

**IOWA DEPARTMENT OF TRANSPORTATION**

<b>TO OFFICE:</b>	Right of Way	<b>DATE:</b>	February 15, 2013
<b>ATTENTION:</b>	M. J. Sankey	<b>REF. :</b>	Delaware/Dubuque Cos. Proj. #: NHSN-020-9(195)—2R-31 ROW#: NHSN-020-8(48)—2R-28 ROW#: NHSN-020-9(202)—2R-31 PIN: 10-31-020-010
<b>FROM:</b>	Jim Schoenrock		
<b>OFFICE:</b>	Design		
<b>SUBJECT:</b>	Right of Way Submittal (D5)		

Project Description:

The project consists of preliminary design for a new interchange on US 20 in Dyersville. US 20 will be reconstructed and lowered in the vicinity of the interchange overpass for a distance of approximately 3,725 feet. The proposed cross section will match existing and will include a four lane cross section with a 50-foot median. Existing daily traffic volumes (ADT) along US 20 in the vicinity of the new interchange are approximately 15,000 vpd (23% trucks), with future projections to 2035 of approximately 23,000 vpd (25% trucks). The future facility will include a new interchange between 330<sup>th</sup> Avenue and 332<sup>nd</sup> Avenue. The newly created cross road at the interchange will consist of a two lane roadway with left and right turn lanes at the ramp terminals. The proposed bridge over US 20 will be a two-span precast concrete structure, 252' long and 56' wide. New connections from Field of Dreams Way, Industrial Parkway, 218<sup>th</sup> Street and 221<sup>st</sup> Street will be established. Access to US 20 between 320<sup>th</sup> Avenue and the interchange at IA 136 will all be closed. Access to the west of the 320<sup>th</sup> Avenue and to the east of the IA 136 interchange will remain at Priority II.

Traffic Control/Staging:

The project will be constructed in three stages, as follows:

Stage 1A – The realignment of 330<sup>th</sup> Avenue south of Industrial Parkway will be constructed, as well as the extension of Industrial Parkway and 221<sup>st</sup> Street. This work will be completed to accommodate traffic from the existing industrial park during construction on the newly constructed Industrial Parkway and 221<sup>st</sup> Street.

Stage 1B – Median crossovers will be constructed on US 20 east and west of the proposed interchange.

Stage 1C – EB and WB traffic on US 20 will be shifted to the WB lanes utilizing the median crossovers, one lane in each direction. Access to 330<sup>th</sup> and 332<sup>nd</sup> Avenues will be closed at US 20. The eastbound lanes of US 20 will be reconstructed, as well as Ramp B and D, and 330<sup>th</sup> Avenue north of Industrial Parkway to the ramp terminals.

Stage 2 – EB and WB traffic on US-20 will be shifted to the EB lanes utilizing the median crossovers, on lane in each direction. Access to 330<sup>th</sup> and 332<sup>nd</sup> Avenues will remain closed at US 20. The westbound lanes of US-20 will be reconstructed, as well as Ramps A and C, 332<sup>nd</sup> Avenue, field of Dreams Way, and 218<sup>th</sup> Street.

Stage 3 – Shift EB and WB traffic on US 20 to the outside lanes, remove median crossovers and construct center bridge pier. Construct bridge over US 20 and bridge approaches. After the interchange is complete and open to traffic, the intersections of 7<sup>th</sup>

Street and 320<sup>th</sup> Avenue at US 20 will be removed.

Detours:

On the south side of US 20, existing traffic on 330<sup>th</sup> Avenue and Industrial Parkway will require detouring. The preliminary plan is to construct the extension of Industrial Parkway and 221<sup>st</sup> Street early in Stage 1, while maintaining access to US 20 on 330<sup>th</sup> Avenue. When completed, Industrial Parkway traffic, and 330<sup>th</sup> Avenue south of US 20 will be detoured to the east along the newly constructed Industrial Parkway extension/221<sup>st</sup> Street extension, to access US 20 at 7<sup>th</sup> Street for the duration of construction activities.

On the north side of US 20, the 7<sup>th</sup> Street intersection at US 20 will remain open until the end of Stage 3 construction, to accommodate access for business and residential traffic along Field of Dreams Way and 7<sup>th</sup> Street from the north. 332<sup>nd</sup> Avenue will be closed to through traffic at 210<sup>th</sup> Street at the beginning of Stage 1B, with local traffic and deliveries allowed access to 12<sup>th</sup> Avenue, while through traffic bound for US 20 will be detoured east to IA 136.

The project directory is W:\Projects\3102001010\Design. No printed plan sheets are included with this submittal. PDF files of the sheets can be found on the network in W:\Projects\3102001010\Design\D5Submittal\folder. Plans and cross section files have been sheeted for batch plotting. The file, Project Documentation Shell.xls has a description of the MicroStation and GEOPAK files, chains and profiles. It also specifies the scale and number of sheets in each file.

Construction need lines required for this project are at the catch (intercept) point and have been added to the design file.

Culverts were completed (B1) on December 28, 2012. Design is shown on “dsnCulvertStrucProp” in plan view and referenced into the design file as “Culverts\_DesignRecord” sub-folder under the “BRPrelim” folder and also drawn on the cross sections.

Borrow Needs:

This project will utilize contractor borrow. The preliminary design indicates a borrow need of approximately 11,000 cubic yards on the north side of US 20 and approximately 6,000 cubic yards on the south side of US 20. The preliminary borrow locations shown in the plans on Sheet A.2 will not be used for this project.

No special mitigation areas are required on this project. Refer to W1 Wetland Design Review letter dated October 29, 2012.

Utilities on this project are as follows:

- Alliant Energy (Electric)
- Maquoketa Valley Electric Cooperative (Electric)
- Wind Stream Communications (Telephone)
- City of Dyersville (Water, Storm Sewer, Sanitary Sewer)
- Black Hills Energy (Natural Gas)
- ICN (Fiber Optic)

- Mediacom (Cable Television)

The current letting date is December, 2014.

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

JRS:JAH:mk

Attach.

cc:	M. J. Kennerly	N. L. McDonald
	K. D. Nicholson	G. A. Novey
	D. L. Maifield	D. R. Claman
	R. L. Stanley	J. P. Rost
	S. C. Marler	B. Hofer
	E. J. Ranney	L. C. Funnell
	D. A. Widick	T. L. Gettings
	S. J. Gent	M. A. Swenson
	T. Crouch	J. W. Smith
	E. C. Wright	D. A. Popp
	J. N. McCollough	B. Bradley
	J. Vortherms	W. Sorenson
	J. R. Schnoebelen	K. Yanna
	S. Flockhart	A. Gourley

Stanley Consultants – David Bovee, Jeff Hillegonds, Mike McKenna  
City of Dyersville – Mick Michel, Dave Vorwald  
Delaware County – Anthony Bardgett, Jeff Madlom

**DELAWARE/DUBUQUE CO. NHSN-020-9(195)--2R-31**  
 PCC PAVEMENT - GRADE AND REPLACE  
 LETTING DATE

INDEX OF SHEETS	
No.	DESCRIPTION
<b>A Sheets</b>	<b>Title Sheets</b>
A.1	Title Sheet
A.2	Location Map Sheet
<b>B Sheets</b>	<b>Typical Cross Sections and Details</b>
B.1 - 8	Typical Cross Sections and Details
<b>D Sheets</b>	<b>Mainline Plan and Profile Sheets</b>
* D.1	Plan & Profile Legend & Symbol Information Sheet
* D.2 - 4	US 20
<b>E Sheets</b>	<b>Side Road Plan and Profile Sheets</b>
* E.1 - 8	330th Ave./332th Ave.
* E.9	Industrial Parkway
* E.10 - 11	221st Street
* E.12	218th Street
* E.13	Field of Dreams Way
* E.14	330th Avenue - Channel
* E.15	320th Avenue/7th Street SW
<b>G Sheets</b>	<b>Survey Sheets</b>
G.1 - 3	Reference Ties and Bench Marks
G.4 - 5	Horizontal Control Tab. & Super for all Alignments
<b>J Sheets</b>	<b>Traffic Control and Staging Sheets</b>
* J.1	Traffic Control Plan
* J.2	Traffic Control & Staging Legend & Symbol Info. Sheet
* J.3	Staging Typical Section
* J.4 - 8	Staging and Traffic Control Sheets Stage 1
* J.9 - 13	Staging and Traffic Control Sheets Stage 2
* J.14	Staging and Traffic Control Sheet Stage 3
<b>K Sheets</b>	<b>Interchange Sheets</b>
* K.1 - 2	Interchange Layout Sheets
* K.3	330th Ave./332th Ave. RAMP A Plan and Profile Sheets
* K.4	330th Ave./332th Ave. RAMP B Plan and Profile Sheets
* K.5	330th Ave./332th Ave. RAMP C Plan and Profile Sheets
* K.6	330th Ave./332th Ave. RAMP D Plan and Profile Sheets
<b>V Sheets</b>	<b>Bridge and Culvert Situation Plans</b>
V.1 - 2	Bridge and Culvert Situation Plans
<b>W Sheets</b>	<b>Mainline Cross Sections</b>
W.1	Cross Sections Legend & Symbol Information Sheet
W.2 - 20	Mainline US 20 Cross Sections - Stage 1
W.21 - 40	Mainline US 20 Cross Sections - Stage 2
<b>X Sheets</b>	<b>Side Road Cross Sections</b>
X.1 - 31	Side Road 330th Ave./332th Ave. Cross Sections
X.32 - 38	Side Road Industrial Parkway Cross Sections
X.39 - 55	Side Road 221st Street Cross Sections
X.56 - 65	Side Road 218th Street Cross Sections
X.66 - 76	Side Road Field of Dreams Way Cross Sections
X.77 - 81	Side Road 330th Avenue - Channel
<b>Y Sheets</b>	<b>Ramp Cross Sections</b>
Y.1 - 8	Ramp A Cross Sections
Y.9 - 16	Ramp B Cross Sections
Y.17 - 27	Ramp C Cross Sections
Y.28 - 37	Ramp D Cross Sections
	* Color Plan Sheets



# Iowa Department of Transportation

## Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

# PRIMARY ROAD SYSTEM

# DELAWARE/DUBUQUE COUNTIES

## PCC PAVEMENT - GRADE AND REPLACE

## BRIDGE NEW - PPCB

U.S. 20 Interchange at 330th Avenue/332nd Avenue

SCALES: As Noted

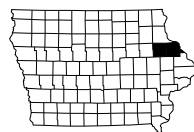
Refer to the Proposal Form for list of applicable specifications.

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



MILEAGE SUMMARY			
		105-1	
		09-27-94	
Div.	Location	Lin. Ft.	Miles
1	US 20		
	Sta. 1039+98.04 to Sta. 1077+25.00	3726.96	
	330th Avenue		
	Sta. 11037+07.02 to Sta. 11059+90.41	2283.39	
	332nd Avenue		
	Sta. 11059+90.41 to Sta. 11082+51.85	2261.44	
	Industrial Parkway		
	Sta. 21046+49.14 to Sta. 21053+69.86	720.72	
	Field of Dreams Way		
	Sta. 51074+02.60 to Sta. 51086+18.48	1215.88	
	Ramp A		
	Sta. 2065+44.21 to Sta. 2077+25.00	1180.79	
	Ramp B		
	Sta. 3050+50.00 to Sta. 3062+35.32	1185.32	
	Ramp C		
	Sta. 4049+98.04 to Sta. 4065+85.11	1587.07	
	Ramp D		
	Sta. 5061+94.60 to Sta. 5077+69.92	1575.32	
	221st Street		
	Sta. 31053+93.86 to Sta. 31094+91.50	4097.64	
	218th Street		
	Sta. 41053+46.33 to Sta. 41073+78.41	2032.08	
	Deduct Bridge at Sta. 1063+89.71	252.00	
	Total Length of Roadway	21614.61	4.094
	Total Length of Bridge	252.00	0.048
	Total Length of Project	21866.61	4.141

PRELIMINARY EARTHWORK QUANTITY SUMMARY			
	Excavation (CYD)	Fill +30% (CYD)	Borrow (CYD)
Northside (Incl. WB US 20)	149,539	160,849	11,310
Southside (Incl. EB US 20)	211,843	218,158	6,315
(Refer to Profiles for Breakdown by Road Segments)			



For Project Location Map Refer to Sheet A.2

DESIGN DATA RURAL			
2015 AADT	14,662	V.P.D.	
2035 AADT	22,113	V.P.D.	
20-- DHV	--	V.P.H.	
TRUCKS	25%	%	
Total Design ESALs	--		

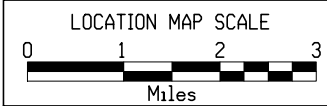
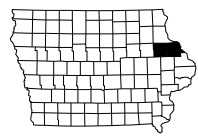
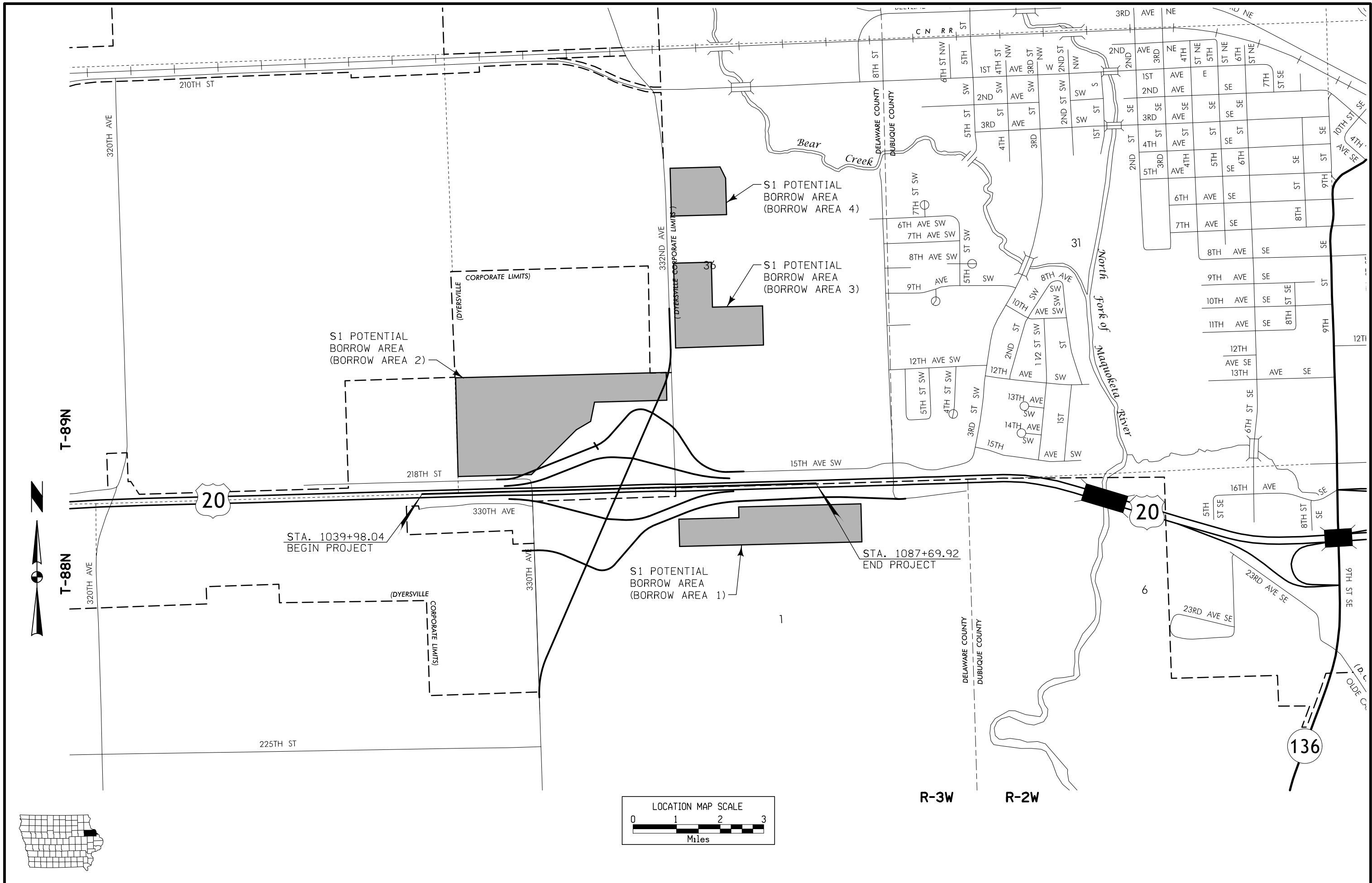
INDEX OF SEALS		
SHEET NO.	NAME	TYPE
A.1	X	Primary Signature Block
X	X	X

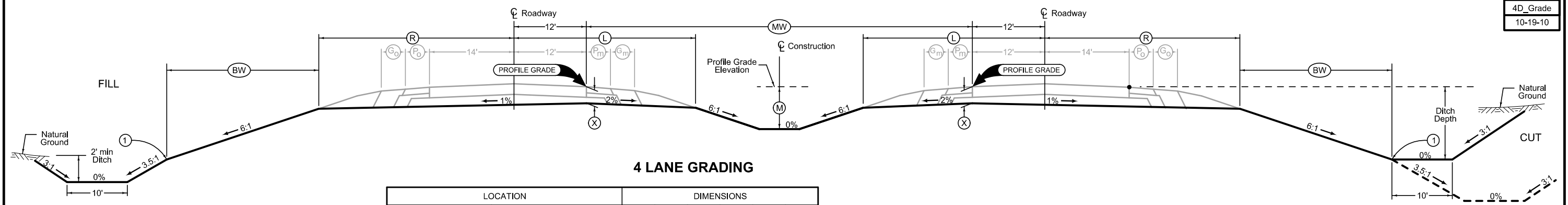
# PRELIMINARY PLANS

Subject to change by final design.

## D5 PLAN - Date: JAN 11, 2013

REVISIONS	TOTAL
PROJECT IDENTIFICATION NUMBER	
10-31-020-010	
PROJECT NUMBER	
NHSN-020-9(195)--2R-31	
R.O.W. PROJECT NUMBER	





**4 LANE GRADING**

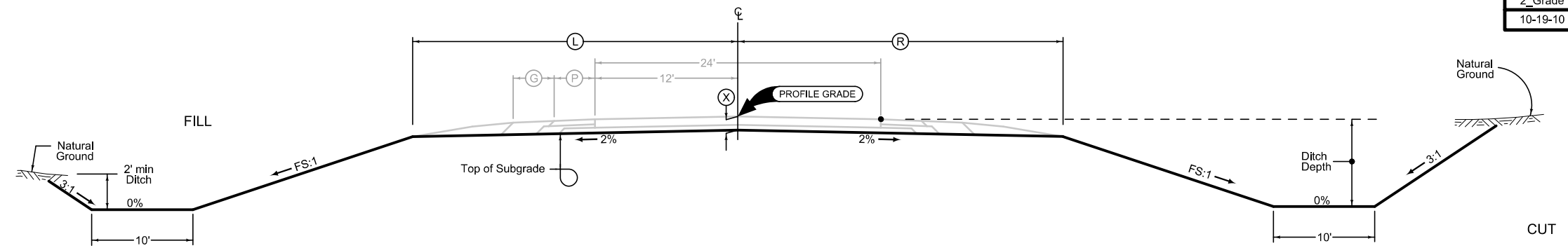
LOCATION		DIMENSIONS						
ROAD IDENTIFICATION	STATION TO STATION	L Feet	R Feet	X Inches	BW Feet	MW Feet	M Feet	
US 20	1039+98.04 - 1077+25.00	28.1	32.1	16	19.6	50	3	

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			
ROAD IDENTIFICATION	STATION TO STATION	(L) Feet	(R) Feet	(X) Inches	FS
330TH AVENUE	11037+07.02 - 11059+90.41	27.7-41.9	27.7-47.7	16	4
332ND AVENUE	11059+90.41 - 11082+51.85	27.7-47.7	27.7-47.7	16	4
INDUSTRIAL PARKWAY	21046+49.14 - 21053+69.86	38.2	38.2	16	4
221ST STREET	31053+93.86 - 31094+91.50	24.0	24.0	16	4
FIELD OF DREAMS WAY	51074+02.60 - 51086+18.48	38.2	38.2	16	4



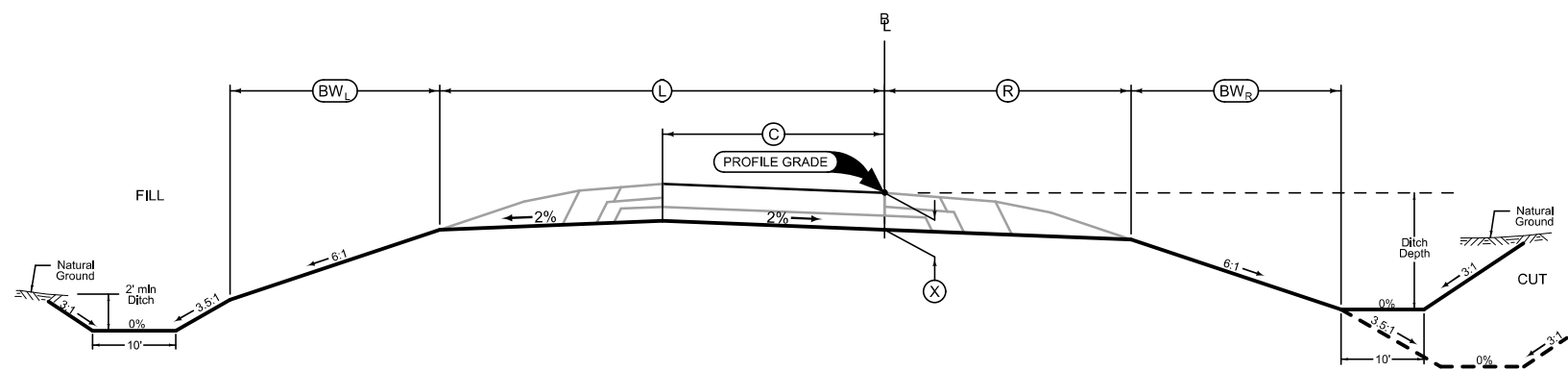
Normal section shown may be modified appropriately in areas of superelevated curves or other locations specifically designated by the Engineer.

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

### 2 LANE GRADING

2\_Grade  
10-19-10

LOCATION			DIMENSIONS					
INTERCHANGE	RAMP	STATION TO STATION	(L) Feet	(R) Feet	(C) Feet	(X) Inches	(BW) <sub>L</sub> Feet	(BW) <sub>R</sub> Feet
330/332	A	2065+44.21 - 2067+42.61	30.36	28.09	16	16	20.27	20.06
330/332	A	2067+42.61 - 2069+22.61	30.36	VARIES	16	16	20.27	20.06
330/332	A	2069+22.61 - 2077+25.00	30.36	16.09	16	16	20.27	20.06
330/332	B	3050+50.00 - 3058+58.92	30.36	16.09	16	16	20.27	20.06
330/332	B	3058+58.92 - 3060+38.92	30.36	VARIES	16	16	20.27	20.06
330/332	B	3060+38.92 - 3062+35.32	30.36	28.09	16	16	20.27	20.06
330/332	C	4049+98.04 - 4065+85.11	30.36	16.09	16	16	20.27	20.06
330/332	D	5061+94.60 - 5077+69.92	30.36	16.09	16	16	20.27	20.06



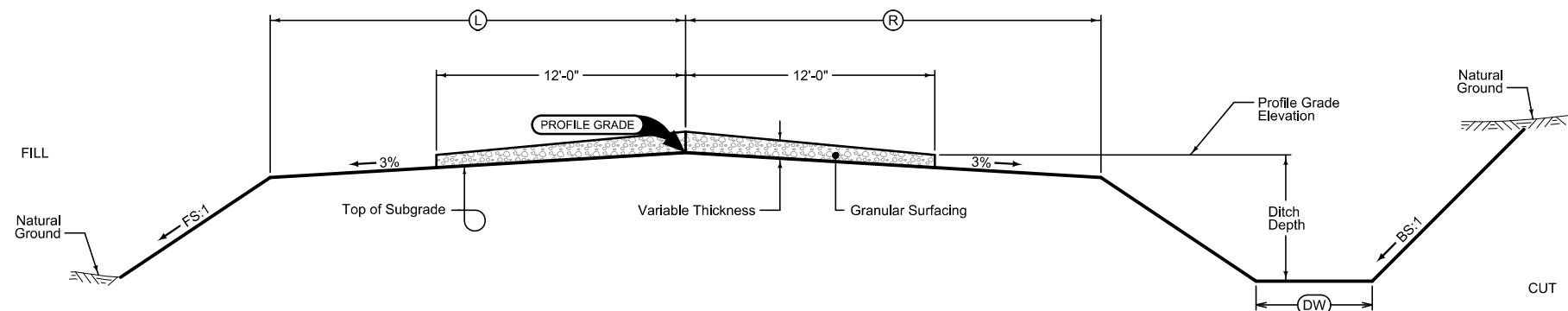
Section view is in direction of traffic.

Normal sections shown may be appropriately modified for areas specifically designated by the Engineer such as intersections or superelevated curves.

### RAMP GRADING

1R\_Grade  
10-18-11

LOCATION		DIMENSIONS				
ROAD IDENTIFICATION	STATION TO STATION	(L) Feet	(R) Feet	FS	BS	(DW) Feet
218TH STREET	41053+46.33 - 41073+78.41	16	16	4	3	10



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 2330 tons per mile.  
Paving design application rate is 0 tons per mile.

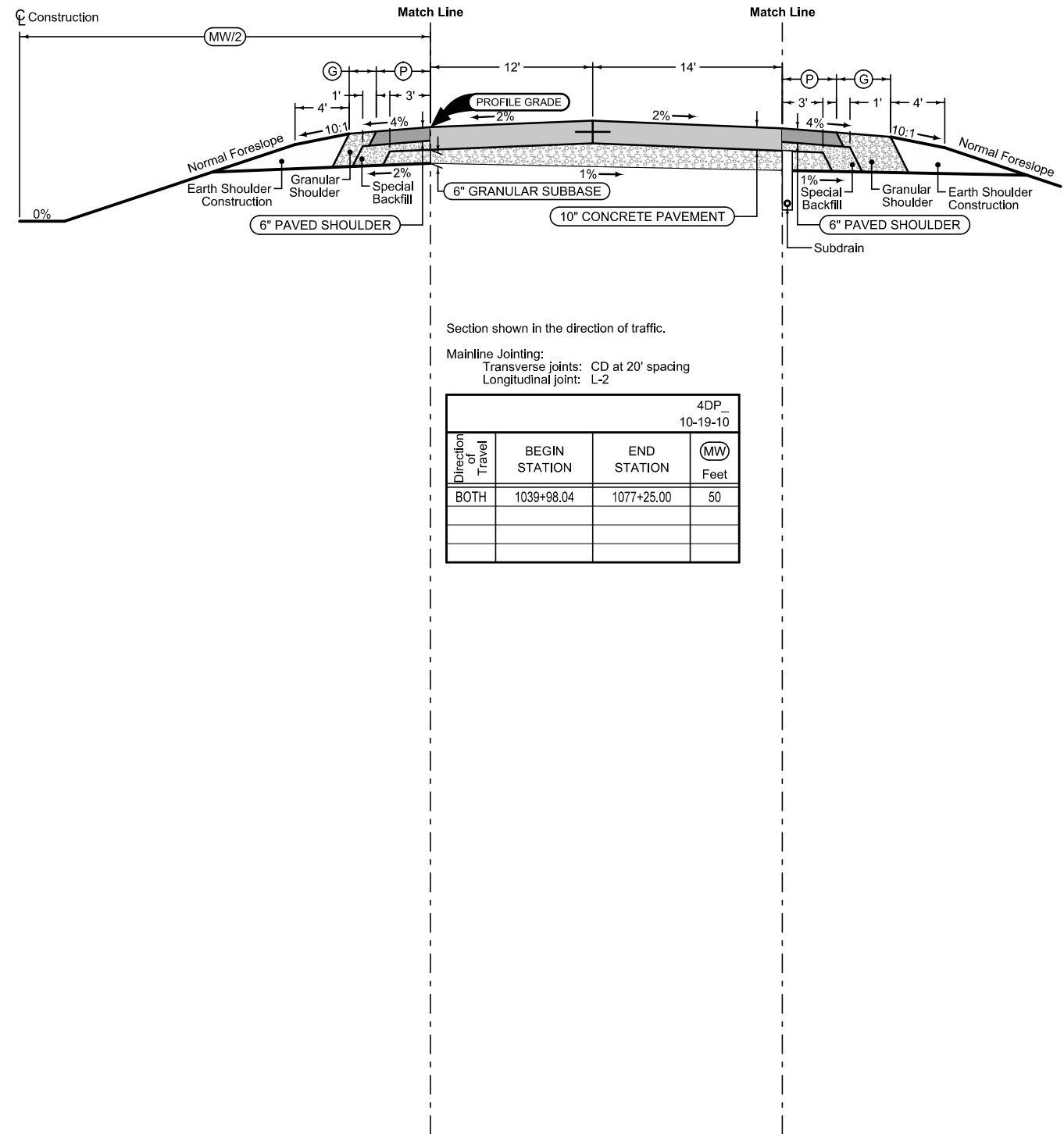
### GRADING AND GRANULAR SURFACING

2\_GradeGran  
04-17-12

**Combination Shoulder**

Shoulder Jointing:  
Longitudinal joint: B

Direction of Travel	BEGIN STATION	END STATION	4_C_	
			(P) Feet	(G) Feet
BOTH	1039+98.04	1077+25.00	4	2



Section shown in the direction of traffic.

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

Direction of Travel	BEGIN STATION	END STATION	4DP_	
			(MW) Feet	
BOTH	1039+98.04	1077+25.00	50	

**Combination Shoulder**

Shoulder Jointing:  
Longitudinal joint: B

Direction of Travel	BEGIN STATION	END STATION	4_C_	
			(P) Feet	(G) Feet
BOTH	1039+98.04	1077+25.00	4	4

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

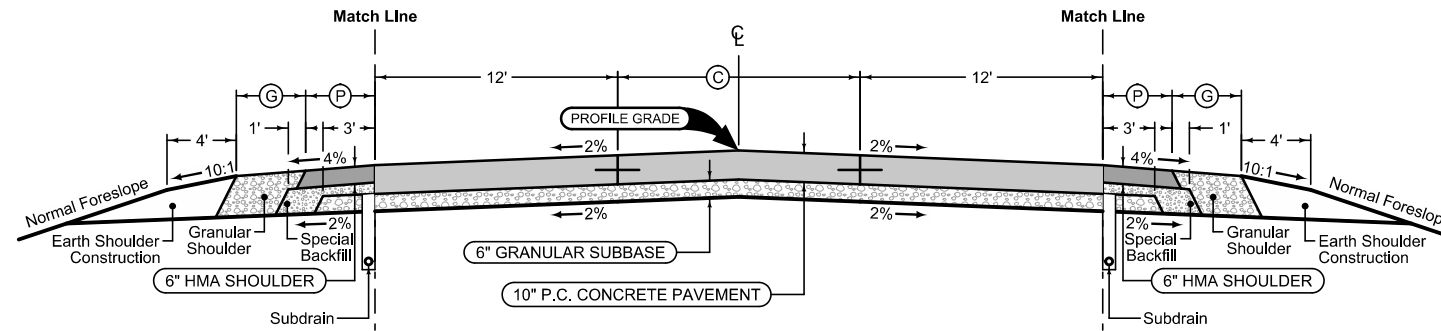
**US HIGHWAY 20**



**Combination Shoulder**

Shoulder Jointing:  
Longitudinal joint: B

2_C_ 10-19-10			
STATION TO STATION		(P) Feet	(G) Feet
11060+14.41	11067+66.41	2	6



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

2P_TWLTL_ 10-19-10		
STATION TO STATION		(C) Feet
11060+14.41	11067+66.41	16

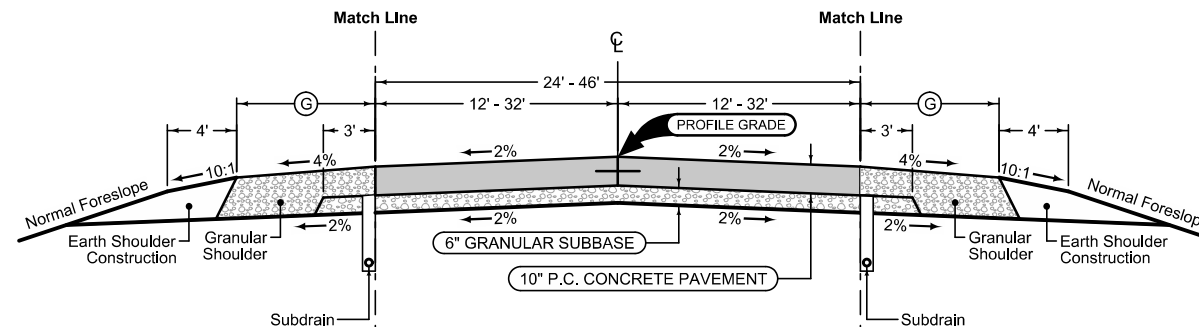
**Combination Shoulder**

Shoulder Jointing:  
Longitudinal joint: B

2_C_ 10-19-10			
STATION TO STATION		(P) Feet	(G) Feet
11060+14.41	11067+66.41	2	6

**Granular Shoulder**

2_G_SR_ 10-19-10		
STATION TO STATION		(G) Feet
11052+63.36	11059+90.41	8
11067+90.41	11082+51.85	8



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

2P_ 10-19-10		
STATION TO STATION		(C) Feet
11052+63.36	11059+90.41	8
11067+90.41	11082+51.85	8

**Granular Shoulder**

2_G_SR_ 10-19-10		
STATION TO STATION		(G) Feet
11052+63.36	11059+90.41	8
11067+90.41	11082+51.85	8

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

**330TH / 332ND AVENUE**

### Curbed Shoulder

Shoulder Jointing:  
 Longitudinal joint not required when distance from back of  
 curb to nearest joint is less than 15':

Single pour: L-2  
 Staged: KT-2  
 Transverse: C at 20' spacing

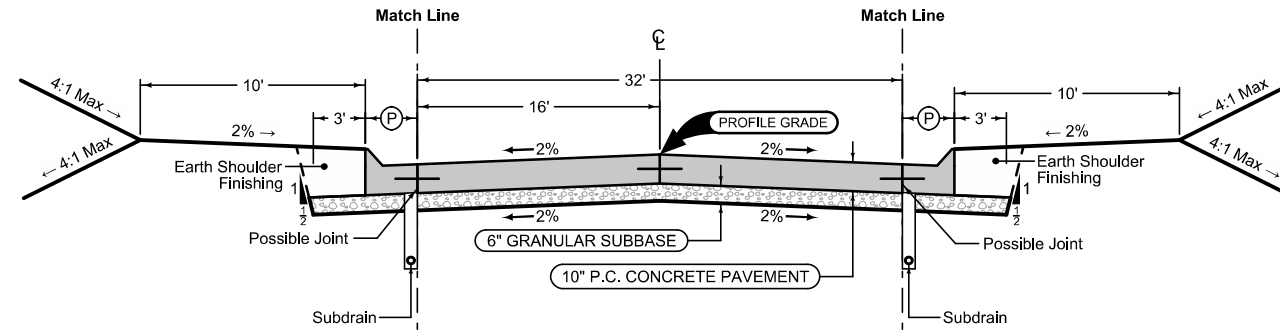
2_Curb_ MODIFIED				
ROAD IDENTIFICATION	STATION TO STATION		(P) Feet	Curb Type See PV-102
INDUSTRIAL PARKWAY	21046+49.14	21049+14.47	2.5	6" STANDARD CURB
FIELD OF DREAMS WAY	51074+71.95	51086+18.48	2.5	6" STANDARD CURB

### Curbed Shoulder

Shoulder Jointing:  
 Longitudinal joint not required when distance from back of  
 curb to nearest joint is less than 15':

Single pour: L-2  
 Staged: KT-2  
 Transverse: C at 20' spacing

2_Curb_ MODIFIED				
ROAD IDENTIFICATION	STATION TO STATION		(P) Feet	Curb Type See PV-102
INDUSTRIAL PARKWAY	21046+49.14	21053+61.86	2.5	6" STANDARD CURB
FIELD OF DREAMS WAY	51074+33.58	51086+18.48	2.5	6" STANDARD CURB

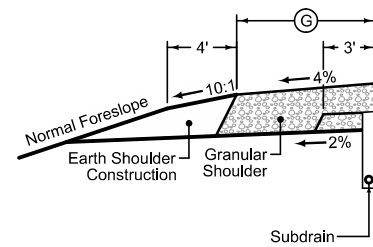


Mainline Jointing:  
 Transverse joints: CD at 20' spacing  
 Longitudinal joint: L-2

2P_ MODIFIED		
ROAD IDENTIFICATION	STATION TO STATION	
INDUSTRIAL PARKWAY	21046+48.14	21053+69.86
FIELD OF DREAMS WAY	51074+02.60	51086+18.48

### Granular Shoulder

2_G_SR_ MODIFIED			
ROAD IDENTIFICATION	STATION TO STATION		(G) Feet
INDUSTRIAL PARKWAY	21049+14.47	21053+69.86	8

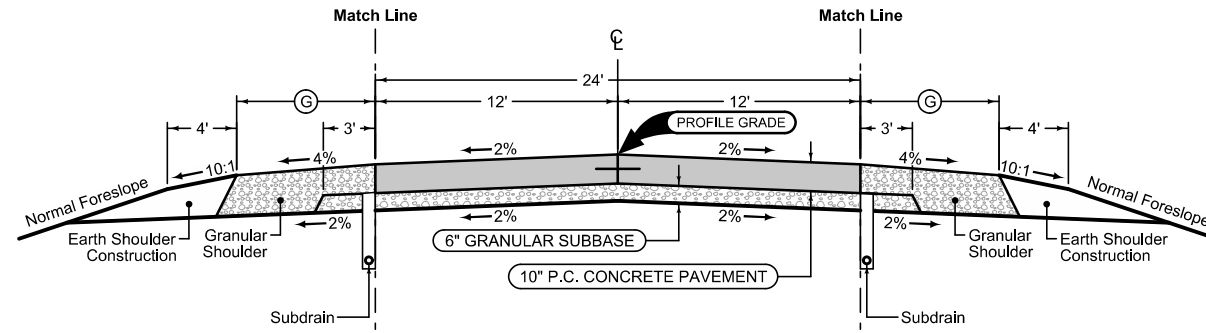


See Tab 100-24 for pavement quantities.  
 See Tab 112-9 for shoulder quantities.

## INDUSTRIAL PARKWAY & FIELD OF DREAMS WAY

**Granular Shoulder**

2_G_SR_		Ⓞ
10-19-10		
STATION TO STATION		Feet
31053+93.86	31094+91.50	4



**Granular Shoulder**

2_G_SR_		Ⓞ
10-19-10		
STATION TO STATION		Feet
31053+93.86	31094+91.50	4

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

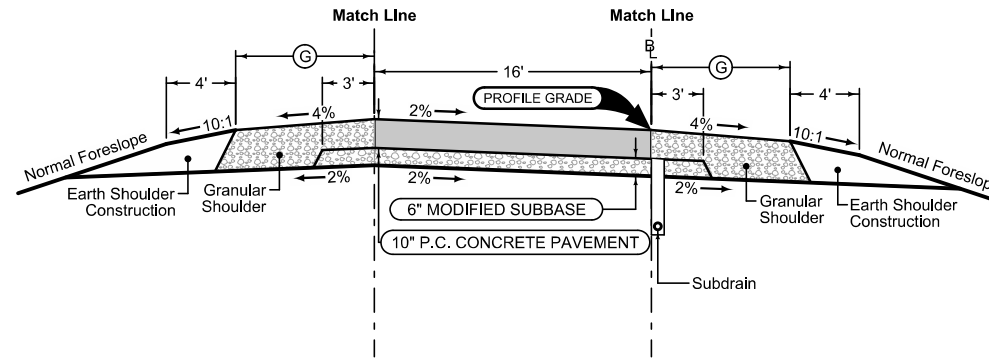
2P_	
10-19-10	
STATION TO STATION	
31053+93.86	31094+91.50

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

**221ST STREET**

**Granular Shoulder**

1R_G_ 10-19-10		
BEGIN STATION	END STATION	Ⓞ Feet
2069+22.61	2077+25.00	4
3050+50.00	3058+58.92	4
4049+98.04	4065+85.11	4
5061+94.60	5077+69.92	4



Section shown in the direction of traffic.

Ramp Jointing:  
Transverse joints: CD at 20' spacing.

1RP_ 10-19-10	
BEGIN STATION	END STATION
2065+44.21	2077+25.00
3050+50.00	3062+35.32
4049+98.04	4065+85.11
5061+94.60	5077+69.92

**Granular Shoulder**

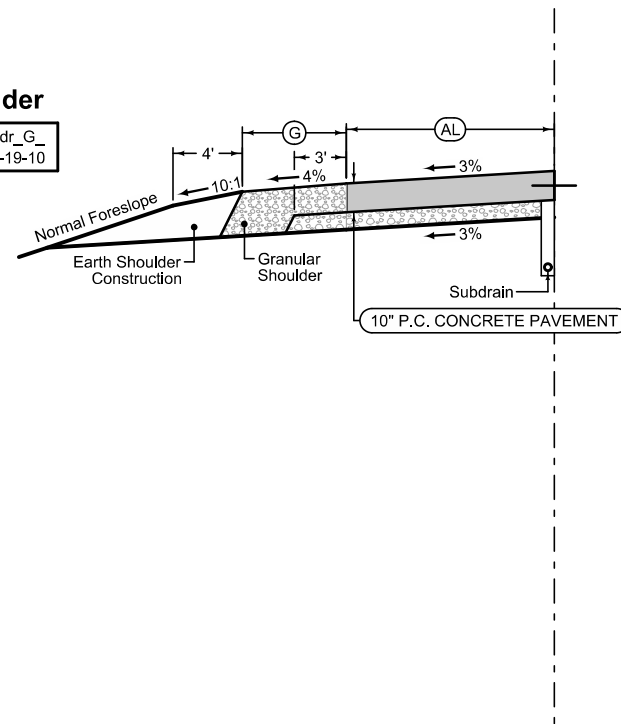
1R_G_ 10-19-10		
BEGIN STATION	END STATION	Ⓞ Feet
2065+44.21	2077+25.00	6
3050+50.00	3062+35.32	6
4049+98.04	4065+85.11	6
5061+94.60	5077+69.92	6

**Auxiliary Lane**

Longitudinal joint: L or KT  
Transverse joint: Match Mainline

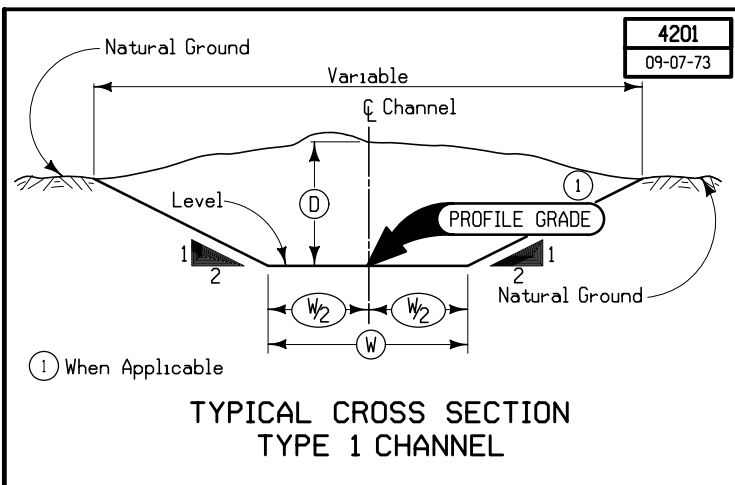
2_AuxLane_PCC_ 10-19-10		2_AL_Shldr_G_ 10-19-10	
STATION TO STATION	Ⓞ Feet	Ⓞ Feet	Ⓞ Feet
2066+22.41	2067+42.61	8	4
2067+42.61	2069+22.61	0-8	4
3058+58.92	3060+38.92	0-8	4
3060+38.92	3061+56.85	8	4

**Auxiliary Lane Granular Shoulder**

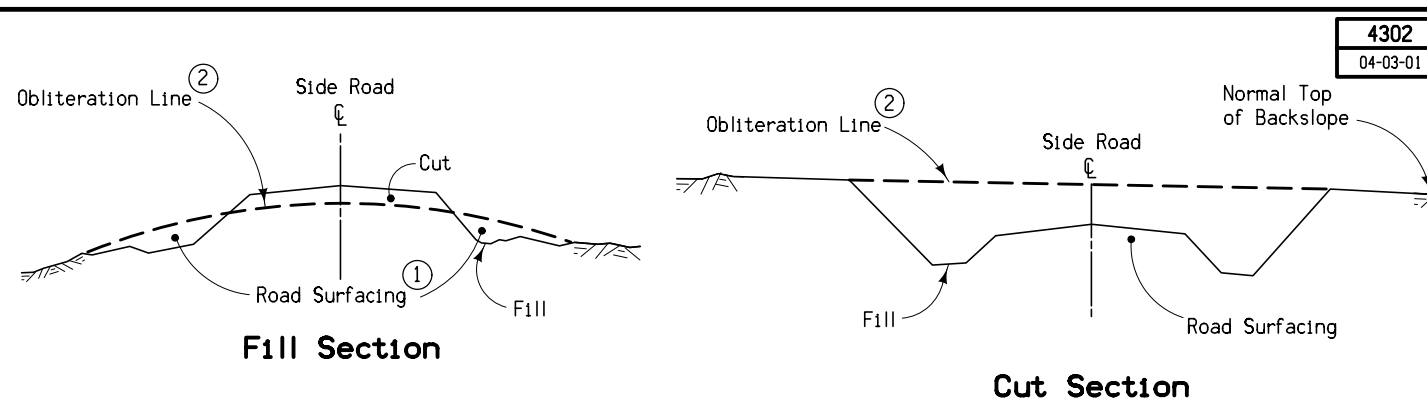


See Tab 100-24 for pavement quantities.  
See Tab 112-9 for shoulder quantities.

**RAMPS A, B, C, and D**



LOCATION		WIDTH	DEPTH (Average)
STATION	SIDE	(W)	(D)
2032+50 to 2045+25	BOTH	Refer to XS	5ft

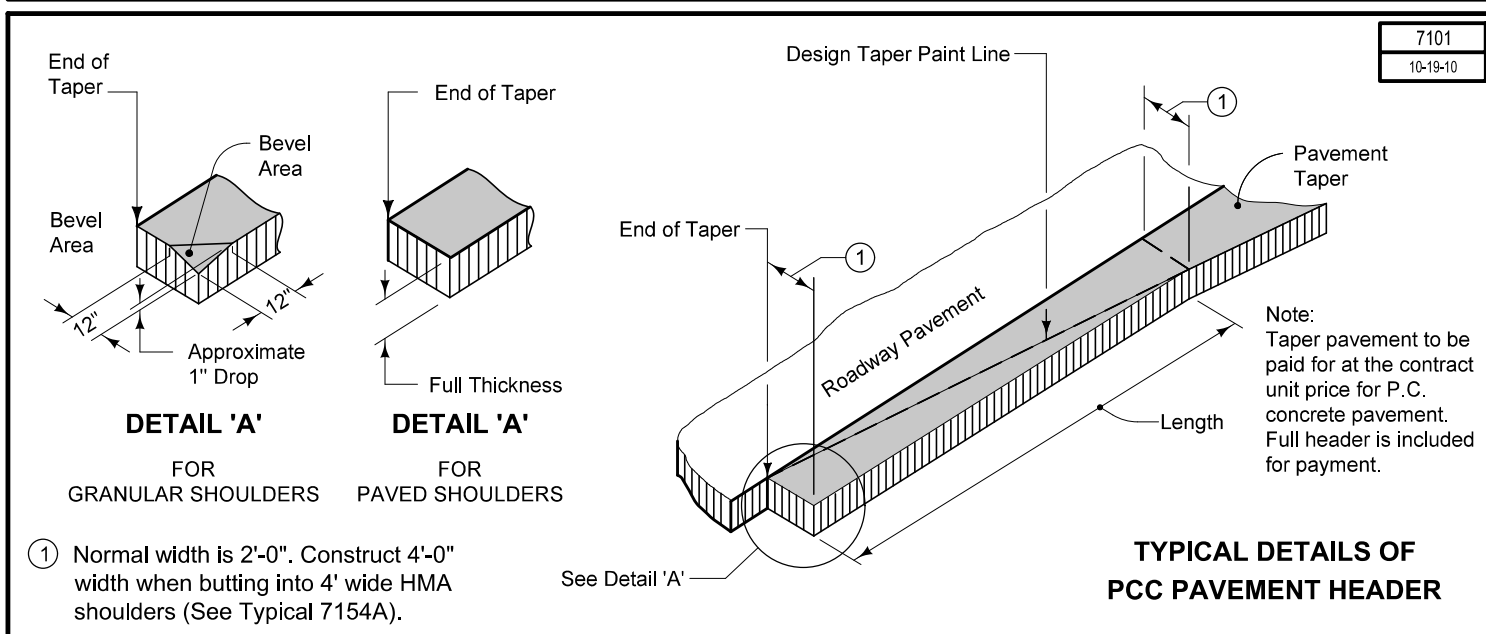
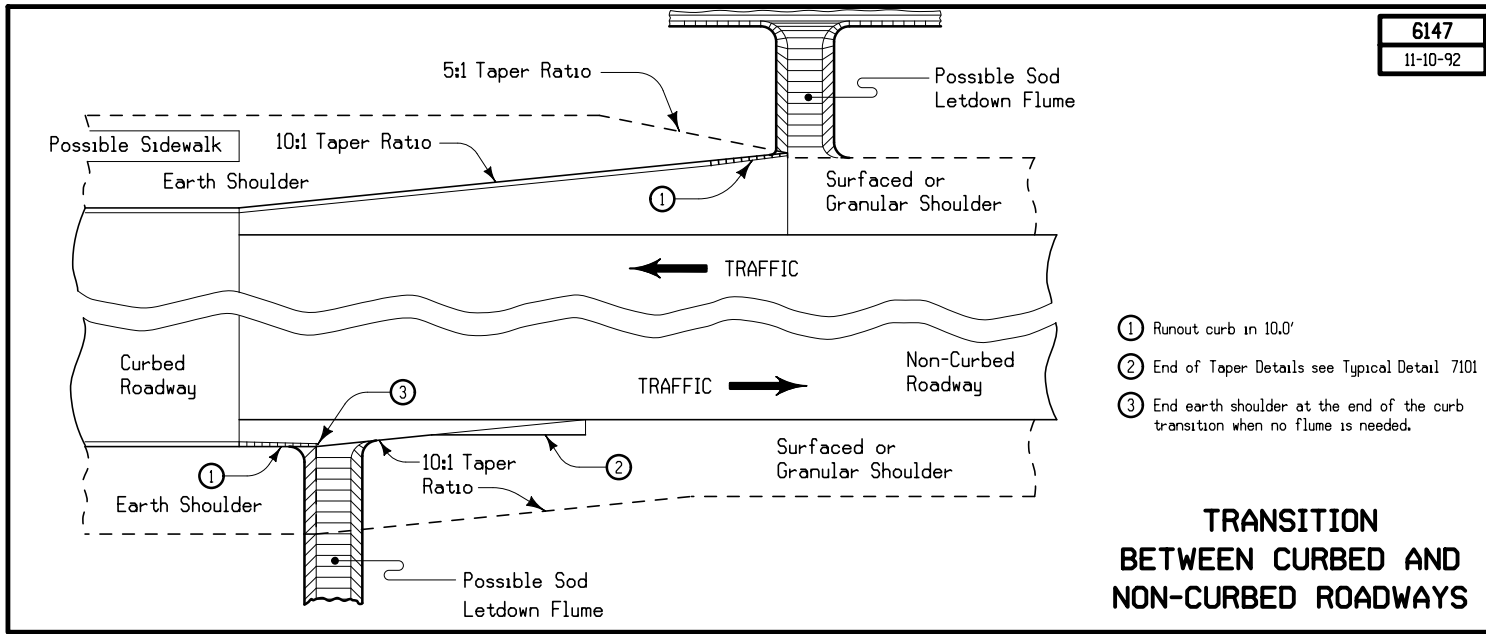
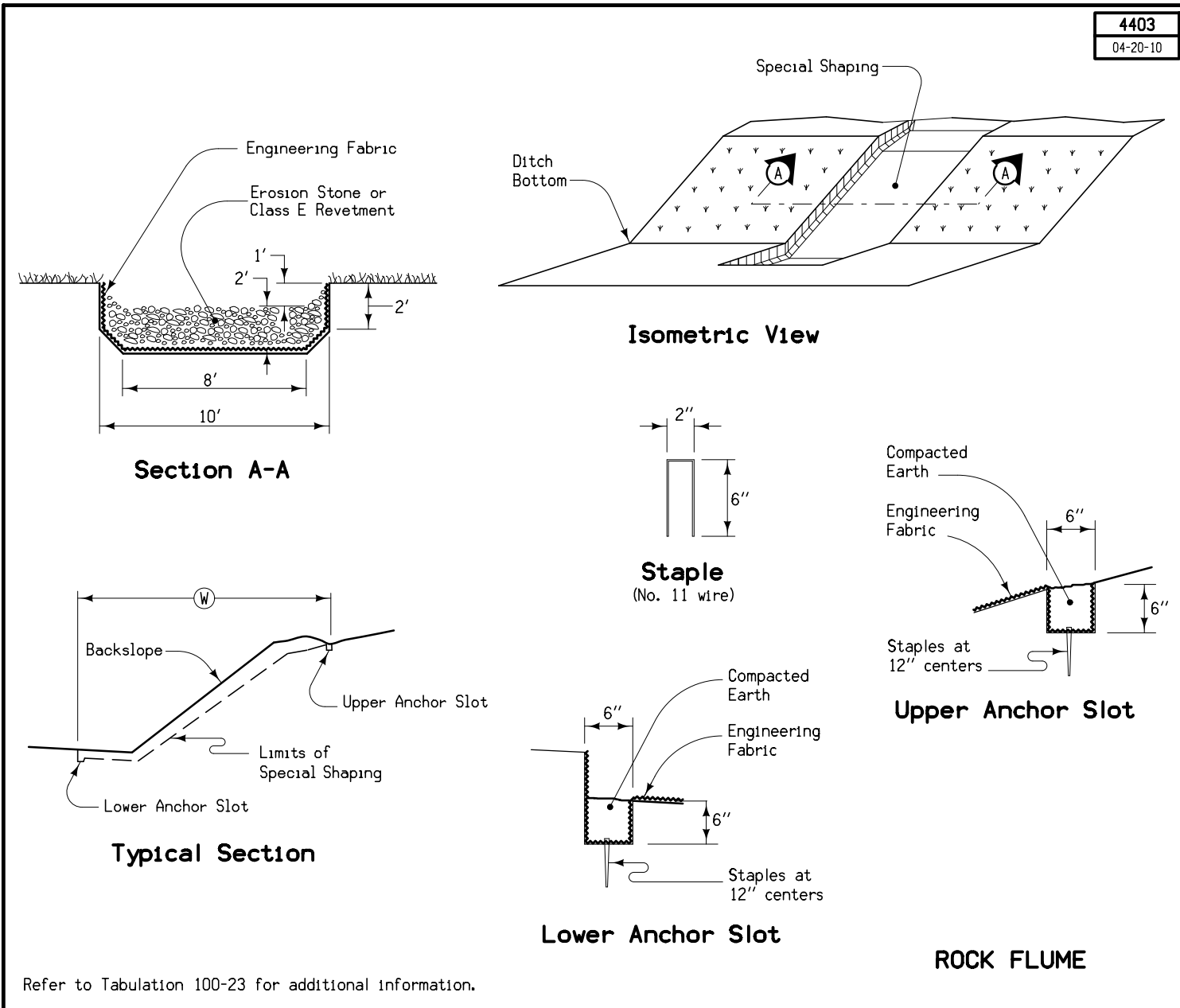


① Existing road surfacing (granular material) shall be placed as shown unless otherwise directed by the Engineer or provided for in the detail project plans.

