

IOWA DEPARTMENT OF TRANSPORTATION

TO OFFICE: Bridges and Structures

DATE: April 2, 2012

ATTENTION: D. R. Claman

REF. NO. Louisa County
Proj. No. NHS-061-3(48)--19-58

FROM: Jim Schoenrock

PIN: 09-58-061-030

OFFICE: Design

SUBJECT: Culvert Submittal (D3)

This project involves PCC Pavement, grade and new, from 2 miles south of IA 92 (130th St.) to the Muscatine County Line. Traffic will be maintained via staging.

The Project Directory is W:\Projects2\P0102000\5806103009\Design. No printed plan sheets are included with this submittal. Items included in the electronic files with this submittal are tabulated on the "D3 Check List." The MicroStation and GEOPAK files, chains, and profiles are described in W:\Projects2\P0102000\5806103009\Design\DOCS\Project_Documentation_File.xlsm.

By copy of this letter, the Office of Location and Environment is requested to make any necessary reviews.

The Bridge submittal (B1) is scheduled for 7-20-2012. The Right of Way submittal (D5) is scheduled for 9-14-2012. The current letting date is November 2014.

You may indicate your acceptance or request additional information by e-mail.

JRS:JMH:mk

Attach.

cc: M. J. Kennerly	L. McDonald
K. D. Nicholson	G. A. Novey
R. L. Stanley	J. P. Rost
Judy Lensing	L. C. Funnell
M. J. Sankey	S. C. Marler
T. Gettings	T. Crouch
D. A. Widick	E.C. Wright
M. A. Swenson	B. Bradley
J. McCollough	J. W. Smith
J. V. Armstrong	J. Vortherms
G. L. Mulder	B. M. Clancy

D3 Check List

Updated Field Exam Plans including:

Typicals reviewed for correct dimensions, and stationing.

- Yes Main Line
- Yes Side roads
- Yes Accessways
- Yes Interchange Ramps & Loops

D, E, F & K sheets updated for Field Exam changes.

- Yes Horizontal and vertical alignments, including stationing and tic marks.
- Yes Ditch bar graph and ditch grades
- Yes Entrances and crossovers (future labeled as future)
- Yes Auxiliary and turn lanes including tapers.
- Yes Final Interchange layouts and details
- * Staging or Detour Runarounds.

Cross Sections

- Yes Mainline
- Yes Side road
- no Accessways
- Yes Ramps and loops
- * Detour runarounds or staging details
- no Draw sections, at box culvert locations
- no Skewed culvert locations (3 cross sections minimum, 1 on skew and 1 at each end of skewed culvert, perpendicular to centerline)
- no Estimate of Stability berm and backslope benching locations
- Yes Auxiliary and turn lanes including tapers
- no Entrances

no Pipe culvert layouts with type, size and location of culvert from Field Exam; including station/elevations for centerline, hinge point, flow lines and length of the culverts.

Yes A copy of the PDF of the plans and cross sections has been created, printed and checked to make sure the plans and cross sections print appropriately.

* Submittal of these items will follow at a later date



Iowa Department of Transportation

Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

PRIMARY ROAD SYSTEM LOUISA COUNTY PCC PAVEMENT - GRADE AND NEW

US 61 From Approx. 2 Miles South
of Ia. 92 (130th St.) N. To Muscatine Co. Line

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

Value Engineering Saves. Refer to Article 1105.15 of the Specifications.



REVISIONS

TOTAL

PROJECT IDENTIFICATION NUMBER

09-58-061-030

PROJECT NUMBER

NHS-061-3(48)--19-58

R.O.W. PROJECT NUMBER

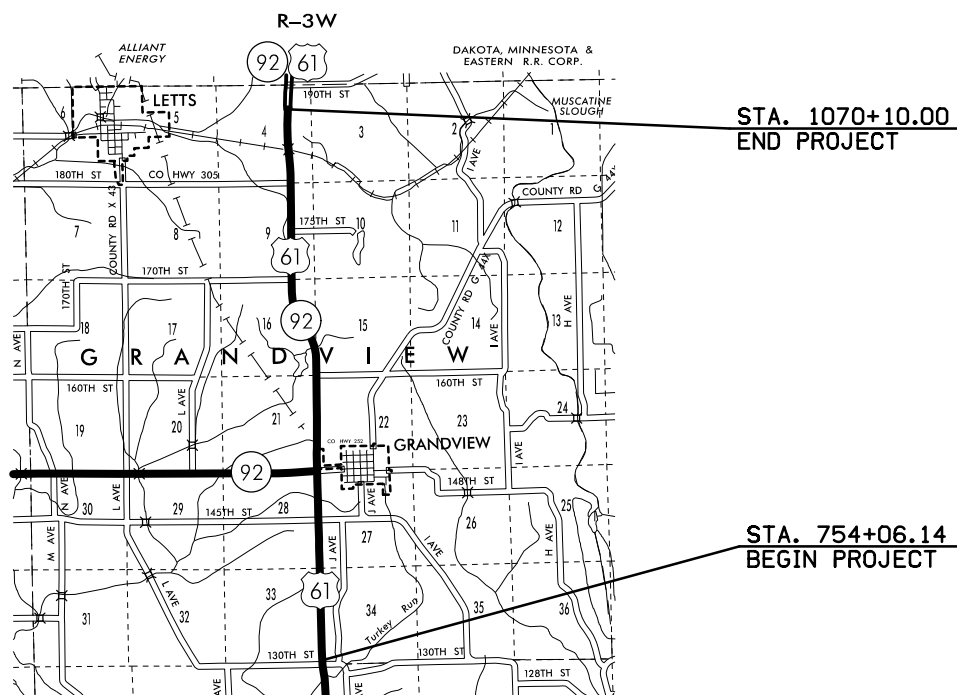
NHSN-061-3(55)--2R-58

NHSN-061-3(55)--2R-58

LETTING DATE

PCC PAVEMENT - GRADE AND NEW
NHS-061-3(48)--19-58

LOUISA CO.



MILEAGE SUMMARY			
			105-1
			09-27-94
Div.	Location	Lin. Ft.	Miles
1	RURAL: Sta. 754+06.14 to Sta. 1070+10.00	31,603.86	
	Deduct Dual Bridges Sta. 956+40 +/-	240.00	
	Deduct Dual Bridges Sta. 964+95 +/-	205.00	
	Deduct Single Bridge Sta. 1037+40 +/-	200.00	
TOTAL:		30,958.86	5.863

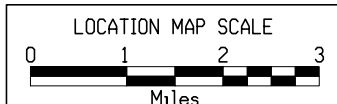
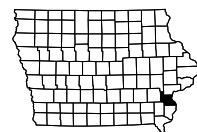
DESIGN DATA RURAL			
2015	AADT	5700	V.P.D.
2035	AADT	--	V.P.D.
20--	DHV	--	V.P.H.
	TRUCKS	16	%
	Total		
	Design ESALs	--	

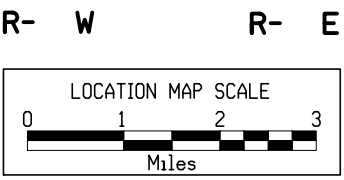
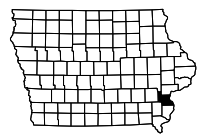
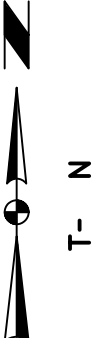
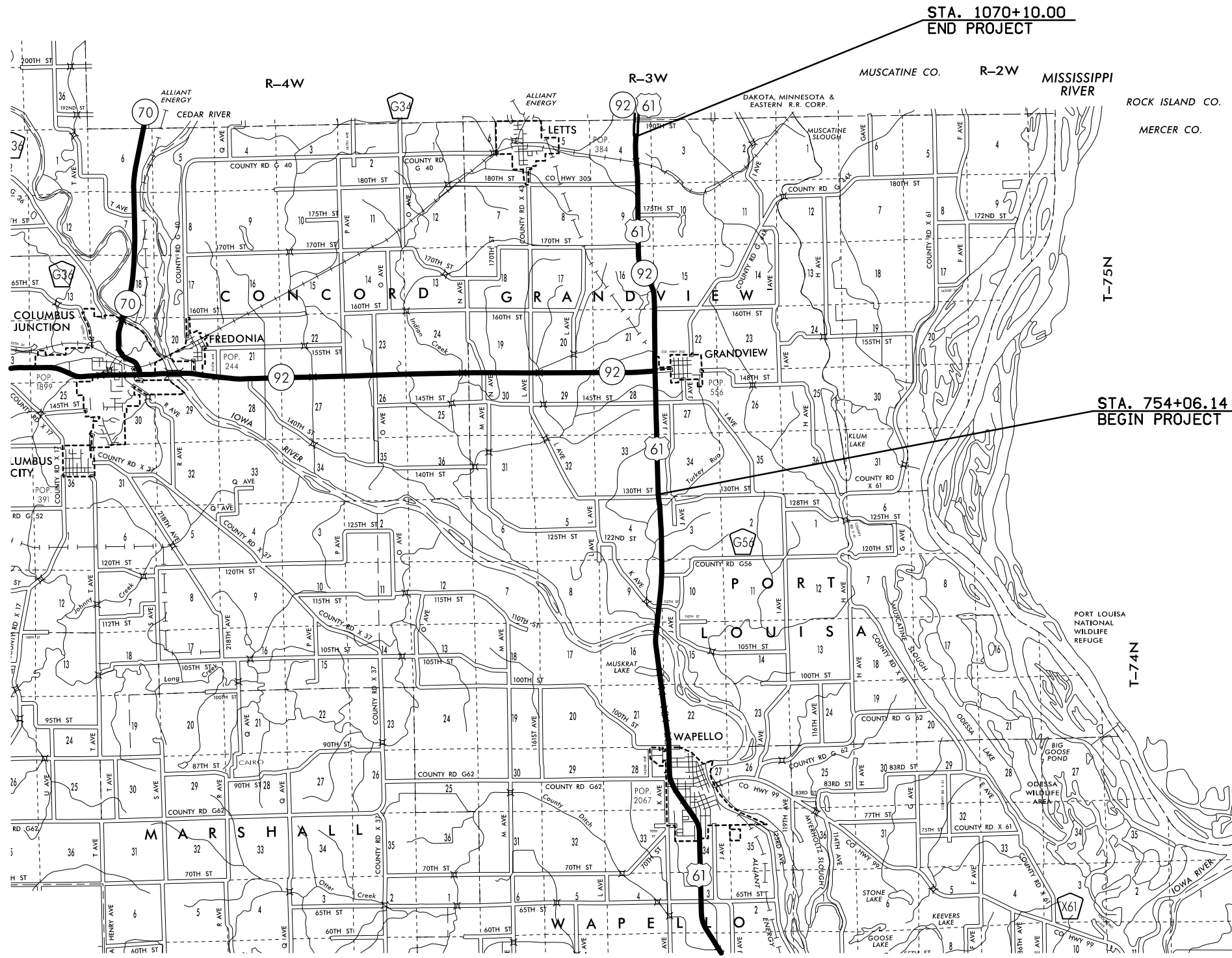
INDEX OF SEALS		
SHEET NO.	NAME	TYPE
A.1	Jim Schoenrock	Primary Signature Block
X	Robert L. Stanley	Soils Signature Block

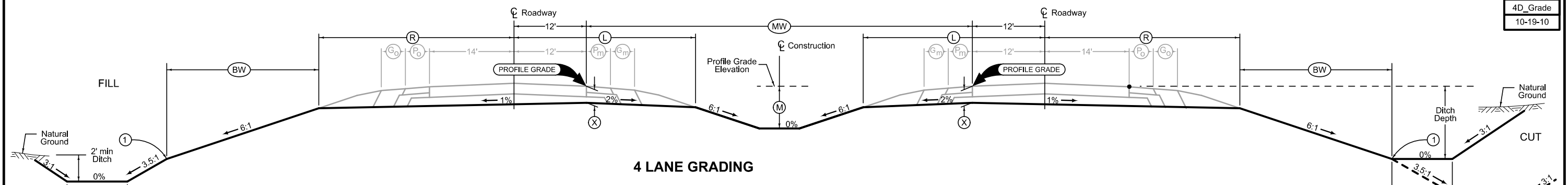
PRELIMINARY PLANS

Subject to change by final design.

D3 PLAN - Date: 04-02-2012







4 LANE GRADING

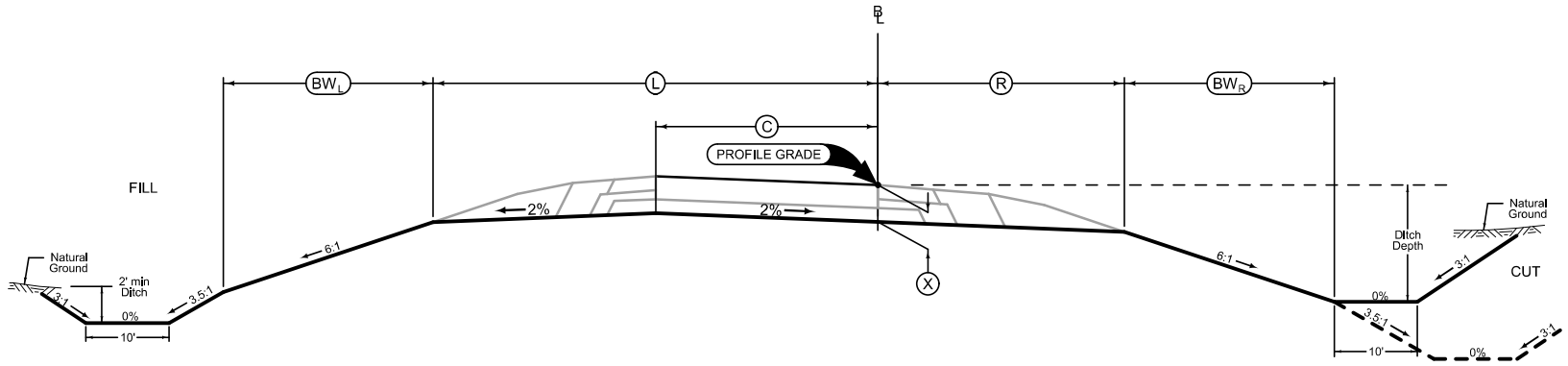
LOCATION		DIMENSIONS						
ROAD IDENTIFICATION	STATION TO STATION	L	R	X	BW	MW	M	
		Feet	Feet	Inches	Feet	Feet	Feet	
US 61	754+06 1040+08	29.2	33.1	18	20.4	82	4	
US 61	1040+08 1070+10	29.2	33.1	18	20.4	82-70	4	

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

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

① Refer to project plan and cross sections for specific location of foreslope change.

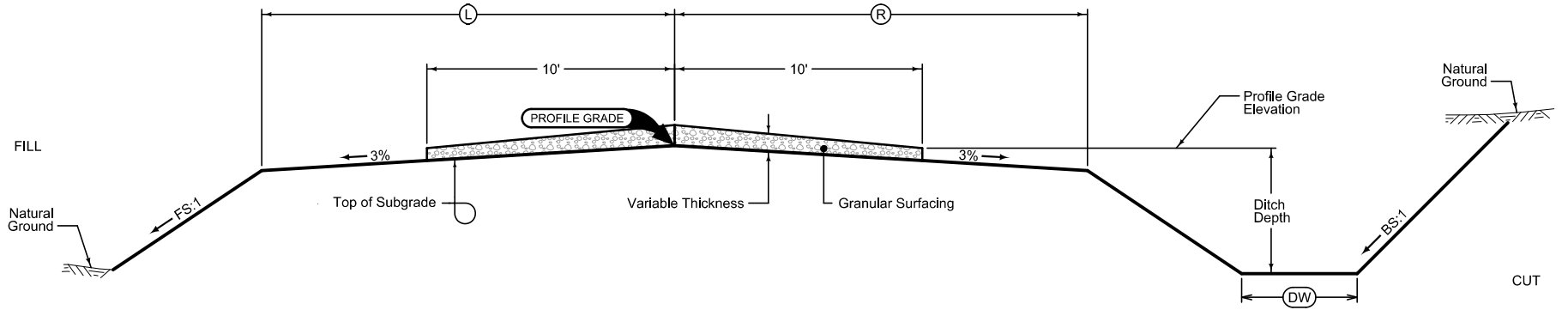
LOCATION			DIMENSIONS						
INTERCHANGE	RAMP	STATION TO STATION	L	R	C	X	BW _L	BW _R	
			Feet	Feet	Feet	Inches	Feet	Feet	
US 61\ IA 92	A	1556+28 1570+50	30.4	16.1	16	16	21.2	10	
US 61\ IA 92	B	2543+50 2556+69	30.4	16.1	16	16	21.2	10	
US 61\ IA 92	C	3544+80 3556+42	30.4	16.1	16	16	21.2	10	
US 61\ IA 92	D	4556+50 4580+50	30.4	16.1	16	16	21.2	10	
US 61\ 170th	A	5564+70 5579+25	30.4	16.1	16	16	21.2	10	
US 61\ 170th	B	6551+00 6564+12	30.4	16.1	16	16	21.2	10	
US 61\ 170th	C	7550+50 7565+89	30.4	16.1	16	16	21.2	10	
US 61\ 170th	D	8563+94 8579+00	30.4	16.1	16	16	21.2	10	



RAMP GRADING

Section view is in direction of traffic.
Normal sections shown may be appropriately modified for areas specifically designated by the Engineer such as intersections or superelevated curves.

LOCATION		DIMENSIONS				
ROAD IDENTIFICATION	STATION TO STATION	L	R	FS	BS	DW
		Feet	Feet			Feet
145th	2803+75 2818+73	13	13	3:1	2.5:1	UAC
175th	9970+20 10001+25	12	12	3:1	2.5:1	UAC



GRADING AND GRANULAR SURFACING

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

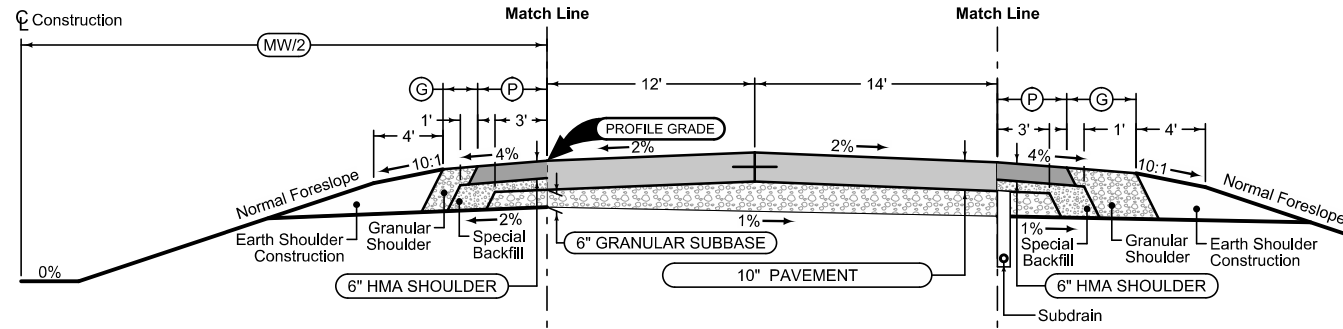
See plan & profile sheets and cross sections for additional details of ditches and backslopes.

Place Granular Surfacing as follows:
Grading design application rate is ___ tons per mile.
Paving design application rate is ___ tons per mile.

Combination Shoulder

Shoulder Jointing:
Longitudinal joint: B

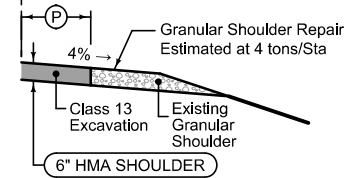
		4_C_ 10-19-10		
Direction of Travel	BEGIN STATION	END STATION	(P) Feet	(G) Feet
Both	754+06	1012+02	4	2
SB	1012+02	1070+10	4	2



Section shown in the direction of traffic.

Mainline Jointing:
Transverse joints: CD at 20' spacing
Longitudinal joint: L-2

		4DP_ 10-19-10		
Direction of Travel	BEGIN STATION	END STATION	(MW) Feet	
Both	754+06	986+83	82	
SB	986+83	1040+08	82	
SB	1040+08	1070+10	82-70	
NB	986+83	1012+02	Var	



Combination Shoulder

Shoulder Jointing:
Longitudinal joint: B

		4_C_ 10-19-10		
Direction of Travel	BEGIN STATION	END STATION	(P) Feet	(G) Feet
SB	754+06	769+60	4	4
Both	769+60	1012+02	4	4
SB	1012+02	1070+10	4	4

HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B

		3R_Shldr_Paved_ 04-19-11		
Direction of Travel	STATION TO STATION		(P) Feet	
NB	754+06	769+60	4	

See Tab 100-24 for pavement quantities.

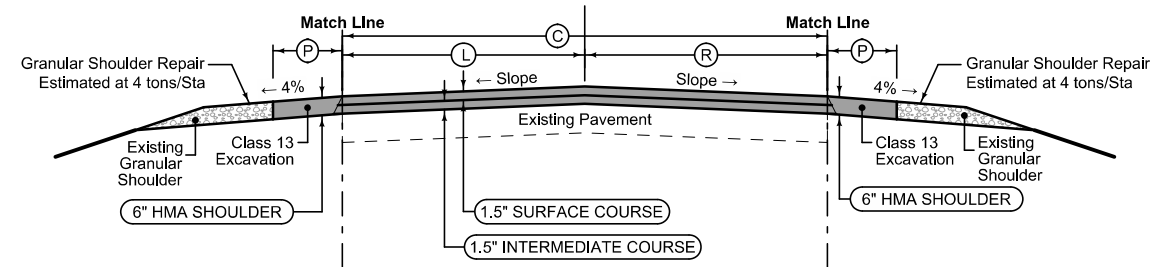
See Tab 112-9 for shoulder quantities.

US 61

HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B

3R_Shldr_Paved_04-19-11		
STATION TO STATION		(P) Feet
1012+02	1049+35	8



3R_Overlay_04-19-11				
STATION TO STATION		(C) Feet	(L) Feet	(R) Feet
1012+02	1049+35	24	12	12

HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B

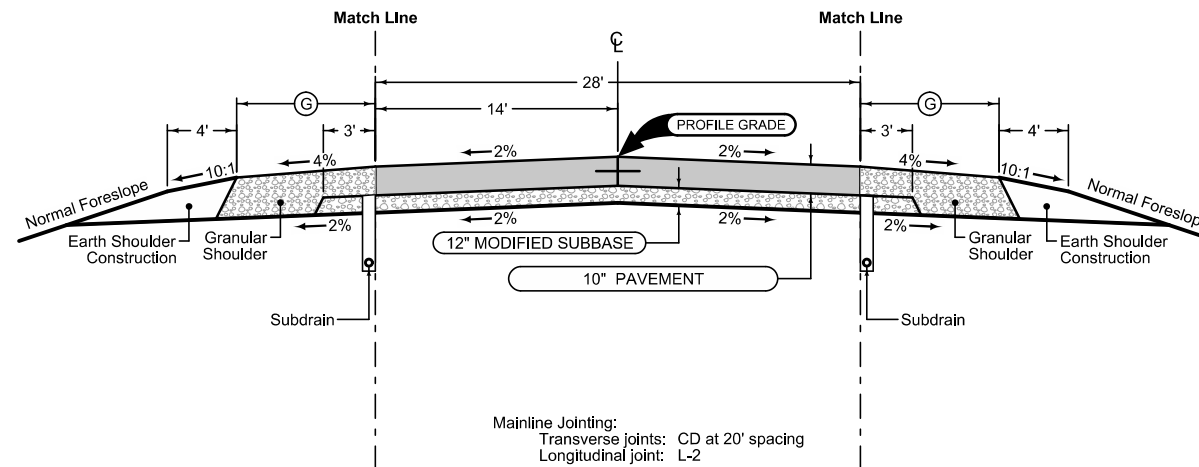
3R_Shldr_Paved_04-19-11		
STATION TO STATION		(P) Feet
1012+02	1049+35	8

See Tab 100-24 for pavement quantities.
See Tab 112-9 for shoulder quantities.

US 61 - NB

Granular Shoulder

2_G_SR_10-19-10		
STATION TO STATION		(G) Feet
2818+73	2825+90.00	6



Mainline Jointing:
Transverse joints: CD at 20' spacing
Longitudinal joint: L-2

2P_10-19-10	
STATION TO STATION	
2818+73	2825+90.00

Granular Shoulder

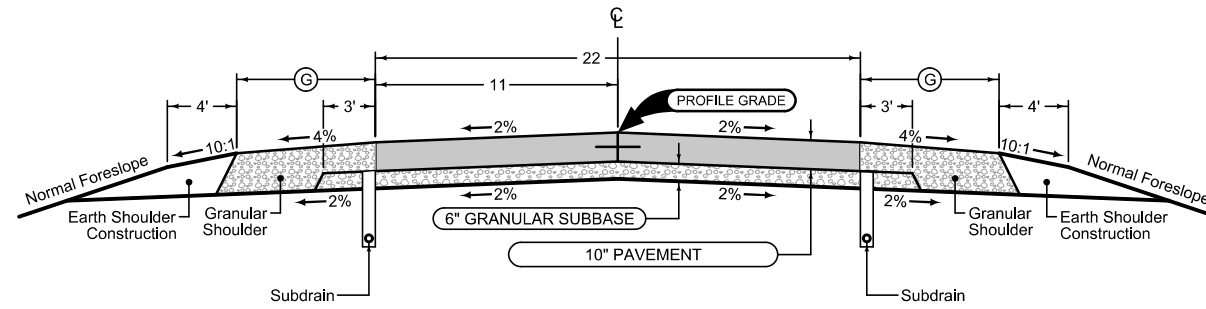
2_G_SR_10-19-10		
STATION TO STATION		(G) Feet
2818+73	2825+90.00	6

See Tab 100-24 for pavement quantities.
See Tab 112-9 for shoulder quantities.

145th St

Granular Shoulder

2_G_SR_10-19-10		
STATION TO STATION		Ⓞ Feet
3945+47	8970+20	6



Granular Shoulder

2_G_SR_10-19-10		
STATION TO STATION		Ⓞ Feet
3945+47	8970+20	6

Mainline Jointing:
 Transverse joints: CD at 20' spacing
 Longitudinal joint: L-2

2P_10-19-10		
STATION TO STATION		Ⓞ Feet
3945+47	8970+20	6

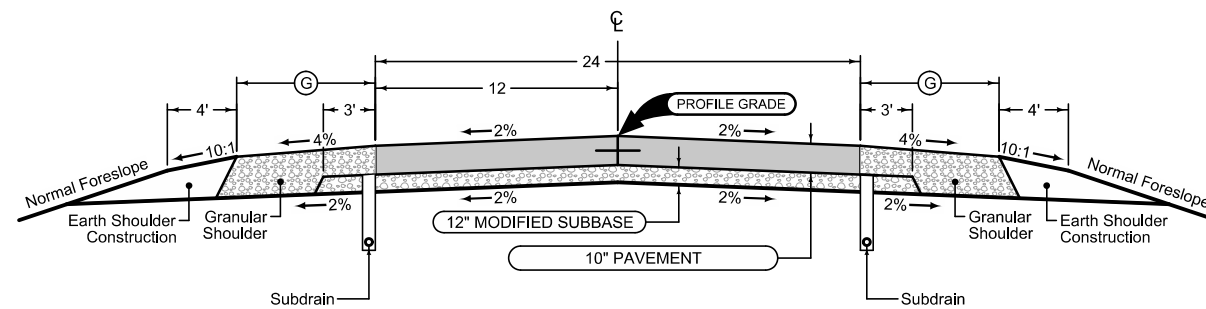
Sta 3947+47.70 BK = Sta 8958+09.61 AH

See Tab 100-24 for pavement quantities.
 See Tab 112-9 for shoulder quantities.

170th St

Granular Shoulder

2_G_SR_10-19-10		
STATION TO STATION		Ⓞ Feet
851+25	863+00	6
961+82	964+32	6



Granular Shoulder

2_G_SR_10-19-10		
STATION TO STATION		Ⓞ Feet
851+25	863+00	6
961+82	964+32	6

Mainline Jointing:
 Transverse joints: CD at 20' spacing
 Longitudinal joint: L-2

2P_10-19-10		
STATION TO STATION		Ⓞ Feet
851+25	863+00	6
961+82	964+32	6

See Tab 100-24 for pavement quantities.
 See Tab 112-9 for shoulder quantities.

Existing US 61 reconstruction

Combination Shoulder

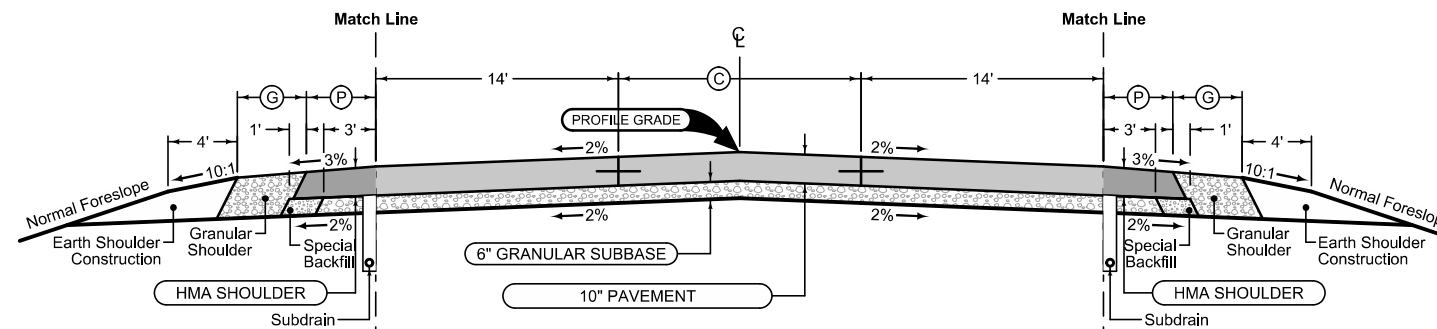
Shoulder Jointing:
Longitudinal joint: B

STATION TO STATION		(P) Feet	(G) Feet
502+49	513+13	4	4
516+99	521+60	4	4

Combination Shoulder

Shoulder Jointing:
Longitudinal joint: B

STATION TO STATION		(P) Feet	(G) Feet
507+30	521+60	4	4



Mainline Jointing:
Transverse joints: CD at 20' spacing
Longitudinal joint: L-2

STATION TO STATION		(C) Feet
502+48	507+07	0-16
507+07	516+87	16
516+87	521+60	16-0

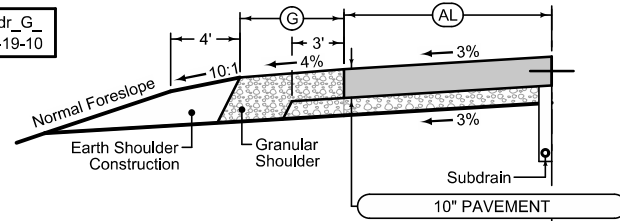
Auxiliary Lane

Longitudinal joint: L or KT
Transverse joint: Match Mainline

STATION TO STATION		(AL) Feet	(G) Feet
514+80	516+75	10	6

Auxiliary Lane

Granular Shoulder



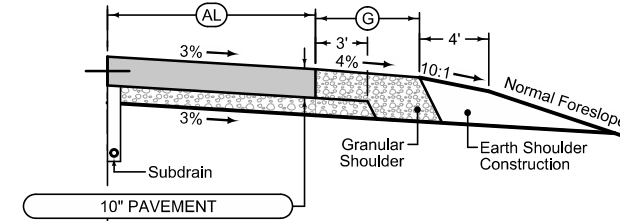
Auxiliary Lane

Longitudinal joint: L or KT
Transverse joint: Match Mainline

STATION TO STATION		(AL) Feet	(G) Feet
499+40	501+20	10	6
501+20	505+60	10	6

Auxiliary Lane

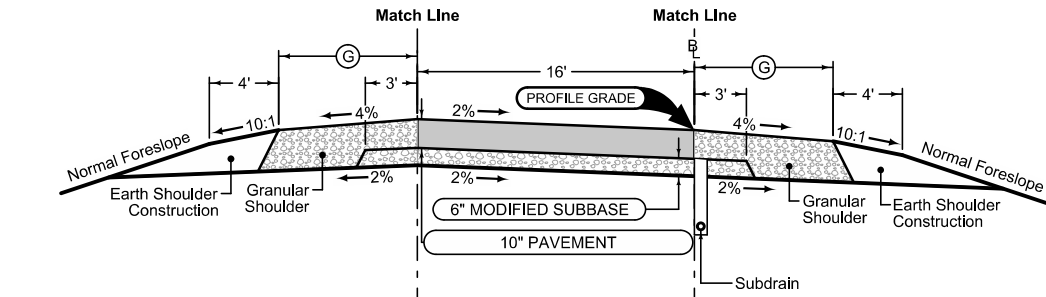
Granular Shoulder



See Tab 100-24 for pavement quantities.
See Tab 112-9 for shoulder quantities.

Granular Shoulder

1R_G_ 10-19-10		
BEGIN STATION	END STATION	Ⓞ Feet
2543+50	2556+69	4
4556+50	4580+50	4



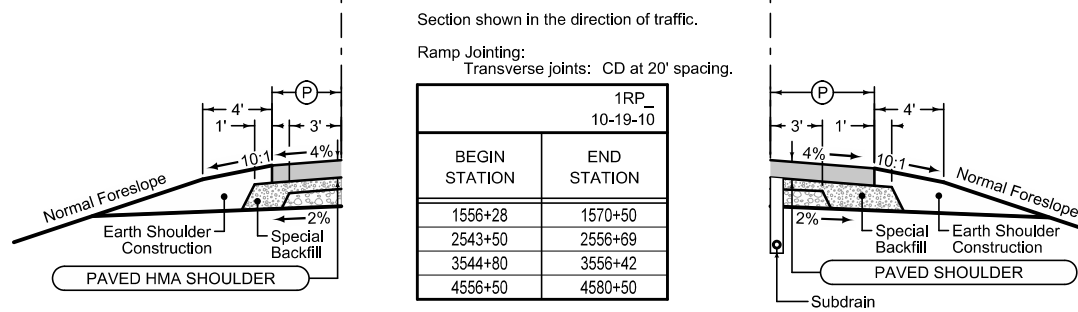
Granular Shoulder

1R_G_ 10-19-10		
BEGIN STATION	END STATION	Ⓞ Feet
2543+50	2556+69	6
4556+50	4580+50	6

Paved Shoulder Alternates

PCC Shoulder Jointing:
 Longitudinal joint: BT-1 or BT-3
 Transverse joints: C at 20' spacing
 HMA Shoulder Jointing:
 Longitudinal joint: B

1R_P_ALT_ 10-19-10		
BEGIN STATION	END STATION	Ⓟ Feet
1556+28	1570+50	4
3544+80	3556+42	4



Paved Shoulder Alternates

PCC Shoulder Jointing:
 Longitudinal joint: BT-1 or BT-3
 Transverse joints: C at 20' spacing
 HMA Shoulder Jointing:
 Longitudinal joint: B

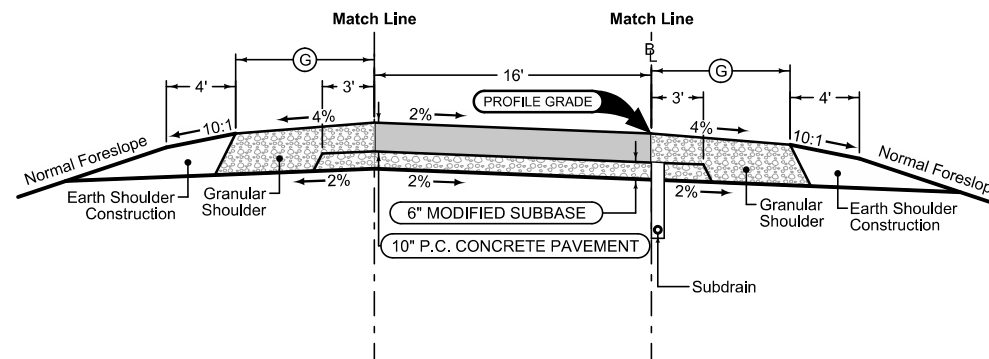
1R_P_ALT_ 10-19-10		
BEGIN STATION	END STATION	Ⓟ Feet
1556+28	1570+50	6
3544+80	3556+42	6

See Tab 100-24 for pavement quantities.
 See Tab 112-9 for shoulder quantities.

US-61\IA-92 Interchange Ramps

Granular Shoulder

1R_G_ 10-19-10		
BEGIN STATION	END STATION	Ⓞ Feet
5564+70	5579+25	4
6551+00	6564+12	4
7550+50	7565+89	4
8563+94	8579+00	4



Granular Shoulder

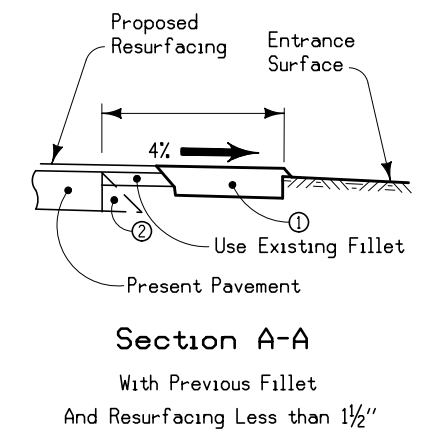
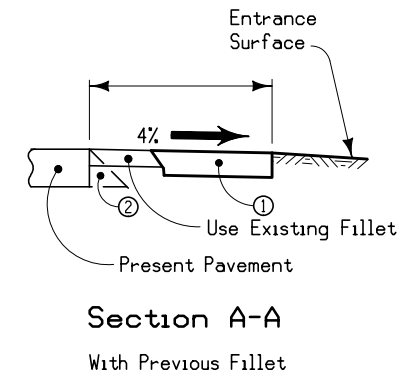
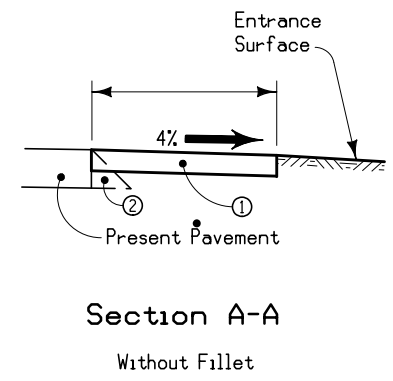
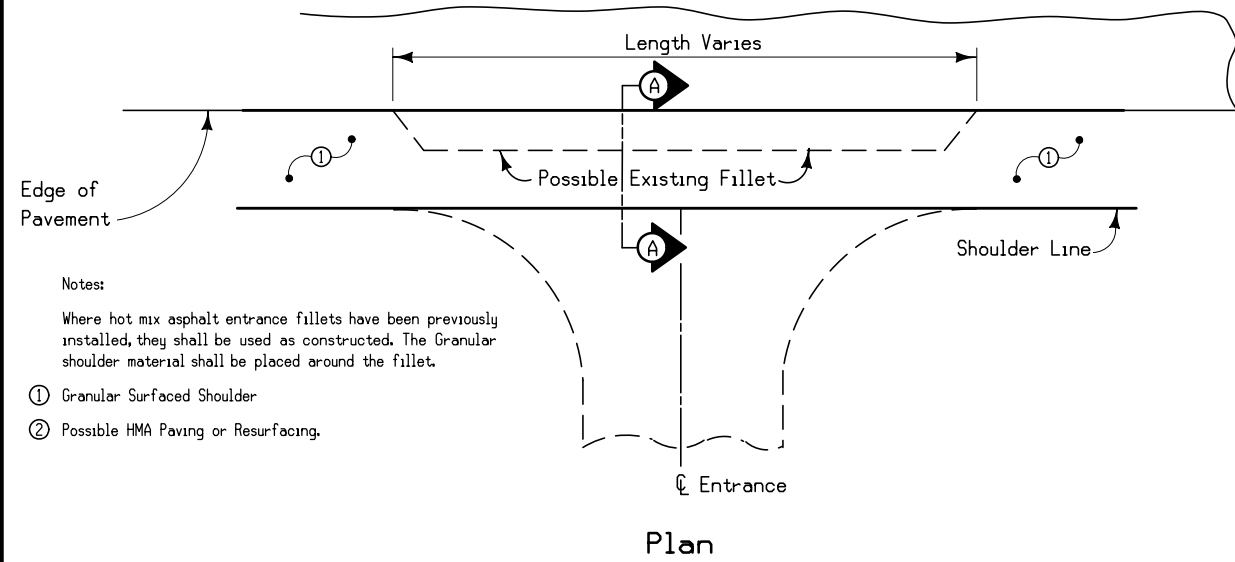
1R_G_ 10-19-10		
BEGIN STATION	END STATION	Ⓞ Feet
5564+70	5579+25	6
6551+00	6564+12	6
7550+50	7565+89	6
8563+94	8579+00	6

Section shown in the direction of traffic.
 Ramp Jointing:
 Transverse joints: CD at 20' spacing.

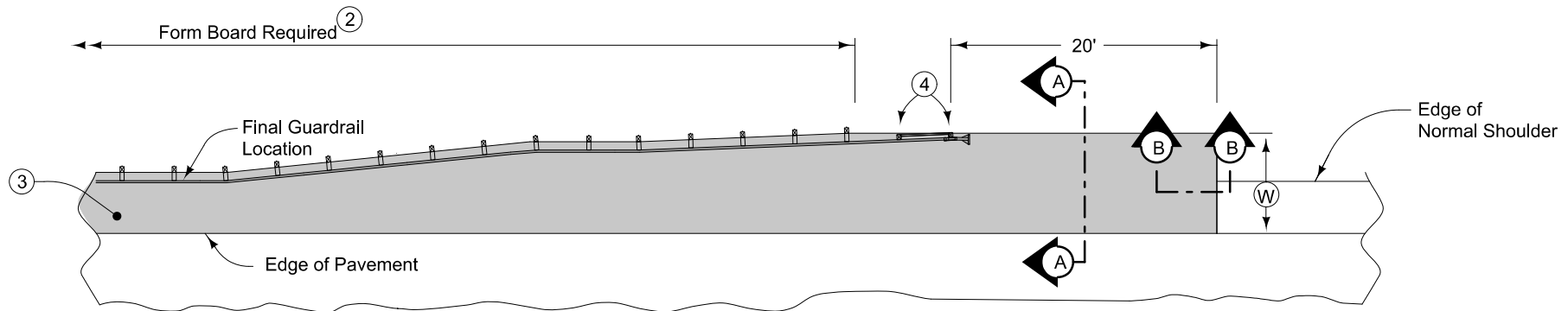
1RP_ 10-19-10	
BEGIN STATION	END STATION
5564+70	5579+25
6551+00	6564+12
7550+50	7565+89
8563+94	8579+00

See Tab 100-24 for pavement quantities.
 See Tab 112-9 for shoulder quantities.

US-61/170th St Interchange Ramps



GRANULAR SHOULDER CONSTRUCTION THRU ENTRANCES



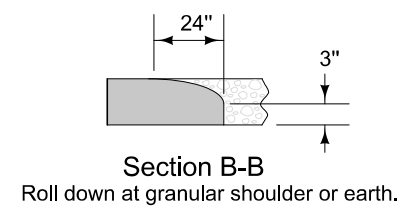
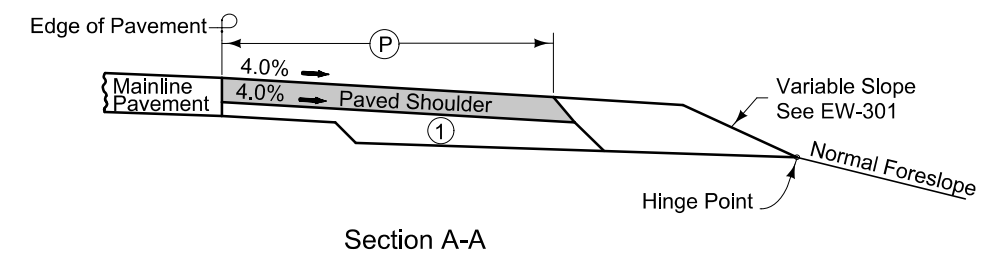
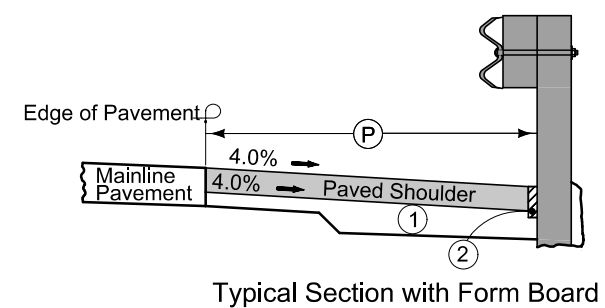
6" HMA Paved Shoulder at guardrail. 7" PCC may be substituted with the following jointing layout:

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

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

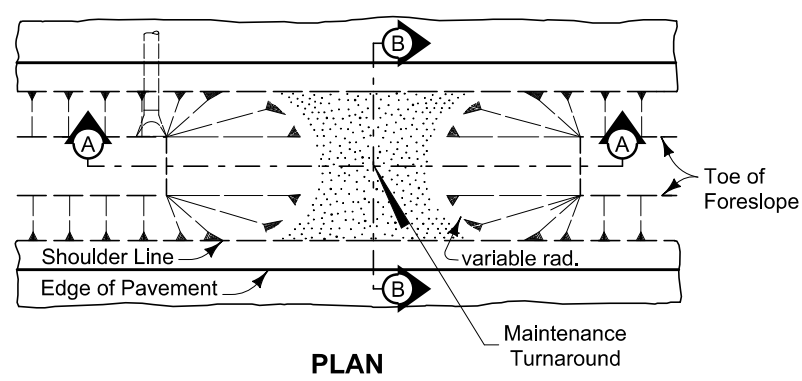
Refer to Shoulder tabulation (112-9) for quantities.

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



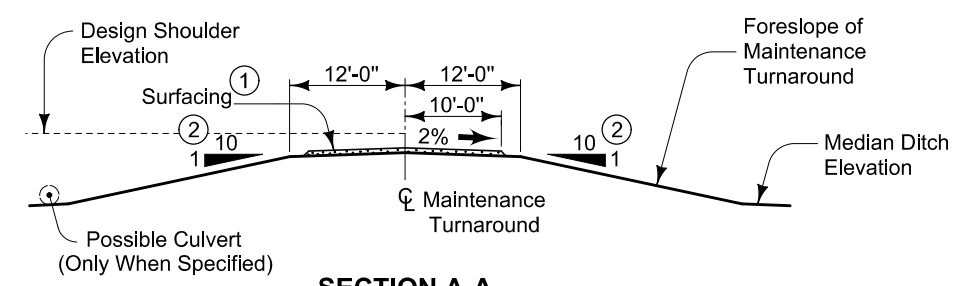
PAVED SHOULDER AT GUARDRAIL

8101
04-20-10

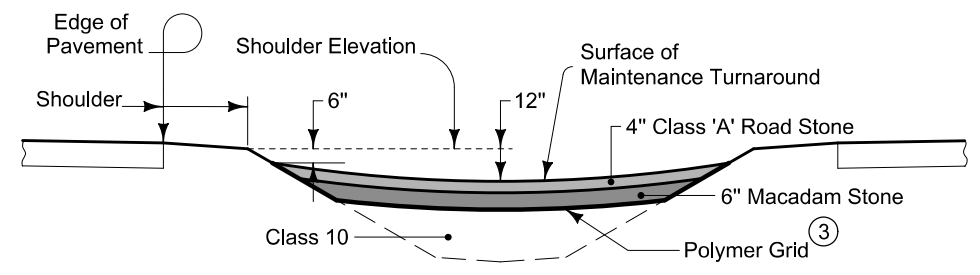


- ① Surfacing quantities based on a 6 inch layer of Macadam Stone base and a 4 inch layer of Class 'A' Road Stone. Apply surfacing as directed by the Engineer.
- ② Construct 8:1 foreslope when drainage pipe is incorporated into the maintenance turnaround.
- ③ Install Polymer Grid between earth fill and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

PLAN



SECTION A-A

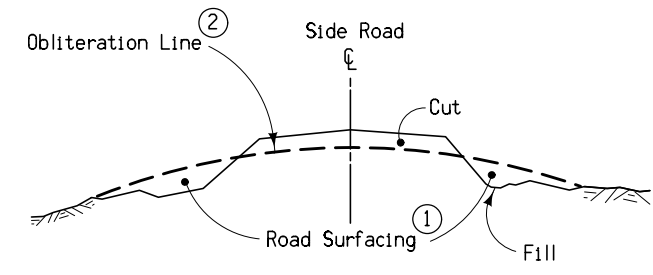


SECTION B-B

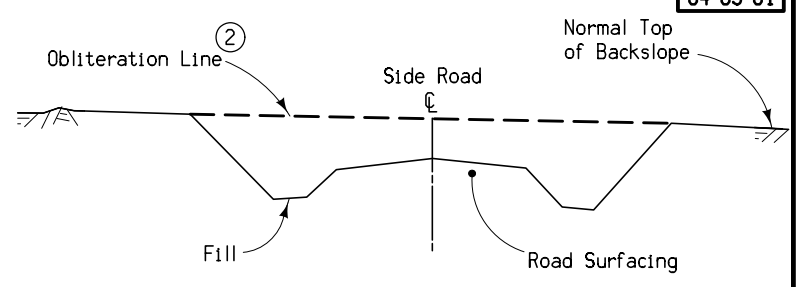
Location		Macadam Stone Tons	Class 'A' Road Stone Tons	Polymer Grid SY	Class 10 CY
Road Identification	Station				
US 61	885+50				
US 61	940+00				
US 61	990+25				

MAINTENANCE TURNAROUND

4302
04-03-01



FILL SECTION

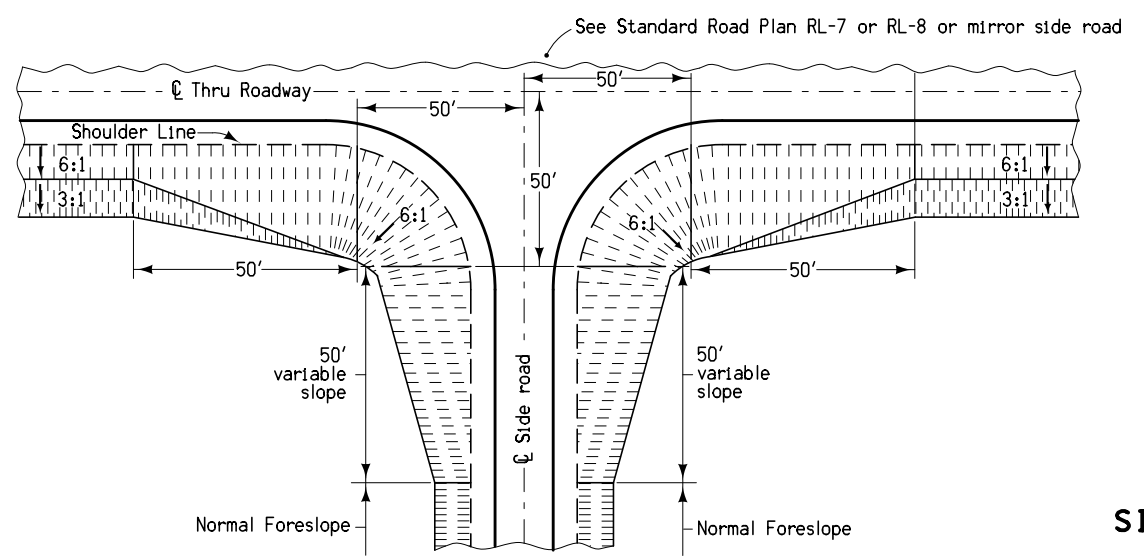


CUT SECTION

- ① Existing road surfacing (granular material) shall be placed as shown unless otherwise directed by the Engineer or provided for in the detail project plans.
 - ② When specified, the upper 1' to be suitable for vegetation (grass or crops).
- Note:
The work of obliterating or reshaping old roadbeds shall be done at the direction of the Engineer.

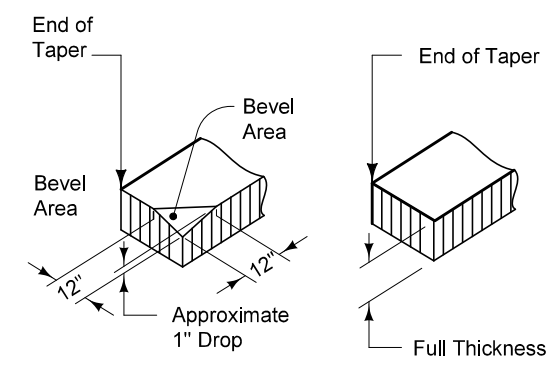
TYPICAL DETAILS FOR OBLITERATION EXISTING ROADBED

2117
04-15-08



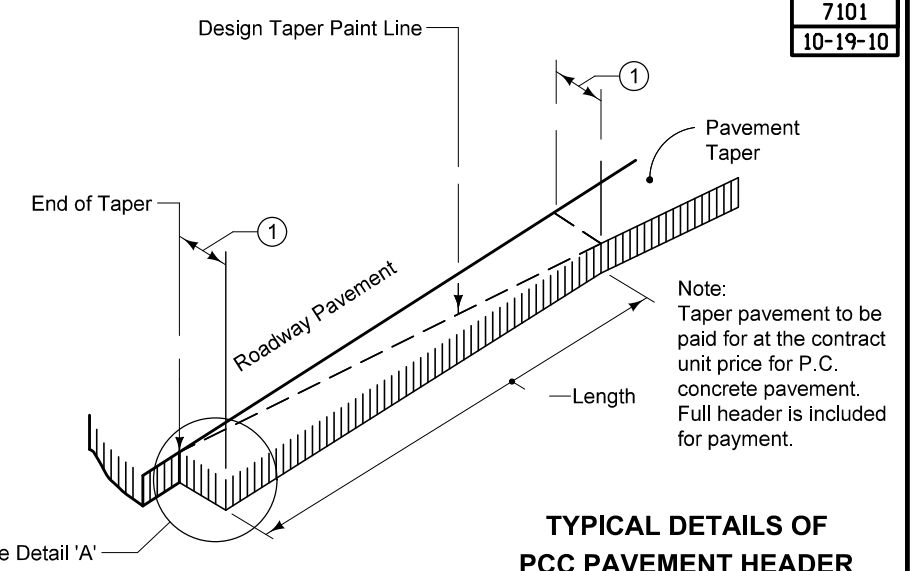
SIDE ROAD GRADING (BARNROOF)

7101
10-19-10



DETAIL 'A'
FOR GRANULAR SHOULDERS
DETAIL 'A'
FOR PAVED SHOULDERS

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



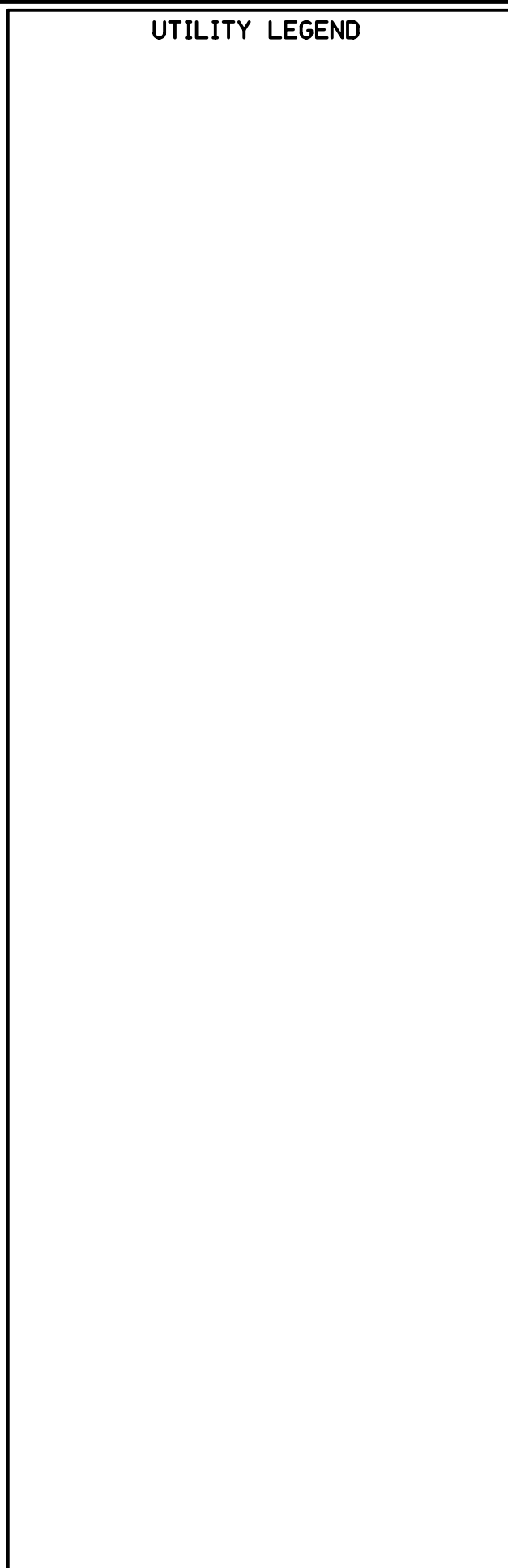
TYPICAL DETAILS OF PCC PAVEMENT HEADER

Note:
Taper pavement to be paid for at the contract unit price for P.C. concrete pavement. Full header is included for payment.

SURVEY SYMBOLS

○ MIS Miscellaneous	--- ENT Centerline BL of Entrance
--- LIN Miscellaneous Line	--- CON Concrete or A/C Slab
--- PIP Pipe Culvert	--- ENP Edge Paved Entrance & Park Lot
--- TIL Tile Line	--- RR Centerline of Railroad Tracks
○ OUT Tile Outlet	--- EW Edge of Water
☒ IN Storm Sewer Intake	--- CU Back of Curb
--- CUL Culvert	--- GU Gutter In Front of Curb
⊗ INB Storm Sewer Beehive Intake	--- E1 ELA Underground Electric Line Co. 1
○ MM Mile Marker Post	--- E2 ELB Underground Electric Line Co. 2
RRW Railroad Switch	--- T1 TLA Underground Telephone Line Co. 1
RRS Railroad Signal	--- F04 FOD Underground Fiber Optic Co. 4
RRF Railroad Frog	--- GHA Underground High Pres Gas Co 1
□ EB Electrical Box	--- F03 FOC Underground Fiber Optic Co. 3
--- BRG Bridge	--- F0 FOA Underground Fiber Optic Co. 1
--- GDL Guard Rail Steel	--- BL Topo Breakline
BB BB Billboard	--- BLD Building or Foundation
□ SIGN SL Speed Limit Sign	--- SWP Swamp or Marsh
PPA Power Pole Co. 1	--- SWK Sidewalk
○ TA Tower Anchor	☒ WM Wind Mill
PR Electric Riser Pole	LP L.P. Tank
○ LUM Luminaire	TV Satellite TV Dish
☒ MH Utility Access (Manhole)	BB Billboard
□ SIGN SI Sign	○ FLG Flag Poles
PPC Power Pole Co. 3	--- RET Retaining Walls
LC Lot Corner	--- FCL Chain Link and Security Fence
* TEV Evergreen Tree	--- C Centerline BL of Road (ML or SR)
○ TDC Tree Deciduous	--- FVD Wood Fence
--- HDG Hedge Row	SHR Shrub
SHR Shrub	--- TER Terrace
HT Electrical Highline Tower	
○ TP Telephone Pedestal	
* TSG Traffic Signal	
○ GV Gas Valve	
--- UV Underground Utility Vault	
--- x FW Wire Fence	
--- GPR Guard Post (4 or More Posts)	
--- BLD Building or Foundation	
--- # FCL Chain Link and Security Fence	
--- BNK Stream Bank	
--- EP Edge of Paved Roads (ML or SR)	
--- SNP Unpaved Shoulder	
--- DIK Centerline of Dike or Dam	
SNK Sink Hole	
--- D Centerline Draw or Stream (Down)	
--- DU Centerline Draw or Stream (Up)	
--- EG Edge of Gravel Road	
--- ENU Edge Unpaved Entrance & Parking	
--- SH Paved Shoulder	

UTILITY LEGEND



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.		
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
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

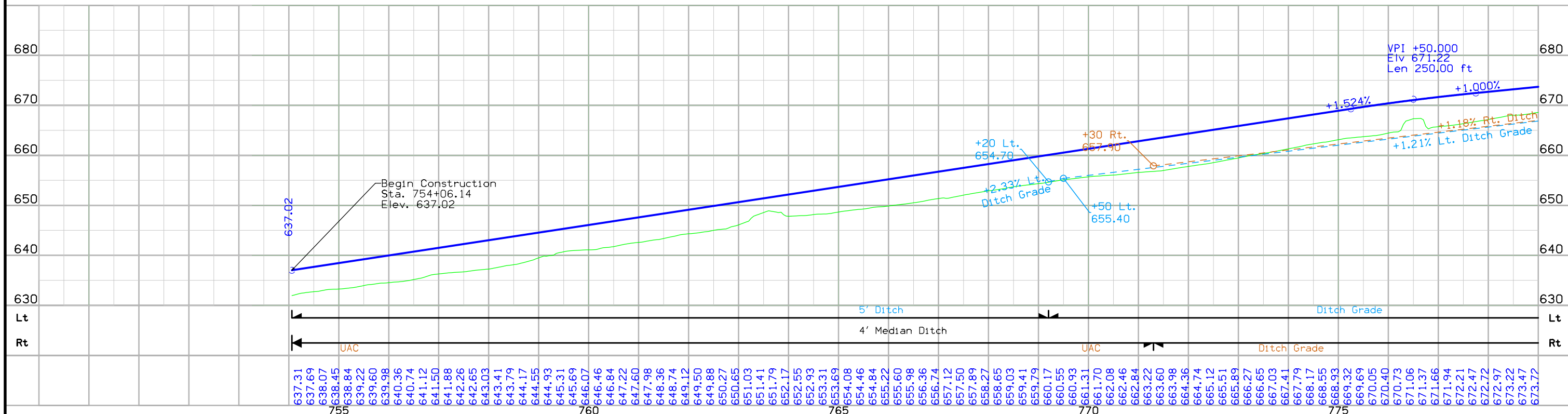
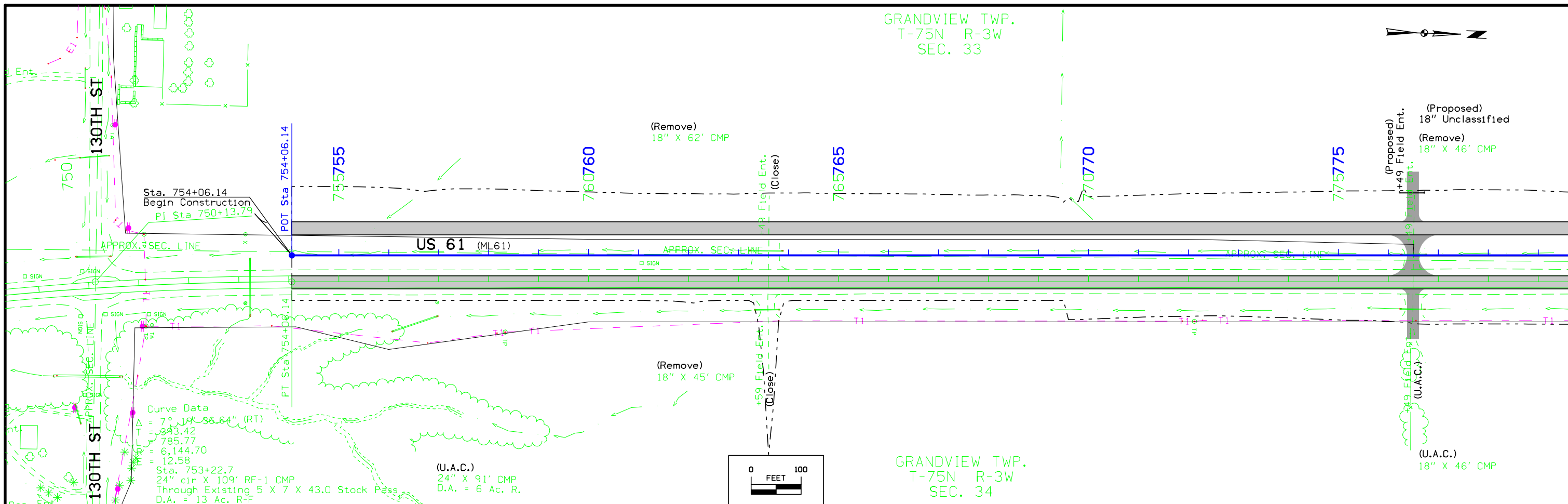
Reference Point	○ Survey Line
Station	△ Section Corner
--- Ground Line Intercept	--- Saw Cut
--- Guardrail	--- Clearing & Grubbing Area
--- Pavement Removal	

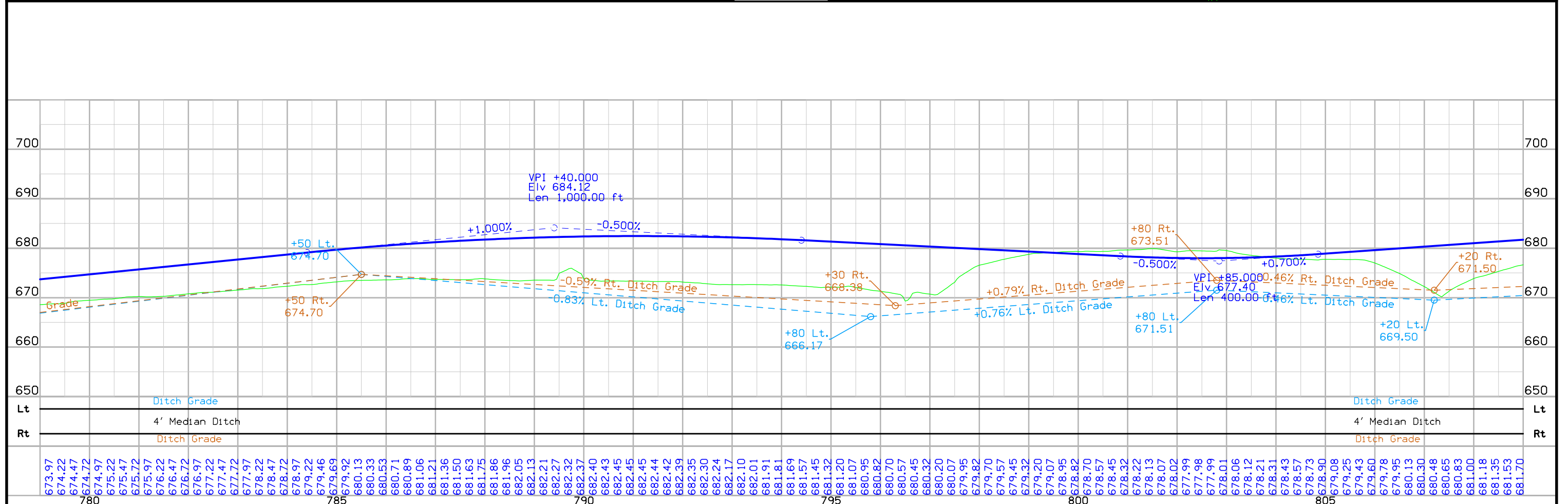
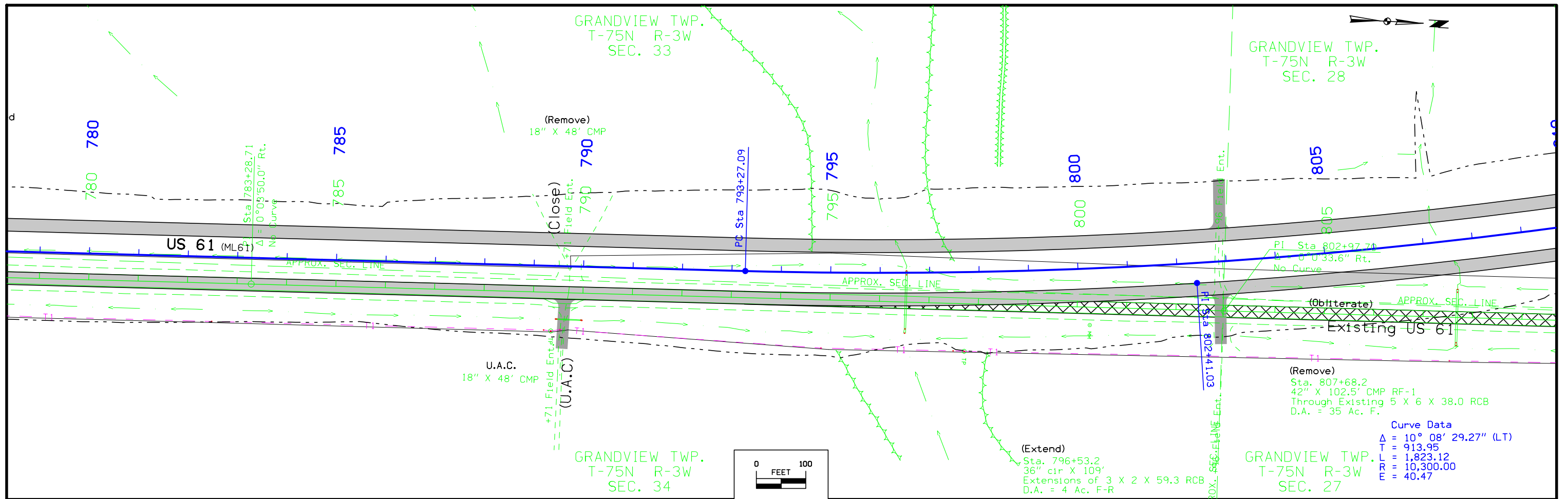
RIGHT-OF-WAY LEGEND

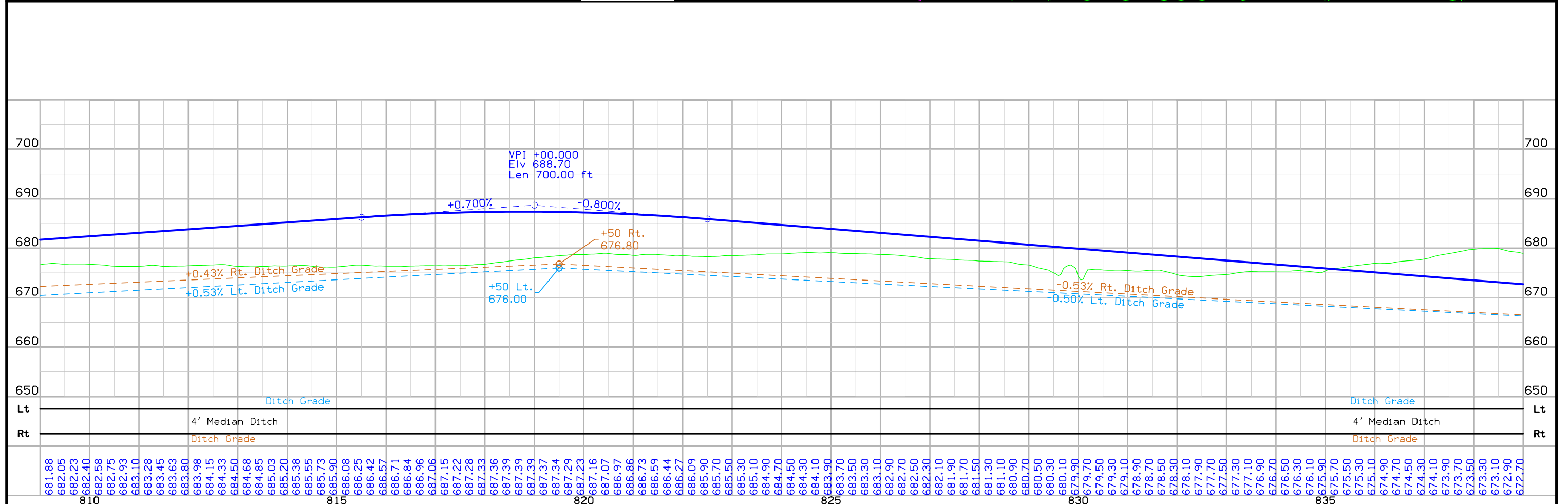
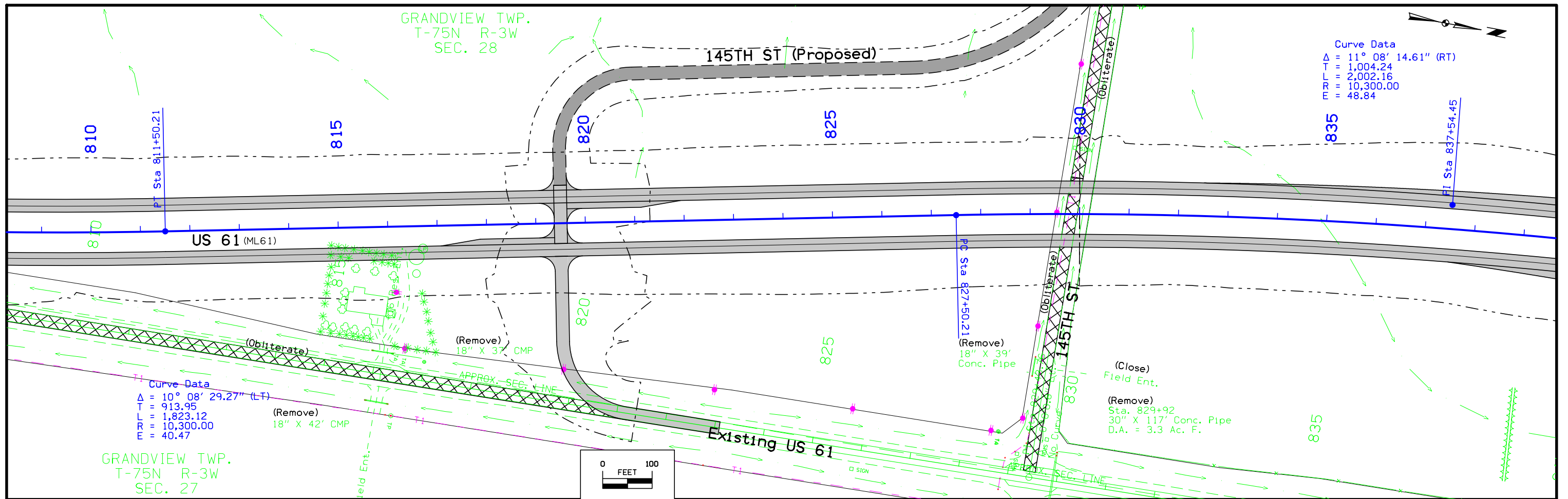
△	Proposed Right-of-Way
△	Existing and Proposed Right-of-Way
△	Easement and Existing Right-of-Way
■	Borrow
○	Easement (Temporary)
●	Easement
X	Excess
A/C	Access Control

PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

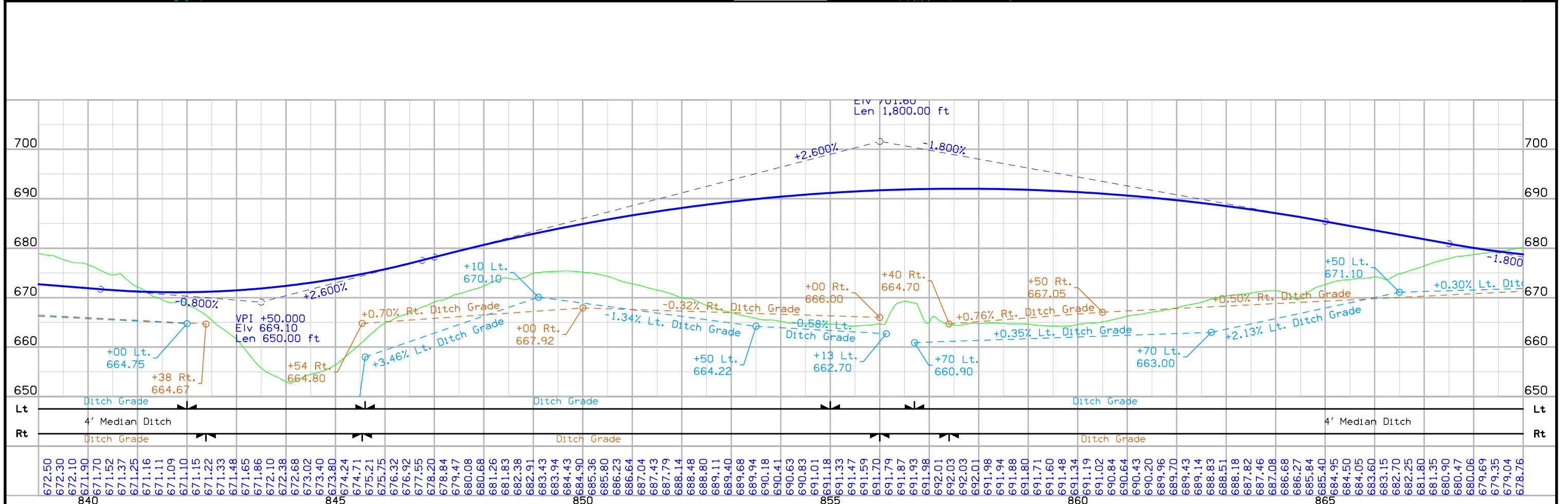
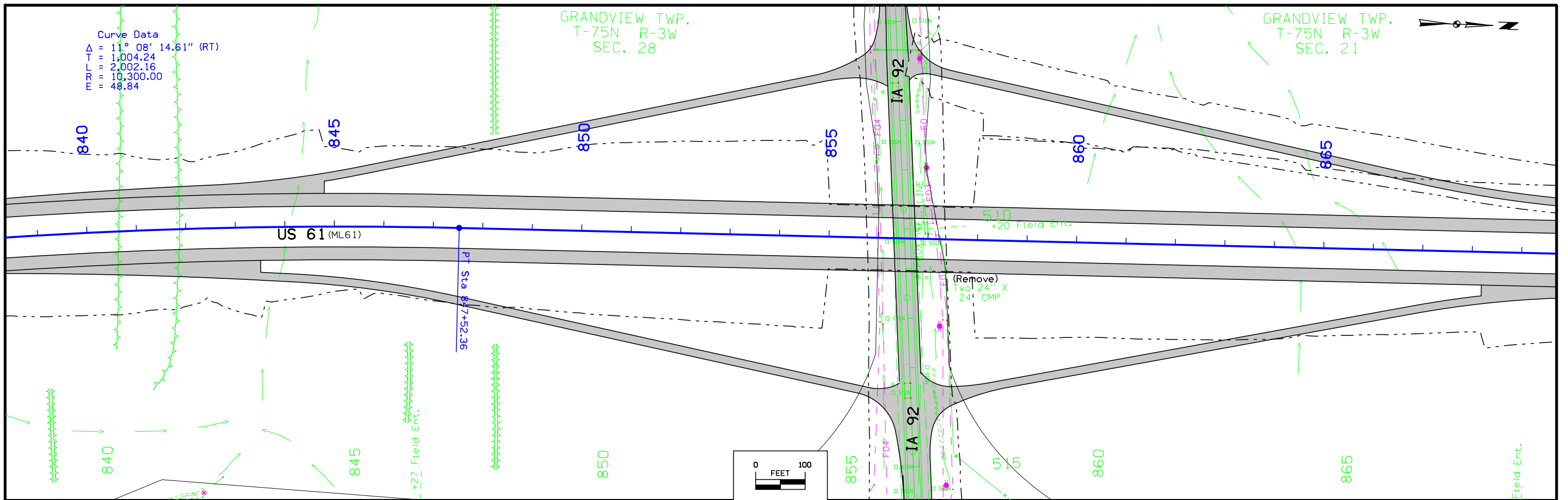
(COVERS SHEET SERIES D, E, F, & K)

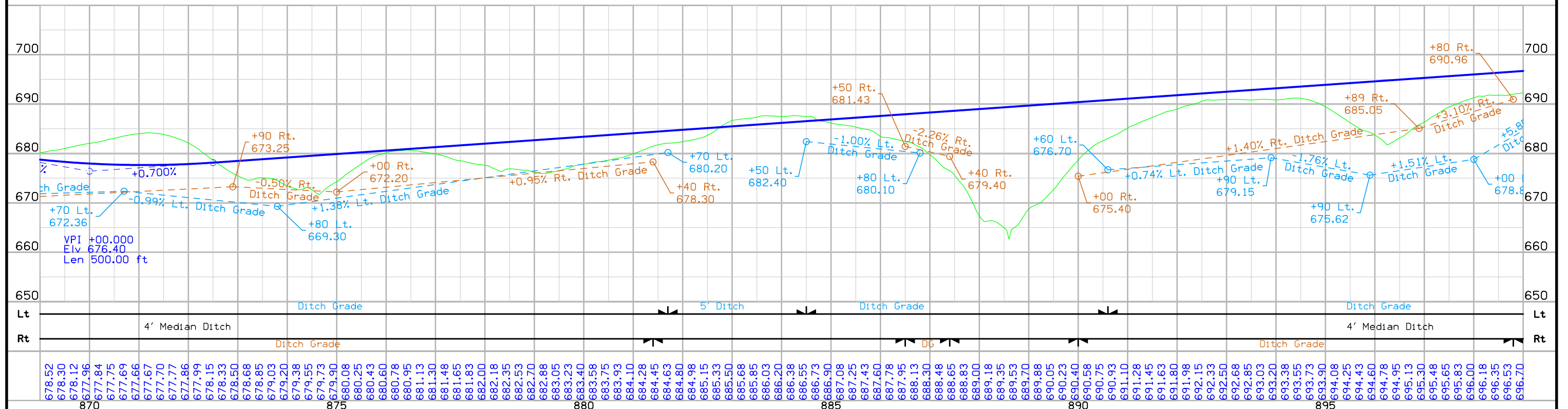
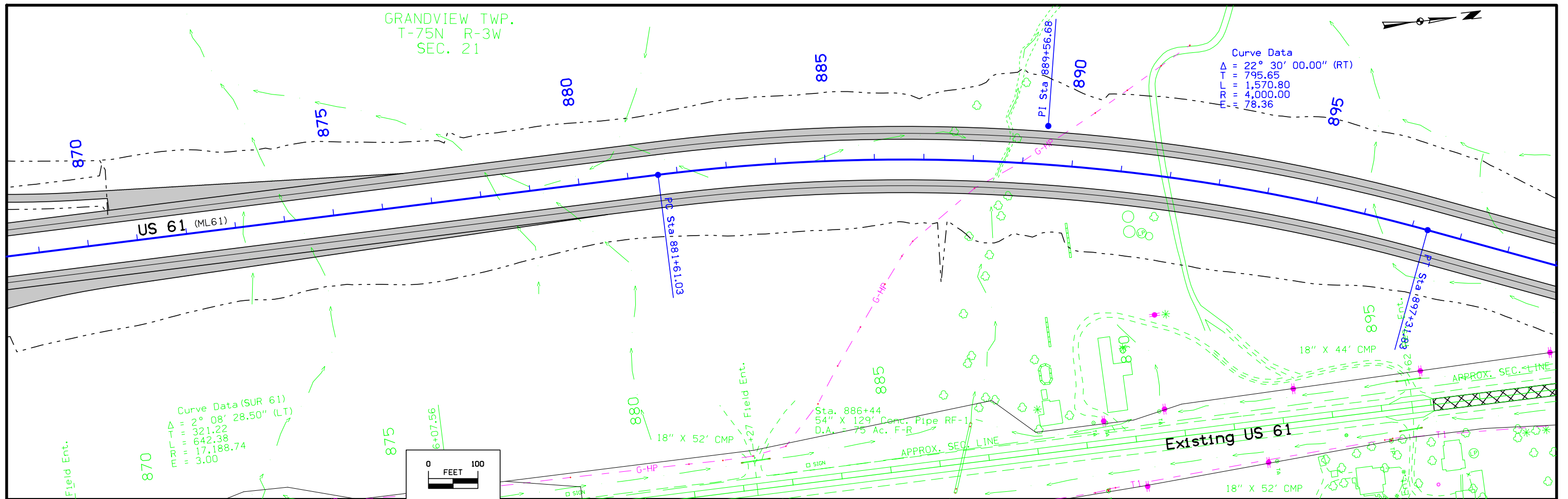


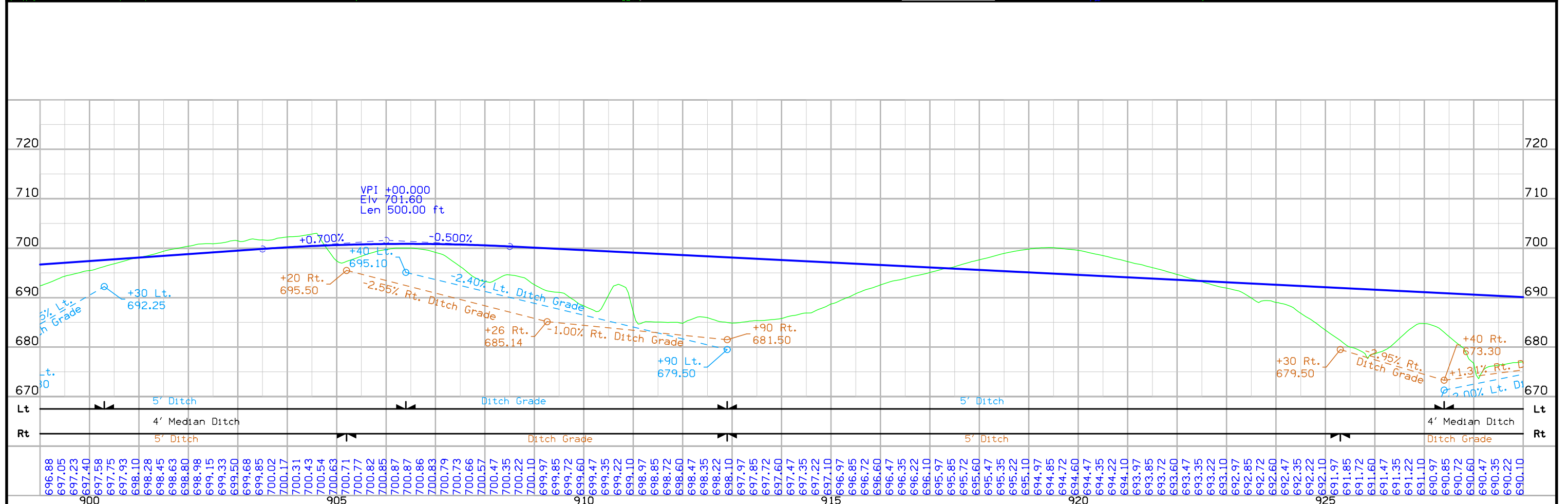
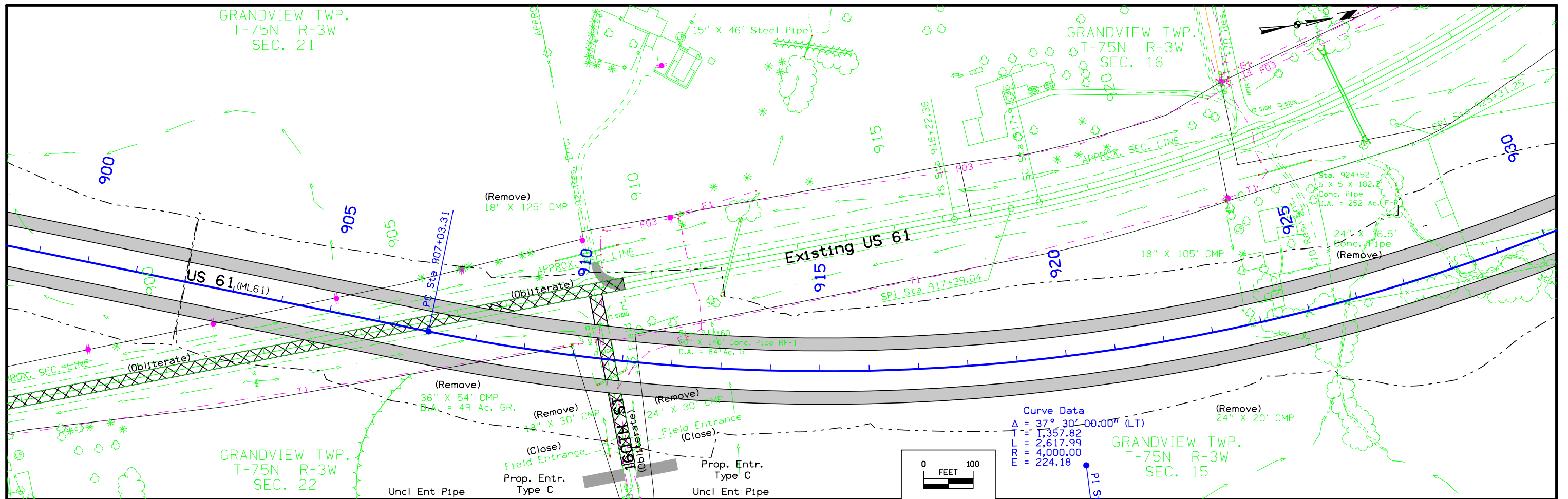




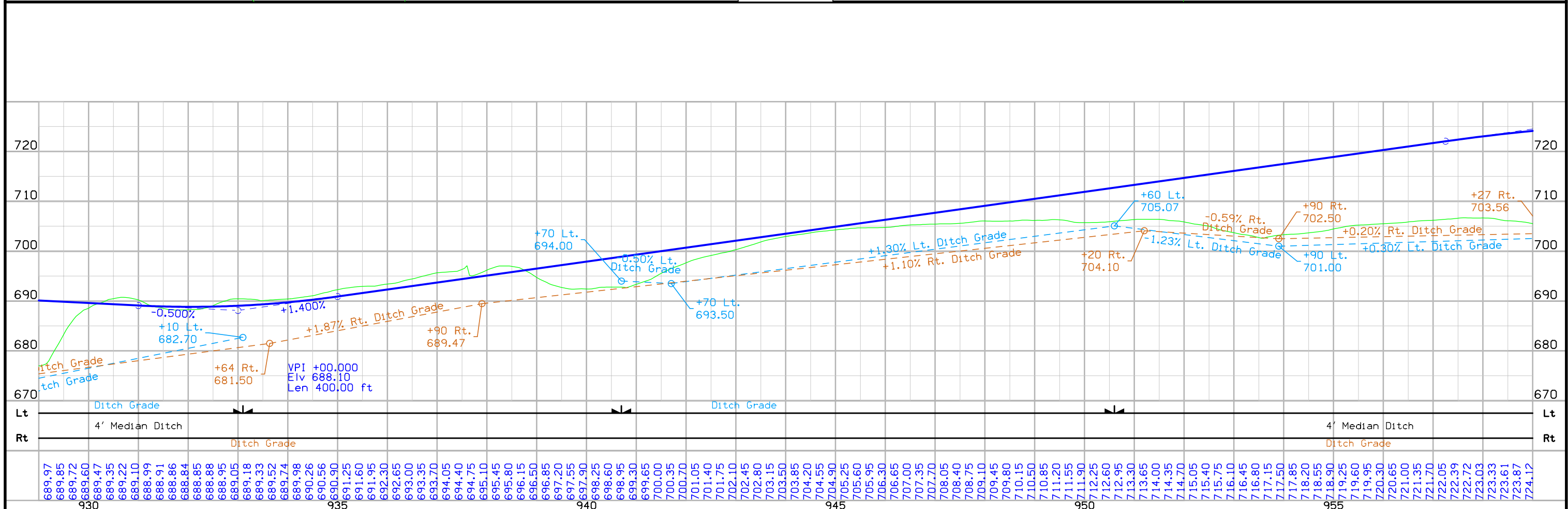
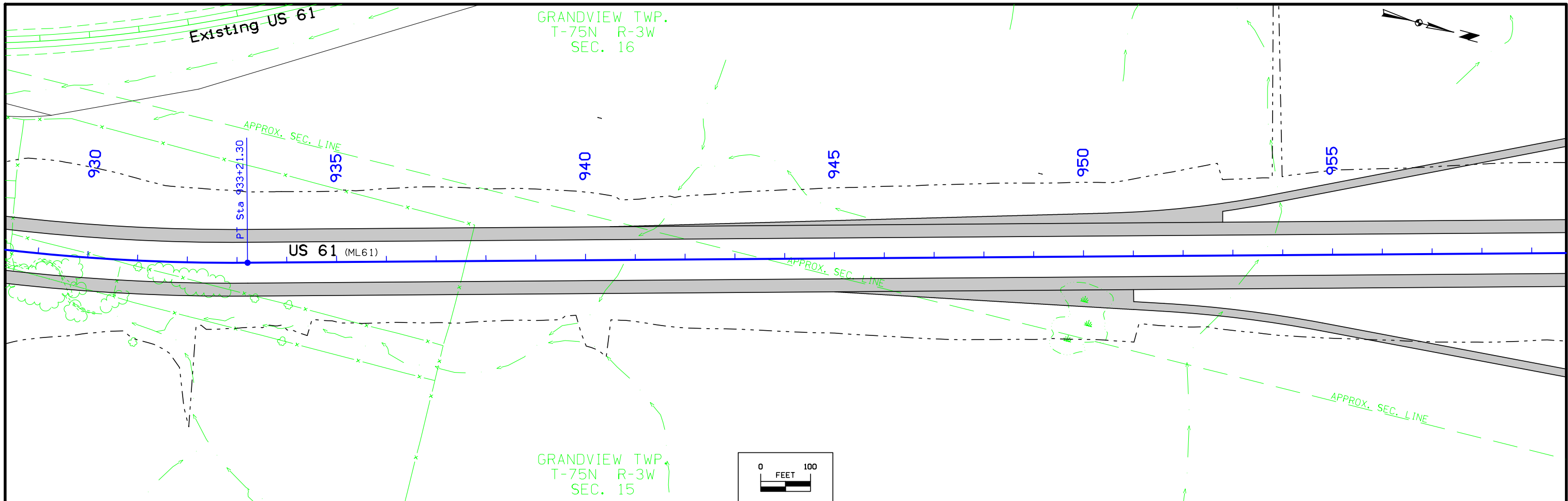
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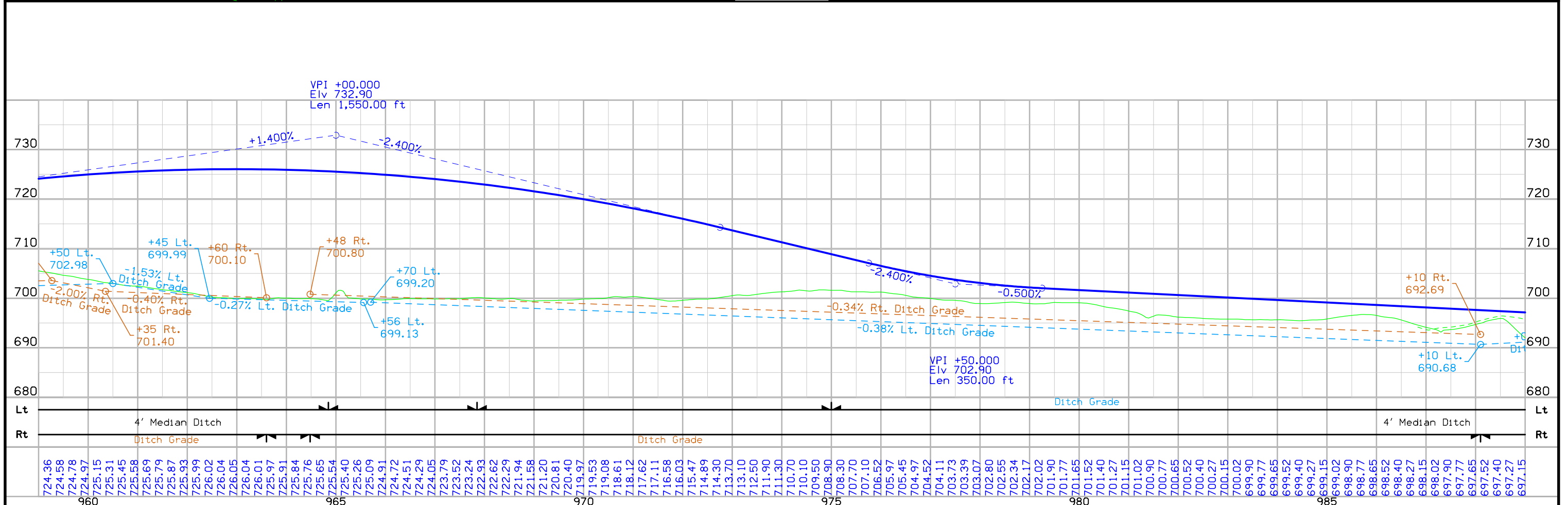
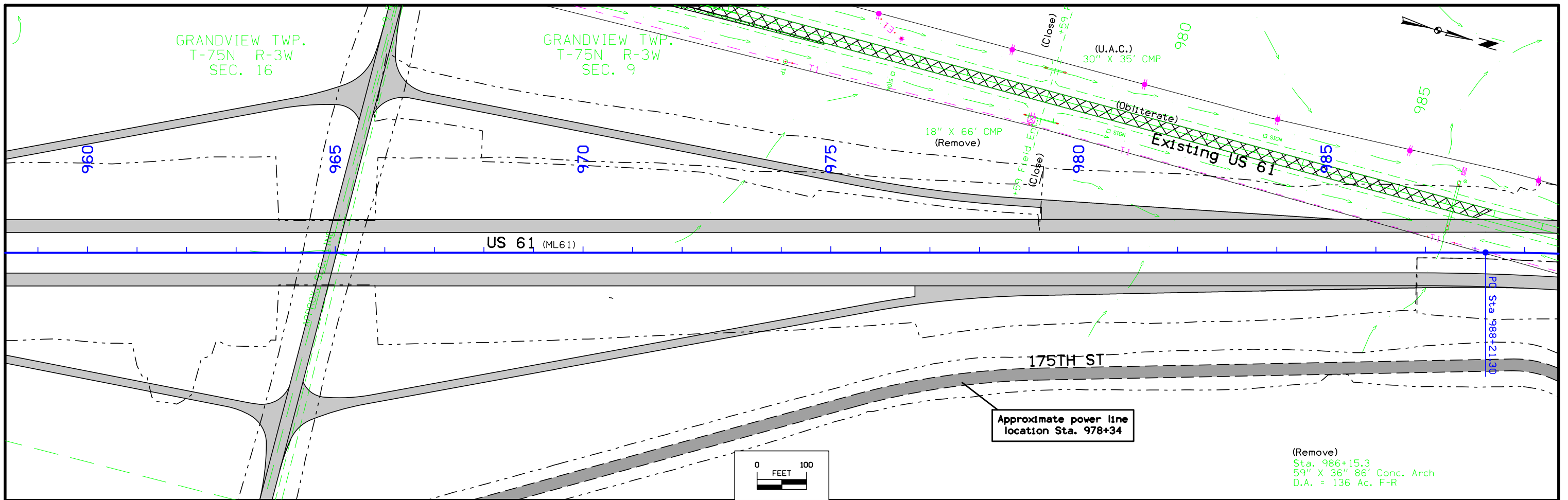


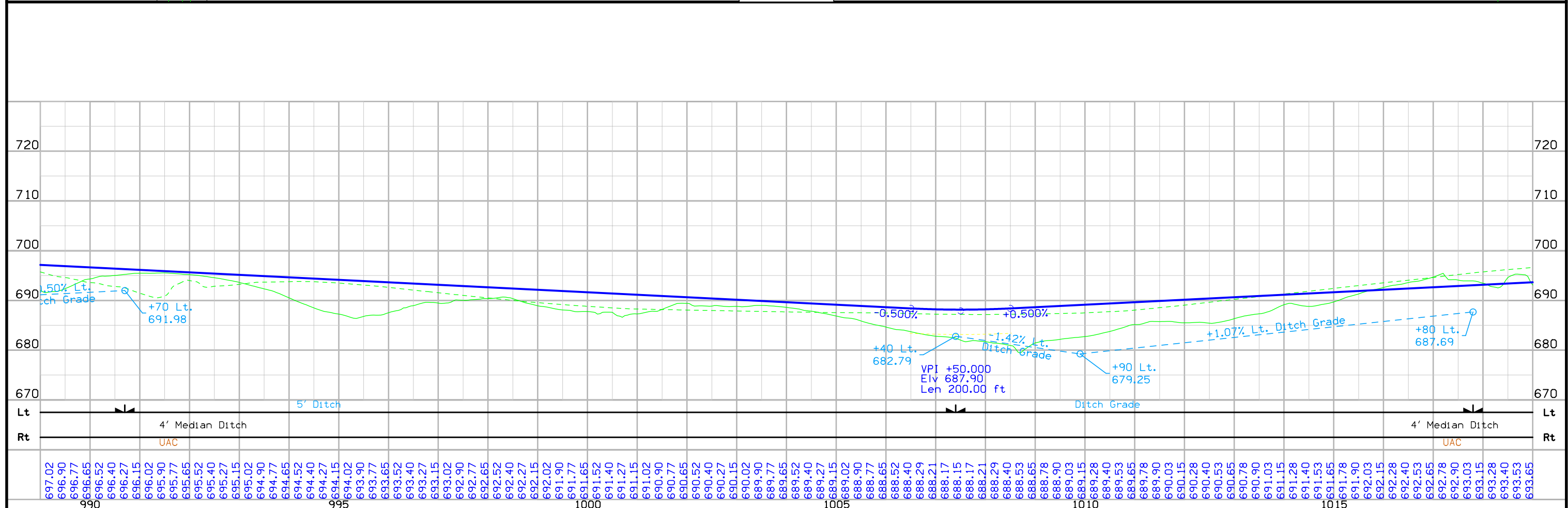
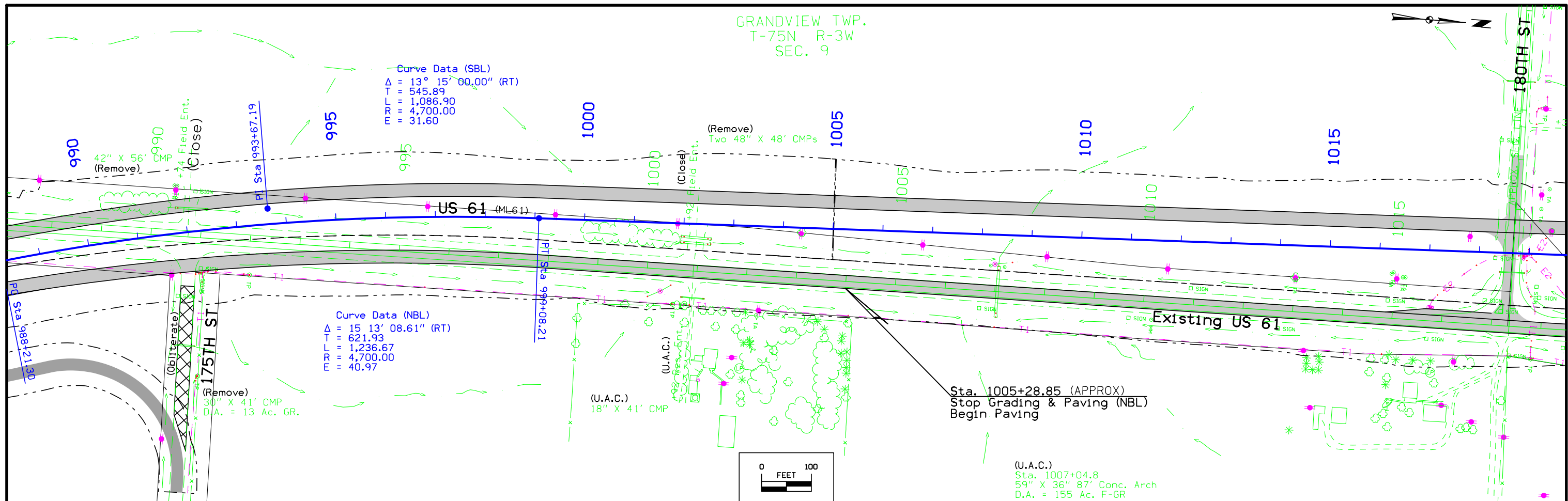


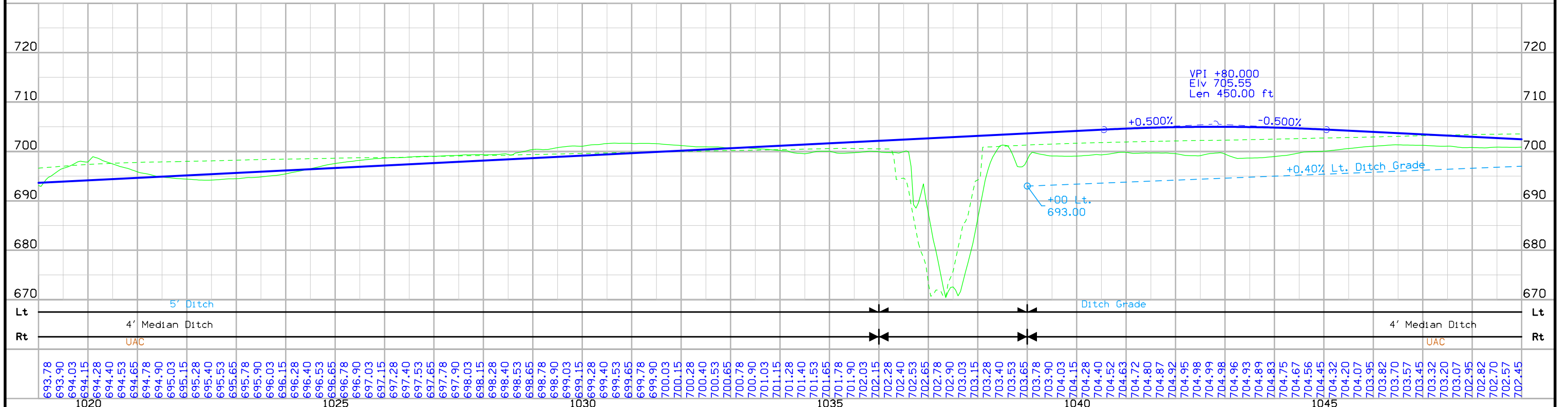
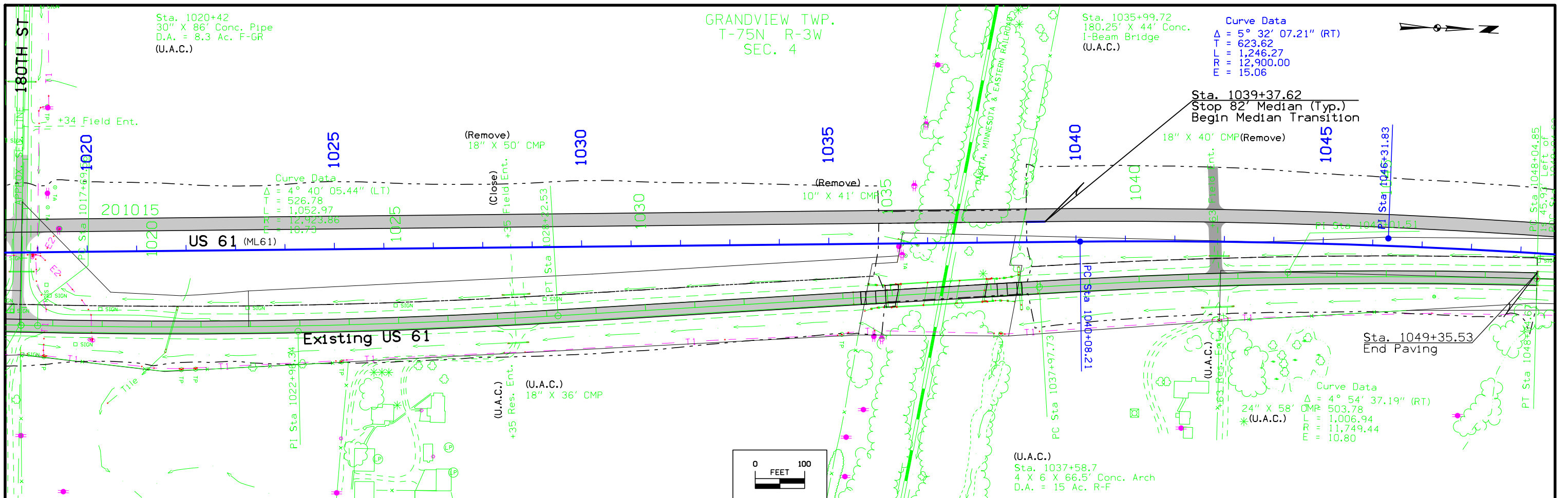


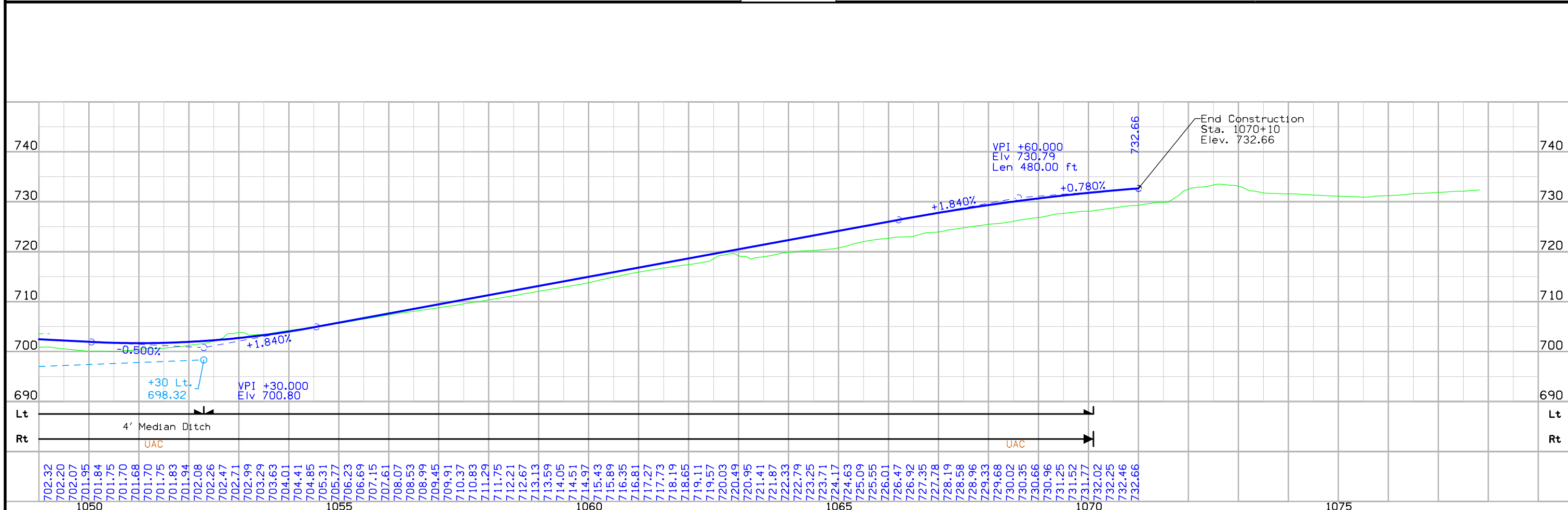
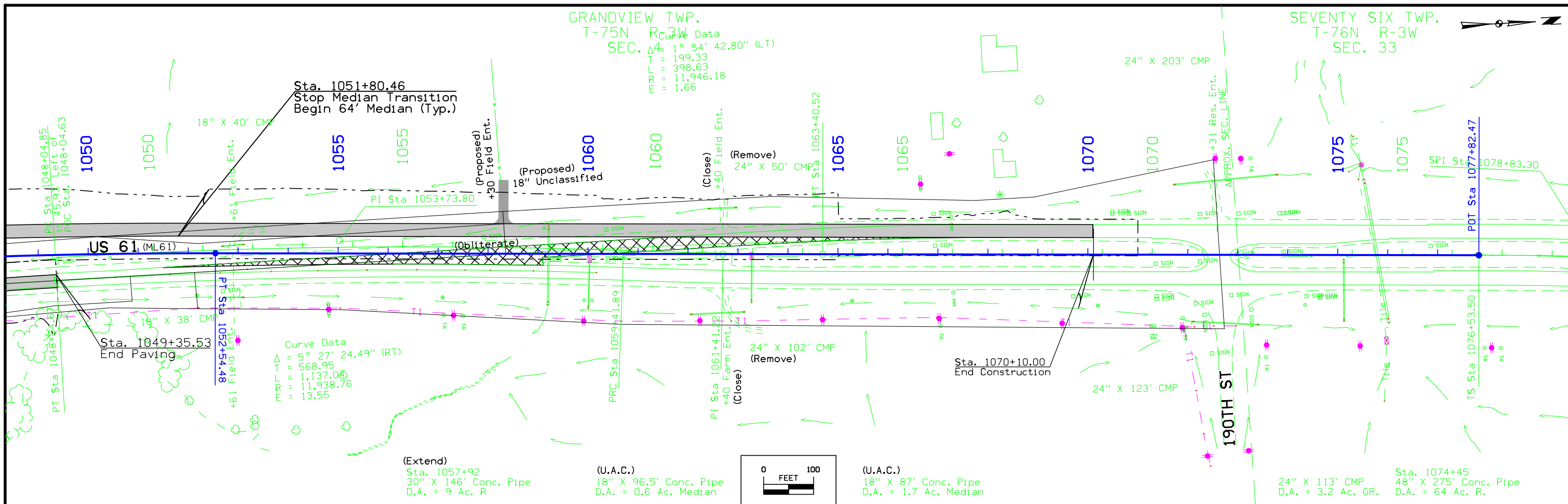
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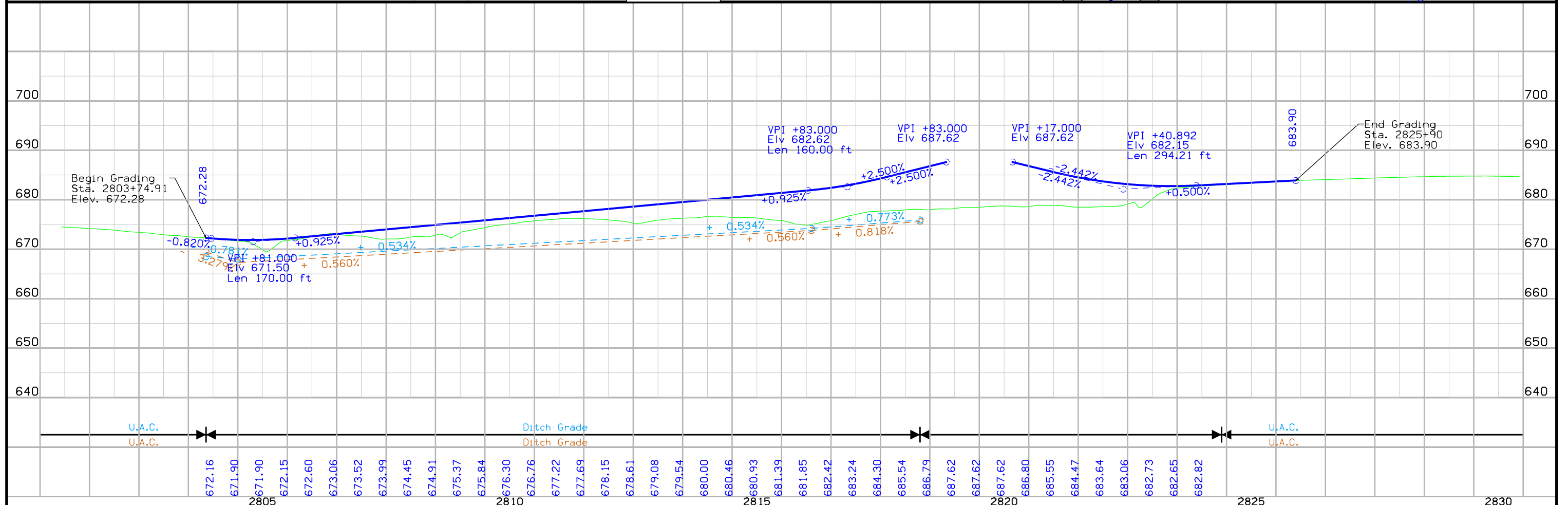
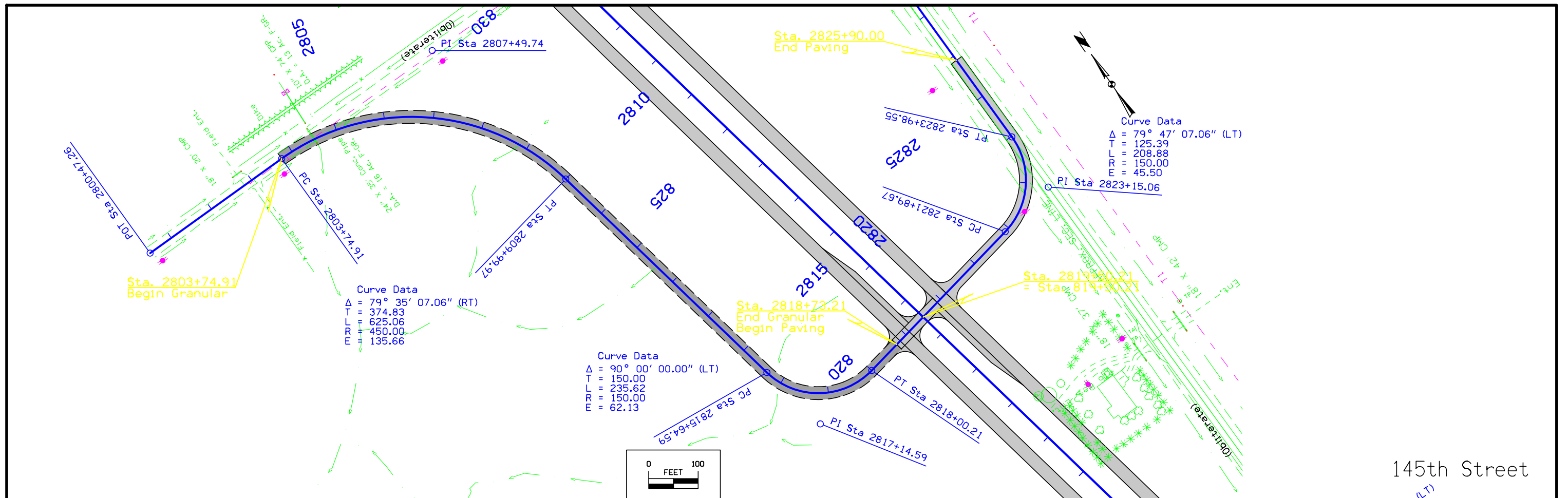


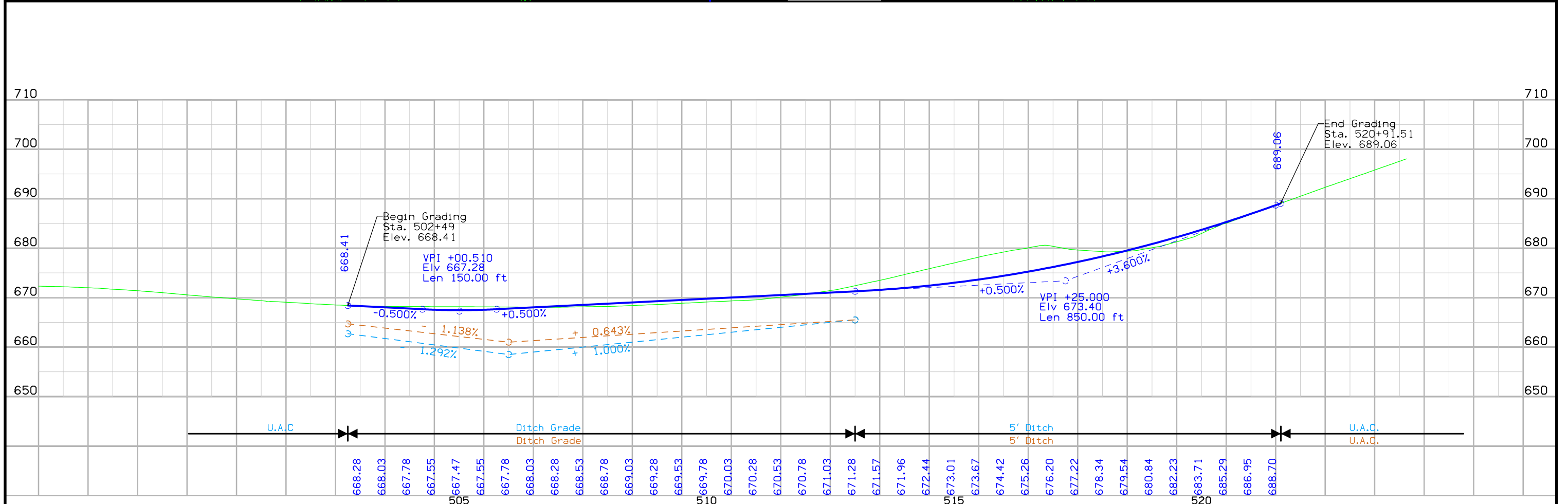
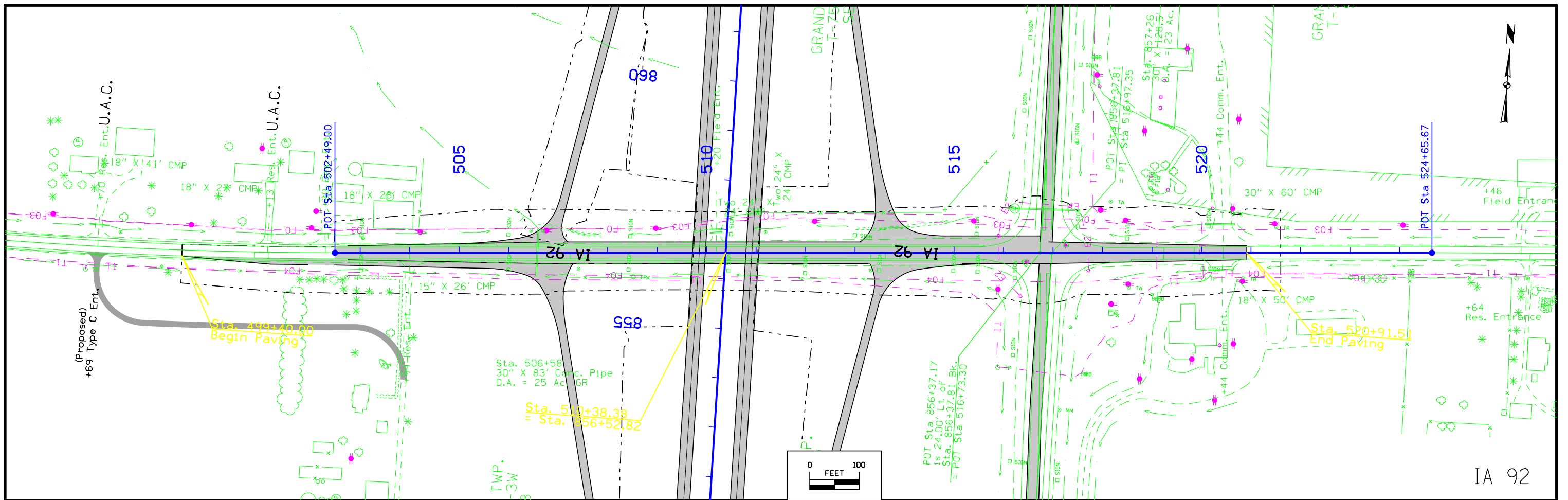


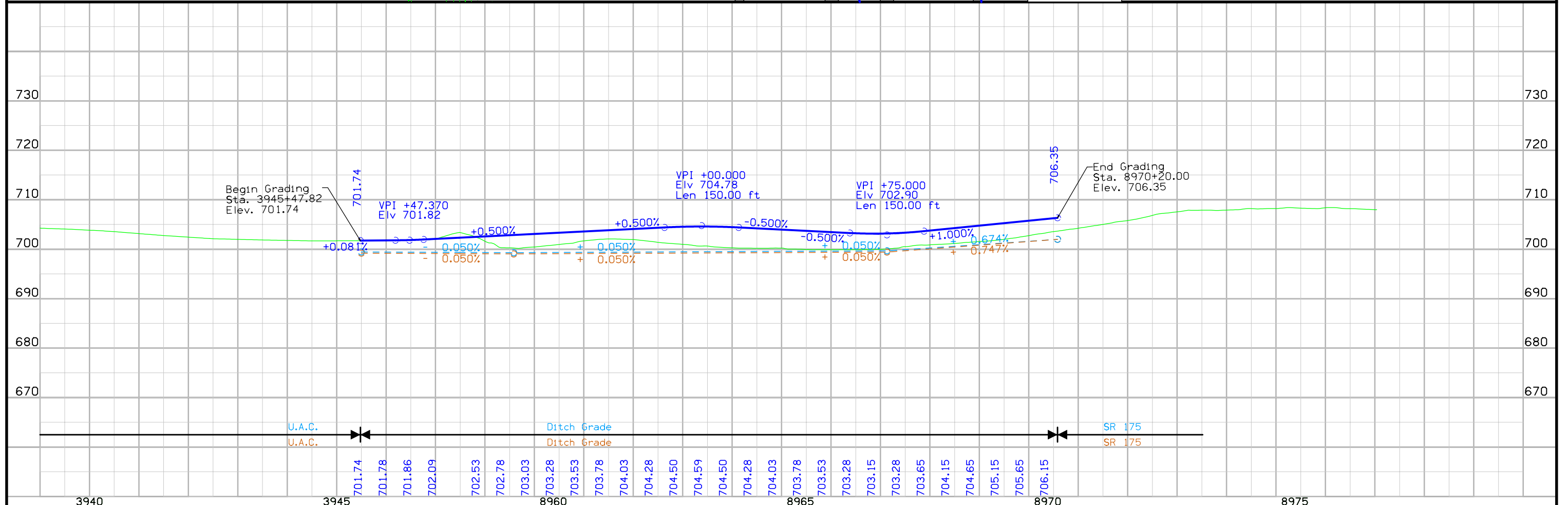
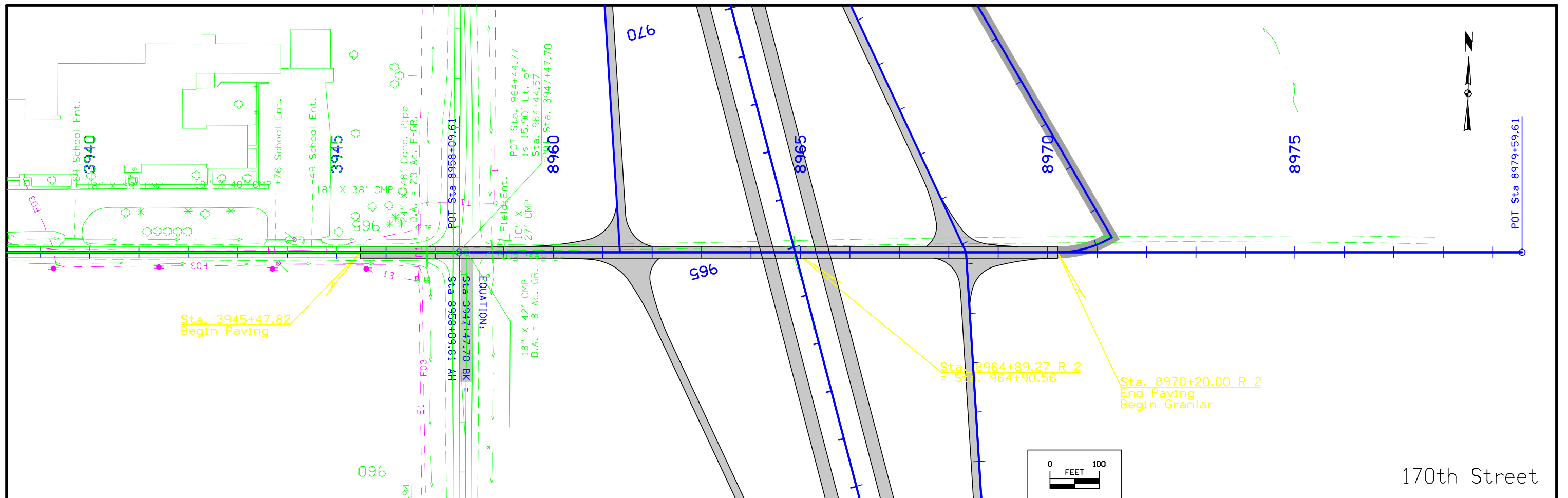


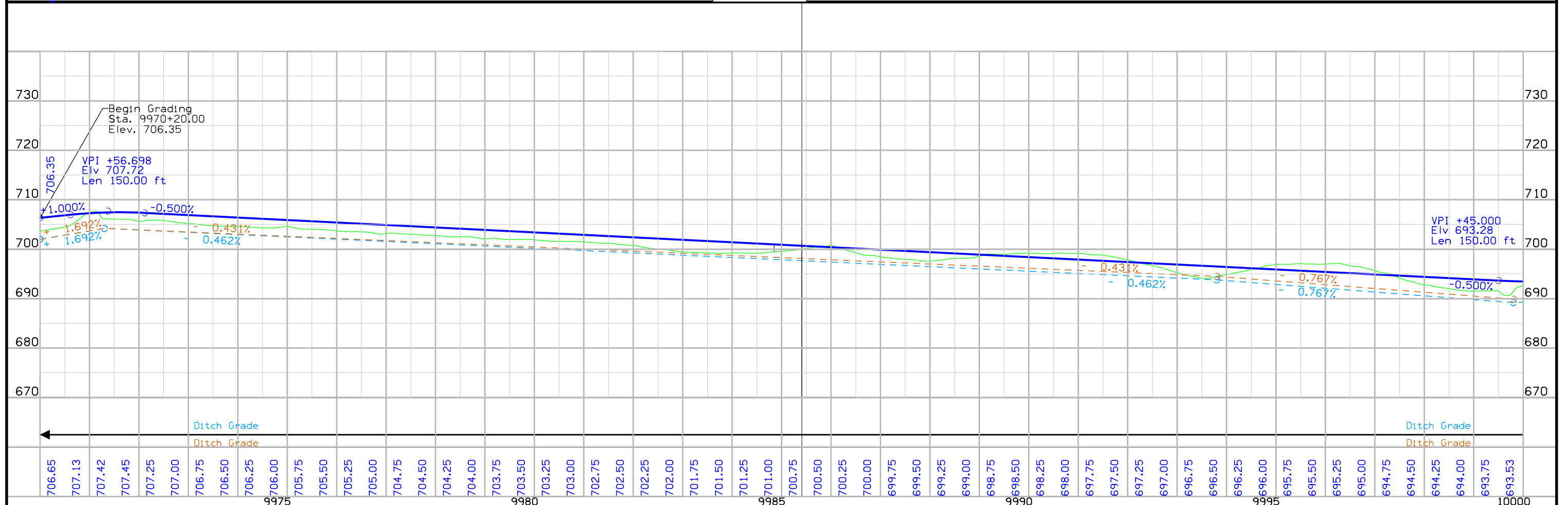
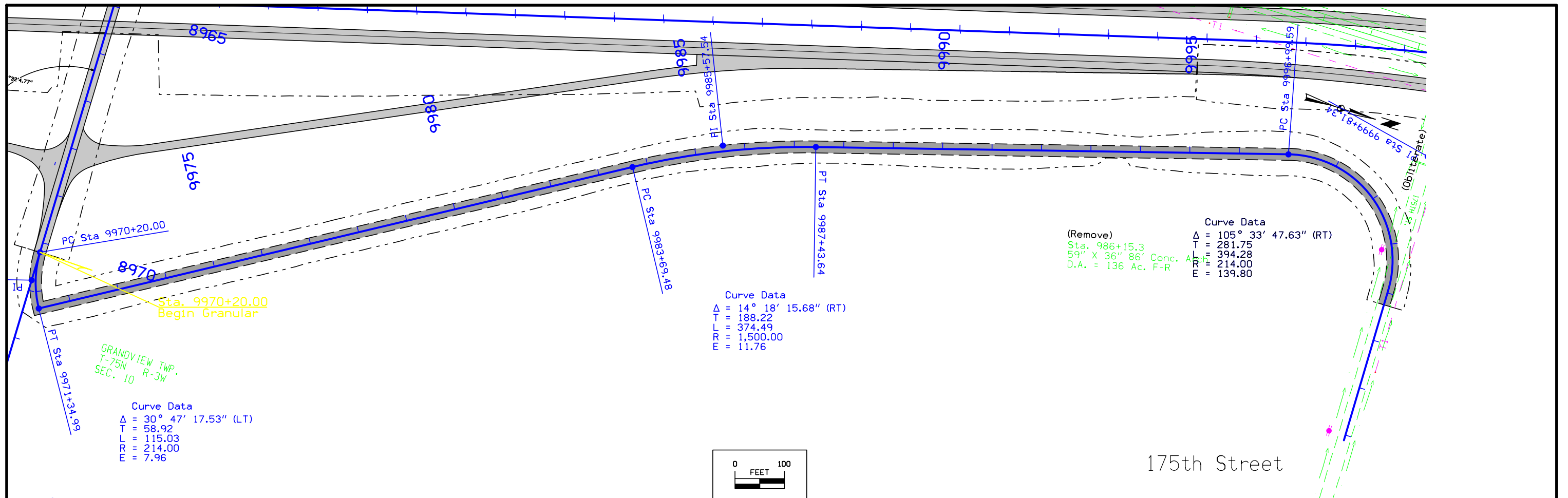


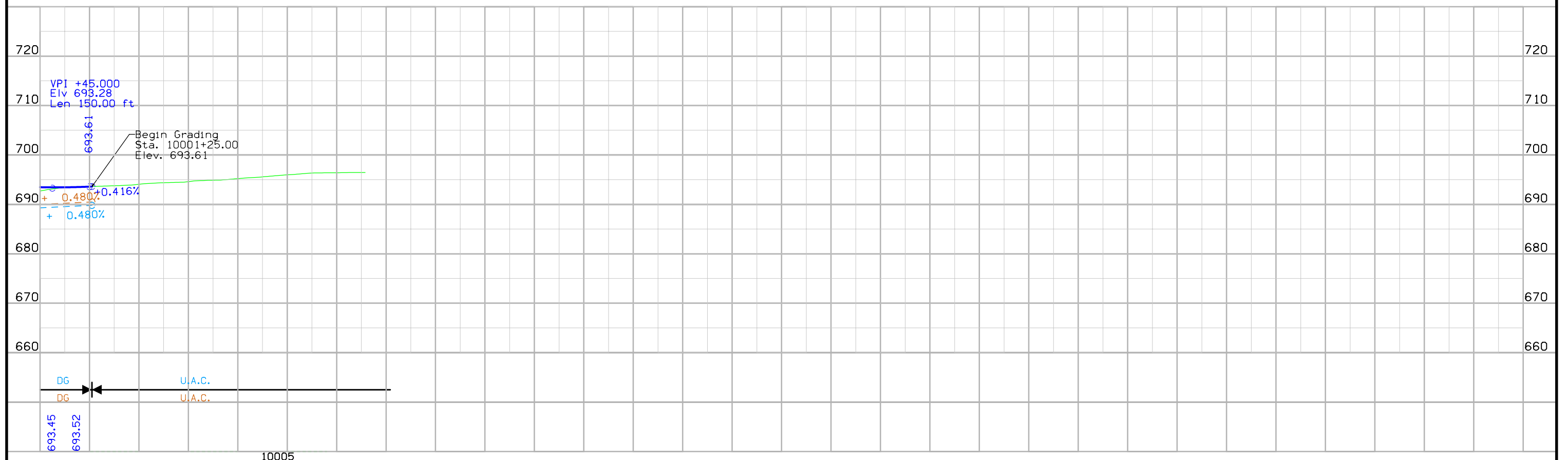
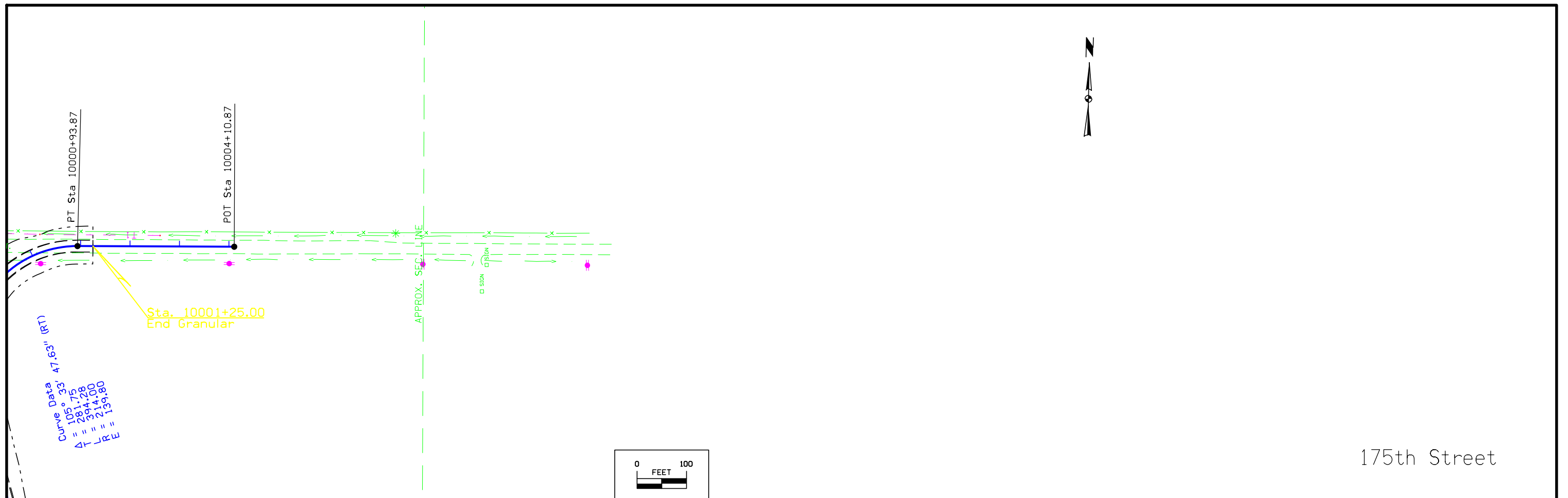


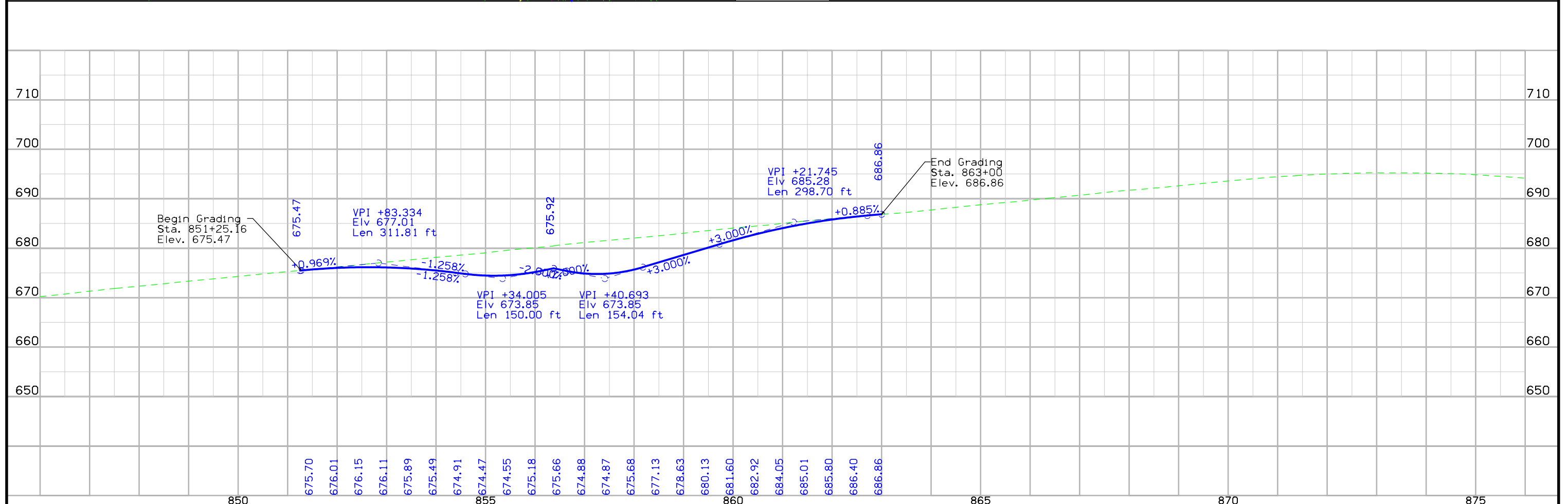
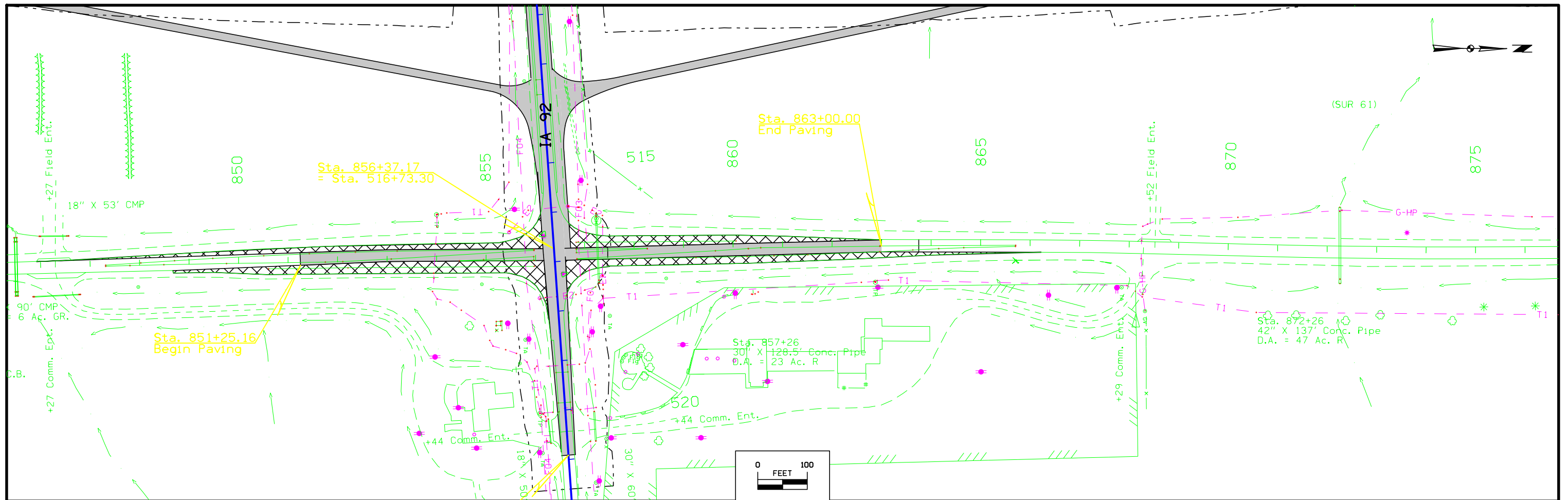


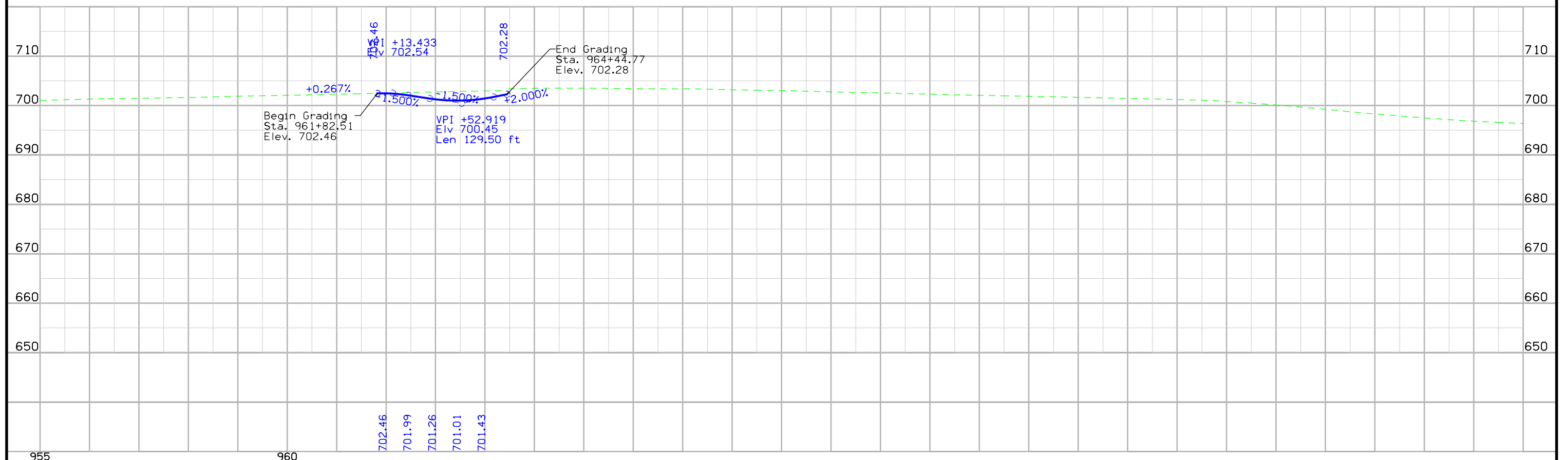
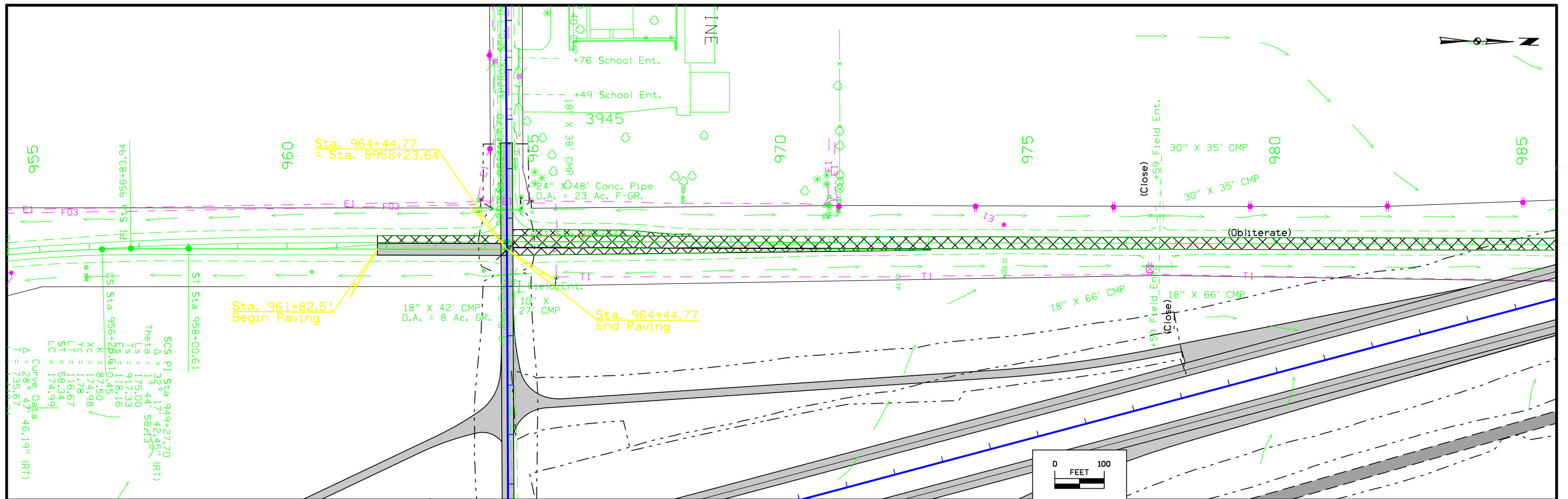












TRAFFIC CONTROL PLAN

Existing US-61:
- Maintain one lane of traffic in each direction except as noted below.

Sideroads: 130th St., 145th St. IA-92, 160th St., 170th St., 175th St., 180th St., 190th St.
- Maintain traffic in each direction except as noted below.

IA-92:
- One lane of traffic will be maintained at all times during reconstruction of IA-92.

TABULATION OF SPECIAL EVENTS

Event	Location	Date
None provided at this time.		

COORDINATED OPERATIONS

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

Project	Type of Work

STAGING NOTES

It is not the intent of the sequence of construction to confine the Contractor's activities to the area of the suggested stages alone. It is understood that some of the various steps, though listed in the numerical order, may occur simultaneously. Therefore, the Contractor may conduct several operations concurrently on the project, provided that the existing traffic is maintained and that these operations do not conflict with the staging indicated here in.

It is recognized that as various activities related to the construction progress, certain situations may arise which will preclude adhering to the original construction sequence or, which in the opinion of the Contractor, would readily adhere itself to a more efficient staging operation. Should this occur, and the Contractor desires to deviate from the original plan, they shall submit an alternate plan for approval by the Engineer.

STAGE I TRAFFIC:
Phase 1.
1. Traffic will be maintained in the existing lanes at all times for the following roadways:
- US 61, IA 92, 130th St., 145th St., 160th St., 170th St., 175th St., 180th St(G-48), and 190th St.
- All farmstead and field entrances are to remain open to traffic at all times.

STAGE I CONSTRUCTION:
Phase 1.
1. Construction of all Stage I pipes and culverts under proposed SB US 61.
2. Grade SB lanes of US 61 between Sta. 754+06 and Sta. 1067+00.
3. Grade crossover at Sta. 760+00.
4. Grade relocated 145th St.
5. Grade detour pavement on US 61 between Sta. 903+00 and Sta. 914+00.
6. Grade relocated 170th St. S. of existing US 61 between existing 170th St. and existing 175th St.
7. Grade detour pavement on US 61 between Sta. 980+00 and Sta. 1006+00.

Phase 2.
1. Pave all sections of roadway previously graded in Phase 1 construction.
2. Grade and Pave NB & SB on and off ramps at IA-92 interchange
4. Grade and Pave NB & SB on and off ramp at IA-92 Interchange
3. Grade and Pave IA 92 detour pavement between SR IA 92 Sta. 502+00 and the intesection with existing US 61.
4. Build NB & SB bridge at the IS92 Interchange
5. Grade NB and SB on and off ramps at 170th St. interchange.
6. Build NB & SB bridges at the 170th St. Interchange
7. Build the ML US 61 SB bridge over the DM&E RR
8. Construct lighting at both the IA 92 and 170th St. interchanges.

STAGE II TRAFFIC:
Phase 1.
1. Head to head traffic will be maintained in the existing SB lanes of US 61 at all times.
2. Traffic will be maintained on existing 130th St., IA 92, 160th St., 175th St., 180th St(G-48), and 190th St.
3. Traffic will be shifted to the new 145th St. and new 170th St. roadways.

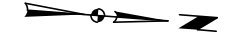
STAGE II CONSTRUCTION:
Phase 1.
1. Pave SB lanes of US 61 between Sta. 754+06 and Sta. 1067+00.
2. Pave crossover at Sta. 760+00.
3. Pave NB & SB on and off ramps at IA-92 interchange
4. Pave NB & SB on and off ramps at 170th St. interchange.
5. Pave detour pavement on US 61 between Sta. 903+00 and Sta. 914+00.
6. Pave detour pavement on US 61 between Sta. 980+00 and Sta. 1006+00.
7. Grade and Pave 170th St. detour pavement between the school entrance and the intesection with existing US 61.

Phase 2.
1. Construct all Stage II pipes and culverts under proposed NB US 61.
2. Finish Grade and Pave proposed NB US 61.
3. Remove existing NB US 61 between Sta. 803+00 and Sta. 820+00.
4. Remove and reconstruct existing NB US 61 between Sta. 1000+00 and the DM&E RR Bridge.
5. Remove and reconstruct NB US 61 between the DM&E RR and the tie in at Sta. 1049+50.

Phase 3.
1. Finish Grade and Pave IA 92.
1. Finish Grade and Pave 170th St.
1. Finish Grade and Pave tie-in of 180th St.(G-48) with proposed US 61.
2. Grade the tie-in of sideroad 160th St. with existing US 61.

Phase 4.
1. Remove detour pavement between Sta. 903+00 and Sta. 914+00.
2. Remove detour pavement between Sta. 980+00 and Sta. 1006+00.
3. Construct signing.
4. Construct erosion control.

GRANDVIEW TWP.
T-75N R-3W
SEC. 28



Curve Data
 $\Delta = 8^\circ 45' 28.96''$ (LT)
 $T = 153.16$
 $L = 305.71$
 $RR = 2,000.00$
 $e = 5.86$
 $\phi = 5.4\%$
 $L = 168'$
 $x = 62'$

POT Sta 506+75.00 (SR092) =
 PI Sta 1556+06.08 (SR92A) =
 PI Sta 3556+64.71 (SR92C) =

POC Sta 842+50.00, 87.00' LT =
 POT Sta 3542+50.00
 See Detail Sheet "U.xx"

POC Sta 843+50.00, 107.00' RT =
 POT Sta 2543+50.00
 Point 'M' Standard Road Plan PV-410

Curve Data
 $\Delta = 9^\circ 33' 22.01''$ (RT)
 $T = 167.17$
 $L = 333.57$
 $RR = 2,000.00$
 $e = 6.97$
 $\phi = 5.4\%$
 $L = 168'$
 $x = 62'$

POT Sta 513+75.00 (SR092) =
 PI Sta 2556+89.90 (SR92B) =
 PI Sta 4556+49.96 (SR92D) =

1000' Taper 50:1 Ratio

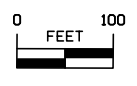
600' Taper 15:1 Ratio

Curve 45001

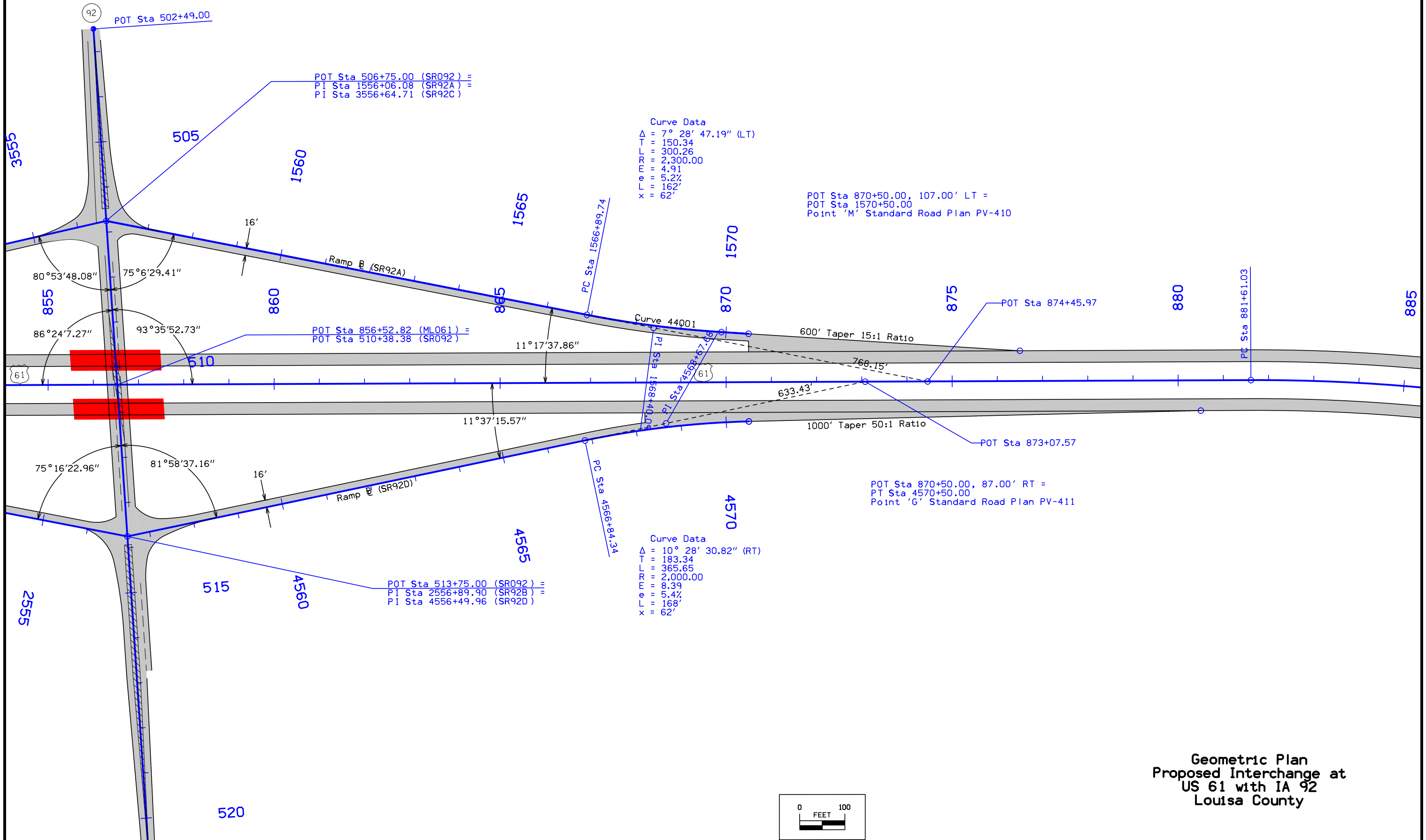
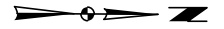
Ramp B (SR92C)

Ramp B (SR92B)

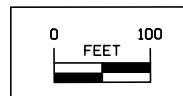
Geometric Plan
 Proposed Interchange at
 US 61 with IA 92
 Louisa County

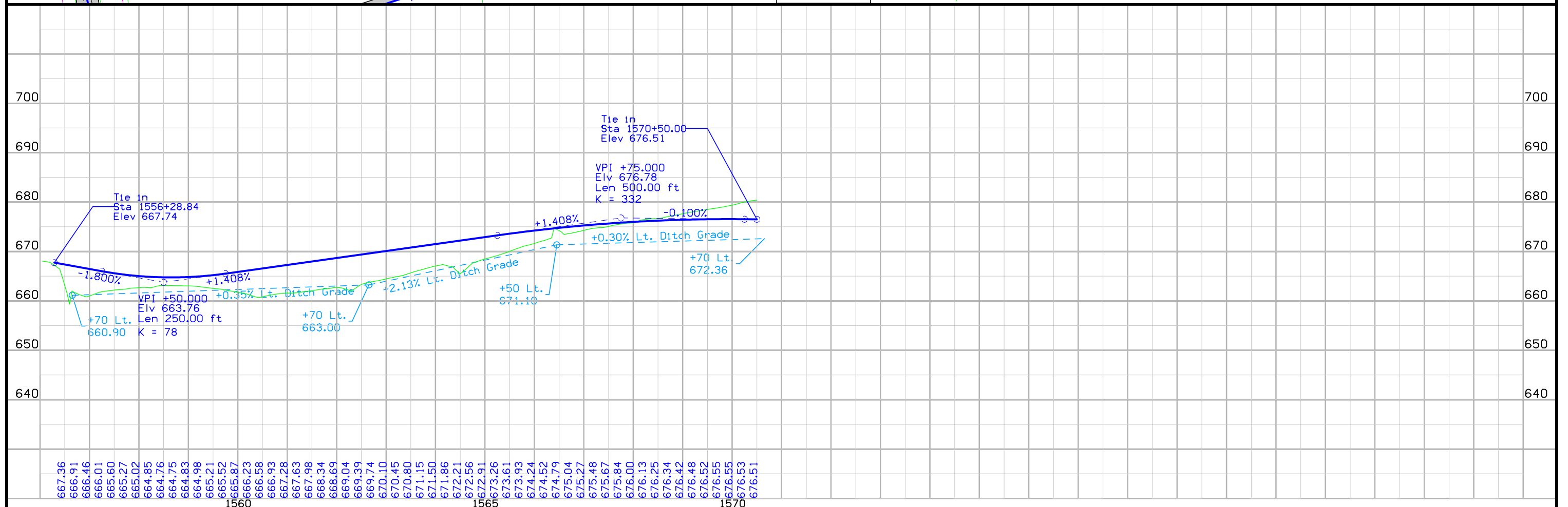
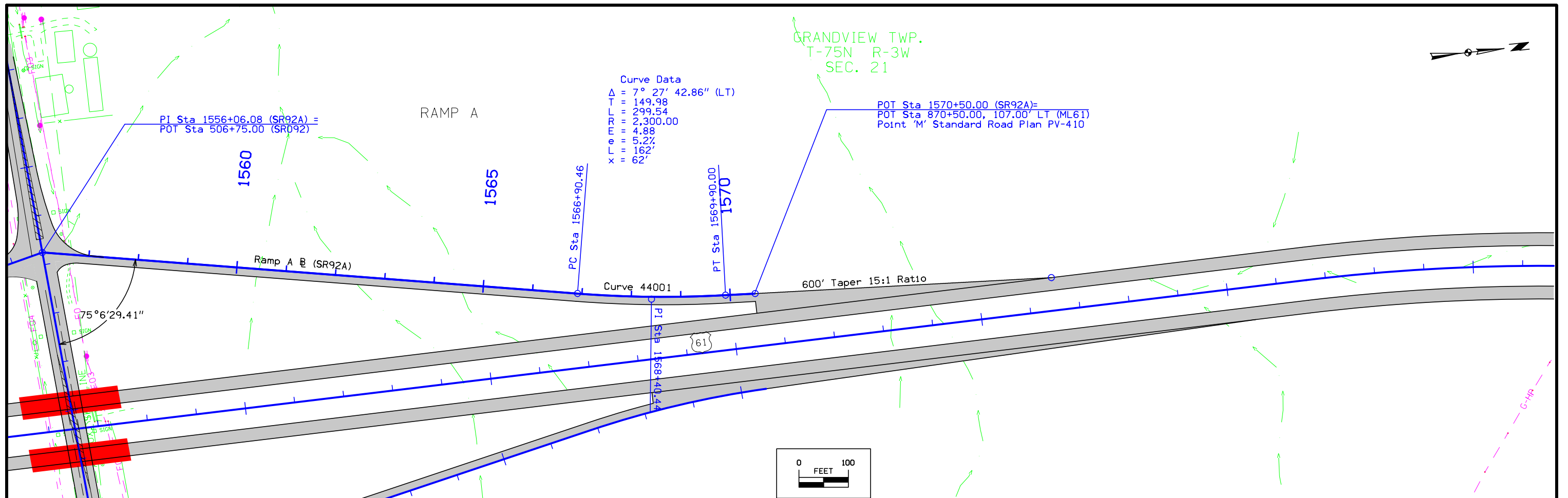


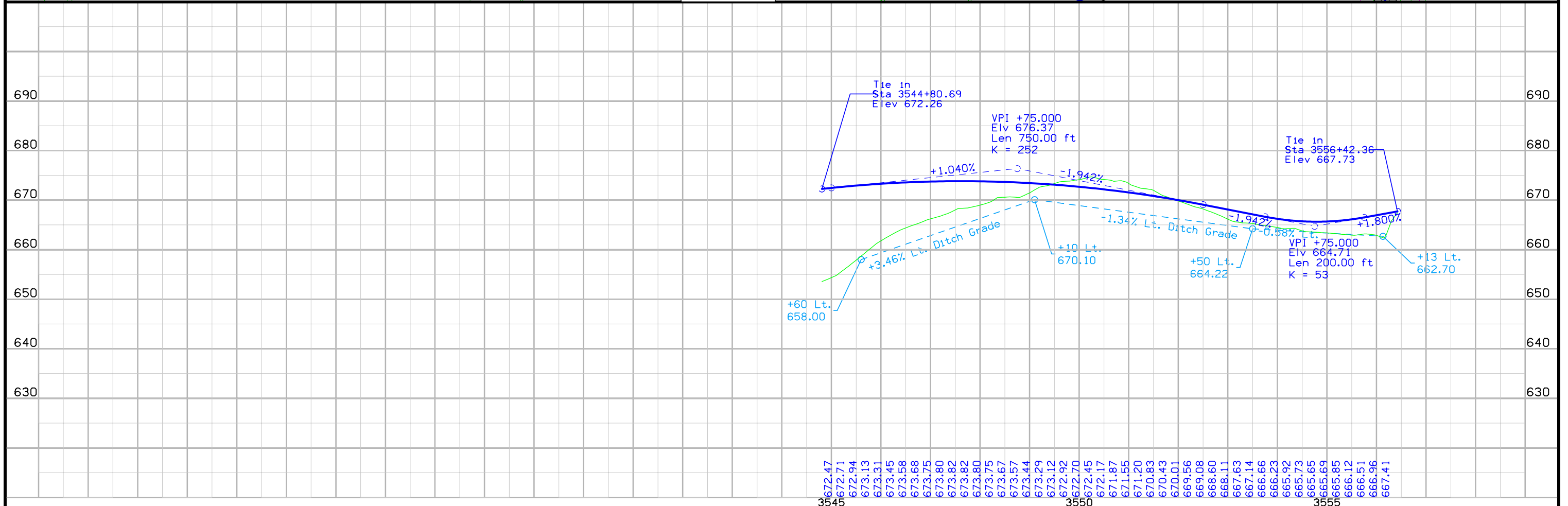
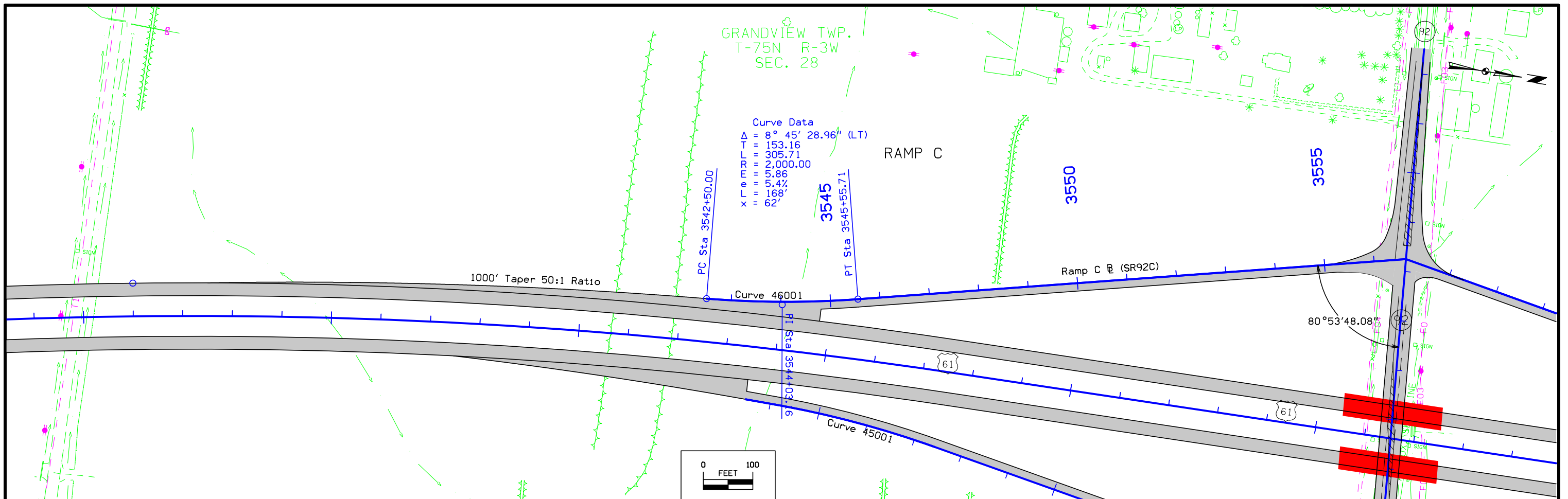
GRANDVIEW TWP.
T-75N R-3W
SEC. 21

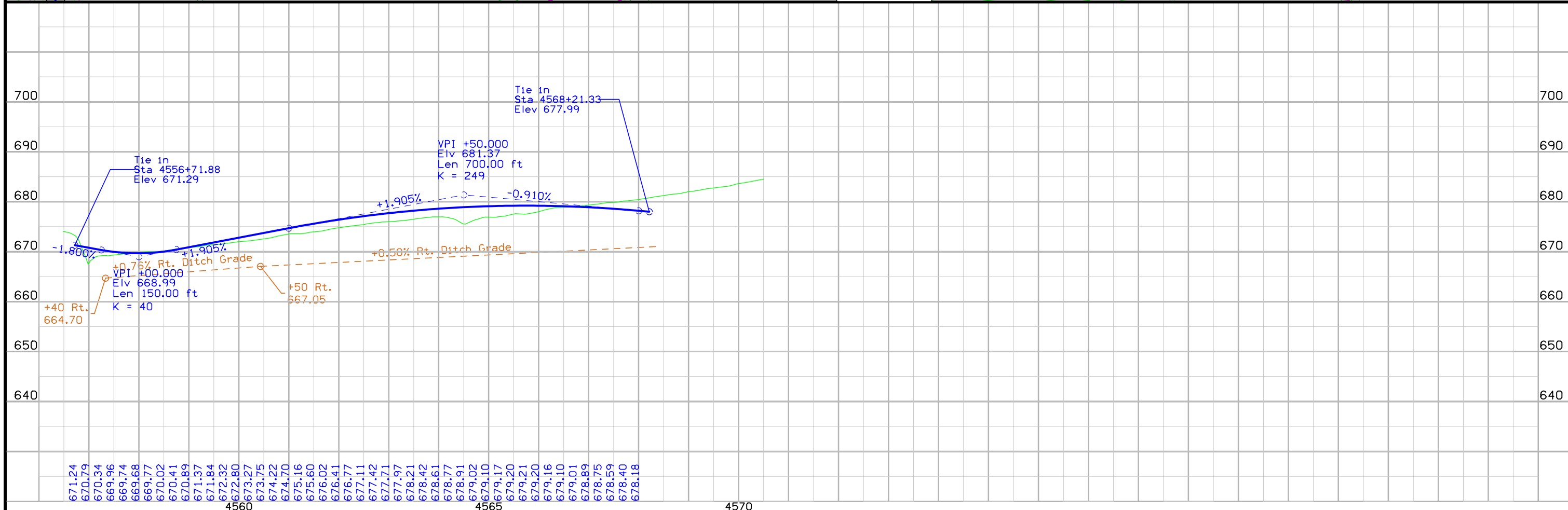
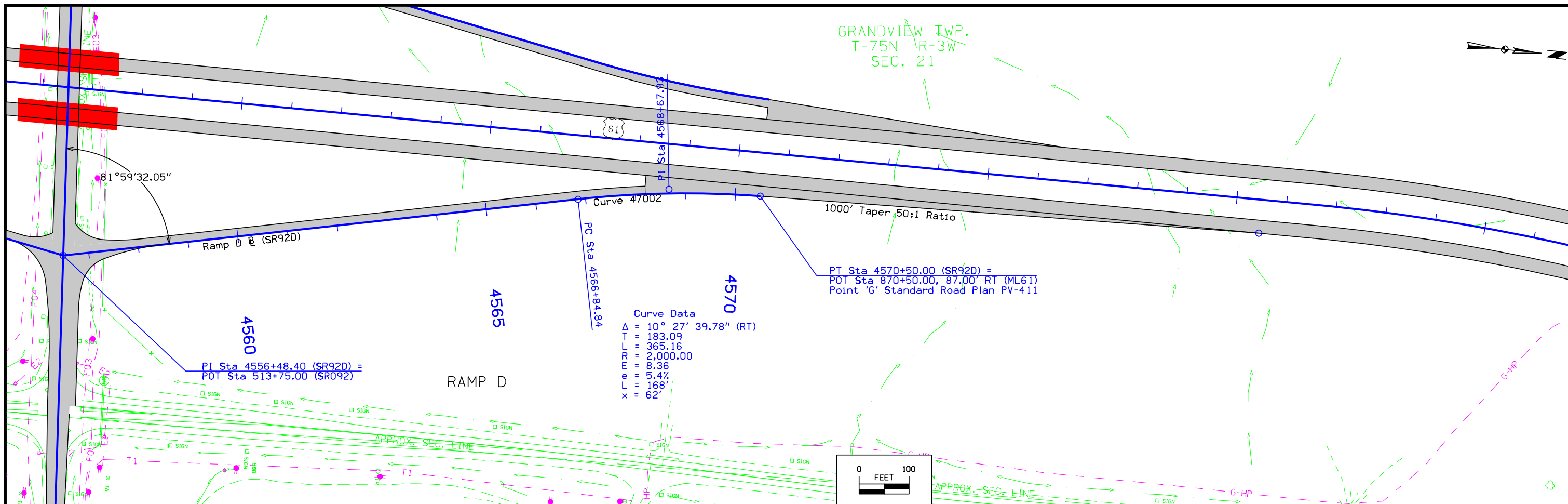


Geometric Plan
Proposed Interchange at
US 61 with IA 92
Louisa County



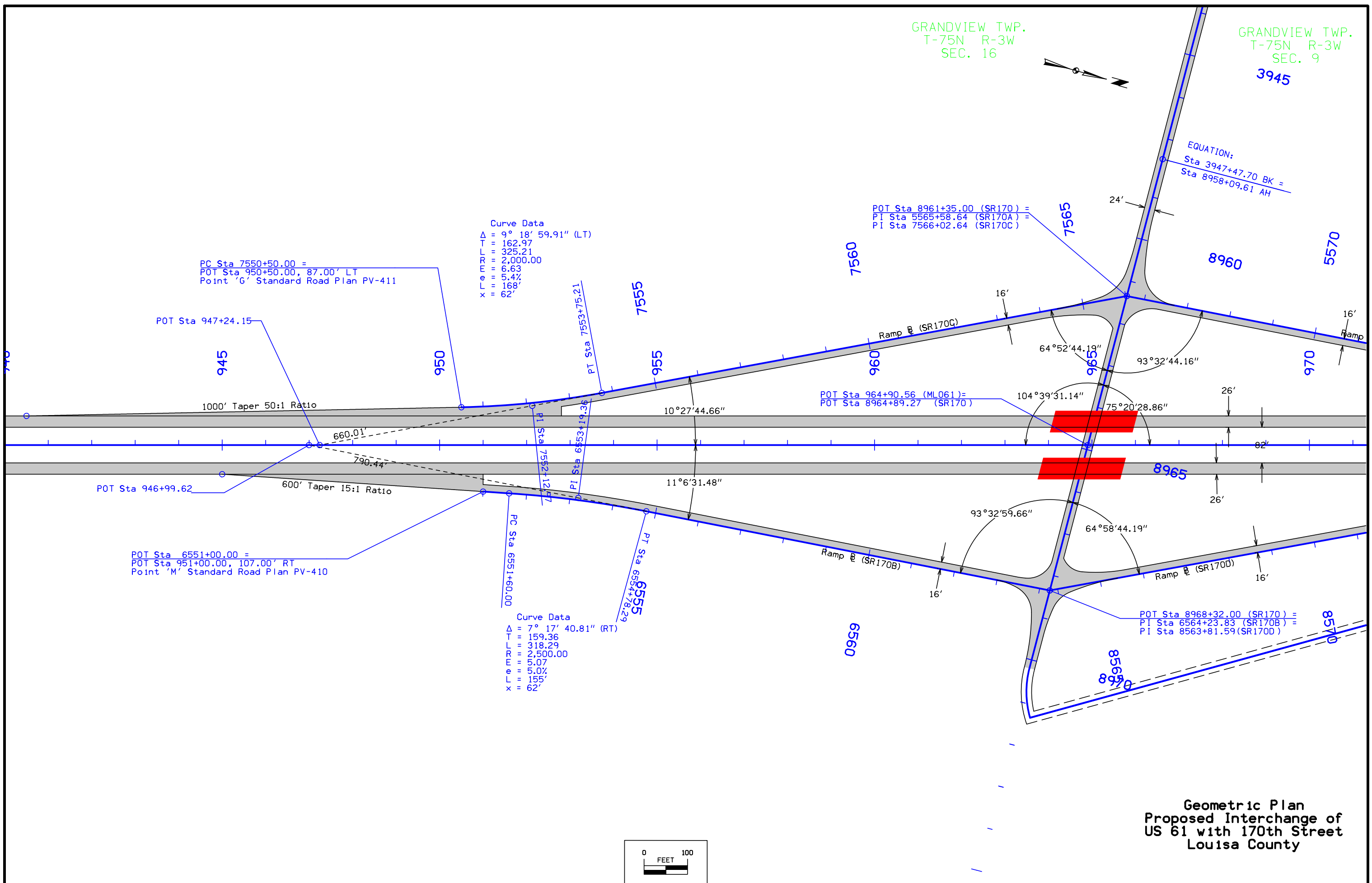






GRANDVIEW TWP.
T-75N R-3W
SEC. 16

GRANDVIEW TWP.
T-75N R-3W
SEC. 9



PC Sta 7550+50.00 =
 POT Sta 950+50.00, 87.00' LT
 Point 'G' Standard Road Plan PV-411

Curve Data
 $\Delta = 9^\circ 18' 59.91''$ (LT)
 $T = 162.97$
 $L = 325.21$
 $R = 2,000.00$
 $e = 6.63$
 $m = 5.47$
 $L_e = 168'$
 $x = 62'$

POT Sta 8961+35.00 (SR170) =
 PI Sta 5565+58.64 (SR170A) =
 PI Sta 7566+02.64 (SR170C)

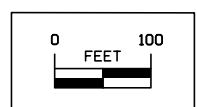
POT Sta 964+90.56 (ML061) =
 POT Sta 8964+89.27 (SR170)

EQUATION:
 Sta 3947+47.70 BK =
 Sta 8958+09.61 AH

POT Sta 6551+00.00 =
 POT Sta 951+00.00, 107.00' RT
 Point 'M' Standard Road Plan PV-410

Curve Data
 $\Delta = 7^\circ 17' 40.81''$ (RT)
 $T = 159.36$
 $L = 318.29$
 $R = 2,500.00$
 $e = 5.07$
 $m = 5.07$
 $L_e = 155'$
 $x = 62'$

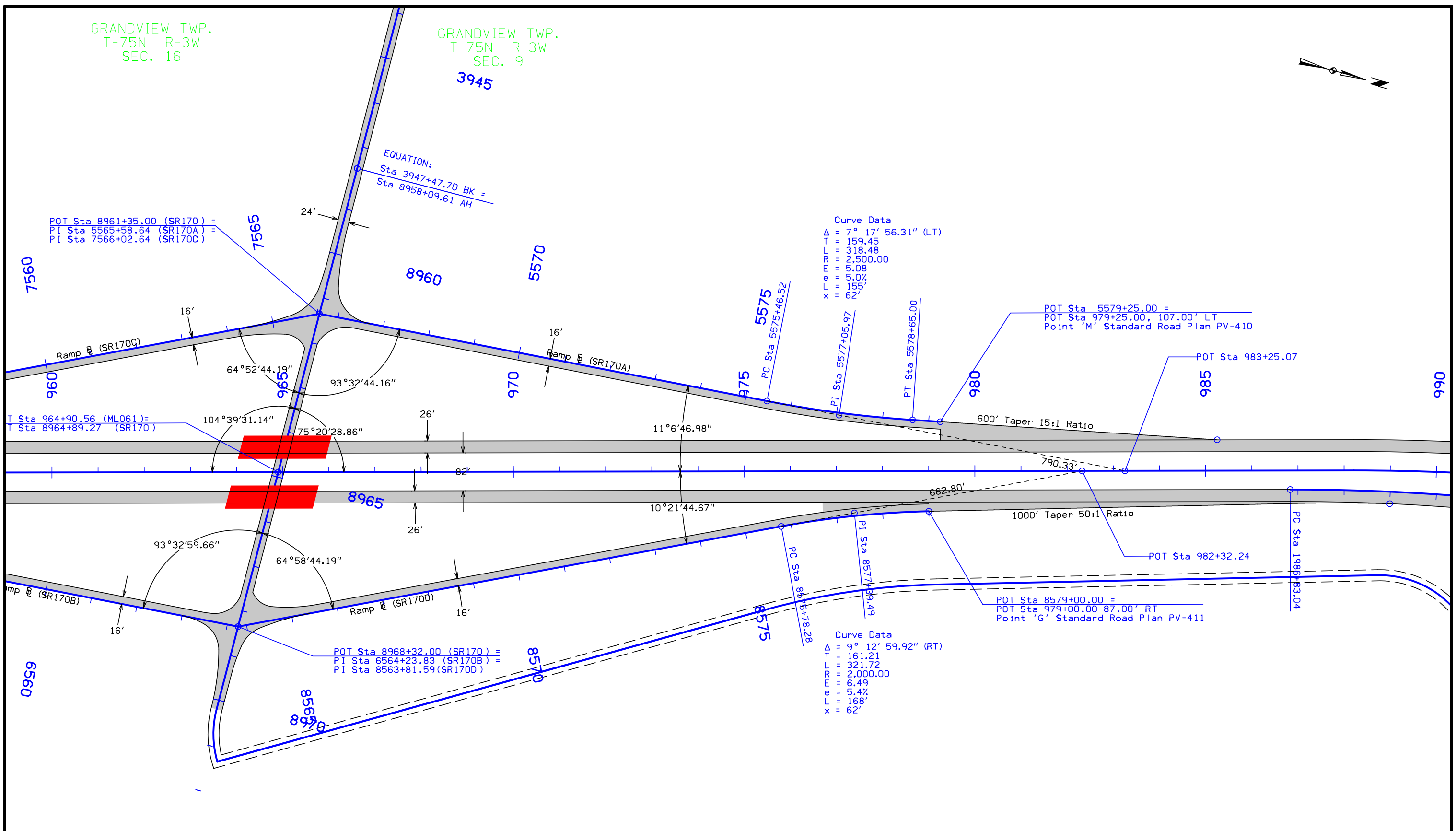
POT Sta 8968+32.00 (SR170) =
 PI Sta 6564+23.83 (SR170B) =
 PI Sta 8563+81.59 (SR170D)



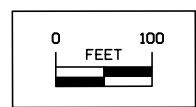
Geometric Plan
 Proposed Interchange of
 US 61 with 170th Street
 Louisa County

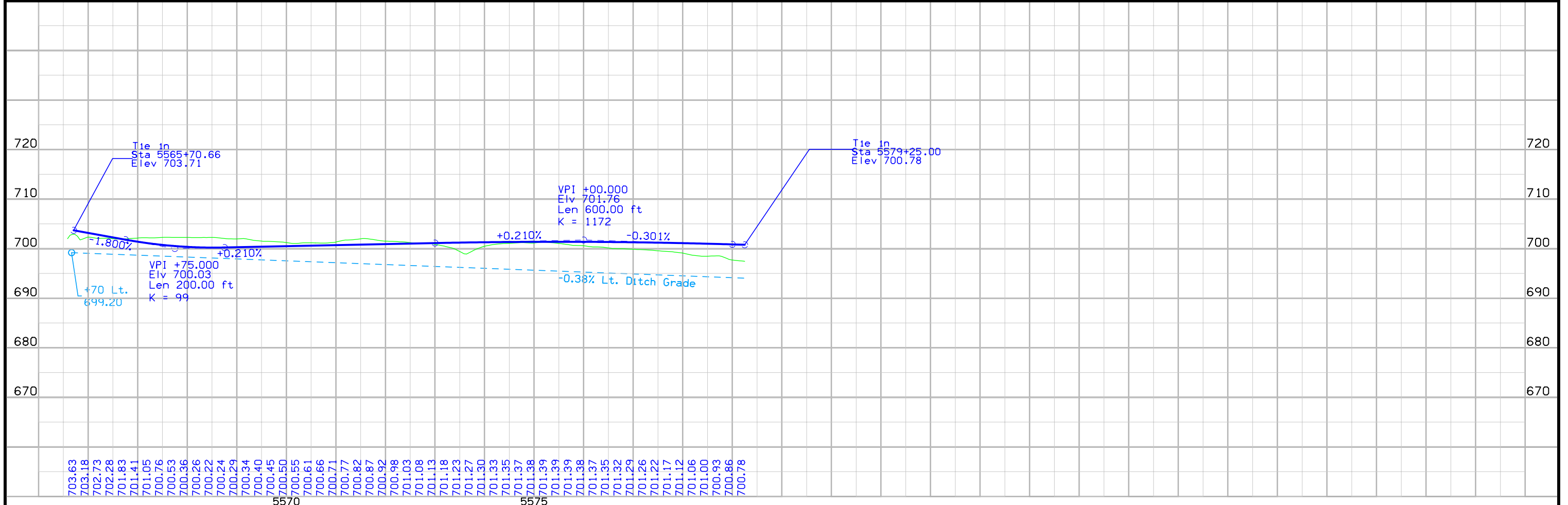
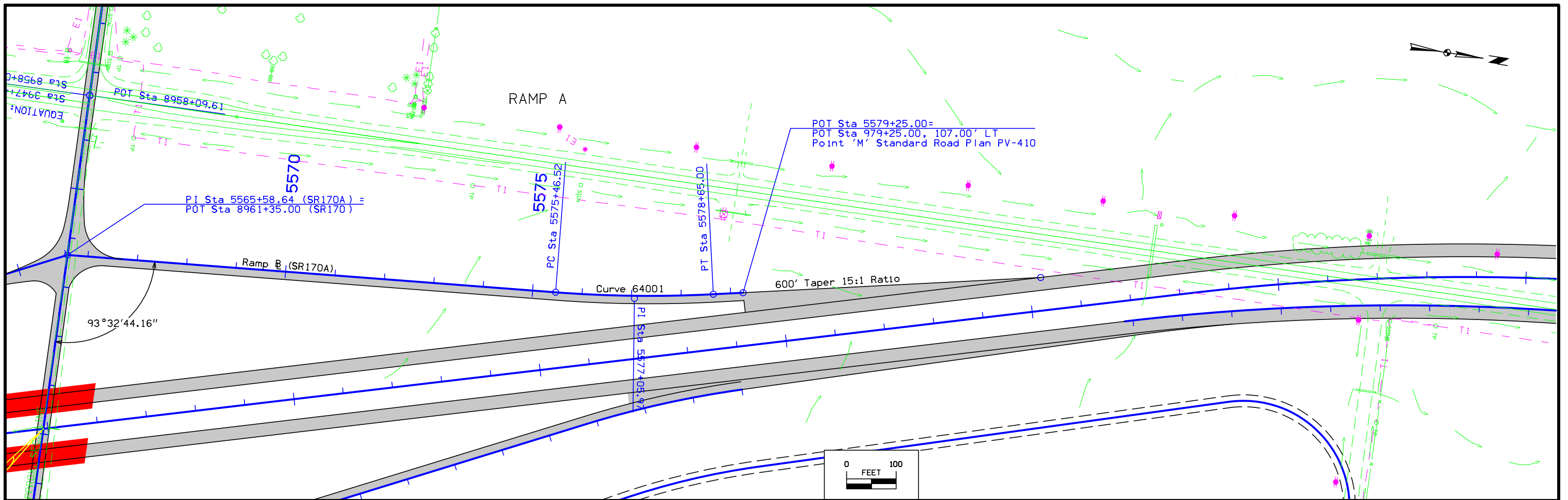
GRANDVIEW TWP.
T-75N R-3W
SEC. 16

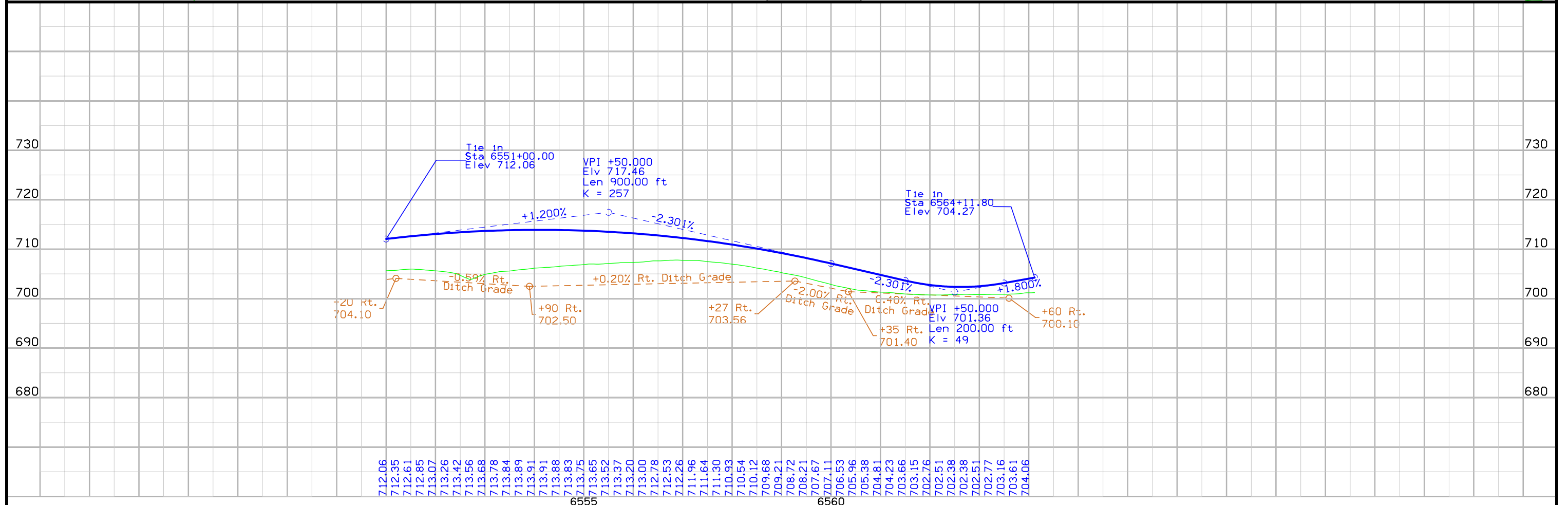
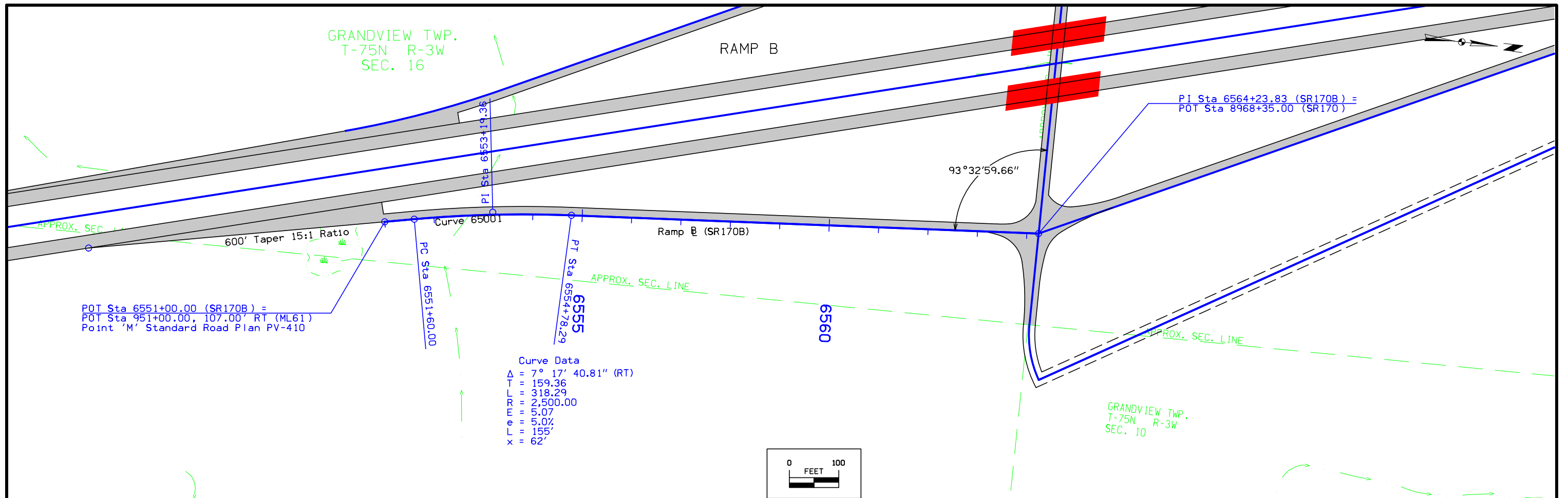
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T-75N R-3W
SEC. 9

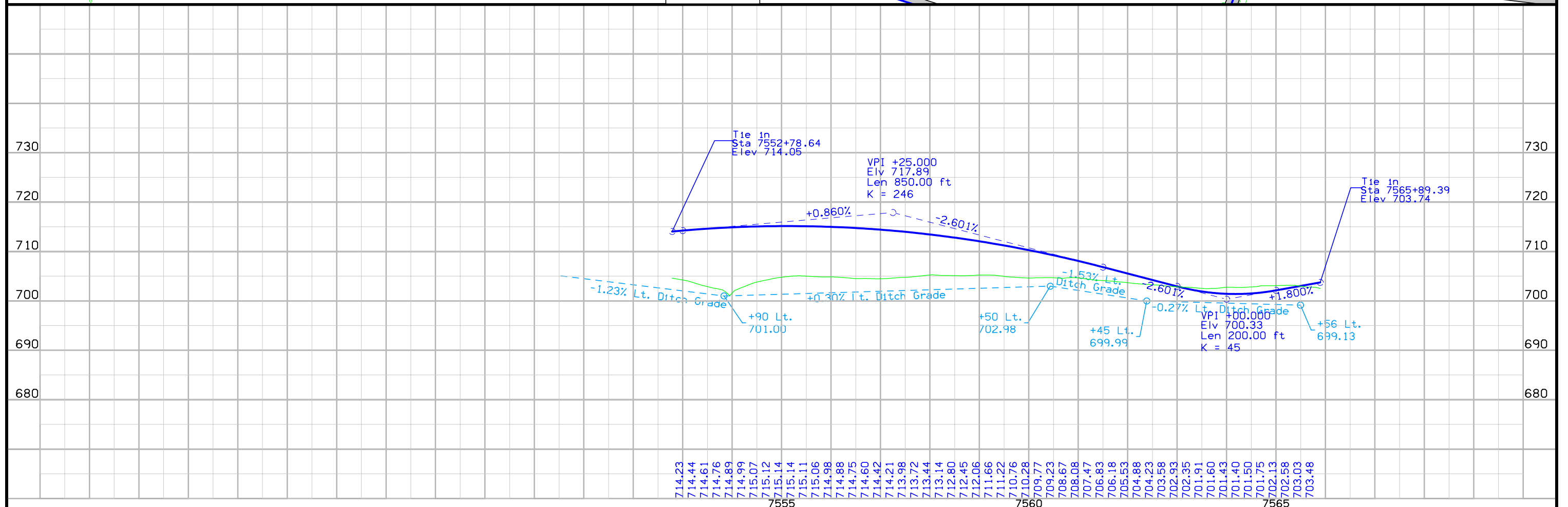
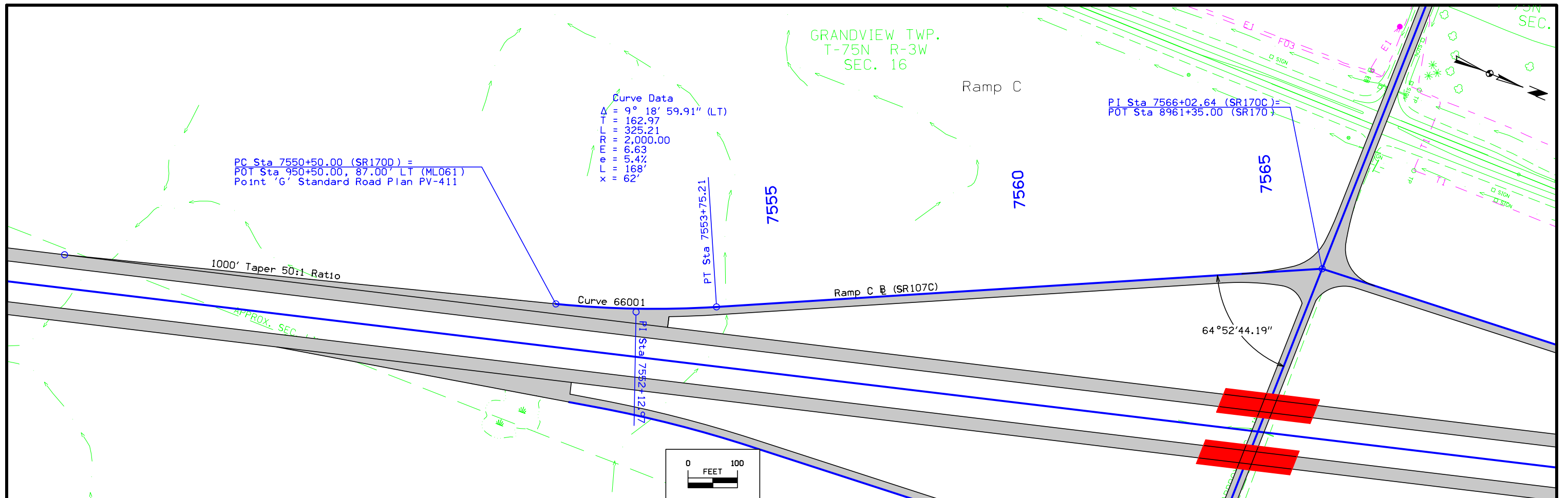


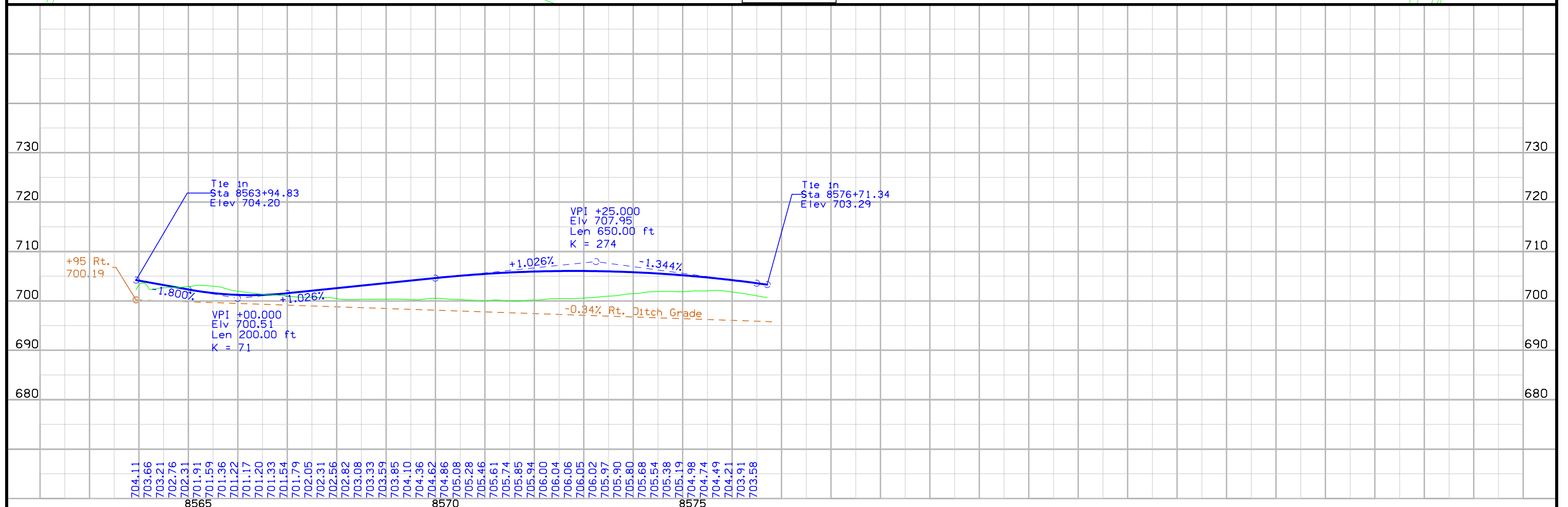
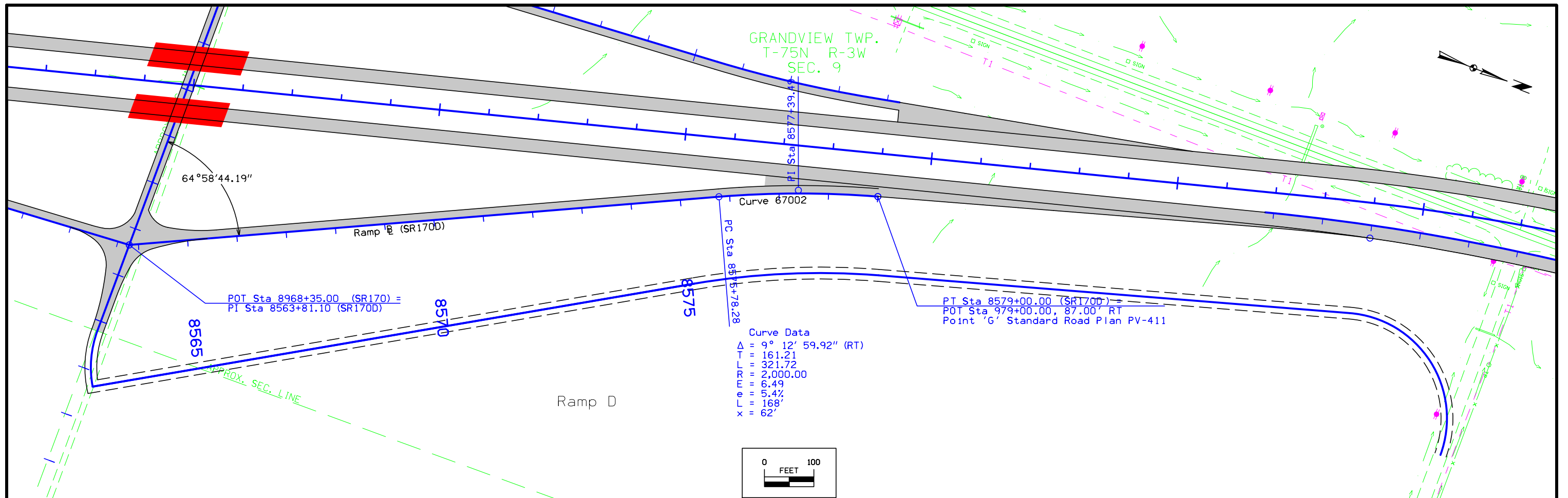
**Geometric Plan
Proposed Interchange of
US 61 with 170th Street
Louisa County**











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)
- TS A——— Topsoil (Type A Disposal)
- TS B——— Topsoil (Type B Disposal)
- TS C——— Topsoil (Type C Disposal)
- 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.

