONON EXISTING MEDIAN DRAIN UNDER NBL.

SLOPE LINES SHOWN FOR STAGE I CONSTRUCTION ONLY.

UTILITIES LEGEND:

REFER TO D.1

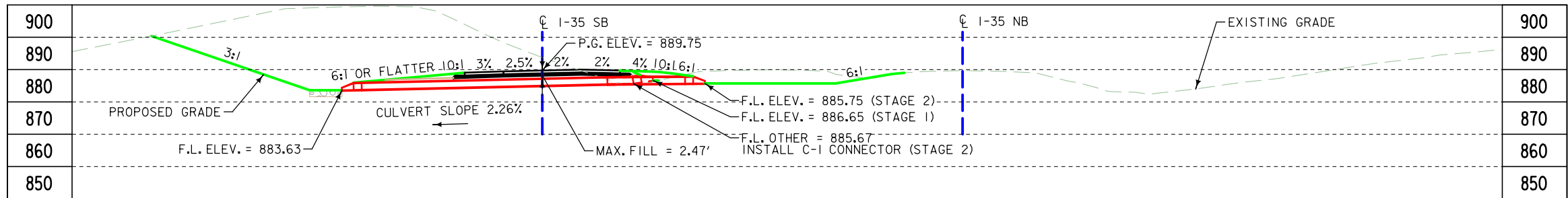
HYDRAULIC DATA

DRAINAGE AREA = 1.79 ACRES ROLLING
DESIGN DISCHARGE, $Q_{50} = 6.8$ CFS

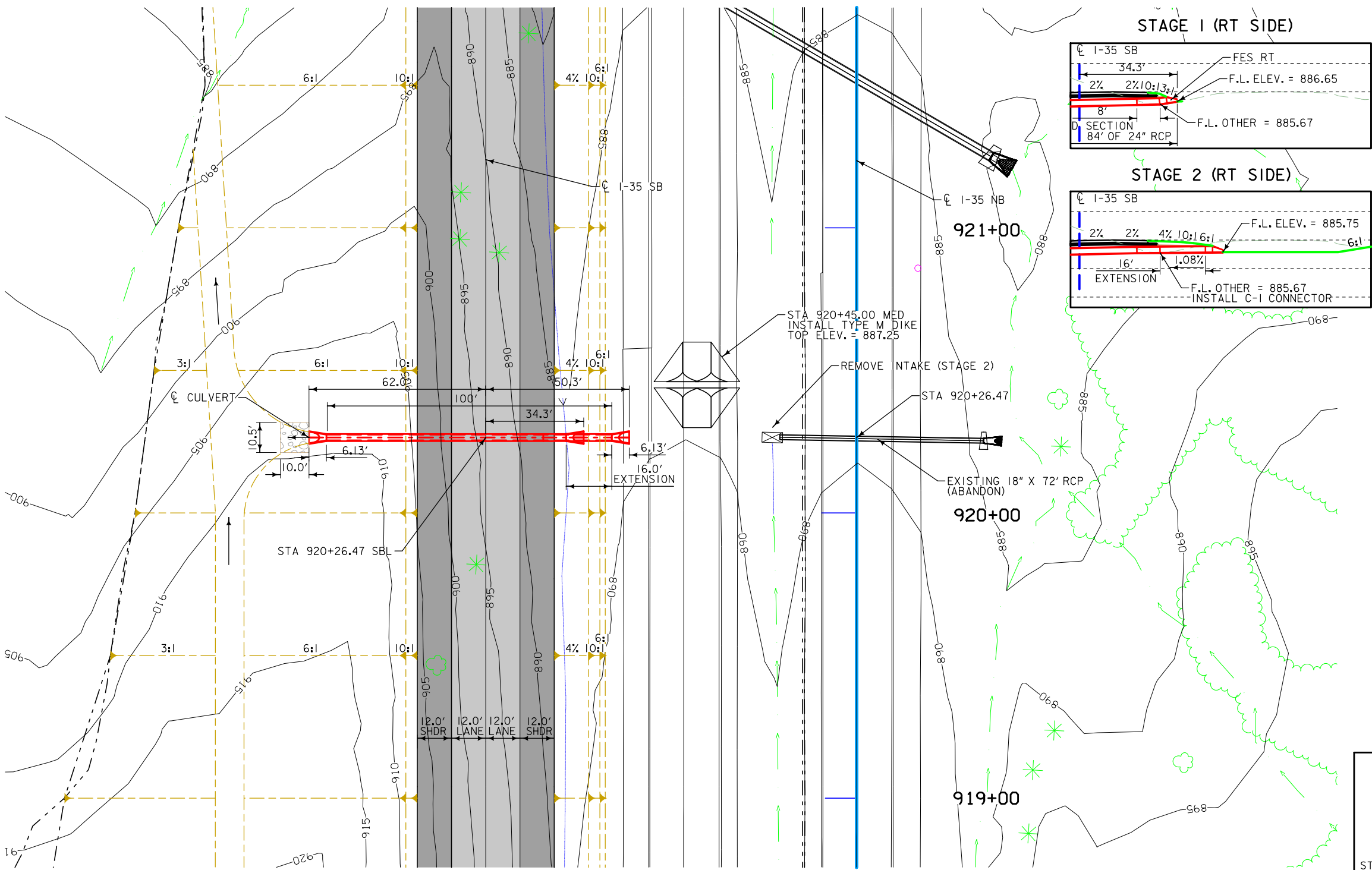
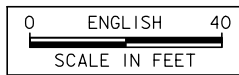
LOCATION

I-35
T-76N R-25W
SECTION 6
JEFFERSON TOWNSHIP
WARREN COUNTY

DESIGN FOR 0° SKEW
24" X 100'
REINFORCED CONCRETE PIPE
PLAT PLAN
STATION 911+53.00 SBL 02/20/2020
WARREN COUNTY
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
DESIGN SHEET NO. ? OF ? FILE NO. ? DESIGN NO. ?



LONGITUDINAL SECTION ALONG CULVERT



PLAT PLAN

LOCATION

STAGE 1:
INSTALL 84 LF OF 24" RCP WITH D SECTION
AND 2 FES.

STAGE 2
REMOVE FES RT AND CUT OFF D SECTION BEVEL.
INSTALL 16 LF RCP AND REINSTALL FES. ABAONDON
EXISTING MEDIAN DRAIN UNDER NBL.

SLOPE LINES SHOWN FOR STAGE 1 CONSTRUCTION
ONLY.

UTILITIES LEGEND:

REFER TO D.I

HYDRAULIC DATA

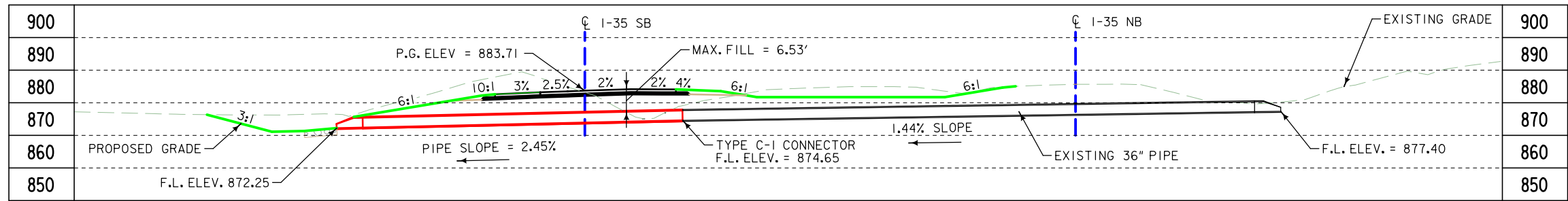
DRAINAGE AREA = 2.61 ACRES ROLLING
DESIGN DISCHARGE, $Q_{50} = 9.06$ CFS

LOCATION

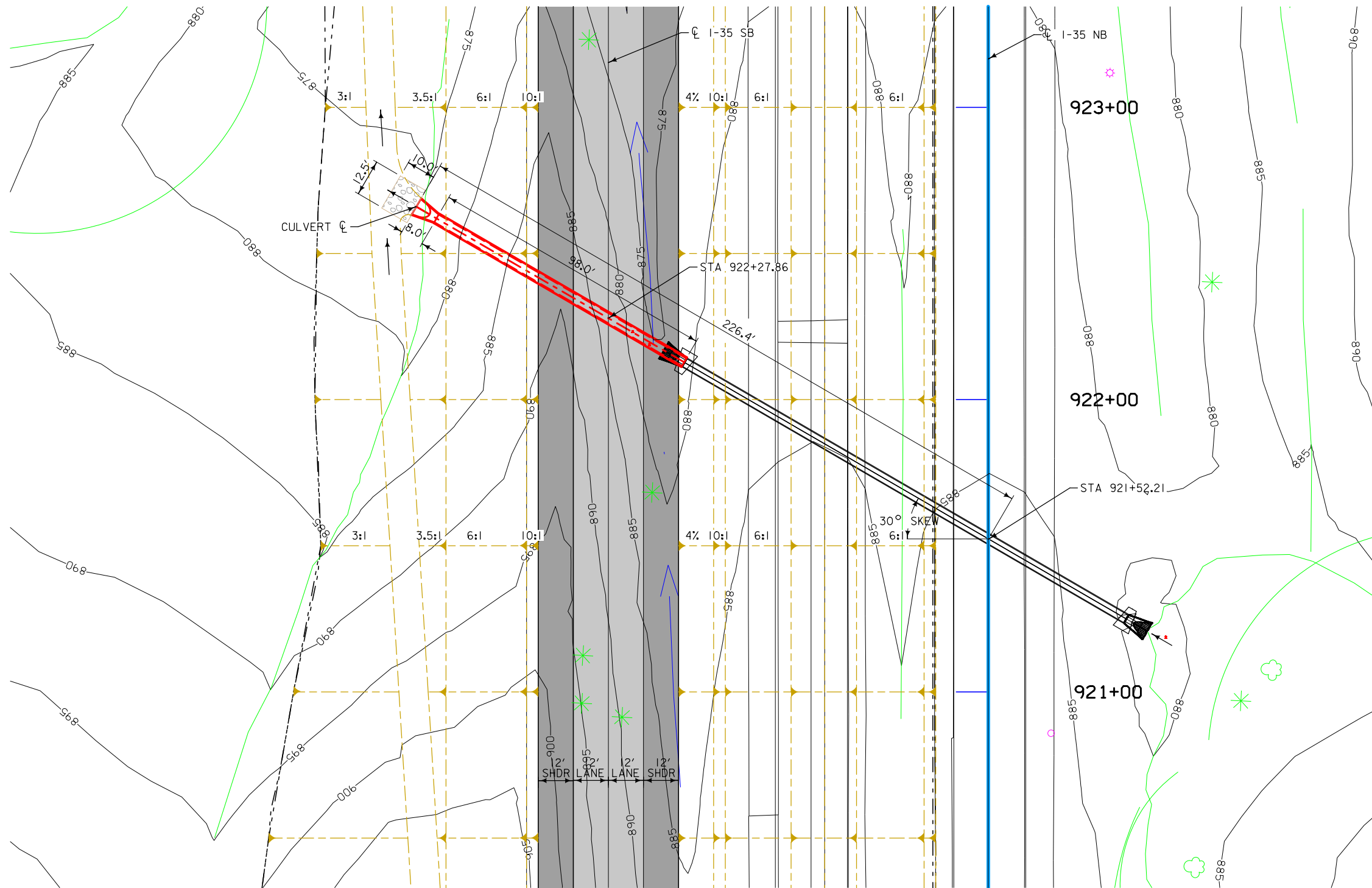
I-35
T-76 R-25
SECTION 6
JEFFERSON TOWNSHIP
WARREN COUNTY

DESIGN FOR 0° SKEW
24" X 100'
REINFORCED CONCRETE PIPE

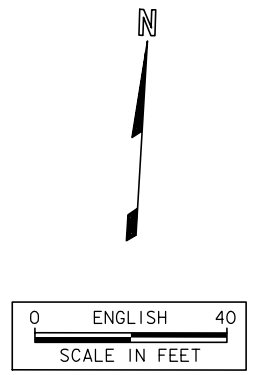
PLAT PLAN
STATION 920+26.47 SBL 04/06/2020
WARREN COUNTY
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
DESIGN SHEET NO. _____ OF _____ FILE NO. _____ DESIGN NO. _____



LONGITUDINAL SECTION ALONG \varnothing CULVERT



PLAT PLAN

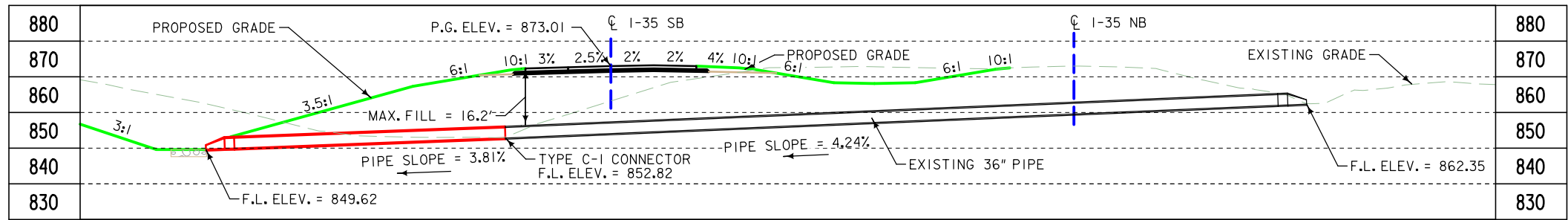


UTILITIES LEGEND:
REFER TO D.I

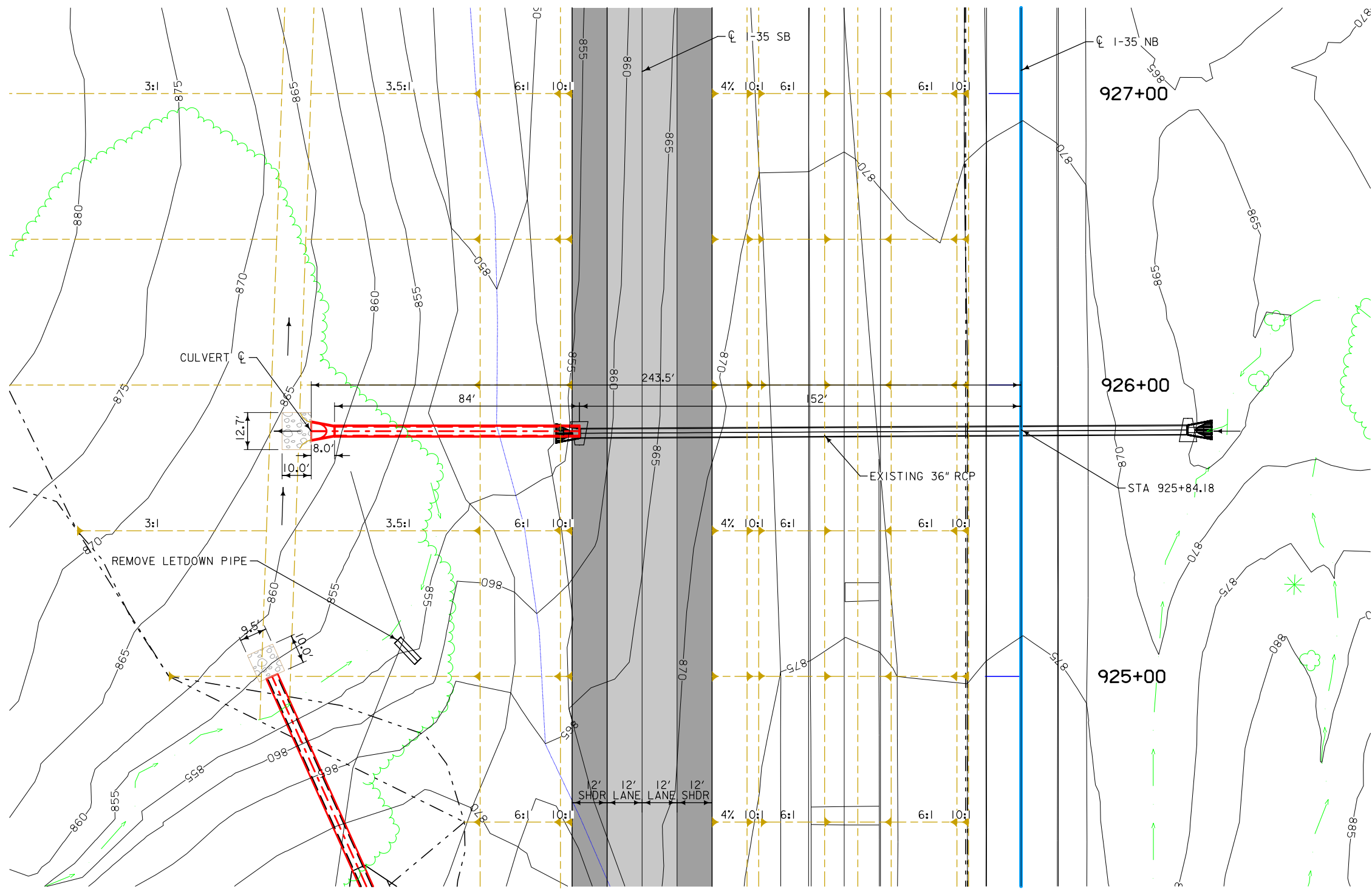
HYDRAULIC DATA
DRAINAGE AREA = 16.0 ACRES HILLY
DESIGN DISCHARGE, Q_{50} = 47.9 CFS

LOCATION
I-35
T-76N R-25W
SECTION 6
JEFFERSON TOWNSHIP
WARREN COUNTY

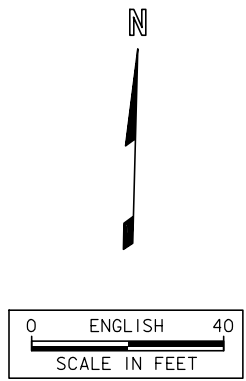
DESIGN FOR 30° SKEW LEFT AHEAD
36" X 98'
REINFORCED CONCRETE
PIPE EXTENSION
PLAT PLAN
 STATION 921+52.21 02/20/2020
WARREN COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. ___ OF ___ FILE NO. ___ DESIGN NO. ___



LONGITUDINAL SECTION ALONG ϕ CULVERT



PLAT PLAN

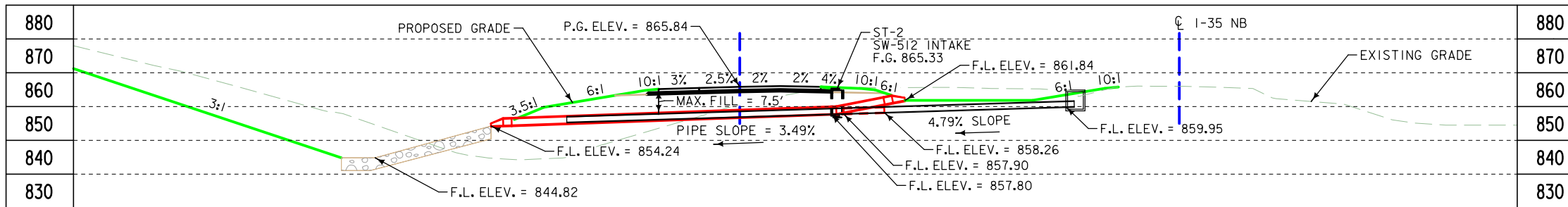


UTILITIES LEGEND:
 REFER TO D.1

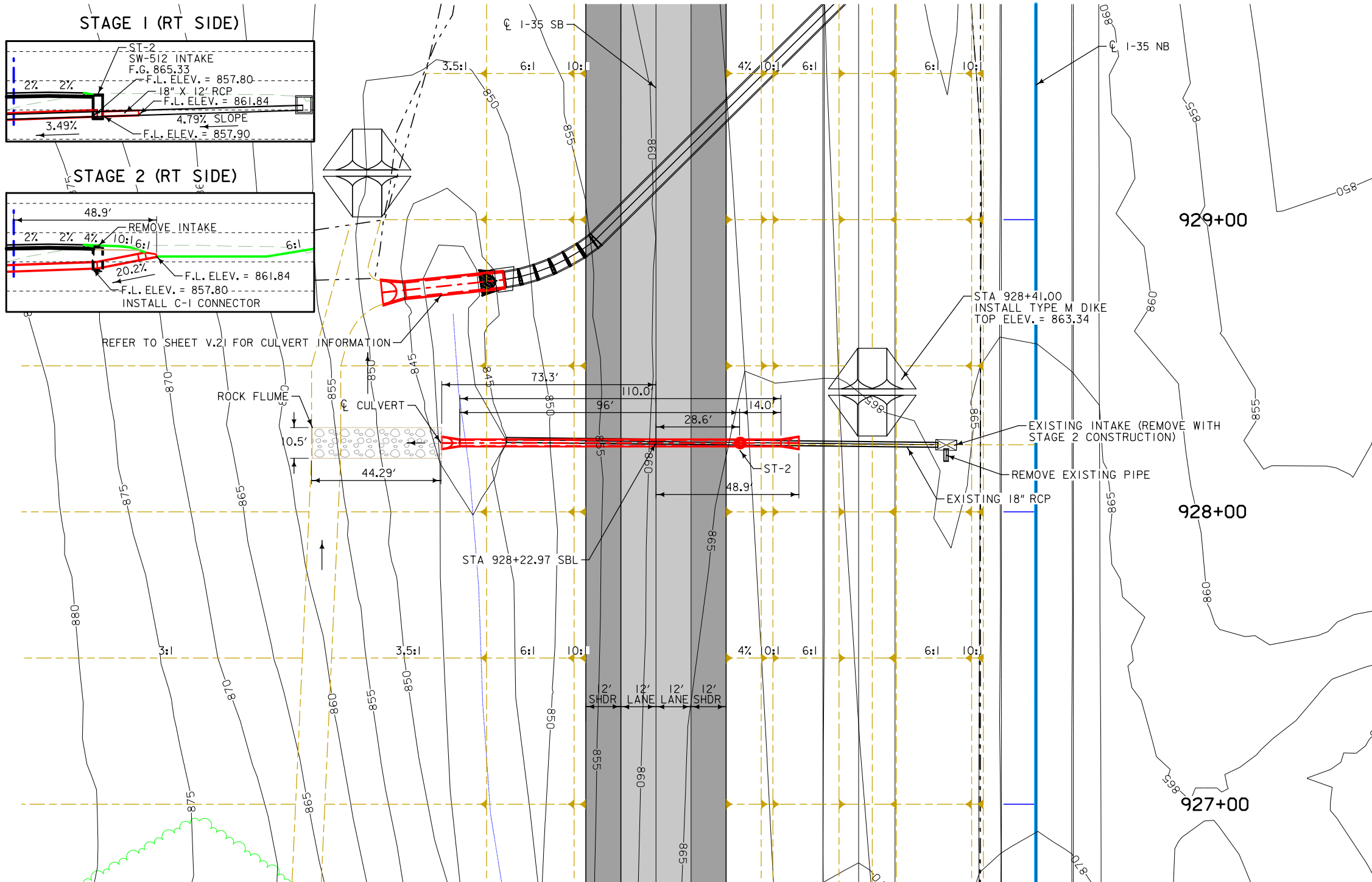
HYDRAULIC DATA
 DRAINAGE AREA = 9.8 ACRES
 DESIGN DISCHARGE, Q_{50} = 33 CFS

LOCATION
 1-35
 T-76N R-25W
 SECTION 6
 JEFFERSON TOWNSHIP
 WARREN COUNTY

DESIGN FOR 0°
36" X 84'
REINFORCED CONCRETE
PIPE EXTENSION
PLAT PLAN
 STATION 925+84.18 02/20/2020
WARREN COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. ____ OF ____ FILE NO. ____ DESIGN NO. ____



LONGITUDINAL SECTION ALONG CULVERT



STAGING NOTES

STAGE 1:
INSTALL ST-2 INTAKE, 96 LF OF 24" RCP WITH FES LT, EXTEND EXISTING 18" RCP 12' TO INTAKE.

STAGE 2:
REMOVE ST-2, INSTALL 14' RCP INCLUDING D SECTION AND C-1 CONNECTOR AND FES RT.

UTILITIES LEGEND:

REFER TO D.I

HYDRAULIC DATA

DRAINAGE AREA = 2.38 ACRES ROLLING
DESIGN DISCHARGE, $Q_{50} = 8.44$ CFS

LOCATION

I-35
T-76N R-25W
SECTION 6
JEFFERSON TOWNSHIP
WARREN COUNTY

**24" X 110'
REINFORCED CONCRETE PIPE**

PLAT PLAN

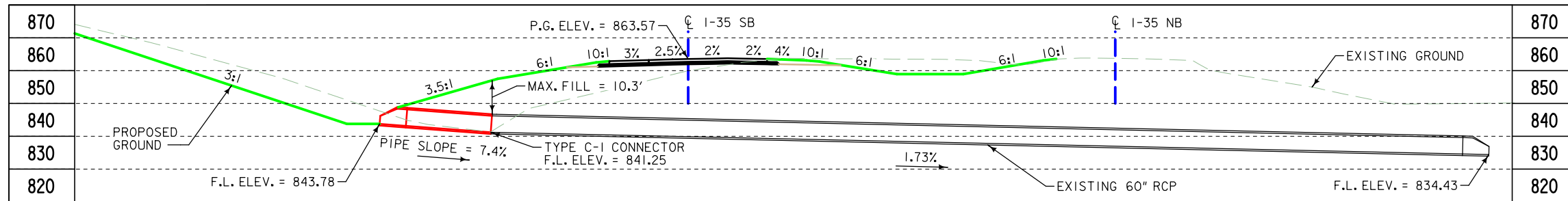
STATION 928+22.97 SBL 04/06/2020

WARREN COUNTY

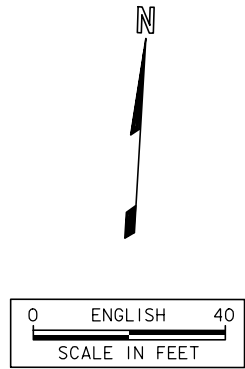
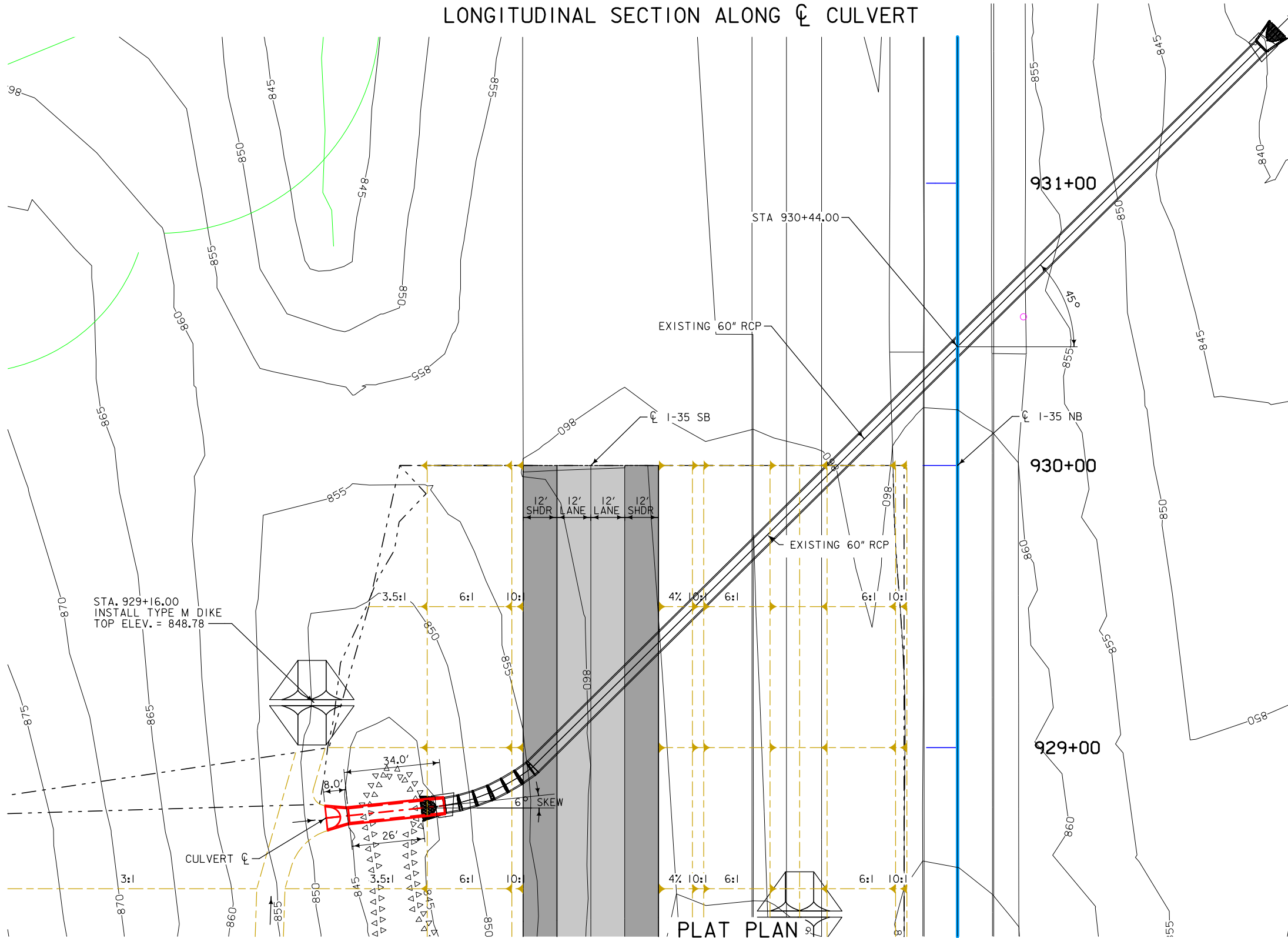
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DESIGN SHEET NO. _____ OF _____ FILE NO. _____ DESIGN NO. _____

PLAT PLAN



LONGITUDINAL SECTION ALONG CL CULVERT

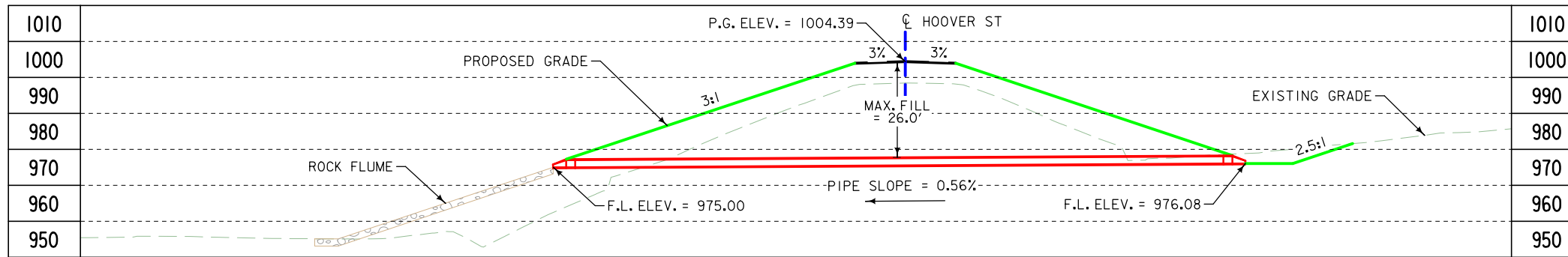


UTILITIES LEGEND:
REFER TO D.I

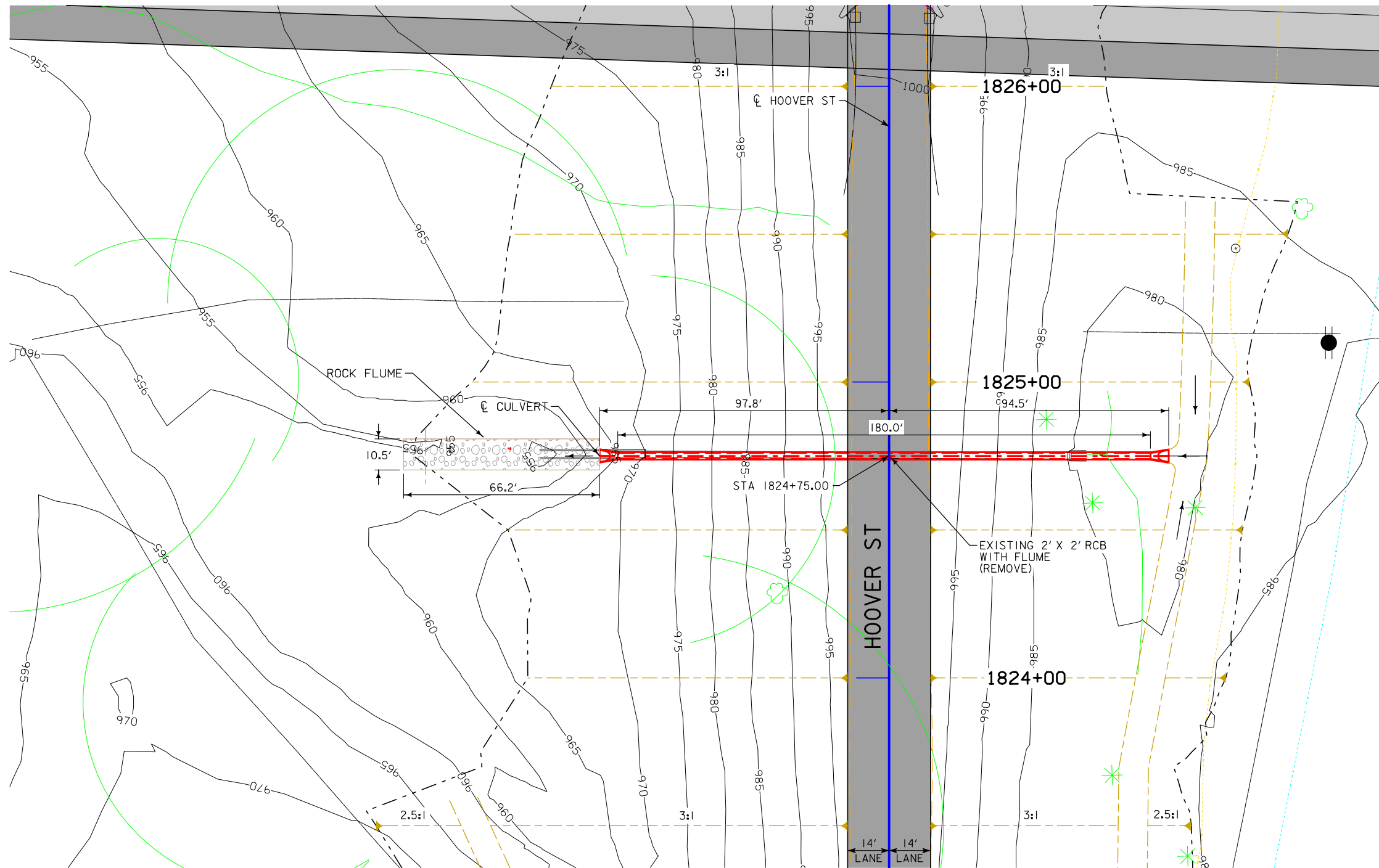
HYDRAULIC DATA
DRAINAGE AREA = 50 ACRES HILLY
DESIGN DISCHARGE, $Q_{50} = 112$ CFS

LOCATION
I-35
T-76N R-25W
SECTION 6
JEFFERSON TOWNSHIP
WARREN COUNTY

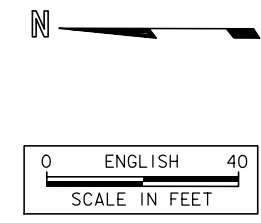
DESIGN FOR 6° SKEW RT. AHEAD
60" X 34'
REINFORCED CONCRETE
PIPE EXTENSION
PLAT PLAN
 STATION 930+44.00 02/20/2020
WARREN COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. ___ OF ___ FILE NO. ___ DESIGN NO. ___



LONGITUDINAL SECTION ALONG ϕ CULVERT



PLAT PLAN

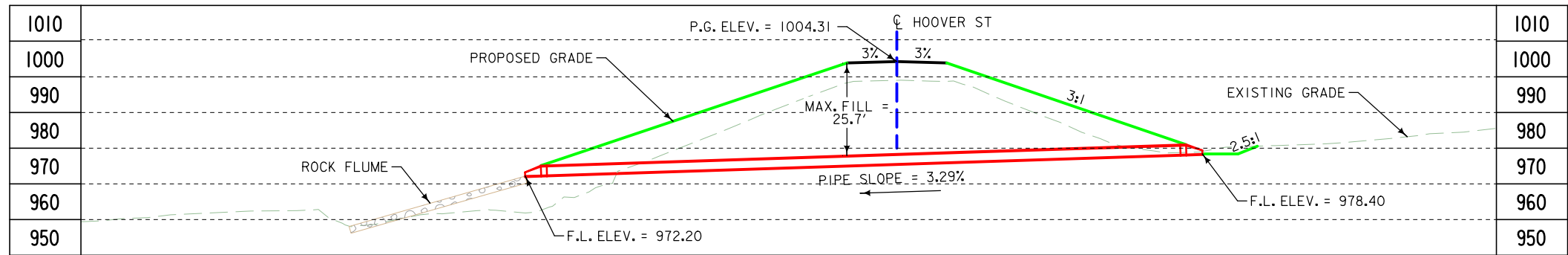


UTILITIES LEGEND:
REFER TO D.1

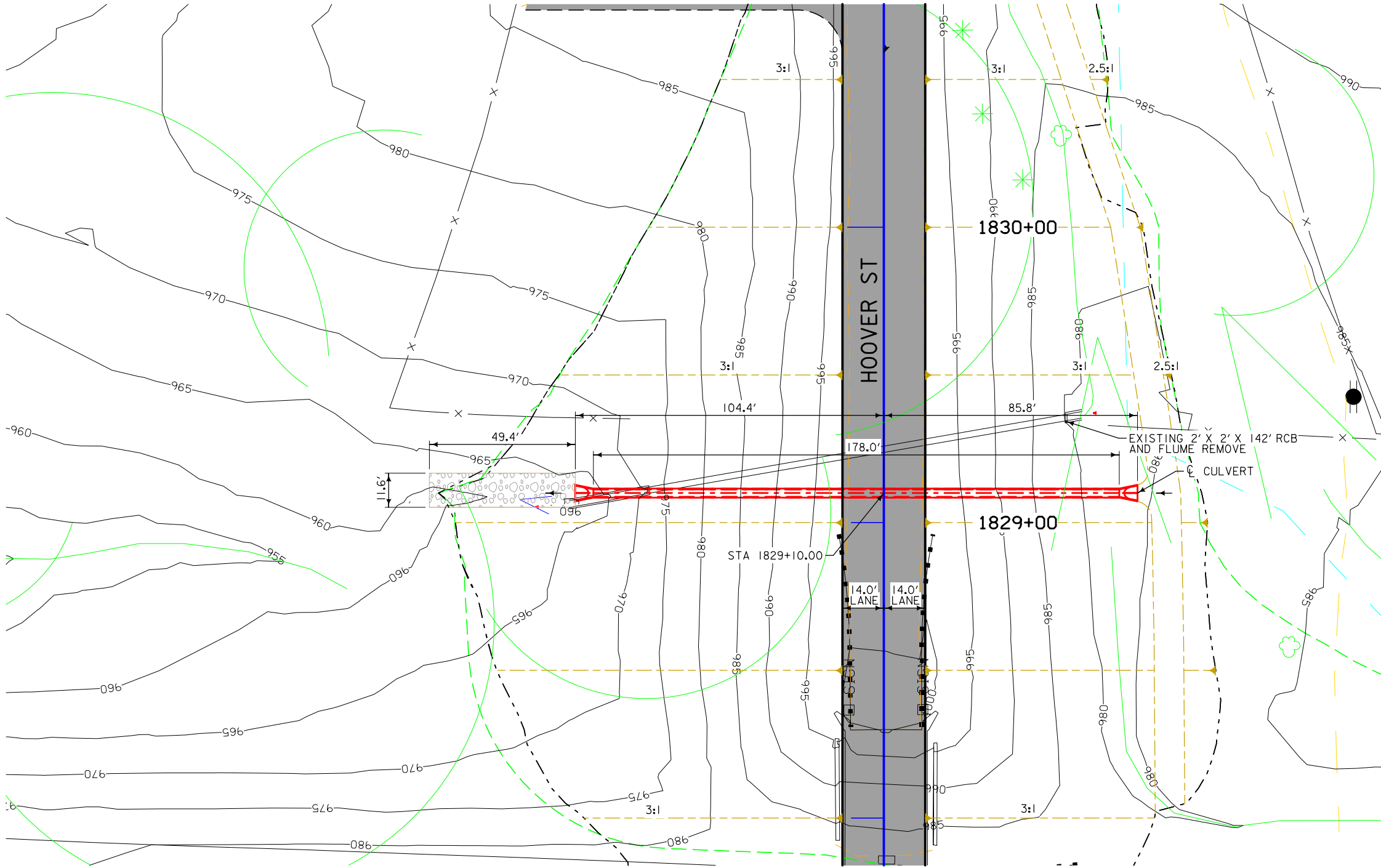
HYDRAULIC DATA
DRAINAGE AREA = 3.1 ACRES HILLY
DESIGN DISCHARGE, Q_{50} = 13.6 CFS

LOCATION
HOOVER ST.
T-76N R-25W
SECTION 18
JEFFERSON TOWNSHIP
WARREN COUNTY

DESIGN FOR 0° SKEW
24" X 180'
3750D REINFORCED CONCRETE PIPE
PLAT PLAN
STATION 1824+75.00 HOOVER ST. 02/20/2020
WARREN COUNTY
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
DESIGN SHEET NO. ___ OF ___ FILE NO. ___ DESIGN NO. ___



LONGITUDINAL SECTION ALONG ϕ CULVERT



PLAT PLAN



UTILITIES LEGEND:
REFER TO D.1

HYDRAULIC DATA
DRAINAGE AREA = 6.9 ACRES ROLLING/HILLY
DESIGN DISCHARGE, $Q_{50} = 22$ CFS

LOCATION
HOOVER ST.
T-76N R-25W
SECTION 18
JEFFERSON TOWNSHIP
WARREN COUNTY

DESIGN FOR 0° SKEW RT. AHEAD
30" X 178'
3750D REINFORCED CONCRETE PIPE
 PLAT PLAN
 STATION 1829+10.00 HOOVER ST. 02/20/2020
WARREN COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. ___ OF ___ FILE NO. ___ DESIGN NO. ___

LINE STYLE LEGEND OF CROSS SECTION SHEETS (ROAD)

- - - - - - Existing Ground Line
- Proposed Template
- Proposed Topsoil Placement
- - - - - Additional Topsoil Removal
- Subgrade Treatment
- - - - - Granular Shoulder
- Pavement
- - - - - Existing Pipe\RCB
- Proposed Pipe\RCB
- Proposed Dike
- All Elements Associated with Proposed Entrances

LINE STYLE LEGEND OF CROSS SECTION SHEETS (SOILS)

- TS ————— Topsoil (Class 10)
- SLOPE DRESSING — Slope Dressing Only
- CL 10 ————— Class 10 Materials
- SEL LO ————— Select Loams And Clay-Loams
- SEL SA ————— Select Sand
- UNS A ————— Unsuitable Type A Disposal
- UNS B ————— Unsuitable Type B Disposal
- UNS C ————— Unsuitable Type C Disposal
- SHALE ————— Shale
- WASTE ————— Waste
- B&W LS ————— Broken and Weathered Rock
- ROCK ————— Solid Rock
- BLDRS ————— Boulders

Note: All layer lines and descriptions identify layers above the line.

Note: Vertical or near vertical lines connecting soil layers at edges of cross sections are only for the purpose of calculating template quantities and do not depict soil stratification.

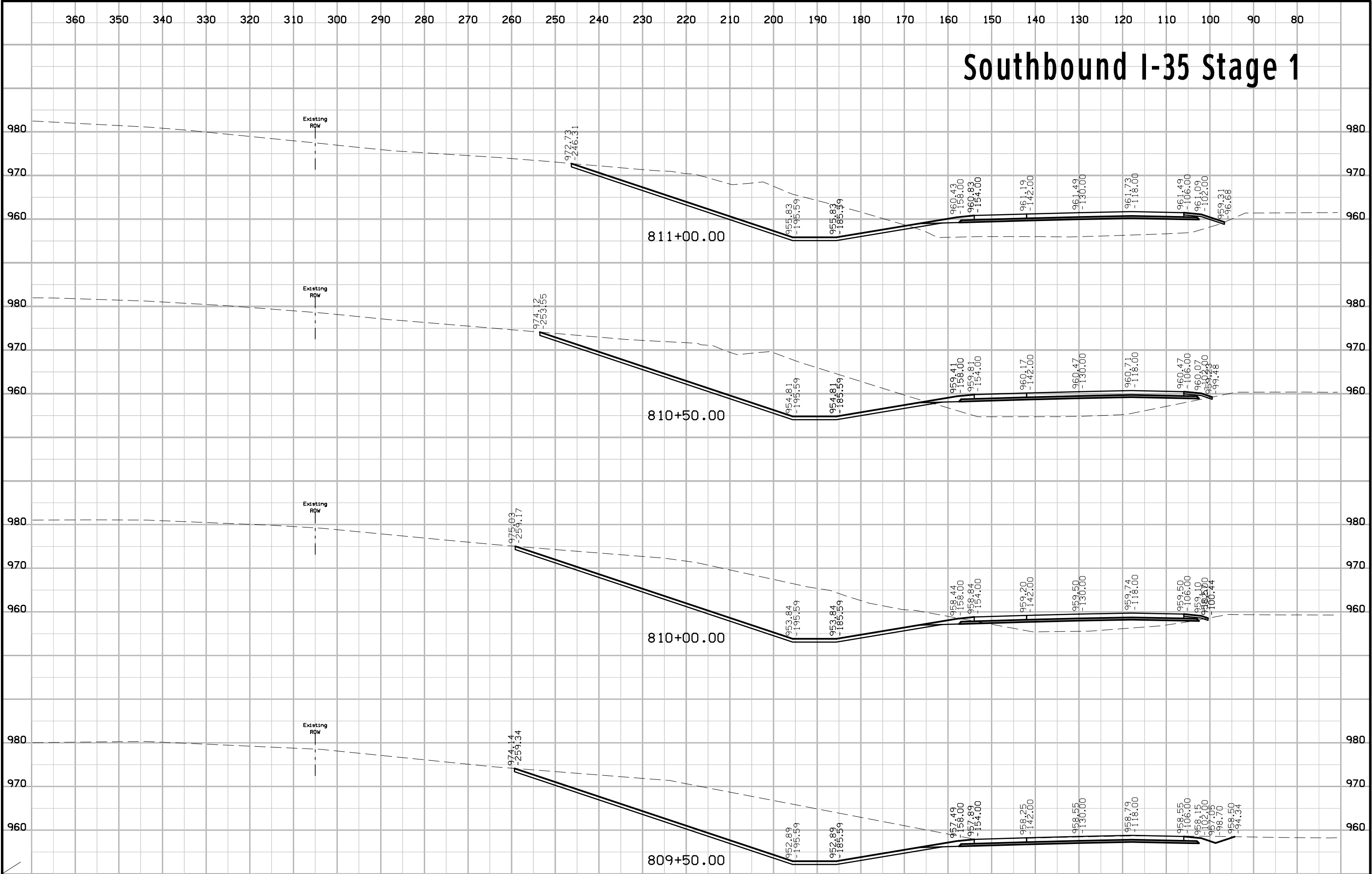
SYMBOL LEGEND OF CROSS SECTION SHEETS

- Existing ROW
|
Existing Right-of-Way Limit
- Proposed ROW
|
Proposed Right-of-Way Limit
- Temporary ROW
|
Temporary Right-of-Way Limit

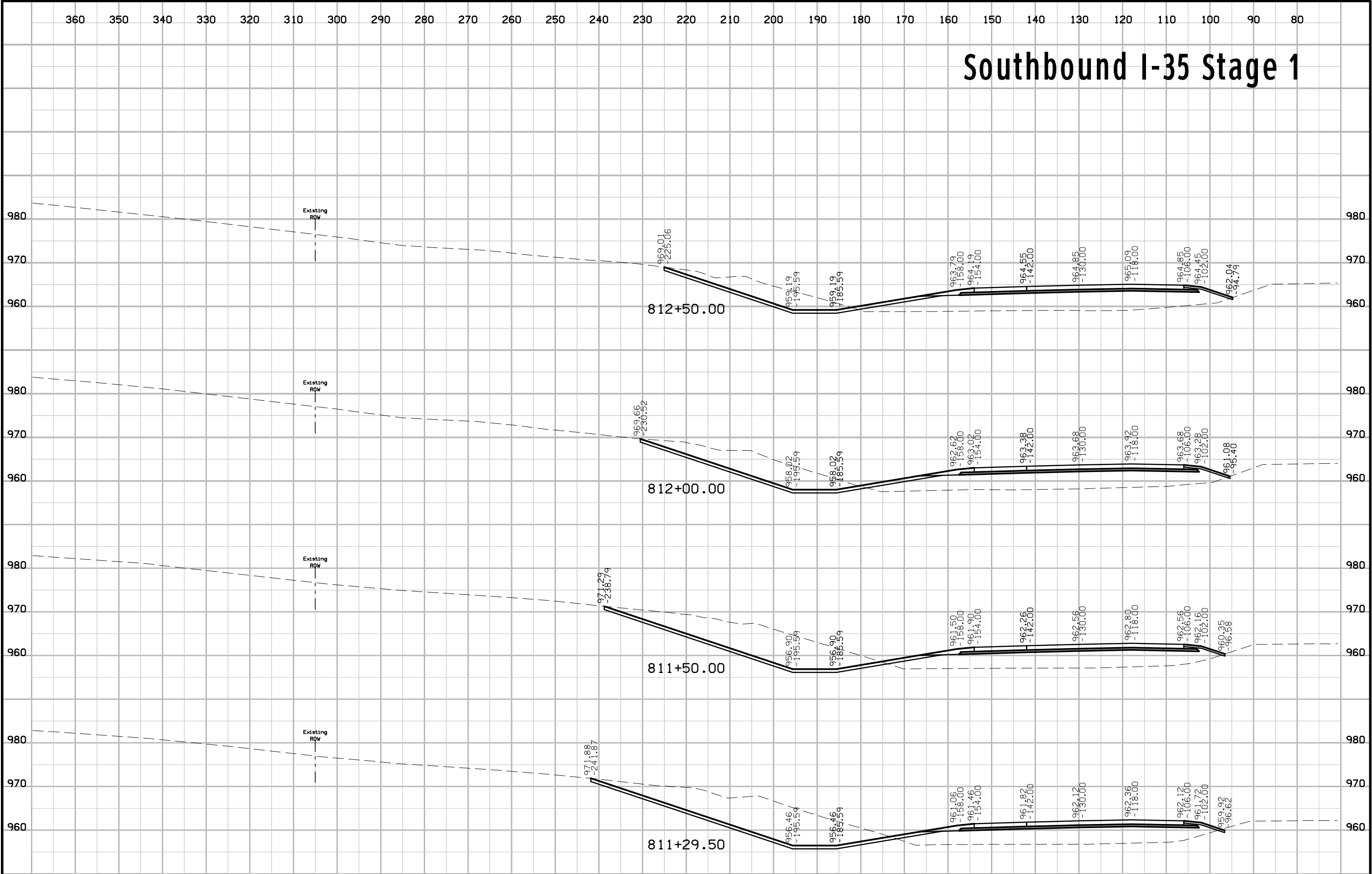
**CROSS SECTION
LEGEND AND SYMBOL
INFORMATION SHEET**