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**



### SURVEY SYMBOLS

- SIGN SI Sign
- PLG Location of General Photo
- PIP Pipe Culvert
- TP TPD Telephone Pedestal
- ⊗ INB Storm Sewer Beehive Intake
- ⊕ MH Utility Access (Manhole)
- BB BB Billboard
- BLD Building or Foundation
- ⊙ MM Mile Marker Post
- x— FW Wire Fence
- OUT Tile Outlet
- ⊗ IN Storm Sewer Intake
- LIN Miscellaneous Line
- LUM Luminaire
- ⊙ FLG Flag Poles
- ⊙ WV Water Valve
- ⊙ X LC Approx. Lot Corner
- EB Electrical Box
- TVP TV Pedestal
- MIS Miscellaneous
- ⊕ PR Electric Riser Pole
- ⊕ FHD Fire Hydrants
- SIGN SL Speed Limit Sign
- #— FCL Chain Link and Security Fence
- ⊕ TDC Tree Deciduous
- ⊕ SHR Shrub
- ⊕ TEV Evergreen Tree
- ~ TLNR Tree Line Right
- ~ WH WHD Water Hydrant
- FWD Wood Fence
- ~ ROC Rock Outcropping
- ~ TLNL Tree Line Left
- CUL Culvert
- T1le — TIL Tile Line
- ⊕ LP L.P. Tank
- ⊕ WEL Well
- EG Edge of Gravel Road
- EP Edge of Paved Roads (ML or SR)
- CU Back of Curb
- GU Gutter In Front of Curb
- CON Concrete or A/C Slab
- ENP Edge Paved Entrance & Park Lot
- ENT Centerline BL of Entrance
- SH Paved Shoulder
- ENU Edge Unpaved Entrance & Parking
- SNP Unpaved Shoulder
- D Centerline Draw or Stream (Down)
- DU Centerline Draw or Stream (Up)
- ▲▲▲▲▲ RIP Rip-Rap
- CP Control Point
- PRO Profile Shot
- SOP Size of Pipe or Culvert
- UE Utility Elevation
- BL Topo Breakline

### UTILITY LEGEND

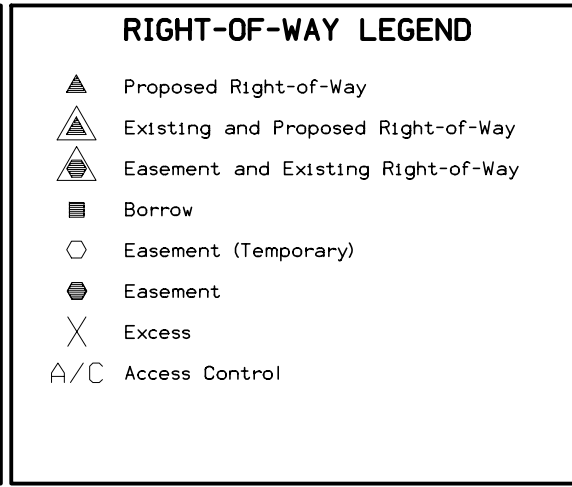
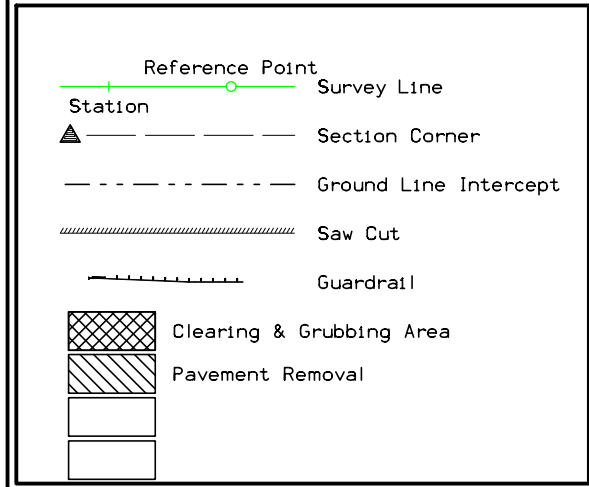
- E1 — ALLIANT ENERGY  
Jason Hogan  
4902 North Biltmore  
Madison, WI 53707-1007  
608-458-4871  
jasonhogan@alliantenergy.com
- E2 — Maquoketa Valley Electric Cooperative  
Jeremy Richert  
P.O. Box 370  
Anamosa, IA 52205  
319-462-3541 : Ext 209  
jrichert@mvec.com
- T1 — Windstream Communications(Formerly Iowa Telecom)  
Dan Hogan  
107 East Fayette  
Manchester, IA 52057  
563-927-2623  
daniel.hogan@windstream.com
- San. — City of Dyersville  
David Vorwald  
340 1st Avenue East  
Dyersville, IA 52040  
563-875-7724  
dvorwald@cityofdyersville.com
- St.S. —
- W —
- G-HP — Black Hills Energy  
Brad Fleming  
1815 Capital Avenue  
Omaha, NE 68102  
402-221-2714  
brad.fleming@blackhillscorp.com
- G —
- G2 —
- FO — ICN  
Larry Klawitter  
400 East 1st Street / Grimes Office Building  
Des Moines, IA 50319  
515-725-4741  
larry.klawitter@iowa.gov
- TV — Mediacom  
Bob Frazer  
207 West Pearl Street  
Decorah, IA 52101  
563-387-6119  
bfrazer@mediacomcc.com

### PLAN VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK	Design Color No.	
Green	(2)	Existing Topographic Features and Labels
Blue	(1)	Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Magenta	(5)	Existing Utilities
SHADING		
Design Color No.		
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

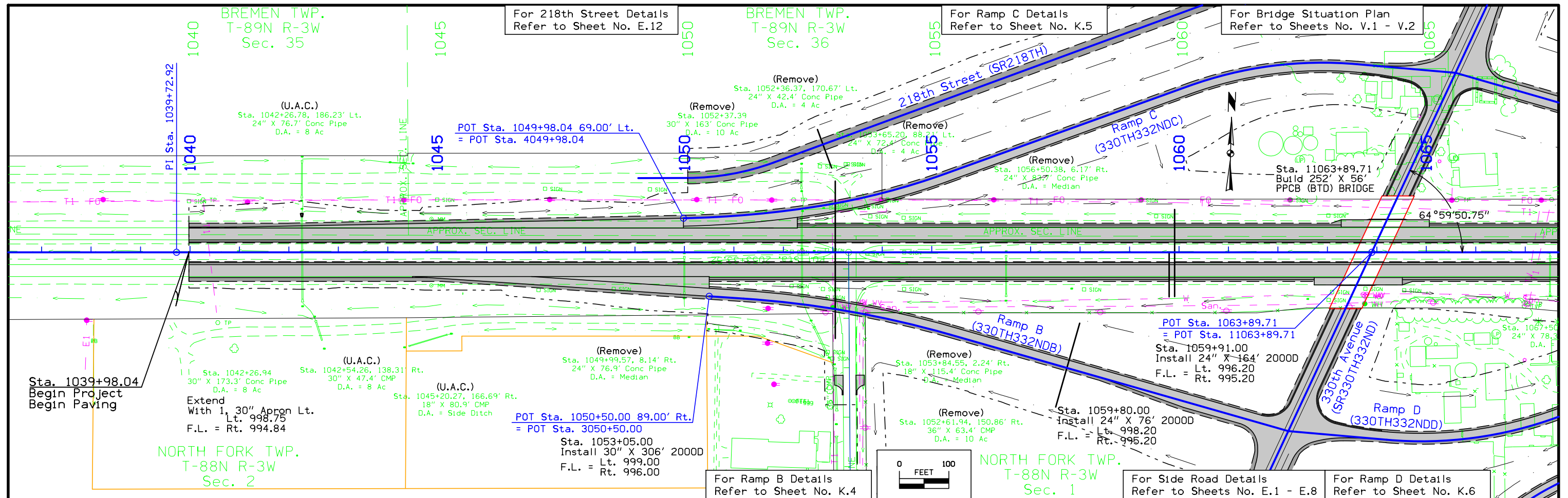
### PROFILE VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK	Design Color No.	
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

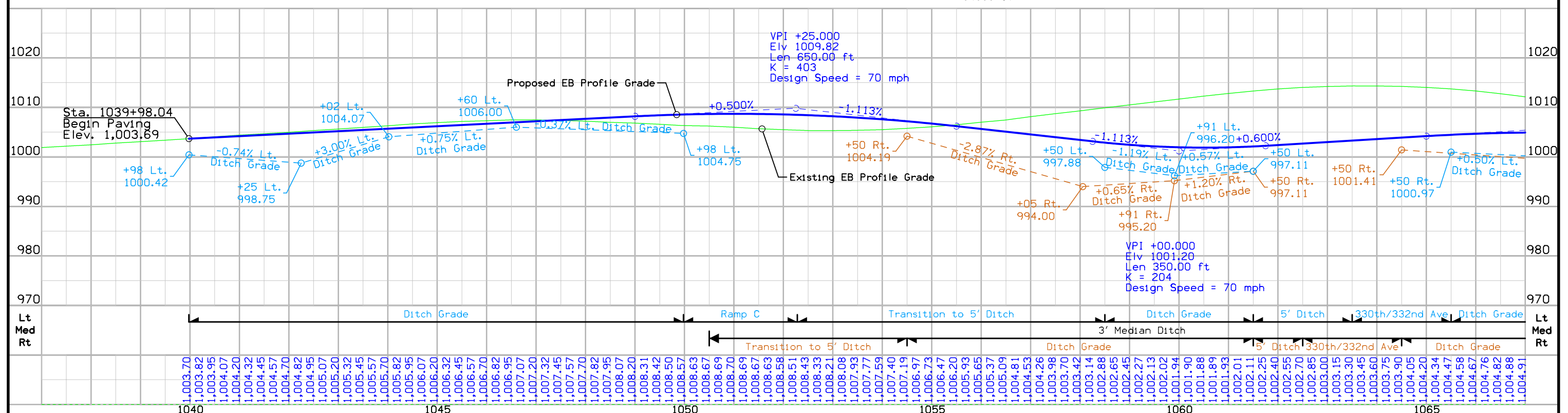


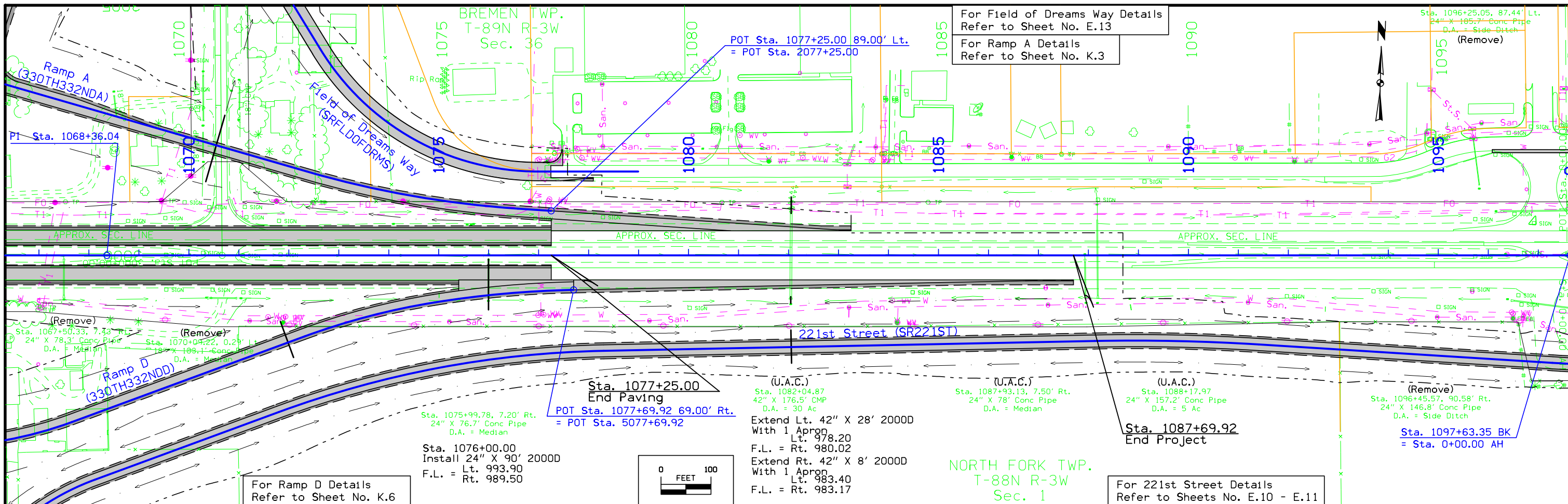
## PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

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



Stage 1	Cut = 46300 CY	Fill+30% = 5022 CY	Waste = 41278 CY
Stage 2	Cut = 54656 CY	Fill+30% = 5225 CY	Waste = 49431 CY

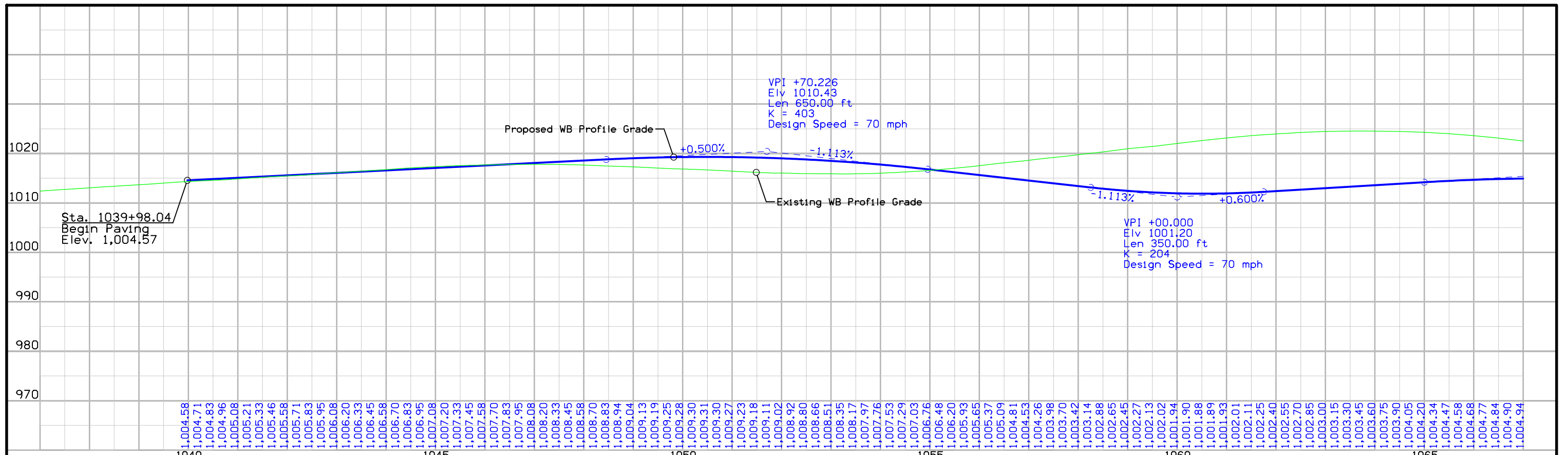




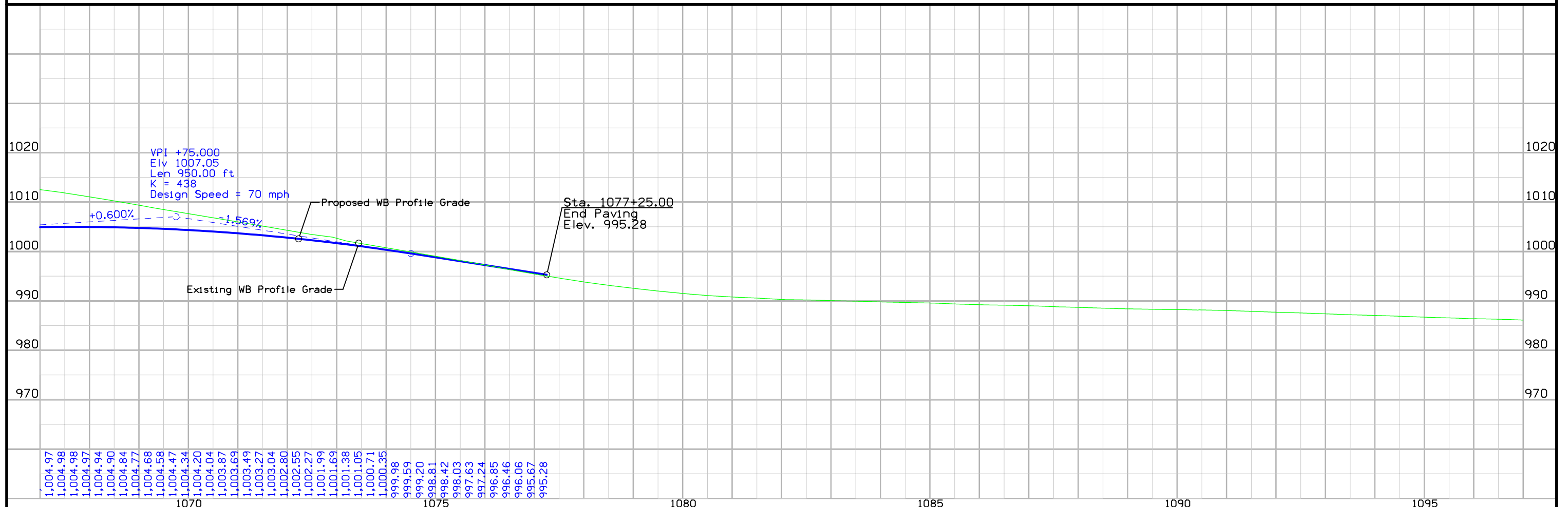
Stage 1	Cut = 17278 CY	Fill+30% = 1169 CY	Waste = 16109 CY
			17278 CY
Stage 2	Cut = 15665 CY	Fill+30% = 3353 CY	Waste = 12312 CY
			15665 CY



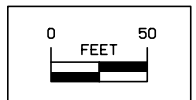
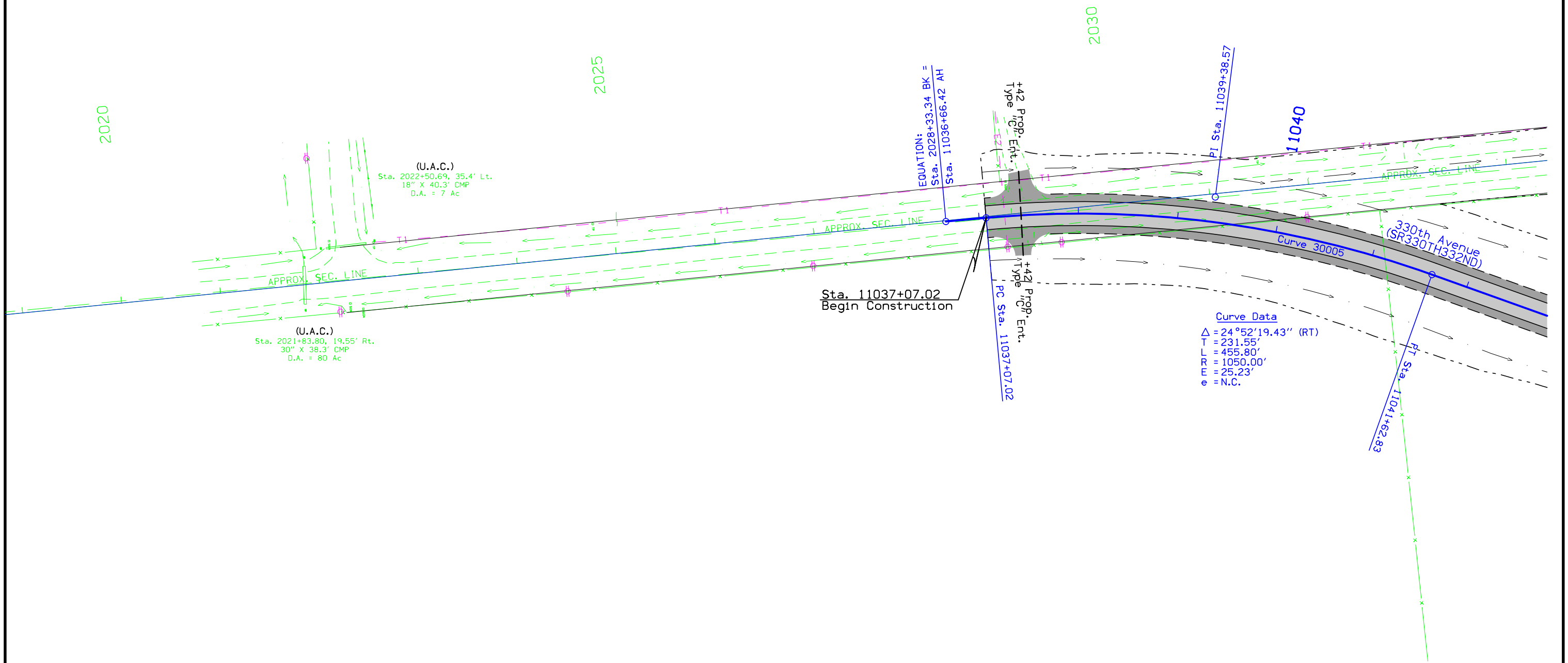




For Plan Details  
Refer to Sheets No. D.2 - D.3



NORTH FORK TWP.  
T-88N R-3W  
Sec. 2



NORTH FORK TWP.  
T-88N R-3W  
Sec. 1

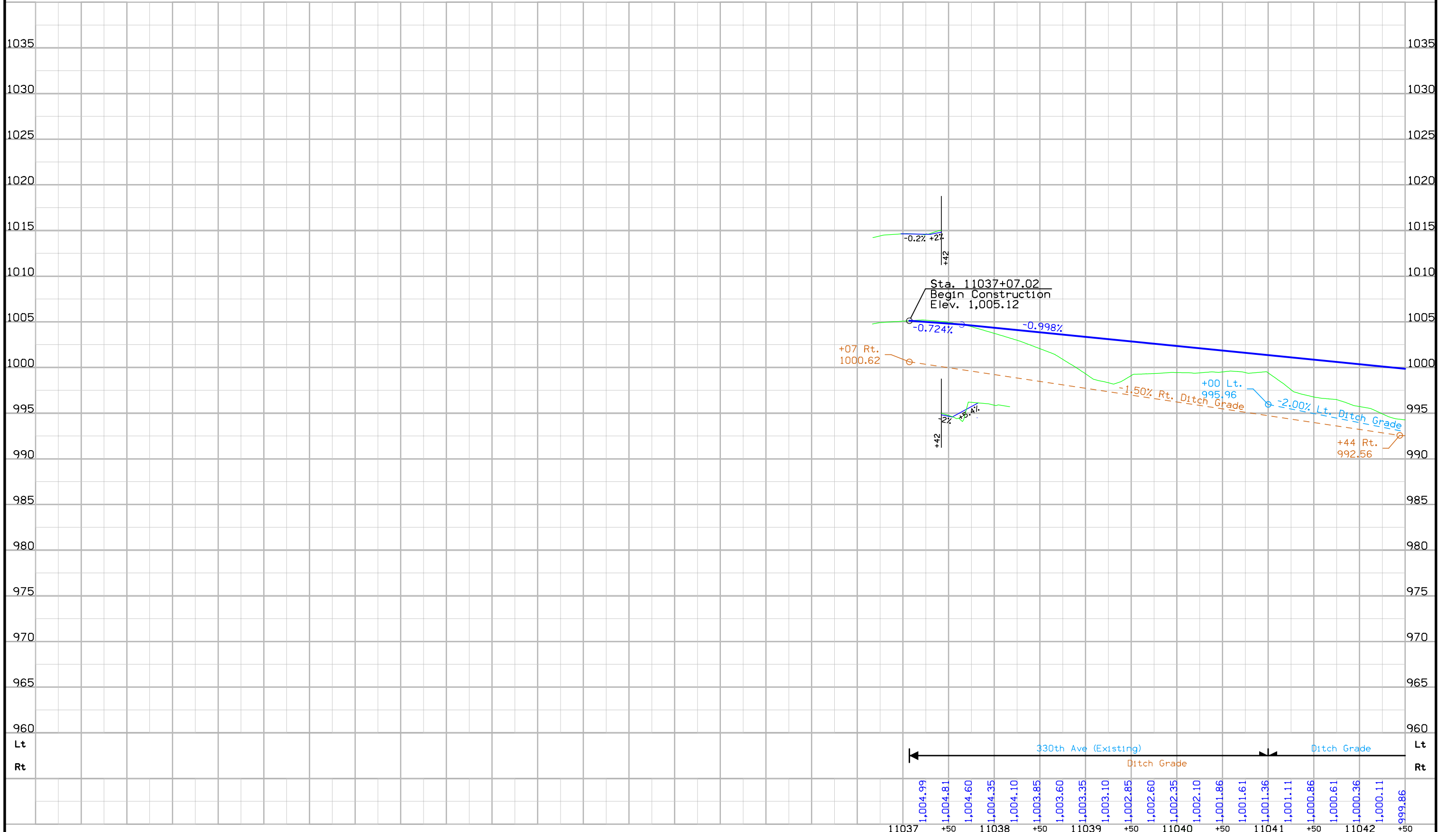
For Profile Details  
Refer to Sheet No. E.2

330th Avenue

For Plan Details  
Refer to Sheet No. E.1

# 330th Avenue

Cut = 4059 CY      Fill+30% = 2726 CY  
Waste = 1333 CY  
4059 CY

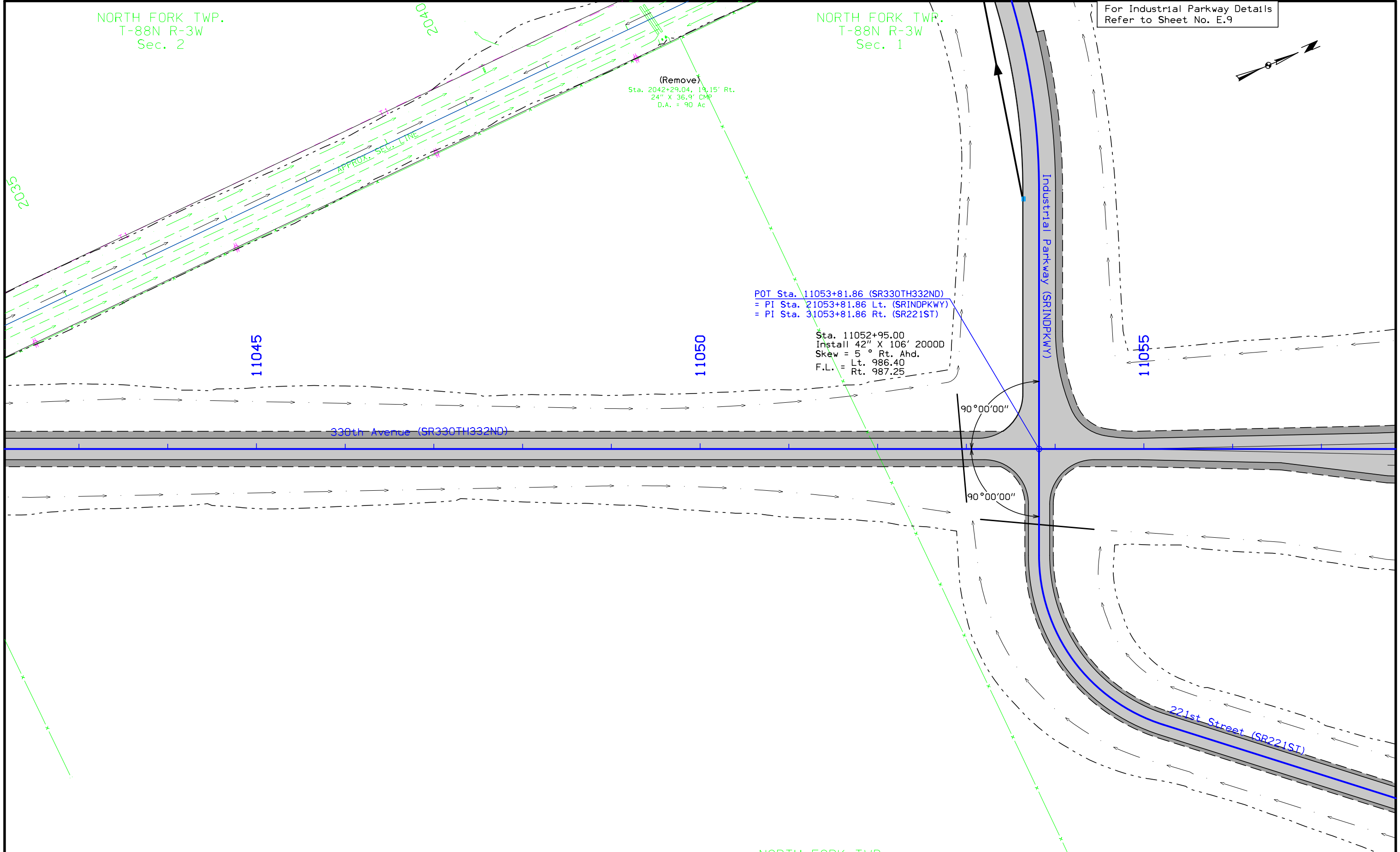
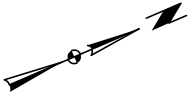


330th Ave (Existing)										Ditch Grade																							
11037	+50	11038	+50	11039	+50	11040	+50	11041	+50	11042	+50	1,004.99	1,004.81	1,004.60	1,004.35	1,004.10	1,003.85	1,003.60	1,003.35	1,003.10	1,002.85	1,002.60	1,002.35	1,002.10	1,001.86	1,001.61	1,001.36	1,001.11	1,000.86	1,000.61	1,000.36	1,000.11	999.86

NORTH FORK TWP.  
T-88N R-3W  
Sec. 2

NORTH FORK TWP.  
T-88N R-3W  
Sec. 1

For Industrial Parkway Details  
Refer to Sheet No. E.9



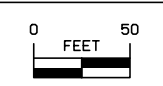
(Remove)  
Sta. 2042+29.04, 19.15' Rt.  
24' X 36.9' CMP  
D.A. = 90 Ac

POT Sta. 11053+81.86 (SR330TH332ND)  
= PI Sta. 21053+81.86 Lt. (SRINDPKWY)  
= PI Sta. 31053+81.86 Rt. (SR221ST)

Sta. 11052+95.00  
Install 42" X 106' 20000  
Skew = 5° Rt. Ahd.  
F.L. = Lt. 986.40  
Rt. 987.25

90°00'00"

90°00'00"



NORTH FORK TWP.  
T-88N R-3W  
Sec. 1

For Profile Details  
Refer to Sheet No. E.4

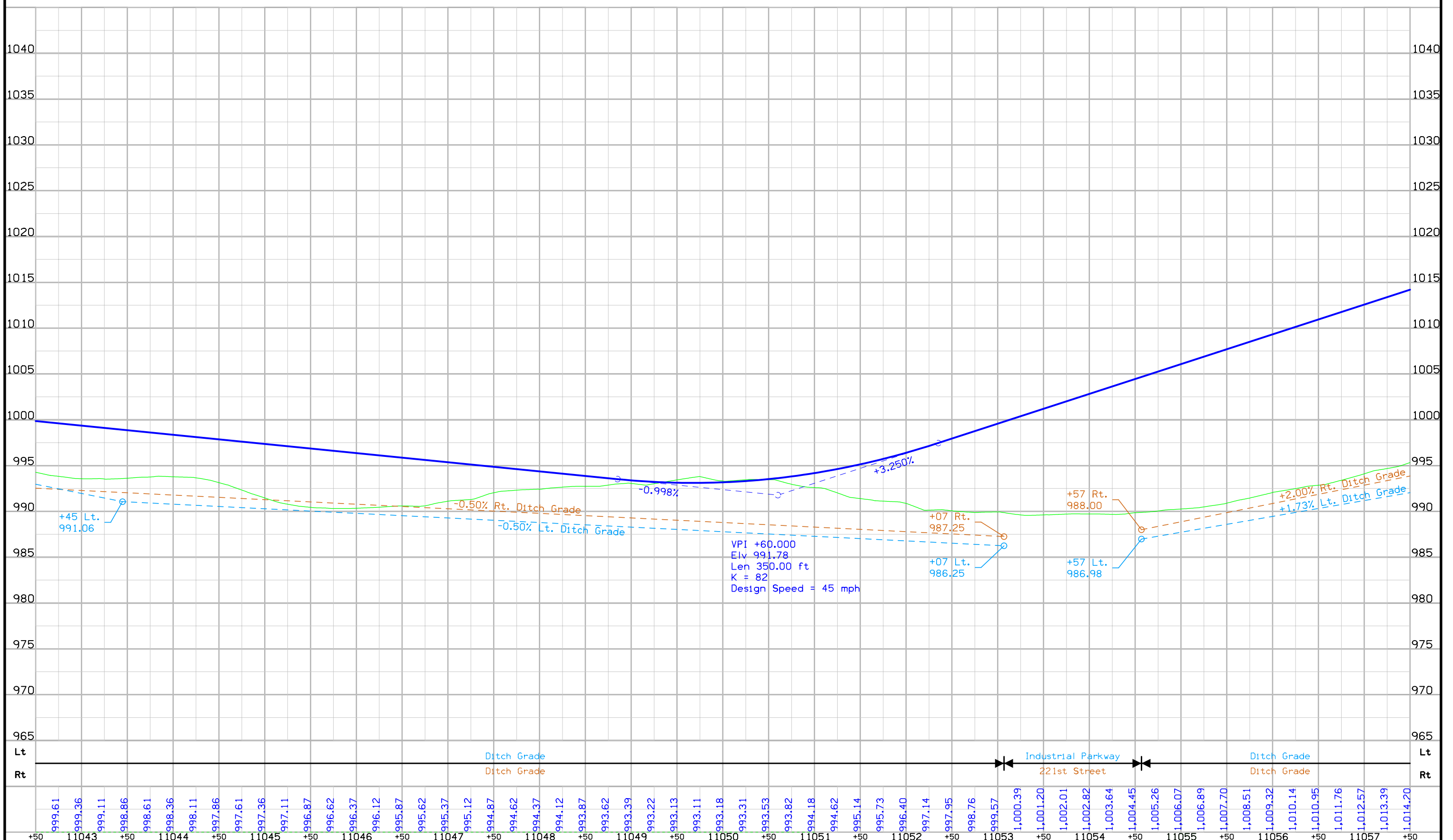
For 221st Street Details  
Refer to Sheets No. E.10 - E.11

330th Avenue

For Plan Details  
Refer to Sheet No. E.3

330th Avenue

Fill+30% = 38959 CY      Cut = 6515 CY  
Borrow = 32444 CY      38959 CY

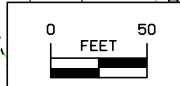
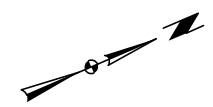
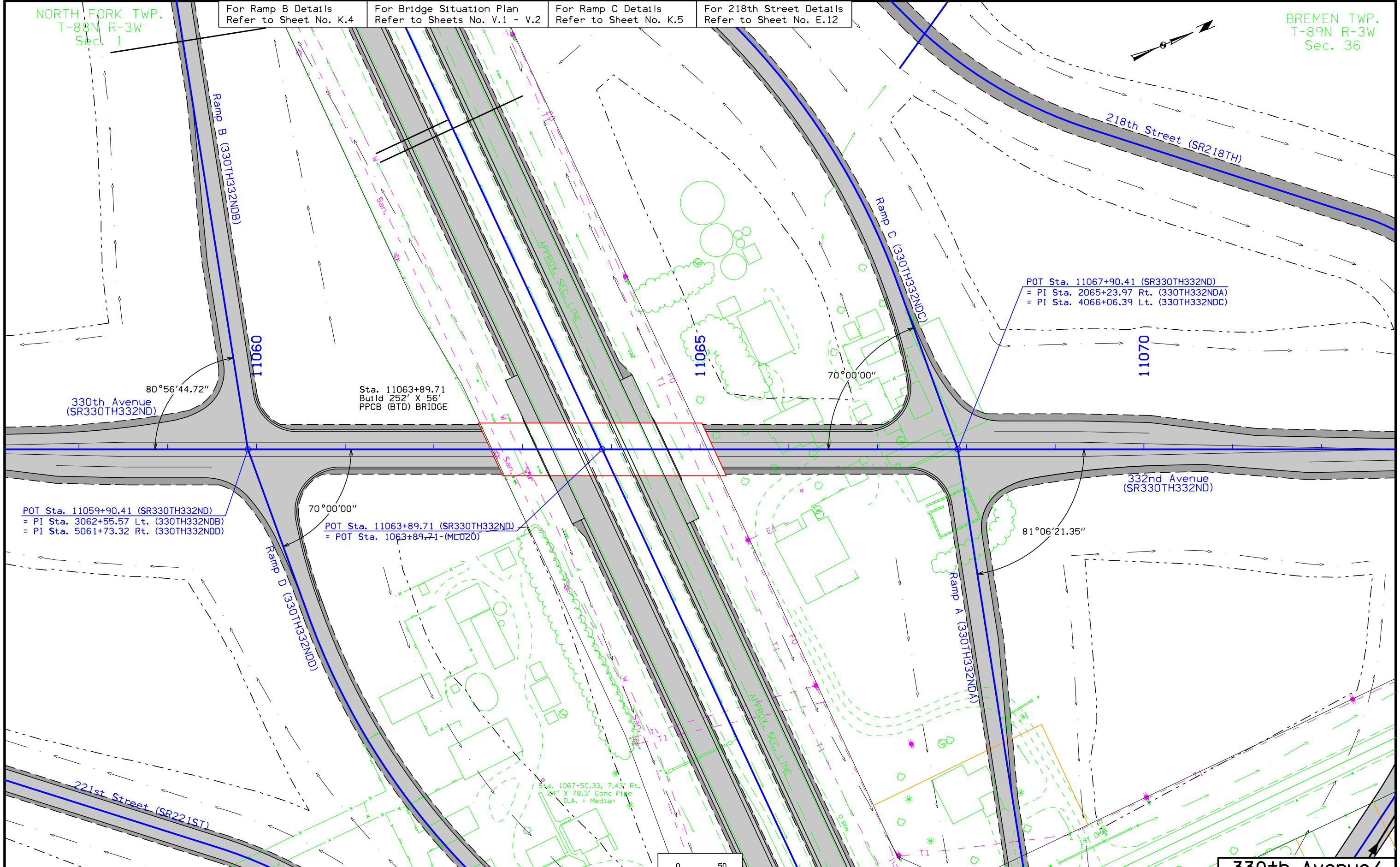


+50	999.61	11043	+50	998.86	11044	+50	997.86	11045	+50	996.87	11046	+50	995.87	11047	+50	994.87	11048	+50	993.87	11049	+50	993.13	11050	+50	993.11	11051	+50	995.73	11052	+50	997.14	11053	+50	1,000.39	11054	+50	1,002.82	11055	+50	1,006.07	11056	+50	1,009.32	11057	+50	1,013.39	1,014.20
-----	--------	-------	-----	--------	-------	-----	--------	-------	-----	--------	-------	-----	--------	-------	-----	--------	-------	-----	--------	-------	-----	--------	-------	-----	--------	-------	-----	--------	-------	-----	--------	-------	-----	----------	-------	-----	----------	-------	-----	----------	-------	-----	----------	-------	-----	----------	----------

NORTH FORK TWP.  
T-88N R-3W  
Sec. 1

BREMEN TWP.  
T-89N R-3W  
Sec. 36

For Ramp B Details Refer to Sheet No. K.4  
For Bridge Situation Plan Refer to Sheets No. V.1 - V.2  
For Ramp C Details Refer to Sheet No. K.5  
For 218th Street Details Refer to Sheet No. E.12



For 221st Street Details Refer to Sheets No. E.10 - E.11  
For Ramp D Details Refer to Sheet No. K.6  
For Profile Details Refer to Sheet No. E.6  
For Main Line Details Refer to Sheets No. D.2 - D.4  
For Ramp A Details Refer to Sheet No. K.3

330th Avenue/  
332nd Avenue

For Plan Details  
Refer to Sheet No. E.5

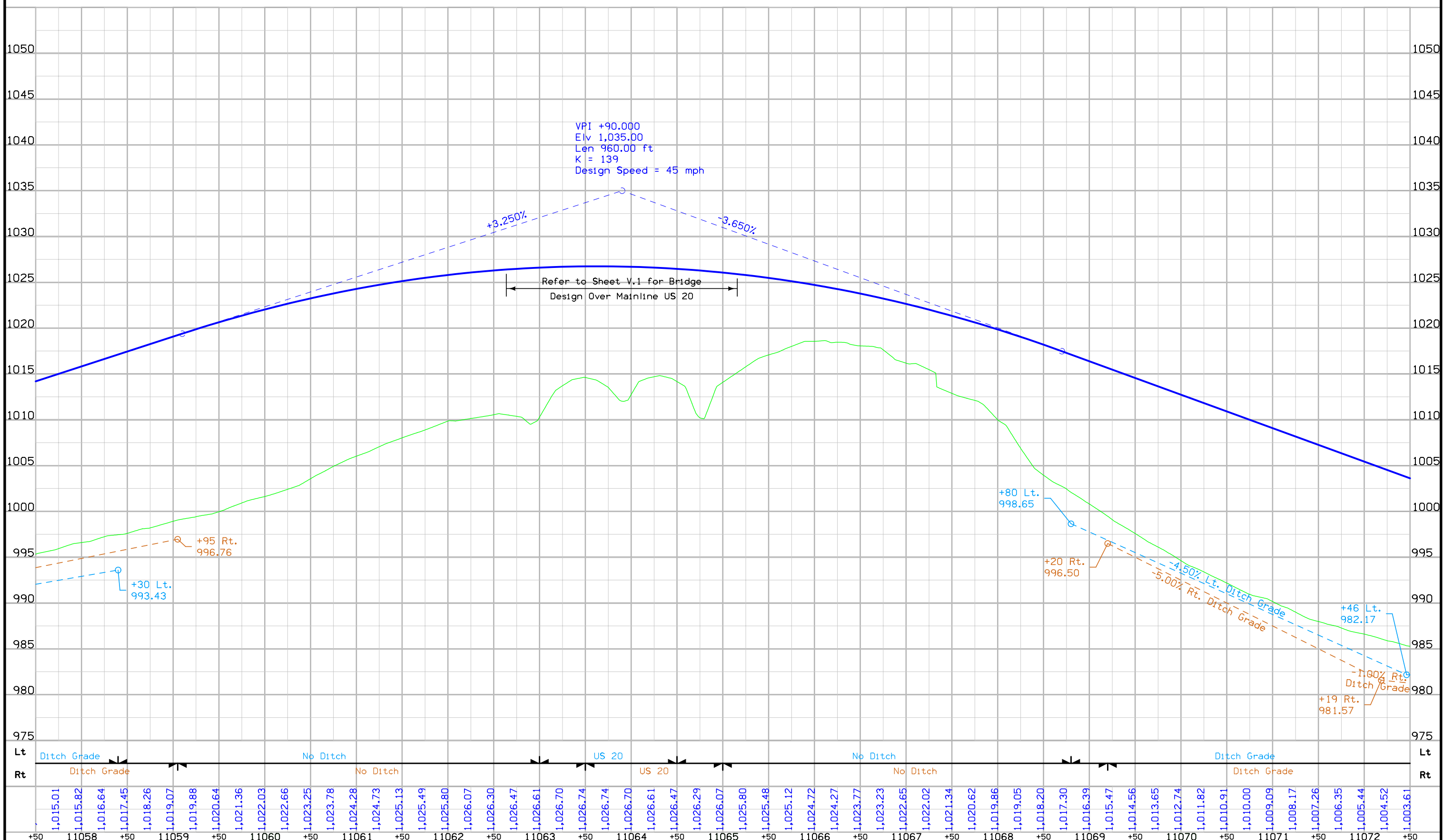
# 330th Avenue/ 332nd Avenue

Fill+30% = 54785 CY

Cut = 328 CY  
Borrow =  $\frac{54457}{54785}$  CY

Fill+30% = 52205 CY

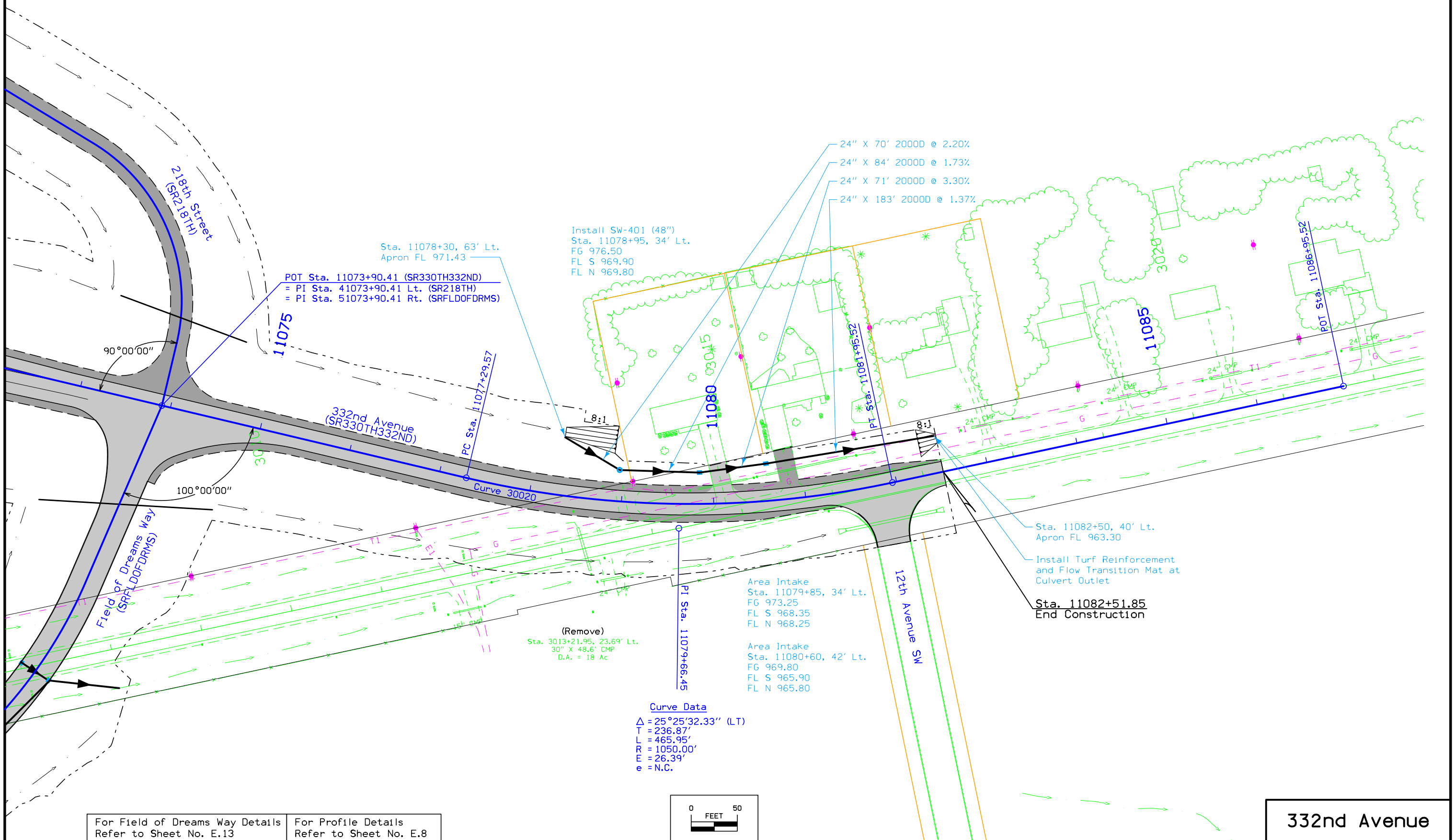
Cut = 1952 CY  
Borrow =  $\frac{50253}{52205}$  CY



Lt	Ditch Grade	No Ditch	US 20	No Ditch	Ditch Grade	Lt																																																						
Rt	Ditch Grade	No Ditch	US 20	No Ditch	Ditch Grade	Rt																																																						
	1,015.01	1,015.82	1,016.64	1,017.45	1,018.26	1,019.07	1,019.88	1,020.64	1,021.36	1,022.03	1,022.66	1,023.25	1,023.78	1,024.28	1,024.73	1,025.13	1,025.49	1,025.80	1,026.07	1,026.30	1,026.47	1,026.61	1,026.70	1,026.74	1,026.74	1,026.70	1,026.61	1,026.47	1,026.29	1,026.07	1,025.80	1,025.48	1,025.12	1,024.72	1,024.27	1,023.77	1,023.23	1,022.65	1,022.02	1,021.34	1,020.62	1,019.86	1,019.05	1,018.20	1,017.30	1,016.39	1,015.47	1,014.56	1,013.65	1,012.74	1,011.82	1,010.91	1,010.00	1,009.09	1,008.17	1,007.26	1,006.35	1,005.44	1,004.52	1,003.61
	+50	11058	+50	11059	+50	11060	+50	11061	+50	11062	+50	11063	+50	11064	+50	11065	+50	11066	+50	11067	+50	11068	+50	11069	+50	11070	+50	11071	+50	11072	+50																													

For 218th Street Details  
Refer to Sheet No. E.12

BREMEN TWP.  
T-89N R-3W  
Sec. 36



POT Sta. 11073+90.41 (SR330TH332ND)  
= PI Sta. 41073+90.41 Lt. (SR218TH)  
= PI Sta. 51073+90.41 Rt. (SRFLDOFDRMS)

Sta. 11078+30, 63' Lt.  
Apron FL 971.43

Install SW-401 (48")  
Sta. 11078+95, 34' Lt.  
FG 976.50  
FL S 969.90  
FL N 969.80

- 24" X 70' 20000 @ 2.20%
- 24" X 84' 20000 @ 1.73%
- 24" X 71' 20000 @ 3.30%
- 24" X 183' 20000 @ 1.37%

Sta. 11082+50, 40' Lt.  
Apron FL 963.30

Install Turf Reinforcement  
and Flow Transition Mat at  
Culvert Outlet

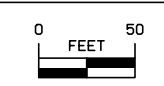
Sta. 11082+51.85  
End Construction

Area Intake  
Sta. 11079+85, 34' Lt.  
FG 973.25  
FL S 968.35  
FL N 968.25

Area Intake  
Sta. 11080+60, 42' Lt.  
FG 969.80  
FL S 965.90  
FL N 965.80

(Remove)  
Sta. 3013+21.95, 23.69' Lt.  
30" X 48.6' CMP  
D.A. = 18 Ac

Curve Data  
Δ = 25°25'32.33" (LT)  
T = 236.87'  
L = 465.95'  
R = 1050.00'  
E = 26.39'  
e = N.C.



For Field of Dreams Way Details Refer to Sheet No. E.13  
For Profile Details Refer to Sheet No. E.8

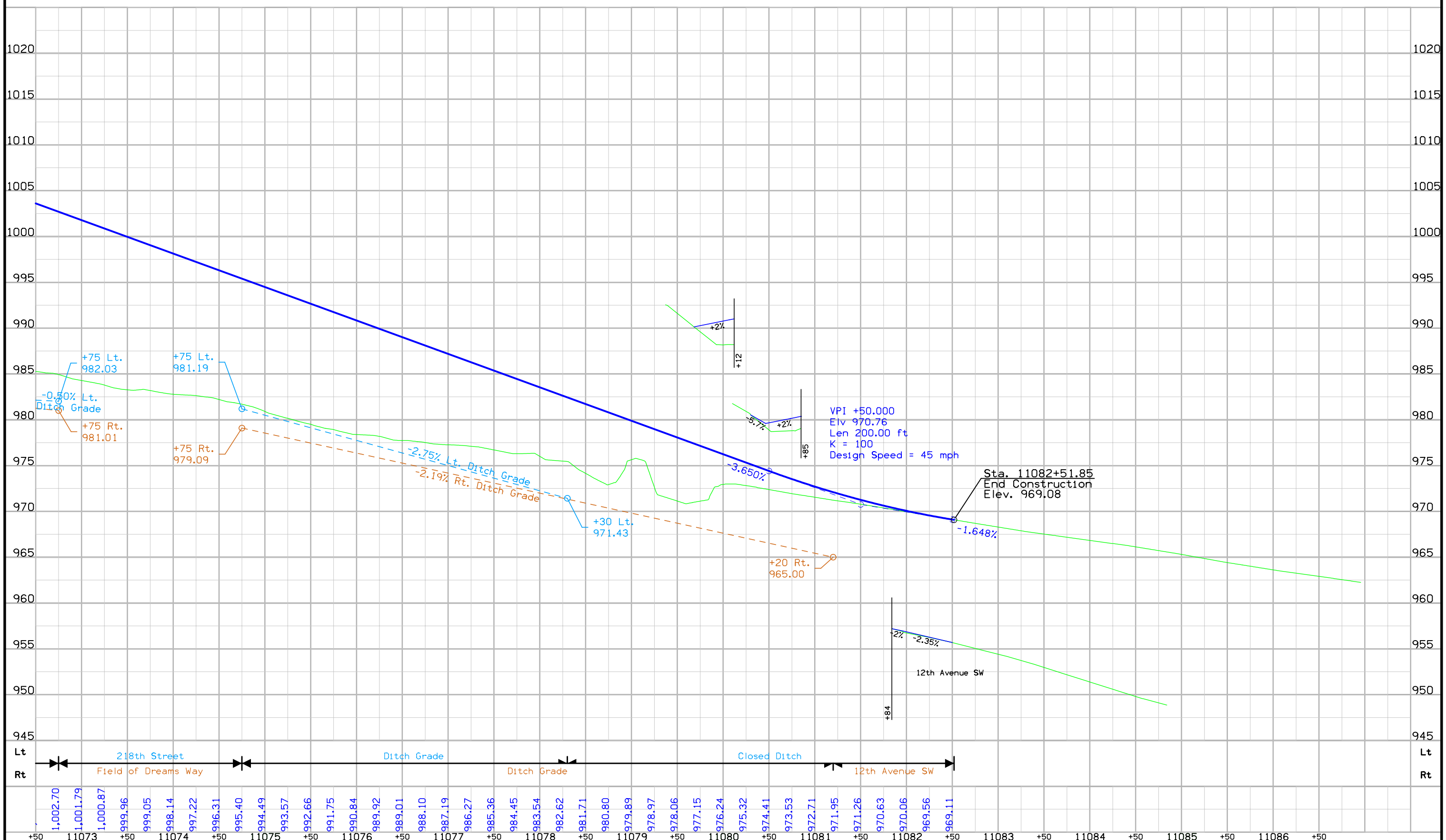
332nd Avenue



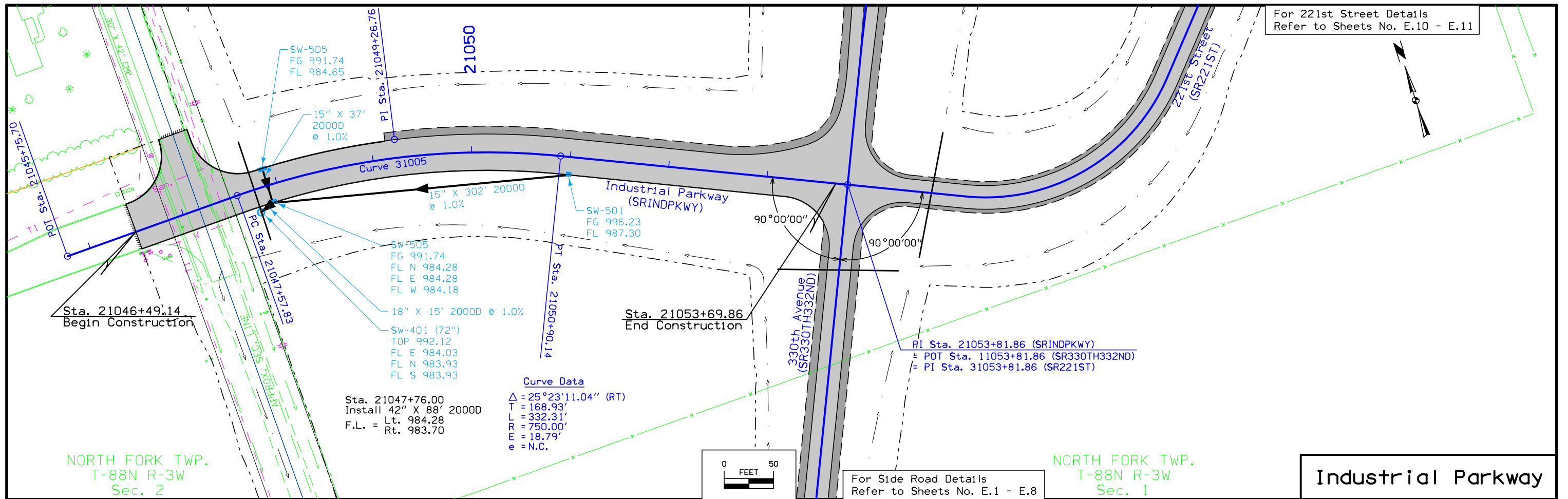
For Plan Details  
Refer to Sheet No. E.7

332nd Avenue

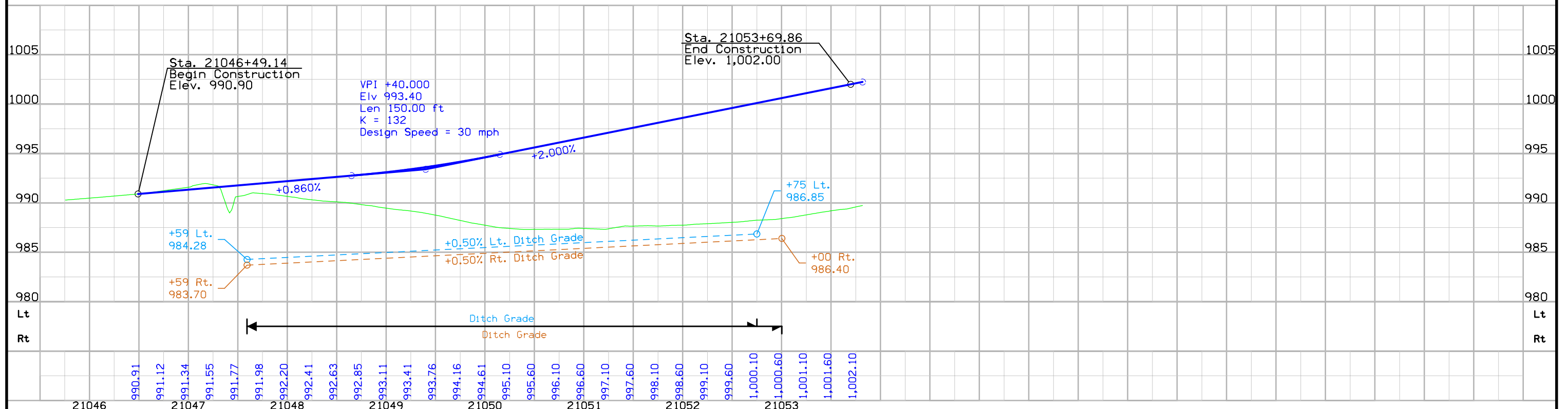
Fill+30% = 31318 CY  
Cut = 3114 CY  
Borrow =  $\frac{28204}{31318}$  CY