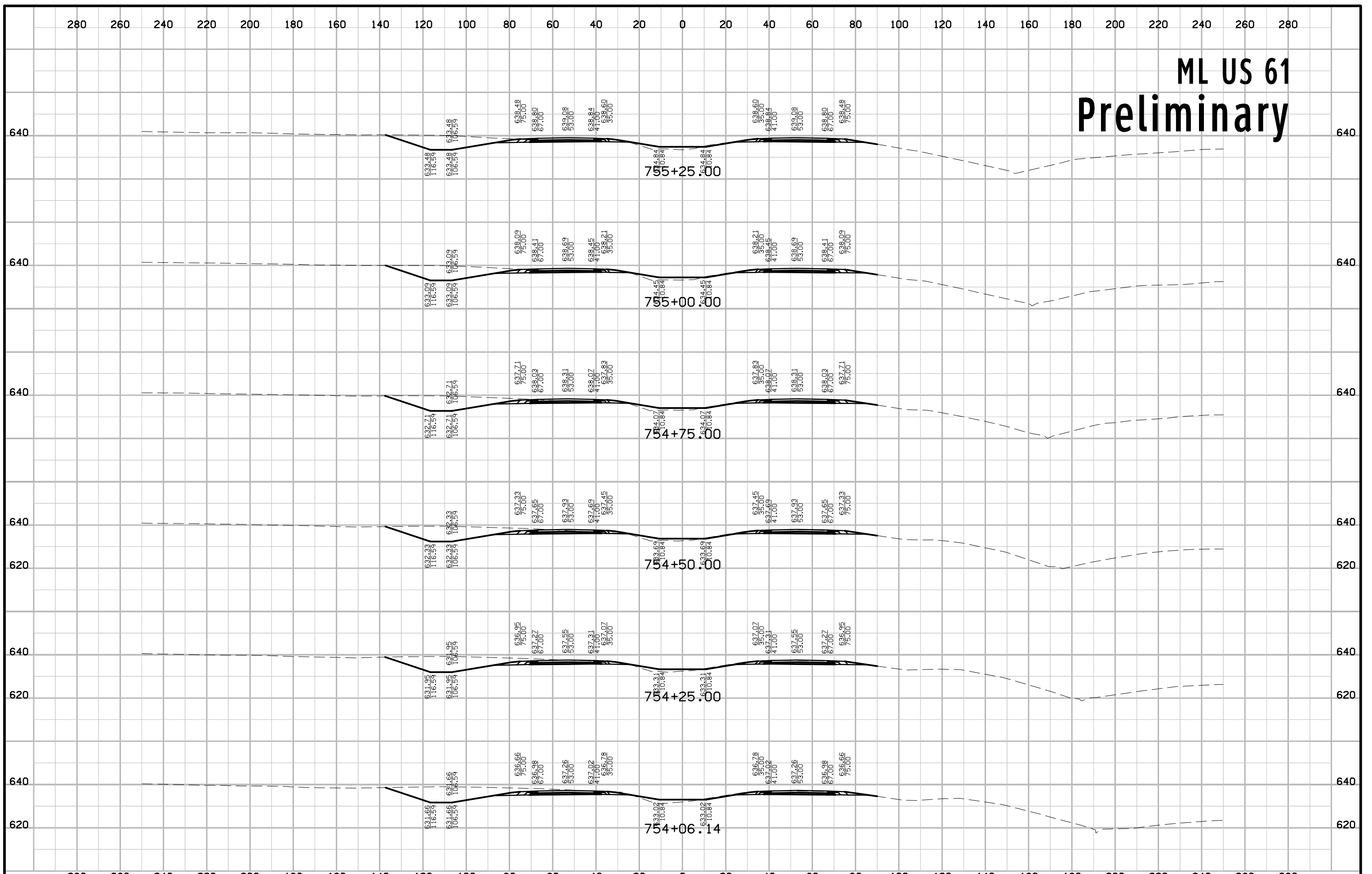
SYMBOL LEGEND OF CROSS SECTION SHEETS

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

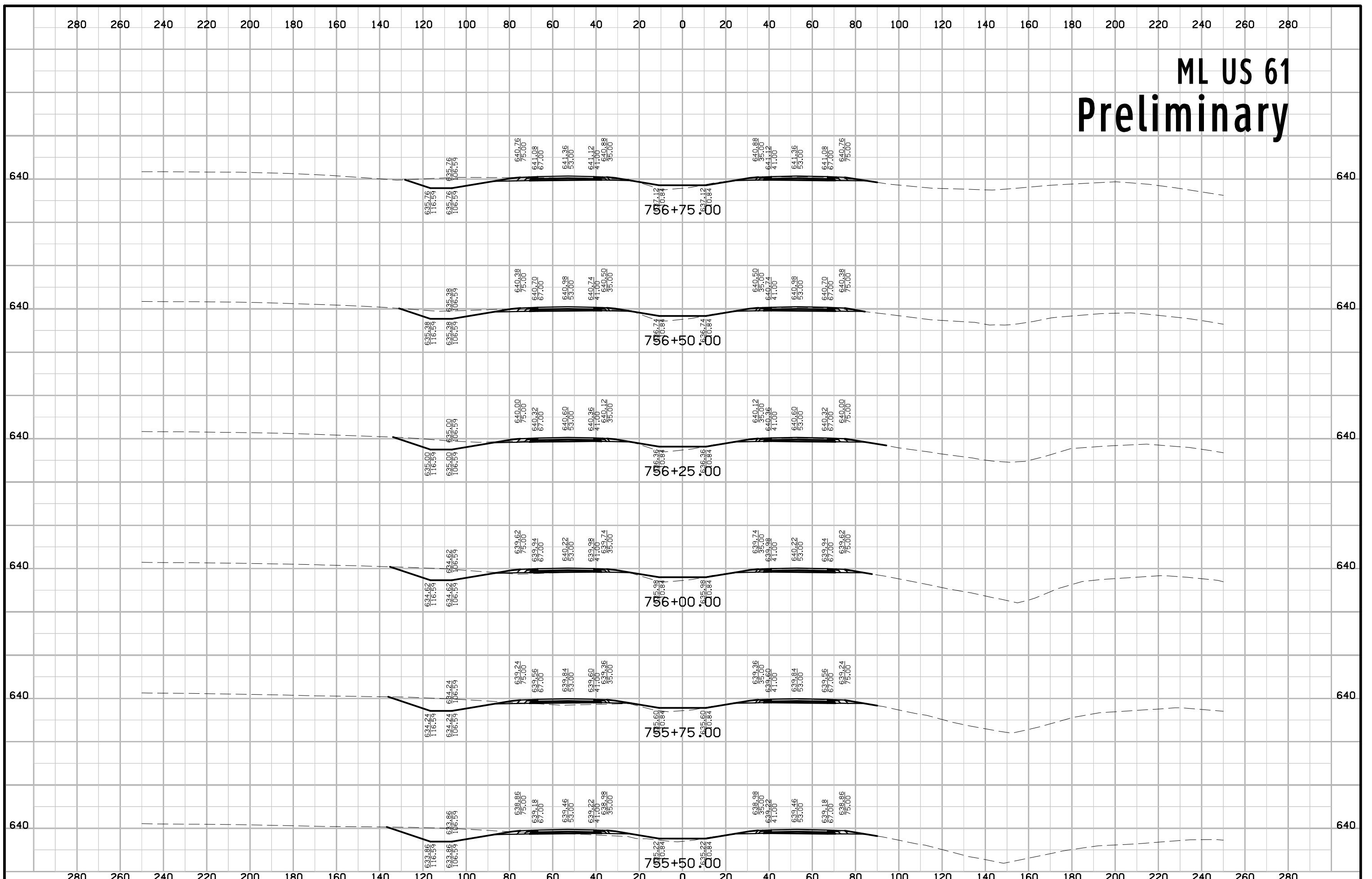
**CROSS SECTION
LEGEND AND SYMBOL
INFORMATION SHEET**

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

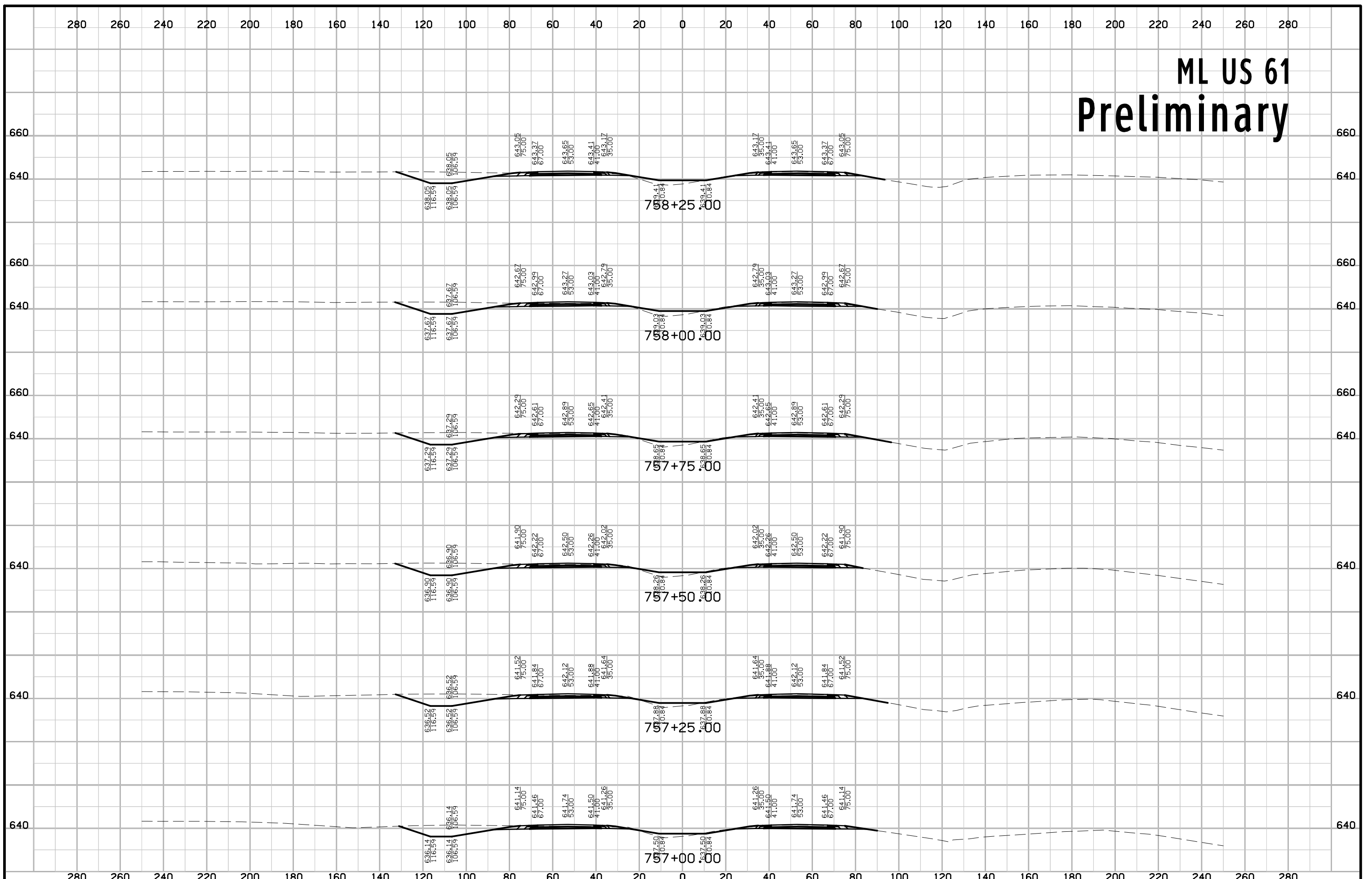
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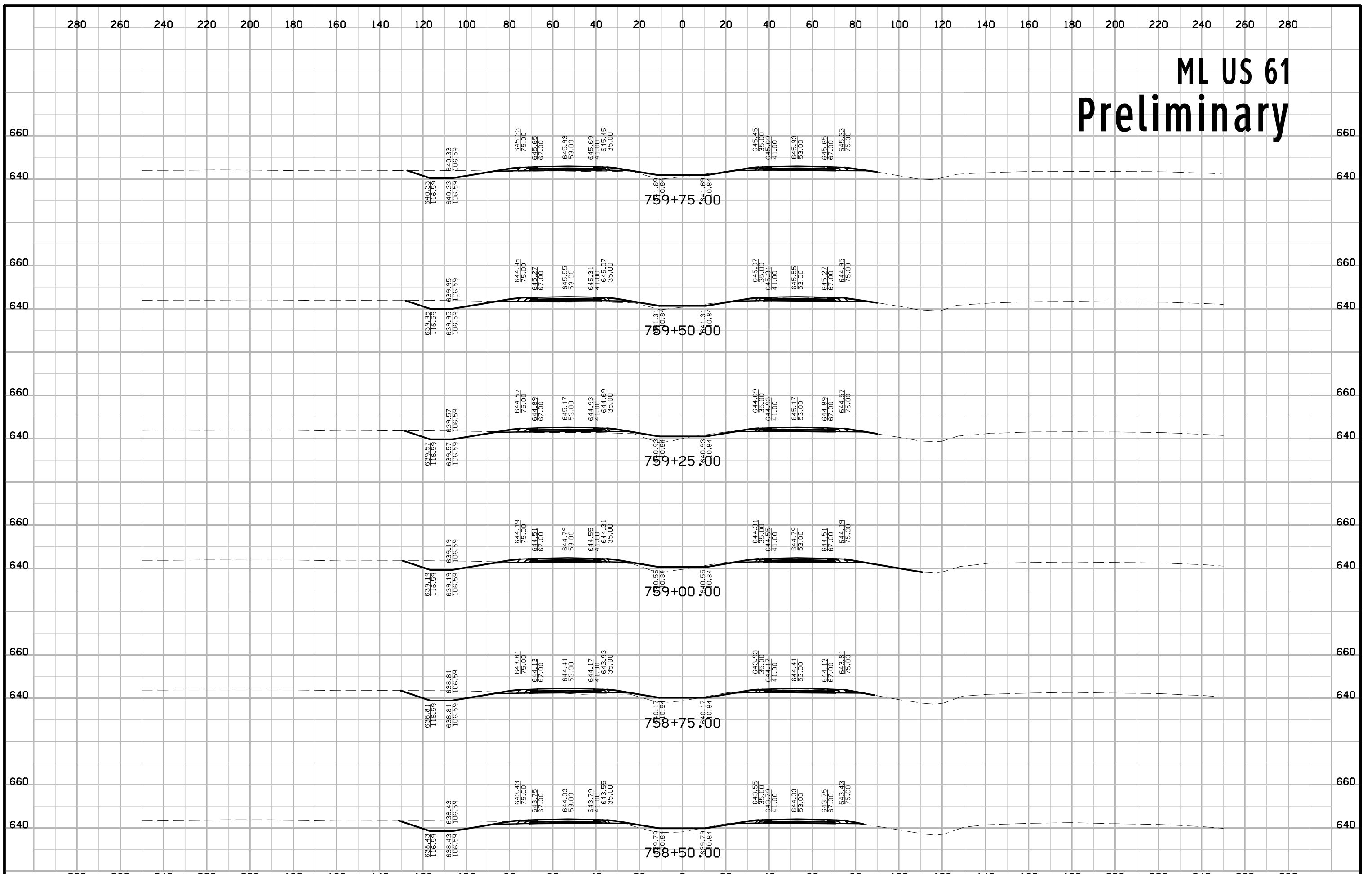
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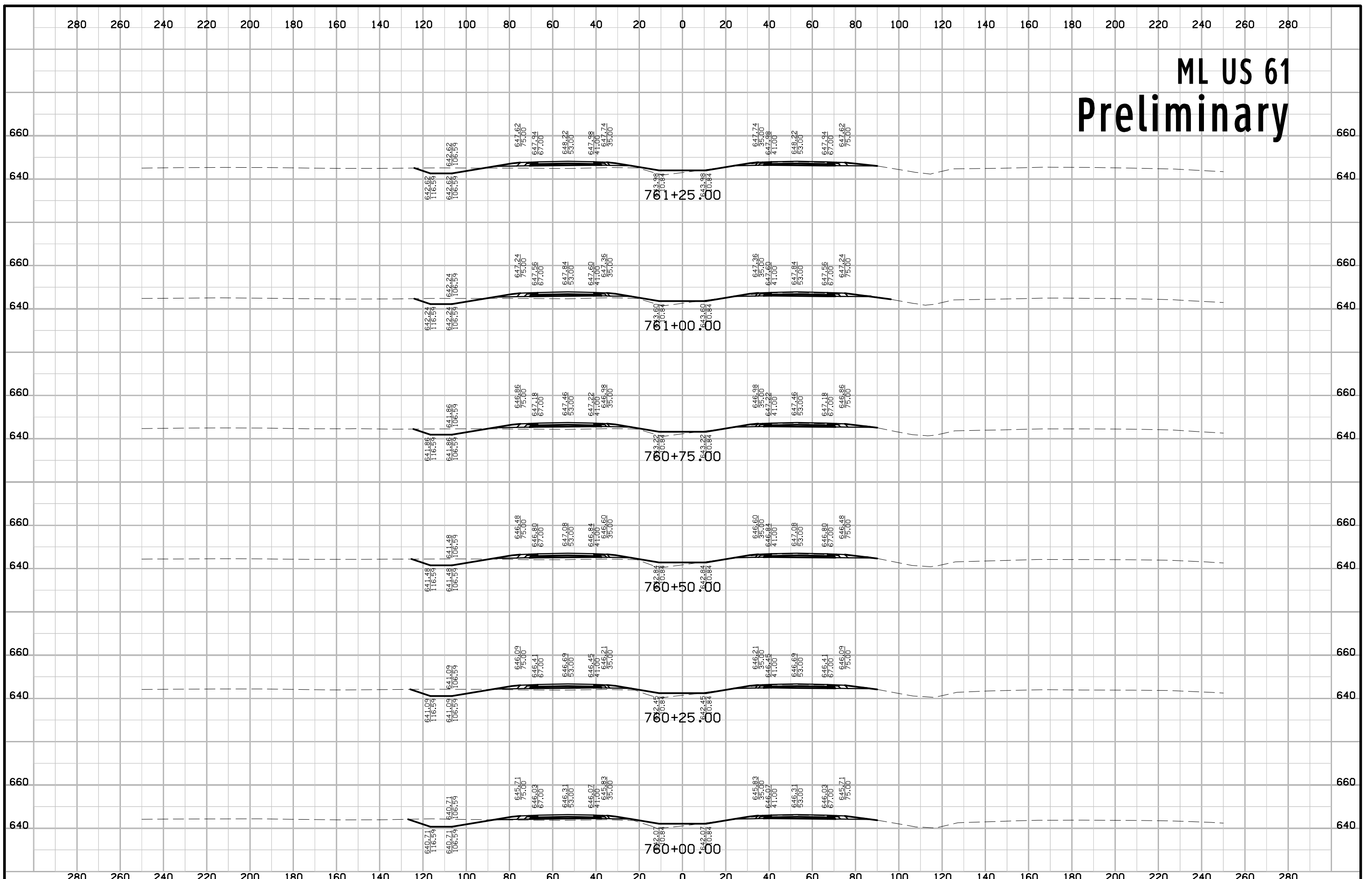
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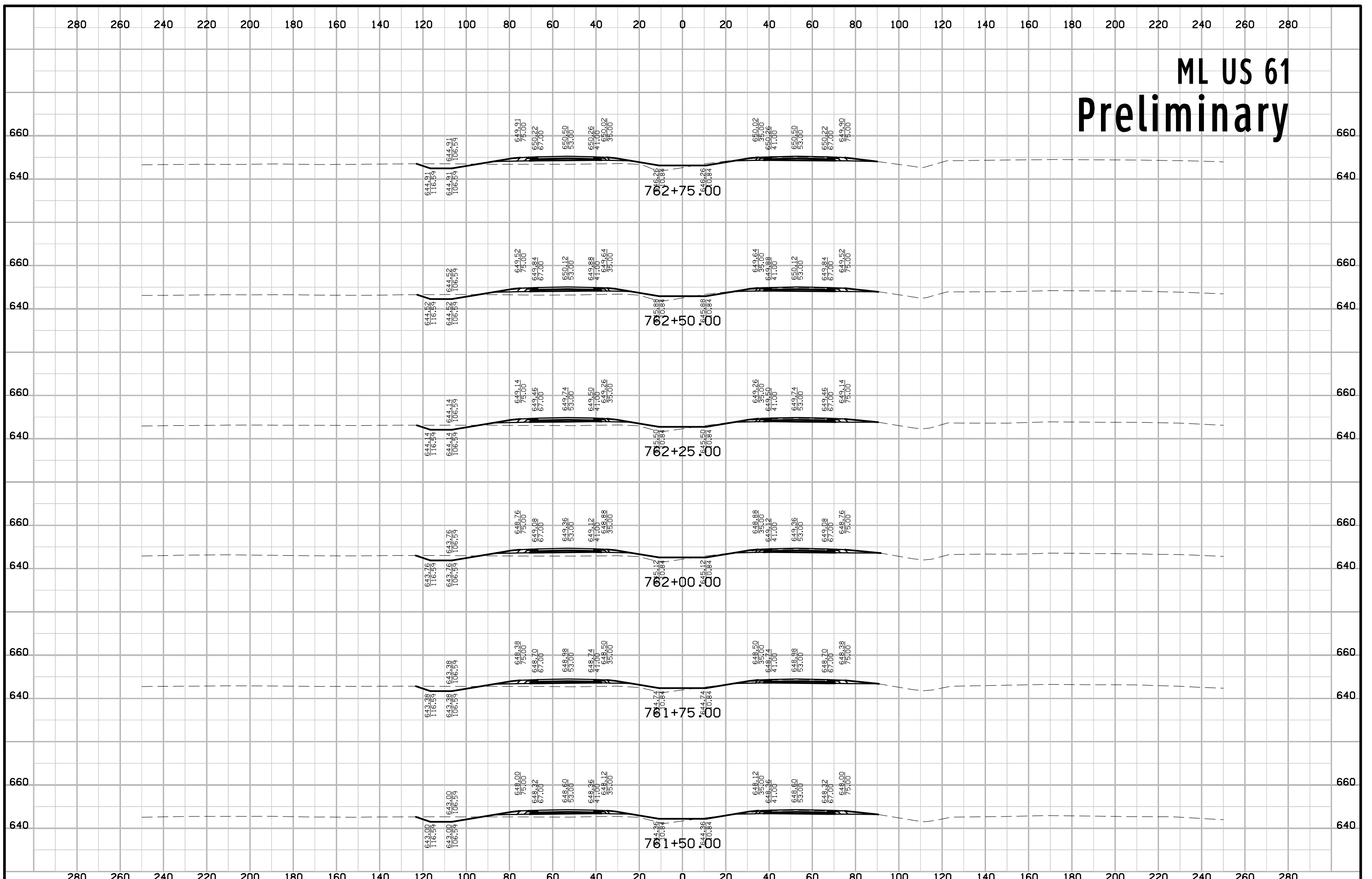
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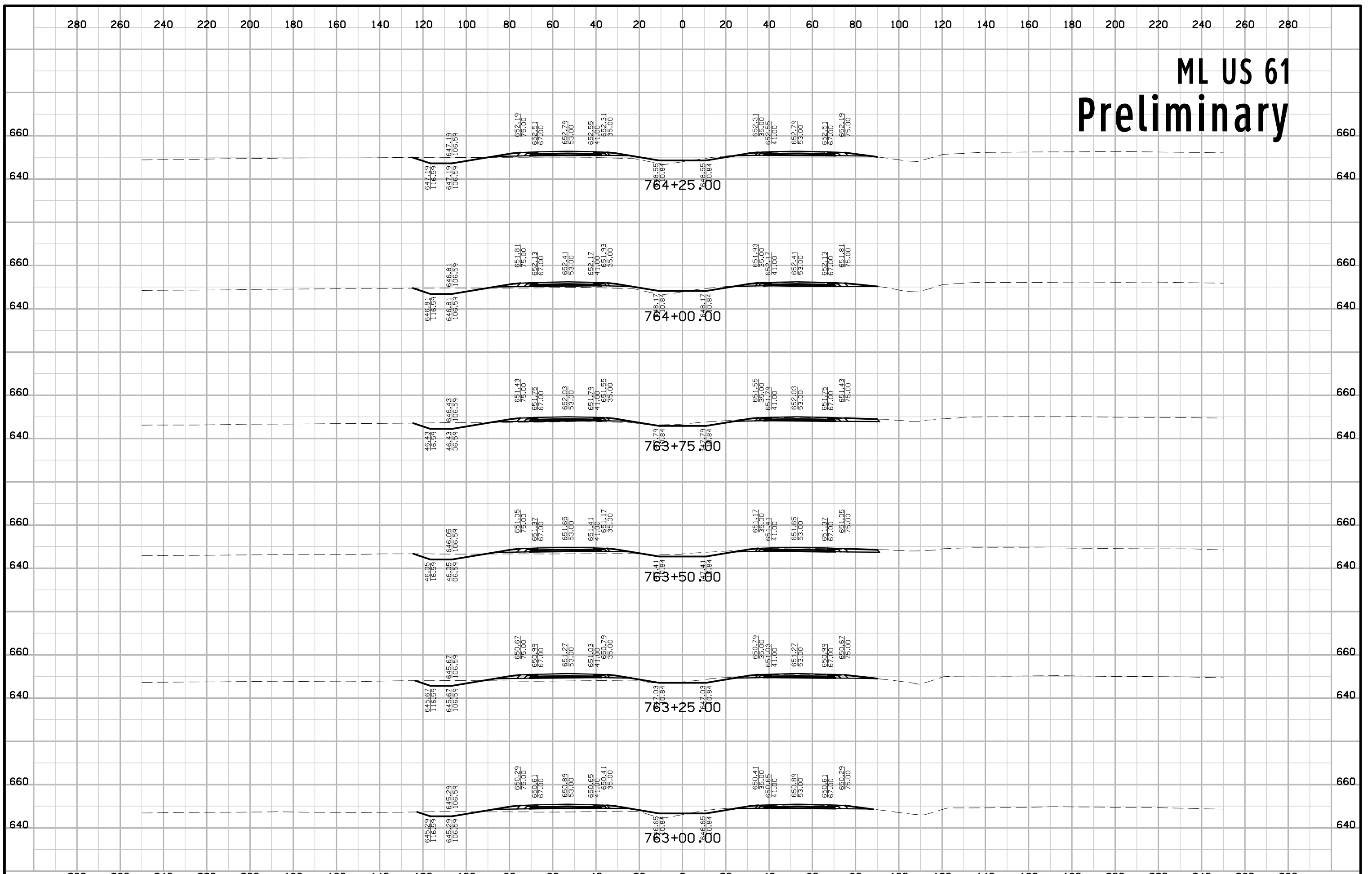
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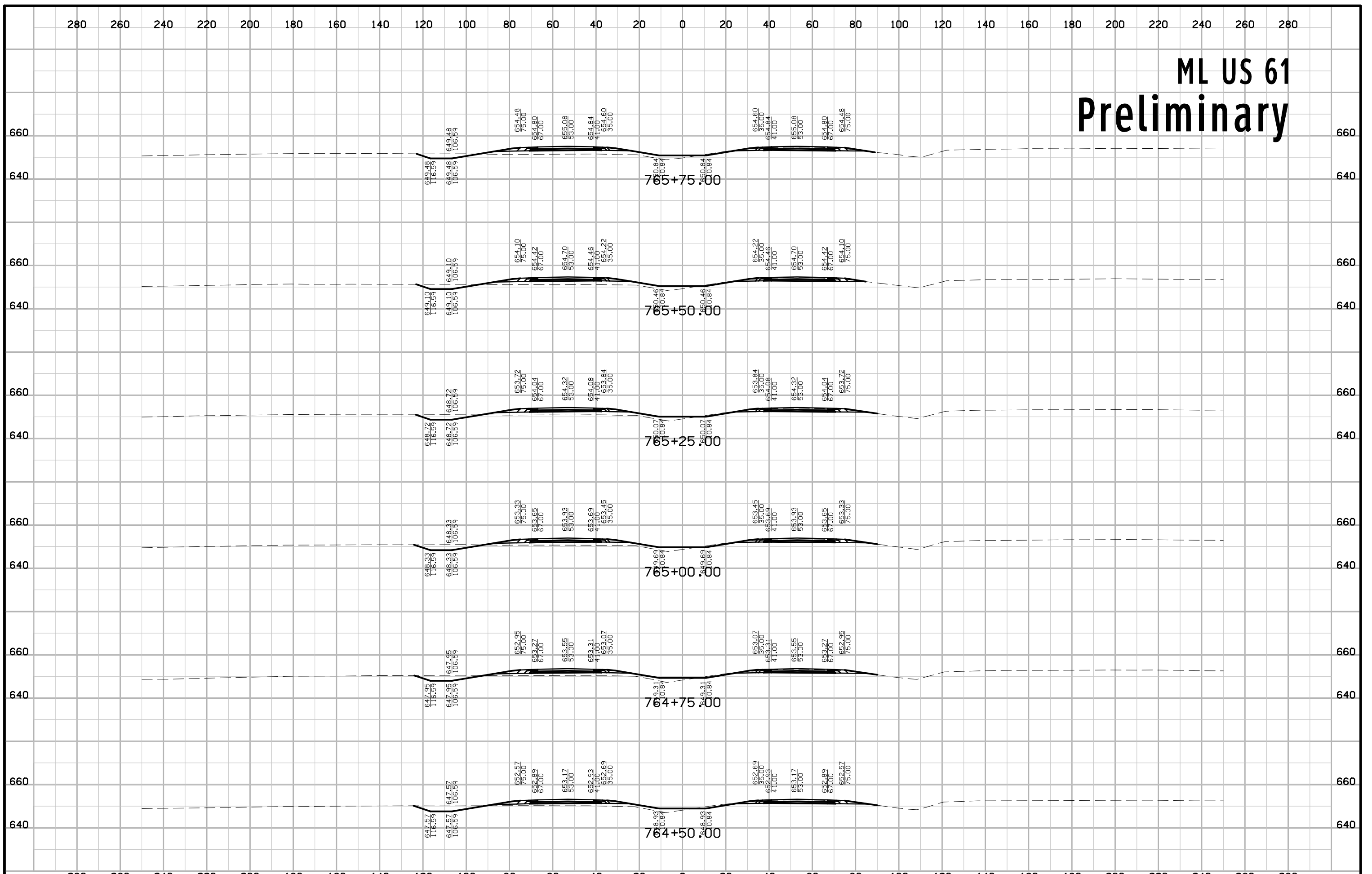
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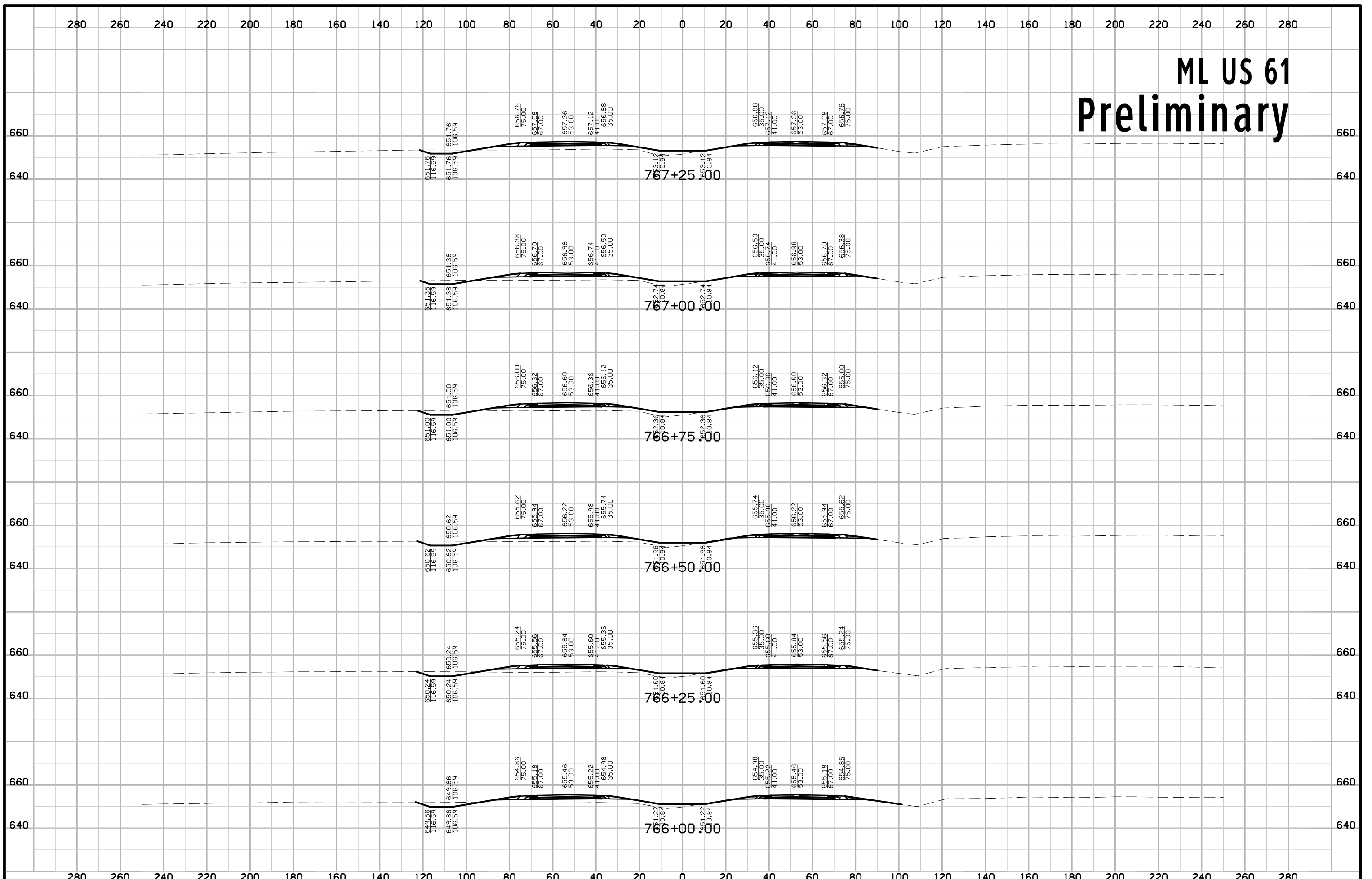
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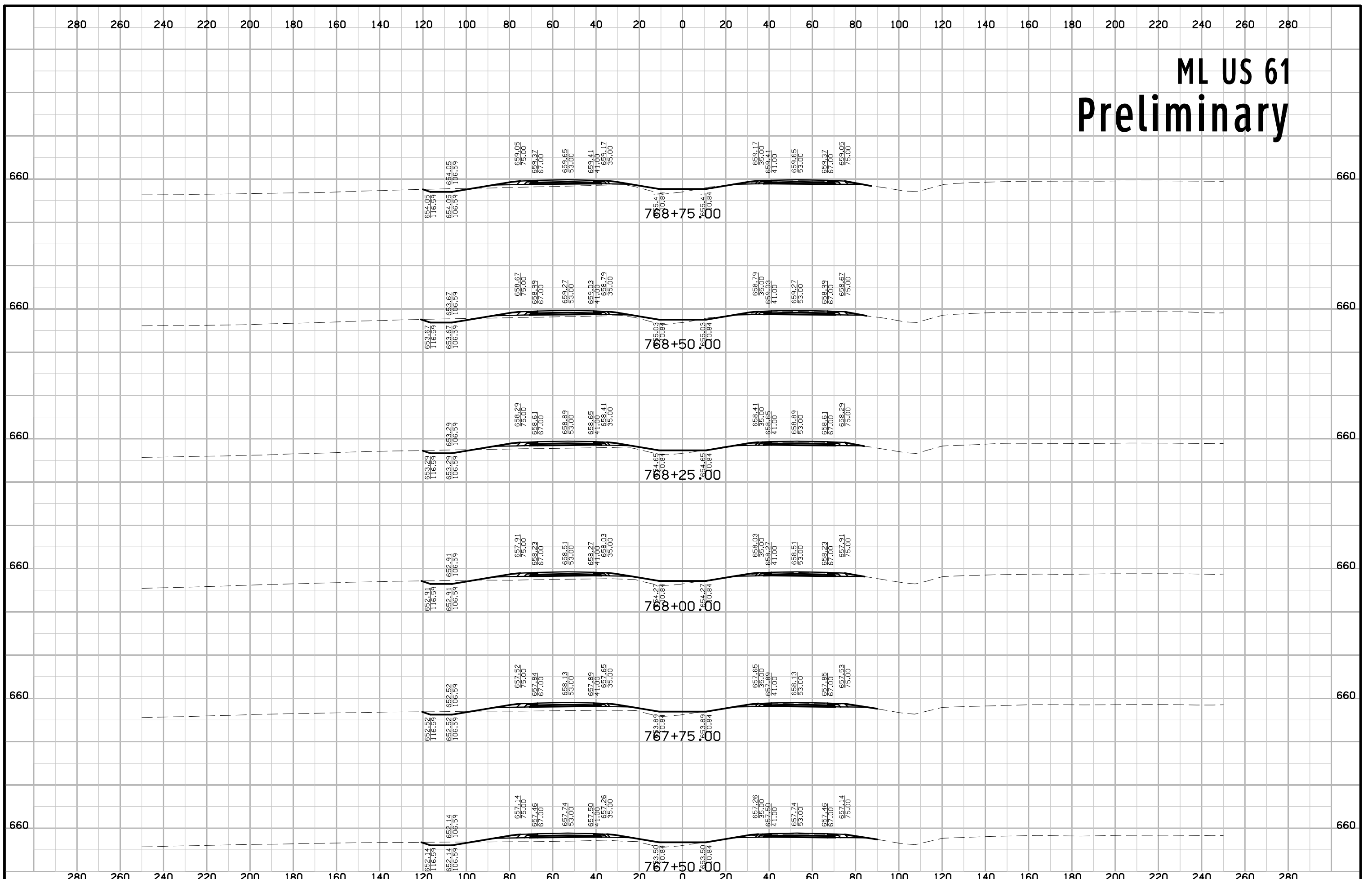
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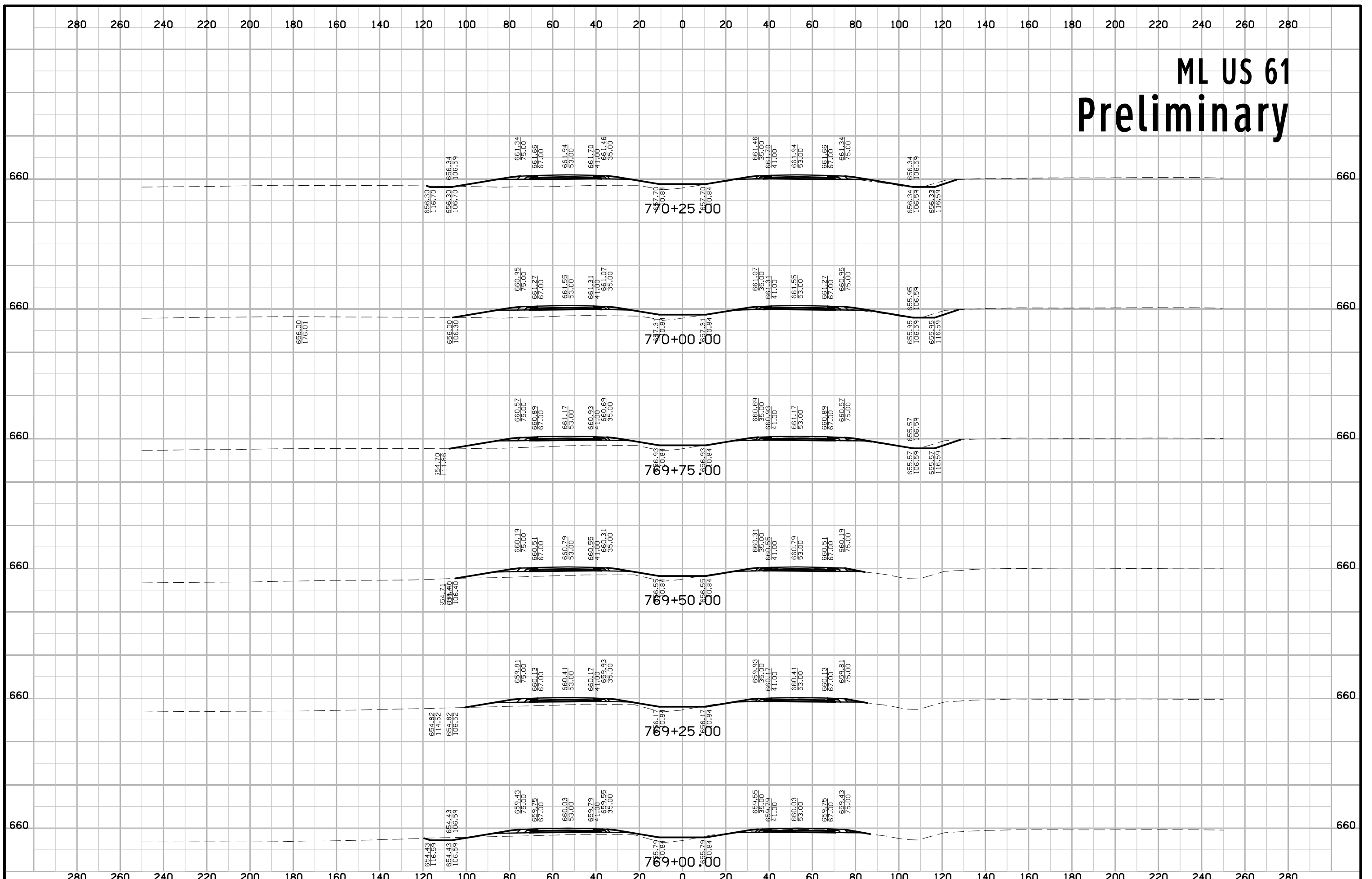
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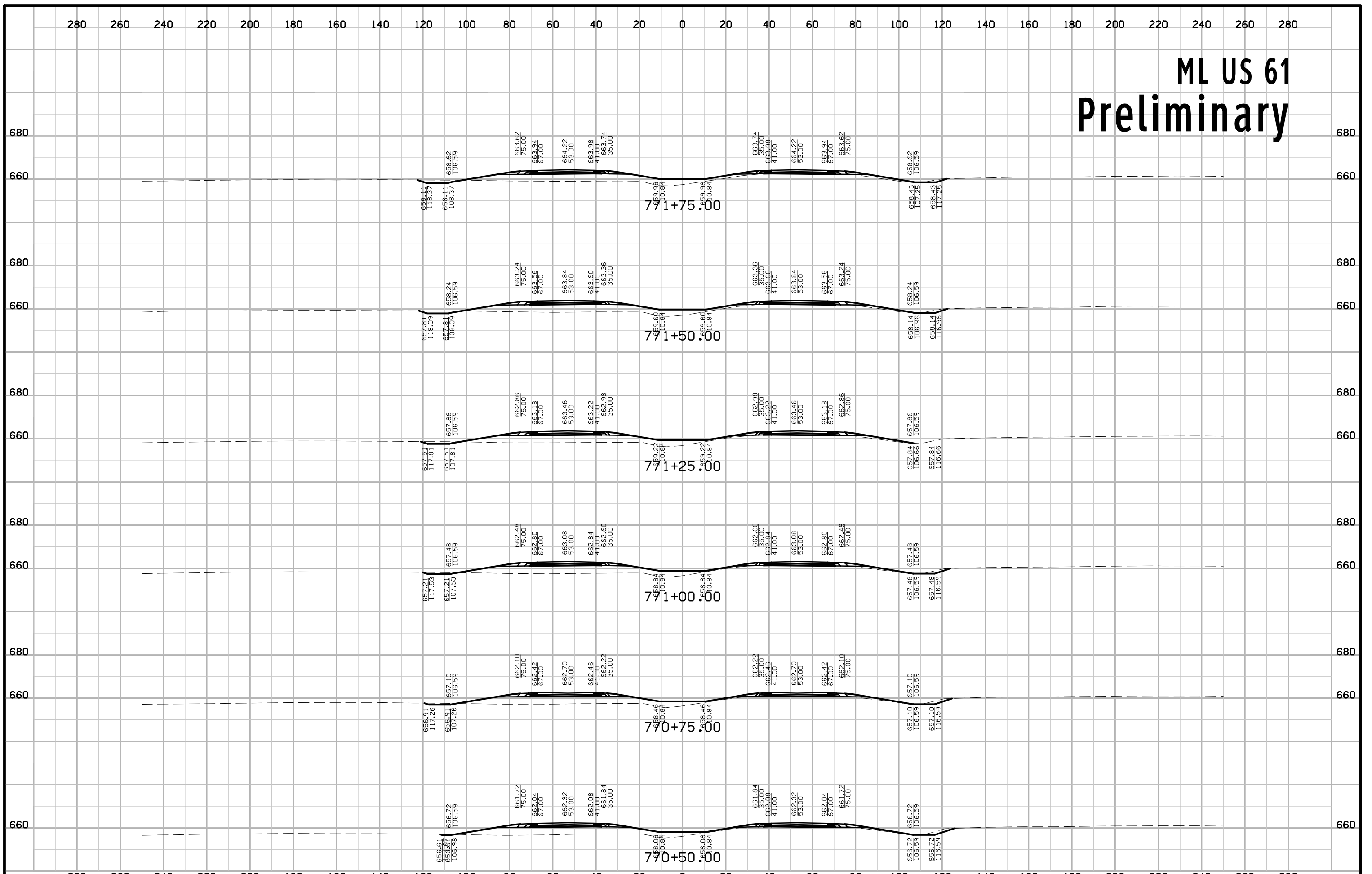
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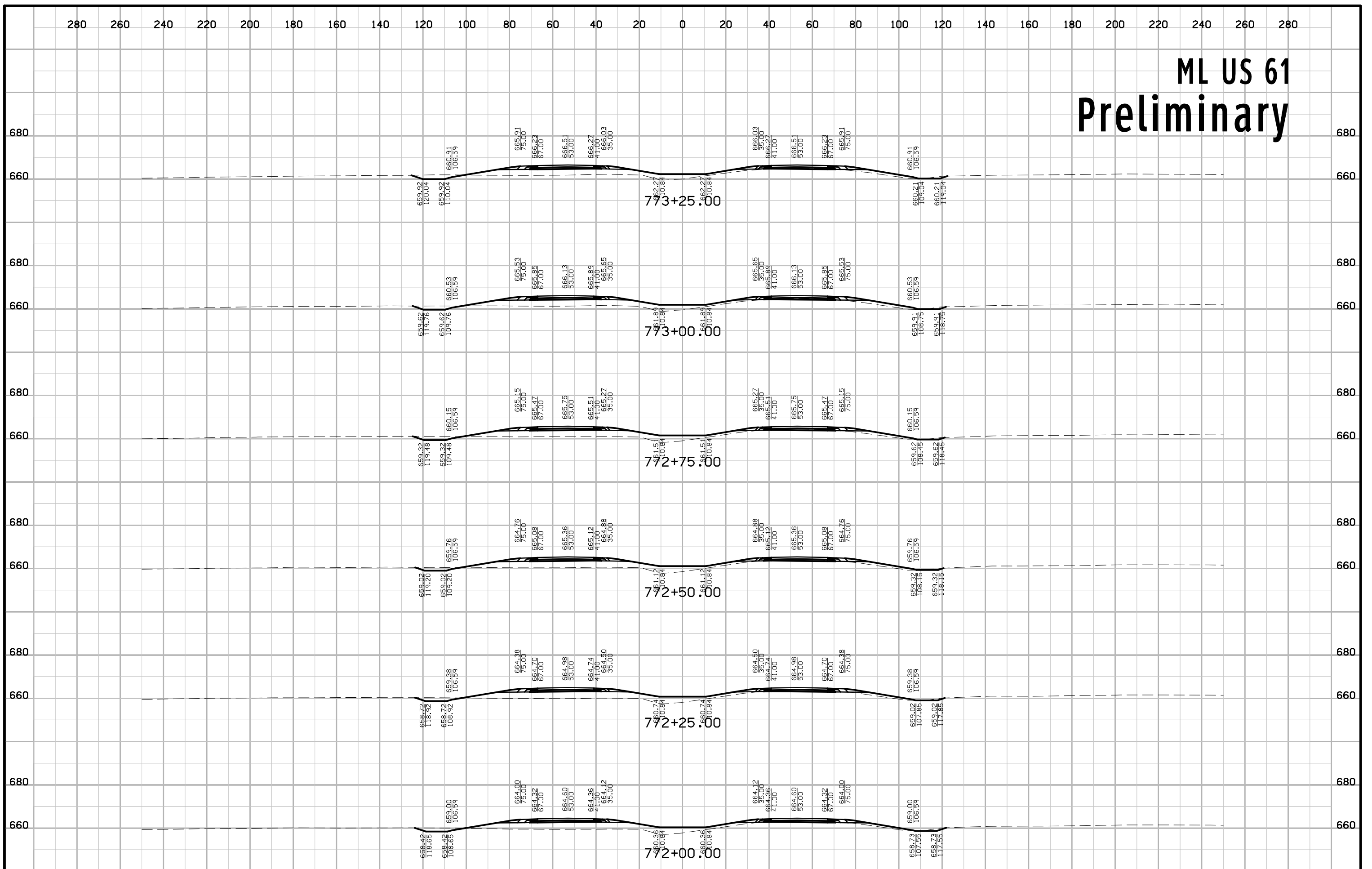
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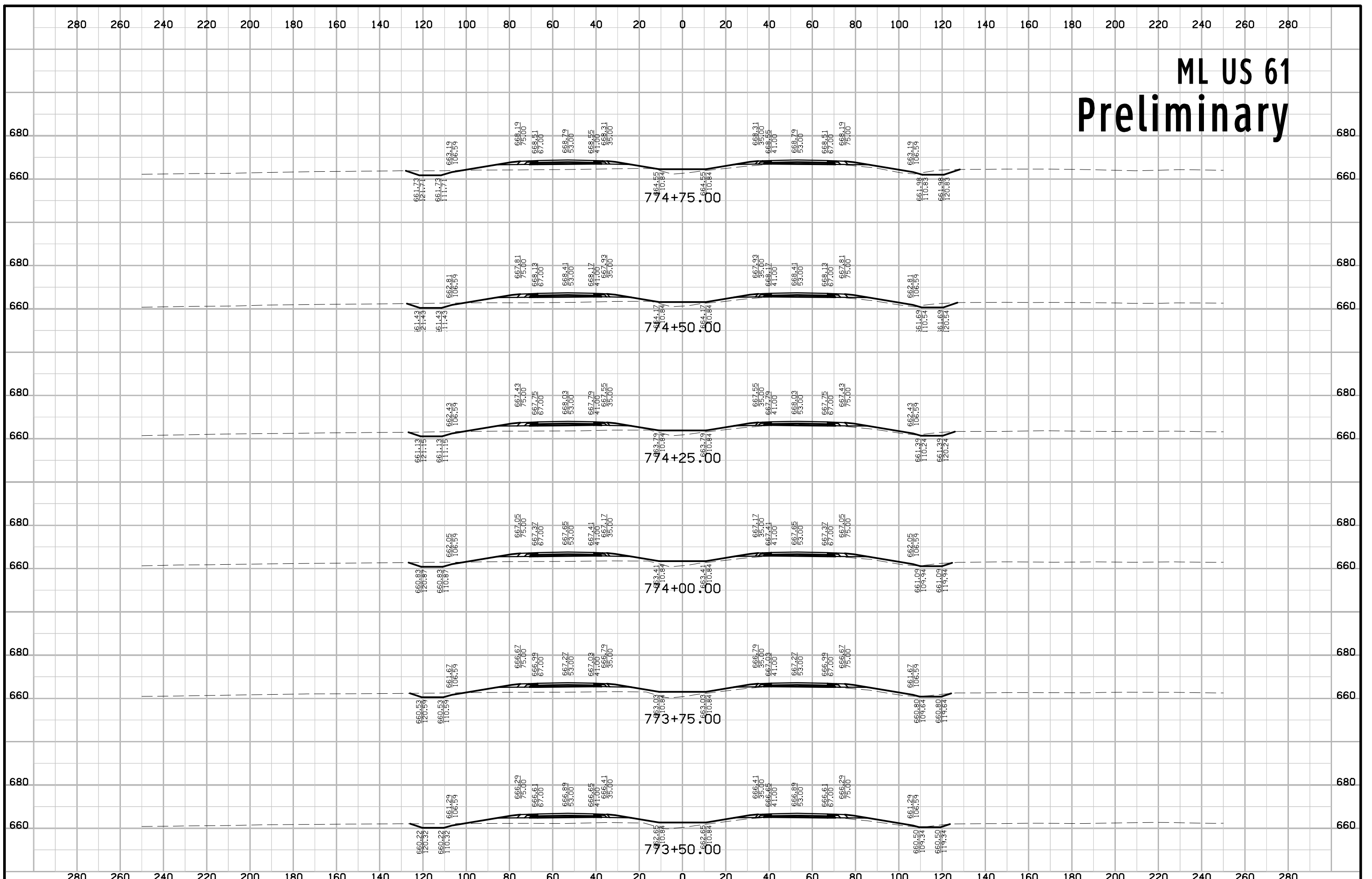
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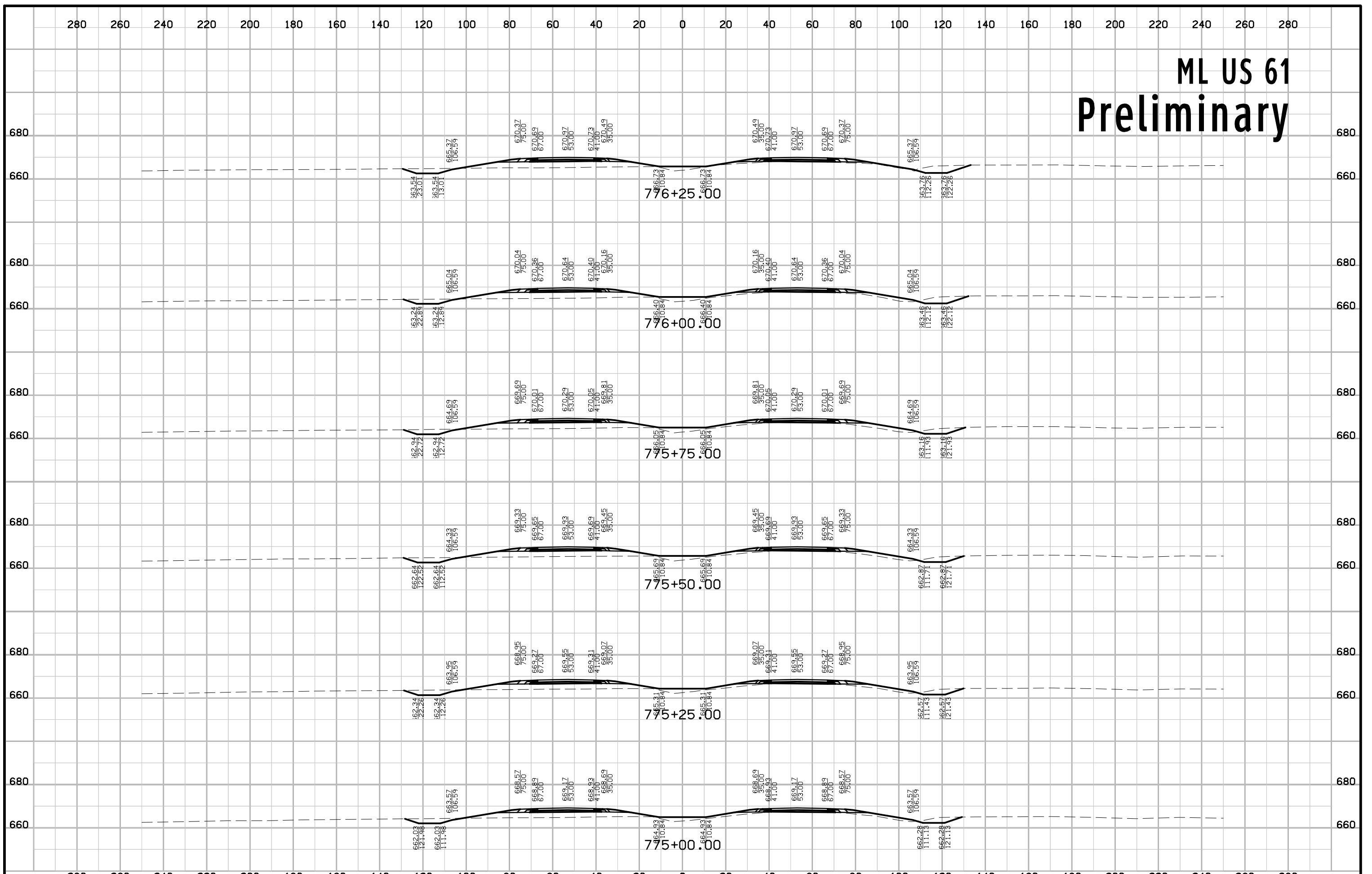
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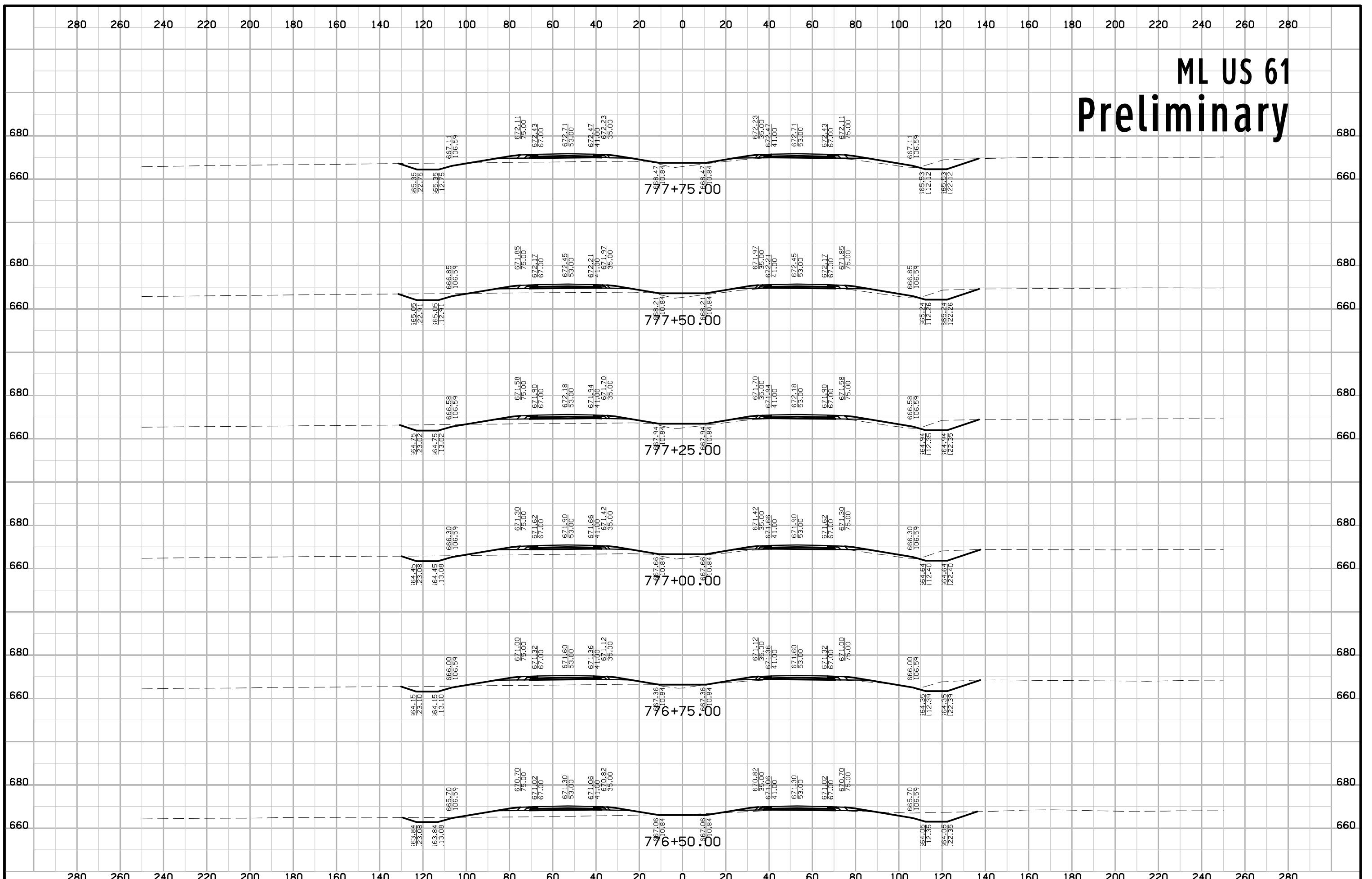
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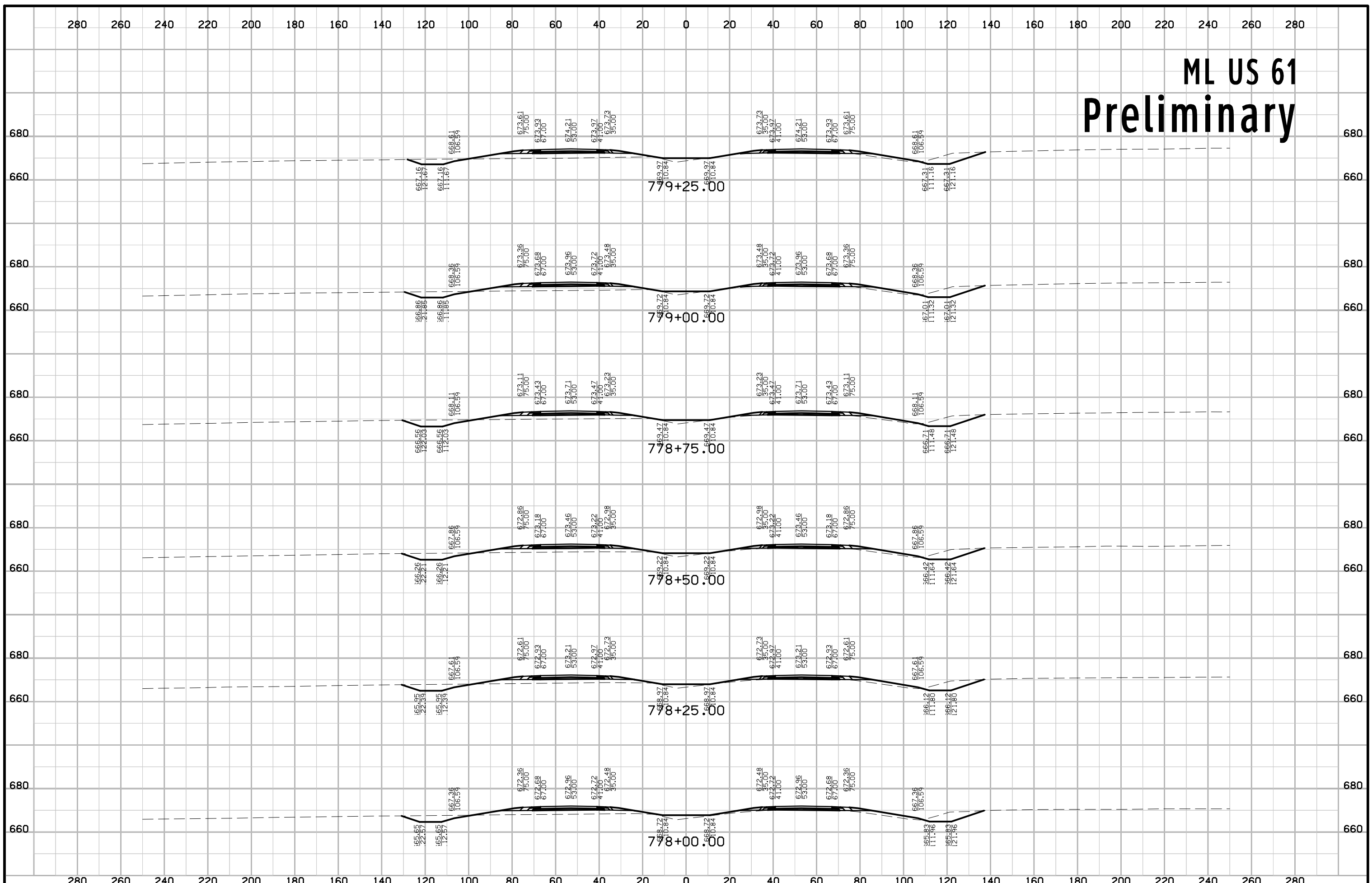
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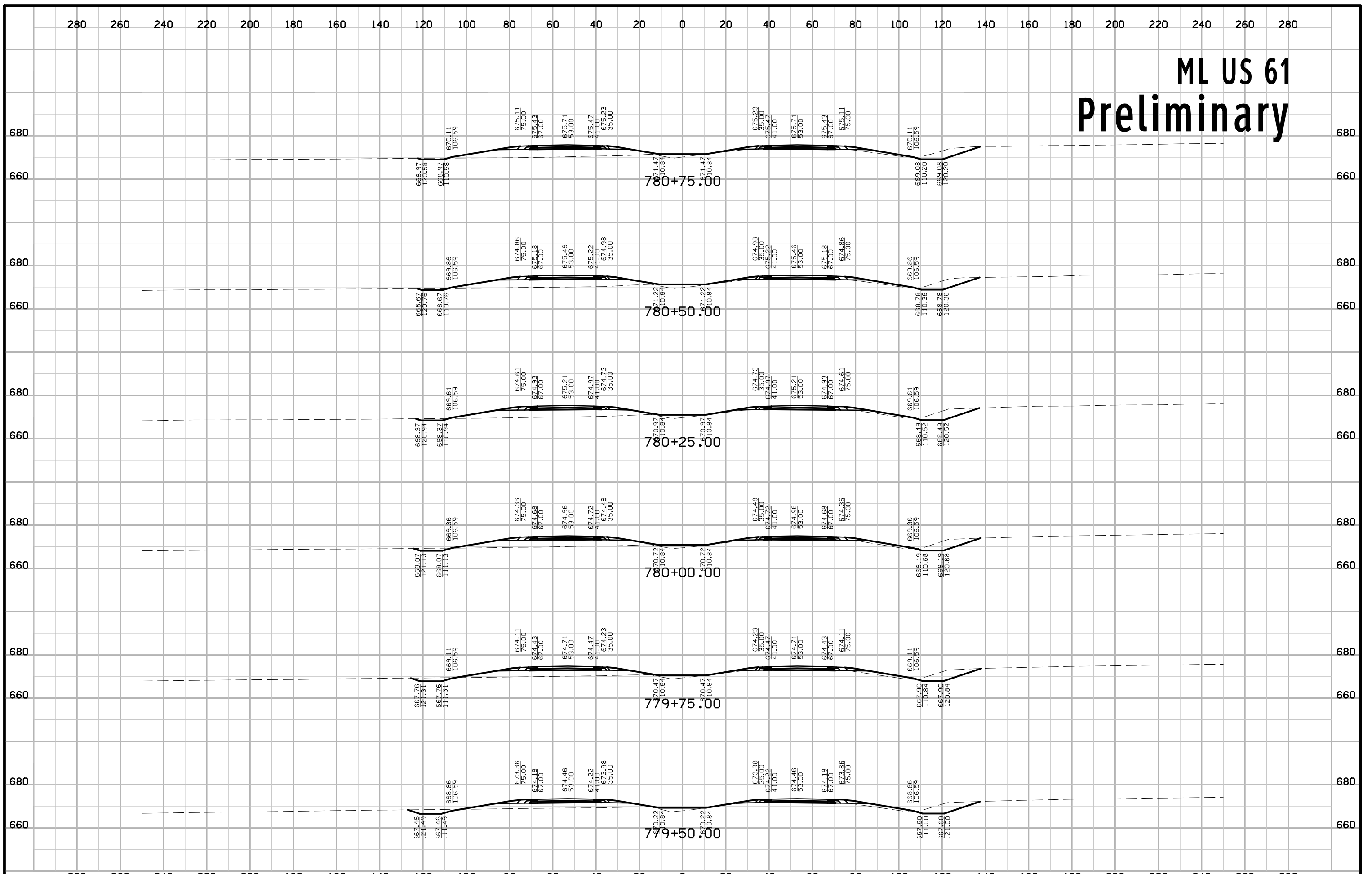
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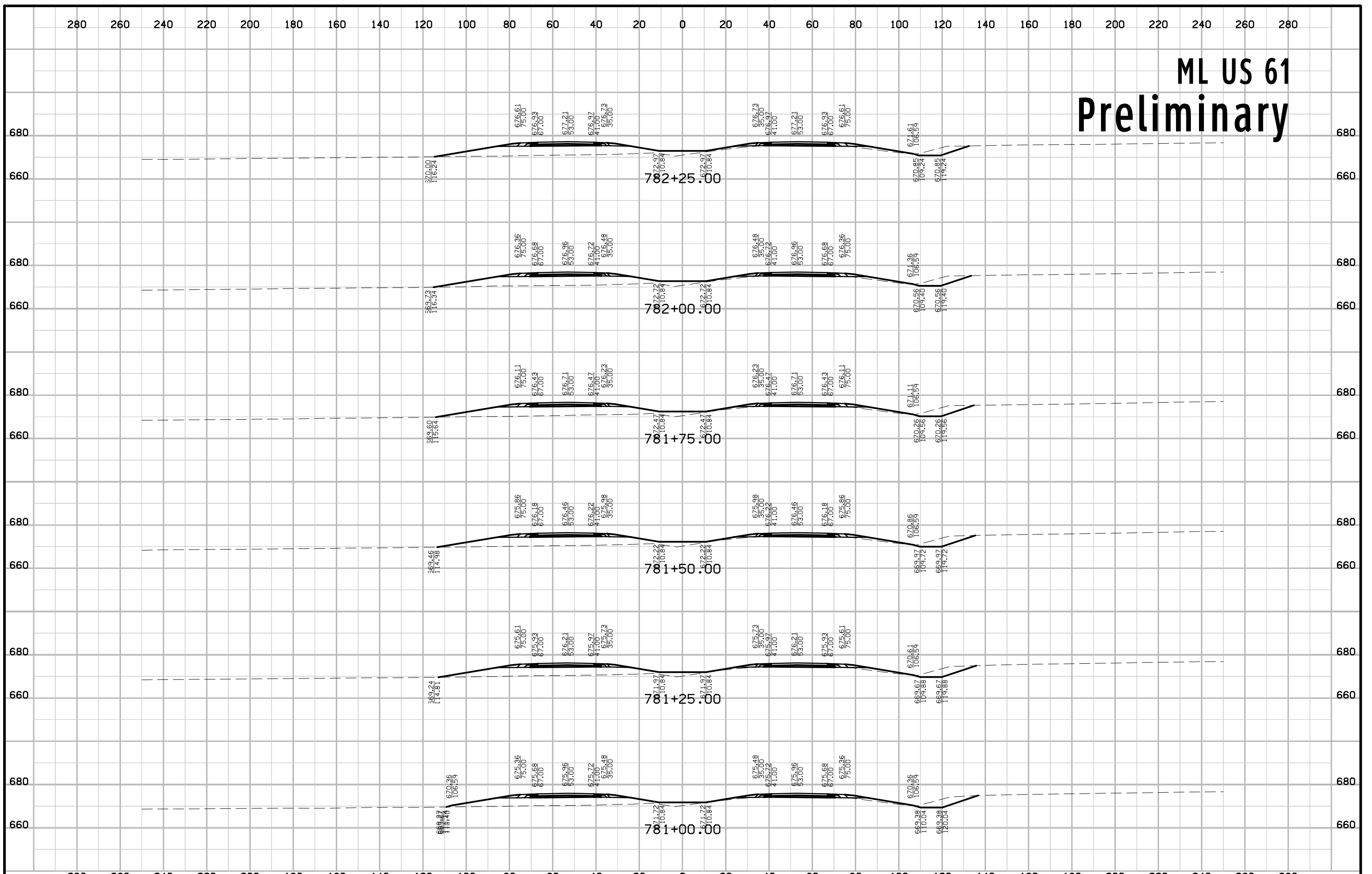
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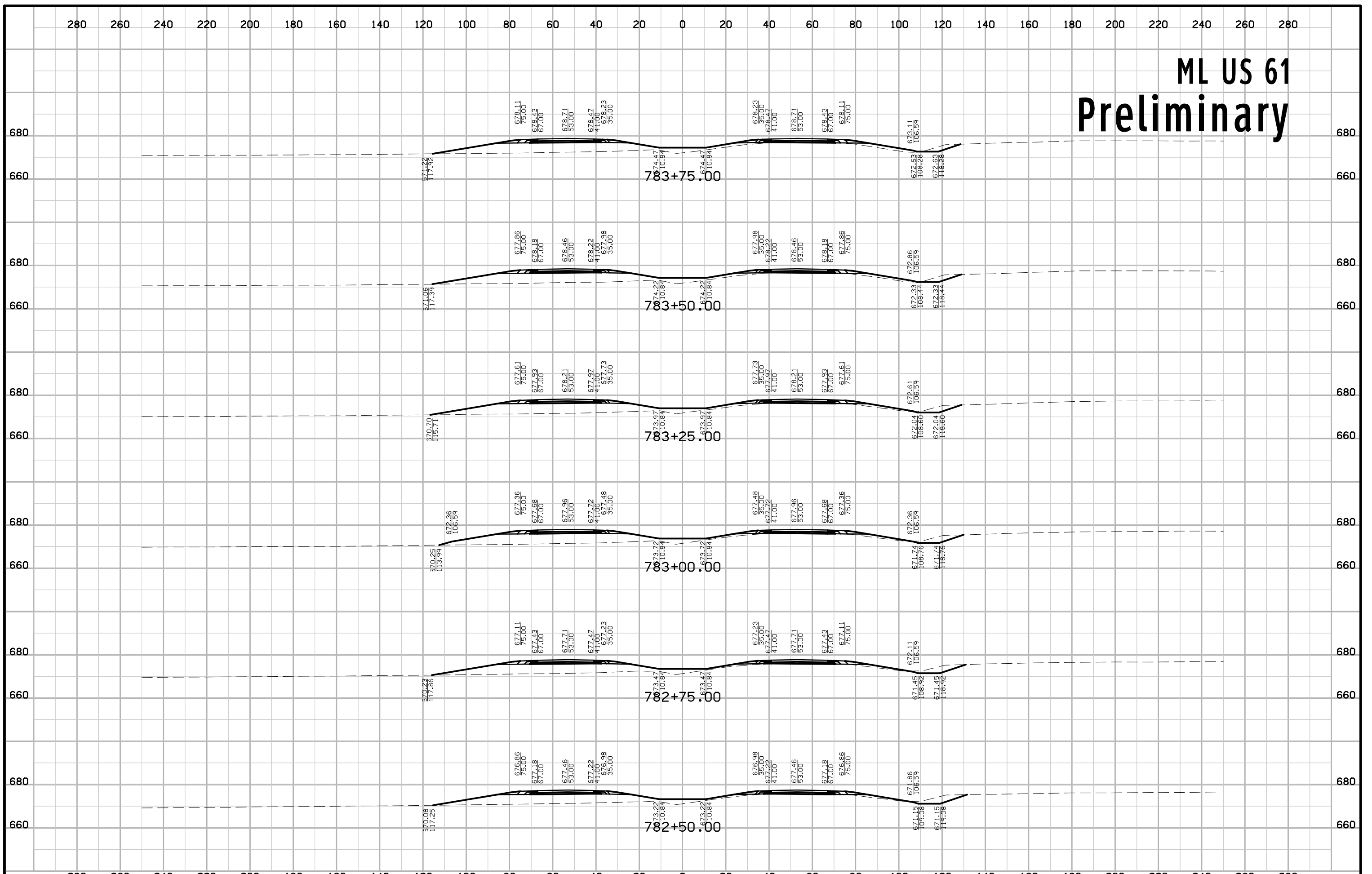
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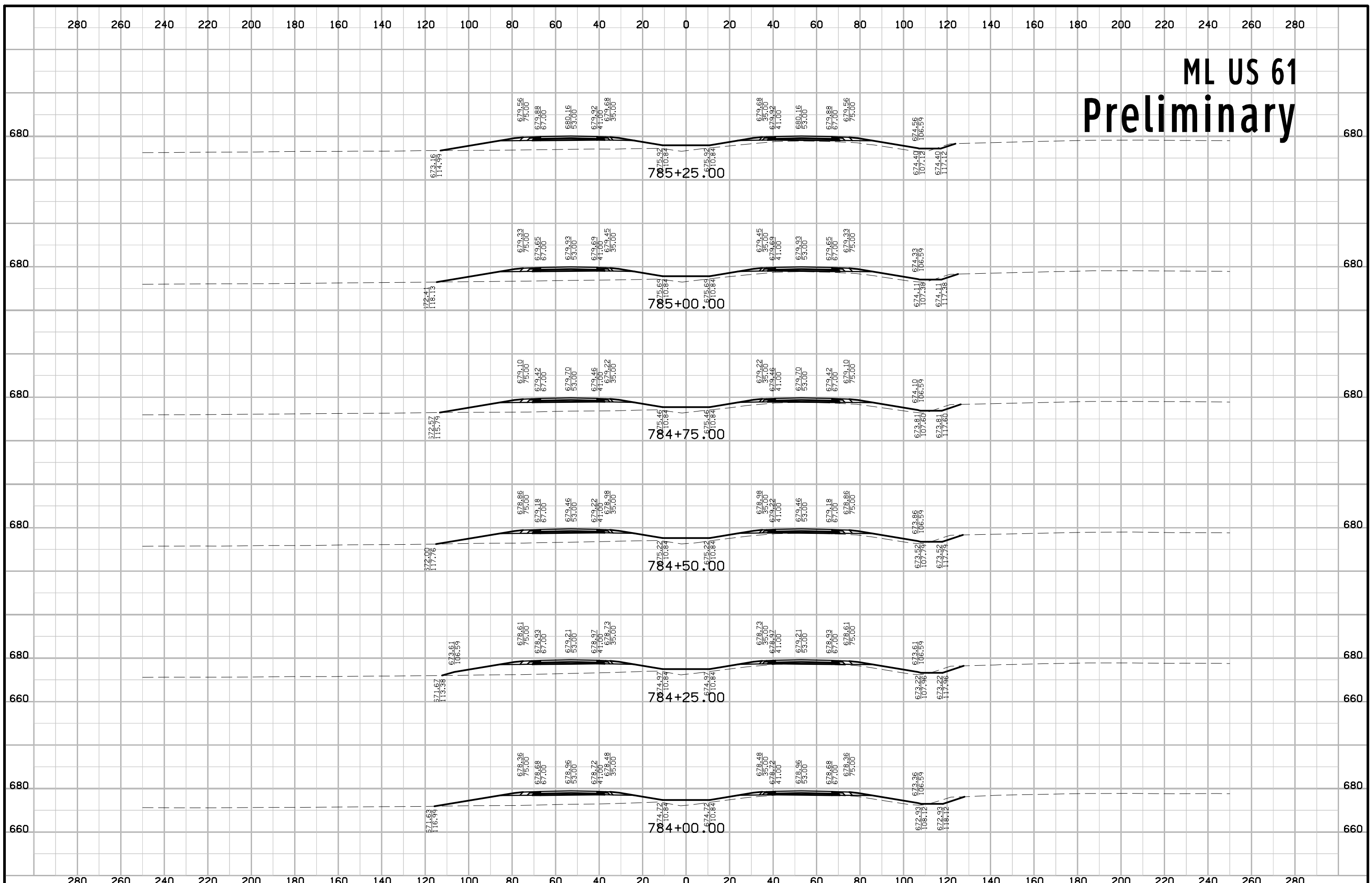
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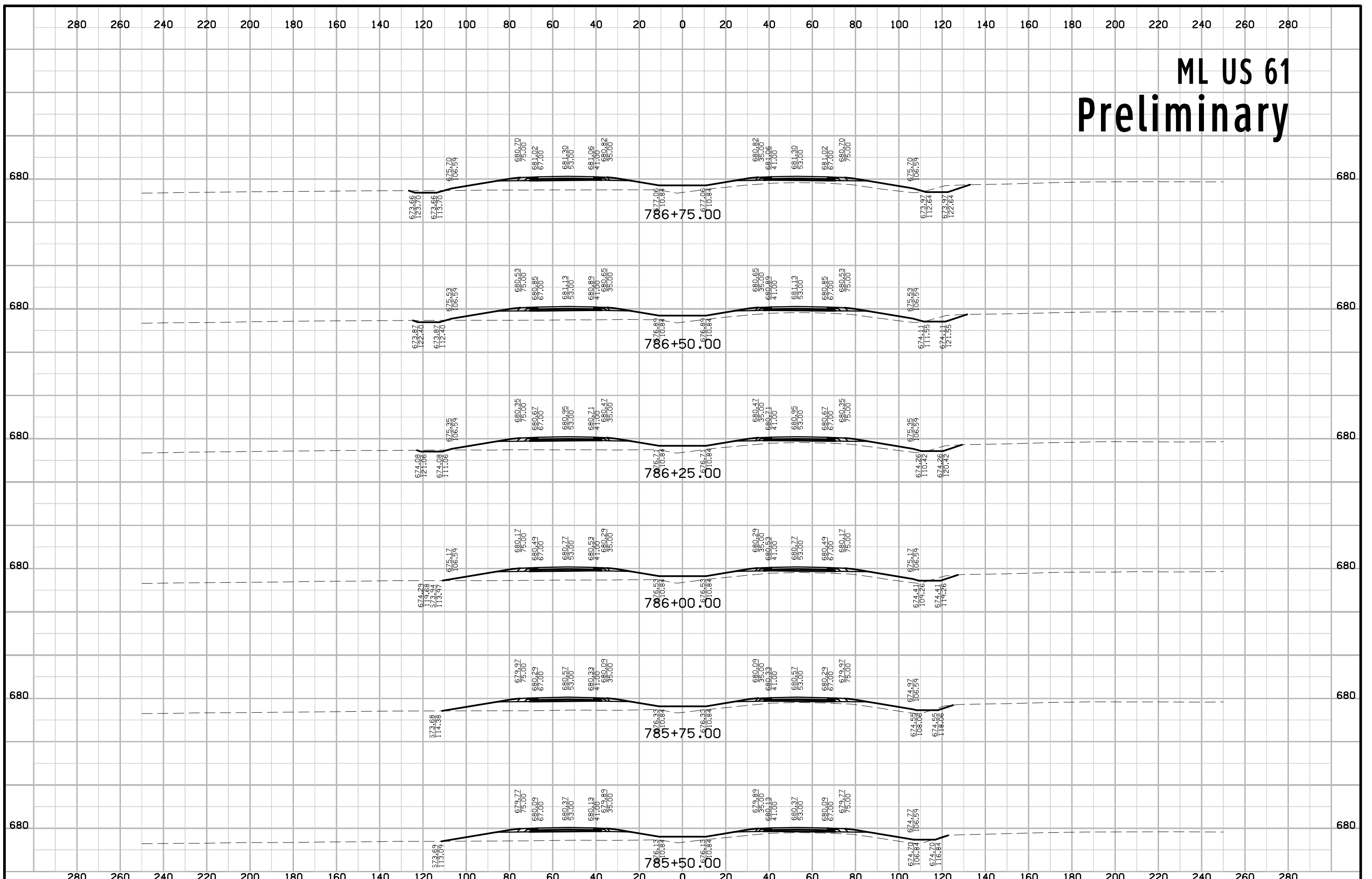
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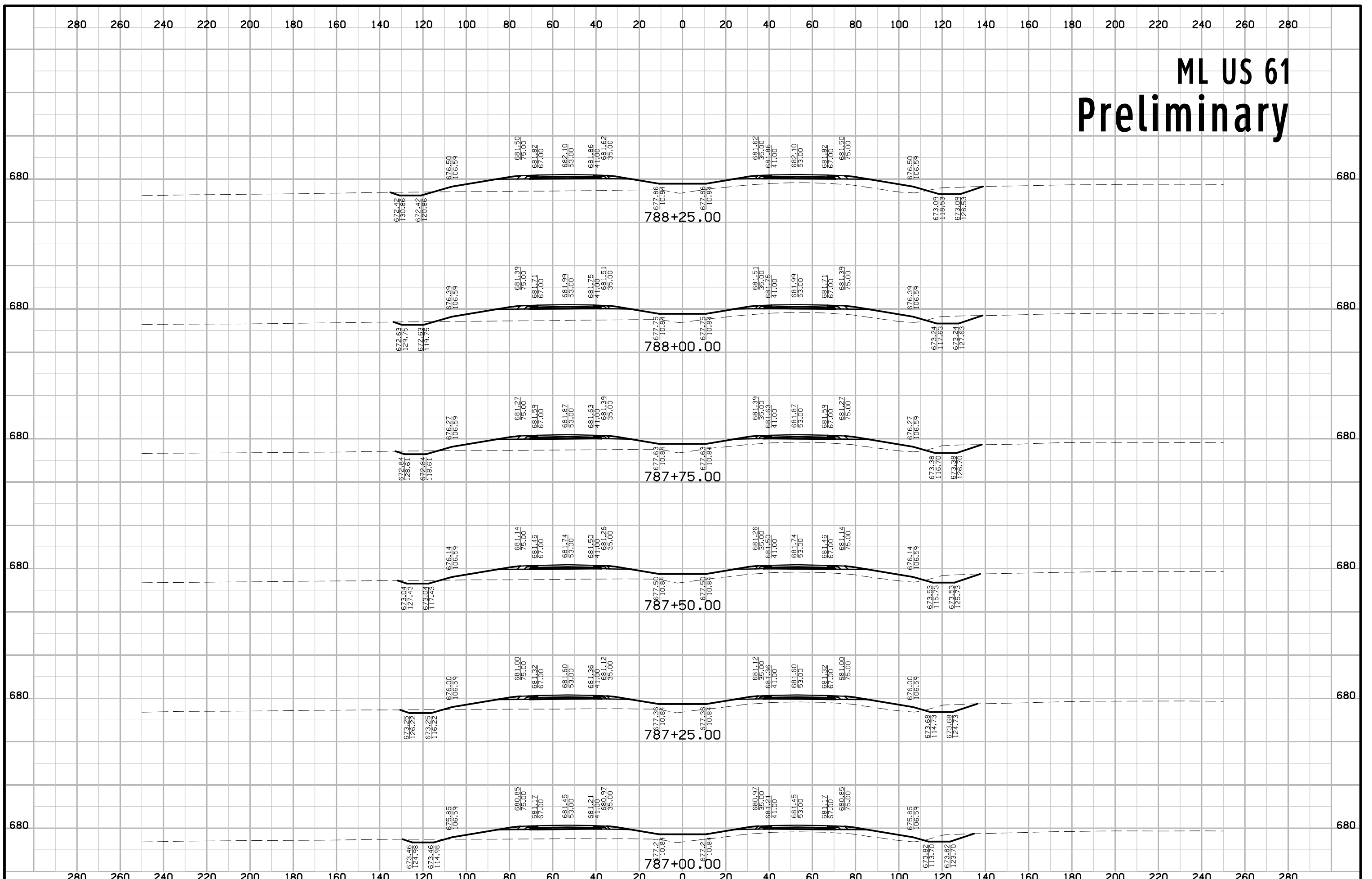
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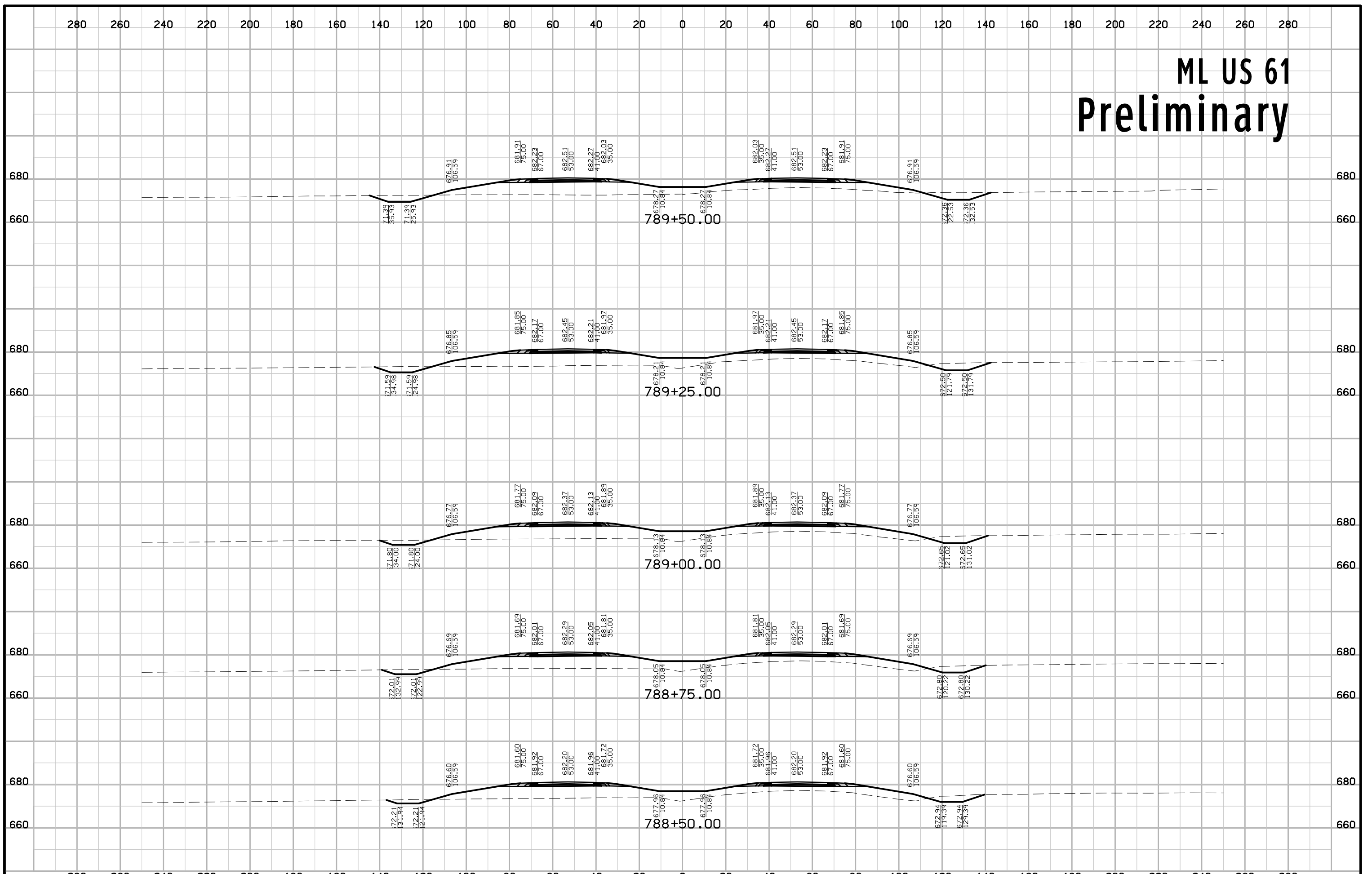
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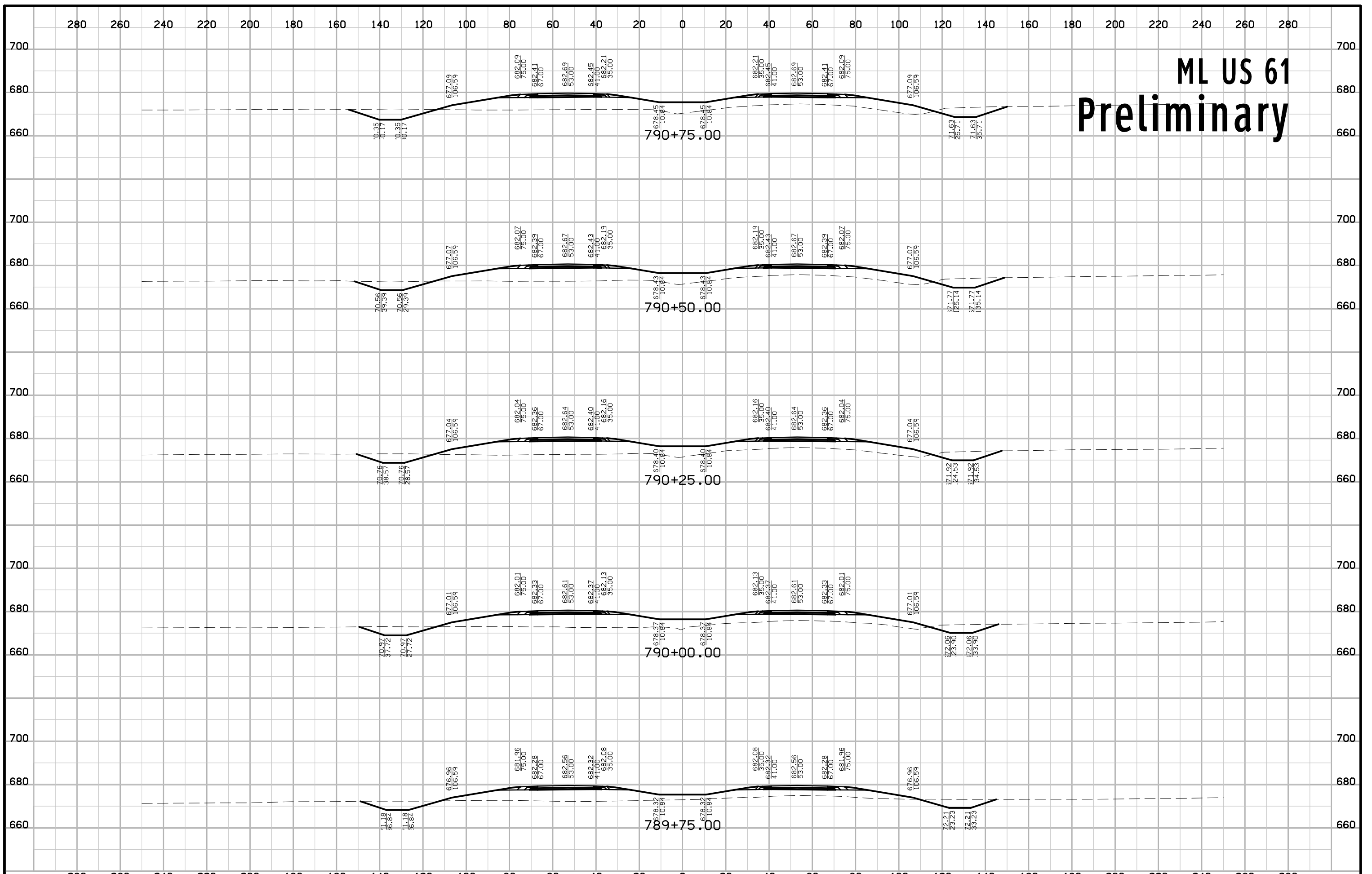
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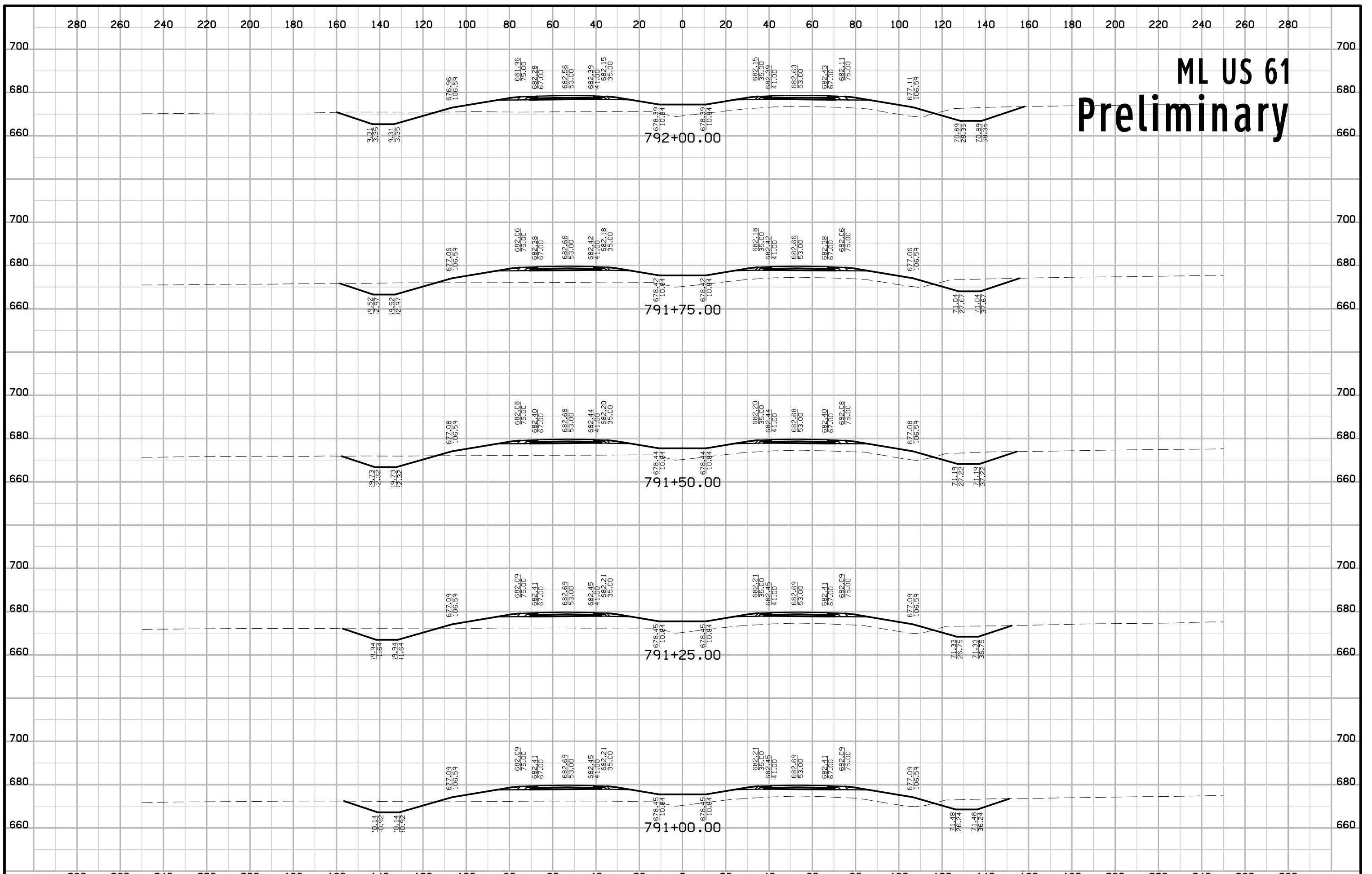
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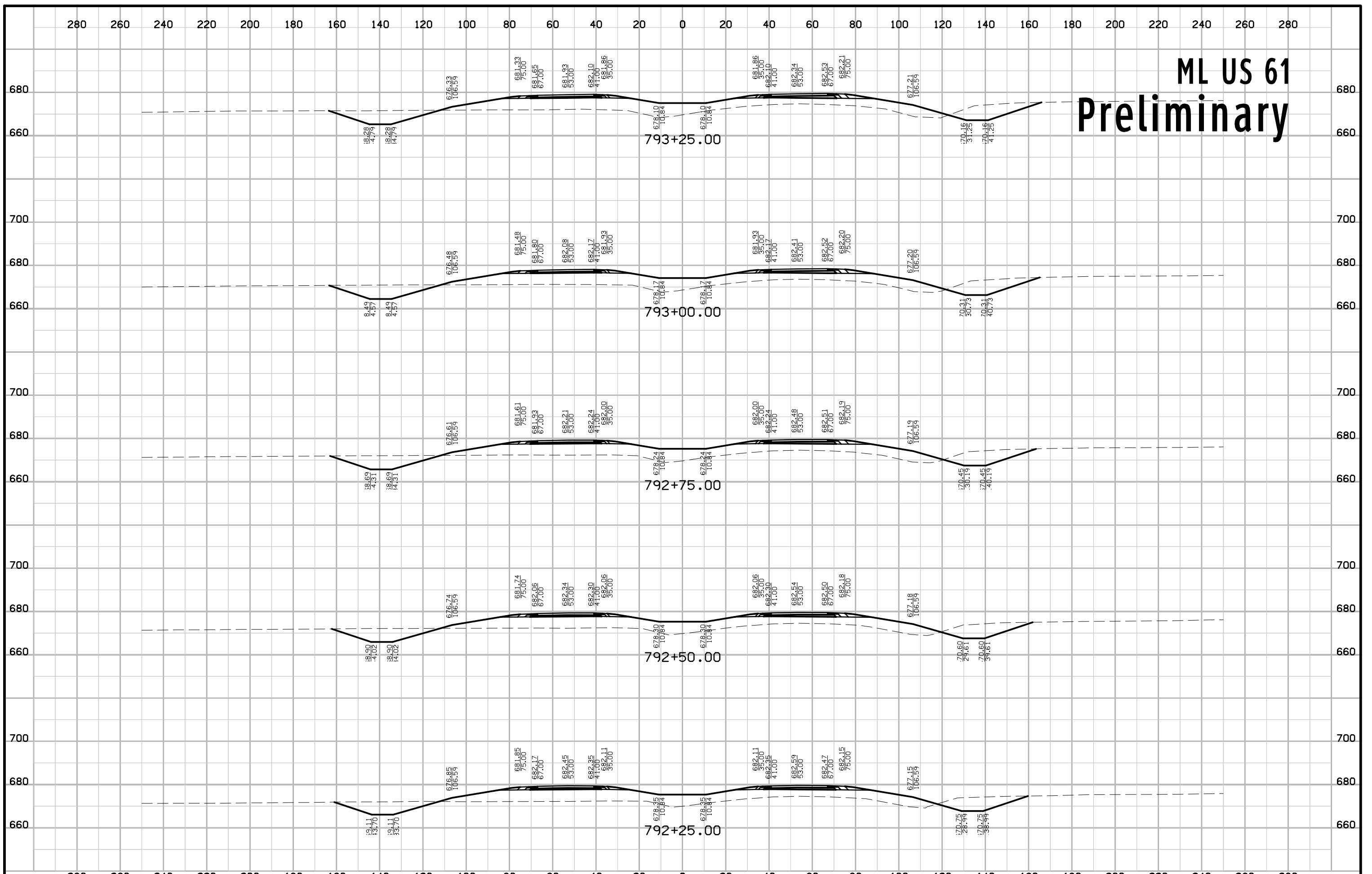
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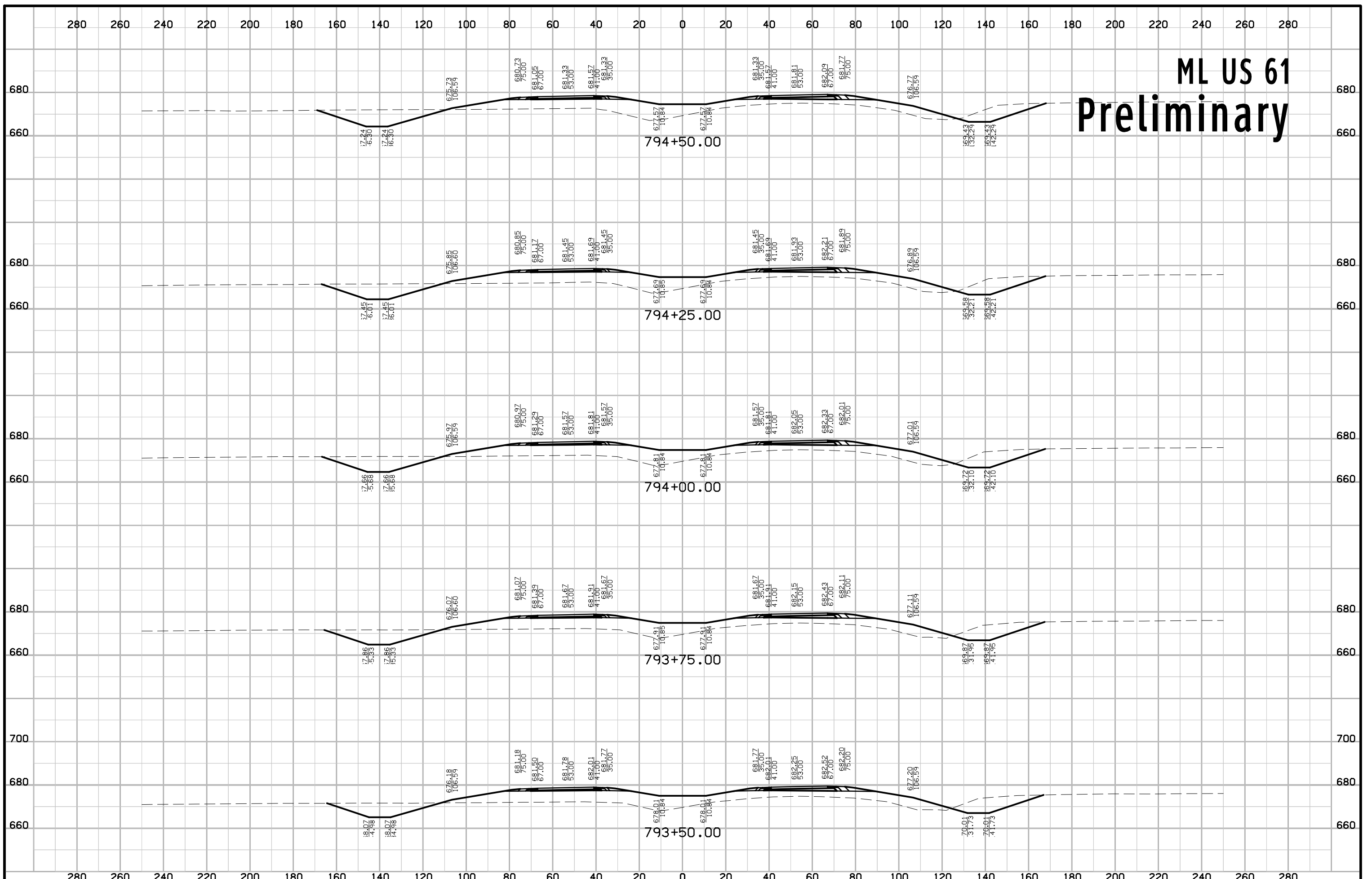
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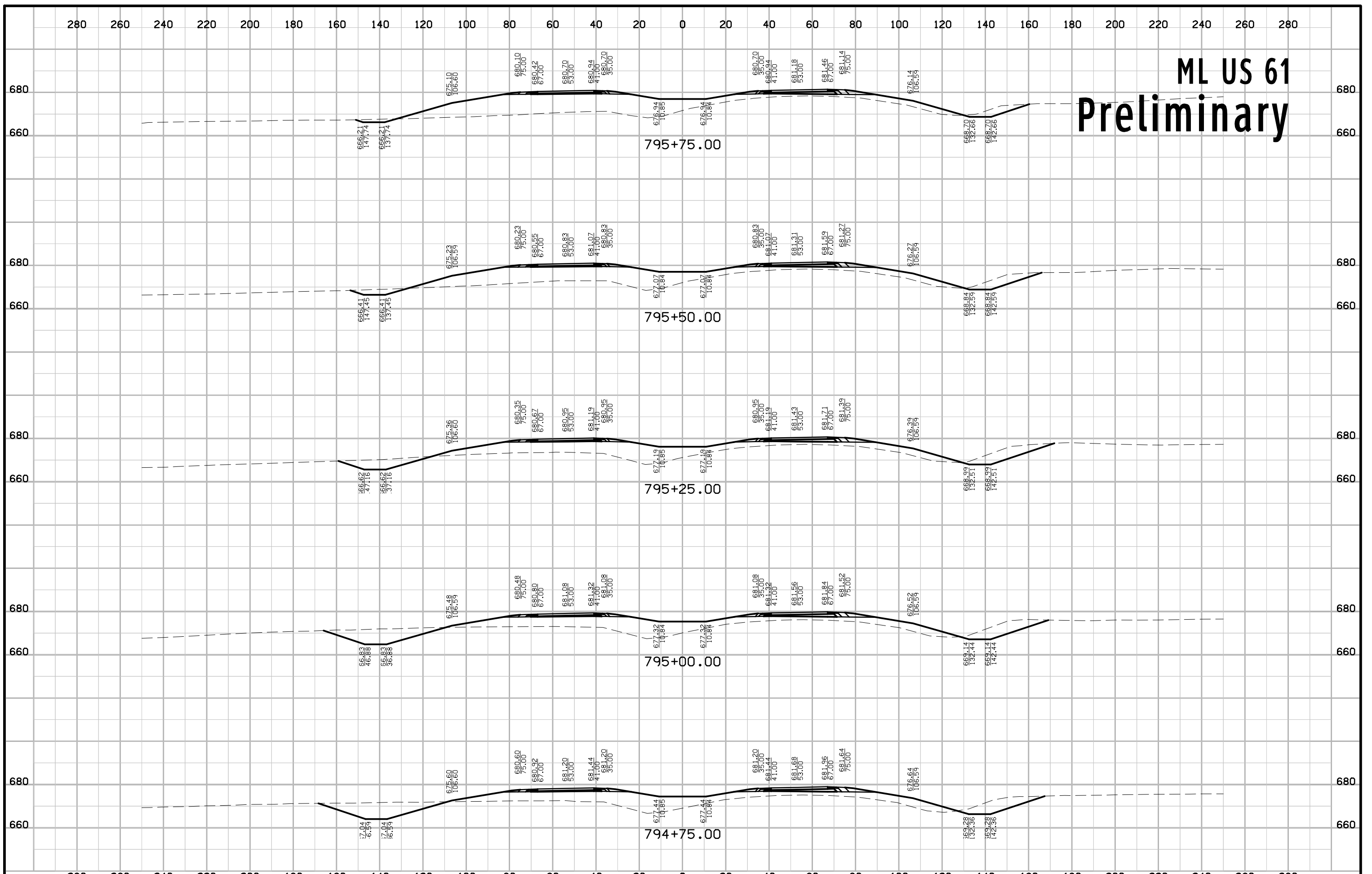
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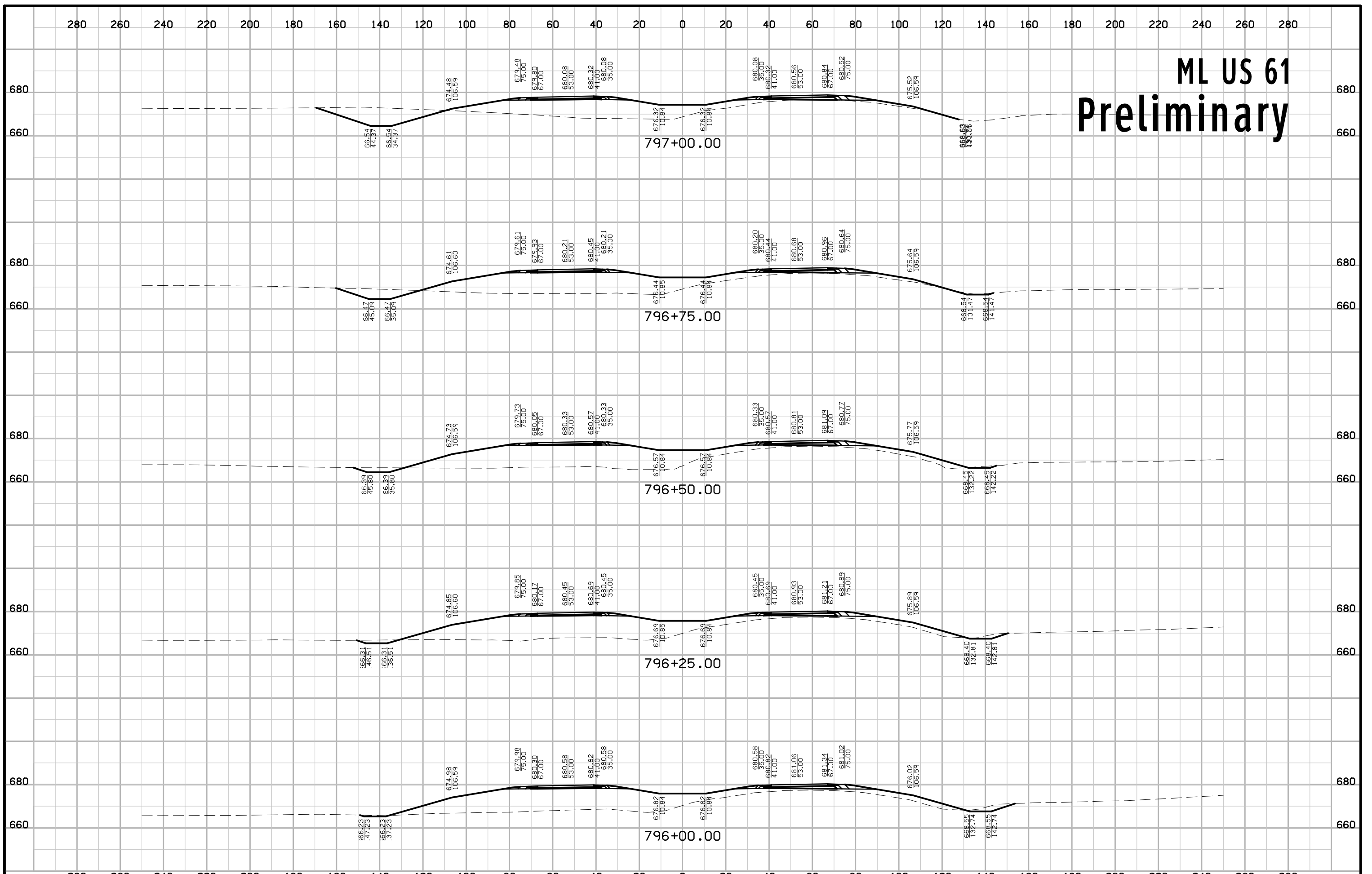
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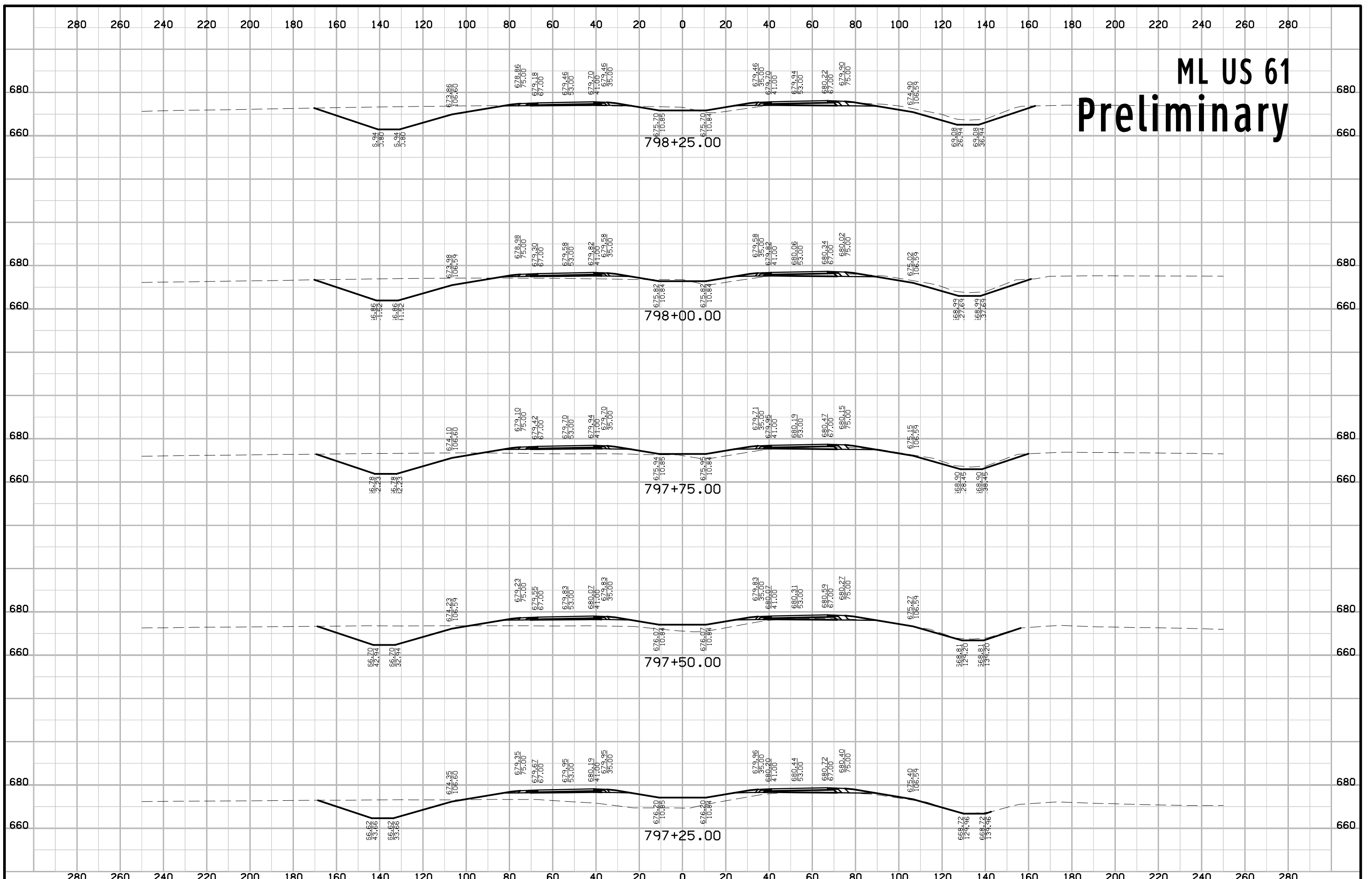
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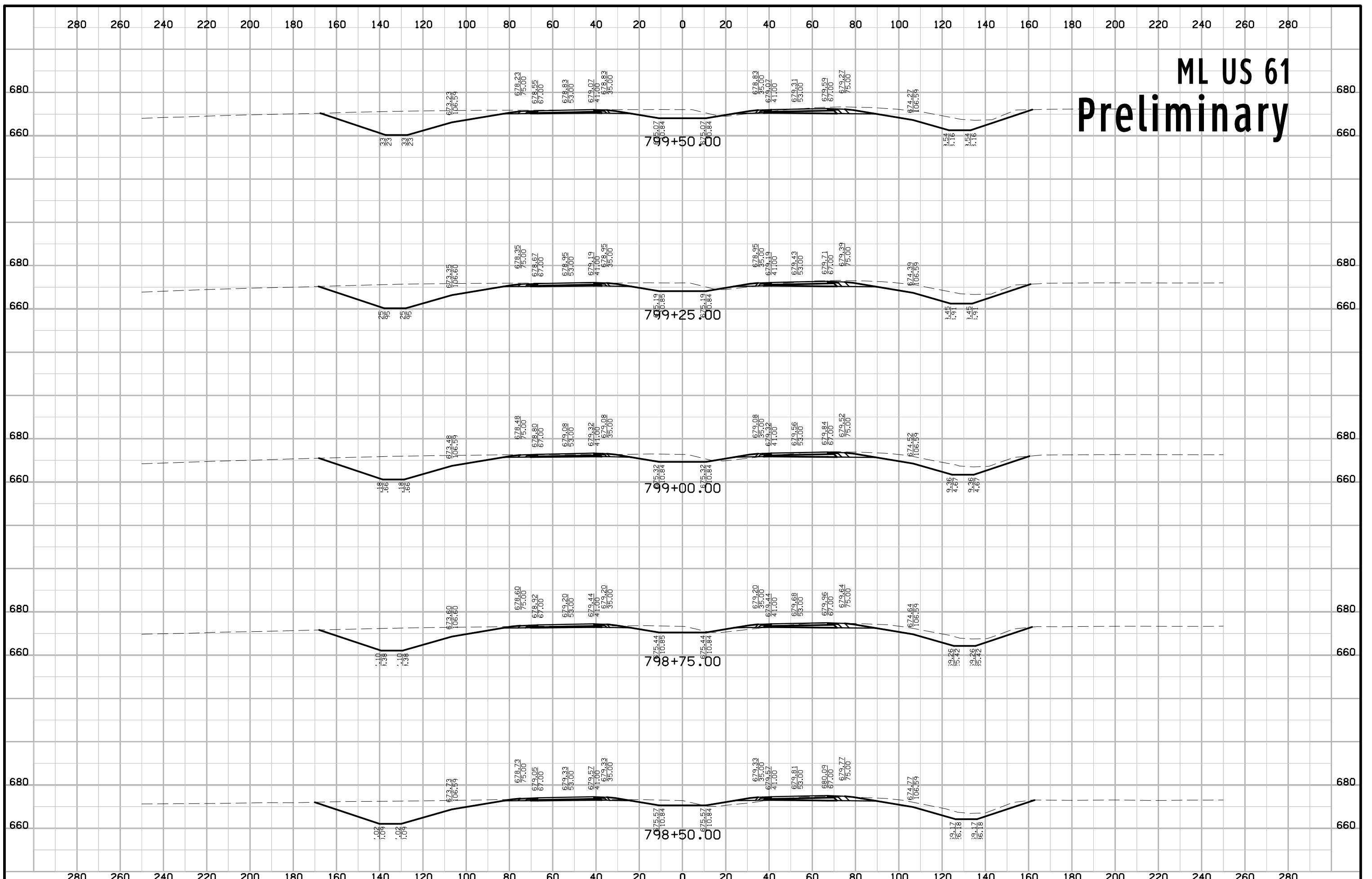
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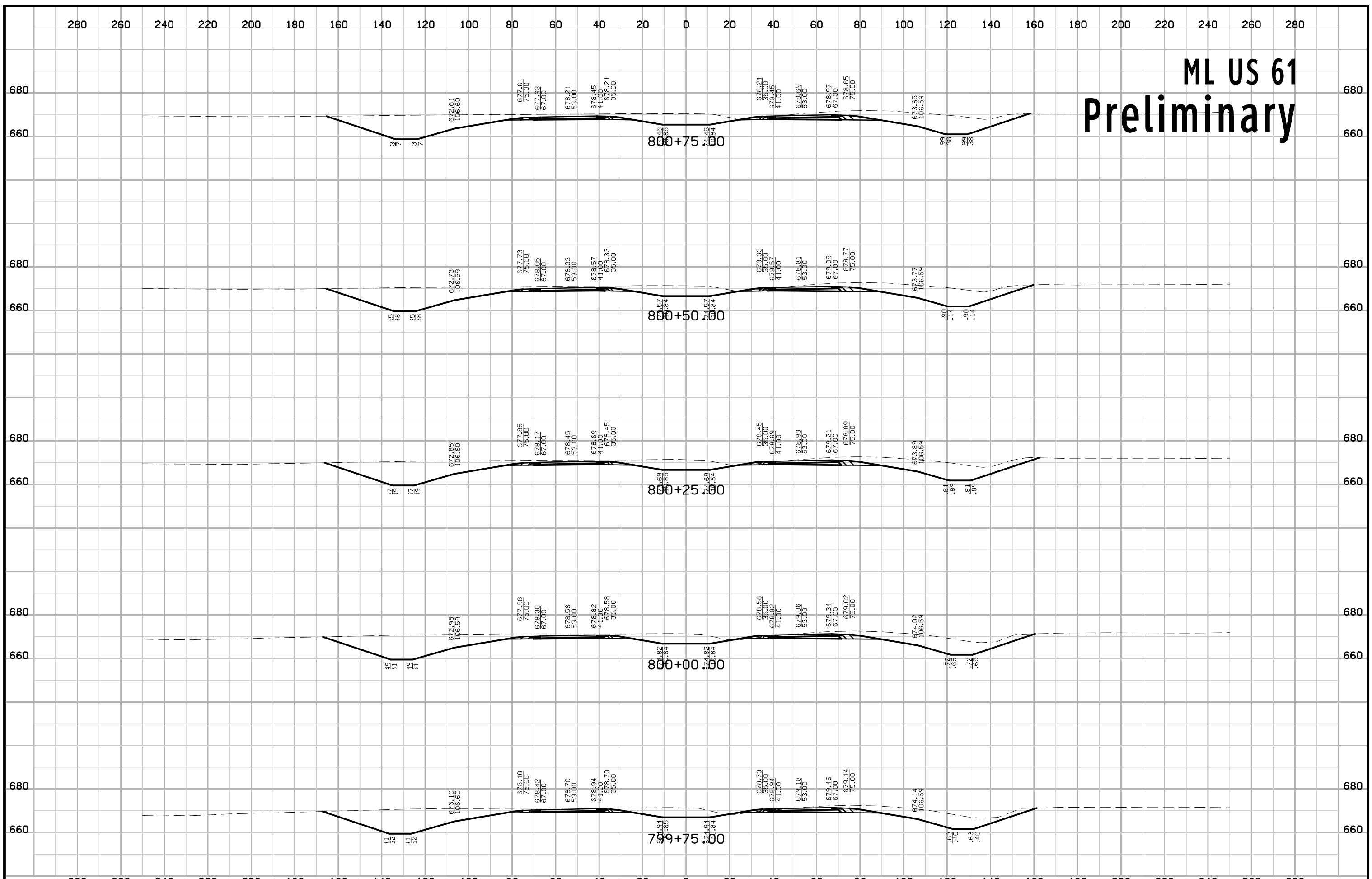
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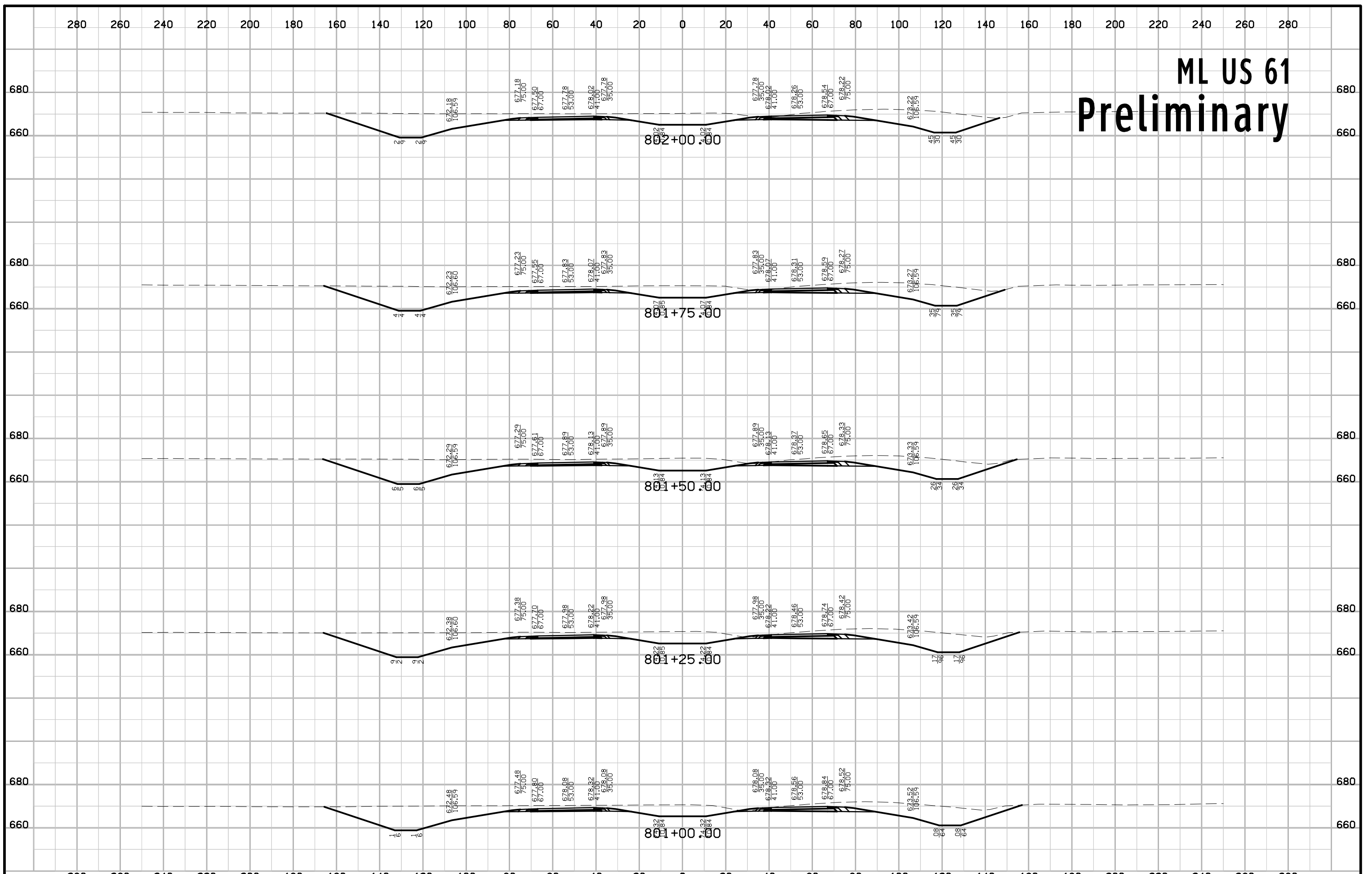
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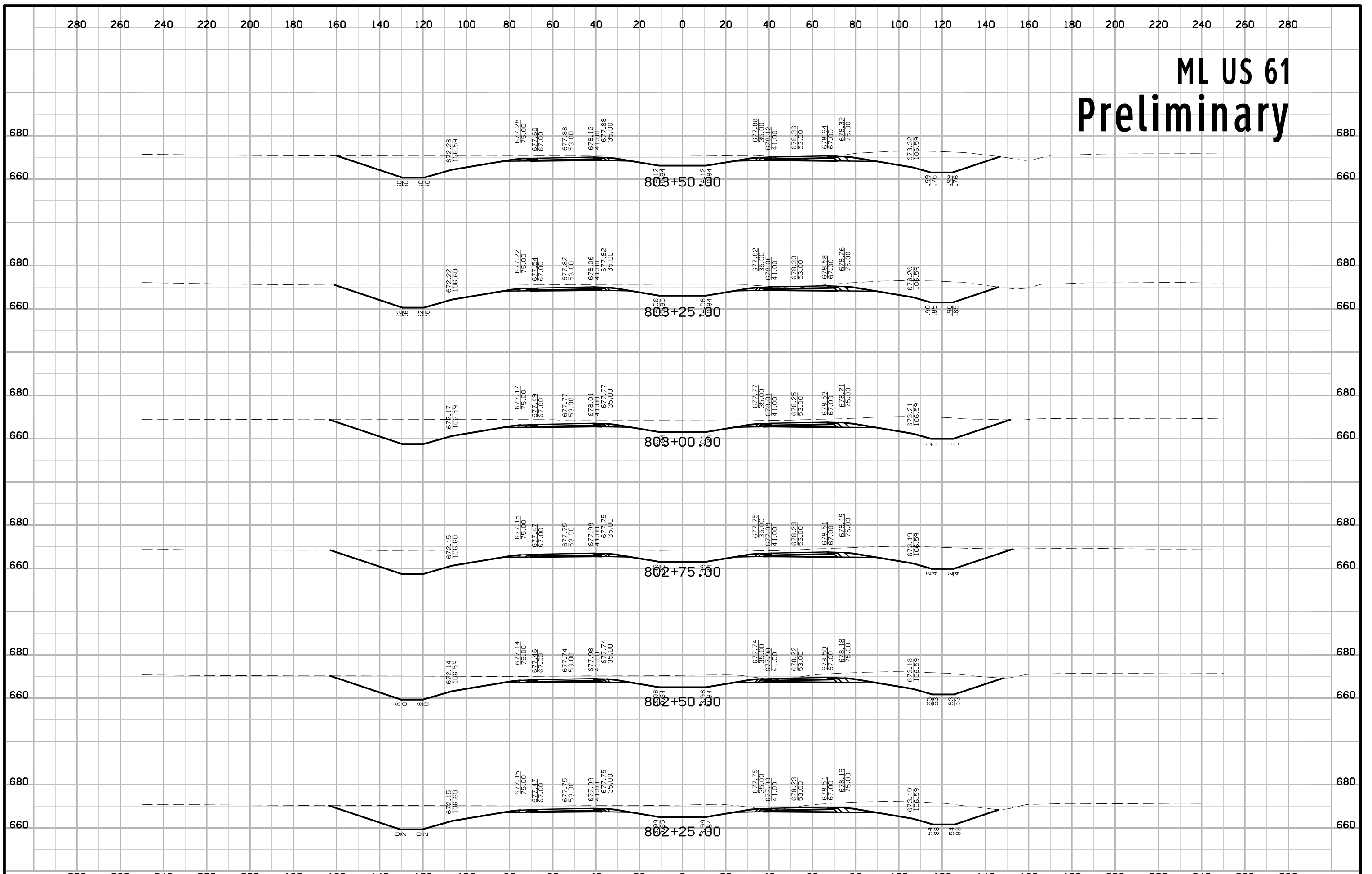
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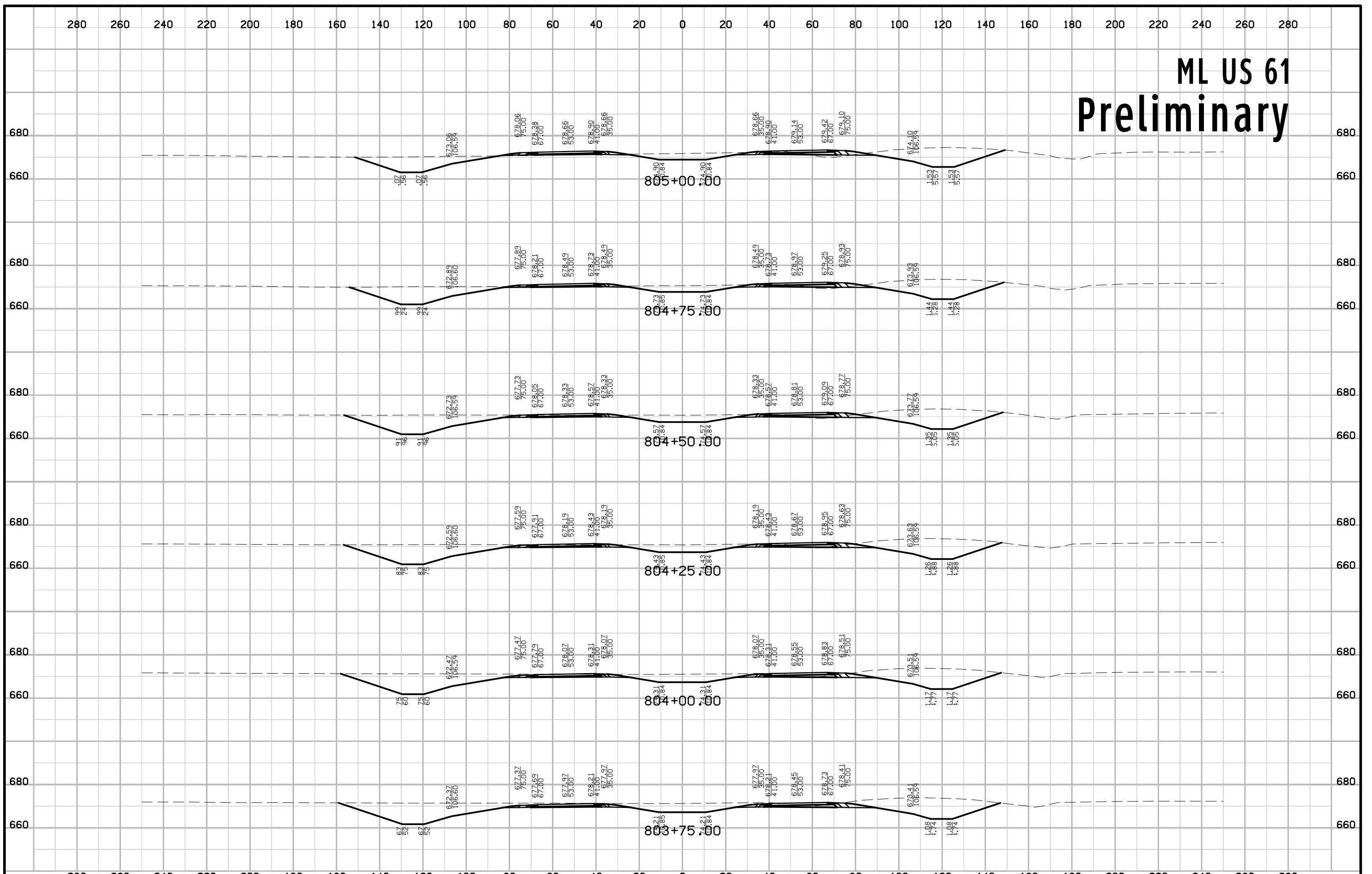
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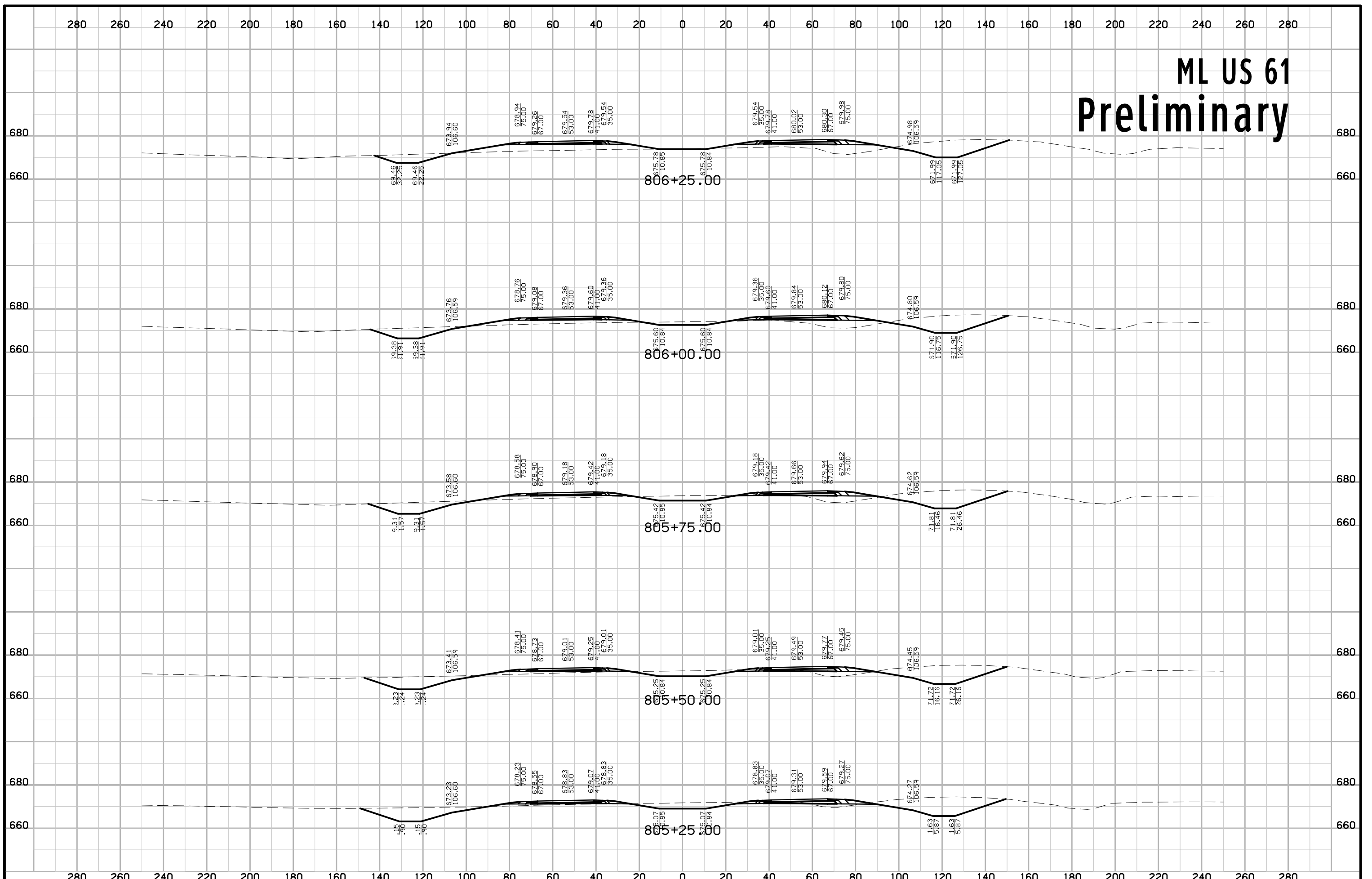
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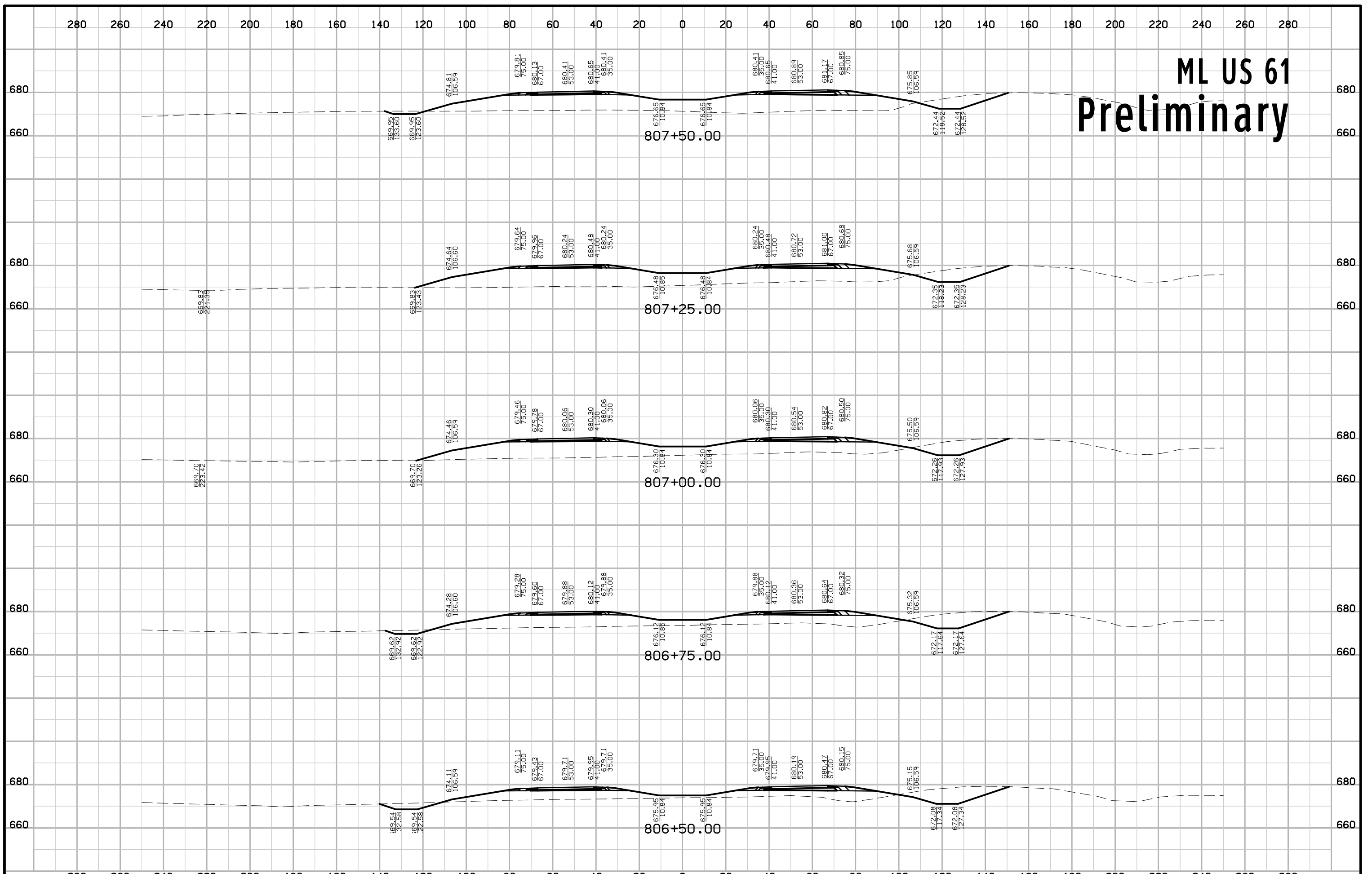
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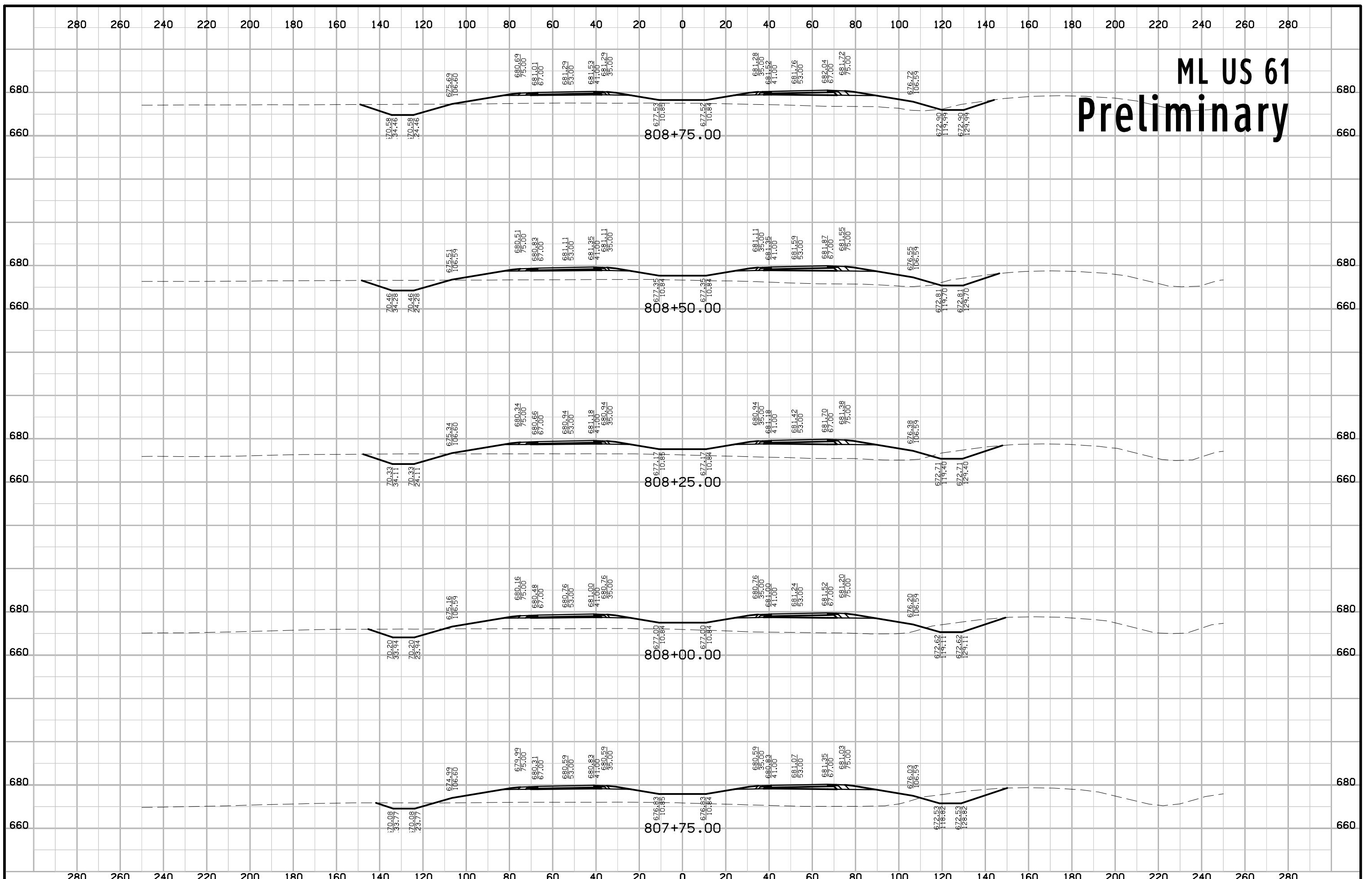


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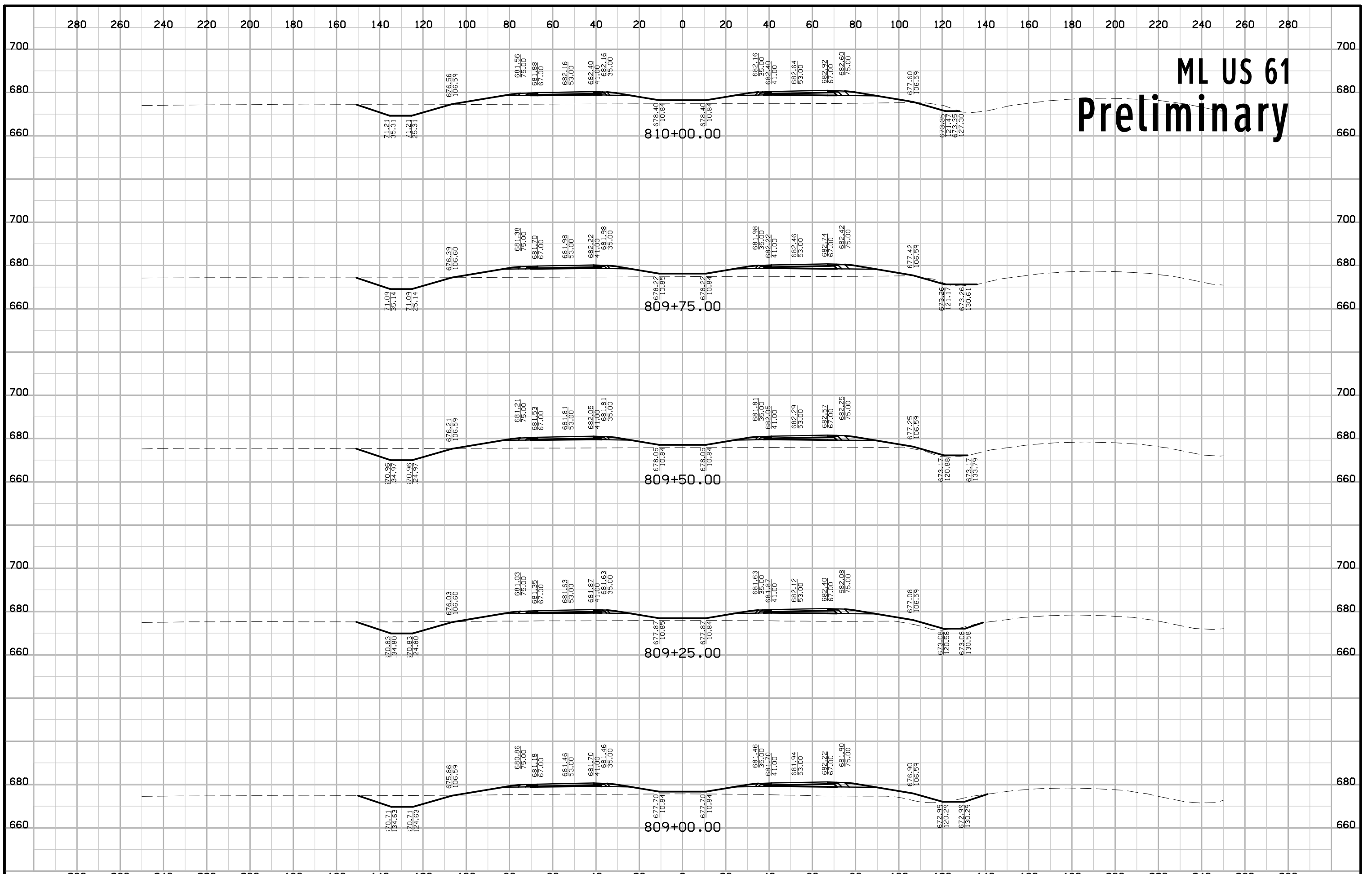


ENGLISH	IOWA DOT	DESIGN TEAM	COUNTY	PROJECT NUMBER	SHEET NUMBER
					W.39

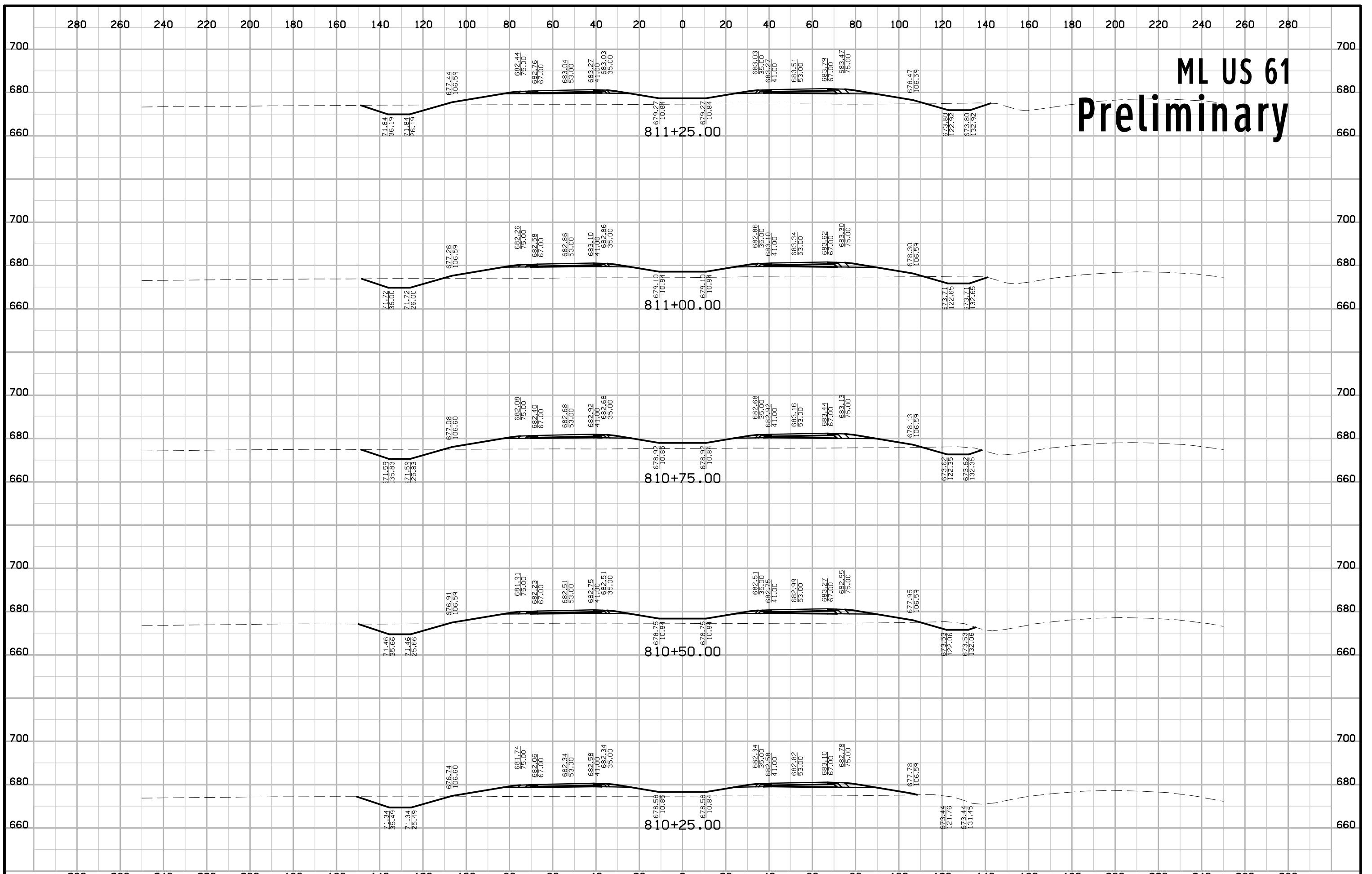
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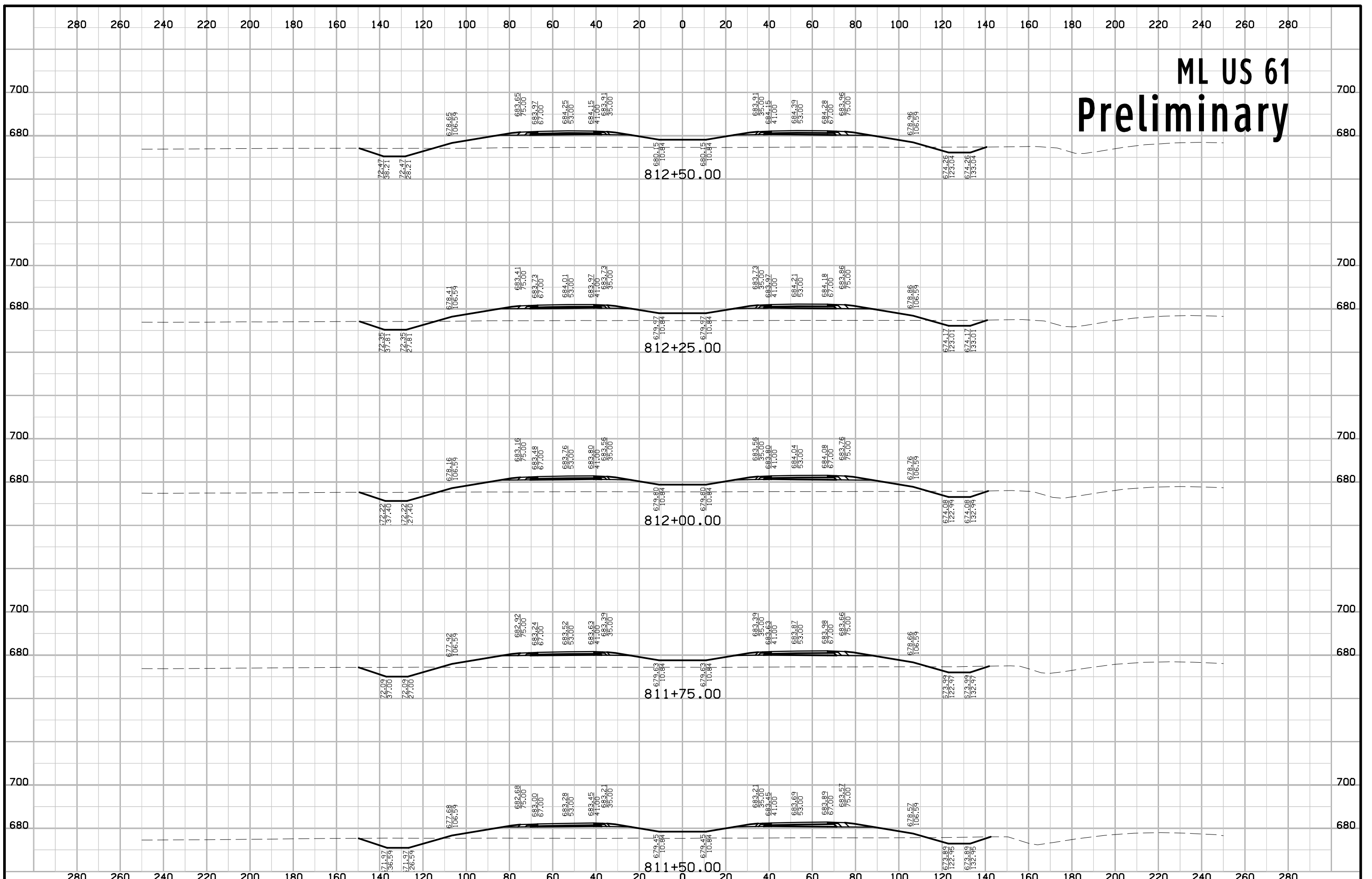
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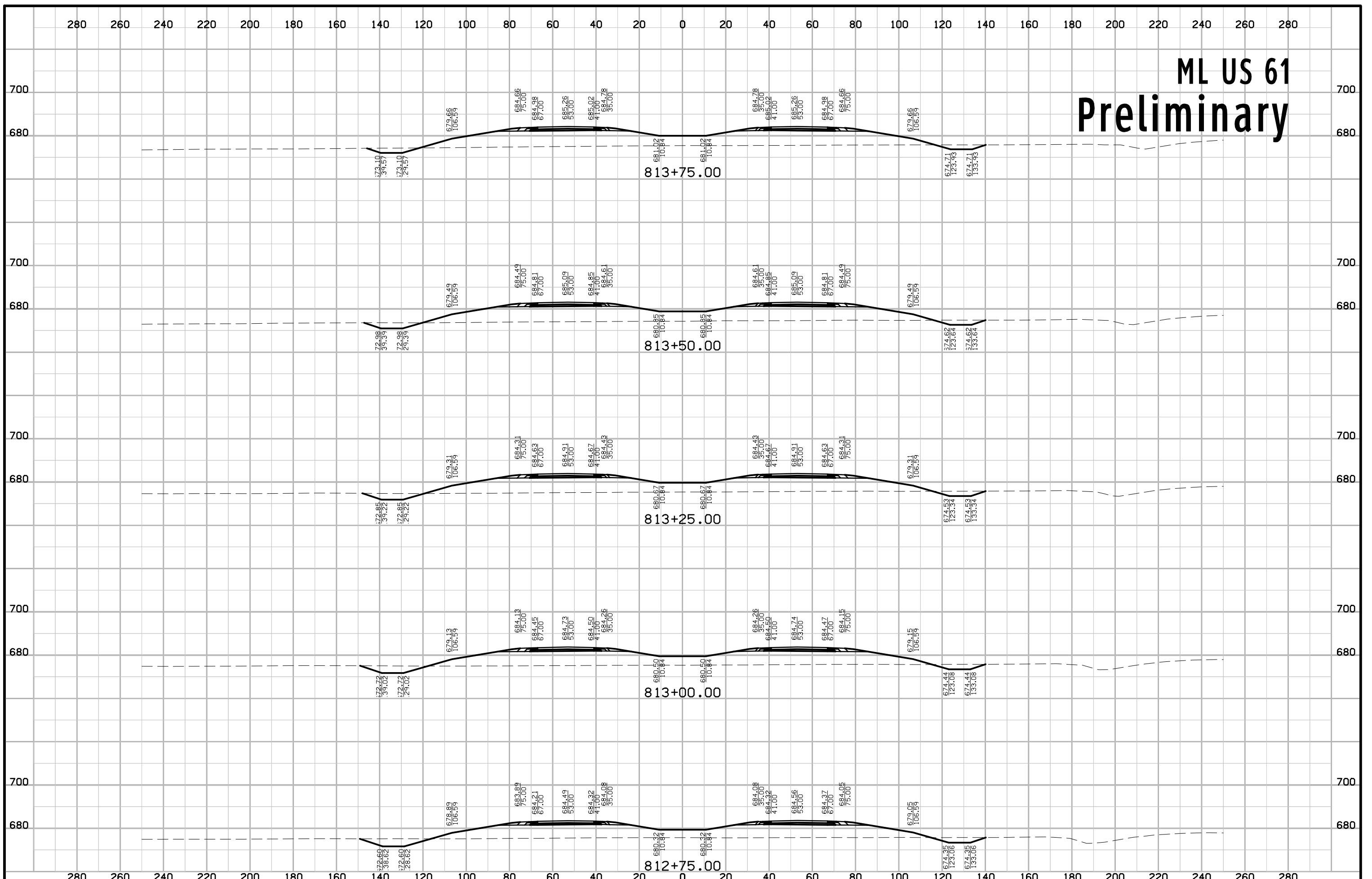
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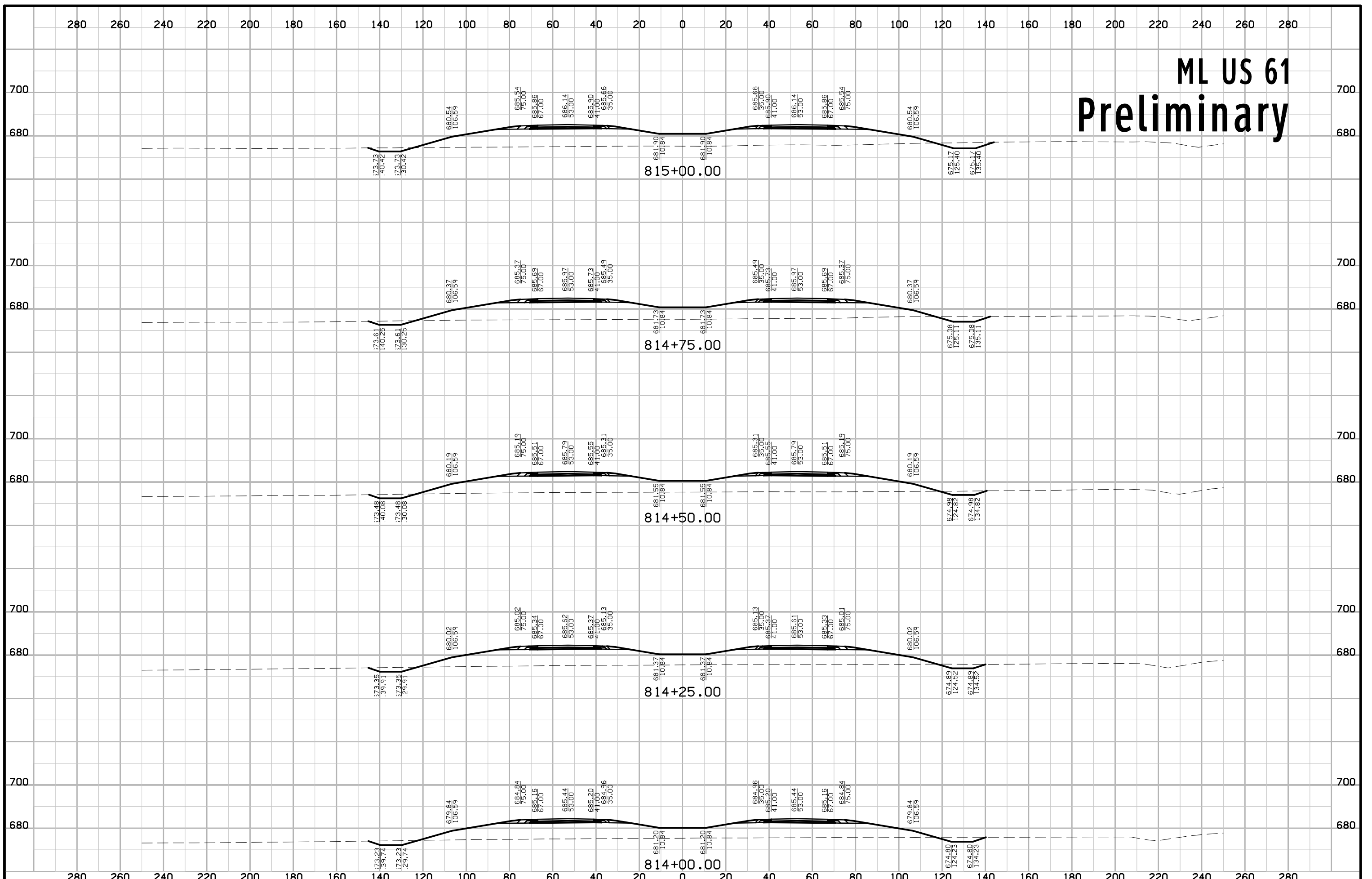
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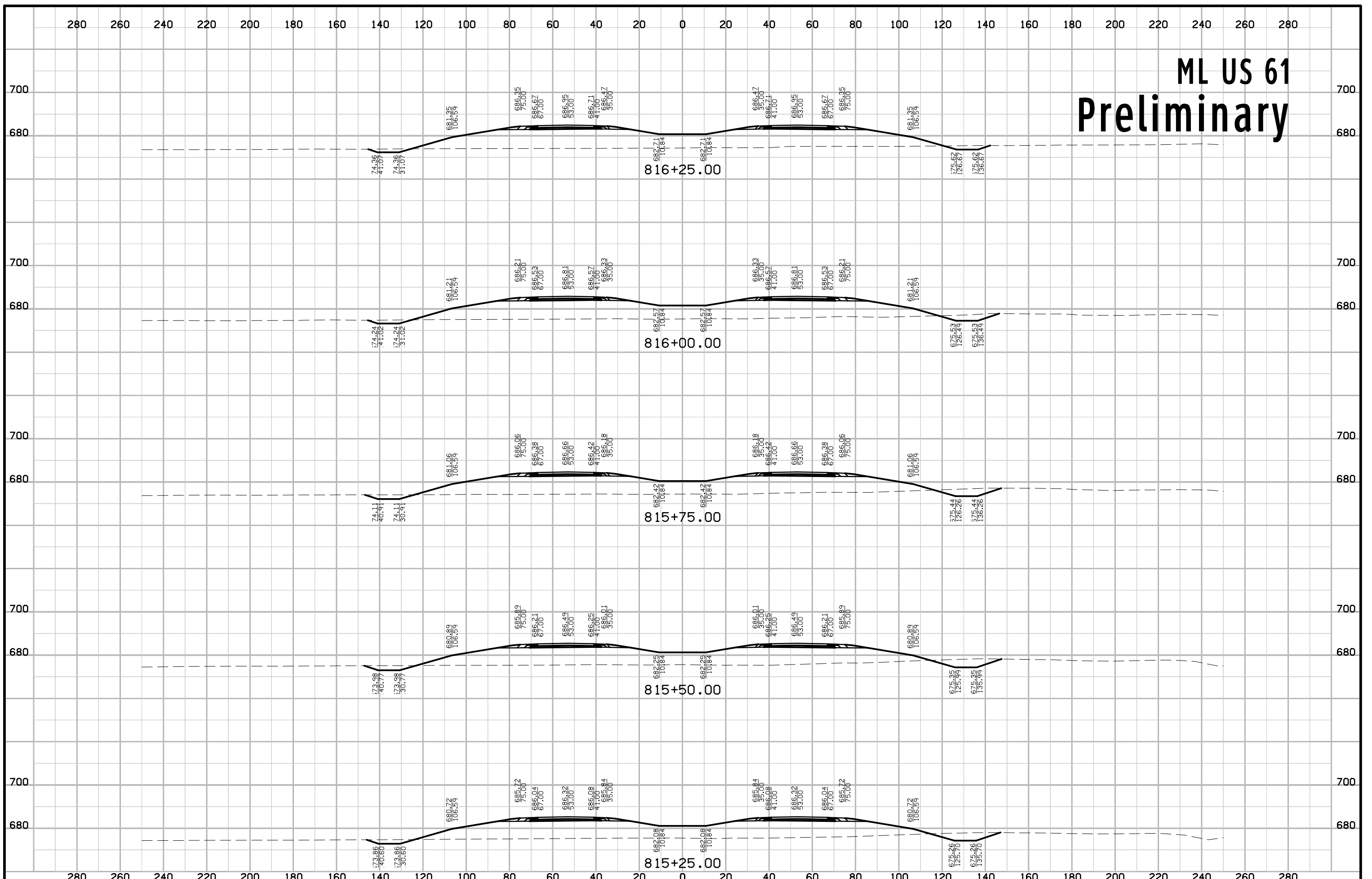
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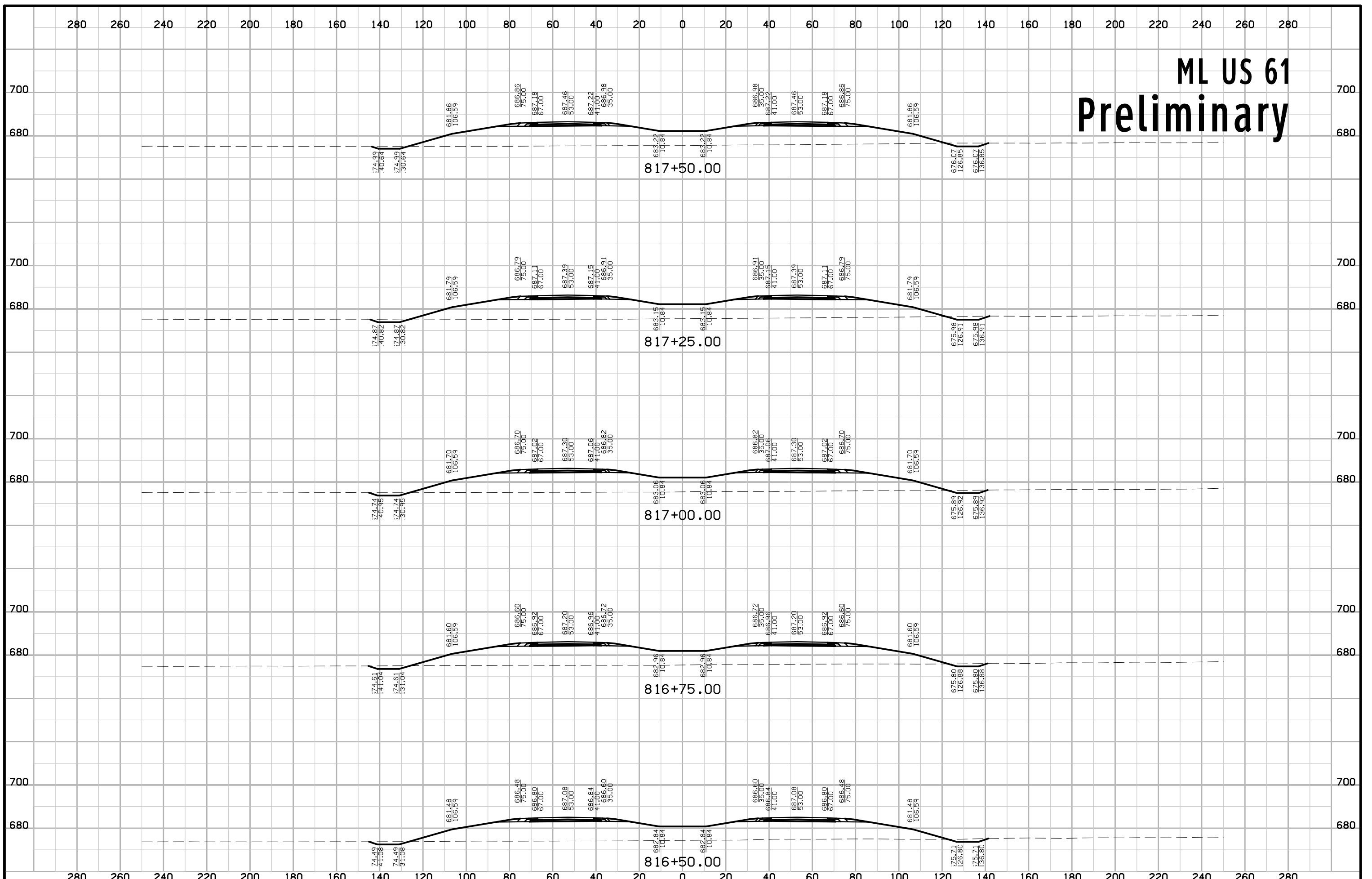
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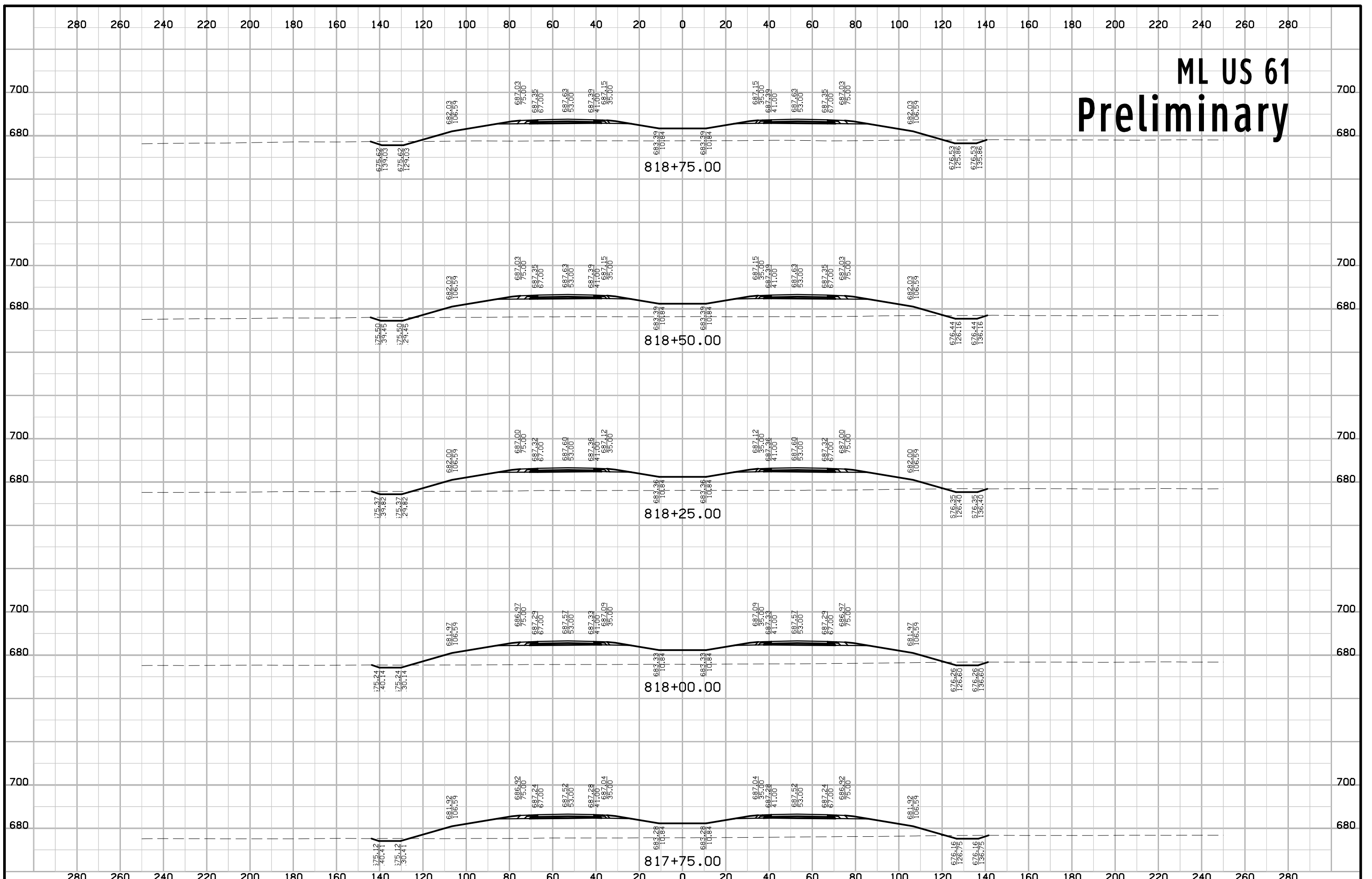
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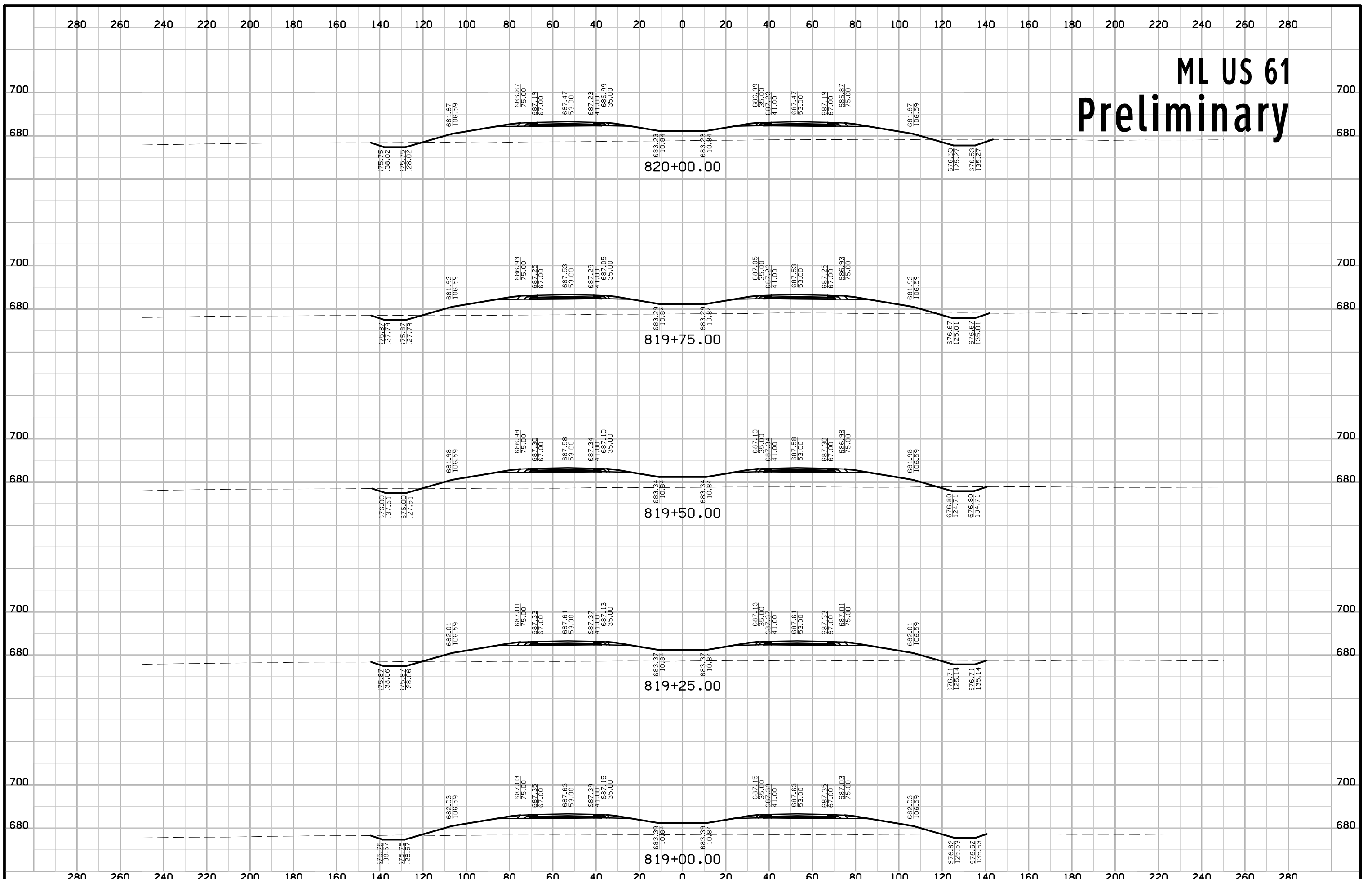
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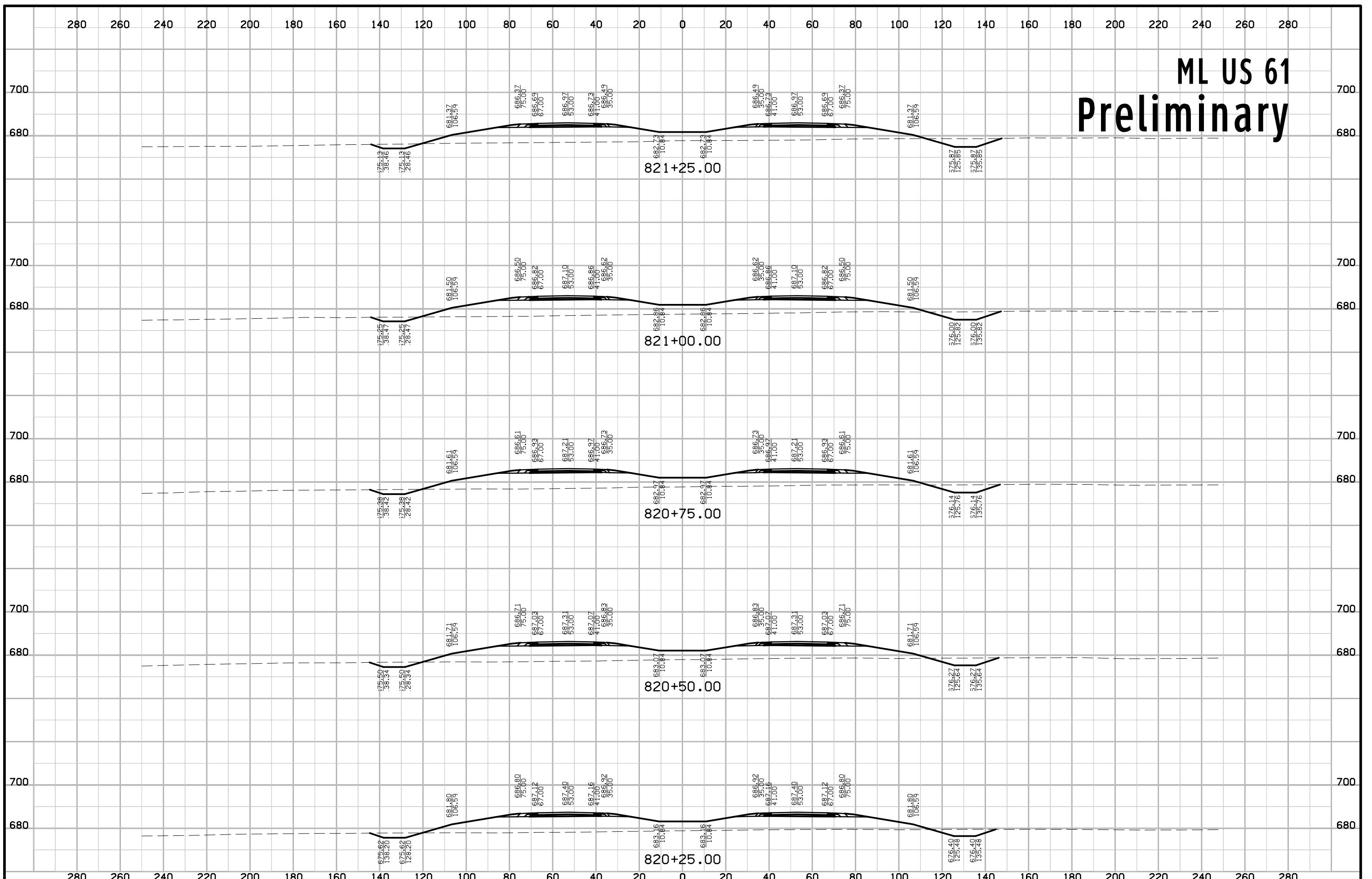
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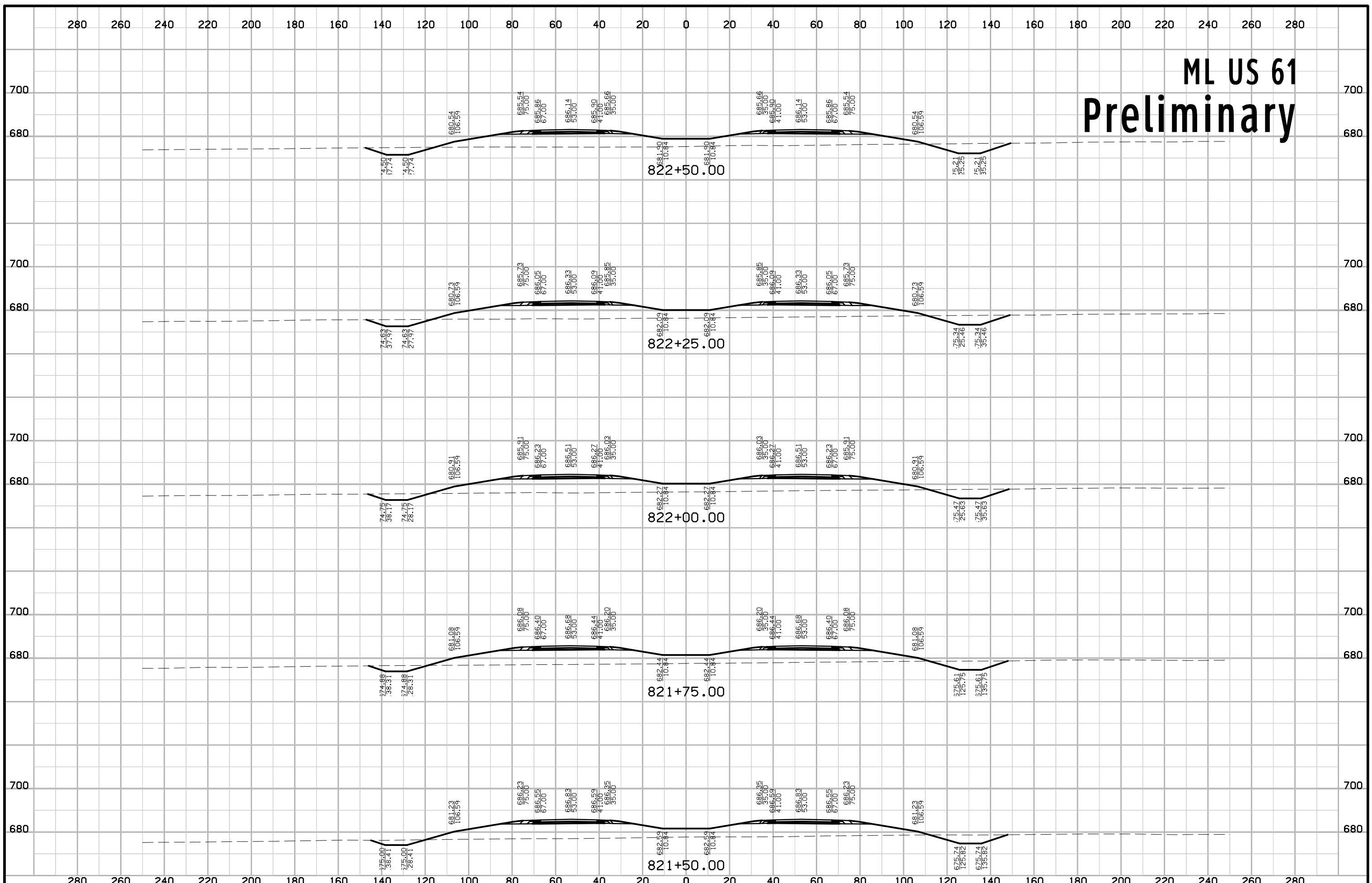
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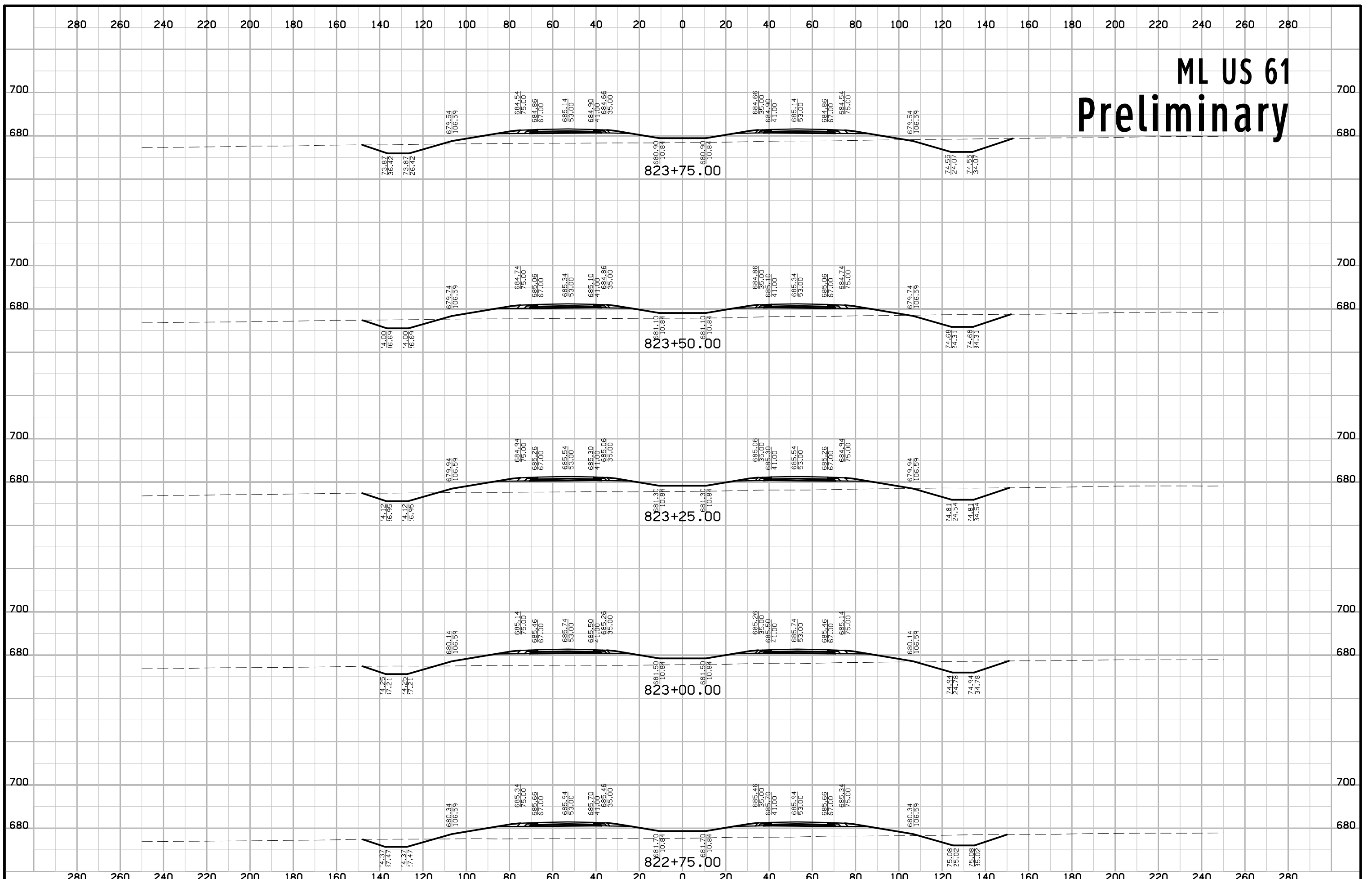
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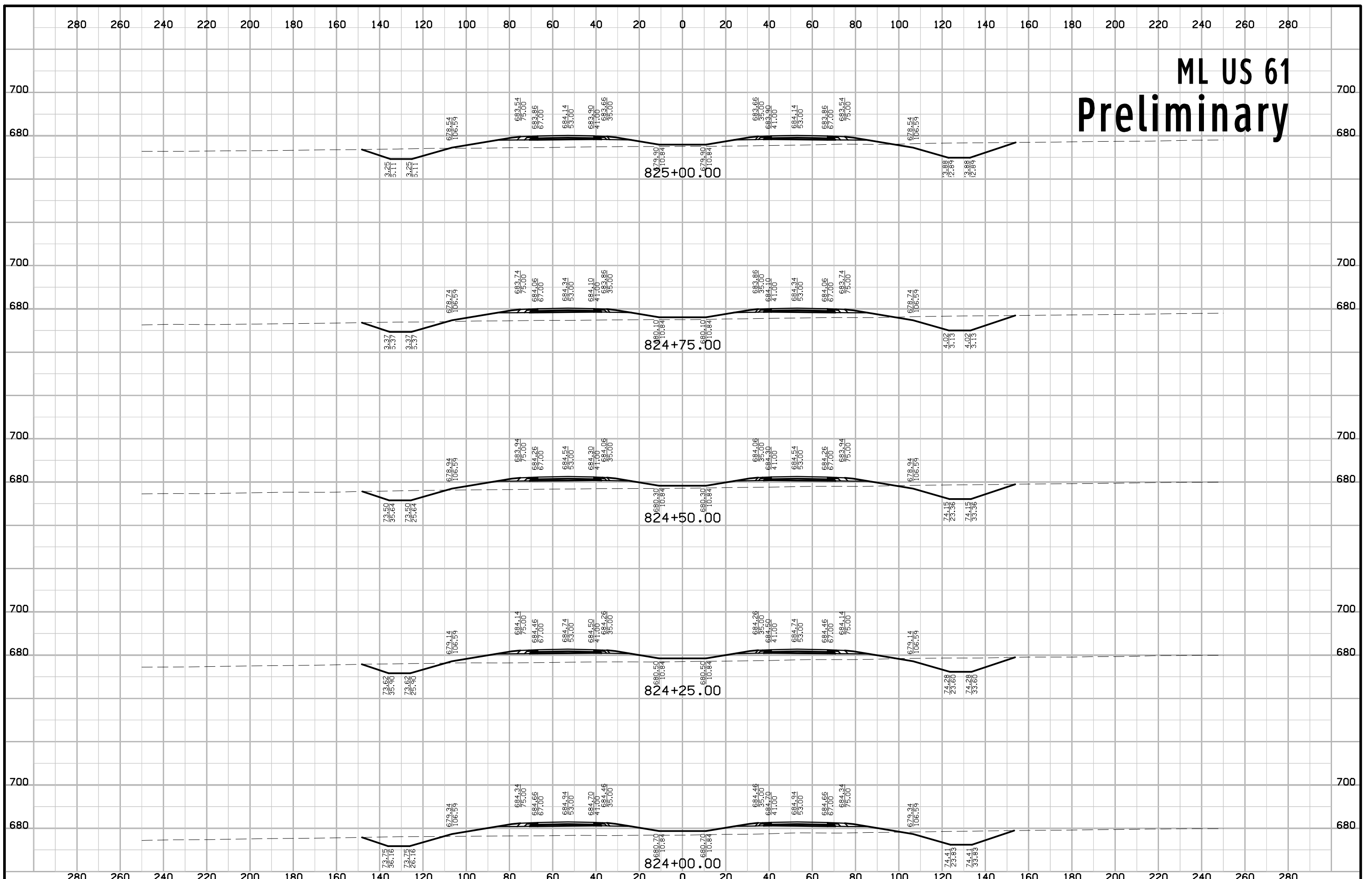
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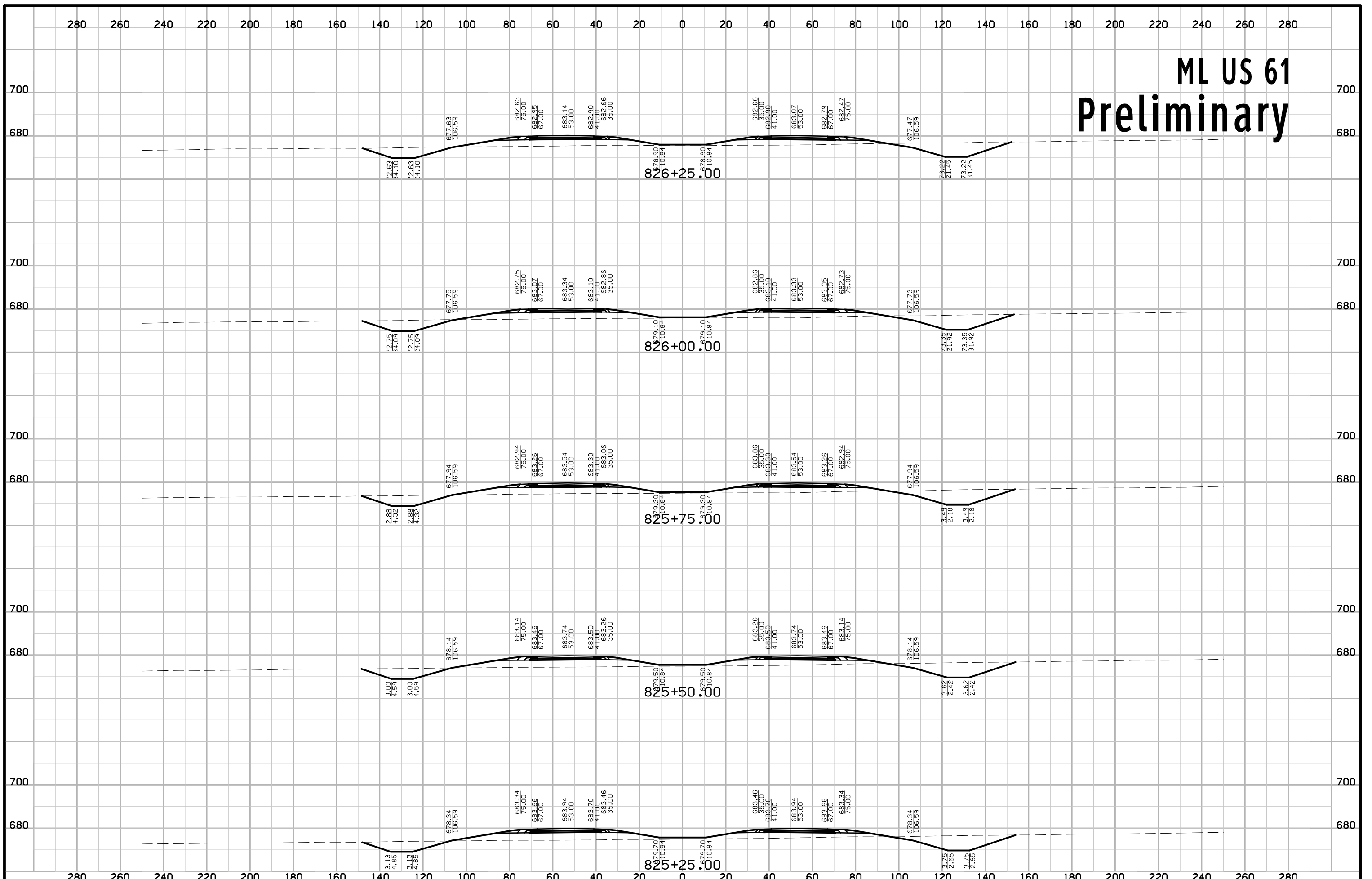
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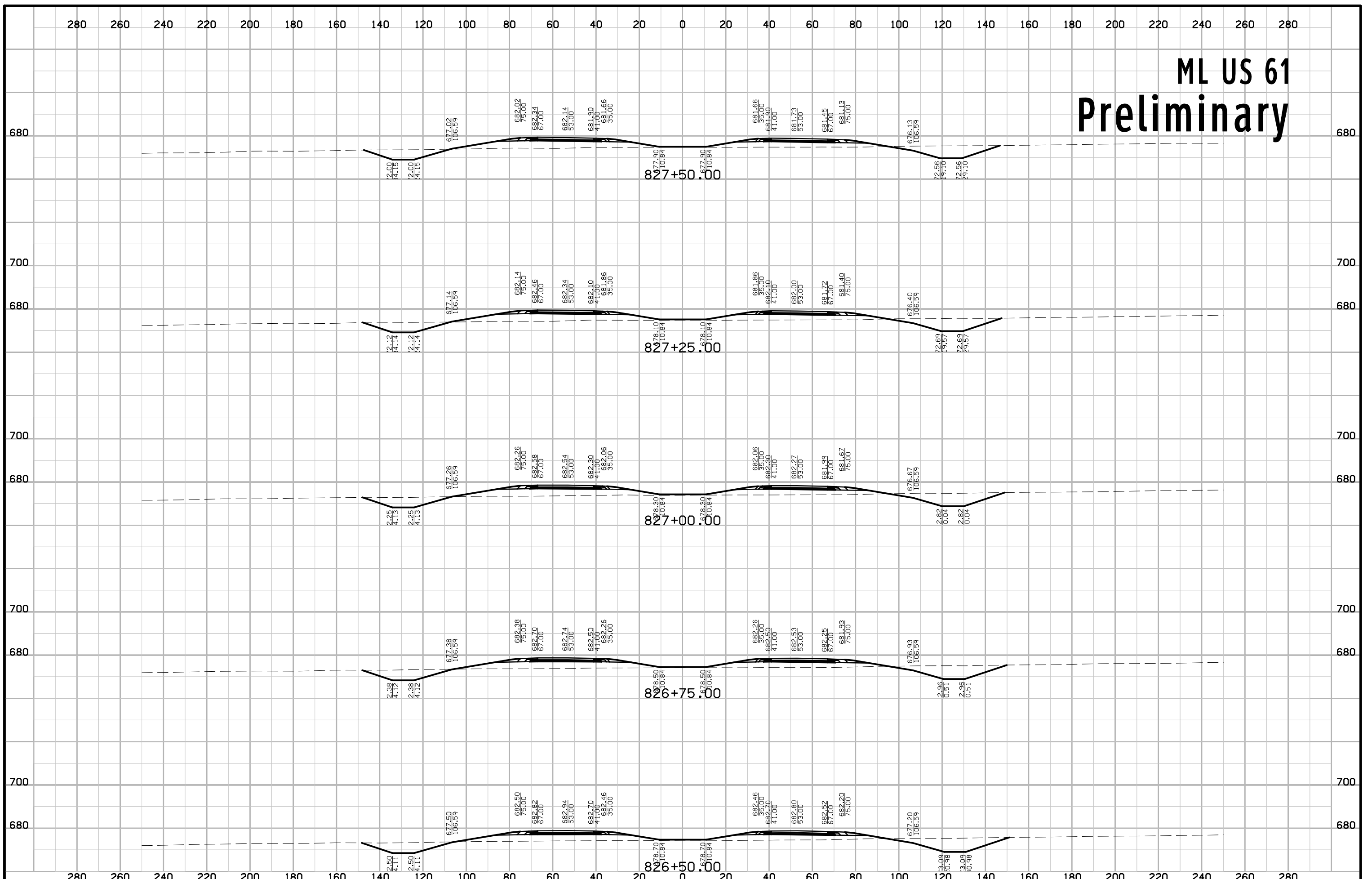
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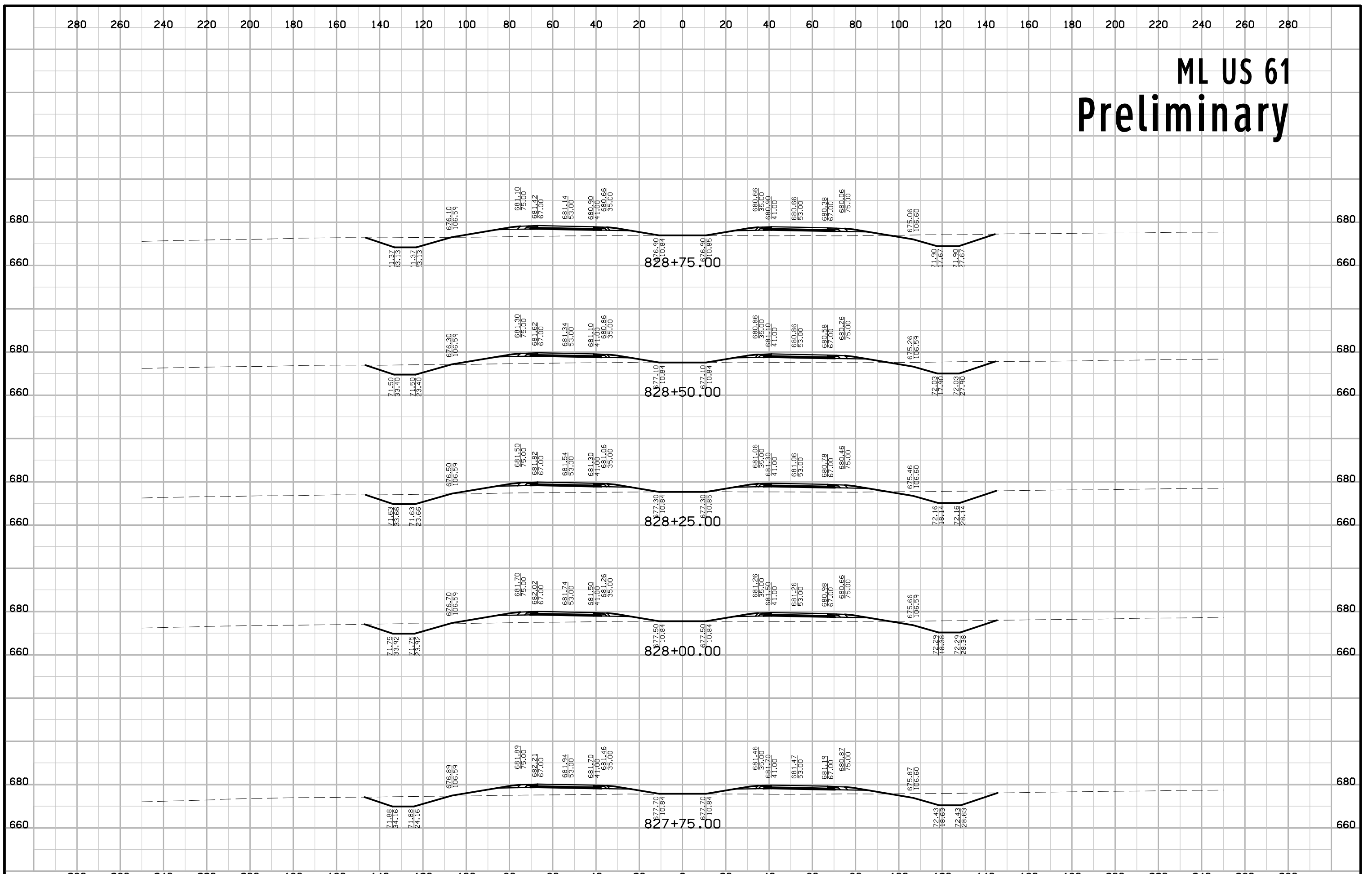
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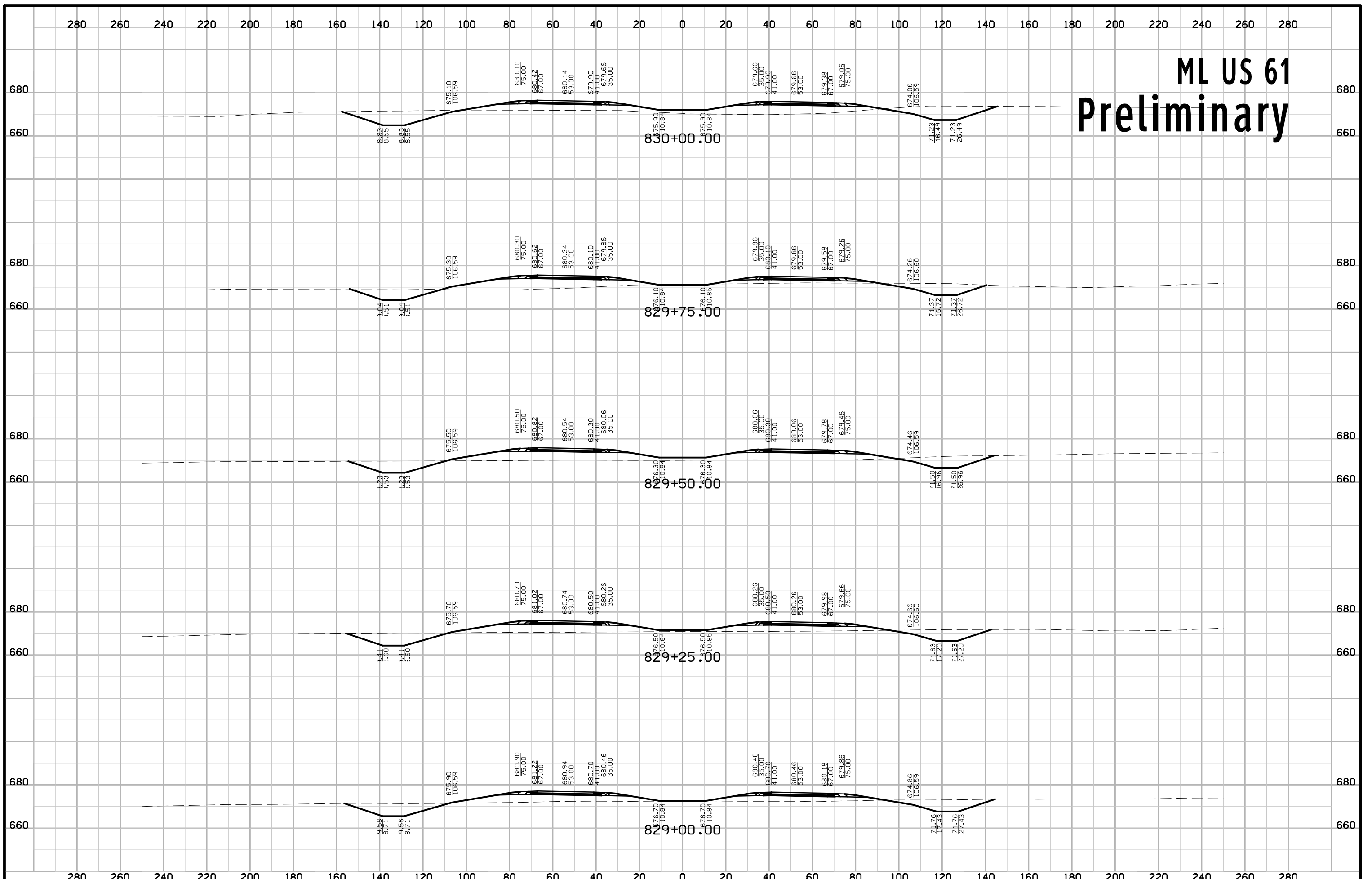
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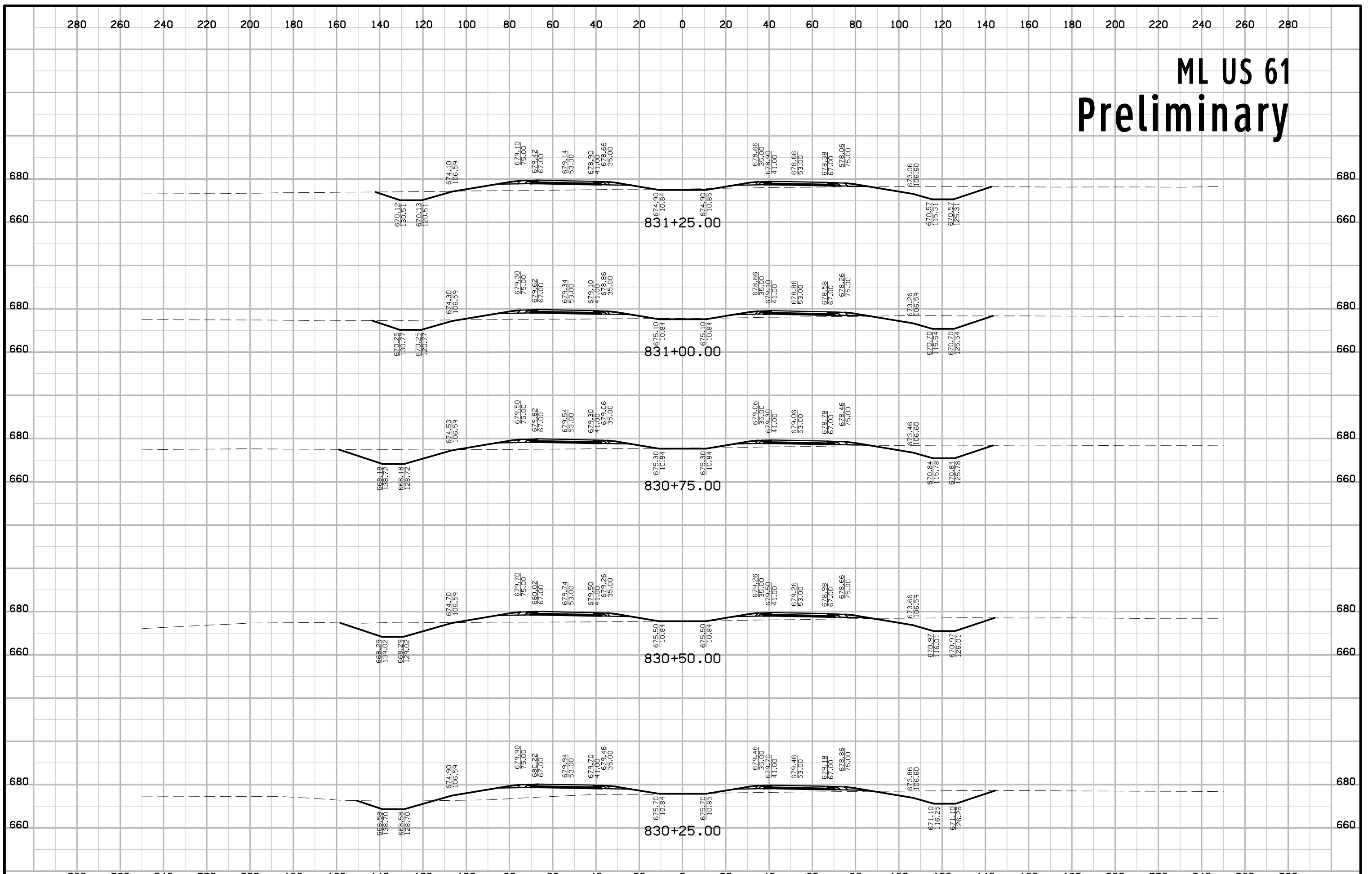
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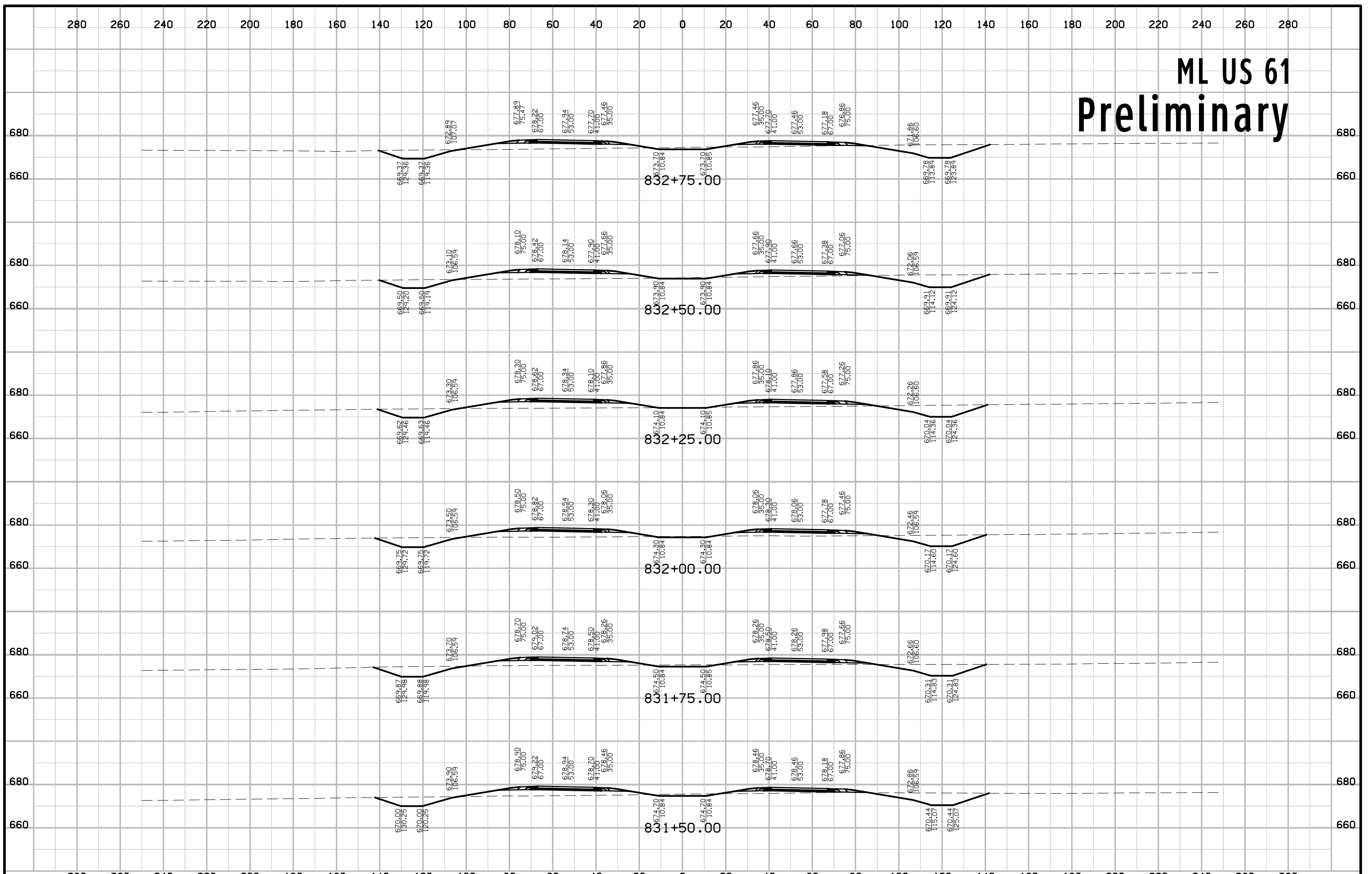
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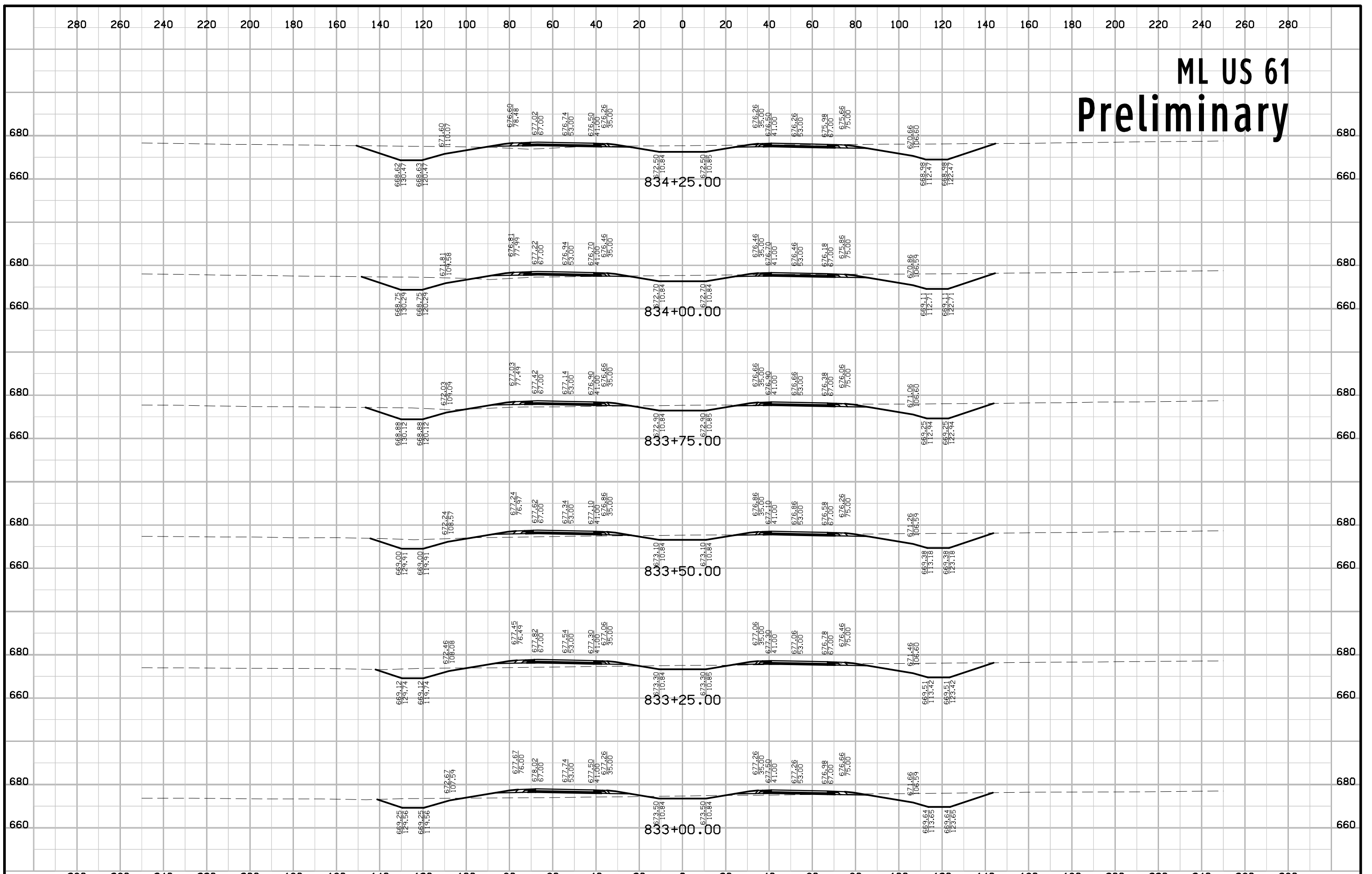
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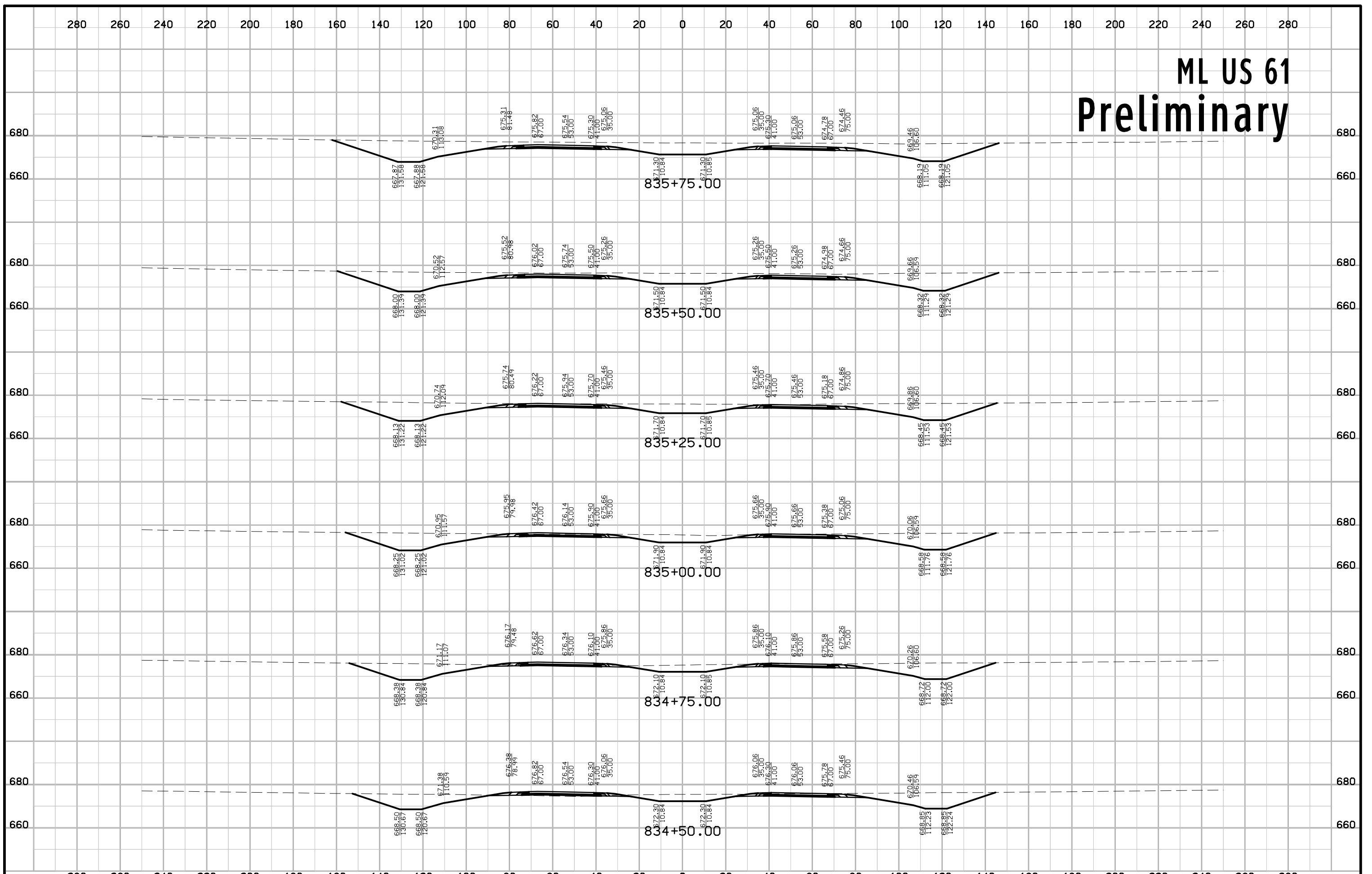
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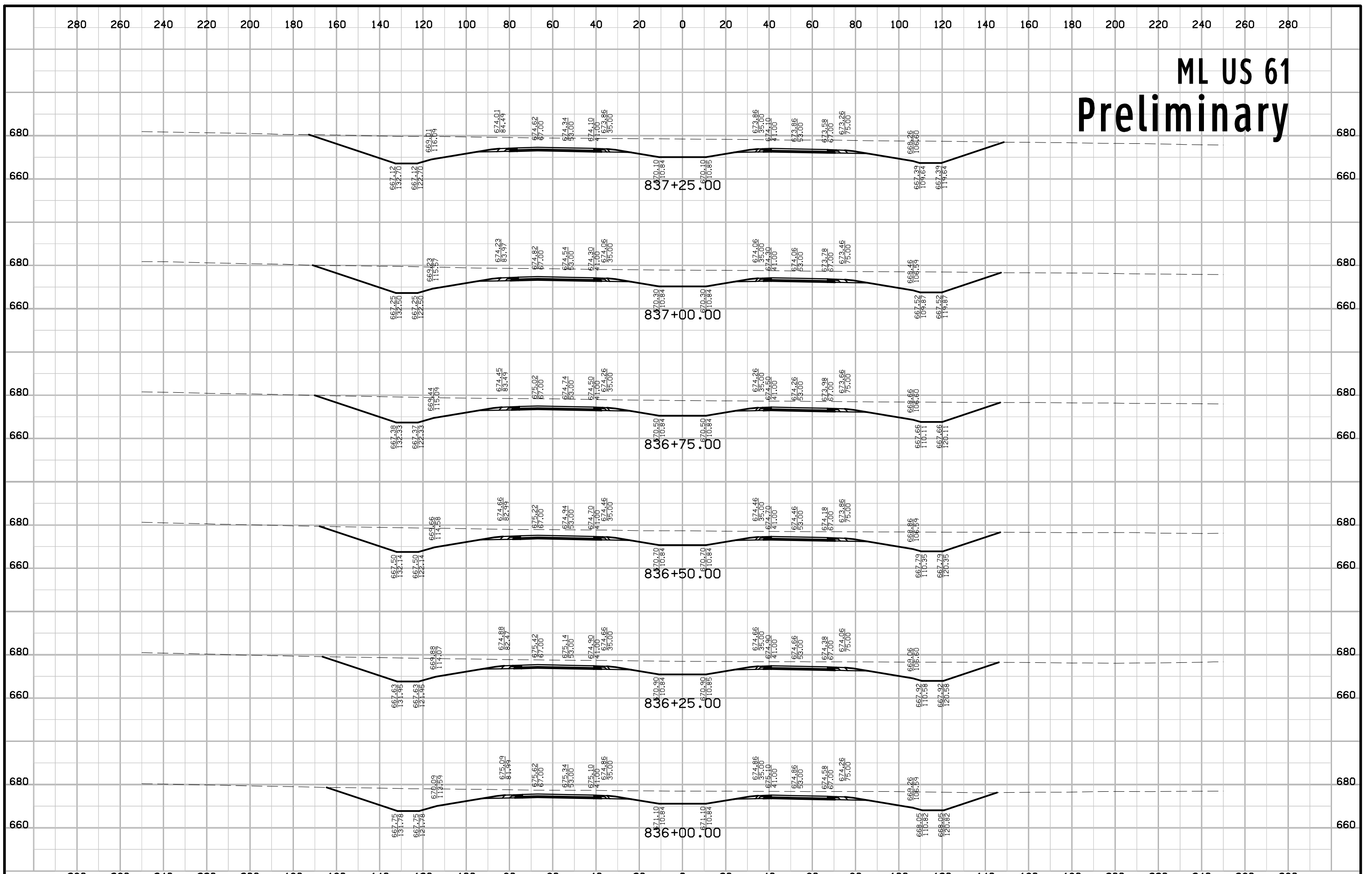
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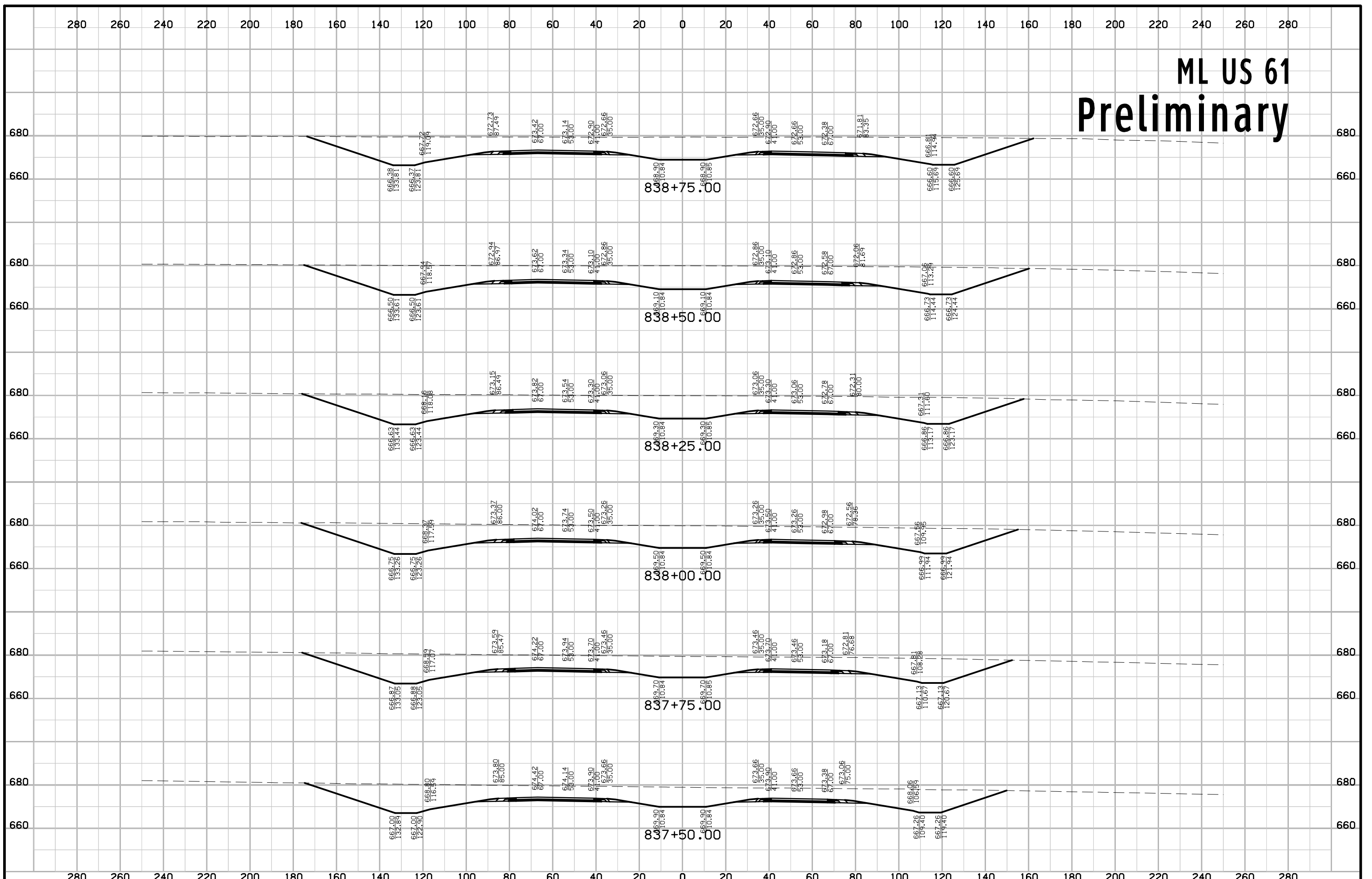
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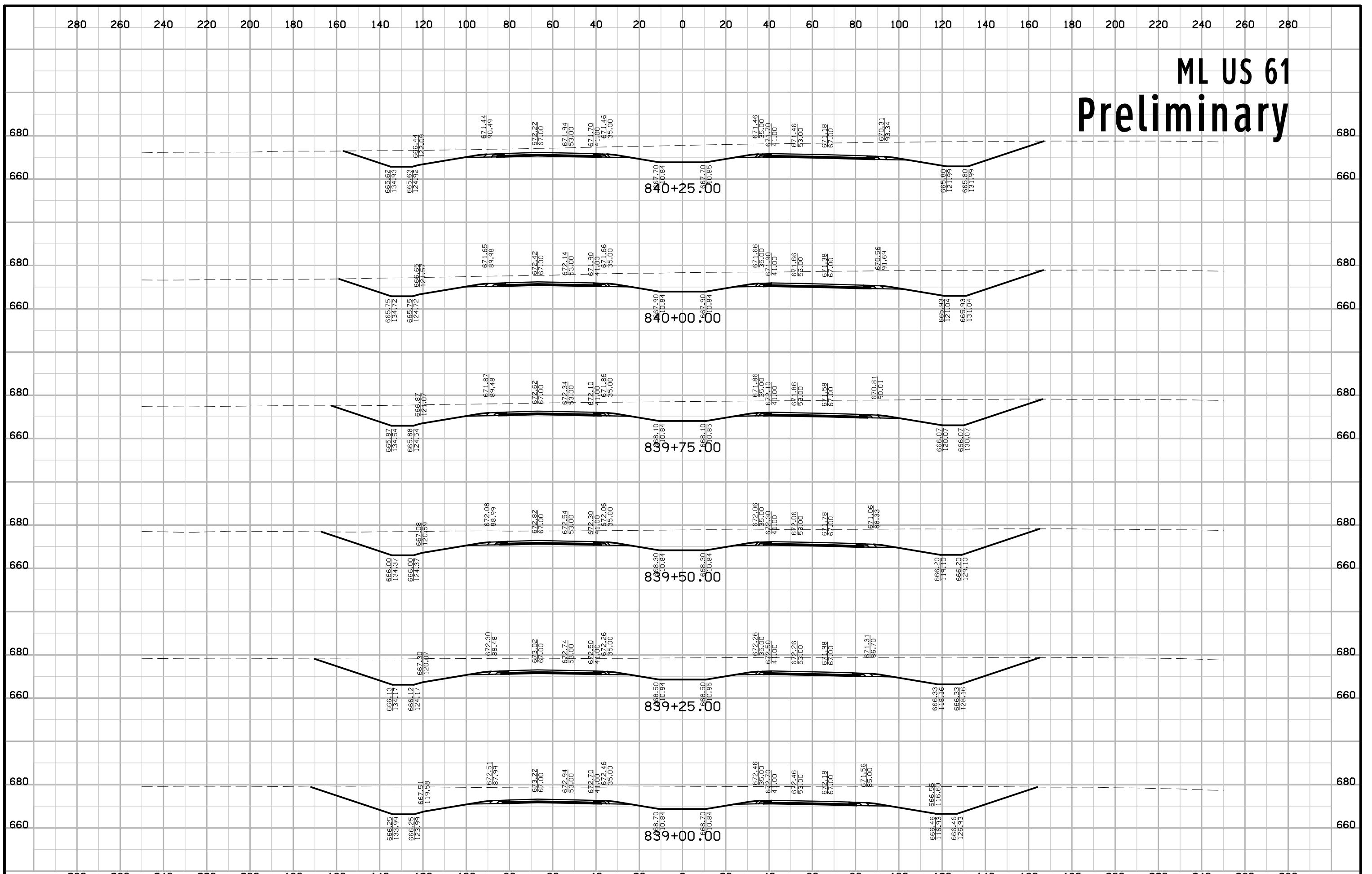
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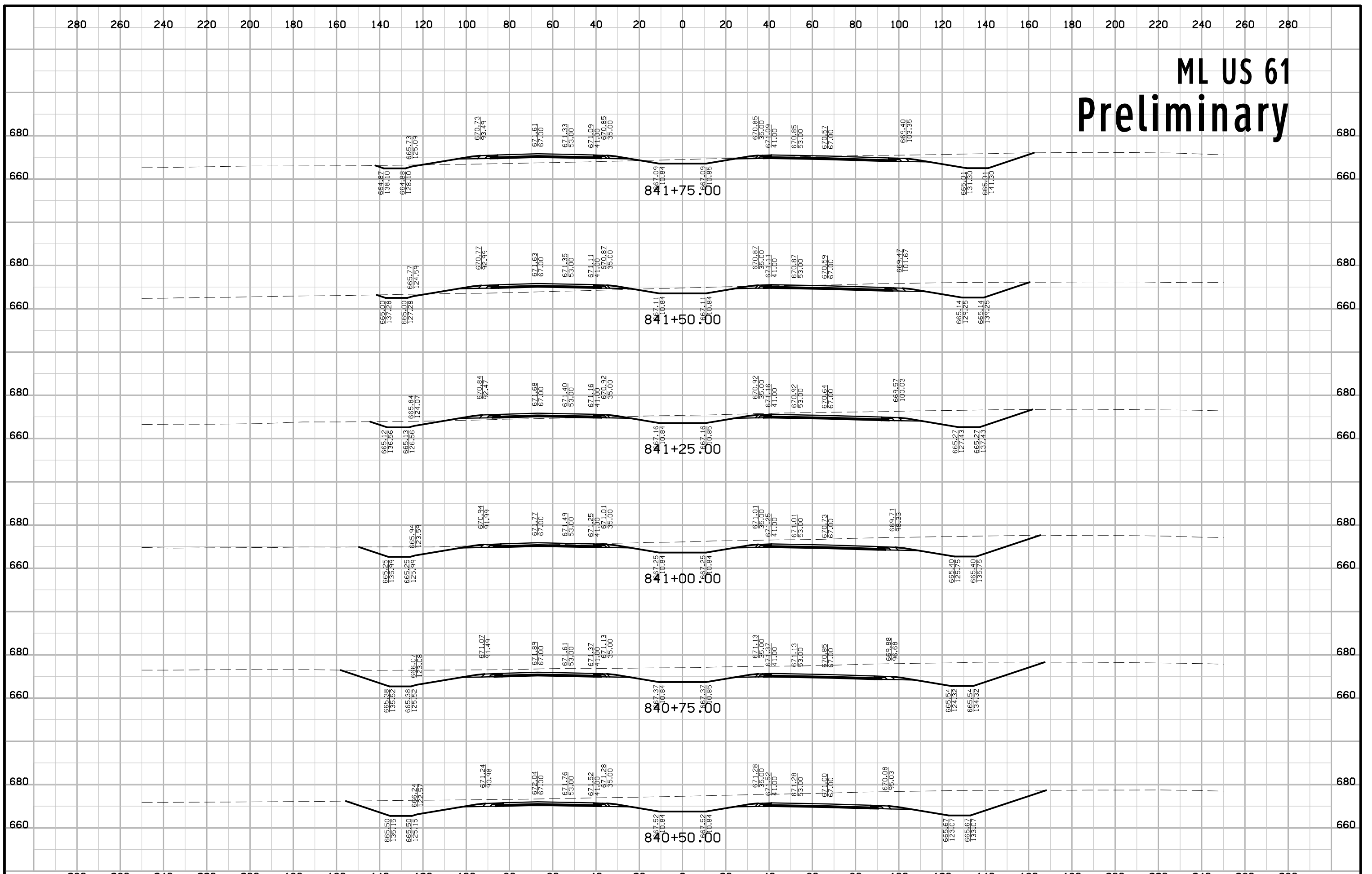
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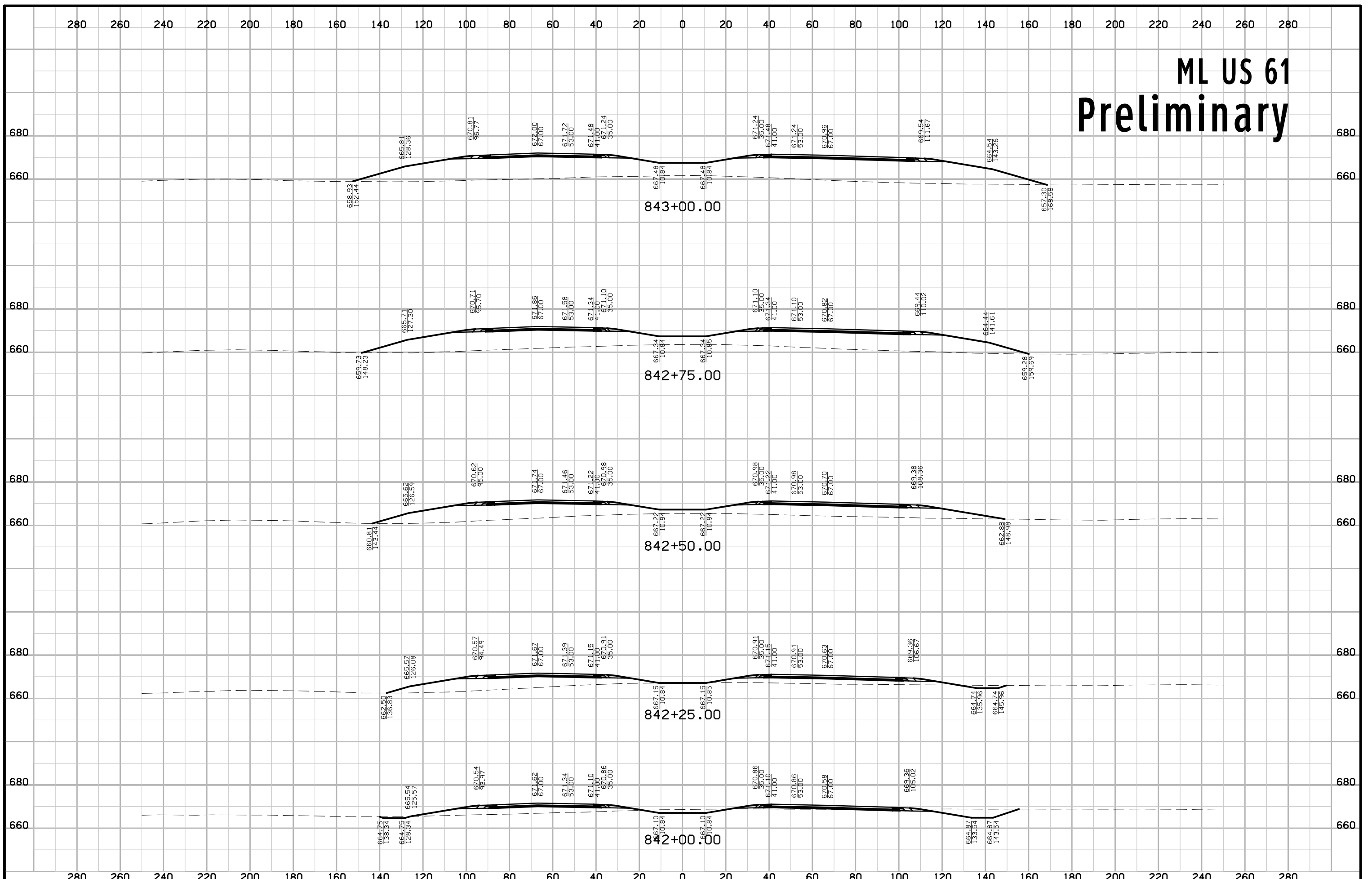
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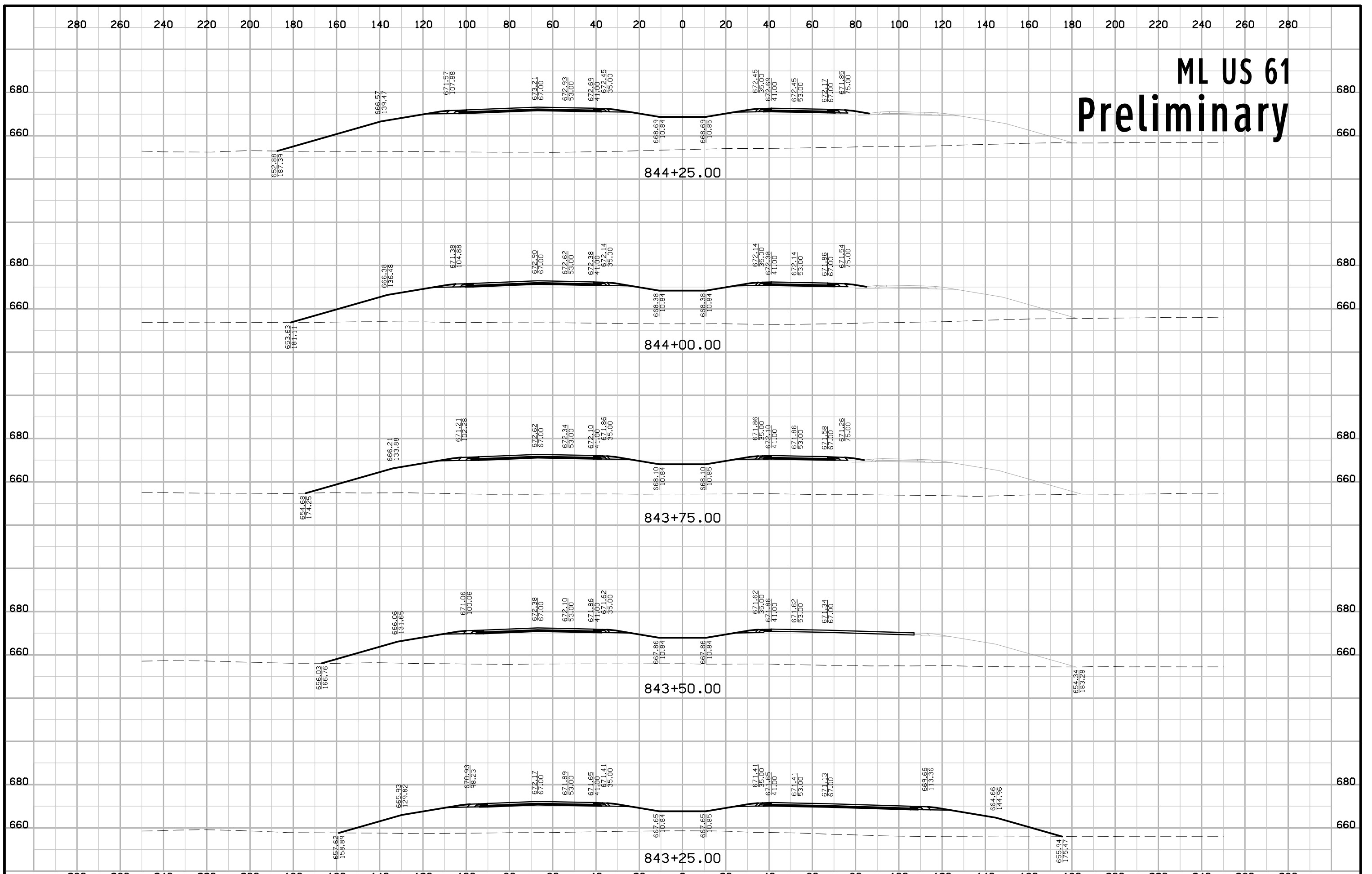
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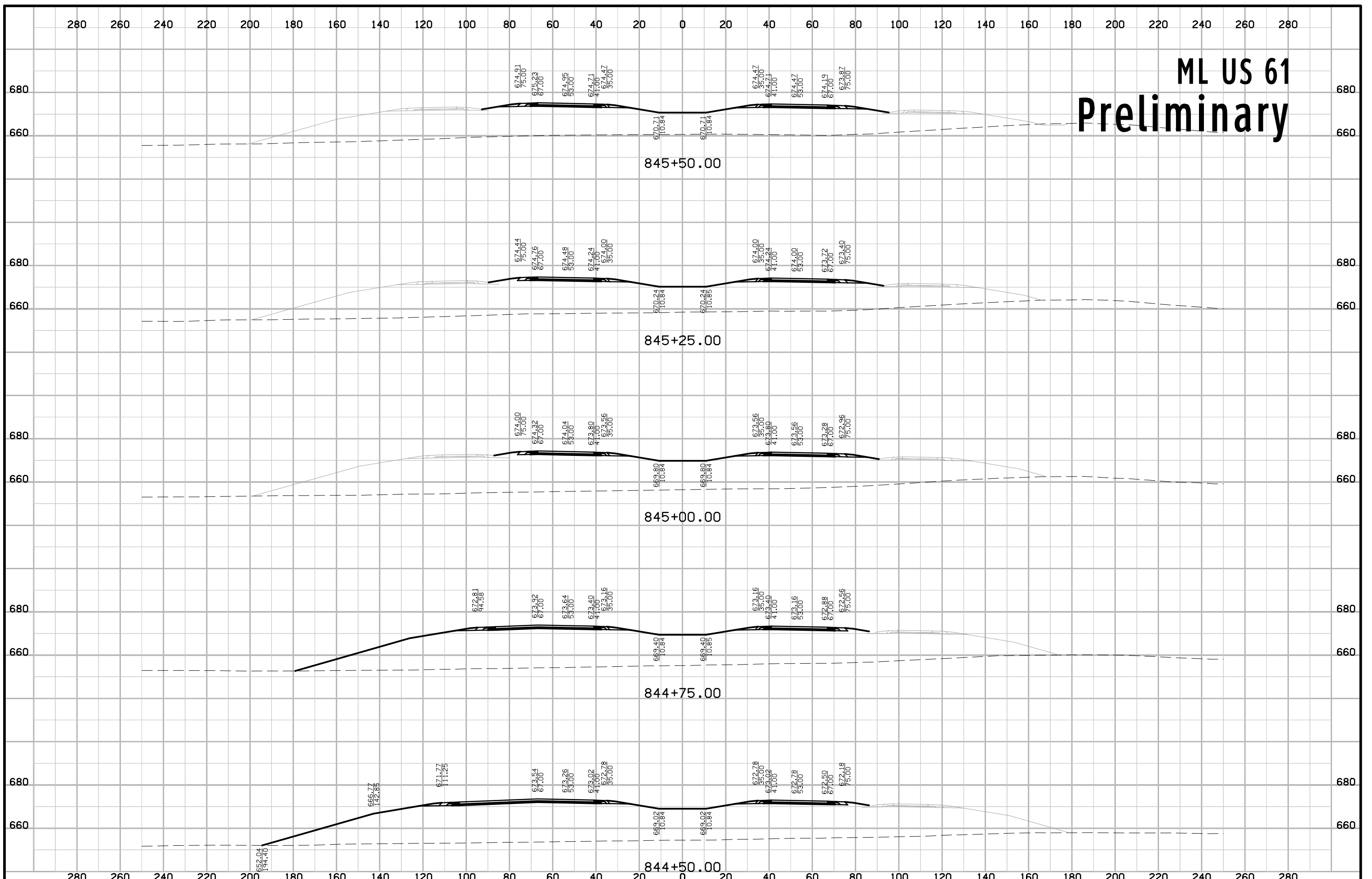
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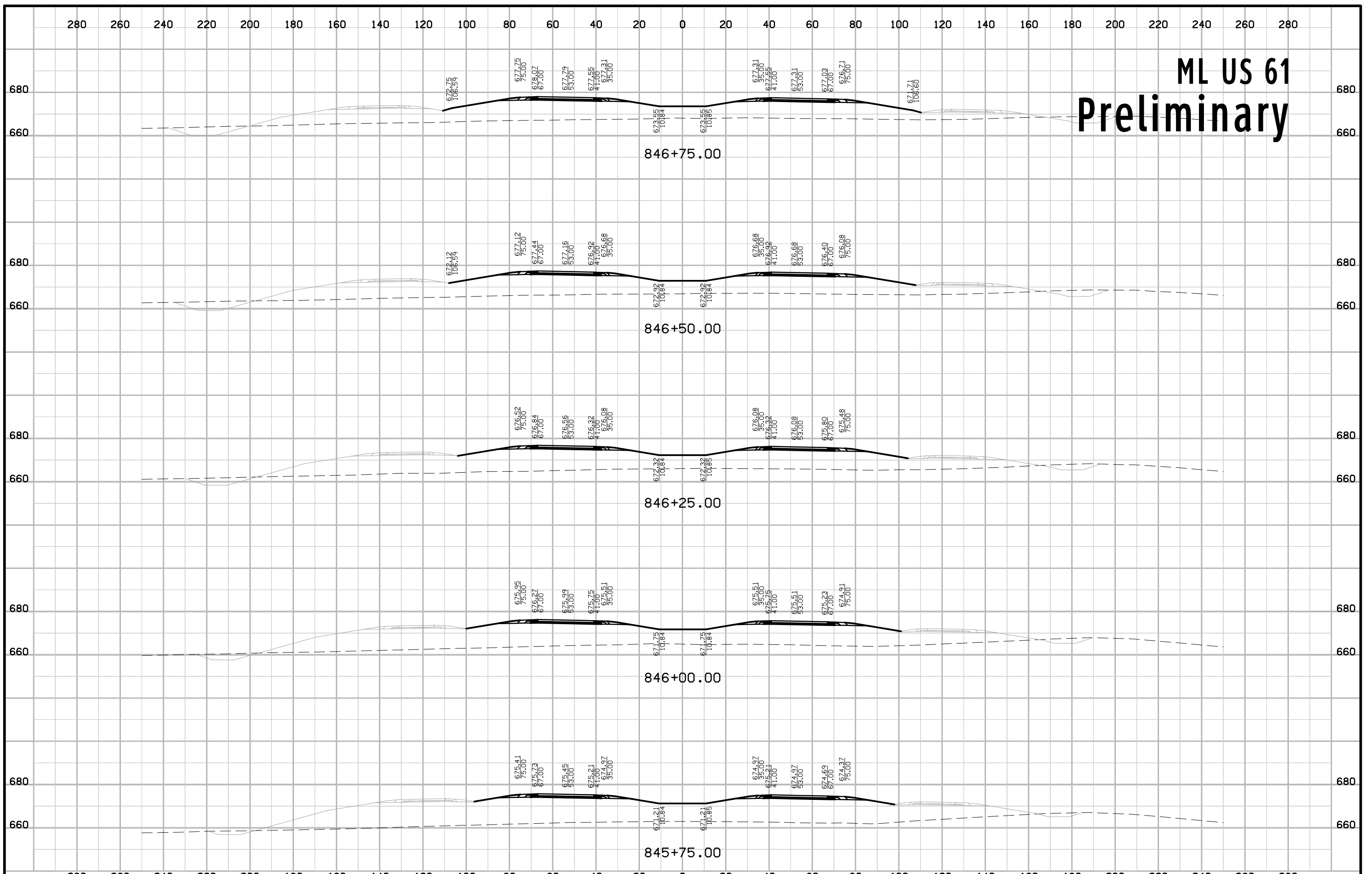
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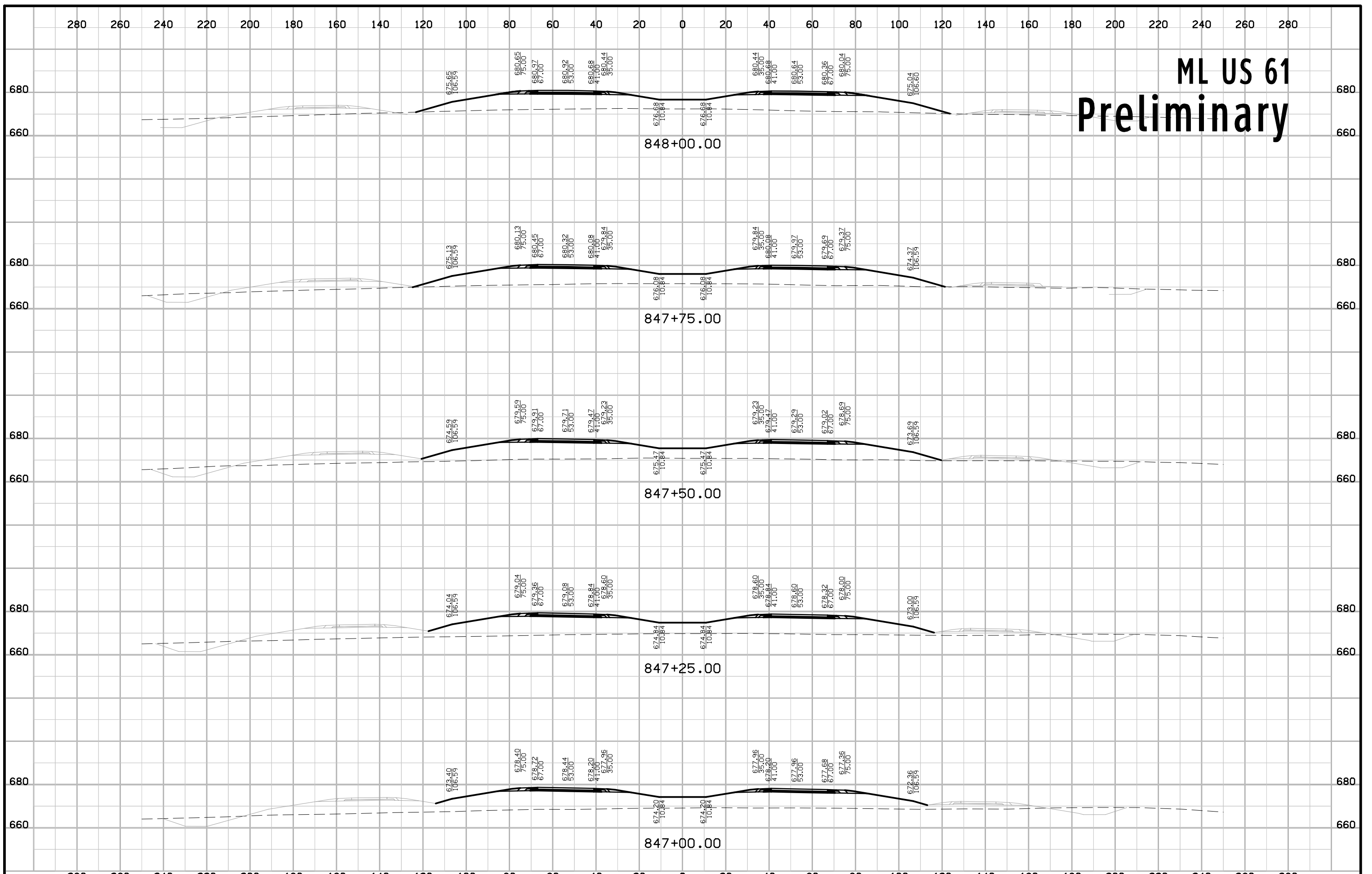
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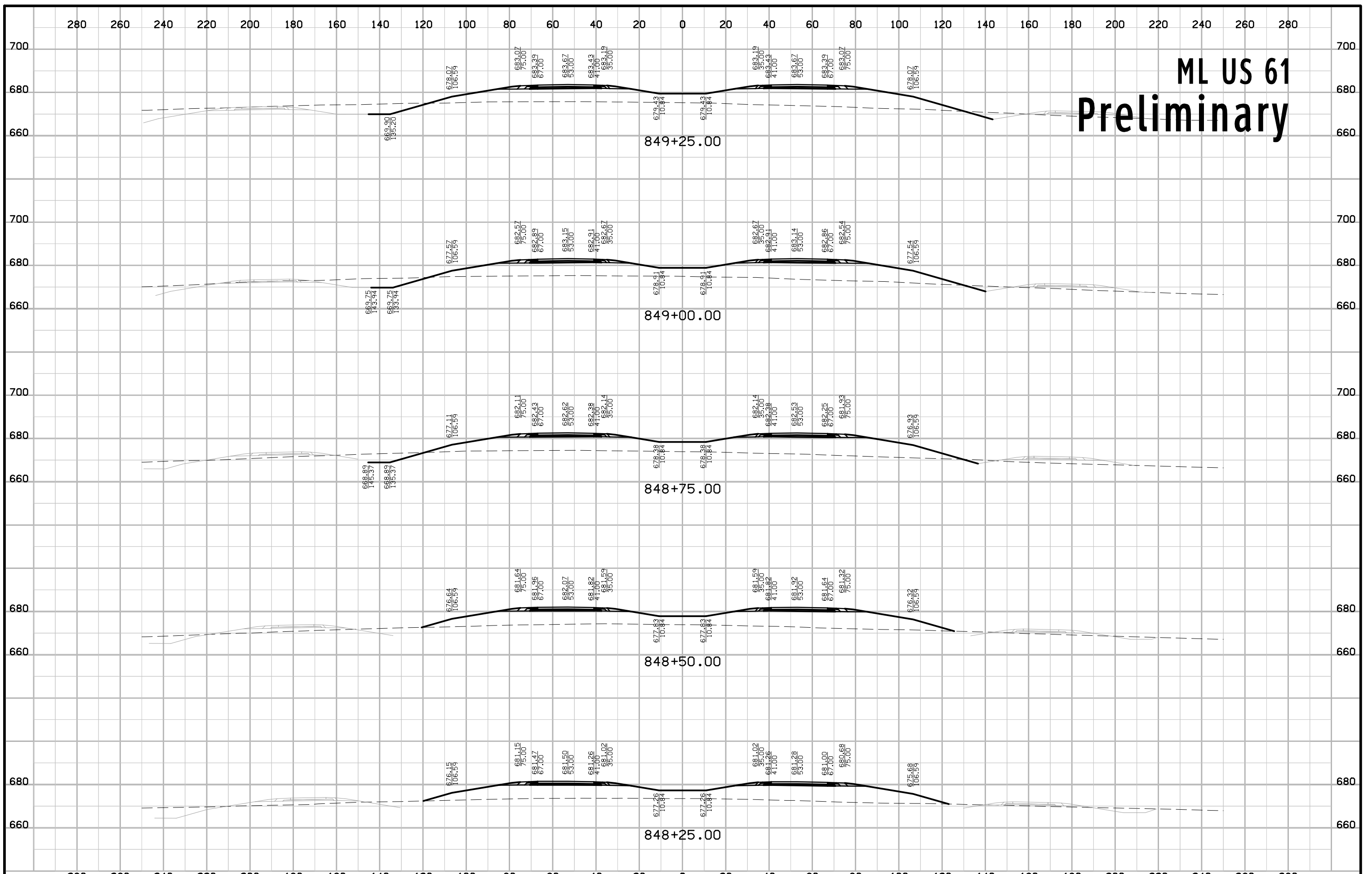
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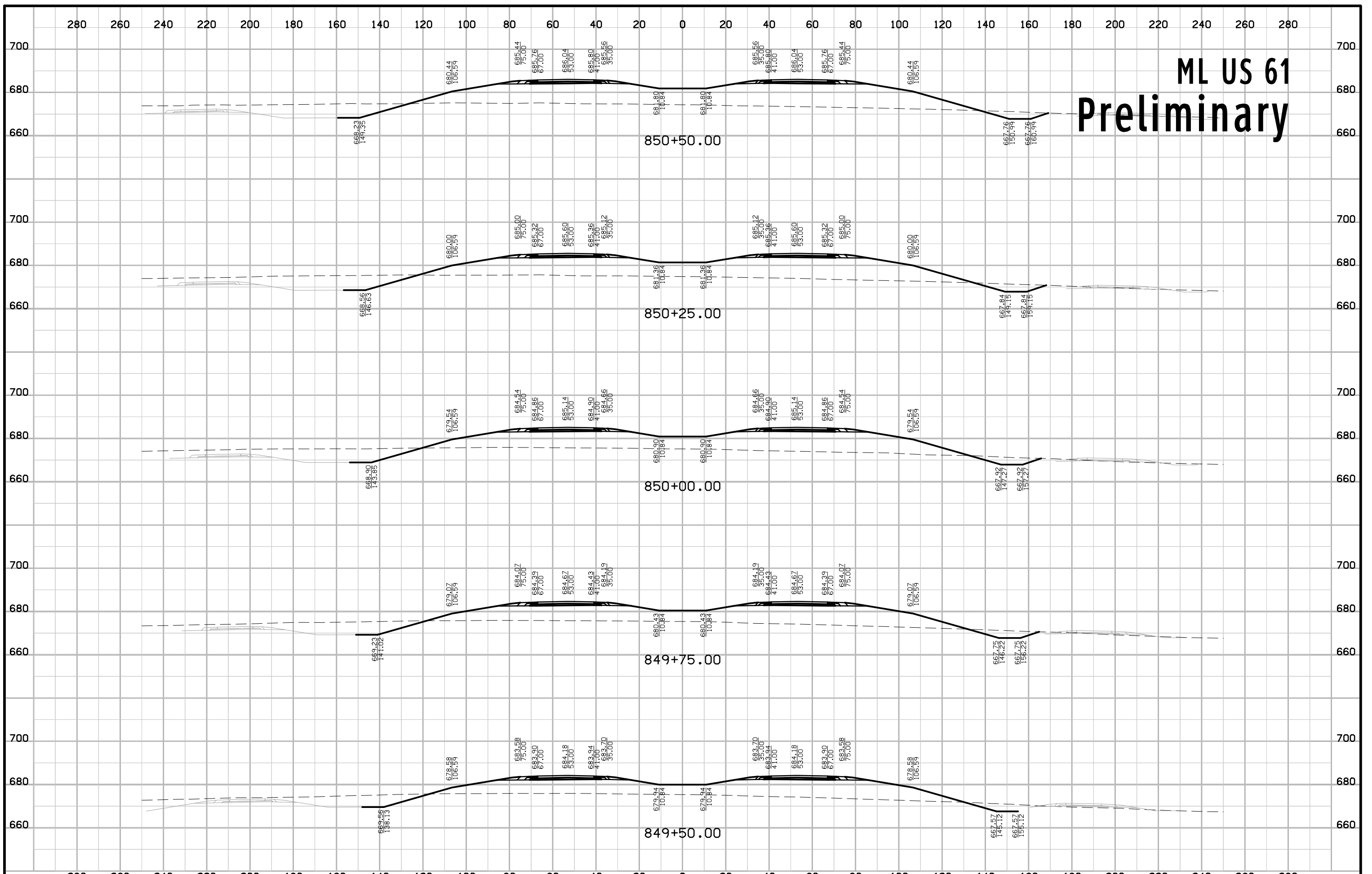
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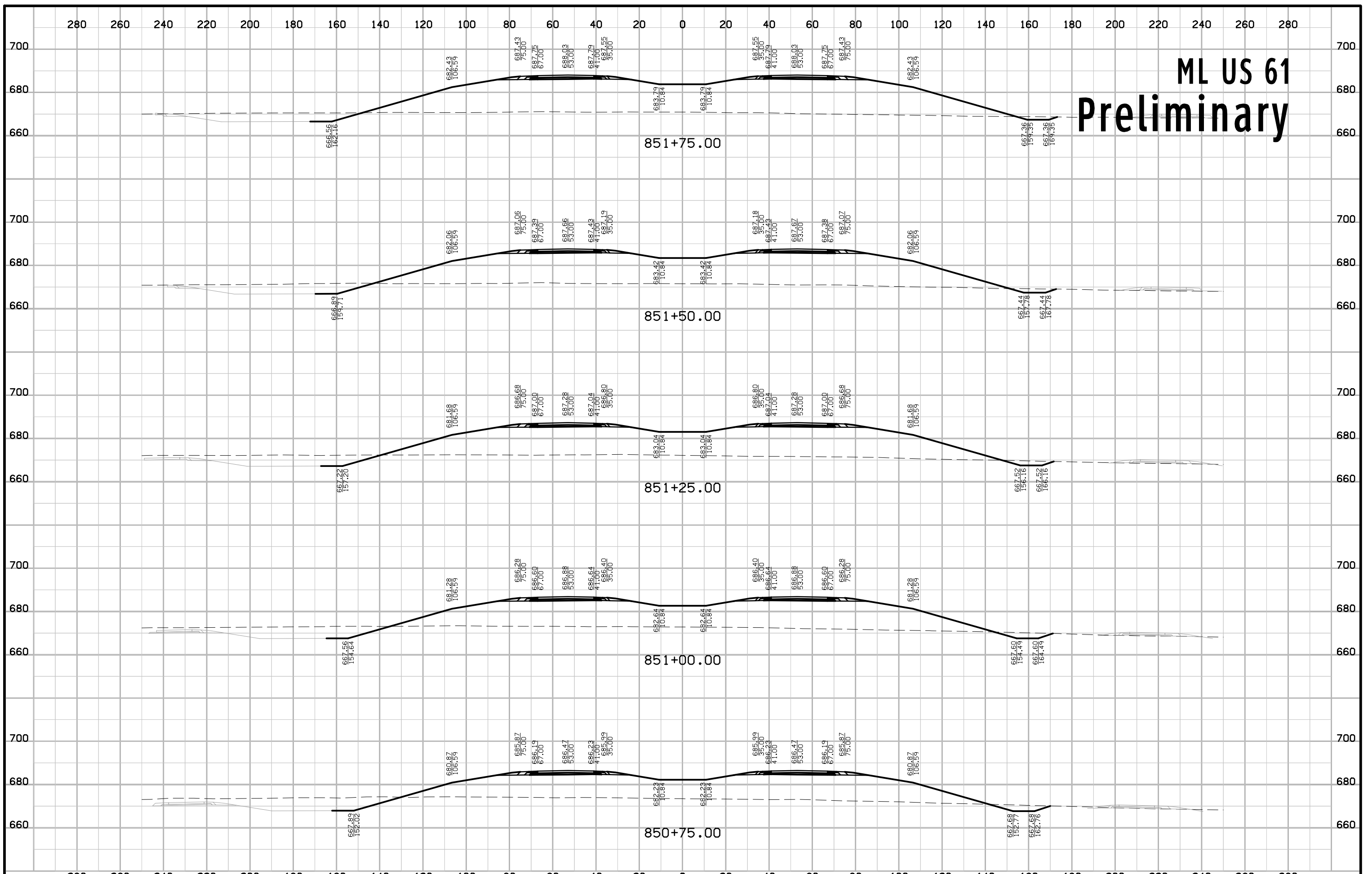
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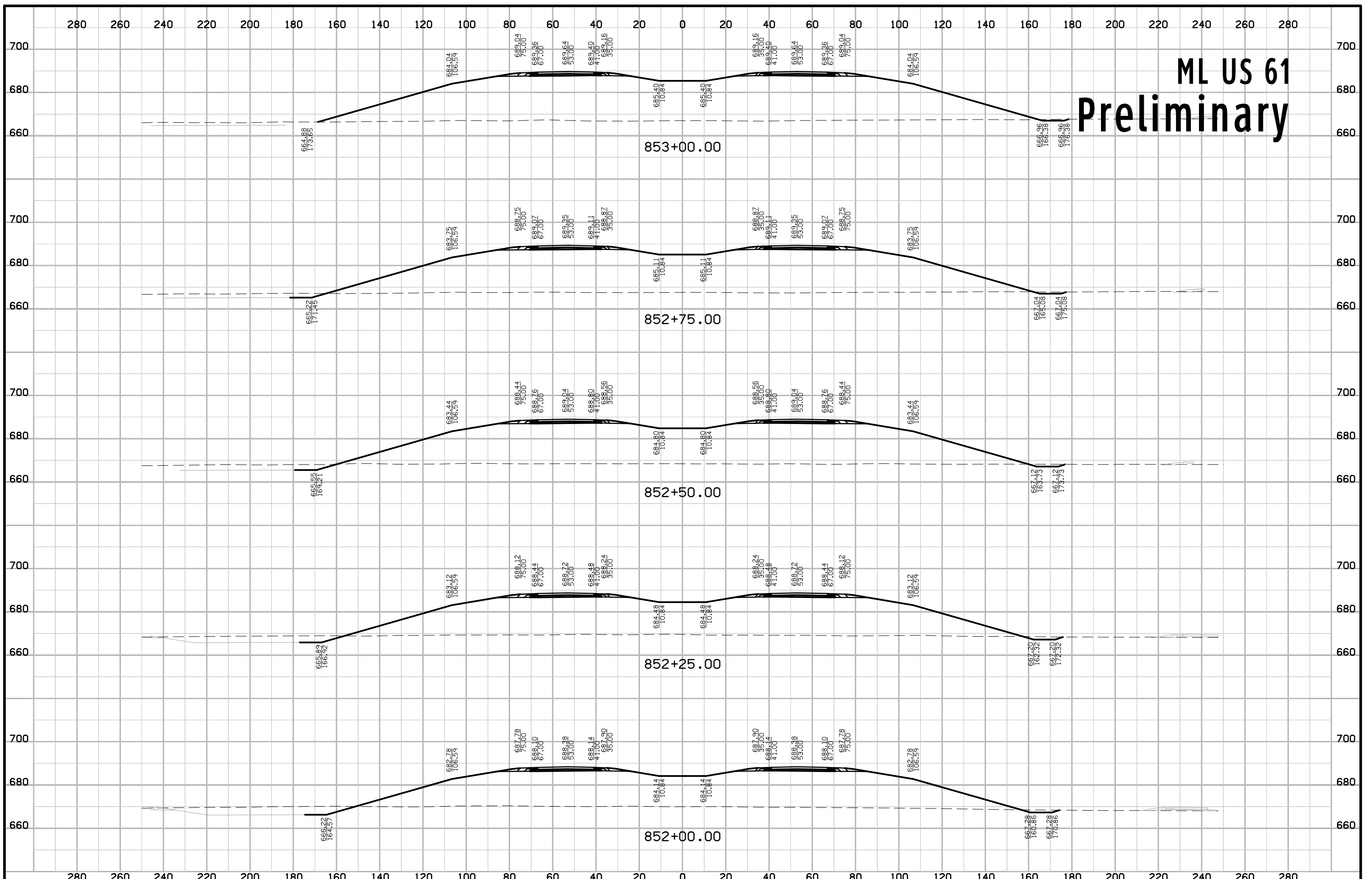
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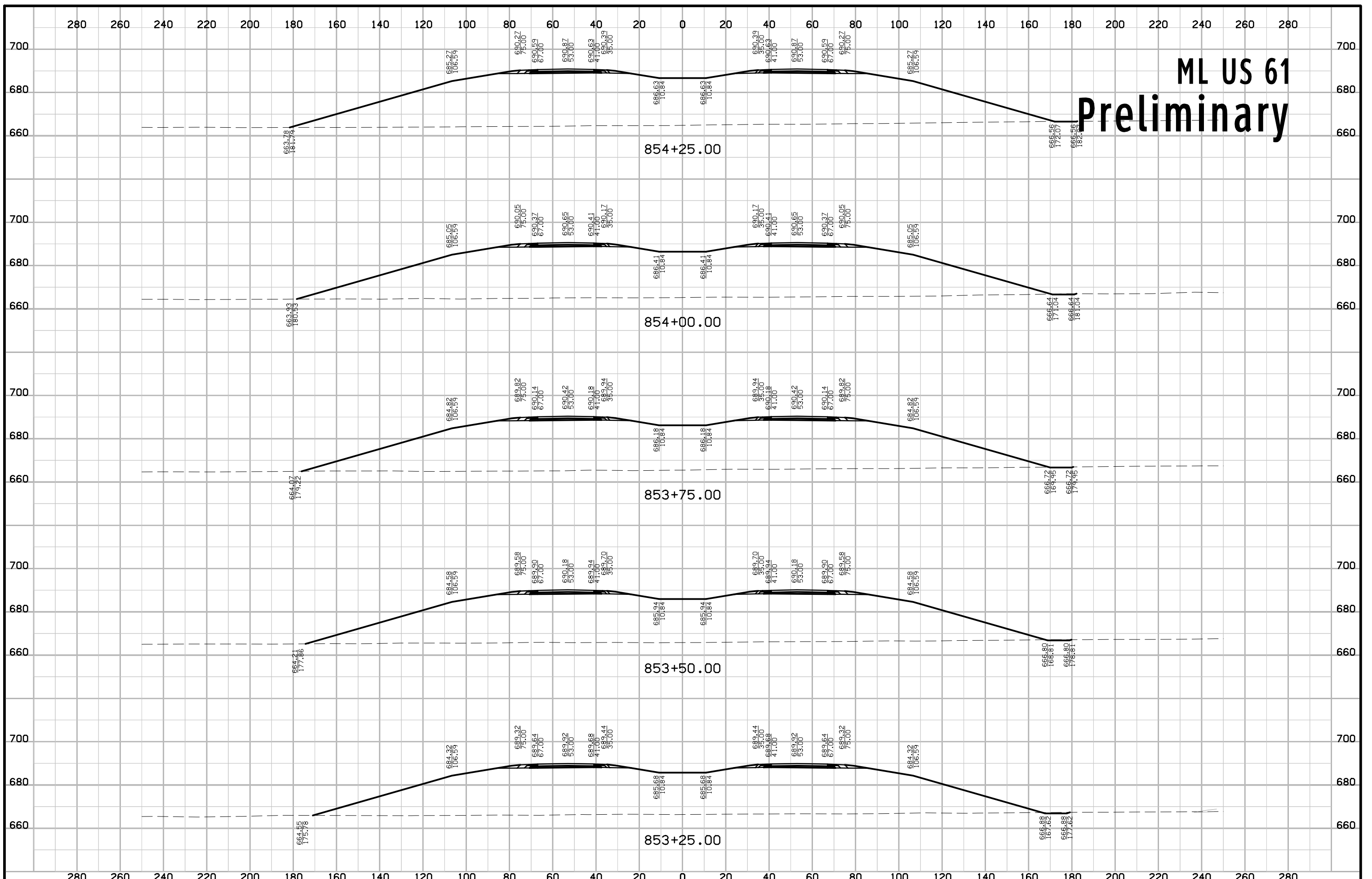
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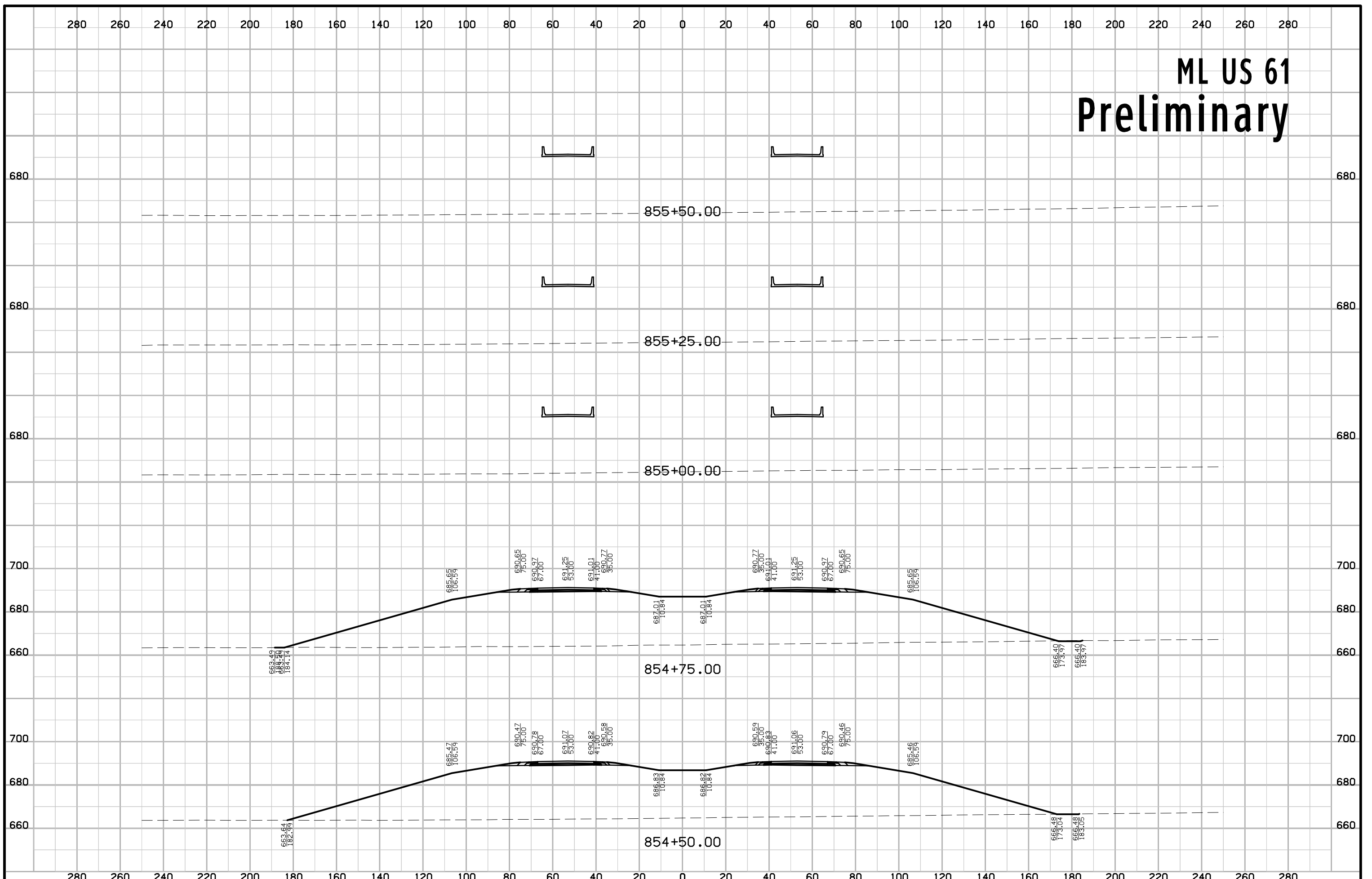
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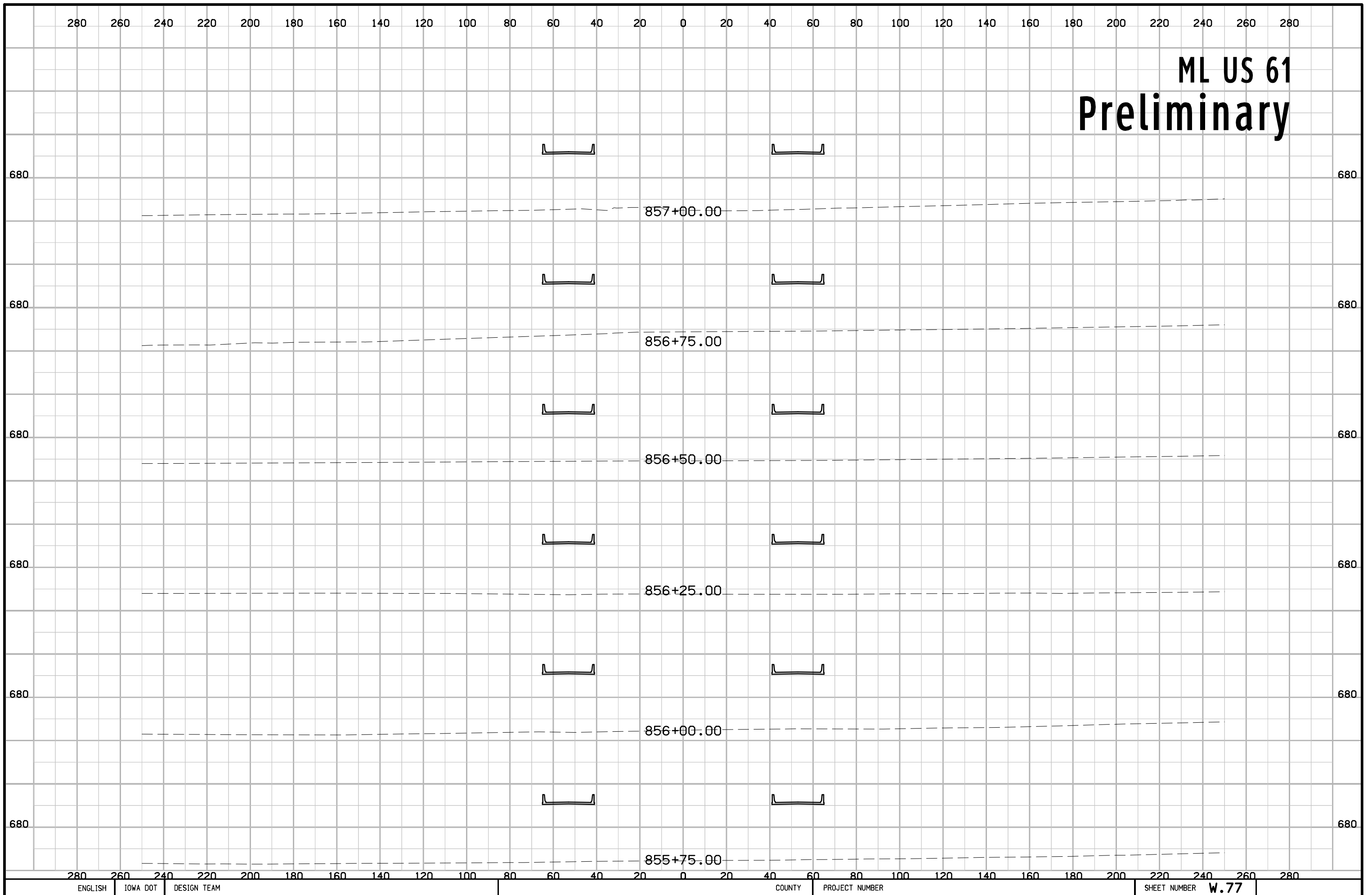
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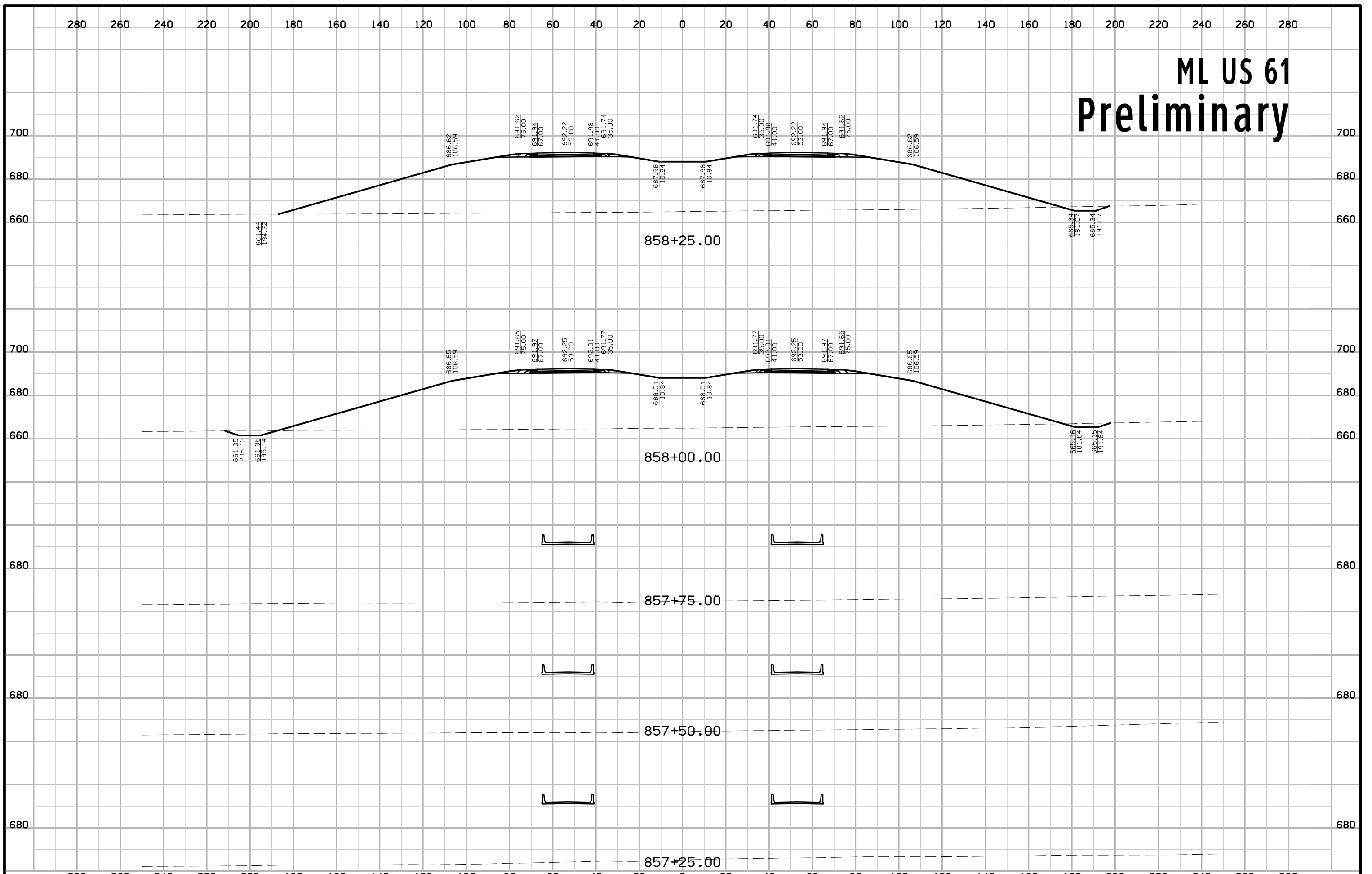
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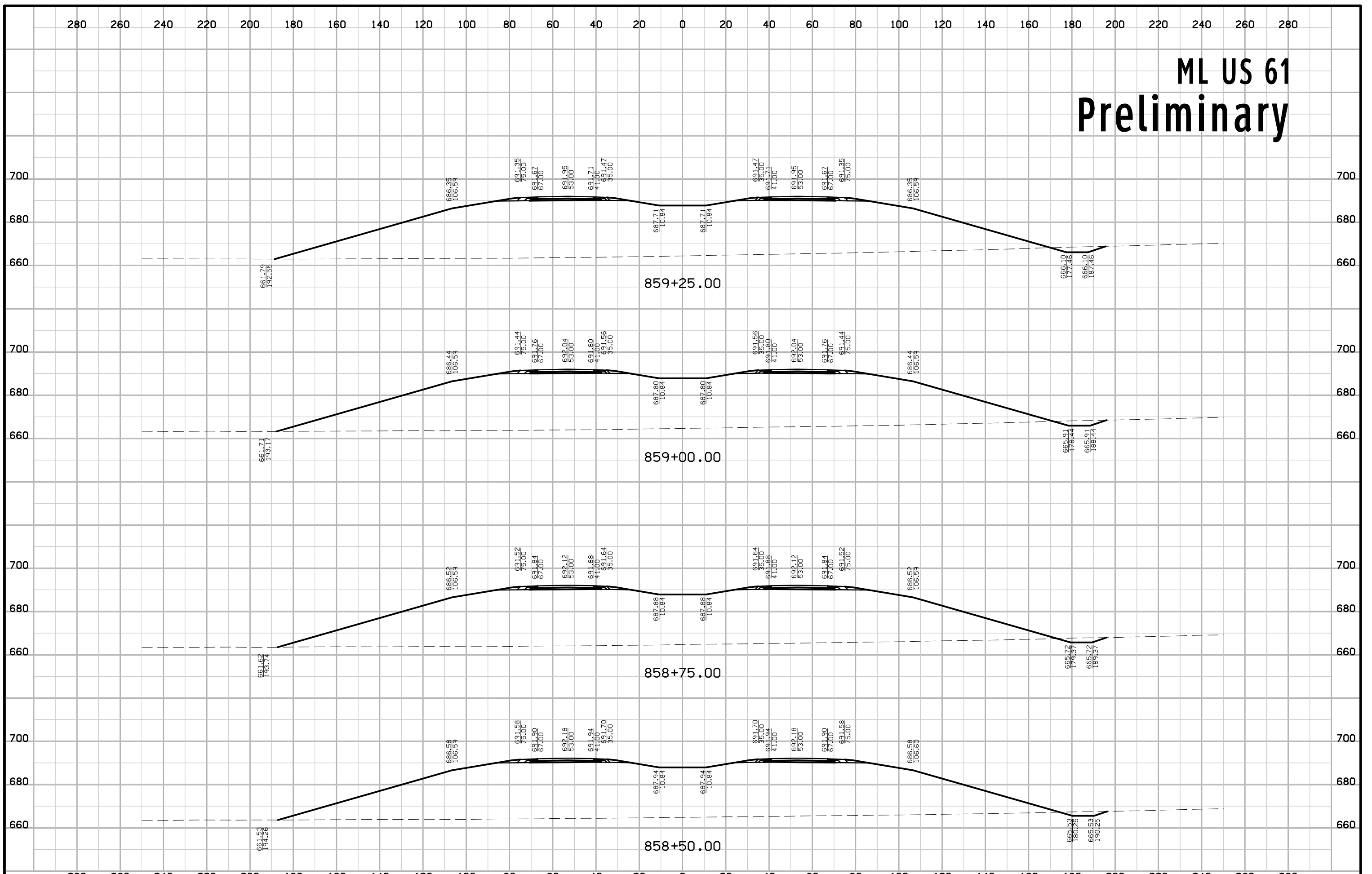
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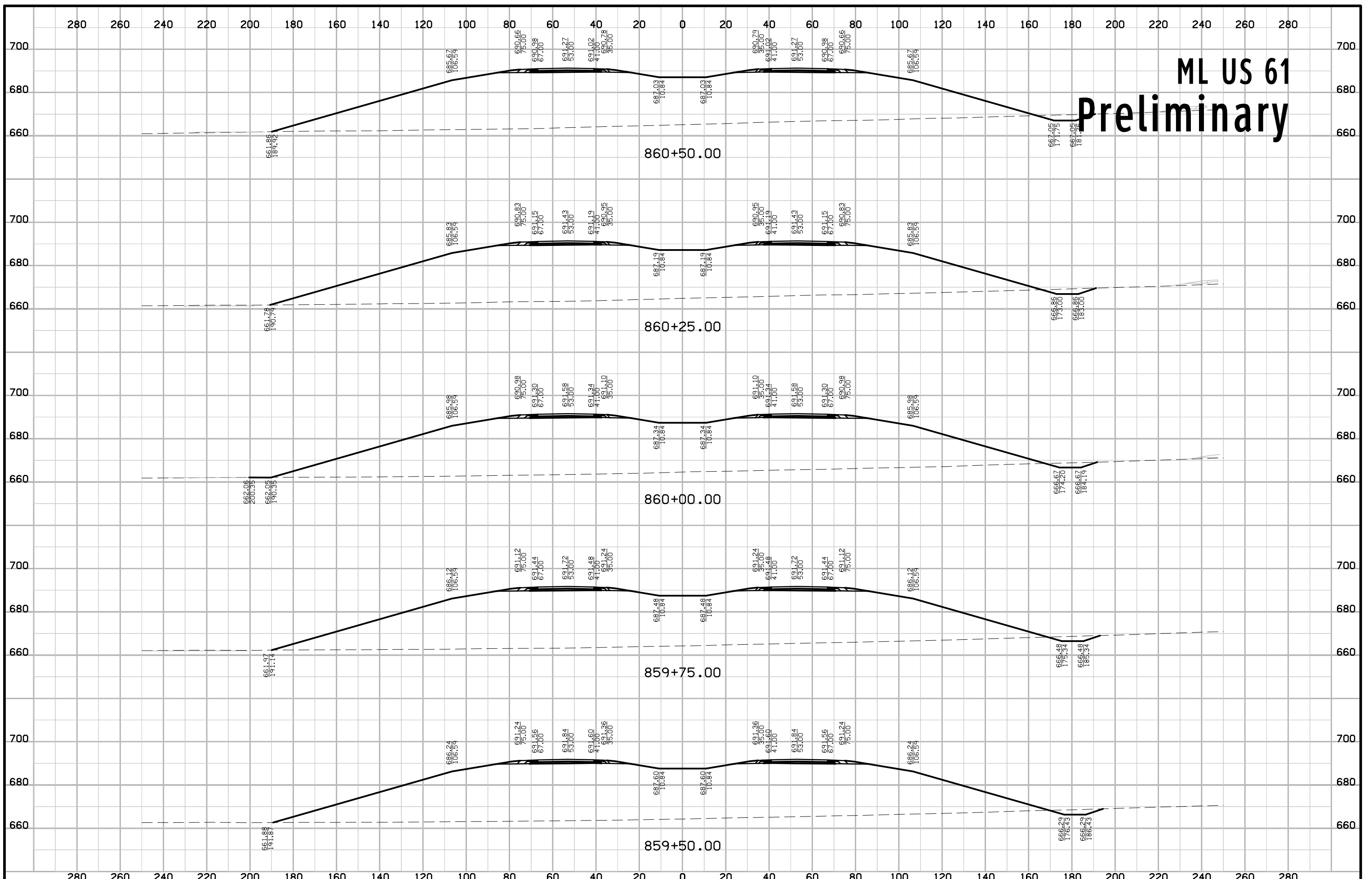
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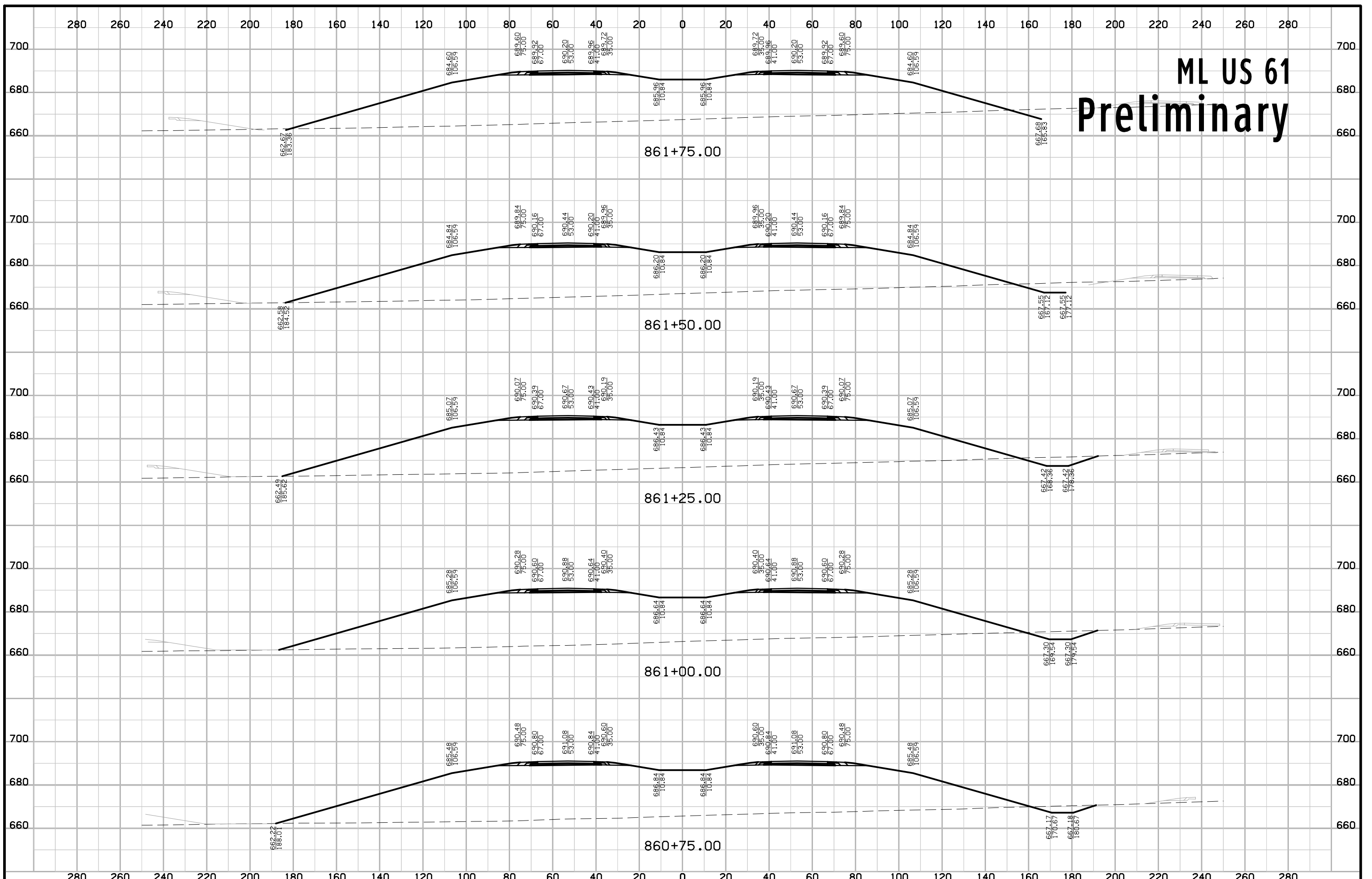
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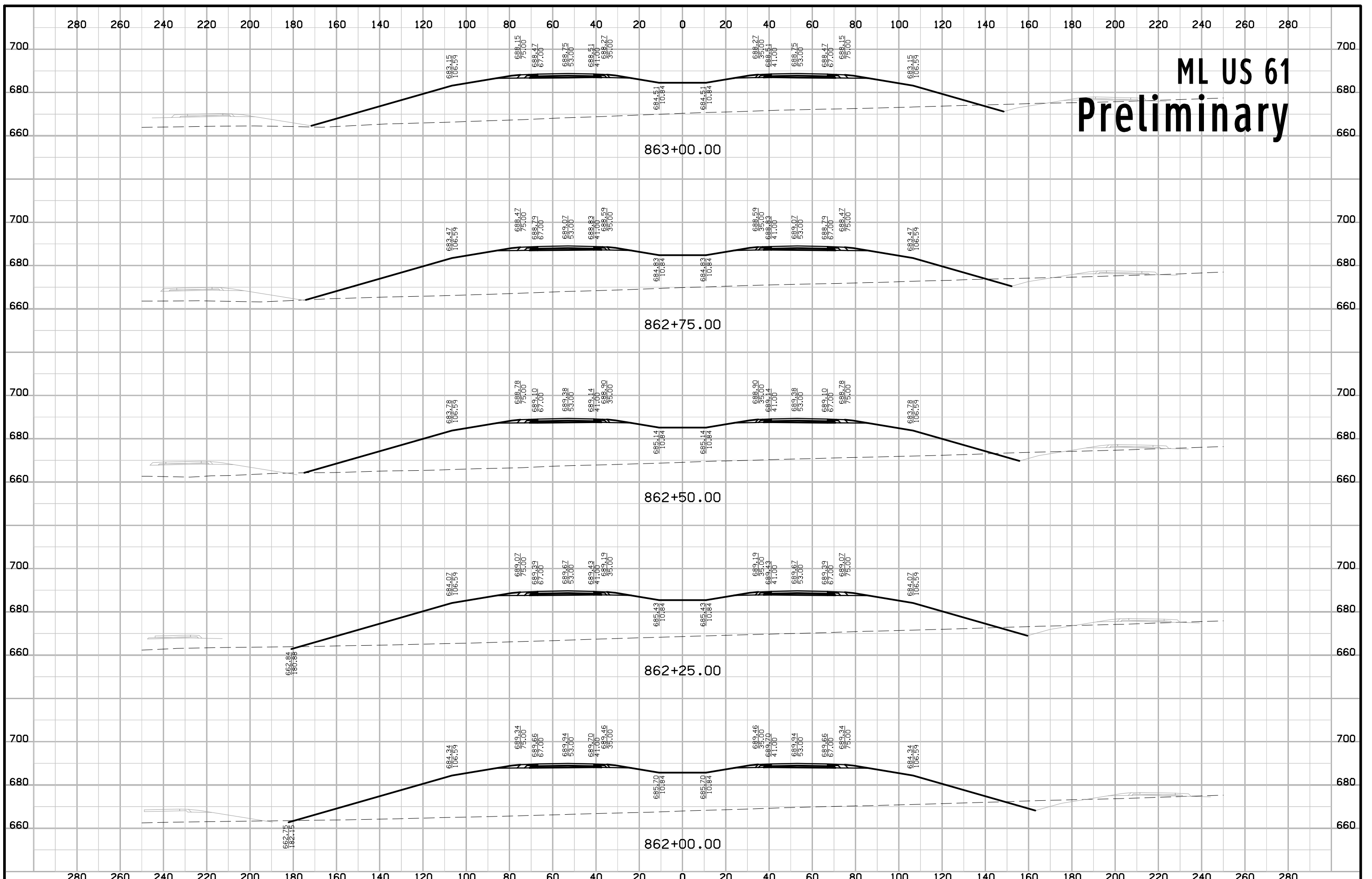
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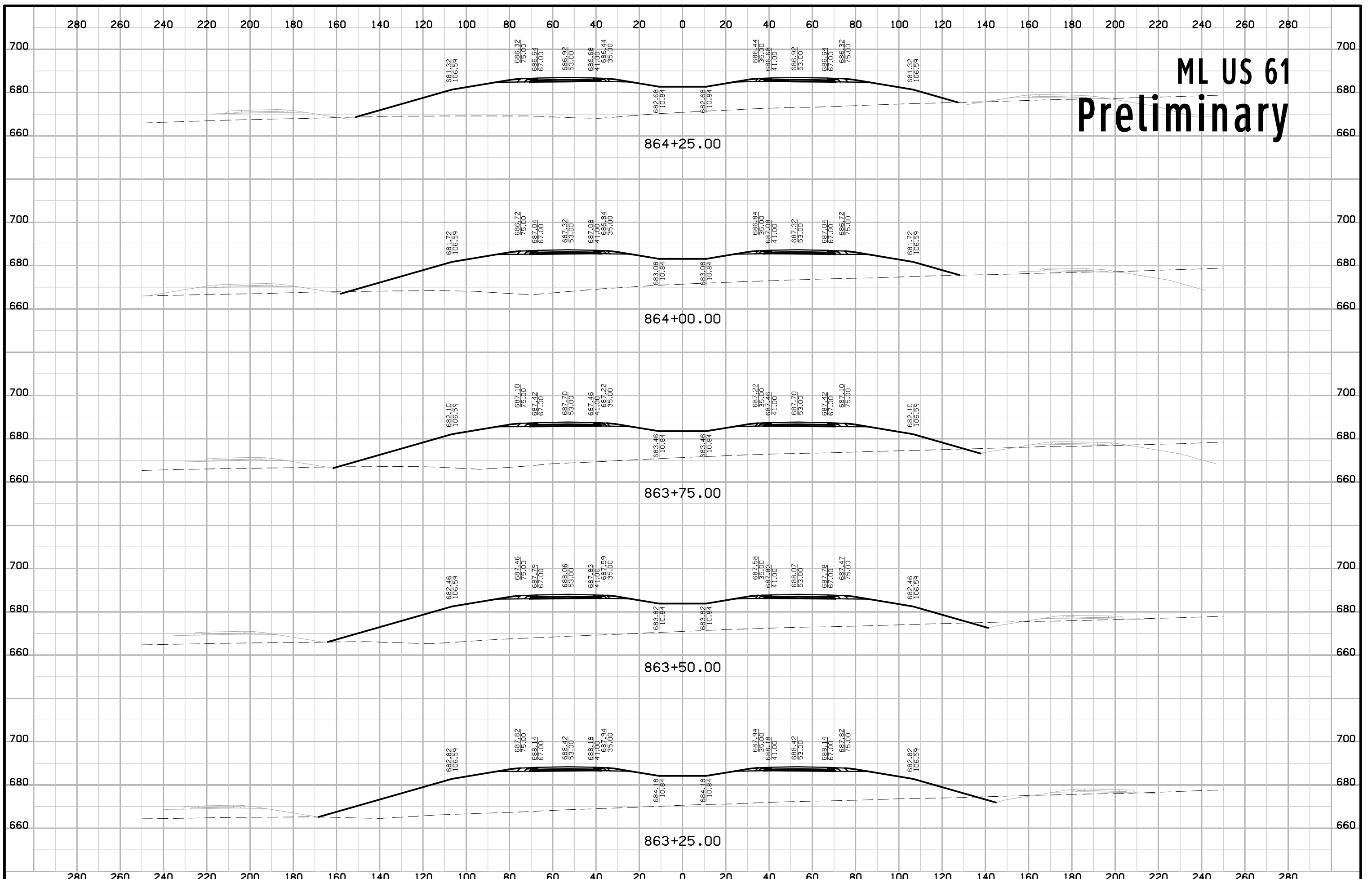
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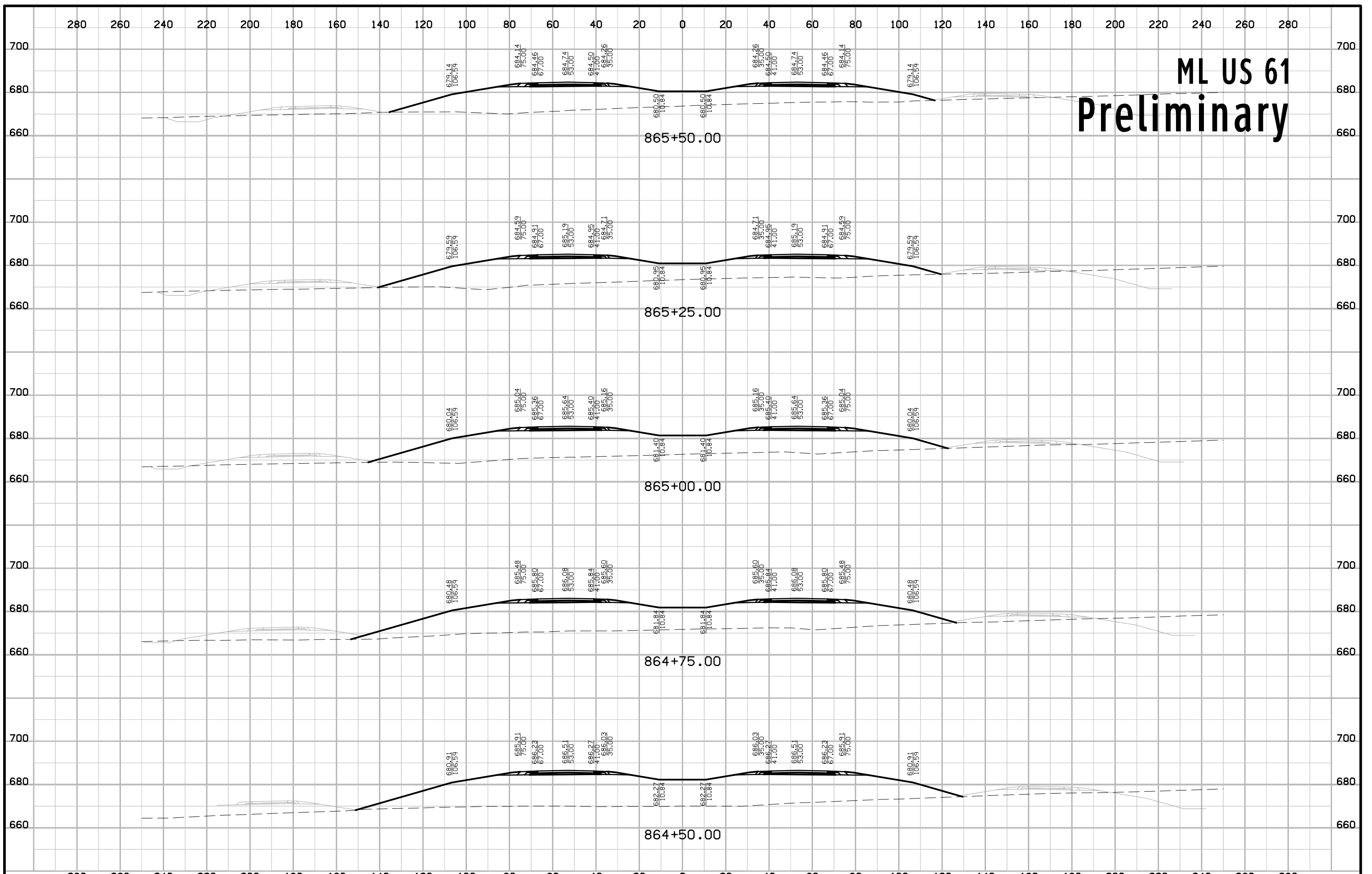
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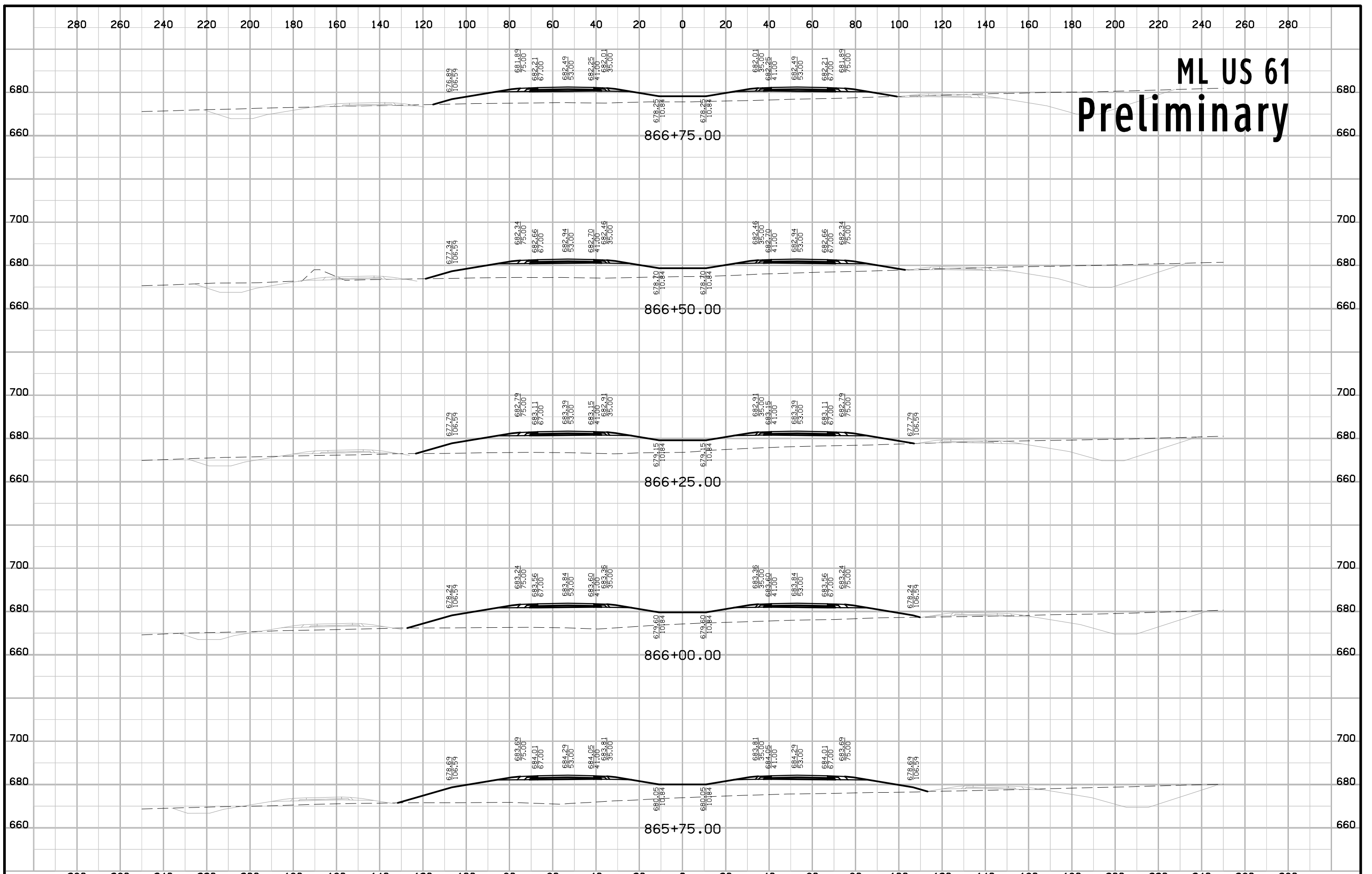
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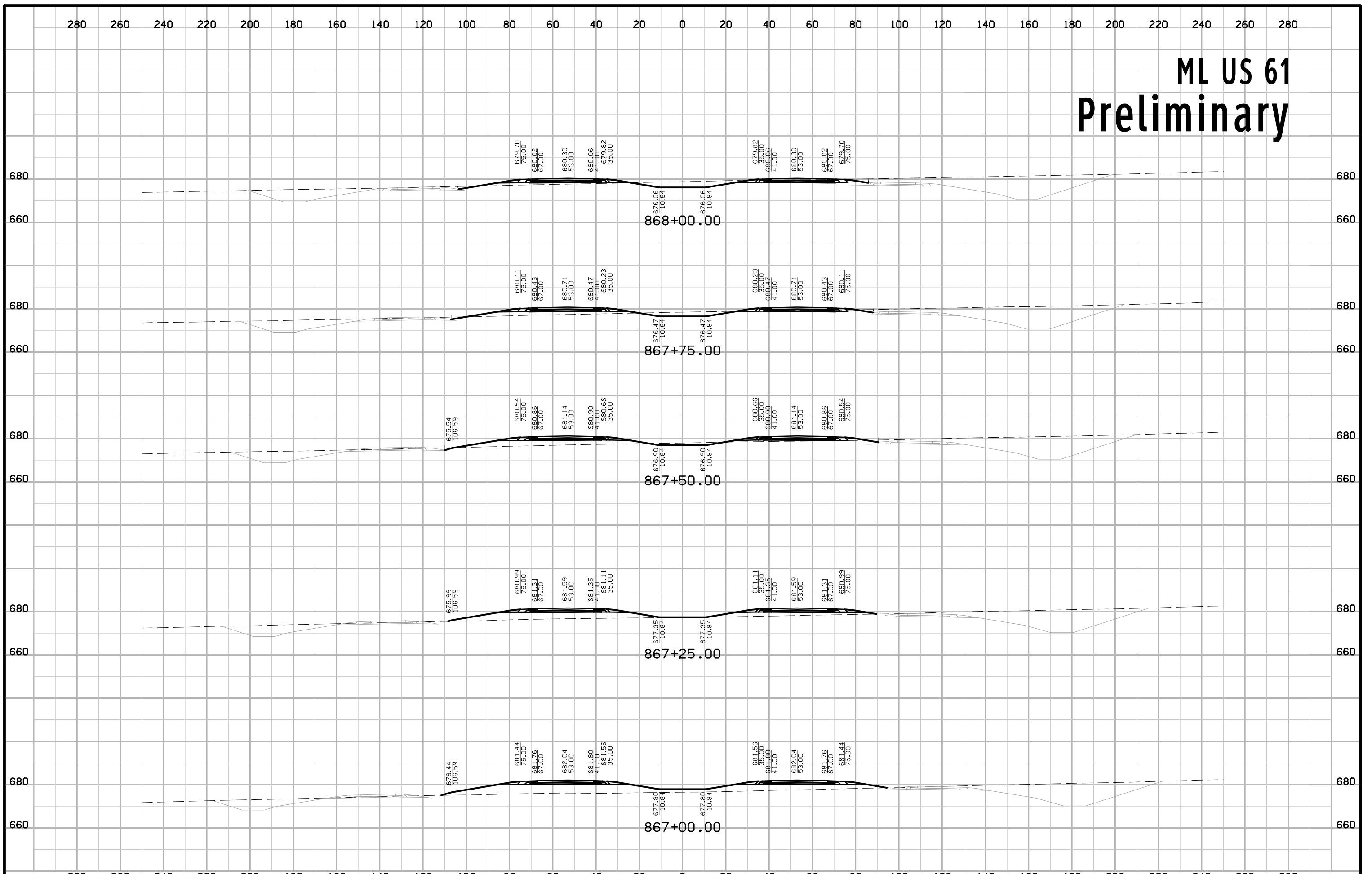
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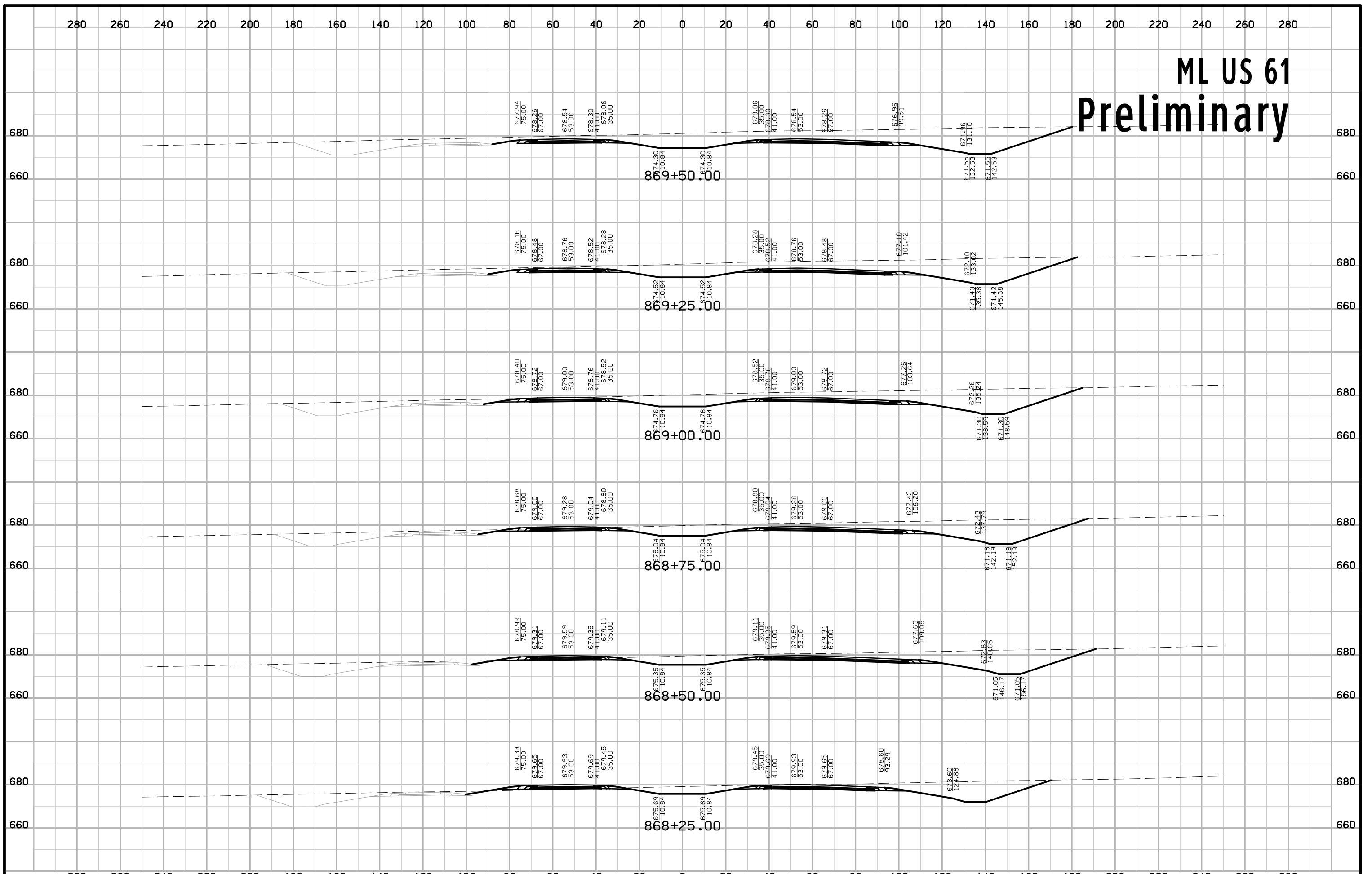
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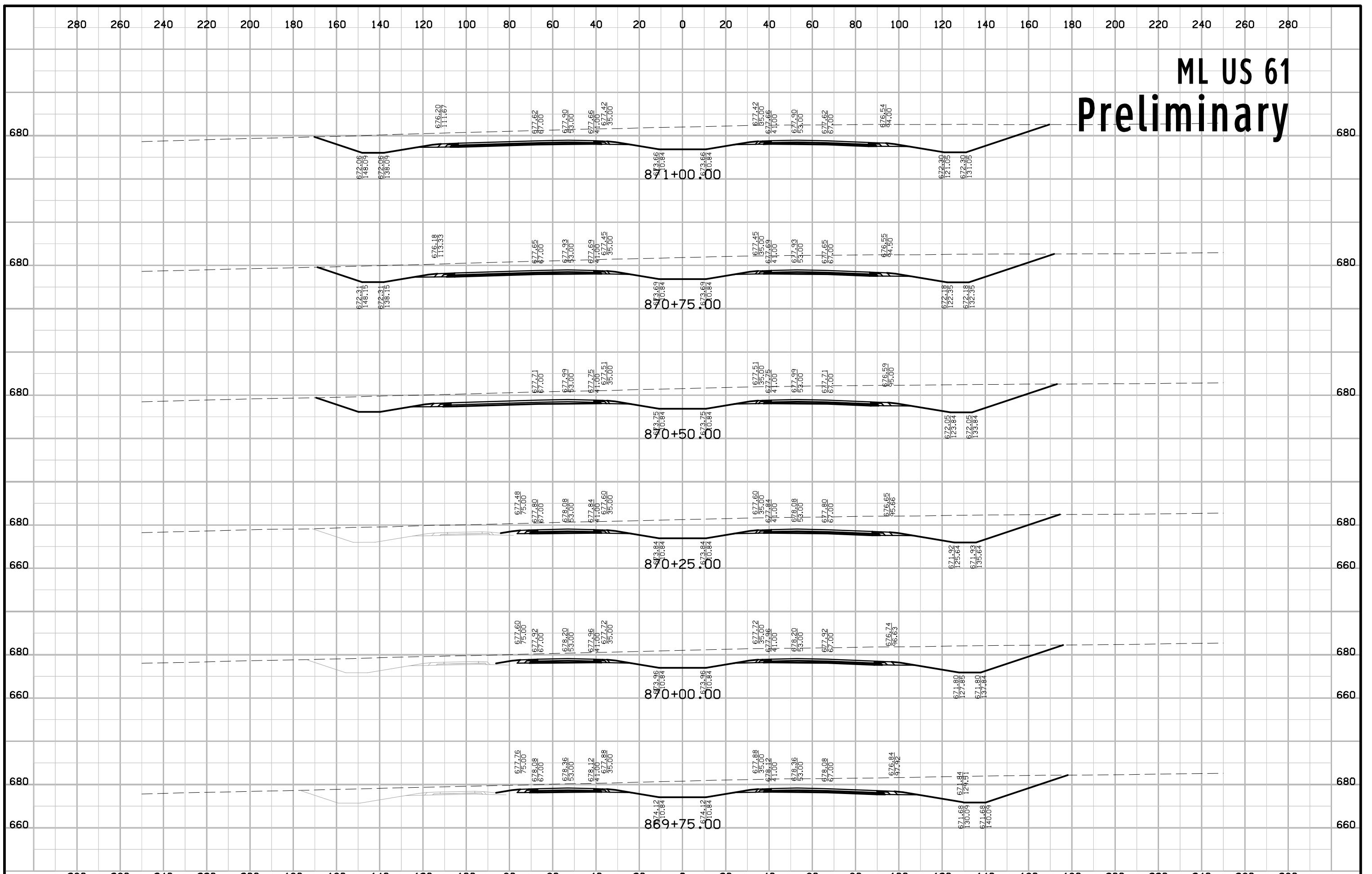
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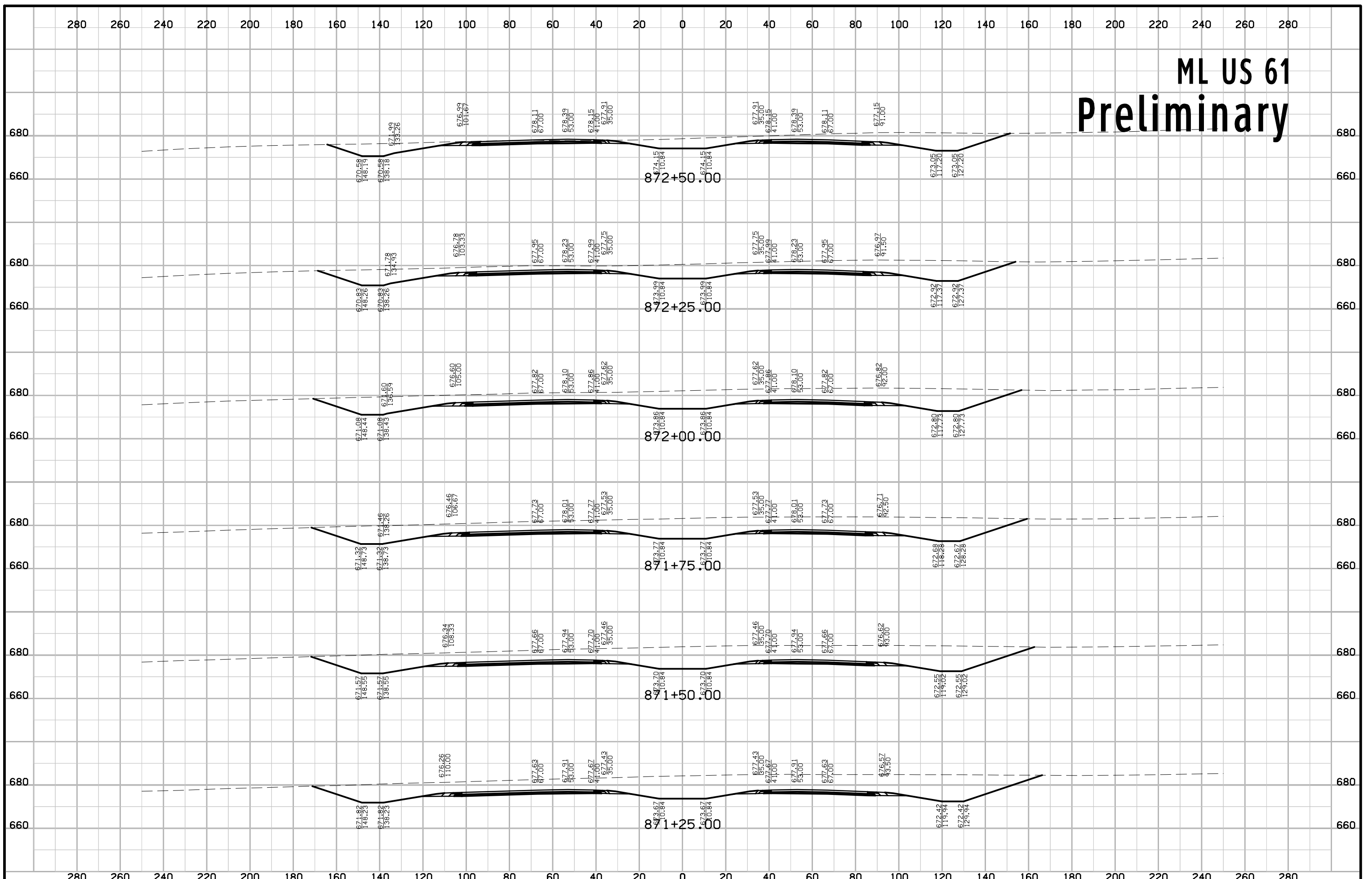
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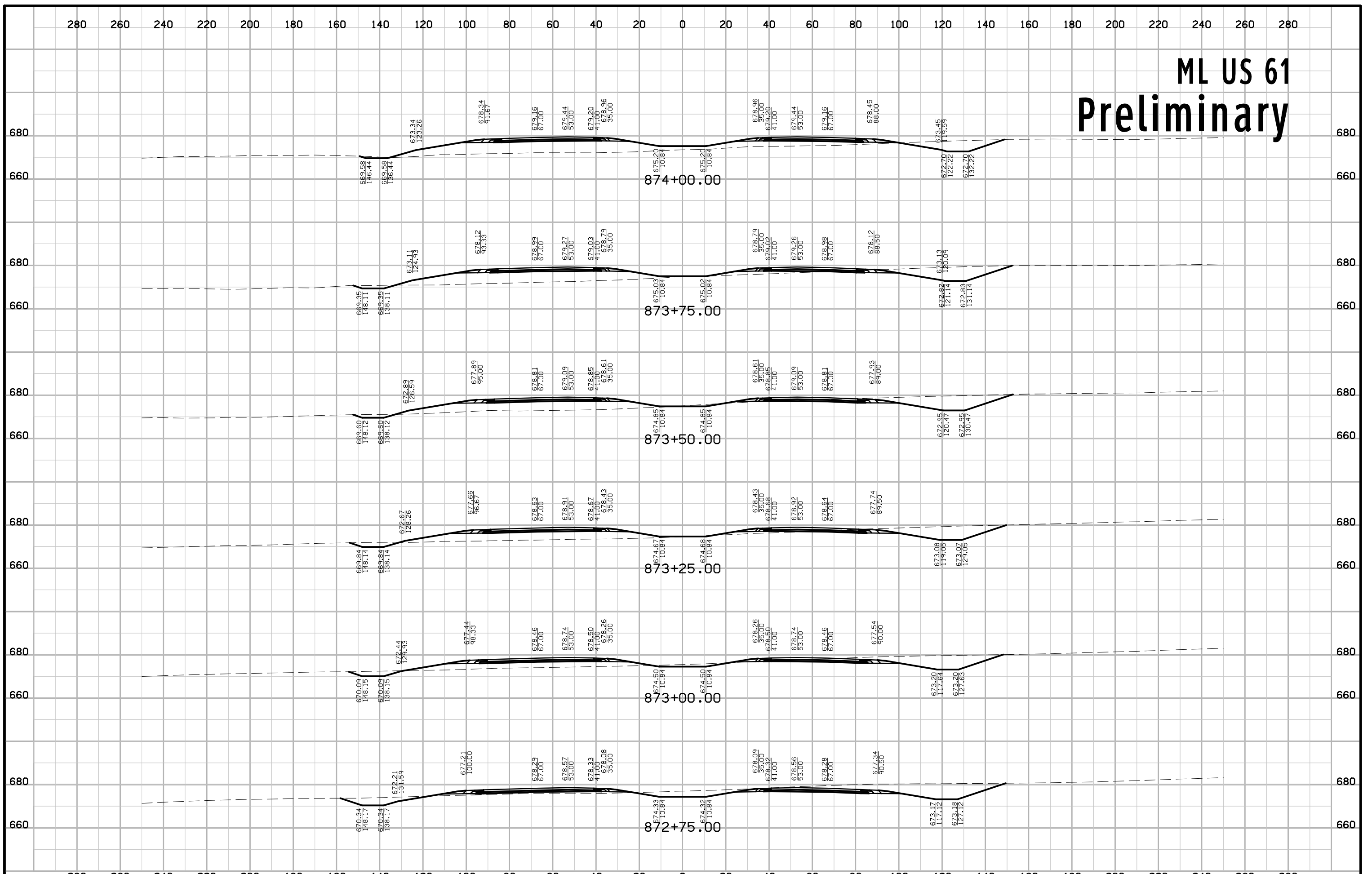
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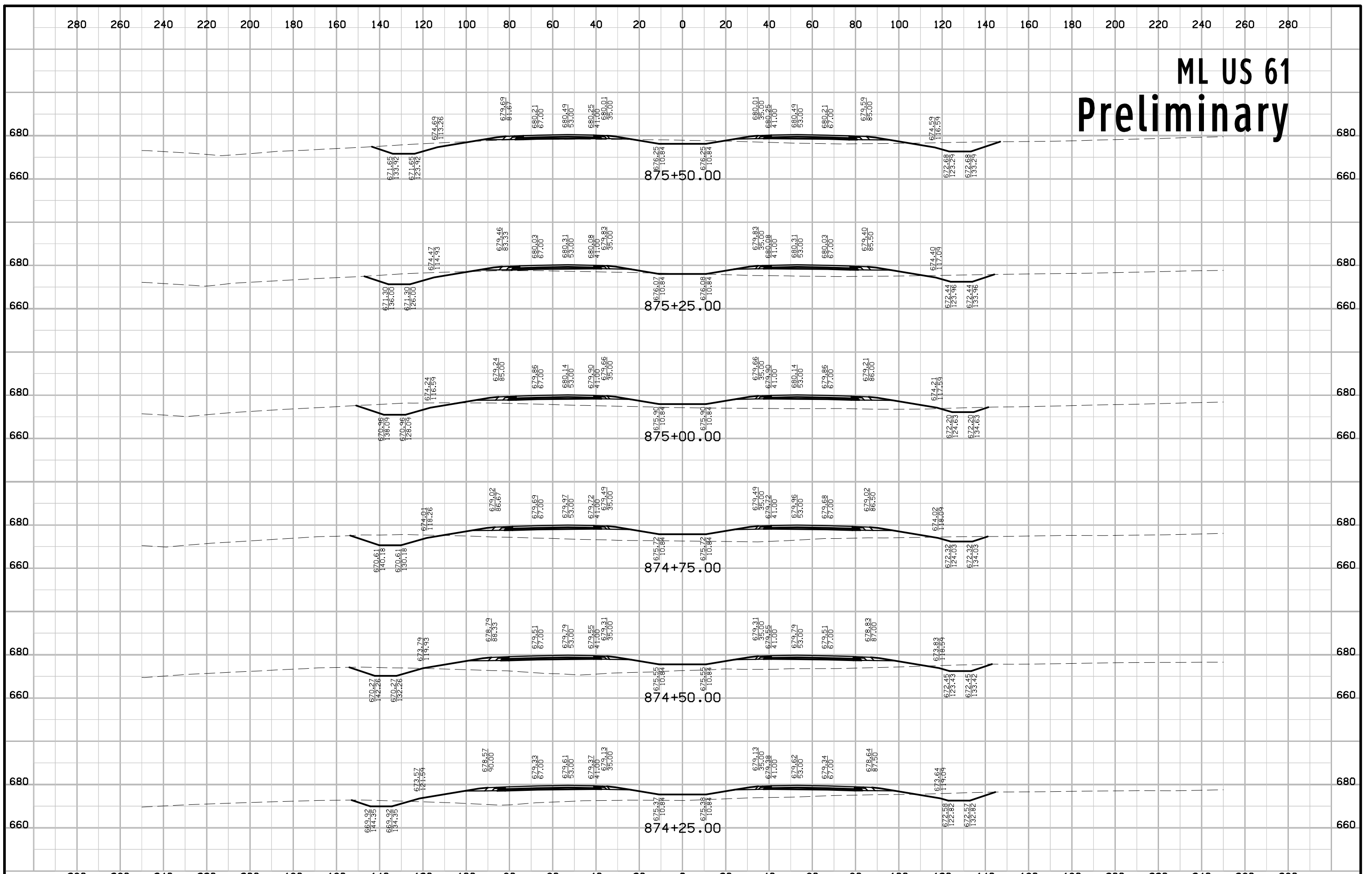