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

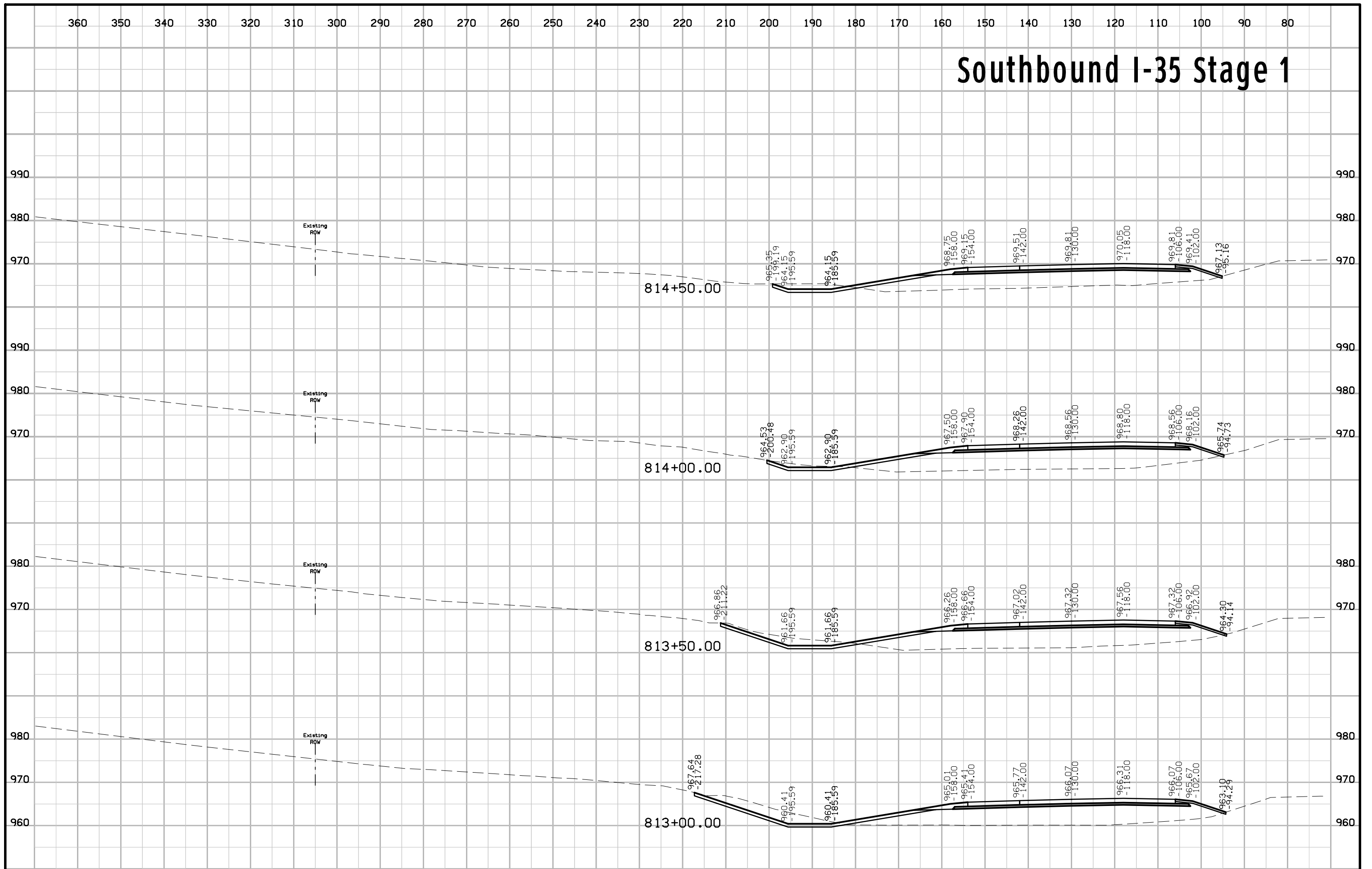
Southbound I-35 Stage 1



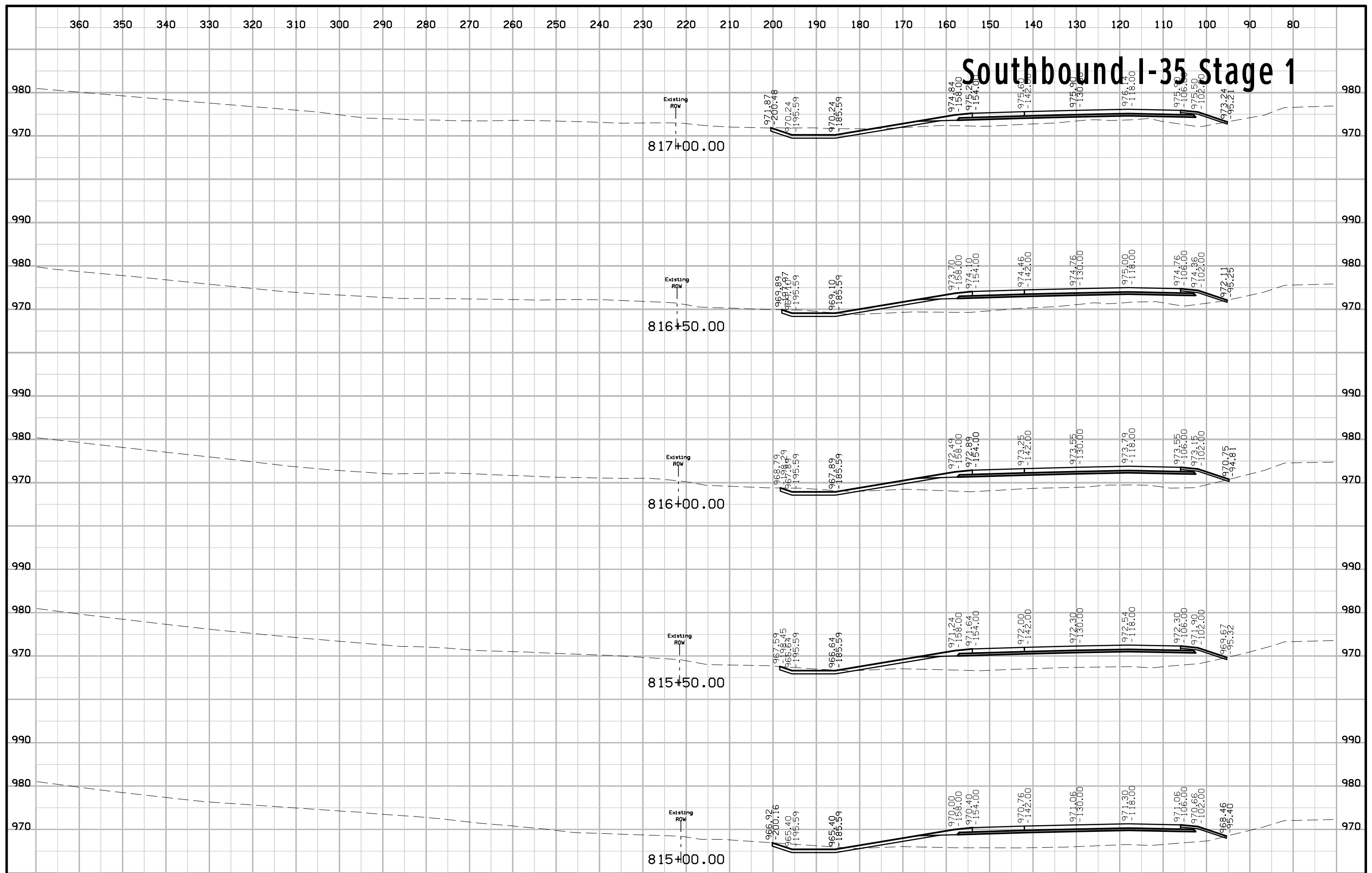
Southbound I-35 Stage 1



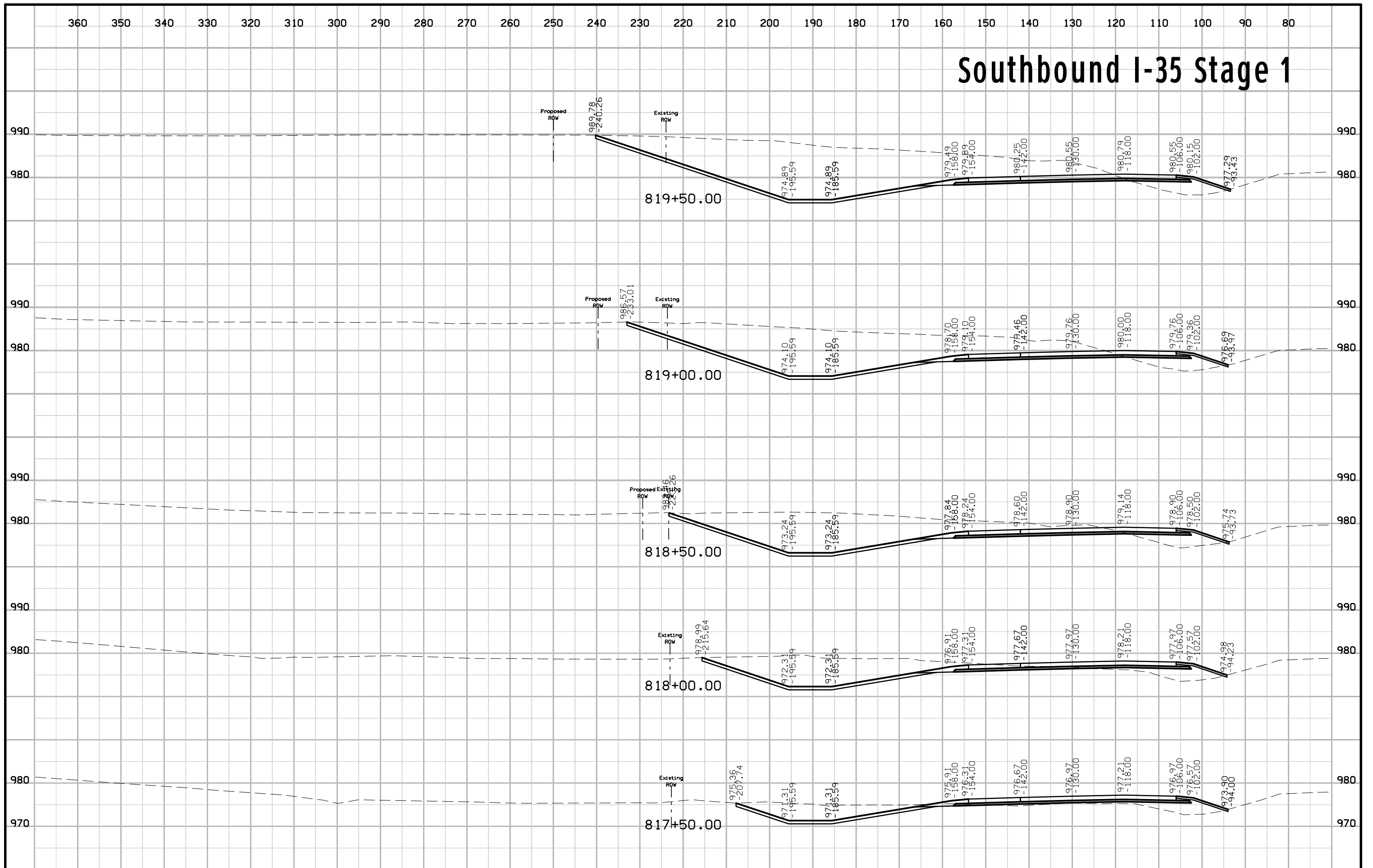
Southbound I-35 Stage 1



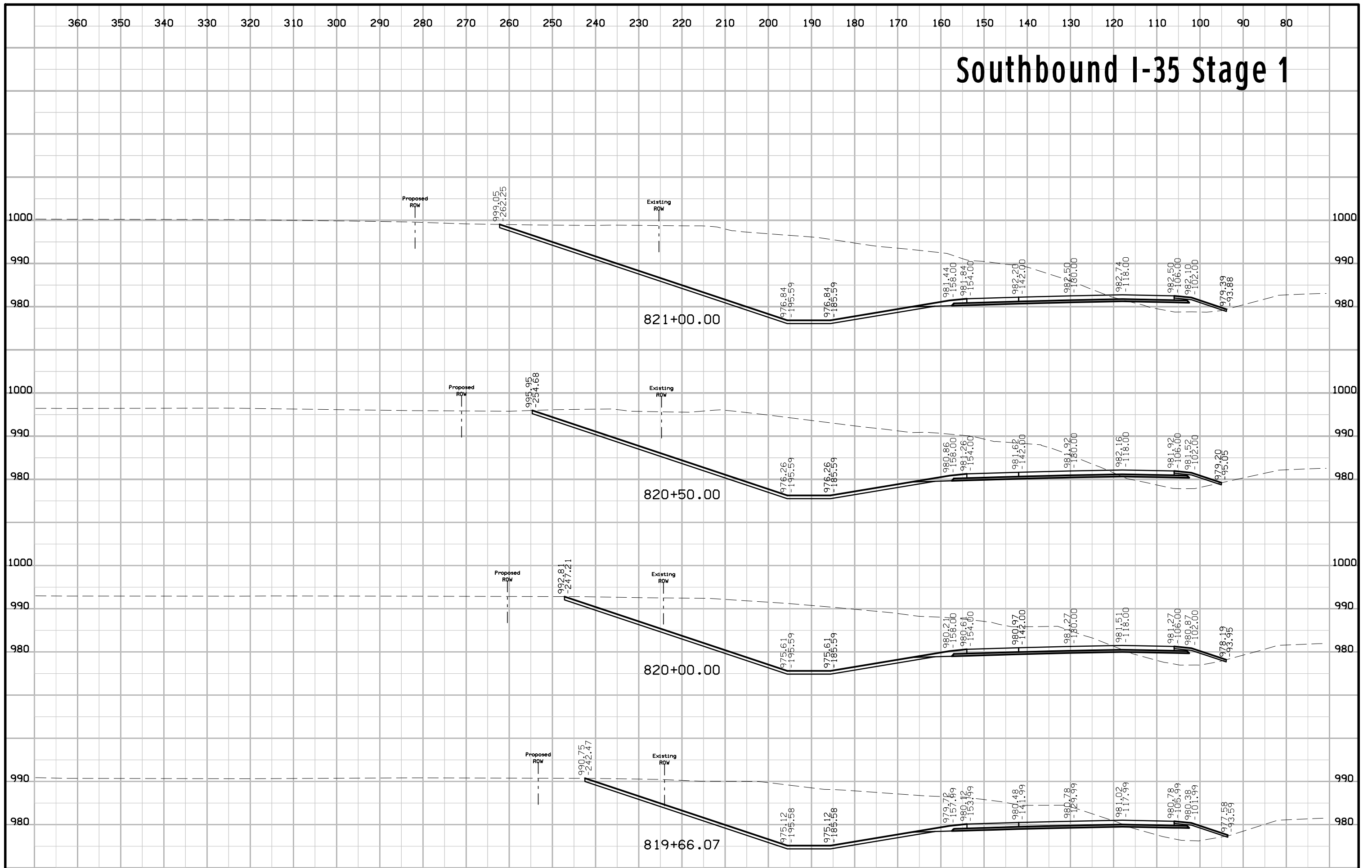
Southbound I-35 Stage 1



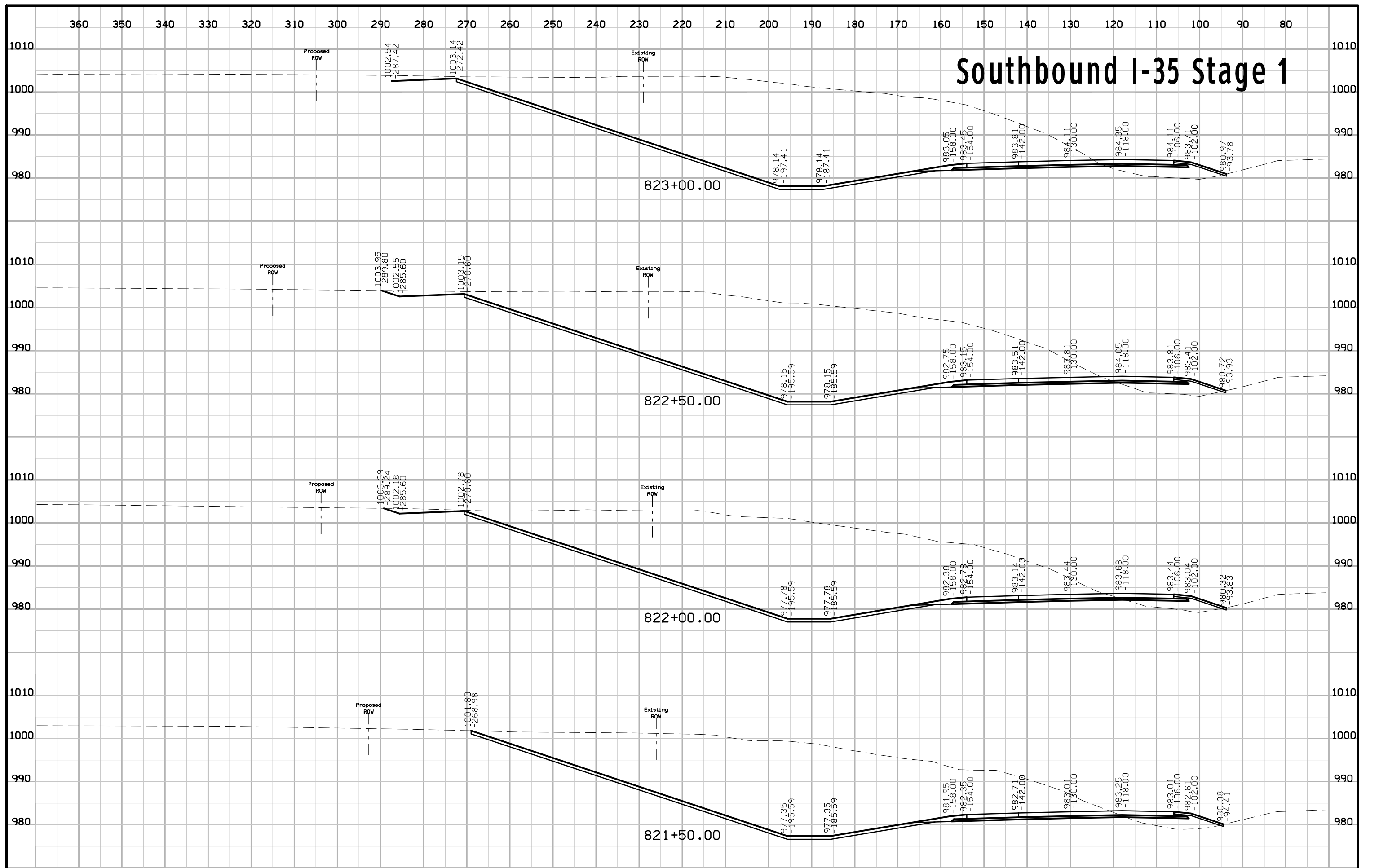
Southbound I-35 Stage 1



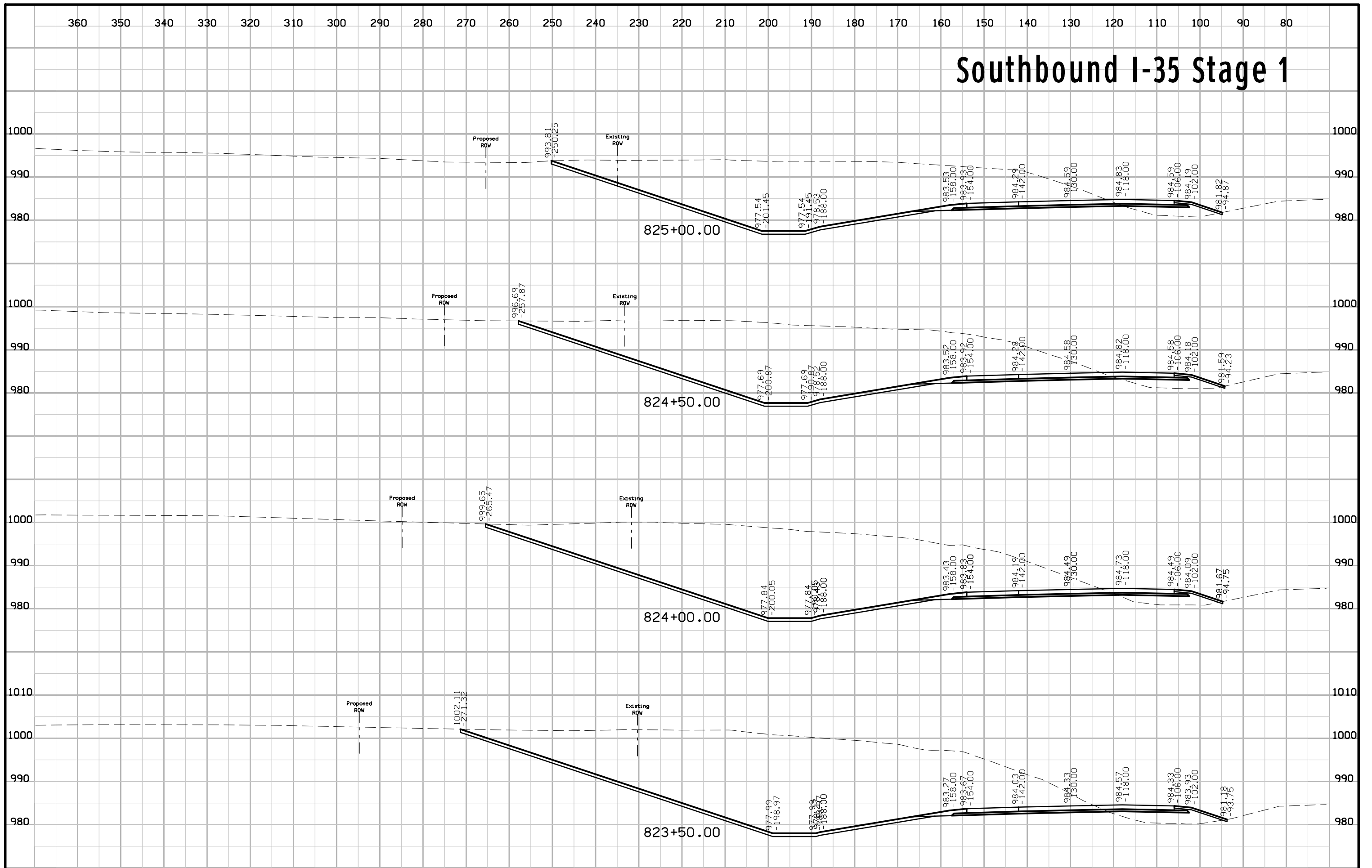
Southbound I-35 Stage 1



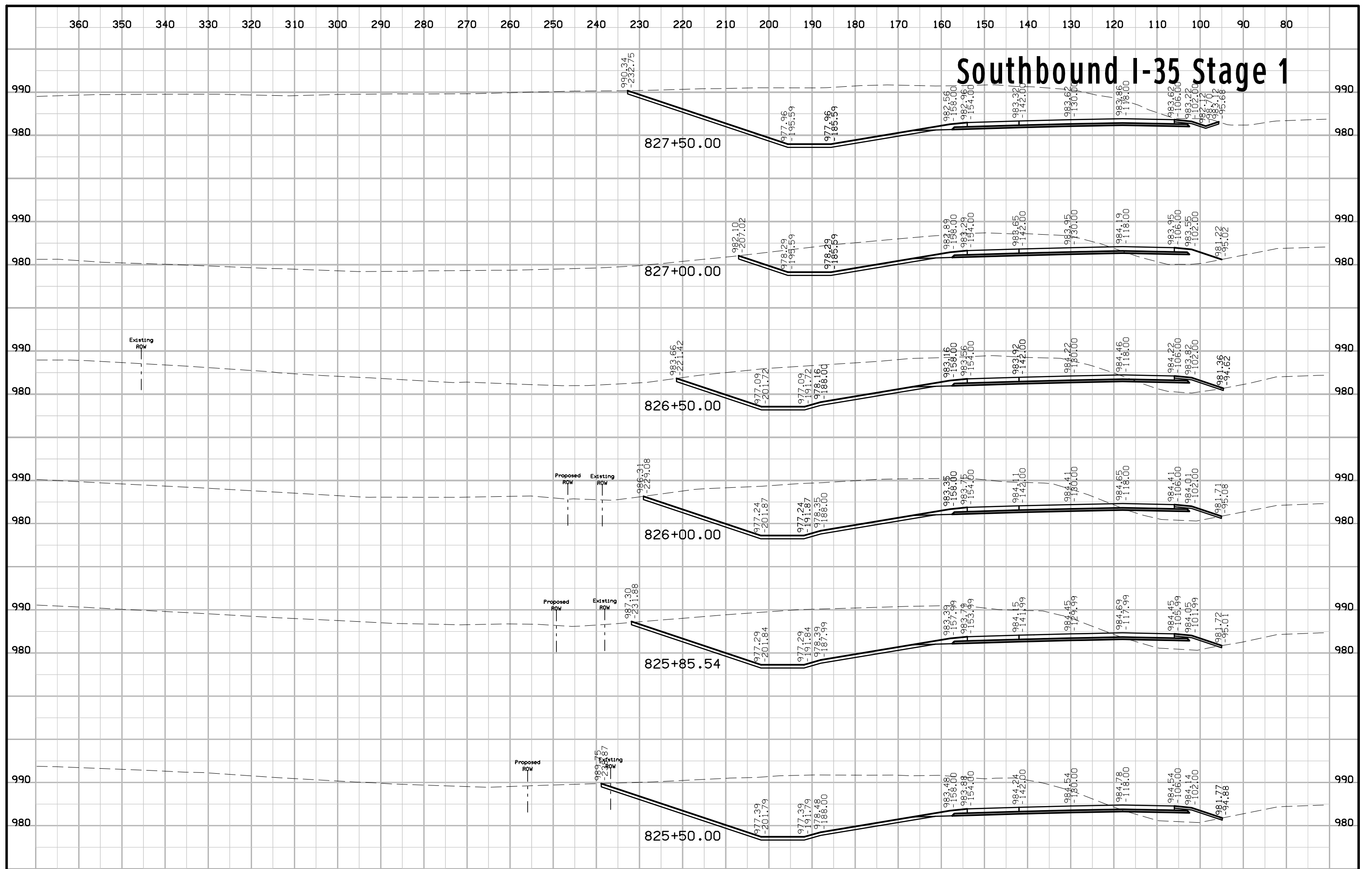
Southbound I-35 Stage 1



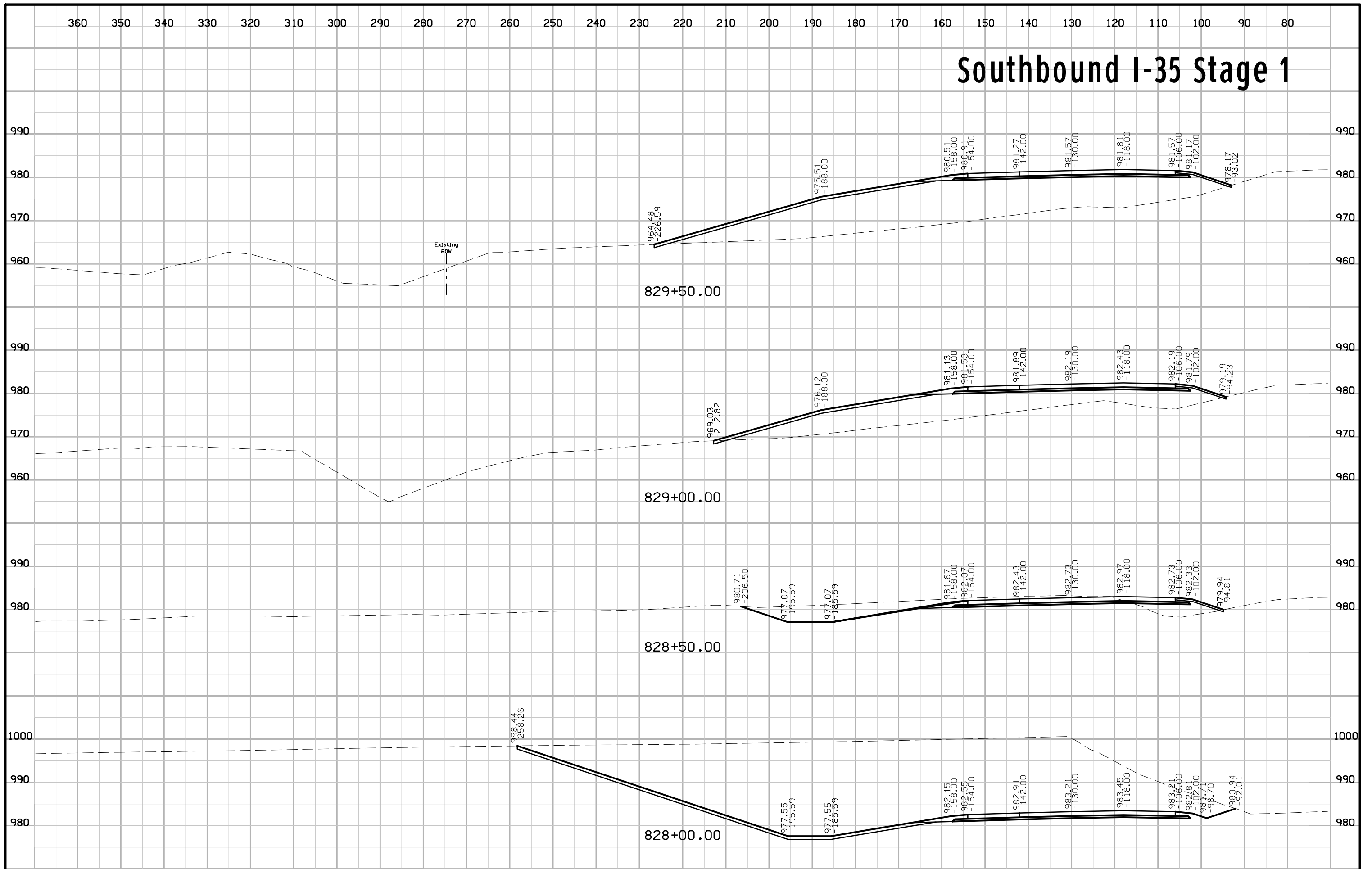
Southbound I-35 Stage 1



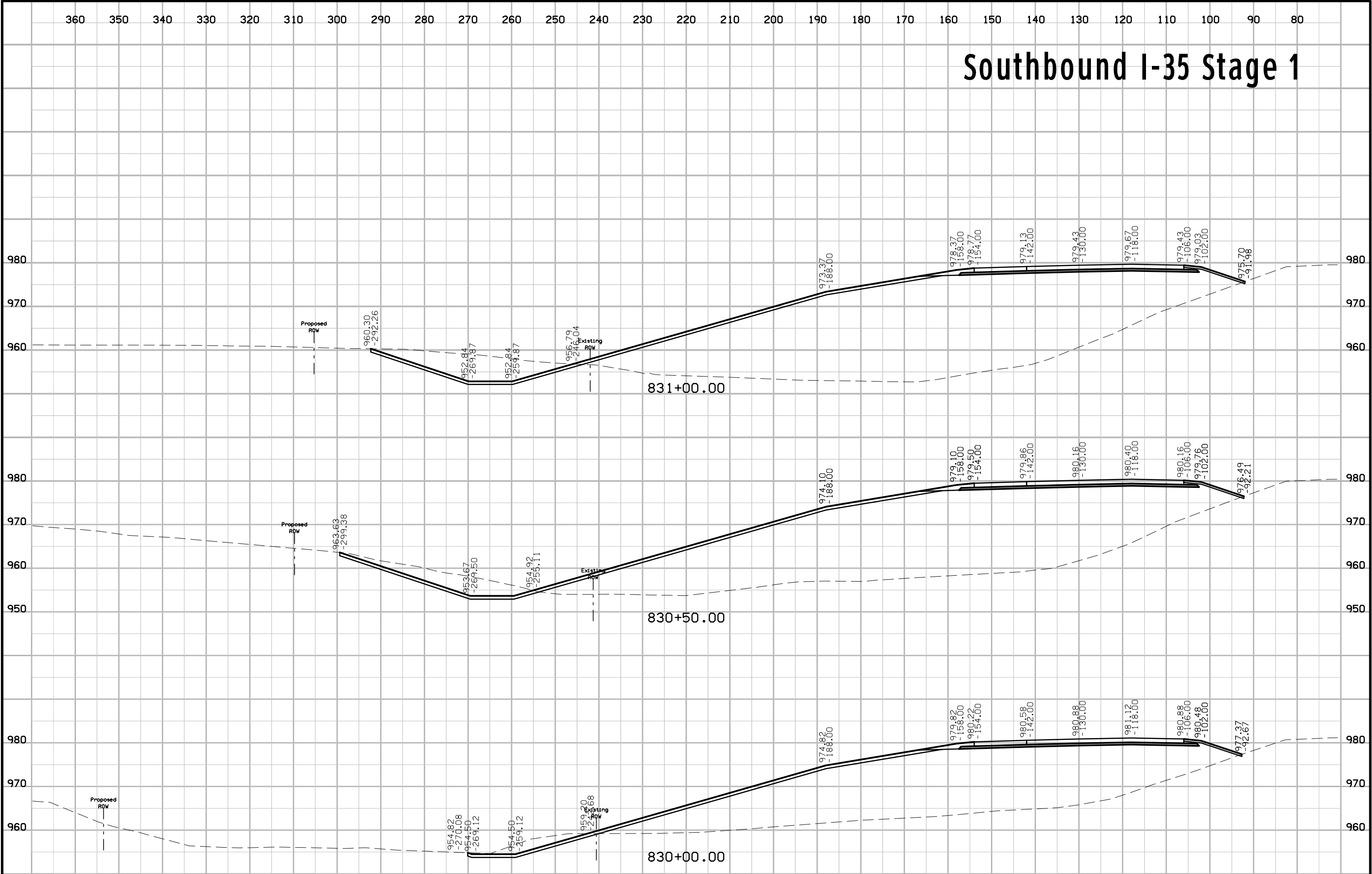
Southbound I-35 Stage 1



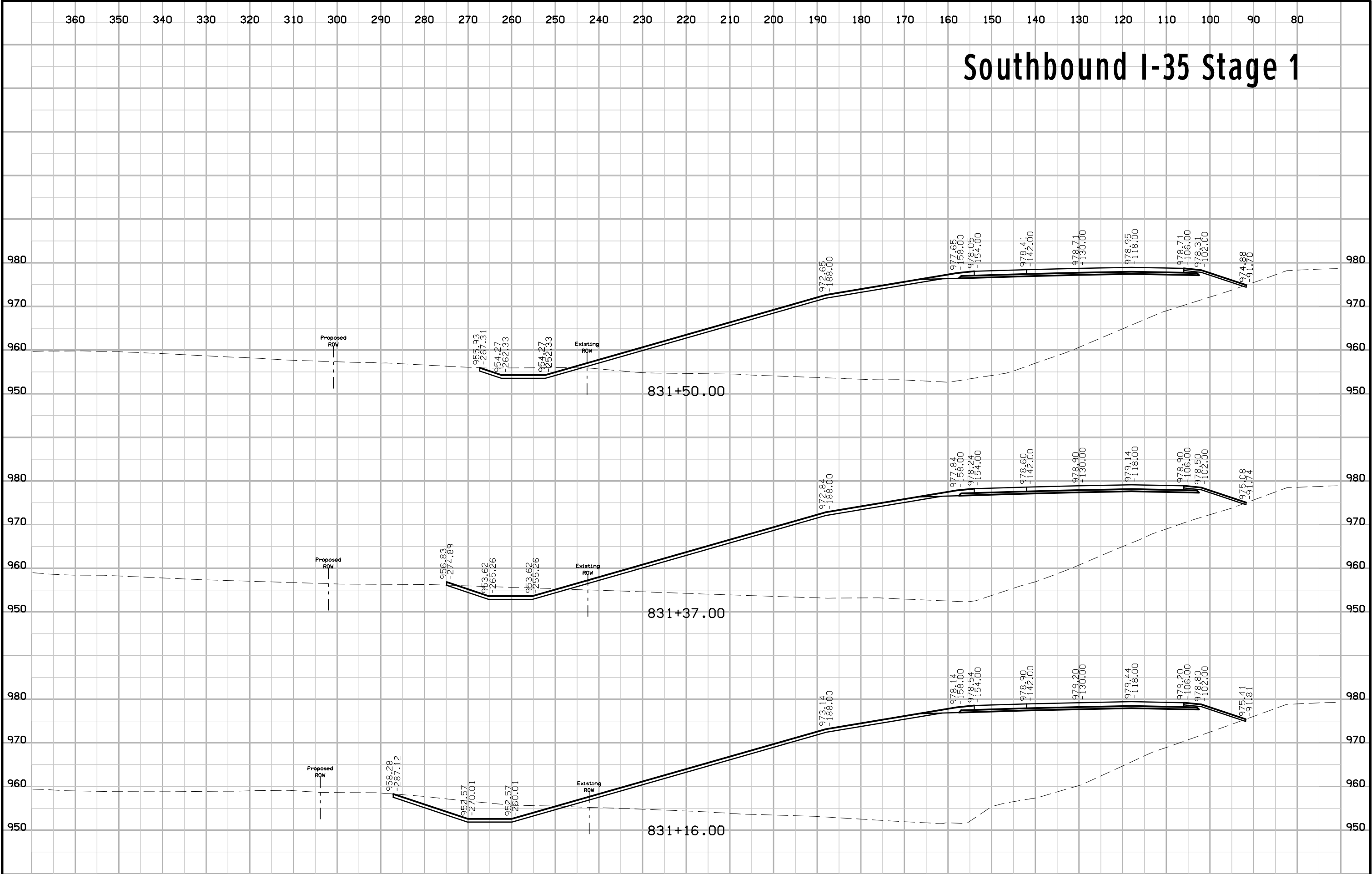
Southbound I-35 Stage 1



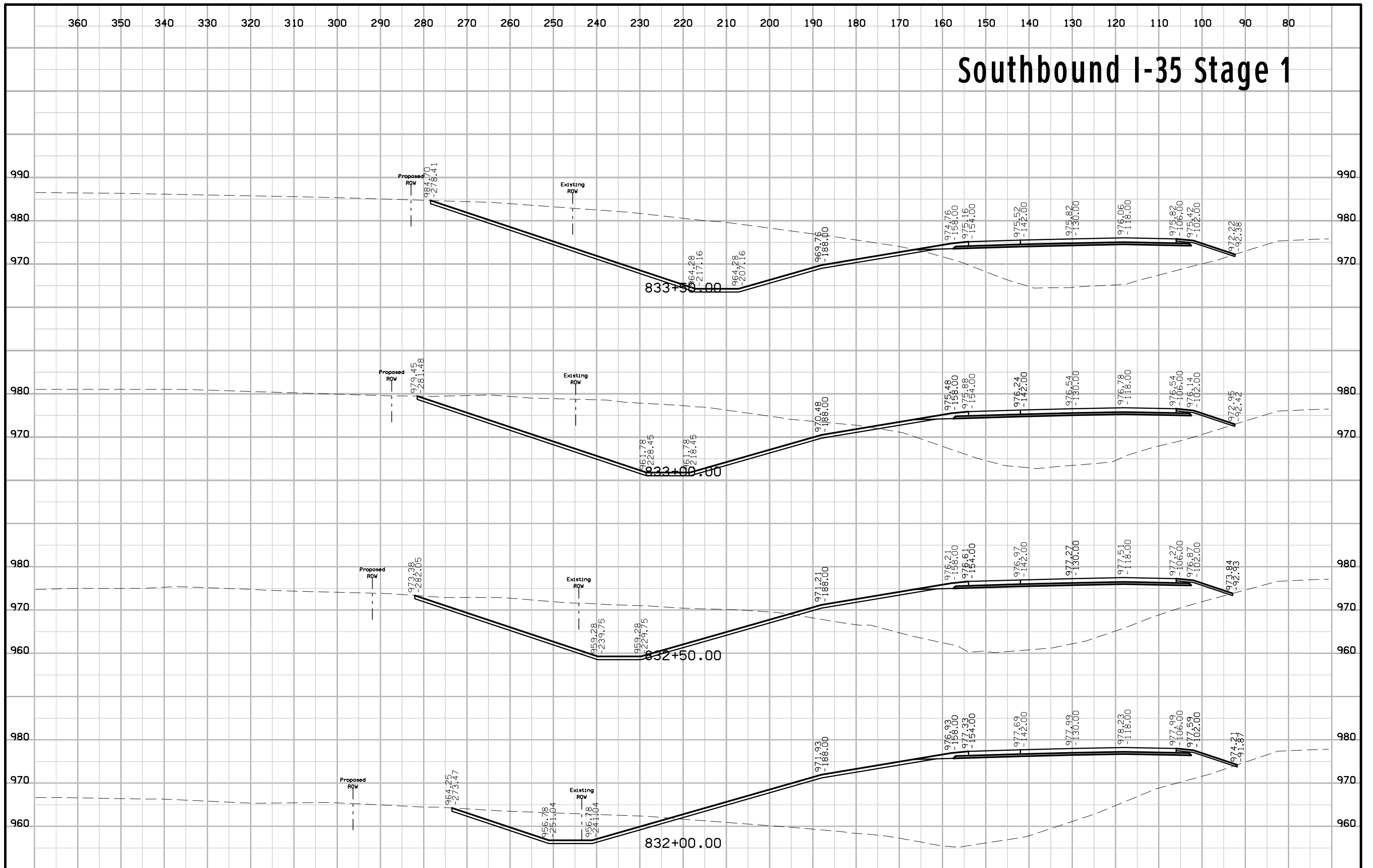
Southbound I-35 Stage 1



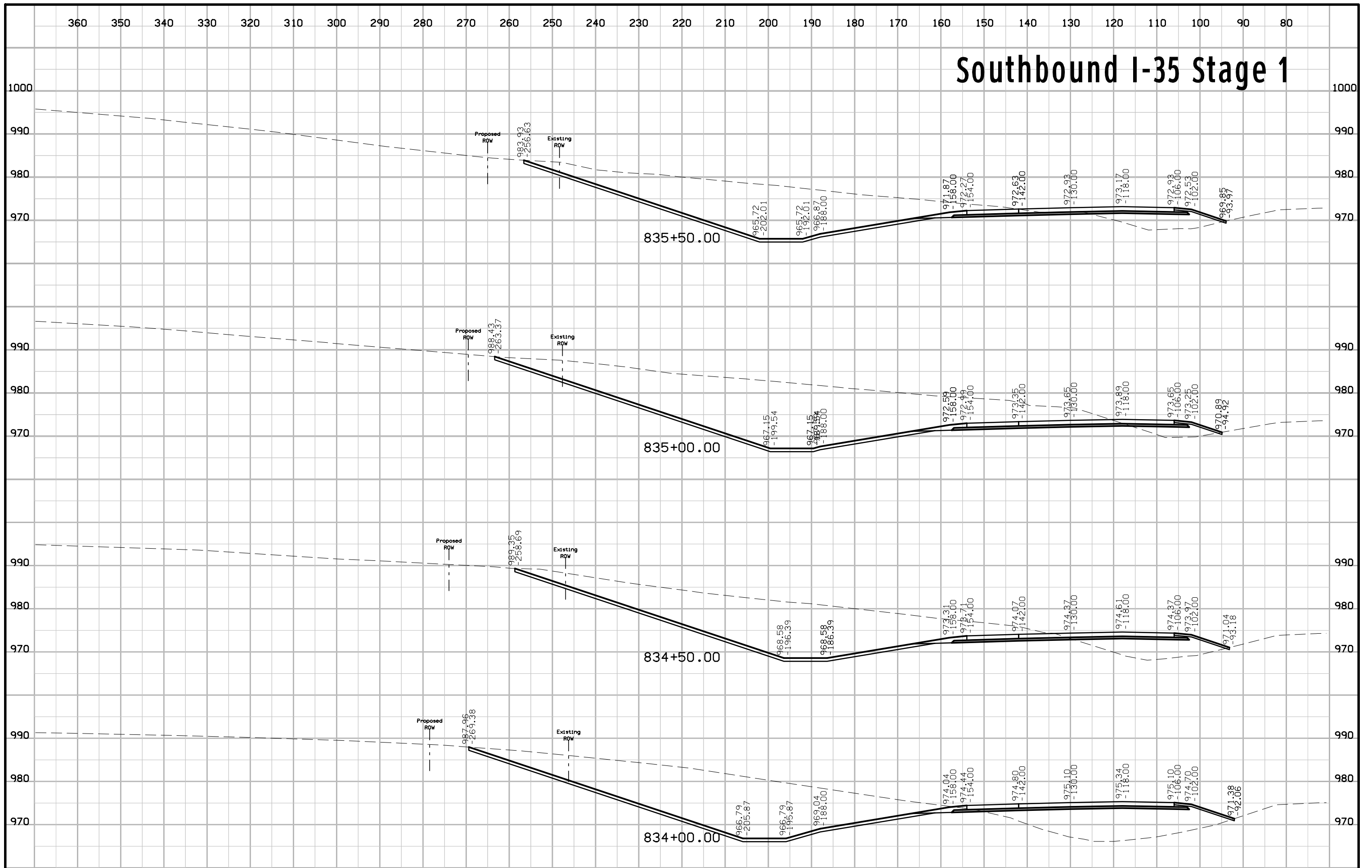
Southbound I-35 Stage 1



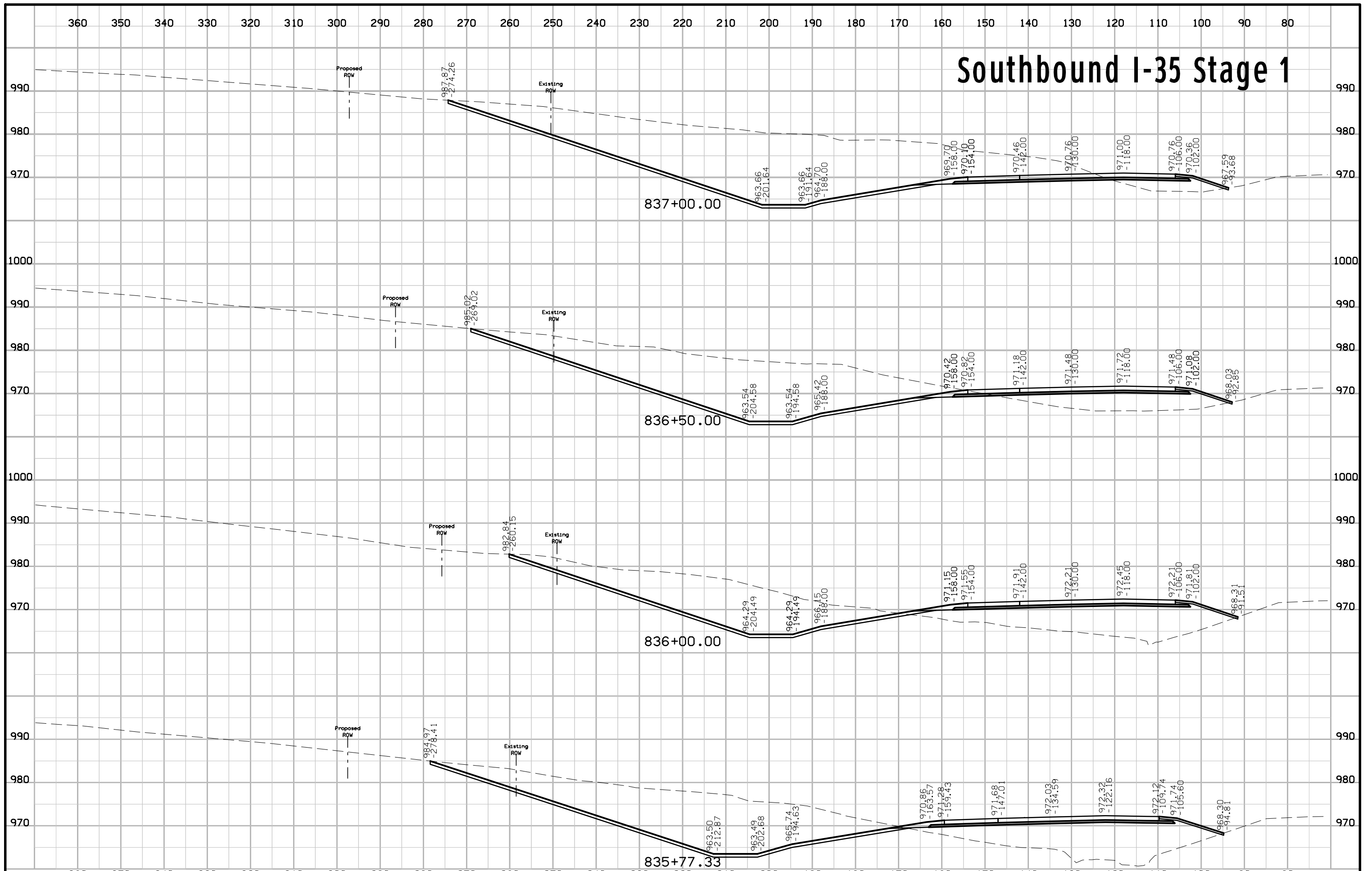
Southbound I-35 Stage 1



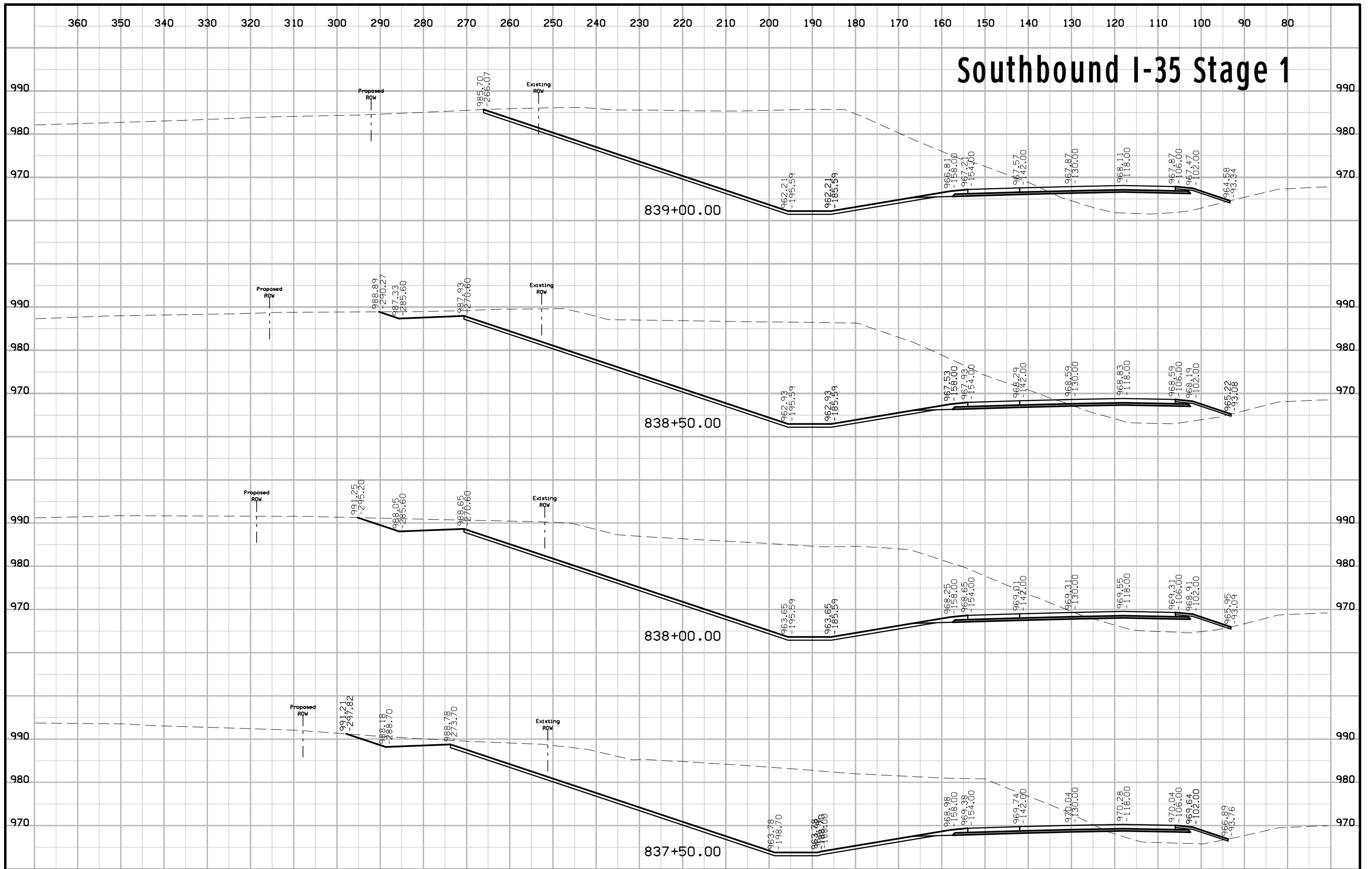
Southbound I-35 Stage 1



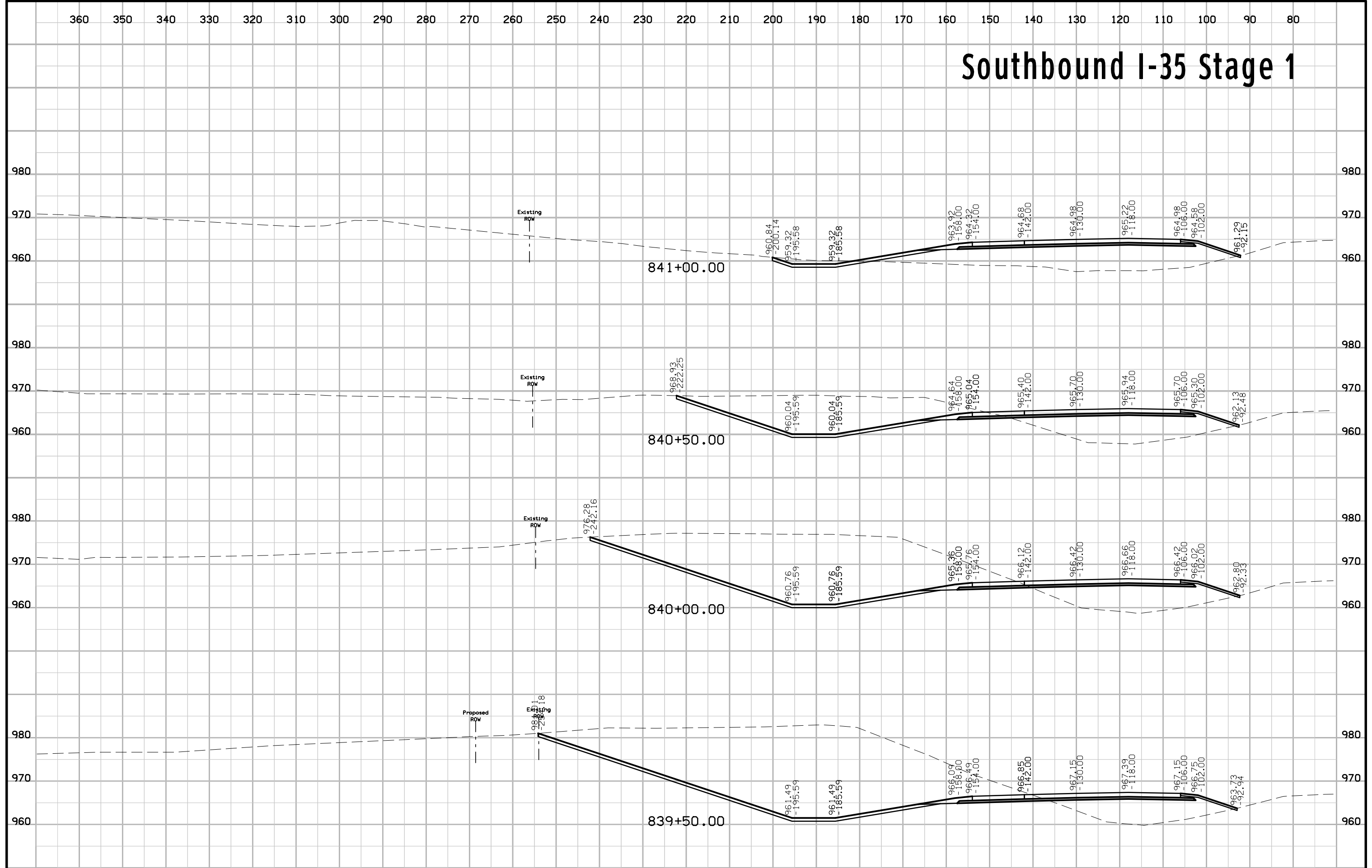
Southbound I-35 Stage 1



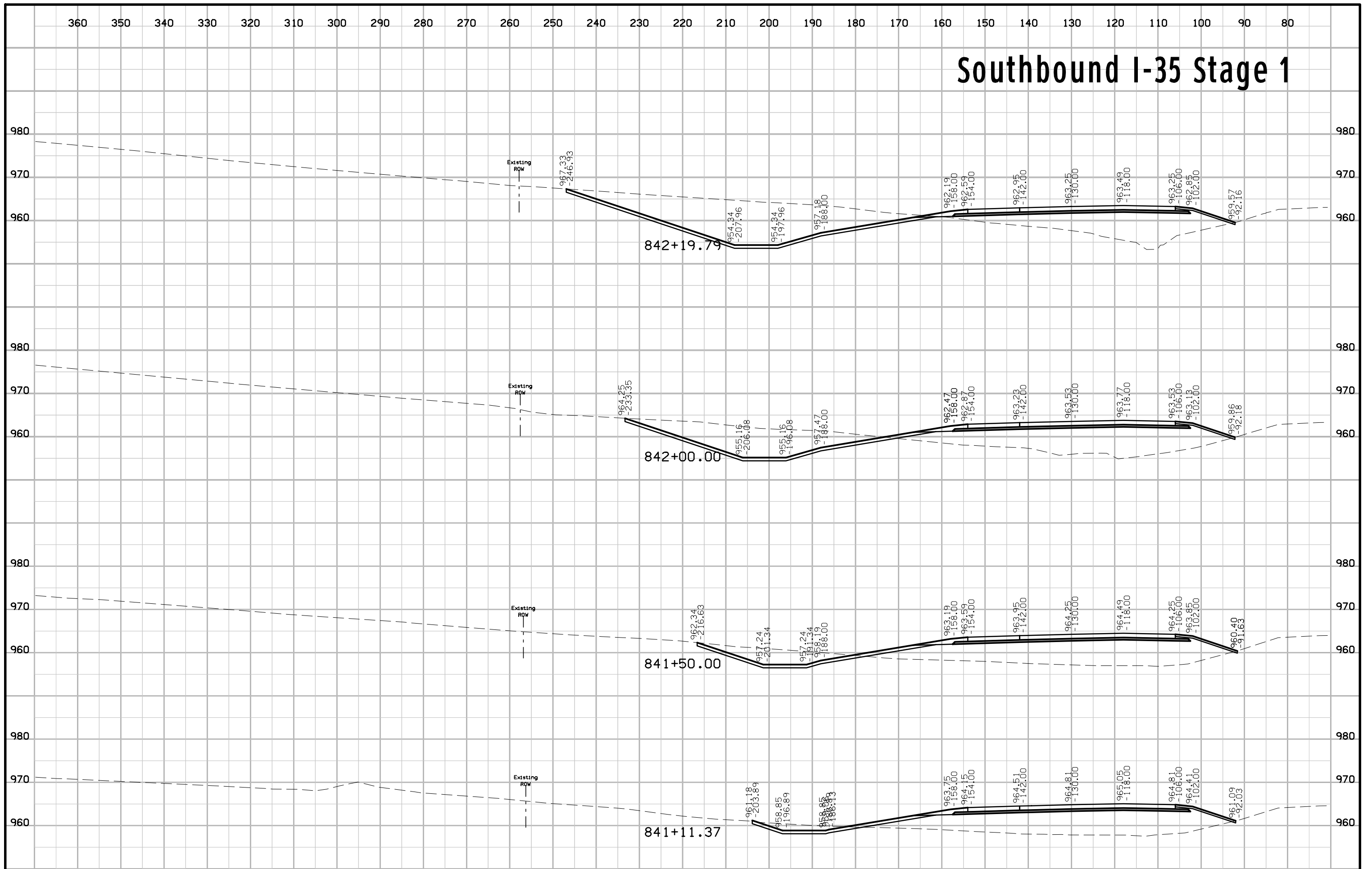
Southbound I-35 Stage 1



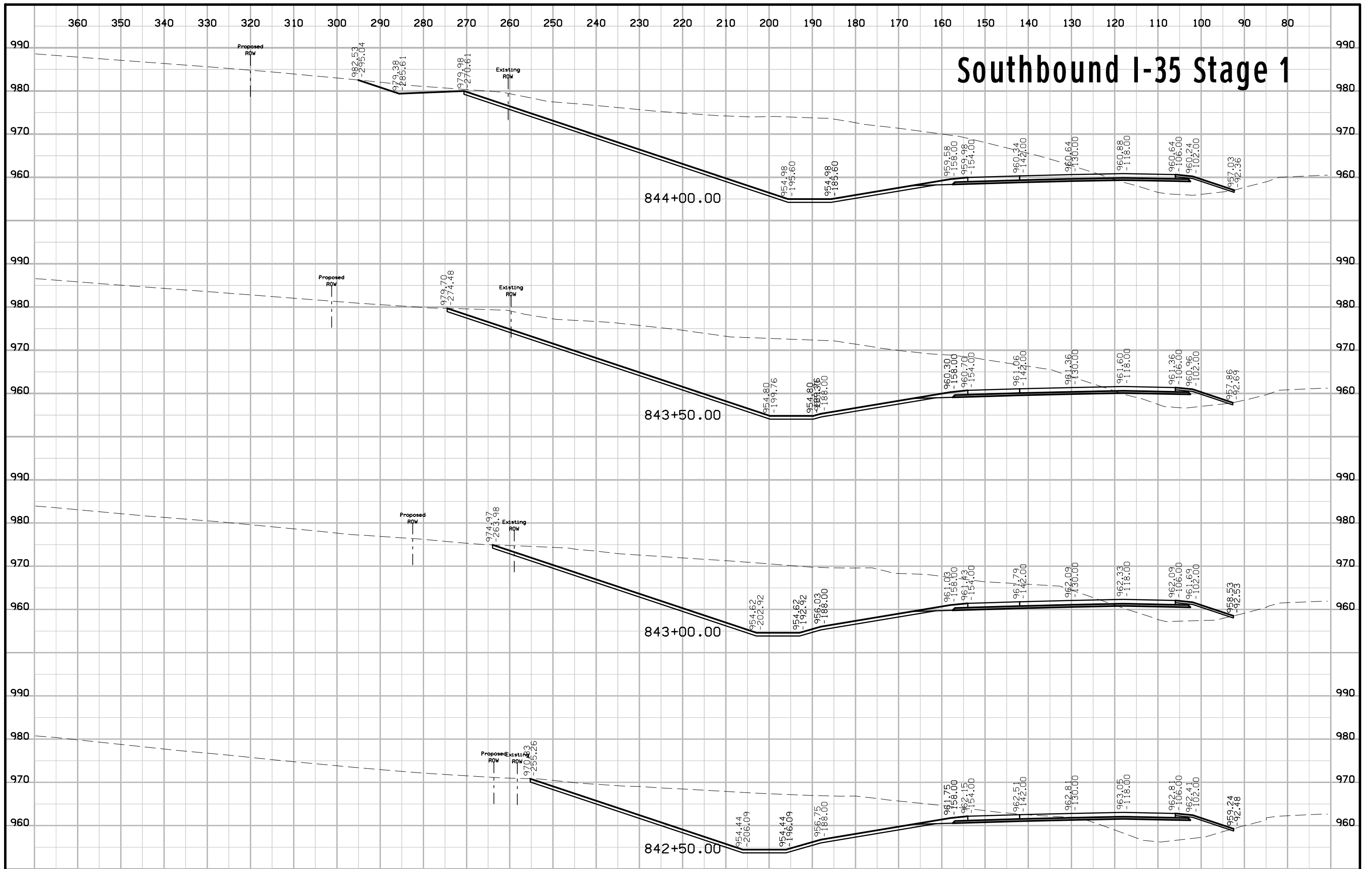
Southbound I-35 Stage 1



Southbound I-35 Stage 1



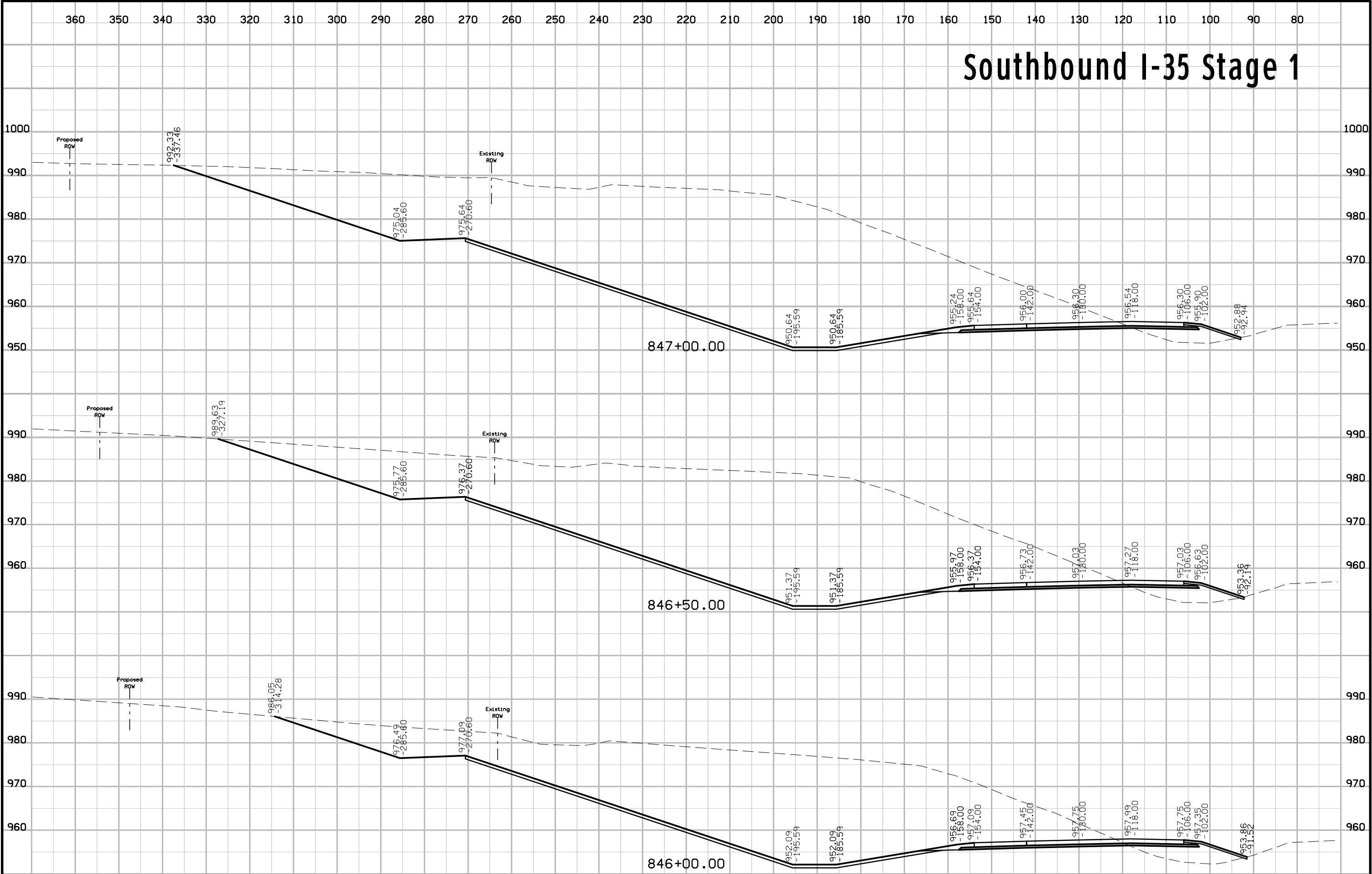
Southbound I-35 Stage 1



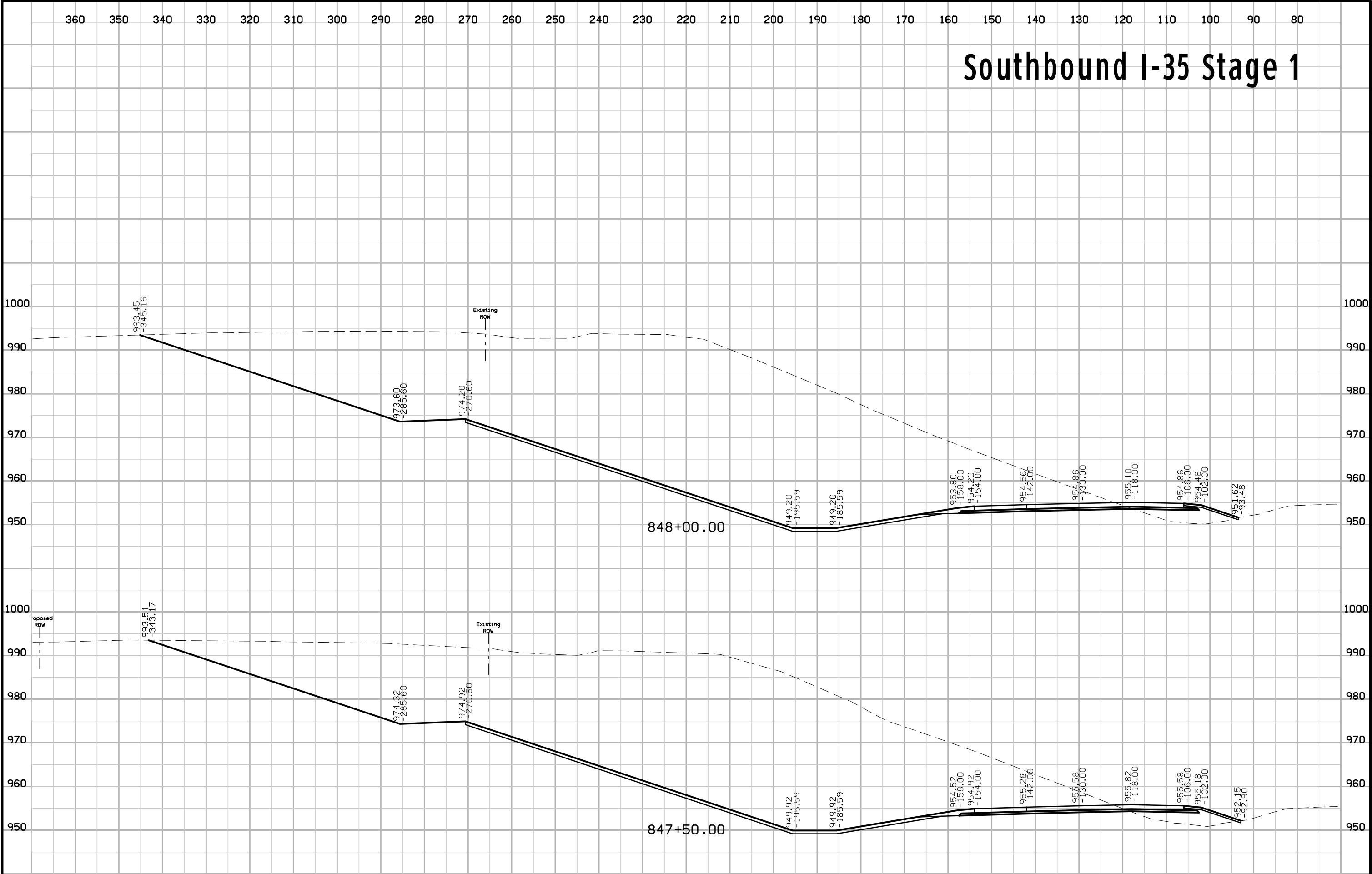
Southbound I-35 Stage 1



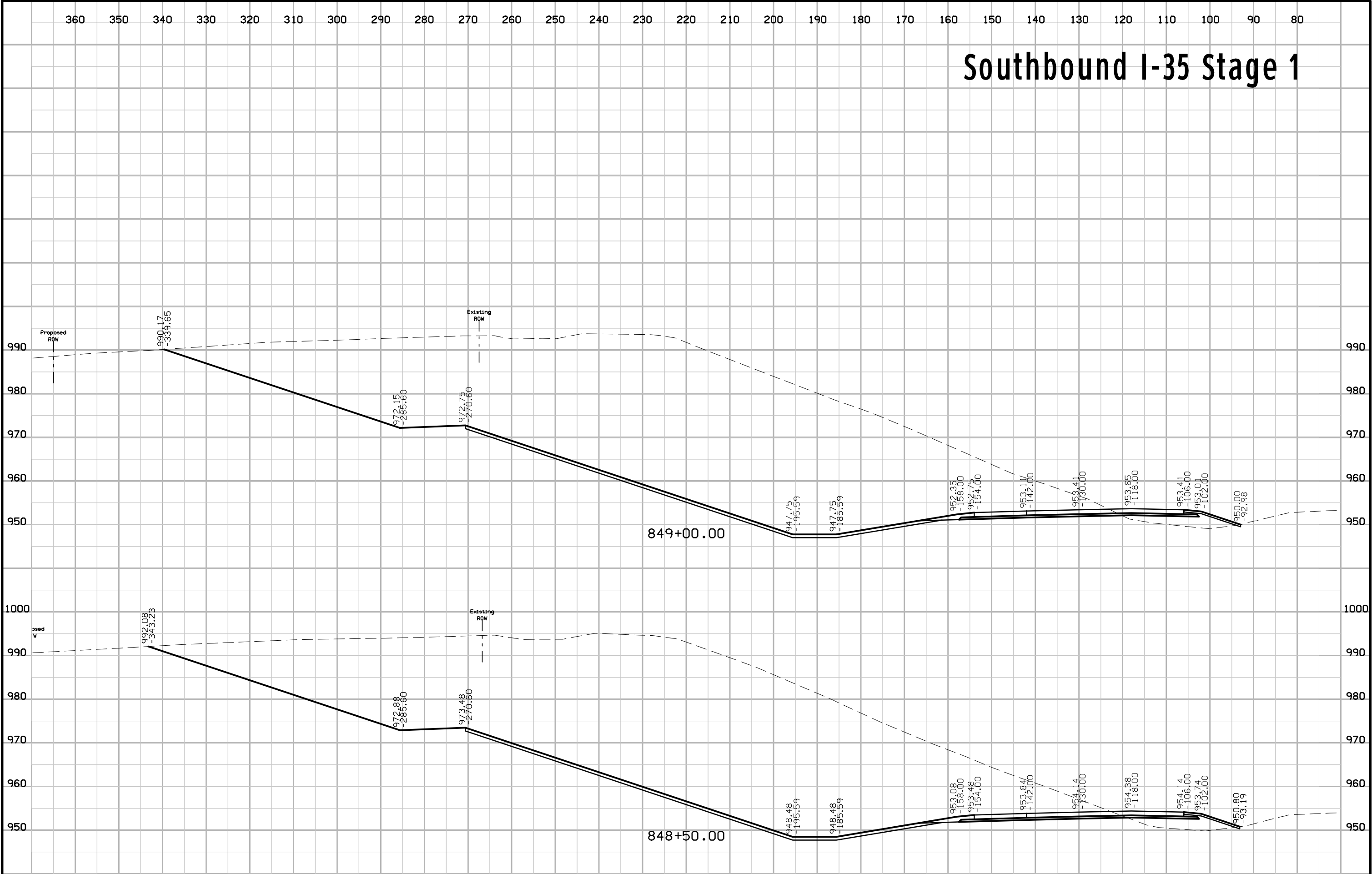
Southbound I-35 Stage 1



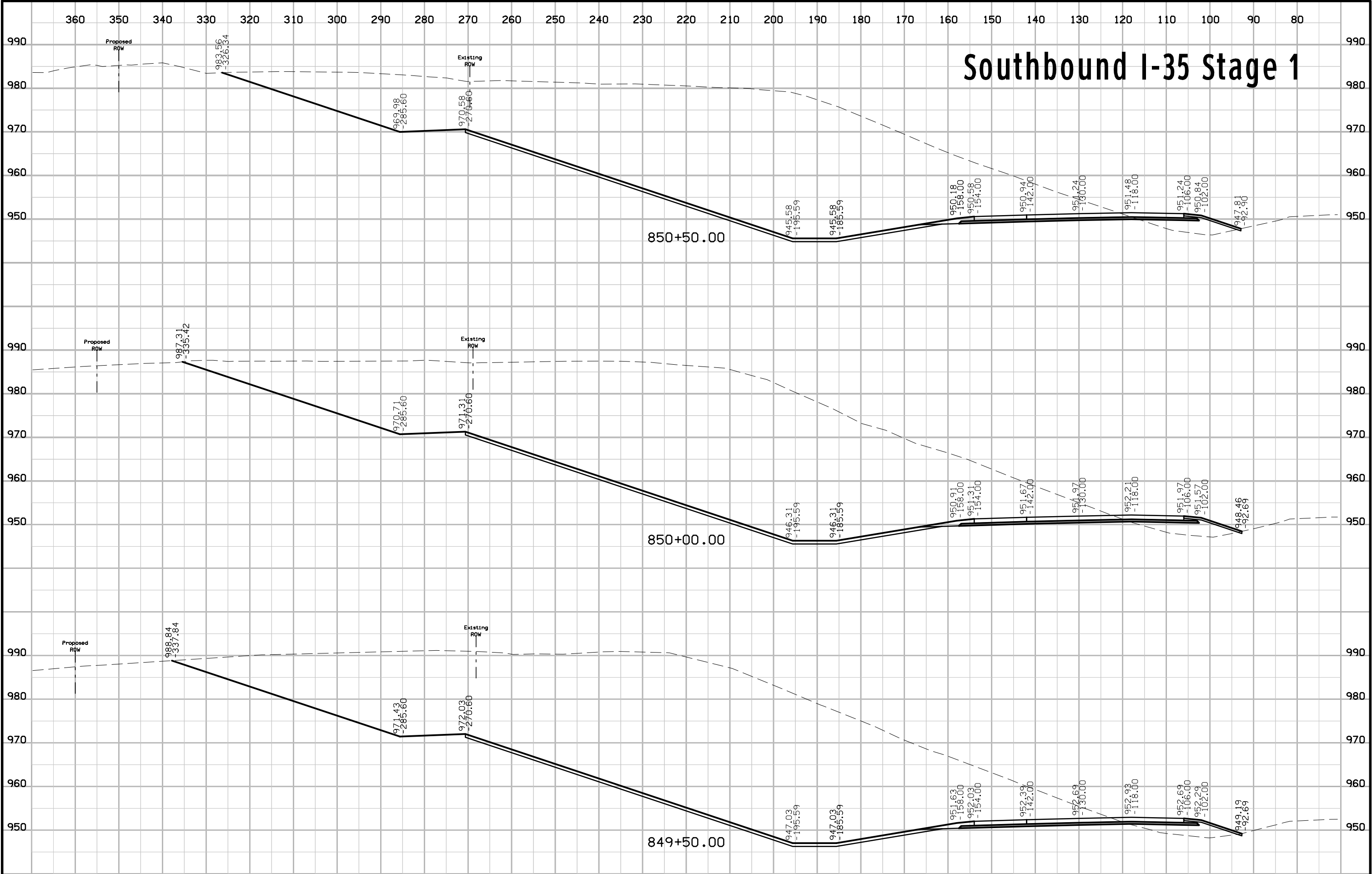
Southbound I-35 Stage 1



Southbound I-35 Stage 1



Southbound I-35 Stage 1

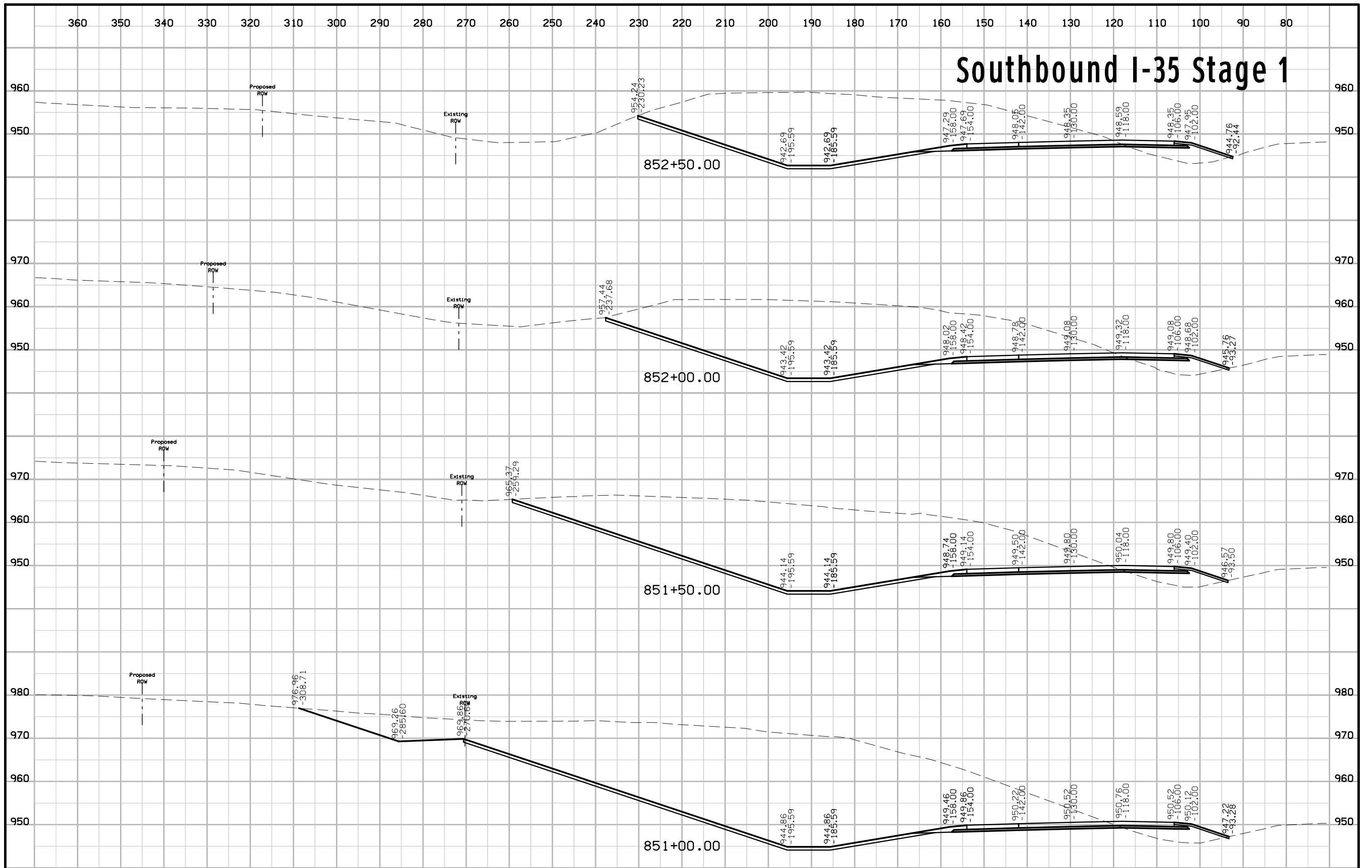


850+50.00

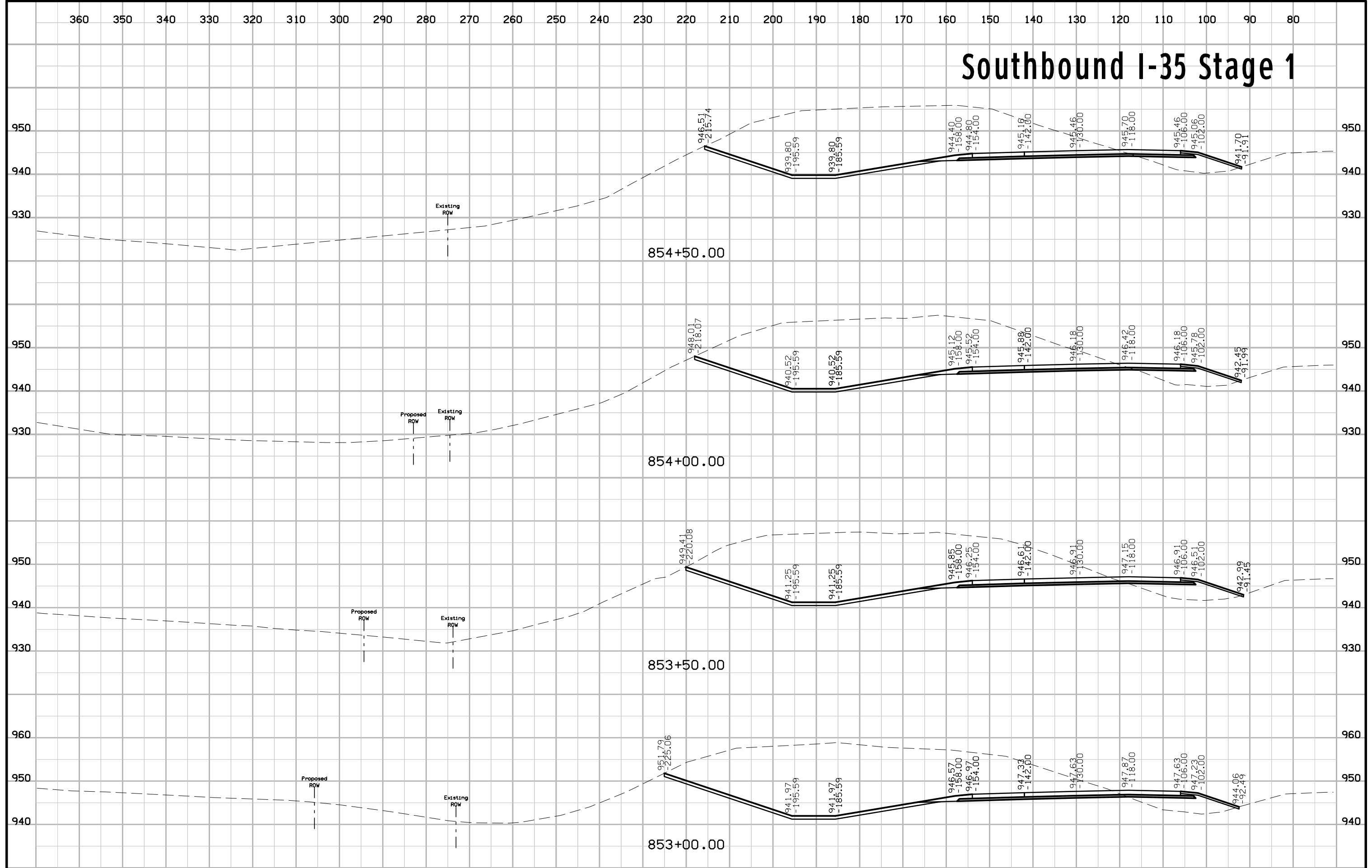
850+00.00

849+50.00

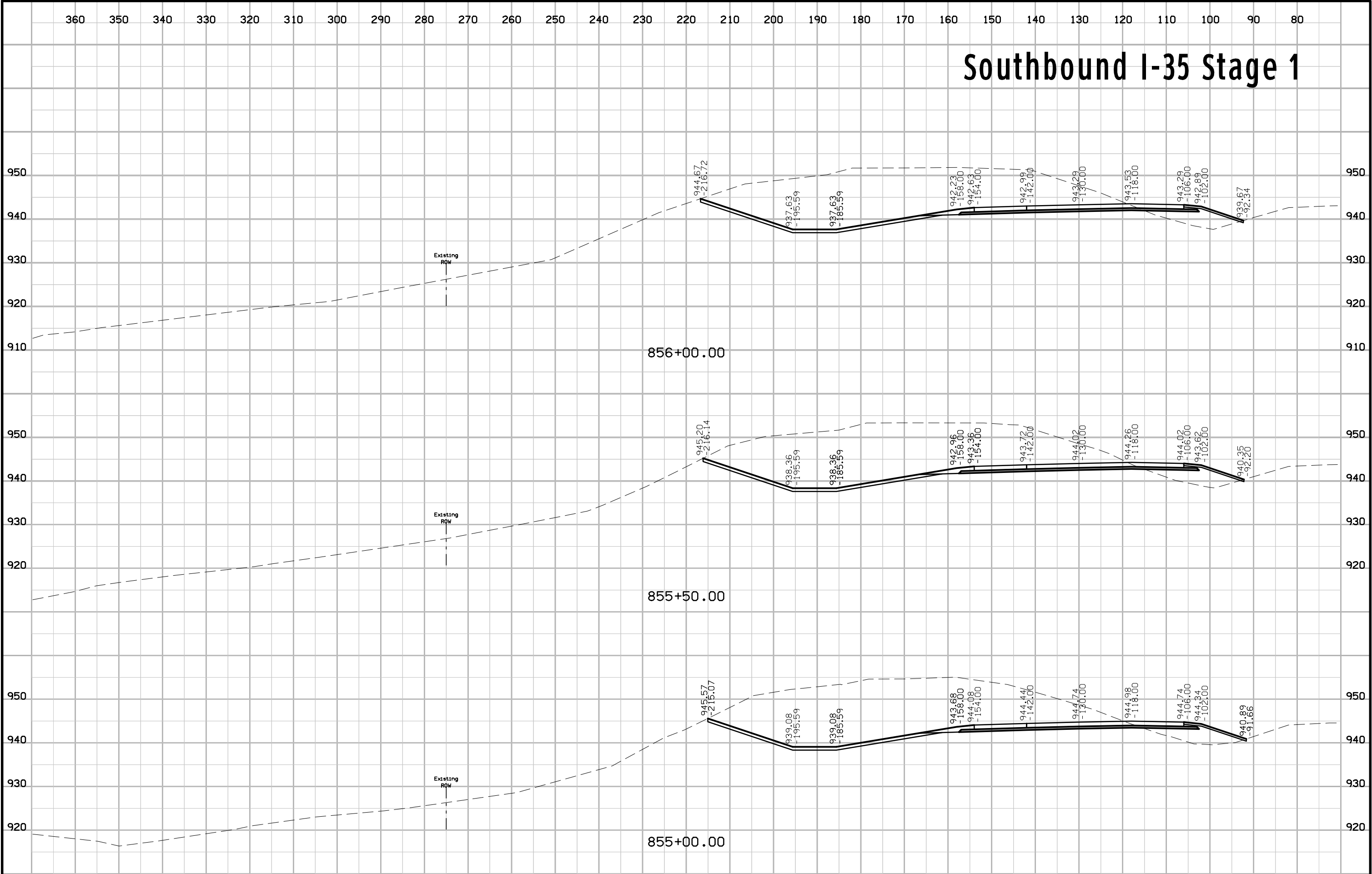
Southbound I-35 Stage 1



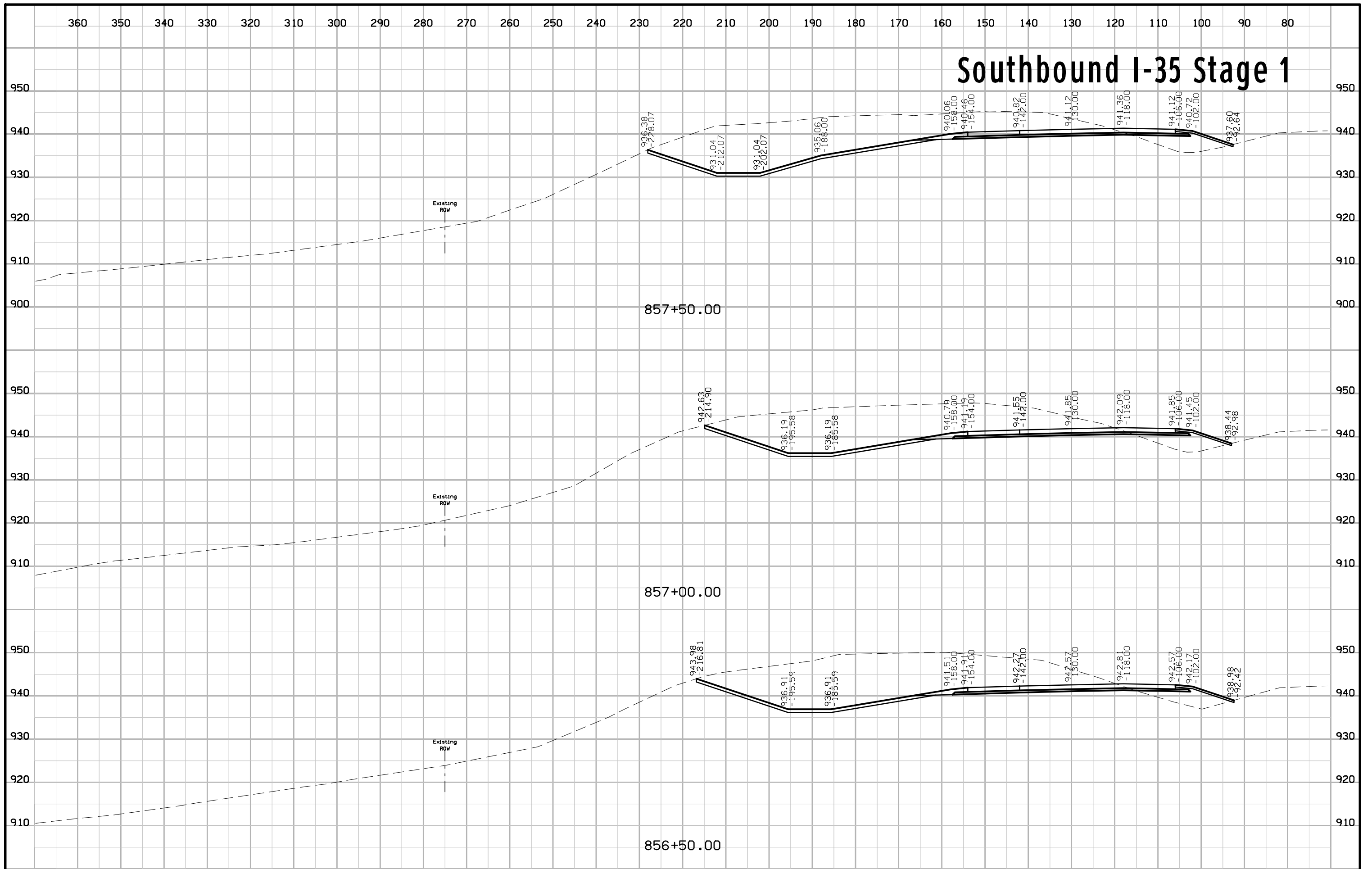
Southbound I-35 Stage 1



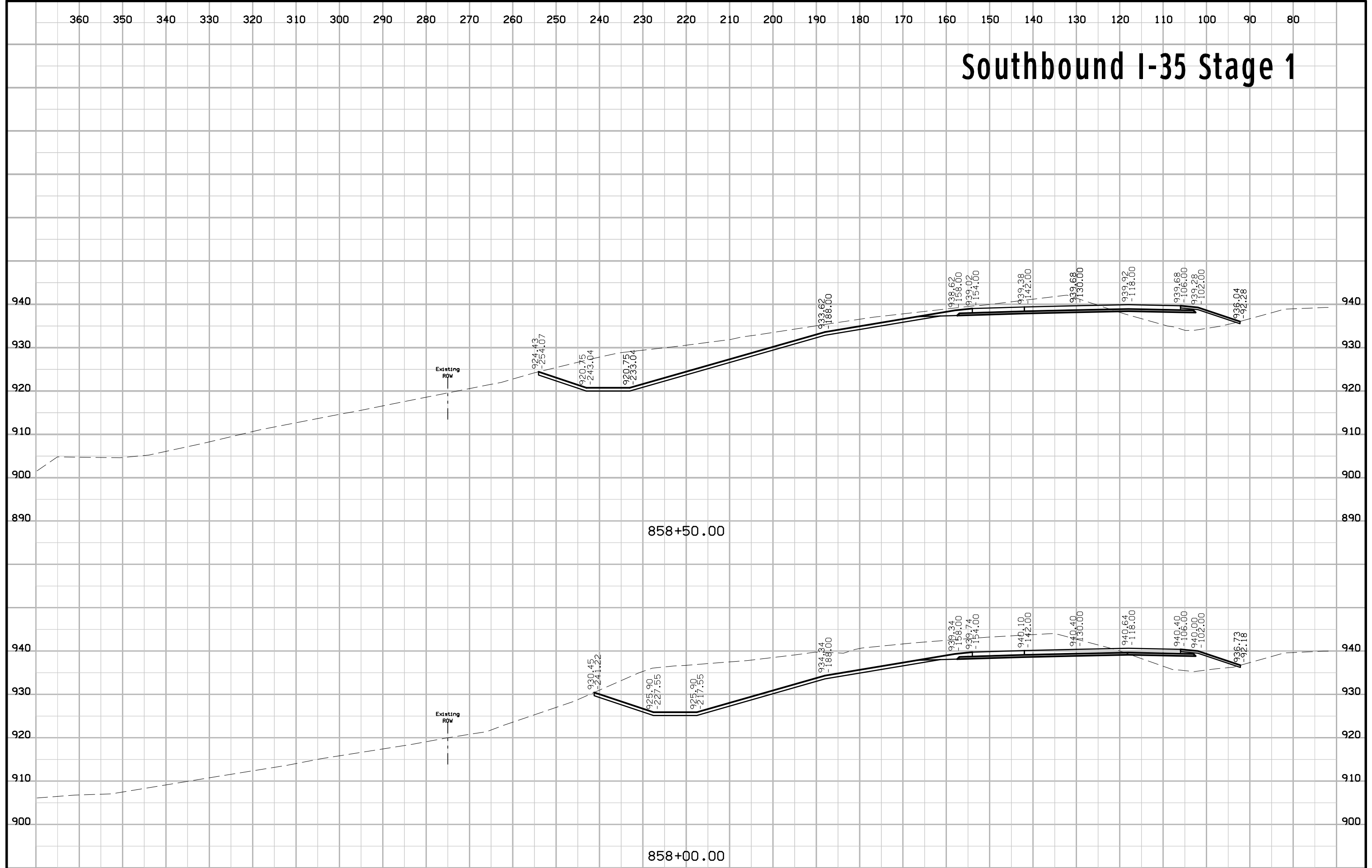
Southbound I-35 Stage 1



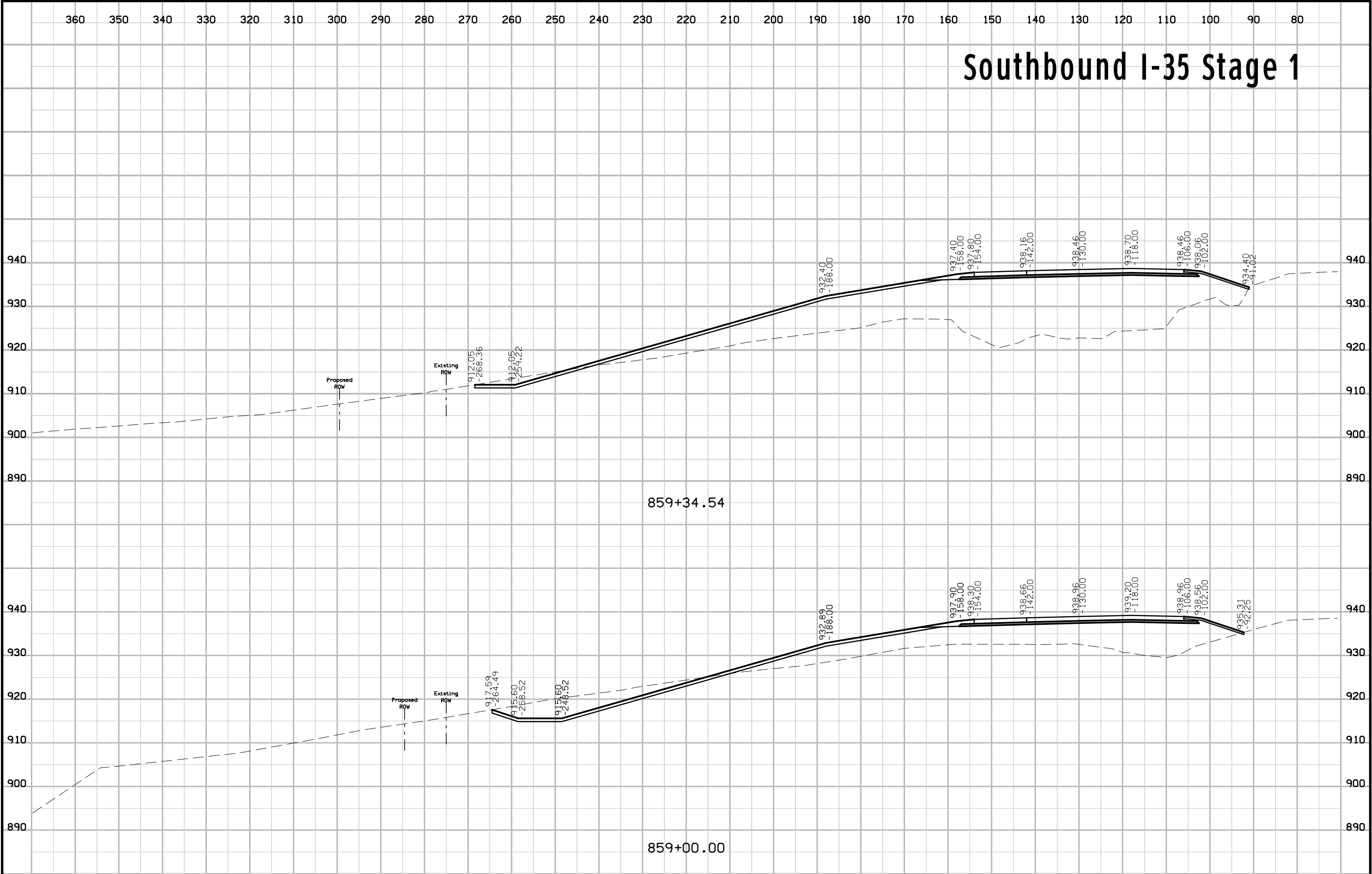
Southbound I-35 Stage 1



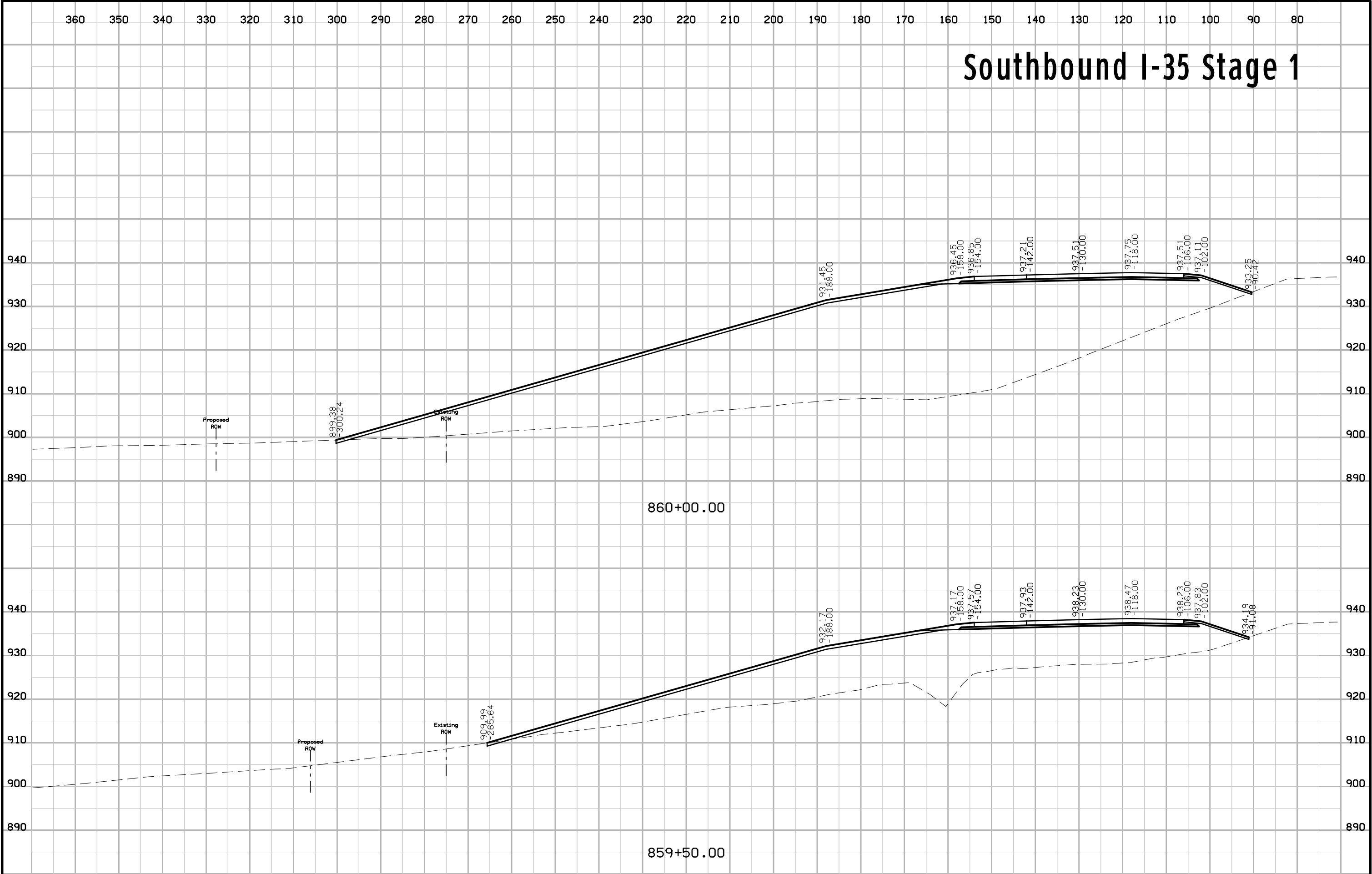
Southbound I-35 Stage 1



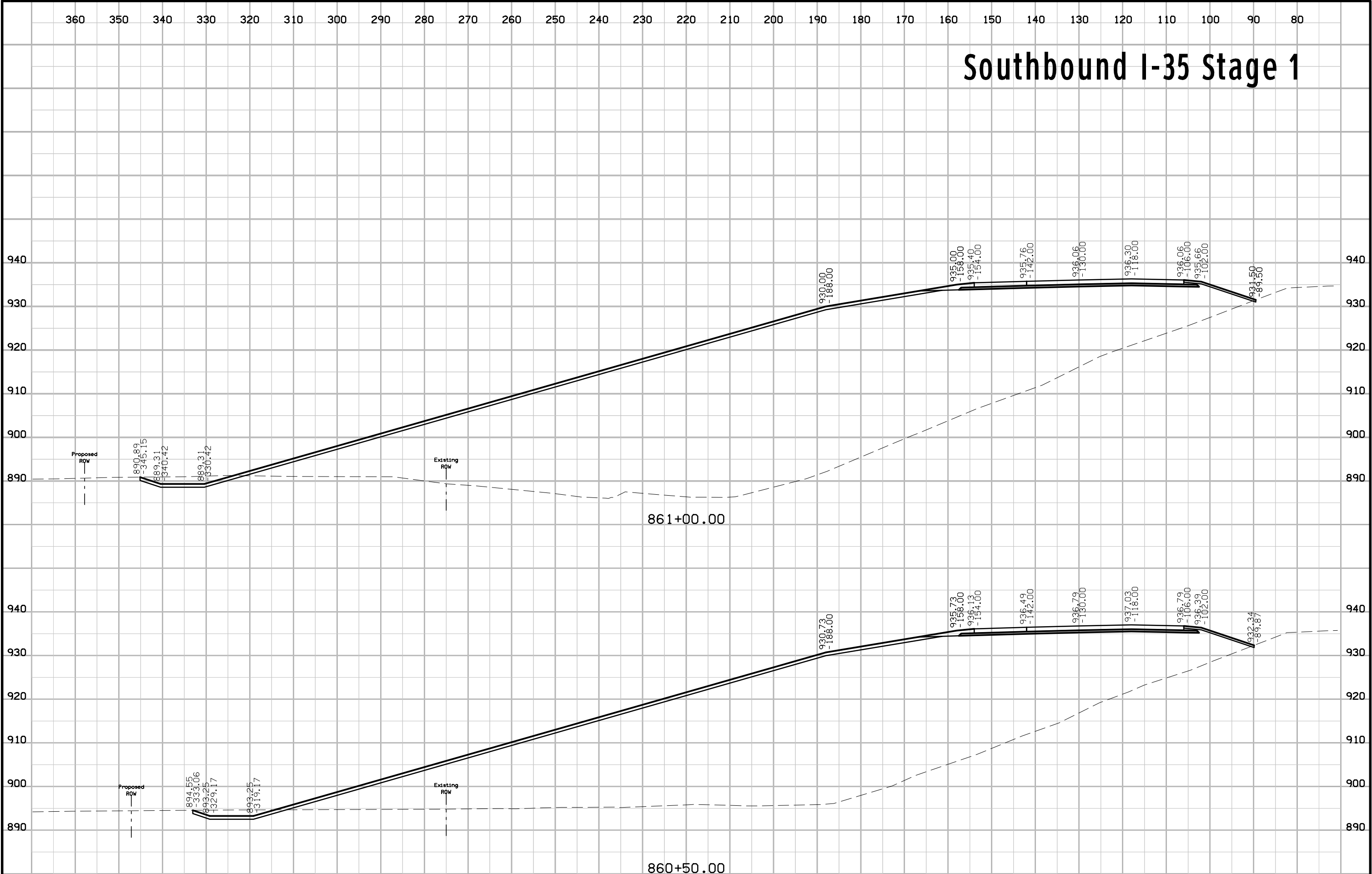
Southbound I-35 Stage 1



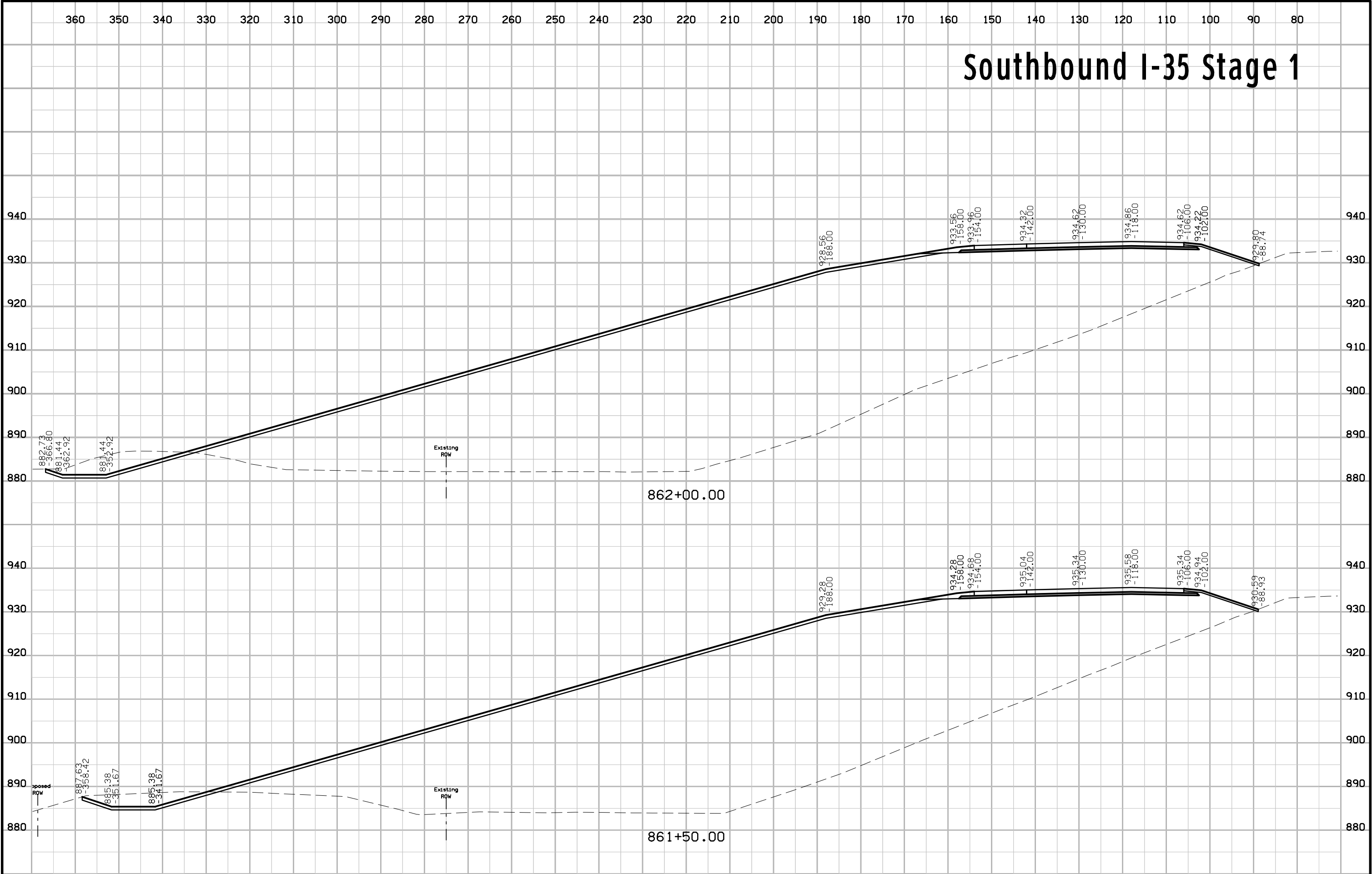
Southbound I-35 Stage 1



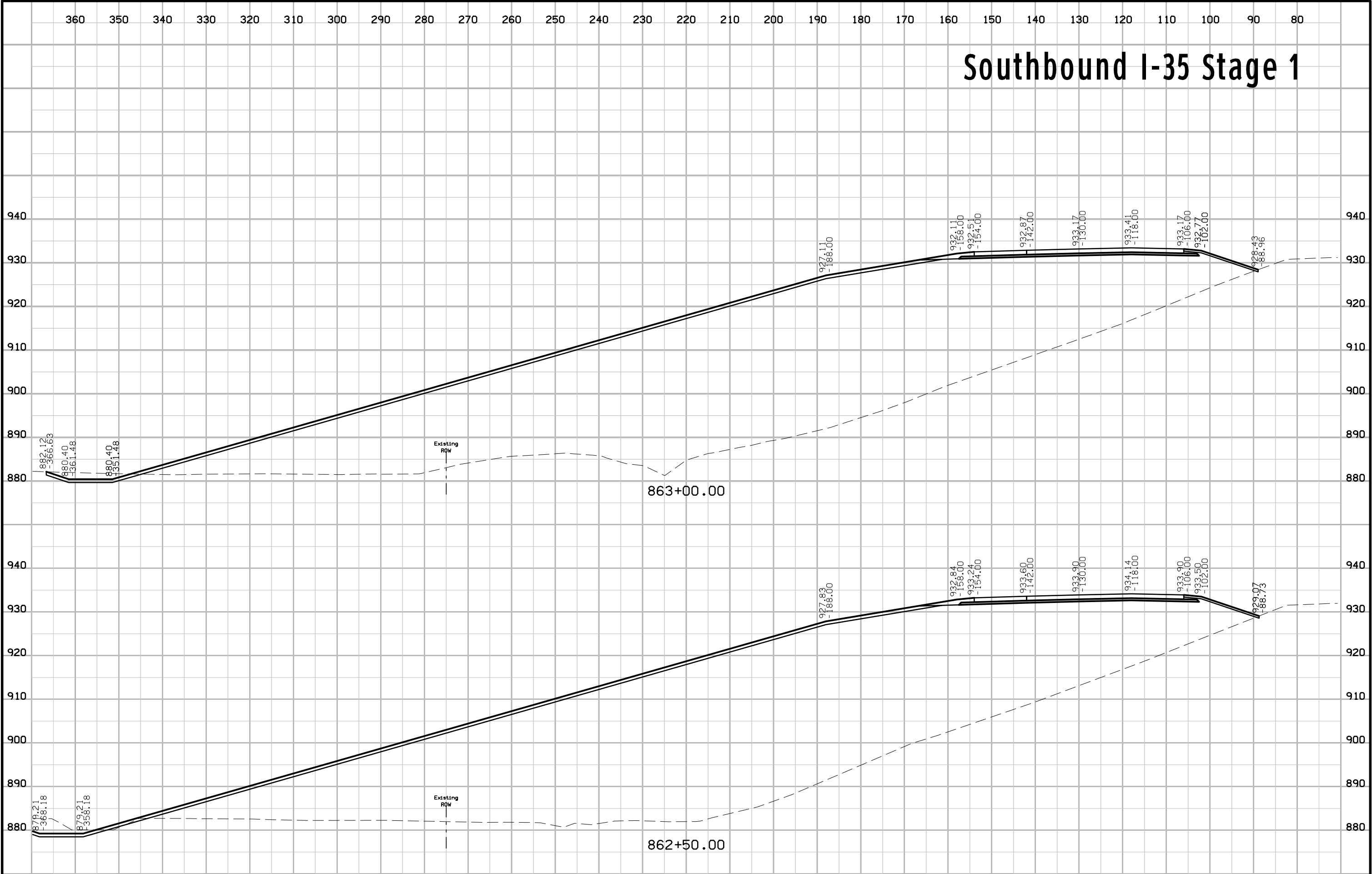
Southbound I-35 Stage 1



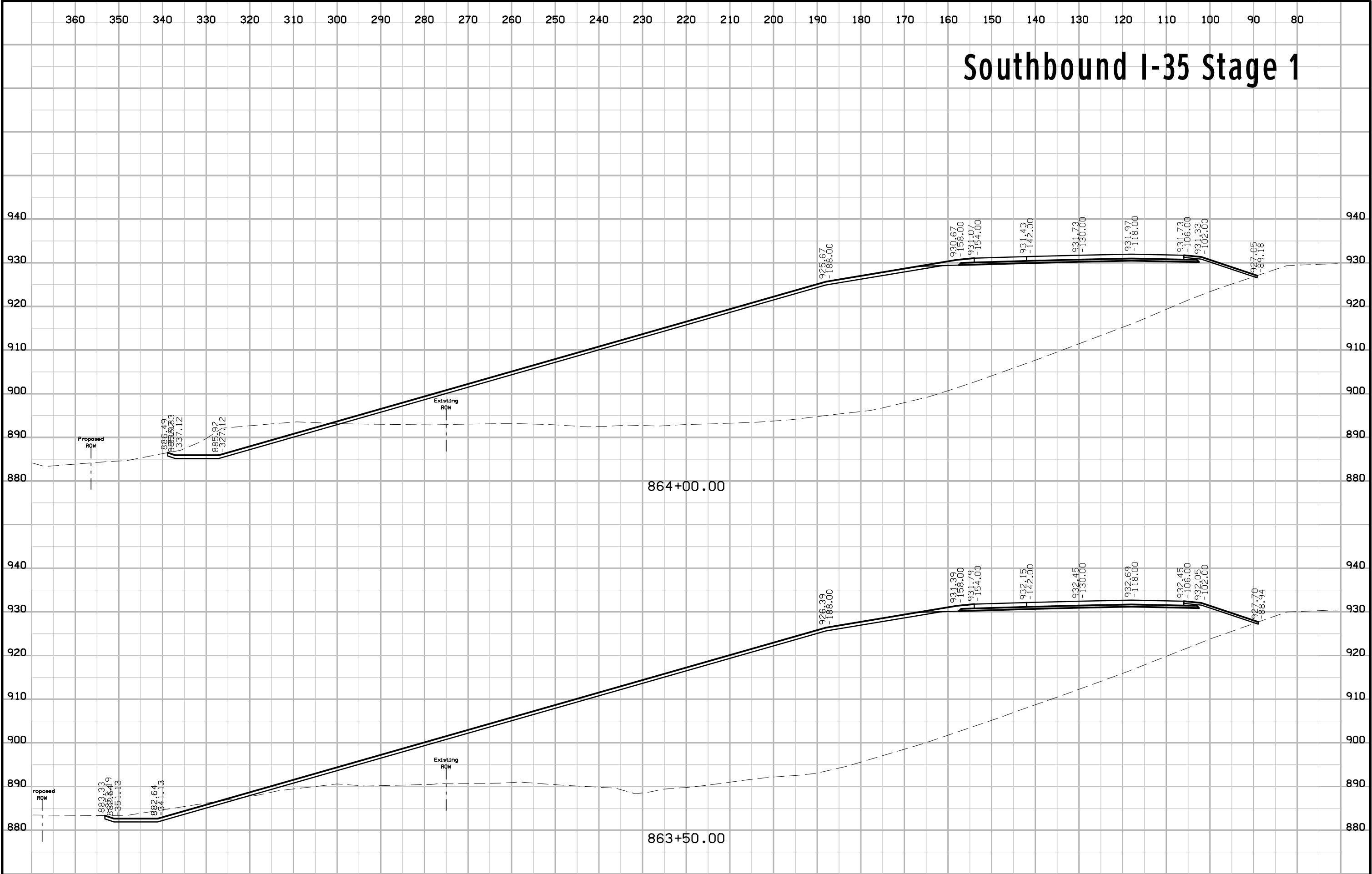
Southbound I-35 Stage 1



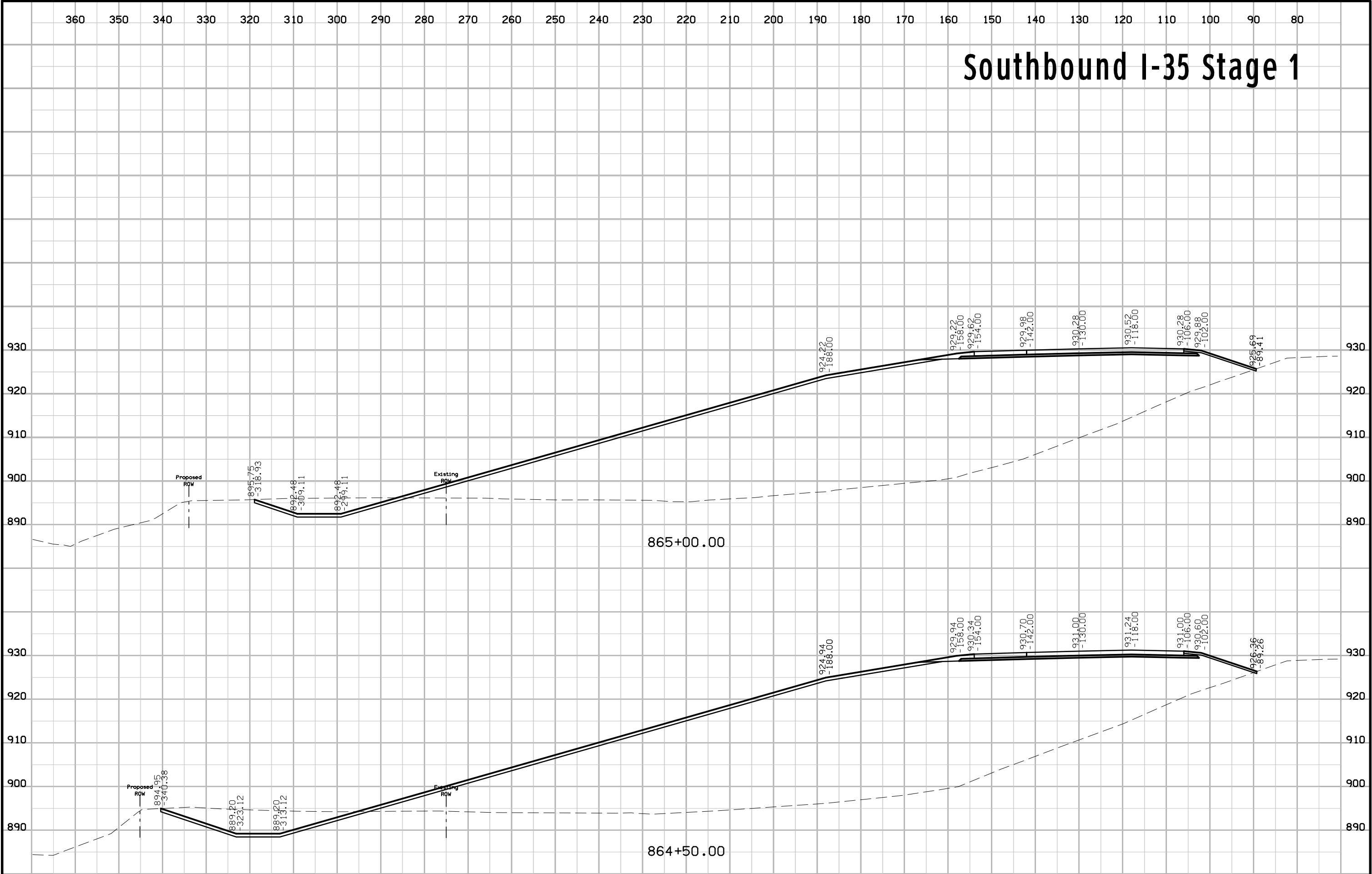
Southbound I-35 Stage 1



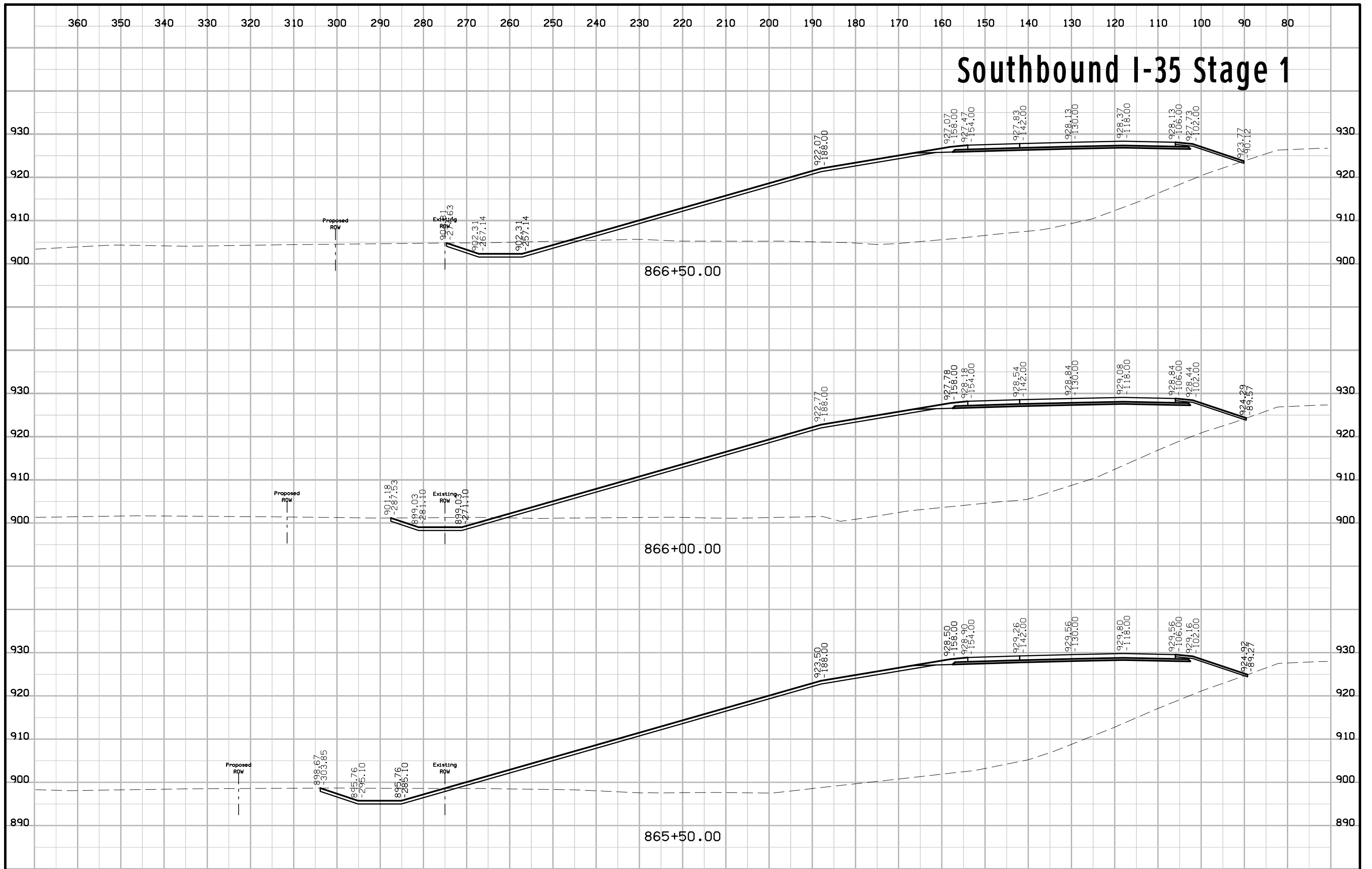
Southbound I-35 Stage 1



Southbound I-35 Stage 1



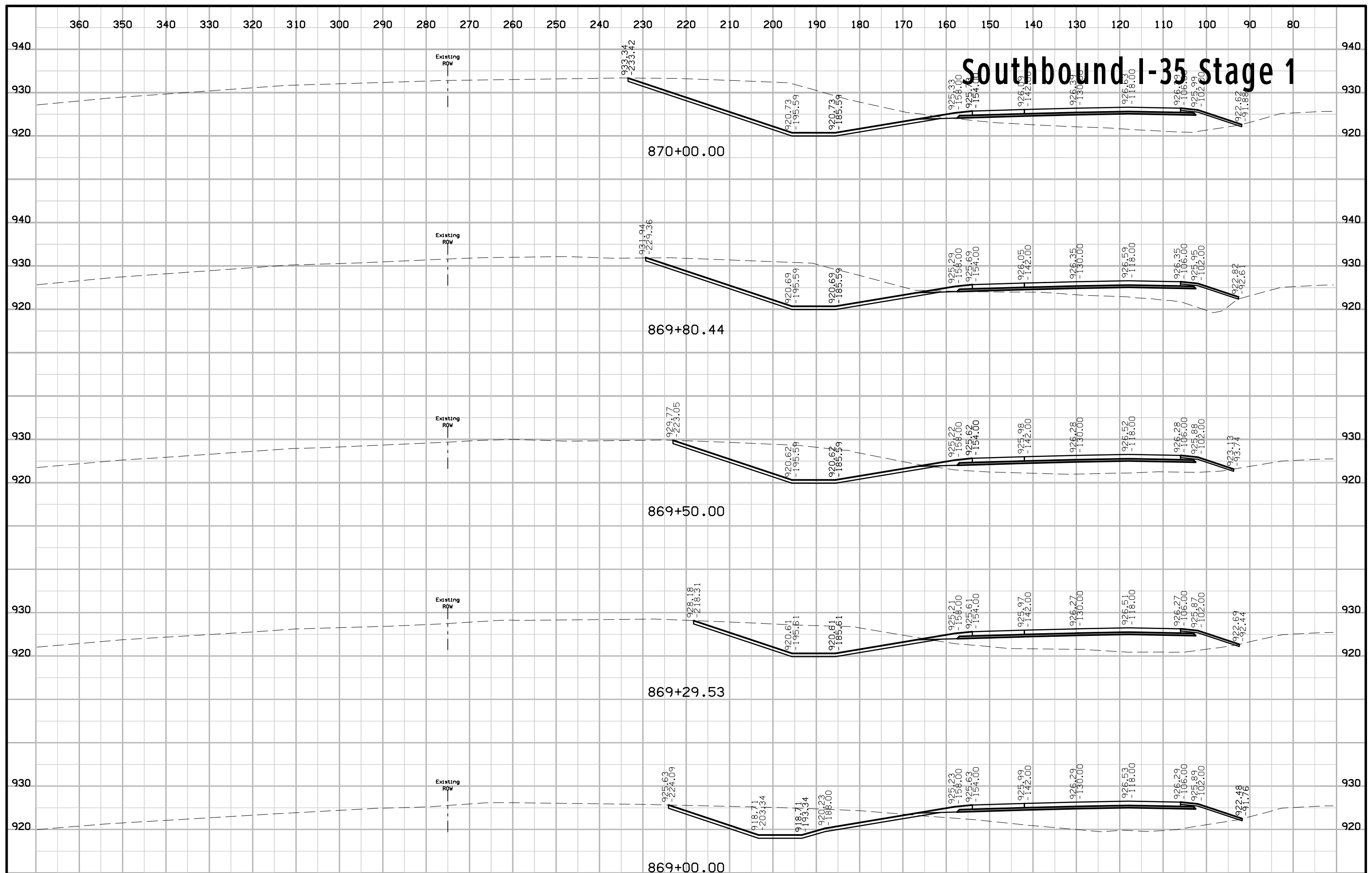
Southbound I-35 Stage 1



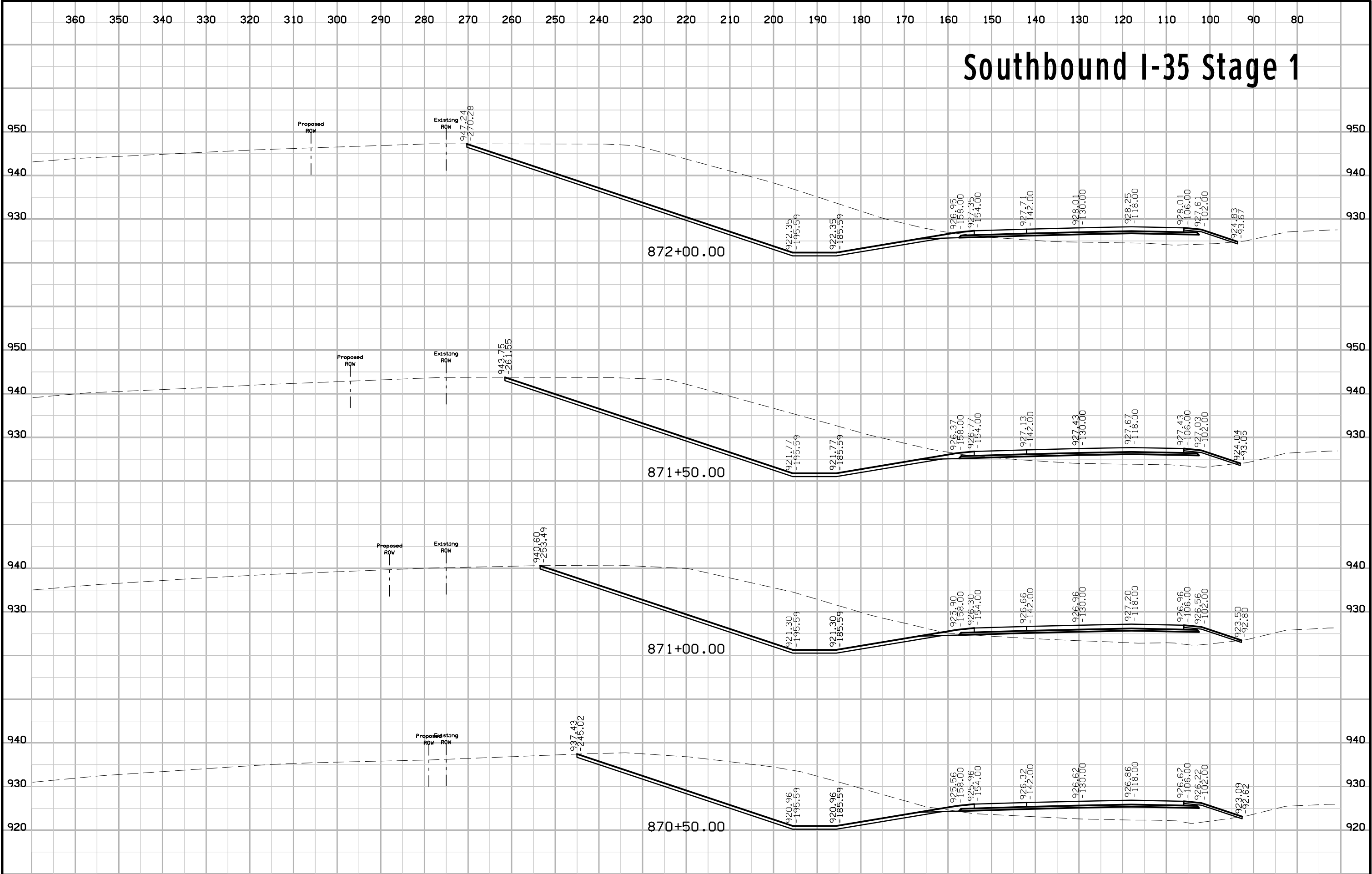
Southbound I-35 Stage 1



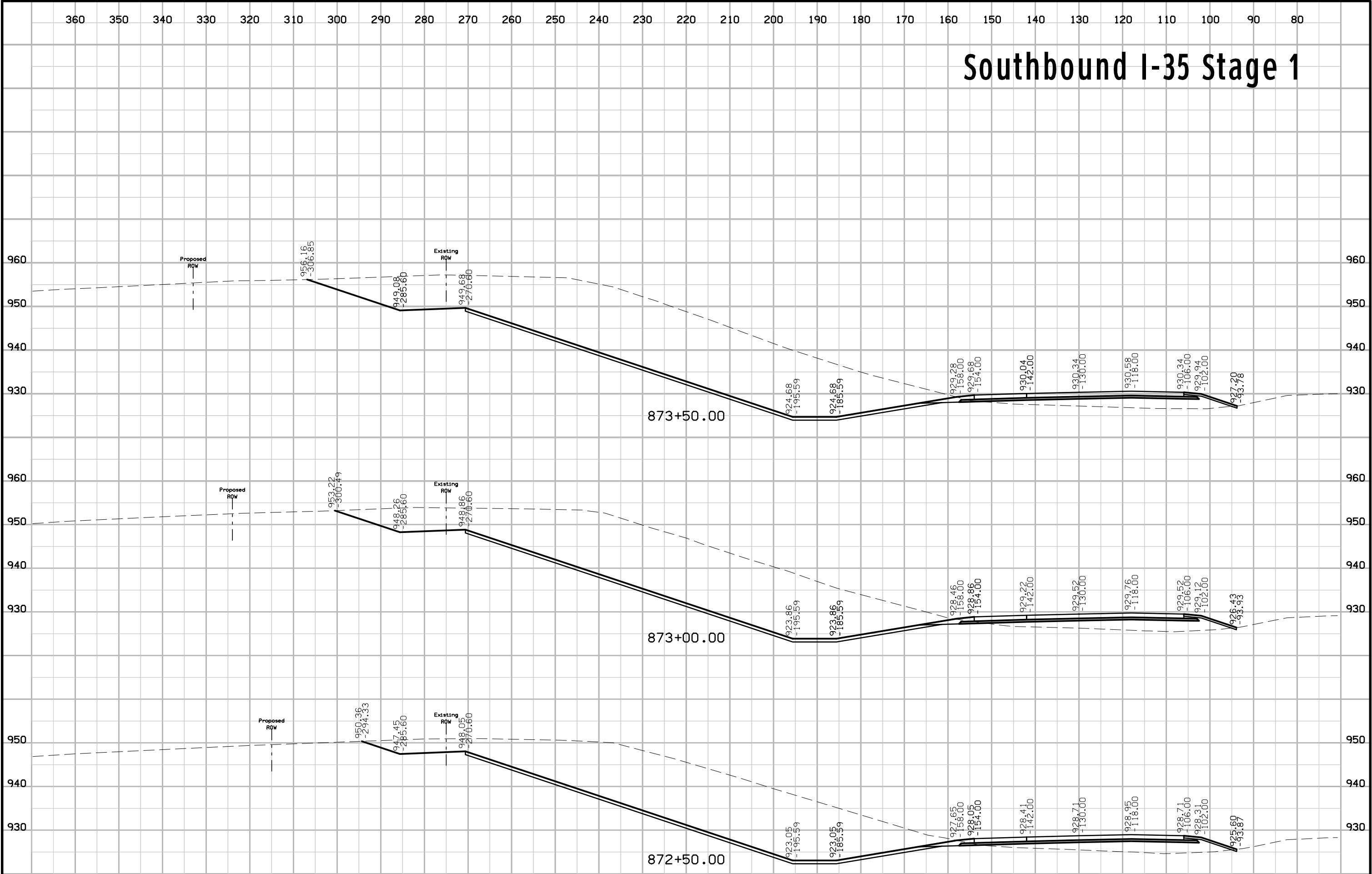
Southbound I-35 Stage 1



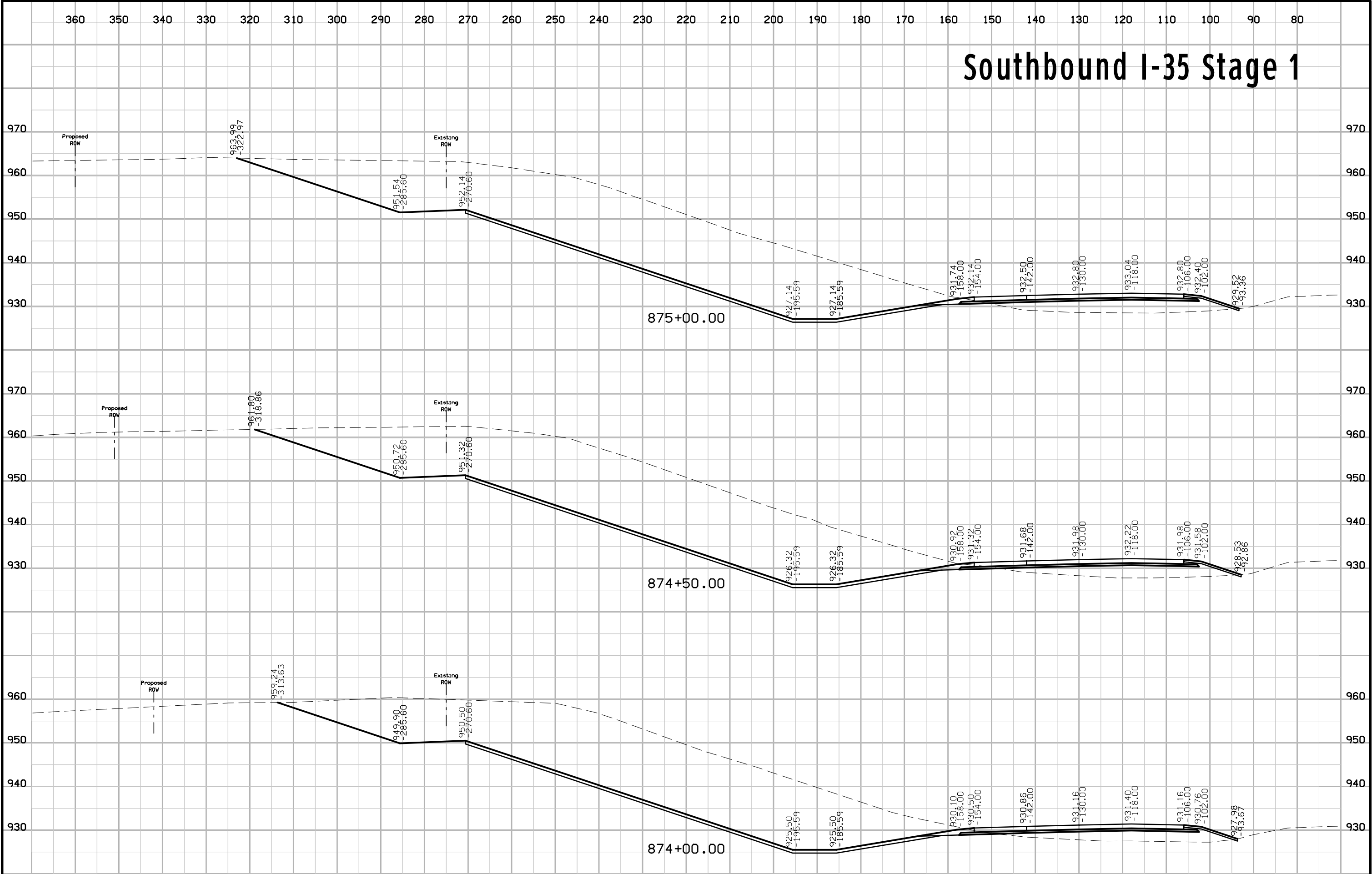
Southbound I-35 Stage 1



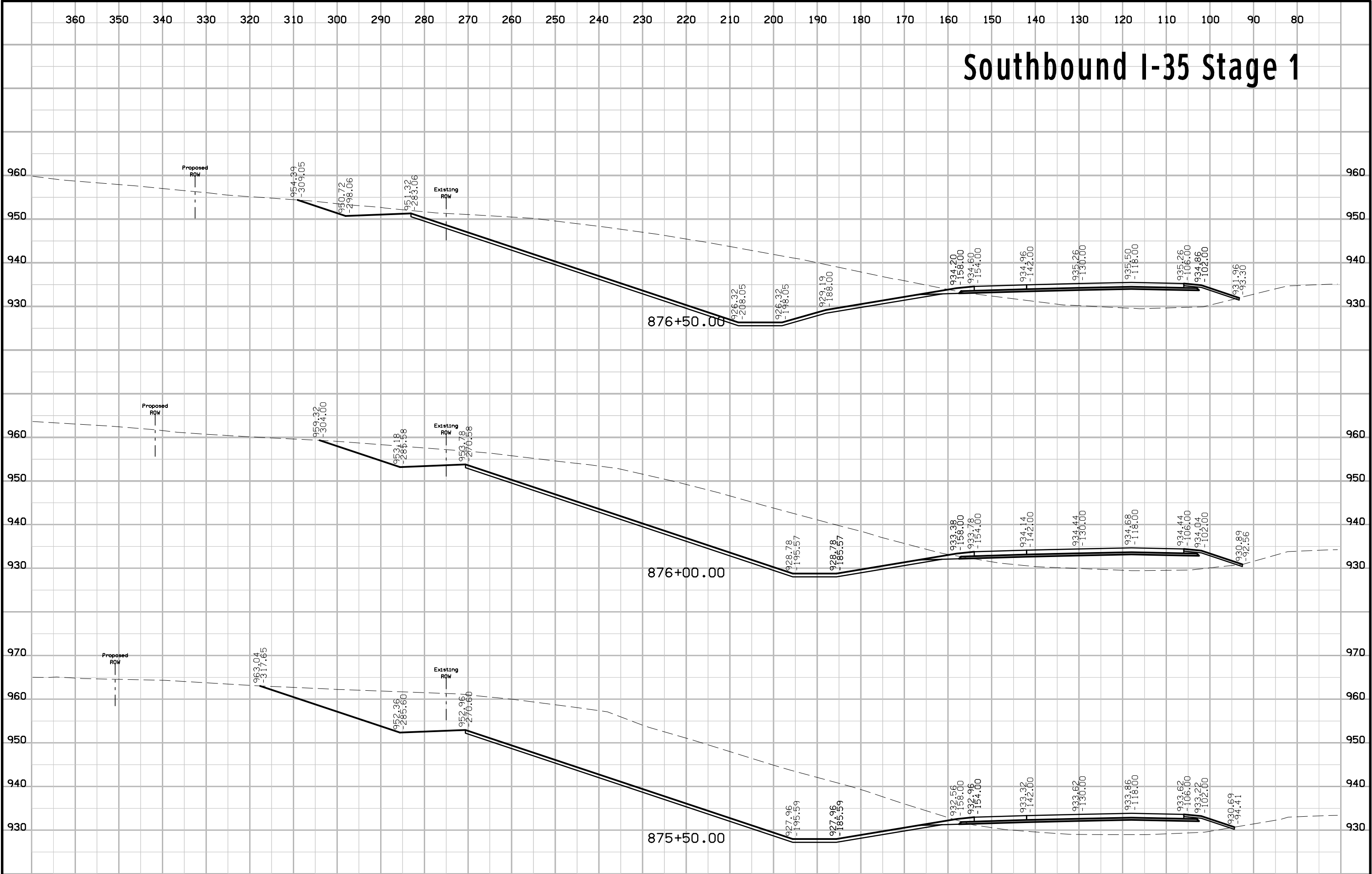
Southbound I-35 Stage 1



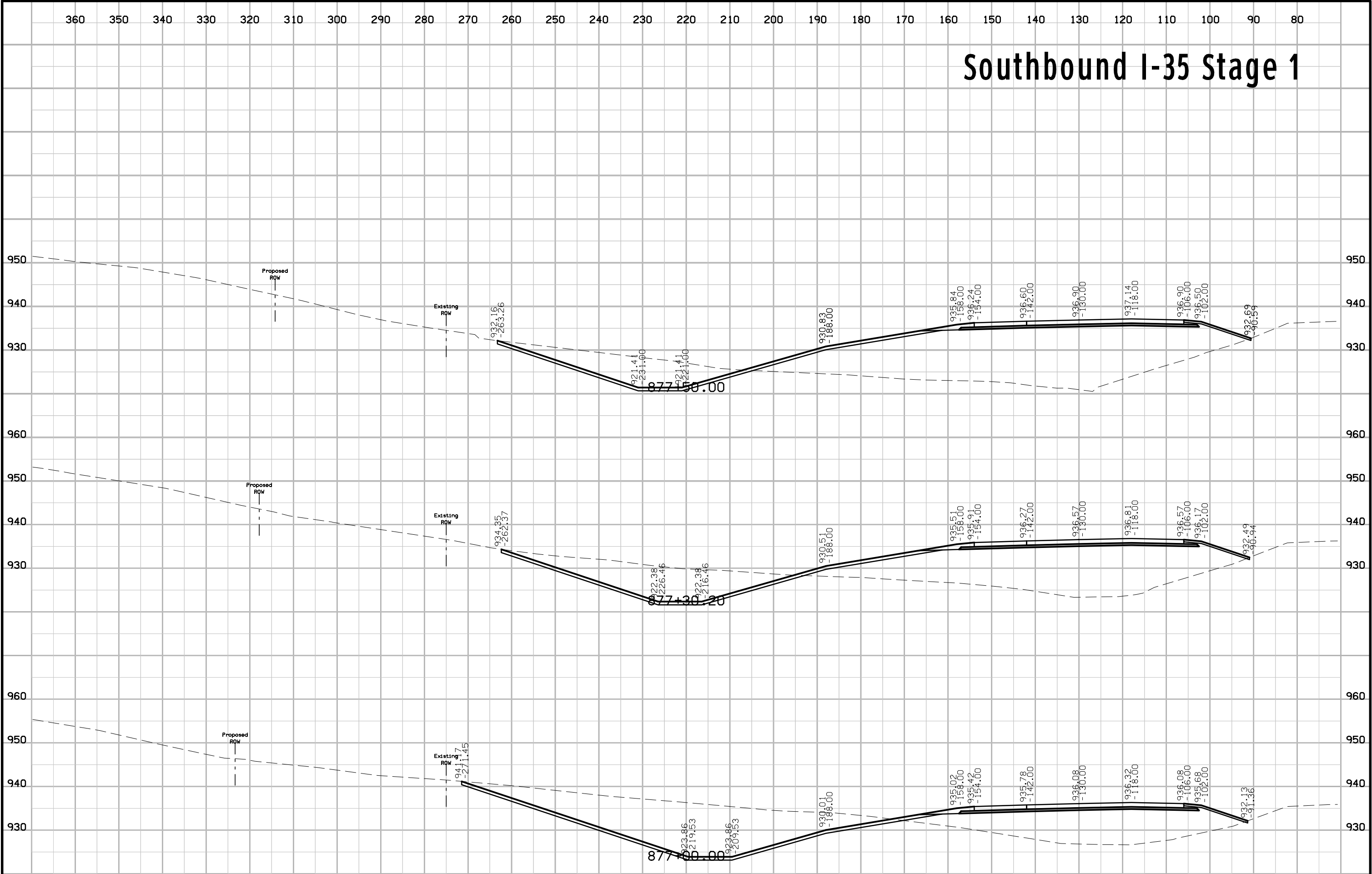
Southbound I-35 Stage 1

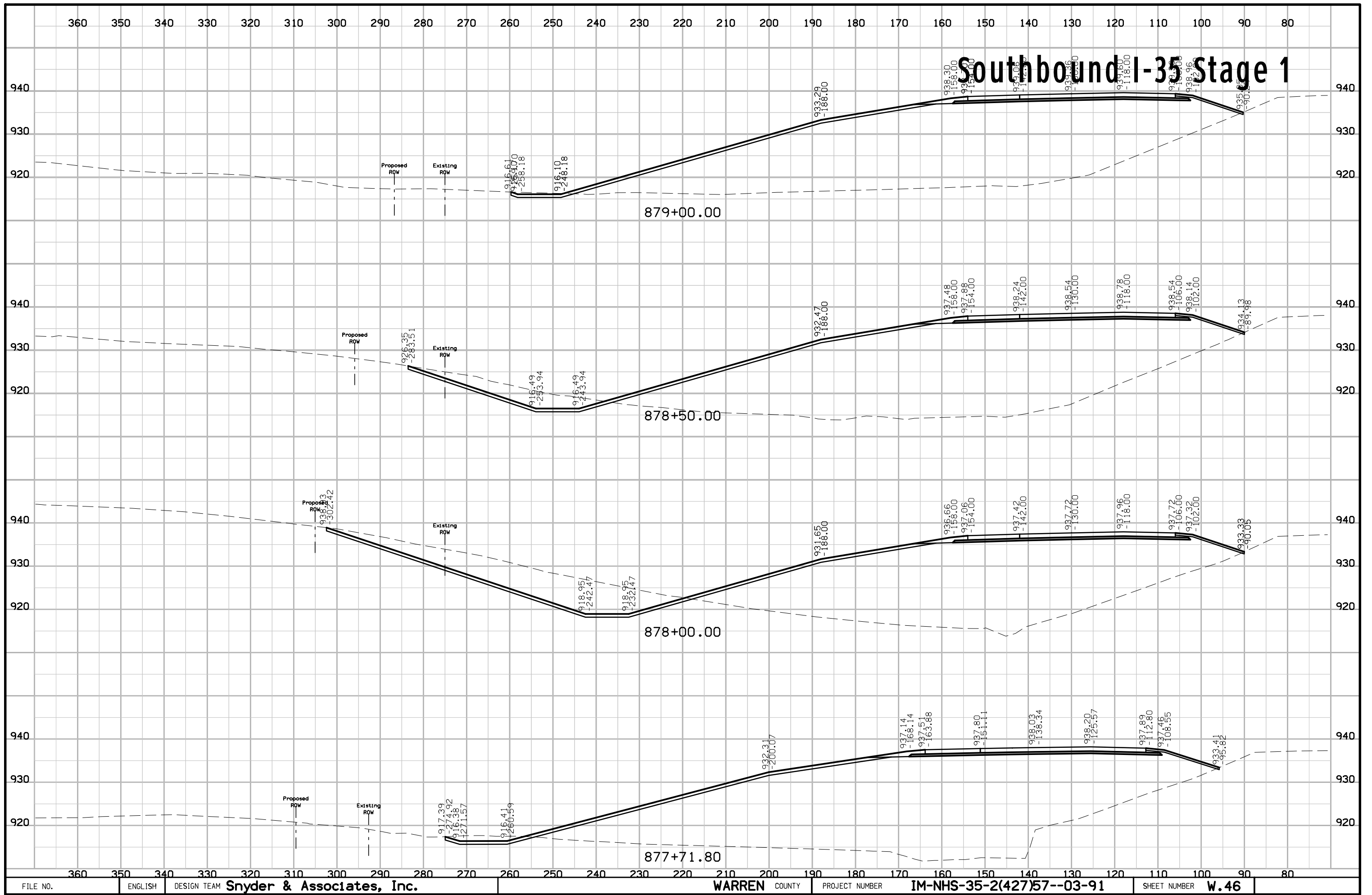


Southbound I-35 Stage 1

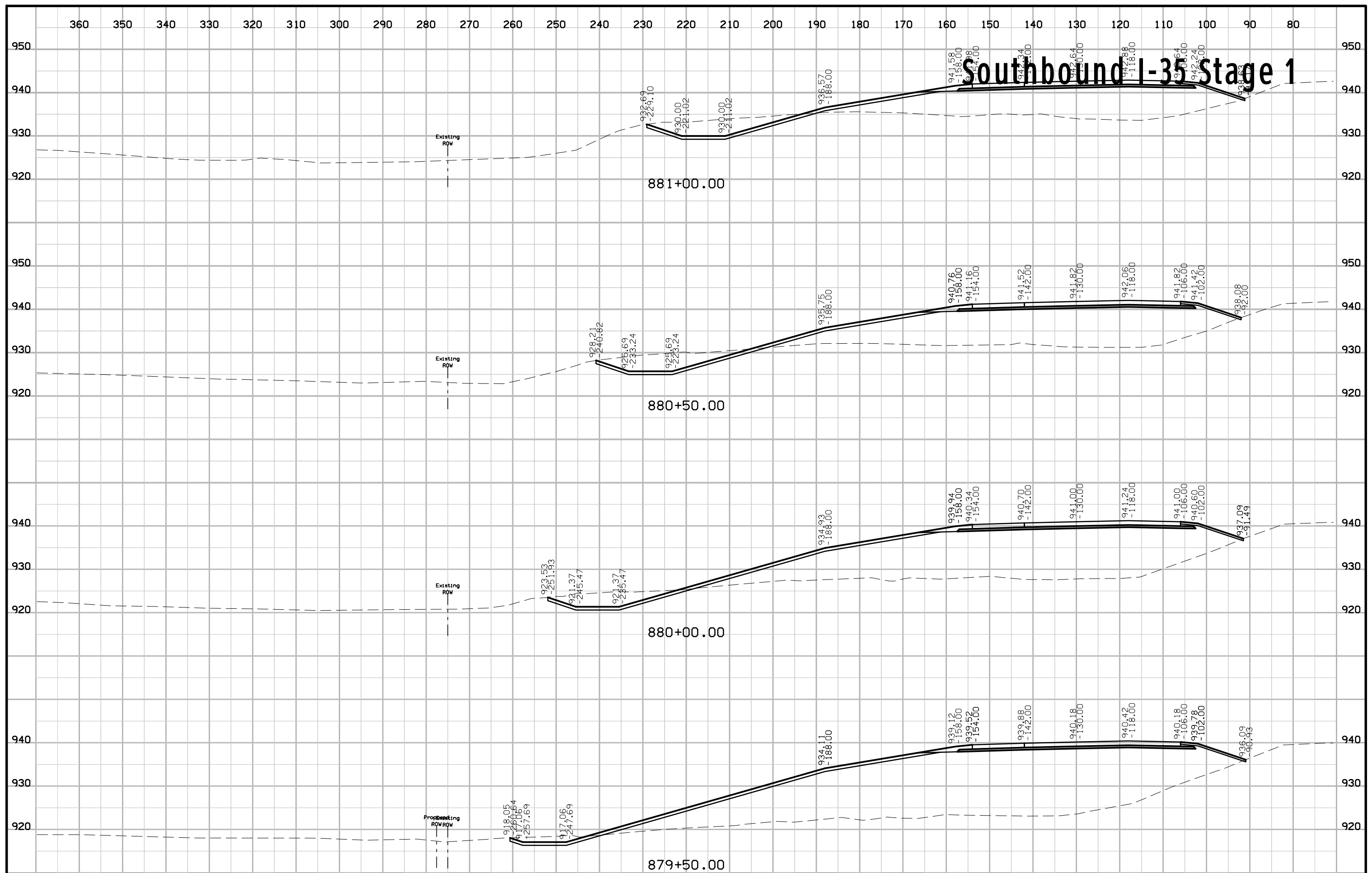


Southbound I-35 Stage 1

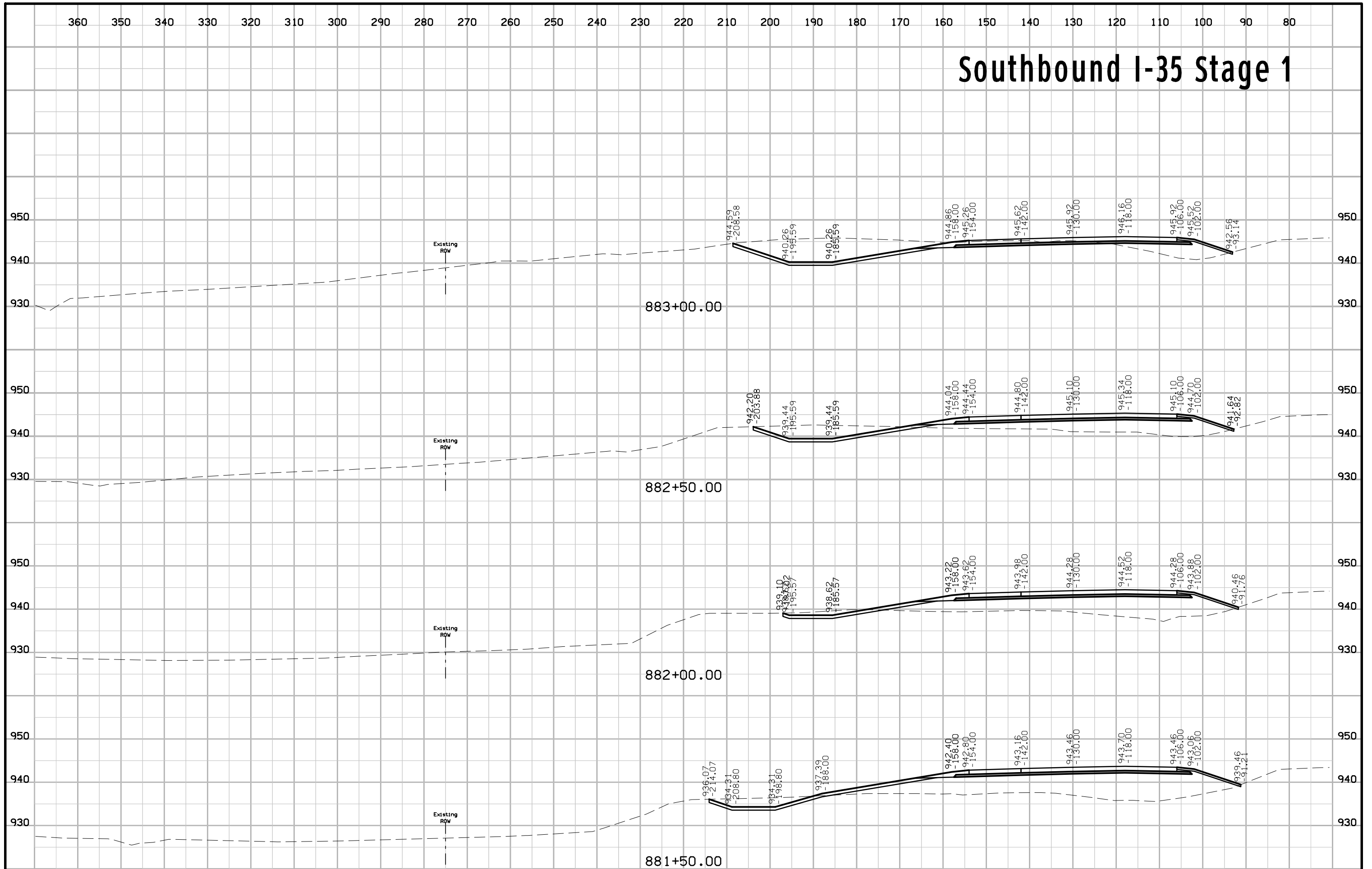




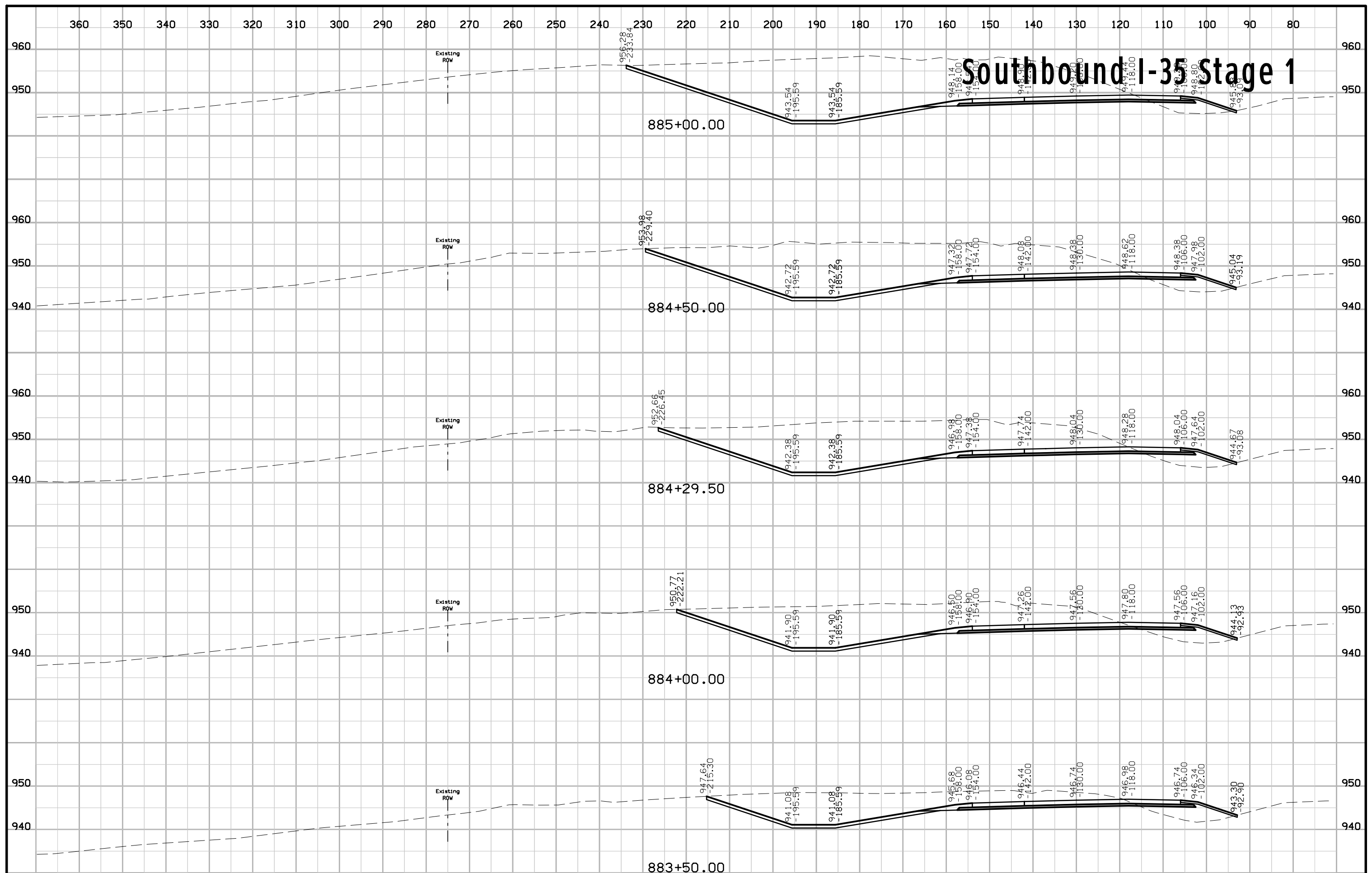
Southbound I-35 Stage 1



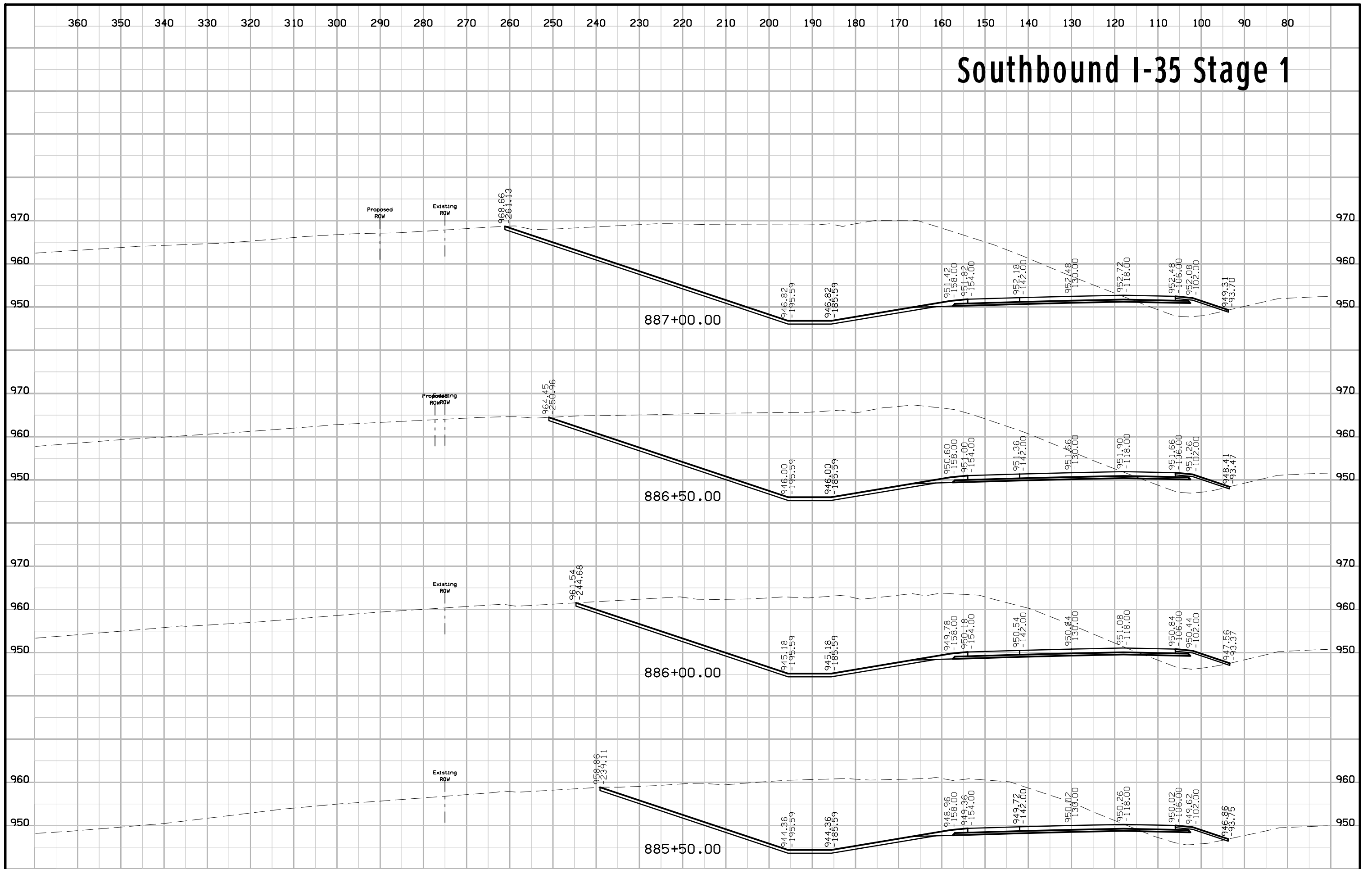
Southbound I-35 Stage 1



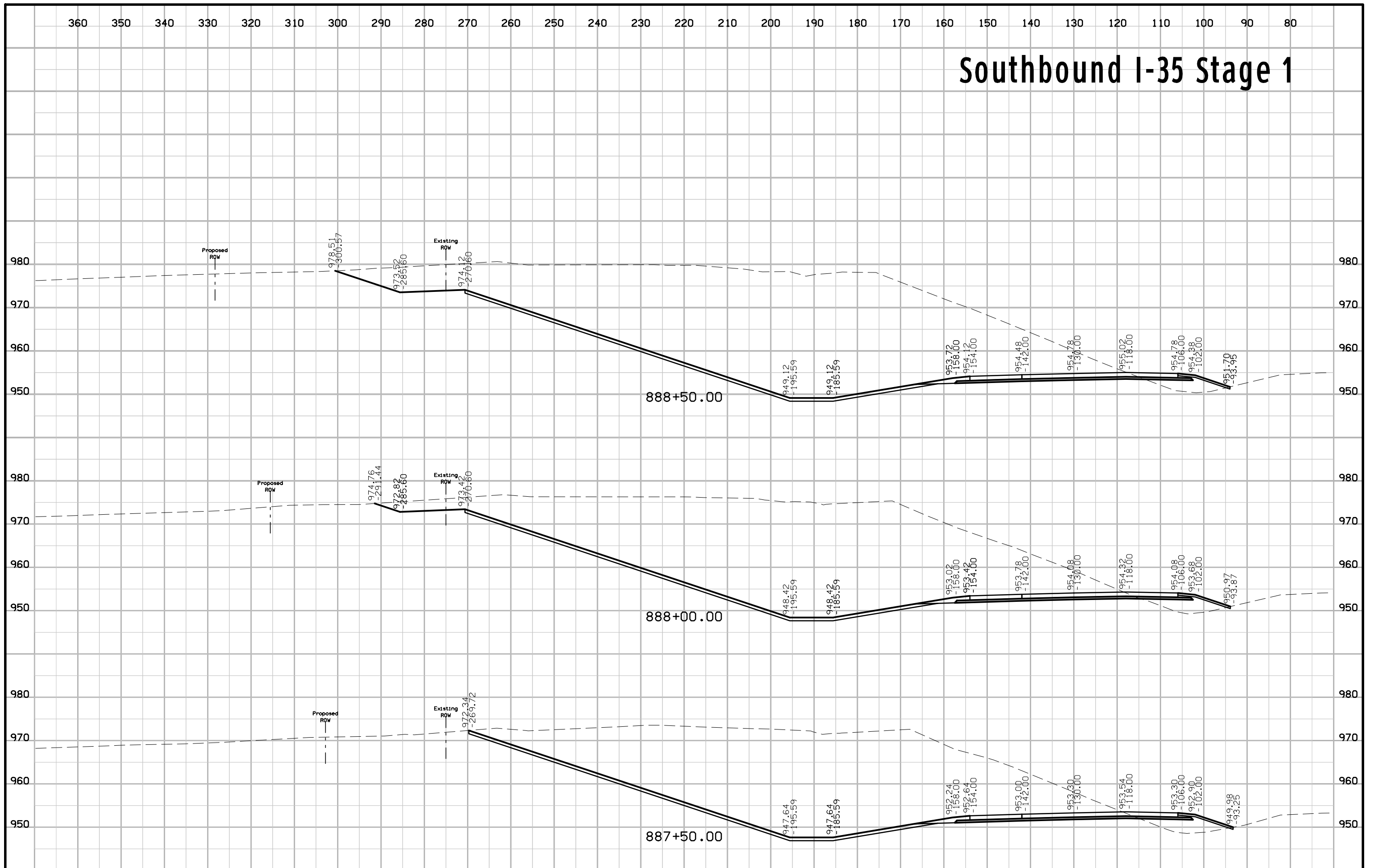
Southbound I-35 Stage 1



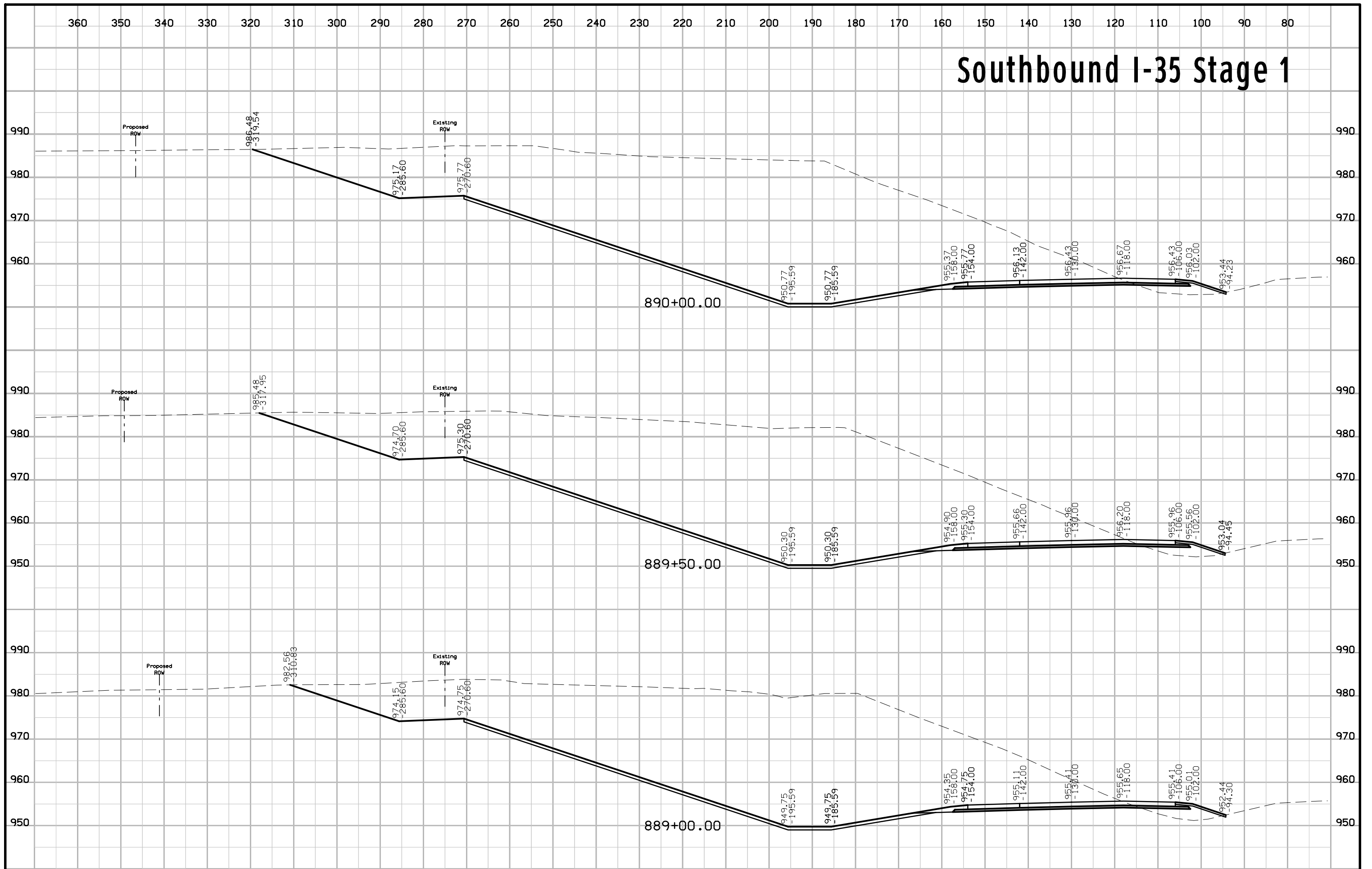
Southbound I-35 Stage 1



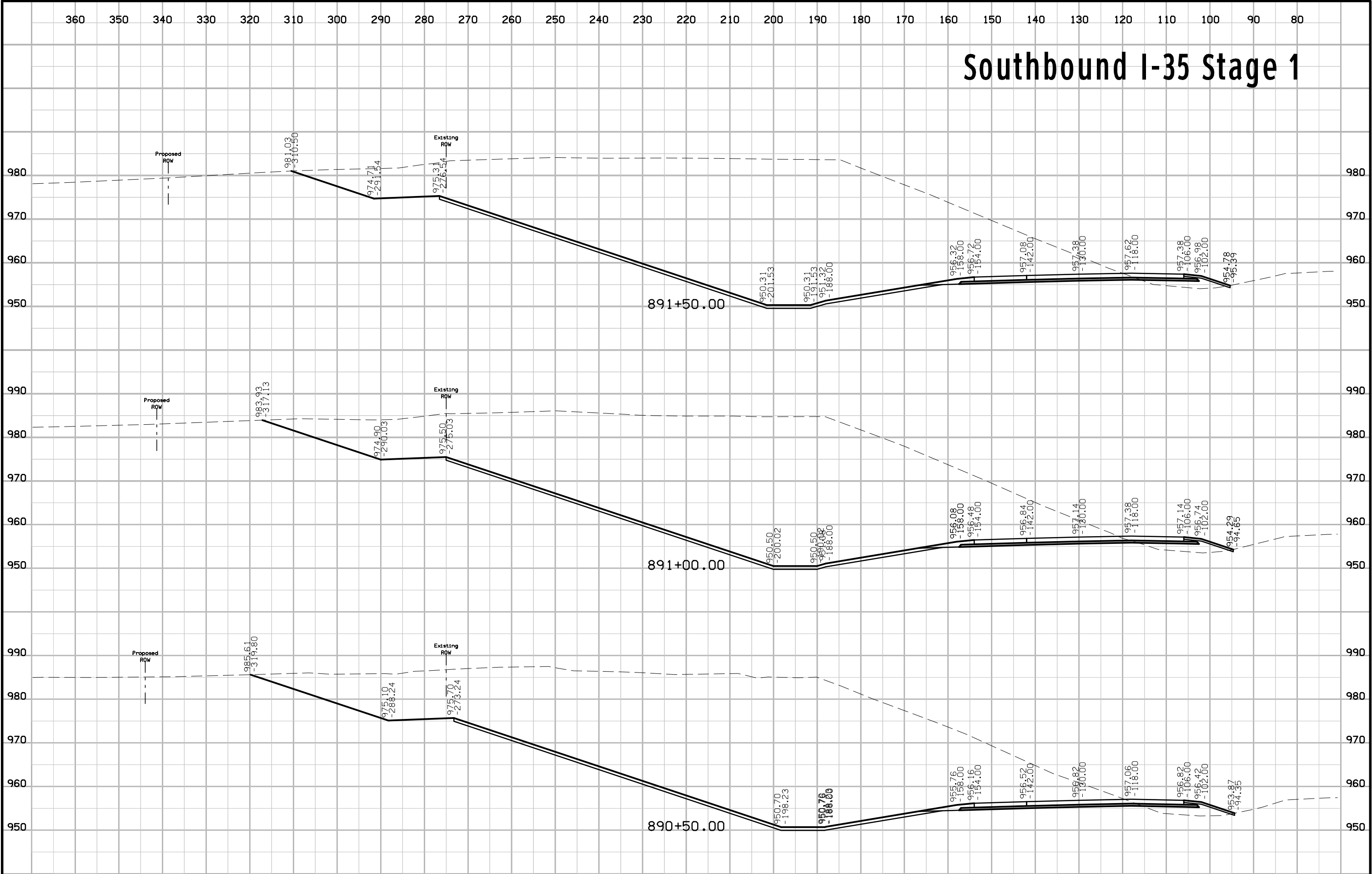
Southbound I-35 Stage 1



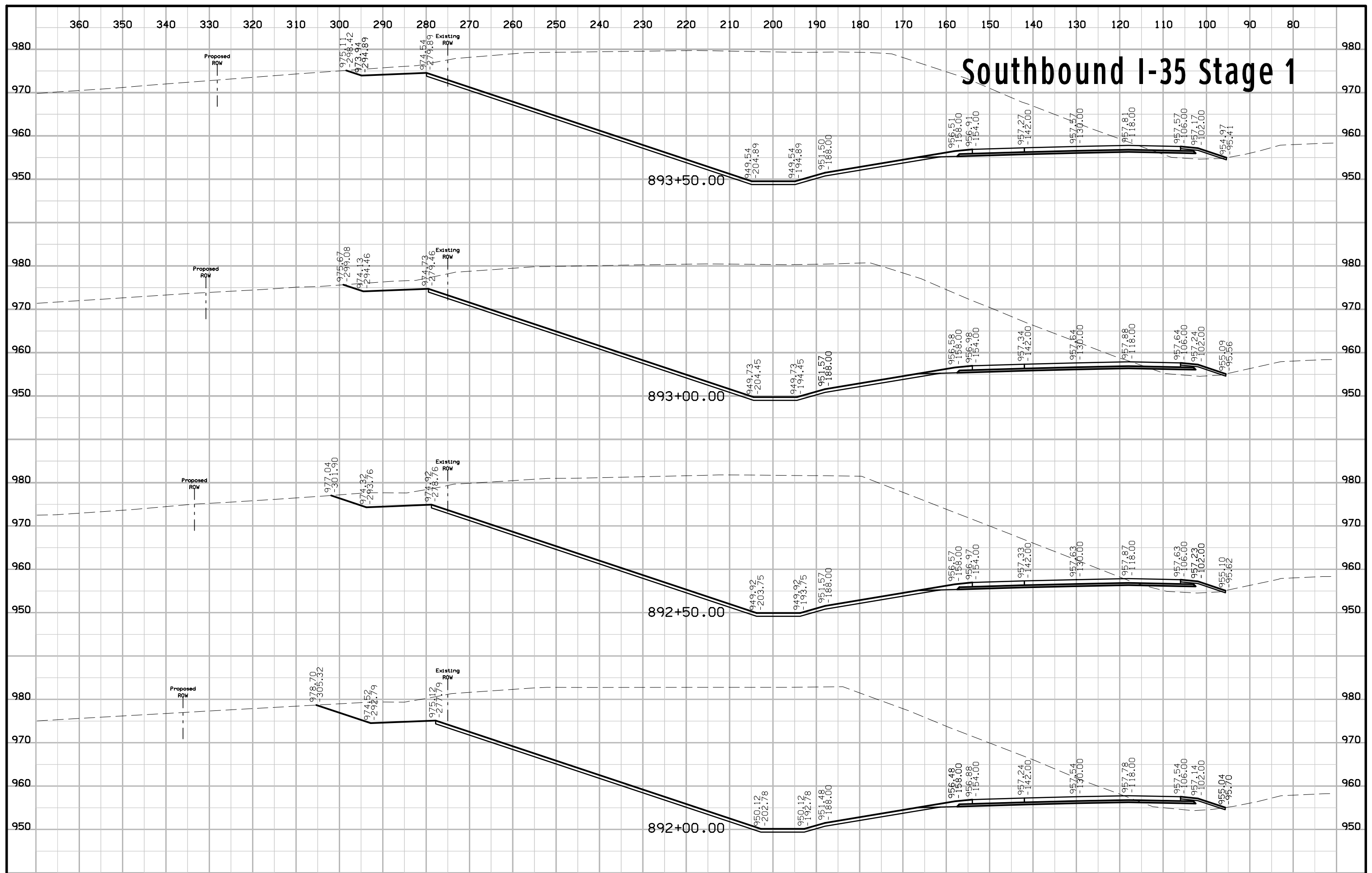
Southbound I-35 Stage 1



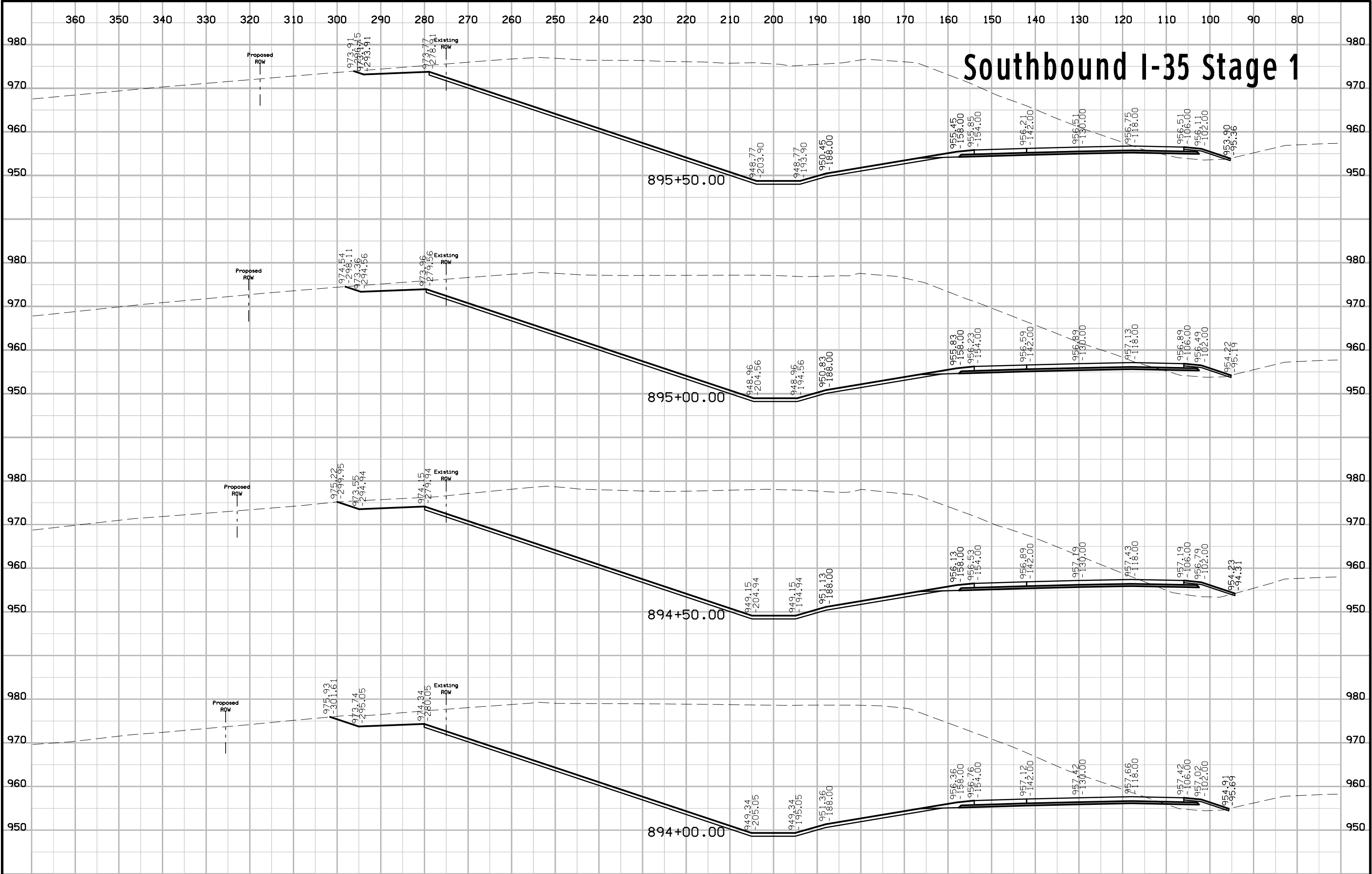
Southbound I-35 Stage 1



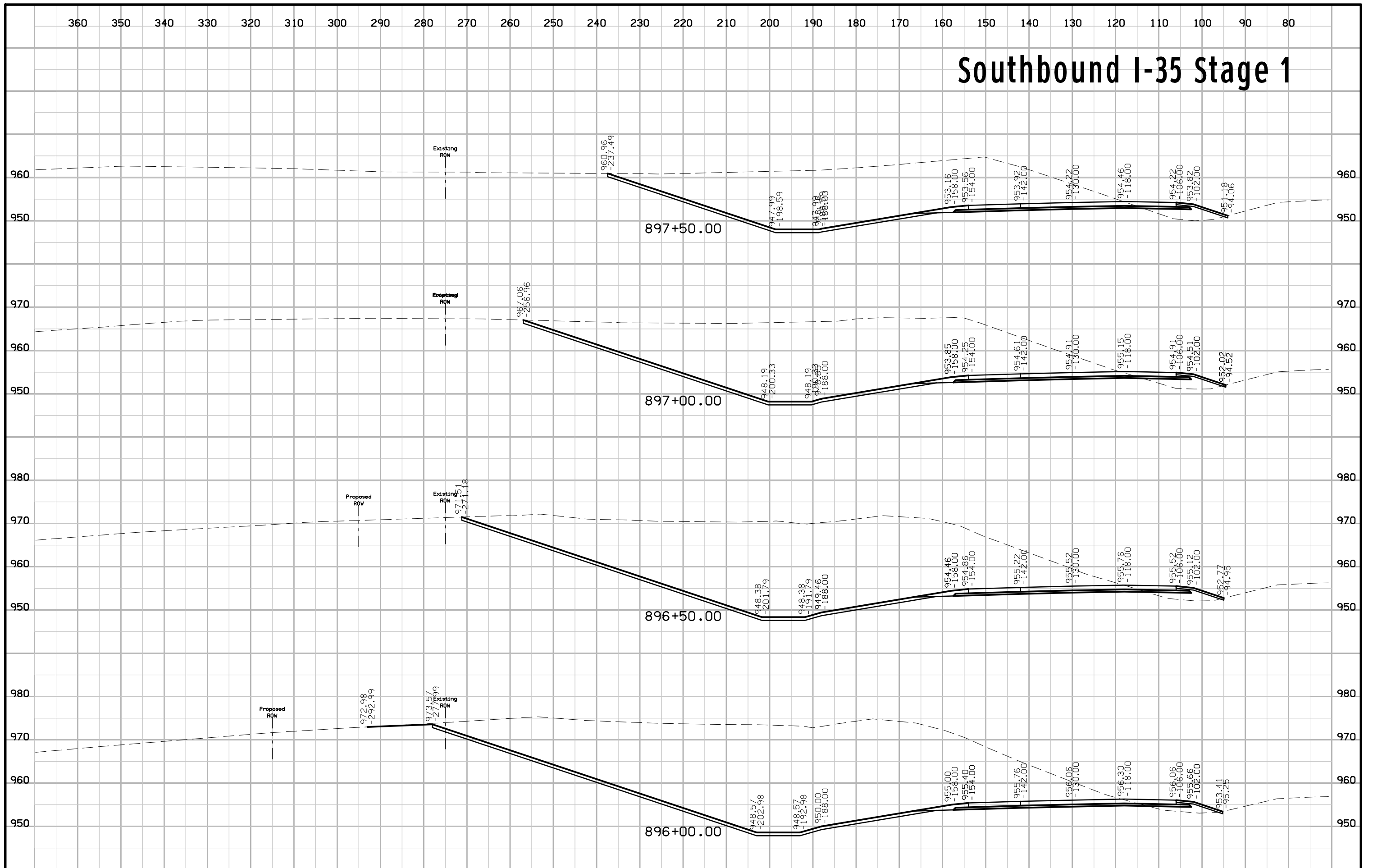
Southbound I-35 Stage 1



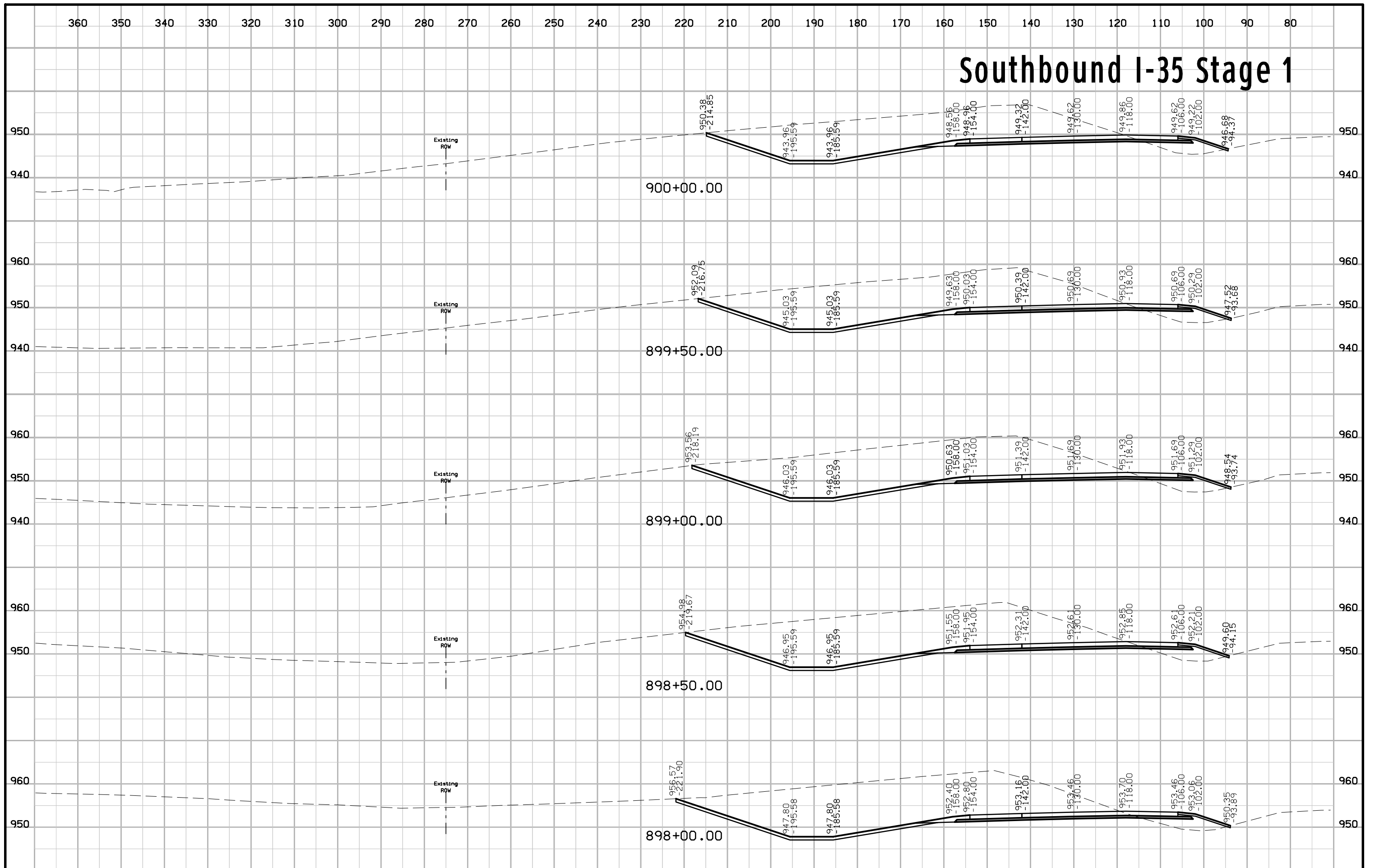
Southbound I-35 Stage 1



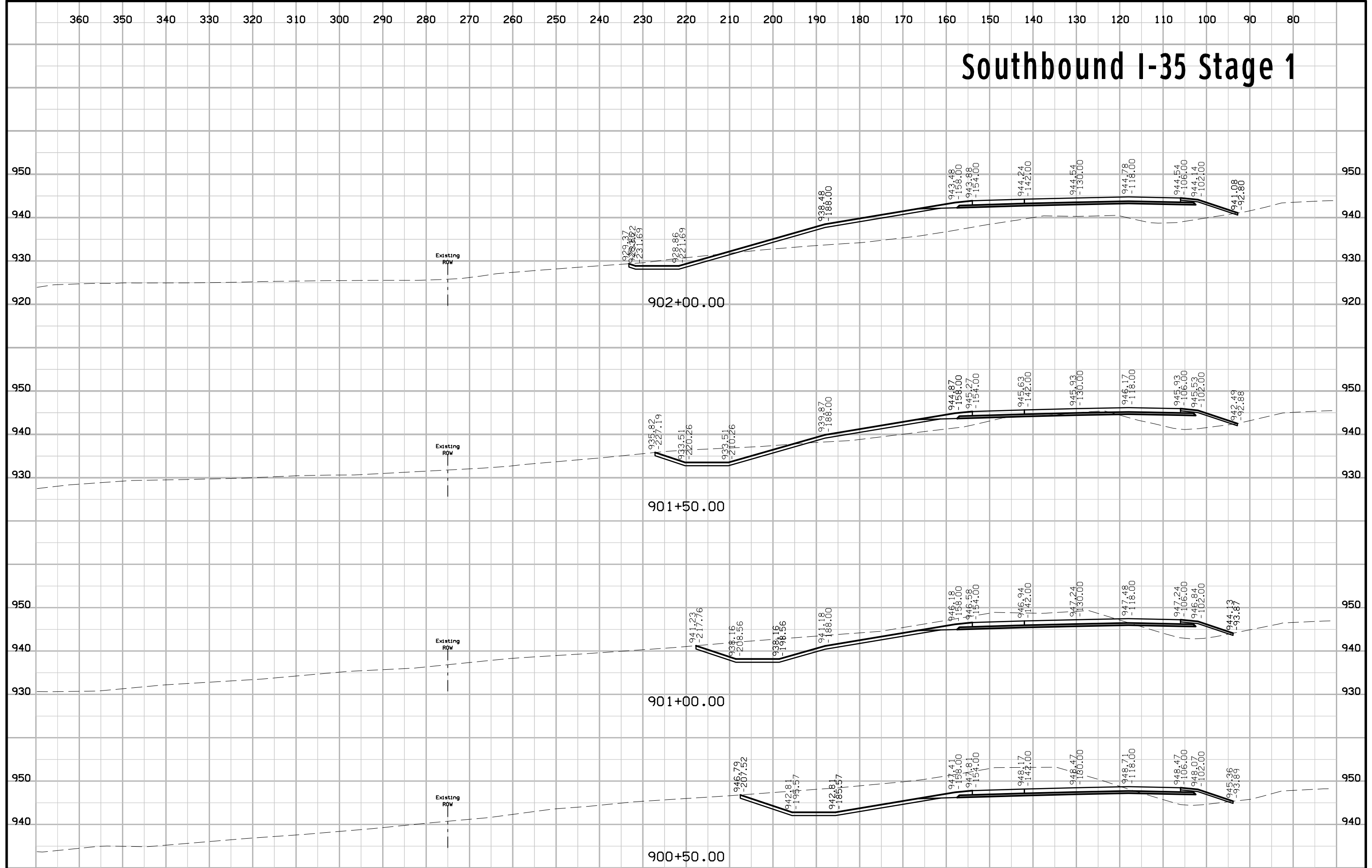
Southbound I-35 Stage 1



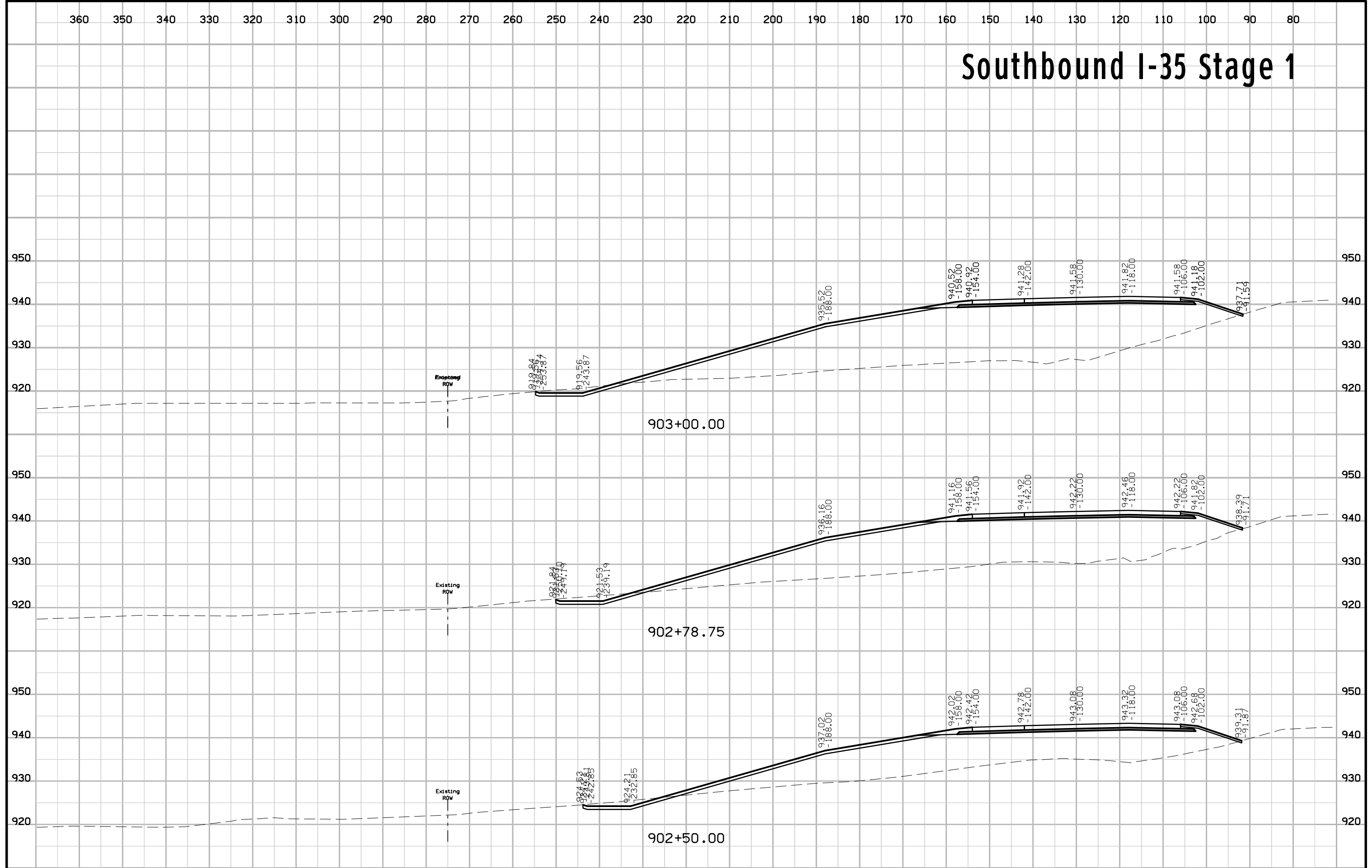
Southbound I-35 Stage 1



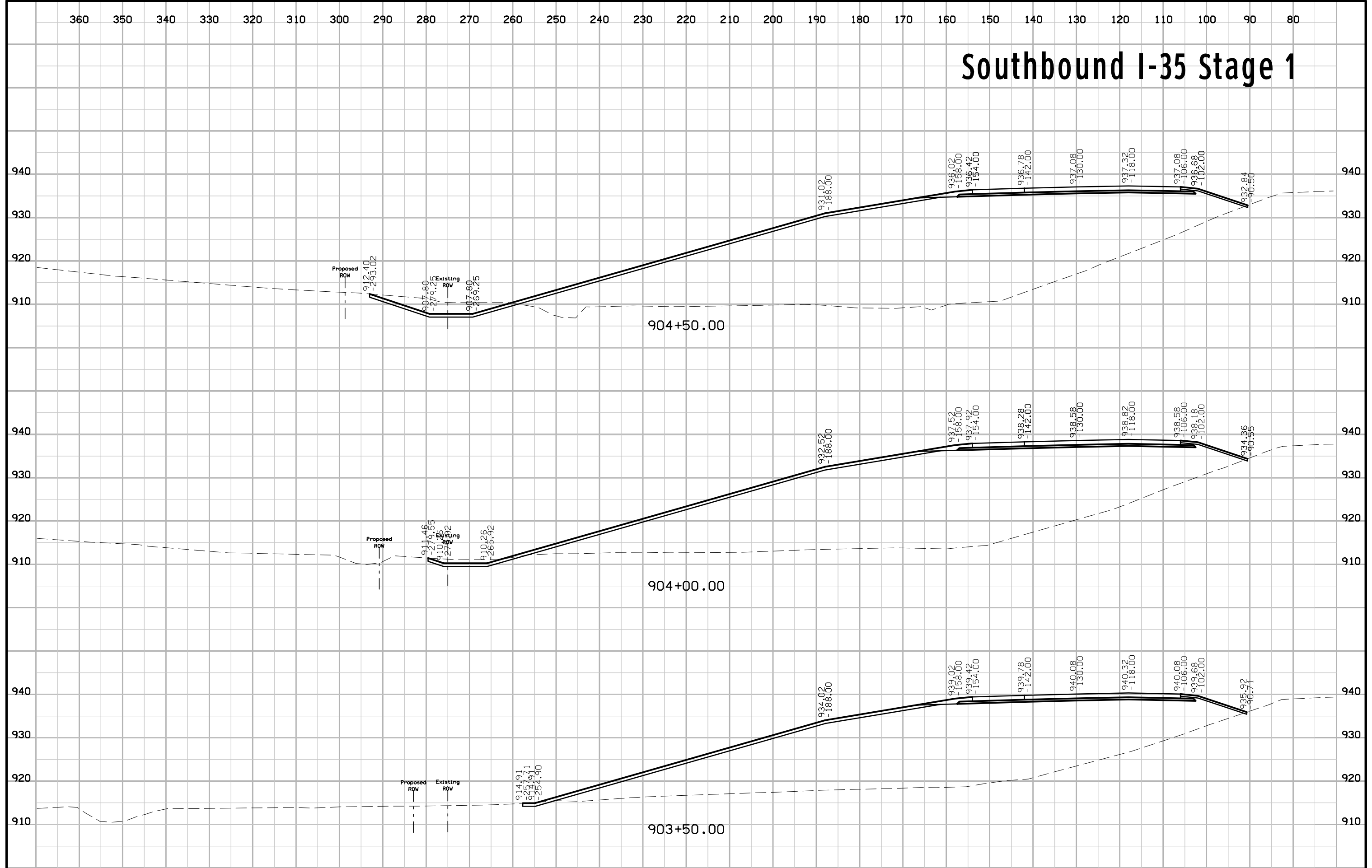
Southbound I-35 Stage 1