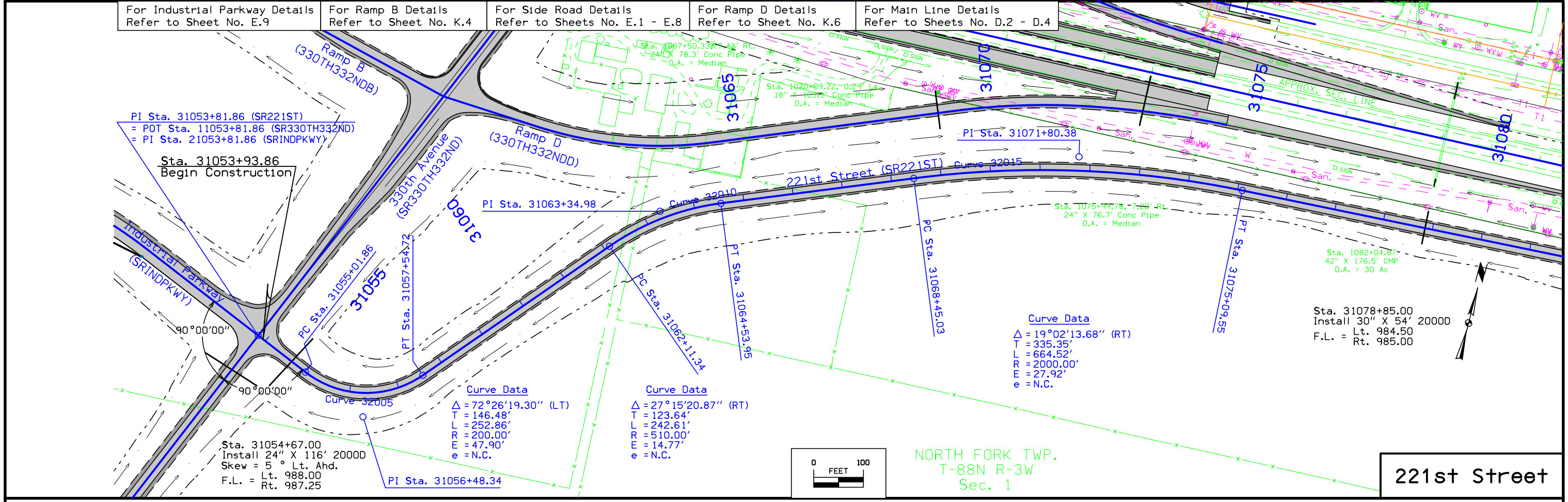
C	ENGLISH	IOWA DOT	DESIGN TEAM	<b>Stanley Consultants Inc.</b>	DELAWARE/DUBUQUE COUNTY	PROJECT NUMBER	<b>NHSN-020-9(195)--2R-31</b>	SHEET NUMBER	<b>E.8</b>
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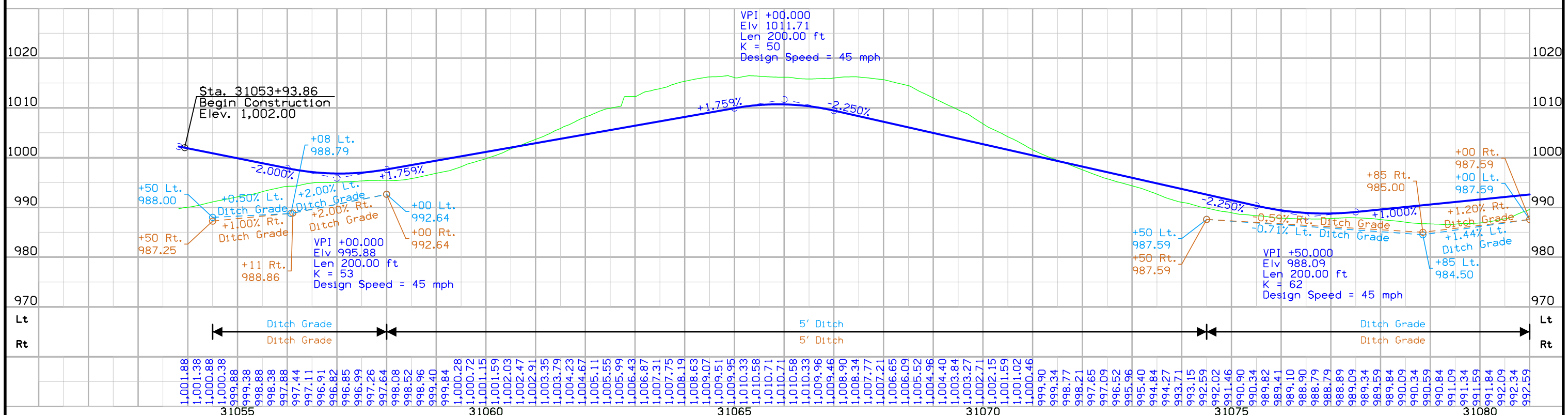
Fill+30% = 17605 CY      Cut = 3987 CY  
Borrow = 13618 CY      17605 CY



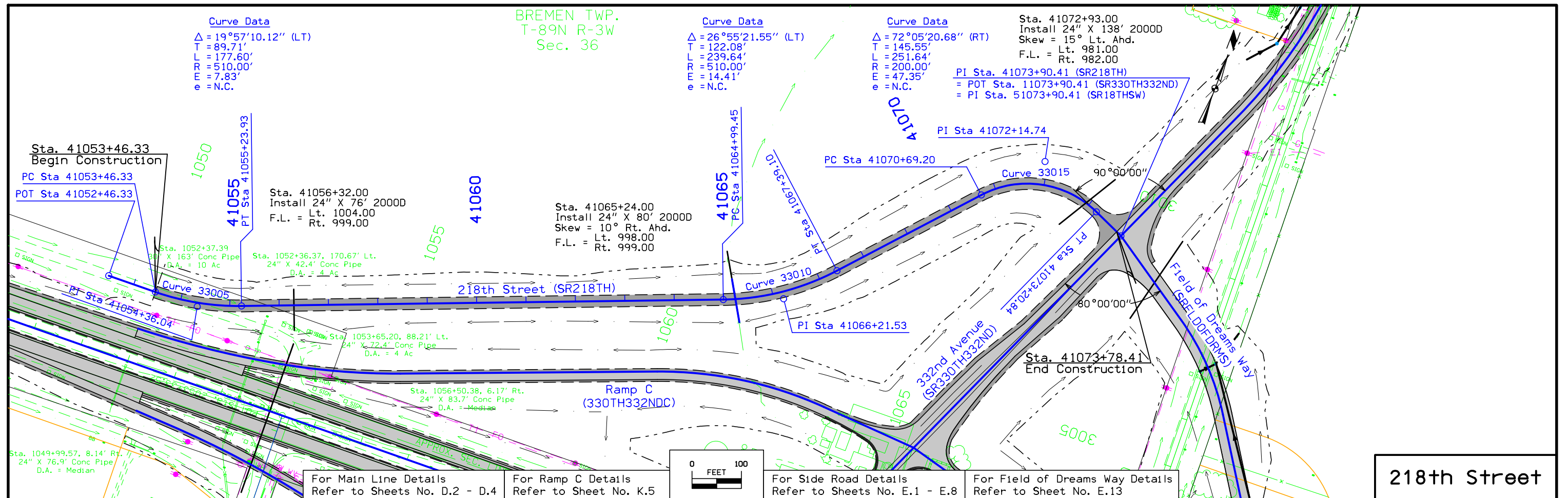
For Industrial Parkway Details Refer to Sheet No. E.9  
 For Ramp B Details Refer to Sheet No. K.4  
 For Side Road Details Refer to Sheets No. E.1 - E.8  
 For Ramp D Details Refer to Sheet No. K.6  
 For Main Line Details Refer to Sheets No. D.2 - D.4



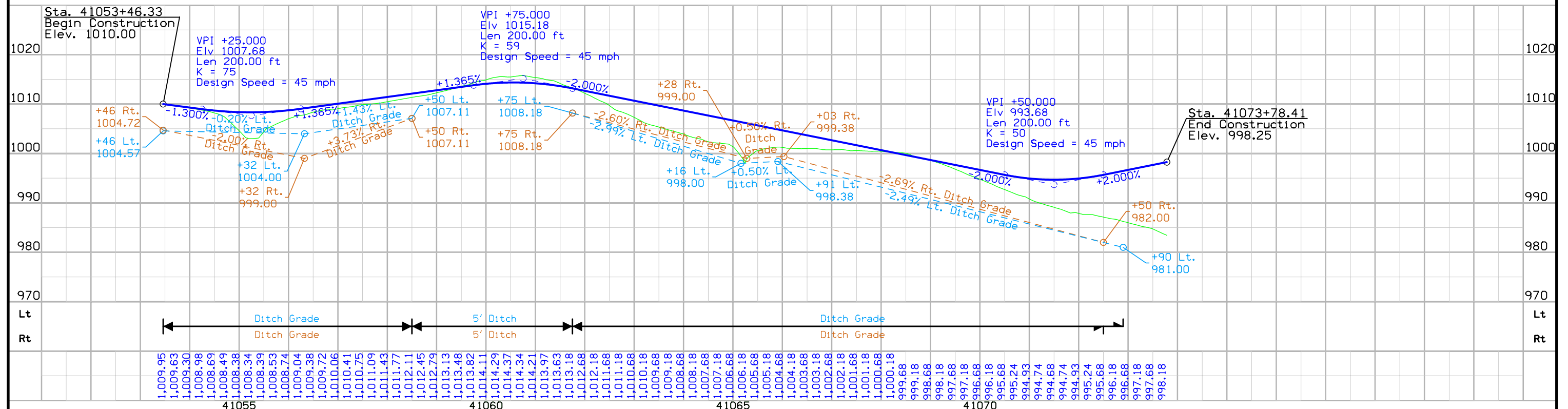
Cut = 50780 CY  
 Fill+30% = 7735 CY  
 Waste = 43045 CY  
 50780 CY

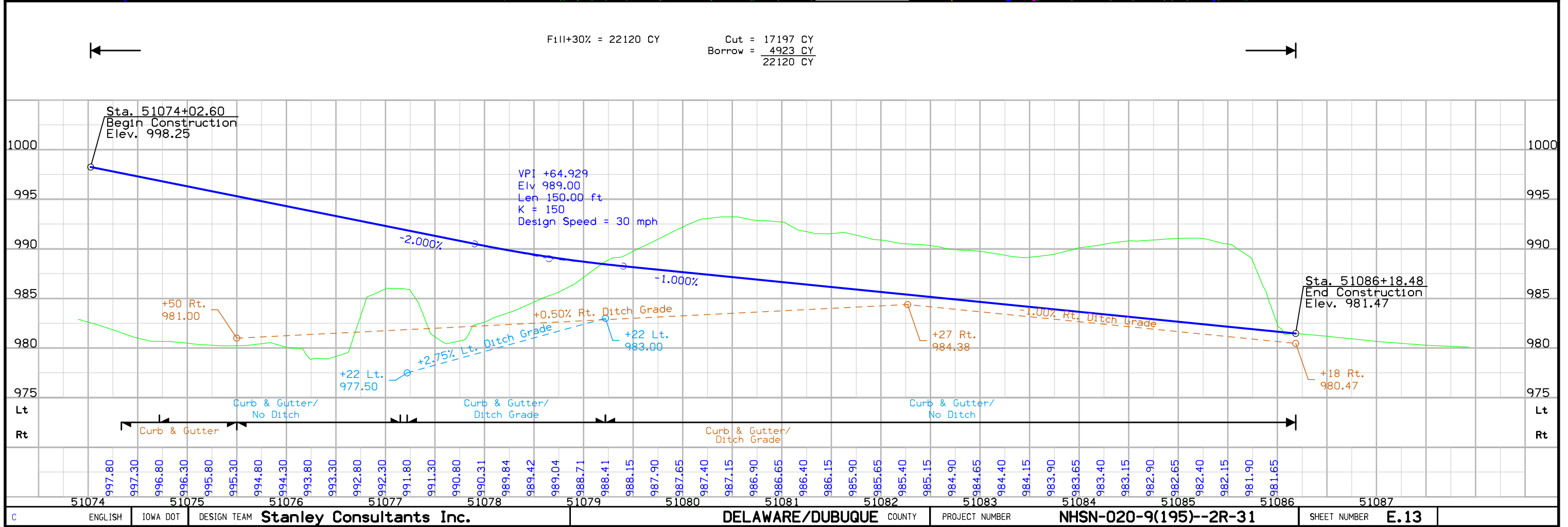
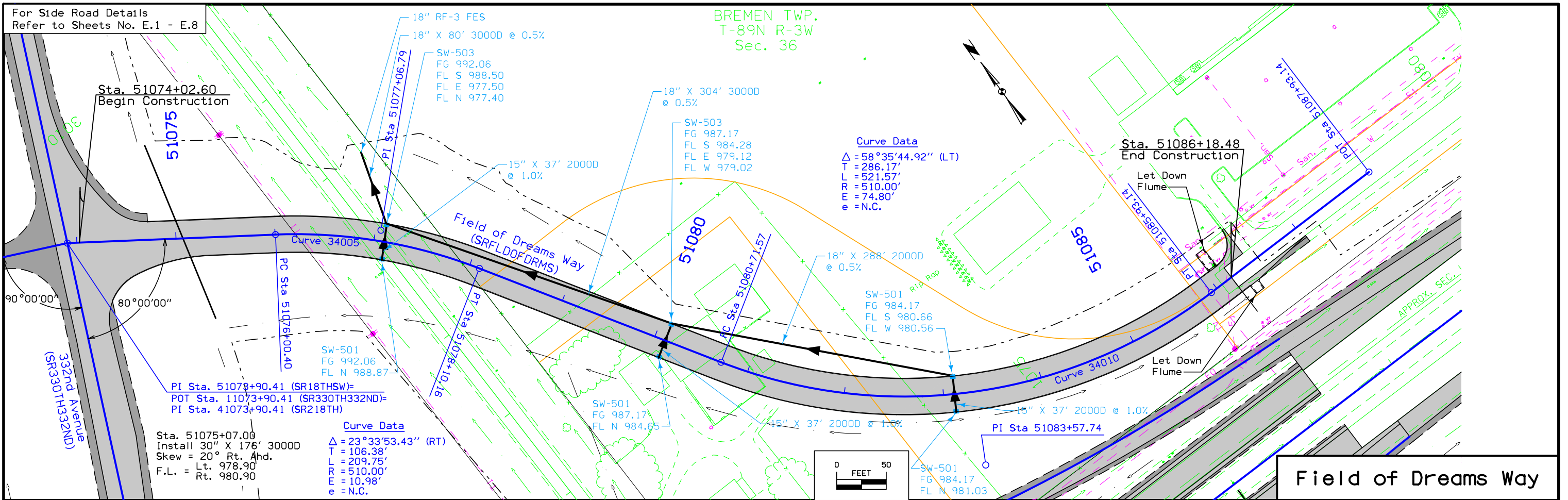




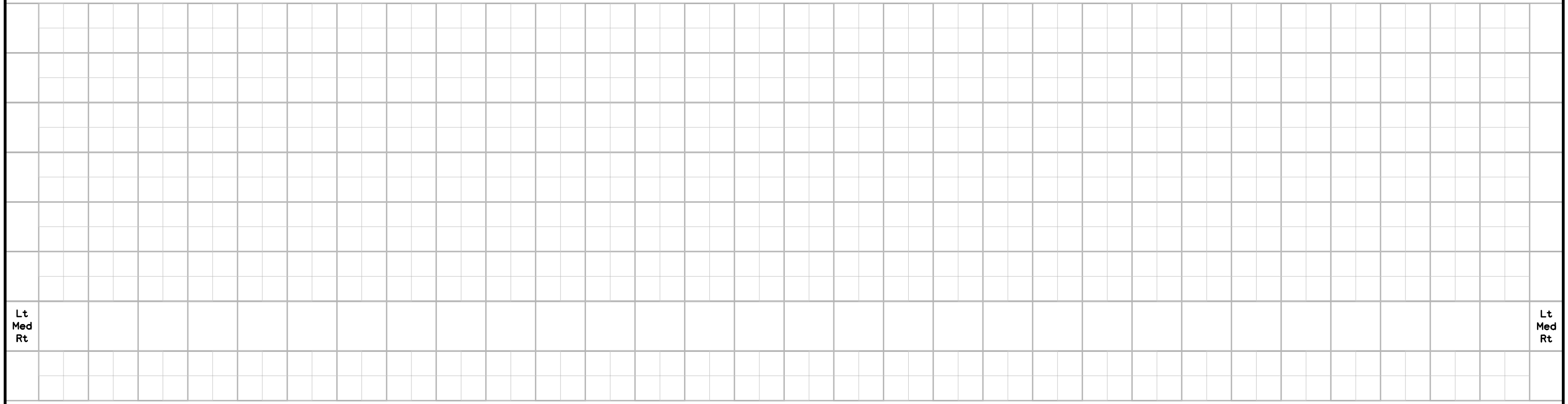
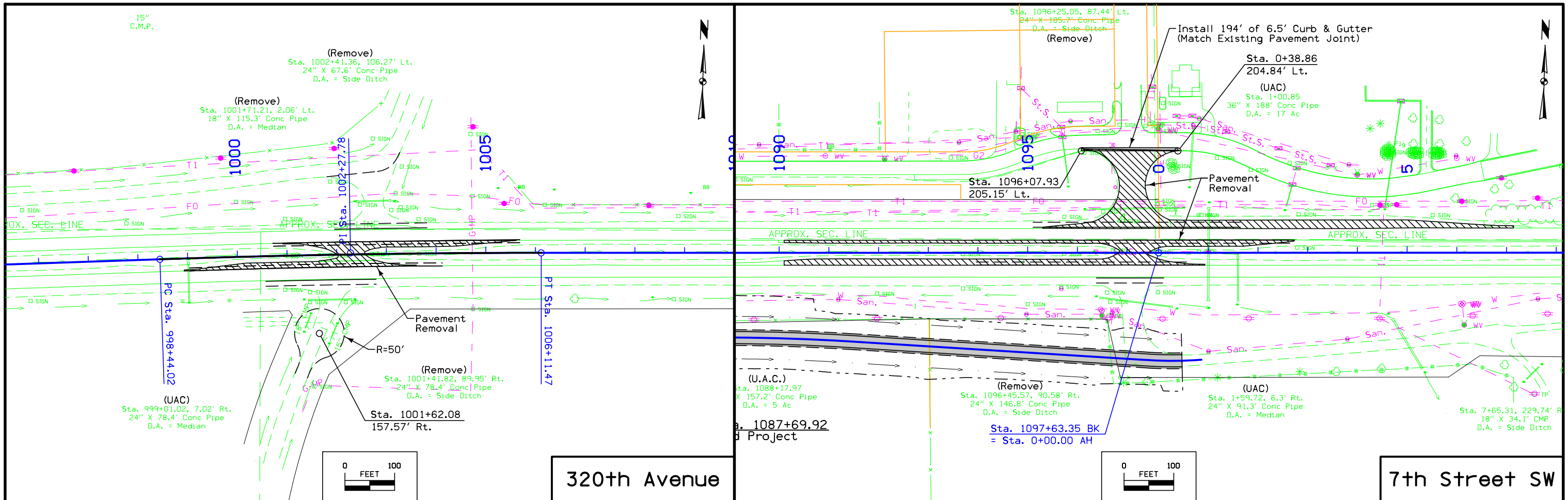


Cut = 16786 CY      Fill+30% = 12131 CY  
 Waste = 4655 CY  
 16786 CY











## Survey Information

### General Information

Measurement units for this survey are US survey feet. This survey is for proposed Dyersville Interchange between Co. Rd. X-47 and IA 136 in Dubuque County, Iowa. Project Datum was established using Opus and verified with multiple Iowa RTN observations. Horizontal Datum is a scaled Iowa North Coordinate System. This project is a Partial DTM field survey for the digital terrain model. It is anticipated aerial coverage will be added at a later. Full survey was not obtained on the Elenz property as anticipated. Access was not granted to our surveyors in the field and by the advice of the IDOT, we were not to survey this property.

### Vertical Control

Vertical datum for this survey is relative to NAVD88.

Vertical datum for this survey is NAVD88 as computed by OPUS using GEOID09. A 5hr and 13min static session was completed on point G10 (Opus\_1). The Reported peak-to-peak accuracy of the orthometric height was 0.063(m). A level run opening on G10, turning through all project benchmarks and closing on G10 was performed. All tolerances were accepted and was distributed proportionately among all turns.

Ia RTN orthometric height was checked against OPUS by averaging the first 5 wildcards collected on G10. The Pt Id's are as follows: 8605, 8244, 8243, 4015 and CHKG10. A difference of 0.0138 was found.

Vertical equations are as follows:

#### Datum Benchmark

BM # 508 this survey = Elev. 989.20  
= Proj. F-20-8(25)--20-28 BM # 40 = Elev. 1000.89

#### Datum Benchmark

BM NGS100 this survey = Elev. 966.46  
= NGS Monument NJ0503 = Elev. 966.54

### Horizontal Control

Measurement units for this survey are US survey feet. Iowa State Plane South coordinates were transformed to project ground coordinates by applying a combined scale factor (computed by OPUS) from held point G10 at the center of the project.

### Alignment Information

The horizontal alignment for this survey is a retrace of Delaware County Plans F-20-8(25)--20-28. Survey stationing was equated to the plan at found Sta. POT Sta 980+95.71 and found PC and PT points were held as shown below. Sideroad alignments were best fit from existing centerlines as surveyed.

Equations are as follows:

#### SUR020

POT Sta. 980+95.71 This Survey  
= POT Sta. 980+95.71 Delaware County Project No. F-20-8(25)--20-28

PC STA 998+44.58 this survey  
= PC STA 998+44.58 Delaware County Project No. F-20-8(25)--20-28

PT STA 1006+15.29 this survey  
= PT STA 1006+15.38 Delaware County Project No. F-20-8(25)--20-28

POT Sta. 1093+63.36 This Survey  
= POT Sta. 1093+63.45 Delaware County Project No. F-20-8(25)--20-28  
=POT Sta. 0+00.00 Dubuque County Project No. F-20-8(25)--20-28

PT STA 21+10.24 this survey  
= PT STA 21+10.19 Dubuque County Project No. F-20-8(25)--20-28

PC STA 39+25.99 this survey  
= PC STA 39+25.98 Dubuque County Project No. F-20-8(25)--20-28

#### SUR330TH

PI STA 2053+33.52 this survey  
=PI STA 2053+33.52 Delaware County Project No. F-20-8(25)--20-28

#### SUR332ND

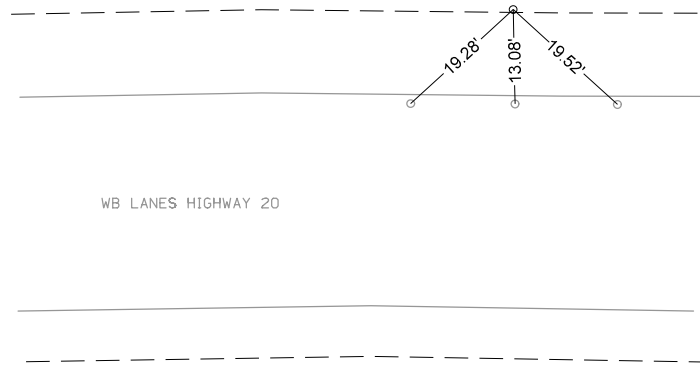
PI STA 3000+00 this survey  
=PI STA 0+00 Delaware County Project No. F-20-8(25)--20-28

PI STA 3036+19.70 this survey  
=PI STA 36+19.70 Delaware County Project No. L-626

## VERTICAL CONTROL

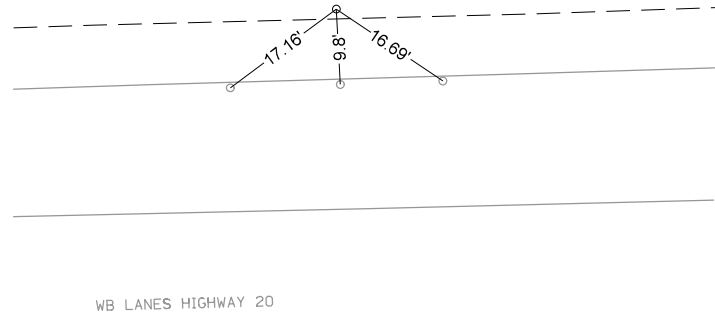
Point	North	East	Elevation	Station	Offset	Feature	Description
500	3643593.871	5560469.981	990.003	9+74.56	112.434	BM	SET RR SPIKE IN POWER POLE
501	3643545.372	5559394.864	982.316	1096+61.88	131.692	BM	SET RR SPIKE IN POWER POLE
502	3643504.172	5558183.464	990.987	1084+49.81	139.948	BM	SET RR SPIKE IN POWER POLE
503	3643472.254	5556936.085	1010.698	1072+02.02	137.948	BM	SET RR SPIKE IN POWER POLE
504	3643697.915	5556279.339	1014.413	1065+51.65	-105.481	BM	SET RR SPIKE IN POWER POLE
505	3643656.520	5554753.227	1004.130	1050+24.98	-105.585	BM	SET RR SPIKE IN POWER POLE
506	3643624.519	5553553.476	1003.385	1038+24.80	-106.208	BM	SET RR SPIKE IN POWER POLE
507	3643580.260	5552322.792	997.857	1025+93.37	-95.418	BM	SET RR SPIKE IN POWER POLE
508	3643523.813	5551398.033	989.200	1016+67.42	-64.129	BM	FND PLUG IN CL HEADWALL
509	3643527.550	5550267.445	996.299	1005+37.68	-98.728	BM	SET RR SPIKE IN POWER POLE
510	3643548.939	5549105.599	1014.432	993+82.14	-180.052	BM	SET RR SPIKE IN POWER POLE
511	3642814.845	5555016.475	993.689	1052+65.25	742.935	BM	SET ARROW 2008 KENNEDY HYDRANT
512	3644251.179	5556715.912	983.661	1070+03.10	-646.674	BM	SET RR SPIKE IN POWER POLE
513	3645995.558	5556654.906	957.557	1069+89.53	-2392.067	BM	SET RR SPIKE IN POWER POLE

STA. 13+22.78, 61.66' Lt.  
 CP G001, SET 1/2" REBAR  
 N=3643775.178 E=55560815.800



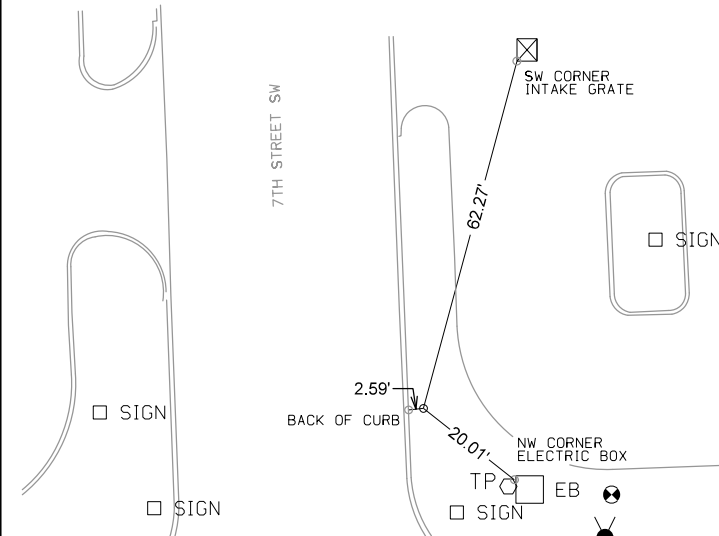
ALL TIES SET  
 MAG NAIL WITH  
 SURVEY MARKER

STA. 1+72.82, 74.83' Lt.  
 CP G002, SET 1/2" REBAR  
 N=3643759.269 E=5559663.450

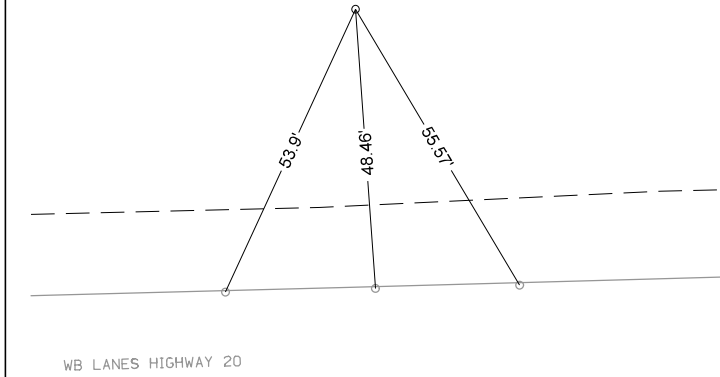


ALL TIES SET  
 MAG NAIL WITH  
 SURVEY MARKER

STA. 1097+32.18, 273.25' Lt.  
 CP G003, SET 1/2" REBAR  
 N=3643952.078 E=5559454.130

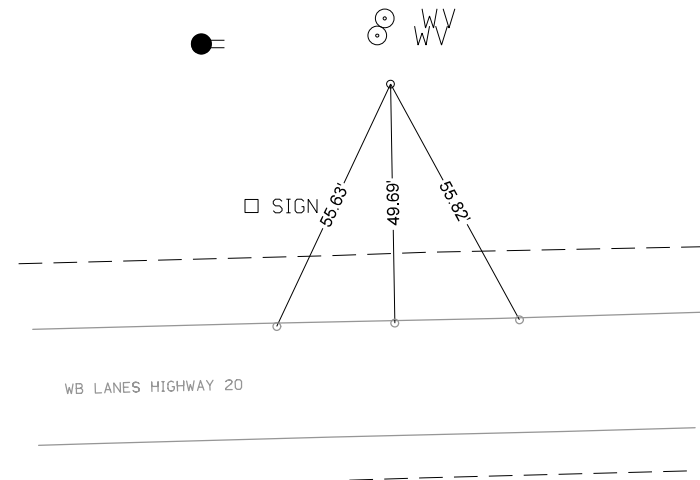


STA. 1085+71.92, 96.76' Lt.  
 CP G004, SET 1/2" REBAR  
 N=3643744.108 E=5558299.096



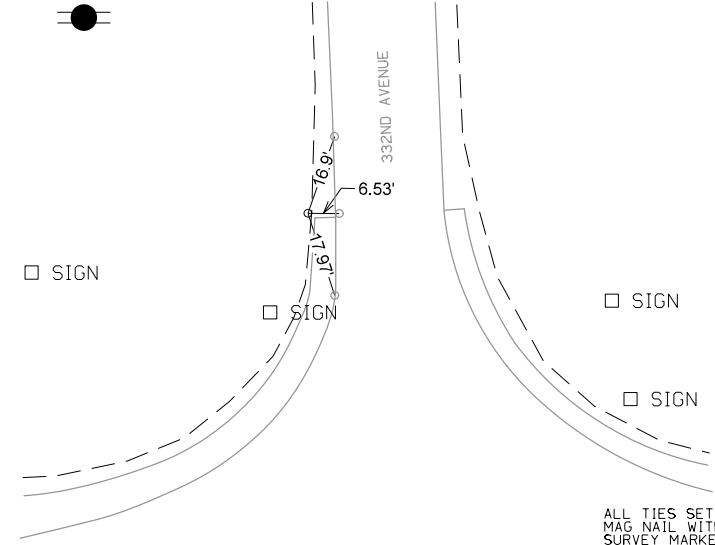
ALL TIES SET  
 MAG NAIL WITH  
 SURVEY MARKER

STA. 1077+22.50, 98.50' Lt.  
 CP G005, SET 1/2" REBAR  
 N=3643722.758 E=5557449.950



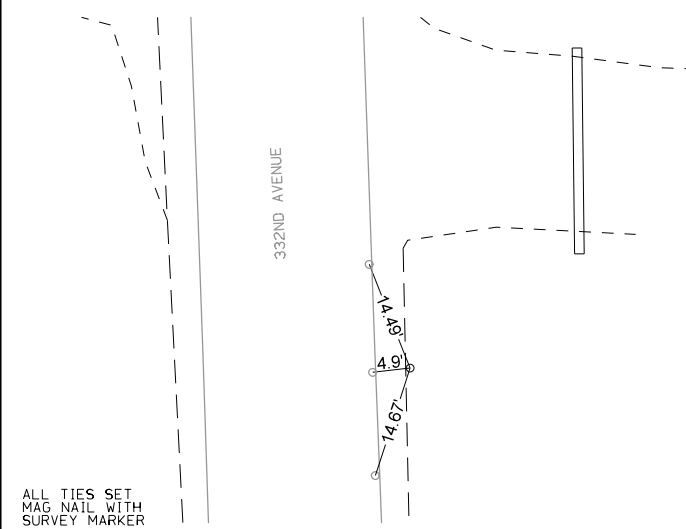
ALL TIES SET  
 MAG NAIL WITH  
 SURVEY MARKER

STA. 1070+49.33, 116.71' Lt.  
 CP G006, SET 1/2" REBAR  
 N=3643722.665 E=5556776.529



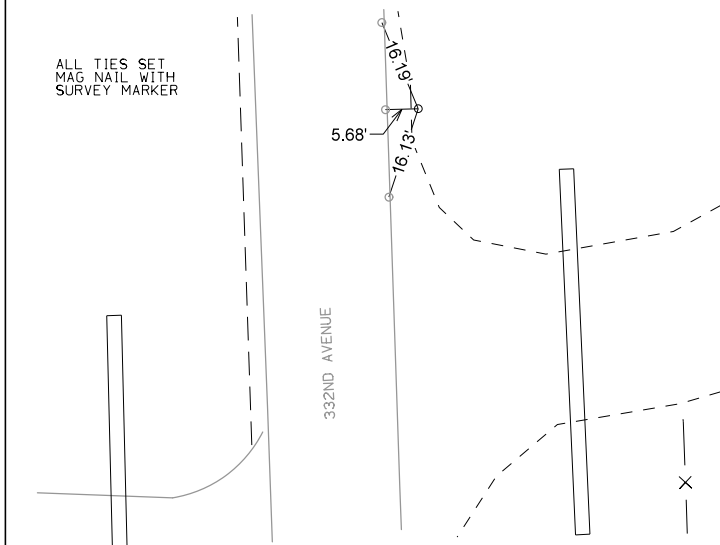
ALL TIES SET  
 MAG NAIL WITH  
 SURVEY MARKER

STA. 1070+72.60, 1320.72' Lt.  
 CP G007, SET 1/2" REBAR  
 N=3644926.867 E=5556767.060



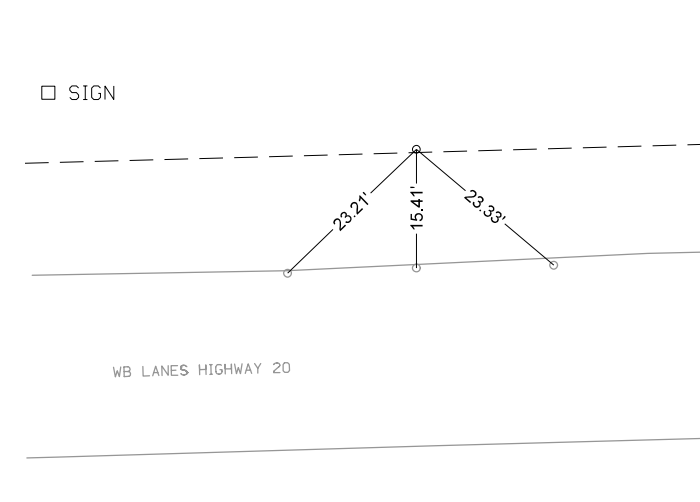
ALL TIES SET  
 MAG NAIL WITH  
 SURVEY MARKER

STA. 1070+61.74, 2867.87' Lt.  
 CP G008, SET 1/2" REBAR  
 N=3646473.143 E=5556714.150



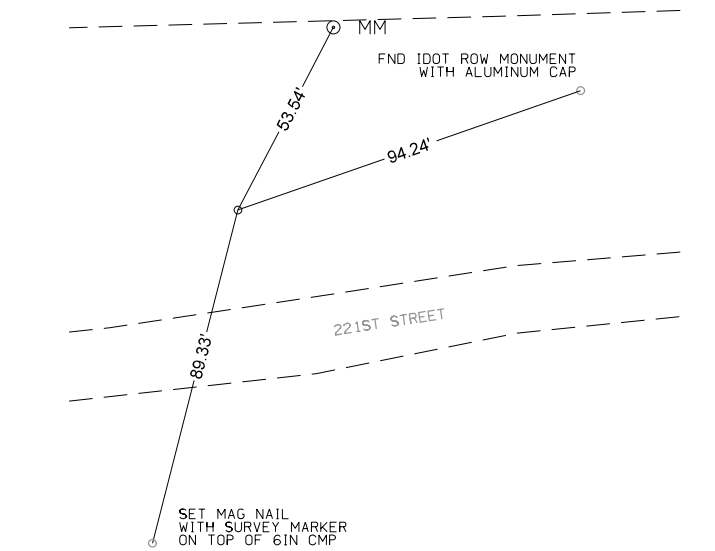
ALL TIES SET  
 MAG NAIL WITH  
 SURVEY MARKER

STA. 1060+01.35, 64.32' Lt.  
 CP G009, SET 1/2" REBAR  
 N=3643641.812 E=5555730.360



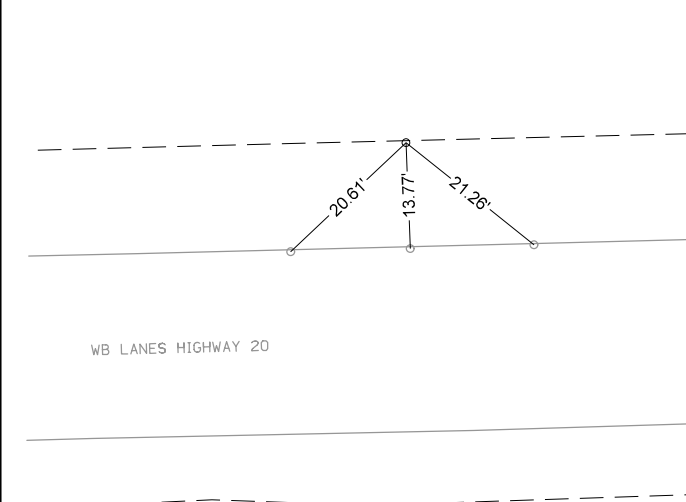
ALL TIES SET  
 MAG NAIL WITH  
 SURVEY MARKER

STA. 1044+61.89, 113.68 Rt.  
 CP G010, SET 1/2" REBAR  
 N=3643422.030 E=5554196.310



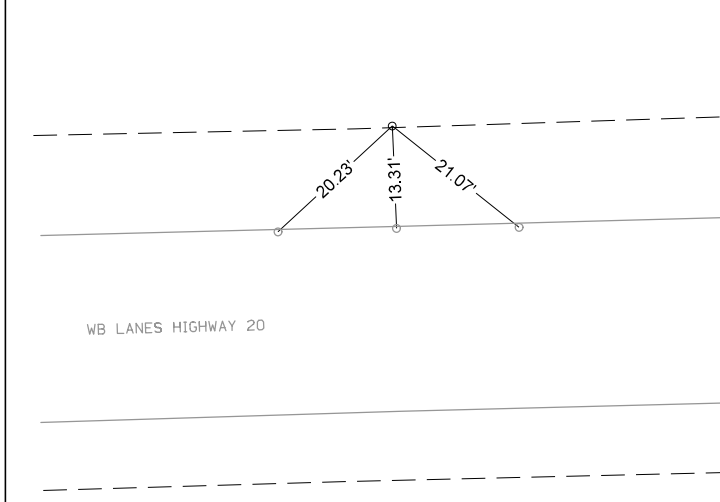
SET MAG NAIL  
 WITH SURVEY MARKER  
 ON TOP OF 6IN CMP

STA. 1050+26.02, 63.14' Lt.  
 CP G011, SET 1/2" REBAR  
 N=3643614.120 E=5554755.420



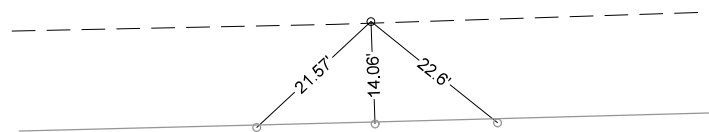
ALL TIES SET  
 MAG NAIL WITH  
 SURVEY MARKER

STA. 1033+30.04, 63.04' Lt.  
 CP G012, SET 1/2" REBAR  
 N=3643567.920 E=5553060.070



ALL TIES SET  
 MAG NAIL WITH  
 SURVEY MARKER

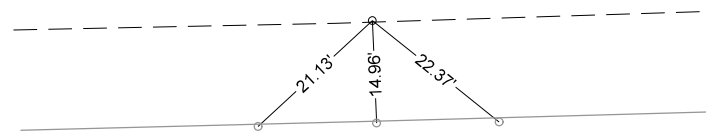
STA. 1021+89.66, 62.87' Lt.  
 CP G013, SET 1/2" REBAR  
 N=3643536.748 E=5551920.120



WB LANES HIGHWAY 20

ALL TIES SET  
 MAG NAIL WITH  
 SURVEY MARKER

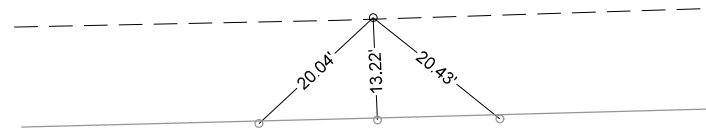
STA. 1010+68.09, 63.58' Lt.  
 CP G014, SET 1/2" REBAR  
 N=3643506.977 E=5550798.940



WB LANES HIGHWAY 20

ALL TIES SET  
 MAG NAIL WITH  
 SURVEY MARKER

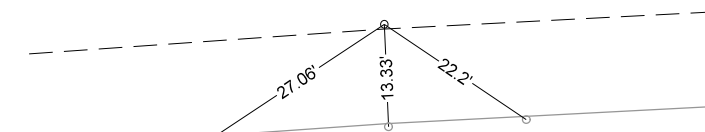
STA. 999+94.25, 61.87' Lt.  
 CP G015, SET 1/2" REBAR  
 N=3643467.636 E=5549724.180



WB LANES HIGHWAY 20

ALL TIES SET  
 MAG NAIL WITH  
 SURVEY MARKER

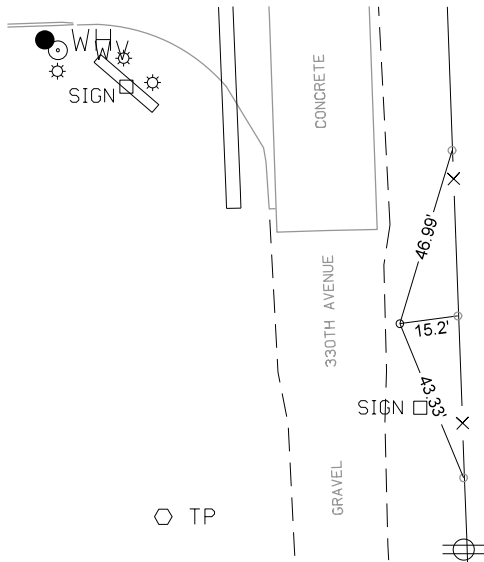
STA. 988+88.23, 62.19' Lt.  
 CP G016, SET 1/2" REBAR  
 N=3643401.346 E=5548619.750



WB LANES HIGHWAY 20

ALL TIES SET  
 MAG NAIL WITH  
 SURVEY MARKER

STA. 1053+55.49, 818.93' Rt.  
 CP G017, SET 1/2" REBAR  
 N=3642741.330 E=5555108.748



○ TP

**ALIGNMENT COORDINATES**

101-16  
10-20-09

Name	Location	Point on Tangent			Begin Spiral			Begin Curve			Simple Curve PI or Master PI of SCS			End Curve			End Spiral		
		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates	
			Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)
US20																			
20005								998+44.02	3,643,397.28	5,549,577.55	1002+27.78	3,643,420.56	5,549,960.61	1006+11.47	3,643,431.01	5,550,344.23			
20010		1039+72.92	3,643,522.50	5,553,704.43															
20015		1068+36.04	3,643,600.23	5,556,566.50															
20020		1097+63.35	3,643,679.77	5,559,492.73															
330th Ave./332th Ave.																			
30000		11036+66.42	3,641,060.60	5,555,148.90															
30005								11037+07.02	3,641,101.19	5,555,147.89	11039+38.57	3,641,332.67	5,555,142.13	11041+62.83	3,641,545.10	5,555,234.27			
30020								11077+29.57	3,644,817.34	5,556,653.46	11079+66.45	3,645,034.66	5,556,747.71	11081+95.52	3,645,271.39	5,556,739.53			
30025		11086+95.52	3,645,771.10	5,556,722.27															
Industrial Parkway																			
31000		21045+75.70	3,642,834.89	5,554,945.84															
31005								21047+57.83	3,642,841.05	5,555,127.87	21049+26.76	3,642,846.77	5,555,296.70	21050+90.14	3,642,779.56	5,555,451.68			
31010		21053+81.86	3,642,663.48	5,555,719.31															
221st St																			
32000		31053+81.86	3,642,663.48	5,555,719.31															
32005								31055+01.86	3,642,615.73	5,555,829.41	31056+48.34	3,642,557.45	5,555,963.79	31057+54.72	3,642,667.99	5,556,059.91			
32010								31062+11.34	3,643,012.56	5,556,359.53	31063+34.98	3,643,105.86	5,556,440.66	31064+53.95	3,643,151.65	5,556,555.51			
32015								31068+45.03	3,643,296.48	5,556,918.79	31071+80.38	3,643,420.68	5,557,230.30	31075+09.55	3,643,436.47	5,557,565.28			
32020								31084+92.00	3,643,482.73	5,558,546.63	31086+56.47	3,643,490.48	5,558,710.93	31088+20.76	3,643,484.71	5,558,875.30			
32030								31094+25.79	3,643,463.48	5,559,479.96	31094+78.39	3,643,461.64	5,559,532.52	31095+30.81	3,643,467.15	5,559,584.83			
32035		31095+30.81	3,643,467.15	5,559,584.83															
218th St																			
33000		41052+46.33	3,643,697.90	5,554,633.56															
33005								41053+46.33	3,643,700.98	5,554,733.52	41054+35.13	3,643,703.75	5,554,823.18	41055+23.93	3,643,736.94	5,554,906.52			
33010								41064+99.45	3,644,097.95	5,555,812.79	41066+19.28	3,644,143.13	5,555,926.20	41067+39.10	3,644,234.76	5,556,006.86			
33015								41070+69.20	3,644,482.53	5,556,224.98	41071+95.02	3,644,591.78	5,556,321.15	41073+20.84	3,644,533.87	5,556,454.68			
33020		41073+90.41	3,644,506.18	5,556,518.51															
Field of Dreams Way																			
34000		51073+90.41	3,644,506.18	5,556,518.51															
34005								51076+00.40	3,644,390.44	5,556,693.73	51077+05.28	3,644,331.81	5,556,782.49	51078+10.16	3,644,242.58	5,556,840.41			
34010								51080+71.57	3,644,023.31	5,556,982.74	51083+32.35	3,643,783.27	5,557,138.55	51085+93.14	3,643,791.19	5,557,424.62			
34015		51087+93.14	3,643,796.72	5,557,624.54															
330th Ave./332th Ave. Ramp A																			
35000		2065+23.97	3,643,955.72	5,556,279.77															
35005								2072+28.85	3,643,778.61	5,556,962.04	2074+44.28	3,643,724.48	5,557,170.55	2076+58.05	3,643,715.99	5,557,385.81			
35010		2077+25.00	3,643,713.36	5,557,452.71															
330th Ave./332th Ave. Ramp B																			
36005		3050+50.00	3,643,462.77	5,554,783.53															
36010								3051+19.79	3,643,460.02	5,554,853.27	3053+32.37	3,643,451.65	5,555,065.68	3055+43.36	3,643,398.81	5,555,271.59			
36015		3062+55.57	3,643,221.78	5,555,961.45															
330th Ave./332th Ave. Ramp C																			
37010								4049+98.04	3,643,619.31	5,554,727.30	4051+38.27	3,643,625.92	5,554,867.37	4052+78.04	3,643,652.01	5,555,005.15			
37020								4052+78.04	3,643,652.01	5,555,005.15	4054+08.90	3,643,676.35	5,555,133.72	4055+39.00	3,643,724.11	5,555,255.56			
37030								4060+59.43	3,643,914.02	5,555,740.10	4062+35.68	3,643,978.34	5,555,904.20	4064+06.39	3,643,967.75	5,556,080.13			
37035		4066+06.39	3,643,955.72	5,556,279.77															
330th Ave./332th Ave. Ramp D																			
38000		5061+73.32	3,643,221.78	5,555,961.45															
38005								5063+73.32	3,643,209.75	5,556,161.09	5065+52.02	3,643,199.01	5,556,339.46	5067+24.94	3,643,265.19	5,556,505.45			
38015								5072+20.85	3,643,448.84	5,556,966.10	5073+55.80	3,643,498.82	5,557,091.46	5074+89.92	3,643,523.93	5,557,224.05			
38025								5074+89.92	3,643,523.93	5,557,224.05	5076+30.15	3,643,550.02	5,557,361.83	5077+69.92	3,643,556.64	5,557,501.91			
330th Ave. Channel																			
39000		2013+33.52	3,639,561.64	5,555,199.11															
39005		2053+33.52	3,643,559.31	5,555,062.80															

**SPIRAL OR CIRCULAR CURVE DATA**

101-17  
04-19-11

Name	Location	Δ <sub>scs</sub>	Horizontal Alignment Data											Remarks		
			Spiral Data					Curve Data								
			θs	Ls	Ts	Es	Xc	Yc	L.T.	S.T.	Δ <sub>c</sub>	T	L	R	E	
US20 20005											01° 55' 07.06" RT	383.76'	767.45'	22,918.32'	3.21'	
330th Ave./332th Ave. 30005 30020											24° 52' 19.43" RT 25° 25' 32.33" LT	231.55' 236.87'	455.80' 465.95'	1,050.00' 1,050.00'	25.23' 26.39'	
Industrial Parkway 31005											25° 23' 11.04" RT	168.93'	332.31'	750.00'	18.79'	
221st St 32005 32010 32015 32020 32030											72° 26' 19.30" LT 27° 15' 20.87" RT 19° 02' 13.68" RT 04° 42' 33.11" RT 08° 01' 22.68" LT	146.48' 123.64' 335.35' 164.47' 52.60'	252.86' 242.61' 664.52' 328.76' 105.02'	200.00' 510.00' 2,000.00' 4,000.00' 750.00'	47.90' 14.77' 27.92' 3.38' 1.84'	
218th St 33005 33010 33015											19° 57' 10.12" LT 26° 55' 21.55" LT 72° 05' 20.68" RT	89.71' 122.08' 145.55'	177.60' 239.64' 251.64'	510.00' 510.00' 200.00'	7.83' 14.41' 47.35'	
Field of Dreams Way 34005 34010											23° 33' 53.43" RT 58° 35' 44.92" LT	106.38' 286.17'	209.75' 521.57'	510.00' 510.00'	10.98' 74.80'	
330th Ave./332th Ave. Ramp A 35005											12° 17' 44.12" LT	215.43'	429.20'	2,000.00'	11.57'	
330th Ave./332th Ave. Ramp B 36010											12° 08' 03.30" RT	212.58'	423.57'	2,000.00'	11.27'	
330th Ave./332th Ave. Ramp C 37010 37020 37030											08° 01' 17.07" LT 10° 40' 47.54" LT 24° 50' 58.62" RT	140.23' 130.86' 176.25'	280.00' 260.96' 346.97'	2,000.00' 1,400.00' 800.00'	4.91' 6.10' 19.19'	
330th Ave./332th Ave. Ramp D 38005 38015 38025											25° 10' 58.43" LT 11° 00' 43.17" RT 08° 01' 17.07" RT	178.70' 134.95' 140.23'	351.62' 269.07' 280.00'	800.00' 1,400.00' 2,000.00'	19.71' 6.49' 4.91'	

PARCEL CHECK LIST

04/15/13 13:48 HSL PRINT FOR N L CUVA PAGES: 1 - 4 GEN: 1

PARCEL CHECK BY PROJ UPDATED 04/15/13 13:48 PAGE: 1  
AND: 2

R2360003 PARCEL CHECK LIST BY PROJECT NUMBER  
COUNTY : DELAWARE PROJECT NO. :NHSN-020-8(48)--2R-28 PIN: 10-31-020010-00  
CONSTRUCTION NO.:NHSN-020-9(195)--2R-31 ASSIGNED TO: NLC

DESCRIPTION : Dyersville Interchange between 330th Aveand 332nd Ave

PARCEL	KEY	OWNER	TYPE	R/W W.D OR EASE.	BORROW W.D OR EASE.	HOUSE OR OTHER	COMMERCIAL	OCC ENVIRONMENTAL CONCERNS
0001	26643	GARY G. WESSELS LORI WESSELS	FEE DYERSVILLE CITY					
			FEE	10.82 WD ACRE				
			STATE OF IOWA					
				13.50 WD ACRE				
0002	26644	HERBERT P. RECKER MARY M. RECKER	FEE STATE OF IOWA					
			FEE	4.86 WD ACRE				
0003	26645	HERBERT P. RECKER MARY M. RECKER MICHAEL RECKER	FEE STATE OF IOWA					
			FEE	3,035.00 WD SQFT				
			CP1					
0003 A	26725	DYERSVILLE INDUSTRIES, INC	FEE DYERSVILLE CITY					
				0.13 WD ACRE				
0004	26646	LEON ELENZ	FEE DELAWARE COUNTY					
				19.62 WD ACRE				
			STATE OF IOWA					
				16.83 WD ACRE				
				10.76 EXCESS AC				
0004 A	26739	PHILIP WESTHOFF MONICA WESTHOFF	FEE DELAWARE COUNTY					
			FEE	1.22 WD ACRE				
0005	26647	GLADYS R. WESSELS	FEE STATE OF IOWA					
				0.69 WD ACRE				
0006	26648	PAUL E. CHRISTOFFER TAMMY L. CHRISTOFFER	FEE DELAWARE COUNTY					
			FEE	1,953.00 WD SQFT				
0007	26649	KAREN M. TEGELER DAVID D. TEGELER	FEE DELAWARE COUNTY					
			FEE	159.00 WD SQFT				

# PARCEL CHECK LIST

04/15/13 13:48 HSL PRINT FOR N L CUVA PAGES: 1 - 4 GEN: 1

PARCEL CHECK BY PROJ UPDATED 04/15/13 13:48 PAGE: 3  
AND: 4

R2360003 PARCEL CHECK LIST BY PROJECT NUMBER  
 COUNTY : DELAWARE PROJECT NO. :NHSN-020-8(48)--2R-28 PIN: 10-31-020010-00  
 CONSTRUCTION NO.:NHSN-020-9(195)--2R-31 ASSIGNED TO: NLC  
 DESCRIPTION : Dyersville Interchange between 330th Aveand 332nd Ave

PARCEL	KEY	OWNER	TYPE	R/W W.D OR EASE.	BORROW W.D OR EASE.	HOUSE OR OTHER	COMMERCIAL	OCC ENVIRONMENTAL CONCERNS
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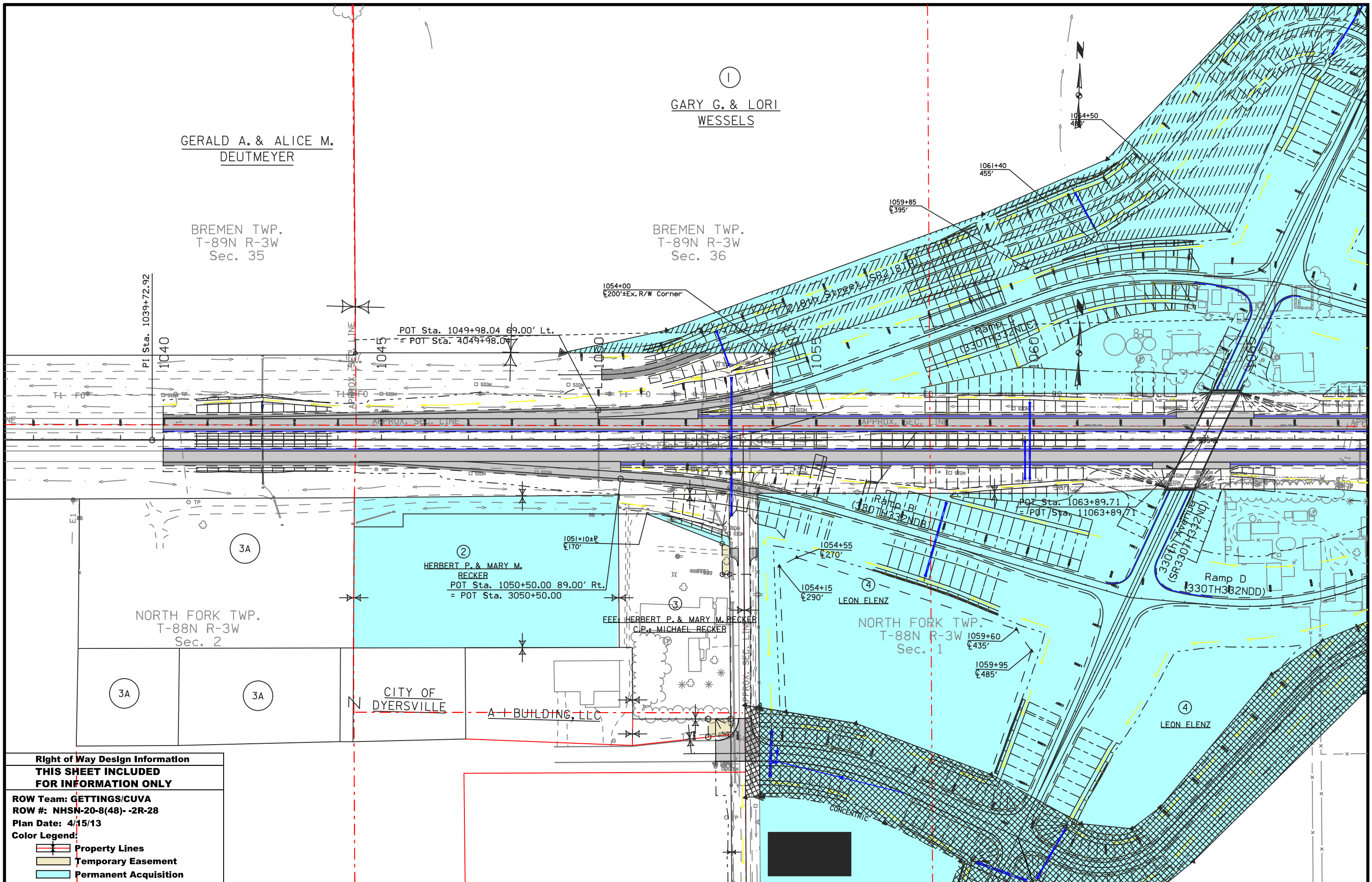
0008	26650	KENNETH G. TUETKEN	FEE DYERSVILLE CITY	1.64	WD ACRE			
			STATE OF IOWA	0.62	WD ACRE			
0009	26651	BGPD LAND HOLDINGS, LLC	FEE DYERSVILLE CITY	2.00	WD ACRE			
0009	26651							
0010	26652	C&G PARTNERSHIP	FEE DYERSVILLE CITY	1.02	WD ACRE			