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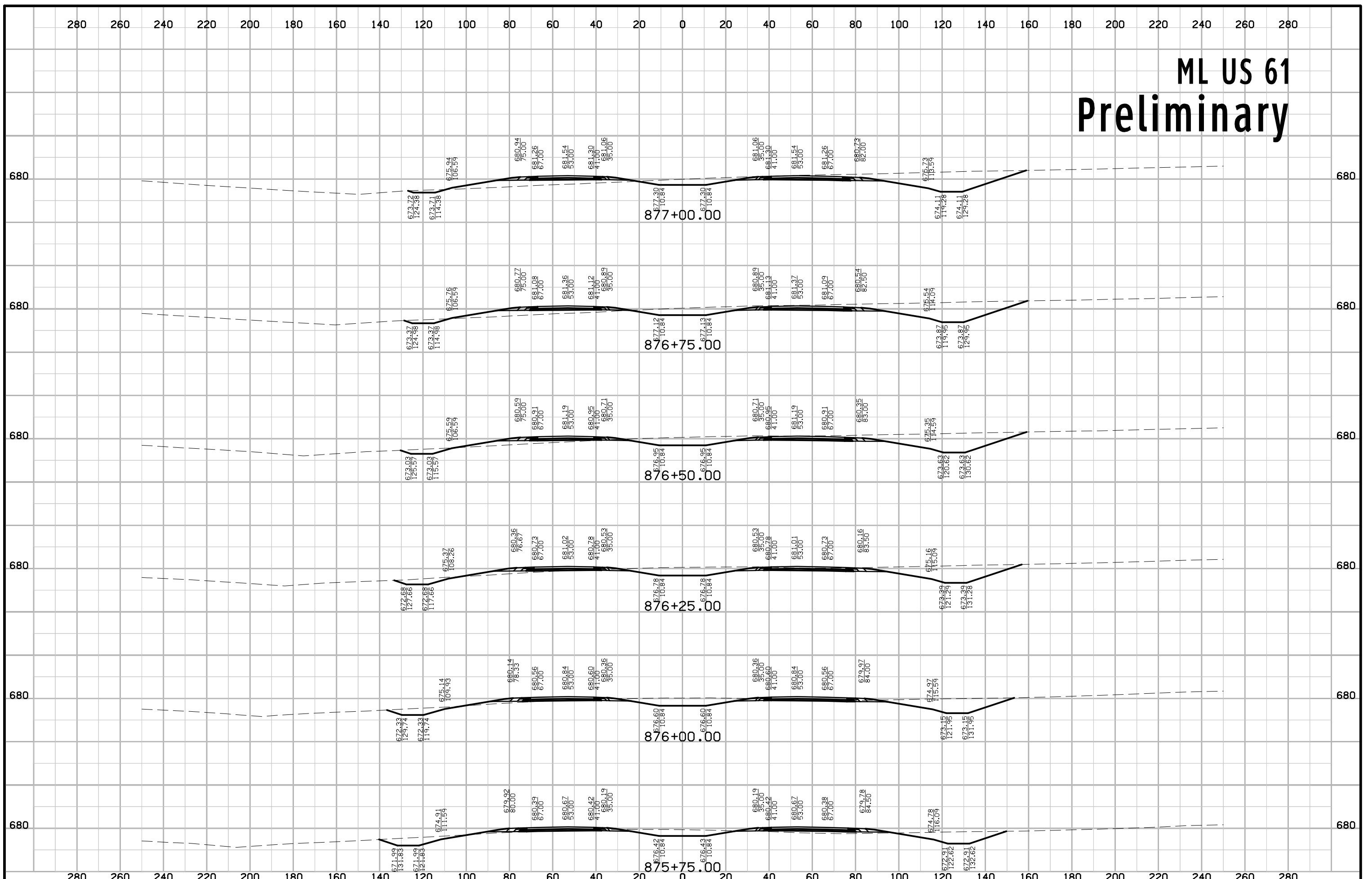