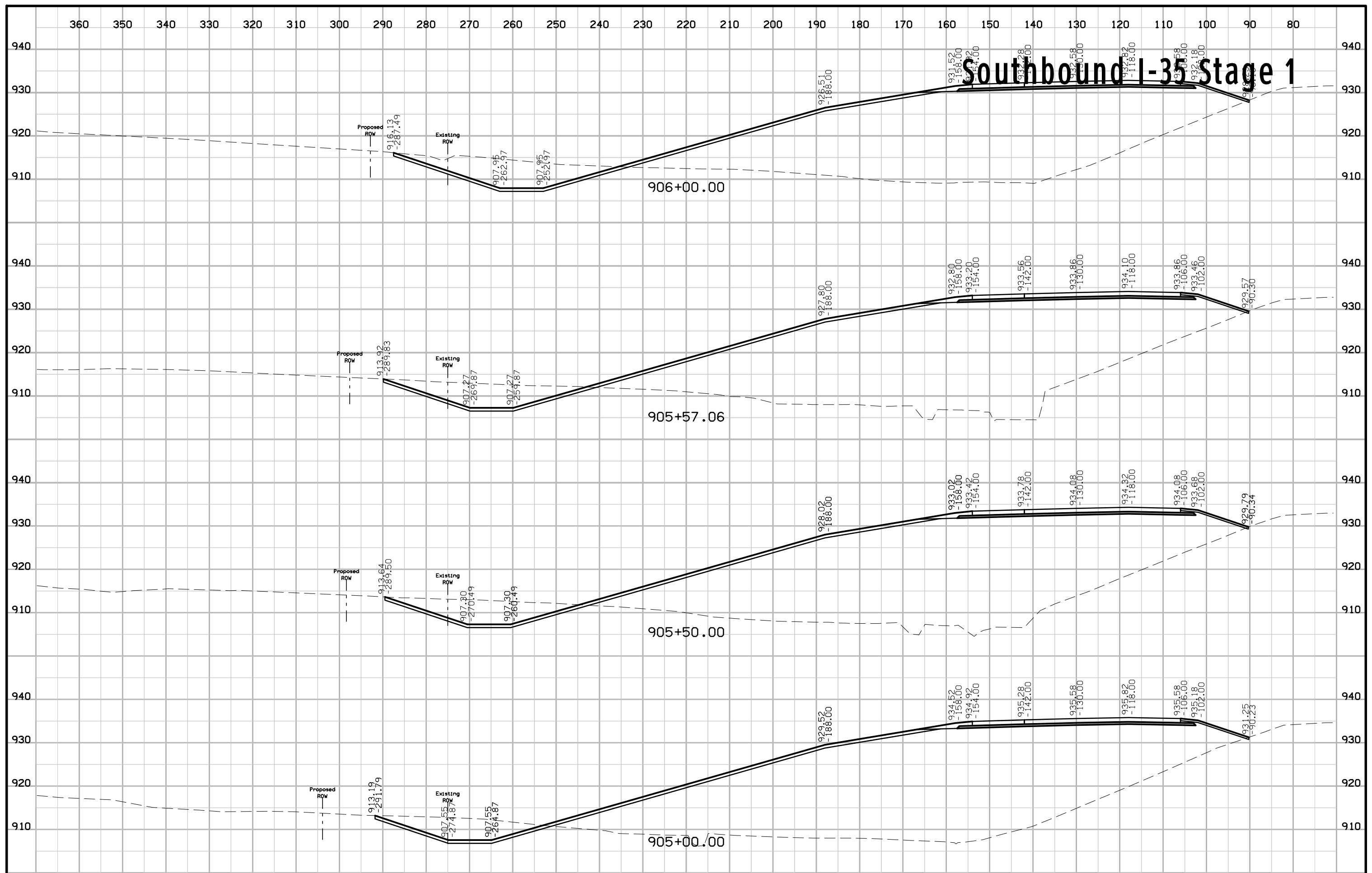
Southbound I-35 Stage 1



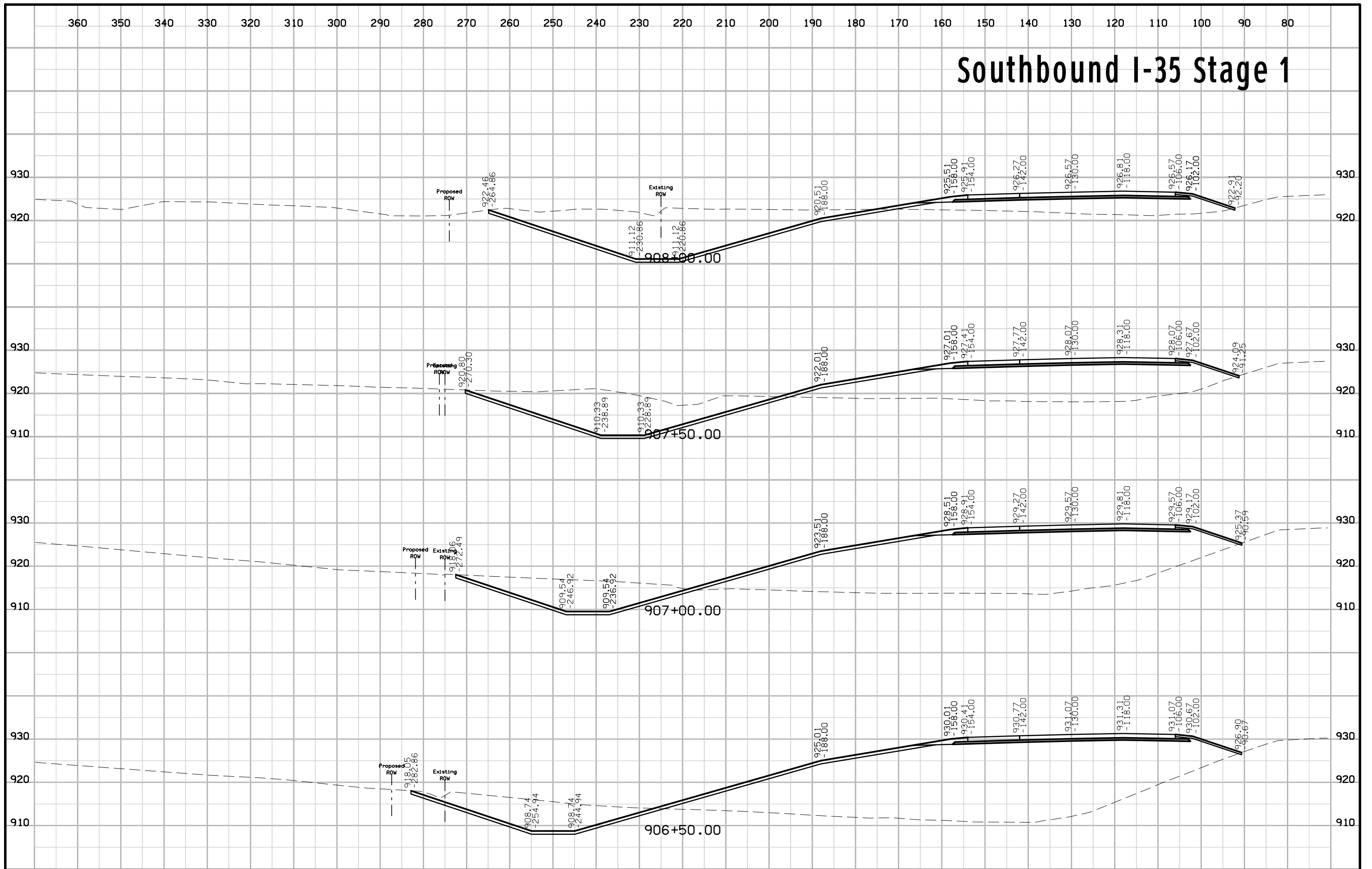
Southbound I-35 Stage 1



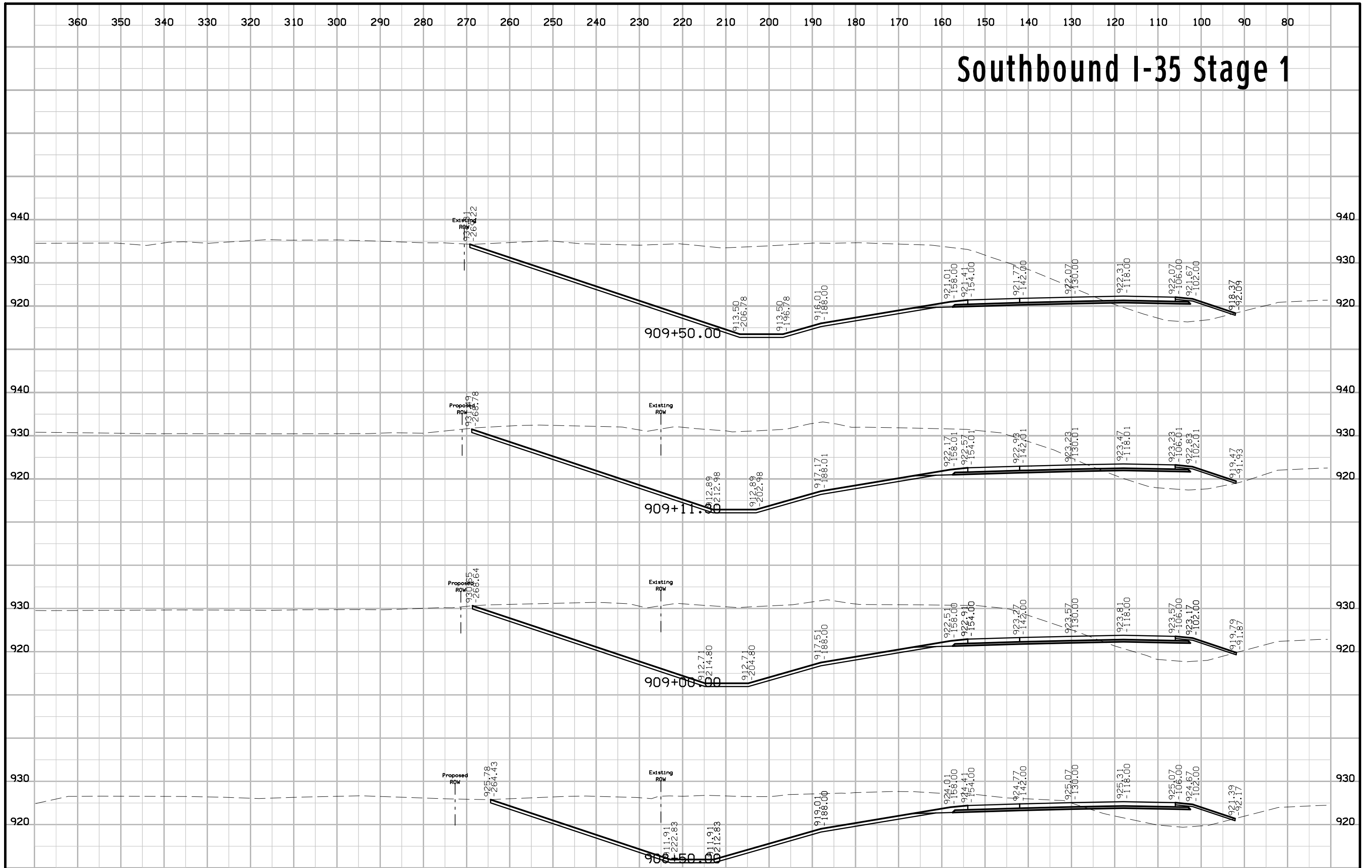
Southbound I-35 Stage 1



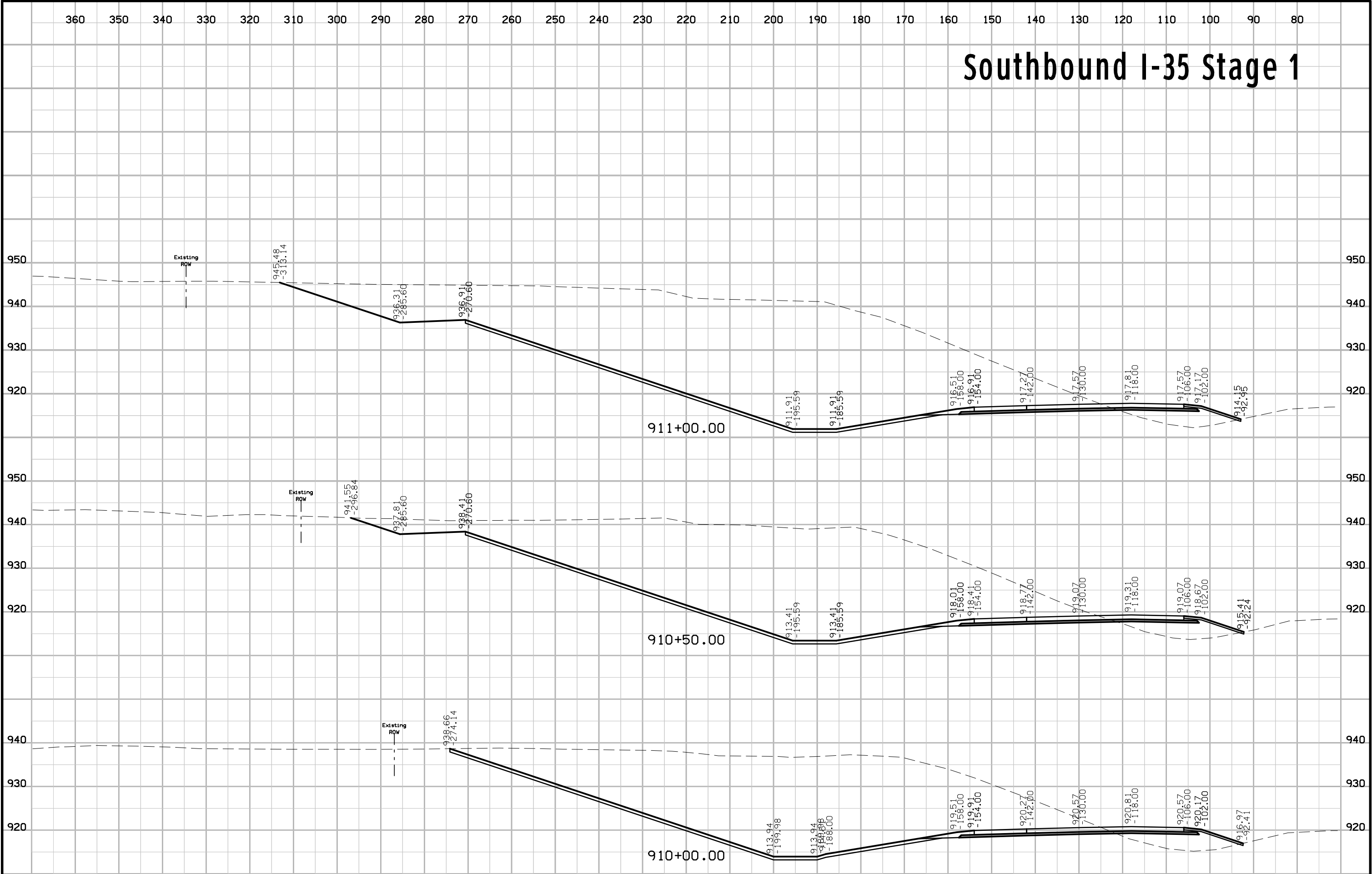
Southbound I-35 Stage 1



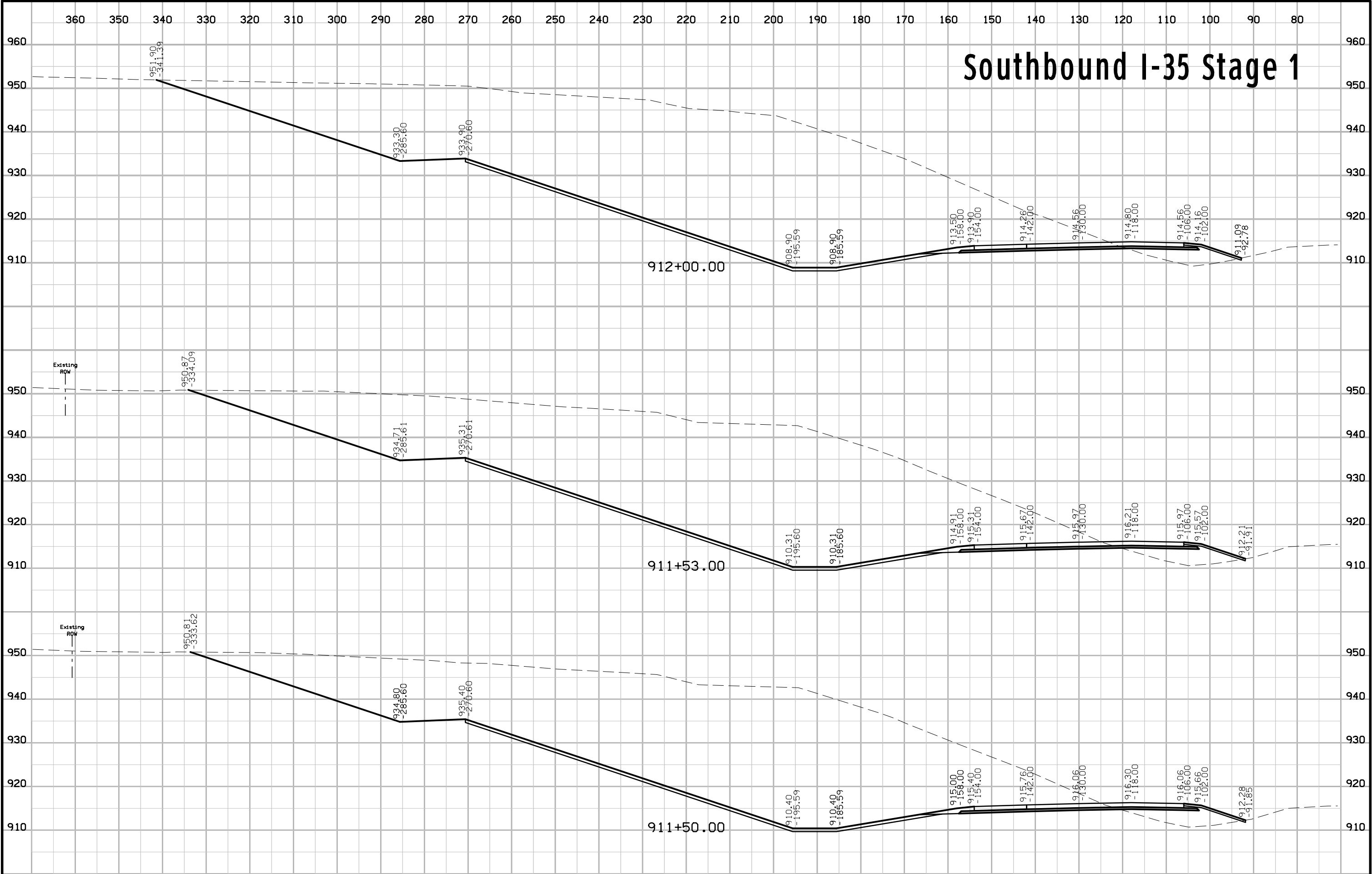
Southbound I-35 Stage 1



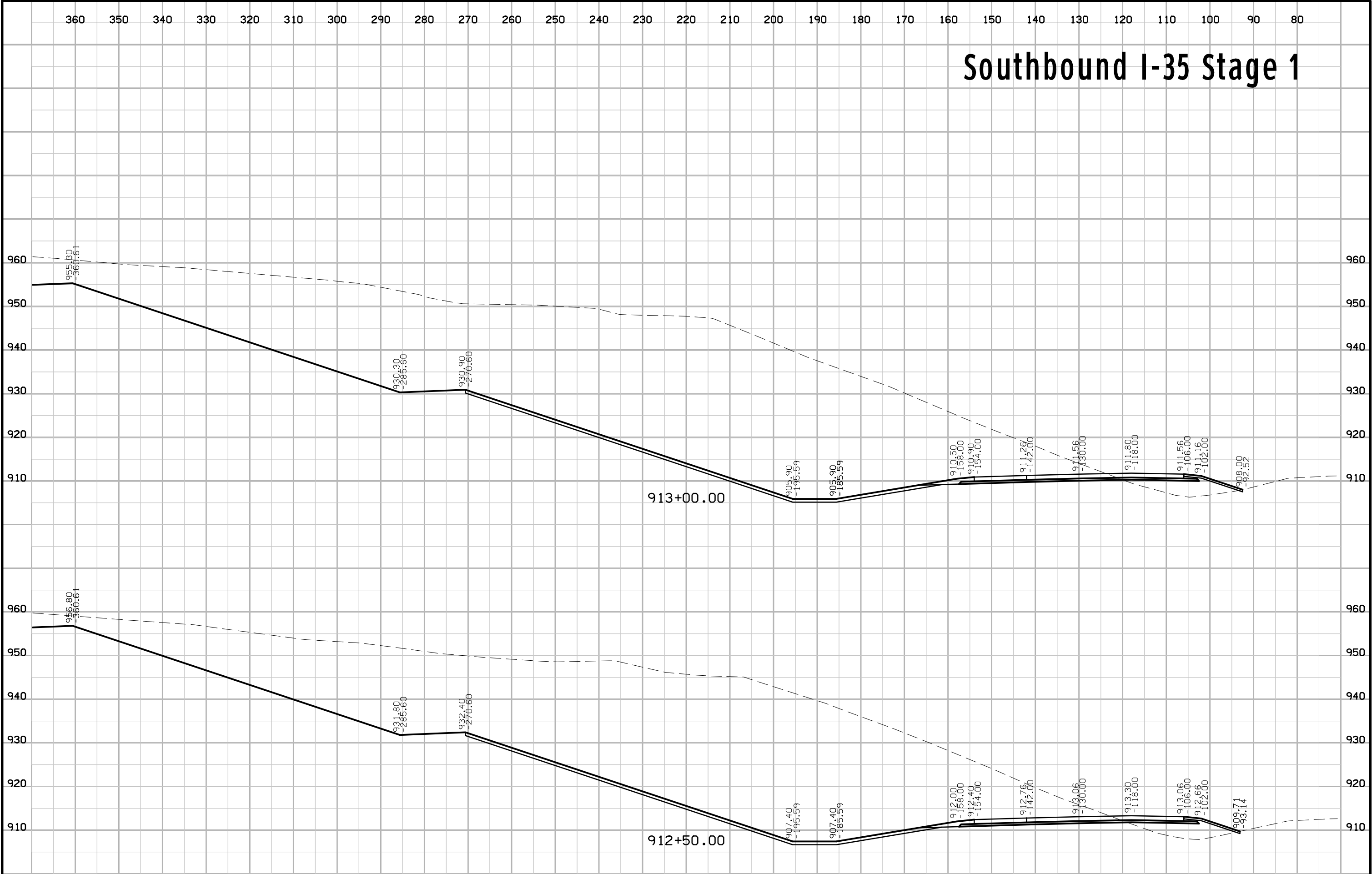
Southbound I-35 Stage 1



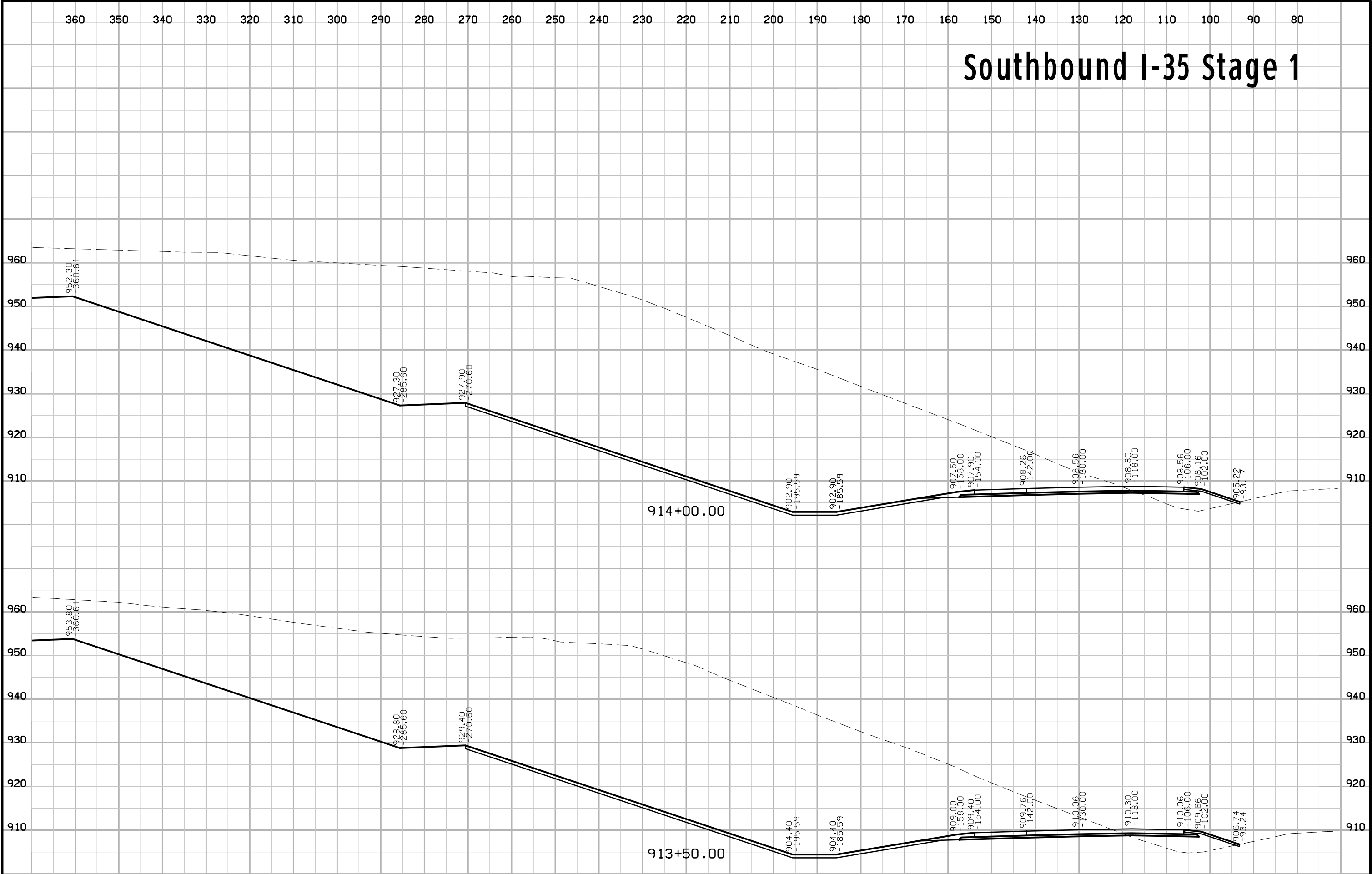
Southbound I-35 Stage 1



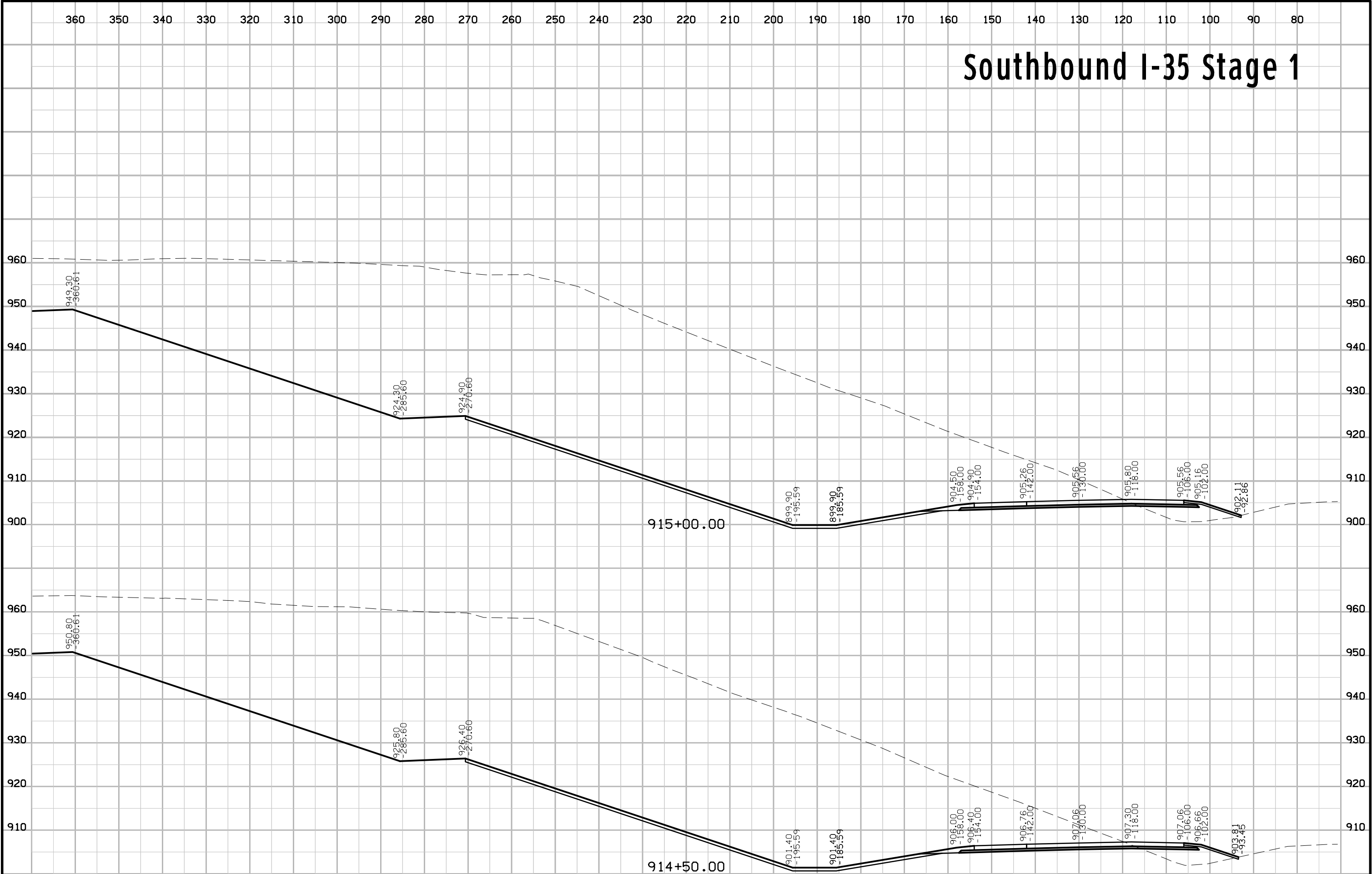
Southbound I-35 Stage 1



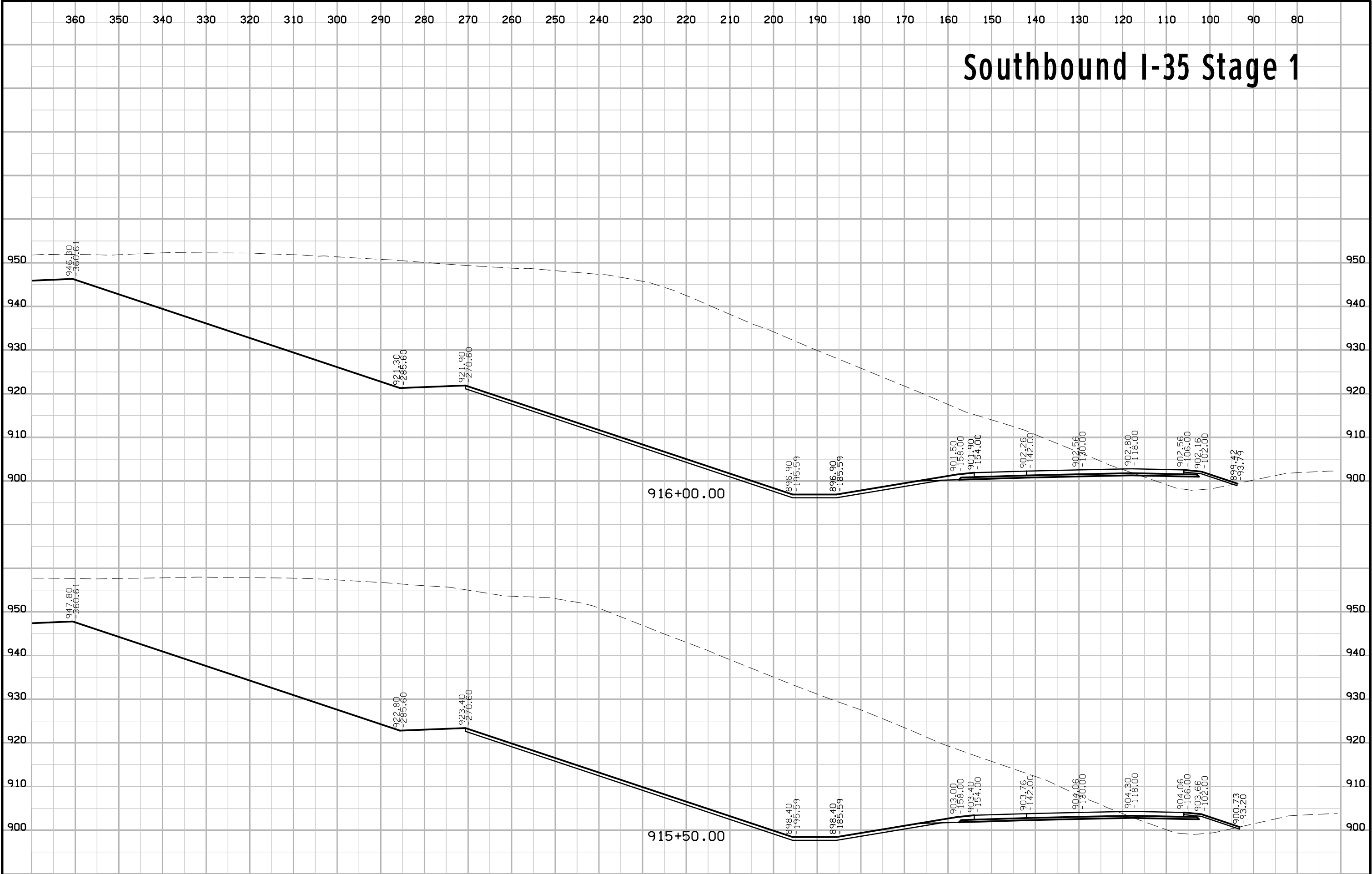
Southbound I-35 Stage 1



Southbound I-35 Stage 1



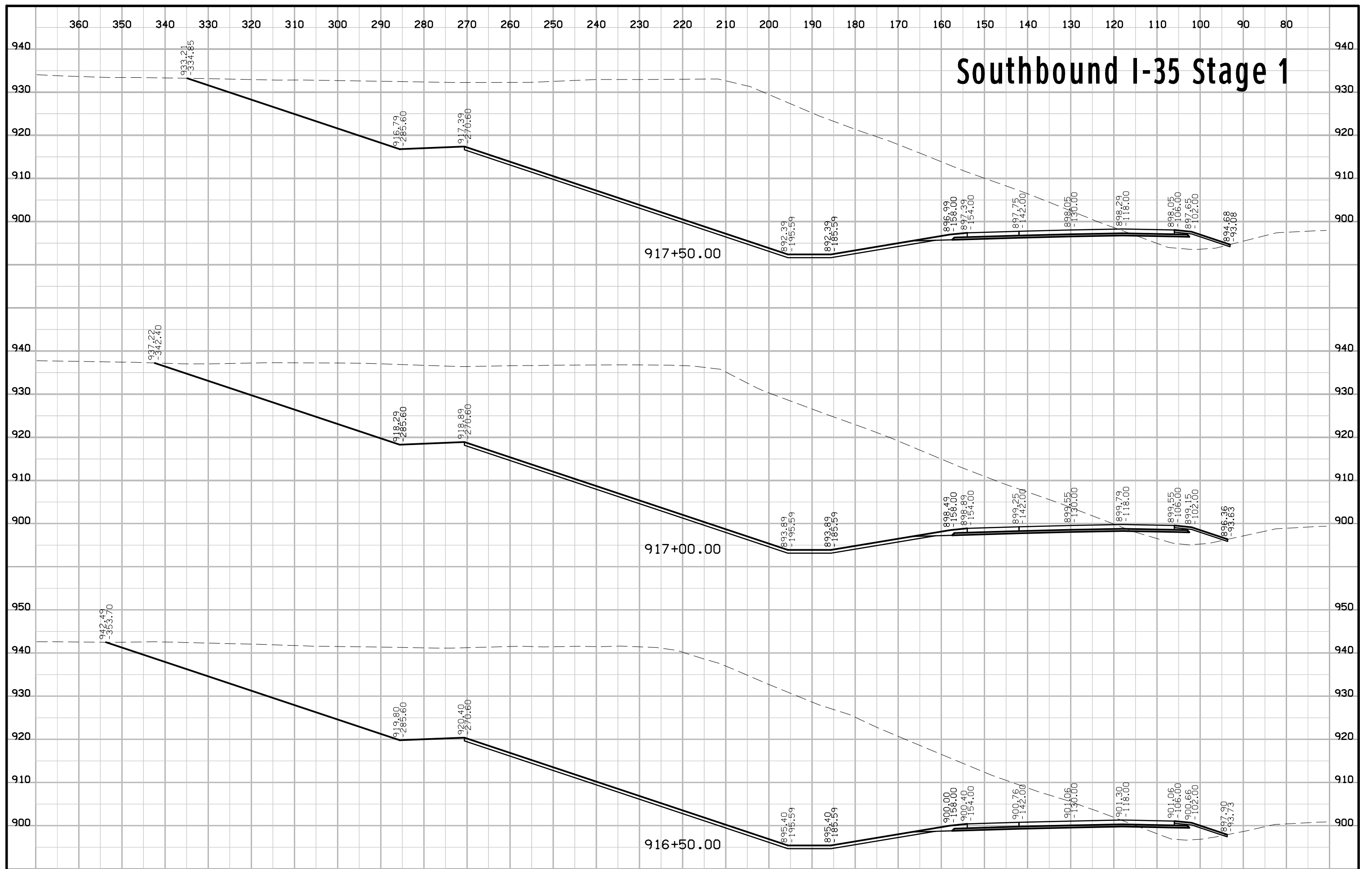
Southbound I-35 Stage 1



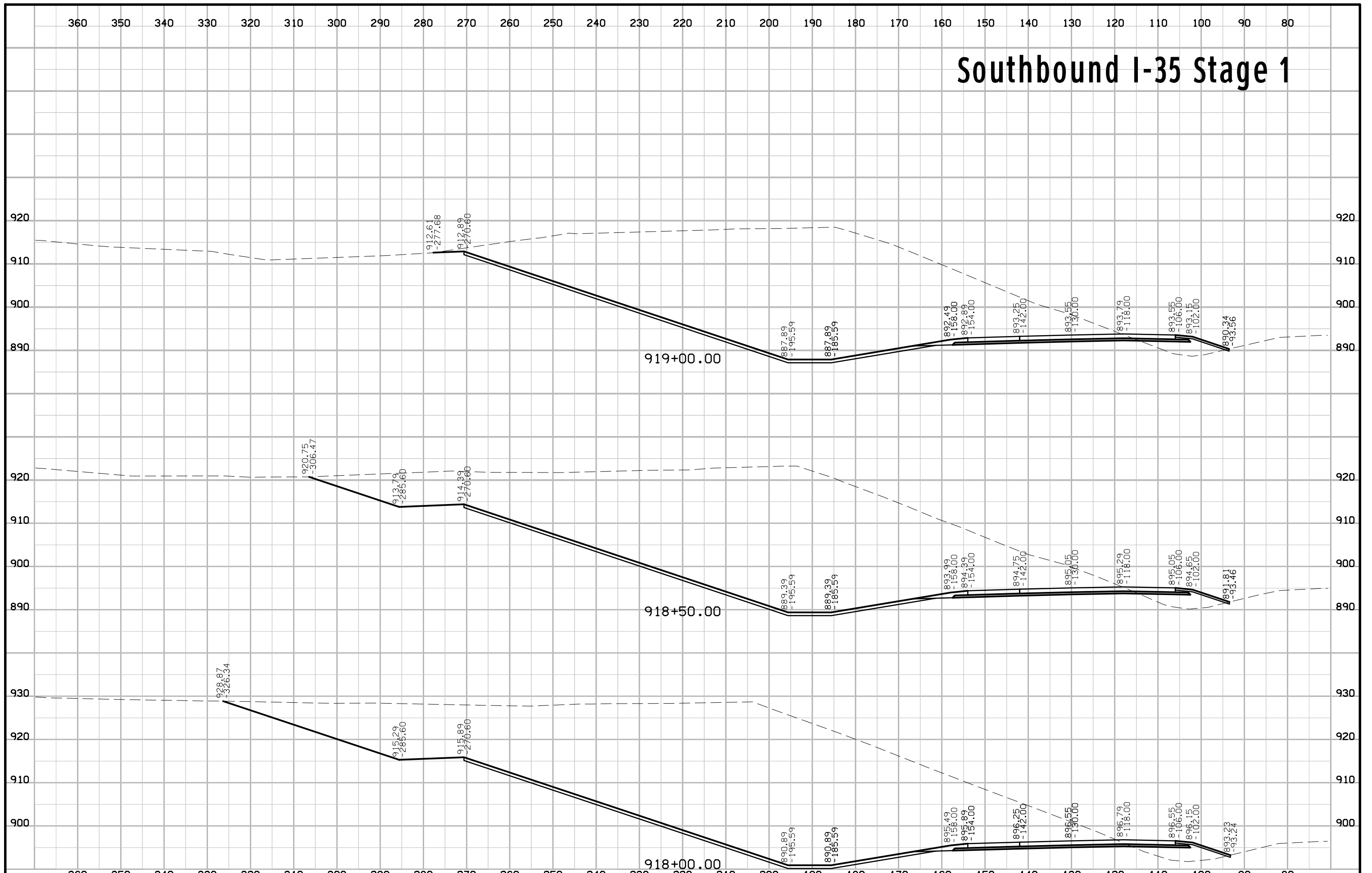
916+00.00

915+50.00

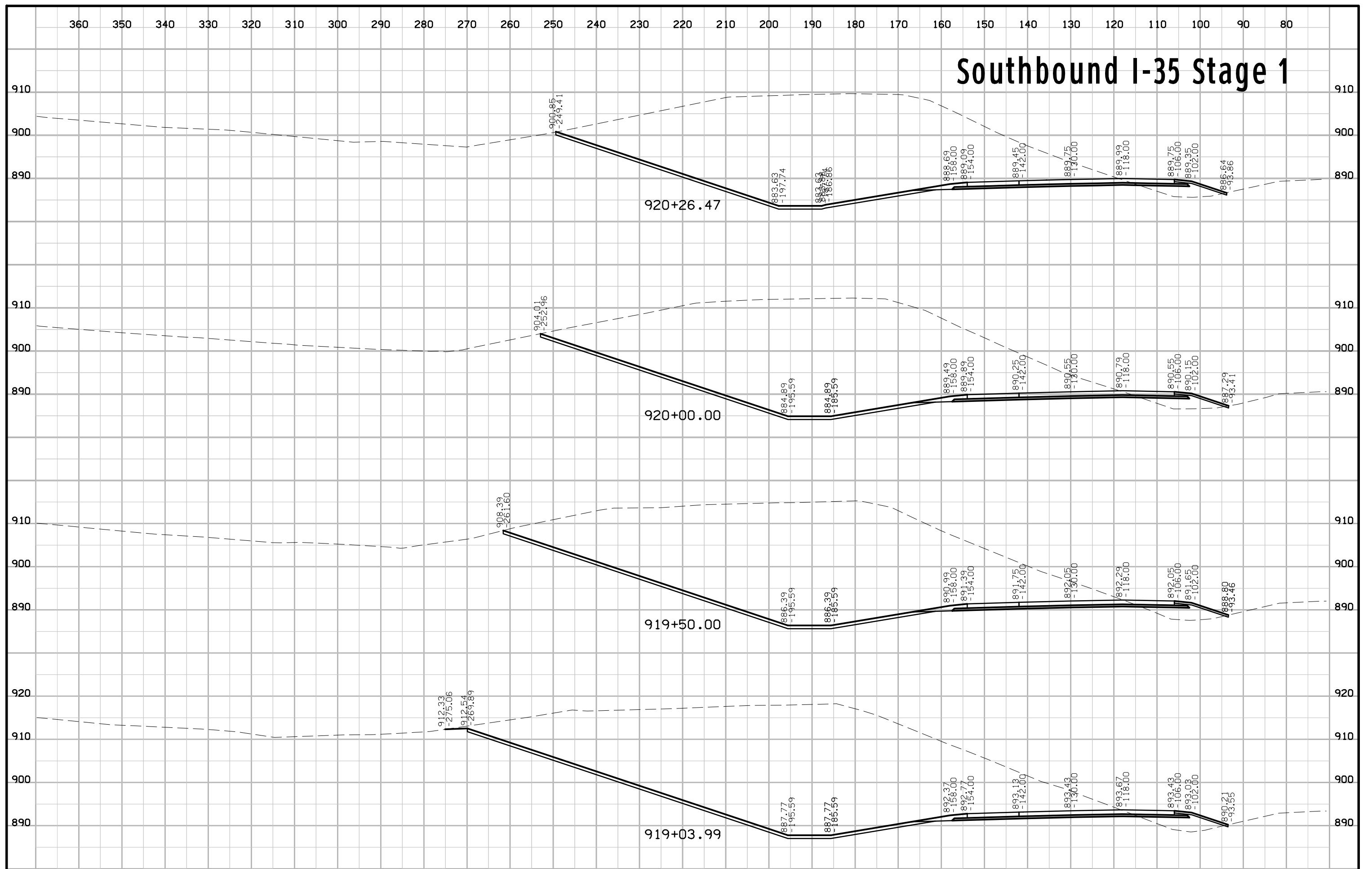
Southbound I-35 Stage 1



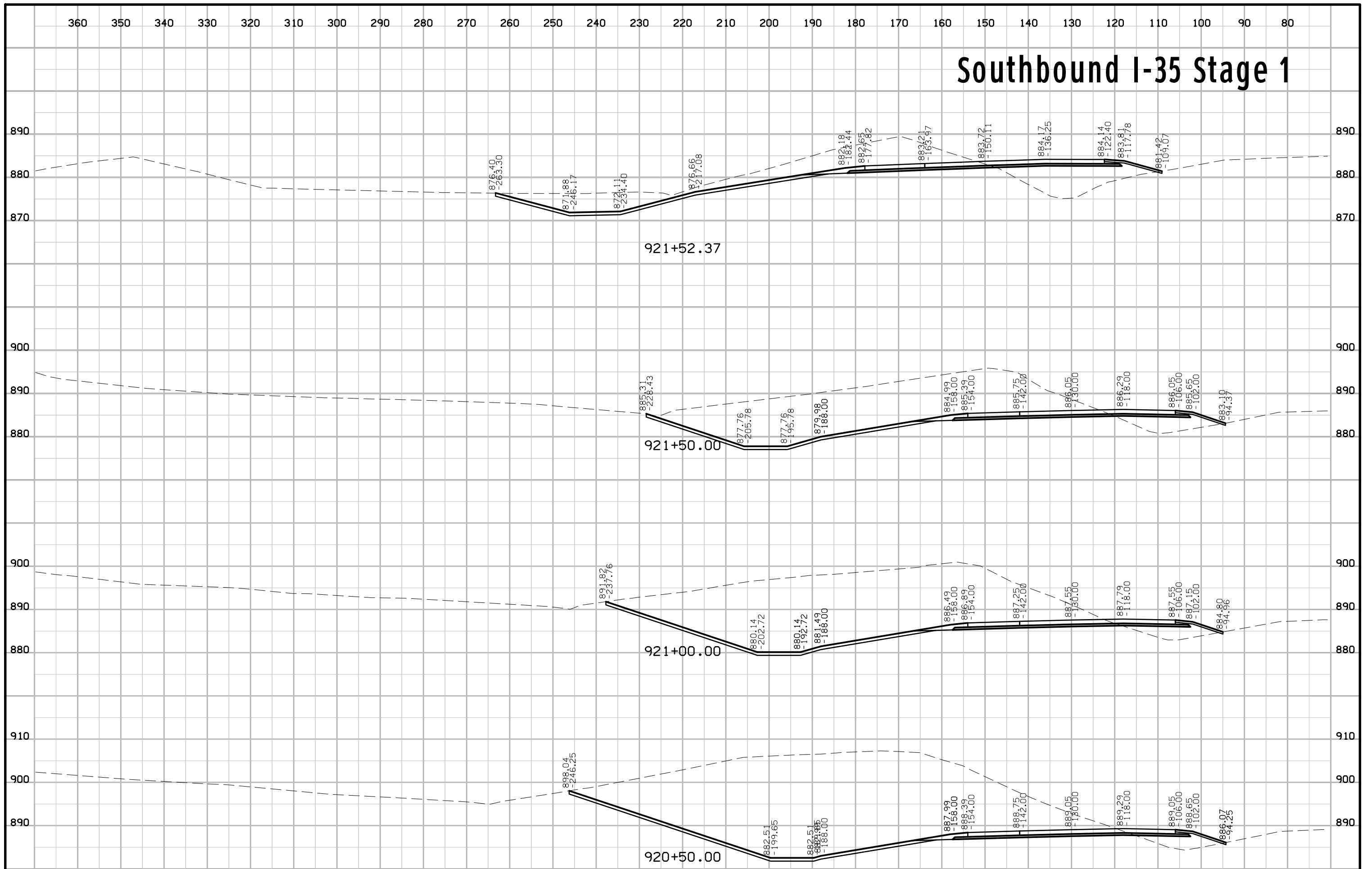
Southbound I-35 Stage 1



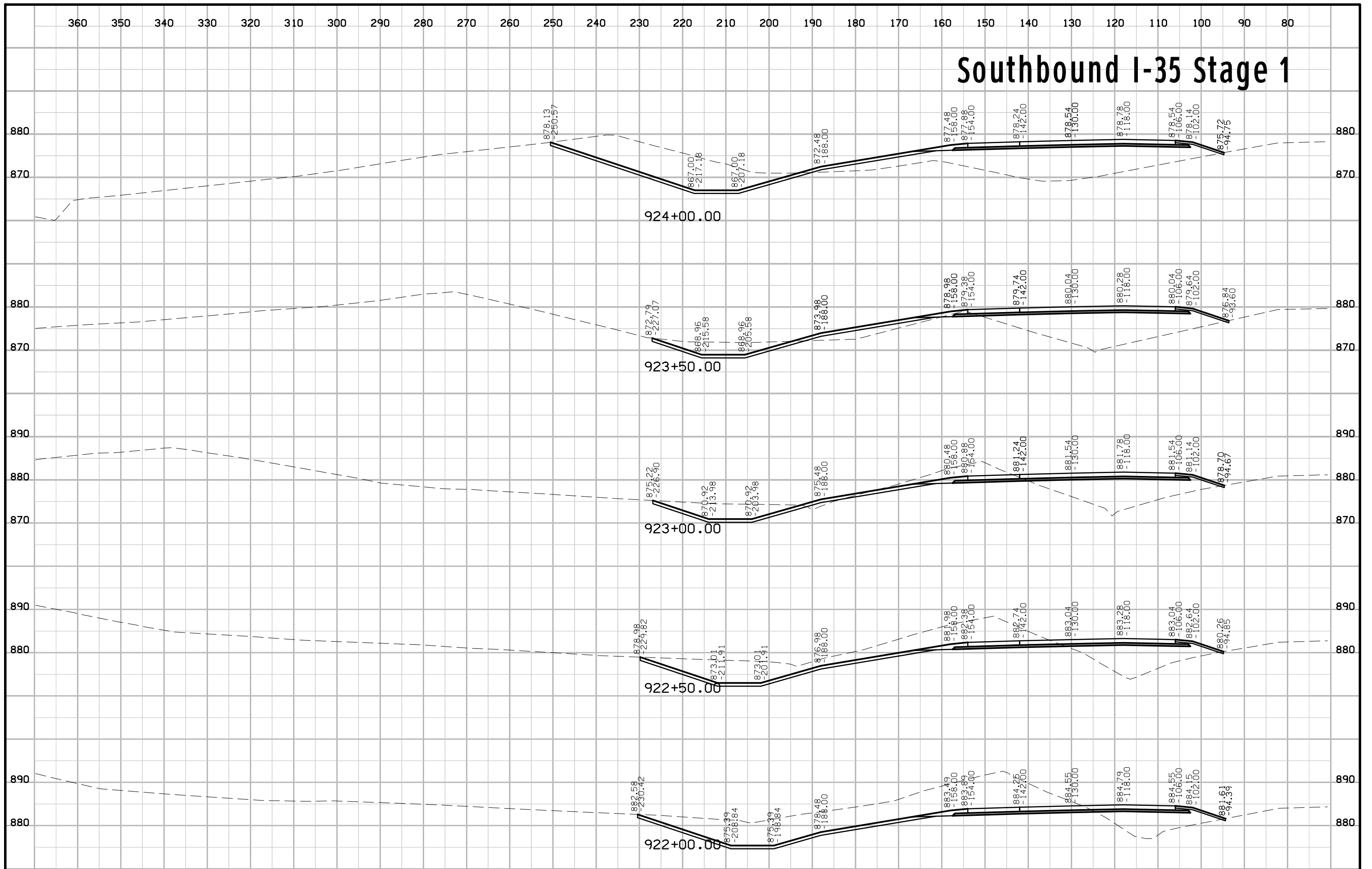
Southbound I-35 Stage 1



Southbound I-35 Stage 1



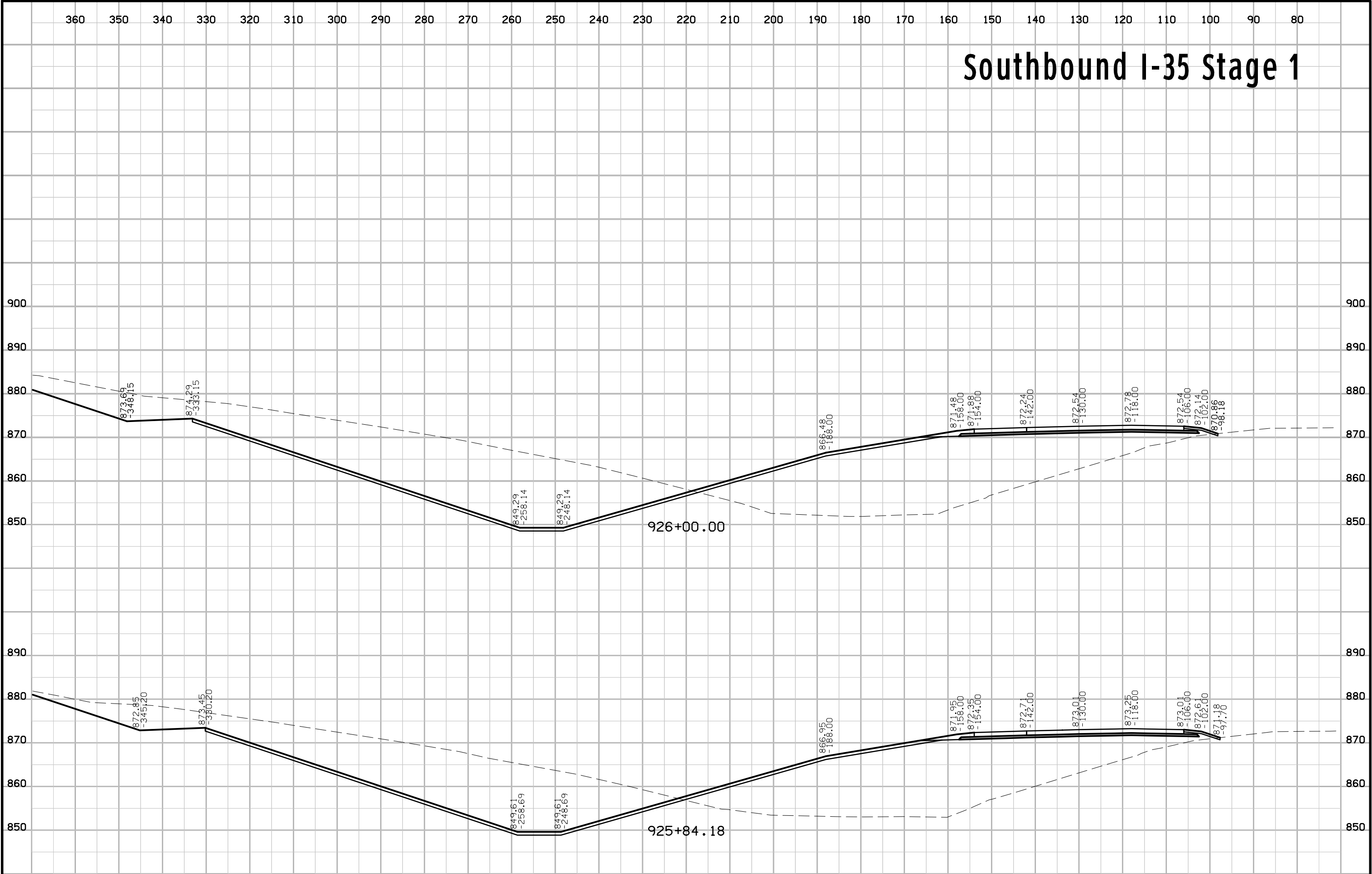
Southbound I-35 Stage 1



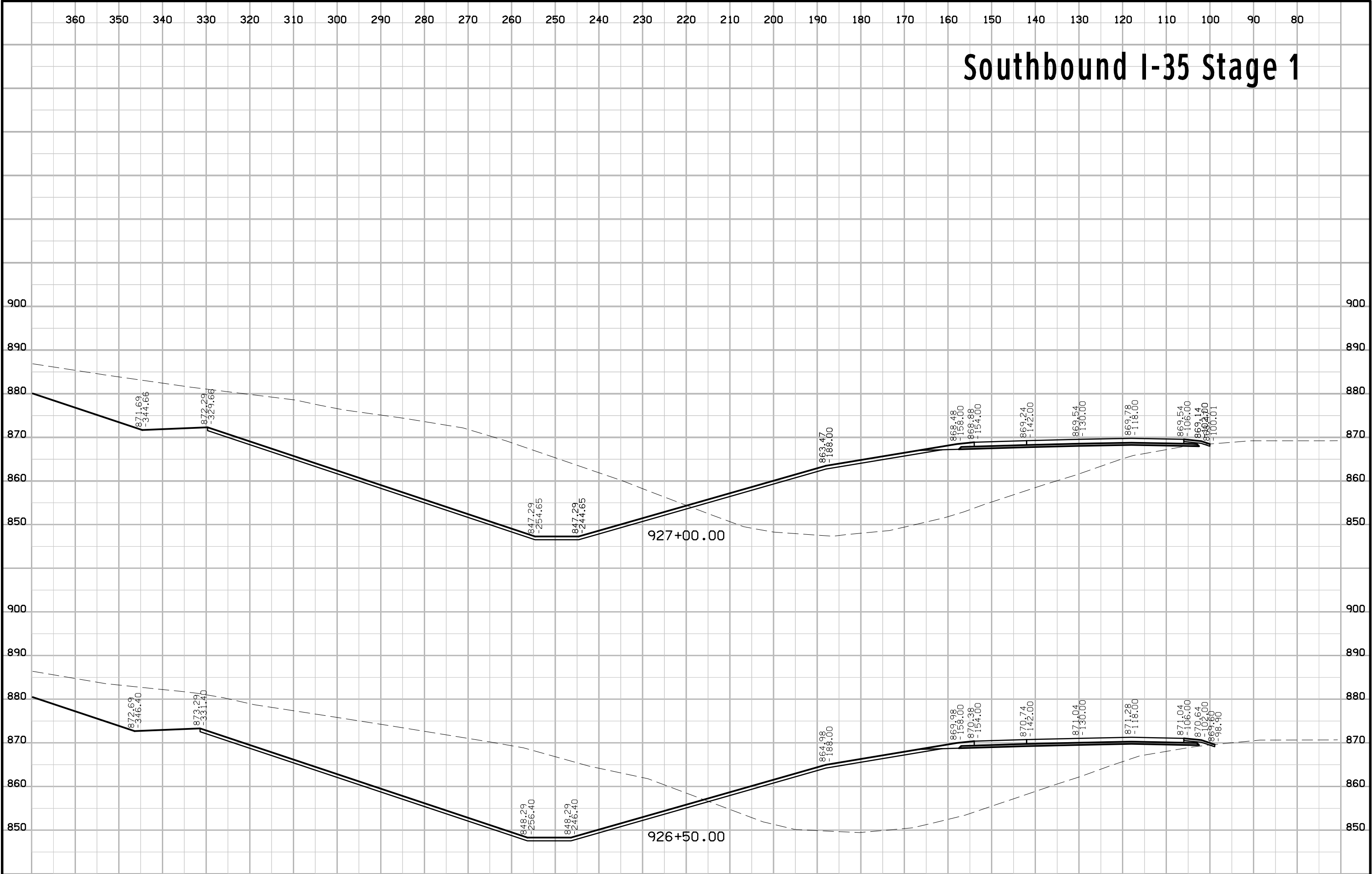
Southbound I-35 Stage 1



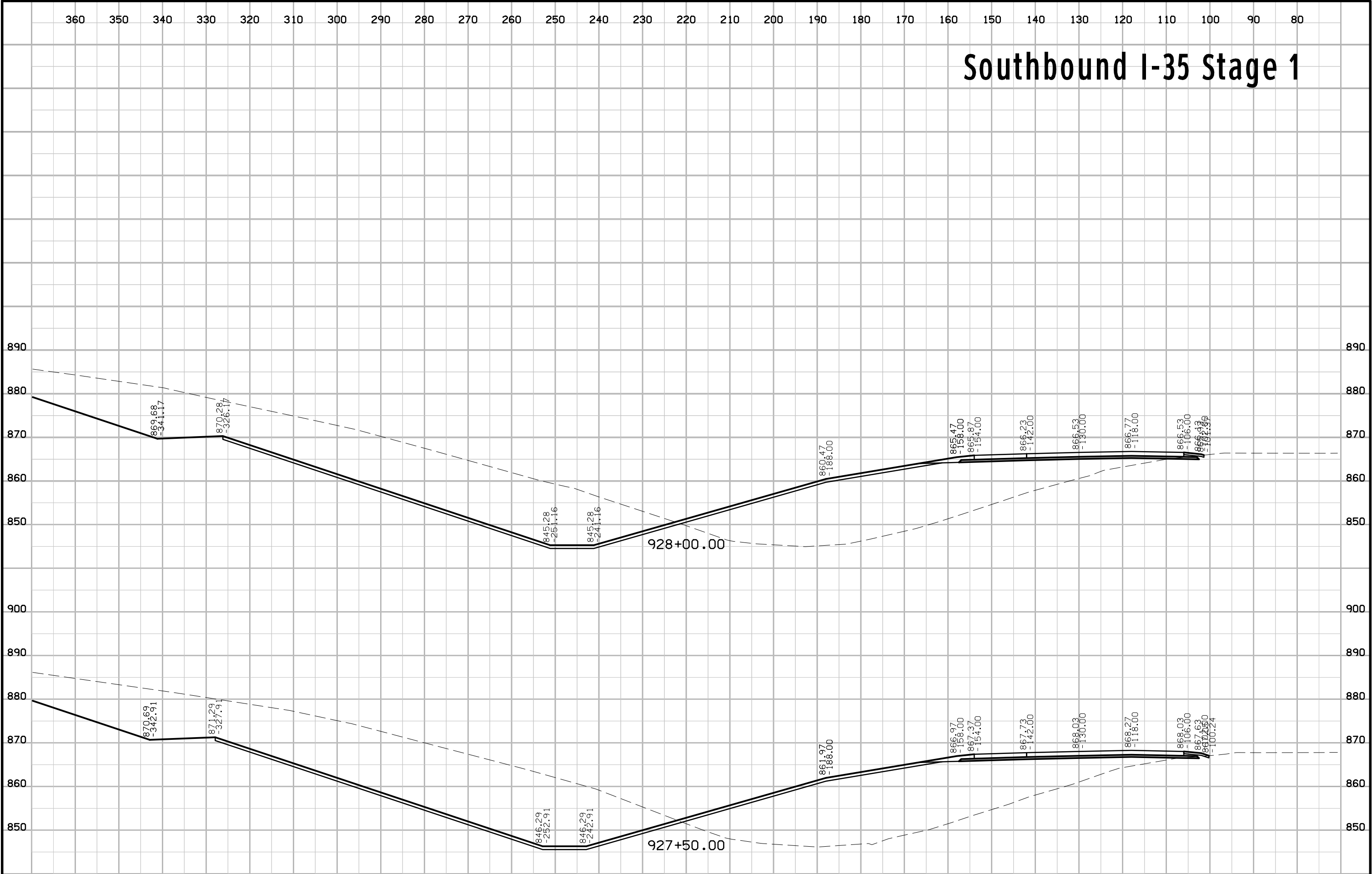
Southbound I-35 Stage 1



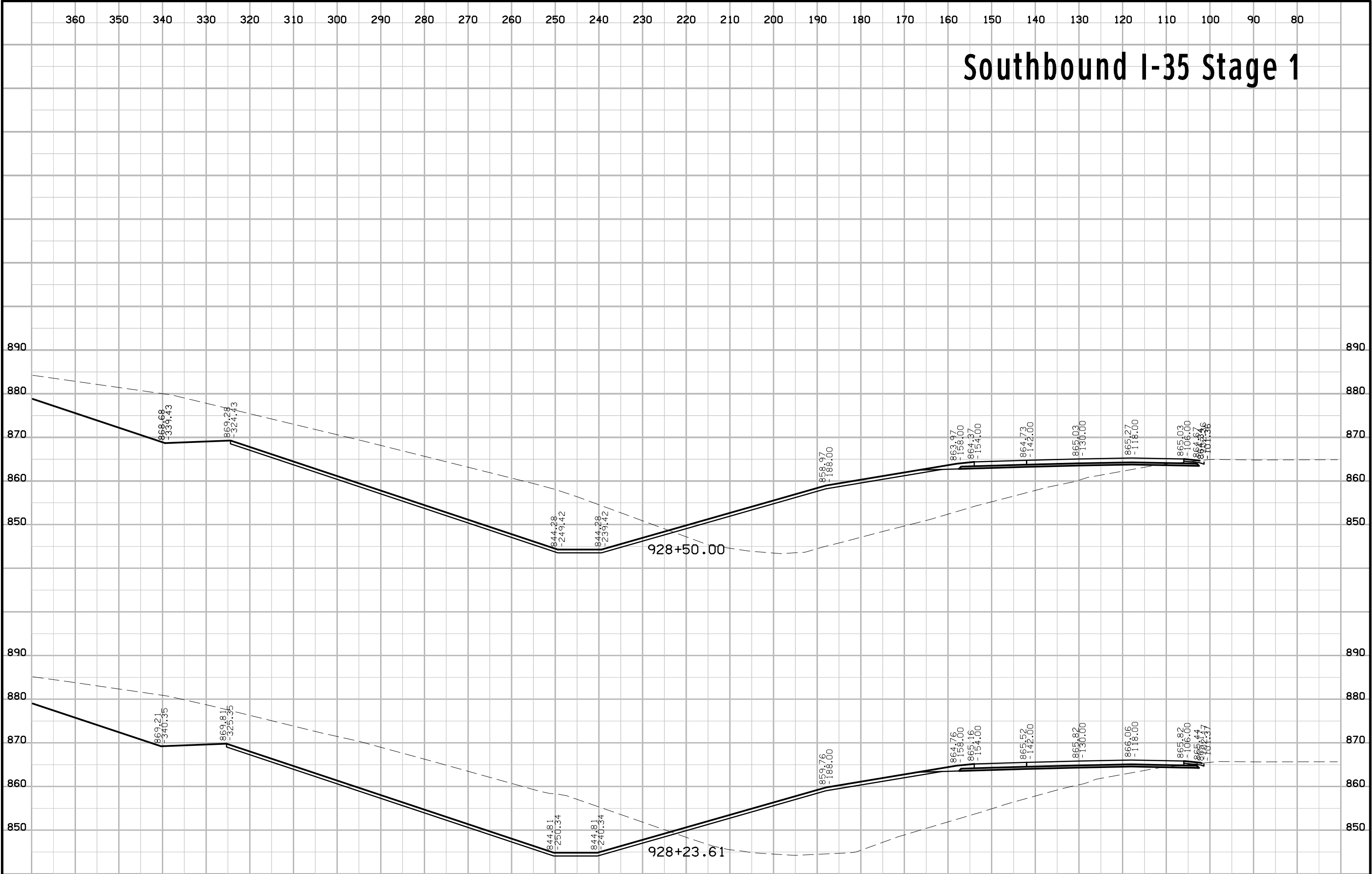
Southbound I-35 Stage 1



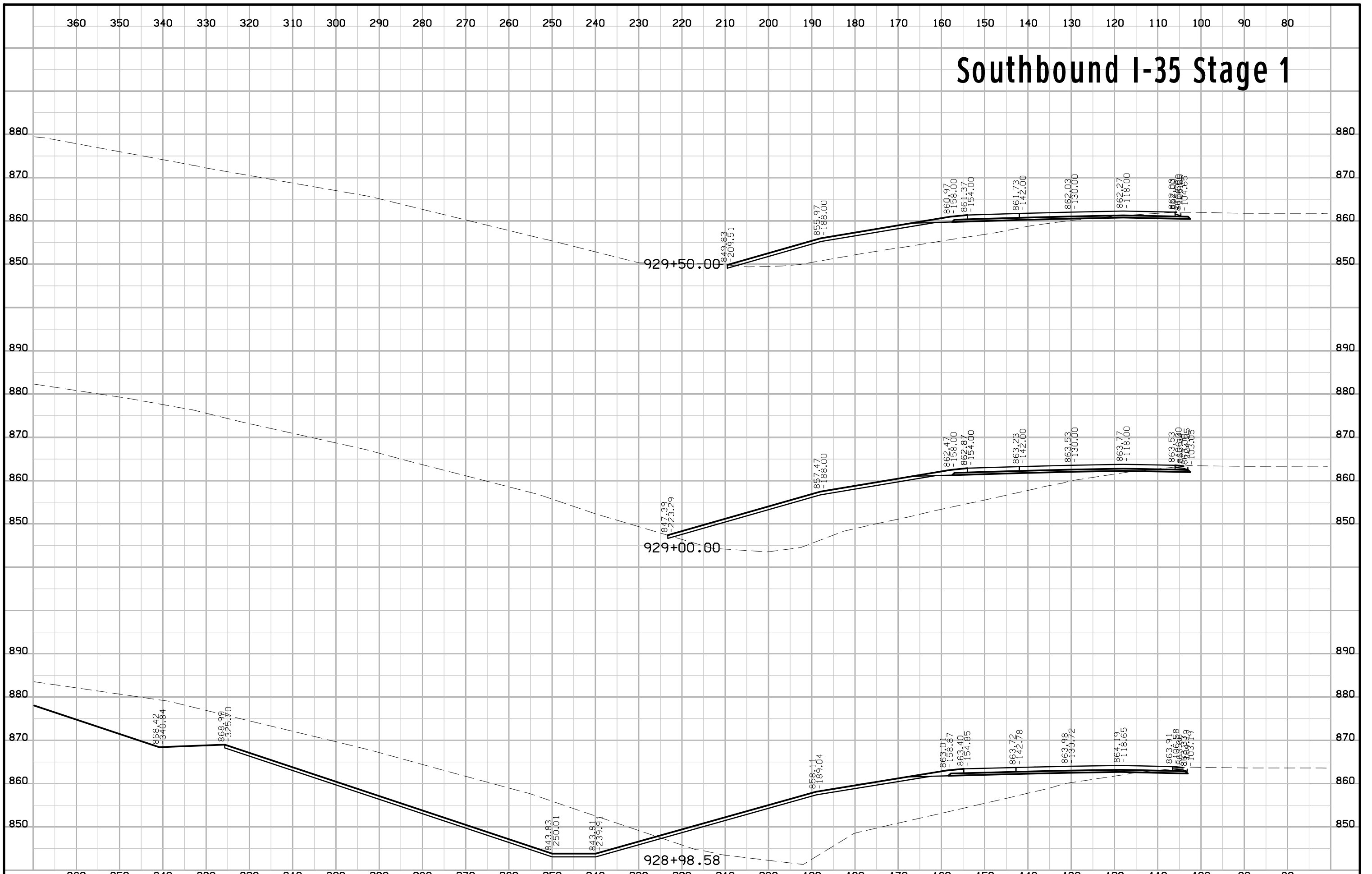
Southbound I-35 Stage 1



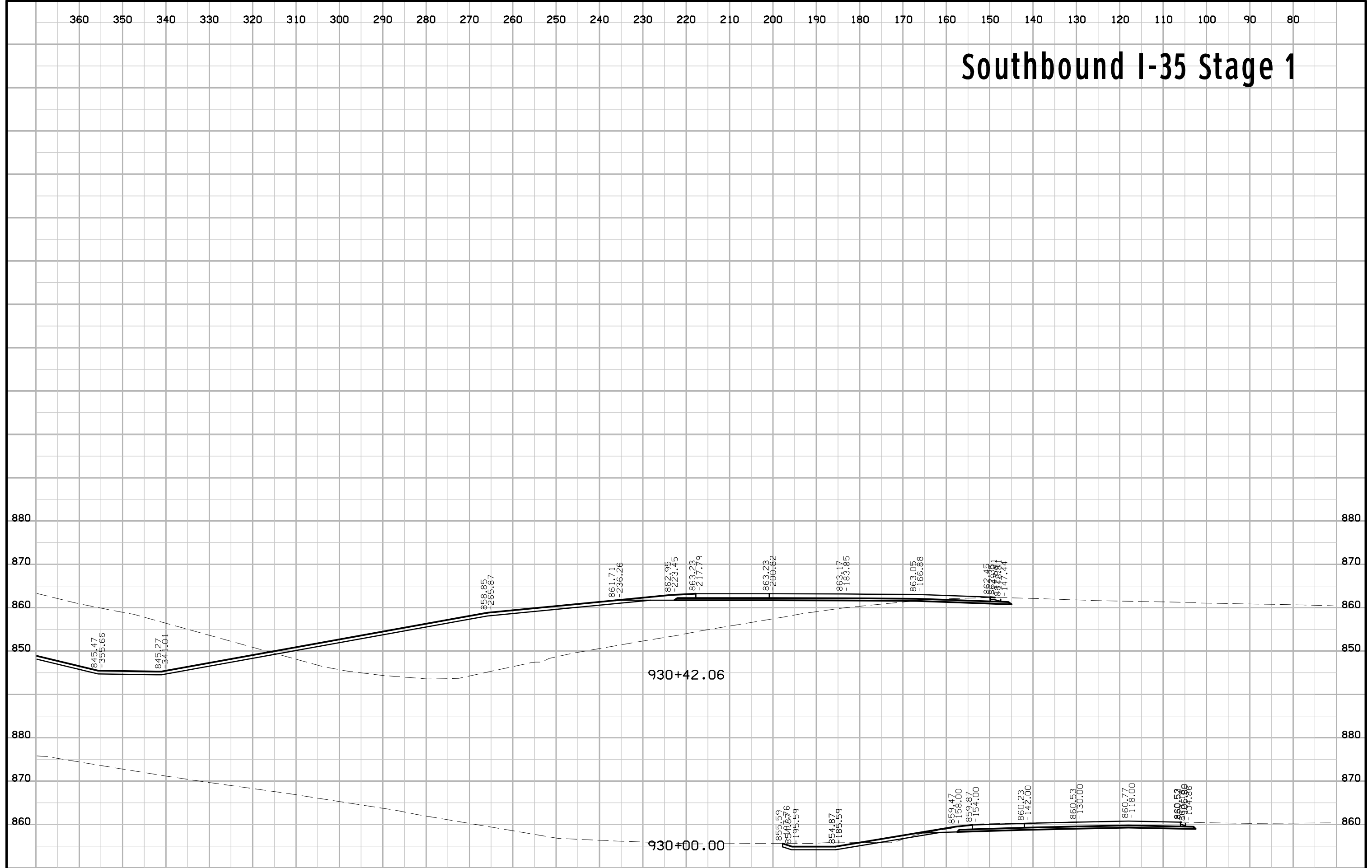
Southbound I-35 Stage 1



Southbound I-35 Stage 1



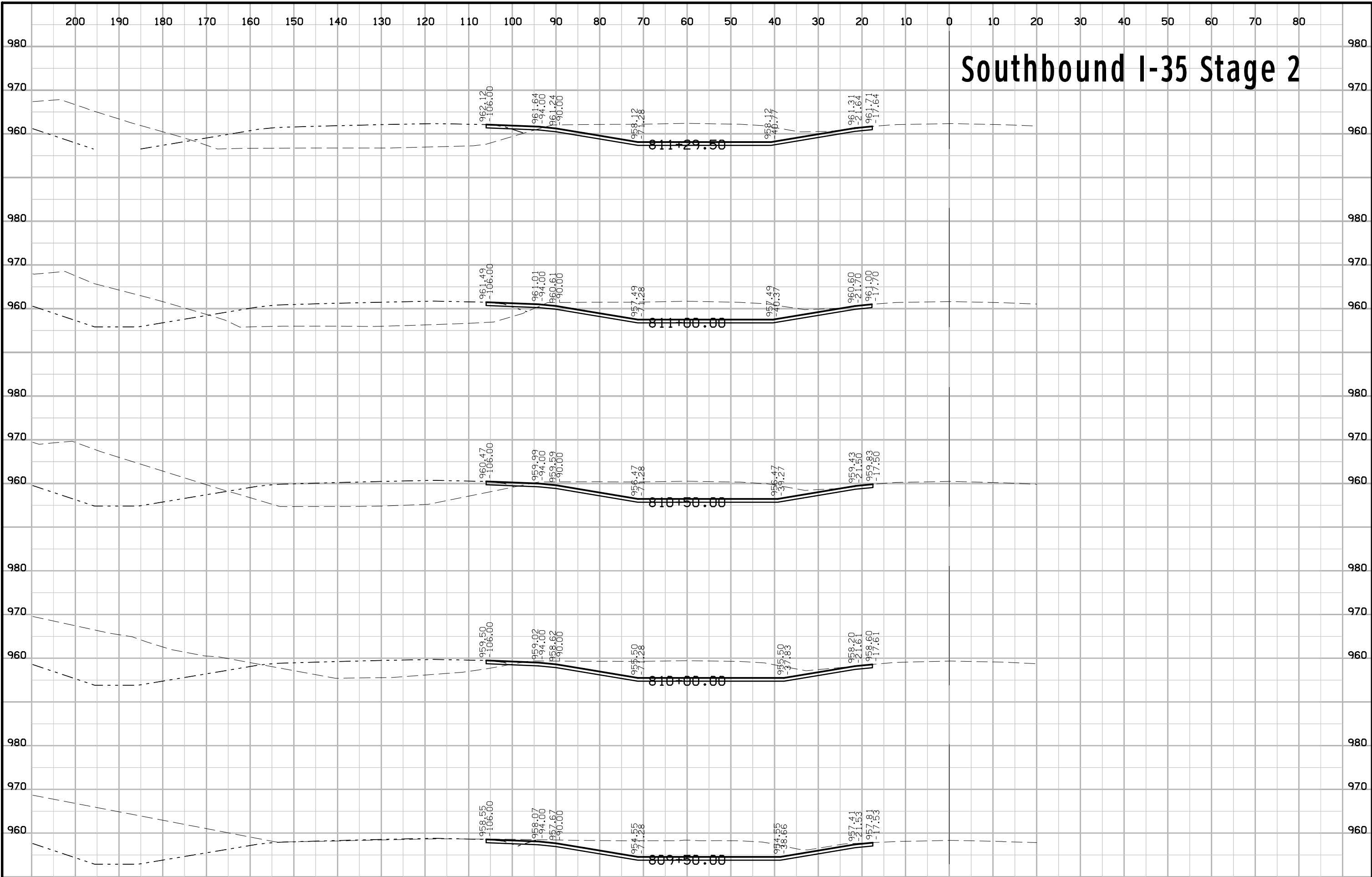
Southbound I-35 Stage 1



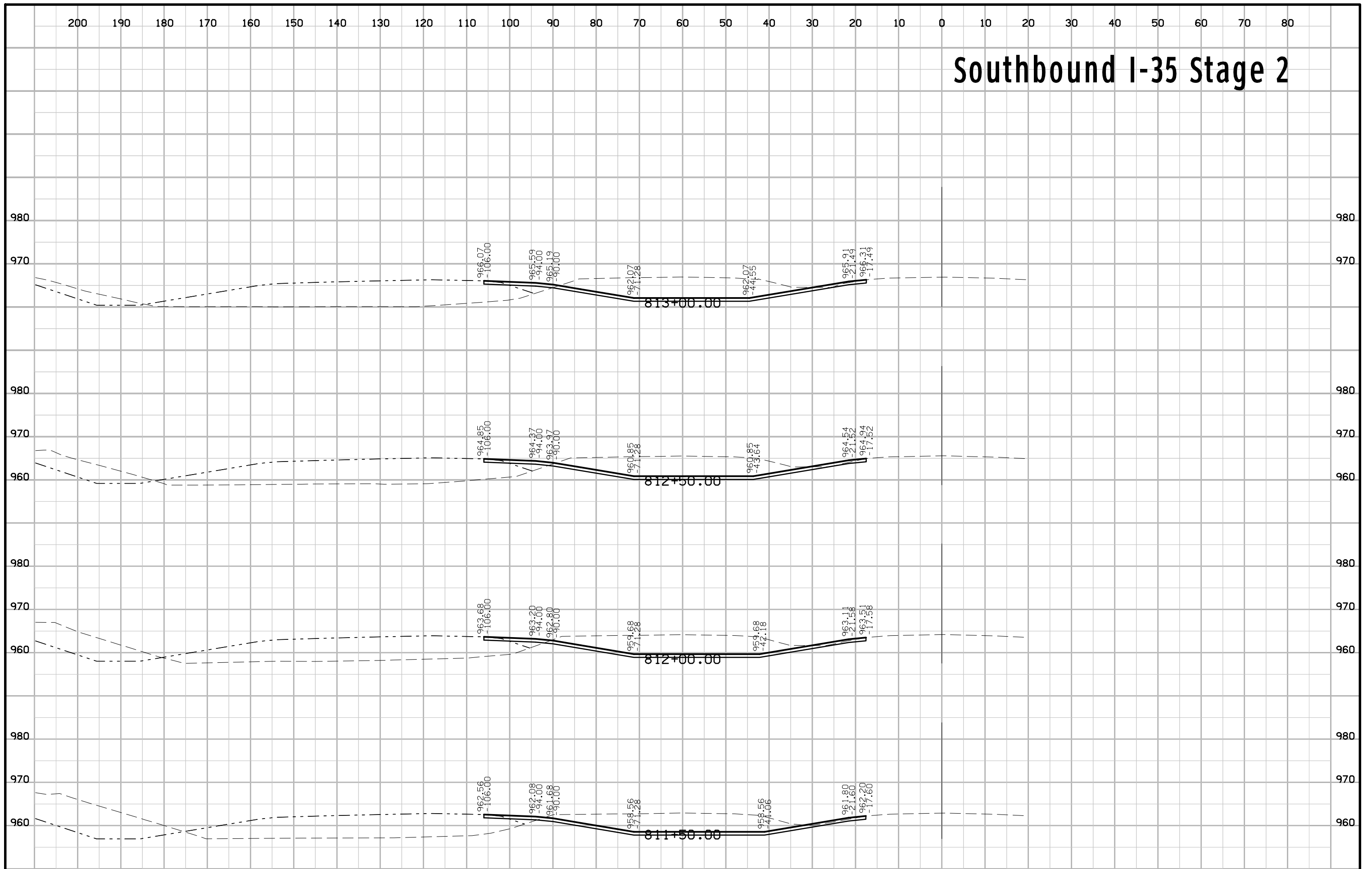
930+42.06

930+00.00

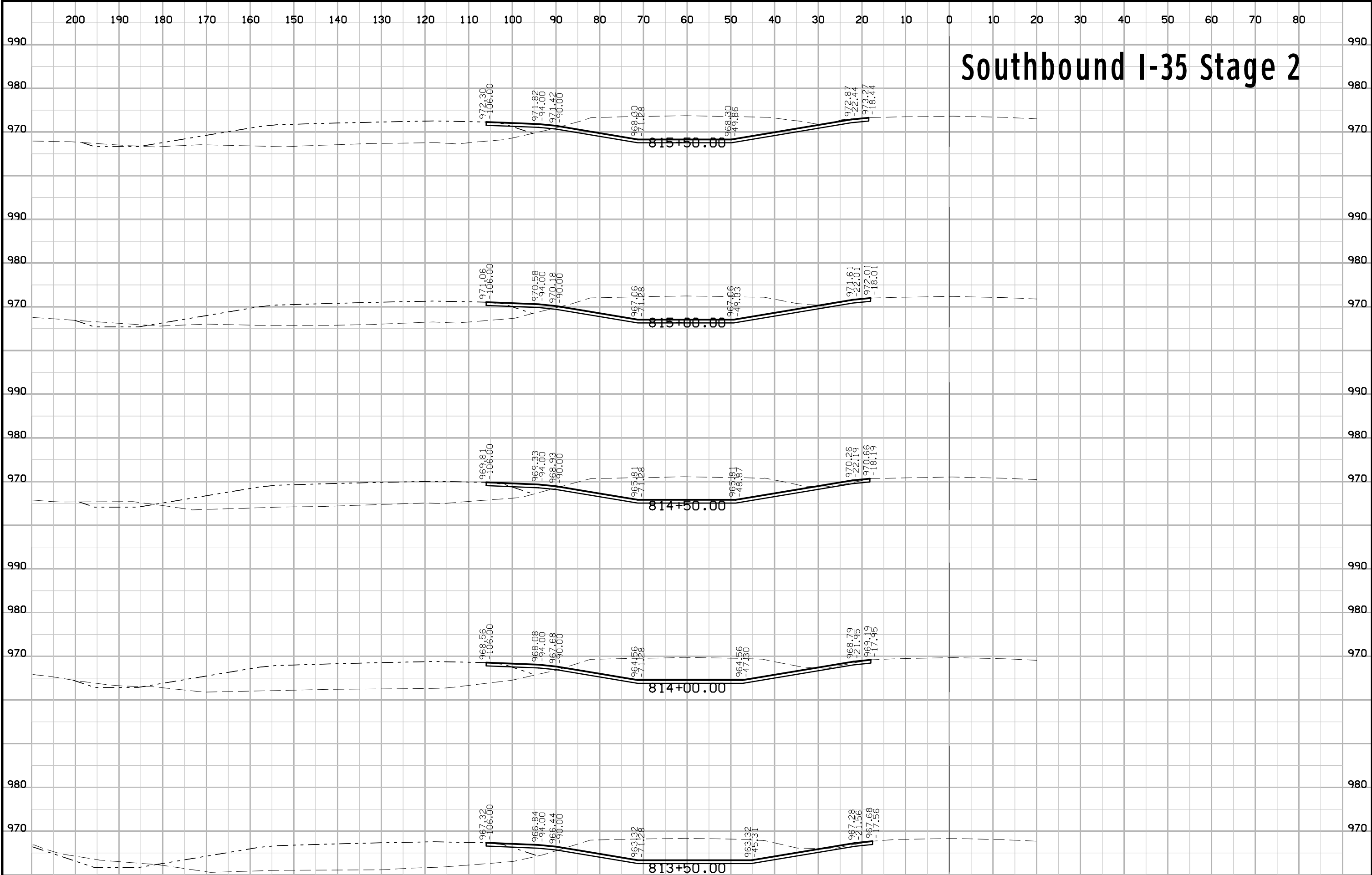
Southbound I-35 Stage 2



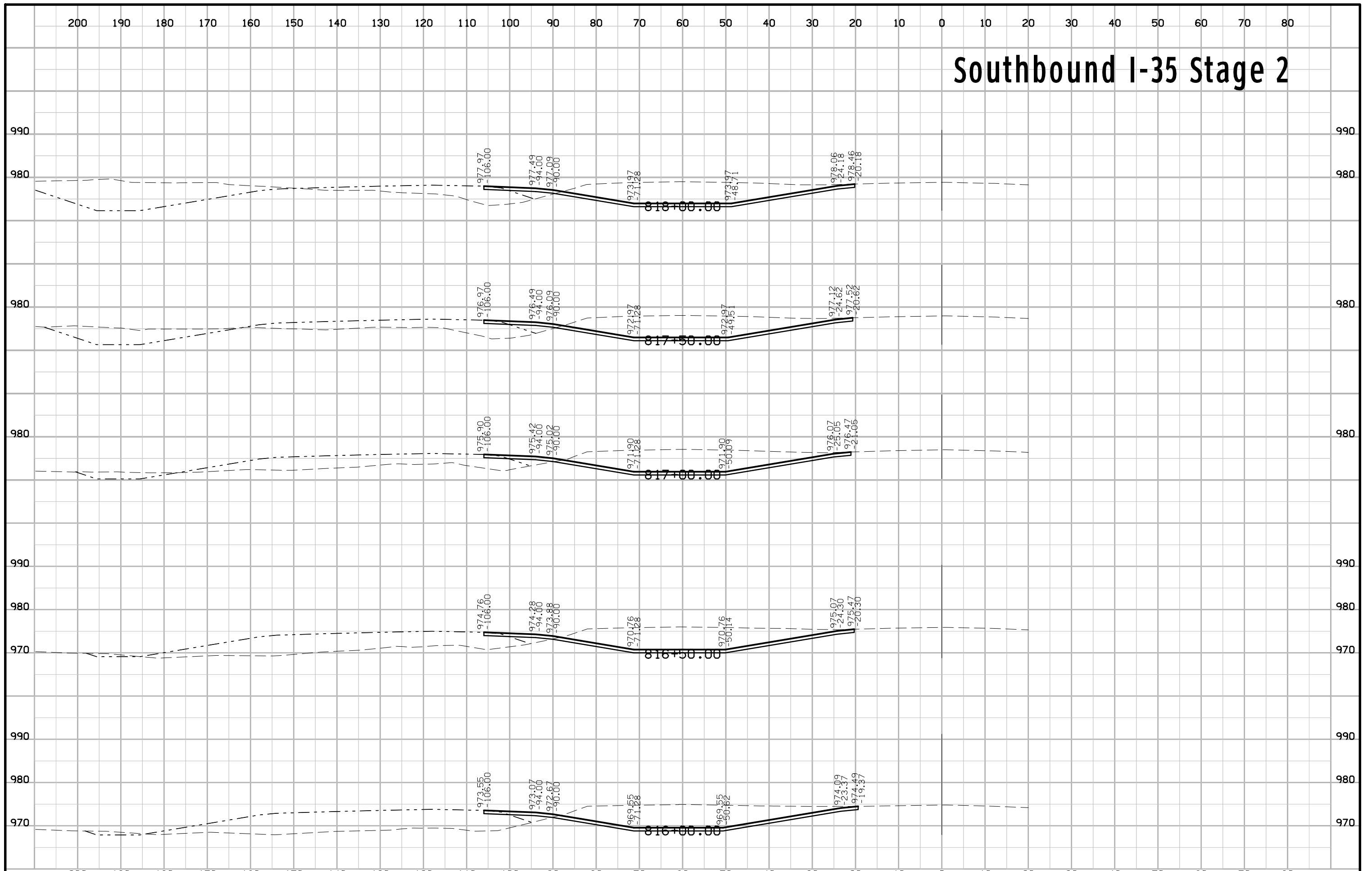
Southbound I-35 Stage 2



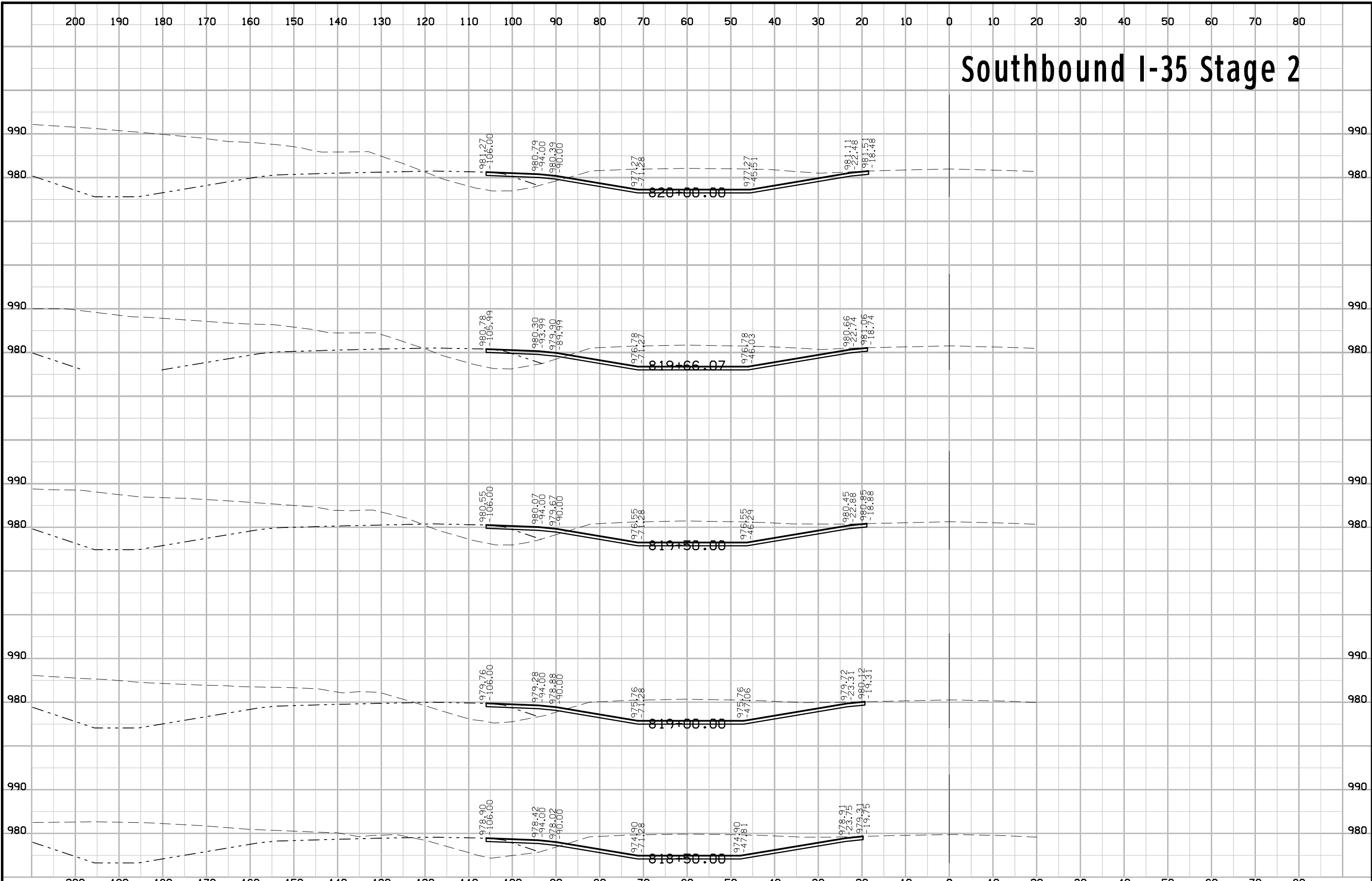
Southbound I-35 Stage 2



Southbound I-35 Stage 2



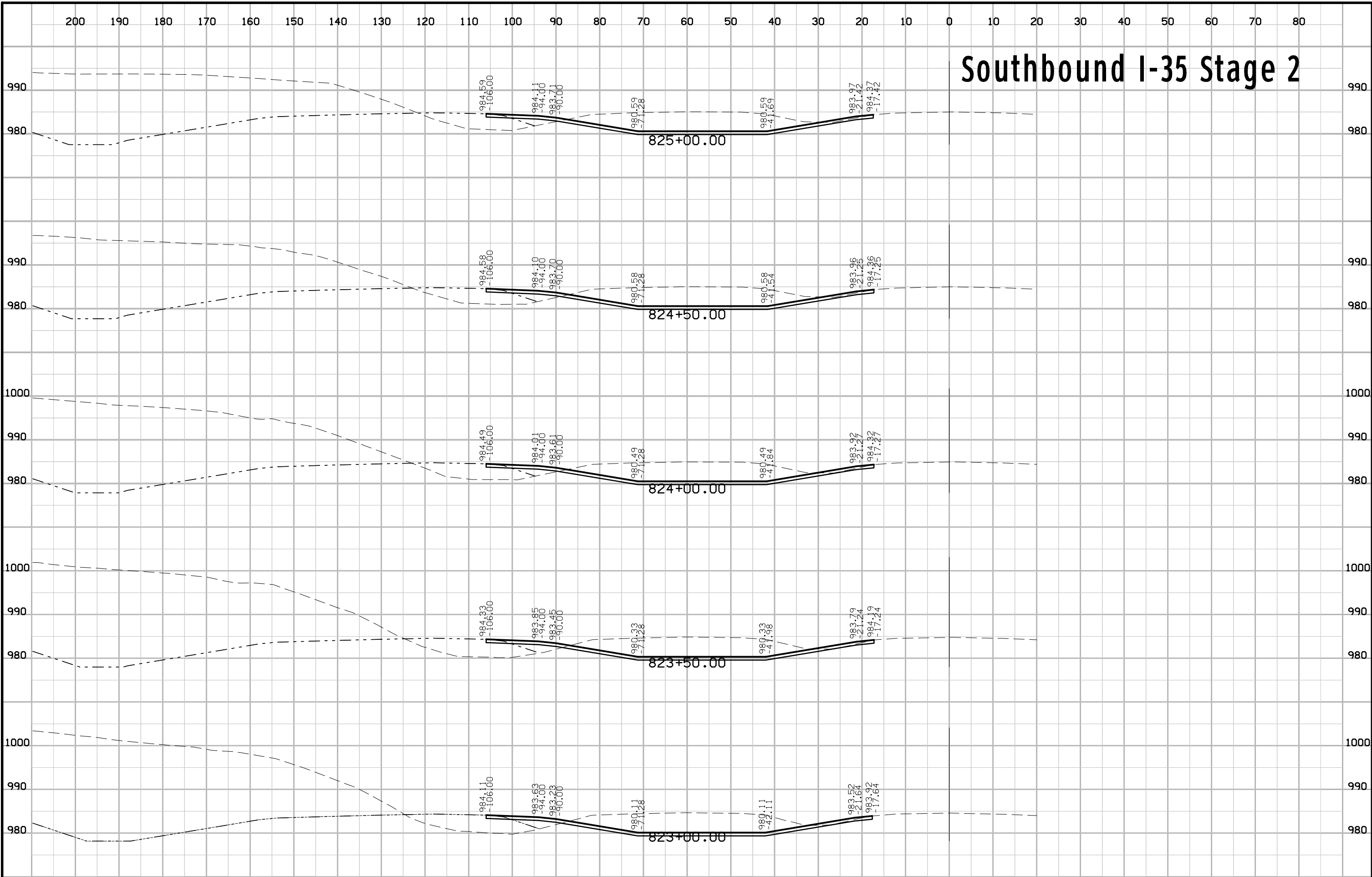
Southbound I-35 Stage 2



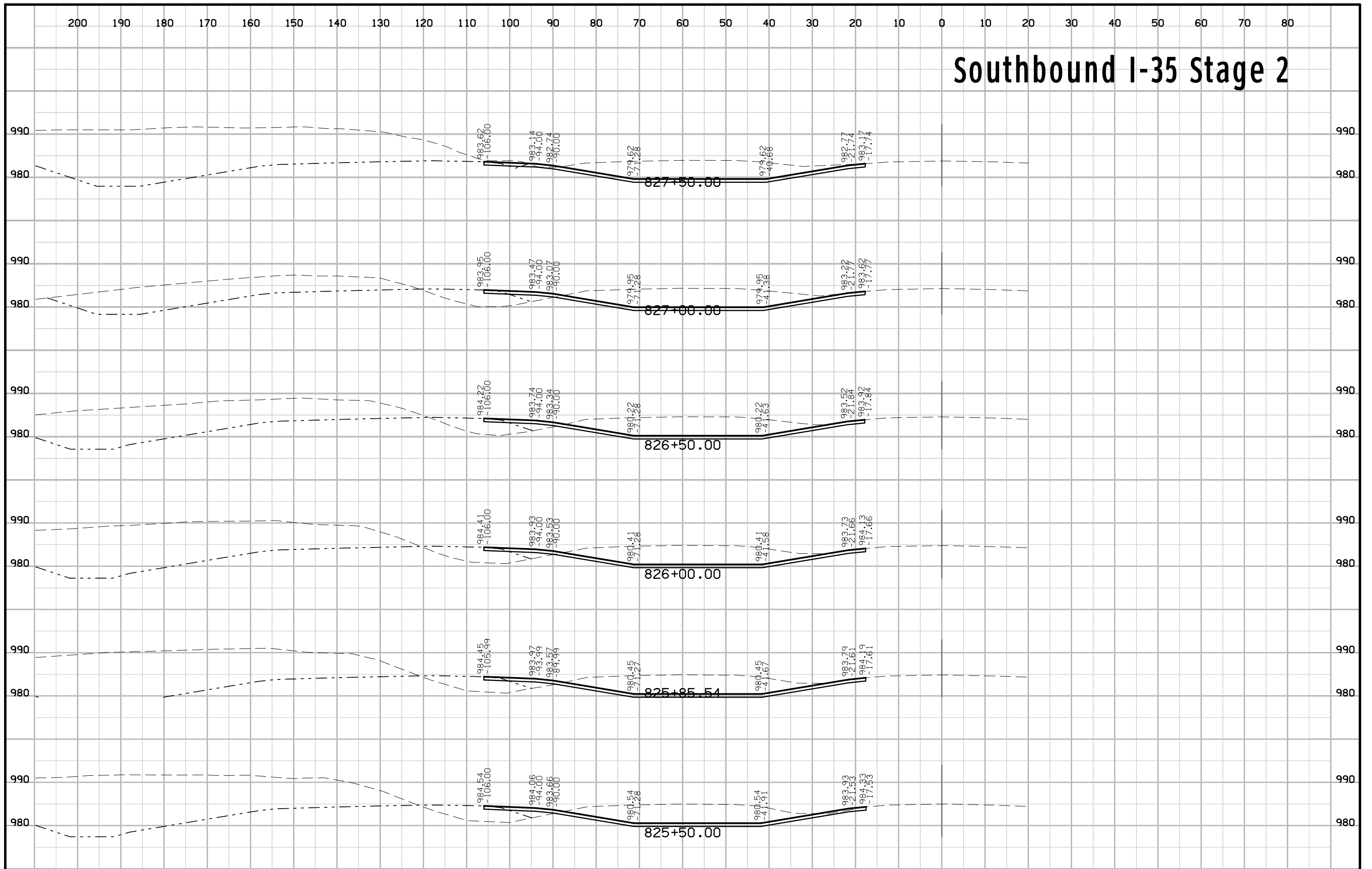
Southbound I-35 Stage 2



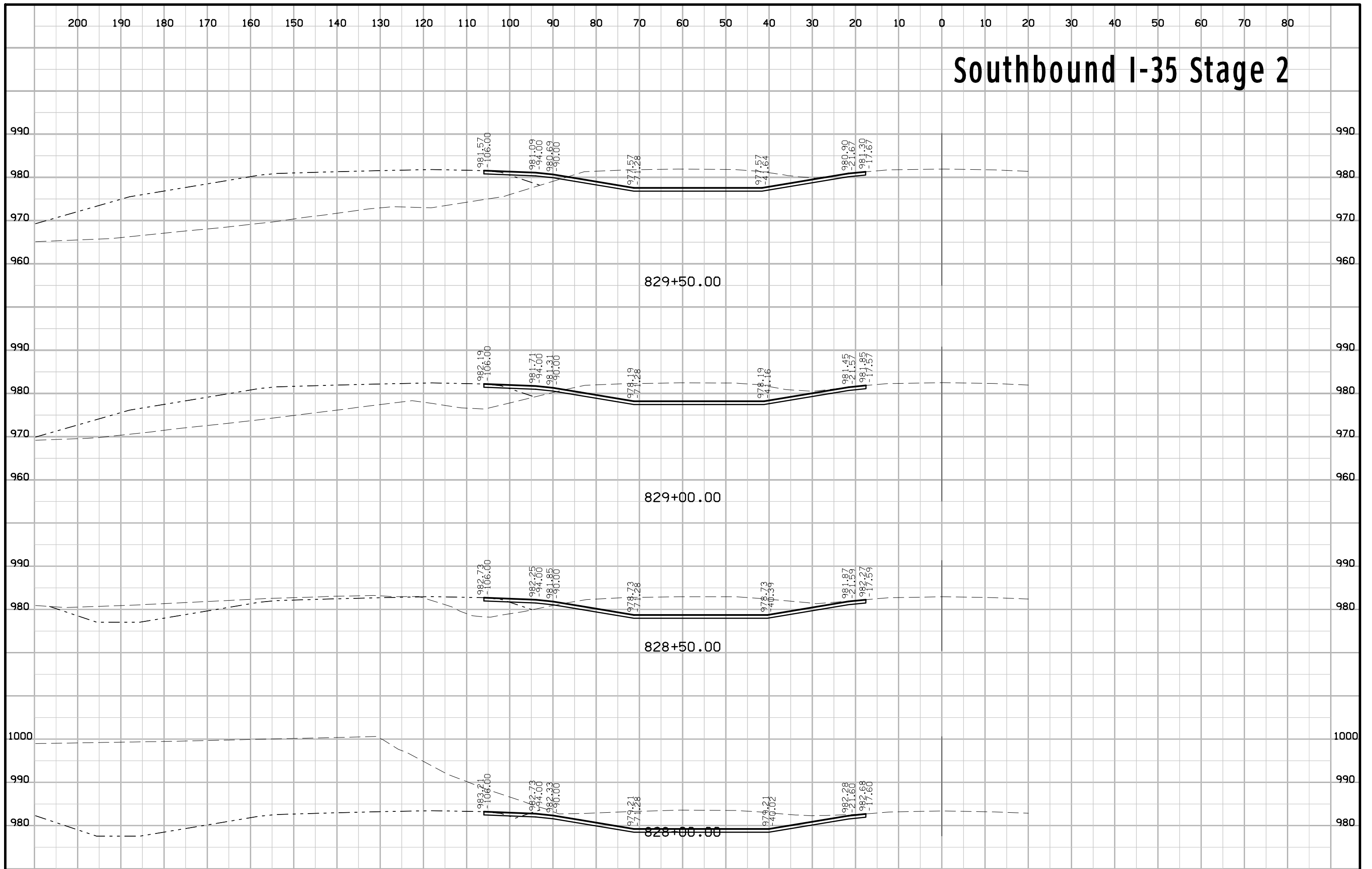
Southbound I-35 Stage 2



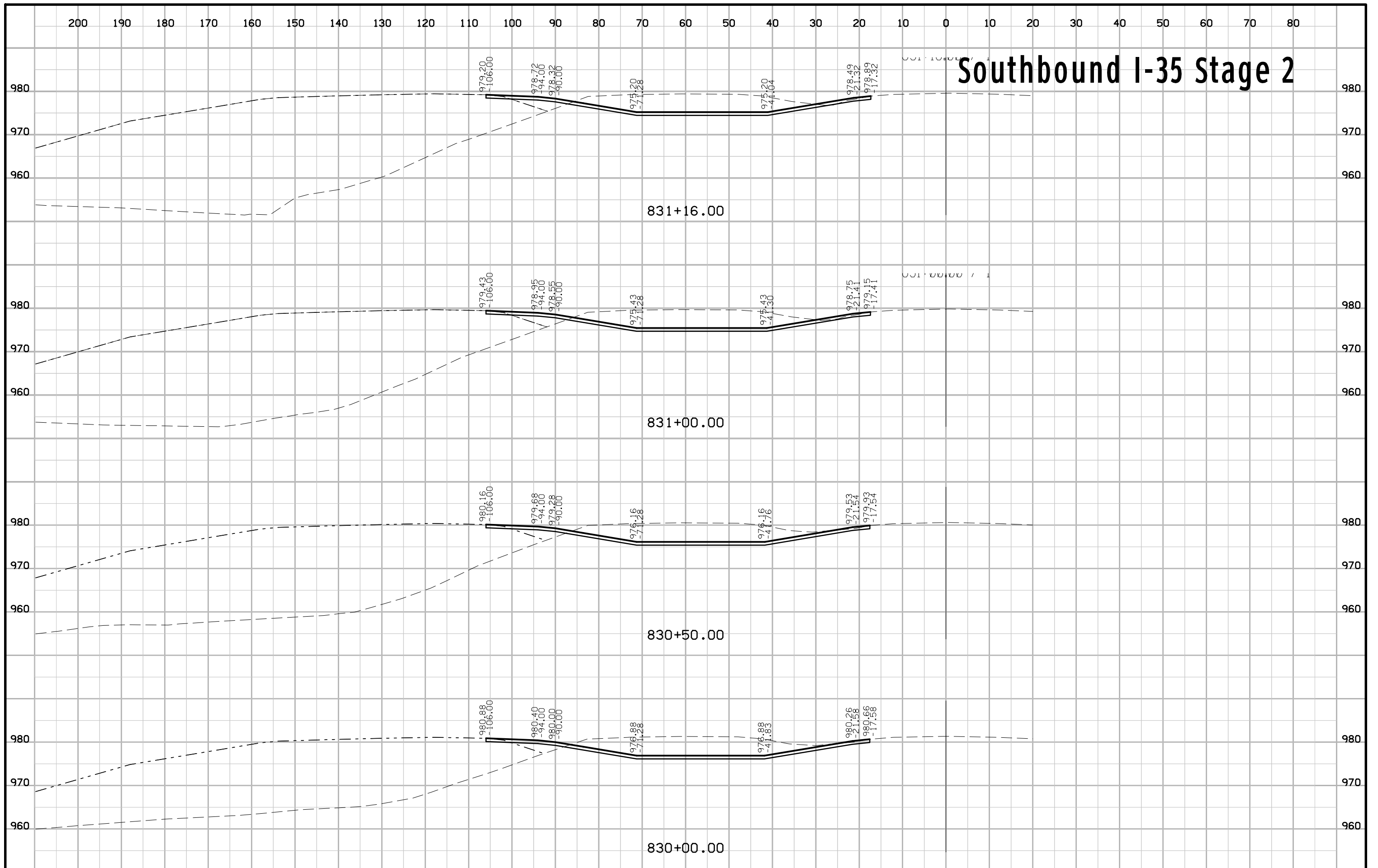
Southbound I-35 Stage 2



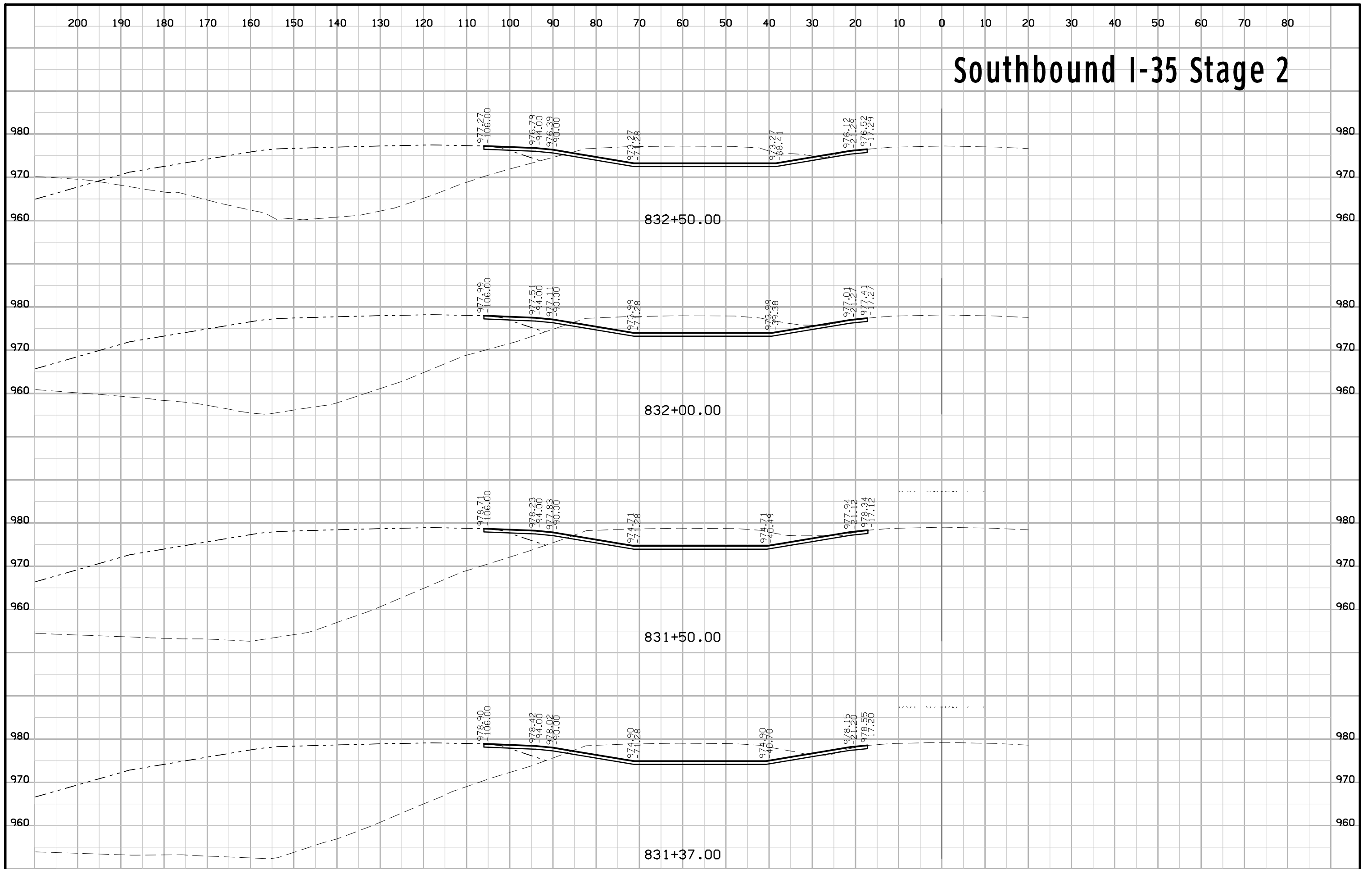
Southbound I-35 Stage 2



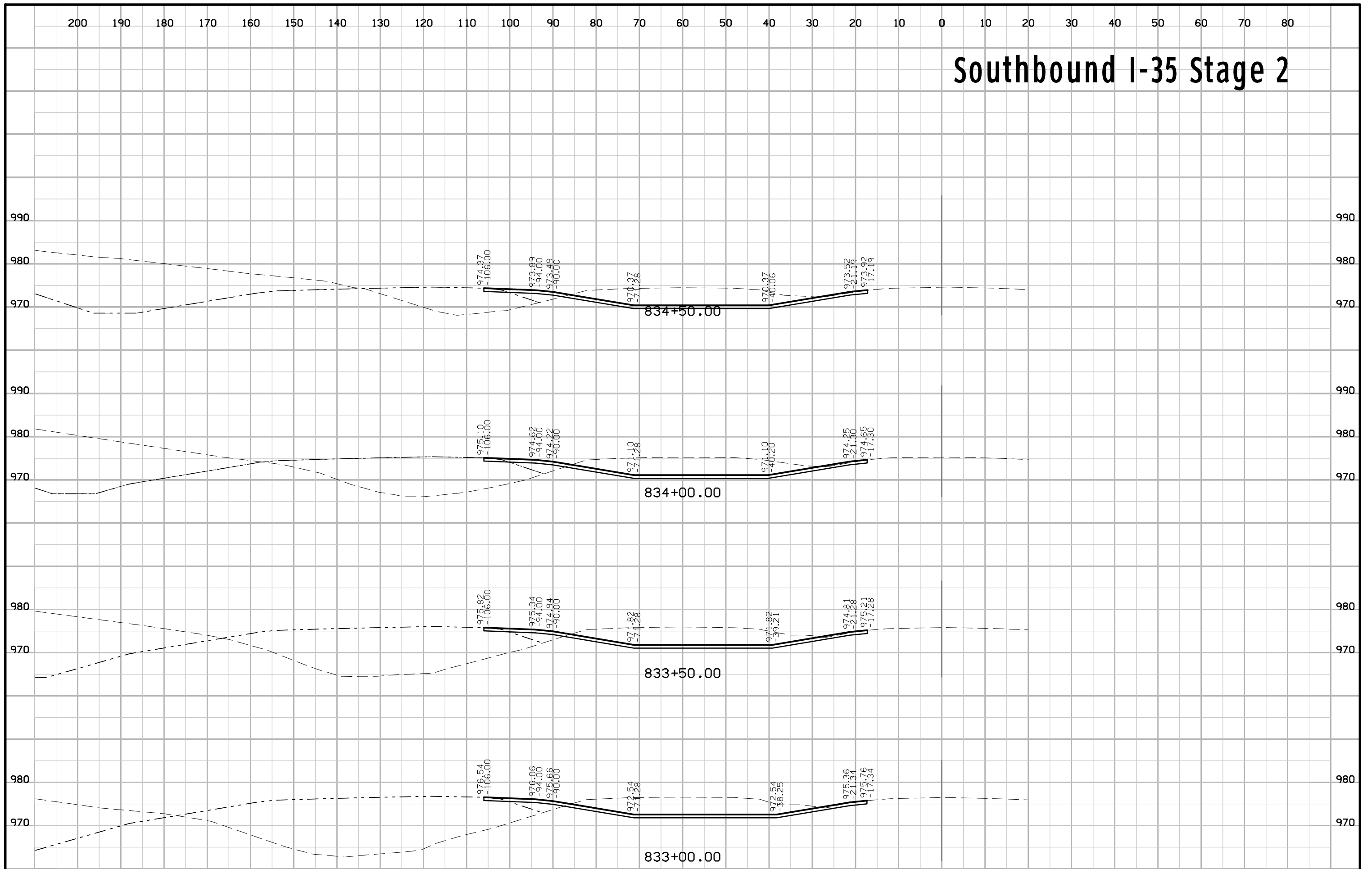
Southbound I-35 Stage 2



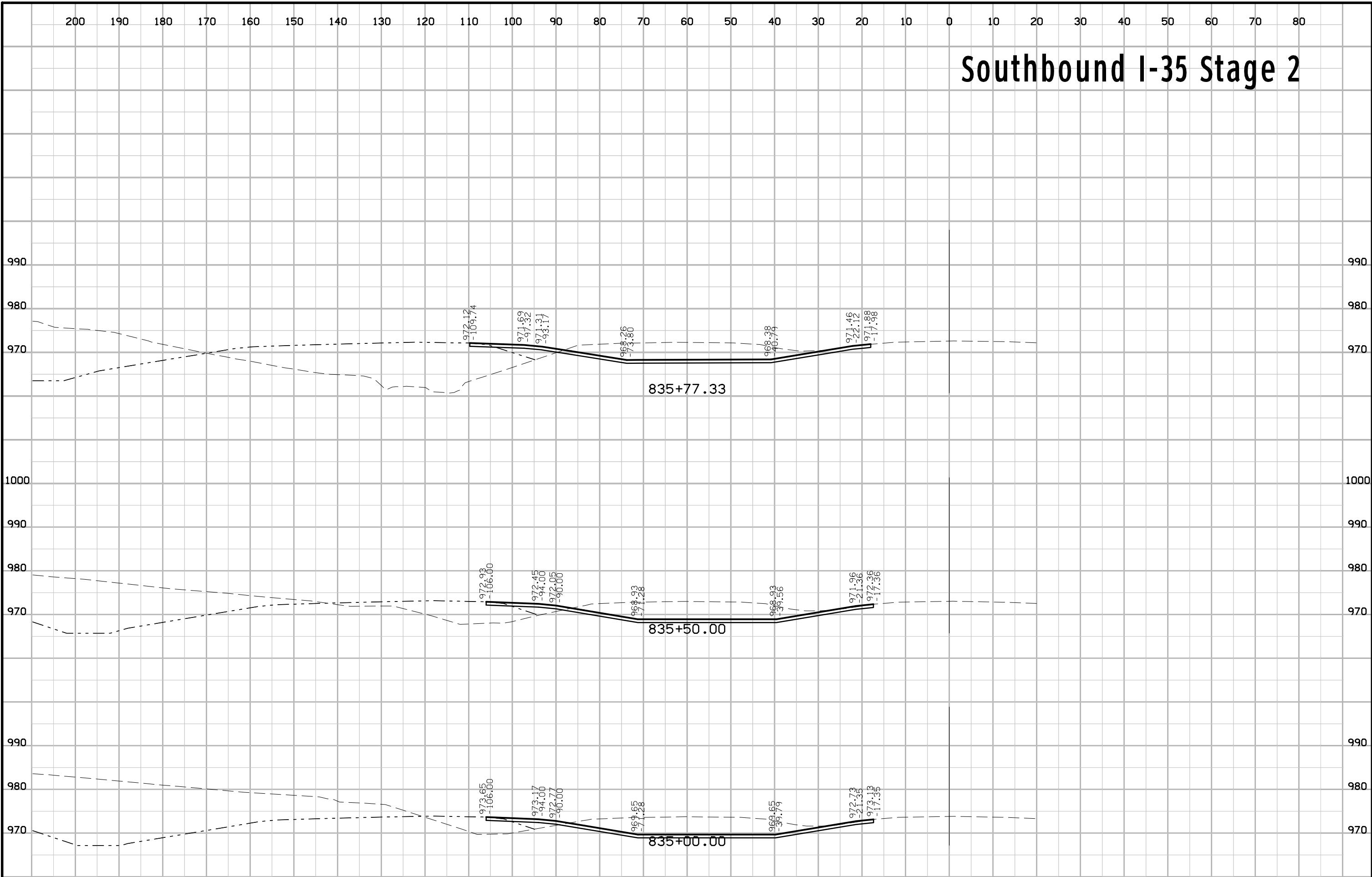
Southbound I-35 Stage 2



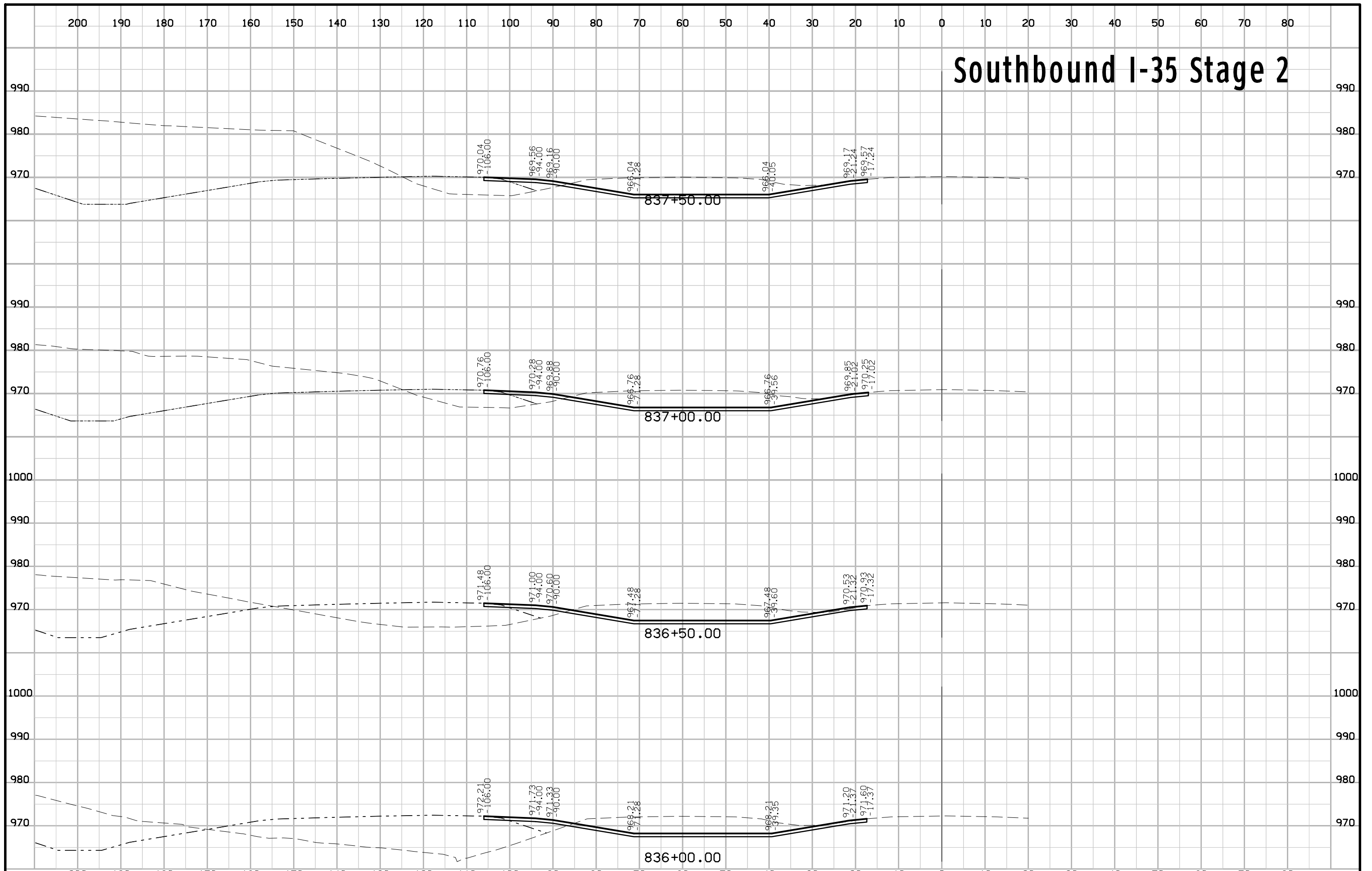
Southbound I-35 Stage 2



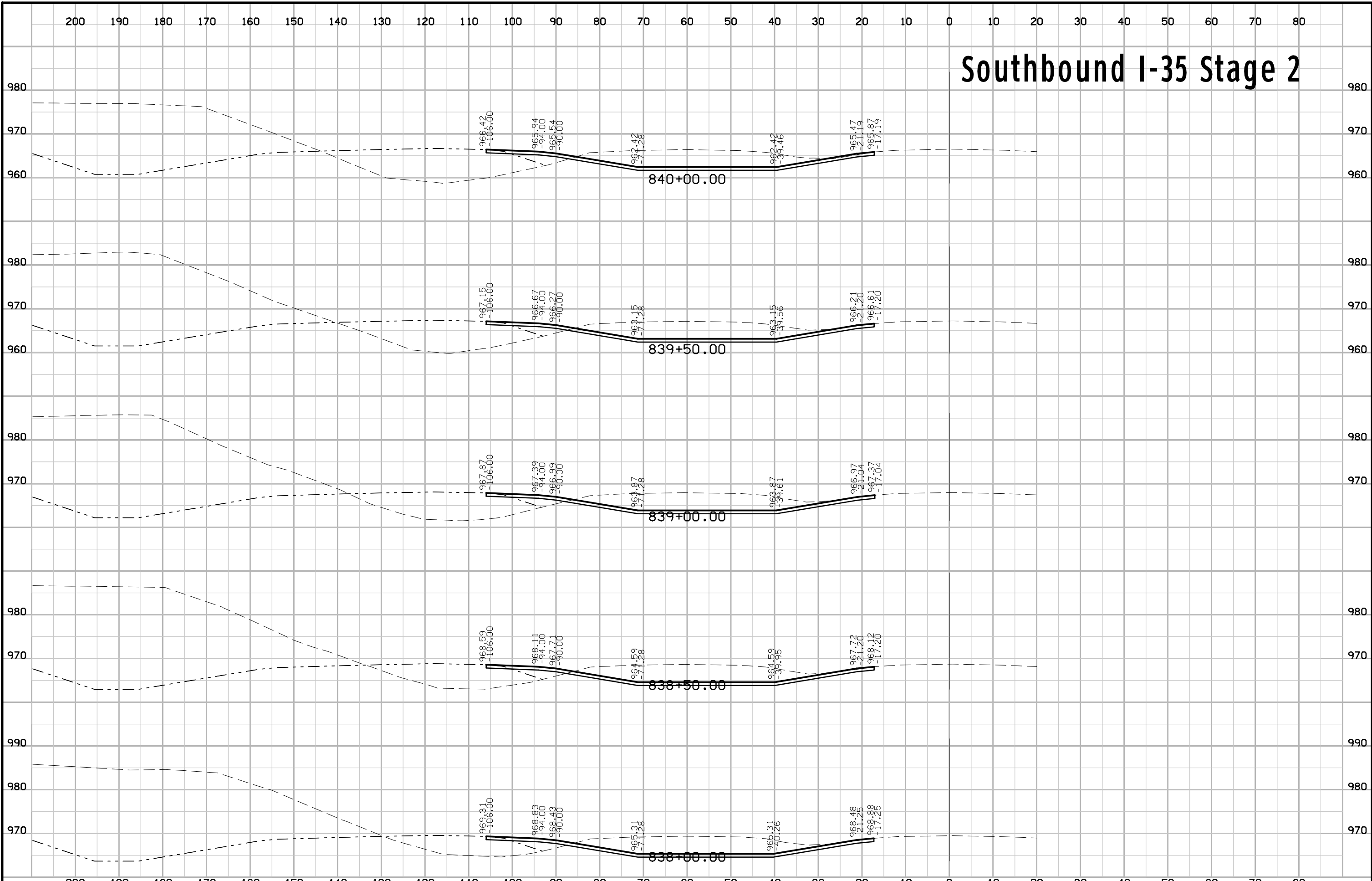
Southbound I-35 Stage 2



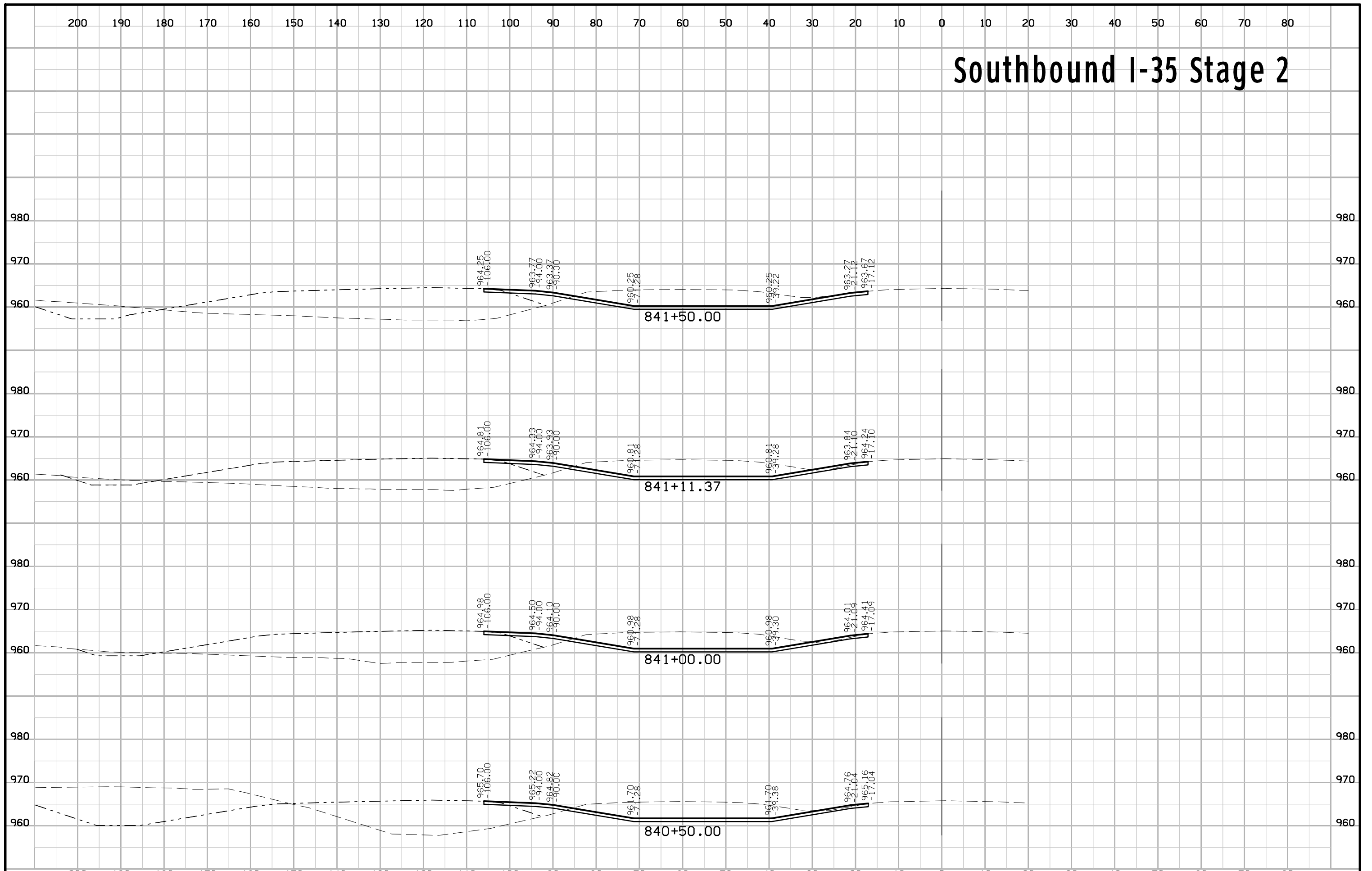
Southbound I-35 Stage 2



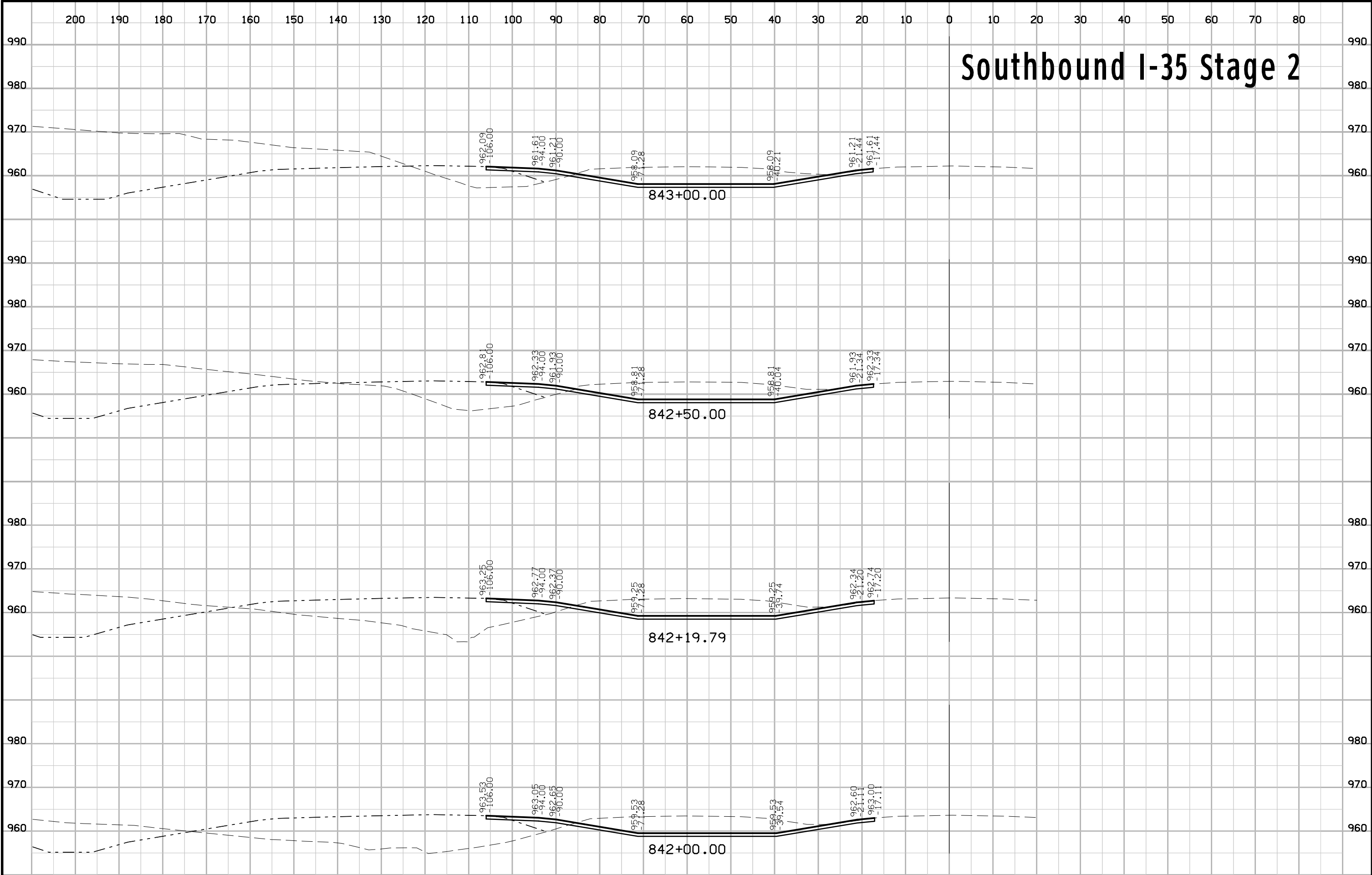
Southbound I-35 Stage 2



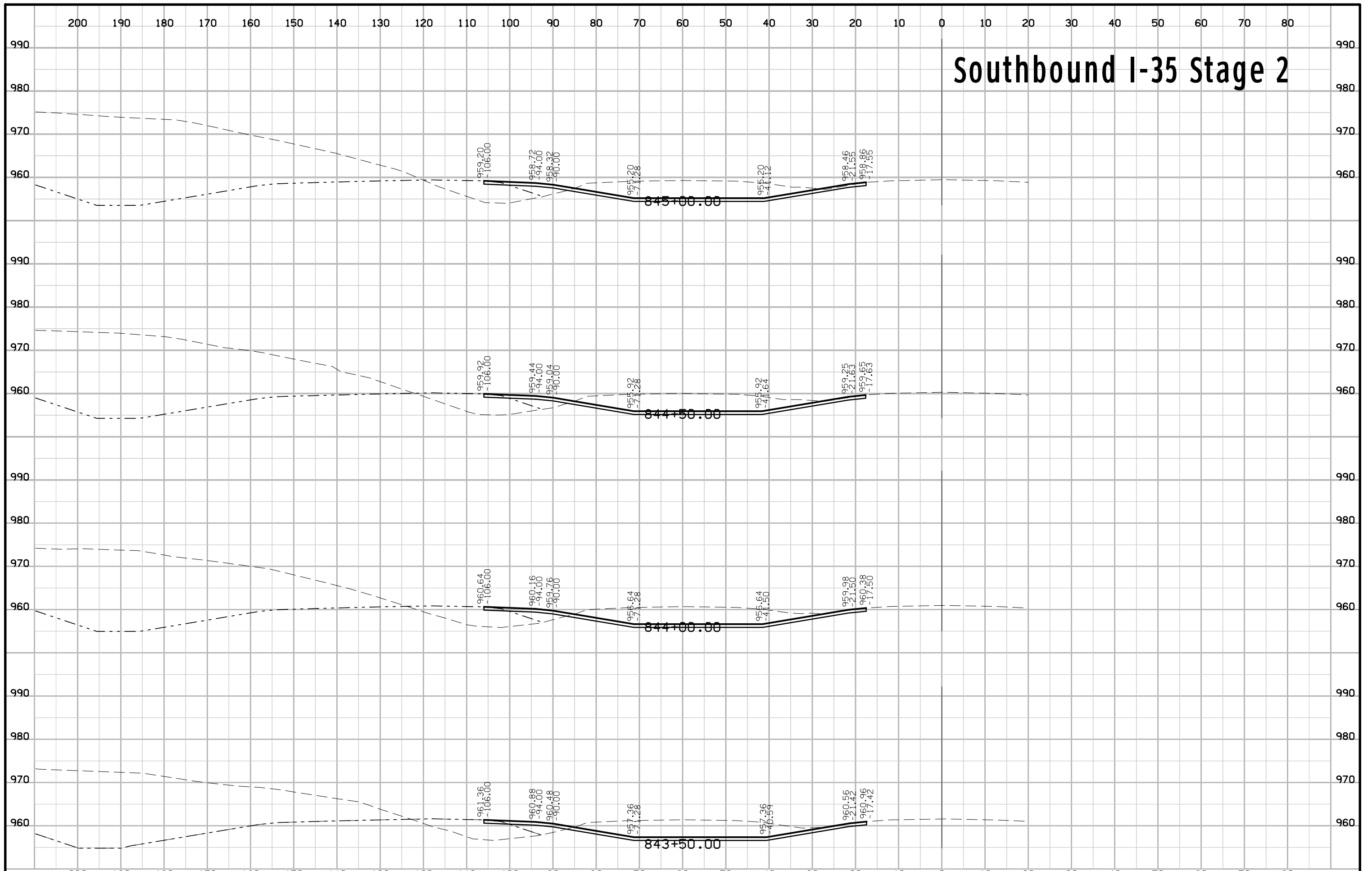
Southbound I-35 Stage 2



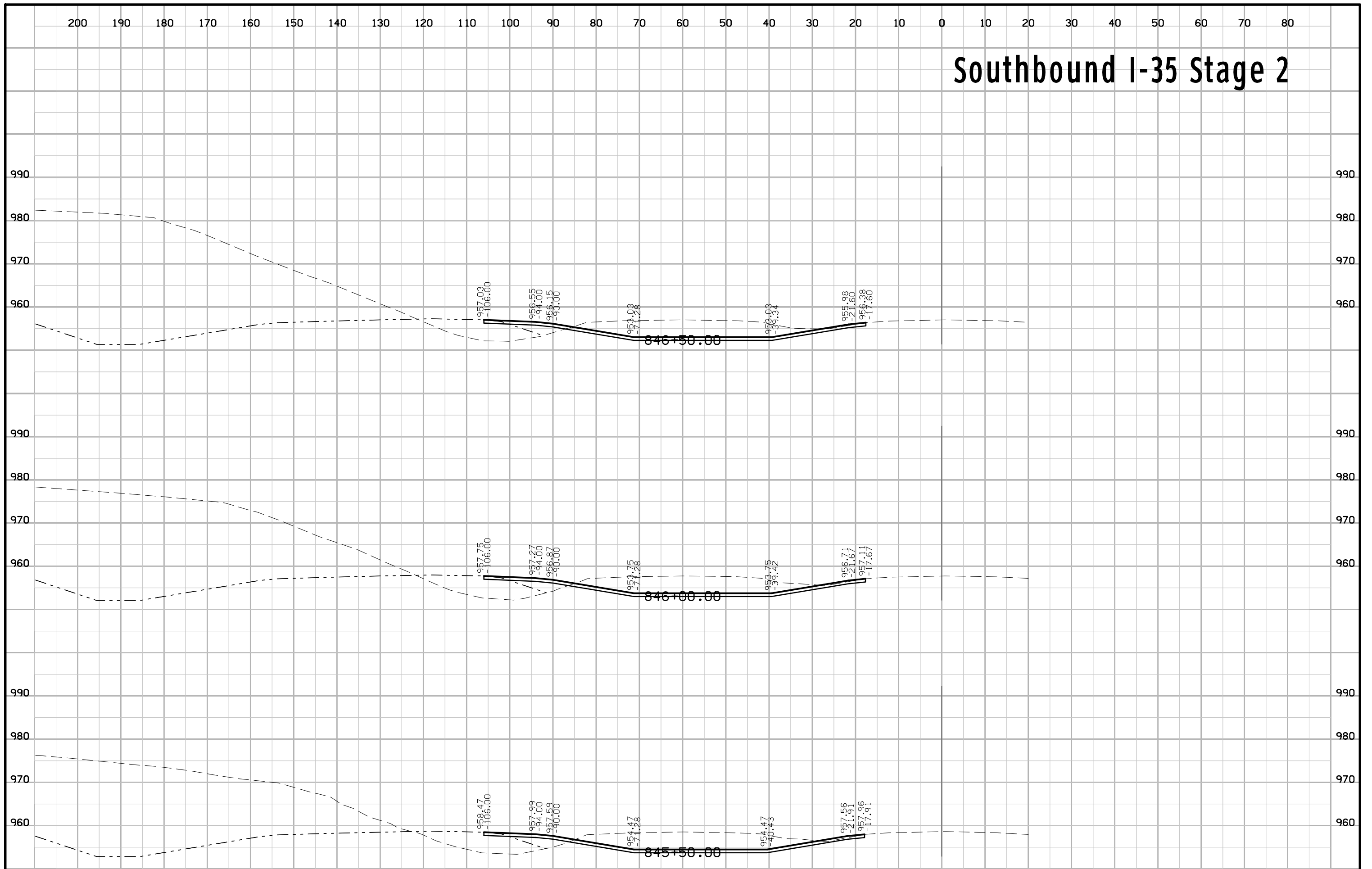
Southbound I-35 Stage 2



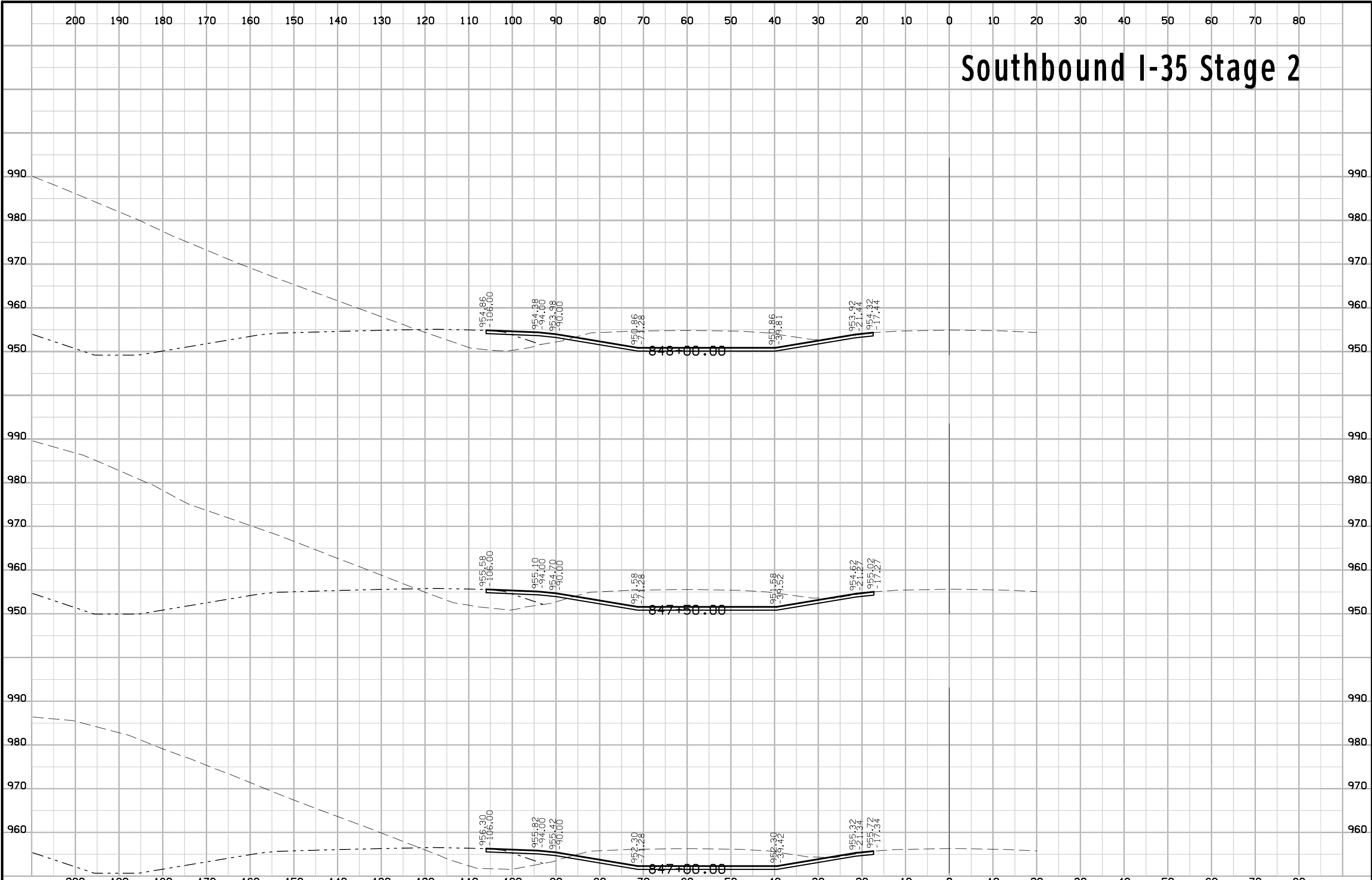
Southbound I-35 Stage 2



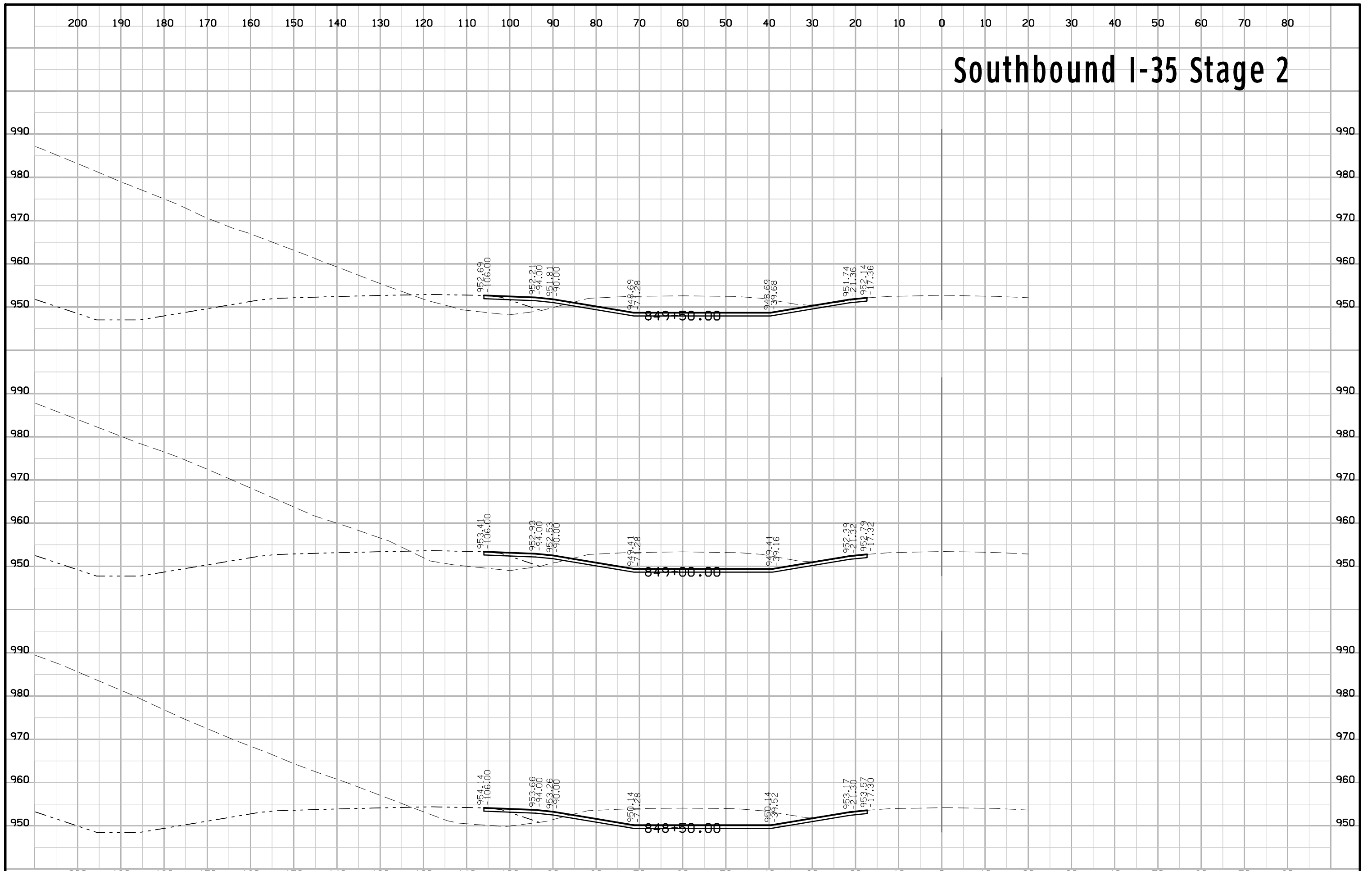
Southbound I-35 Stage 2



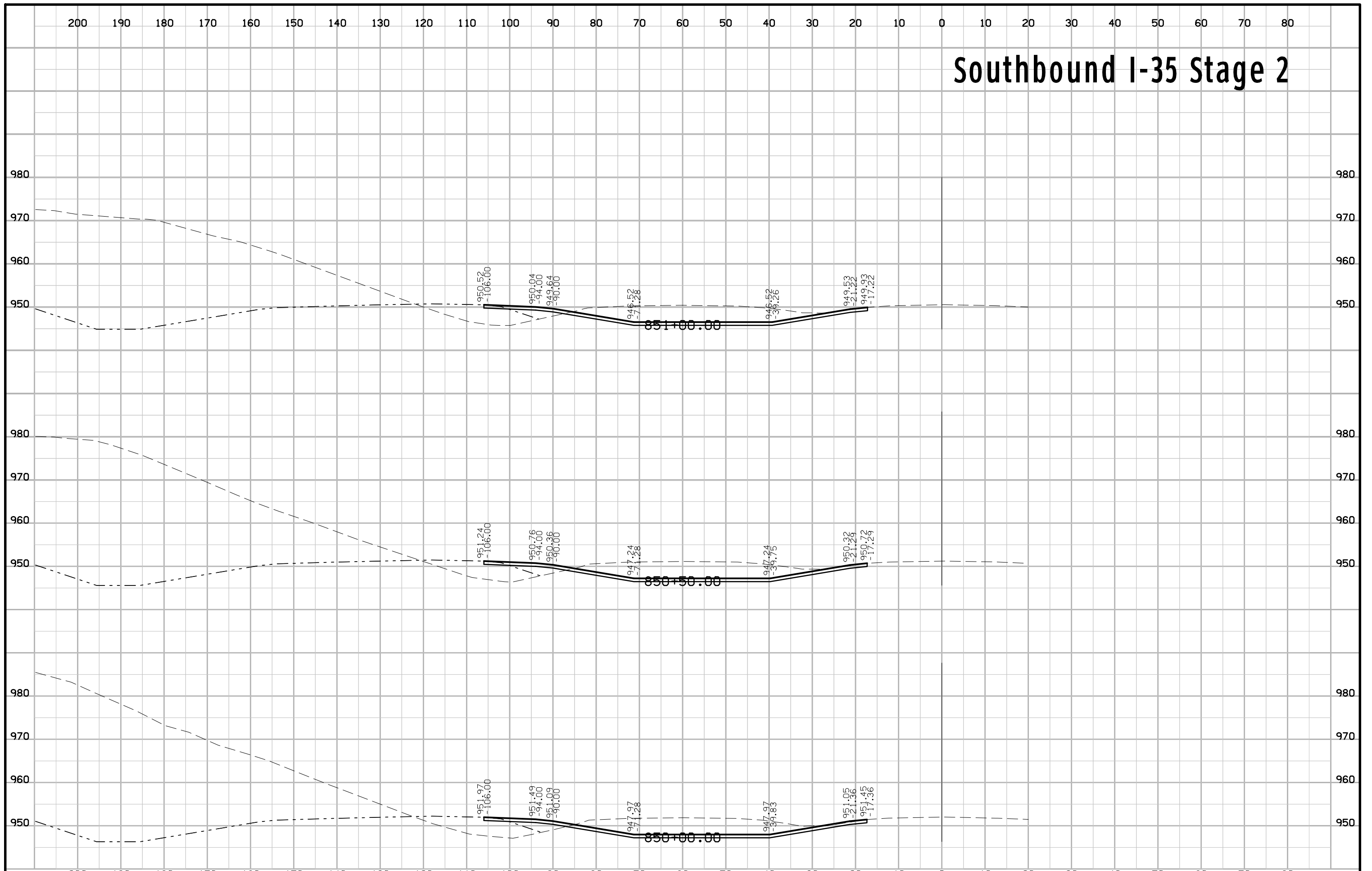
Southbound I-35 Stage 2



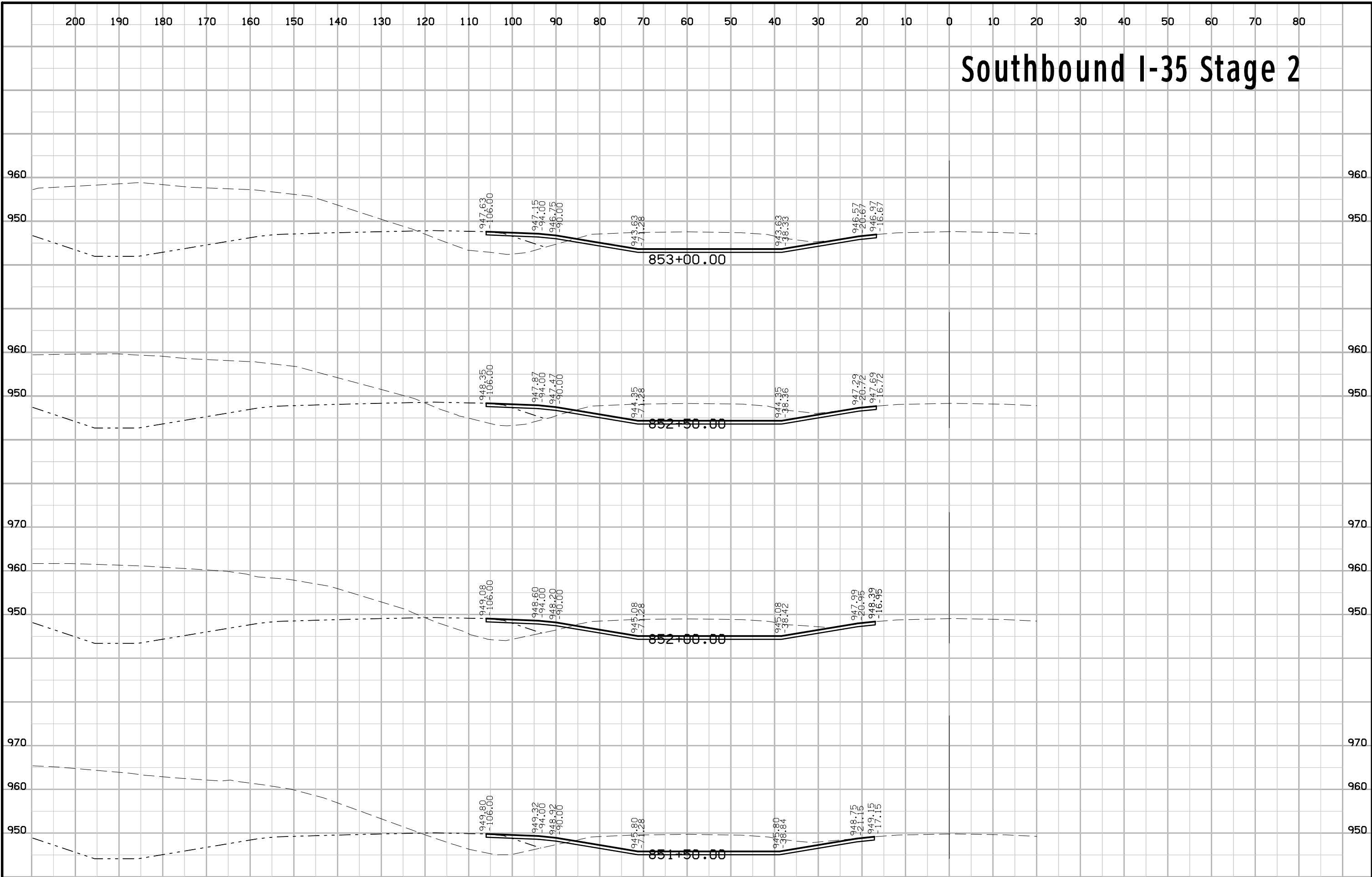
Southbound I-35 Stage 2



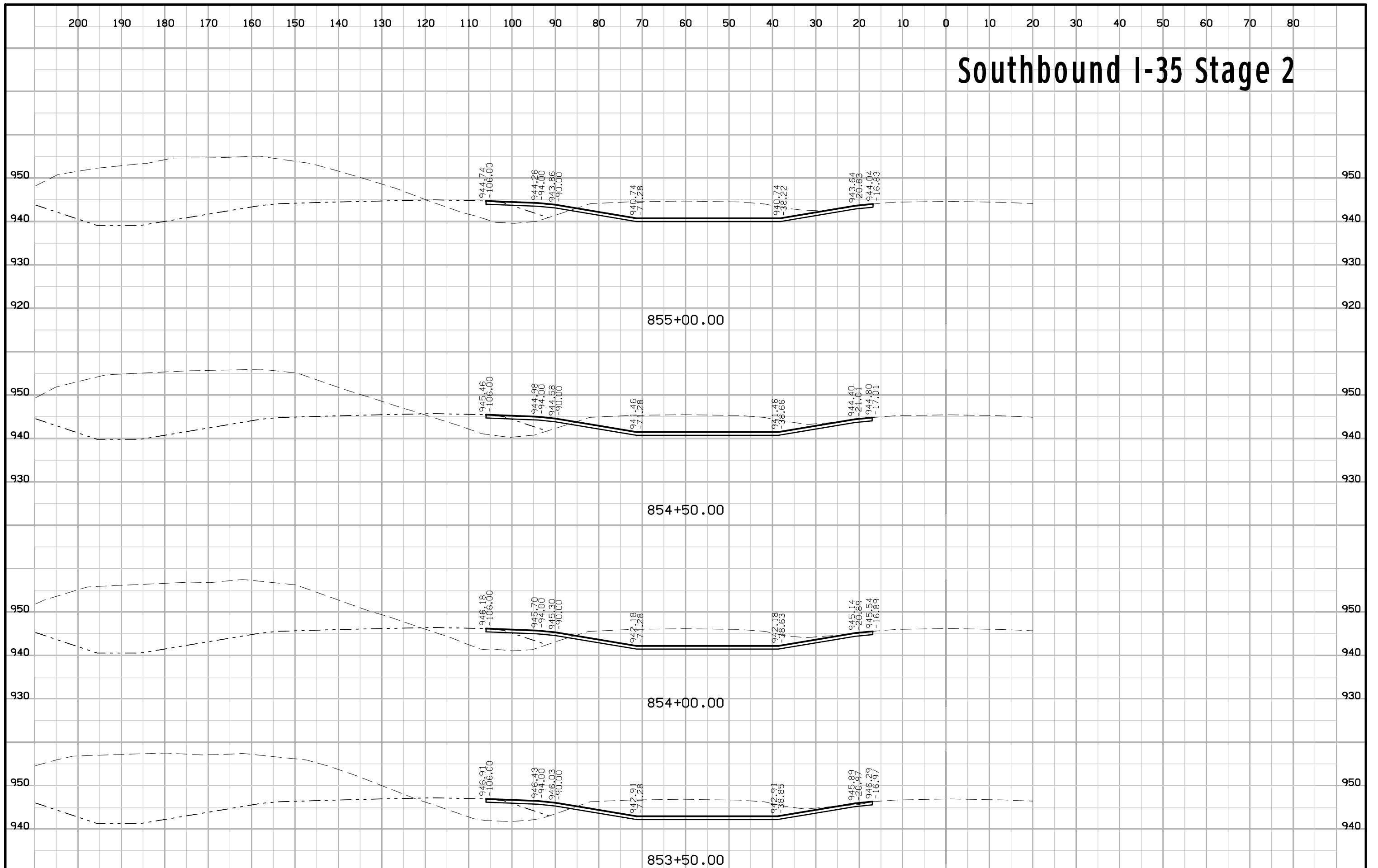
Southbound I-35 Stage 2



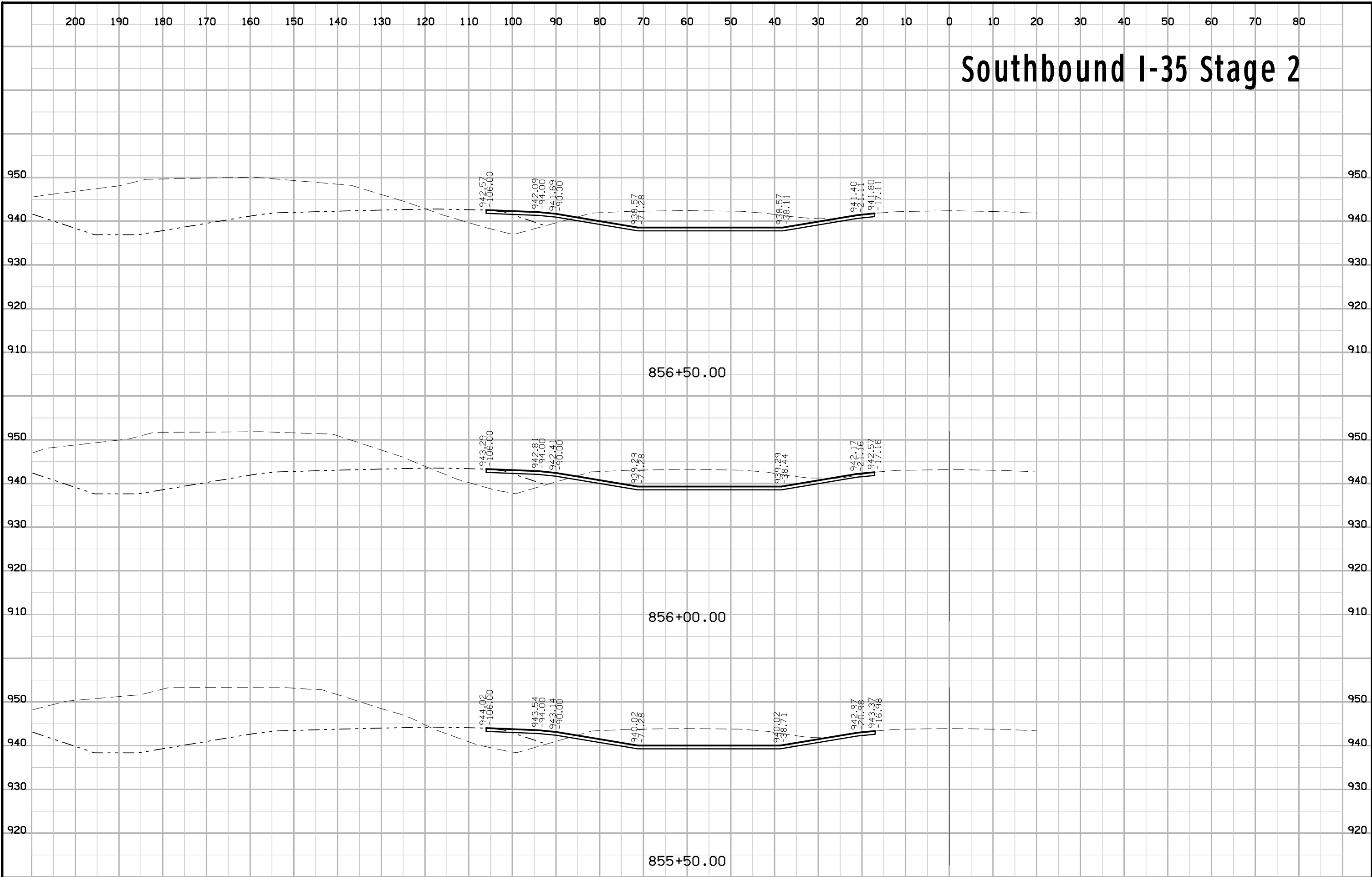
Southbound I-35 Stage 2



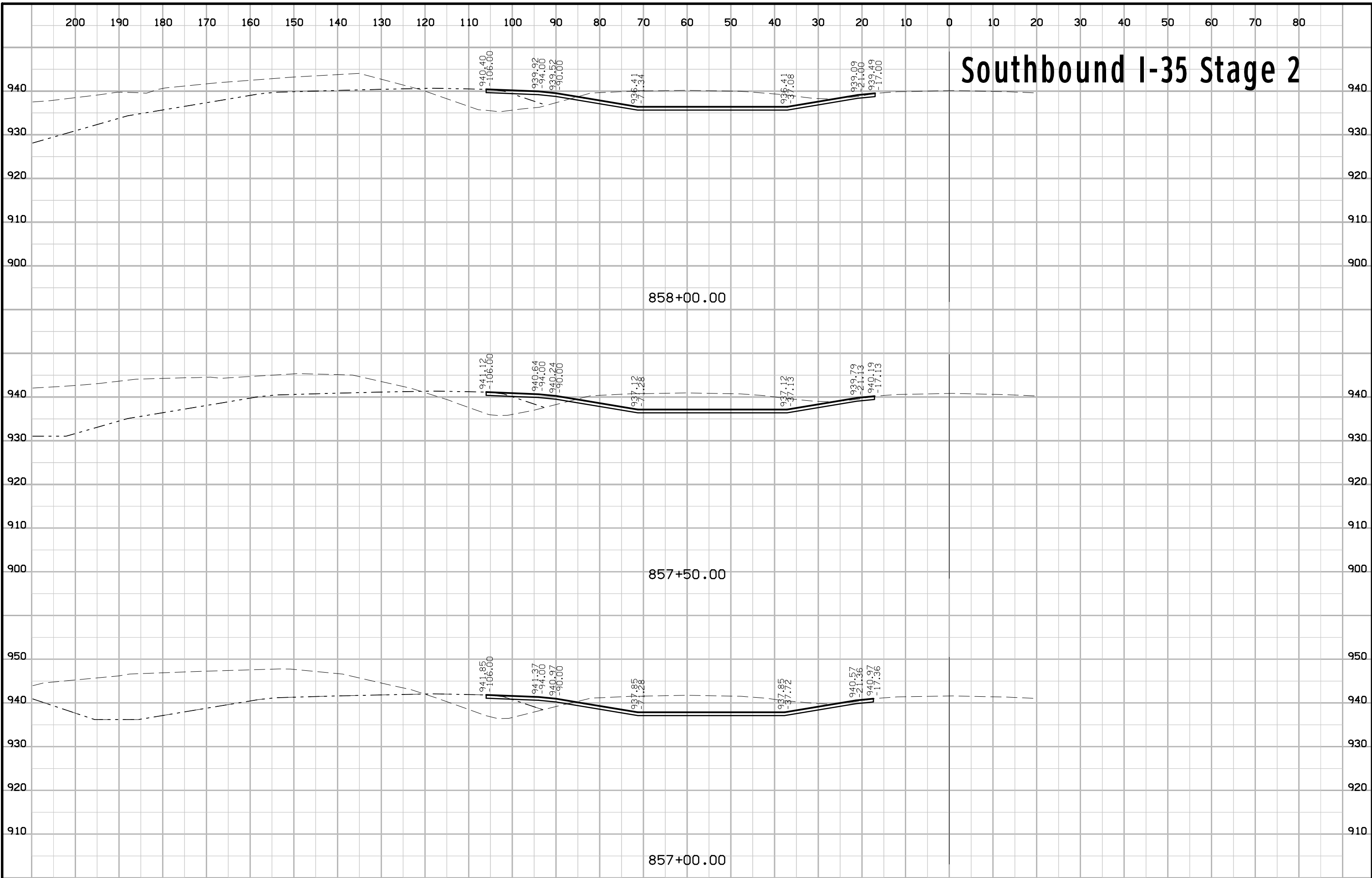
Southbound I-35 Stage 2



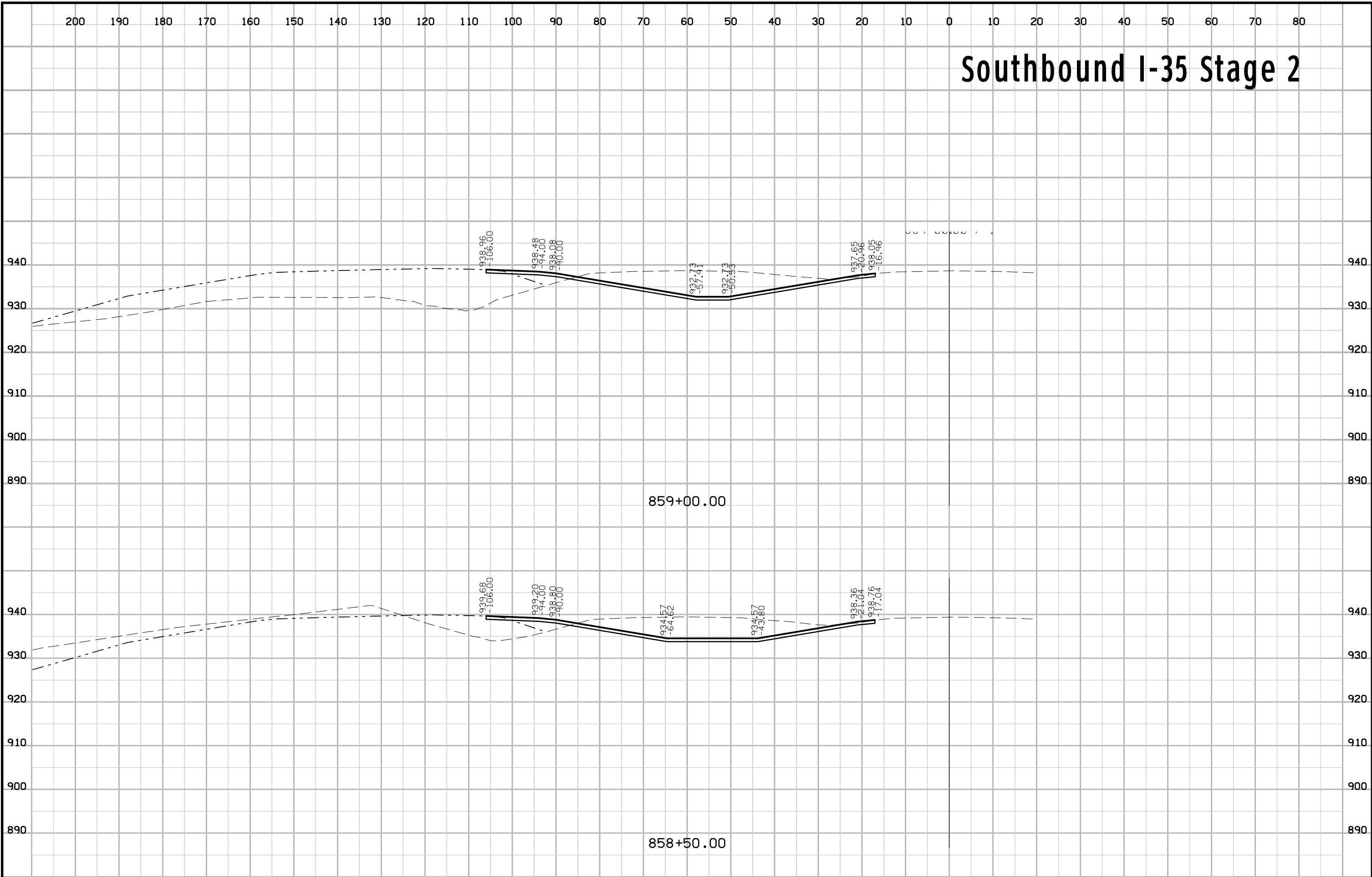
Southbound I-35 Stage 2



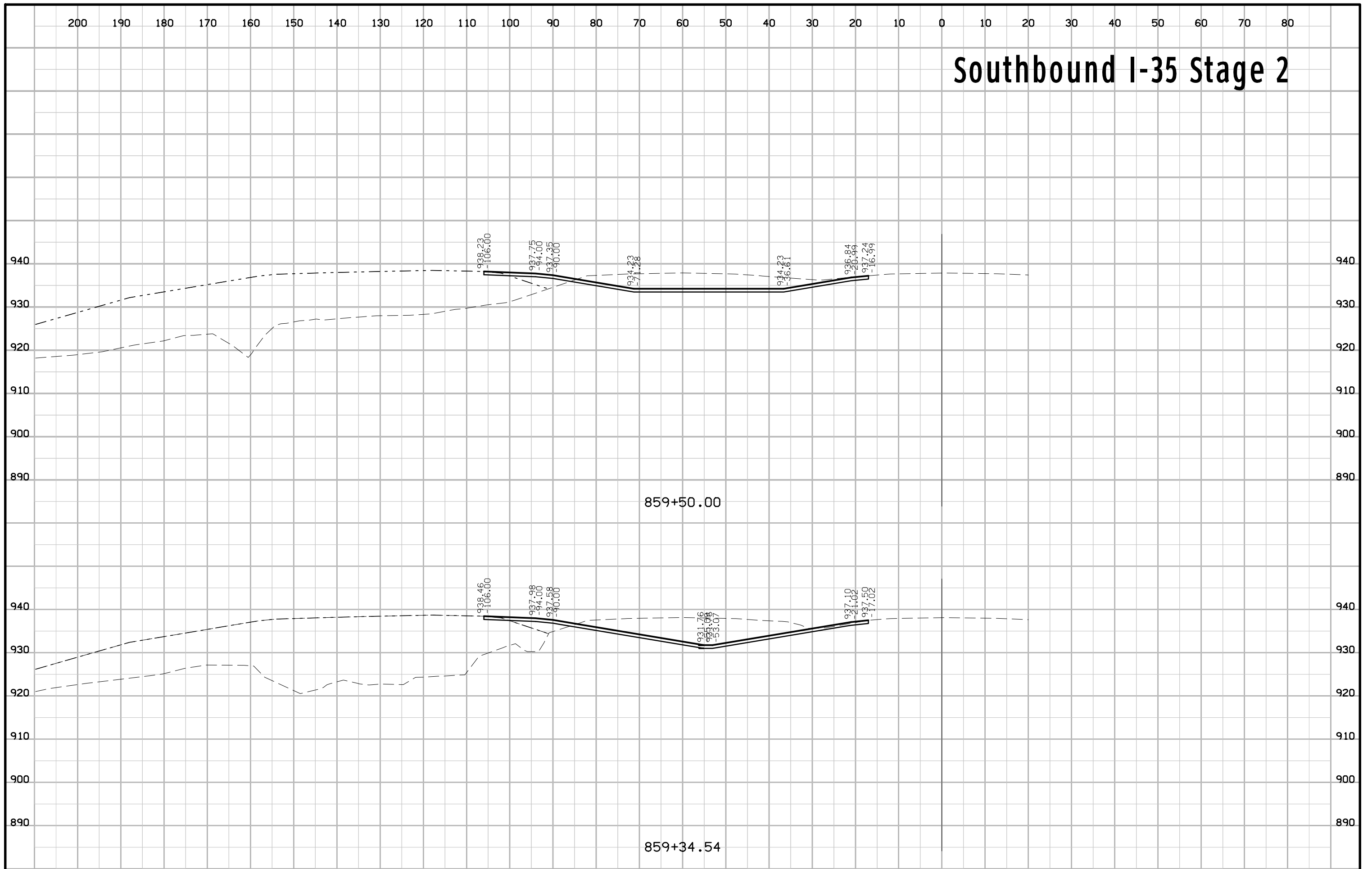
Southbound I-35 Stage 2



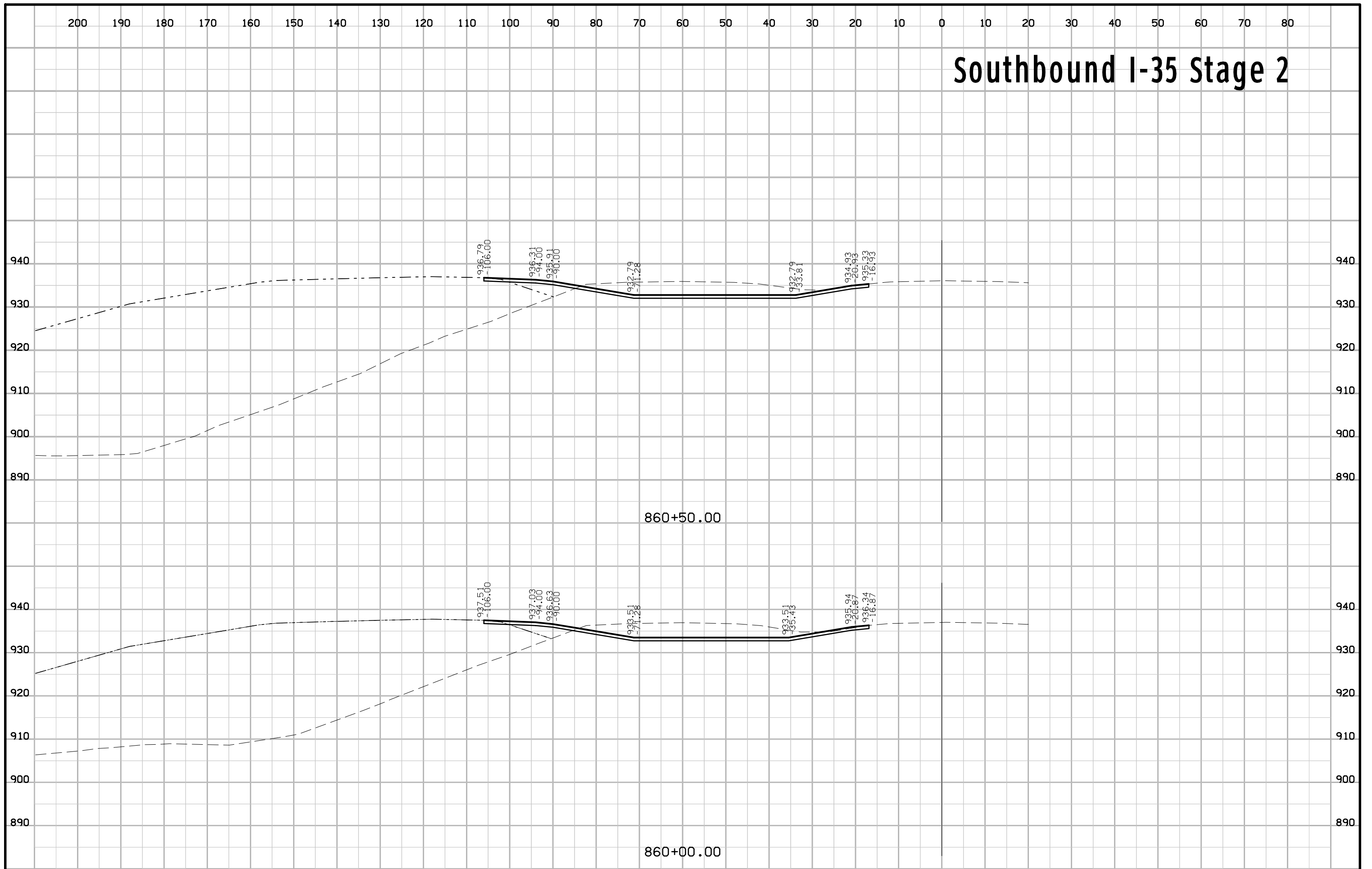
Southbound I-35 Stage 2



Southbound I-35 Stage 2



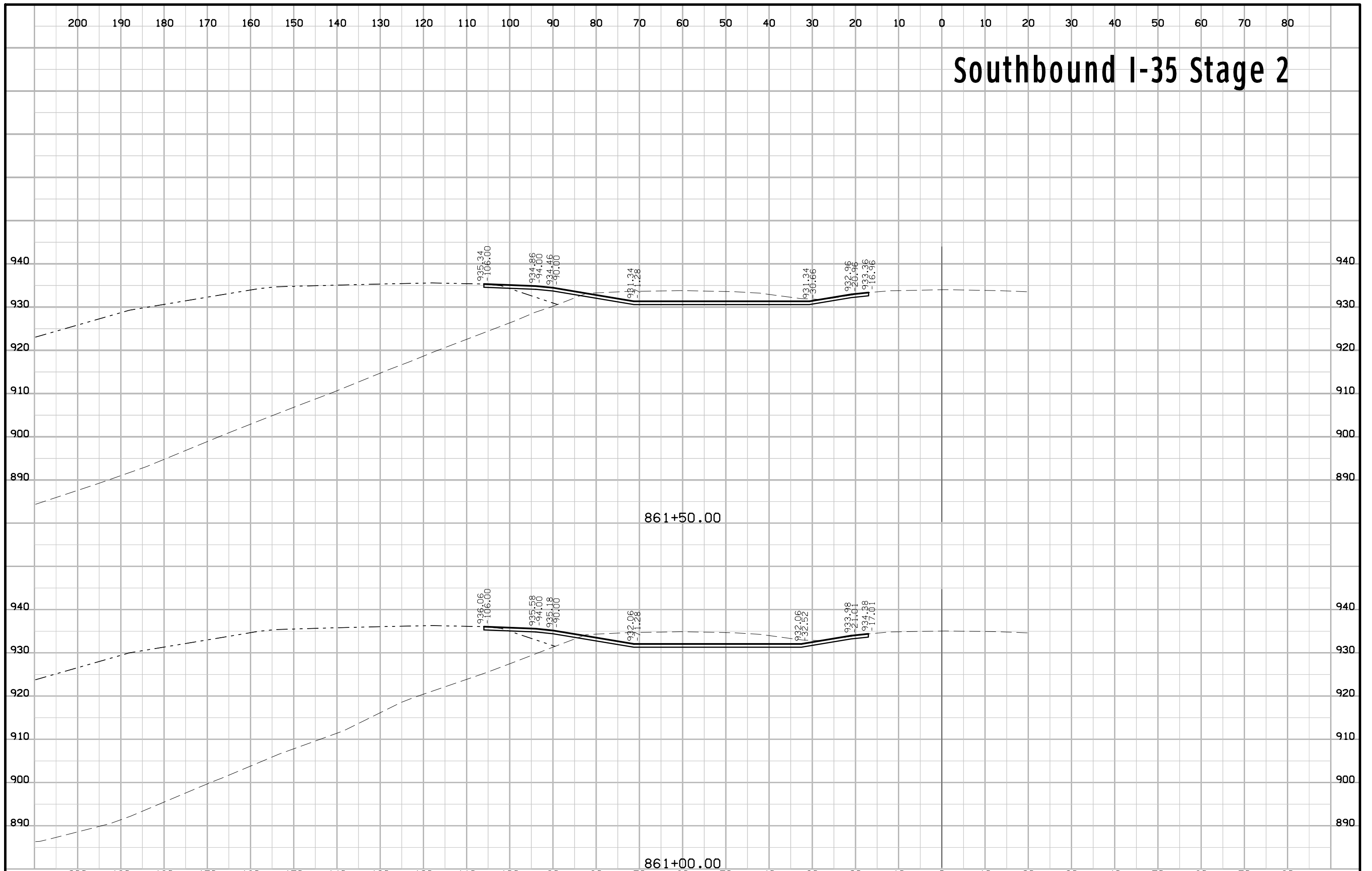
Southbound I-35 Stage 2



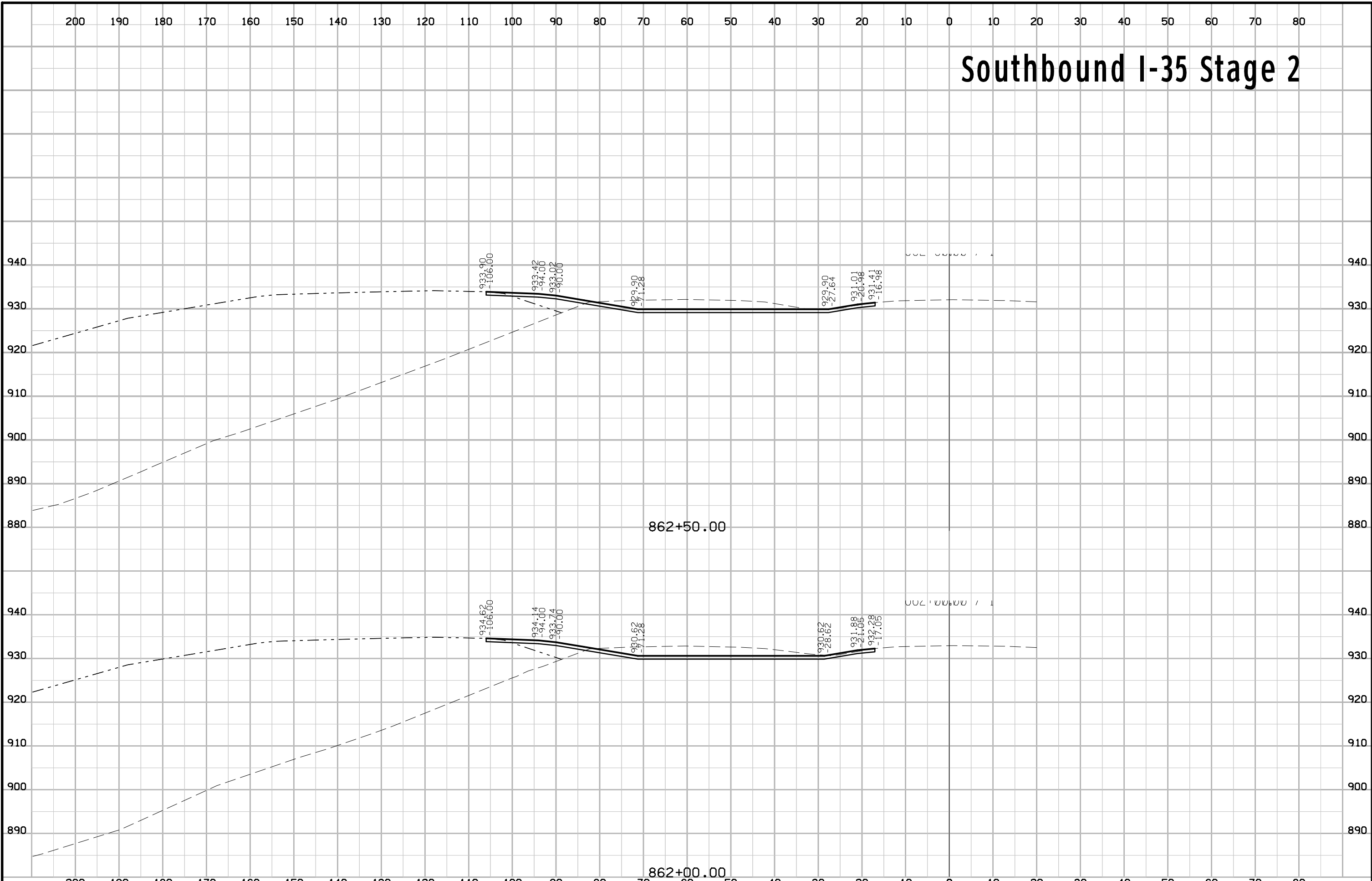
860+50.00

860+00.00

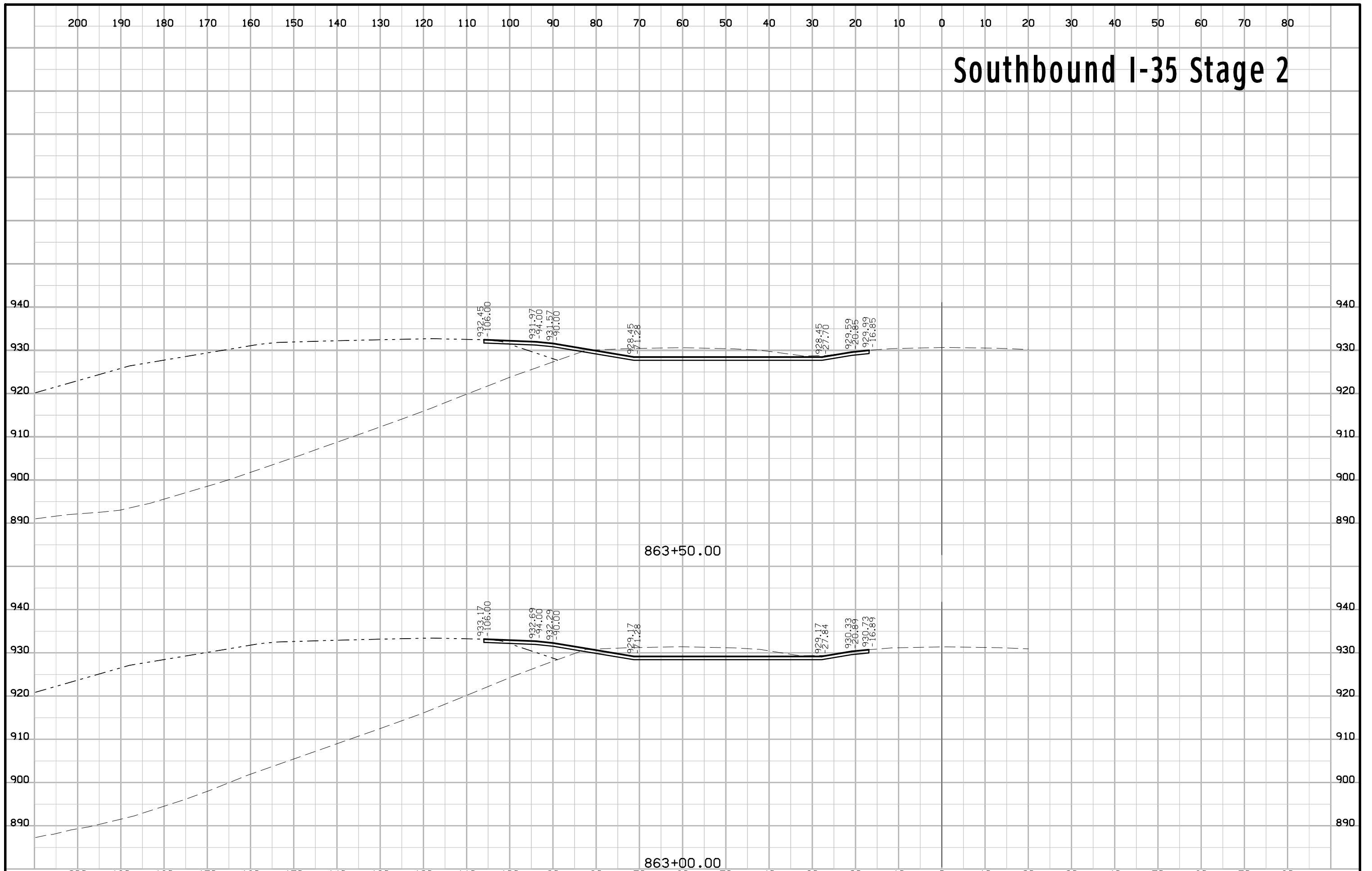
Southbound I-35 Stage 2



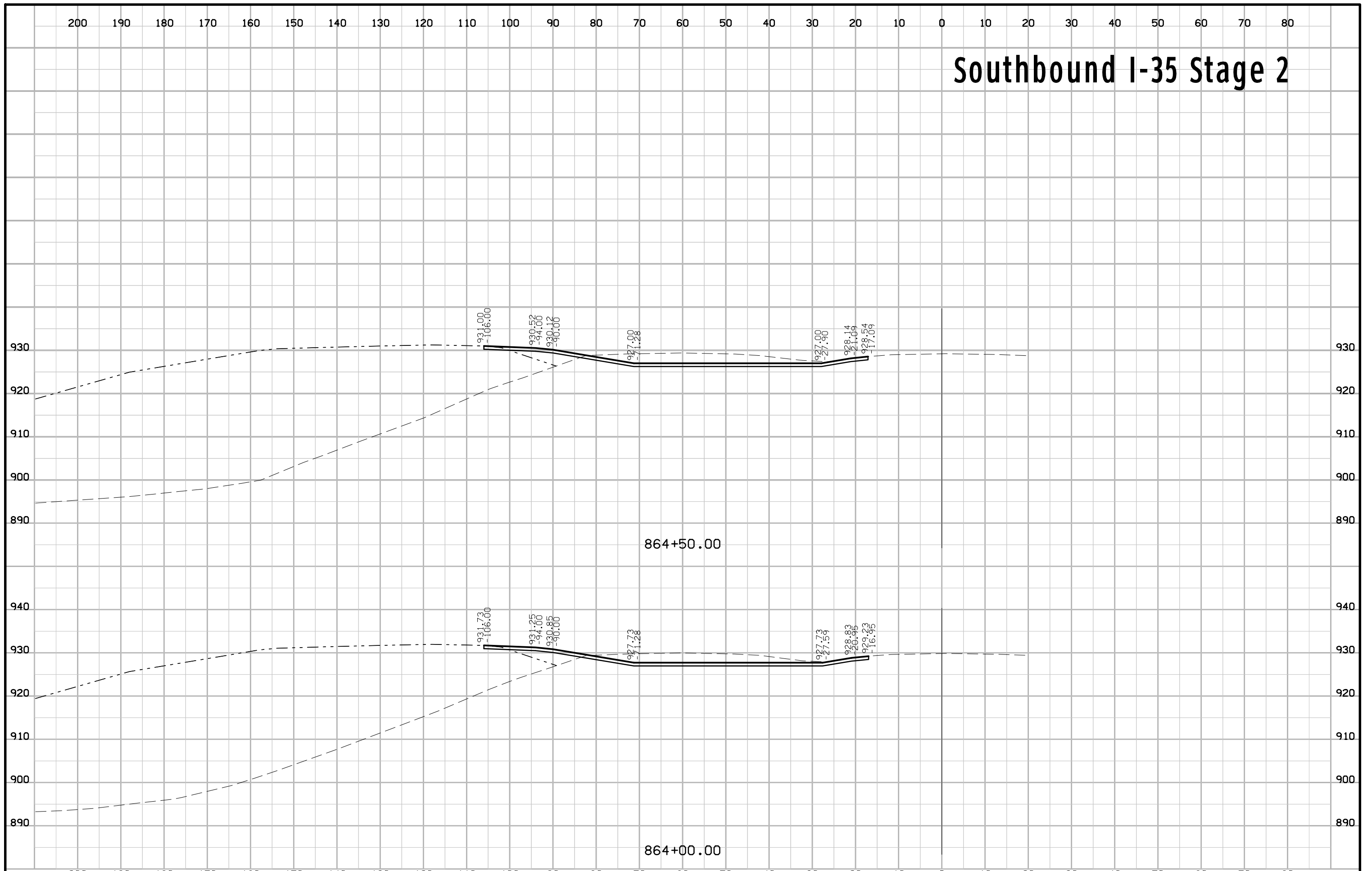
Southbound I-35 Stage 2

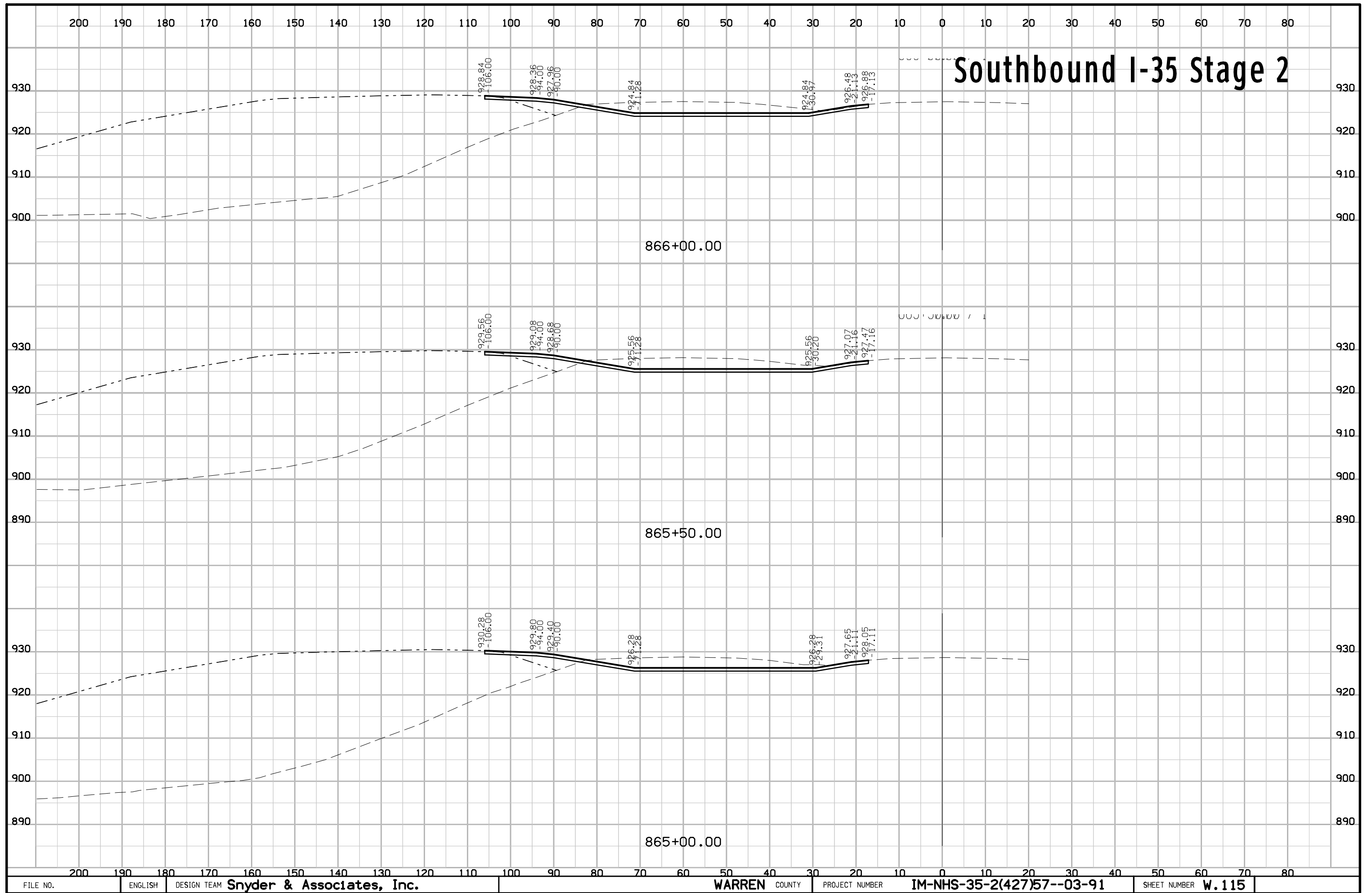


Southbound I-35 Stage 2

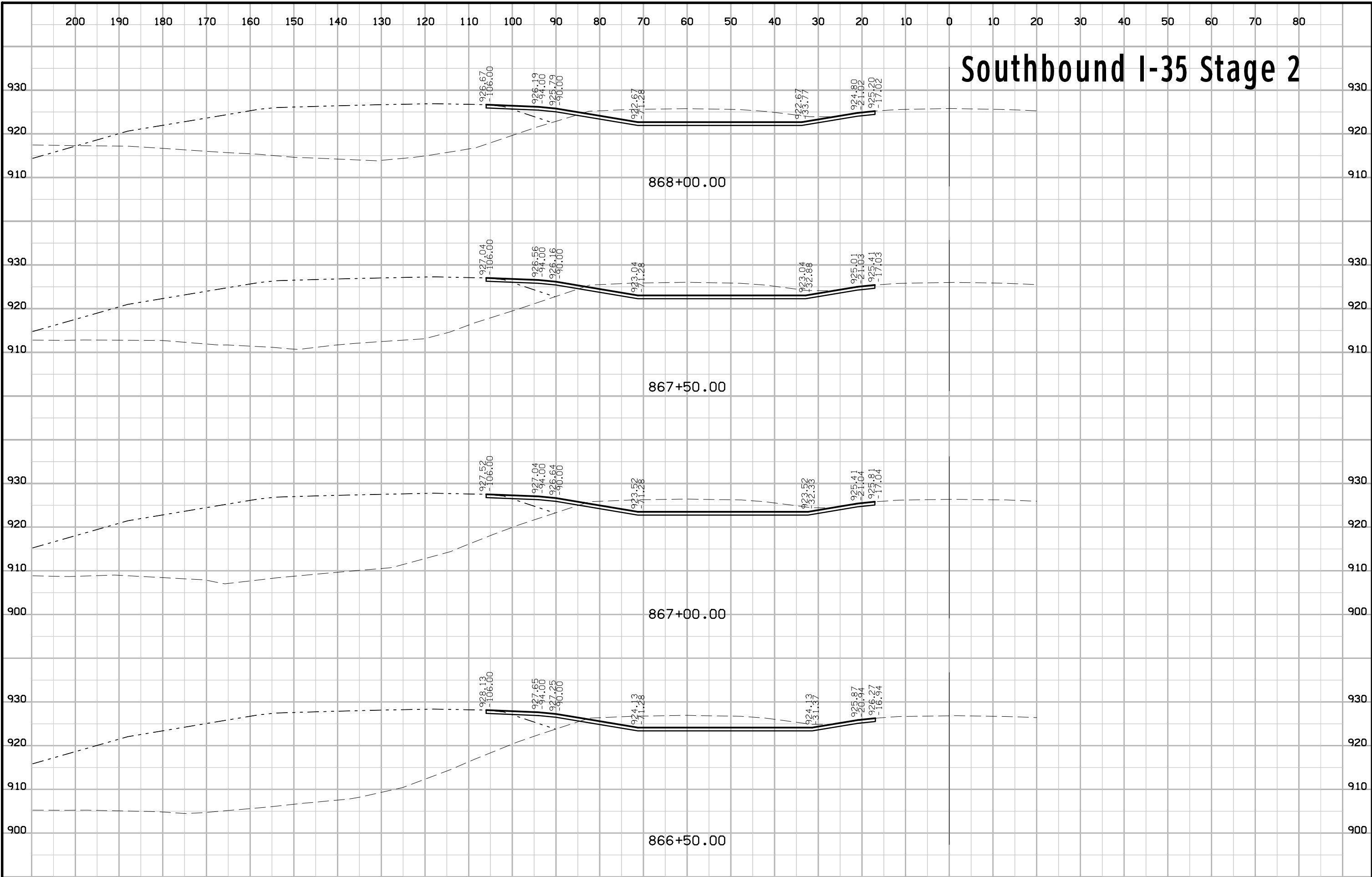


Southbound I-35 Stage 2

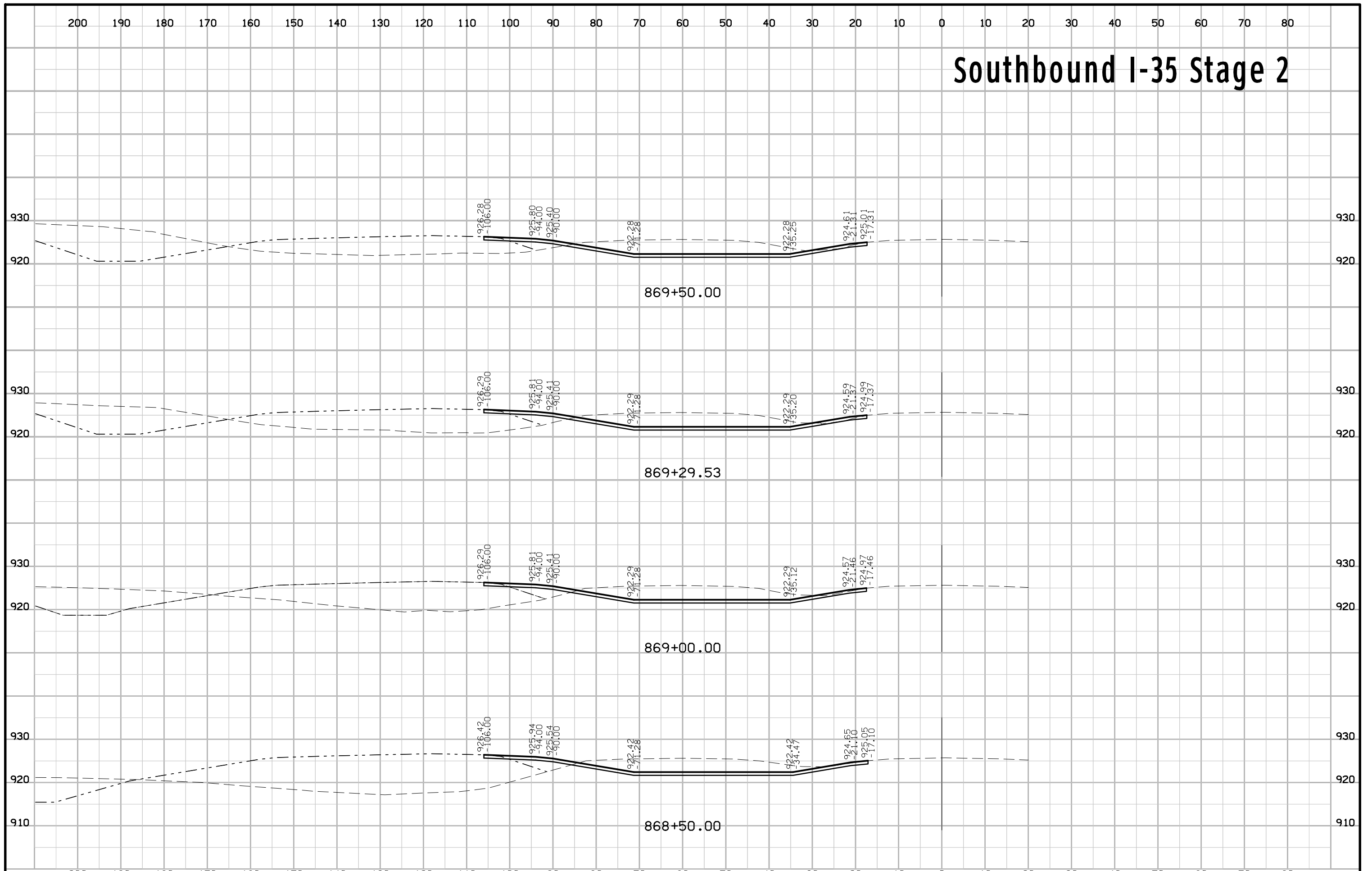




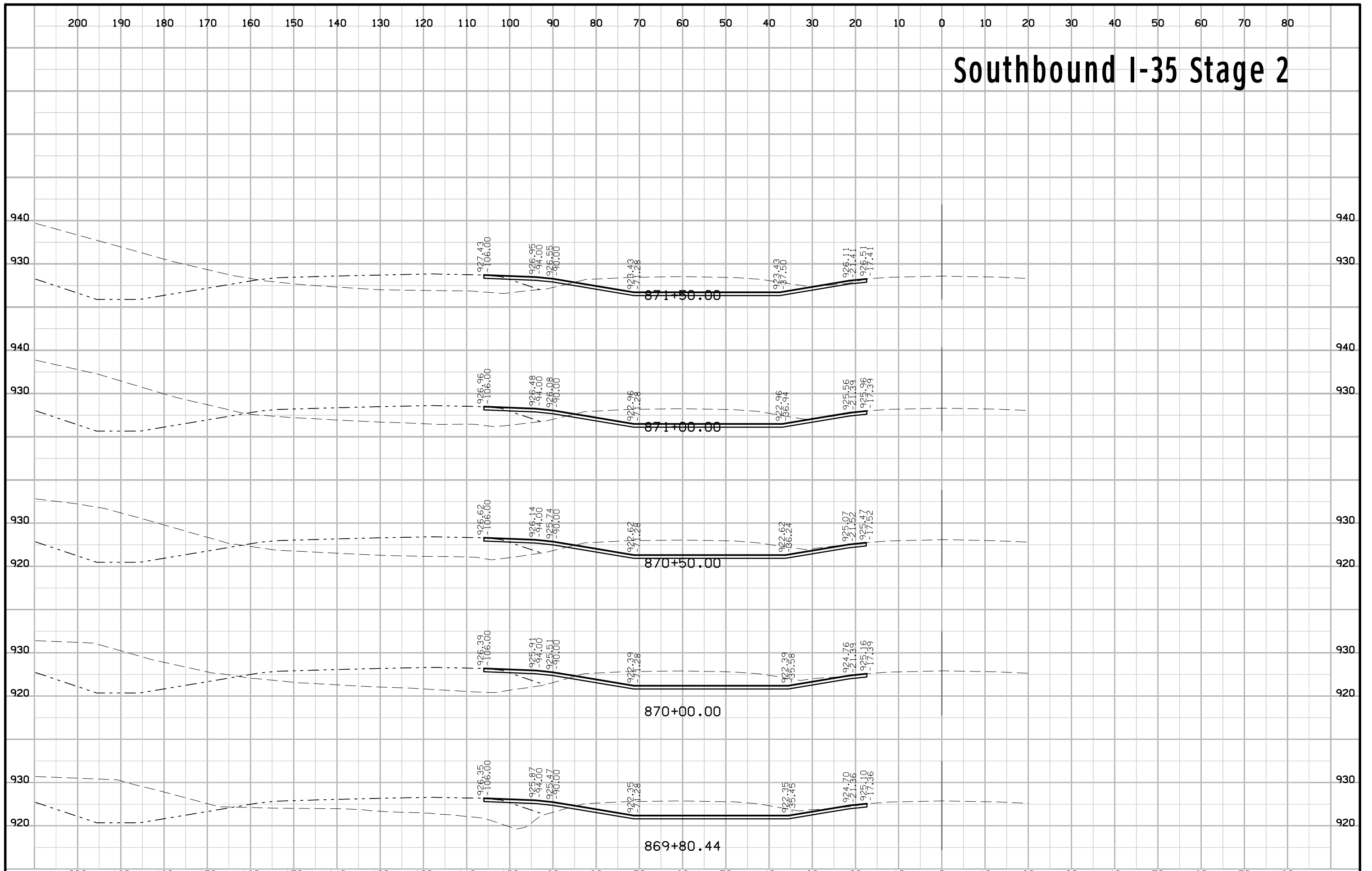