CITY of DYERSVILLE  
15.61 WARRANTY DEED ACRES

COUNTY of DELAWARE  
20.84 WARRANTY DEED ACRES  
2,112.00 WARRANTY DEED SQFT

STATE OF IOWA  
36.50 WARRANTY DEED ACRES  
3,035.00 WARRANTY DEED SQFT  
10.76 EXCESS ACRES

12 TOTAL PARCELS ON PROJECT

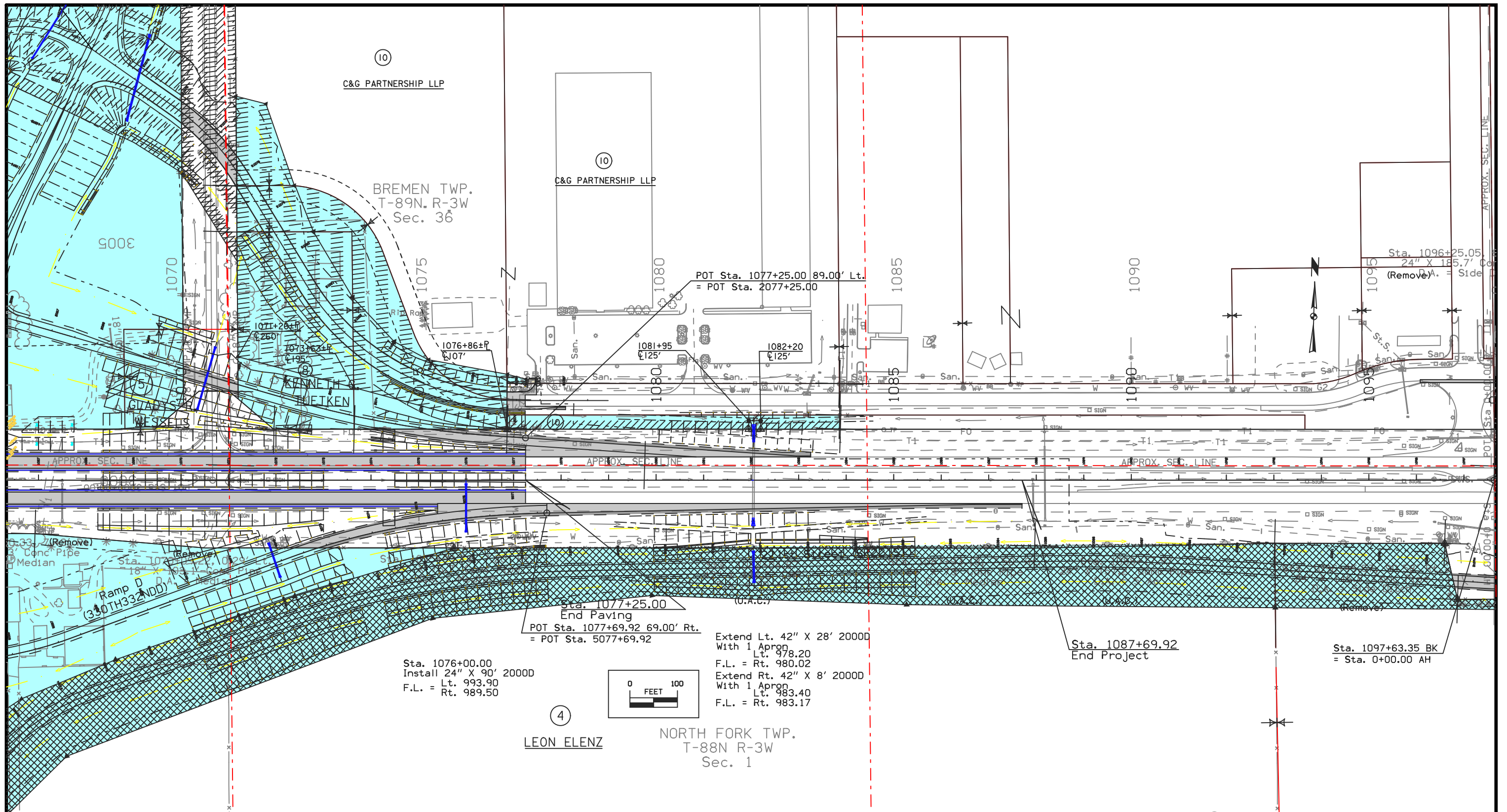


**Right of Way Design Information**  
**THIS SHEET INCLUDED**  
**FOR INFORMATION ONLY**

ROW Team: GETTINGS/CUVA  
 ROW #: NHSN-20-8(48)-2R-28  
 Plan Date: 4/15/13  
 Color Legend:

- Property Lines
- Temporary Easement
- Permanent Acquisition





⑩  
C&G PARTNERSHIP LLP

BREMEN TWP.  
T-89N. R-3W  
Sec. 36

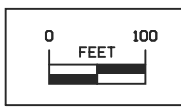
⑩  
C&G PARTNERSHIP LLP

POT Sta. 1077+25.00 89.00' Lt.  
= POT Sta. 2077+25.00

Sta. 1077+25.00  
End Paving  
POT Sta. 1077+69.92 69.00' Rt.  
= POT Sta. 5077+69.92

Sta. 1076+00.00  
Install 24" X 90' 2000D  
F.L. = Lt. 993.90  
Rt. 989.50

Extend Lt. 42" X 28' 2000D  
With 1 Apron  
Lt. 978.20  
F.L. = Rt. 980.02  
Extend Rt. 42" X 8' 2000D  
With 1 Apron  
Lt. 983.40  
F.L. = Rt. 983.17



④  
LEON ELENZ

NORTH FORK TWP.  
T-88N R-3W  
Sec. 1

Sta. 1087+69.92  
End Project

Sta. 1097+63.35 BK  
= Sta. 0+00.00 AH

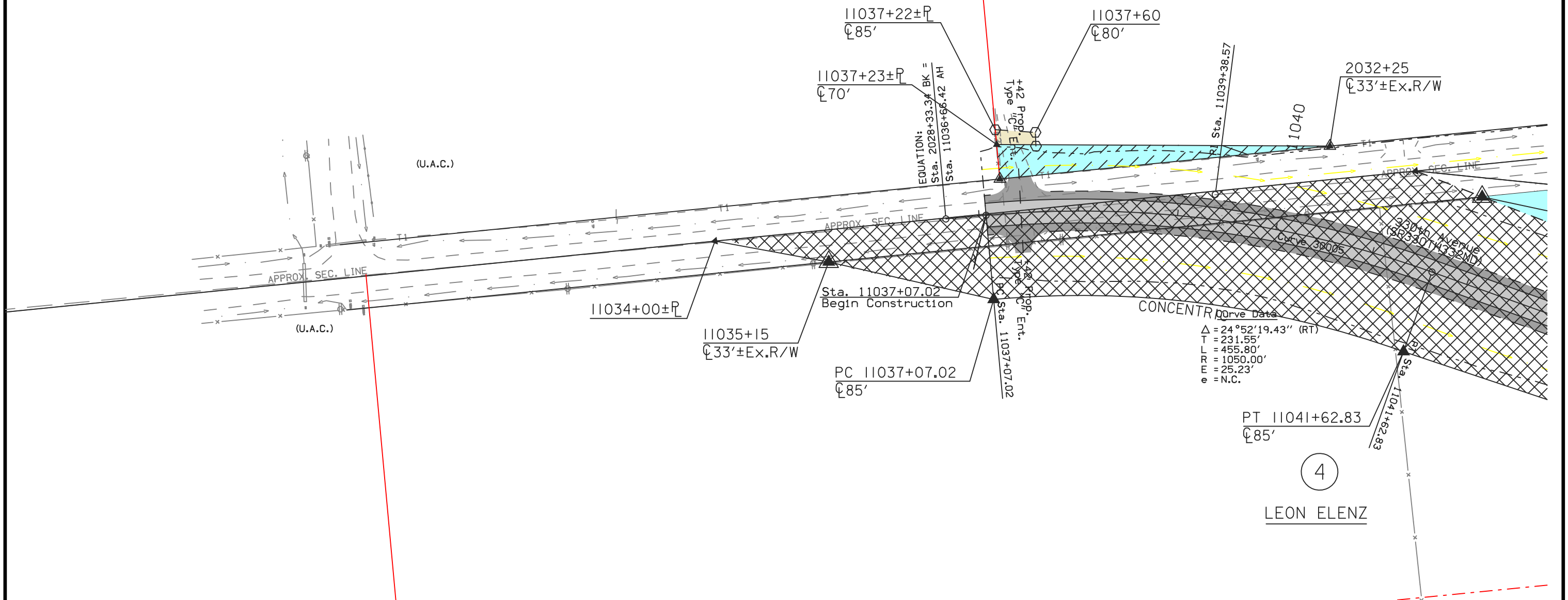
<b>Right of Way Design Information</b>	
<b>THIS SHEET INCLUDED FOR INFORMATION ONLY</b>	
ROW Team: GETTINGS/CUVA	
ROW #: NHSN-20-8(48)-2R-28	
Plan Date: 4/15/13	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition

3A



DYERSVILLE INDUSTRIES, INC.

TEMPORARY EASEMENT TO CONSTRUCT ENTRANCE



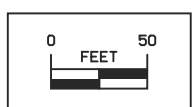
CONCENTRIC Curve Data  
 $\Delta = 24^{\circ}52'19.43''$  (RT)  
 $T = 231.55'$   
 $L = 455.80'$   
 $R = 1050.00'$   
 $E = 25.23'$   
 $e = N.C.$

PT 11041+62.83  
 85'

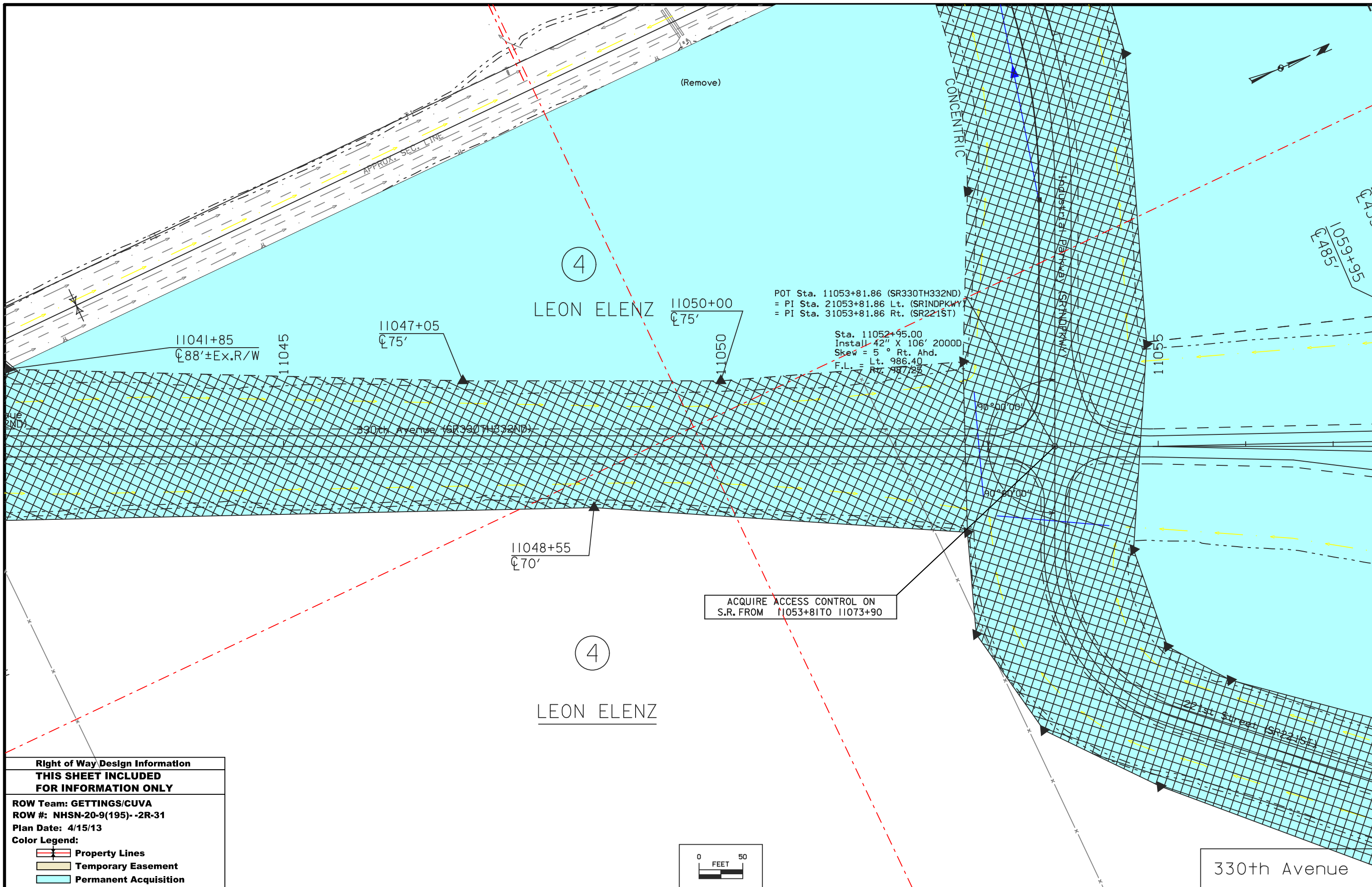
4

LEON ELENZ

<b>Right of Way Design Information</b>
<b>THIS SHEET INCLUDED FOR INFORMATION ONLY</b>
ROW Team: GETTINGS/CUVA
ROW #: NHSN-20-9(195)-2R-31
Plan Date: 4/15/13
Color Legend:
Property Lines
Temporary Easement
Permanent Acquisition



330th Avenue



4

LEON ELENZ

4

LEON ELENZ

POT Sta. 11053+81.86 (SR330TH332ND)  
 = PI Sta. 21053+81.86 Lt. (SRINDPKWY)  
 = PI Sta. 31053+81.86 Rt. (SR221ST)

Sta. 11052+95.00  
 Install 42" X 106' 2000D  
 Skew = 5° Rt. Ahd.  
 F.L. = Lt. 986.40  
 F.L. = Rt. 987.28

ACQUIRE ACCESS CONTROL ON  
 S.R. FROM 11053+81 TO 11073+90

11041+85  
 ±88'±Ex.R/W

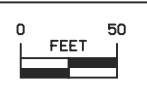
11047+05  
 ±75'

11050+00  
 ±75'

11048+55  
 ±70'

11055

1059+95  
 ±485'



330th Avenue

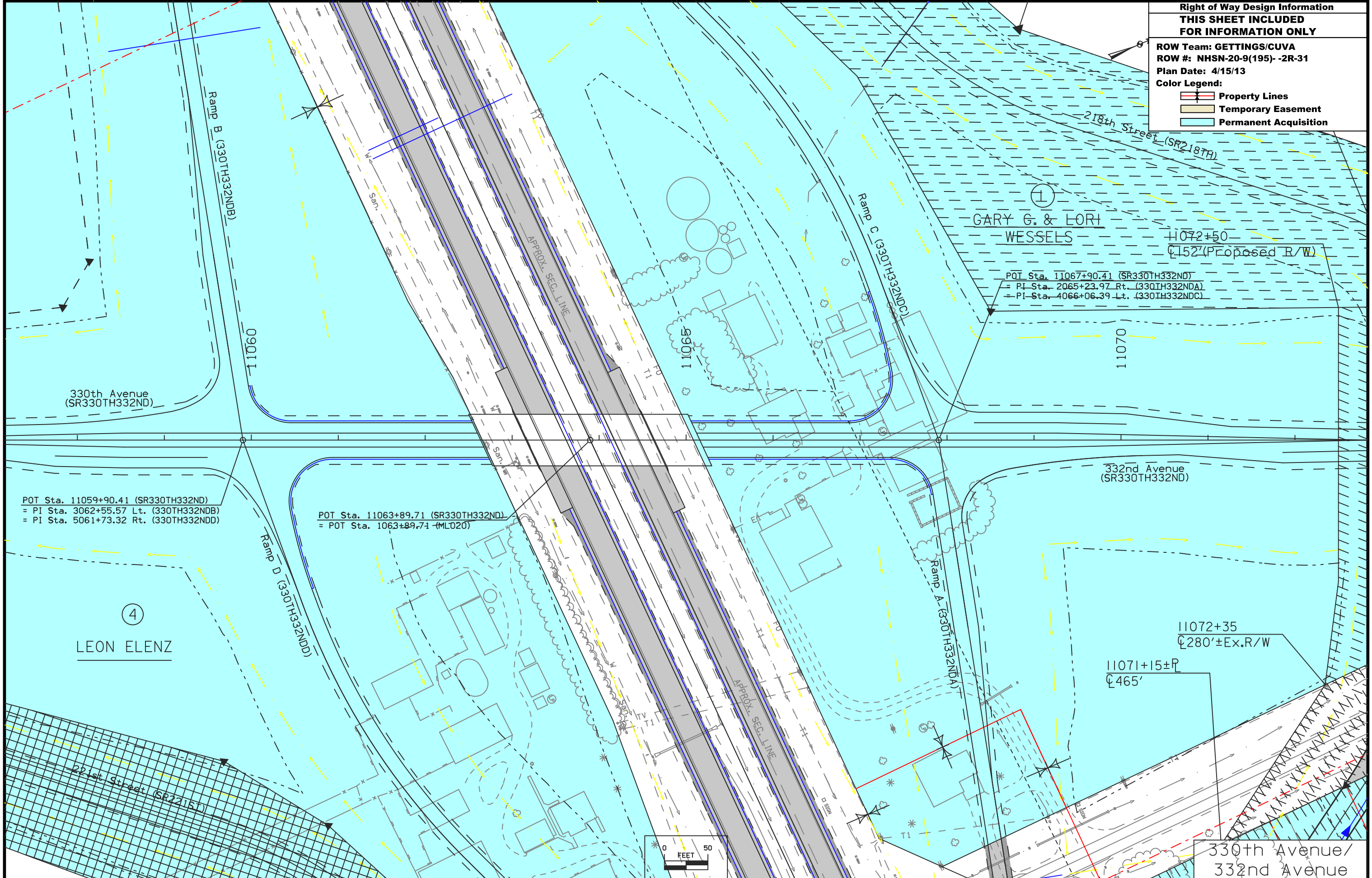
**Right of Way Design Information**  
**THIS SHEET INCLUDED**  
**FOR INFORMATION ONLY**

ROW Team: GETTINGS/CUVA  
 ROW #: NHSN-20-9(195)--2R-31  
 Plan Date: 4/15/13

**Color Legend:**

- Property Lines
- Temporary Easement
- Permanent Acquisition

**Right of Way Design Information**  
**THIS SHEET INCLUDED FOR INFORMATION ONLY**  
 ROW Team: GETTINGS/CUVA  
 ROW #: NHSN-20-9(195)-2R-31  
 Plan Date: 4/15/13  
 Color Legend:  
 - Property Lines  
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POT Sta. 11059+90.41 (SR330TH332ND)  
 = PI Sta. 3062+55.57 Lt. (330TH332NDB)  
 = PI Sta. 5061+73.32 Rt. (330TH332NDD)

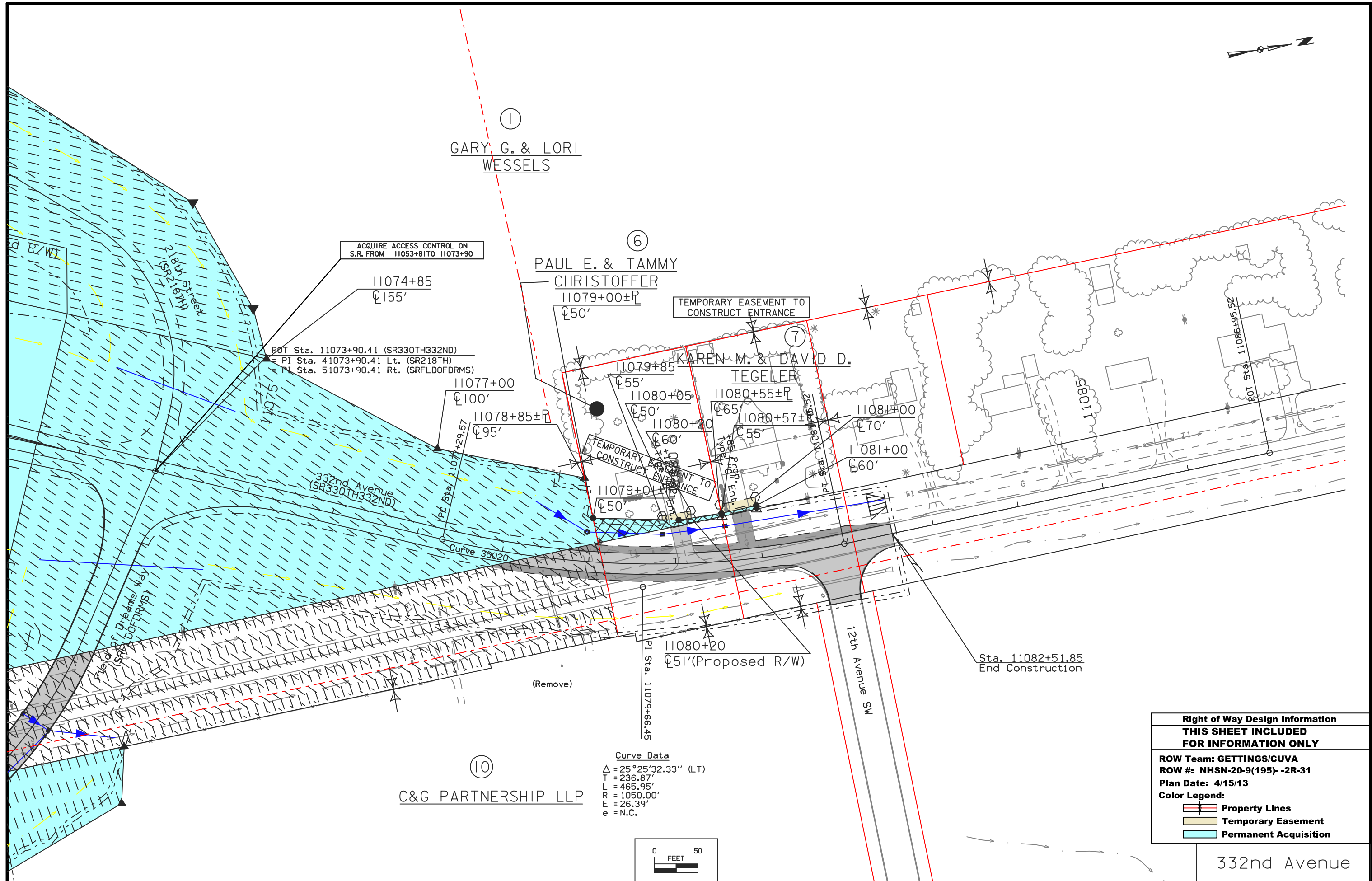
POT Sta. 11063+89.71 (SR330TH332ND)  
 = POT Sta. 1063+89.71 (ML020)

POT Sta. 11067+90.41 (SR330TH332ND)  
 = PI Sta. 2065+23.97 Rt. (330TH332NDA)  
 = PI Sta. 4066+06.39 Lt. (330TH332NDC)

11072+35  
 ±280'±Ex.R/W

11071+15±P  
 ±465'

330th Avenue/  
 332nd Avenue



ACQUIRE ACCESS CONTROL ON S.R. FROM 11053+81 TO 11073+90

POT Sta. 11073+90.41 (SR330TH332ND)  
 PI Sta. 41073+90.41 Lt. (SR218TH)  
 PI Sta. 51073+90.41 Rt. (SRFLDOFDRMS)

332nd Avenue (SR330TH332ND)

TEMPORARY EASEMENT TO CONSTRUCT ENTRANCE

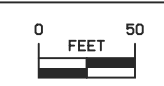
TEMPORARY EASEMENT TO CONSTRUCT ENTRANCE

PI Sta. 11079+66.45  
 51' (Proposed R/W)

Sta. 11082+51.85  
 End Construction

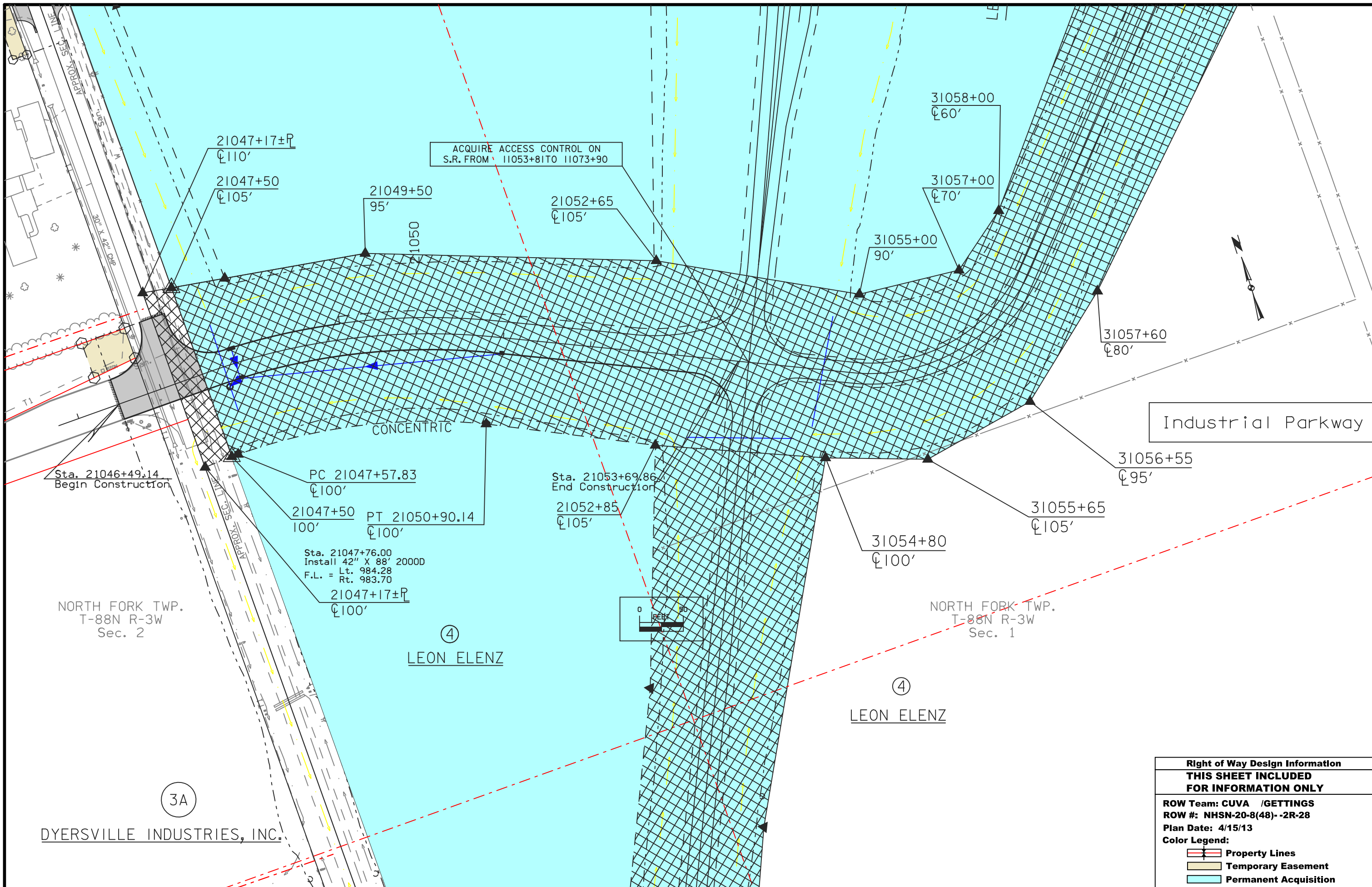
(Remove)




Curve Data  
 $\Delta = 25^\circ 25' 32.33''$  (LT)  
 T = 236.87'  
 L = 465.95'  
 R = 1050.00'  
 E = 26.39'  
 e = N.C.

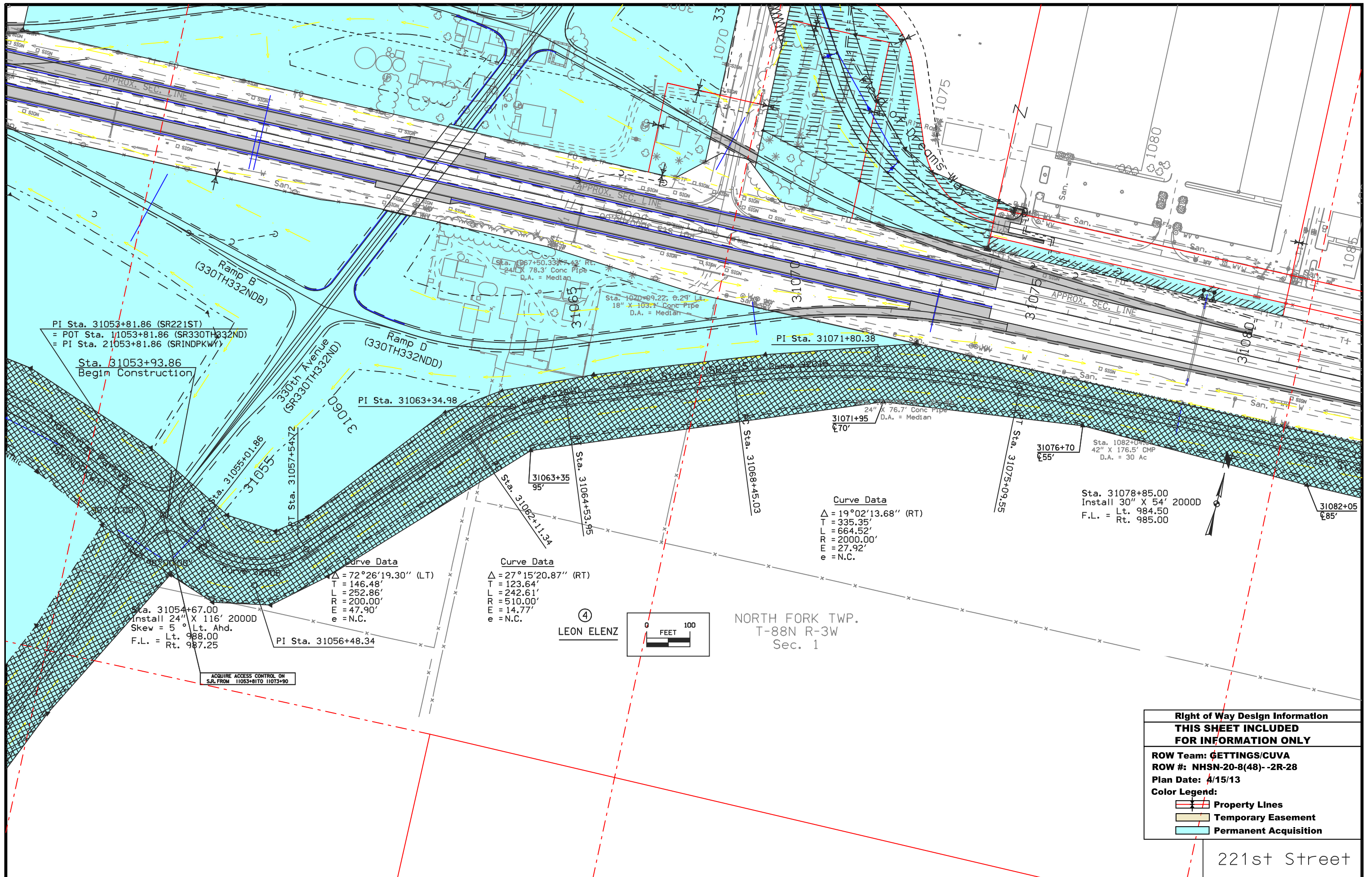


<b>Right of Way Design Information</b>	
<b>THIS SHEET INCLUDED FOR INFORMATION ONLY</b>	
ROW Team: GETTINGS/CUVA	
ROW #: NHSN-20-9(195)-2R-31	
Plan Date: 4/15/13	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition

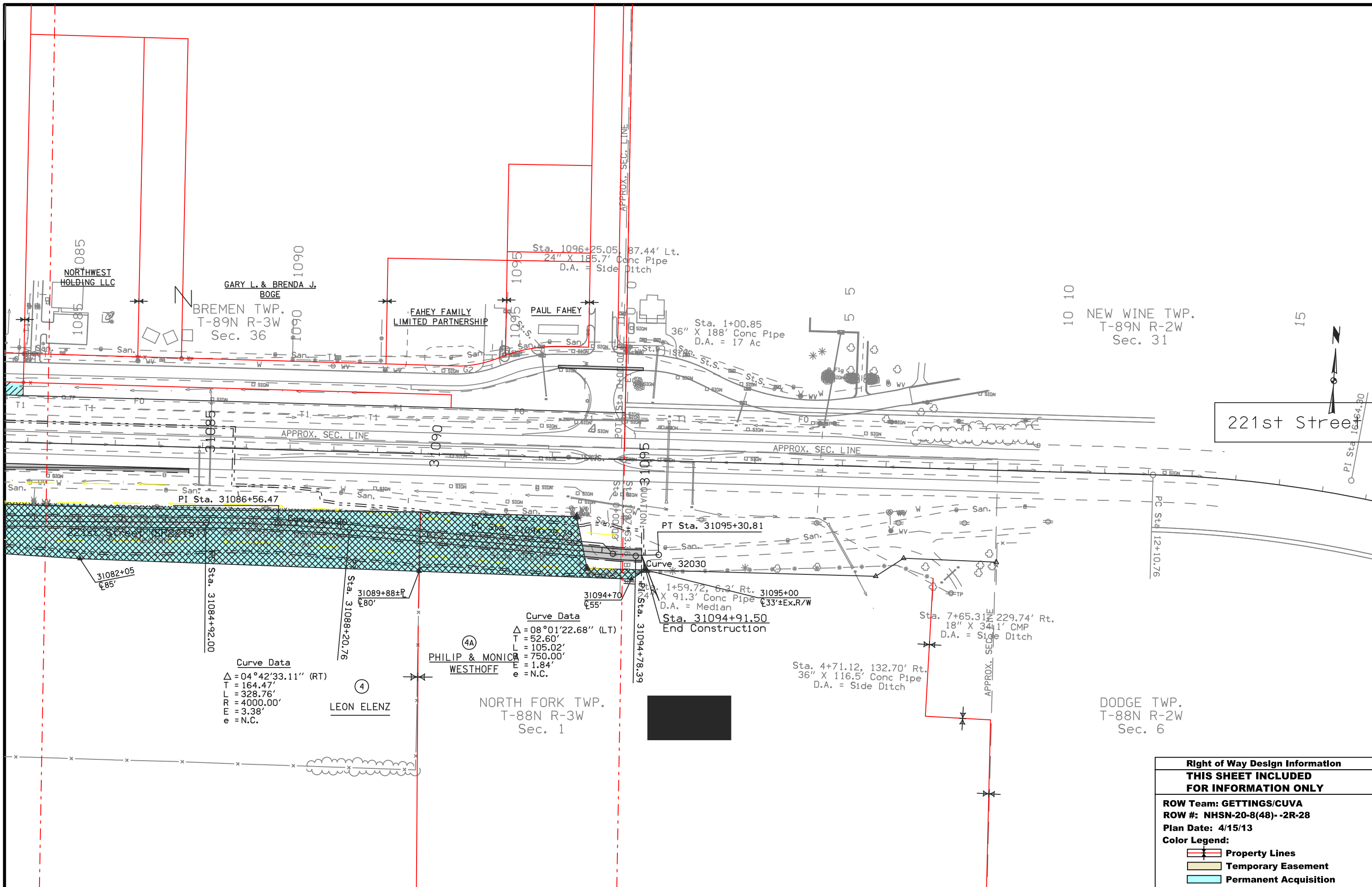
332nd Avenue



<b>Right of Way Design Information</b>	
<b>THIS SHEET INCLUDED FOR INFORMATION ONLY</b>	
ROW Team: CUVA /GETTINGS	
ROW #: NHSN-20-8(48)-2R-28	
Plan Date: 4/15/13	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition



<b>Right of Way Design Information</b>	
<b>THIS SHEET INCLUDED FOR INFORMATION ONLY</b>	
ROW Team: <del>GETTINGS</del> /CUVA	
ROW #: NHSN-20-8(48)-2R-28	
Plan Date: 4/15/13	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition



221st Street

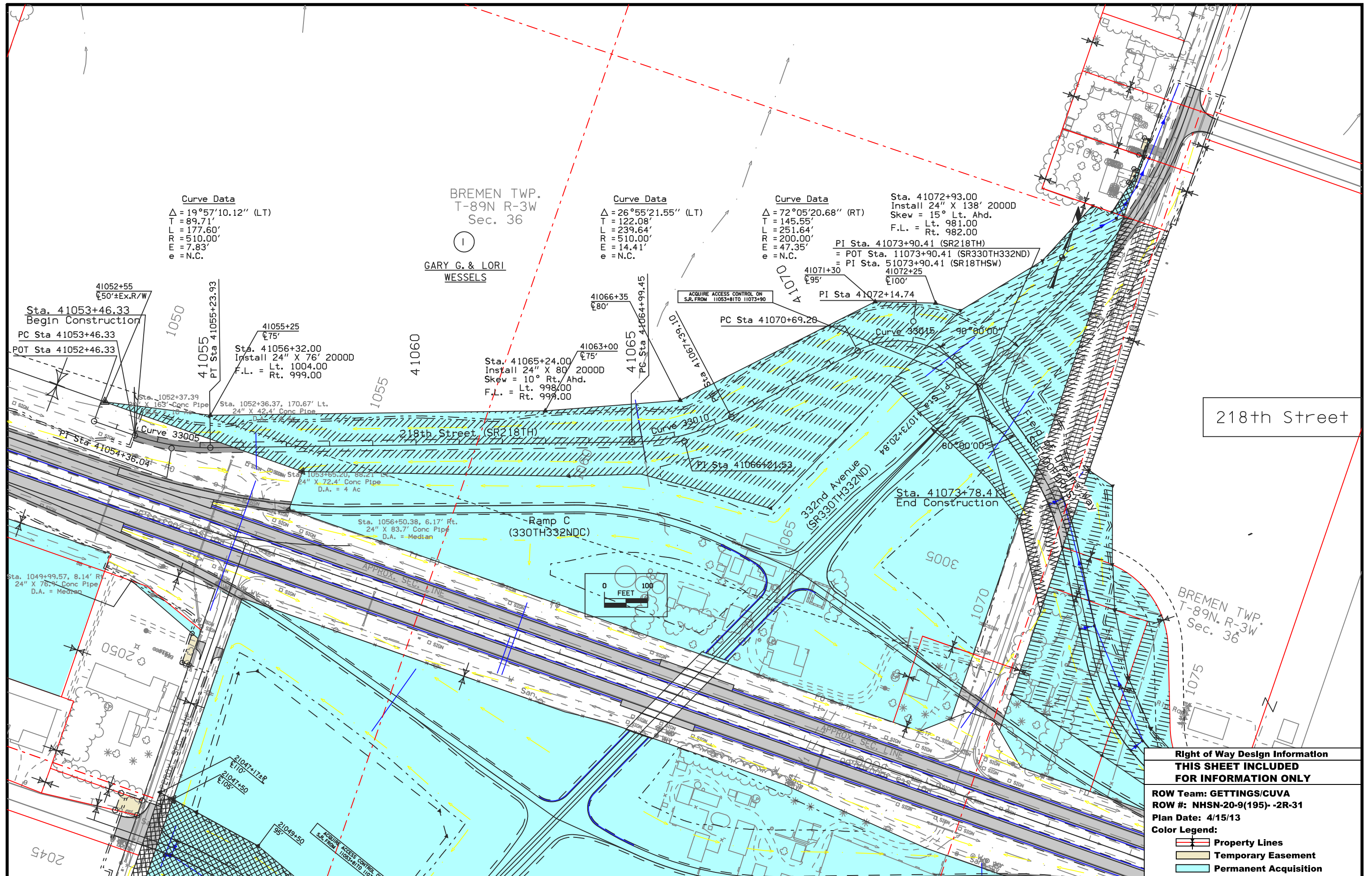


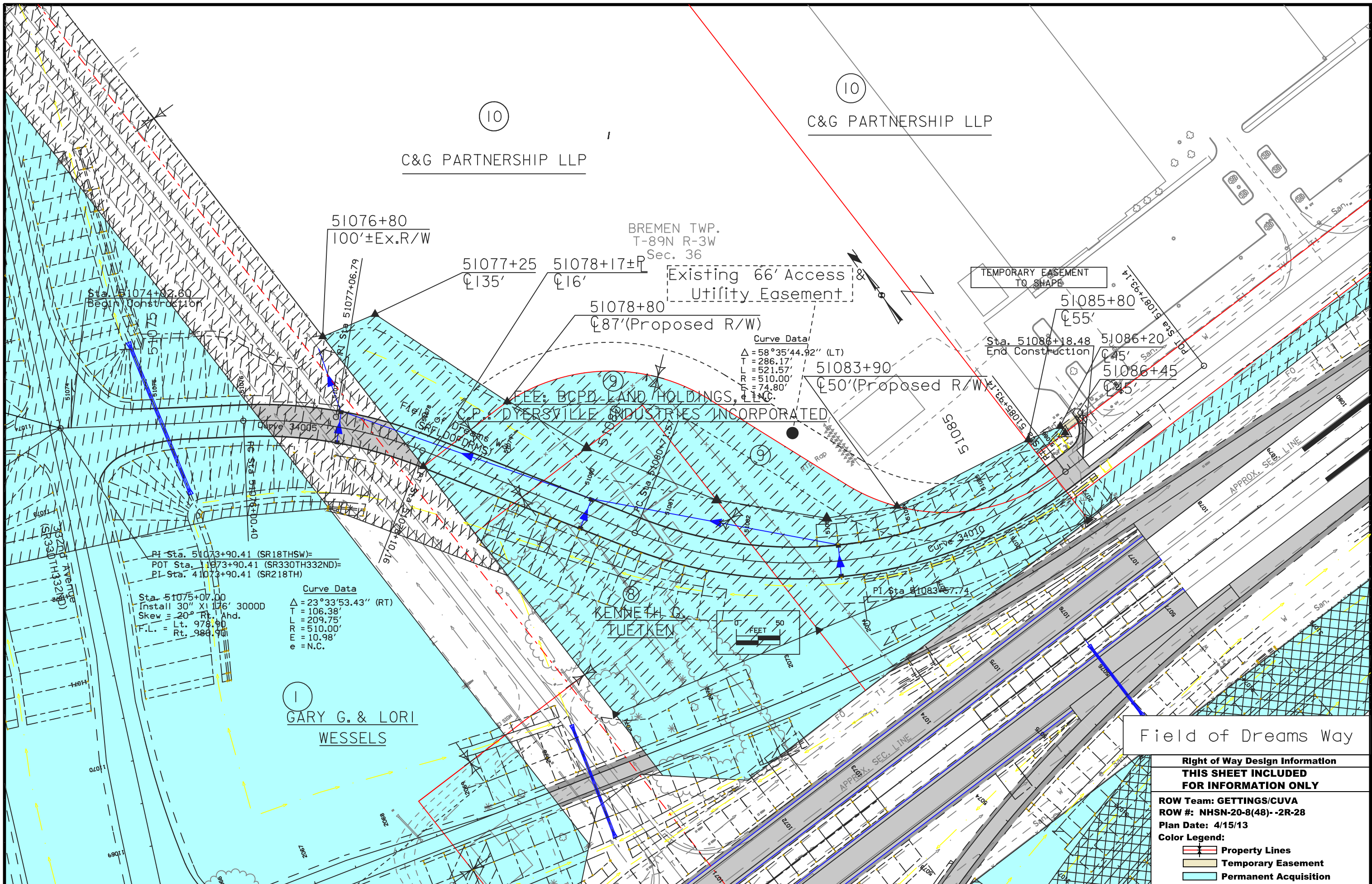
Curve Data  
 $\Delta = 04^{\circ}42'33.11''$  (RT)  
 T = 164.47'  
 L = 328.76'  
 R = 4000.00'  
 E = 3.38'  
 e = N.C.

Curve Data  
 $\Delta = 08^{\circ}01'22.68''$  (LT)  
 T = 52.60'  
 L = 105.02'  
 R = 750.00'  
 E = 1.84'  
 e = N.C.

<b>Right of Way Design Information</b>	
<b>THIS SHEET INCLUDED FOR INFORMATION ONLY</b>	
ROW Team: GETTINGS/CUVA	
ROW #: NHSN-20-8(48)-2R-28	
Plan Date: 4/15/13	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition

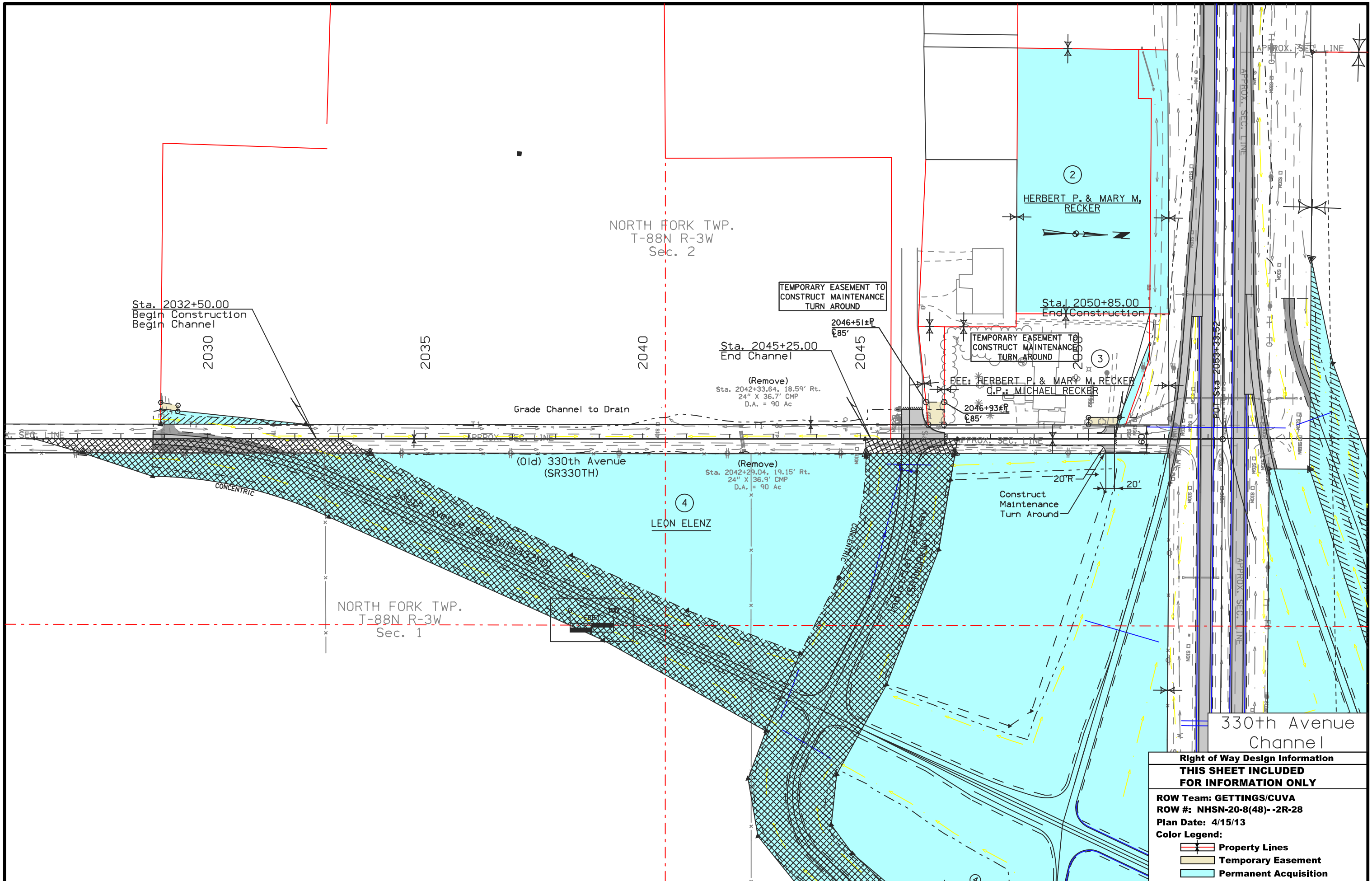






**Field of Dreams Way**

<b>Right of Way Design Information</b>	
<b>THIS SHEET INCLUDED FOR INFORMATION ONLY</b>	
ROW Team: GETTINGS/CUVA	
ROW #: NHSN-20-8(48)-2R-28	
Plan Date: 4/15/13	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition



330th Avenue Channel

<b>Right of Way Design Information</b>	
<b>THIS SHEET INCLUDED FOR INFORMATION ONLY</b>	
ROW Team: GETTINGS/CUVA	
ROW #: NHSN-20-8(48)-2R-28	
Plan Date: 4/15/13	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition

**TRAFFIC CONTROL PLAN**

**STAGING NOTES**

US 20  
At all times, at least one lane of traffic shall be maintained on US 20 in each direction.

330th AVENUE  
330th Avenue will be closed at US 20 until the new interchange is open to traffic.  
Iowa DOT staff will sign a detour route along 320th Avenue to 225th Street.

332nd AVENUE  
332nd Avenue will be closed at US 20 until the new interchange is open to traffic.  
Iowa DOT staff will sign a detour route along 320th Avenue to 210th Street. (Alternate: 7th Street SW to 12th Avenue SW)

320th AVENUE  
320th Avenue will remain open until the new interchange is open to traffic.  
Once the interchange is open to traffic, 320th will be closed at US 20.

7th STREET SW  
7th Street SW will remain open until the new interchange is open to traffic.  
Once the interchange is open to traffic, 7th Street SW will be closed at US 20.

Borrow areas are located on both sides of US 20 to avoid hauling across 20.

Stage 1A  
Traffic Control  
Close 330th Avenue south of the proposed southerly tie-in.  
Maintain access to existing Industrial Parkway via existing 330th Avenue to the north.

Construction  
Construct new 330th Avenue, between southerly tie-in and Industrial Parkway.  
Construct the extension of Industrial Parkway between existing 330th Avenue and 221st Street.  
Construct 221st Street, between new 330th Avenue and the US-20 Access to the east.  
Obliterate existing 330th Avenue south of Industrial Parkway to new tie-in and re-establish existing drainage.

Stage 1B  
Traffic Control  
EB and WB traffic shifted to outside lanes to construct median crossovers.  
Move Industrial Parkway traffic to new construction (Industrial Parkway extension and 221st Street).

Construction  
Construct both median crossovers.

Stage 1C  
Traffic Control  
EB and WB traffic shifted to WB lanes utilizing new median crossovers, one lane in each direction.  
Close access to 330th Avenue and 332nd Avenue at US 20. Construct turnaround on 330th Avenue.  
Maintain access to existing Industrial Parkway via extension of Industrial Parkway and 221st Street.  
Maintain access to existing Field of Dreams Way via 7th Street SW.

Construction  
Reconstruct EB lanes of US 20. Construct Ramp B, Ramp D, and 330th Avenue between Industrial Parkway and Ramps B and D.

Stage 2  
Traffic Control  
EB and WB traffic shifted to newly constructed EB lanes utilizing median crossovers, one lane in each direction.  
Access to 330th Avenue and 332nd Avenue to remain closed at US 20.  
Maintain access to existing Industrial Parkway via extension of Industrial Parkway and 221st Street.  
Maintain access to existing Field of Dreams Way via 7th Street SW.

Construction  
Reconstruct WB lanes of US 20. Construct Ramp A, Ramp C, 332nd Avenue, Field of Dreams Way, and 218th Street.  
Remove 332nd Avenue between US 20 and Field of Dreams Way.










Stage 3  
Traffic Control  
EB and WB traffic shifted to outside lanes to remove median crossovers and construct median bridge pier.  
Maintain access to existing Industrial Parkway via extension of Industrial Parkway and 221st Street.

Construction  
Construct 330th Avenue/332nd Avenue bridge over US 20.  
Construct bridge approaches.  
Remove 7th Street SW access at US 20.  
Remove 320th Street access at US 20 and construct turnaround.  
Remove access to 221st Street at US 20 opposite 7th Street SW.

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

SHADING	Design Color No.	
Green, Light	(225)	Existing Pavement Shading
Gray, Light	(48)	Previously Constructed Pavement Shading
Gray, Med	(80)	Previously Constructed Granular Surface Shading
Blue, Light	(230)	Proposed Pavement Shading
Lavender	(9)	Temporary Pavement Shading
Brown, Light	(236)	Proposed Grading Limits Shading
Brown, Med	(237)	Future Proposed Pavement Shading

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



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

**PLAN VIEW COLOR LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS**

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

SHADING	Design Color No.	
Green, Light	(225)	Existing Pavement Shading
Gray, Light	(48)	Previously Constructed Pavement Shading
Gray, Med	(80)	Previously Constructed Granular Surface Shading
Blue, Light	(230)	Proposed Pavement Shading
Tan	(8)	Proposed Granular Surface Shading
Lavender	(9)	Temporary Pavement Shading
Brown, Light	(236)	Proposed Grading Limits Shading
Pink, Dark	(13)	Proposed MSE or CIP Wall Shading
Red	(3)	Proposed Bridge Shading and Sign Trusses
Black w/Gray, Light Fill	(0,48)	Previously Constructed Structure

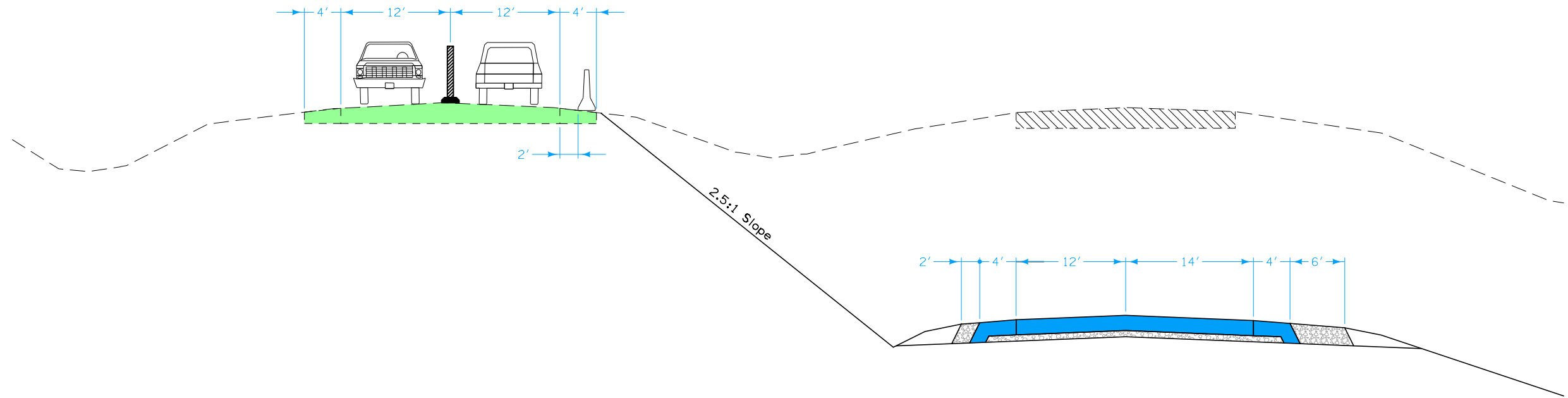
**PLAN VIEW PATTERN AND SYMBOL LEGEND  
OF TRAFFIC CONTROL AND STAGING SHEETS**

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

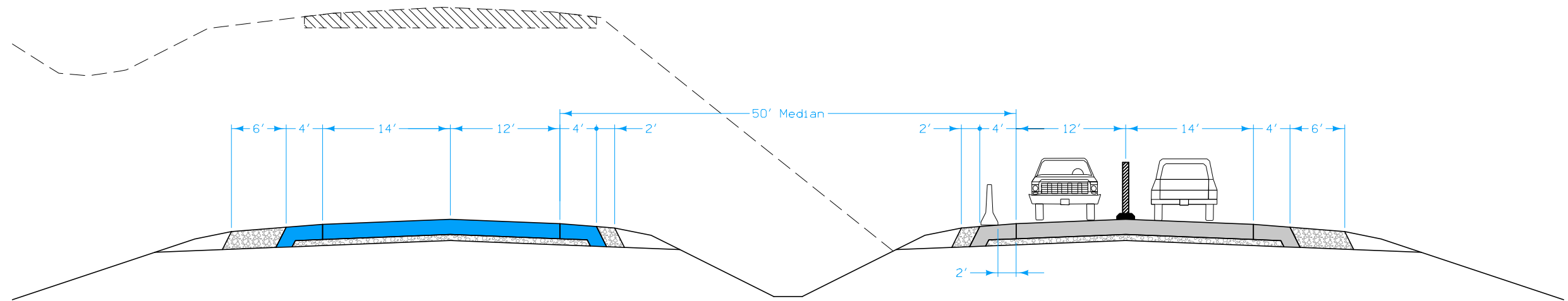
NOTE: Device spacing according to Standard Road Plans unless specifically dimensioned.