ENGLISH	IOWA DOT	DESIGN TEAM	COUNTY	PROJECT NUMBER	SHEET NUMBER
					W.90

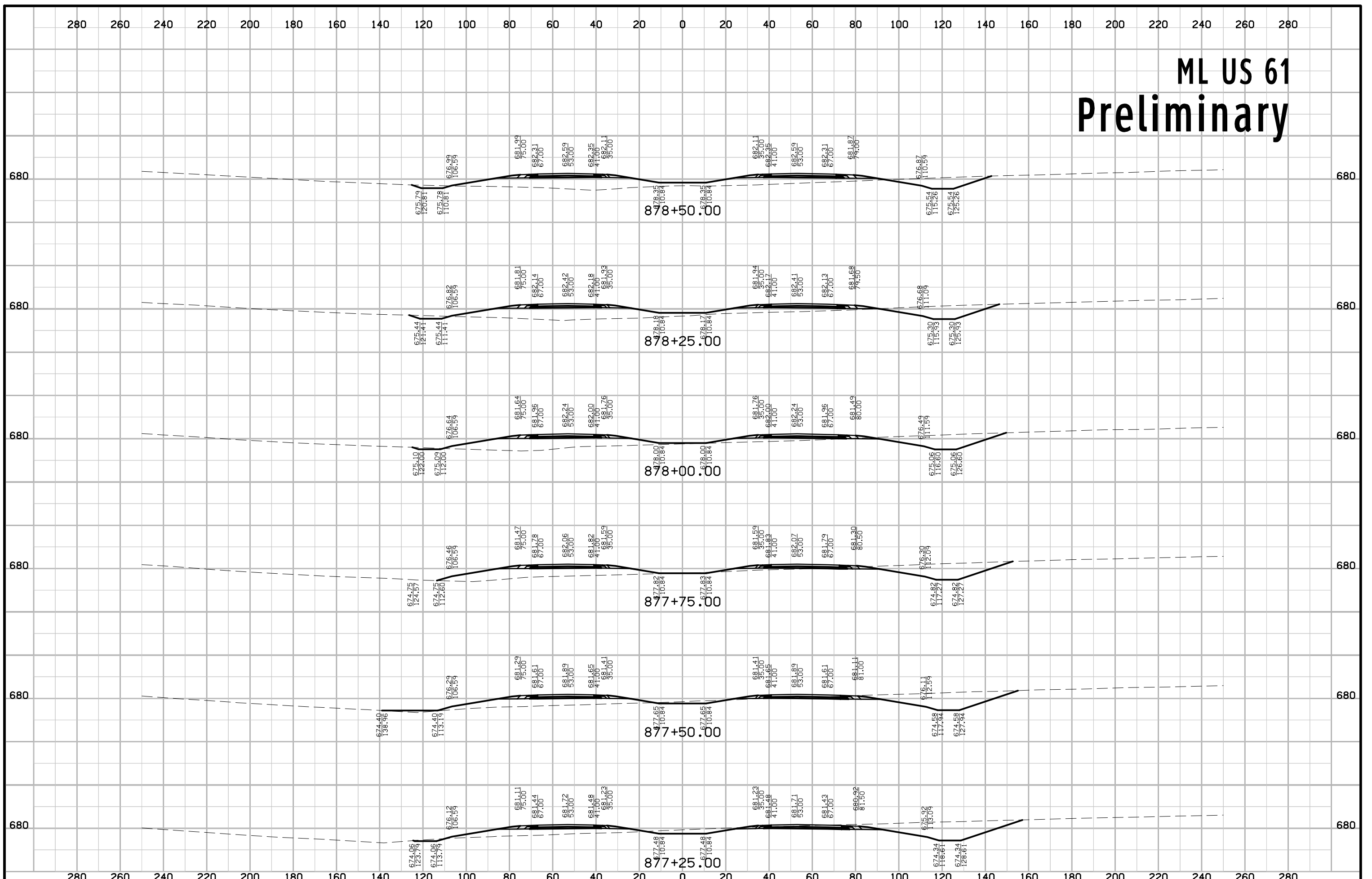
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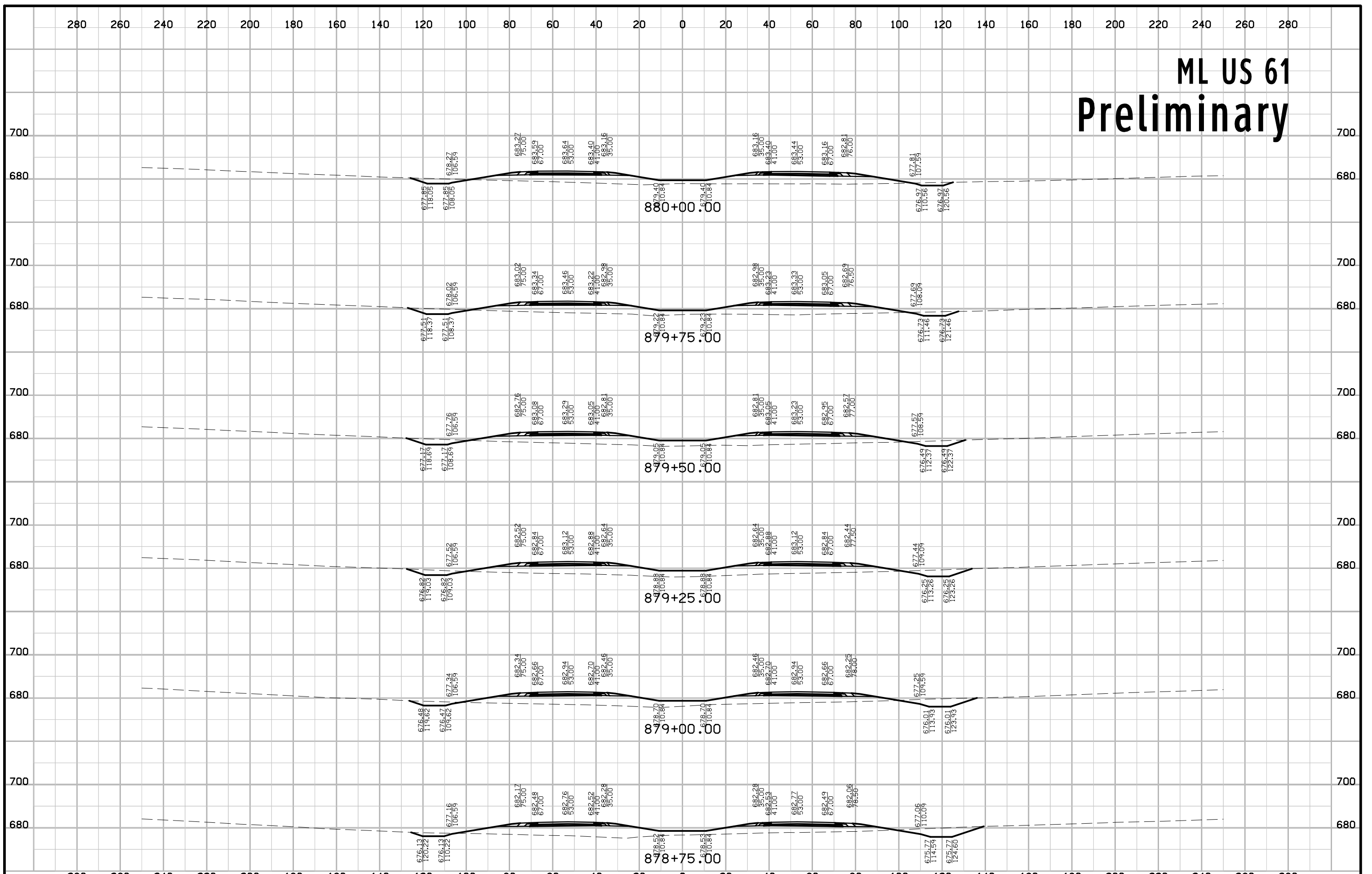
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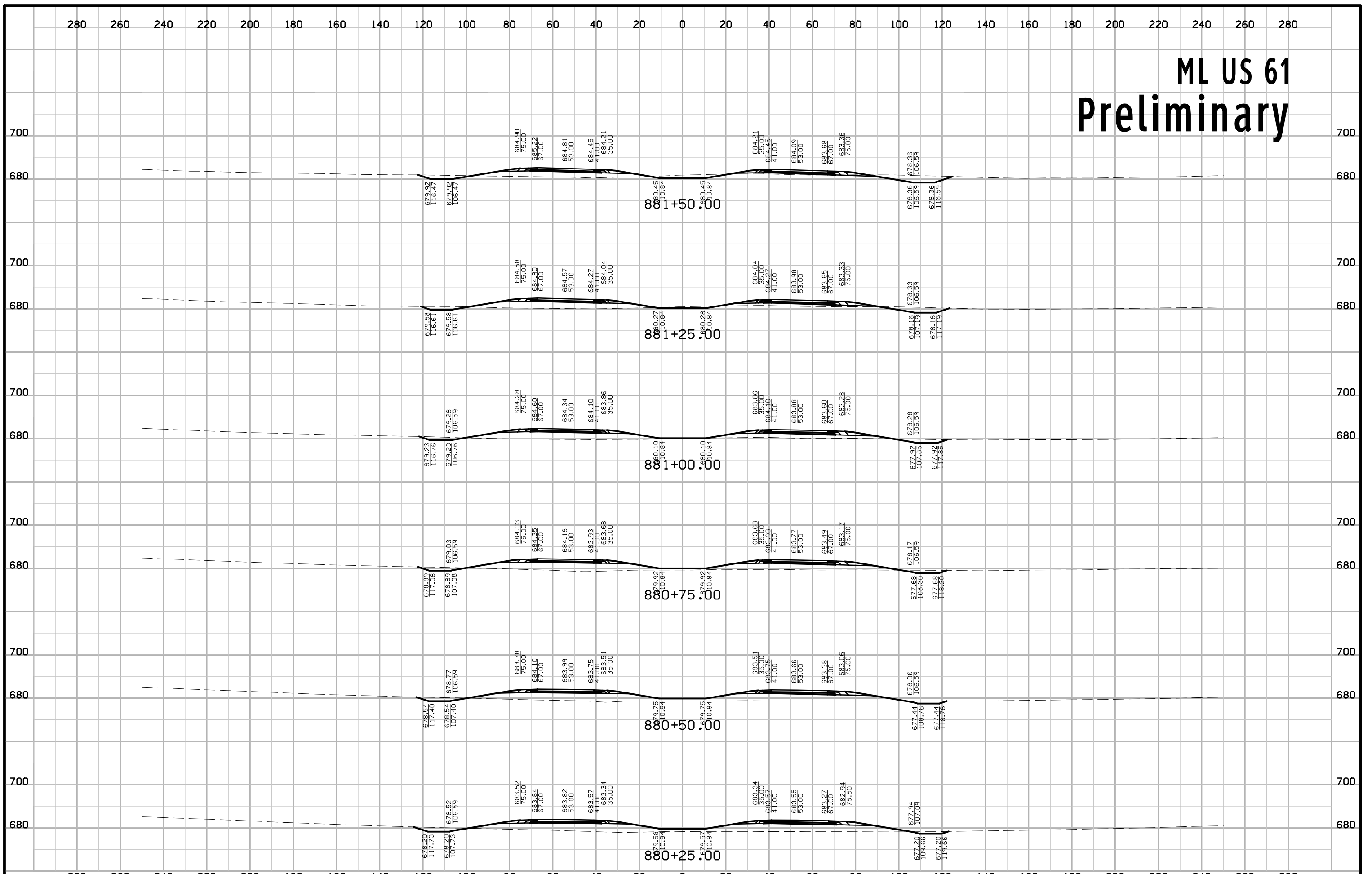
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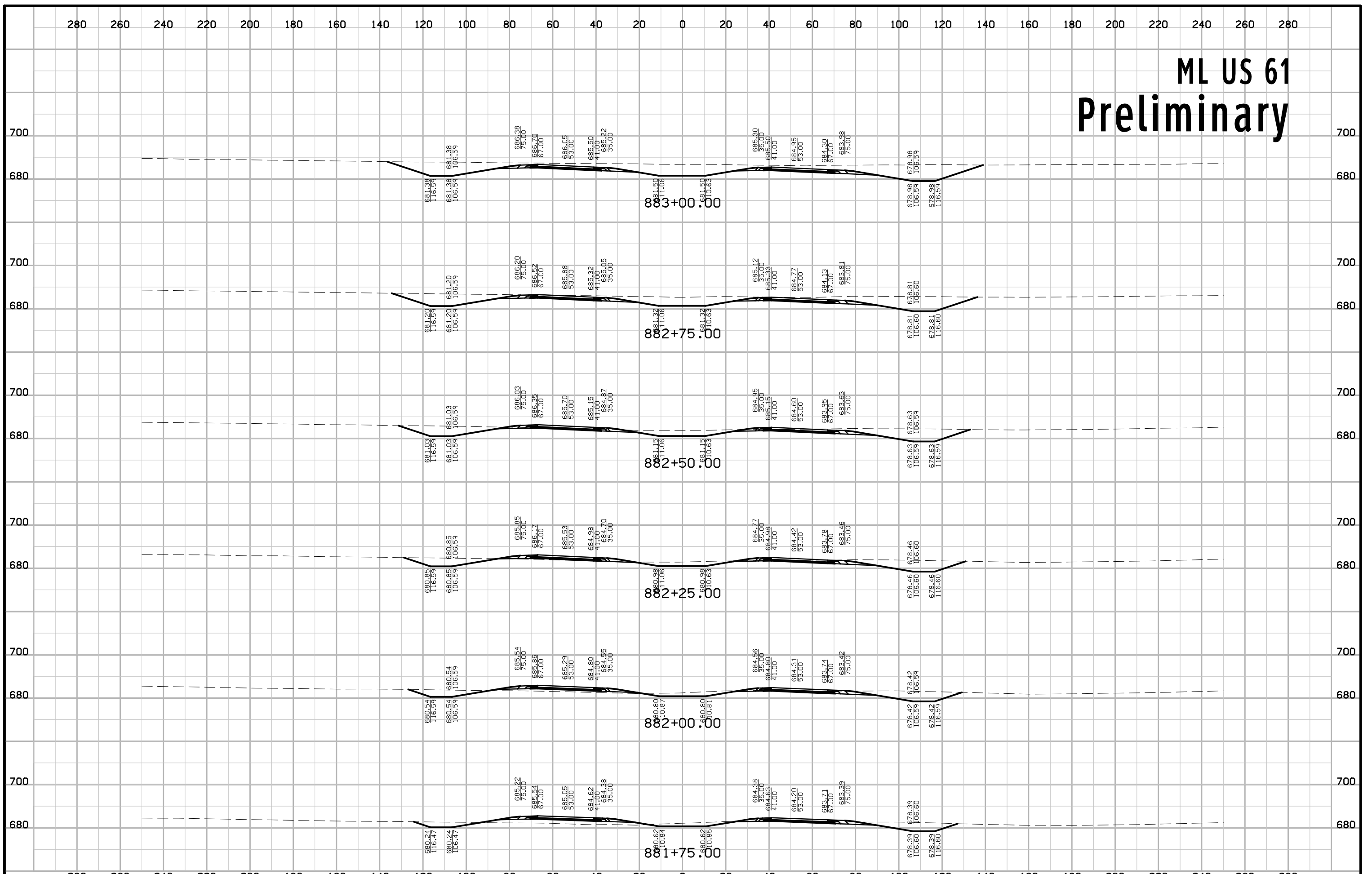
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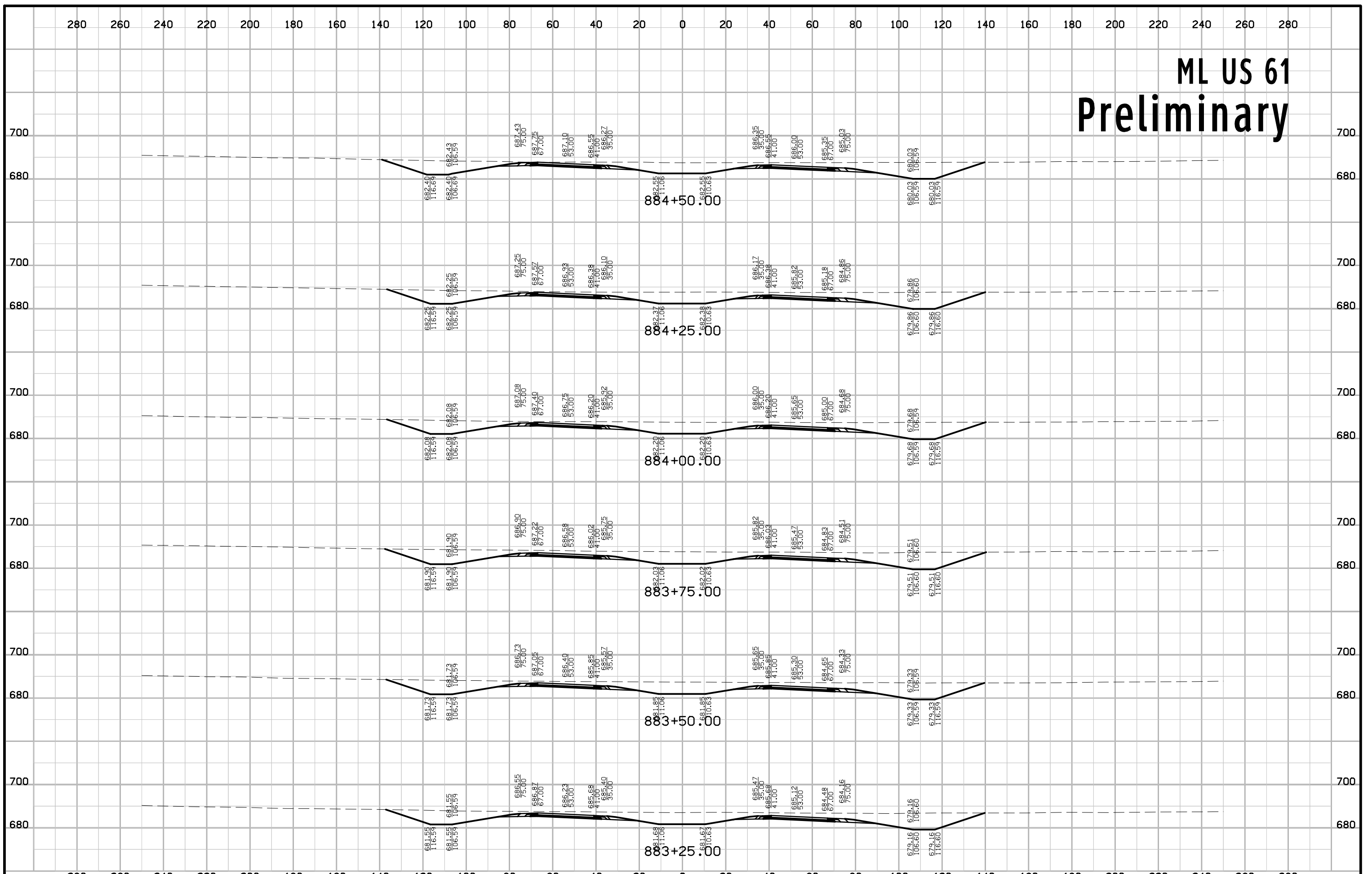
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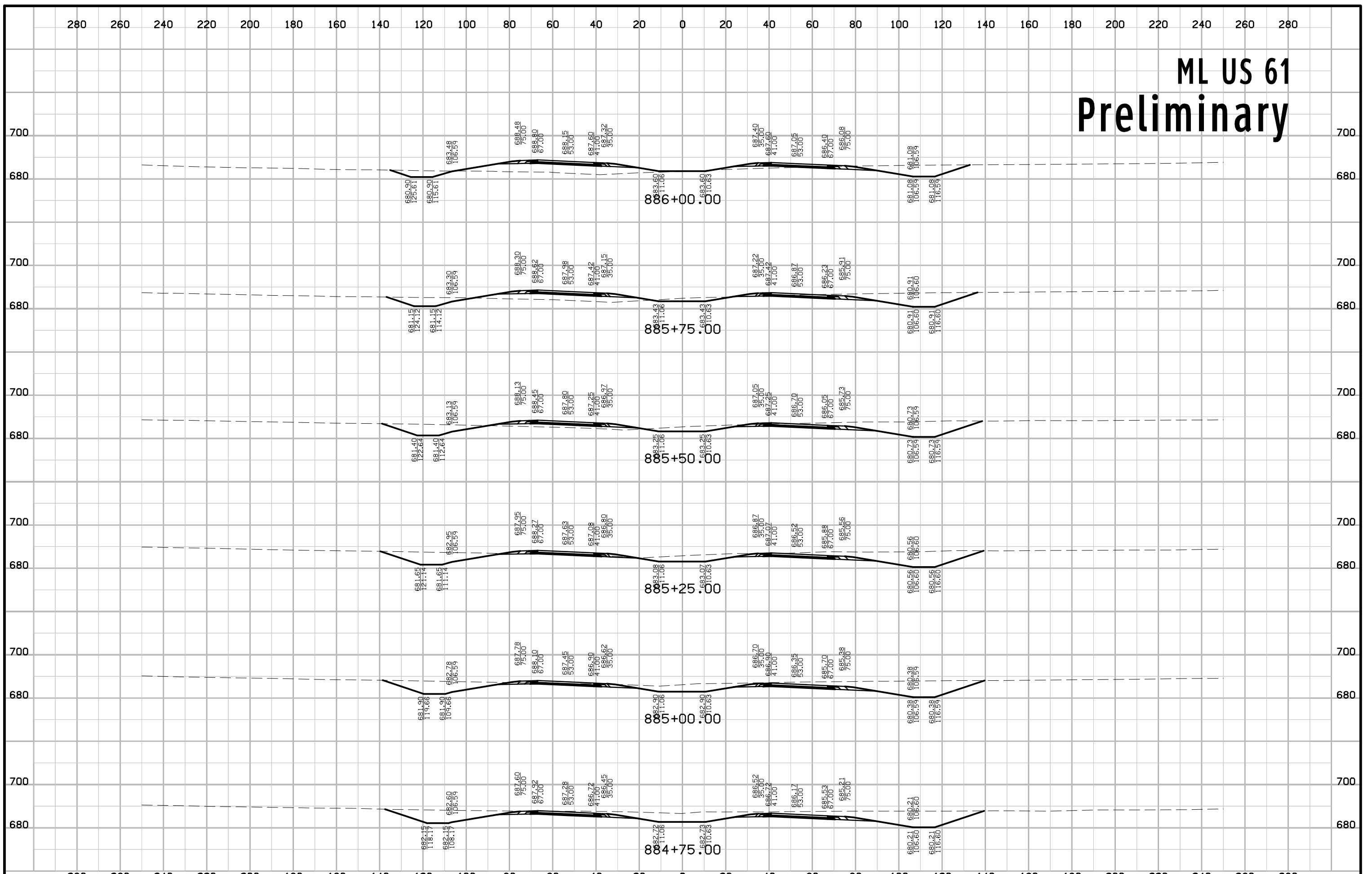
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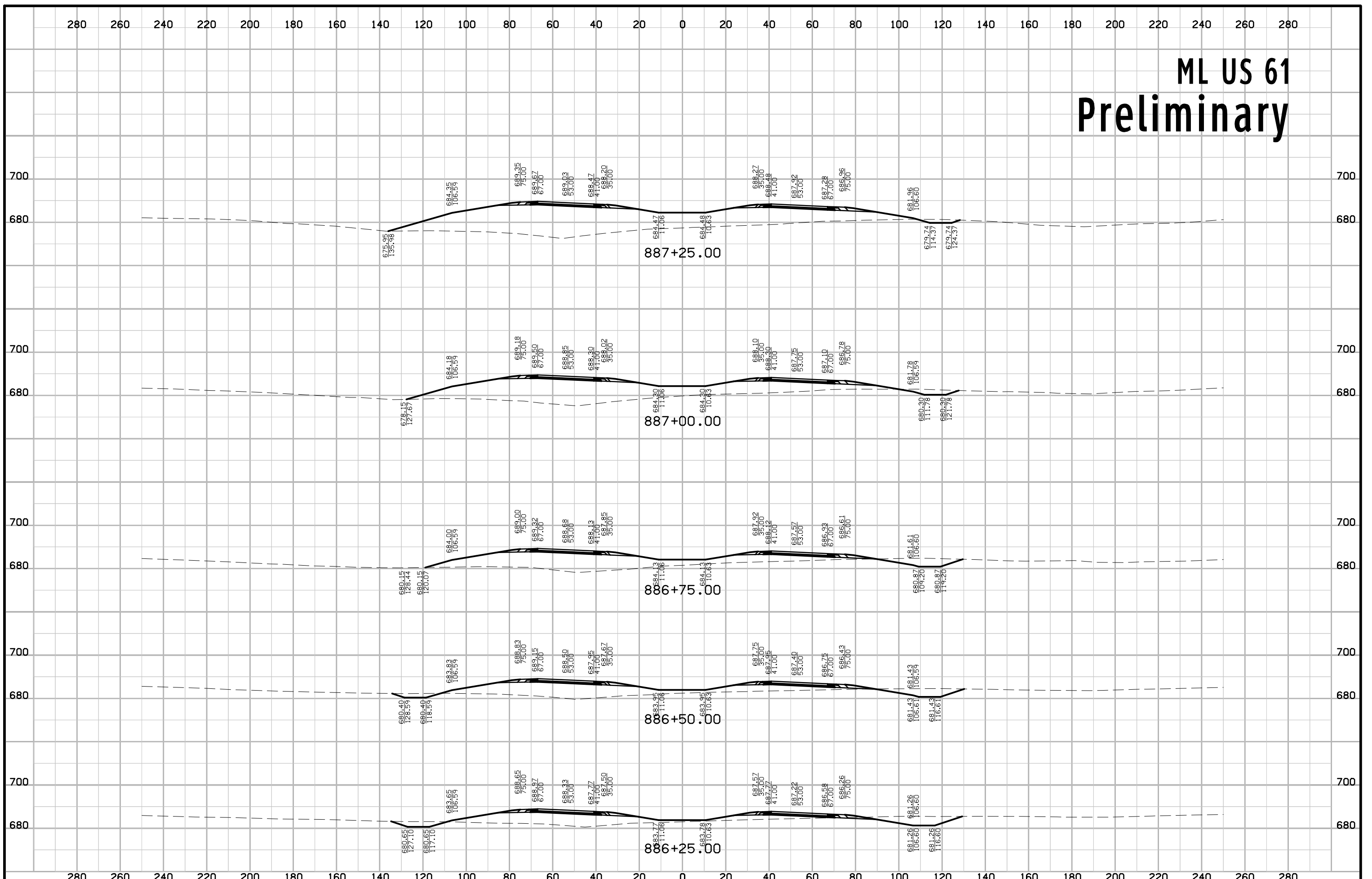
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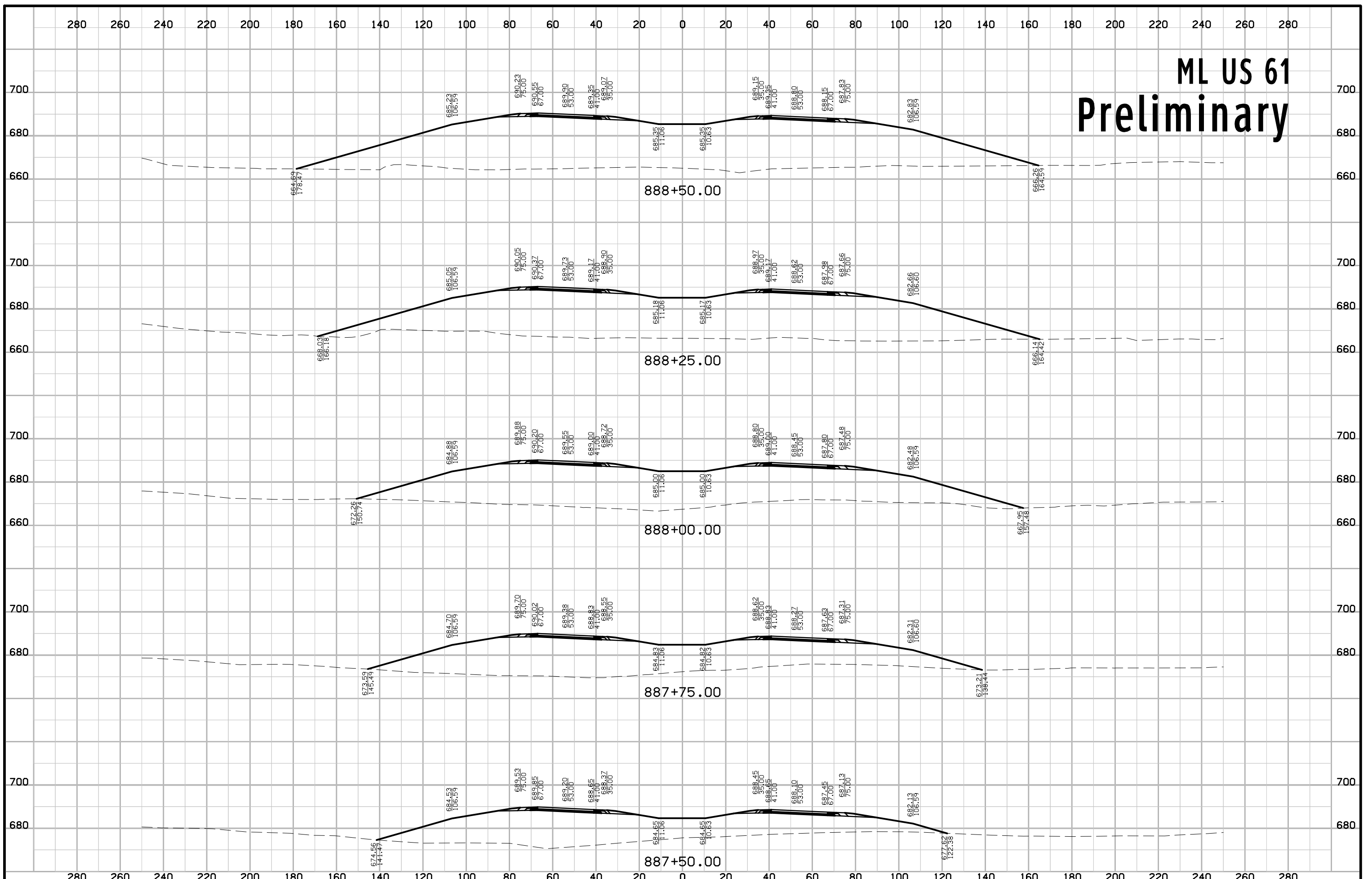
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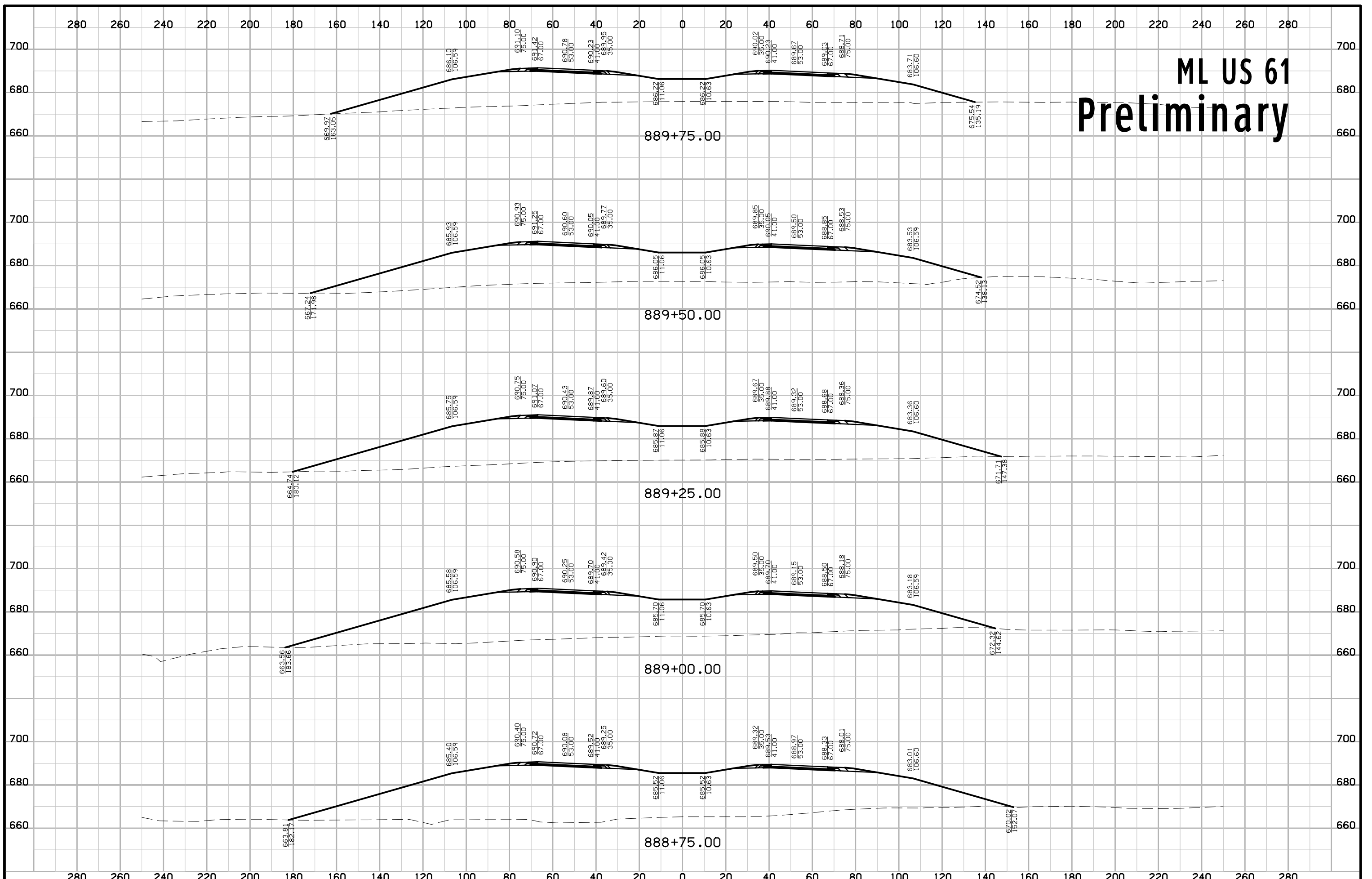
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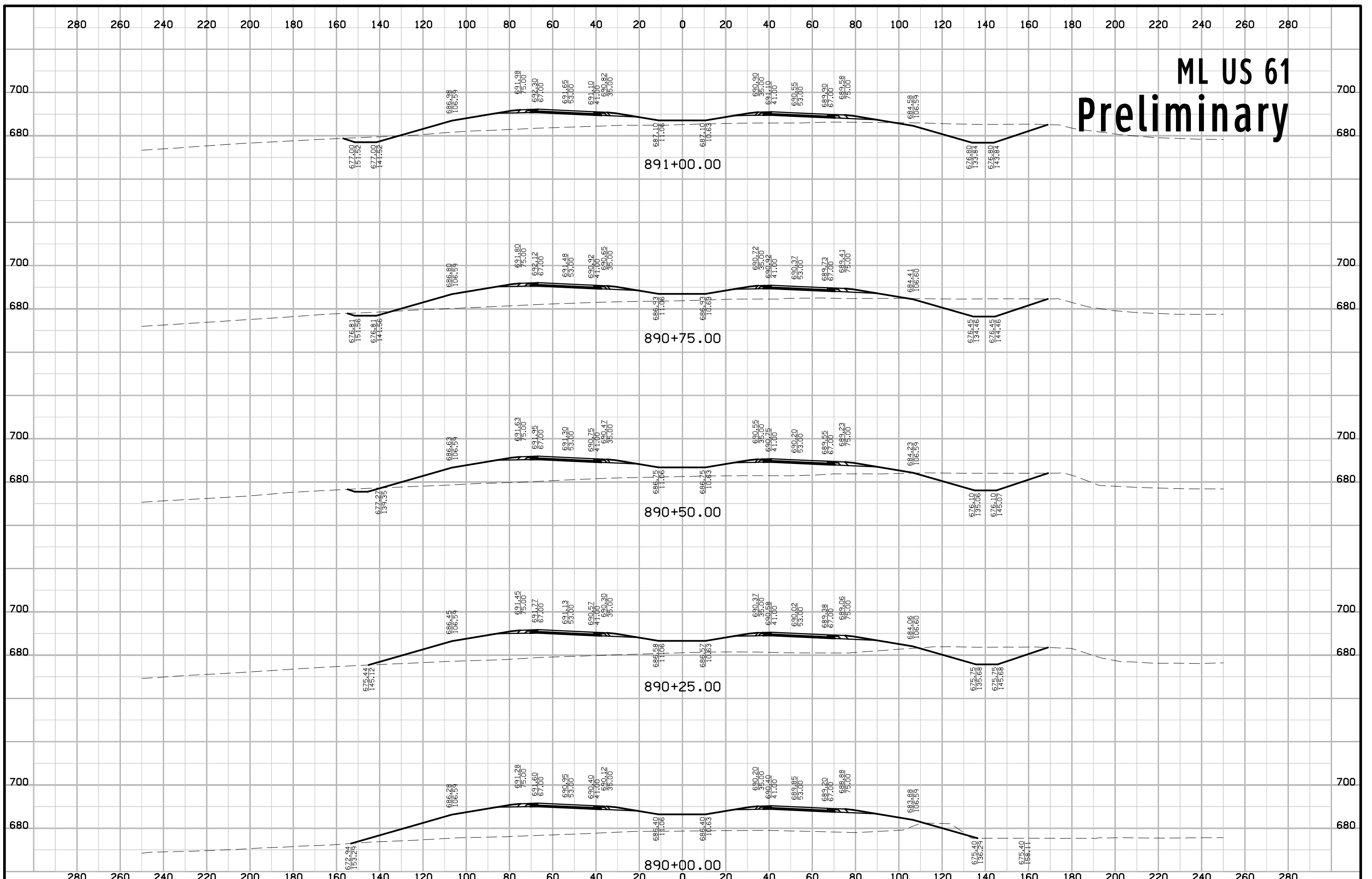
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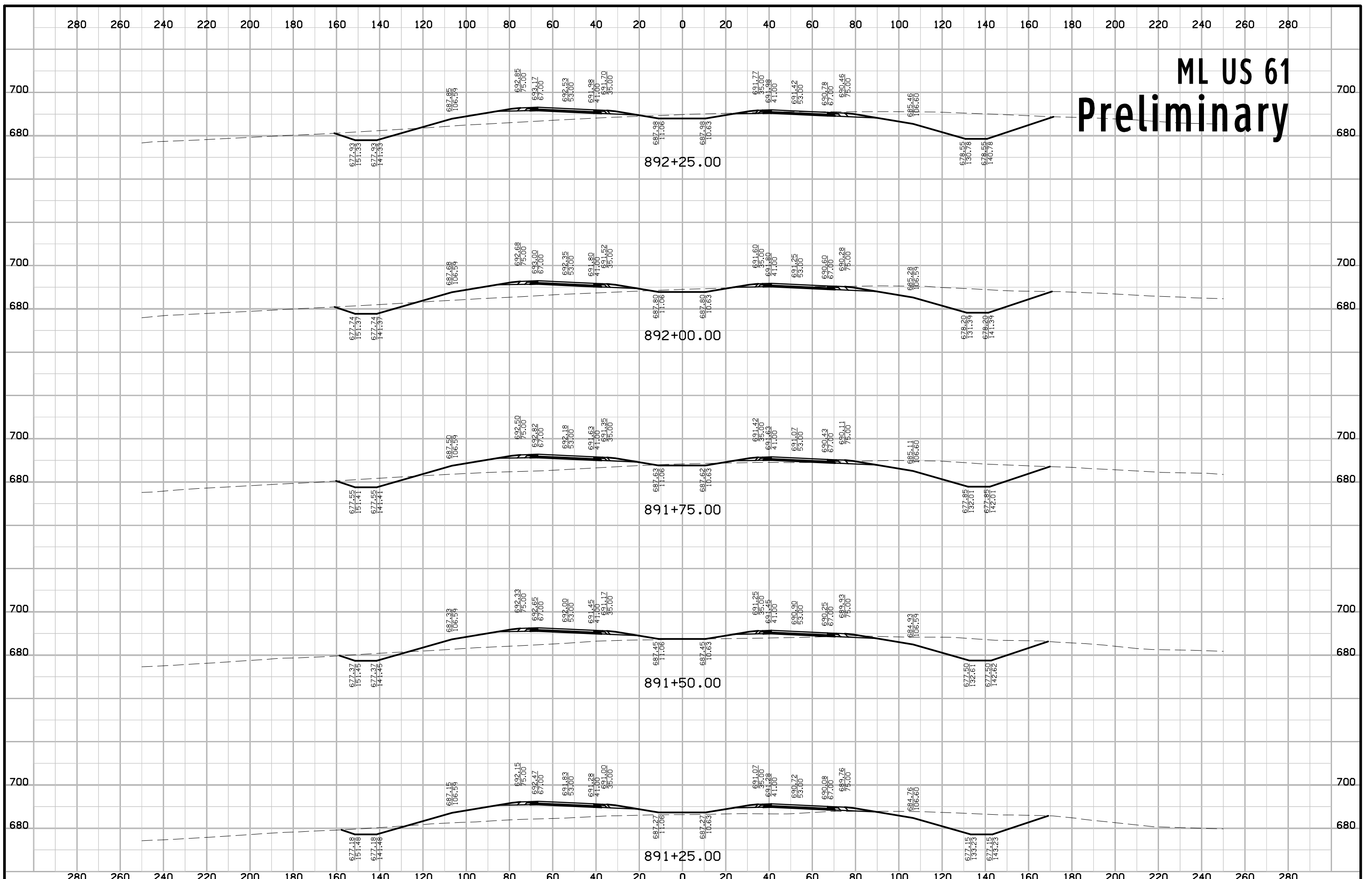
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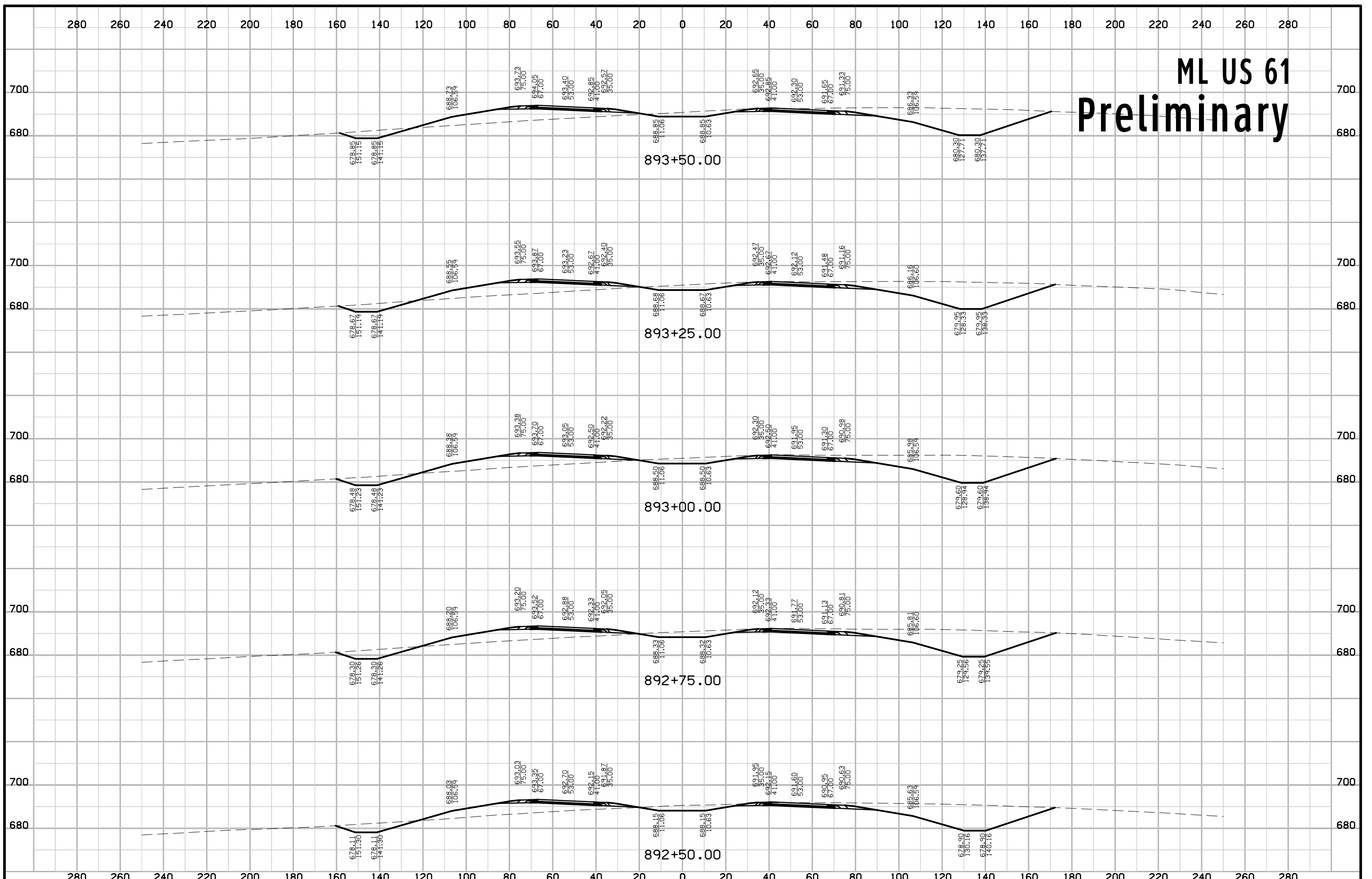
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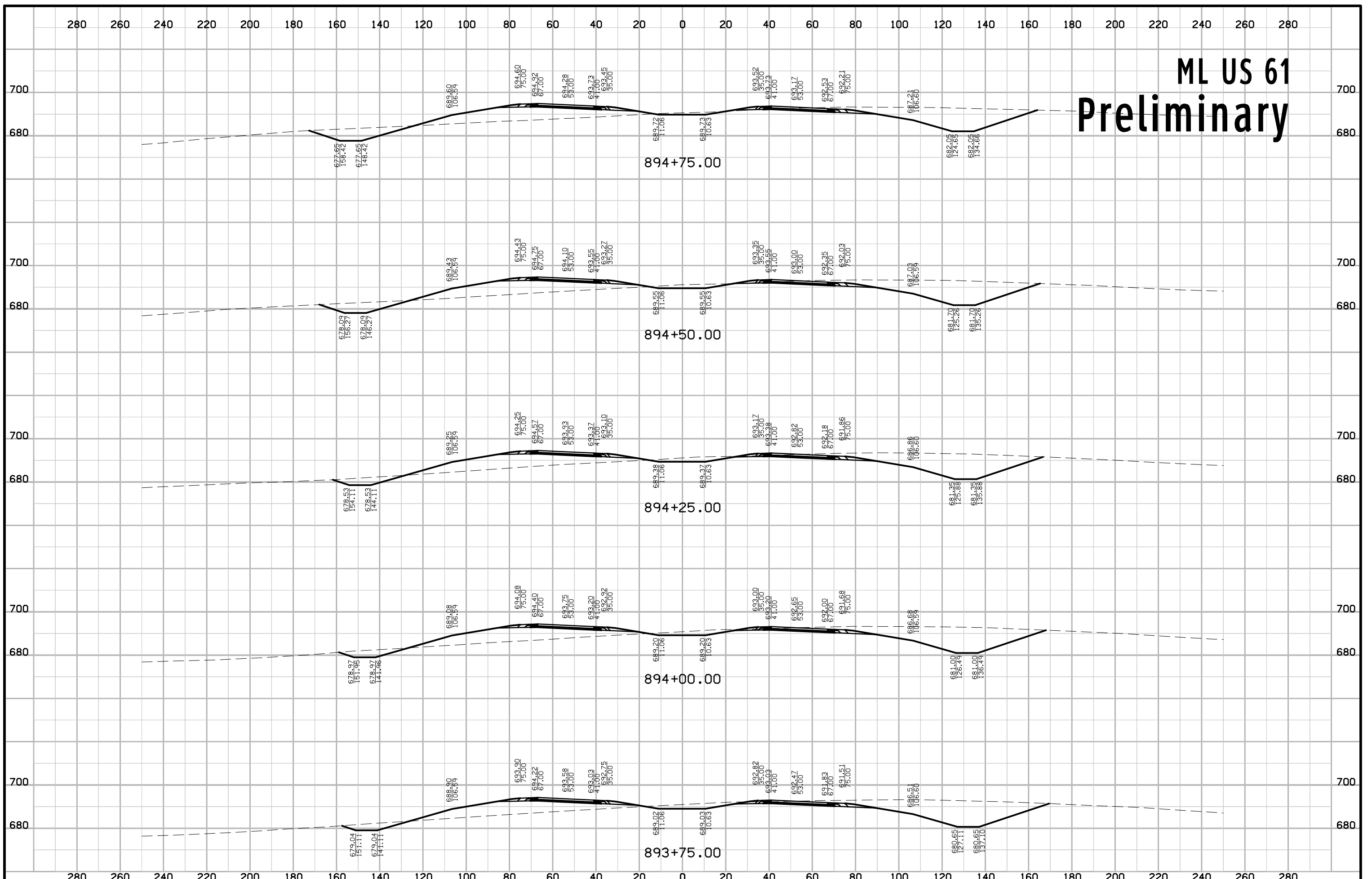
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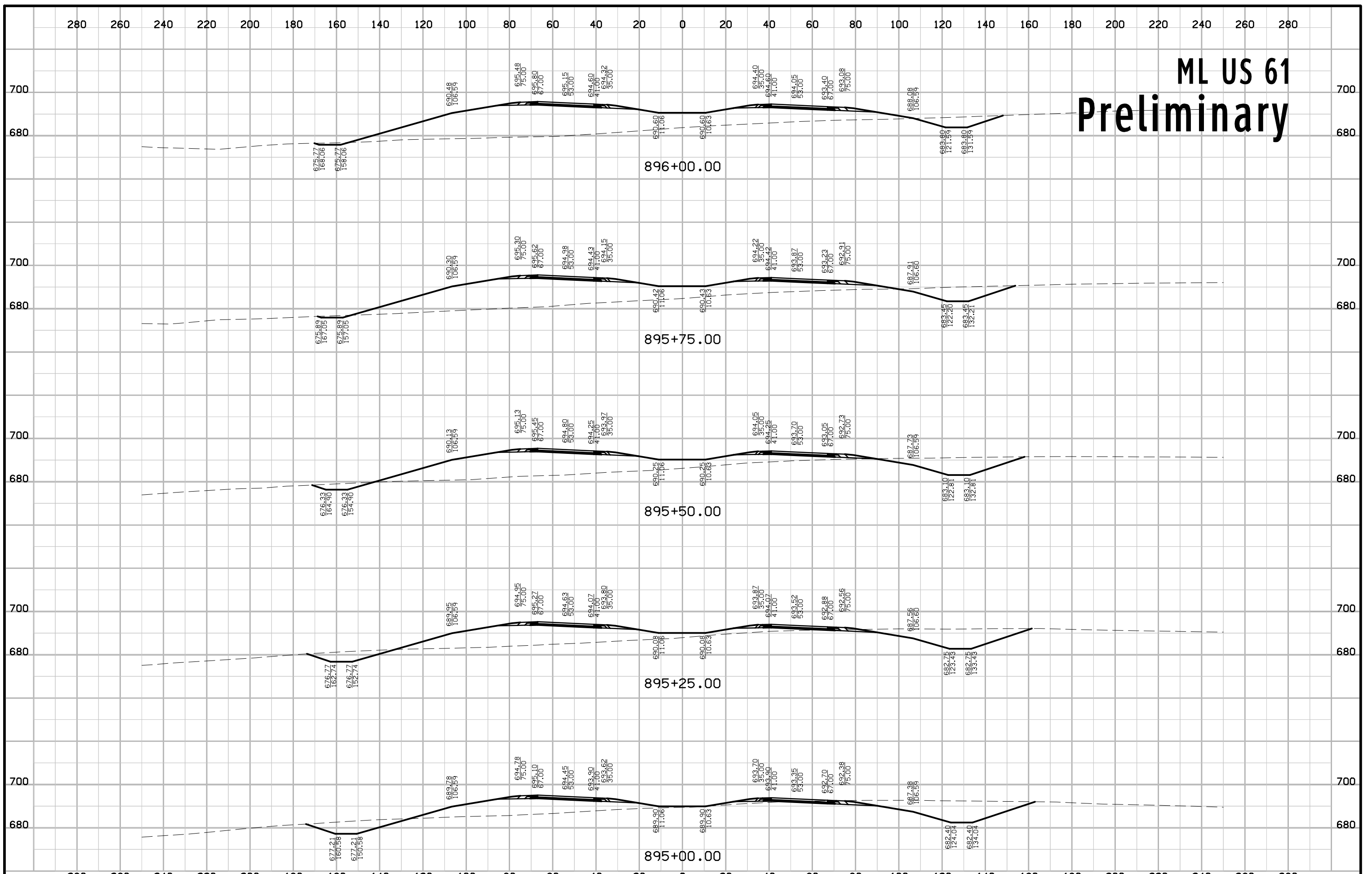
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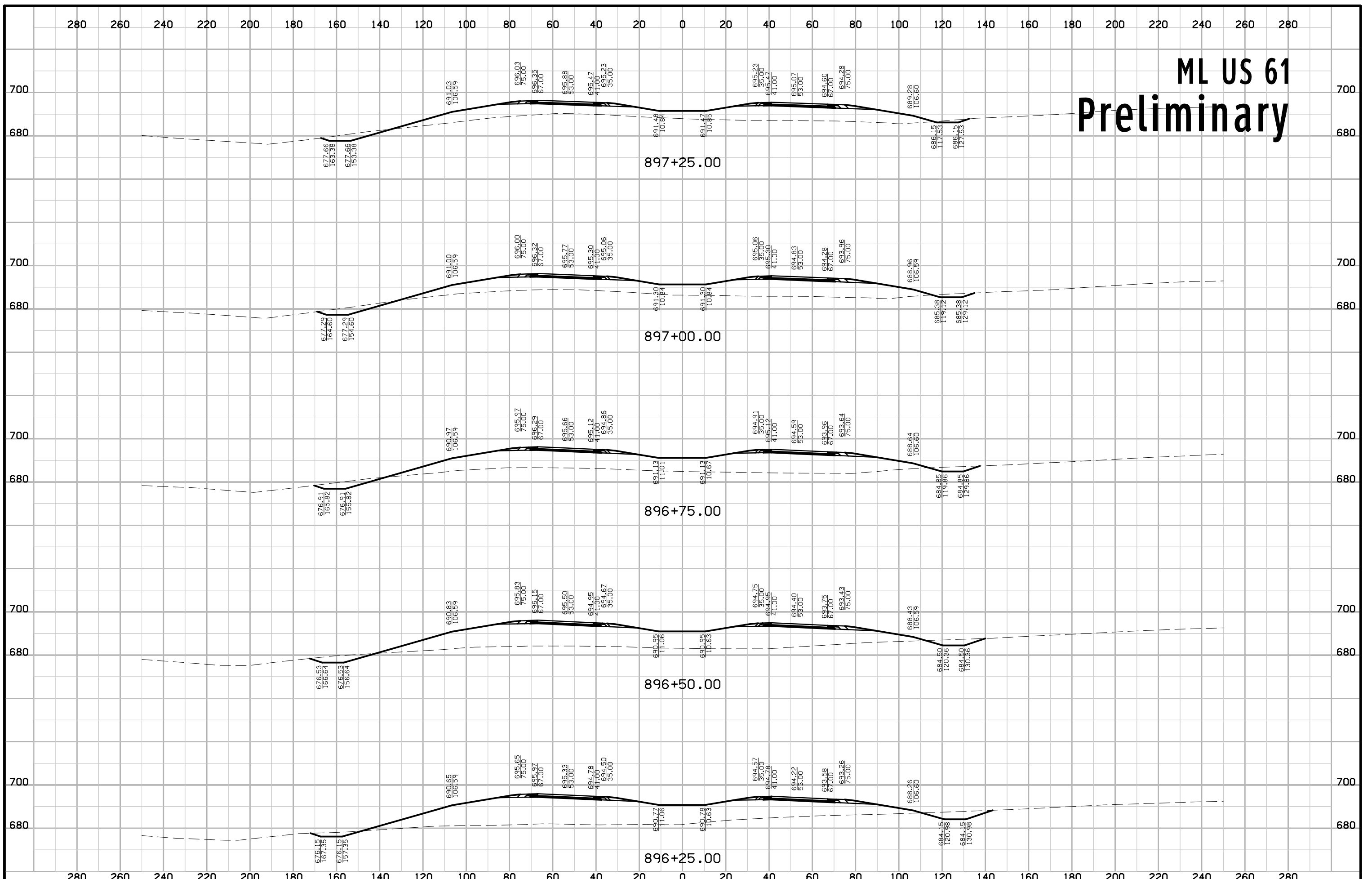
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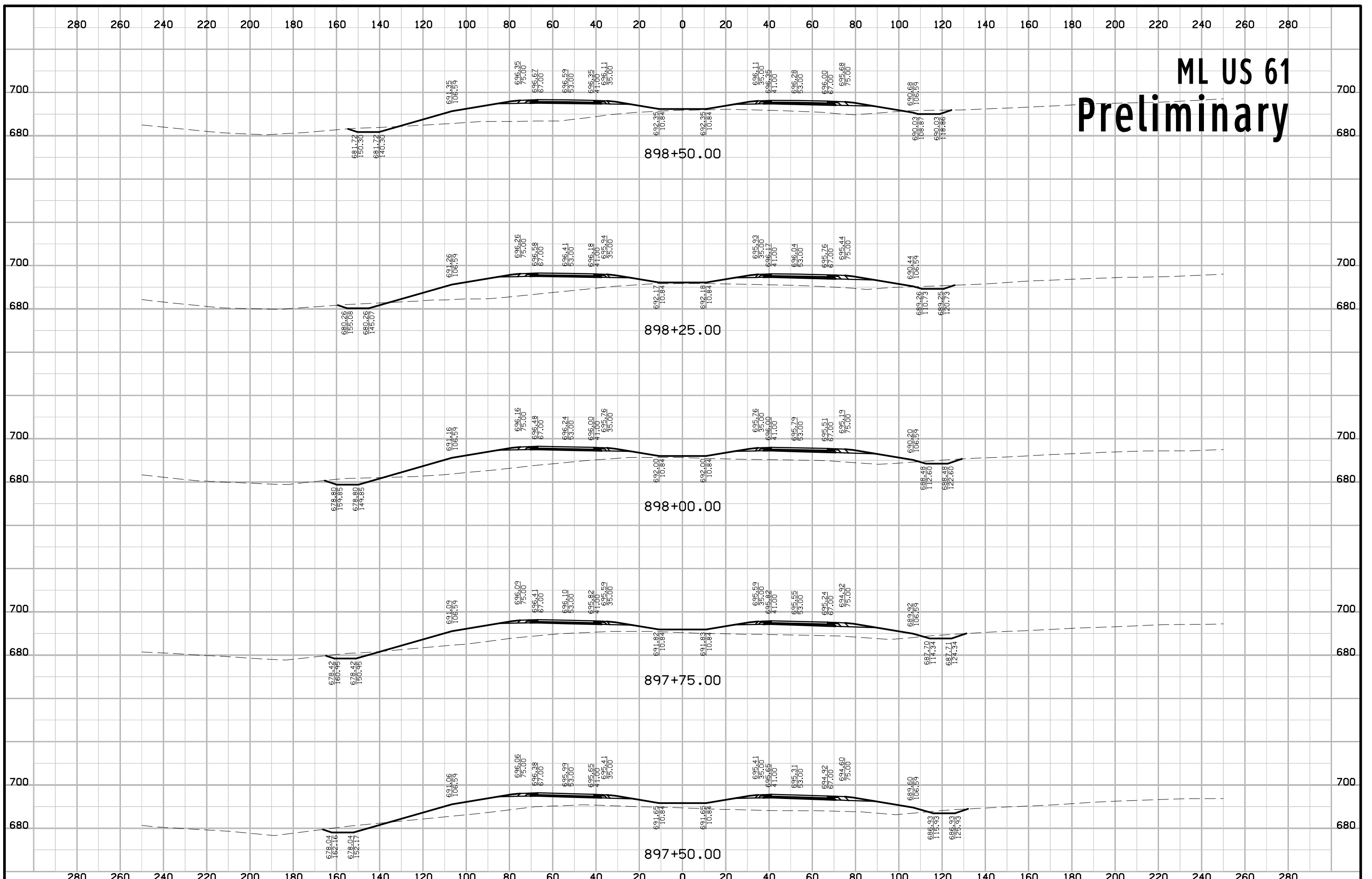
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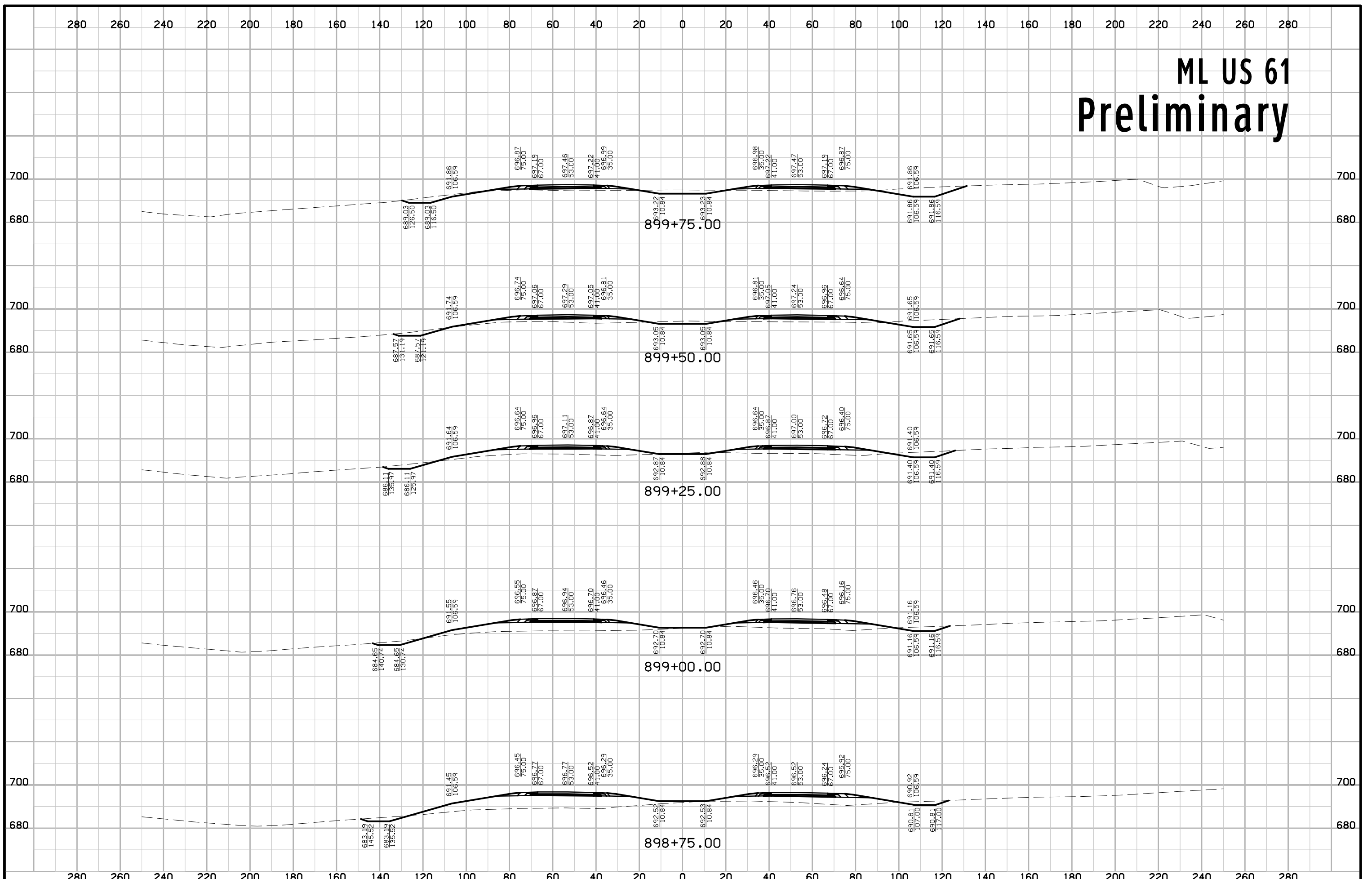
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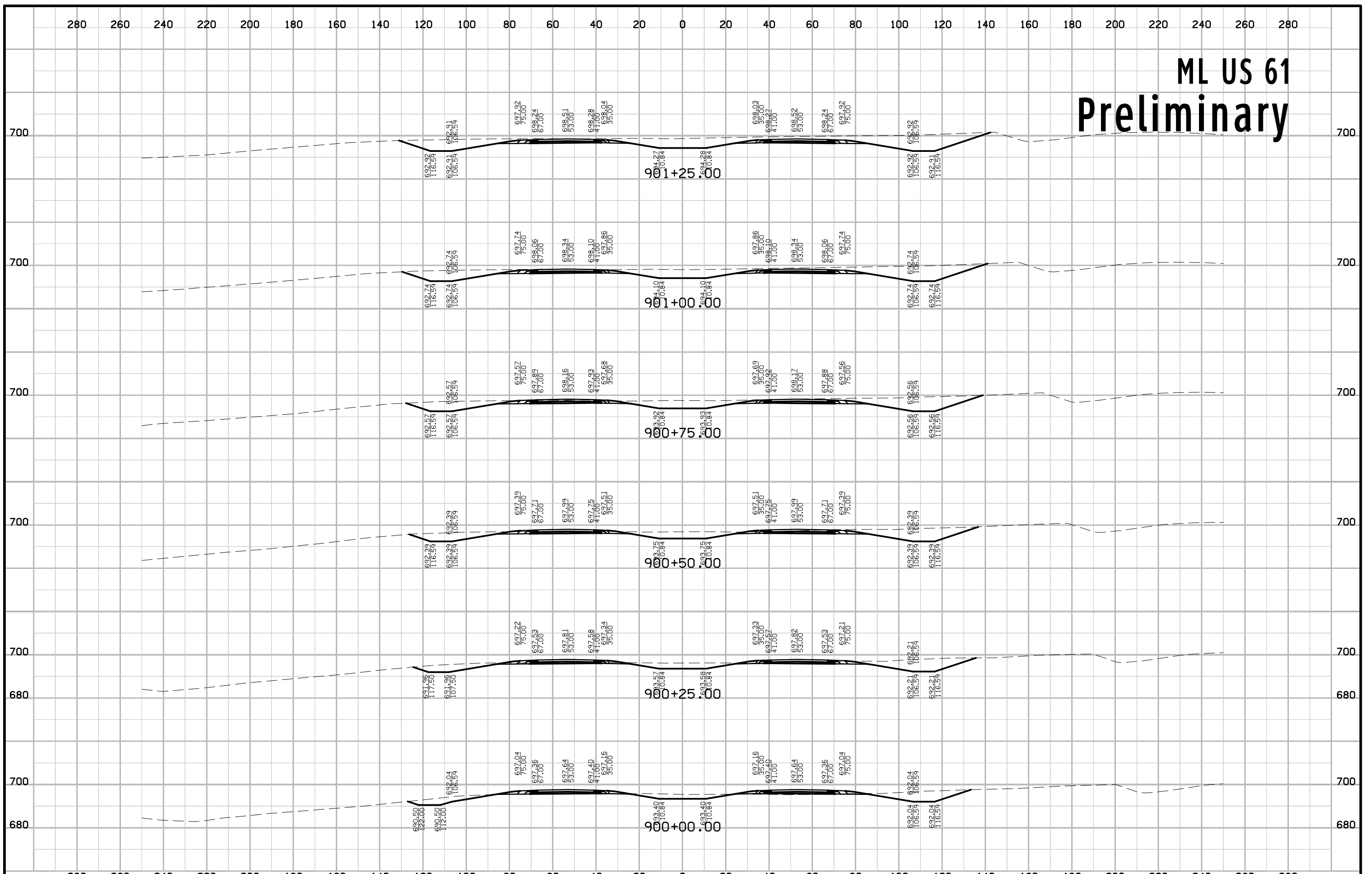
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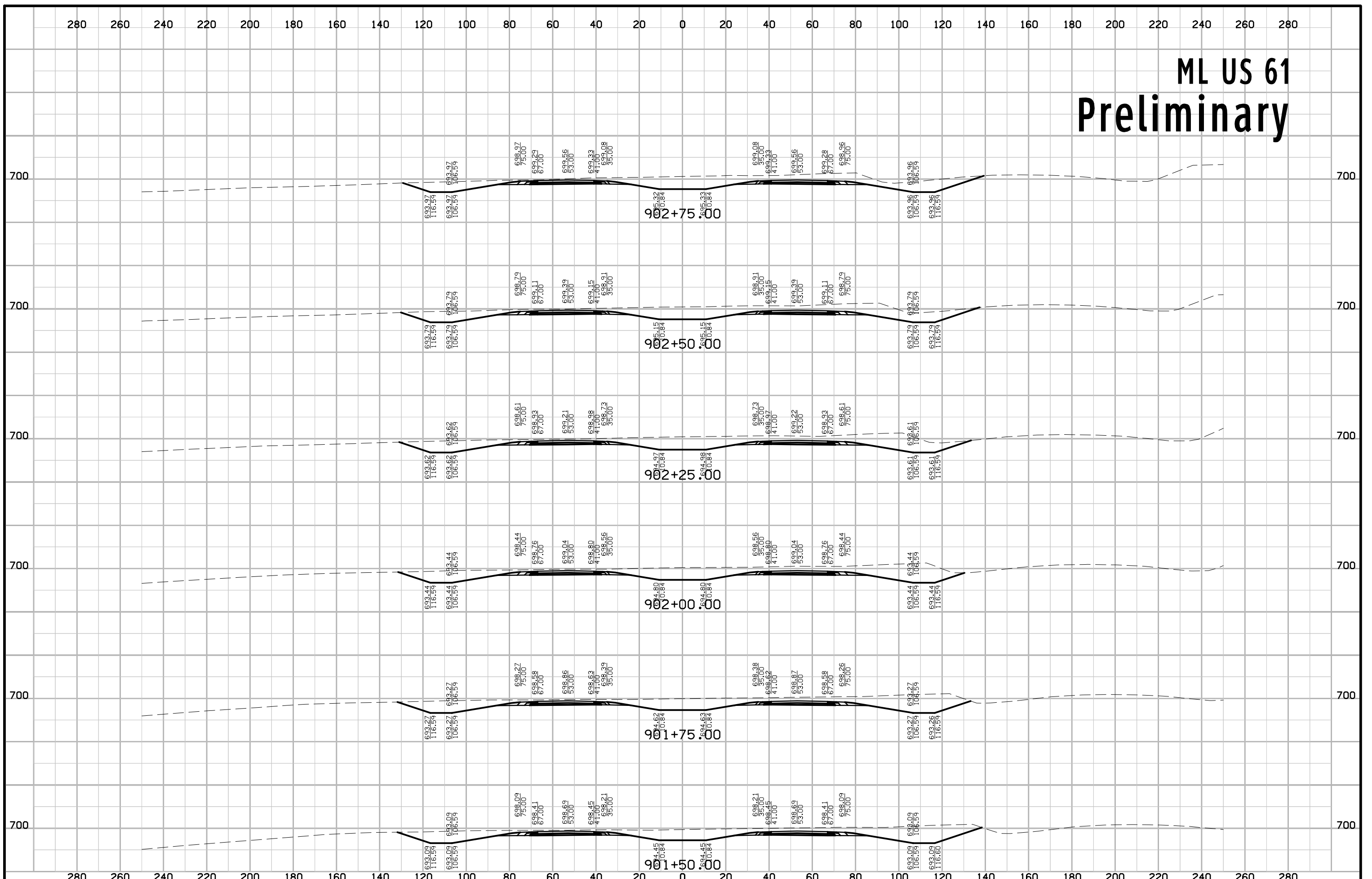
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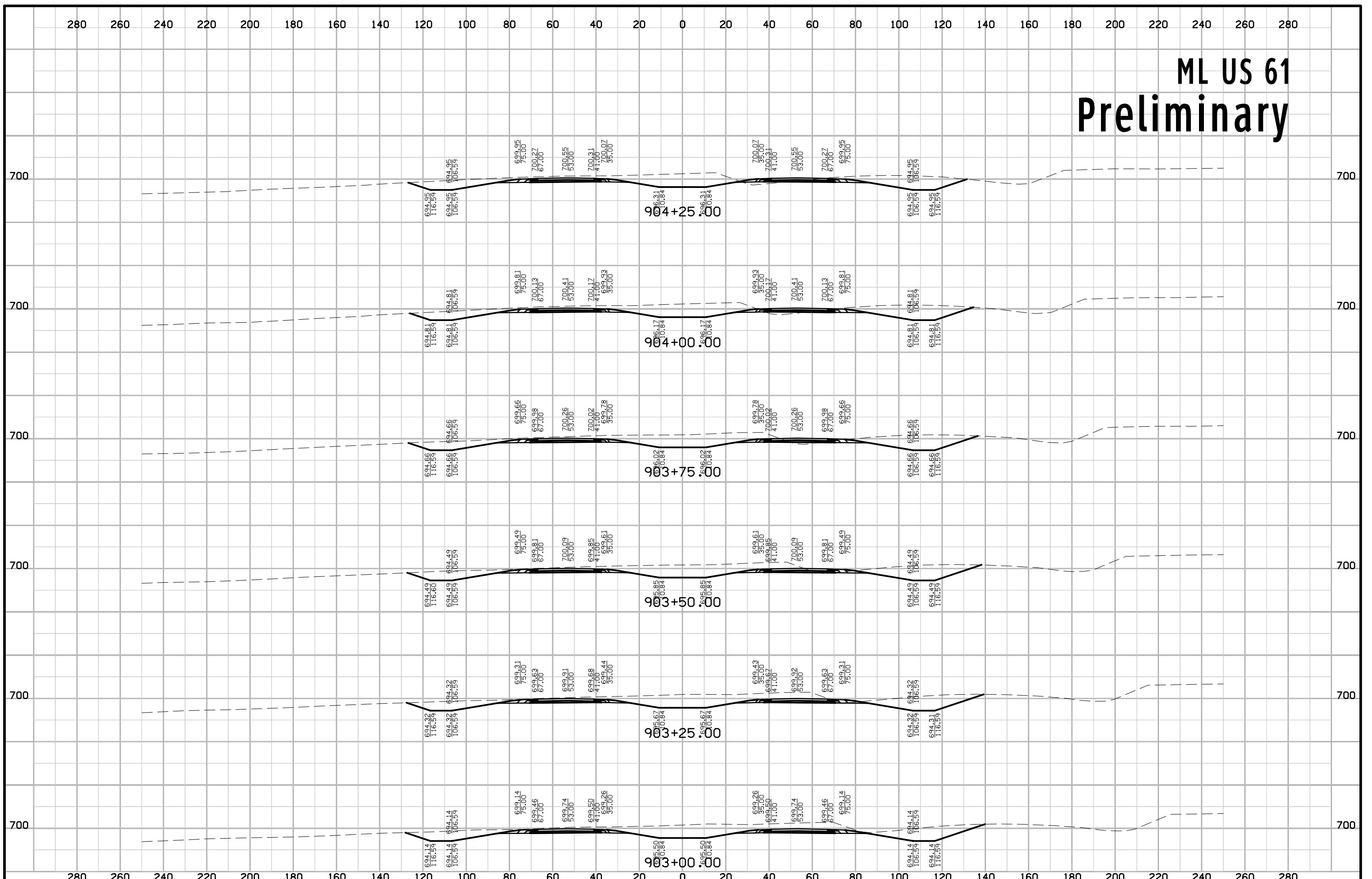
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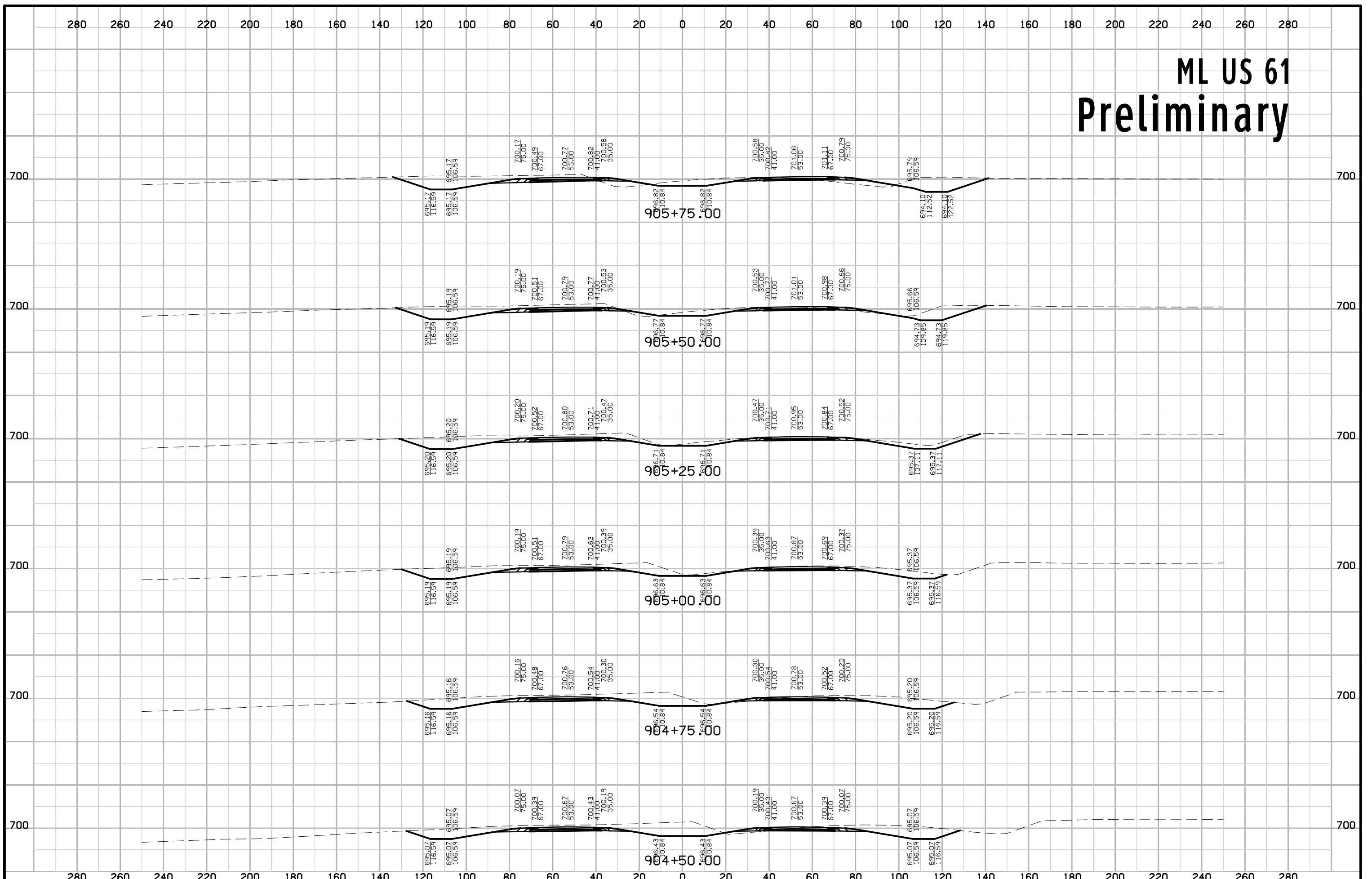
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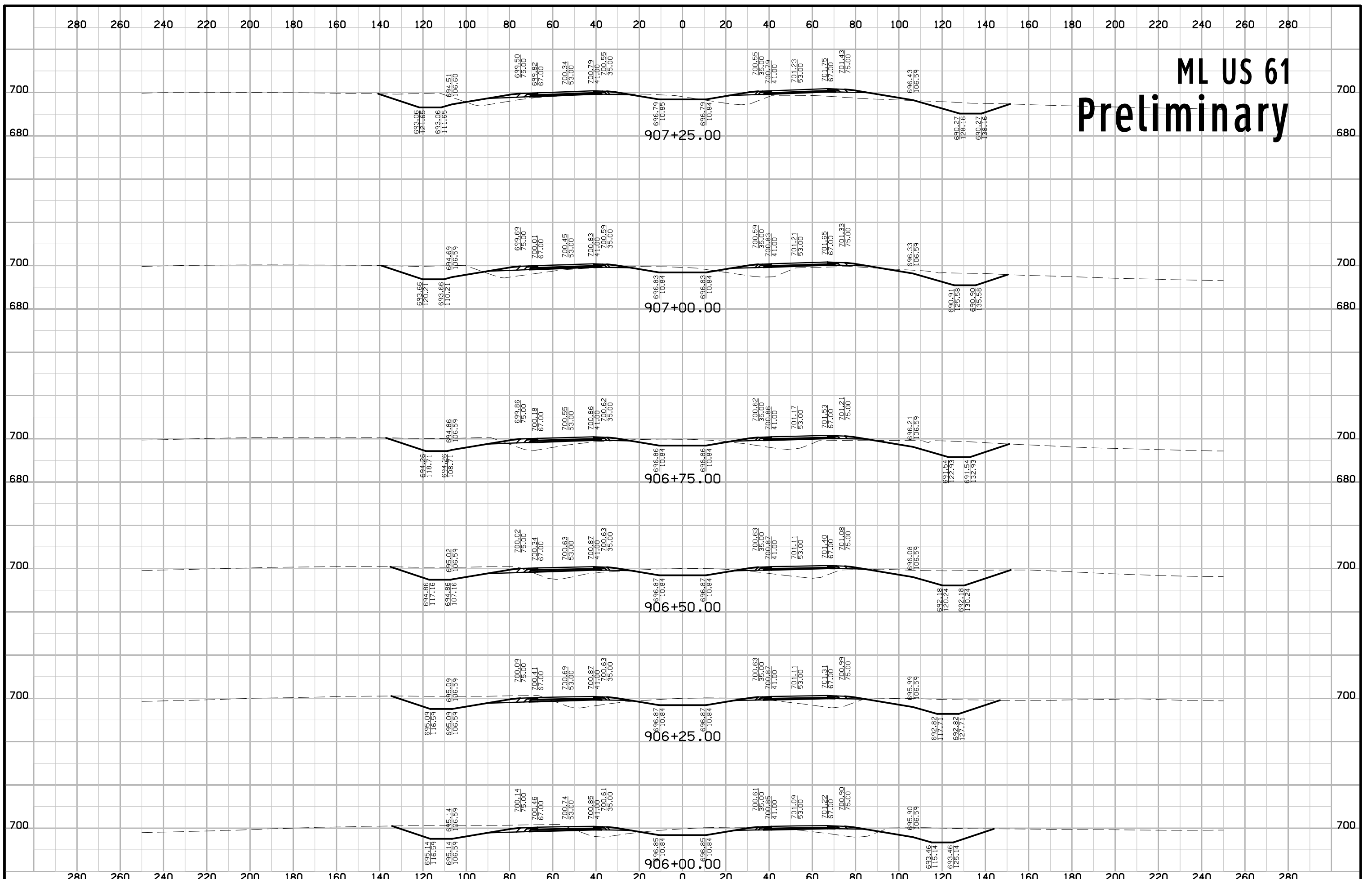
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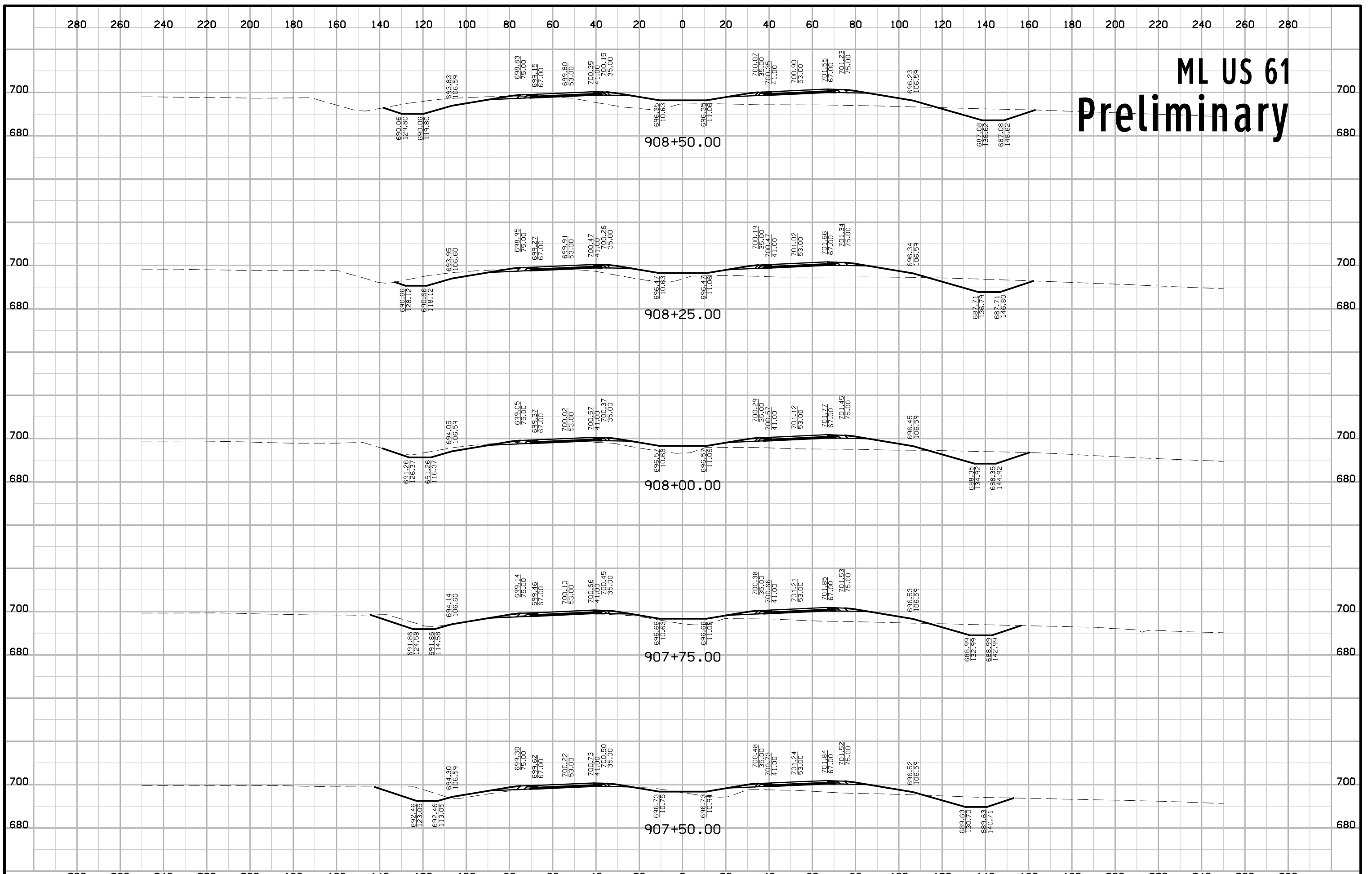
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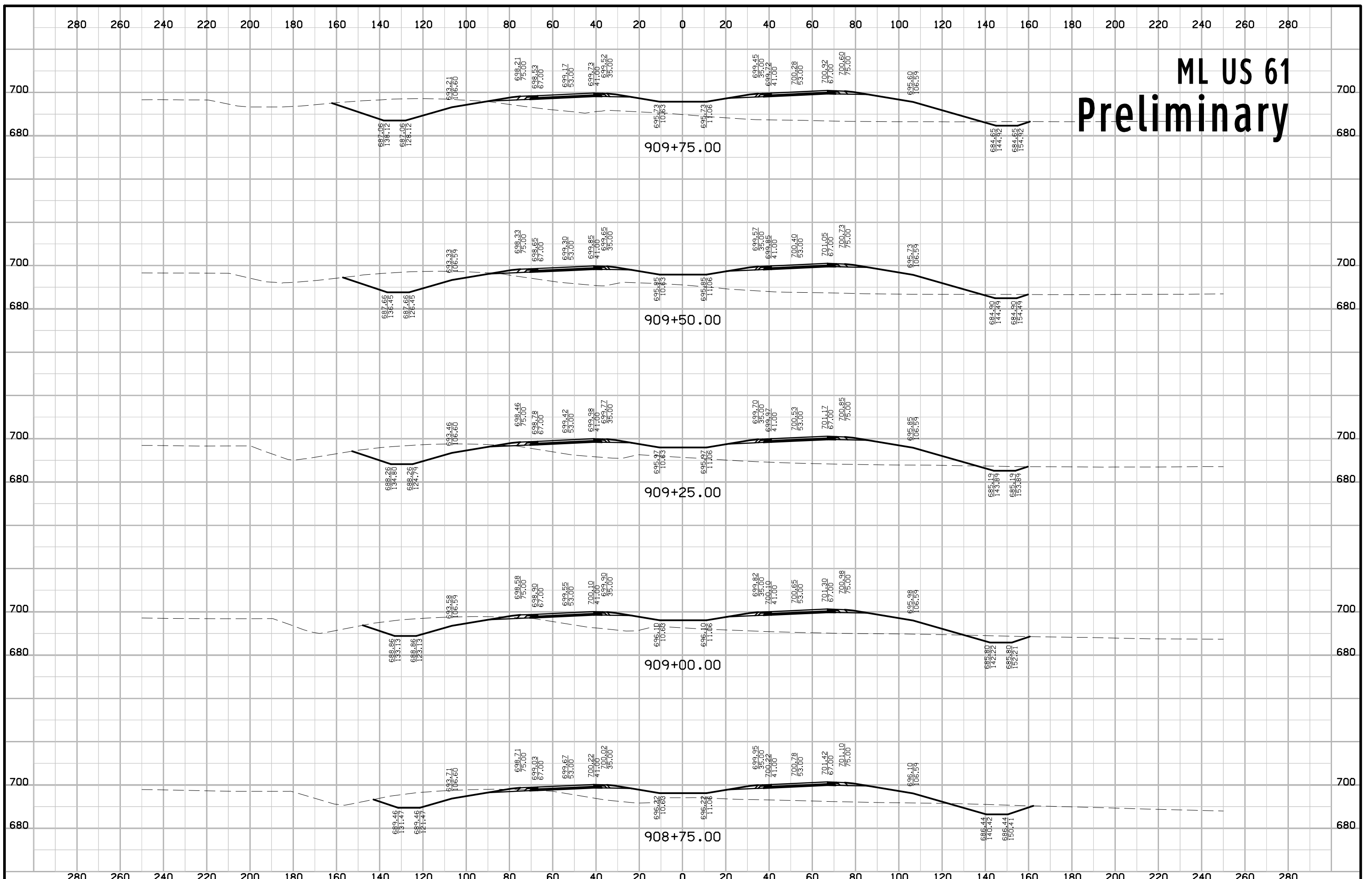
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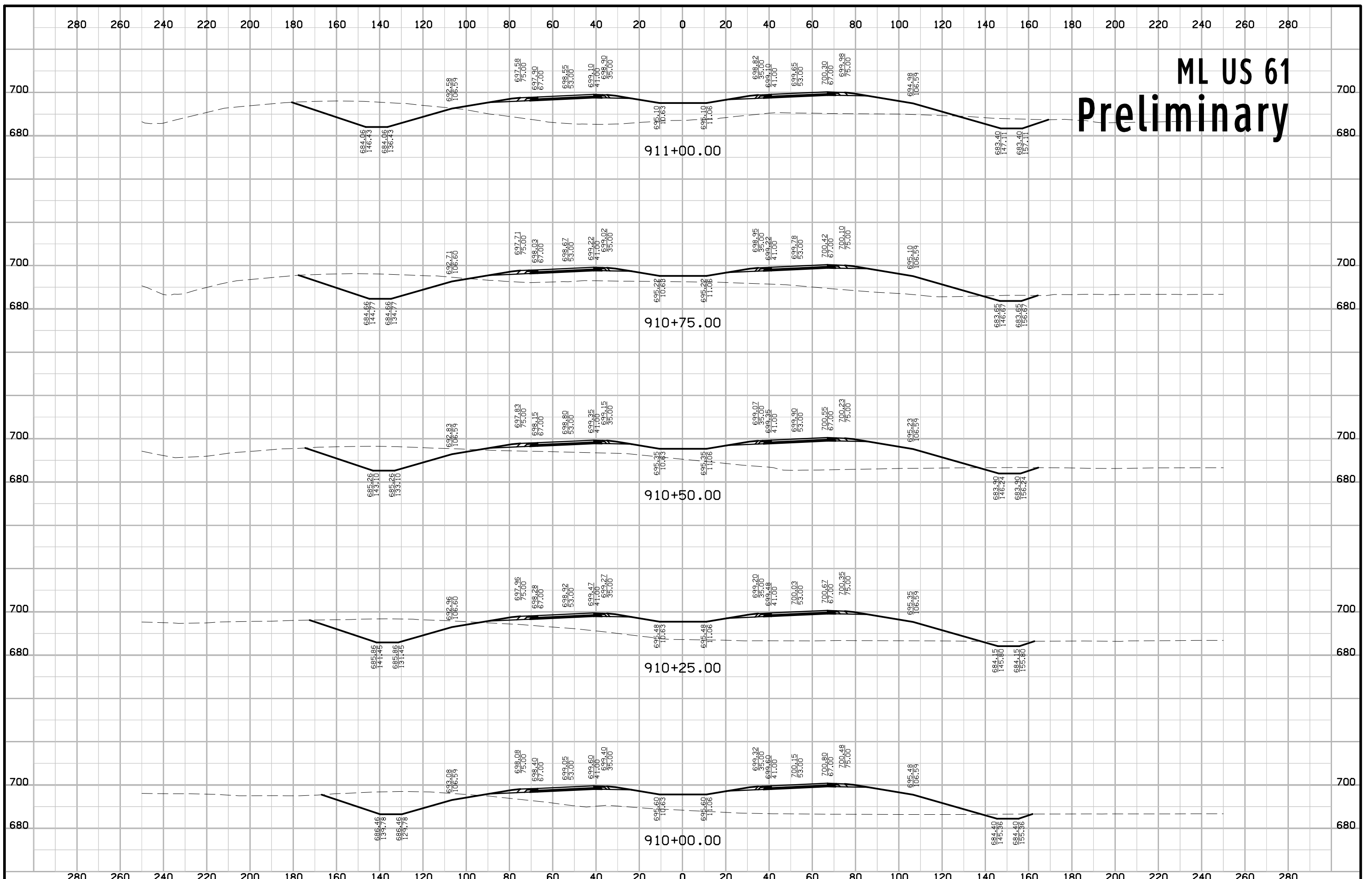
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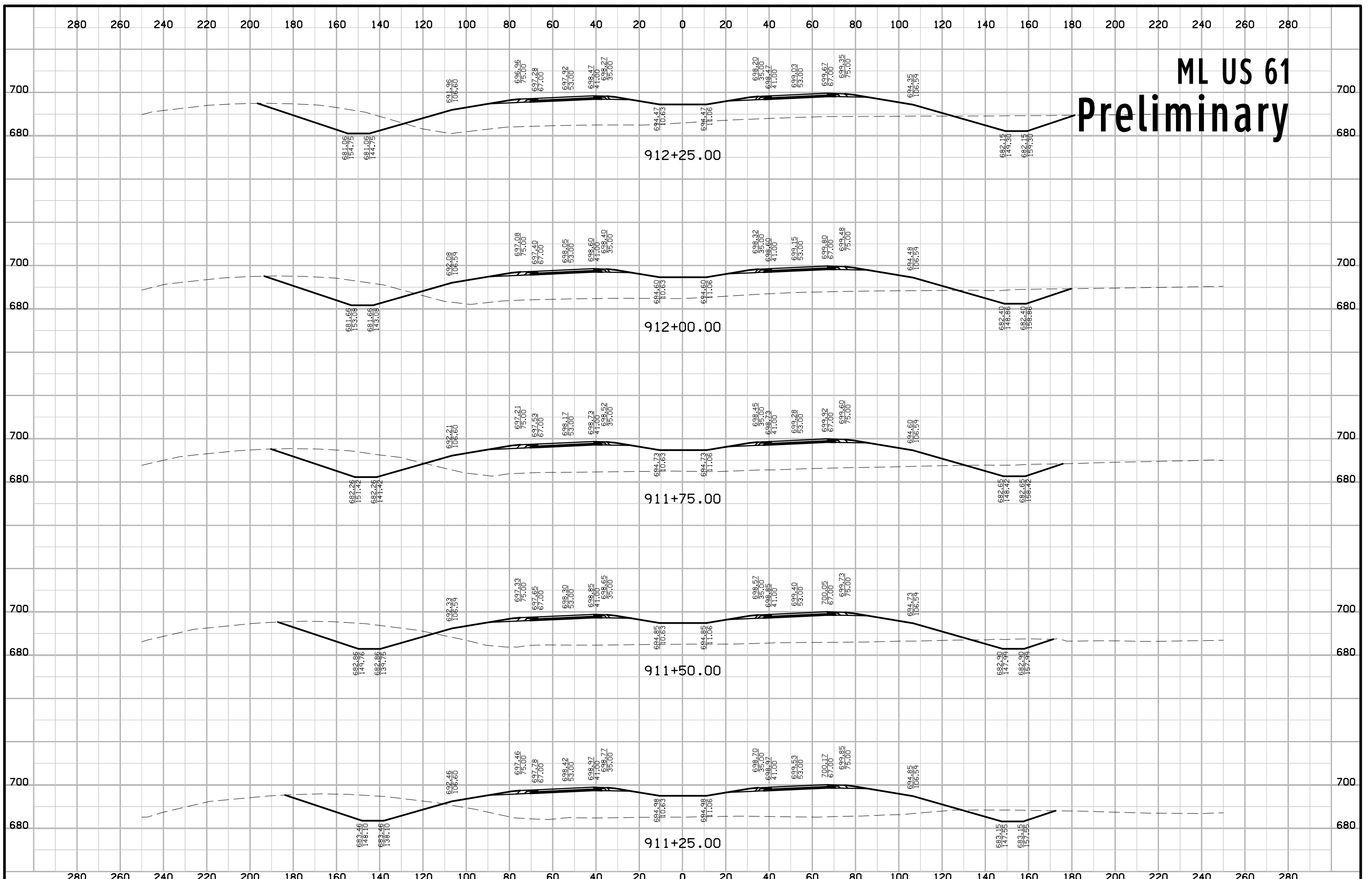
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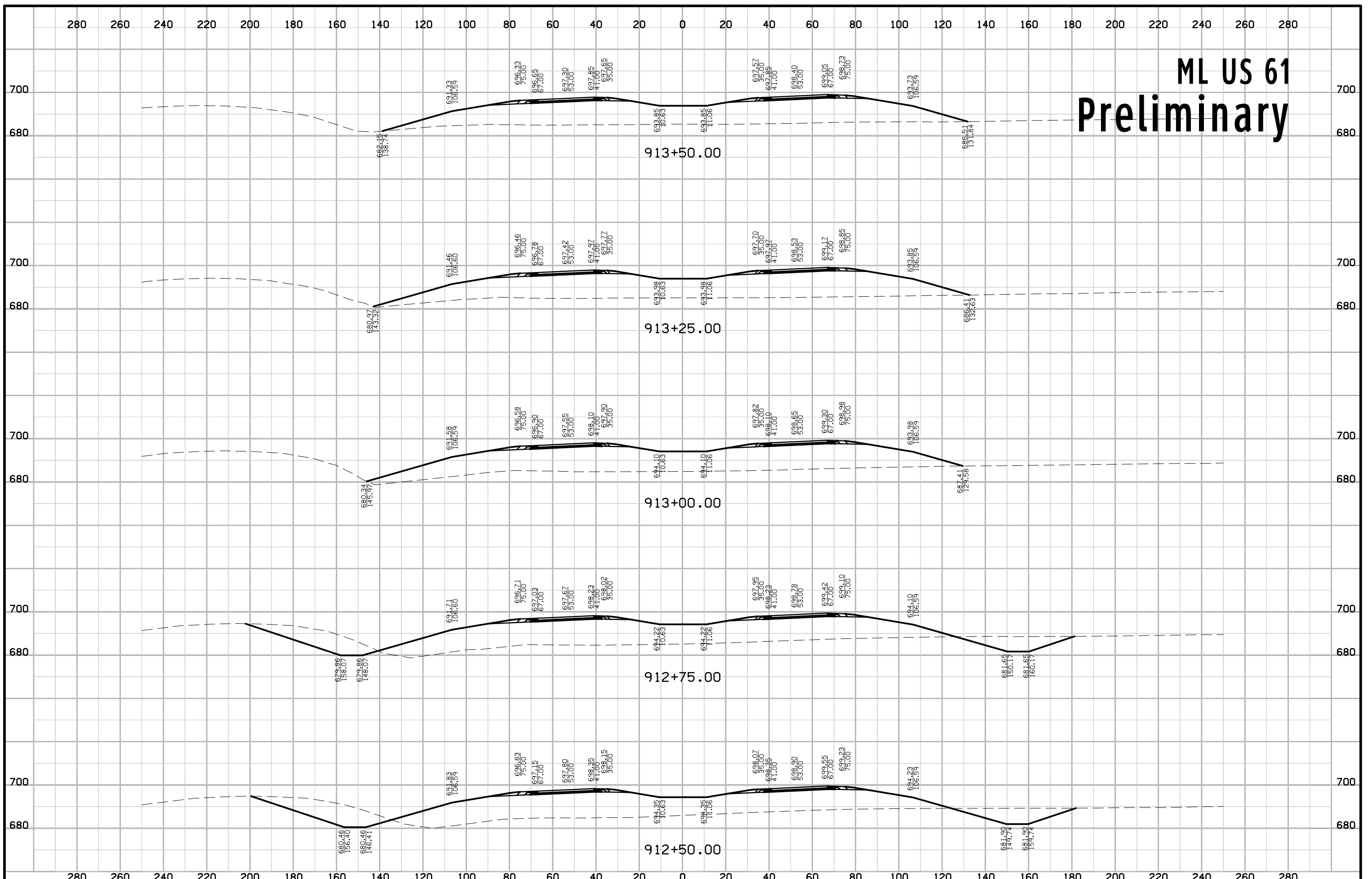
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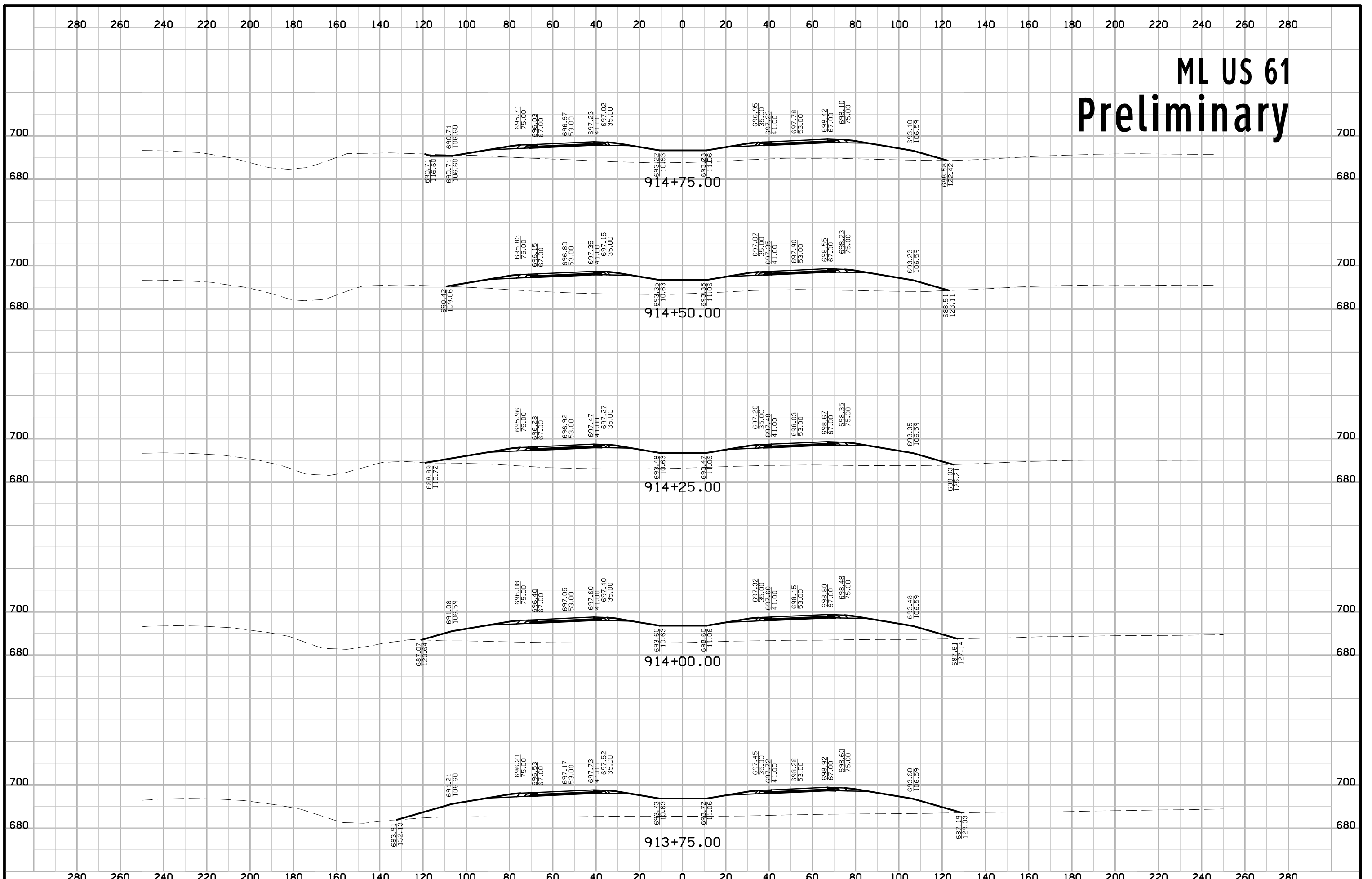
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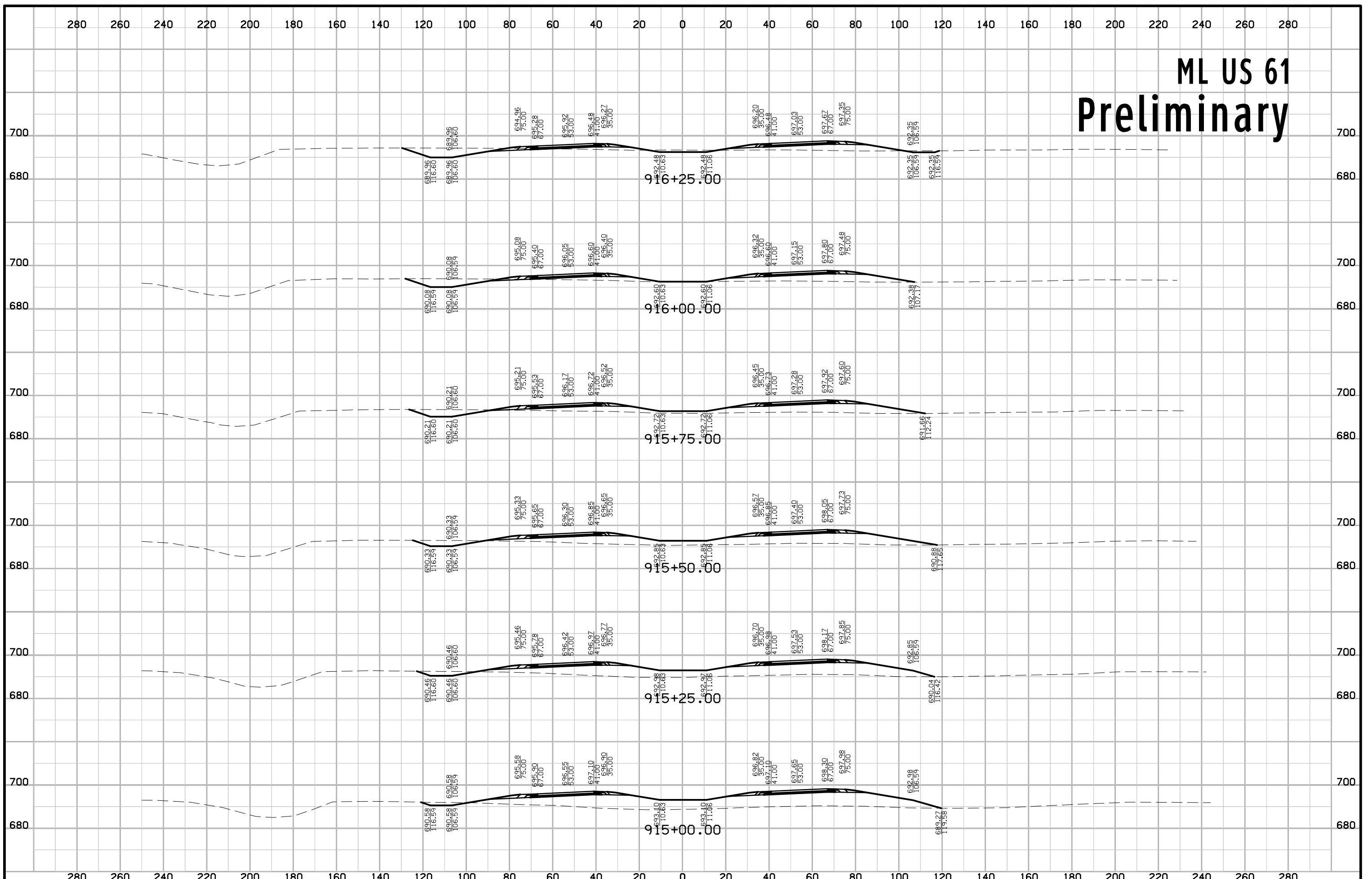
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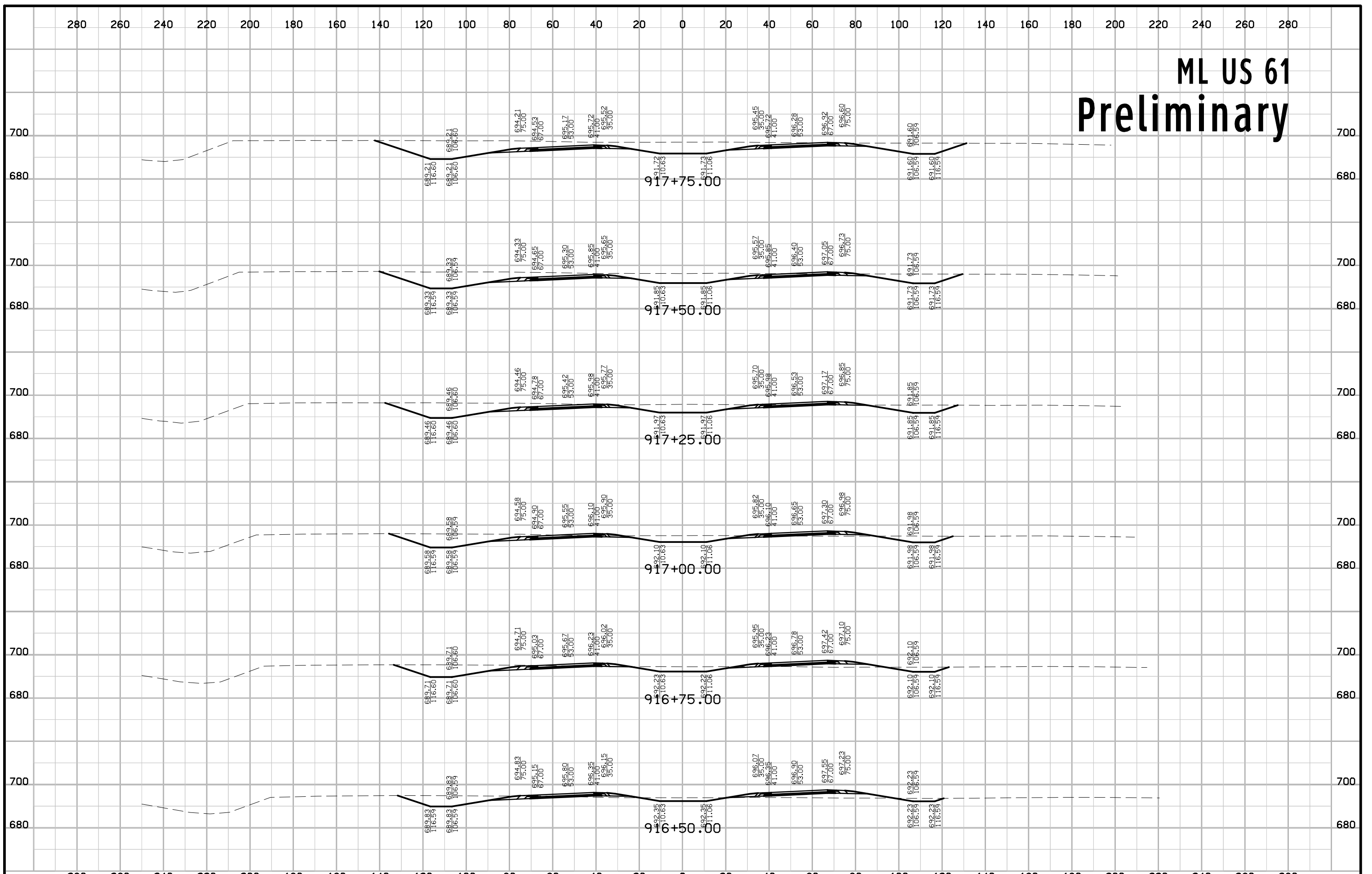
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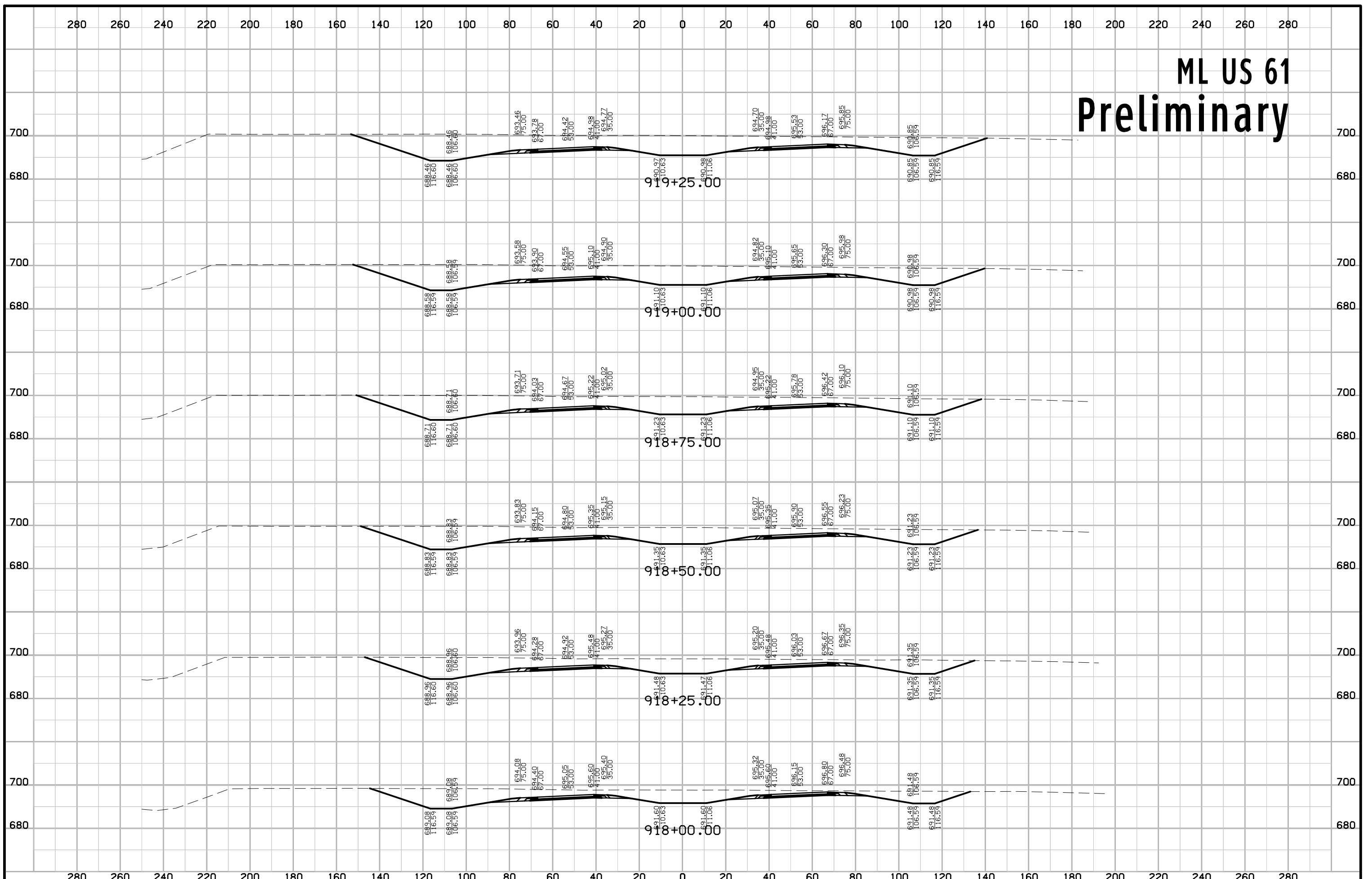
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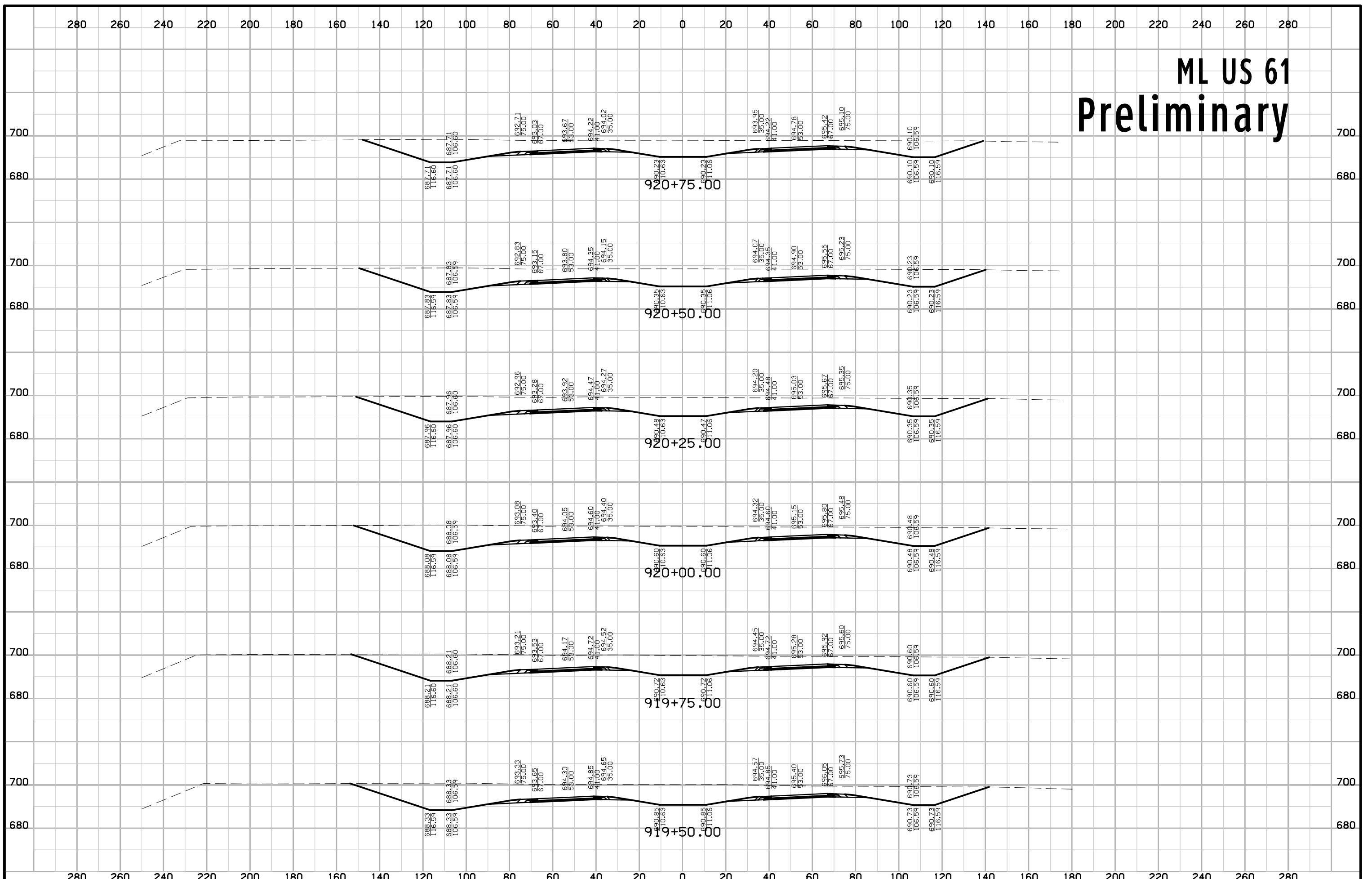
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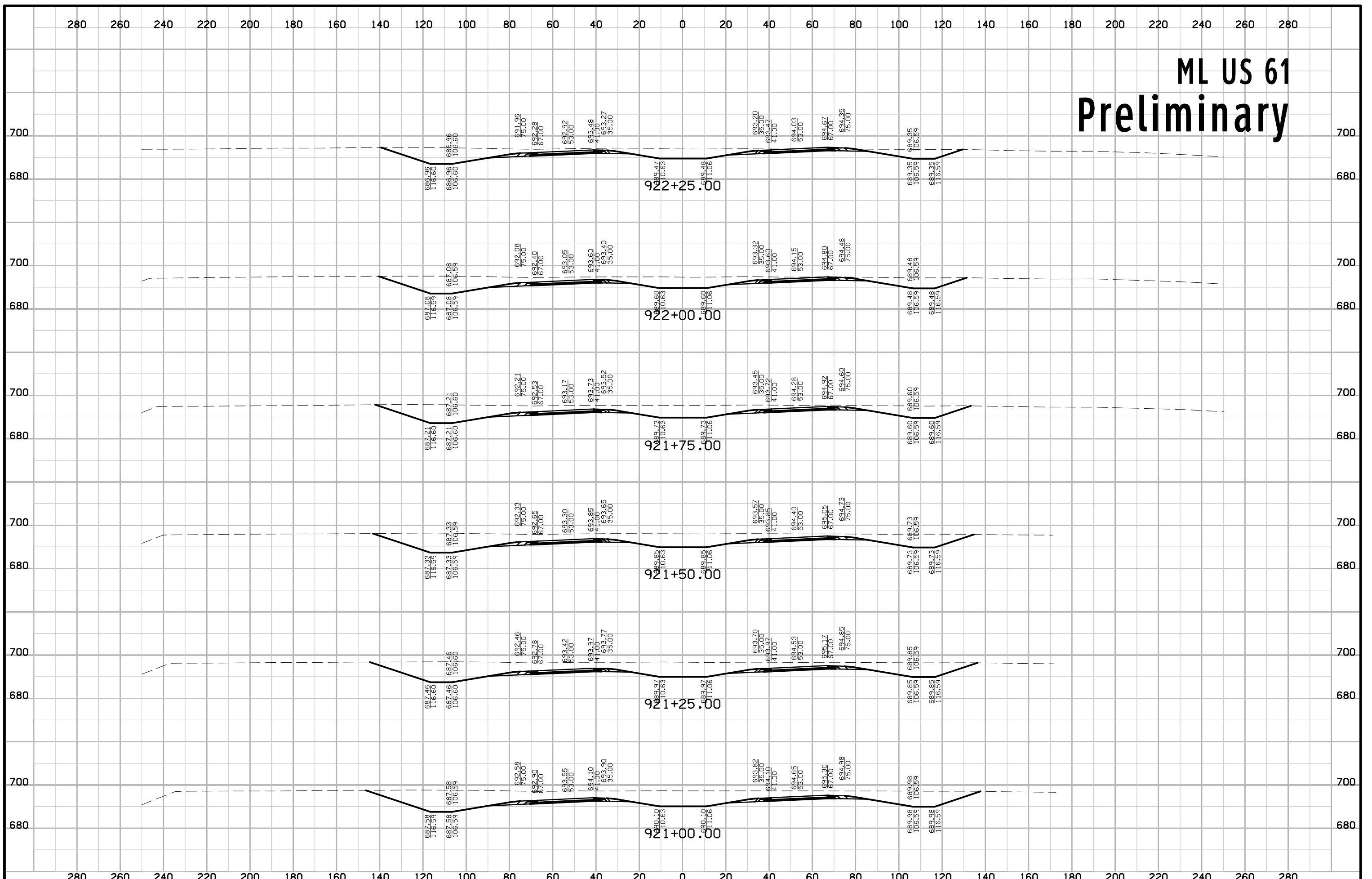
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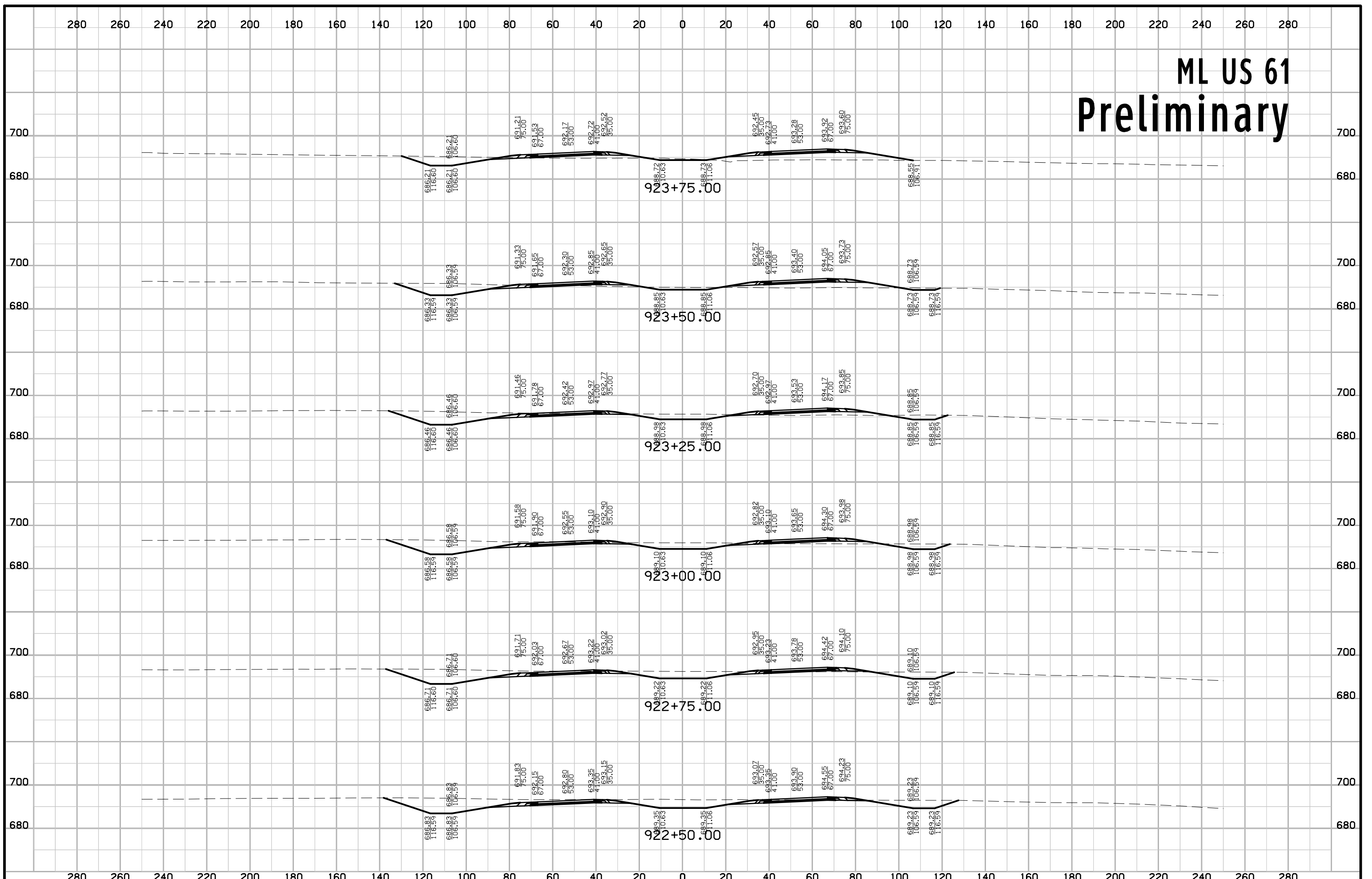
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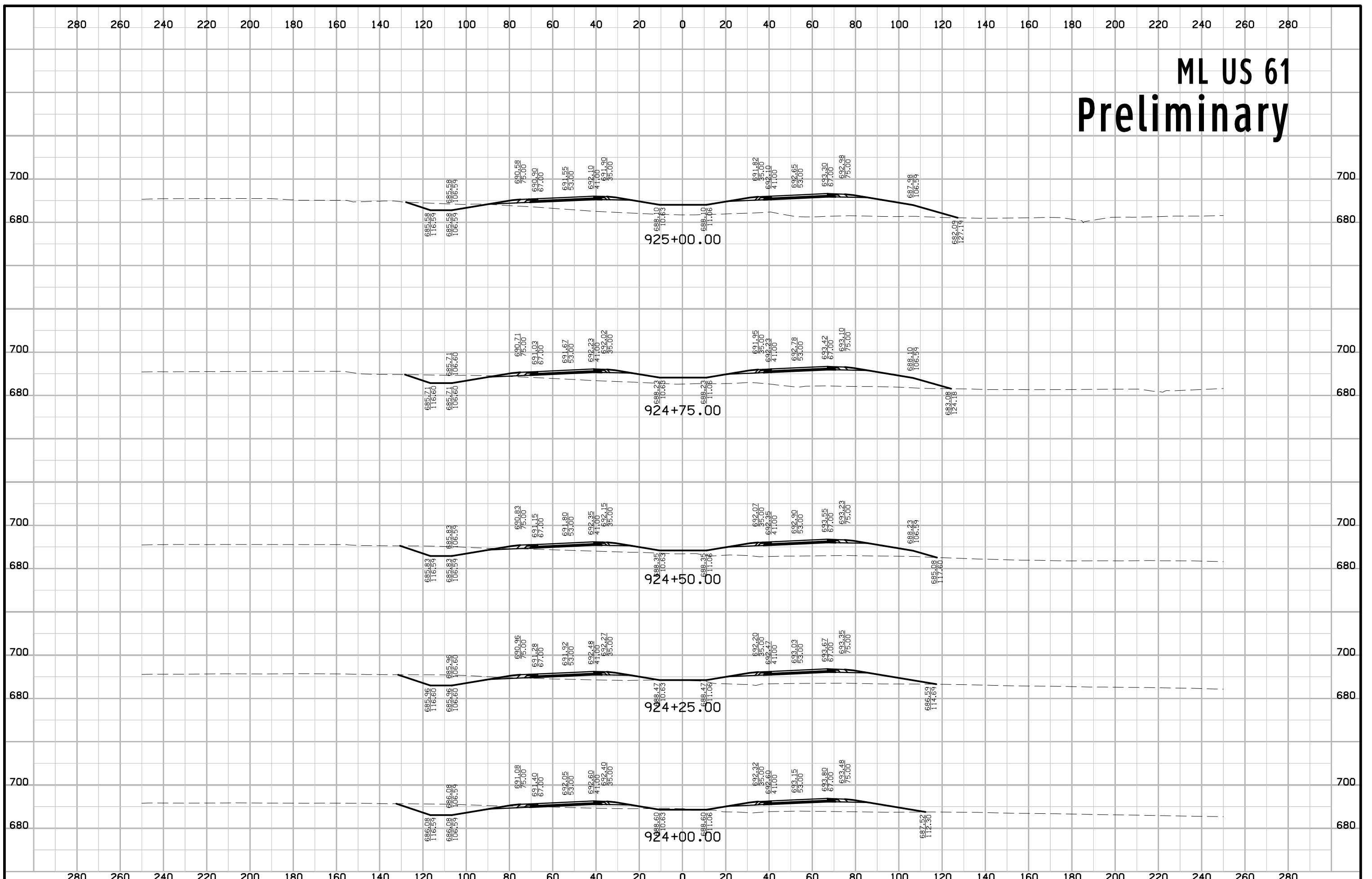
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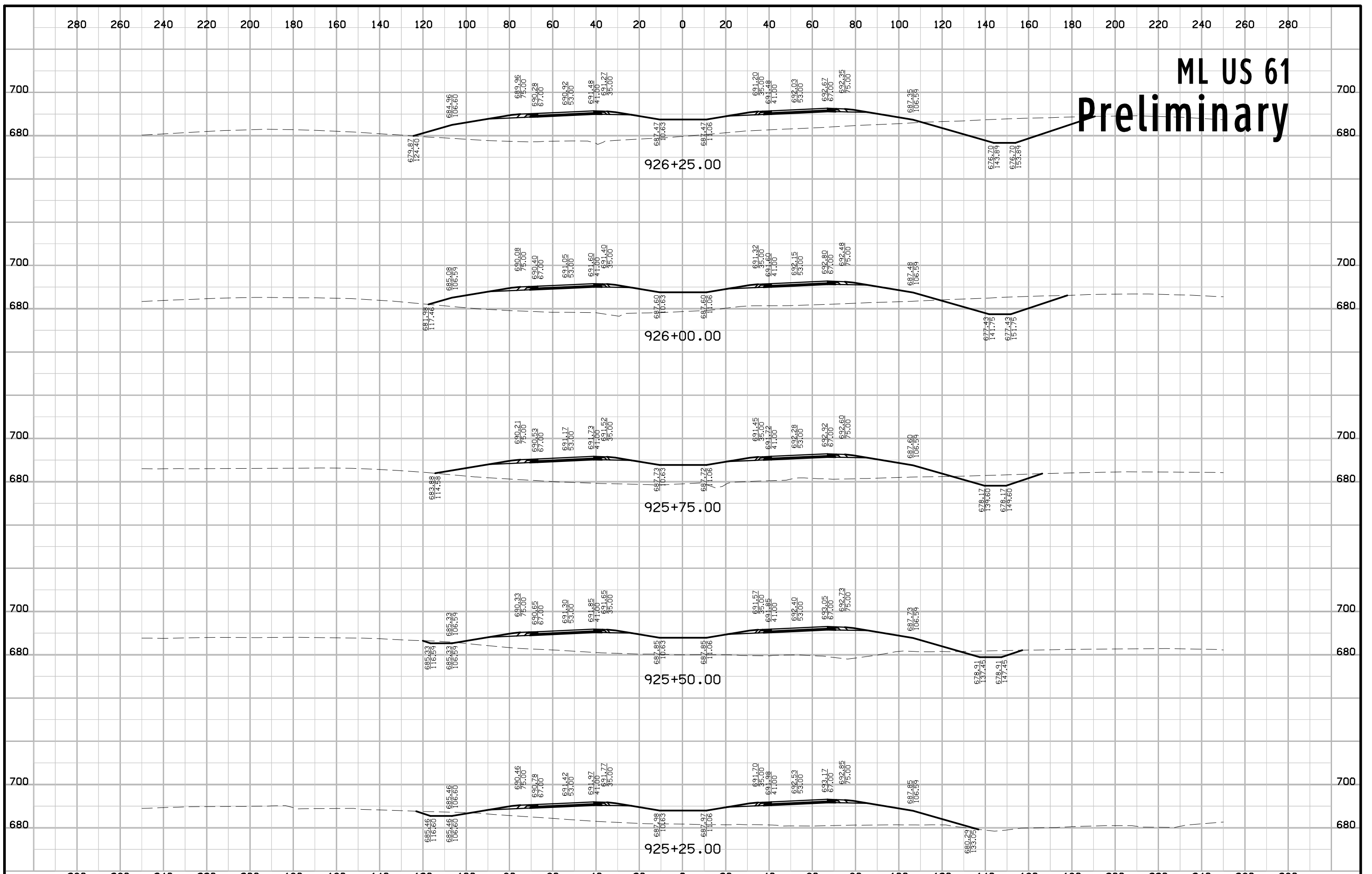
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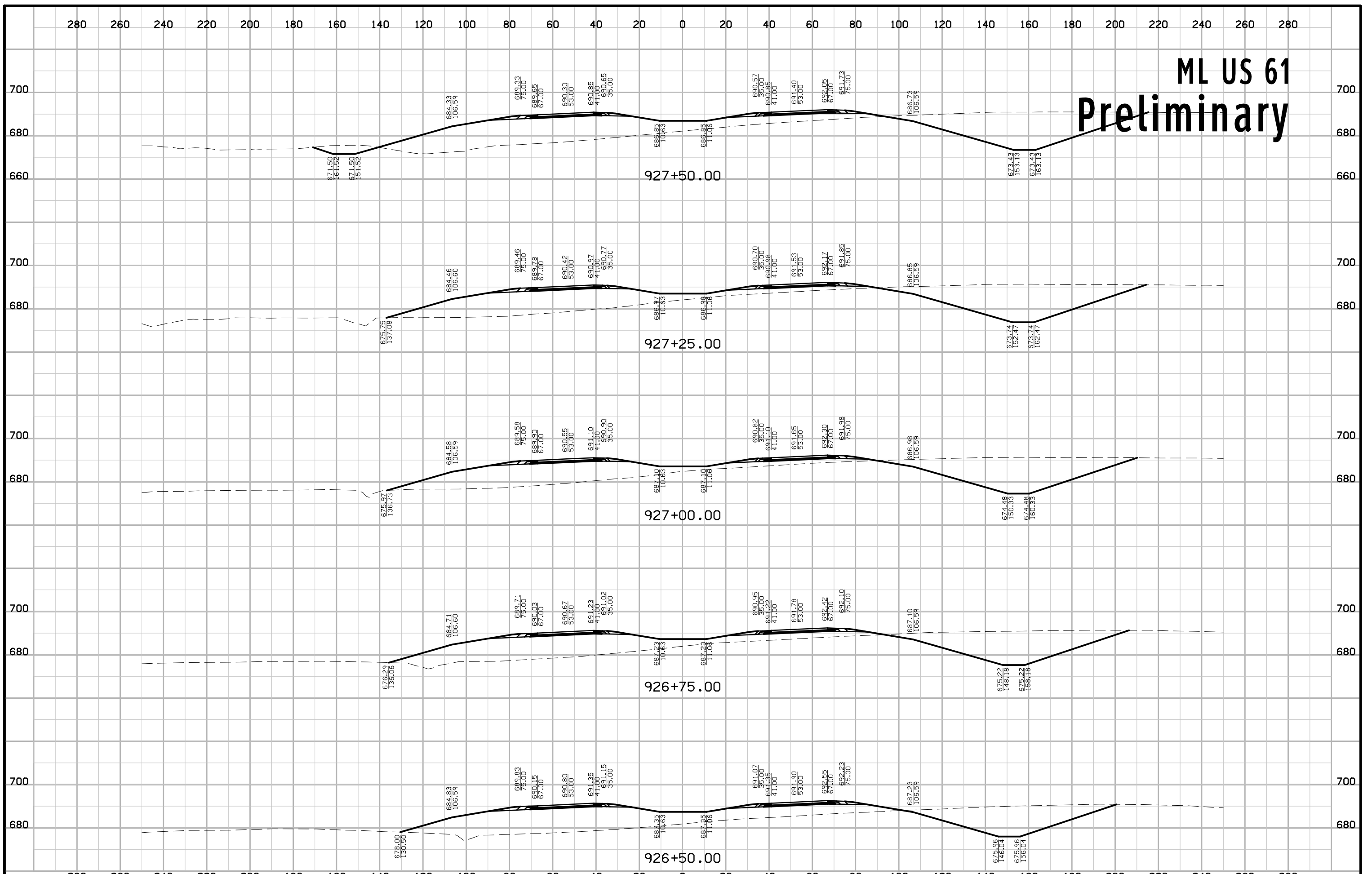
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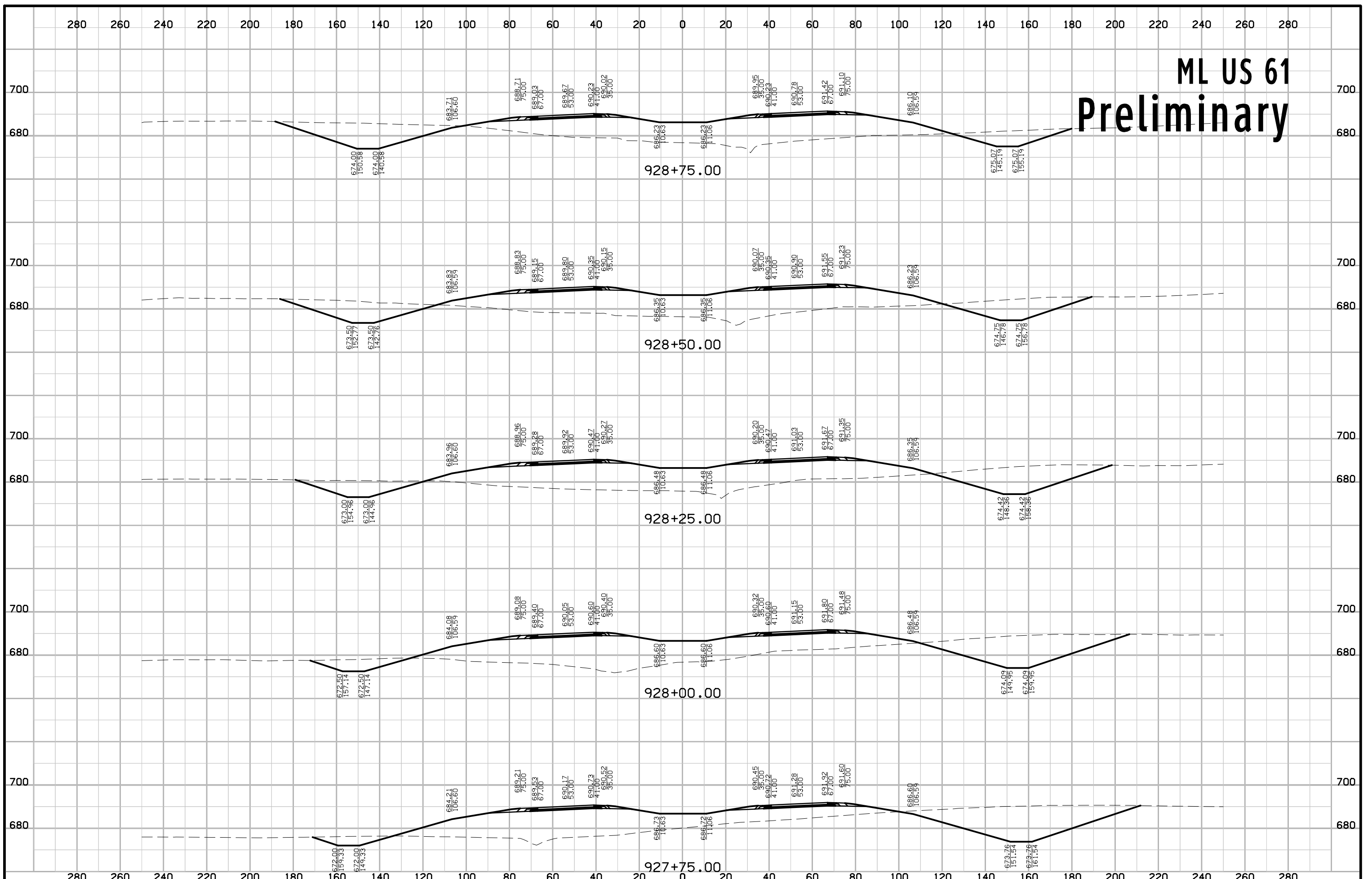
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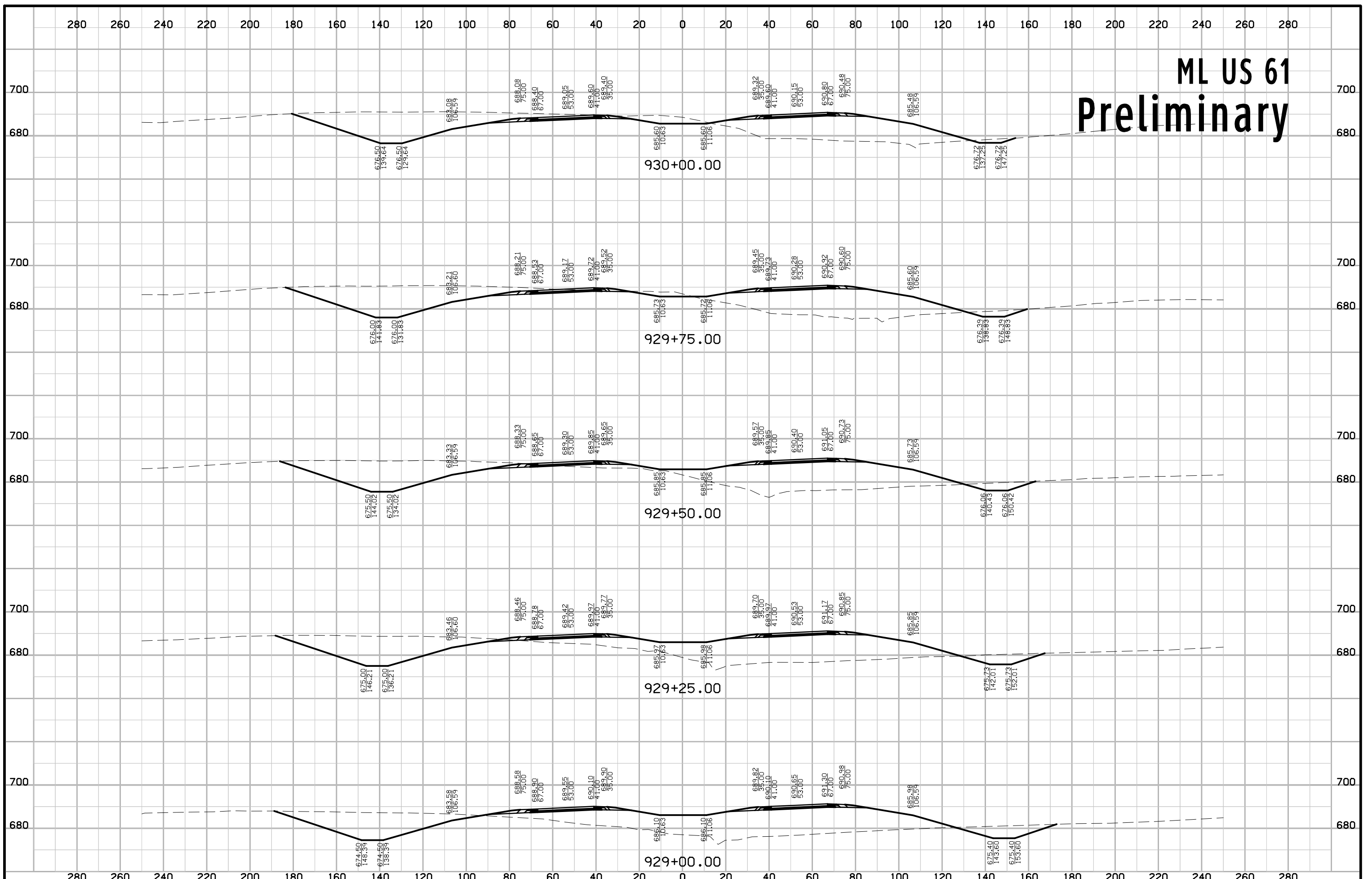
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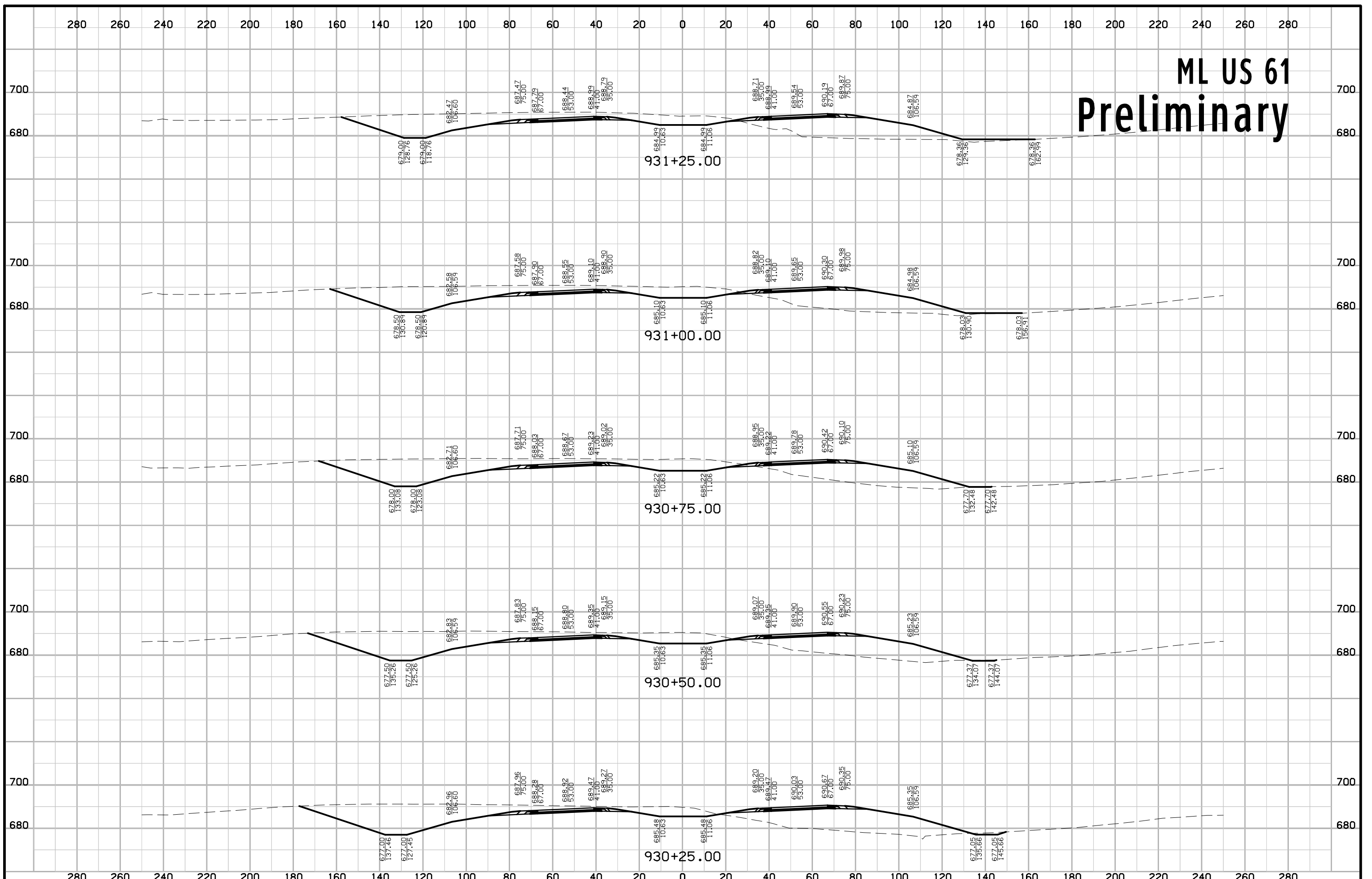
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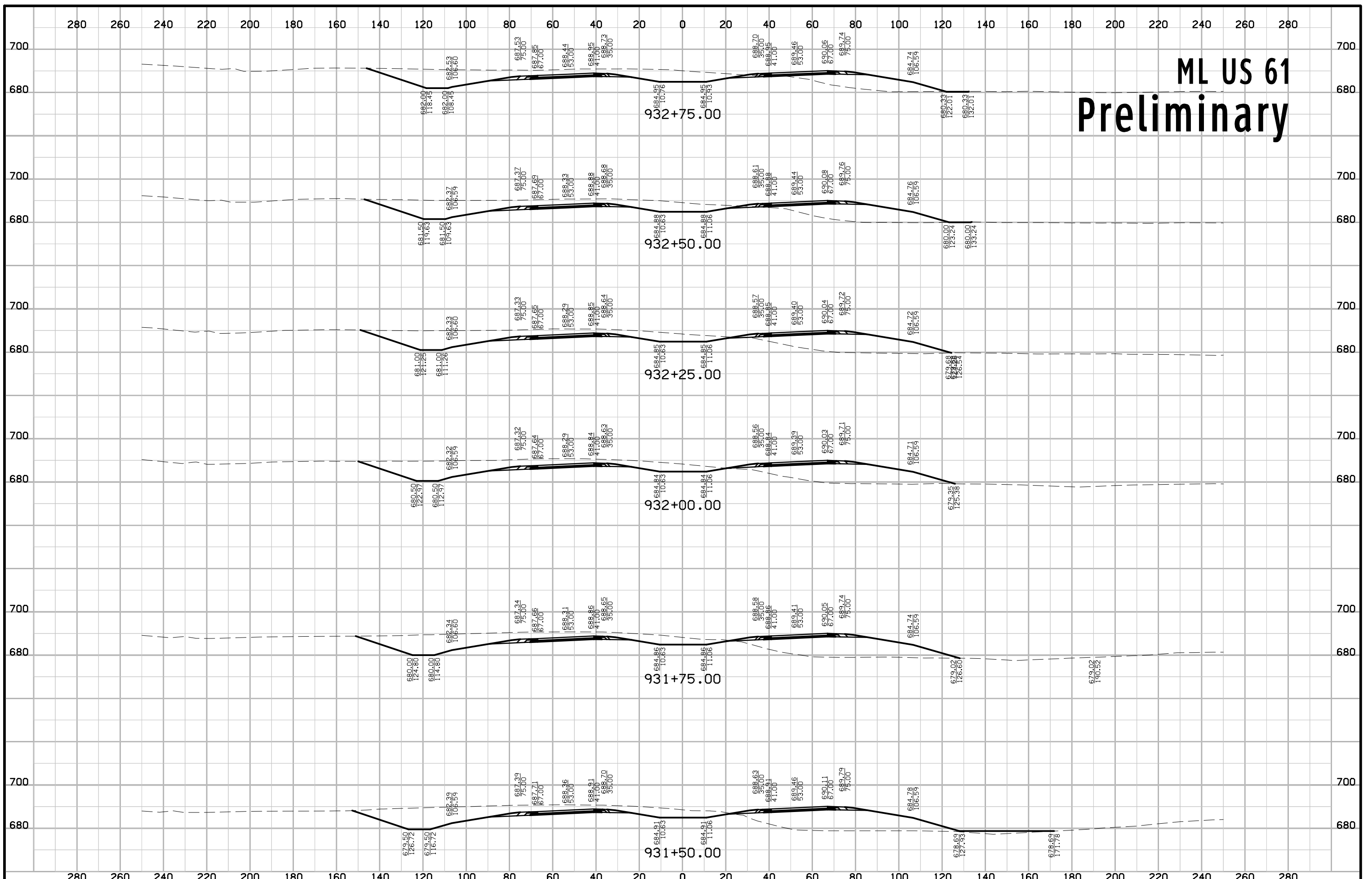
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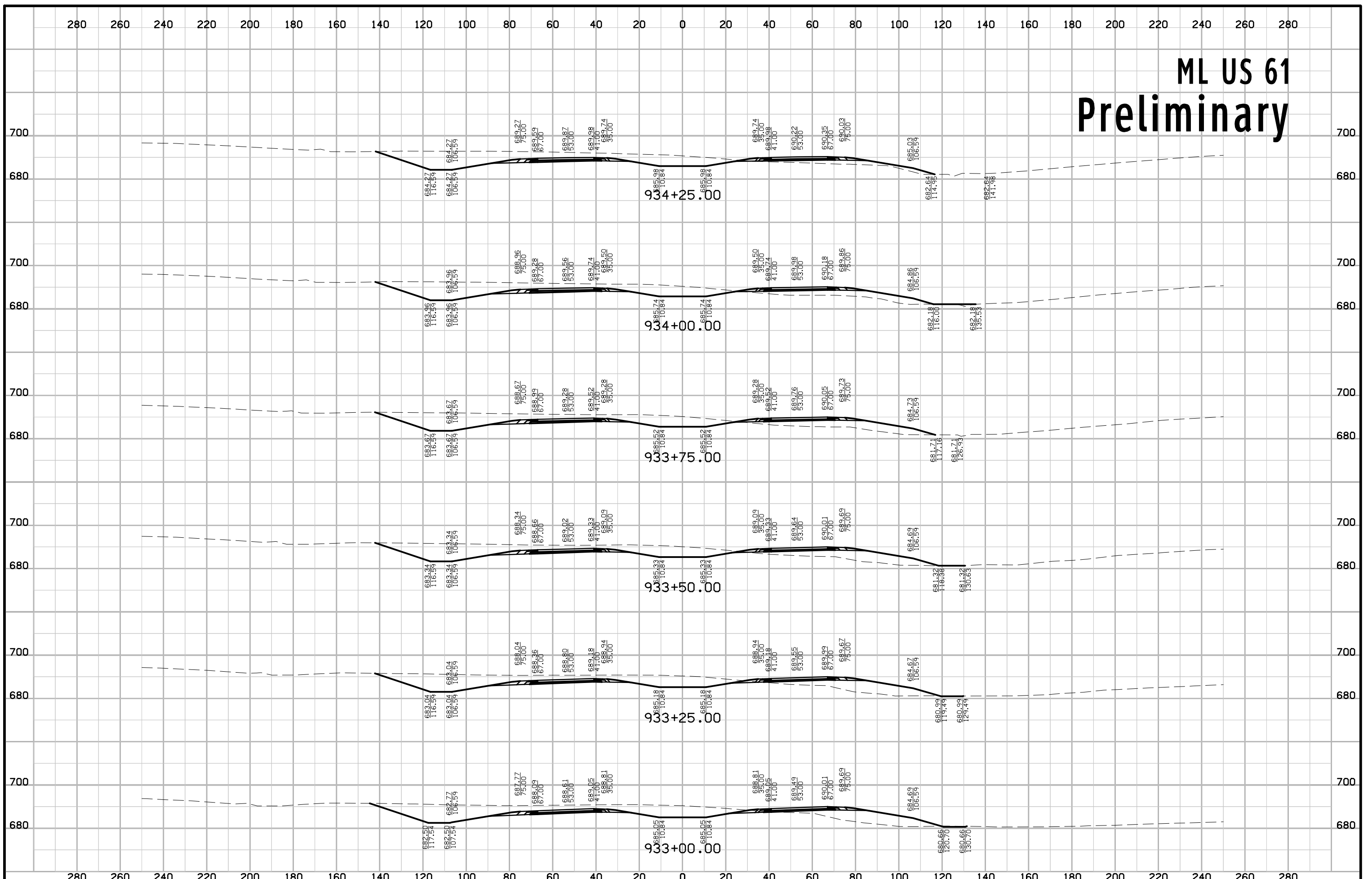
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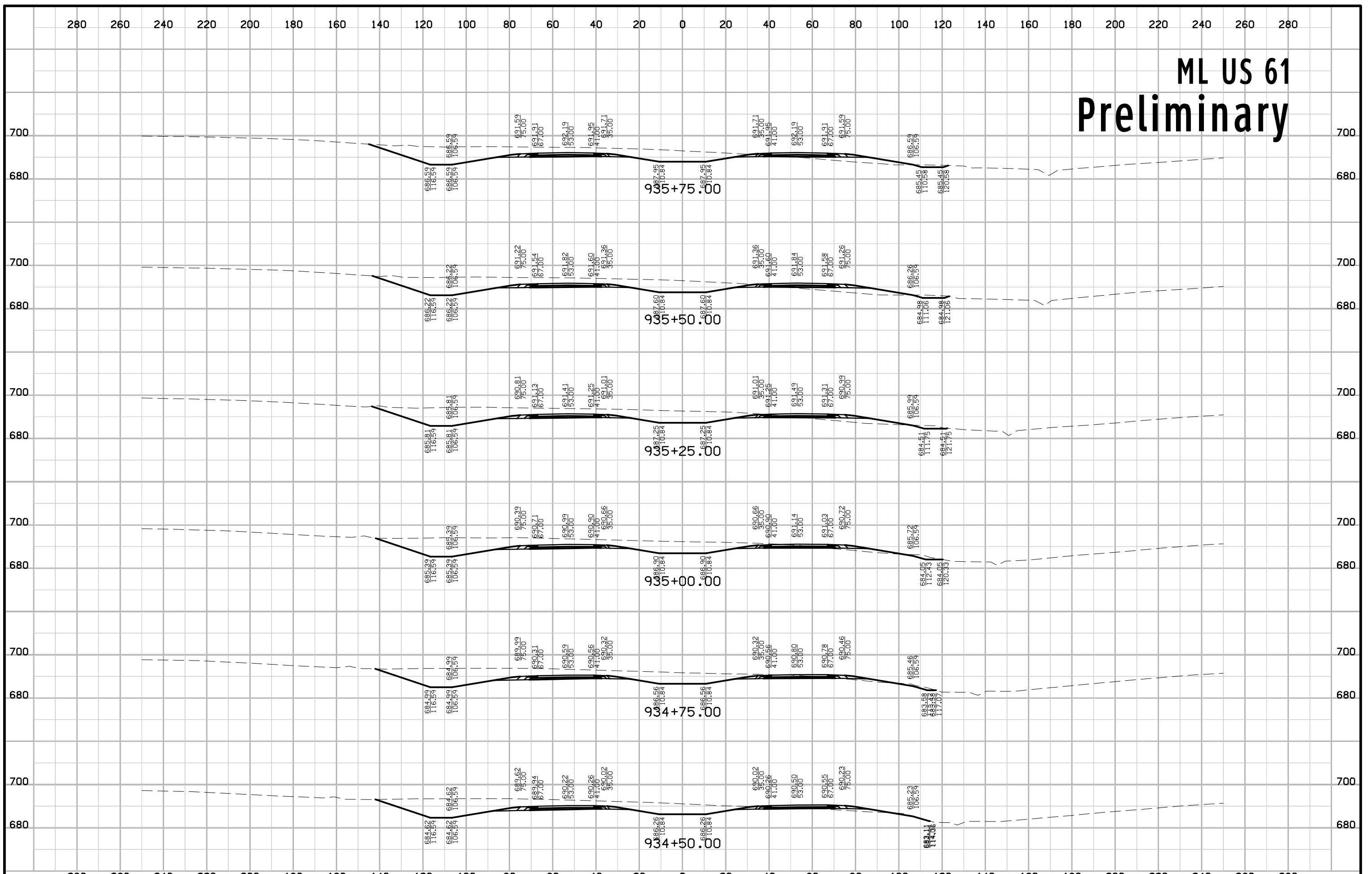
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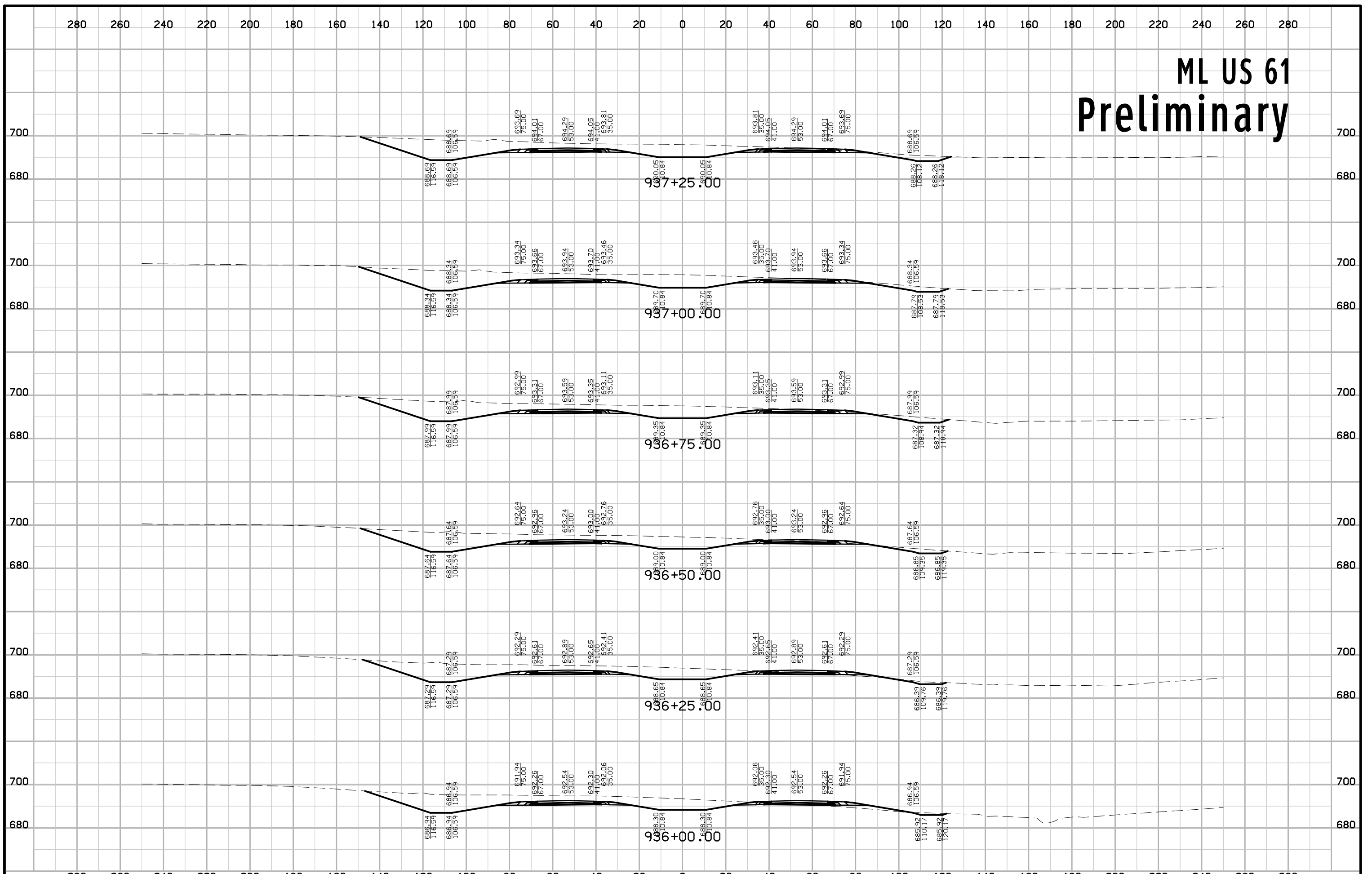
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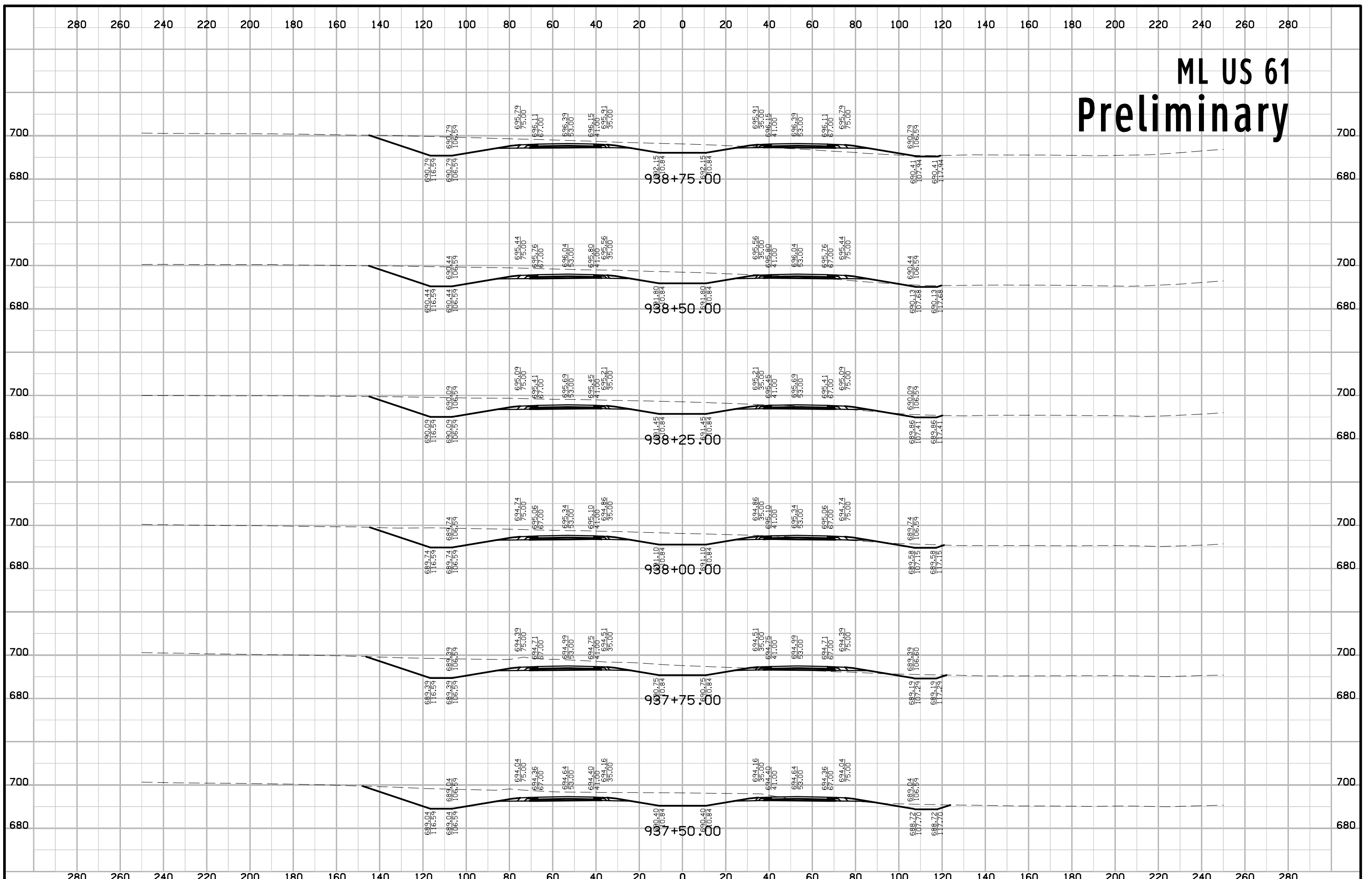
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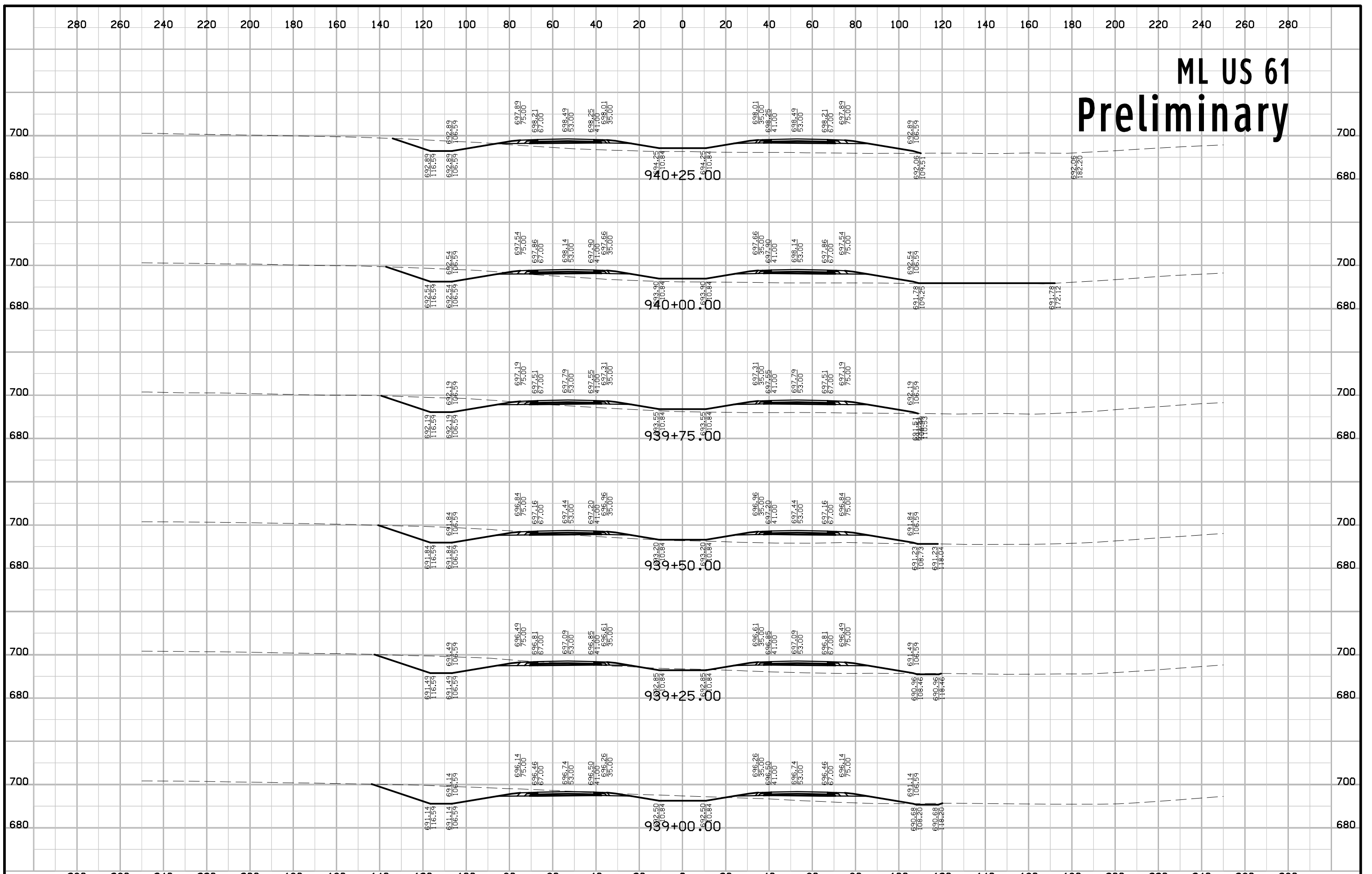
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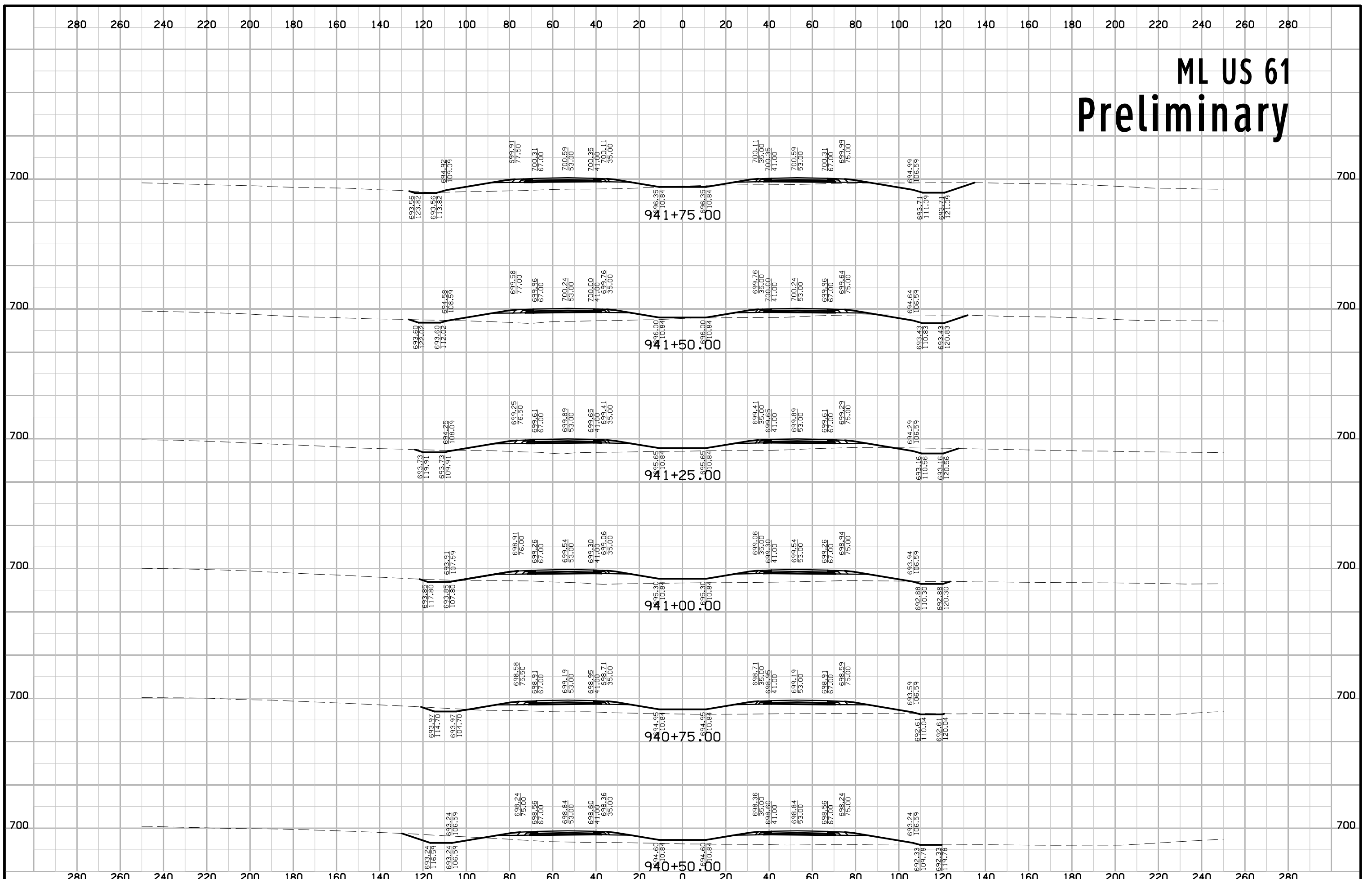
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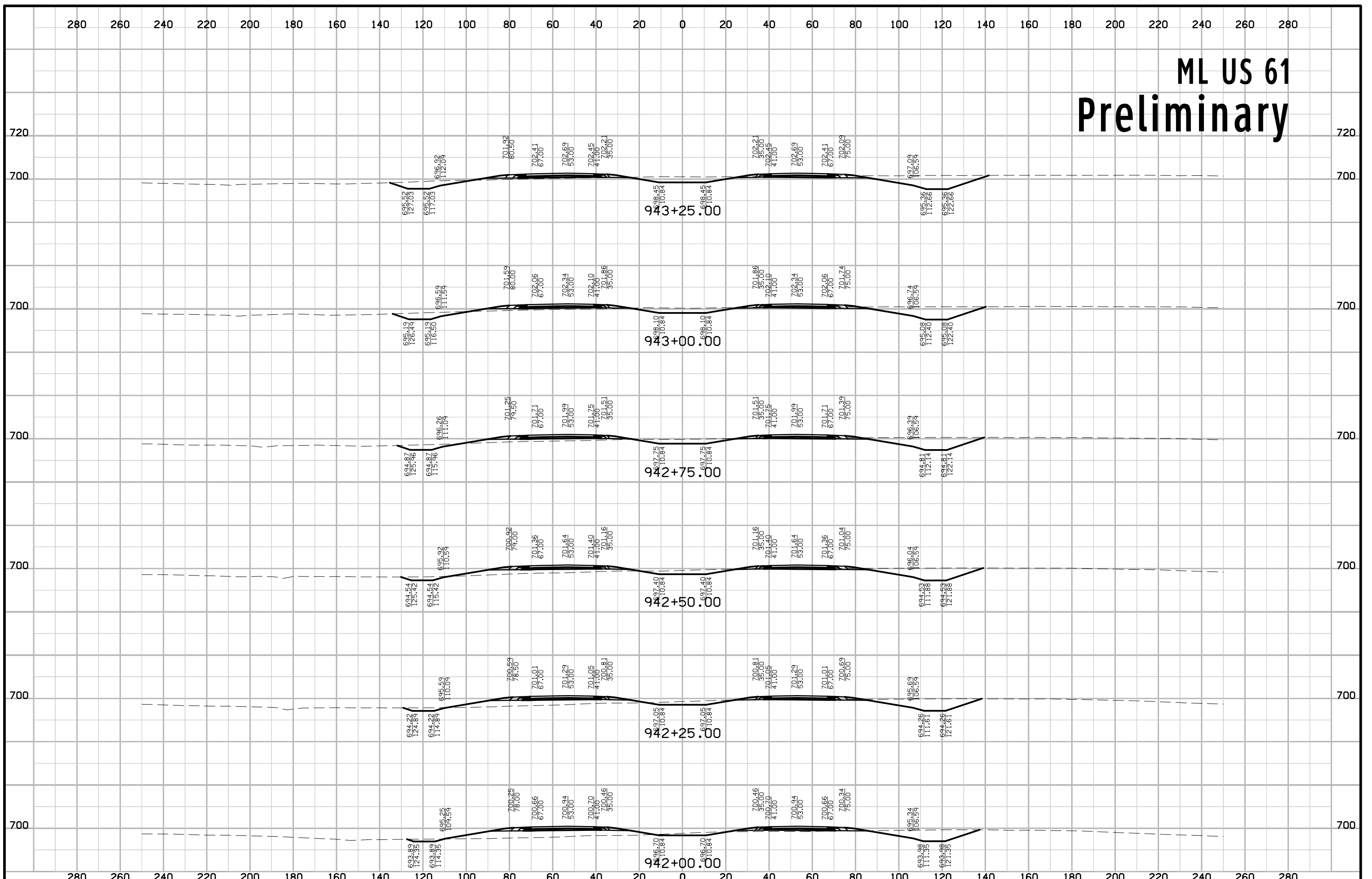
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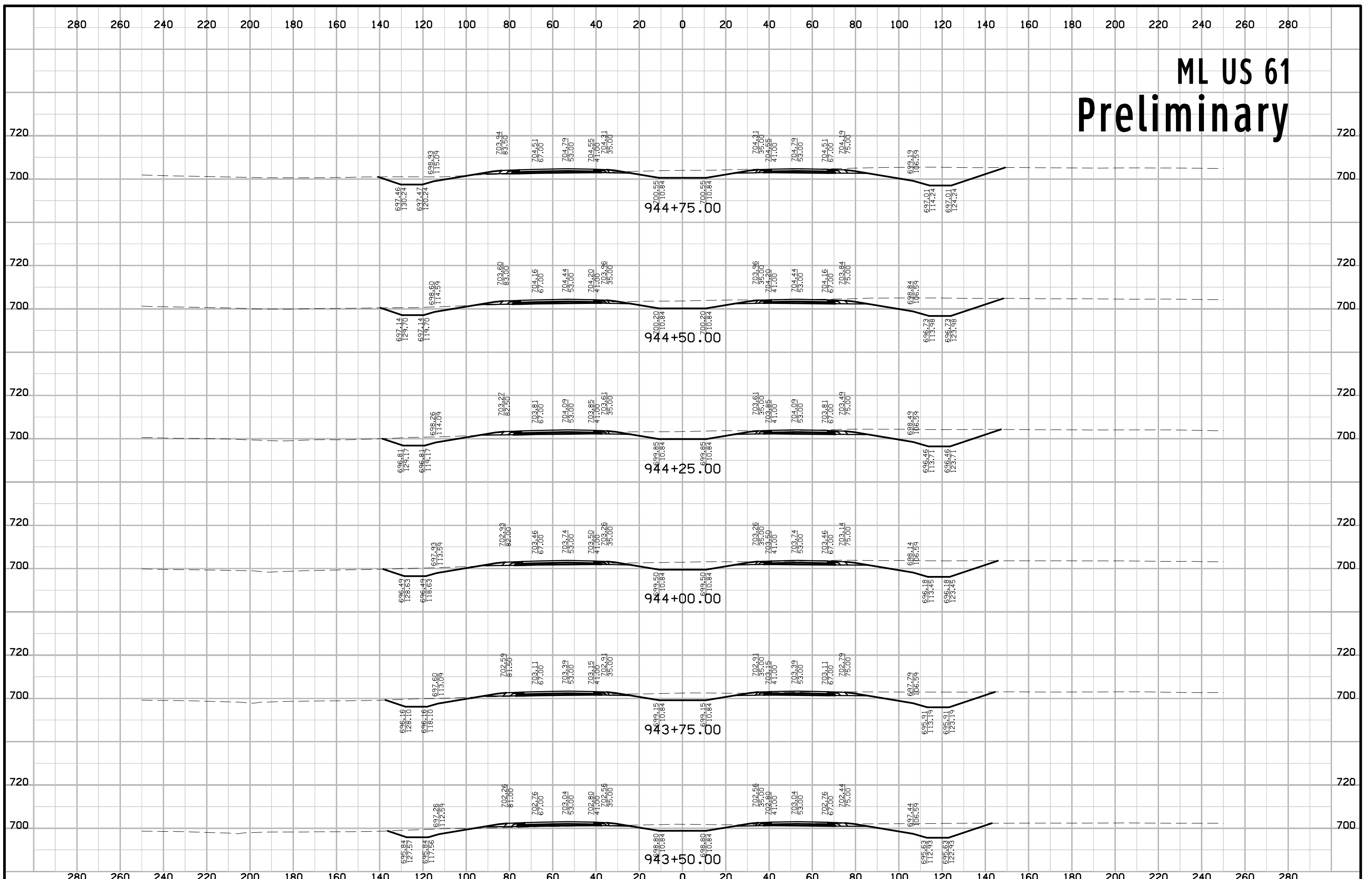
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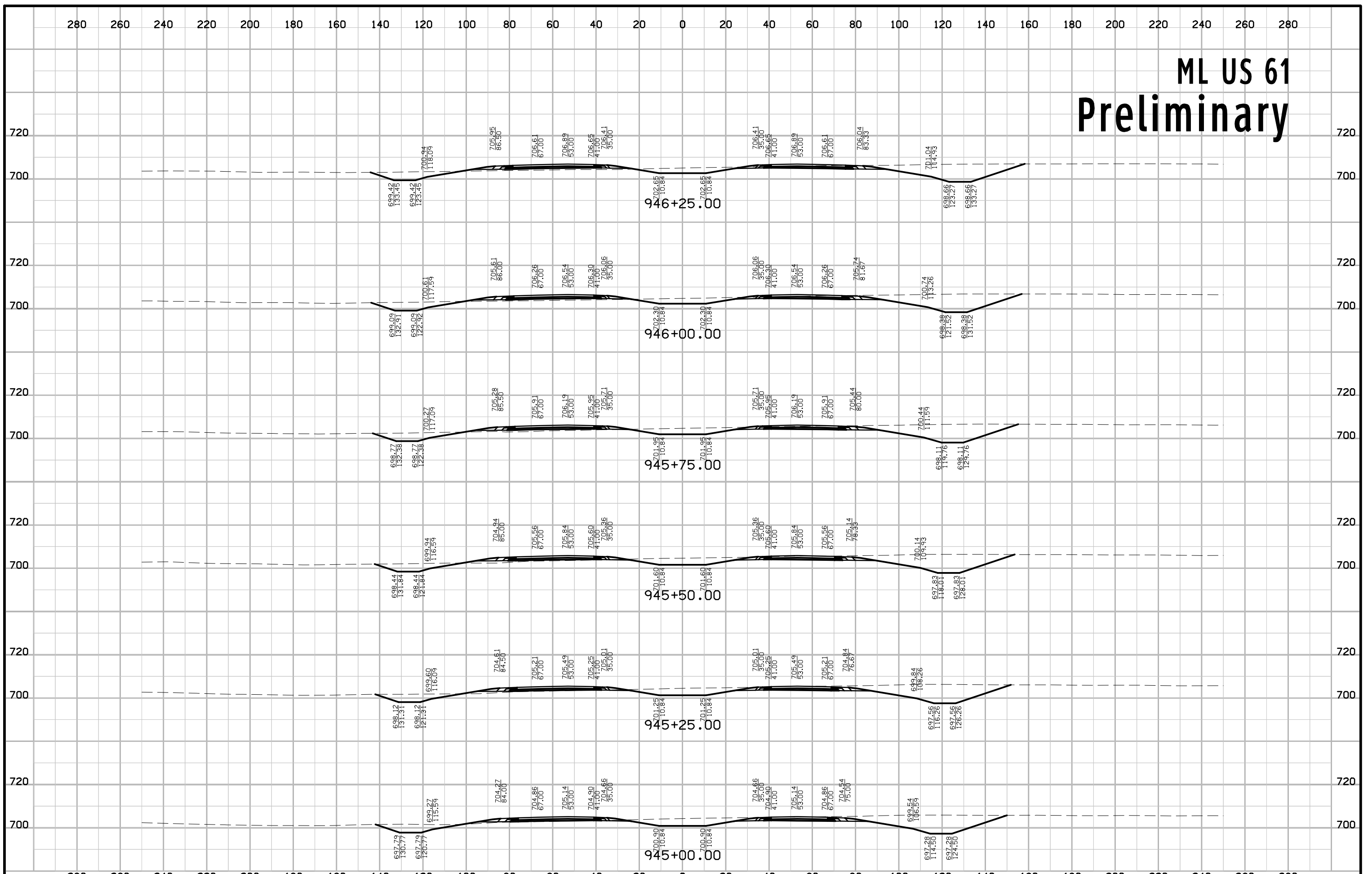
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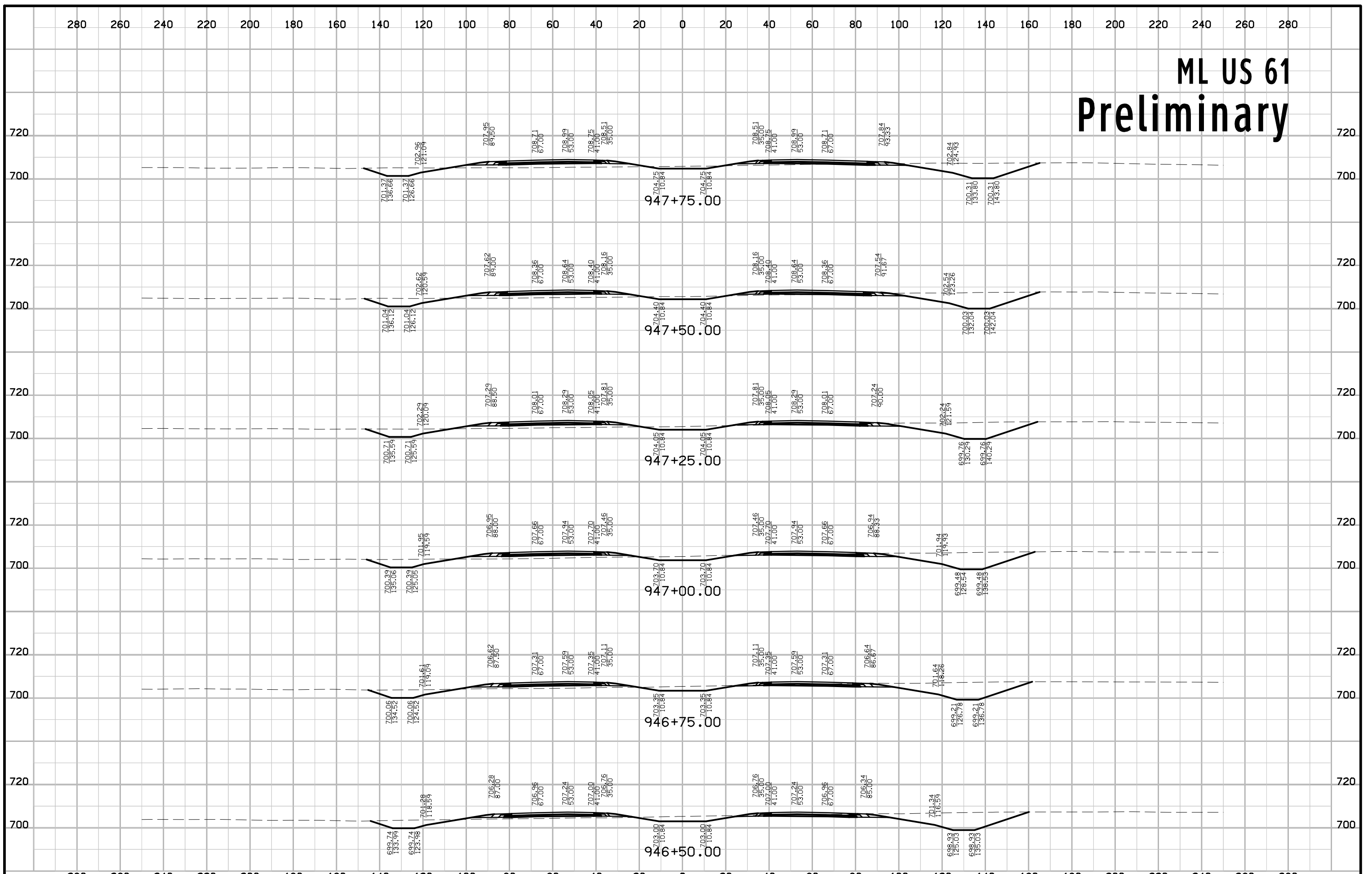
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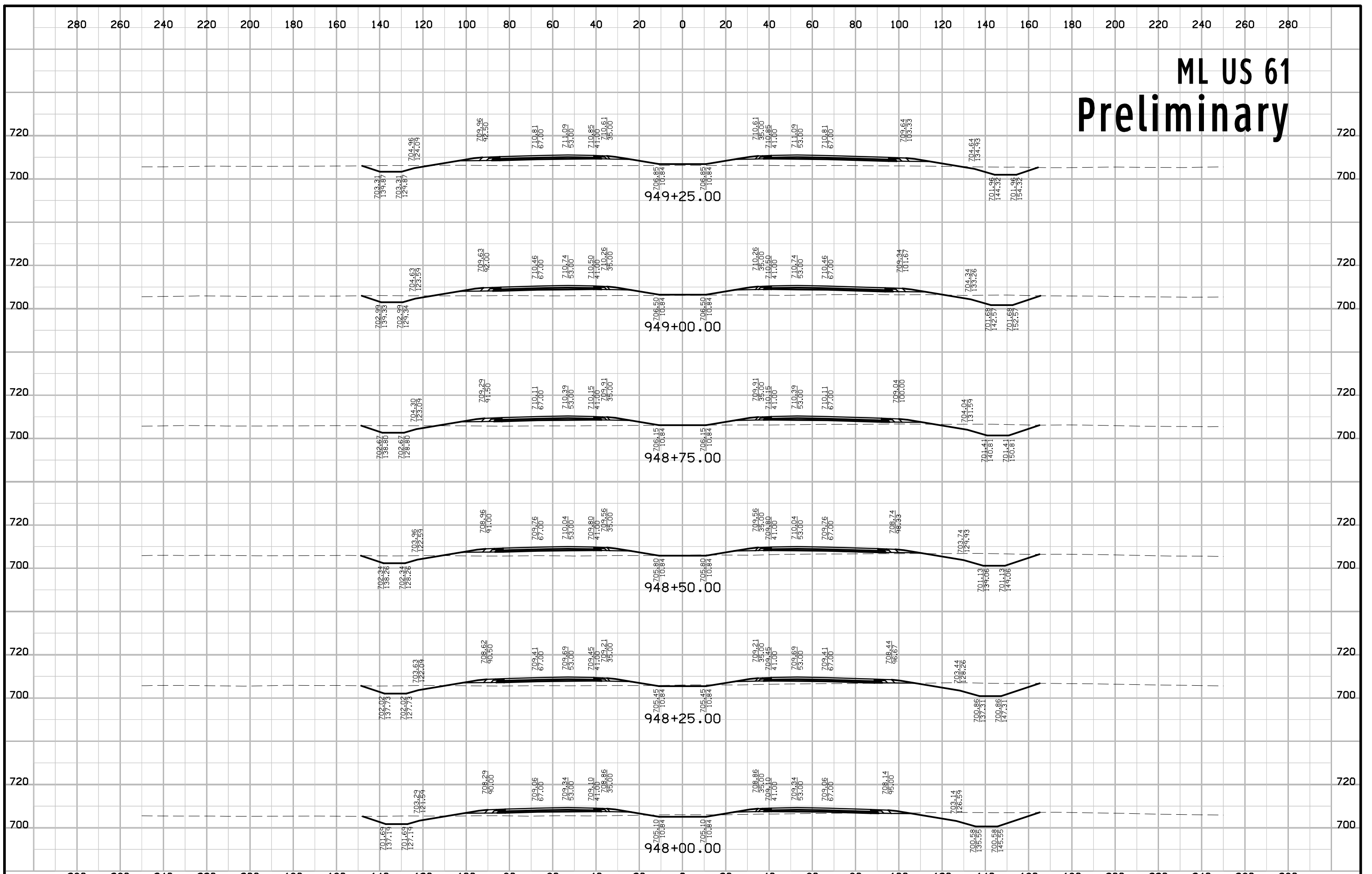
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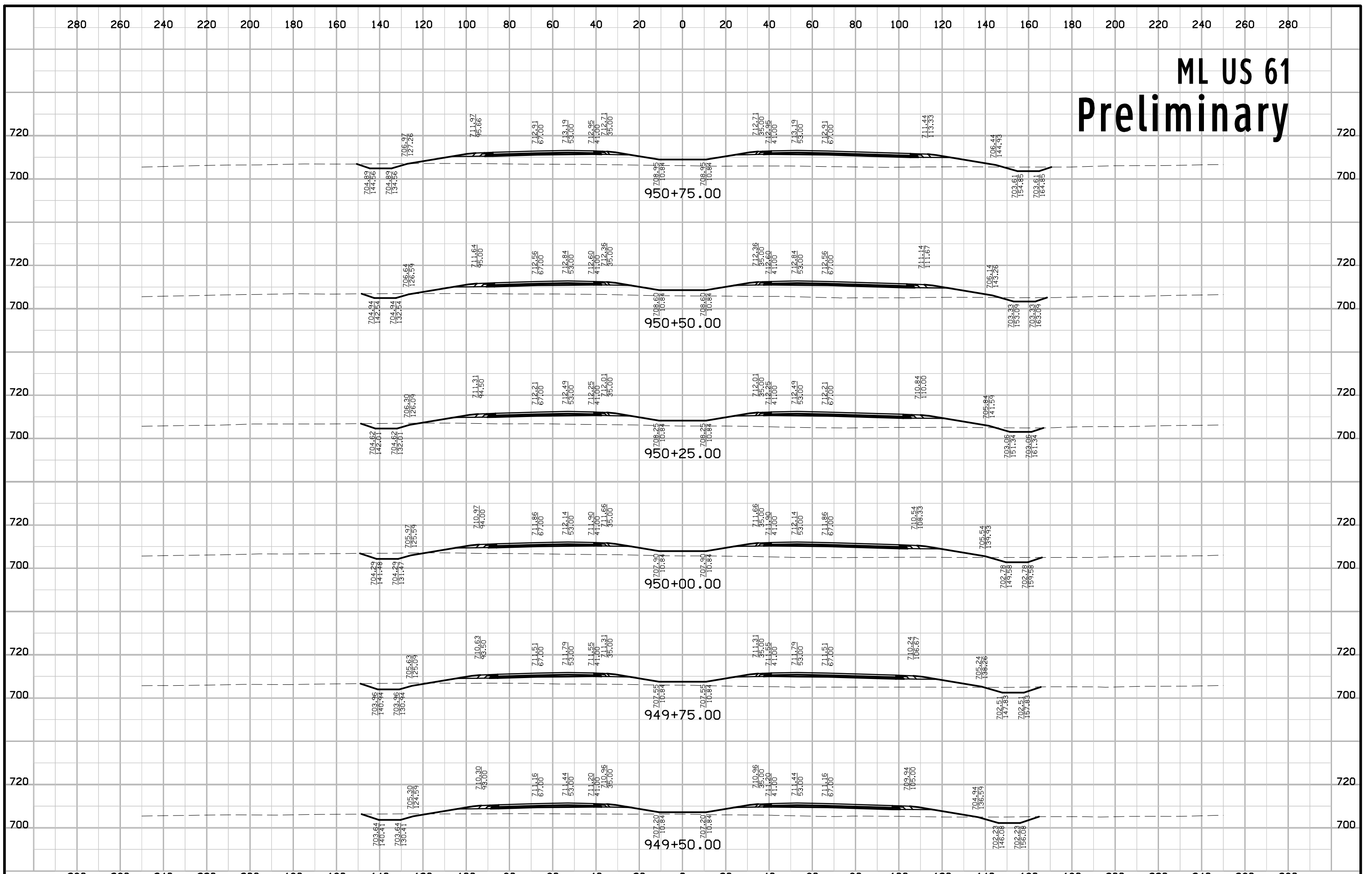
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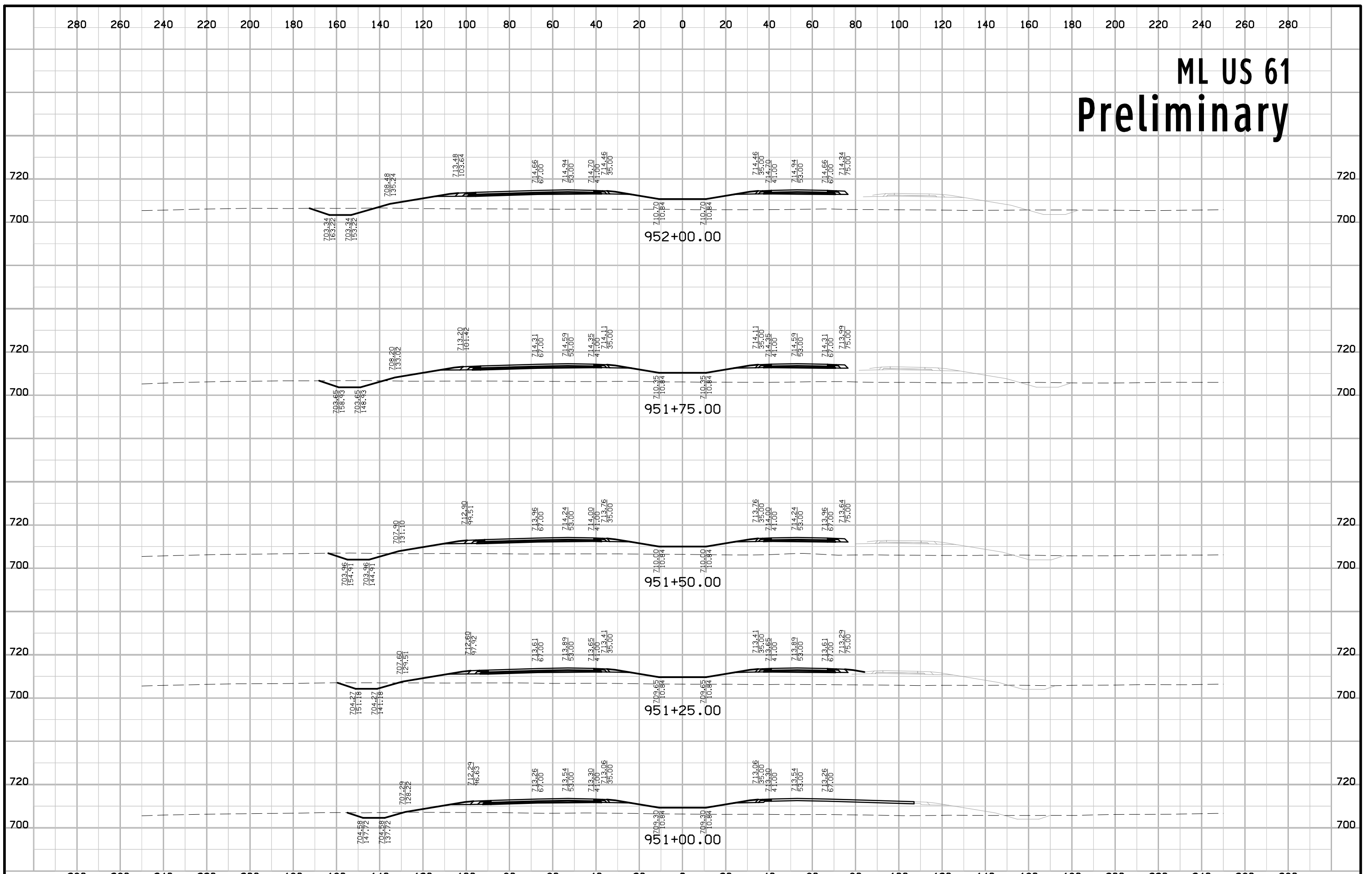
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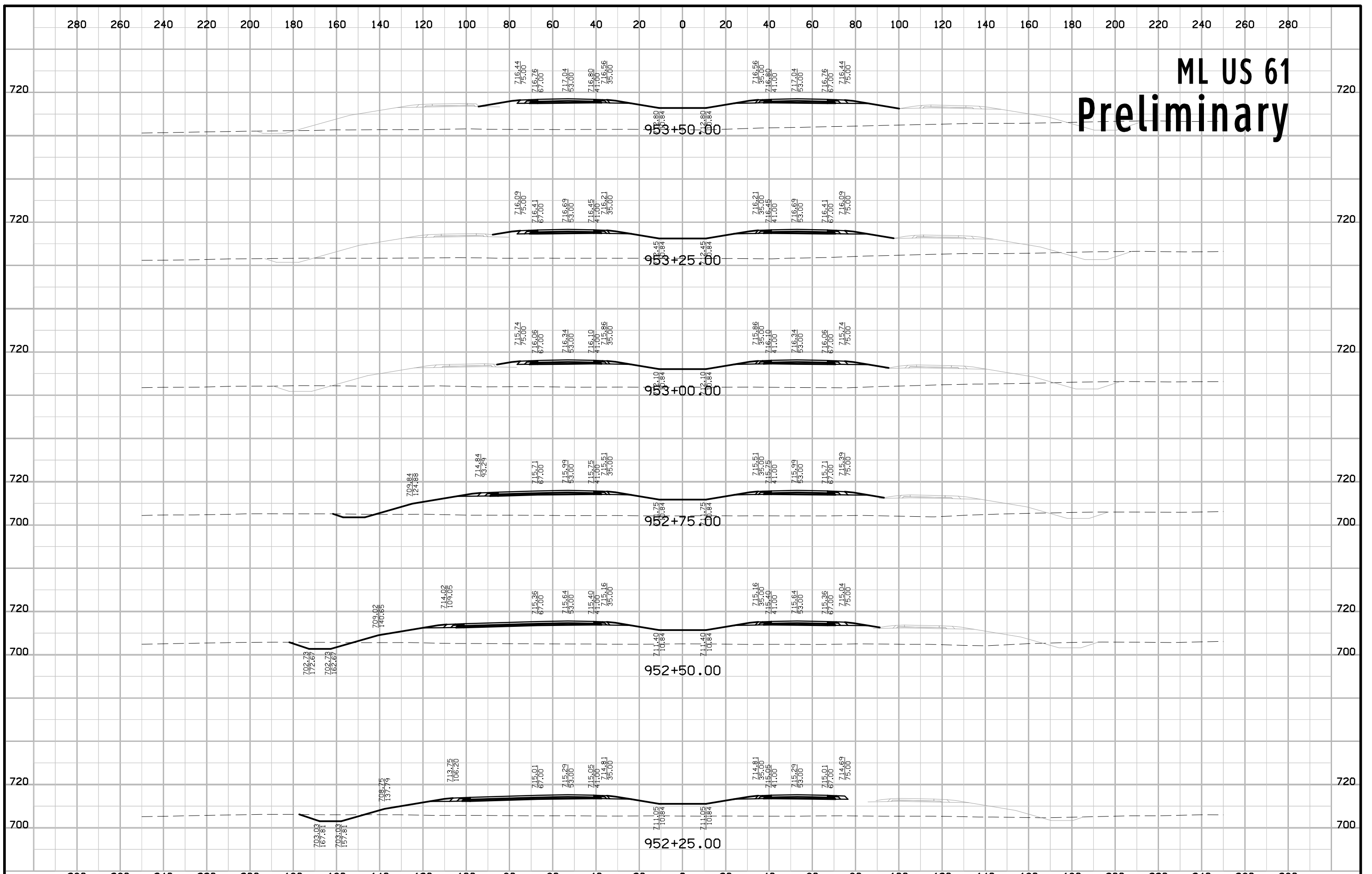
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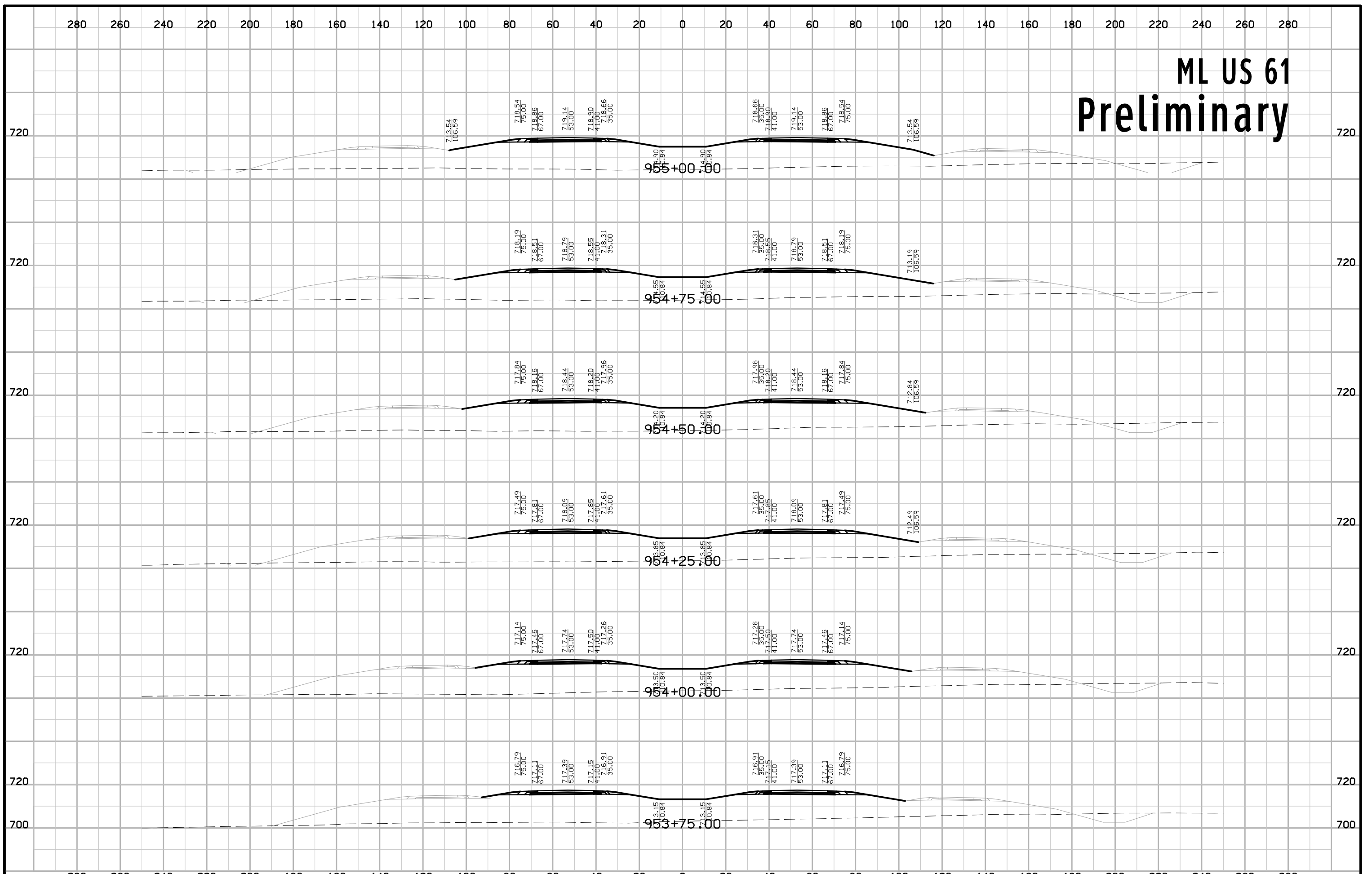
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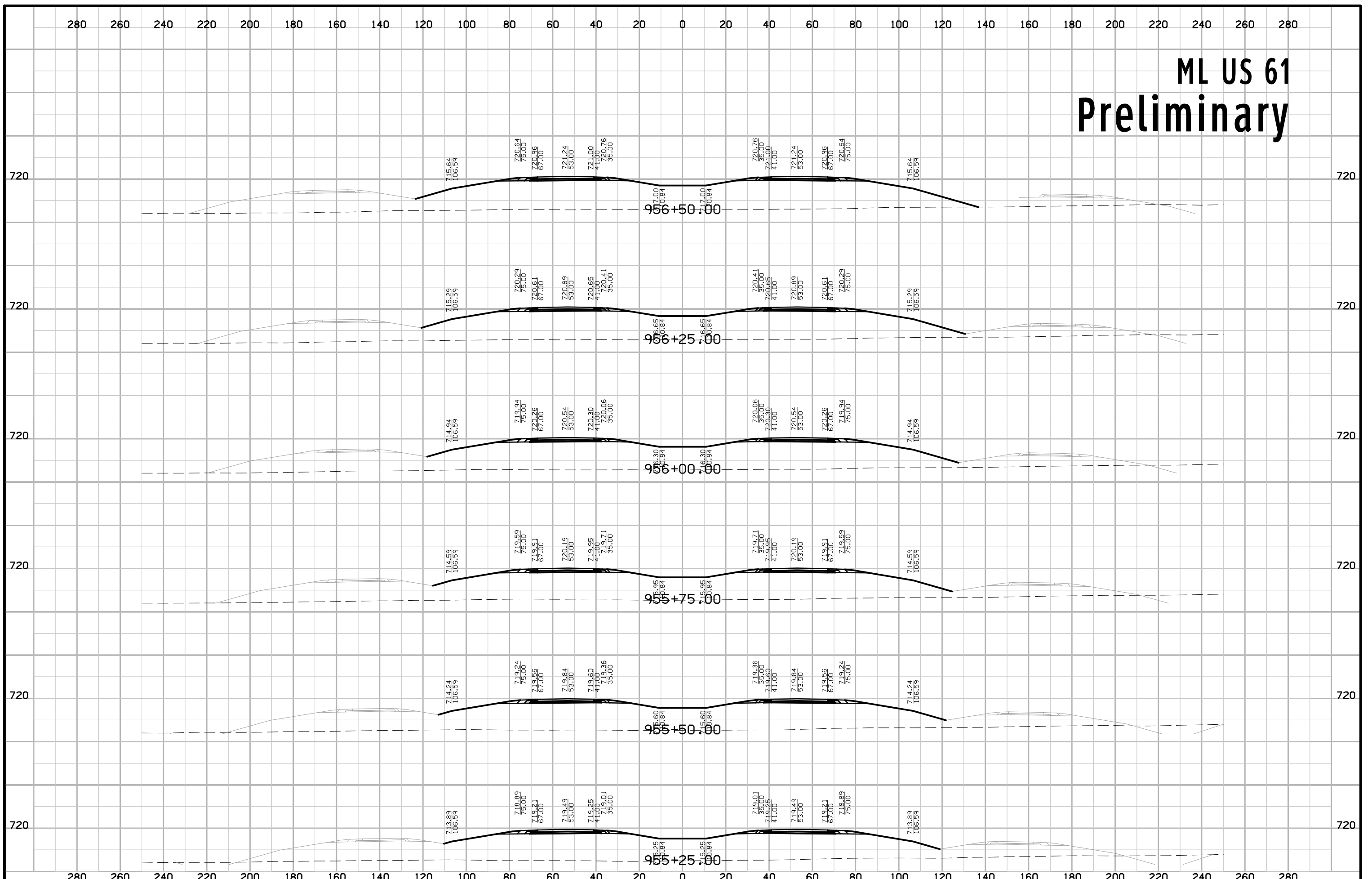
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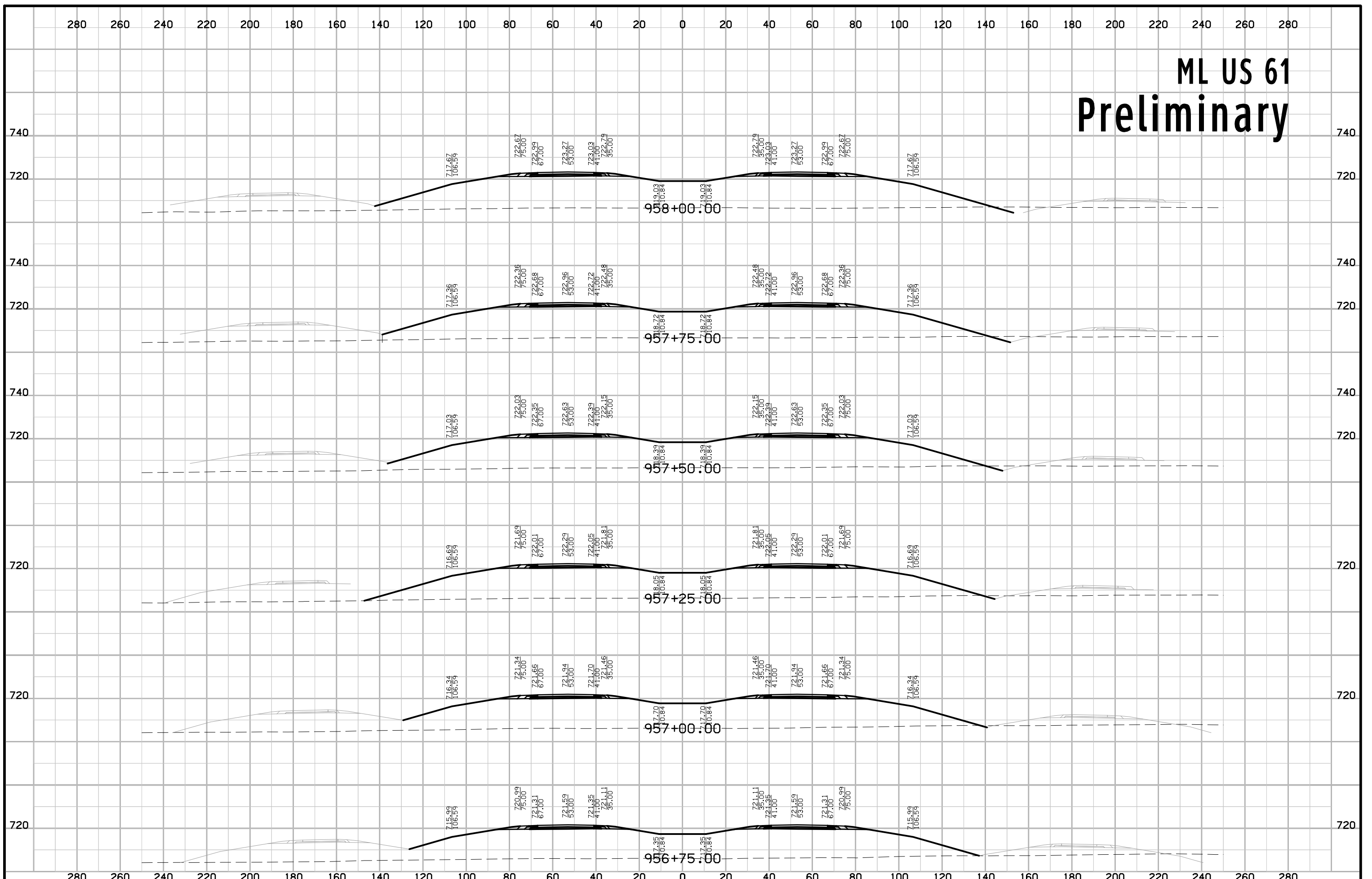
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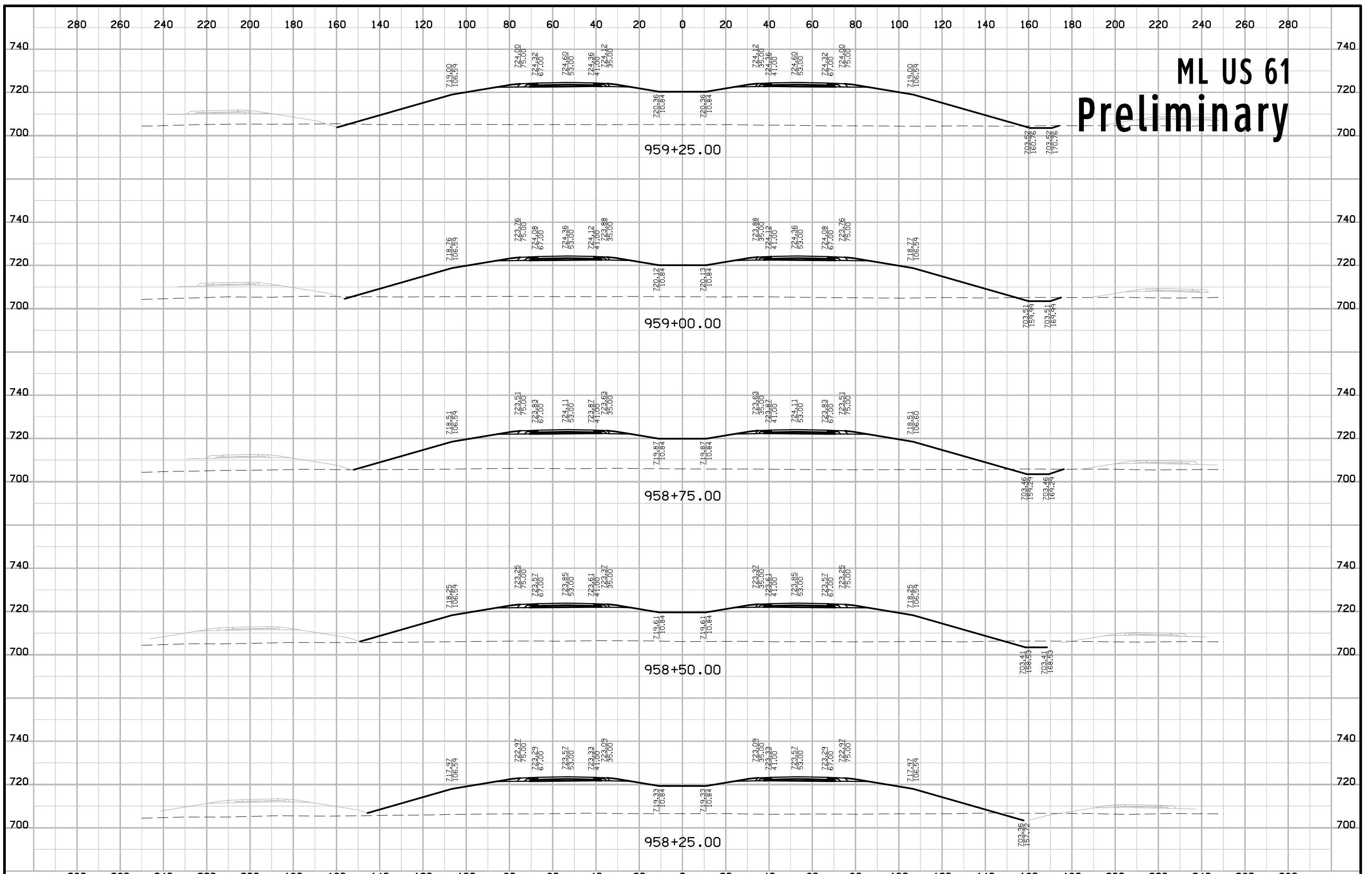
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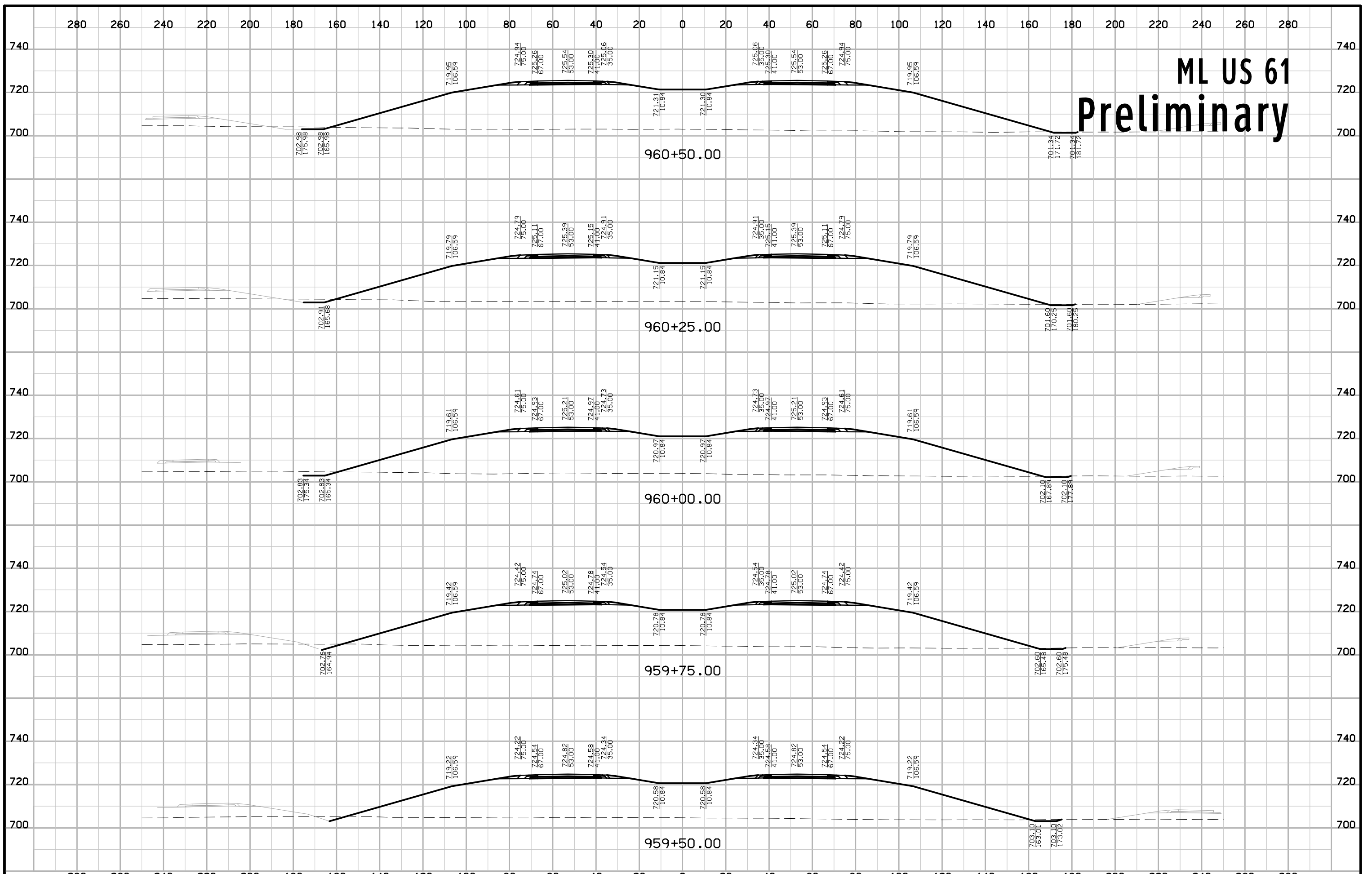
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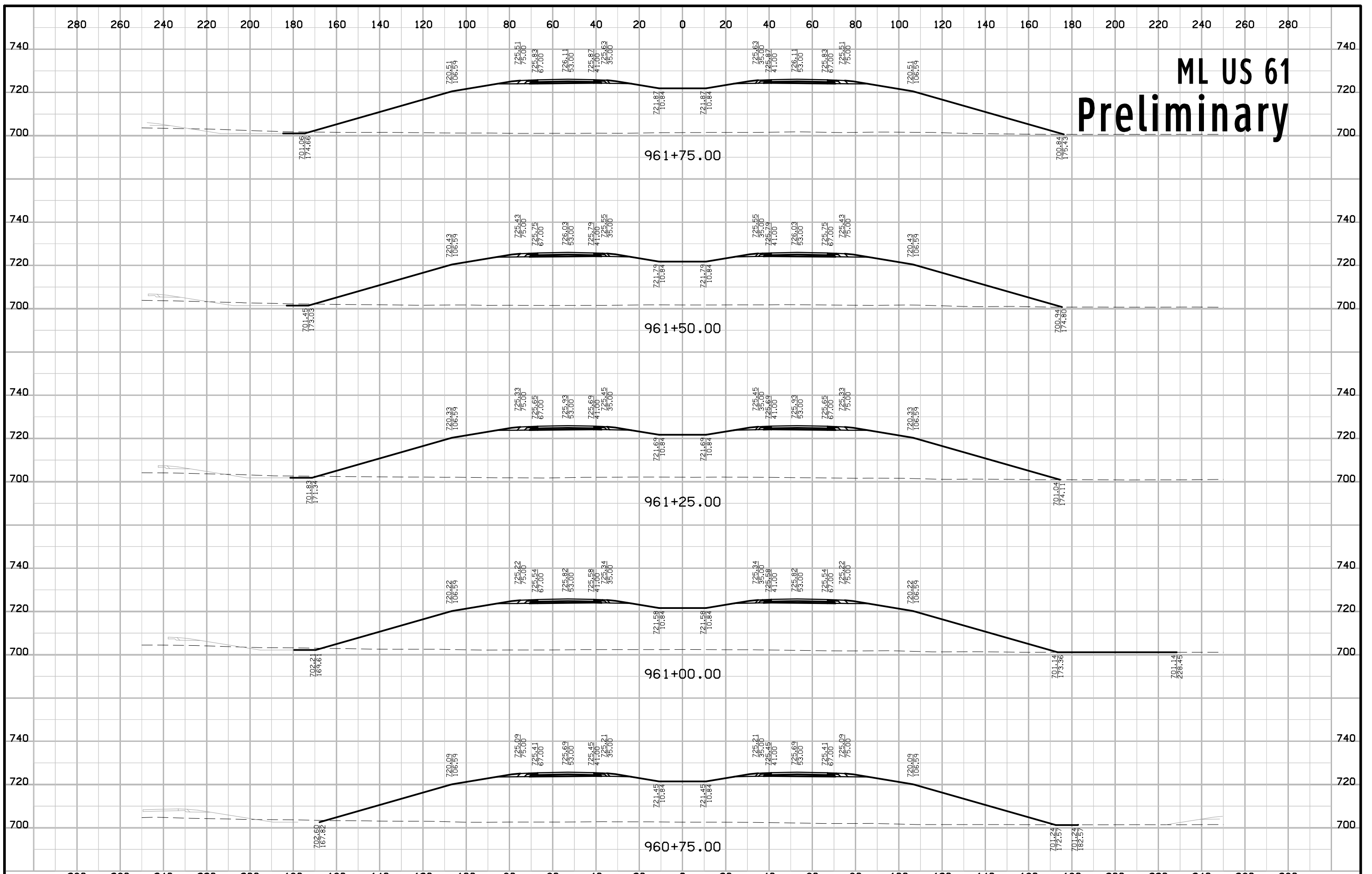
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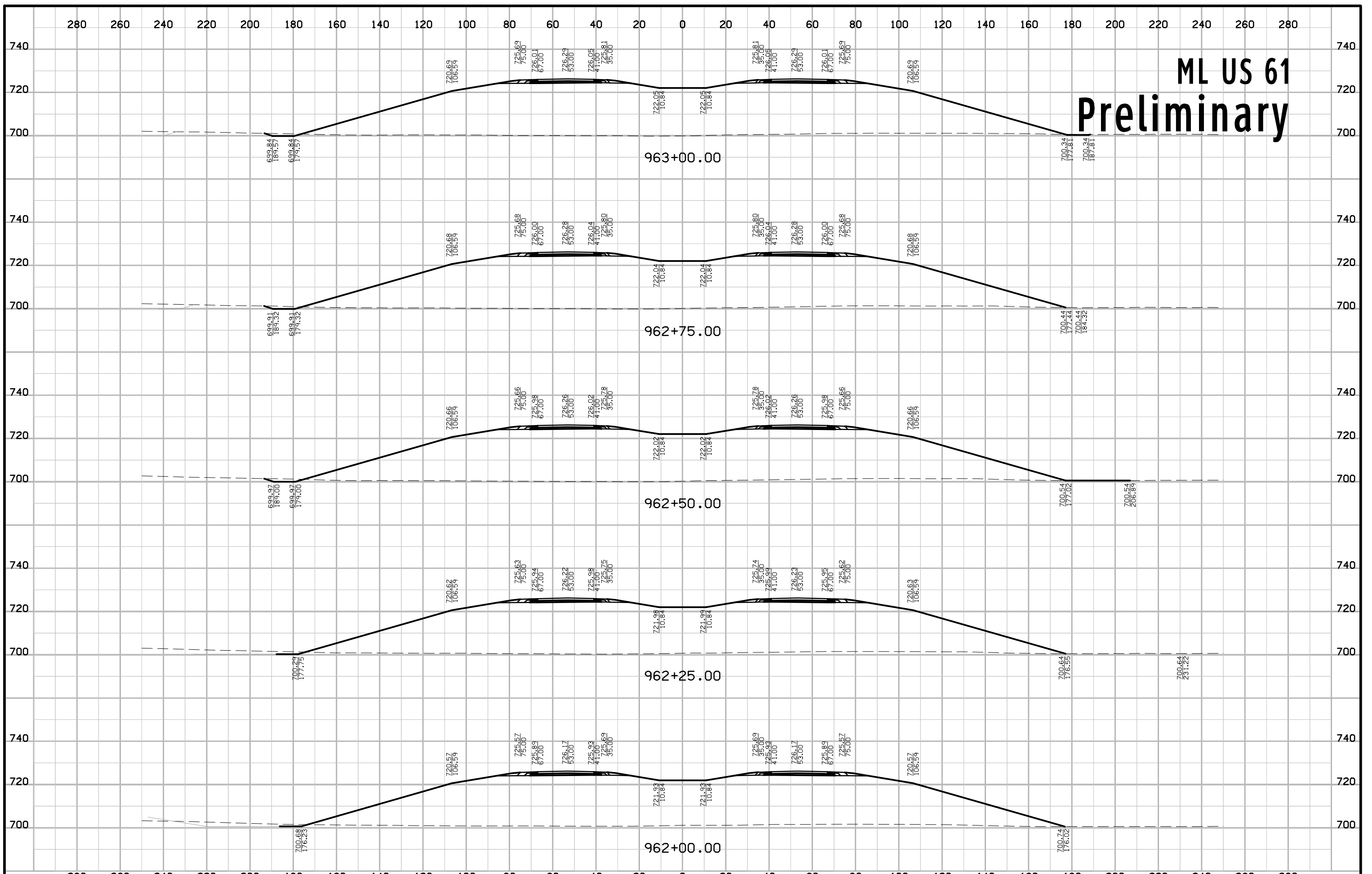
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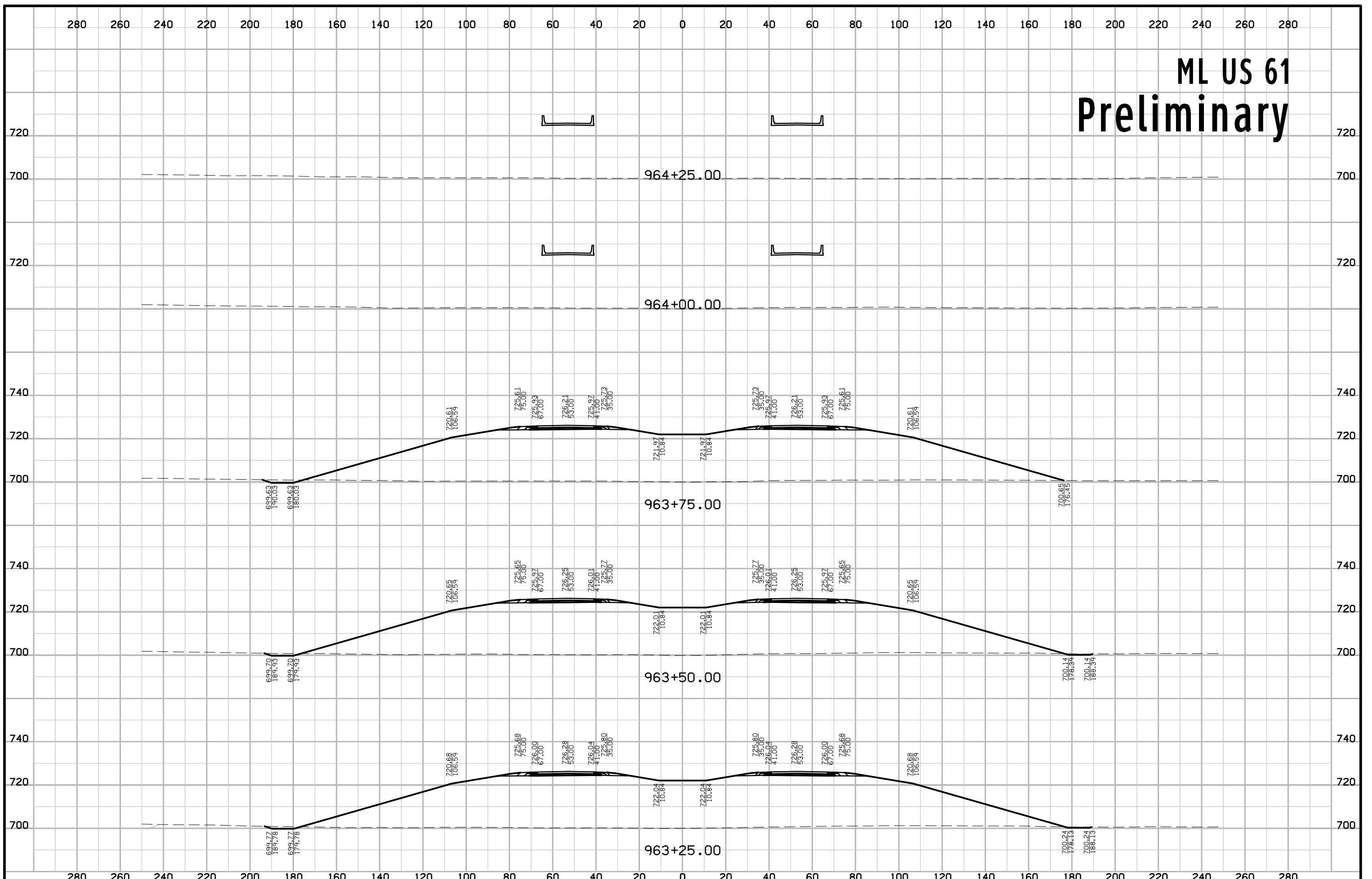
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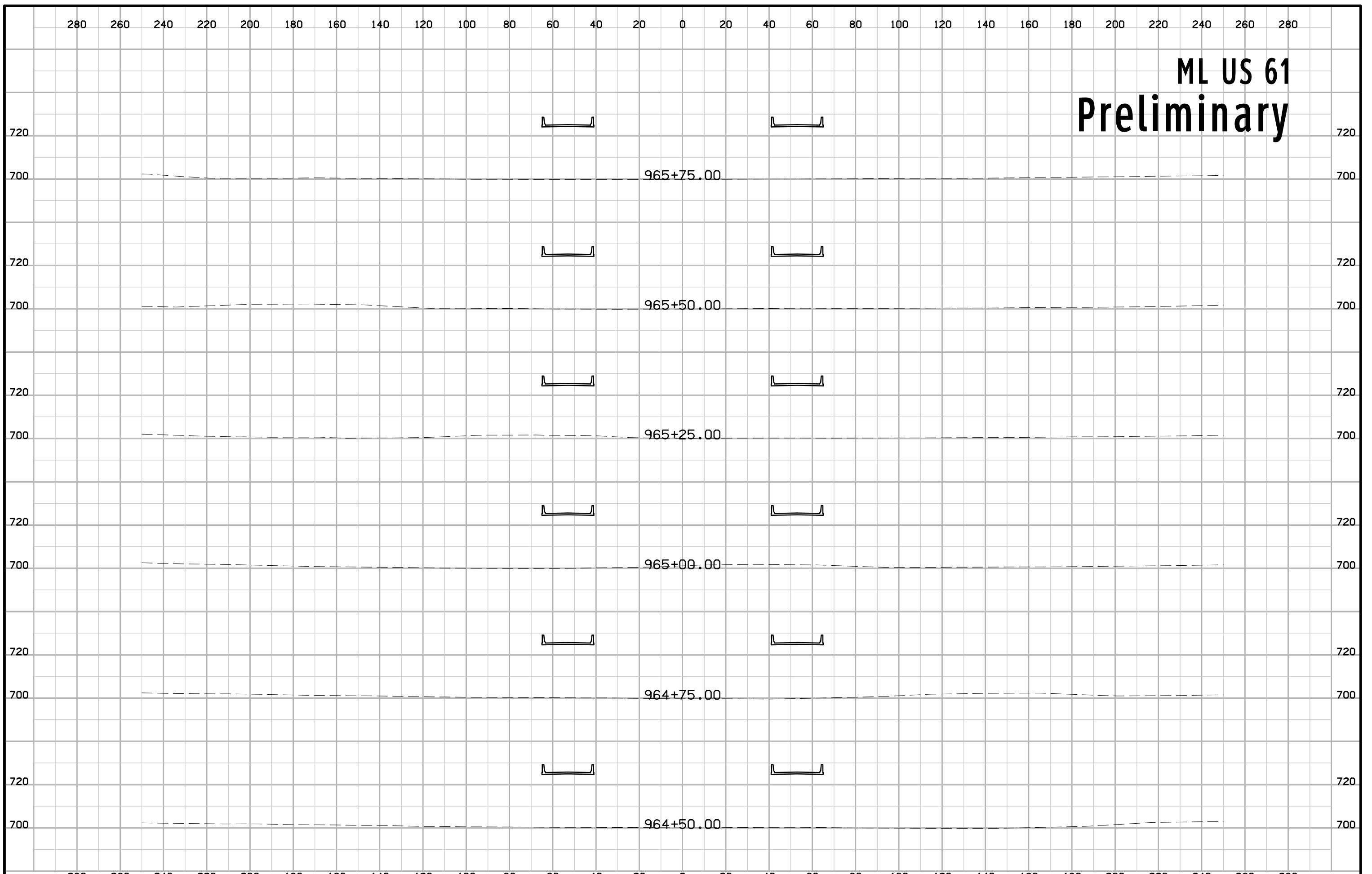
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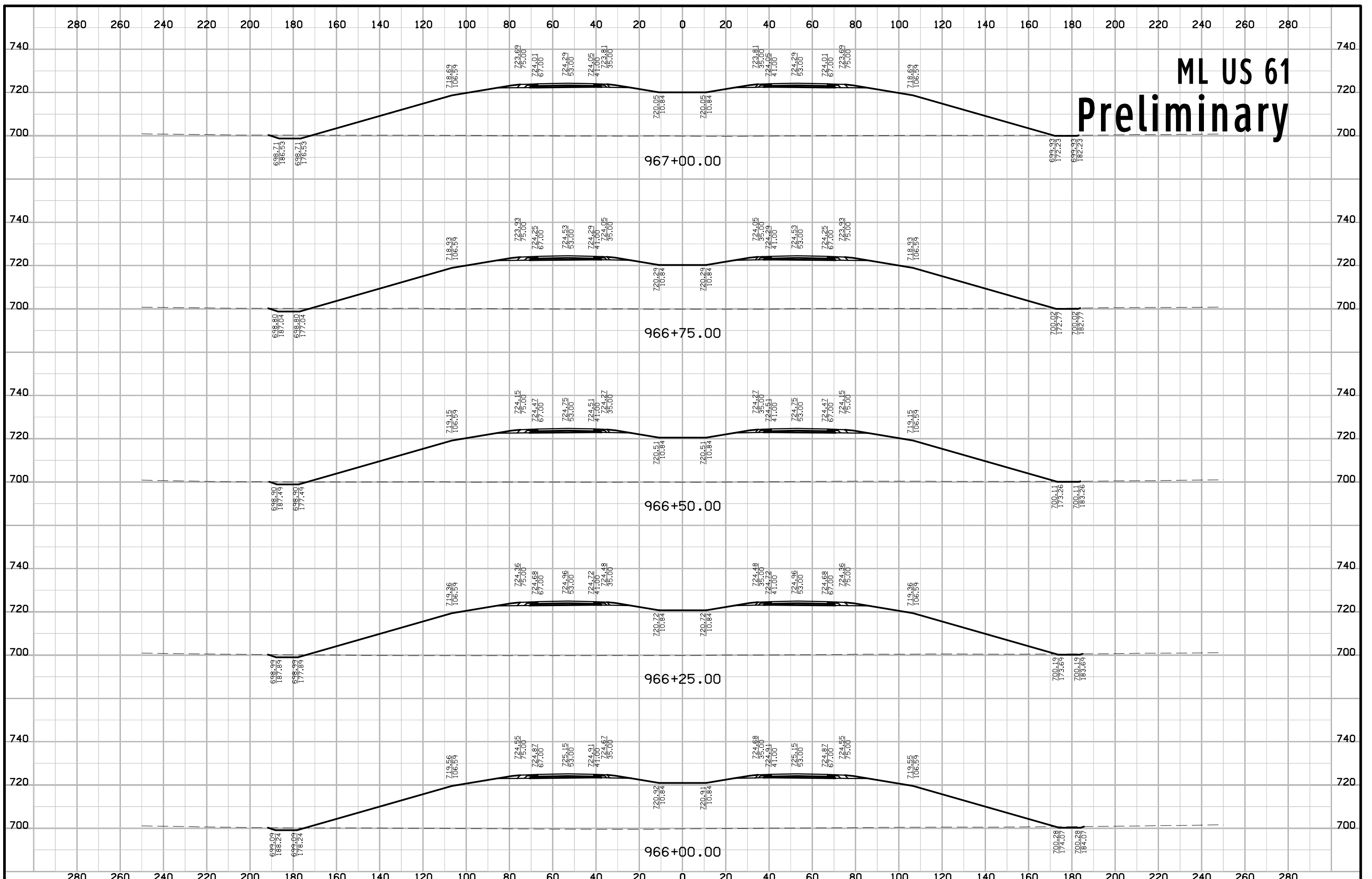
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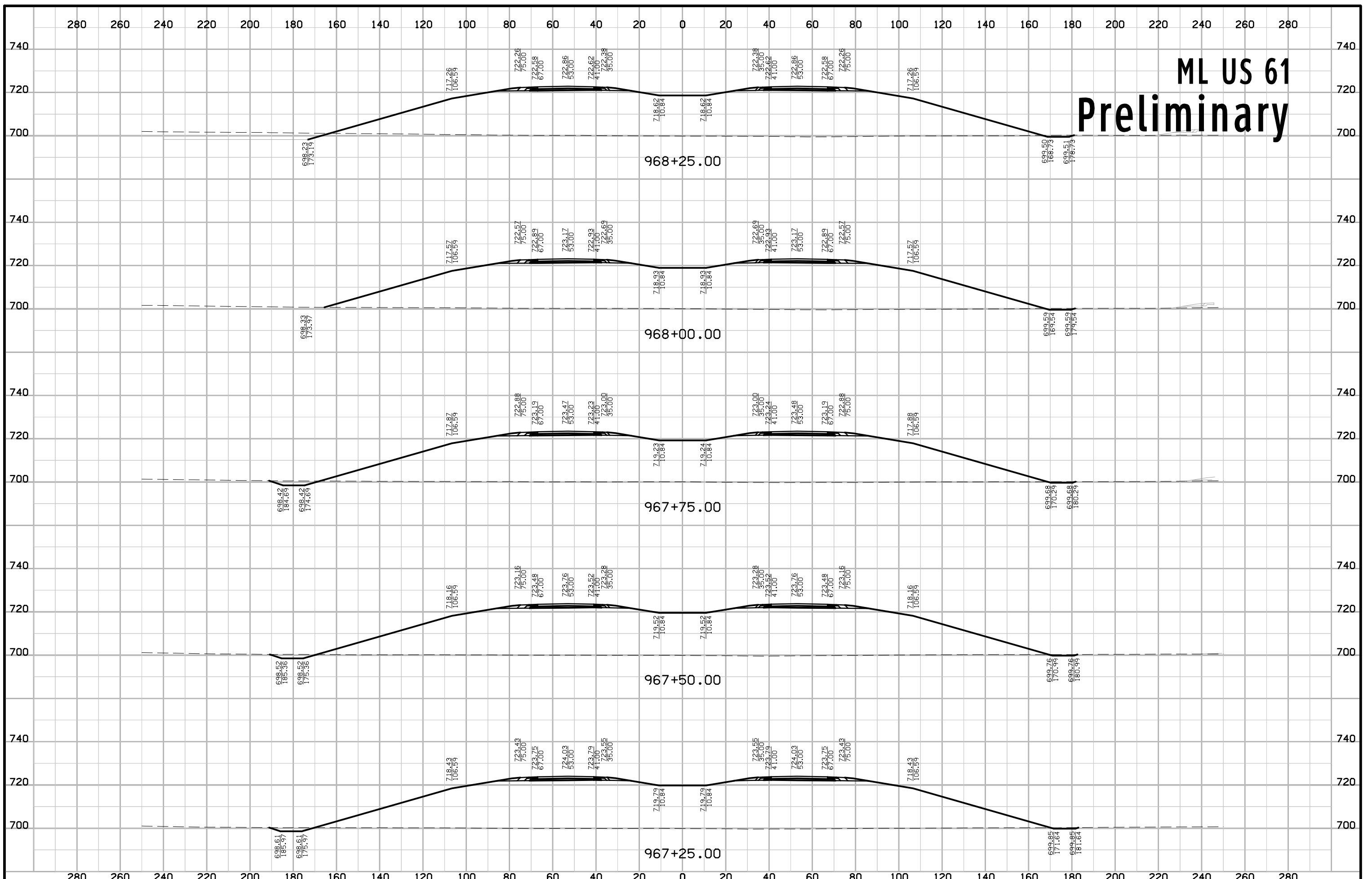
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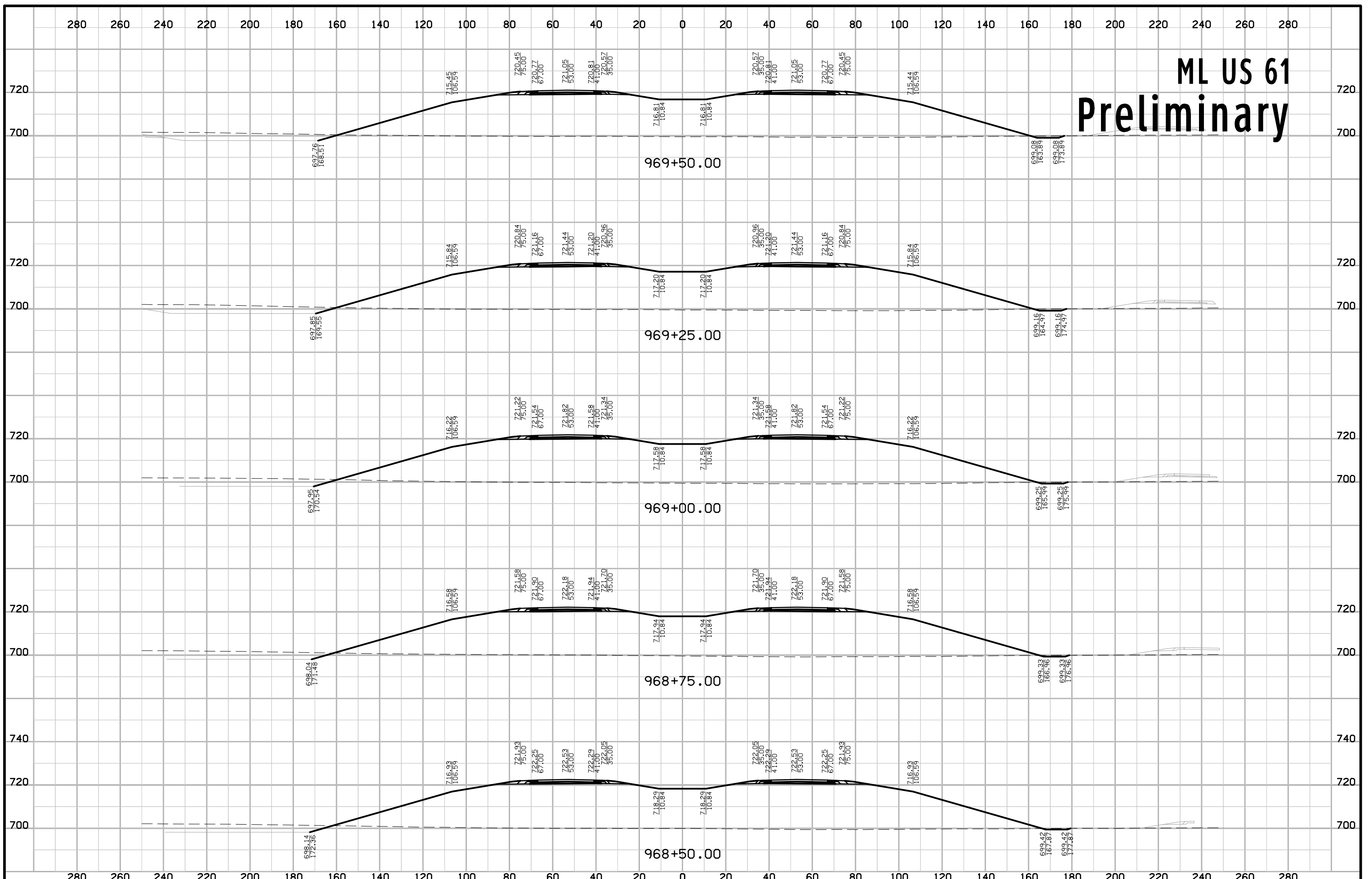
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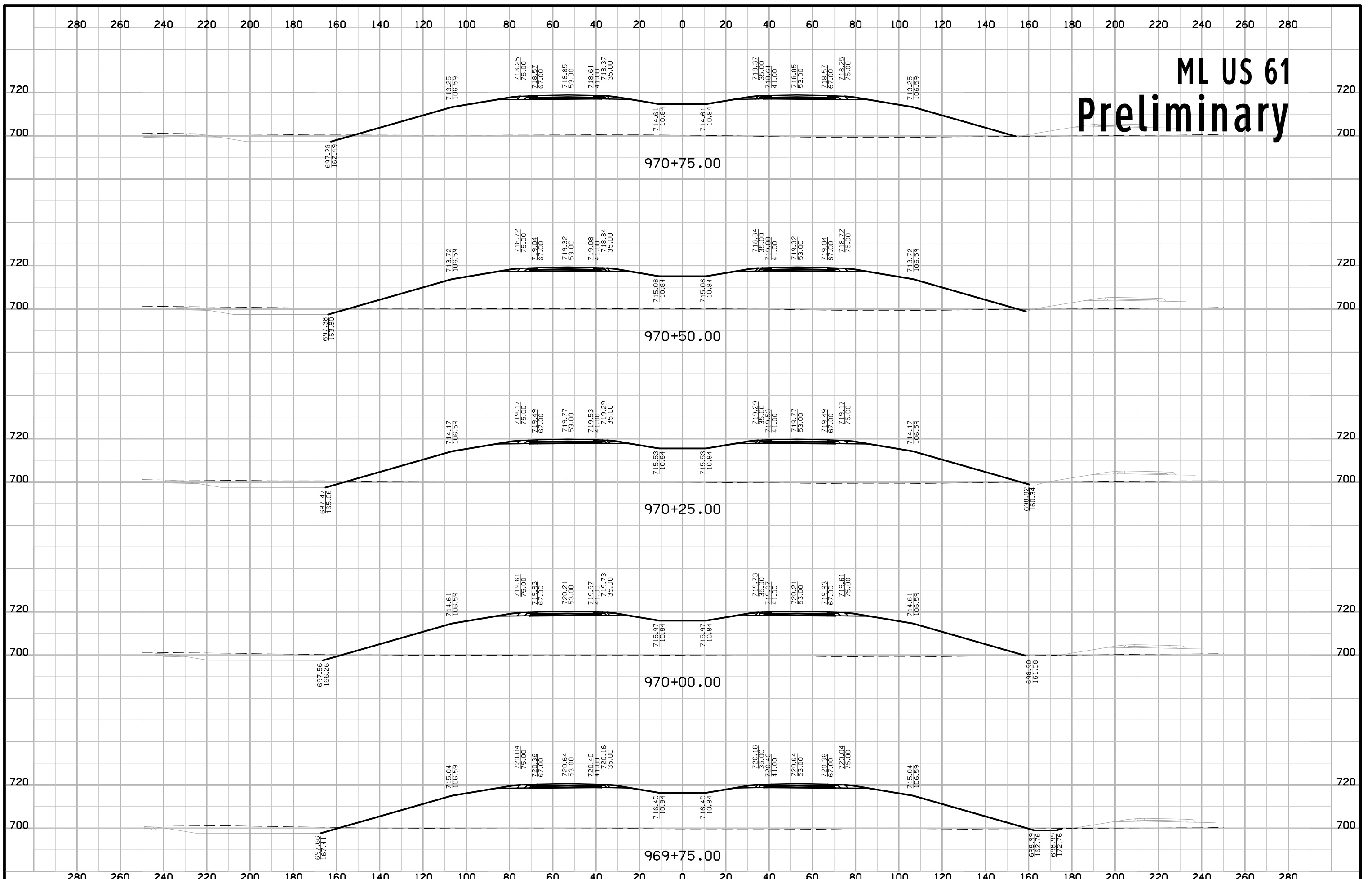
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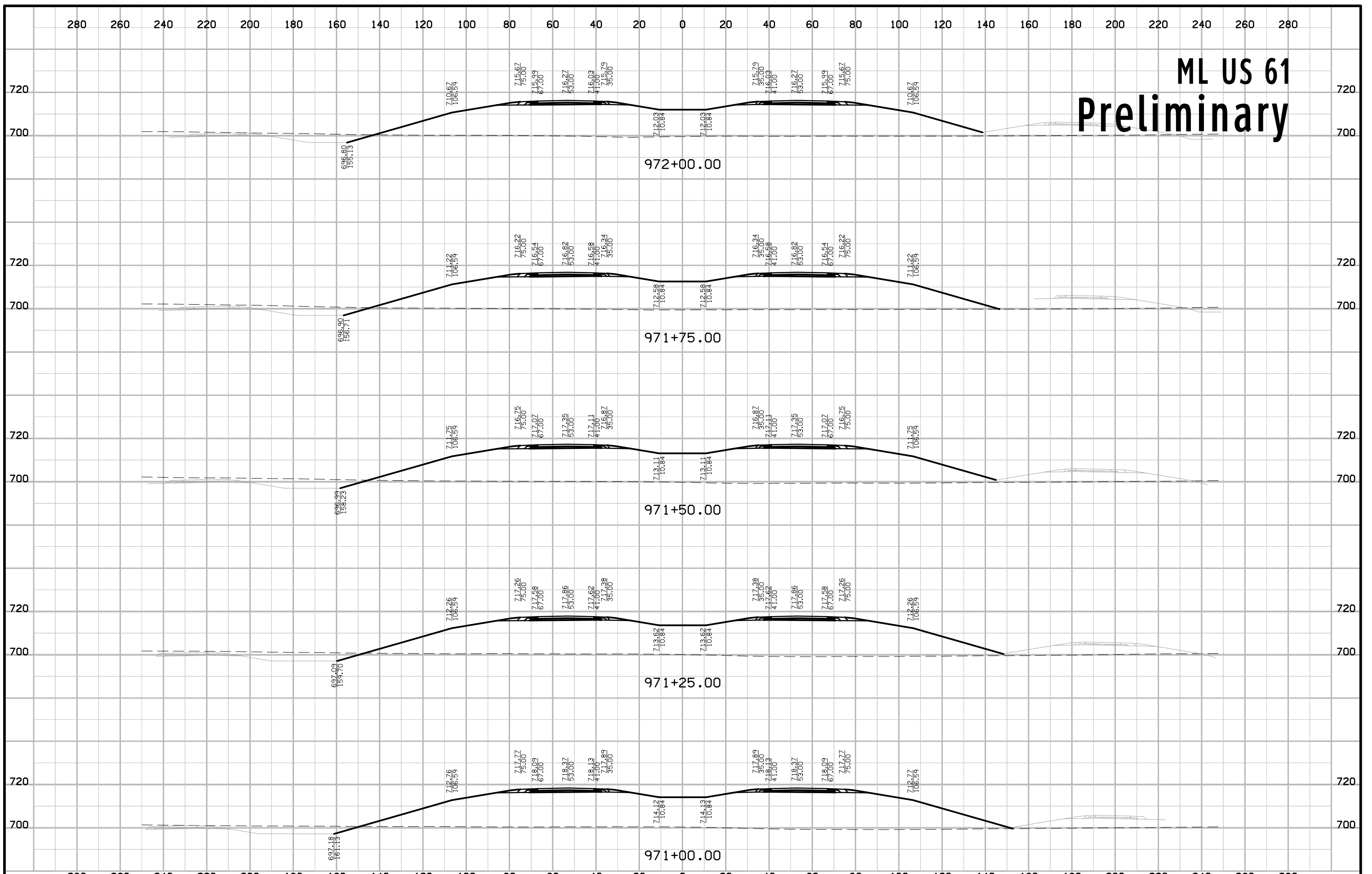
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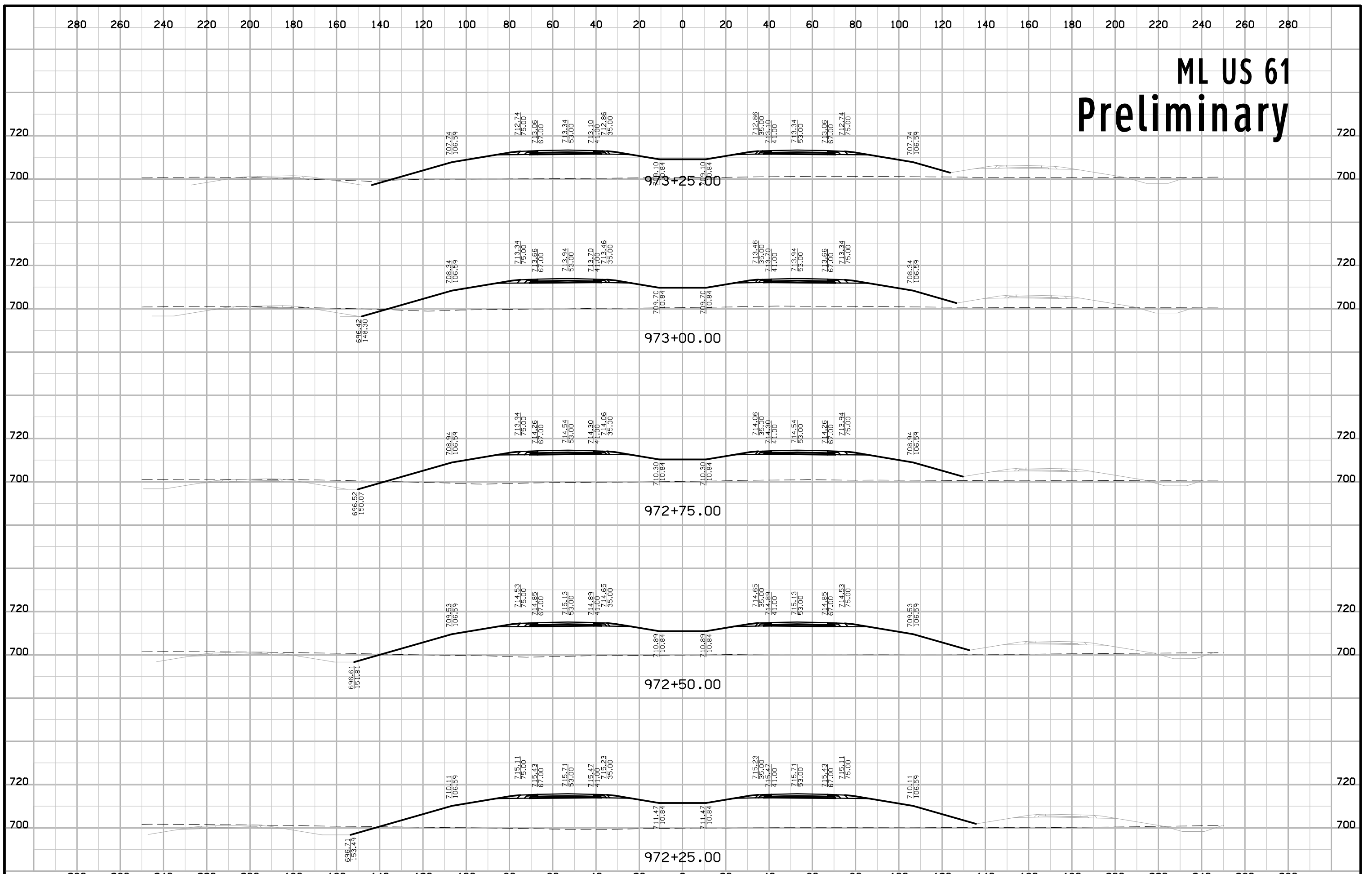
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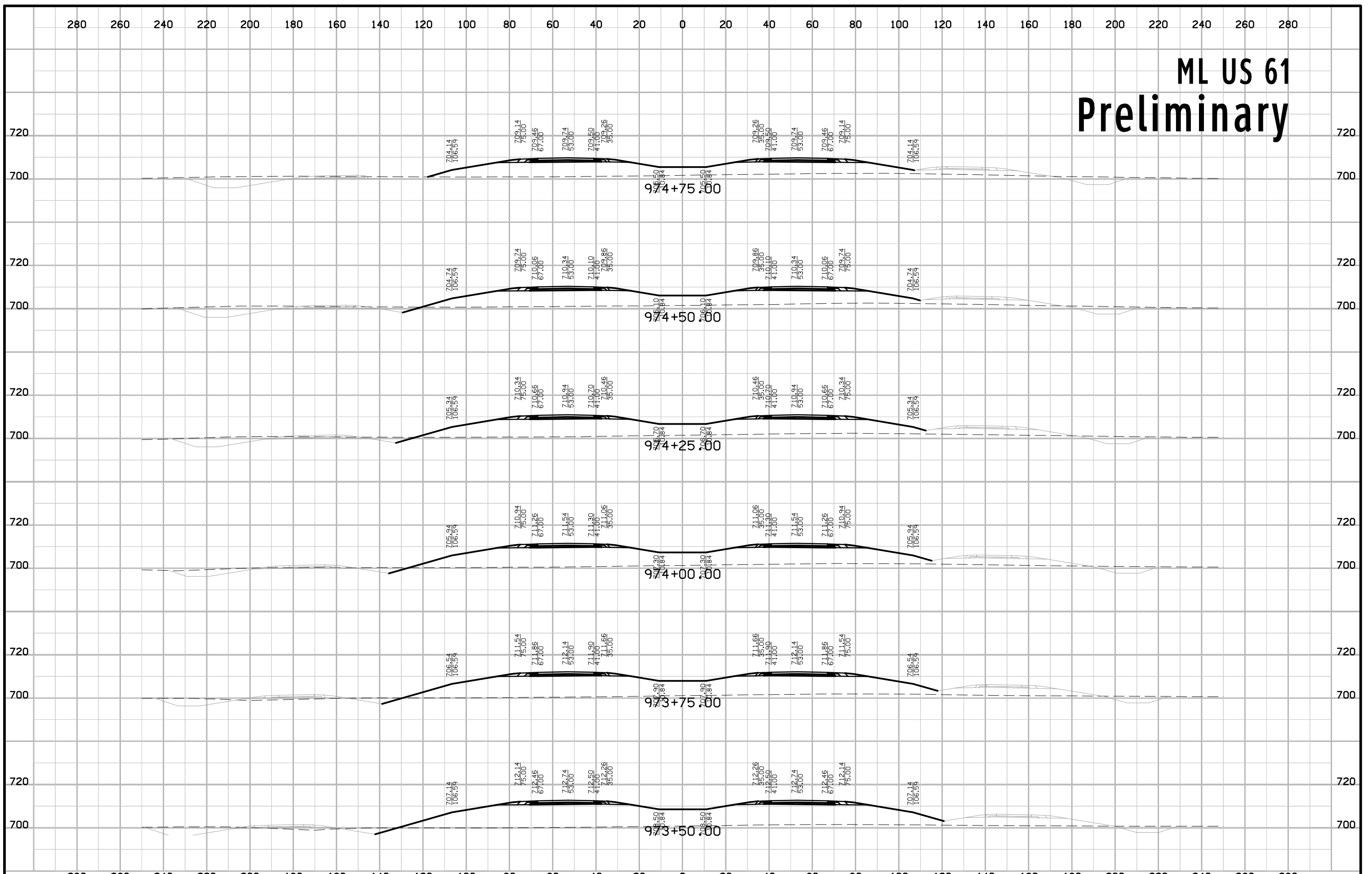
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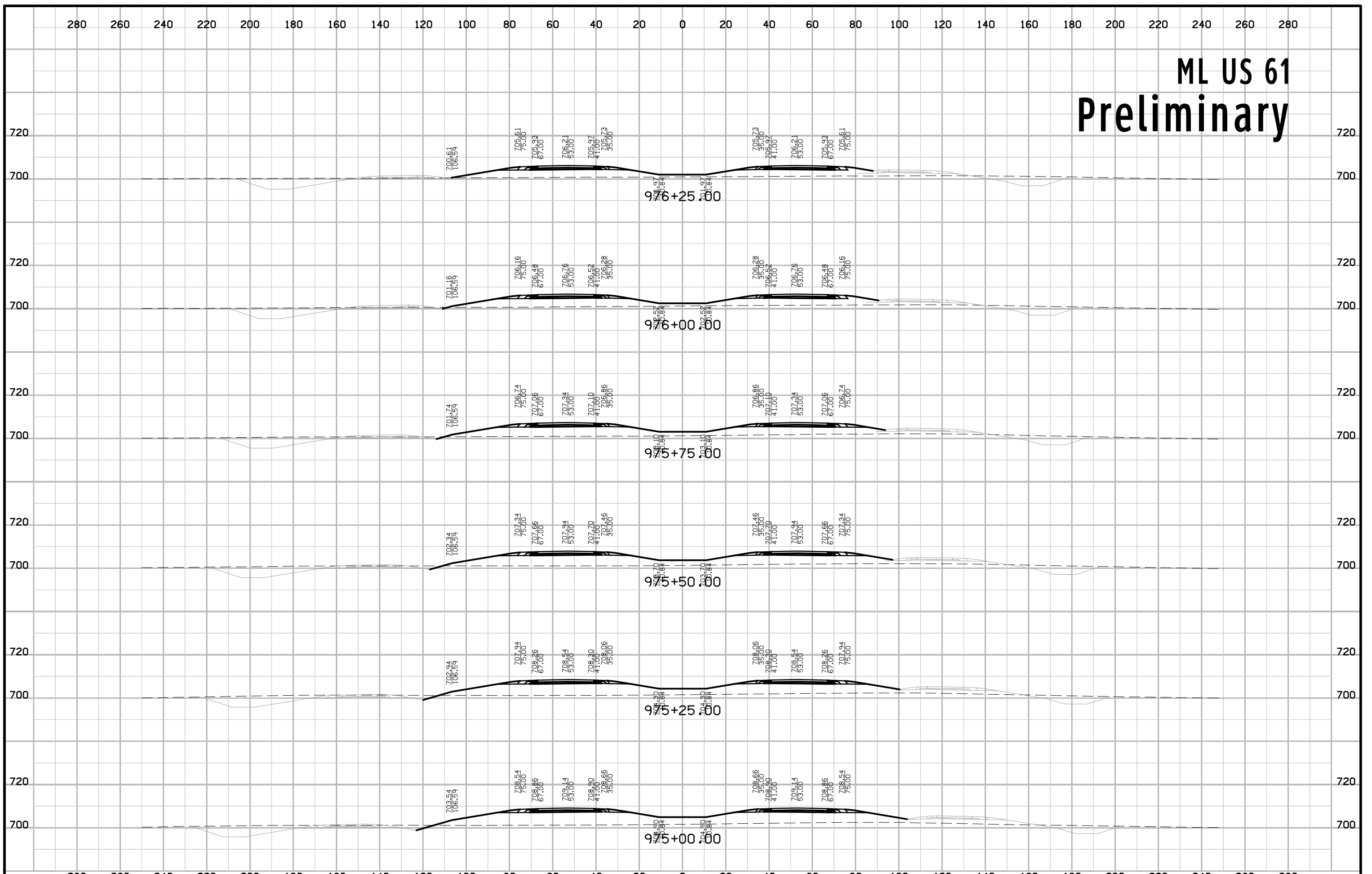
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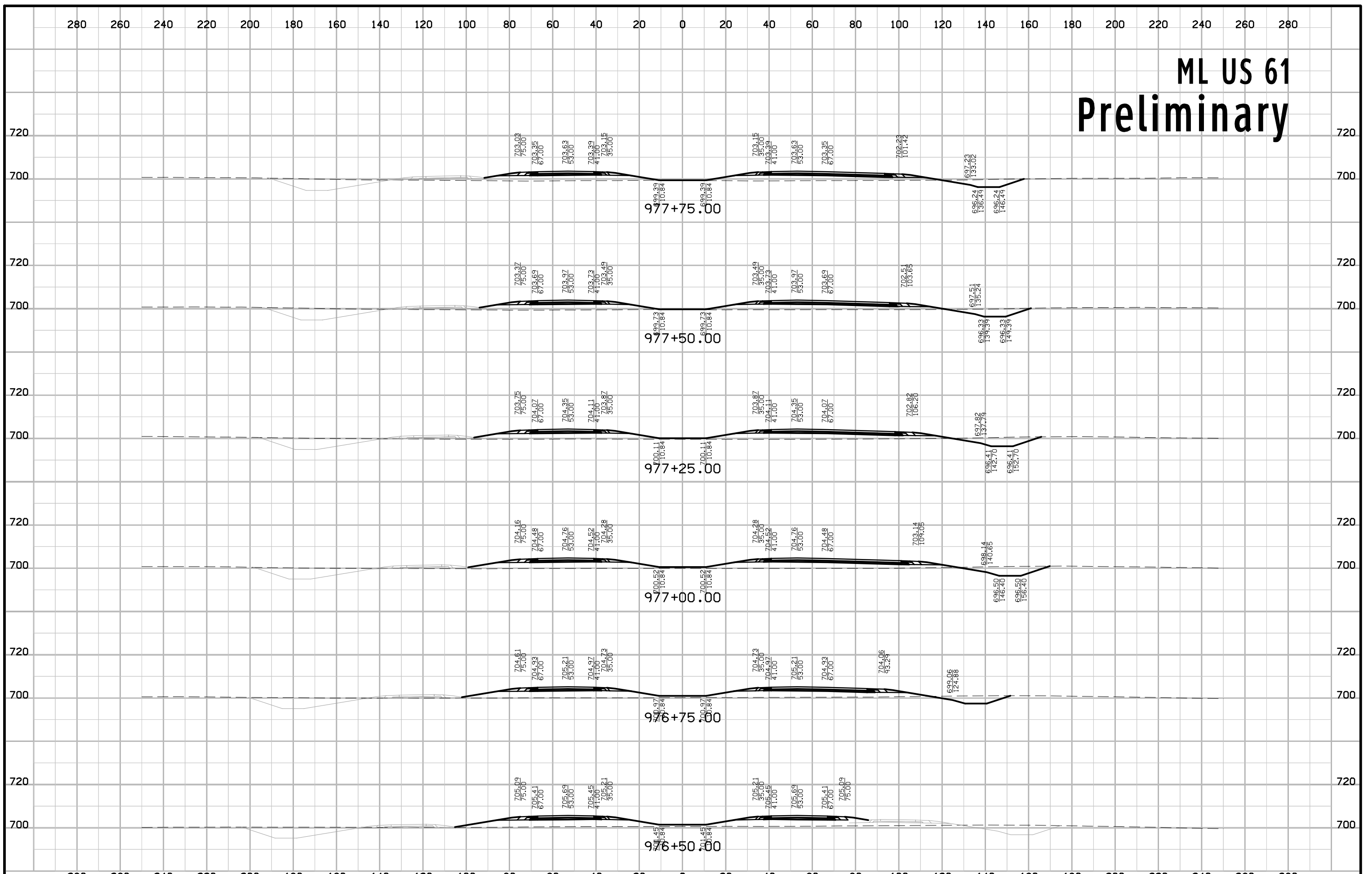
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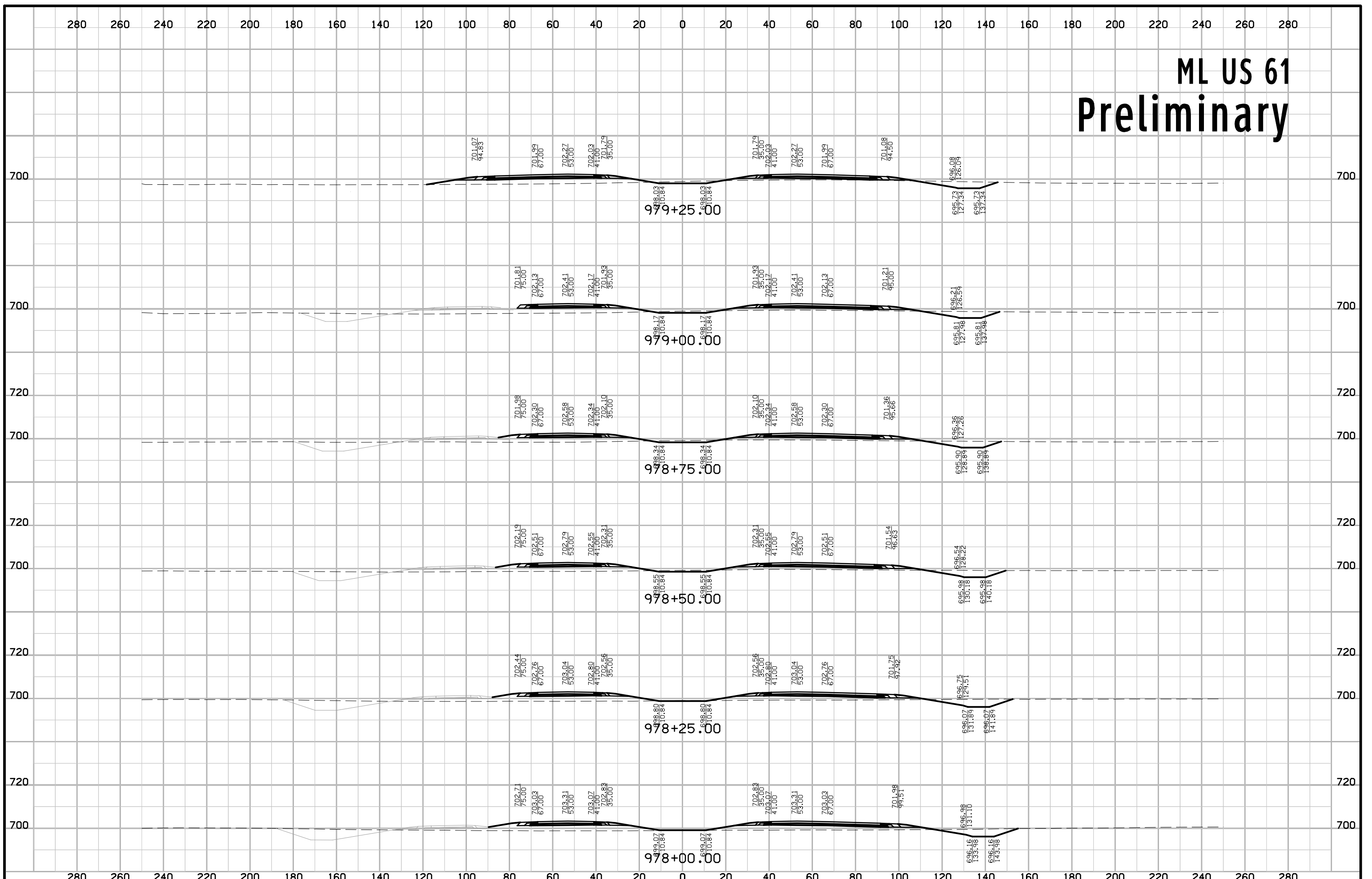
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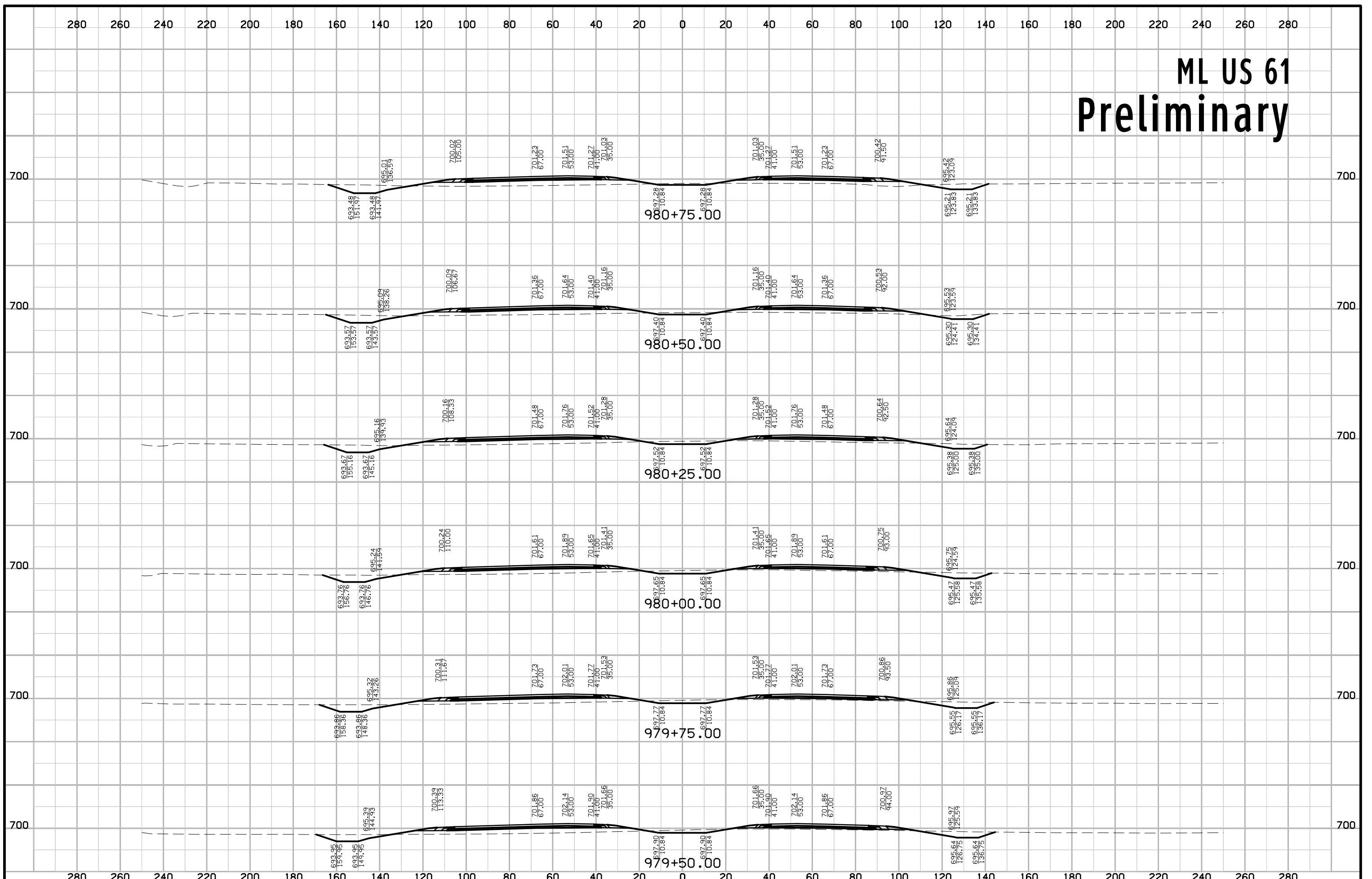
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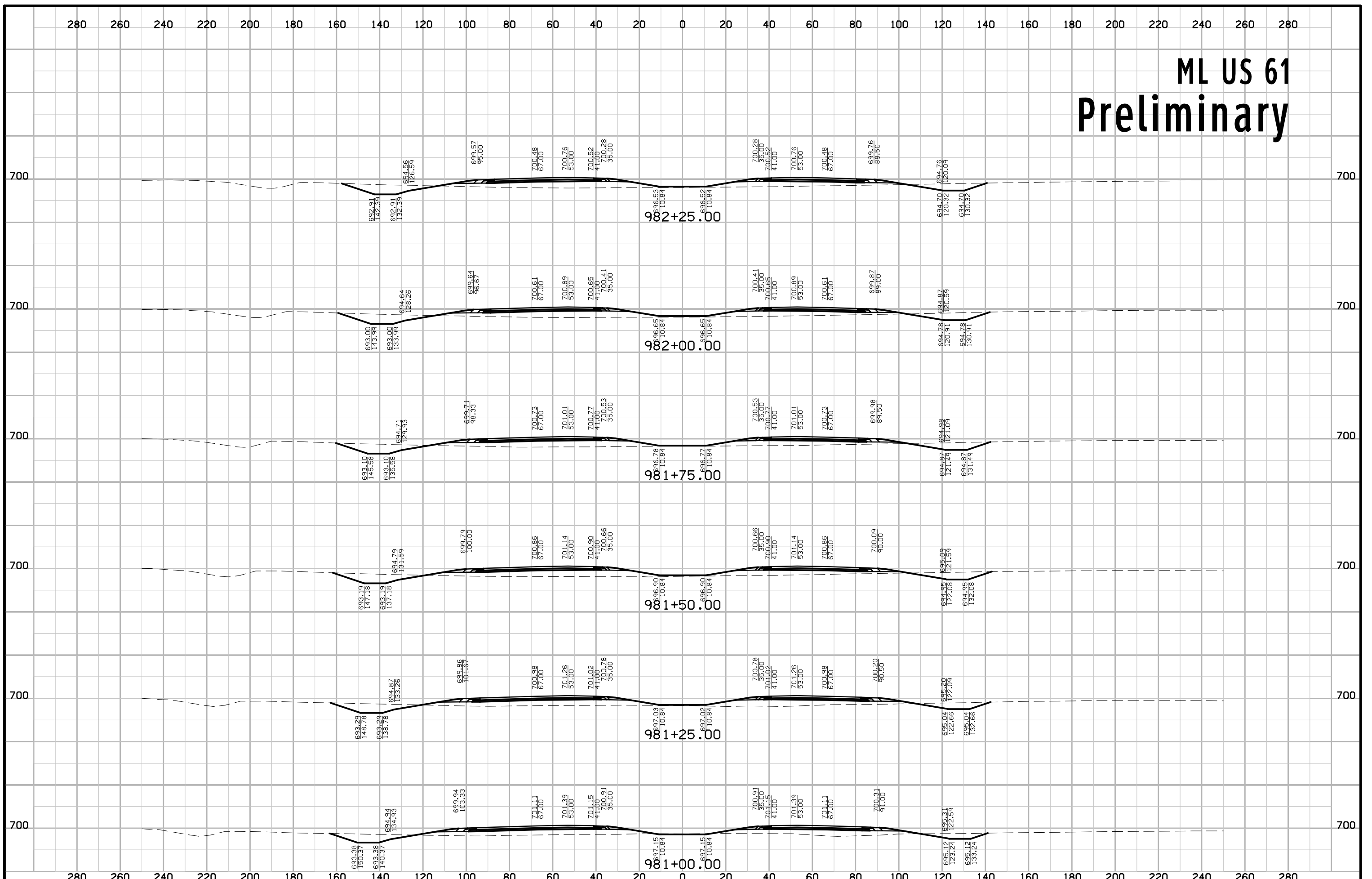
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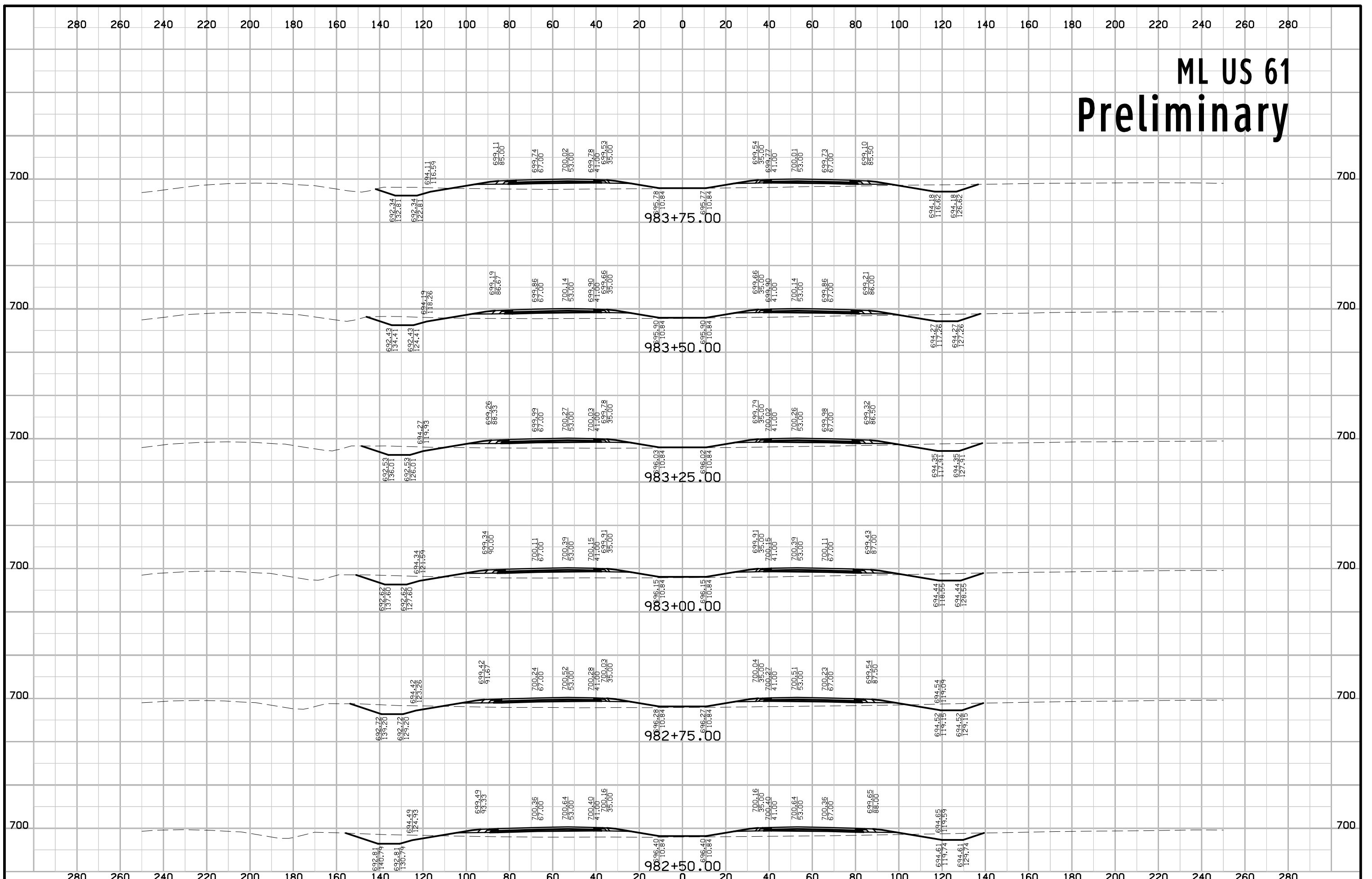
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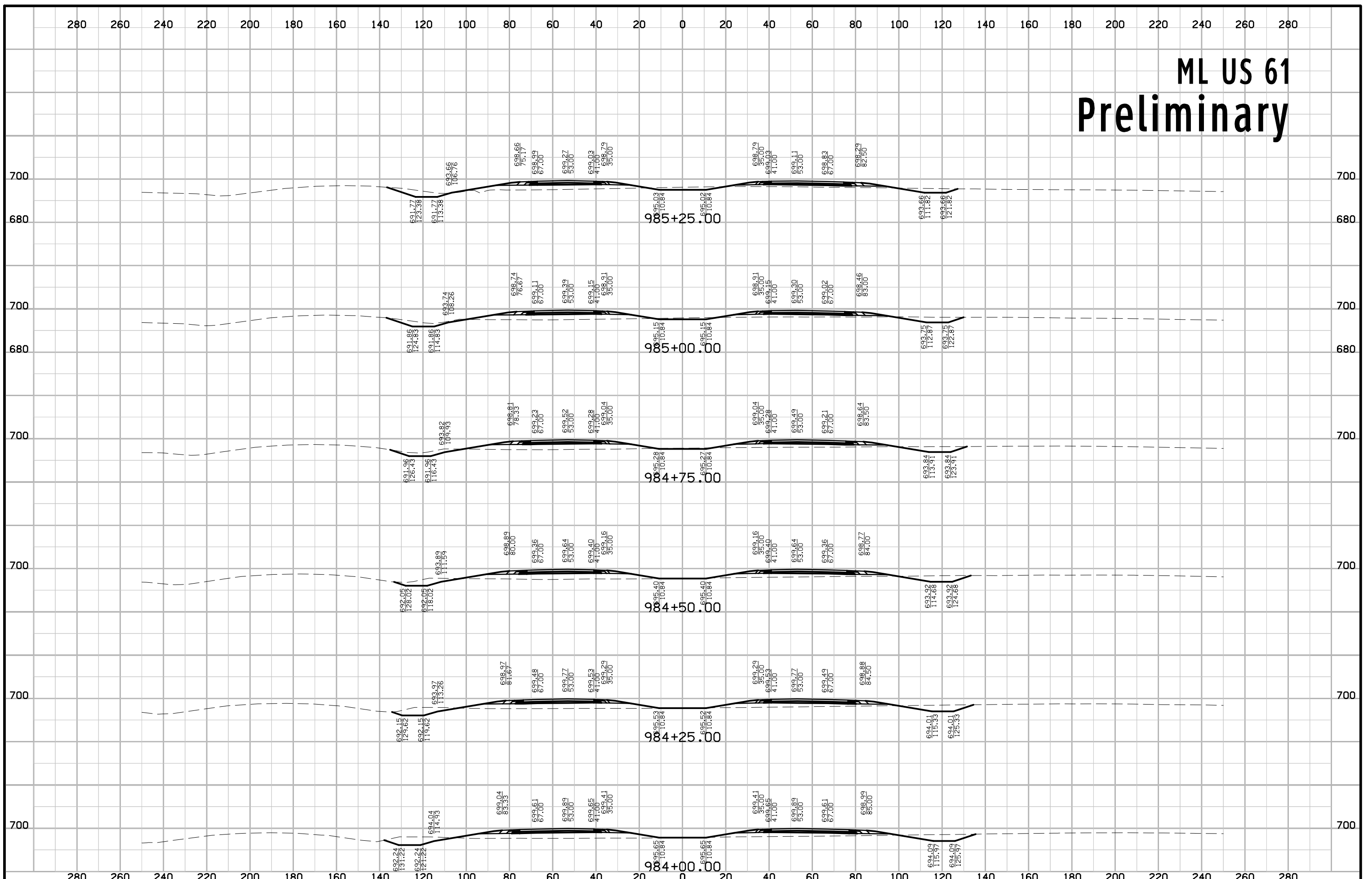
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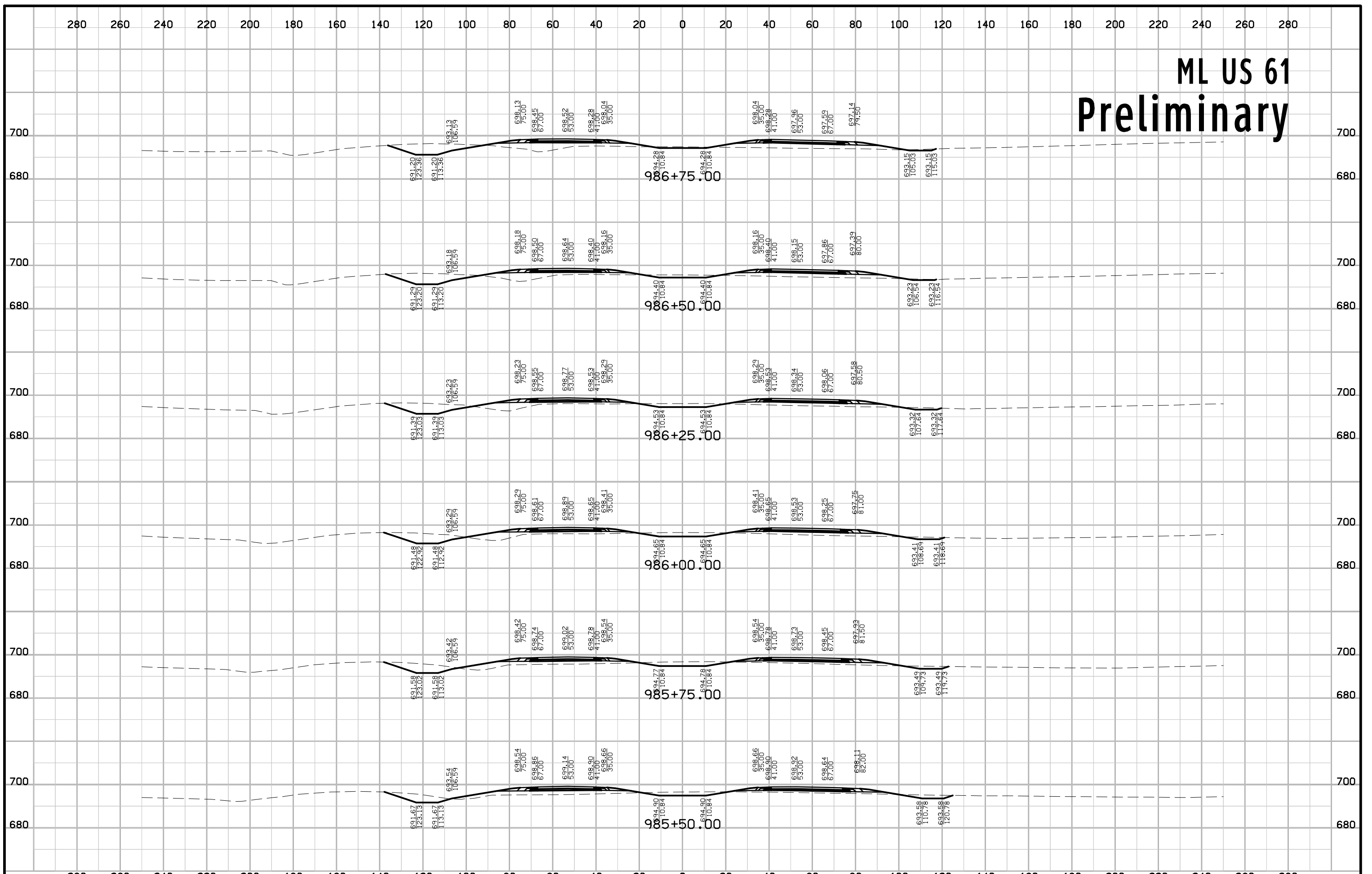
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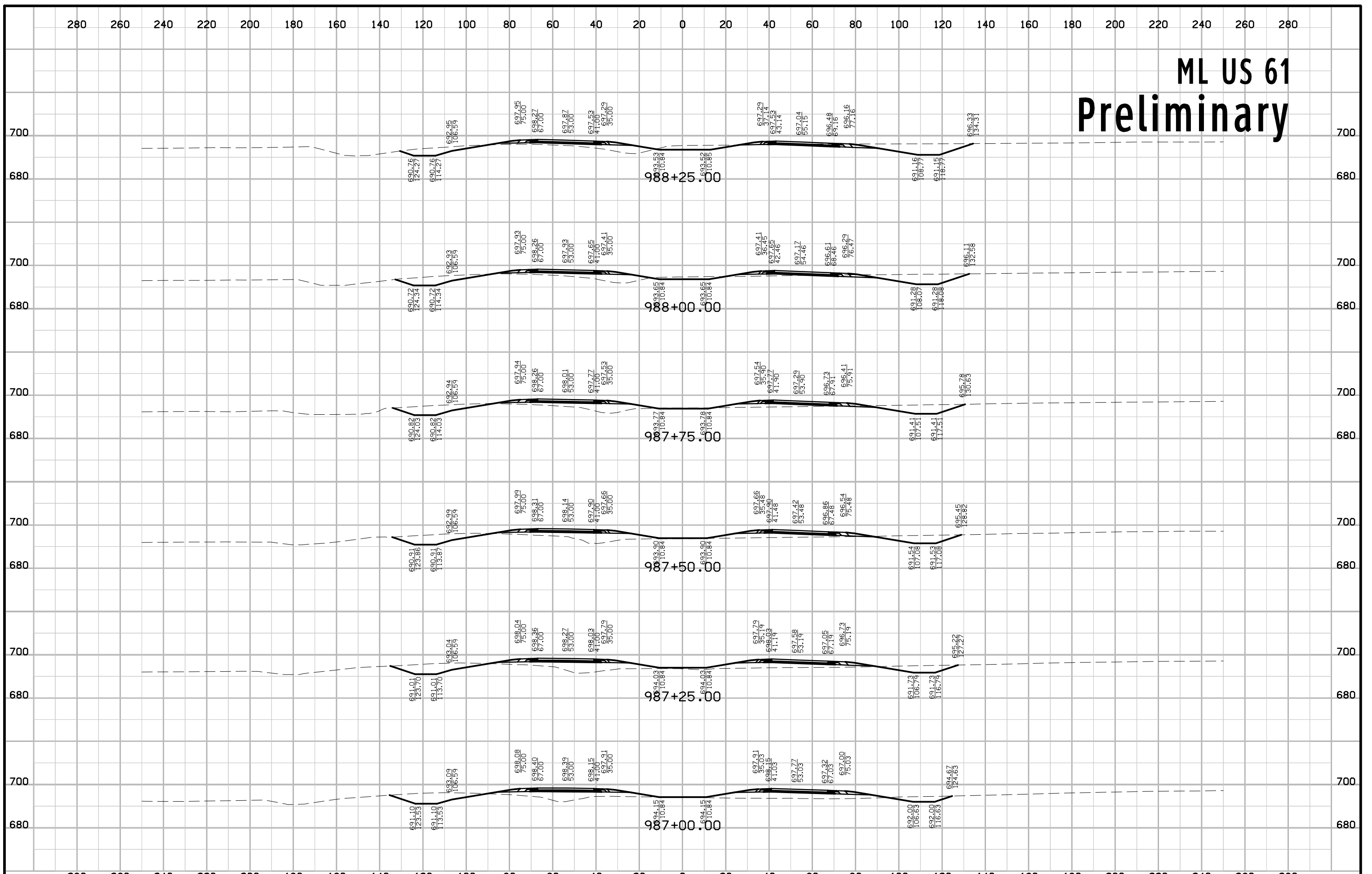
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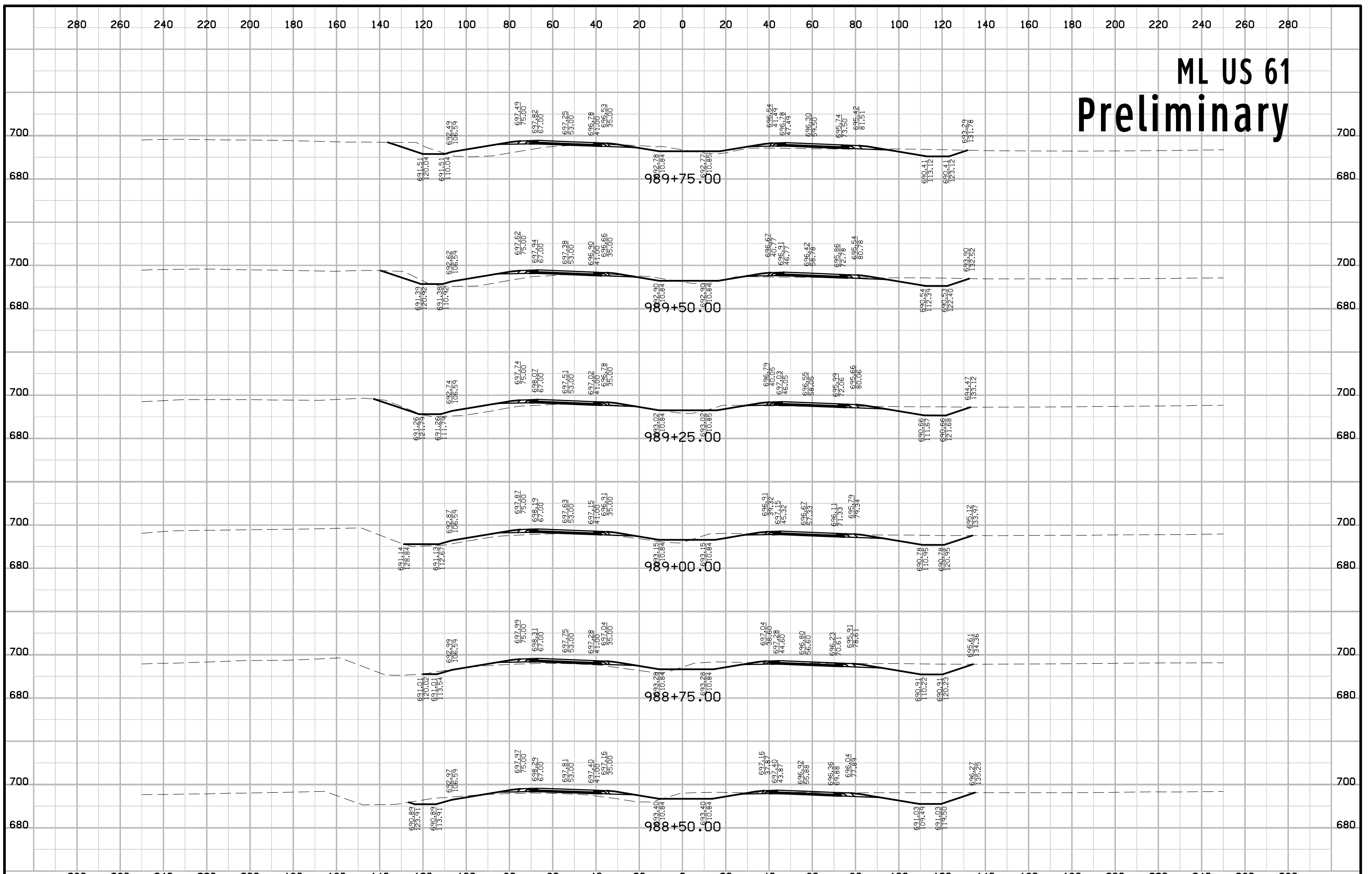
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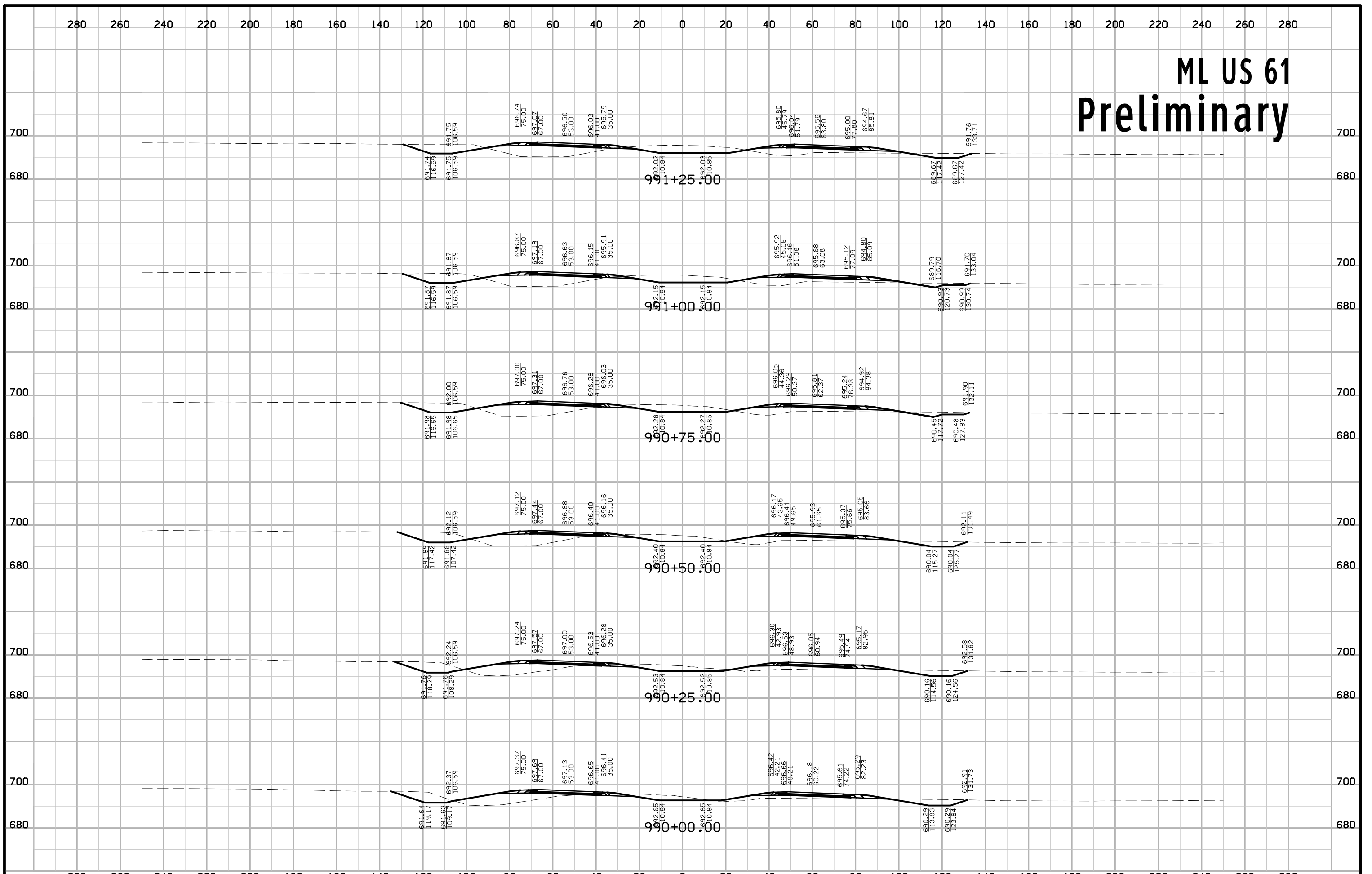


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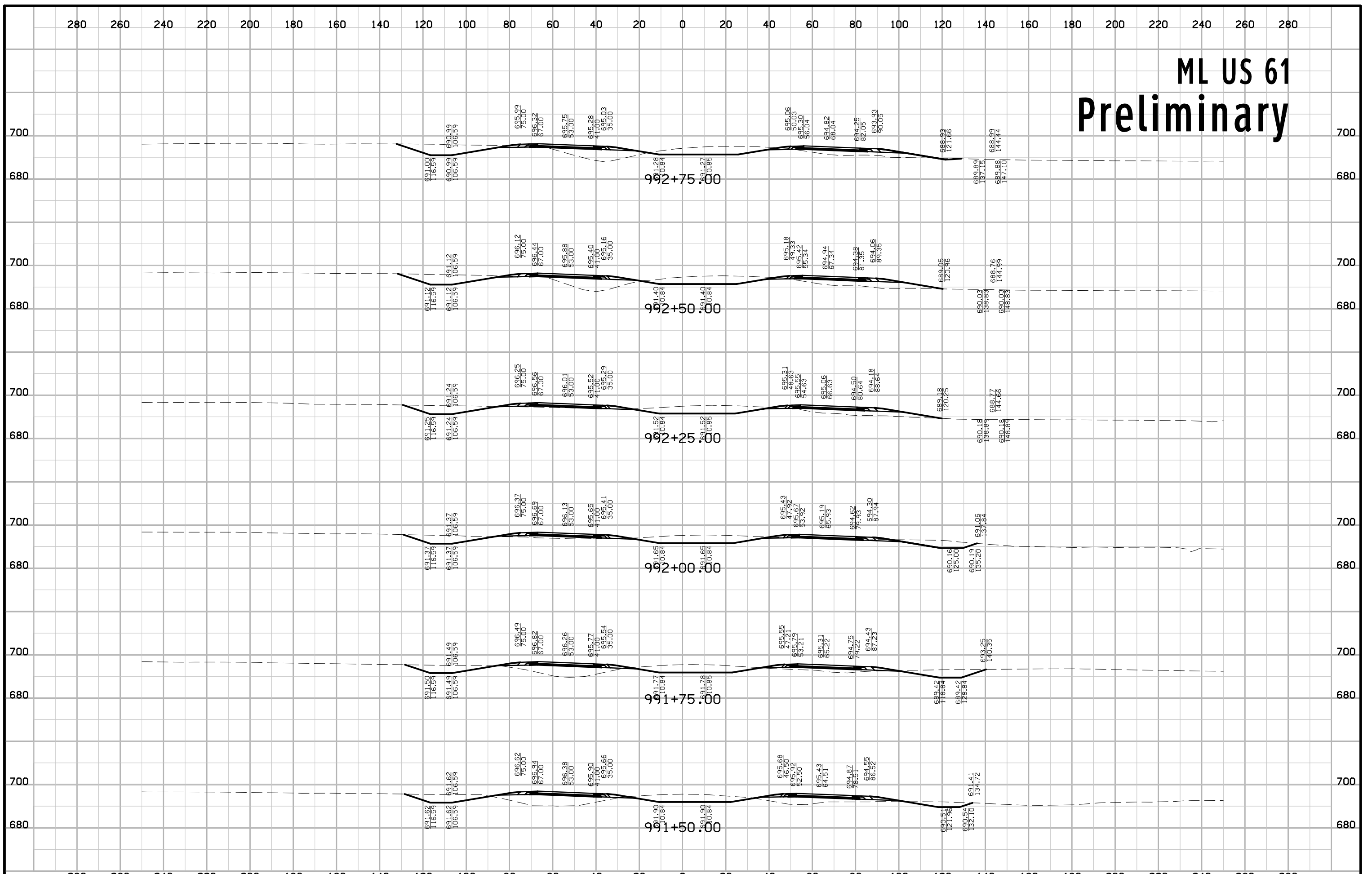


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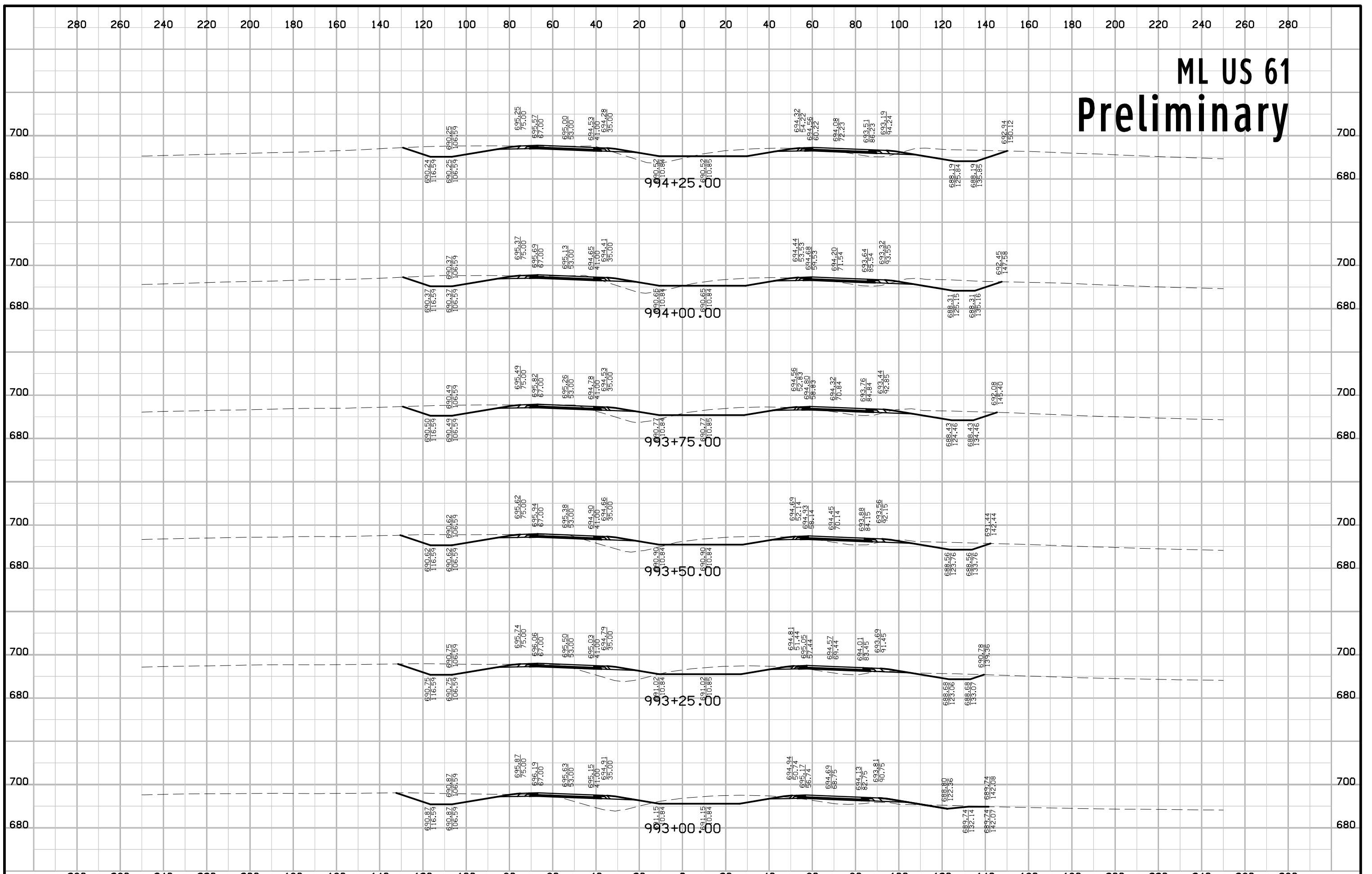
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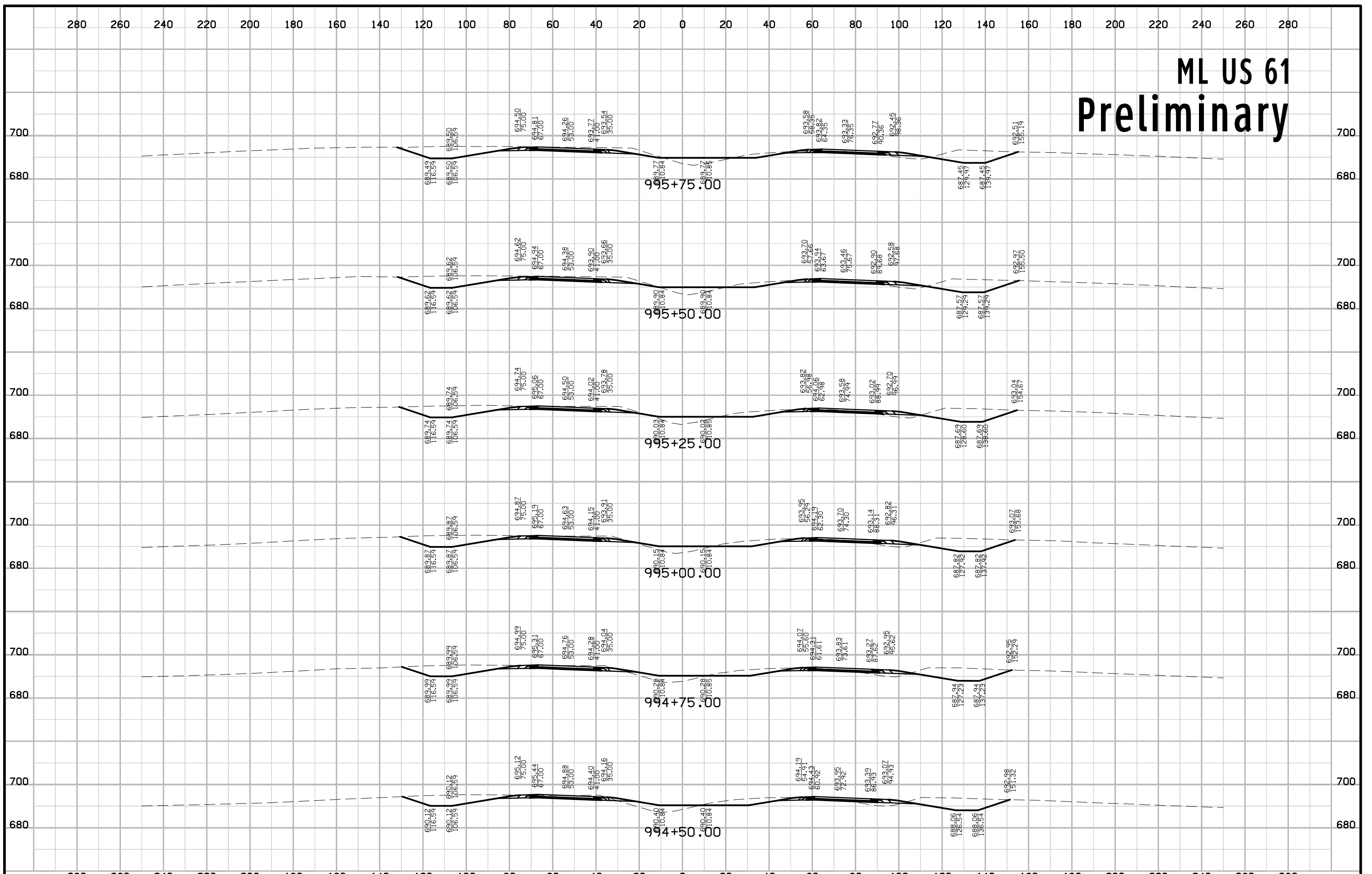
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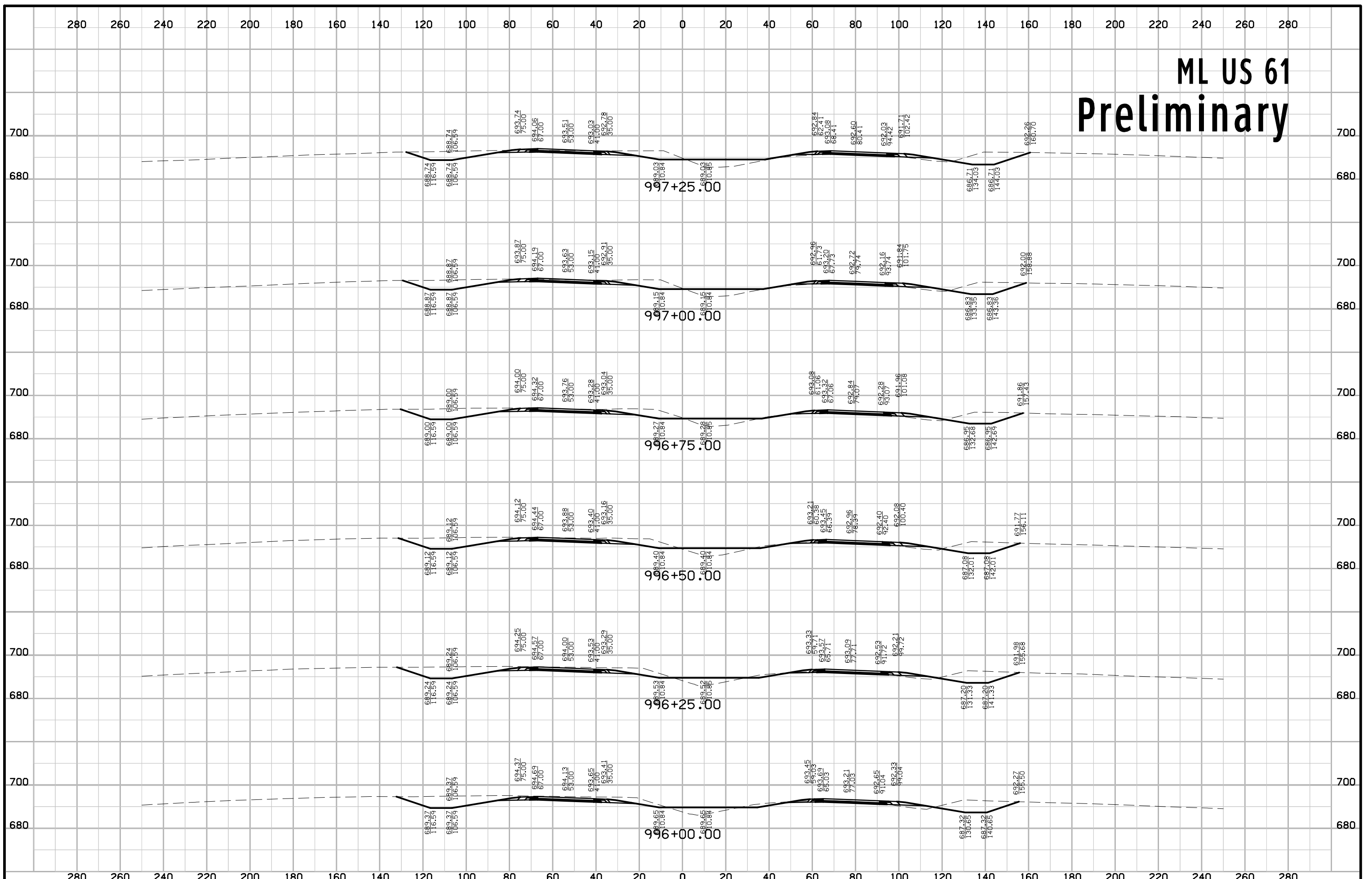


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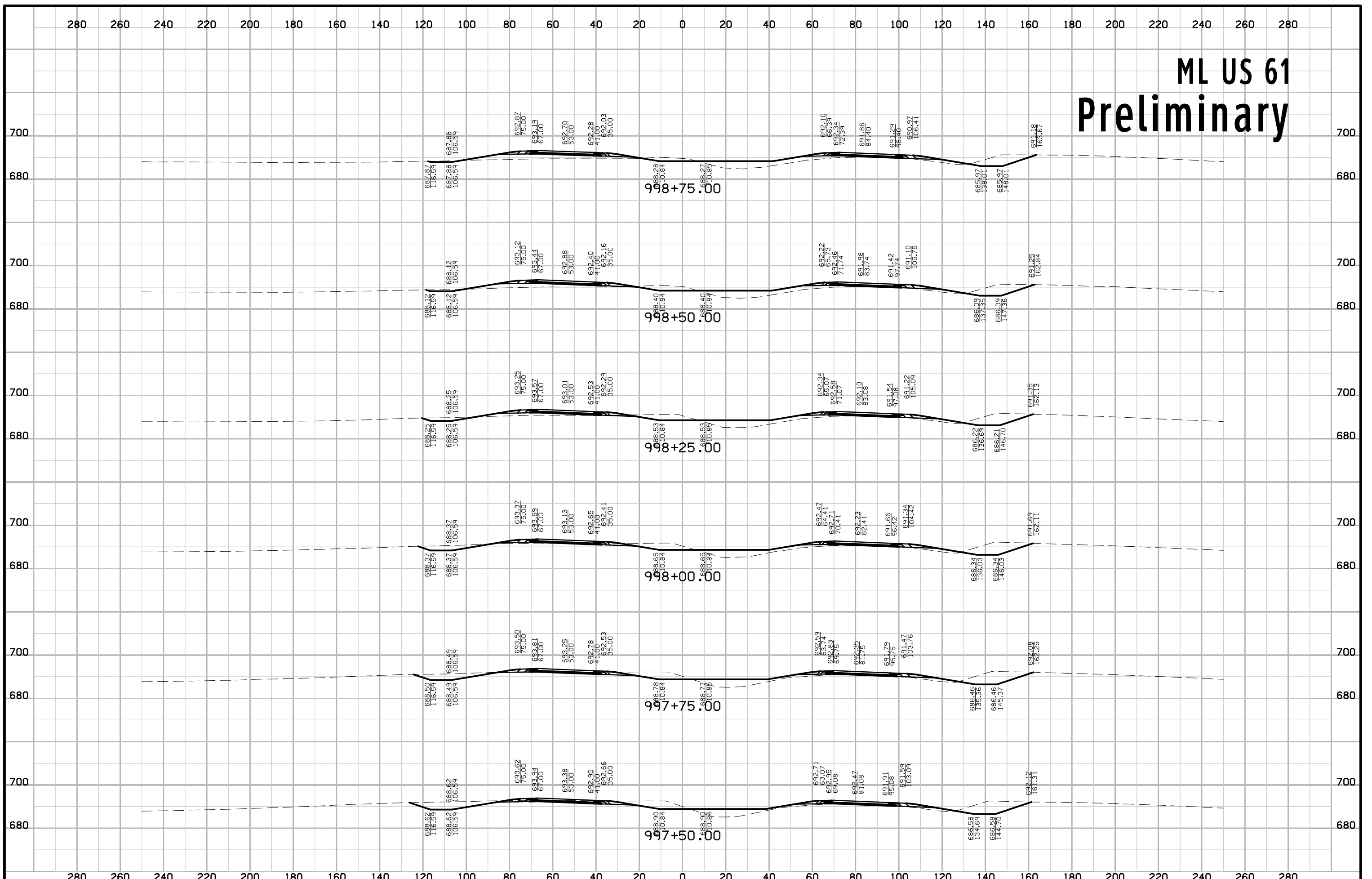