Southbound I-35 Stage 2



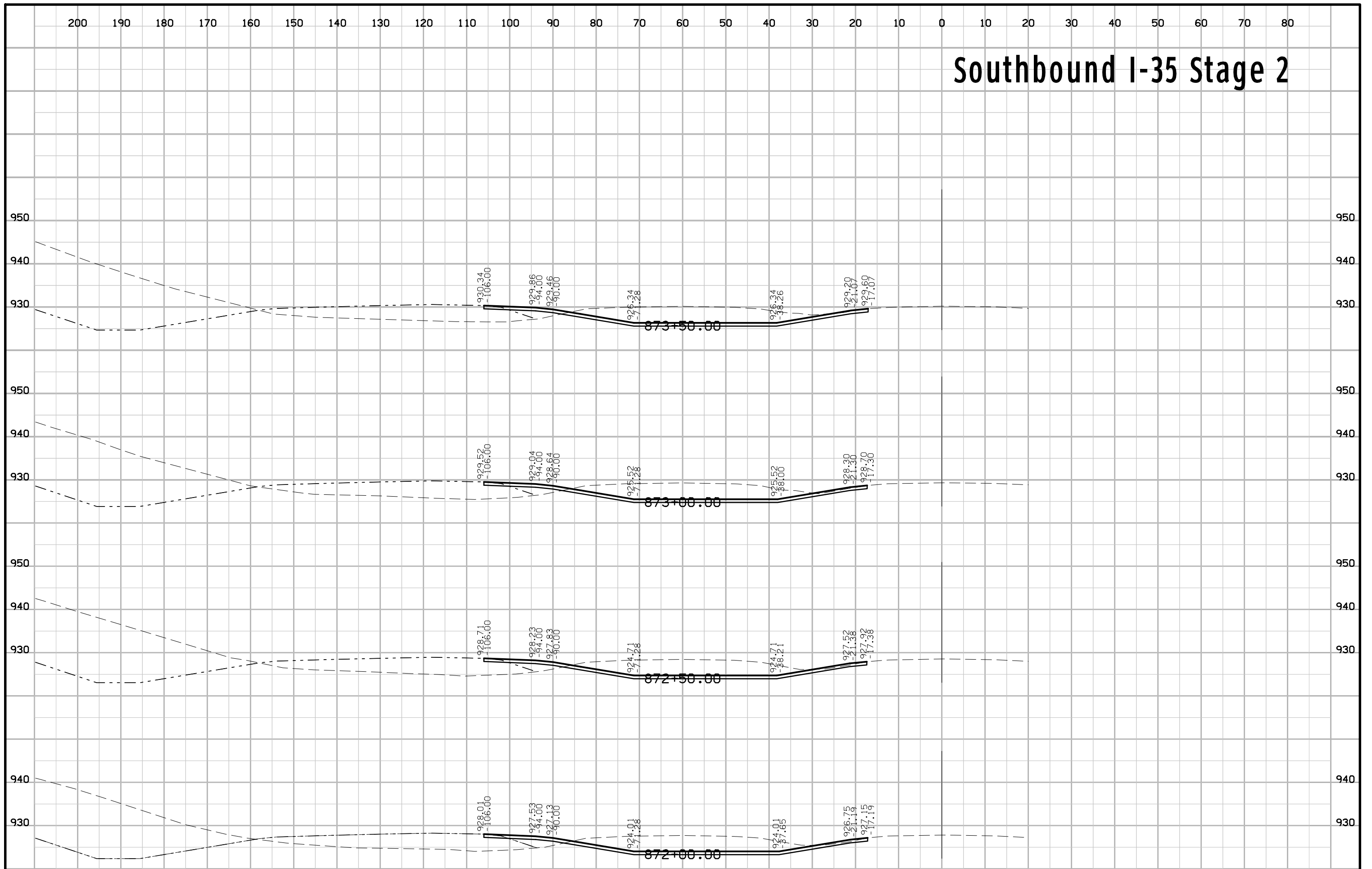
Southbound I-35 Stage 2



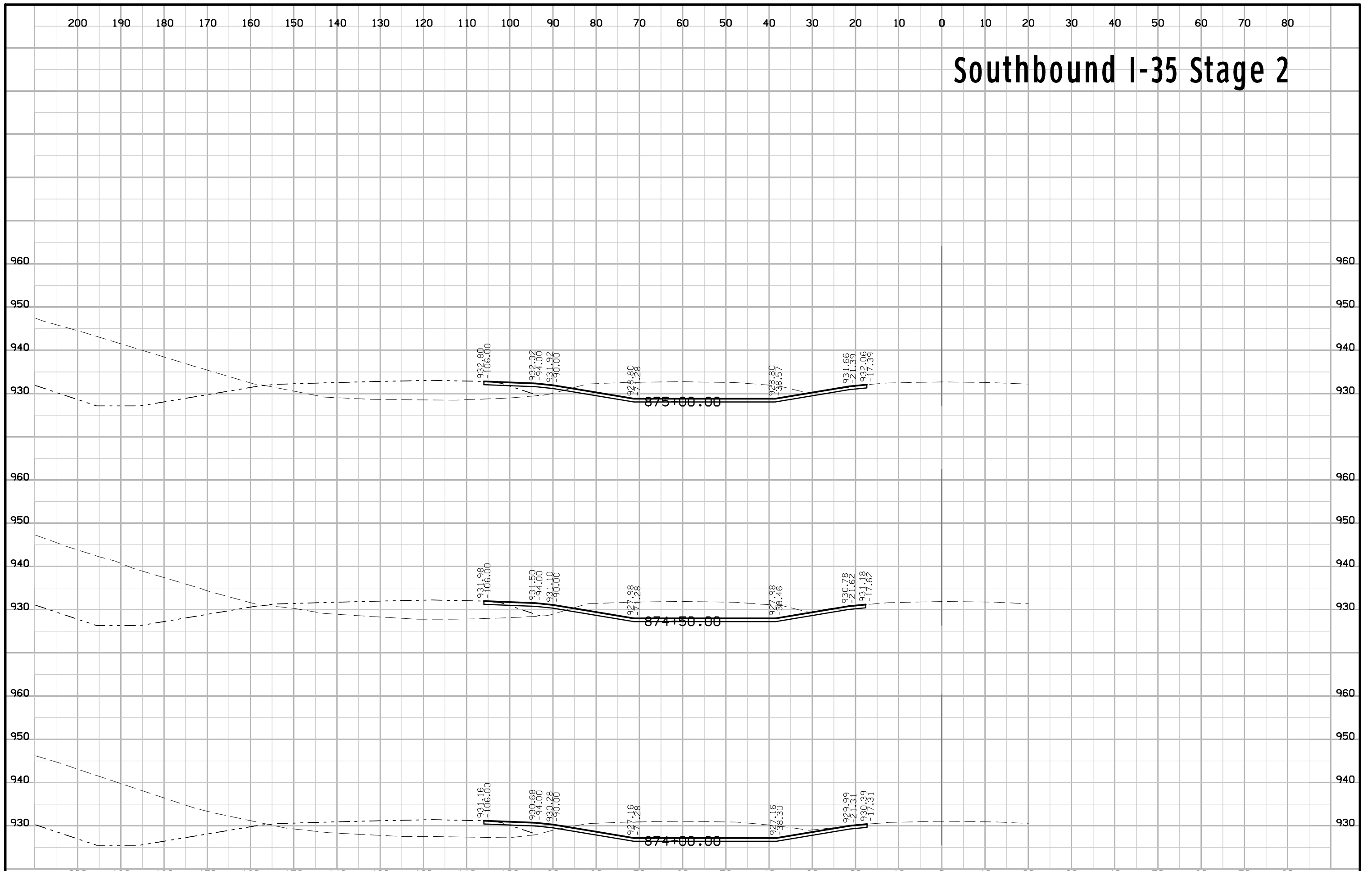
Southbound I-35 Stage 2



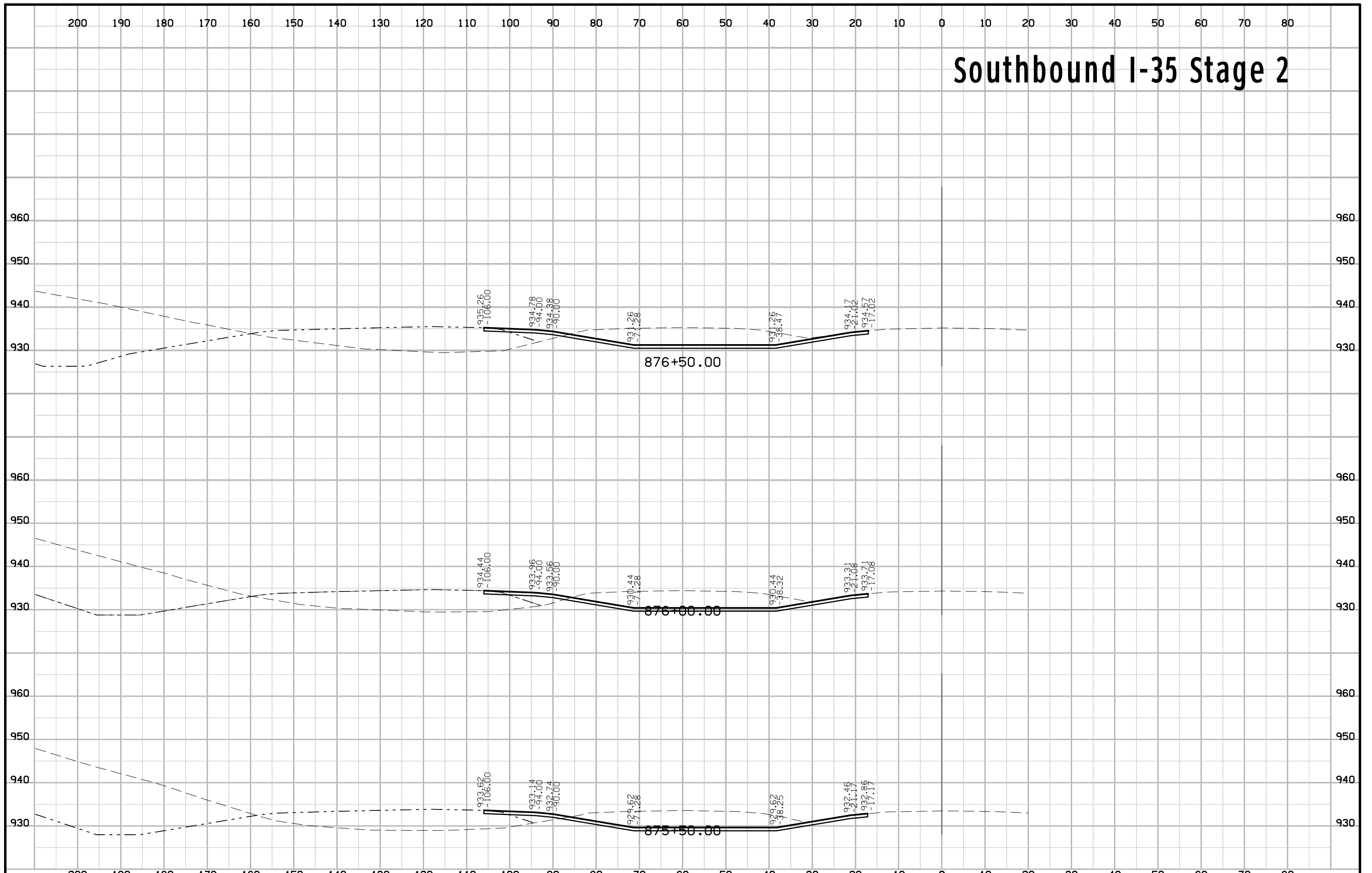
Southbound I-35 Stage 2



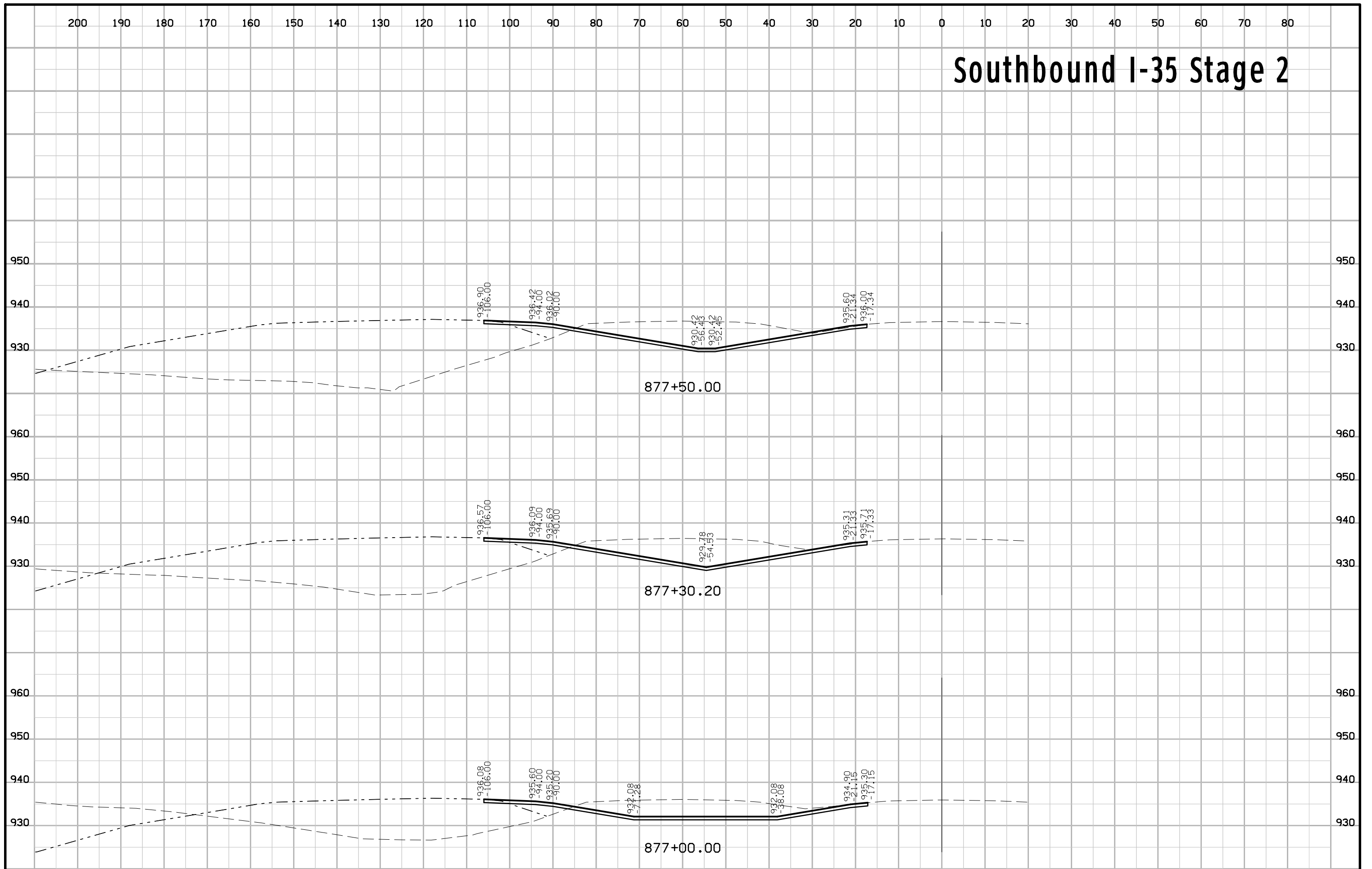
Southbound I-35 Stage 2



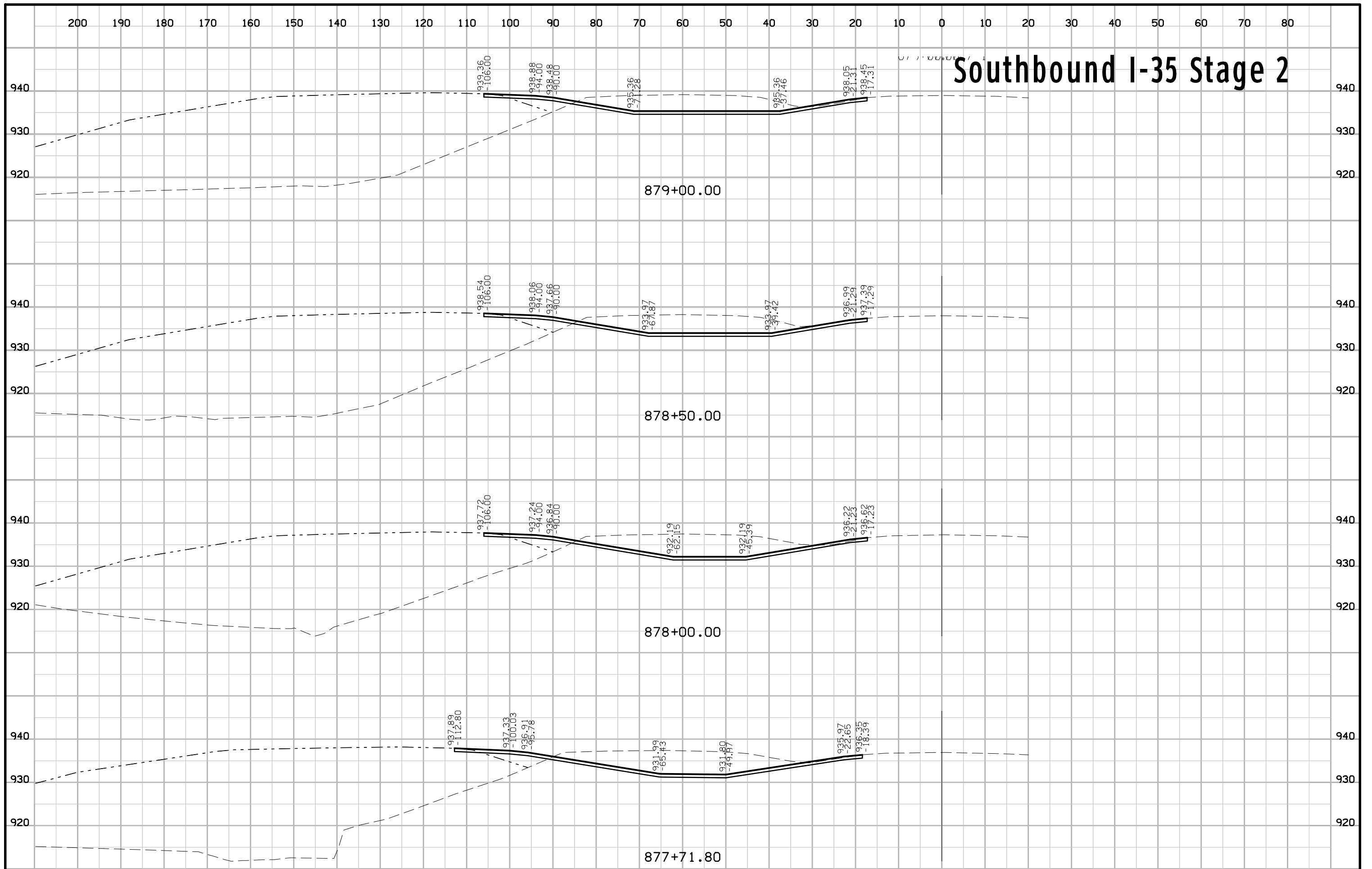
Southbound I-35 Stage 2



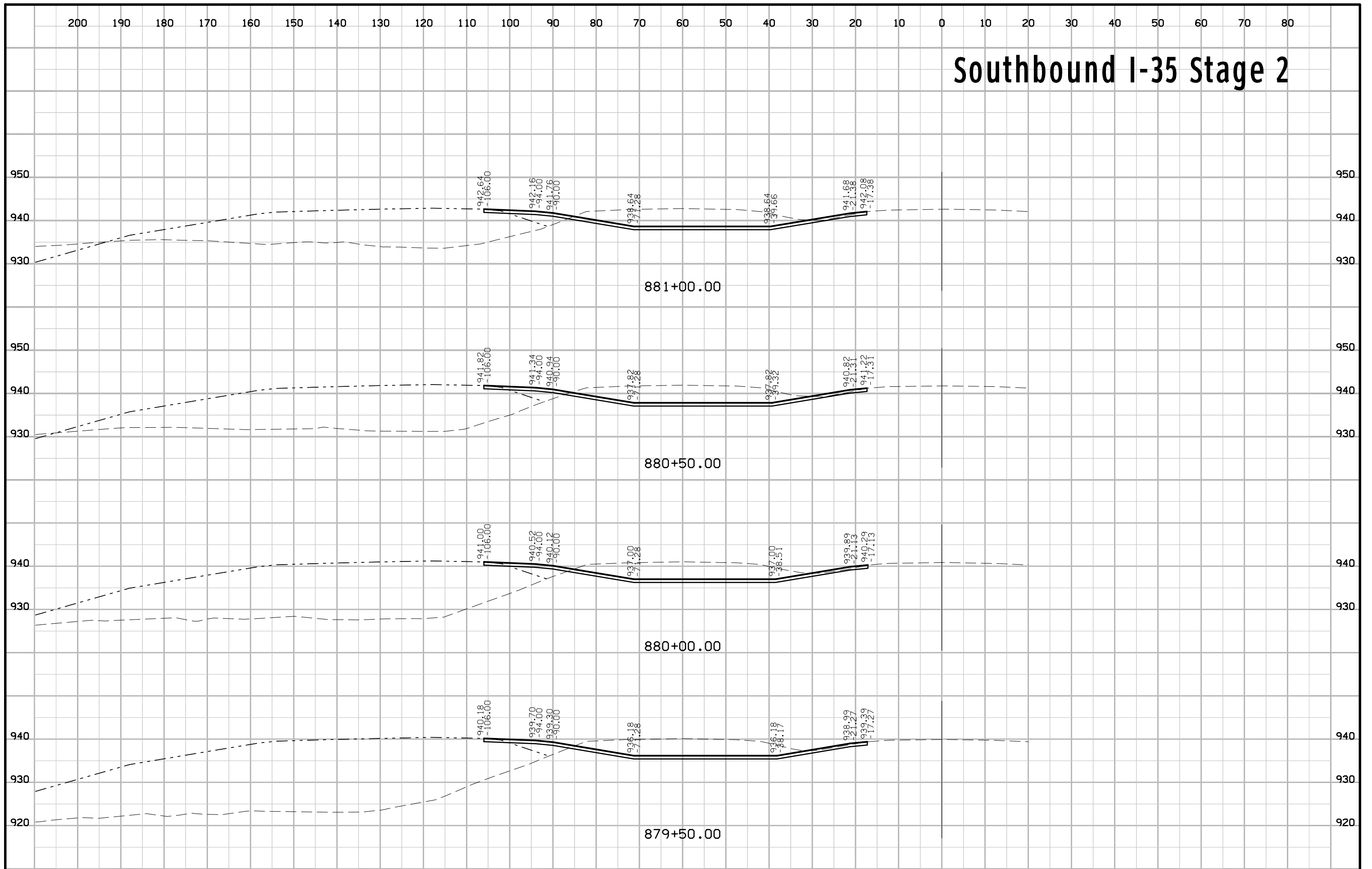
Southbound I-35 Stage 2



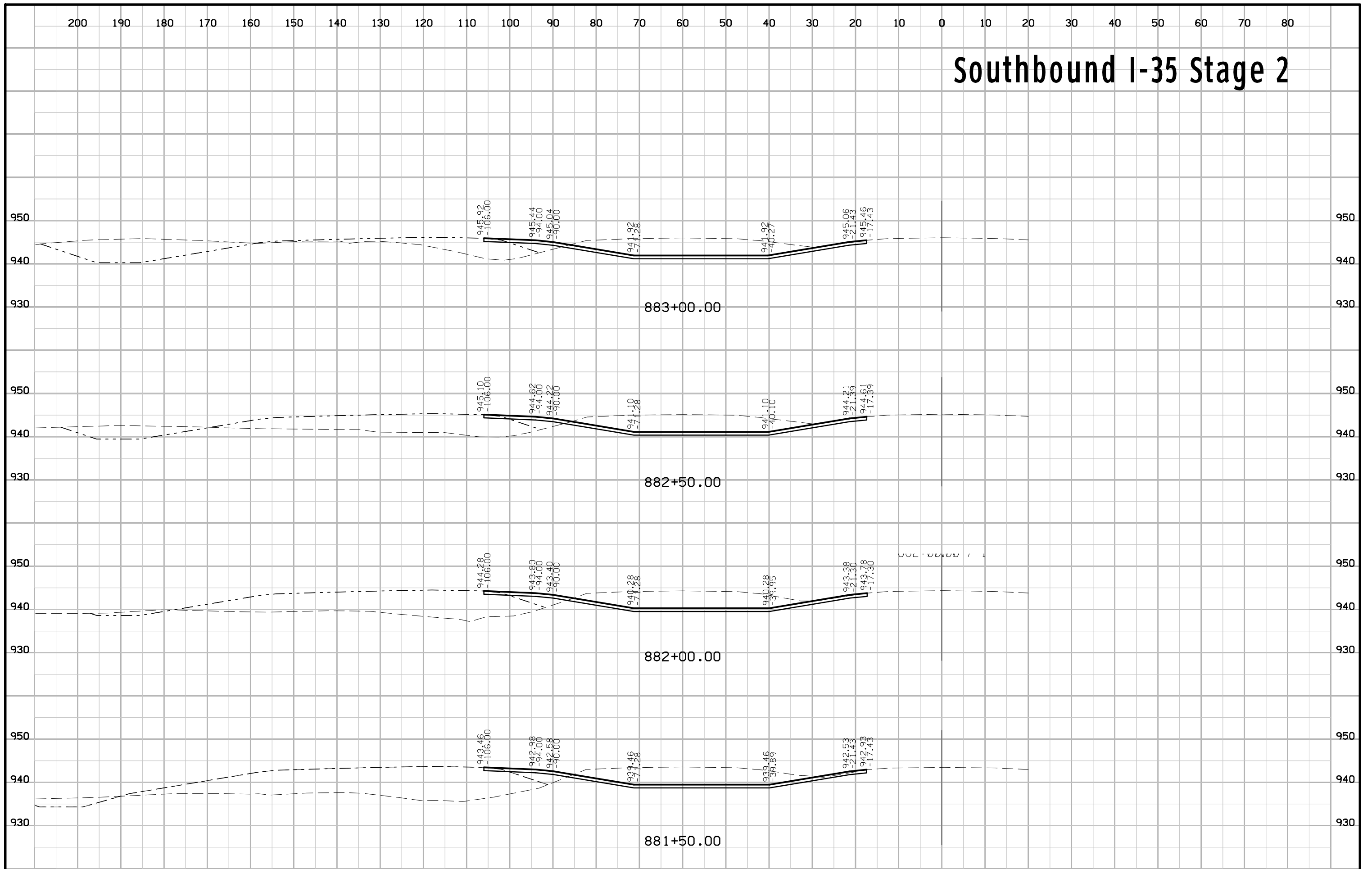
Southbound I-35 Stage 2



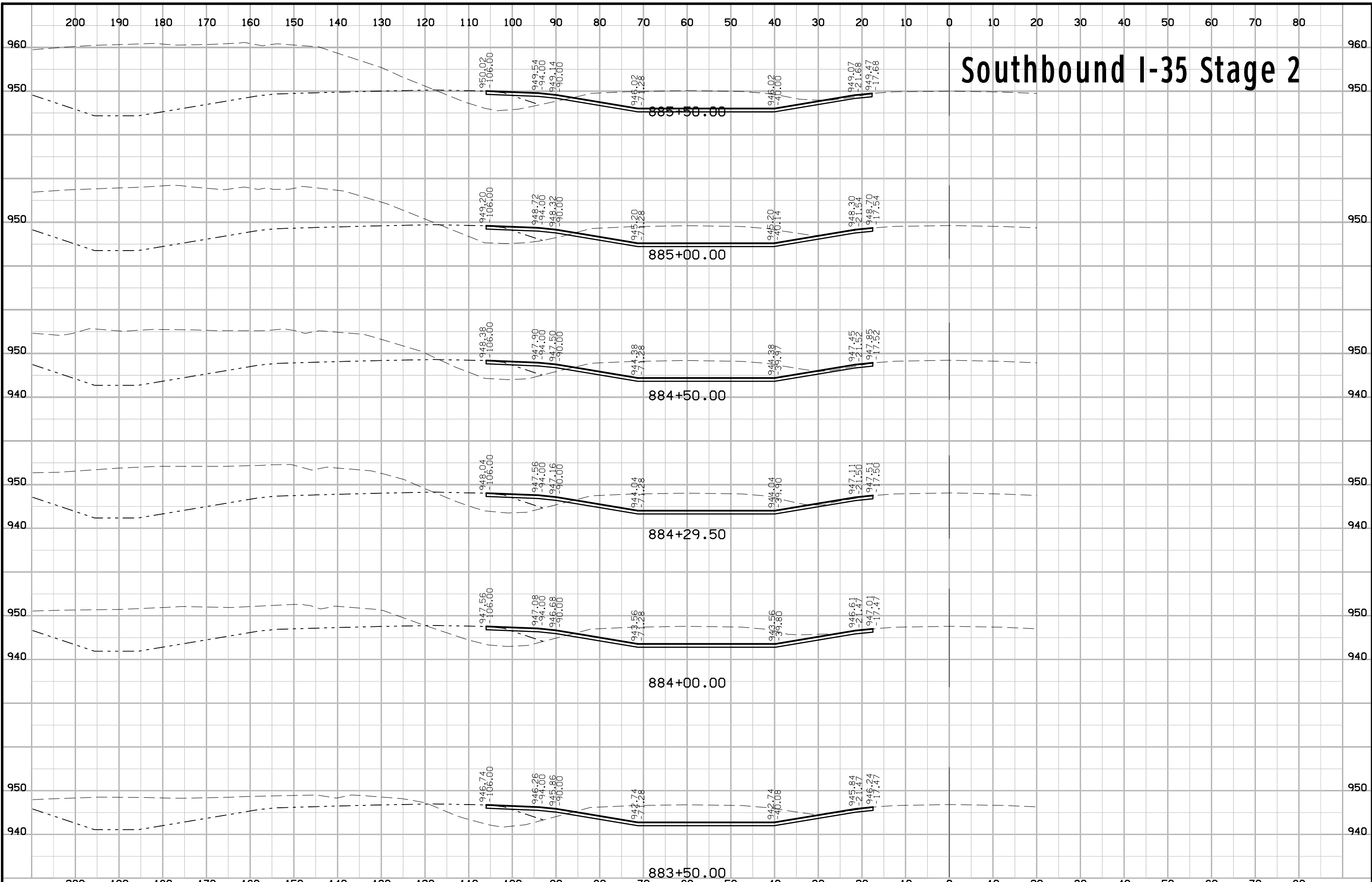
Southbound I-35 Stage 2



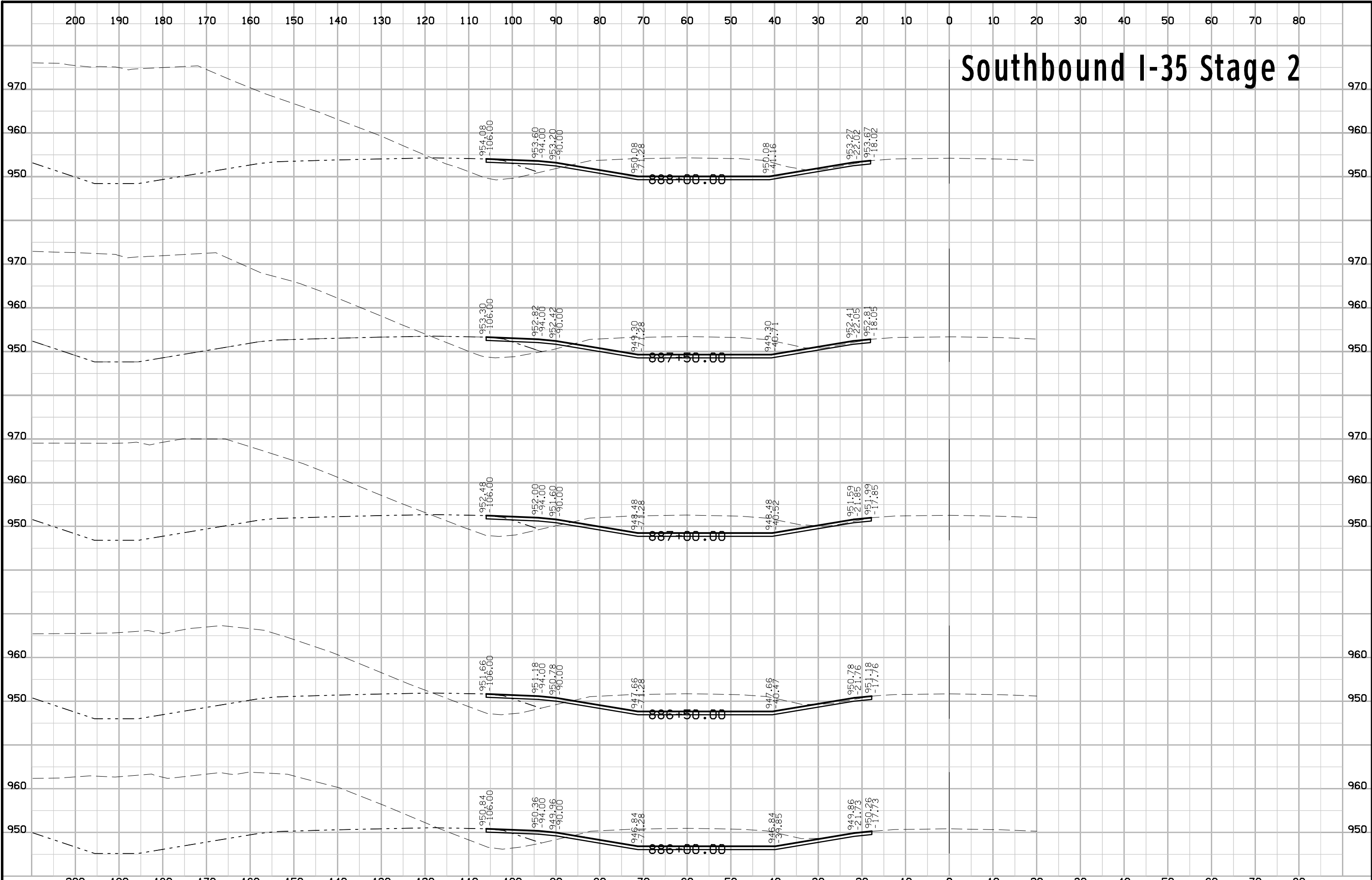
Southbound I-35 Stage 2



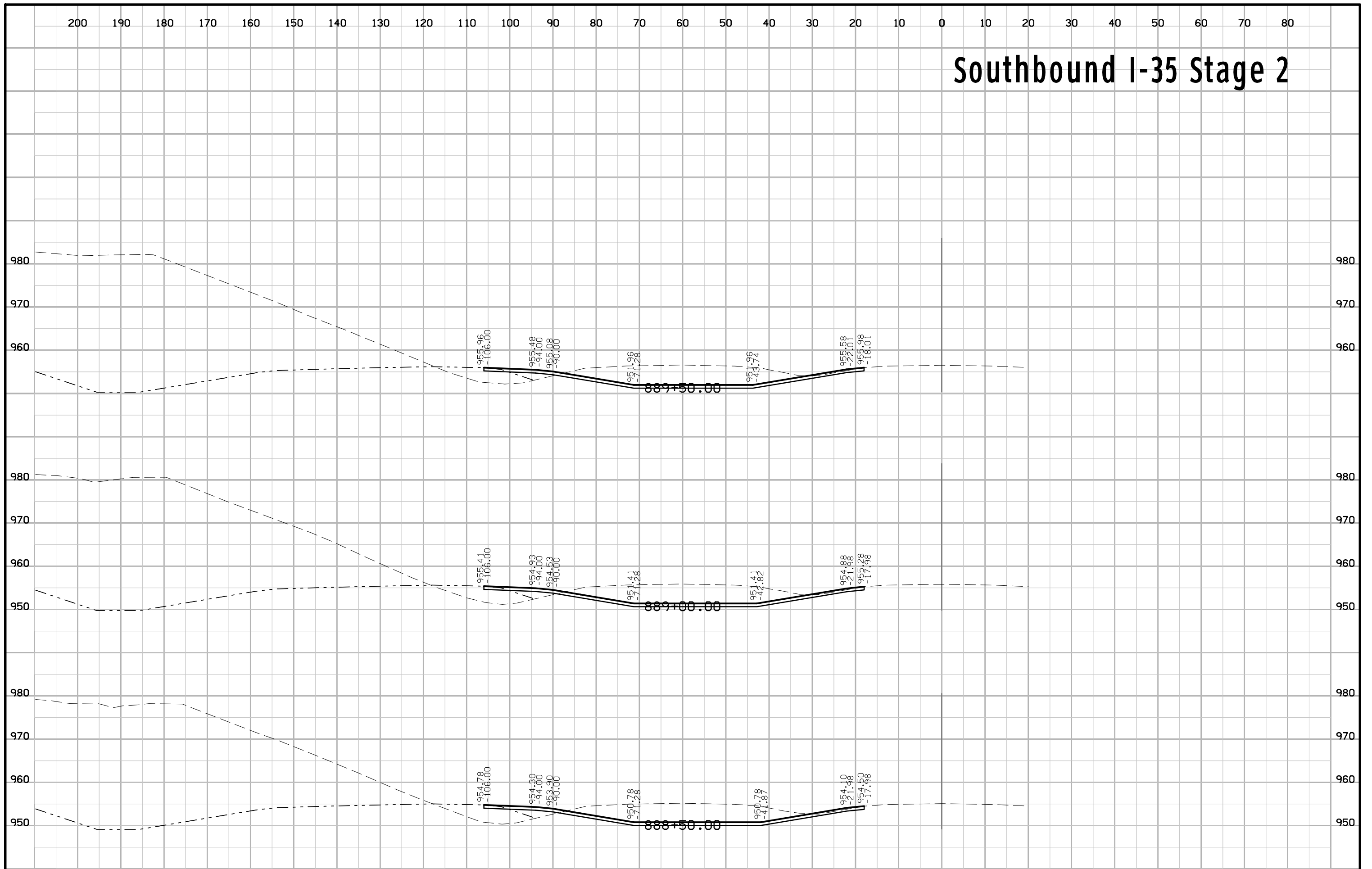
Southbound I-35 Stage 2



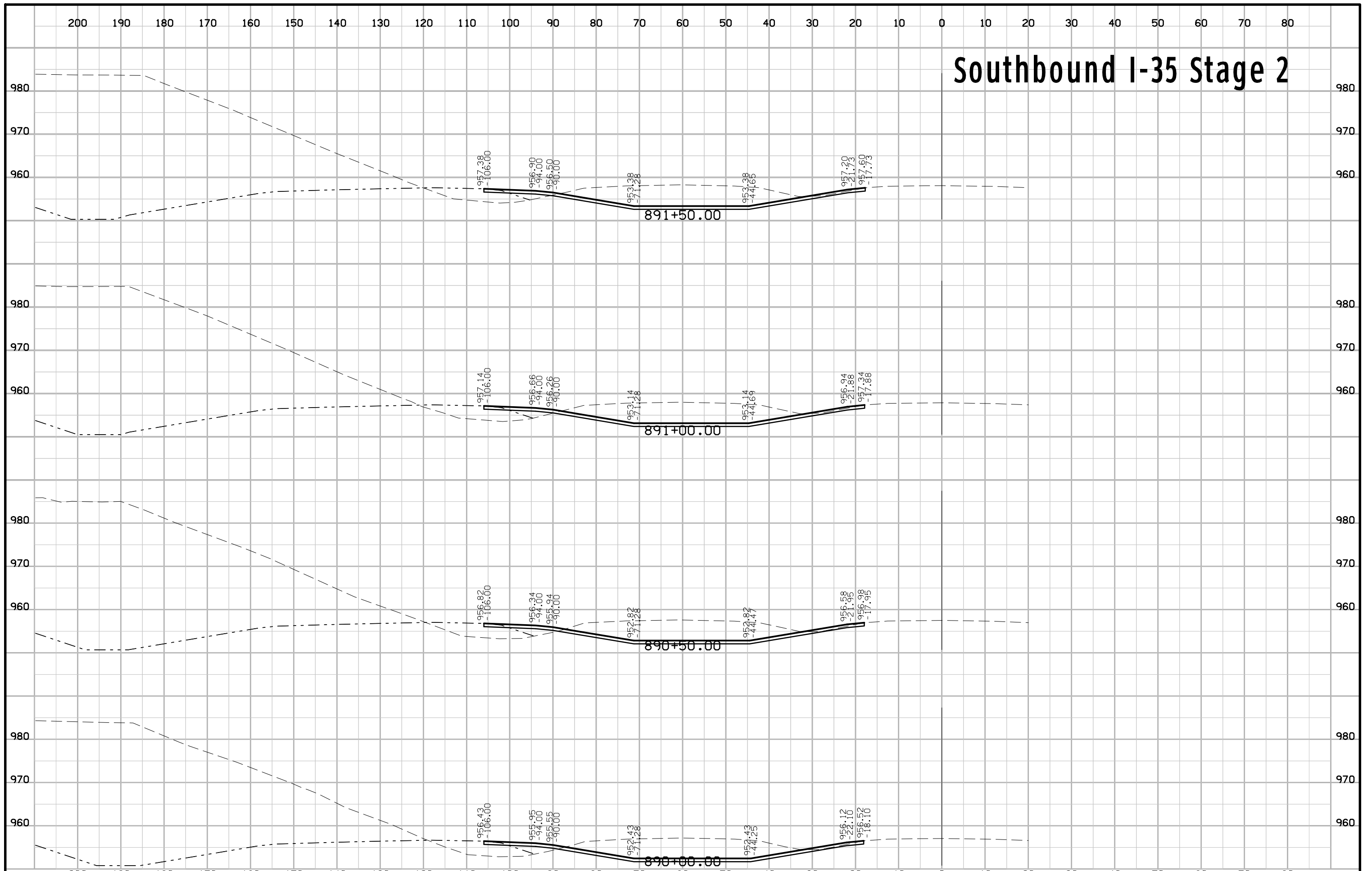
Southbound I-35 Stage 2



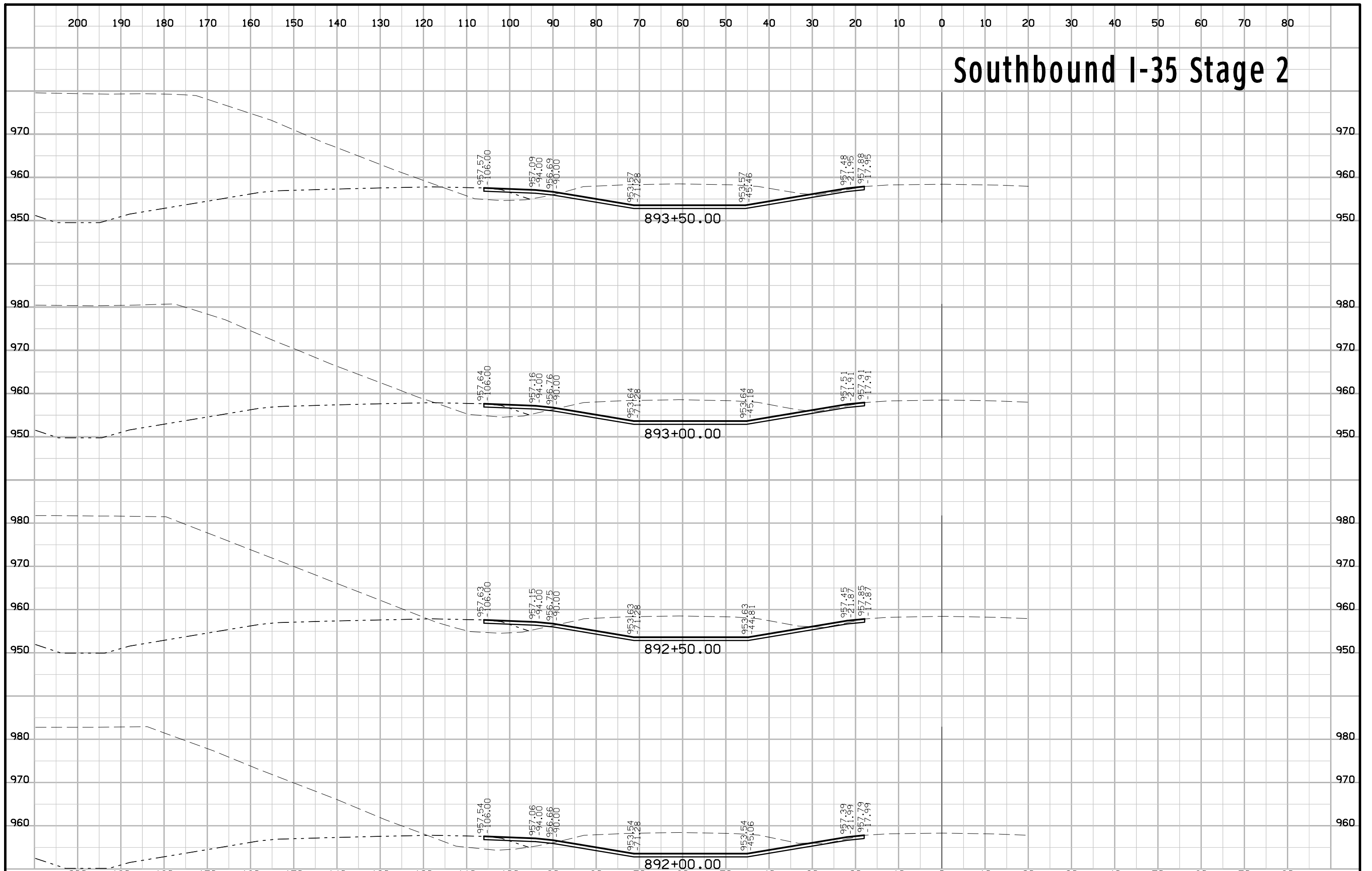
Southbound I-35 Stage 2



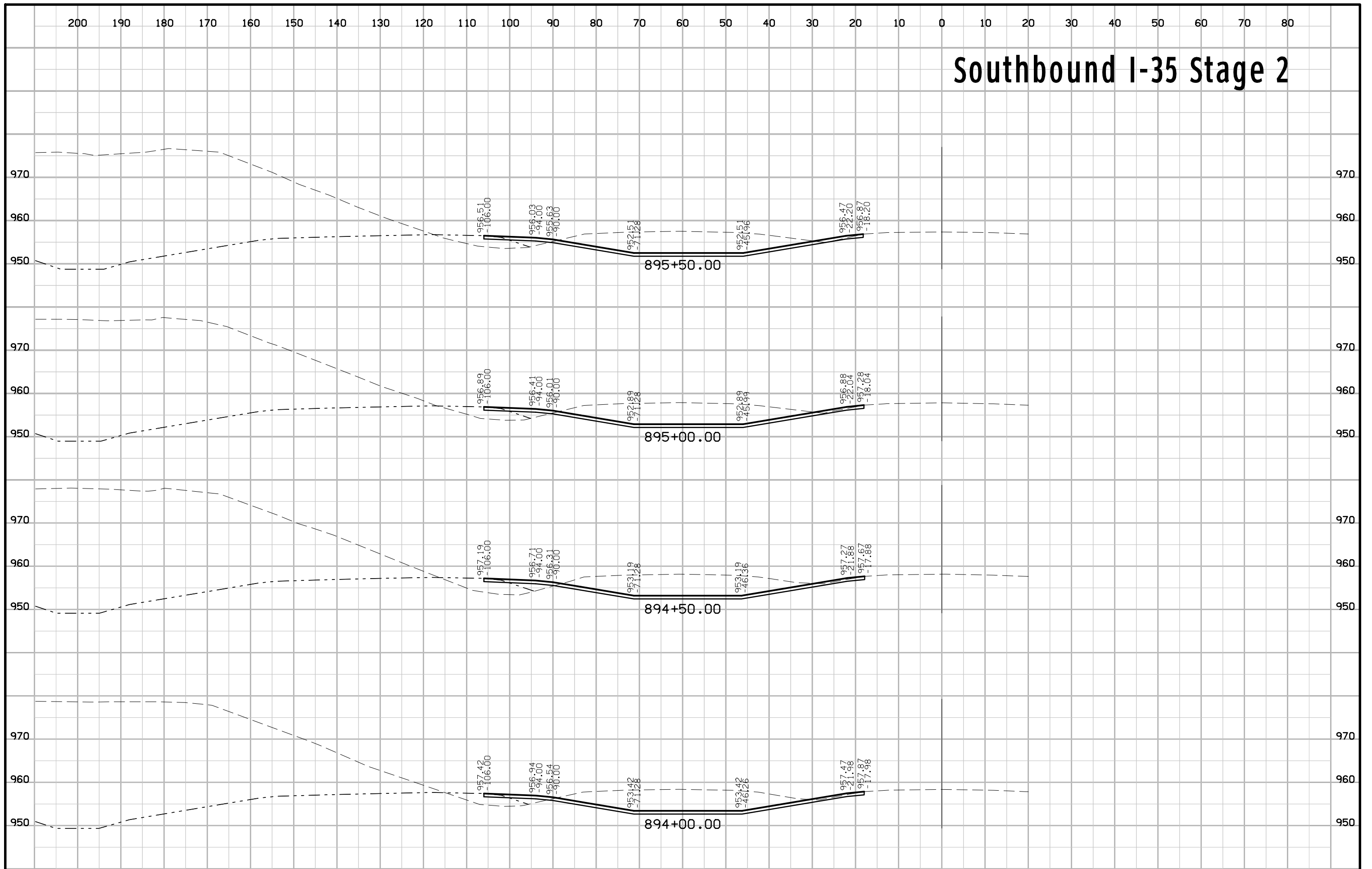
Southbound I-35 Stage 2



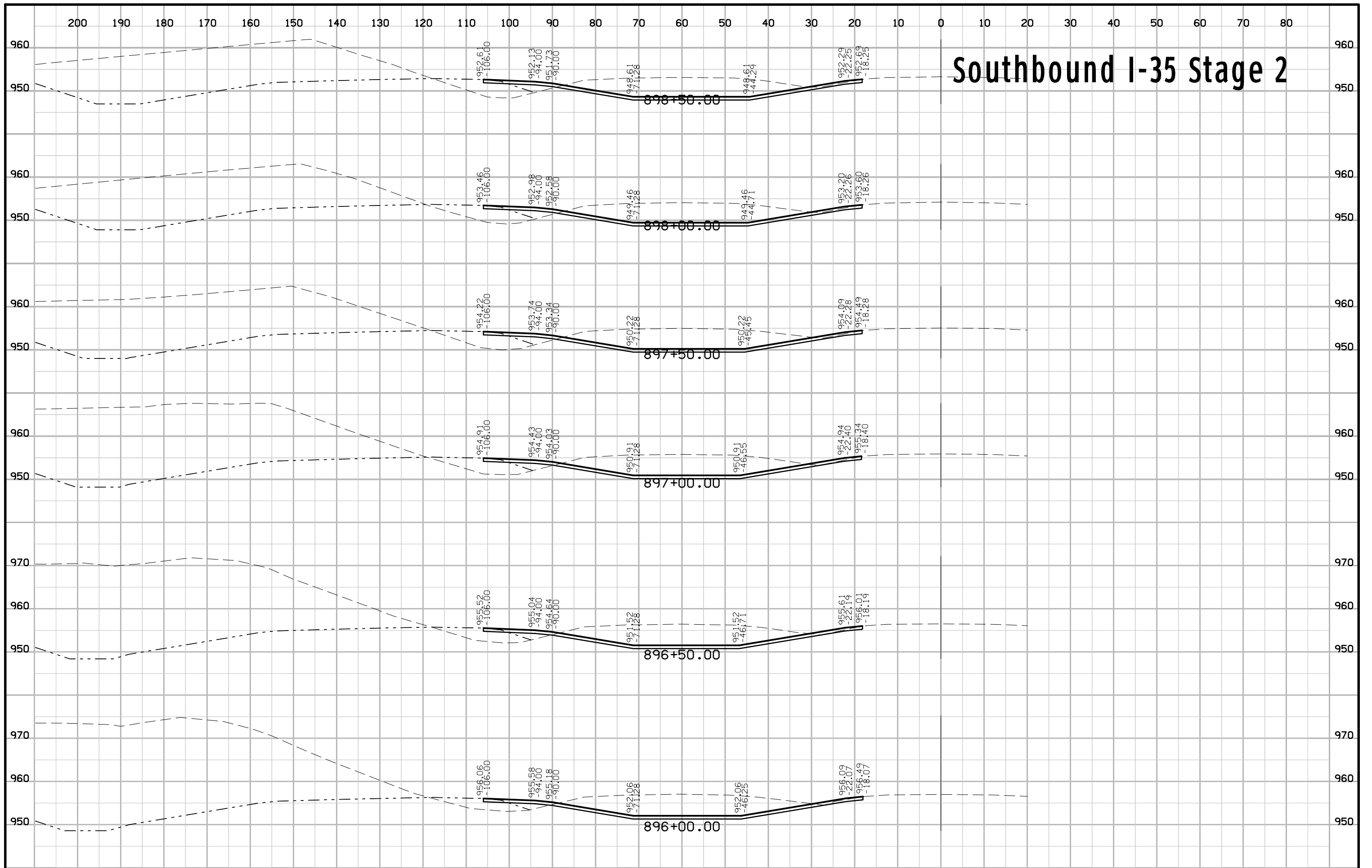
Southbound I-35 Stage 2



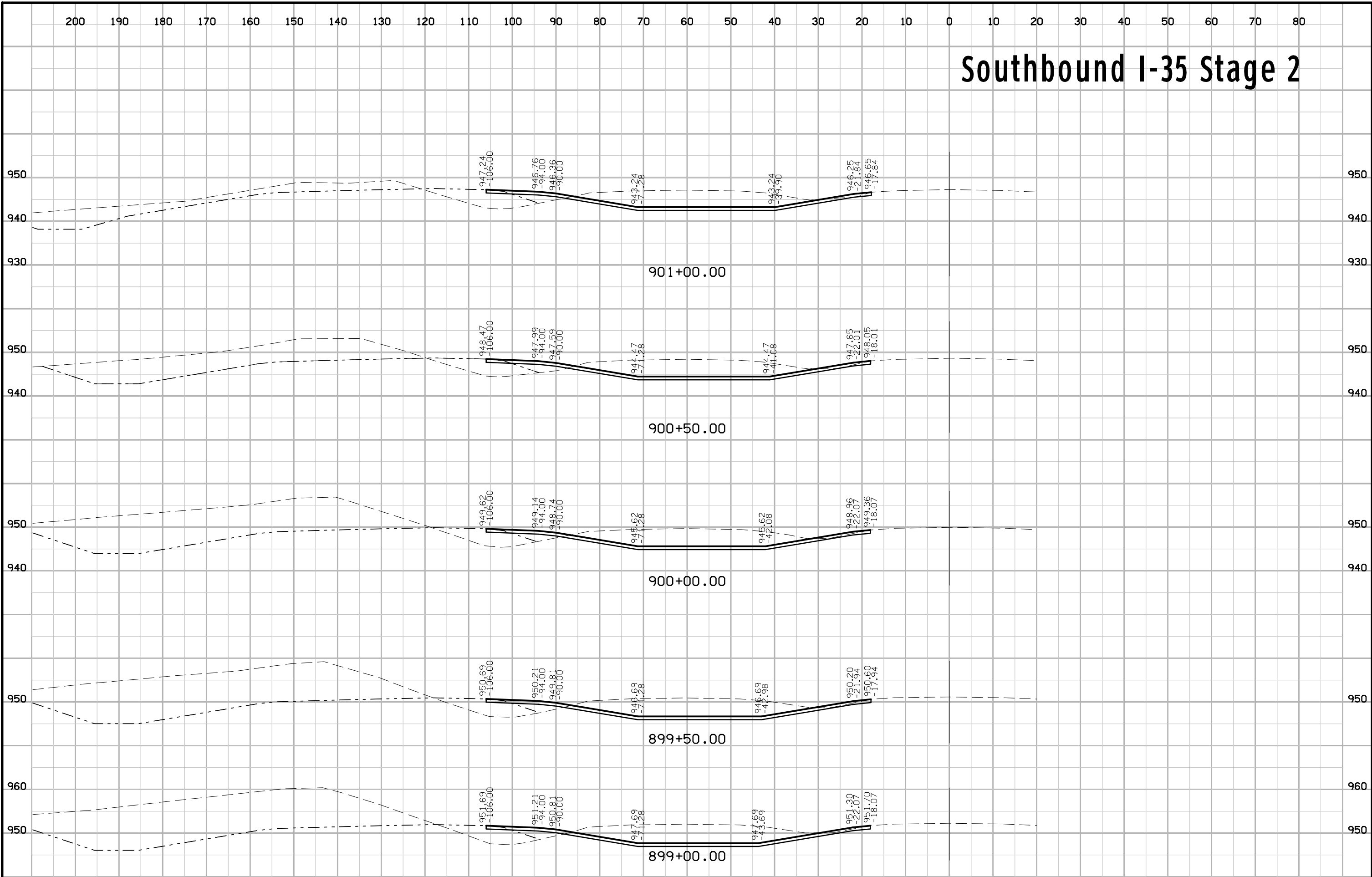
Southbound I-35 Stage 2



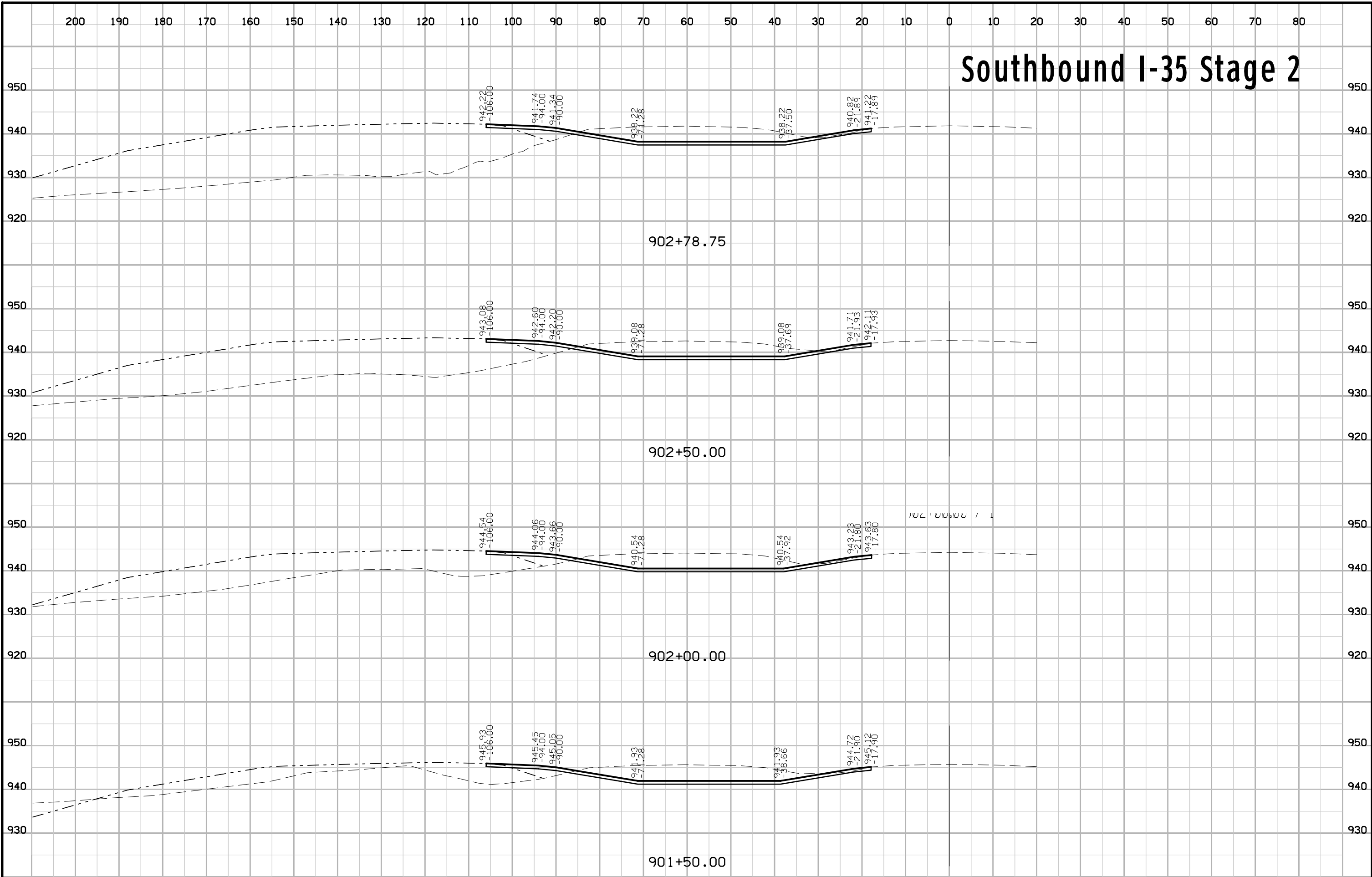
Southbound I-35 Stage 2



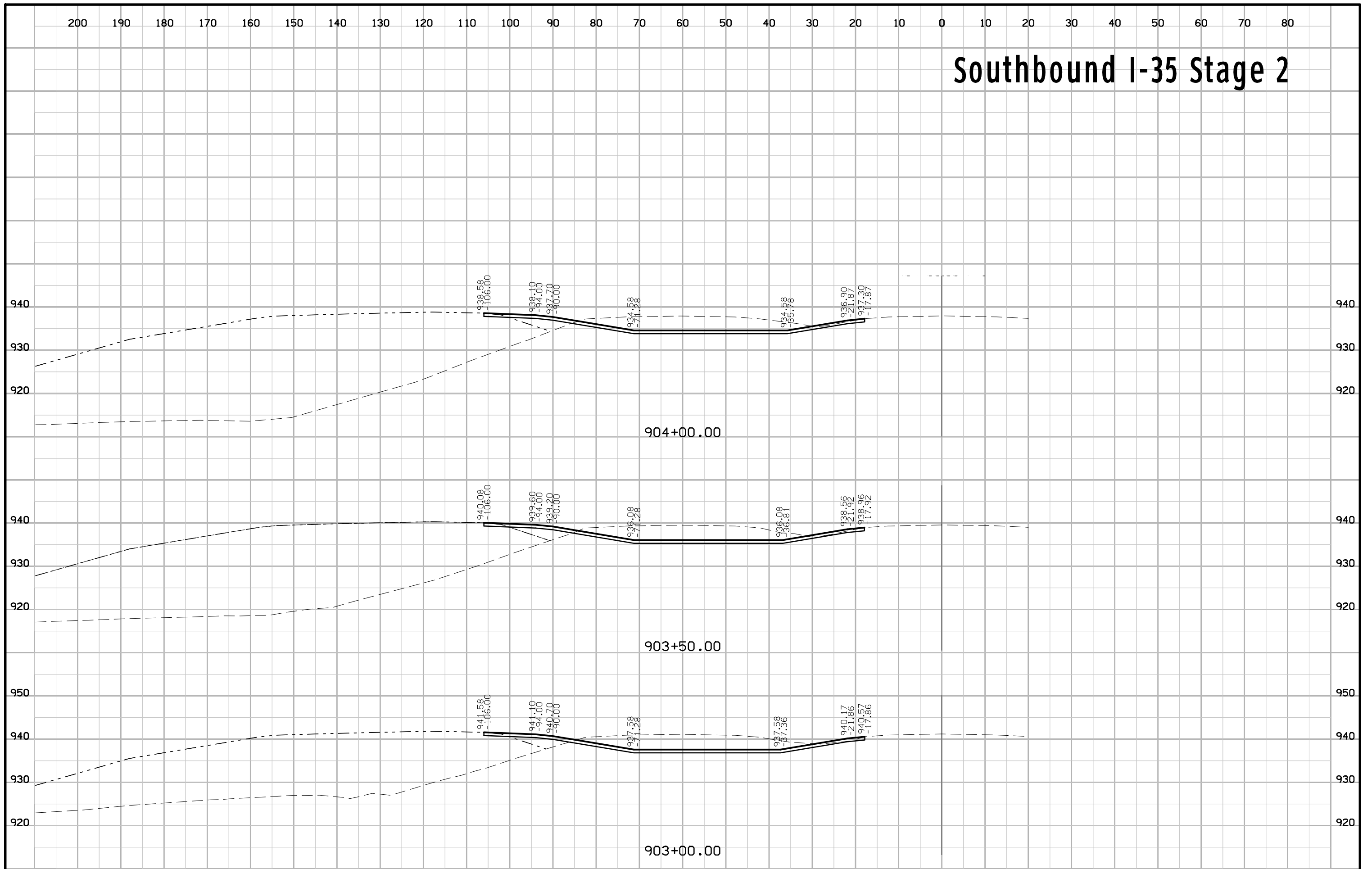
Southbound I-35 Stage 2



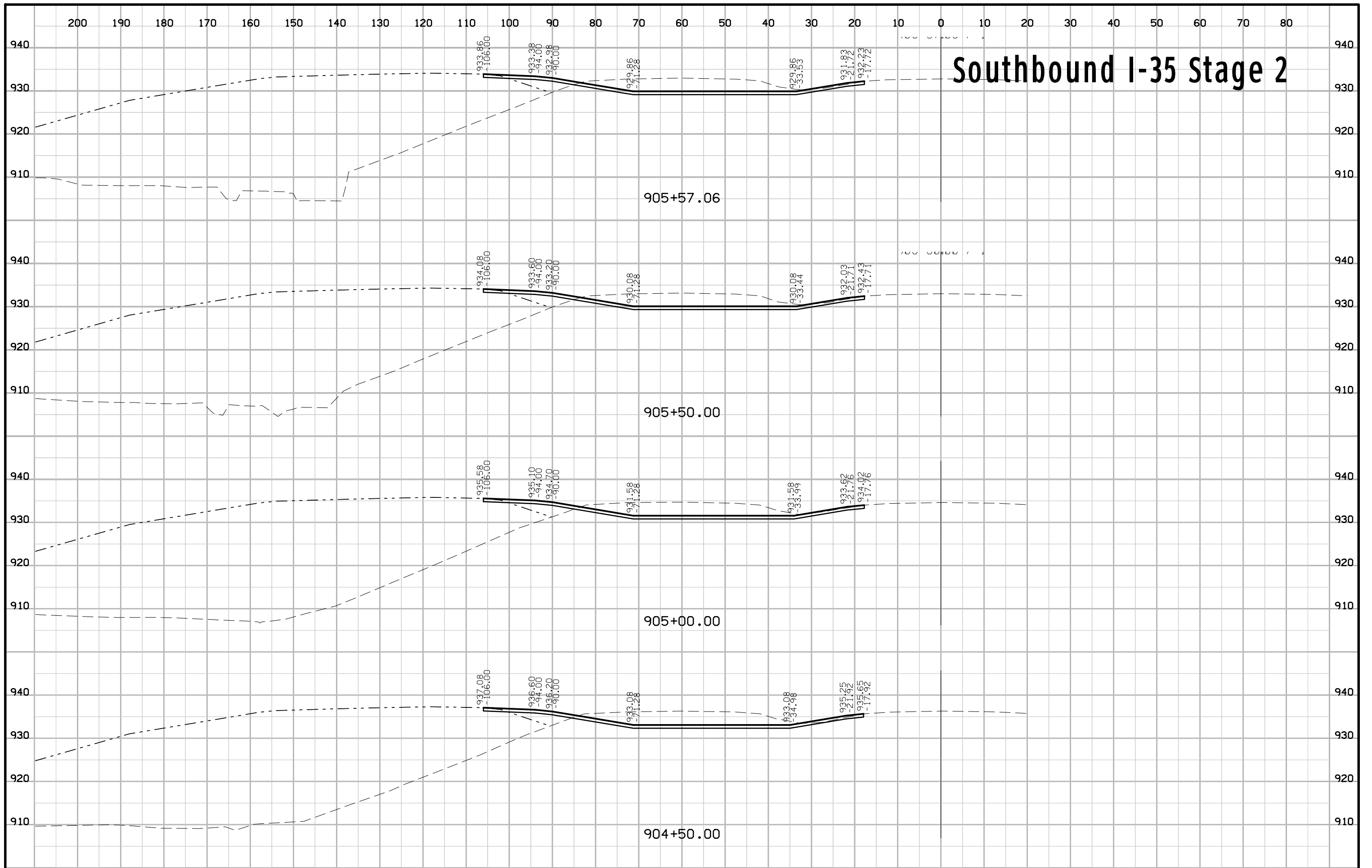
Southbound I-35 Stage 2



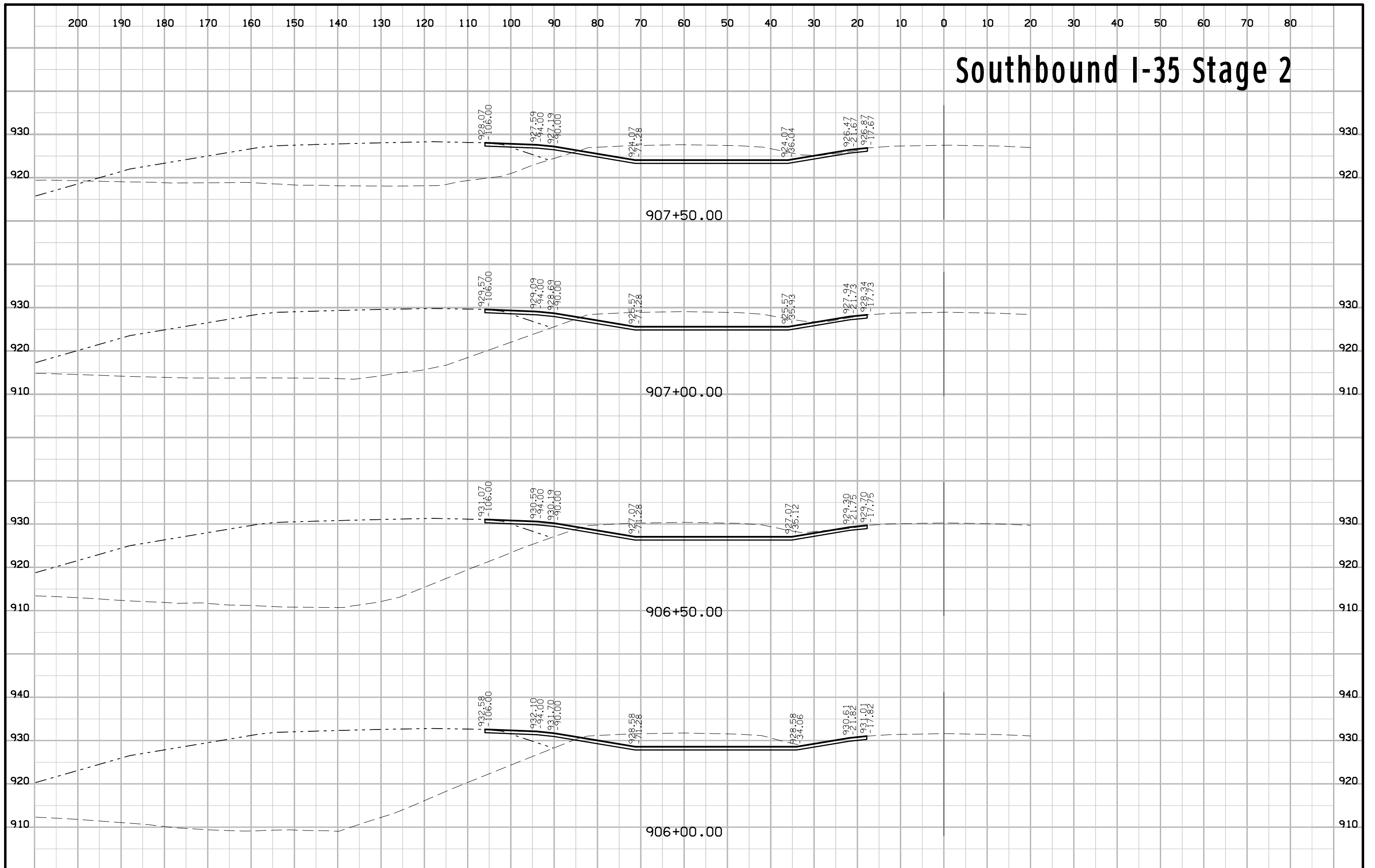
Southbound I-35 Stage 2



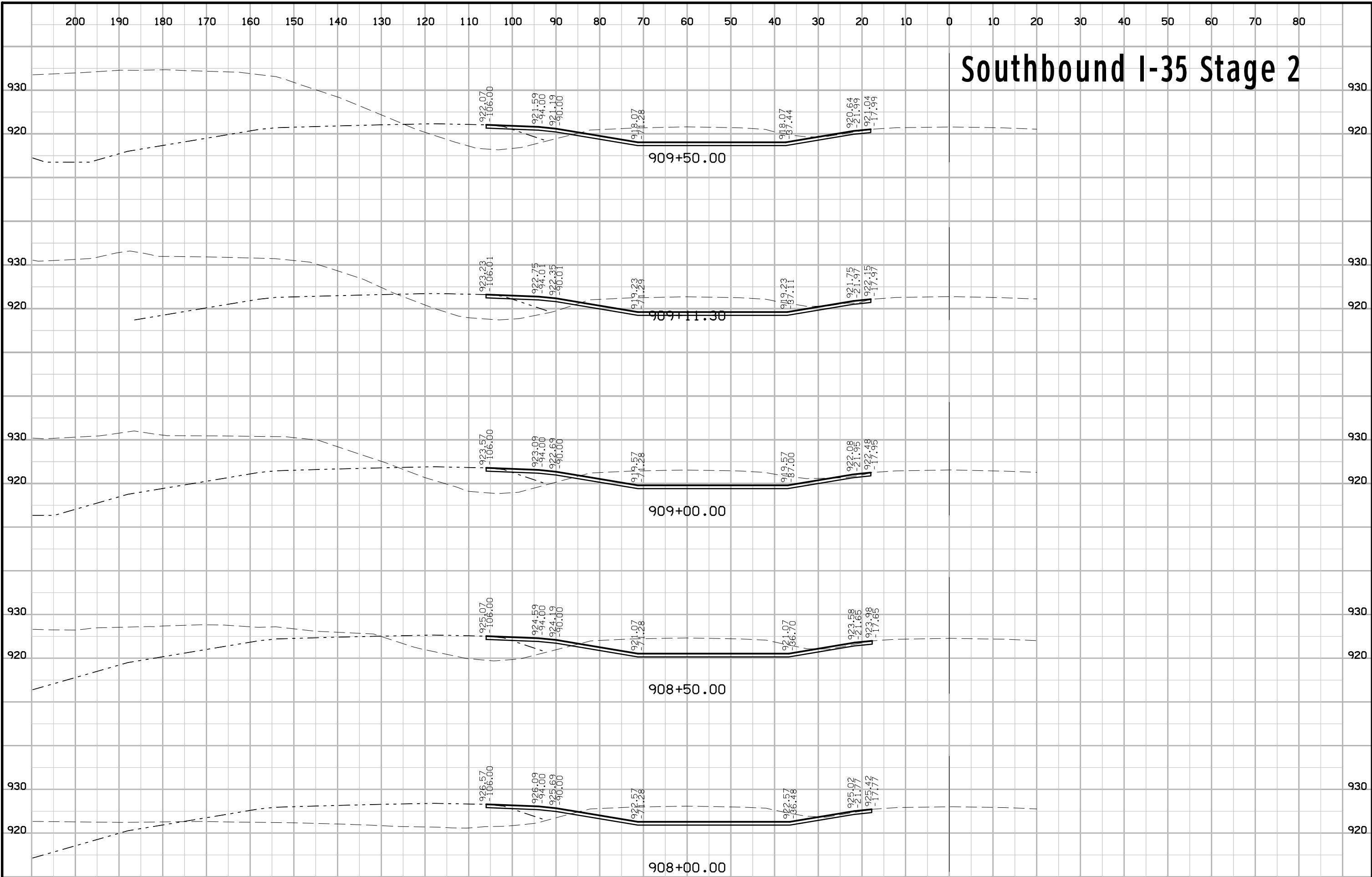
Southbound I-35 Stage 2



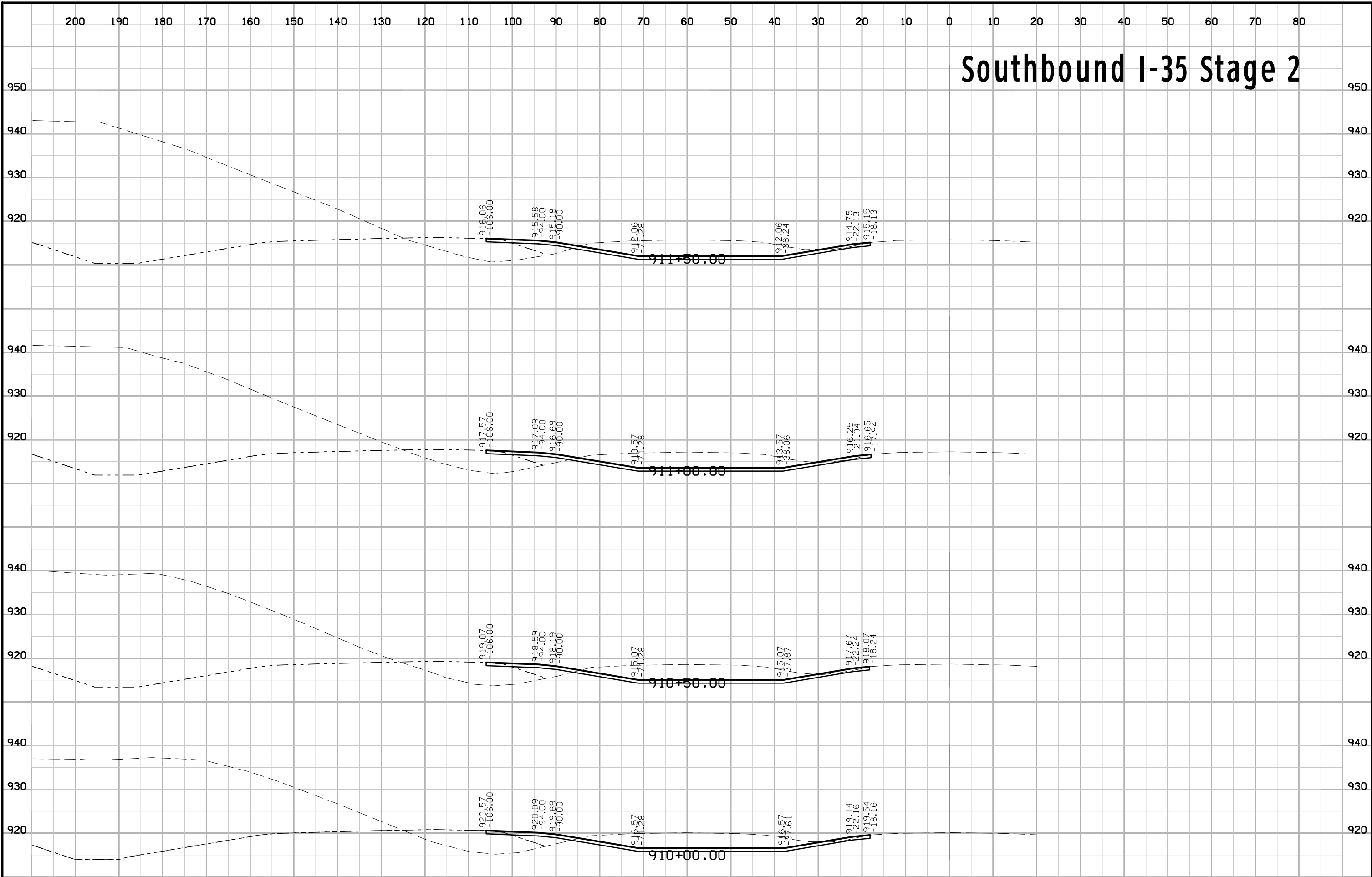
Southbound I-35 Stage 2



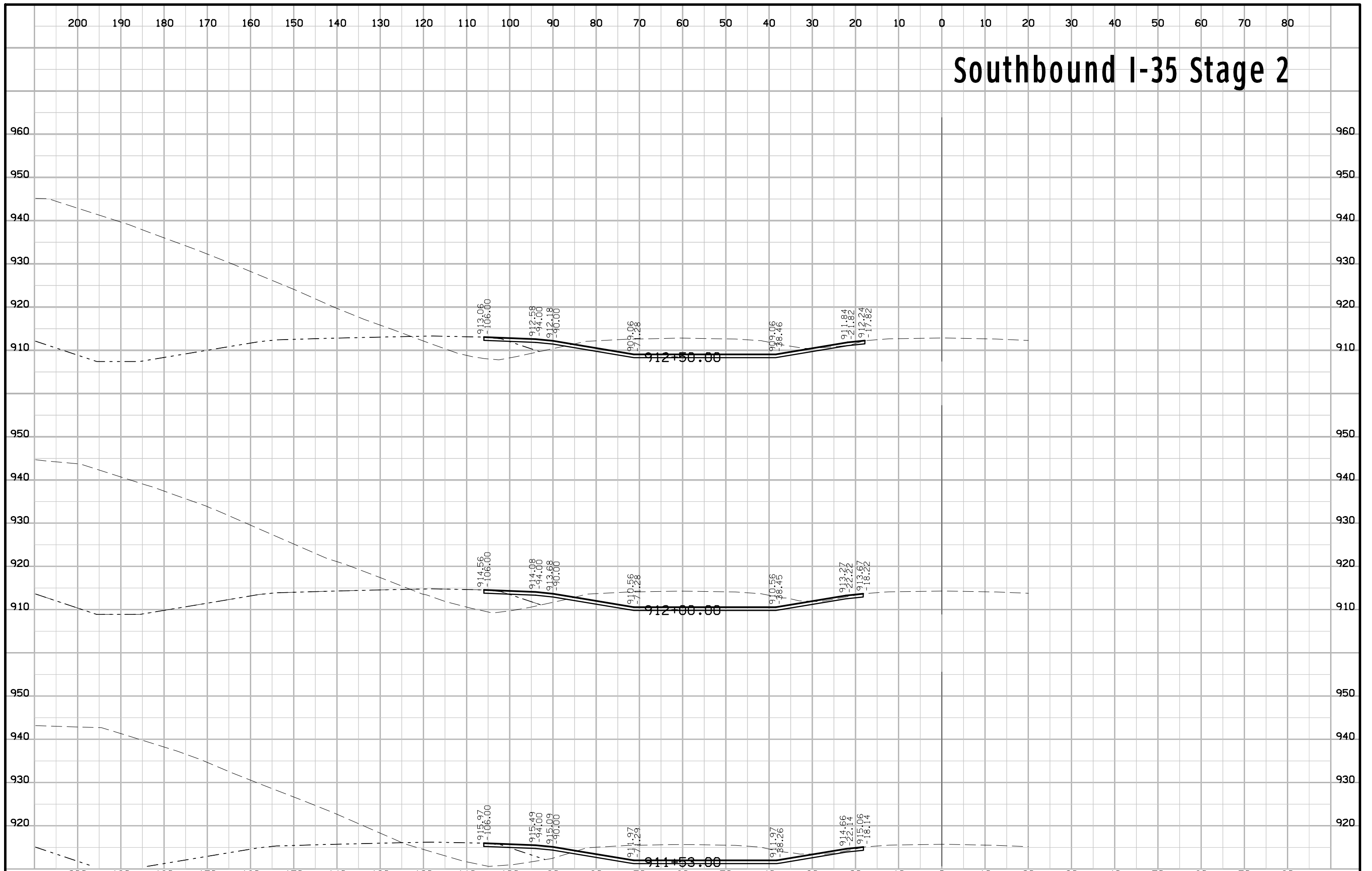
Southbound I-35 Stage 2



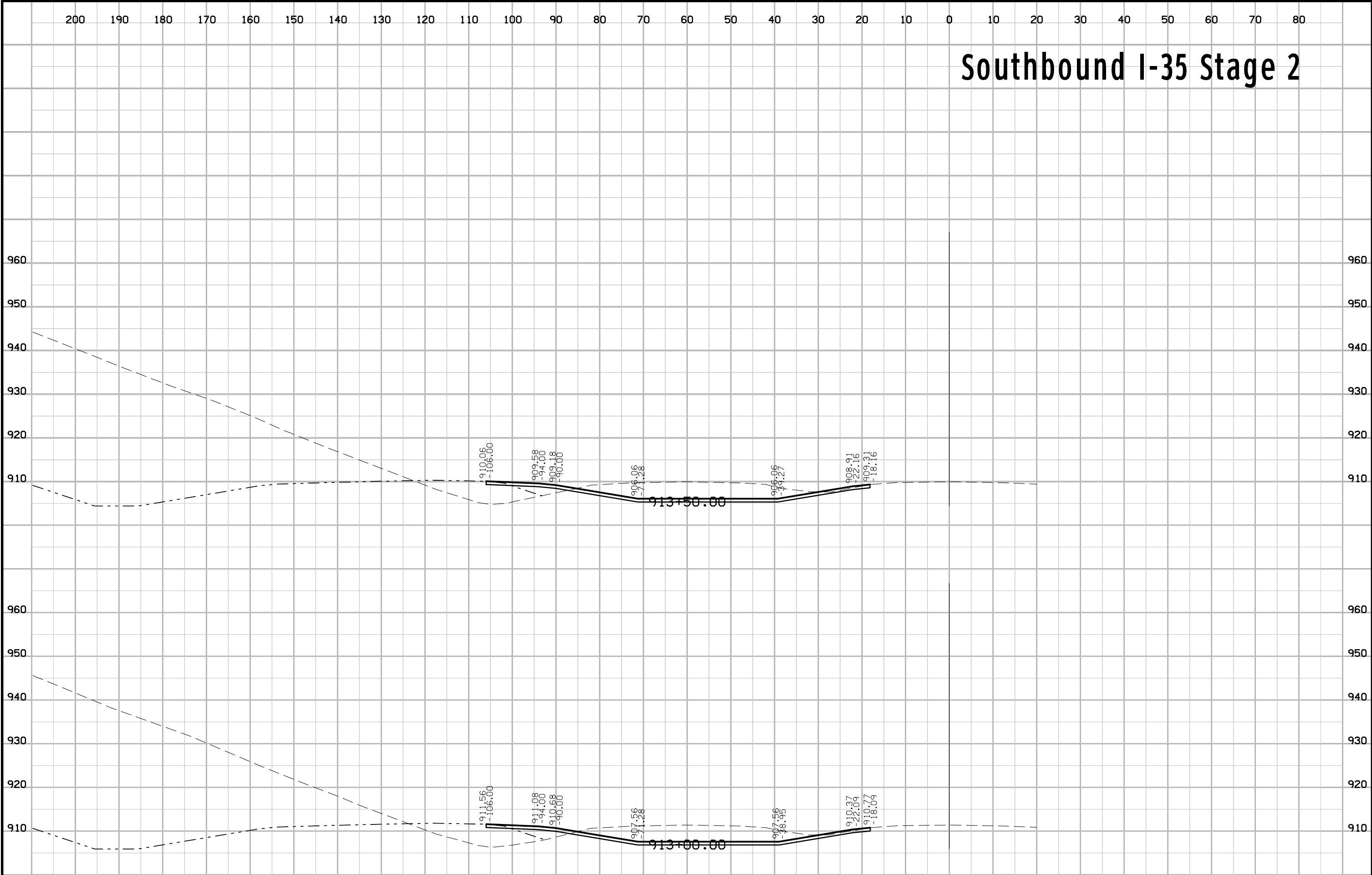
Southbound I-35 Stage 2



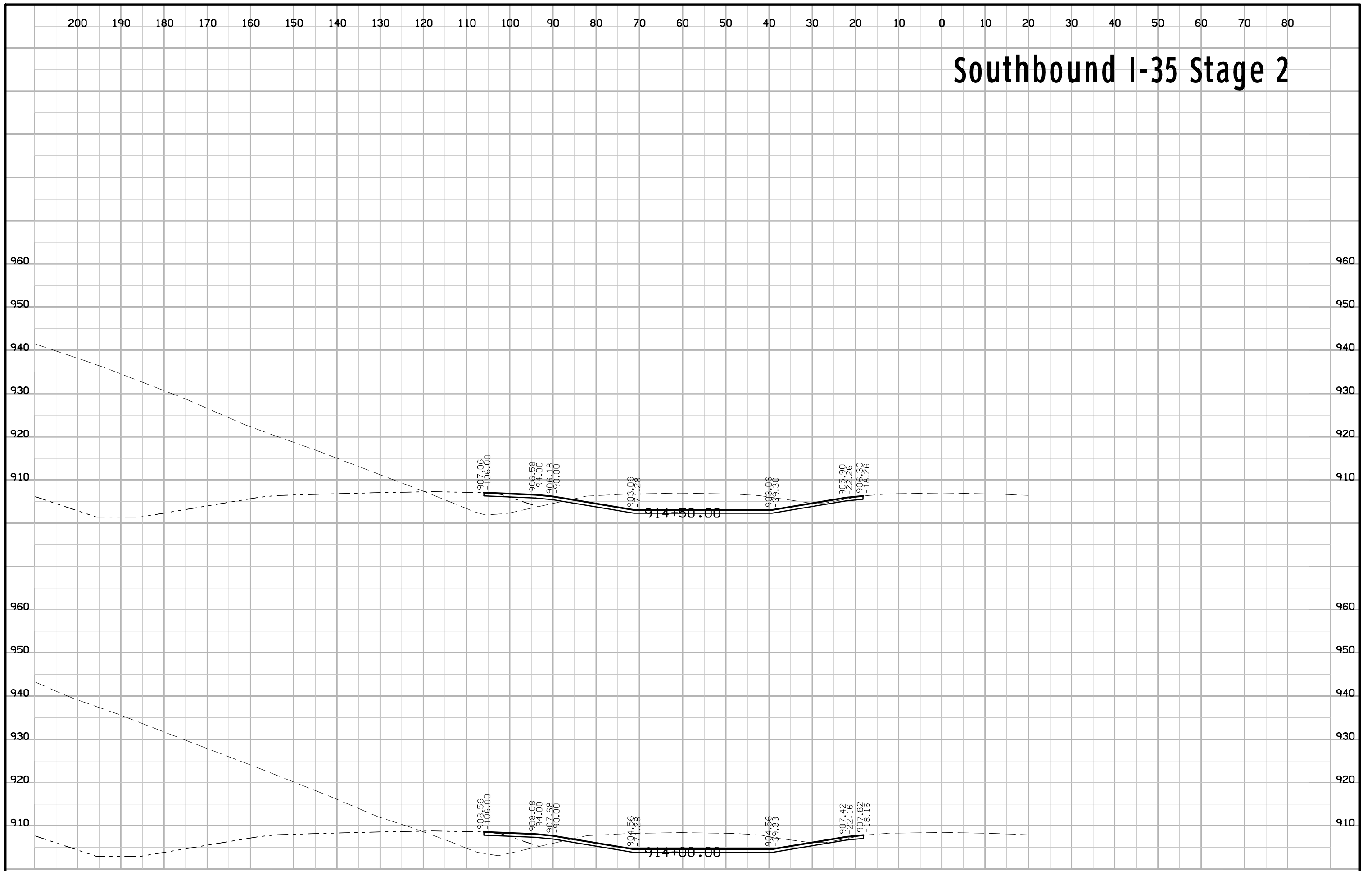
Southbound I-35 Stage 2



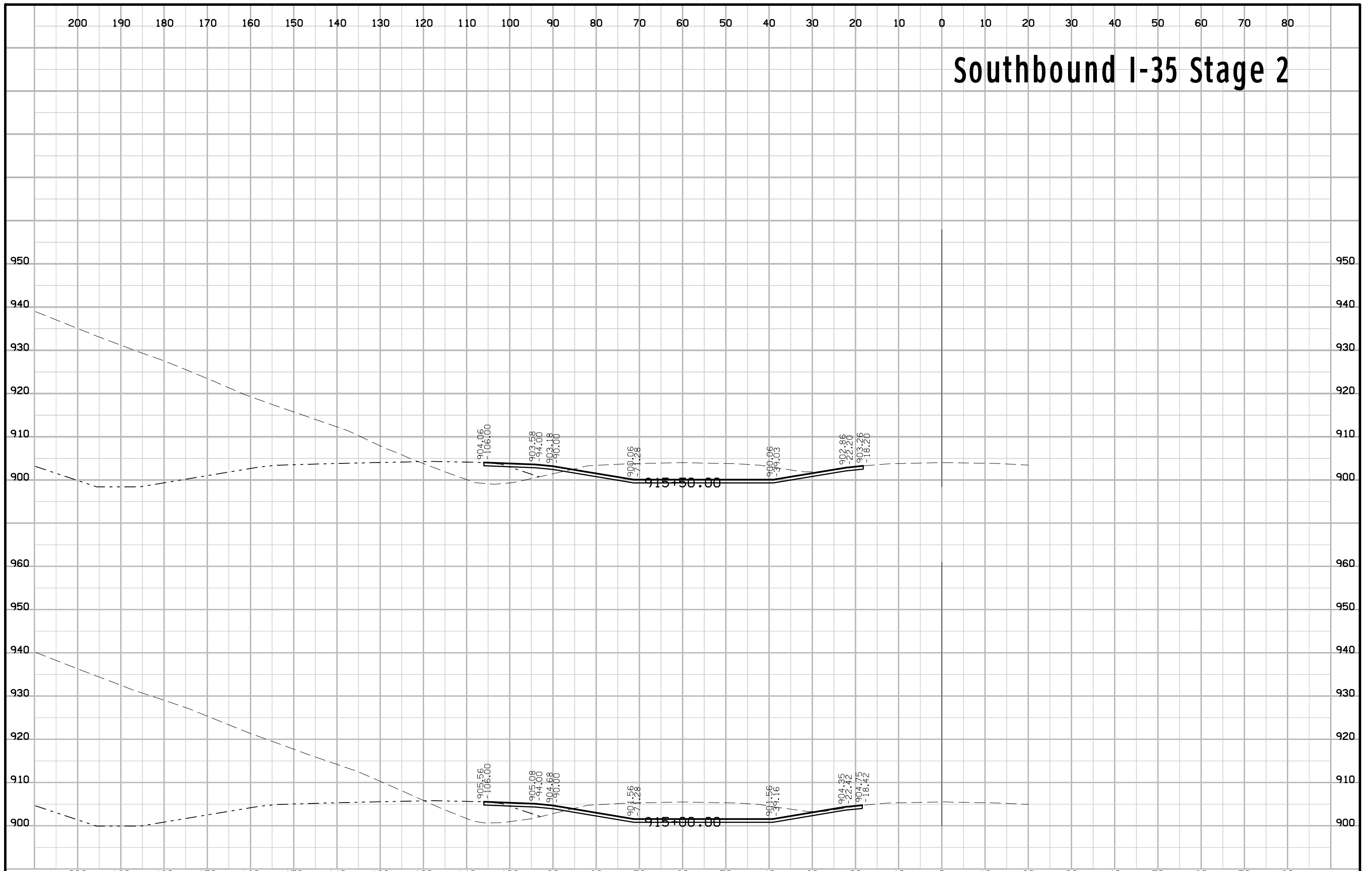
Southbound I-35 Stage 2



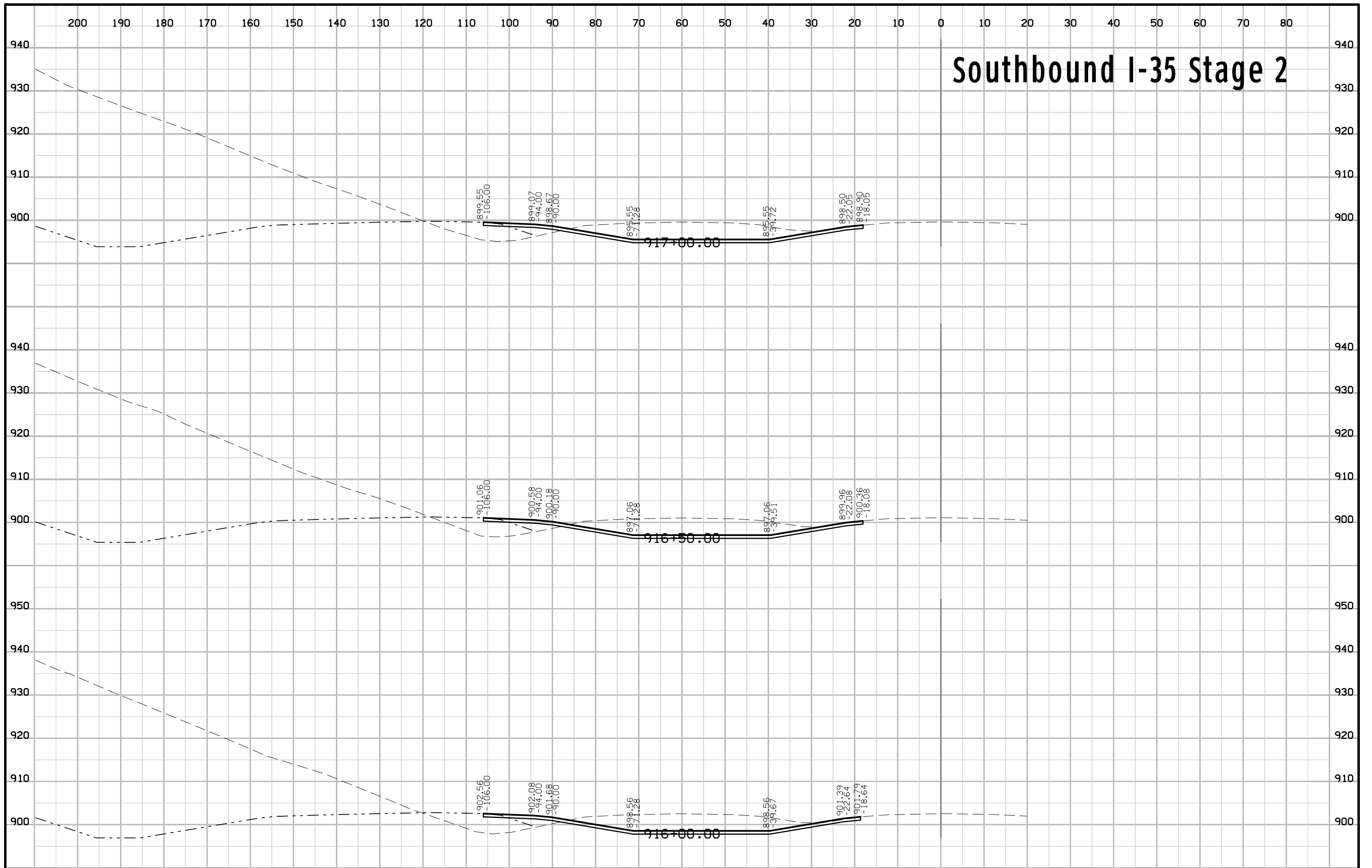
Southbound I-35 Stage 2



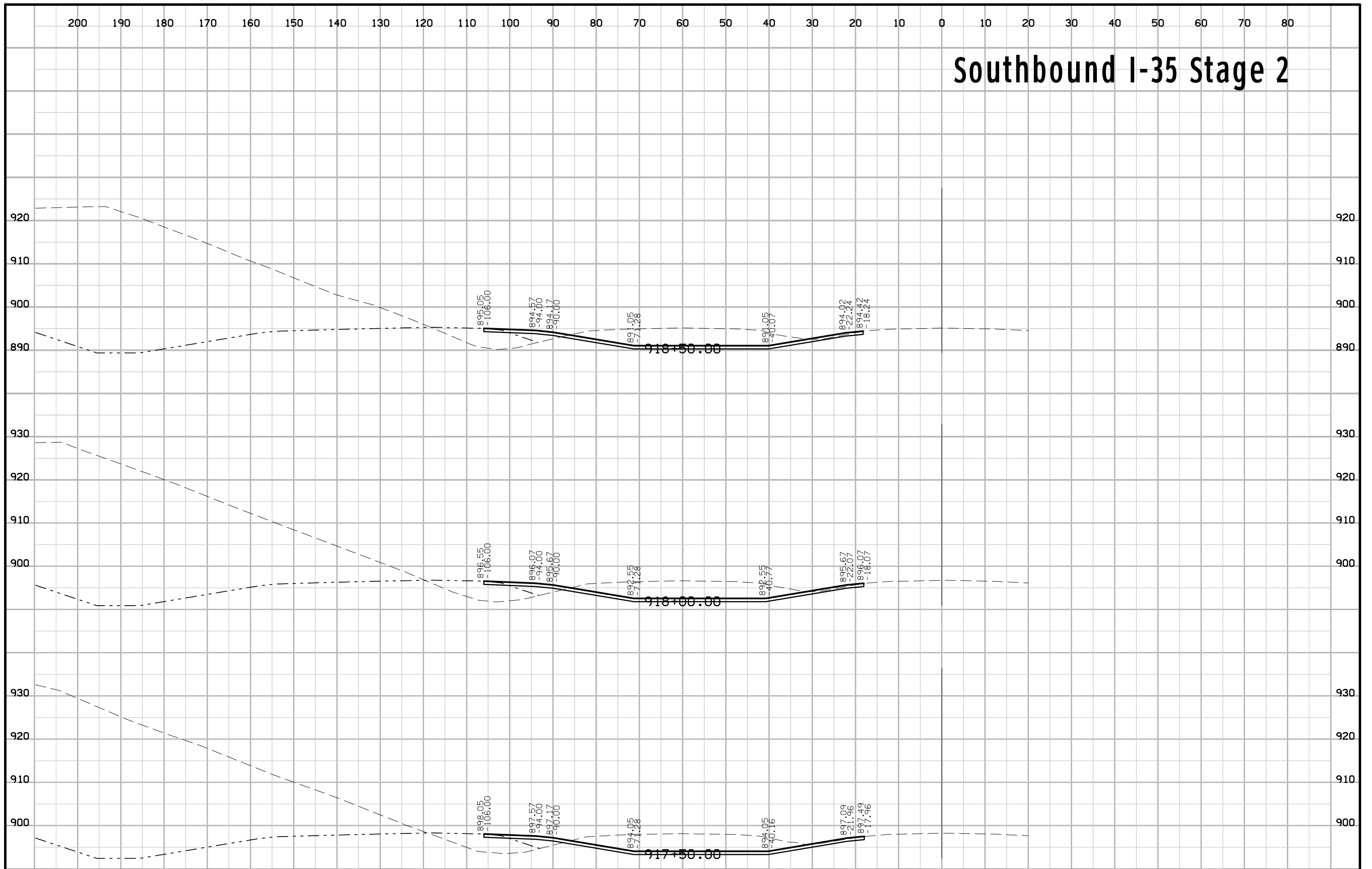
Southbound I-35 Stage 2



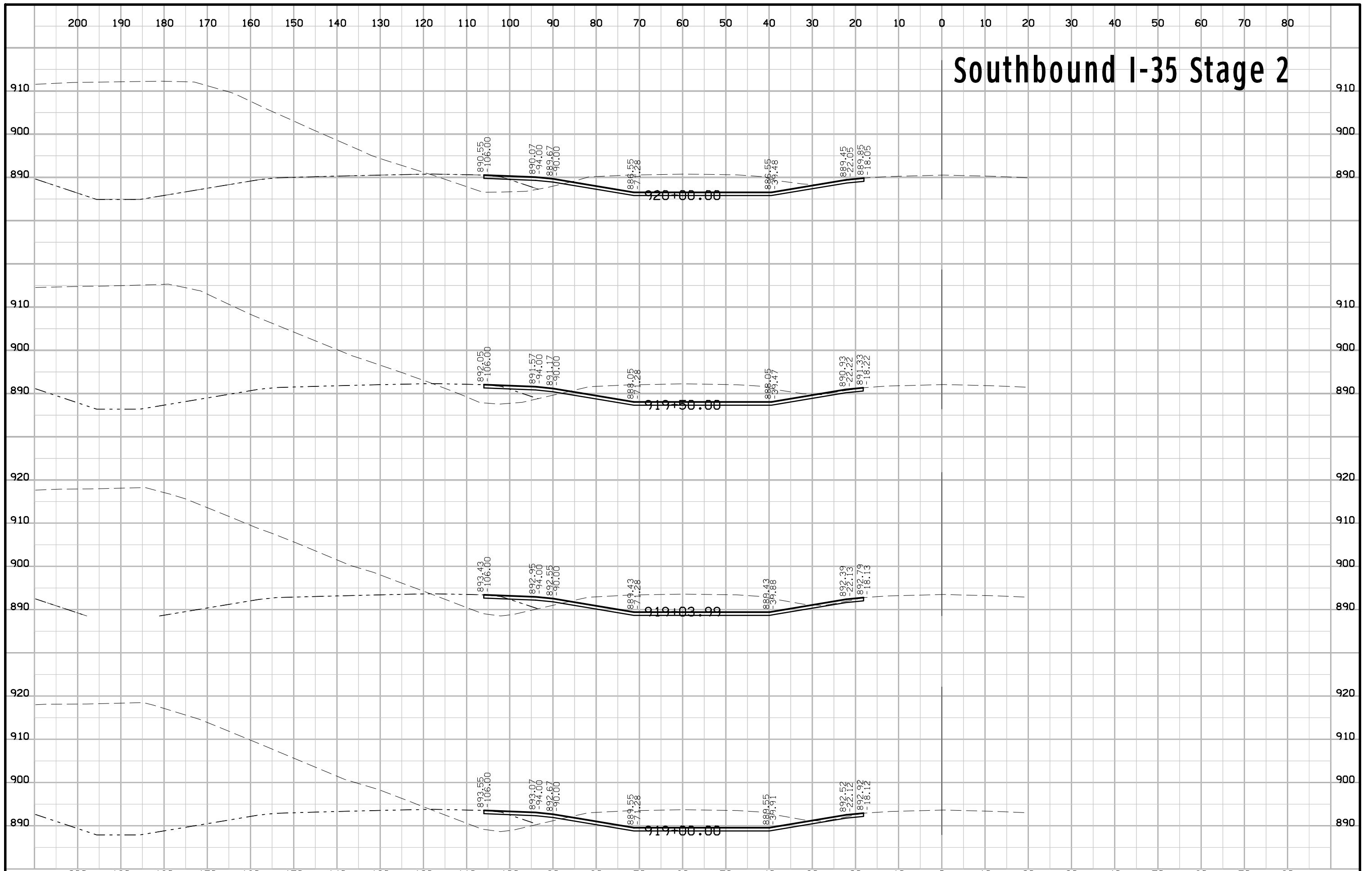
Southbound I-35 Stage 2



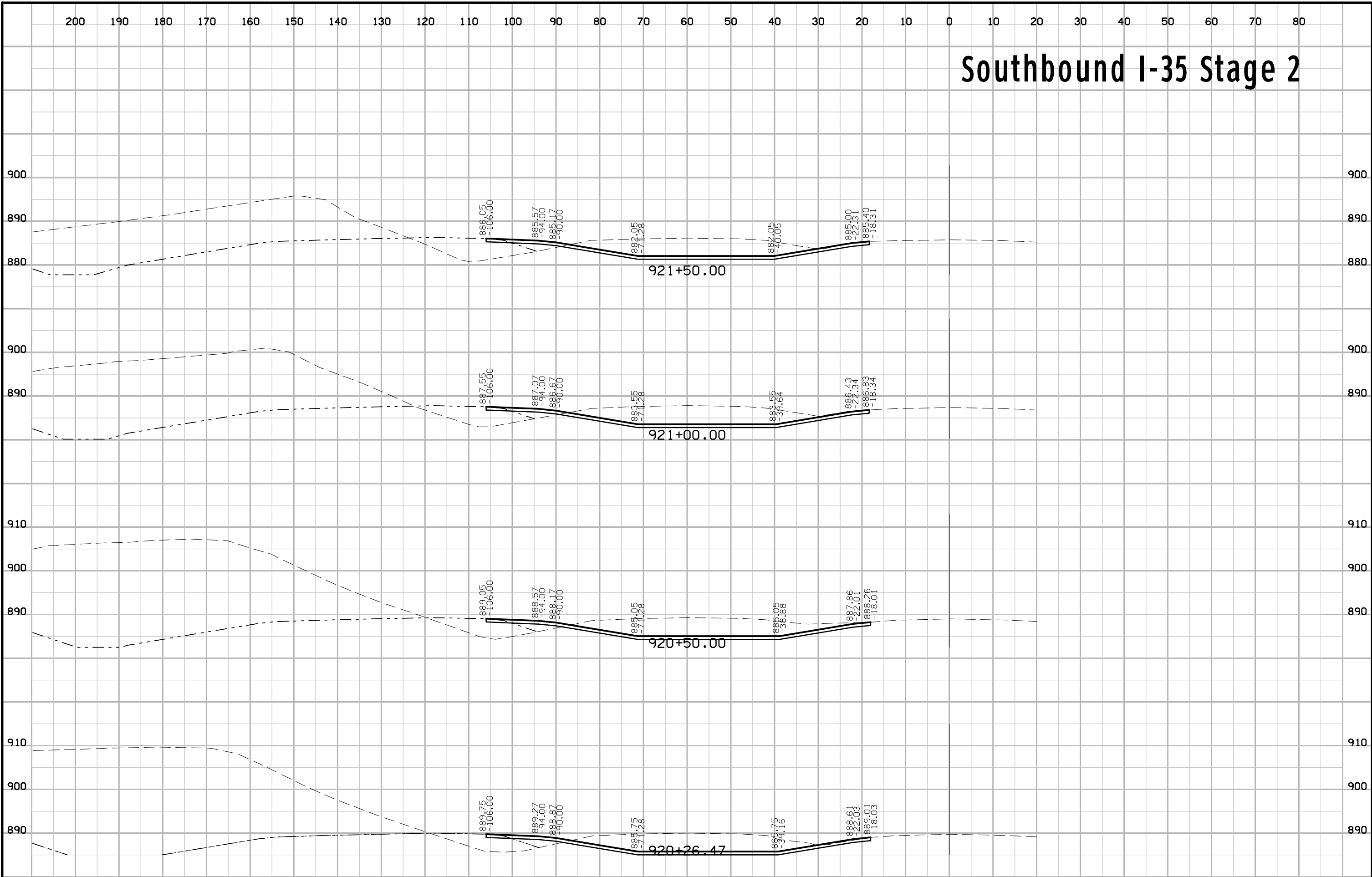
Southbound I-35 Stage 2



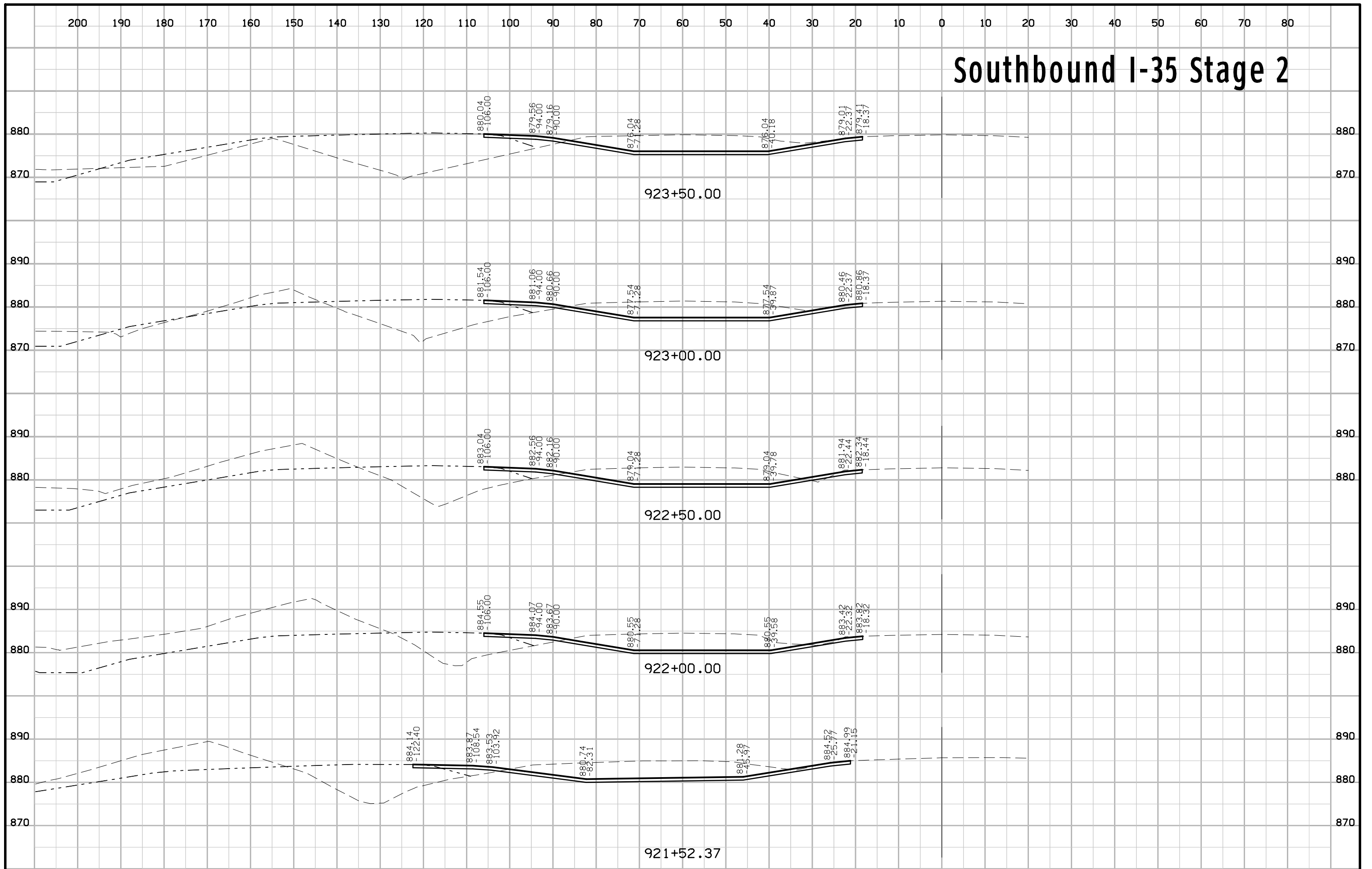
Southbound I-35 Stage 2



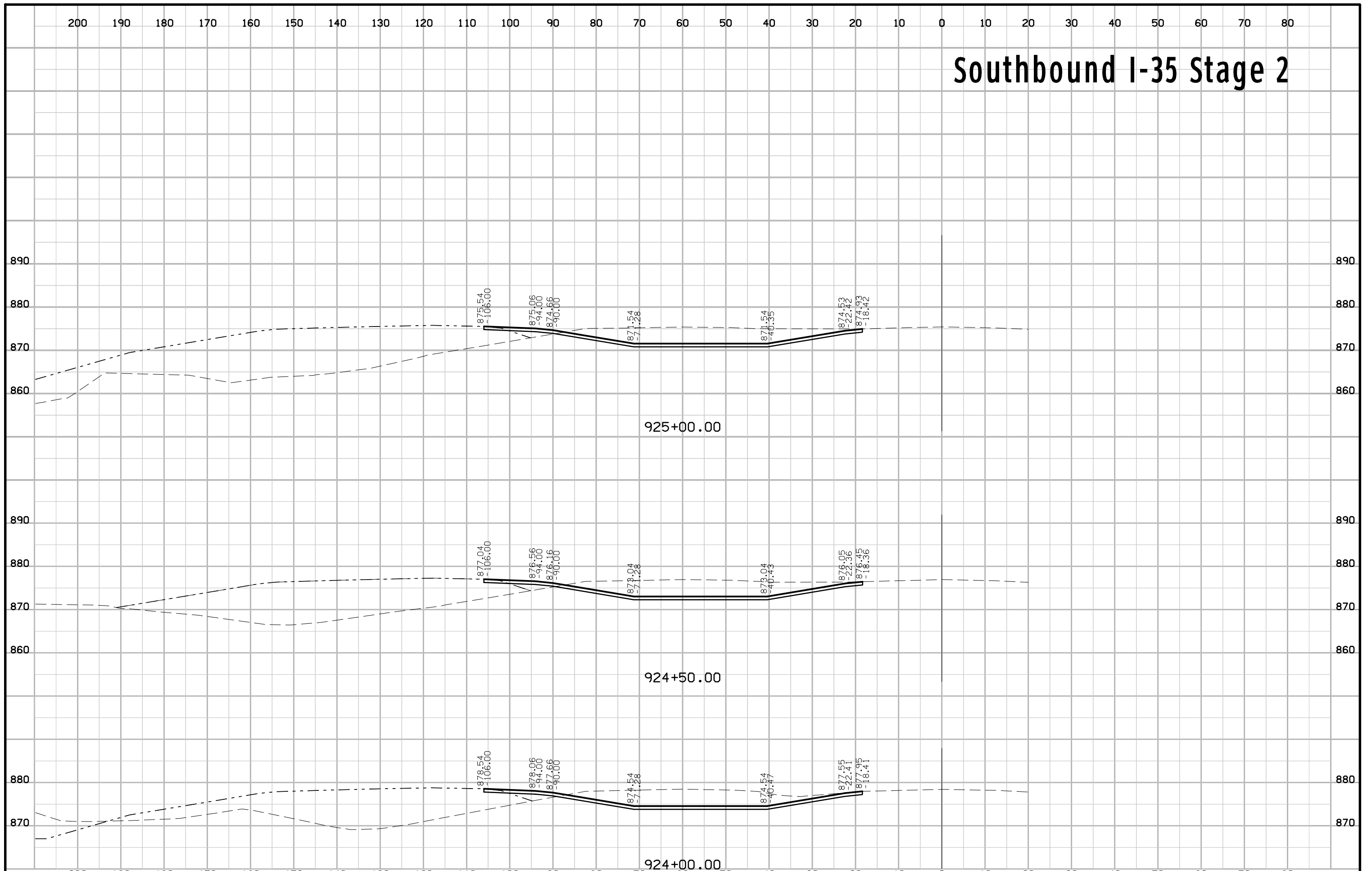
Southbound I-35 Stage 2



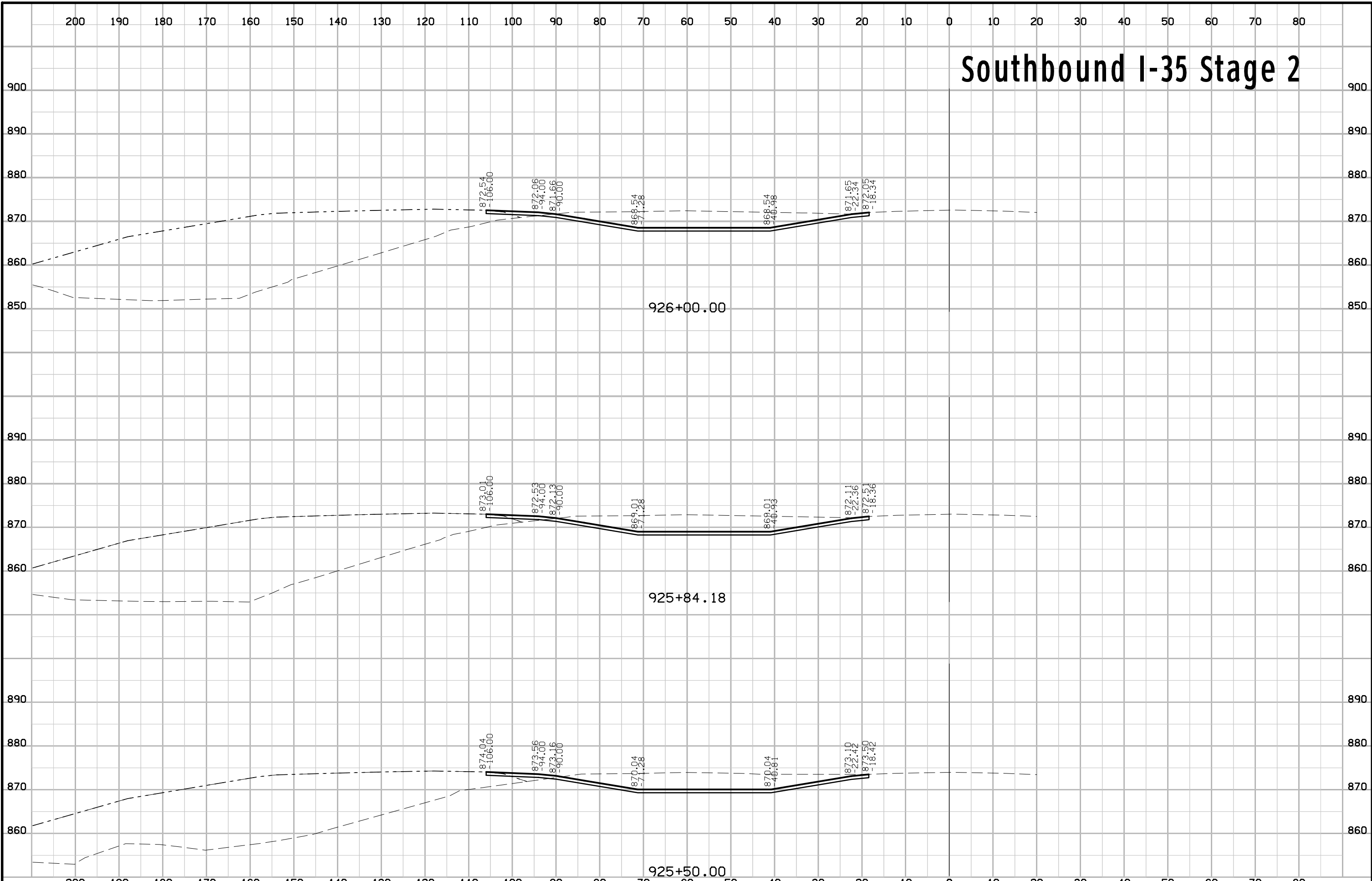
Southbound I-35 Stage 2



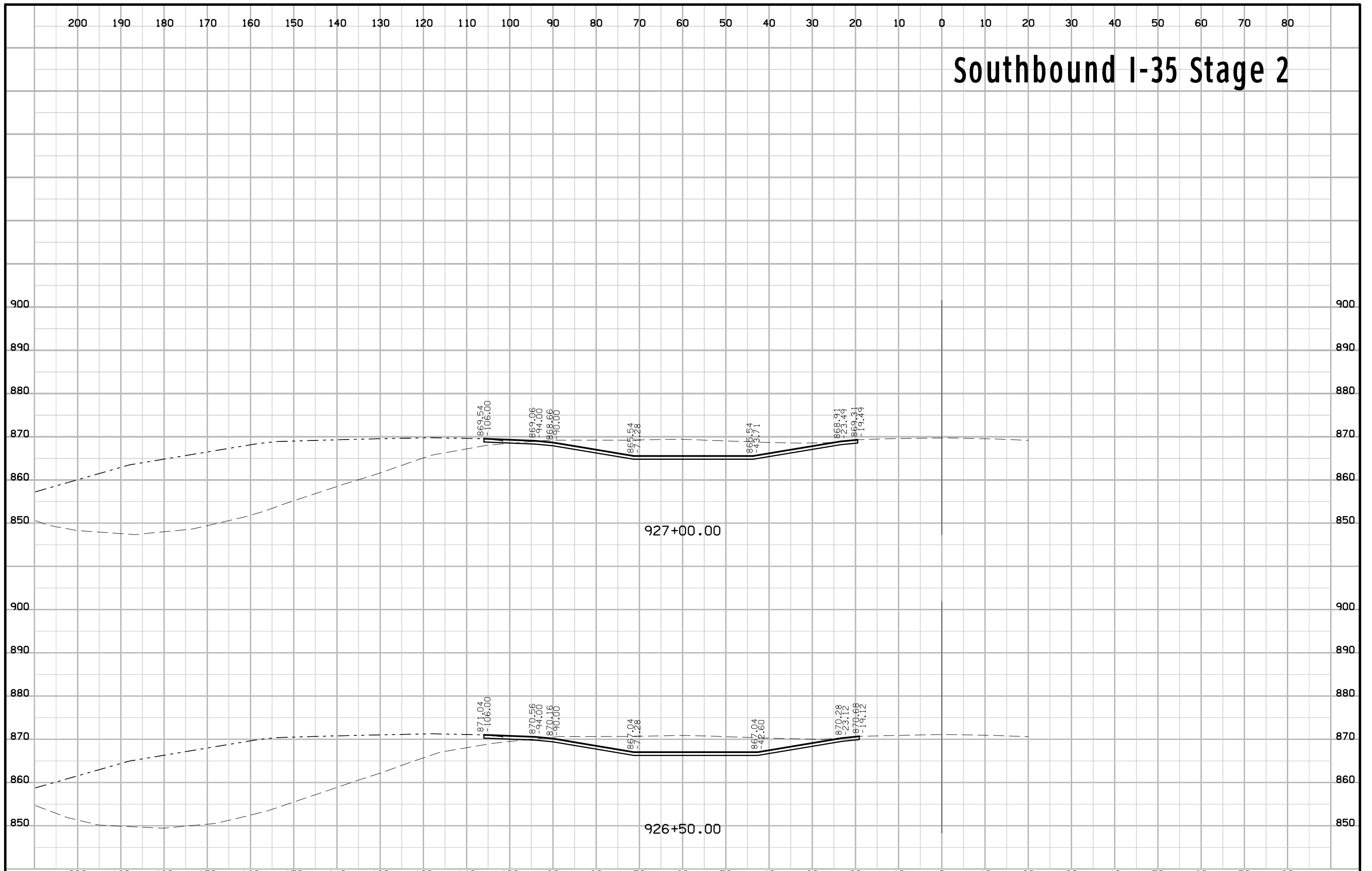
Southbound I-35 Stage 2



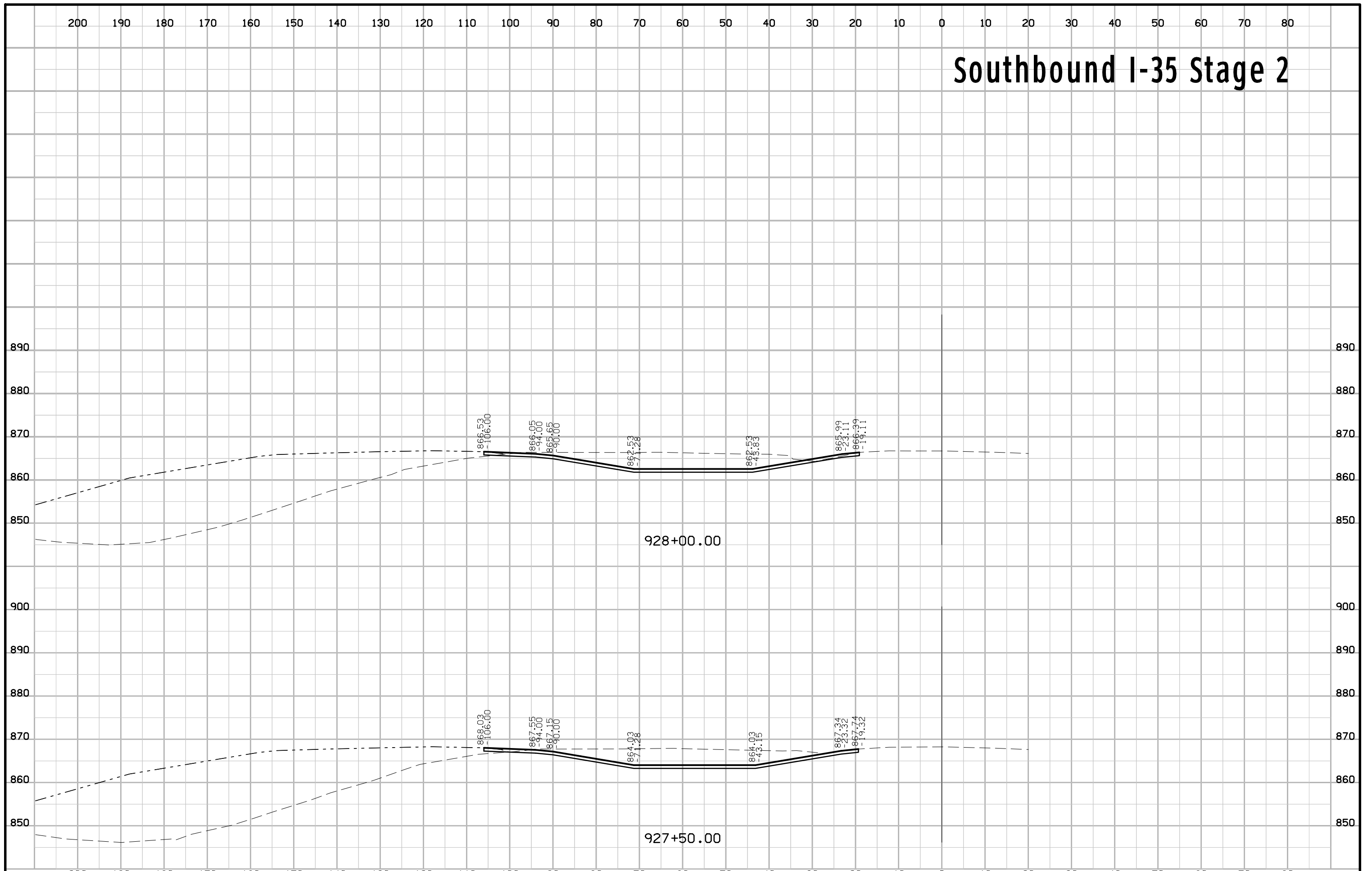
Southbound I-35 Stage 2



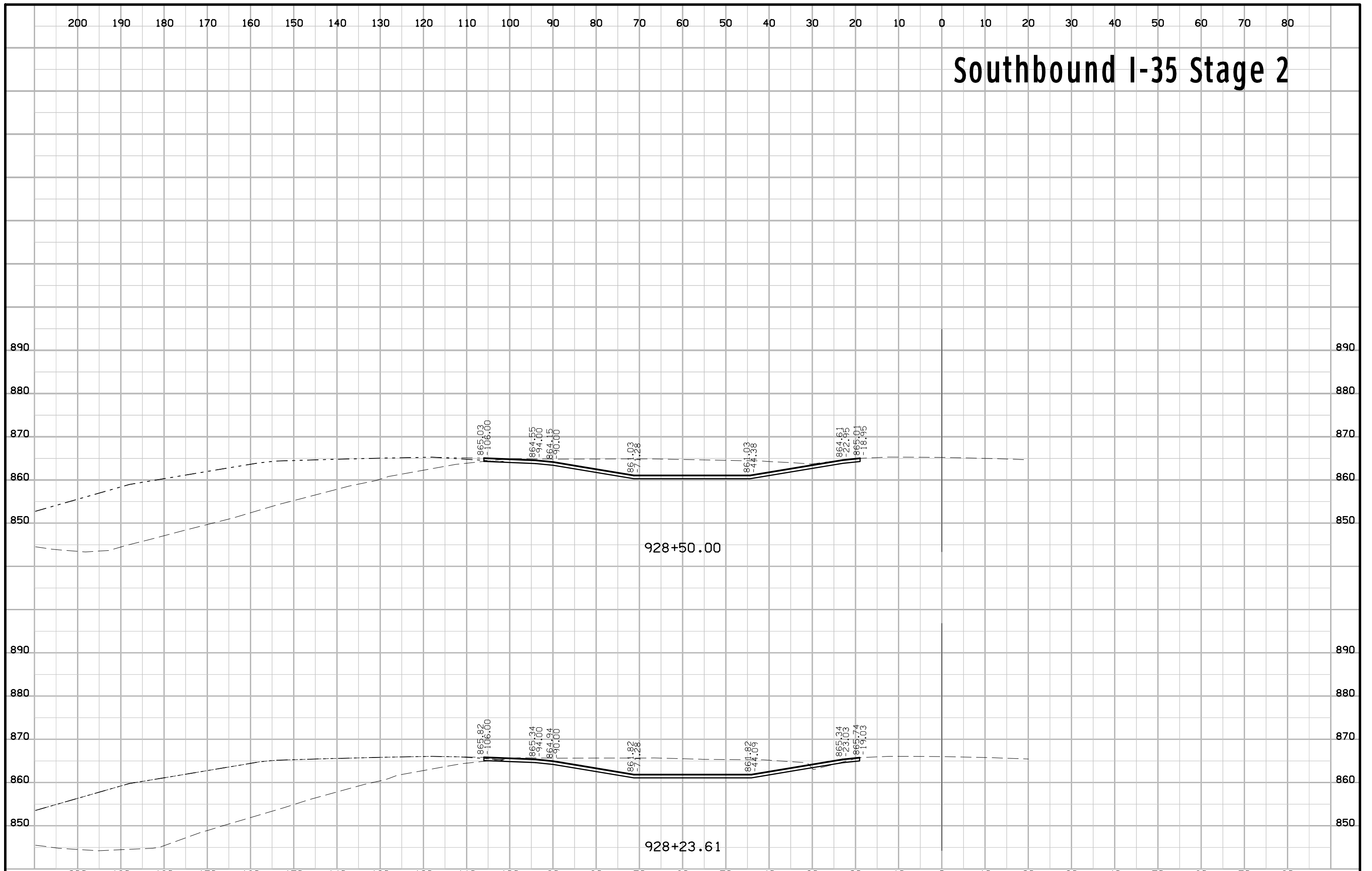
Southbound I-35 Stage 2



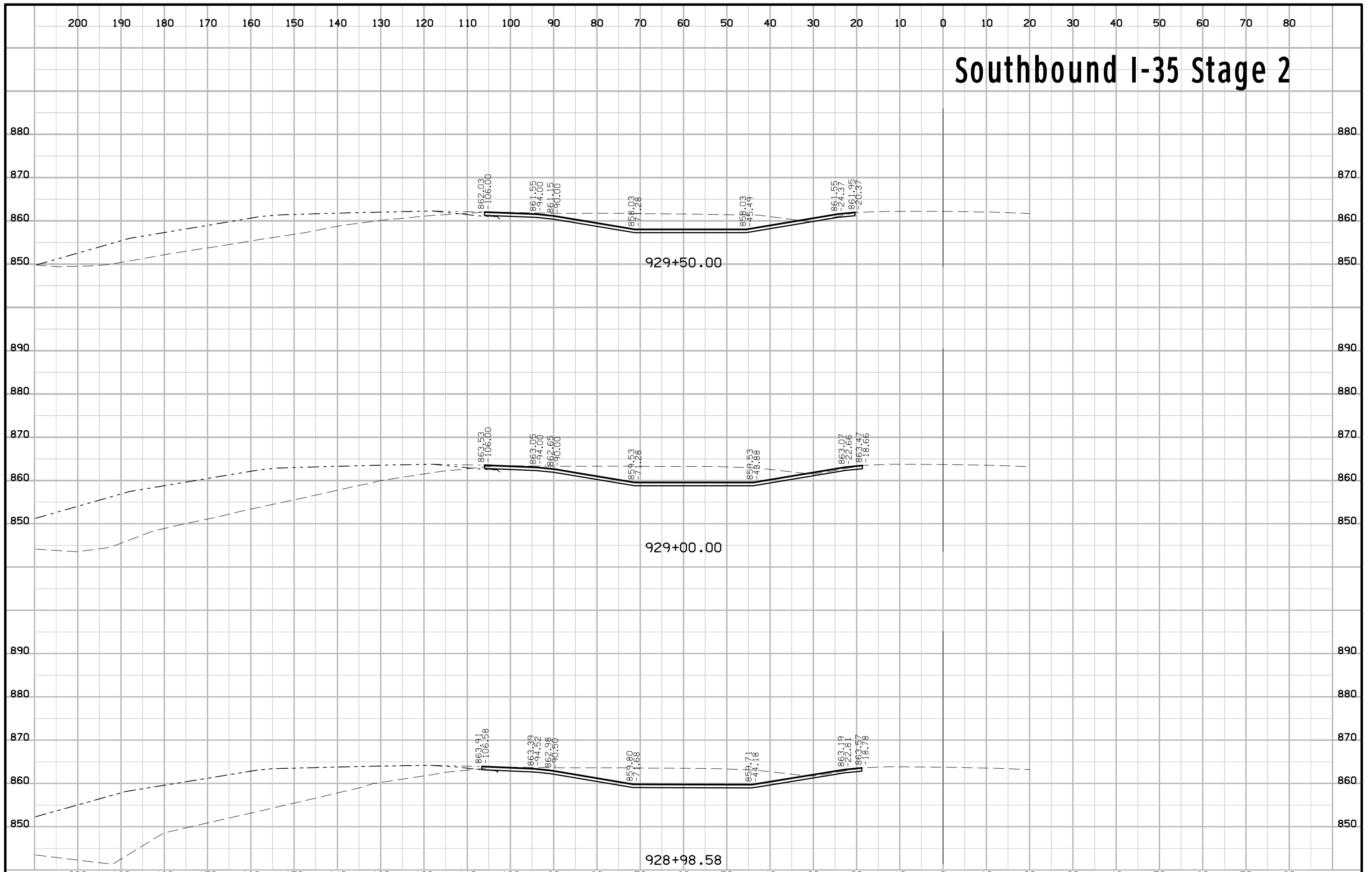
Southbound I-35 Stage 2



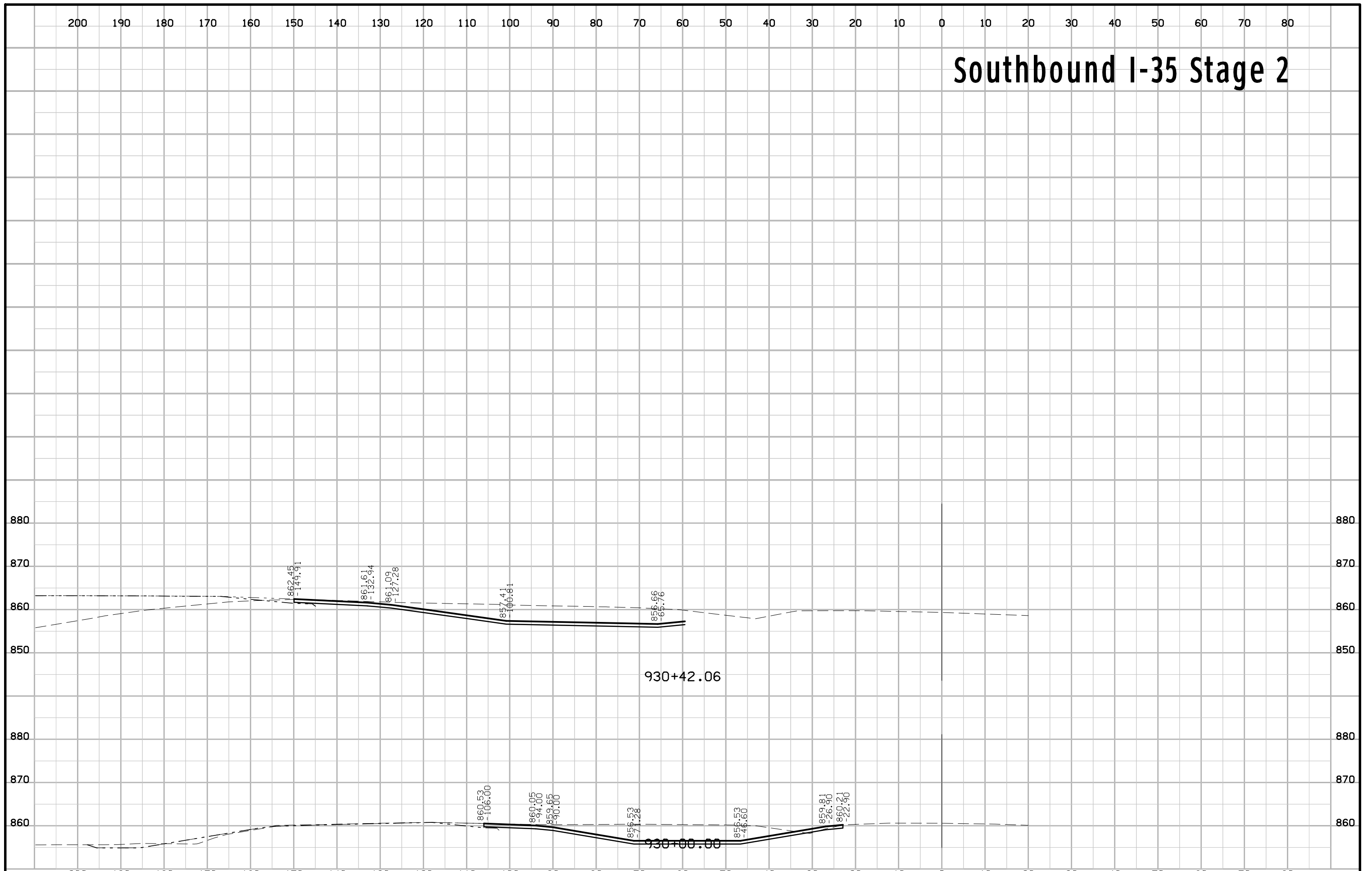
Southbound I-35 Stage 2



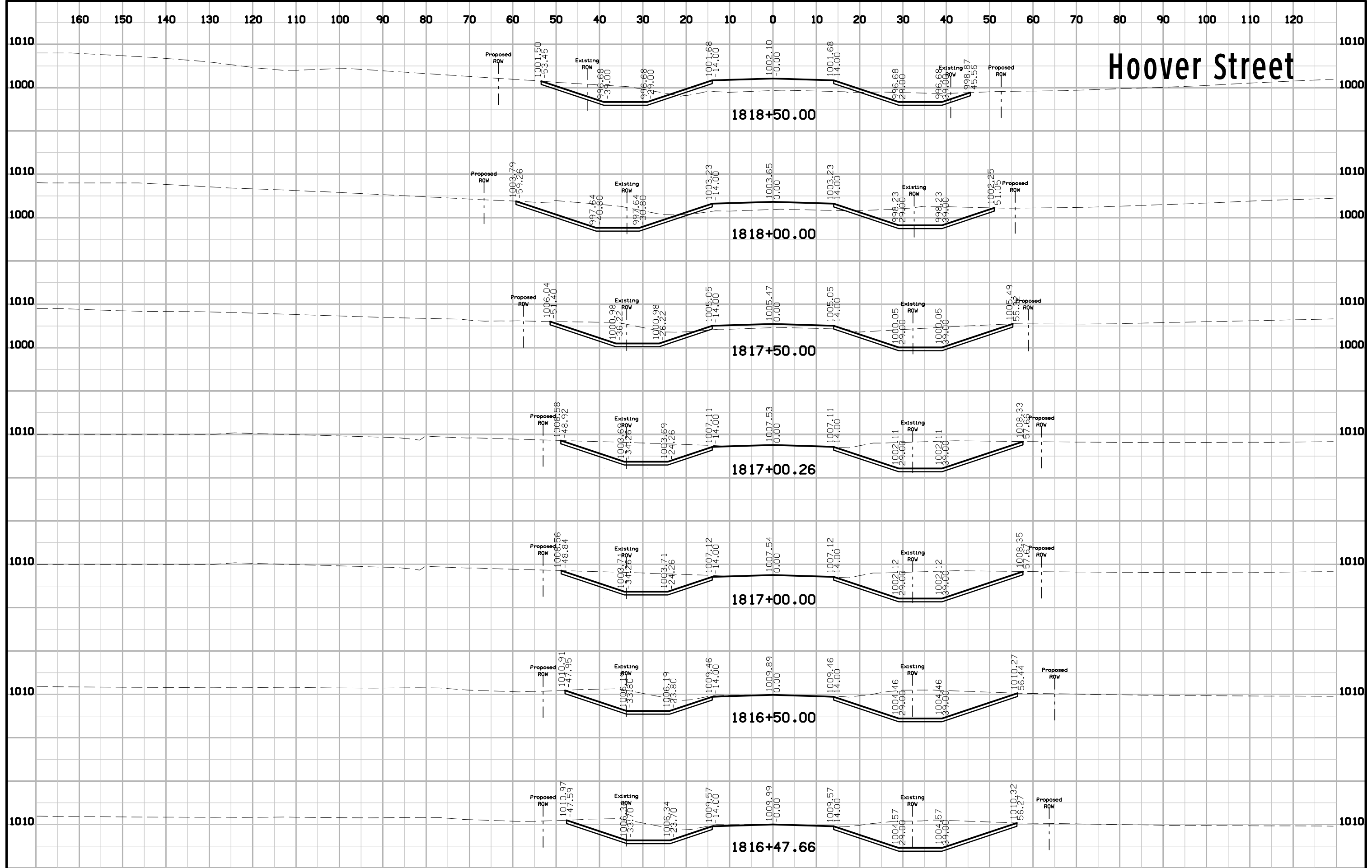
Southbound I-35 Stage 2



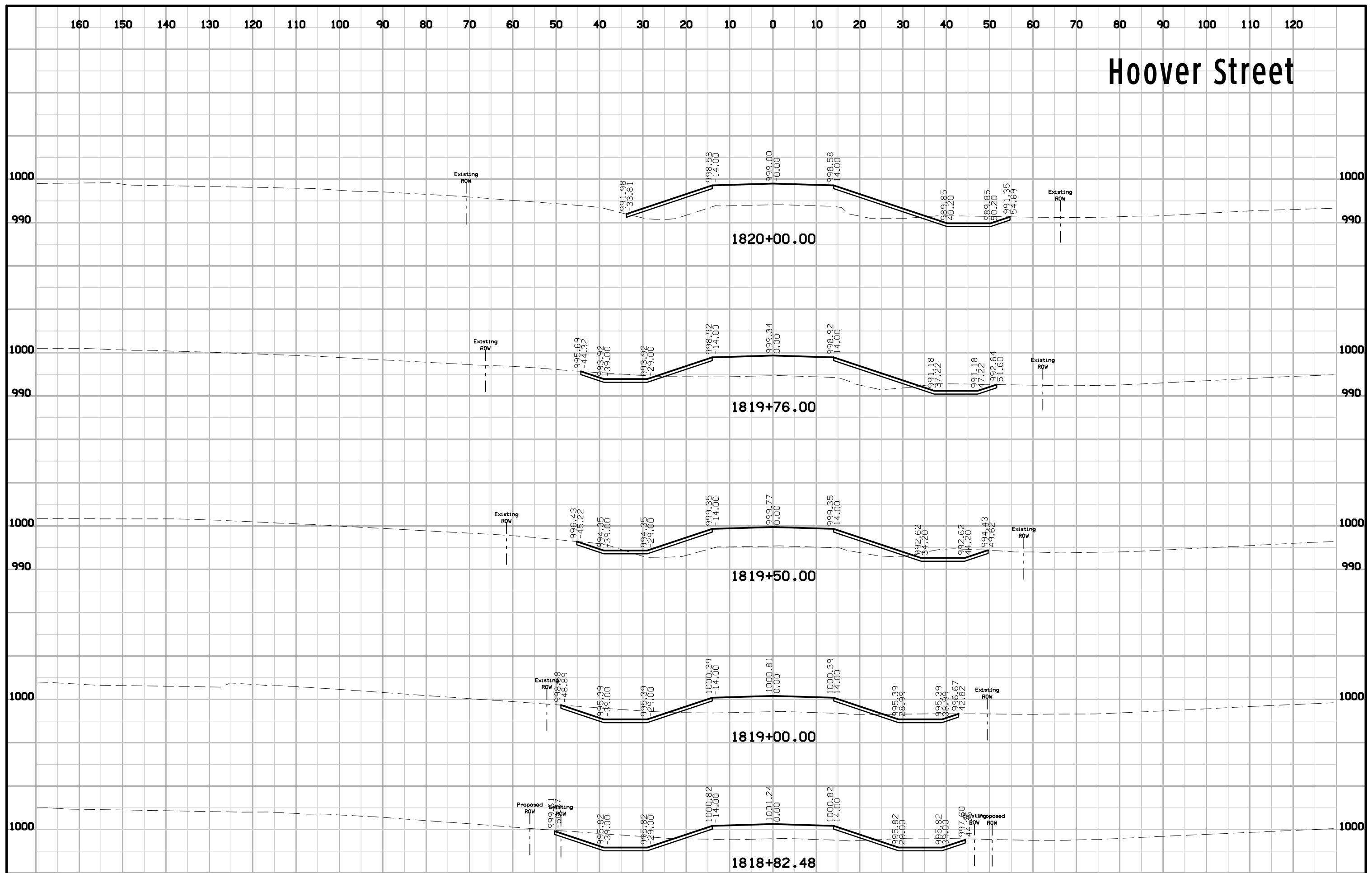
Southbound I-35 Stage 2



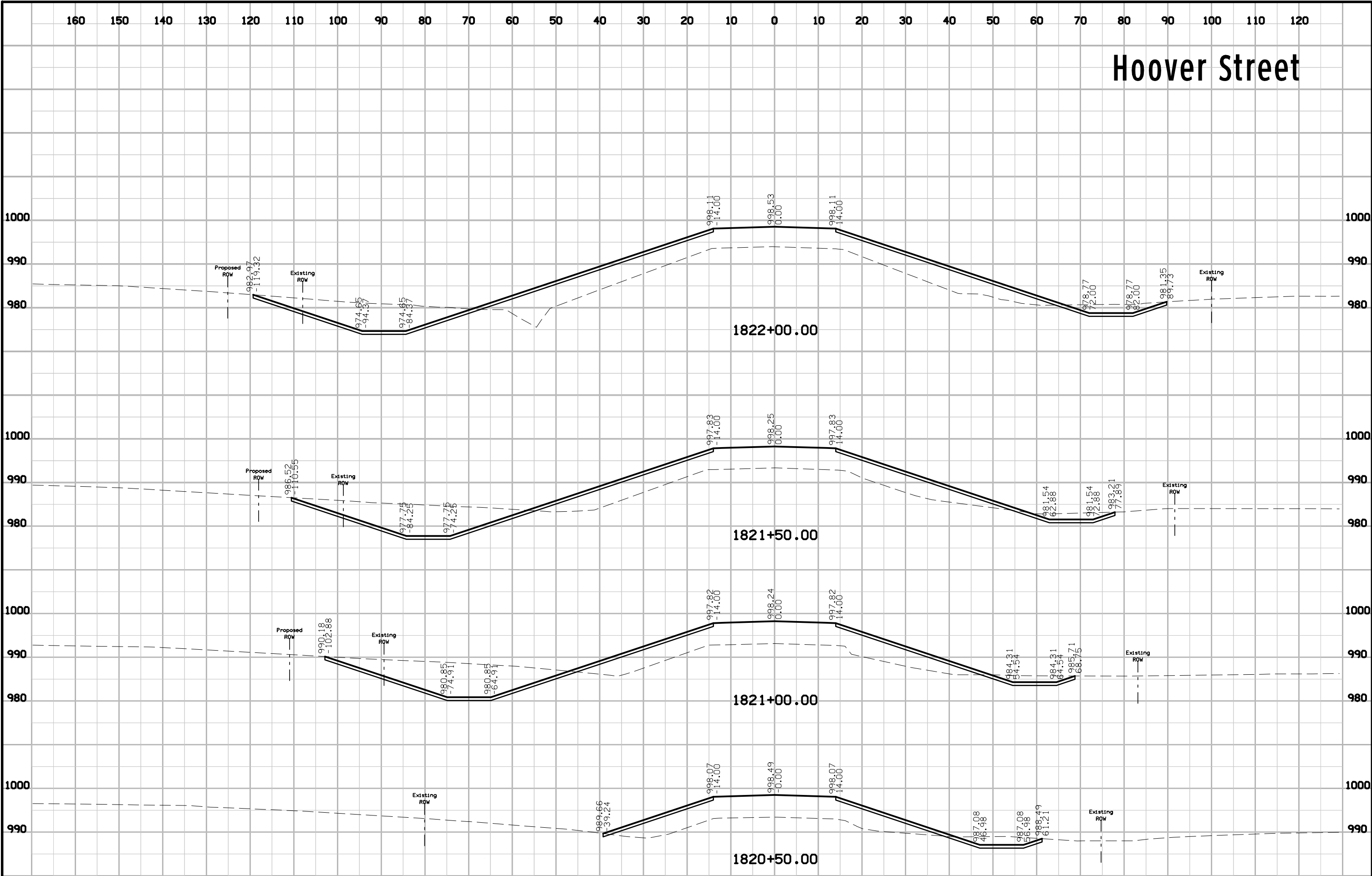
Hoover Street



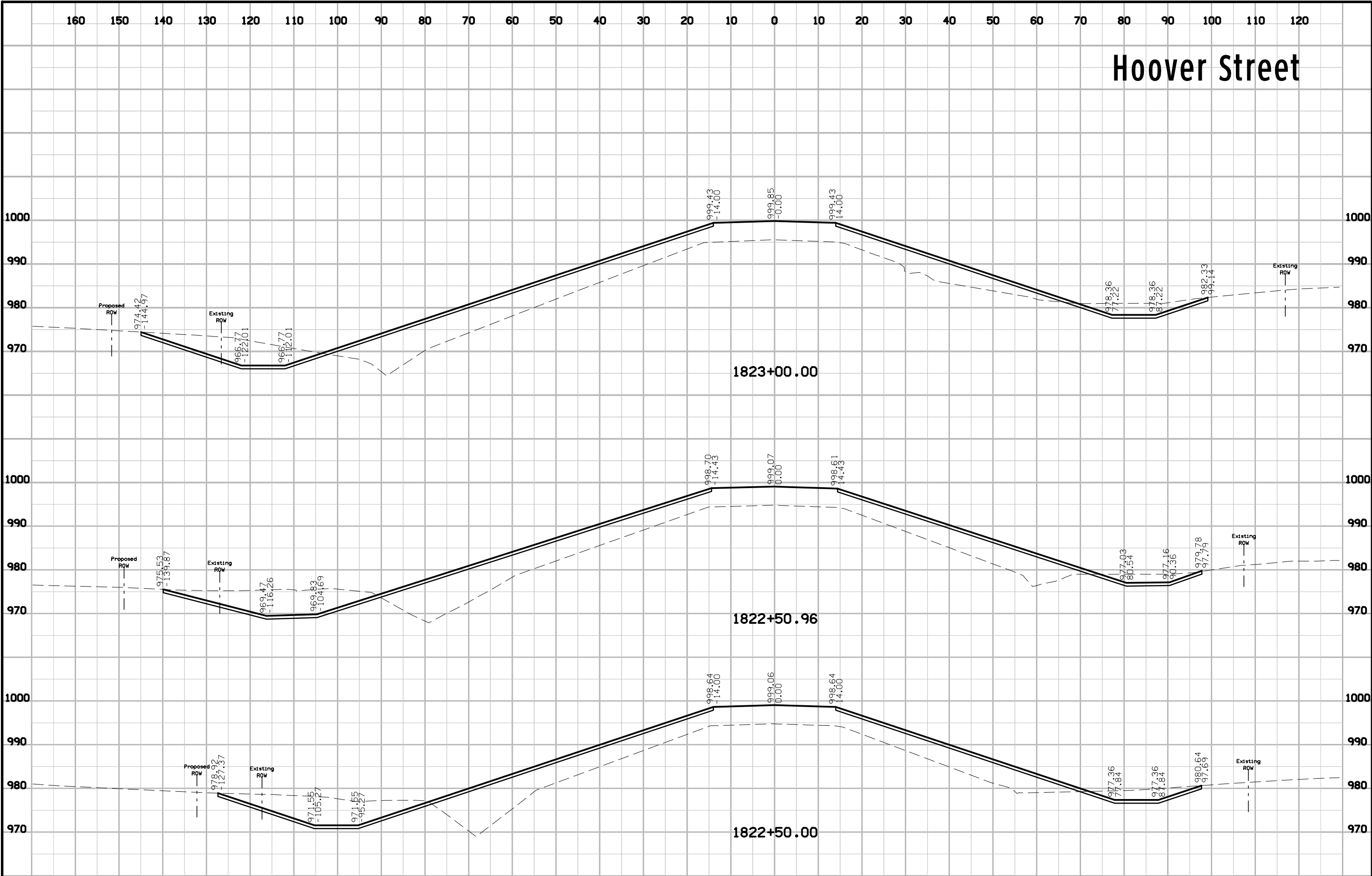
Hoover Street



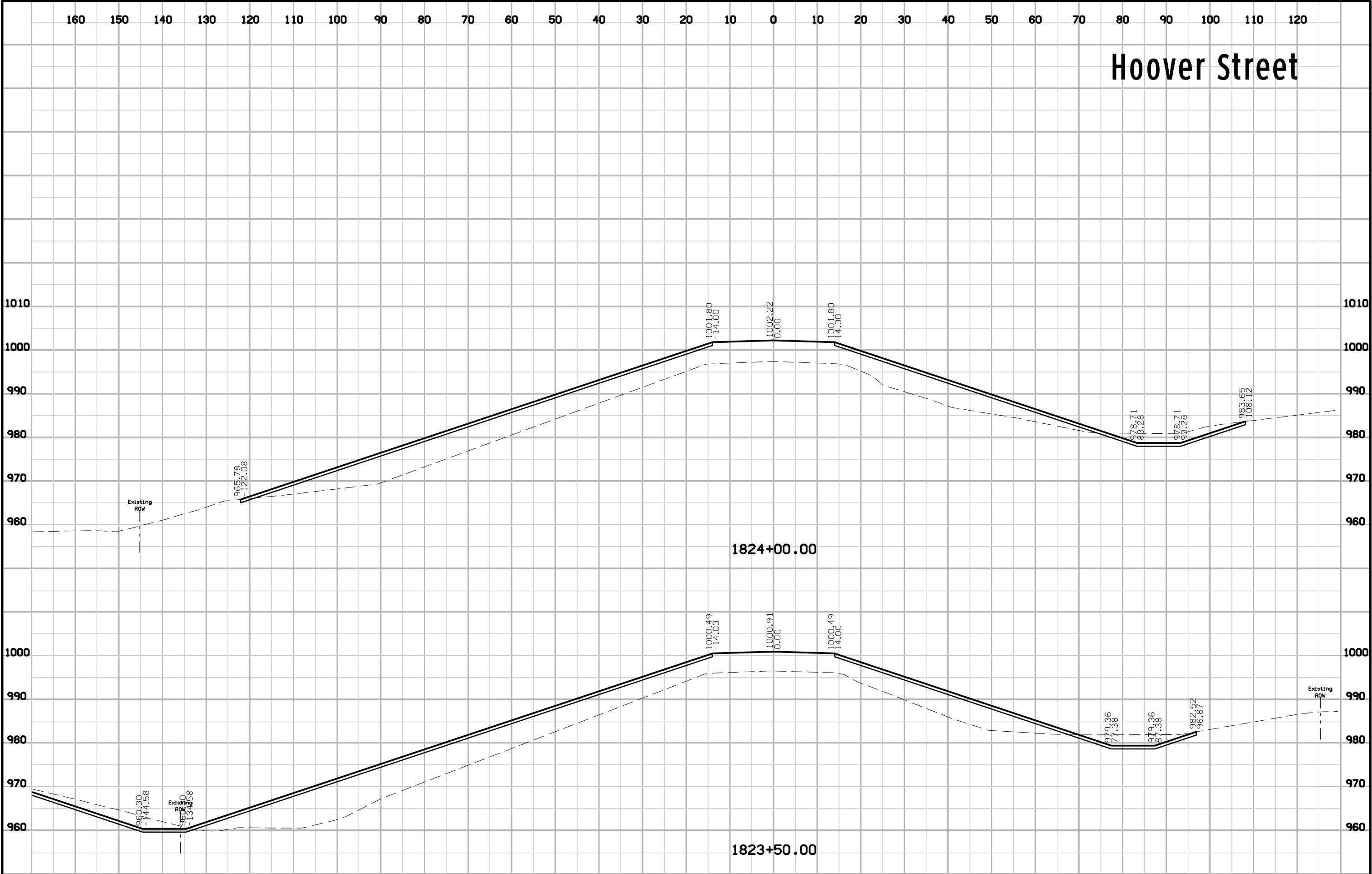
Hoover Street



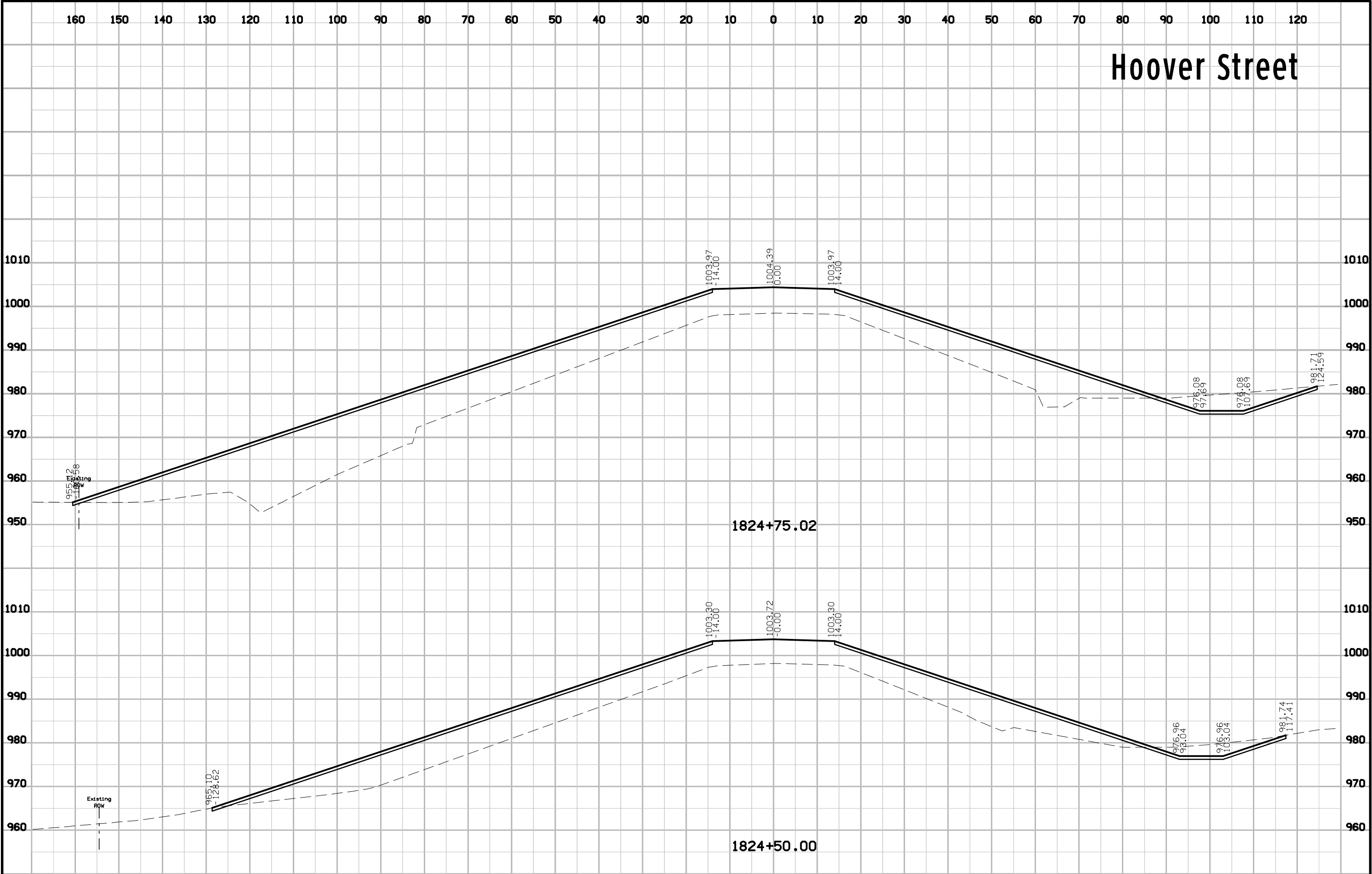
Hoover Street



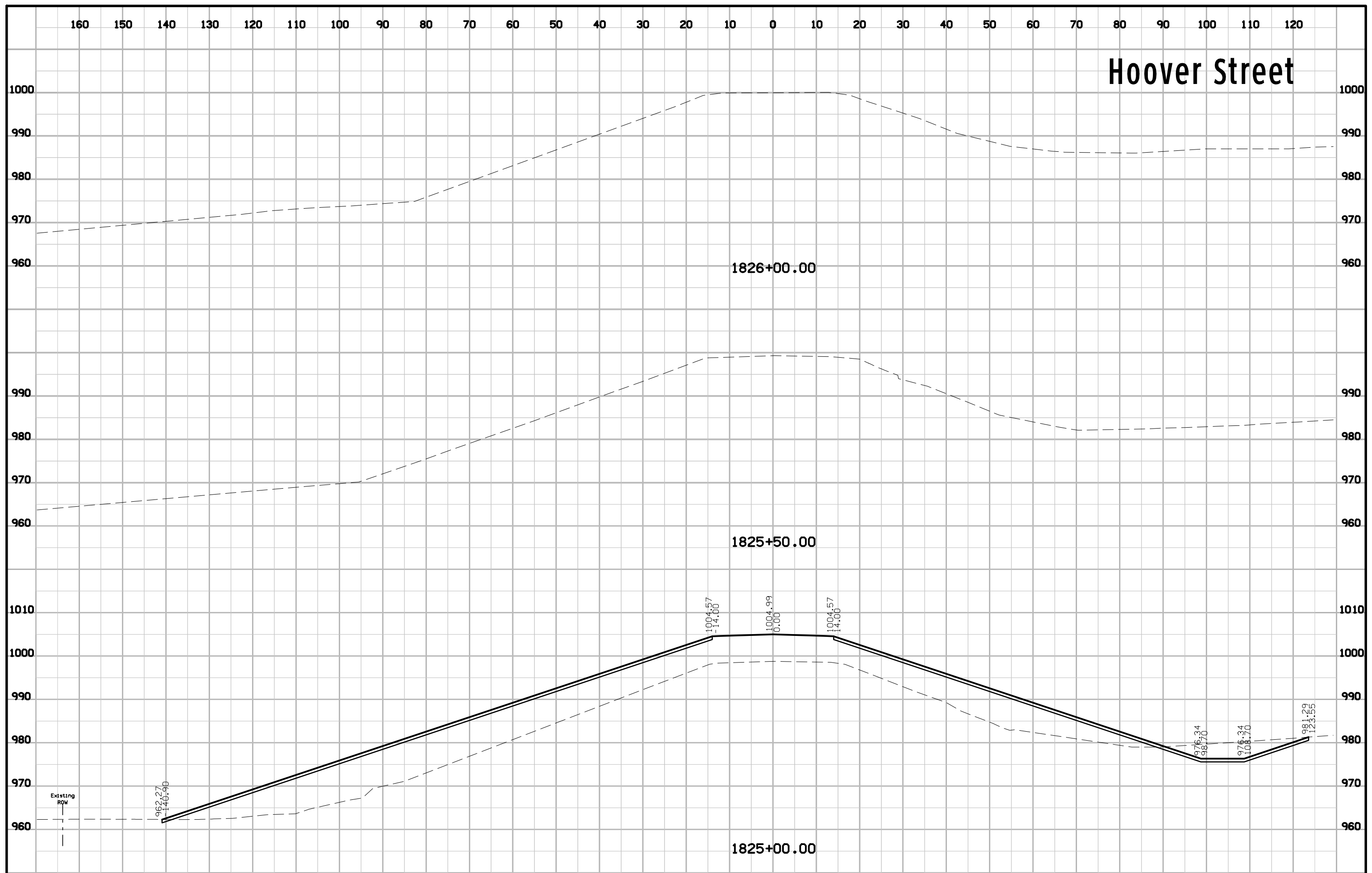
Hoover Street



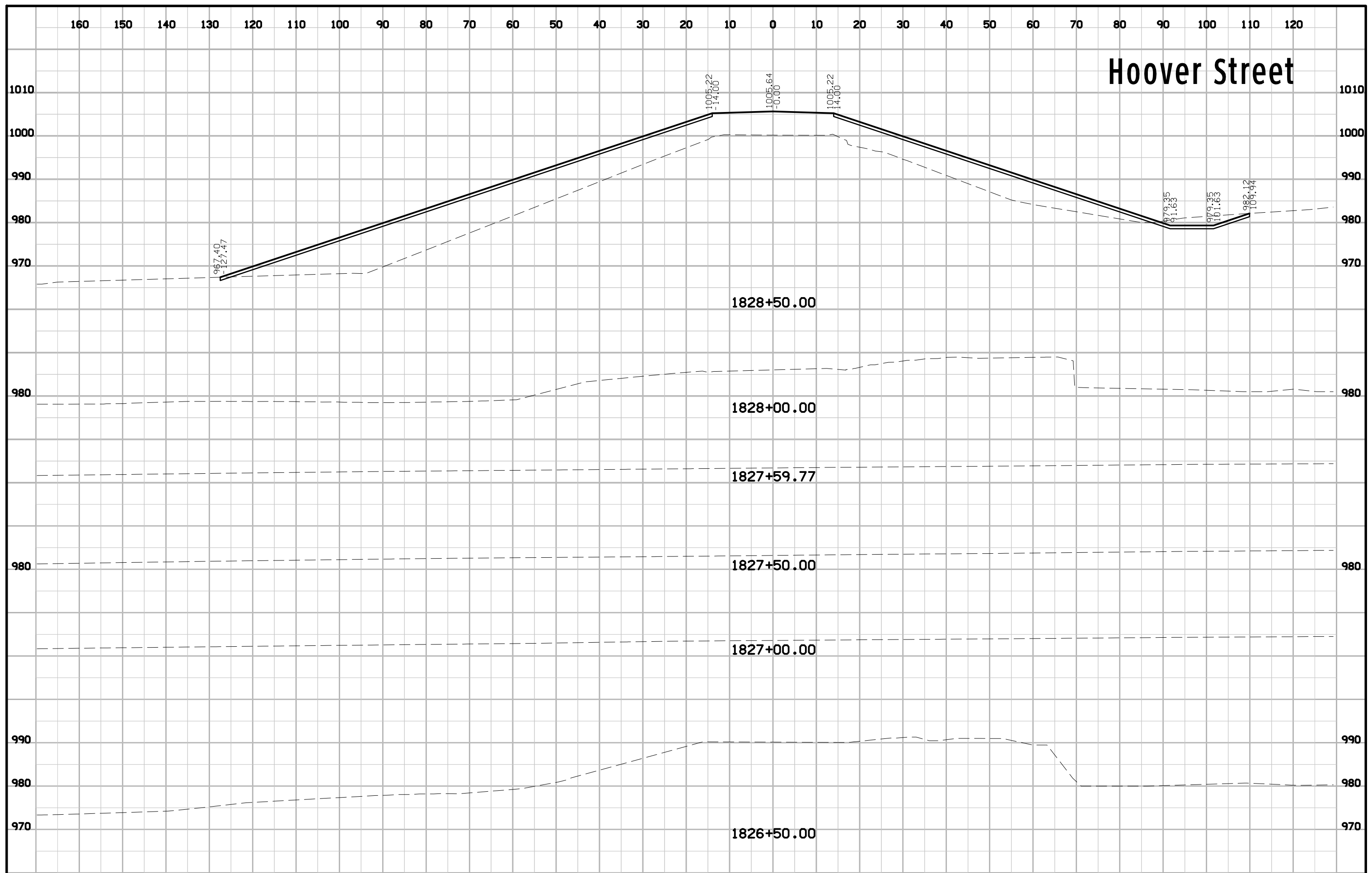
Hoover Street

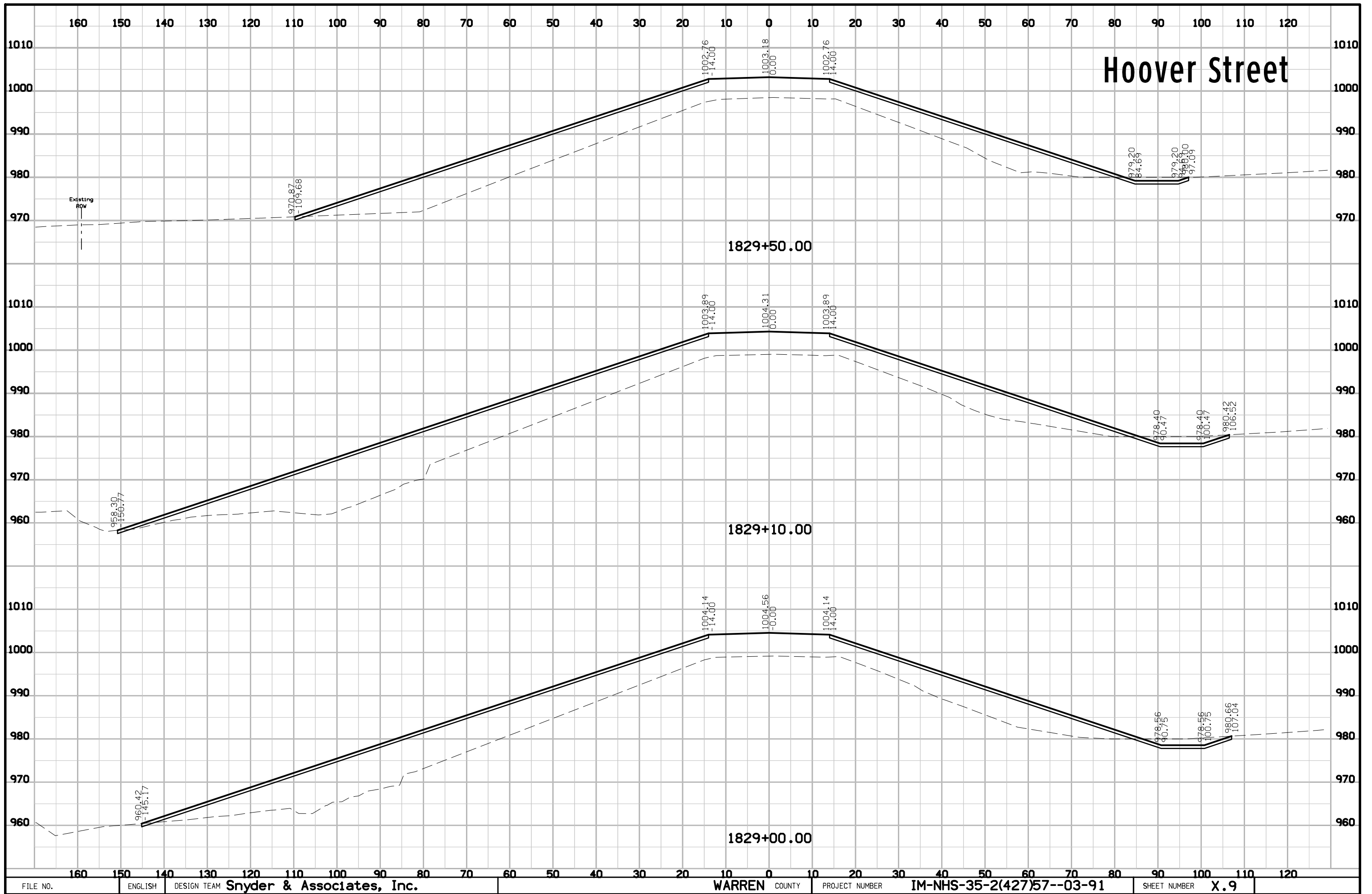


Hoover Street

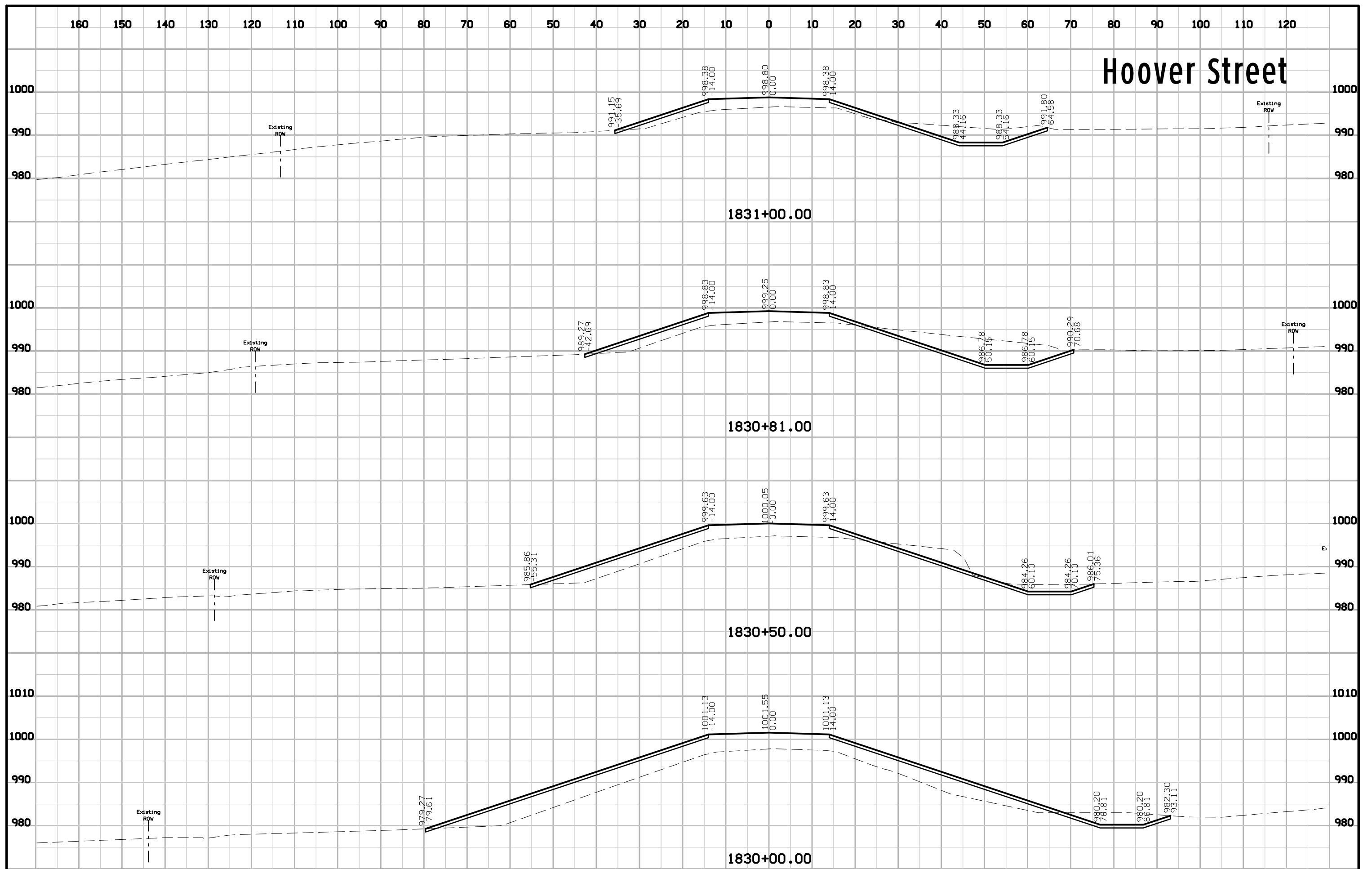


Hoover Street

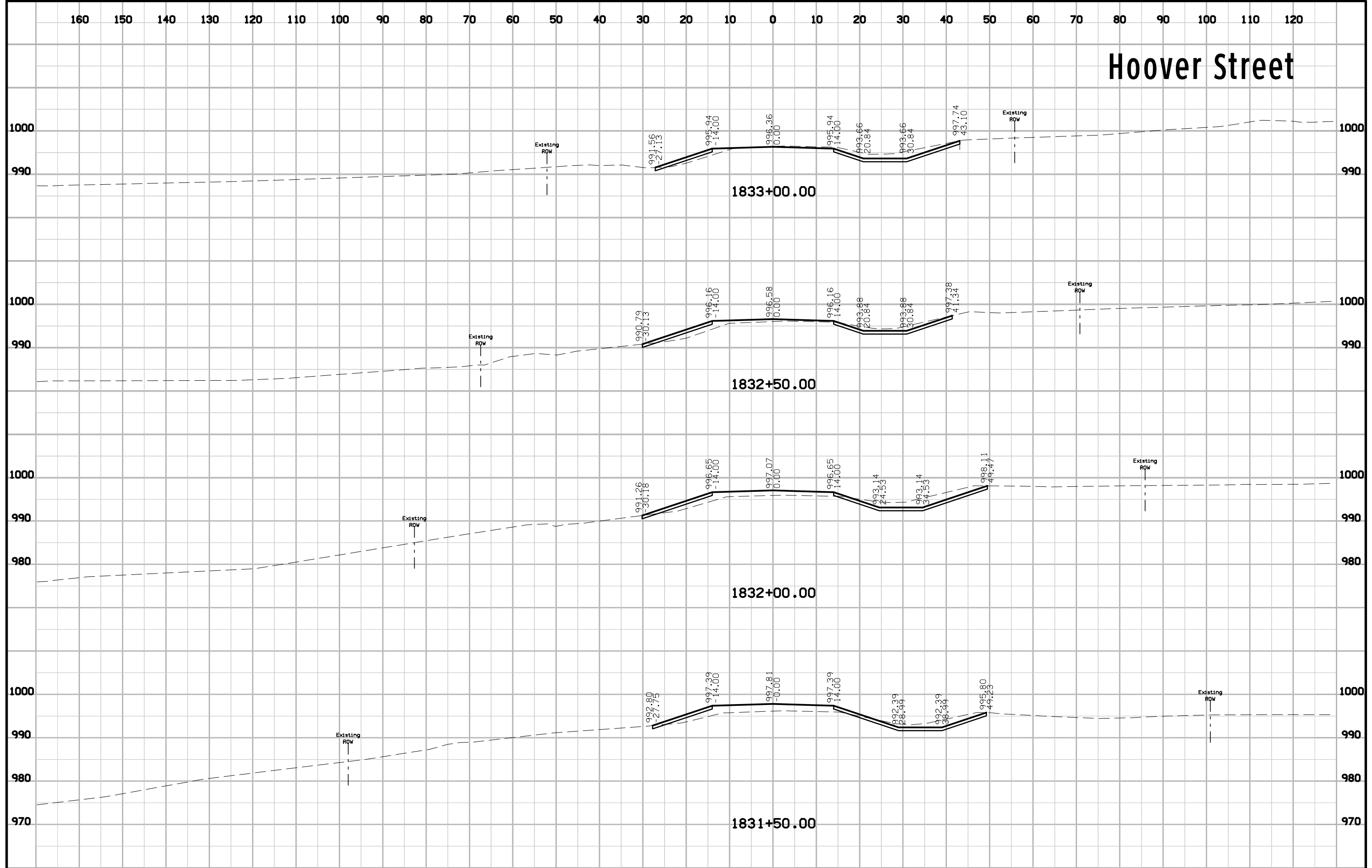




Hoover Street

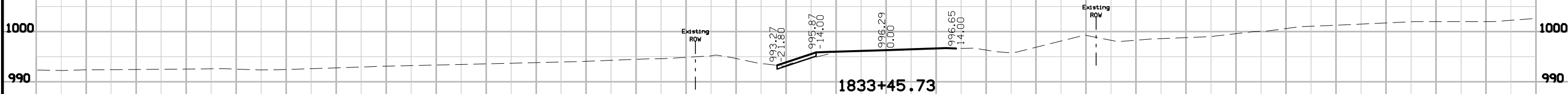


Hoover Street



160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120

Hoover Street



TRAFFIC CONTROL PLAN

1. Two lanes in each direction of I-35 shall remain open to traffic at all times, except as noted below. Shoulder closures will be allowed in accordance with Standard Road Plan TC-402.
2. I-35 will be closed for removal of the existing Hoover Street bridge, and for setting beams on the new bridge. Detour shall follow route shown on Sheet J.2. Closure shall be limited to off-peak hours (after 8 PM and before 6 AM).
3. Hoover Street will be closed to traffic during construction.