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

(COVERS SHEET SERIES J)

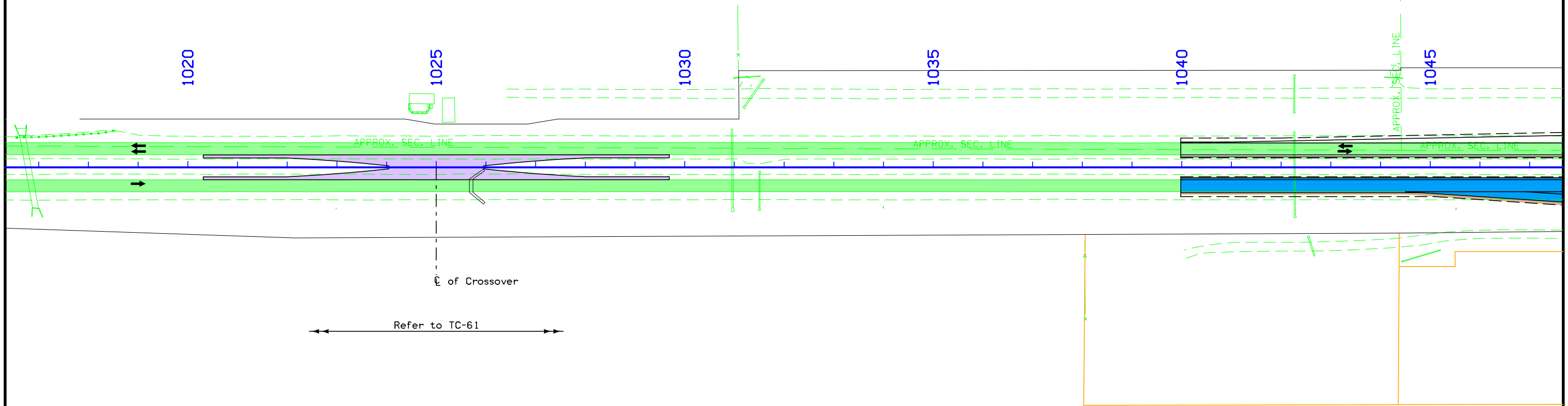


U.S. 20 - STAGE 1 - STA. 1062+00.00

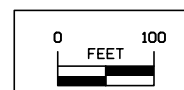


U.S. 20 - STAGE 2 - STA. 1062+00.00

BREMEN TWP.  
T-89N R-3W  
Sec. 35

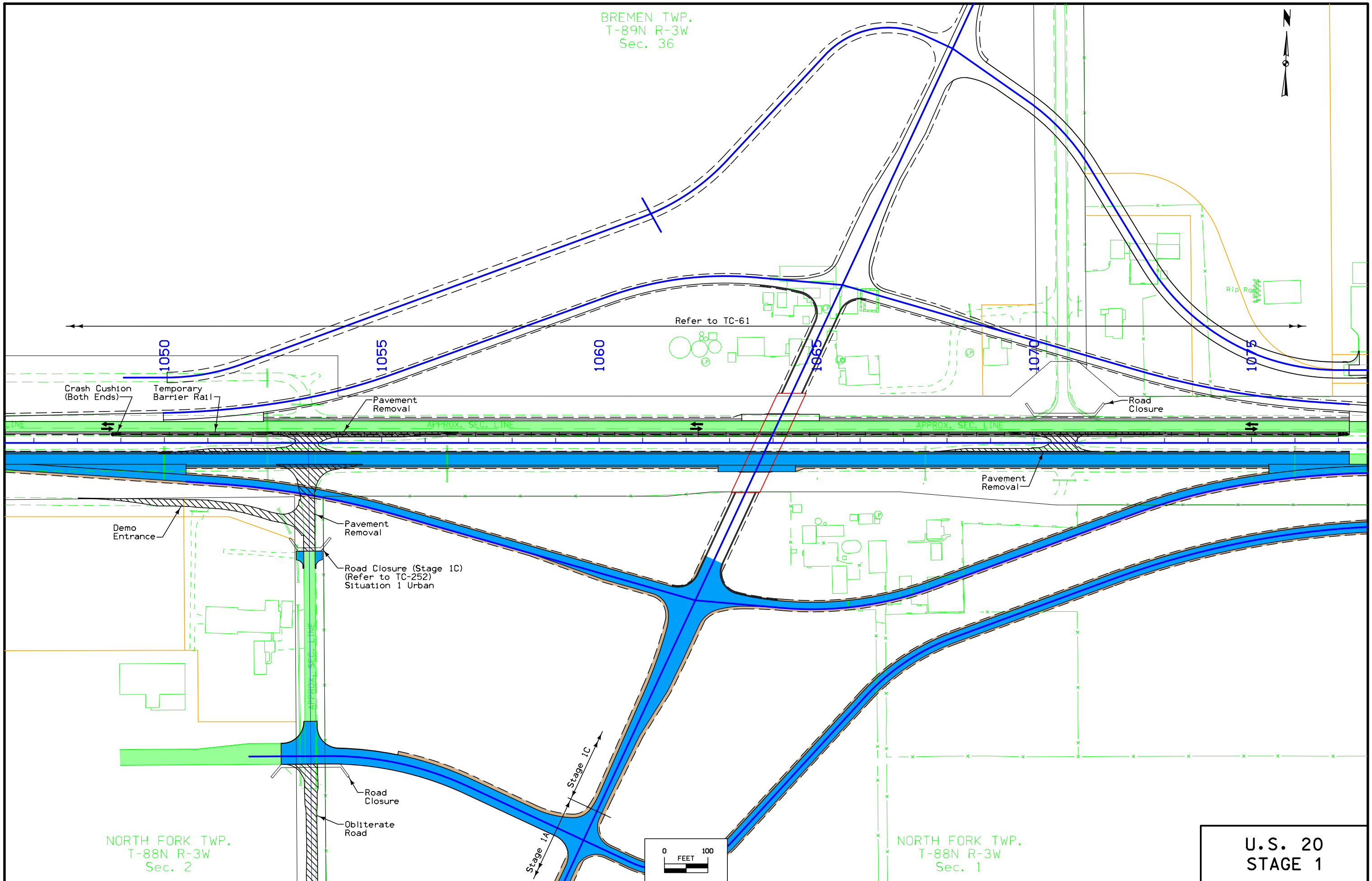


NORTH FORK TWP.  
T-88N R-3W  
Sec. 2



U.S. 20  
STAGE 1

BREMEN TWP.  
T-89N R-3W  
Sec. 36



NORTH FORK TWP.  
T-88N R-3W  
Sec. 2

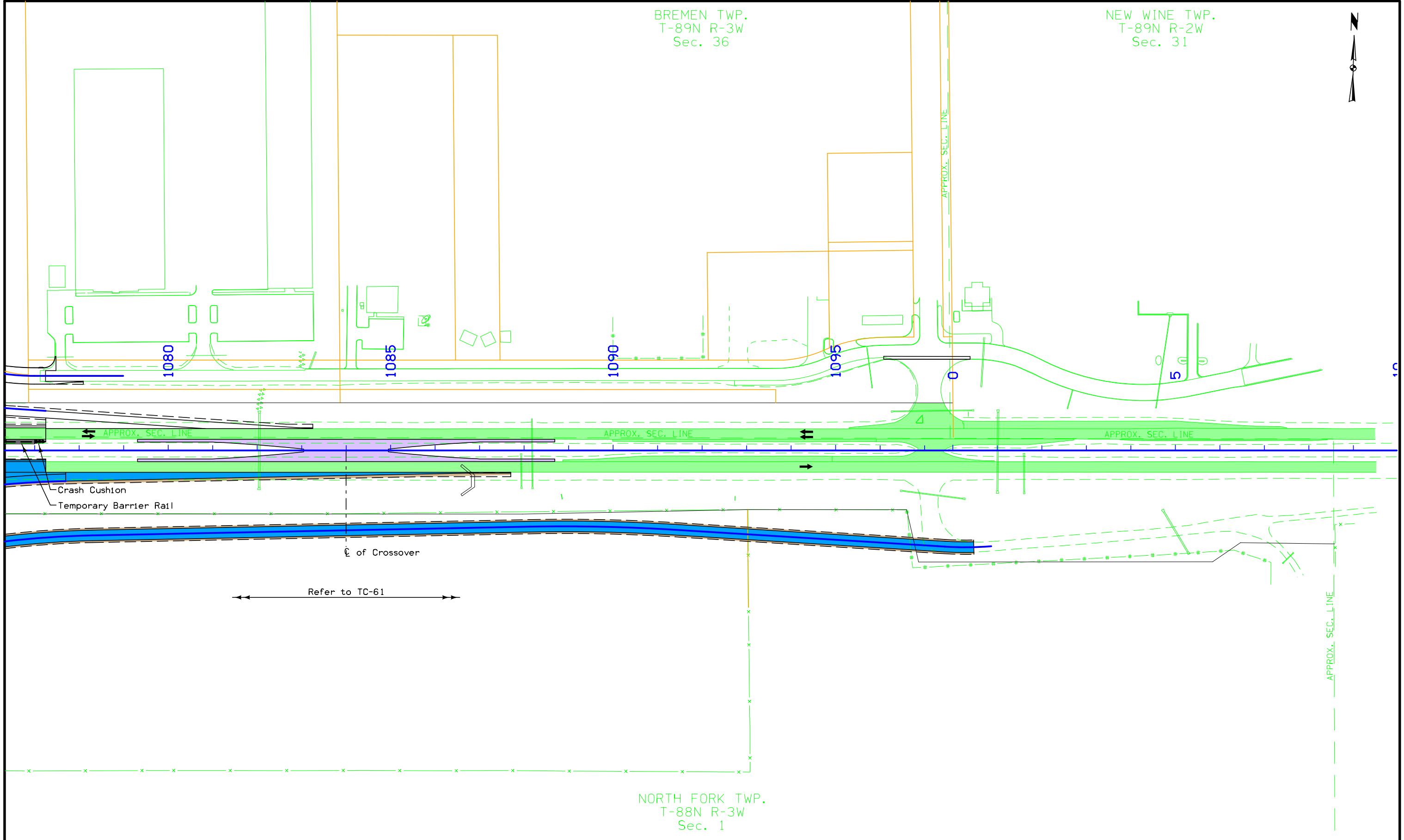
NORTH FORK TWP.  
T-88N R-3W  
Sec. 1

U.S. 20  
STAGE 1

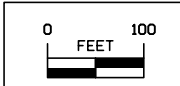


BREMEN TWP.  
T-89N R-3W  
Sec. 36

NEW WINE TWP.  
T-89N R-2W  
Sec. 31

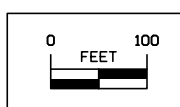
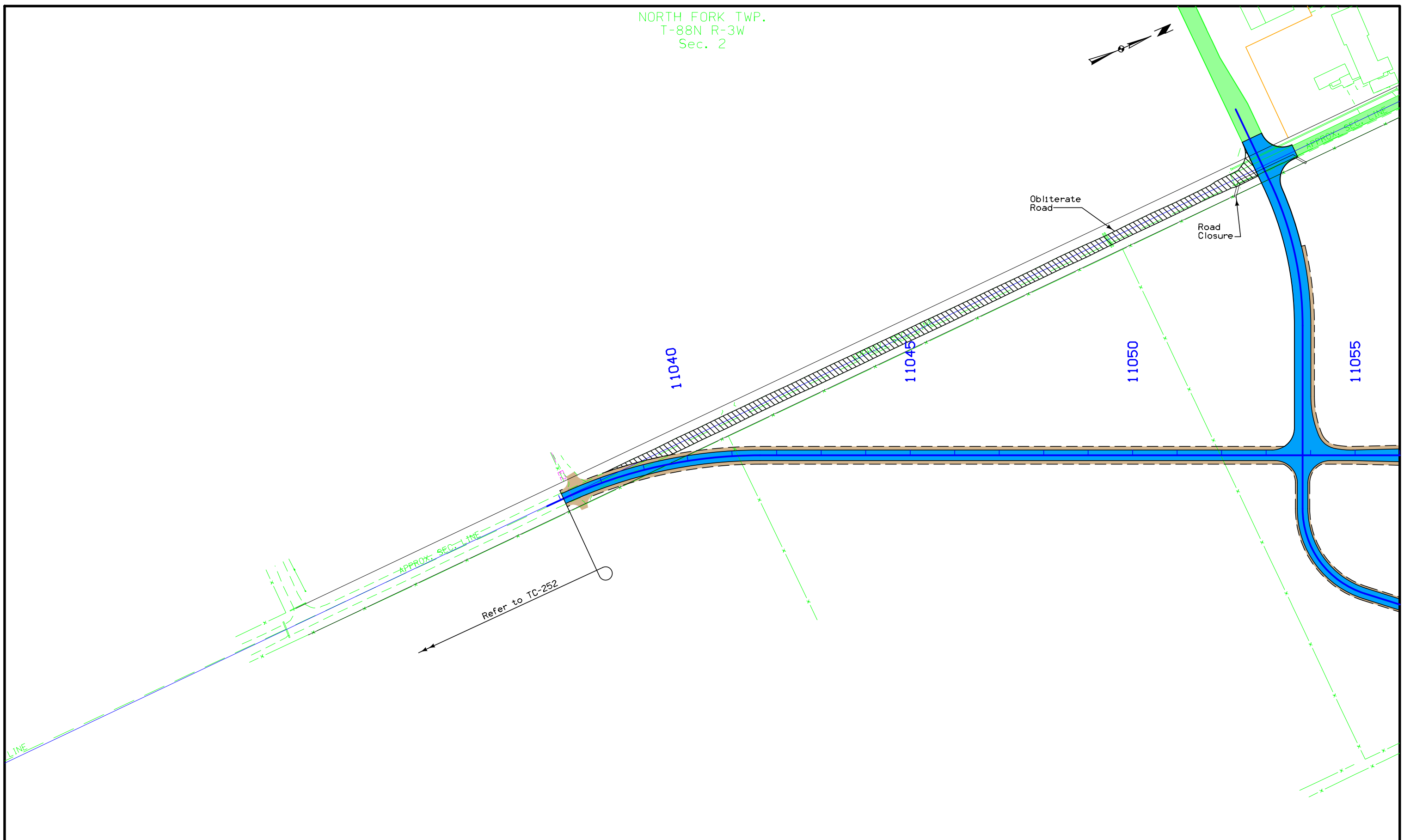
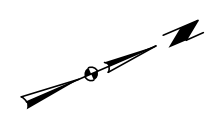


NORTH FORK TWP.  
T-88N R-3W  
Sec. 1



**U.S. 20  
STAGE 1**

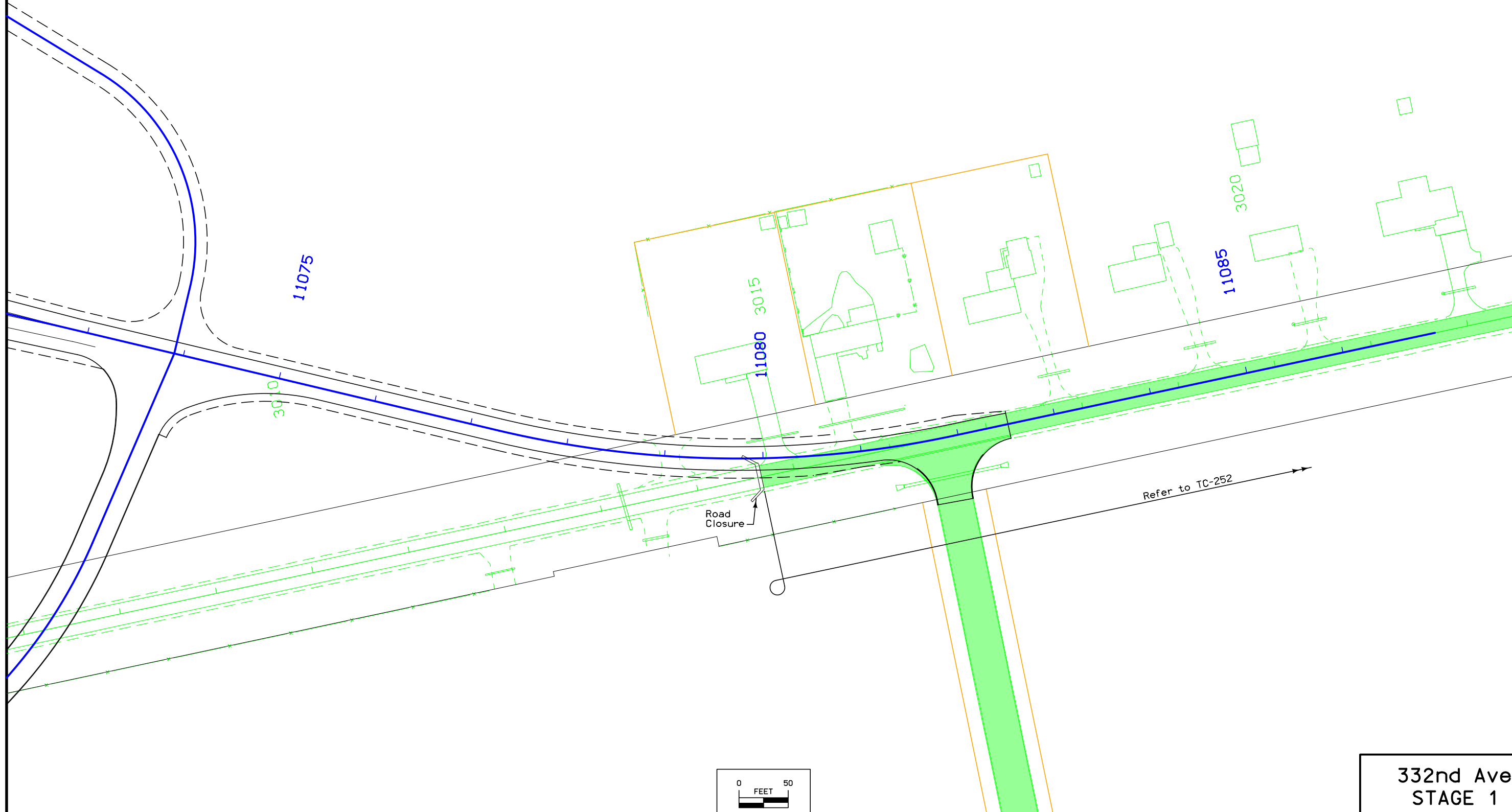
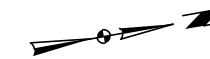
NORTH FORK TWP.  
T-88N R-3W  
Sec. 2



NORTH FORK TWP.  
T-88N R-3W  
Sec. 1

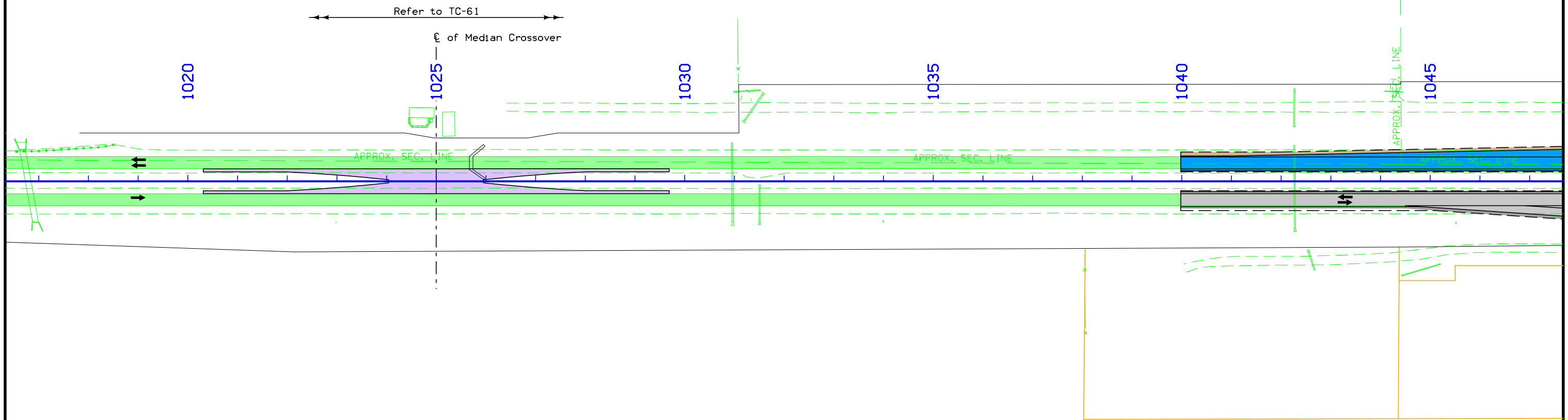
330th Ave  
STAGE 1

BREMEN TWP.  
T-89N R-3W  
Sec. 36

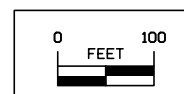


332nd Ave  
STAGE 1

BREMEN TWP.  
T-89N R-3W  
Sec. 35



NORTH FORK TWP.  
T-88N R-3W  
Sec. 2



U.S. 20  
STAGE 2

BREMEN TWP.  
T-89N R-3W  
Sec. 36



Pavement Removal

Rip Road

Refer to TC-61

1050

1055

1060

1065

1070

1075

Crash Cushion  
(Both Ends)

Temporary  
Barrier Rail

Demo  
Entrance

APPROX. SEC. LINE

APPROX. SEC. LINE

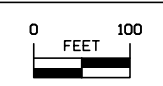
APPROX. SEC. LINE

Road  
Closure

Road  
Closure

NORTH FORK TWP.  
T-88N R-3W  
Sec. 2

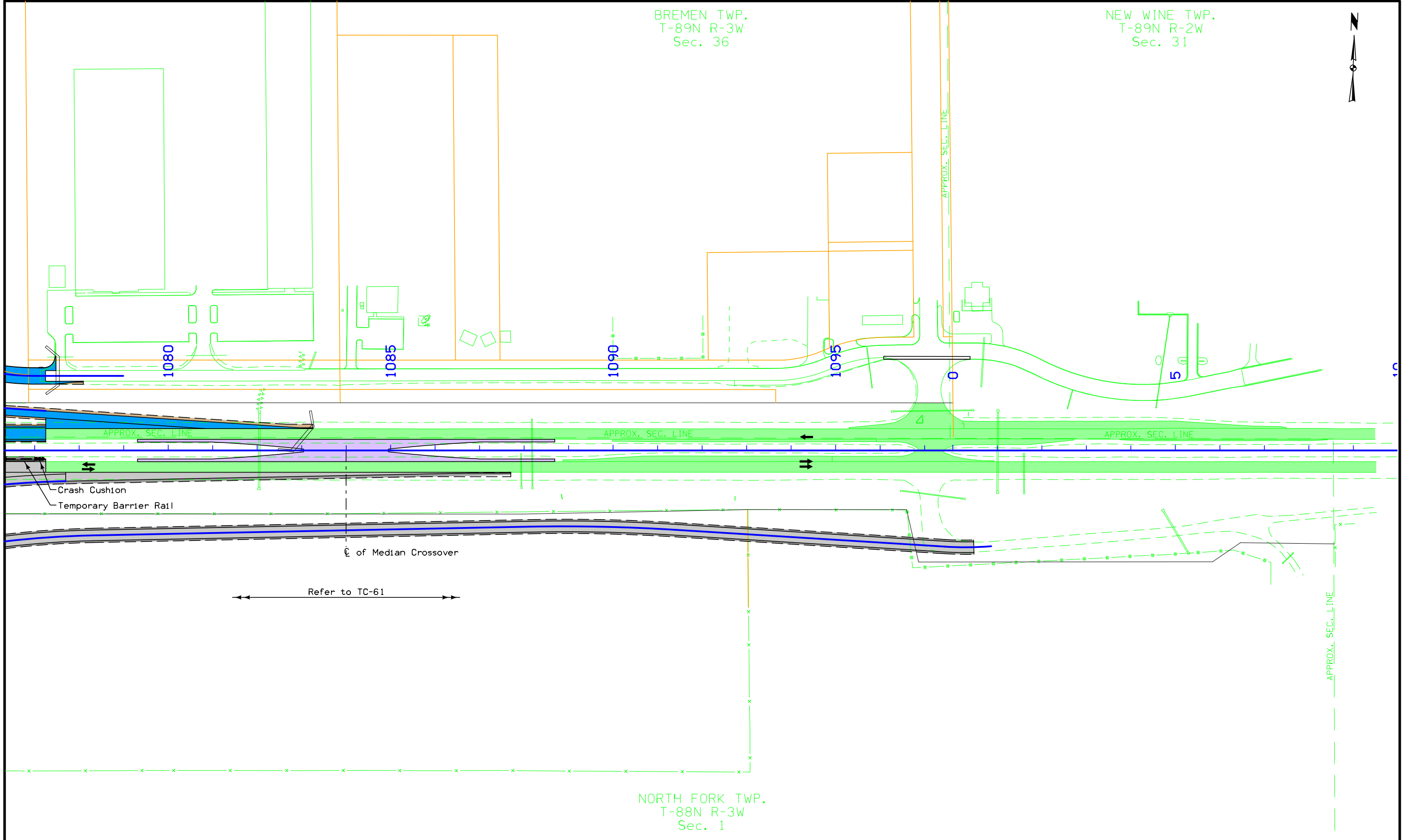
NORTH FORK TWP.  
T-88N R-3W  
Sec. 1



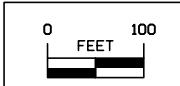
U.S. 20  
STAGE 2

BREMEN TWP.  
T-89N R-3W  
Sec. 36

NEW WINE TWP.  
T-89N R-2W  
Sec. 31

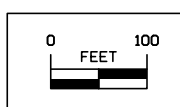
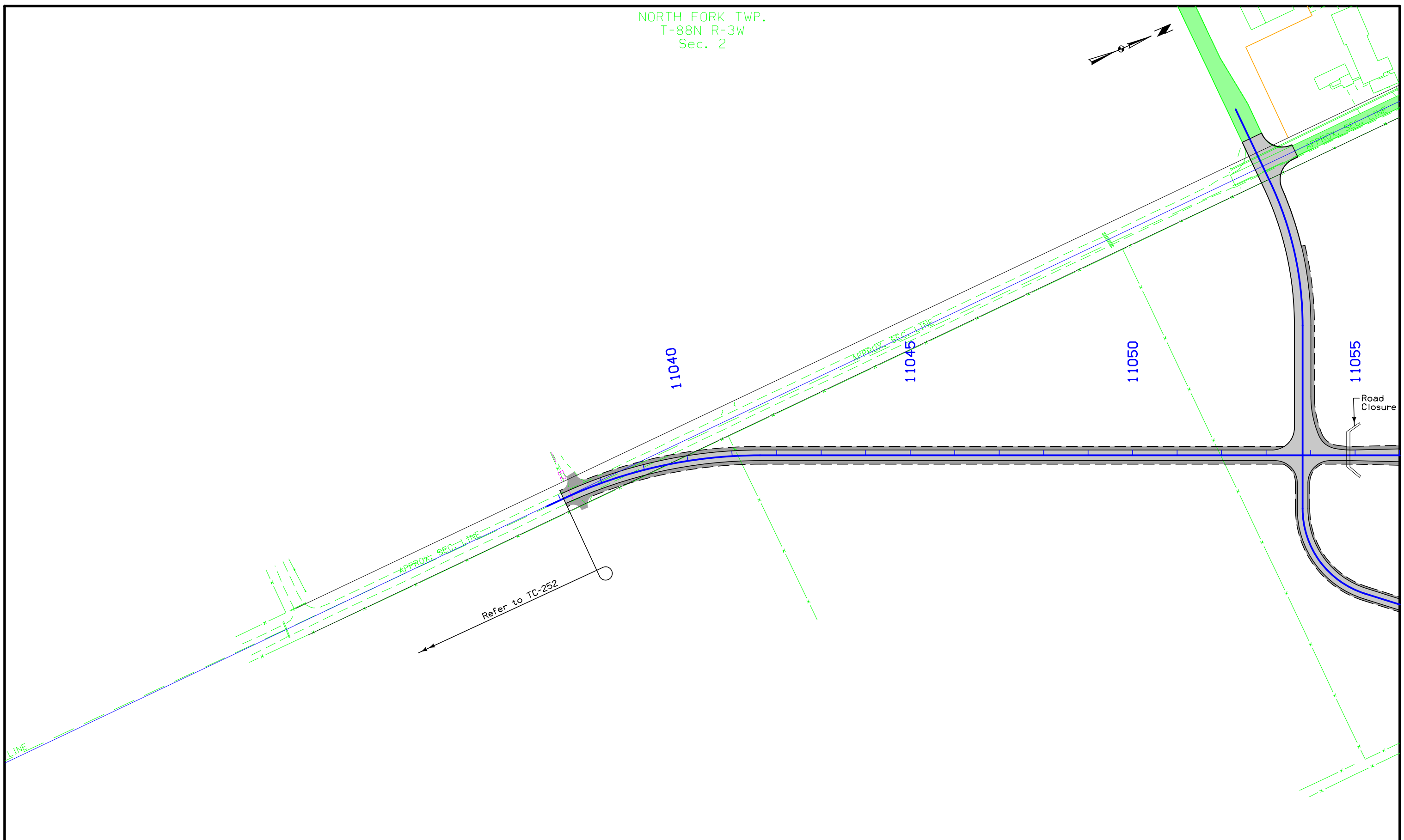


NORTH FORK TWP.  
T-88N R-3W  
Sec. 1



**U.S. 20  
STAGE 2**

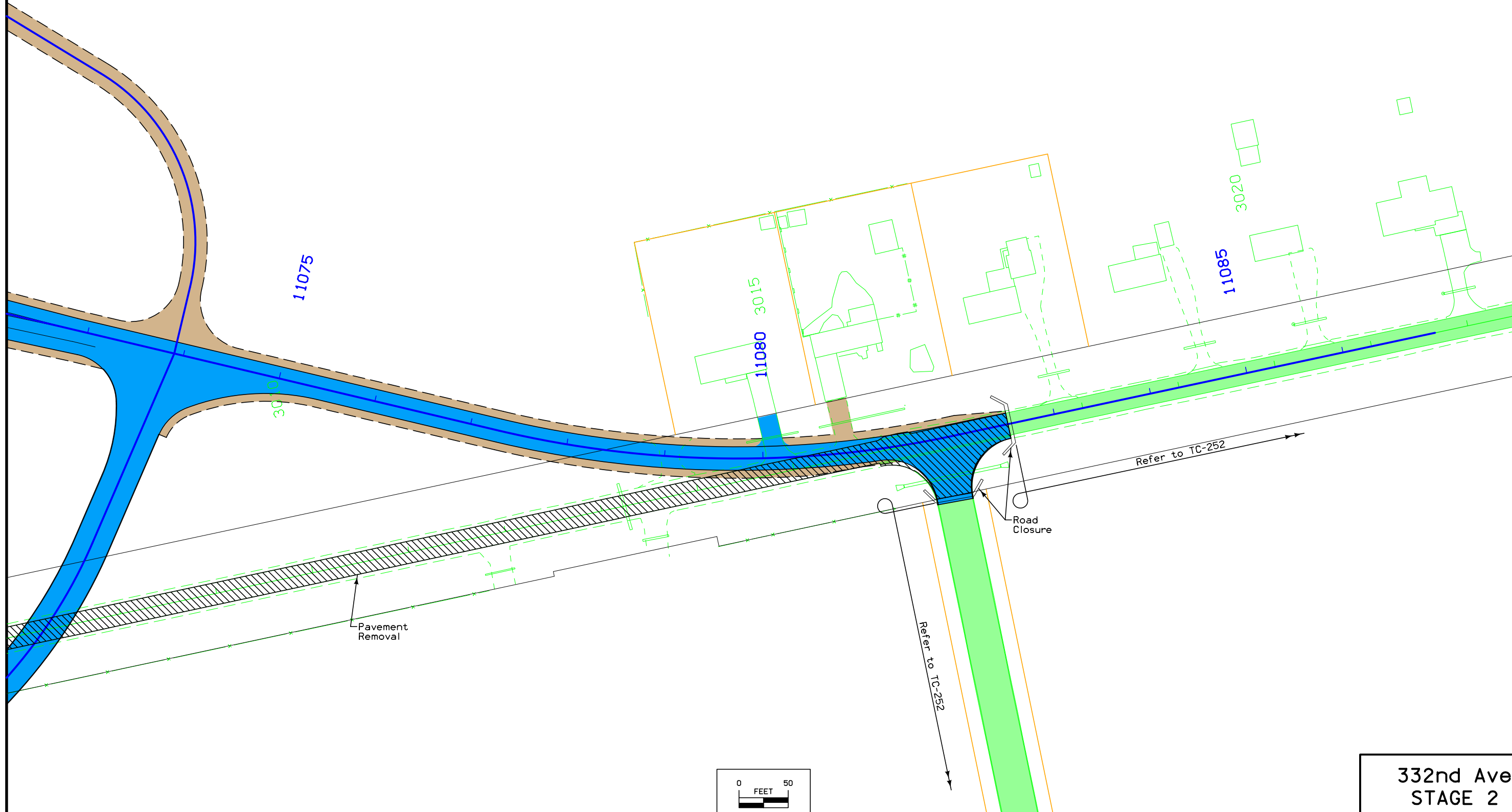
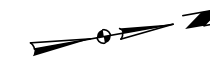
NORTH FORK TWP.  
T-88N R-3W  
Sec. 2



NORTH FORK TWP.  
T-88N R-3W  
Sec. 1

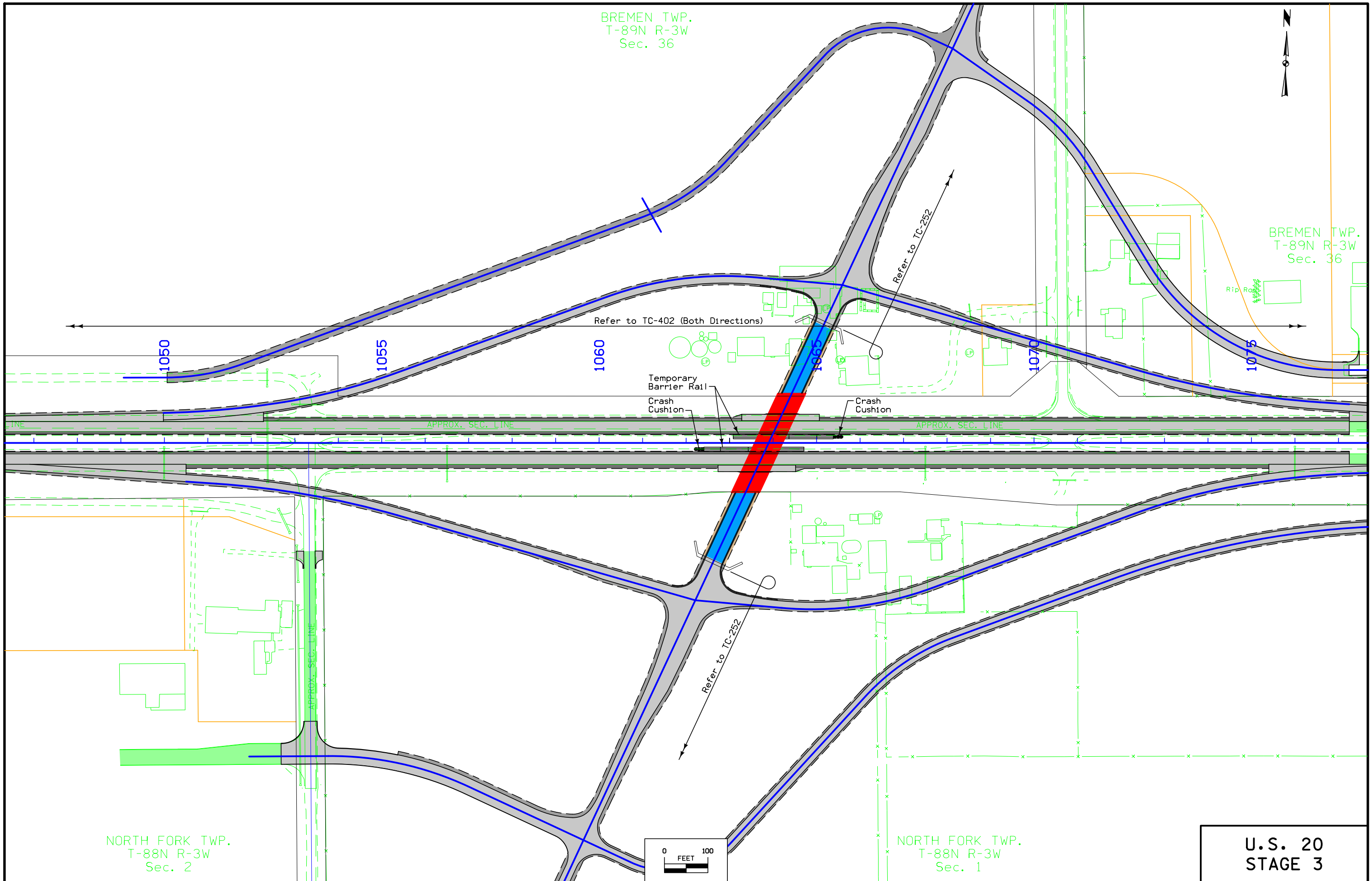
330th Ave  
STAGE 2

BREMEN TWP.  
T-89N R-3W  
Sec. 36



332nd Ave  
STAGE 2





BREMEN TWP.  
T-89N R-3W  
Sec. 36

BREMEN TWP.  
T-89N R-3W  
Sec. 36

Refer to TC-402 (Both Directions)

Refer to TC-252

Temporary  
Barrier Rail

Crash  
Cushion

Crash  
Cushion

APPROX. SEC. LINE

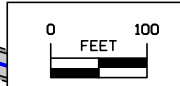
APPROX. SEC. LINE

APPROX. SEC. LINE

Refer to TC-252

NORTH FORK TWP.  
T-88N R-3W  
Sec. 2

NORTH FORK TWP.  
T-88N R-3W  
Sec. 1



U.S. 20  
STAGE 3

BREMEN TWP.  
T-89N R-3W  
Sec. 35

BREMEN TWP.  
T-89N R-3W  
Sec. 36

**Curve Data**  
 $\Delta = 24^\circ 50' 58.62''$  (RT)  
 $D = 07^\circ 09' 43.10''$   
 $R = 800.00'$   
 $T = 176.25'$   
 $L = 346.97'$   
 $E = 19.19'$   
 $e = 5.40\%$   
 $L = 130'$   
 $x = 48'$   
 $m = 39.0'$

**Curve Data**  
 $\Delta = 08^\circ 01' 17.07''$  (LT)  
 $D = 02^\circ 51' 53.24''$   
 $R = 2000.00'$   
 $T = 140.23'$   
 $L = 280.00'$   
 $E = 4.91'$   
 $e = 5.40\%$   
 $L = 168'$   
 $x = 62'$   
 $m = 50.4'$

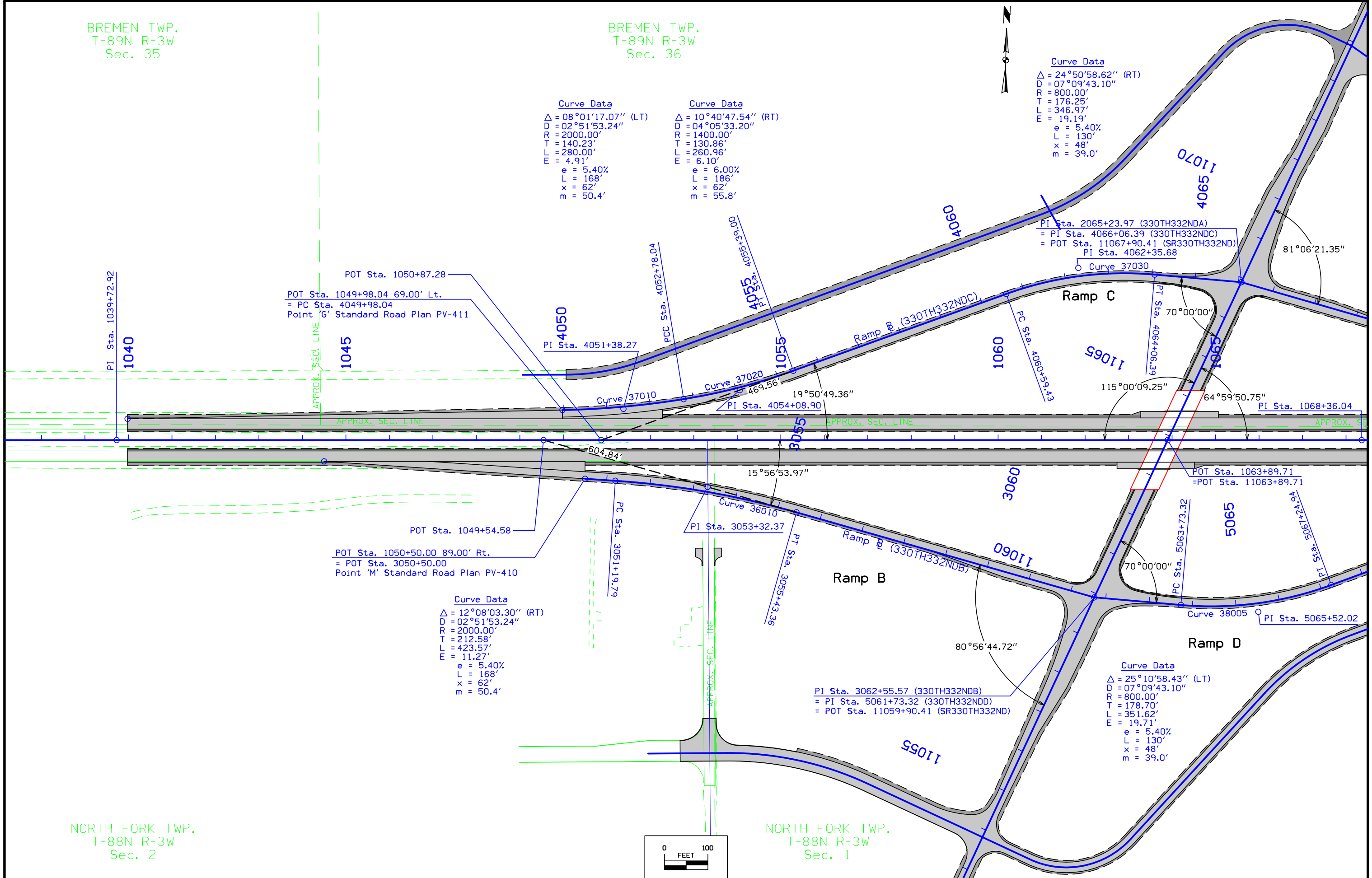
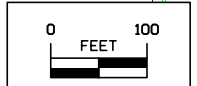
**Curve Data**  
 $\Delta = 10^\circ 40' 47.54''$  (RT)  
 $D = 04^\circ 05' 33.20''$   
 $R = 1400.00'$   
 $T = 130.86'$   
 $L = 260.96'$   
 $E = 6.10'$   
 $e = 6.00\%$   
 $L = 186'$   
 $x = 62'$   
 $m = 55.8'$

**Curve Data**  
 $\Delta = 25^\circ 10' 58.43''$  (LT)  
 $D = 07^\circ 09' 43.10''$   
 $R = 800.00'$   
 $T = 178.70'$   
 $L = 351.62'$   
 $E = 19.71'$   
 $e = 5.40\%$   
 $L = 130'$   
 $x = 48'$   
 $m = 39.0'$

**Curve Data**  
 $\Delta = 12^\circ 08' 03.30''$  (RT)  
 $D = 02^\circ 51' 53.24''$   
 $R = 2000.00'$   
 $T = 212.58'$   
 $L = 423.57'$   
 $E = 11.27'$   
 $e = 5.40\%$   
 $L = 168'$   
 $x = 62'$   
 $m = 50.4'$

NORTH FORK TWP.  
T-88N R-3W  
Sec. 2

NORTH FORK TWP.  
T-88N R-3W  
Sec. 1



BREMEN TWP.  
T-89N R-3W  
Sec. 36



Curve Data  
 $\Delta = 24^\circ 50' 58.62''$  (RT)  
D = 07°09'43.10"  
R = 800.00'  
T = 176.25'  
L = 346.97'  
E = 19.19'  
e = 5.40%  
L = 130'  
x = 48'  
m = 39.0'

Curve Data  
 $\Delta = 12^\circ 17' 44.12''$  (LT)  
D = 02°51'53.24"  
R = 2000.00'  
T = 215.43'  
L = 429.20'  
E = 11.57'  
e = 5.40%  
L = 168'  
x = 62'  
m = 50.4'

PI Sta. 2065+23.97 (330TH332NDA)  
= PI Sta. 4066+06.39 (330TH332NDC)  
= POT Sta. 11067+90.41 (SR330TH332ND)  
PI Sta. 4062+35.68

POT Sta. 1077+25.00 89.00' Lt.  
= POT Sta. 2077+25.00  
Point 'M' Standard Road Plan PV-410

Ramp C

Ramp A

4065  
1070

2070

2075

1080

1090

11065  
59011

1065

1070

1075

5075

81°06'21.35"

70°00'00"

PI Sta. 1068+36.04

PI Sta. 2074+44.28

POT Sta. 1078+16.44

16°06'34.79"

APPROX. SEC. LINE

APPROX. SEC. LINE

APPROX. SEC. LINE

POT Sta. 1063+89.71  
= POT Sta. 11063+89.71

20°10'44.99"

470.20'

POT Sta. 1077+69.92 69.00' Rt.  
= POT Sta. 5077+69.92  
Point 'G' Standard Road Plan PV-411

POT Sta. 1076+72.72

70°00'00"

Curve 38005 PI Sta. 5065+52.02

PI Sta. 5073+55.80

PI Sta. 5076+30.15

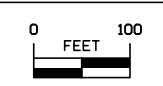
Ramp D

Ramp B (330TH332NDD)

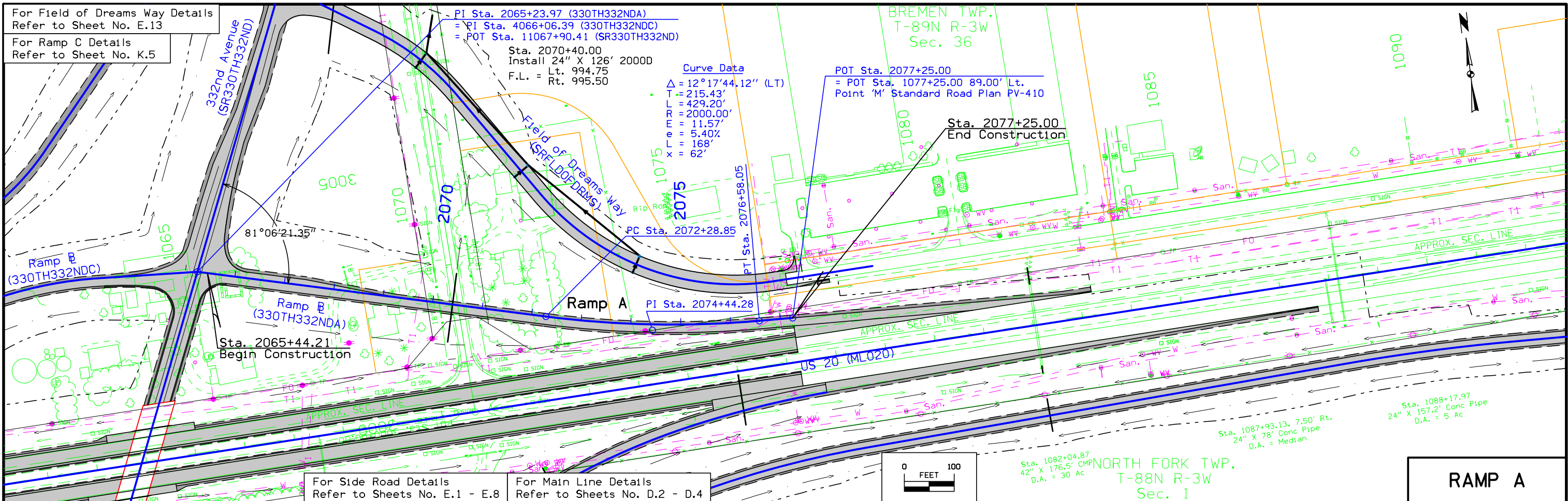
Curve Data  
 $\Delta = 11^\circ 00' 43.17''$  (RT)  
D = 04°05'33.20"  
R = 1400.00'  
T = 134.95'  
L = 269.07'  
E = 6.49'  
e = 6.00%  
L = 186'  
x = 62'  
m = 55.8'

Curve Data  
 $\Delta = 08^\circ 01' 17.07''$  (RT)  
D = 02°51'53.24"  
R = 2000.00'  
T = 140.23'  
L = 280.00'  
E = 4.91'  
e = 5.40%  
L = 168'  
x = 62'  
m = 50.4'

Curve Data  
 $\Delta = 25^\circ 10' 58.43''$  (LT)  
D = 07°09'43.10"  
R = 800.00'  
T = 178.70'  
L = 351.62'  
E = 19.71'  
e = 5.40%  
L = 130'  
x = 48'  
m = 39.0'

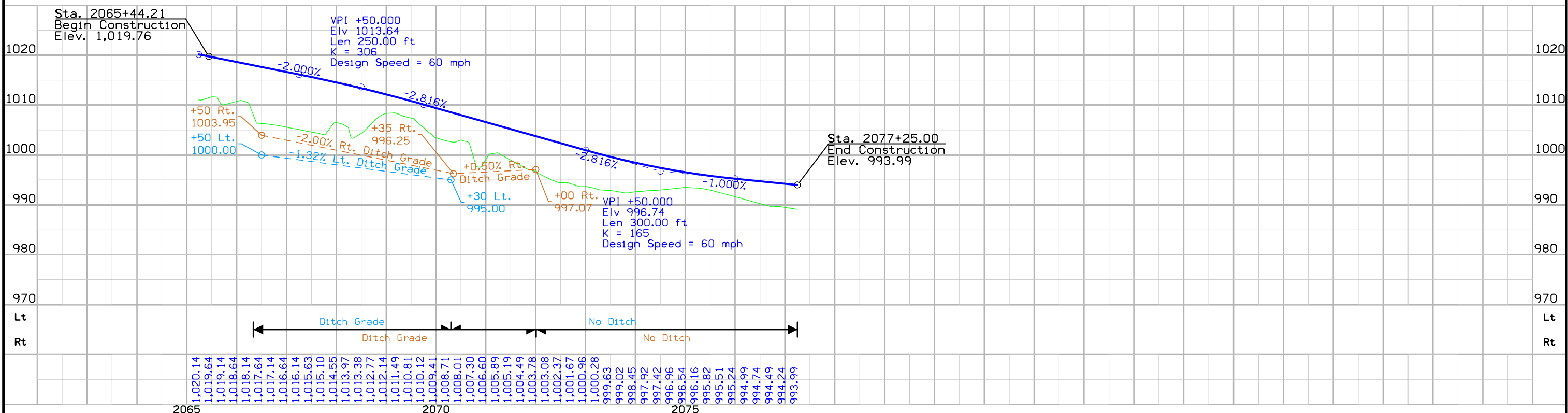


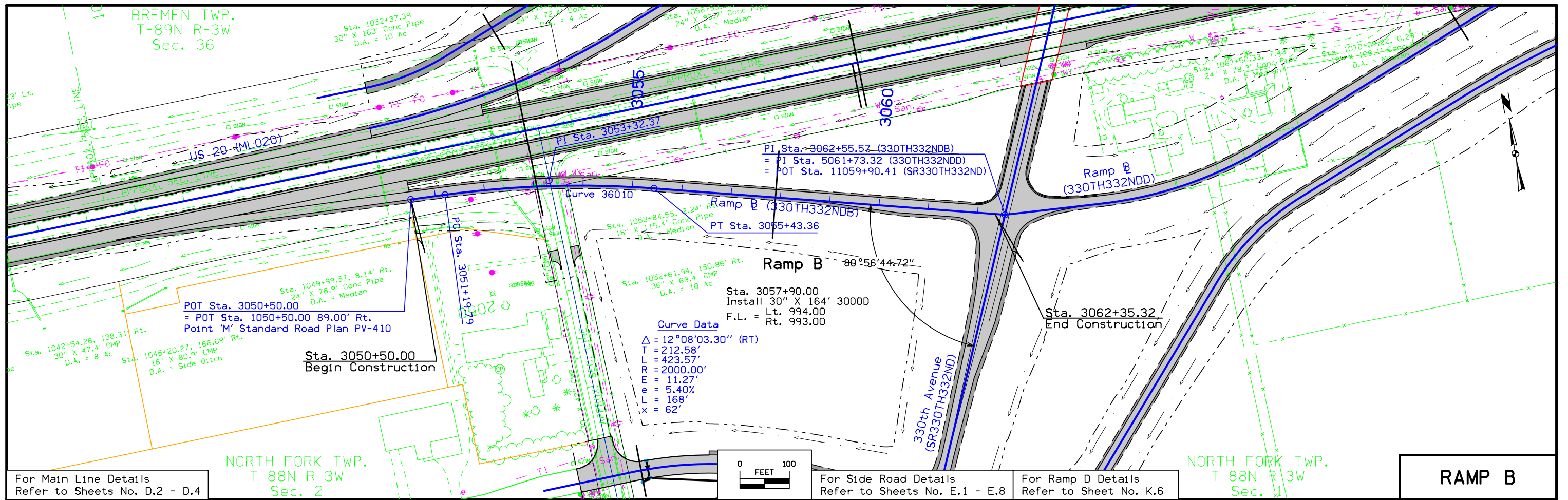
NORTH FORK TWP.  
T-88N R-3W  
Sec. 1



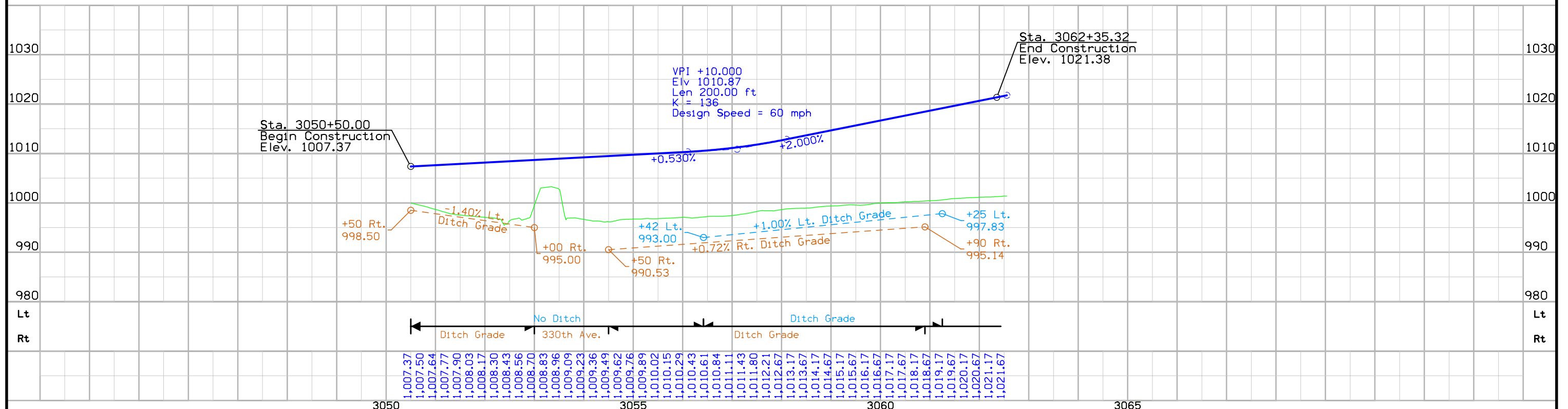
Fill+30% = 25632 CY

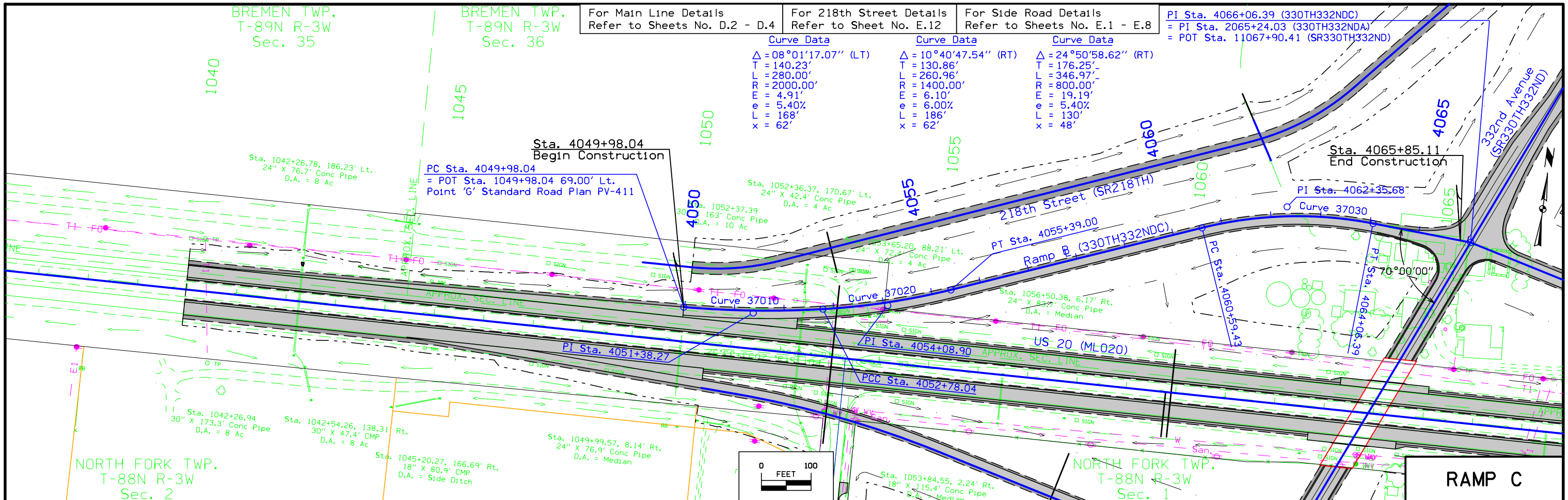
Cut = 5849 CY  
Borrow = 19783 CY  
25632 CY