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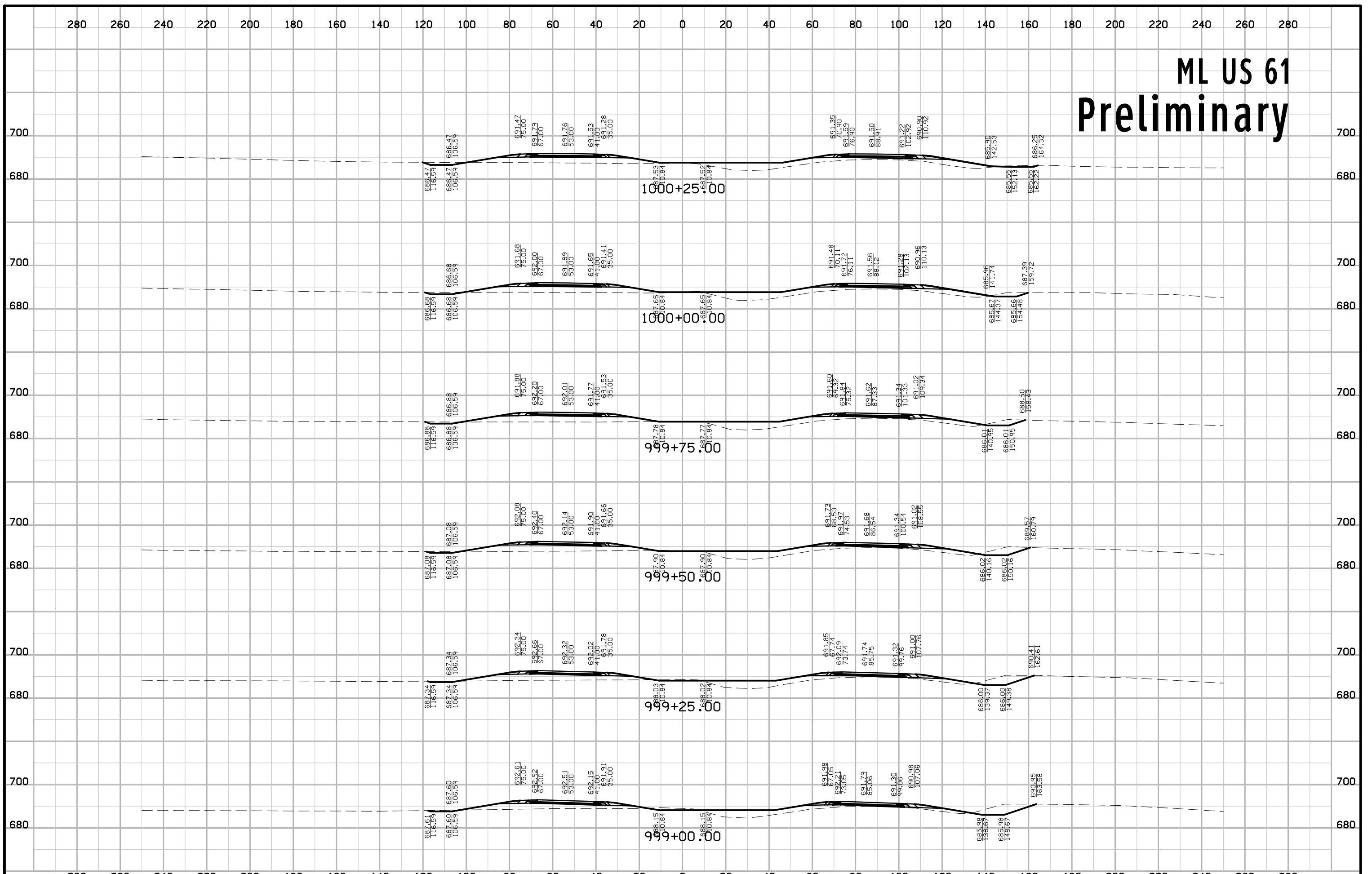
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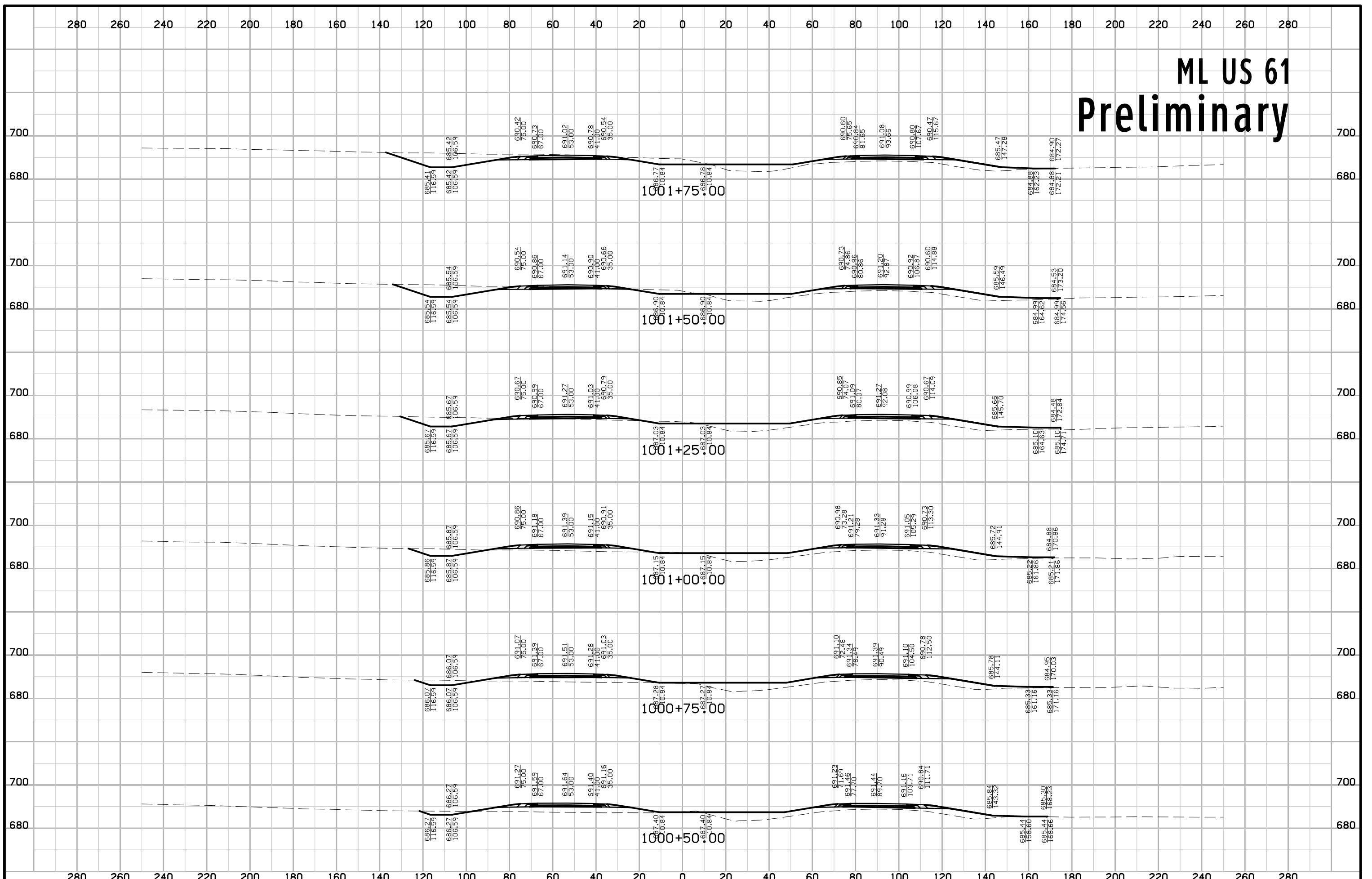
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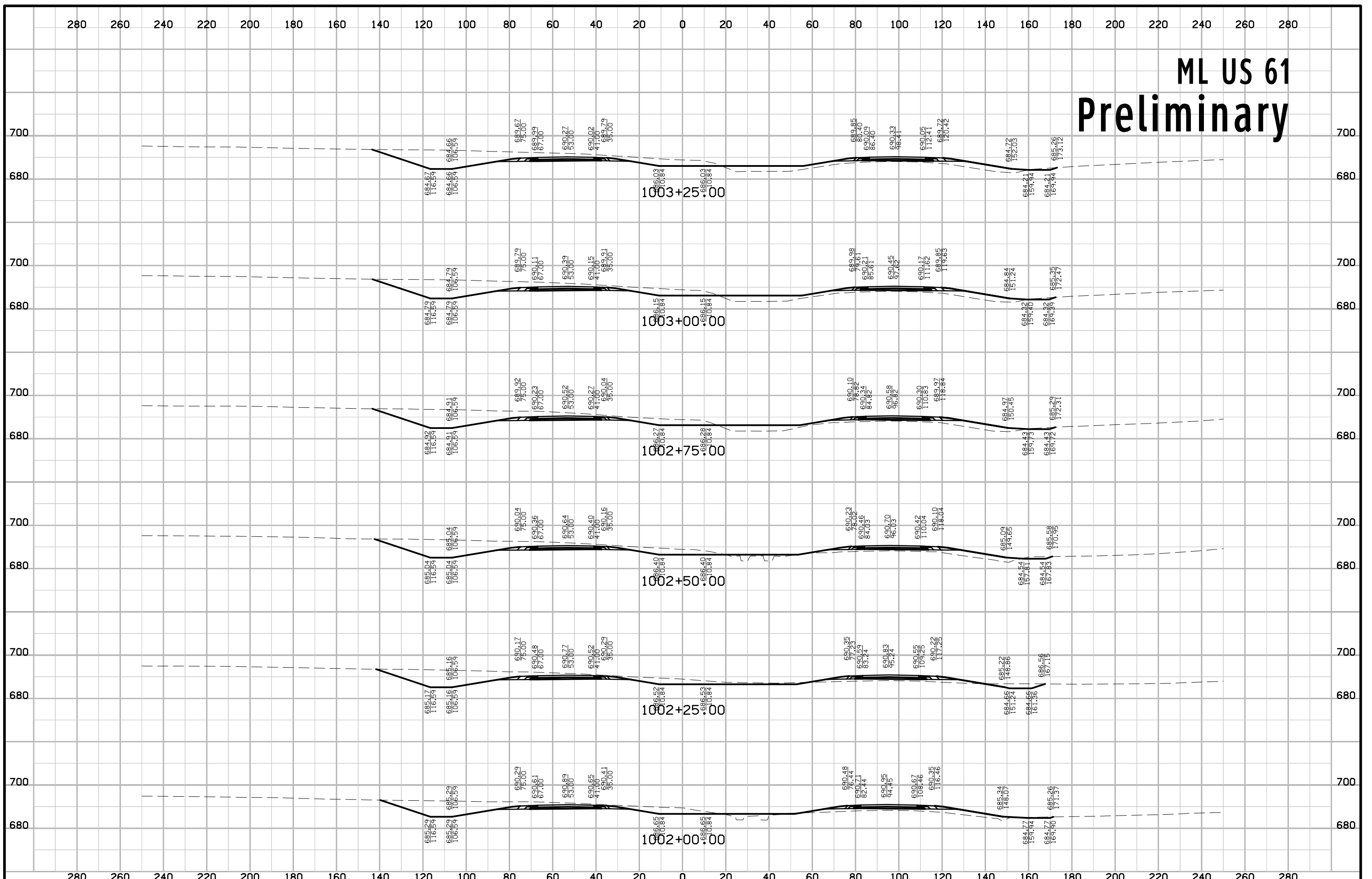
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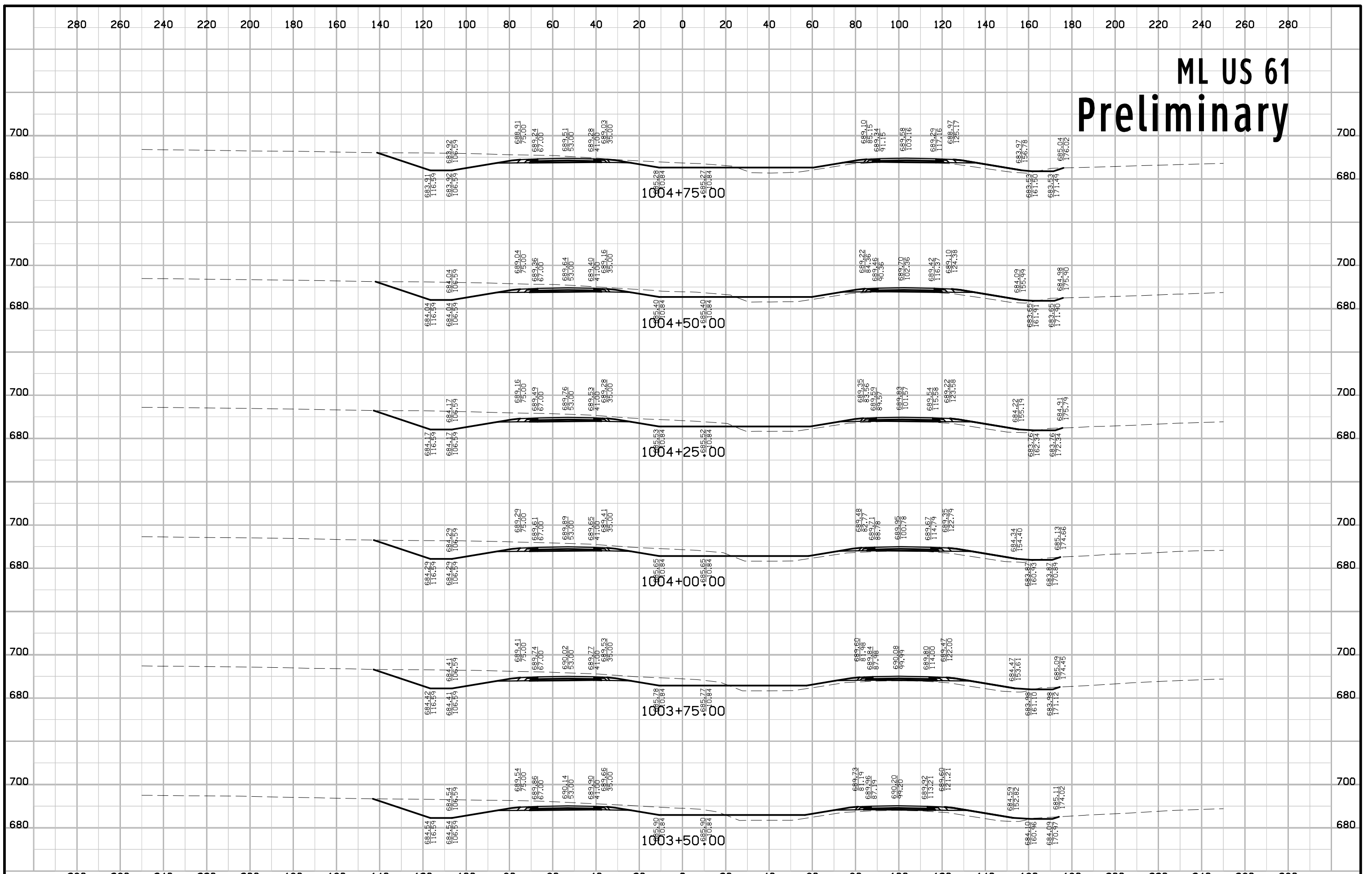
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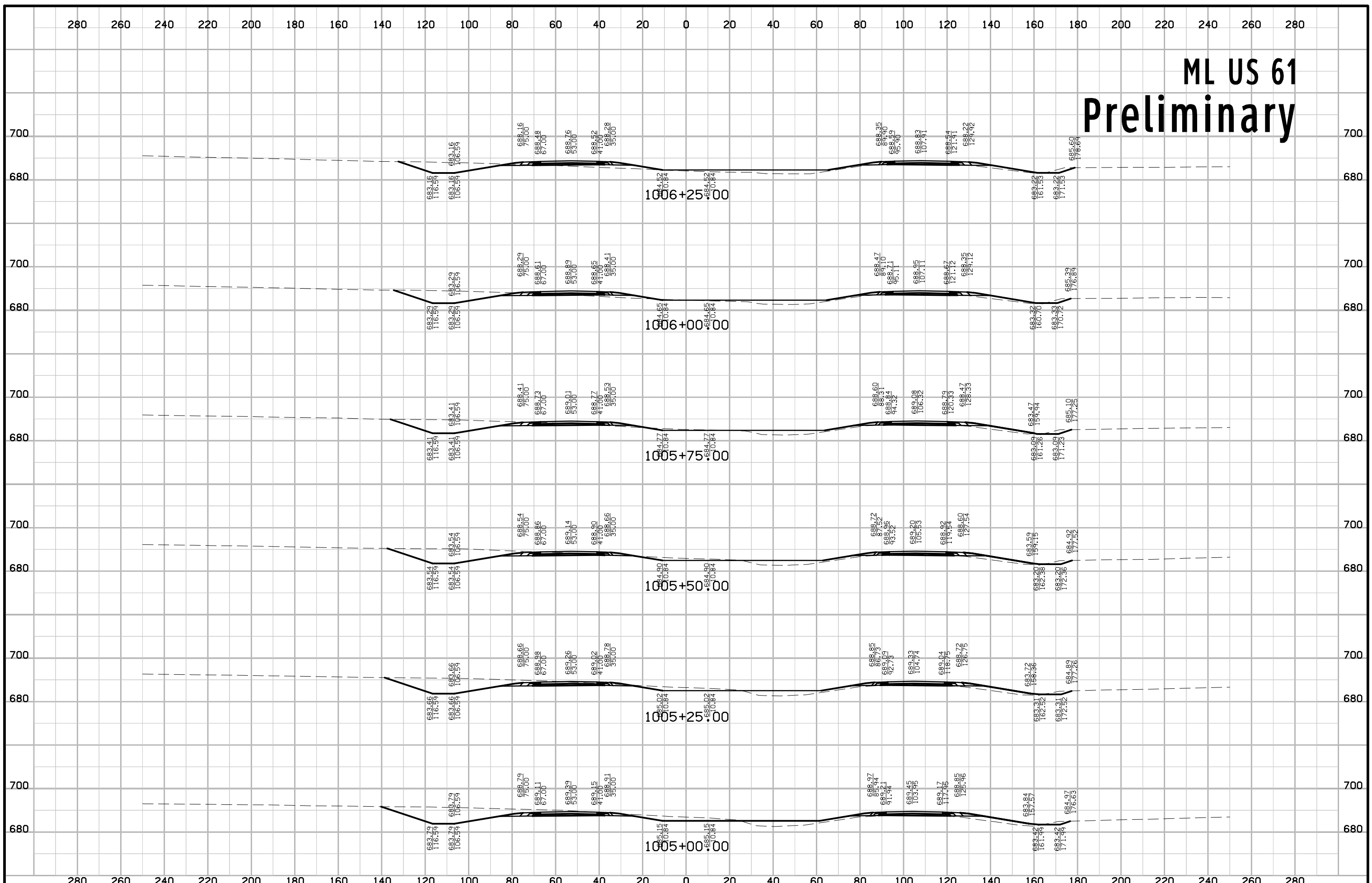
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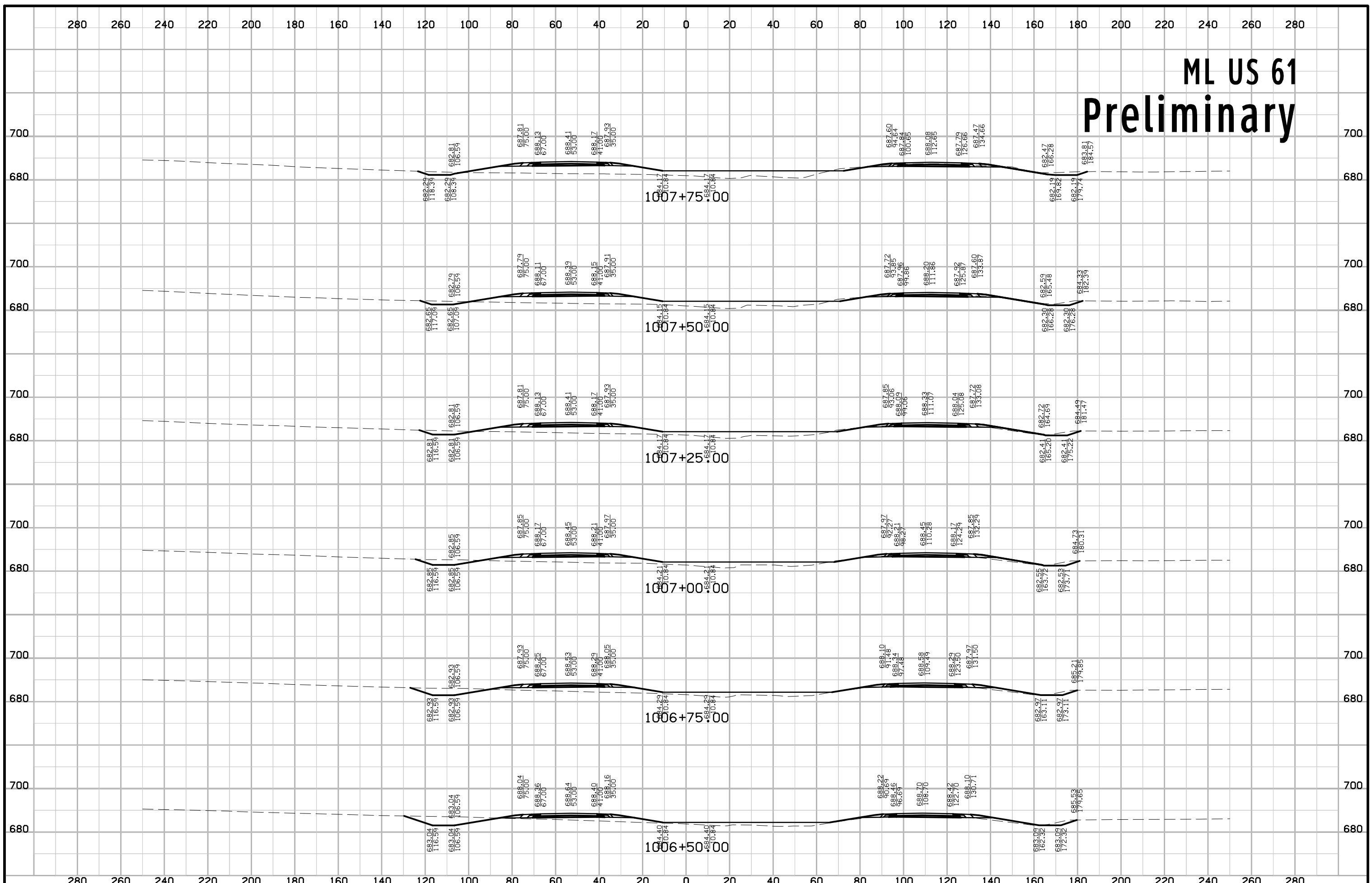
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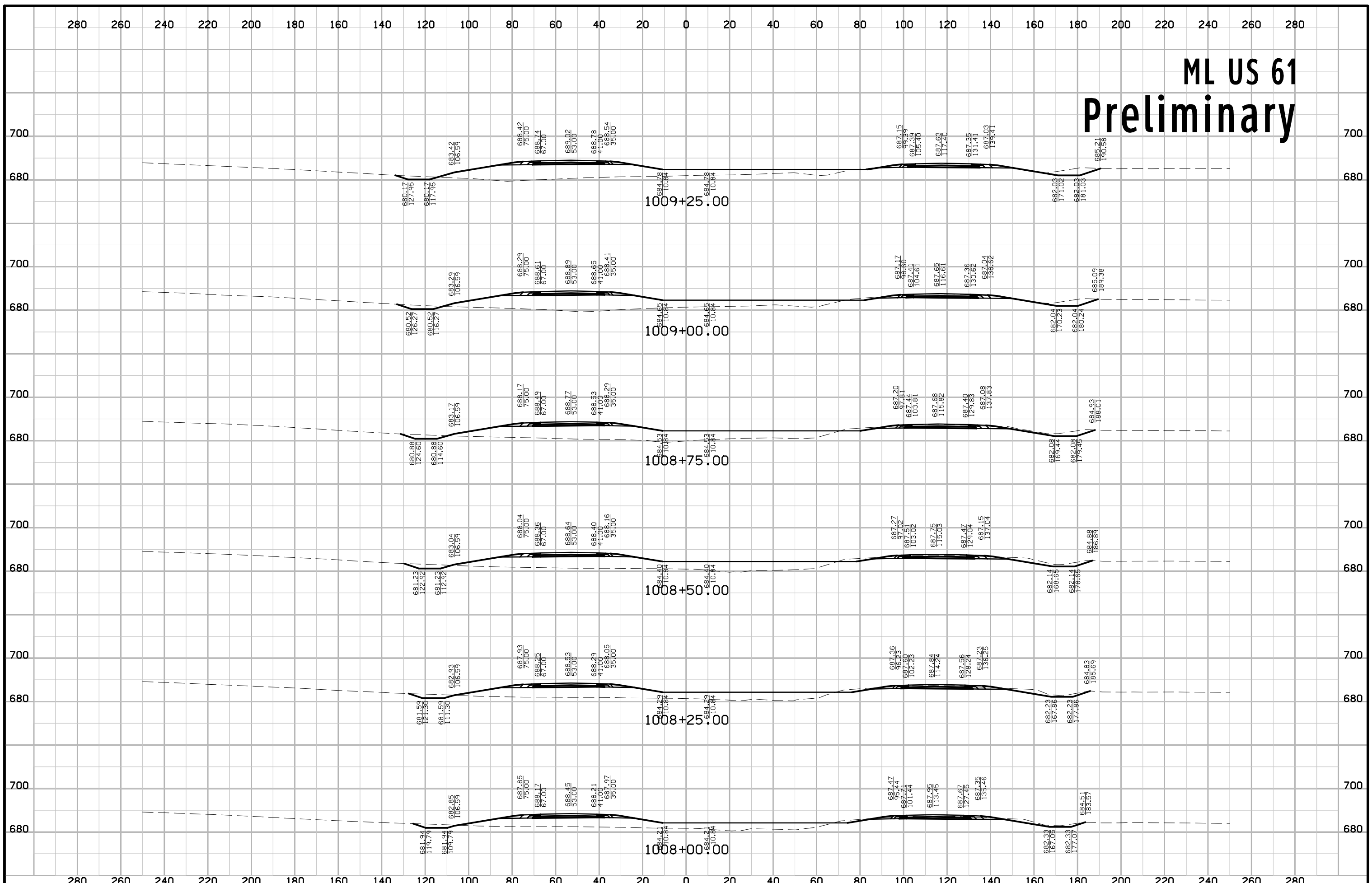
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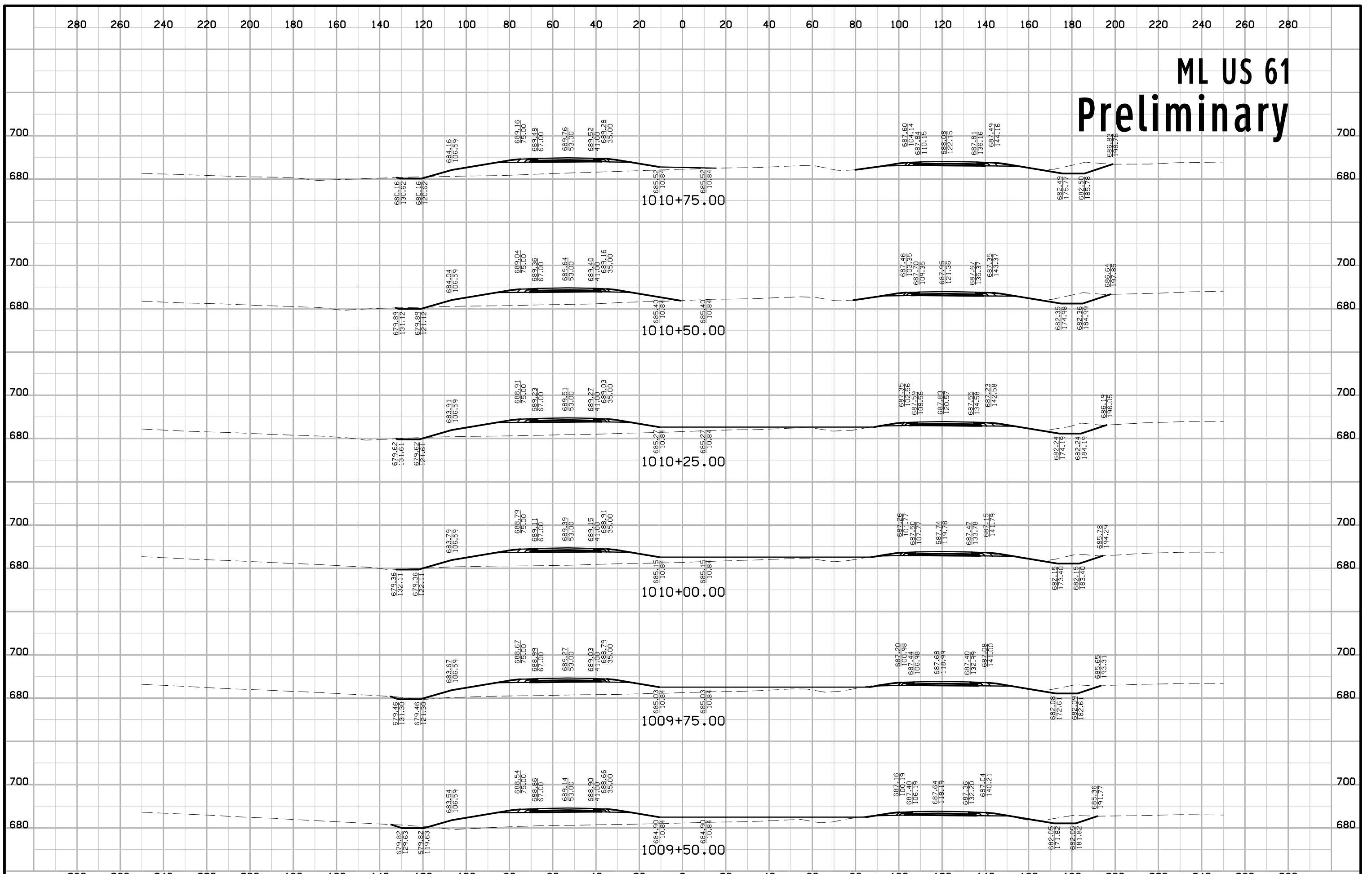
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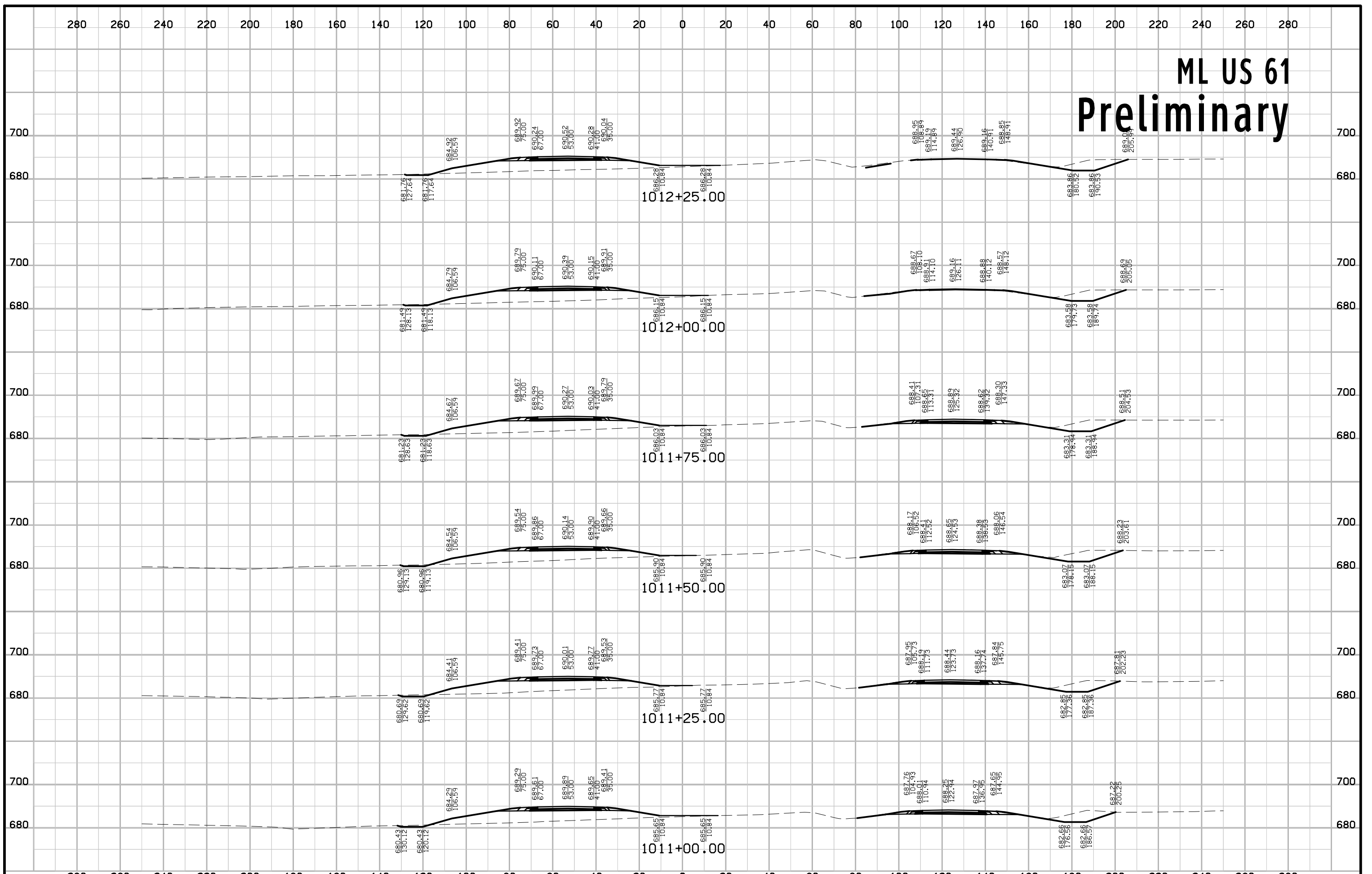
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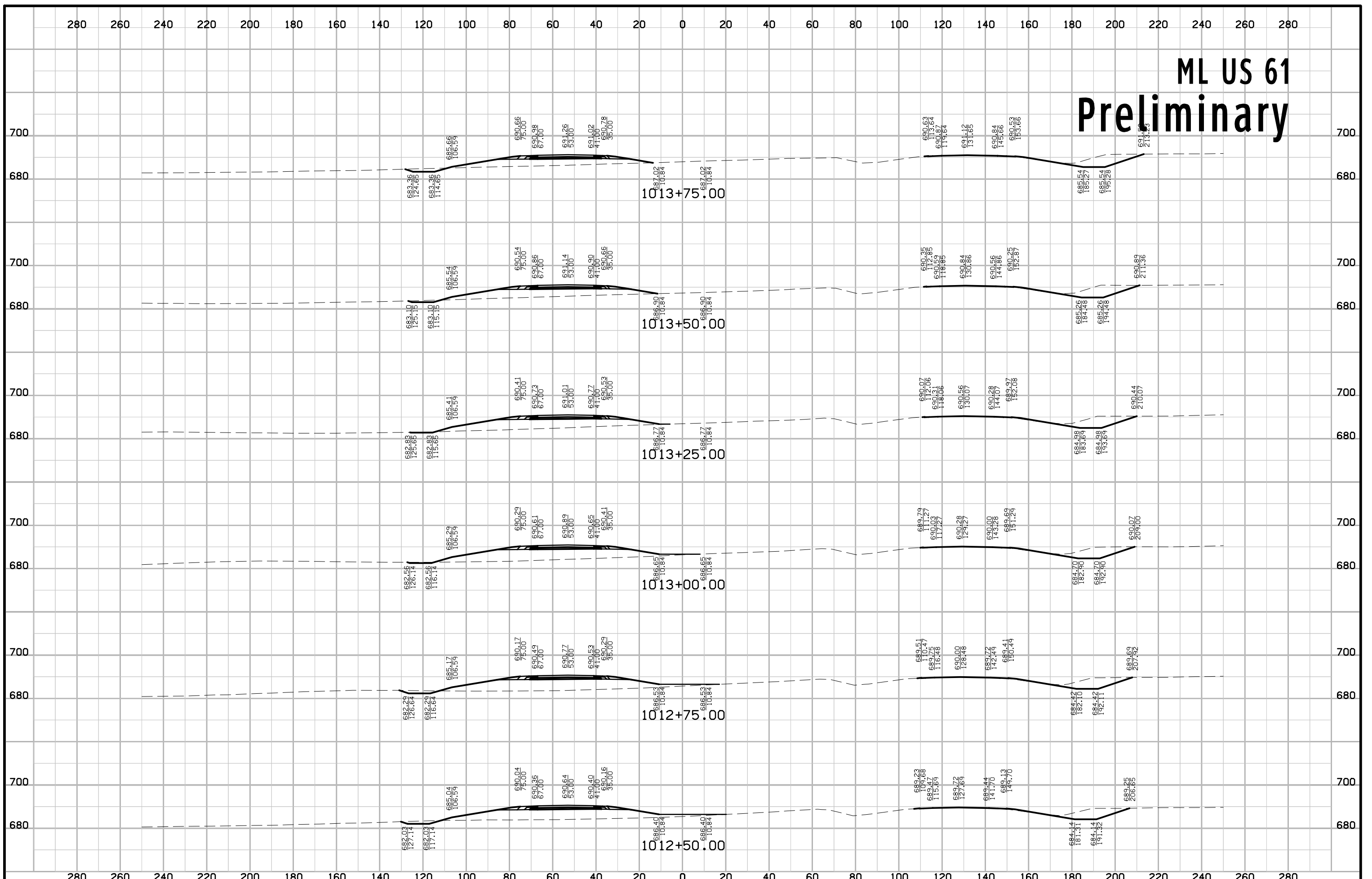
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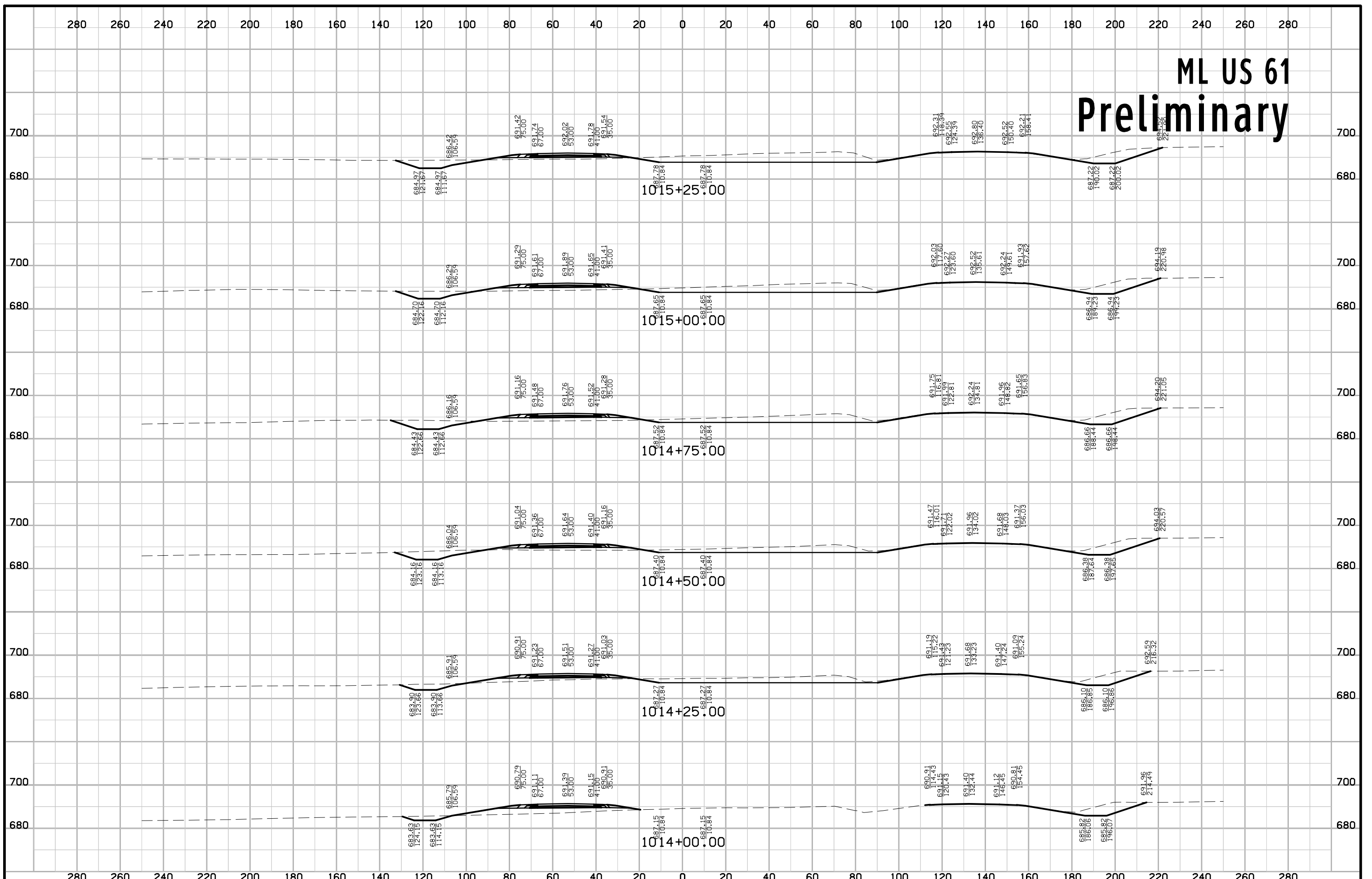
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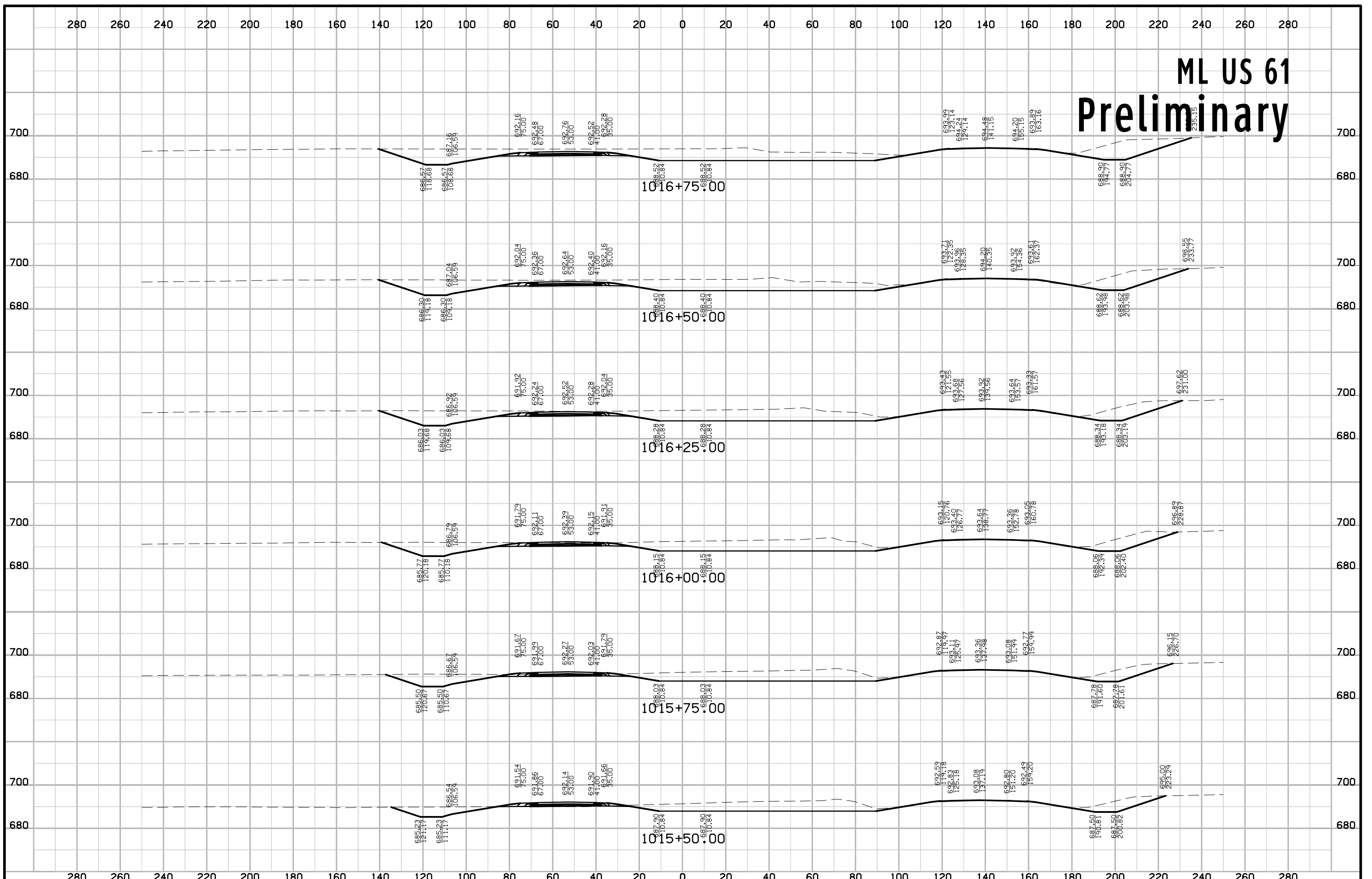
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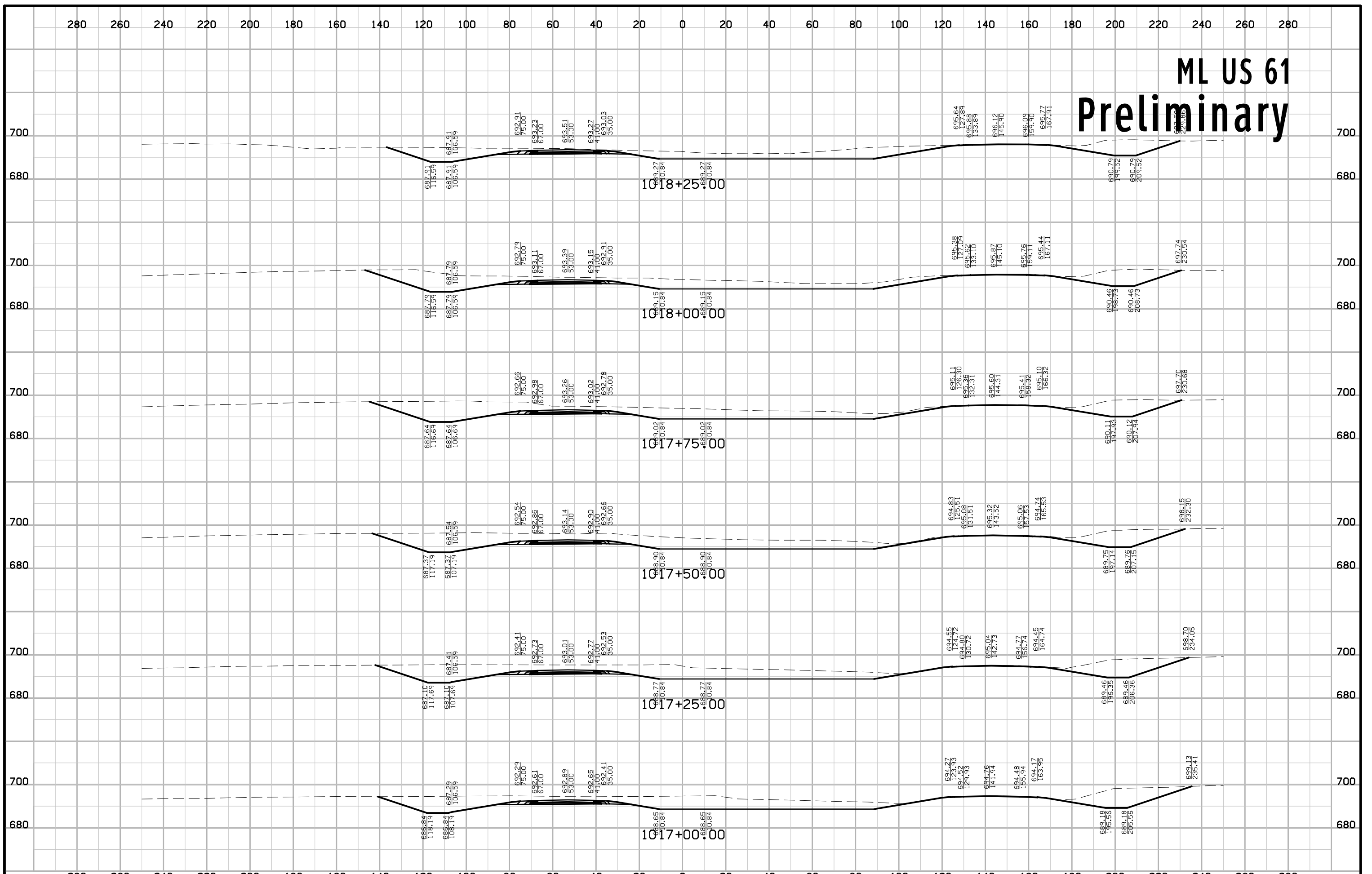
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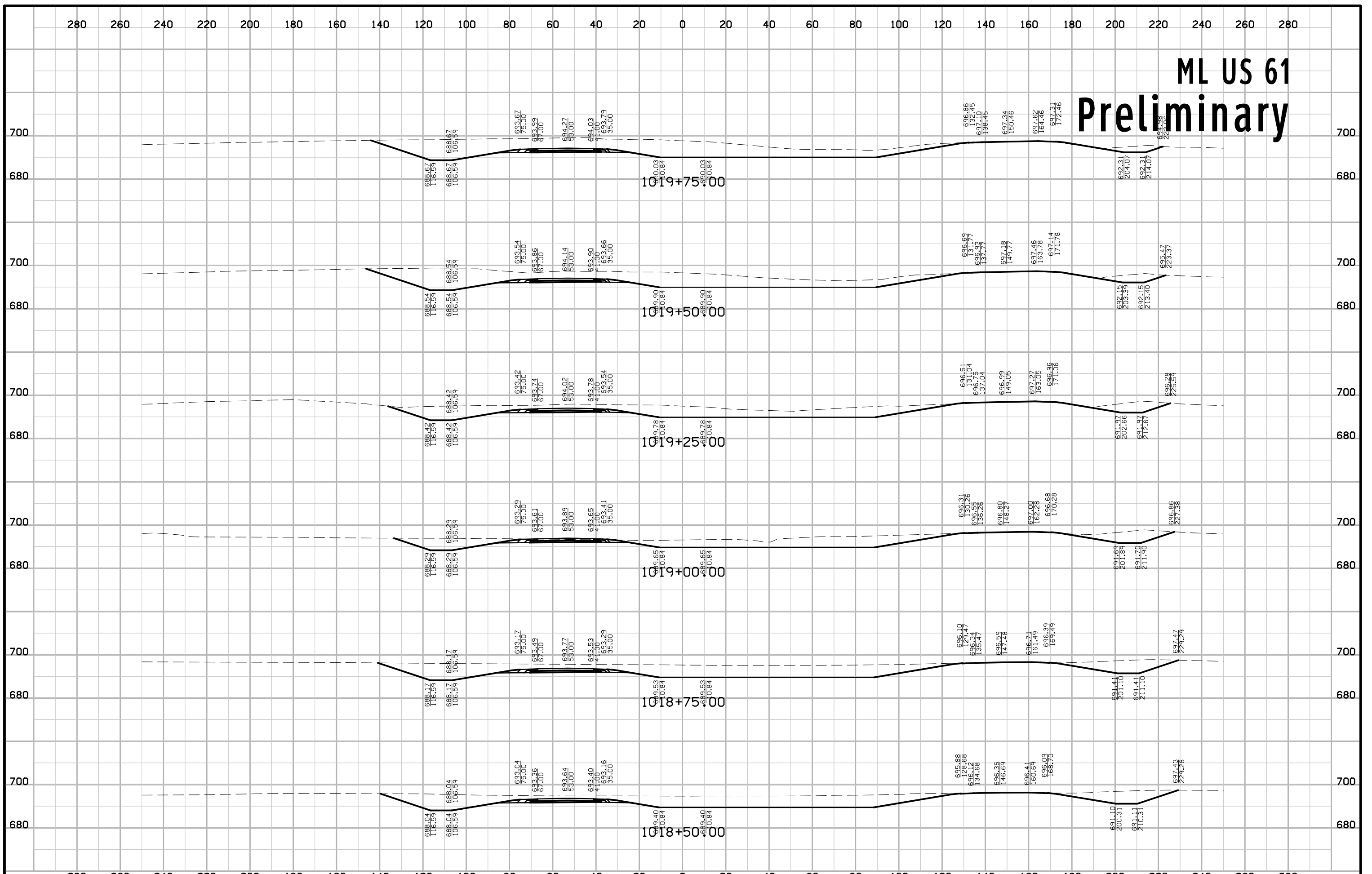
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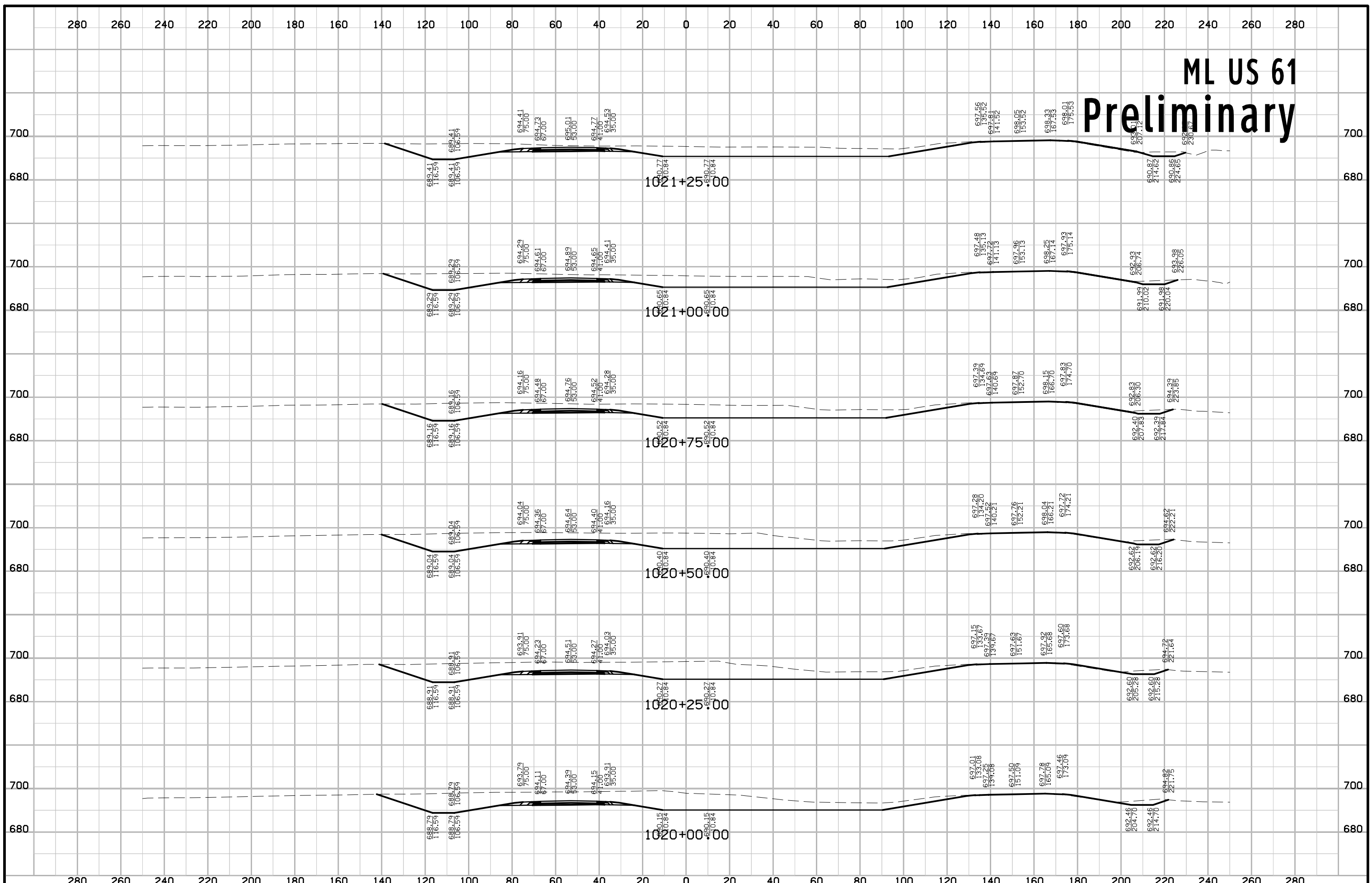
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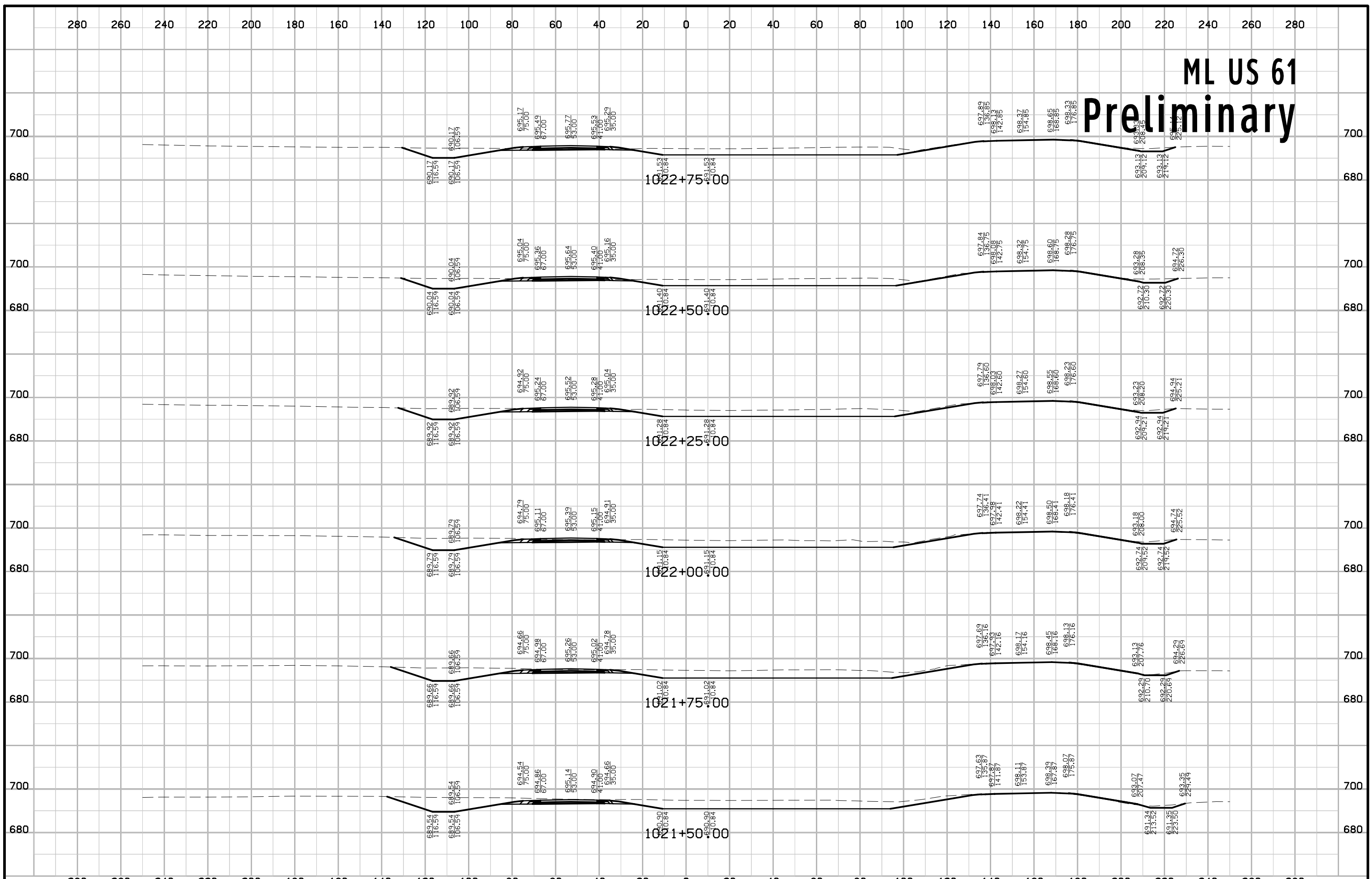
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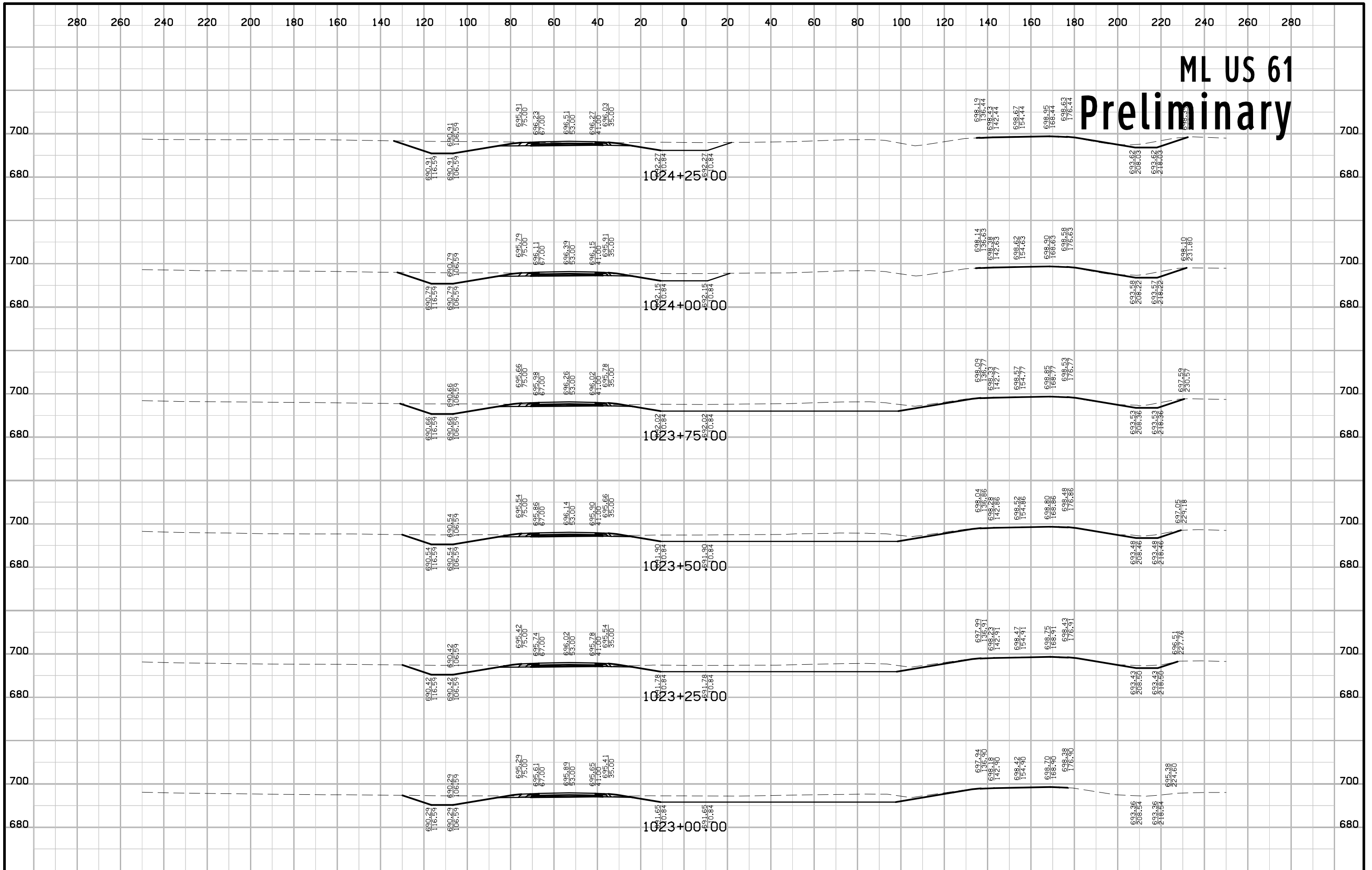
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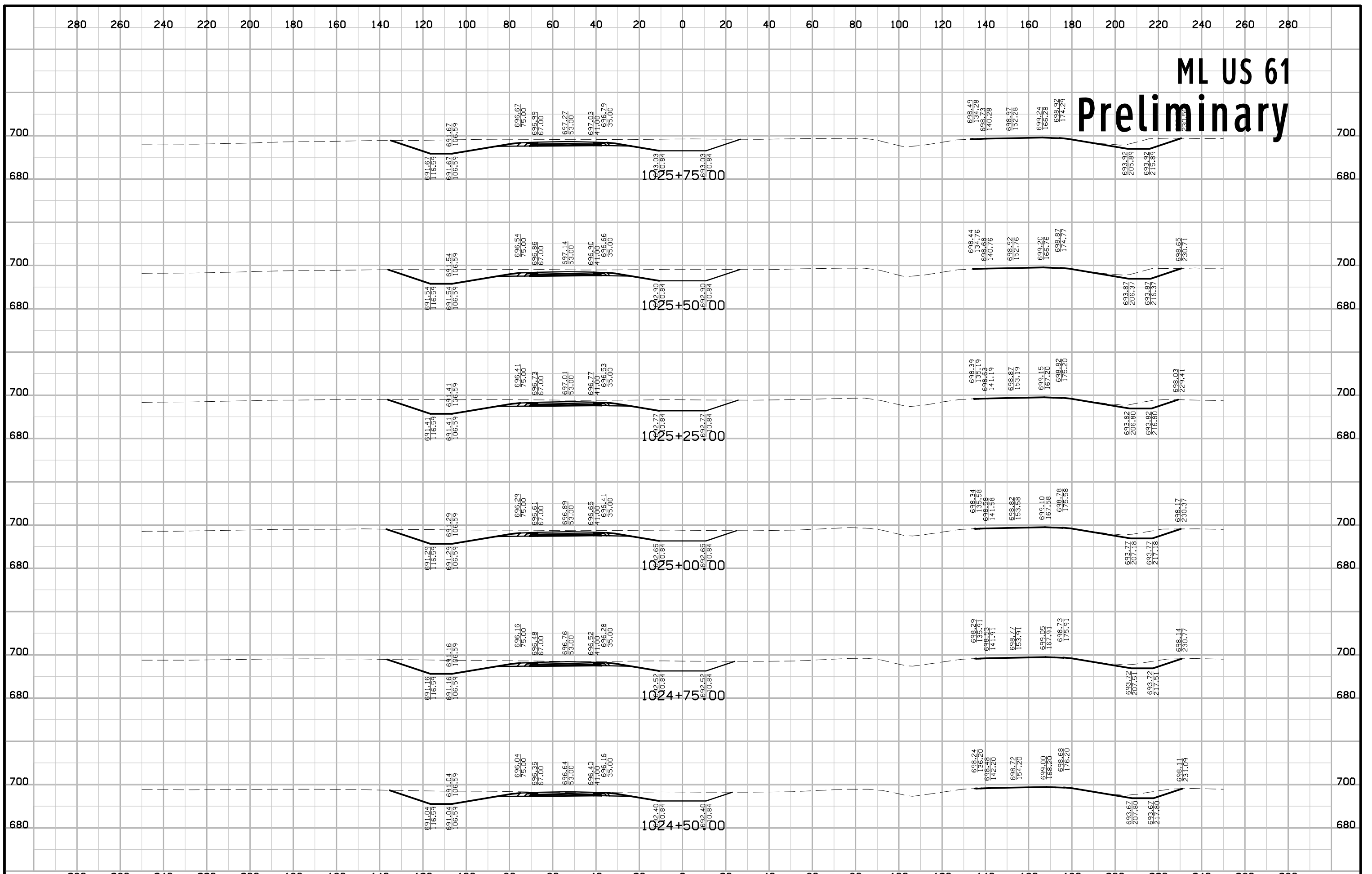
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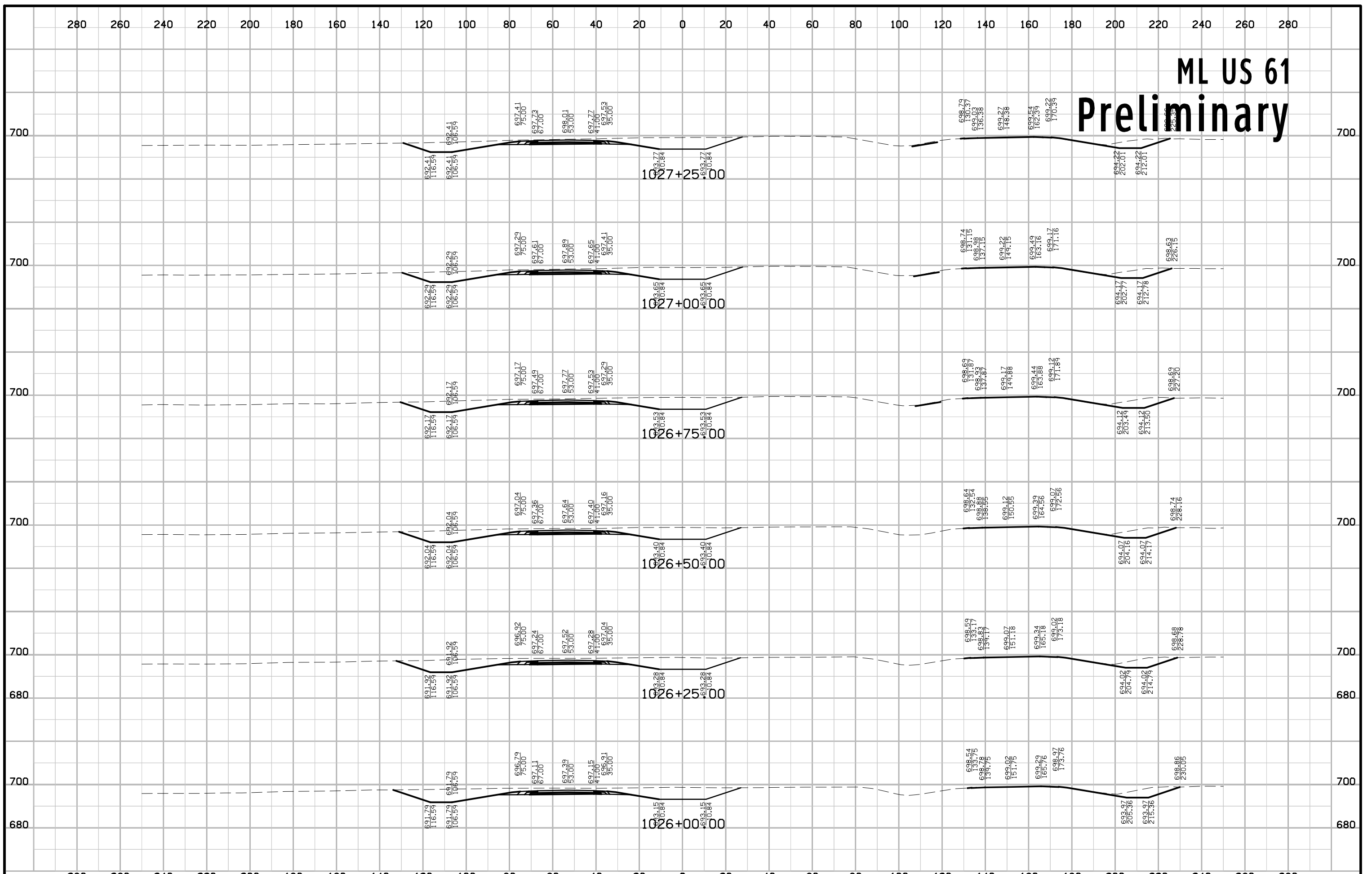
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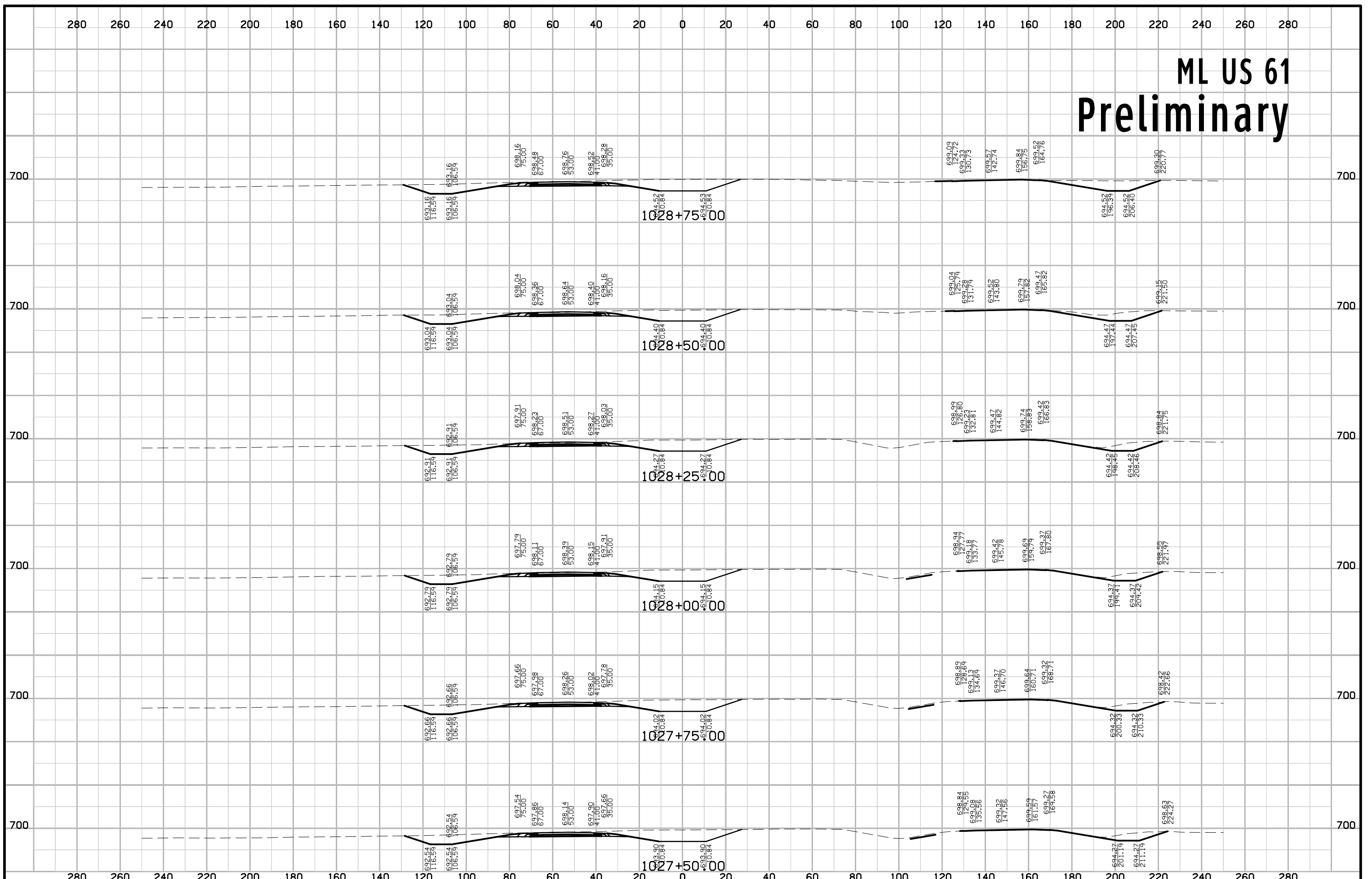
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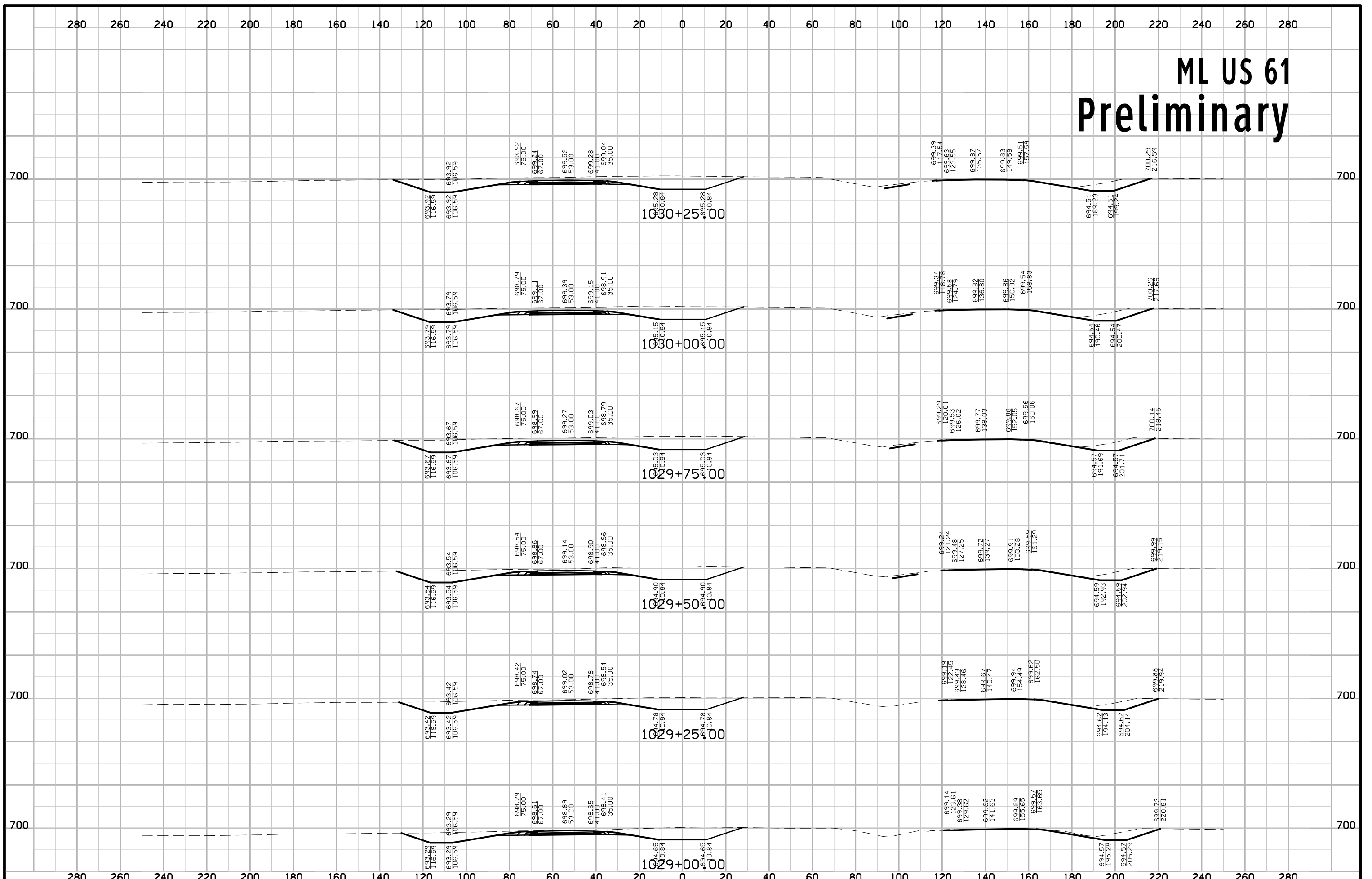
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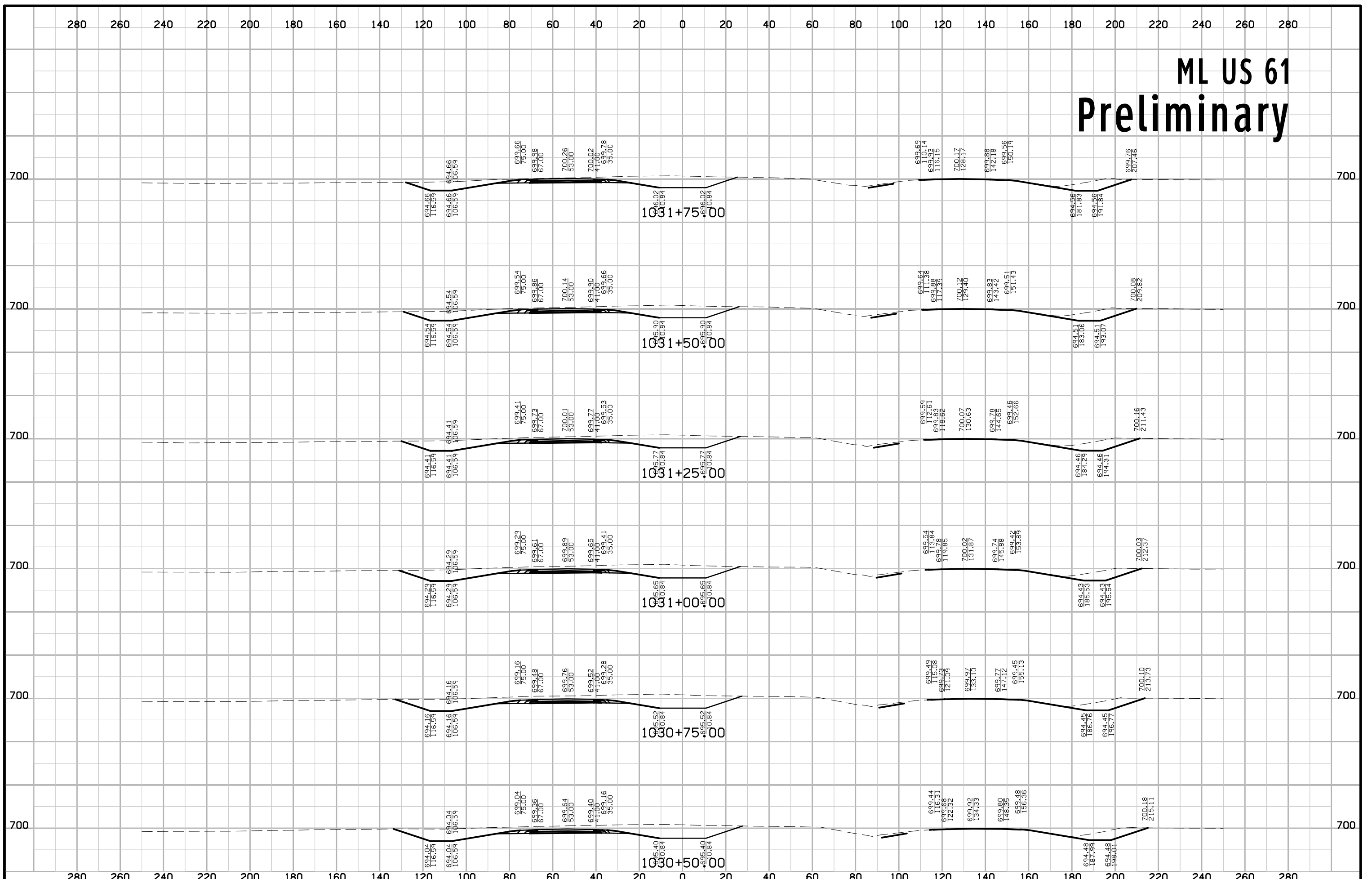
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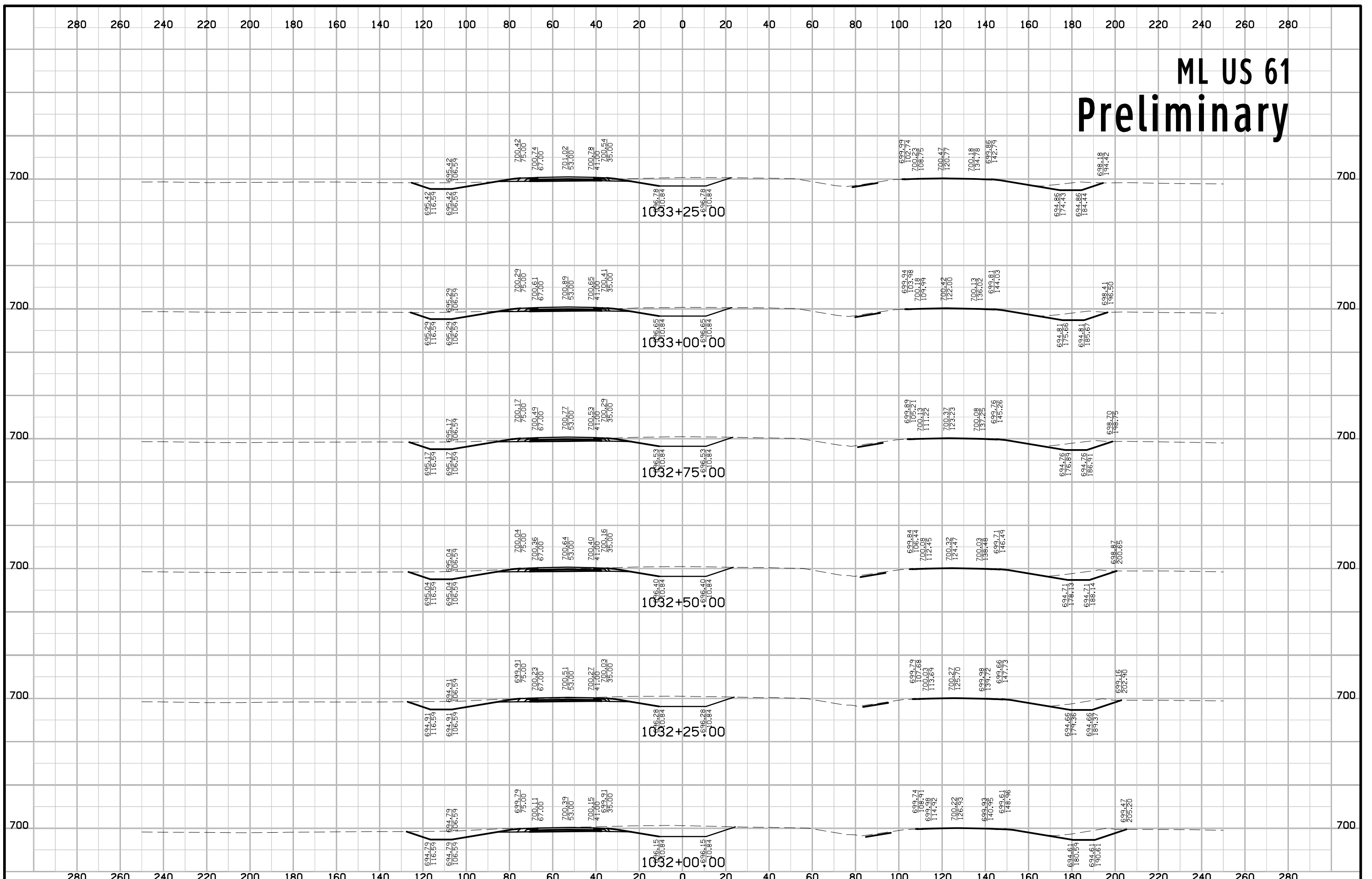
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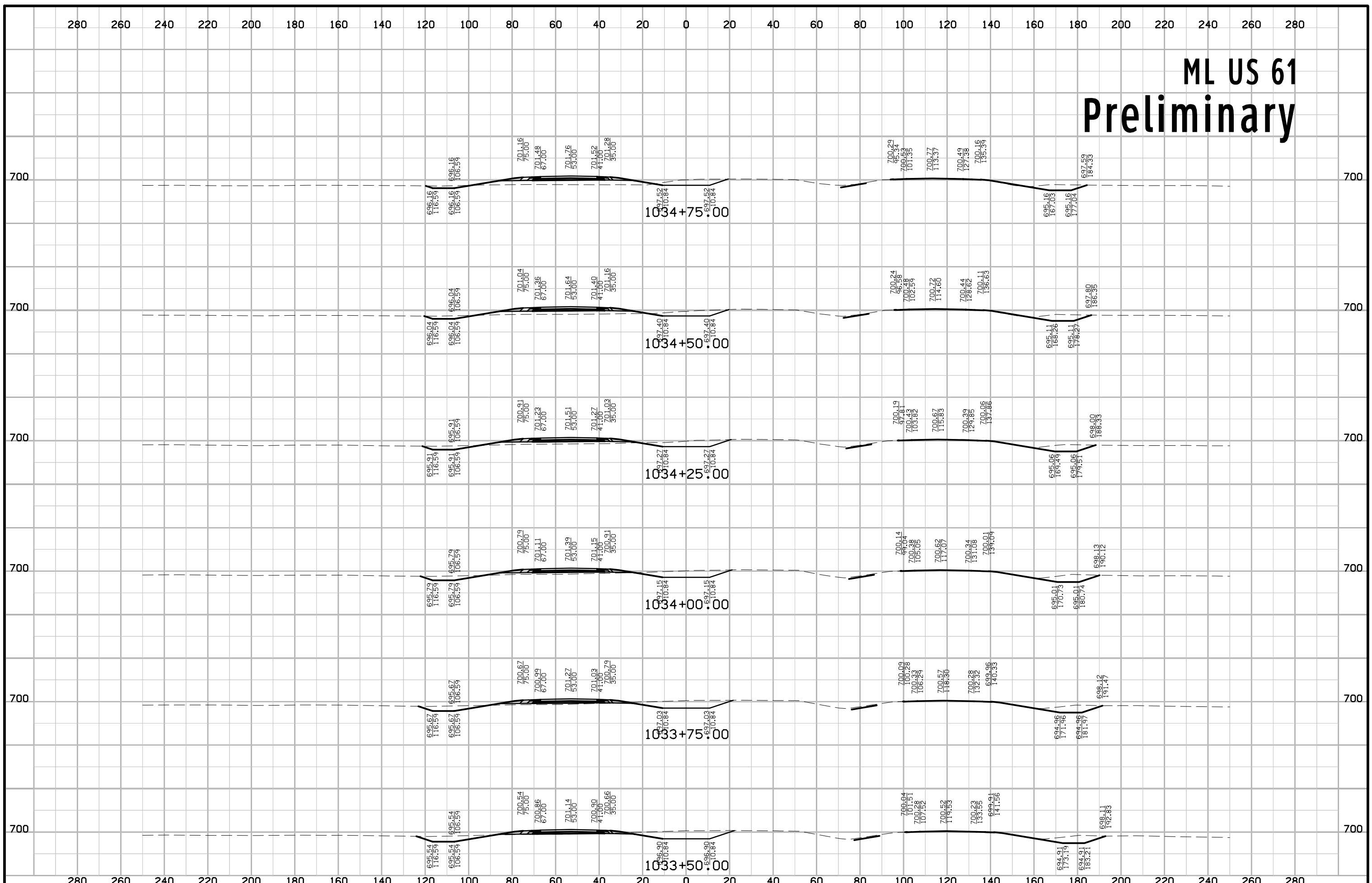
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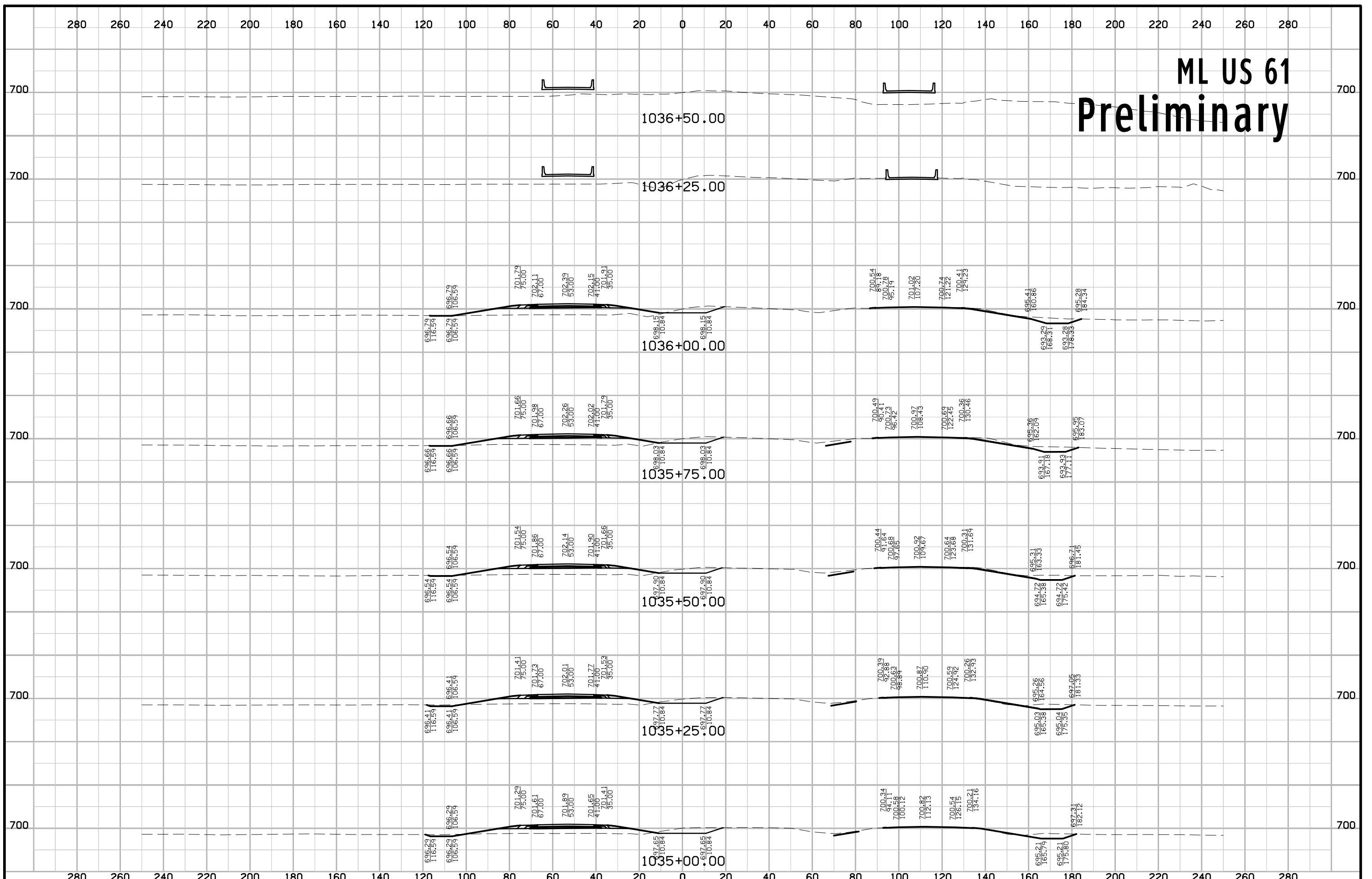
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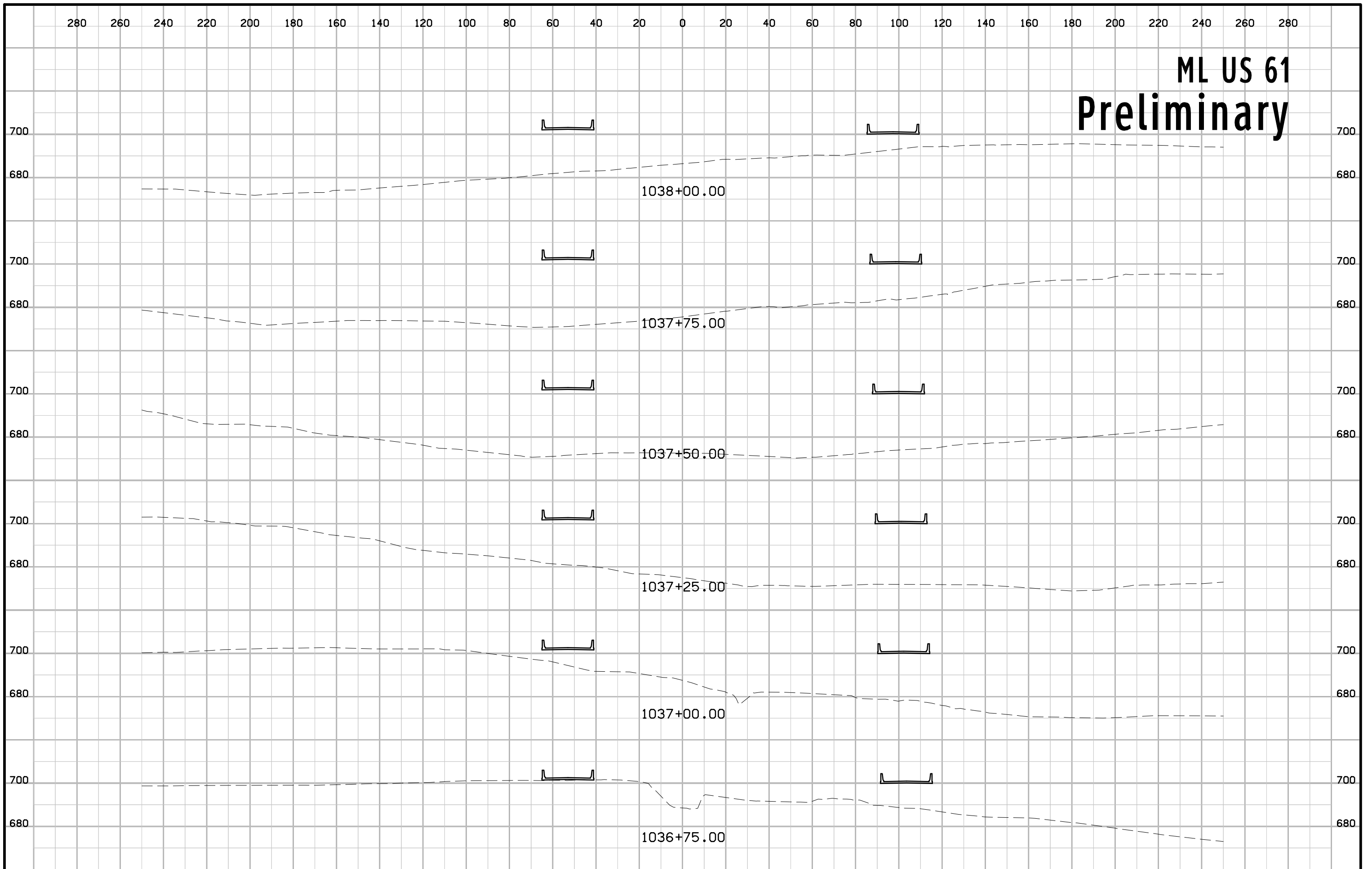
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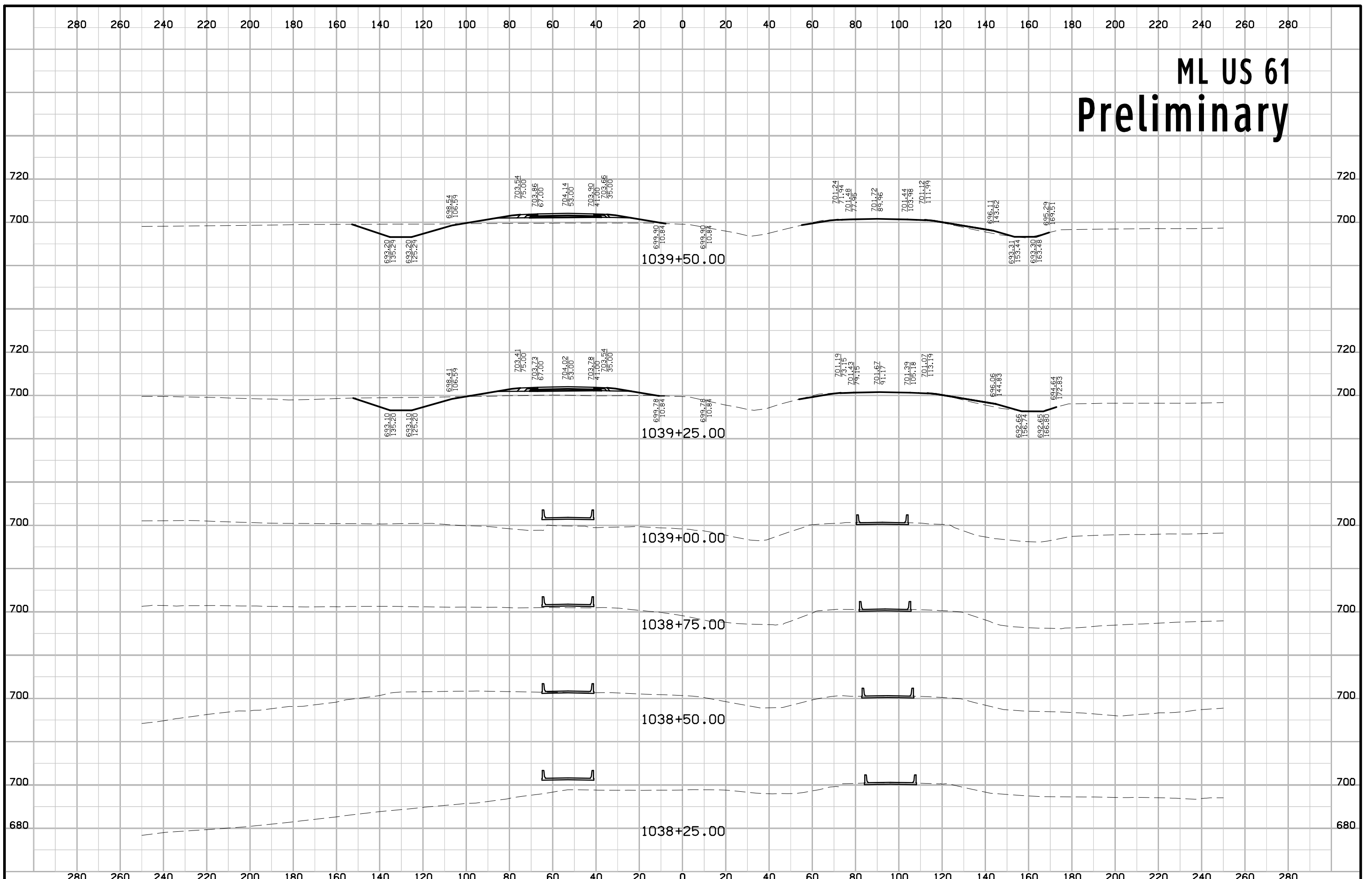
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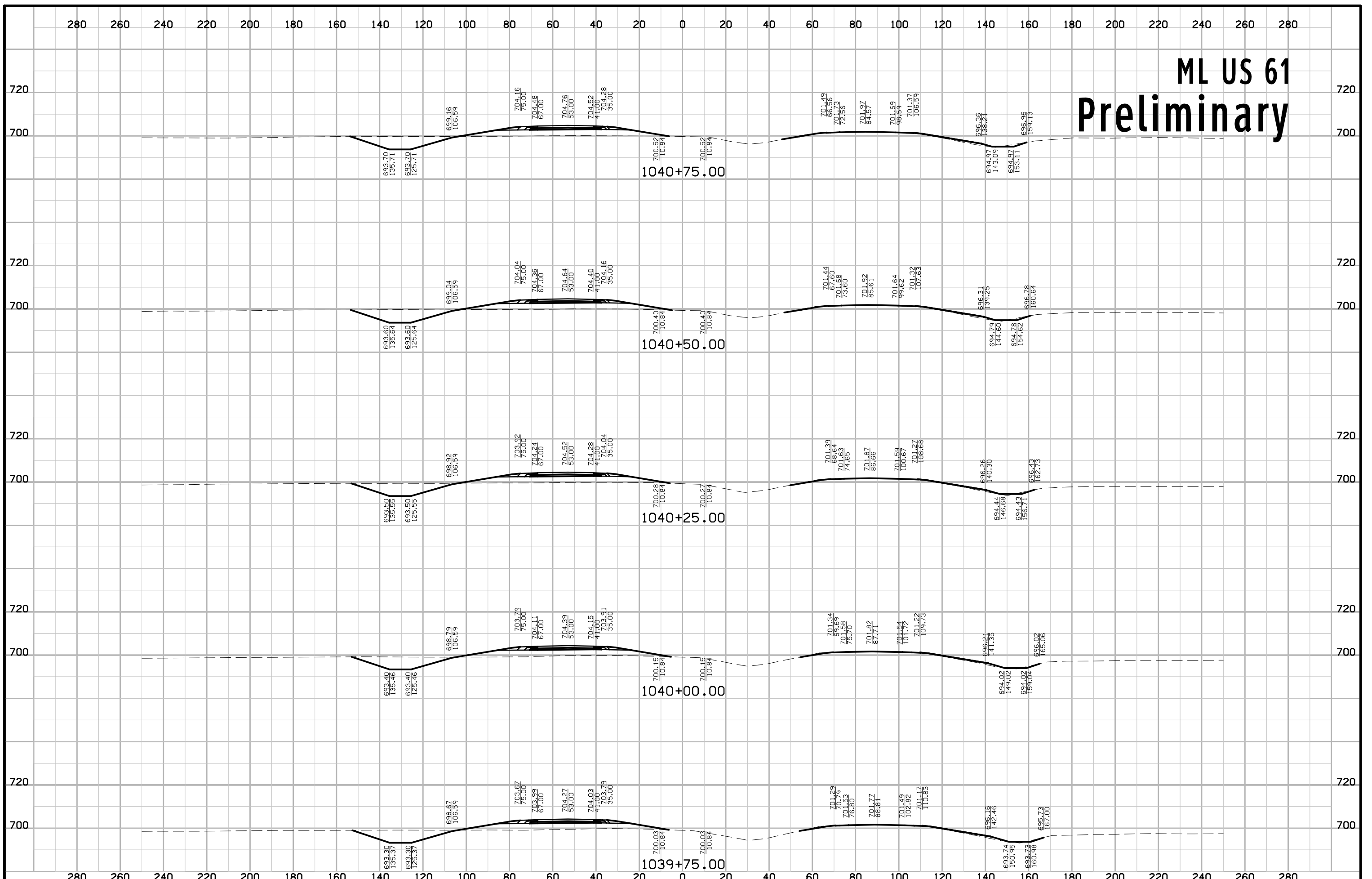
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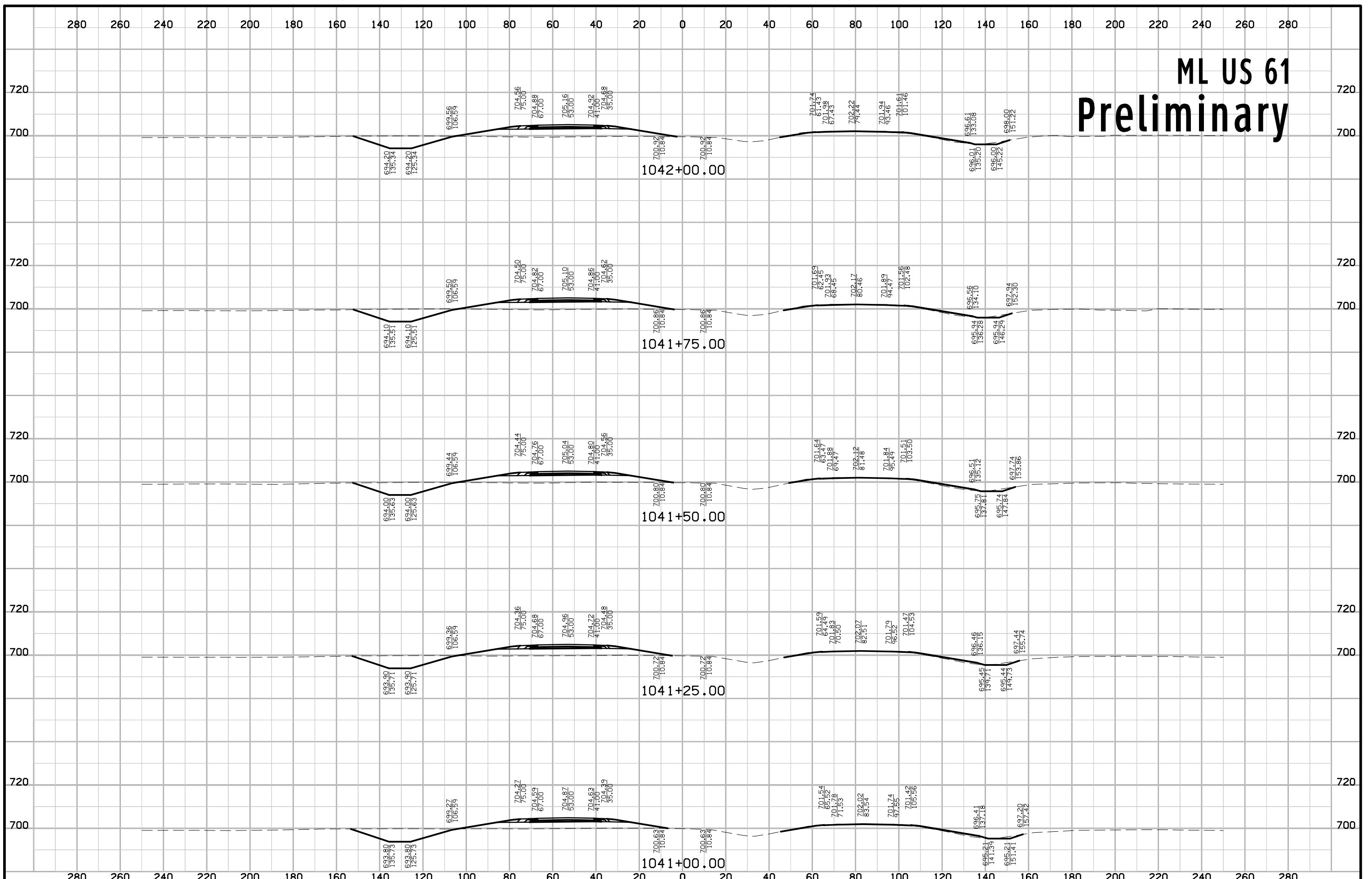
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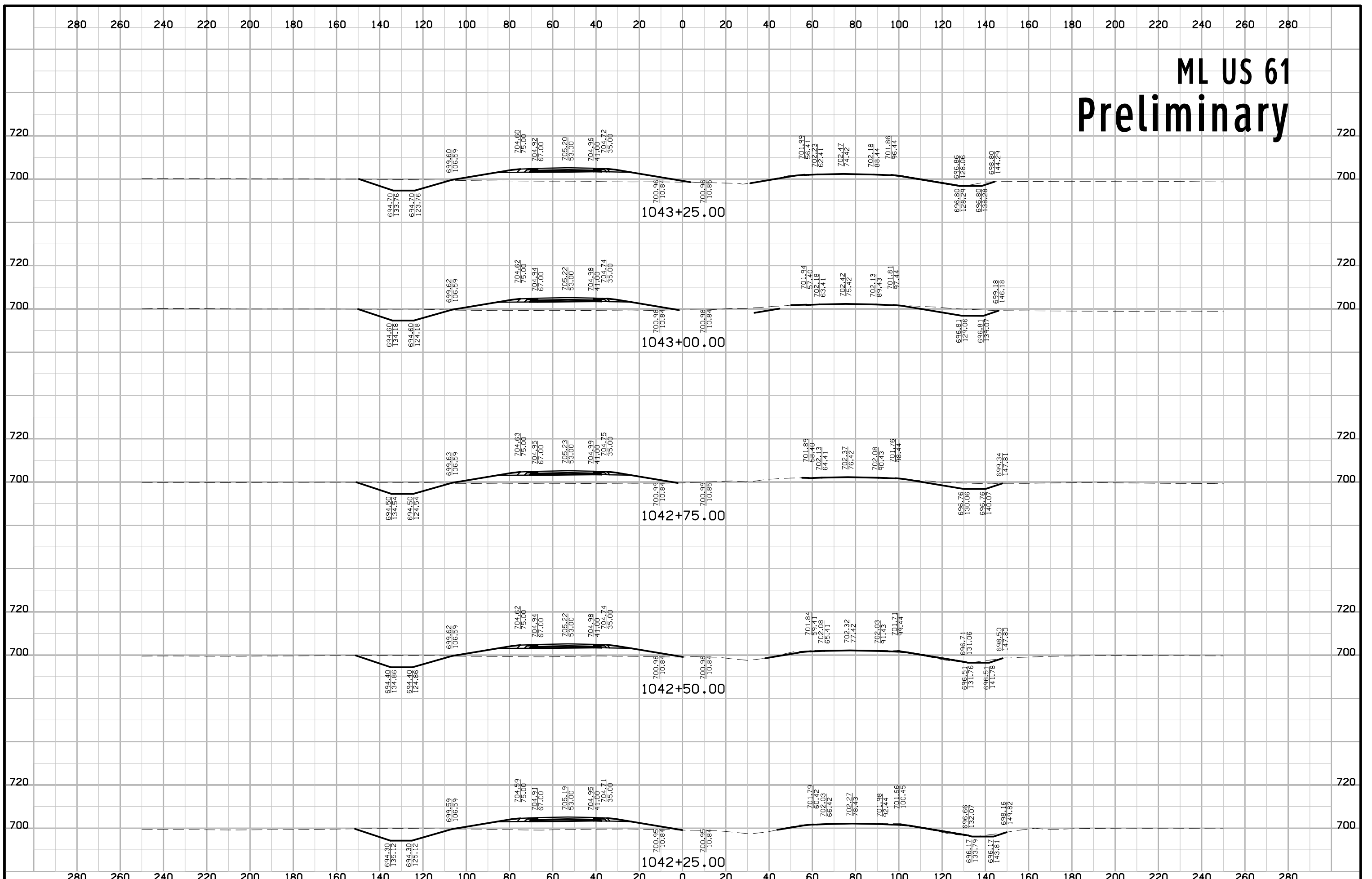
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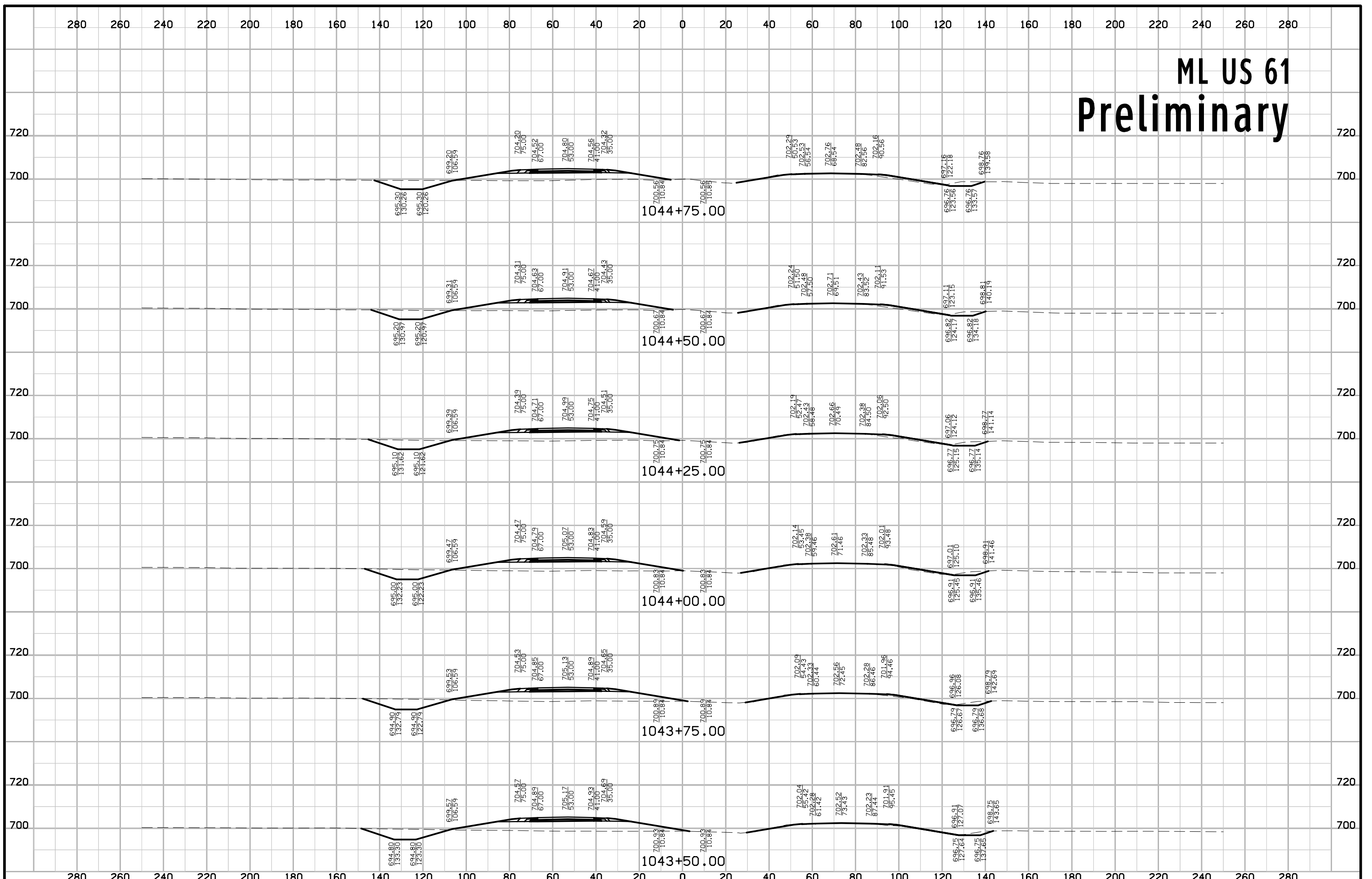
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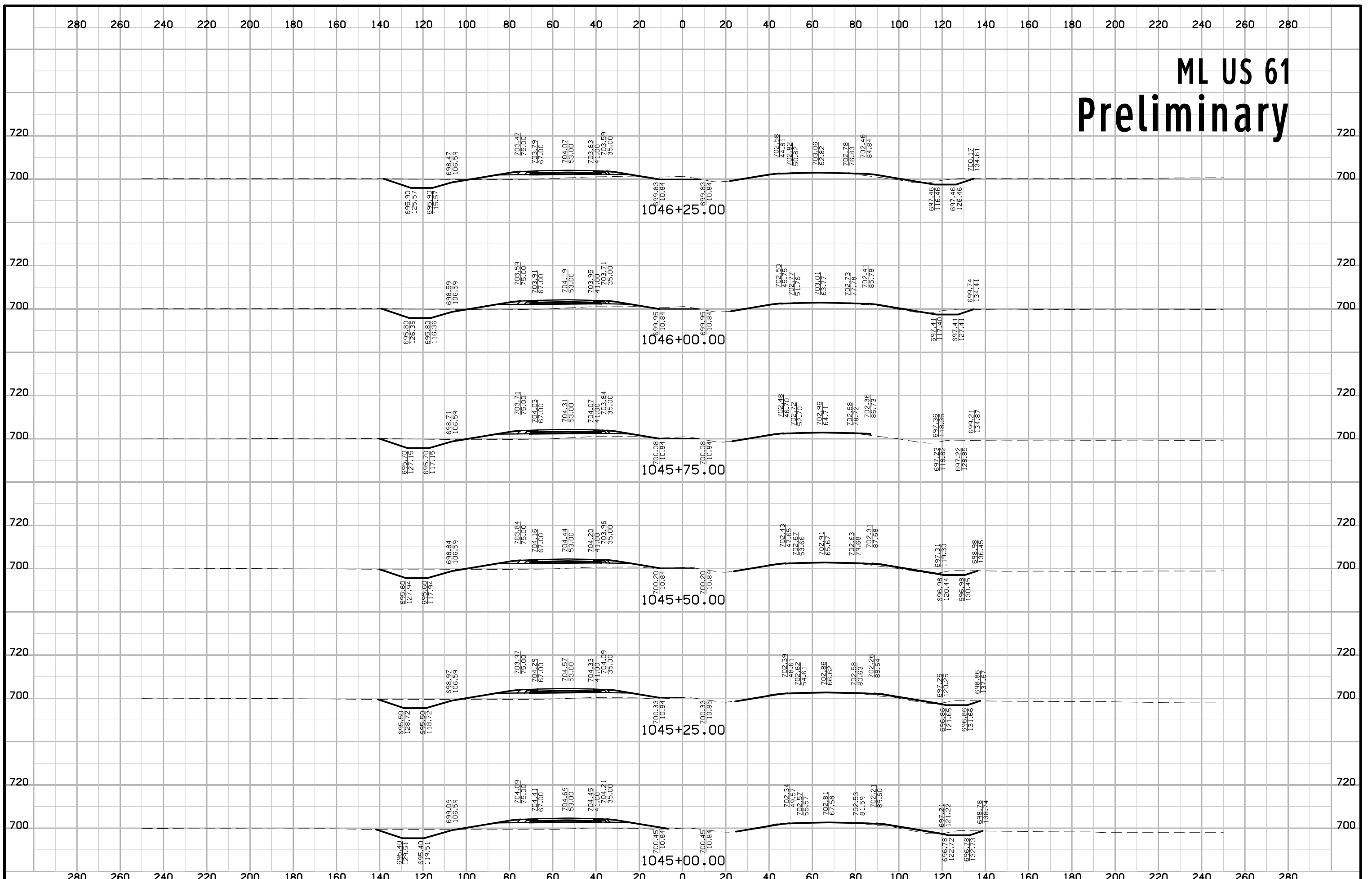
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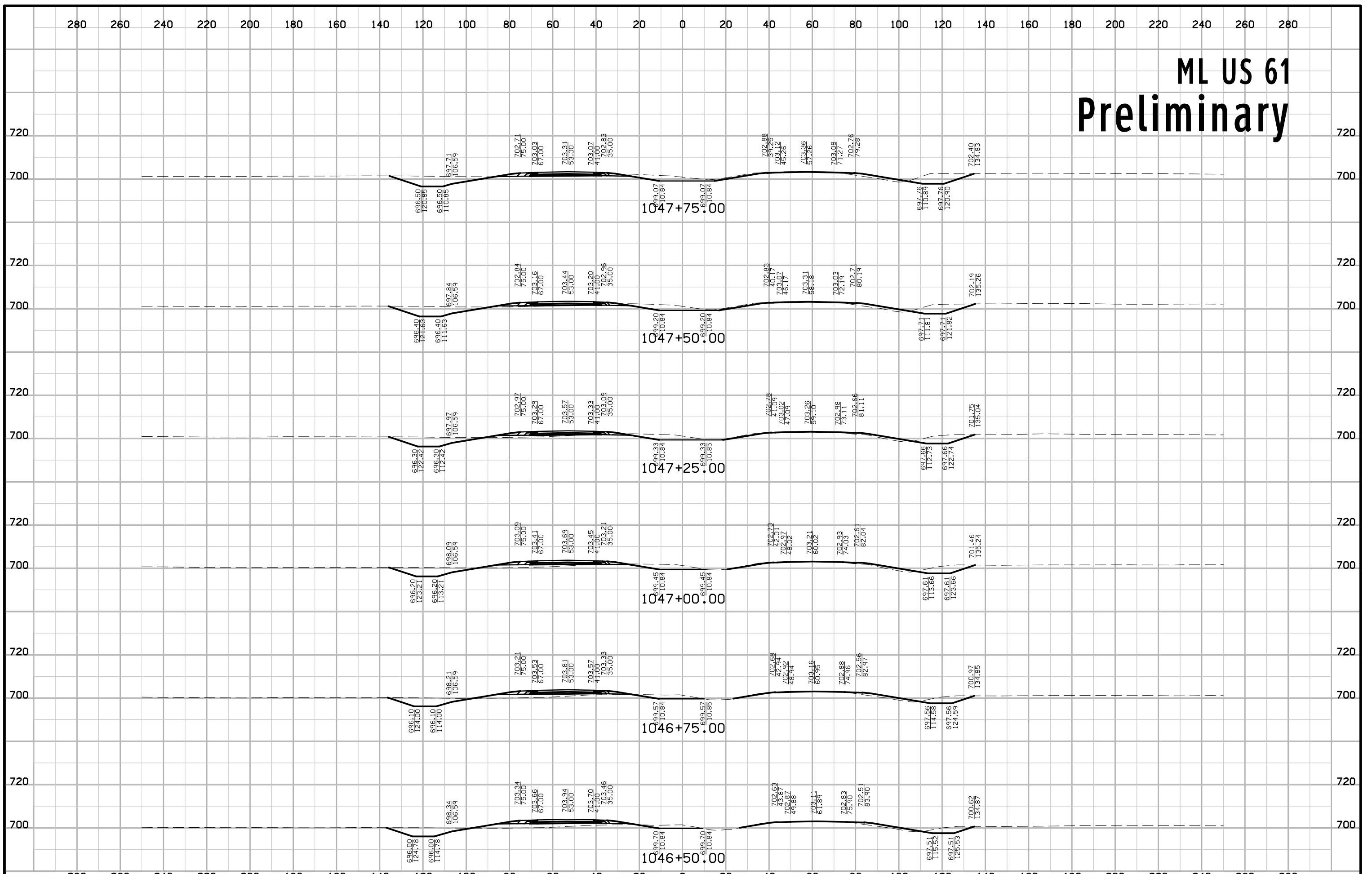
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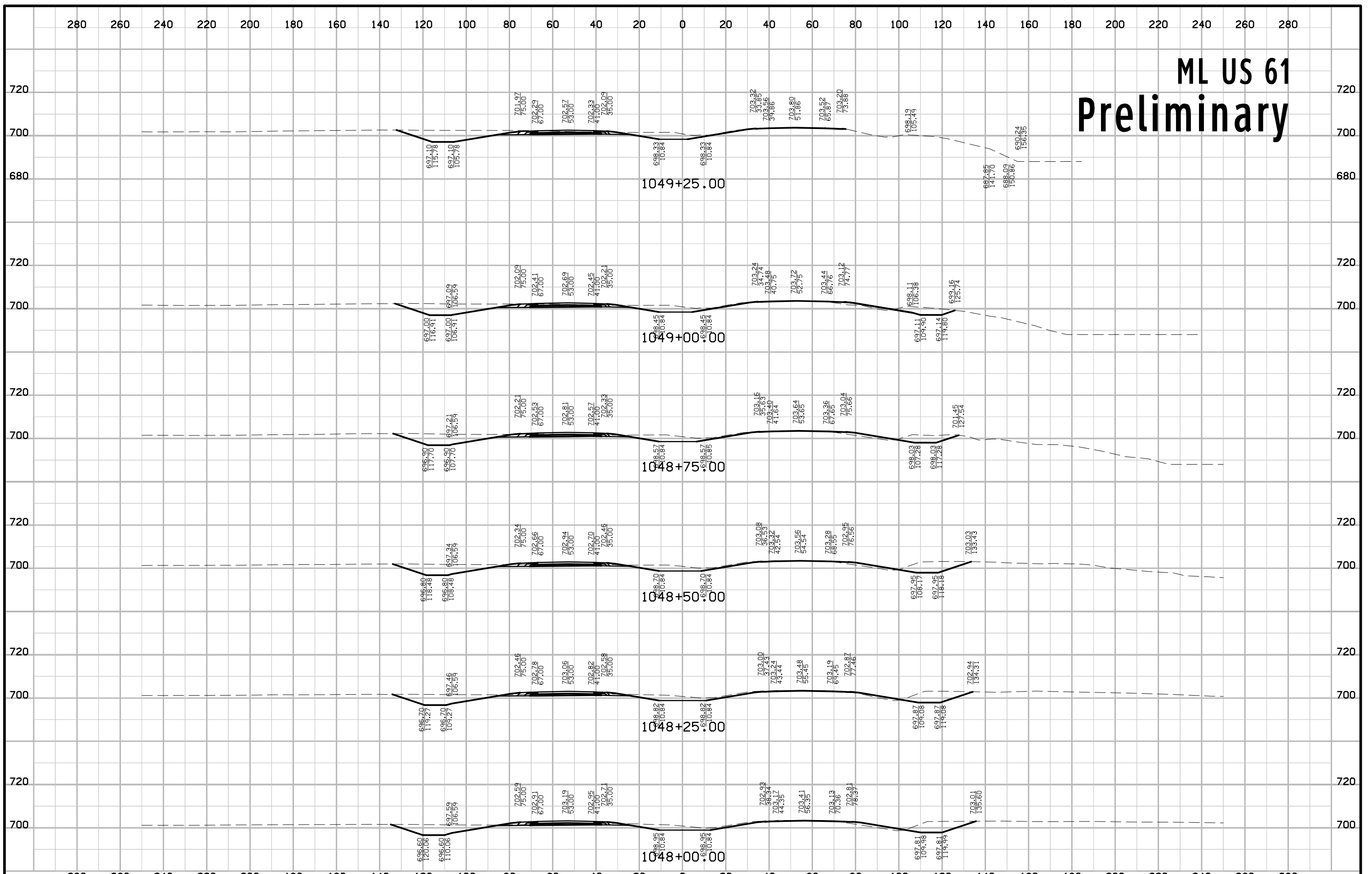
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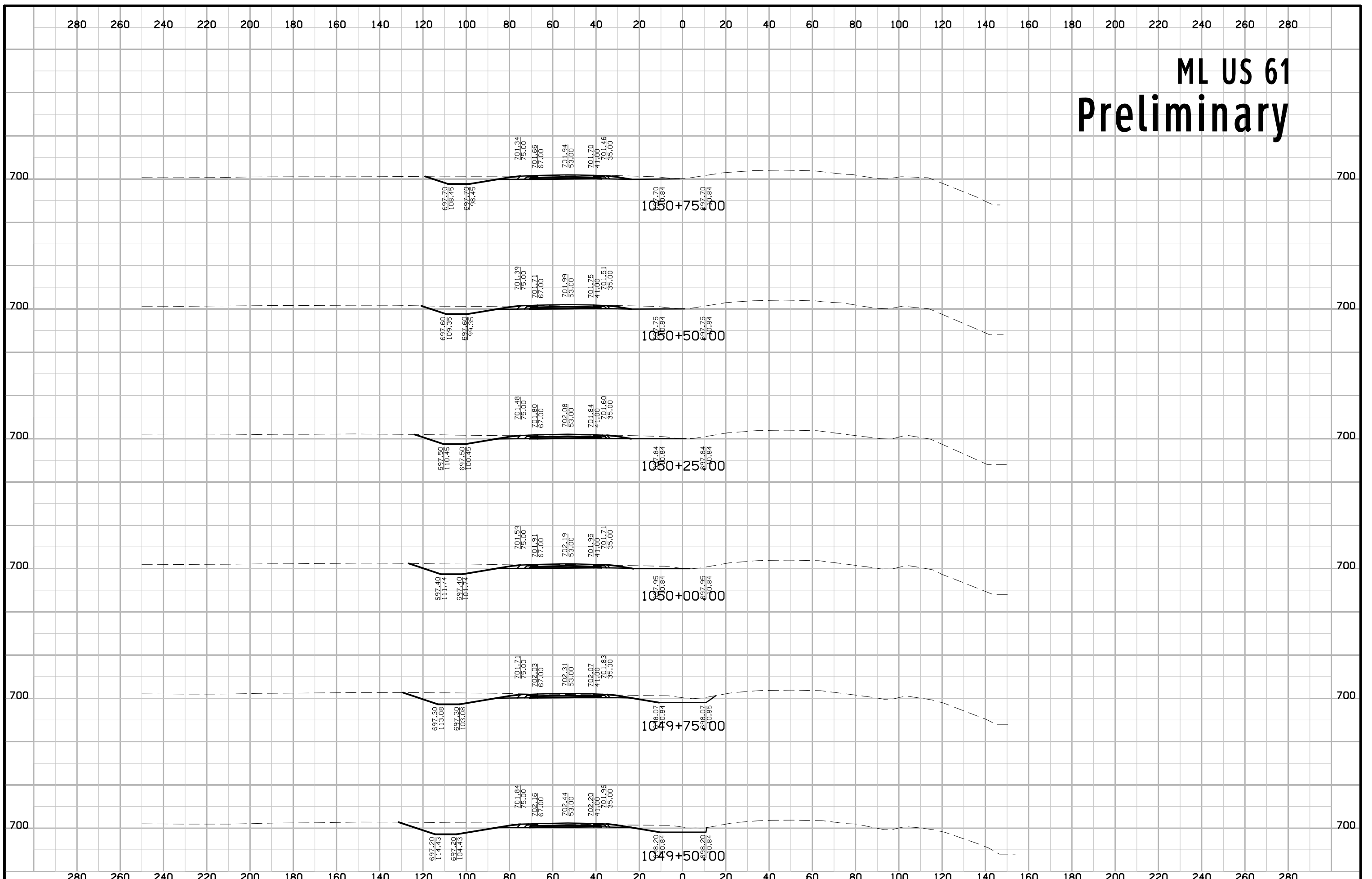
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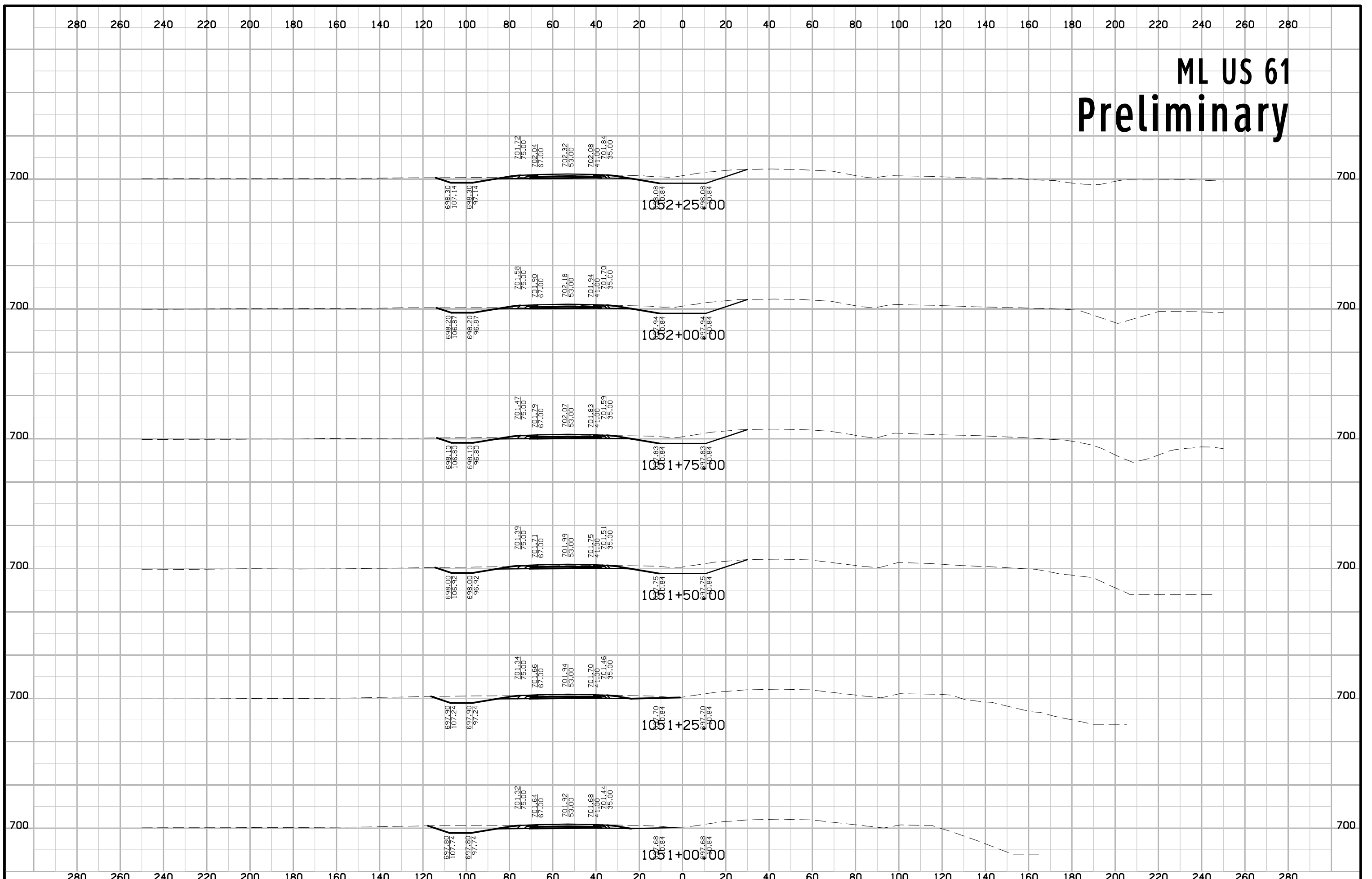
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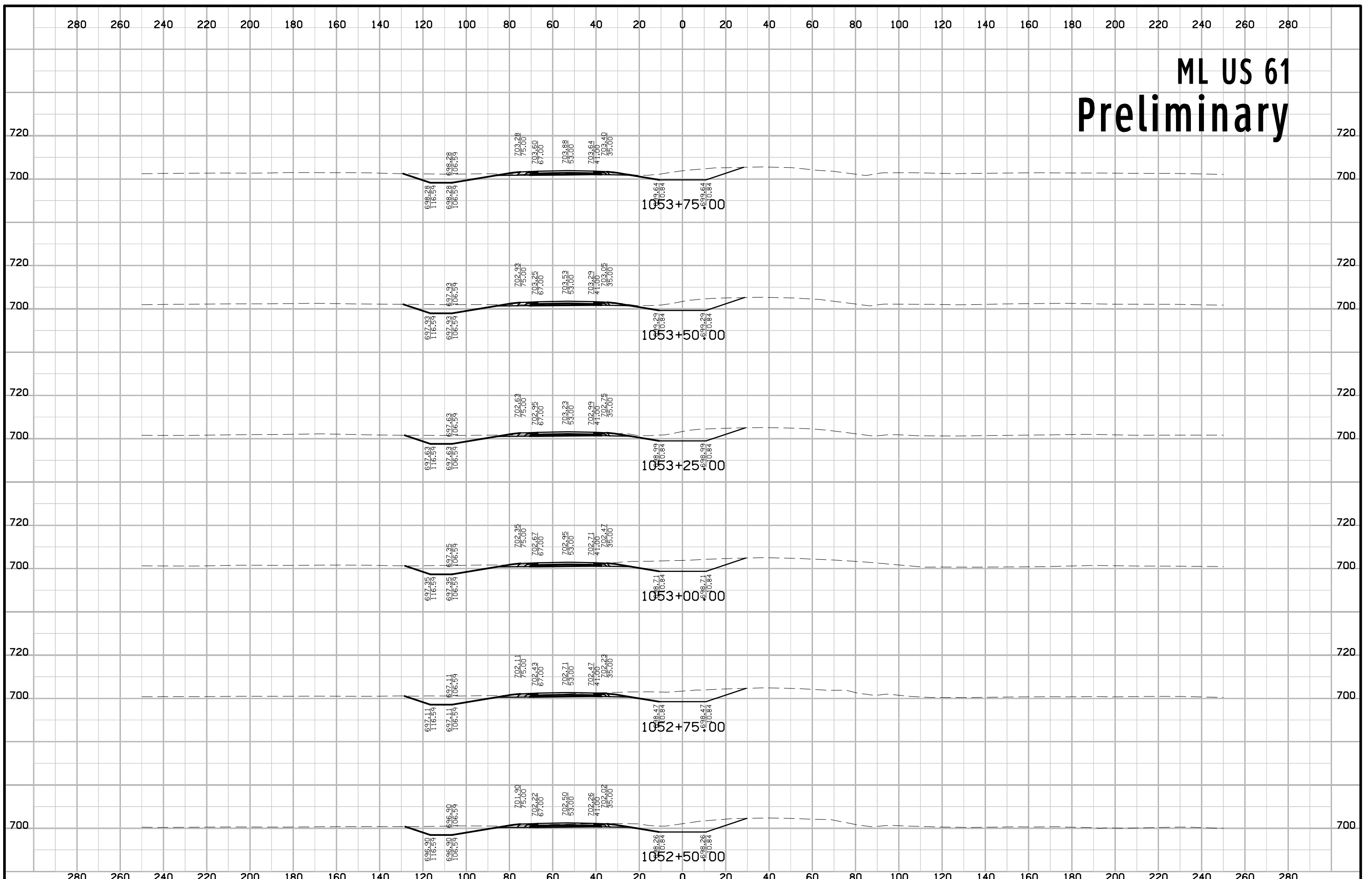
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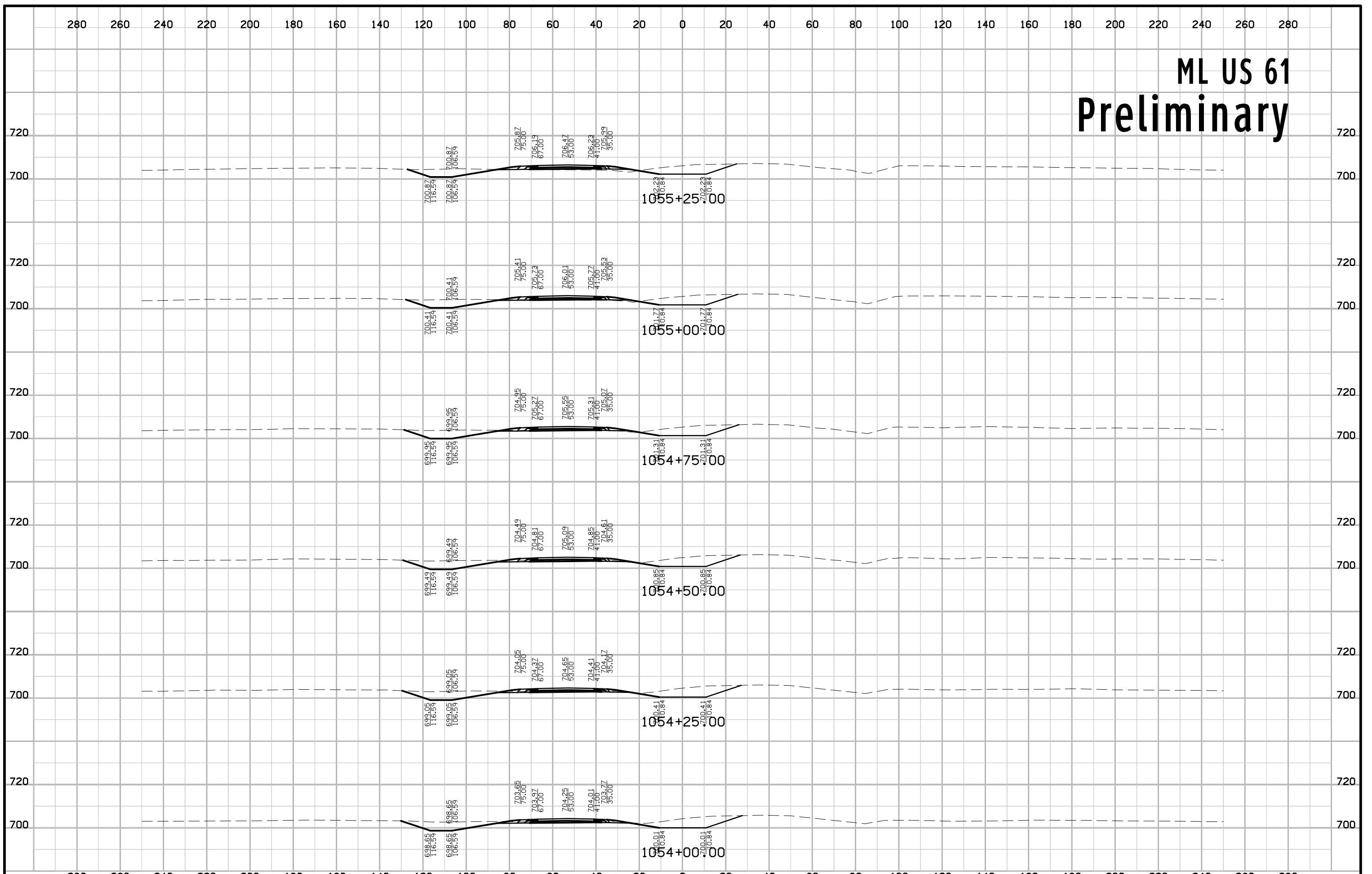
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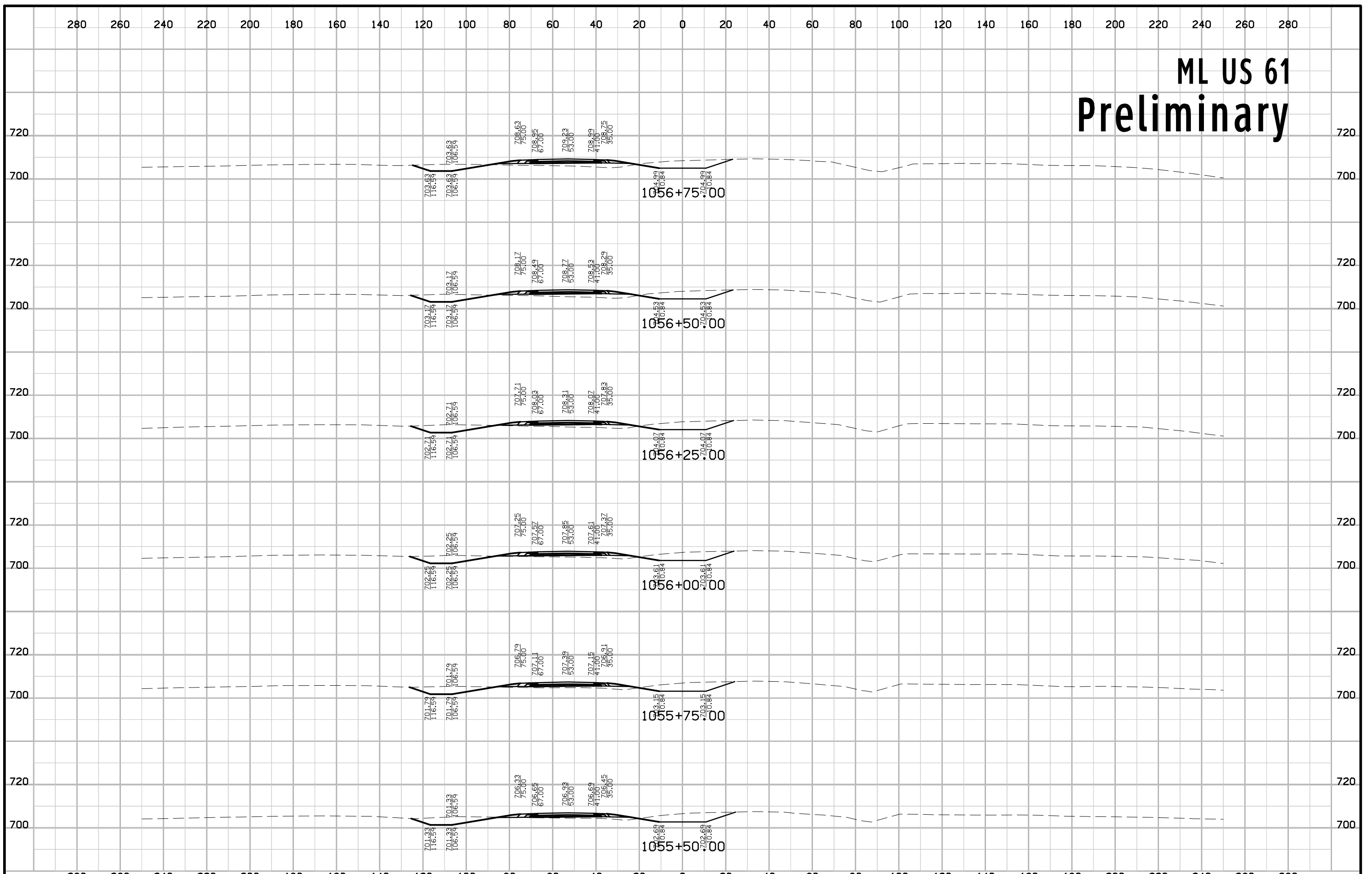
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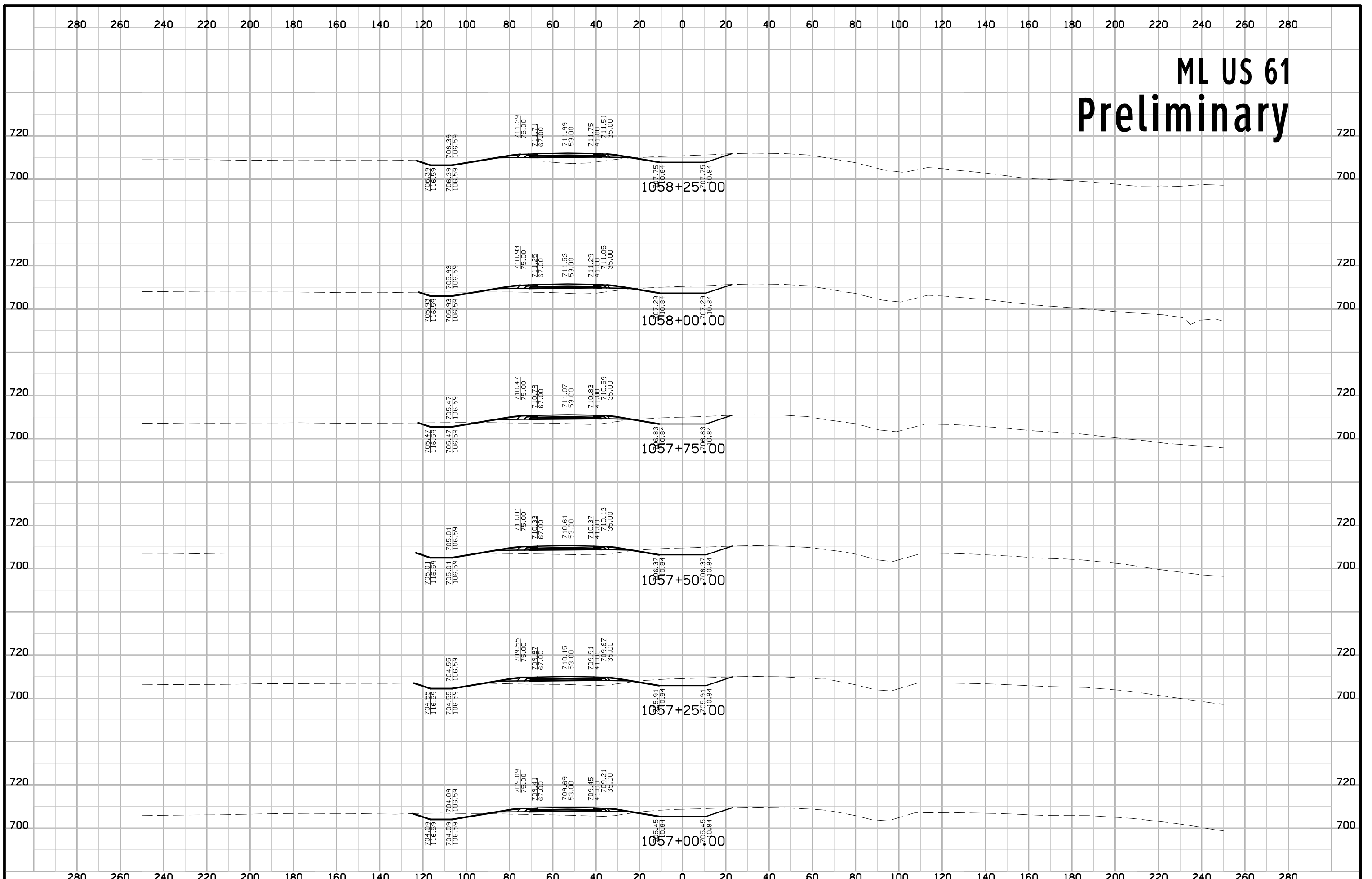
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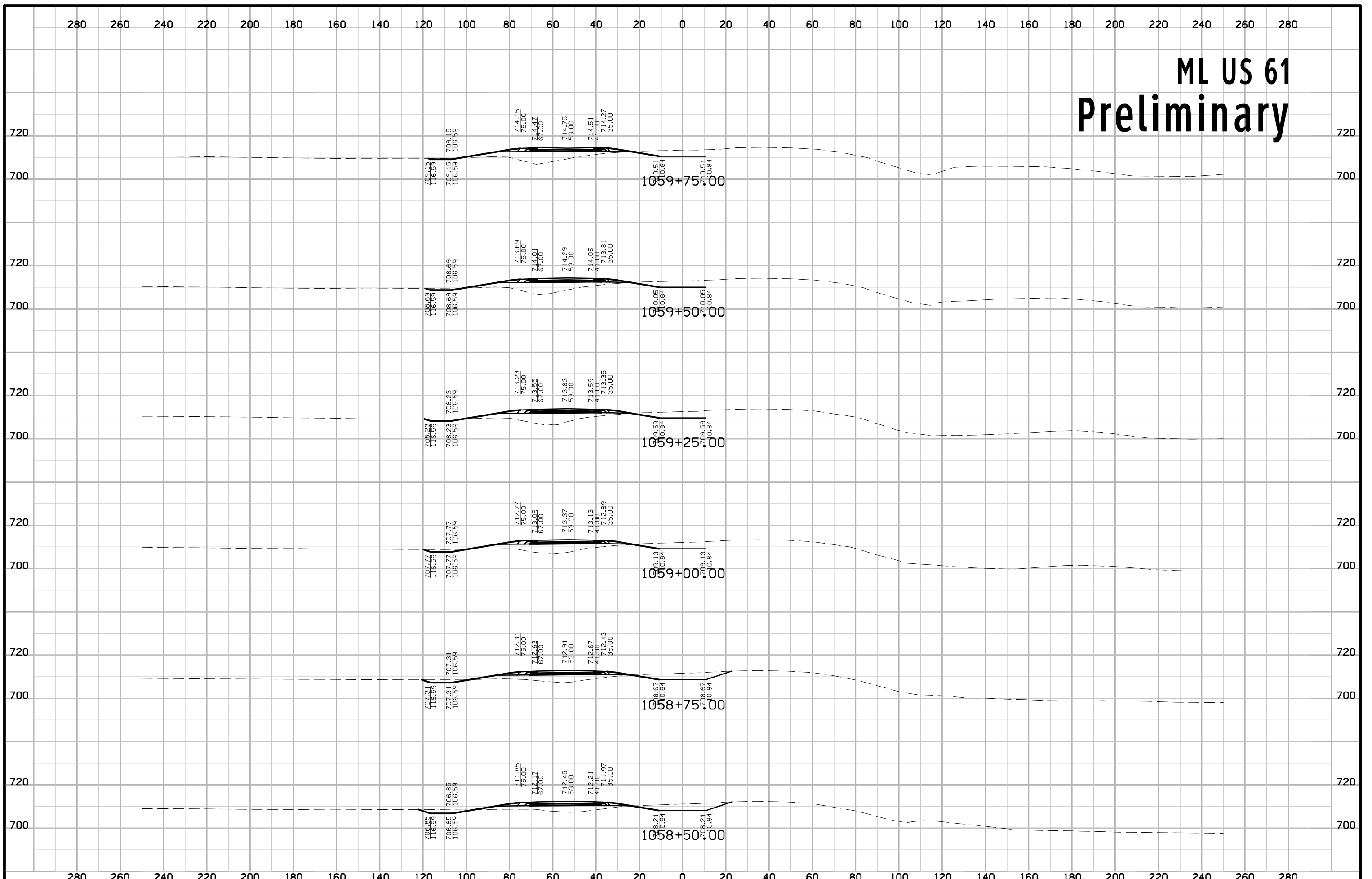
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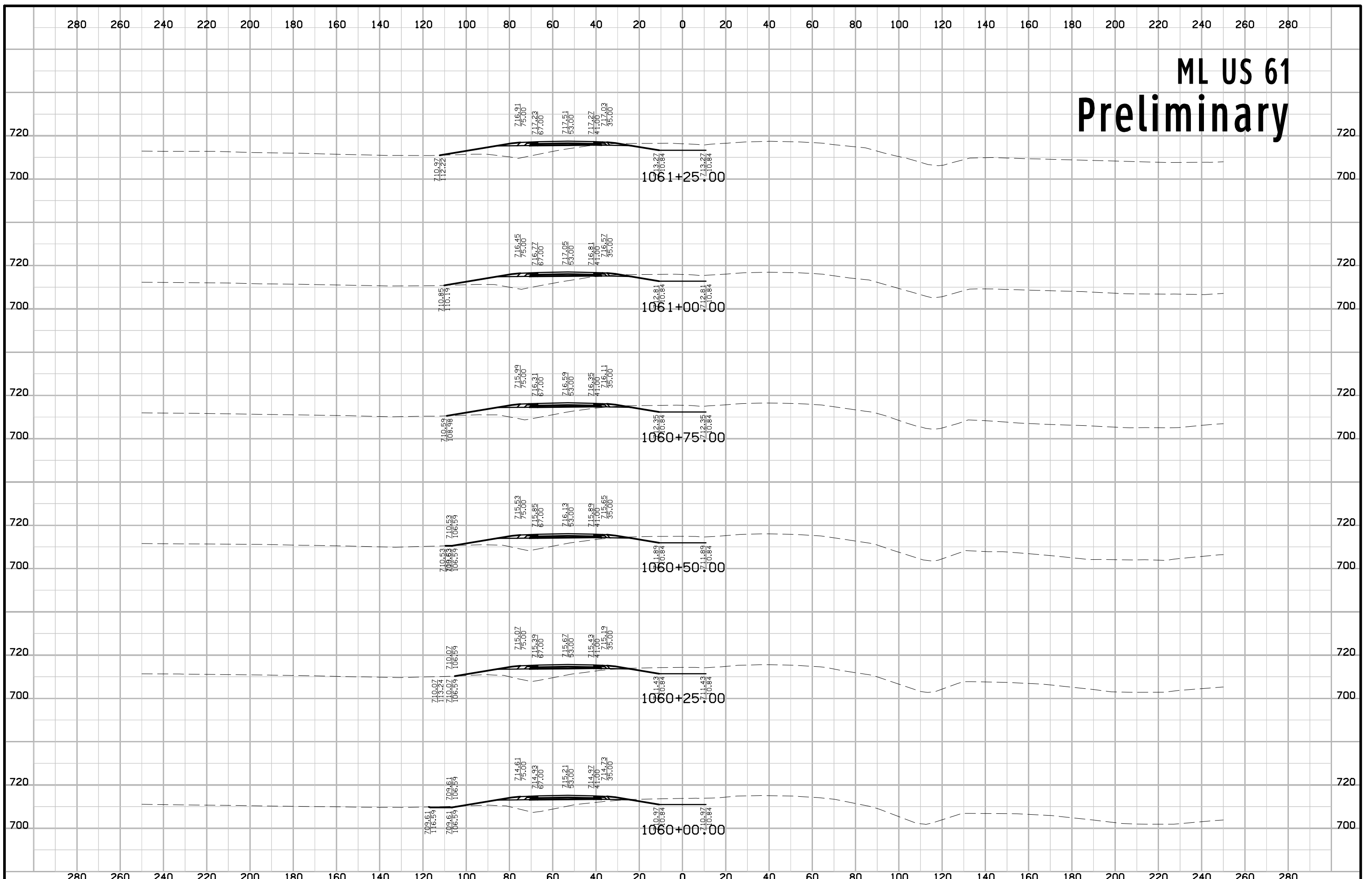
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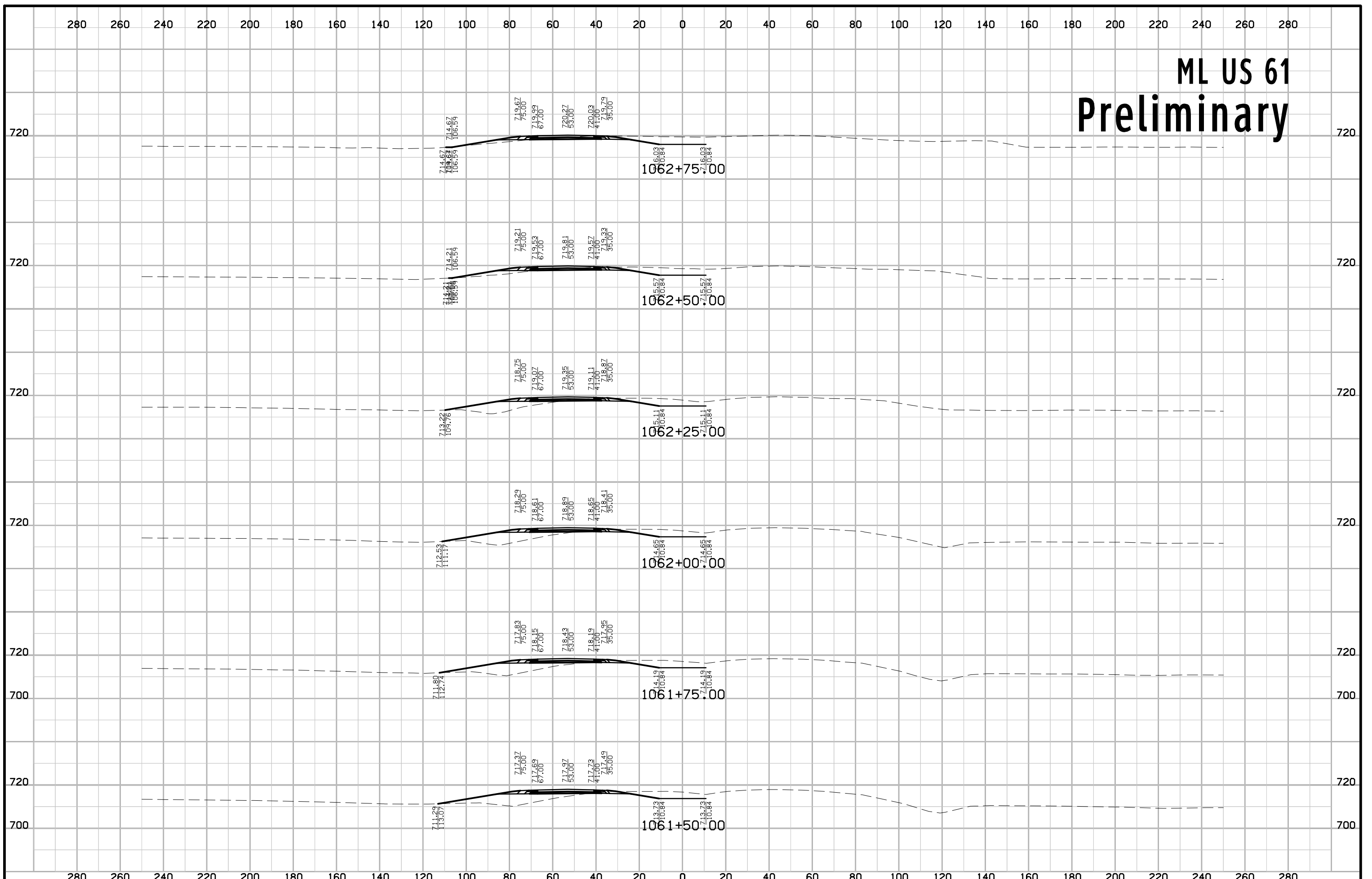
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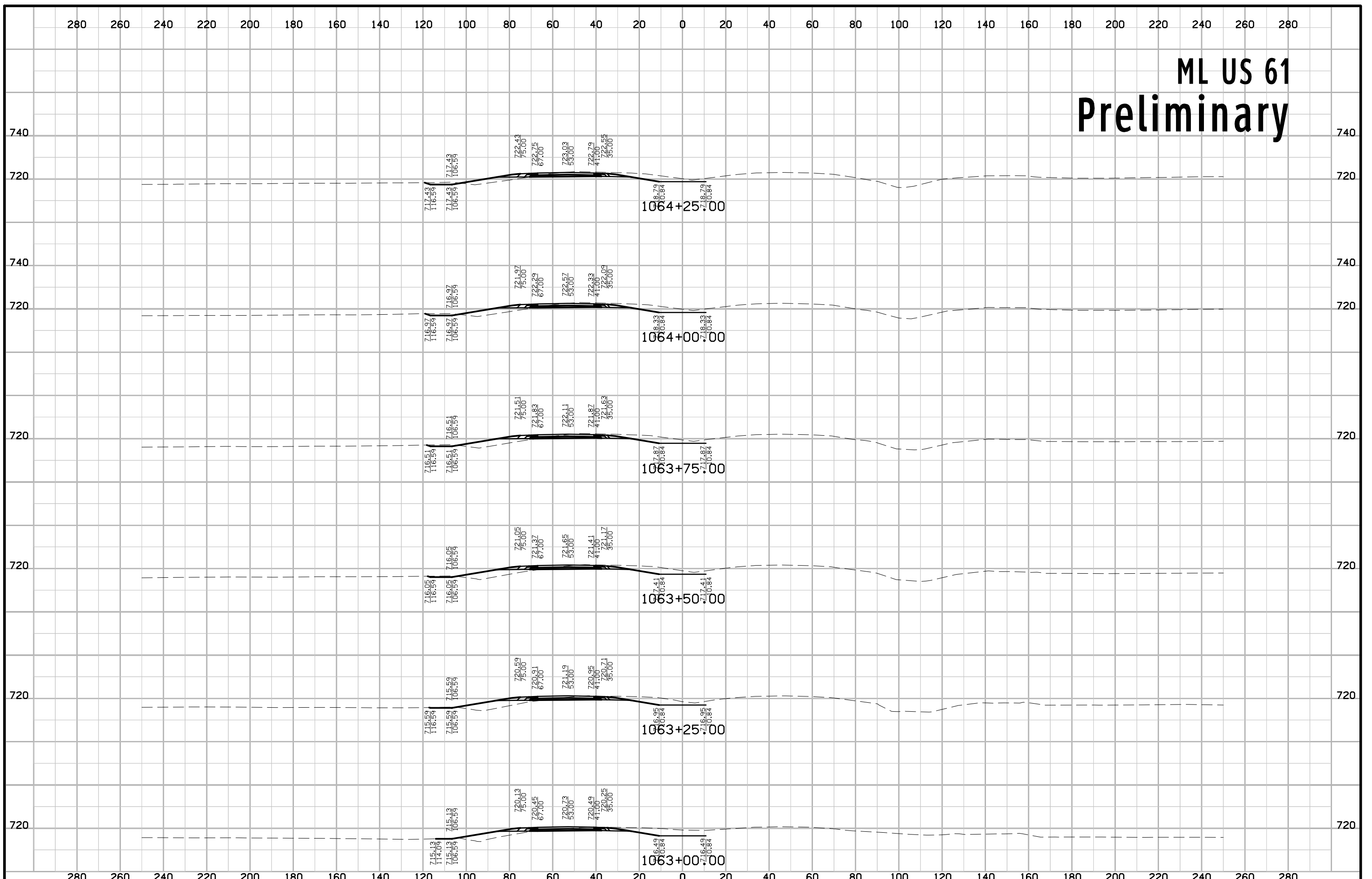
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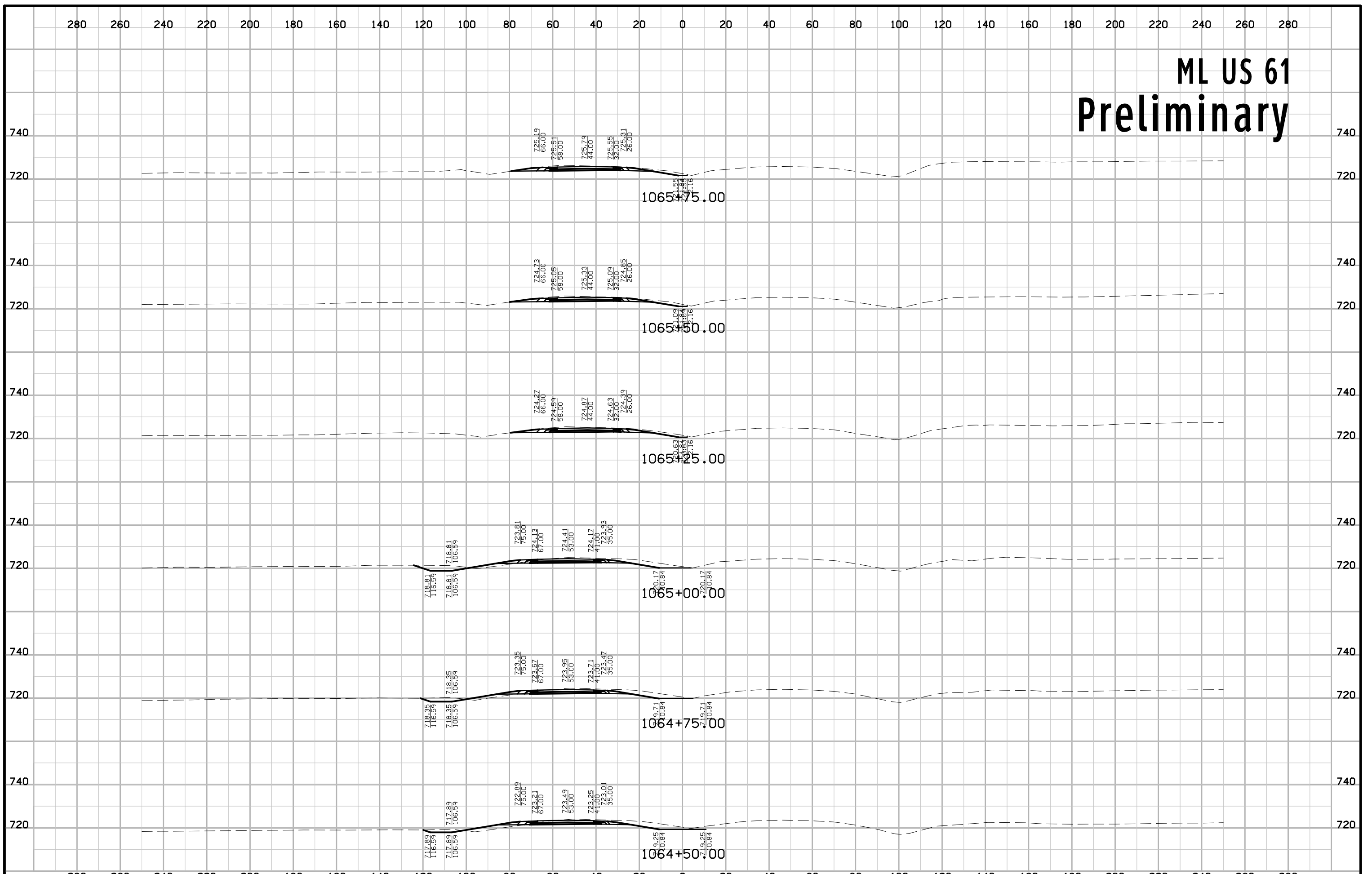
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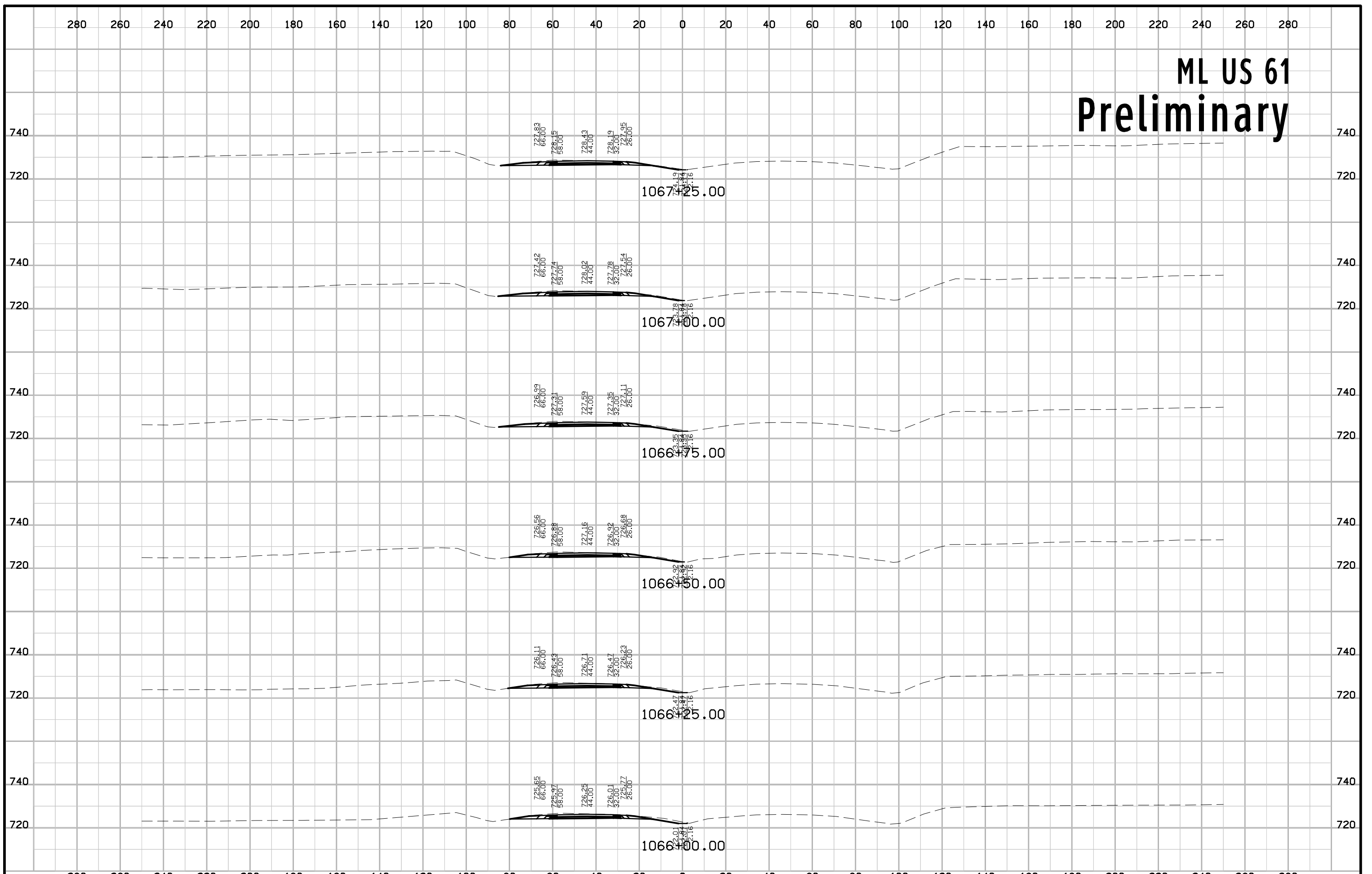
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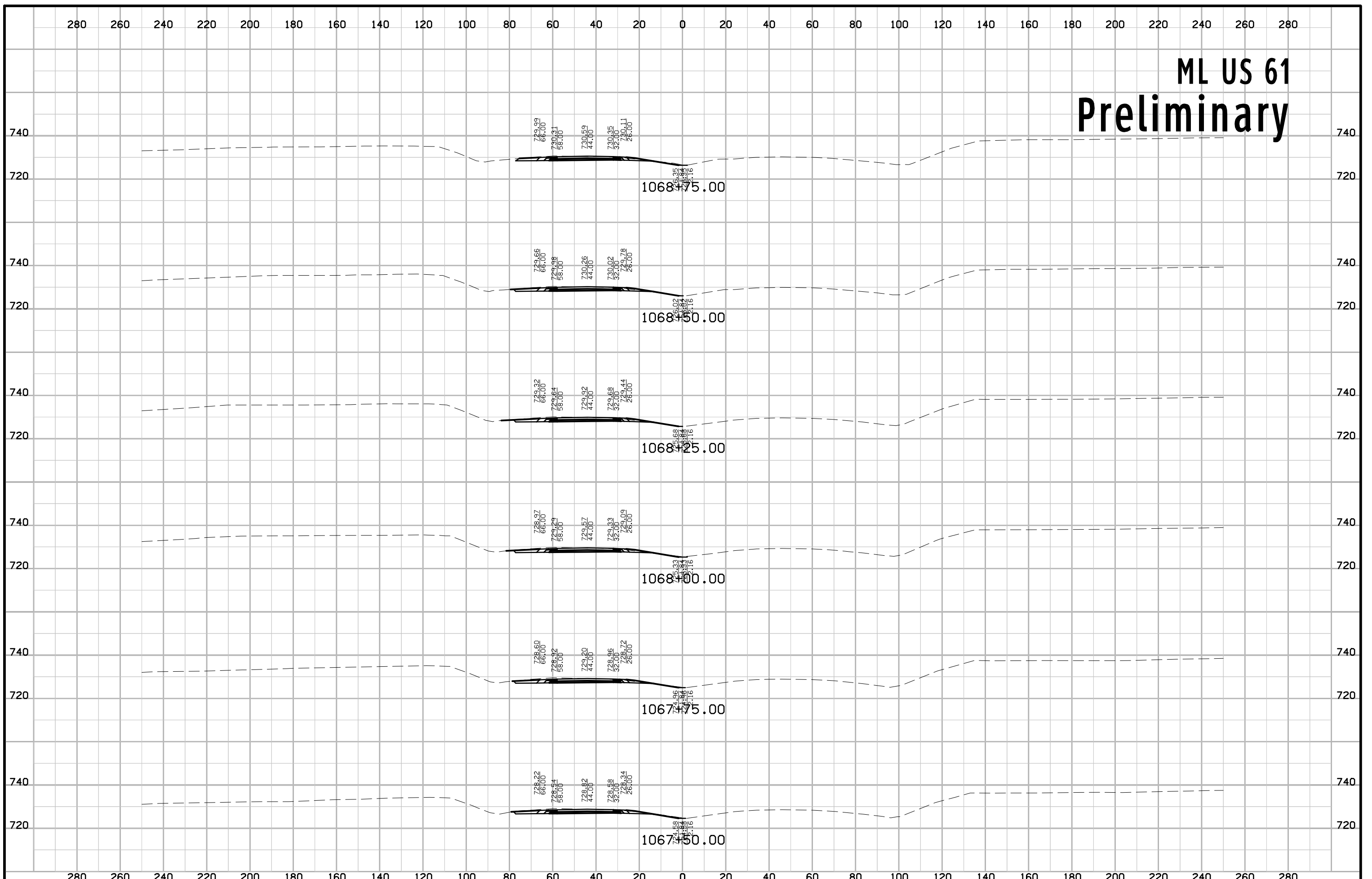
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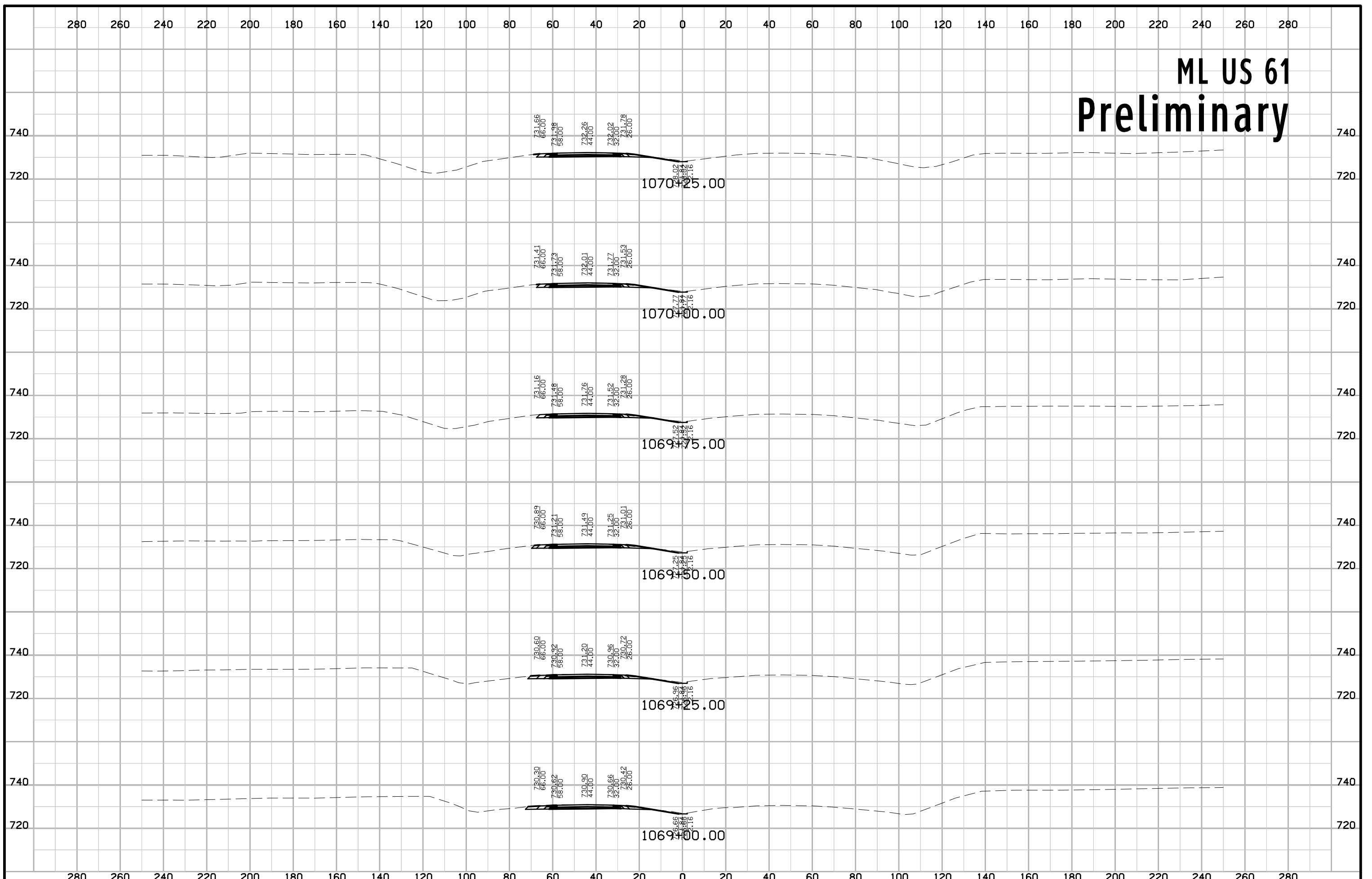
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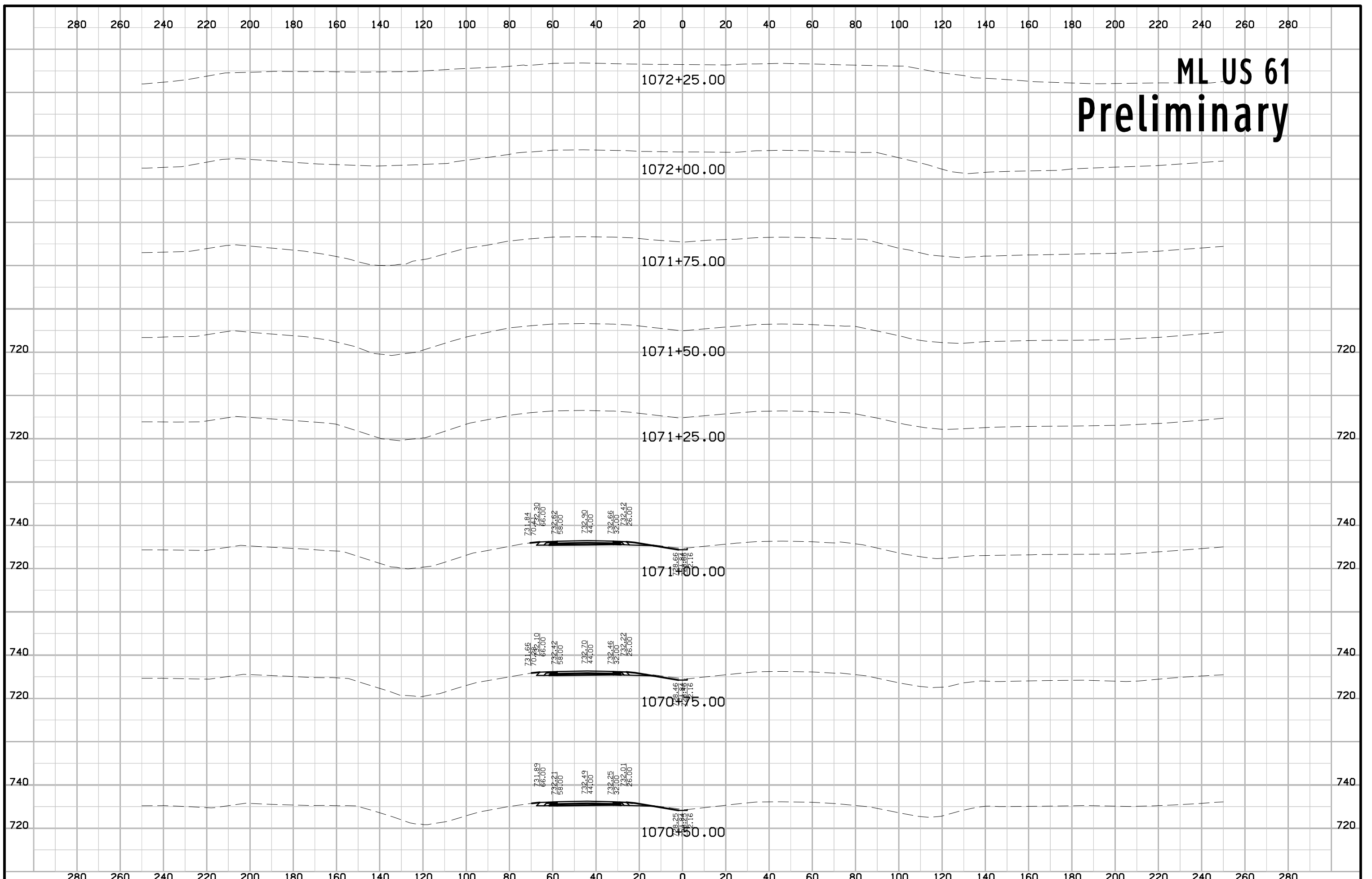
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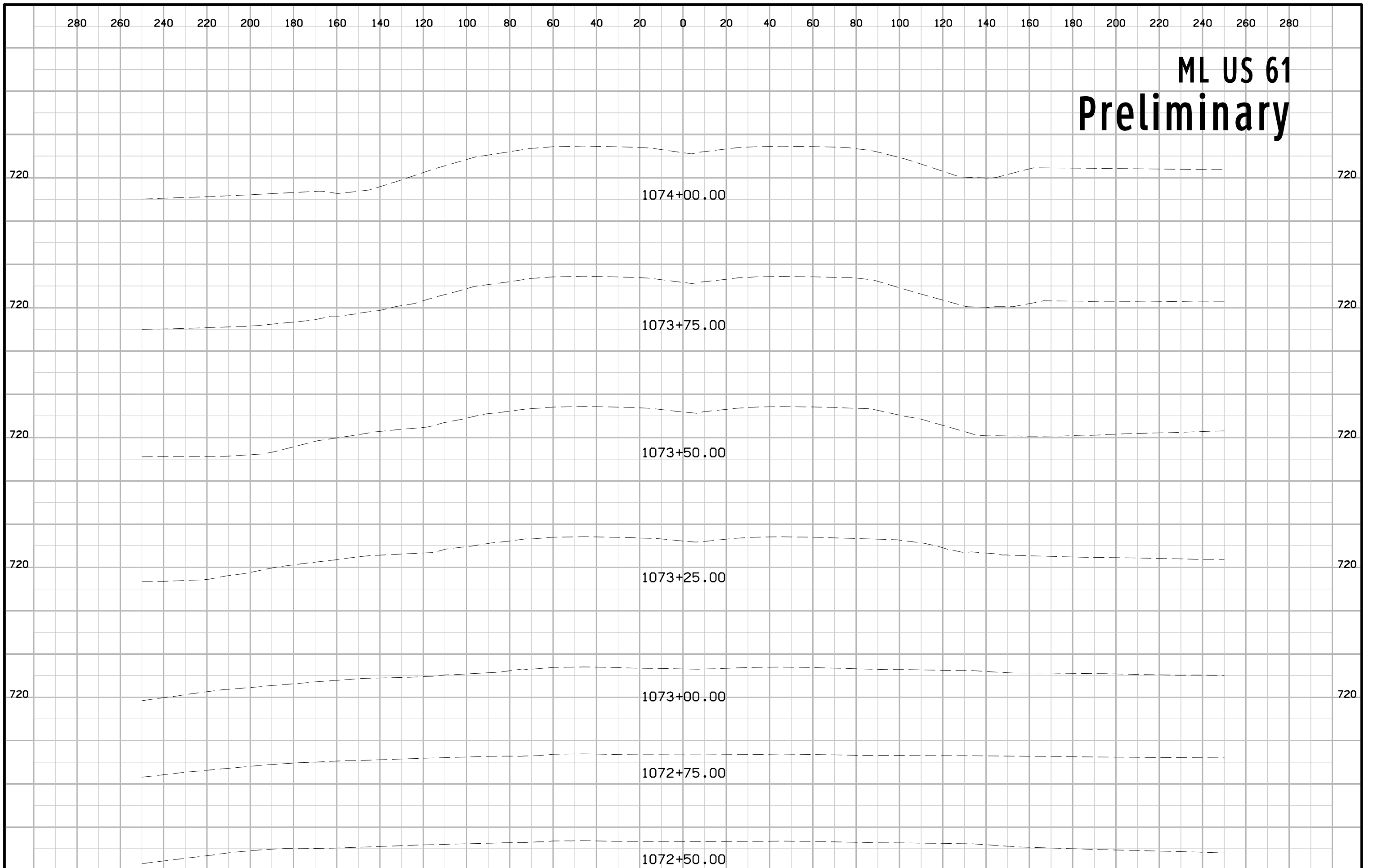
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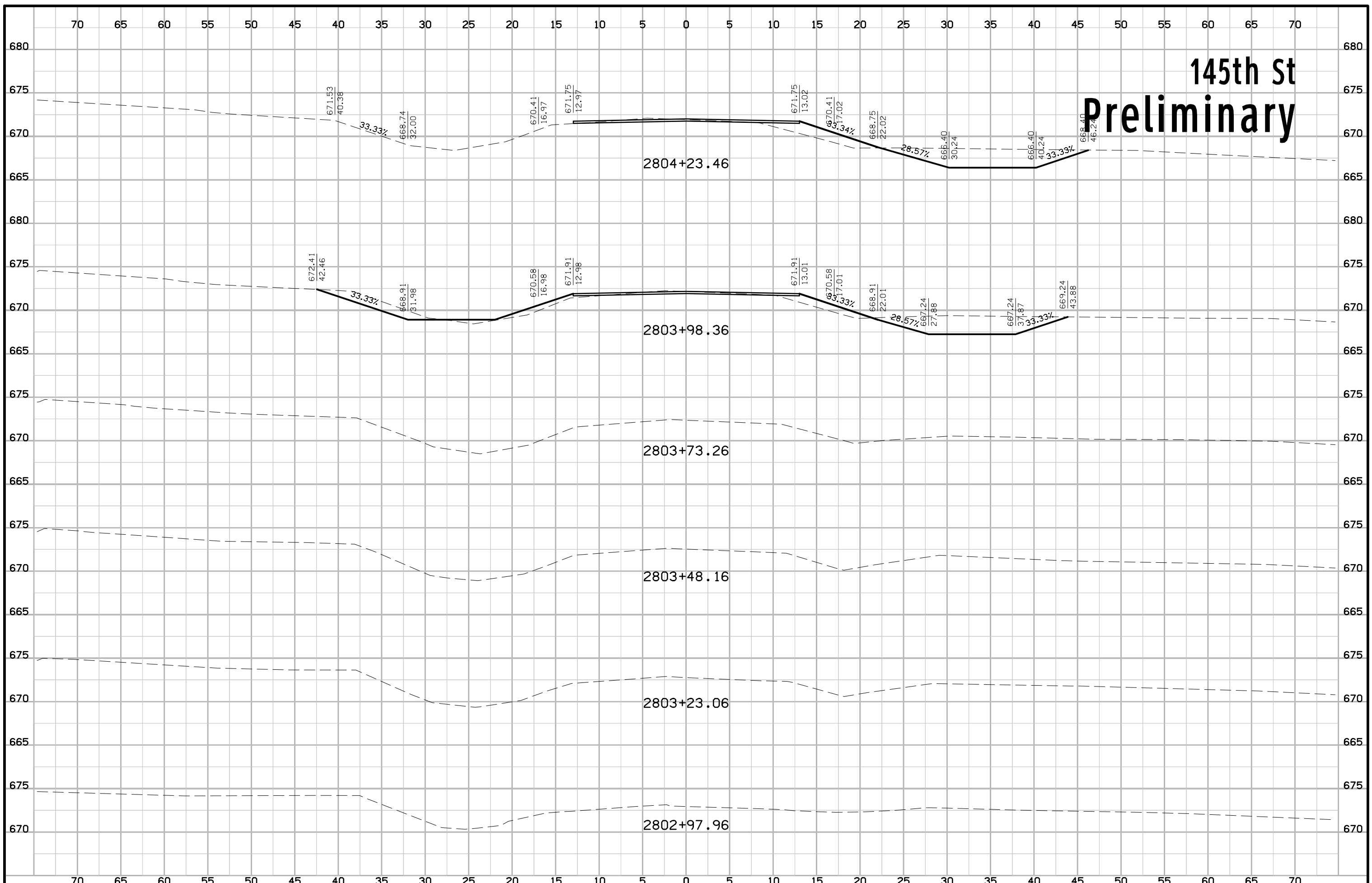
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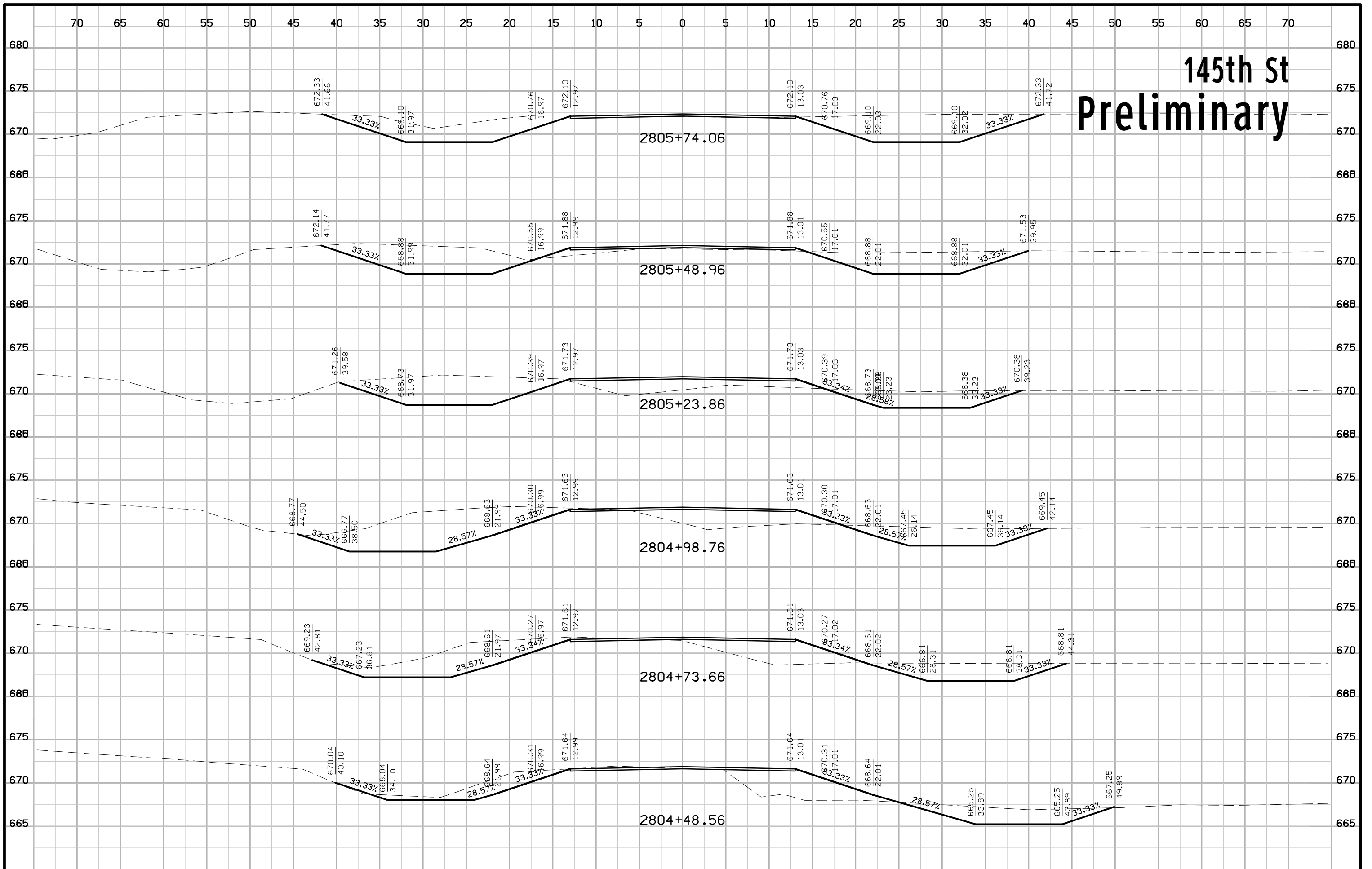
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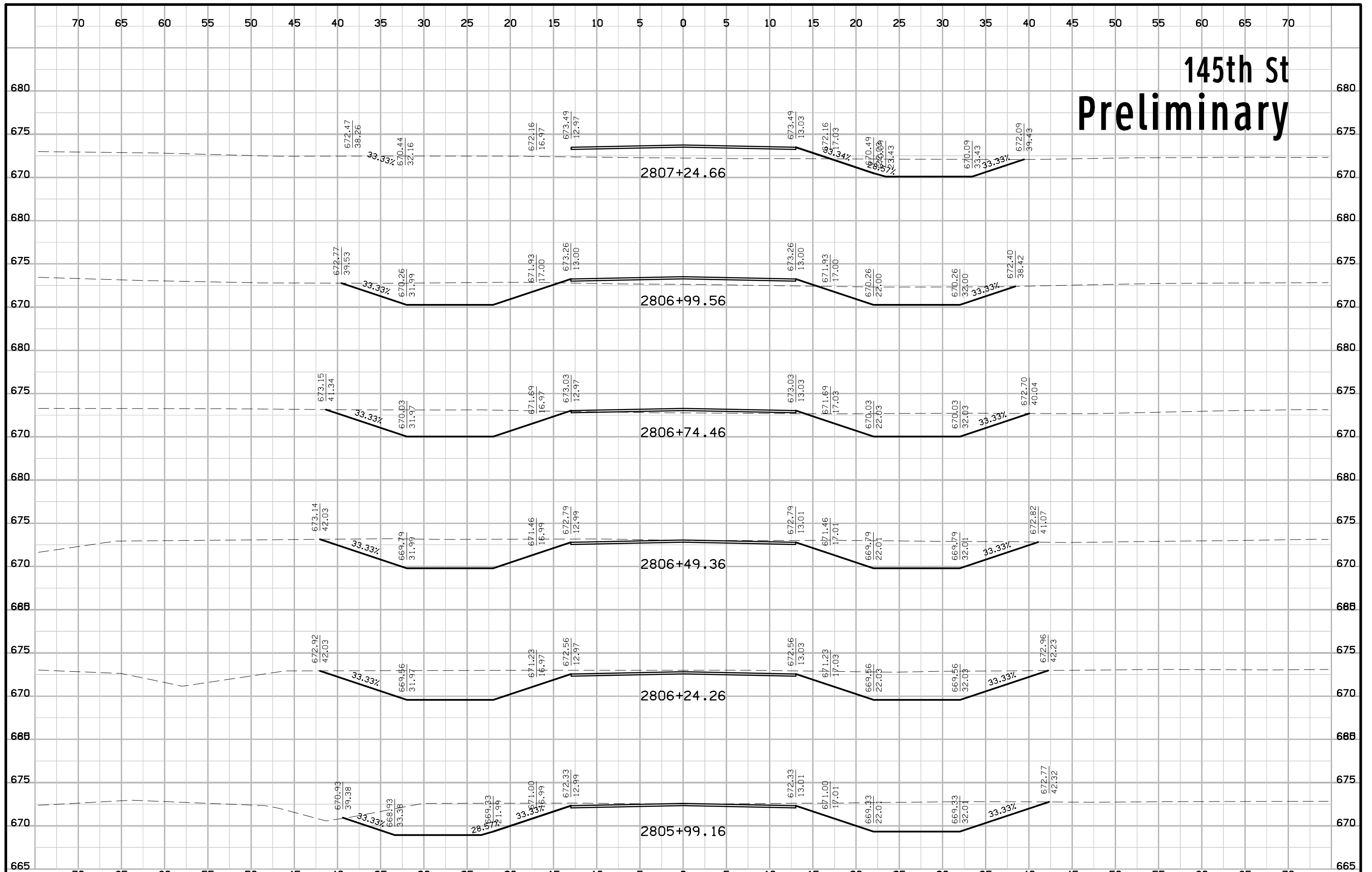
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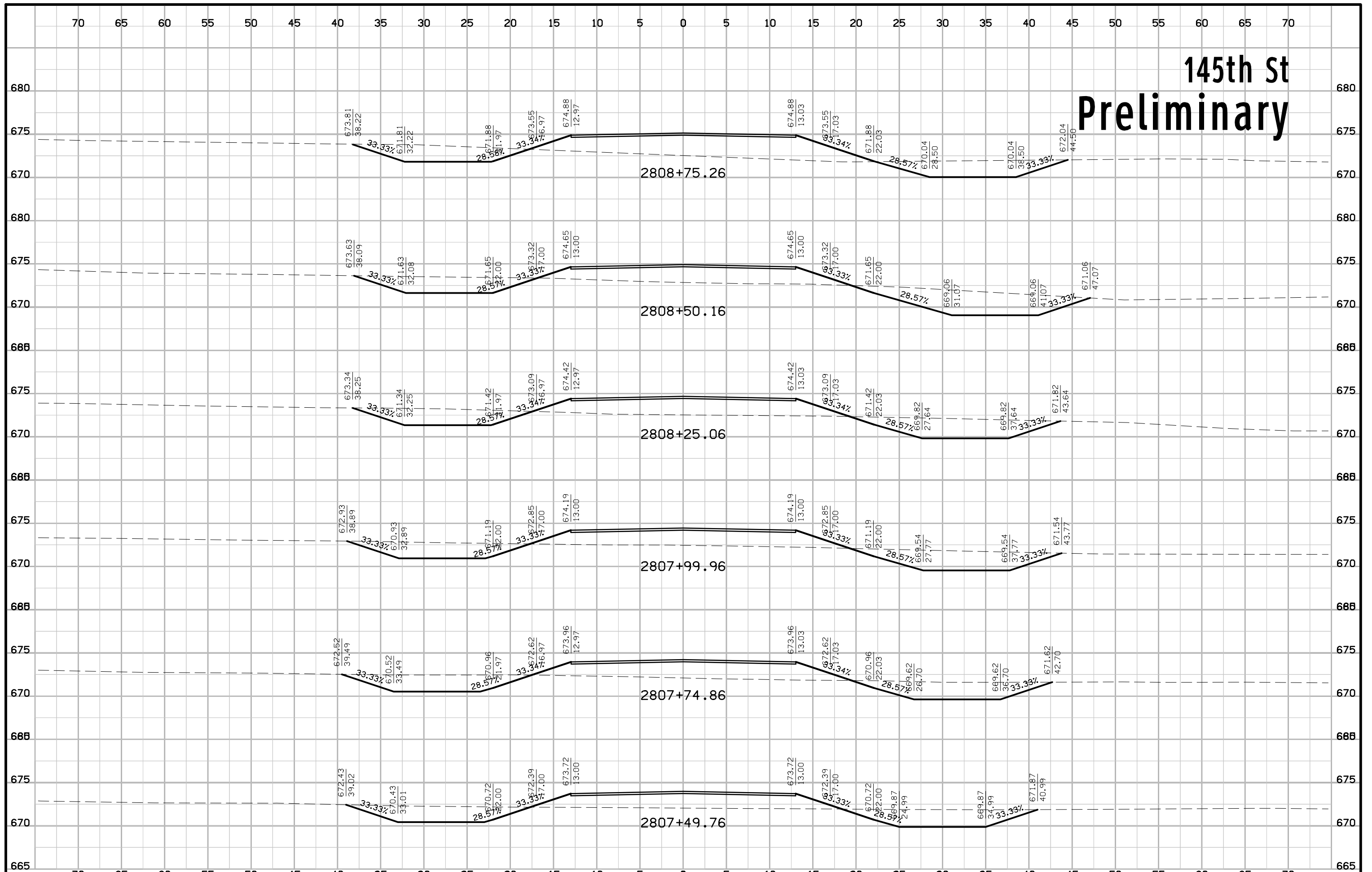
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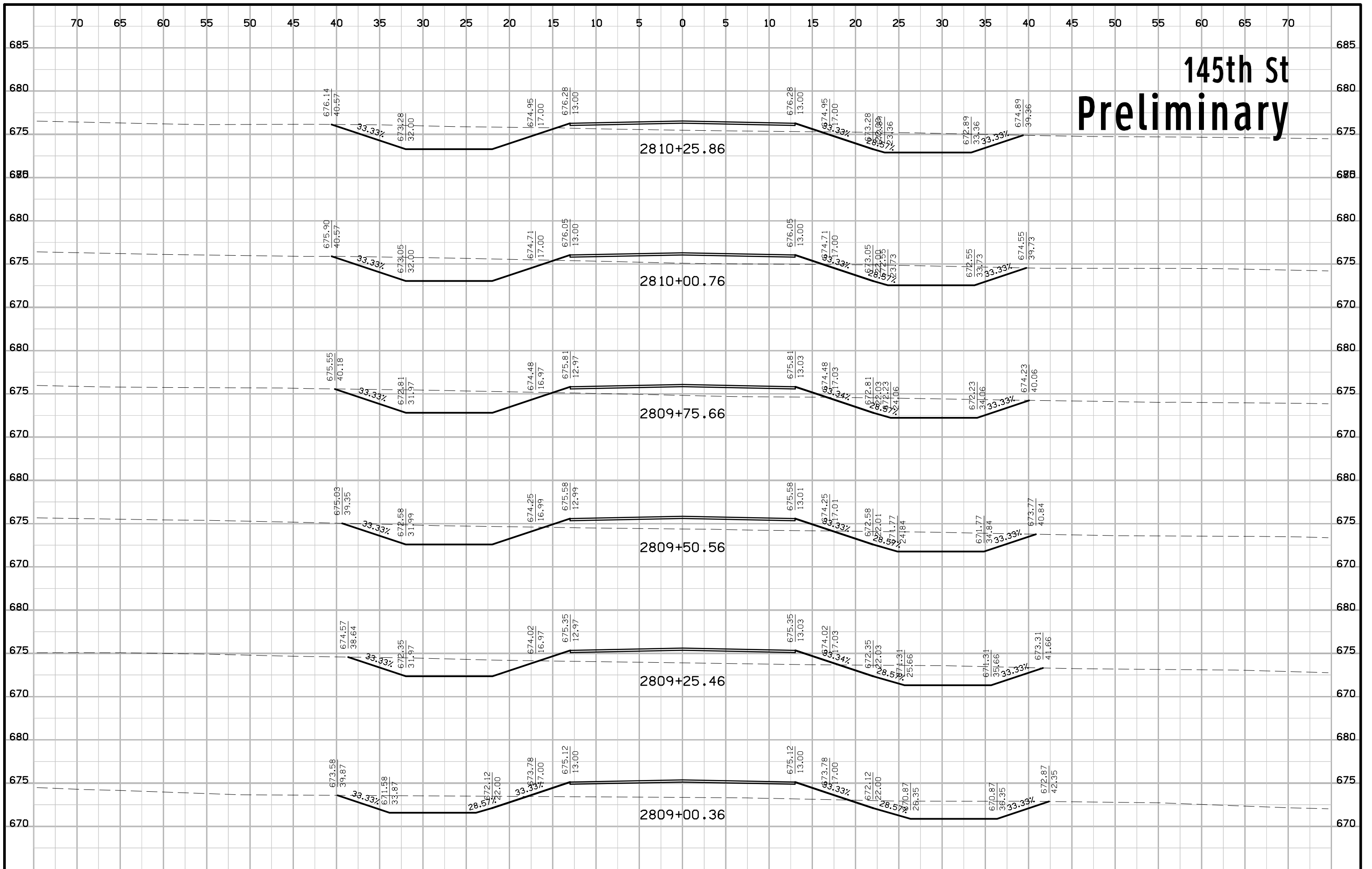
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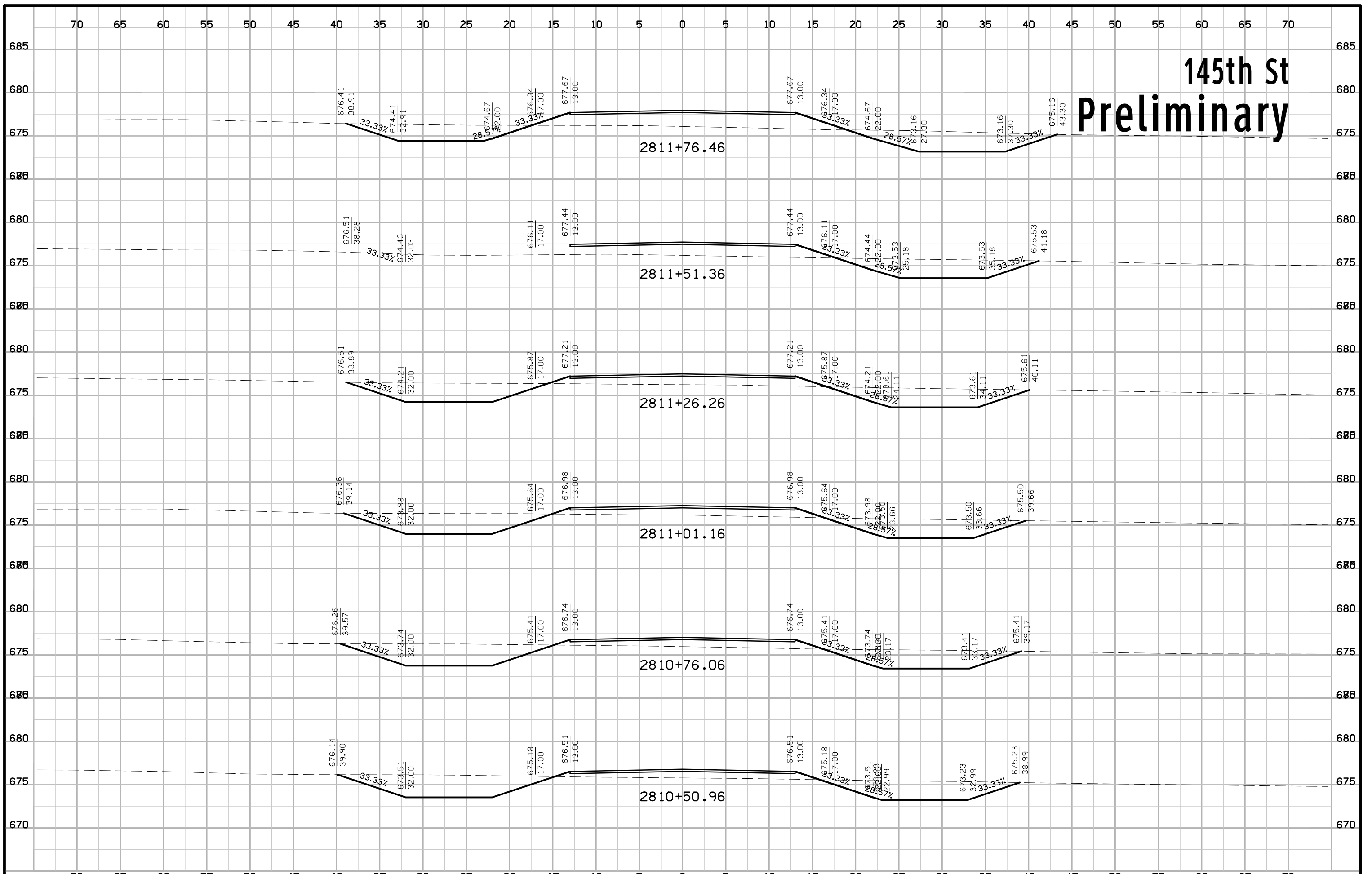
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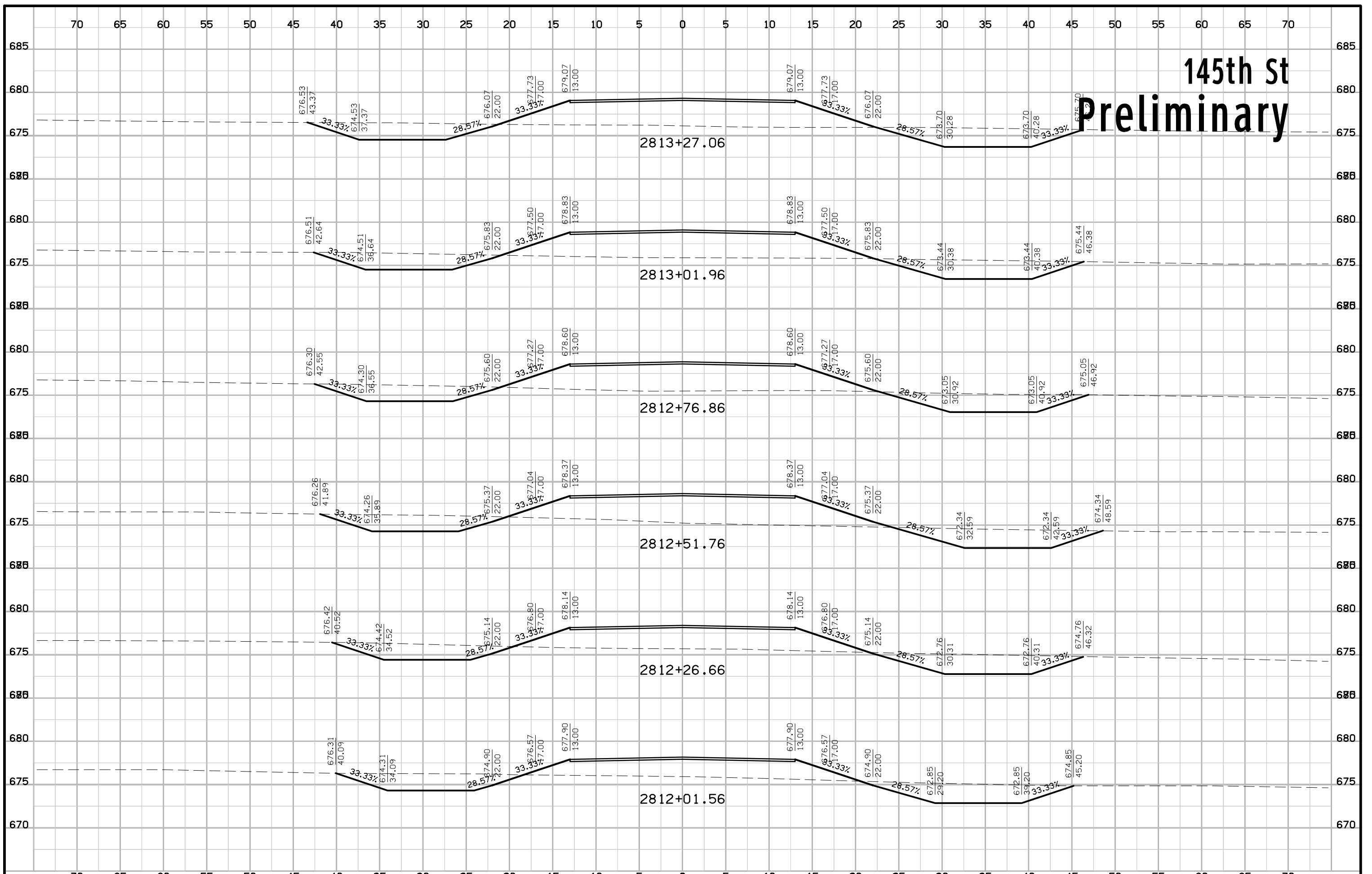
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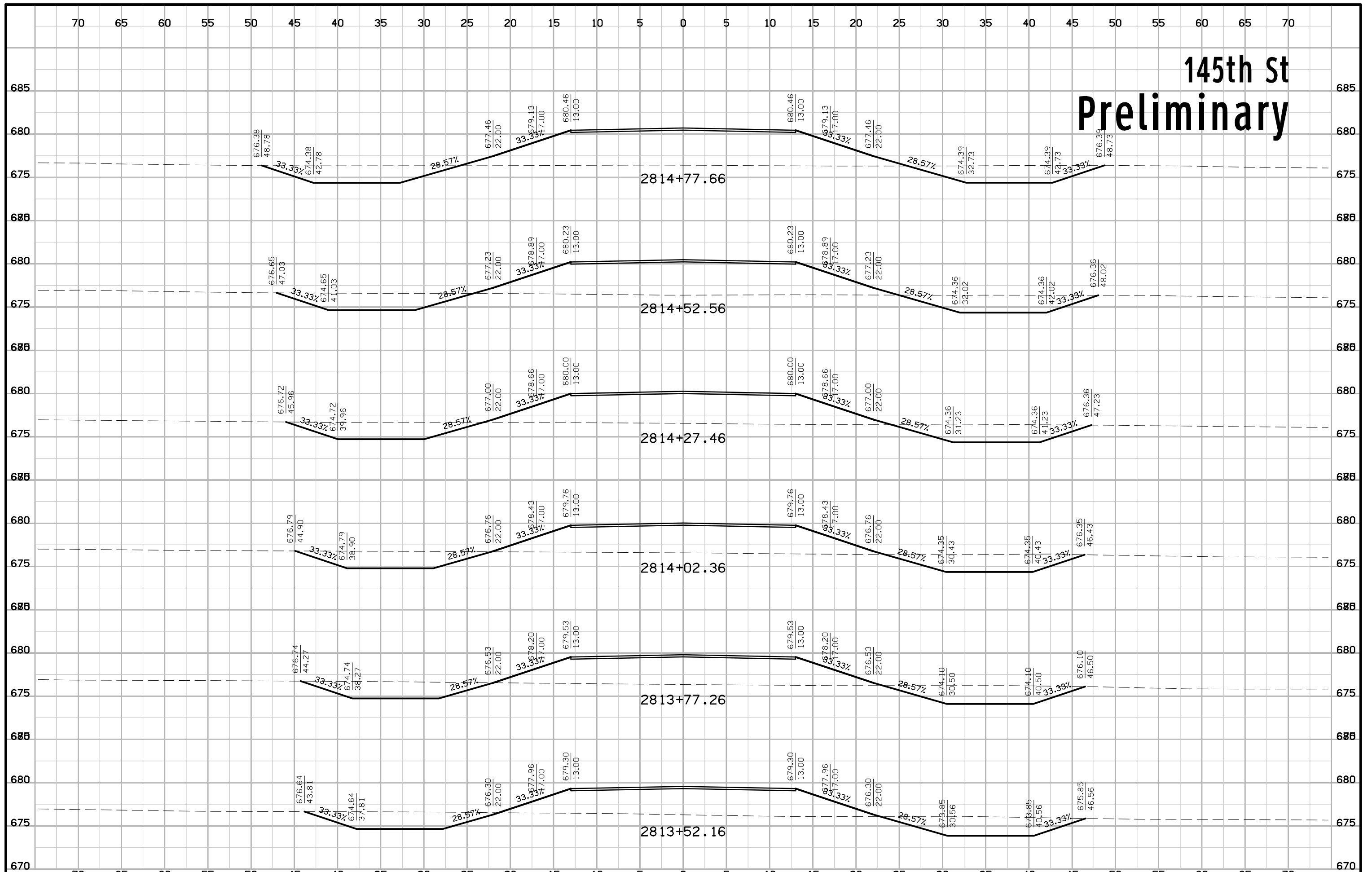
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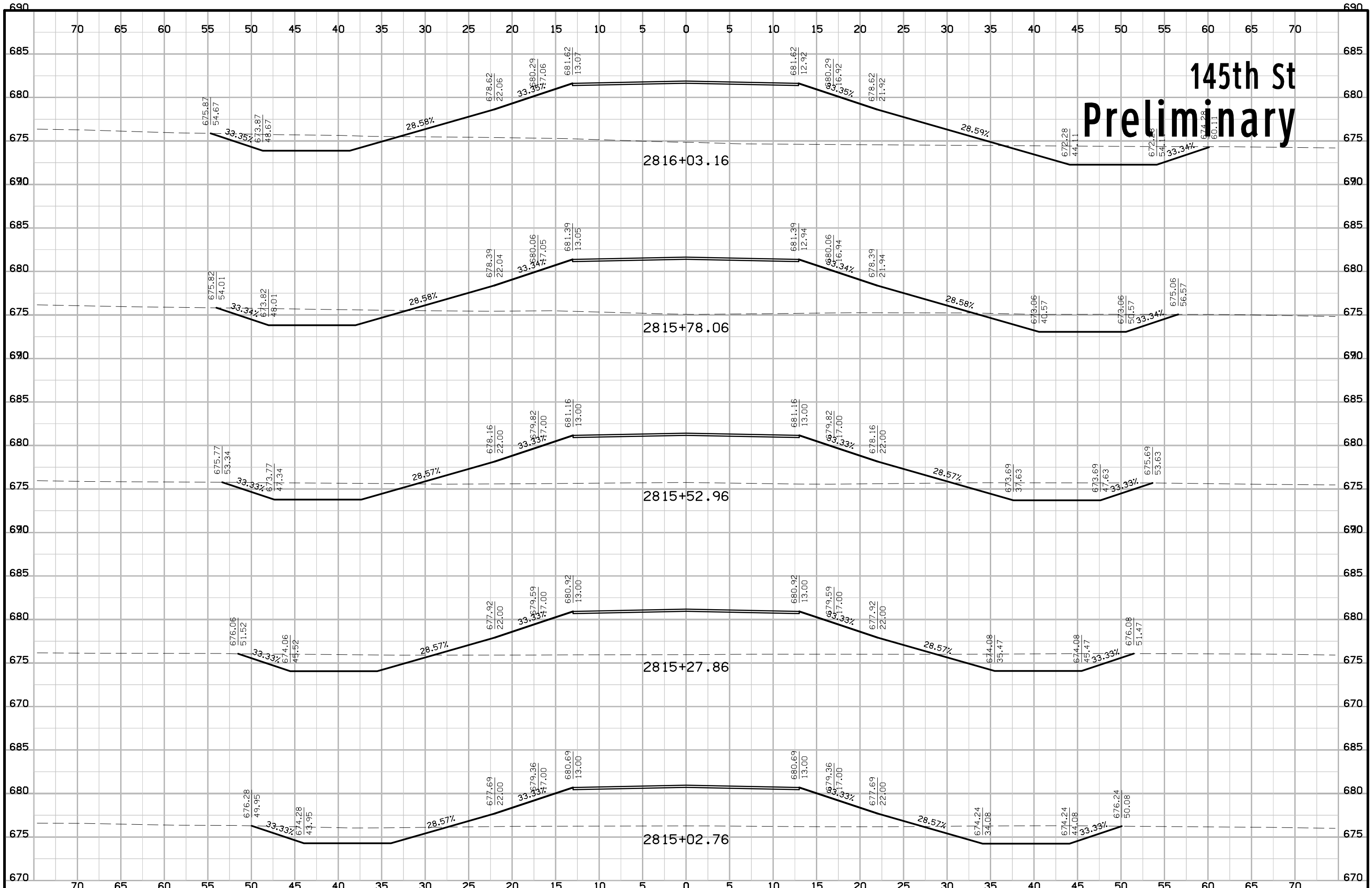
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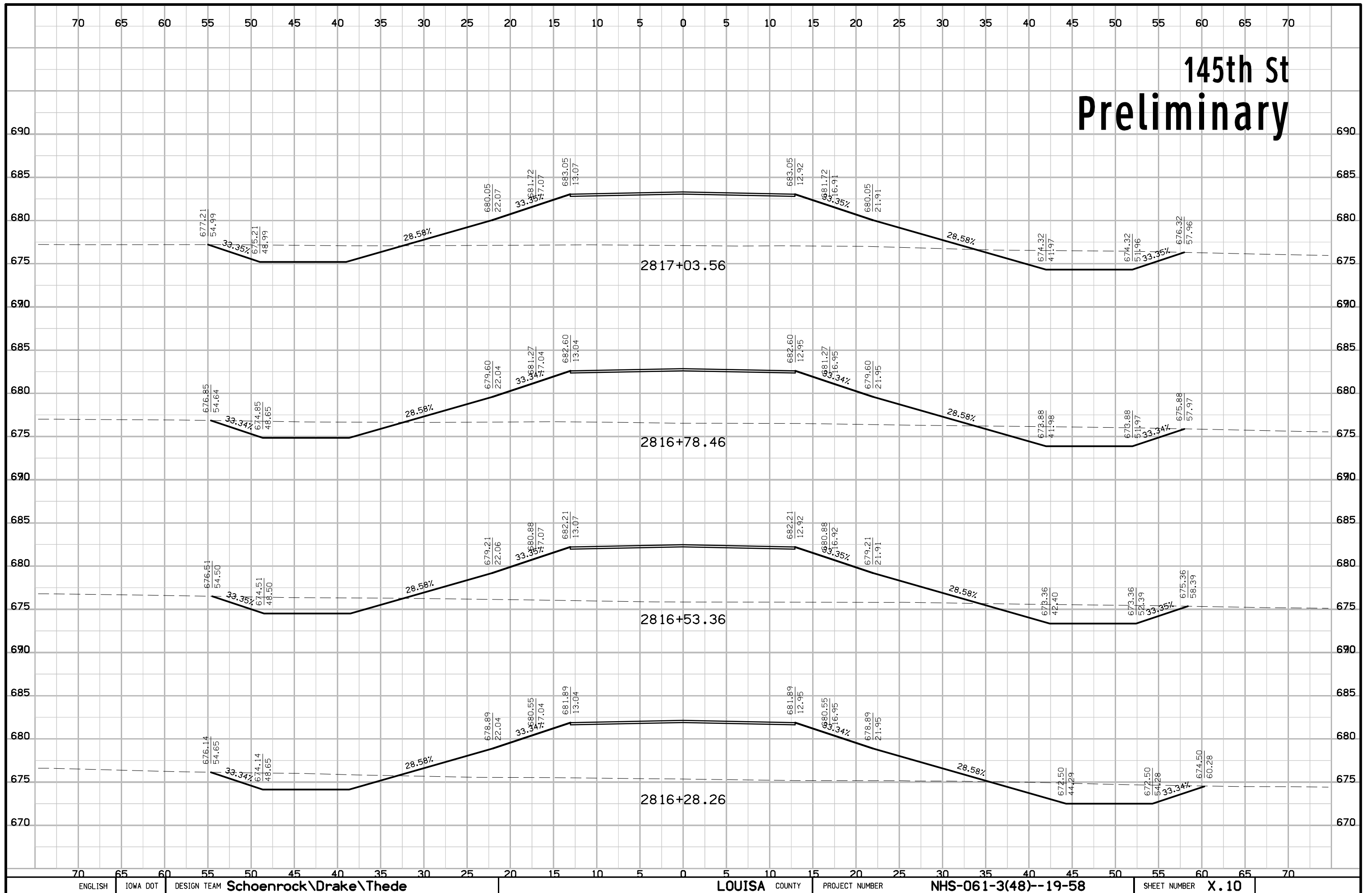
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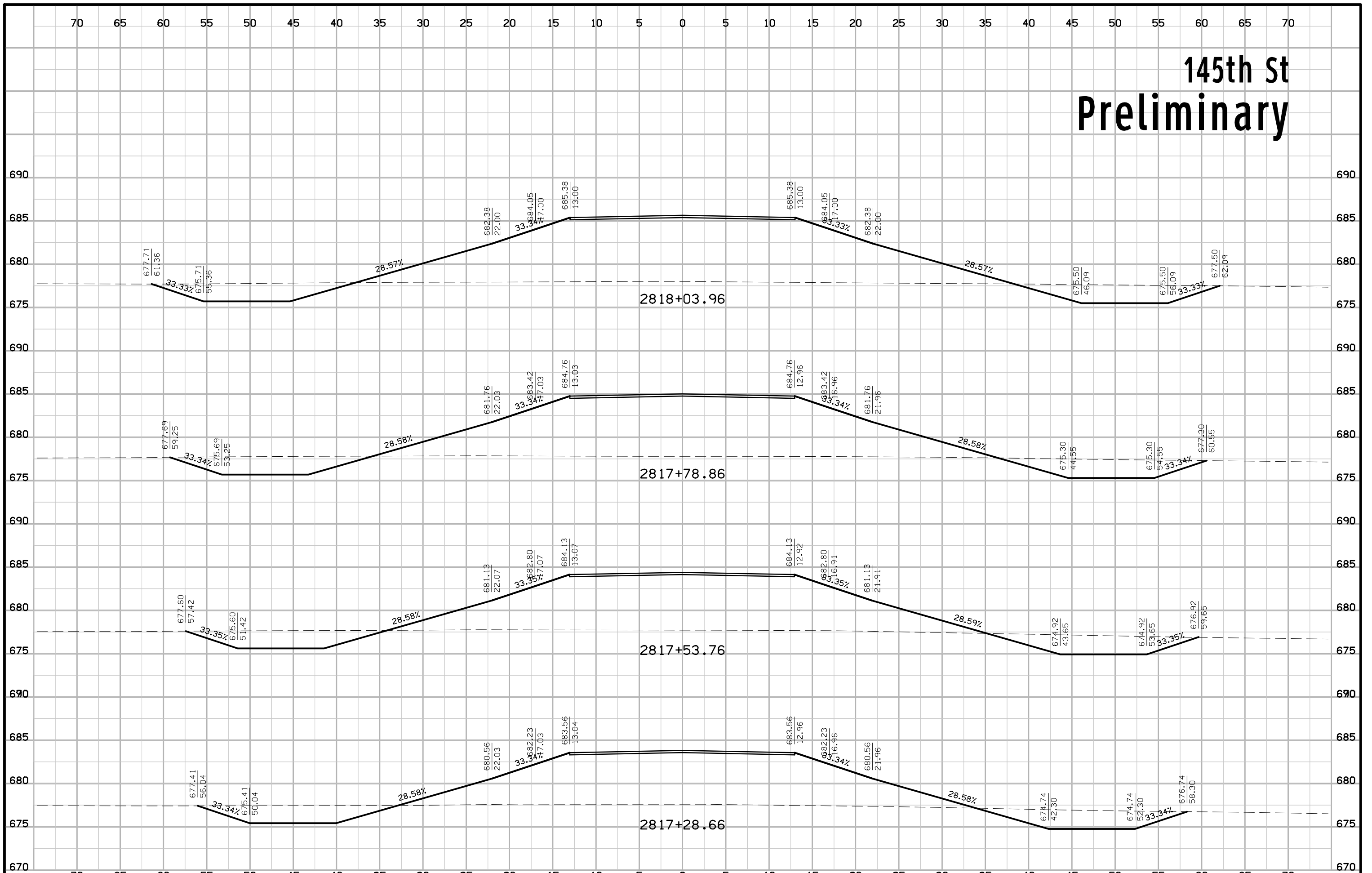
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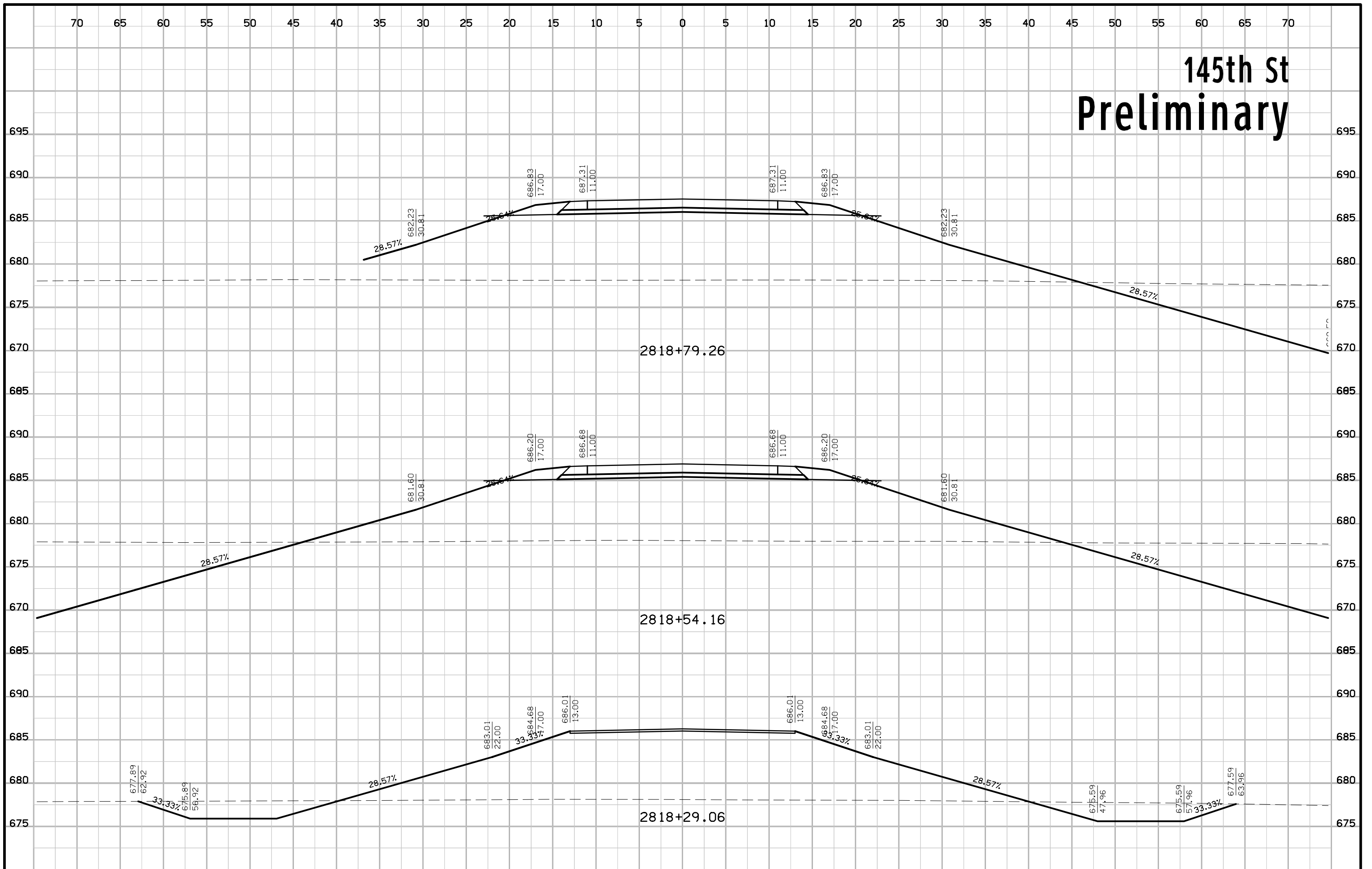
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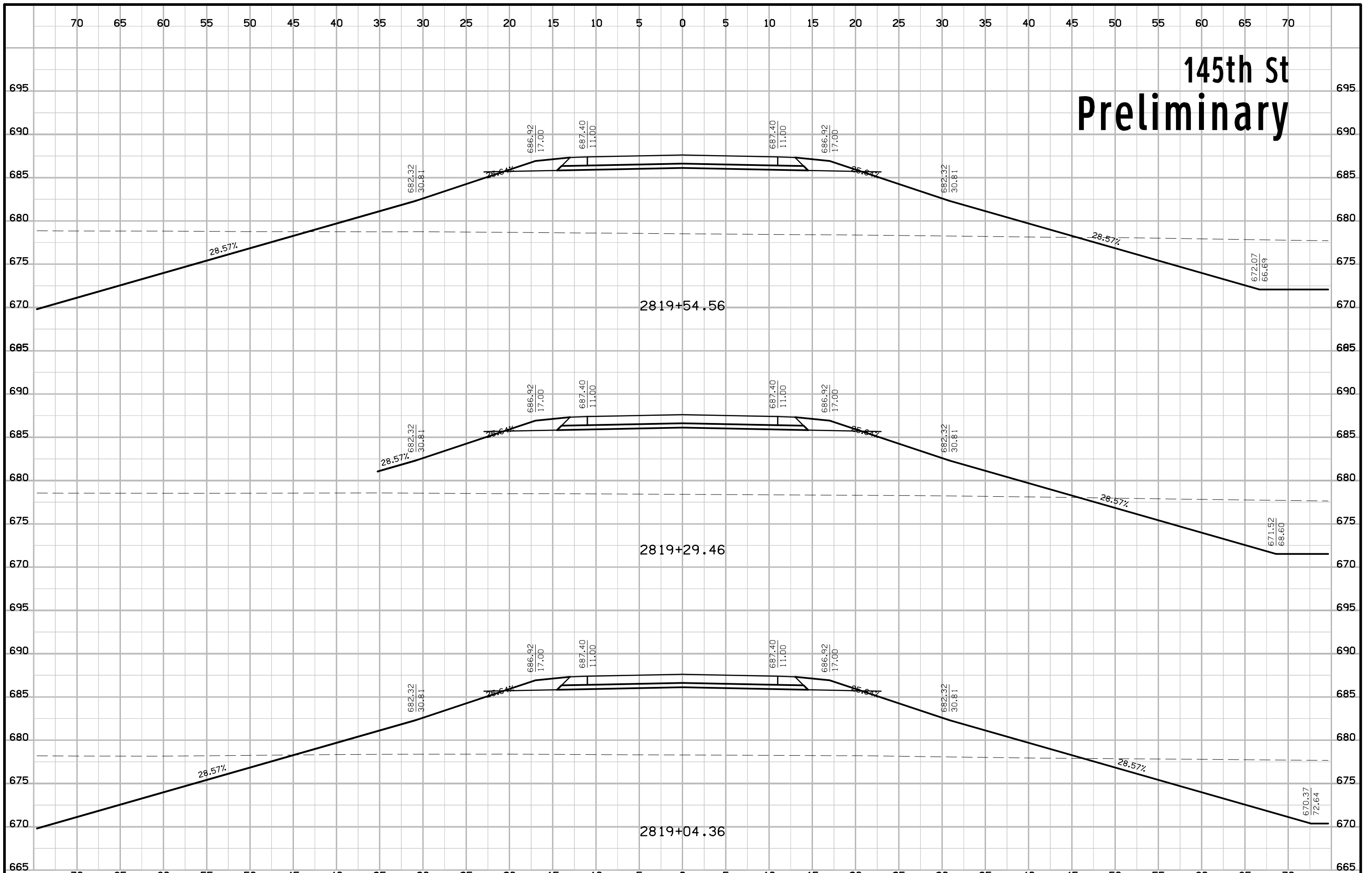
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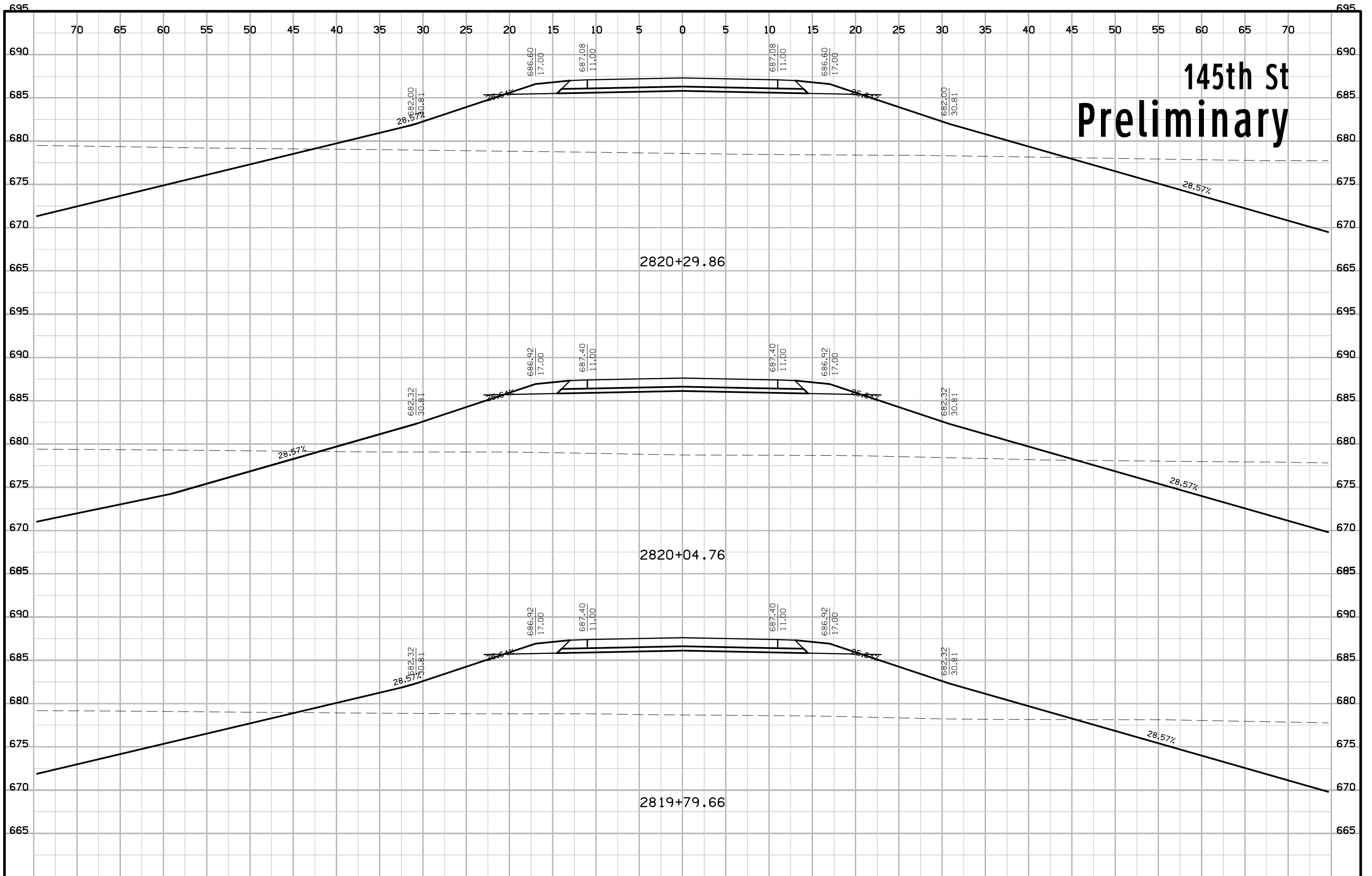
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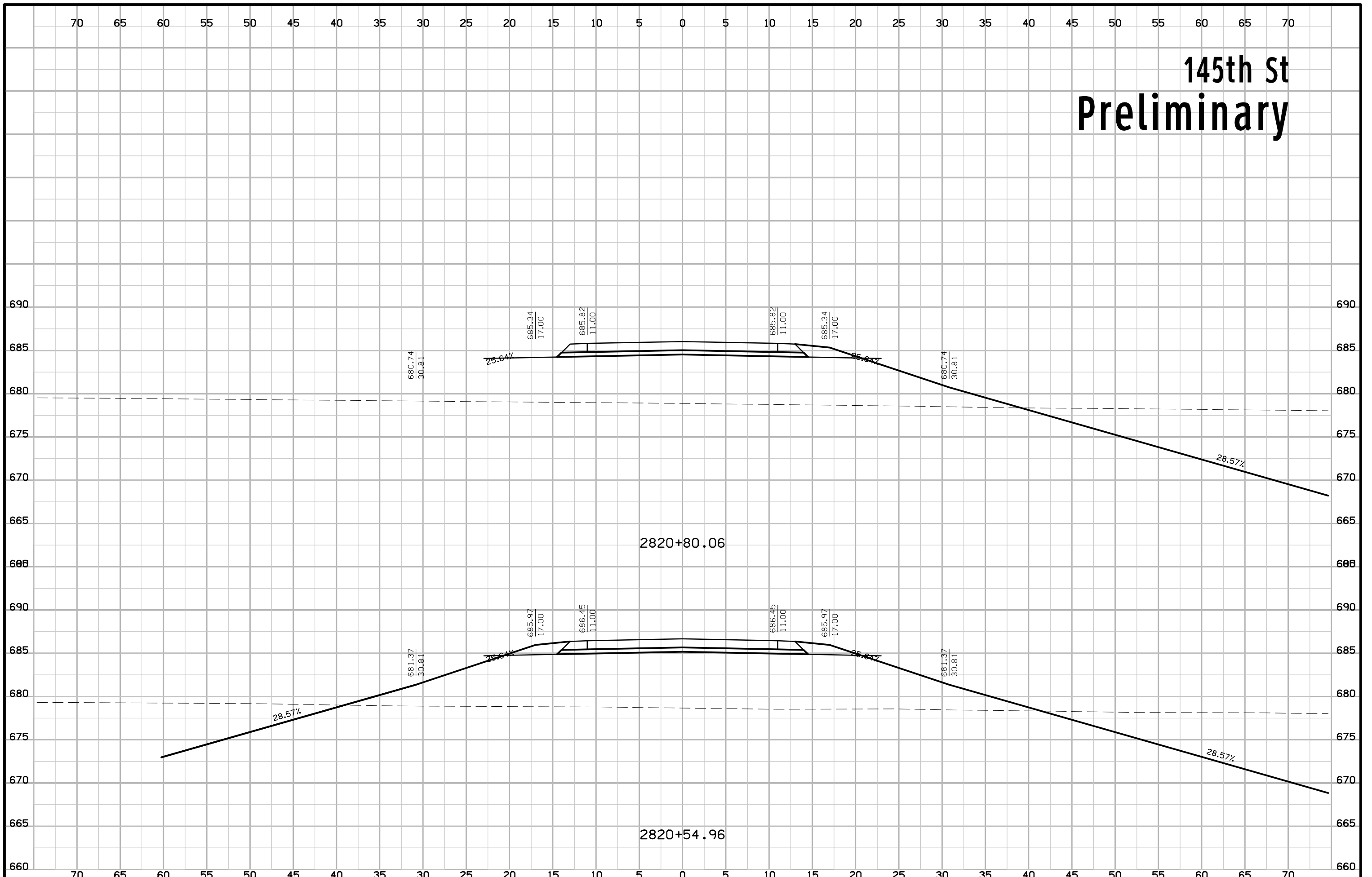
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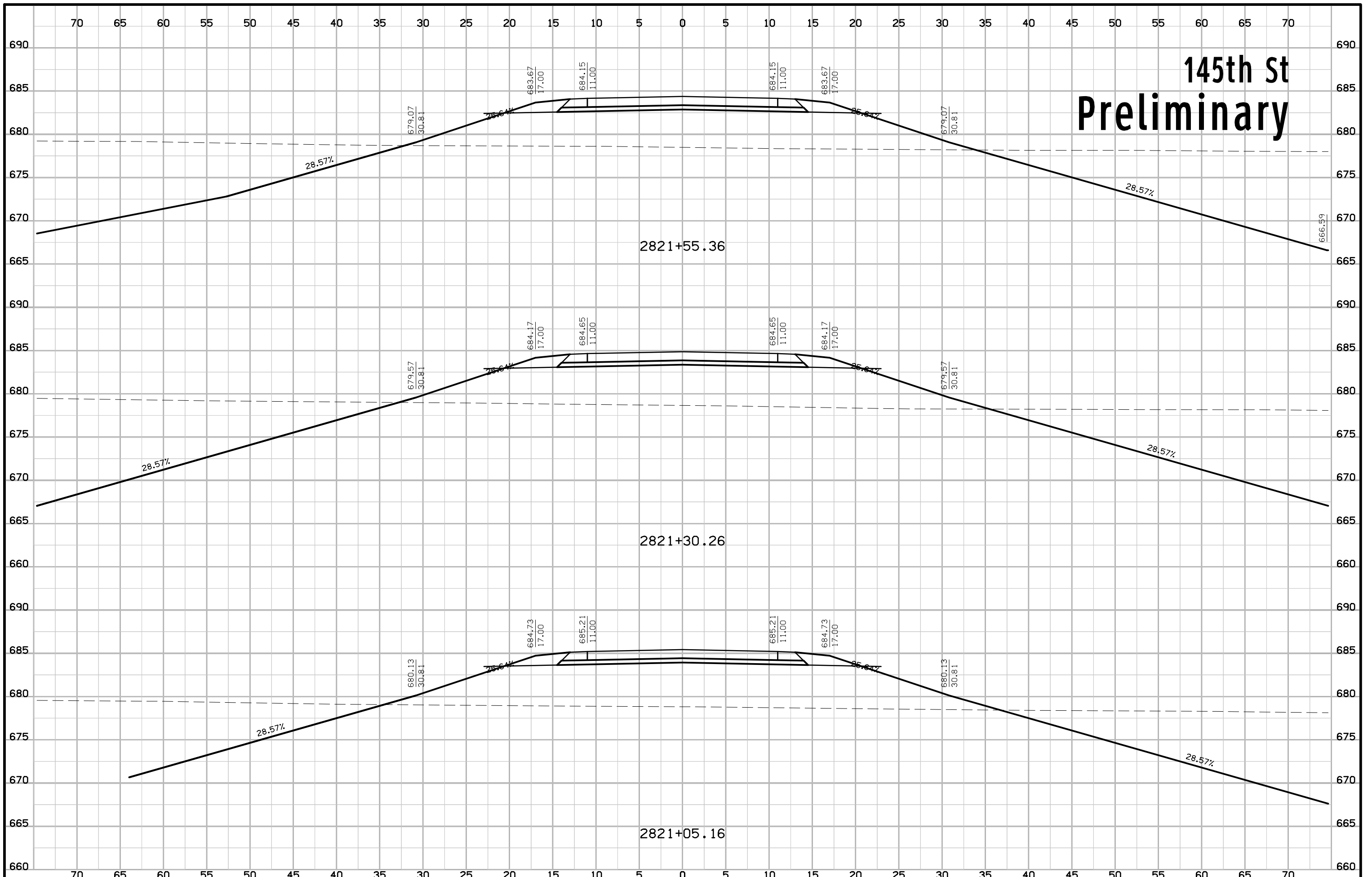
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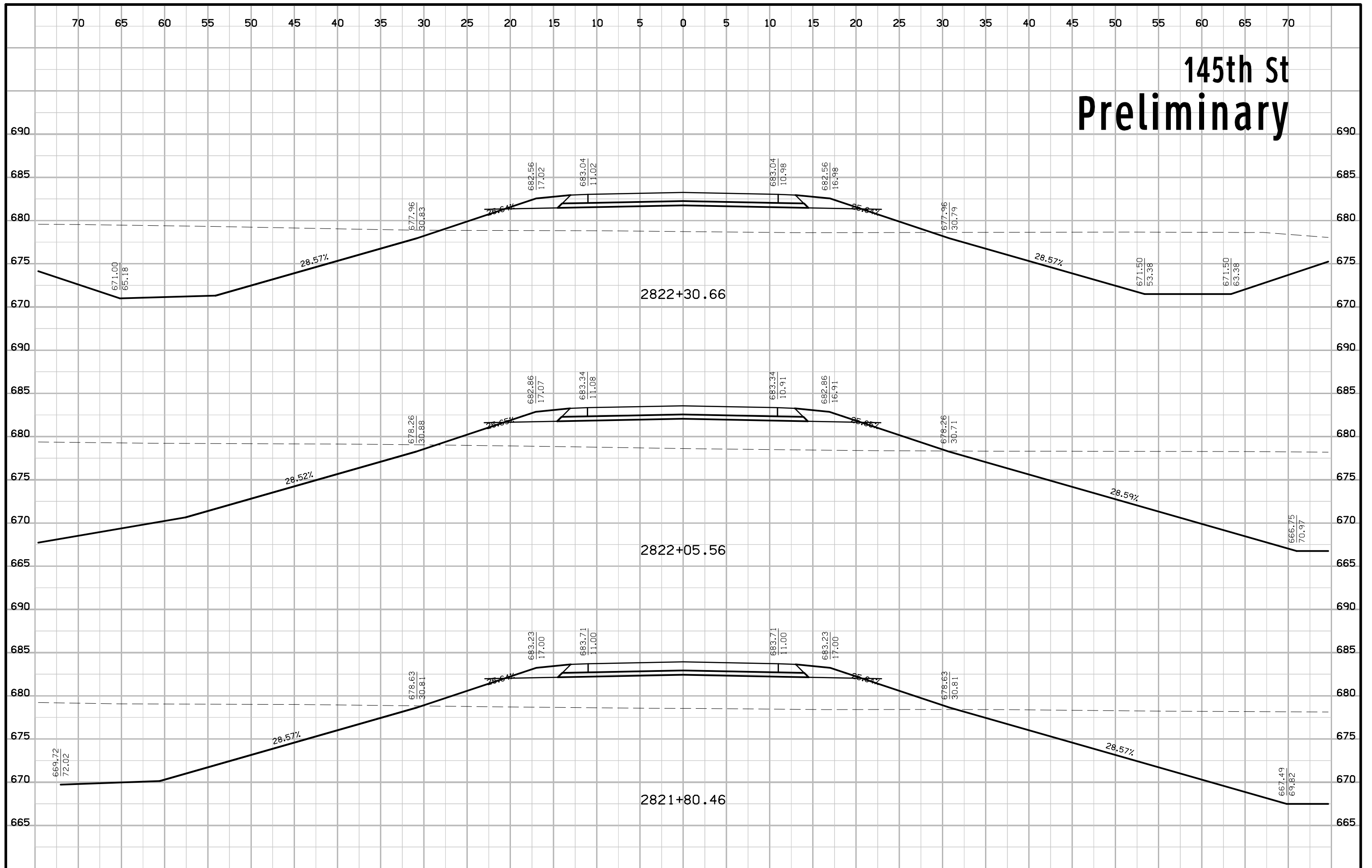
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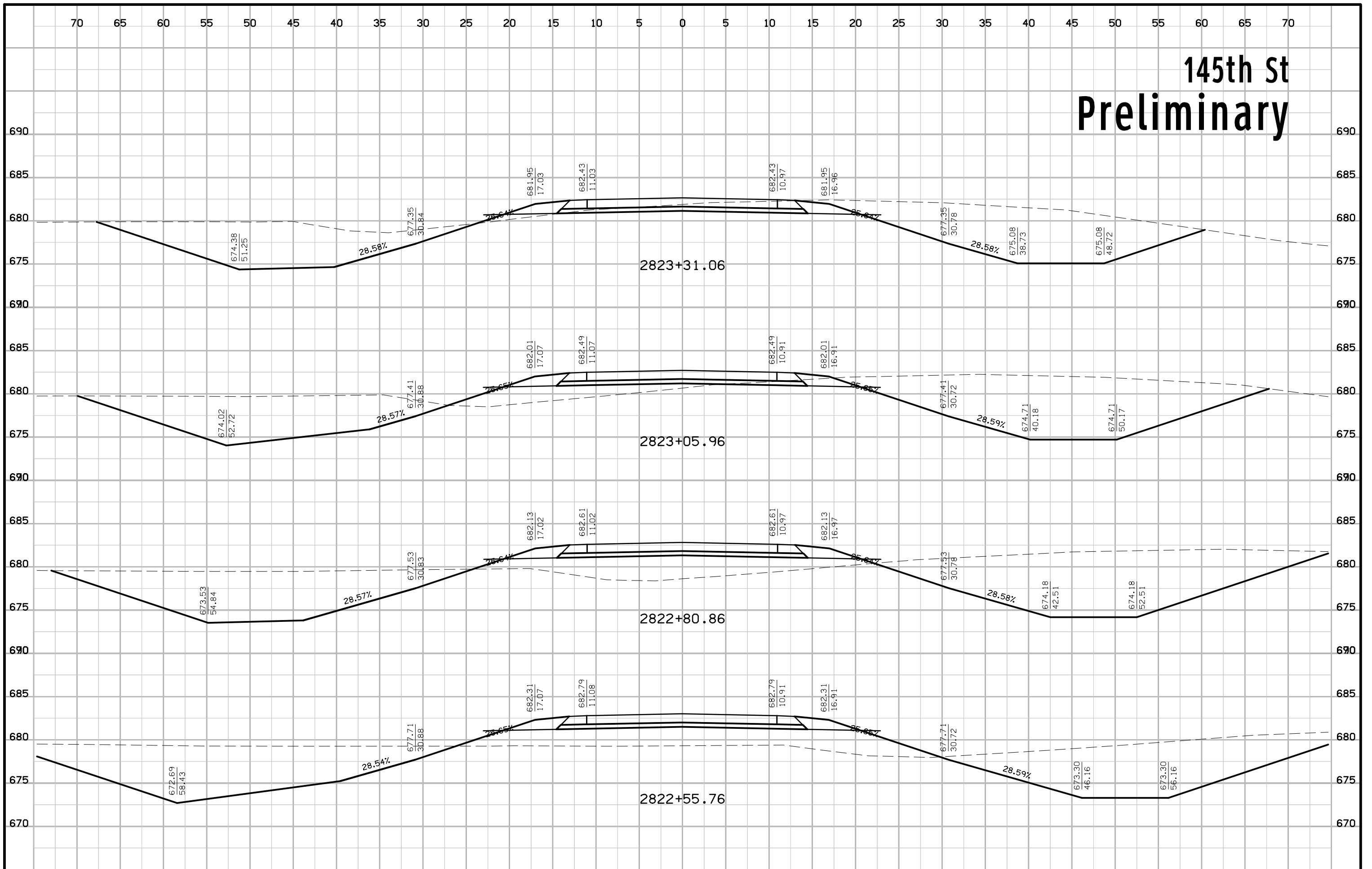
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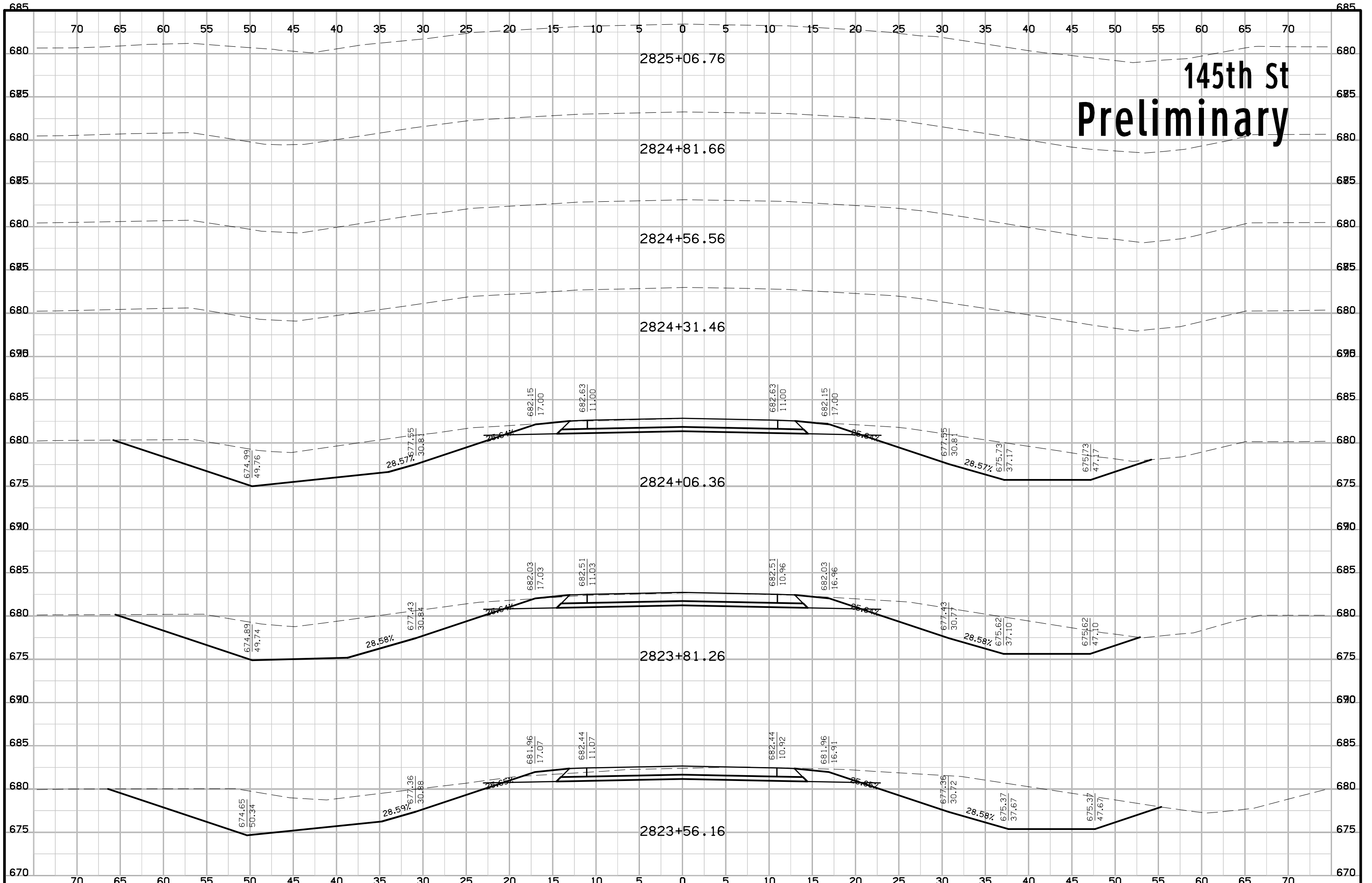
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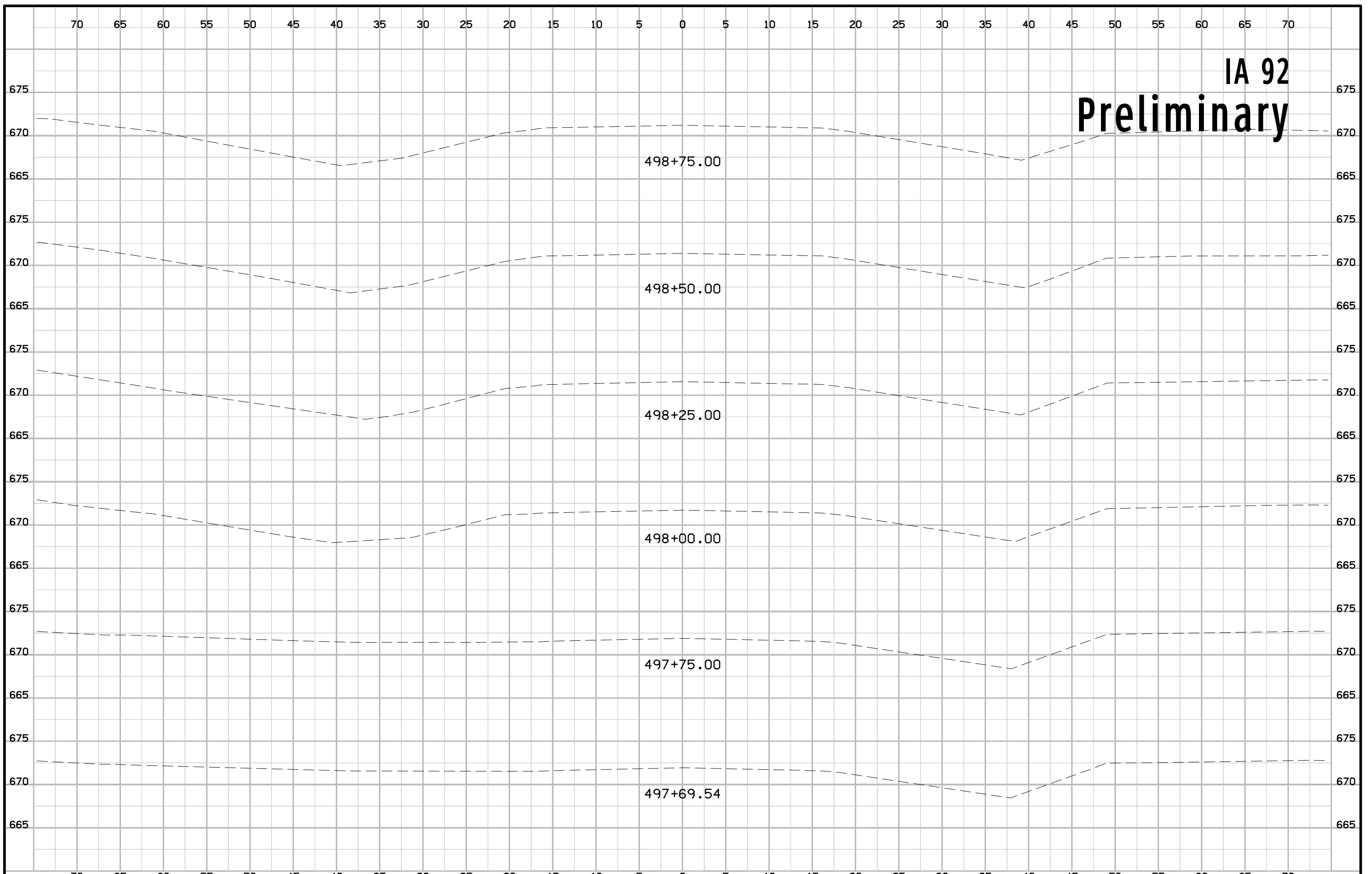
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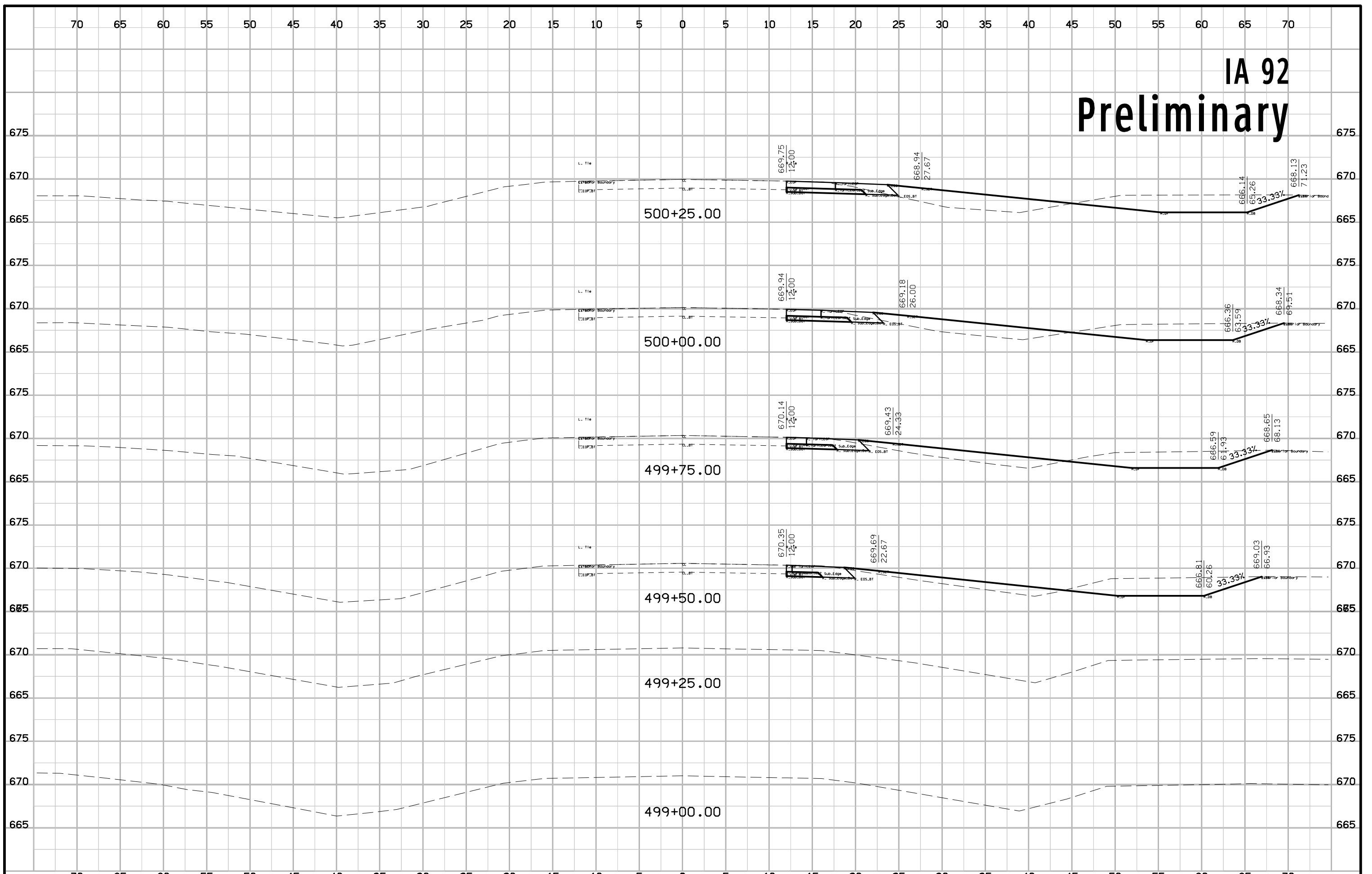
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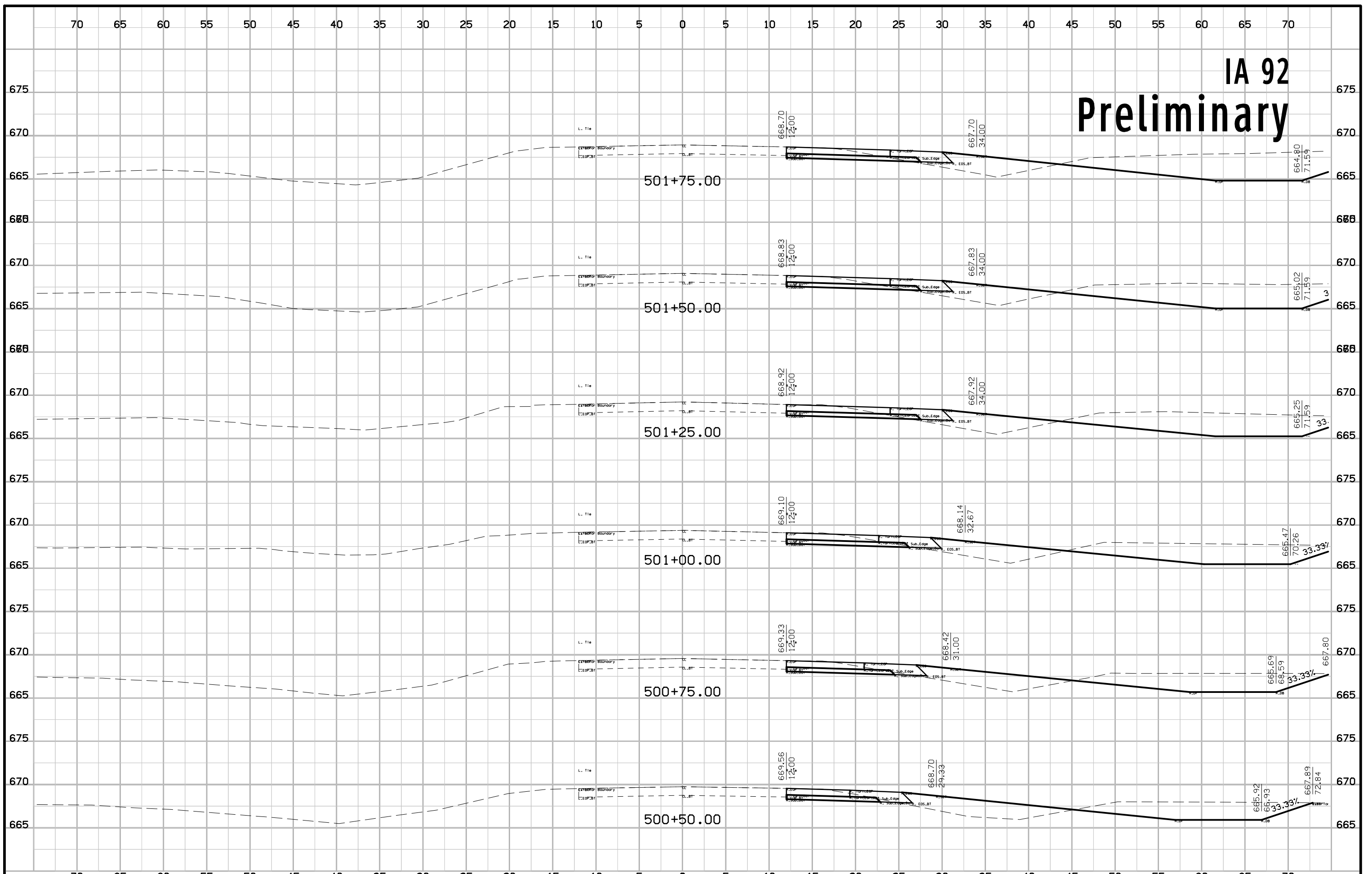
IA 92 Preliminary