STAGING NOTES

- Stage 1: Construct new southbound lanes. Includes grading, drainage, and paving. Existing traffic patterns are maintained. Do not disturb existing pavement.
- Stage 2: Construct median ditch. Includes removal of existing southbound lanes. Southbound traffic utilizes newly constructed southbound lanes (constructed with Stage 1).

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)	Detour Pavement Shading
Brown, Med	(237)	Future Proposed Pavement Shading
Pink, Lavender(5)		Shoulder Strengthening 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
Pink, Lavender(5)		Shoulder Strengthening Shading
Black w/Gray, Light Fill	(0,48)	Previously Constructed Structure

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

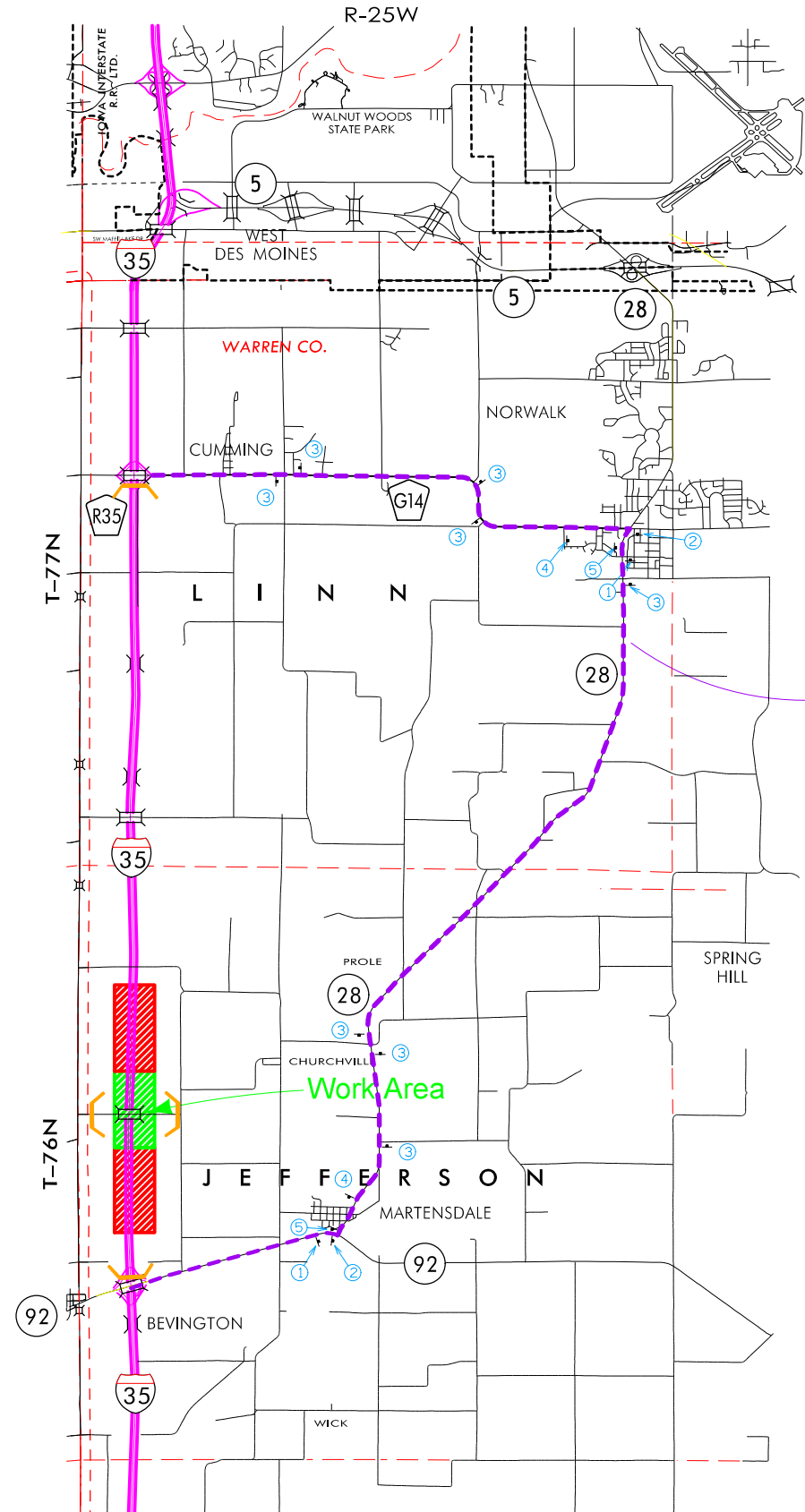
	Channelizing Device		Crash Cushion
	Drum		Traffic Signal
	Temporary Lane Separator		Flagger
	Tubular Marker		Temporary Floodlighting
	Channelizer Marker		Traffic Sign
	Concrete Barrier Marker		Type III Barricade
	Delineator		Type A Warning Light
	Temporary Barrier Rail		Direction of Traffic
	Pavement Removal		Safety Closure
	Arrow Board		

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

TRAFFIC CONTROL AND STAGING LEGEND AND SYMBOL INFORMATION SHEET

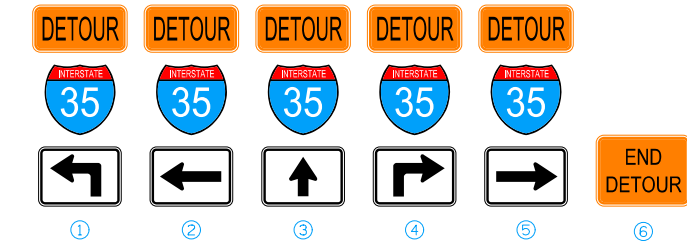
(COVERS SHEET SERIES J)

DETOUR ROUTE

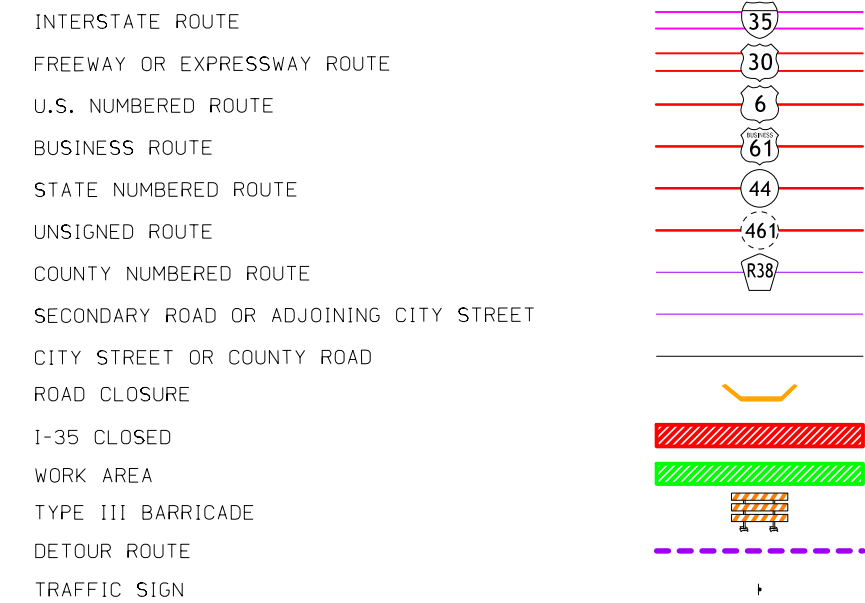


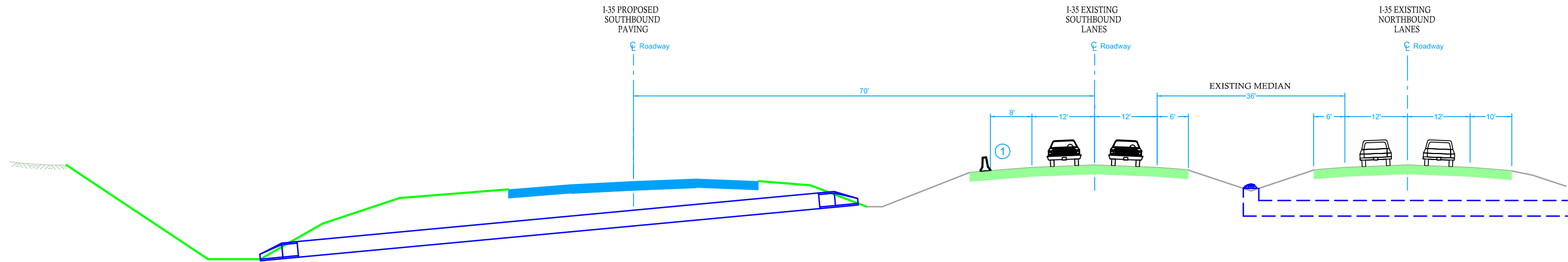
NOTES:

- A. Detour route is for removal of existing Hoover Street bridge and setting of beams.
- B. Maintain a min. of 400' spacing between existing signs and detour signs.
- C. Place CMS one week prior to closure. Include date/time of closure.
- D. Refer to standard road plan TC-454 for traffic control and signage on interstate during closure.



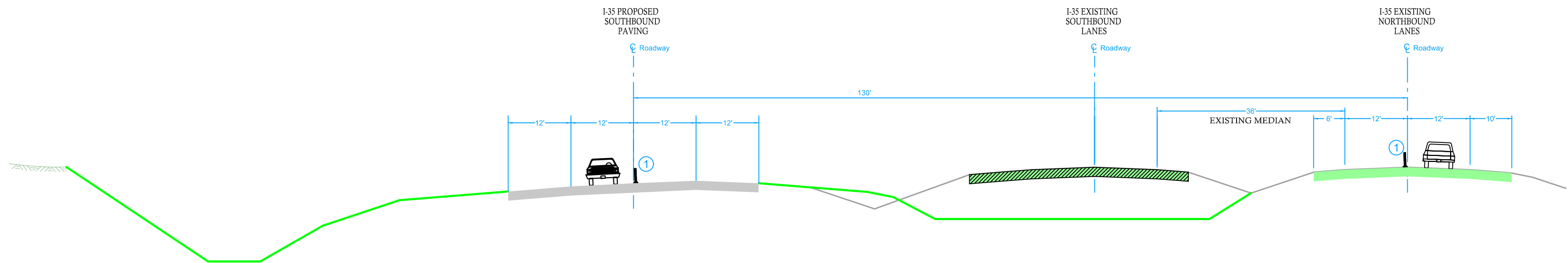
LEGEND





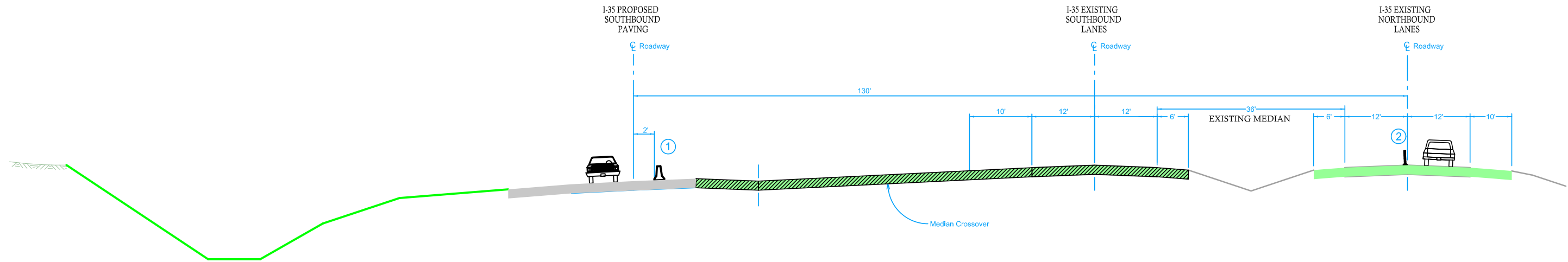
STAGE 1 CONSTRUCTION
STA. 809+50 to STA. 930+00
Proposed Southbound Paving Construction
Traffic On Existing Lanes

Notes:
① Temporary Barrier Rail



STAGE 2 CONSTRUCTION
STA. 809+50 to STA. 927+63
Removal of Existing Southbound Pavement
Traffic On Newly Constructed and Existing Lanes

Notes:
① 42" Channelizer



STAGE 2 CONSTRUCTION
 STA. 801+66.95 to 809+50.00 and 927+63 to 938+00
 Removal of Existing Median Crossovers
 Traffic On Newly Constructed and Existing Lanes

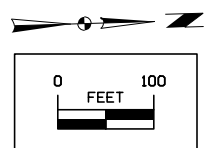
Notes:

- ① Temporary Barrier Rail
- ② 42" Channelizer

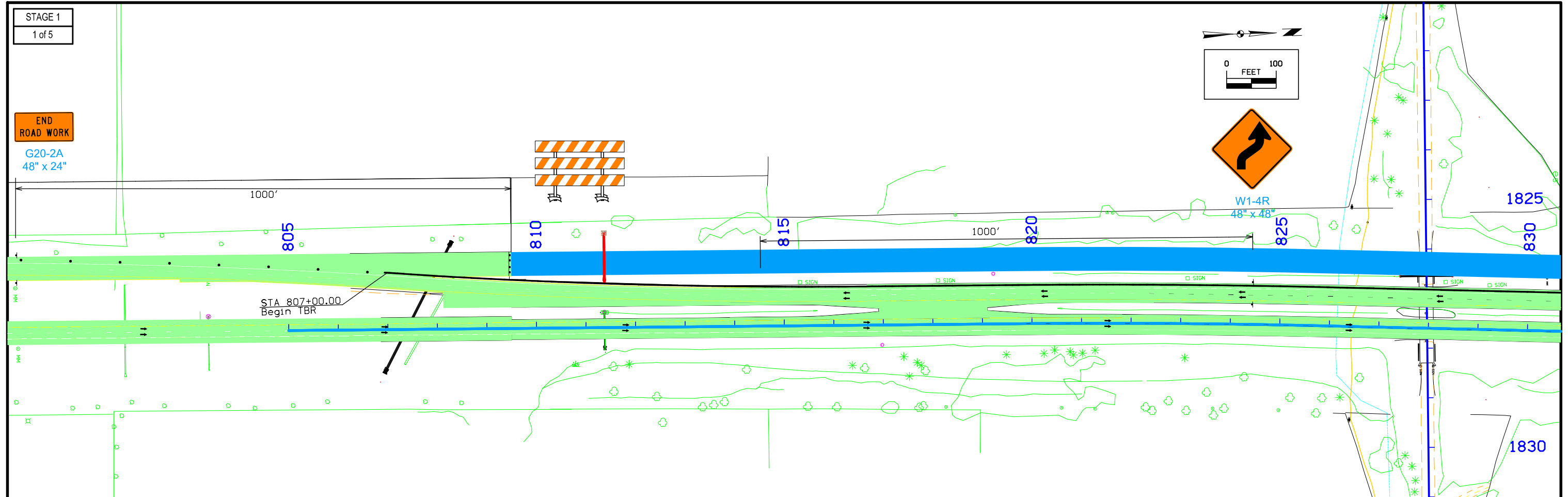
STAGE 1
1 of 5

END
ROAD WORK

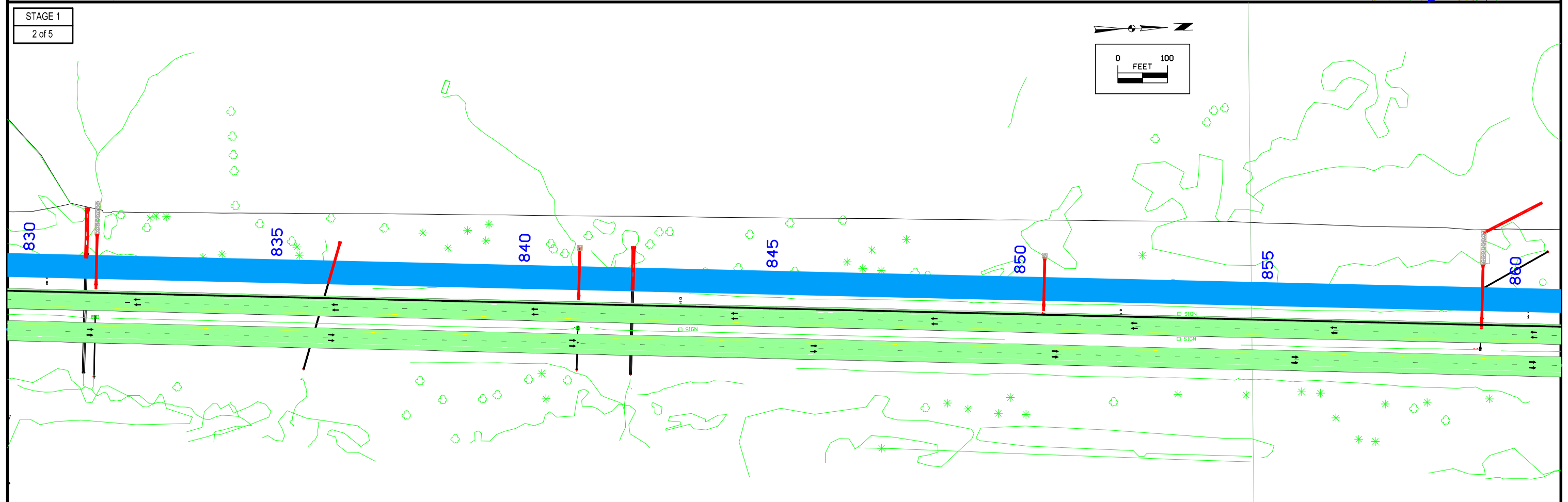
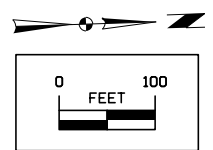
G20-2A
48" x 24"



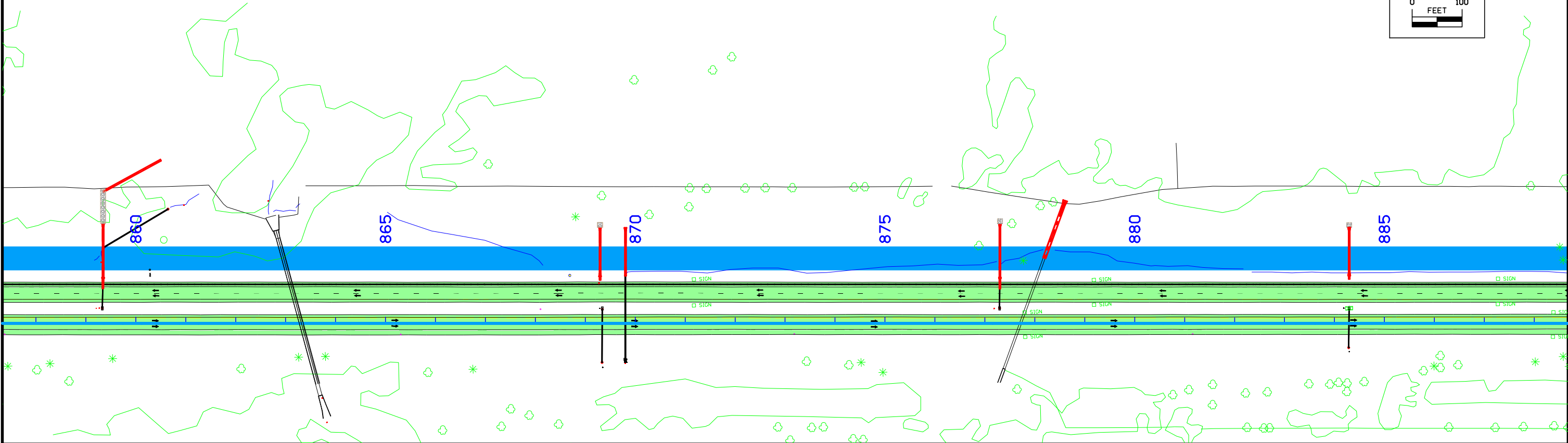
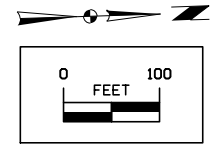
W1-4R
48" x 48"



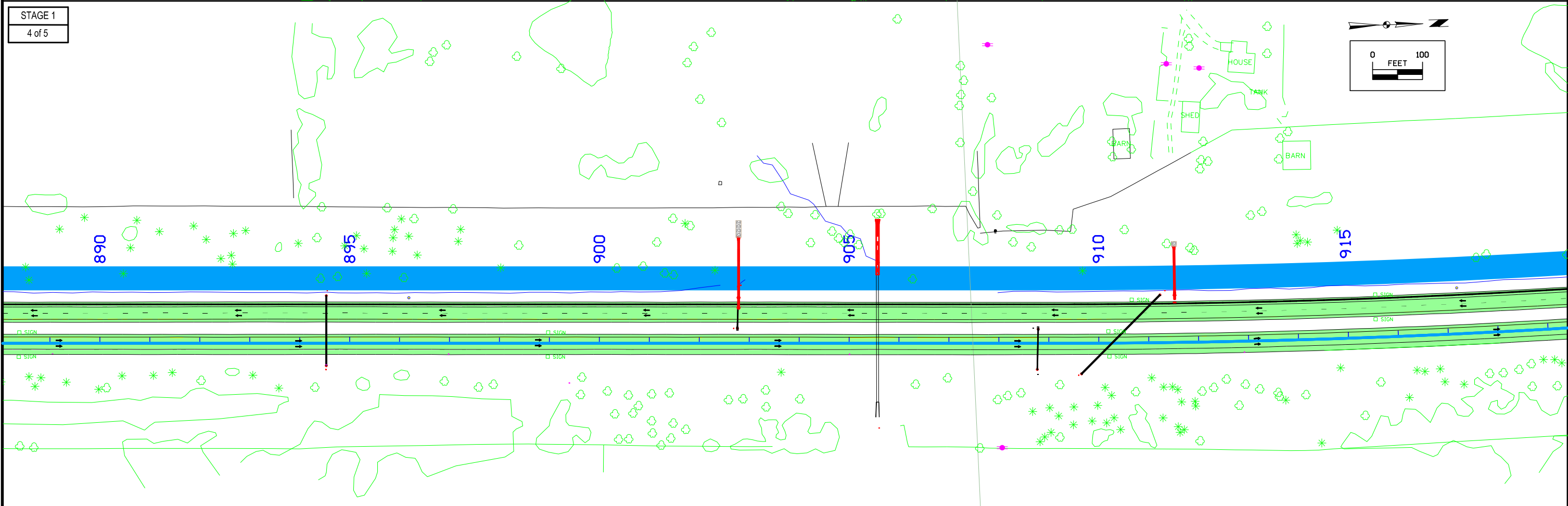
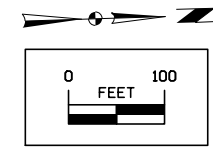
STAGE 1
2 of 5



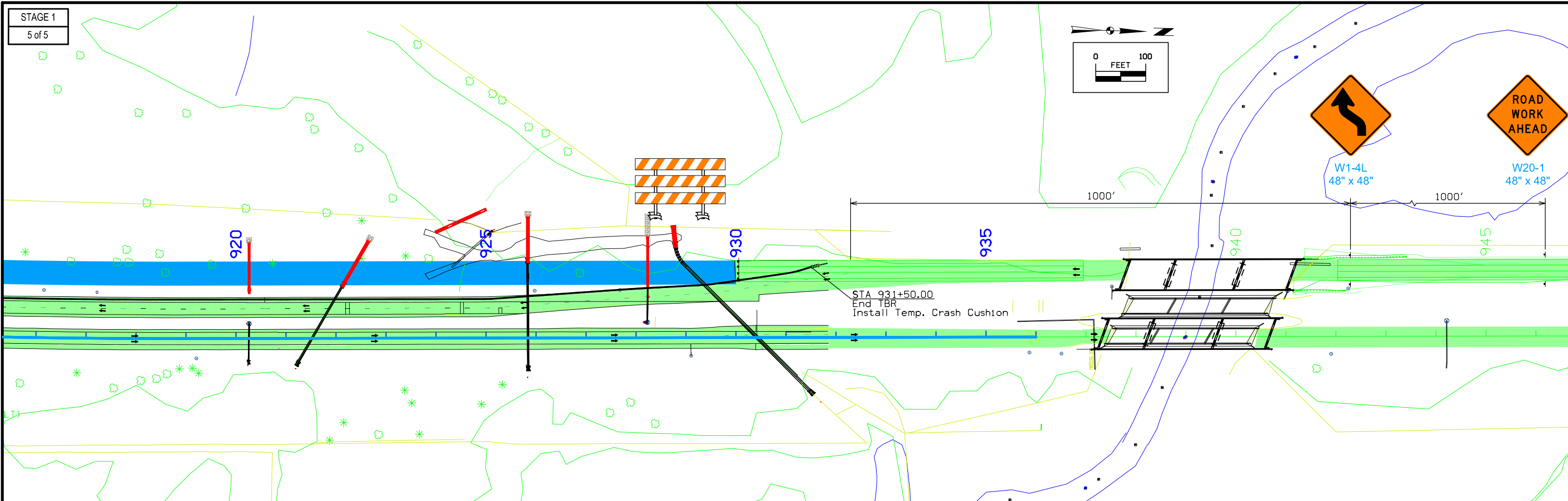
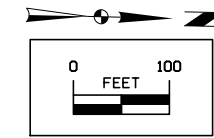
STAGE 1
3 of 5

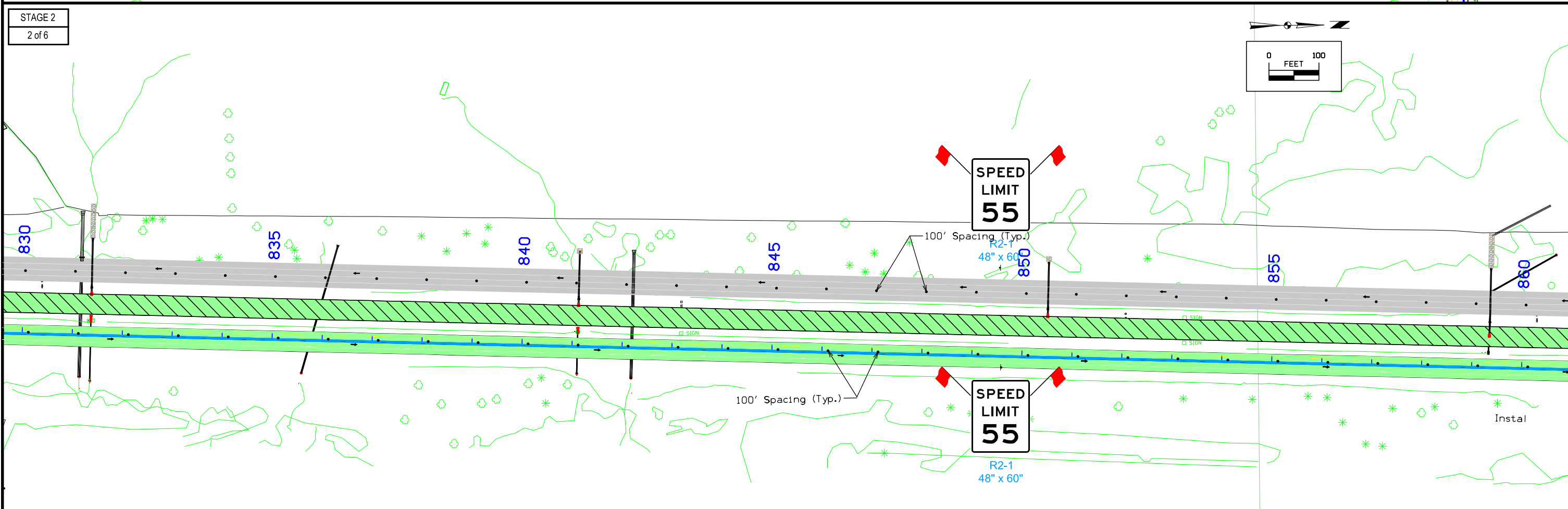
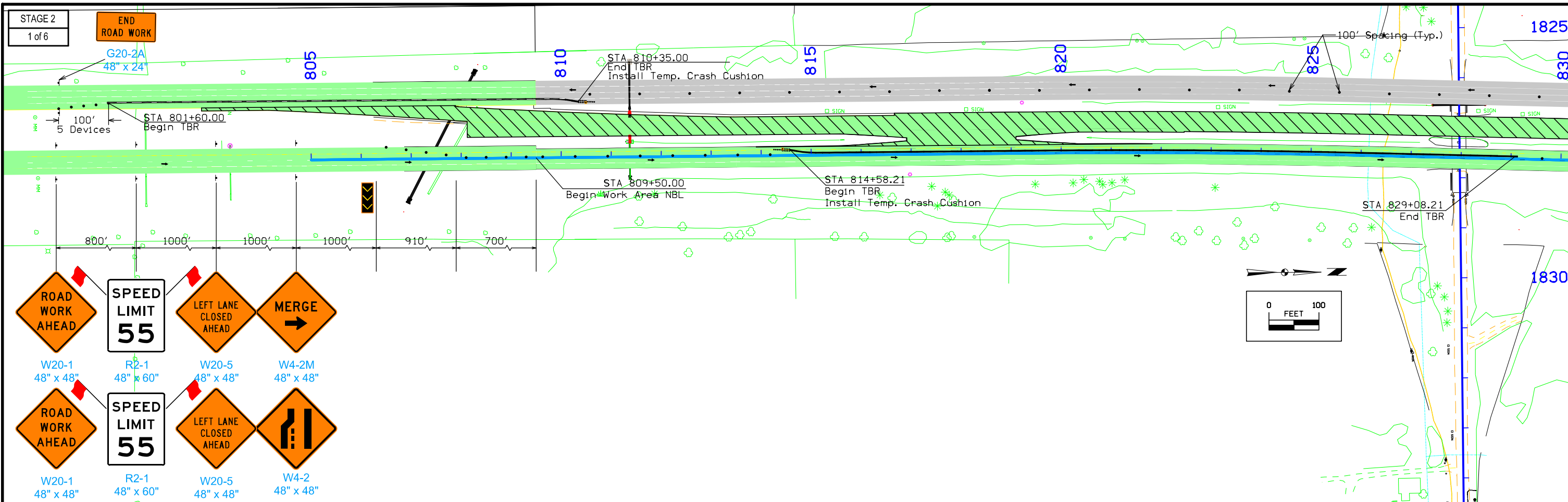


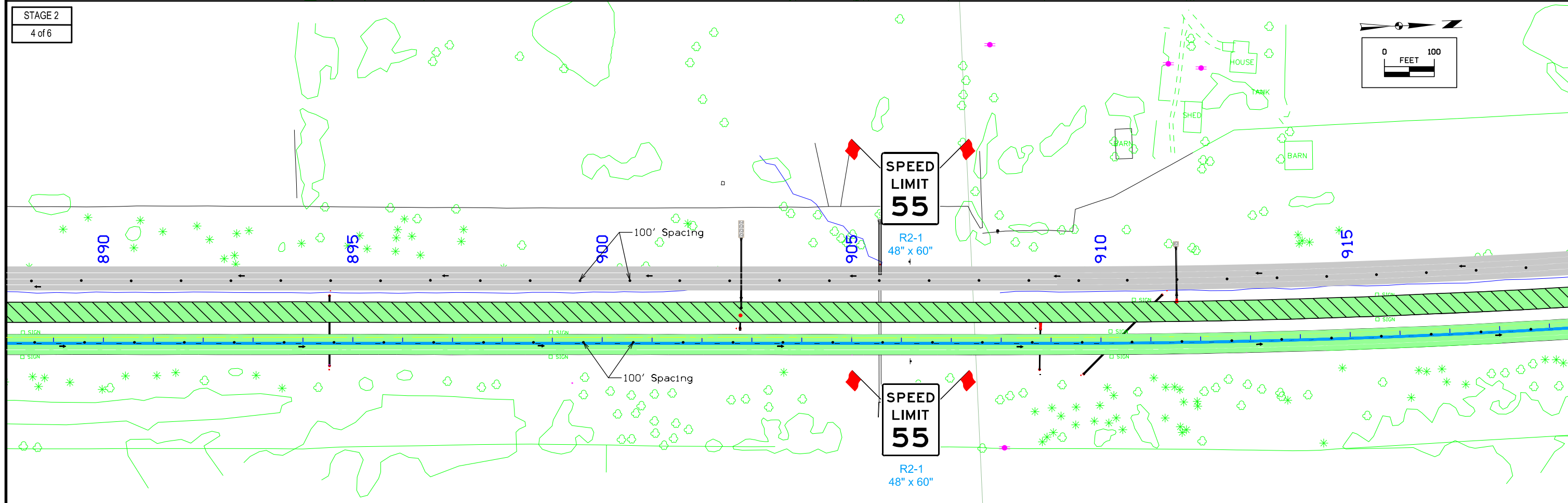
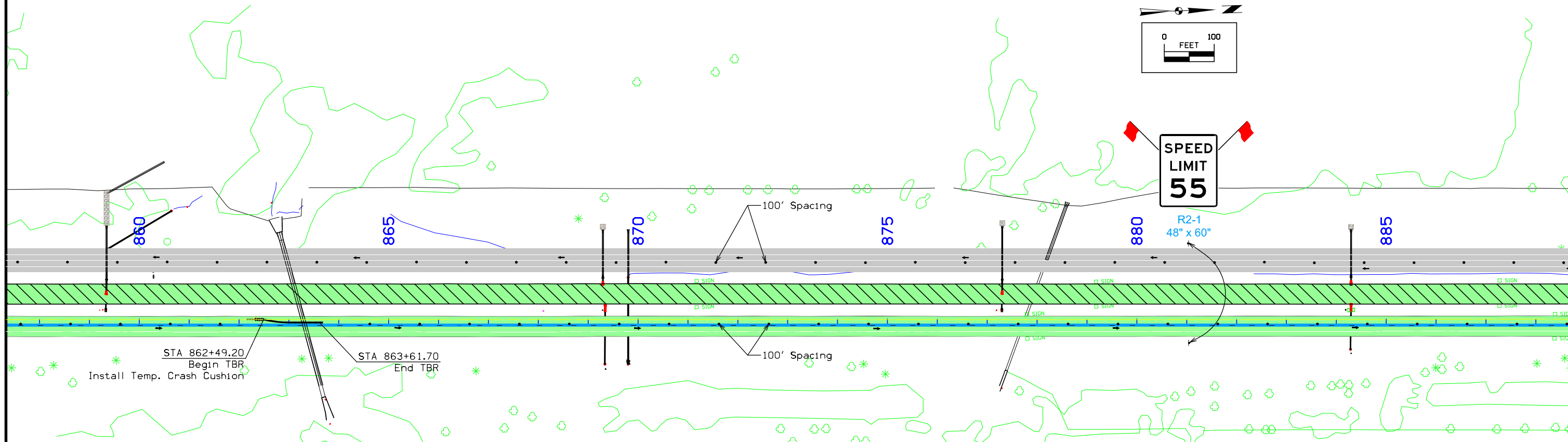
STAGE 1
4 of 5



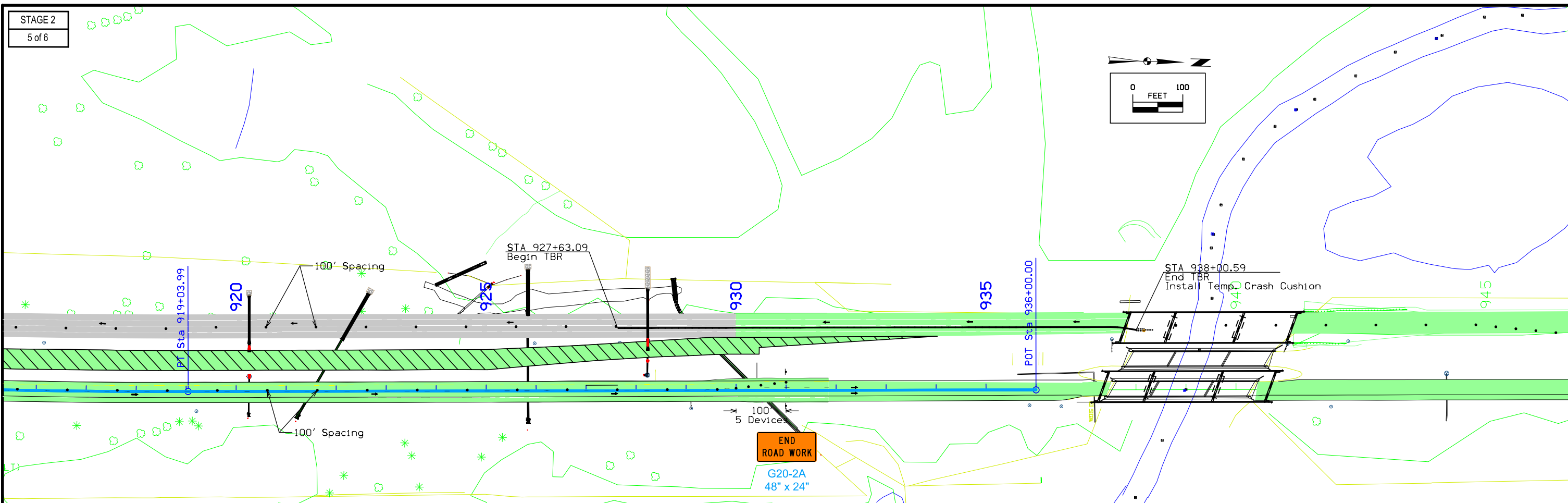
STAGE 1
5 of 5



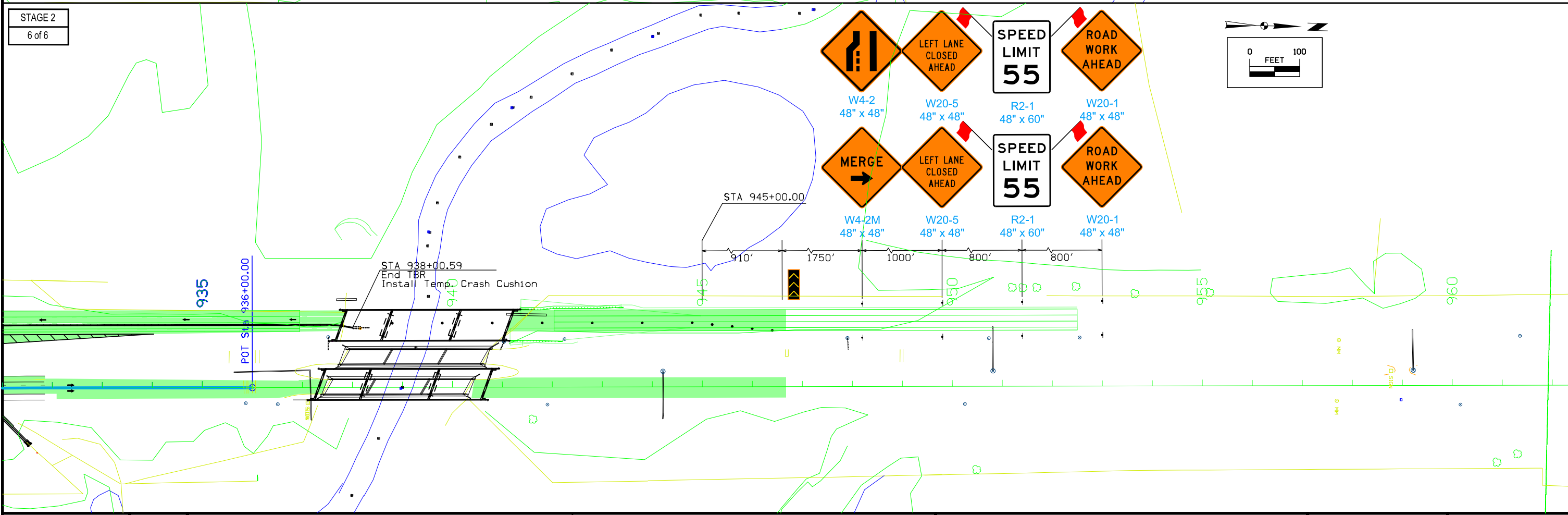




STAGE 2
5 of 6



STAGE 2
6 of 6



STORM SEWER

① Diameter or equivalent diameter

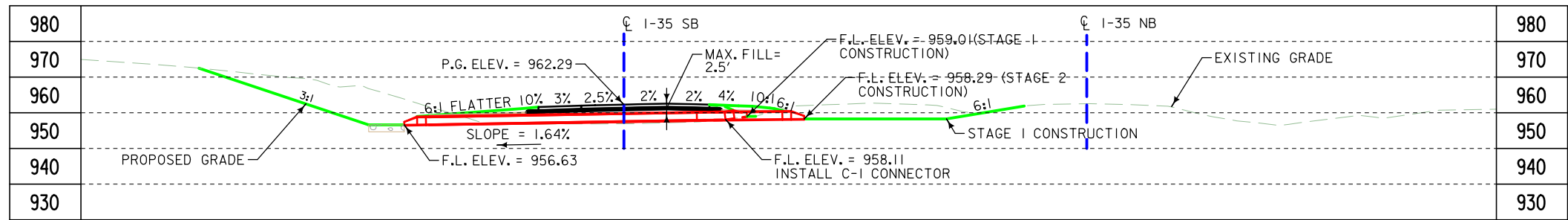
* Bid Item

** For SW-545

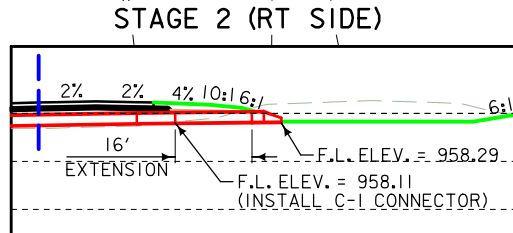
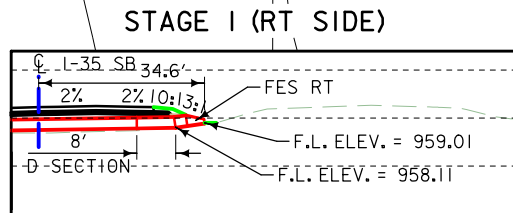
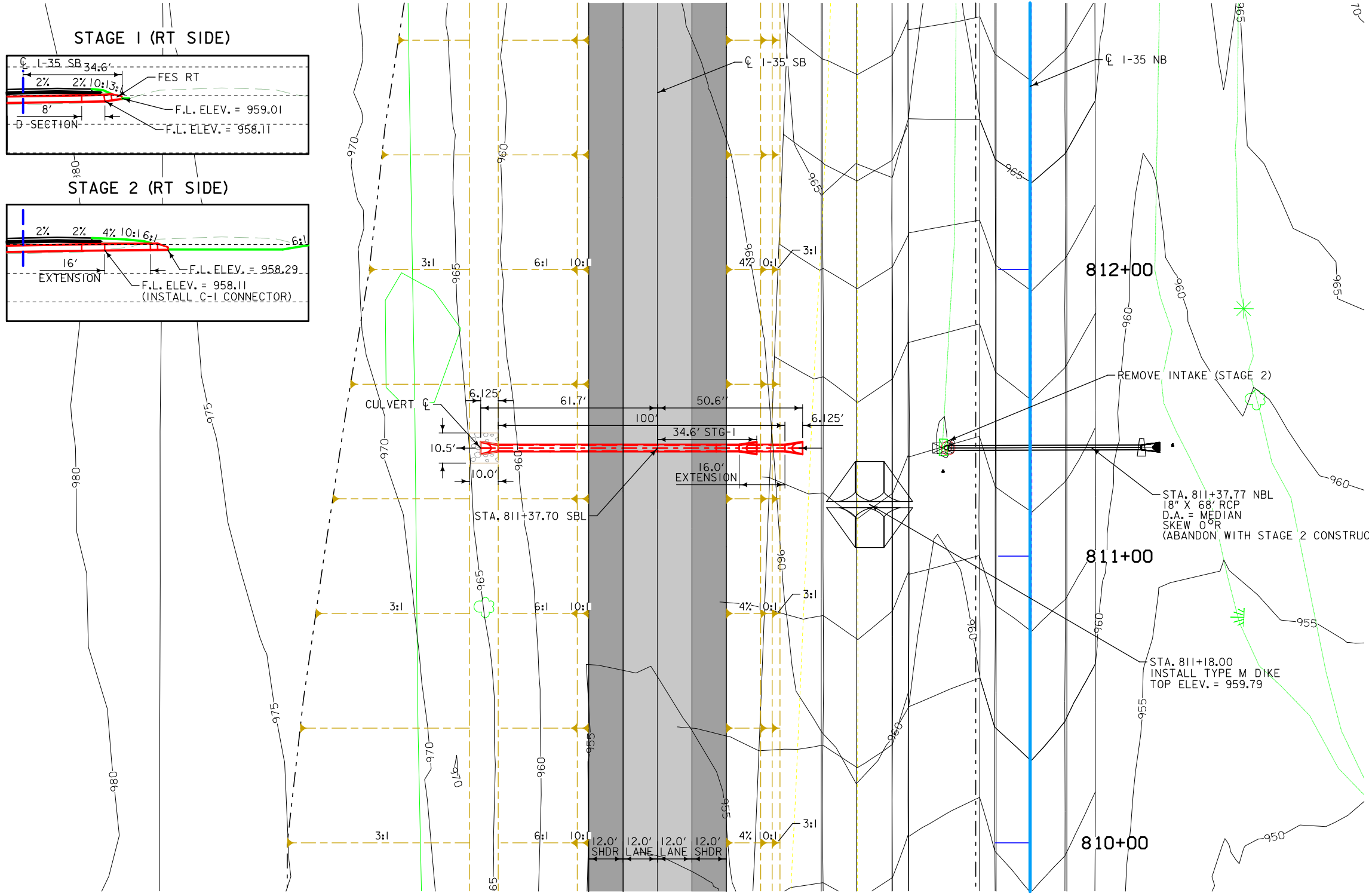
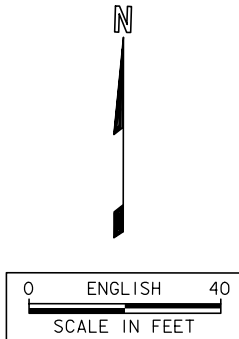
INTAKES AND UTILITY ACCESSES	PIPES
------------------------------	-------

Design Length, Slope, and Flowlines are calculated from center of structure to center of structure along CL of pipe.

No.	Location Station and Offset	*Type or Standard Road Plan	Form	Bottom	Ext	Notes	Line Number	Intake/Utility Access No.		Class 'D'	Pipe Size ①	Bid* Length	Design Length	Slope %	Connected Pipe Joint (DR-121) Type	Flow Lines			Pipe Profile Sheet No.	Notes	
			Grade	Well	Length**			From	To							Inlet Elevation	Outlet Elevation	Other Elevation			
			Elev.	Elev.	FT			IN	FT							FT					
1A	859+33.11, 39.0' RT SBL	SW-512	934.40	929.92		30" DIA															
1B	877+30.20, 39.0' RT SBL	SW-512	932.48	928.25		30" DIA															
1C	902+78.75, 38.6' RT SBL	SW-512	938.29	931.70		30" DIA															
1	902+78.75, 59.0' RT SBL	SW-512	938.22	932.10		30" DIA	3	S3	S4	2000	18	96.0	102.1	4.81							
2	928+22.97, 28.8' RT SBL	SW-512	865.33	857.30		30" DIA	4	S4	S5	2000	18	114.0	120.1	4.90							
3	1818+20.6, 36' LT	FES																			
4	1819+22.8, 46' LT	SW-512	994.41	989.78		30" DIA															
5	1820+43.0, 60' LT	FES																			



LONGITUDINAL SECTION ALONG ϕ CULVERT



STAGING NOTES

STAGE 1:
INSTALL 84 LF OF 24" RCP WITH D SECTION AND 2 FES.

STAGE 2:
REMOVE FES RT AND CUT BEVEL OFF D SECTION. INSTALL 16 LF RCP AND REINSTALL FES. ABANDON EXISTING MEDIAN DRAIN UNDER NBL.

SLOPE LINES SHOWN FOR STAGE I CONSTRUCTION ONLY.

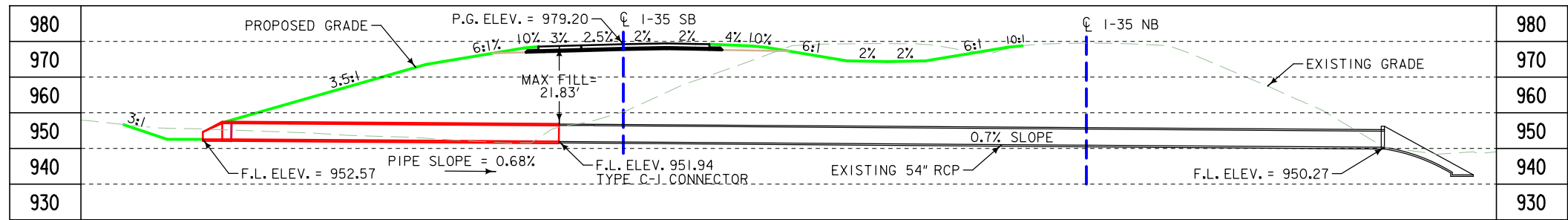
UTILITIES LEGEND:
REFER TO D.I

HYDRAULIC DATA
DRAINAGE AREA = 4.02 ACRES ROLLING
DESIGN DISCHARGE, Q_{50} = 12.57 CFS

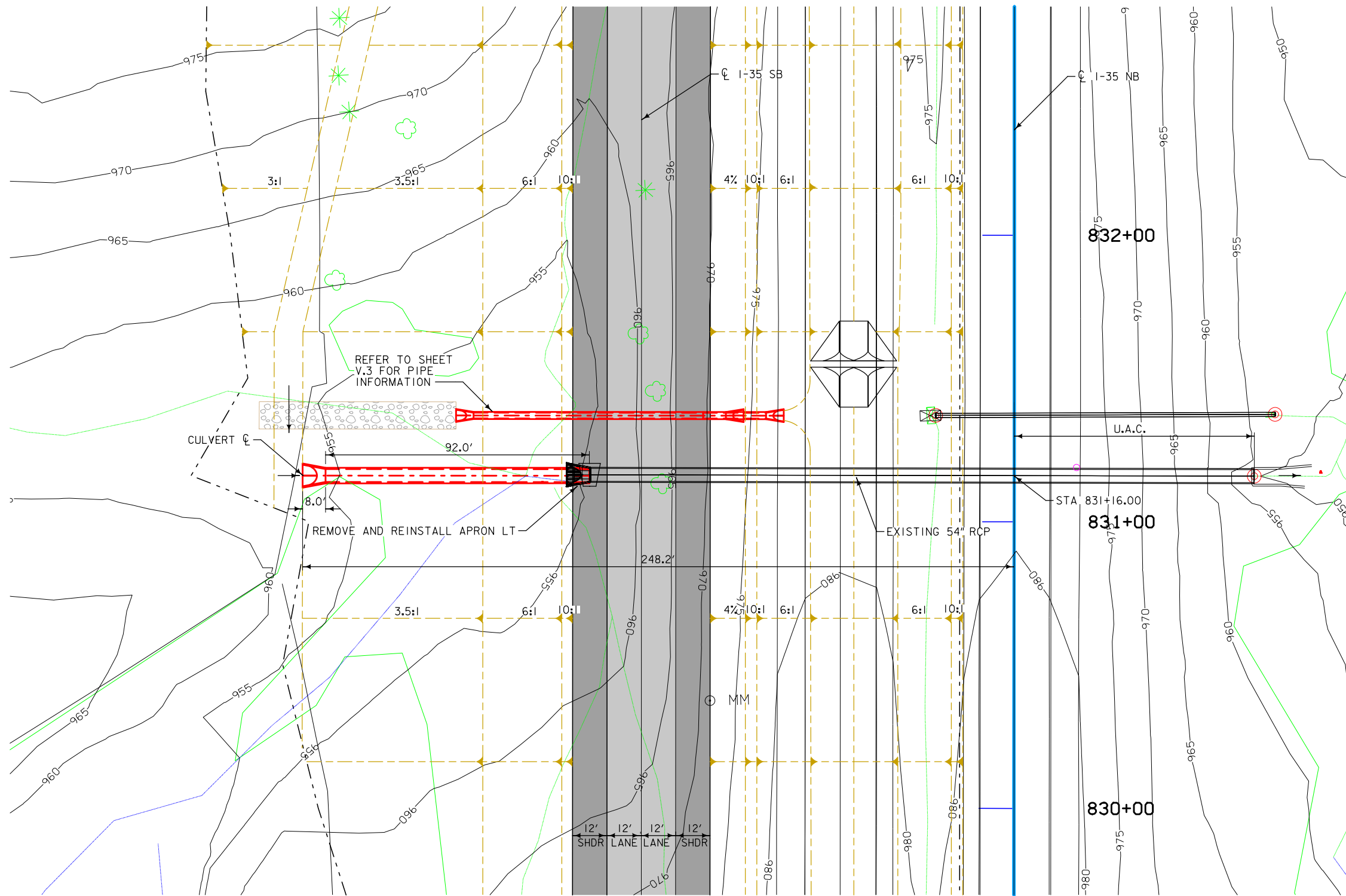
LOCATION
I-35
T-76N R-25W
SECTION 18
JEFFERSON TOWNSHIP
WARREN COUNTY

DESIGN FOR 0° SKEW
24" X 100'
REINFORCED CONCRETE PIPE

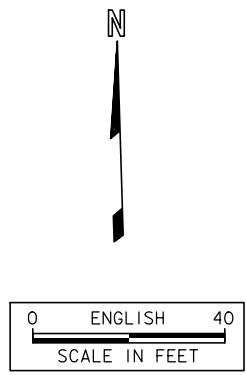
PLAT PLAN
STATION 811+37.70 SBL 02/20/2020
WARREN COUNTY
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
DESIGN SHEET NO. ___ OF ? FILE NO. ___ DESIGN NO. ___



LONGITUDINAL SECTION ALONG ϕ CULVERT



PLAT PLAN

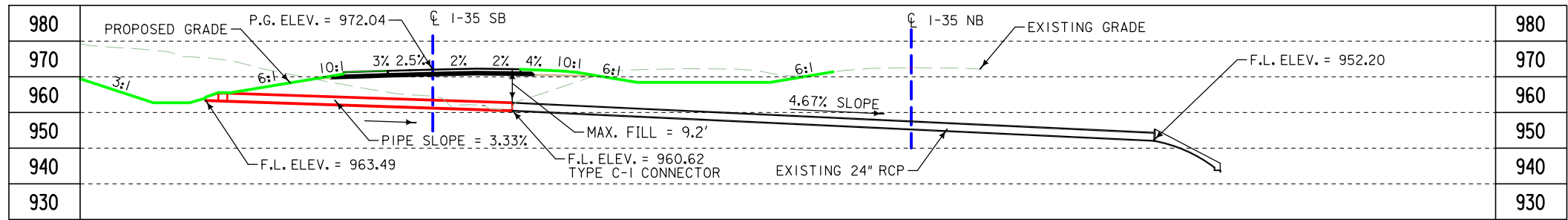


UTILITIES LEGEND:
REFER TO D.I

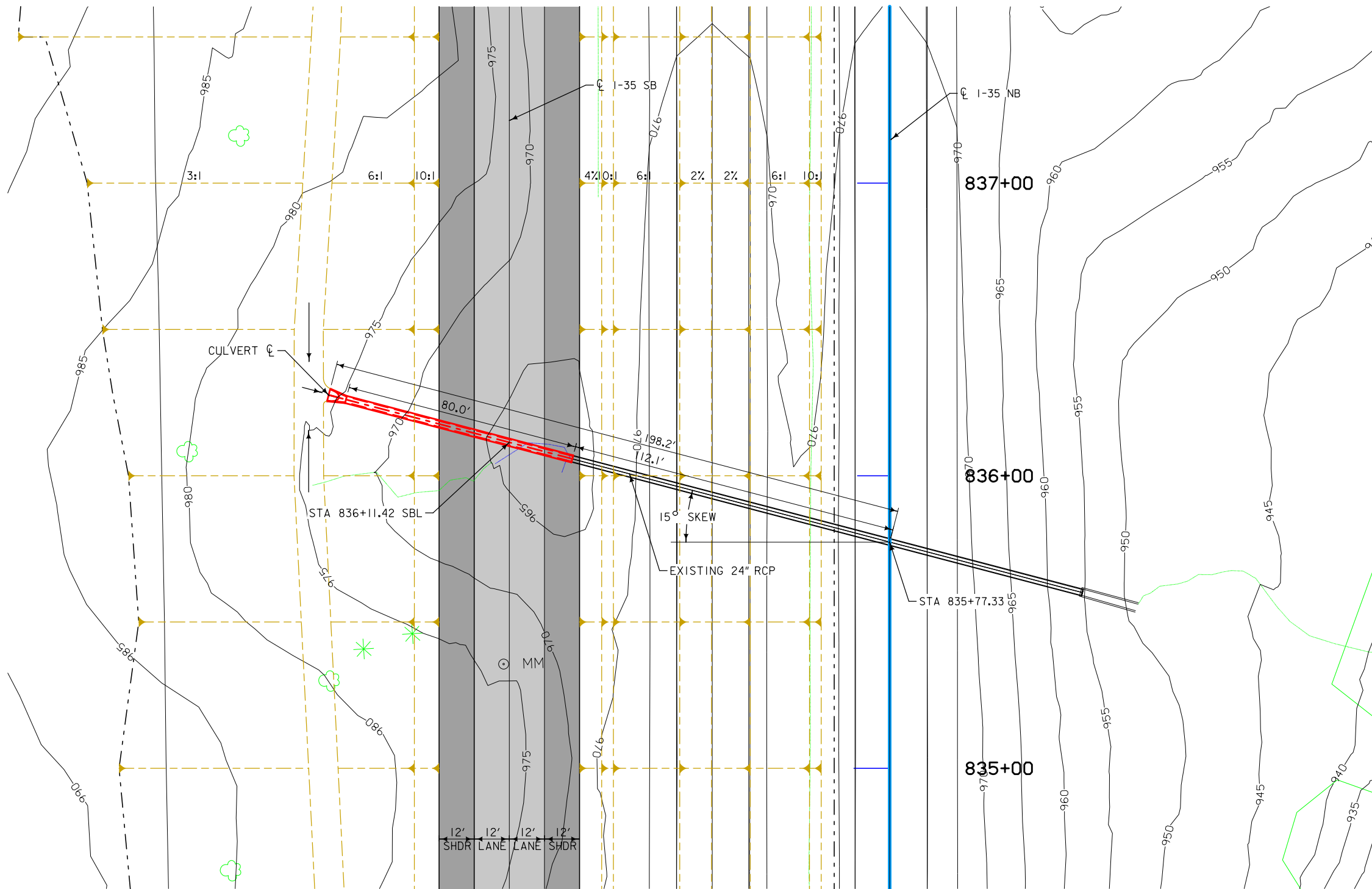
HYDRAULIC DATA
DRAINAGE AREA = 32.37 ACRES HILLY
DESIGN DISCHARGE, $Q_{50} = 81.8$ CFS

LOCATION
I-35
T-76N R-25W
SECTION 18
JEFFERSON TOWNSHIP
WARREN COUNTY

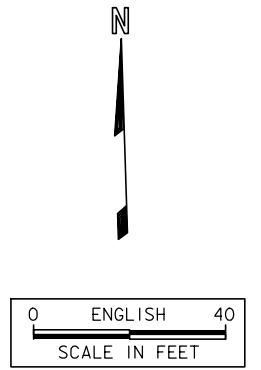
DESIGN FOR 0° SKEW
54" X 92'
3000D REINFORCED CONCRETE
PIPE EXTENSION
PLAT PLAN
 STATION 831+16.00 02/20/2020
WARREN COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. ___ OF ___ FILE NO. ___ DESIGN NO. ___



LONGITUDINAL SECTION ALONG CL CULVERT



PLAT PLAN

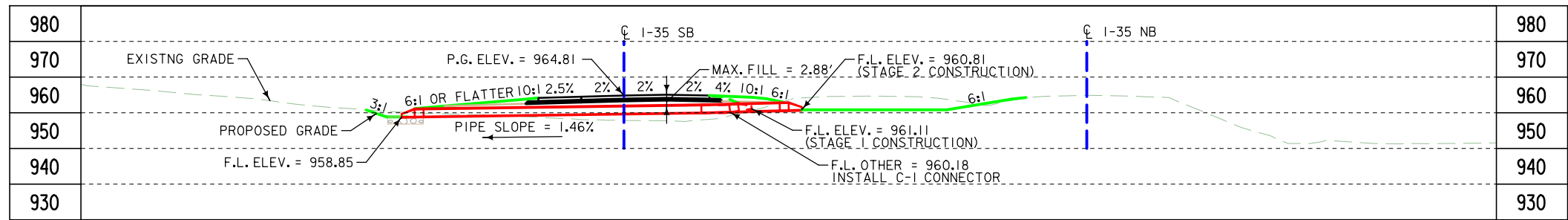


UTILITIES LEGEND:
REFER TO D.I

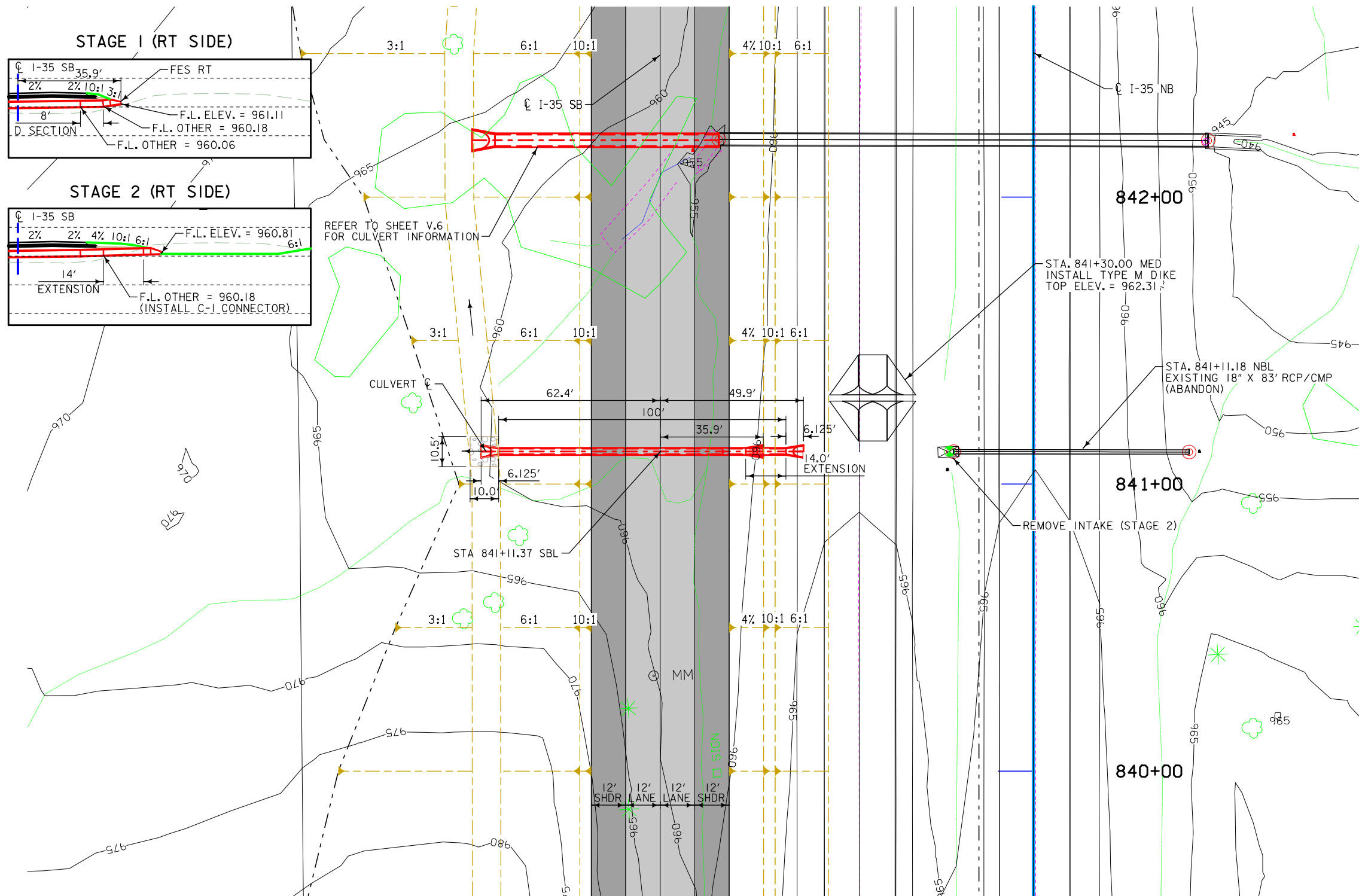
HYDRAULIC DATA
DRAINAGE AREA = 2.95 ACRES HILLY
DESIGN DISCHARGE, Q₅₀ = 13.2 CFS

LOCATION
I-35
T-76N R-25W
SECTION 18
JEFFERSON TOWNSHIP
WARREN COUNTY

DESIGN FOR 15° SKEW LT. AHEAD
24" X 80'
REINFORCED CONCRETE
PIPE EXTENSION
PLAT PLAN
 STATION 835+77.33 02/20/2020
WARREN COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. ___ OF ___ FILE NO. ___ DESIGN NO. ___



LONGITUDINAL SECTION ALONG \bar{C} CULVERT



STAGING NOTES

STAGE 1:
 INSTALL 86 LF OF 24" RCP WITH D SECTION AND 2 FES.

STAGE 2
 REMOVE FES RT AND CUT OFF D SECTION BEVEL. INSTALL 14 LF RCP AND REINSTALL FES. ABANDON EXISTING MEDIAN DRAIN UNDER NBL.

SLOPE LINES SHOWN FOR STAGE 1 CONSTRUCTION ONLY.

UTILITIES LEGEND:

REFER TO D.I

HYDRAULIC DATA

DRAINAGE AREA = 2.91 ACRES ROLLING
 DESIGN DISCHARGE, Q_{50} = 9.84 CFS

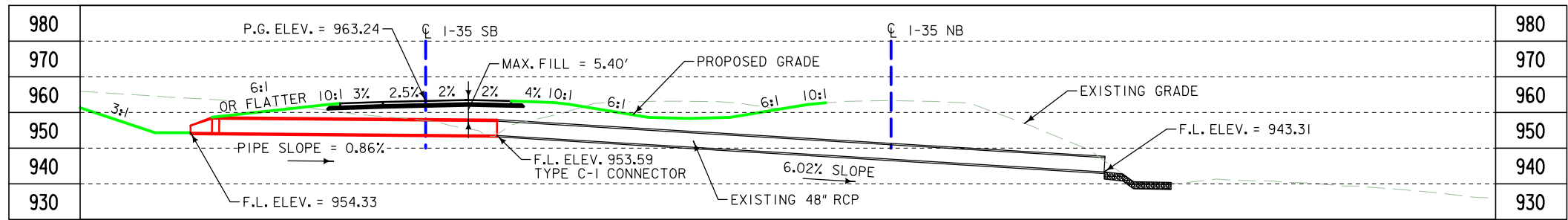
LOCATION

I-35
 T-76N R-25W
 SECTION 18
 JEFFERSON TOWNSHIP
 WARREN COUNTY

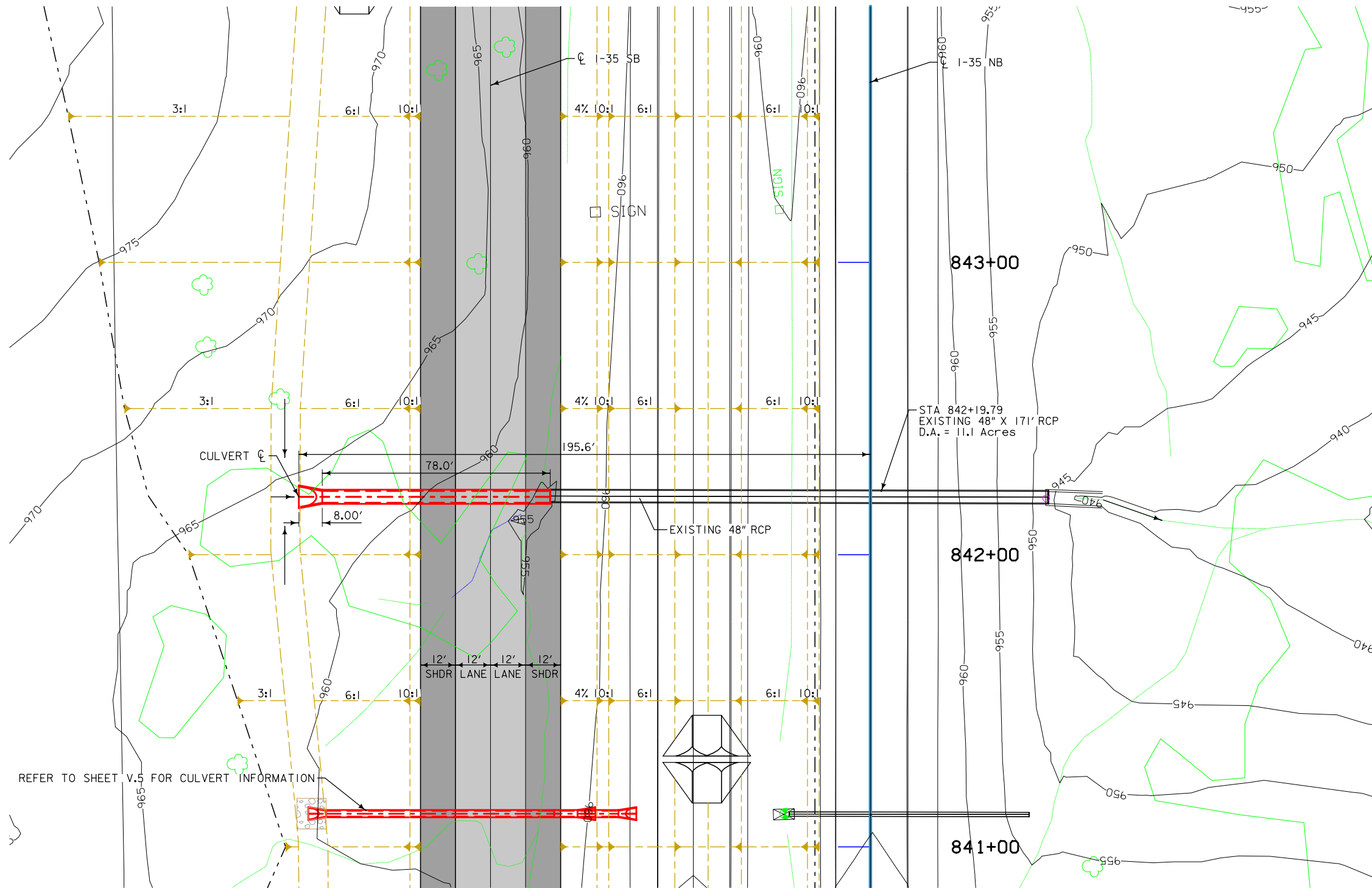
DESIGN FOR 0° SKEW
24" X 100'
REINFORCED CONCRETE PIPE

PLAT PLAN
 STATION 841+11.37 SBL 02/20/2020
WARREN COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. ___ OF ___ FILE NO. ___ DESIGN NO. ___

PLAT PLAN



LONGITUDINAL SECTION ALONG CULVERT



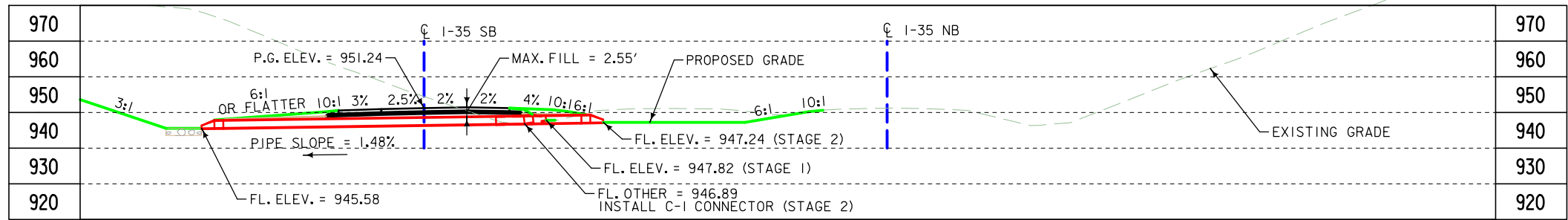
PLAT PLAN

UTILITIES LEGEND:
REFER TO D.I

HYDRAULIC DATA
DRAINAGE AREA = 11.3 ACRES HILLY
DESIGN DISCHARGE, $Q_{50} = 36.8$ CFS

LOCATION
I-35
T-76N R-25W
SECTION 18
JEFFERSON TOWNSHIP
WARREN COUNTY

DESIGN FOR 0° SKEW
48" X 78'
REINFORCED CONCRETE
PIPE EXTENSION
PLAT PLAN
 STATION 842+19.79 02/20/2020
WARREN COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. ___ OF ___ FILE NO. ___ DESIGN NO. ___



STAGING NOTES

STAGE 1:
INSTALL 84' LF OF 24" RCP WITH D SECTION AND 2 FES.

STAGE 2:
REMOVE FES RT AND CUT OFF D SECTION BEVEL. INSTALL 16 LF RCP AND REINSTALL FES. ABAONDON EXISTING MEDIAN DRAIN UNDER NBL.

UTILITIES LEGEND

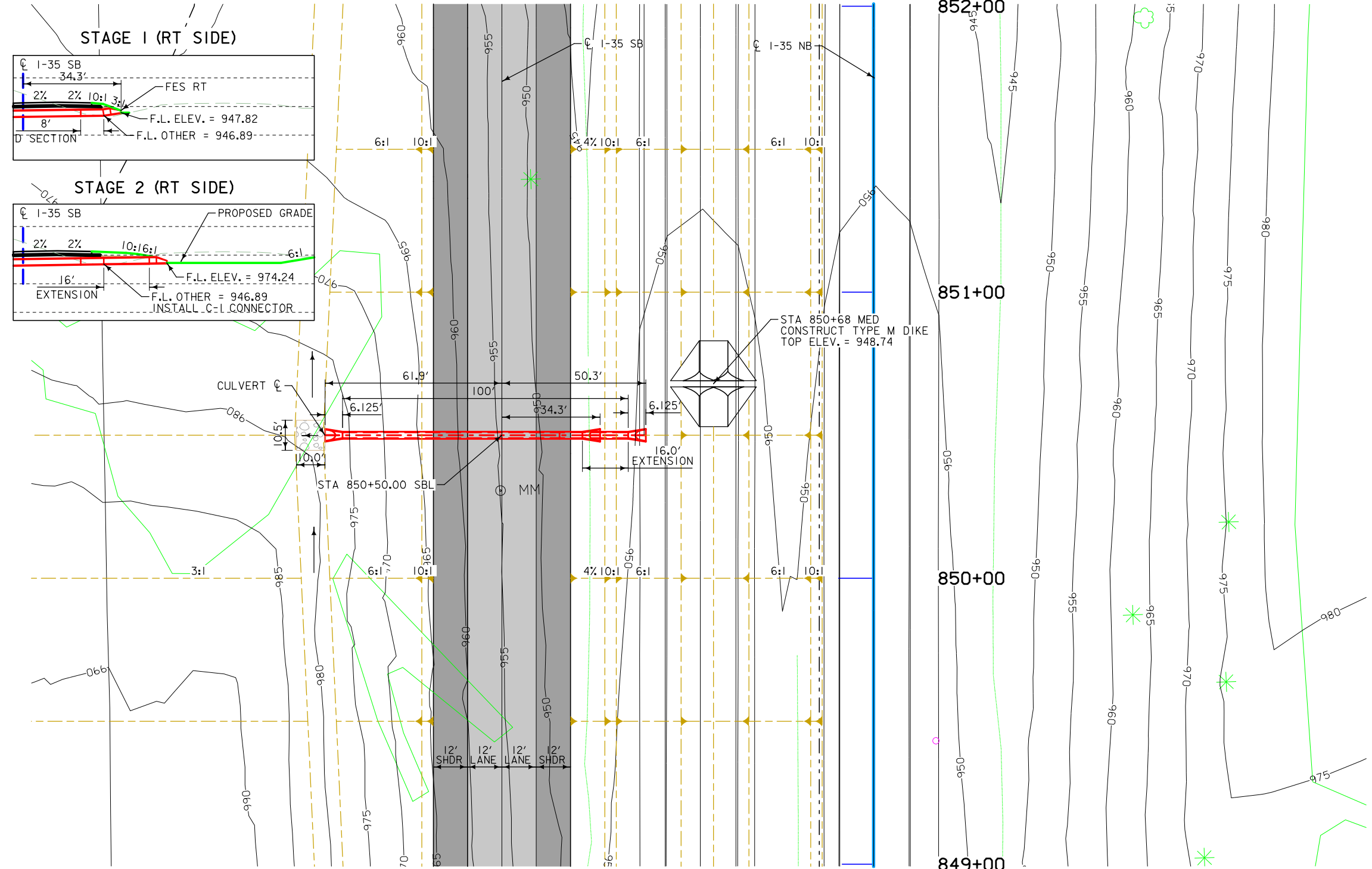
REFER TO D.1

HYDRAULIC DATA

DRAINAGE AREA = 2.80 ACRES ROLLING
DESIGN DISCHARGE, Q₅₀ = 9.55 CFS

LOCATION

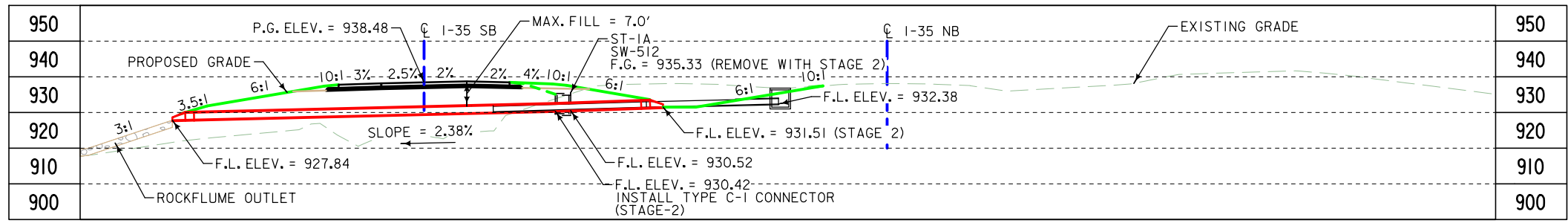
I-35
T-76N R-25
SECTION 18
JEFFERSON TOWNSHIP
WARREN COUNTY



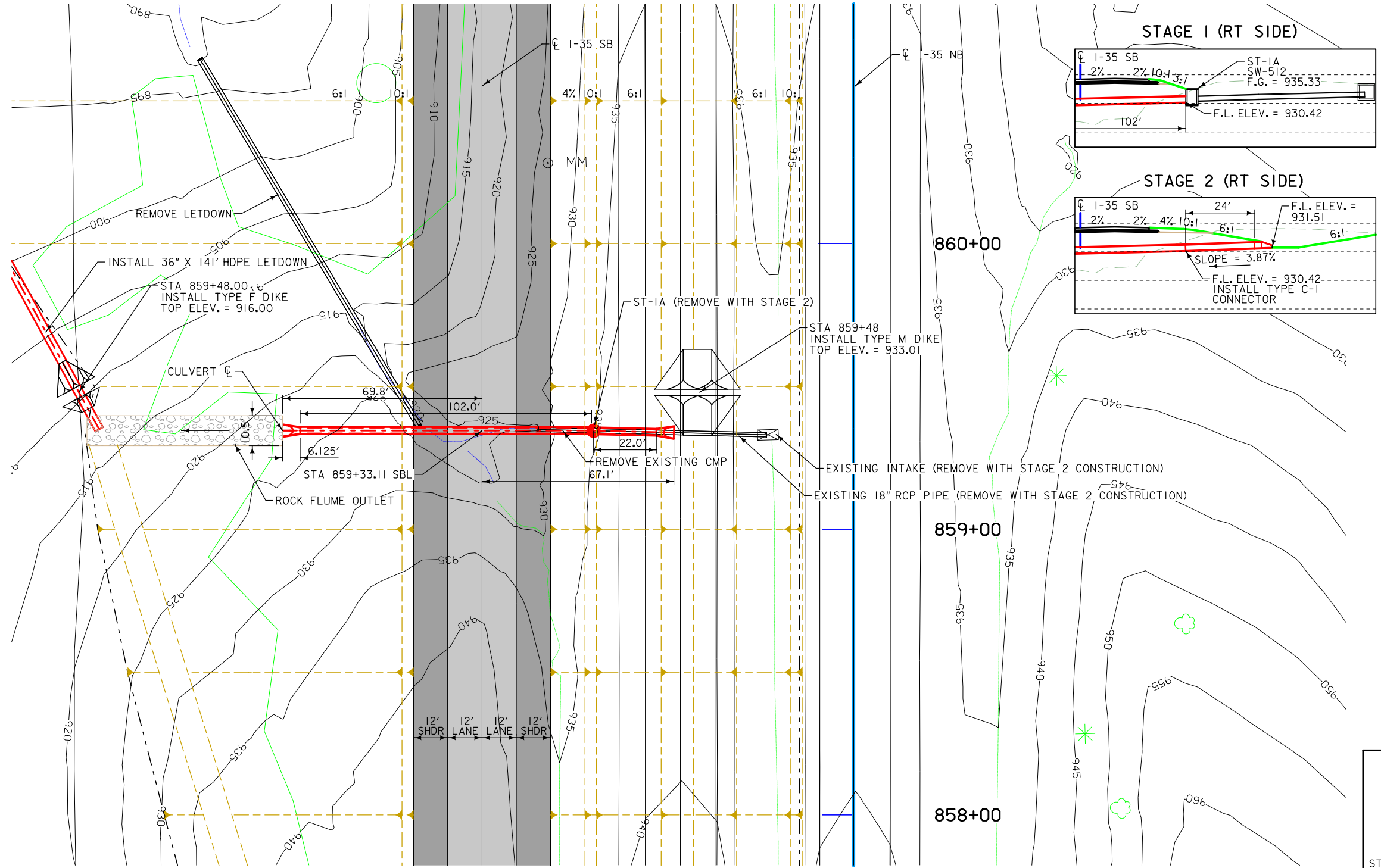
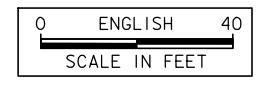
PLAT PLAN

DESIGN FOR 0° SKEW
24" X 100'
REINFORCED CONCRETE PIPE

PLAT PLAN
STATION 850+50.00 SBL 02/21/2020
WARREN COUNTY
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
DESIGN SHEET NO. _____ OF _____ FILE NO. _____ DESIGN NO. _____



LONGITUDINAL SECTION ALONG \bar{C} CULVERT



PLAT PLAN

STAGING NOTES

STAGE 1:
REMOVE EXISTING CMP. INSTALL STRUCTURE ST-1A AND 102 LF OF 24" RCP

STAGE 2:
REMOVE STRUCTURE ST-1A AND 18" RCP. INSTALL 22 LF OF 24" RCP EXTENSION AND FES RT.

UTILITIES LEGEND:

REFER TO D.I

HYDRAULIC DATA

DRAINAGE AREA = 5.2 ACRES ROLLING
DESIGN DISCHARGE, Q_{50} = 15.29 CFS

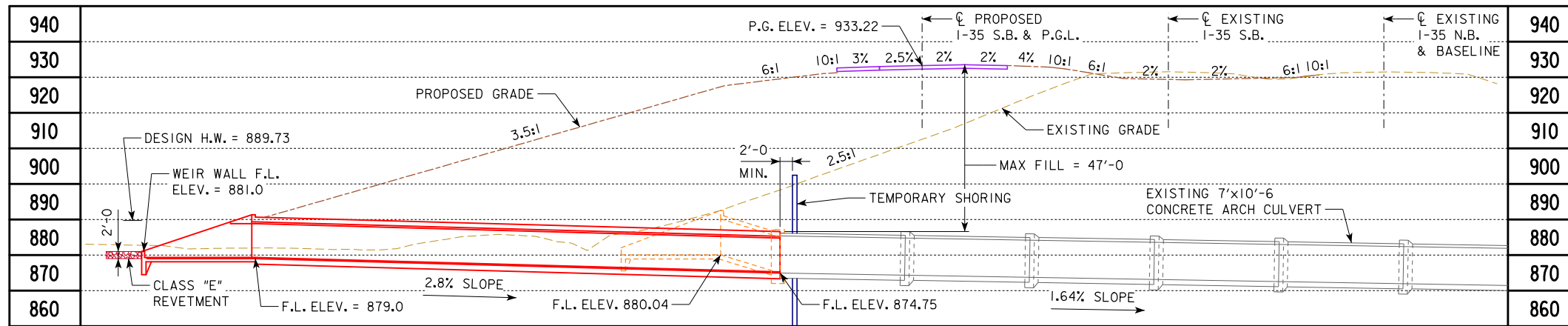
LOCATION

I-35
T-76N R-25
SECTION 7
JEFFERSON TOWNSHIP
WARREN COUNTY

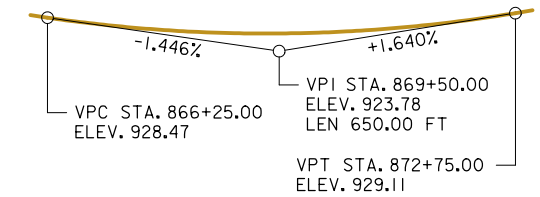
DESIGN FOR 0° SKEW
24" X 124'
REINFORCED CONCRETE PIPE

PLAT PLAN

STATION 859+33.11 SBL 02/20/2020
WARREN COUNTY
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
DESIGN SHEET NO. ____ OF ____ FILE NO. ____ DESIGN NO. ____



BENCH MARK NO. CP820: ELEV. 927.81, N.509709.753 E.1563549.912, SET MAG NAIL, E SIDE NBL AT STATION MARKER 865 (ASPHALT).



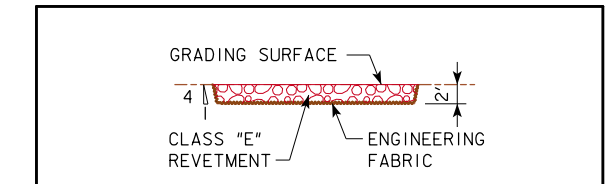
PROFILE GRADE I-35 S.B.

LONGITUDINAL SECTION ALONG CL CULVERT



HYDRAULIC DATA

DRAINAGE AREA = 795.0 ACRES
 $Q_{50} = 830$ CFS
 HW ELEV. = 889.73



TYPICAL CHANNEL PROTECTION

ESTIMATED REVETMENT QUANTITIES INCLUDED WITH ROAD PLANS

LOCATION	REVETMENT CL. "E" (TON)	ENGINEERING FABRIC (SY)	EXCAVATION (CY)
INLET	42.1	79.7	26.3
OUTLET	---	---	---
TOTALS	42.1	79.7	26.3

EXCAVATION QUANTITY CALCULATED FROM GRADING SURFACE. QUANTITIES SHOWN FOR INFORMATION ONLY. SEE ROAD SHEETS.

UTILITIES LEGEND:

NO KNOWN UTILITIES

UTILITIES SHOWN ON THIS SHEET ARE FOR INFORMATION ONLY, SEE ROAD DESIGN SHEETS FOR FINAL UTILITY INFORMATION.

LOCATION

I-35 OVER CREEK
 T-76N R-25W
 SECTION 7
 JEFFERSON TOWNSHIP
 WARREN COUNTY
 LATITUDE 41.398139°
 LONGITUDE -93.780278°

TRAFFIC ESTIMATE

2015 AADT	22,700	V.P.D.
2035 AADT	29,800	V.P.D.
20... DHV	25	V.P.H.
TOTAL TRUCKS	25	%
DESIGN ESALS		

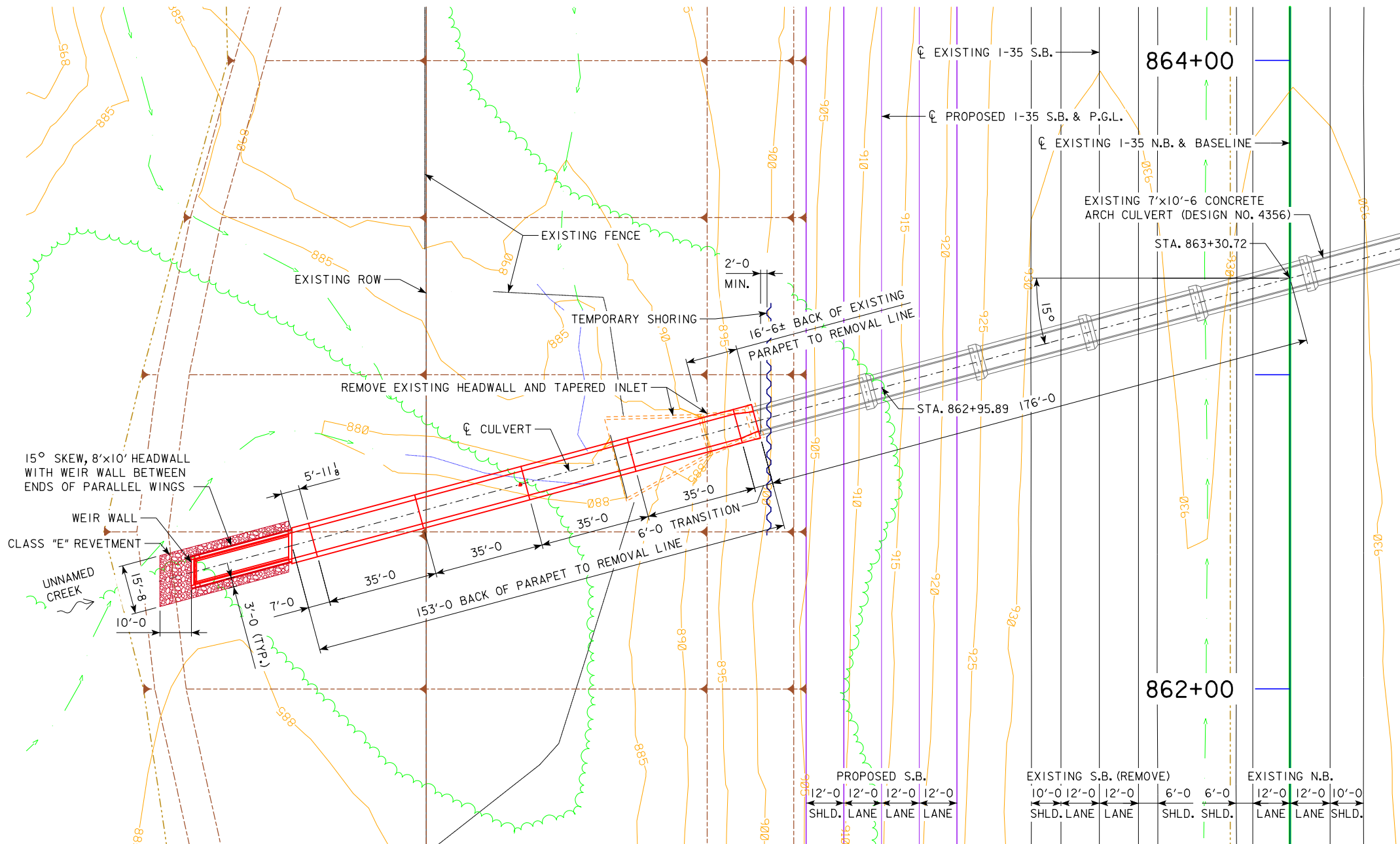
PRELIMINARY

DESIGN FOR 15° SKEW (R.A.)
8'-0" X 10'-0"
R.C.B. EXTENSION

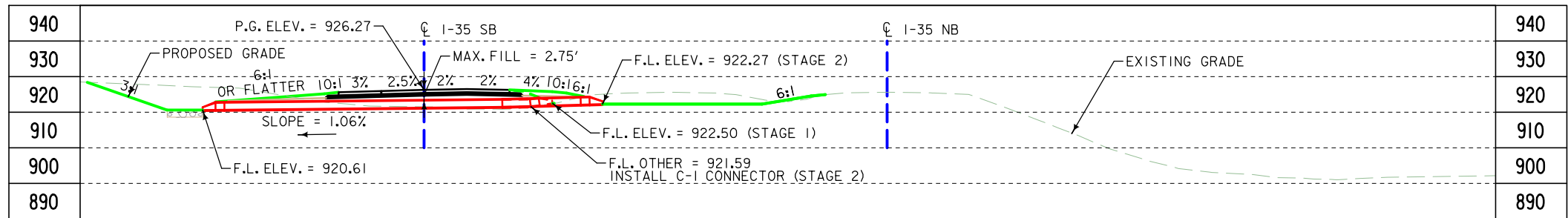
SITUATION PLAN
 STATION 863+30.72
WARREN COUNTY

DECEMBER, 2019

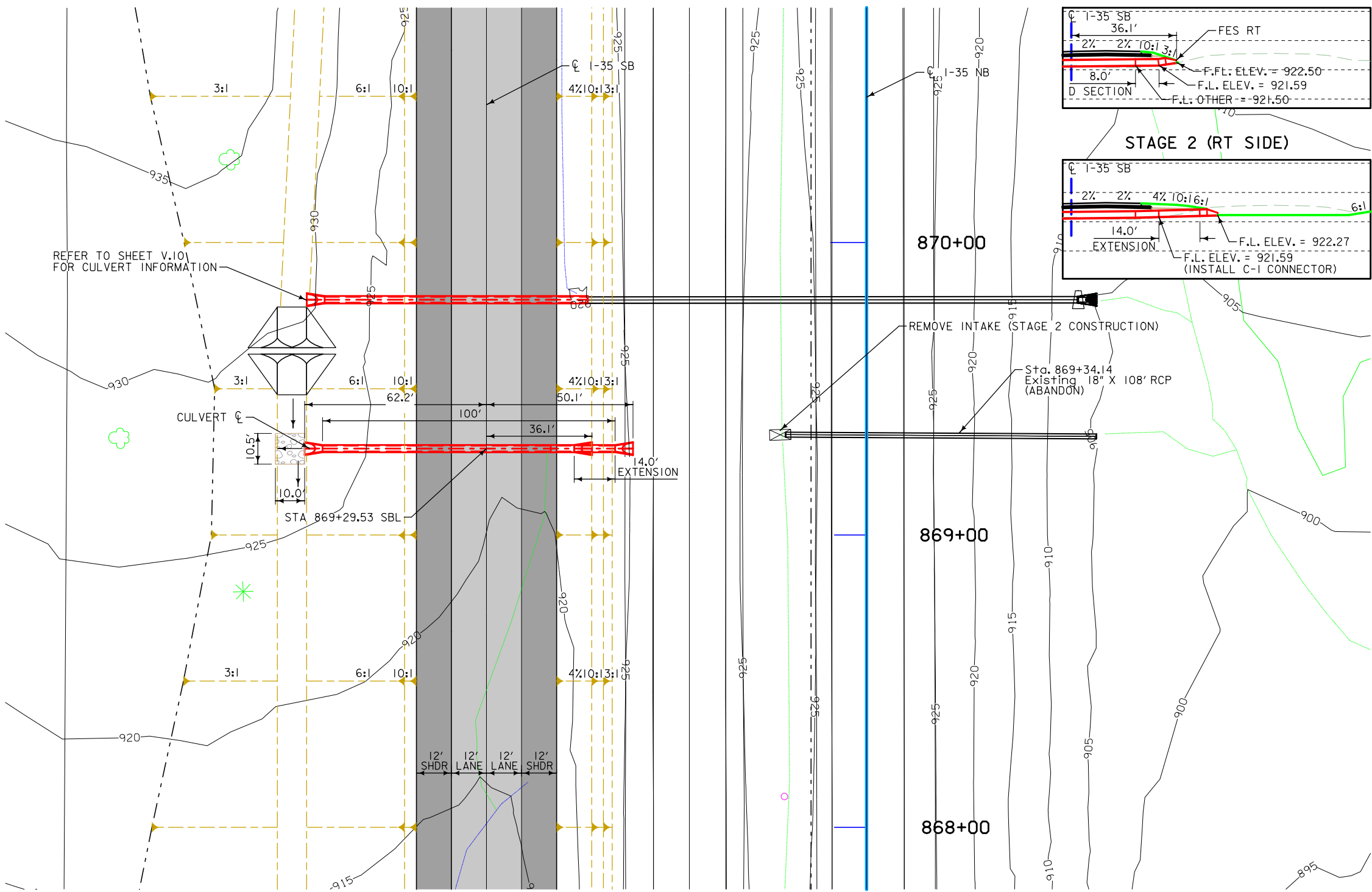
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 1 OF 1 FILE NO. 30450 DESIGN NO. 223



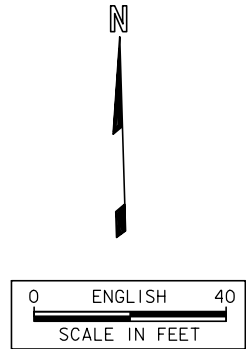
SITUATION PLAN



LONGITUDINAL SECTION ALONG CULVERT



PLAT PLAN



STAGING NOTES

STAGE 1:
INSTALL 86 LF OF 24" RCP WITH D SECTION AND 2 FES.

STAGE 2:
REMOVE FES RT AND CUT OFF D SECTION BEVEL. INSTALL 14 LF RCP AND REINSTALL FES. ABANDON EXISTING MEDIAN DRAIN UNDER NBL.

SLOPE LINES SHOWN FOR STAGE 1 CONSTRUCTION ONLY.

UTILITIES LEGEND:
REFER TO D.1

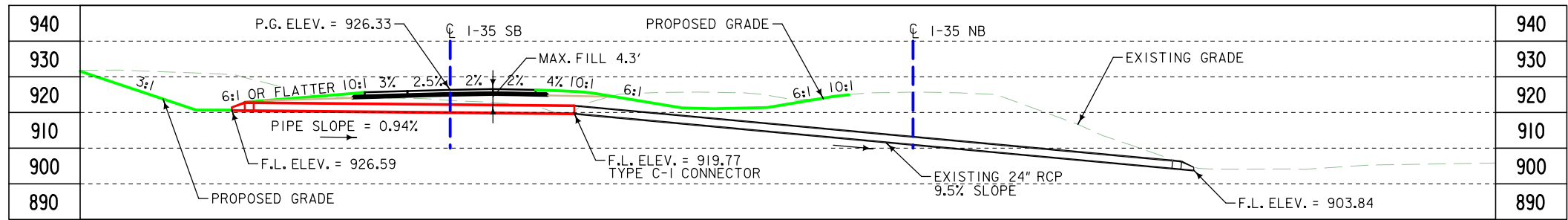
HYDRAULIC DATA
DRAINAGE AREA = 5.36 ACRES ROLLING
DESIGN DISCHARGE, $Q_{50} = 15.65$ CFS

LOCATION
I-35
T-76N R-25
SECTION 7
JEFFERSON TOWNSHIP
WARREN COUNTY

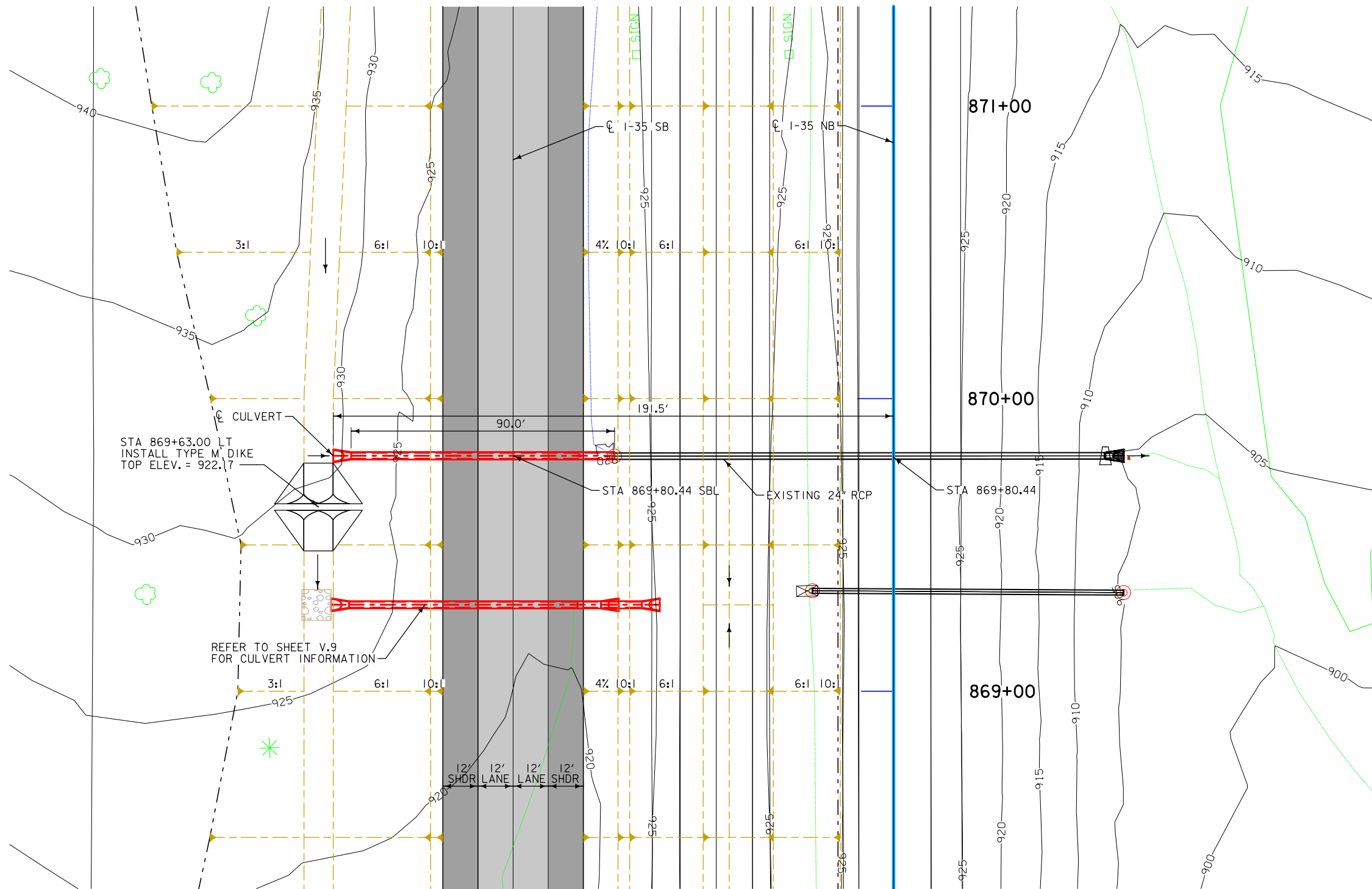
DESIGN FOR 0° SKEW
24" X 100'
REINFORCED CONCRETE PIPE

PLAT PLAN
STATION 869+29.53 SBL 02/21/2020

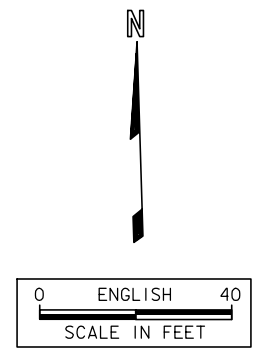
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
DESIGN SHEET NO. ___ OF ___ FILE NO. ___ DESIGN NO. ___



LONGITUDINAL SECTION ALONG ϕ CULVERT



PLAT PLAN

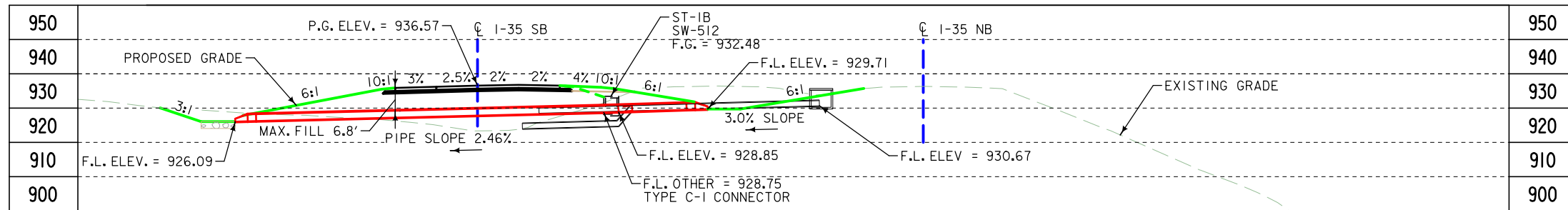


UTILITIES LEGEND:
REFER TO D.1

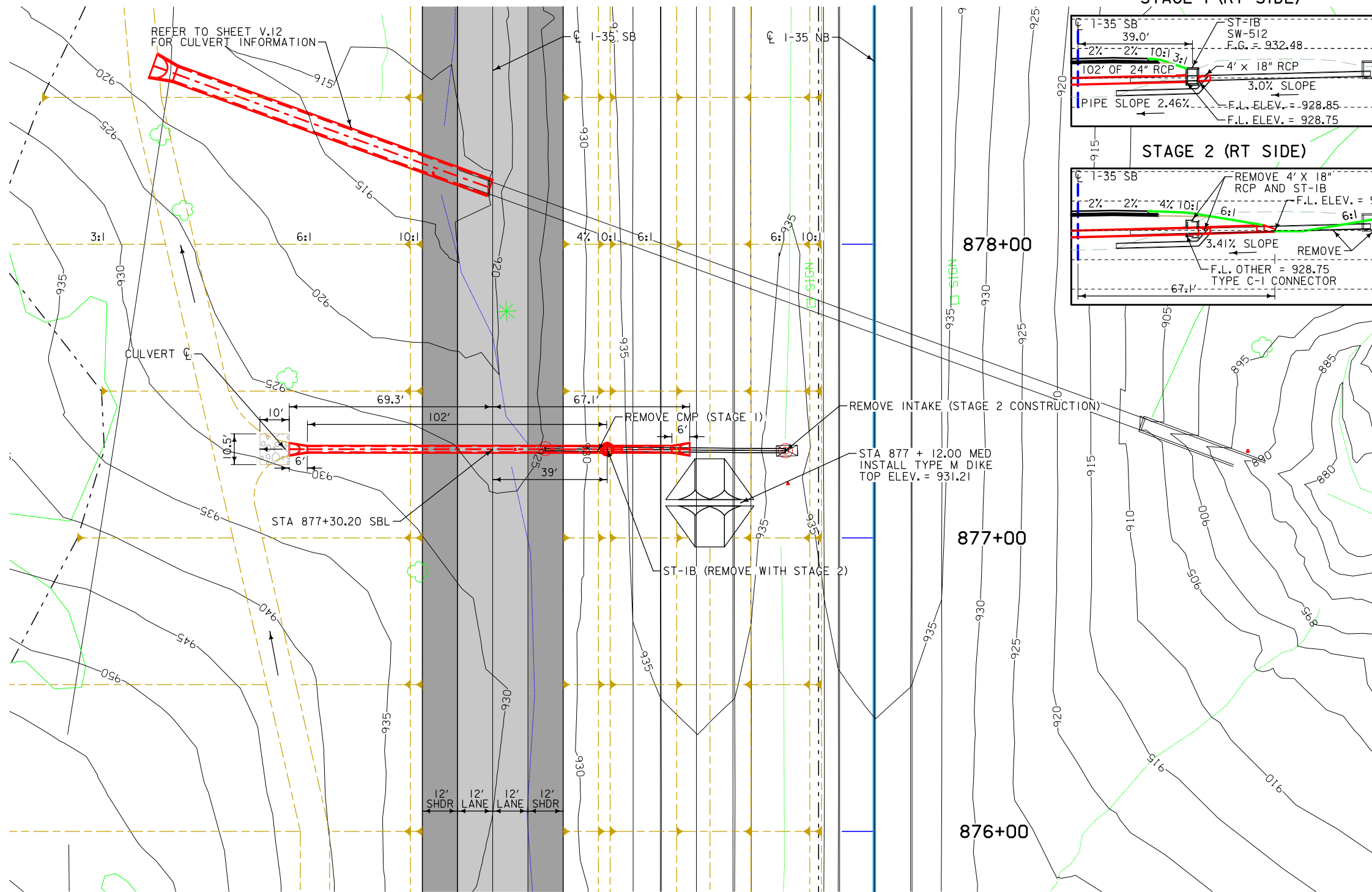
HYDRAULIC DATA
DRAINAGE AREA = 2.80 ACRES
DESIGN DISCHARGE, Q_{50} = 12.7 CFS

LOCATION
I-35
T-76N R-25W
SECTION 7
JEFFERSON TOWNSHIP
WARREN COUNTY

DESIGN FOR 0° SKEW
24" X 90'
REINFORCED CONCRETE
PIPE EXTENSION
PLAT PLAN
STATION 869+80.44 02/20/2020
WARREN COUNTY
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
DESIGN SHEET NO. ___ OF ___ FILE NO. ___ DESIGN NO. ___



LONGITUDINAL SECTION ALONG CULVERT



PLAT PLAN



STAGING NOTES

STAGE 1:
REMOVE EXISTING 18" CMP. EXTEND 18" RCP 4', INSTALL STRUCTURE ST-IB AND 102 LF OF 24" RCP AND FES LT.

STAGE 2:
REMOVE STRUCTURE ST-IB AND 18" RCP. EXTEND 22 LF OF 24" RCP, INSTALL C-1 CONNECTOR AND FES RT.

UTILITIES LEGEND:

REFER TO D.I

HYDRAULIC DATA

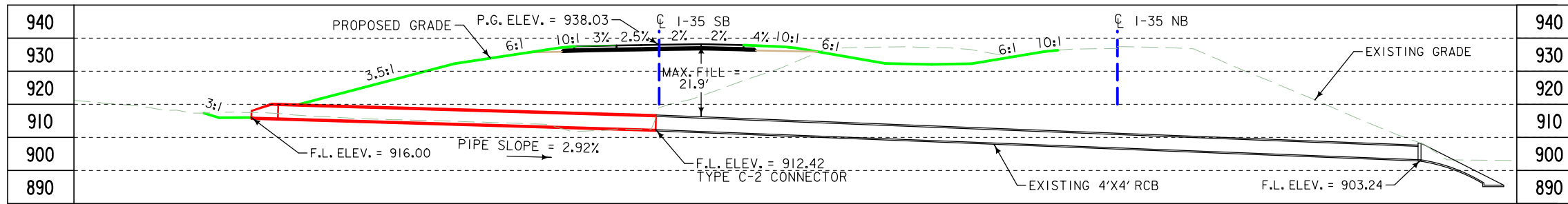
DRAINAGE AREA = 2.1 ACRES
DESIGN DISCHARGE, $Q_{50} = 7.65$ ROLLING CFS

LOCATION

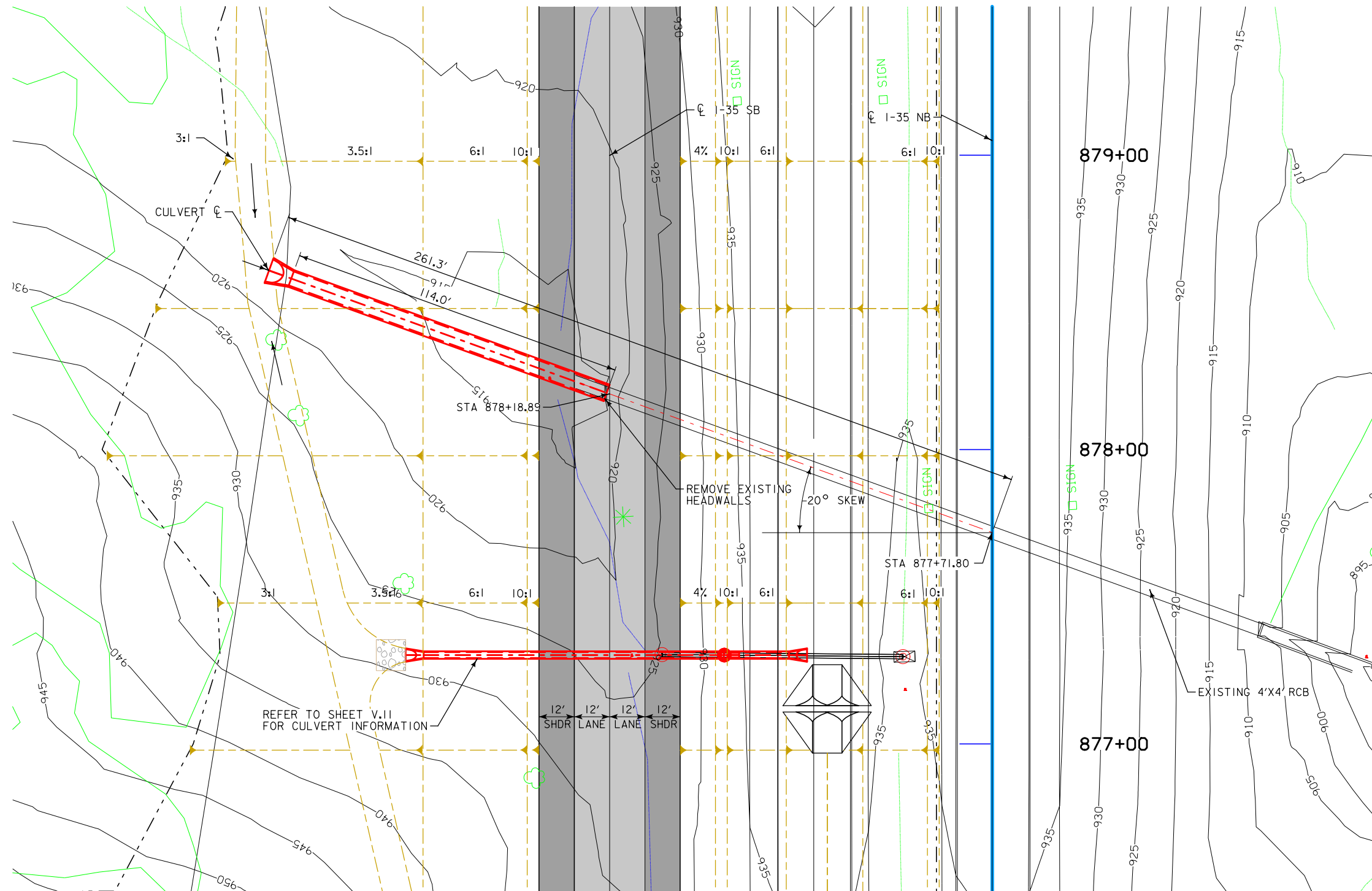
1-35
T-76N R-25
SECTION 7
JEFFERSON TOWNSHIP
WARREN COUNTY

DESIGN FOR 0° SKEW
24" X 124'
REINFORCED CONCRETE PIPE

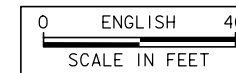
PLAT PLAN
STATION 877+30.20 SBL 04/03/2020
WARREN COUNTY
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
DESIGN SHEET NO. ___ OF ___ FILE NO. ___ DESIGN NO. ___



LONGITUDINAL SECTION ALONG ϕ CULVERT



PLAT PLAN

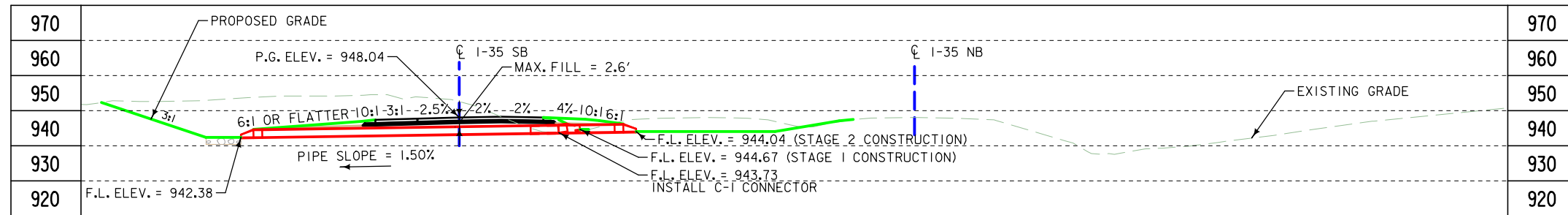


UTILITIES LEGEND:
REFER TO D.I

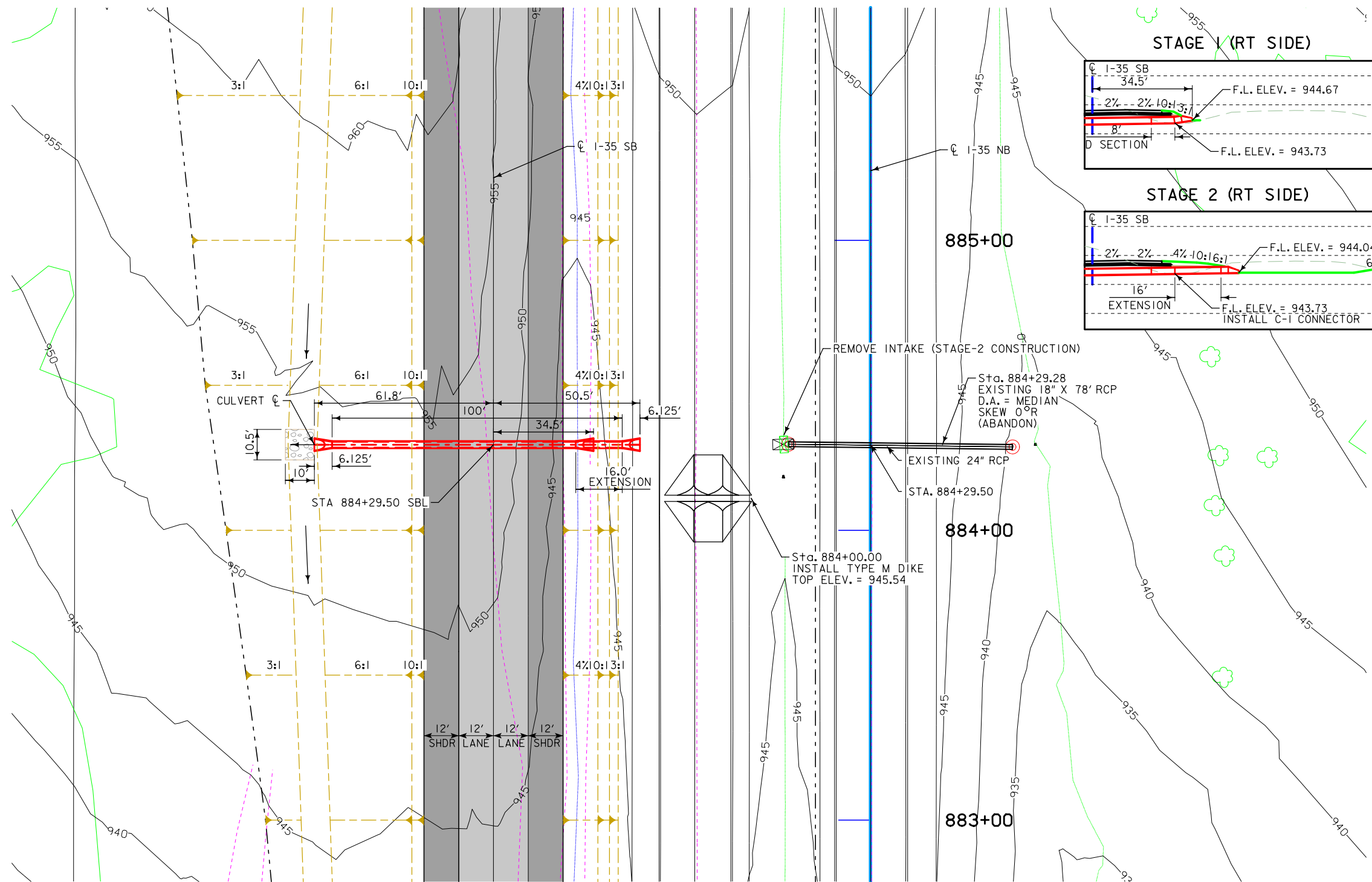
HYDRAULIC DATA
DRAINAGE AREA = 46.0 ACRES HILLY
DESIGN DISCHARGE, Q_{50} = 106.9 CFS

LOCATION
I-35
T-76N R-25W
SECTION 7
JEFFERSON TOWNSHIP
WARREN COUNTY

DESIGN FOR 20° SKEW LT. AHEAD
54" X 114'
REINFORCED CONCRETE
PIPE EXTENSION
PLAT PLAN
 STATION 877+71.80 02/21/2020
WARREN COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. ? OF ? FILE NO. ? DESIGN NO. ?



LONGITUDINAL SECTION ALONG ϕ CULVERT



PLAT PLAN

STAGING NOTES

STAGE 1:
 INSTALL 84 LF OF 18" RCP WITH D SECTION, AND 2 FES.

STAGE 2:
 REMOVE FES RT AND CUT OFF D SECTION BEVEL. INSTALL 16 LF RCP AND REINSTALL FES. ABAONDON EXISTING MEDIAN DRAIN UNDER NBL.

SLOPE LINES SHOWN FOR STAGE 1 CONSTRUCTION ONLY.

UTILITIES LEGEND:

REFER TO D.I

HYDRAULIC DATA

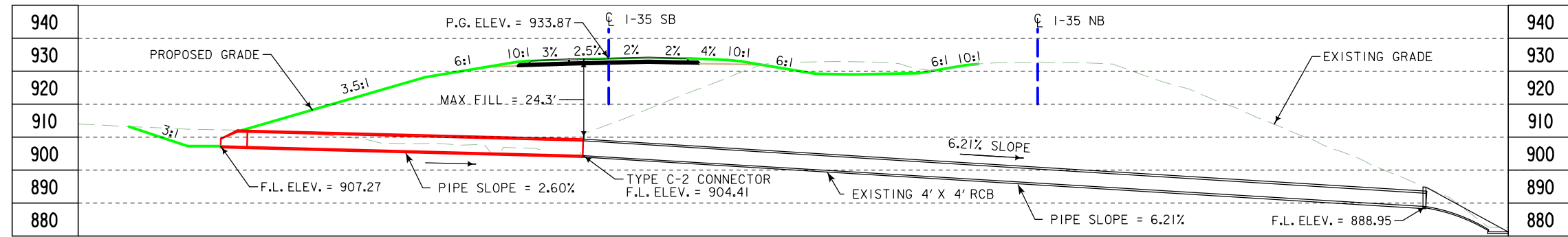
DRAINAGE AREA = 2.54 ACRES ROLLING
 DESIGN DISCHARGE, Q_{50} = 8.87 CFS

LOCATION

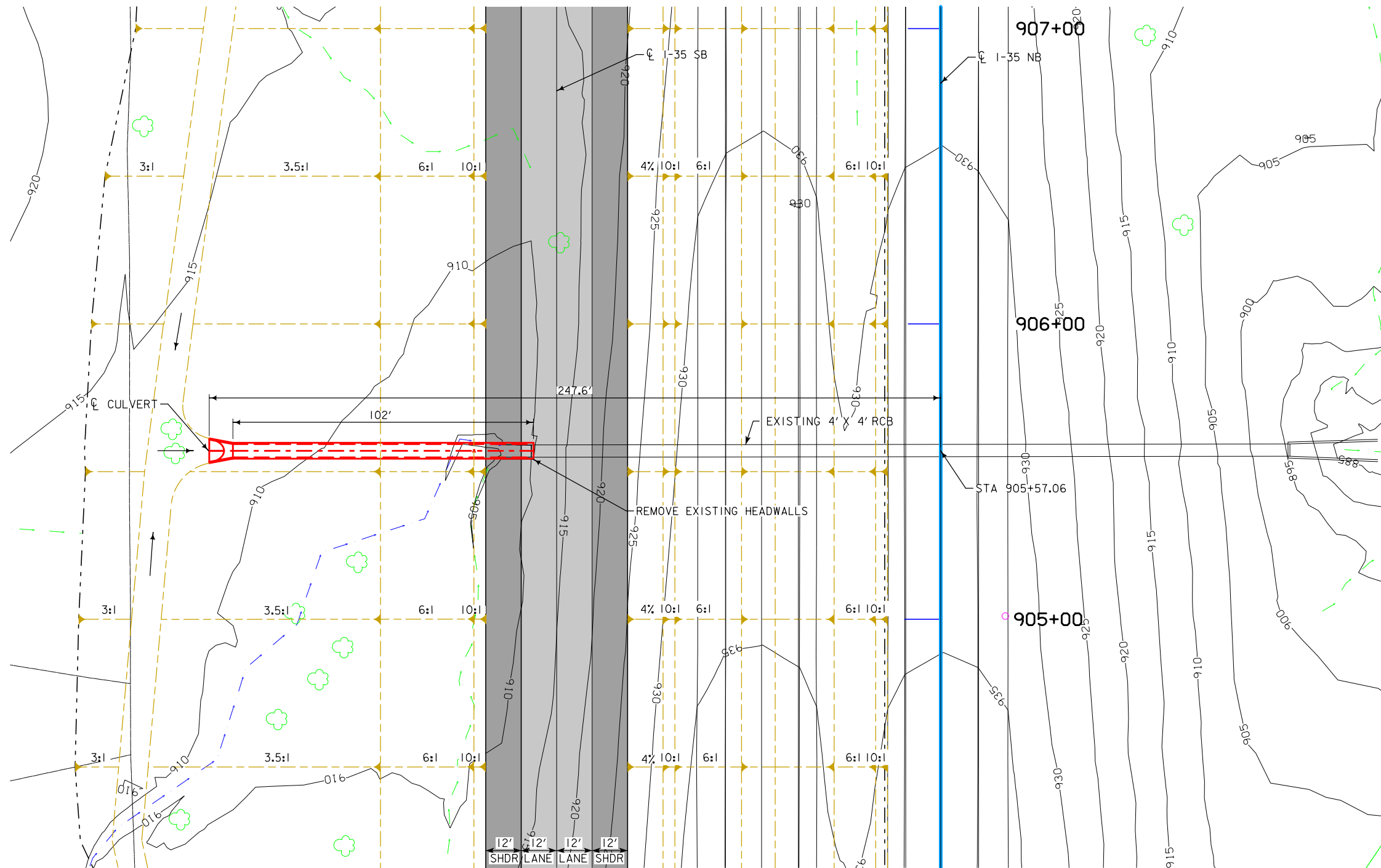
I-35
 T-76N R-25W
 SECTION 7
 JEFFERSON TOWNSHIP
 WARREN COUNTY

DESIGN FOR 0° SKEW
24" X 100'
REINFORCED CONCRETE PIPE

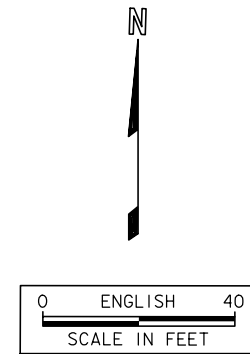
PLAT PLAN
 STATION 884+29.50 SBL 02/21/2020
WARREN COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. ___ OF ___ FILE NO. ___ DESIGN NO. ___



LONGITUDINAL SECTION ALONG \bar{C} CULVERT



PLAT PLAN

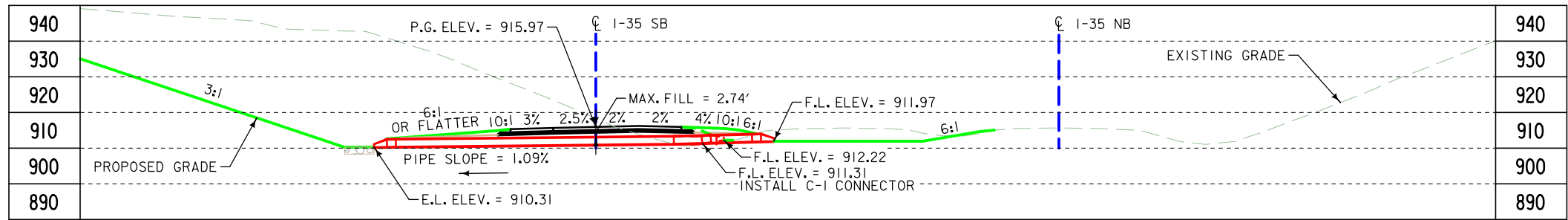


UTILITIES LEGEND:
REFER TO D.1

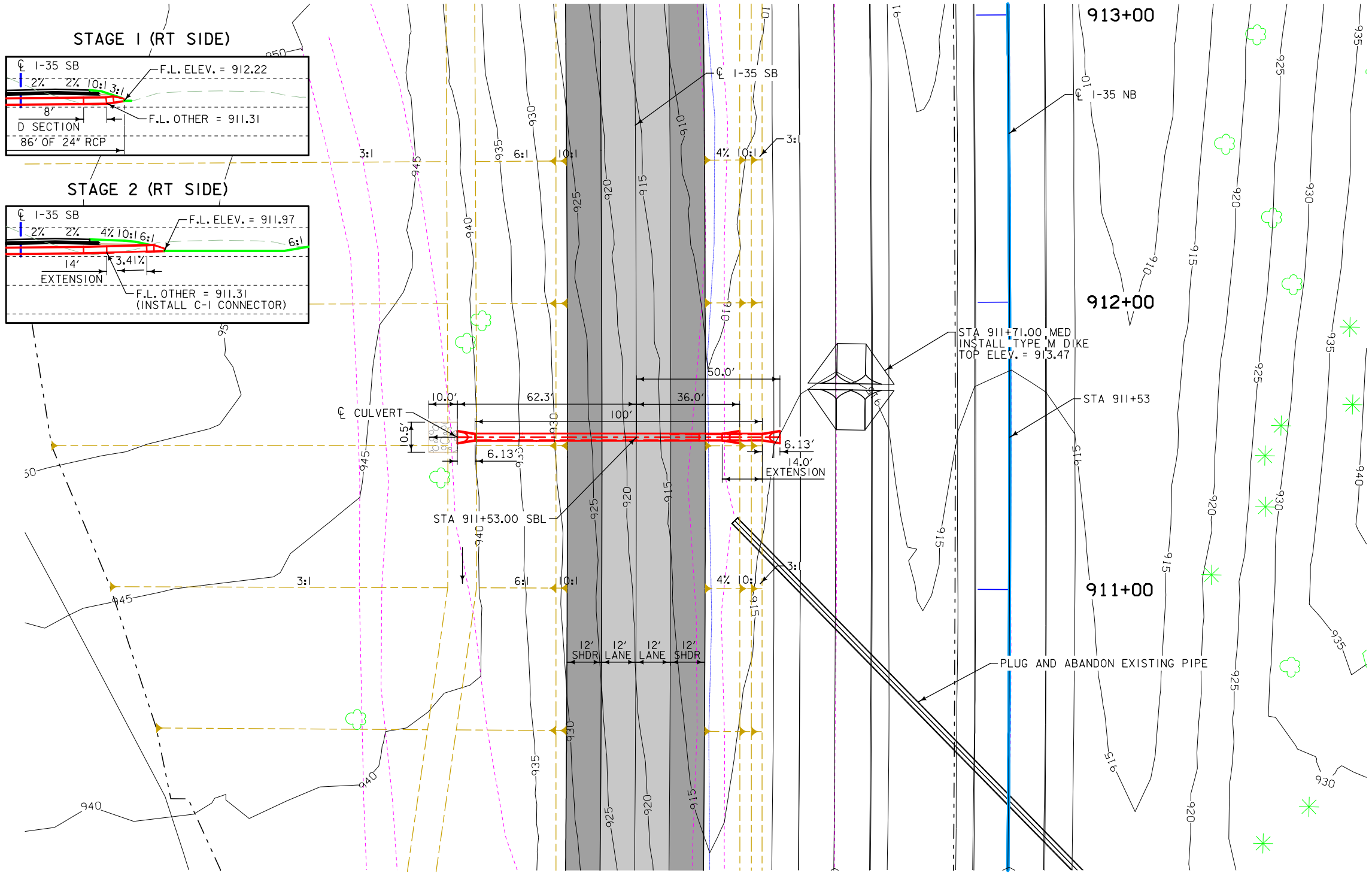
HYDRAULIC DATA
DRAINAGE AREA = 43.7 ACRES HILLY
DESIGN DISCHARGE, Q_{50} = 102.9 CFS

LOCATION
I-35
T-76N R-25W
SECTION 7
JEFFERSON TOWNSHIP
WARREN COUNTY

DESIGN FOR 0° SKEW
54" X 102'
REINFORCED CONCRETE
PIPE EXTENSION
PLAT PLAN
 STATION 905+57.06
WARREN COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. ___ OF ? FILE NO. ? DESIGN NO. ?



LONGITUDINAL SECTION ALONG CULVERT



PLAT PLAN

STAGING NOTES

STAGE 1:
INSTALL 86 LF OF 24" RCP WITH D SECTION AND 2 FES.

STAGE 2:
REMOVE FES RT AND CUT OFF D SECTION BEVEL. INSTALL 14 LF RCP AND REINSTALL FES. ABAONDON EXISTING MEDIAN DRAIN UNDER NBL.

SLOPE LINES SHOWN FOR STAGE 1 CONSTRUCTION ONLY.

UTILITIES LEGEND:

REFER TO D.1

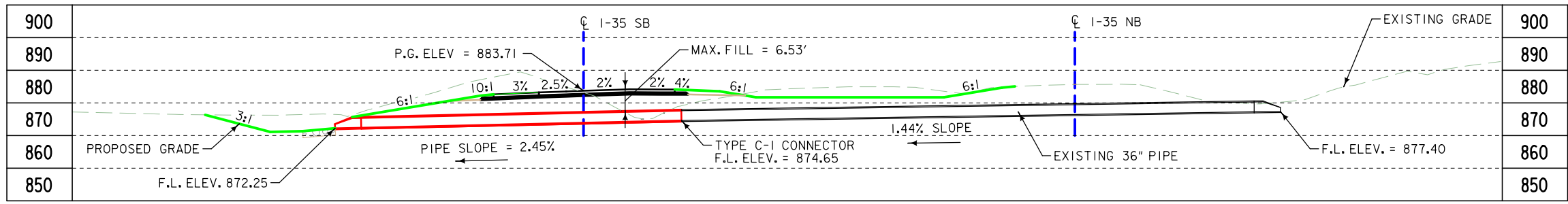
HYDRAULIC DATA

DRAINAGE AREA = 1.79 ACRES ROLLING
DESIGN DISCHARGE, $Q_{50} = 6.8$ CFS

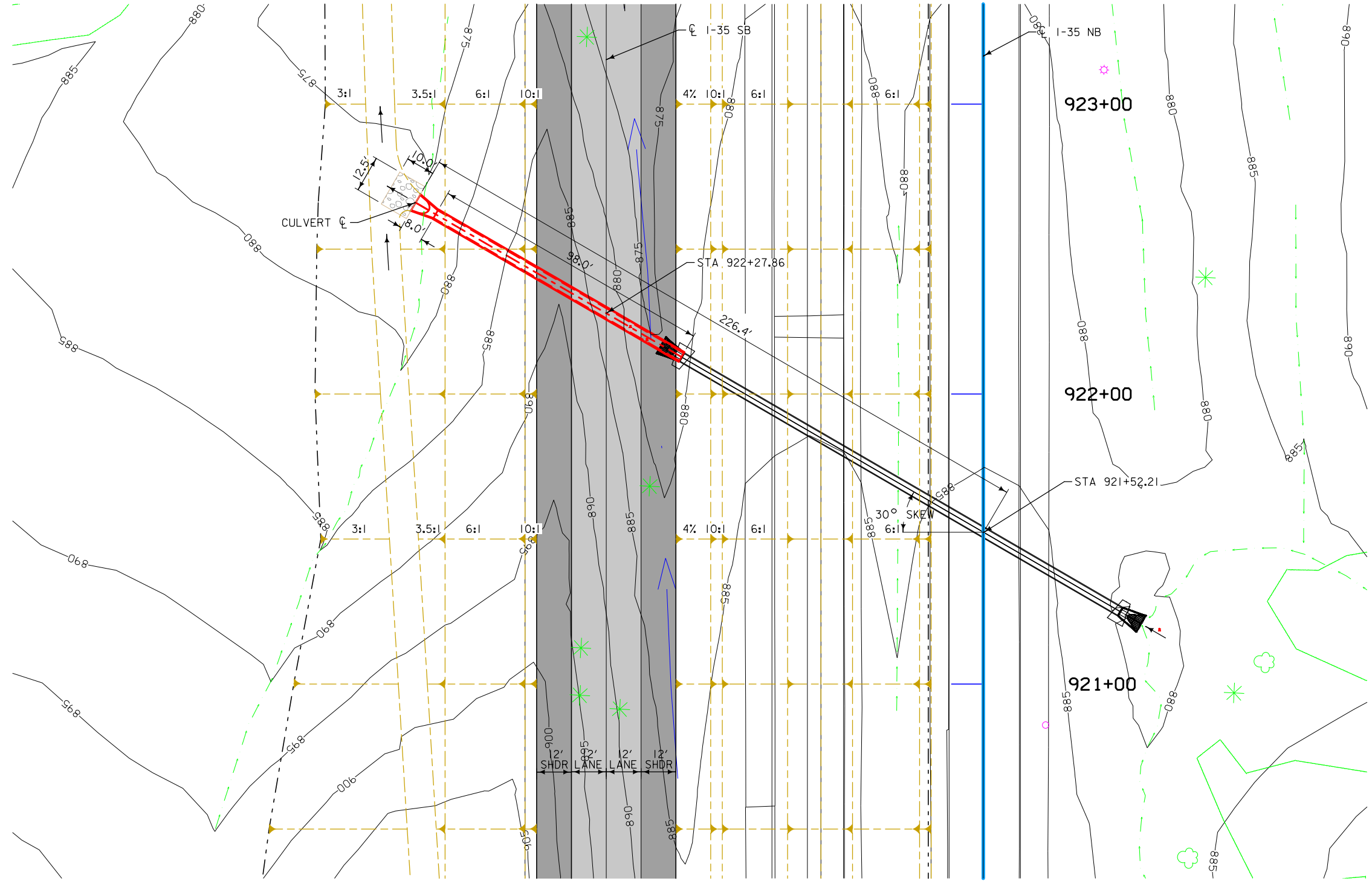
LOCATION

I-35
T-76N R-25W
SECTION 6
JEFFERSON TOWNSHIP
WARREN COUNTY

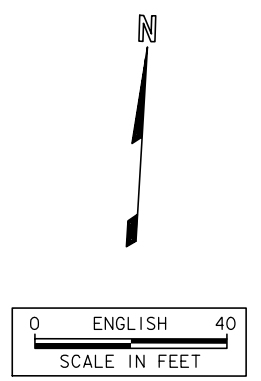
DESIGN FOR 0° SKEW
24" X 100'
REINFORCED CONCRETE PIPE
PLAT PLAN
STATION 911+53.00 SBL 02/20/2020
WARREN COUNTY
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
DESIGN SHEET NO. ? OF ? FILE NO. ? DESIGN NO. ?