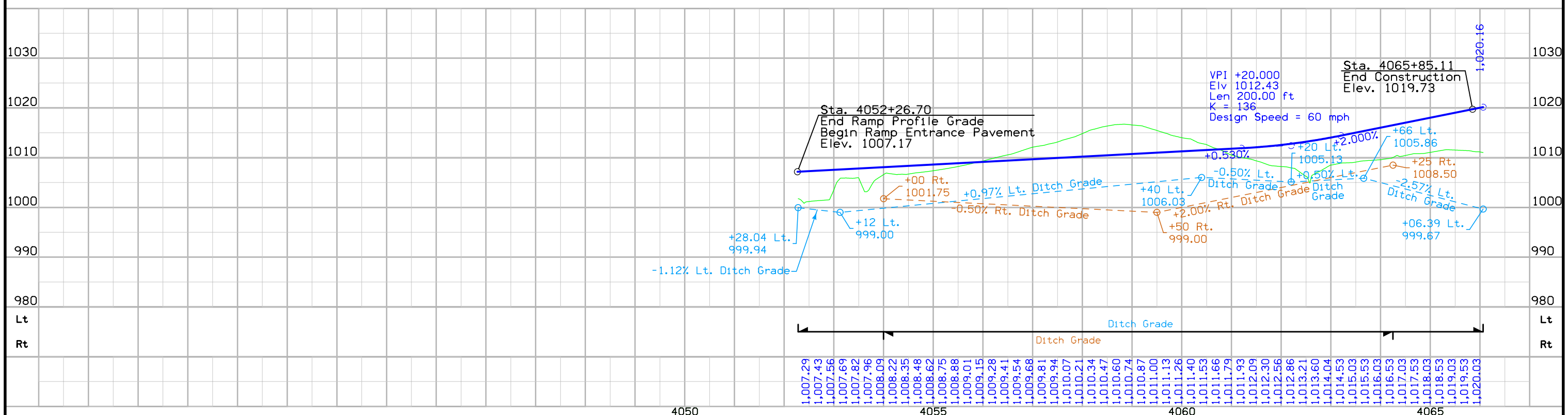


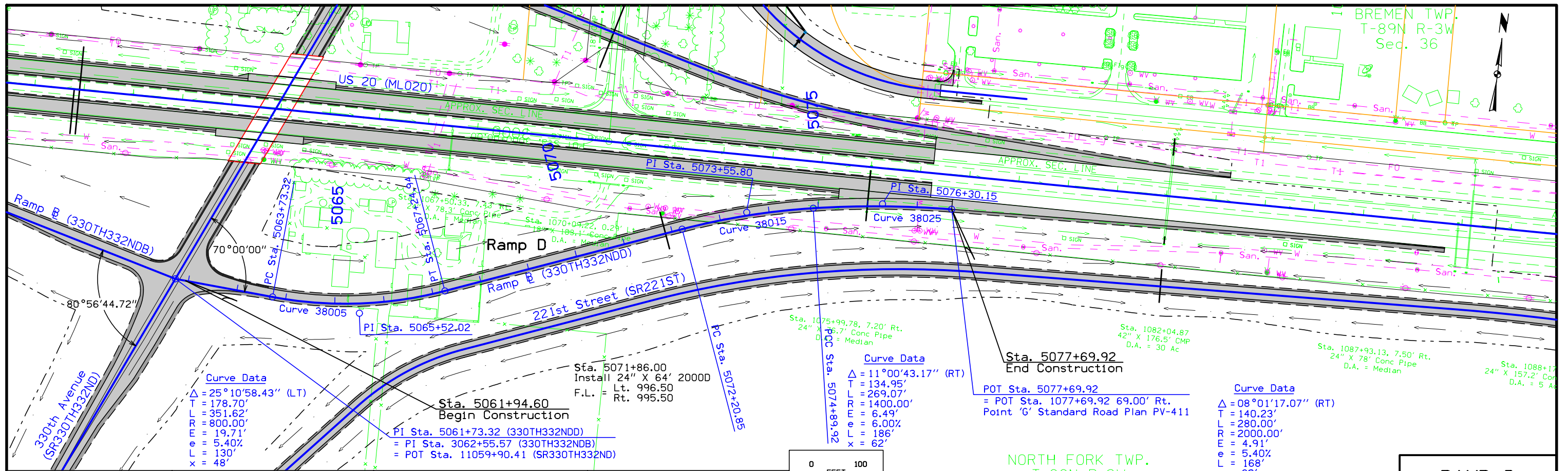
Fill+30% = 68124 CY      Cut = 6512 CY  
 Borrow = 61612 CY      68124 CY





← Cut = 34320 CY Fill+30% = 8865 CY Waste = 25455 CY 34320 CY →



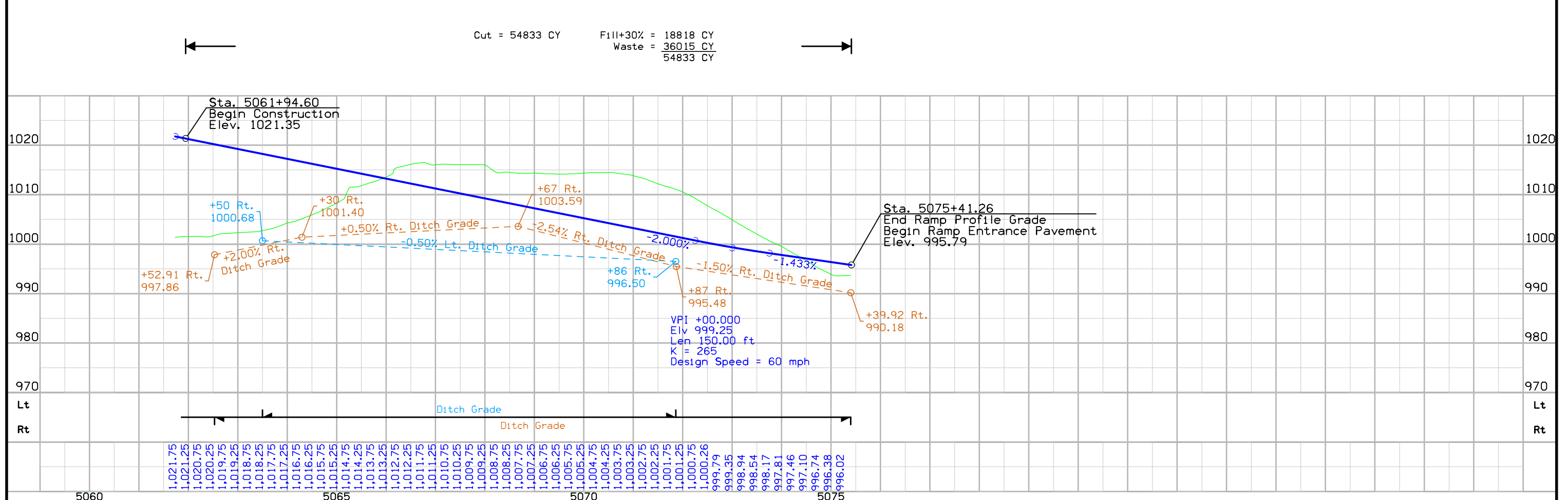


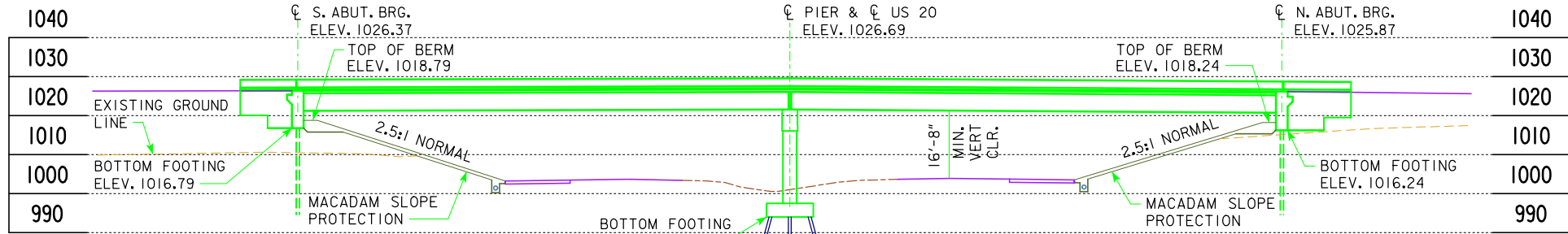
For Ramp B Details Refer to Sheet No. K.4  
 For Side Road Details Refer to Sheets No. E.1 - E.8  
 For 221st Street Details Refer to Sheets No. E.10 - E.11  
 For Main Line Details Refer to Sheets No. D.2 - D.4

0 100 FEET

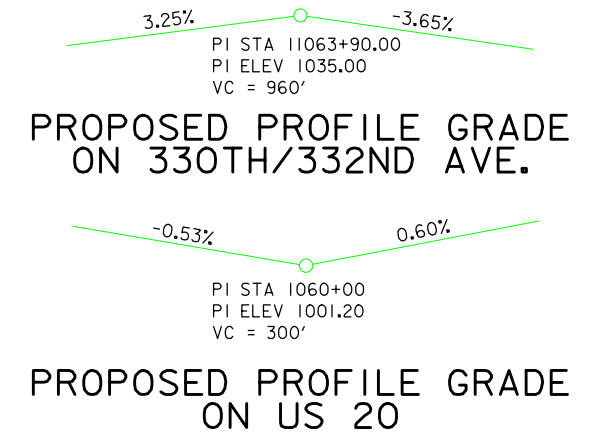
NORTH FORK TWP.  
T-88N R-3W  
Sec. 1

**RAMP D**





LONGITUDINAL SECTION ALONG CL BRIDGE ROADWAY



MINIMUM VERTICAL CLEARANCE

OVERHEAD STATION	11064+42.70
OVERHEAD ELEVATION	1025.93
DEPTH OF SUPERSTRUCTURE	5.25'
UNDER PASS STATION	1064+37.12
UNDER PASS ELEVATION	1003.82
MINIMUM VERTICAL CLEARANCE	16'-8"

PIER SHALL BE DESIGNED FOR COLLISION FORCE.  
 2-SPAN GRADING SHOWN (SEE EW 203/204 -5' OFFSET)  
 TOP OF BRIDGE DECK CROWN IS 0.03' BELOW PROFILE GRADE.  
 TL-4 BRIDGE RAILING PROPOSED

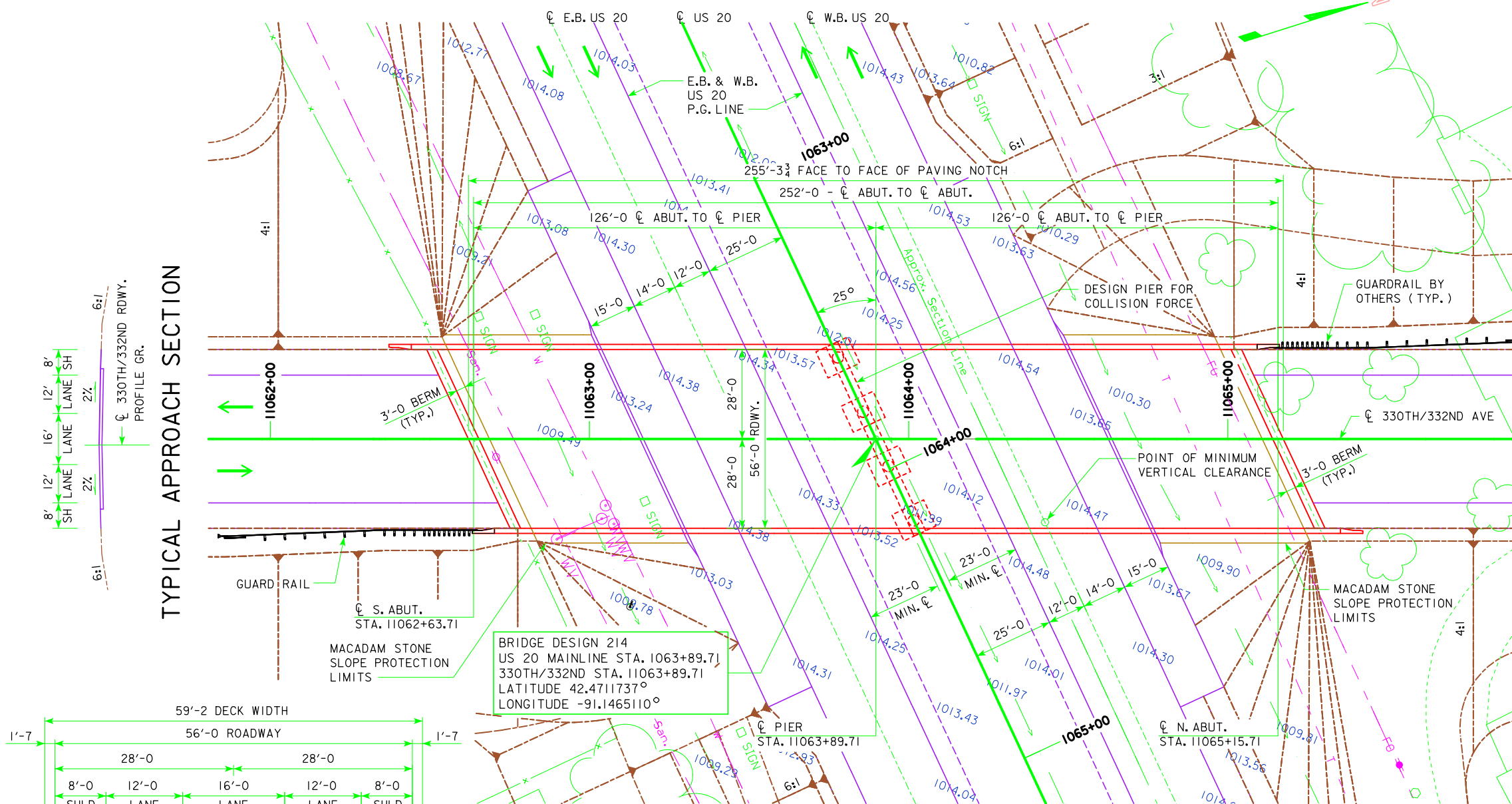
LOCATION

330TH/332ND AVE OVER US 20  
 T-88N R-3W SECTION 1  
 NORTH FORK TWP.  
 T-89N R-3W SECTION 36  
 BREMEN TWP.  
 DELAWARE COUNTY  
 LATITUDE 42.4711737°  
 LONGITUDE -91.1465110°

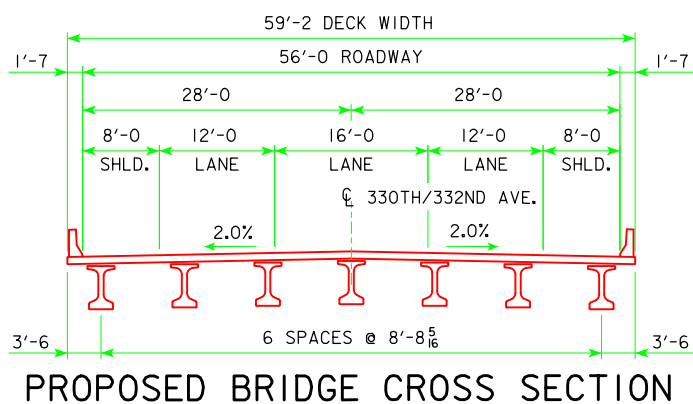
TRAFFIC ESTIMATE

2015 AADT	5420	V.P.D.
2035 AADT	9420	V.P.D.
2035 DHV	2355	V.P.H.
TRUCKS	25	%
TOTAL DESIGN ESALs		

TYPICAL APPROACH SECTION



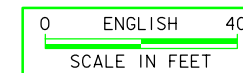
SITUATION PLAN



BRIDGE DESIGN 214  
 US 20 MAINLINE STA. 1063+89.71  
 330TH/332ND STA. 11063+89.71  
 LATITUDE 42.4711737°  
 LONGITUDE -91.1465110°

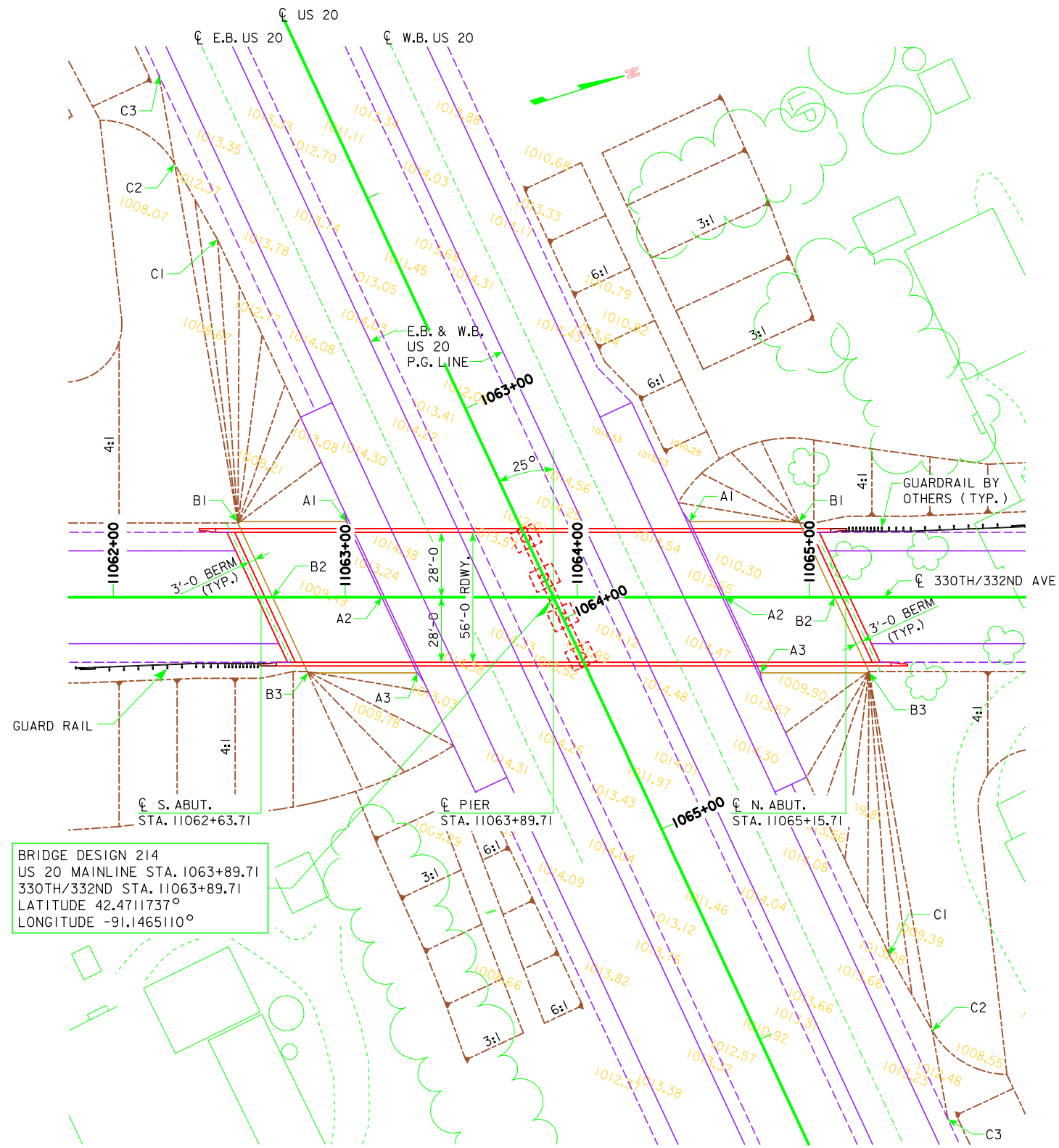
UTILITY LEGEND

F0	FIBER OPTIC - ICN
San.	SANITARY - CITY OF DYERSVILLE
T	TELEPHONE - MEDIACOM
W	WATER - CITY OF DYERSVILLE



PRELIMINARY  
 DESIGN FOR 25° SKEW (R.A.)  
**252'-0 x 56'-0 PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGE**  
 (BTD BEAM)  
 126'-0 AND 126'-0 END SPANS  
**SITUATION PLAN**  
 US 20 MAINLINE STA. 1063+89.71  
 330TH/332ND STA. 11063+89.71  
 OCTOBER, 2012  
**DELAWARE COUNTY**  
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION  
 DESIGN SHEET NO. 1 OF 2 FILE NO. 30549 DESIGN NO. 214





BRIDGE DESIGN 214  
 US 20 MAINLINE STA. 1063+89.71  
 330TH/332ND STA. 11063+89.71  
 LATITUDE 42.4711737°  
 LONGITUDE -91.1465110°

SITE PLAN

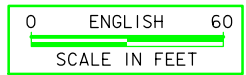
**BERM SLOPE LOCATION TABLE**

MK.	SOUTH ABUTMENT			NORTH ABUTMENT		
	STATION	OFFSET	ELEV.	STATION	OFFSET	ELEV.
A1	11063+00.59	32.58' LT	1003.00	11064+48.44	32.58' LT	1003.37
A2	11063+15.78	0.000	1003.21	11064+63.64	0.000	1003.59
A3	11063+30.98	32.58' RT	1003.43	11064+78.83	32.58' RT	1003.80
B1	11062+53.48	32.58' LT	1018.79	11064+95.55	32.58' LT	1018.24
B2	11062+68.75	0.000	1018.79	11065+10.75	0.000	1018.24
B3	11062+83.87	32.58' RT	1018.79	11065+25.94	32.58' RT	1018.24

**RECOVERABLE BERM LOCATION TABLE**

MK.	SOUTH ABUTMENT			NORTH ABUTMENT		
	STATION	OFFSET	ELEV.	STATION	OFFSET	ELEV.
C1	11062+44.94	154.28' LT	1001.69	11065+34.49	154.28' RT	1004.01
C2	11062+26.45	186.83' LT	1001.34	11065+52.98	186.83' RT	1004.02
C3	11062+19.74	224.88' LT	1001.54	11065+59.69	224.88' RT	1004.51

SEE EW-203 FOR SHAPING



PRELIMINARY

DESIGN FOR 25° SKEW (R.A.)

**252'-0 x 56'-0 PRETENSIONED  
 PRESTRESSED CONCRETE BEAM BRIDGE**  
 (BTD BEAM)

126'-0 AND 126'-0 END SPANS

**SITUATION PLAN - SITE**

US 20 MAINLINE STA. 1063+89.71  
 330TH/332ND STA. 11063+89.71

OCTOBER, 2012

**DELAWARE COUNTY**

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DESIGN SHEET NO. 2 OF 2 FILE NO. 30549 DESIGN NO. 214

**LEGEND OF CROSS SECTION SHEETS (ROAD)**

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

**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

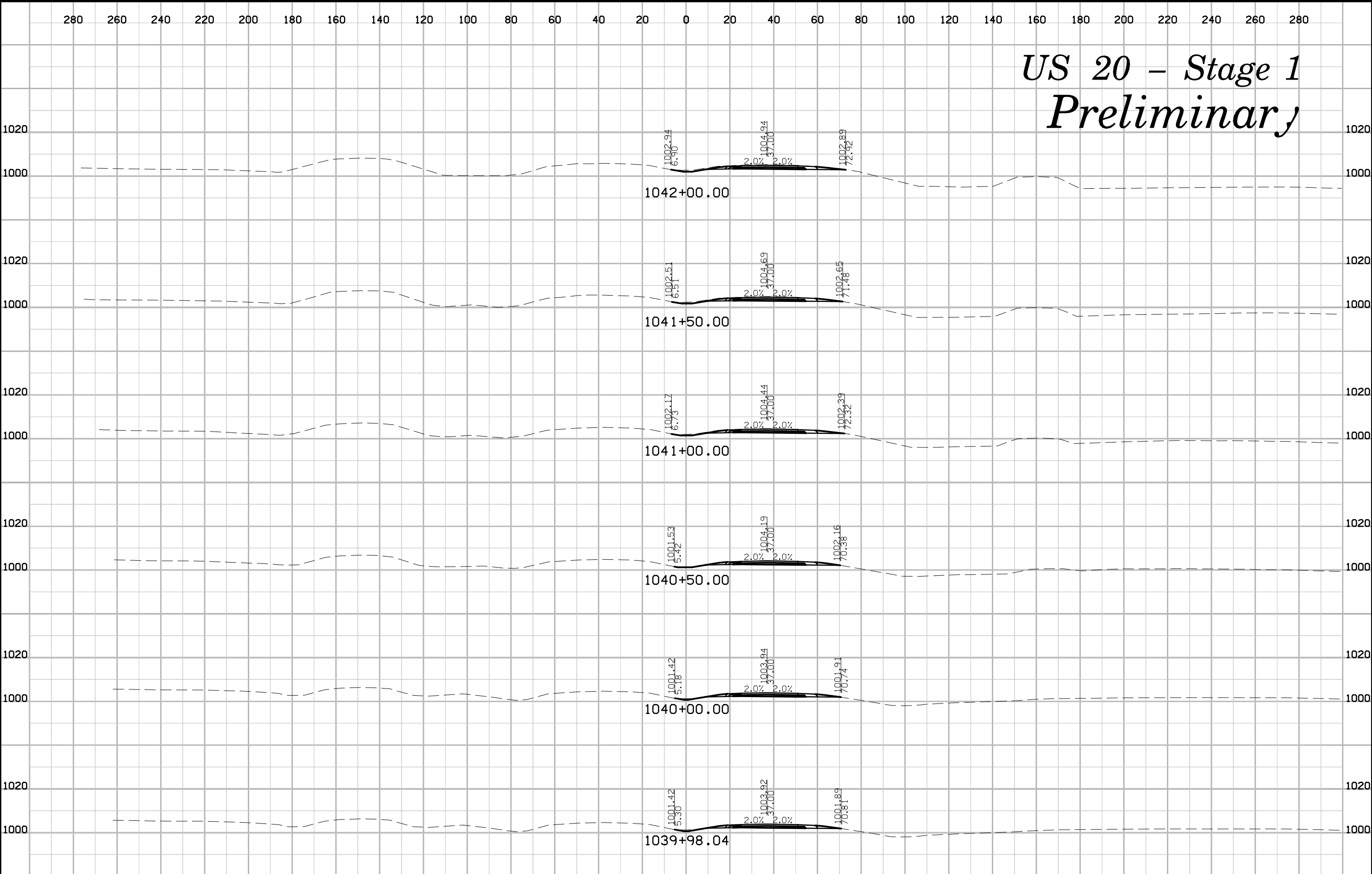
Note: All layer lines and descriptions identify layers above the line.

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.

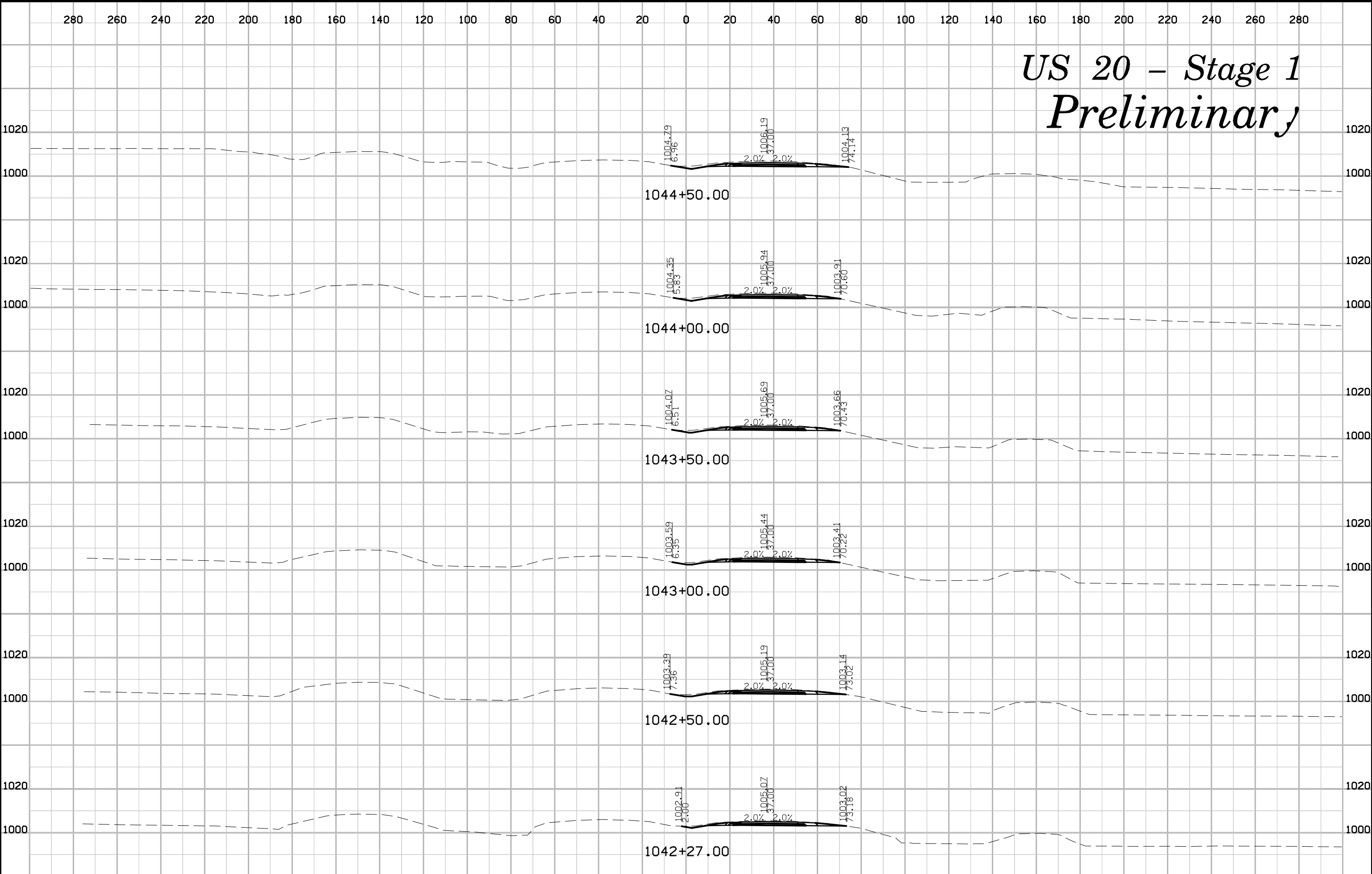
**CROSS SECTION  
LEGEND AND SYMBOL  
INFORMATION SHEET**