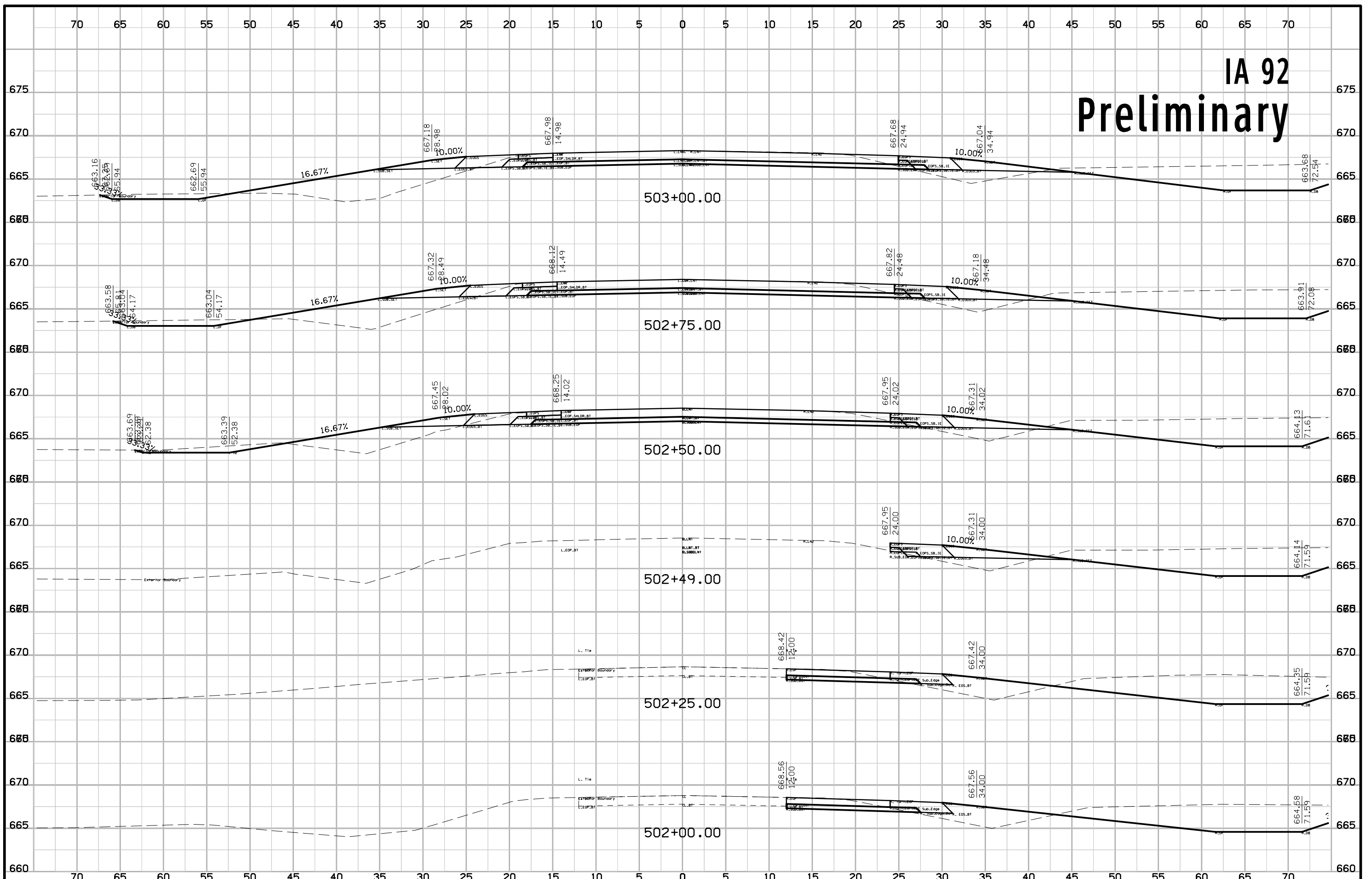
IA 92 Preliminary

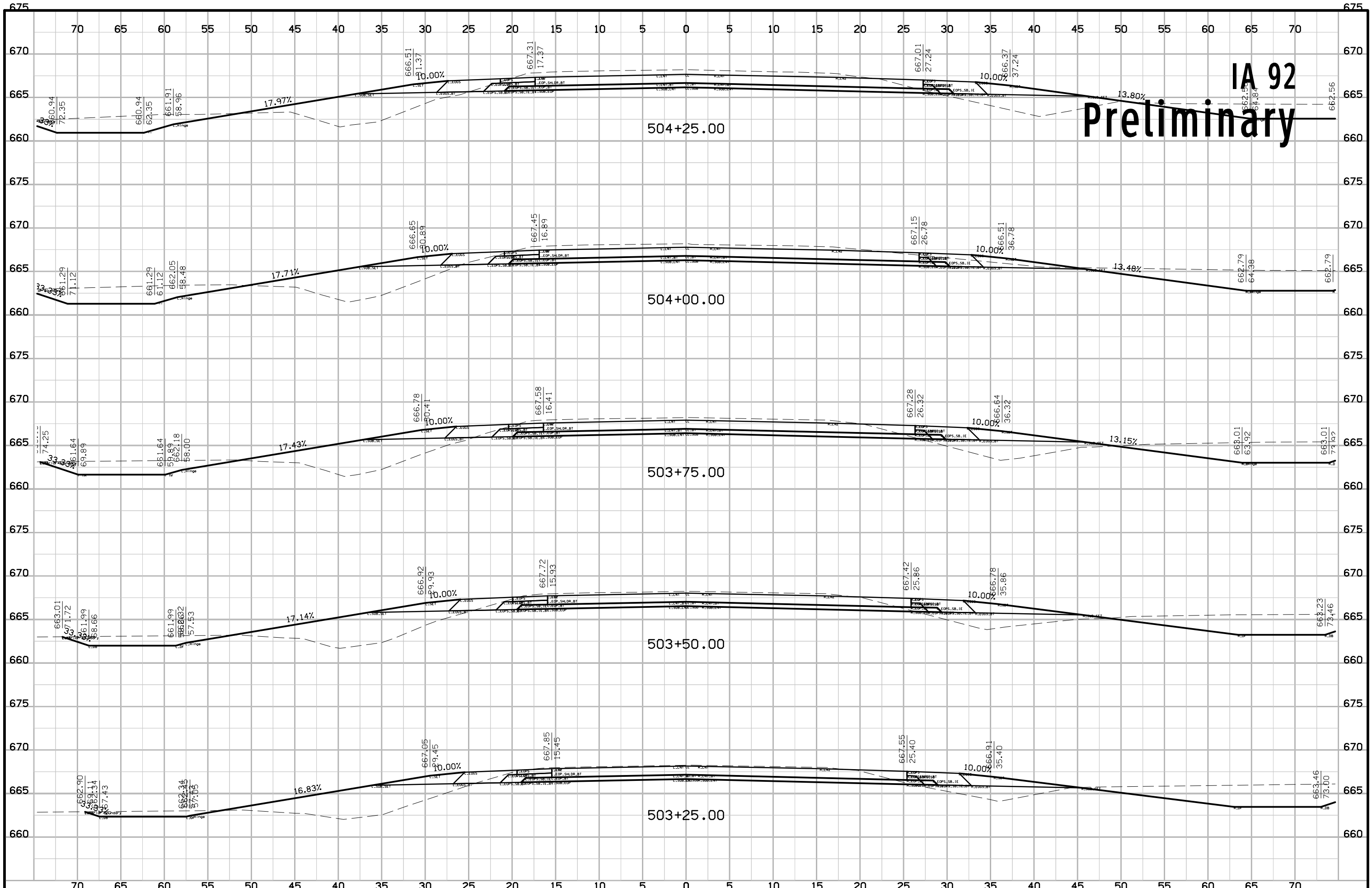


IA 92 Preliminary

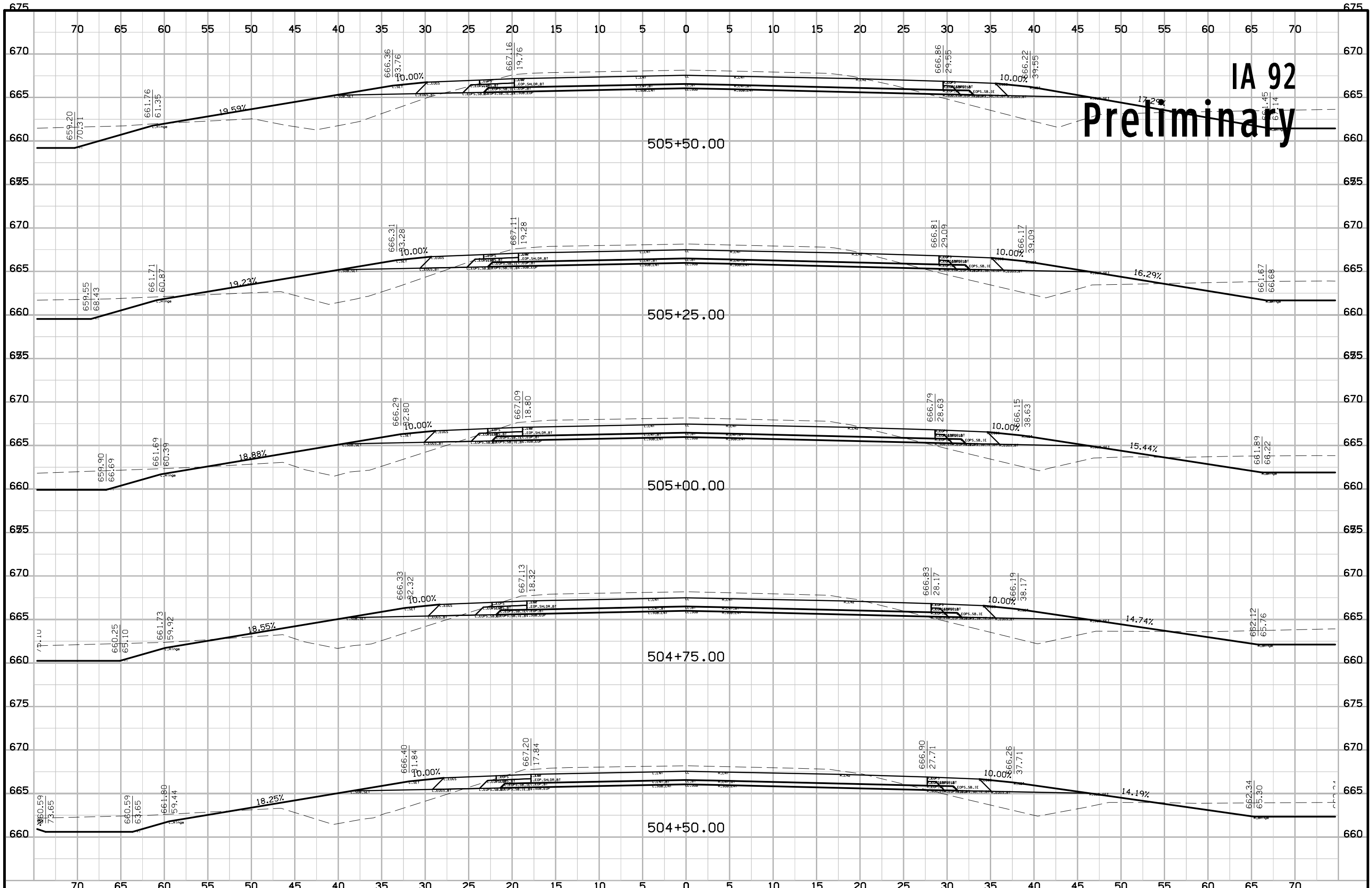


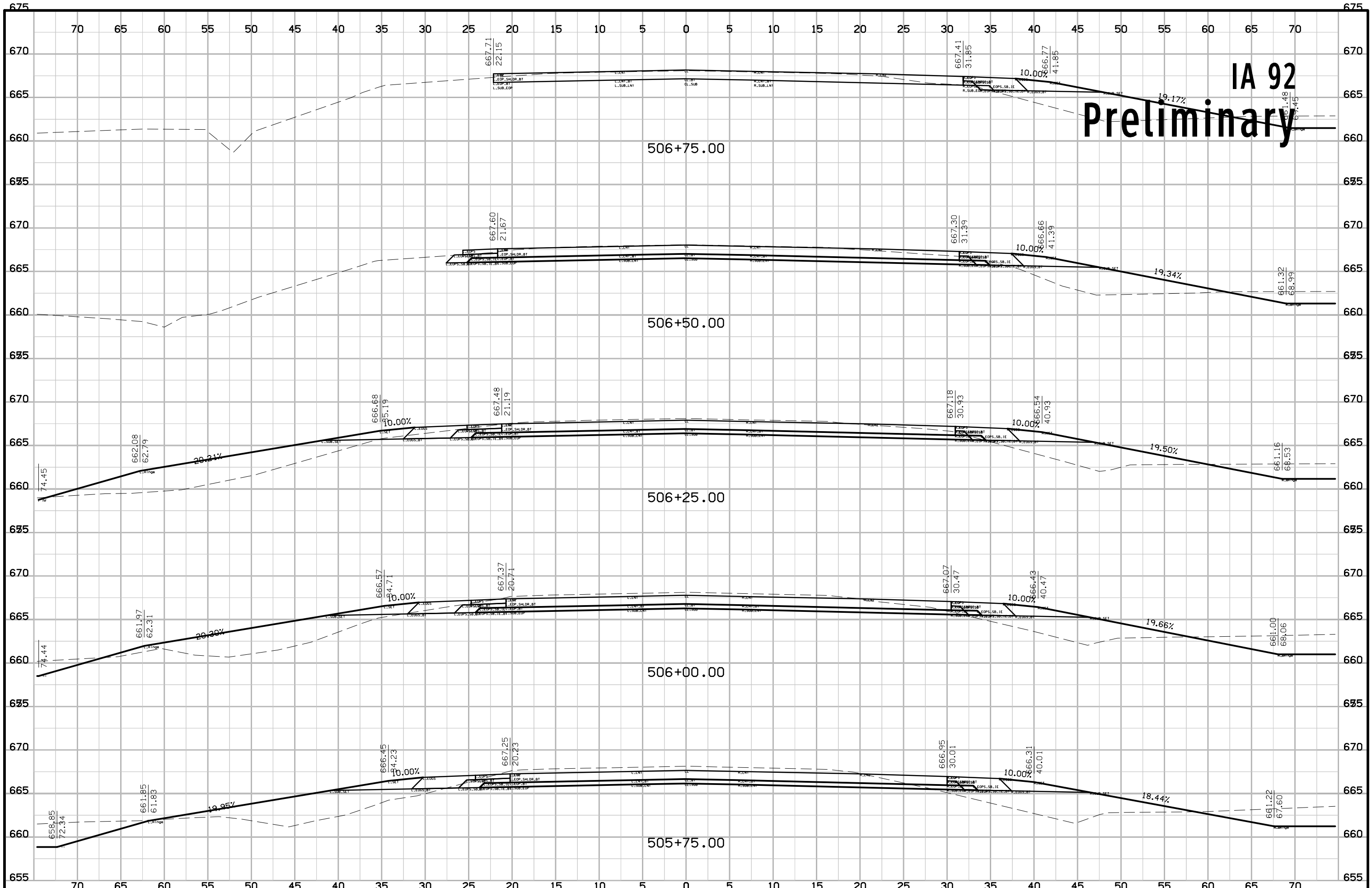
IA 92 Preliminary



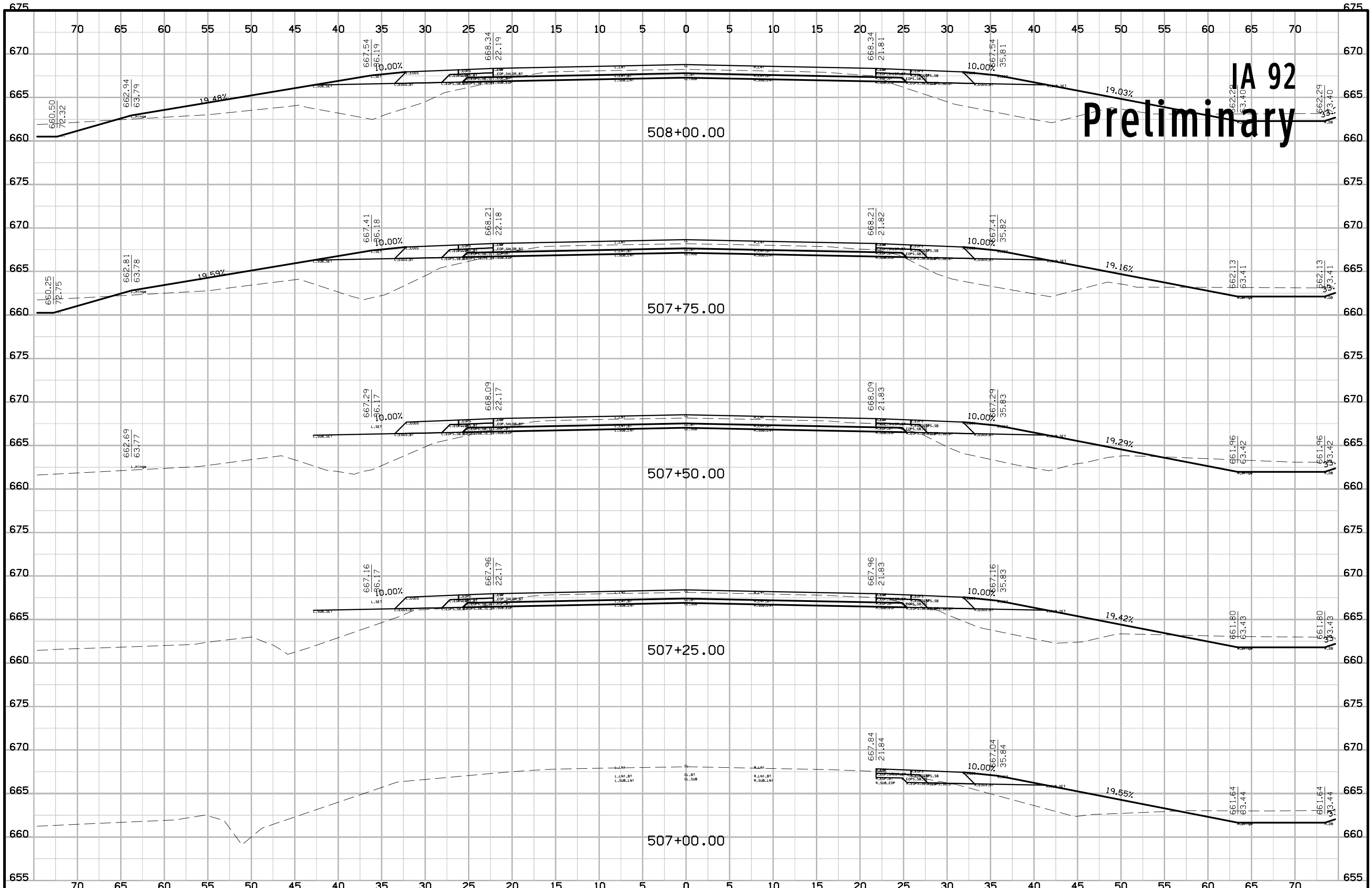


IA 92
Preliminary

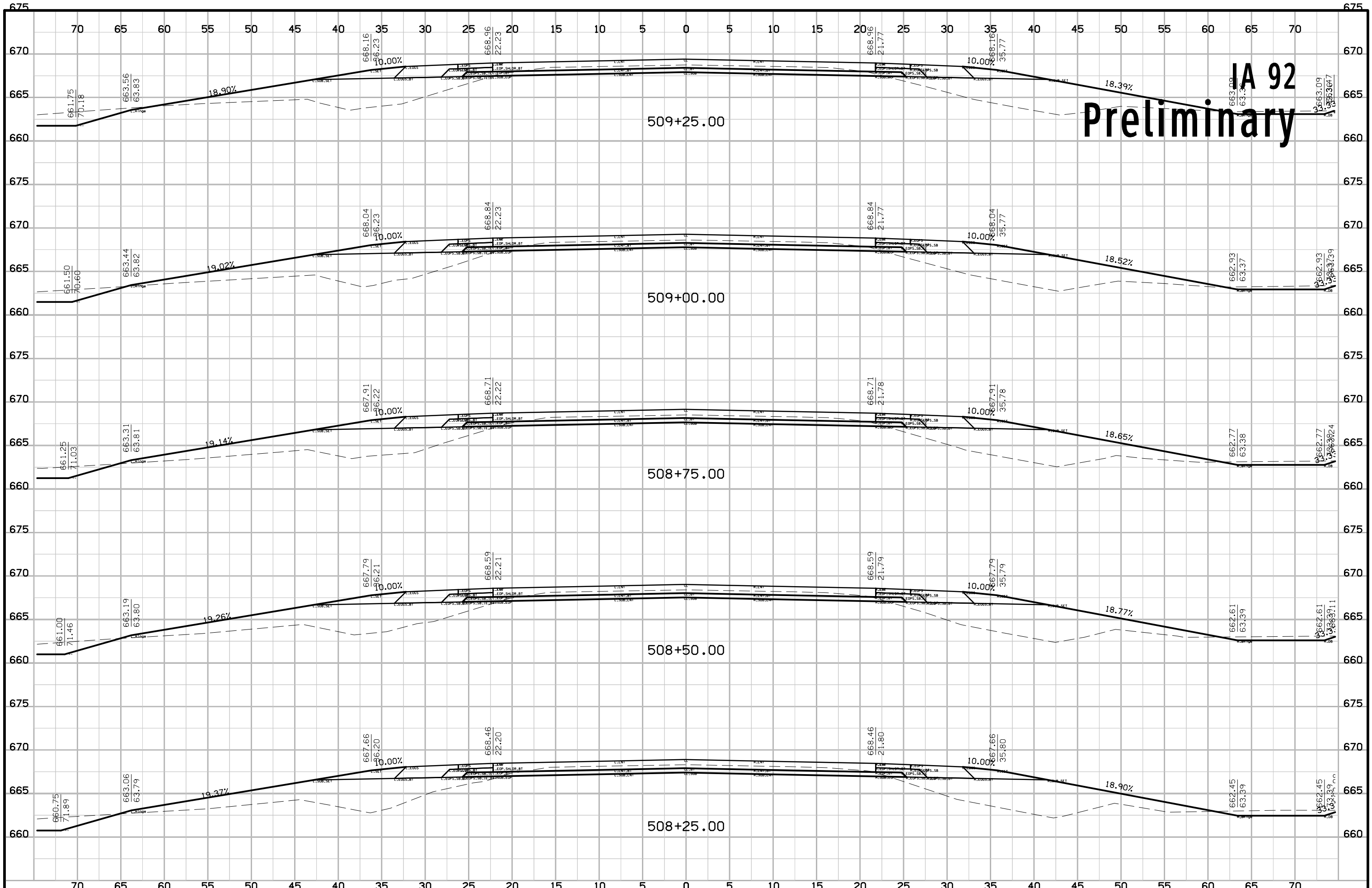




IA 92
Preliminary

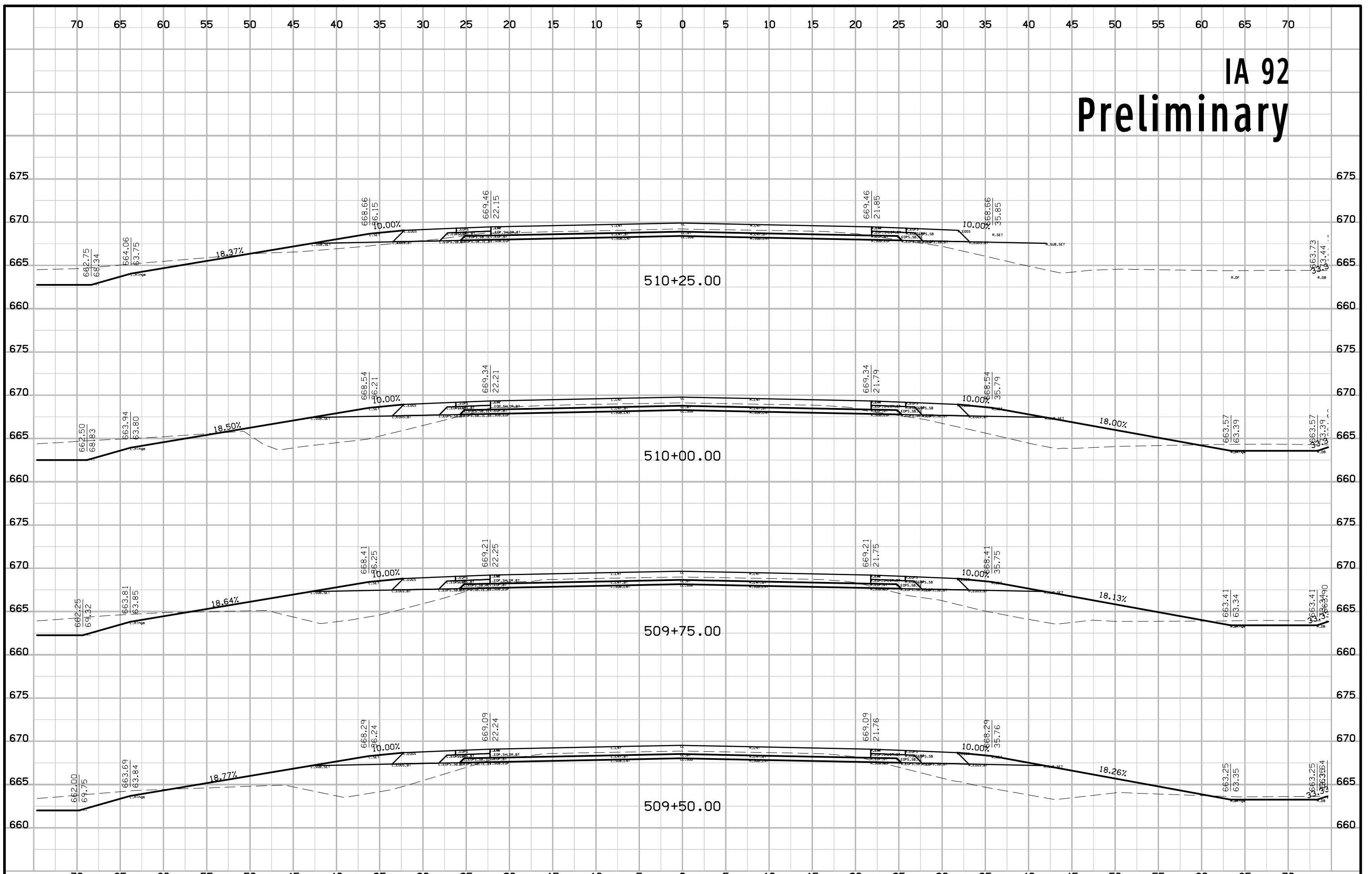


**IA 92
Preliminary**

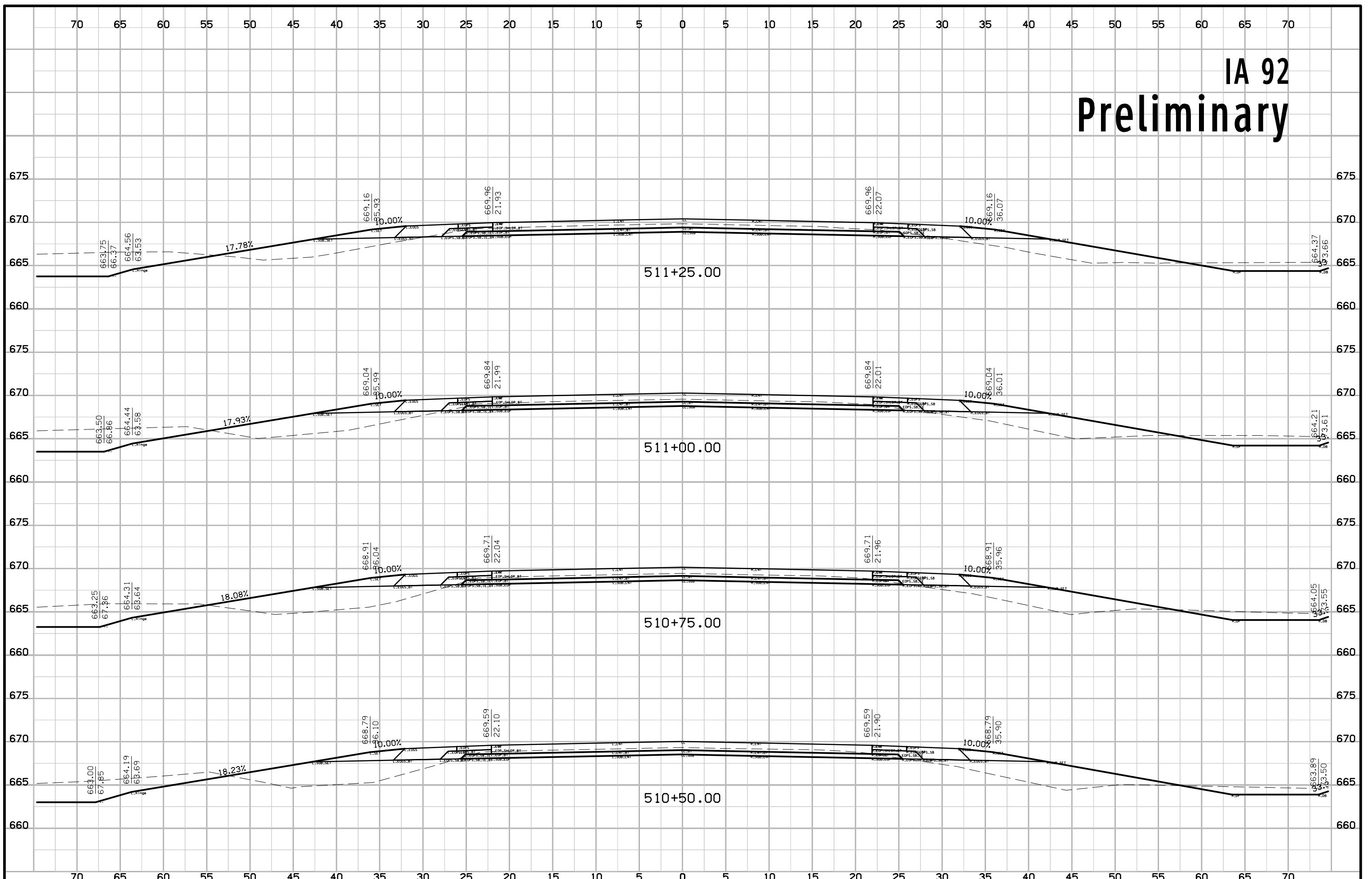


IA 92
Preliminary

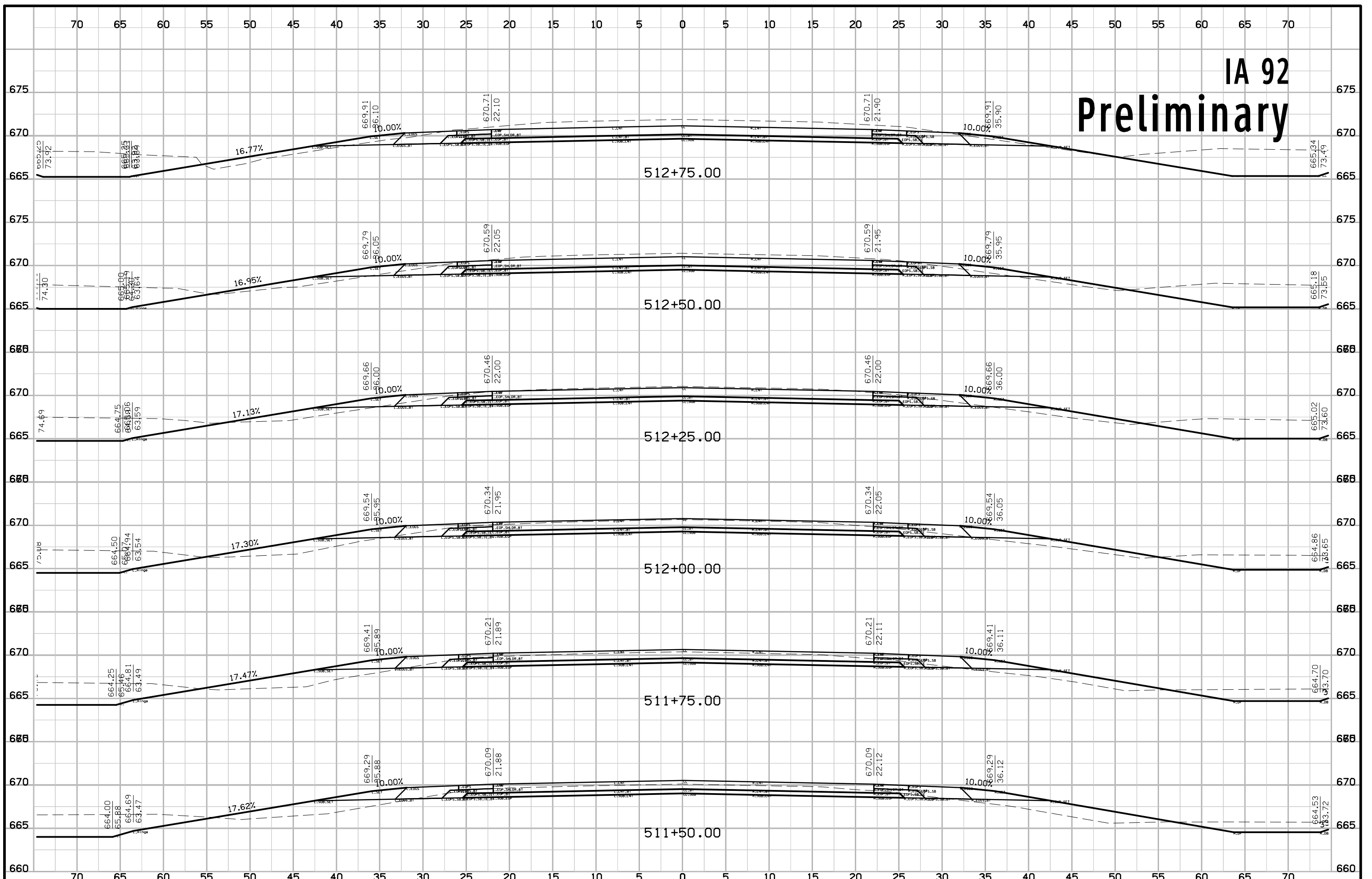
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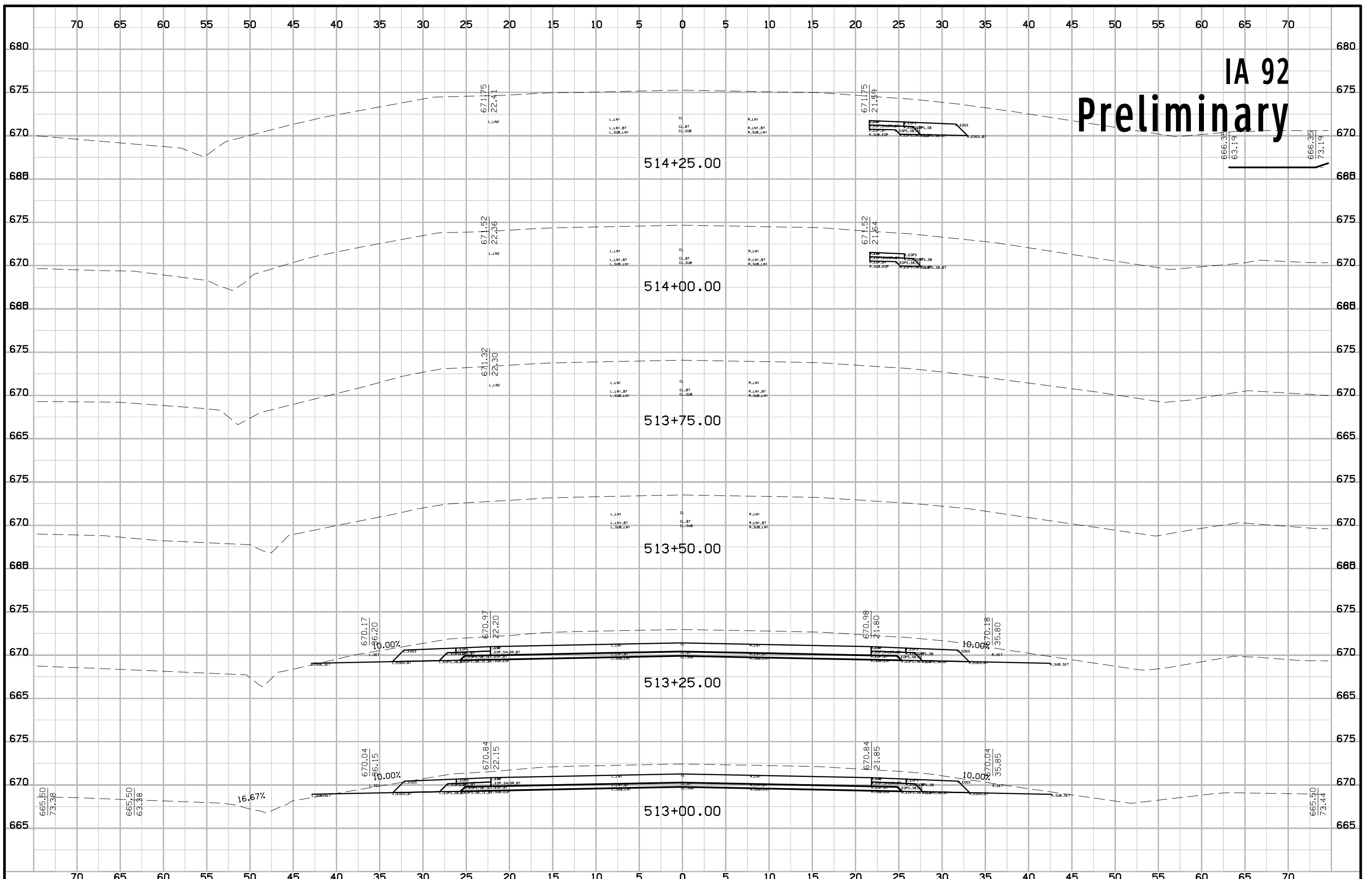
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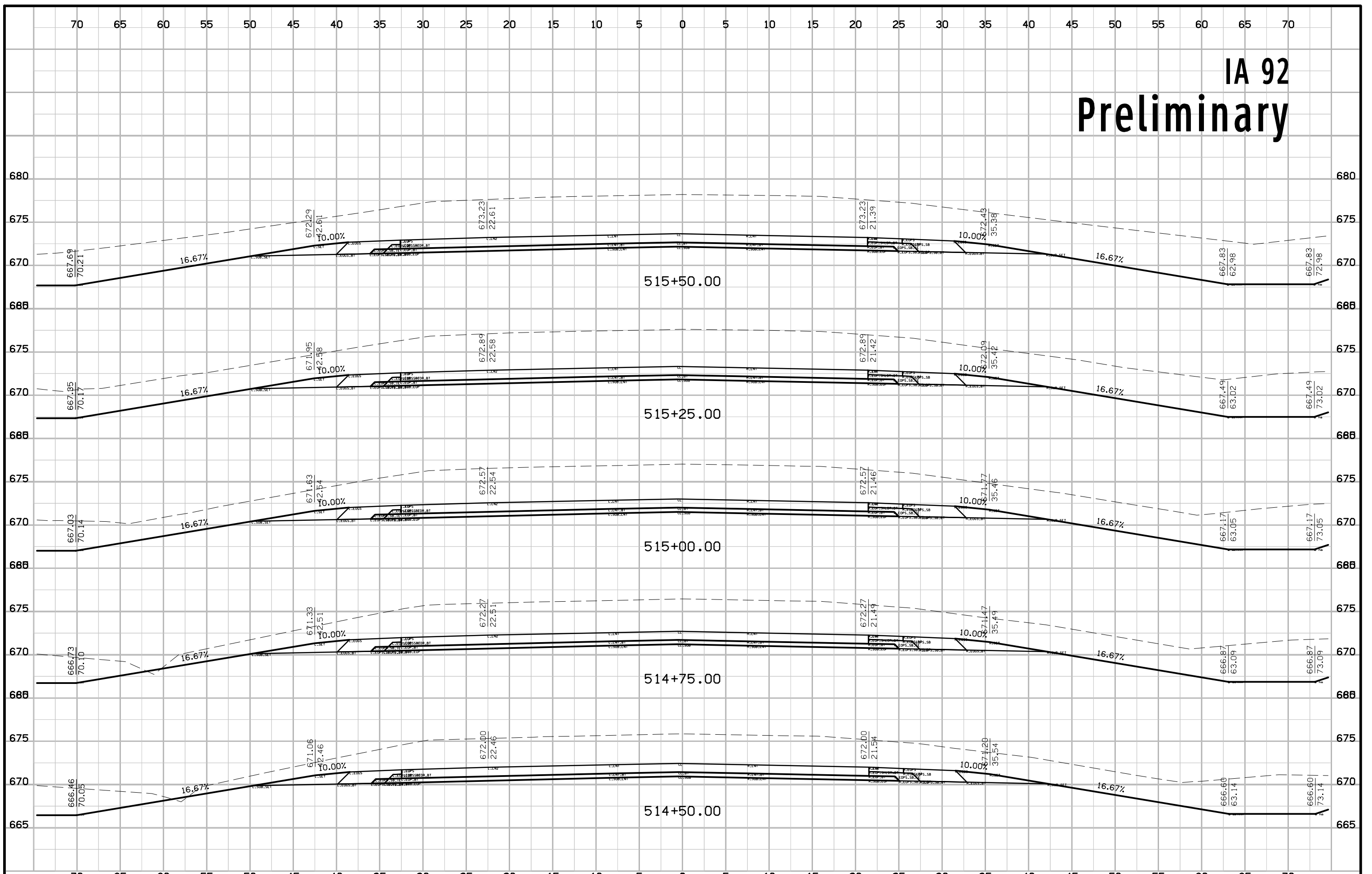
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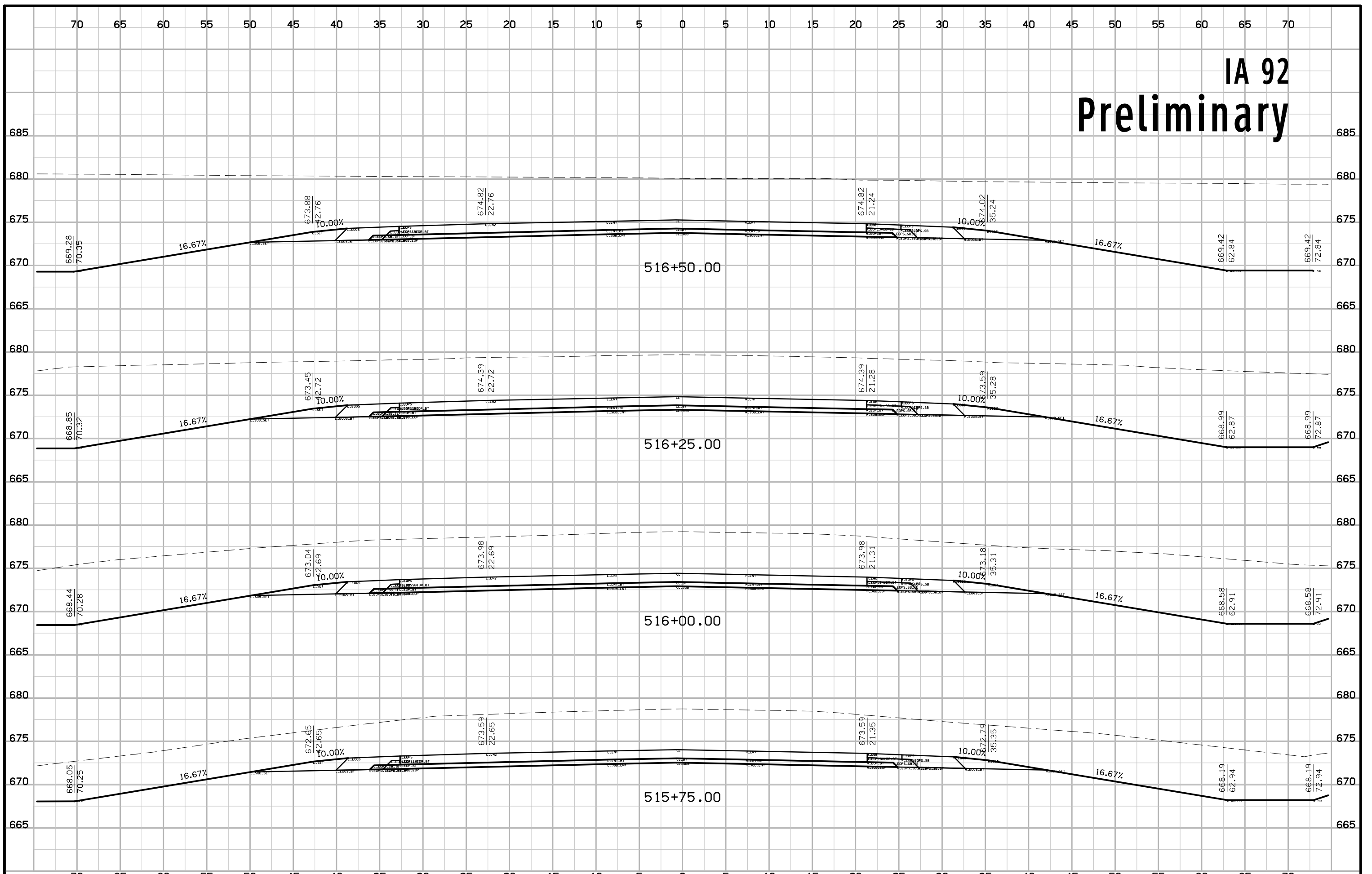
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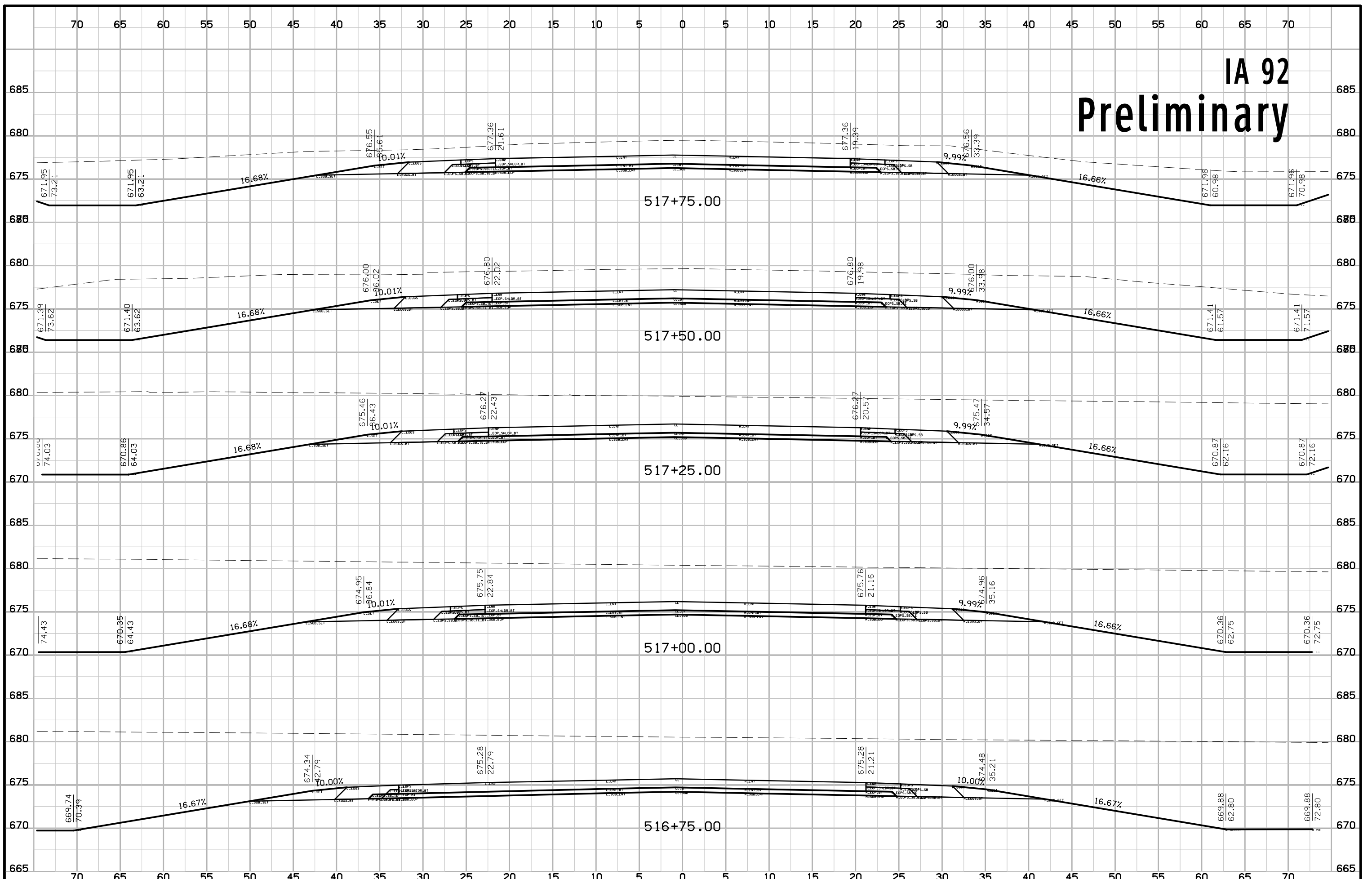
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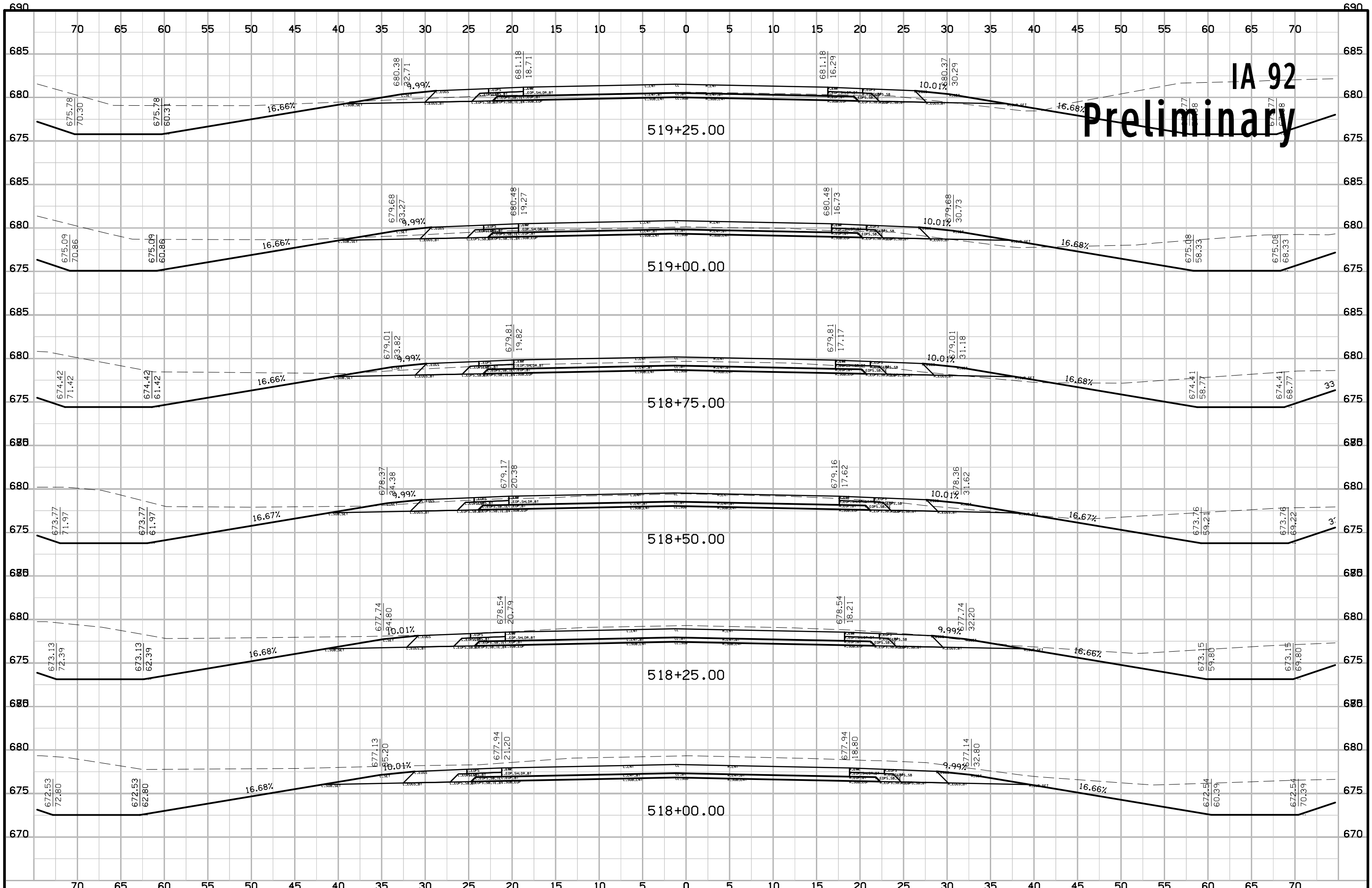


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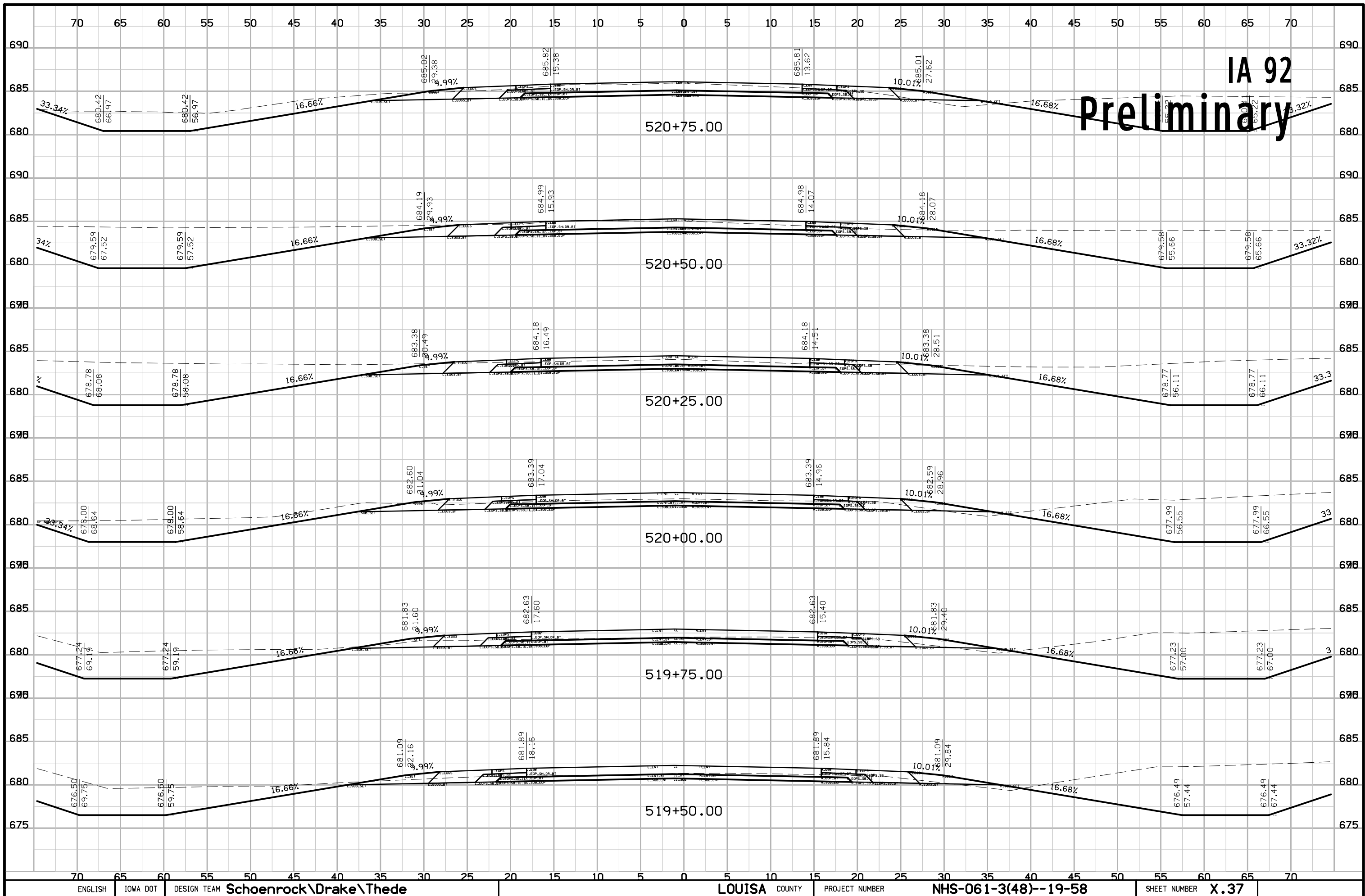


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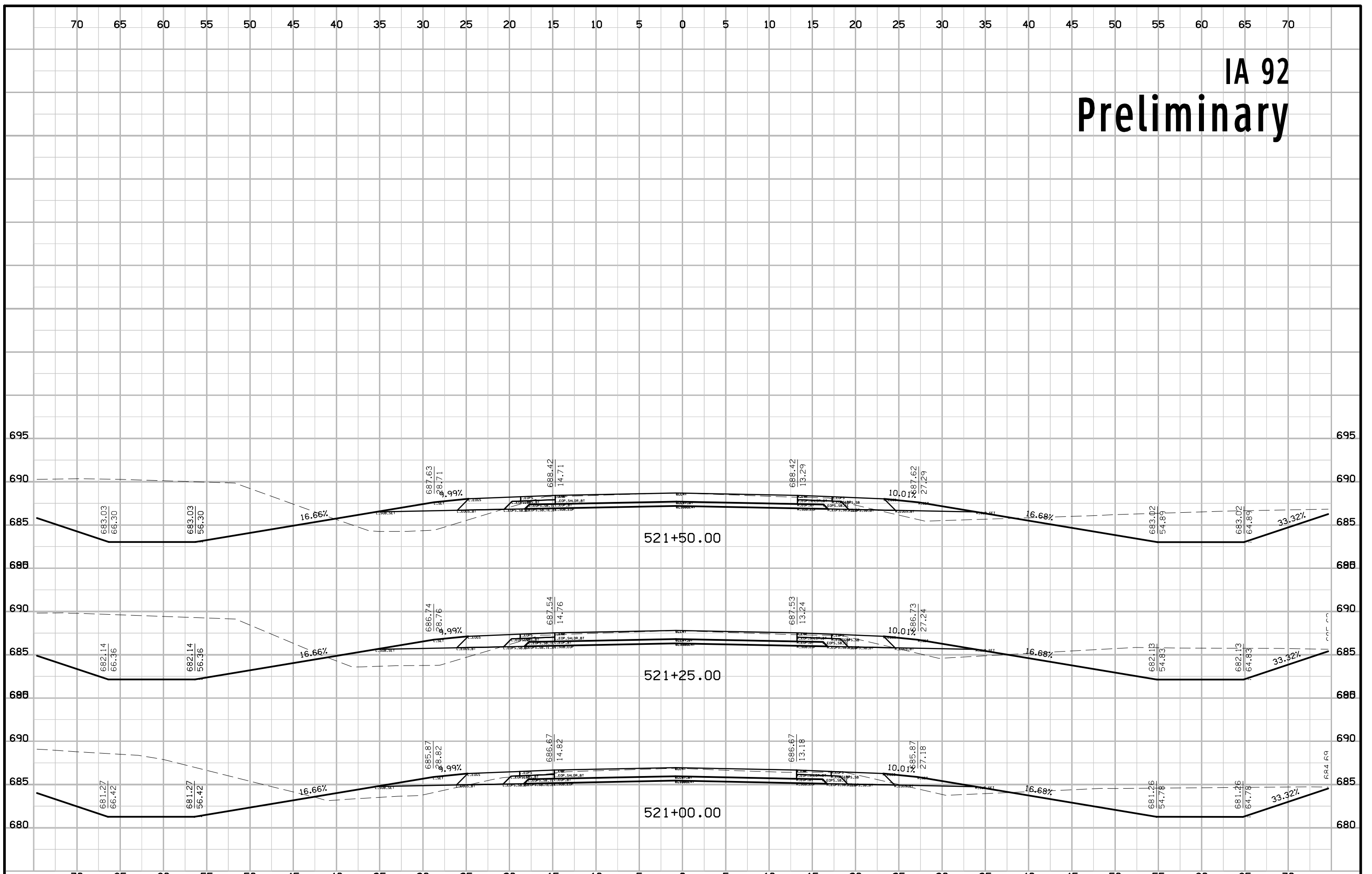




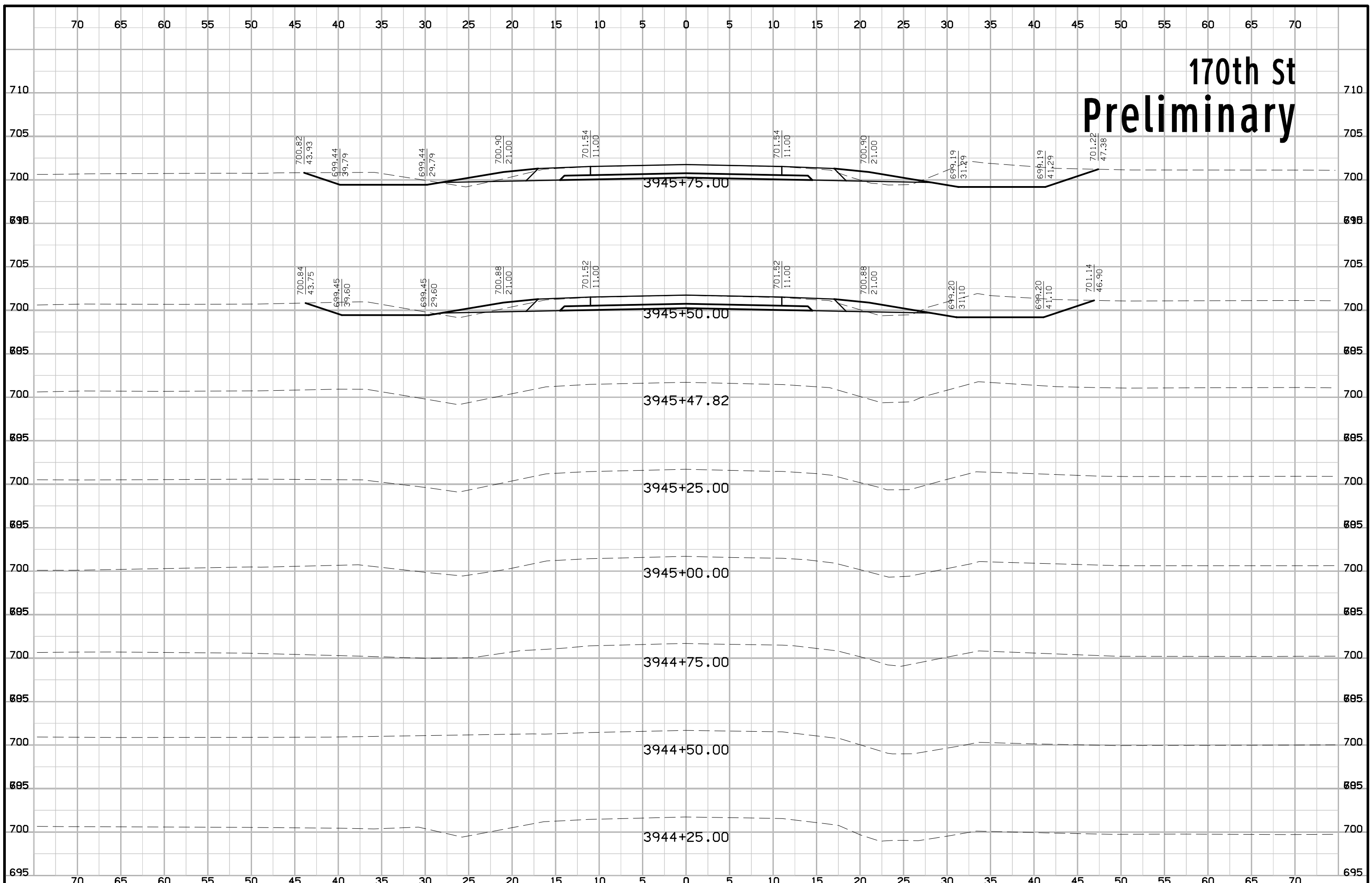
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Preliminary



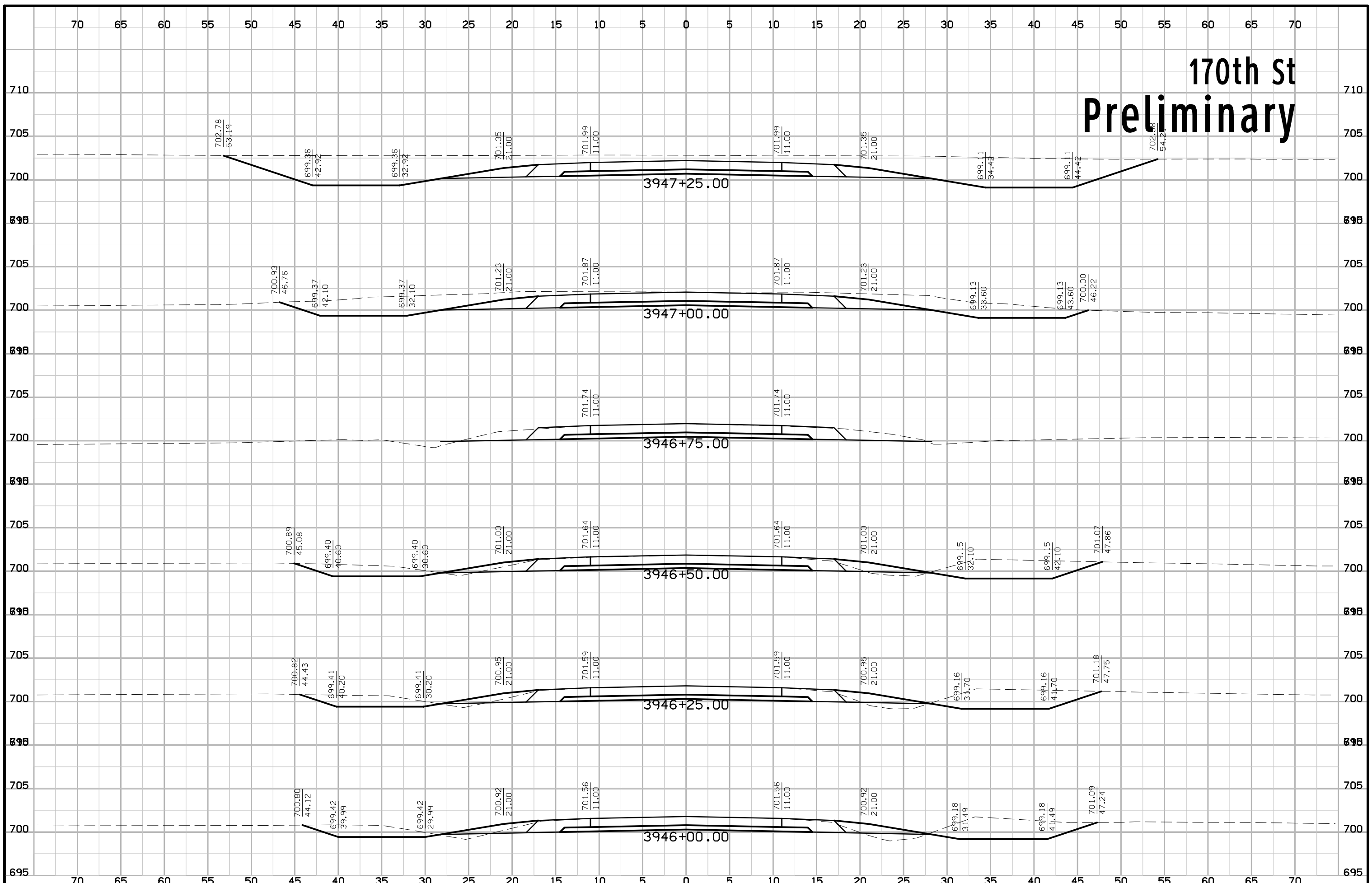
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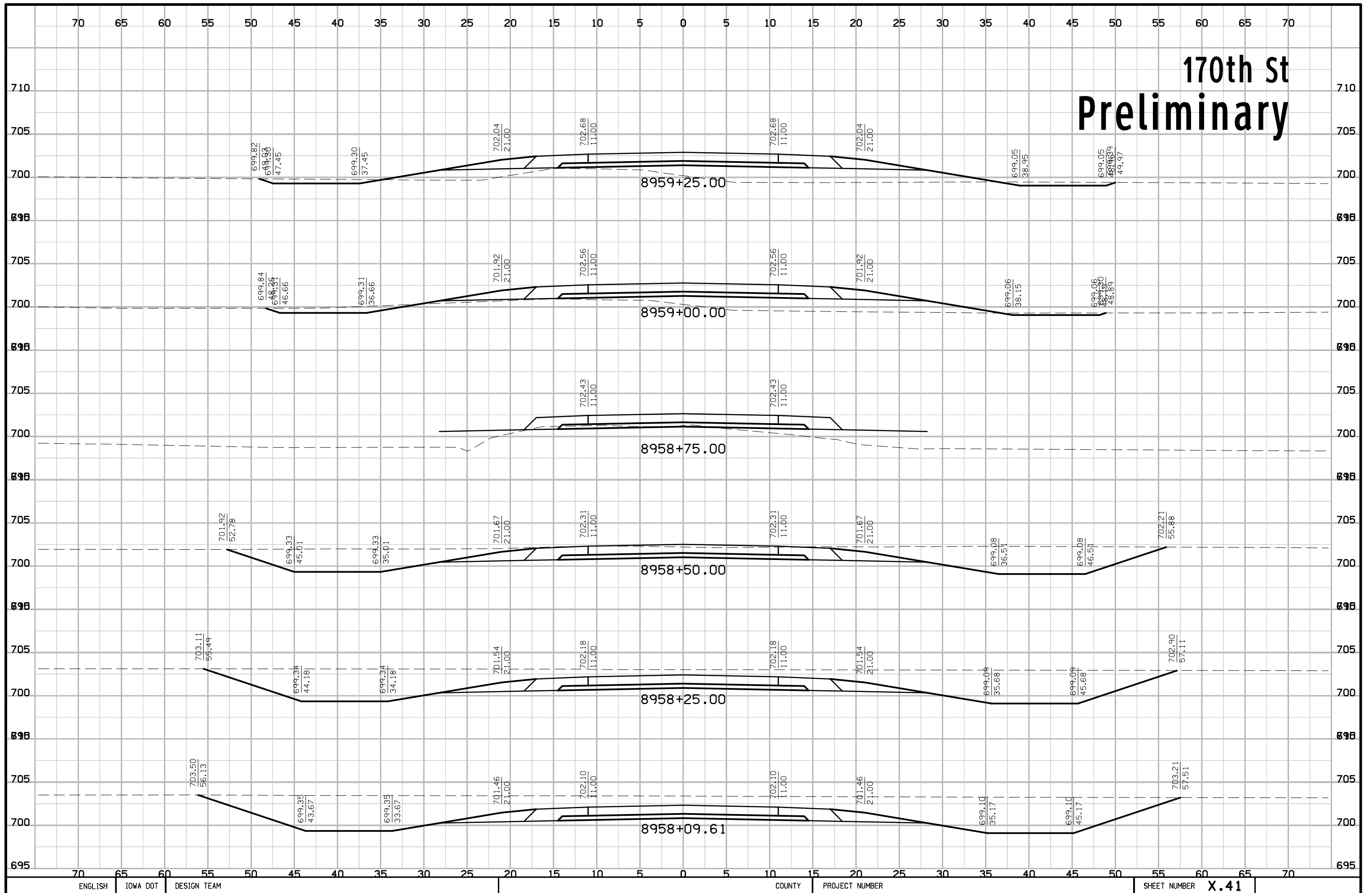
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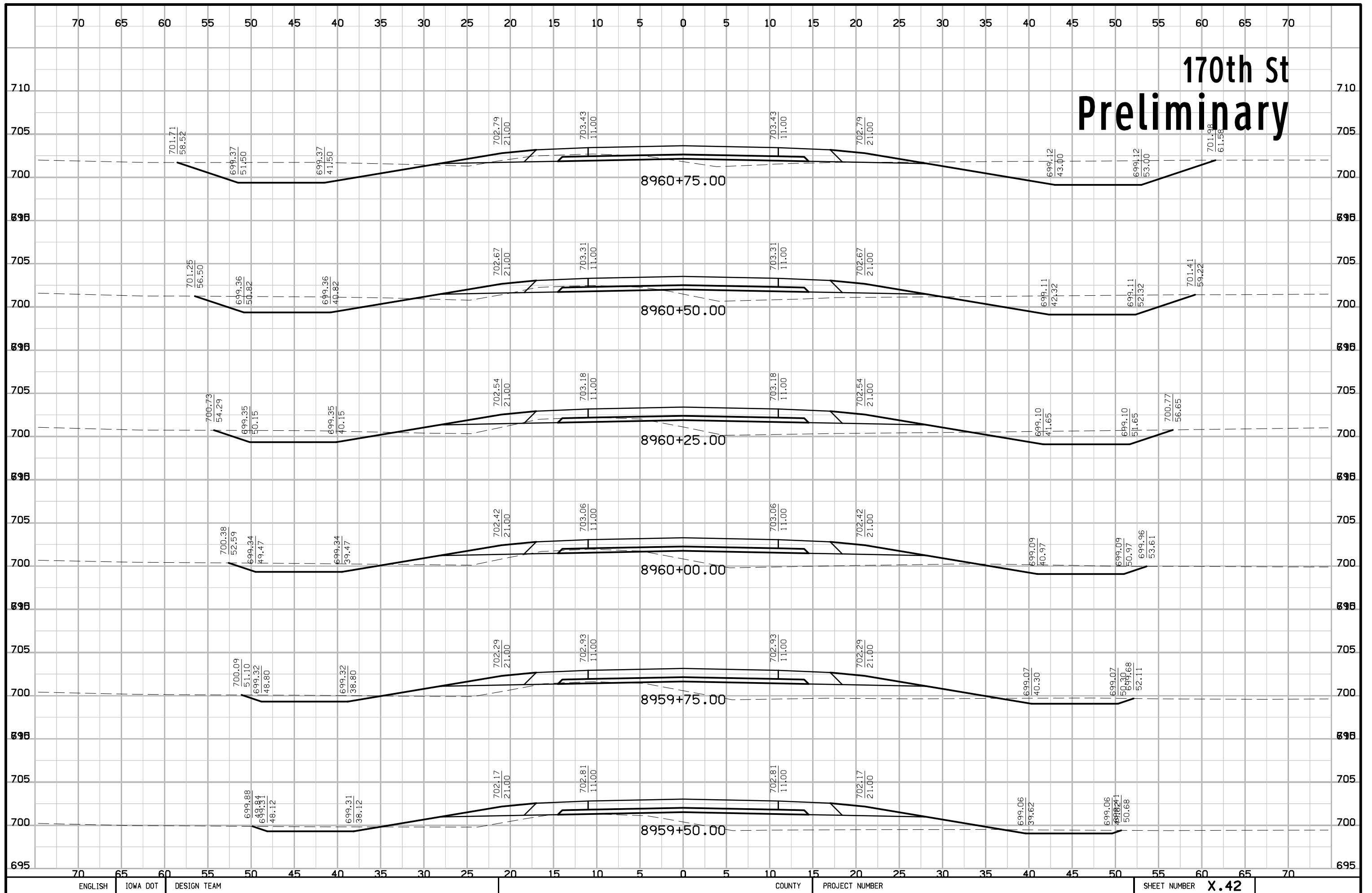
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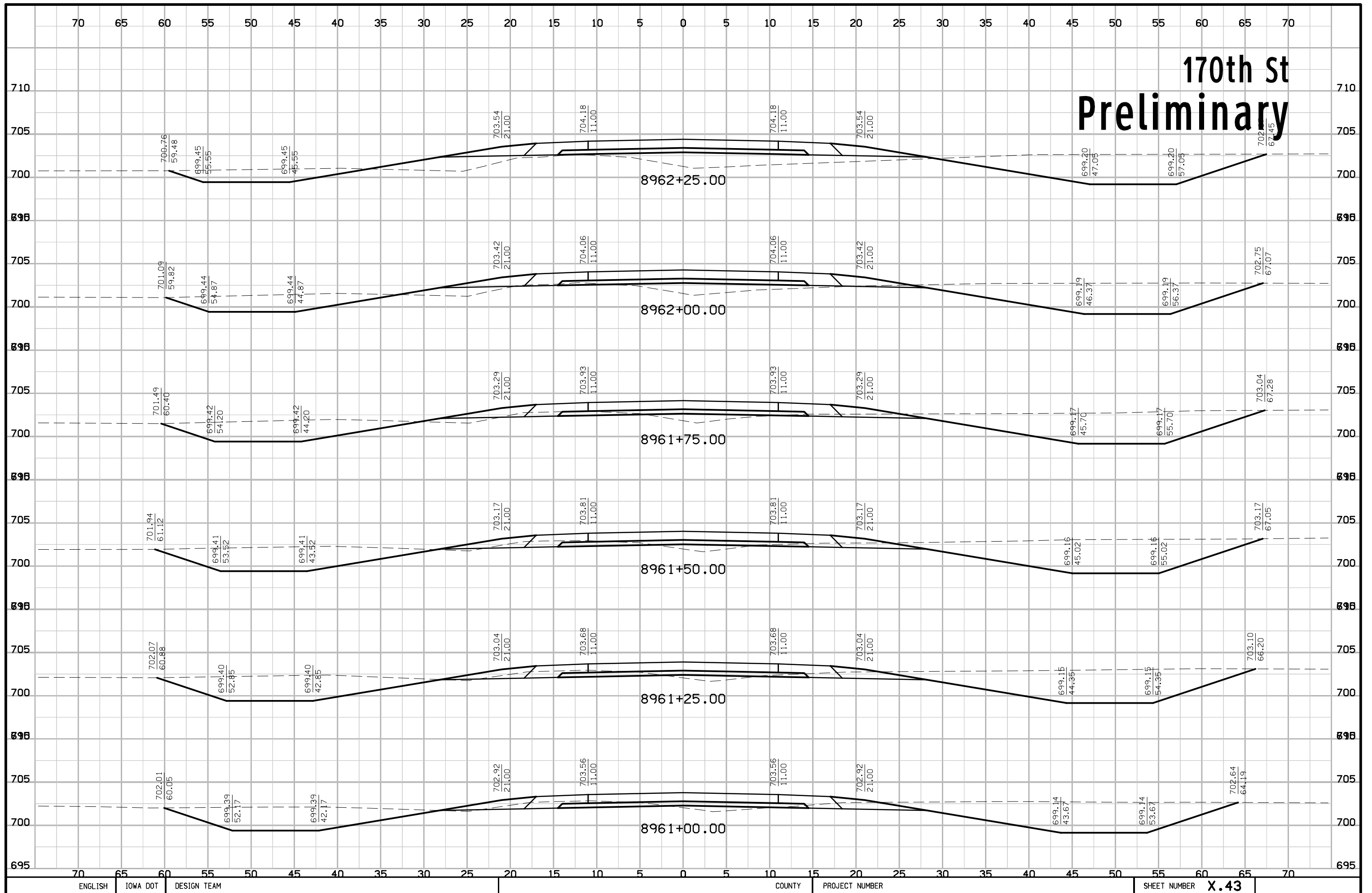
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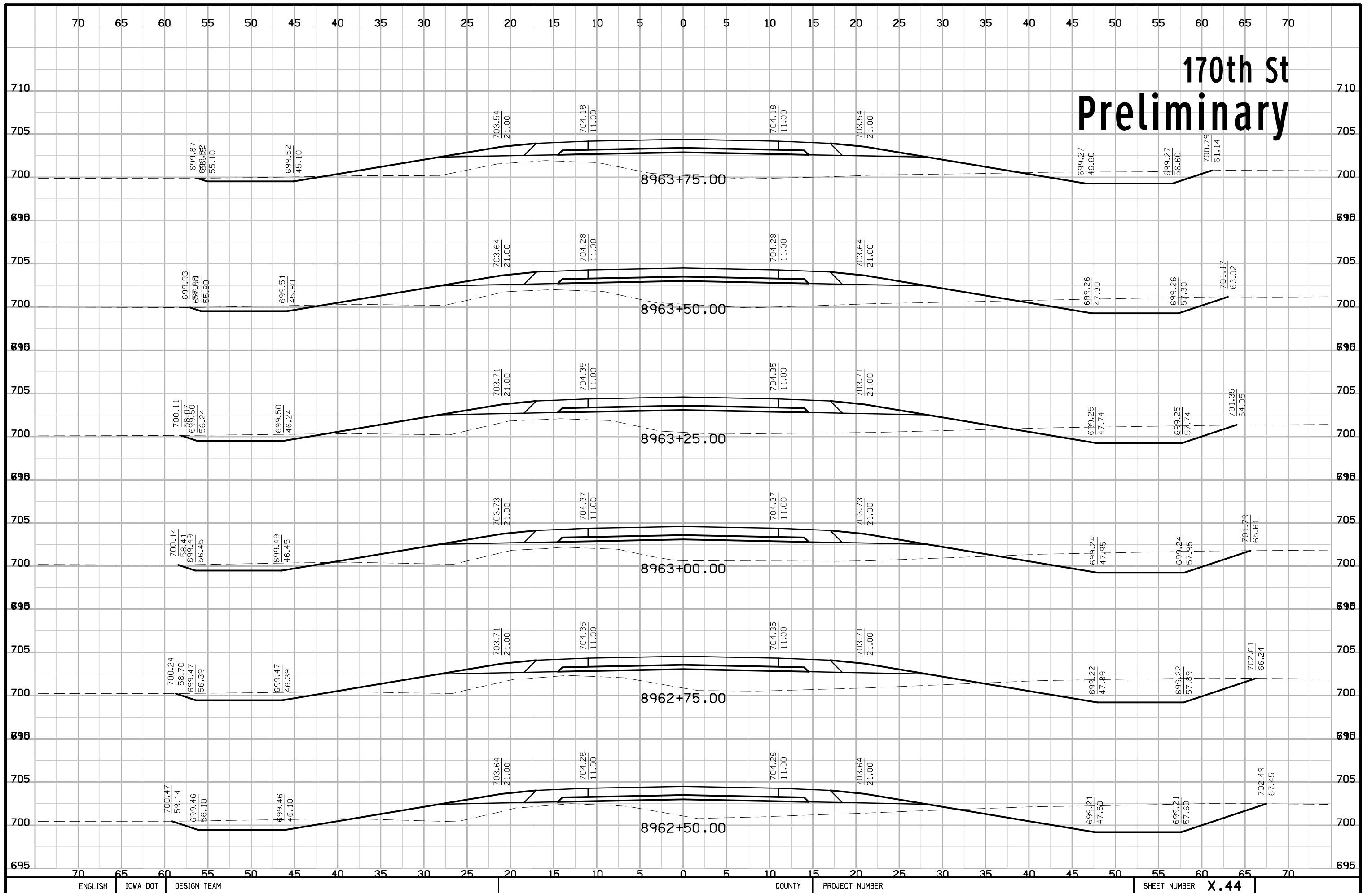
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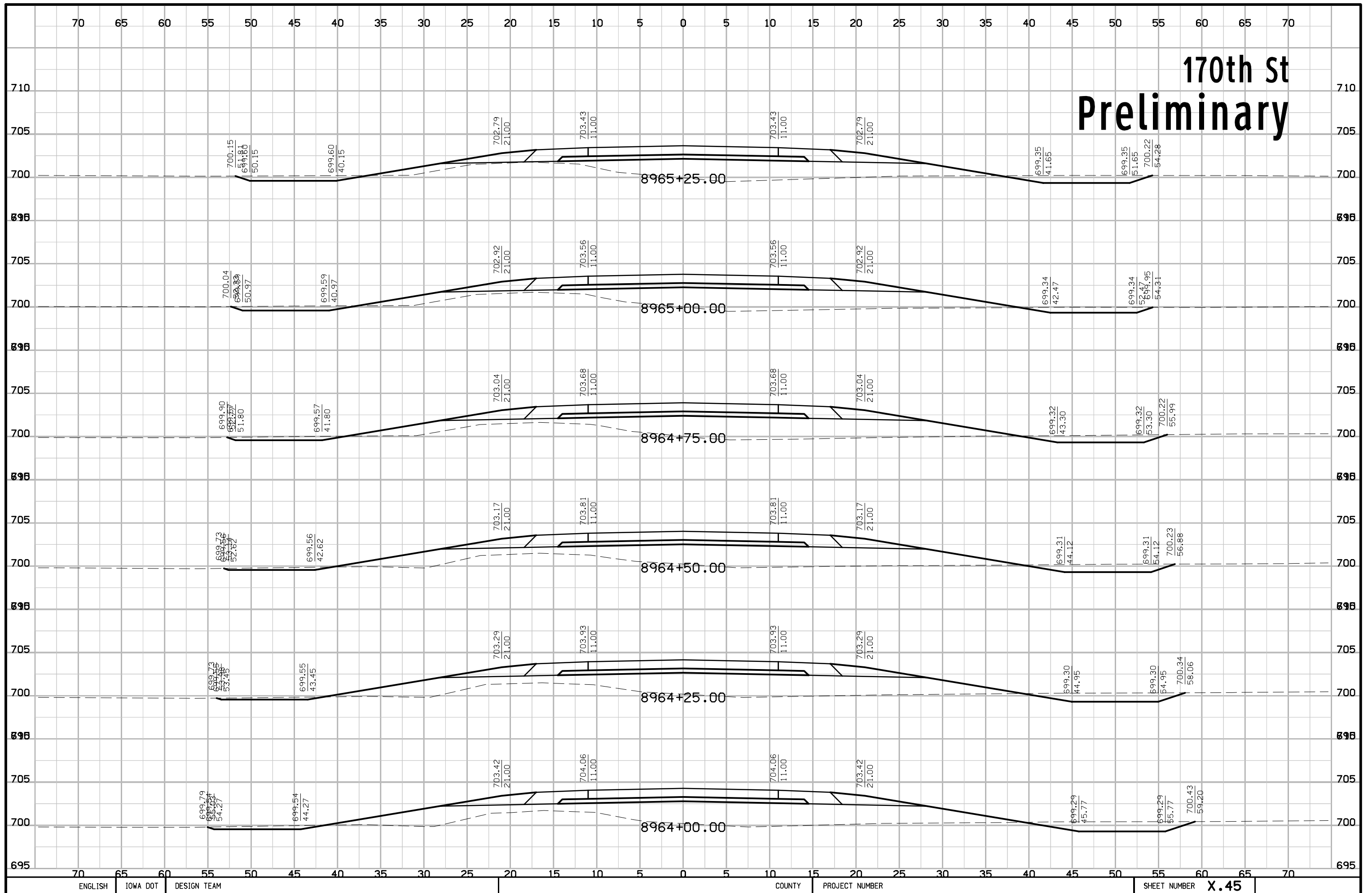
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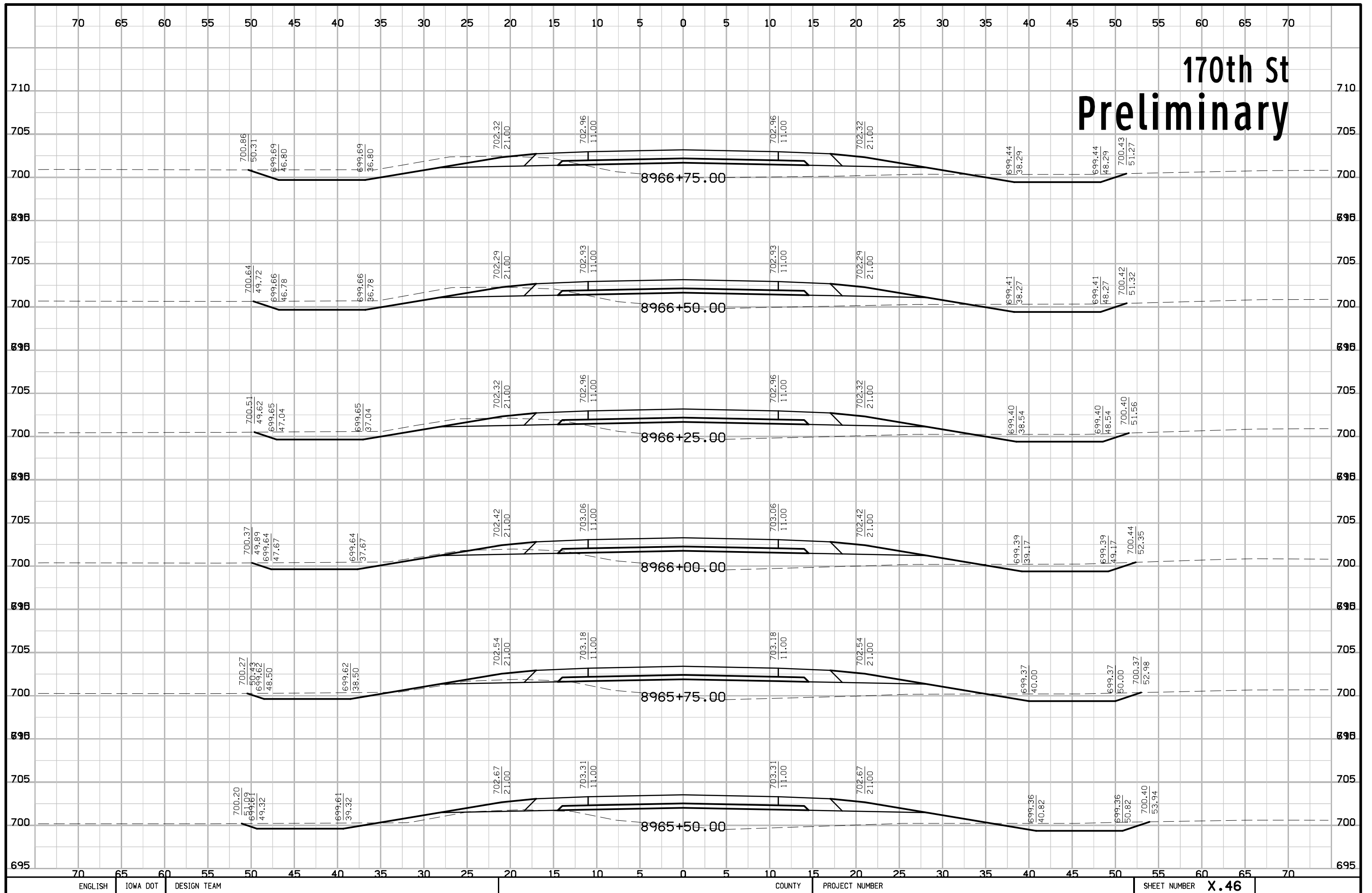
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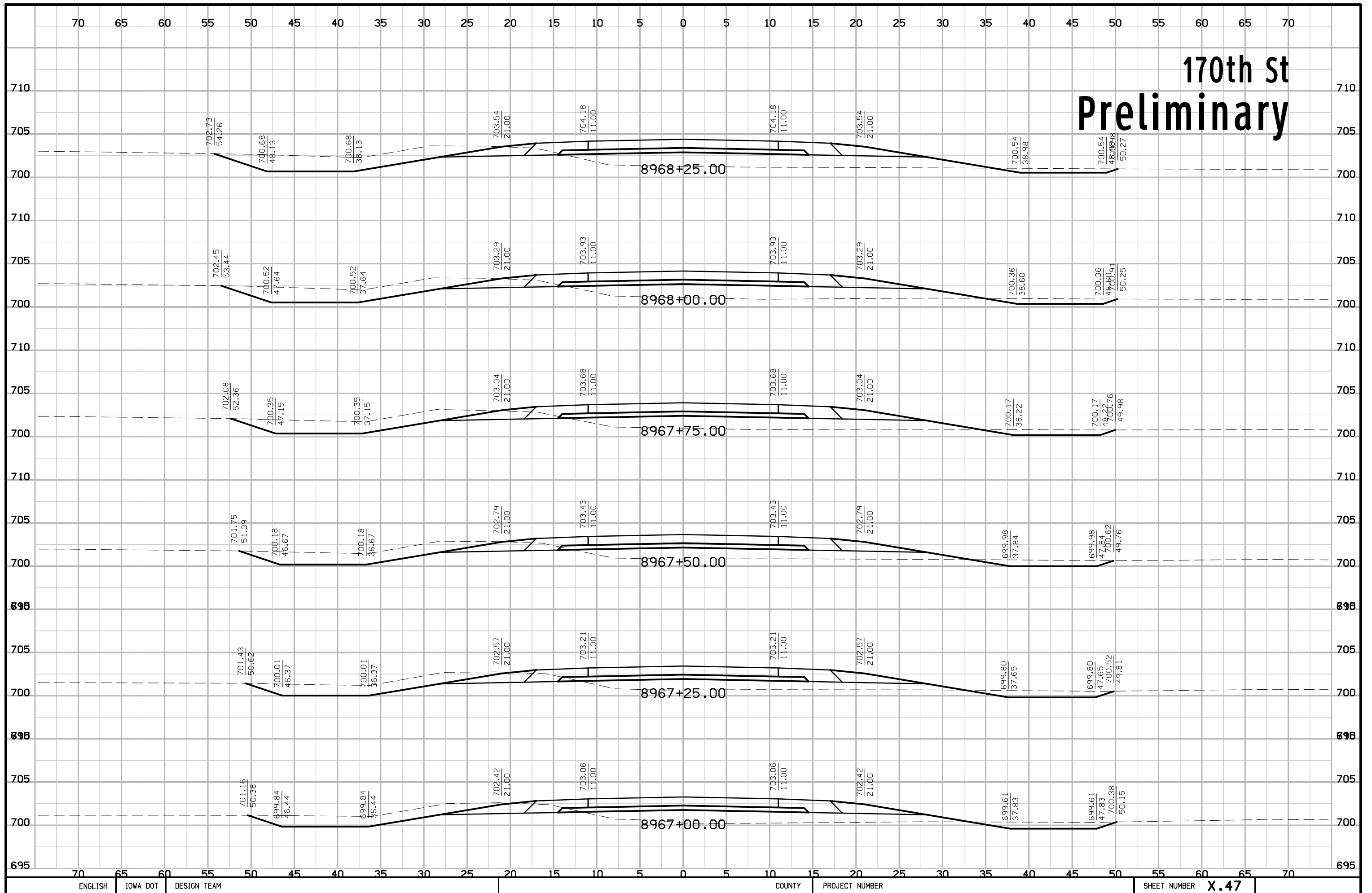
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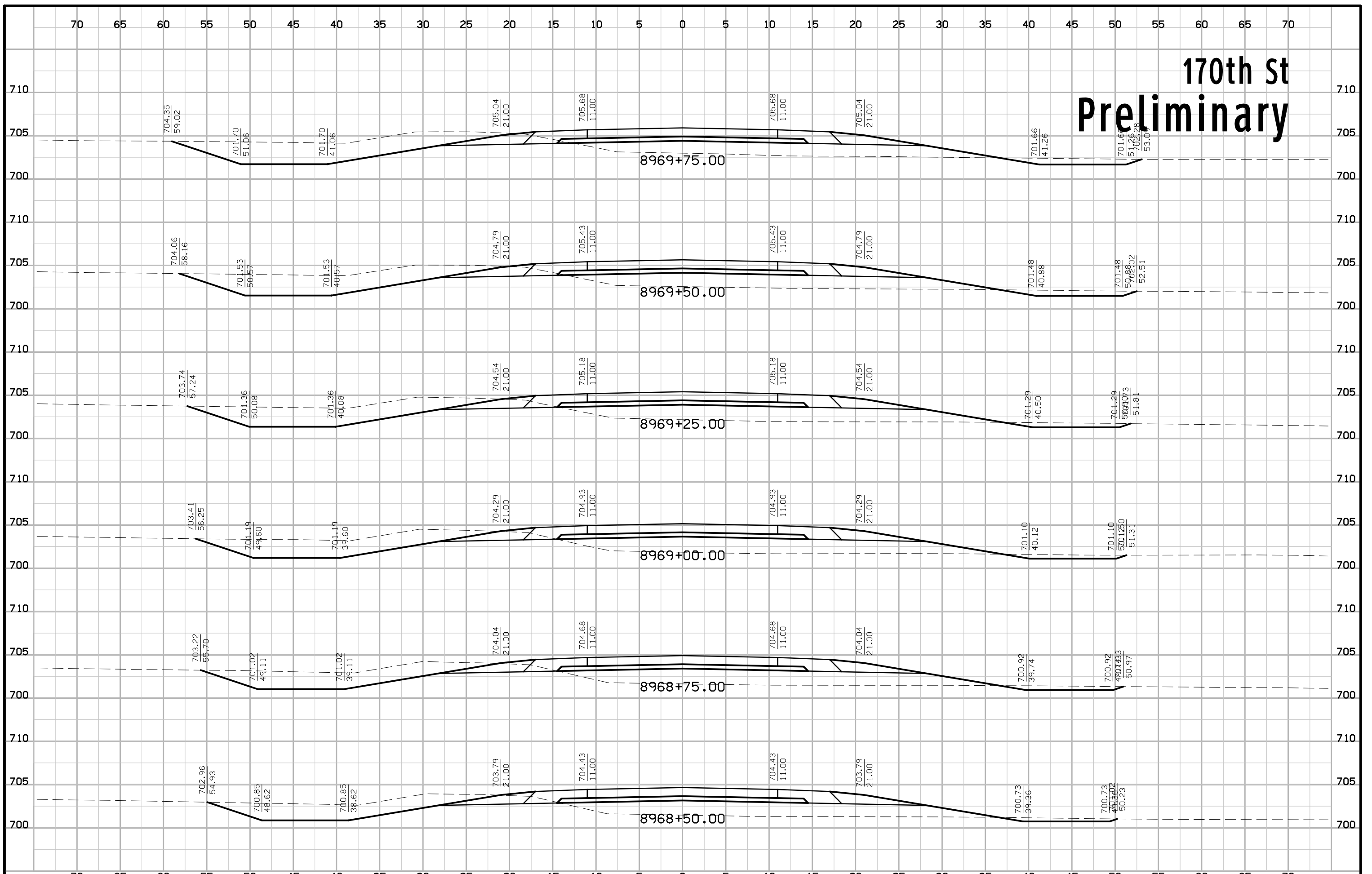
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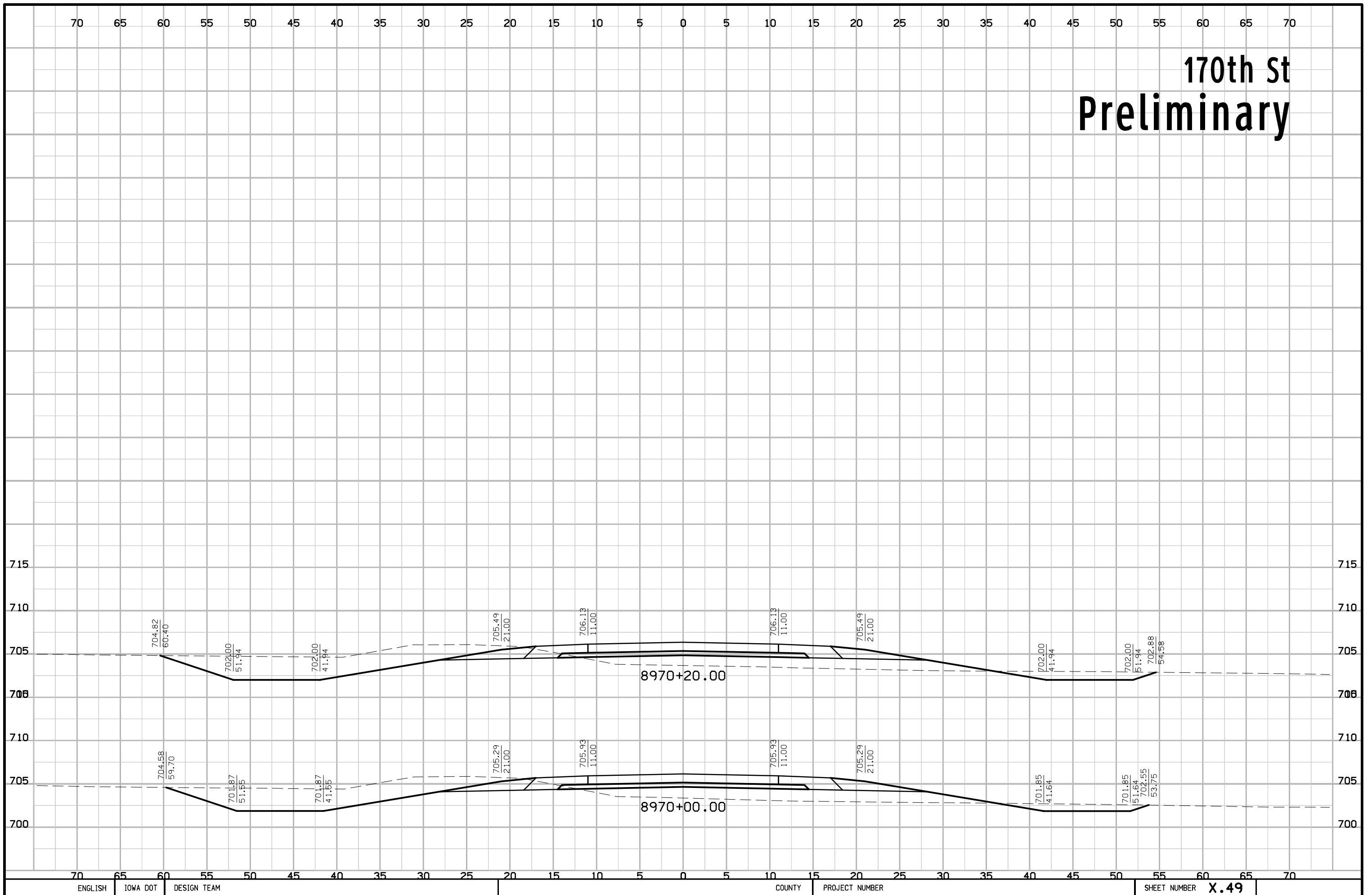
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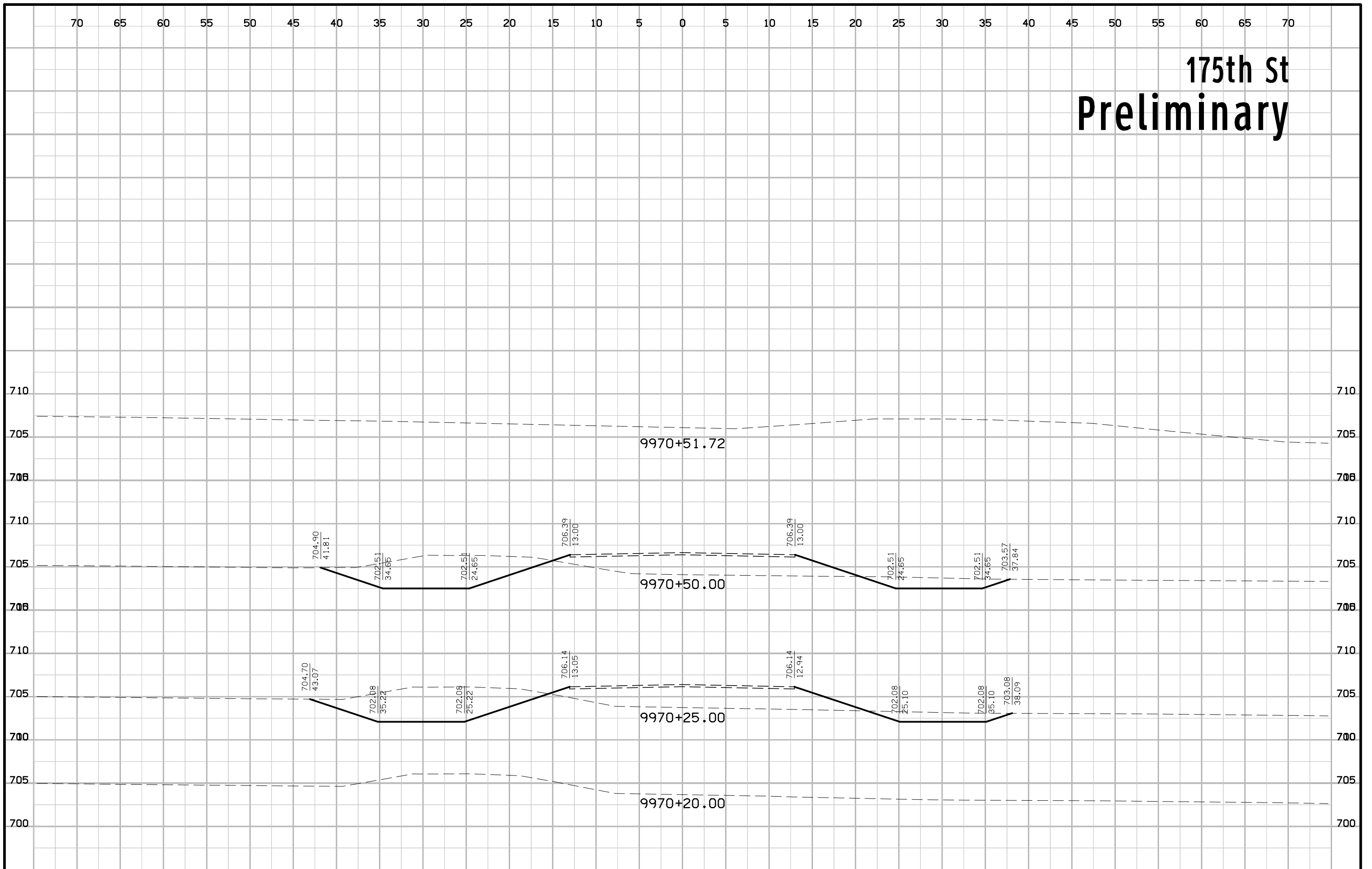
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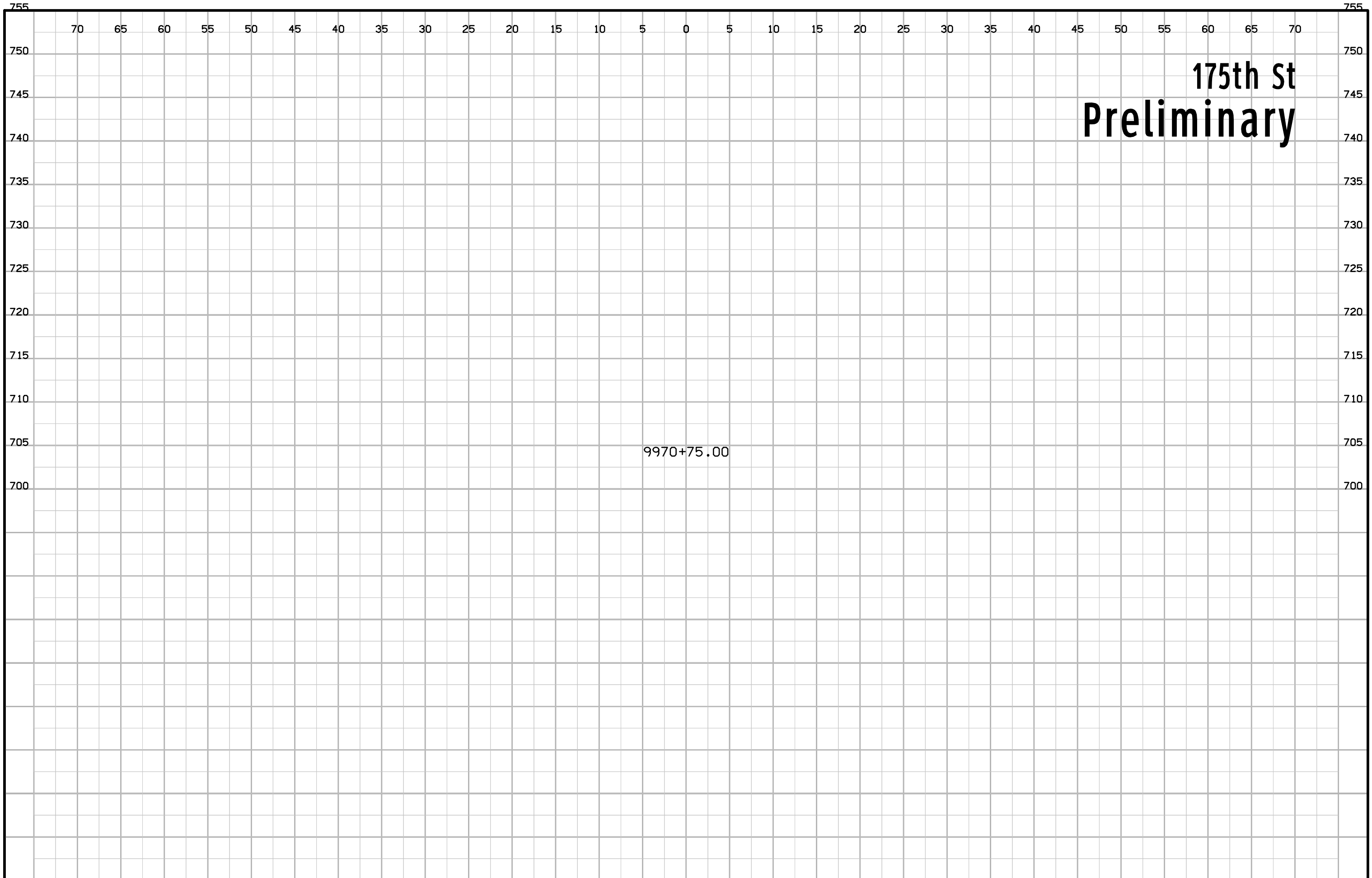


170th St Preliminary



175th St Preliminary

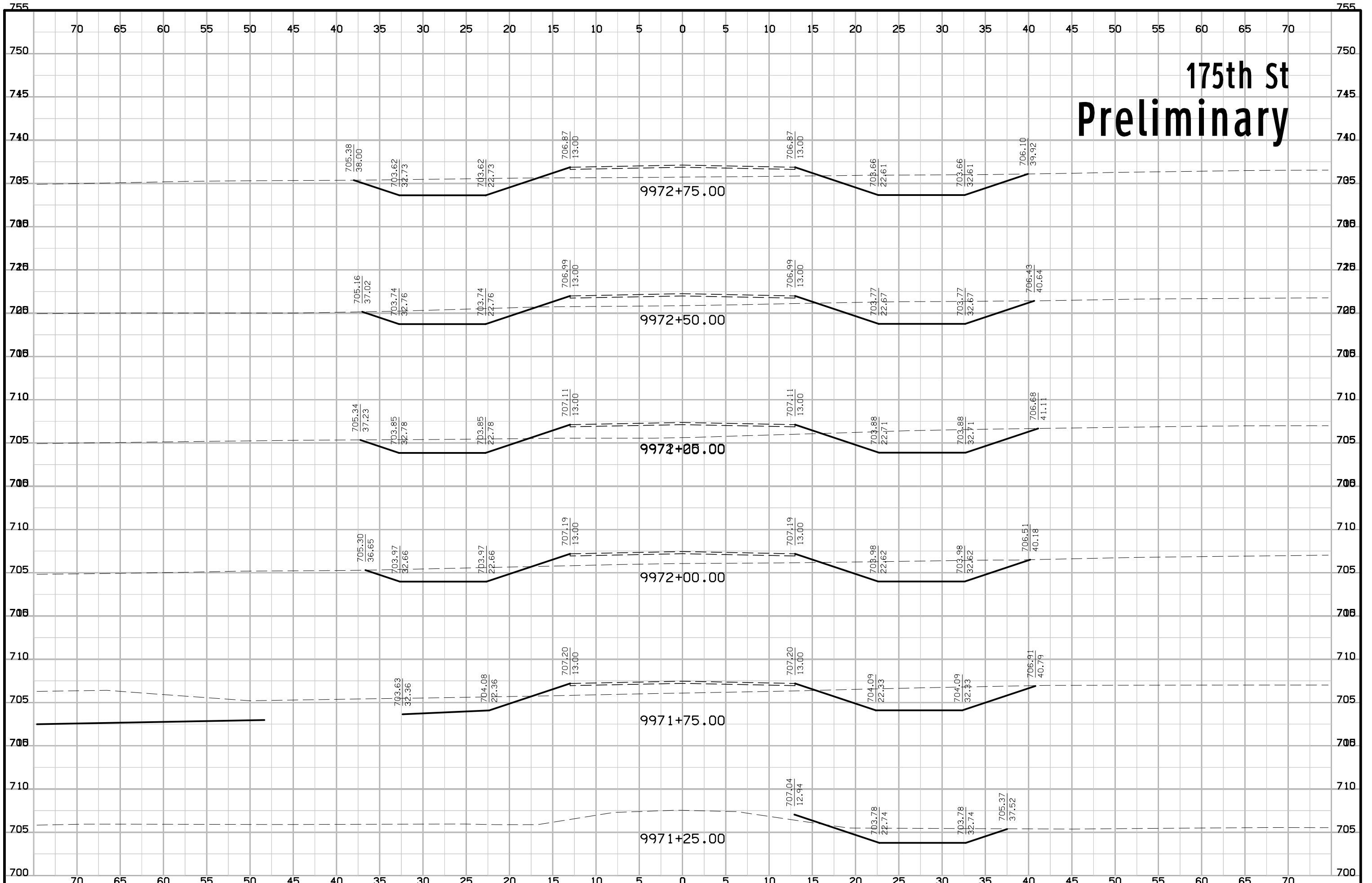




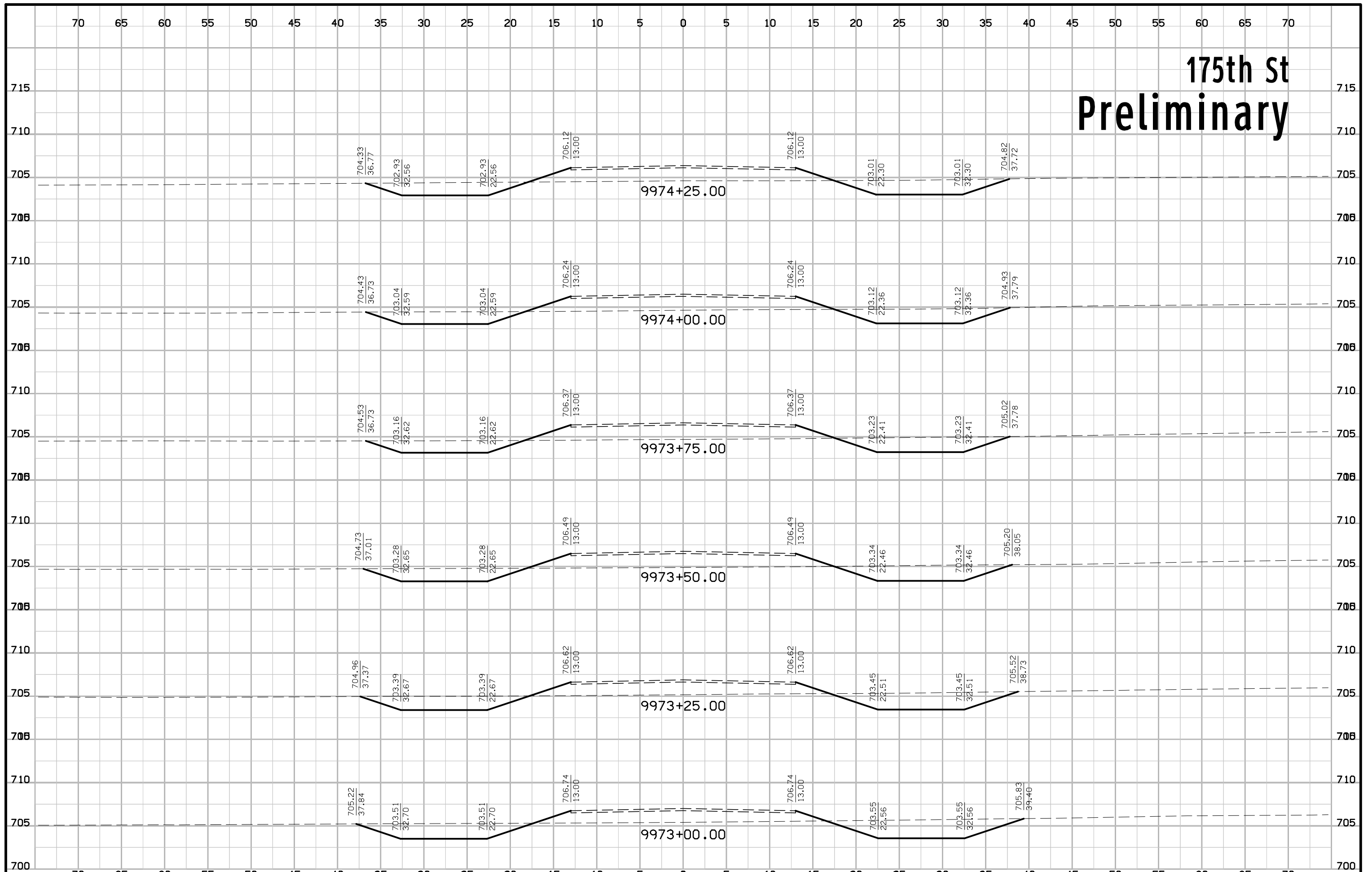
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9970+75.00

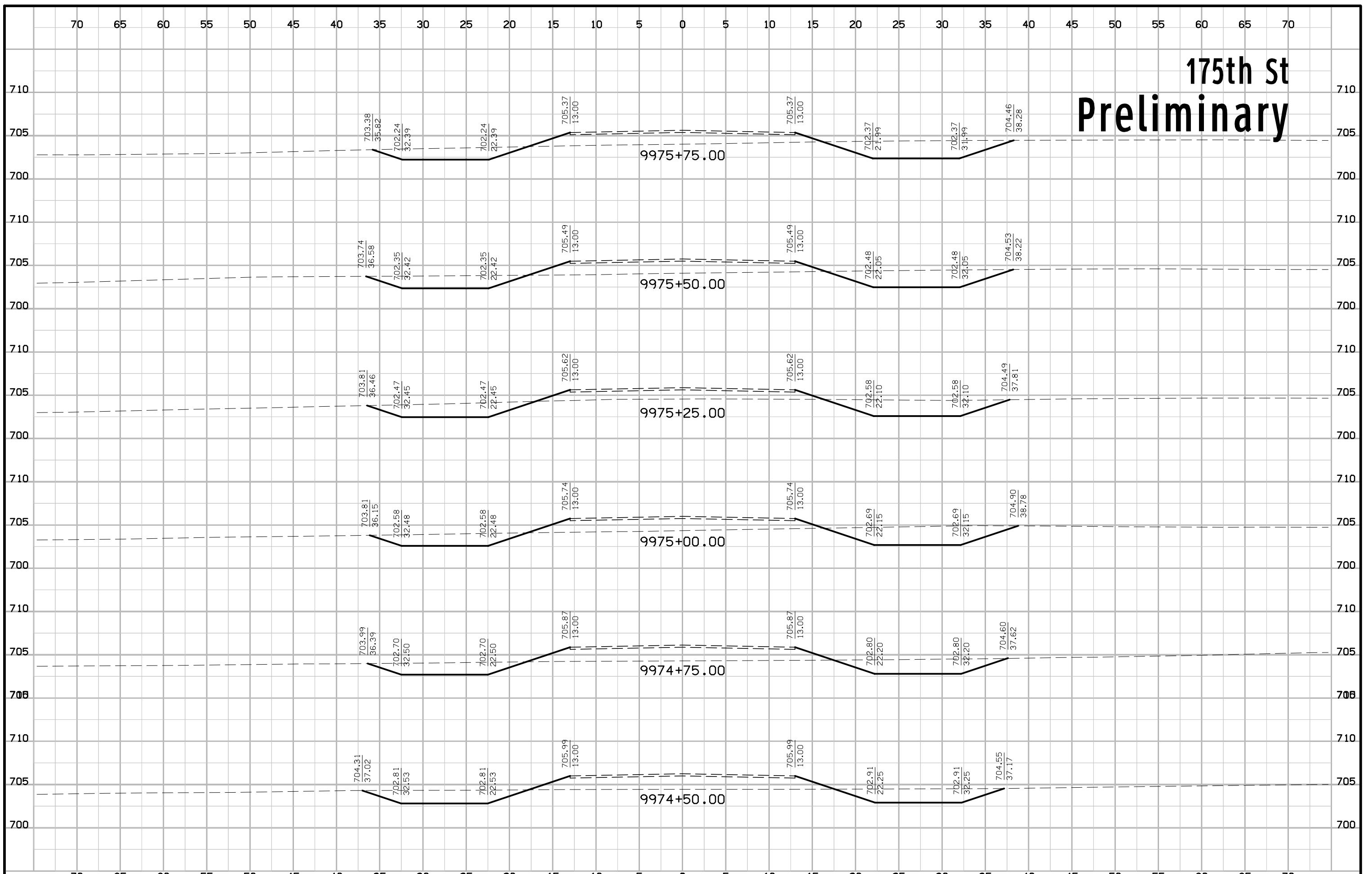
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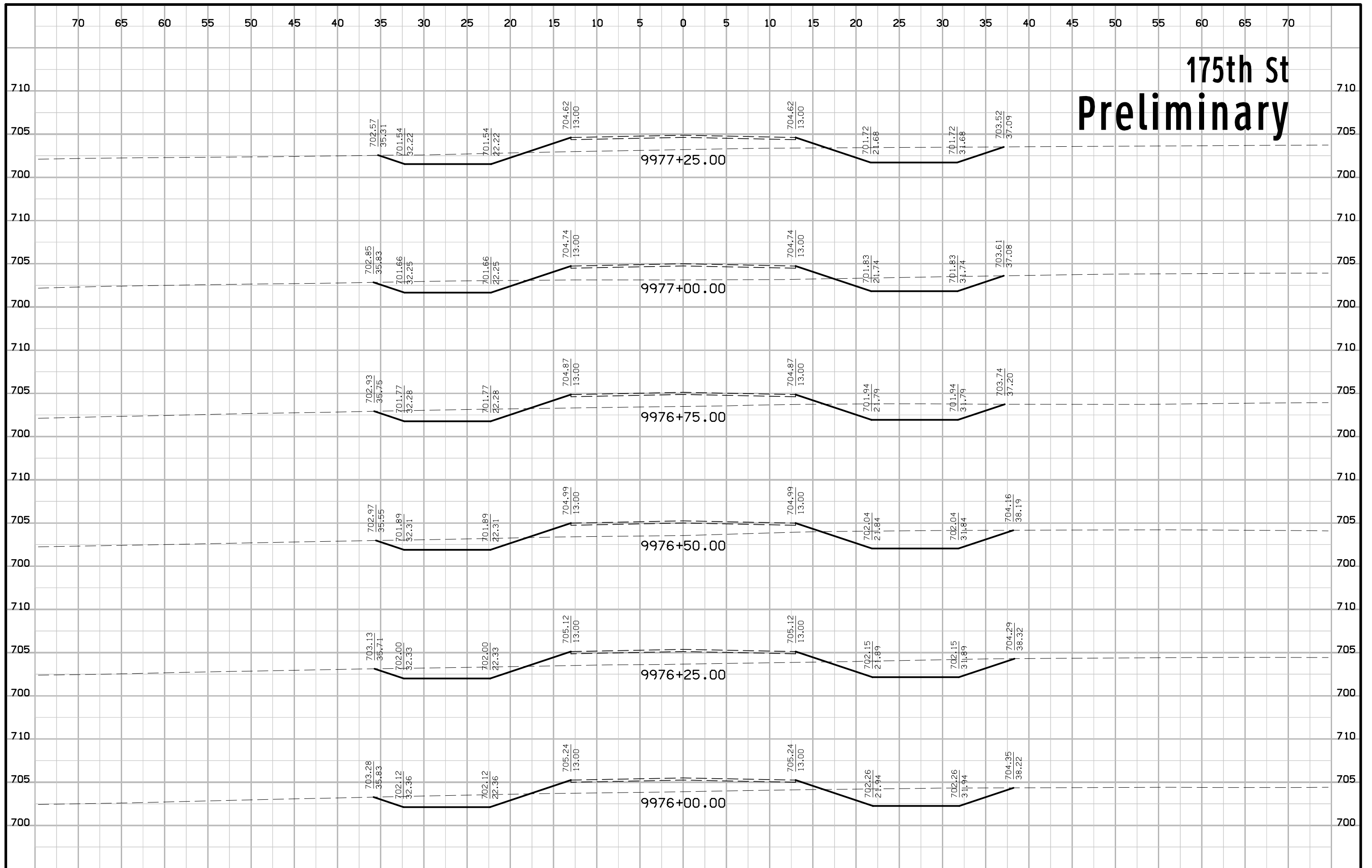
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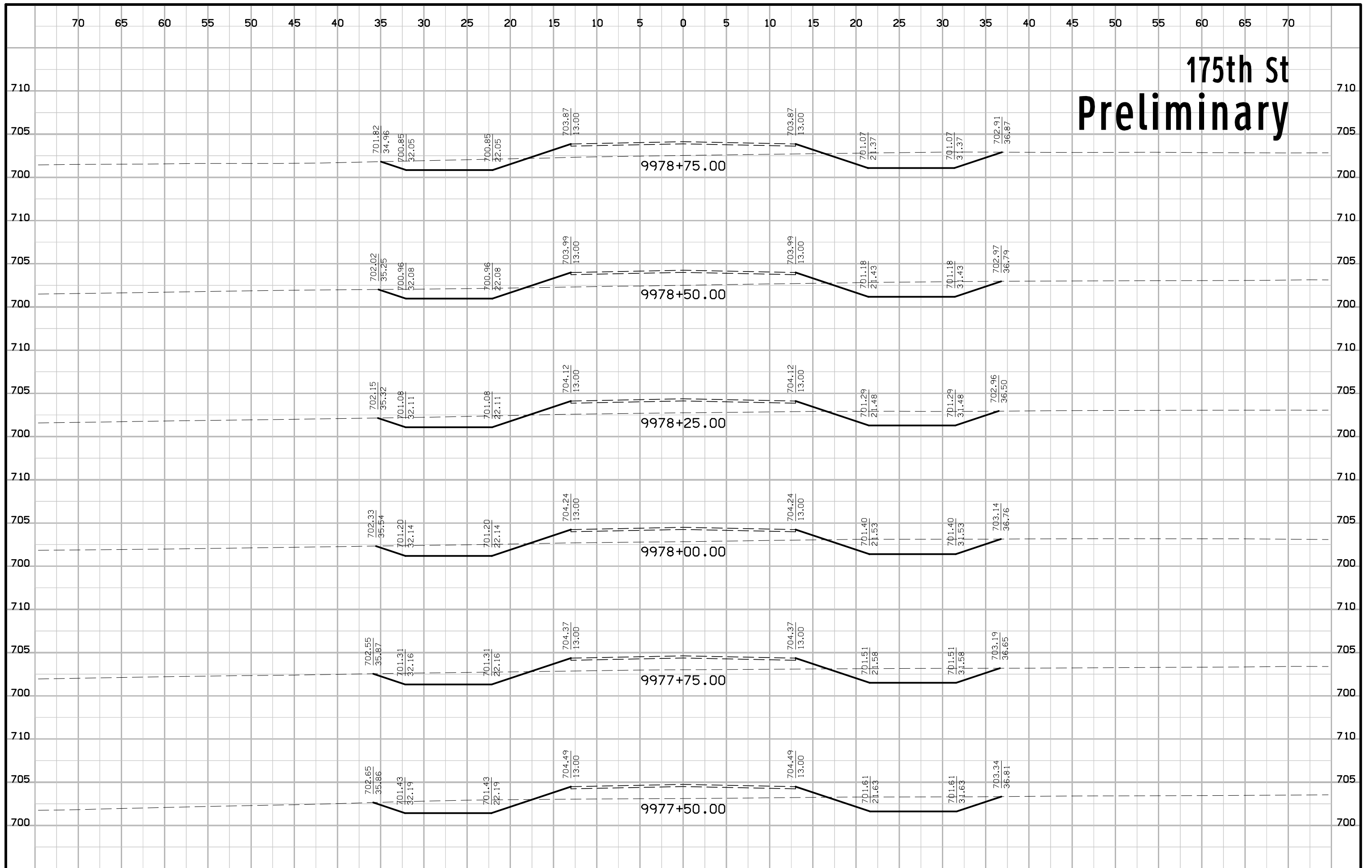
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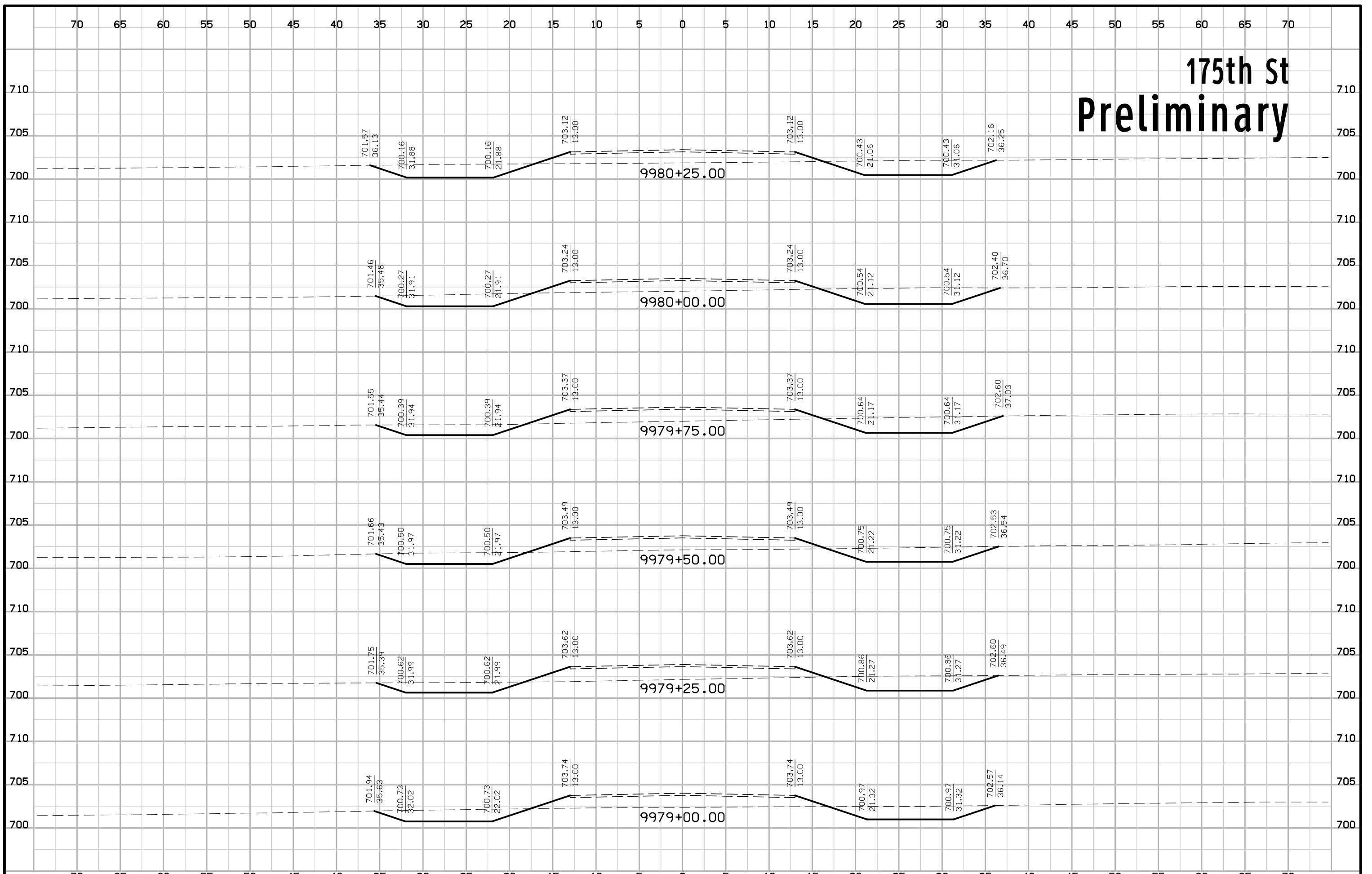
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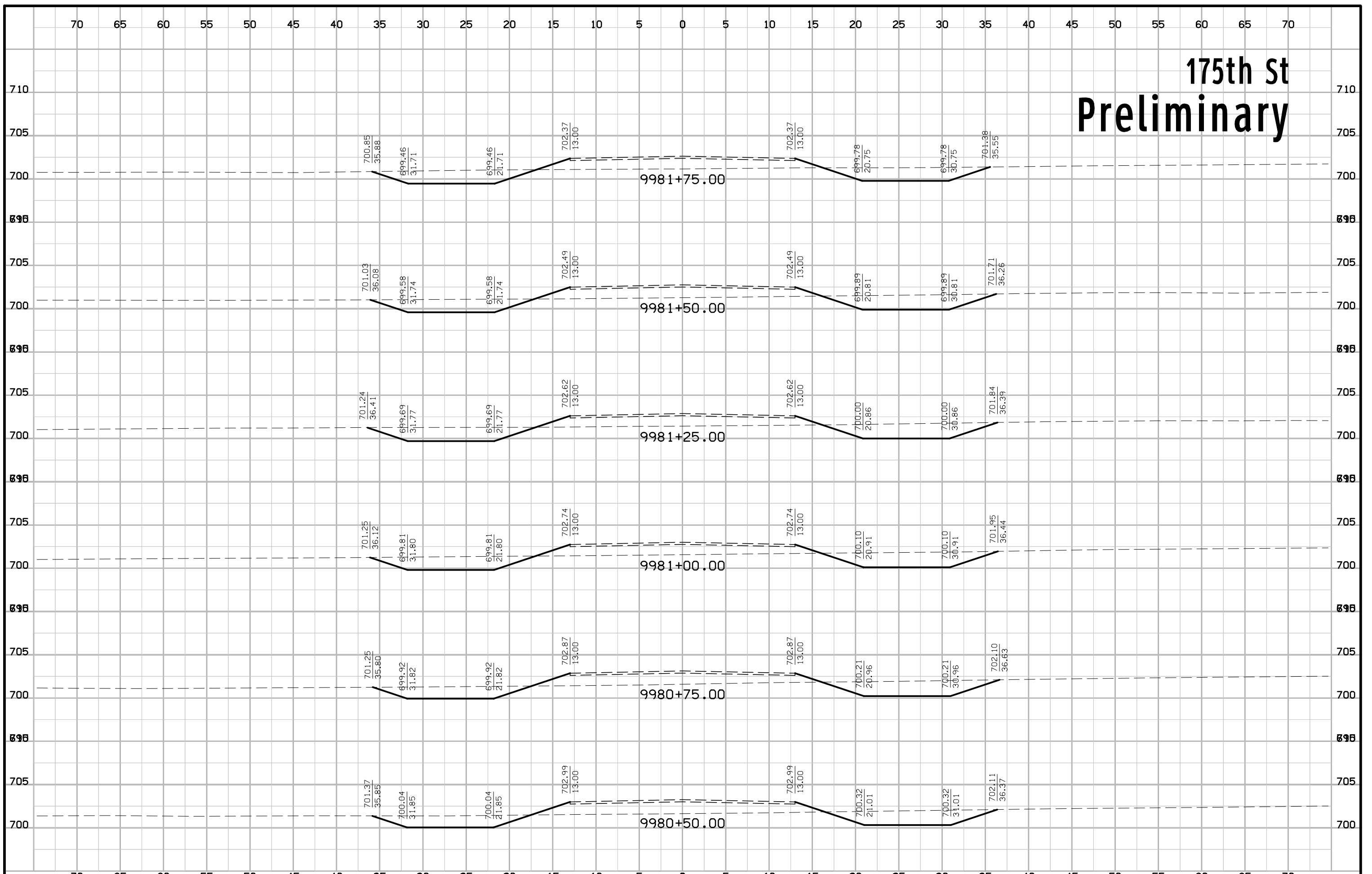
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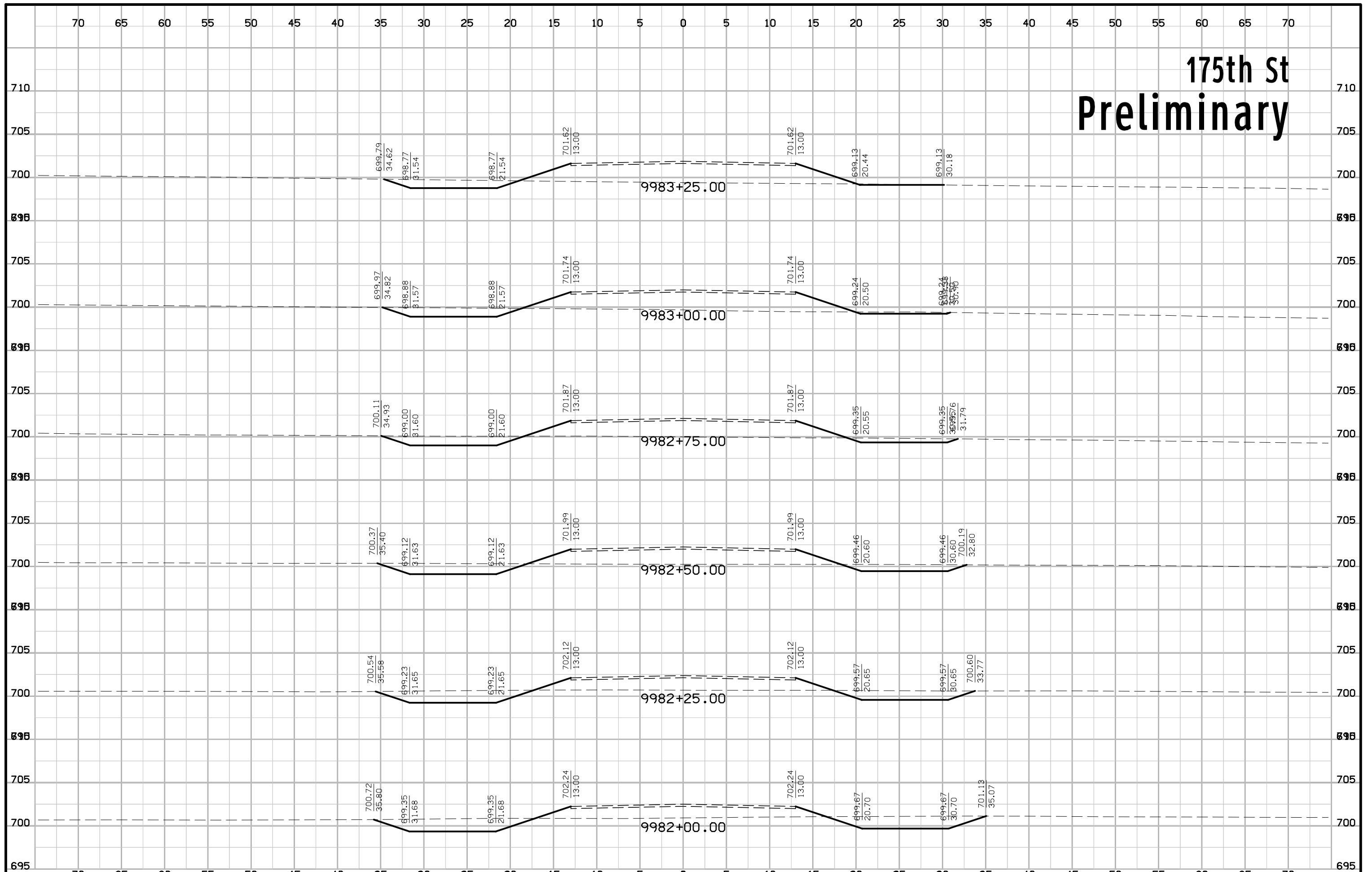
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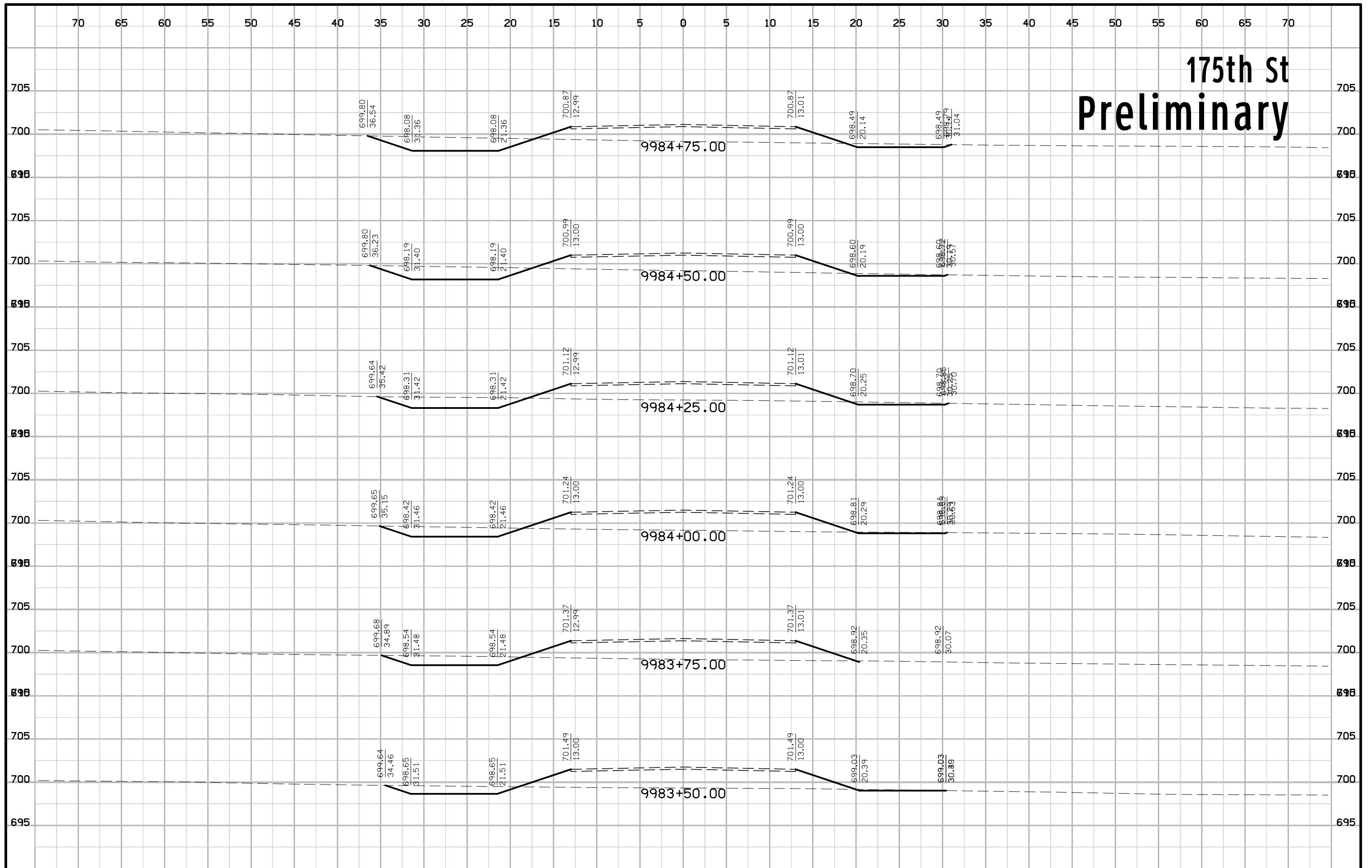
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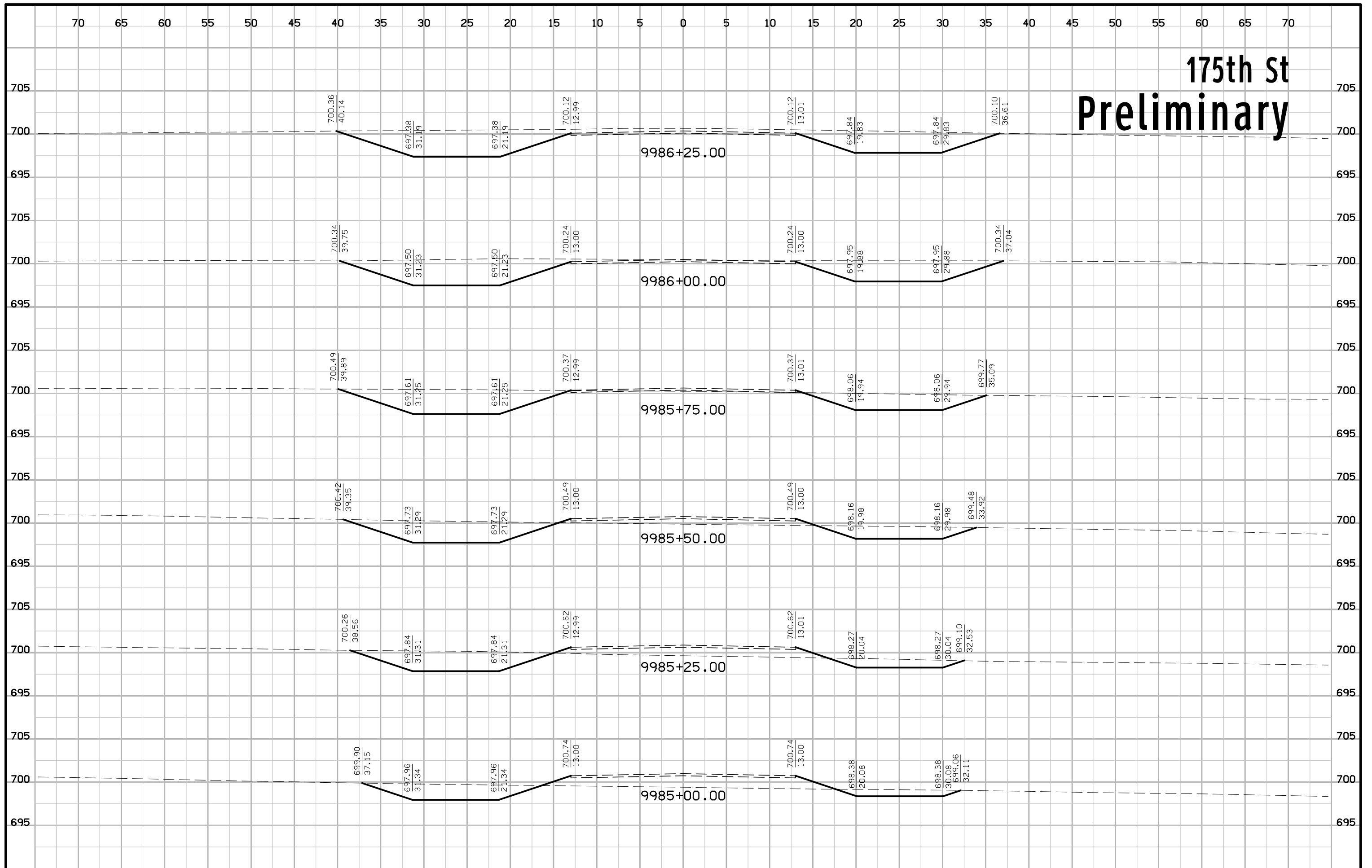
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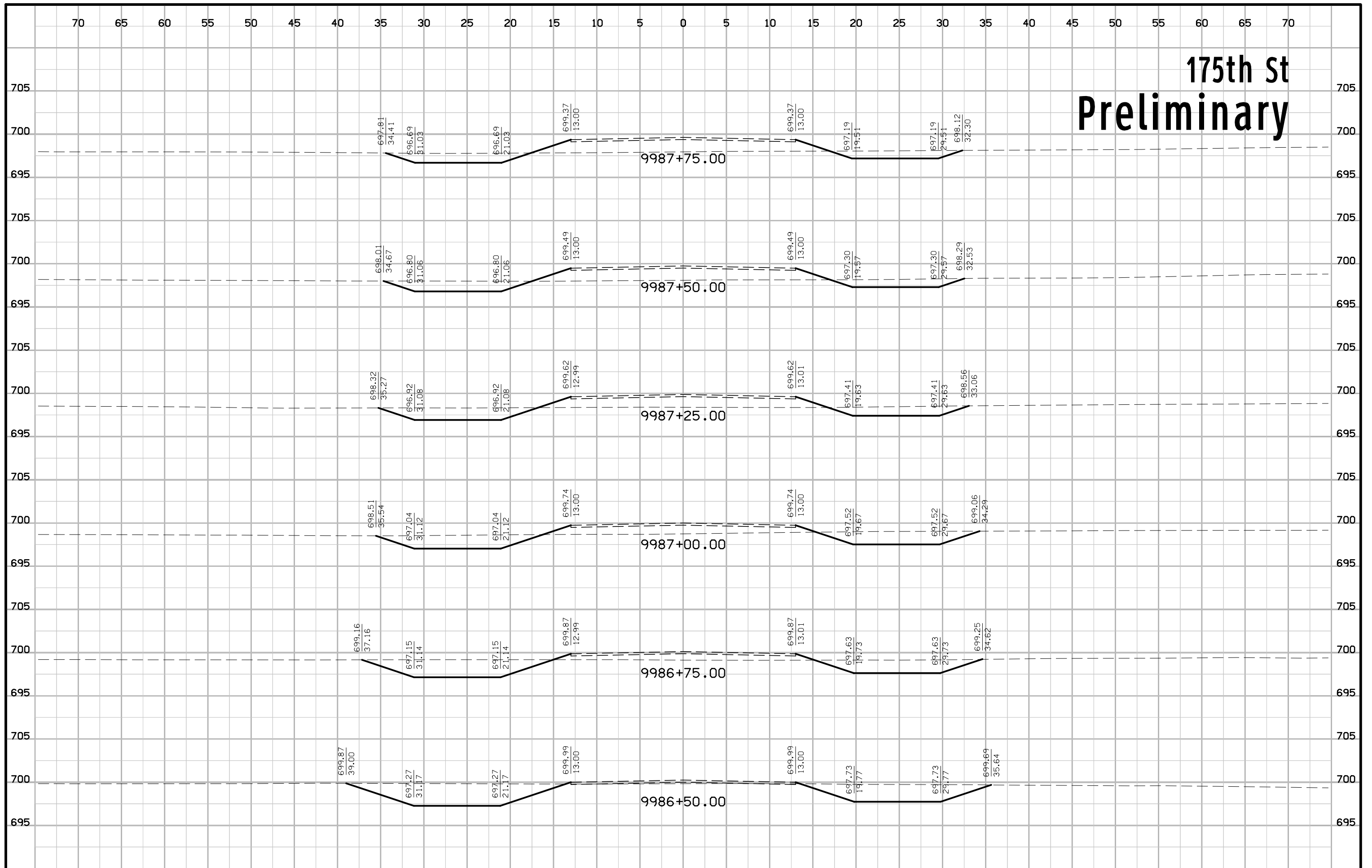
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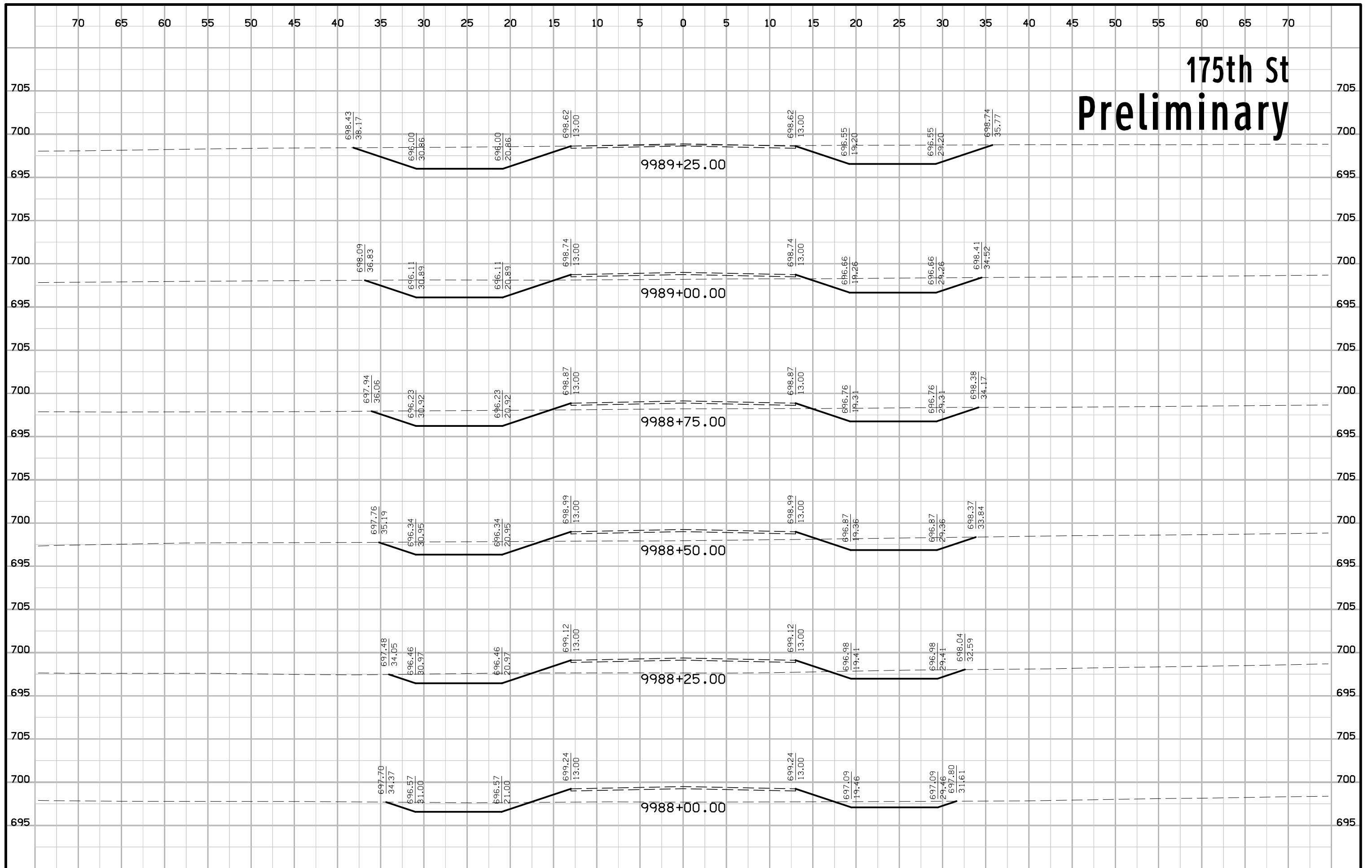
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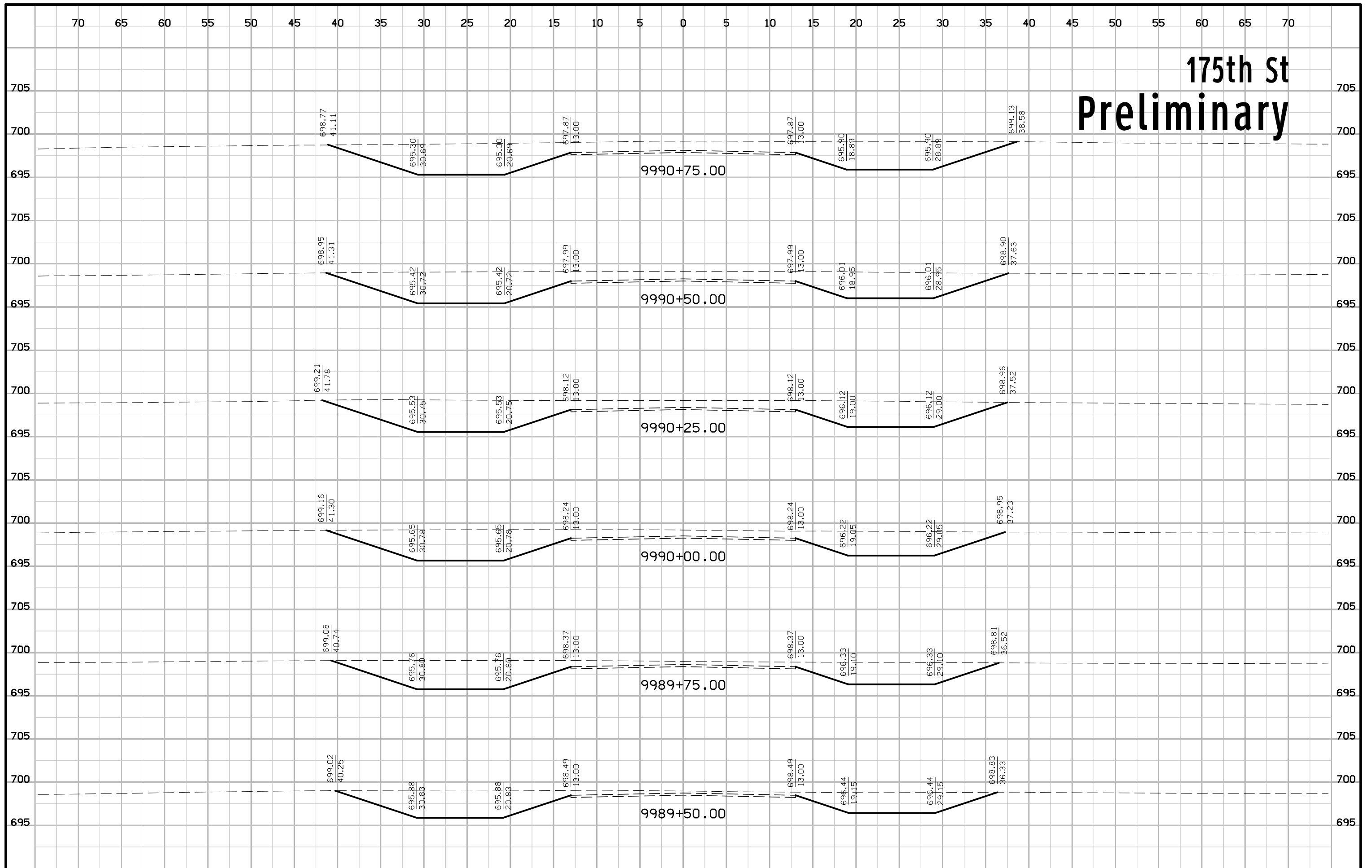
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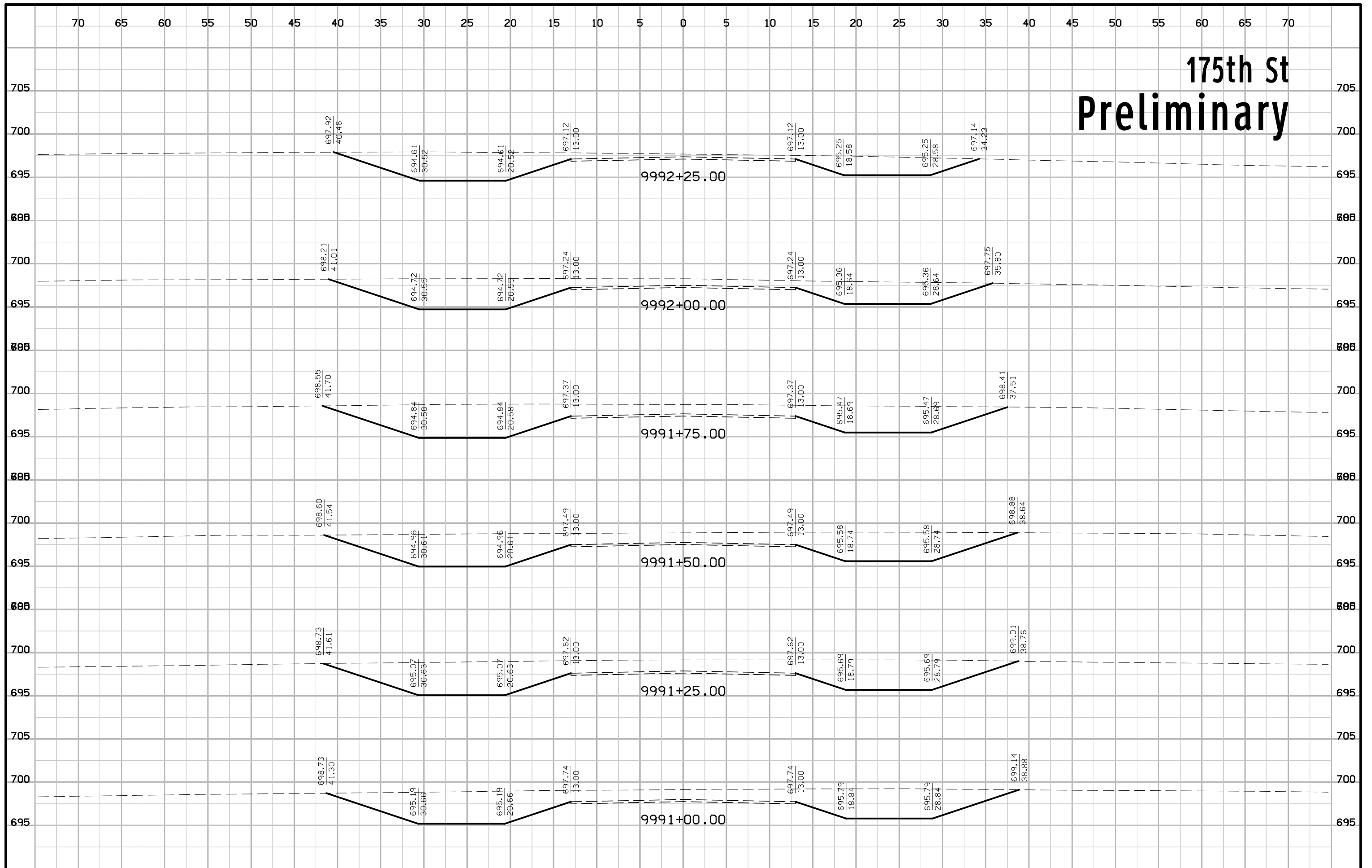
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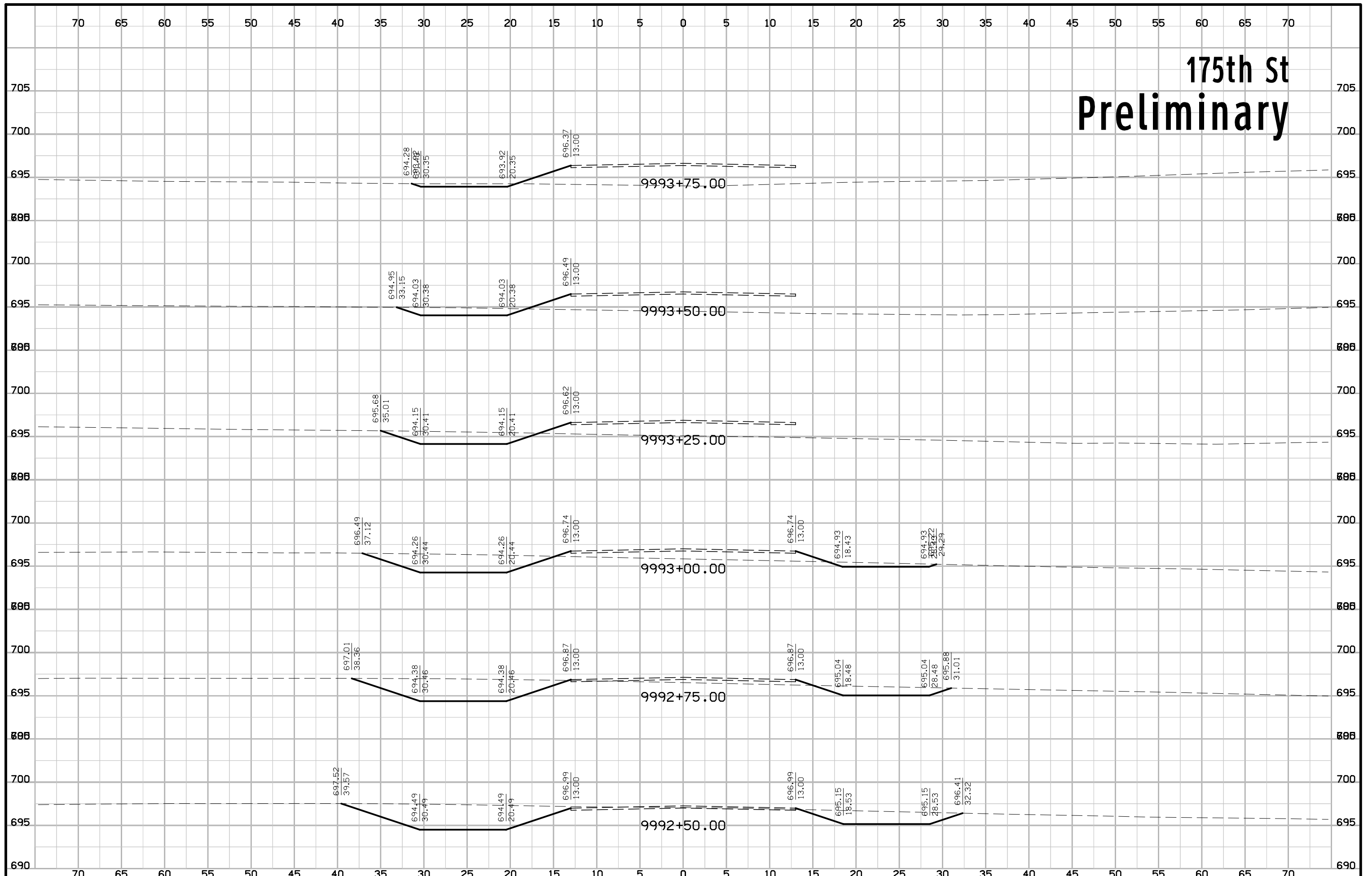
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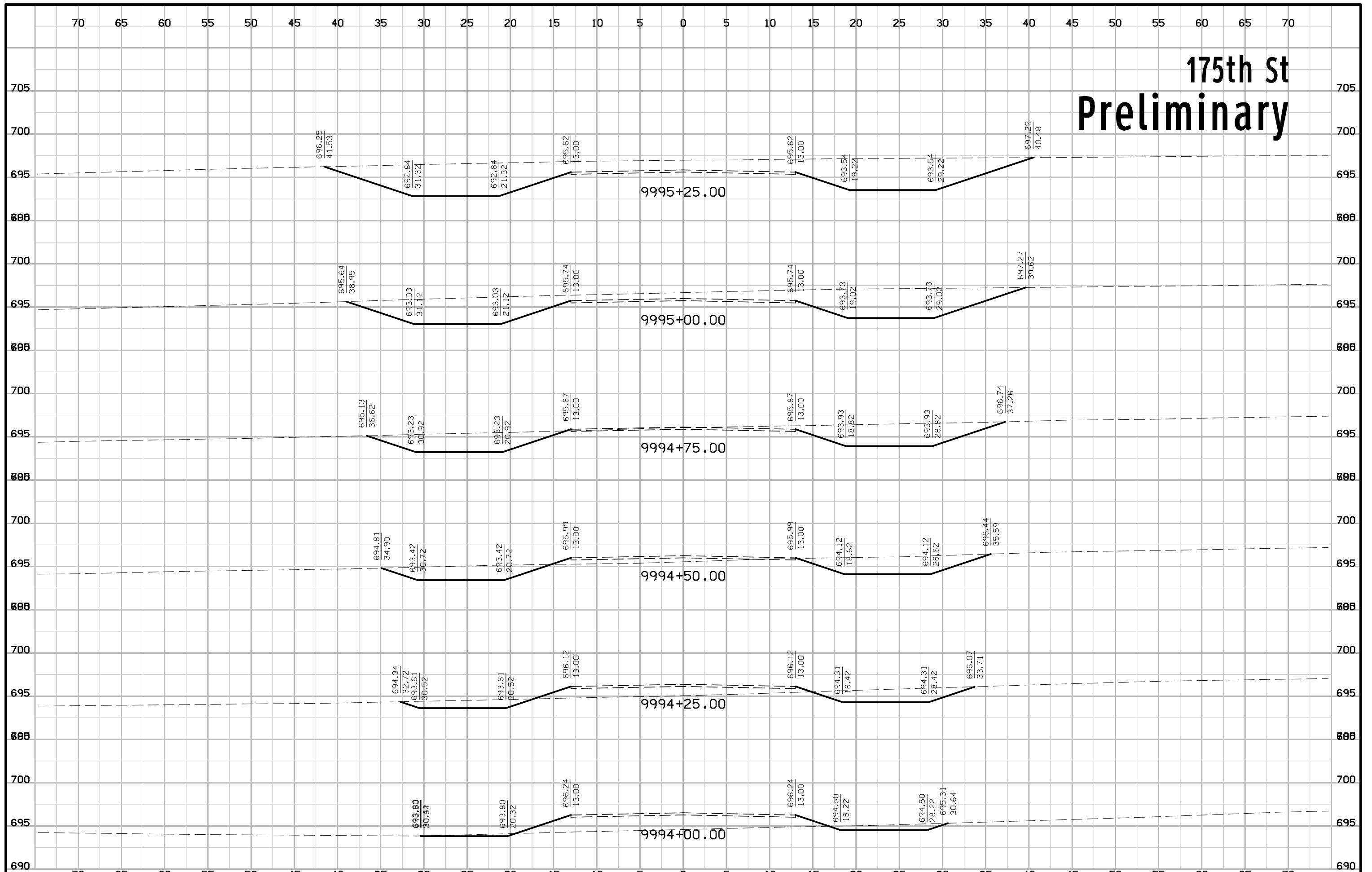
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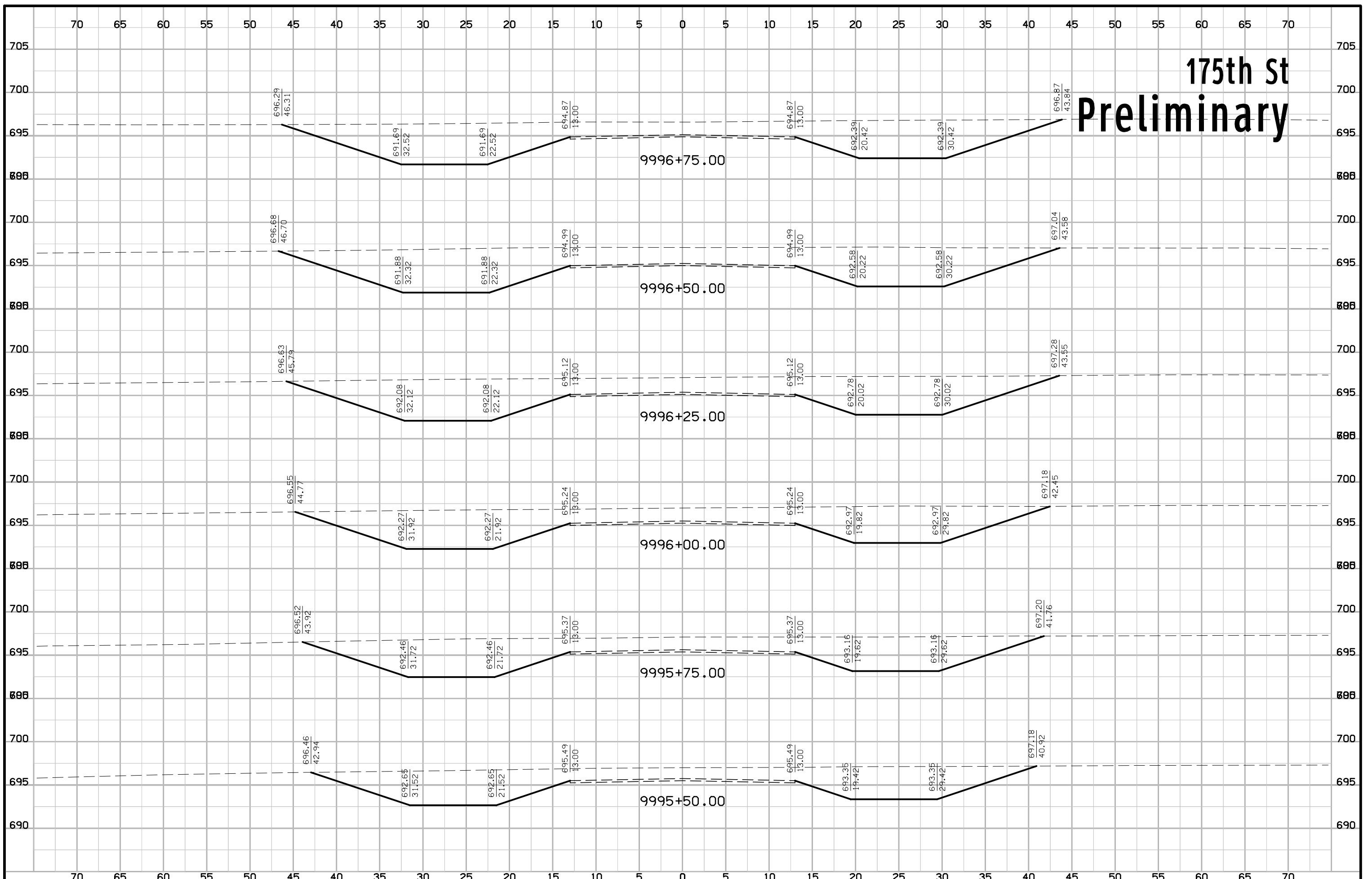
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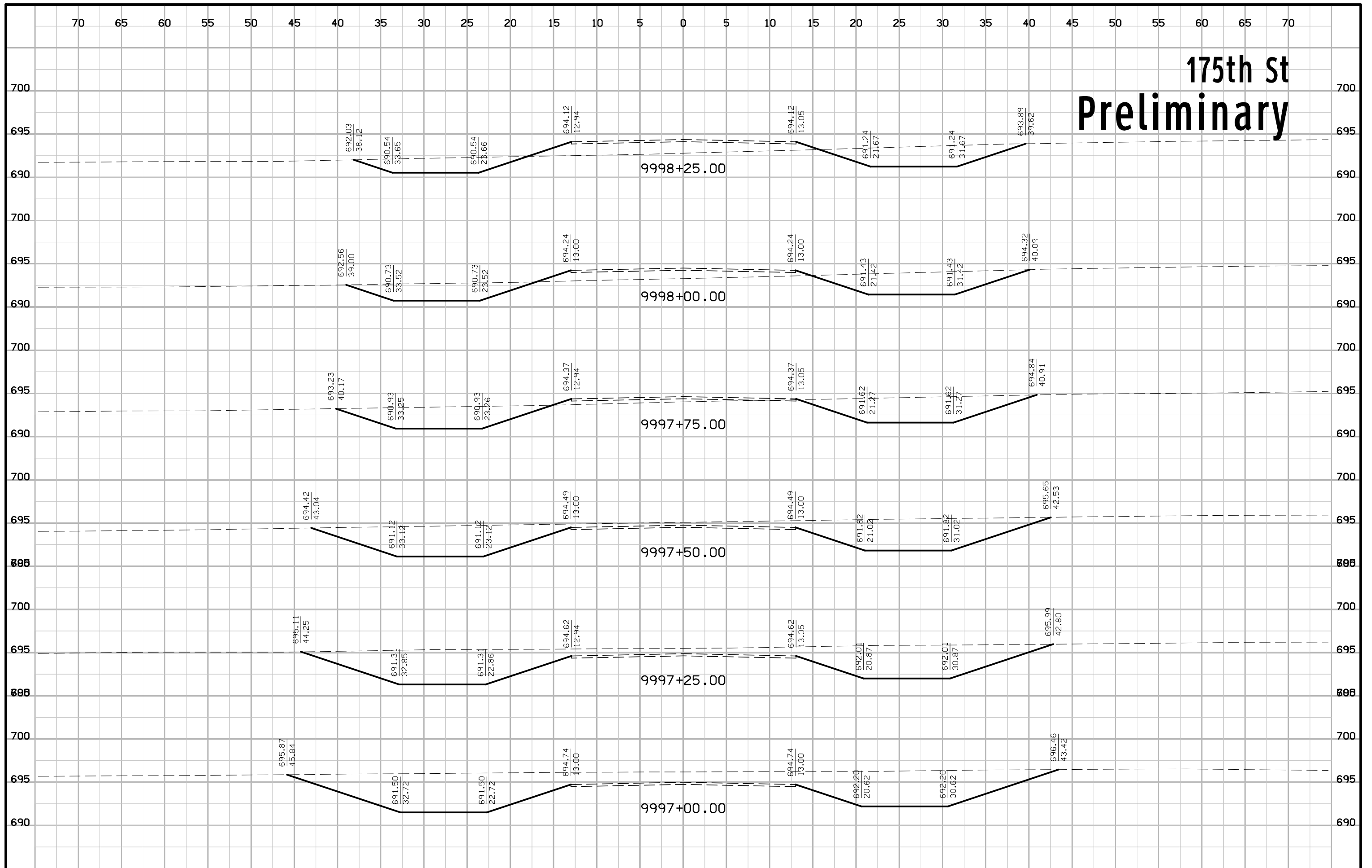
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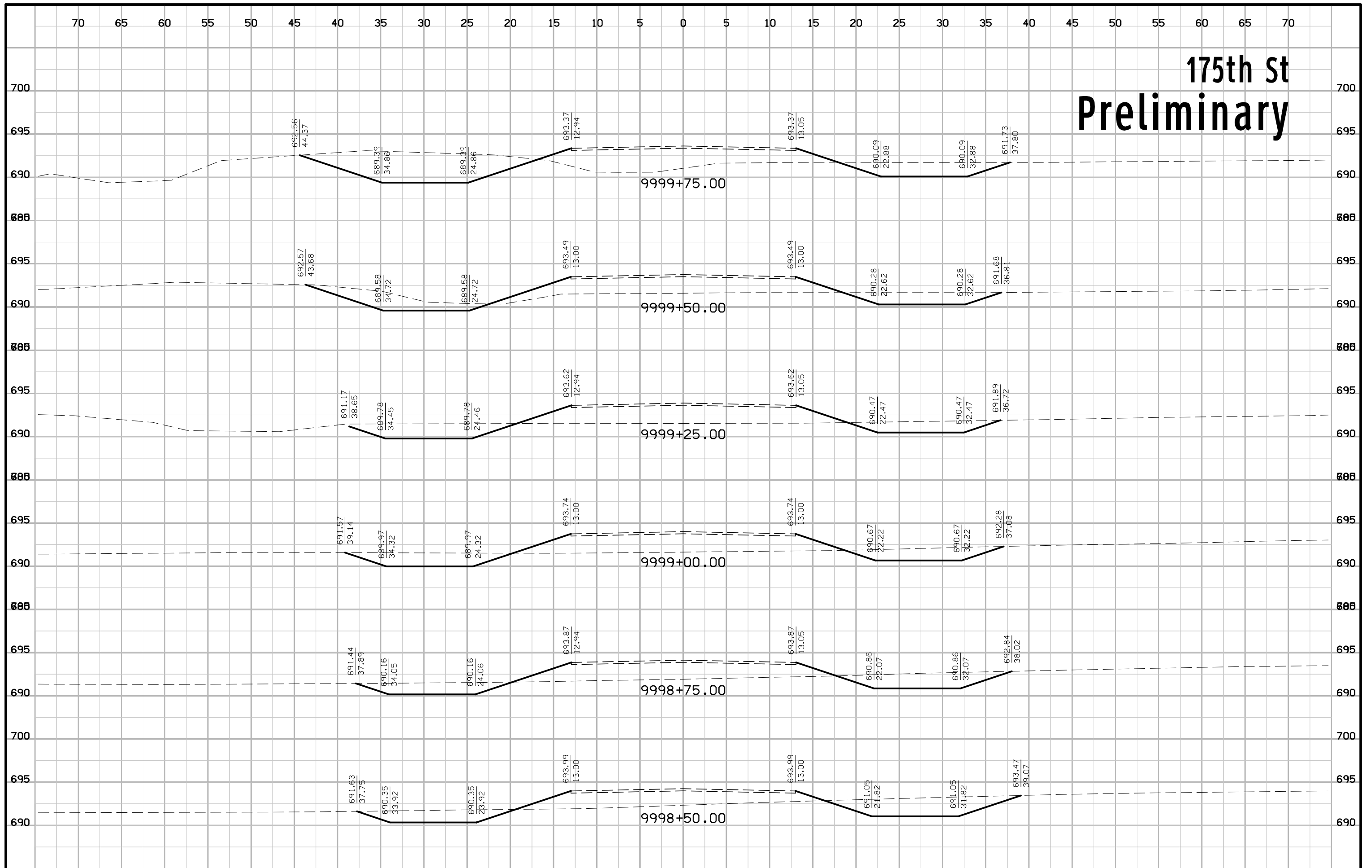
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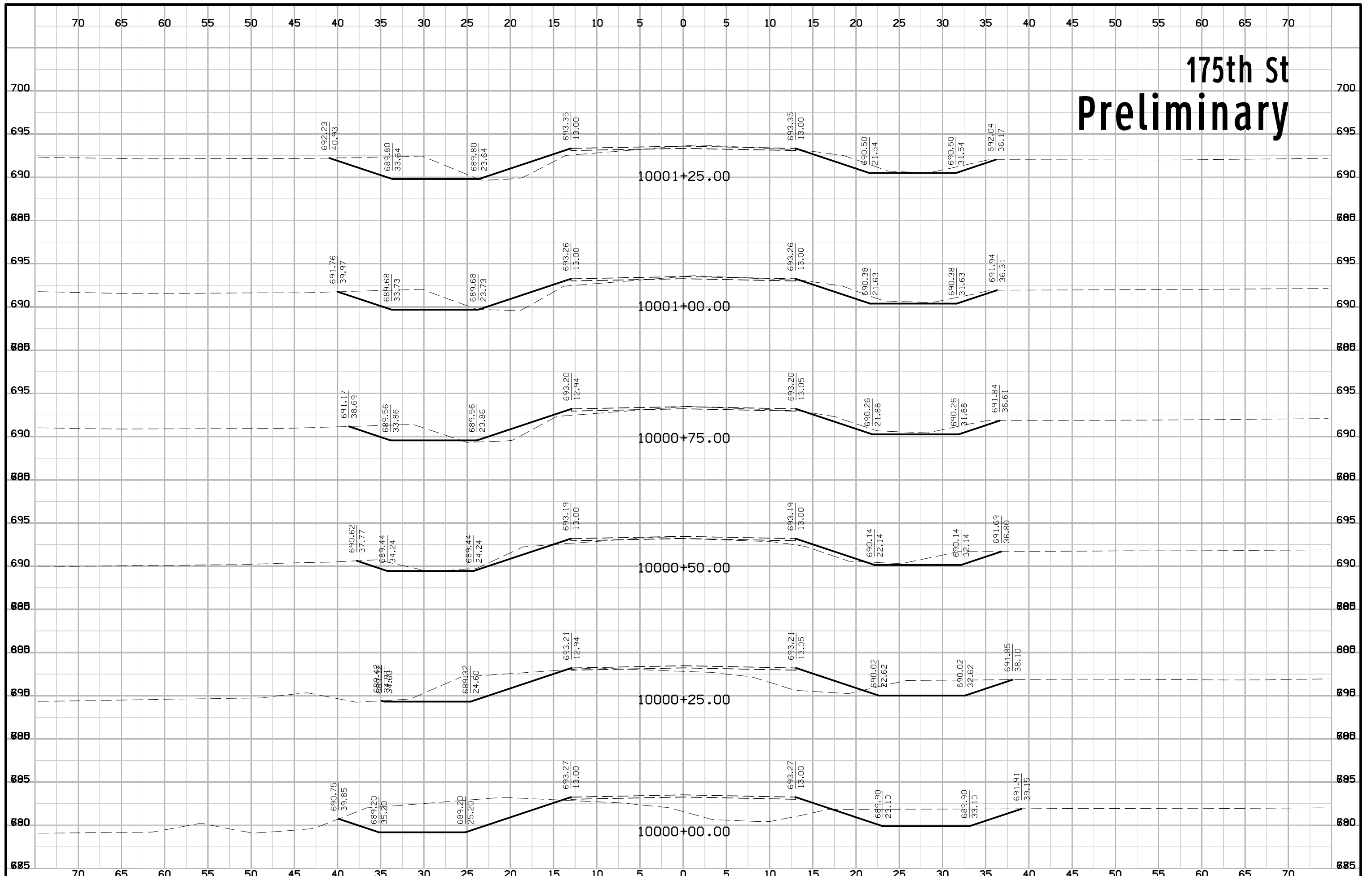
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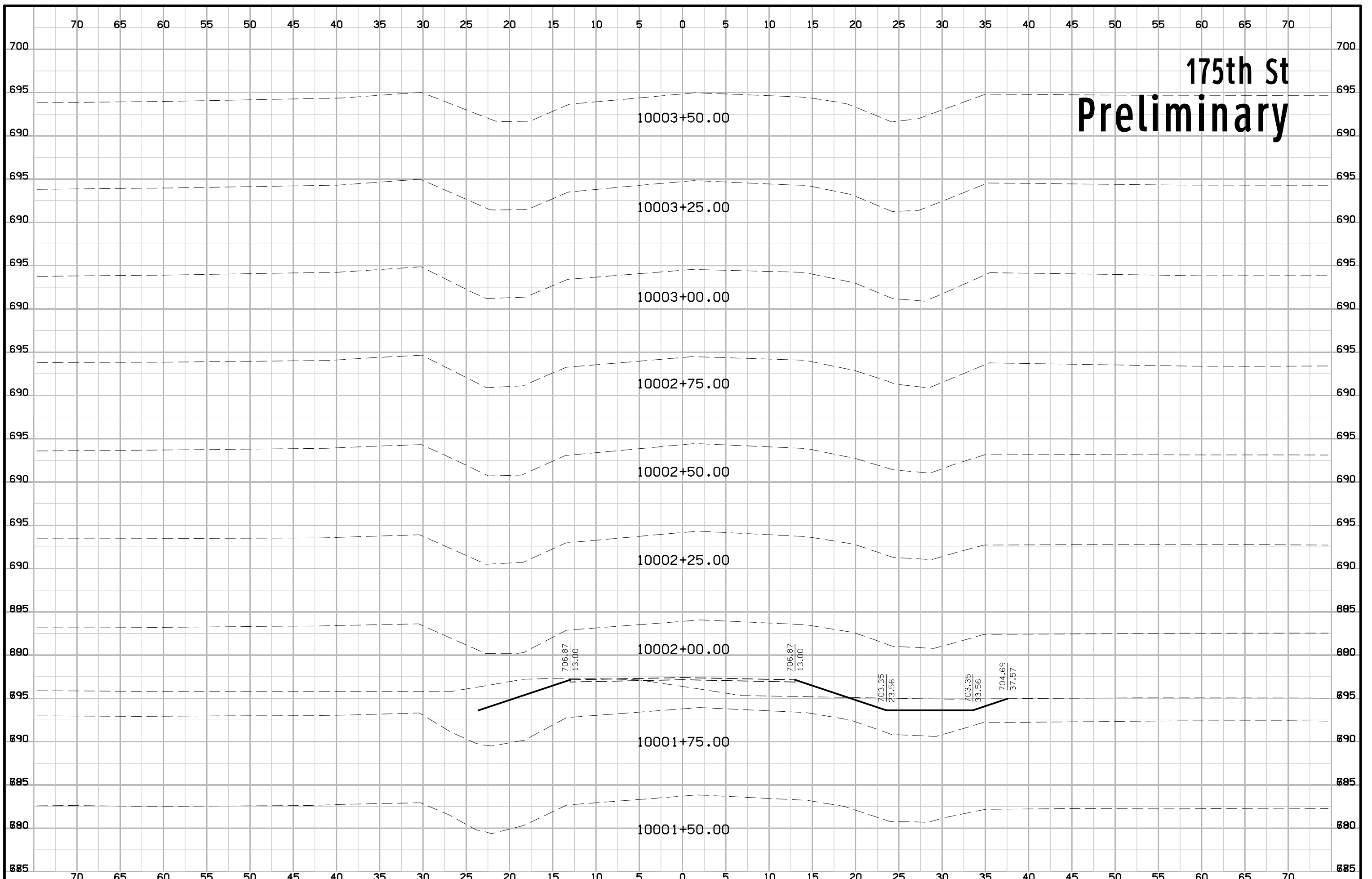
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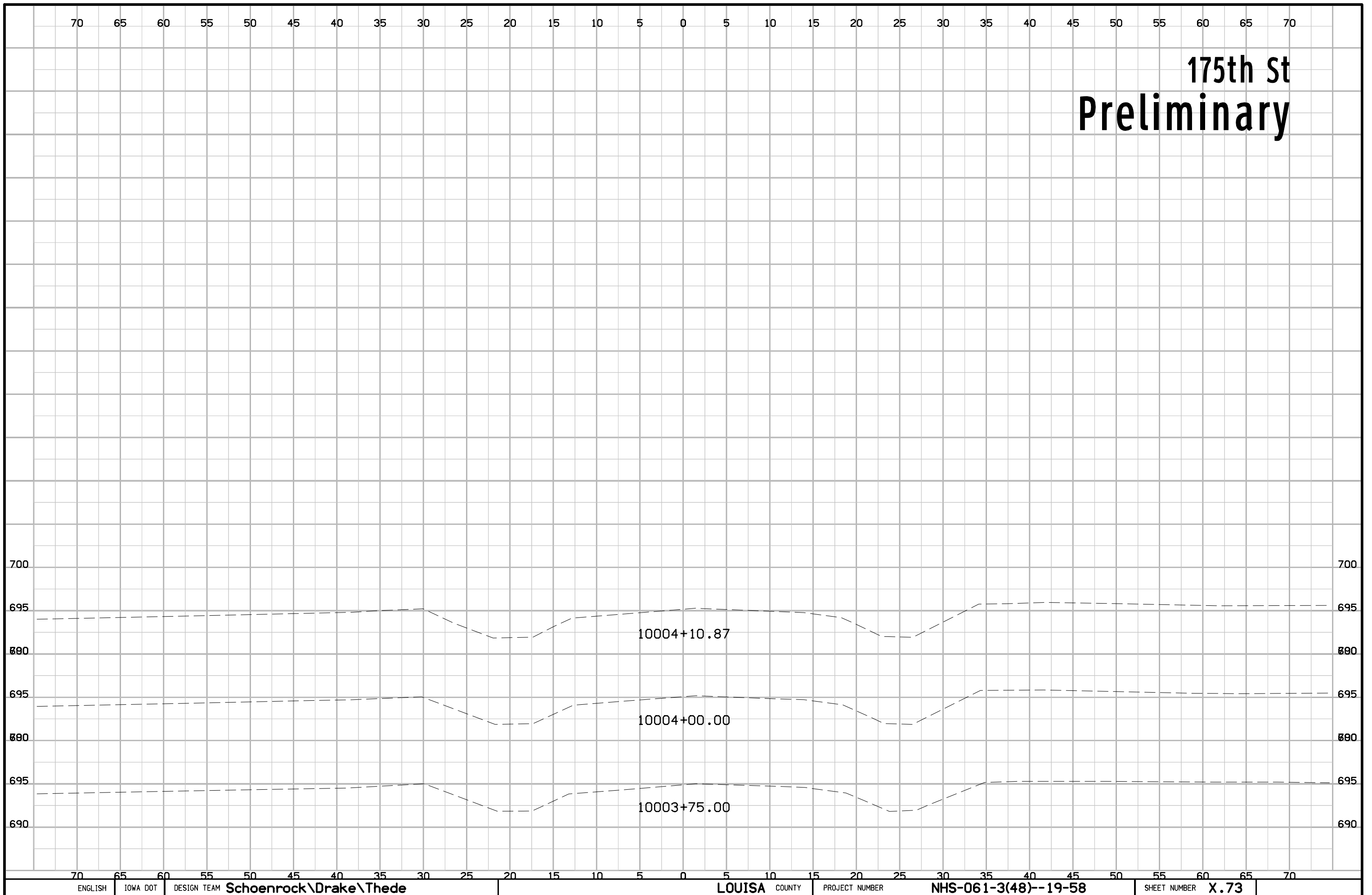
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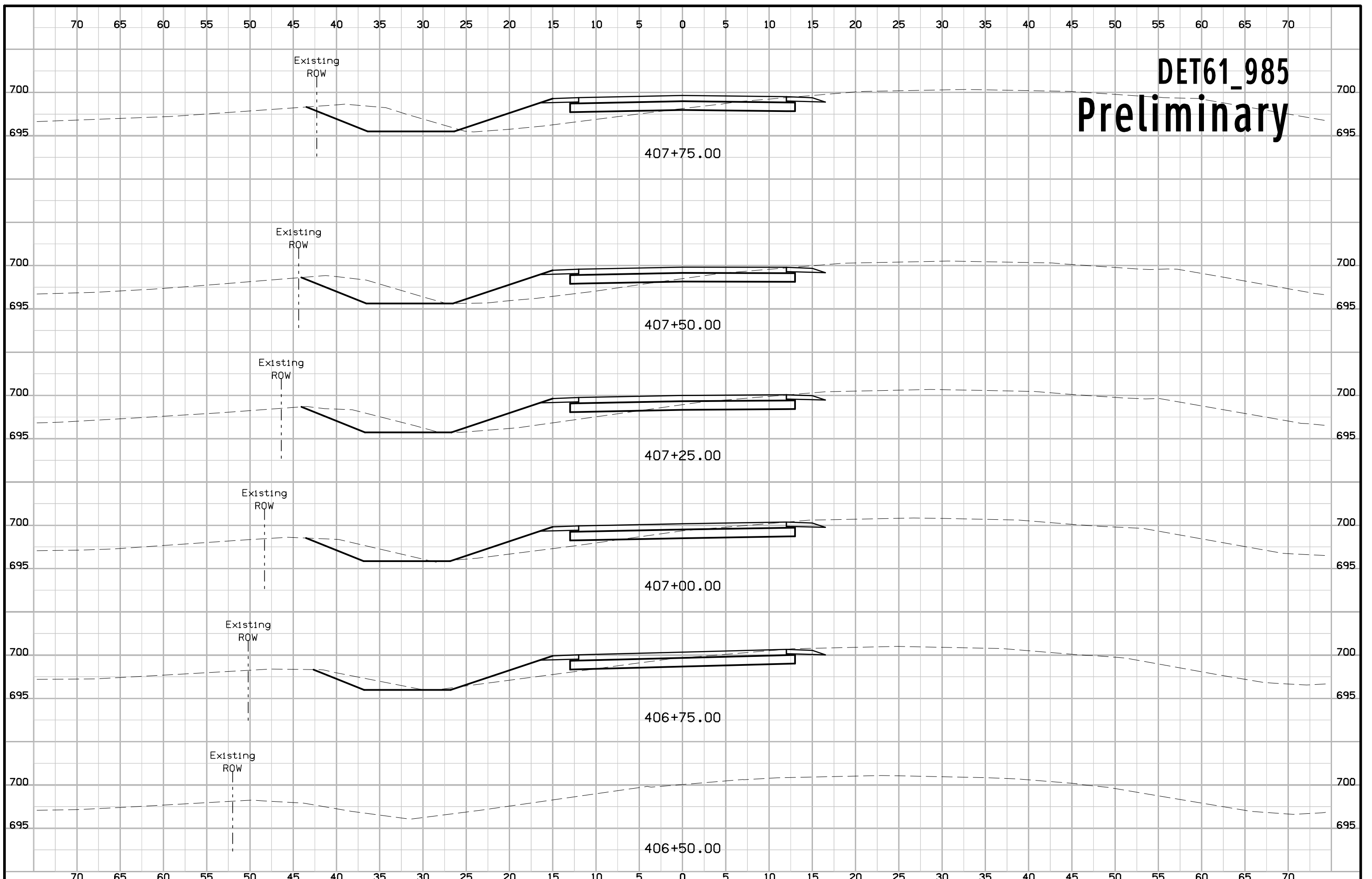
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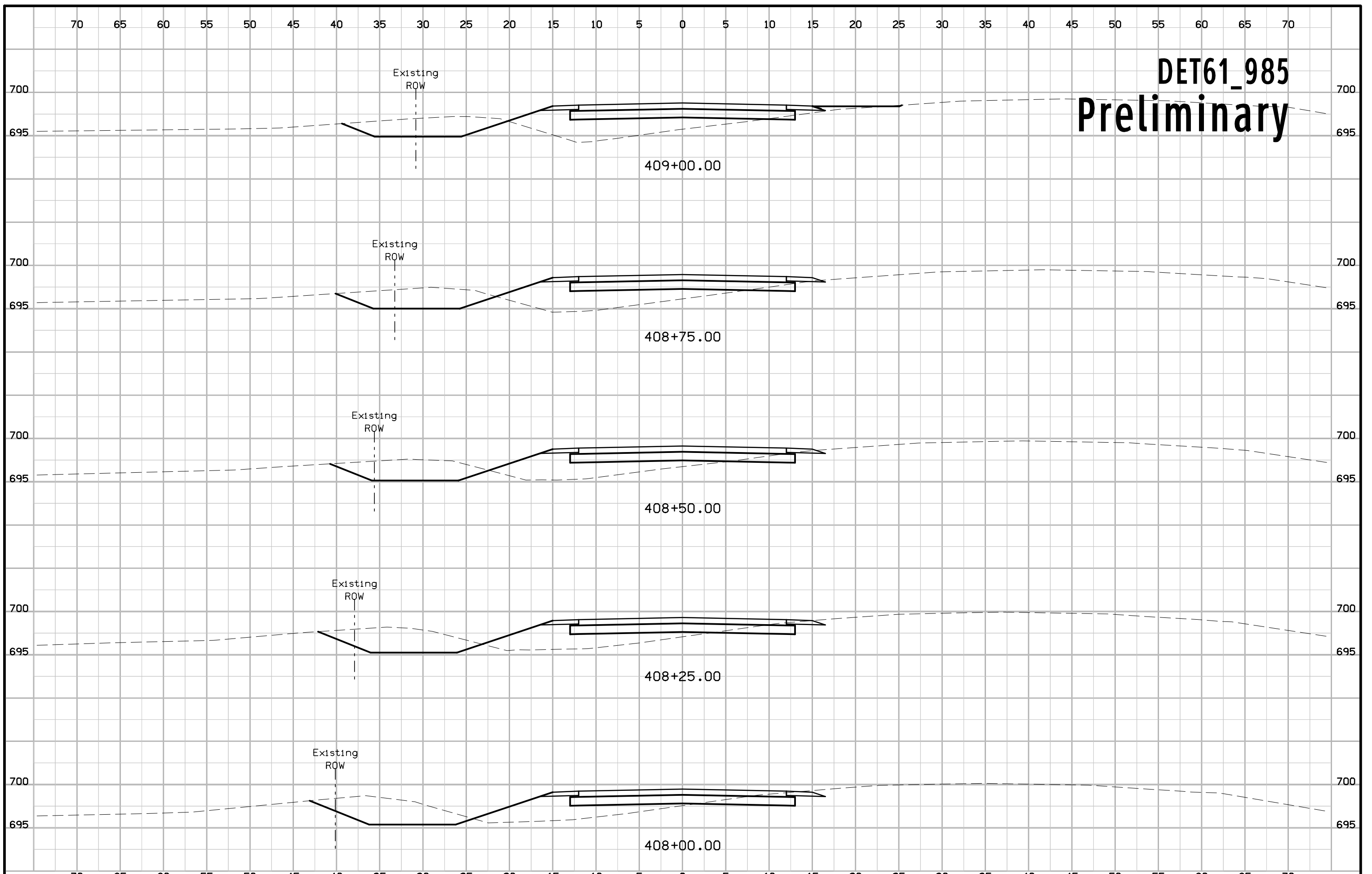
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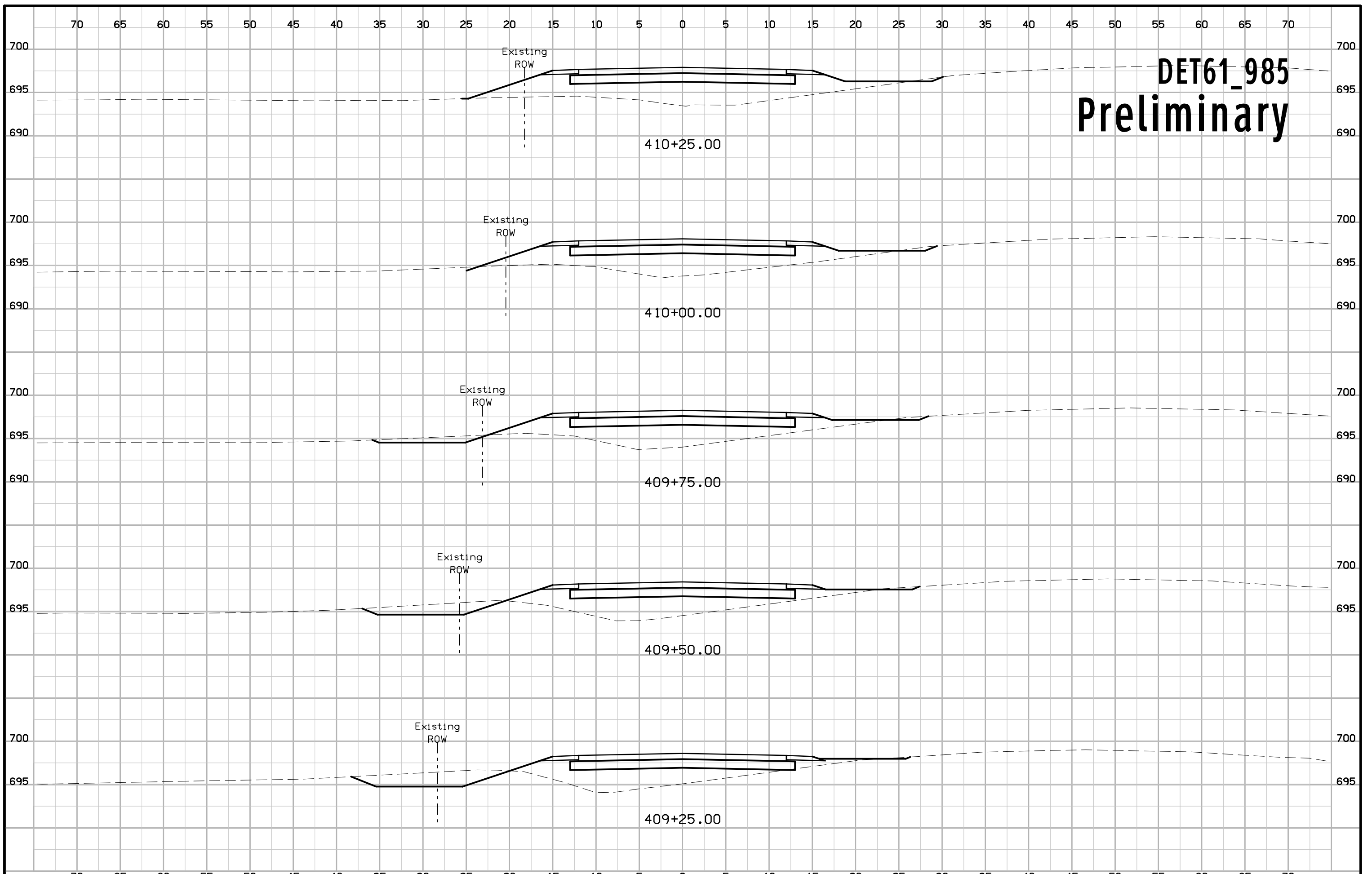
DET61_985 Preliminary



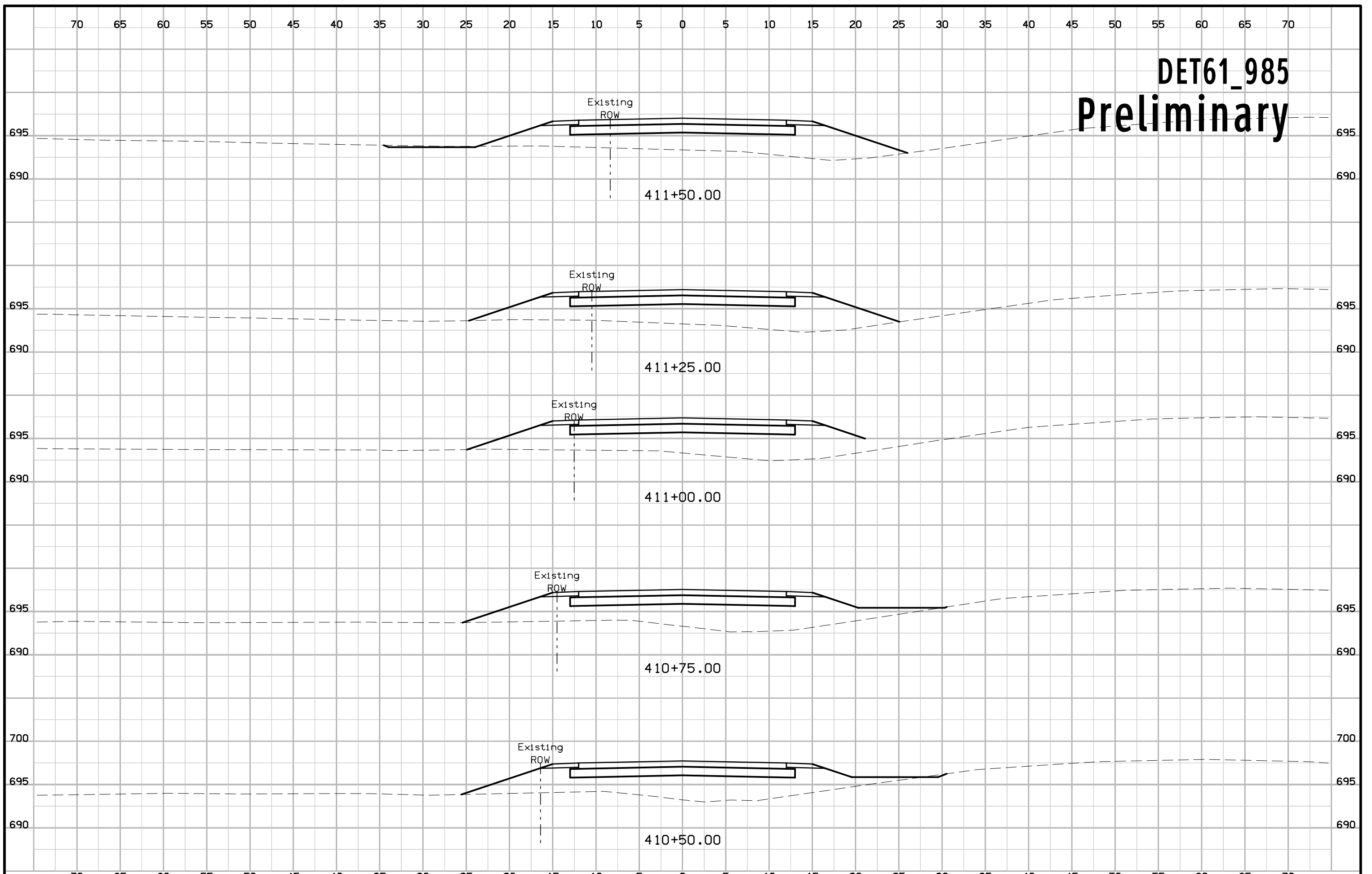
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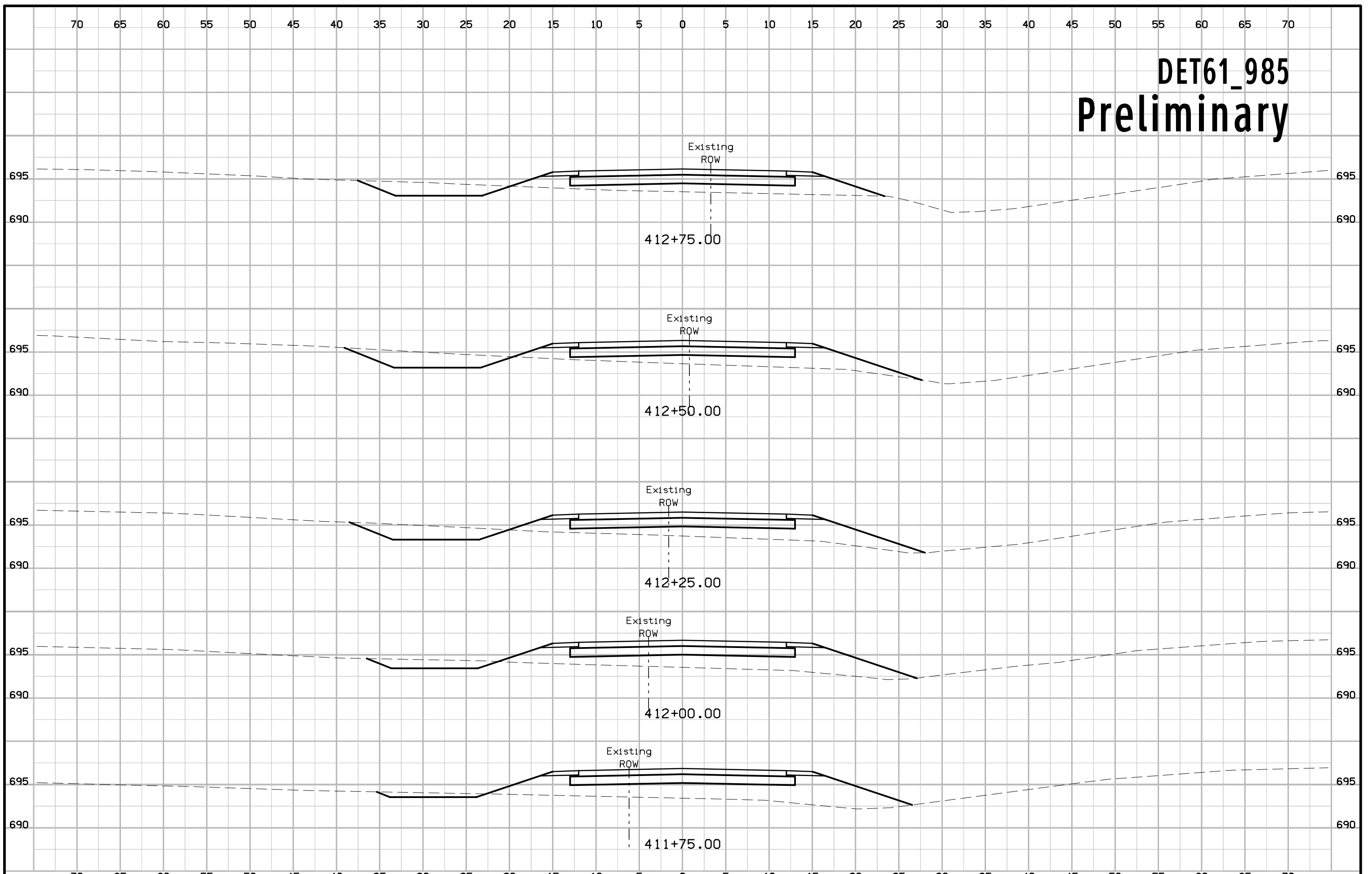
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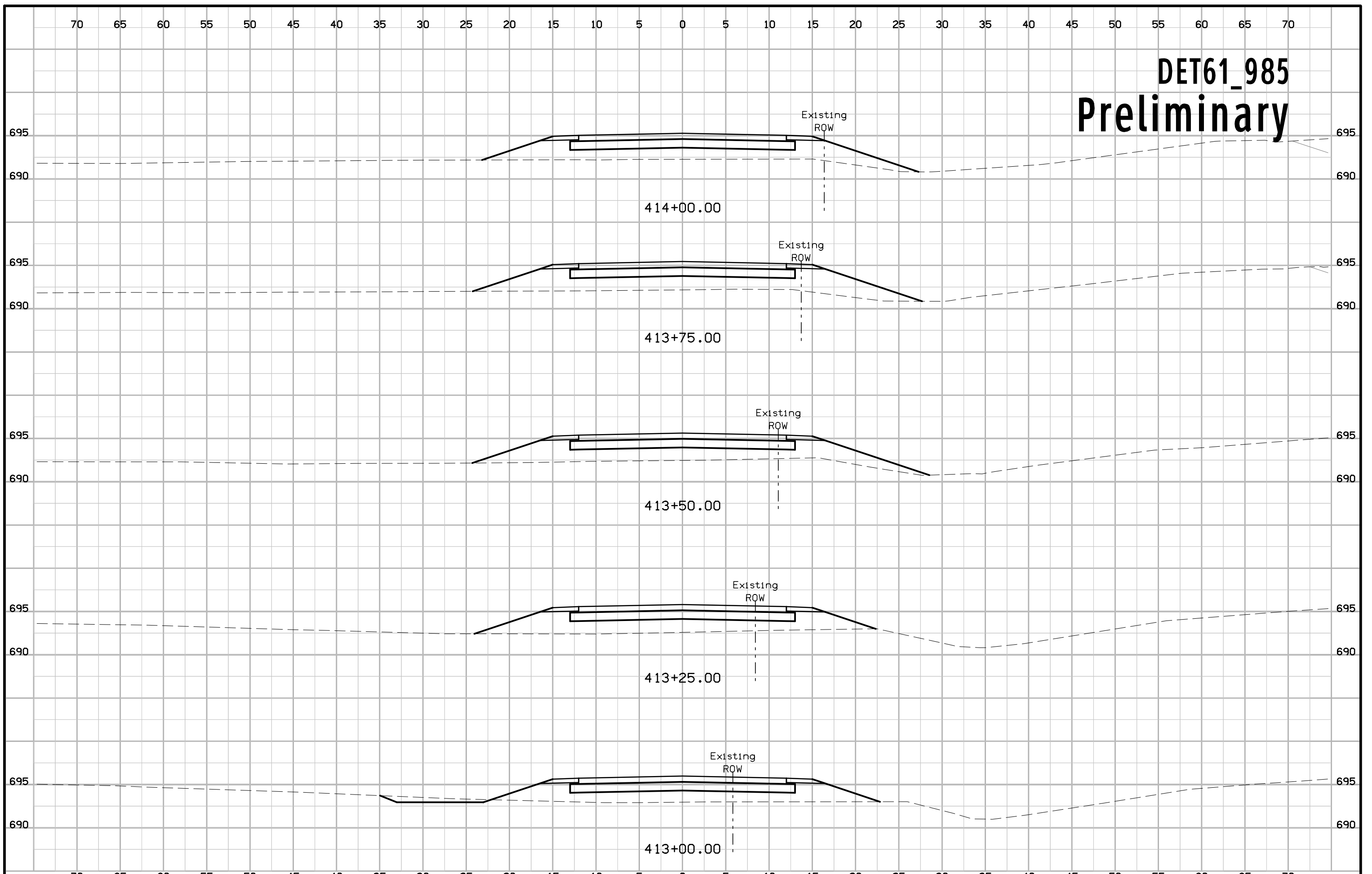
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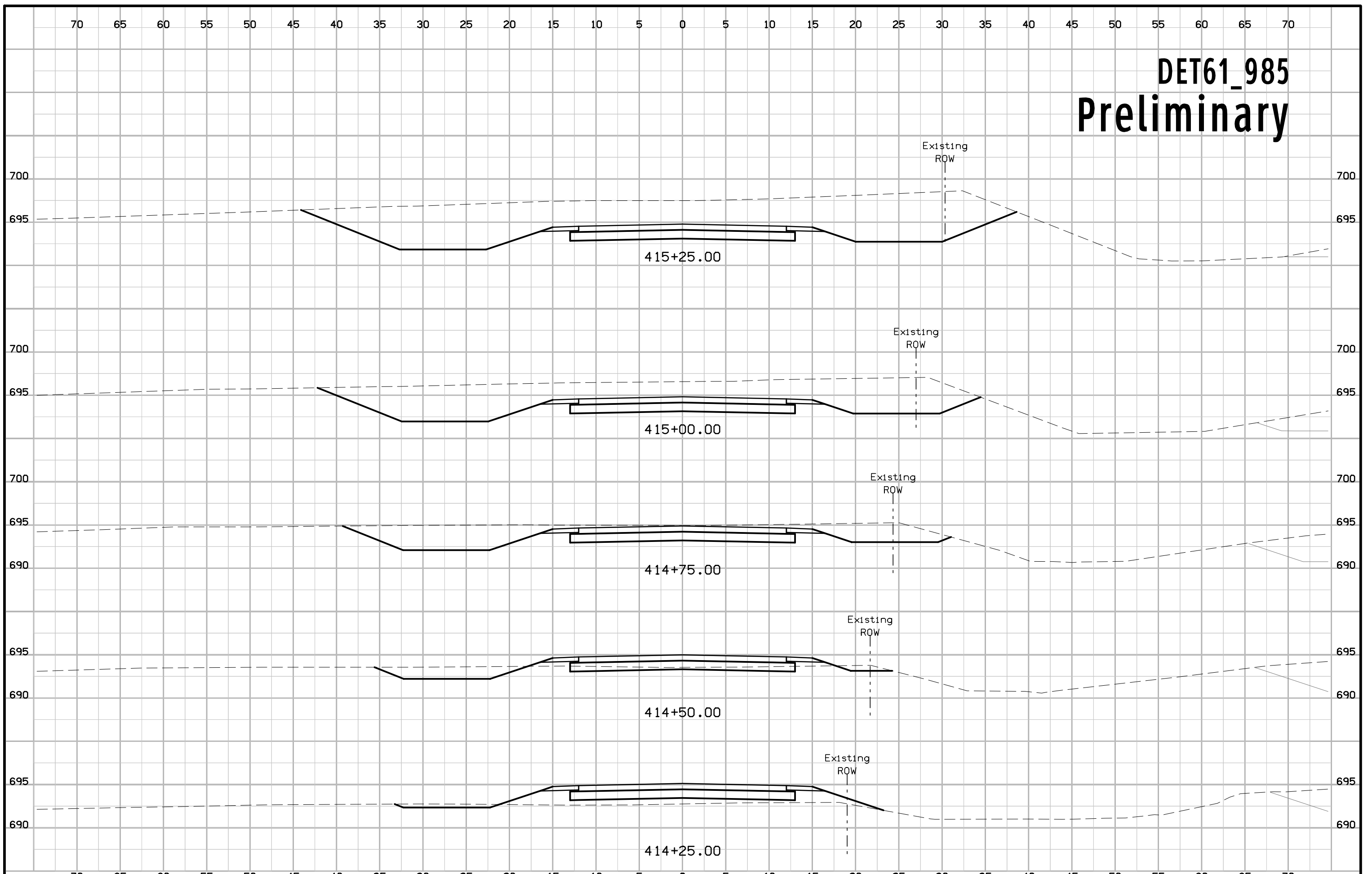
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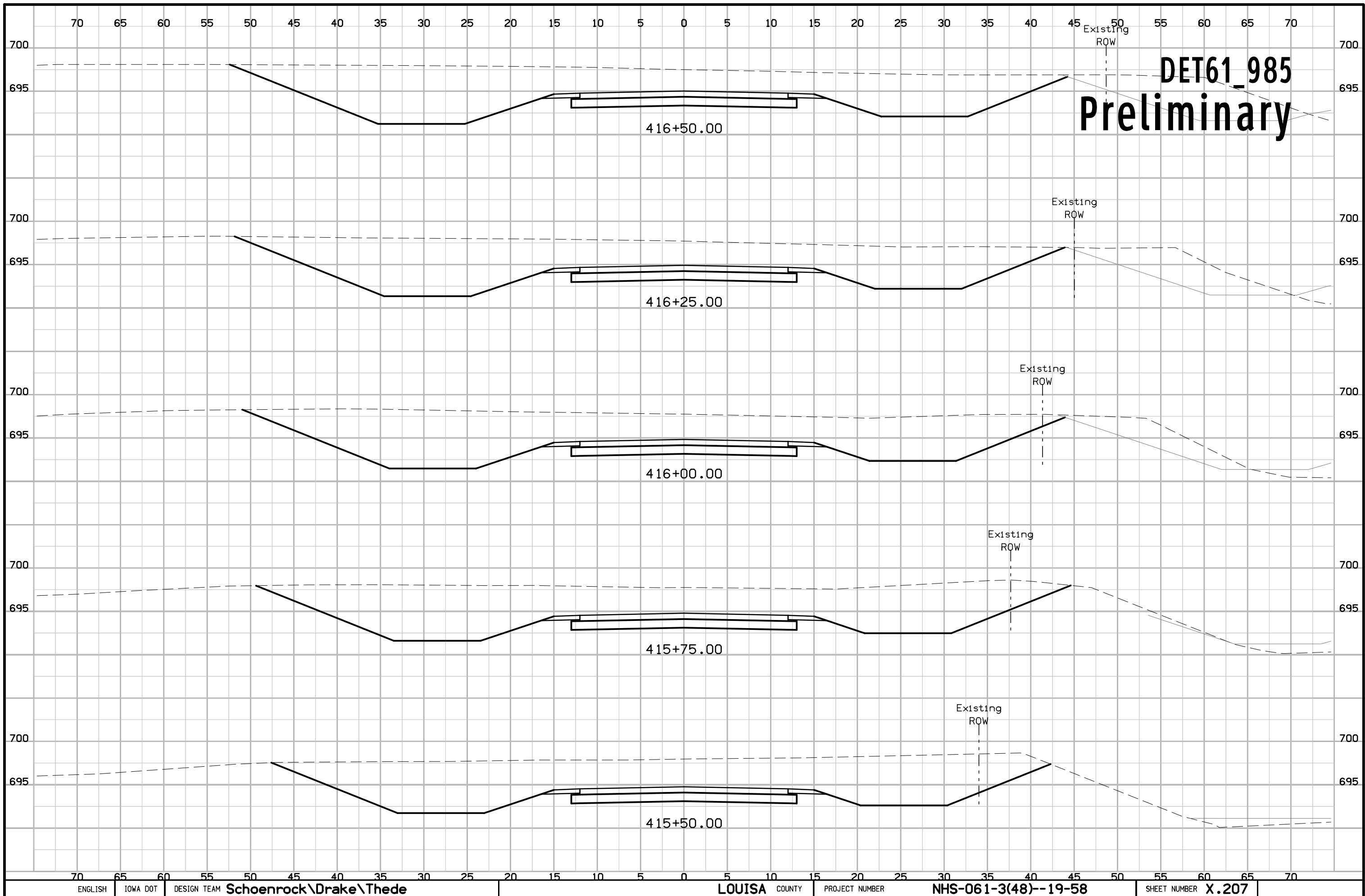


DET61_985 Preliminary



DET61_985 Preliminary





DET61_985
Preliminary

416+50.00

416+25.00

416+00.00

415+75.00

415+50.00

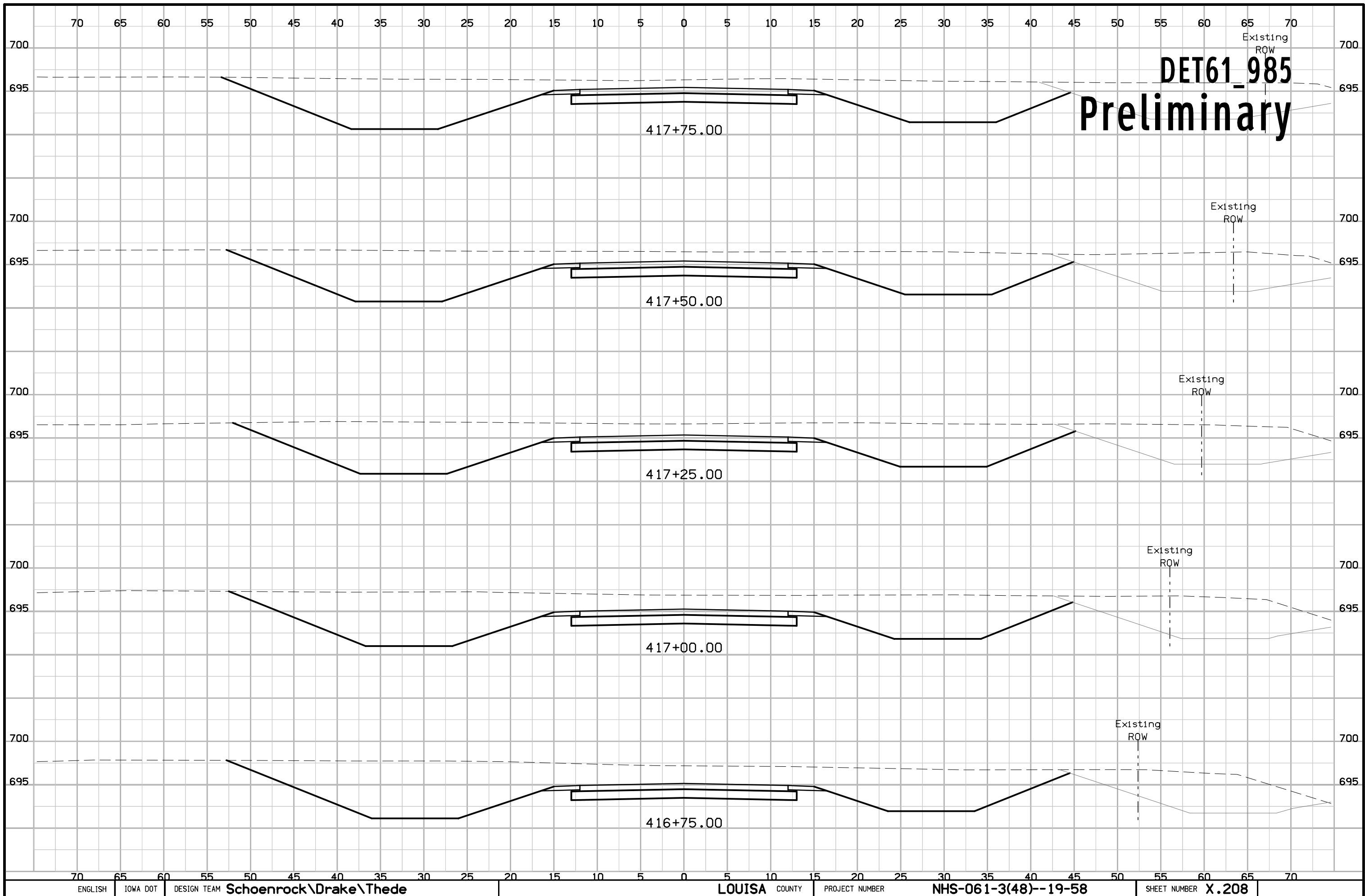
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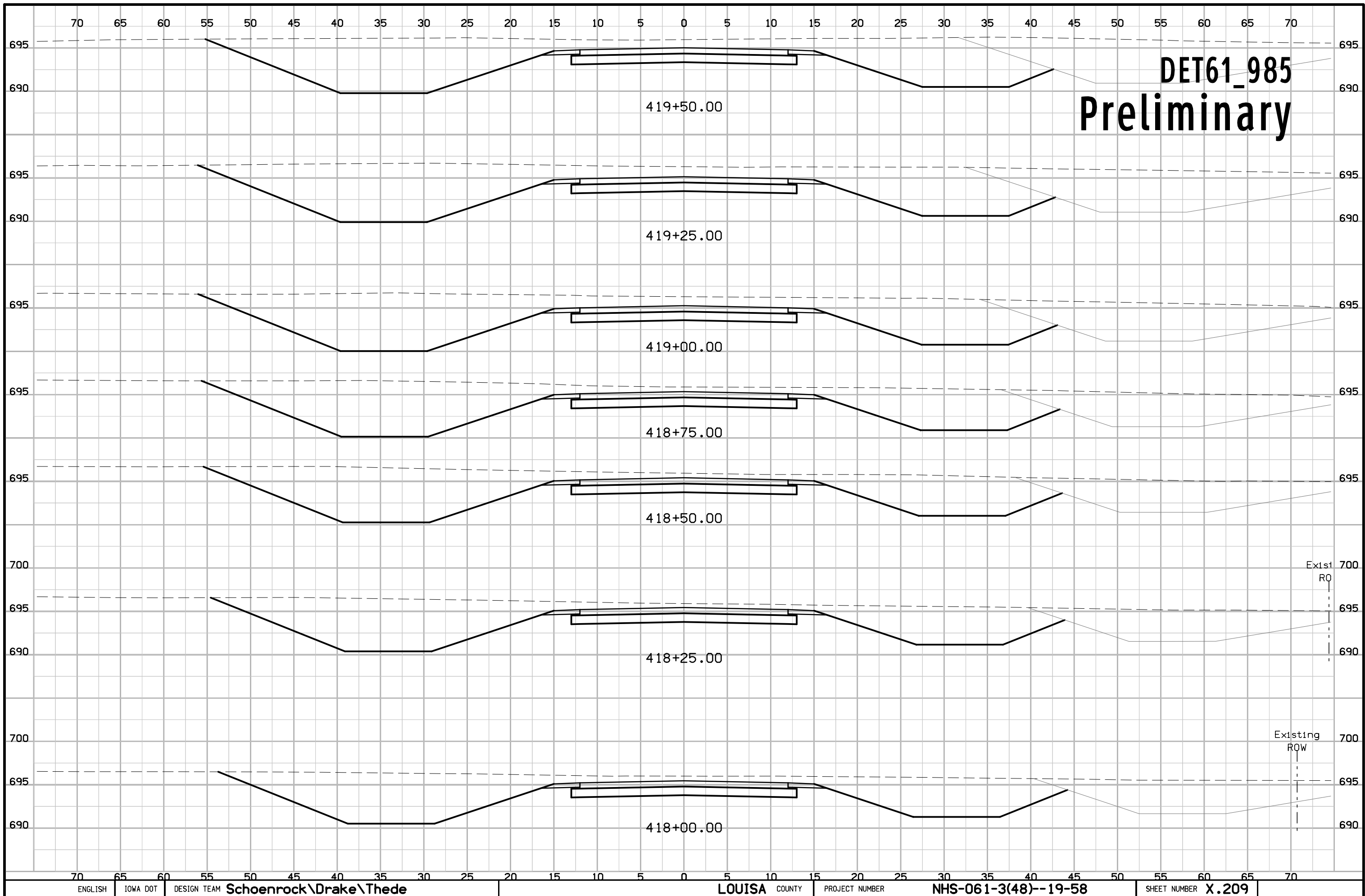
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ROW

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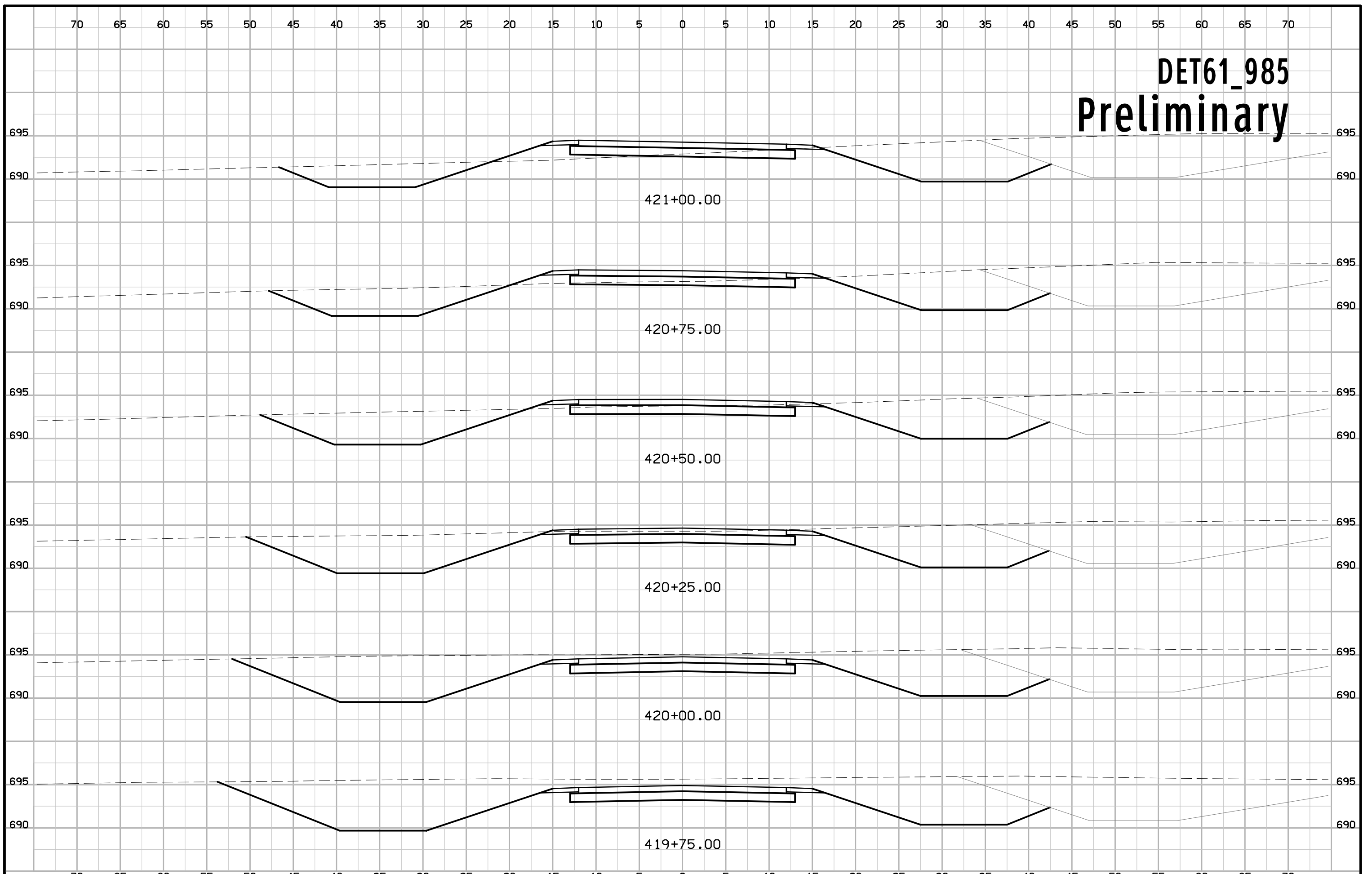
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ROW

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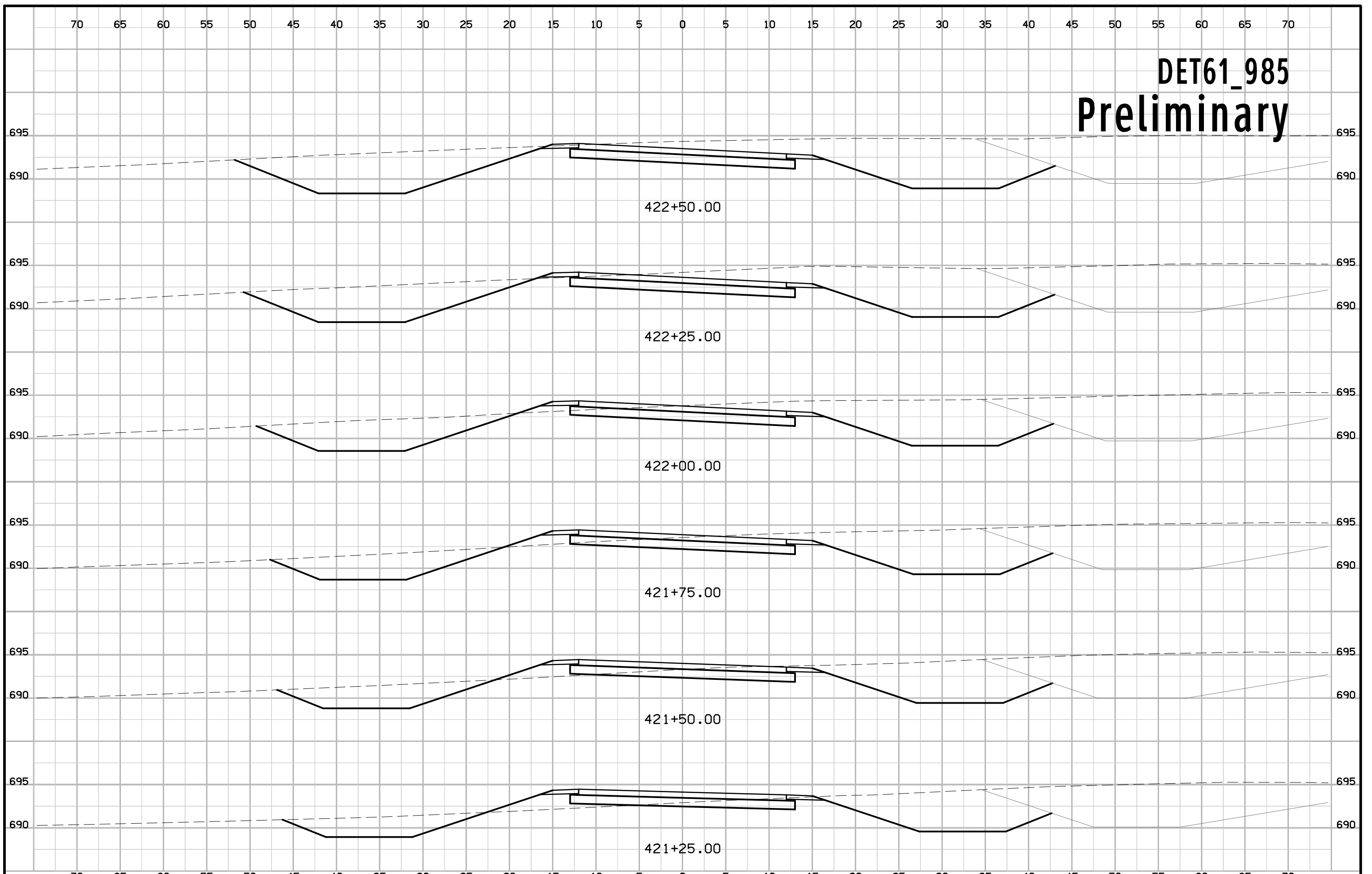