LONGITUDINAL SECTION ALONG CL CULVERT



PLAT PLAN

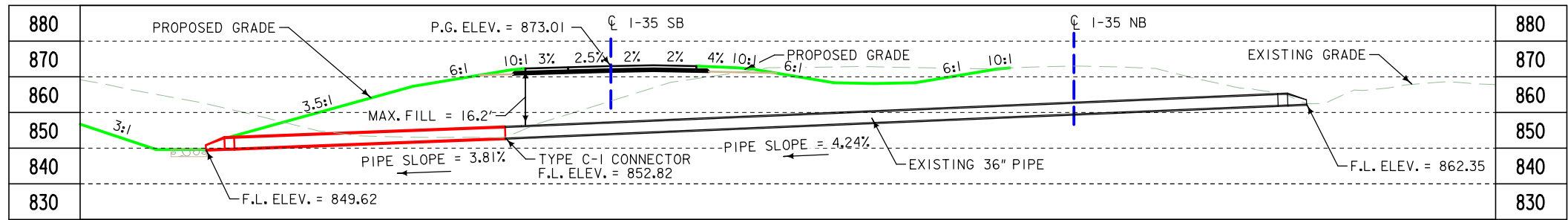


UTILITIES LEGEND:
REFER TO D.I

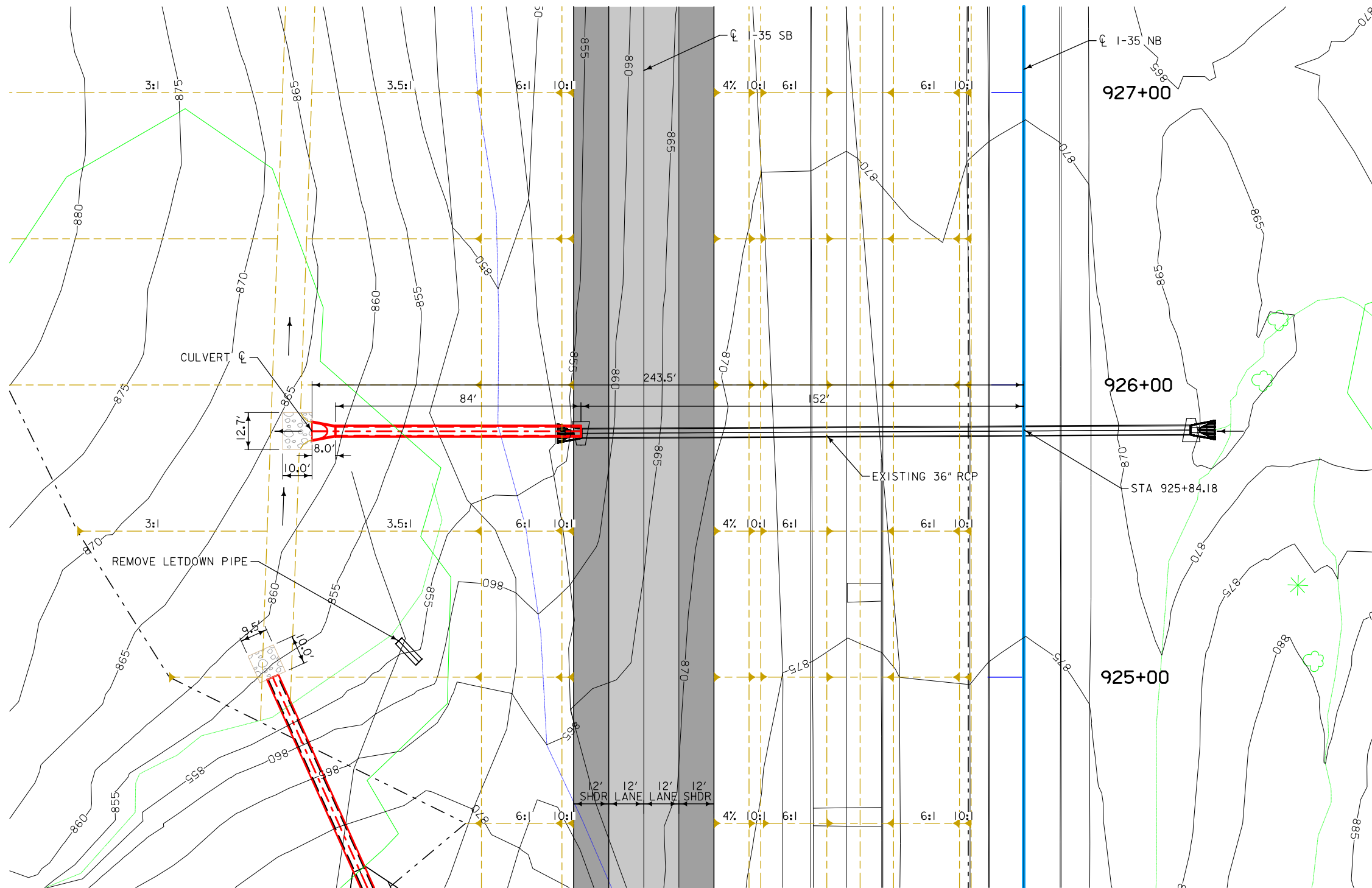
HYDRAULIC DATA
DRAINAGE AREA = 16.0 ACRES HILLY
DESIGN DISCHARGE, Q_{50} = 47.9 CFS

LOCATION
I-35
T-76N R-25W
SECTION 6
JEFFERSON TOWNSHIP
WARREN COUNTY

DESIGN FOR 30° SKEW LEFT AHEAD
36" X 98'
REINFORCED CONCRETE
PIPE EXTENSION
PLAT PLAN
 STATION 921+52.21 02/20/2020
WARREN COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. ___ OF ___ FILE NO. ___ DESIGN NO. ___



LONGITUDINAL SECTION ALONG ϕ CULVERT



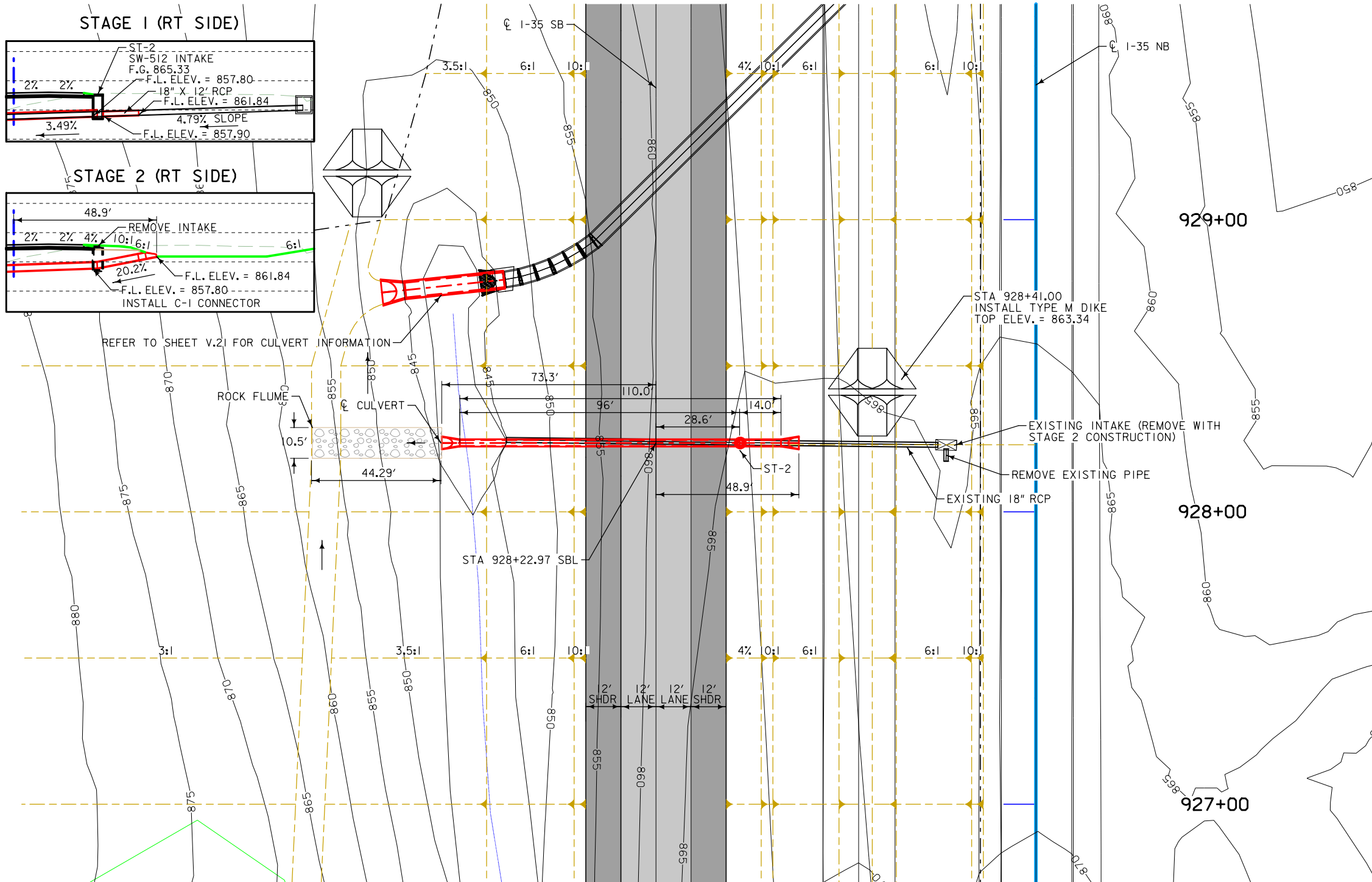
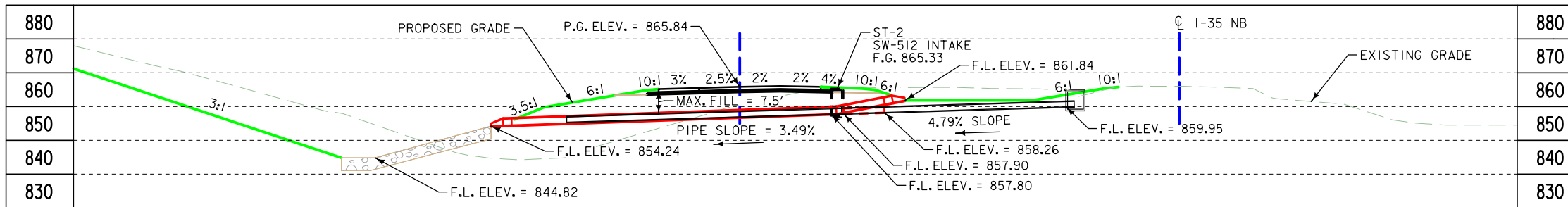
PLAT PLAN

UTILITIES LEGEND:
 REFER TO D.1

HYDRAULIC DATA
 DRAINAGE AREA = 9.8 ACRES
 DESIGN DISCHARGE, Q_{50} = 33 CFS

LOCATION
 1-35
 T-76N R-25W
 SECTION 6
 JEFFERSON TOWNSHIP
 WARREN COUNTY

DESIGN FOR 0°
36" X 84'
REINFORCED CONCRETE
PIPE EXTENSION
PLAT PLAN
 STATION 925+84.18
WARREN COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. ___ OF ___ FILE NO. ___ DESIGN NO. ___



STAGING NOTES

STAGE 1:
 INSTALL ST-2 INTAKE, 96 LF OF 24" RCP WITH FES LT, EXTEND EXISTING 18" RCP 12' TO INTAKE.

STAGE 2:
 REMOVE ST-2, INSTALL 14' RCP INCLUDING D SECTION AND C-I CONNECTOR AND FES RT.

UTILITIES LEGEND:
 REFER TO D.I

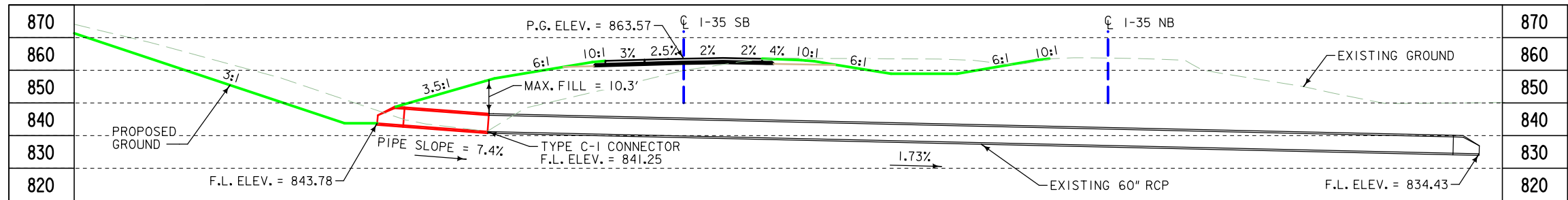
HYDRAULIC DATA
 DRAINAGE AREA = 2.38 ACRES ROLLING
 DESIGN DISCHARGE, Q₅₀ = 8.44 CFS

LOCATION
 I-35
 T-76N R-25W
 SECTION 6
 JEFFERSON TOWNSHIP
 WARREN COUNTY

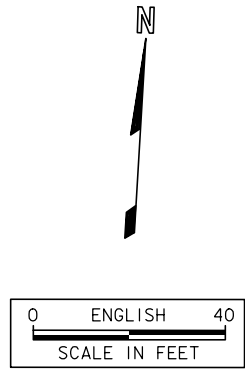
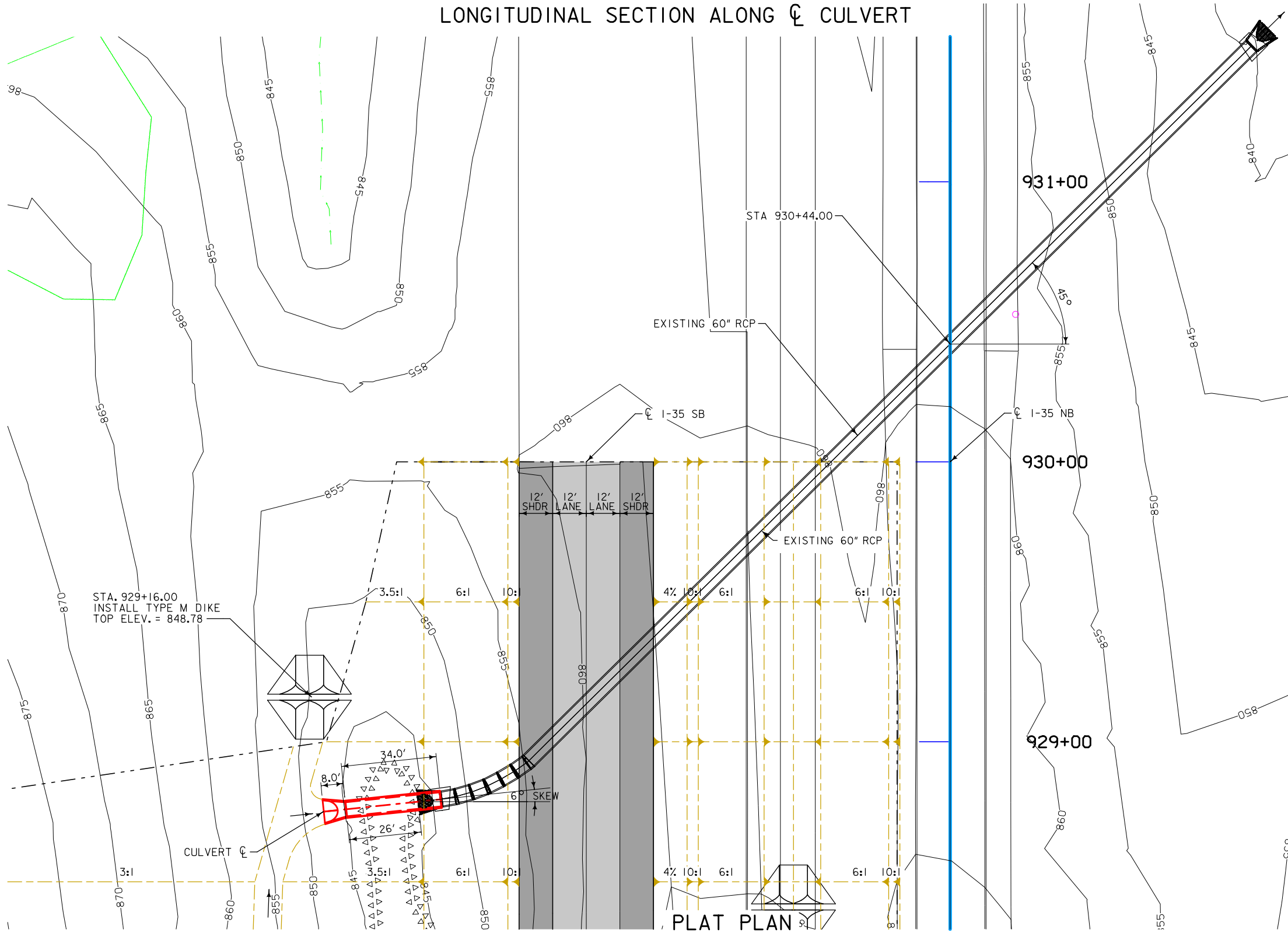
24" X 110' REINFORCED CONCRETE PIPE

PLAT PLAN

STATION 928+22.97 SBL 04/06/2020
WARREN COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. ___ OF ___ FILE NO. ___ DESIGN NO. ___



LONGITUDINAL SECTION ALONG CL CULVERT

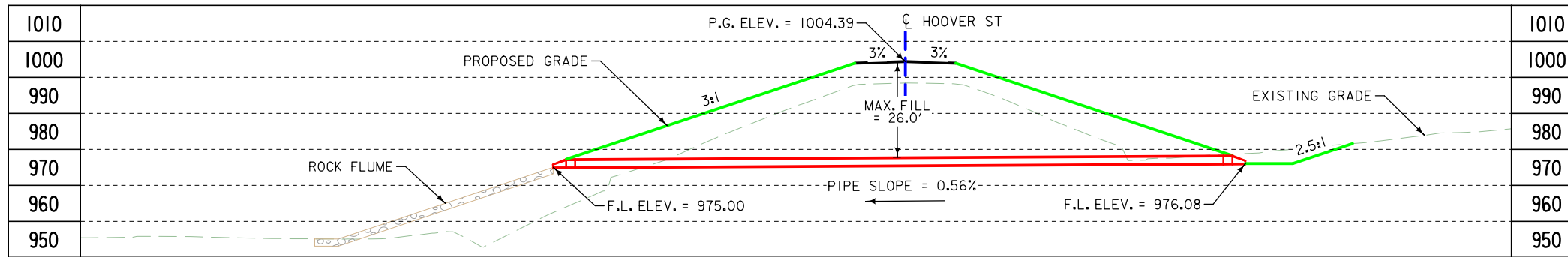


UTILITIES LEGEND:
REFER TO D.1

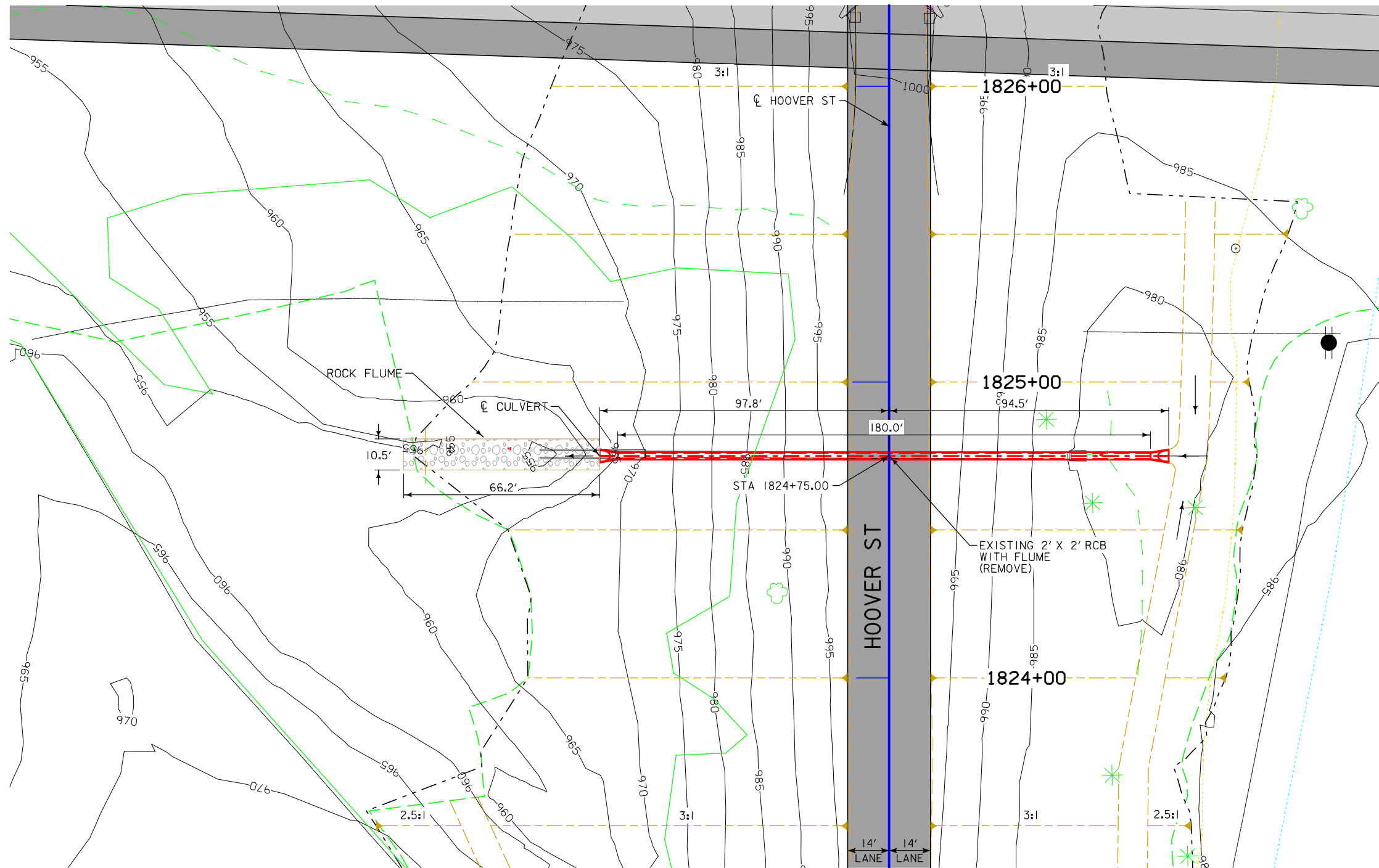
HYDRAULIC DATA
DRAINAGE AREA = 50 ACRES HILLY
DESIGN DISCHARGE, $Q_{50} = 112$ CFS

LOCATION
I-35
T-76N R-25W
SECTION 6
JEFFERSON TOWNSHIP
WARREN COUNTY

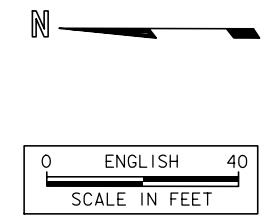
DESIGN FOR 6° SKEW RT. AHEAD
60" X 34'
REINFORCED CONCRETE
PIPE EXTENSION
PLAT PLAN
 STATION 930+44.00 02/20/2020
WARREN COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. ___ OF ___ FILE NO. ___ DESIGN NO. ___



LONGITUDINAL SECTION ALONG ϕ CULVERT



PLAT PLAN

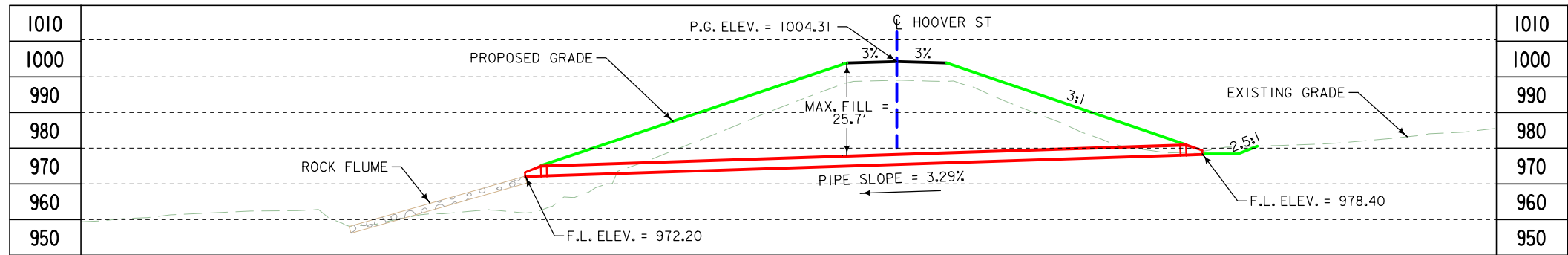


UTILITIES LEGEND:
REFER TO D.1

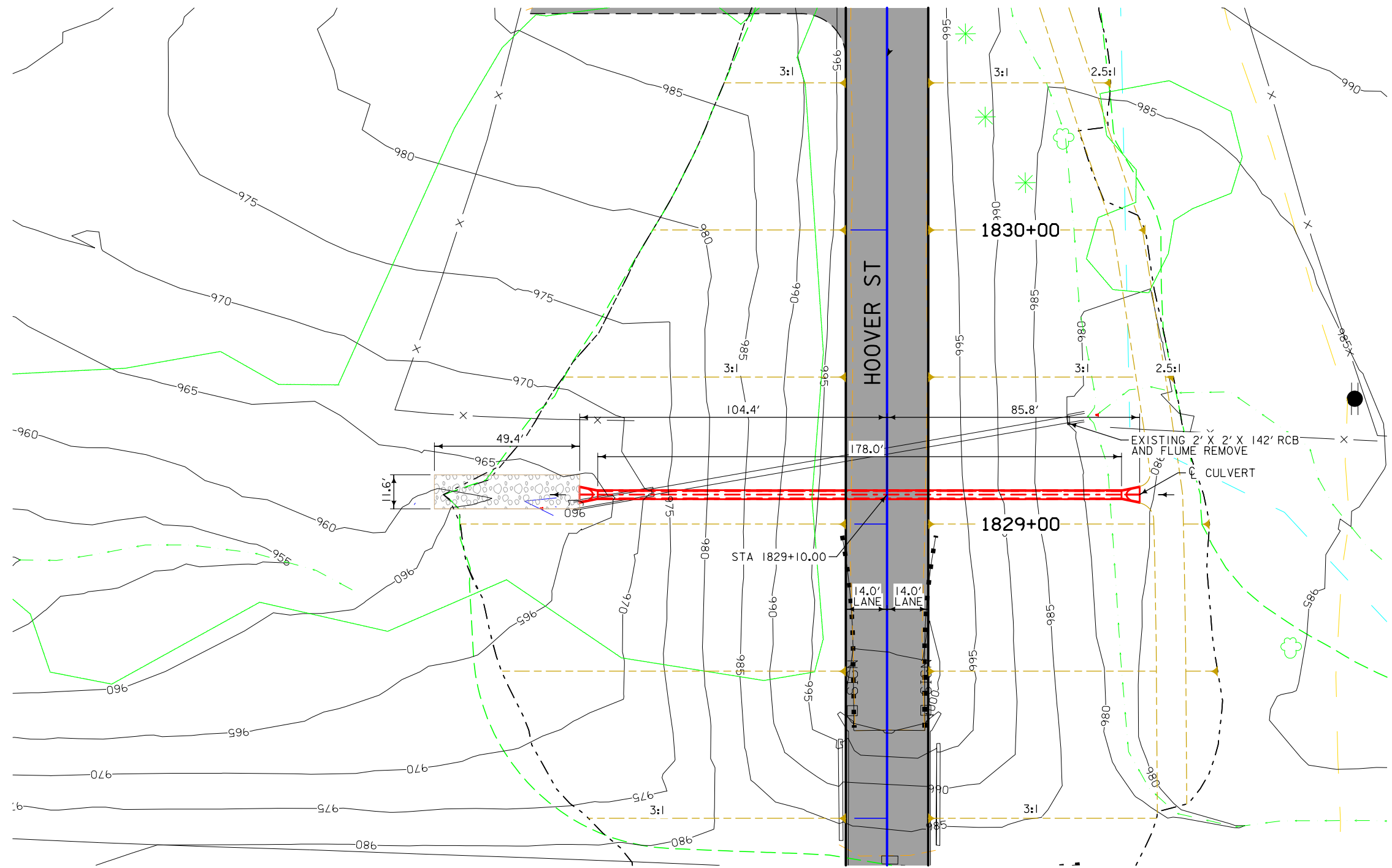
HYDRAULIC DATA
DRAINAGE AREA = 3.1 ACRES HILLY
DESIGN DISCHARGE, Q_{50} = 13.6 CFS

LOCATION
HOOVER ST.
T-76N R-25W
SECTION 18
JEFFERSON TOWNSHIP
WARREN COUNTY

DESIGN FOR 0° SKEW
24" X 180'
3750D REINFORCED CONCRETE PIPE
PLAT PLAN
STATION 1824+75.00 HOOVER ST. 02/20/2020
WARREN COUNTY
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
DESIGN SHEET NO. ___ OF ___ FILE NO. ___ DESIGN NO. ___



LONGITUDINAL SECTION ALONG ϕ CULVERT



PLAT PLAN

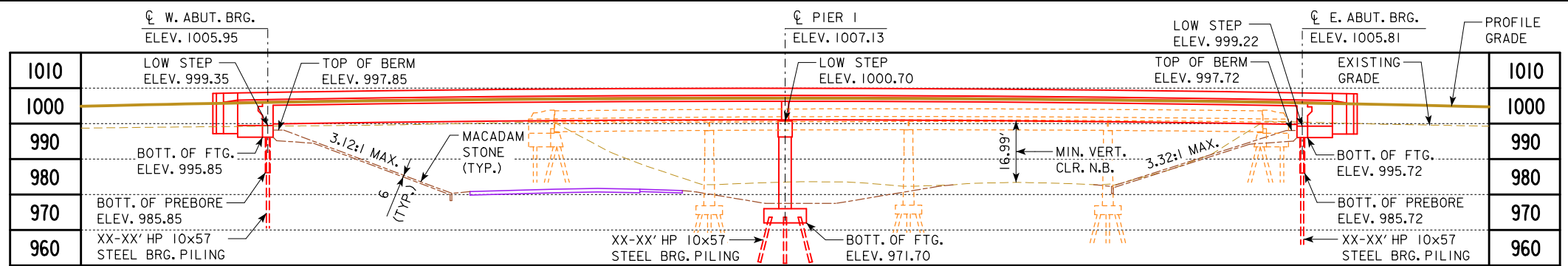


UTILITIES LEGEND:
REFER TO D.1

HYDRAULIC DATA
DRAINAGE AREA = 6.9 ACRES ROLLING/HILLY
DESIGN DISCHARGE, $Q_{50} = 22$ CFS

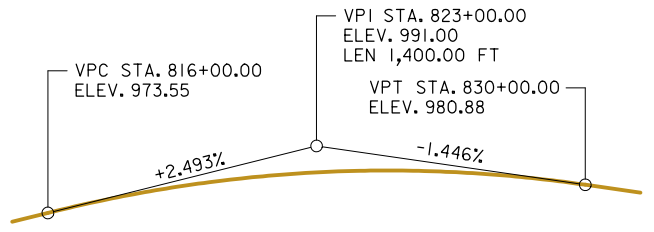
LOCATION
HOOPER ST.
T-76N R-25W
SECTION 18
JEFFERSON TOWNSHIP
WARREN COUNTY

DESIGN FOR 0° SKEW RT. AHEAD
30" X 178'
3750D REINFORCED CONCRETE PIPE
PLAT PLAN
 STATION 1829+10.00 HOOPER ST. 02/20/2020
WARREN COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. ___ OF ___ FILE NO. ___ DESIGN NO. ___

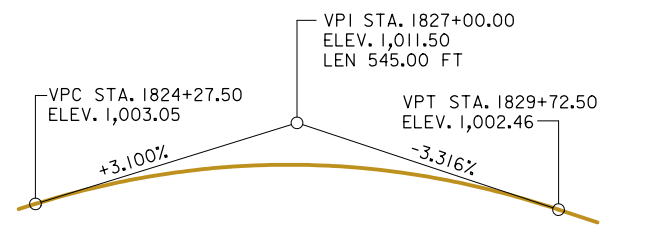


LONGITUDINAL SECTION ALONG CENTERLINE APPROACH ROADWAY

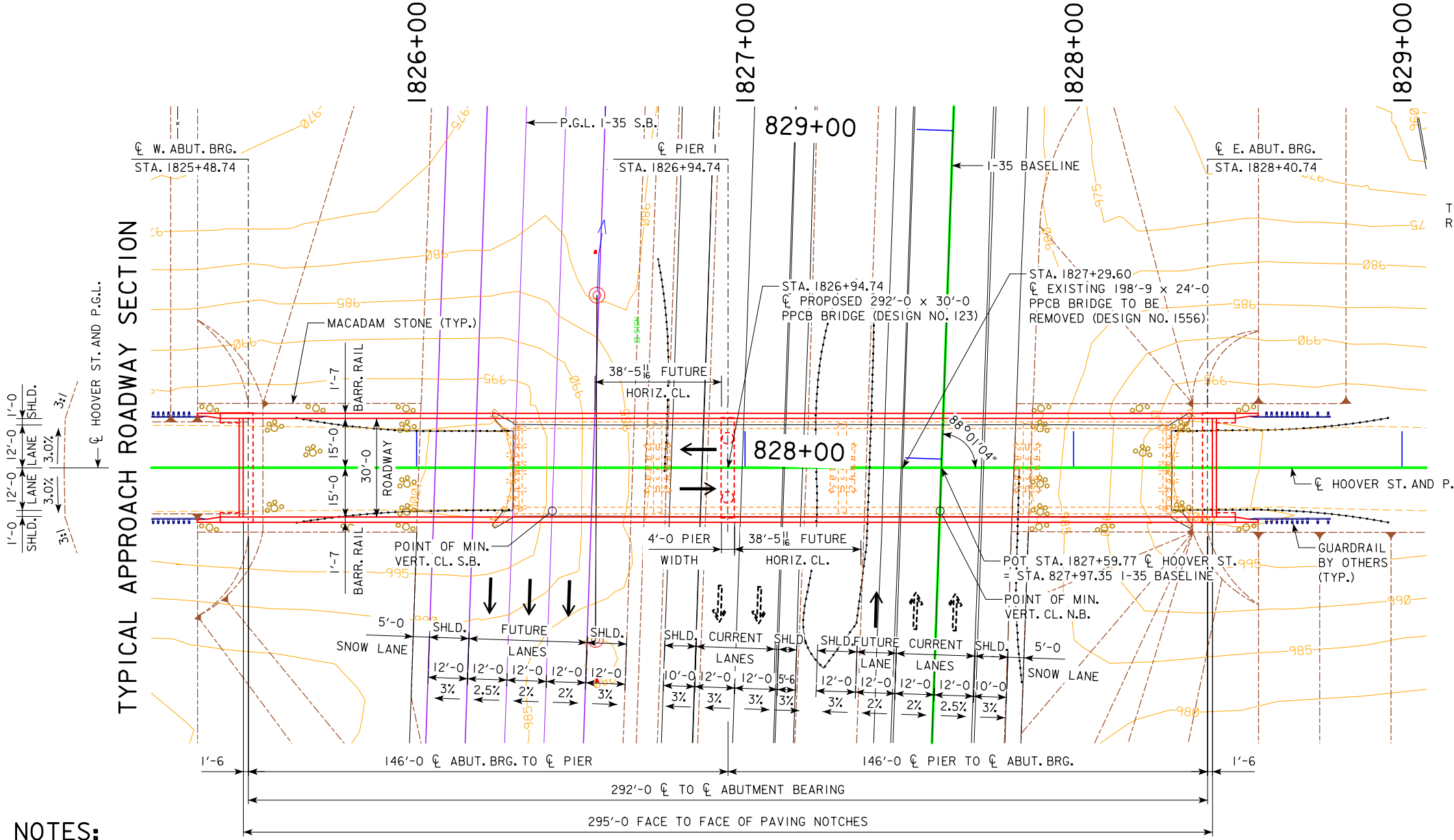
BENCH MARK NO. 539: ELEV. 1003.23, N.505965.323 E.1563277.406, FD IHC BM SW WINGWALL COUNTY RD OVER I-35 FROM PROJECT # IMN-35-2(314)67-OE-77



PROFILE GRADE I-35 S.B.

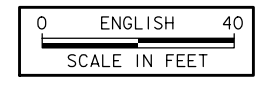


PROFILE GRADE HOOVER ST.

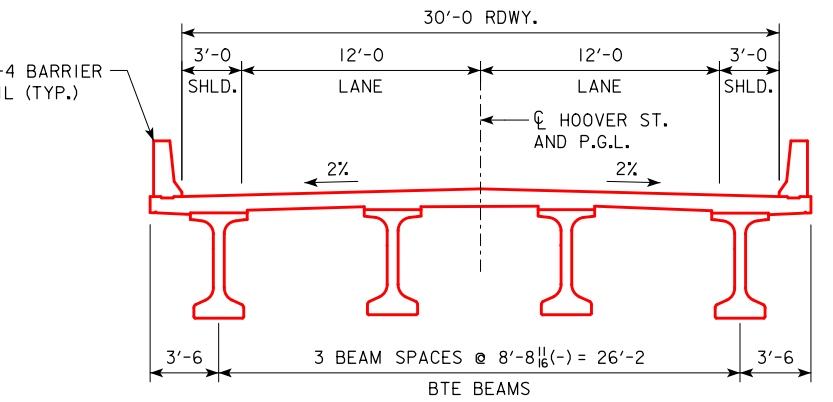


NOTES:
 ALL OFFSETS ARE MEASURED FROM CL OF HOOVER STREET.
 ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED.
 TOP OF BRIDGE DECK CROWN AT CL ROADWAY IS 0.03 FT BELOW THE PROFILE GRADE TO ACCOUNT FOR DECK CROSS SLOPE AND PARABOLIC CROWN.
 PIER TYPE - FRAME PIER, PIERS EXEMPT FROM VEHICULAR COLLISION FORCE DESIGN.
 BEAM TYPE - BTE BEAMS, DEPTH = 5'-3".
 TL-4 BRIDGE RAILING PROPOSED.
 2 - SPAN GRADING SHOWN.
 BERM SLOPES TO BE CONFIRMED DURING FINAL DESIGN.

SITUATION PLAN
MINIMUM VERTICAL CLEARANCE
 OVERHEAD STATION = 1827+59.28, OFFSET 13.08' RT.
 OVERHEAD ELEVATION = 1006.60
 DEPTH OF SUPERSTRUCTURE = 6.08'
 UNDERPASS STATION = 827+83.01, OFFSET 0.00 LT.
 UNDERPASS ELEVATION = 983.53
 MINIMUM VERTICAL CLEARANCE = 16.99'



LOCATION
 HOOVER ST. OVER I-35
 T-76N R-25W
 SECTION 18
 JEFFERSON TOWNSHIP
 WARREN COUNTY
 WARREN COUNTY
 FHWA NO. 51381
 BRIDGE MAINT. NO. 9158.50035
 LATITUDE 41.388436°
 LONGITUDE -93.780884°



TYPICAL BRIDGE CROSS SECTION

UTILITIES LEGEND:
 FO(B) - FIBER OPTIC - AUREON
 W(B) - WATER - WARREN WATER DISTRICT
 P - POWER POLE
 UTILITIES SHOWN ON THIS SHEET ARE FOR INFORMATION ONLY, SEE ROAD DESIGN SHEETS FOR FINAL UTILITY INFORMATION.

I-35 TRAFFIC ESTIMATE

2011 AADT	25,900	V.P.D.
2035 AADT	49,800	V.P.D.
2035 DHV	-	V.P.H.
TRUCKS	25	%
TOTAL DESIGN ESALS	-	

HOOVER ST. TRAFFIC ESTIMATE

2012 AADT	90	V.P.D.
2035 AADT	180	V.P.D.
2035 DHV	-	V.P.H.
TRUCKS	3	%
TOTAL DESIGN ESALS	-	

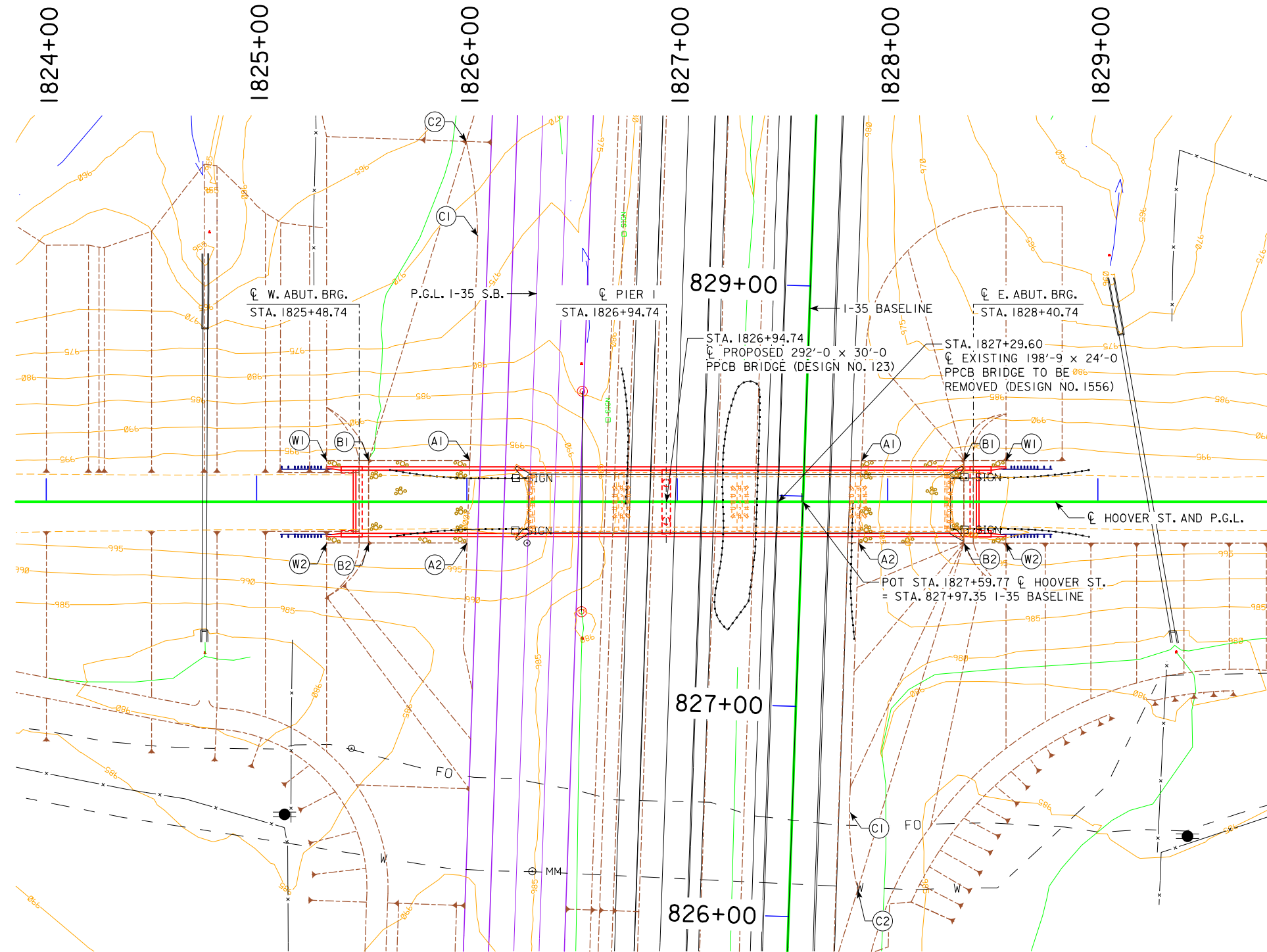
DESIGN FOR 0° SKEW
292'-0 X 30'-0 PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGE
 146'-0 SPANS
SITUATION PLAN
 STATION 1826+94.74
 WARREN COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 1 OF 2 FILE NO. 30450 DESIGN NO. 123
 PRELIMINARY
 DECEMBER, 2019

BERM SLOPE LOCATION TABLE						
POINTS	WEST ABUTMENT			EAST ABUTMENT		
	STATION	OFFSET	ELEV.	STATION	OFFSET	ELEV.
A1	1826+01.36	19.58 LT	981.88	1827+87.47	19.58 LT	982.12
A2	1826+00.00	19.58 RT	982.22	1827+86.11	19.58 RT	982.47
B1	1825+53.24	19.58 LT	997.85	1828+36.24	19.58 LT	997.72
B2	1825+53.24	19.58 RT	997.85	1828+36.24	19.58 RT	997.72
W1	1825+33.24	19.58 LT	1005.22	1828+56.24	19.58 LT	1005.07
W2	1825+33.24	19.58 RT	1005.22	1828+56.24	19.58 RT	1005.07

BERM SLOPE ELEVATIONS REFLECT THE GRADING SURFACE

RECOVERABLE BERM LOCATION TABLE						
	WEST ABUTMENT			EAST ABUTMENT		
	STATION	OFFSET	ELEV	STATION	OFFSET	ELEV
C1	1826+05.26	126.44 LT	981.11	1827+82.11	147.59 RT	983.72
C2	1825+99.61	171.43 LT	980.25	1827+85.70	184.38 RT	983.71
C3	1826+13.15	215.77 LT	980.11	1827+74.58	220.64 RT	984.27
B	1825+53.24	19.58 LT	997.85	1828+36.24	19.58 RT	997.72

ⓐ POINTS FOR THE ABUTMENTS ARE BEYOND THE LIMITS OF THIS SHEET. SEE THE RECOVERABLE BERM LOCATION TABLE FOR THEIR LOCATIONS, OFFSETS, AND ELEVATIONS. REFER TO EW-203 FOR TYPICAL LOCATIONS.



UTILITIES LEGEND:

- FO(B) - FIBER OPTIC - AUREON
- W(B) - WATER - WARREN WATER DISTRICT
- ⊕ - POWER POLE

UTILITIES SHOWN ON THIS SHEET ARE FOR INFORMATION ONLY, SEE ROAD DESIGN SHEETS FOR FINAL UTILITY INFORMATION.

NOTE:
 FOR MACADAM STONE SLOPE PROTECTION SECTIONS AND ESTIMATED QUANTITIES SEE STANDARD SHEET 1006.

SITE PLAN

ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED OR SHOWN.



PRELIMINARY
 DESIGN FOR 0° SKEW
**292'-0 X 30'-0 PRETENSIONED
 PRESTRESSED CONCRETE BEAM BRIDGE**
 146'-0 SPANS
SITE PLAN
 STATION 1826+94.74 DECEMBER, 2019
WARREN COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 2 OF 2 FILE NO. 30450 DESIGN NO. 123

LINE STYLE LEGEND OF CROSS SECTION SHEETS (ROAD)

- Existing Ground Line
- ===== Proposed Template
- ===== Proposed Topsoil Placement
- Additional Topsoil Removal
- Subgrade Treatment
- Granular Shoulder
- ===== Pavement
- Existing Pipe\RCB
- ===== Proposed Pipe\RCB
- Proposed Dike
- ===== All Elements Associated with Proposed Entrances

LINE STYLE LEGEND OF CROSS SECTION SHEETS (SOILS)

- Topsoil (Class 10)
- Slope Dressing Only
- Class 10 Materials
- Select Loams And Clay-Loams
- Select Sand
- Unsuitable Type A Disposal
- Unsuitable Type B Disposal
- Unsuitable Type C Disposal
- Shale
- Waste
- Broken and Weathered Rock
- Solid Rock
- Boulders

Note: All layer lines and descriptions identify layers above the line.

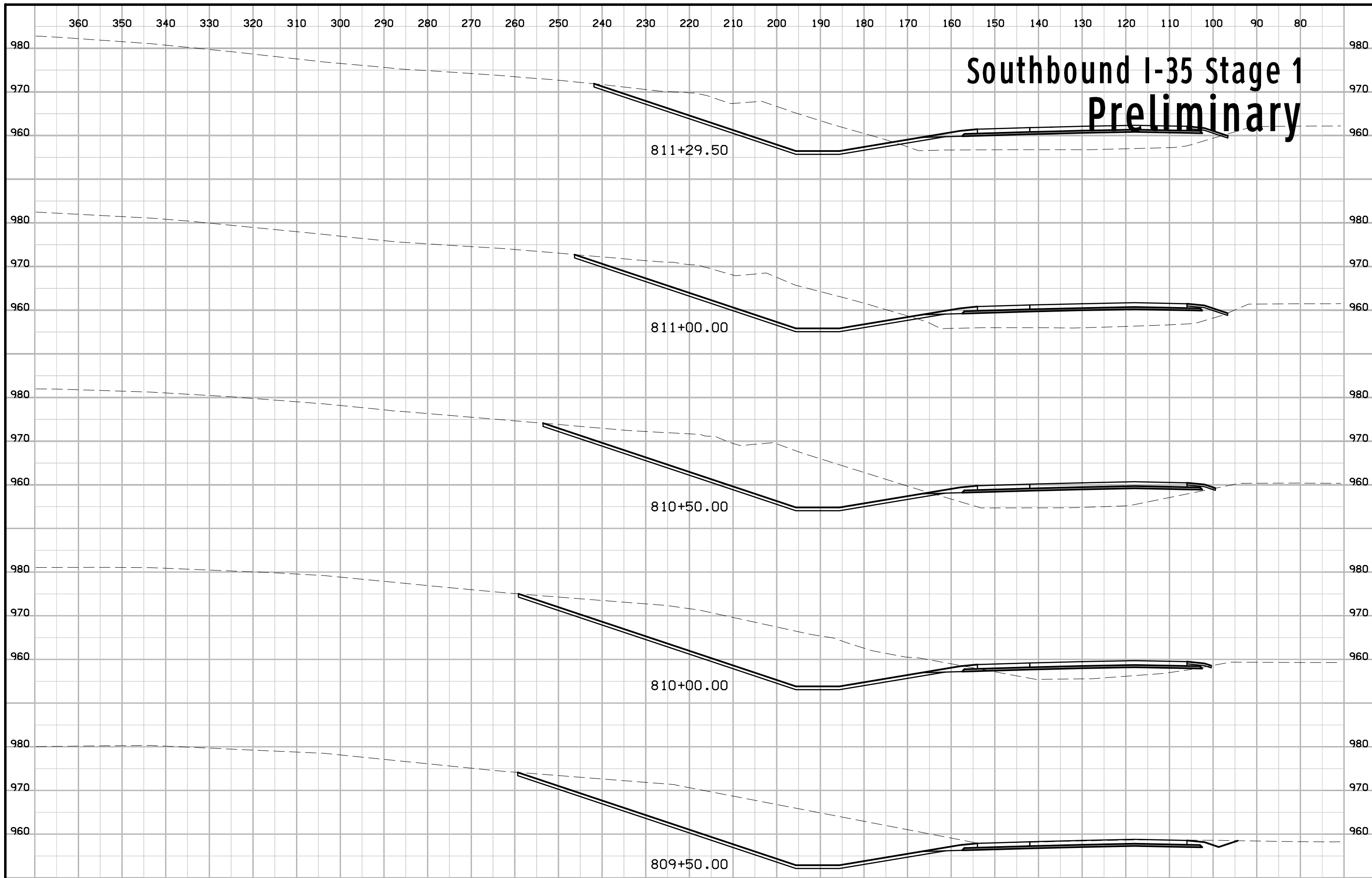
Note: Vertical or near vertical lines connecting soil layers at edges of cross sections are only for the purpose of calculating template quantities and do not depict soil stratification.

SYMBOL LEGEND OF CROSS SECTION SHEETS

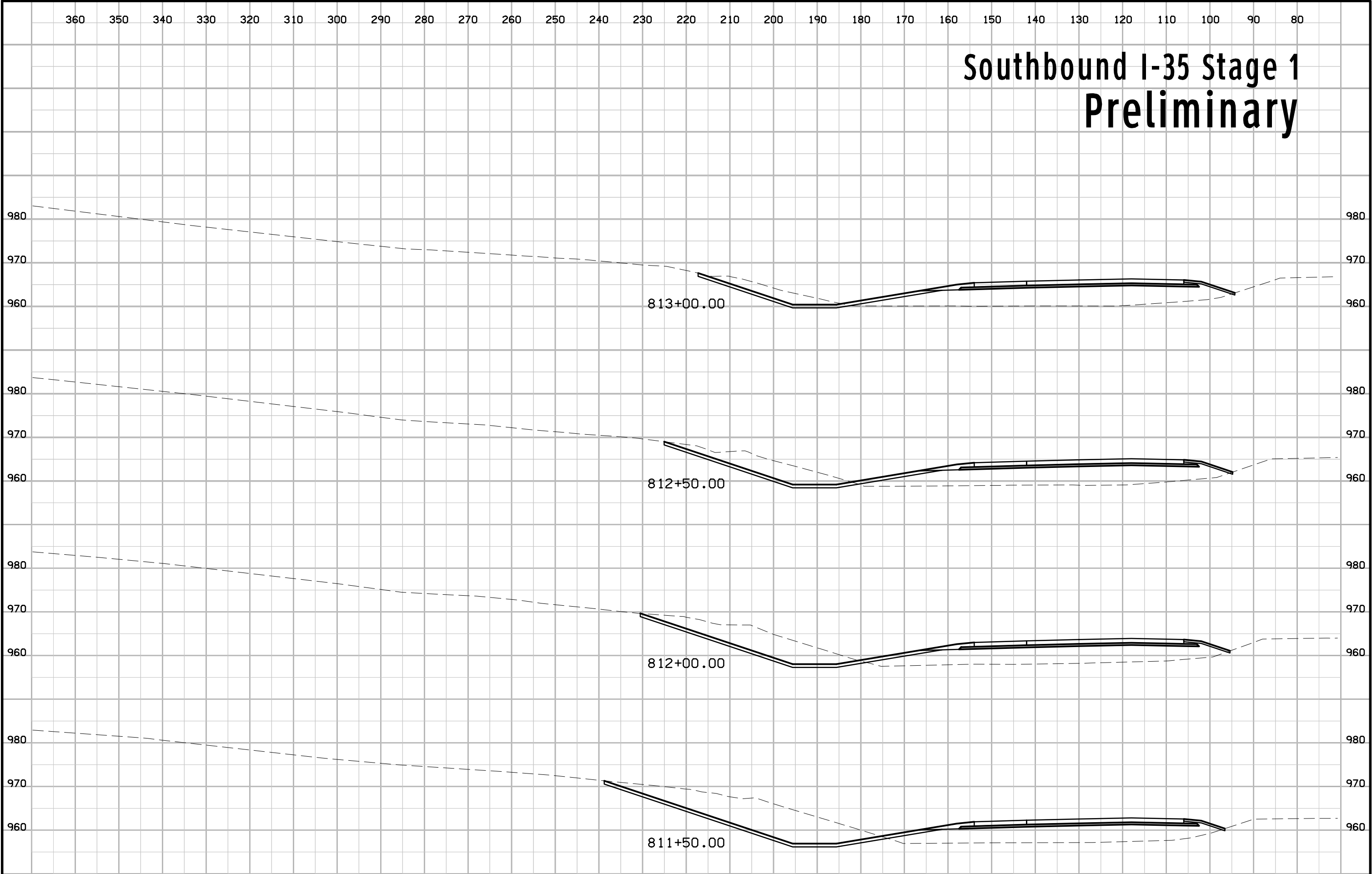
- Existing ROW
----- Existing Right-of-Way Limit
- Proposed ROW
----- Proposed Right-of-Way Limit
- Temporary ROW
----- Temporary Right-of-Way Limit

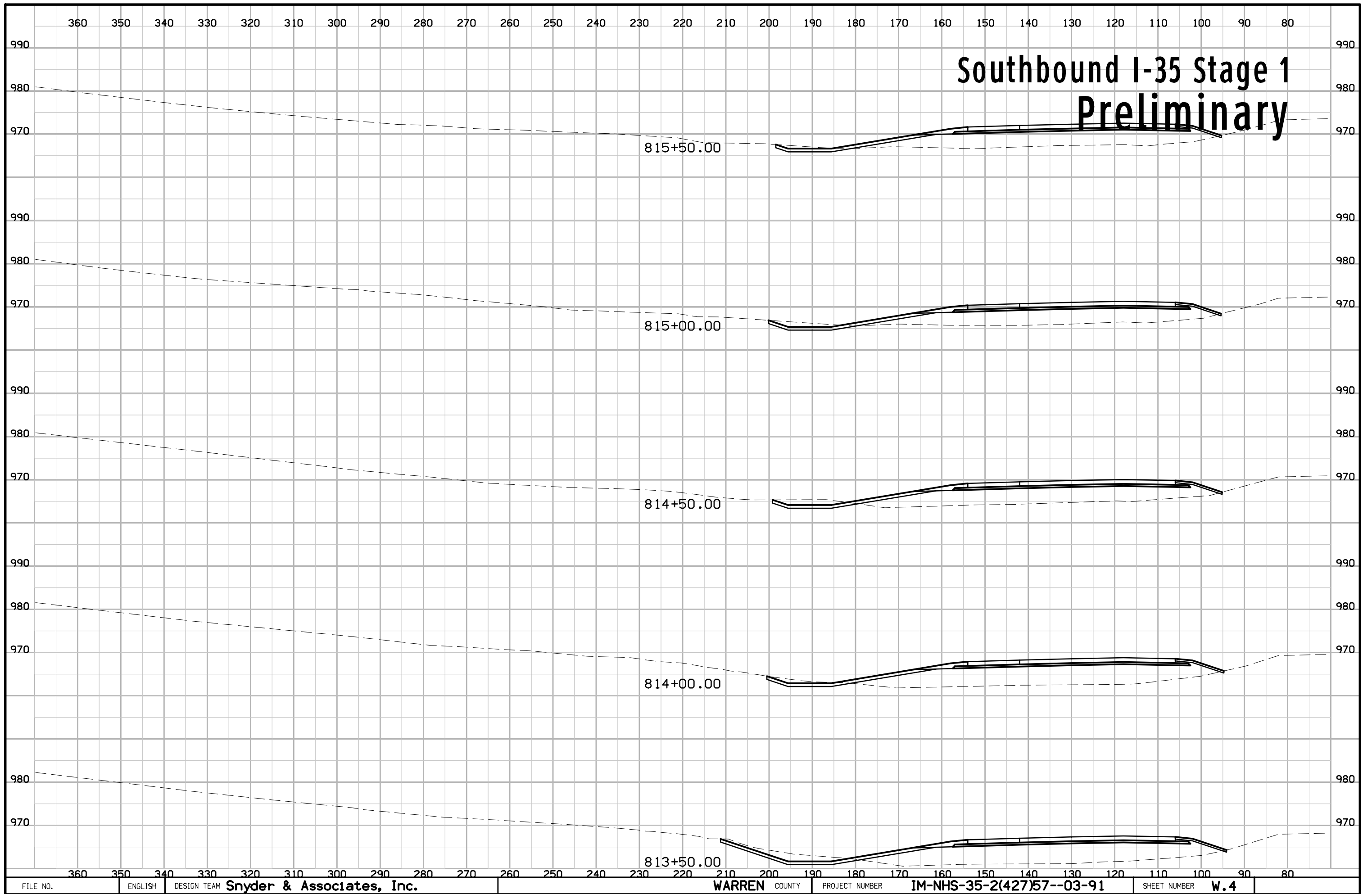
**CROSS SECTION
LEGEND AND SYMBOL
INFORMATION SHEET**