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

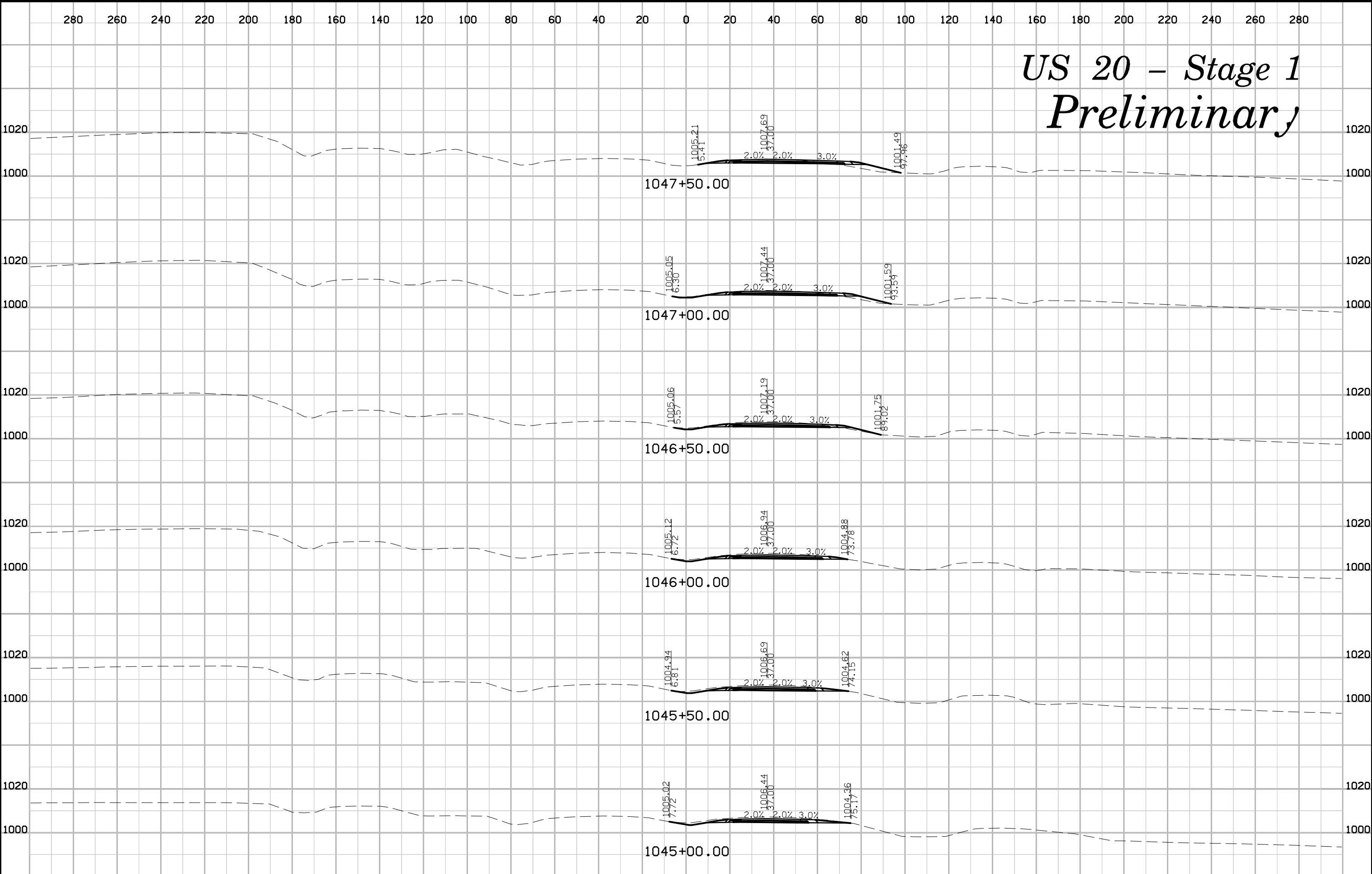
# US 20 - Stage 1 Preliminary



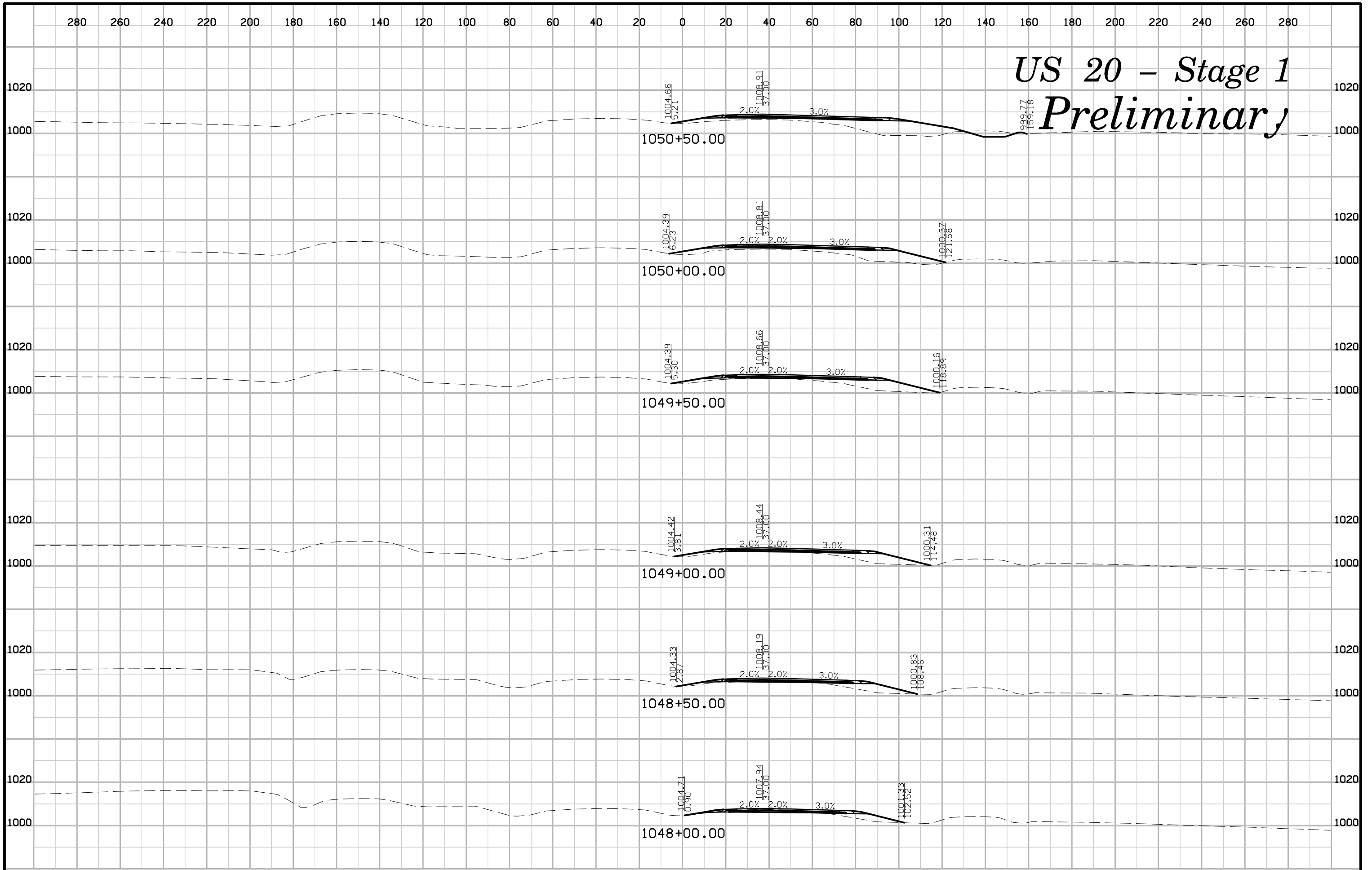
# US 20 - Stage 1 Preliminary



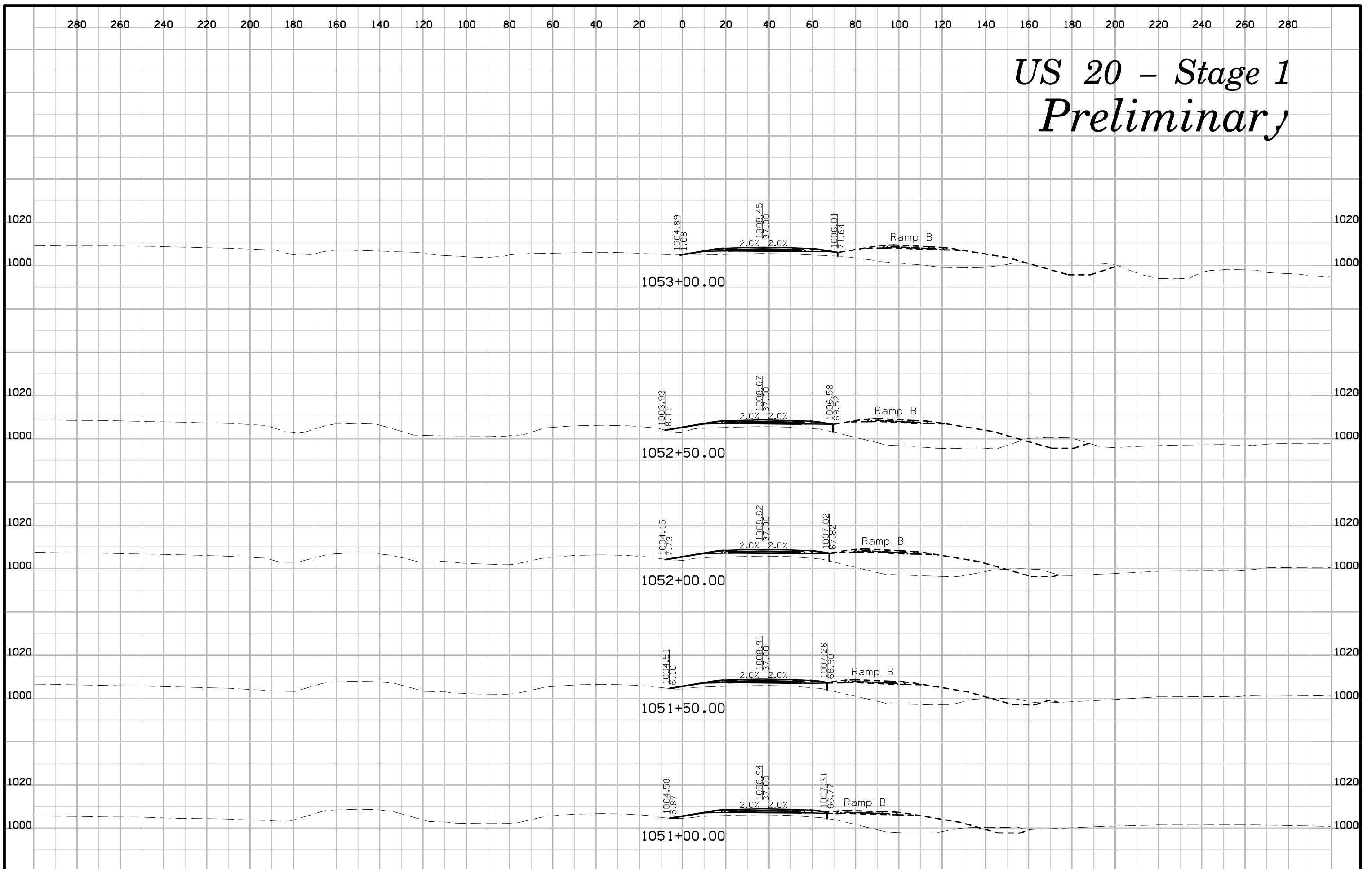
# US 20 - Stage 1 Preliminary



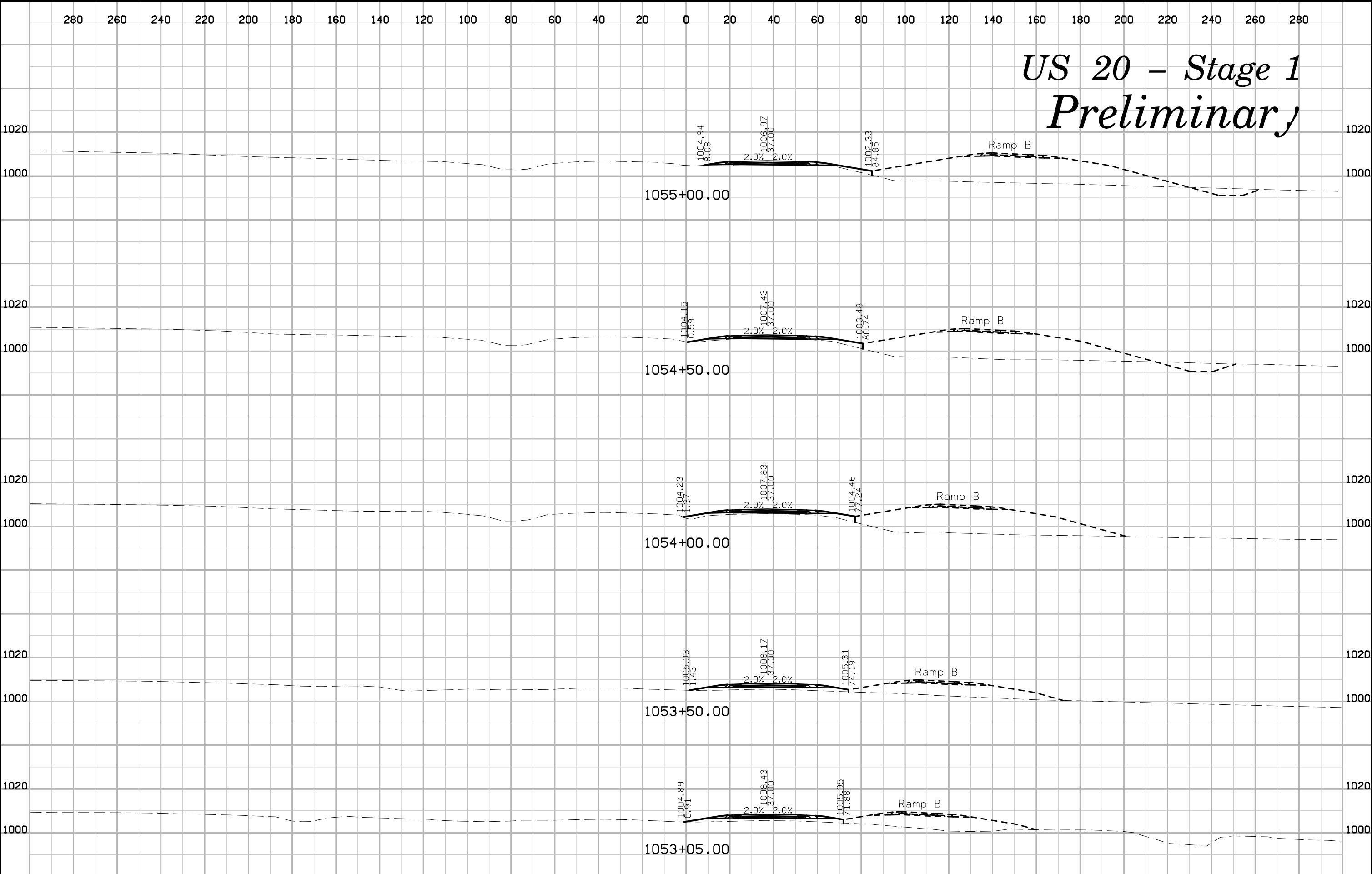
# US 20 - Stage 1 Preliminary



# US 20 - Stage 1 Preliminary

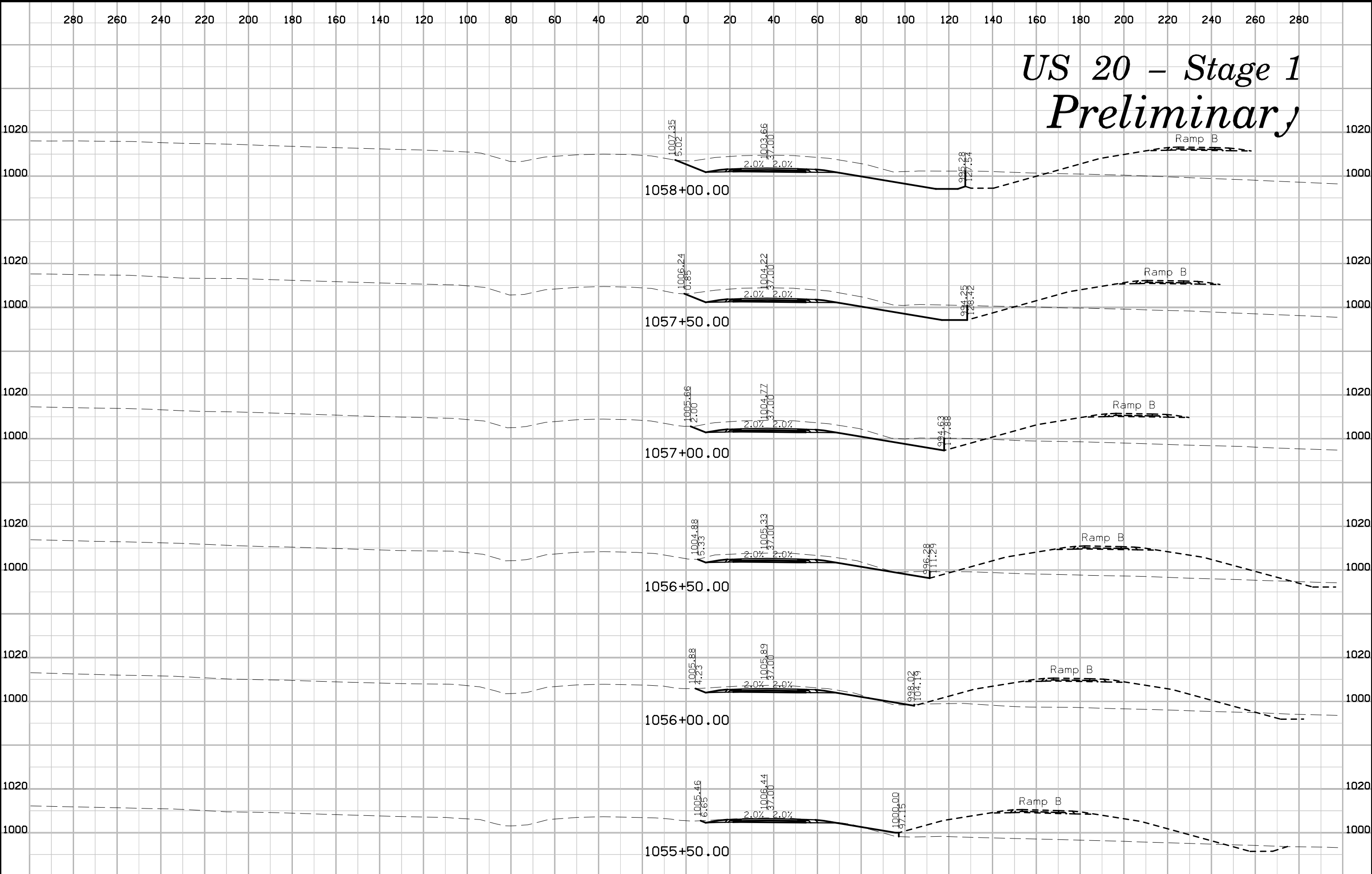


# US 20 - Stage 1 Preliminary

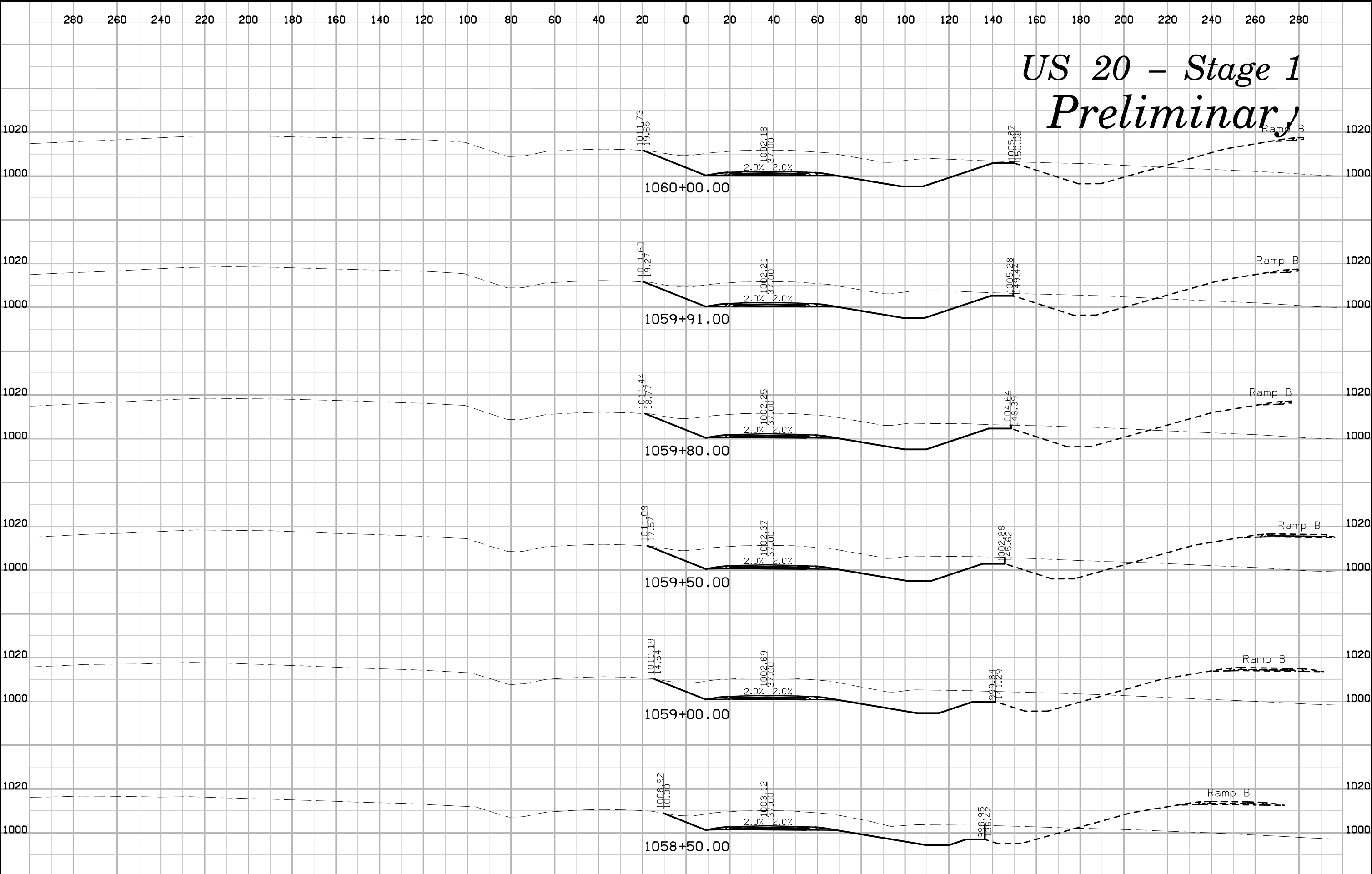




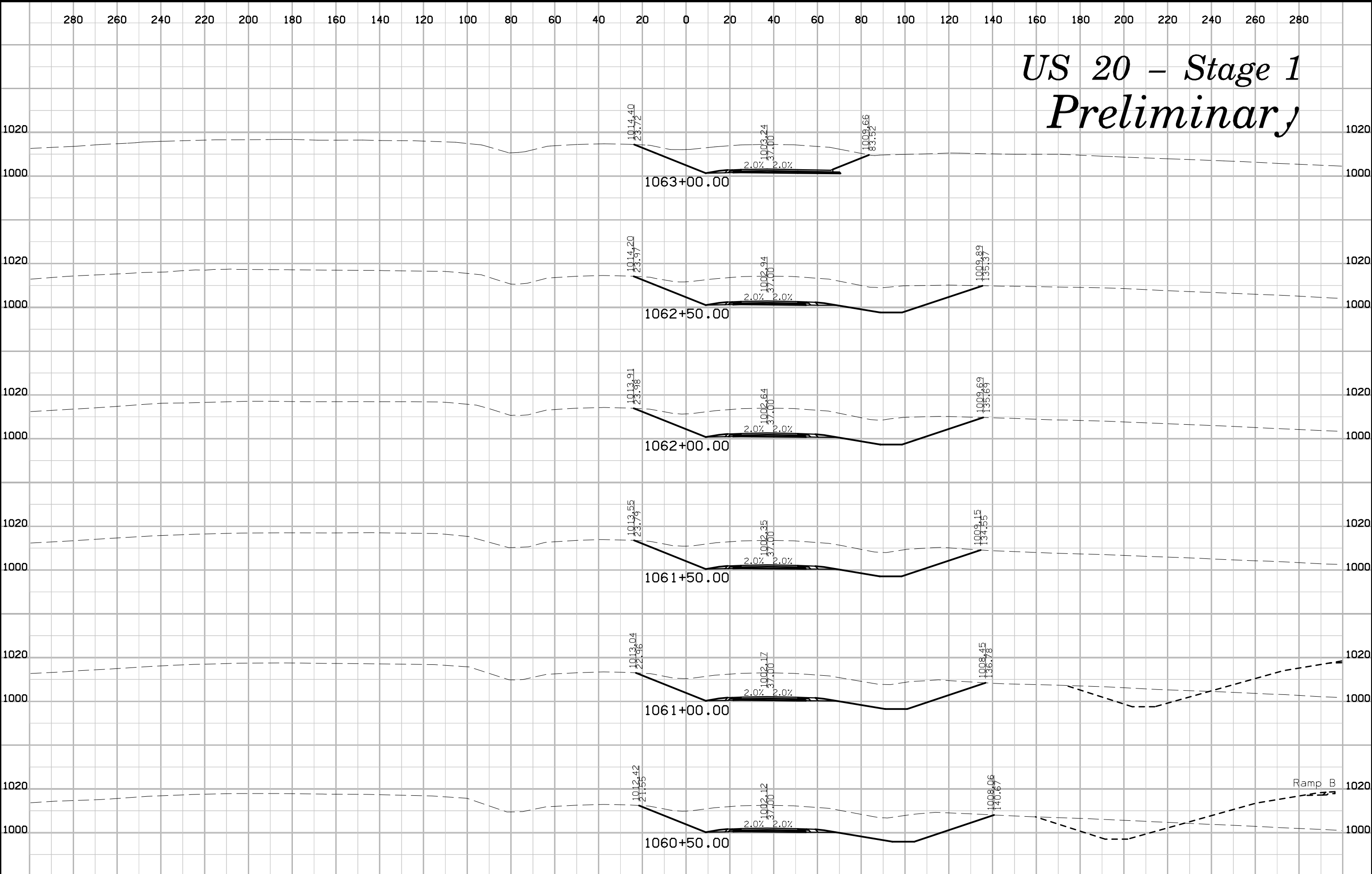
# US 20 - Stage 1 Preliminary



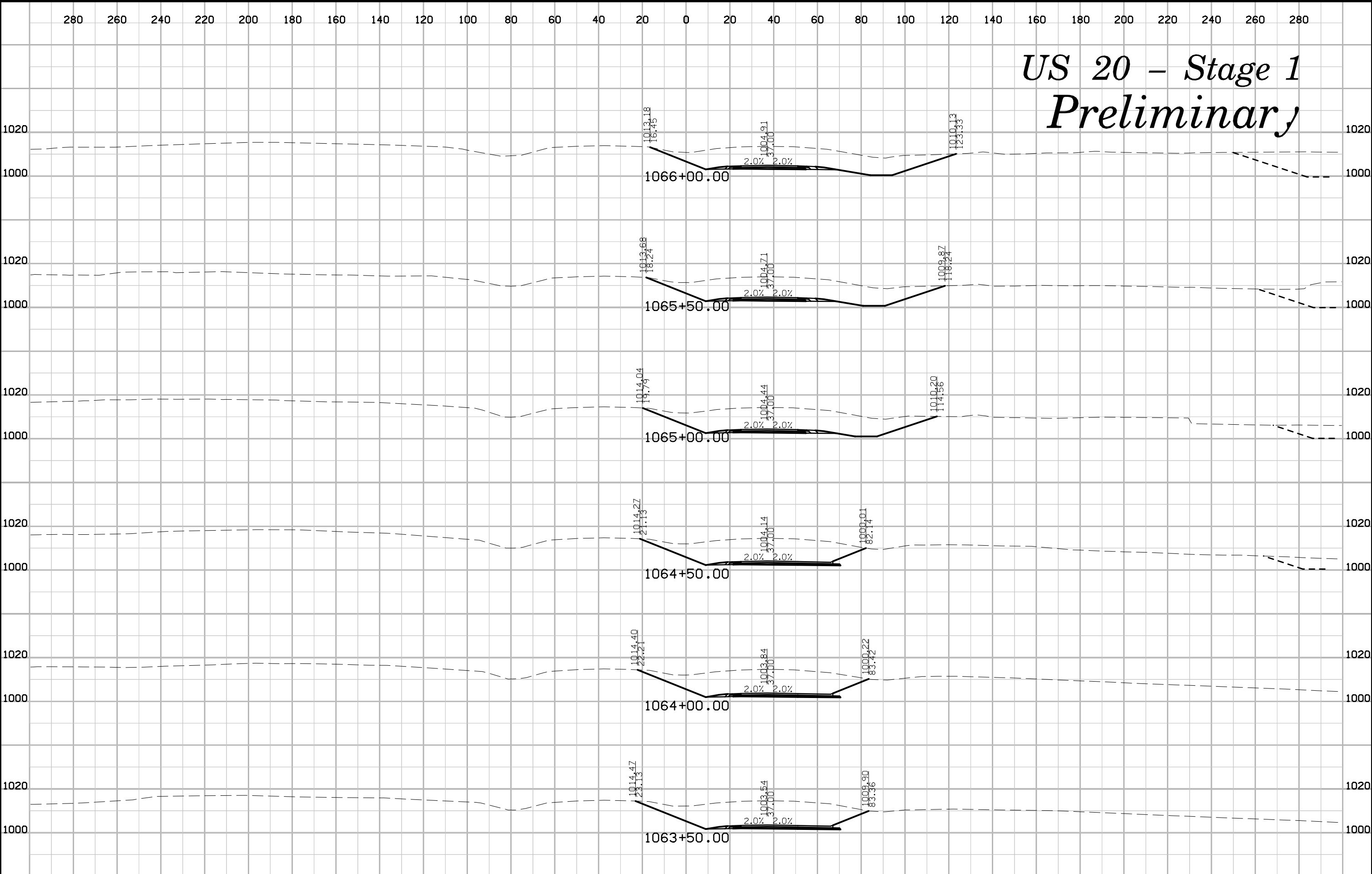
# US 20 - Stage 1 Preliminary



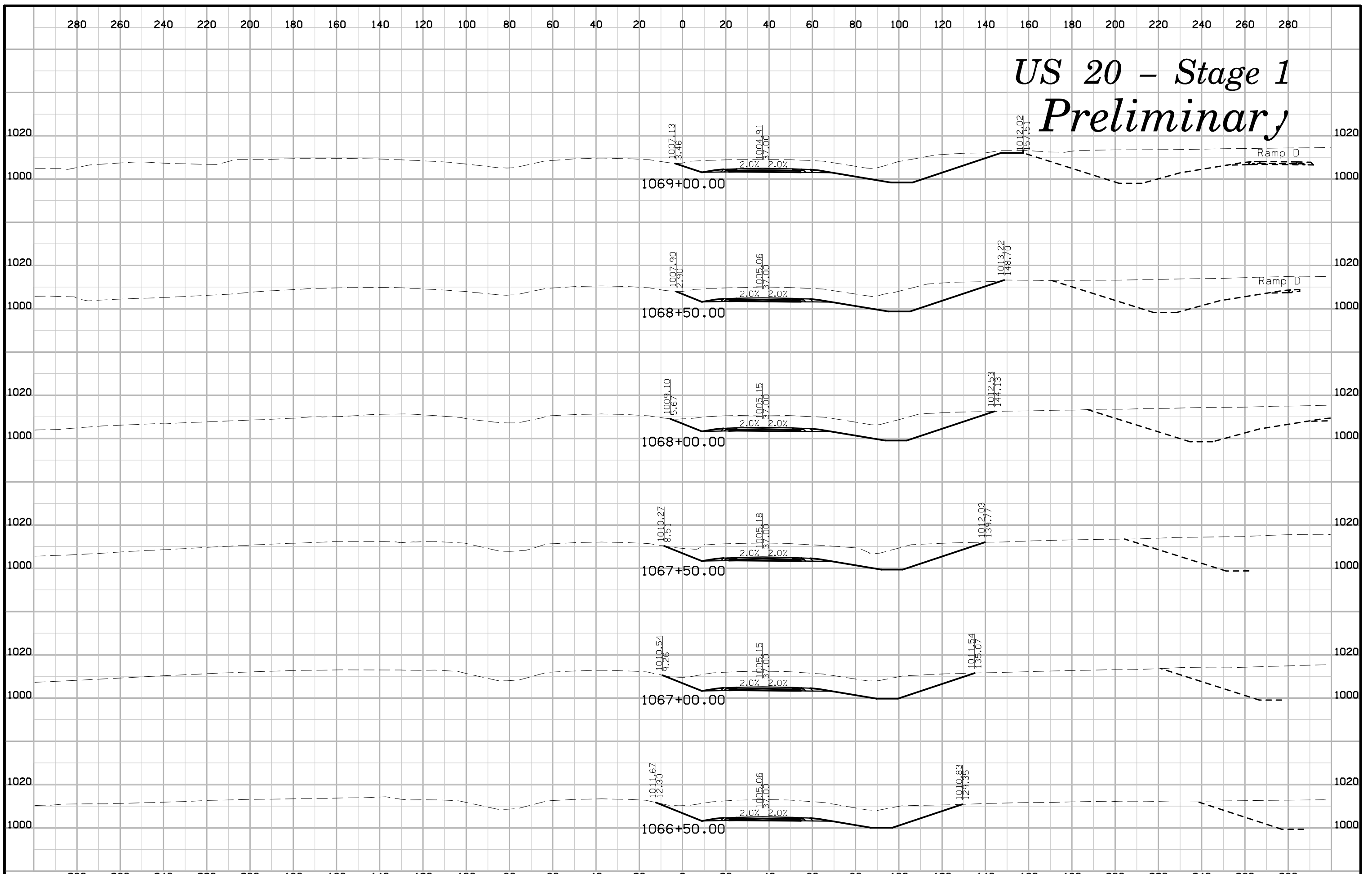
# US 20 - Stage 1 Preliminary



# US 20 - Stage 1 Preliminary



# US 20 - Stage 1 Preliminary



Ramp D

Ramp D

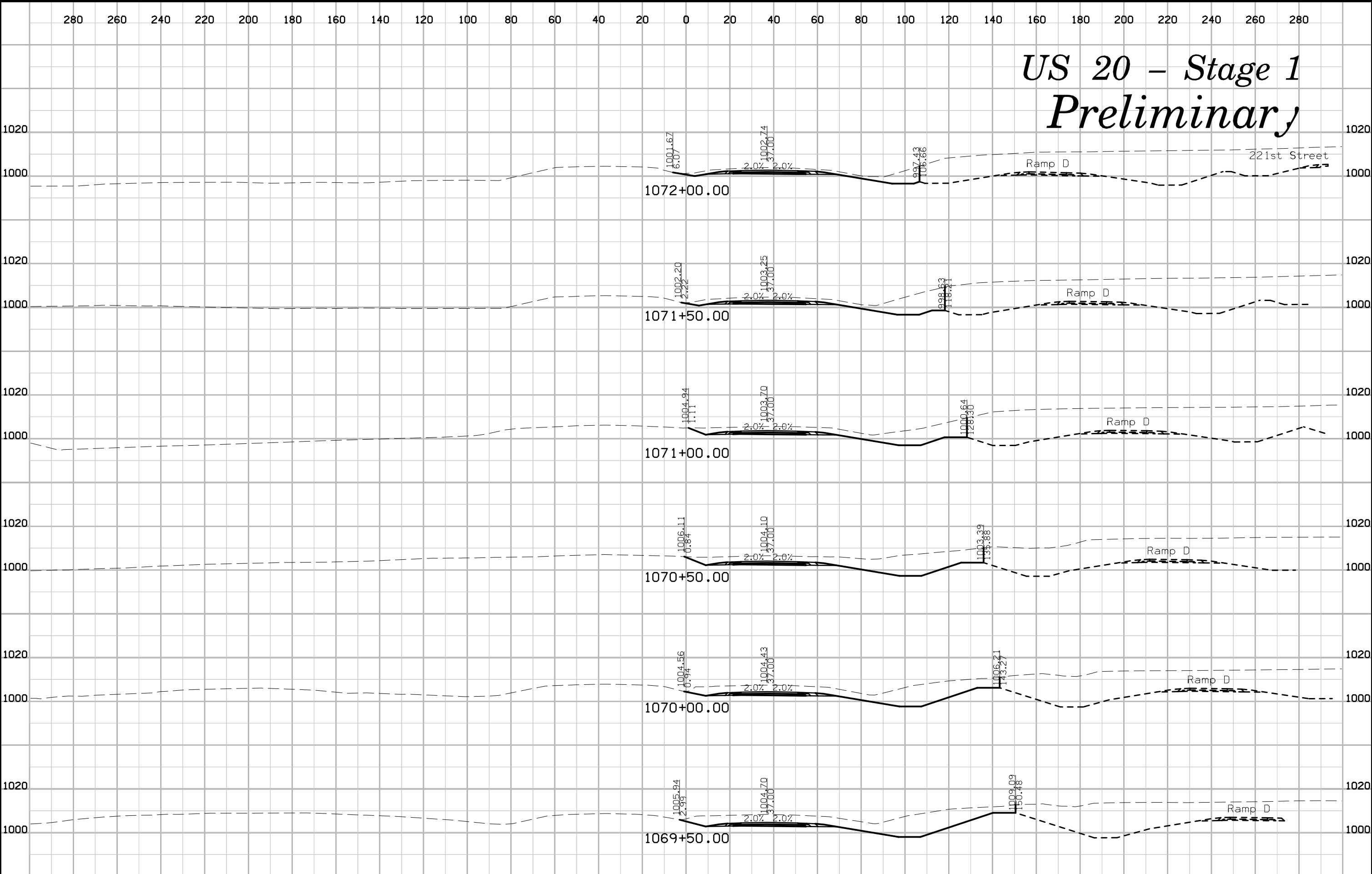
Ramp D

Ramp D

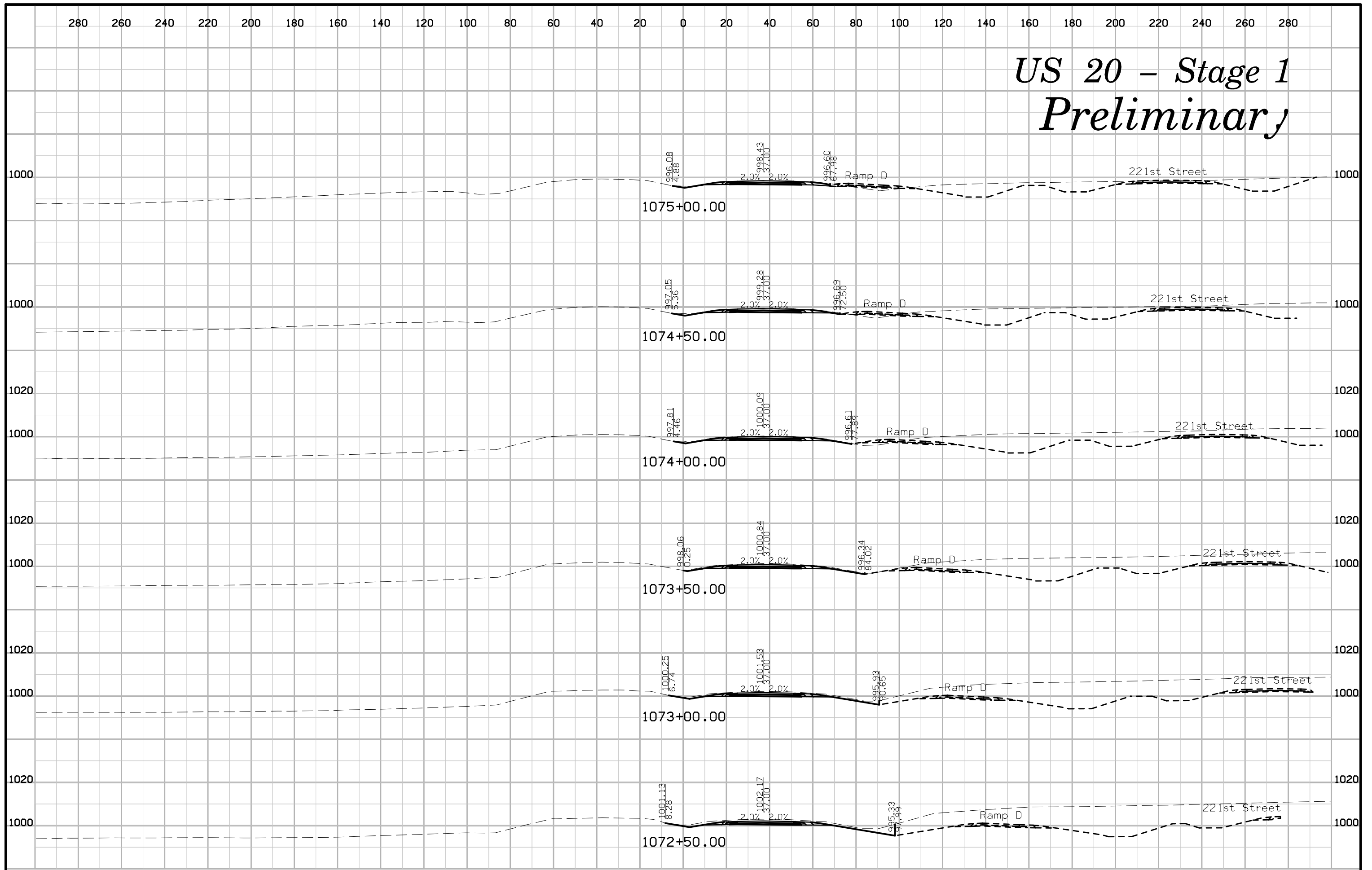
Ramp D

Ramp D

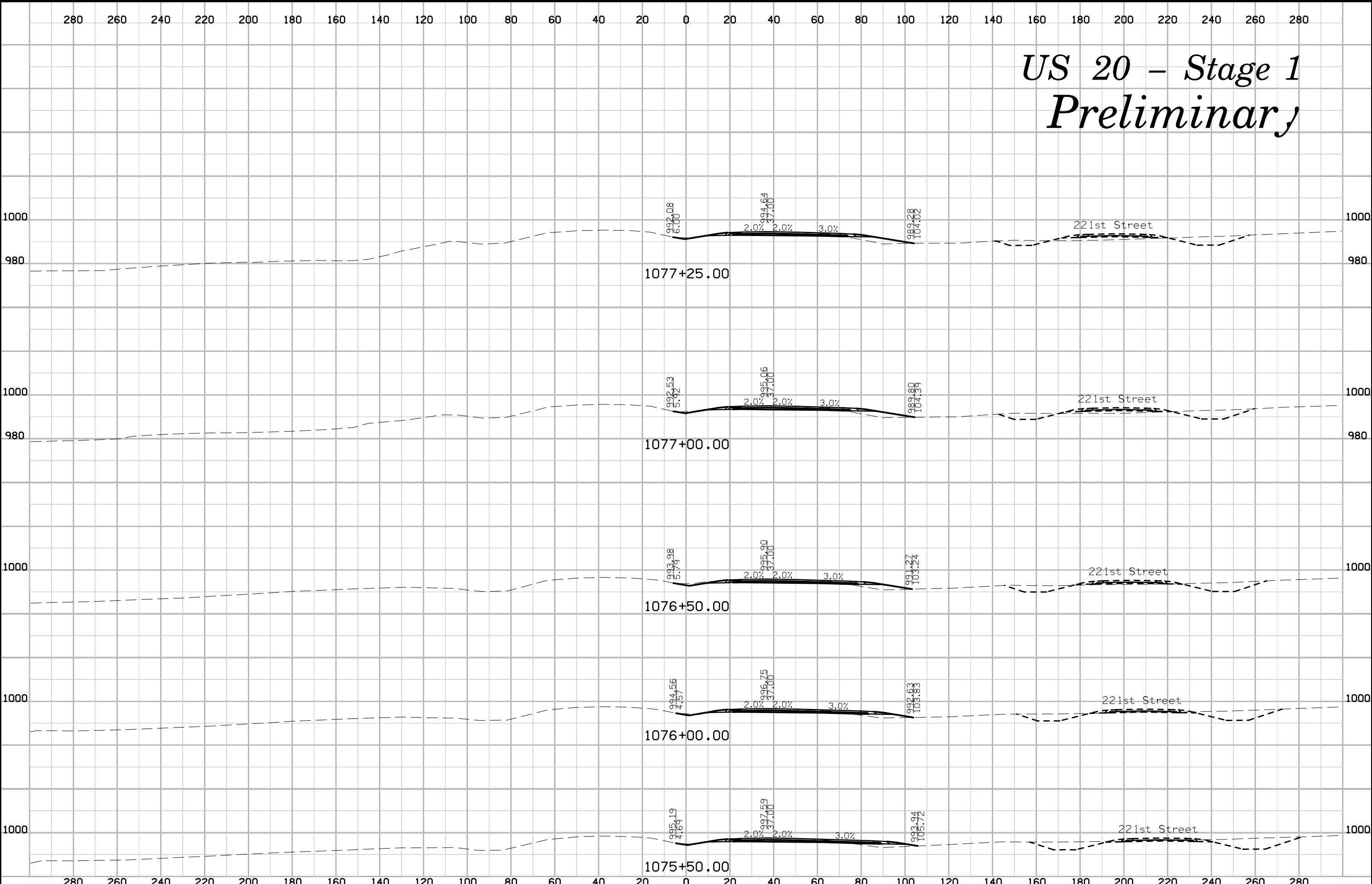
# US 20 - Stage 1 Preliminary



# US 20 - Stage 1 Preliminary

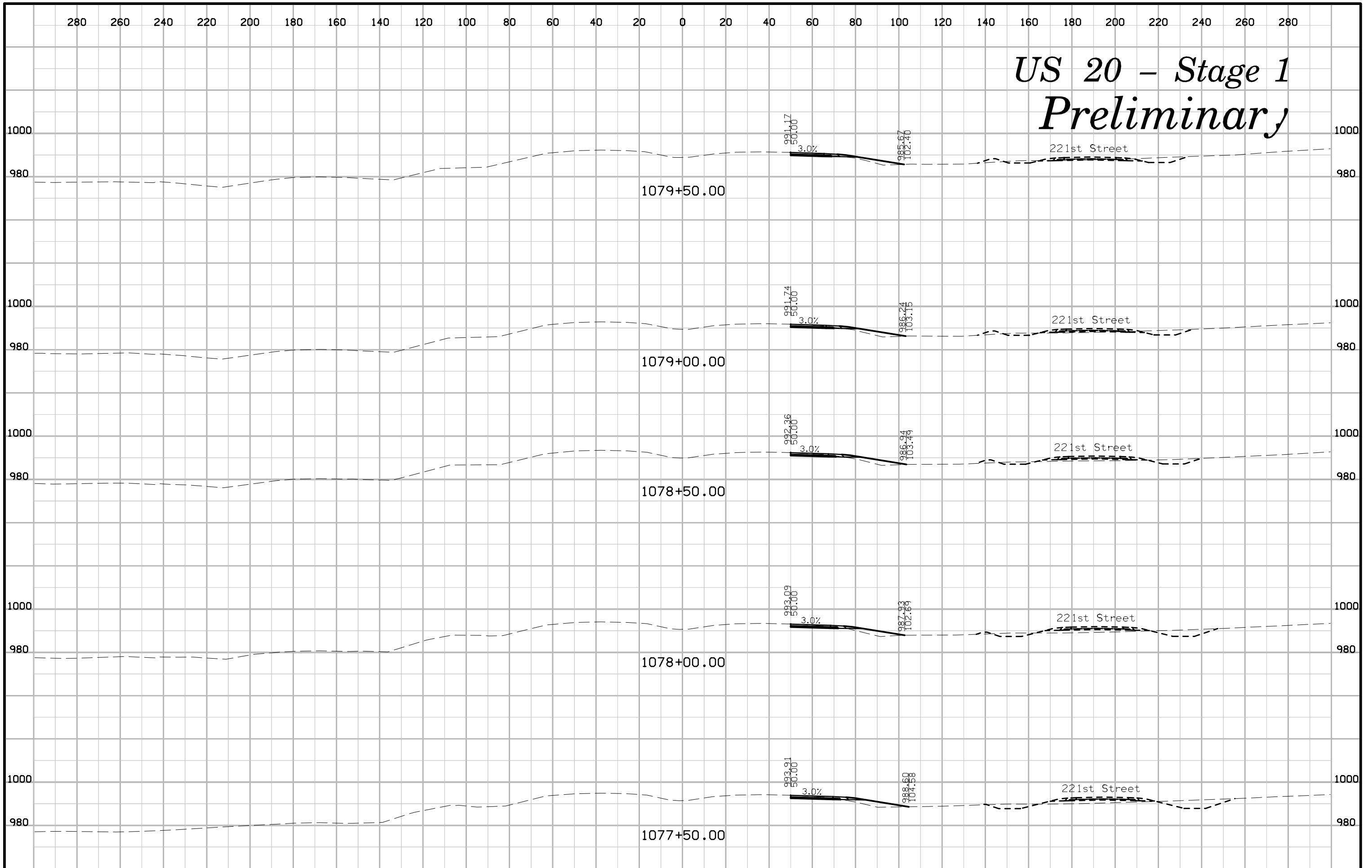


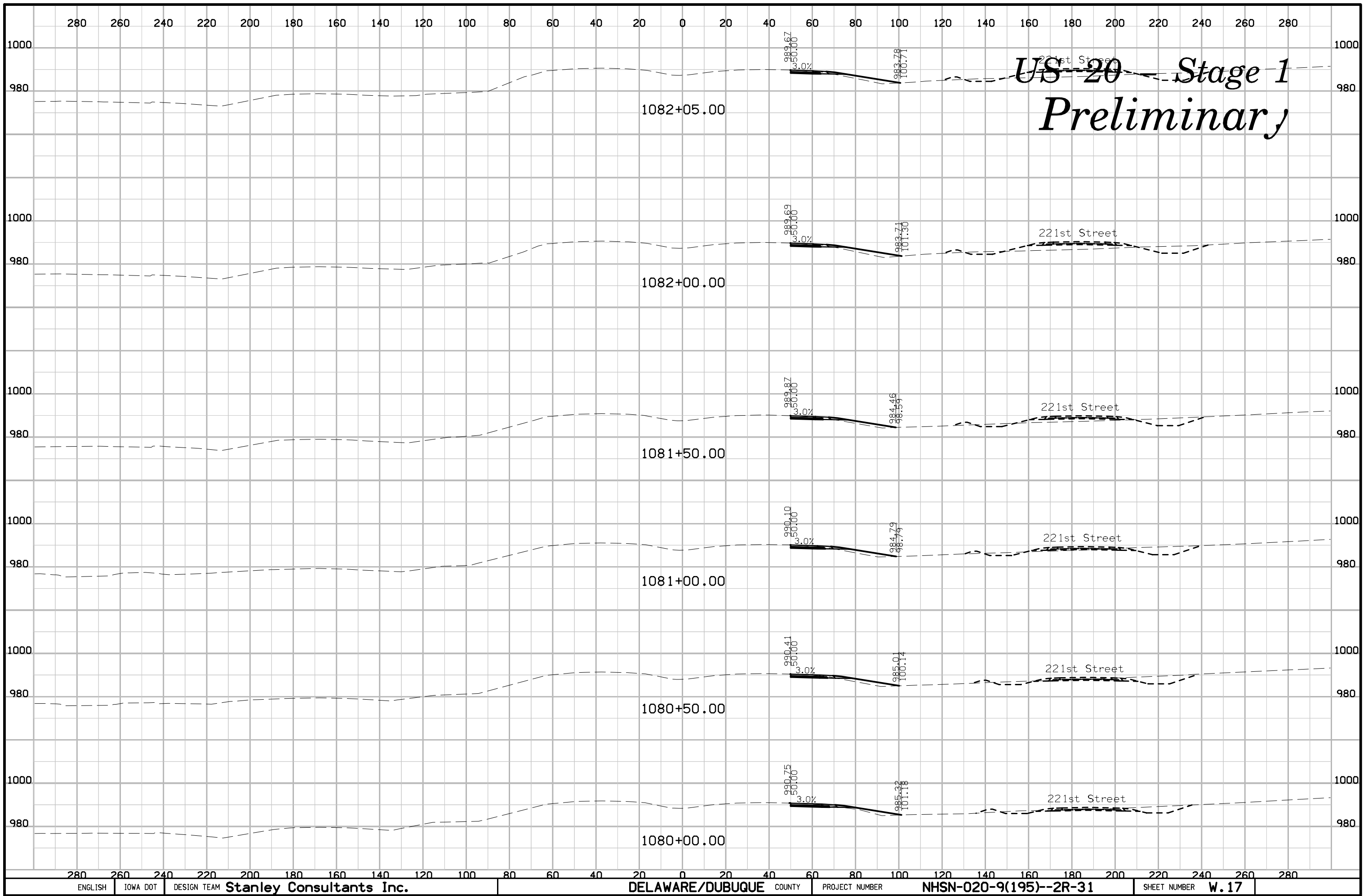
# US 20 - Stage 1 Preliminary





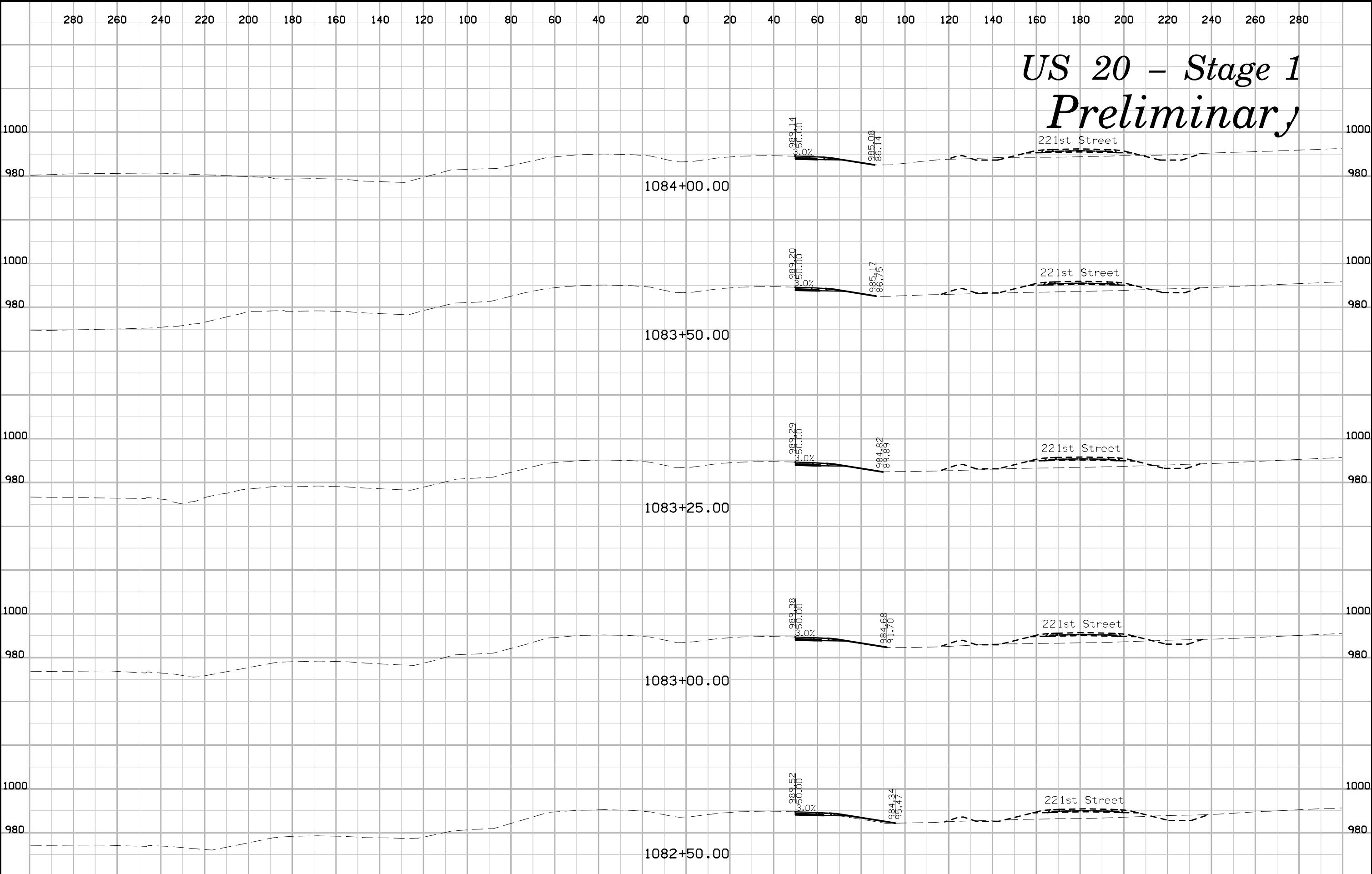
# US 20 - Stage 1 Preliminary



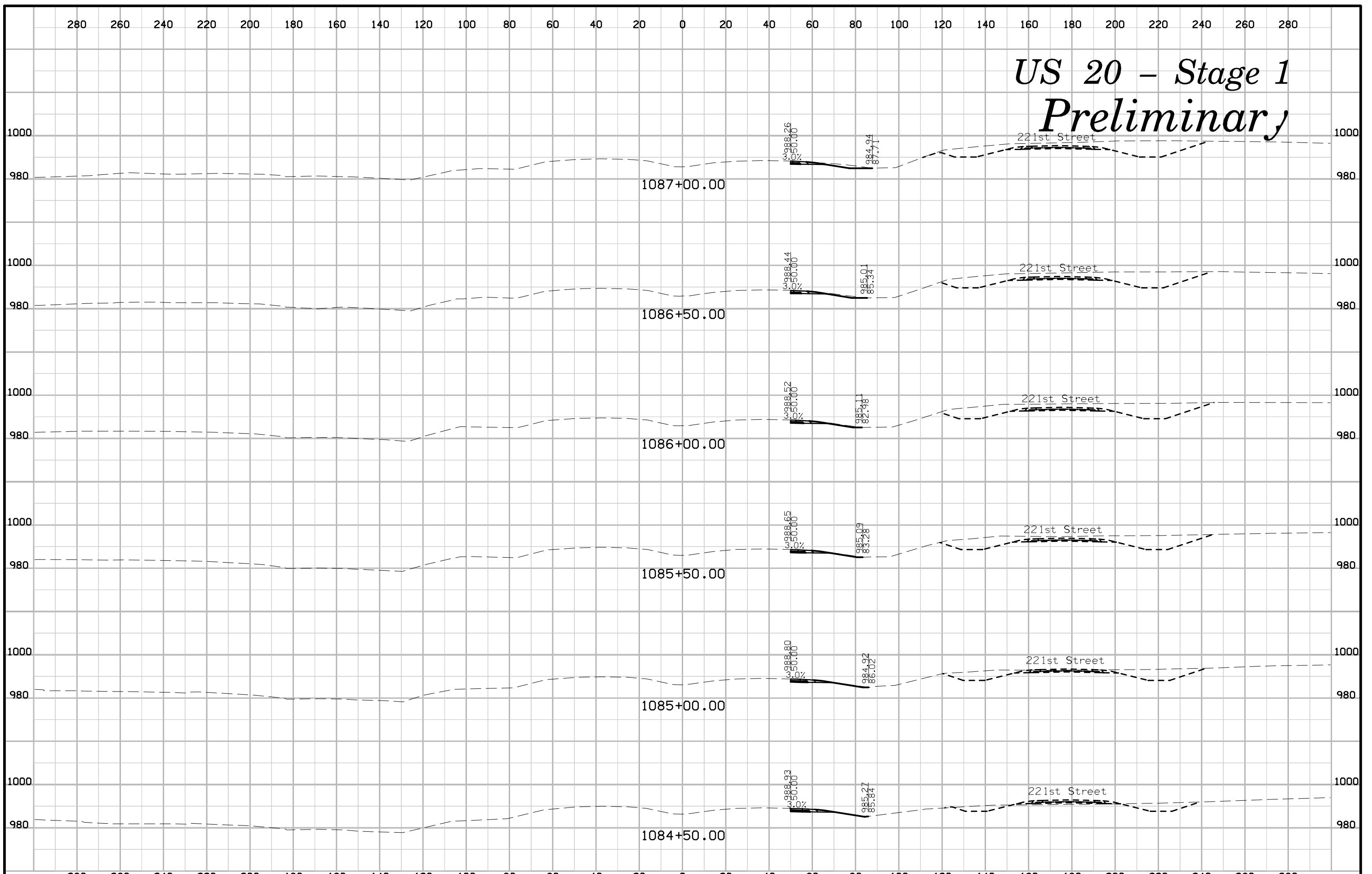


*US-20 Stage 1 Preliminary*

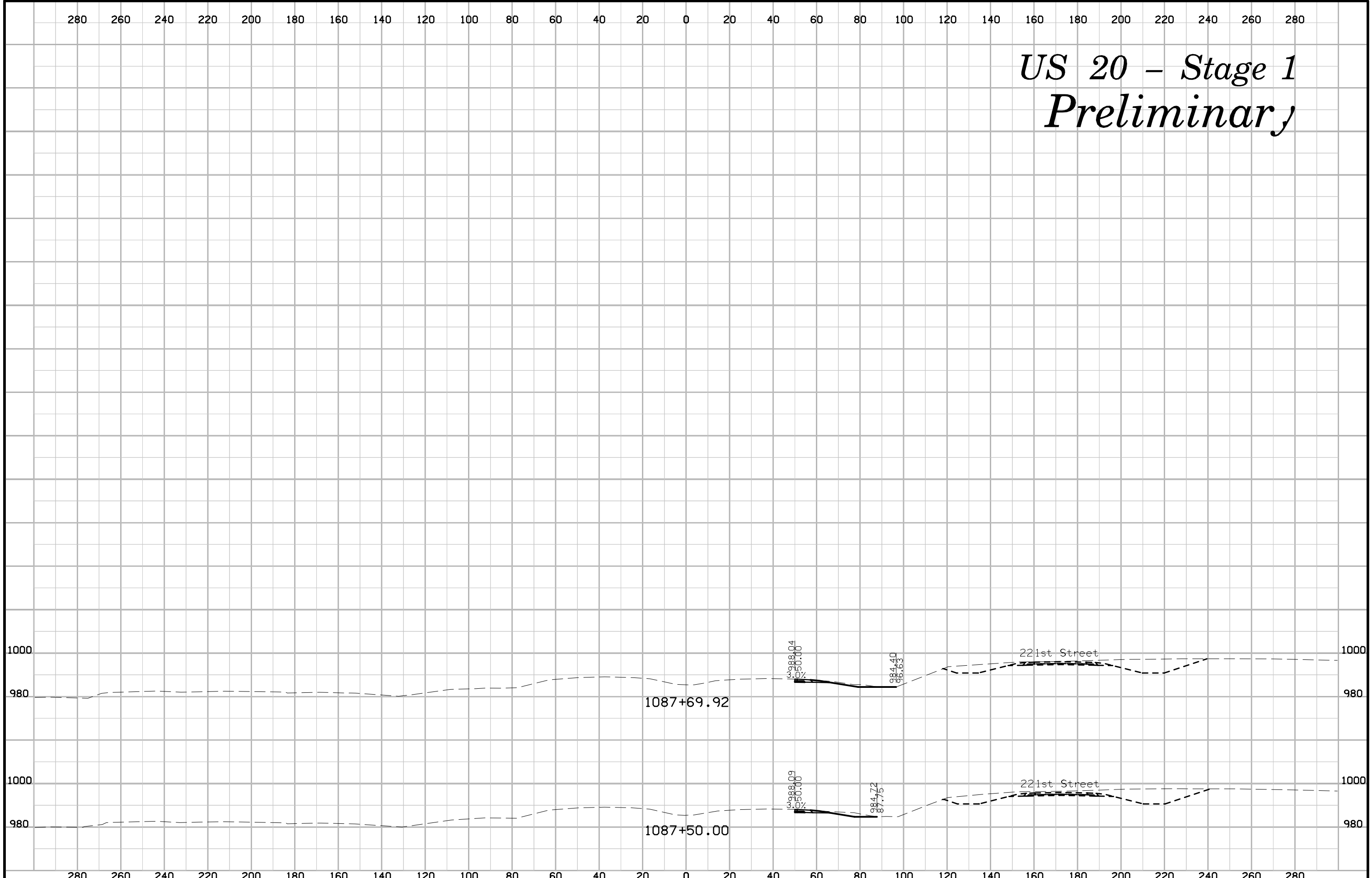
# US 20 - Stage 1 Preliminary



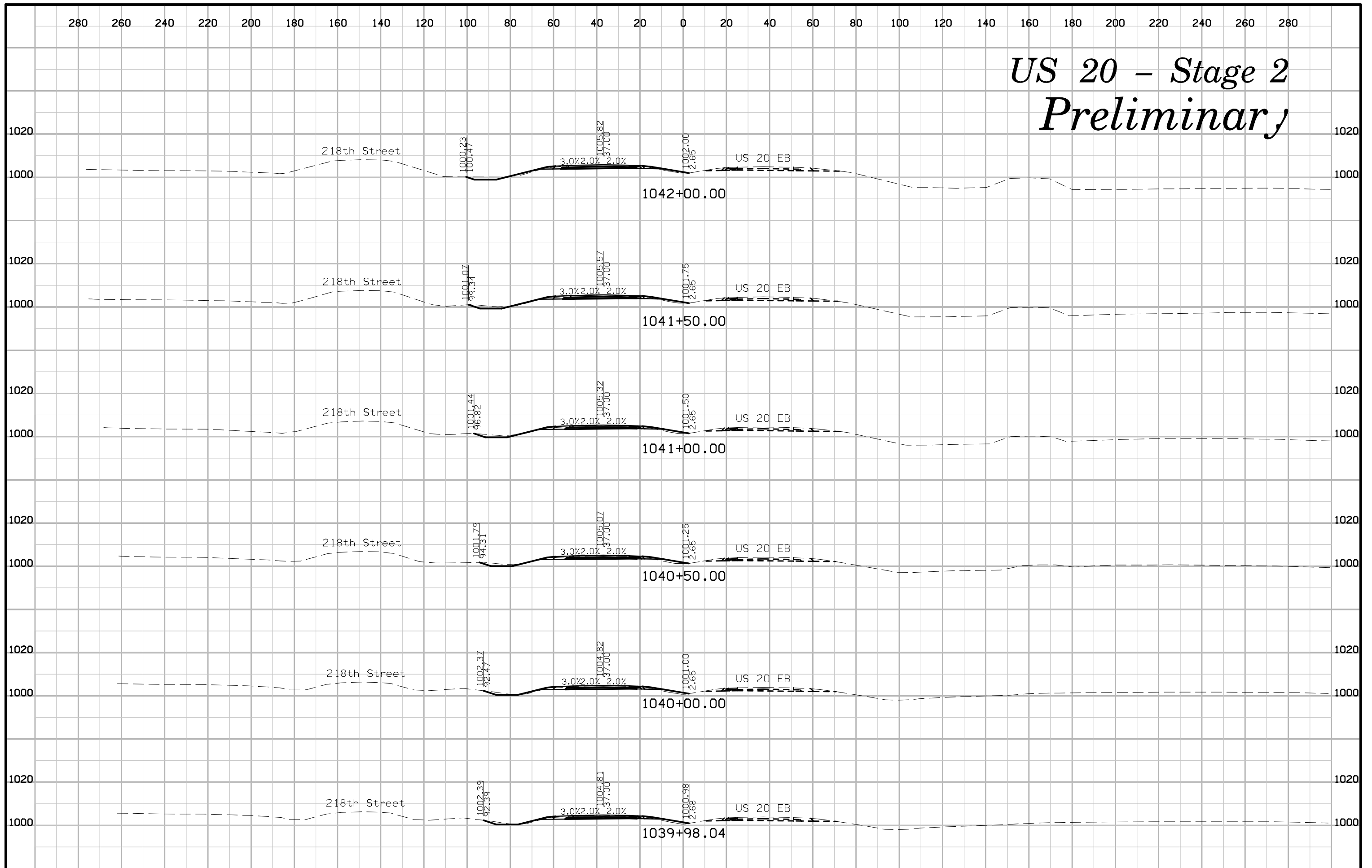
# US 20 - Stage 1 Preliminary



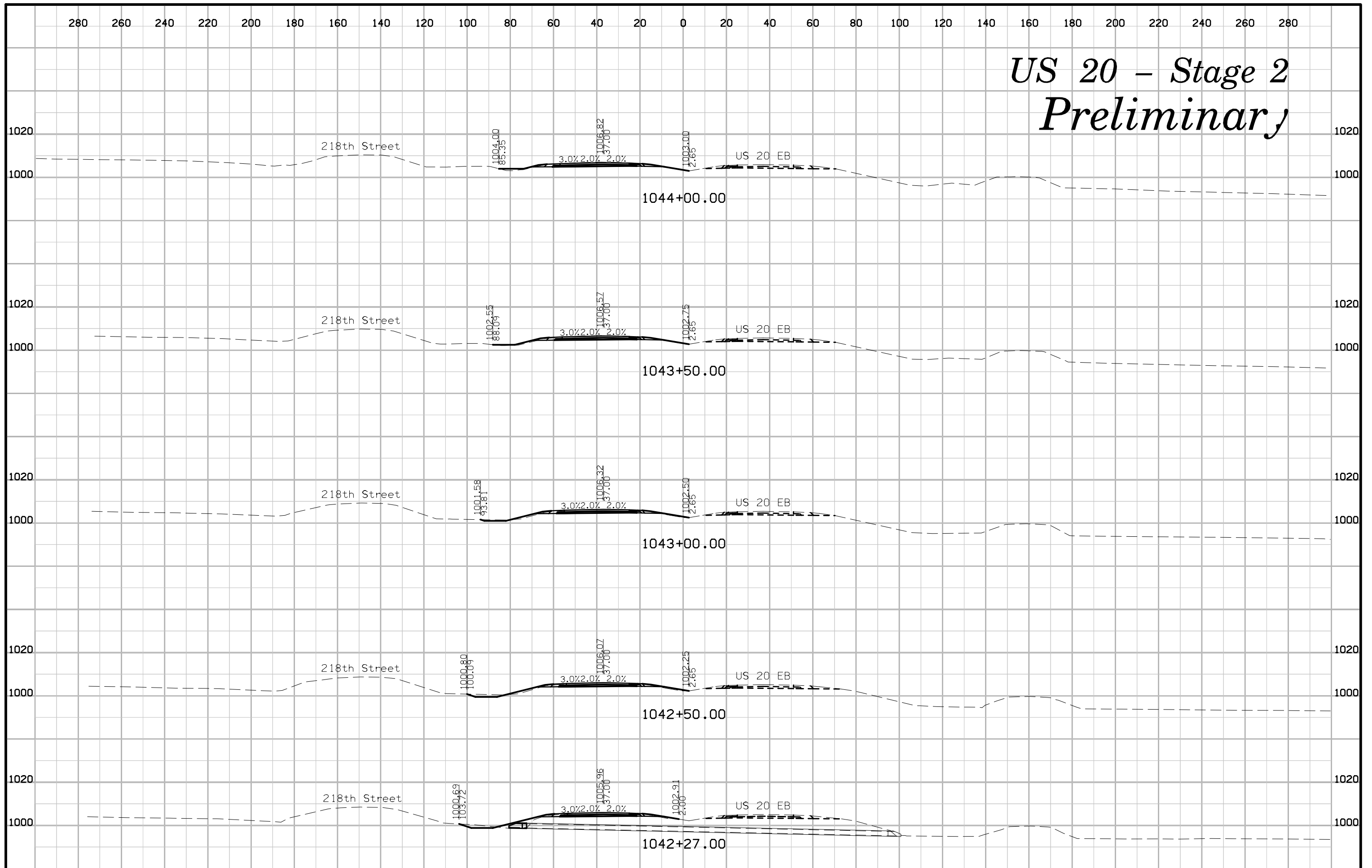
# US 20 - Stage 1 Preliminary



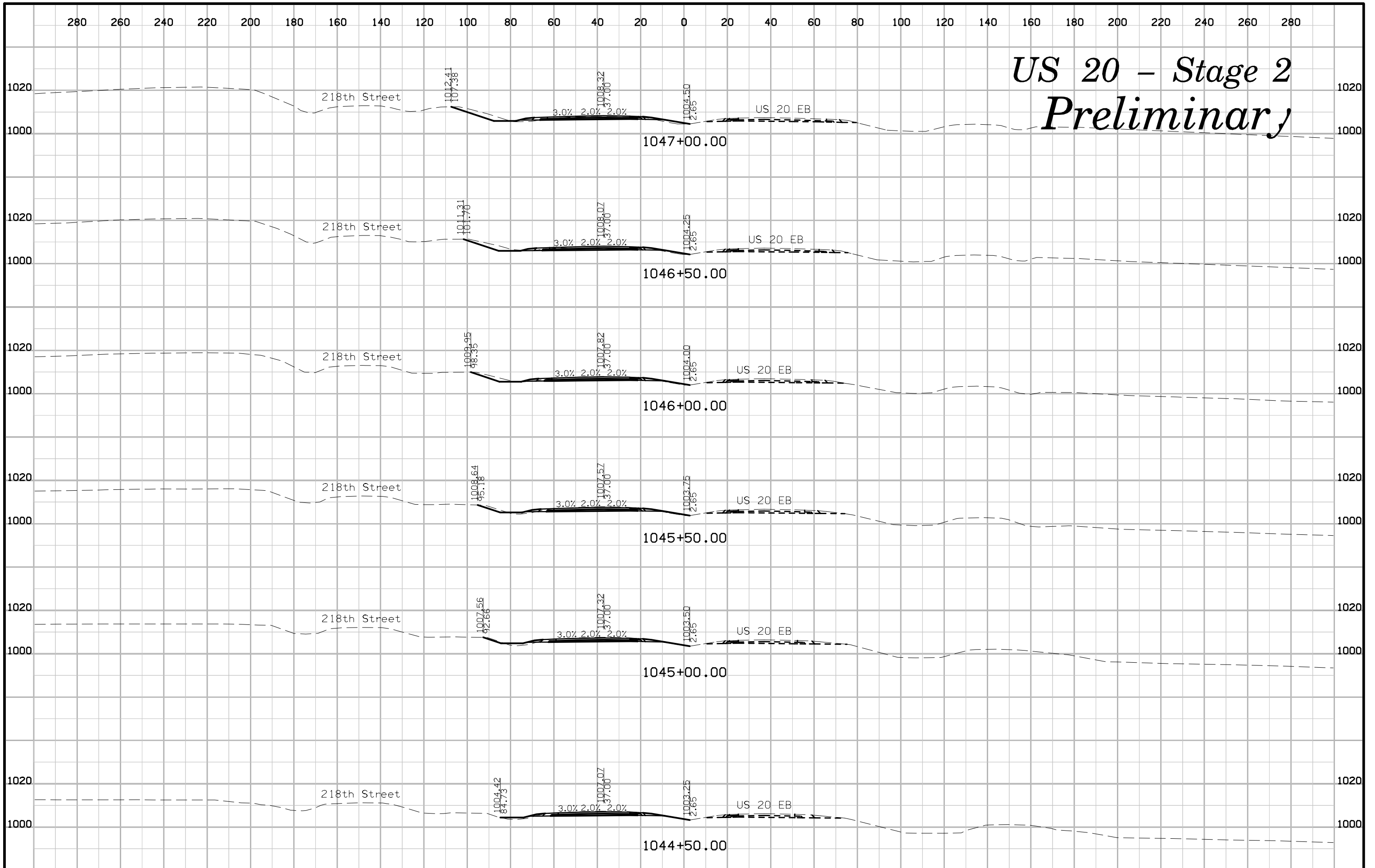
# US 20 - Stage 2 Preliminary



# US 20 - Stage 2 Preliminary

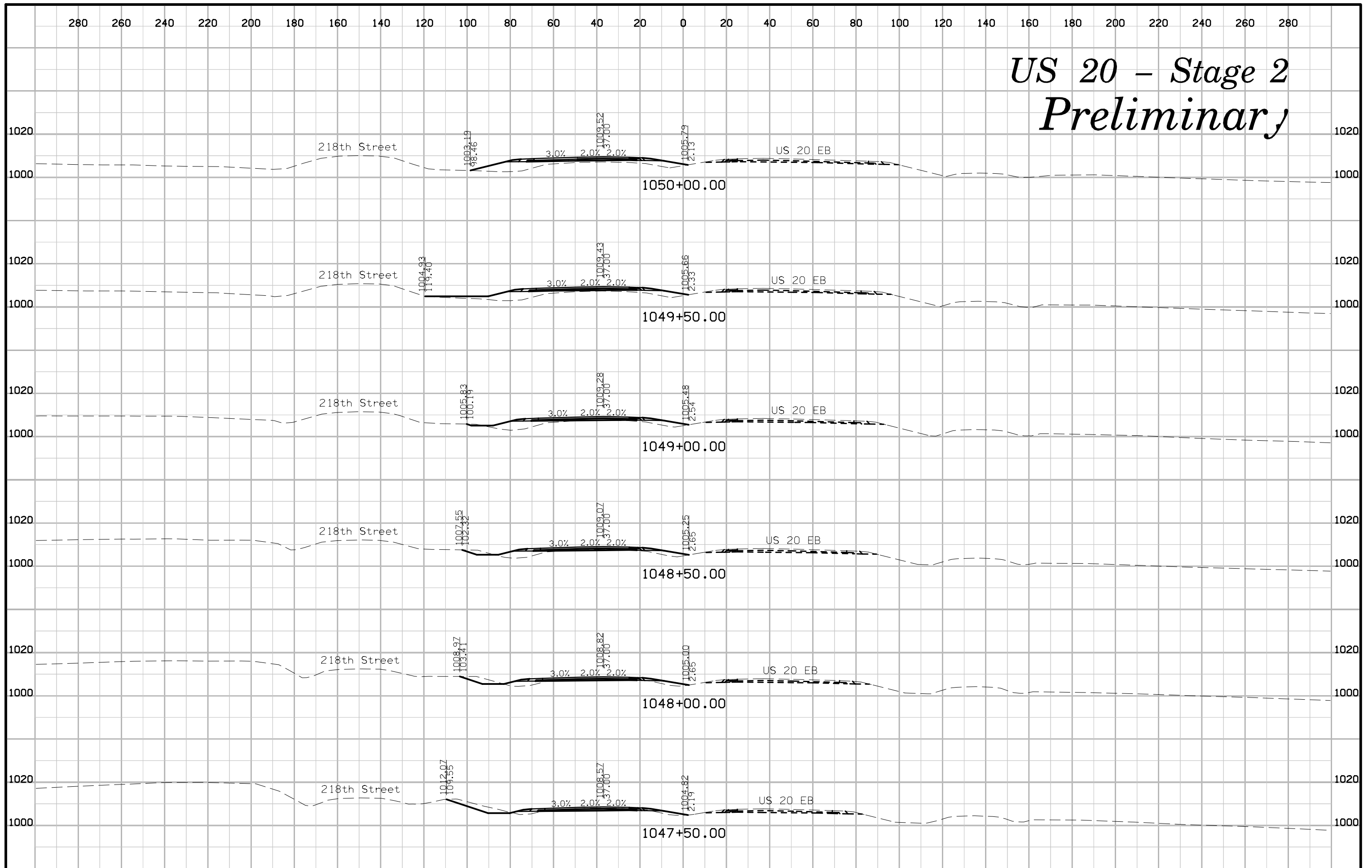


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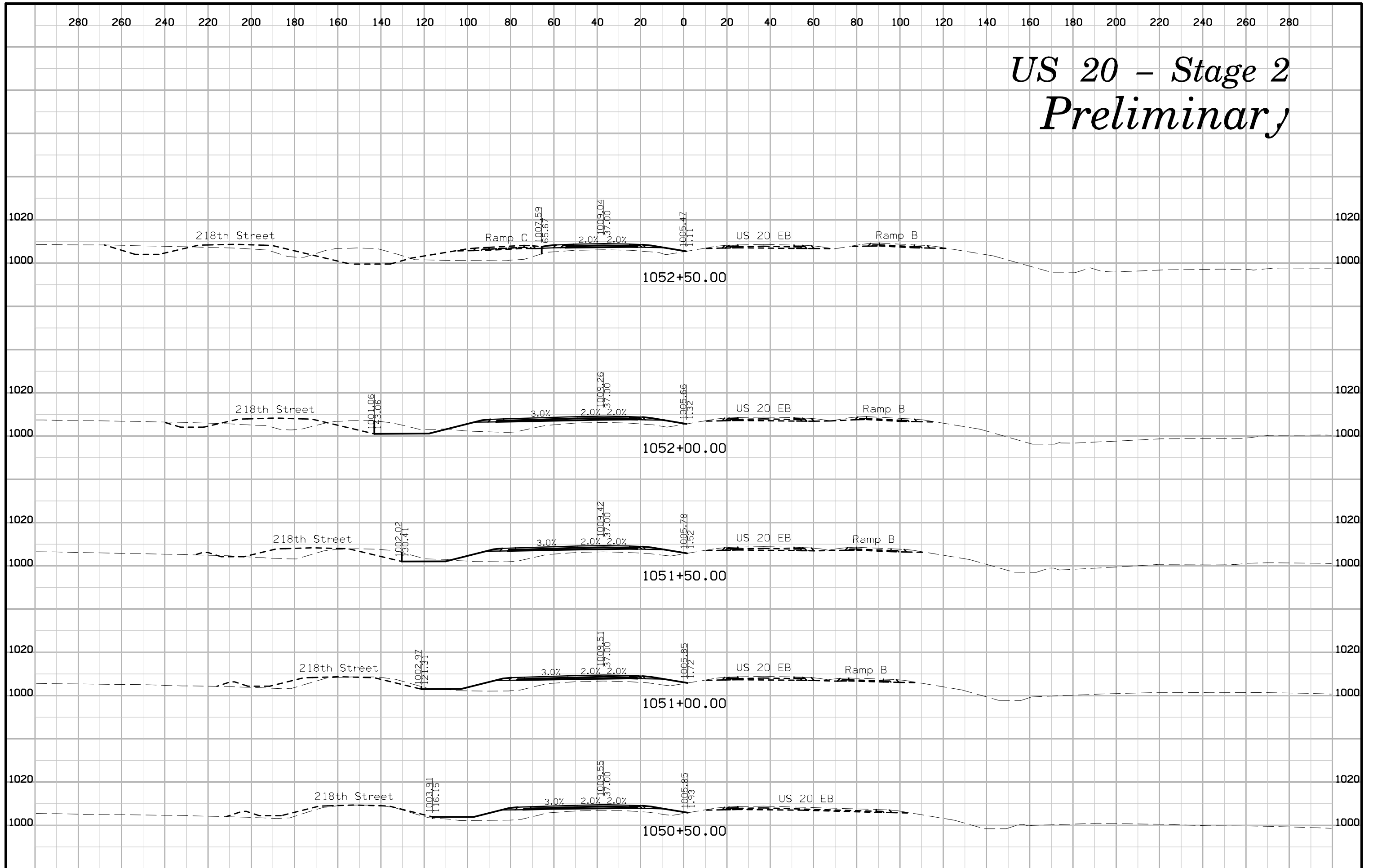