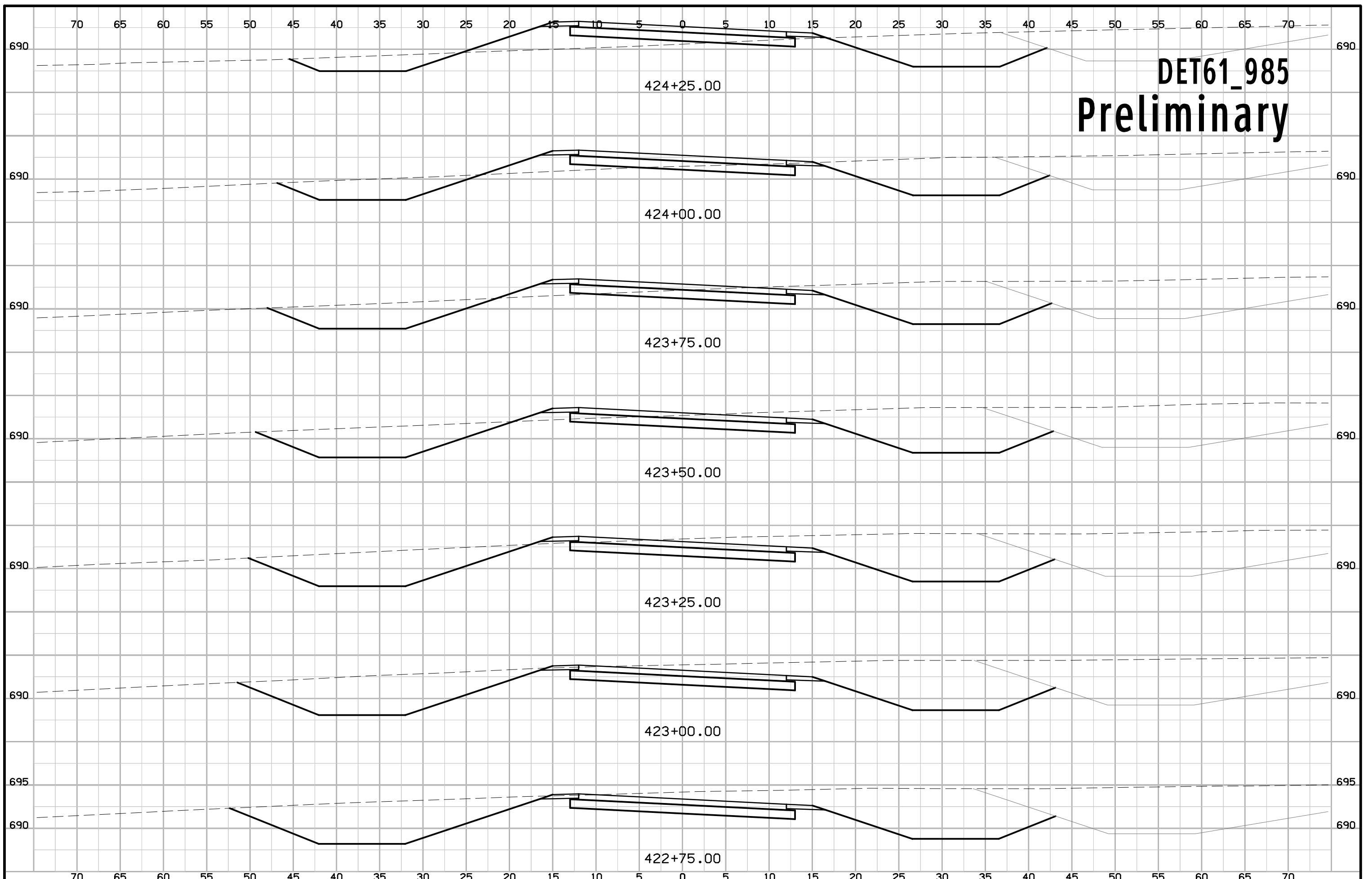
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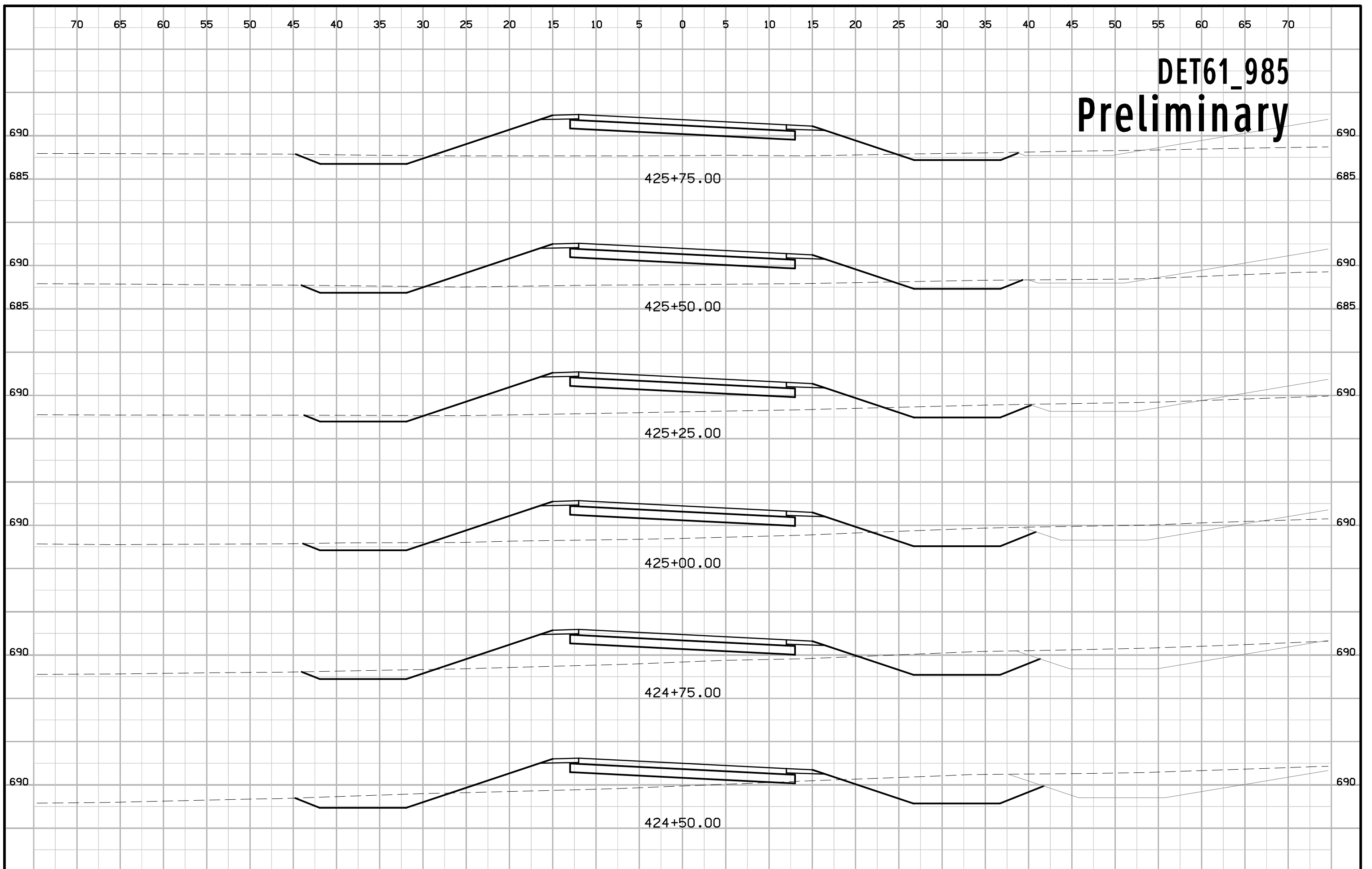
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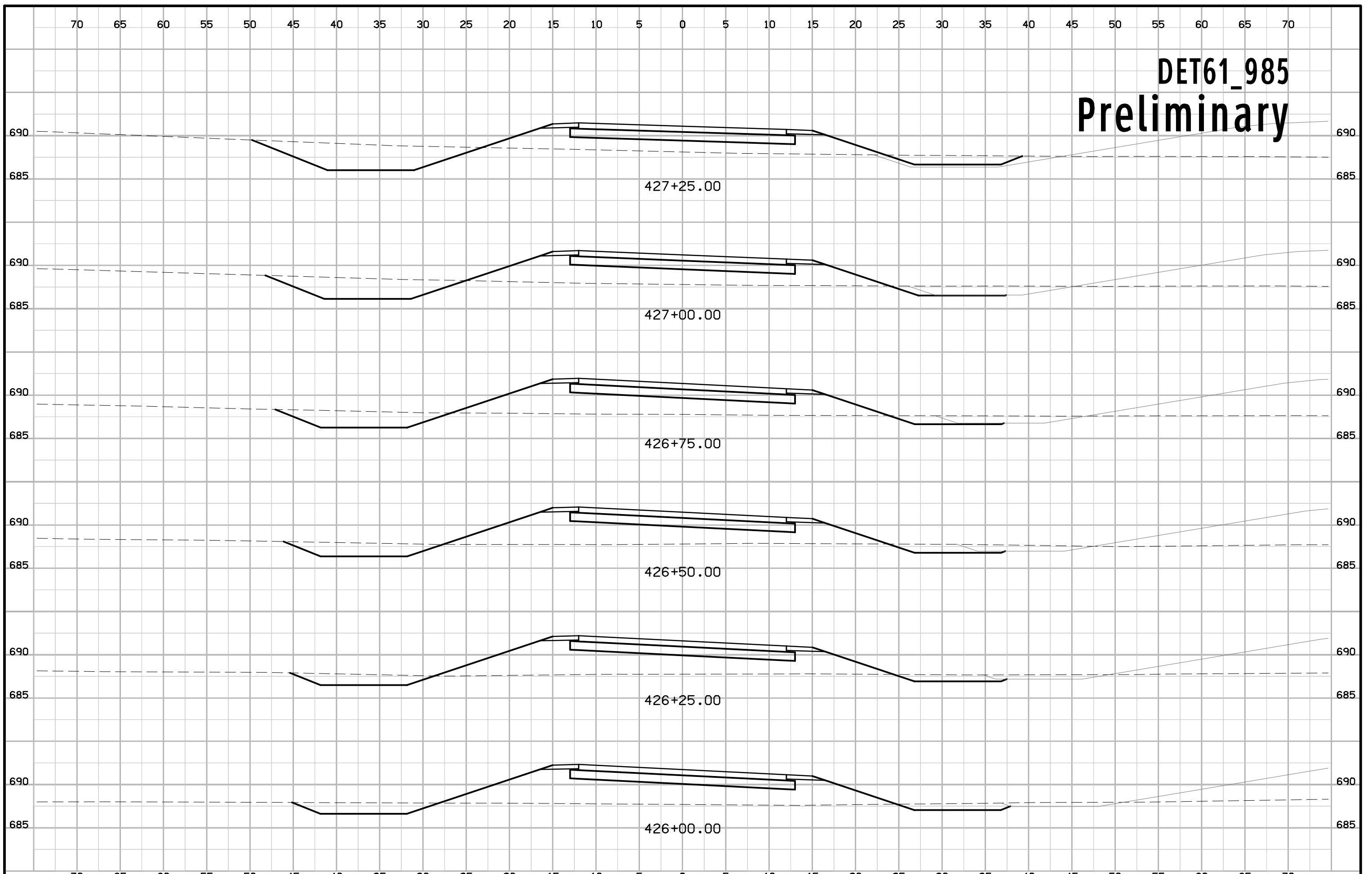
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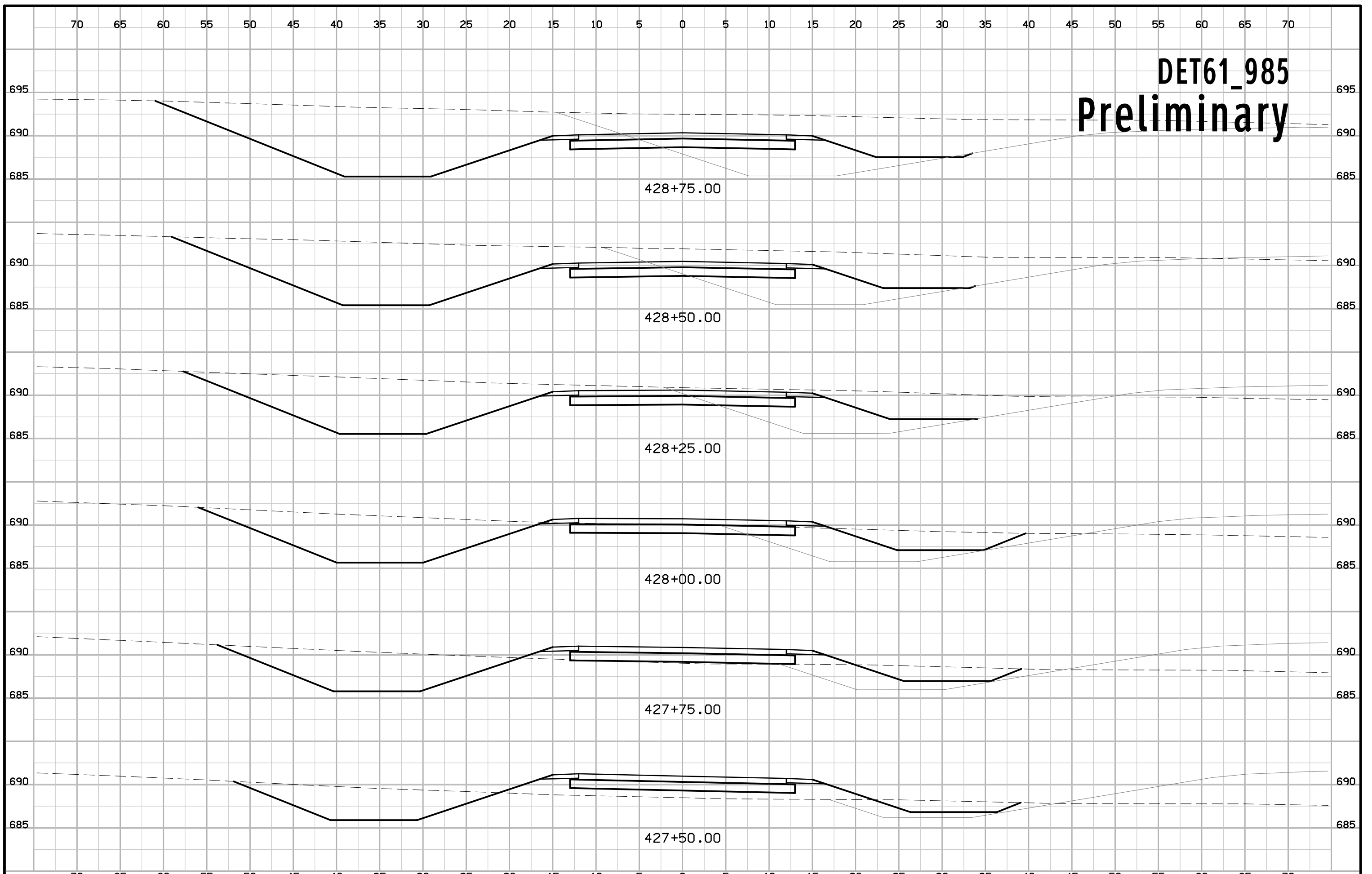
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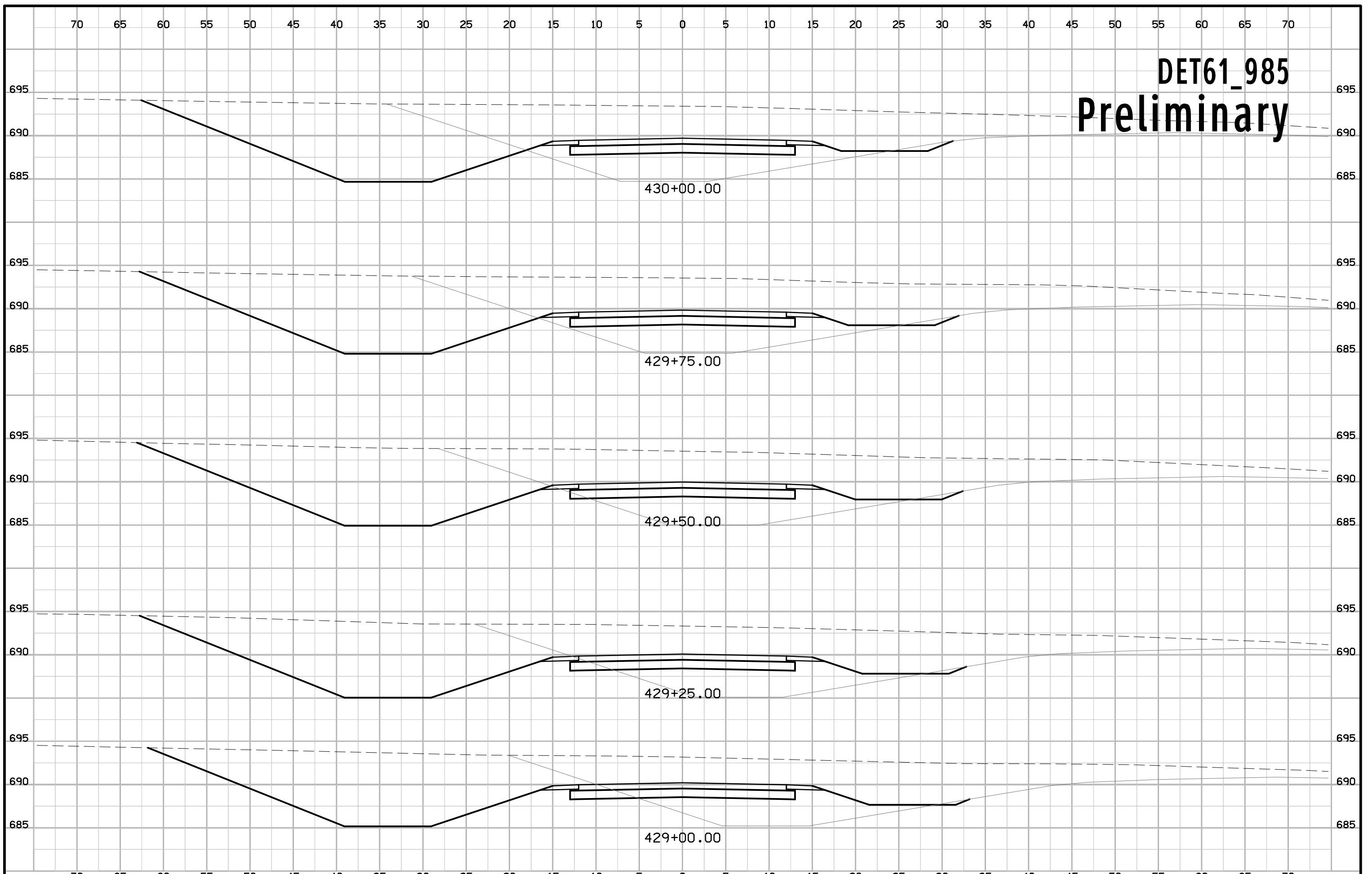
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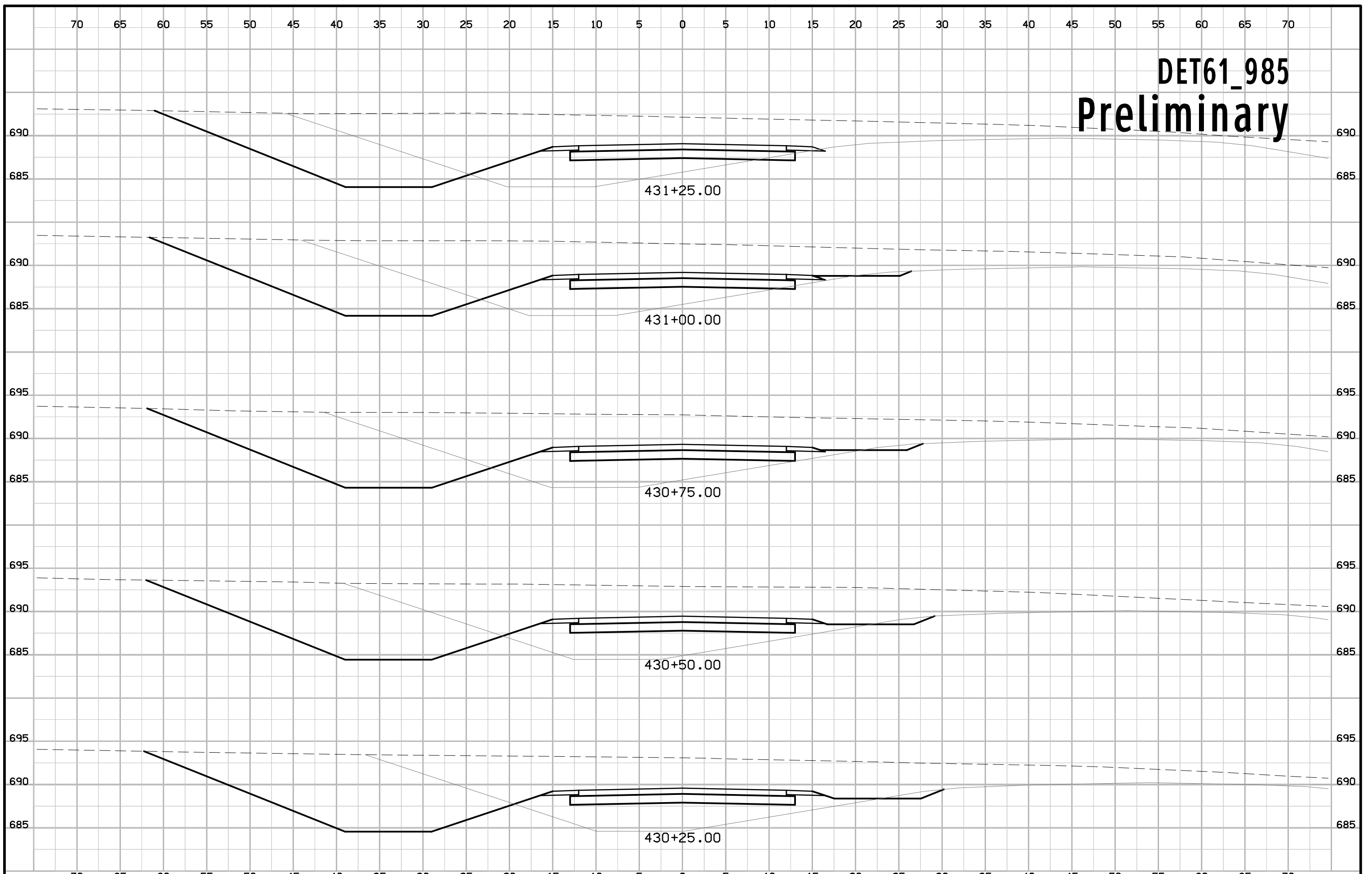
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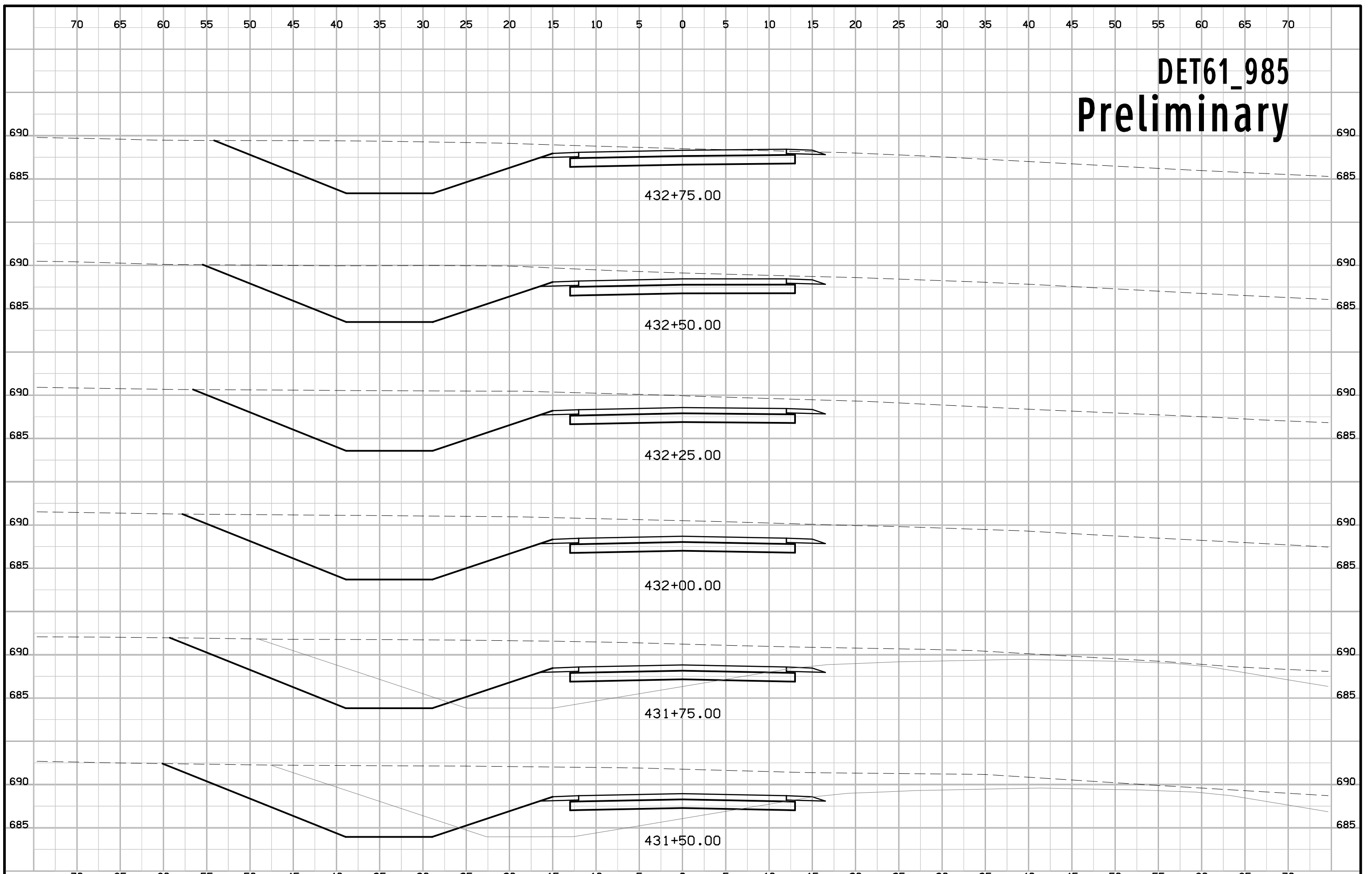
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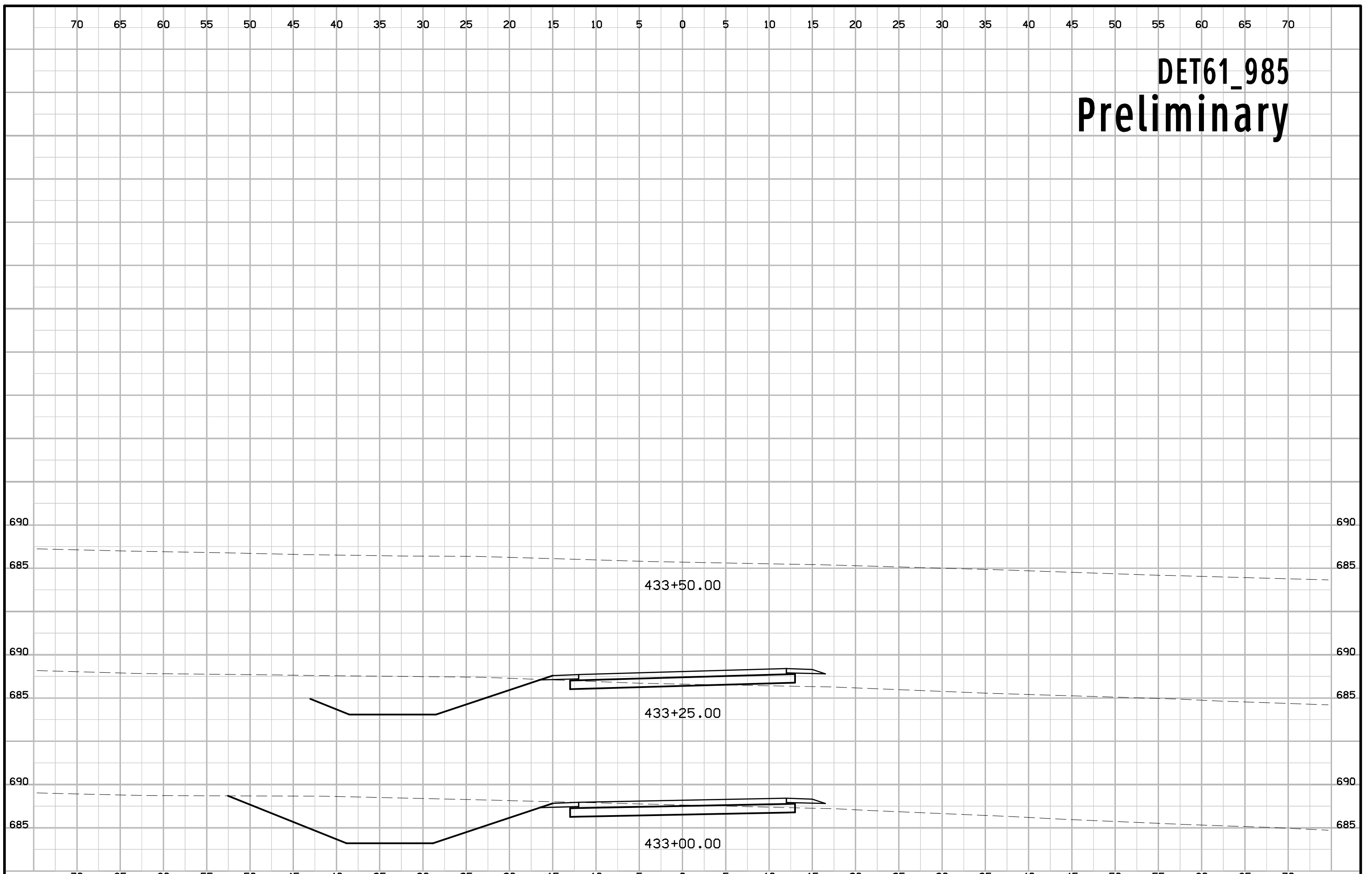
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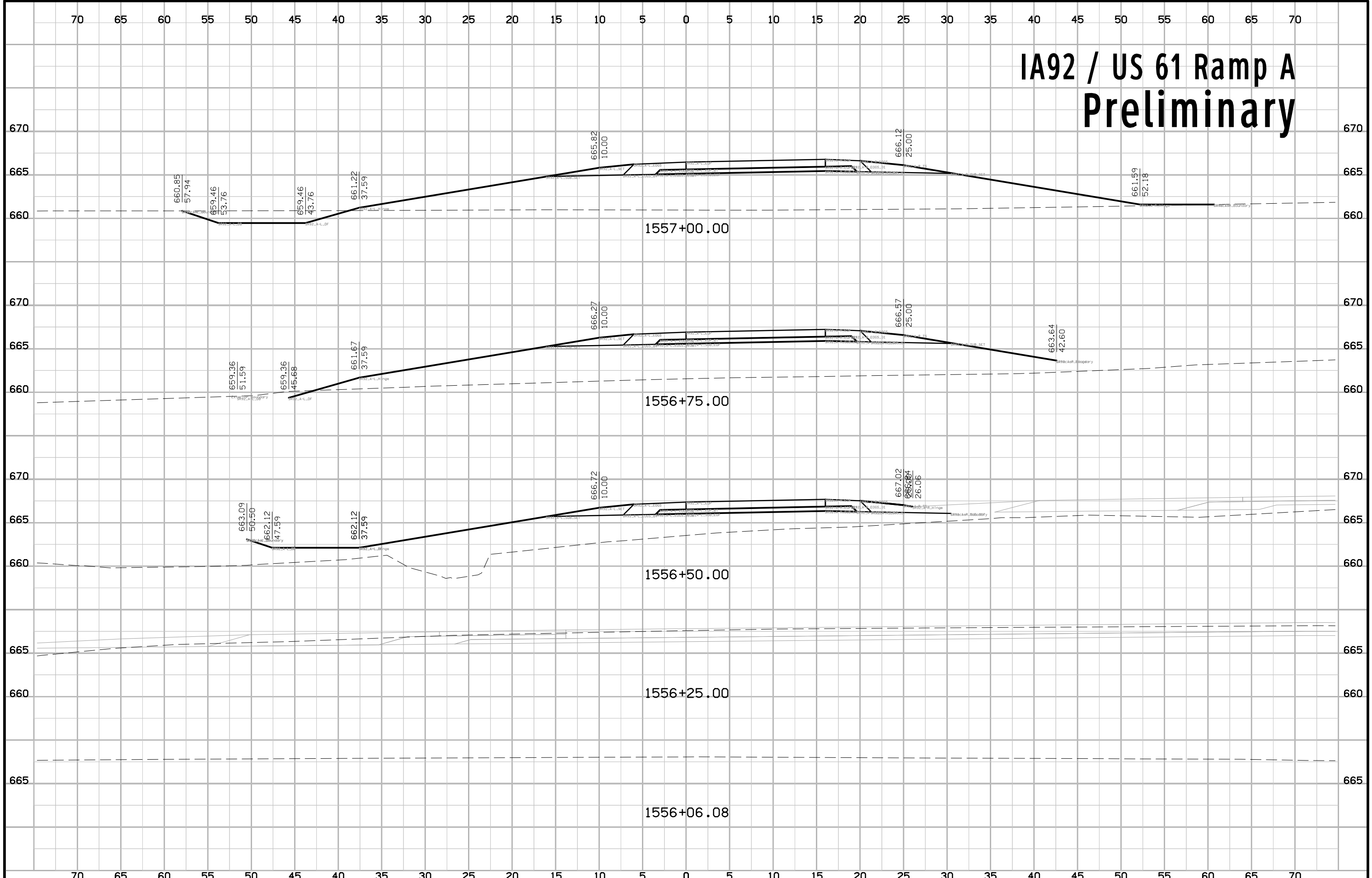
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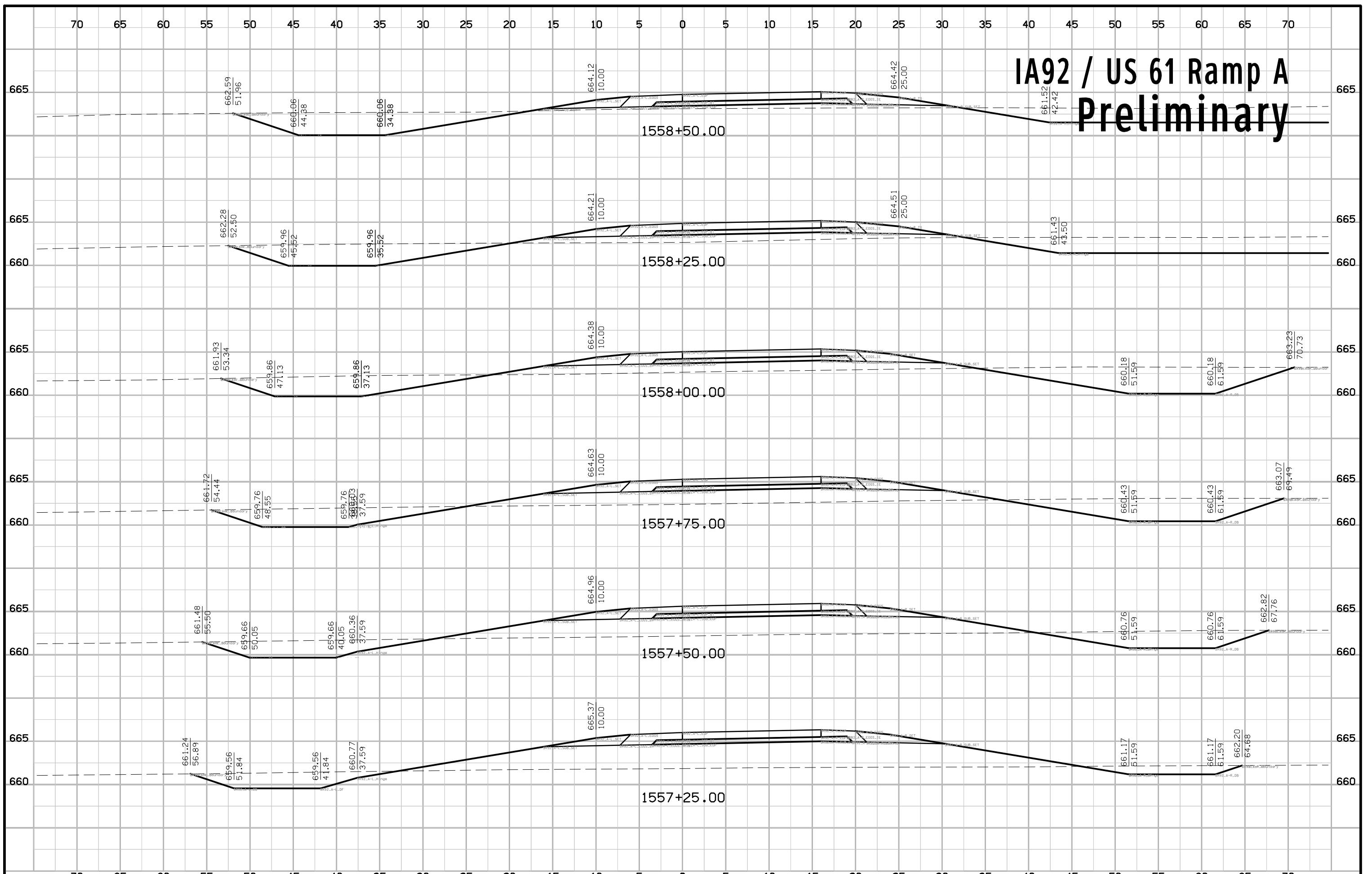
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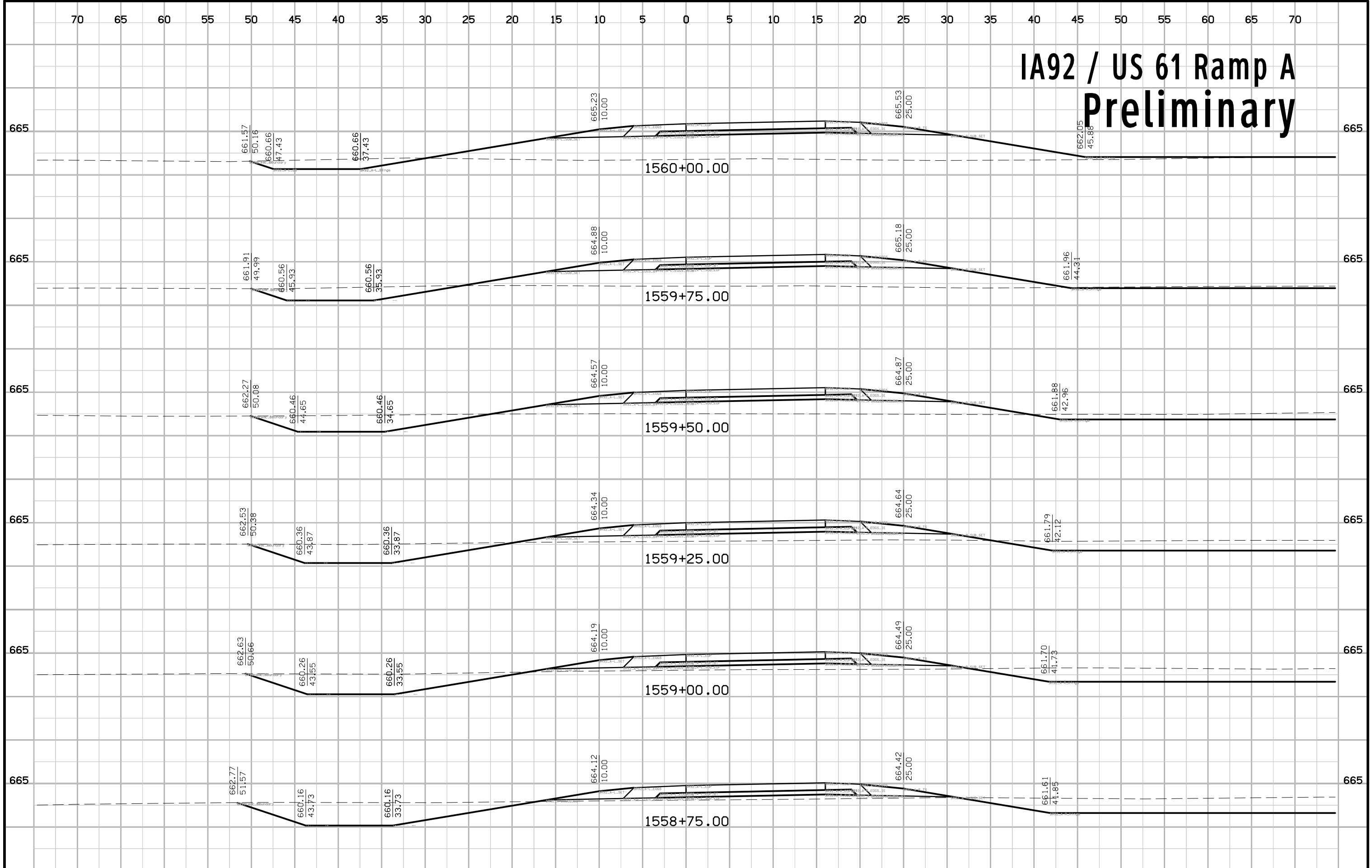
IA92 / US 61 Ramp A Preliminary



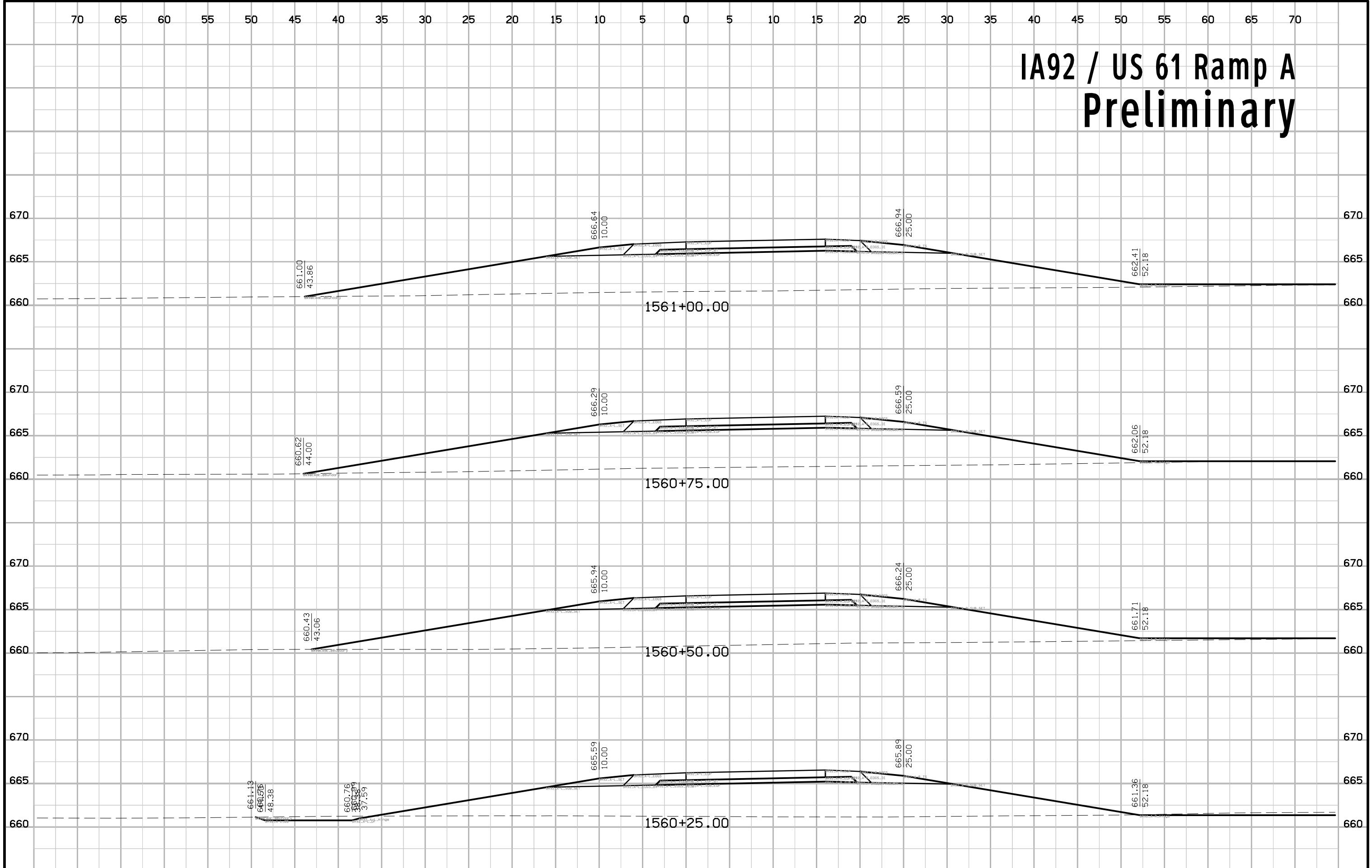
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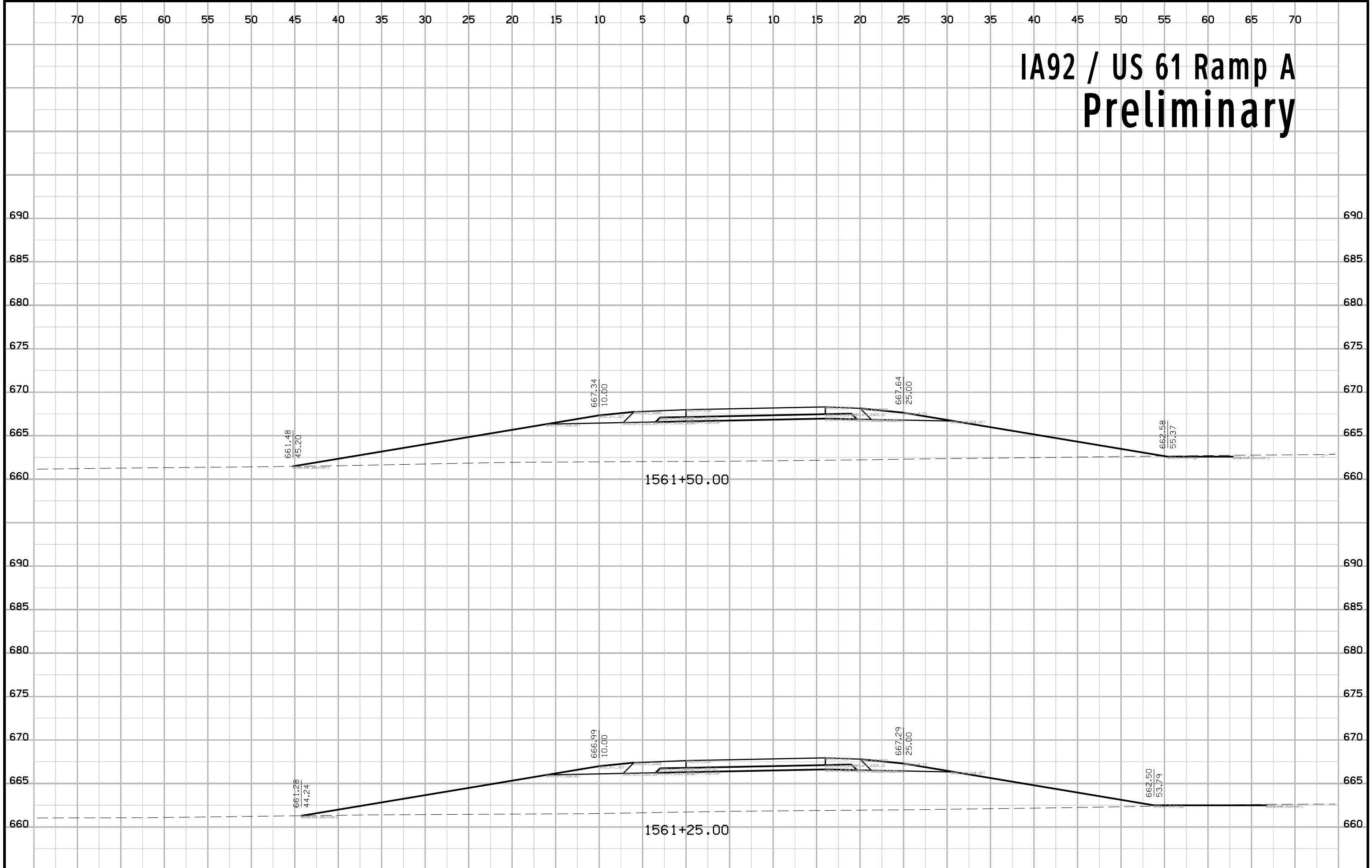
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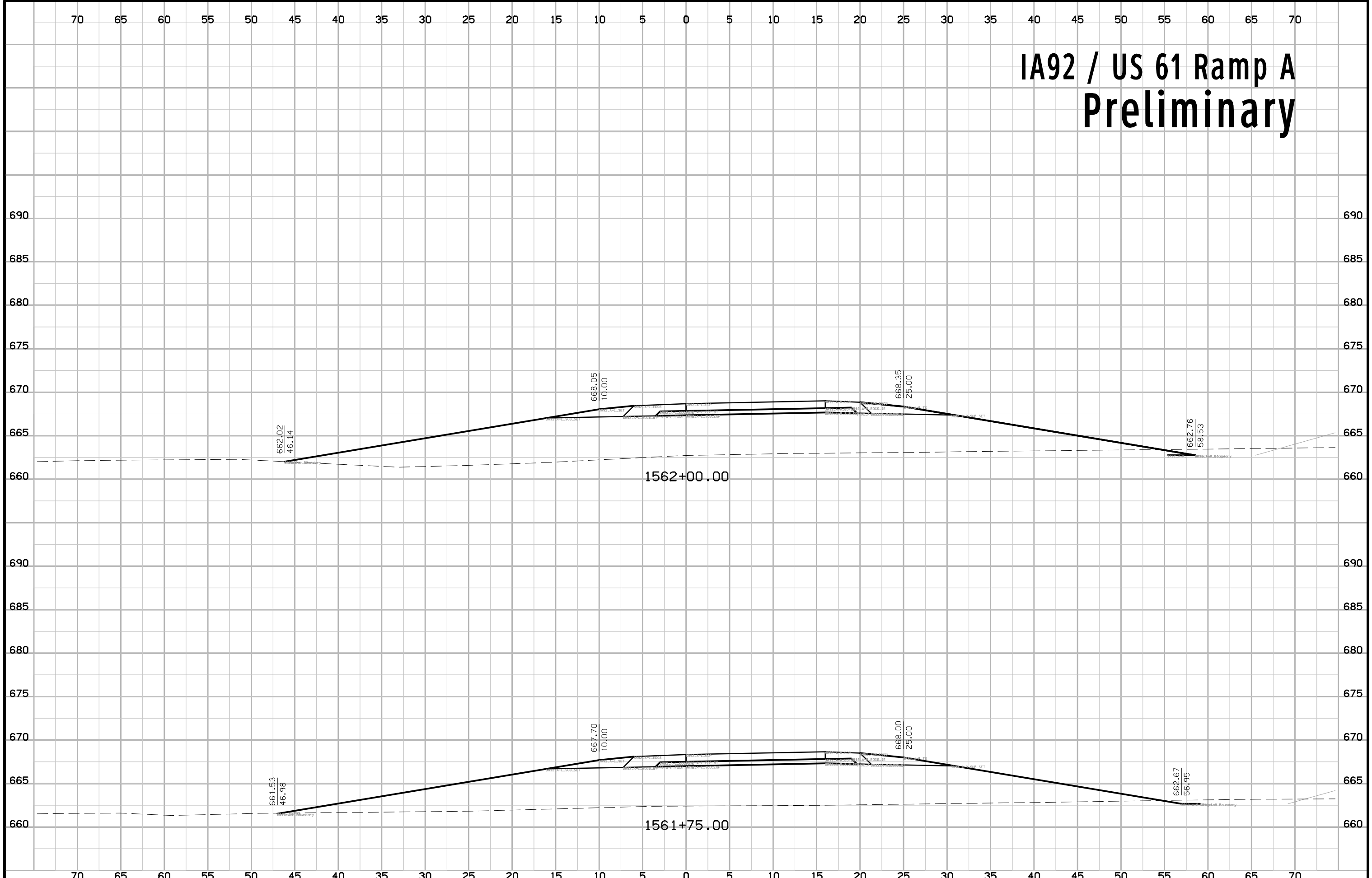
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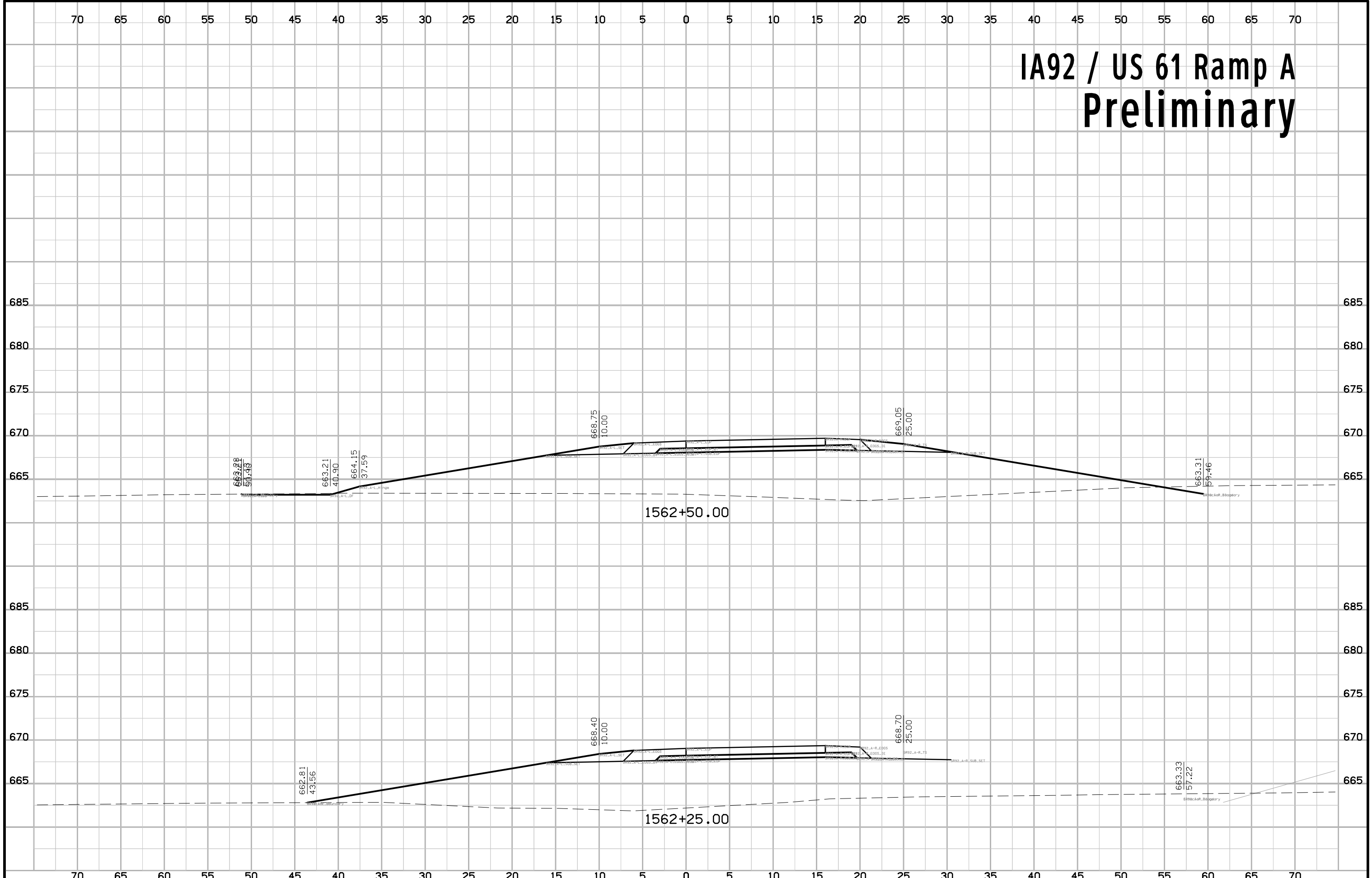
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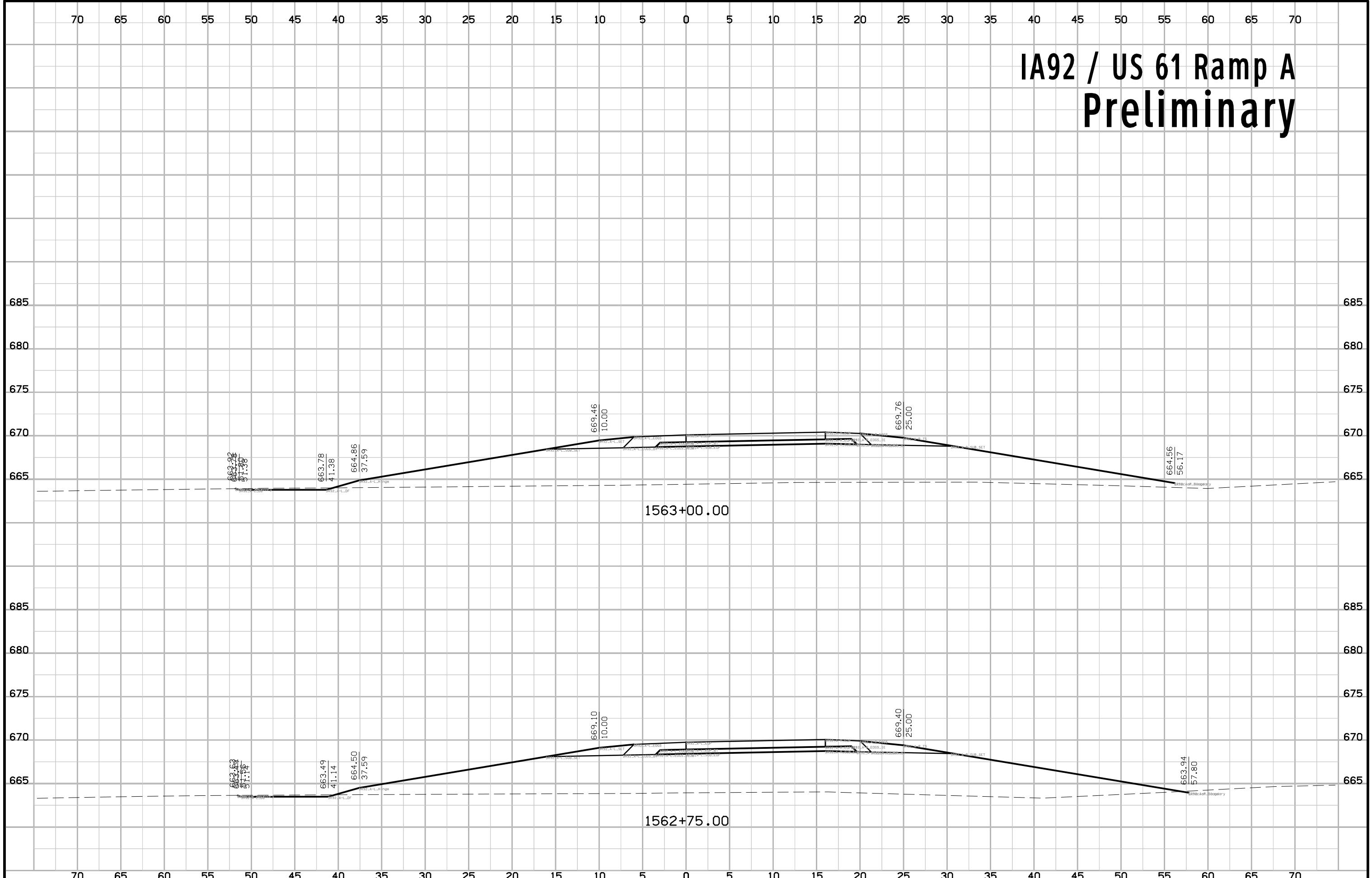
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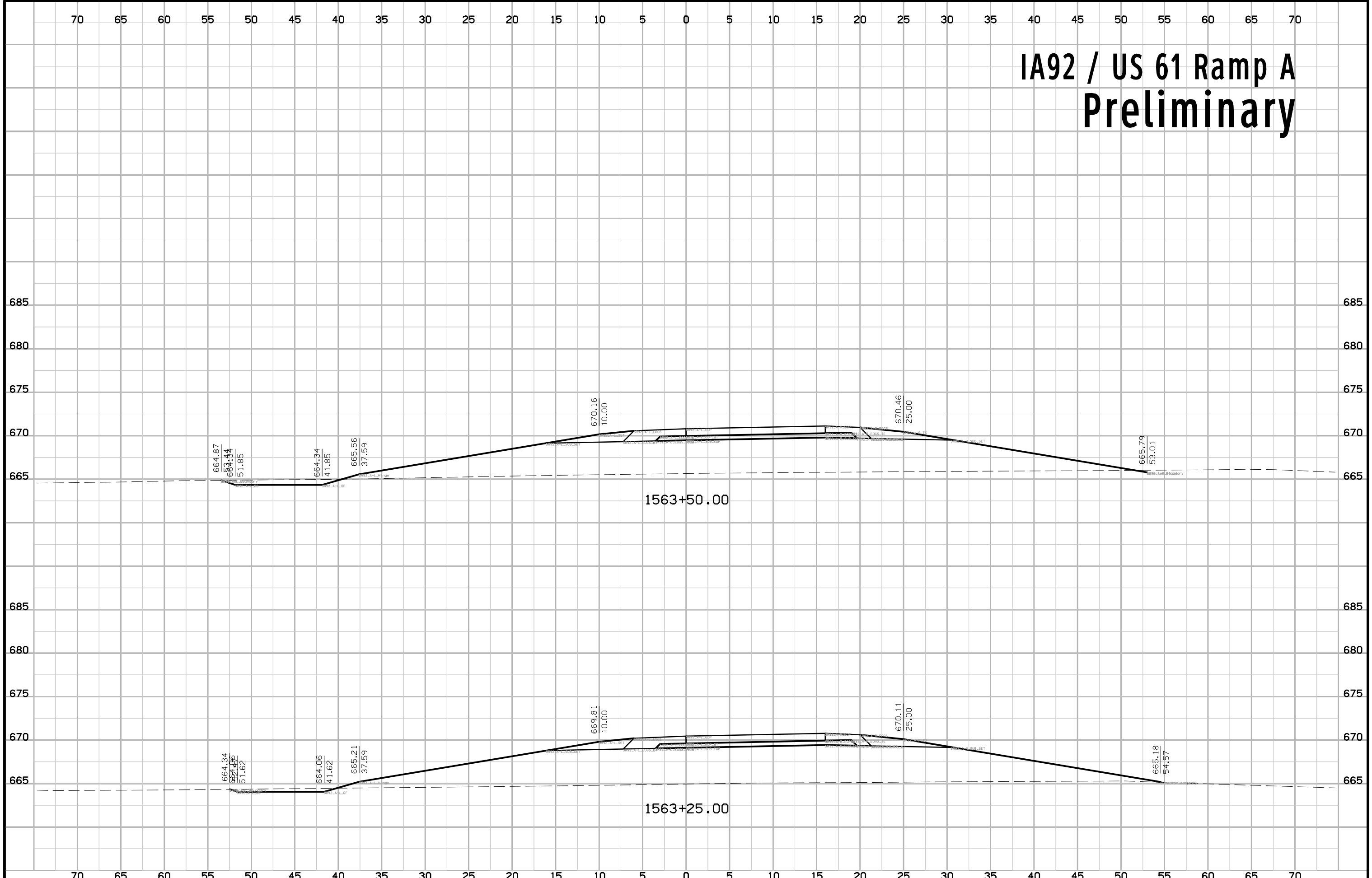
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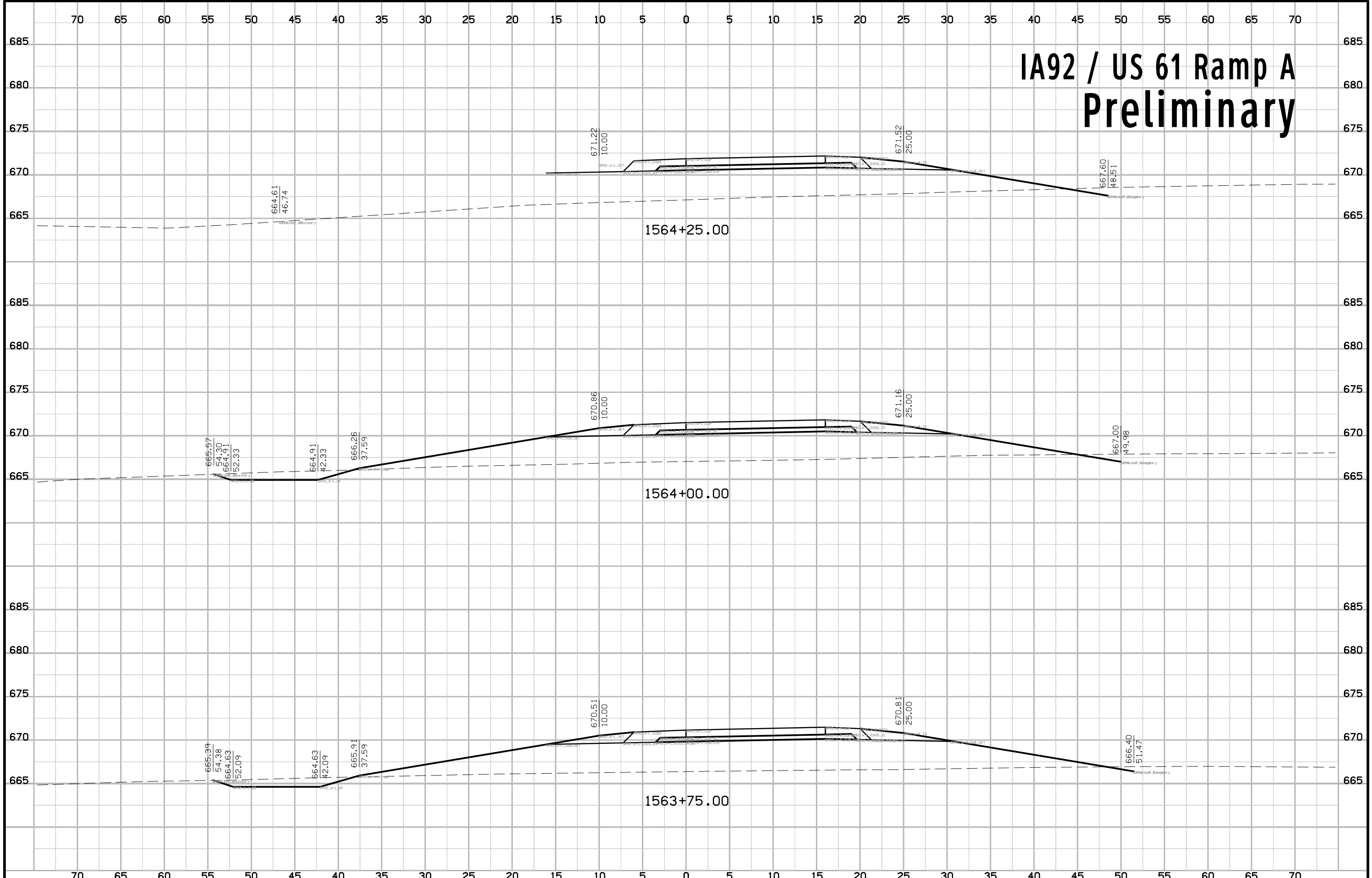
IA92 / US 61 Ramp A Preliminary



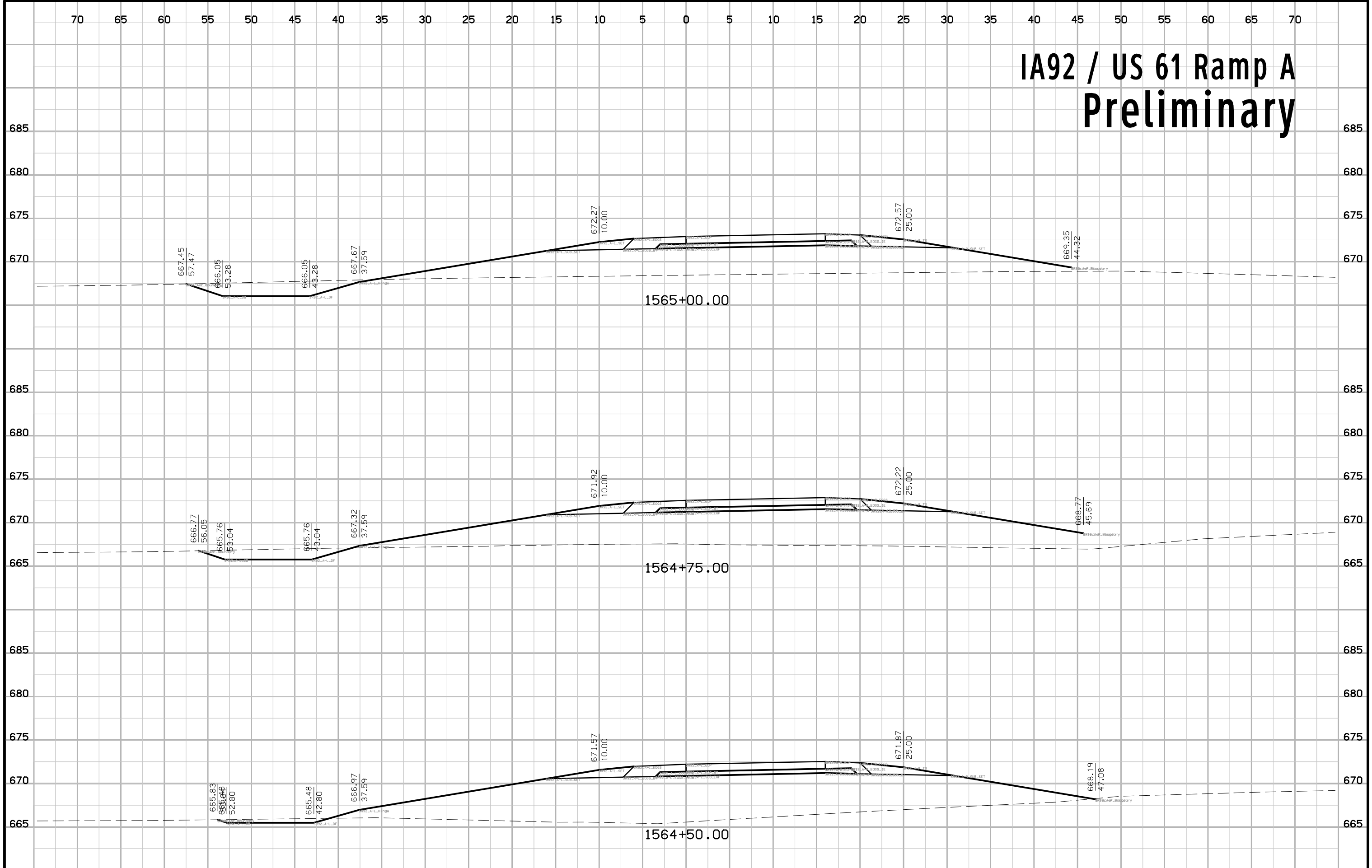
IA92 / US 61 Ramp A Preliminary



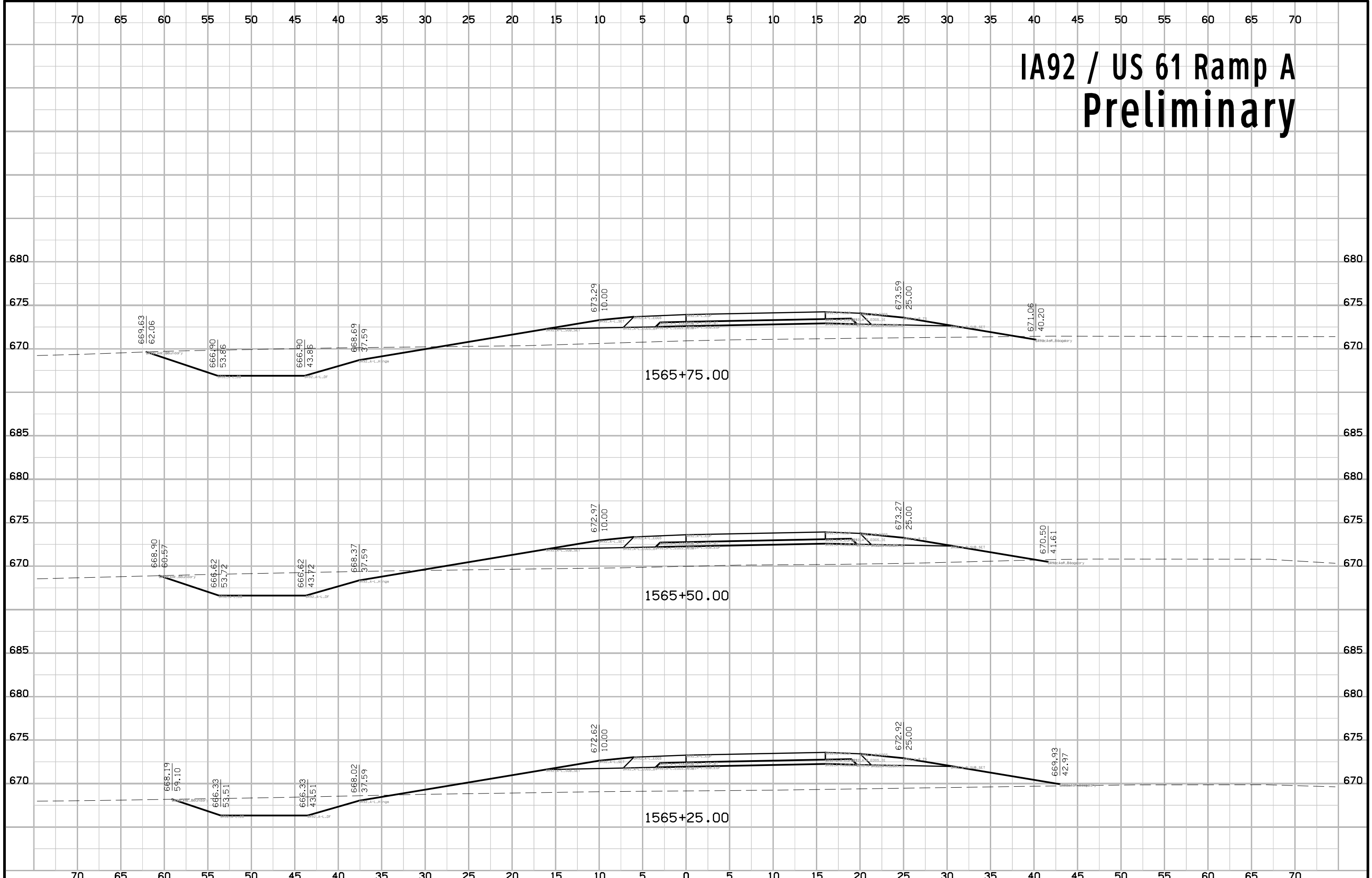
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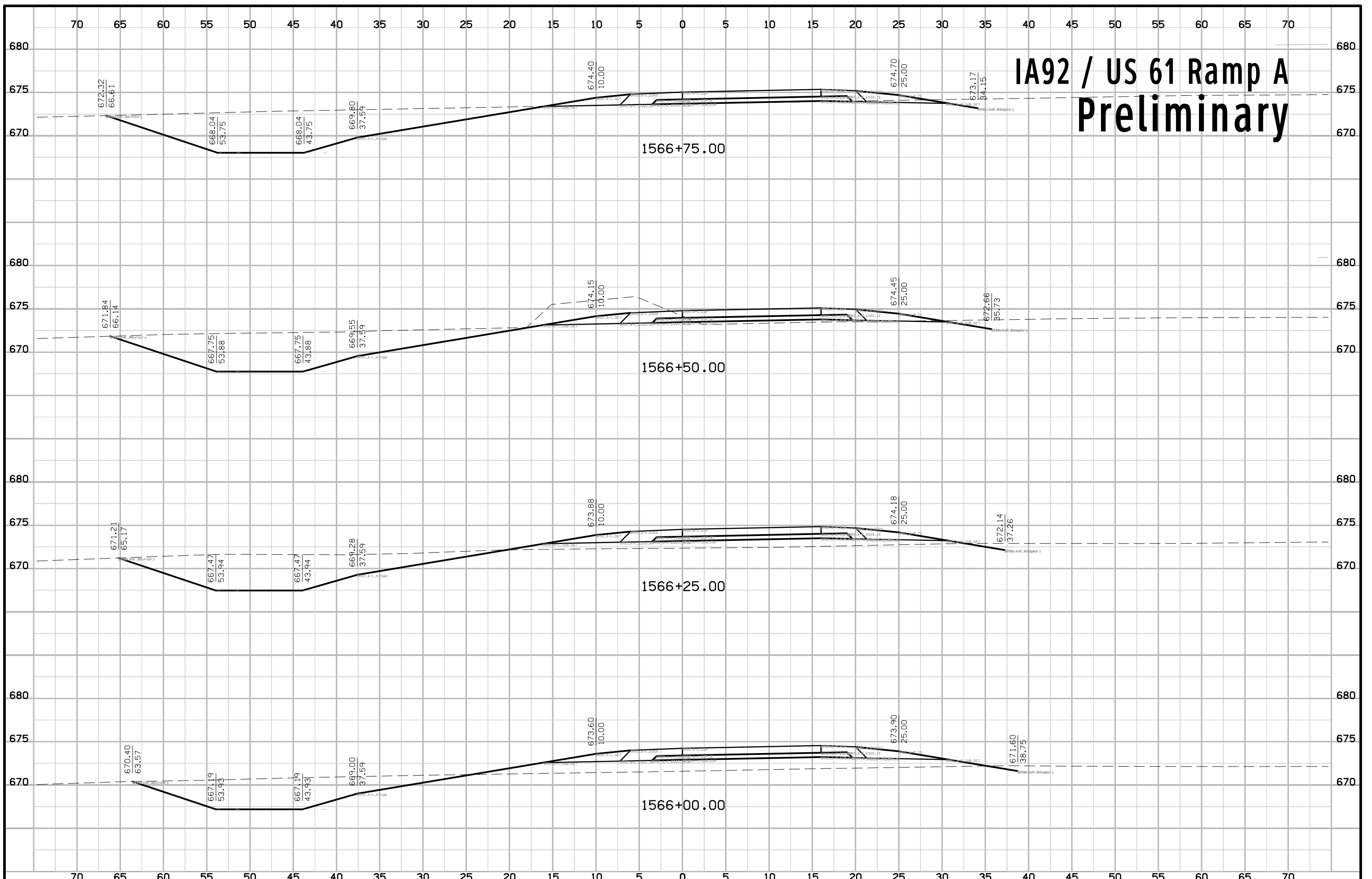
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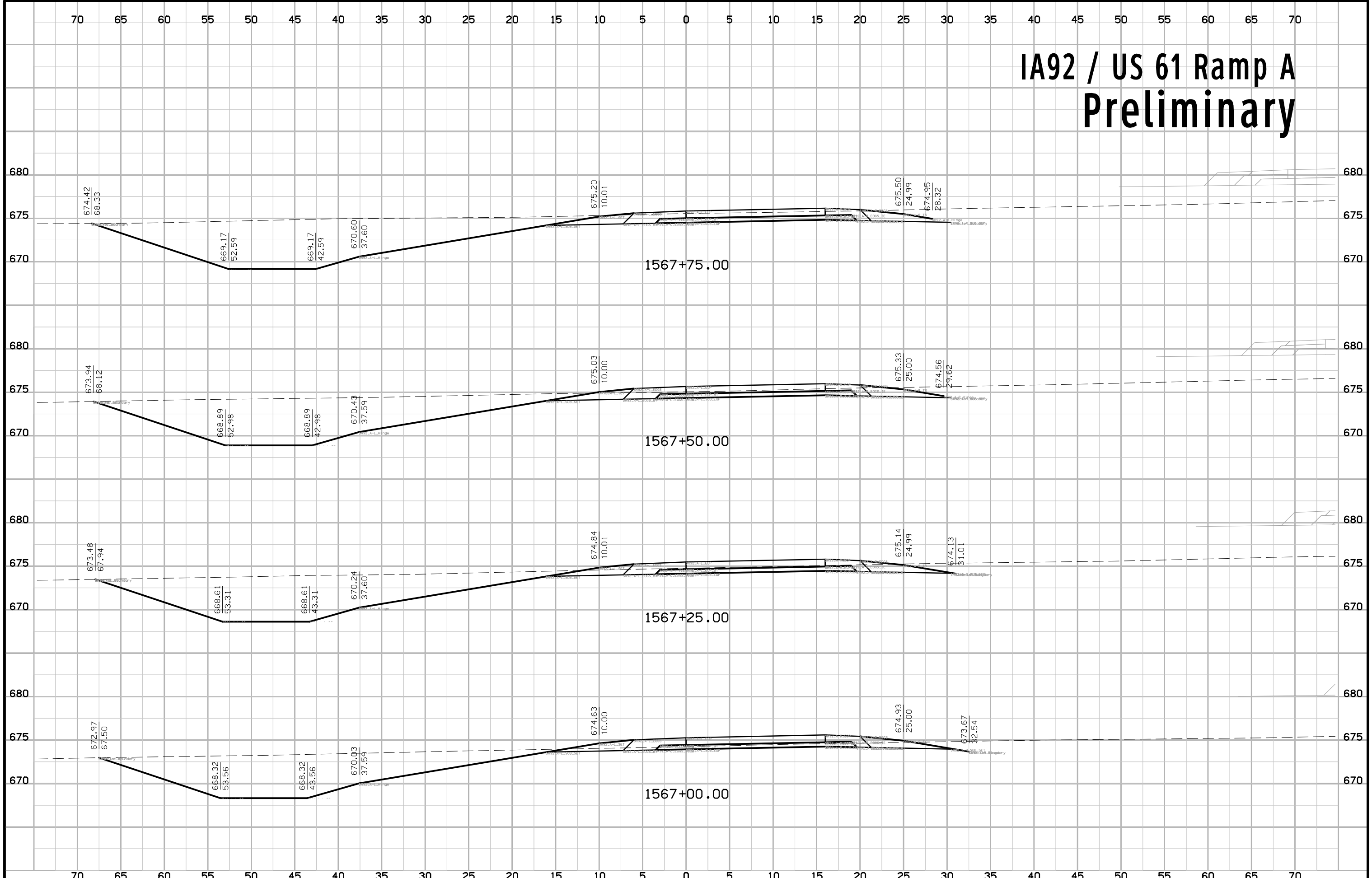
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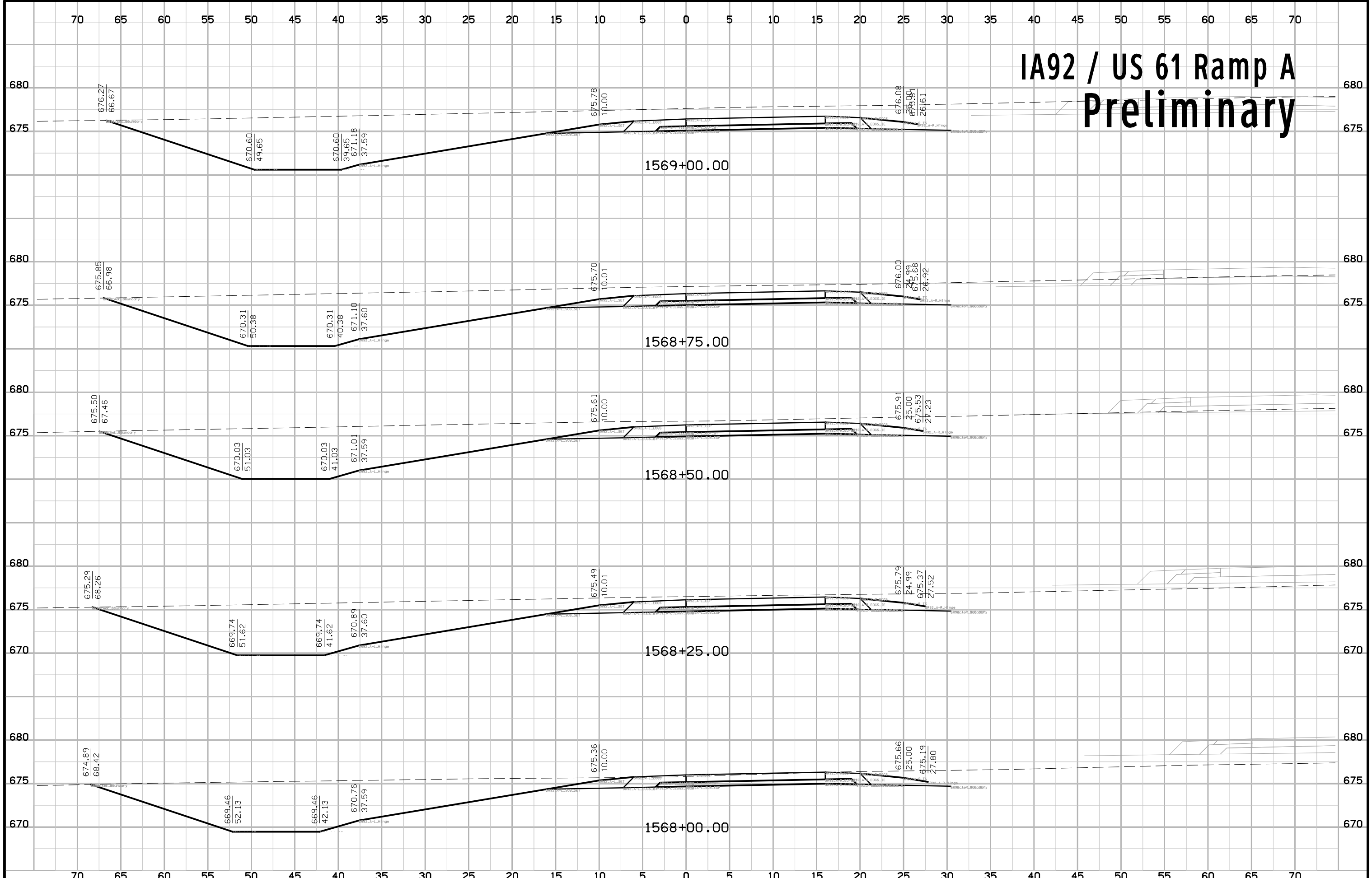
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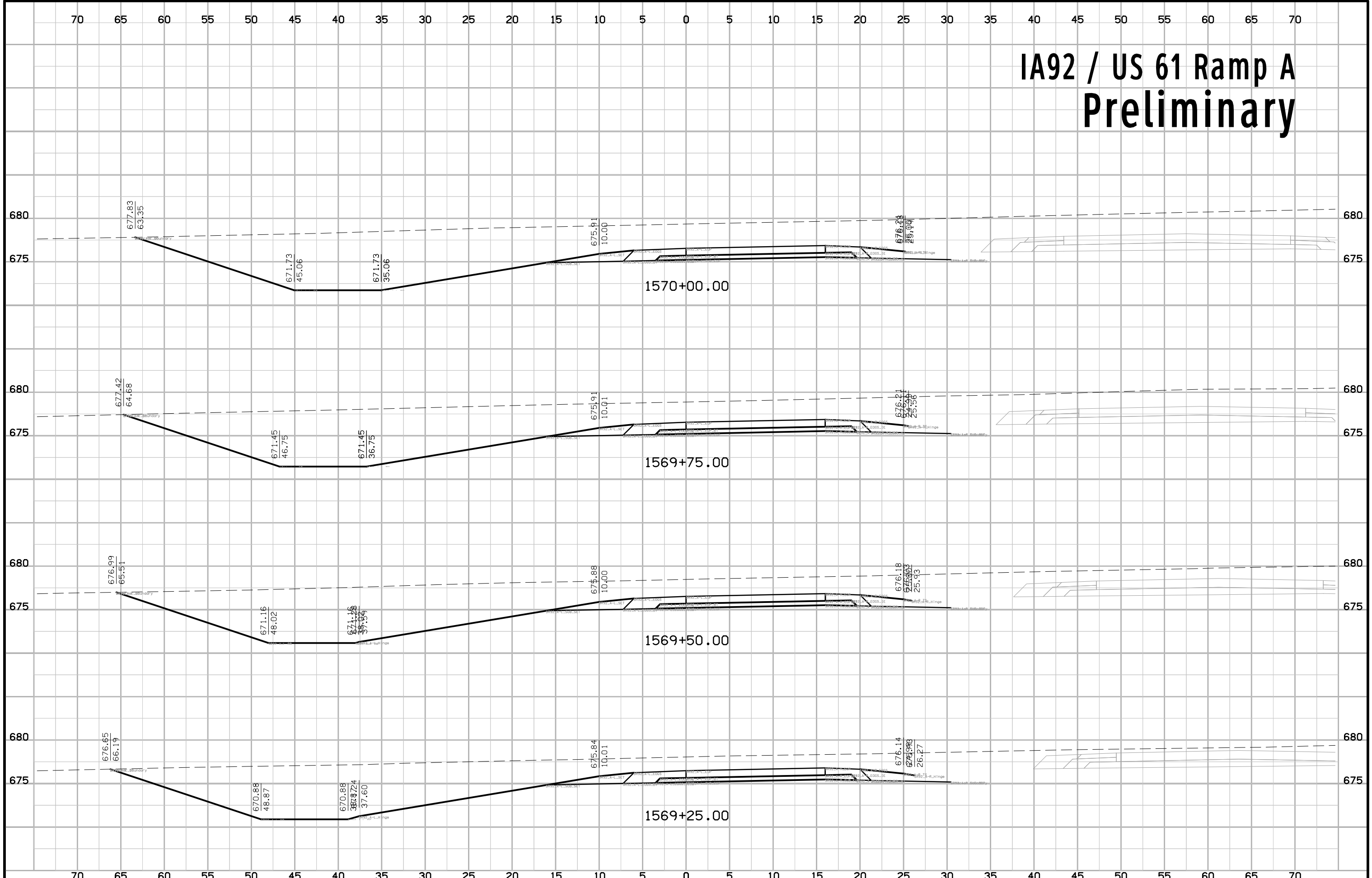
IA92 / US 61 Ramp A Preliminary



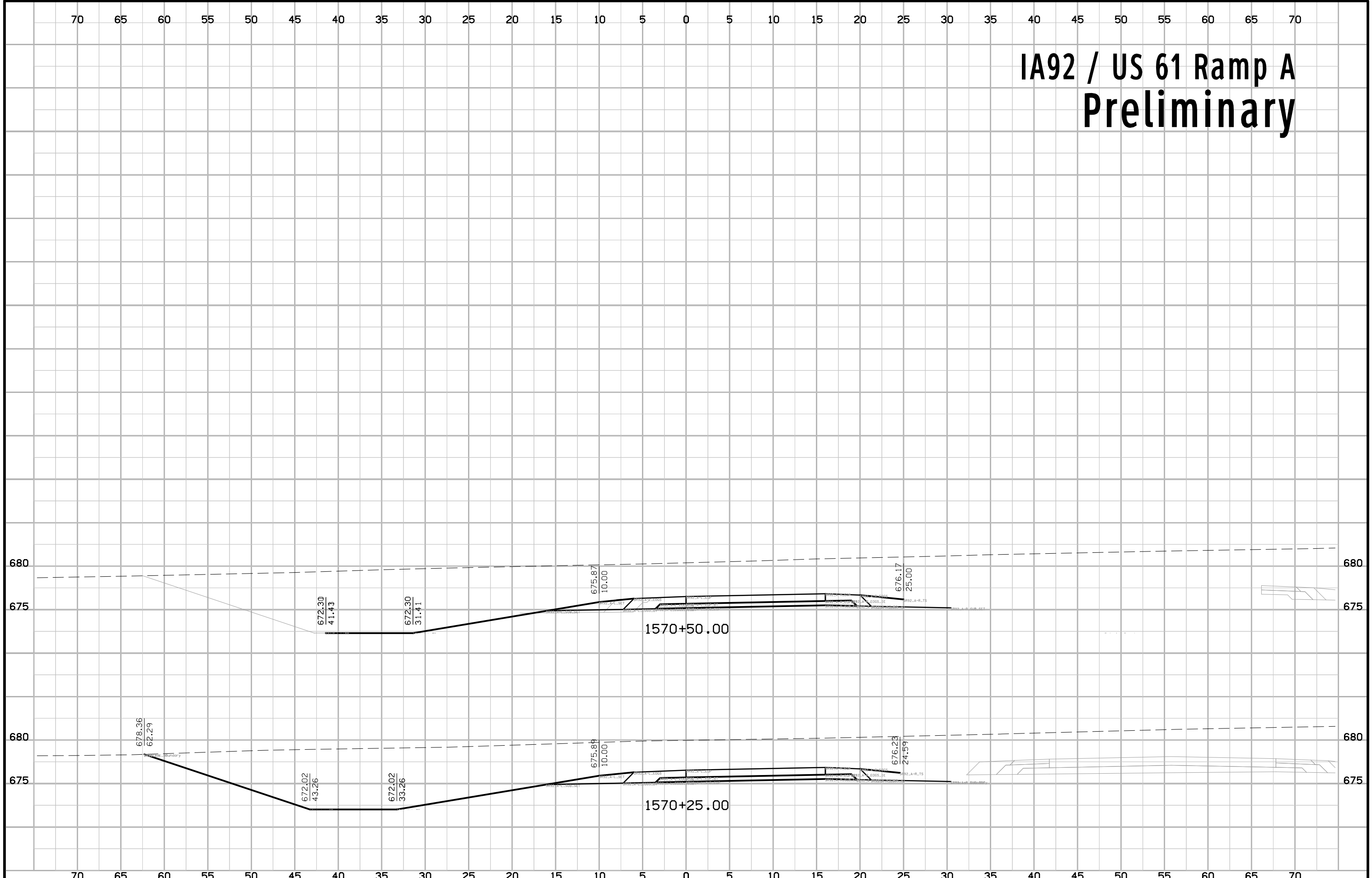
IA92 / US 61 Ramp A Preliminary



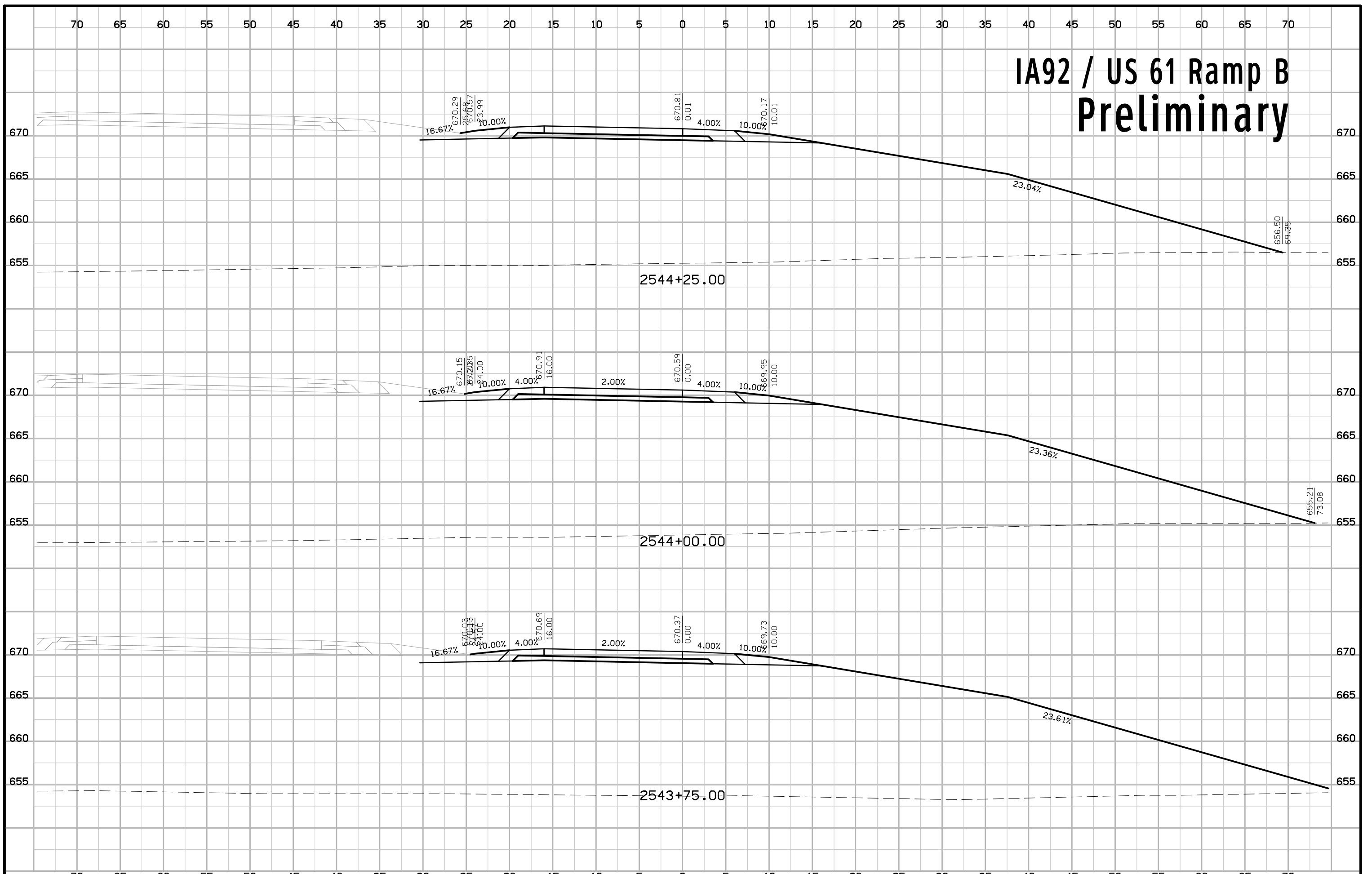
IA92 / US 61 Ramp A Preliminary



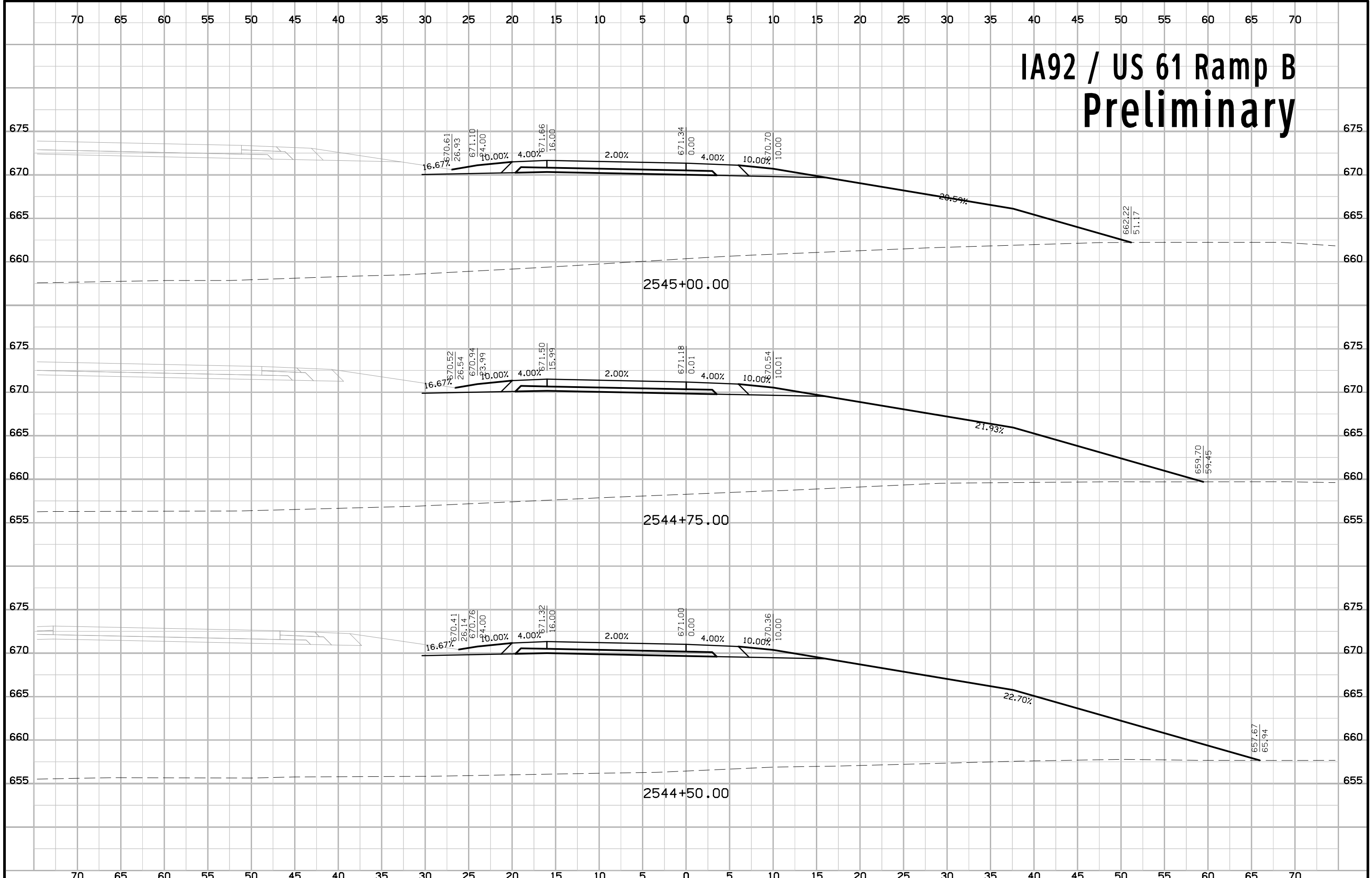
IA92 / US 61 Ramp A Preliminary



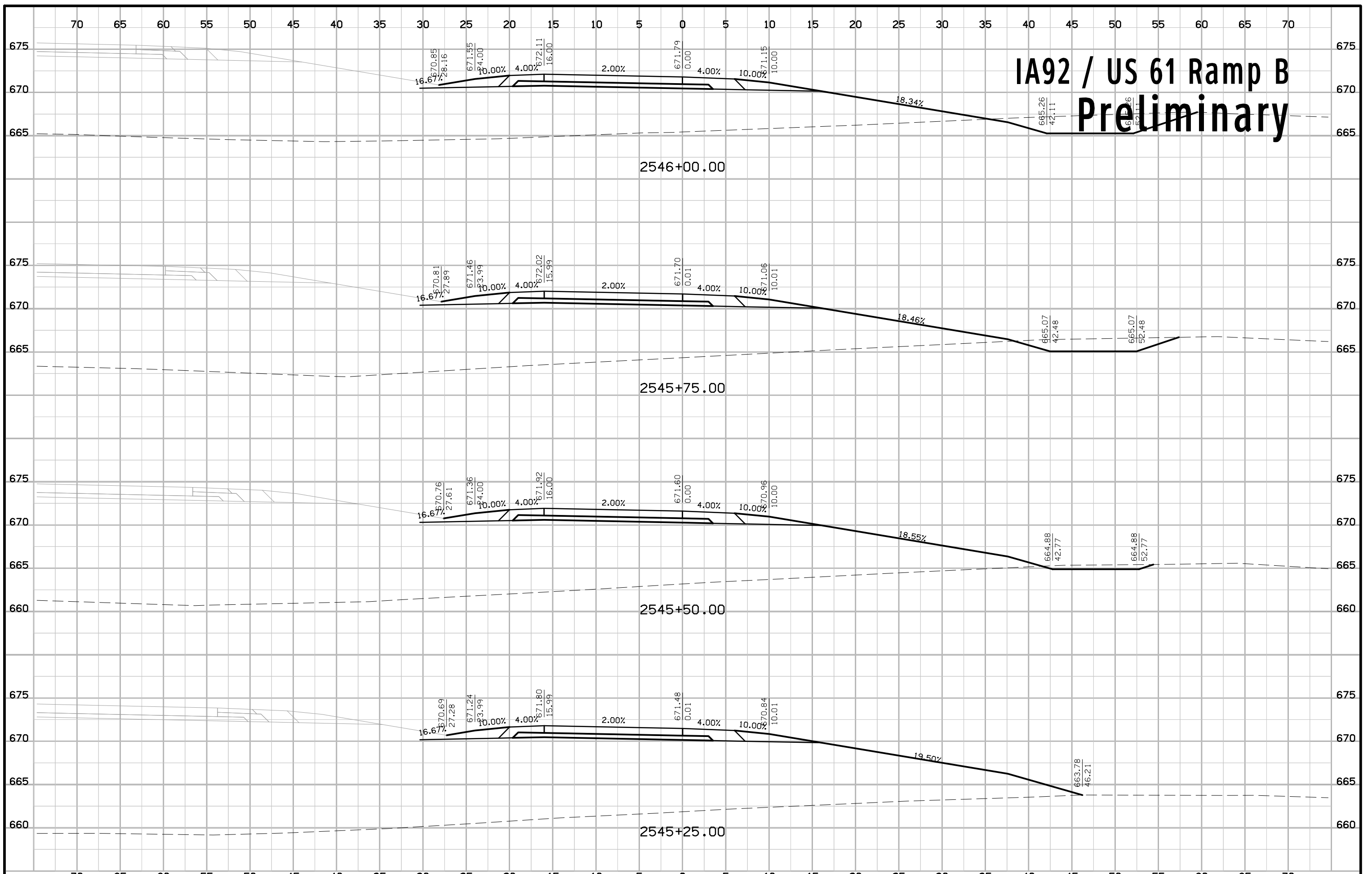
IA92 / US 61 Ramp B Preliminary



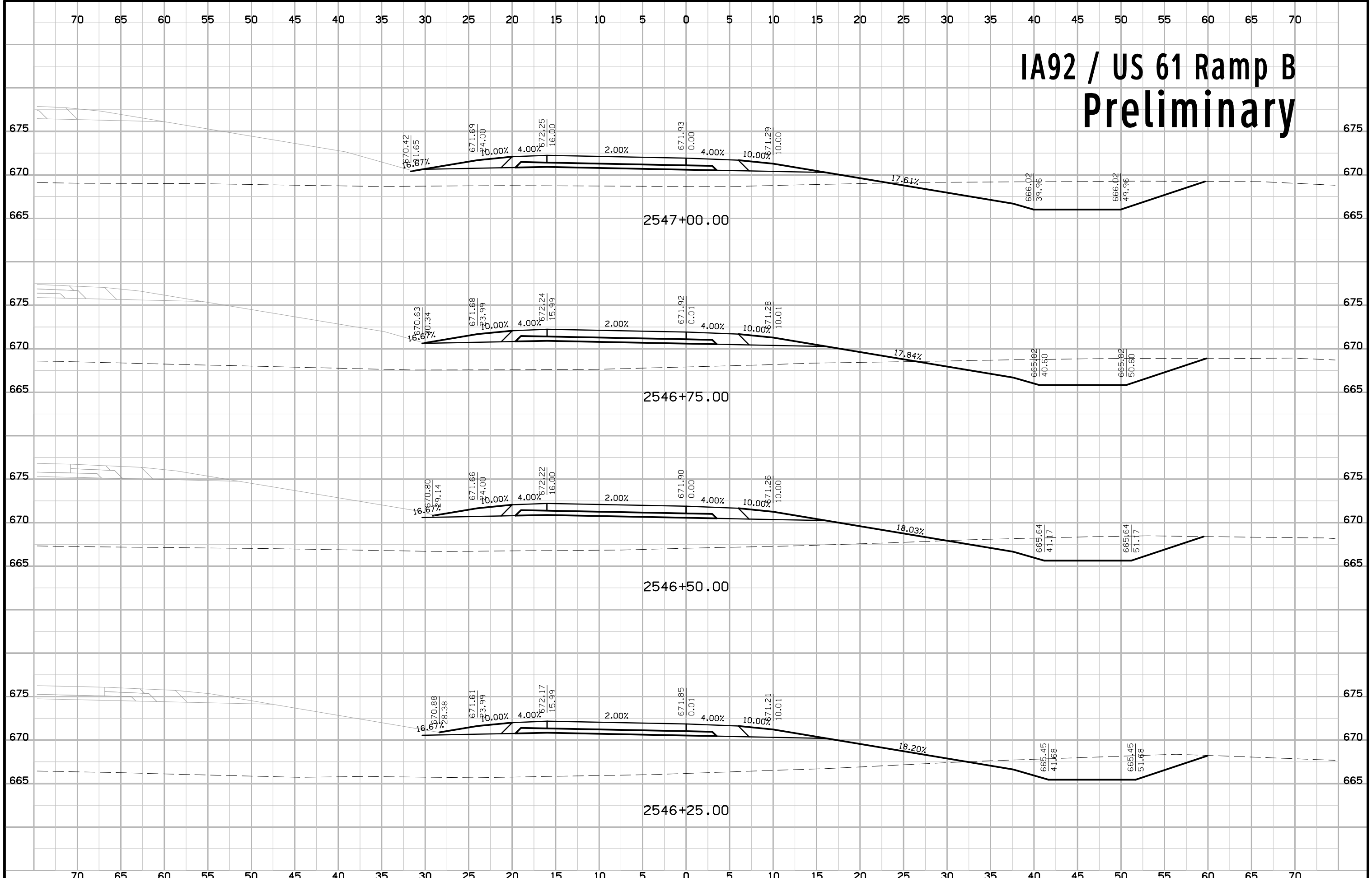
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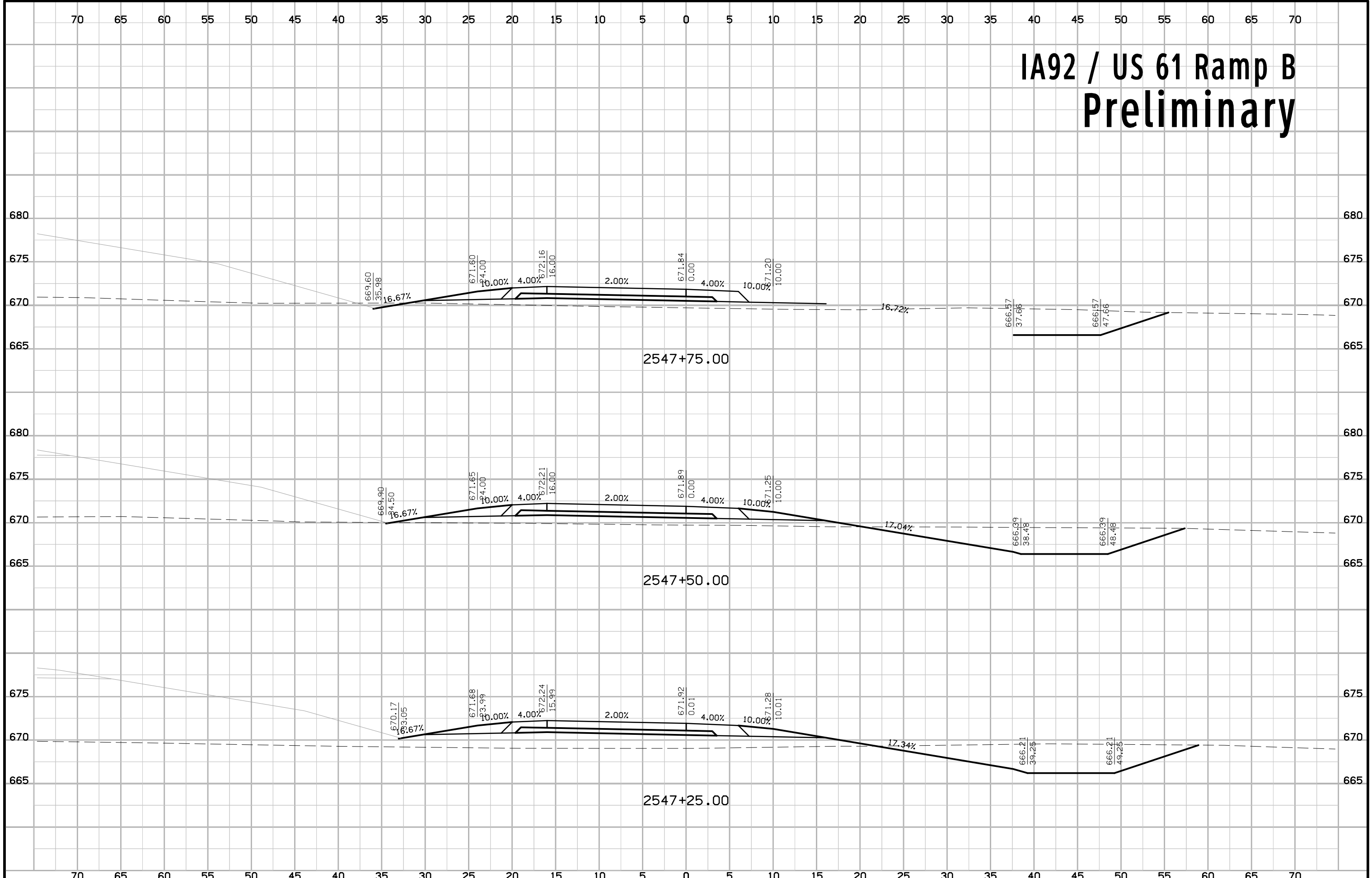
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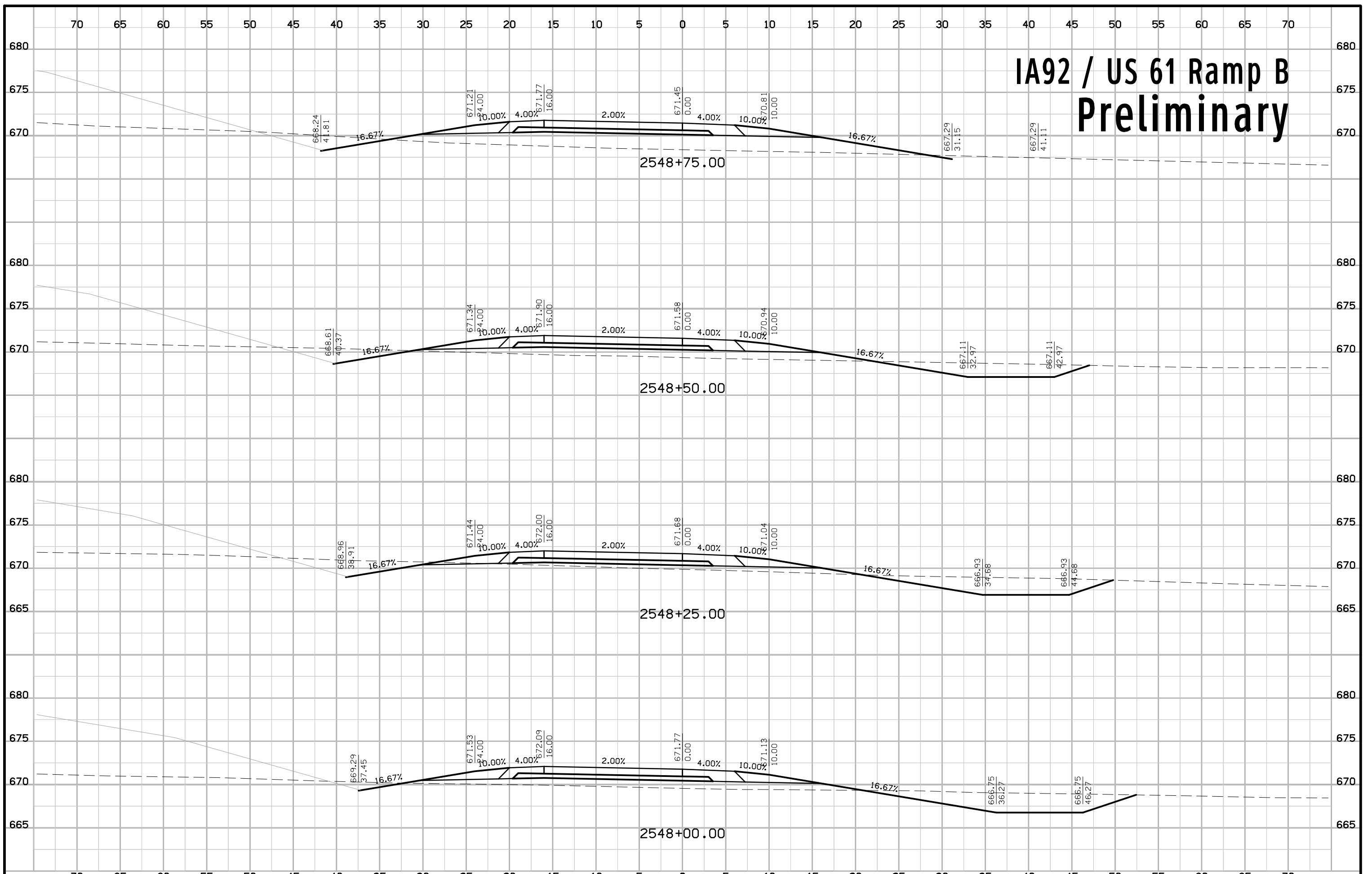
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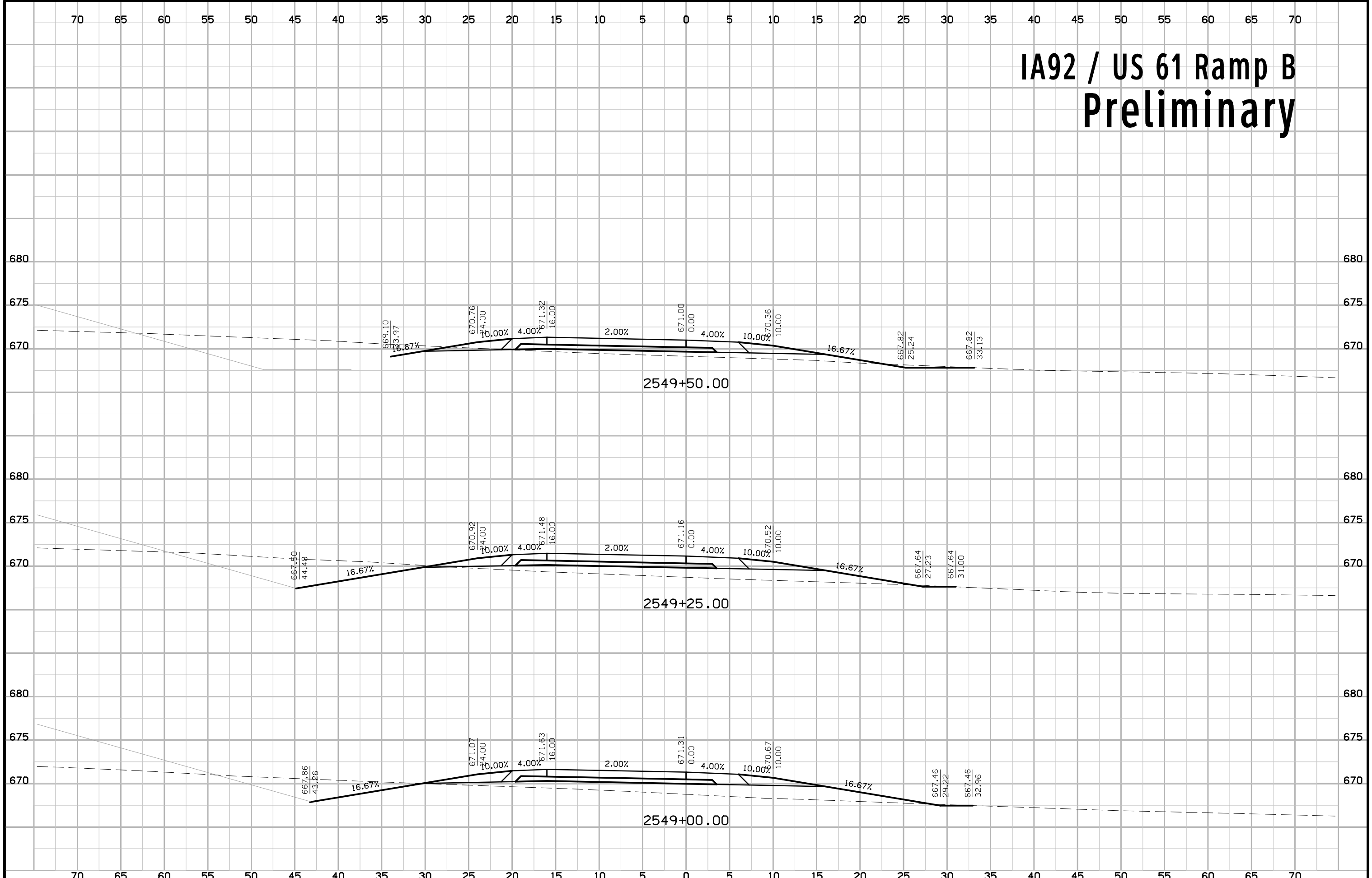
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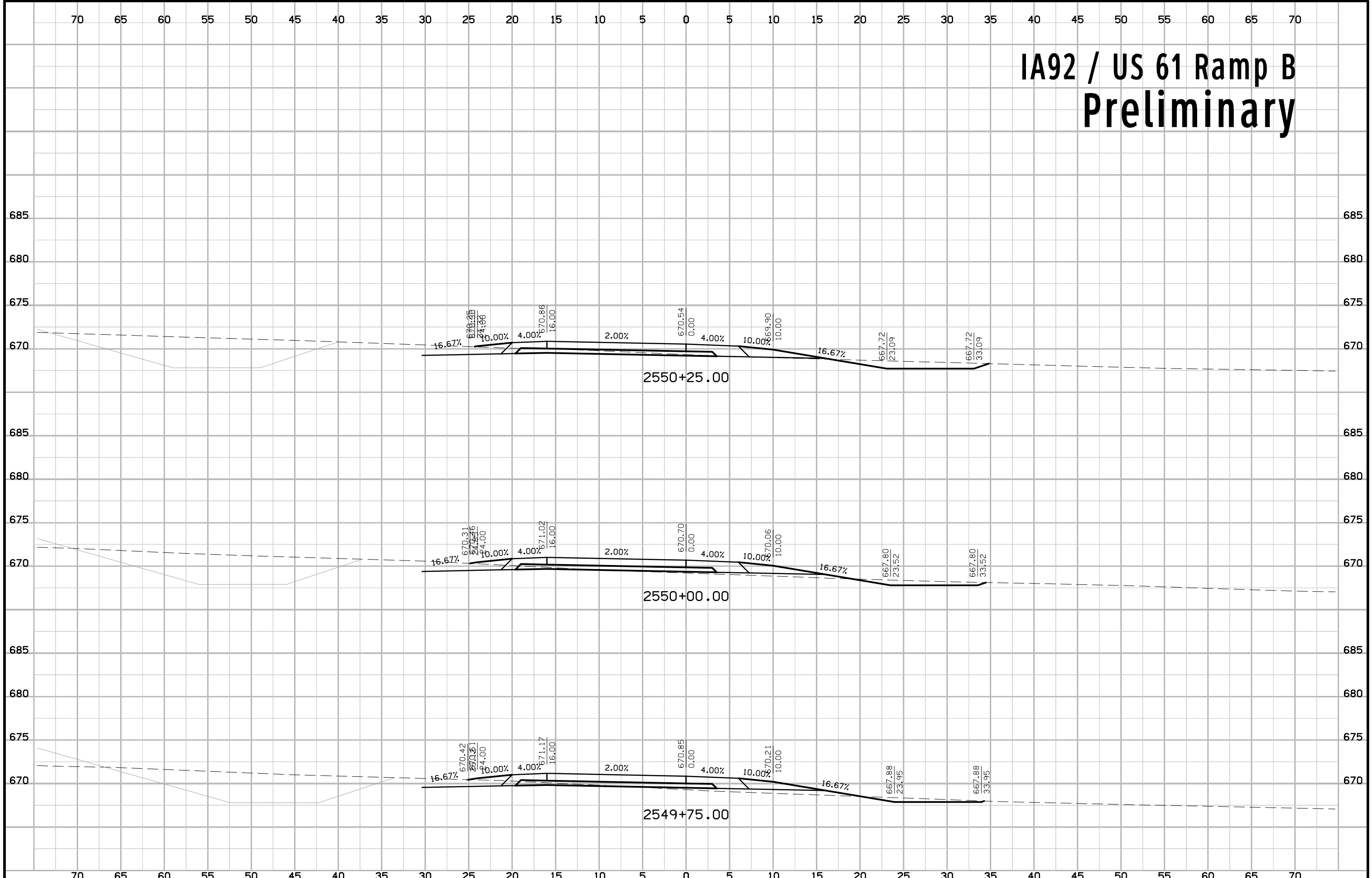
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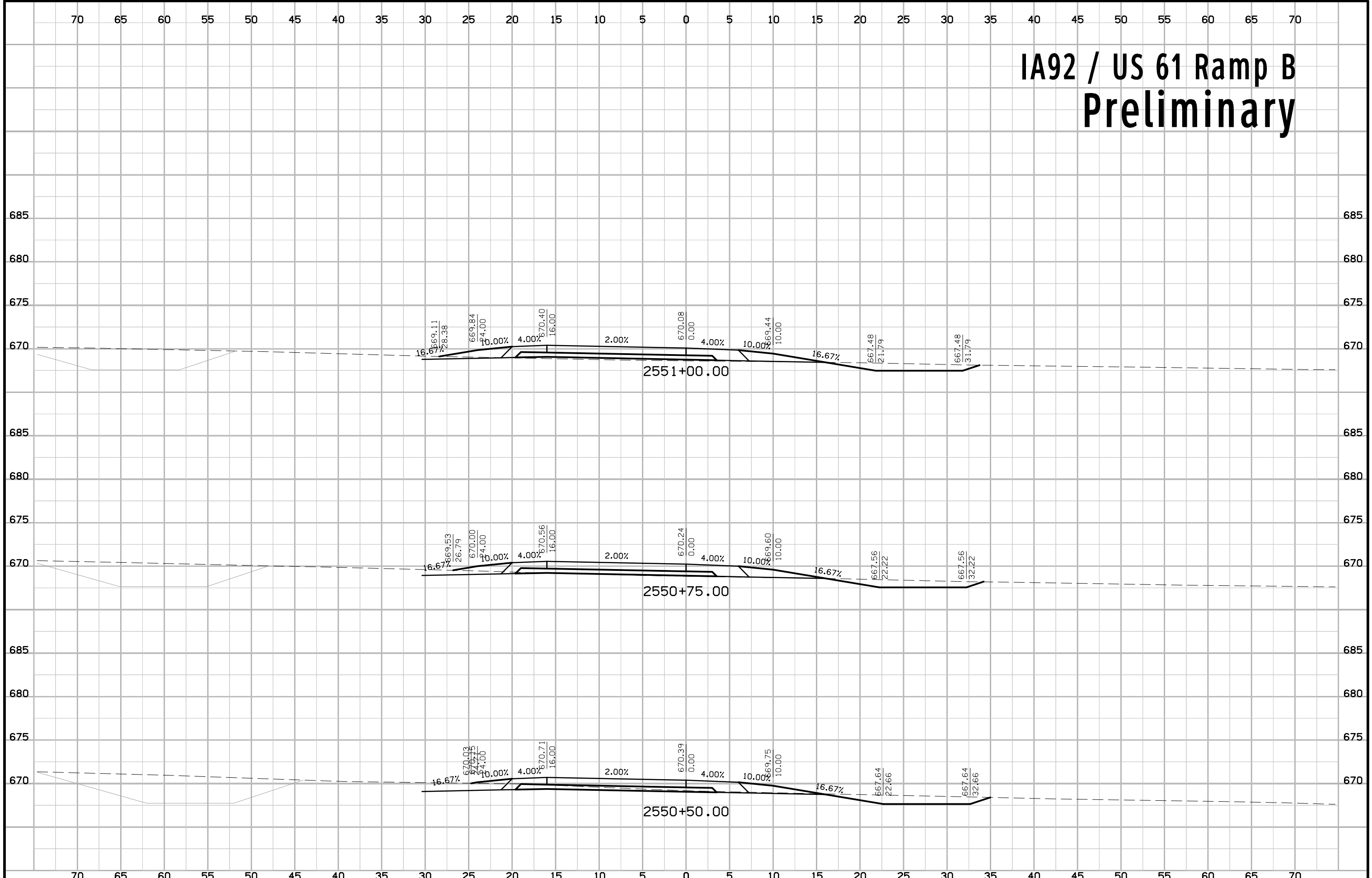
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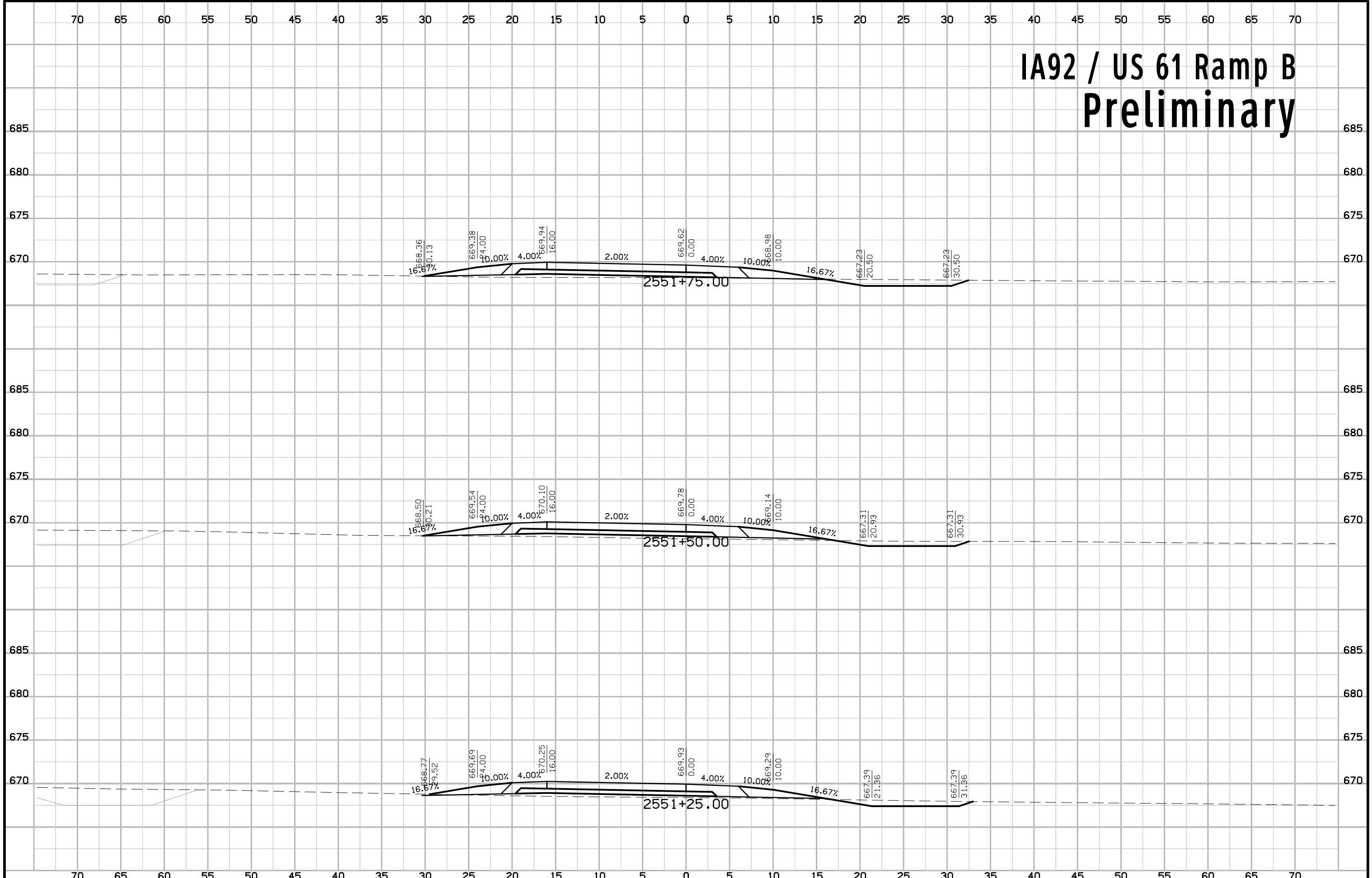
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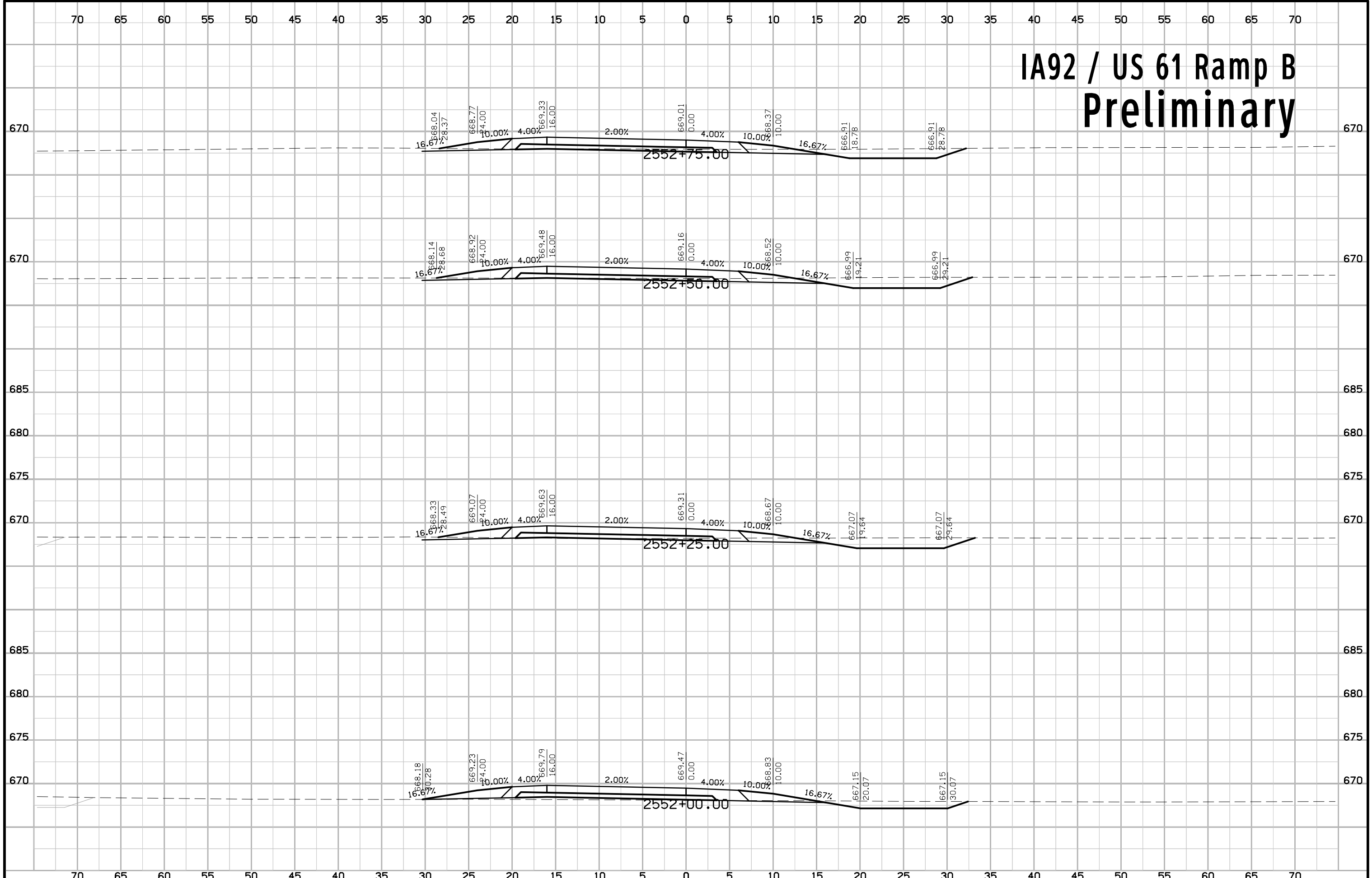
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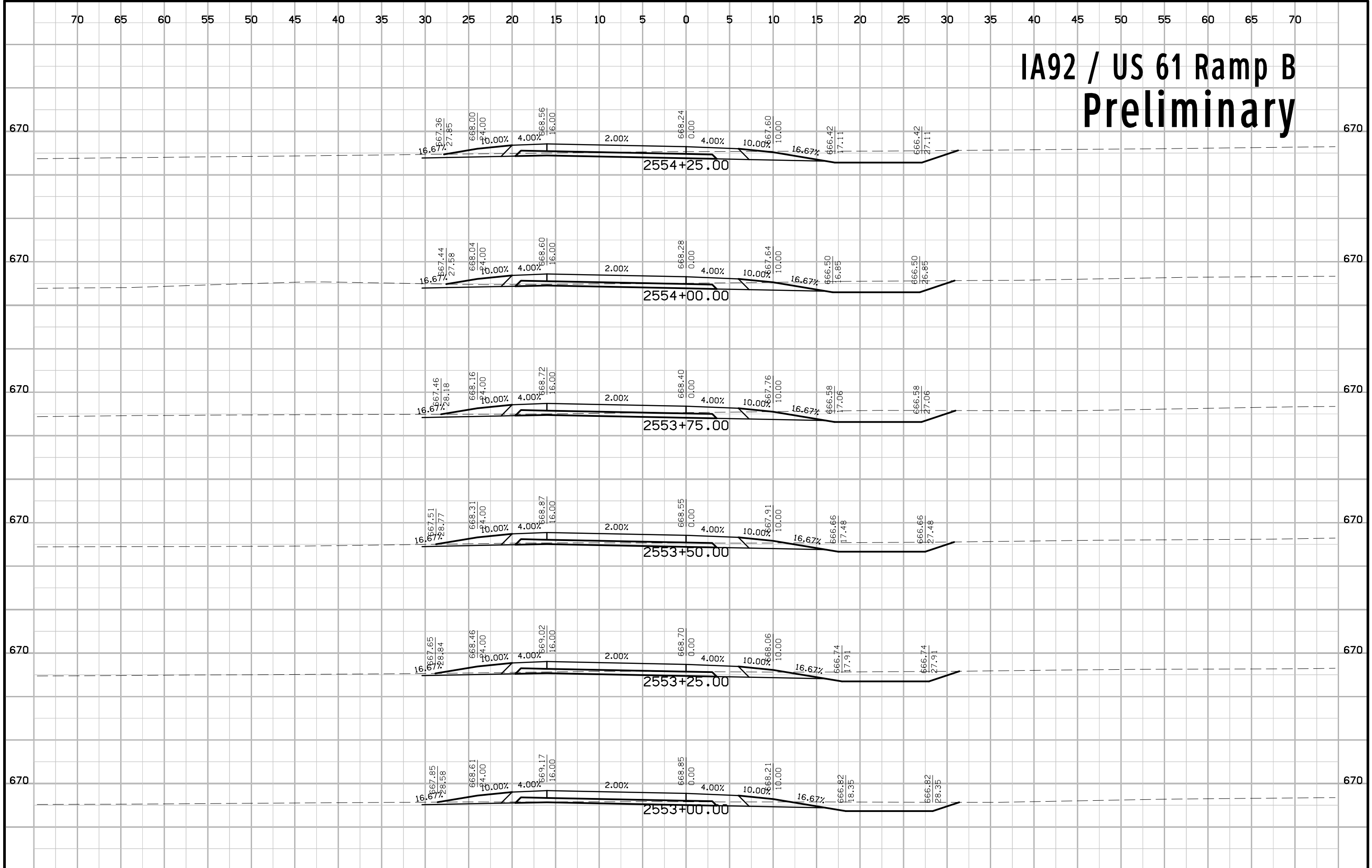
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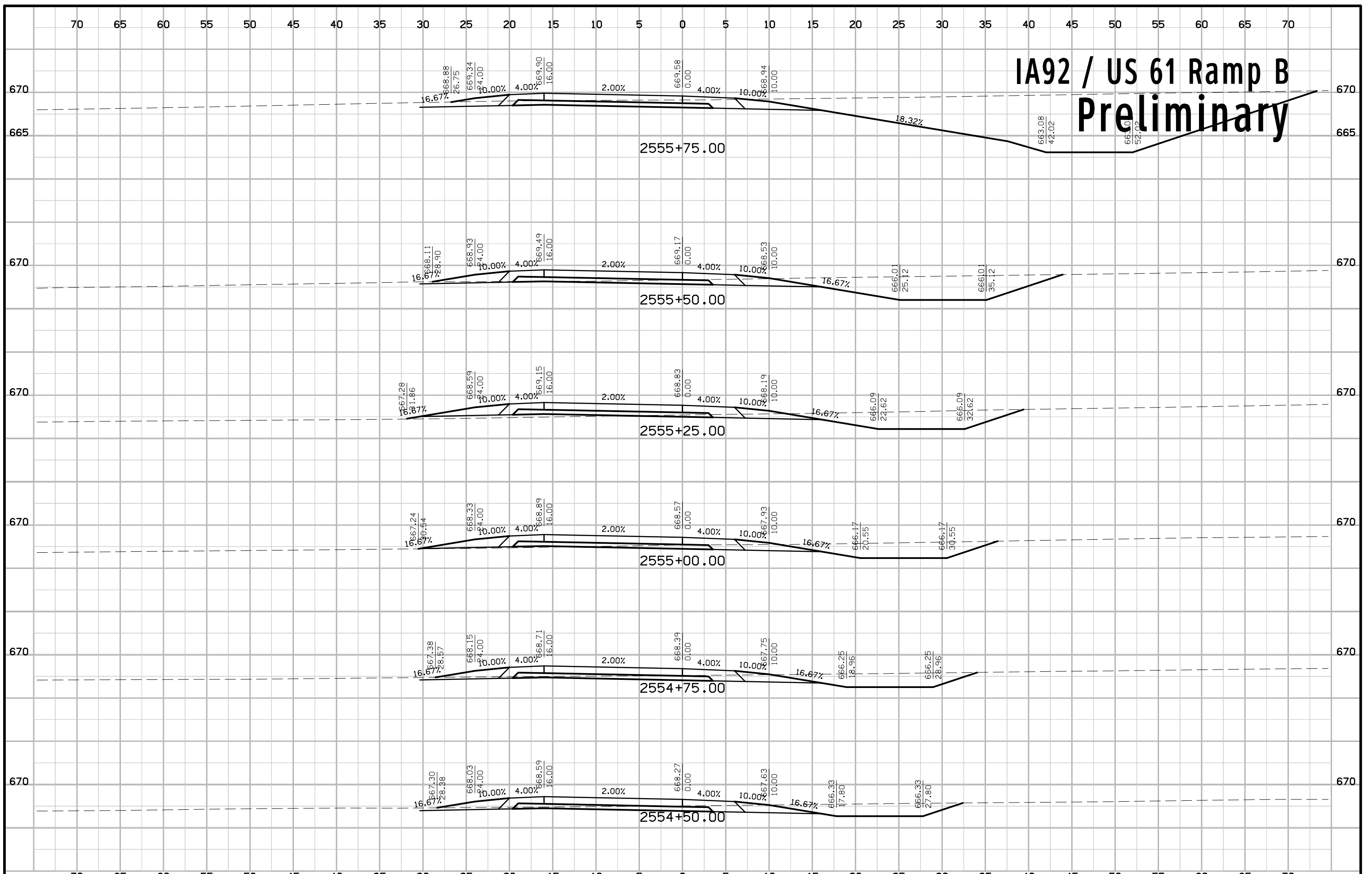
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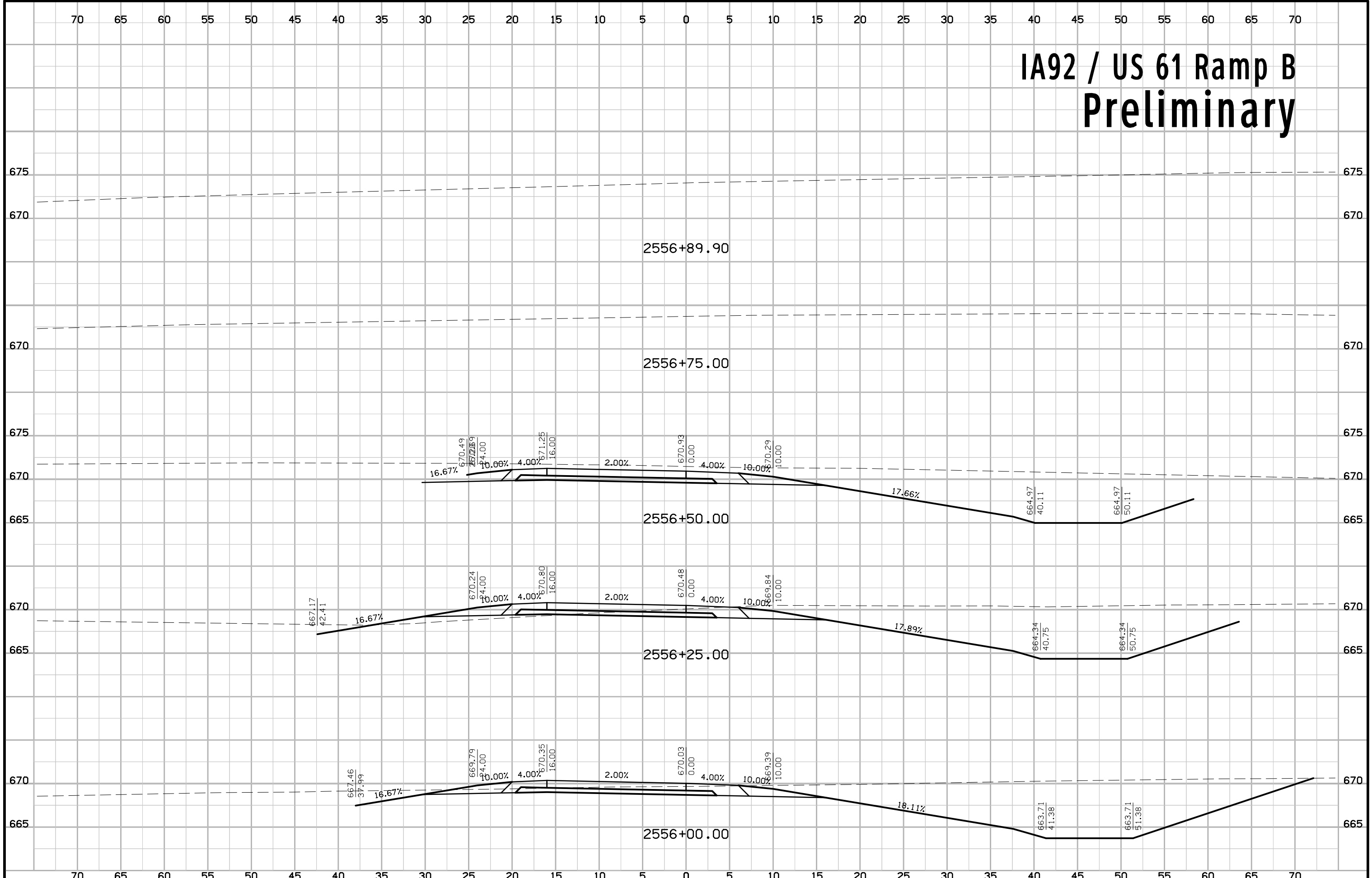
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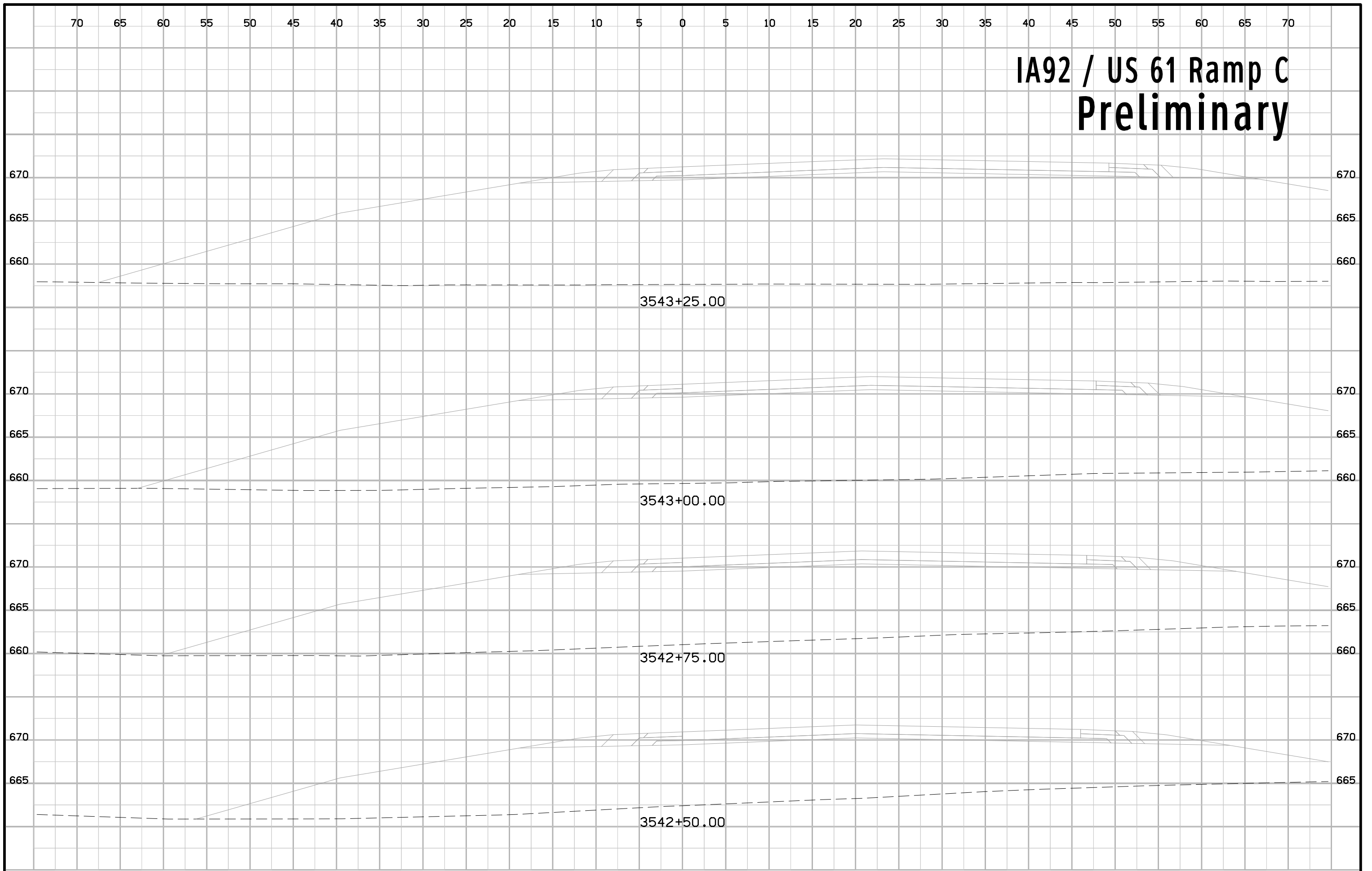
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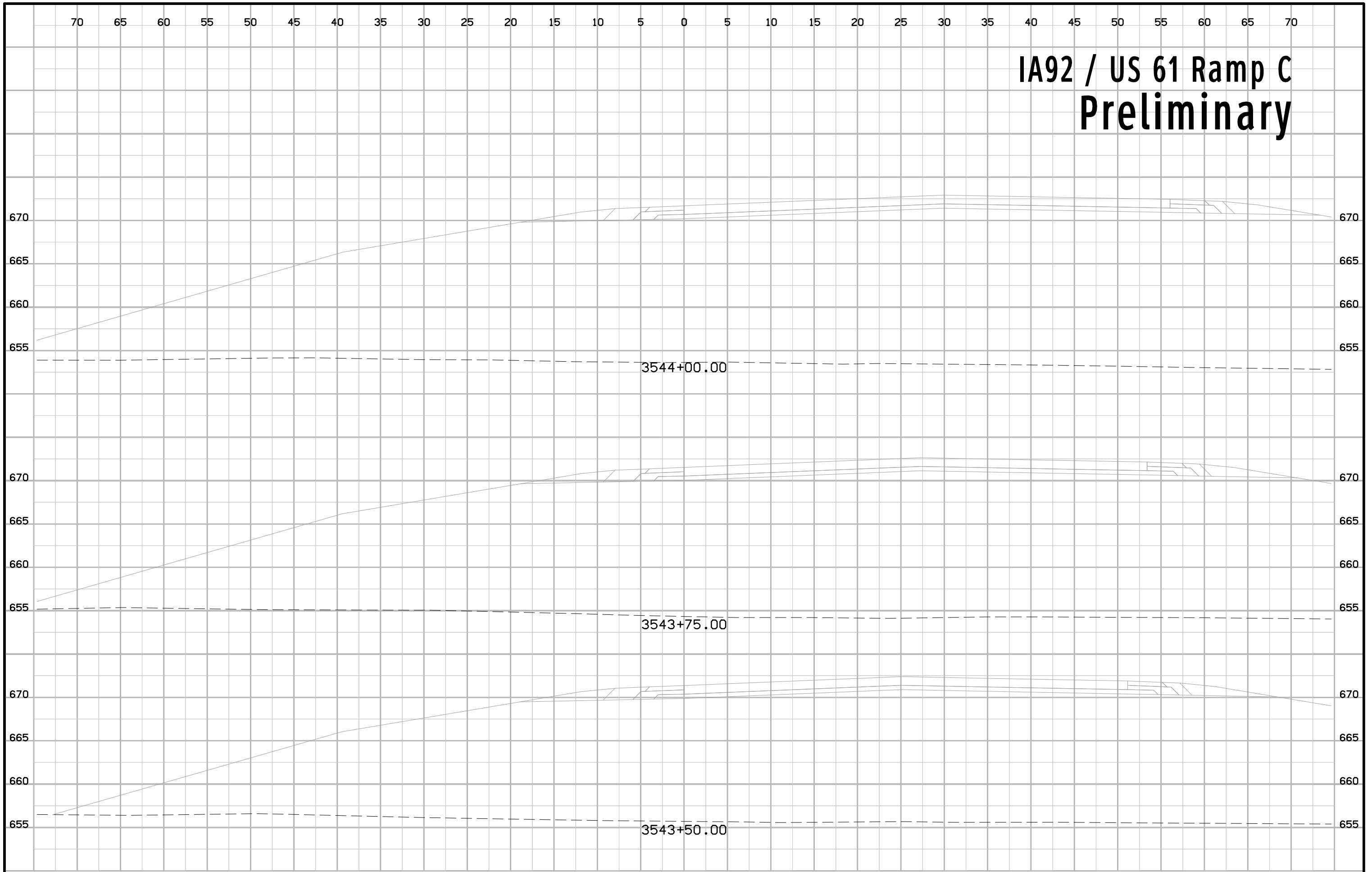
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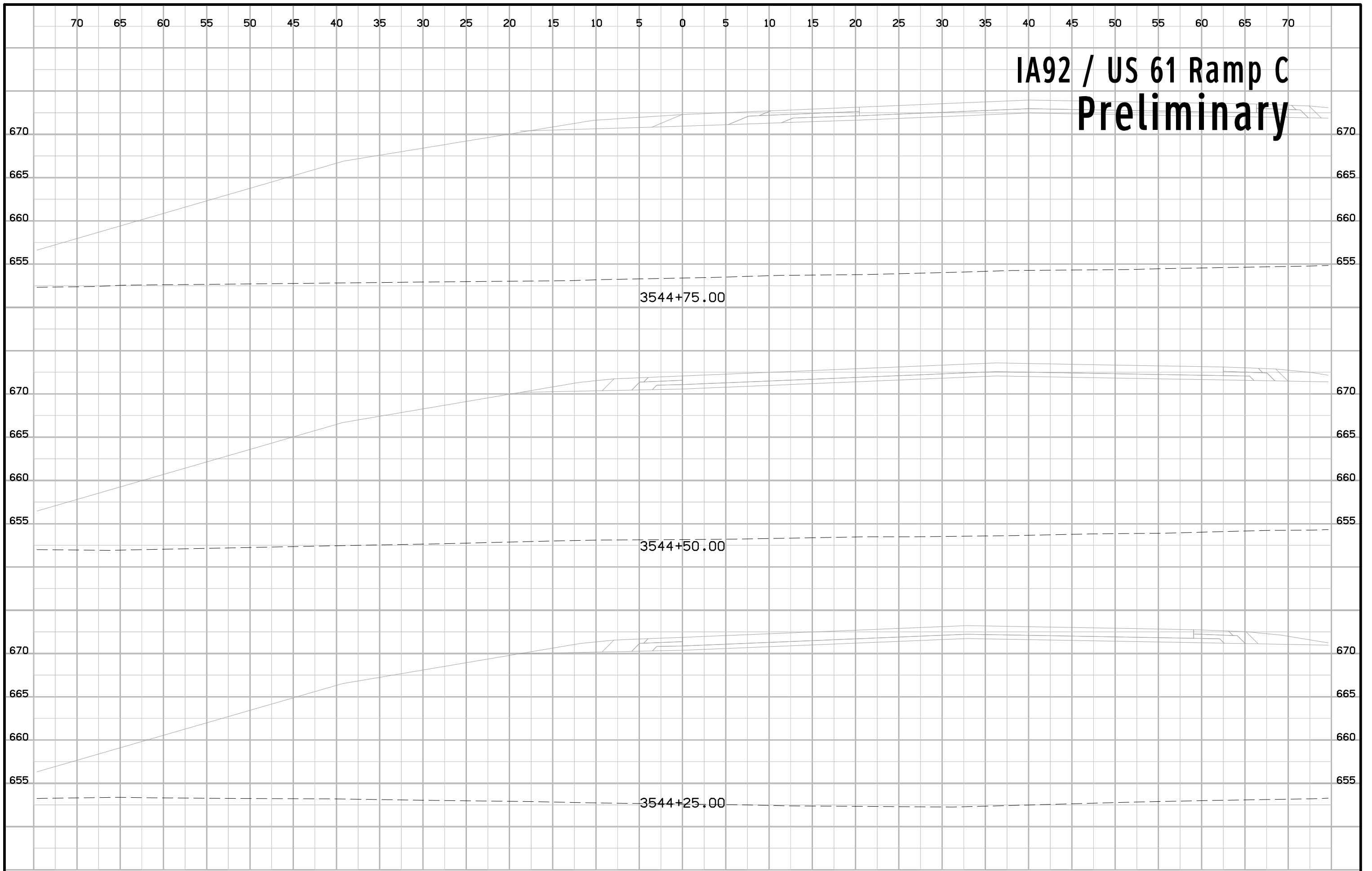
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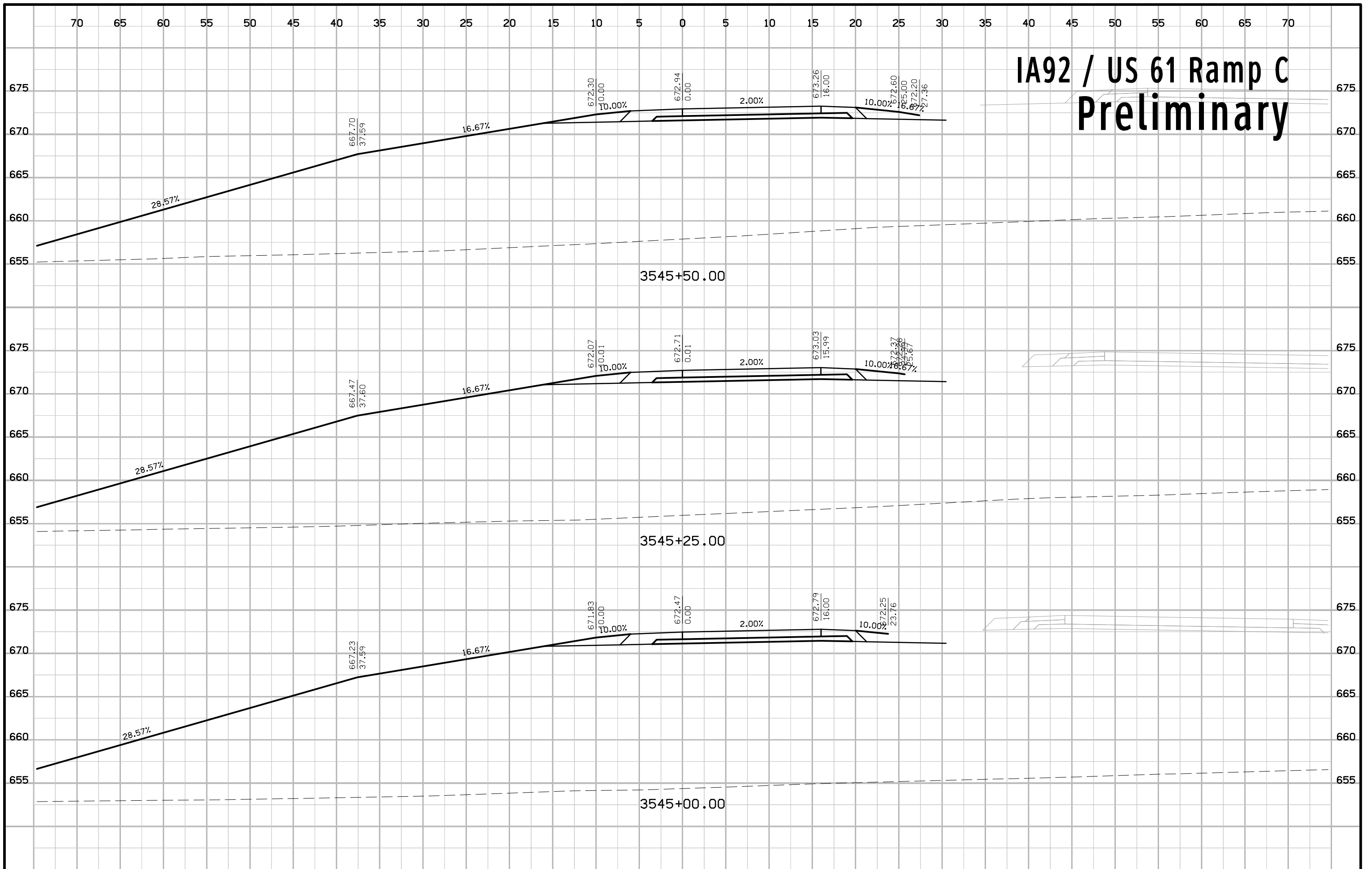
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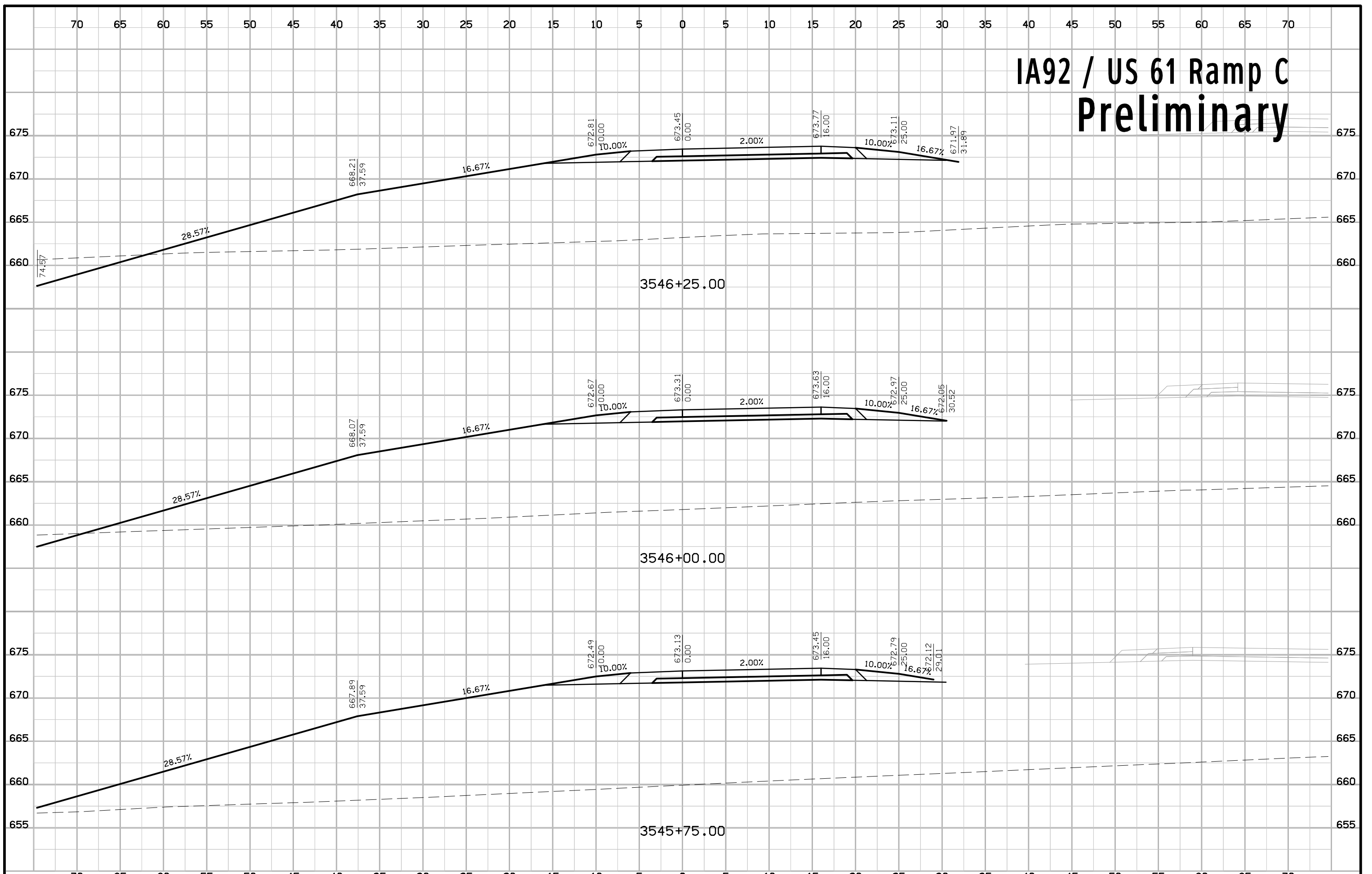
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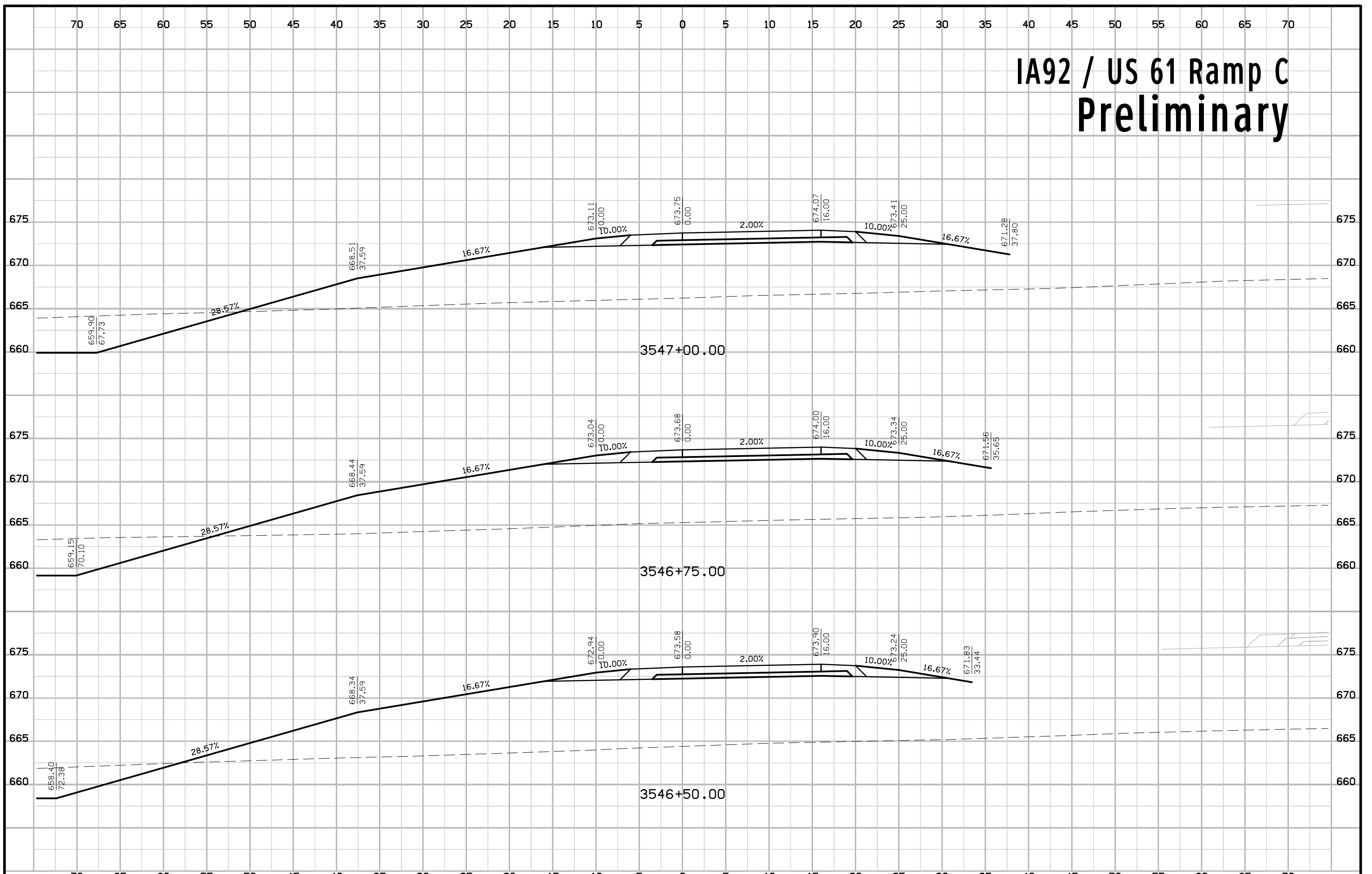
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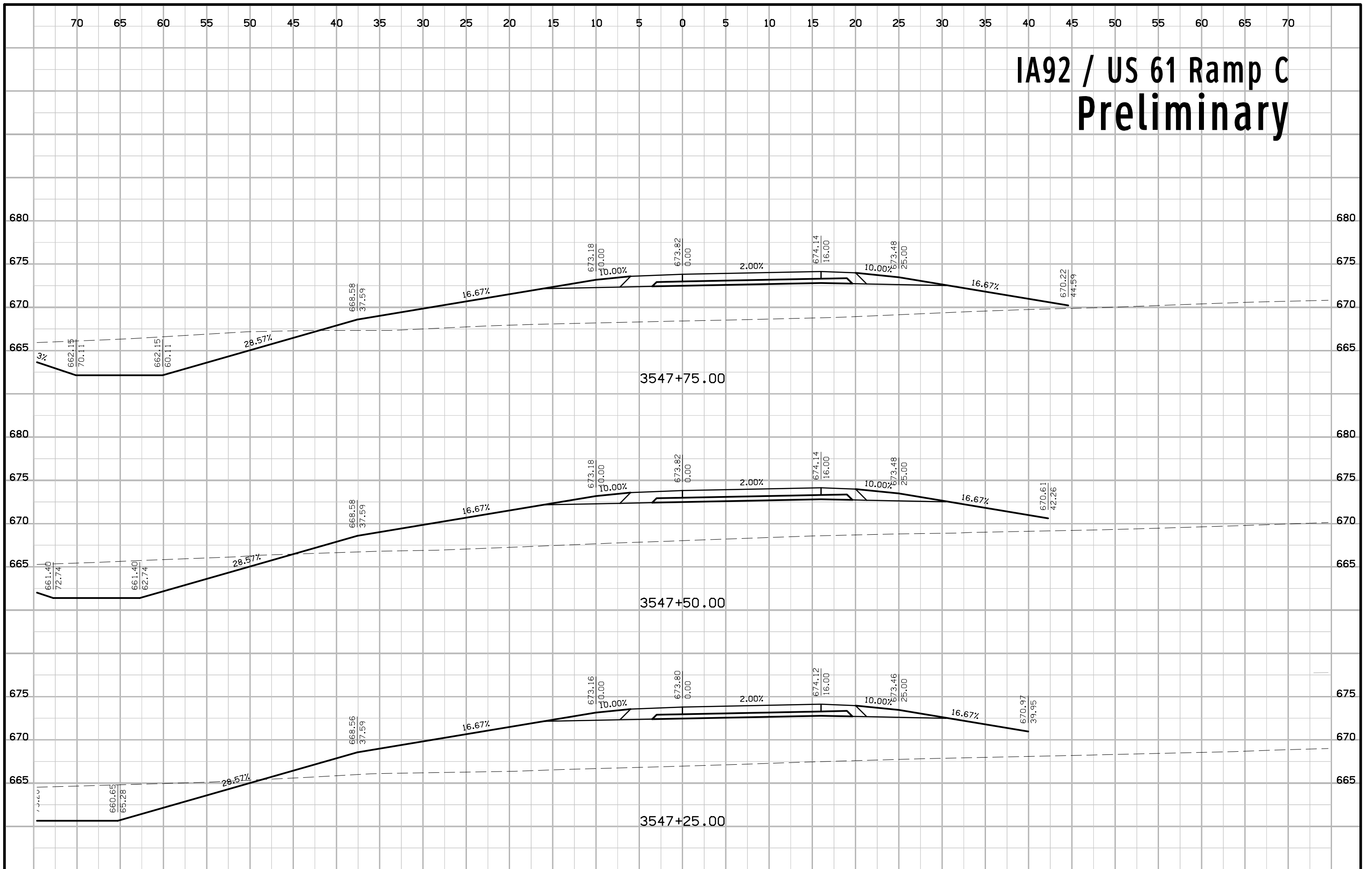
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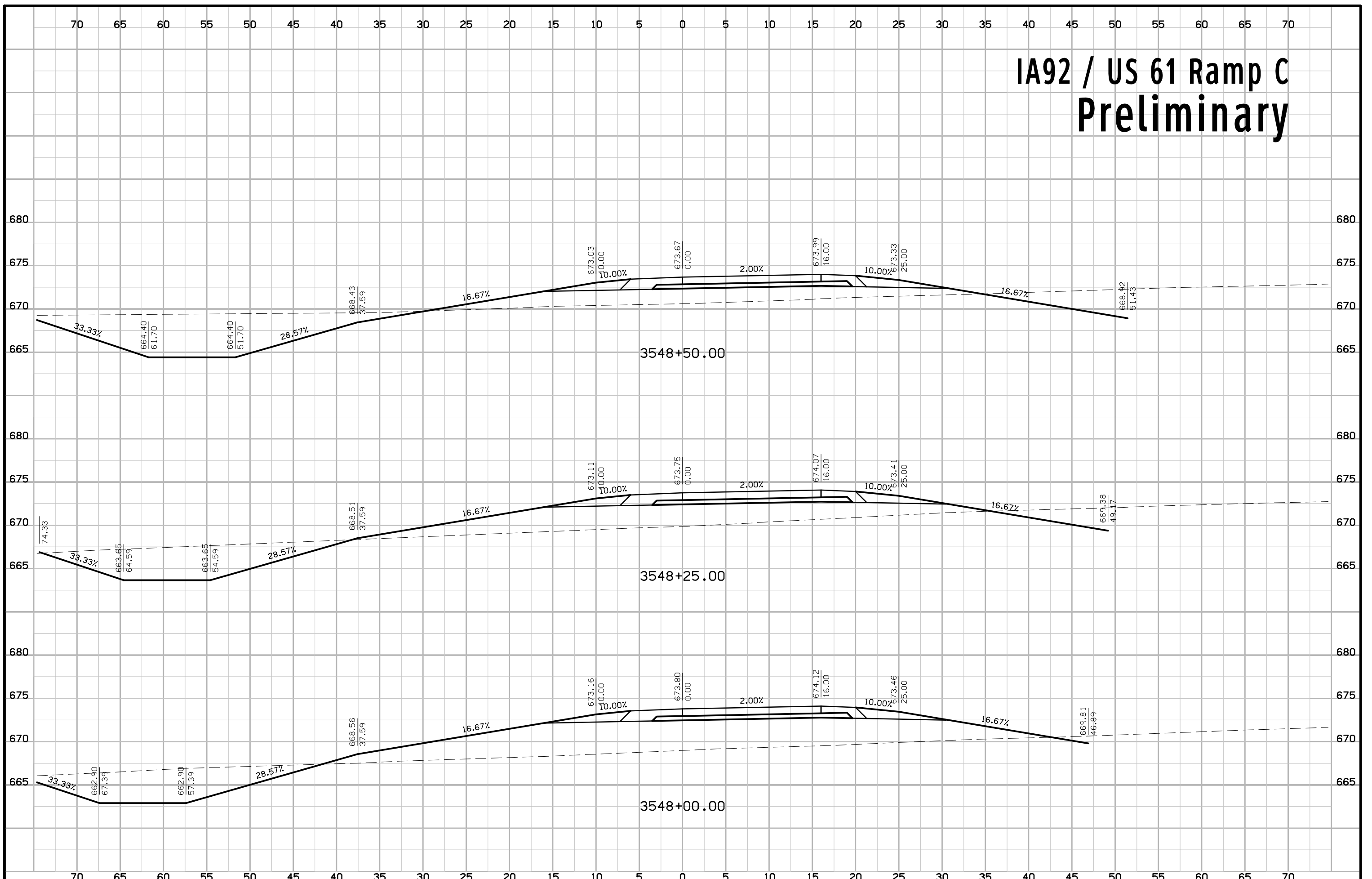
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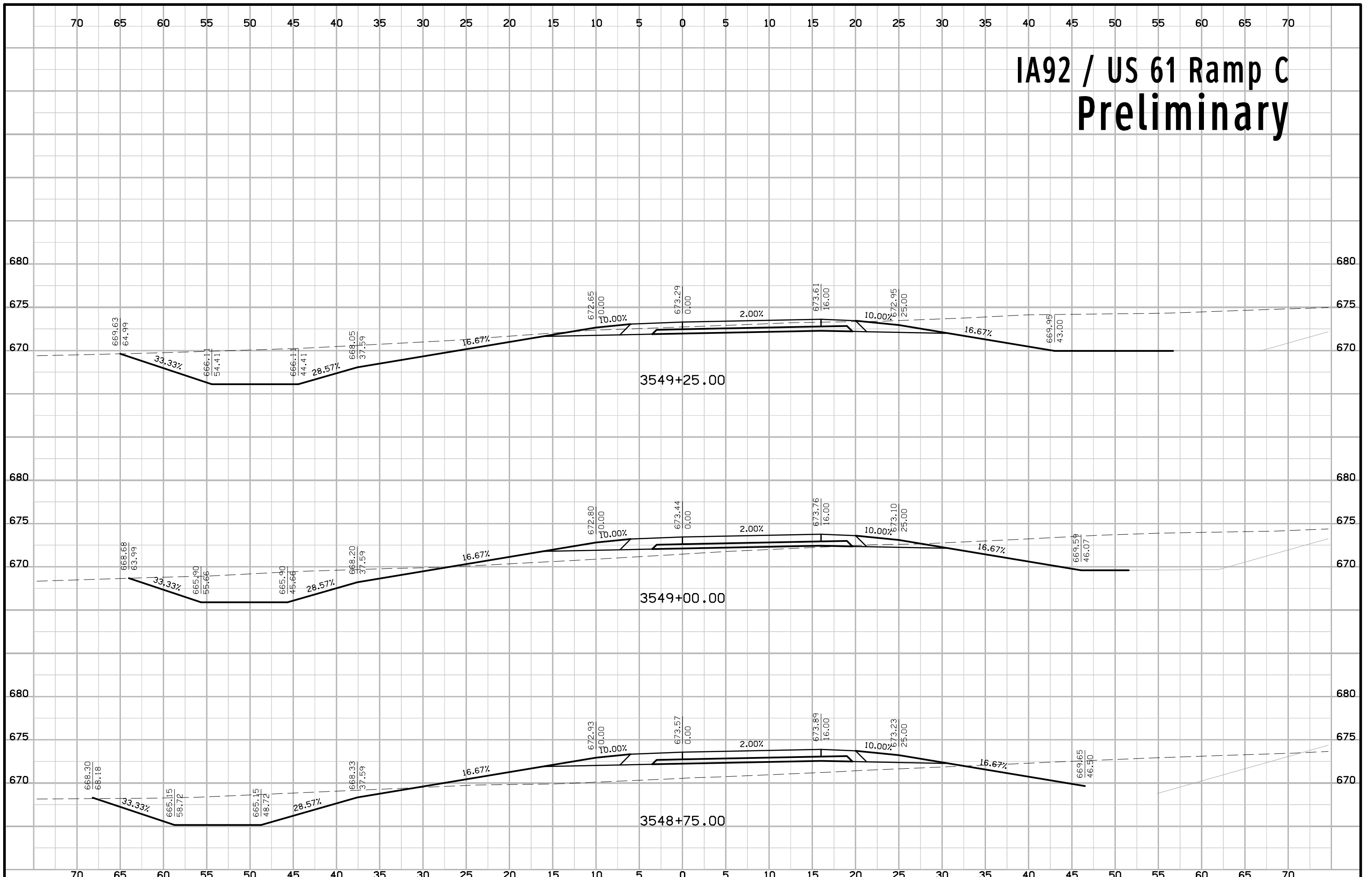
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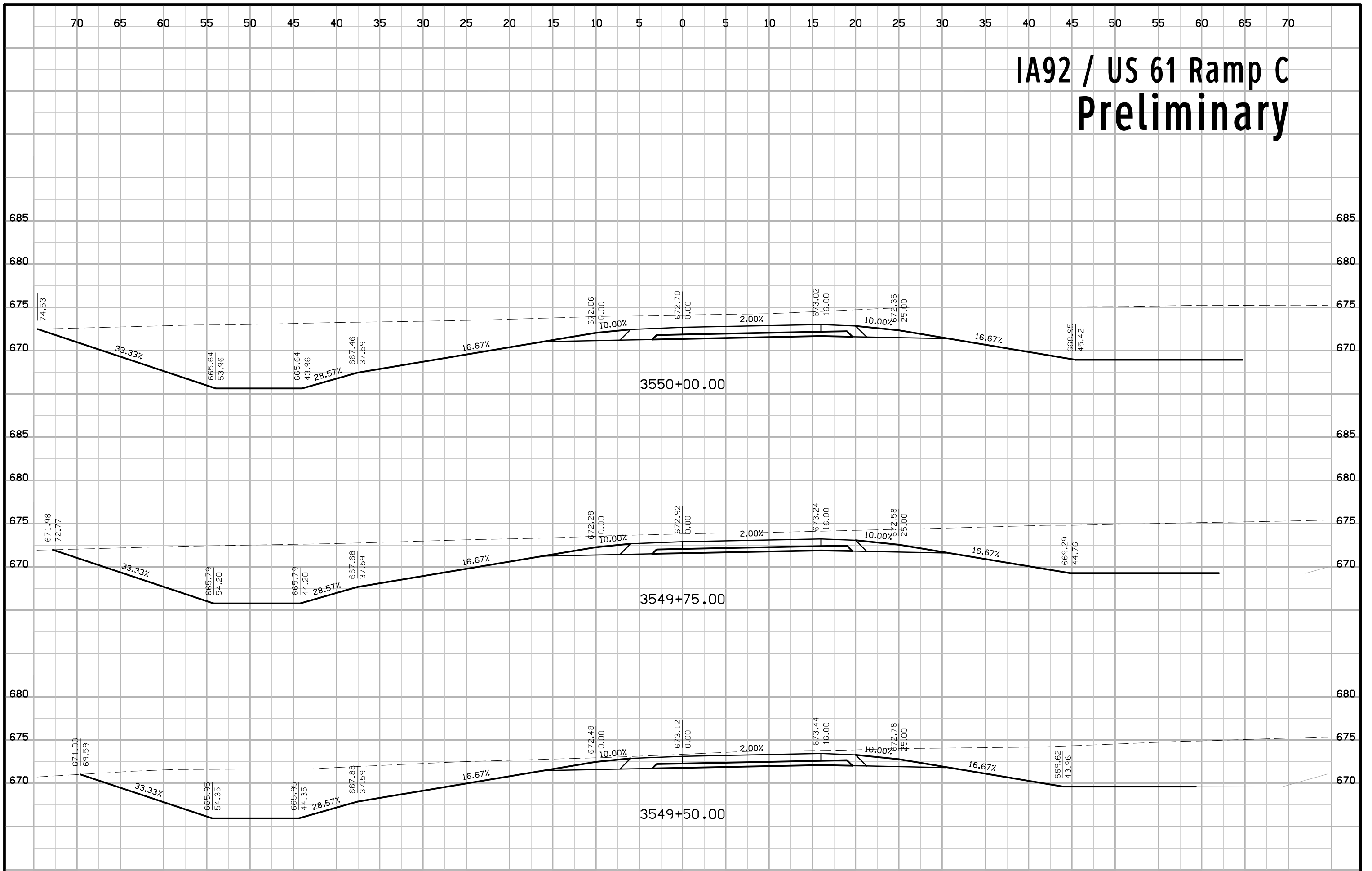
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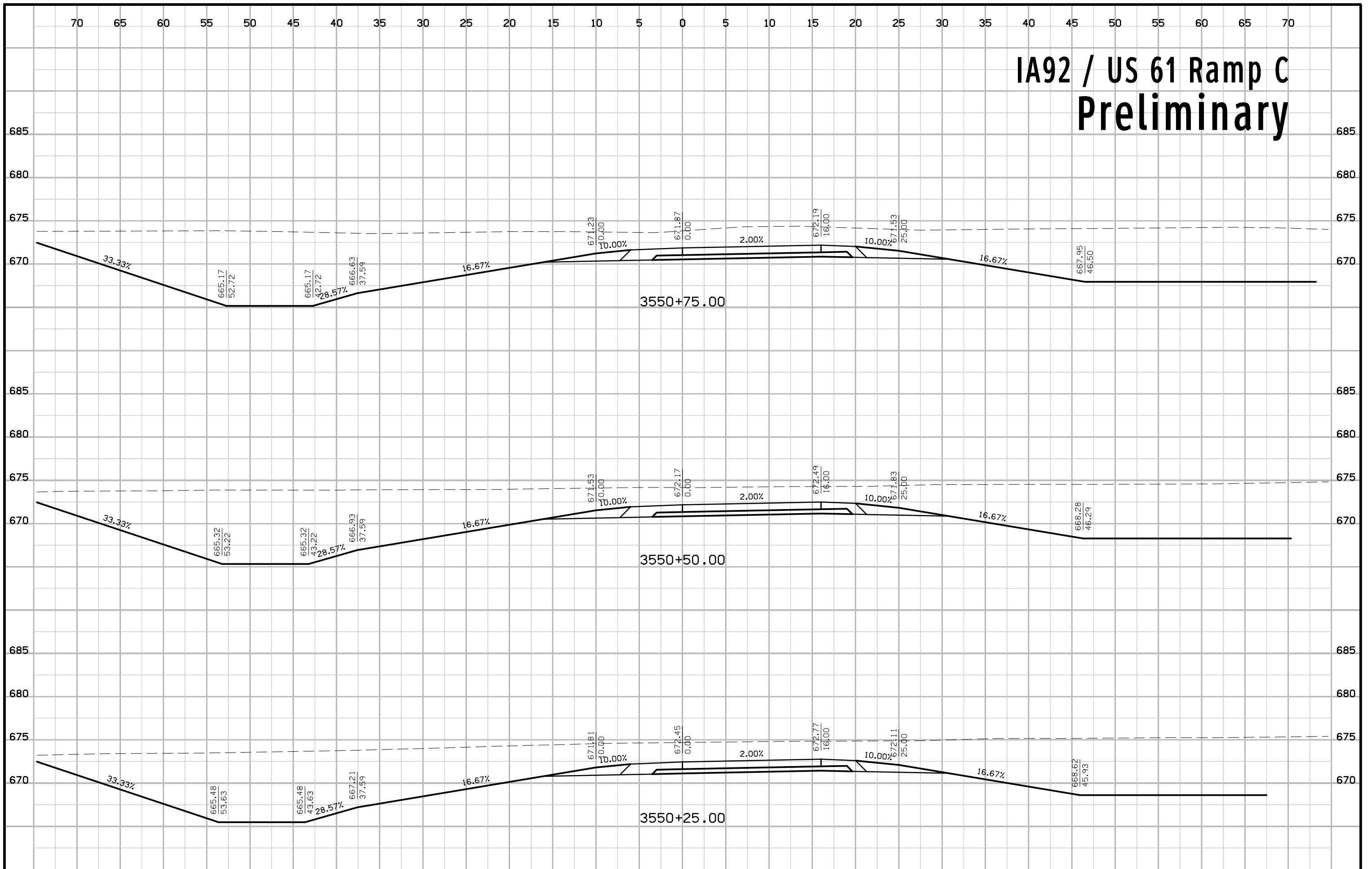
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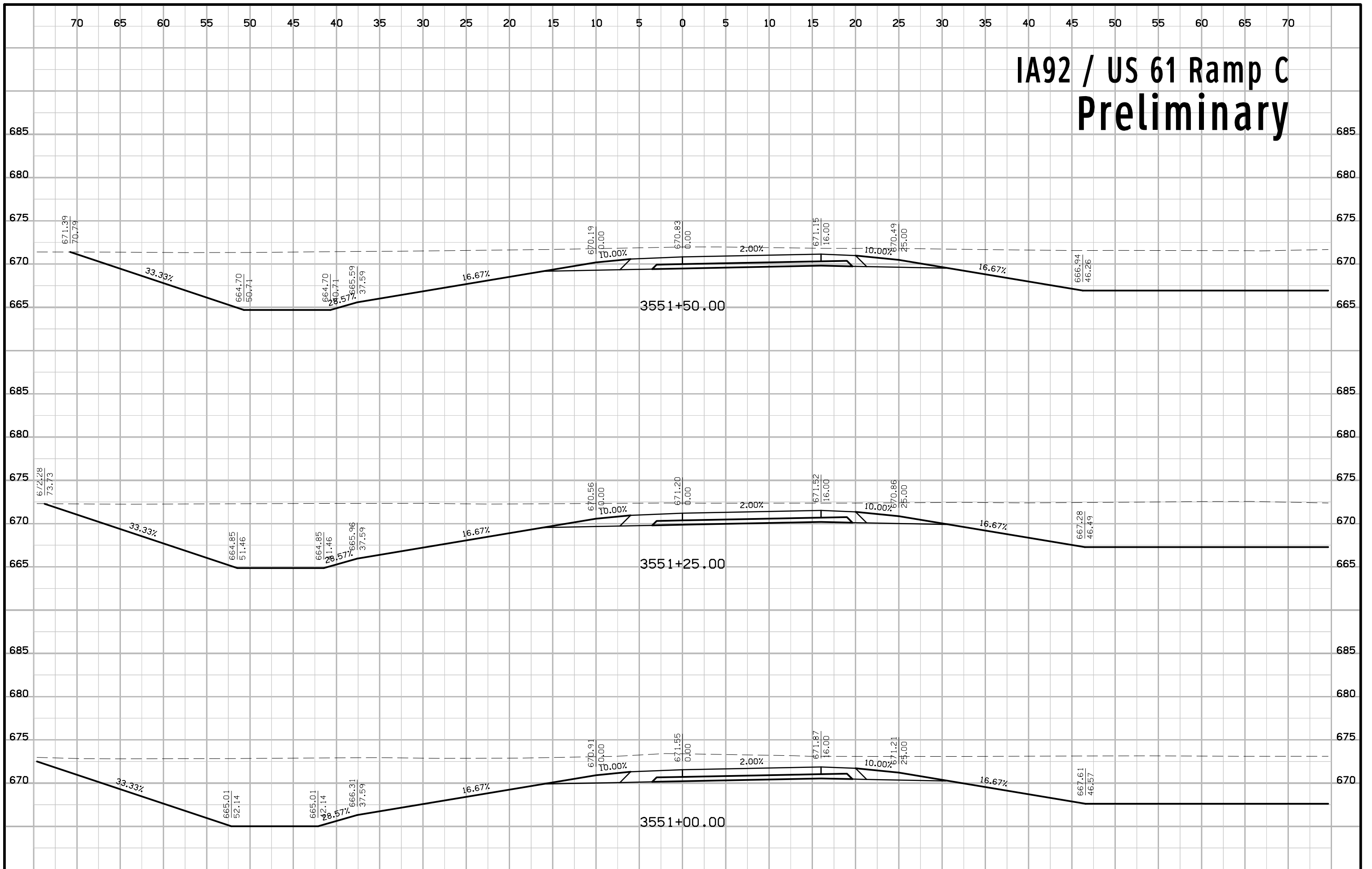
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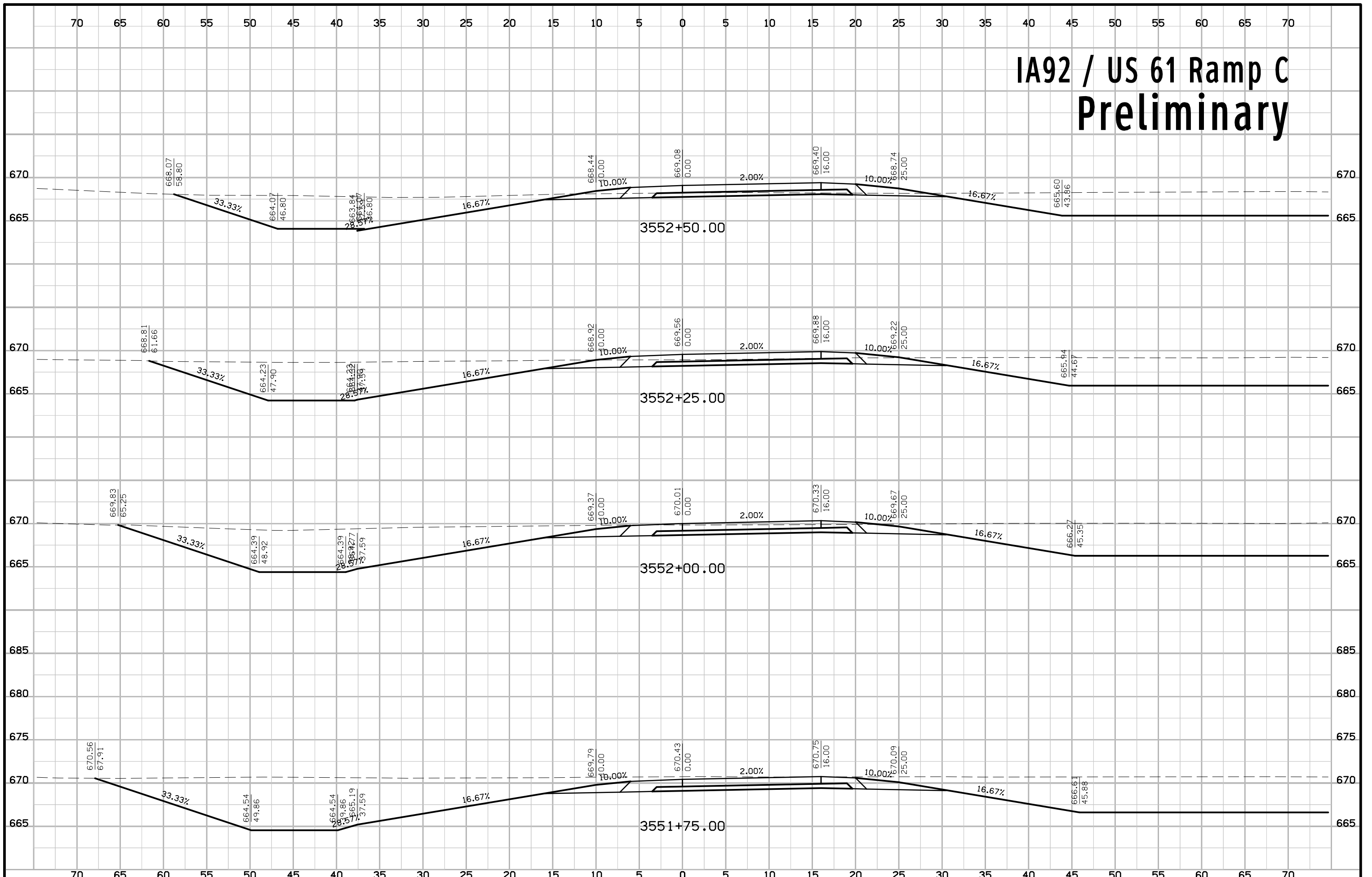
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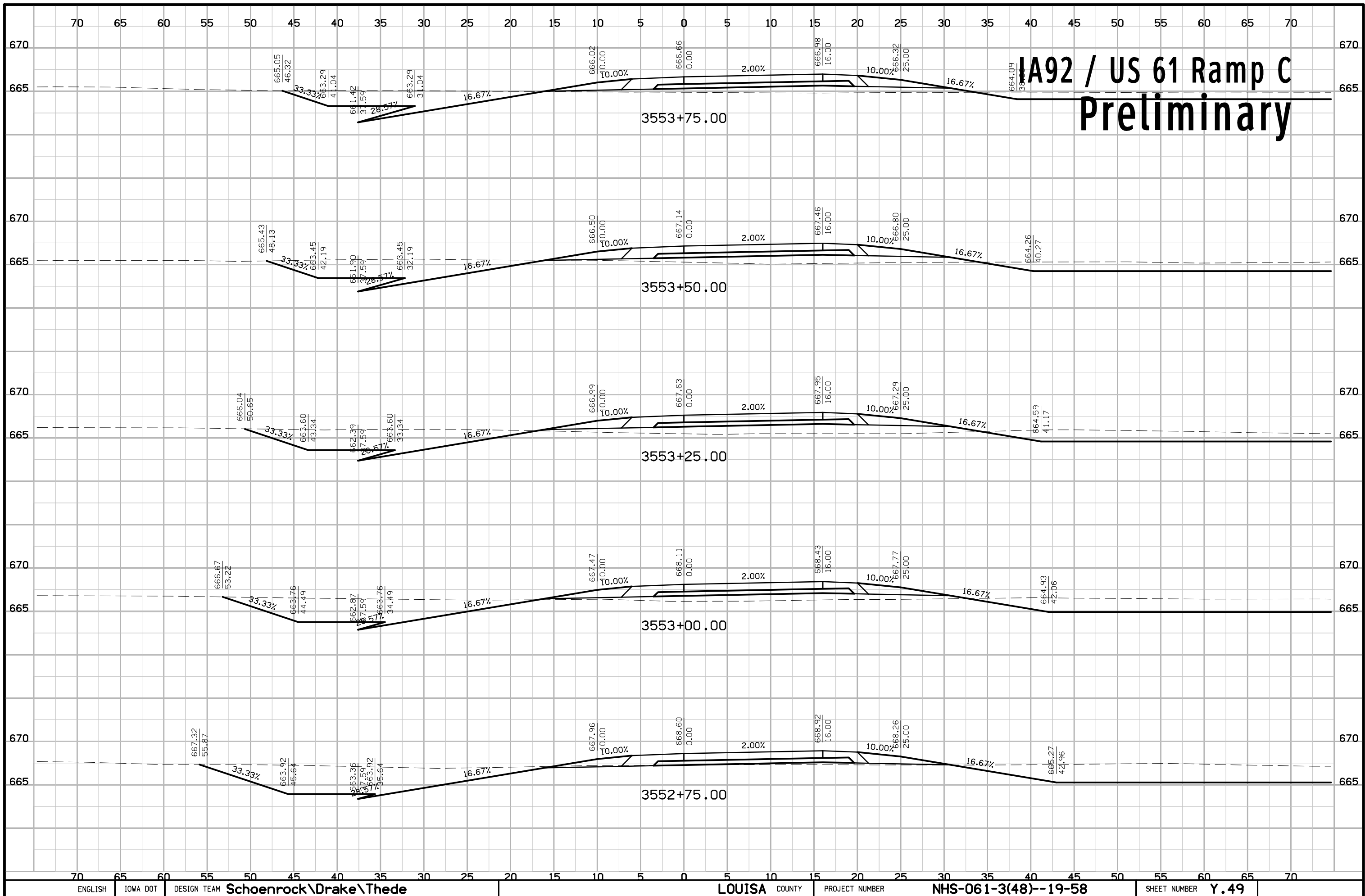


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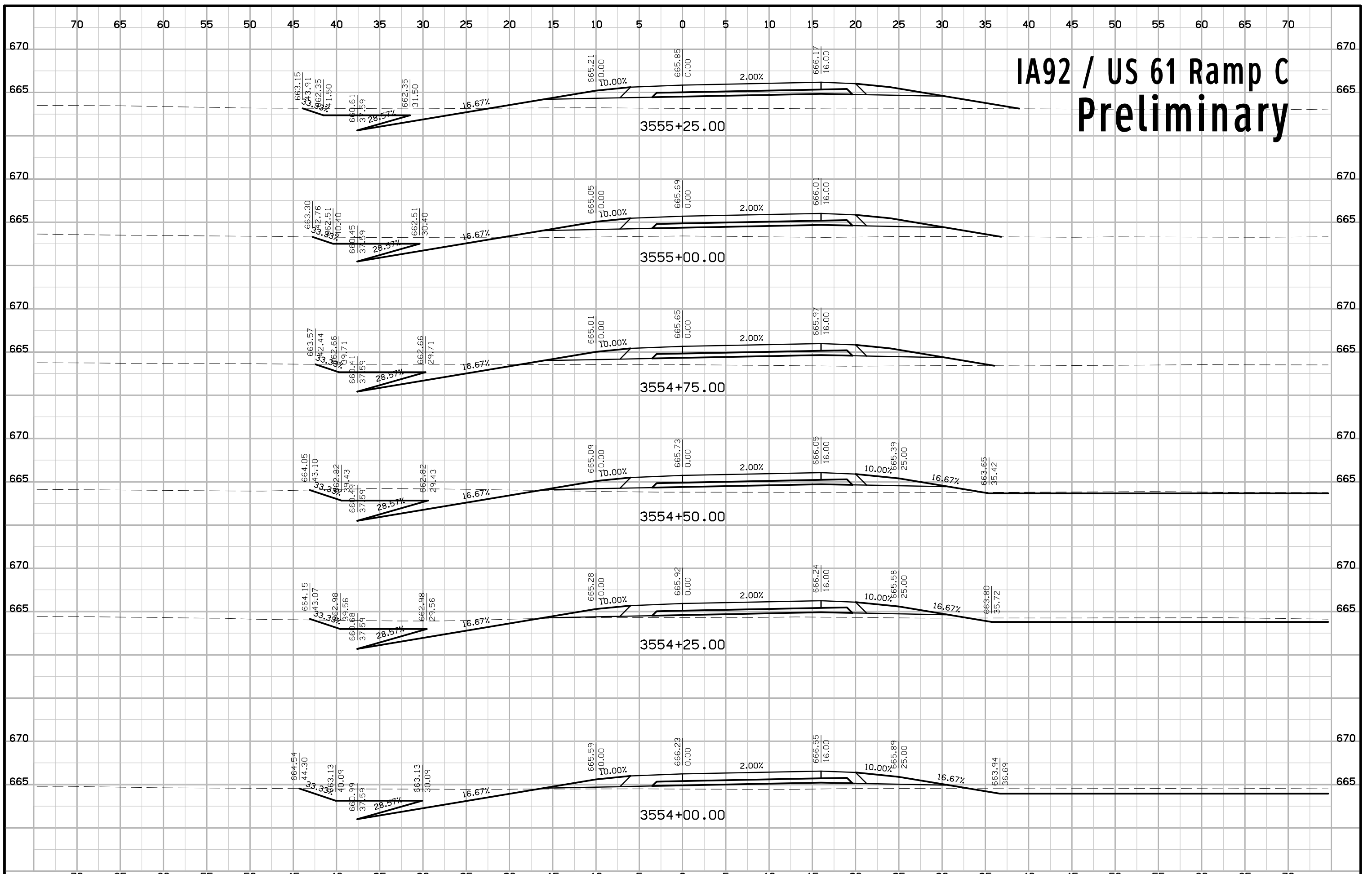


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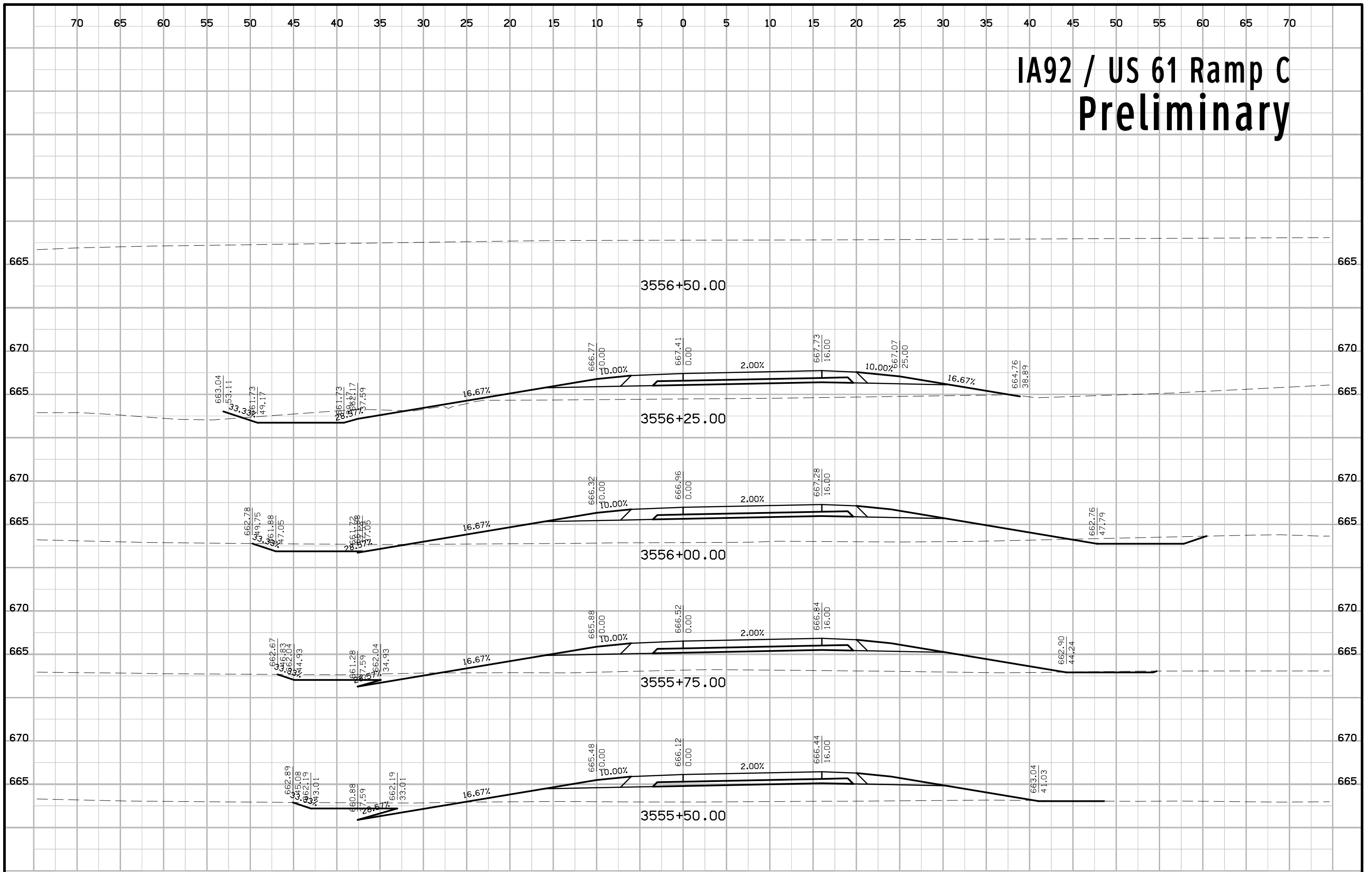