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

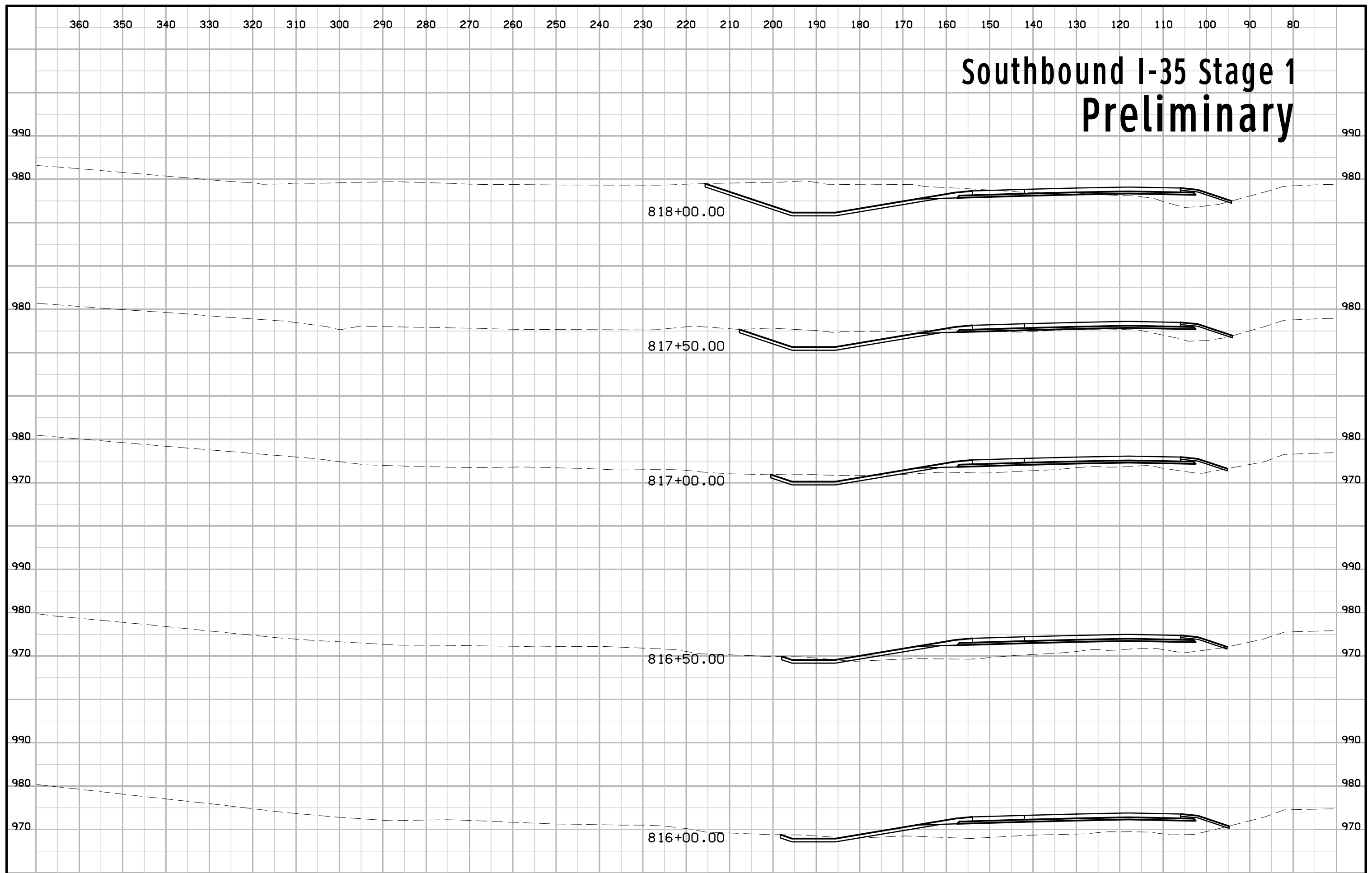


Southbound I-35 Stage 1 Preliminary



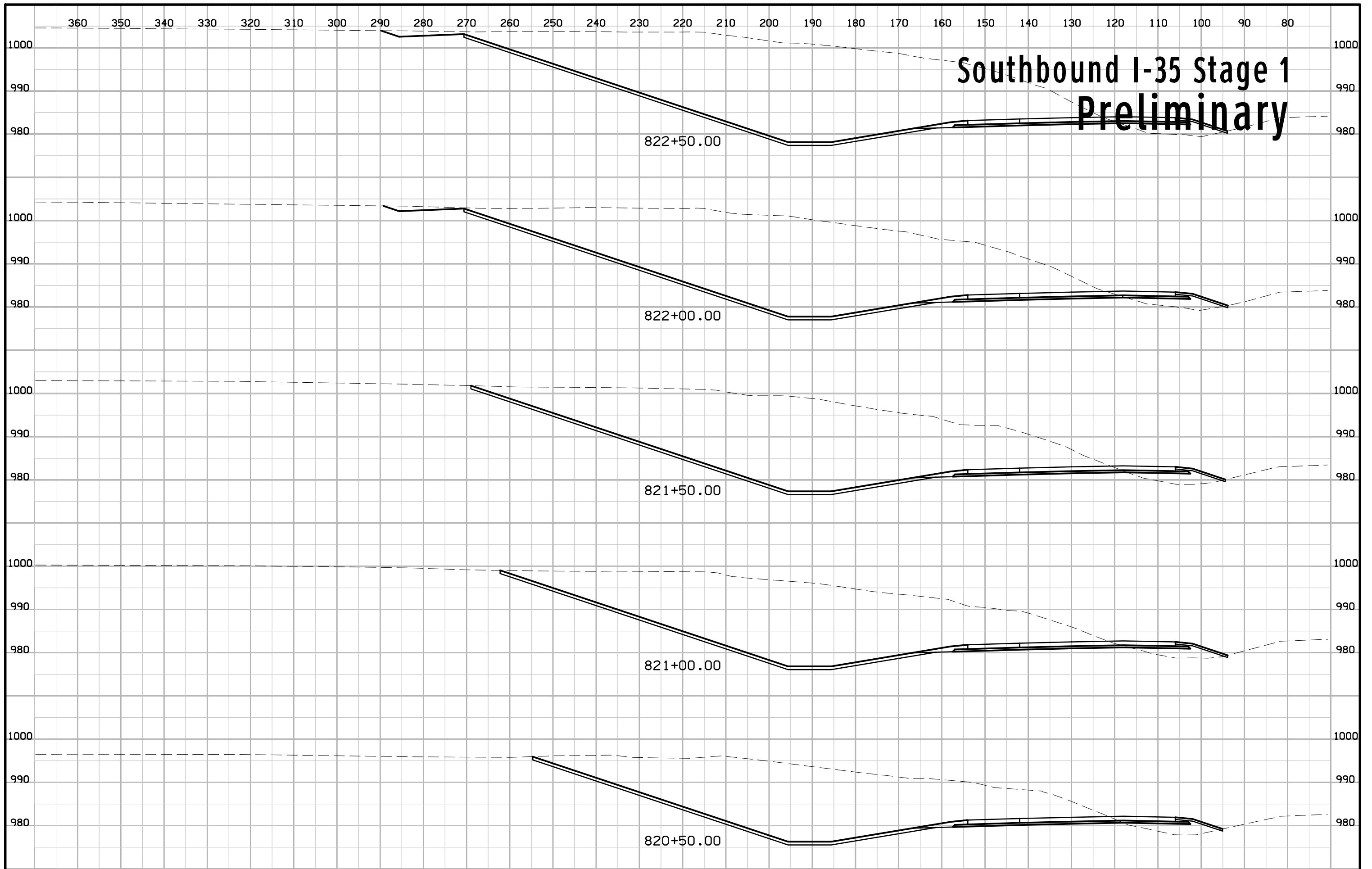


Southbound I-35 Stage 1 Preliminary

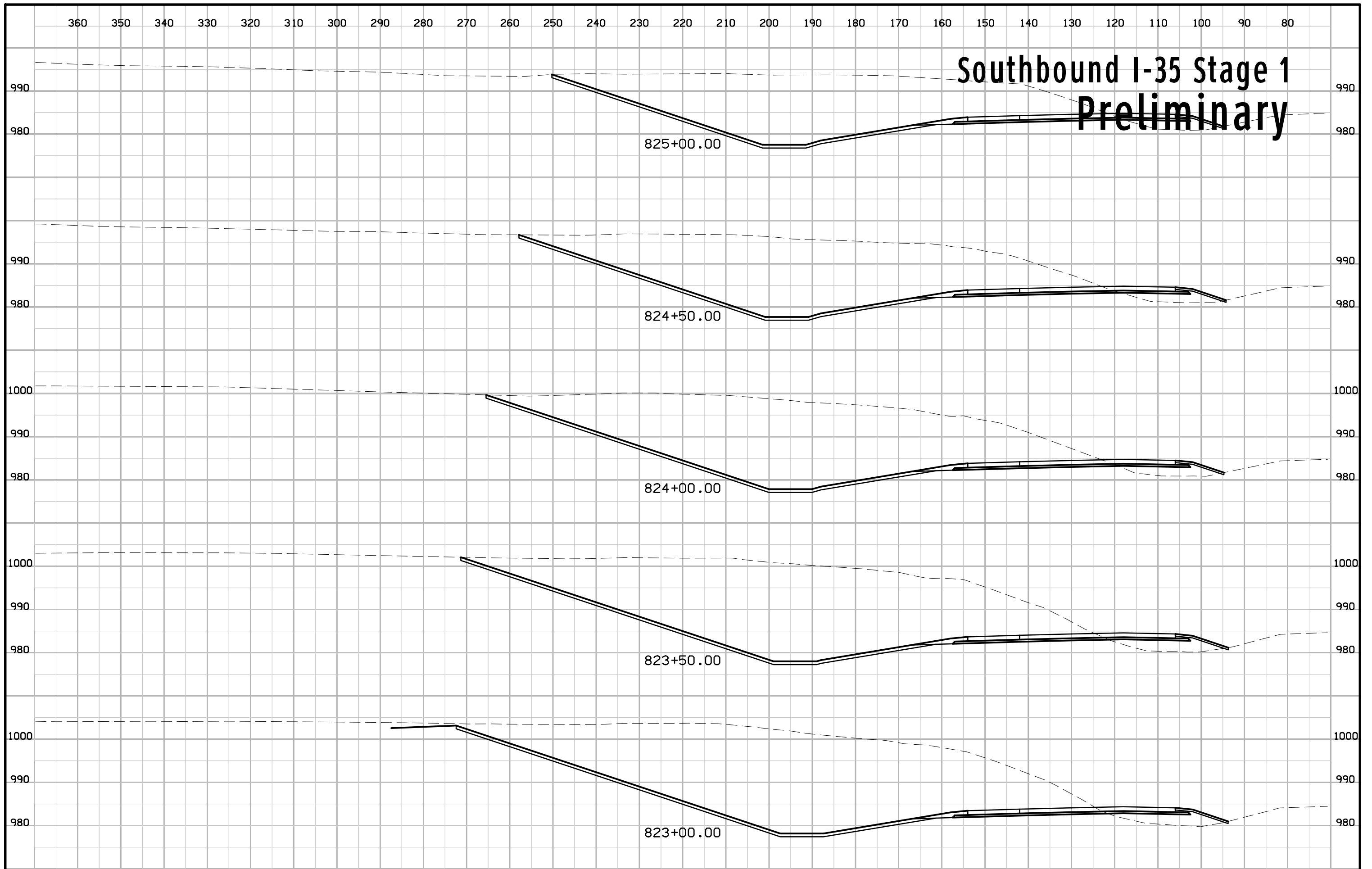




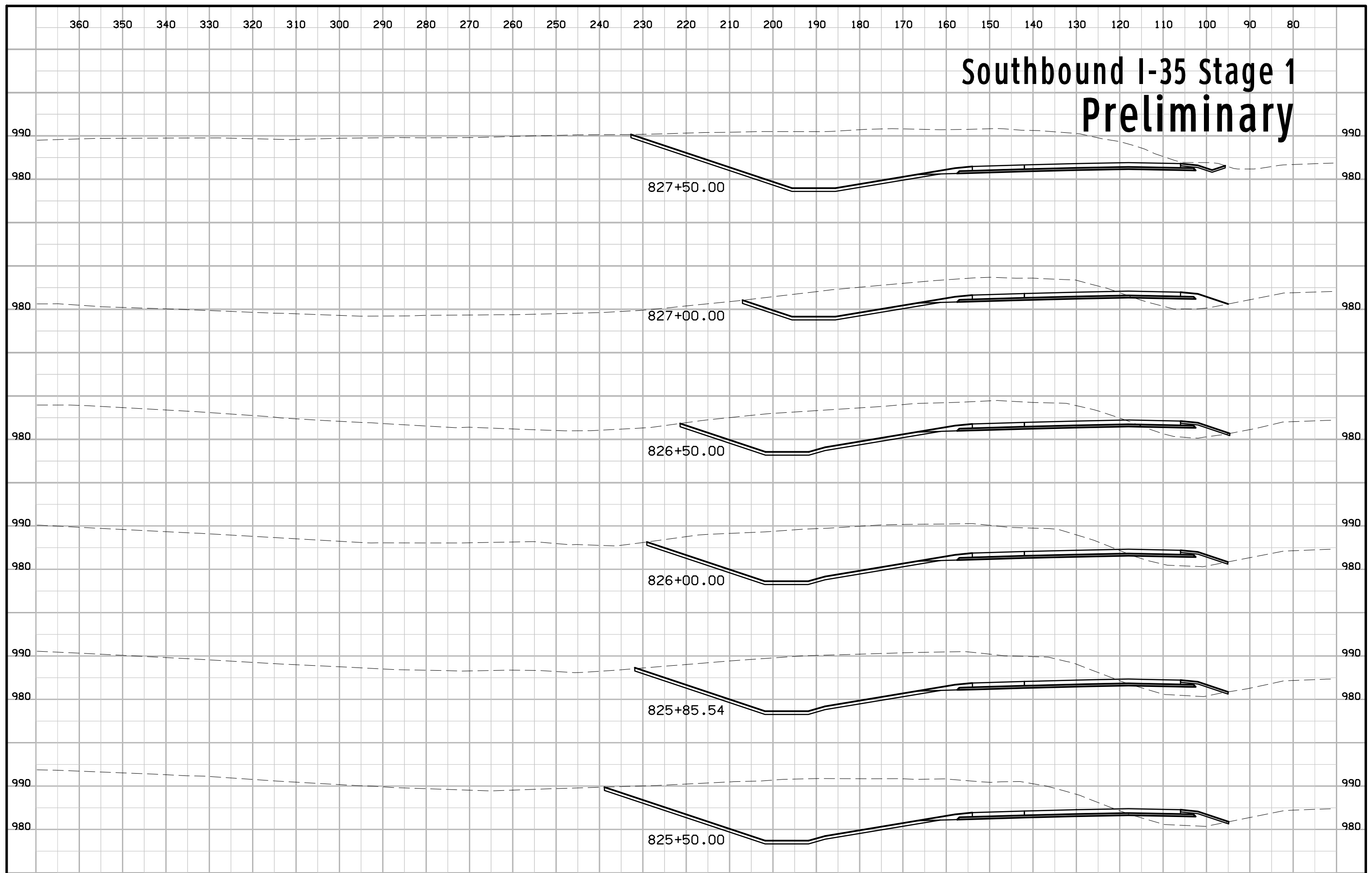
Southbound I-35 Stage 1 Preliminary

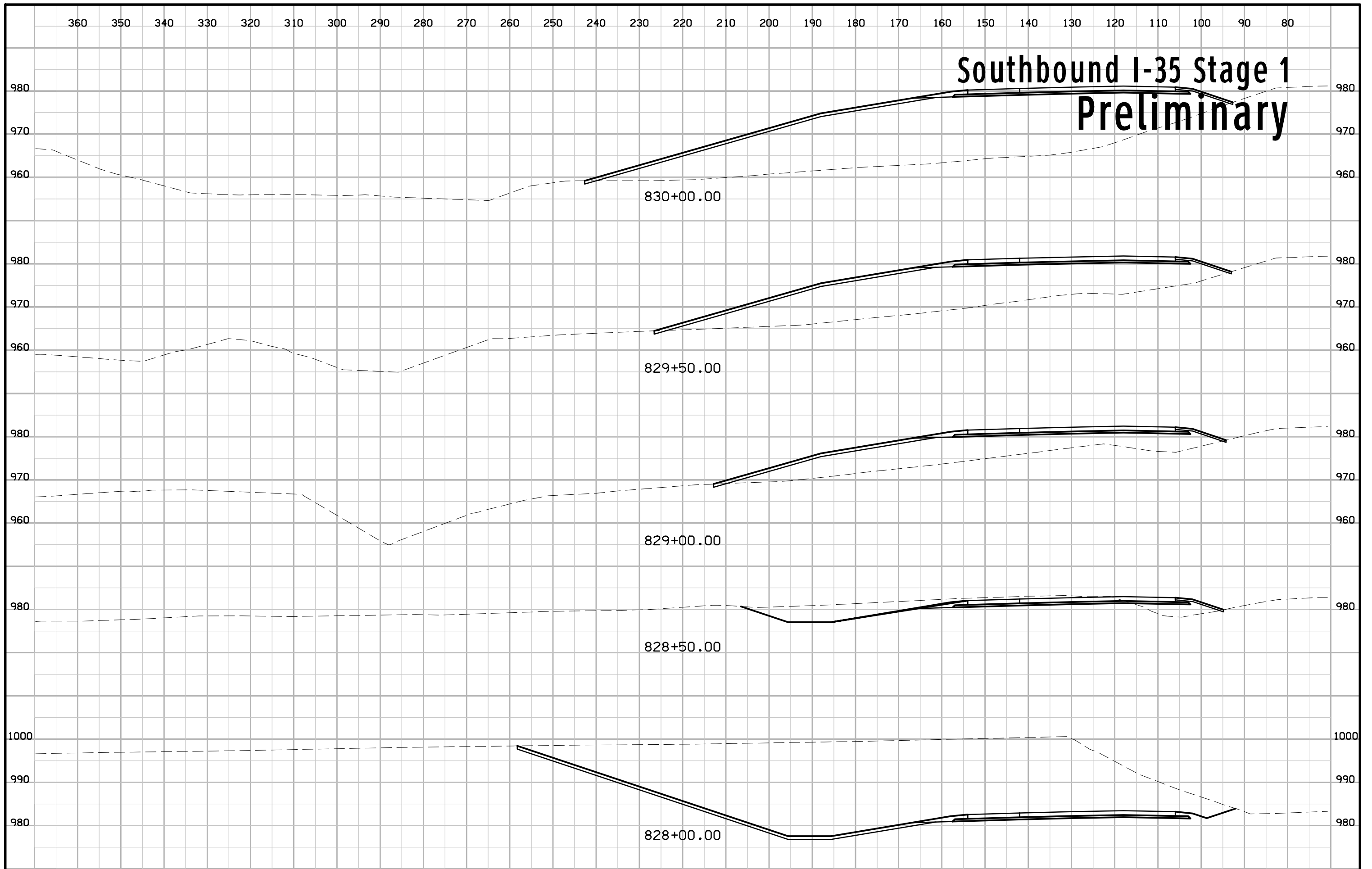


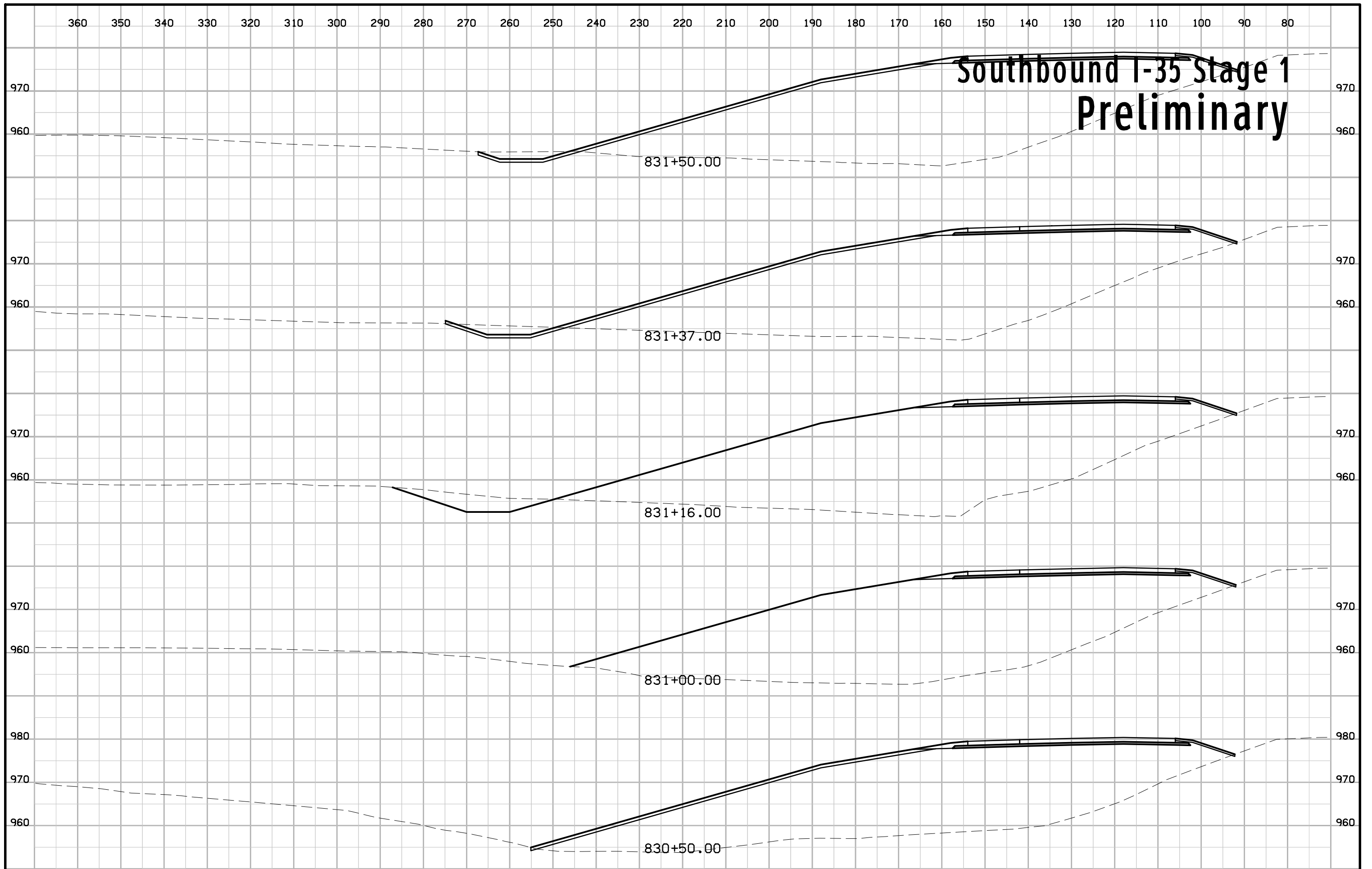
Southbound I-35 Stage 1 Preliminary



Southbound I-35 Stage 1 Preliminary



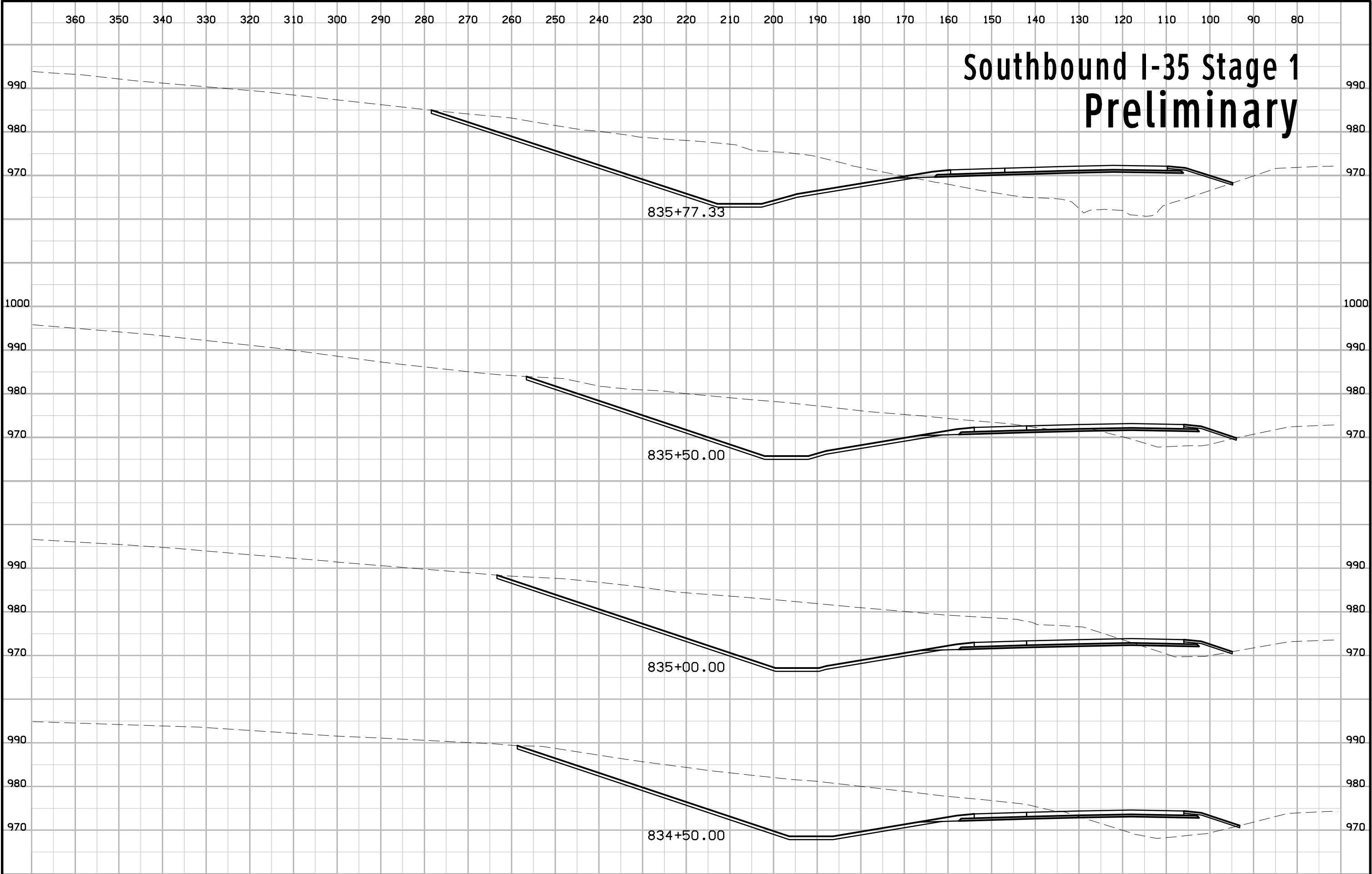


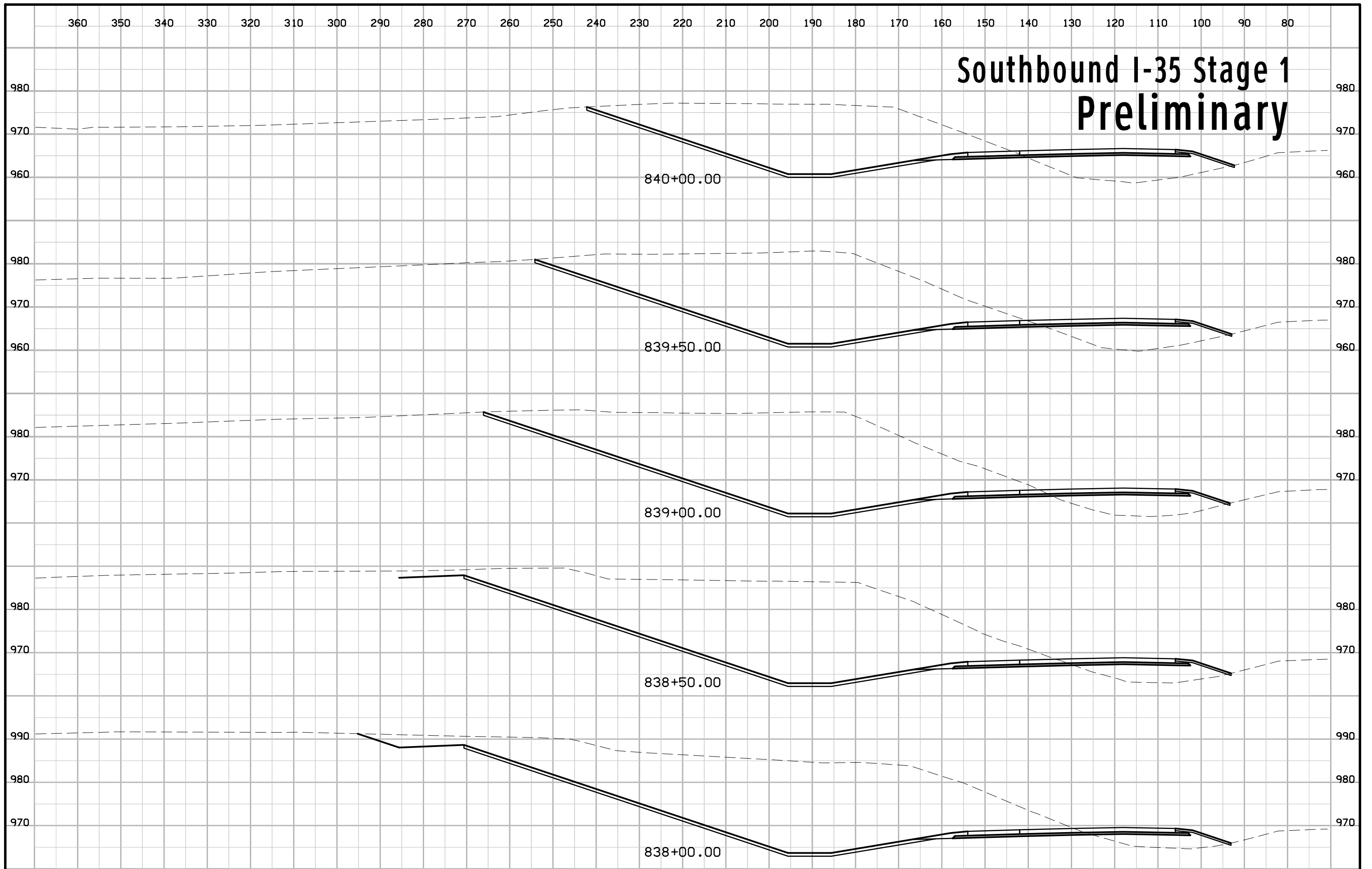


Southbound I-35 Stage 1 Preliminary

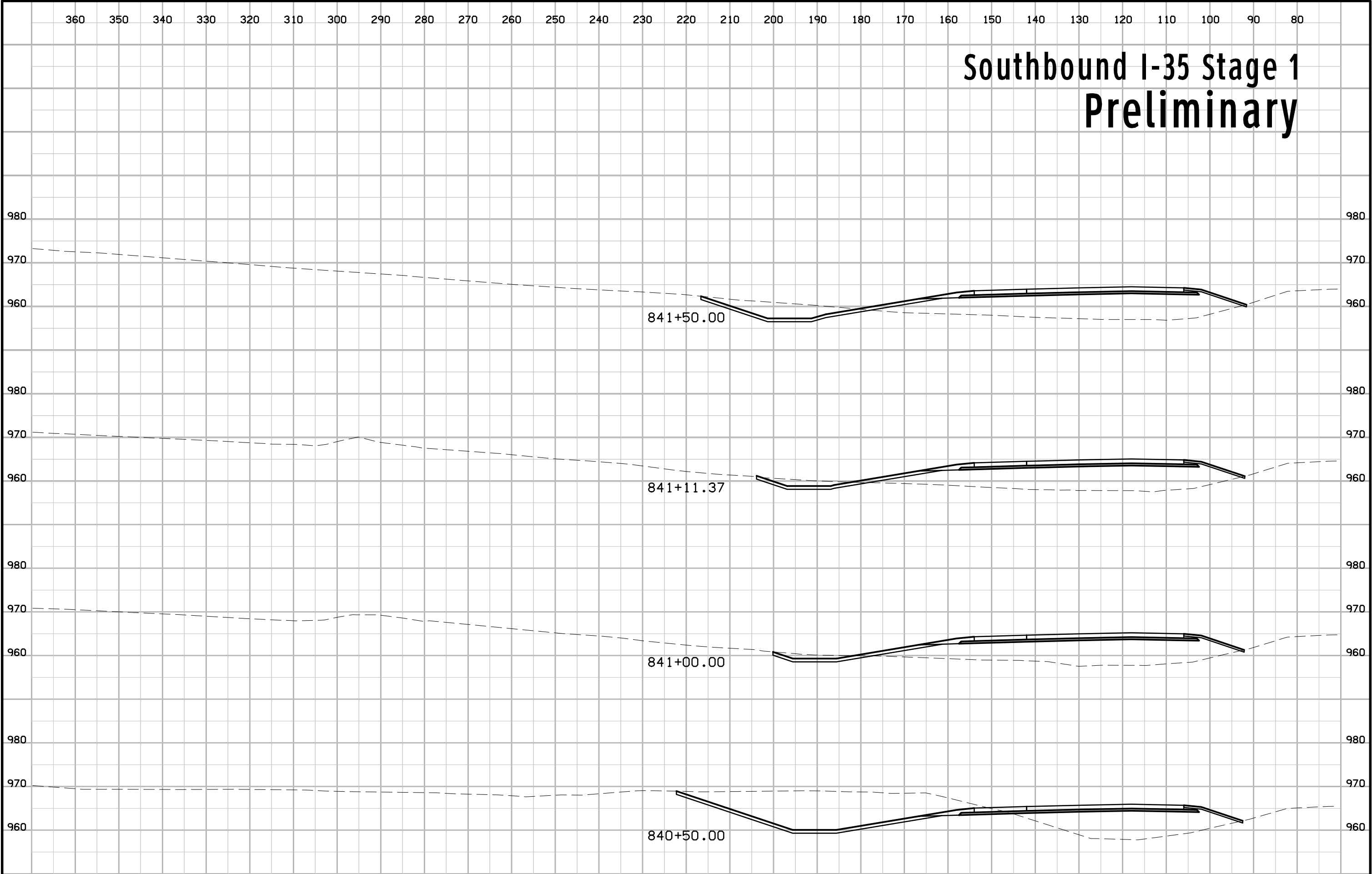


Southbound I-35 Stage 1 Preliminary

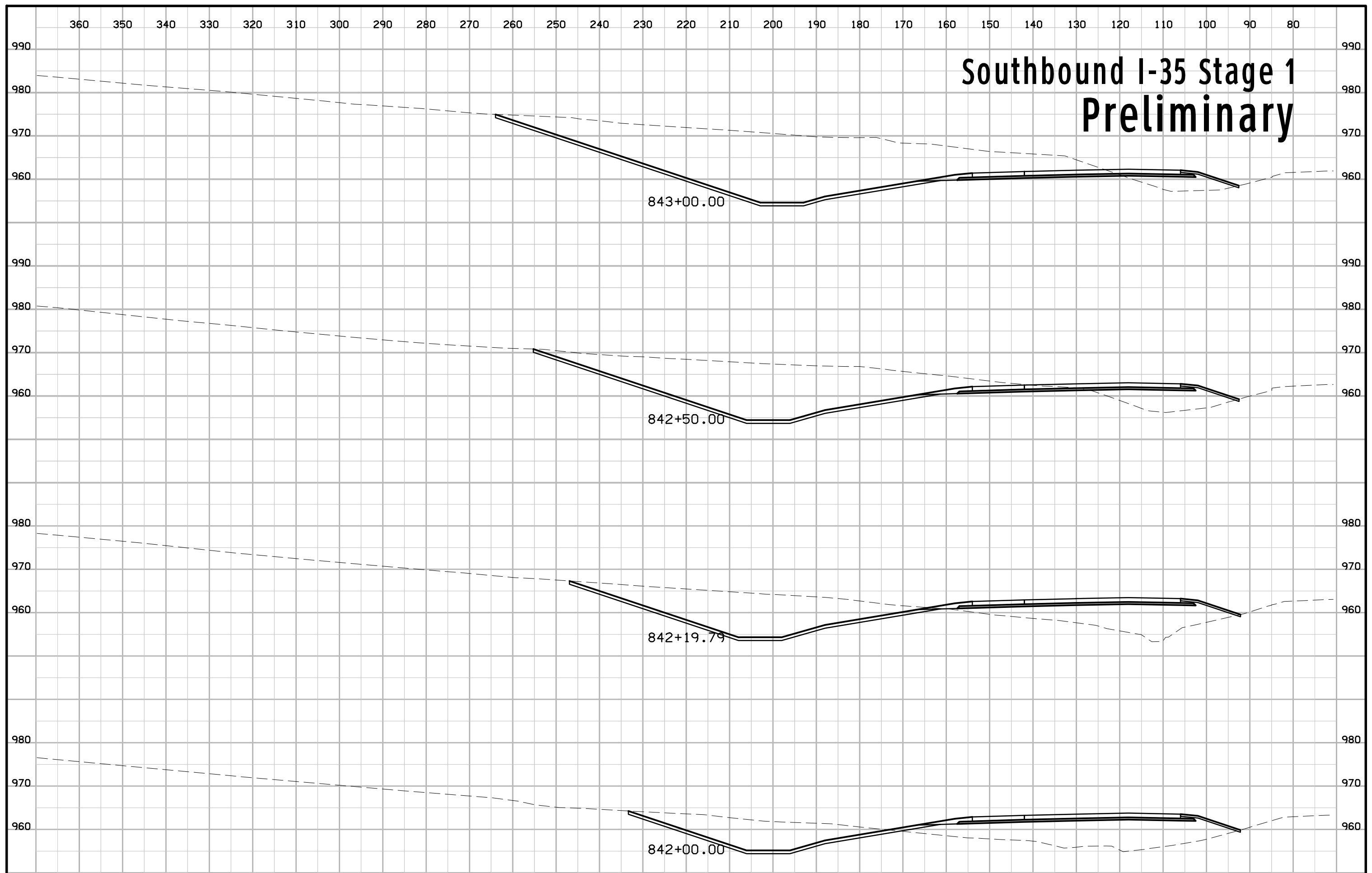




Southbound I-35 Stage 1 Preliminary



Southbound I-35 Stage 1 Preliminary



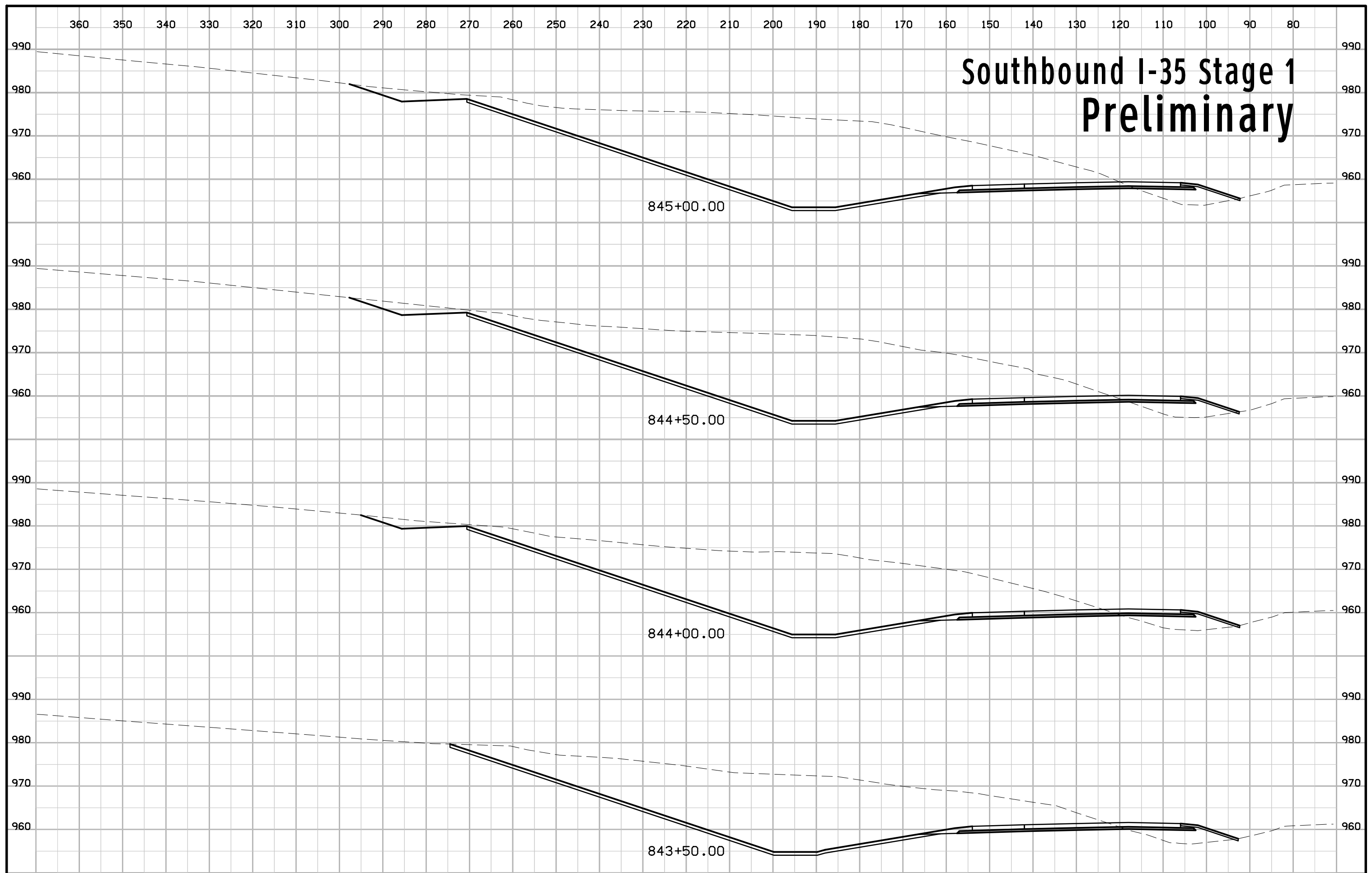
843+00.00

842+50.00

842+19.79

842+00.00

Southbound I-35 Stage 1 Preliminary



Southbound I-35 Stage 1 Preliminary



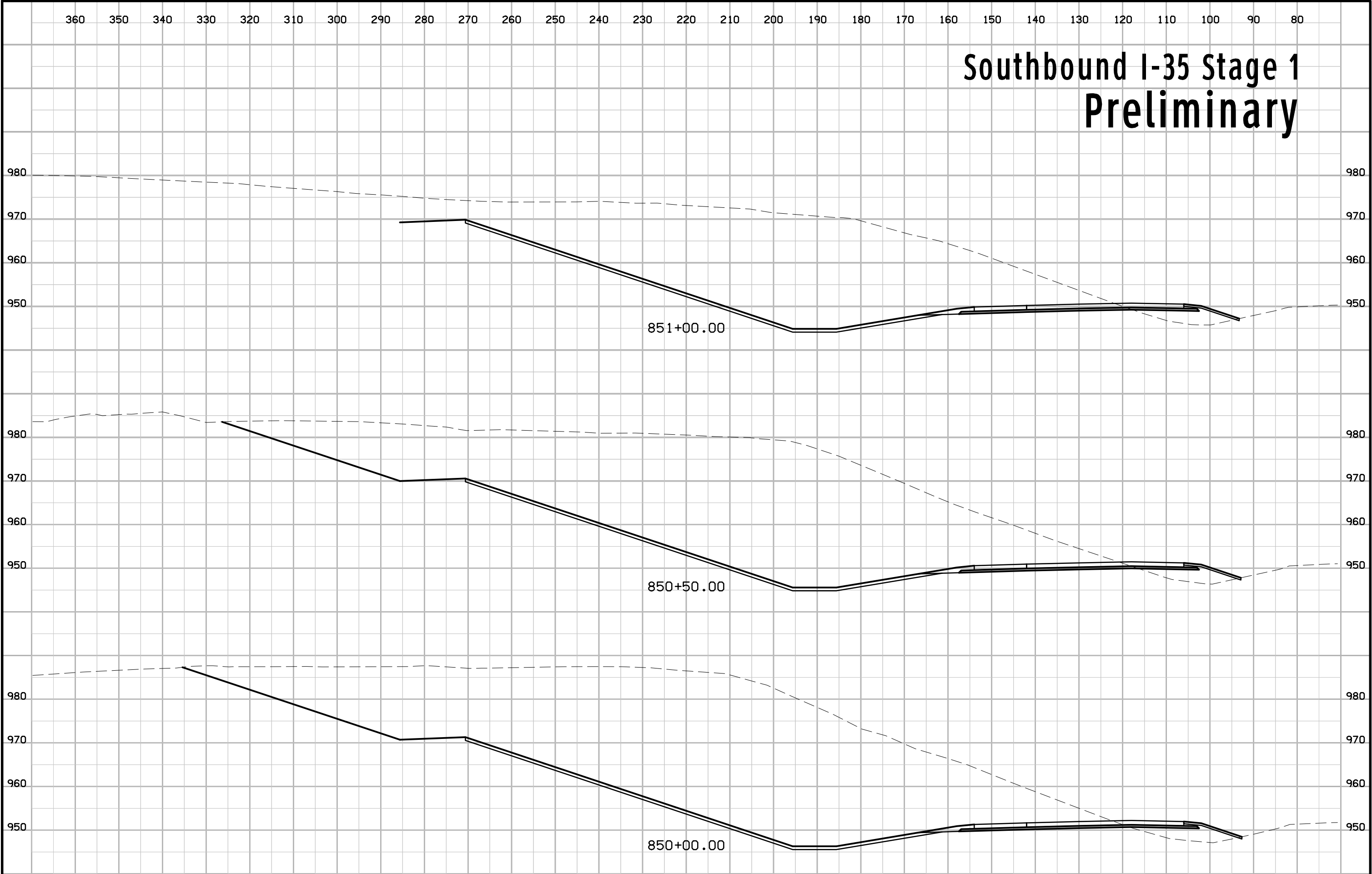
Southbound I-35 Stage 1 Preliminary



Southbound I-35 Stage 1 Preliminary



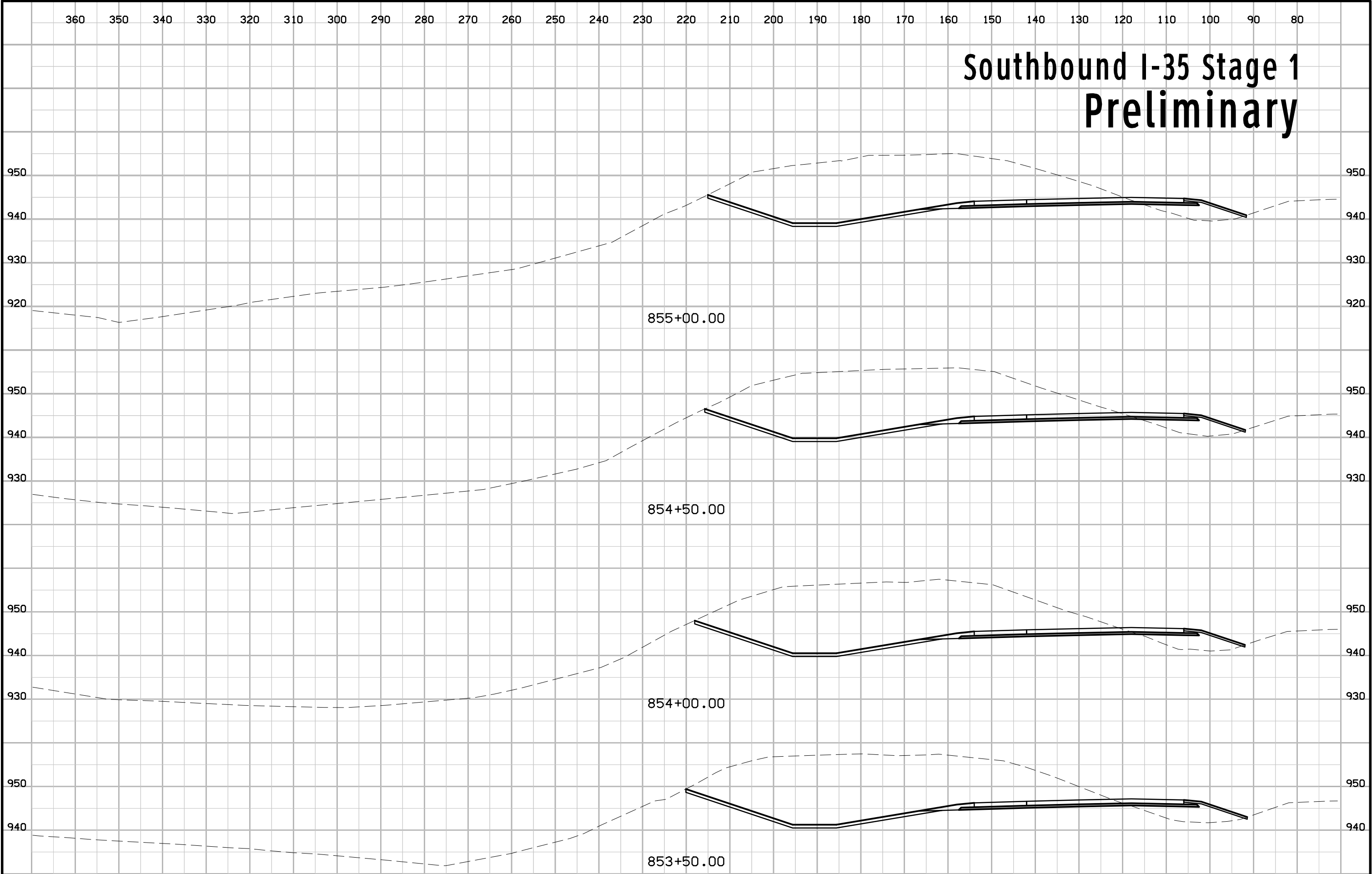
Southbound I-35 Stage 1 Preliminary



Southbound I-35 Stage 1 Preliminary

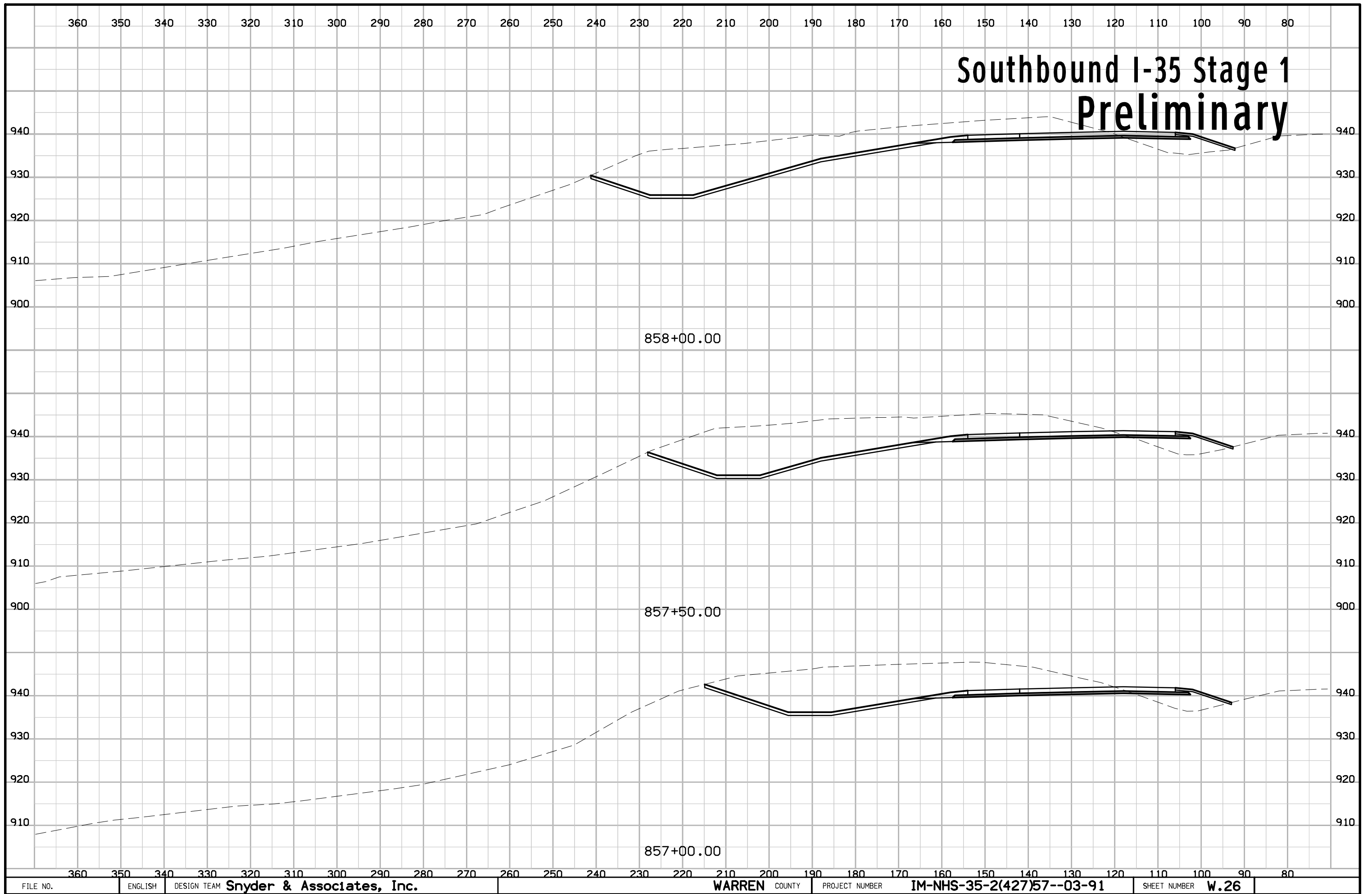


Southbound I-35 Stage 1 Preliminary



Southbound I-35 Stage 1 Preliminary





Southbound I-35 Stage 1 Preliminary

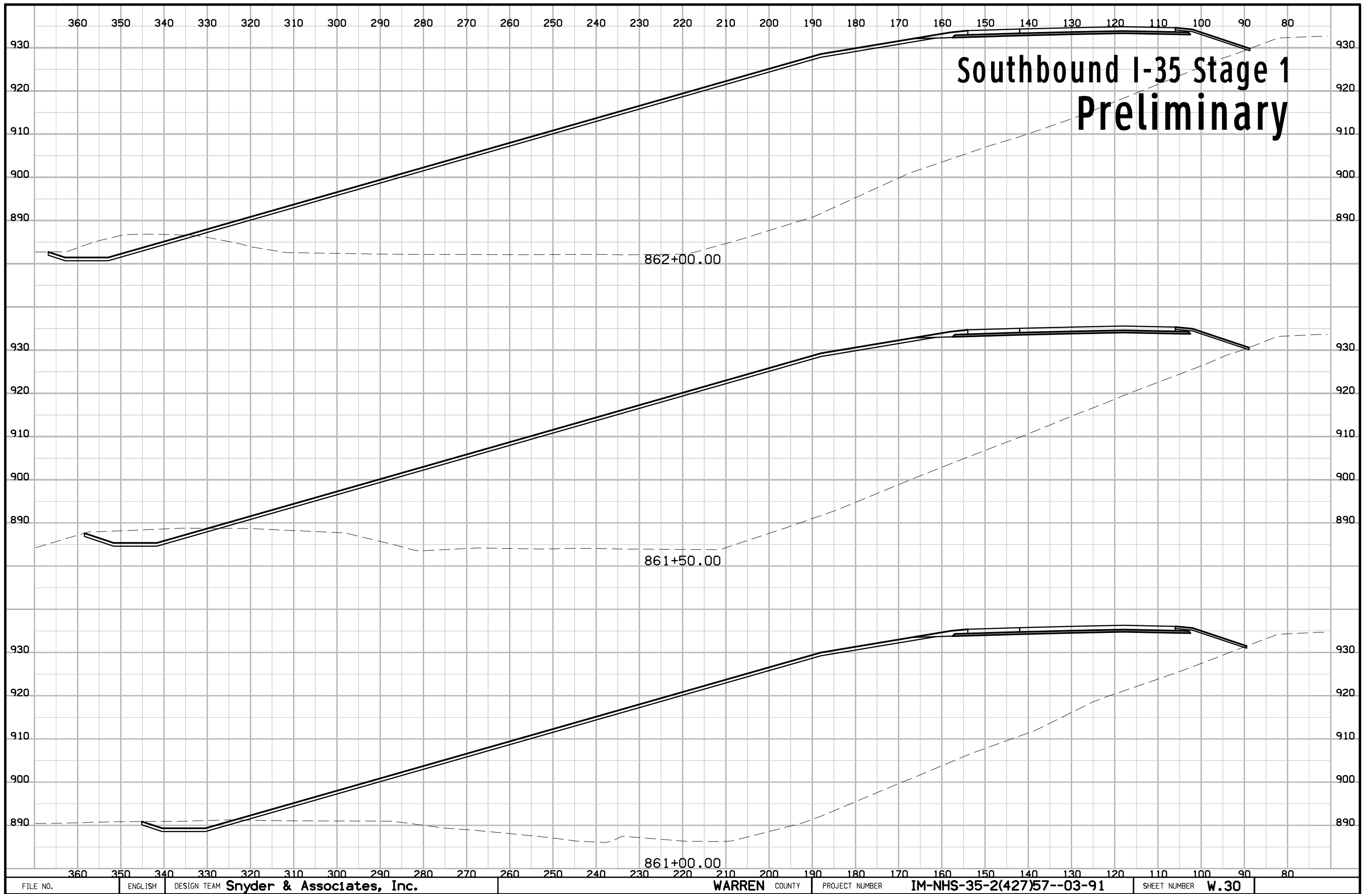


Southbound I-35 Stage 1 Preliminary



Southbound I-35 Stage 1 Preliminary





Southbound I-35 Stage 1 Preliminary



Southbound I-35 Stage 1 Preliminary



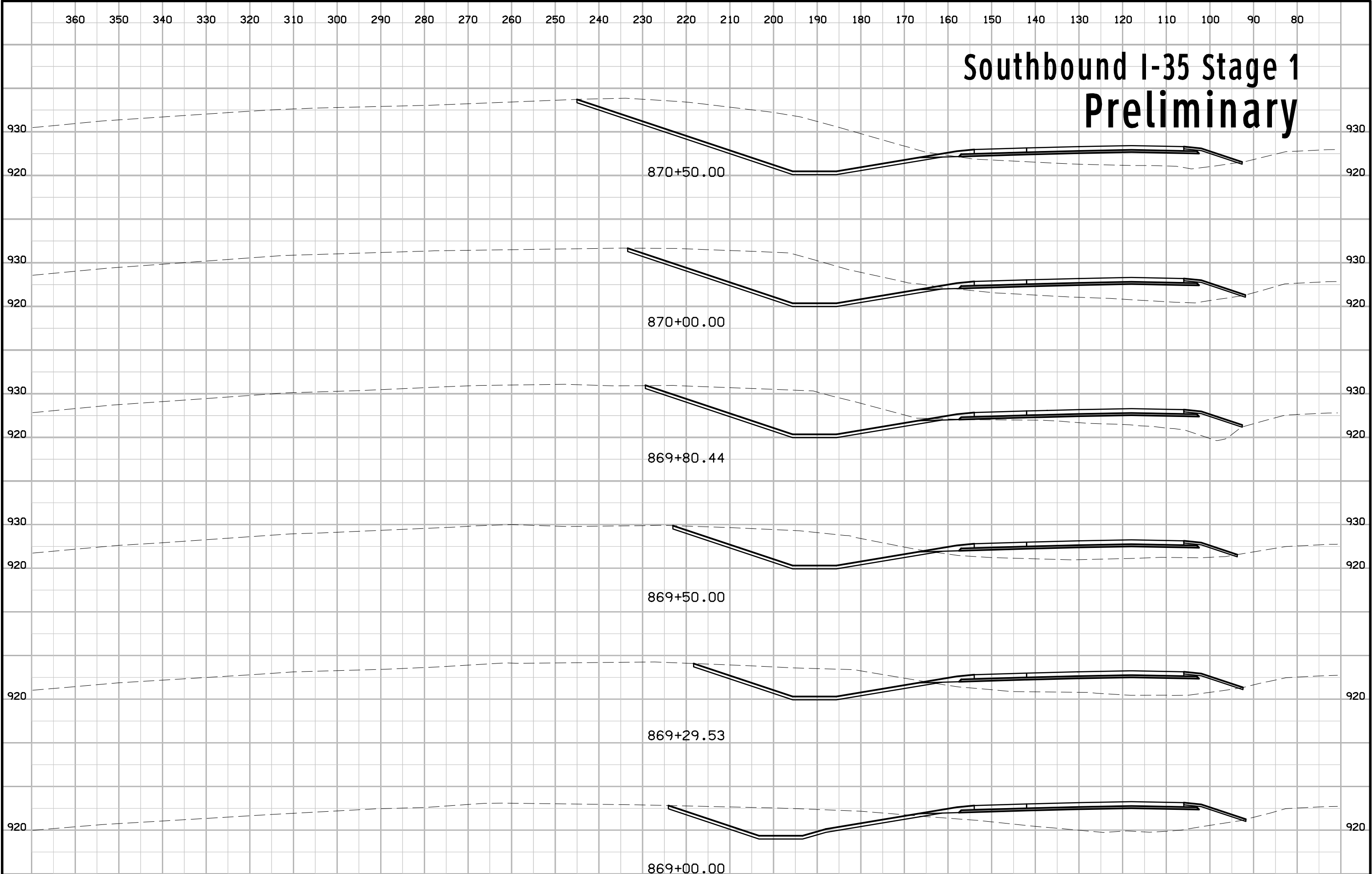
Southbound I-35 Stage 1 Preliminary



Southbound I-35 Stage 1 Preliminary



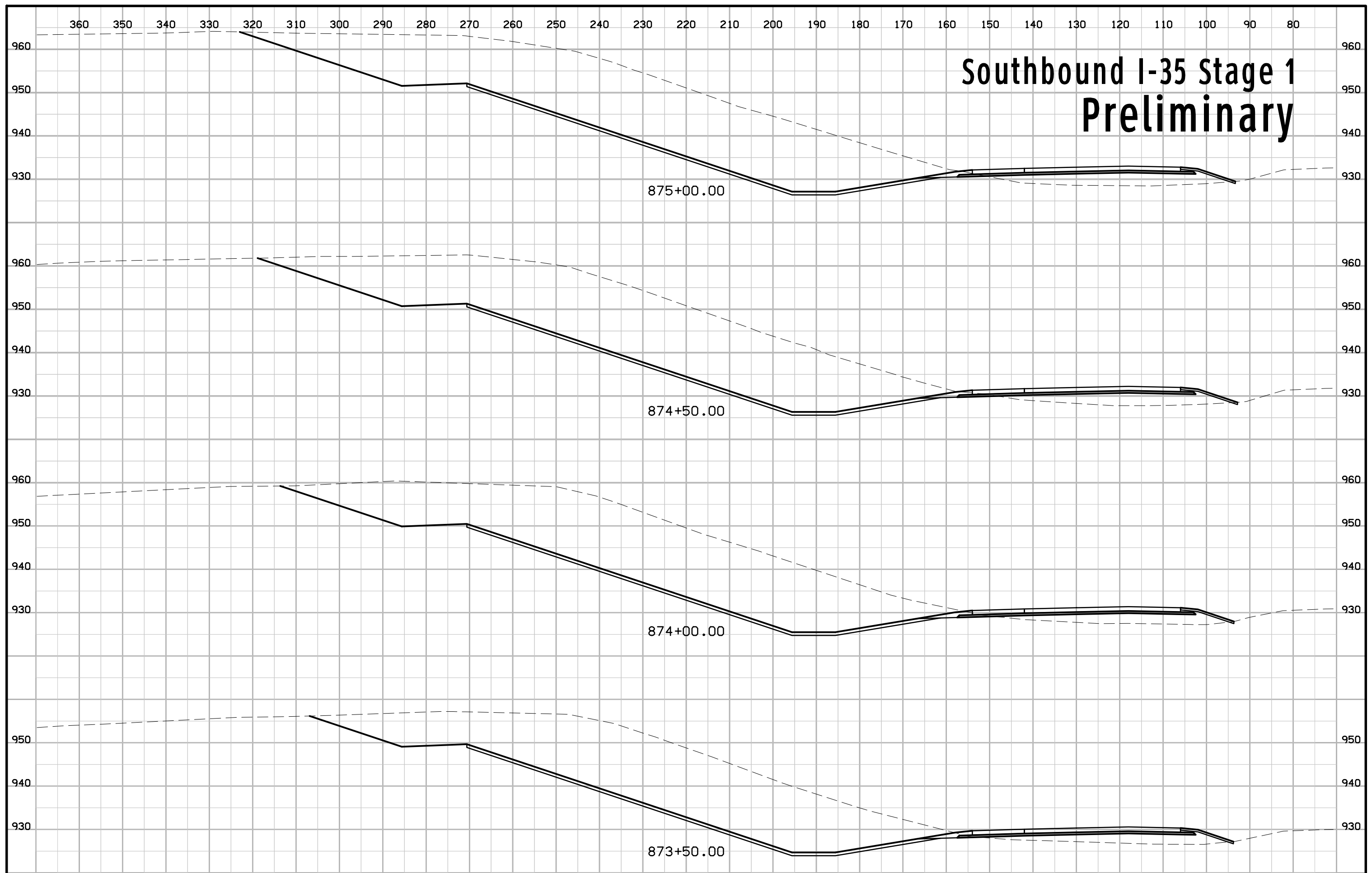
Southbound I-35 Stage 1 Preliminary



Southbound I-35 Stage 1 Preliminary

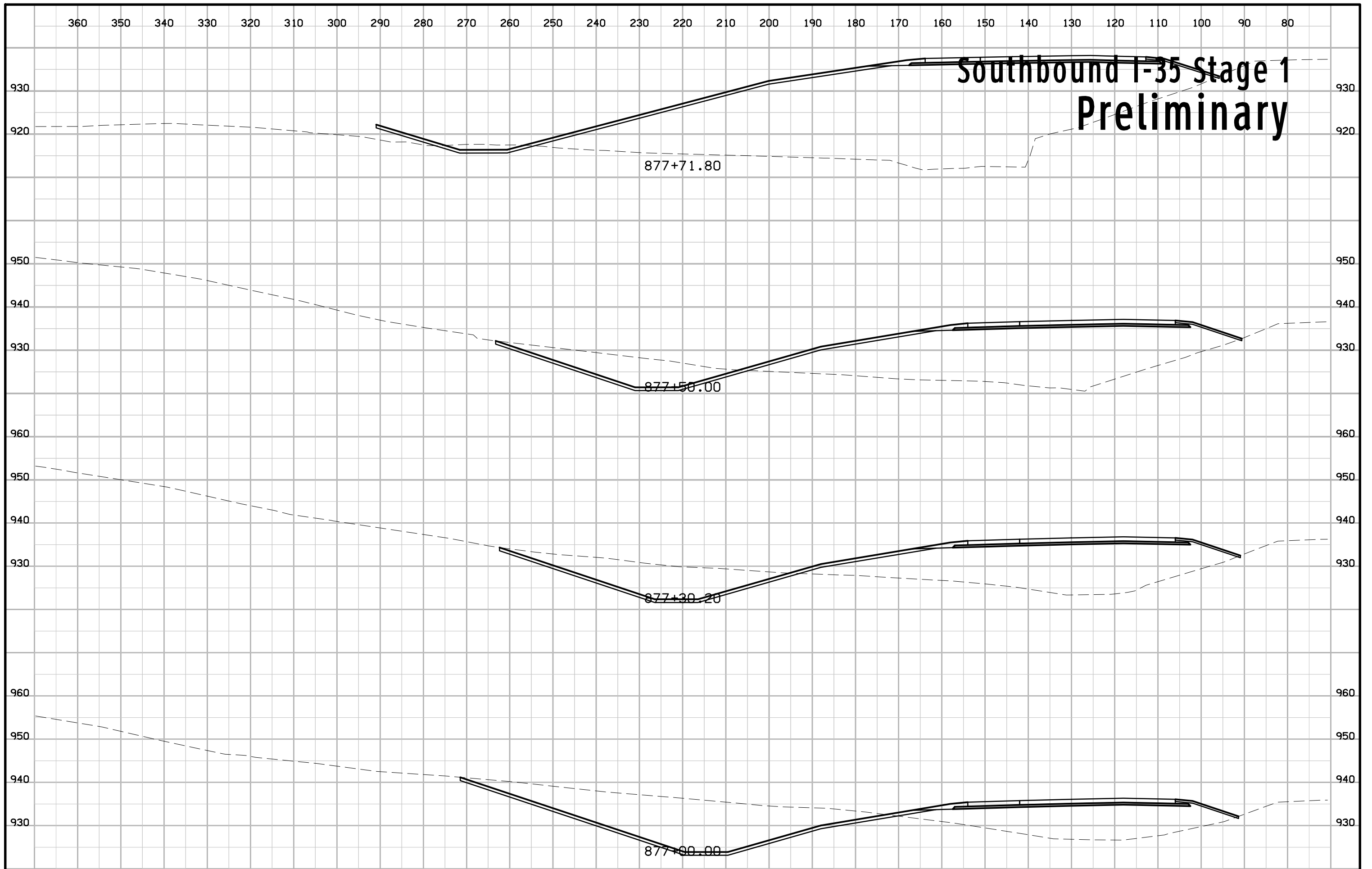


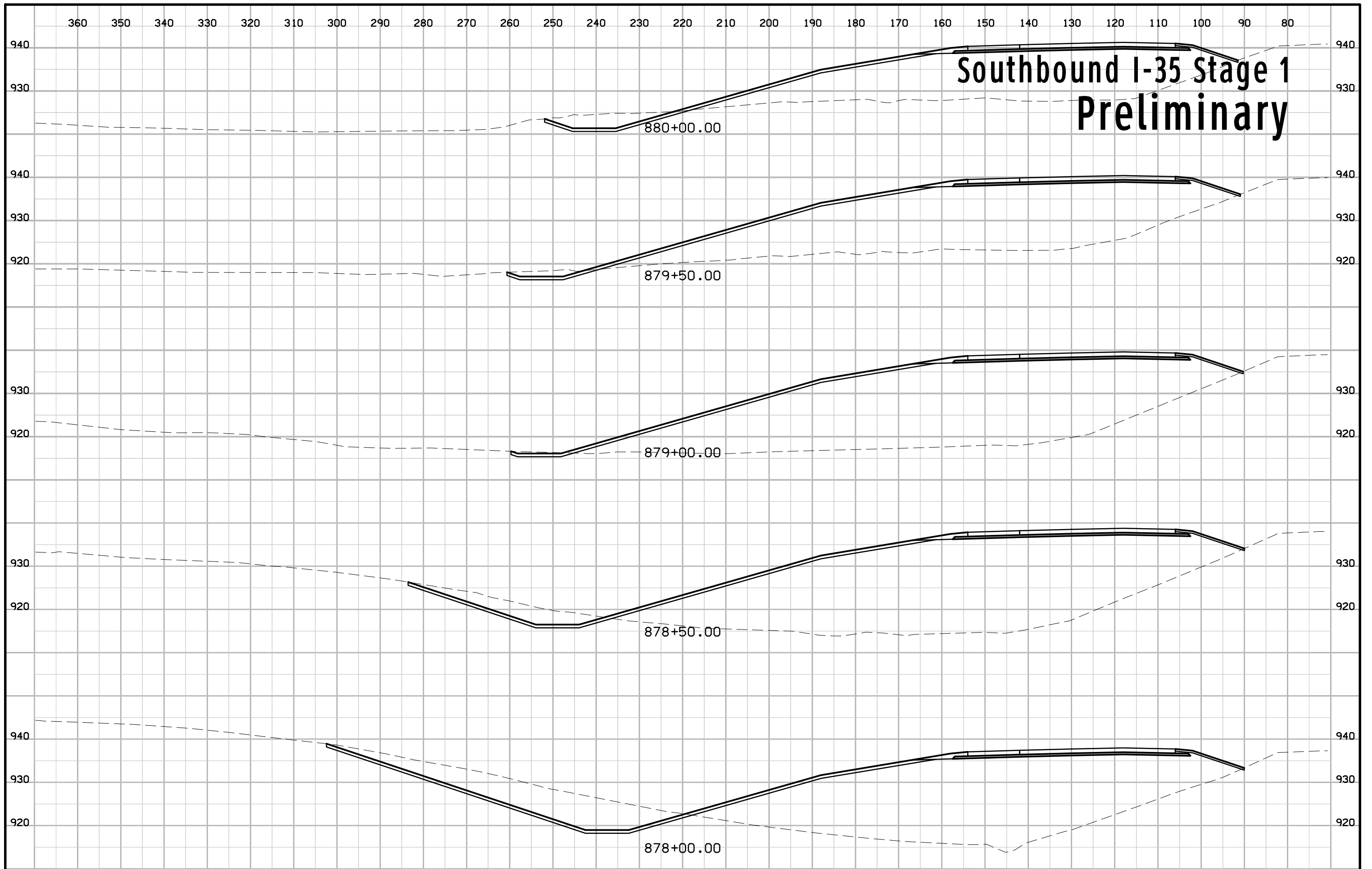
Southbound I-35 Stage 1 Preliminary



Southbound I-35 Stage 1 Preliminary

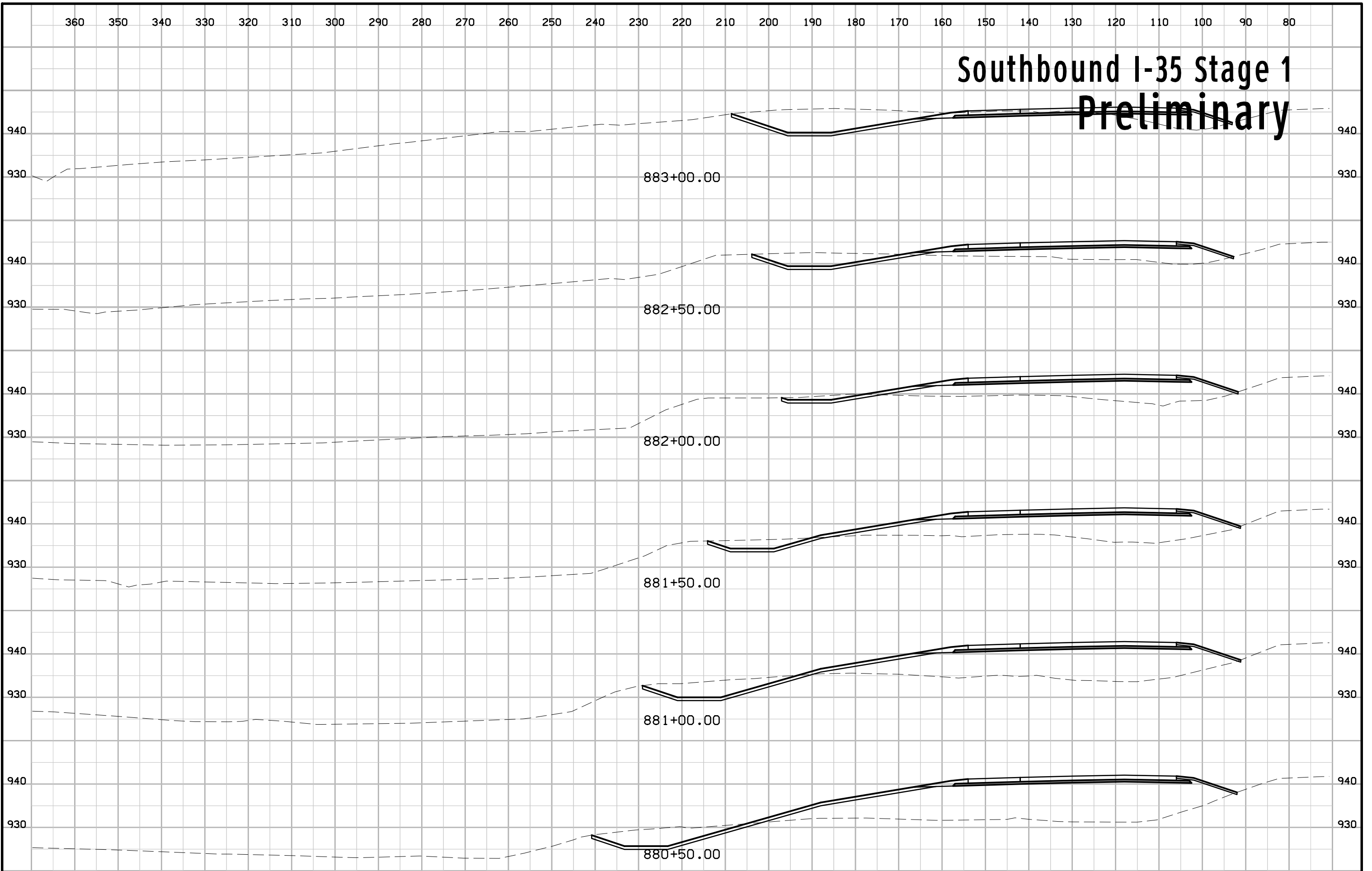


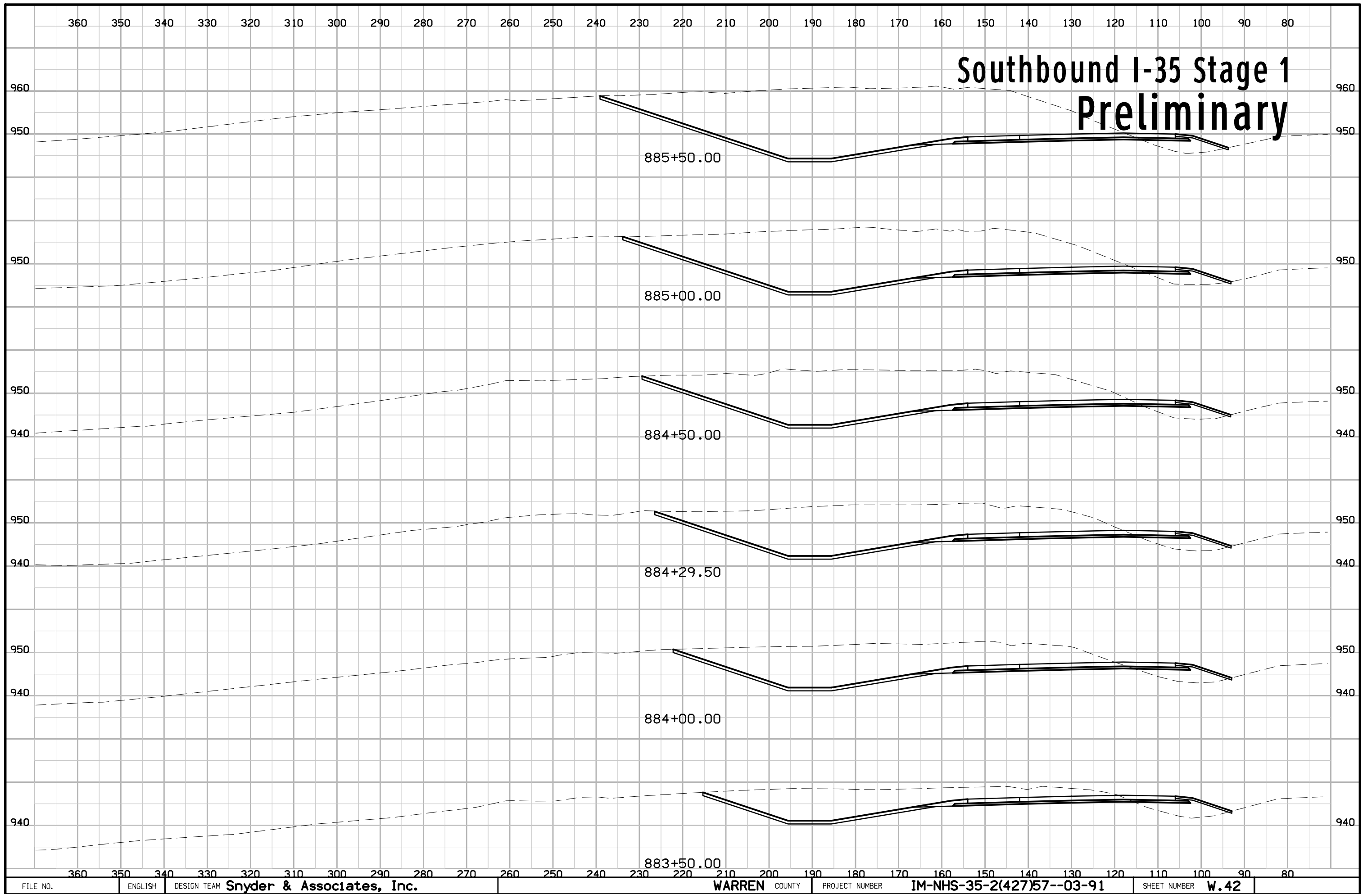


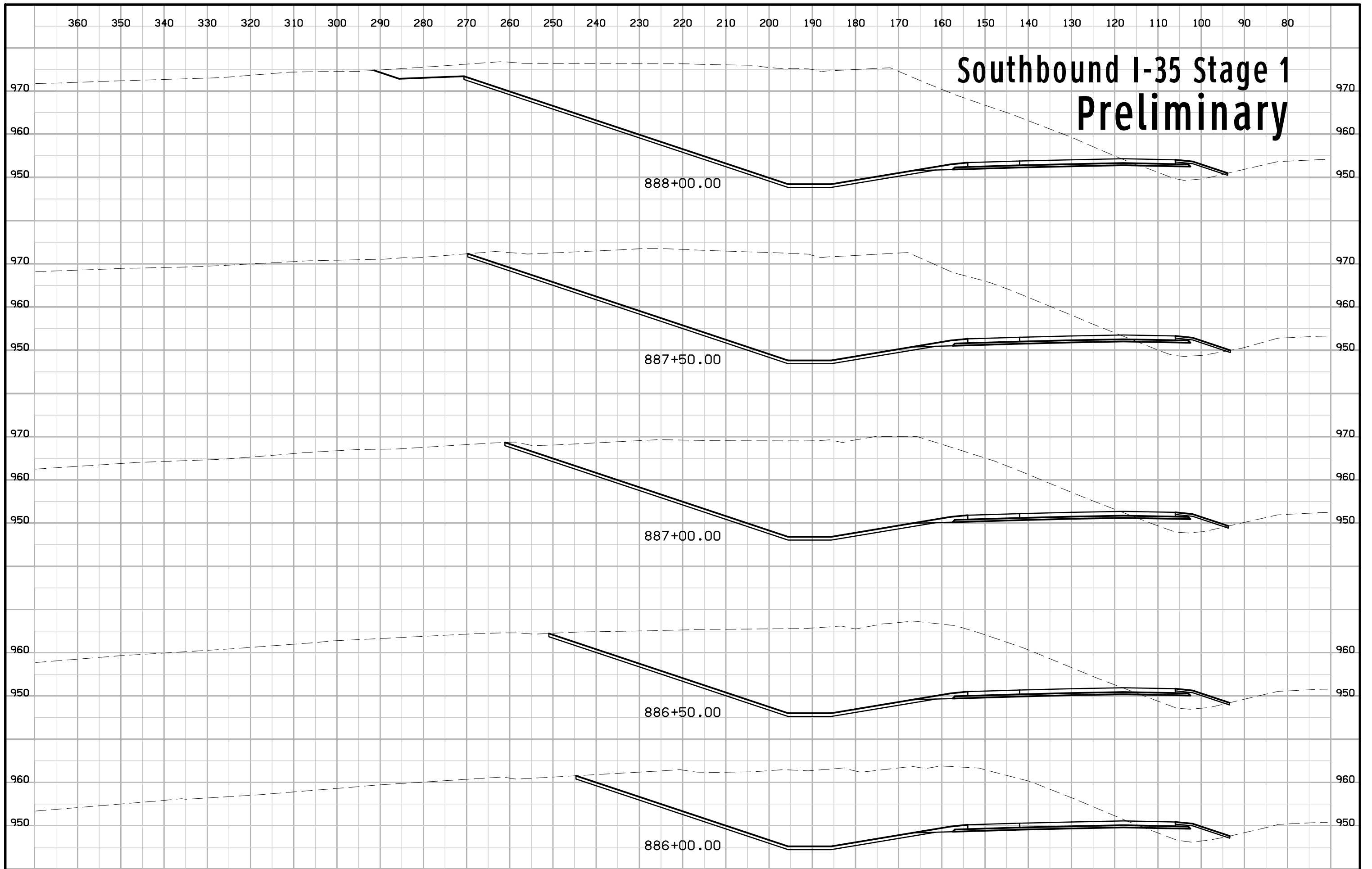


Southbound I-35 Stage 1 Preliminary

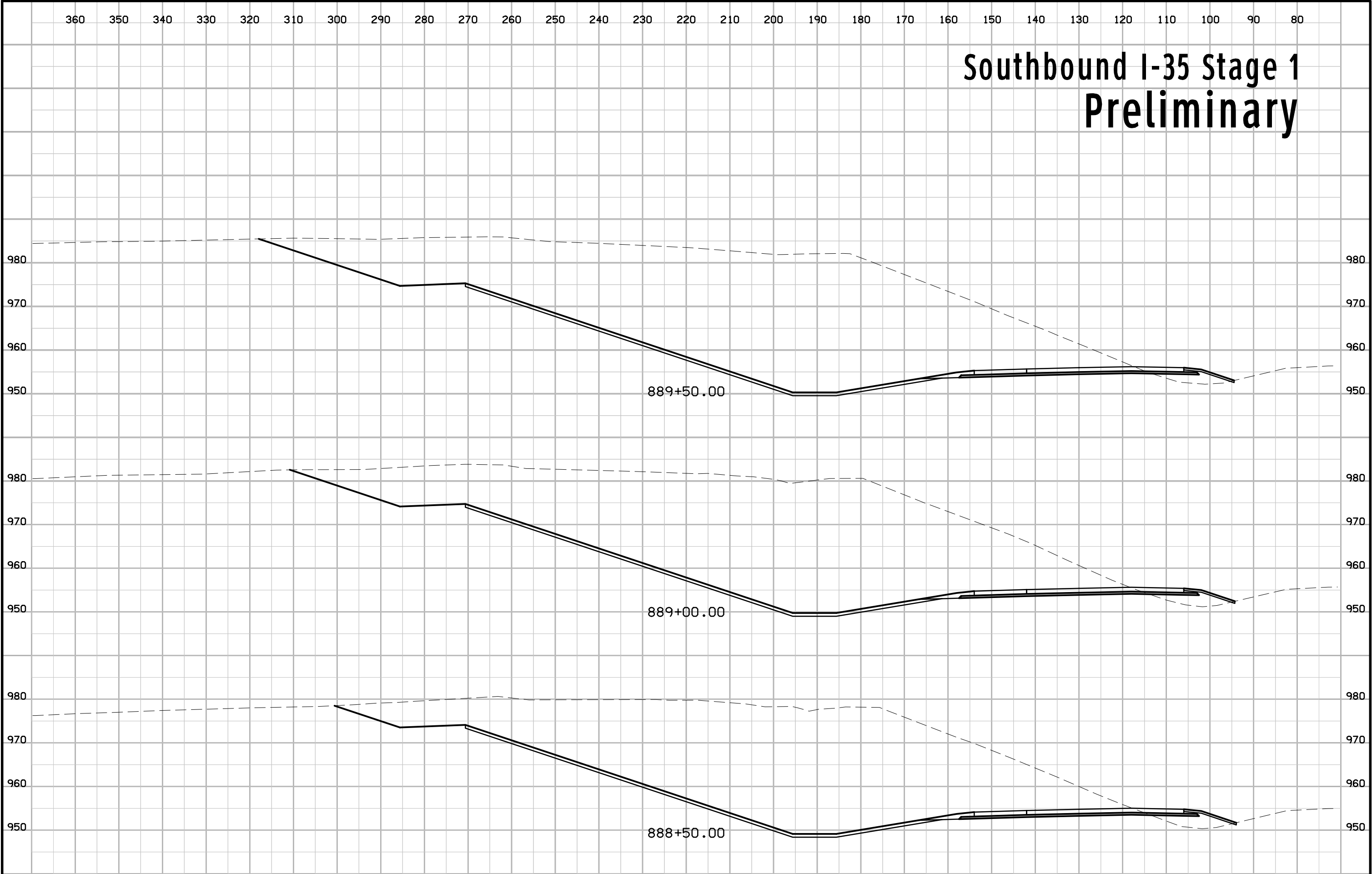
Southbound I-35 Stage 1 Preliminary

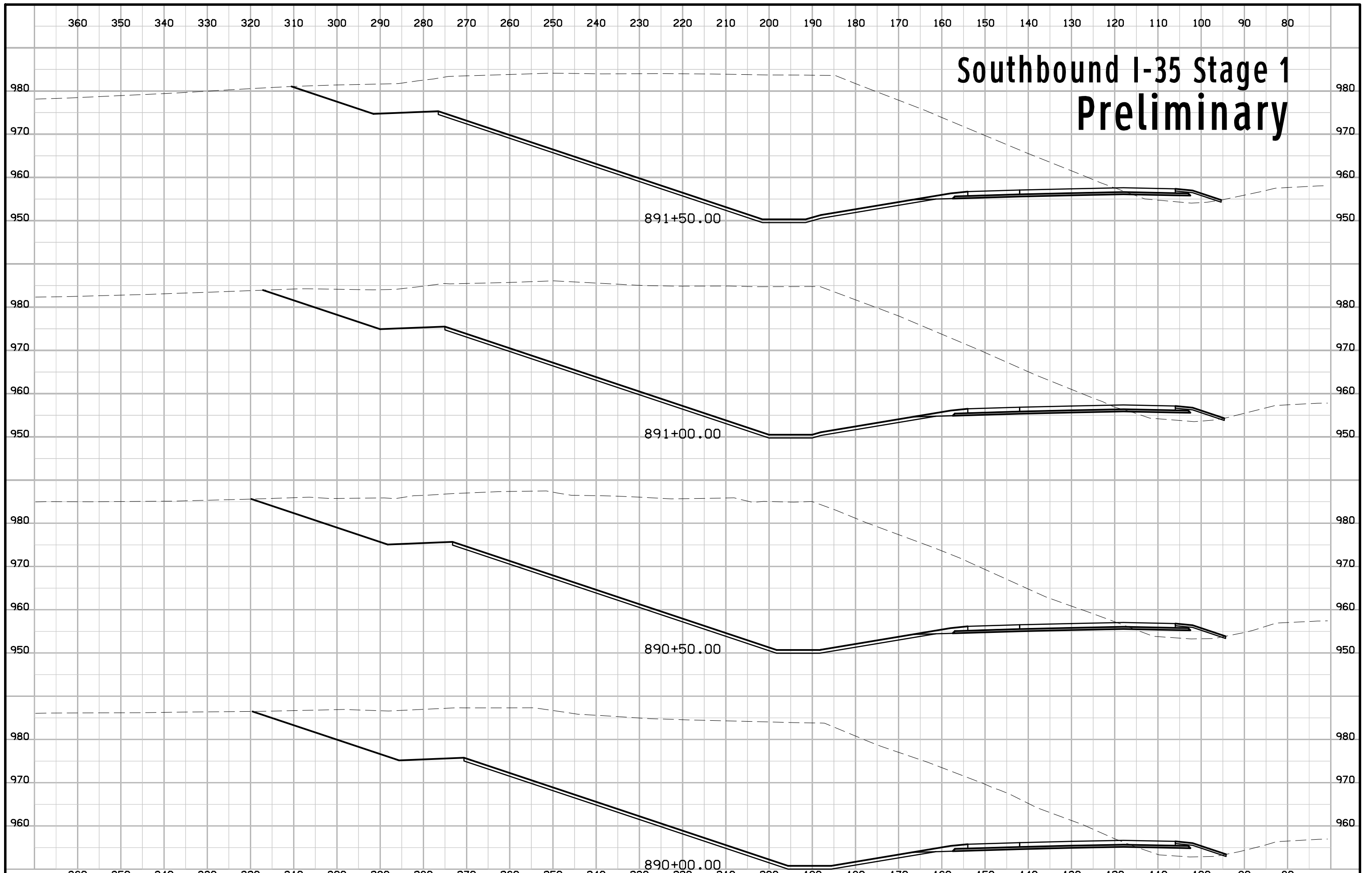


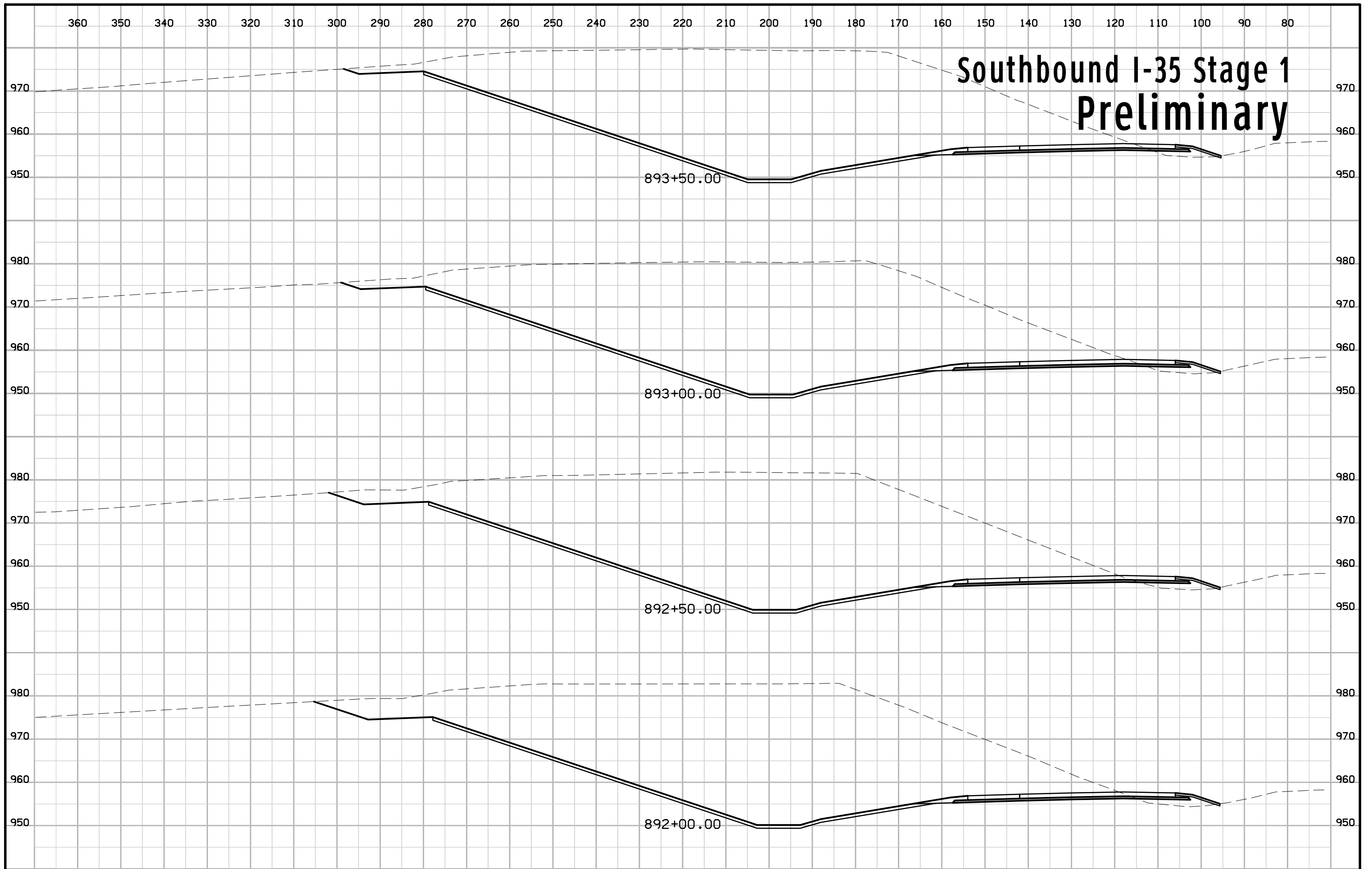




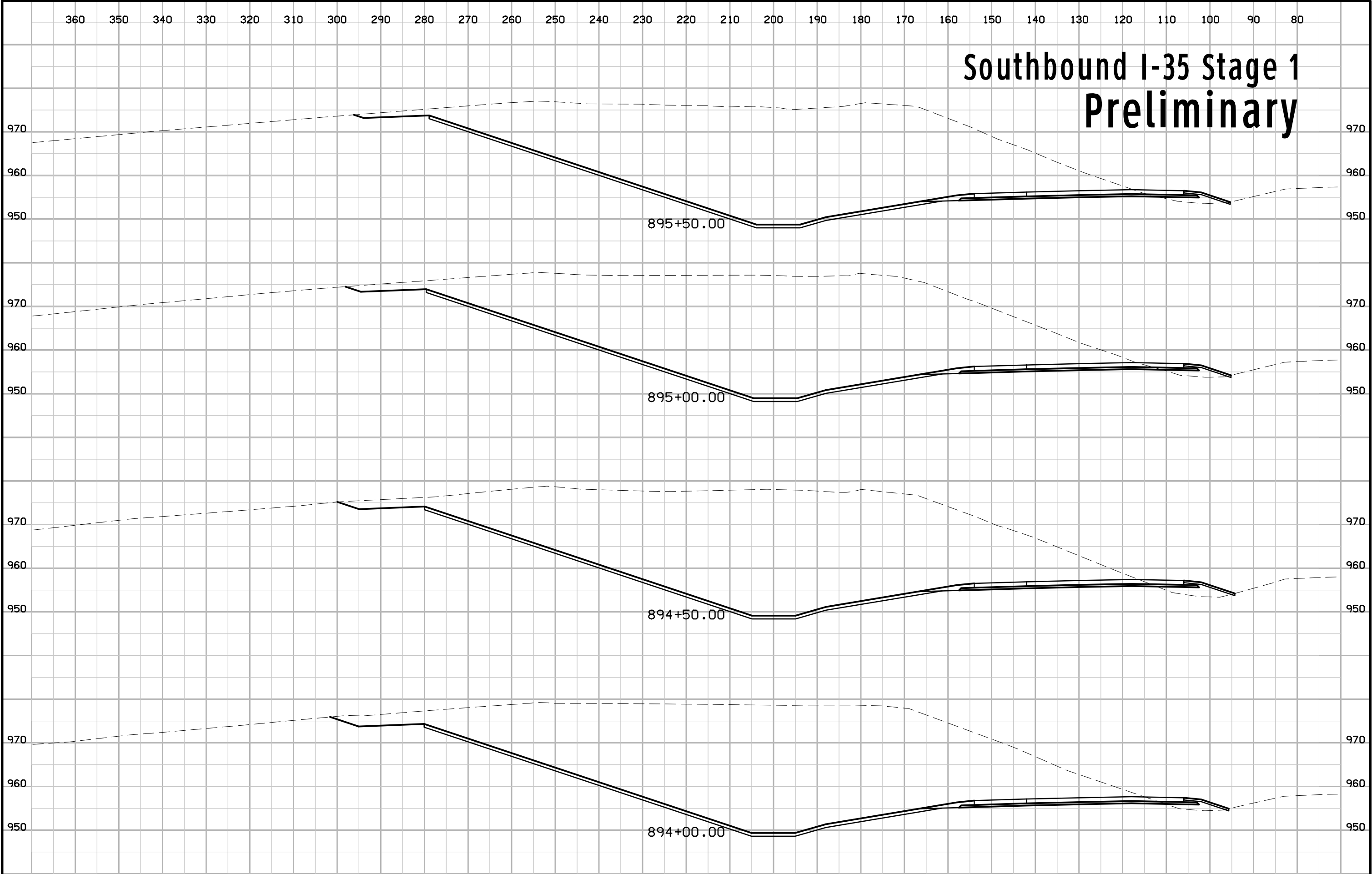
Southbound I-35 Stage 1 Preliminary



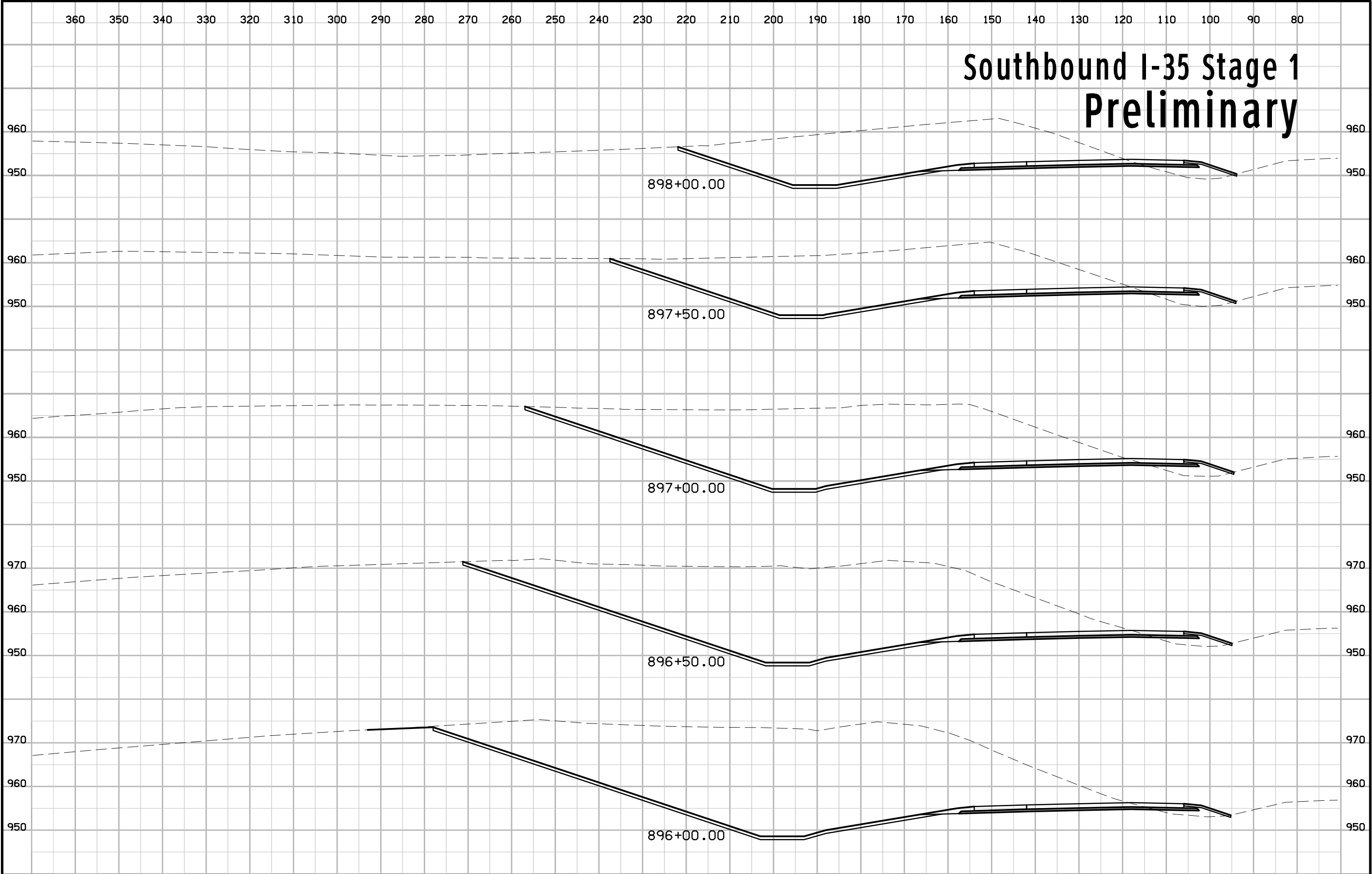


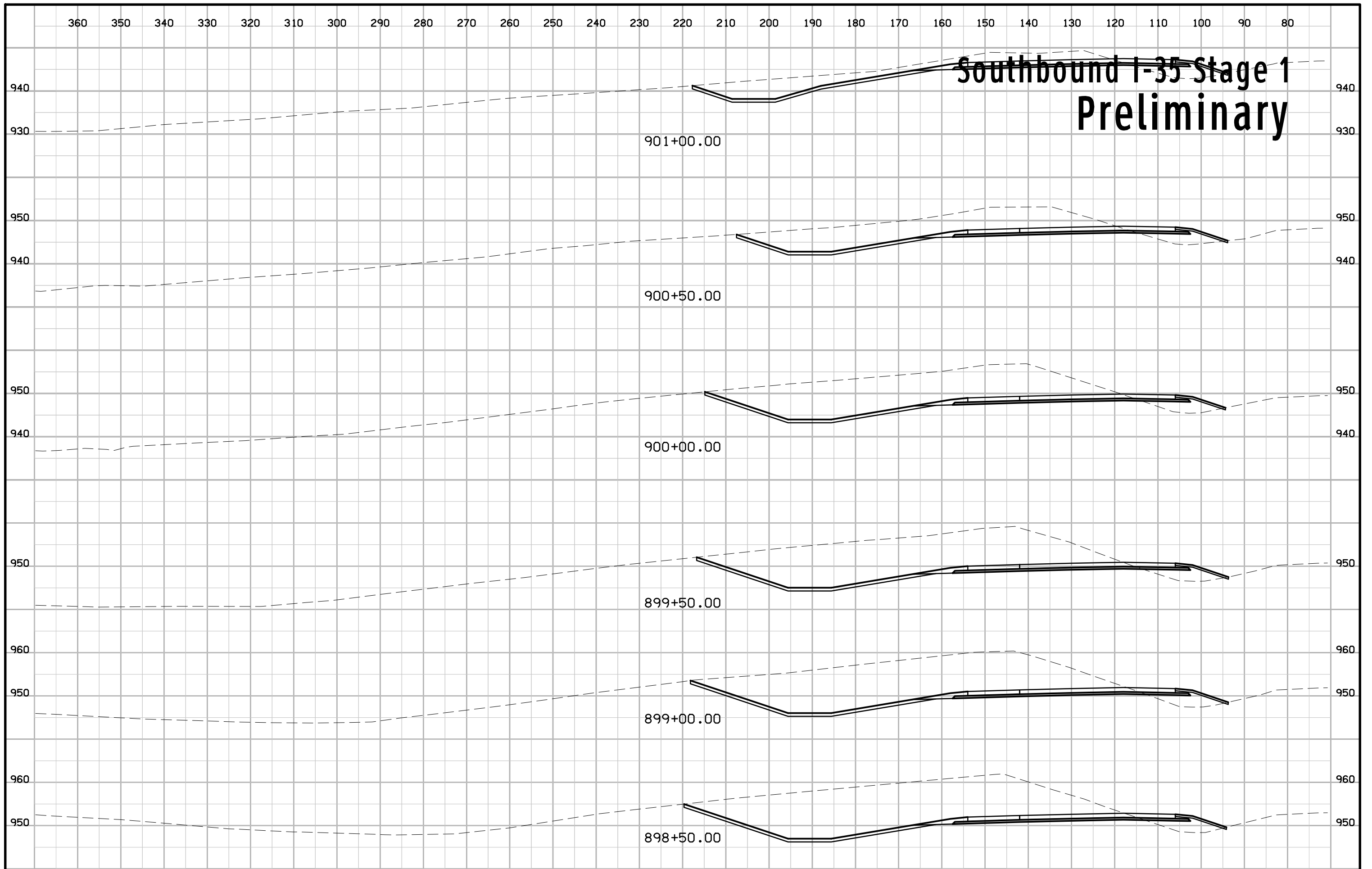


Southbound I-35 Stage 1 Preliminary

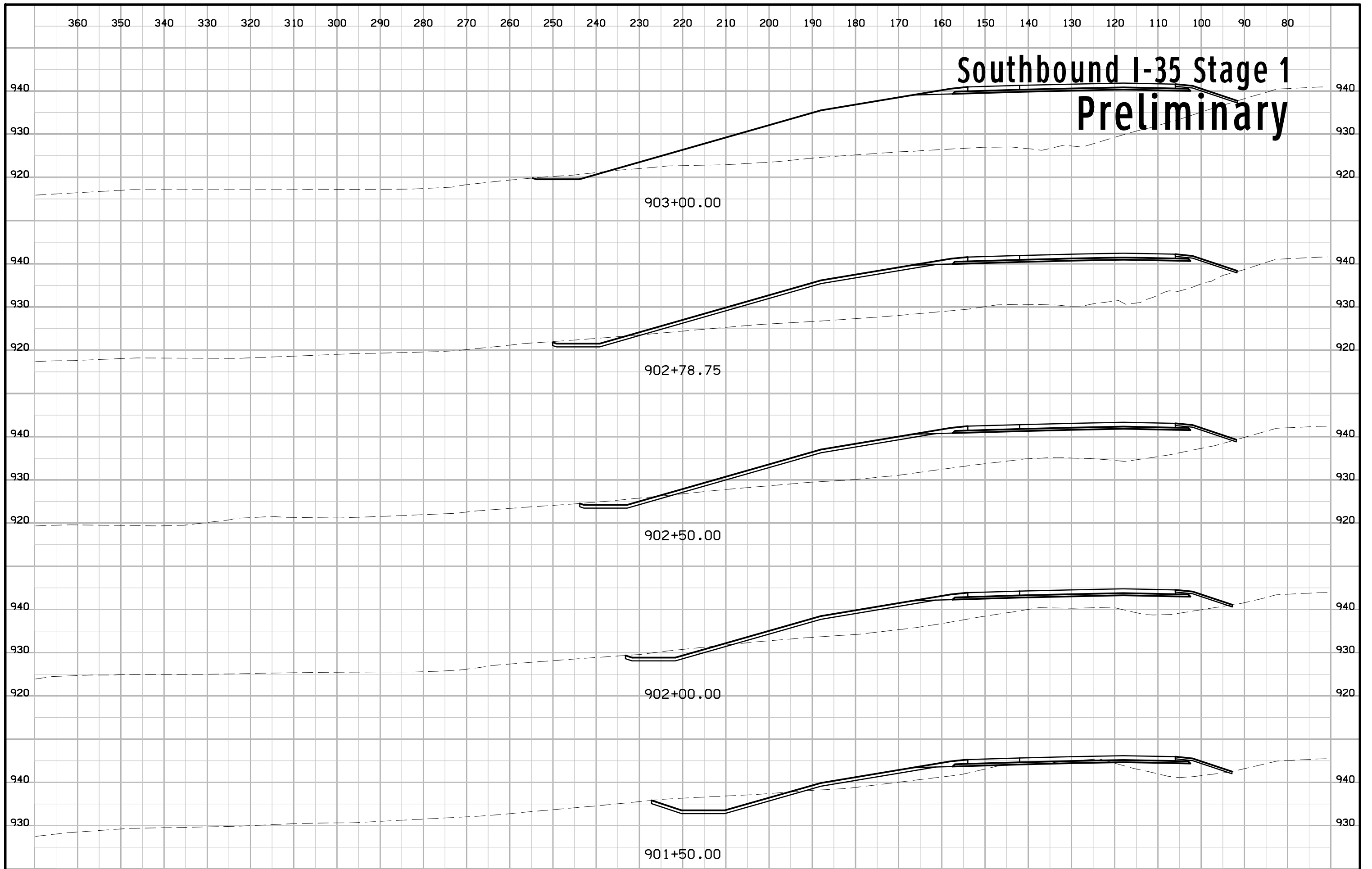


Southbound I-35 Stage 1 Preliminary





Southbound I-35 Stage 1 Preliminary



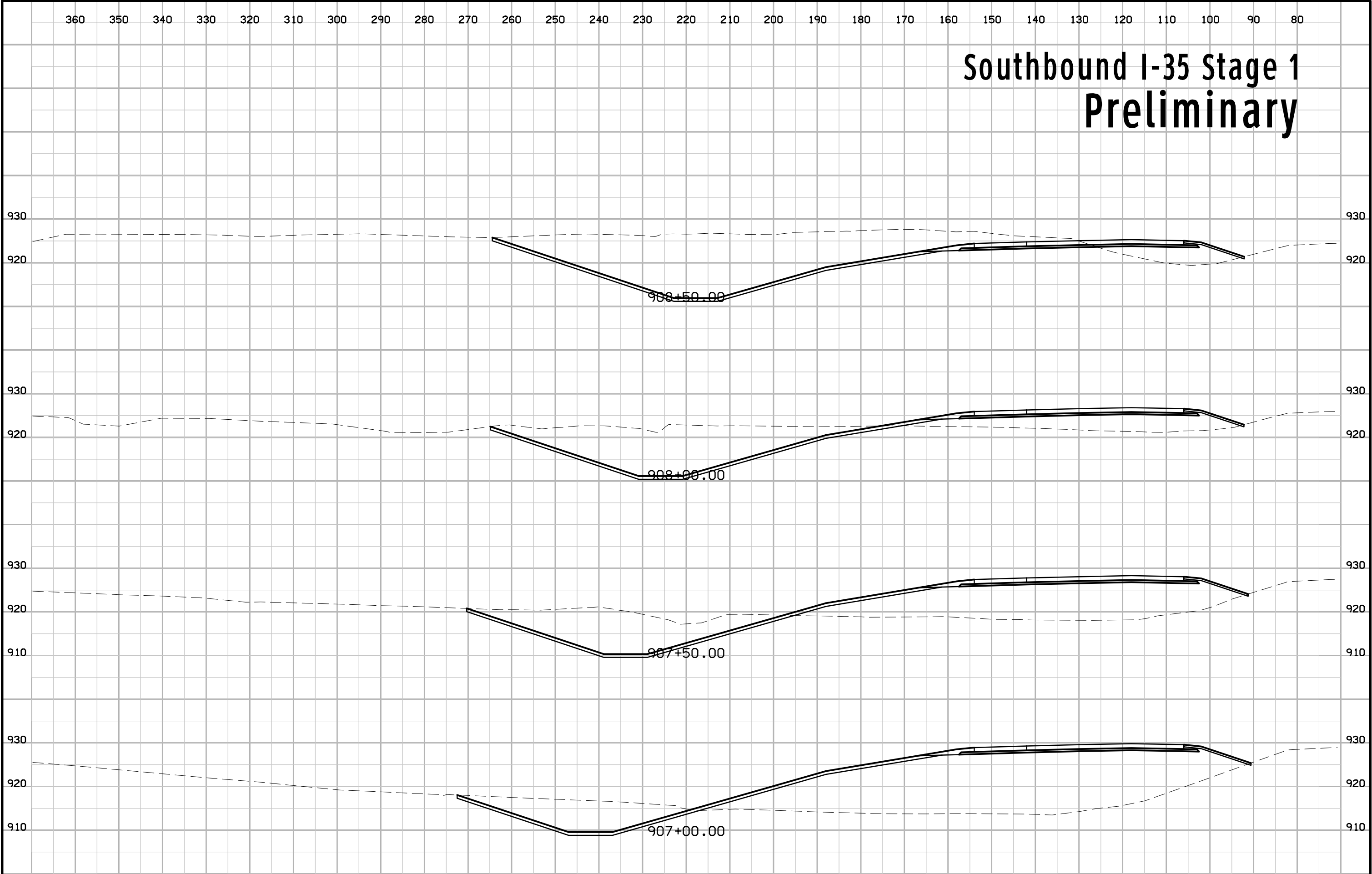
Southbound I-35 Stage 1 Preliminary

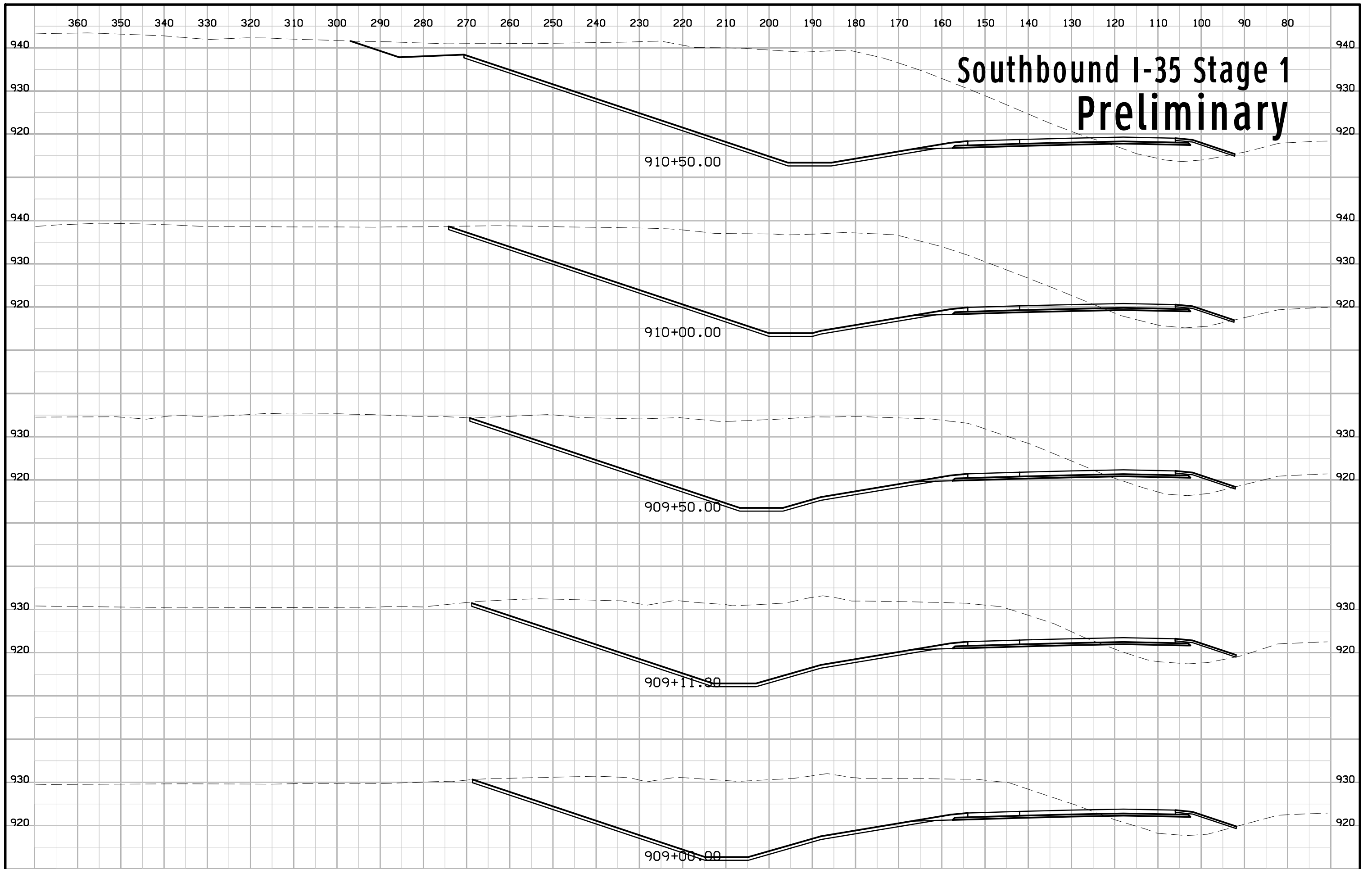


Southbound I-35 Stage 1 Preliminary



Southbound I-35 Stage 1 Preliminary



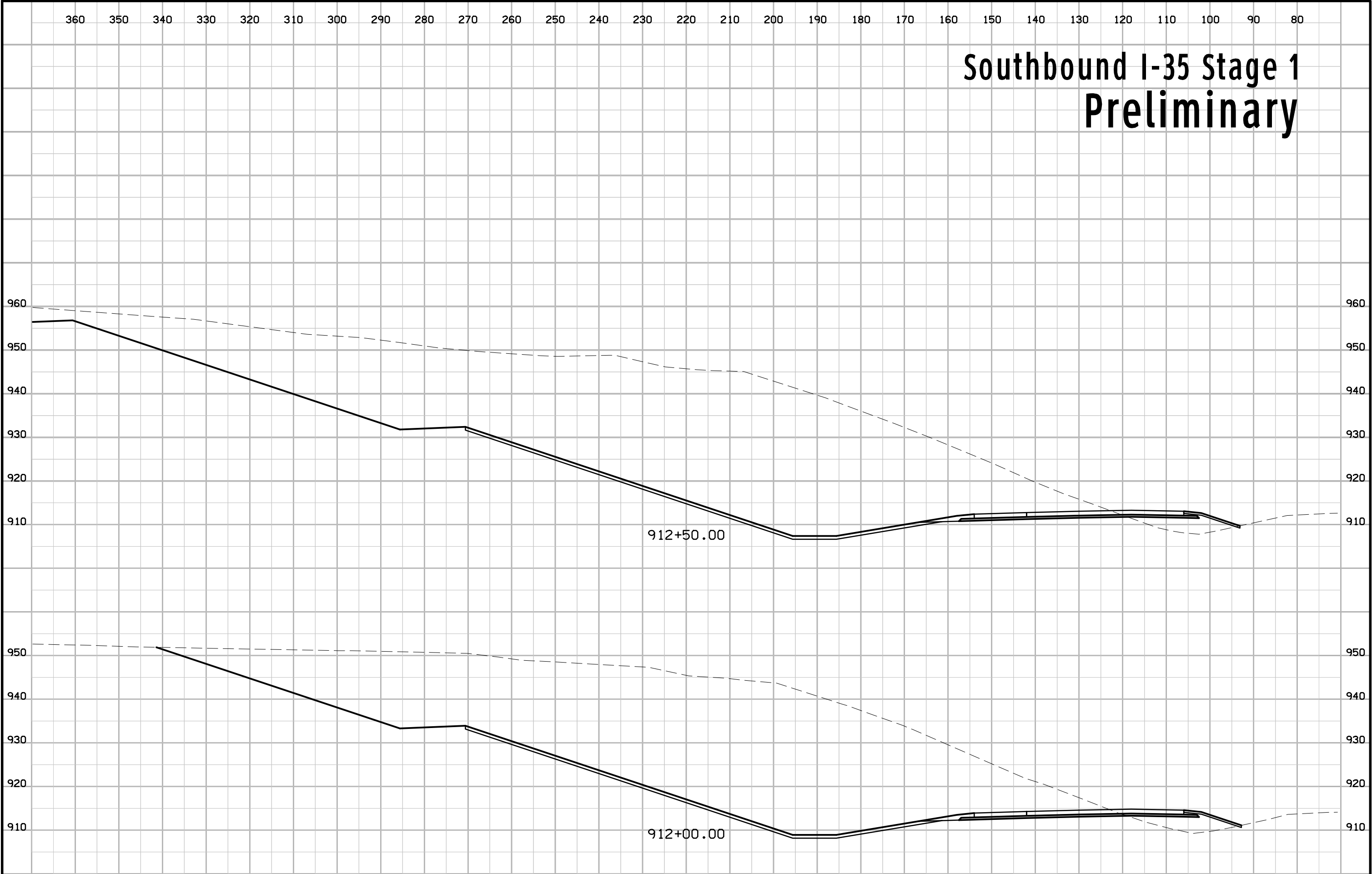


Southbound I-35 Stage 1 Preliminary

Southbound I-35 Stage 1 Preliminary



Southbound I-35 Stage 1 Preliminary



Southbound I-35 Stage 1 Preliminary

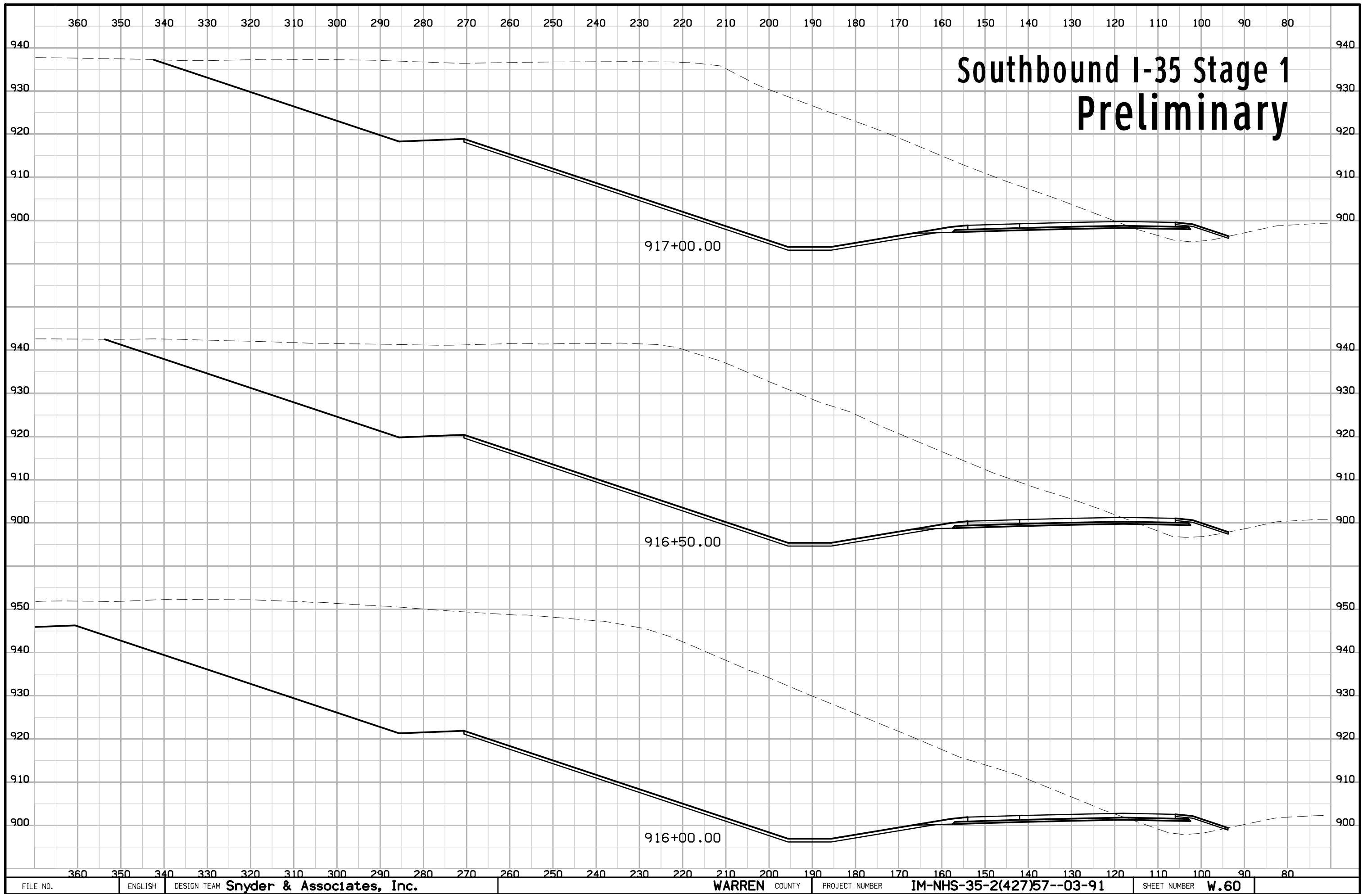


Southbound I-35 Stage 1 Preliminary



Southbound I-35 Stage 1 Preliminary





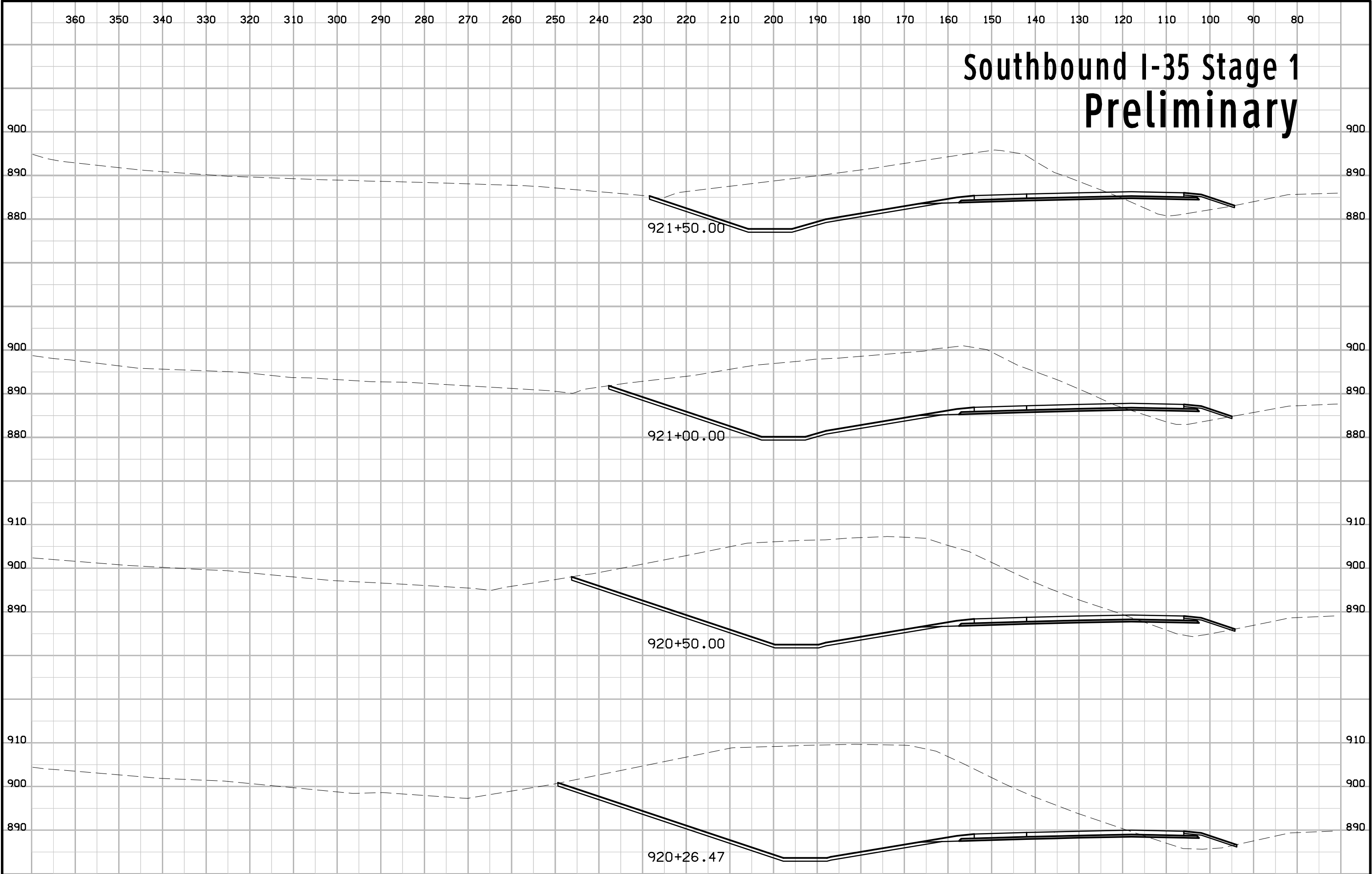
Southbound I-35 Stage 1 Preliminary





Southbound I-35 Stage 1 Preliminary

Southbound I-35 Stage 1 Preliminary



Southbound I-35 Stage 1 Preliminary



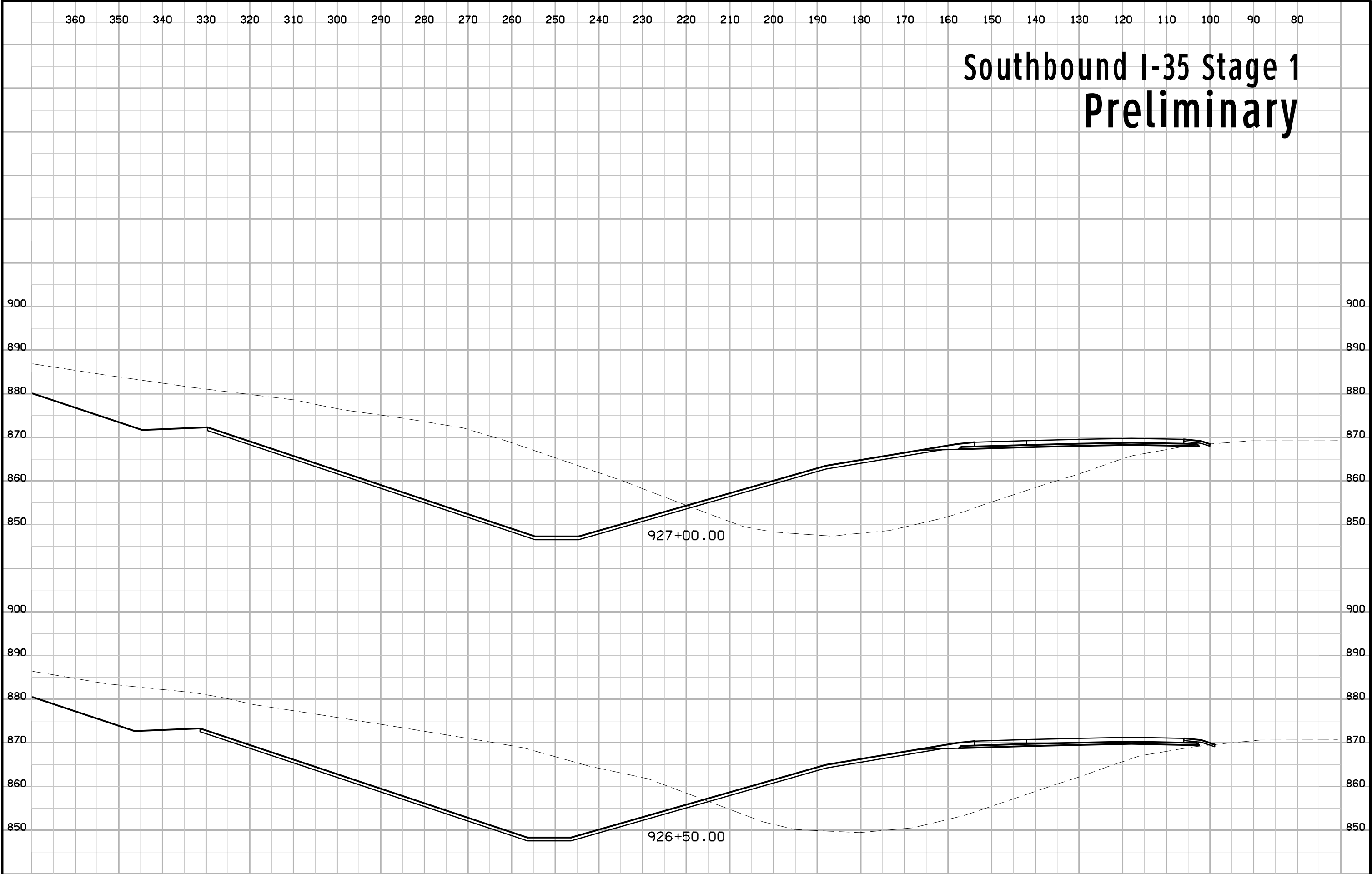
Southbound I-35 Stage 1 Preliminary



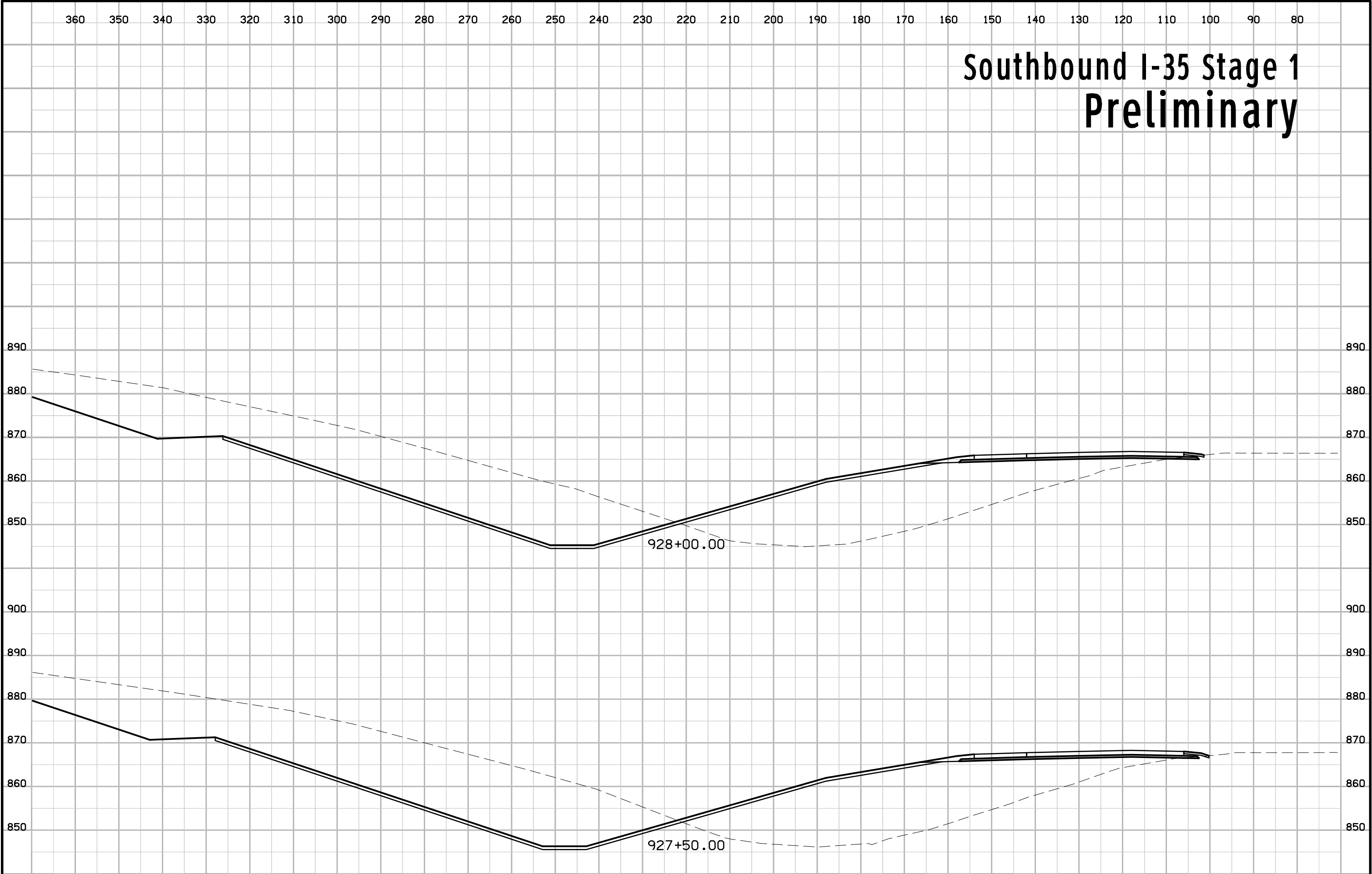
Southbound I-35 Stage 1 Preliminary



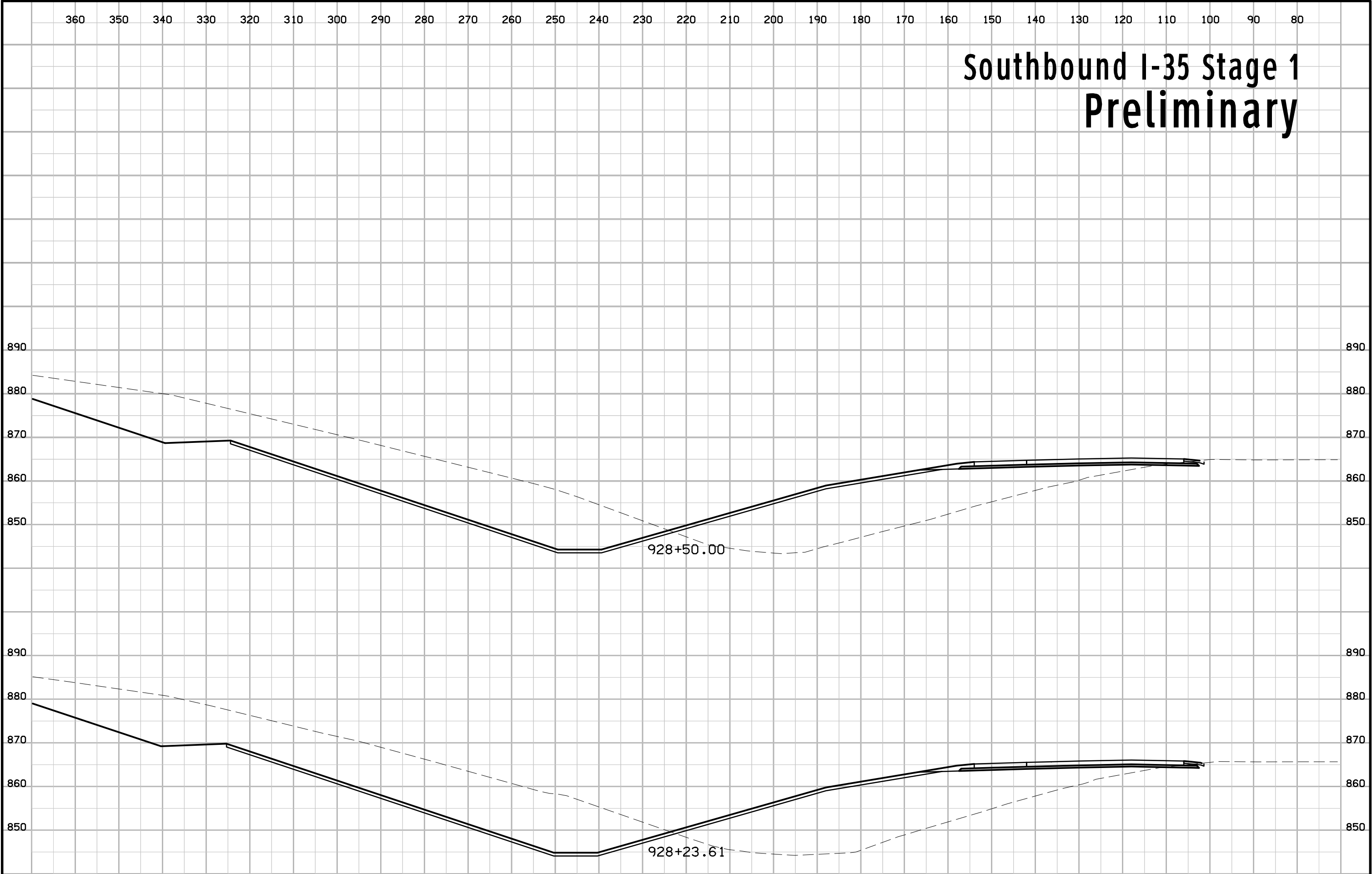
Southbound I-35 Stage 1 Preliminary



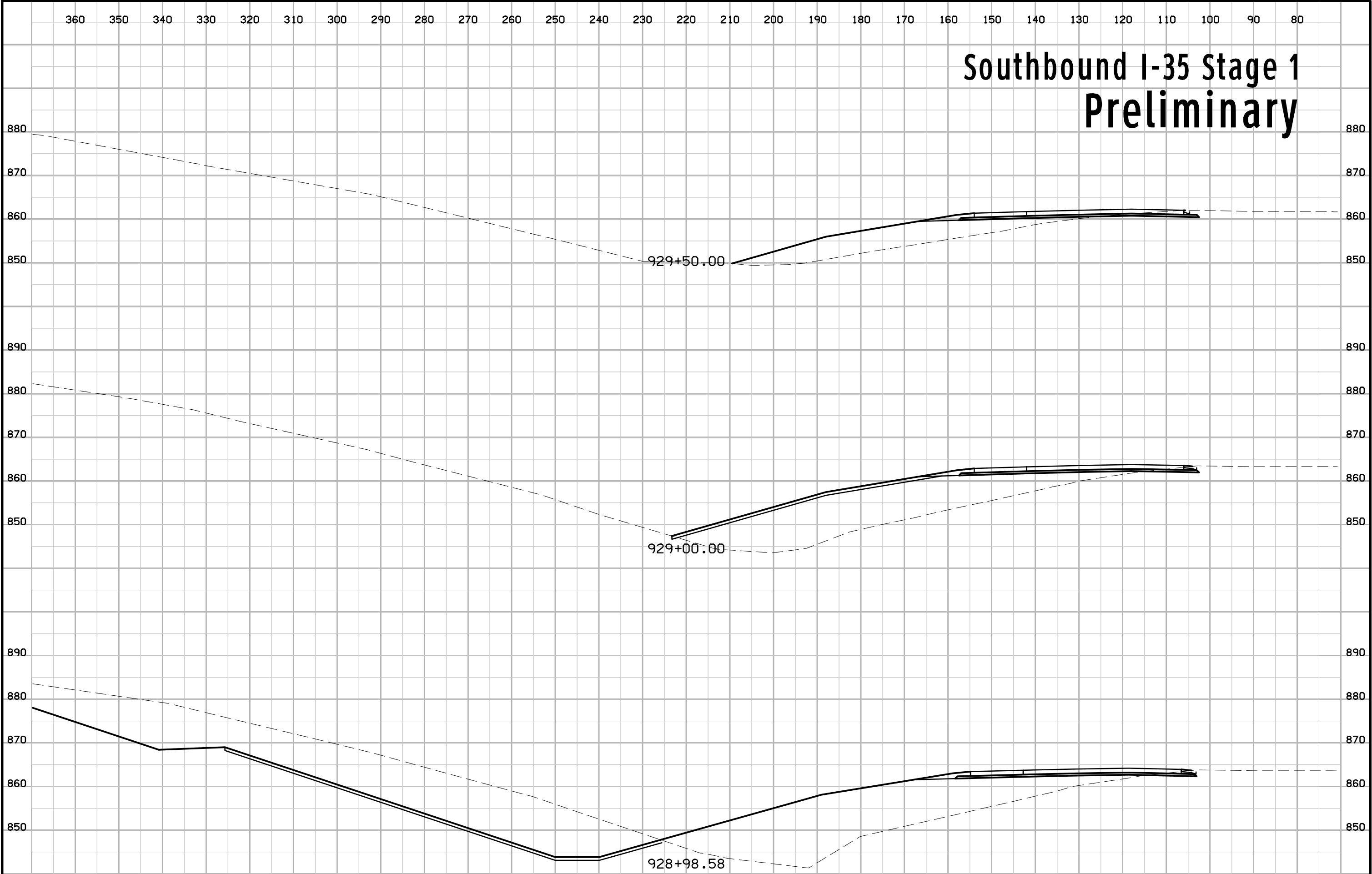
Southbound I-35 Stage 1 Preliminary



Southbound I-35 Stage 1 Preliminary

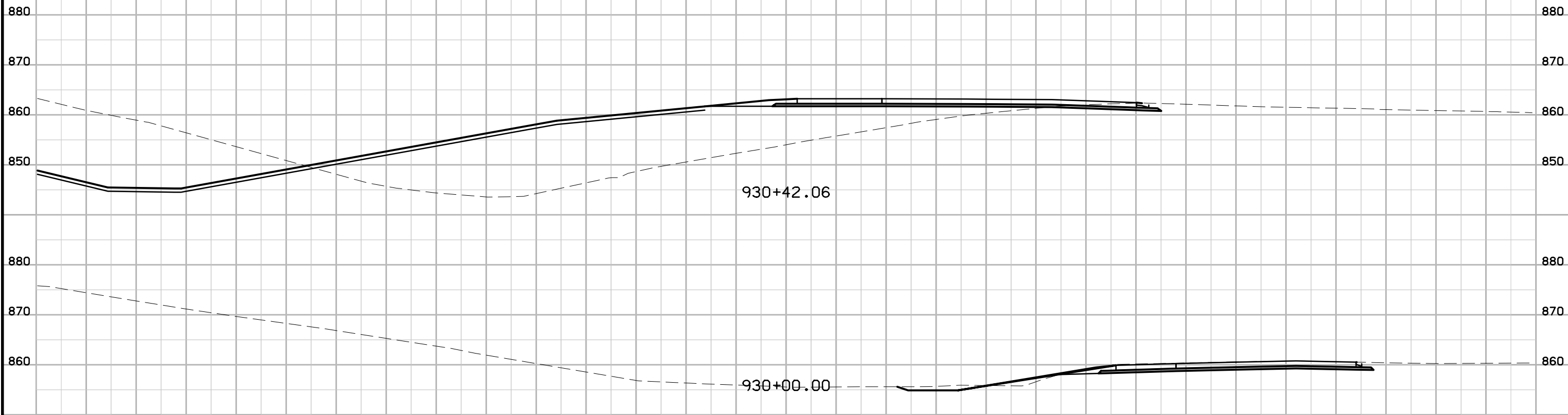


Southbound I-35 Stage 1 Preliminary

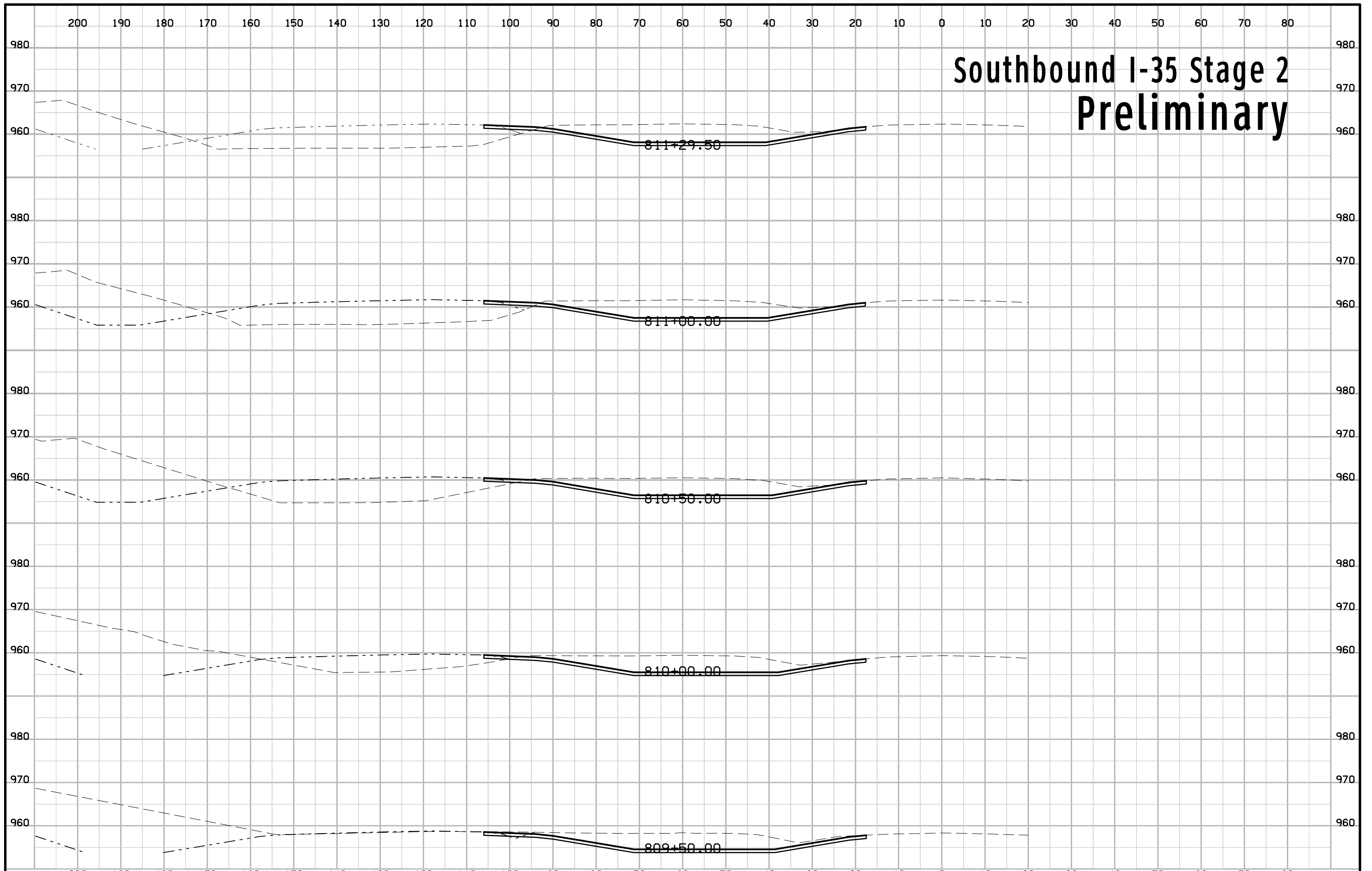


360 350 340 330 320 310 300 290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80

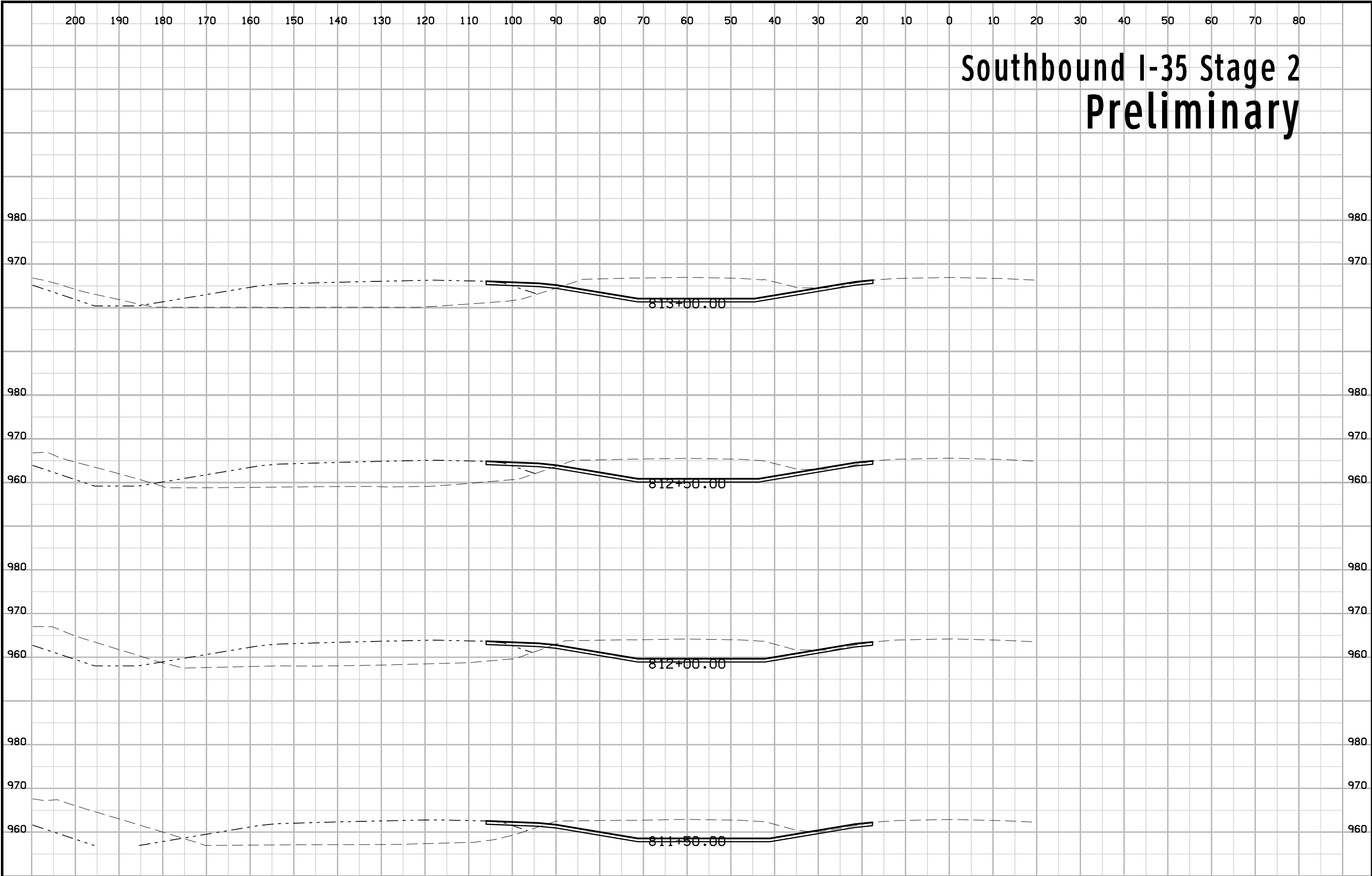
Southbound I-35 Stage 1 Preliminary



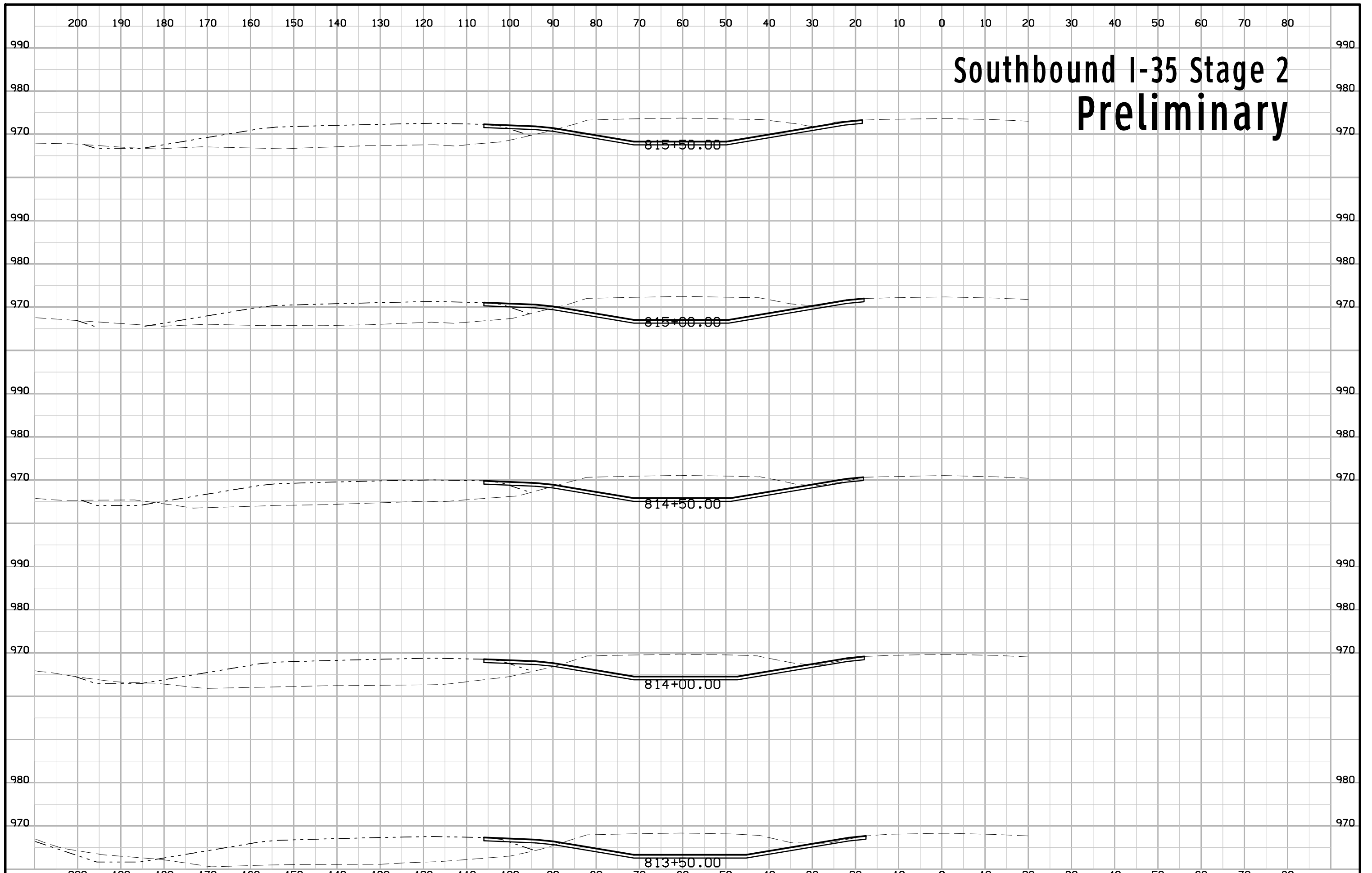
Southbound I-35 Stage 2 Preliminary



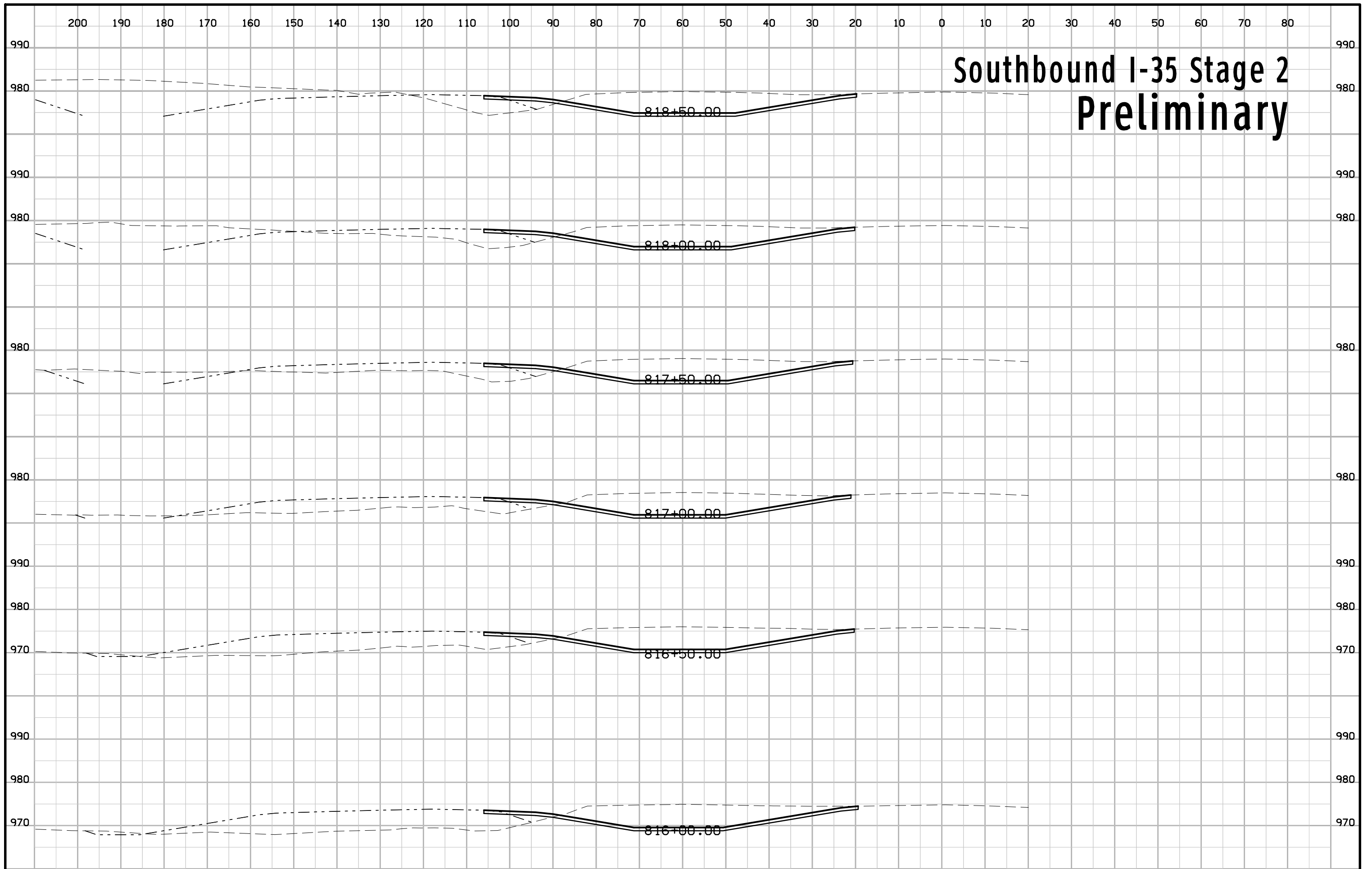
Southbound I-35 Stage 2 Preliminary



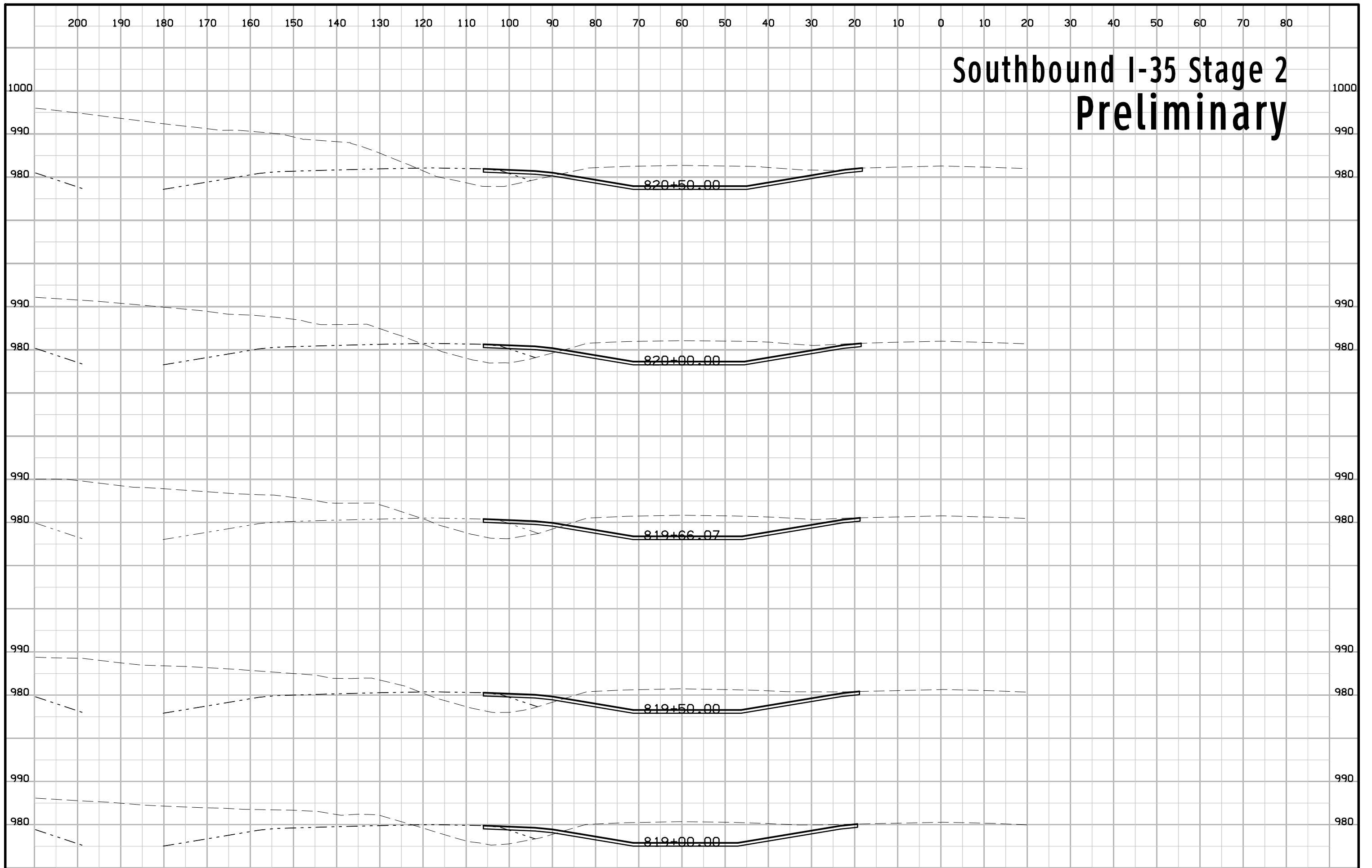
Southbound I-35 Stage 2 Preliminary



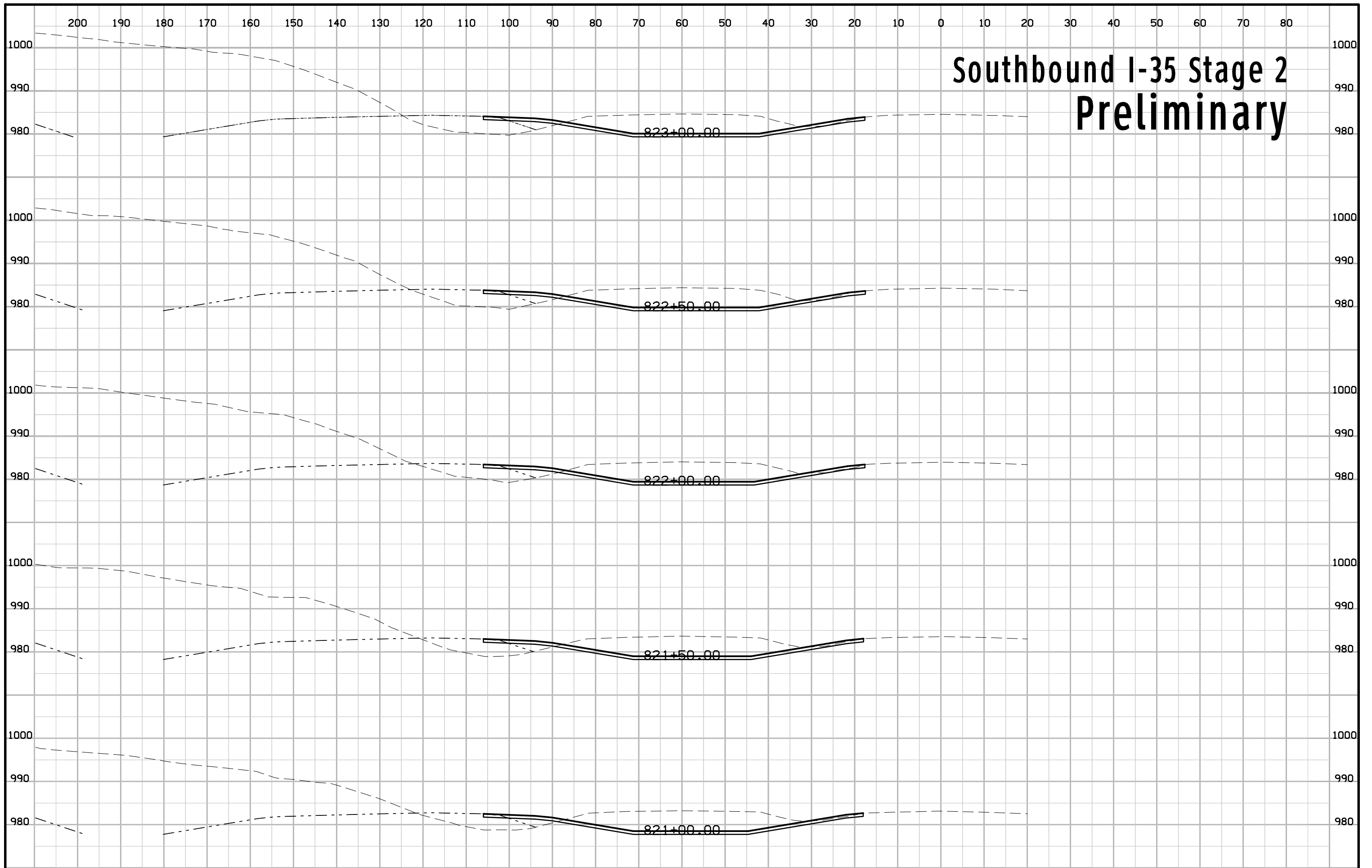
Southbound I-35 Stage 2 Preliminary



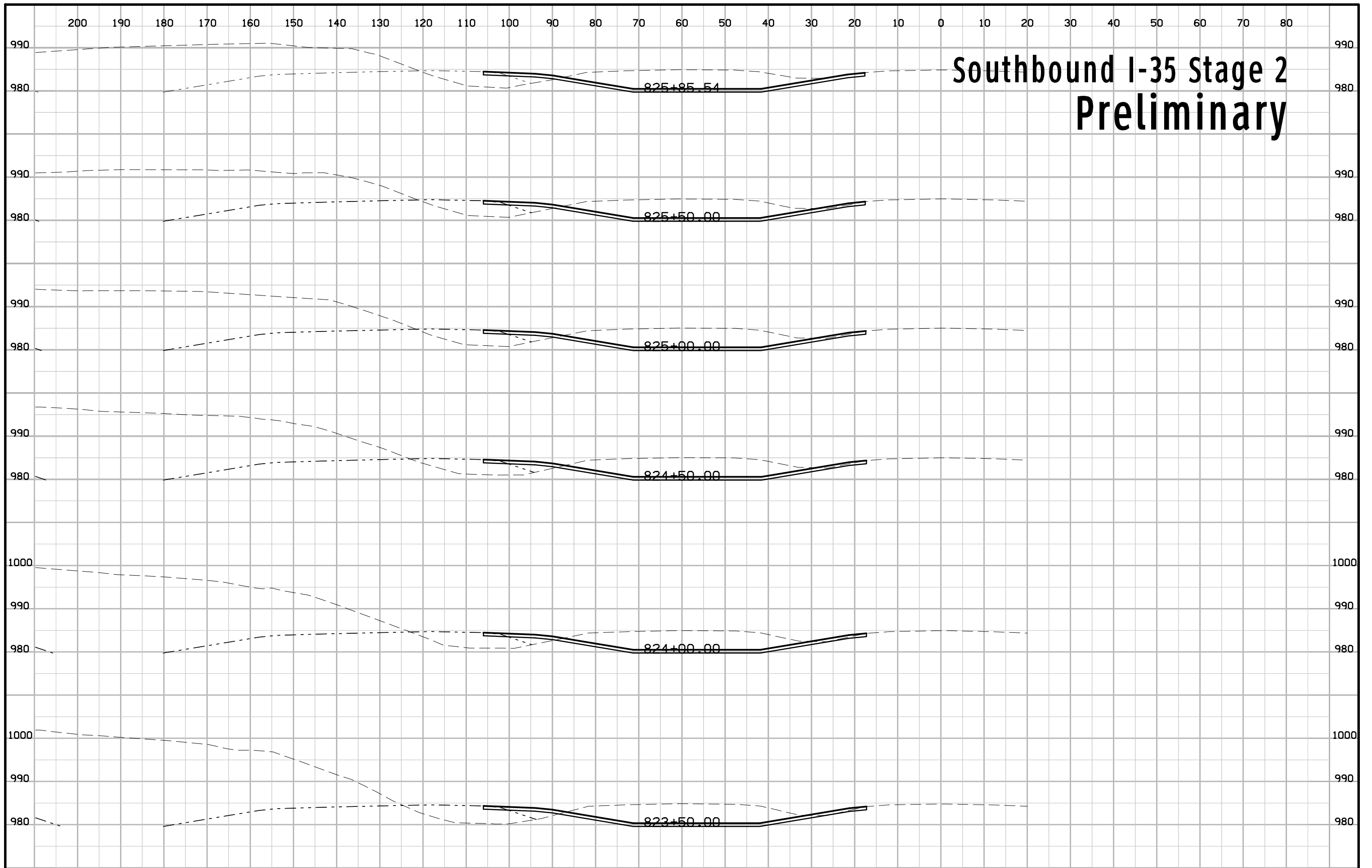
Southbound I-35 Stage 2 Preliminary



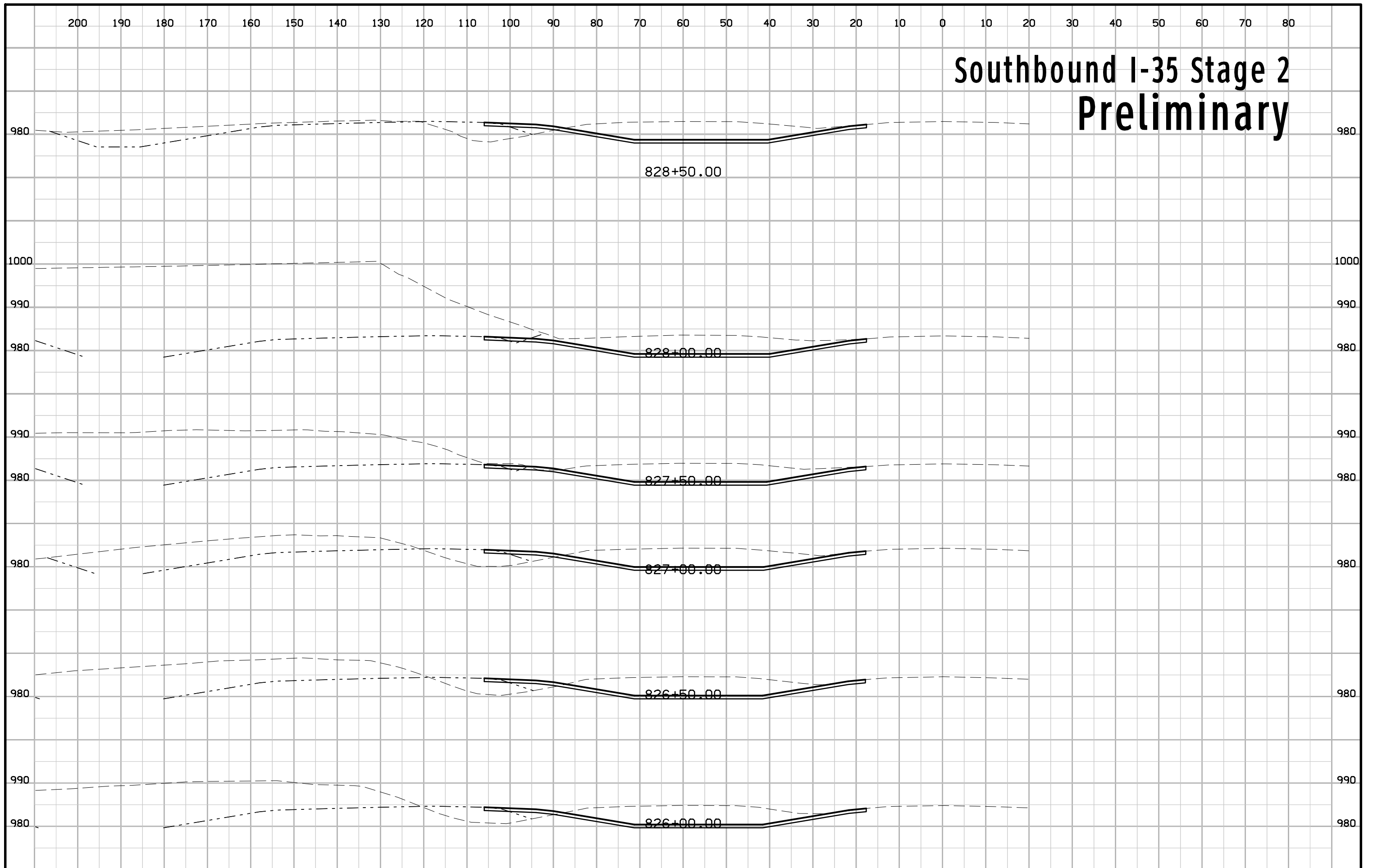
Southbound I-35 Stage 2 Preliminary

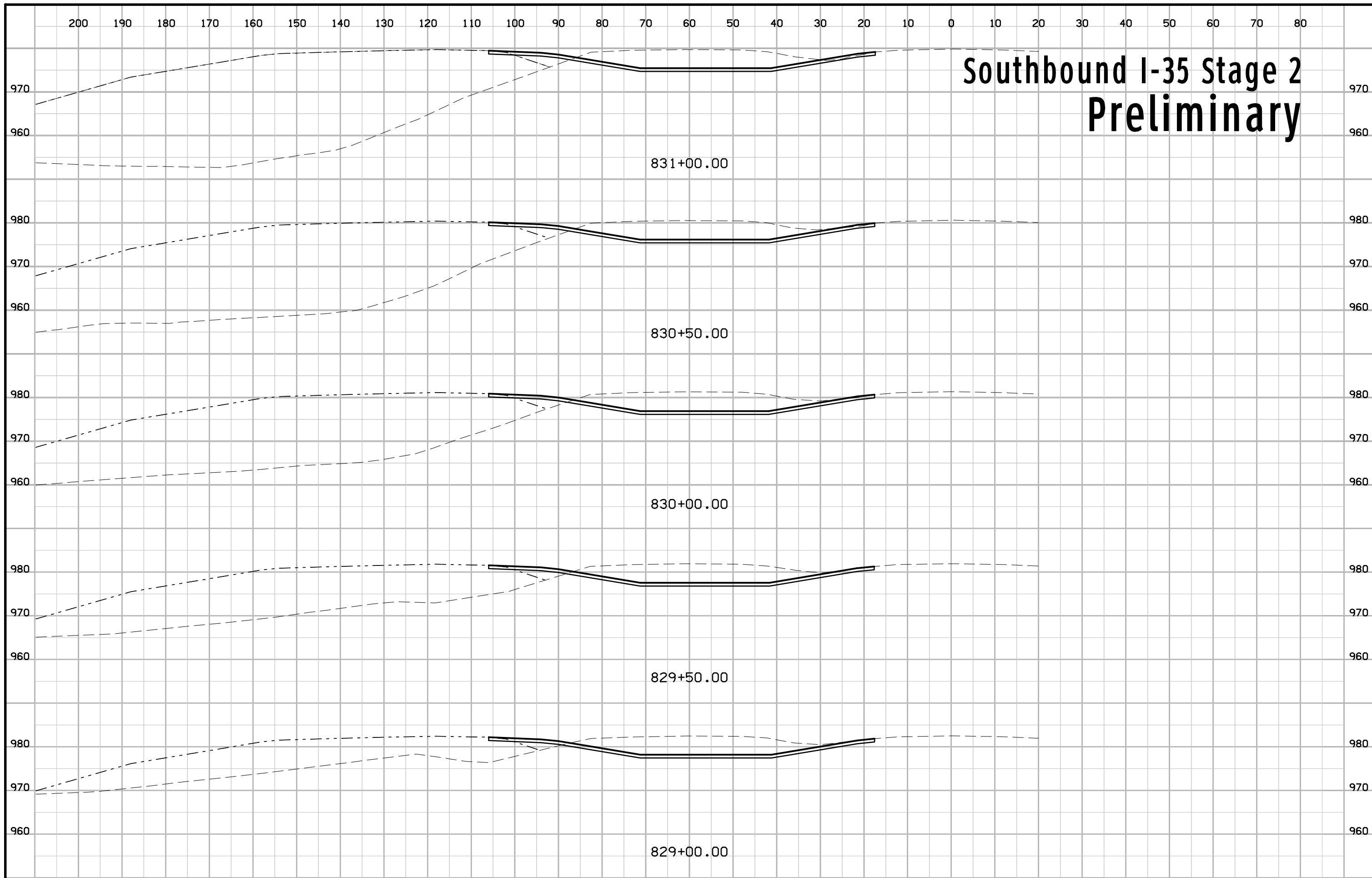


Southbound I-35 Stage 2 Preliminary



Southbound I-35 Stage 2 Preliminary





Southbound I-35 Stage 2 Preliminary

831+00.00

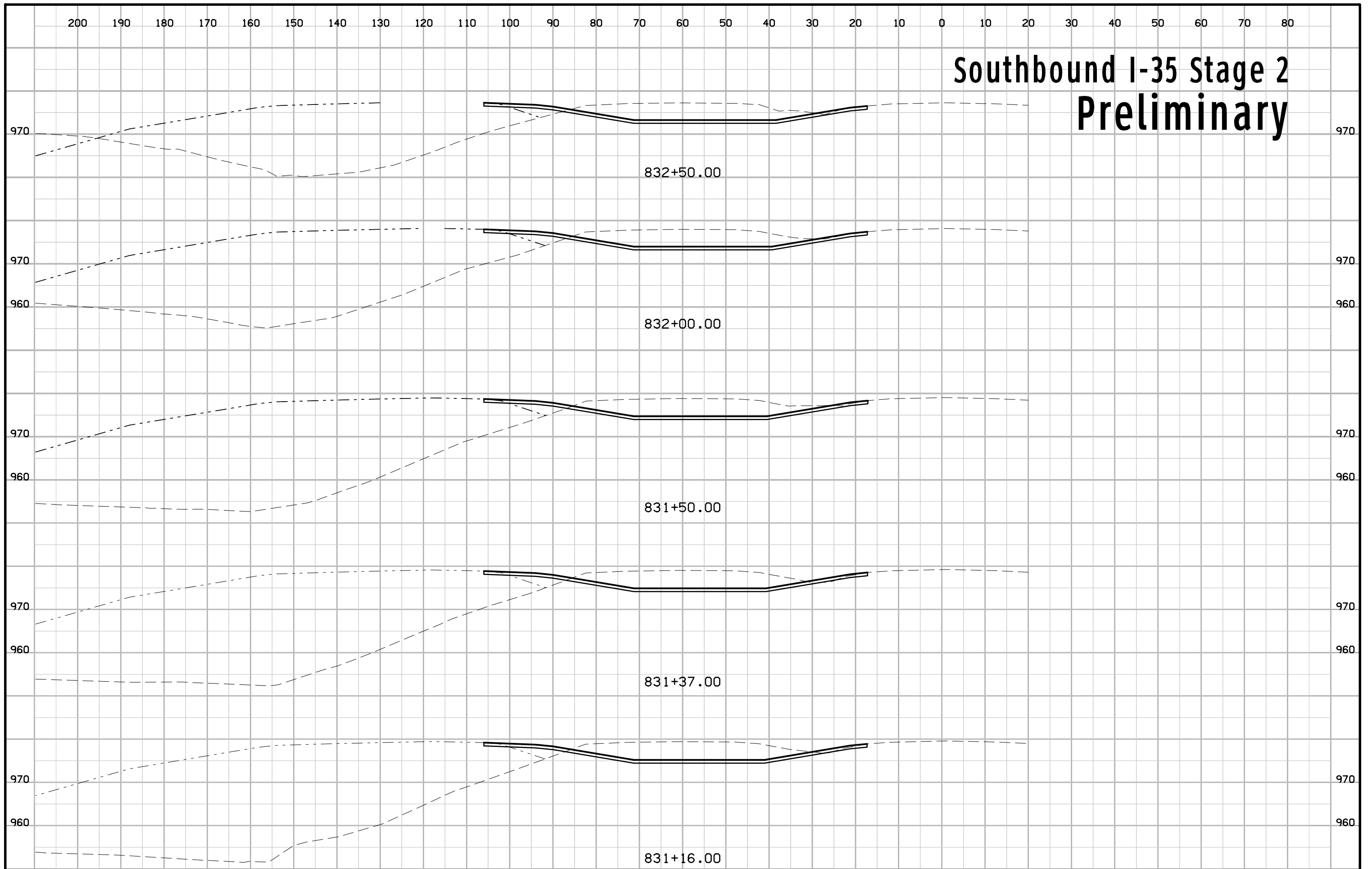
830+50.00

830+00.00

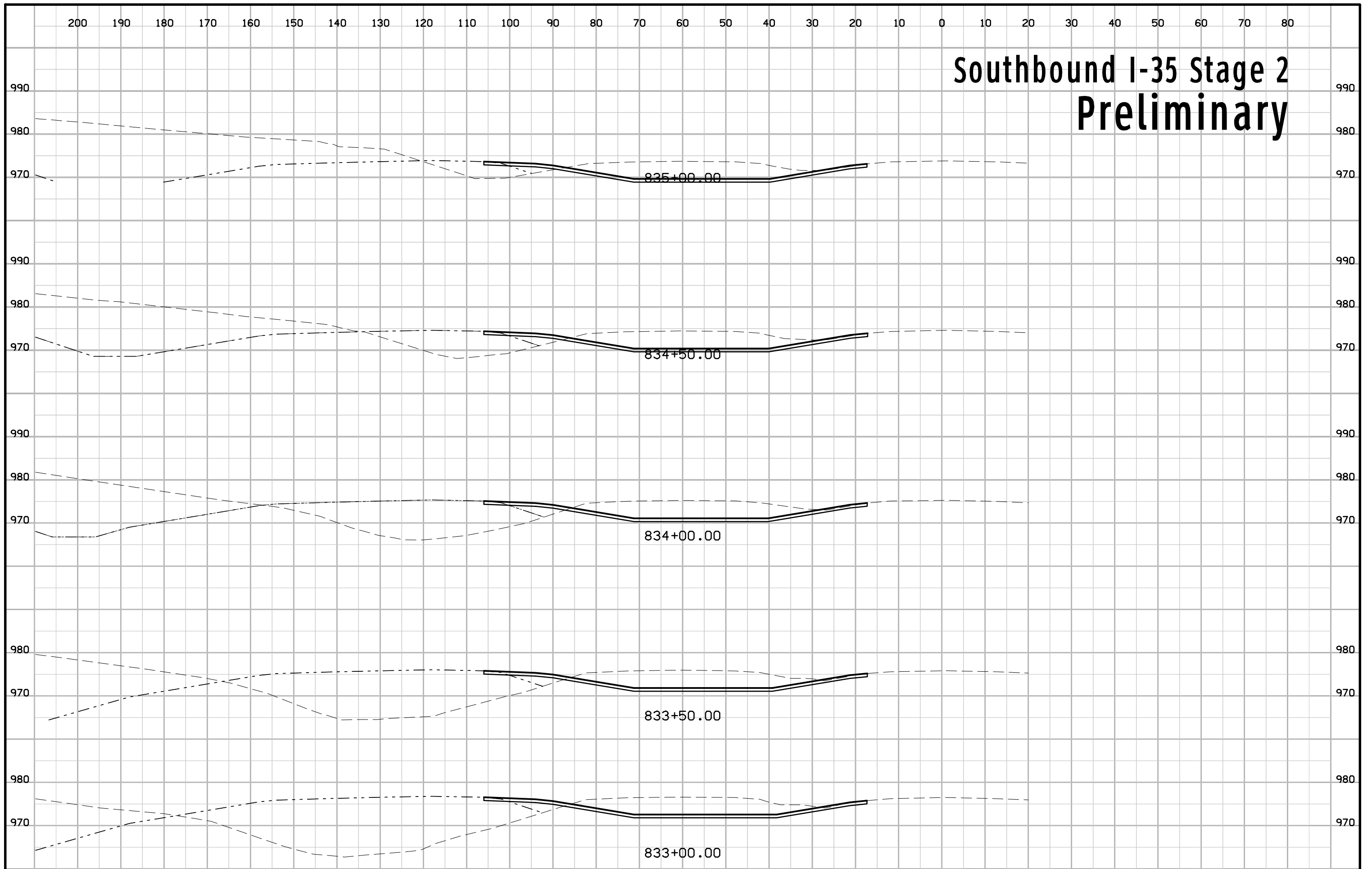
829+50.00

829+00.00

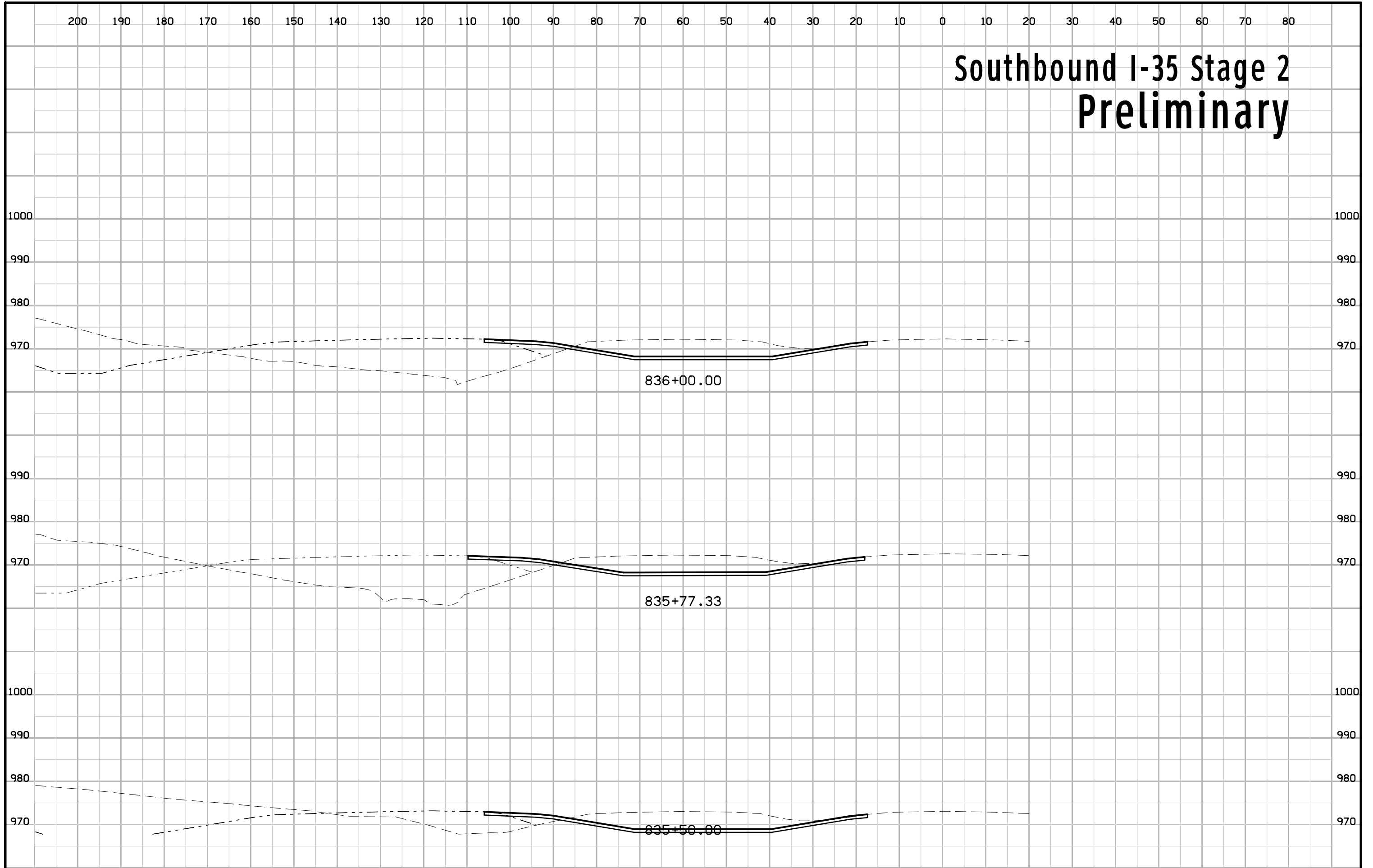
Southbound I-35 Stage 2 Preliminary



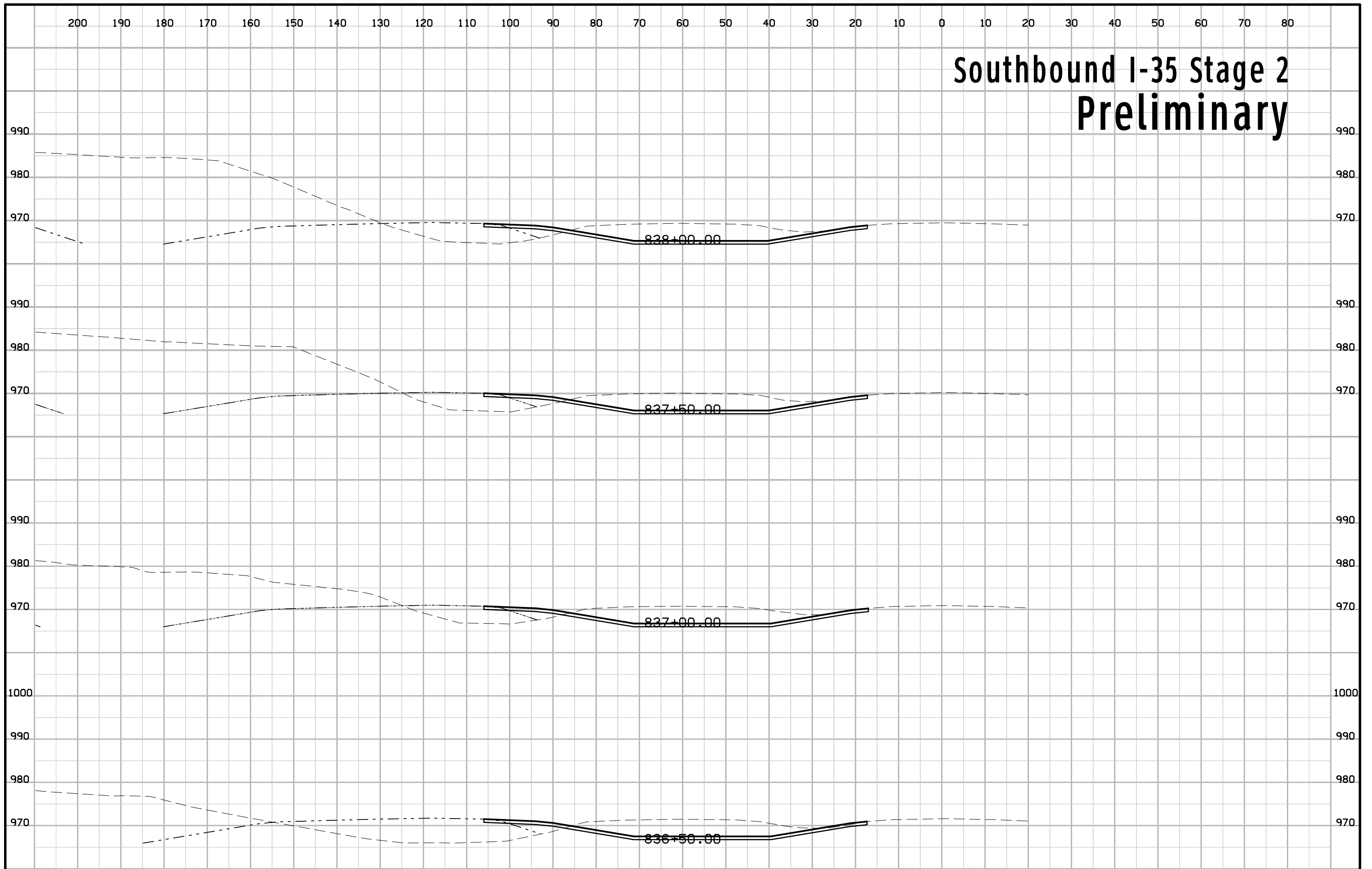
Southbound I-35 Stage 2 Preliminary



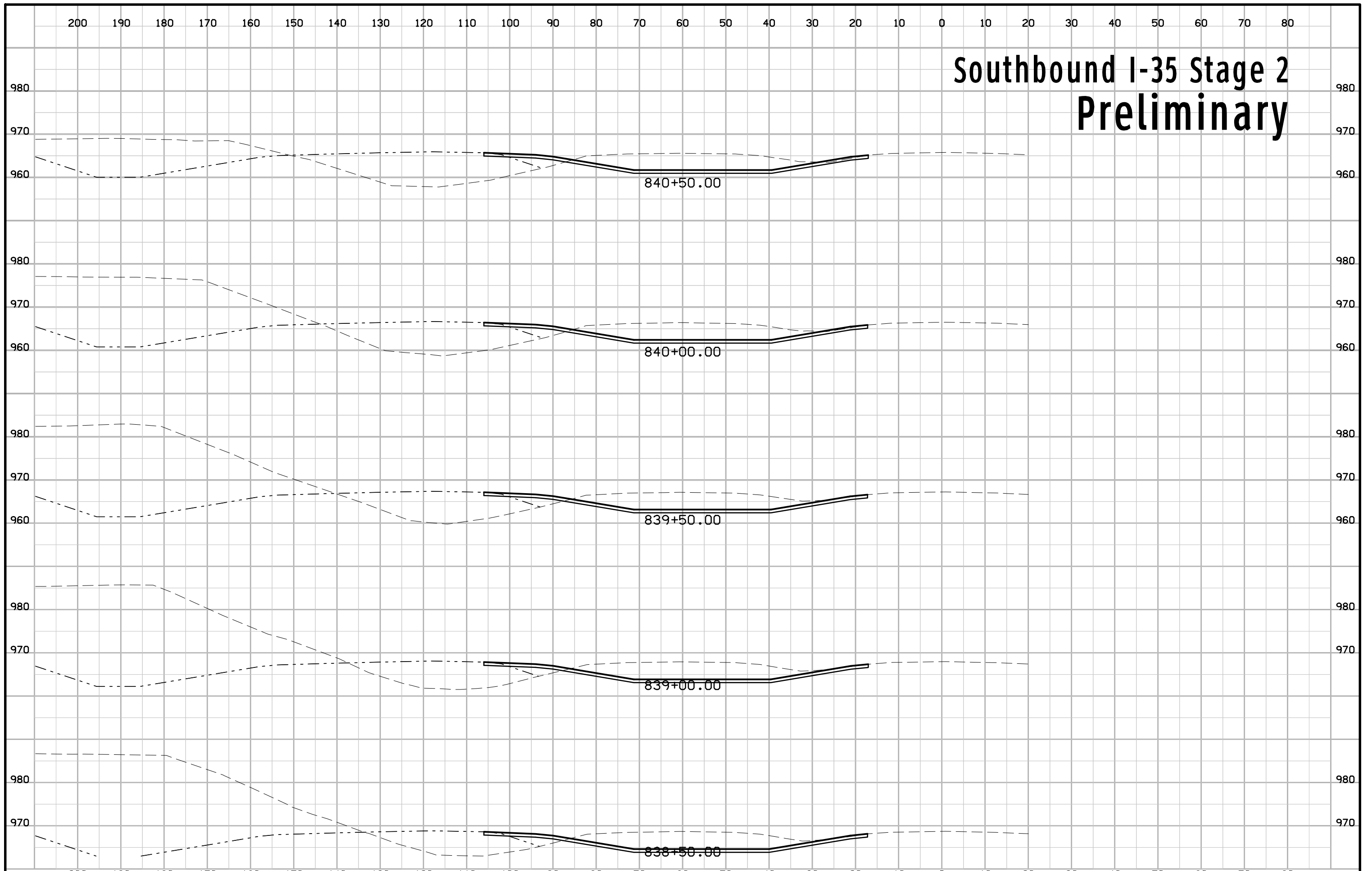
Southbound I-35 Stage 2 Preliminary



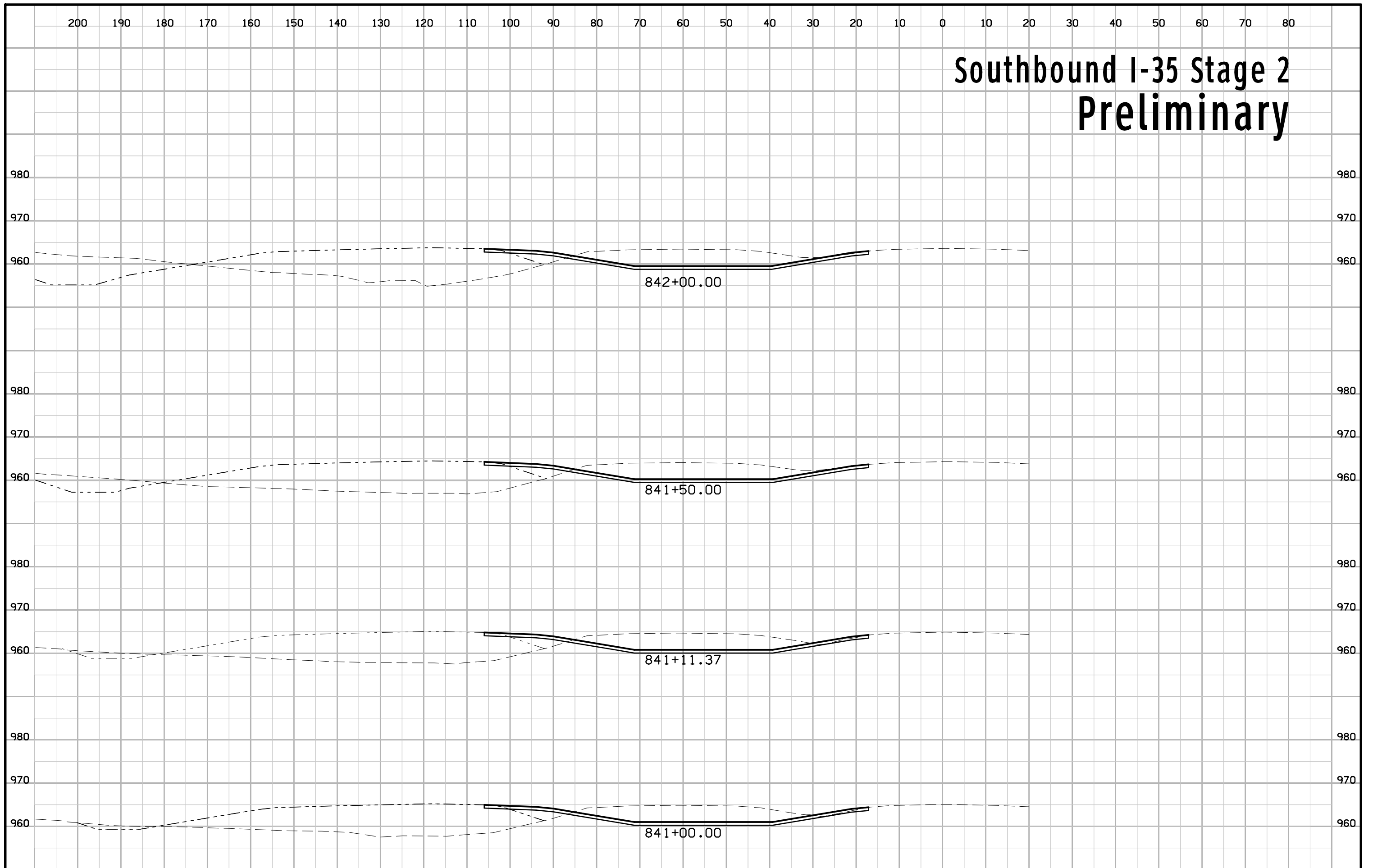
Southbound I-35 Stage 2 Preliminary



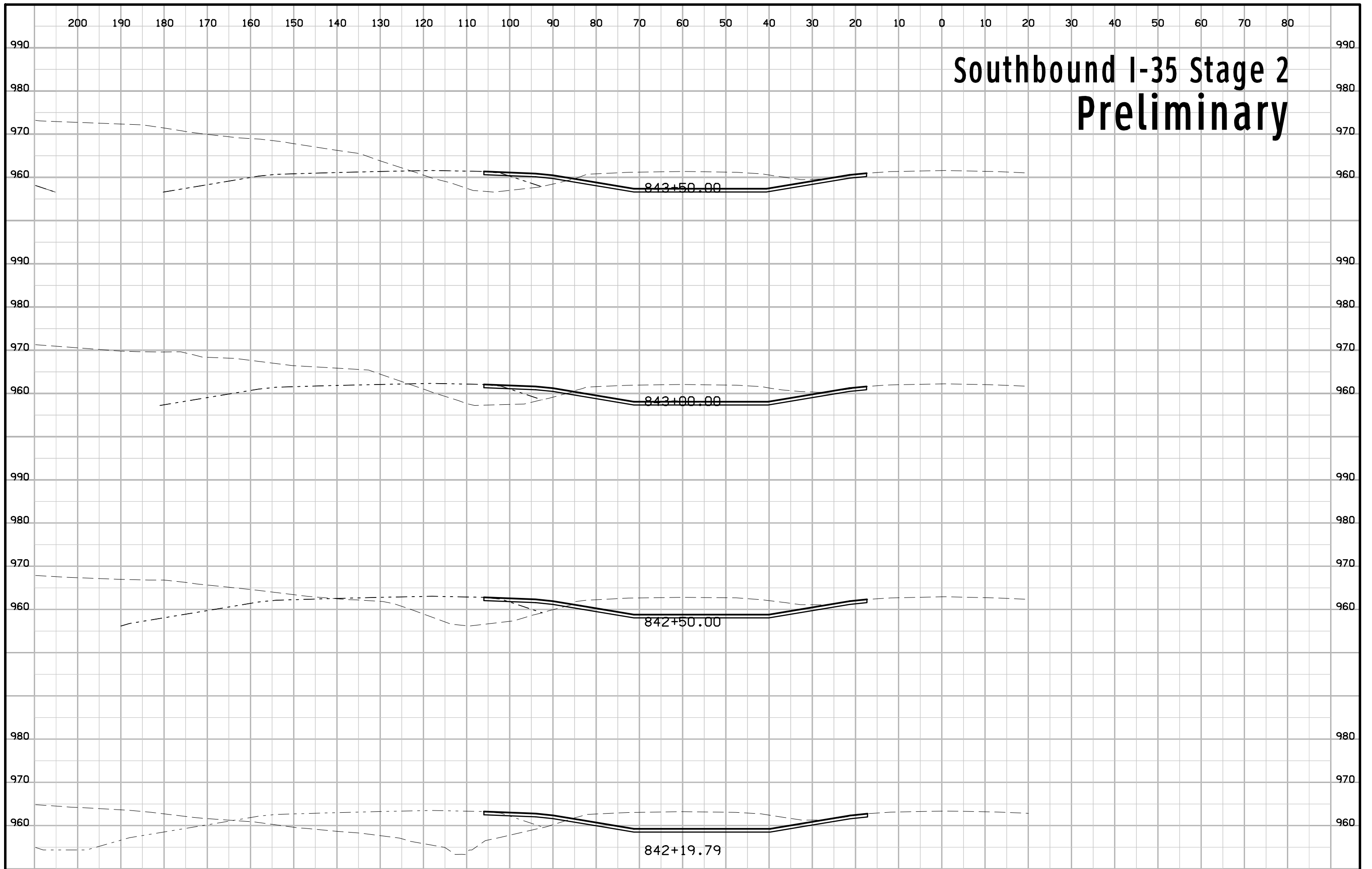
Southbound I-35 Stage 2 Preliminary



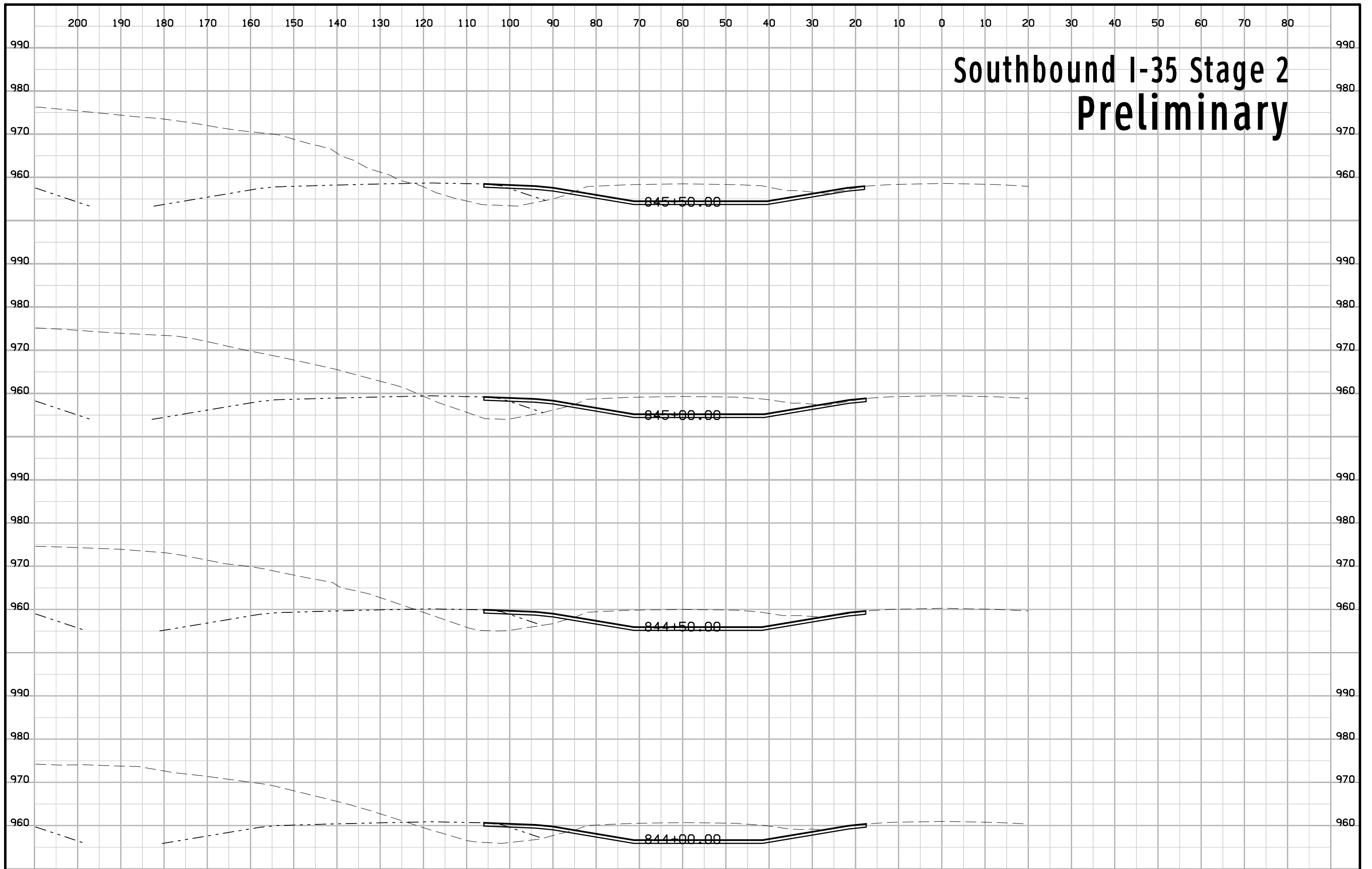
Southbound I-35 Stage 2 Preliminary



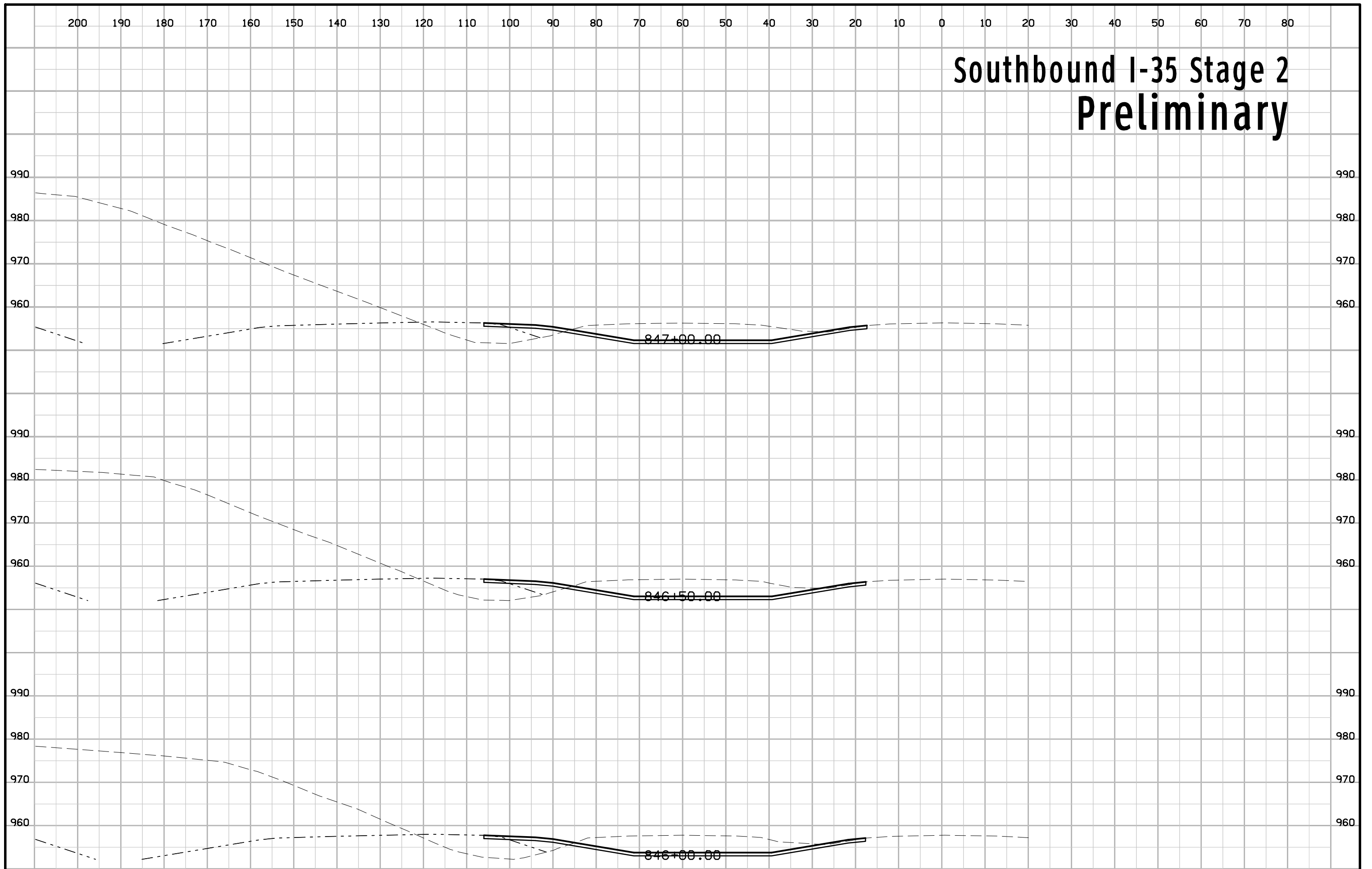
Southbound I-35 Stage 2 Preliminary



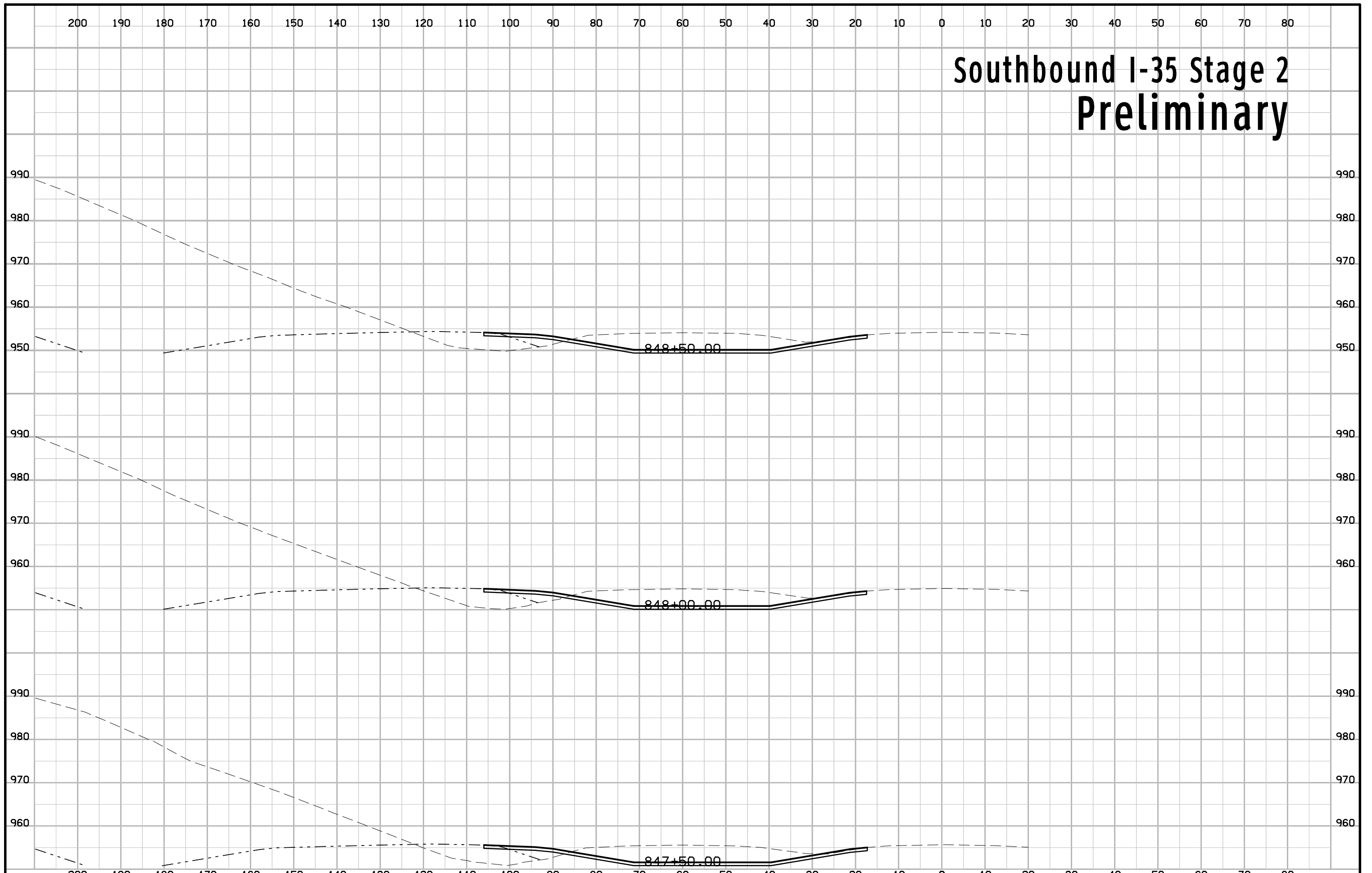
Southbound I-35 Stage 2 Preliminary



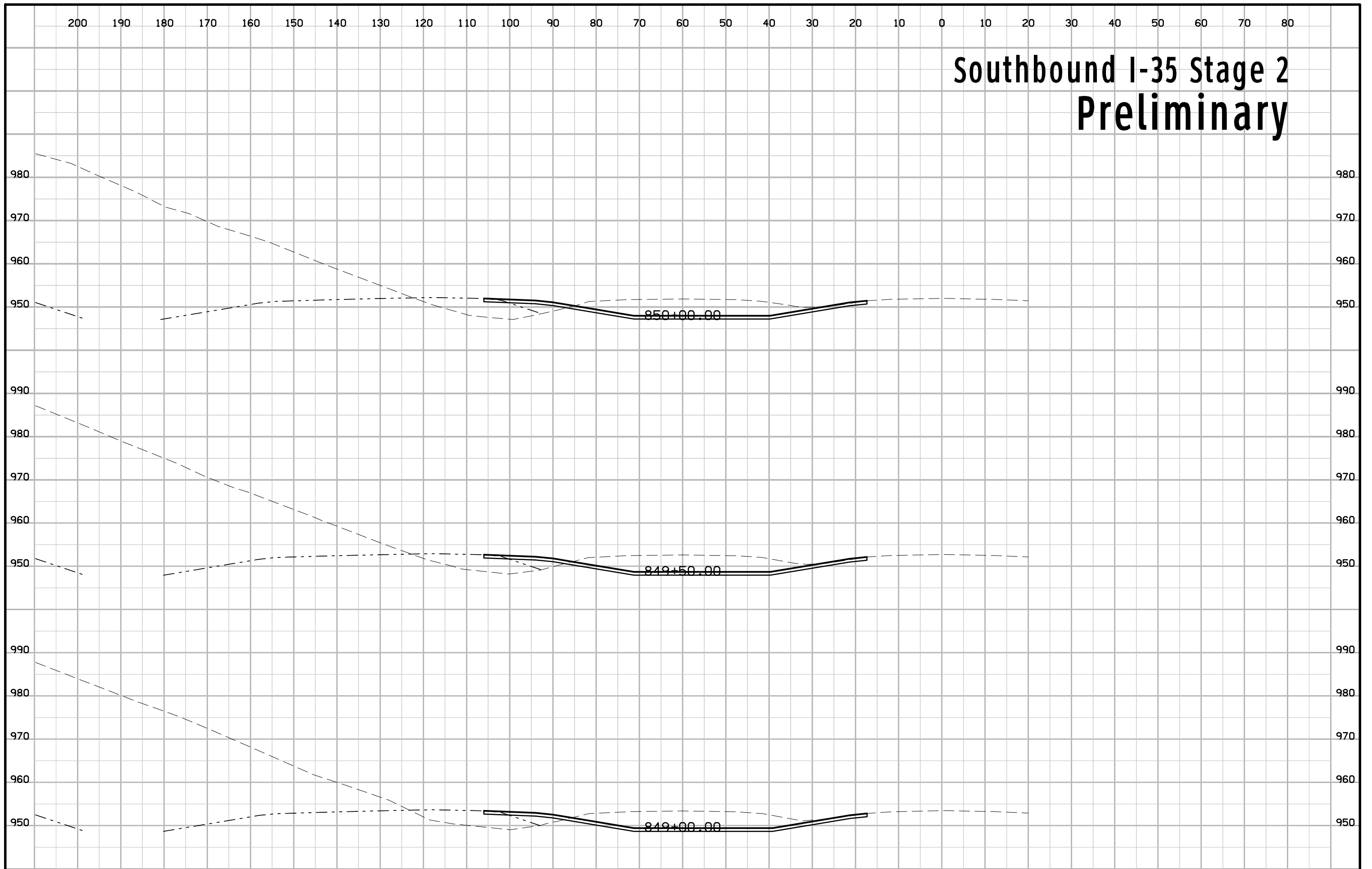
Southbound I-35 Stage 2 Preliminary



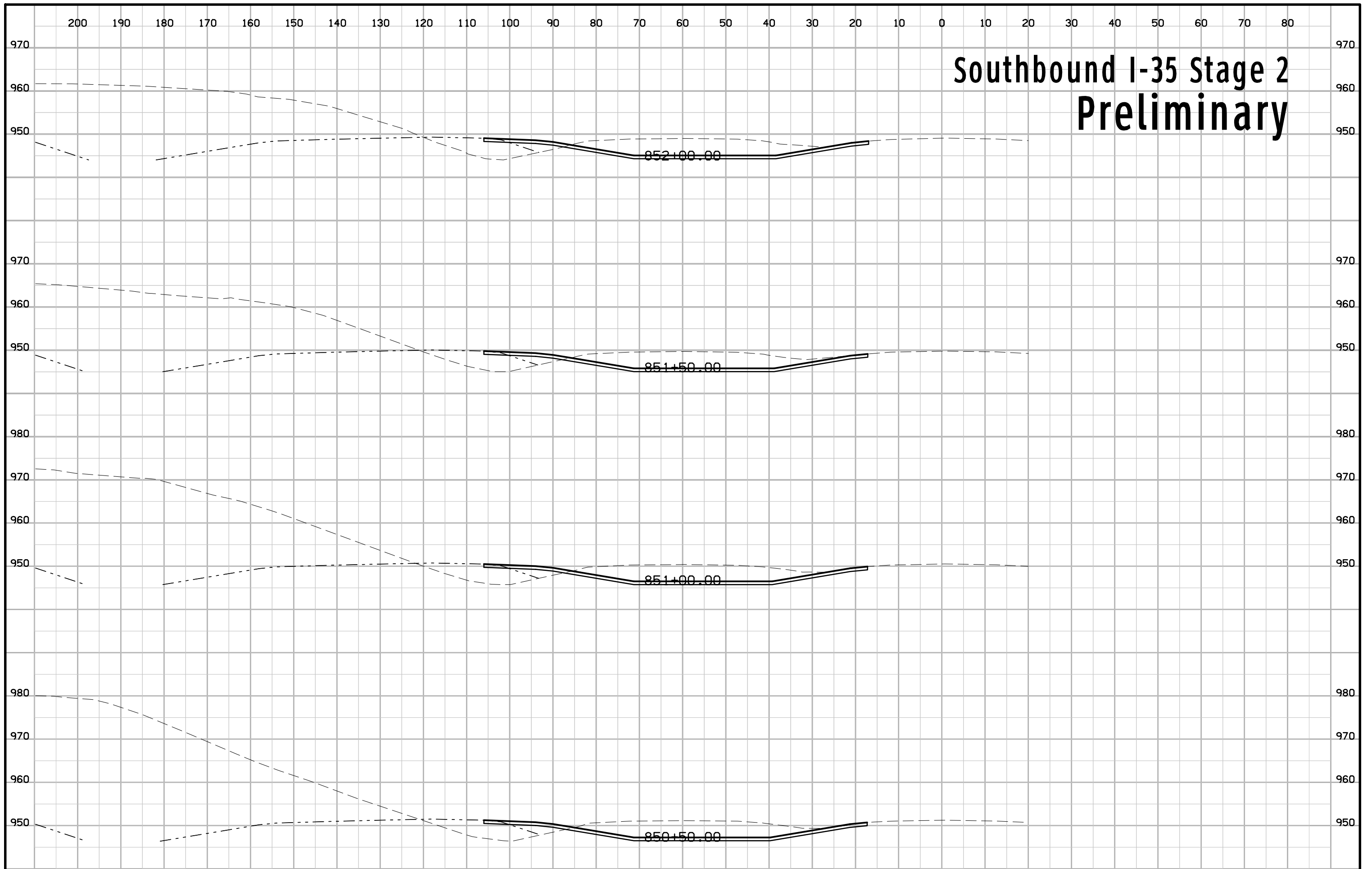
Southbound I-35 Stage 2 Preliminary



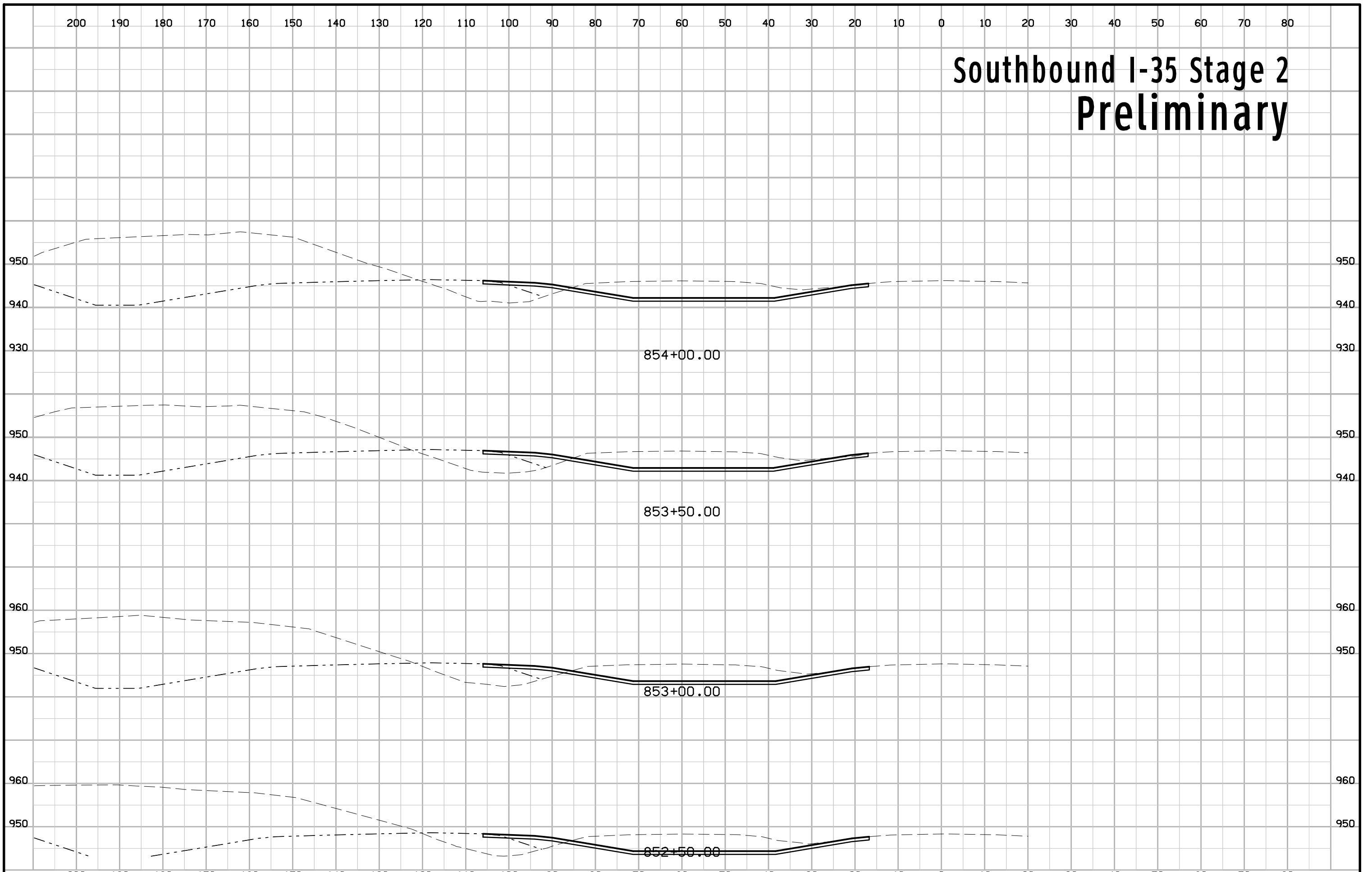
Southbound I-35 Stage 2 Preliminary



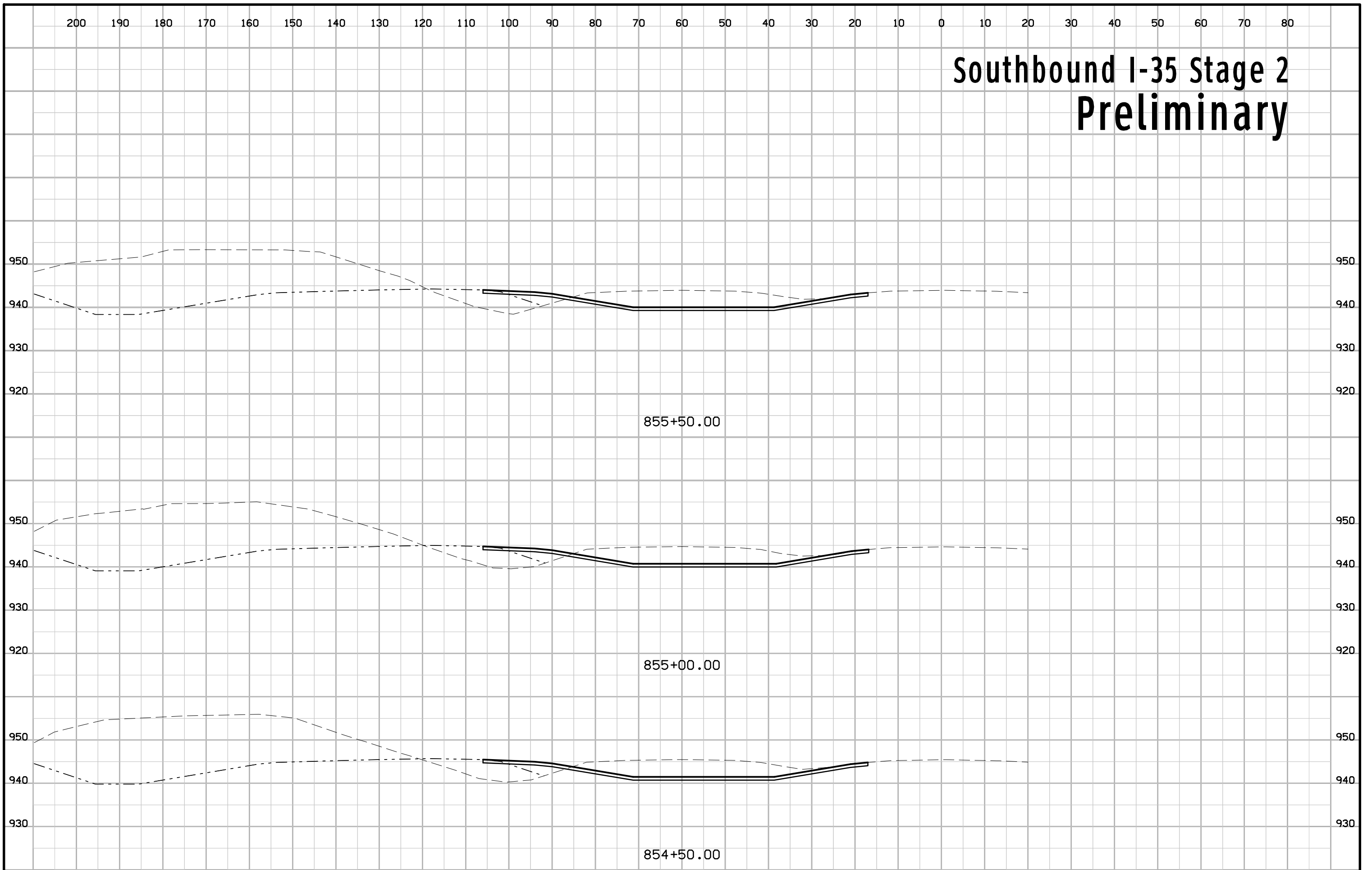
Southbound I-35 Stage 2 Preliminary



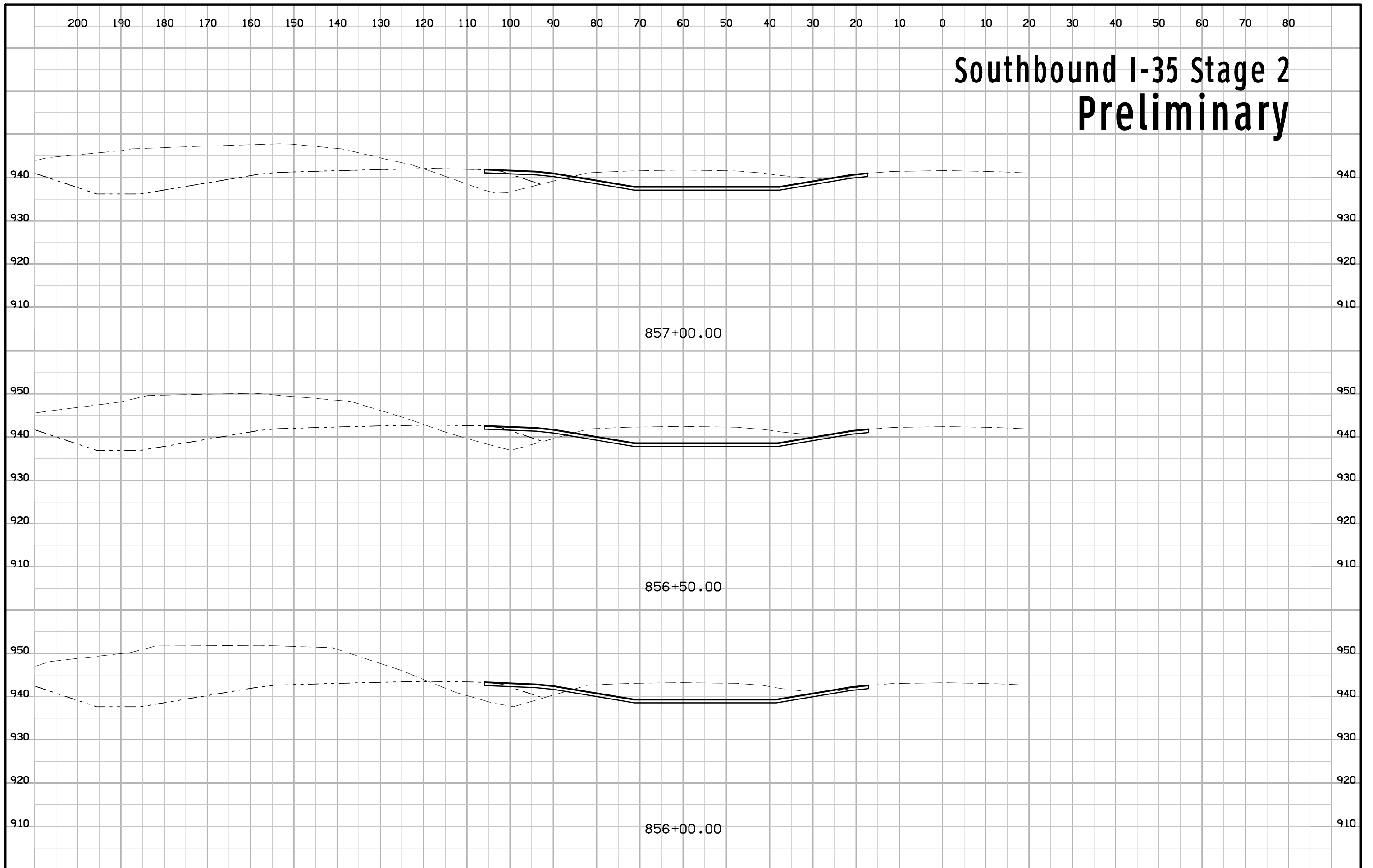
Southbound I-35 Stage 2 Preliminary



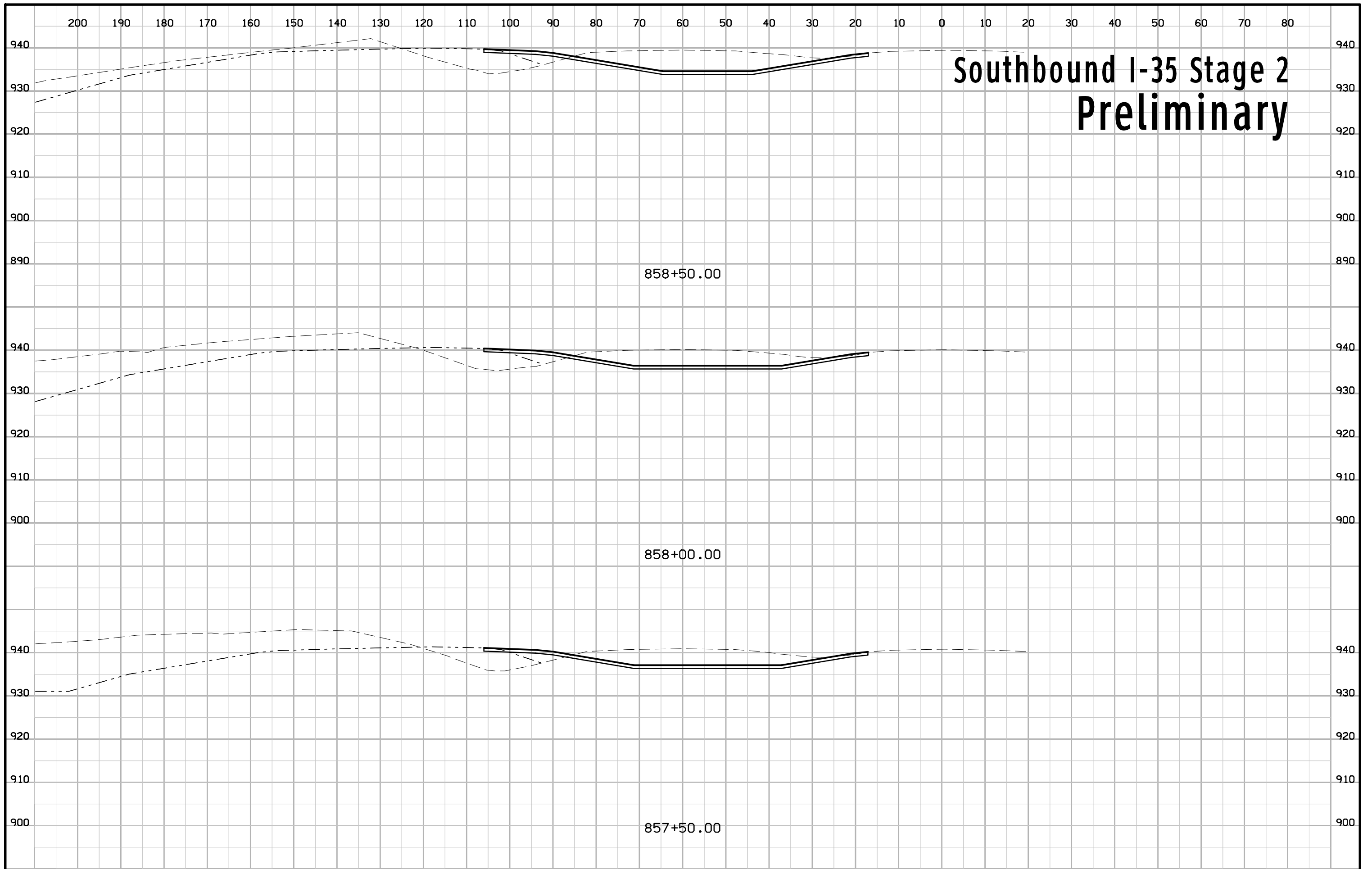
Southbound I-35 Stage 2 Preliminary



Southbound I-35 Stage 2 Preliminary



FILE NO.	ENGLISH	DESIGN TEAM	Snyder & Associates, Inc.	WARREN COUNTY	PROJECT NUMBER	IM-NHS-35-2(427)57--03-91	SHEET NUMBER	W.95
----------	---------	-------------	--------------------------------------	---------------	----------------	----------------------------------	--------------	-------------