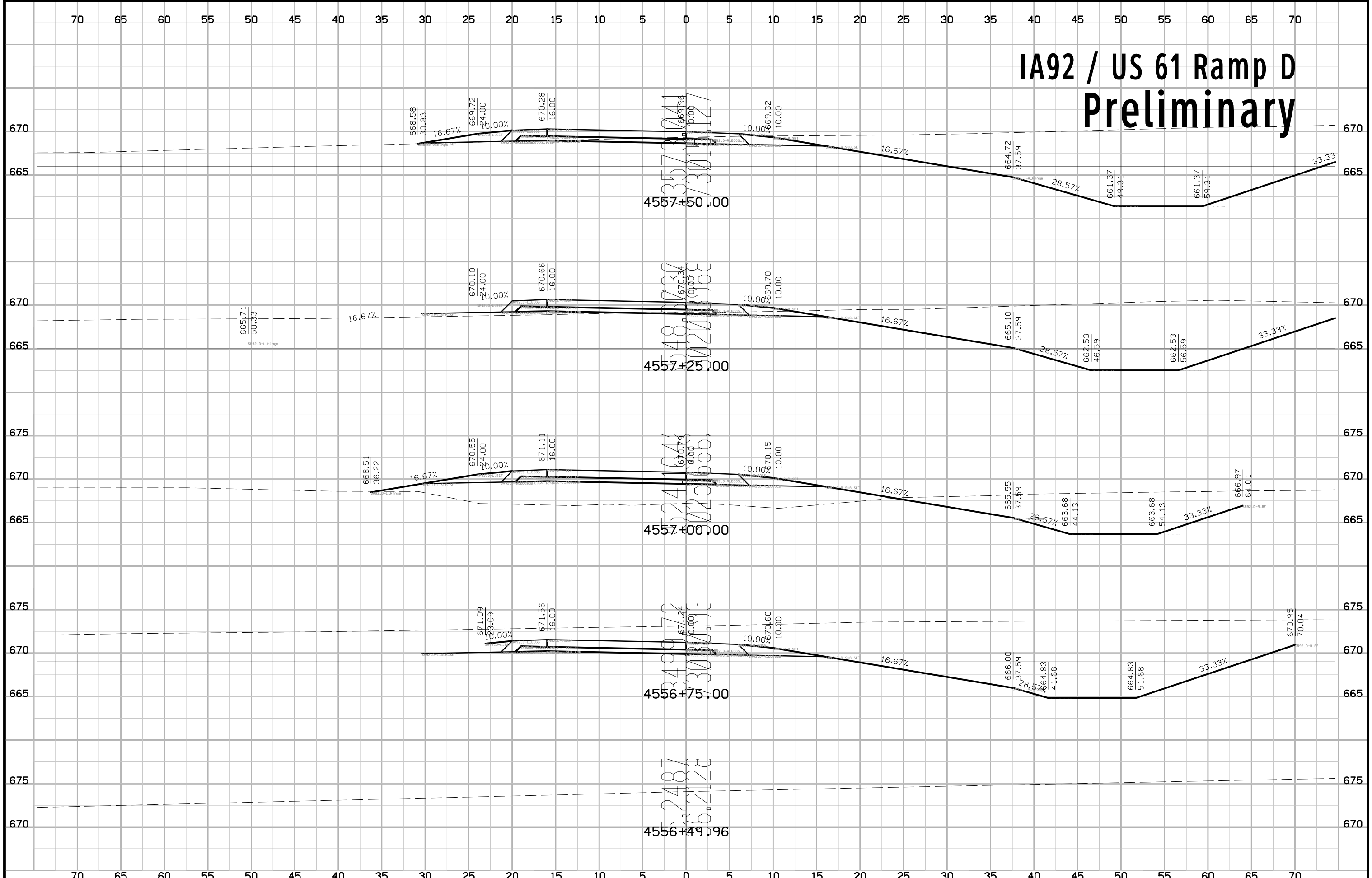
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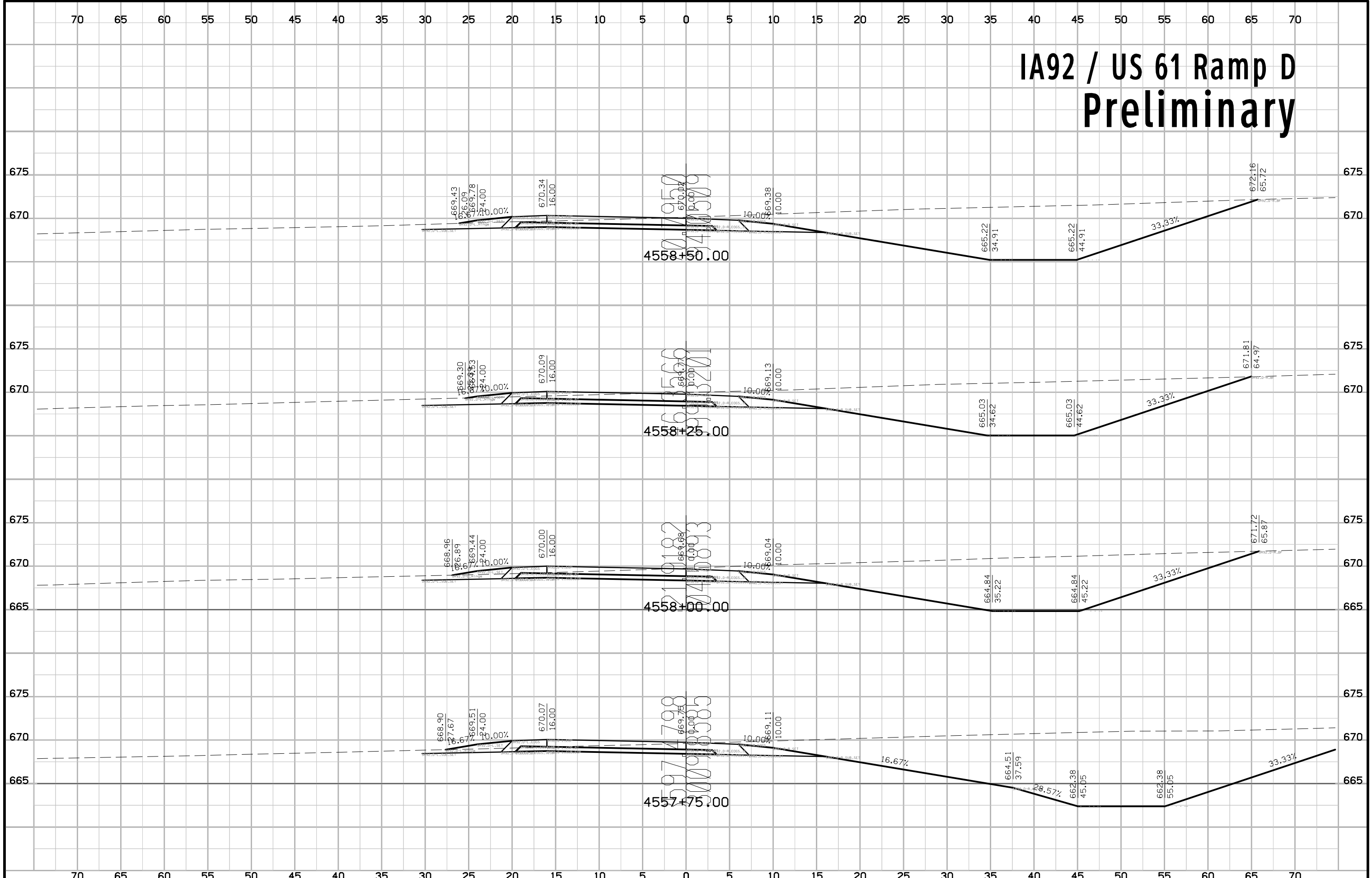
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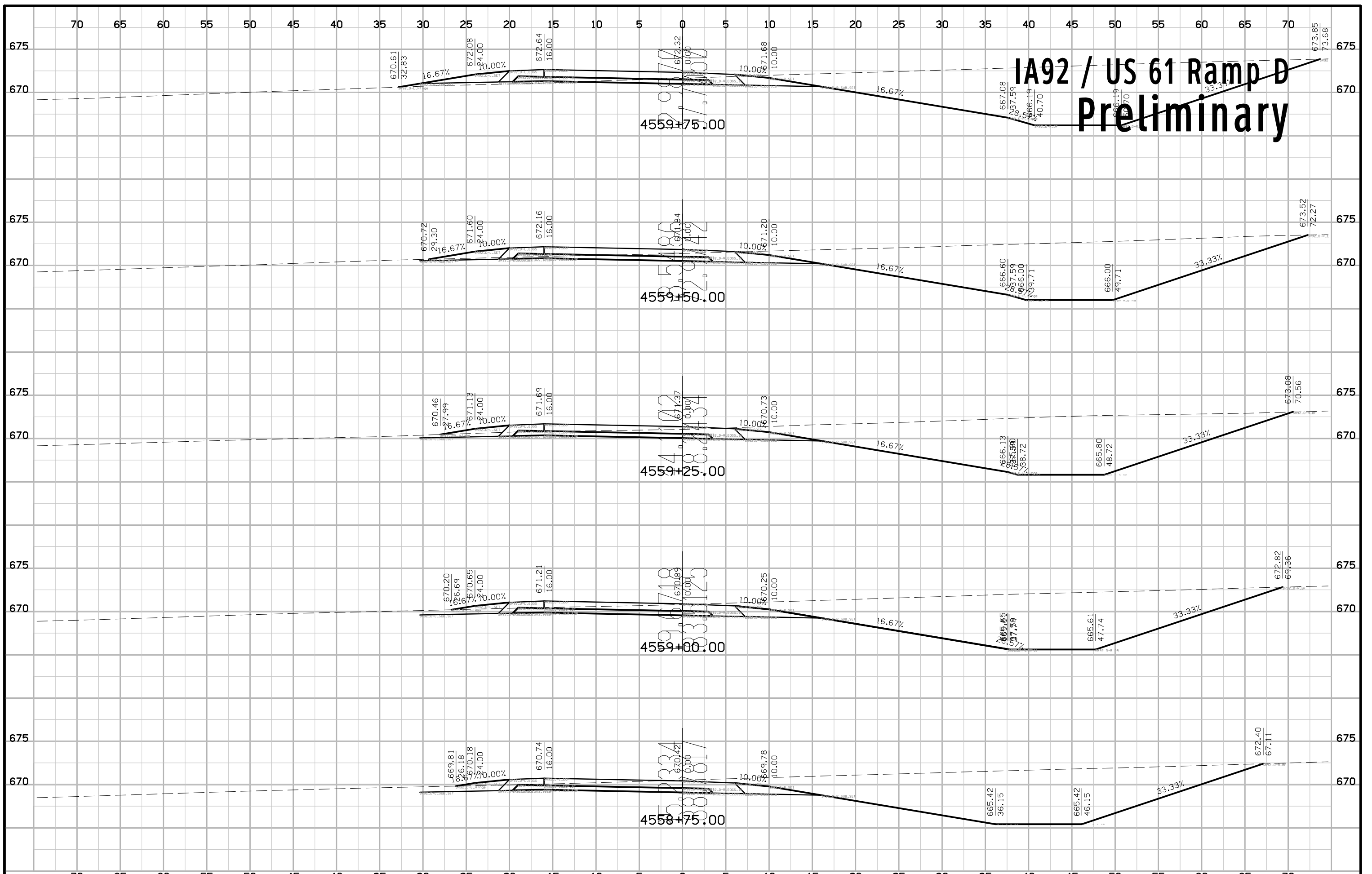
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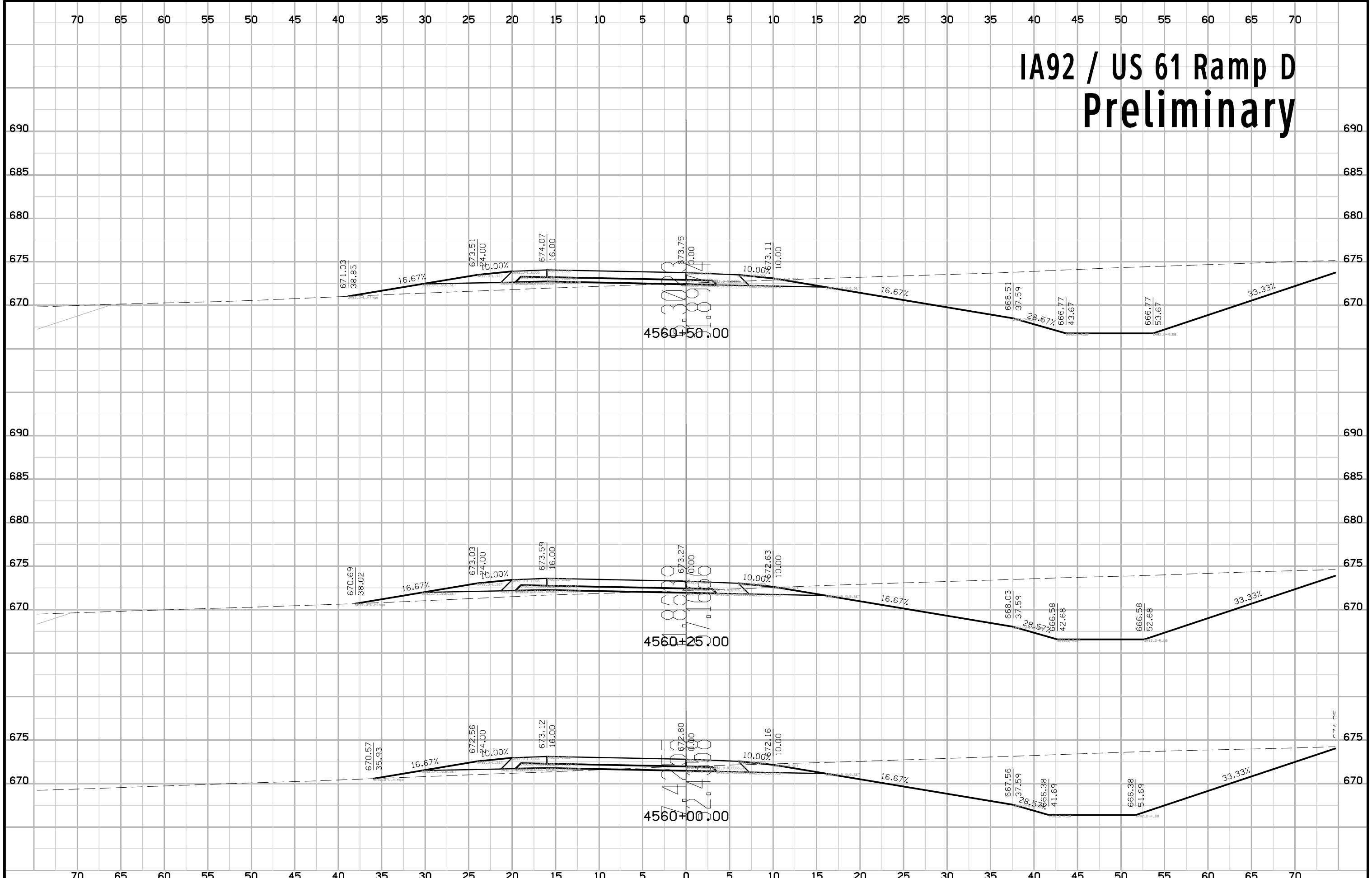
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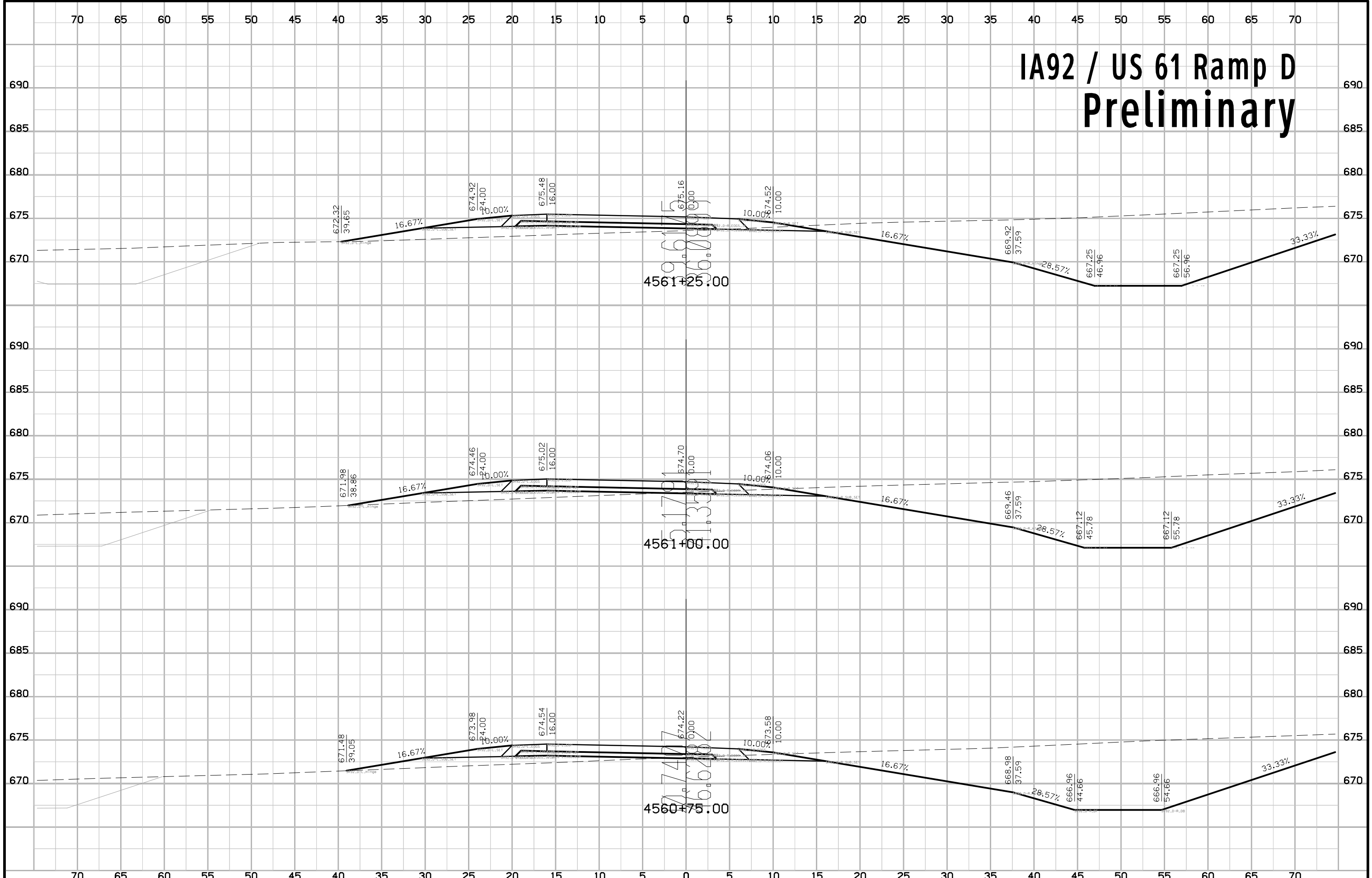
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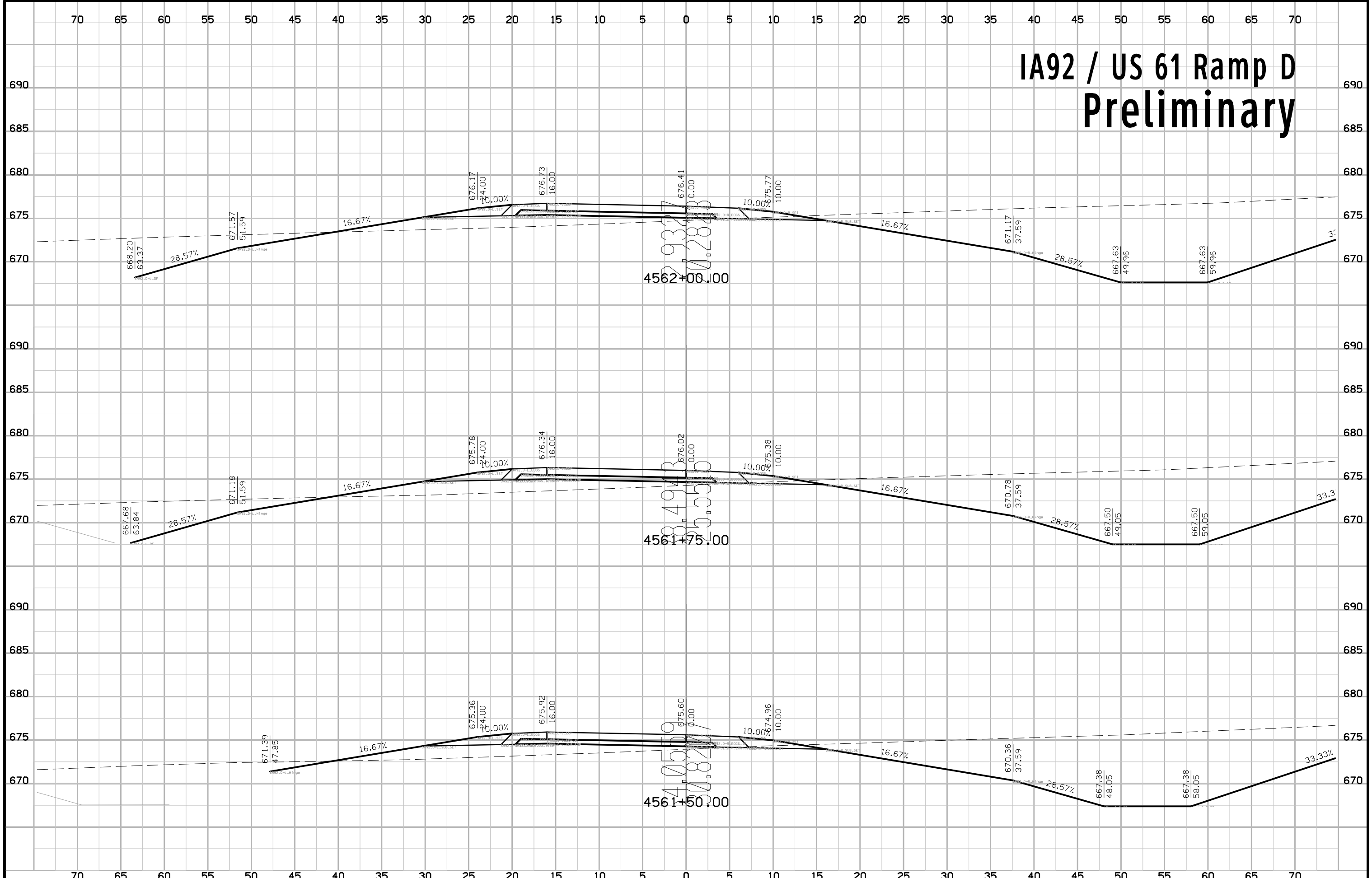
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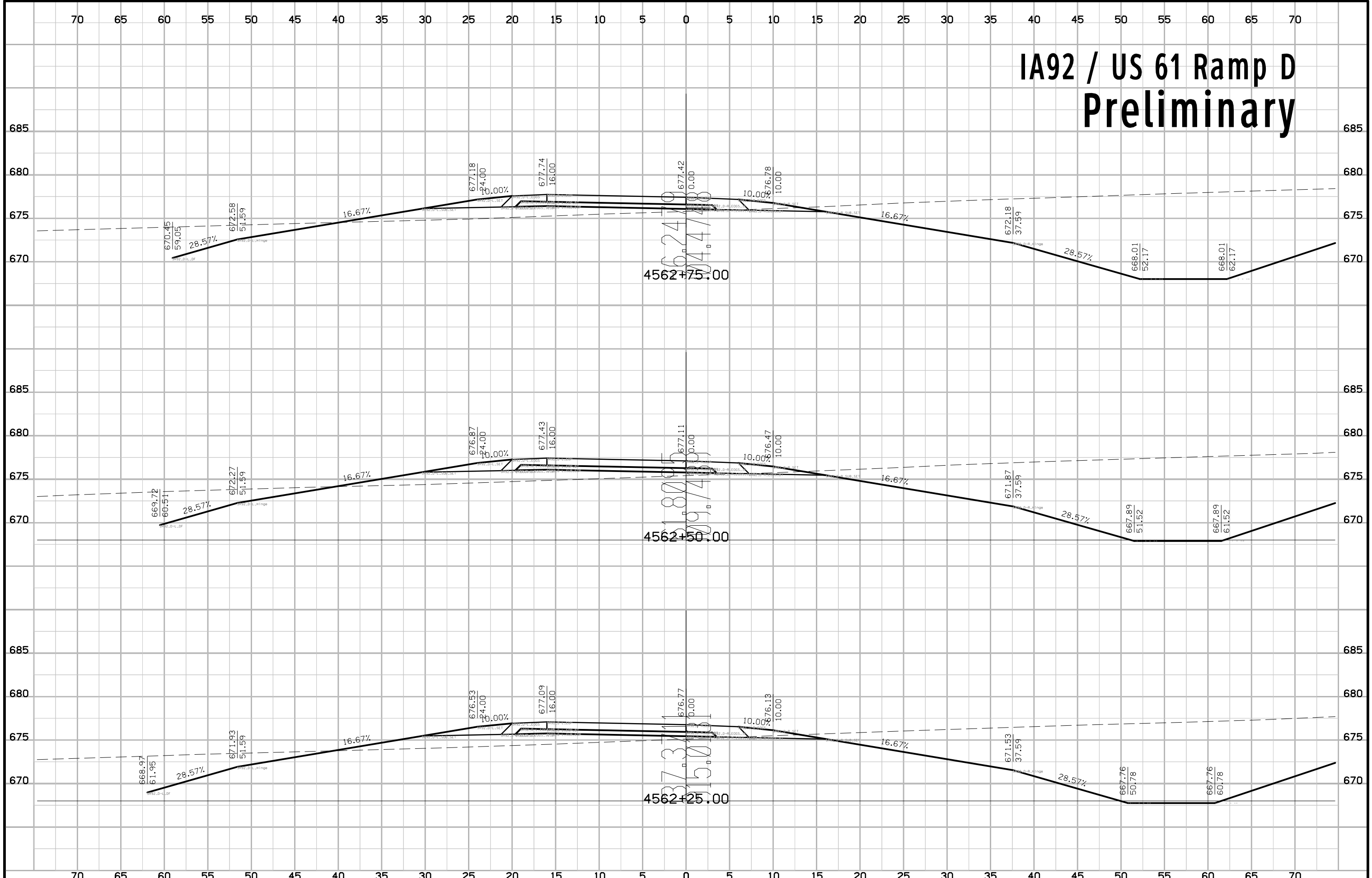
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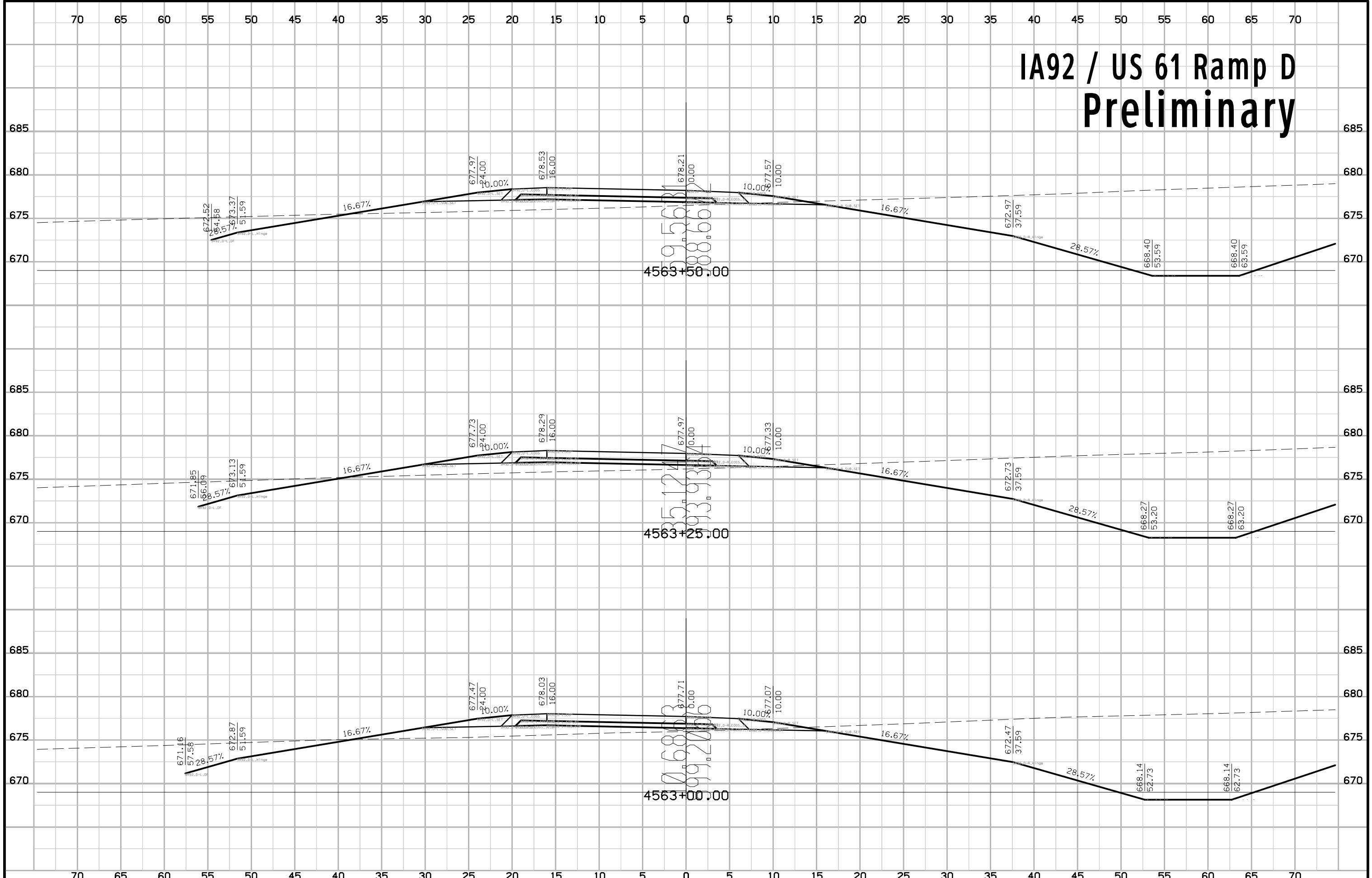
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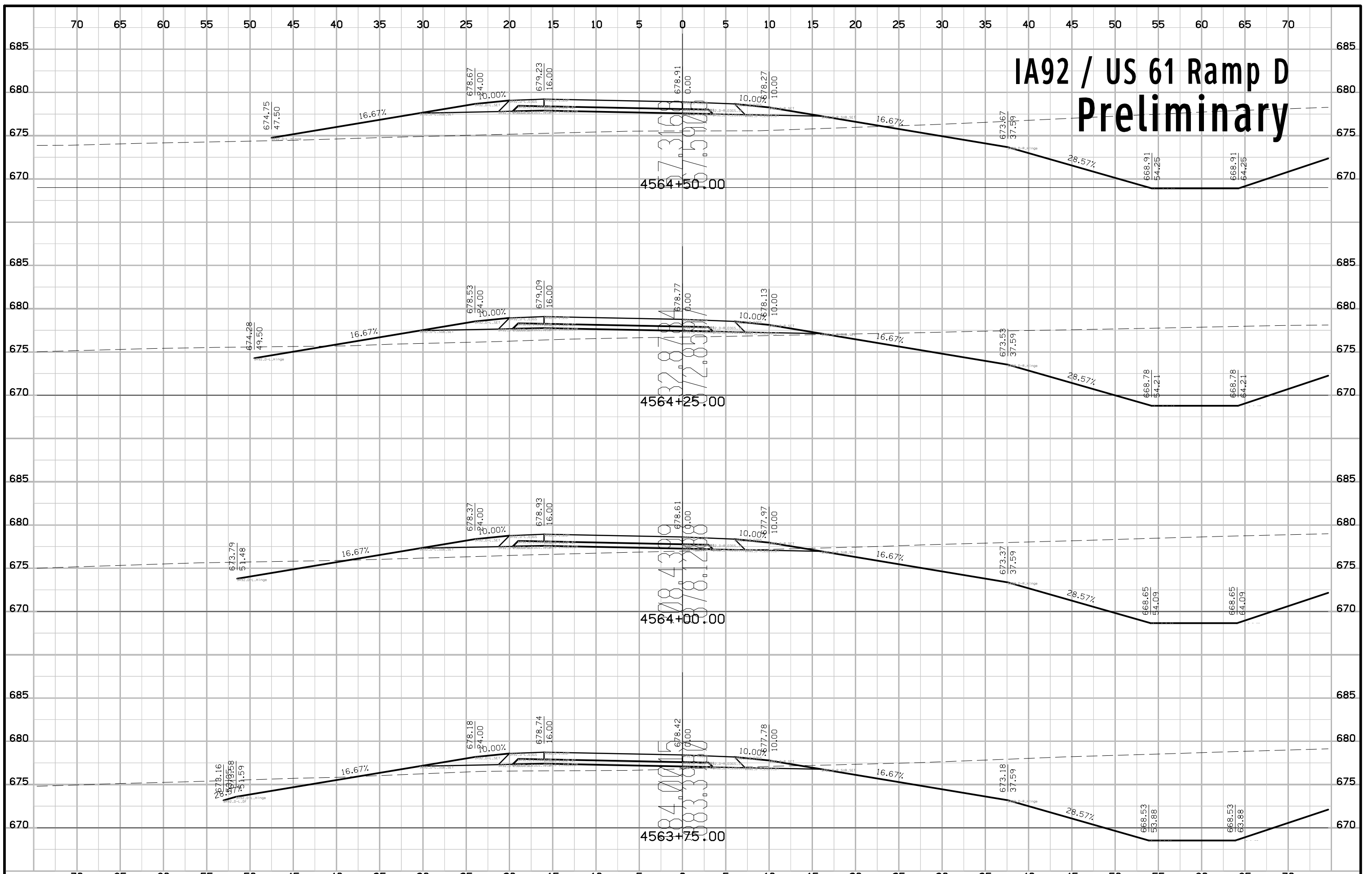
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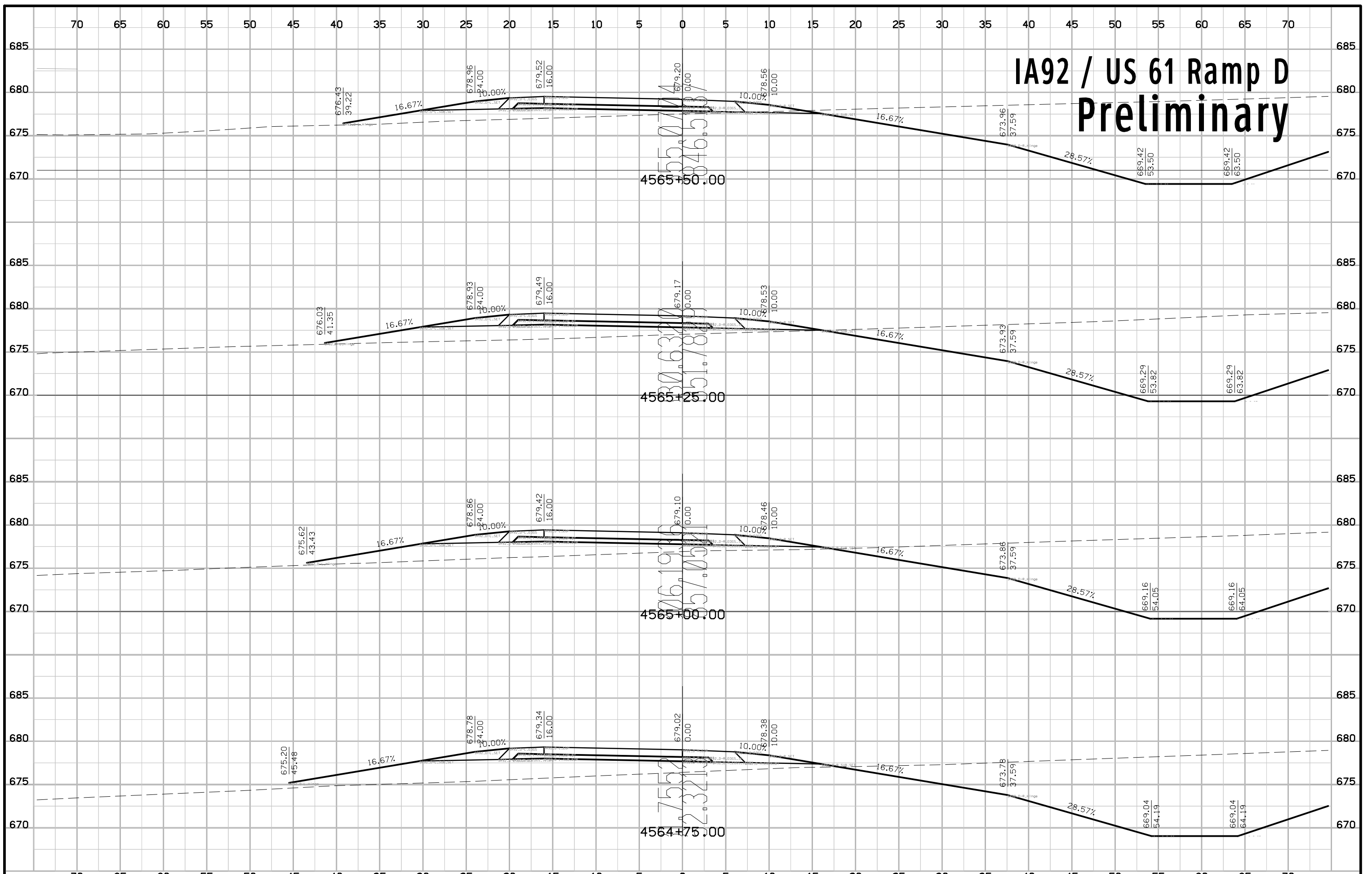
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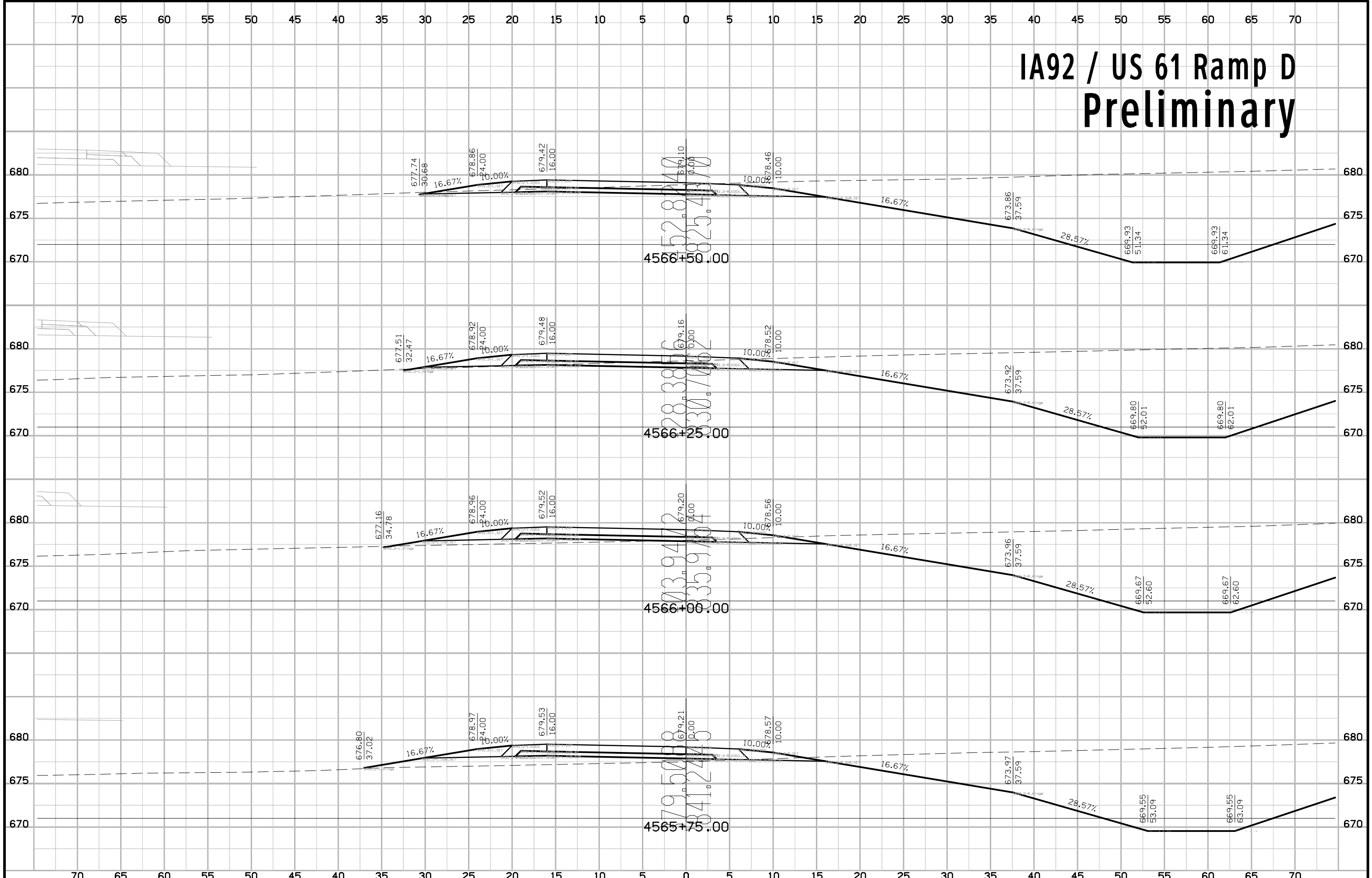
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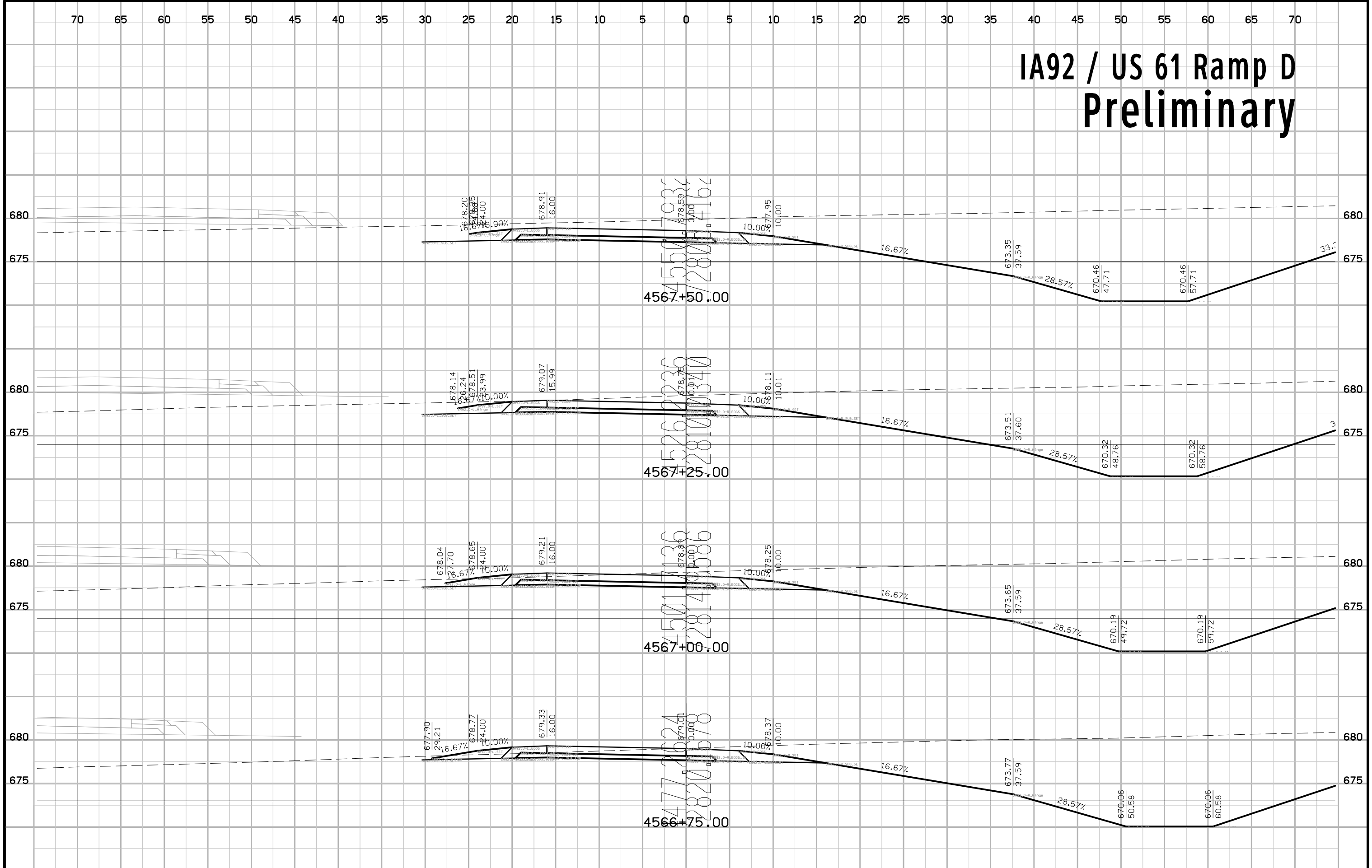
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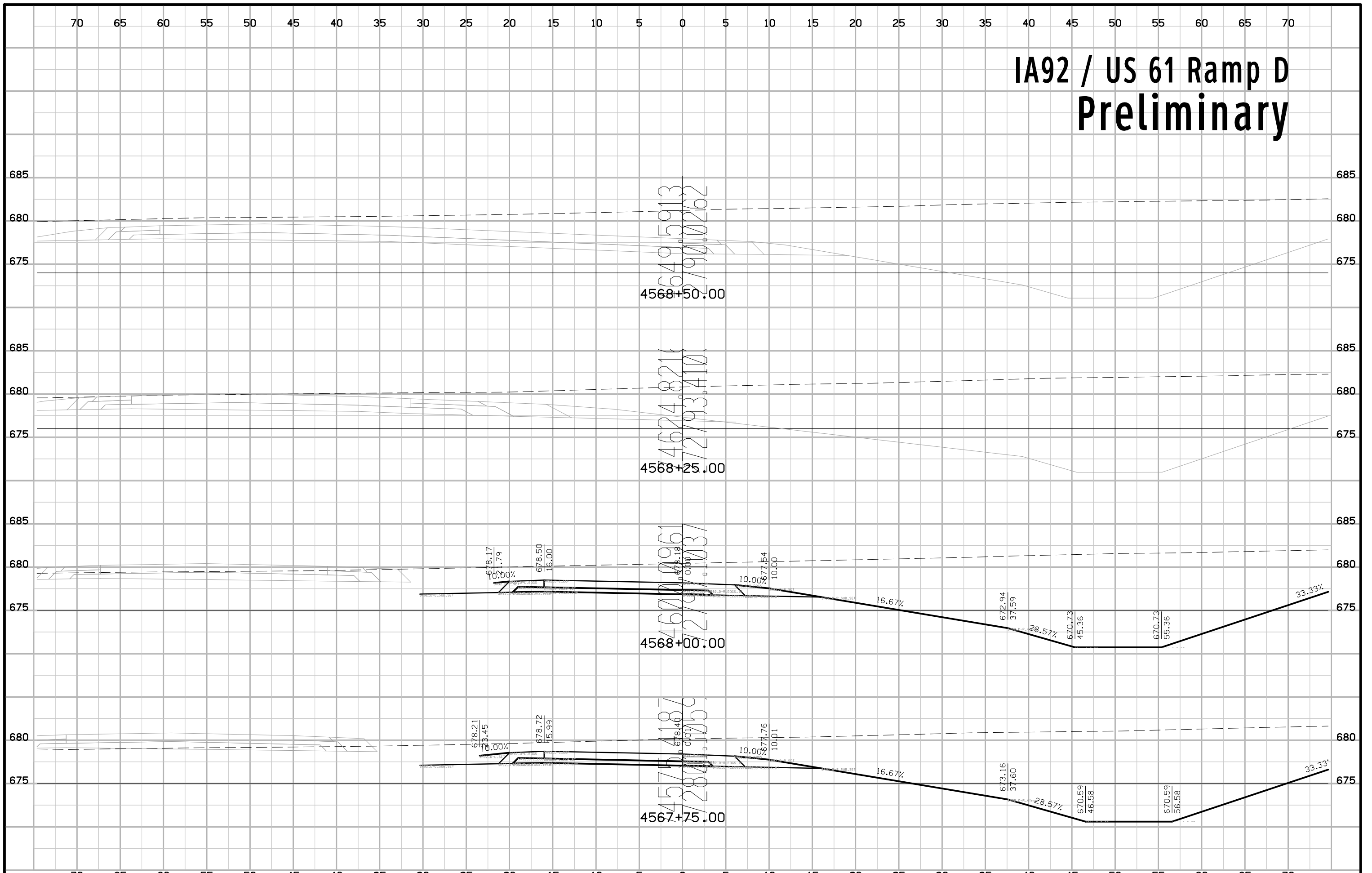
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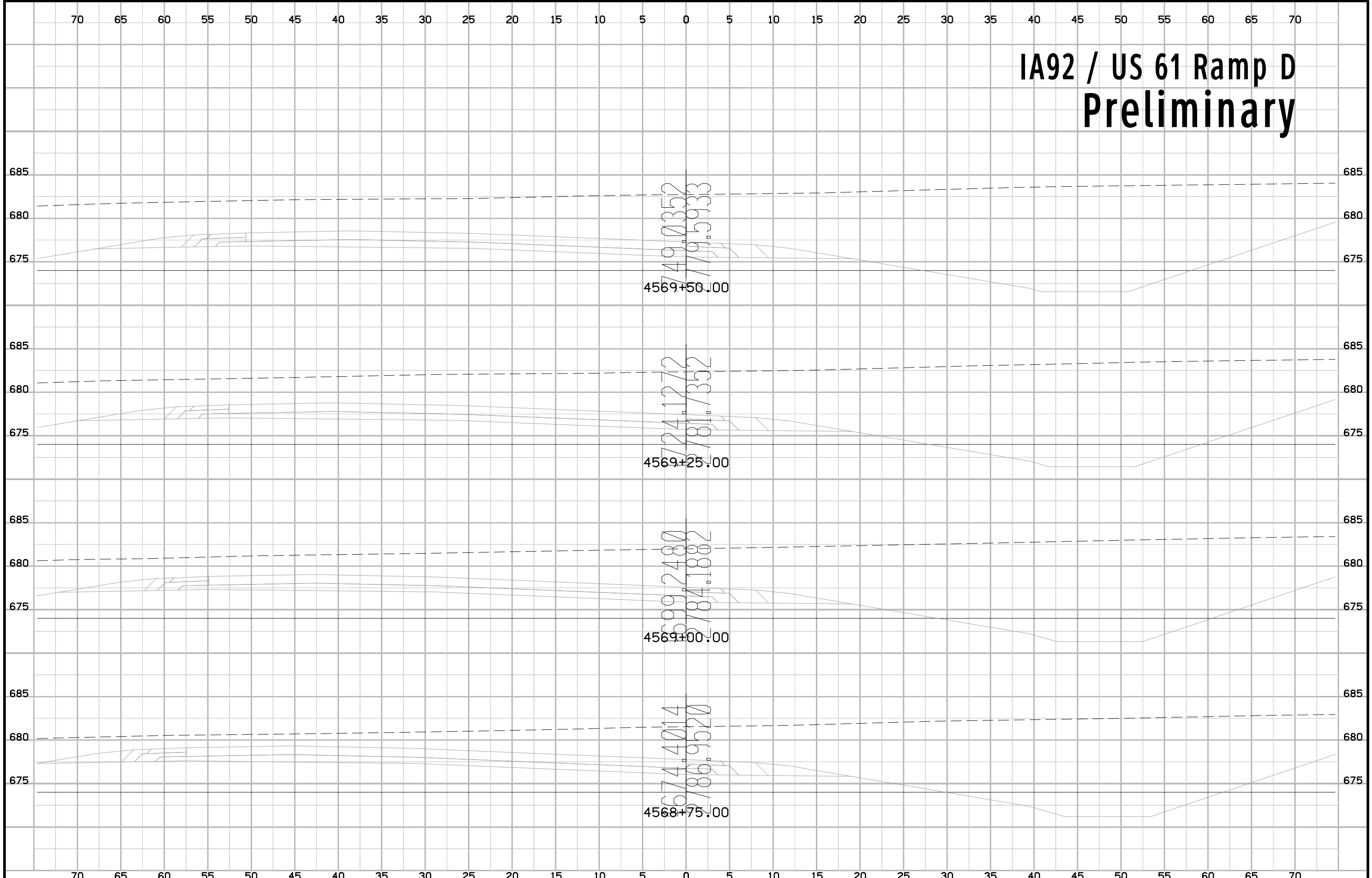
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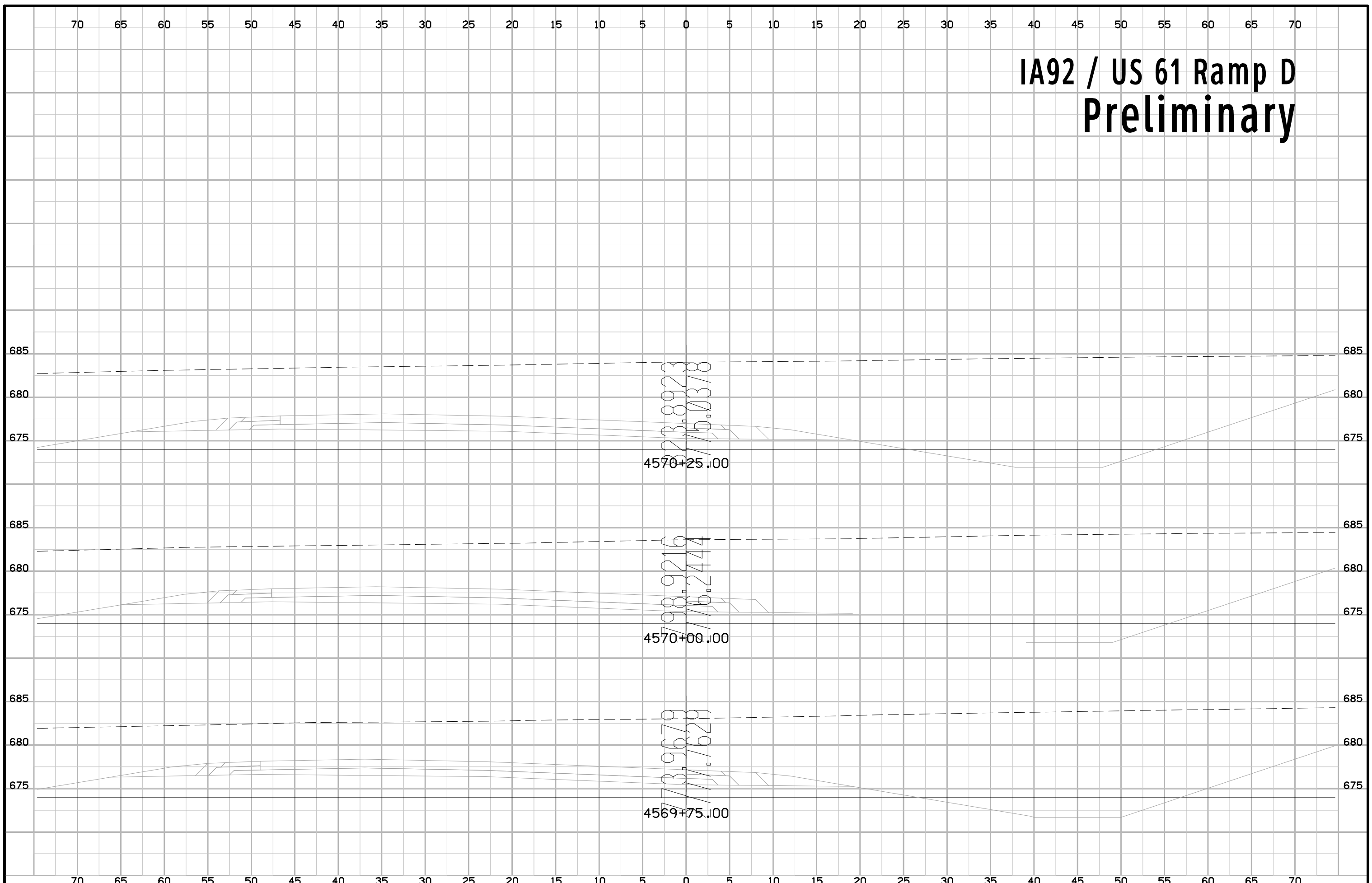
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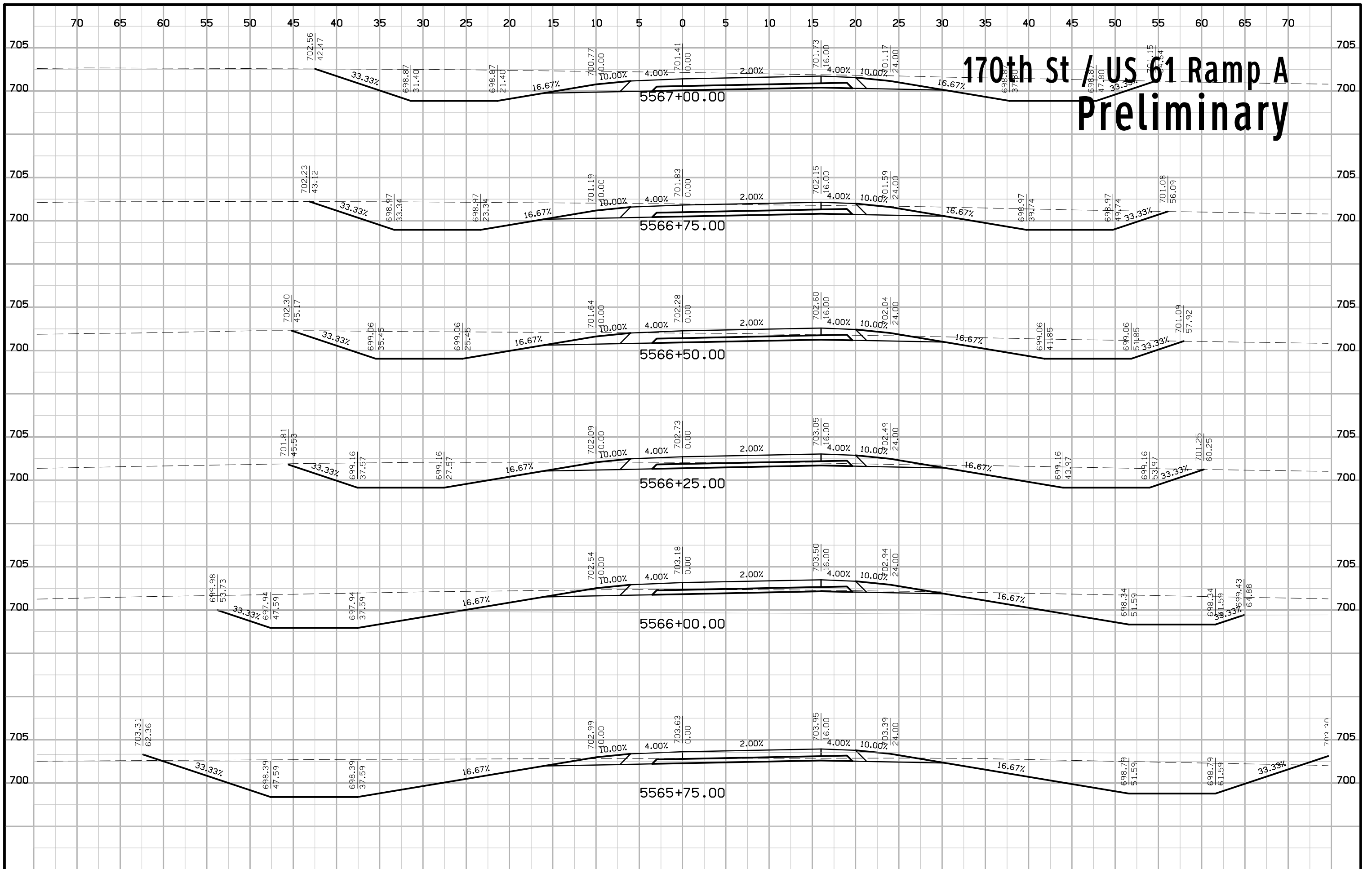
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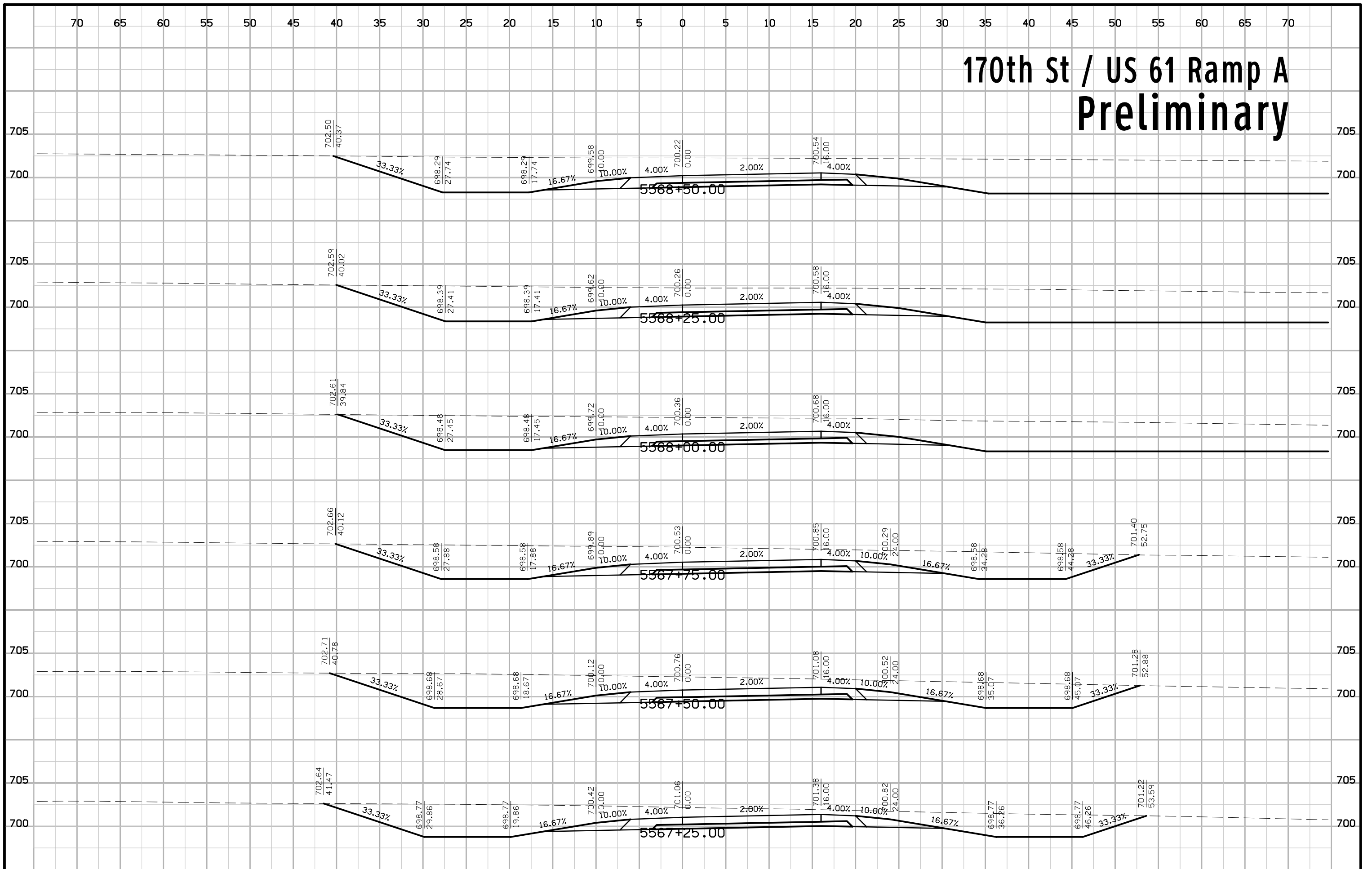
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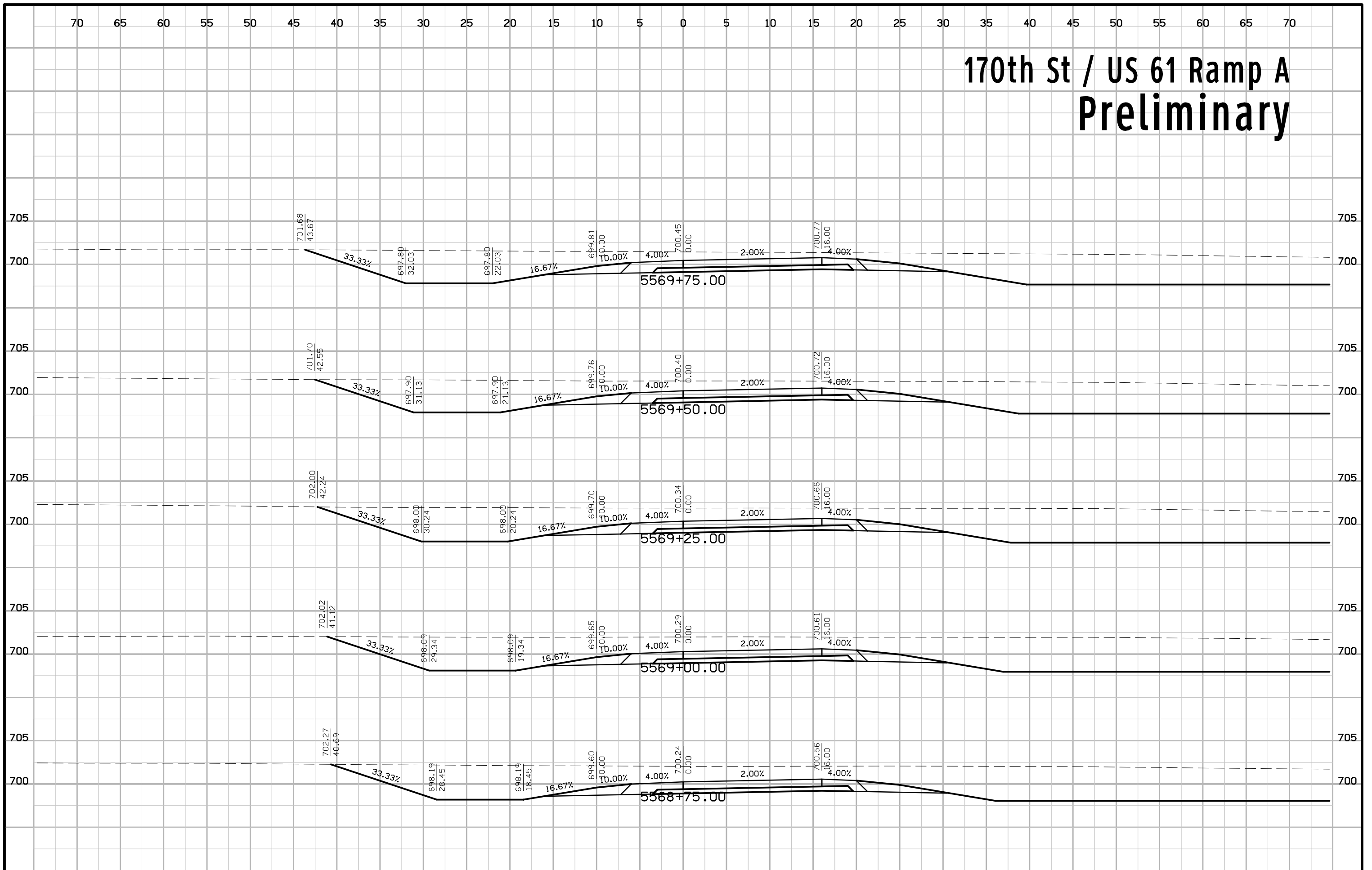
170th St / US 61 Ramp A Preliminary



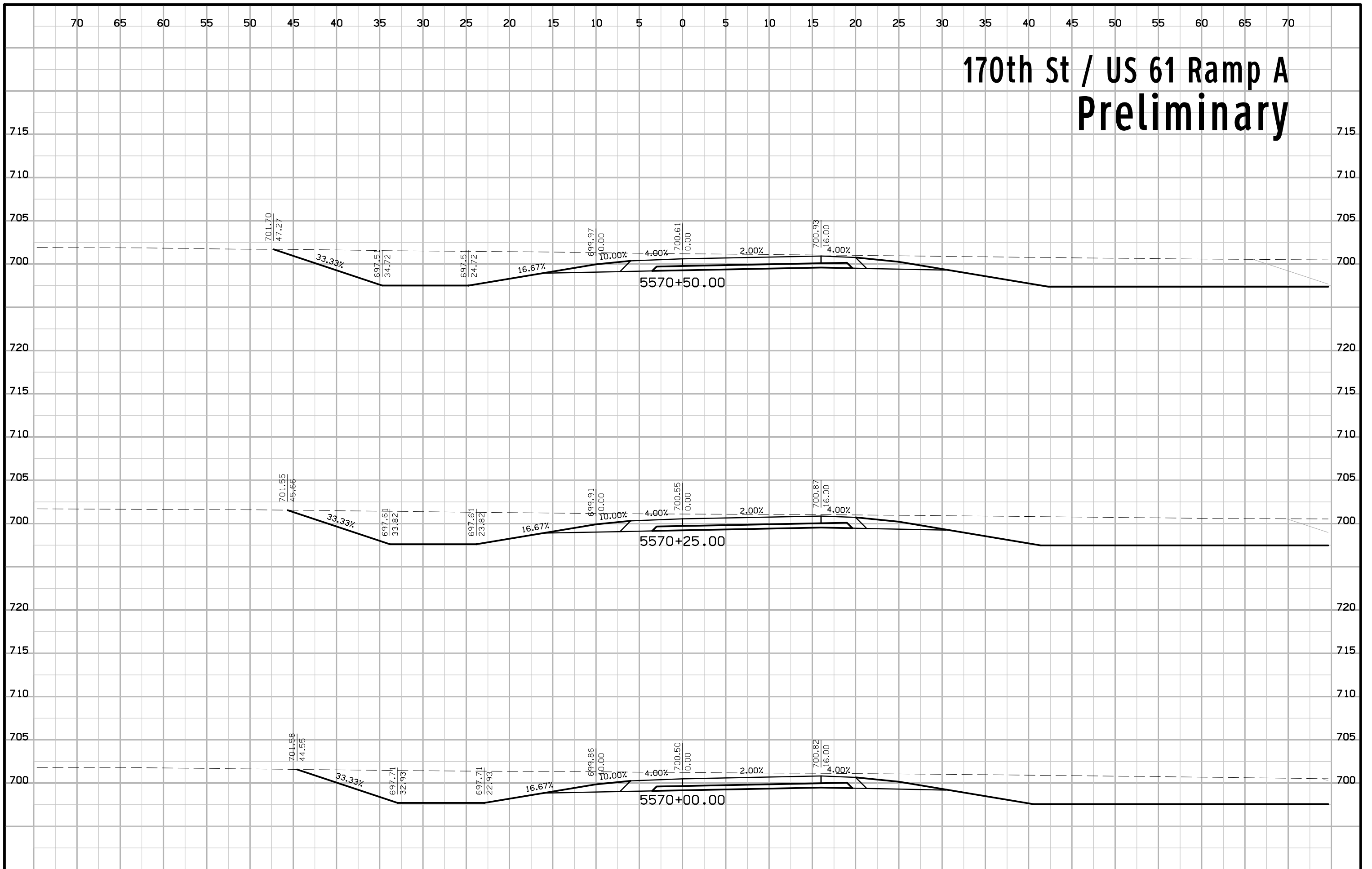
170th St / US 61 Ramp A Preliminary



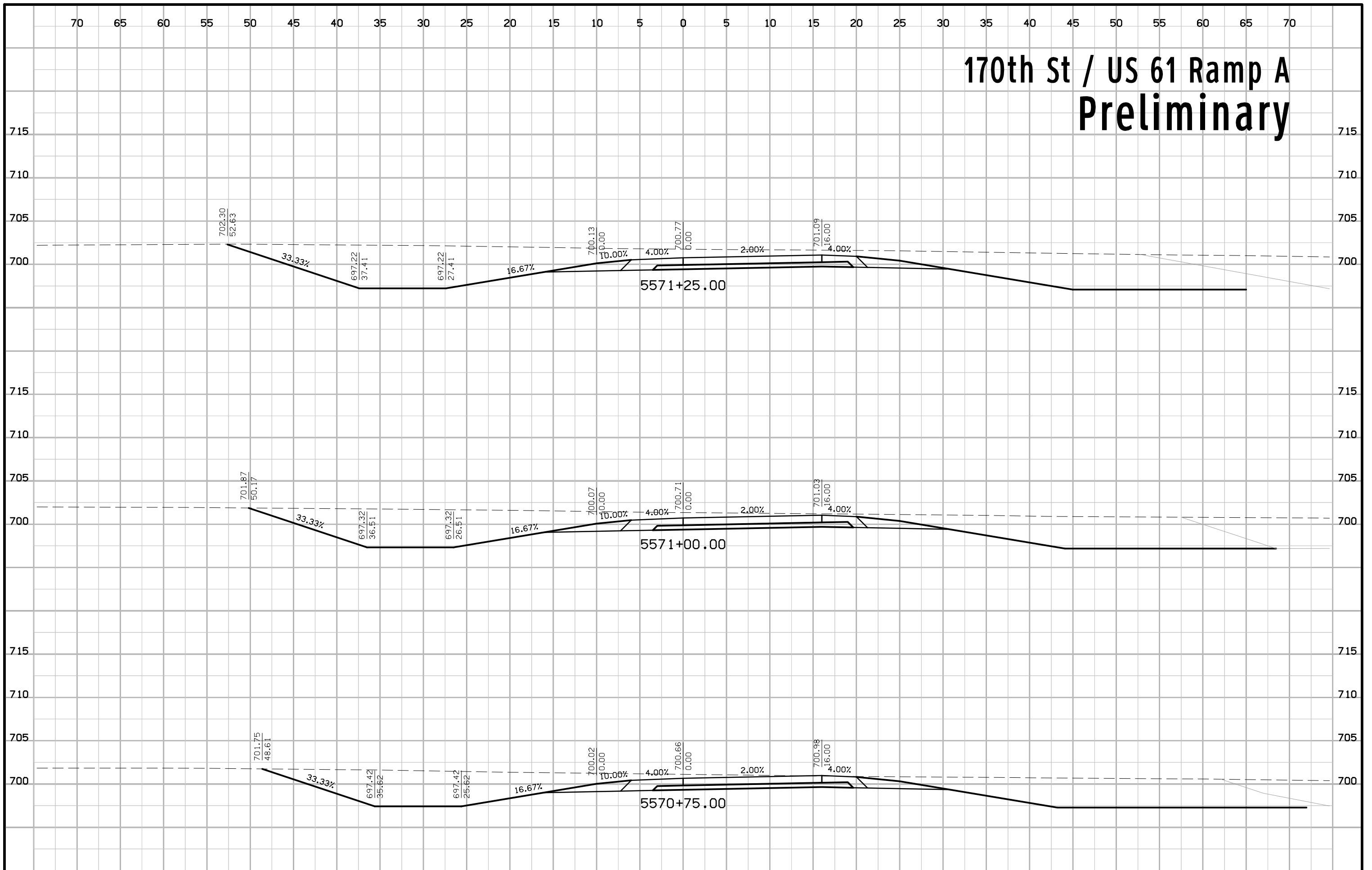
170th St / US 61 Ramp A Preliminary



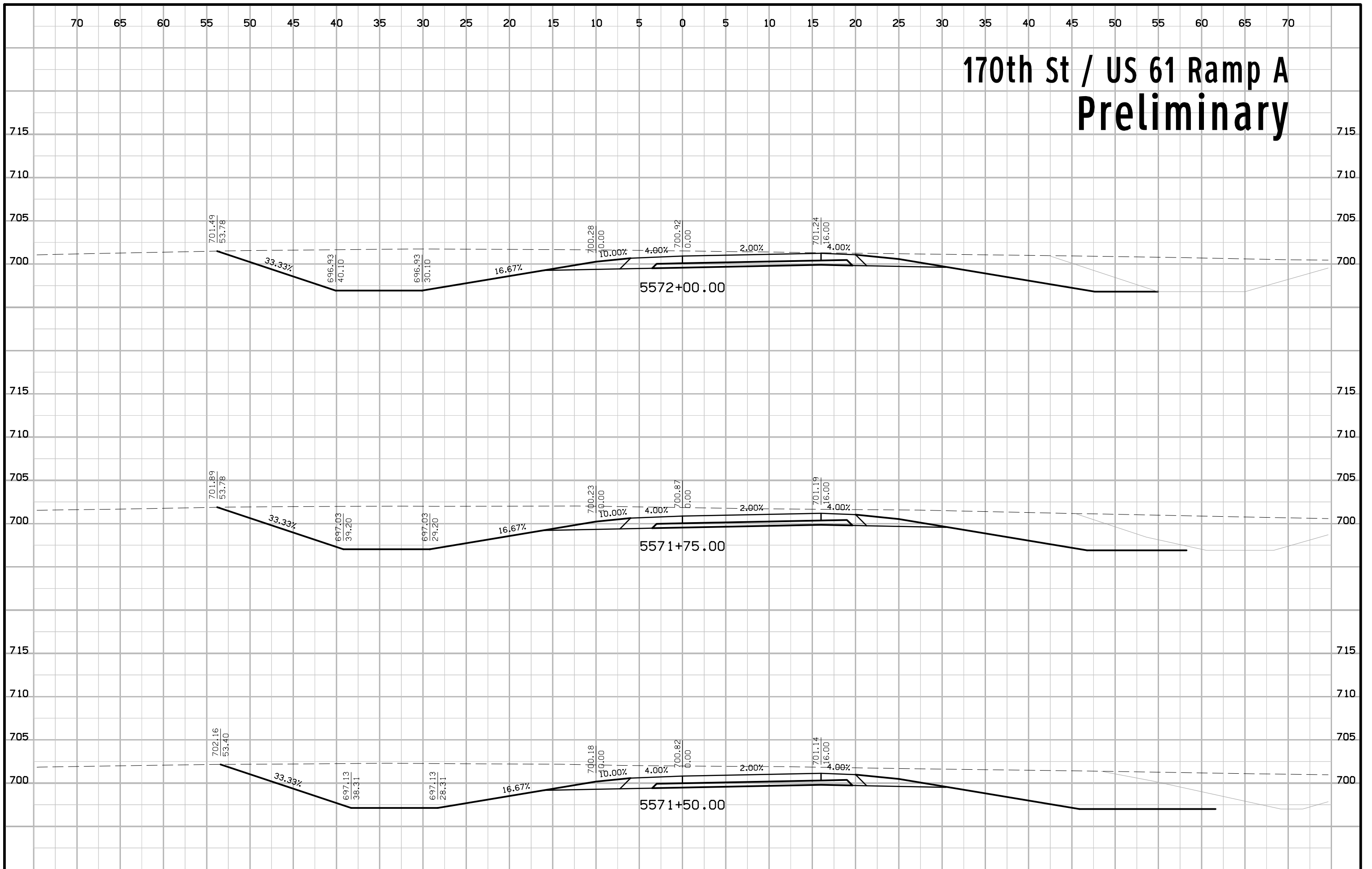
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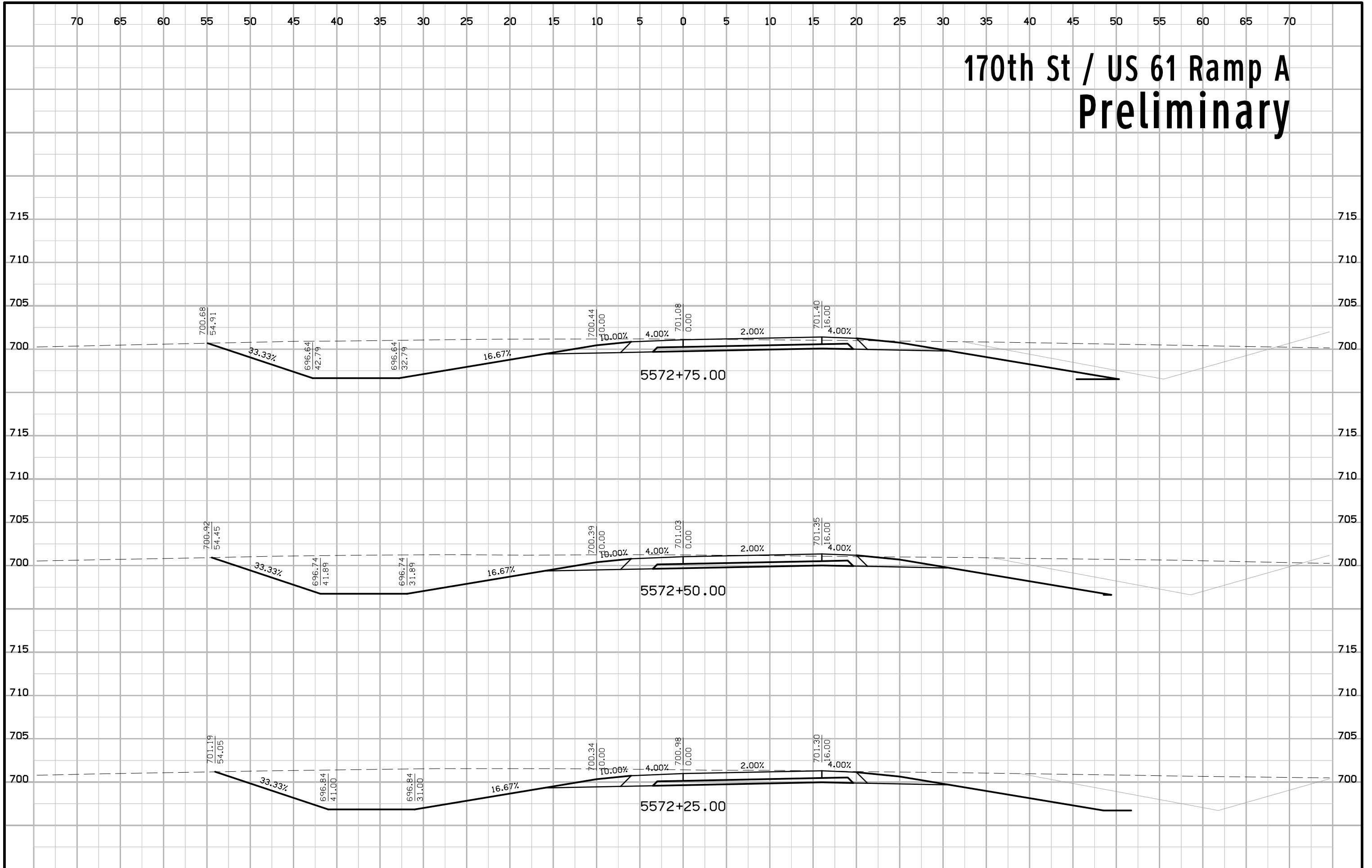
170th St / US 61 Ramp A Preliminary



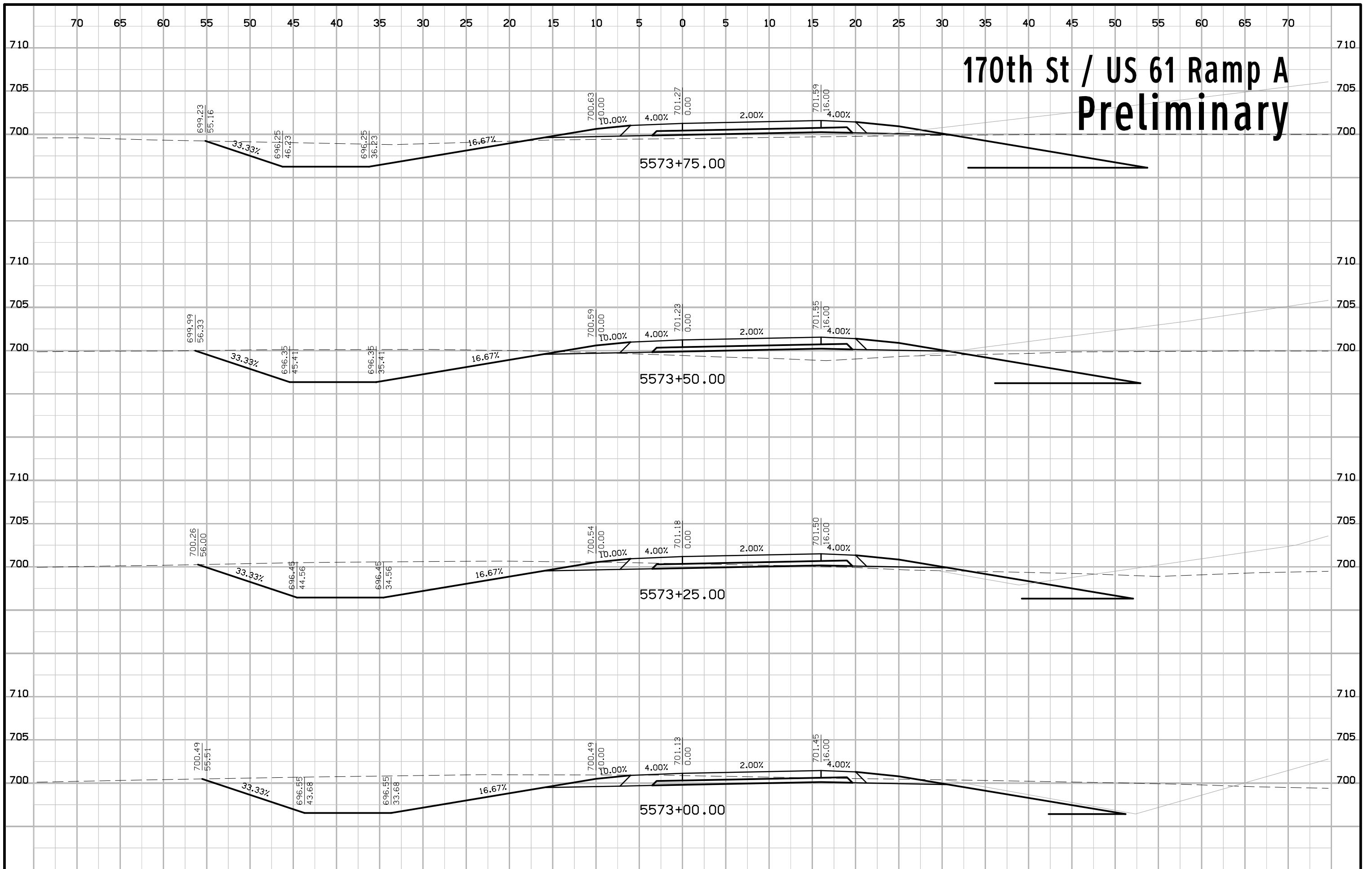
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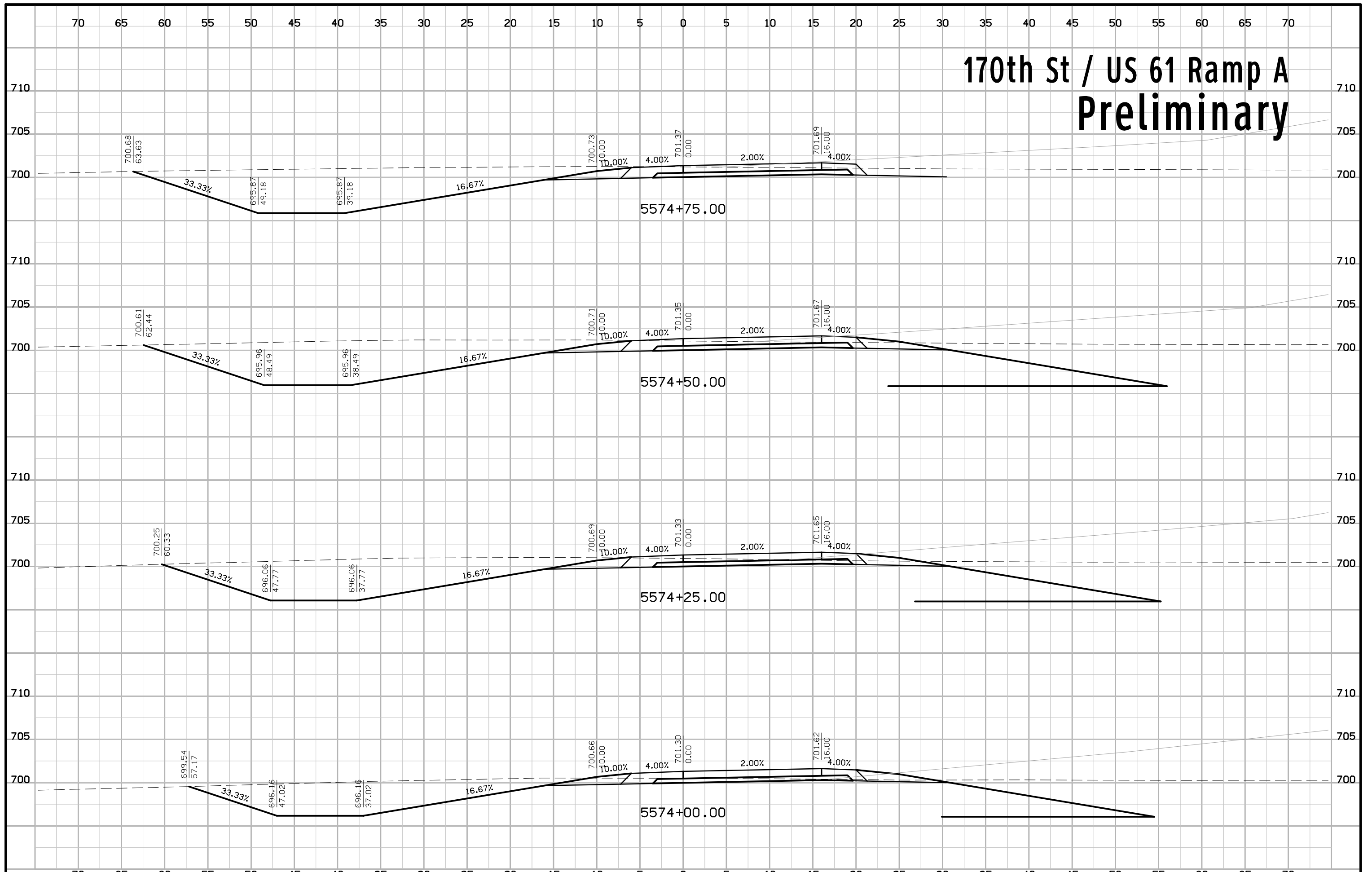
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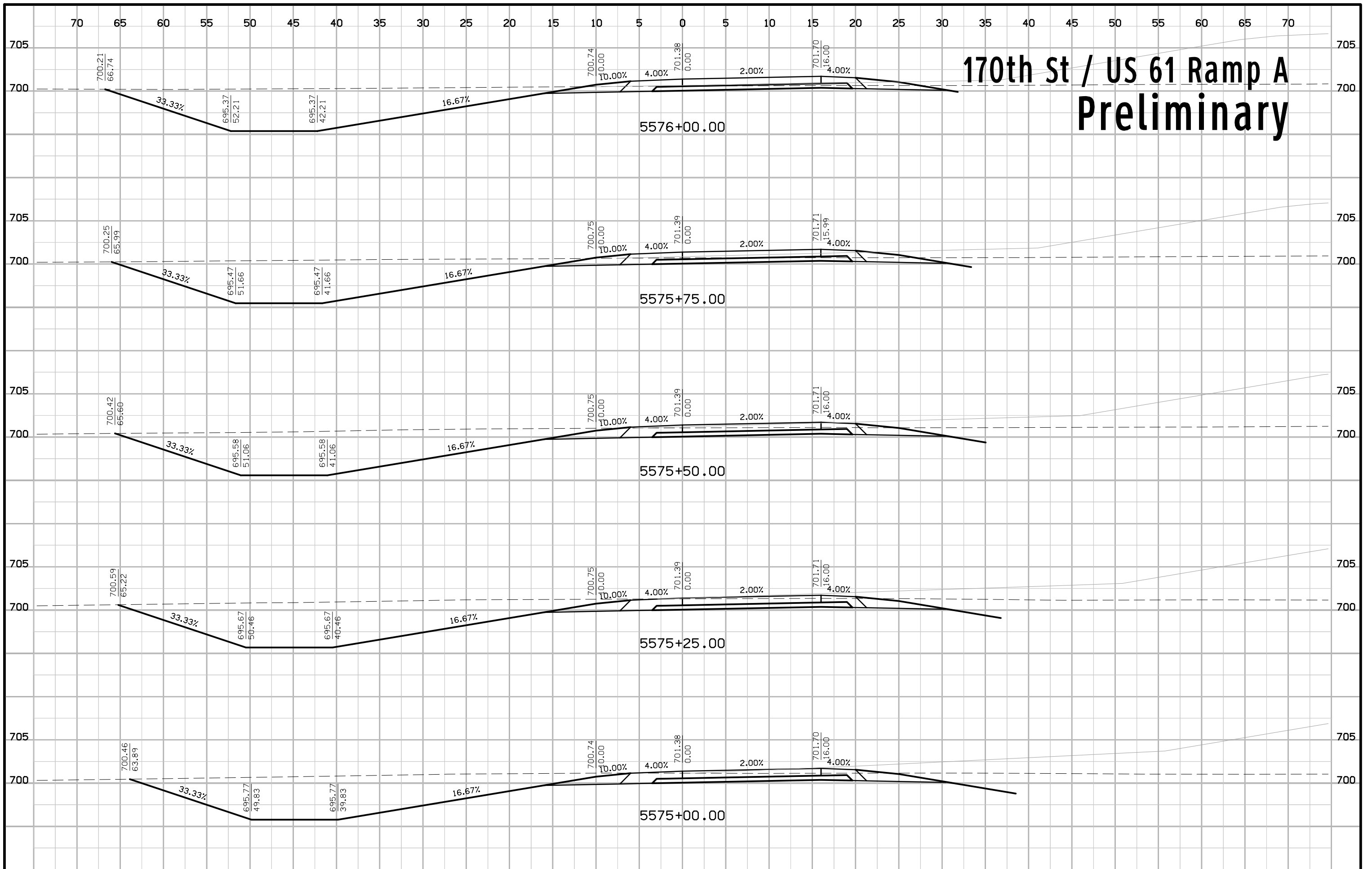
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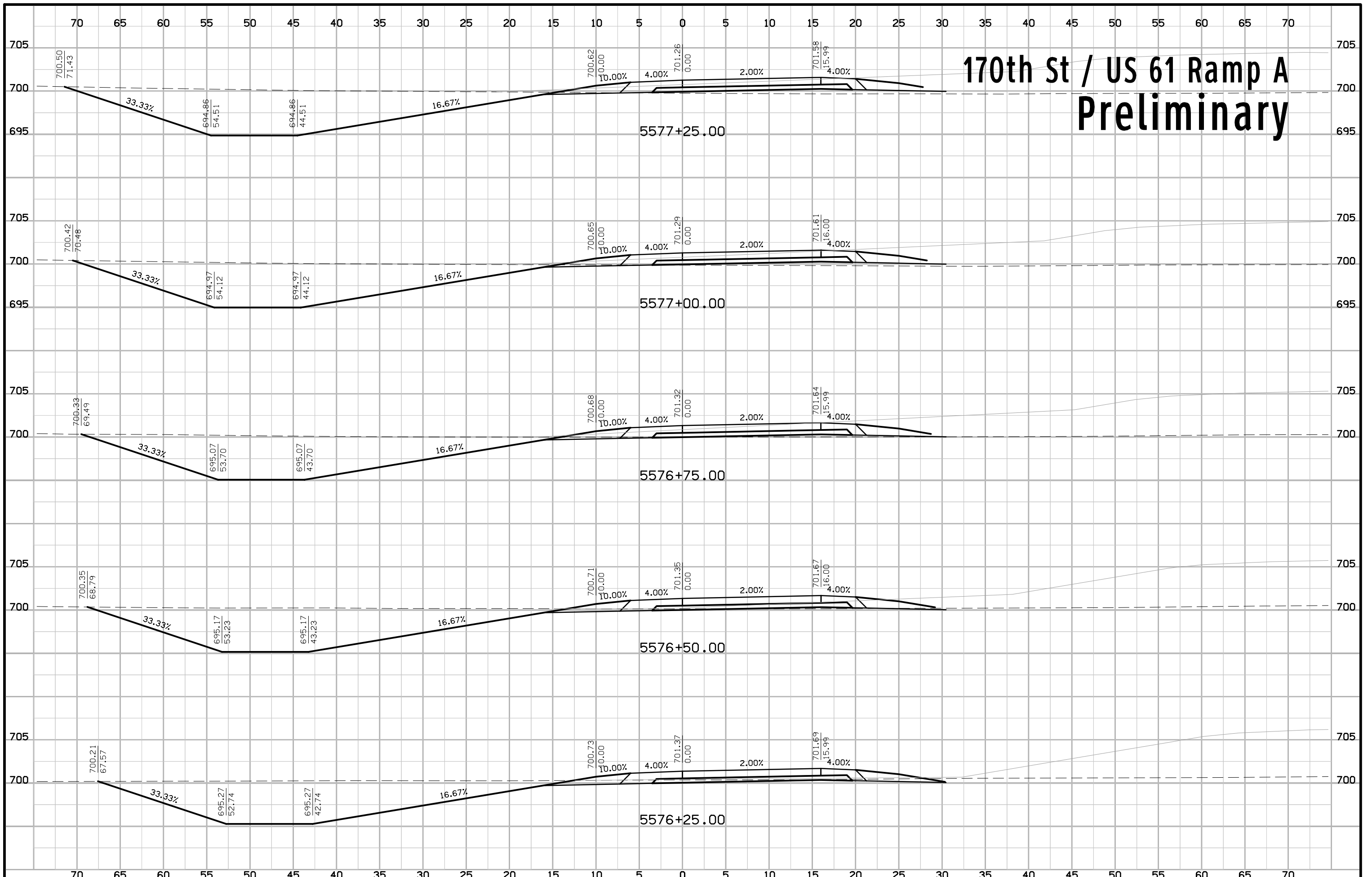
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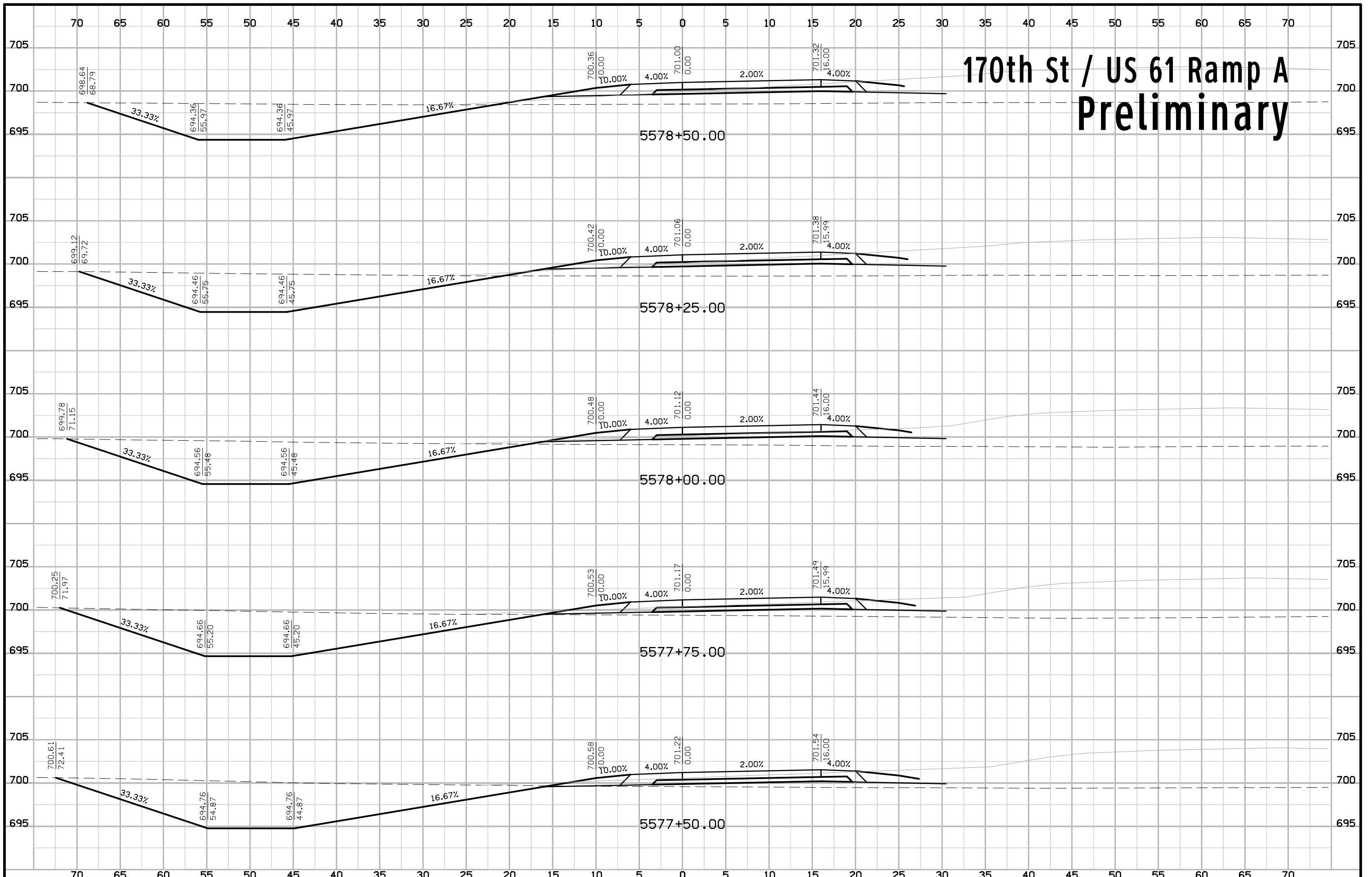
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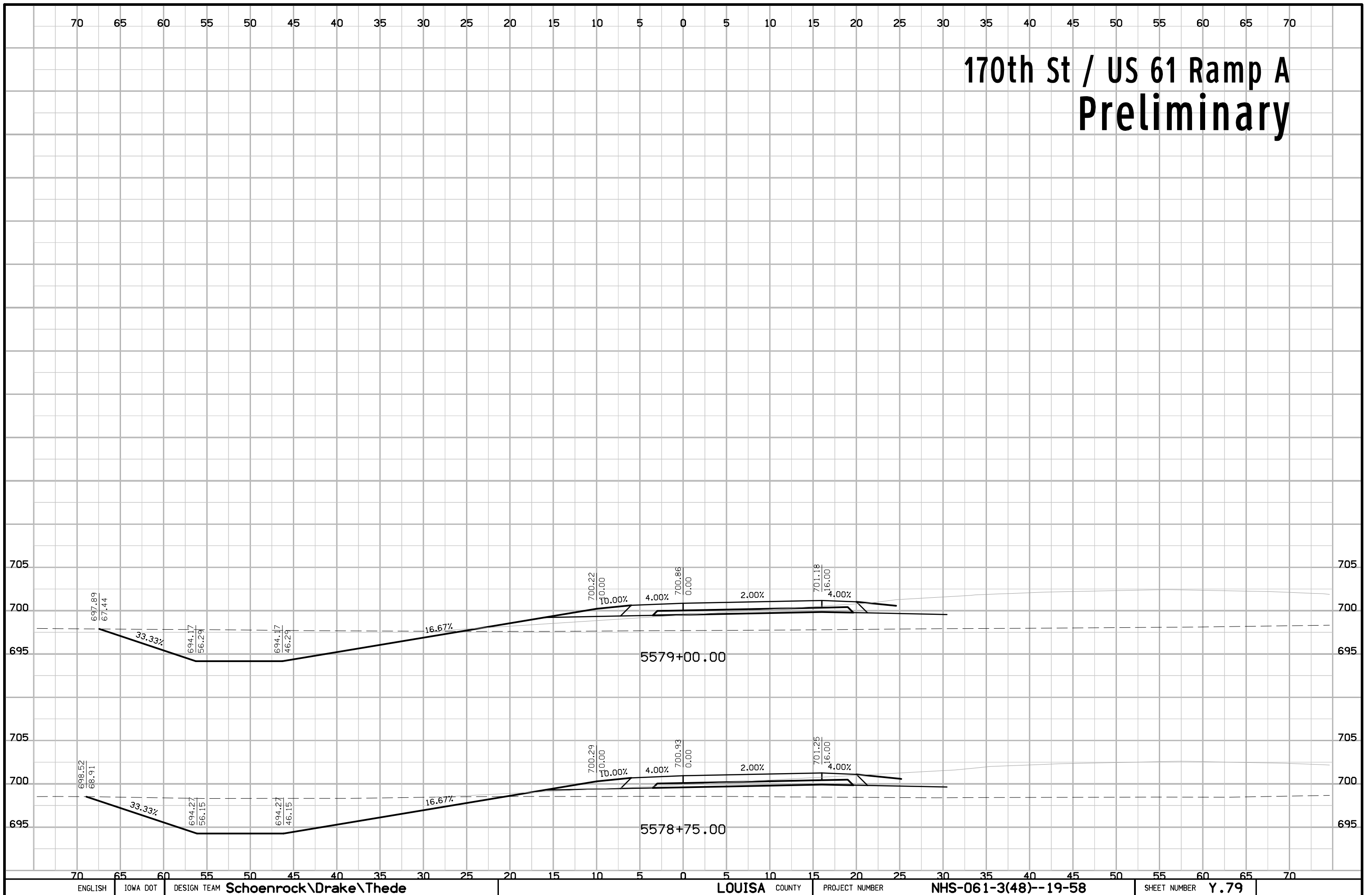
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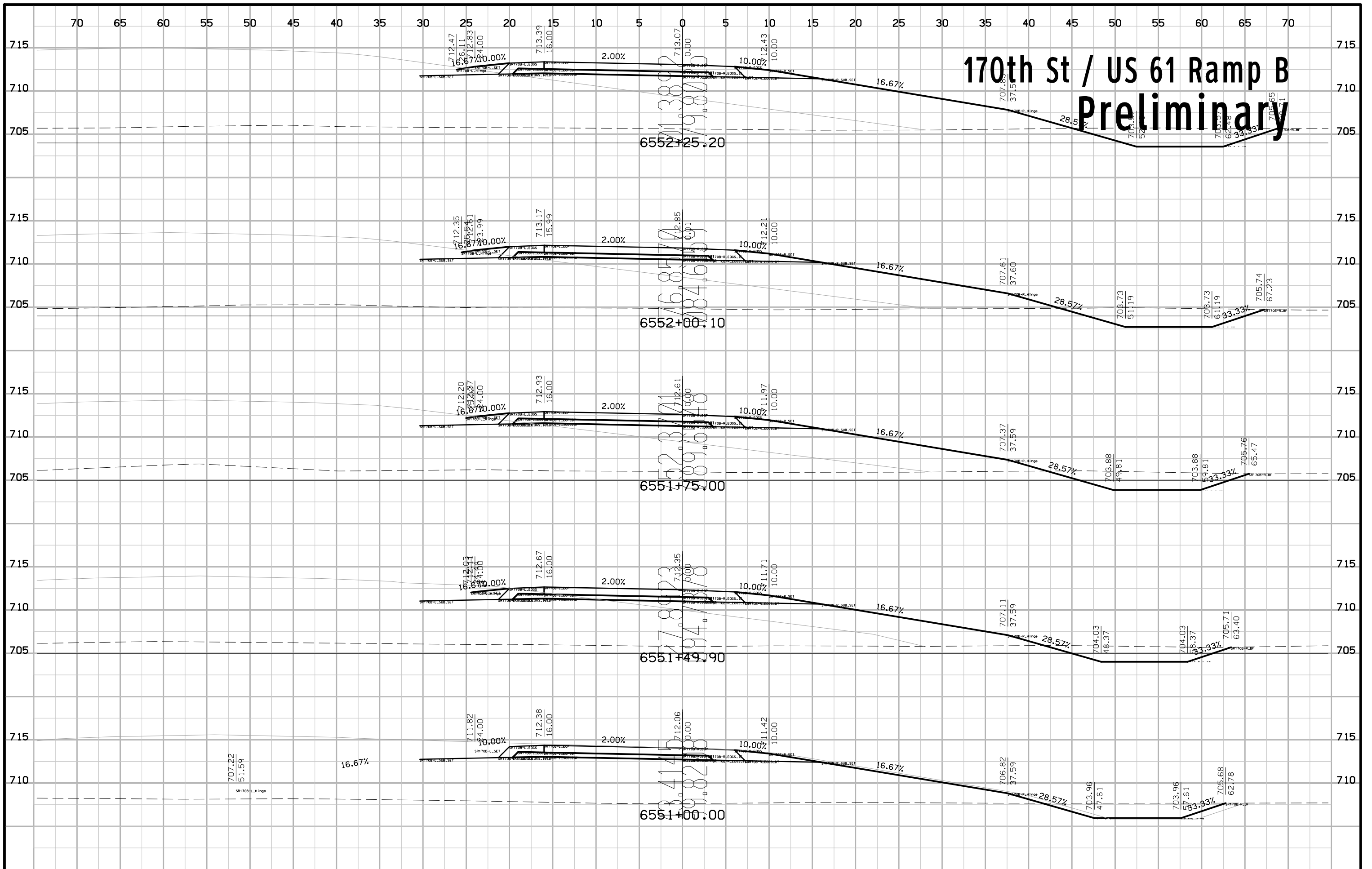
170th St / US 61 Ramp A Preliminary



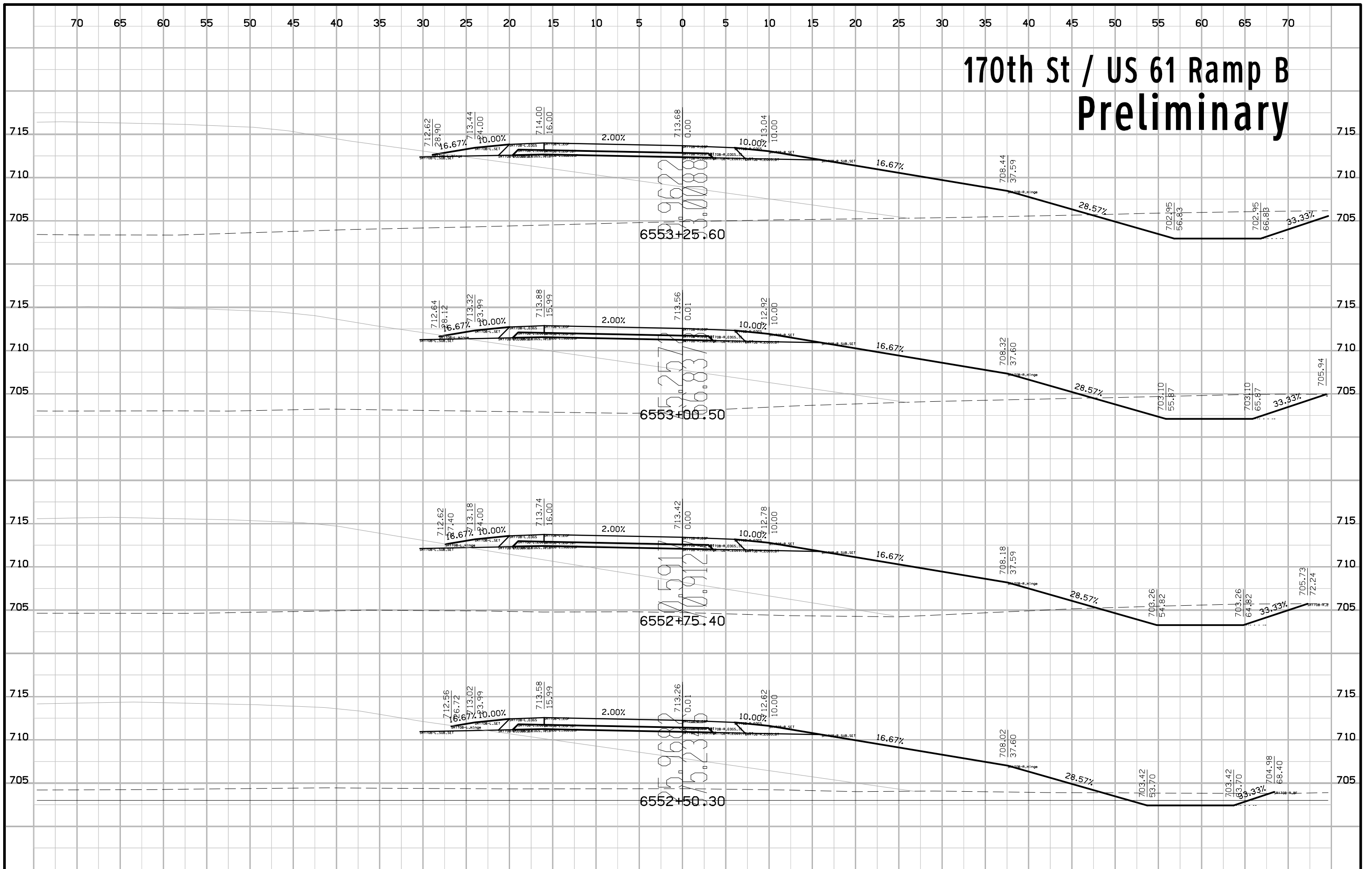
170th St / US 61 Ramp A Preliminary



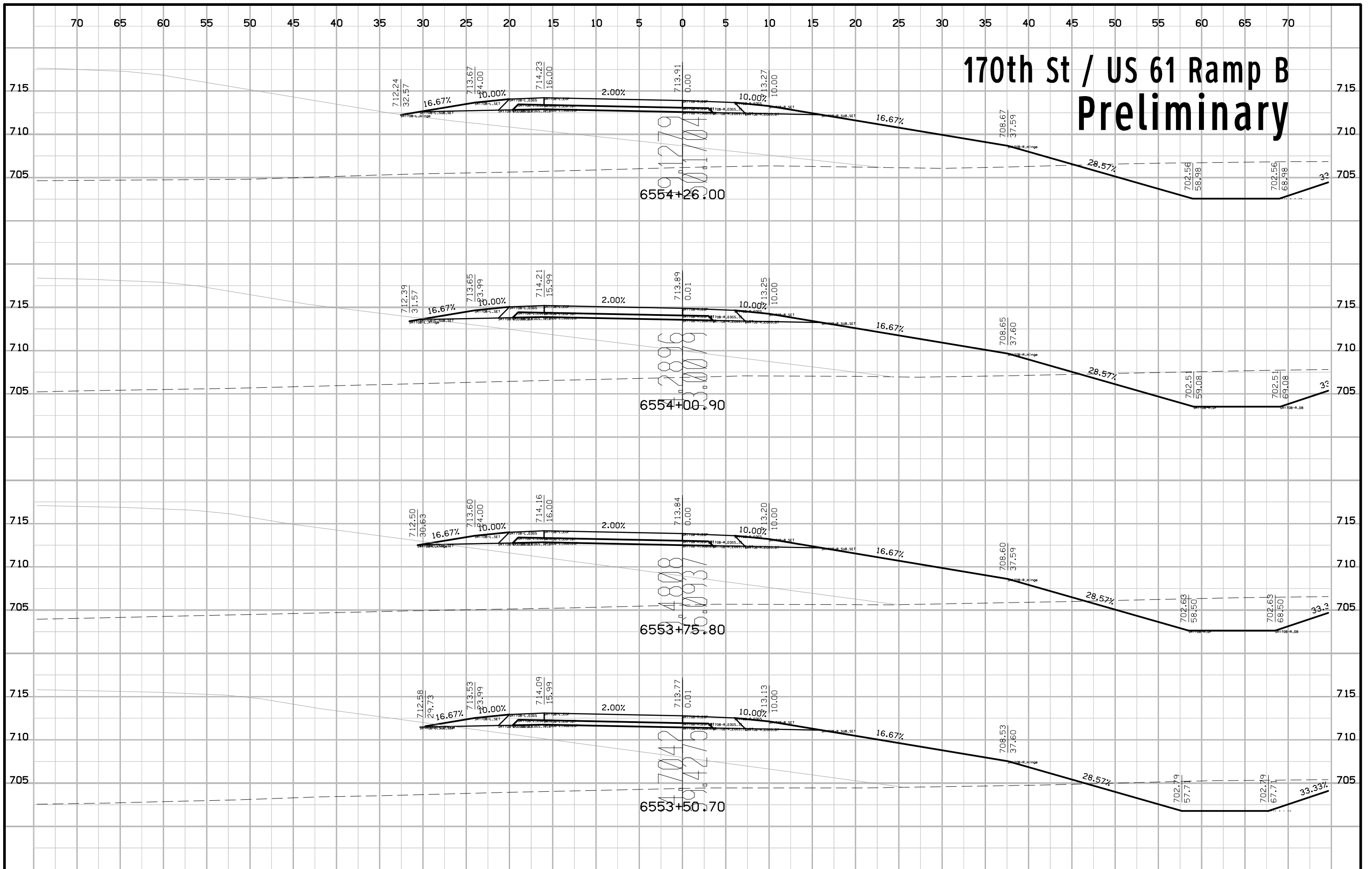
170th St / US 61 Ramp B Preliminary



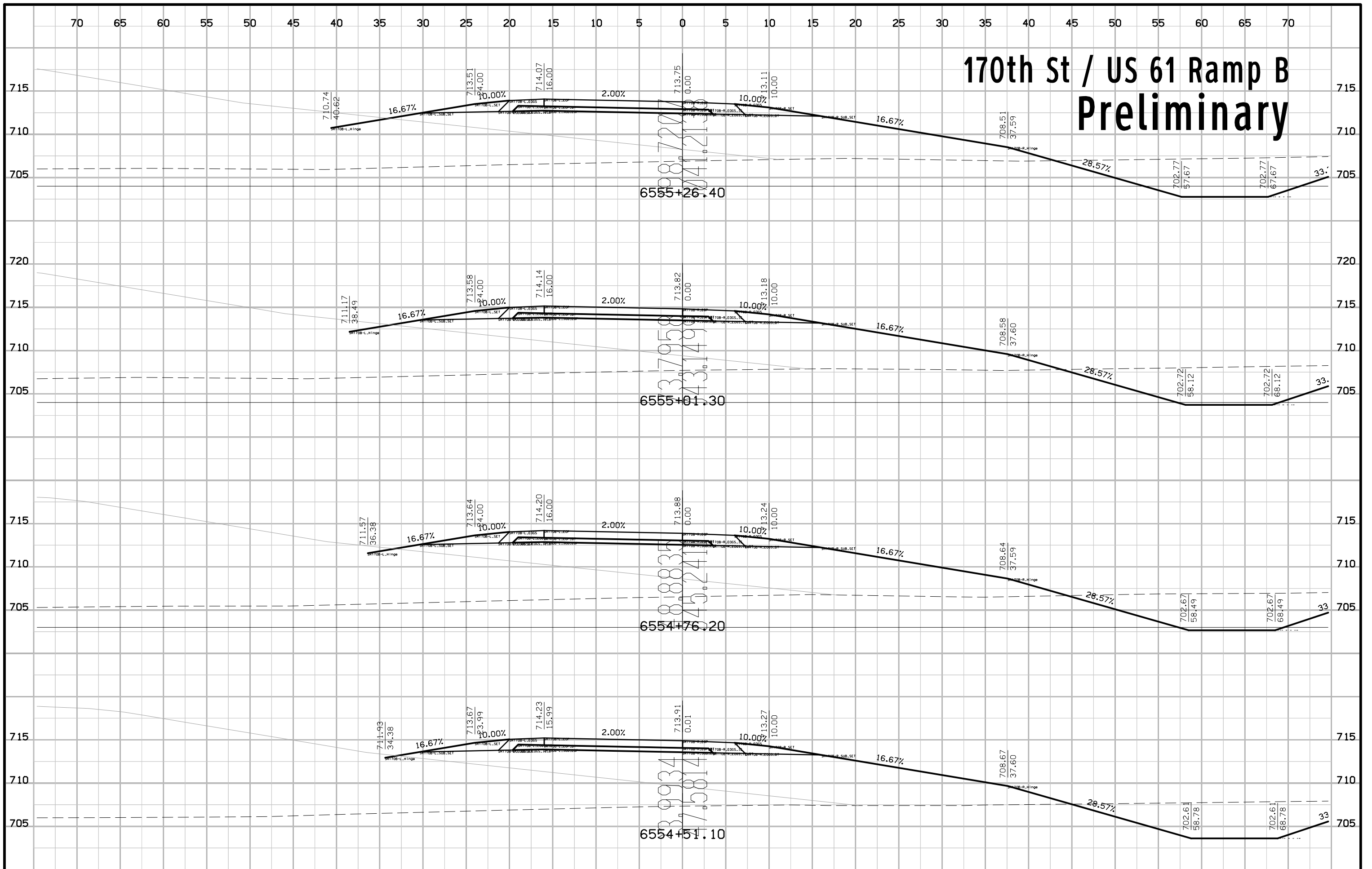
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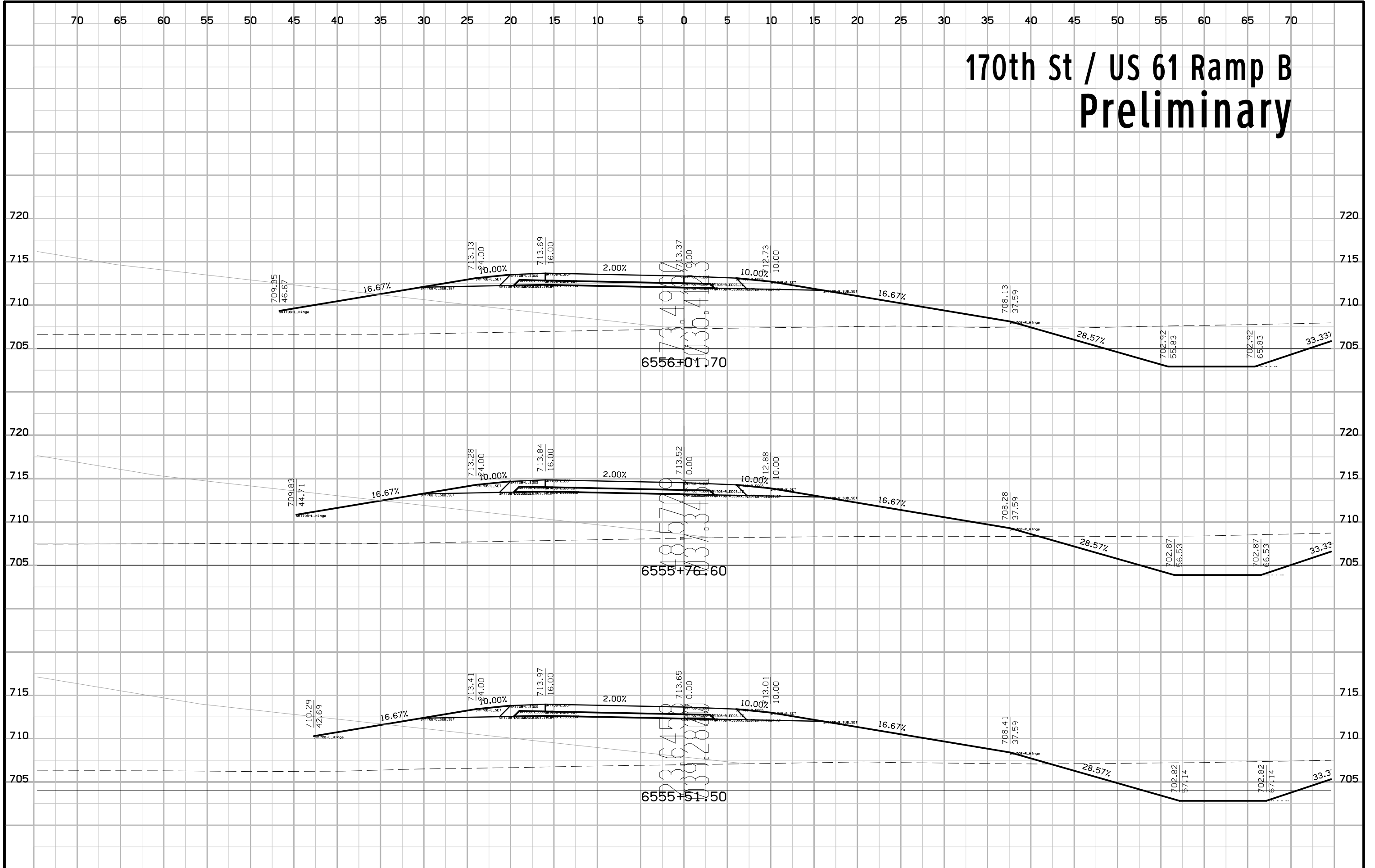
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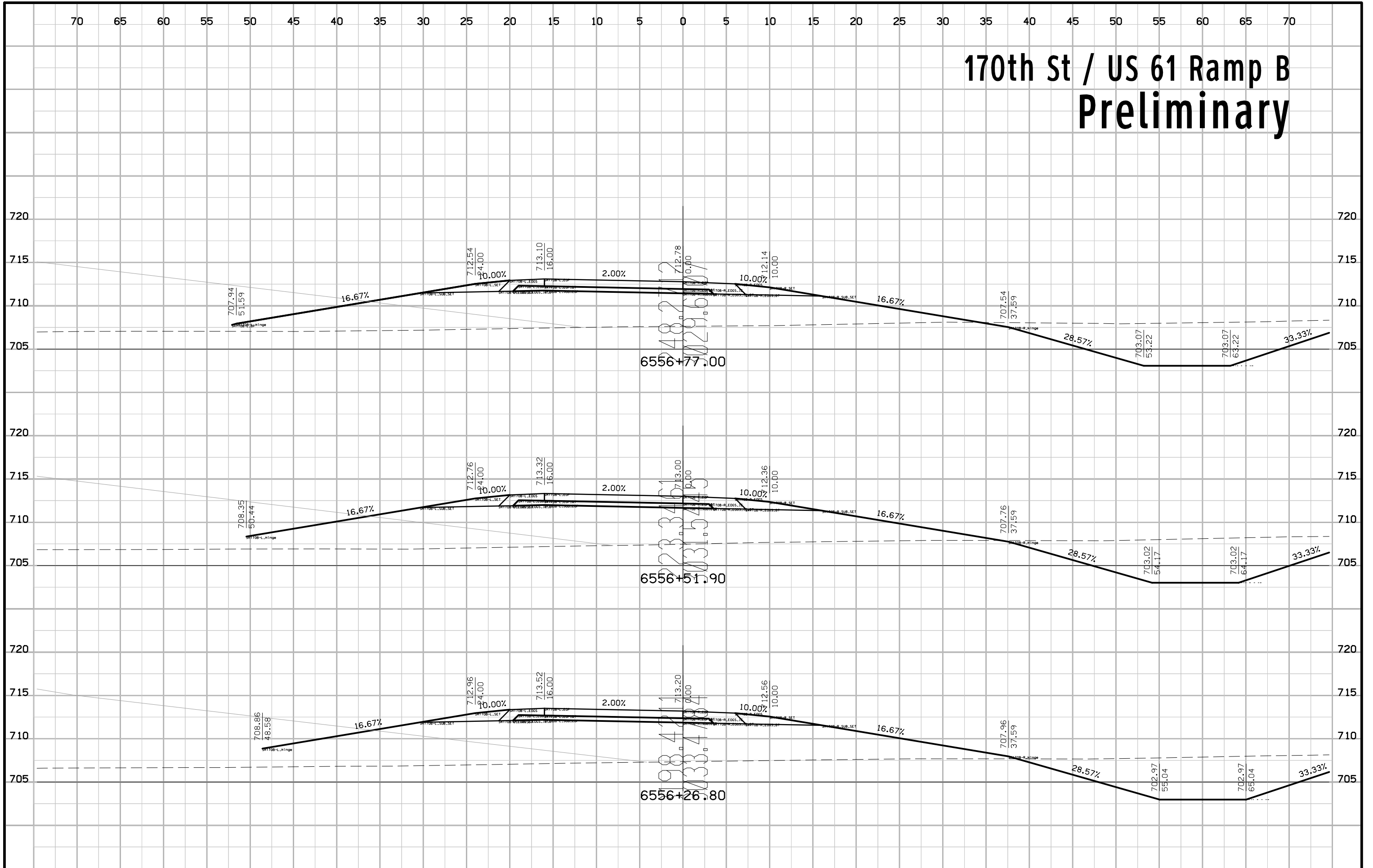
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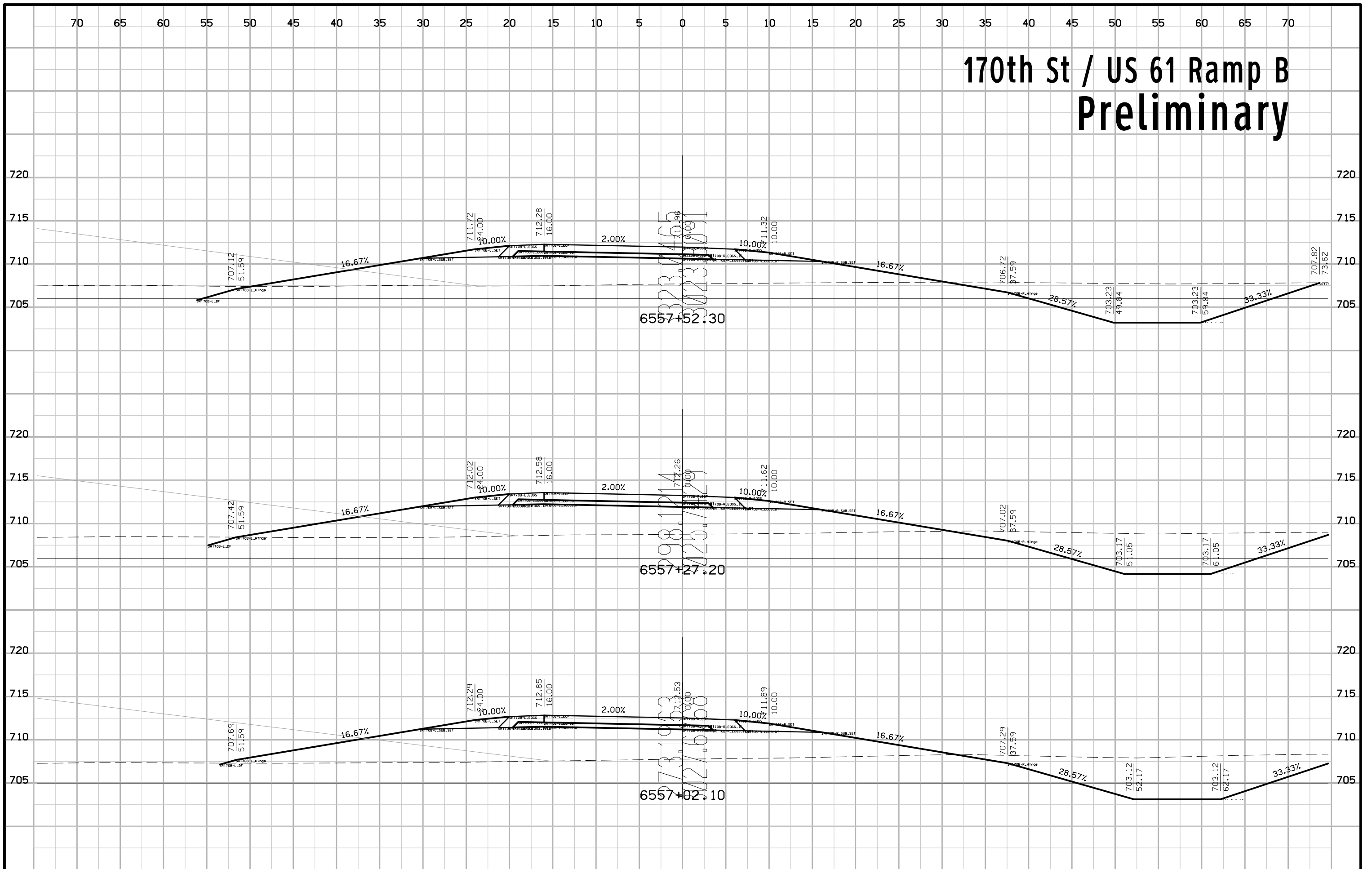
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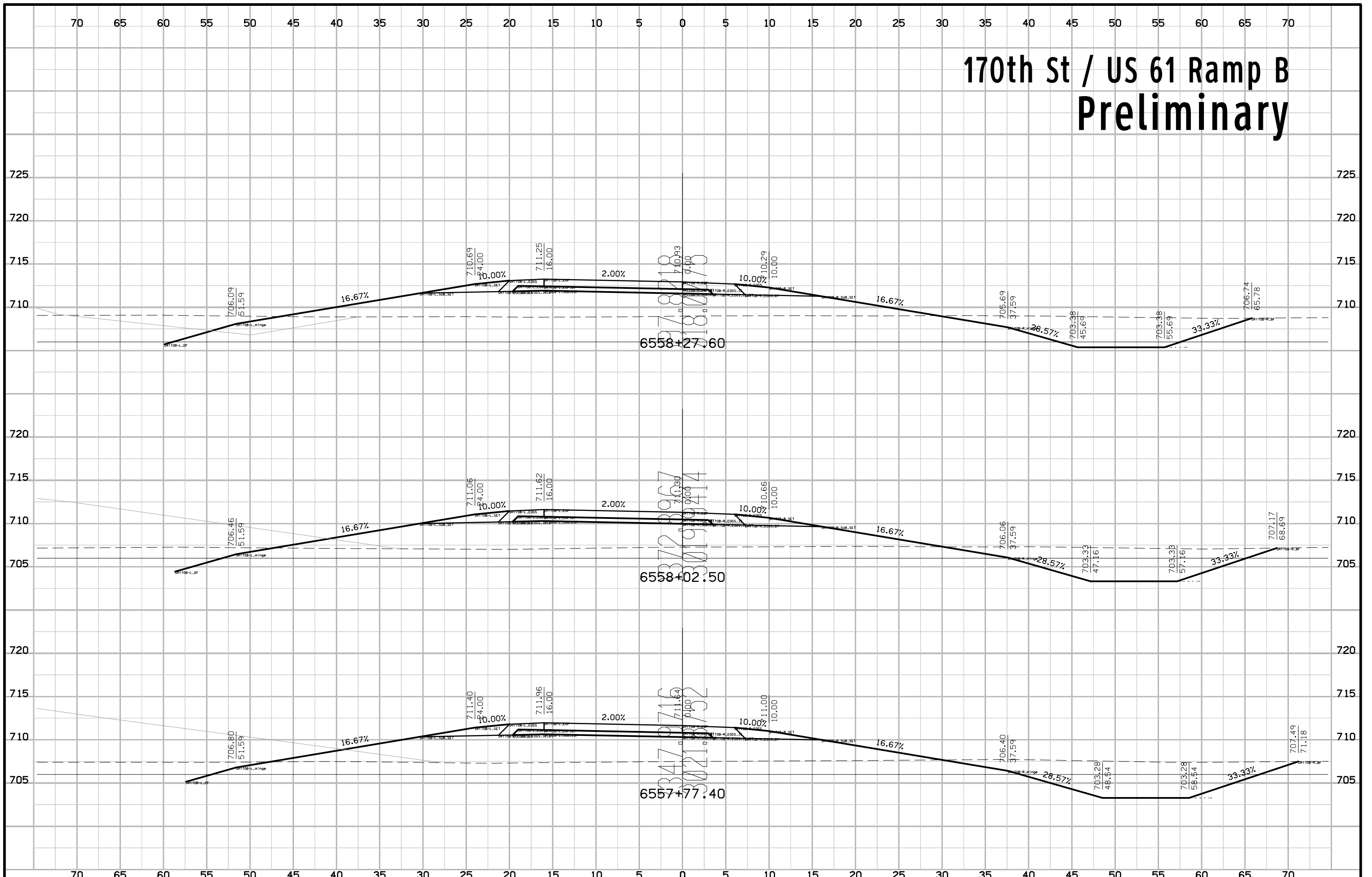
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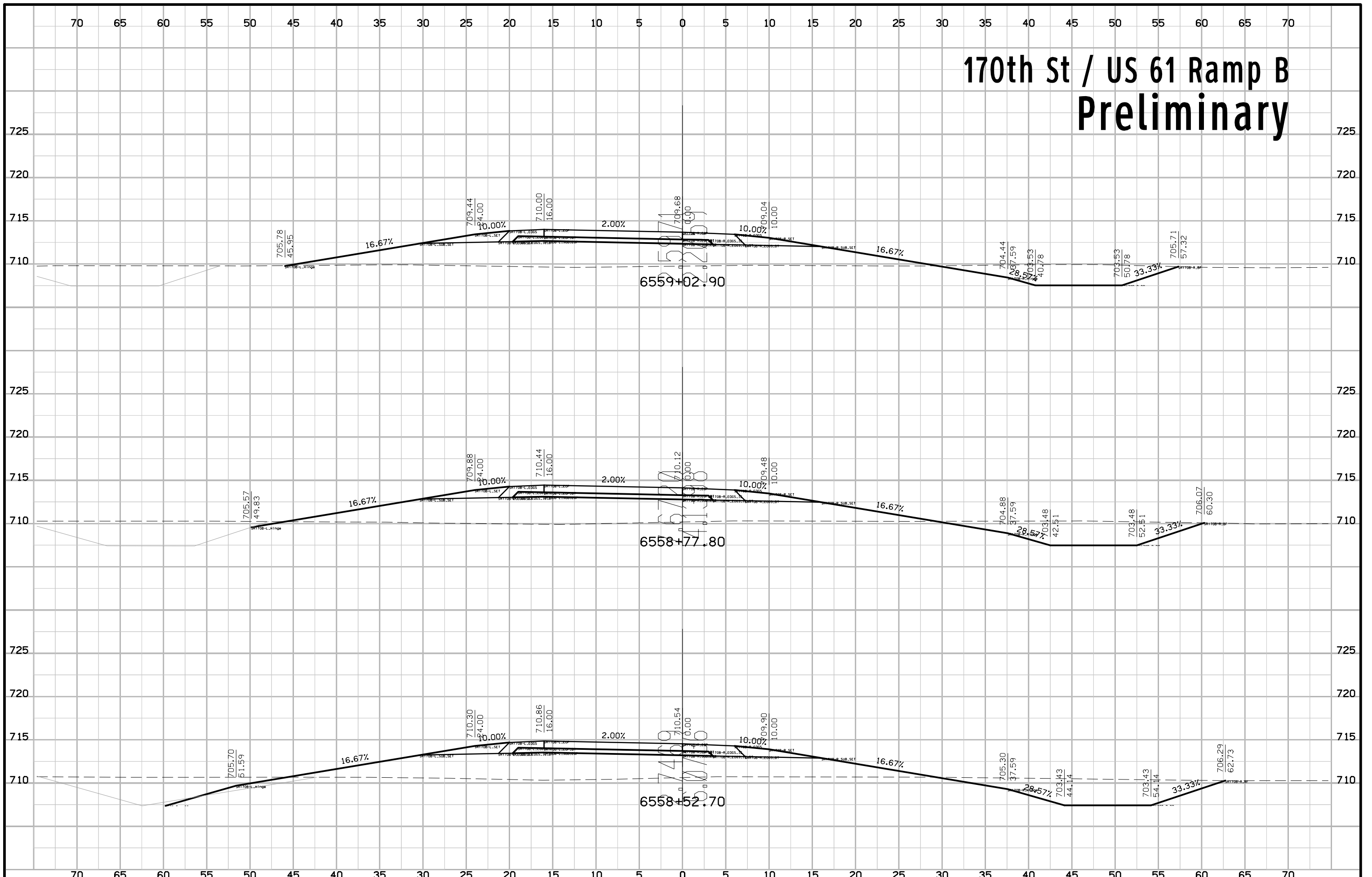
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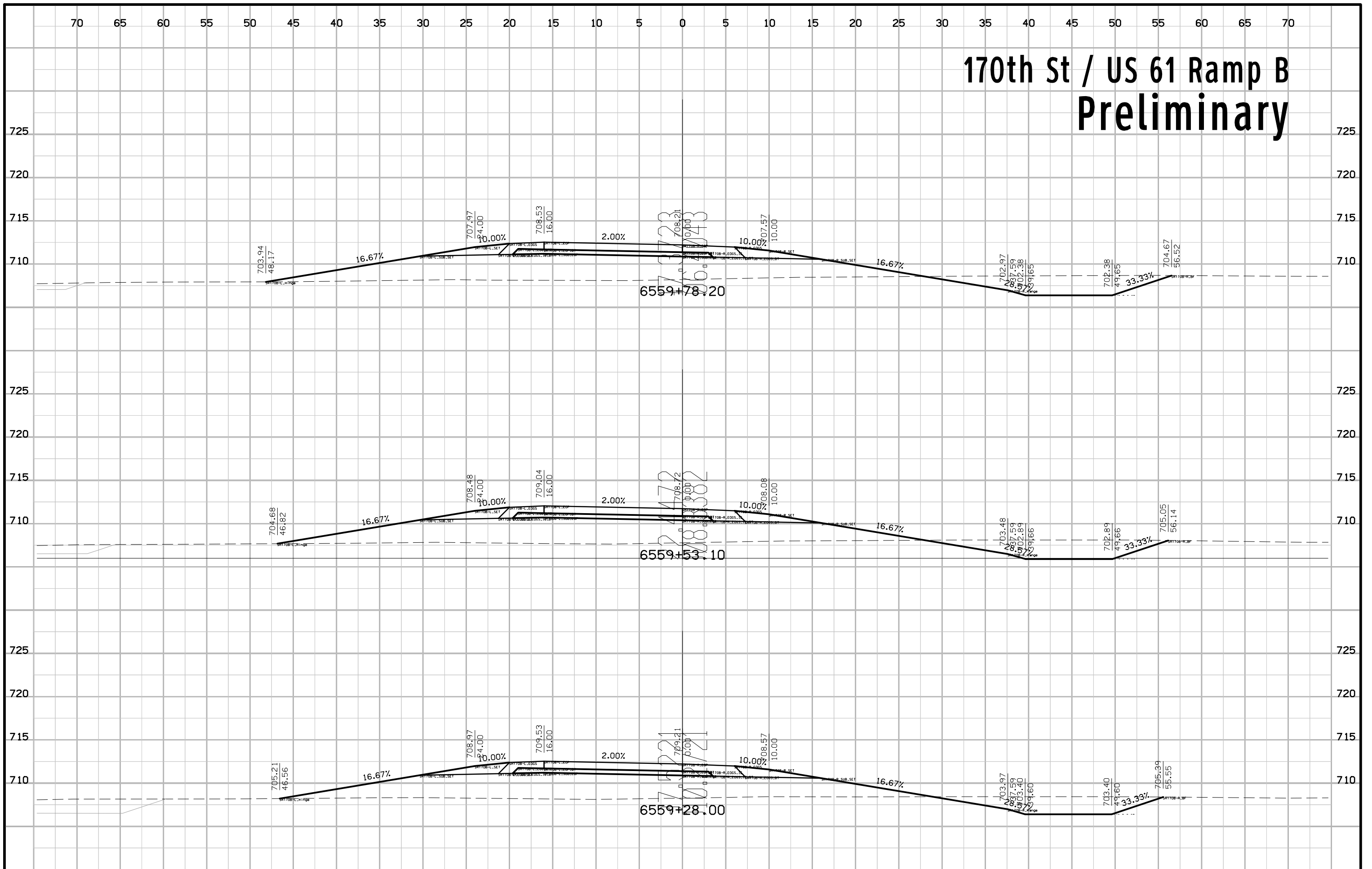
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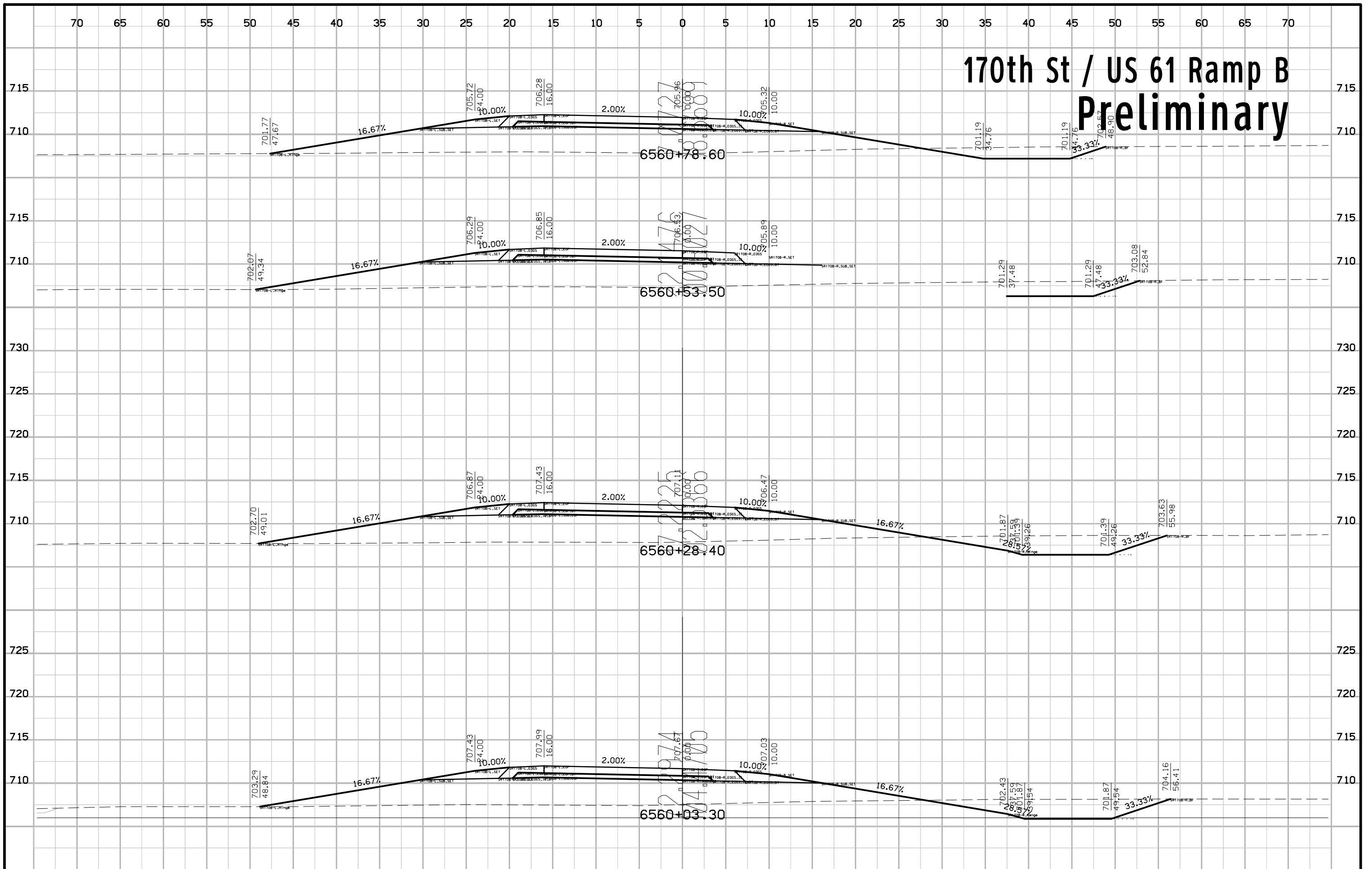
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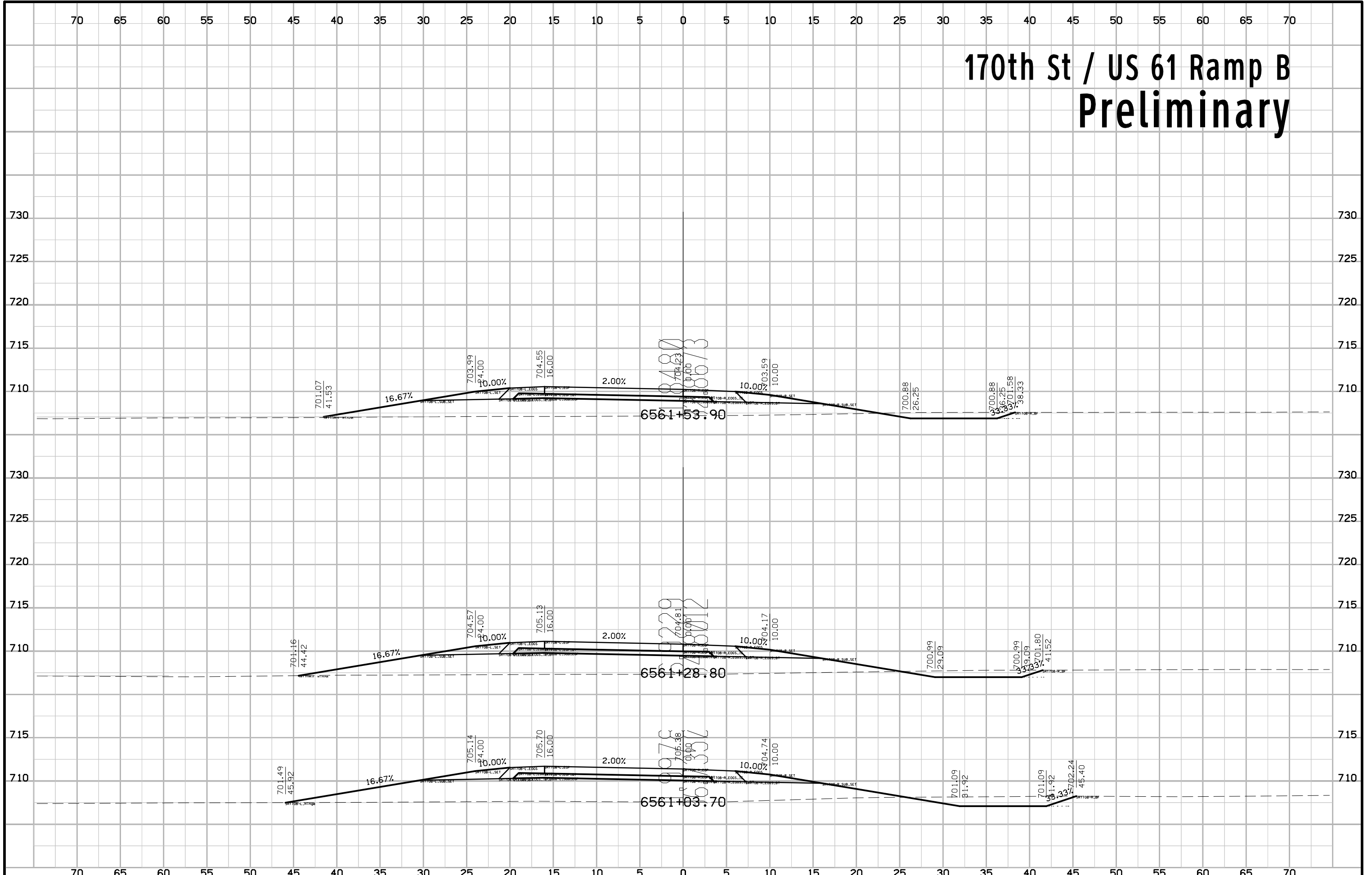
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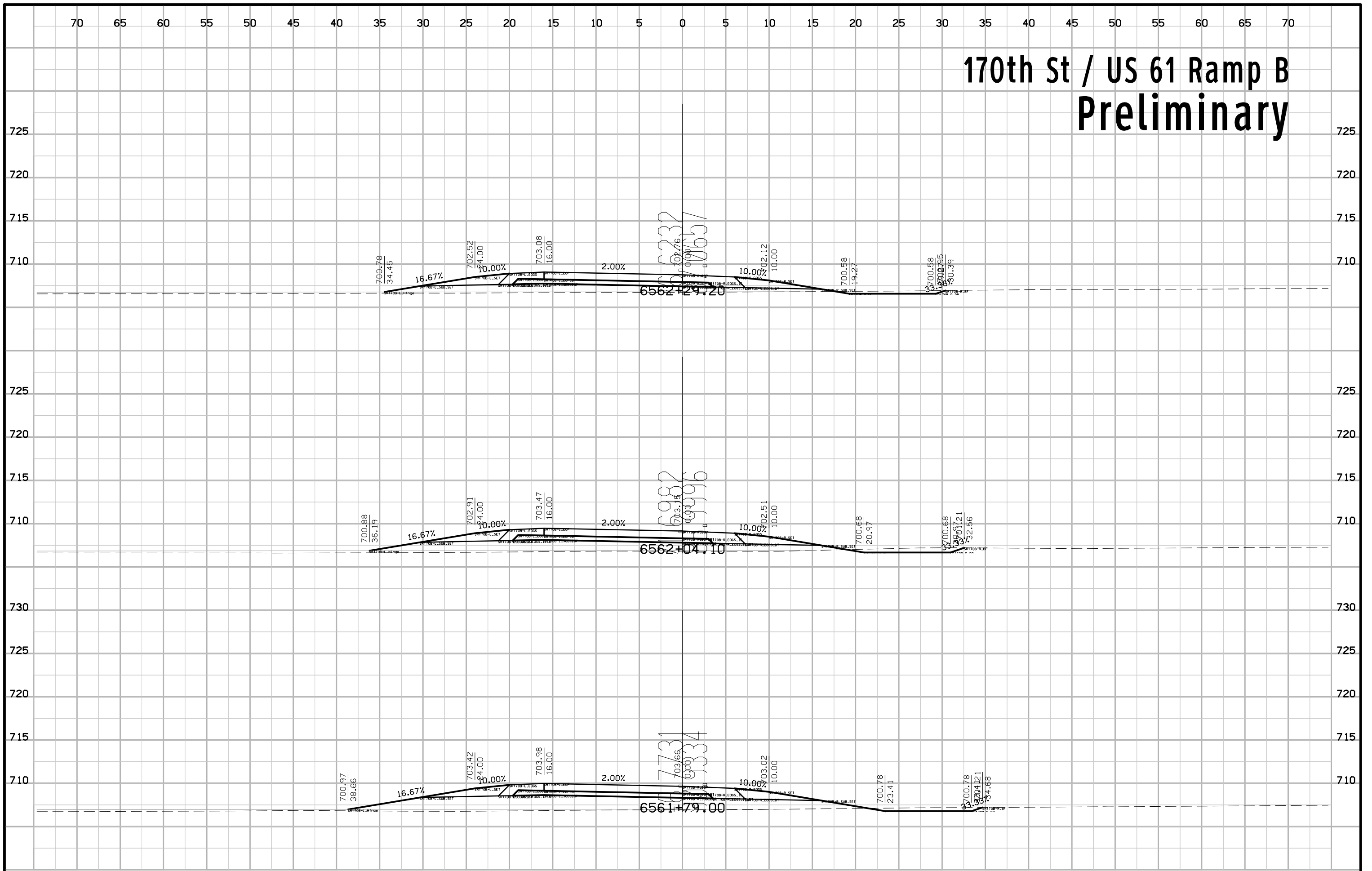
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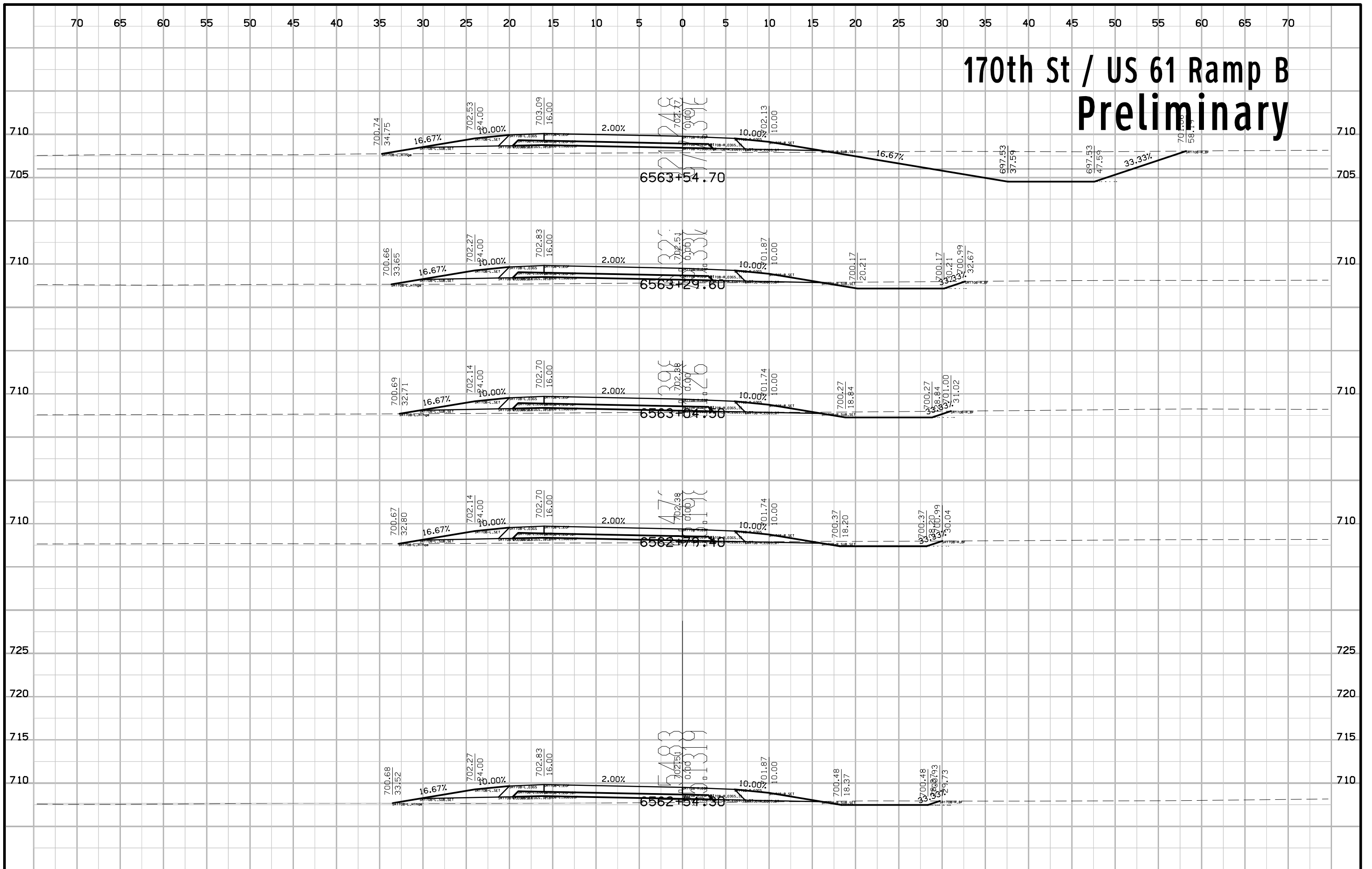
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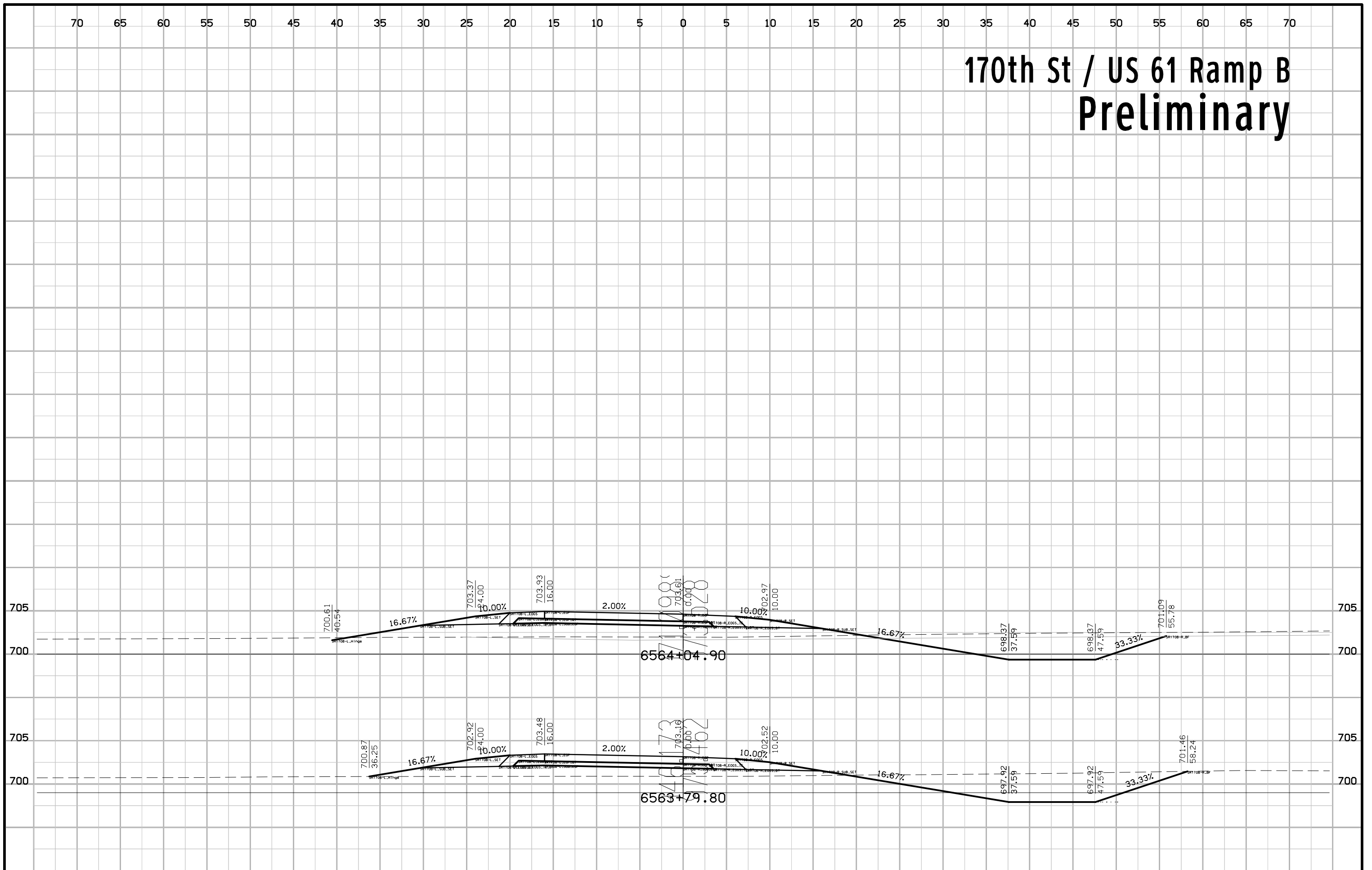
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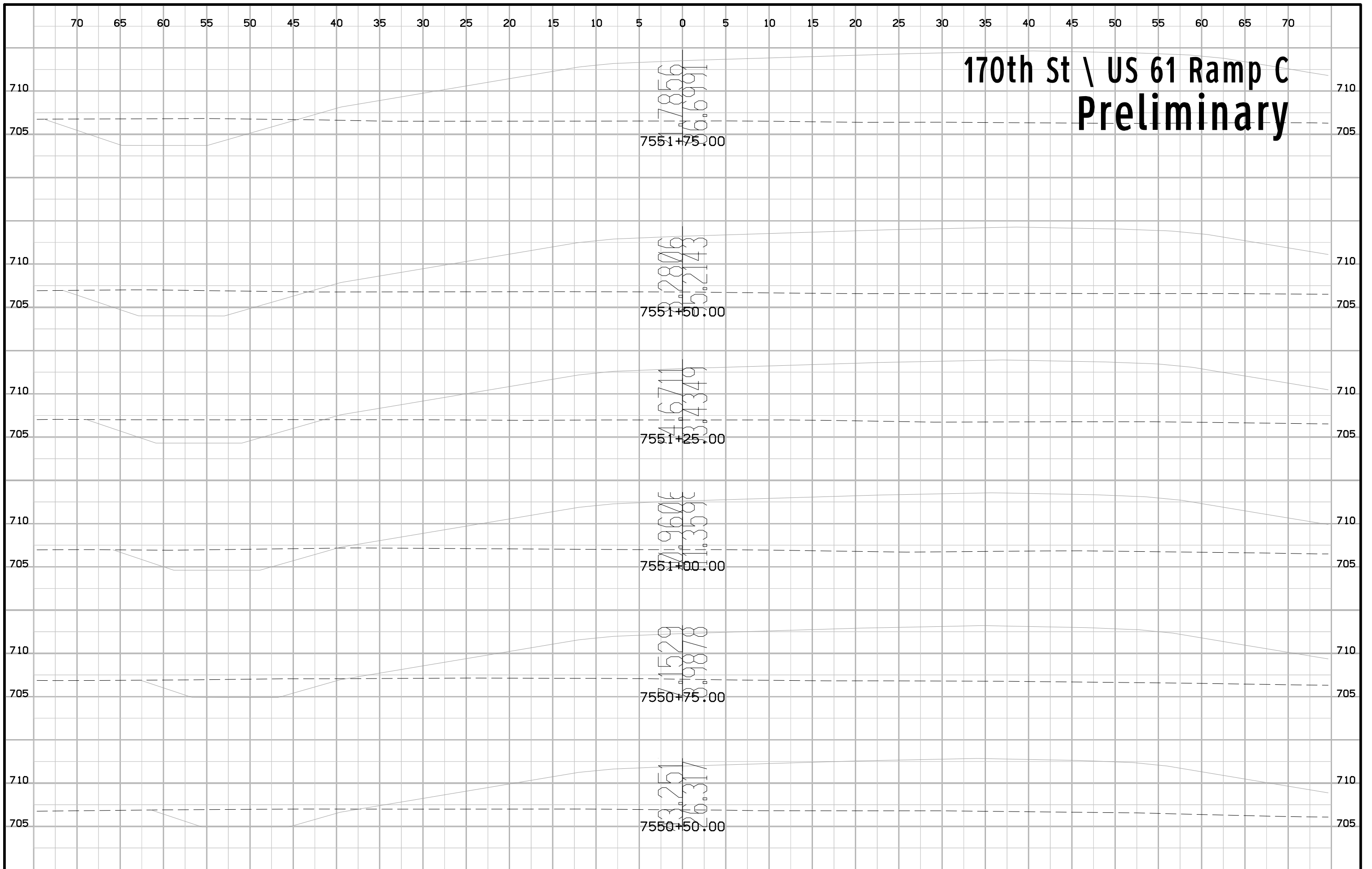
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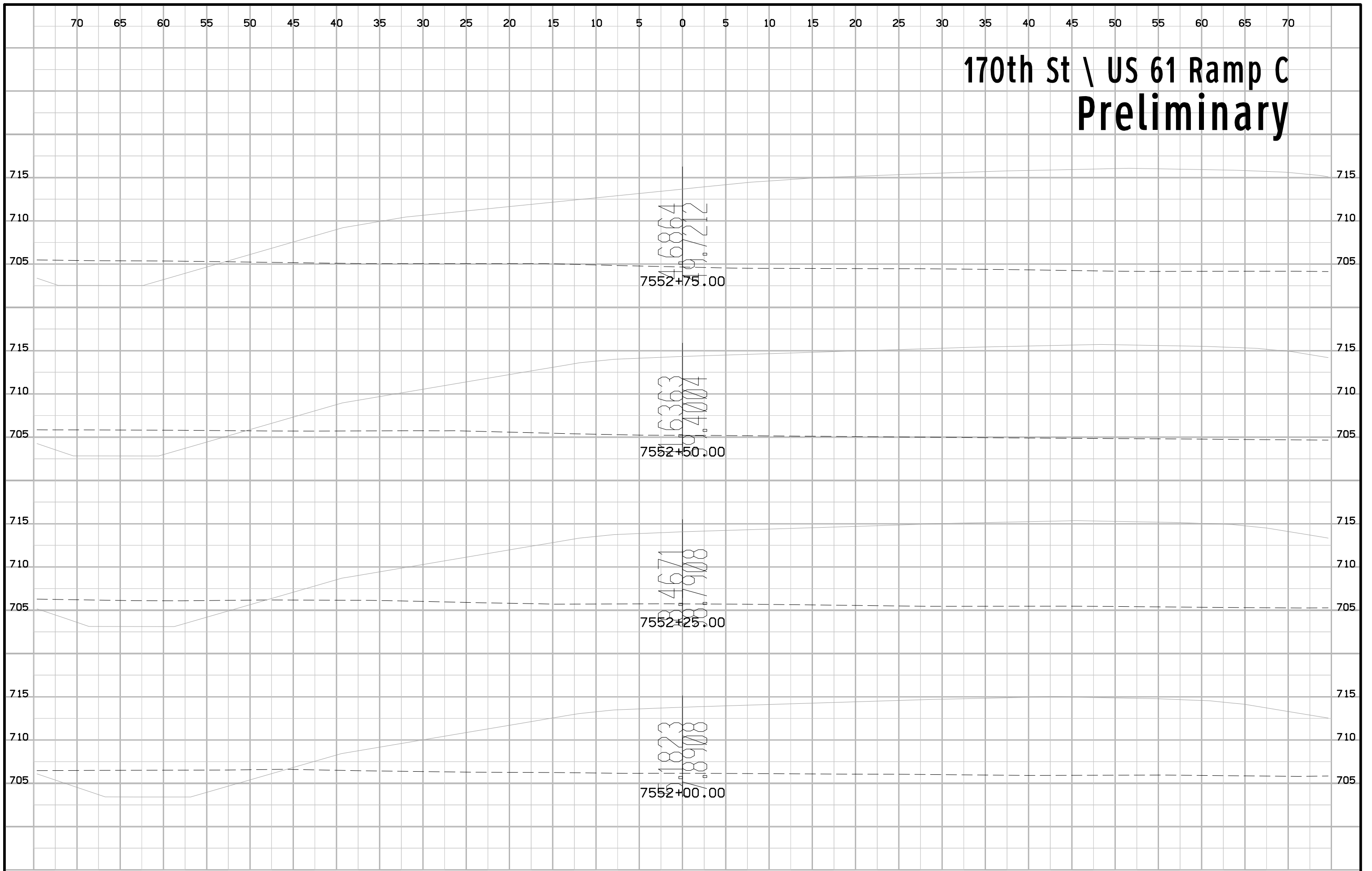
170th St / US 61 Ramp B Preliminary



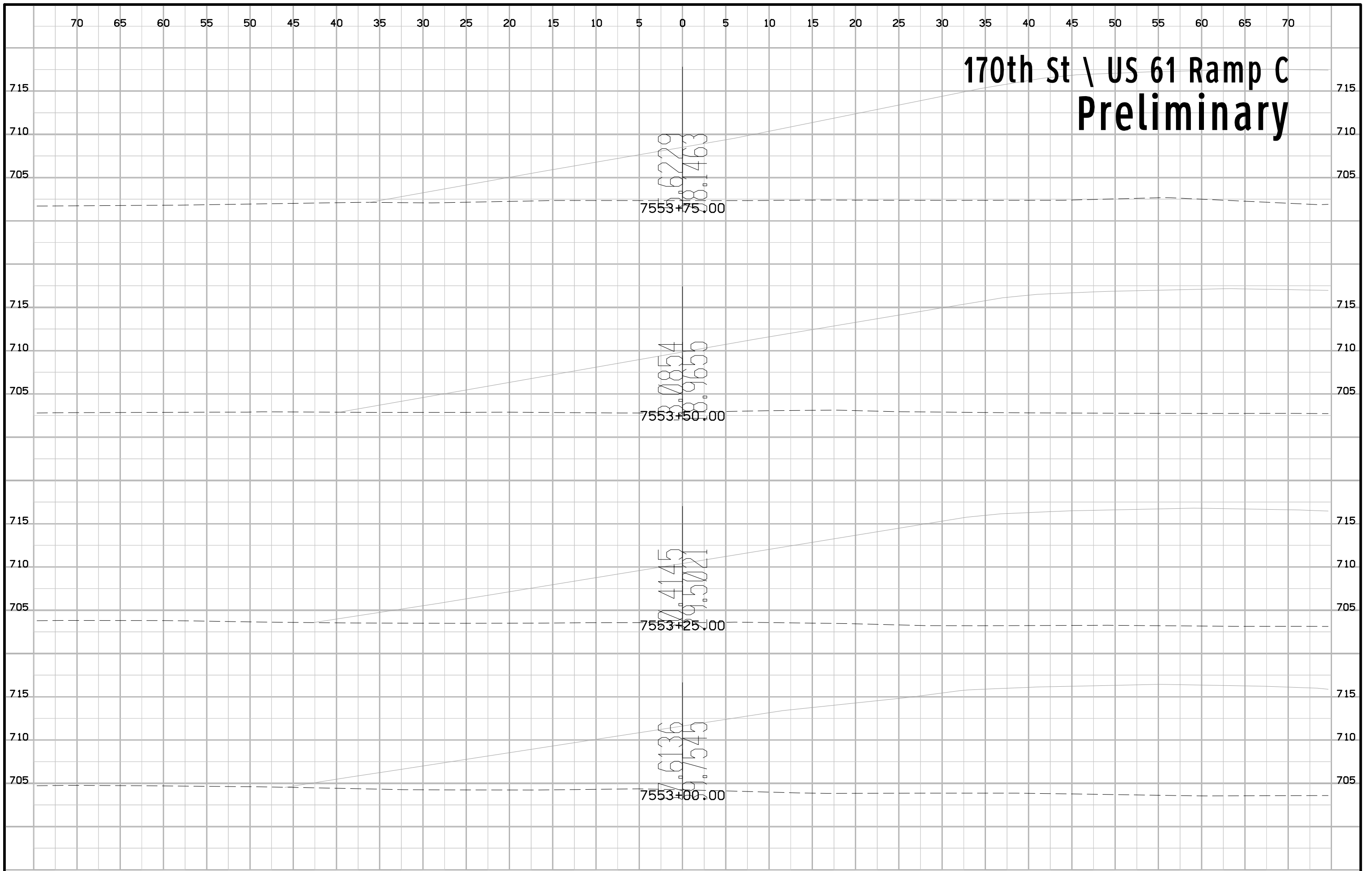
170th St \ US 61 Ramp C Preliminary



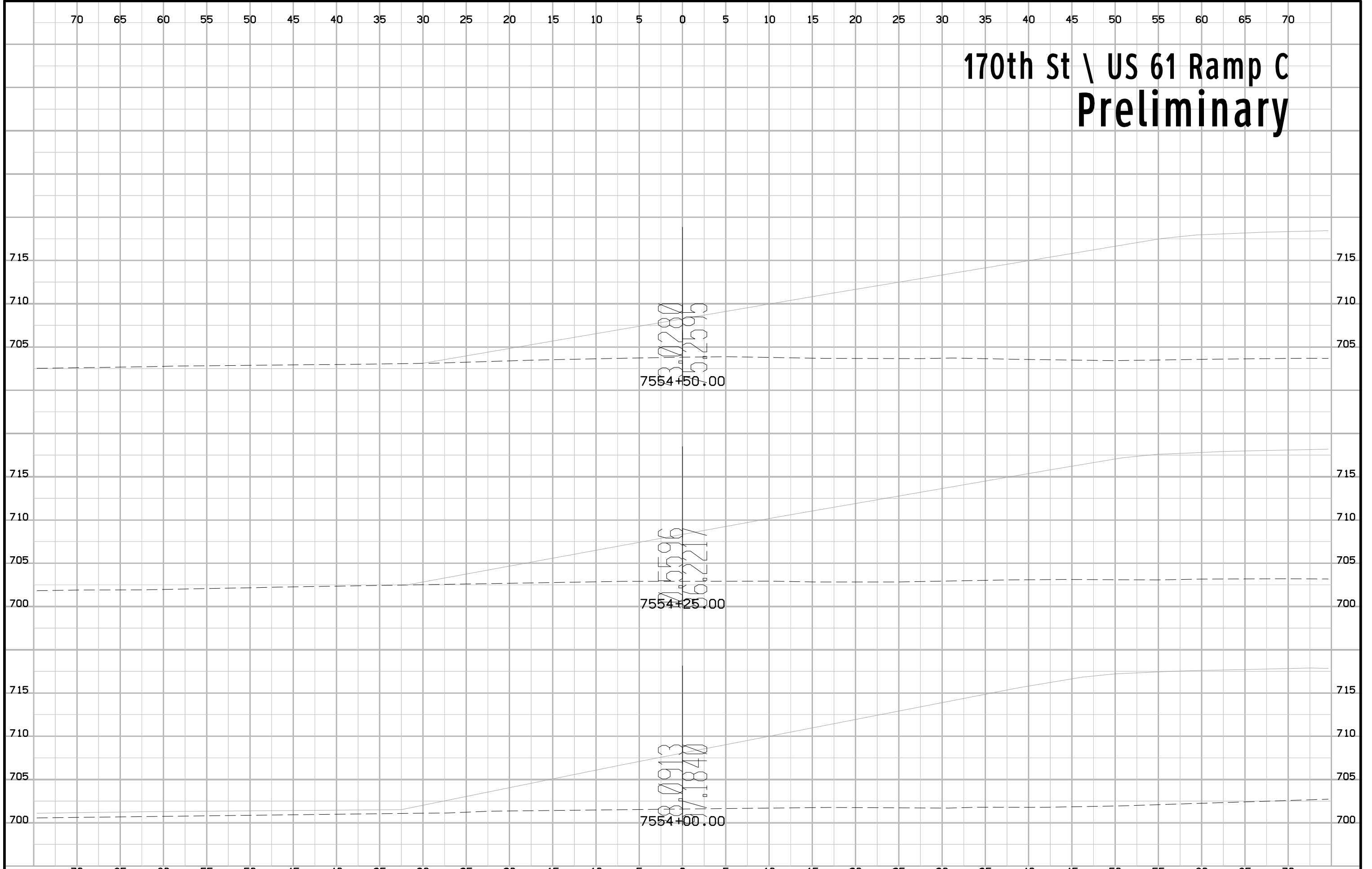
170th St \ US 61 Ramp C Preliminary



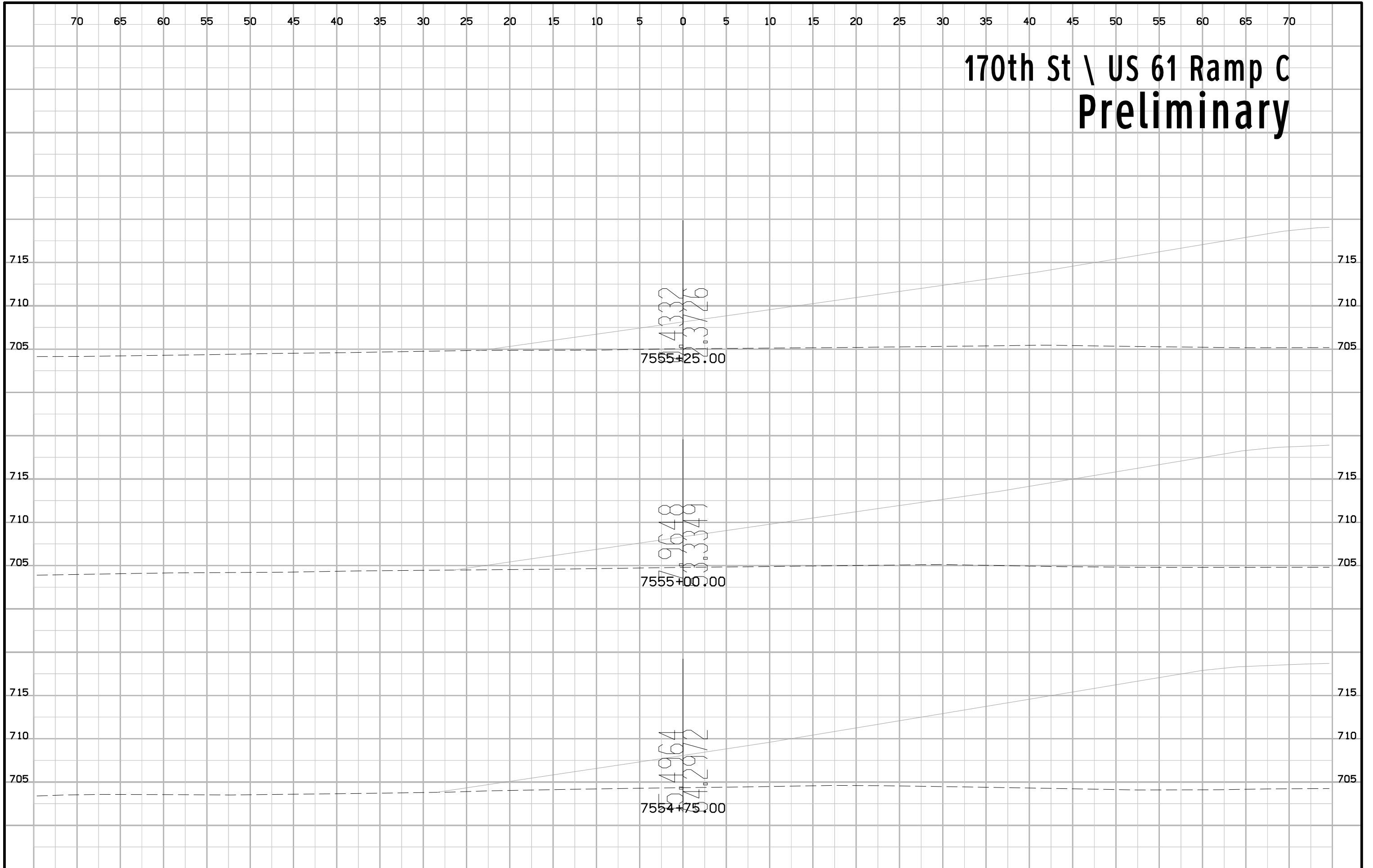
170th St \ US 61 Ramp C Preliminary

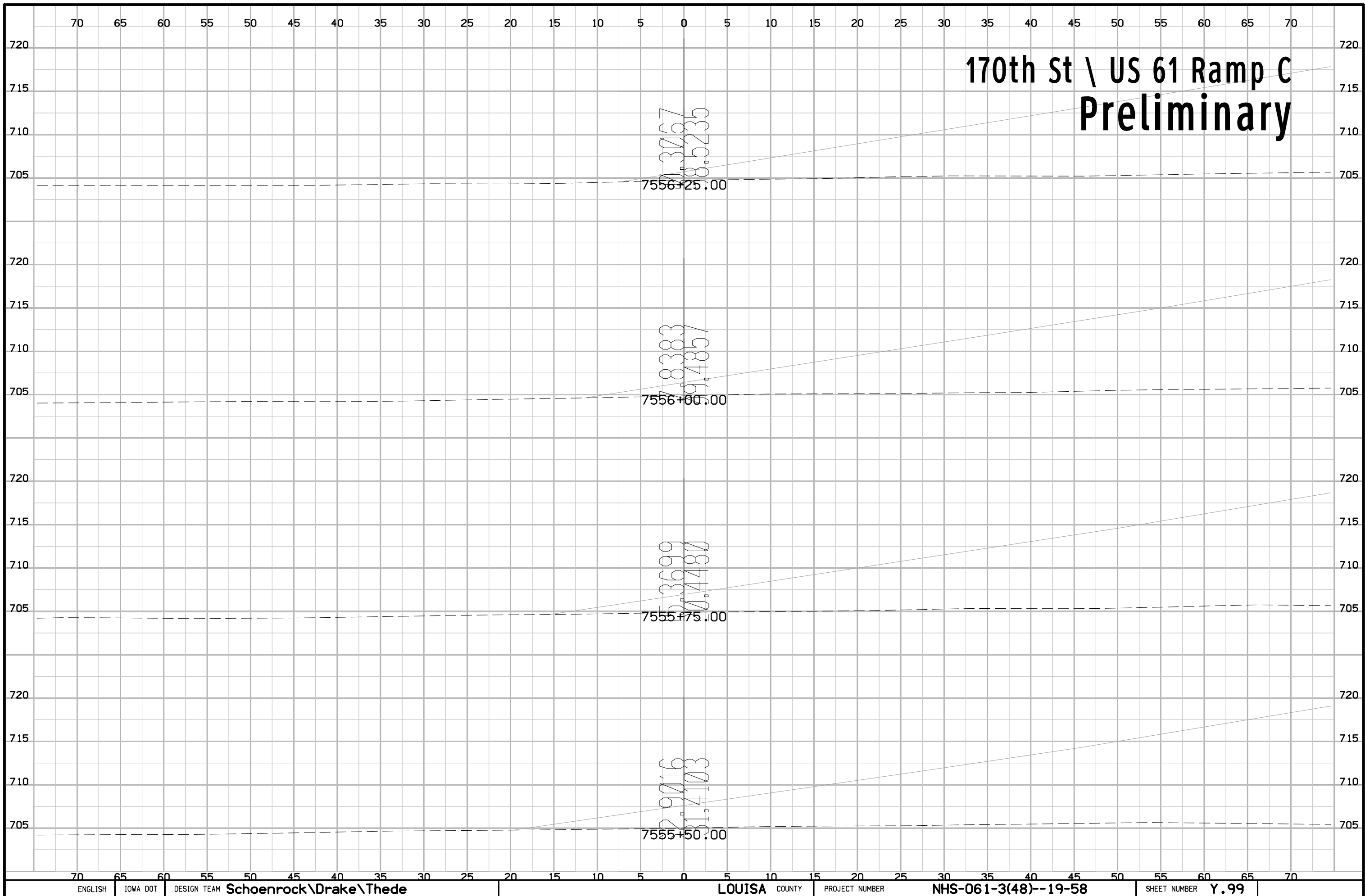


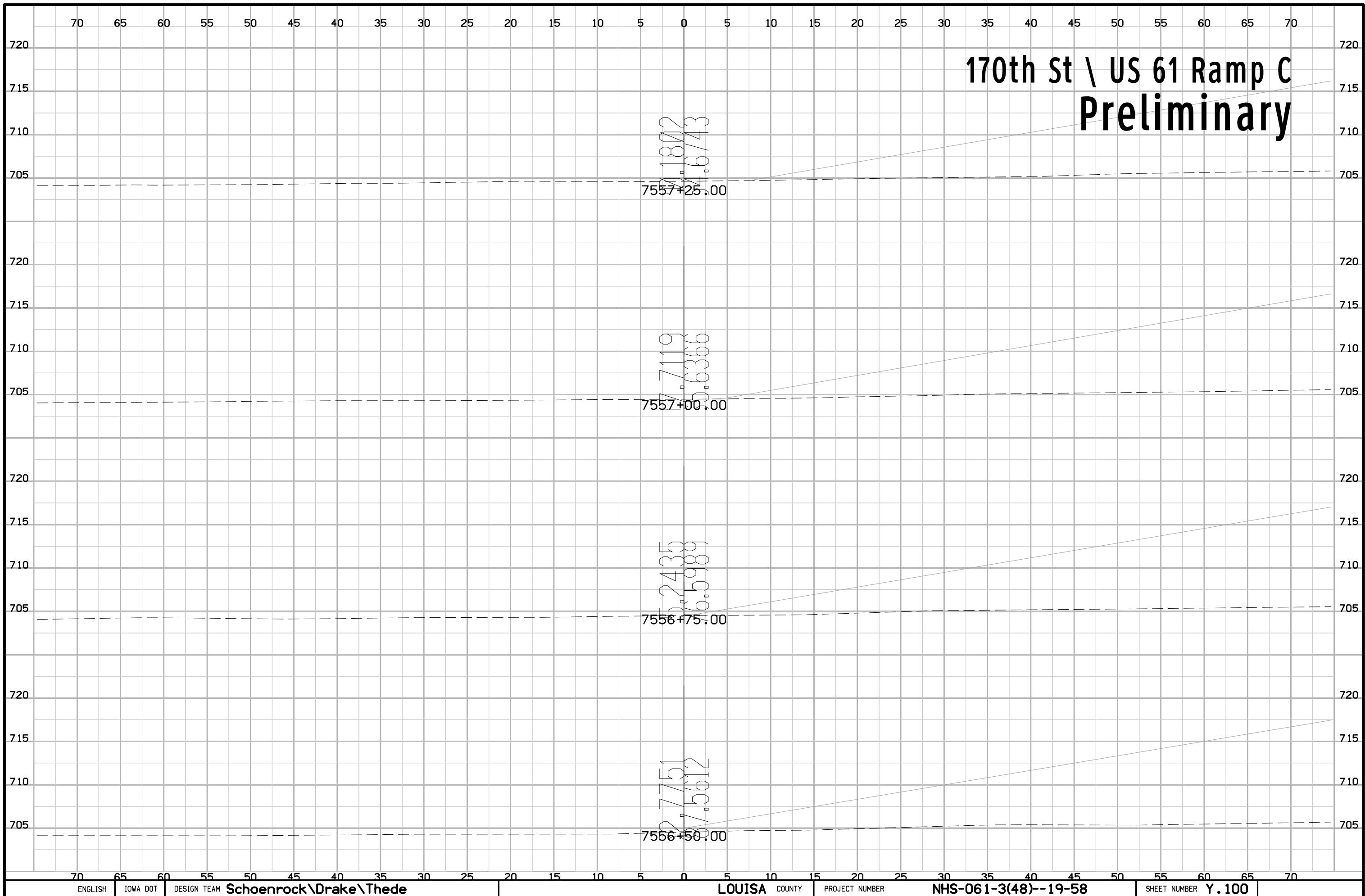
170th St \ US 61 Ramp C Preliminary



170th St \ US 61 Ramp C Preliminary







170th St \ US 61 Ramp C Preliminary

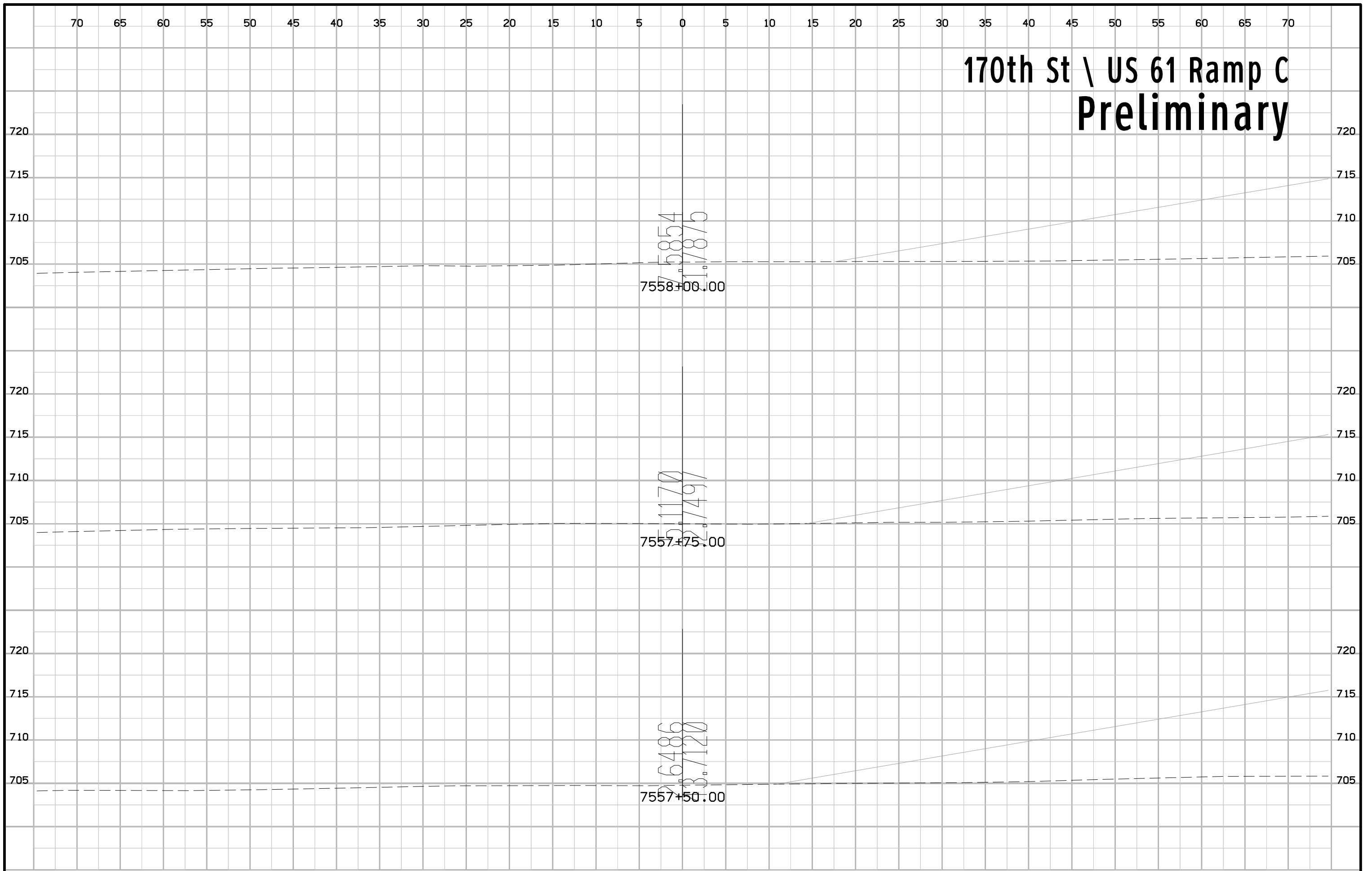
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705.71
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705.24
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170th St \ US 61 Ramp C Preliminary

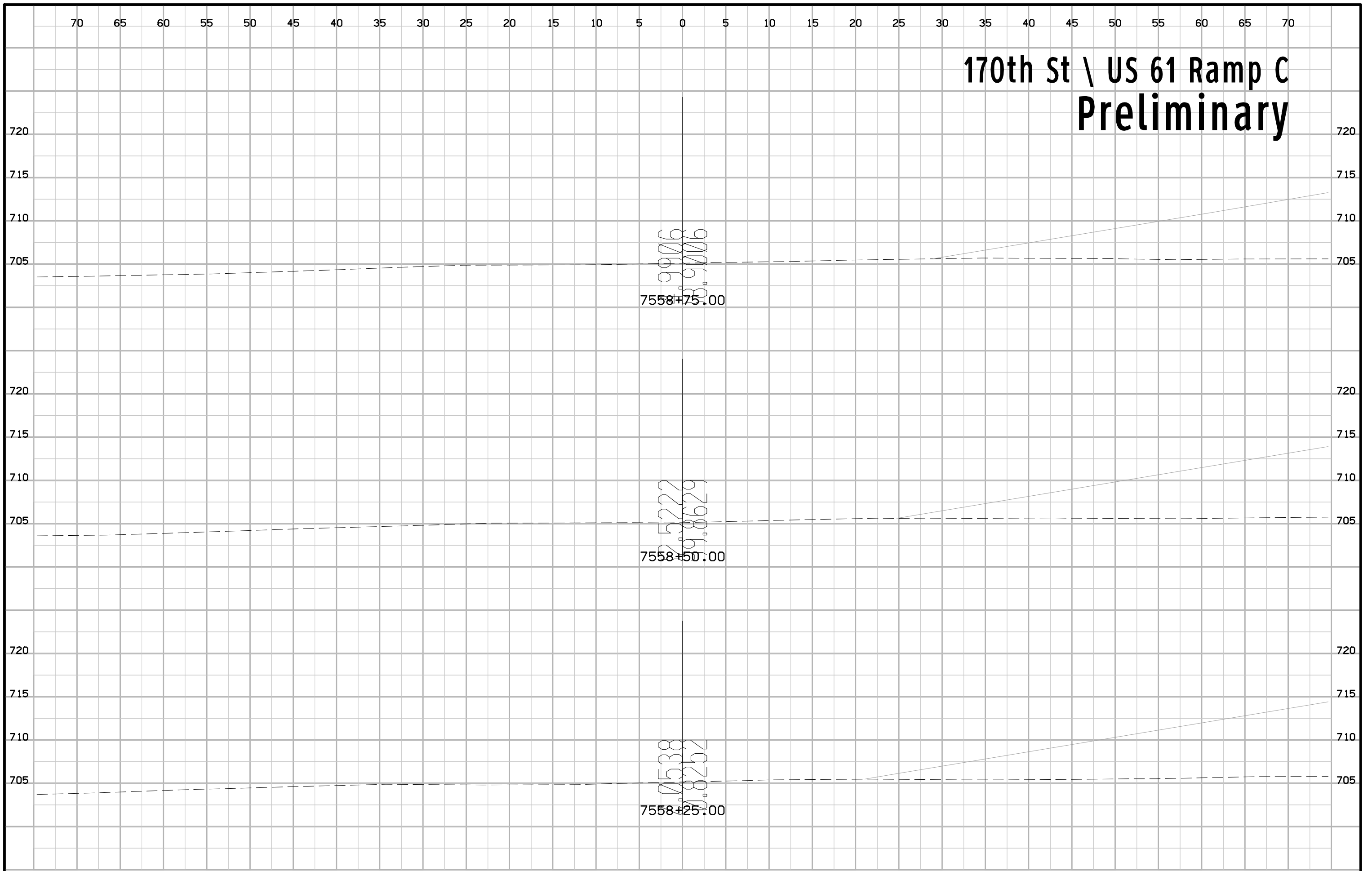


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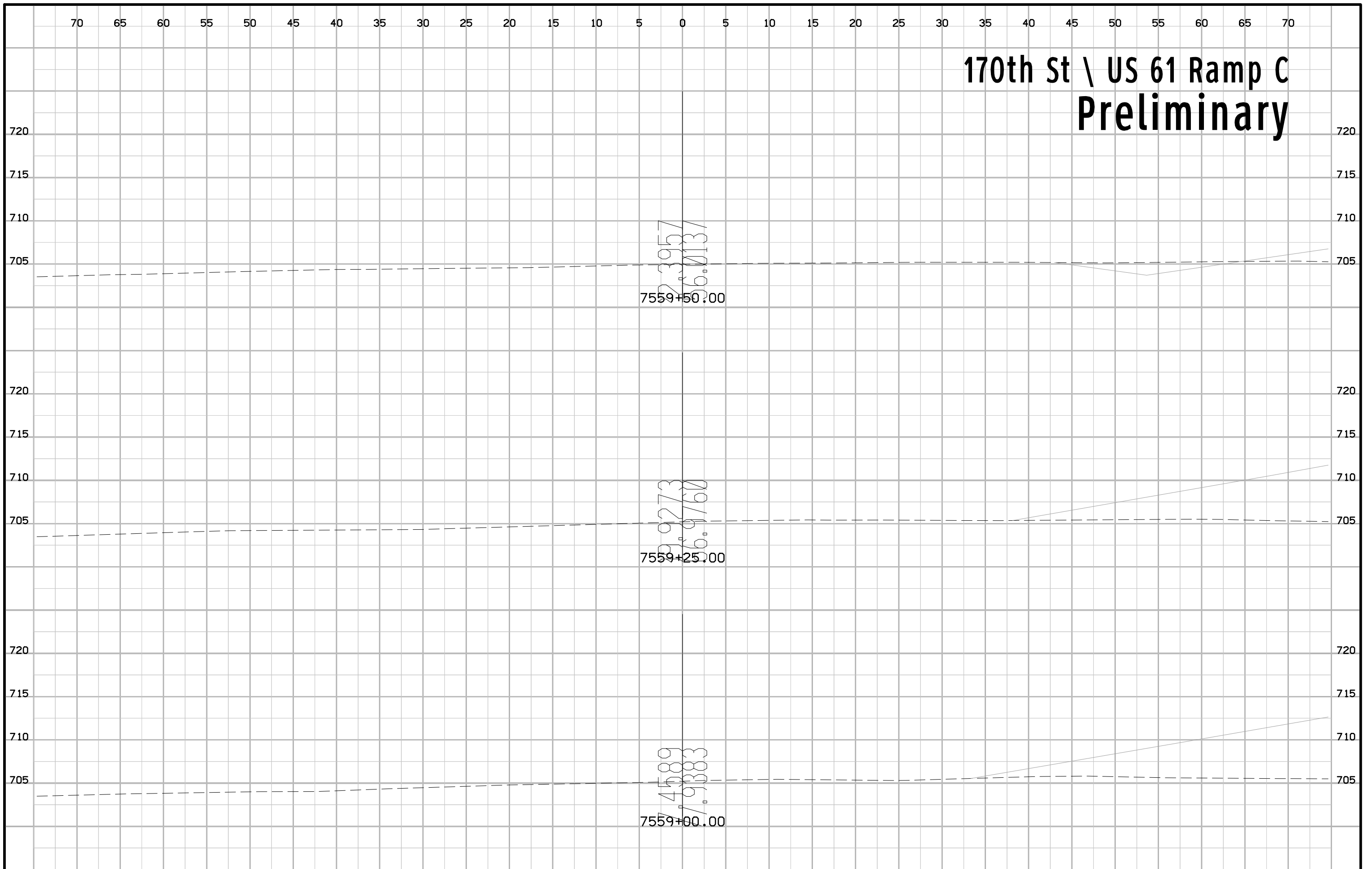
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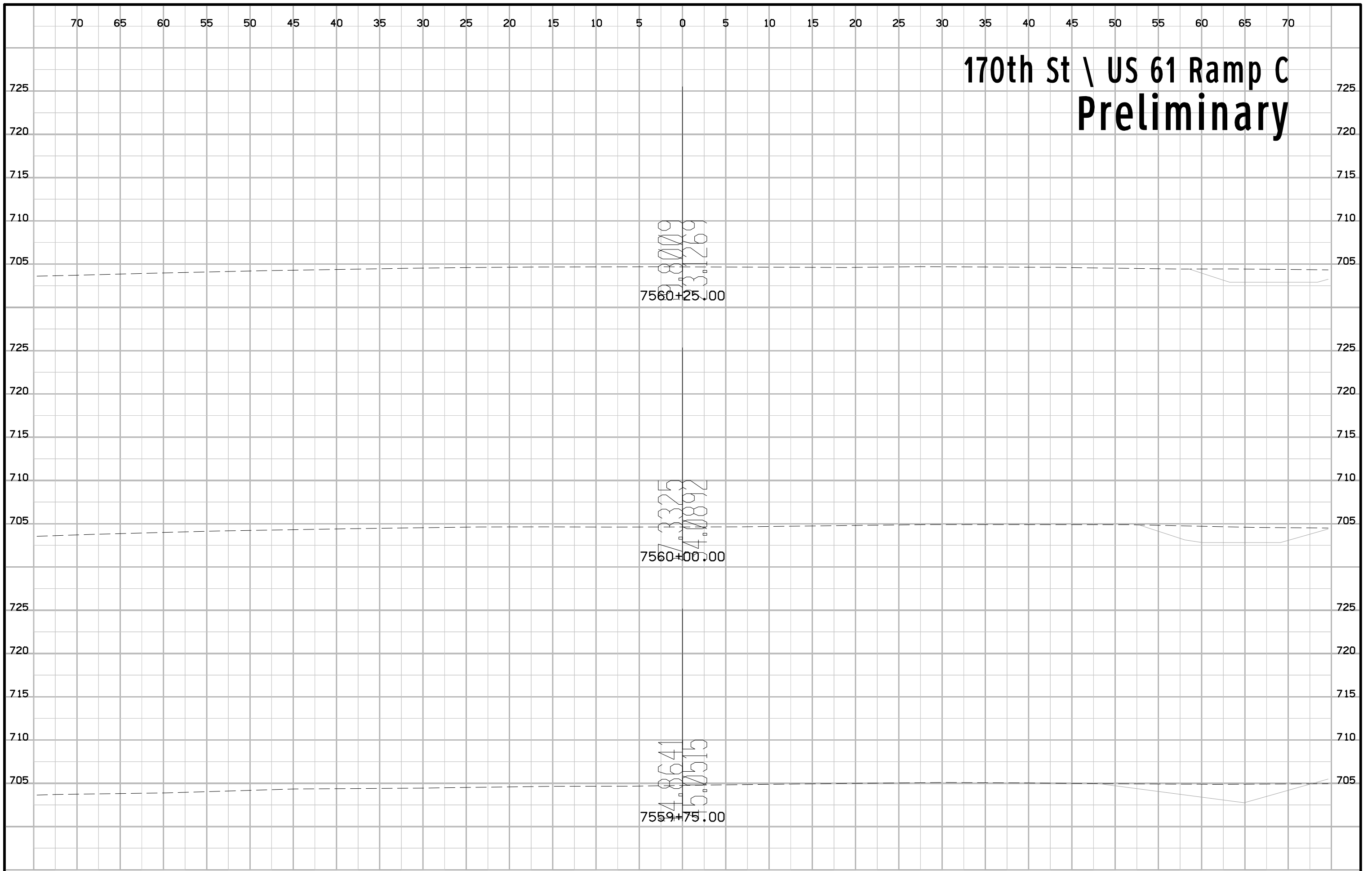
170th St \ US 61 Ramp C Preliminary

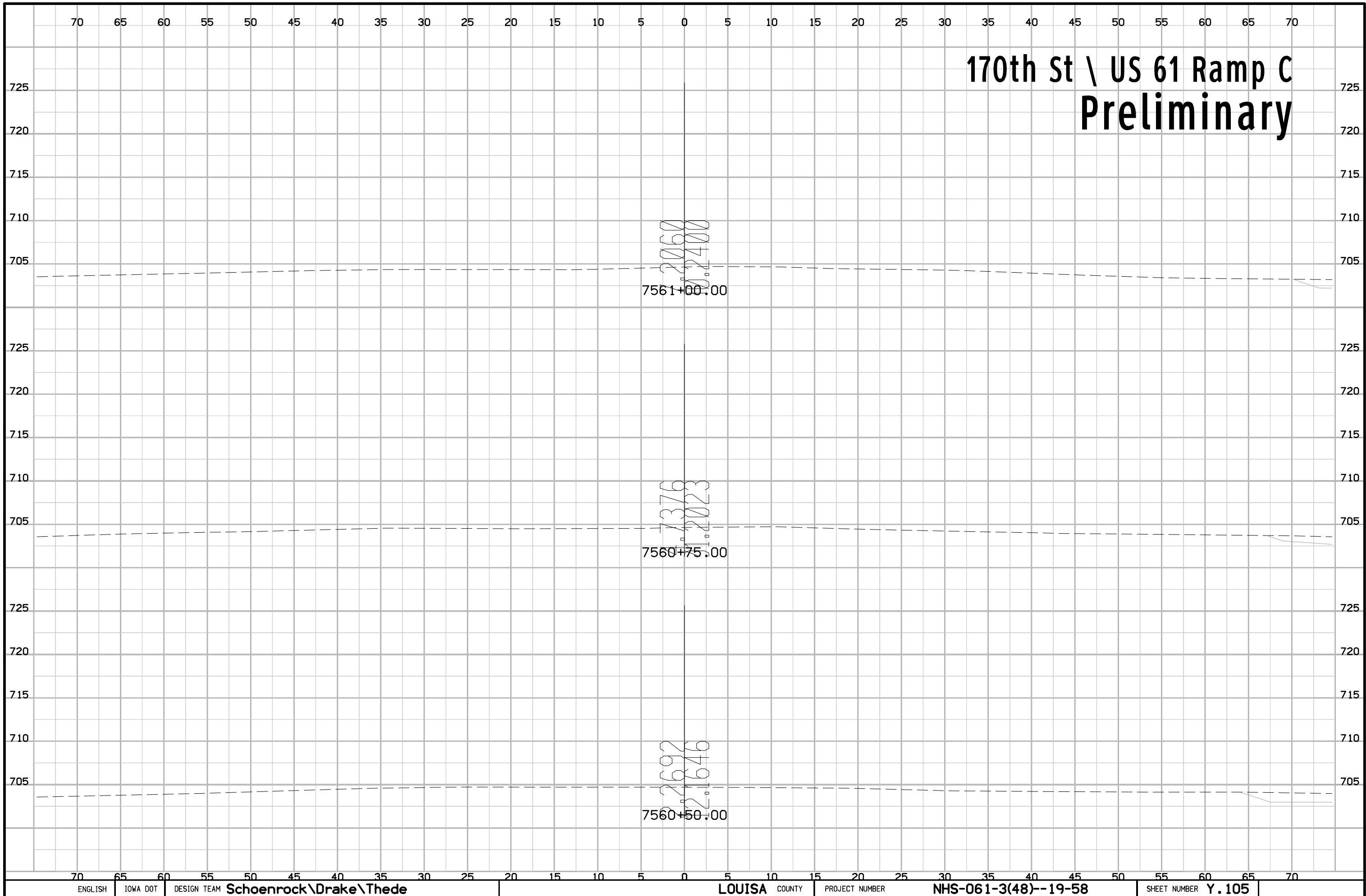


170th St \ US 61 Ramp C Preliminary



170th St \ US 61 Ramp C Preliminary



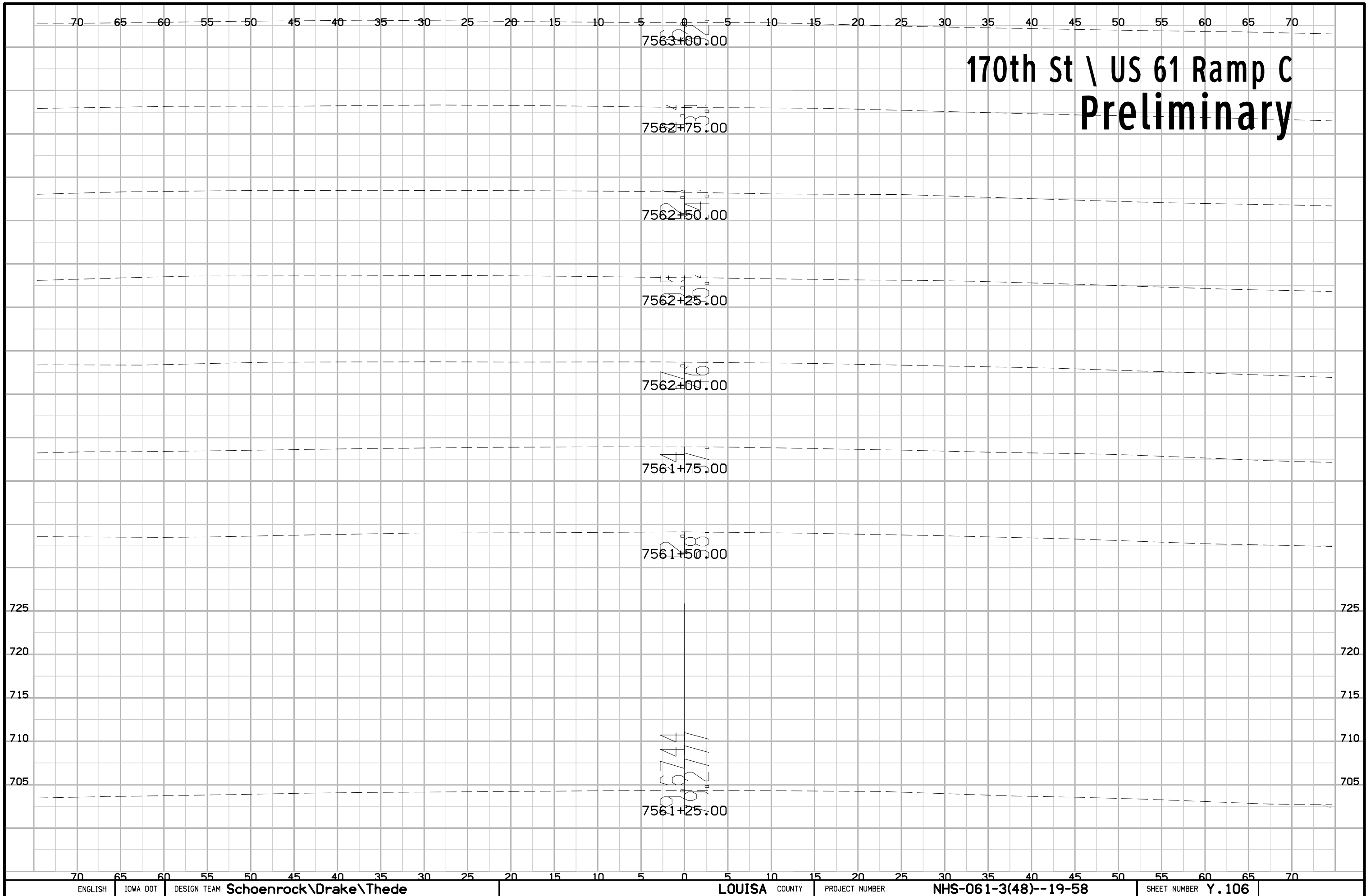


170th St \ US 61 Ramp C Preliminary

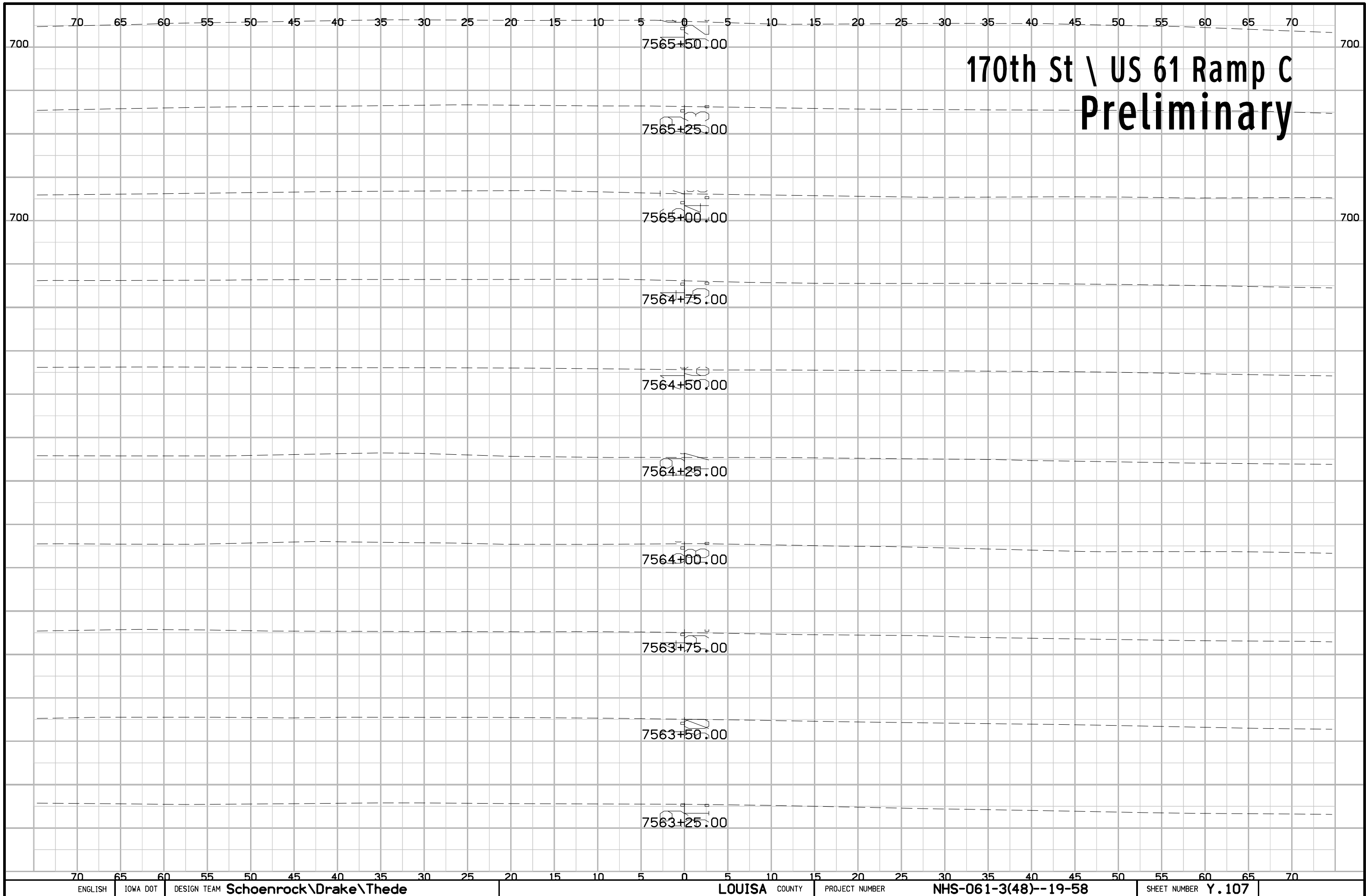
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707.00
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709.00
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7560+50.00



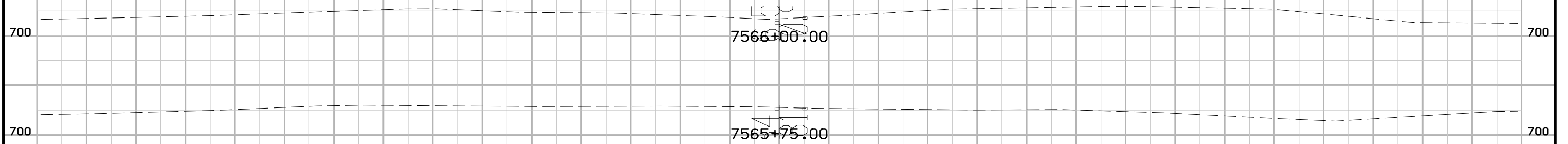
170th St \ US 61 Ramp C Preliminary



170th St \ US 61 Ramp C
Preliminary

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170th St \ US 61 Ramp C Preliminary



70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

ENGLISH

IOWA DOT

DESIGN TEAM

Schoenrock\Drake\Thede

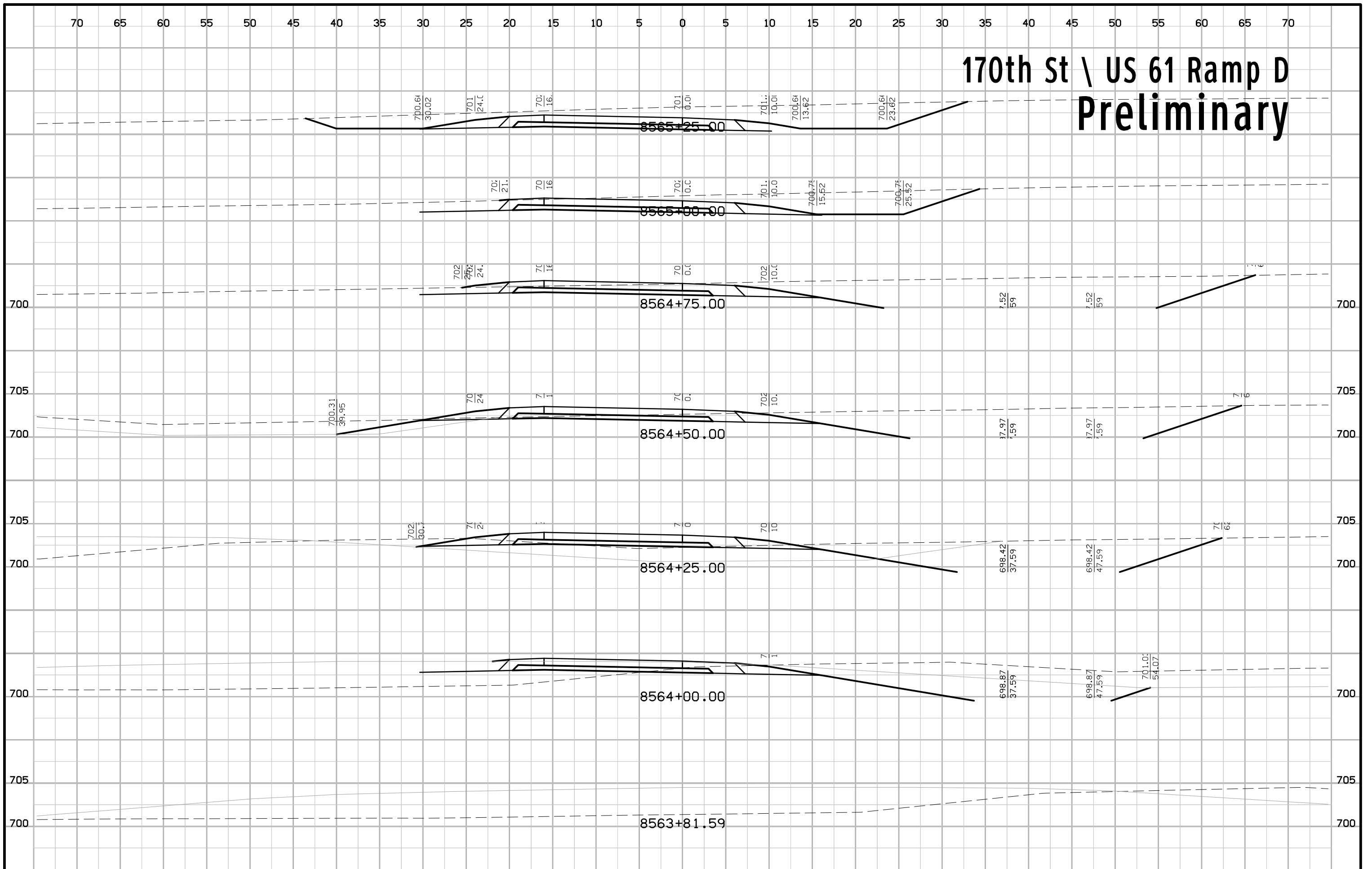
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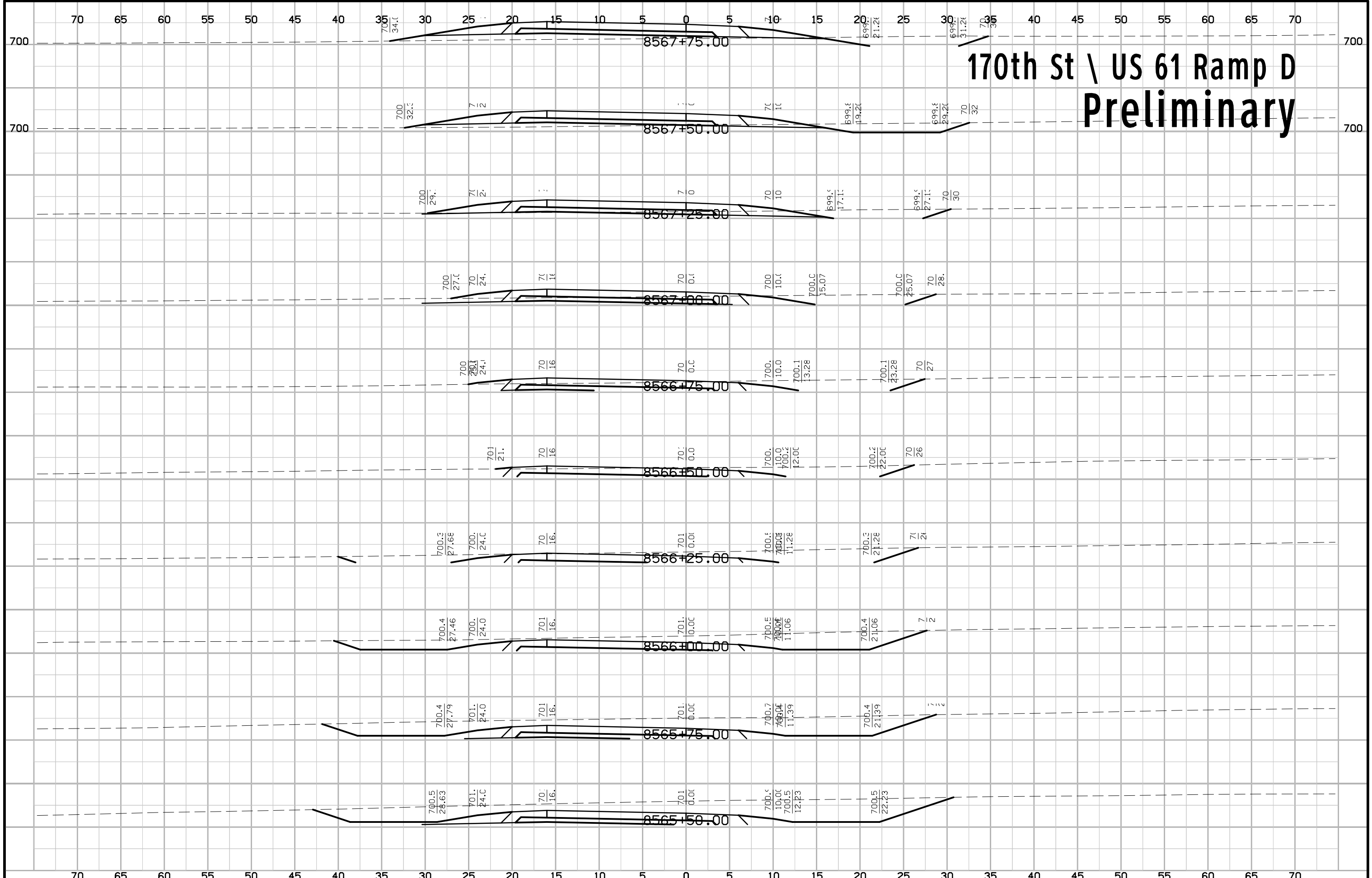
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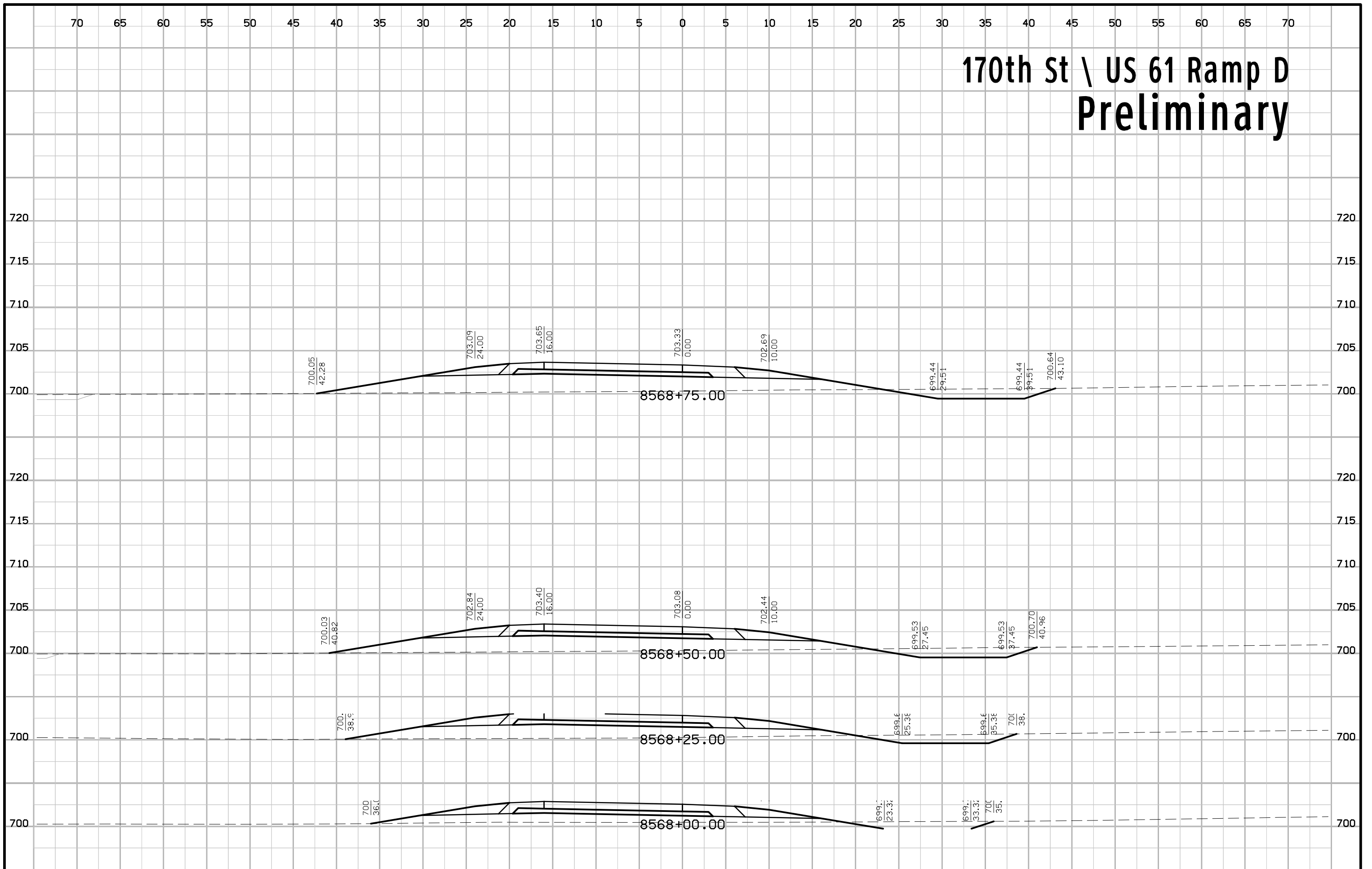
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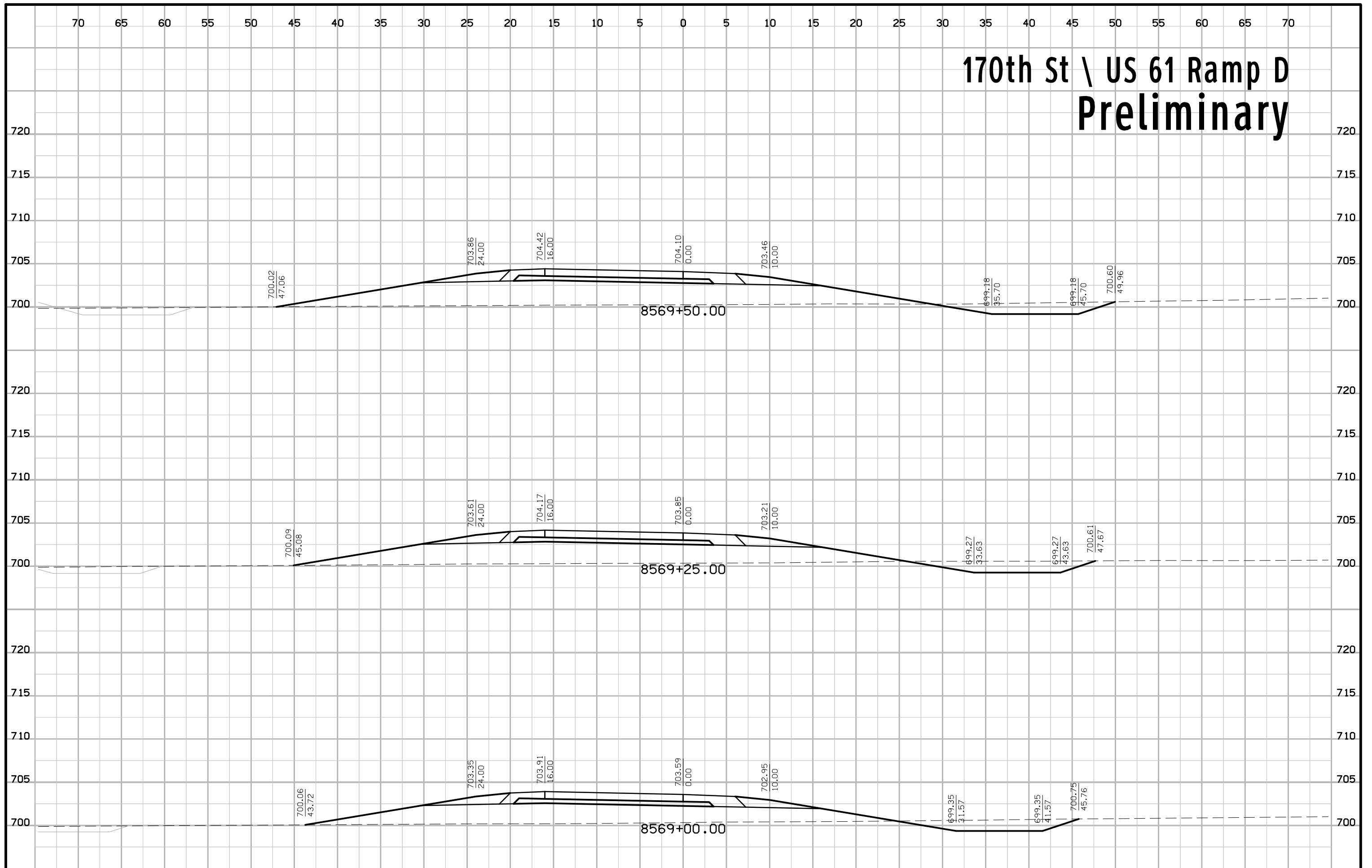
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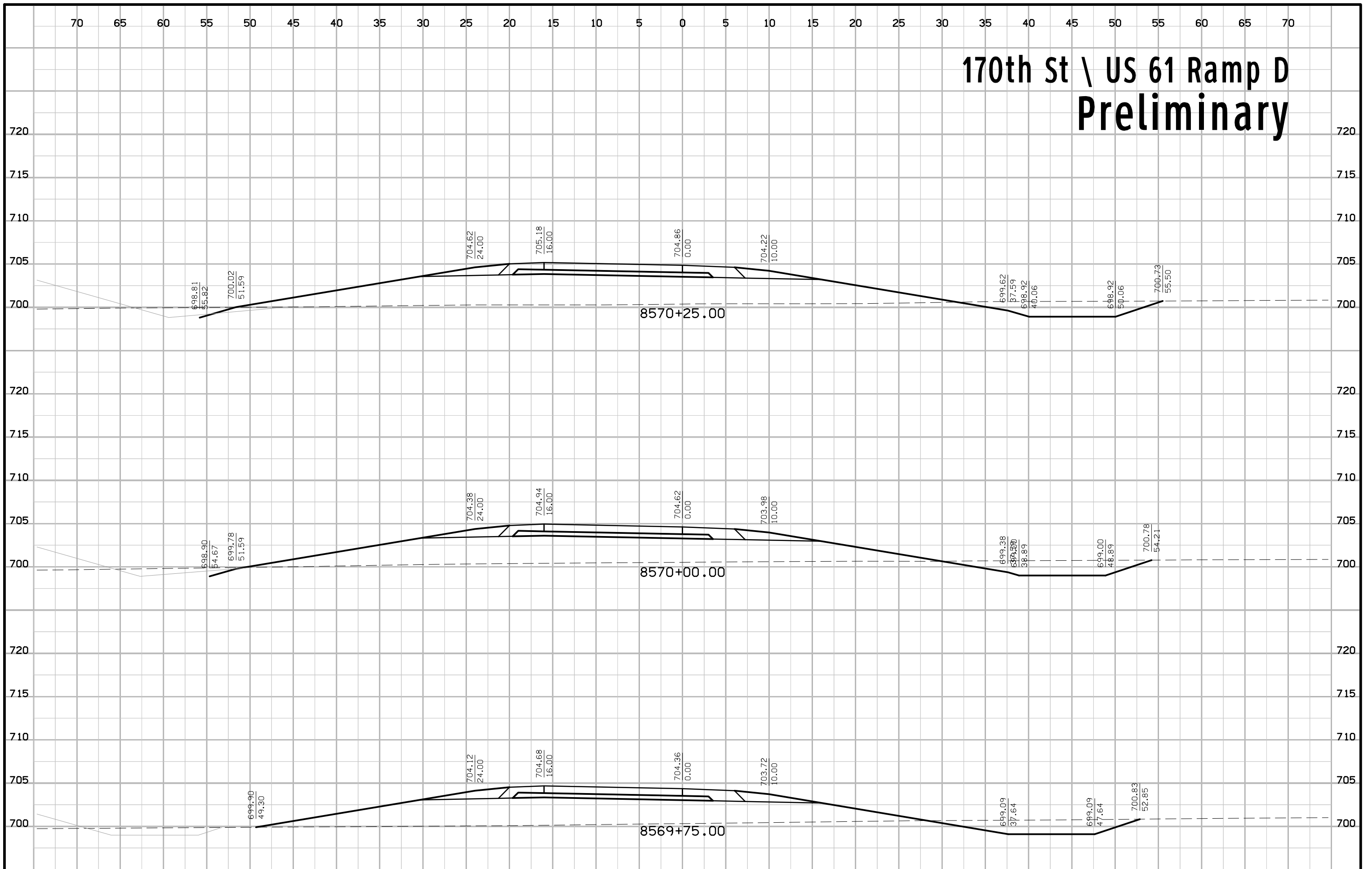
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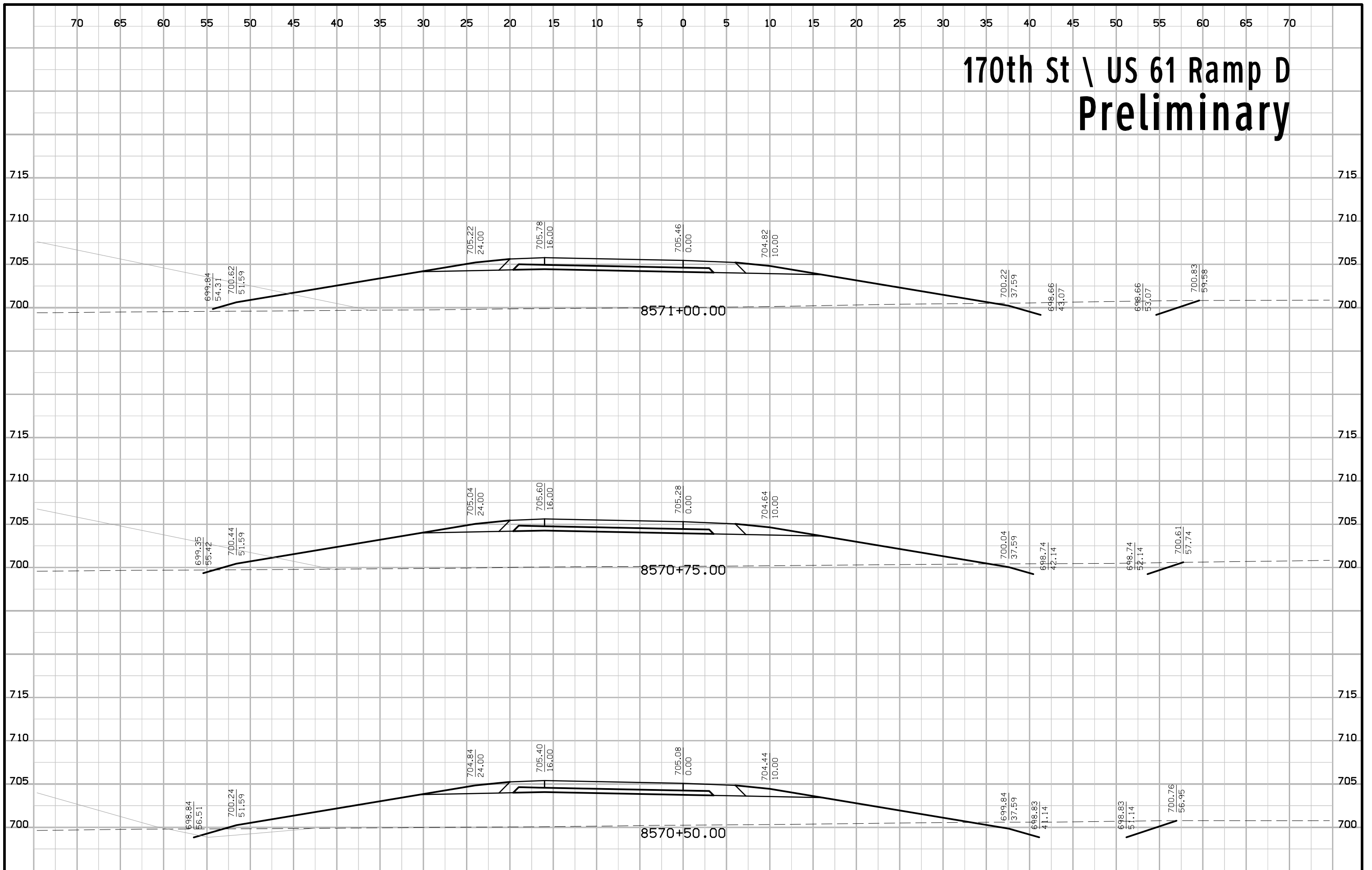
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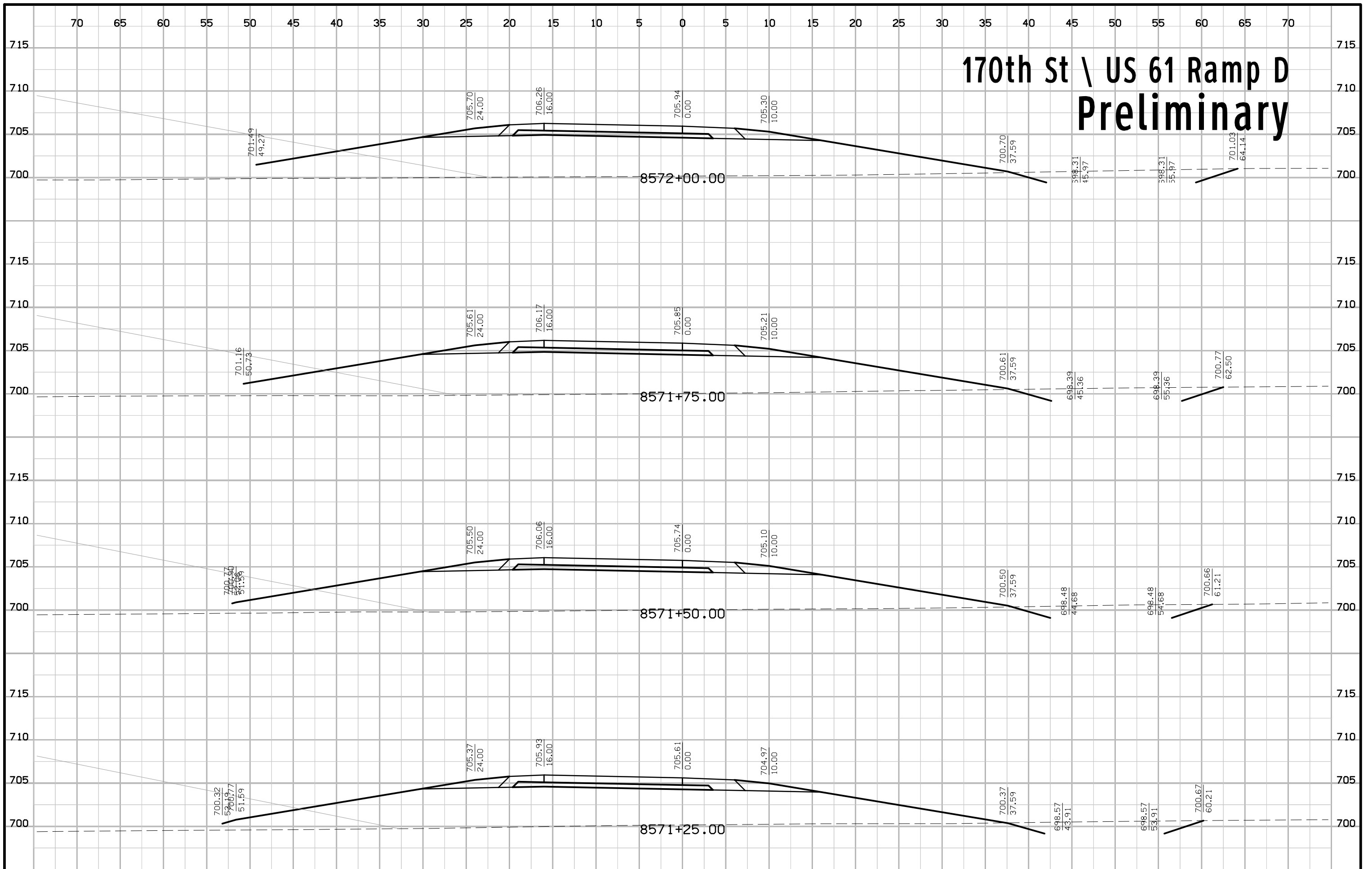
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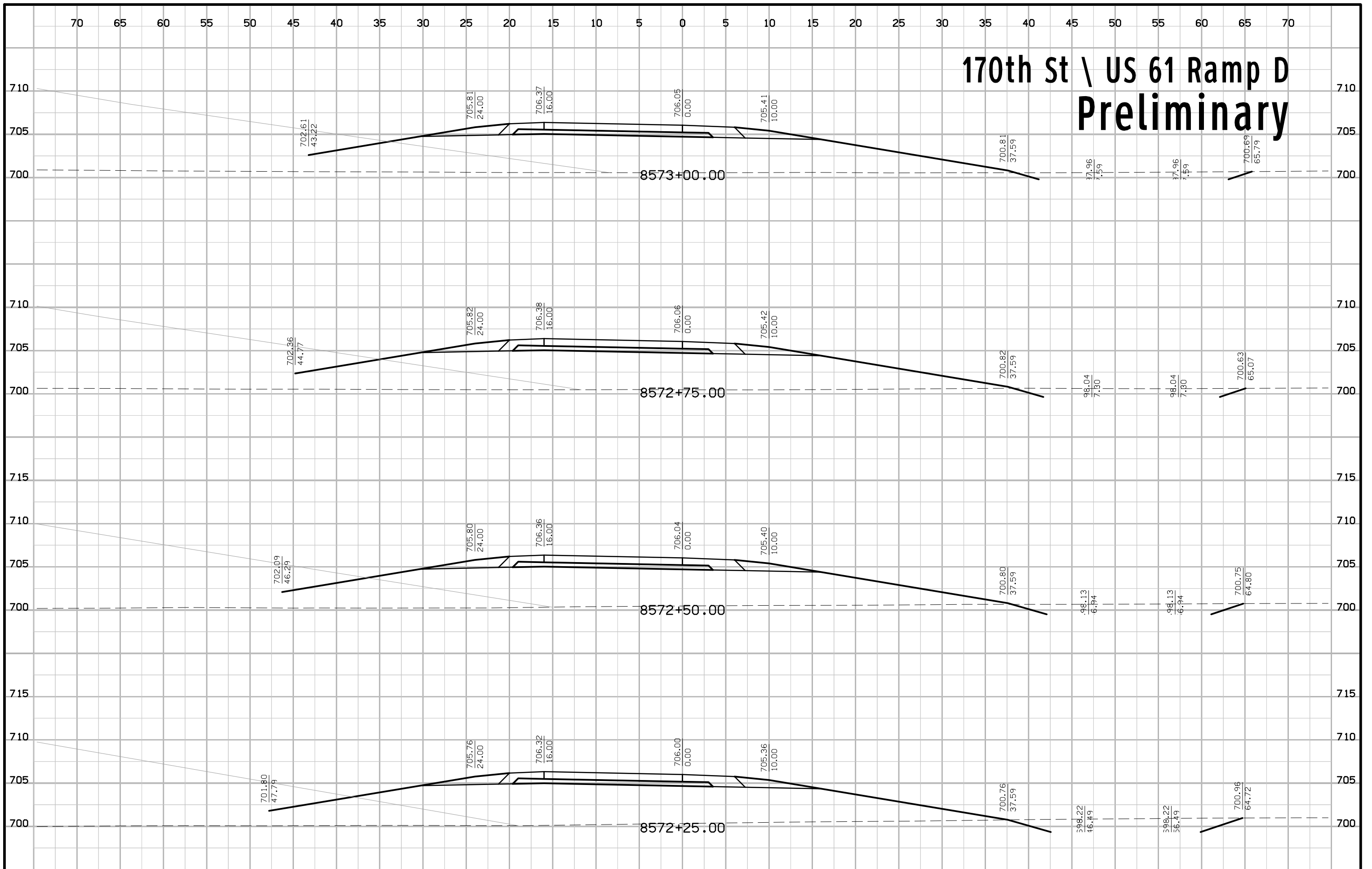
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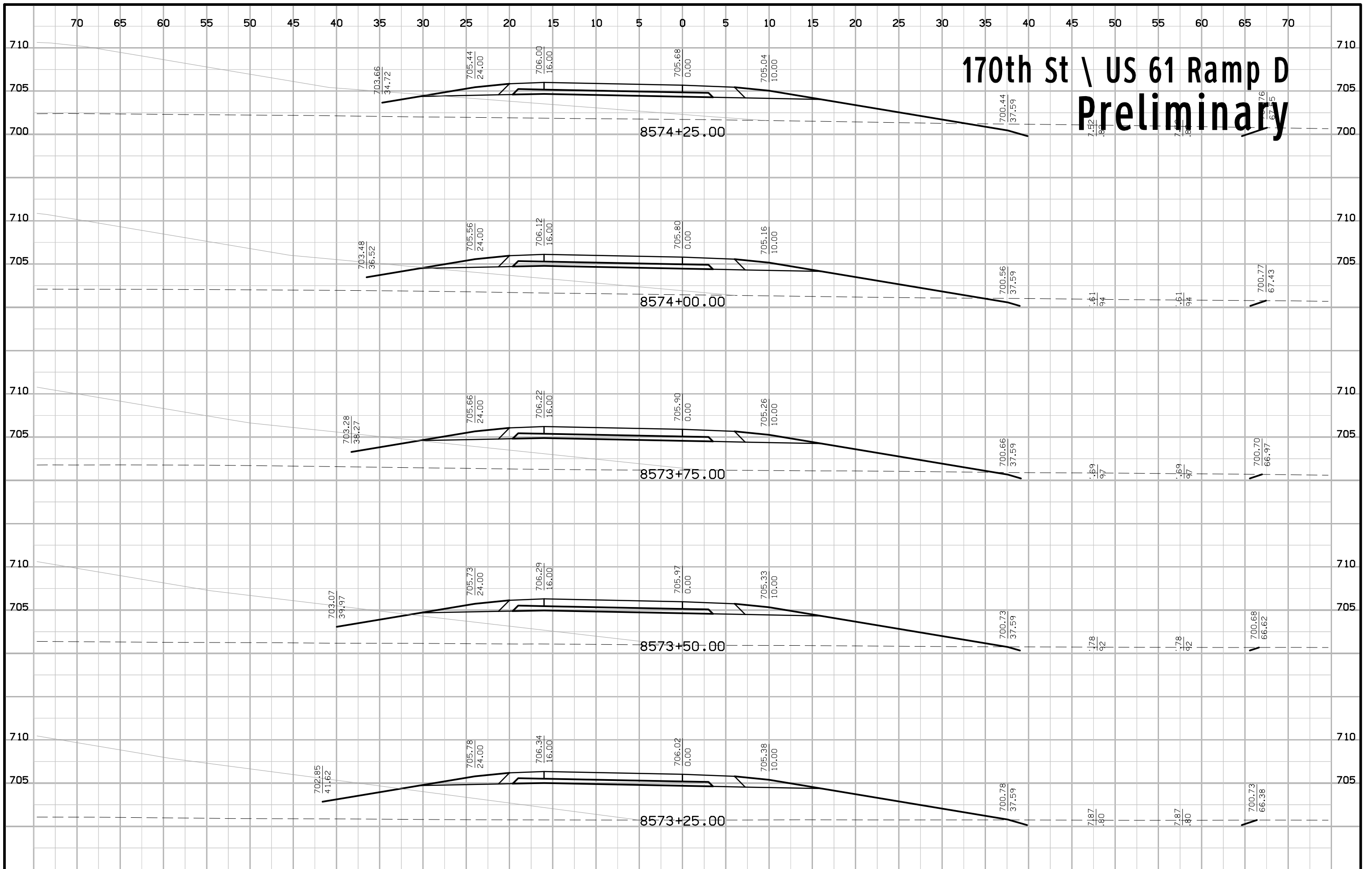
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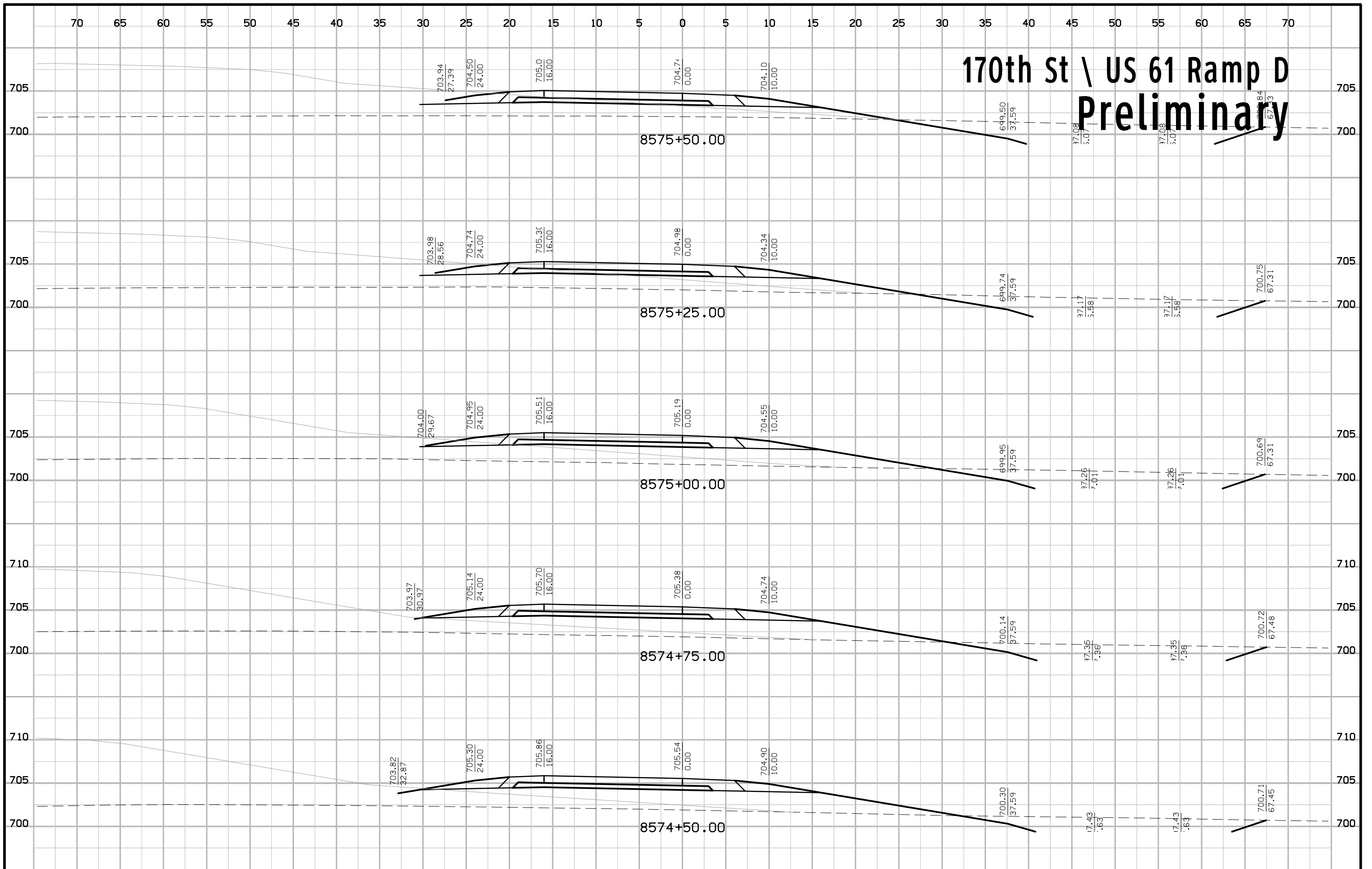
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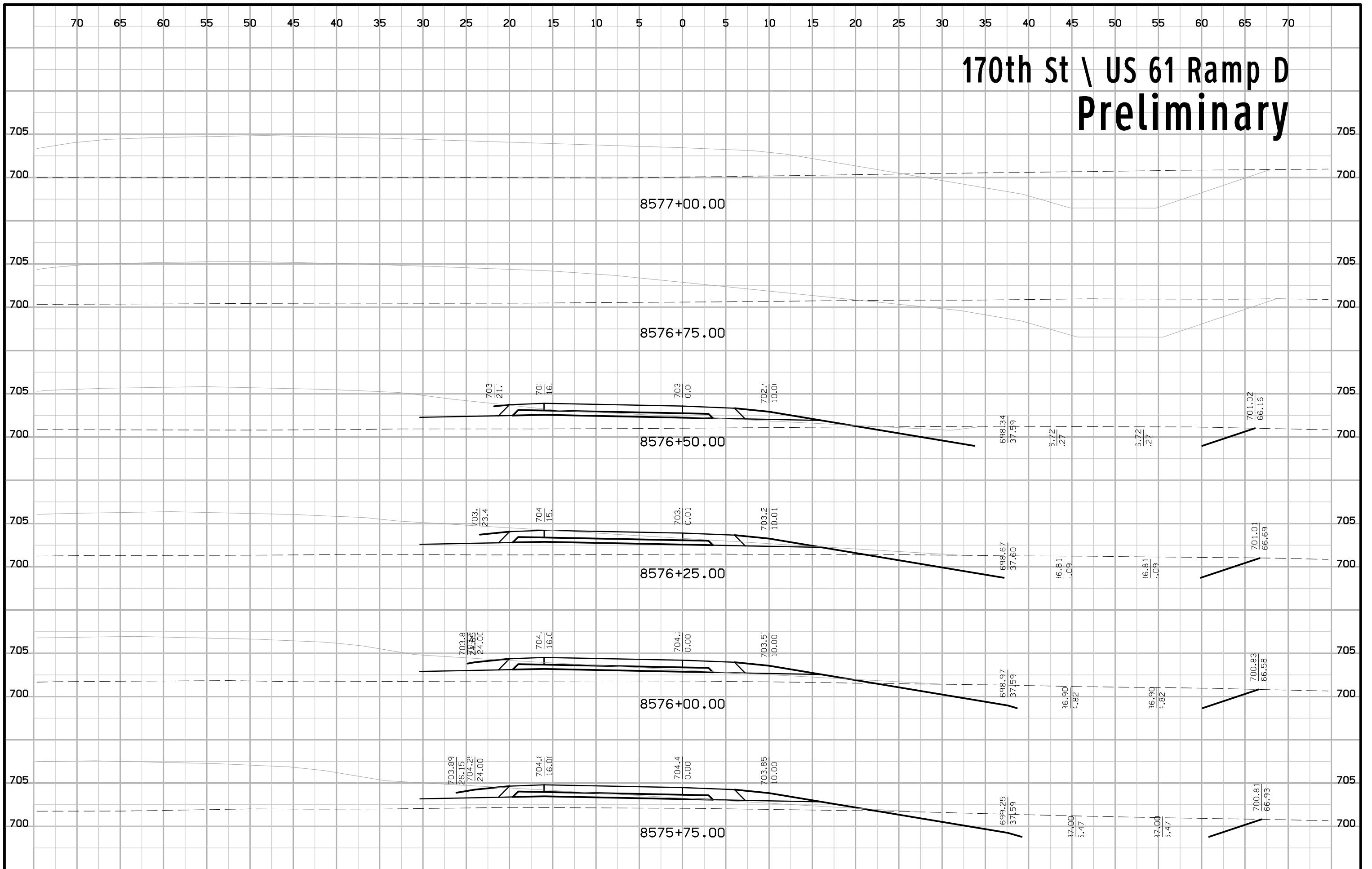
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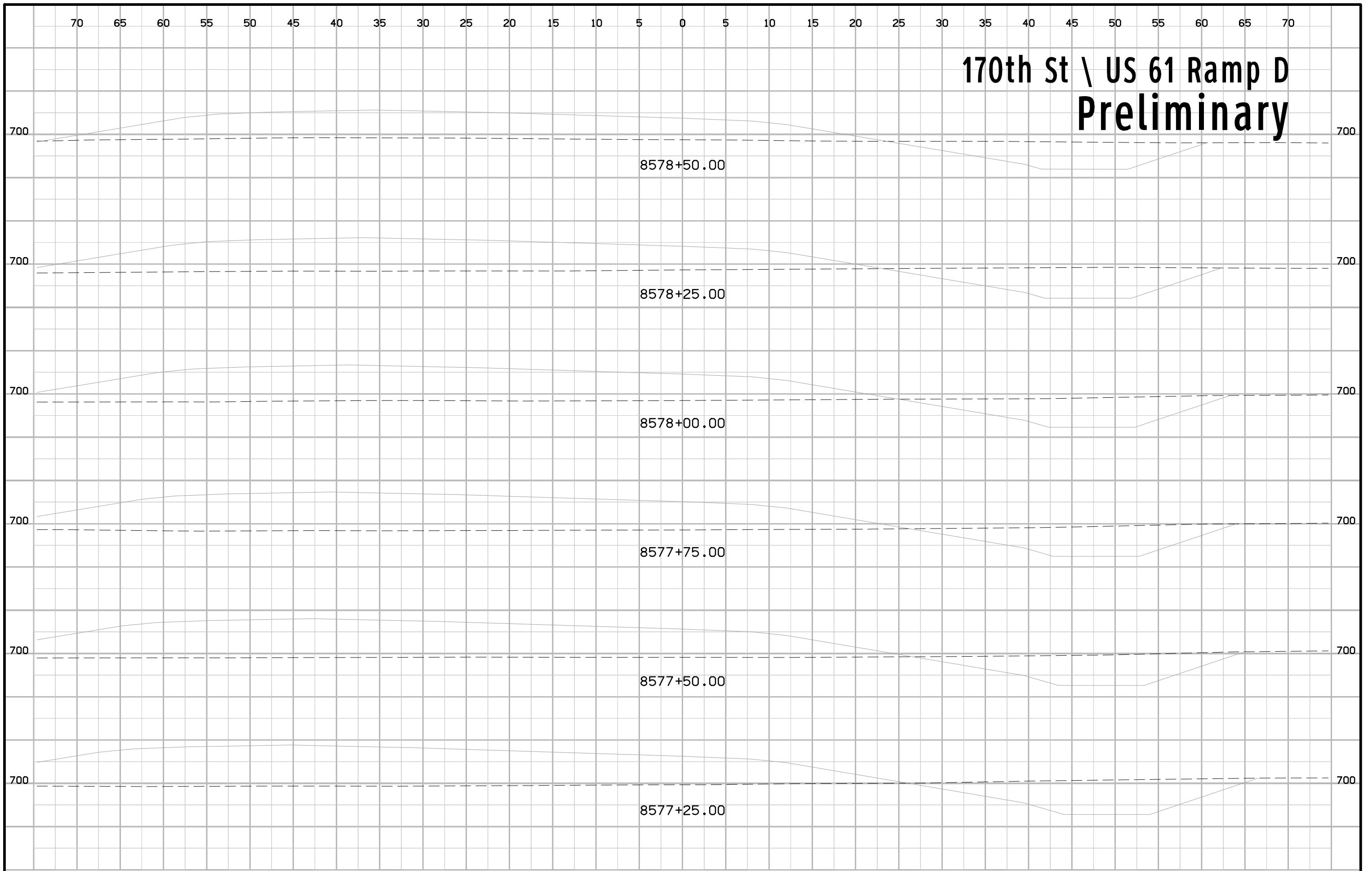
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170th St \ US 61 Ramp D Preliminary



170th St \ US 61 Ramp D Preliminary



170th St \ US 61 Ramp D Preliminary