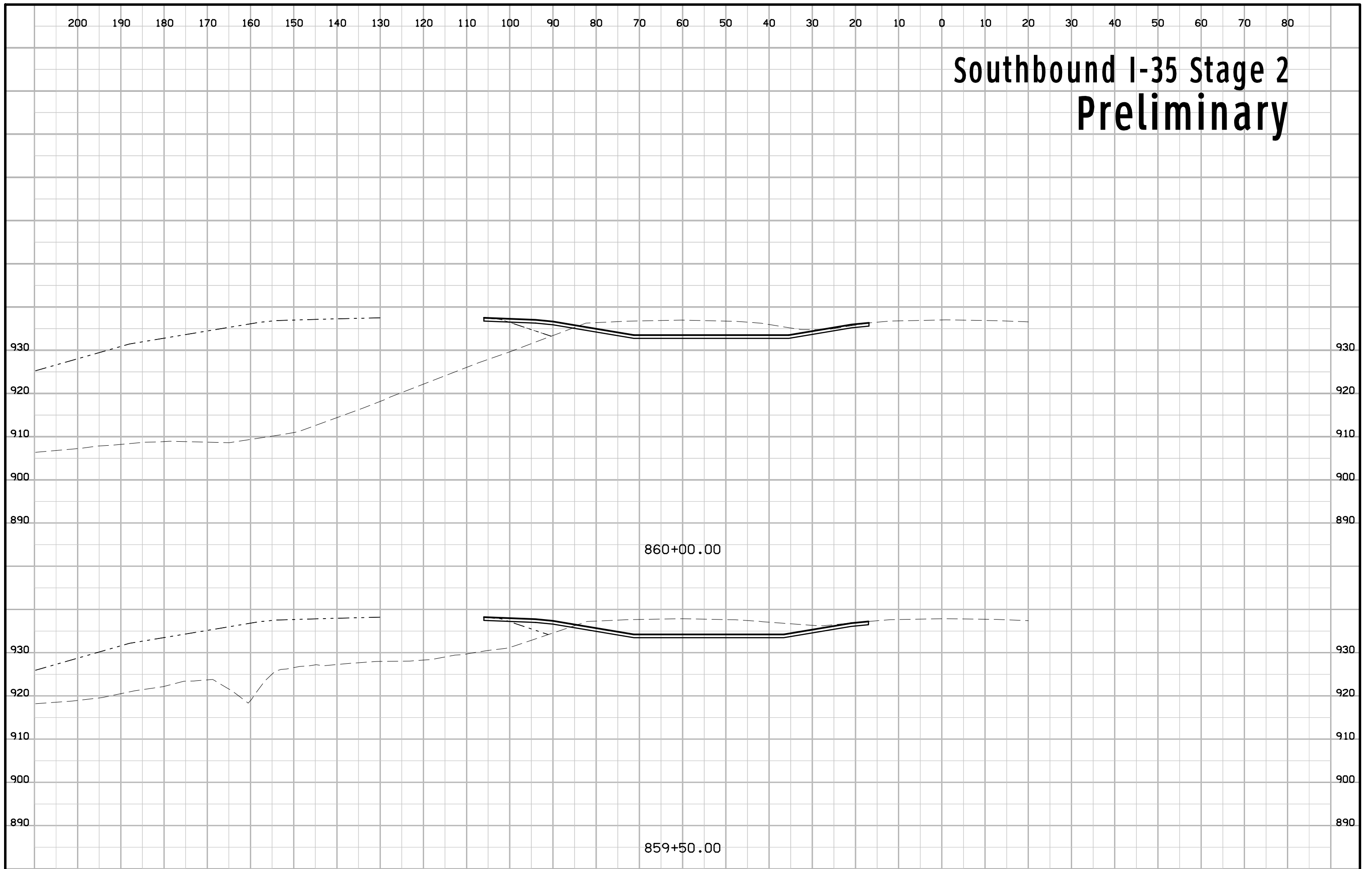


Southbound I-35 Stage 2 Preliminary

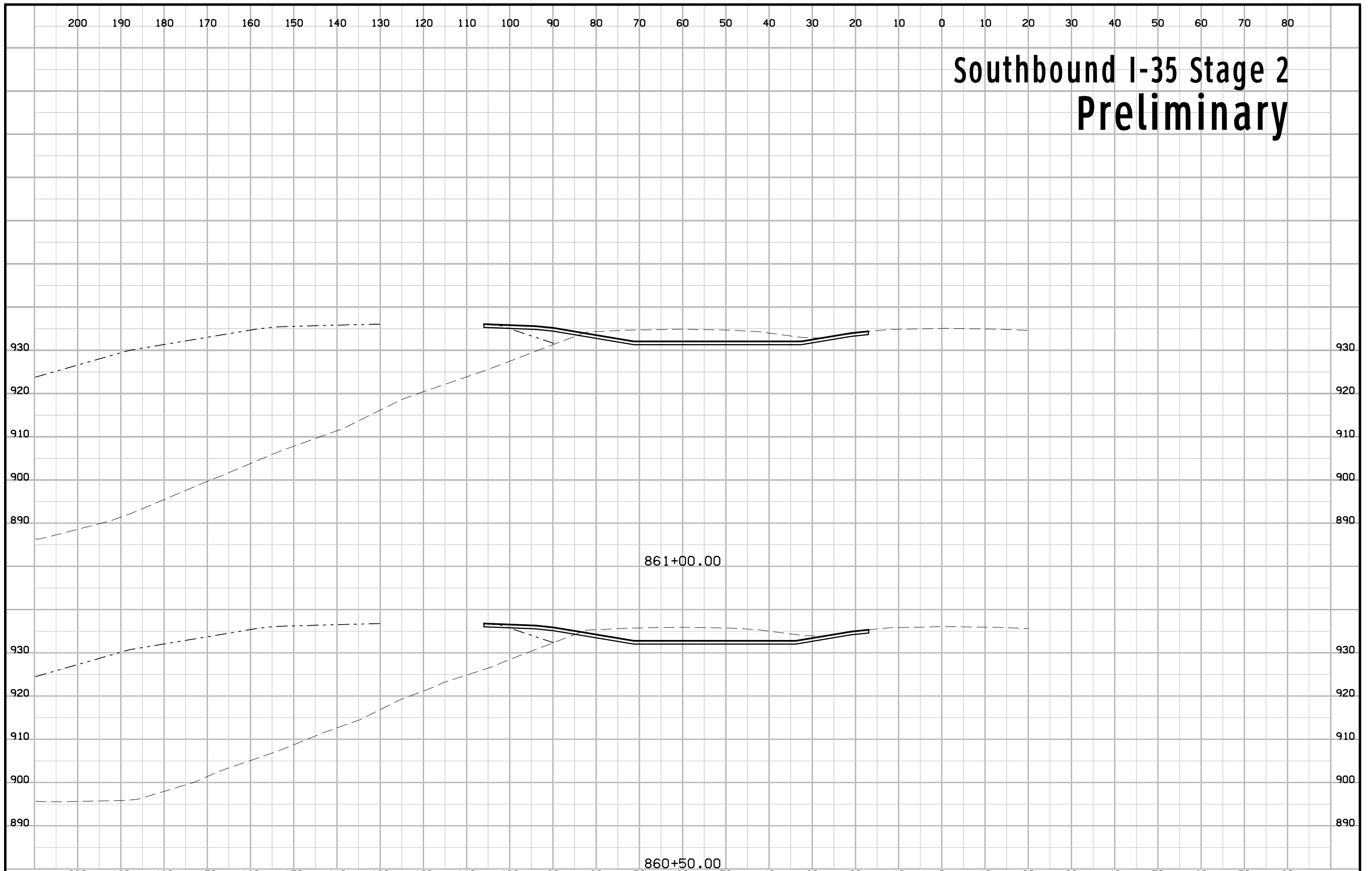
Southbound I-35 Stage 2 Preliminary



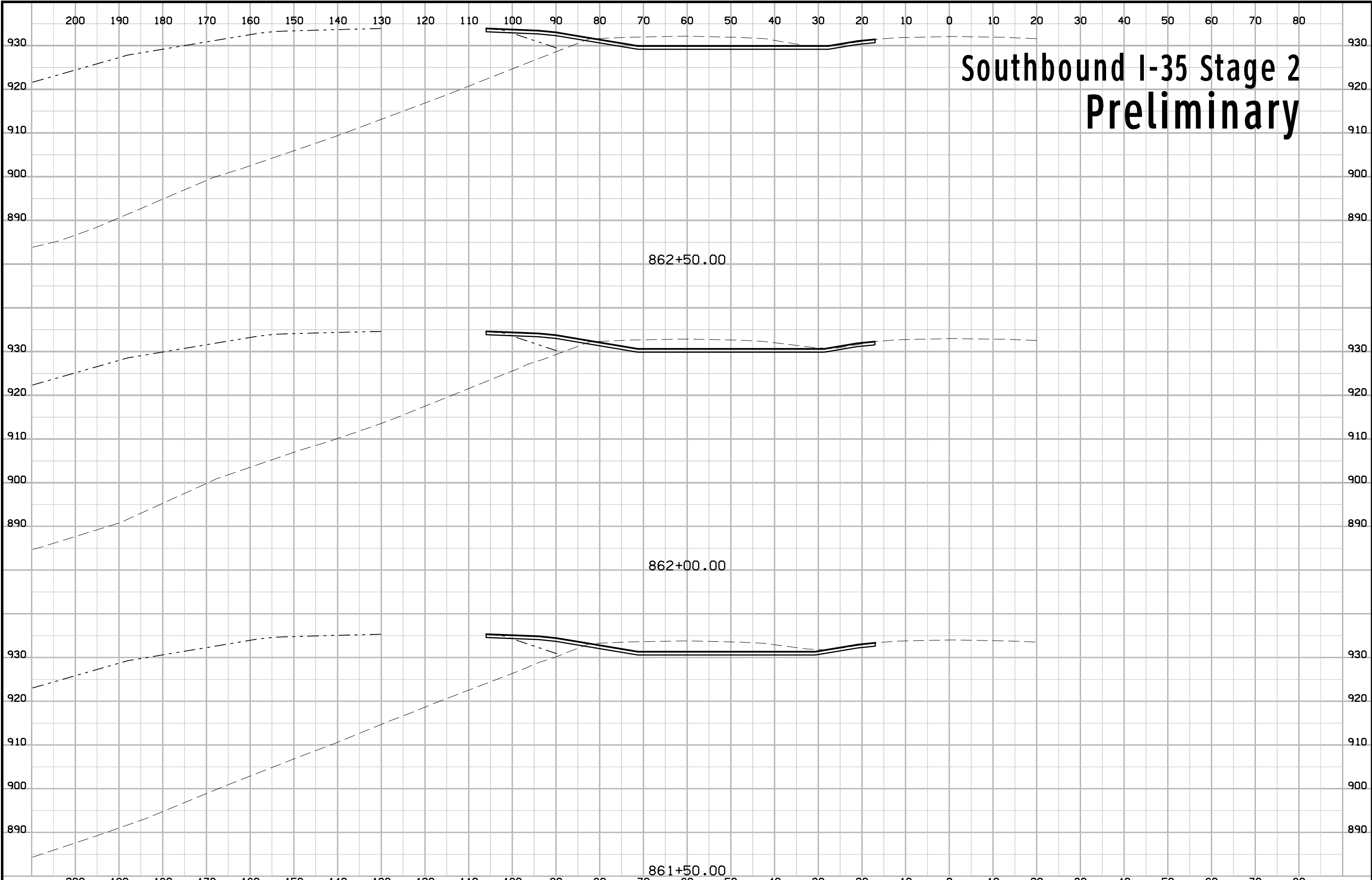
Southbound I-35 Stage 2 Preliminary

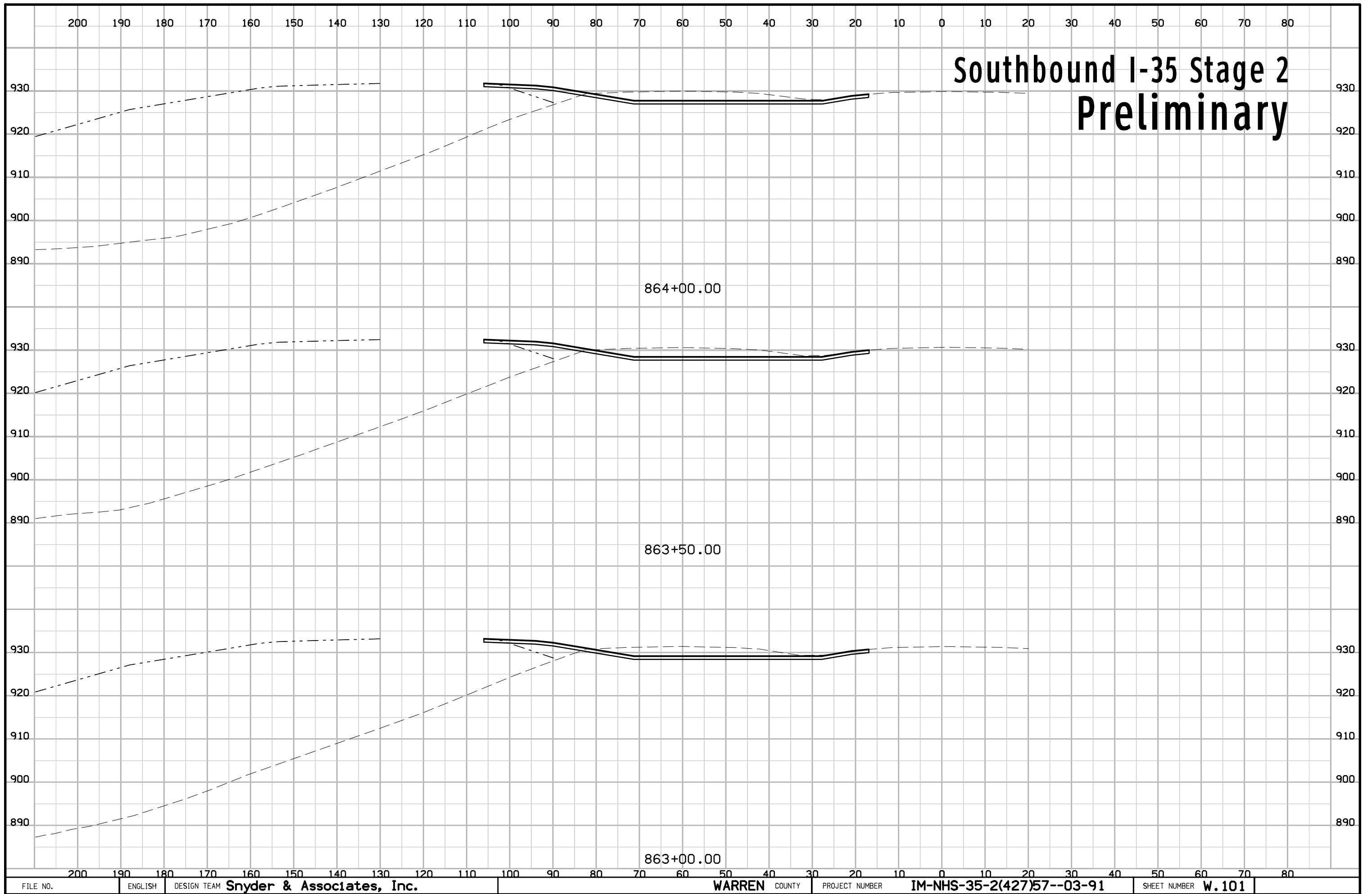


Southbound I-35 Stage 2 Preliminary



Southbound I-35 Stage 2 Preliminary

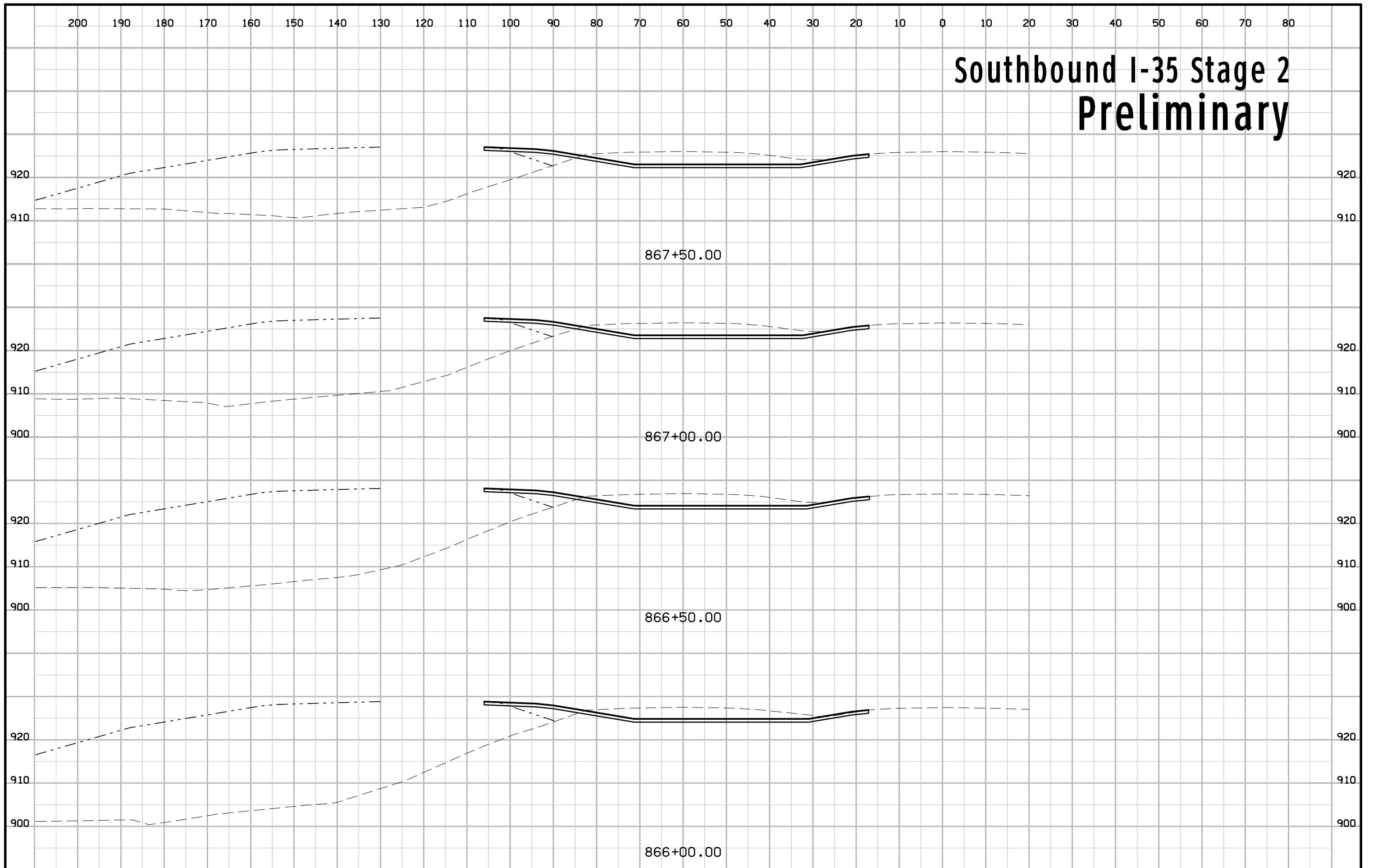




Southbound I-35 Stage 2 Preliminary



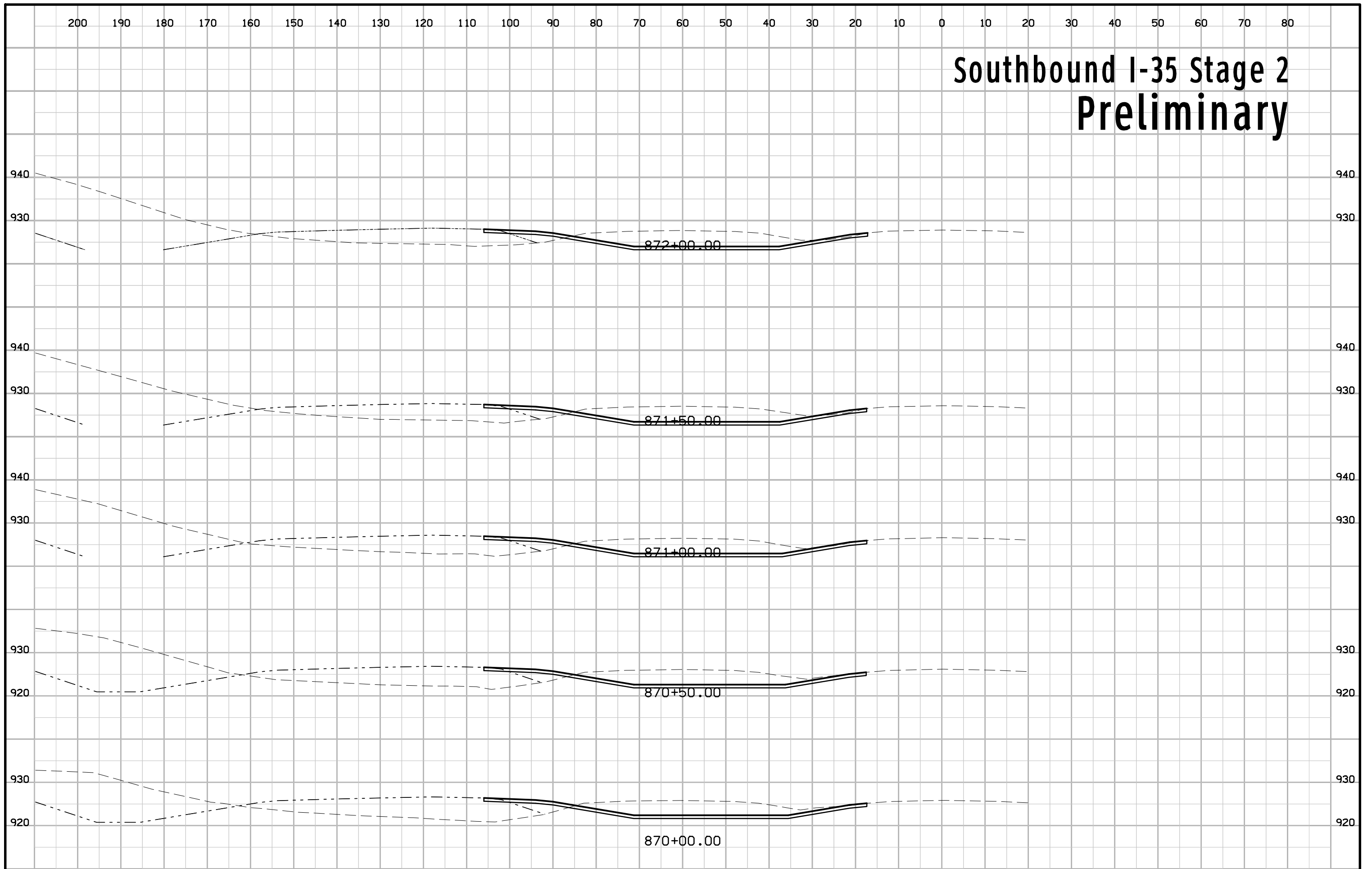
Southbound I-35 Stage 2 Preliminary



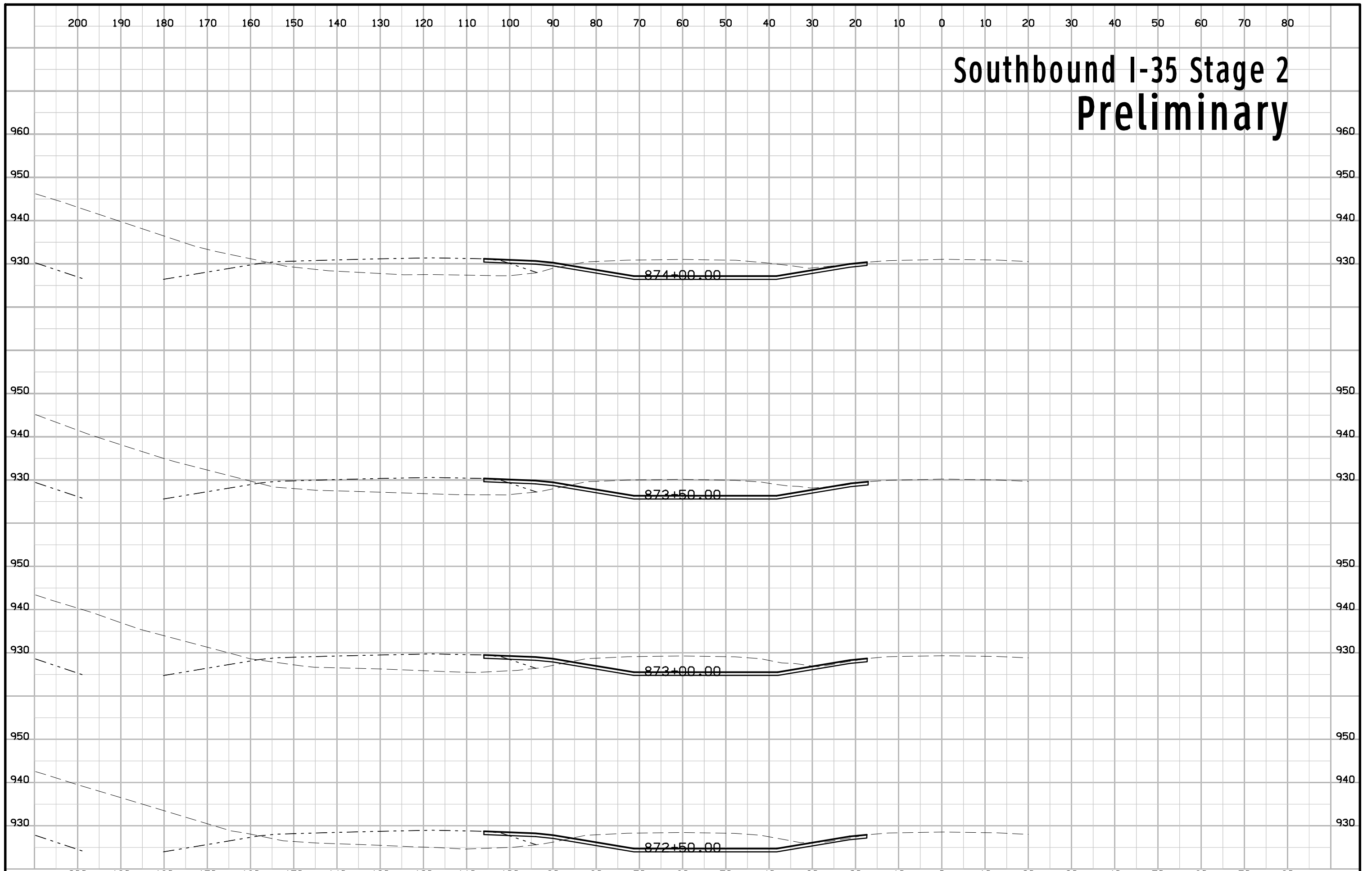
Southbound I-35 Stage 2 Preliminary



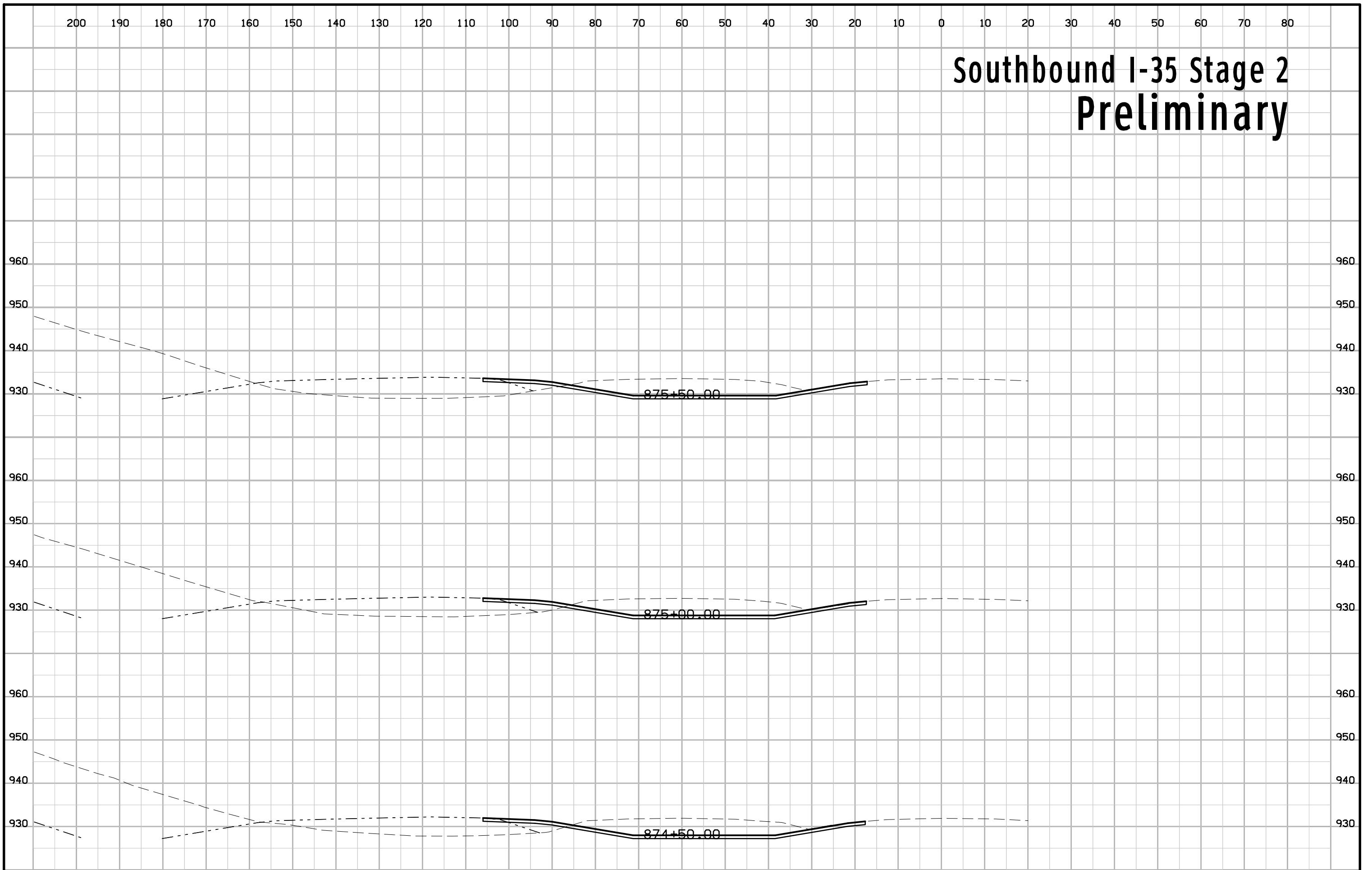
Southbound I-35 Stage 2 Preliminary



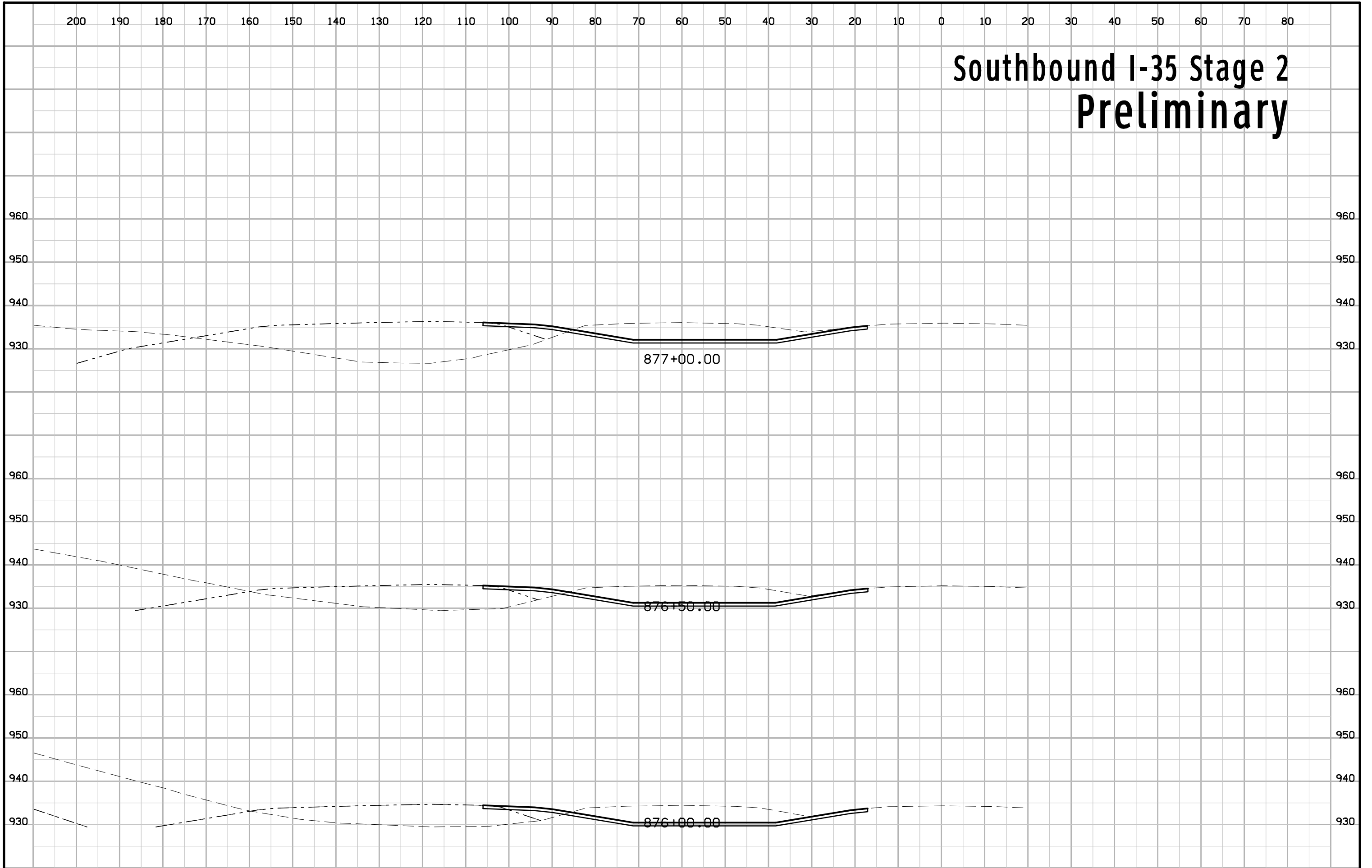
Southbound I-35 Stage 2 Preliminary



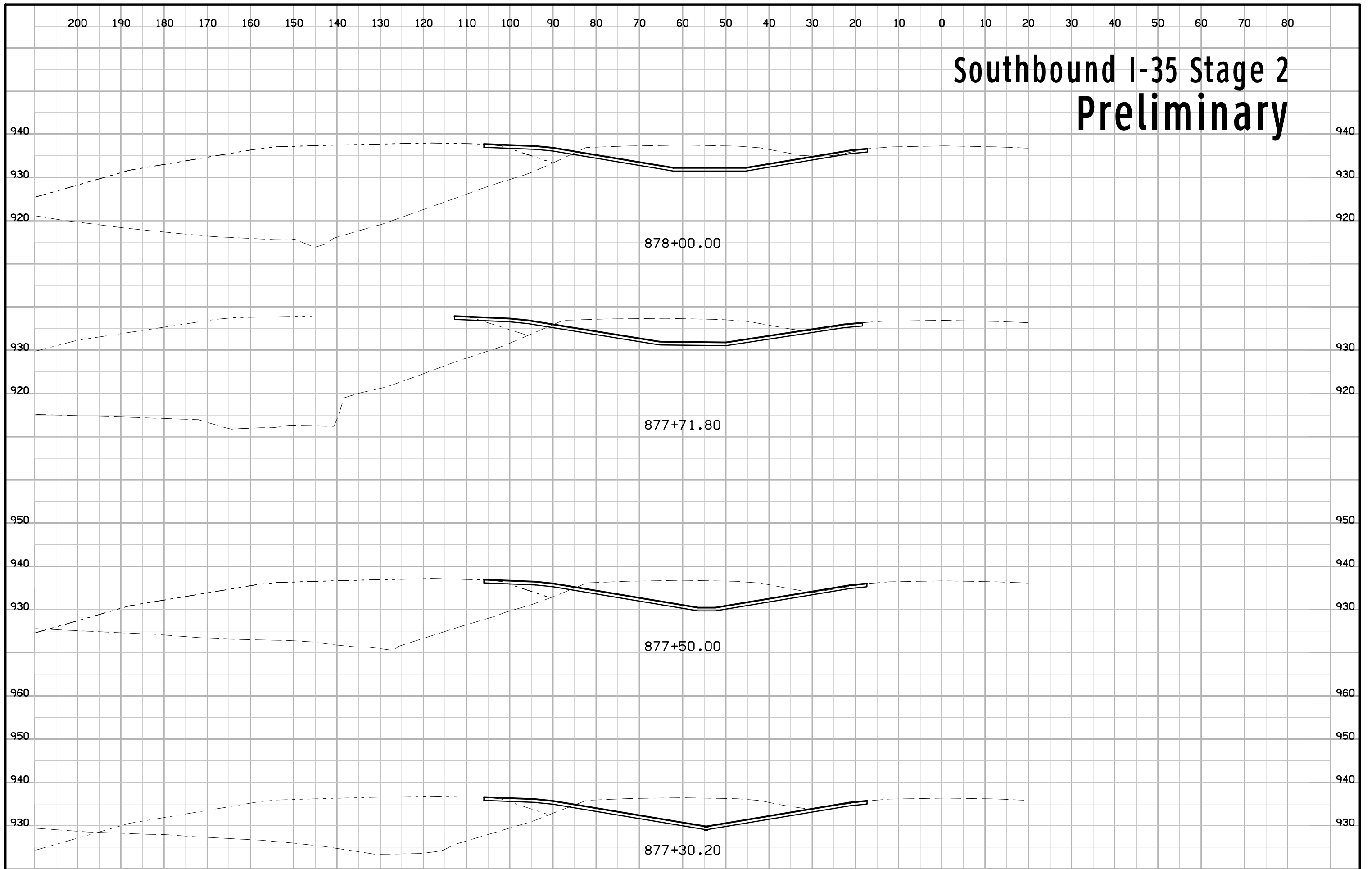
Southbound I-35 Stage 2 Preliminary



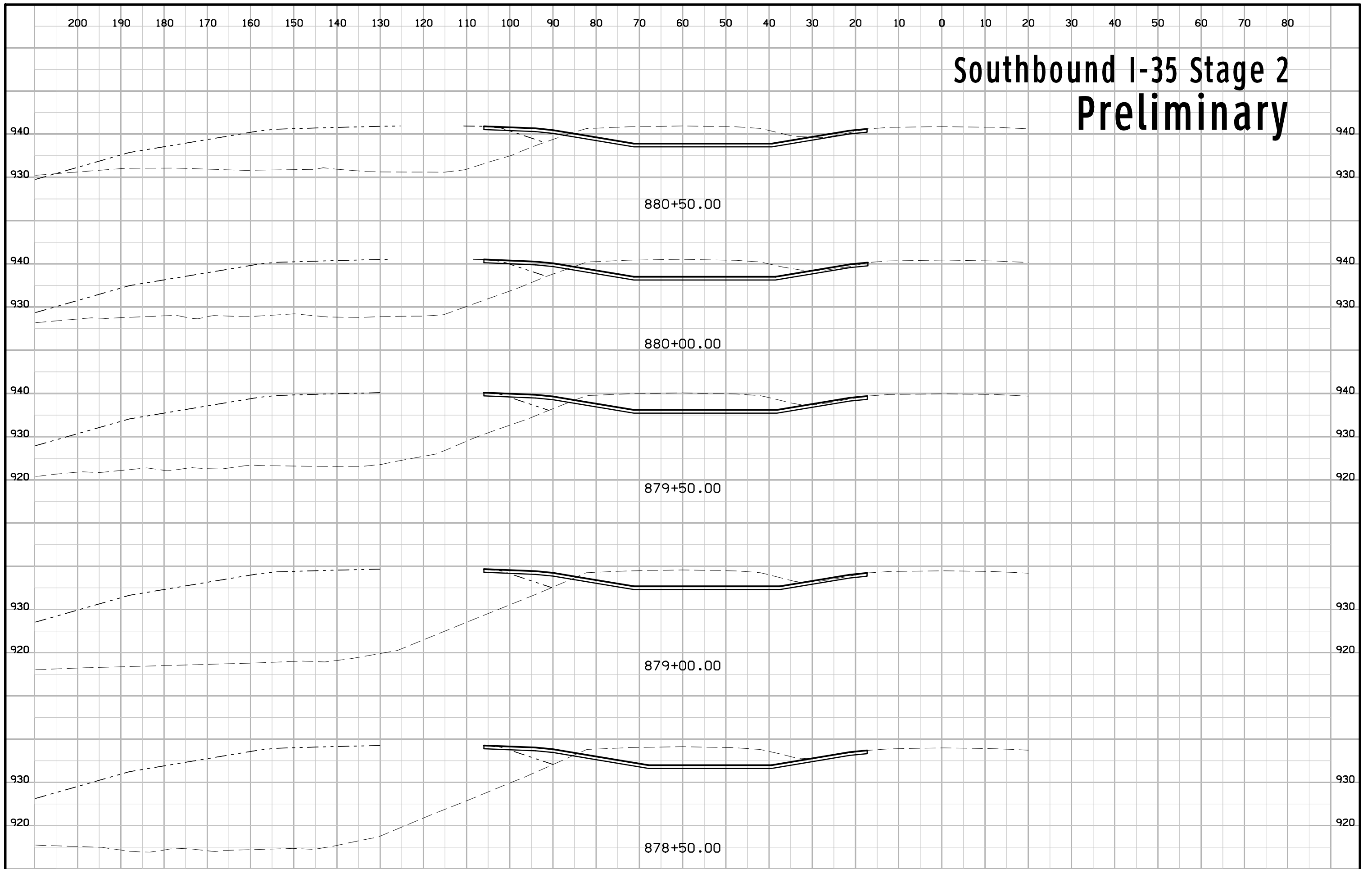
Southbound I-35 Stage 2 Preliminary



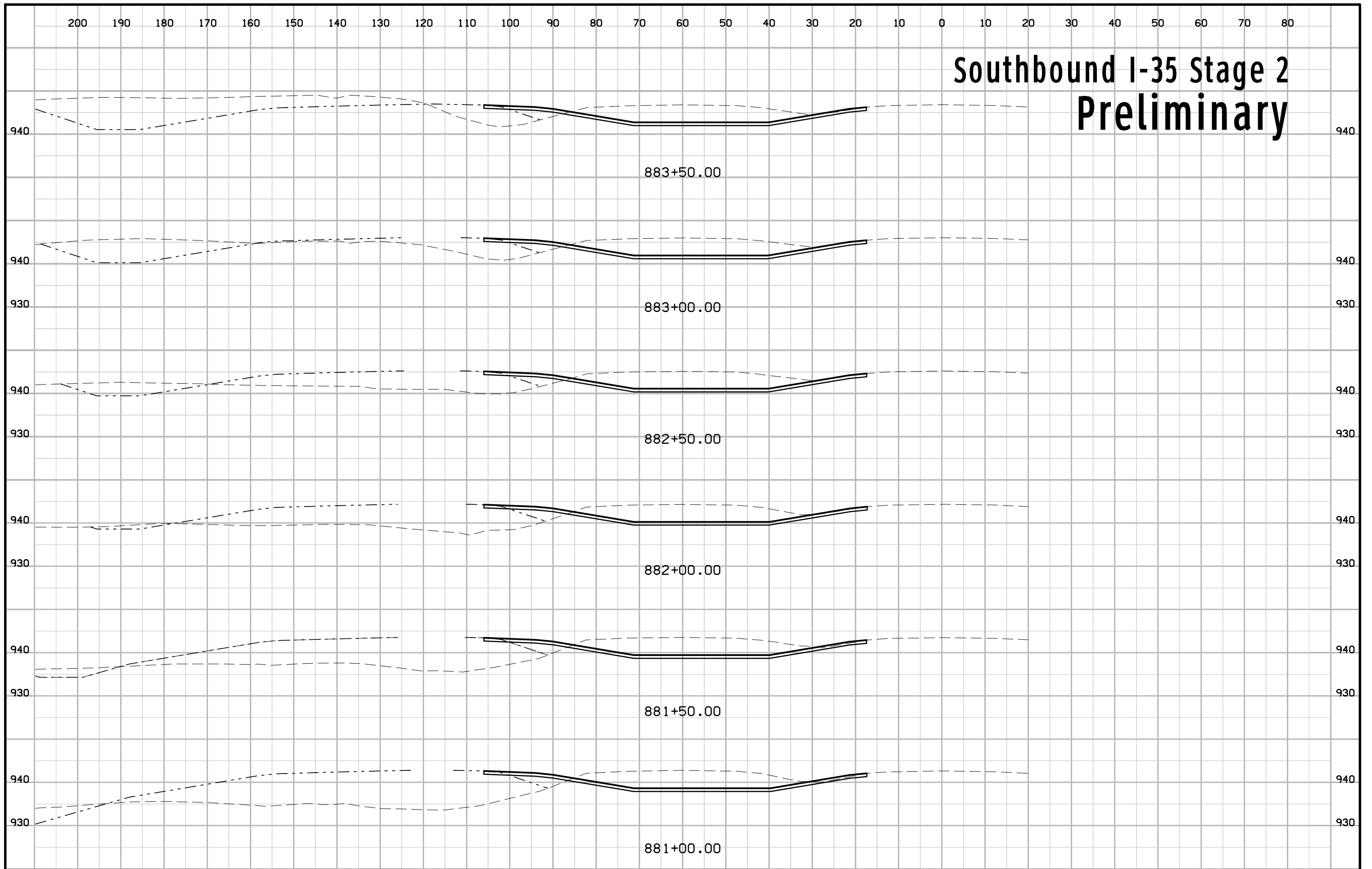
Southbound I-35 Stage 2 Preliminary



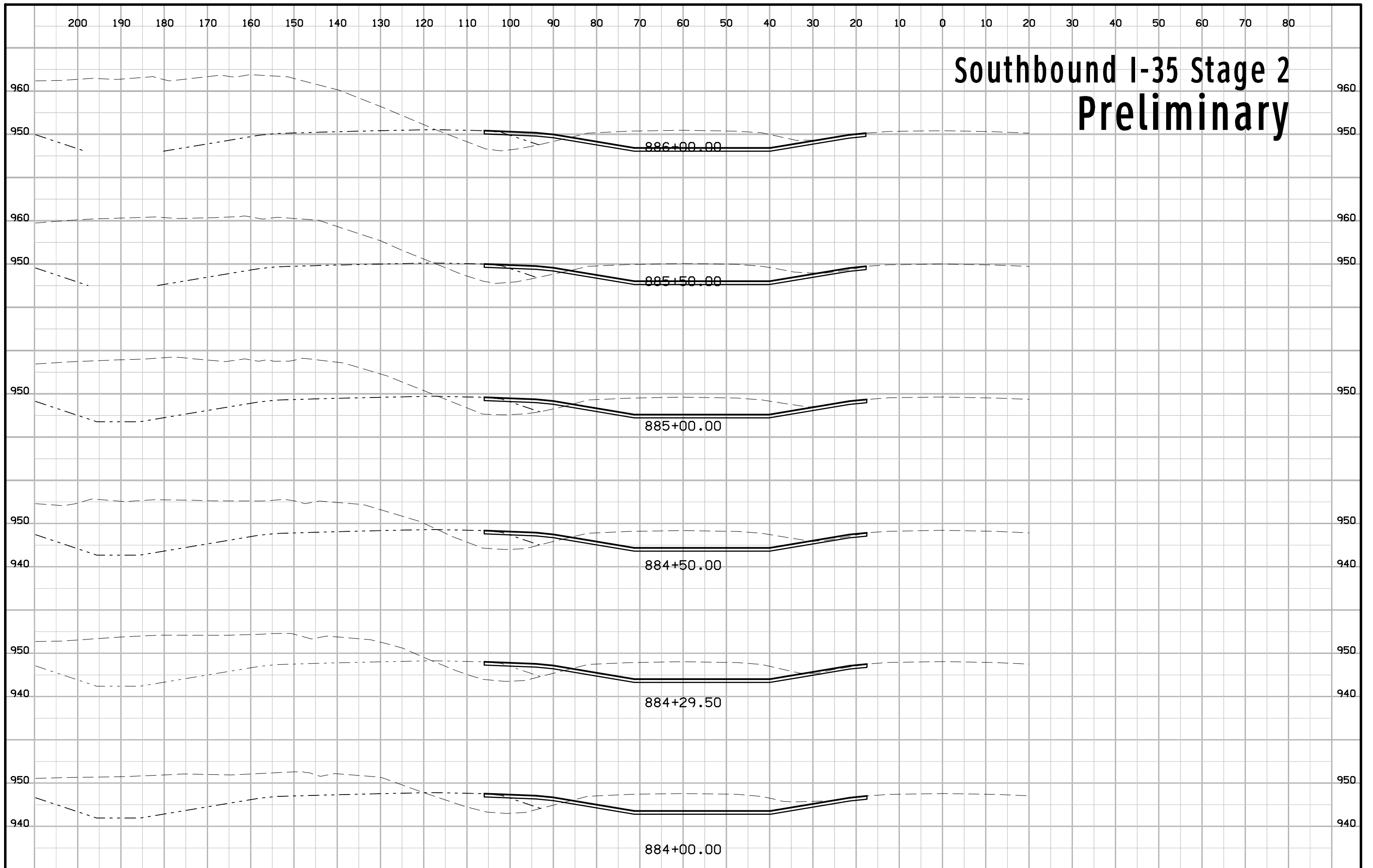
Southbound I-35 Stage 2 Preliminary



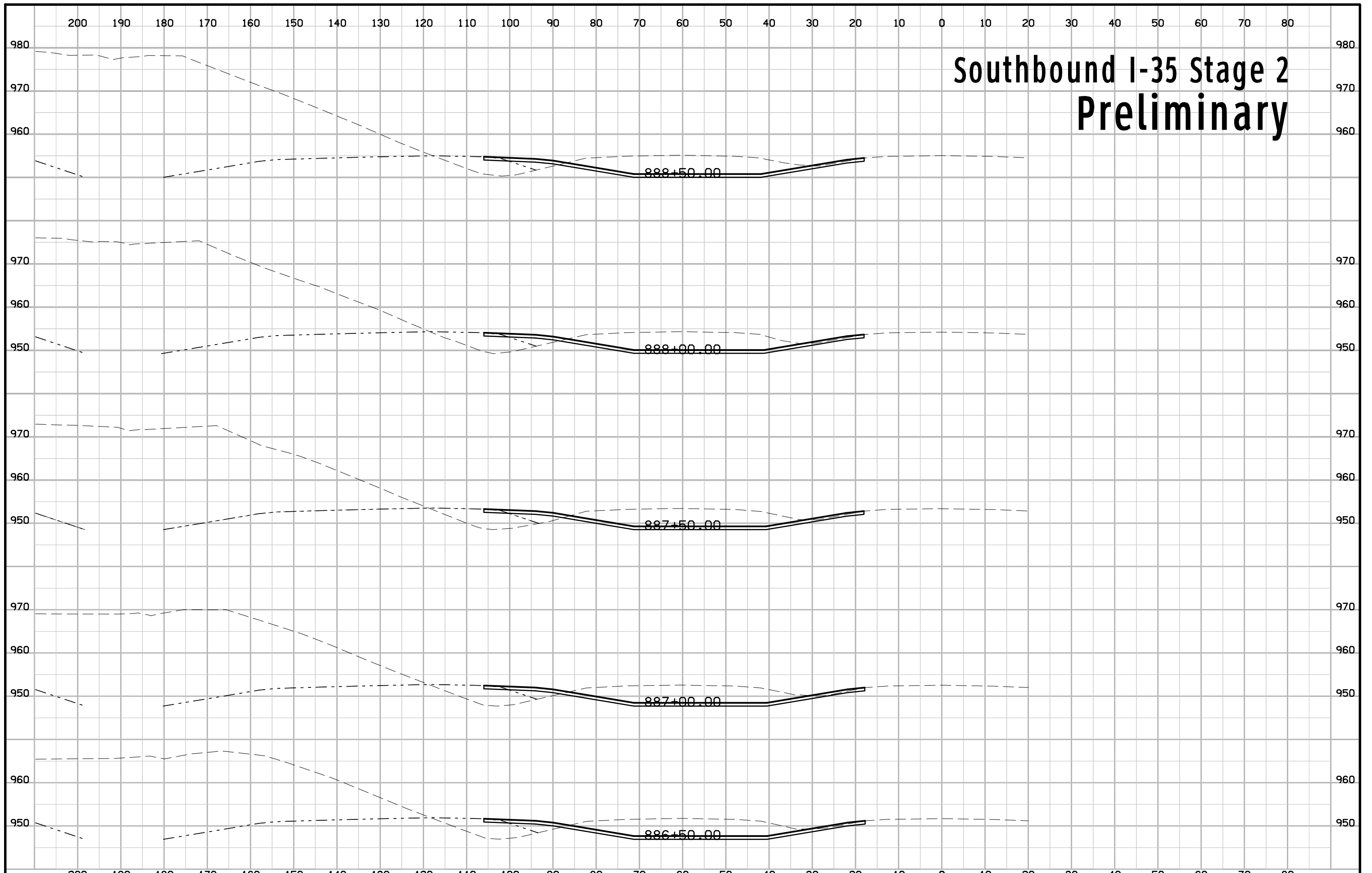
Southbound I-35 Stage 2 Preliminary



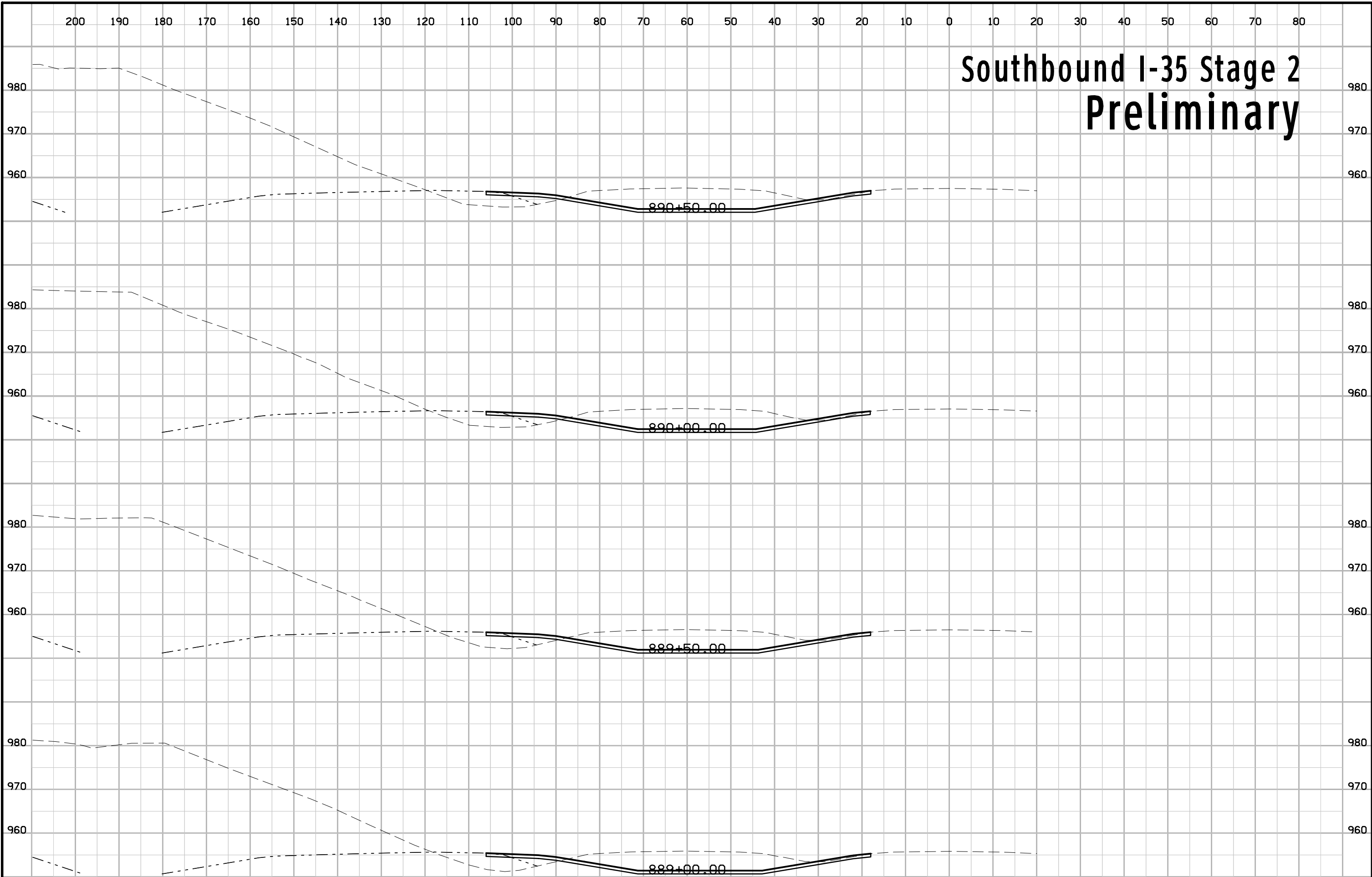
Southbound I-35 Stage 2 Preliminary



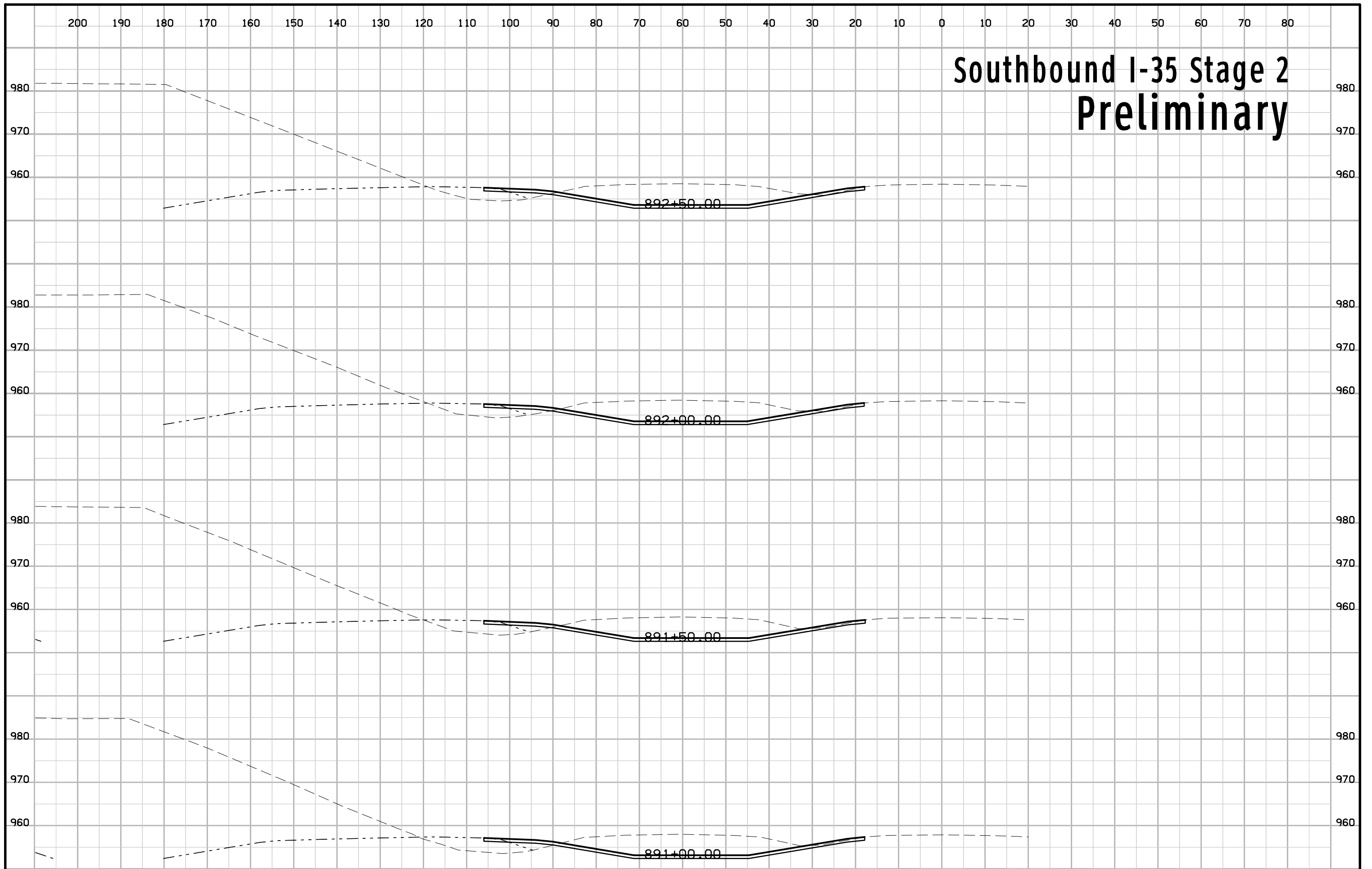
Southbound I-35 Stage 2 Preliminary



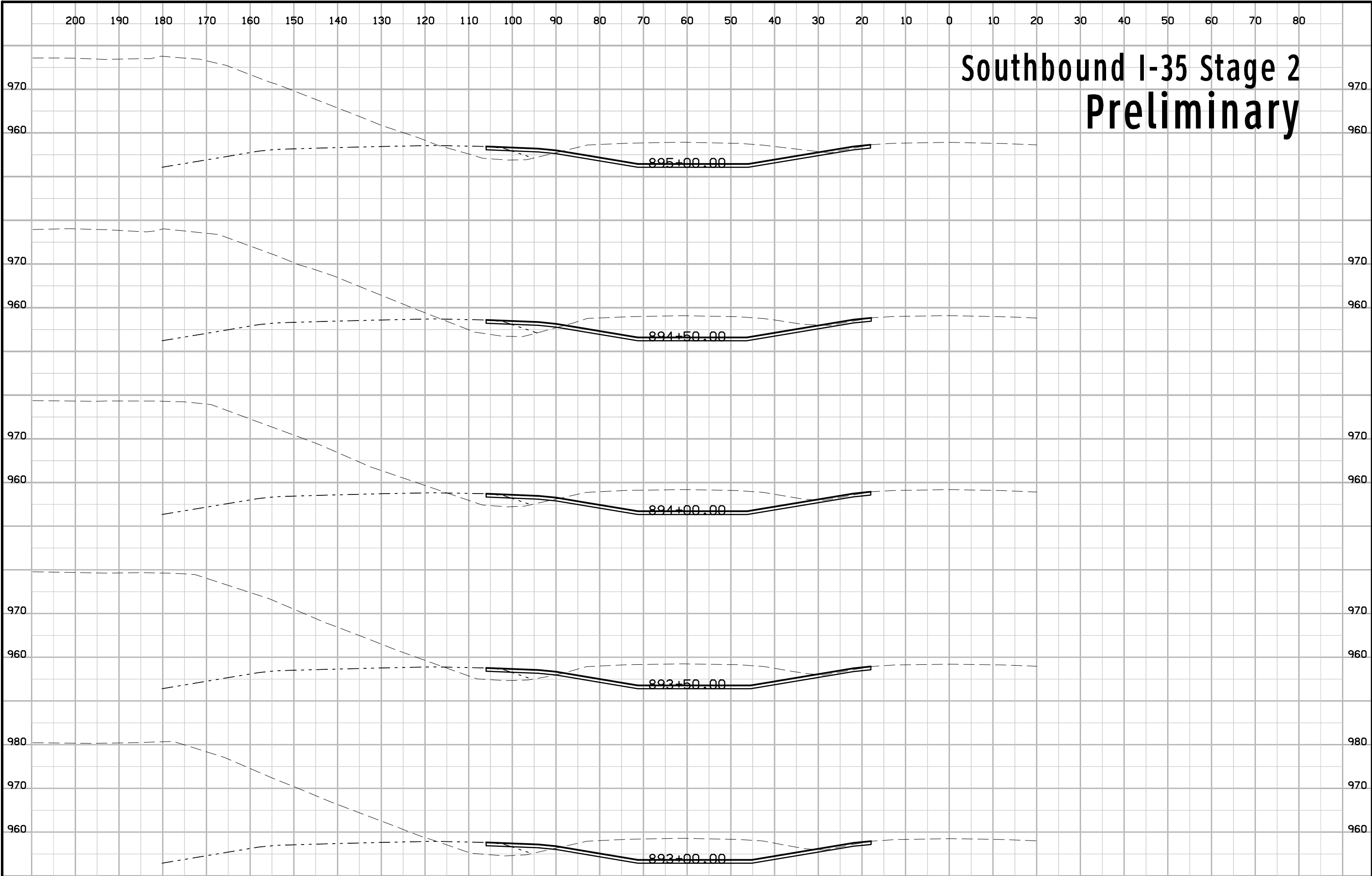
Southbound I-35 Stage 2 Preliminary

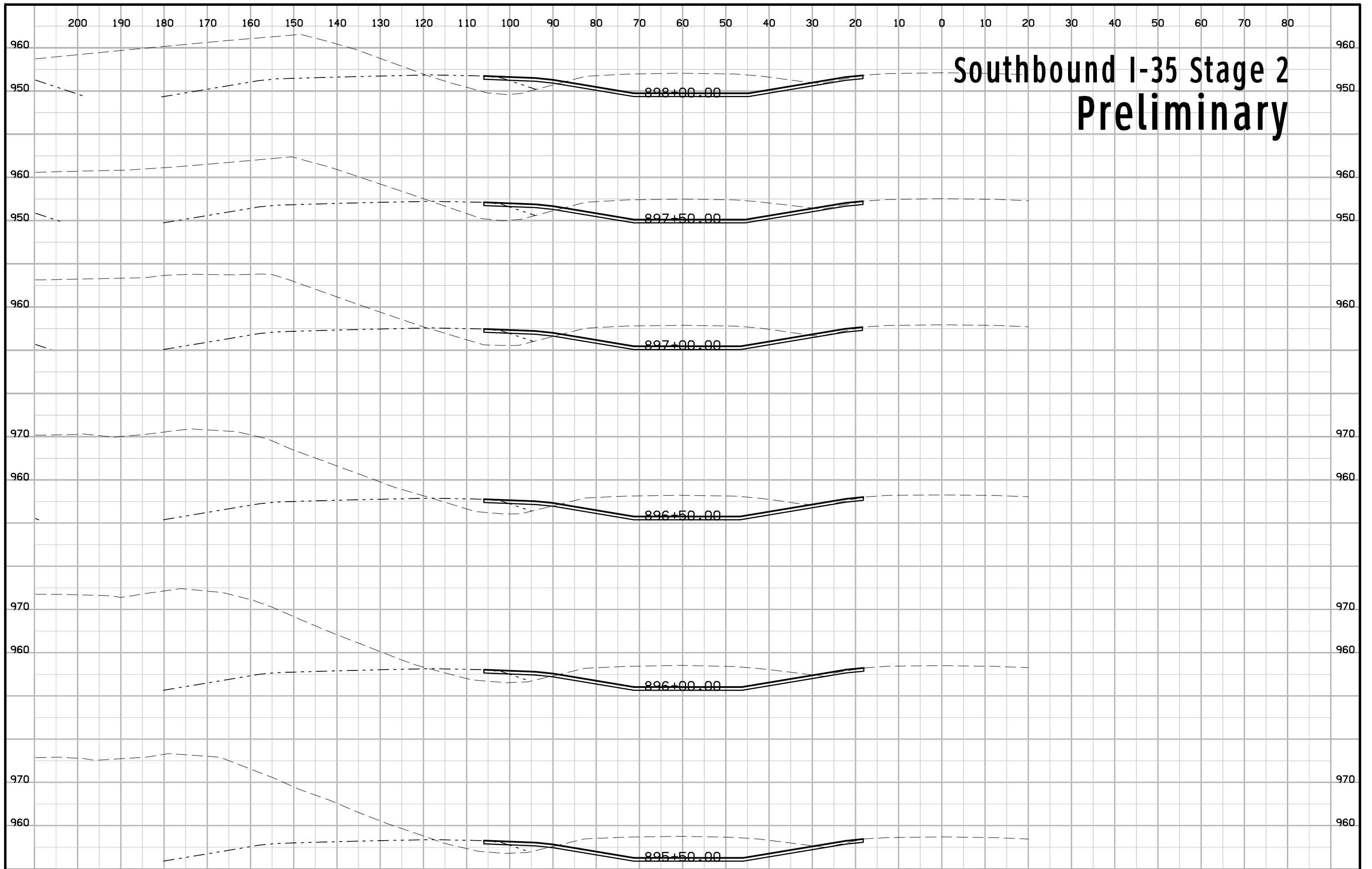


Southbound I-35 Stage 2 Preliminary

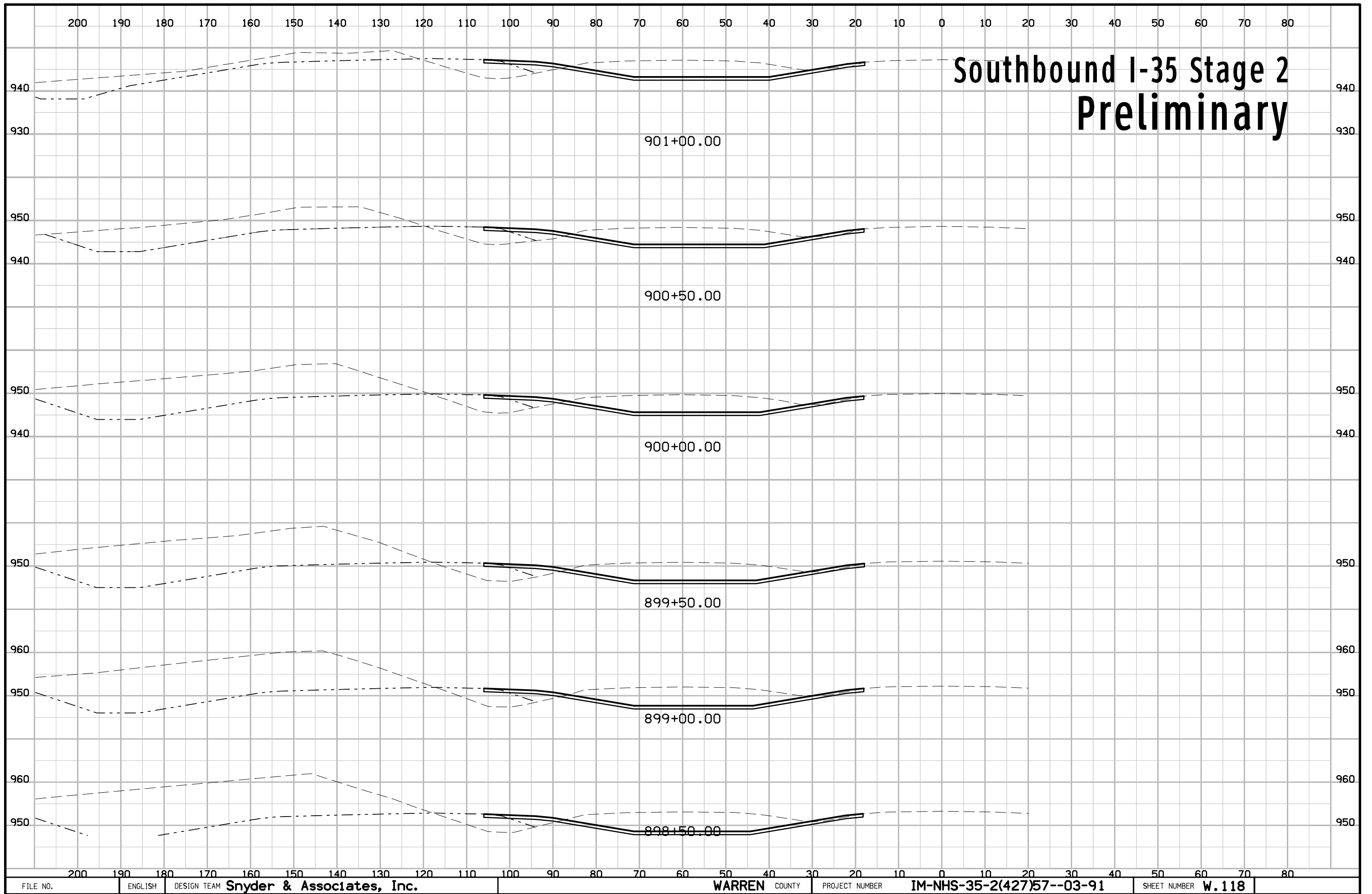


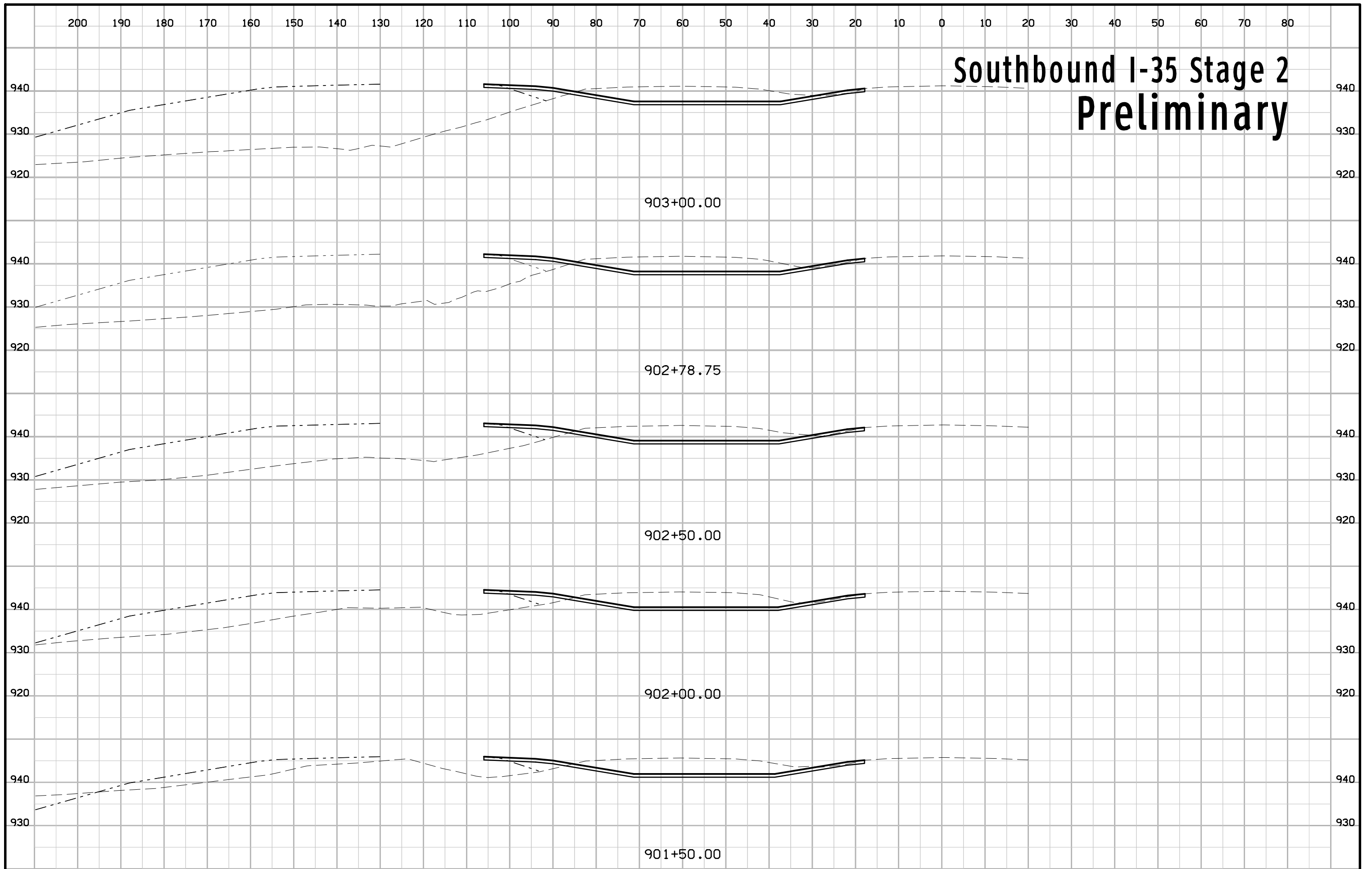
Southbound I-35 Stage 2 Preliminary





Southbound I-35 Stage 2 Preliminary





Southbound I-35 Stage 2 Preliminary

903+00.00

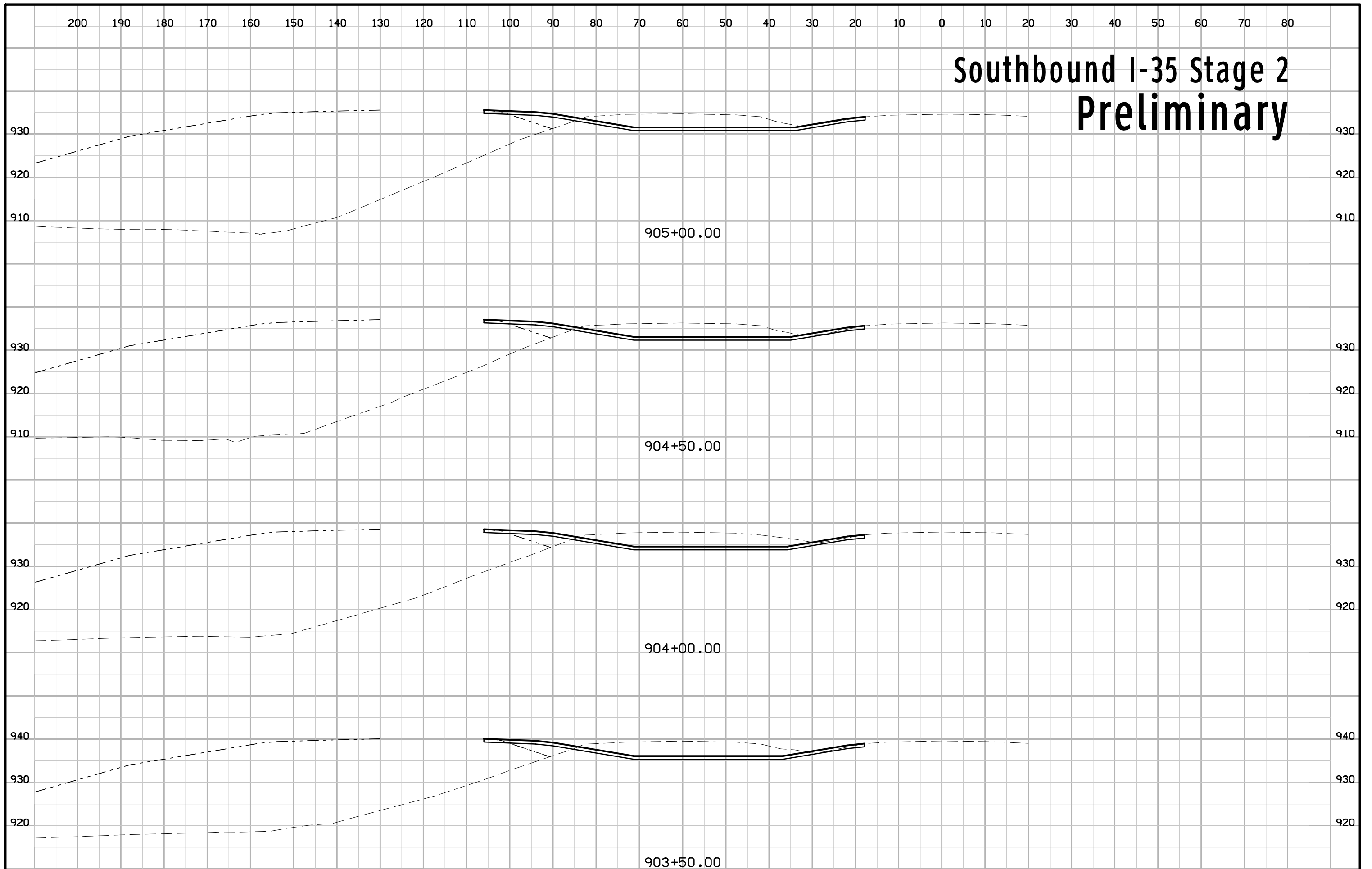
902+78.75

902+50.00

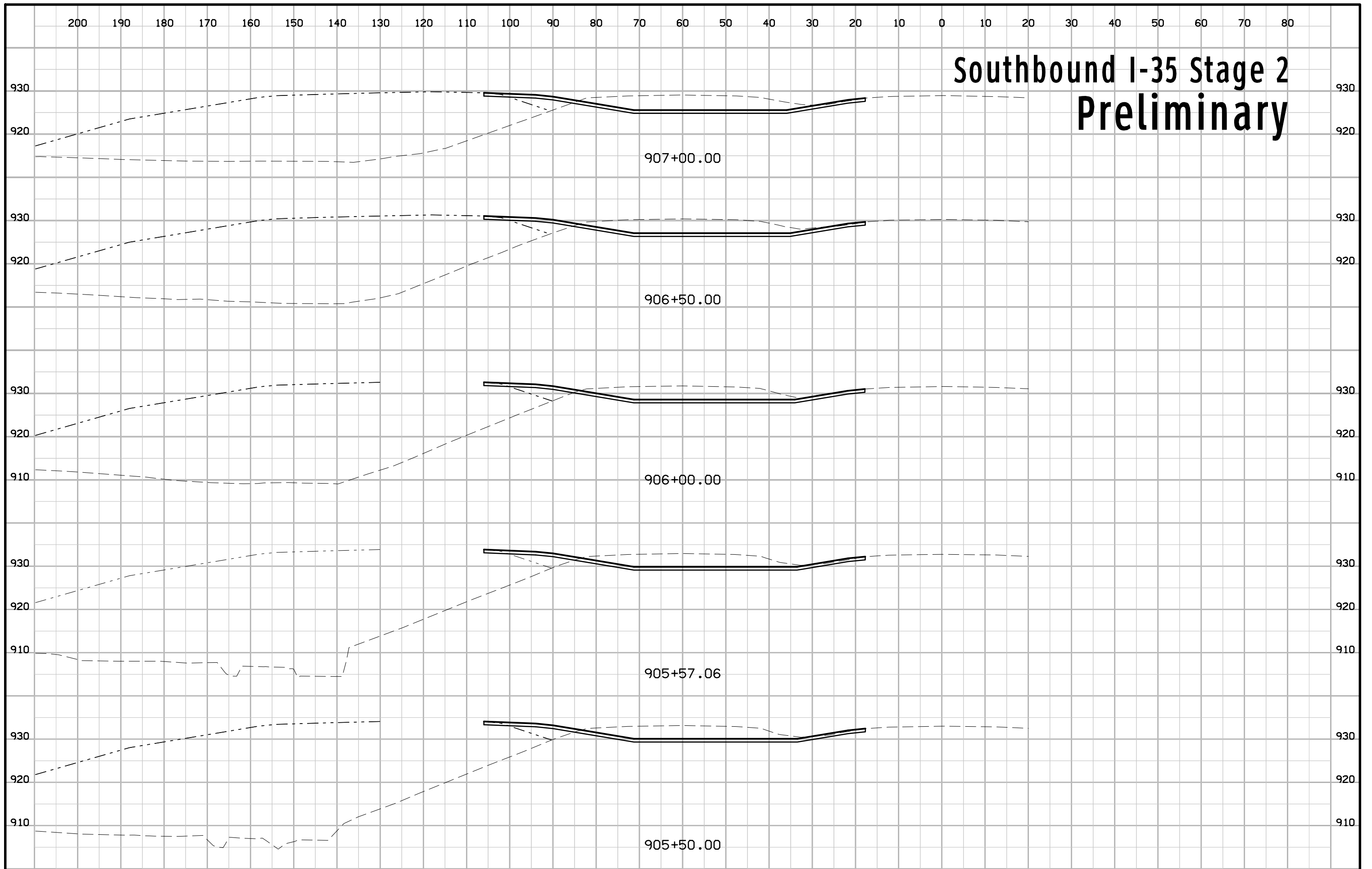
902+00.00

901+50.00

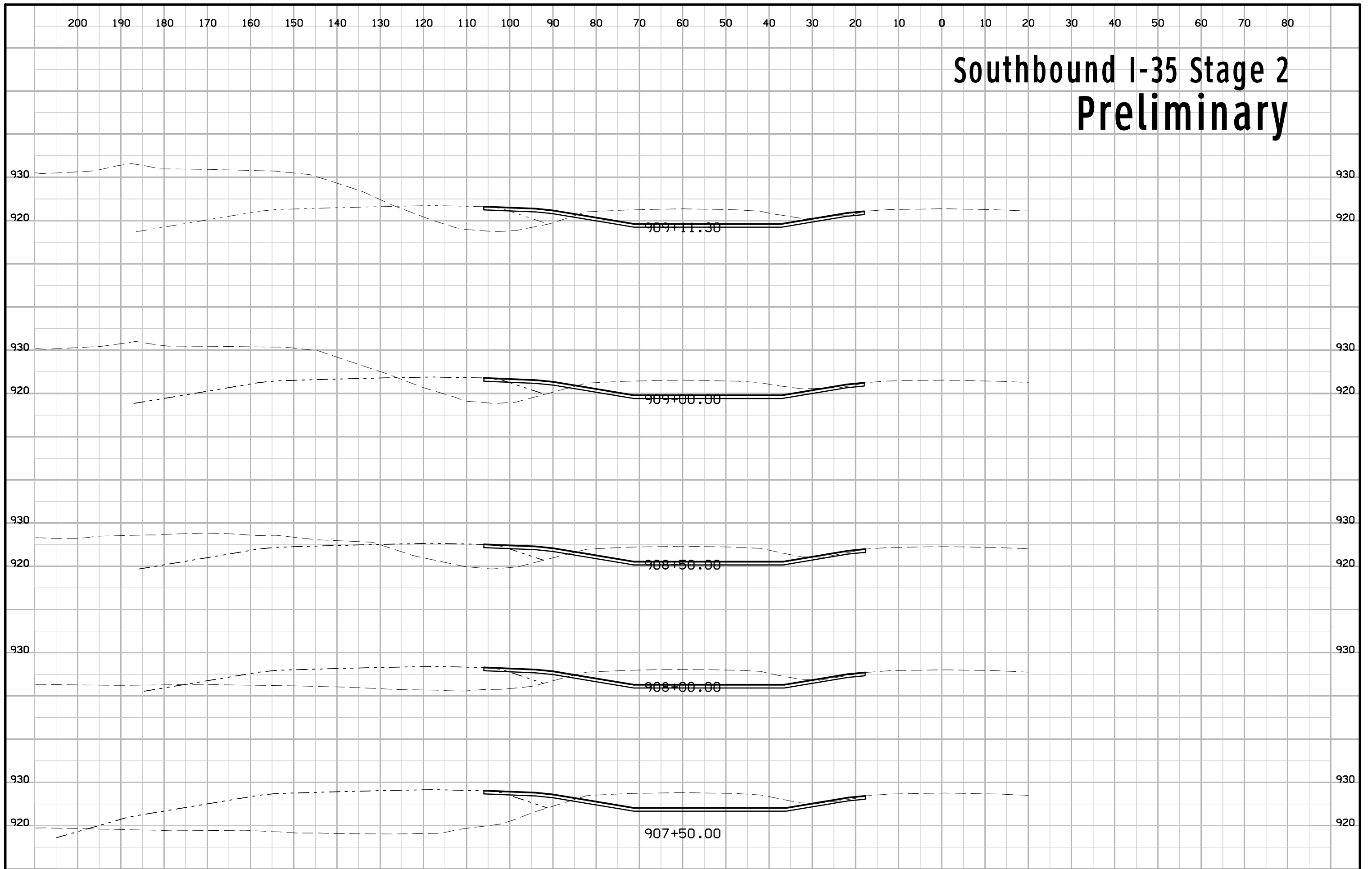
Southbound I-35 Stage 2 Preliminary



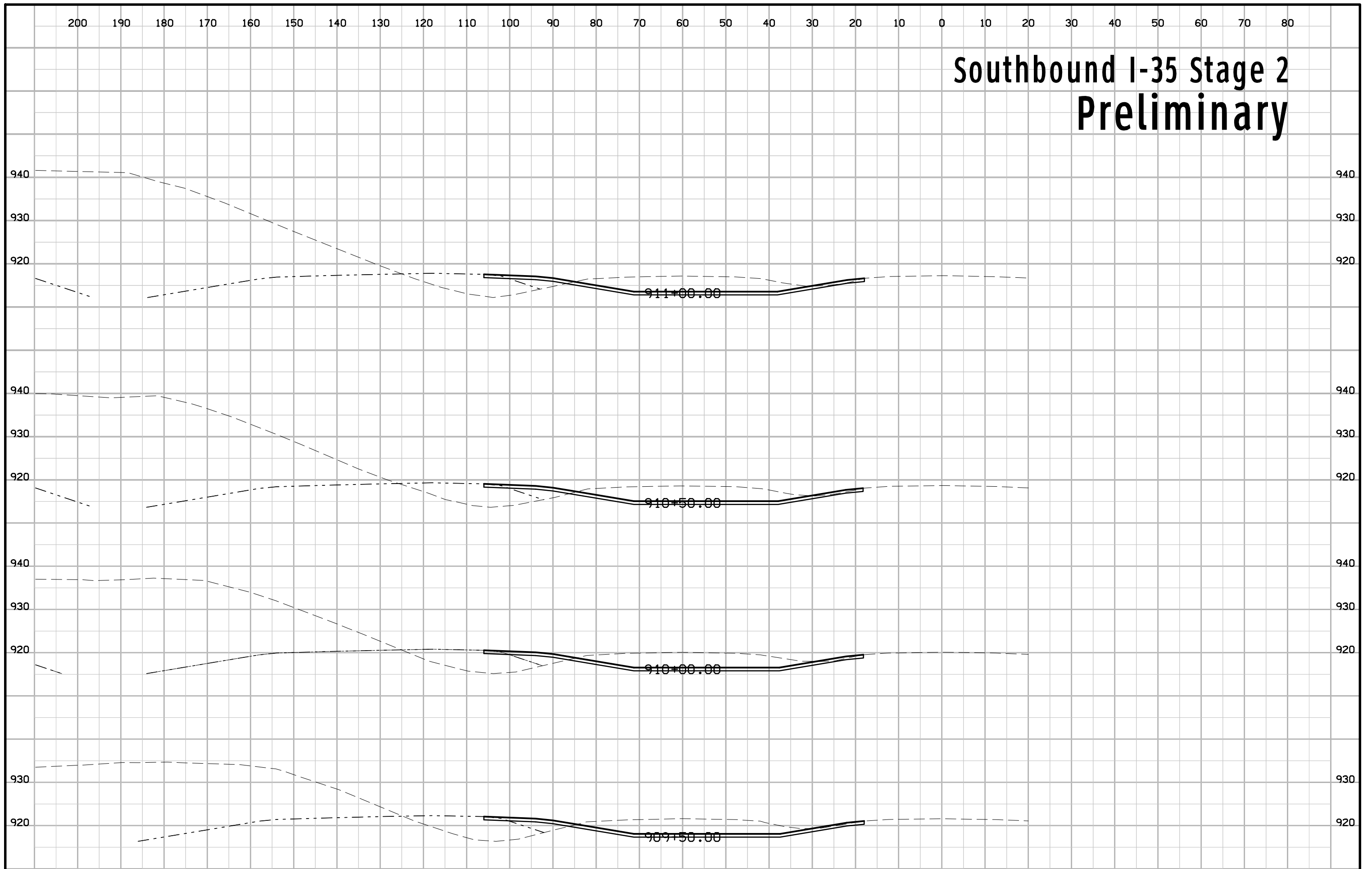
Southbound I-35 Stage 2 Preliminary



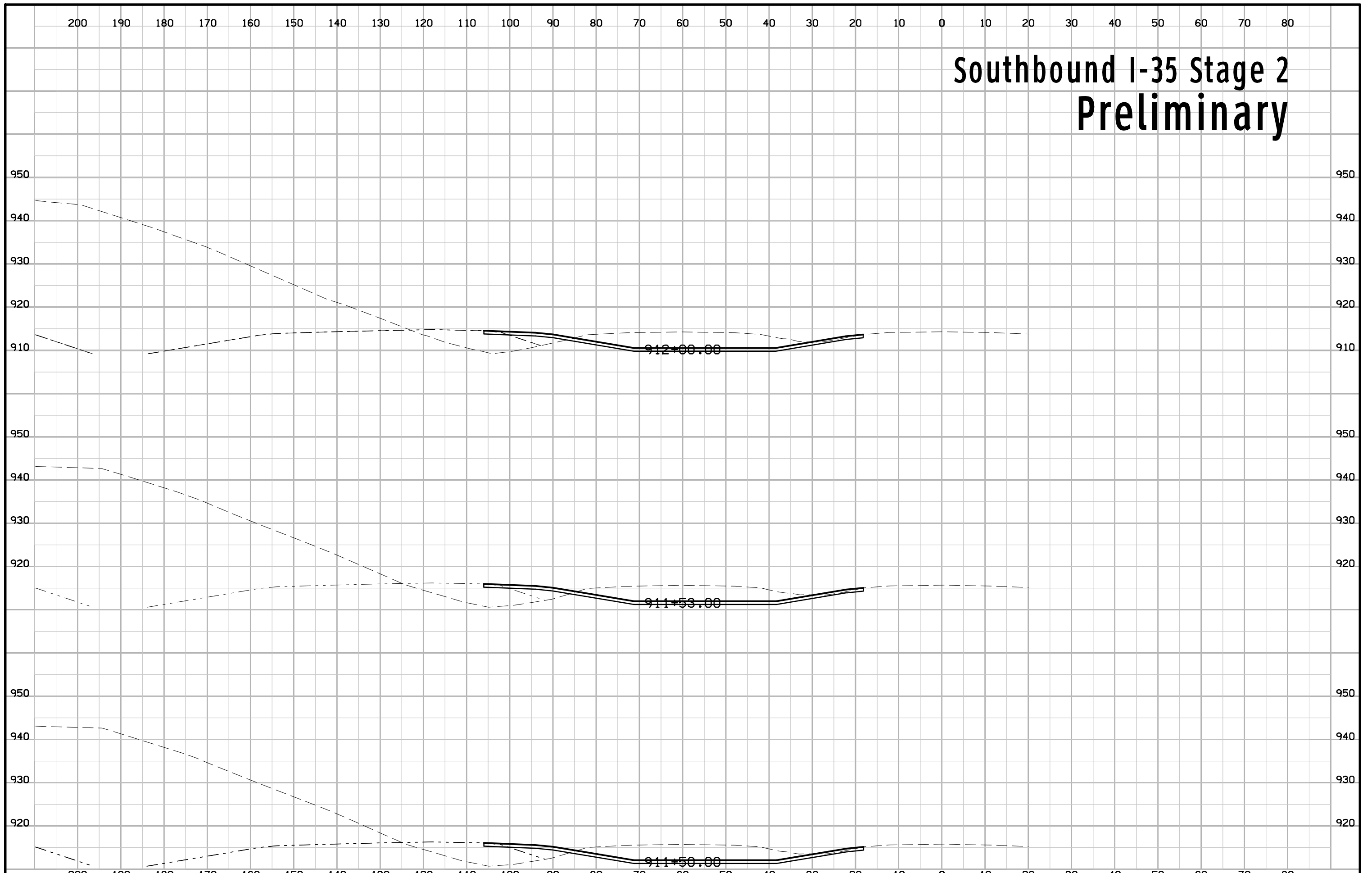
Southbound I-35 Stage 2 Preliminary



Southbound I-35 Stage 2 Preliminary



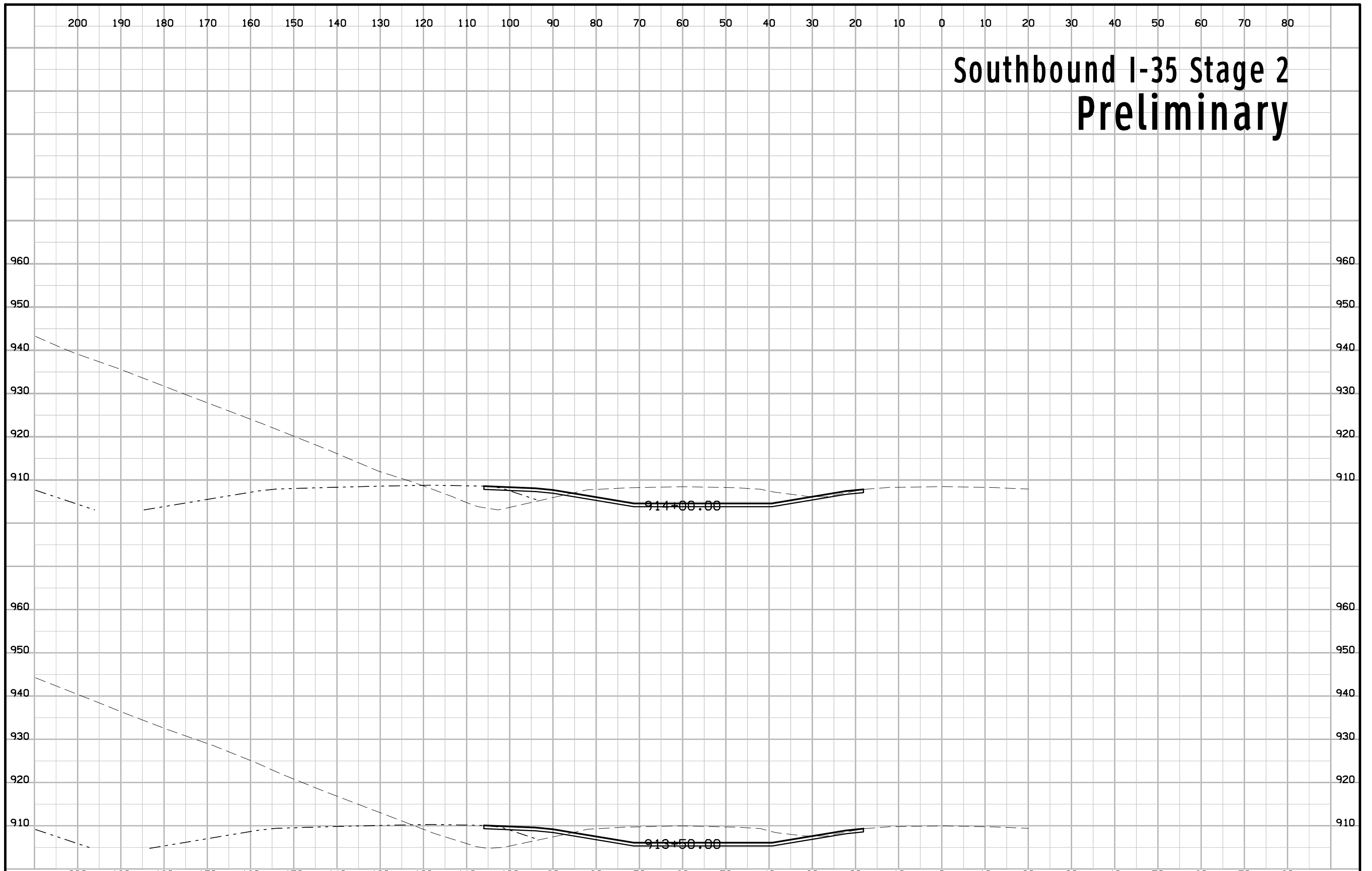
Southbound I-35 Stage 2 Preliminary



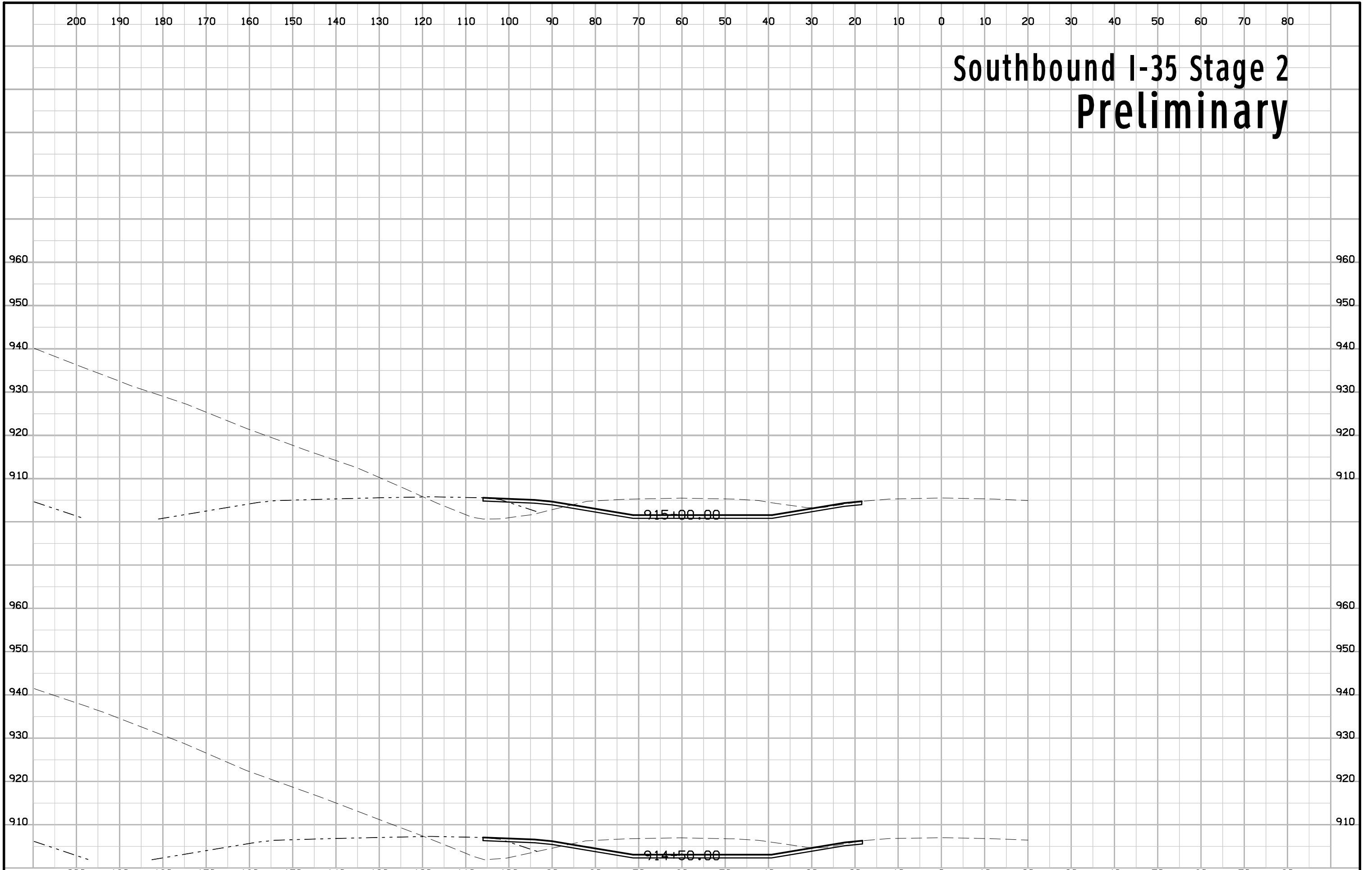
Southbound I-35 Stage 2 Preliminary



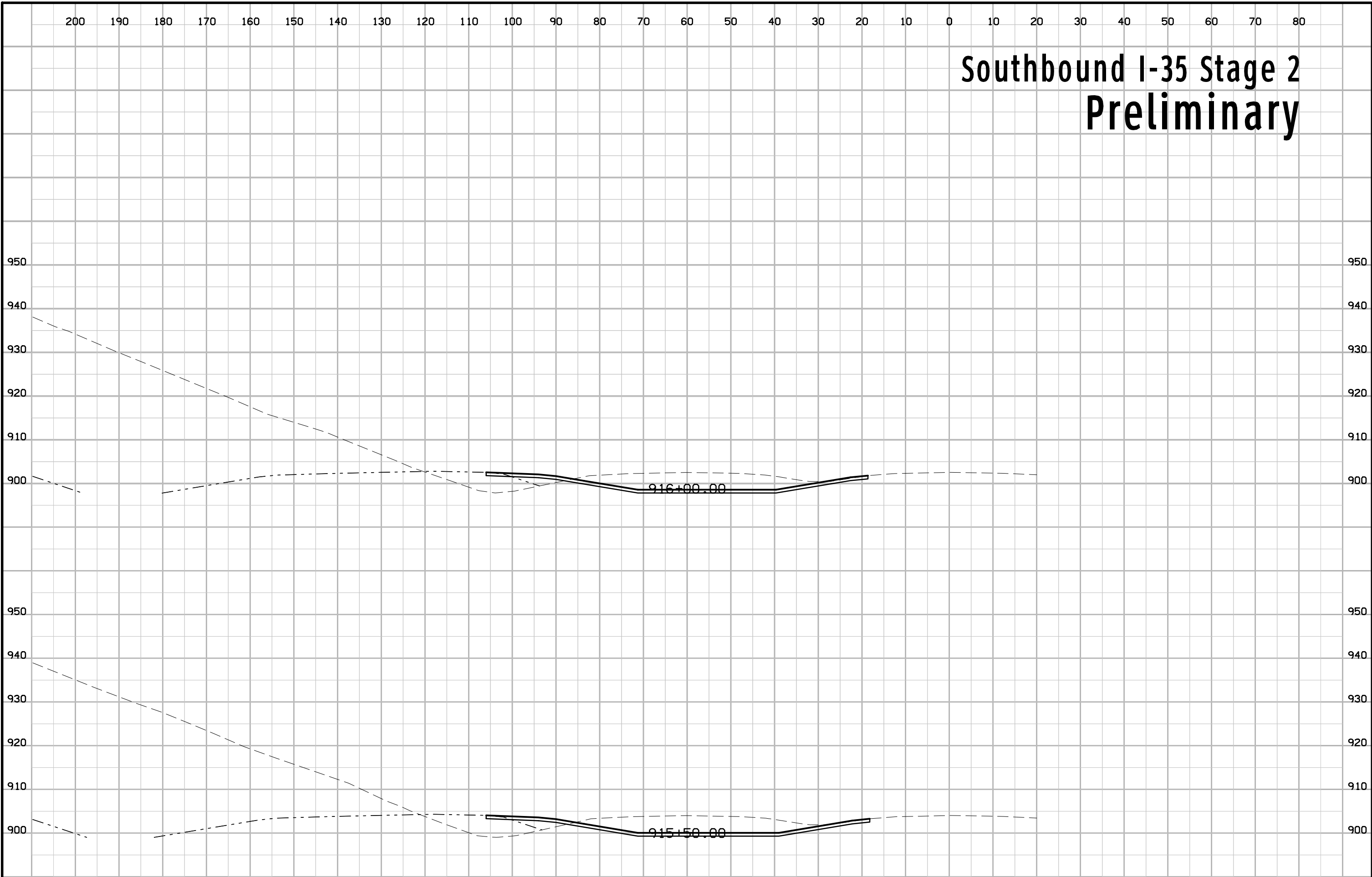
Southbound I-35 Stage 2 Preliminary



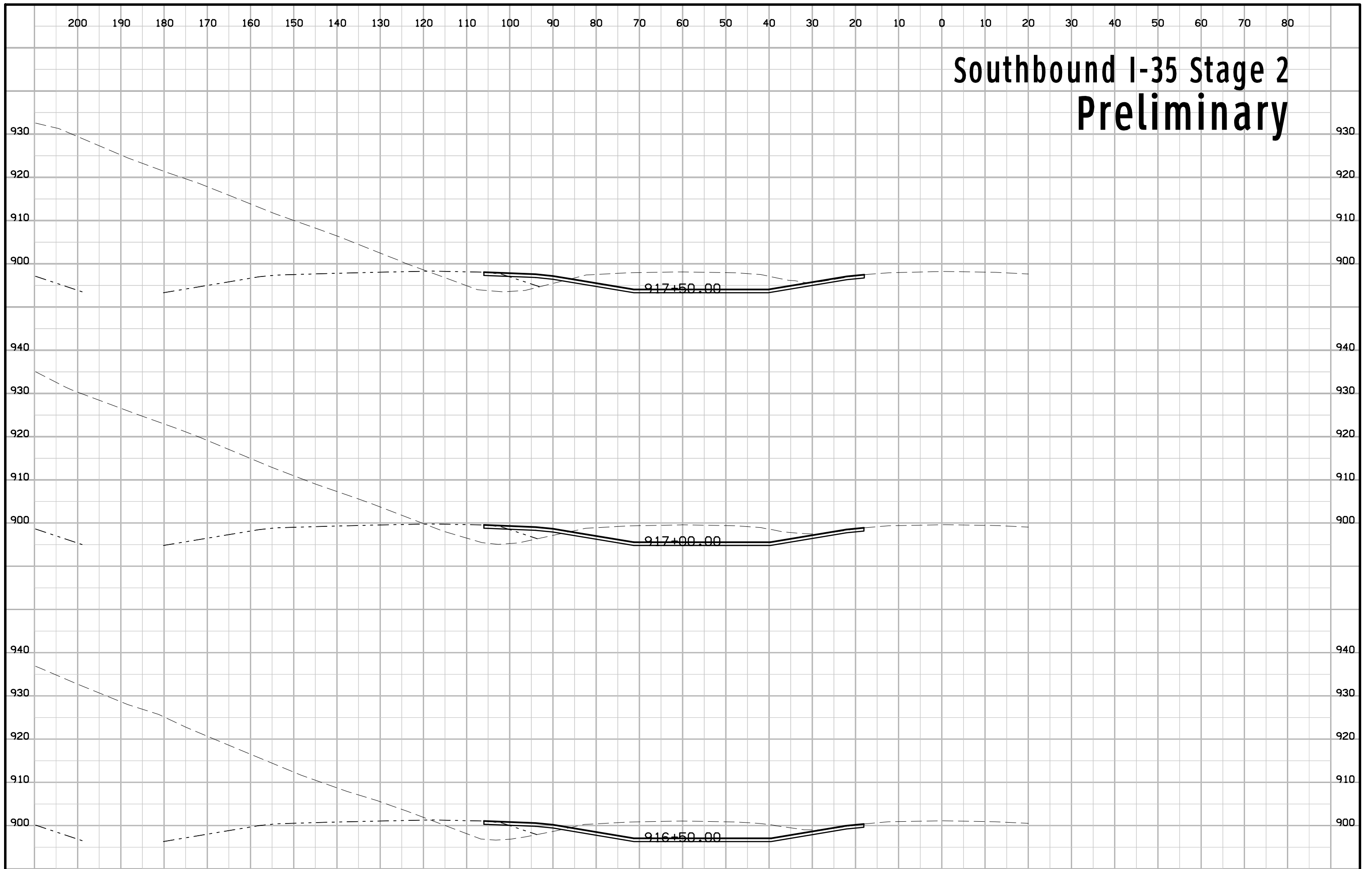
Southbound I-35 Stage 2 Preliminary



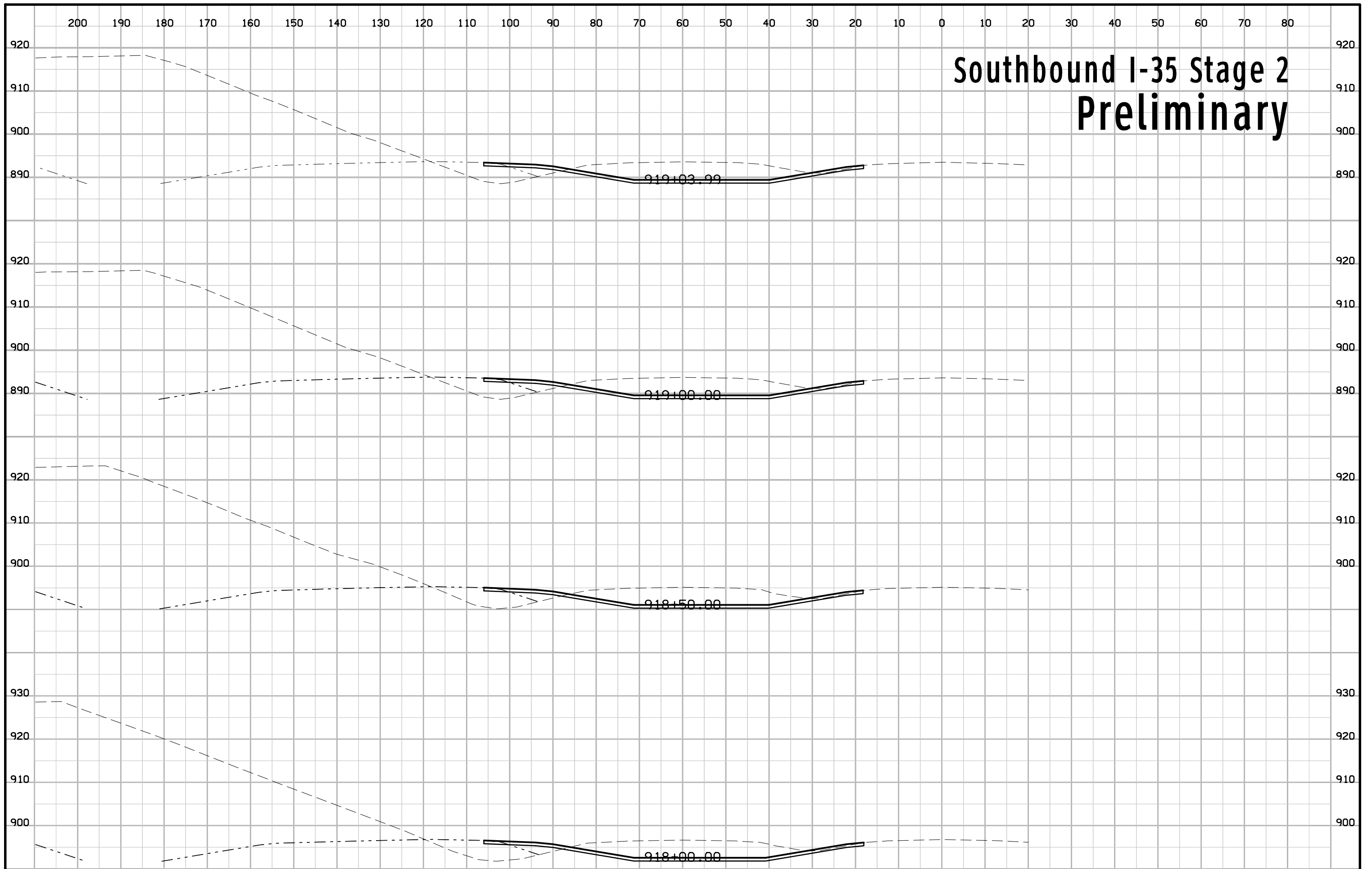
Southbound I-35 Stage 2 Preliminary



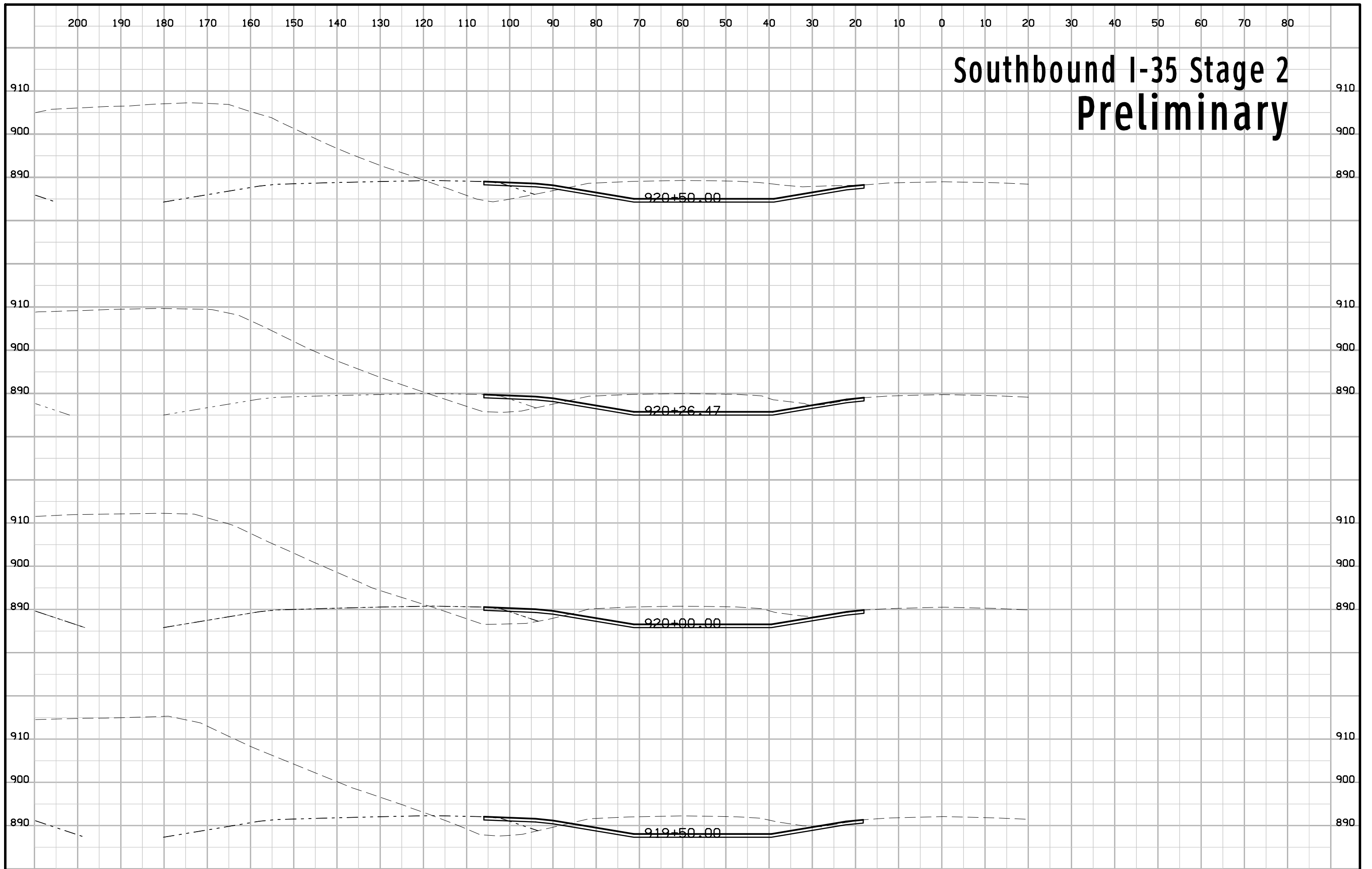
Southbound I-35 Stage 2 Preliminary



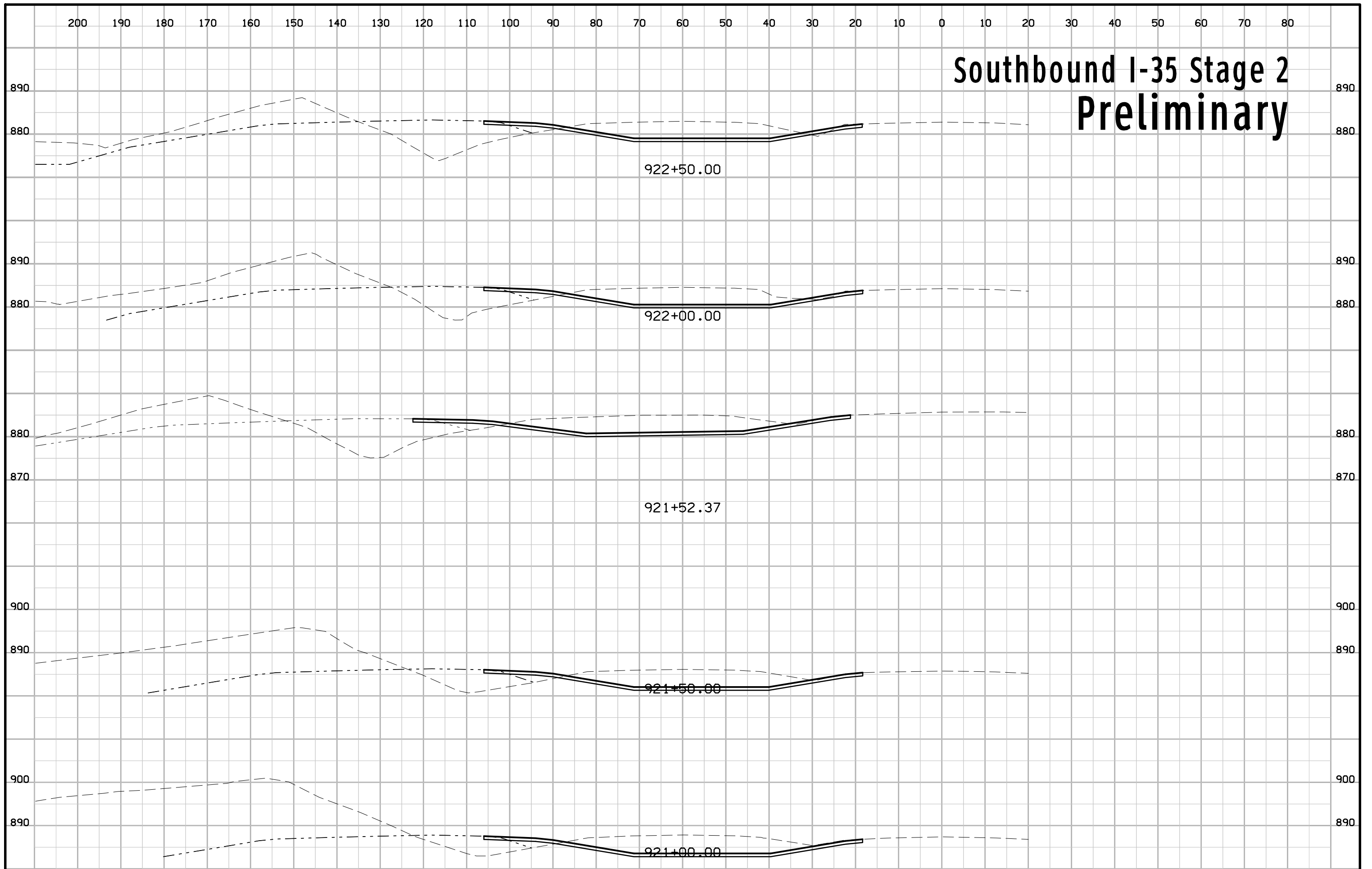
Southbound I-35 Stage 2 Preliminary



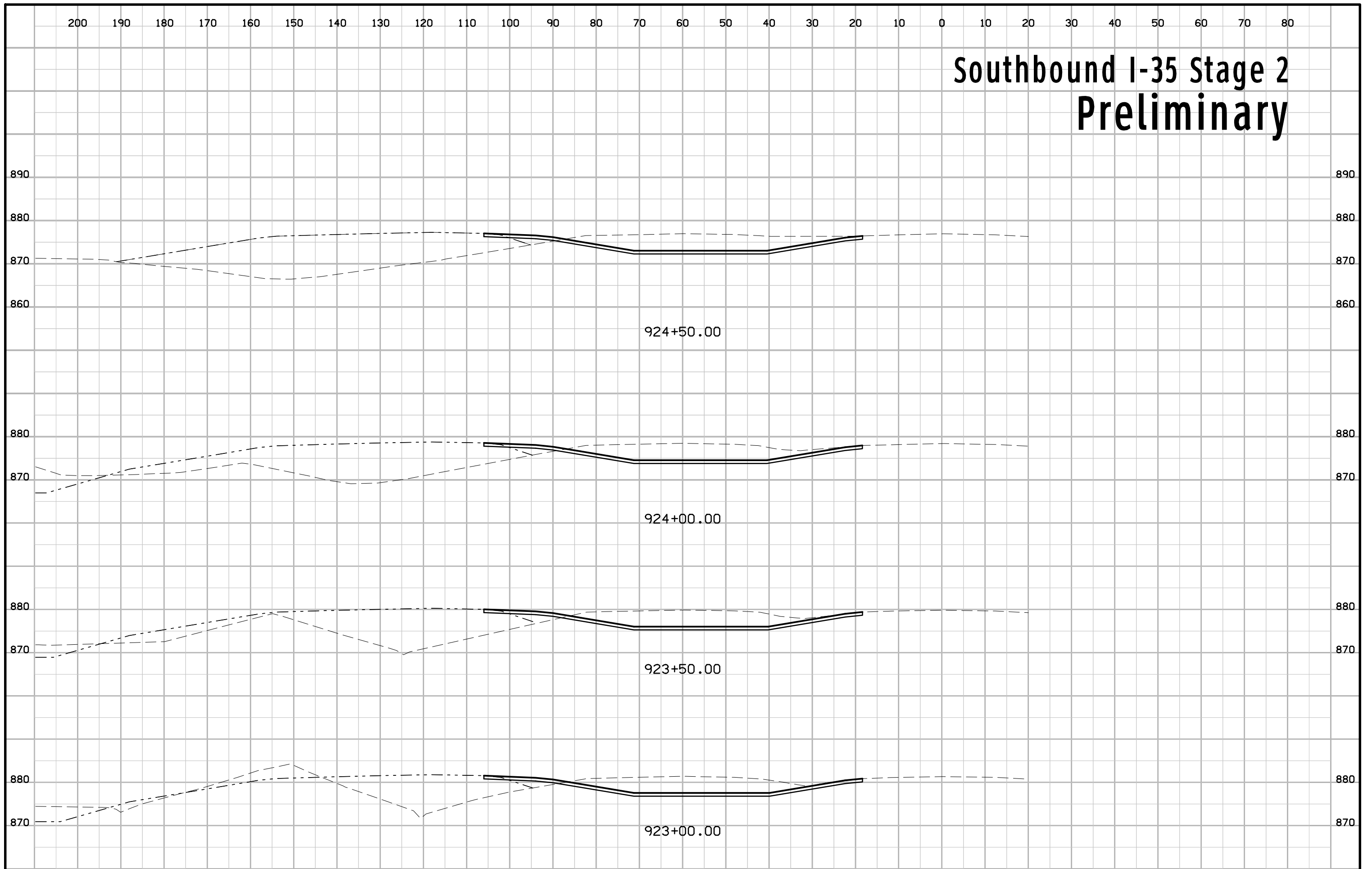
Southbound I-35 Stage 2 Preliminary



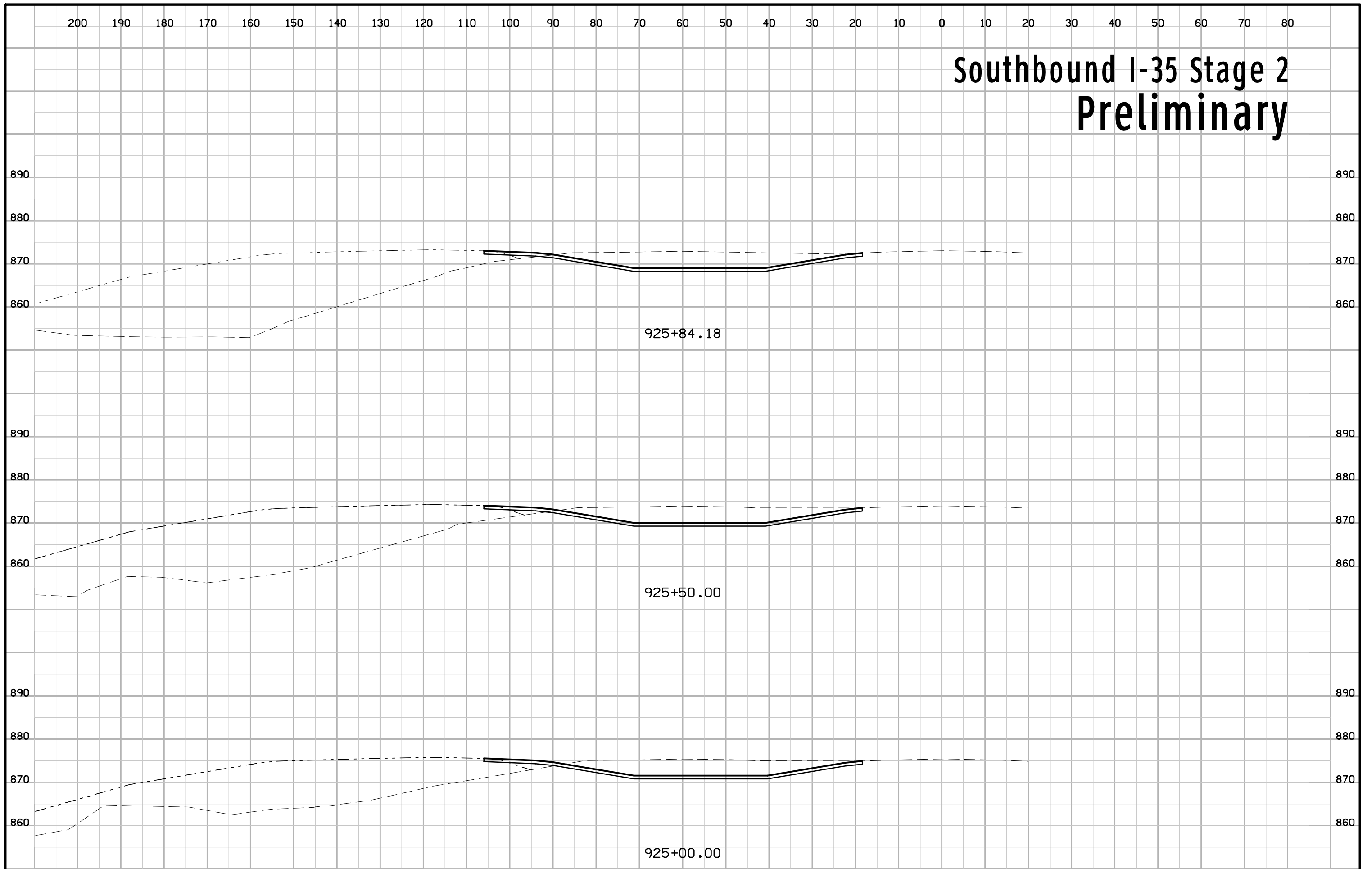
Southbound I-35 Stage 2 Preliminary



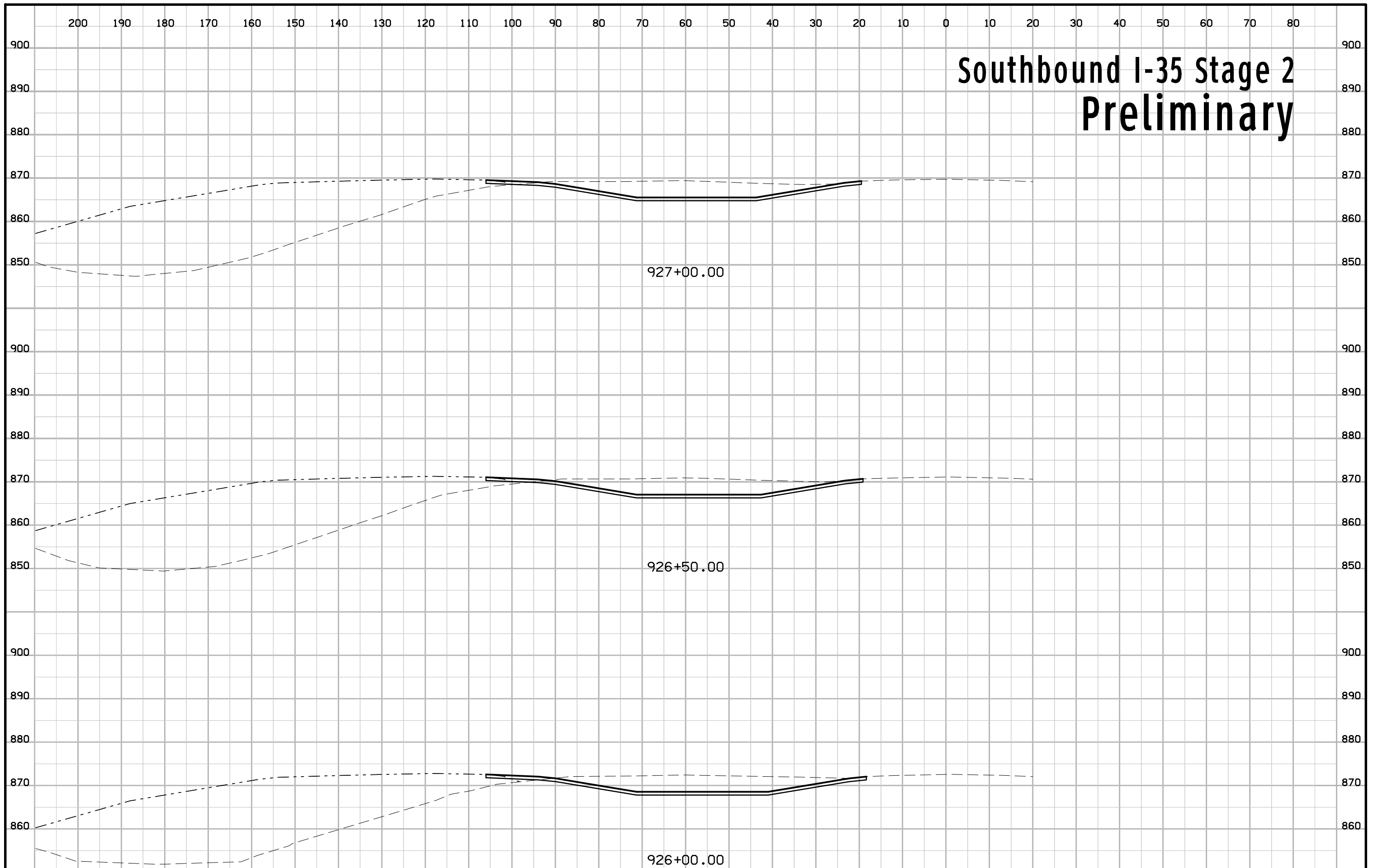
Southbound I-35 Stage 2 Preliminary



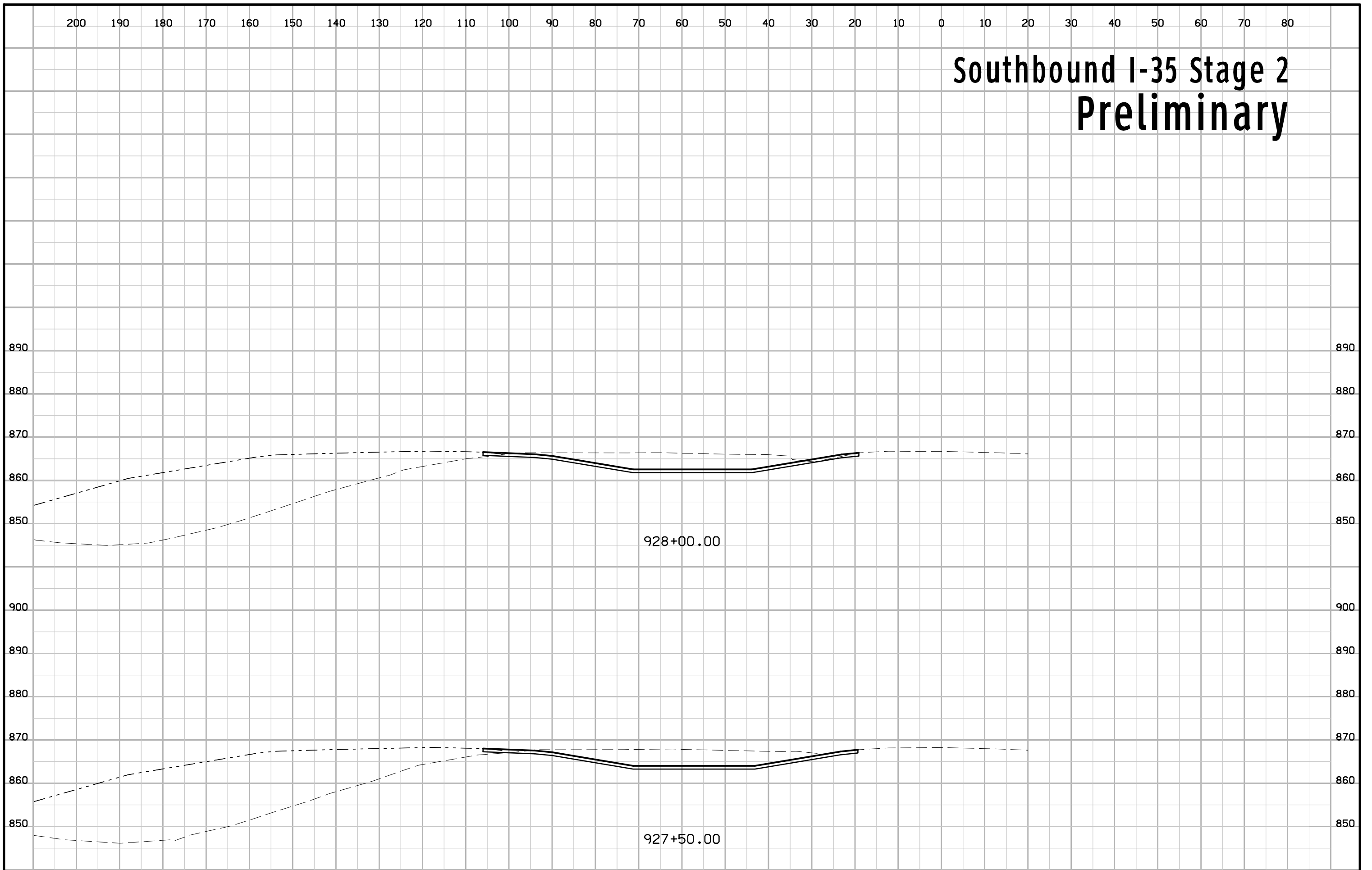
Southbound I-35 Stage 2 Preliminary



Southbound I-35 Stage 2 Preliminary



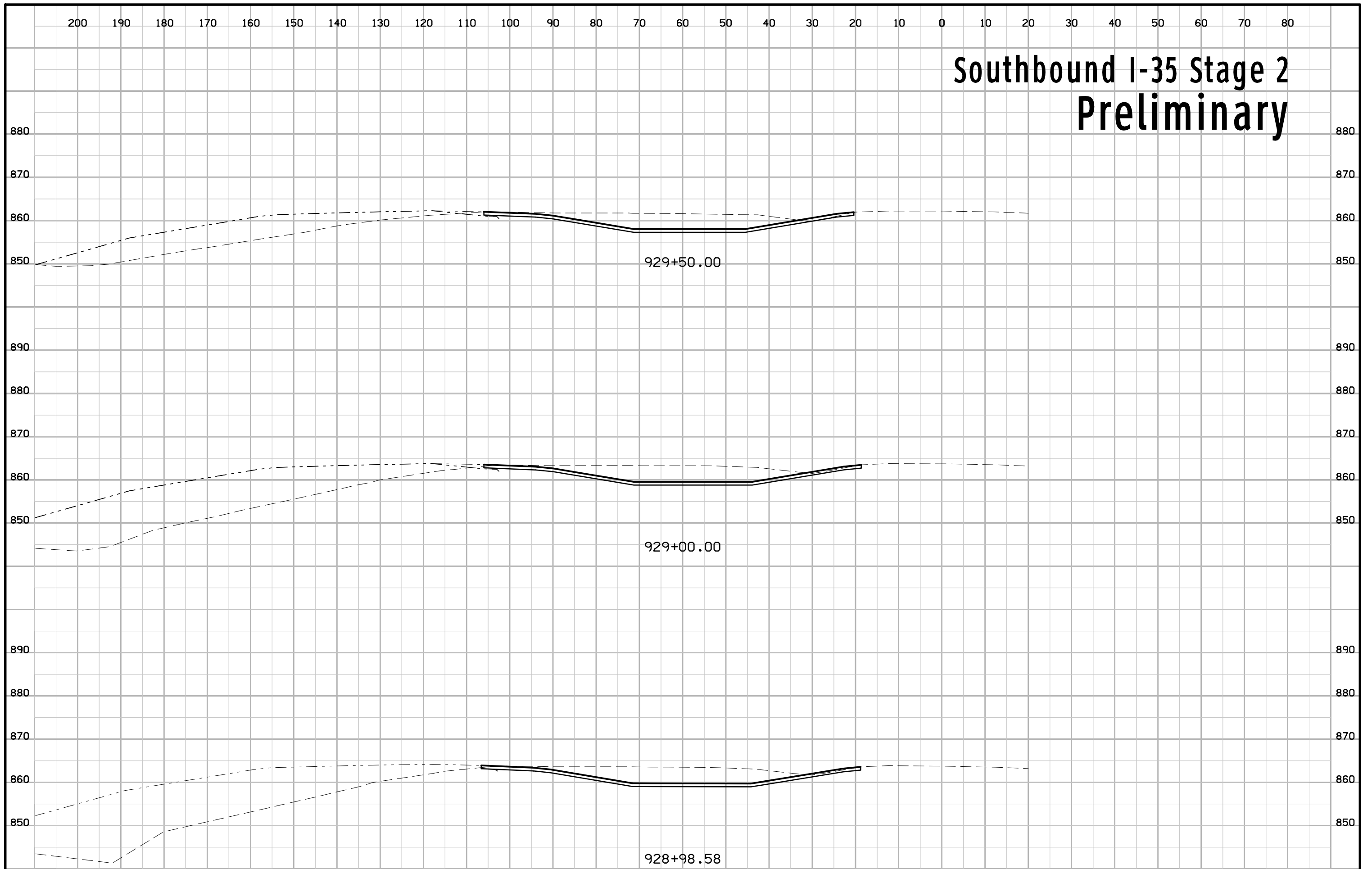
Southbound I-35 Stage 2 Preliminary



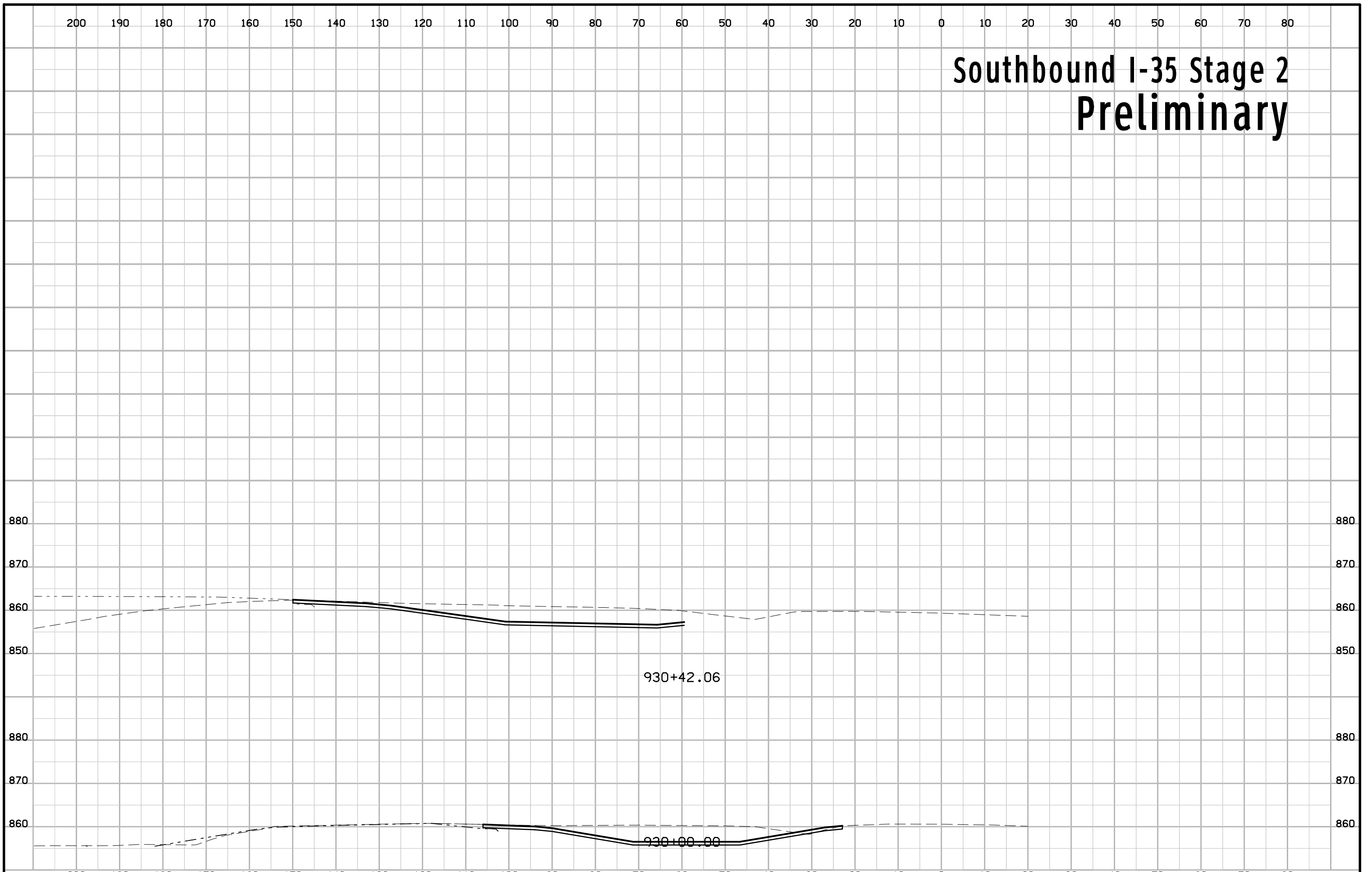
Southbound I-35 Stage 2 Preliminary



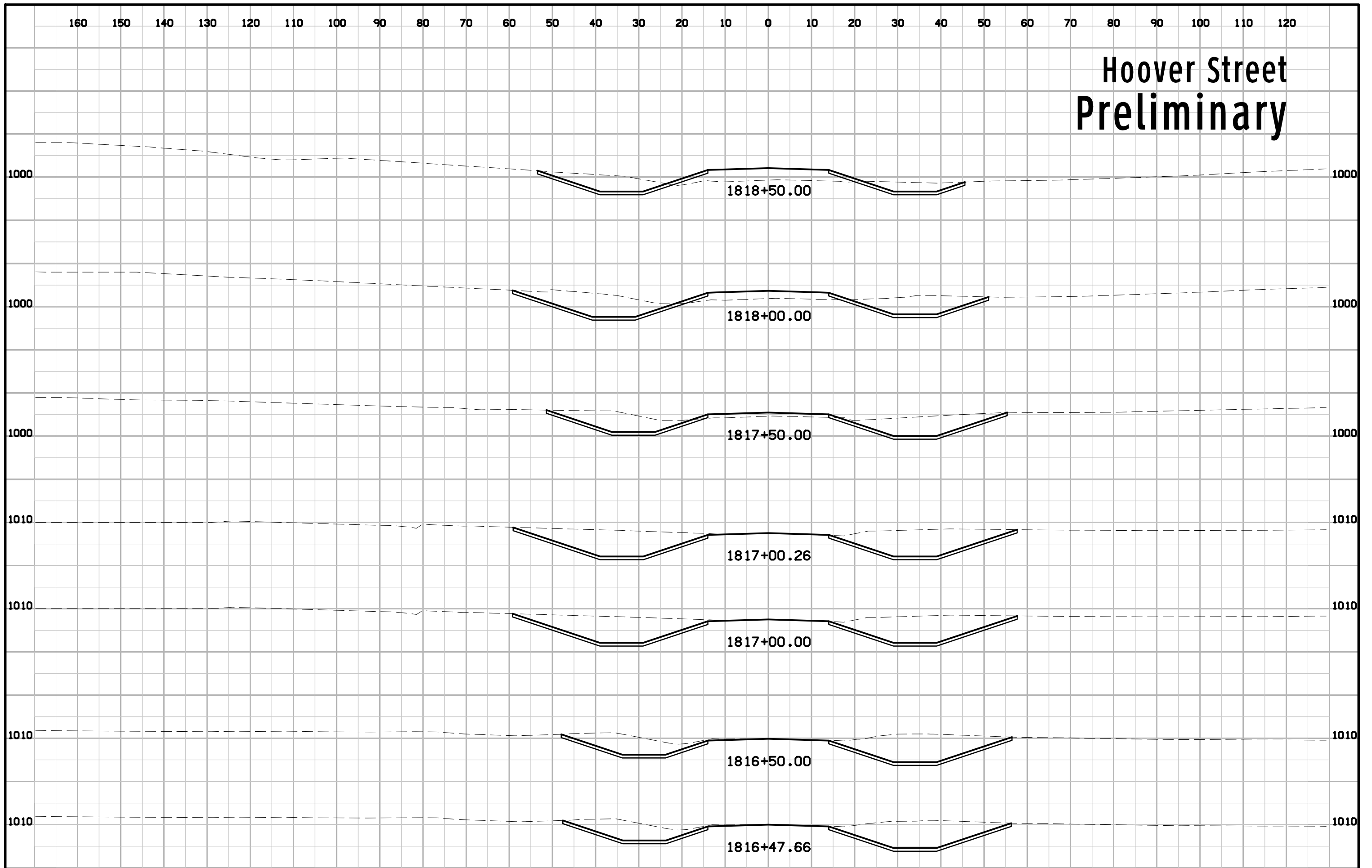
Southbound I-35 Stage 2 Preliminary



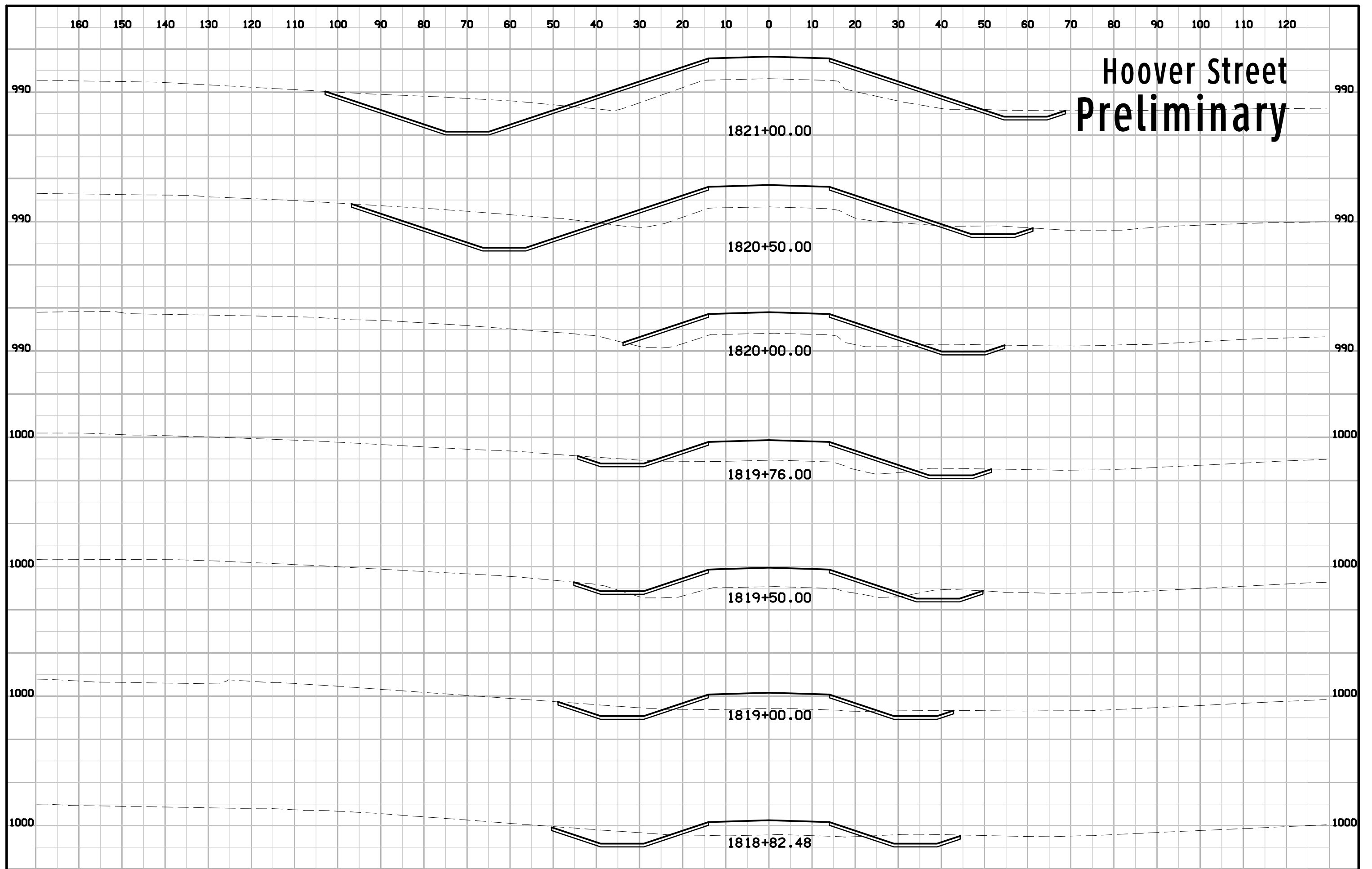
Southbound I-35 Stage 2 Preliminary



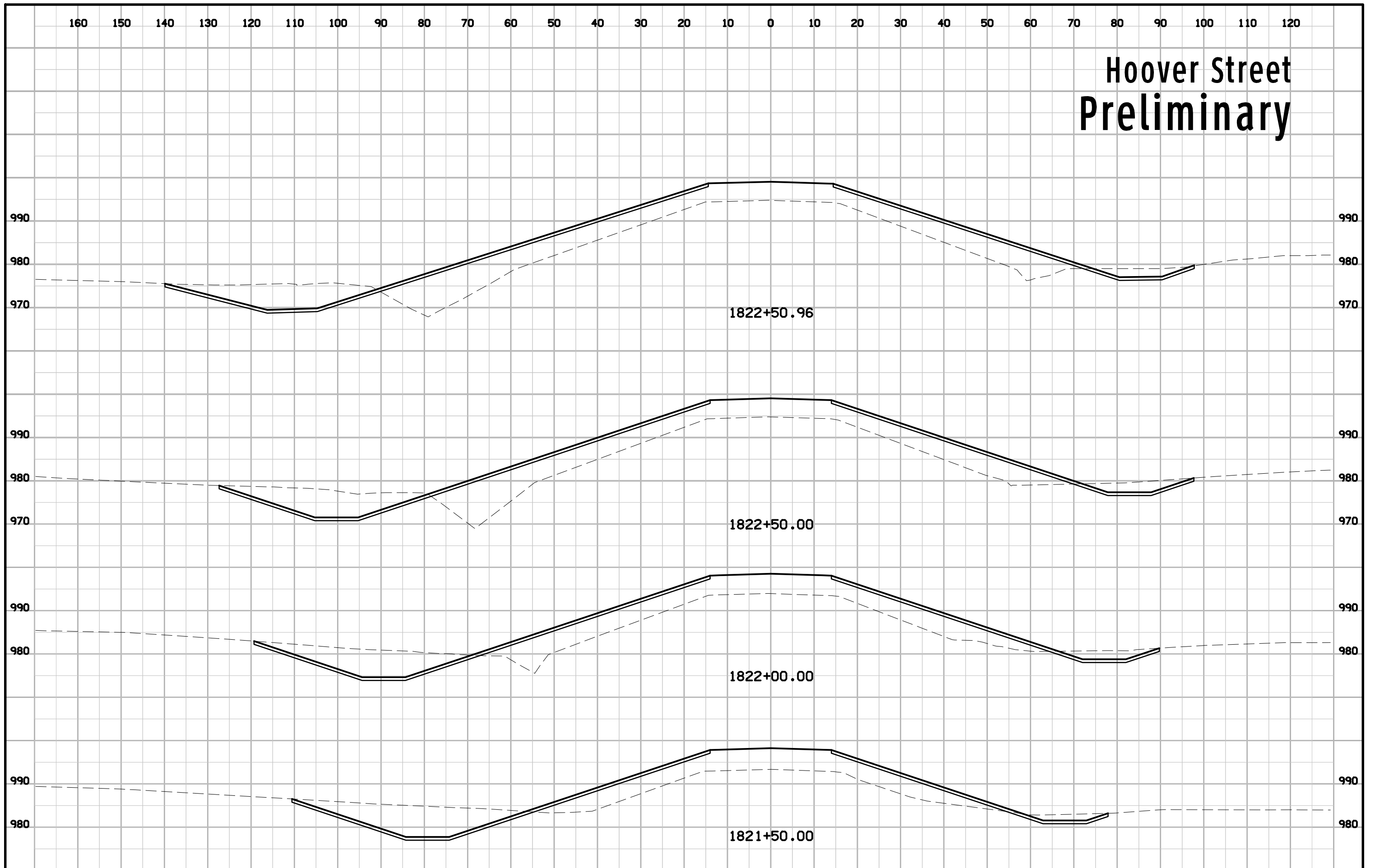
Hoover Street Preliminary



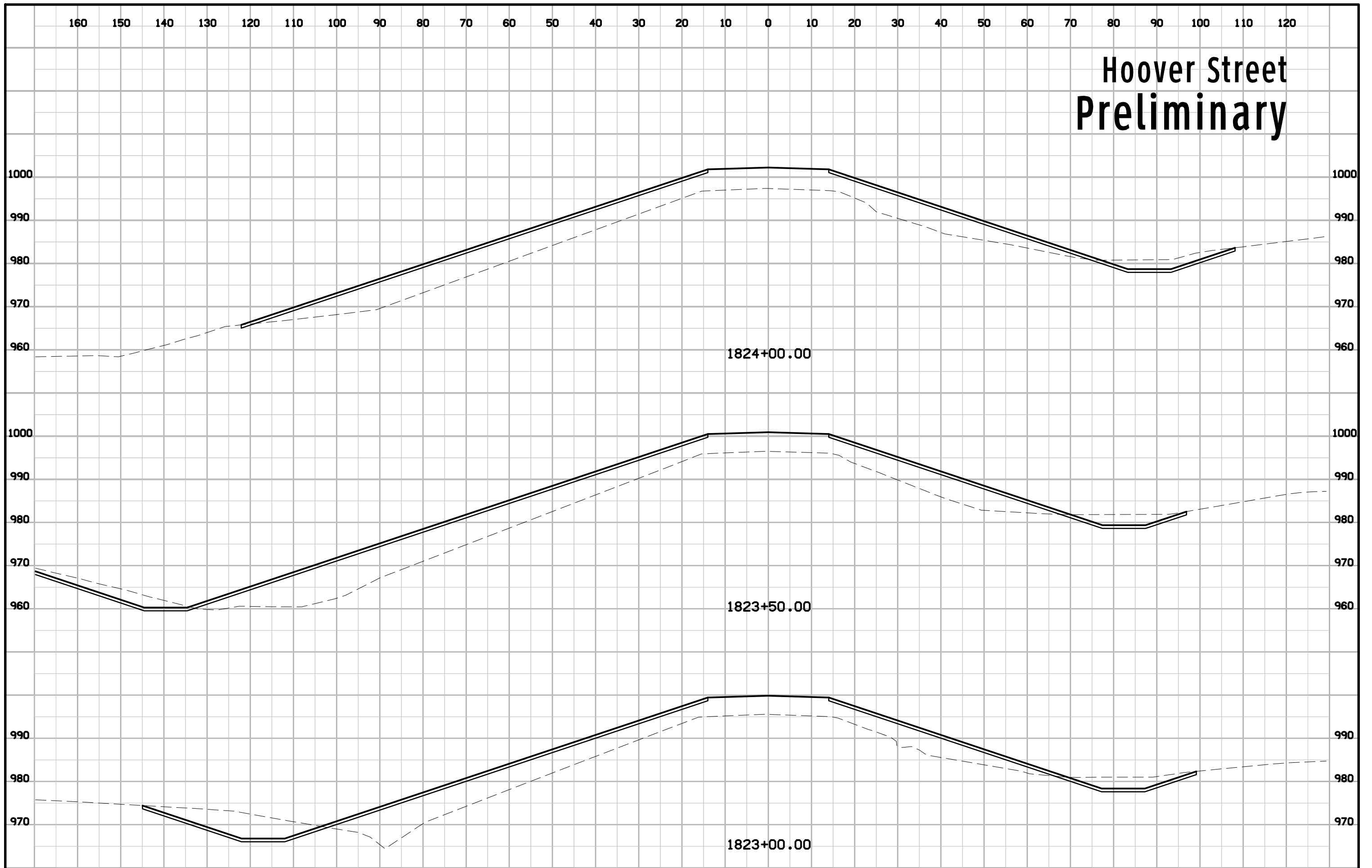
Hoover Street Preliminary



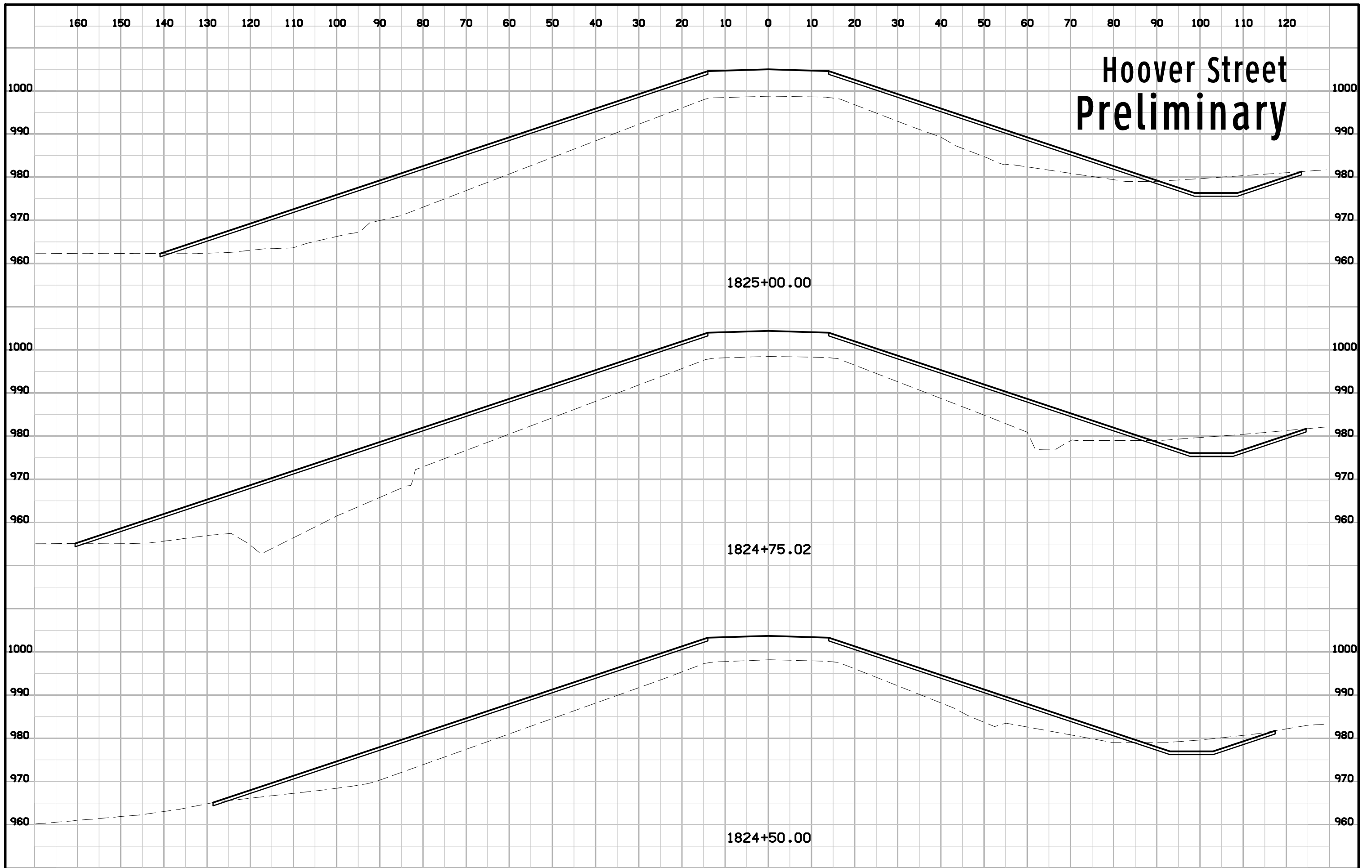
Hoover Street Preliminary



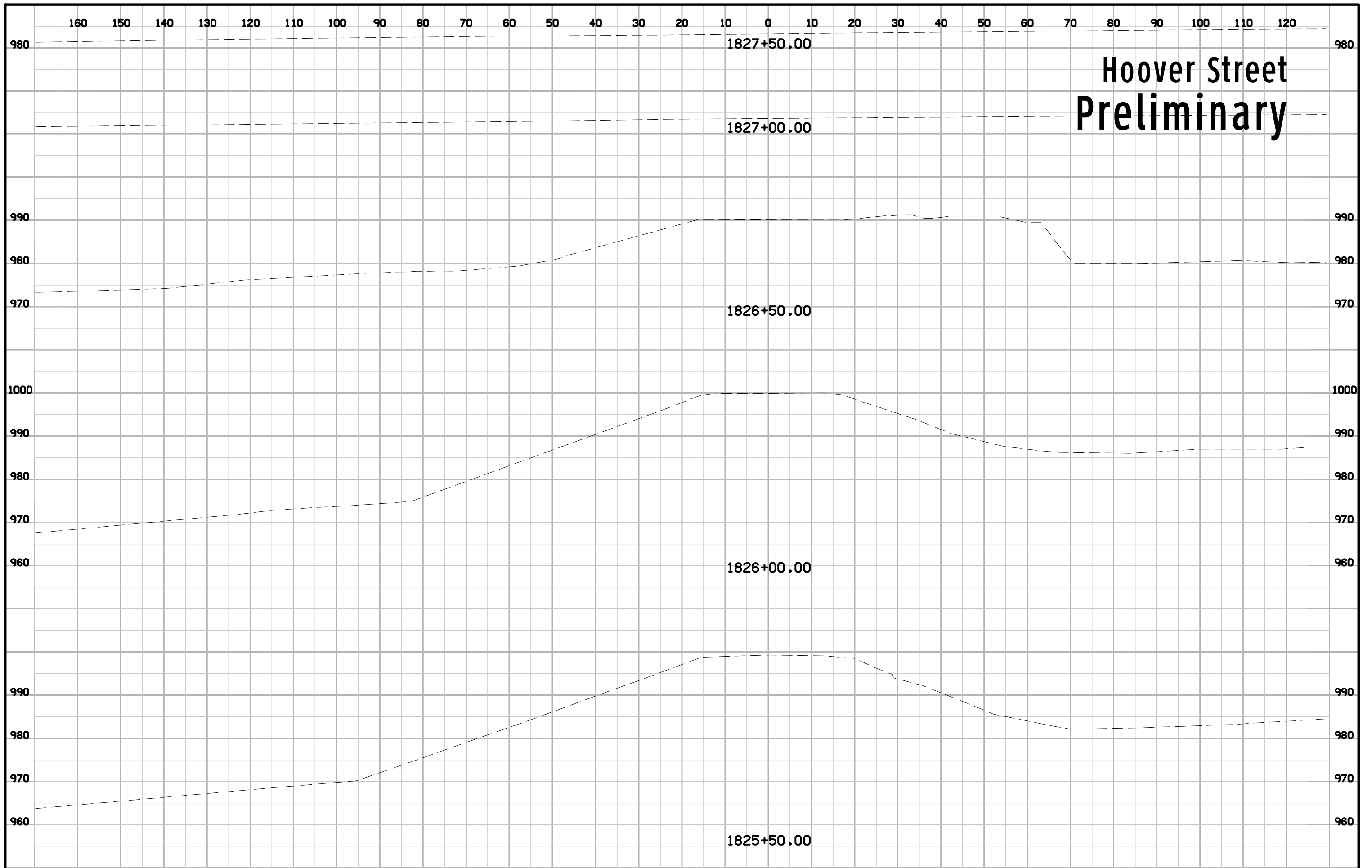
Hoover Street Preliminary



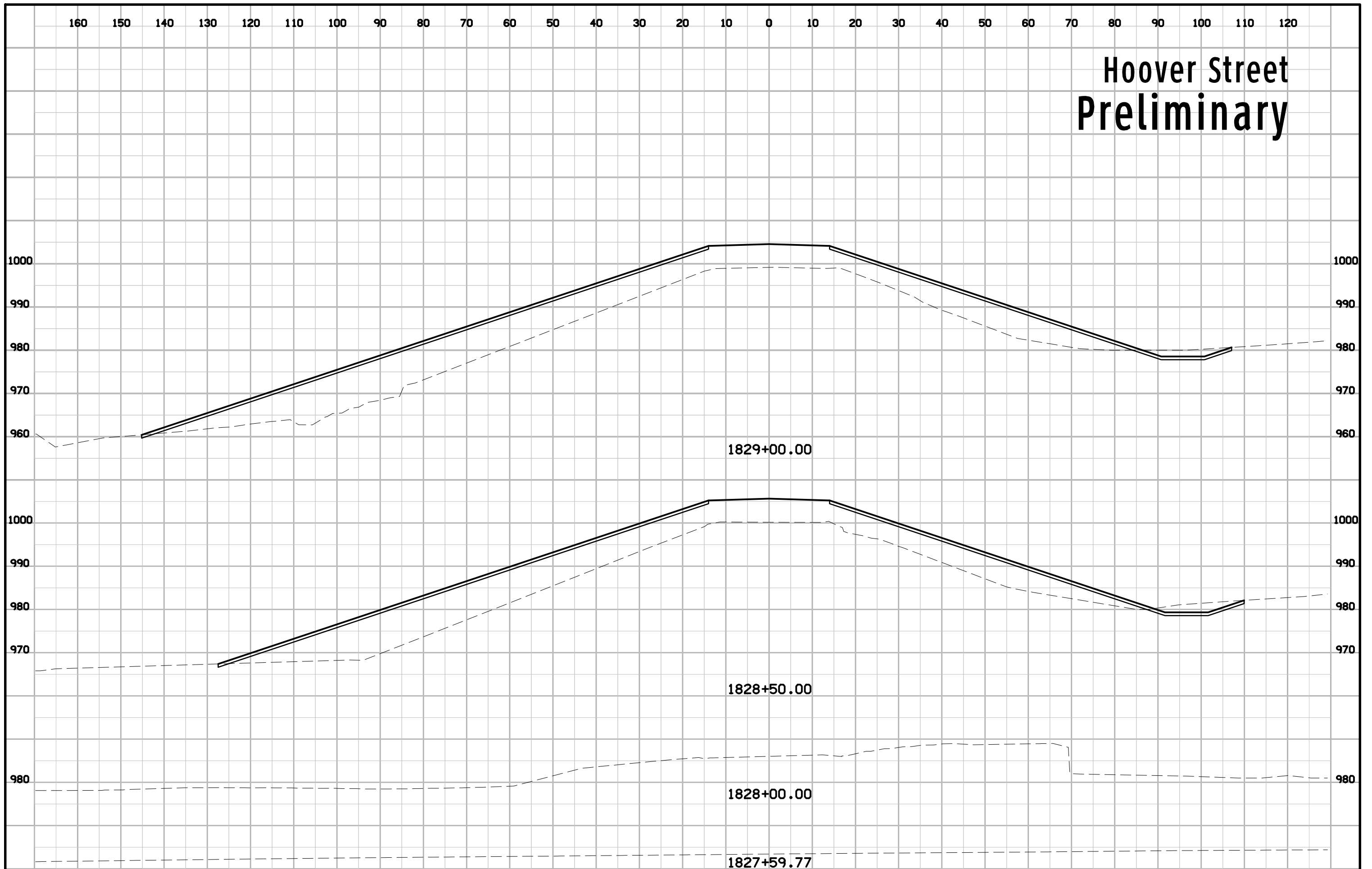
Hoover Street Preliminary



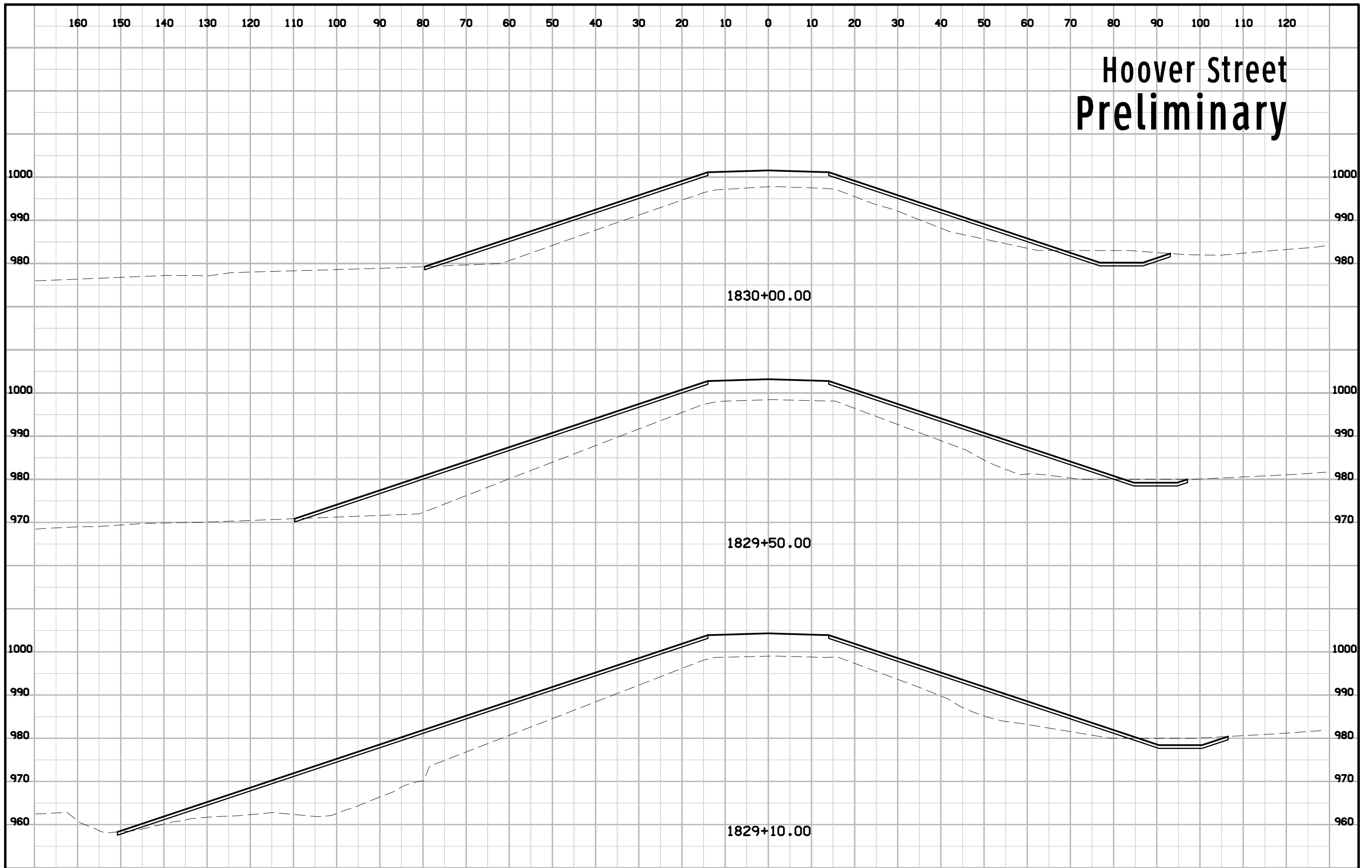
Hoover Street Preliminary



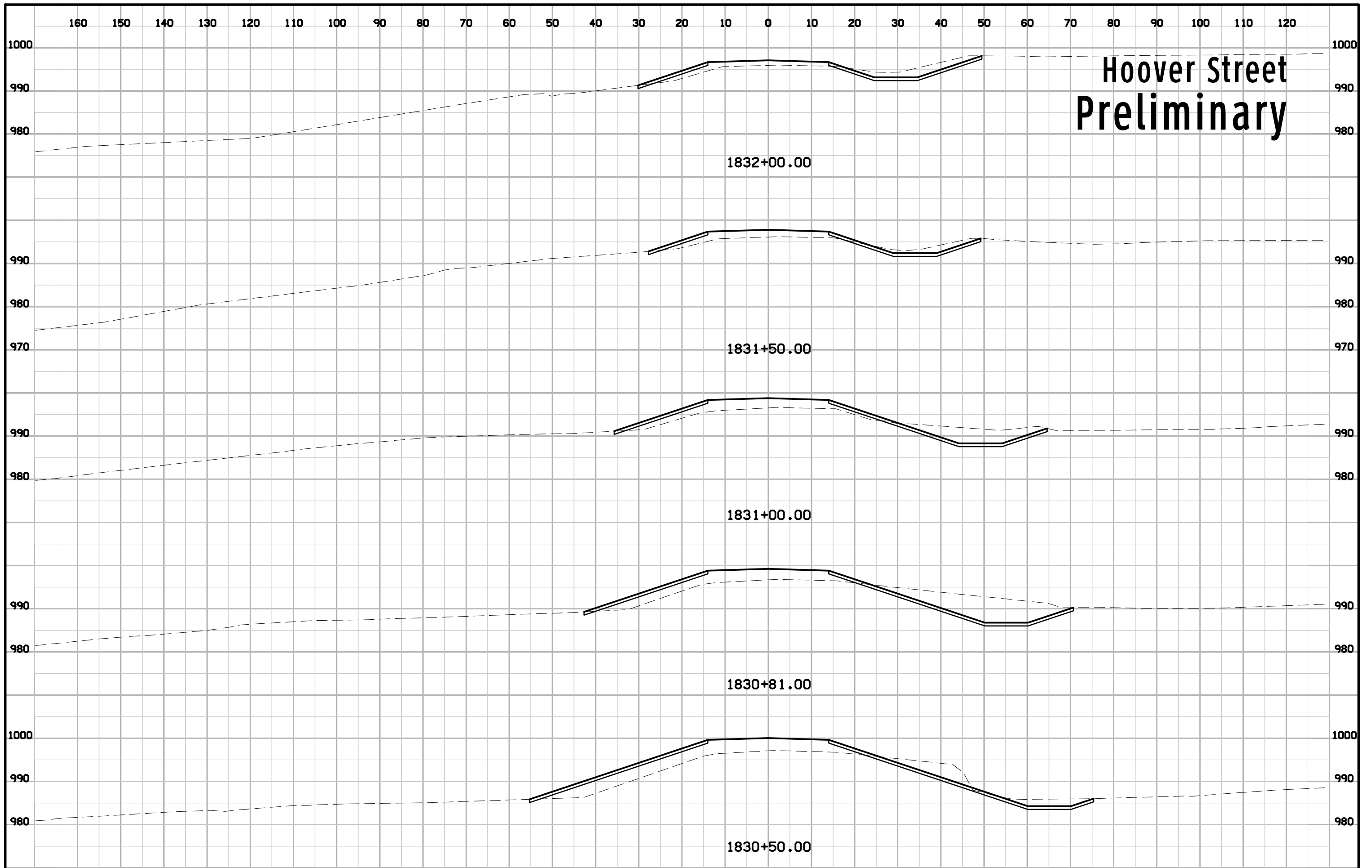
Hoover Street Preliminary



Hoover Street Preliminary



Hoover Street Preliminary



Hoover Street Preliminary