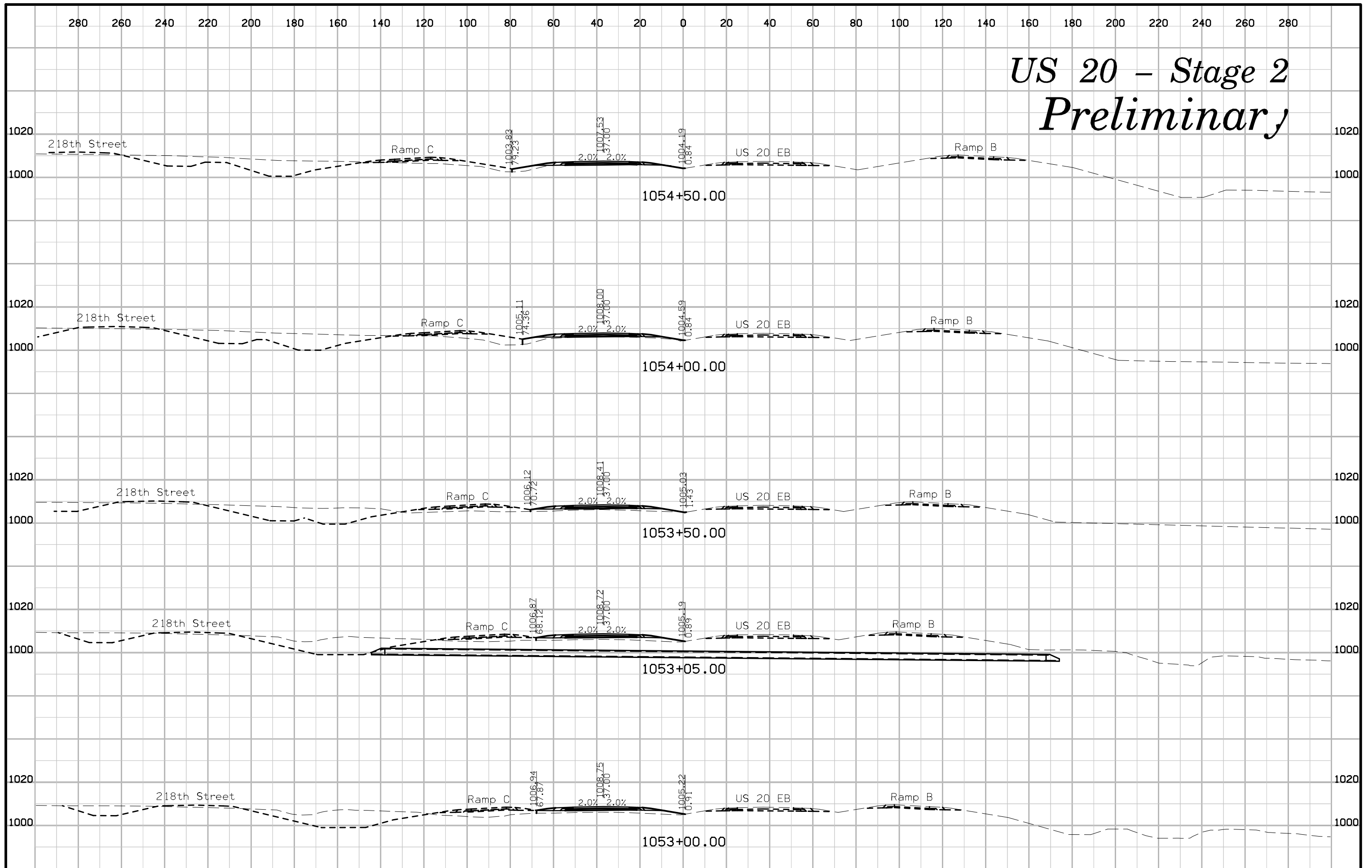
# US 20 - Stage 2 Preliminary



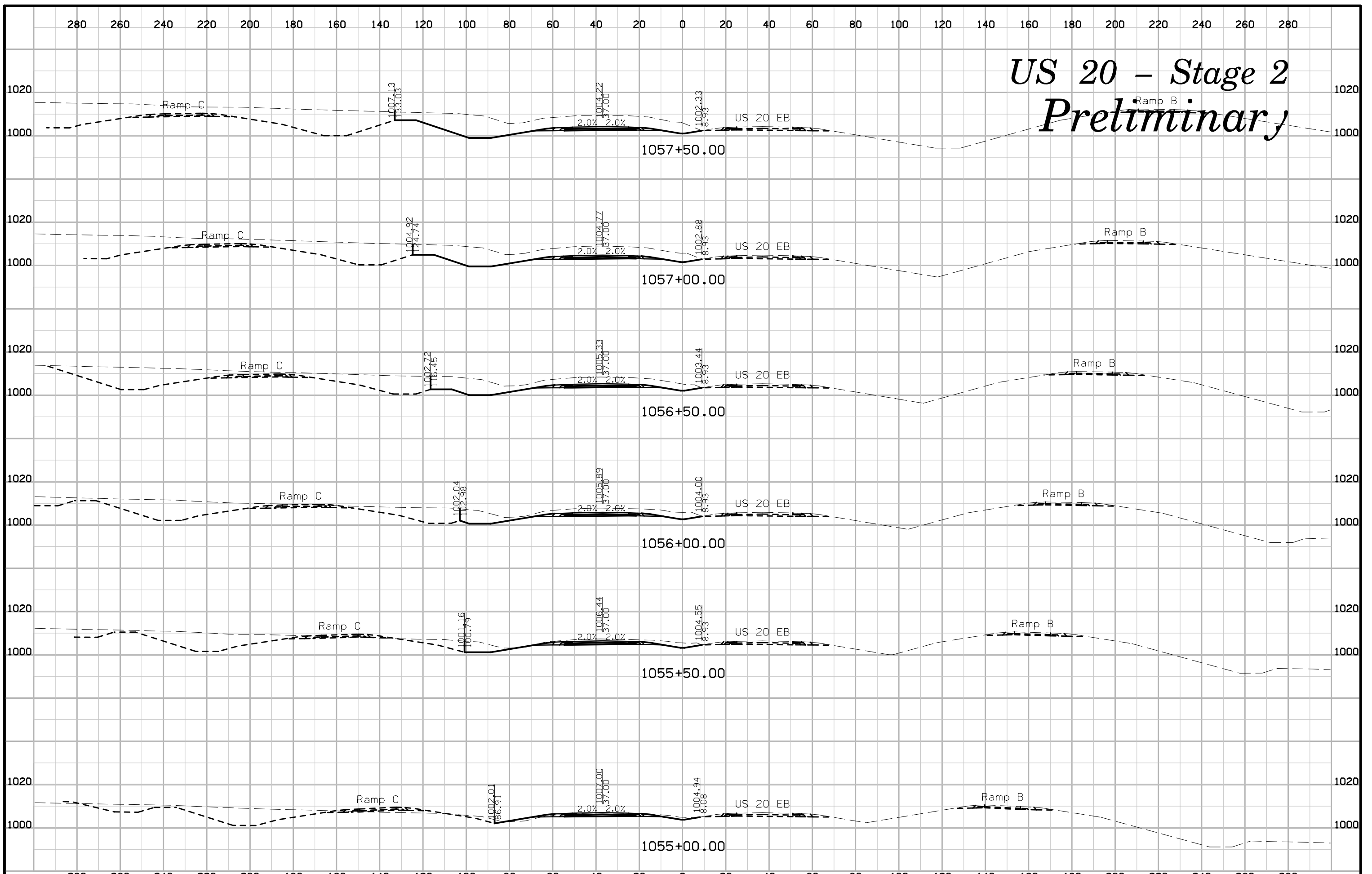
# US 20 - Stage 2 Preliminary



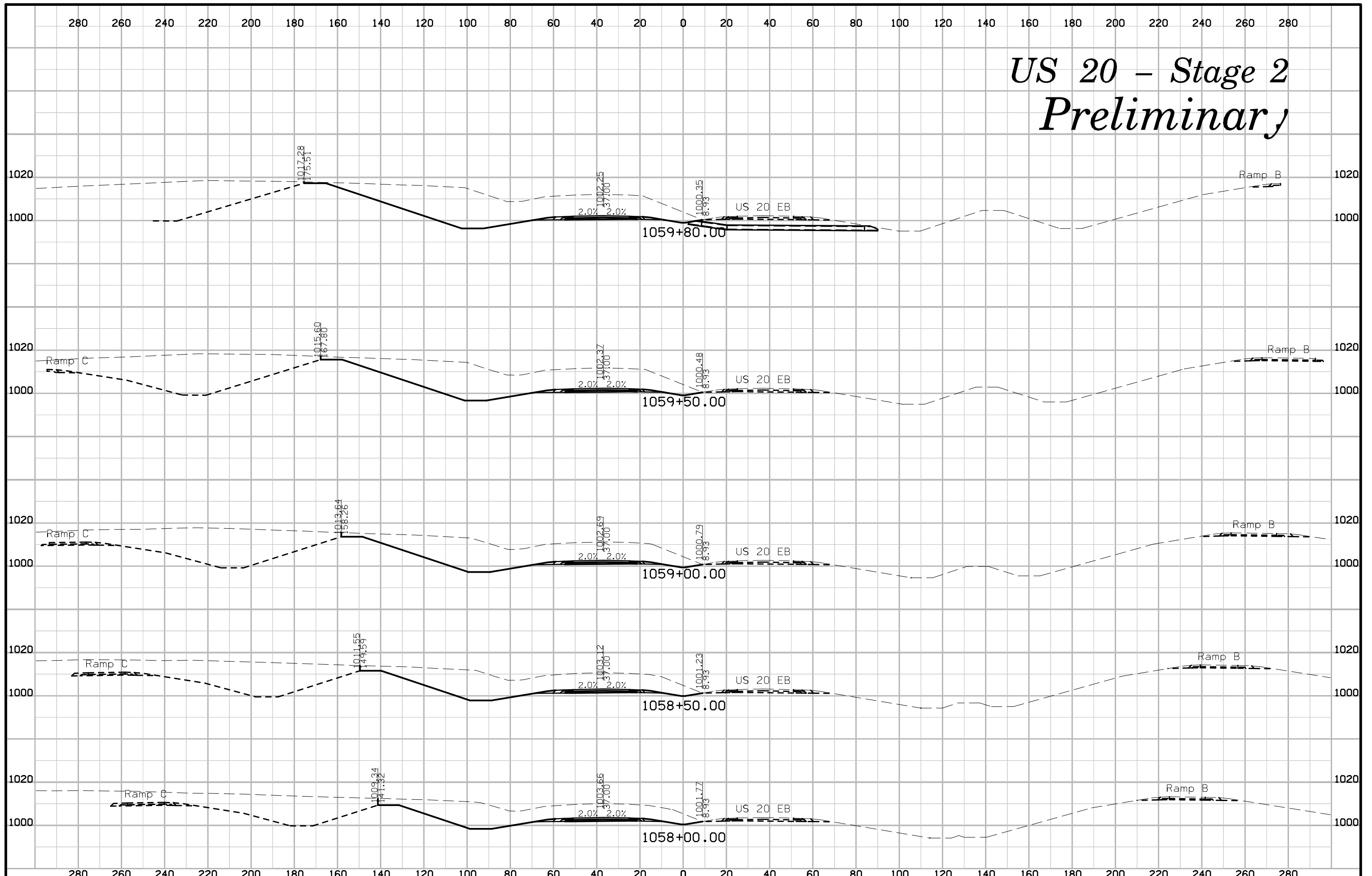
# US 20 - Stage 2 Preliminary



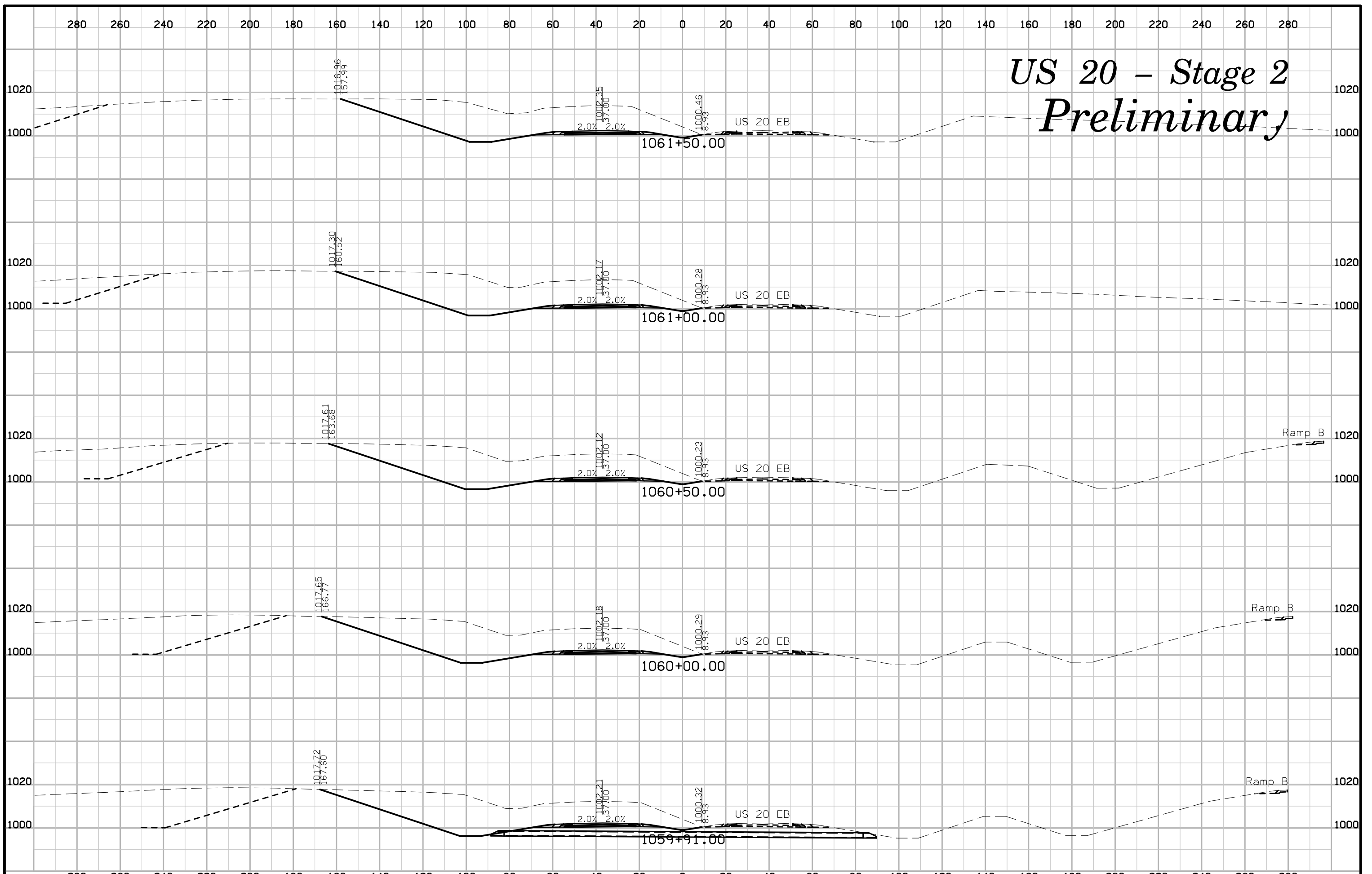
# US 20 - Stage 2 Preliminary



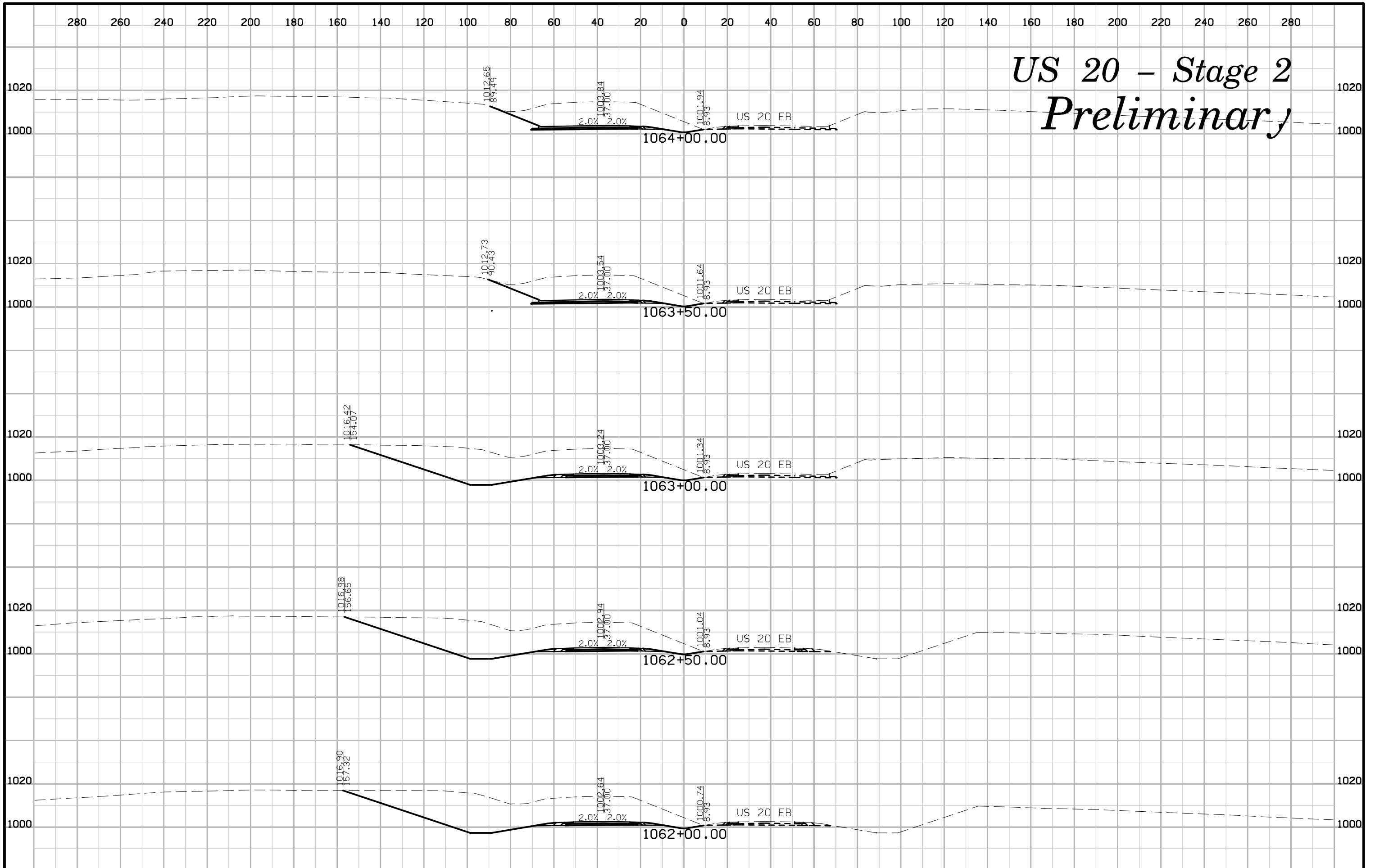
# US 20 - Stage 2 Preliminary



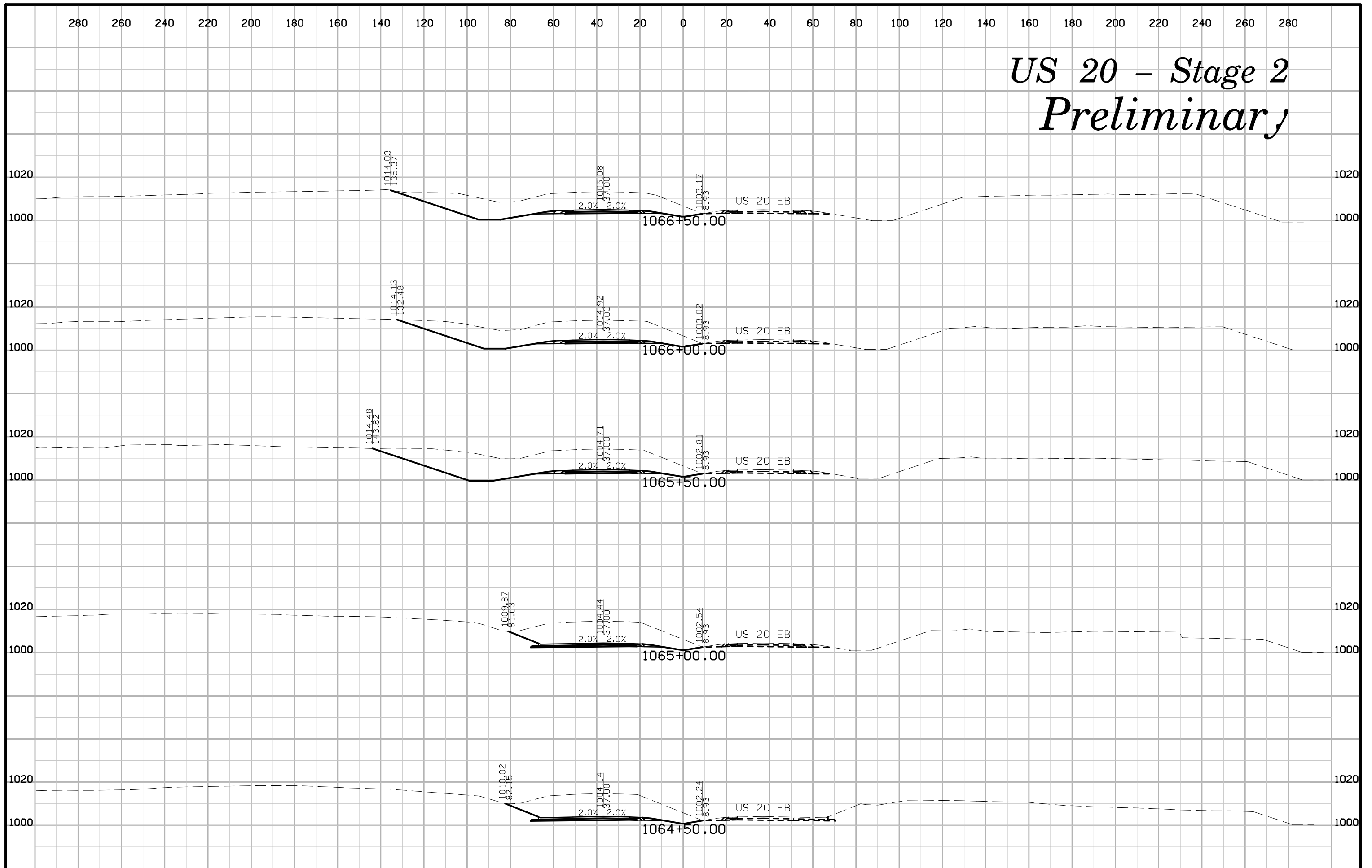
# US 20 - Stage 2 Preliminary



# US 20 - Stage 2 Preliminary

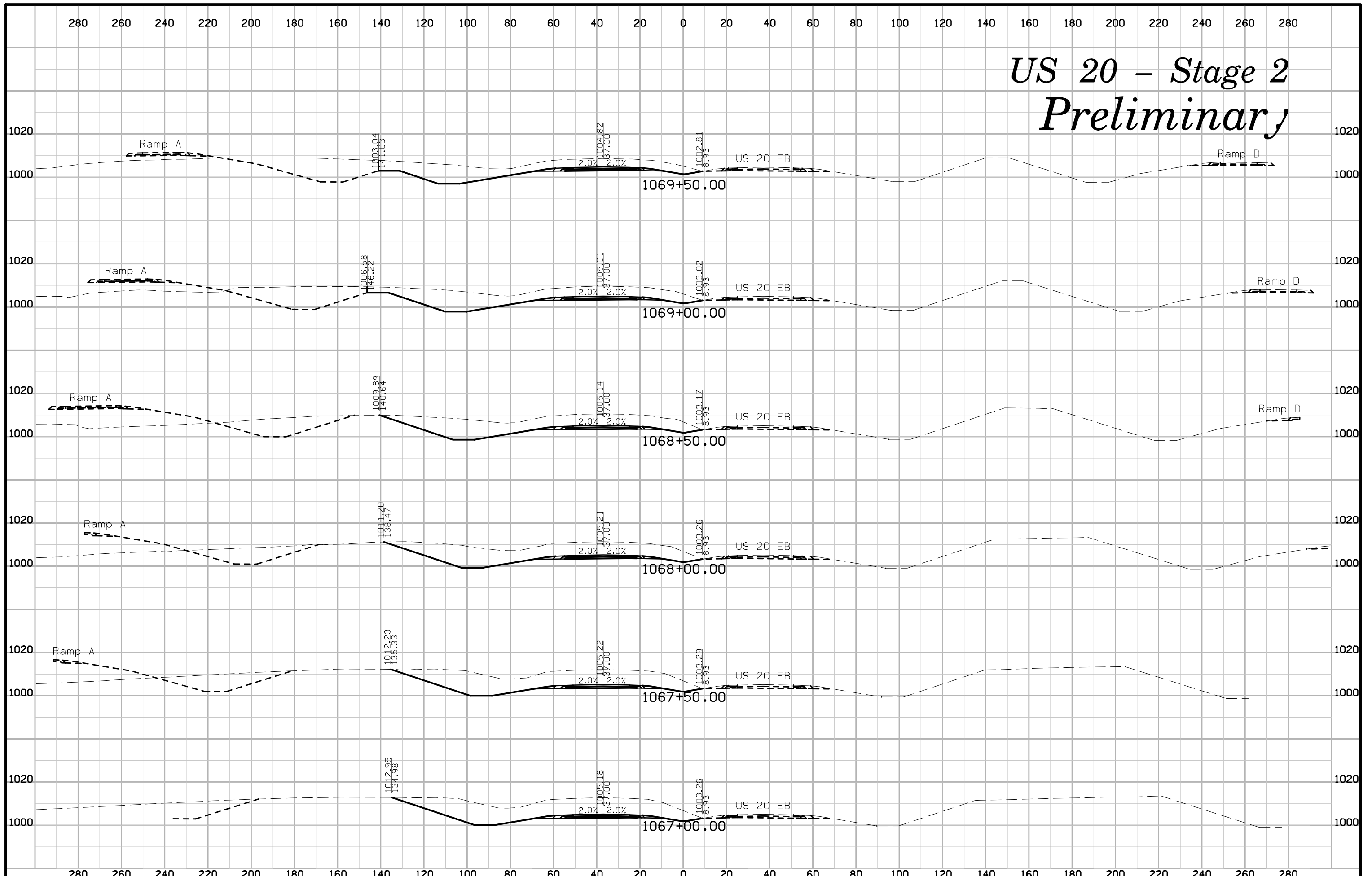


# US 20 - Stage 2 Preliminary

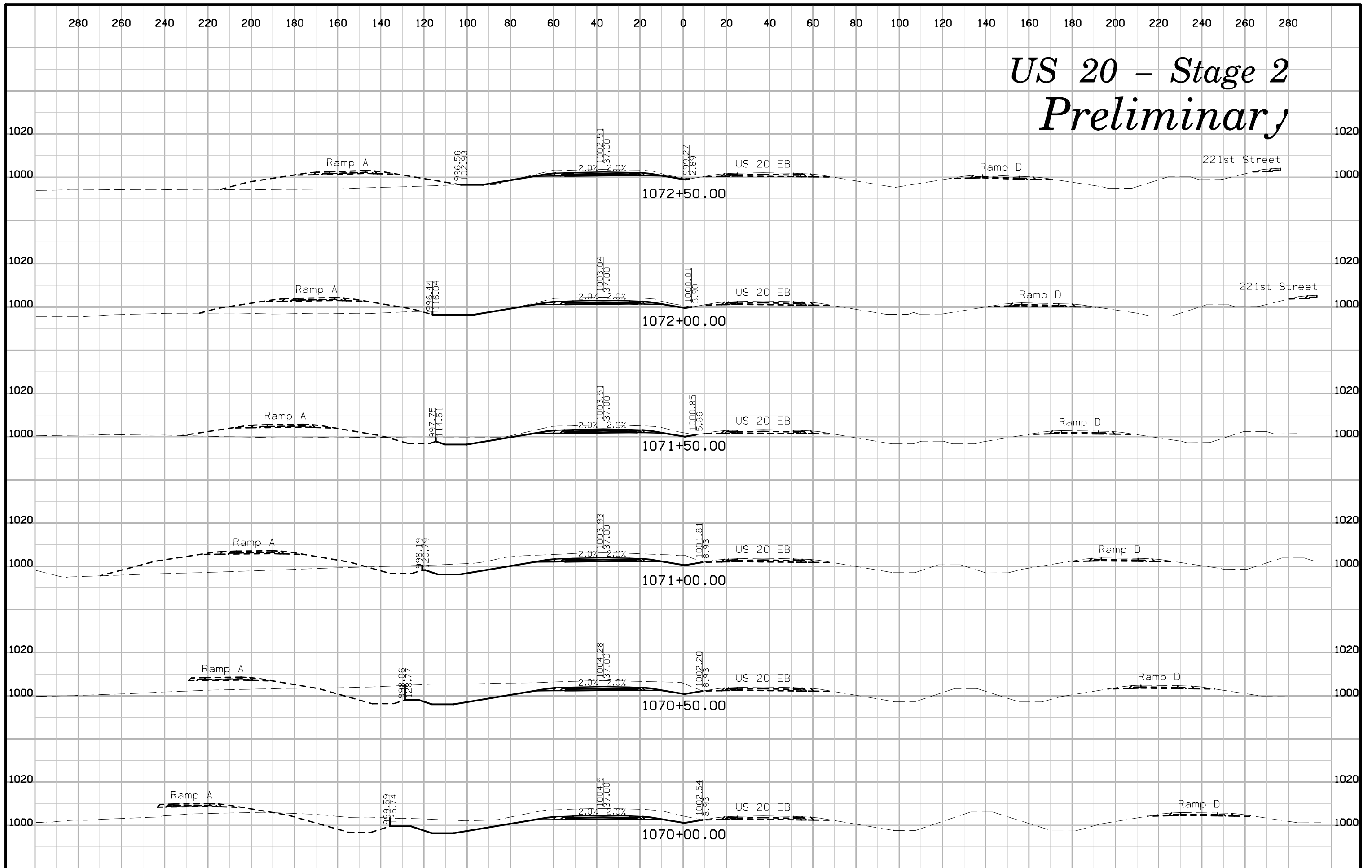




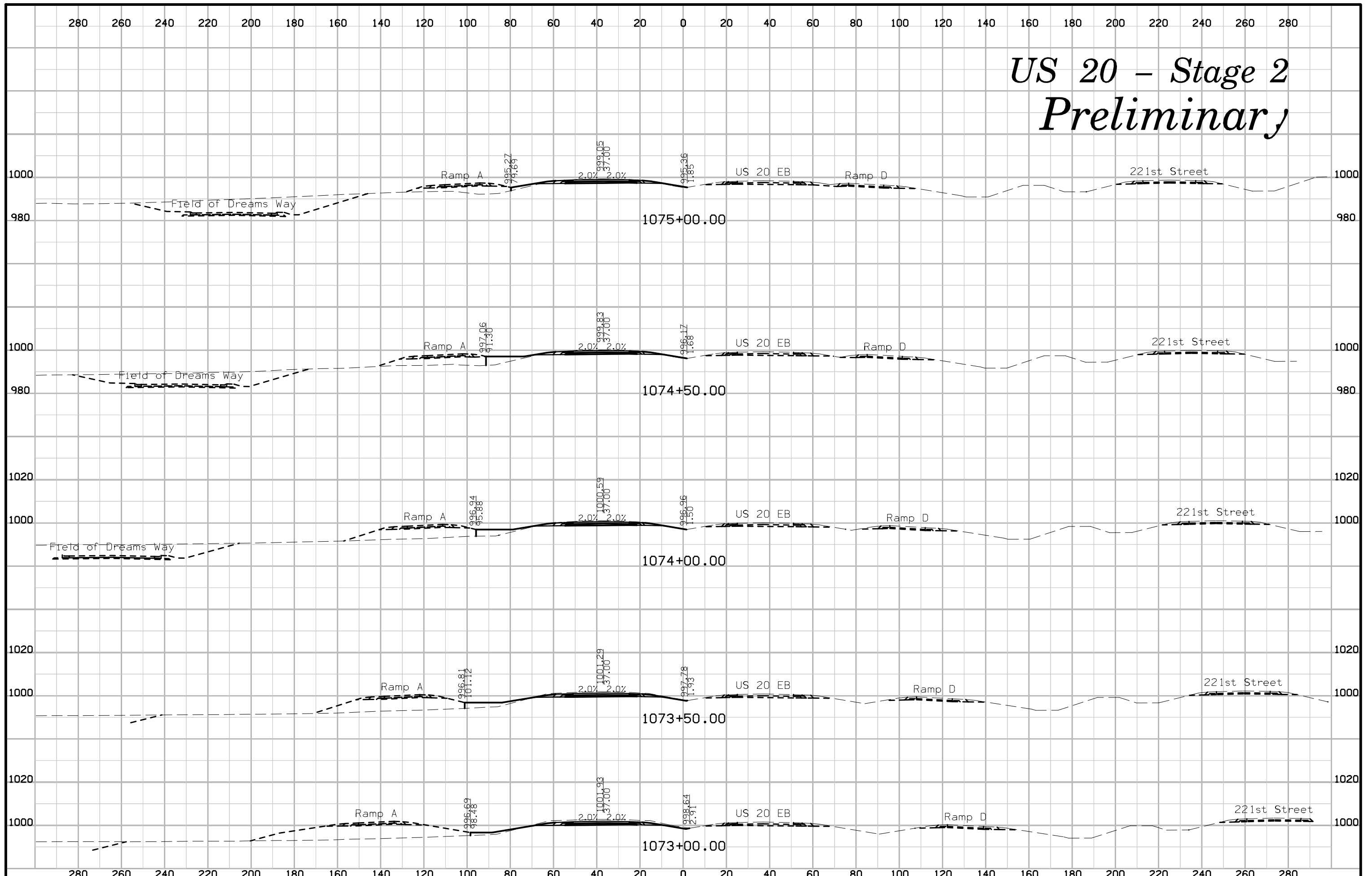
# US 20 - Stage 2 Preliminary



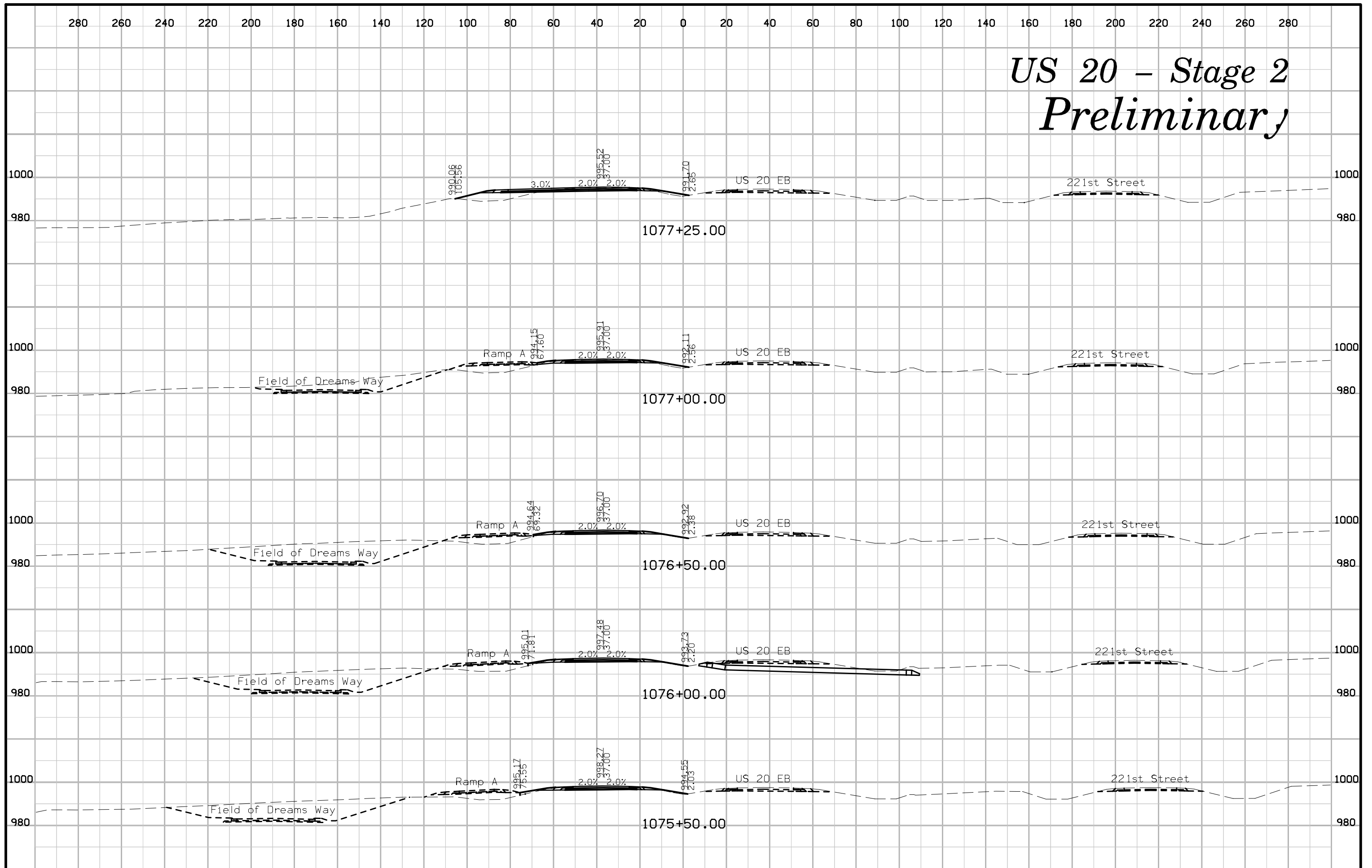
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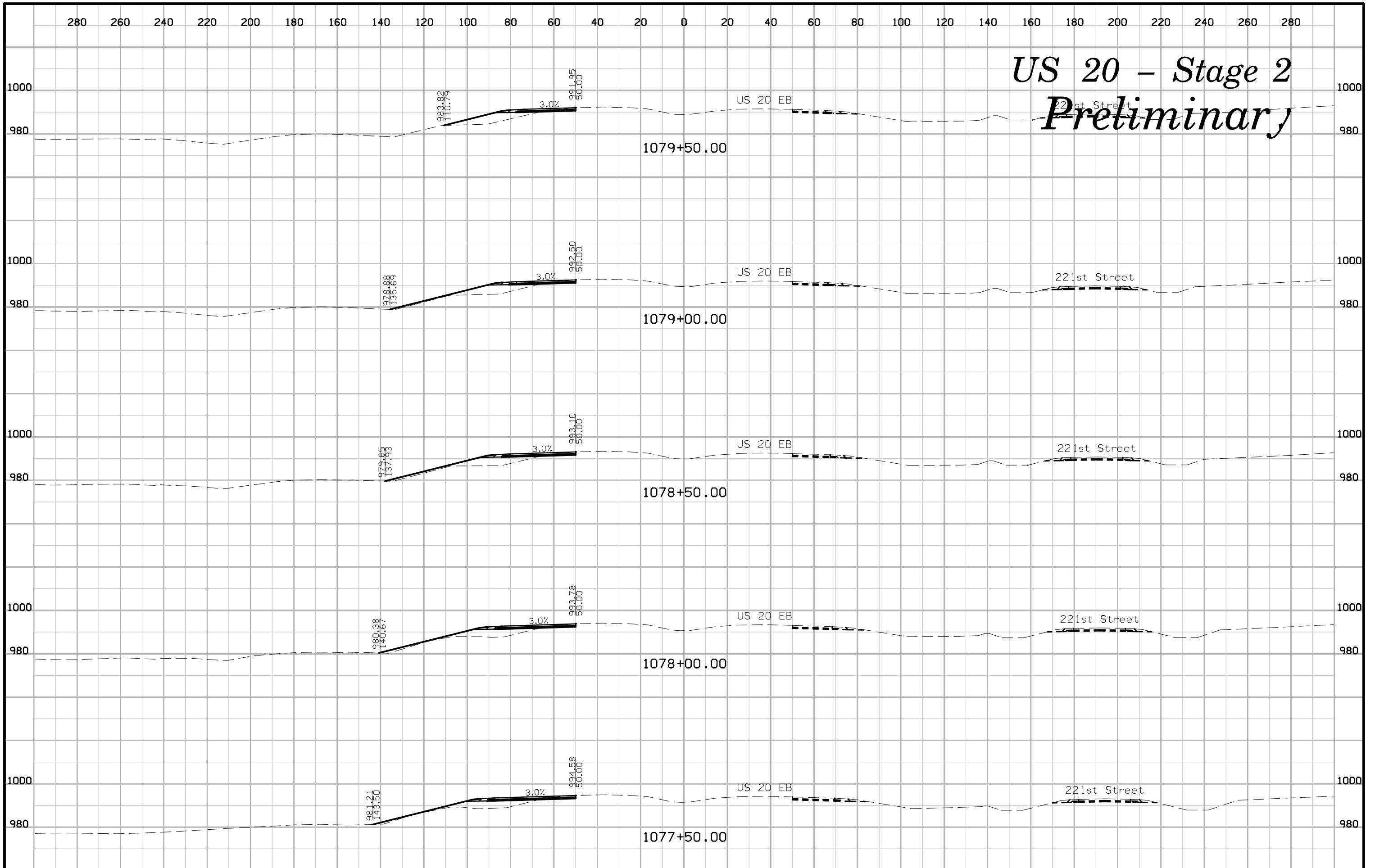
# US 20 - Stage 2 Preliminary



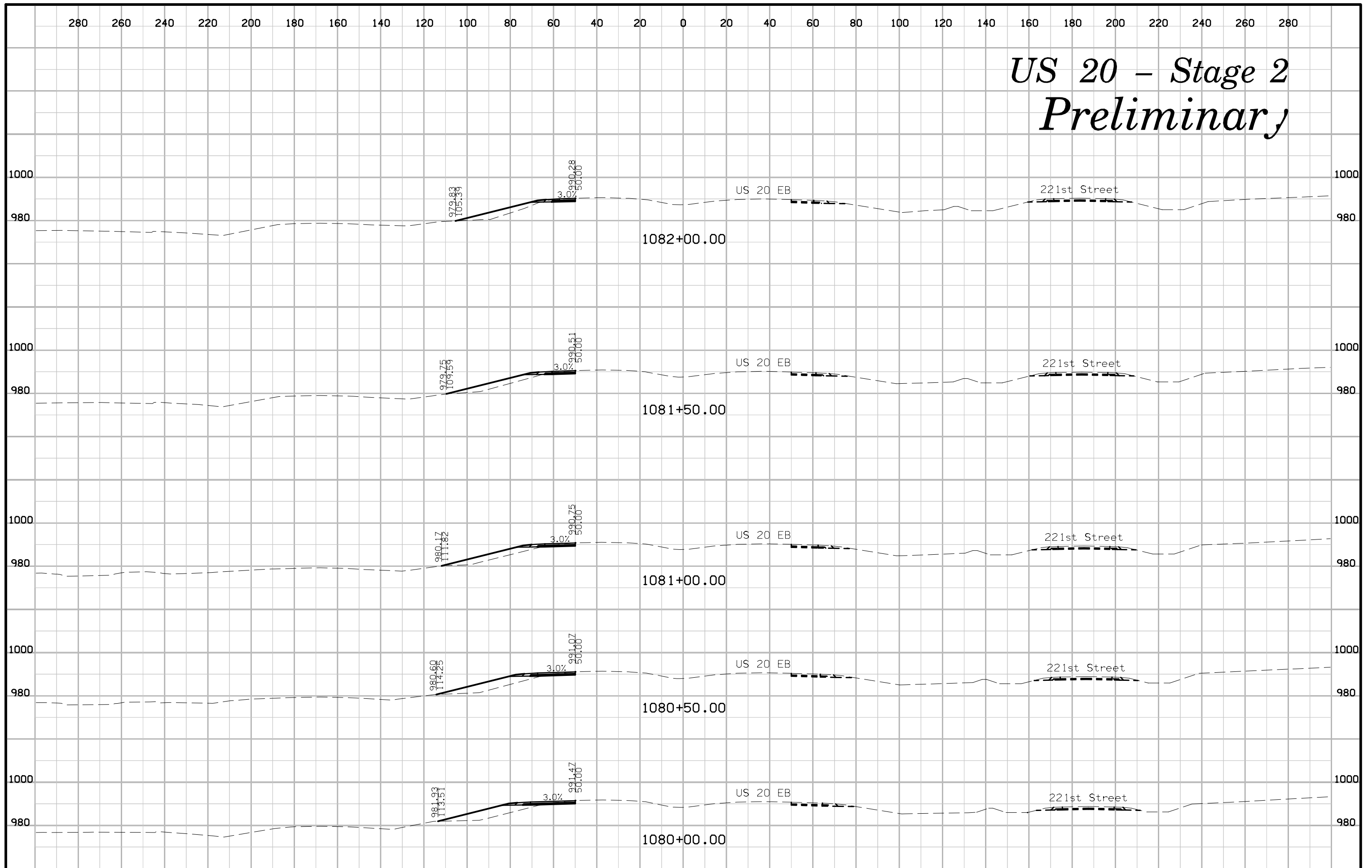
# US 20 - Stage 2 Preliminary



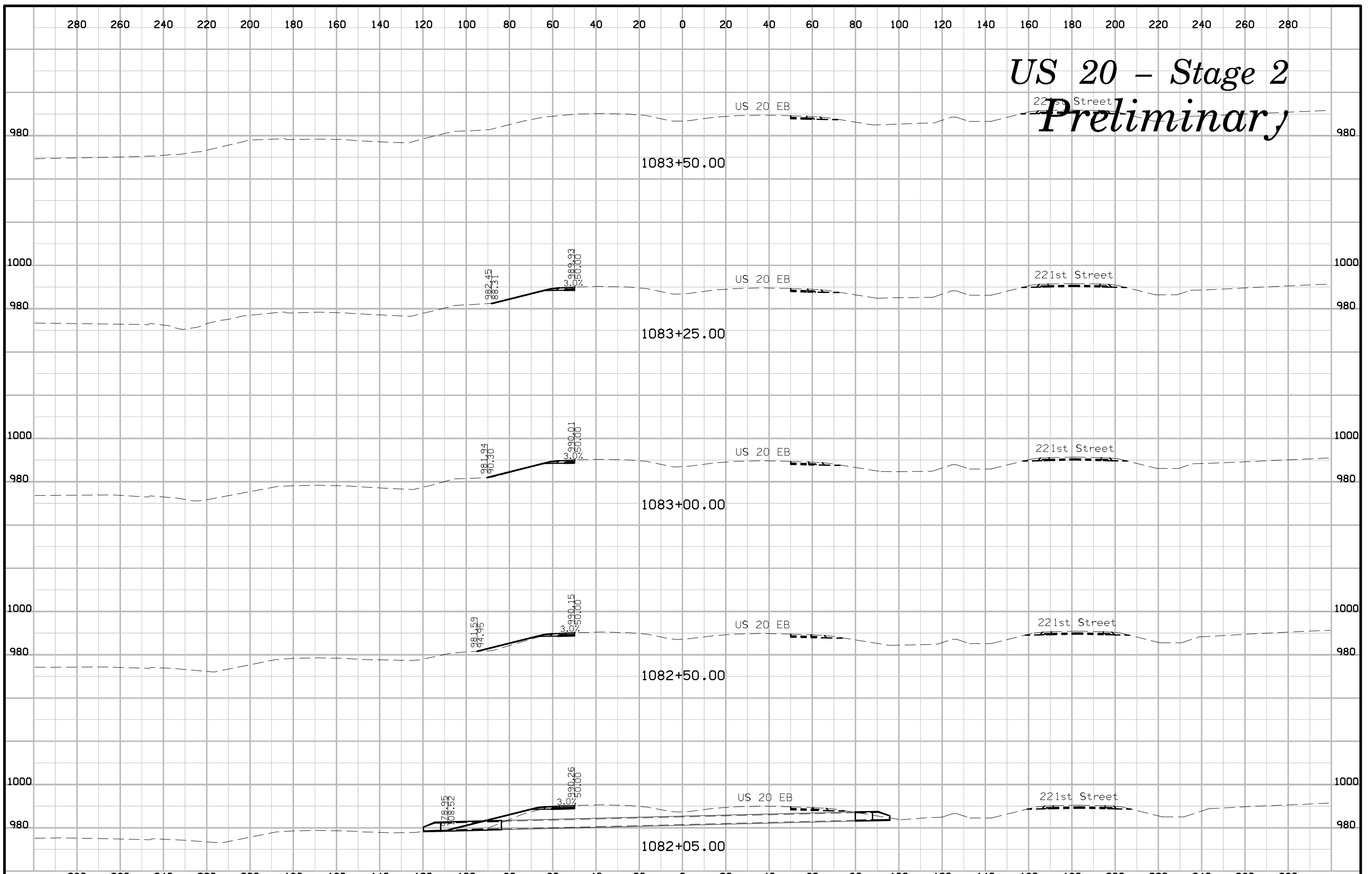
# US 20 - Stage 2 Preliminary



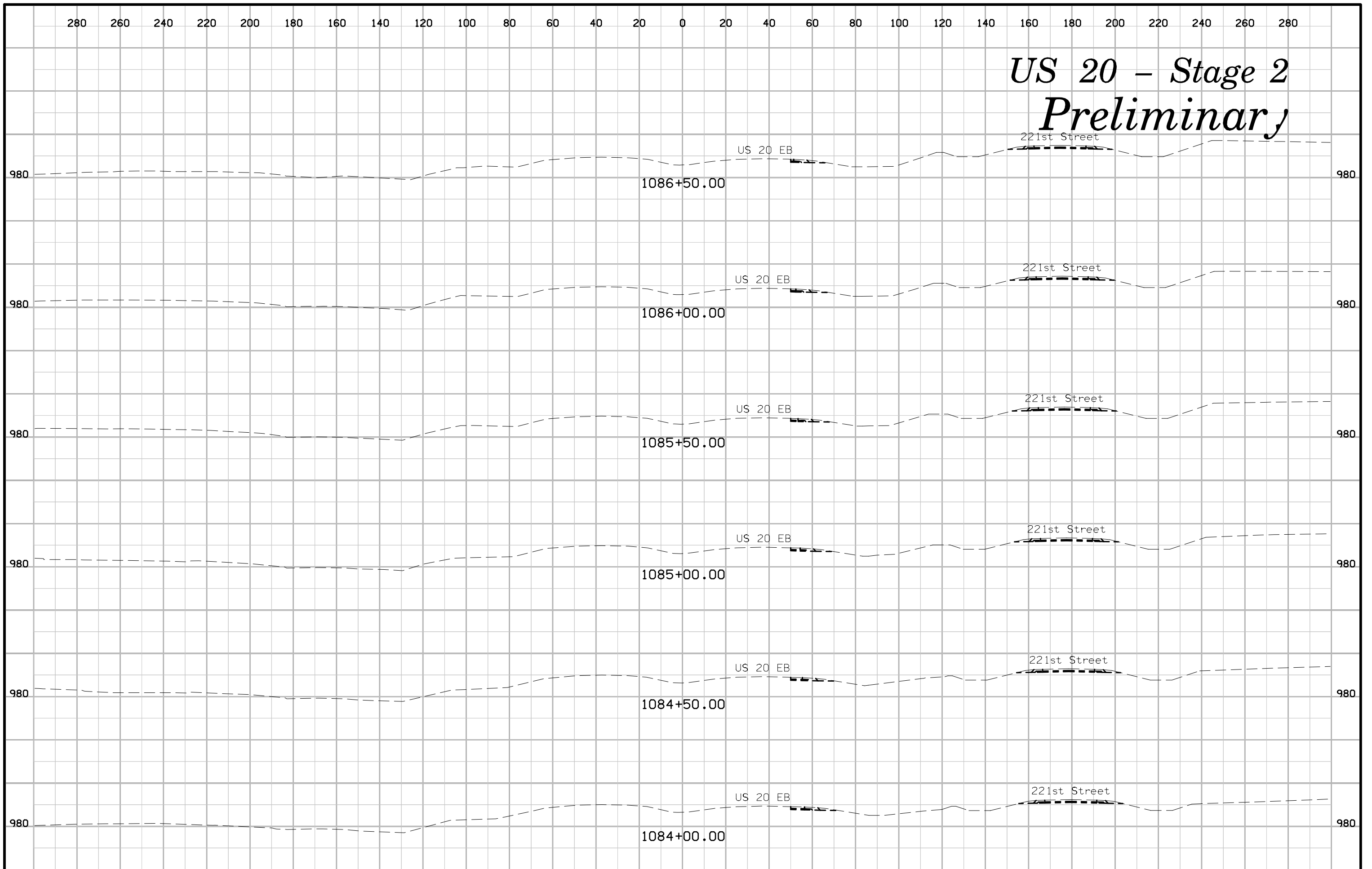
# US 20 - Stage 2 Preliminary



# US 20 - Stage 2 Preliminary

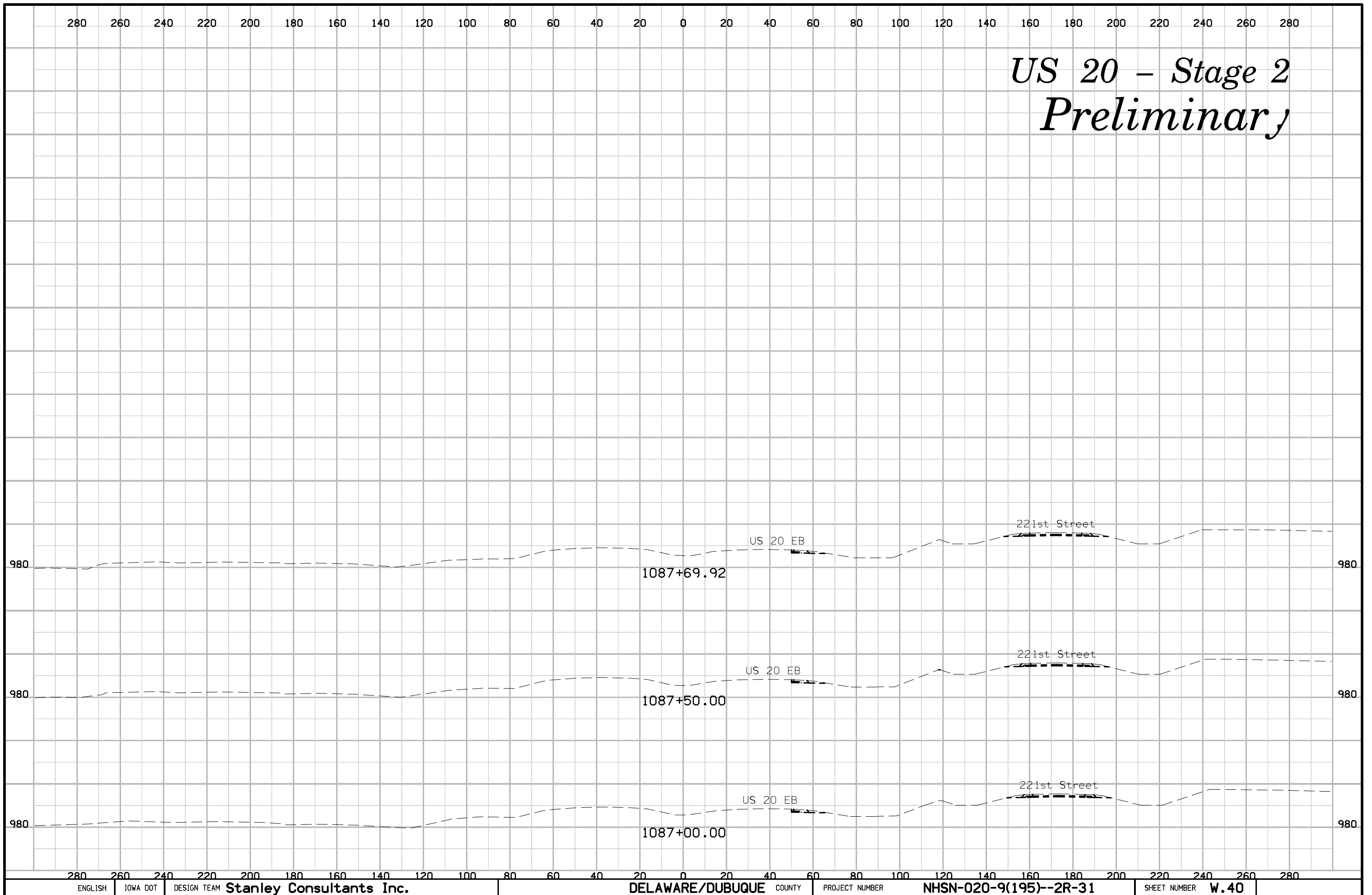


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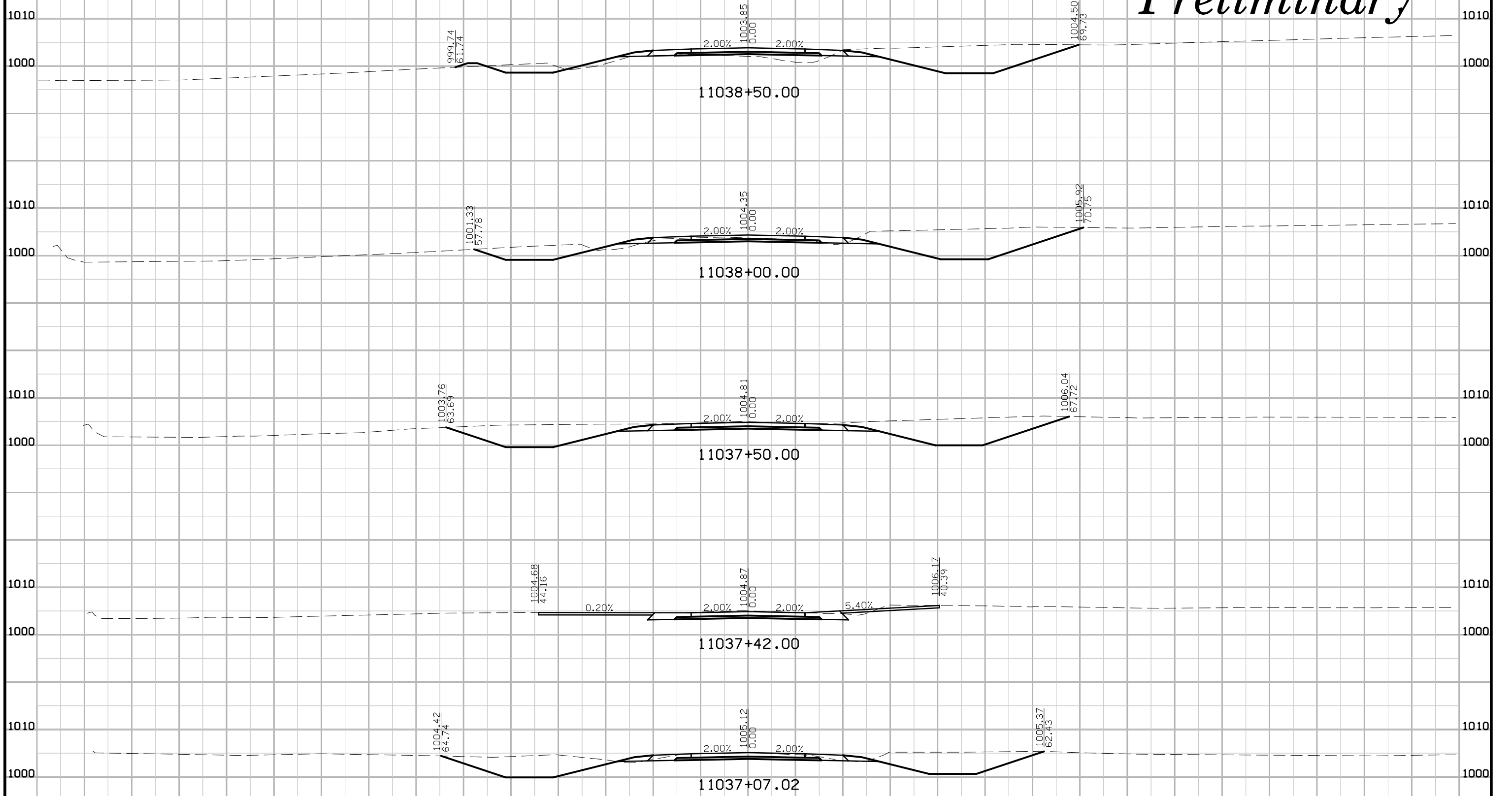


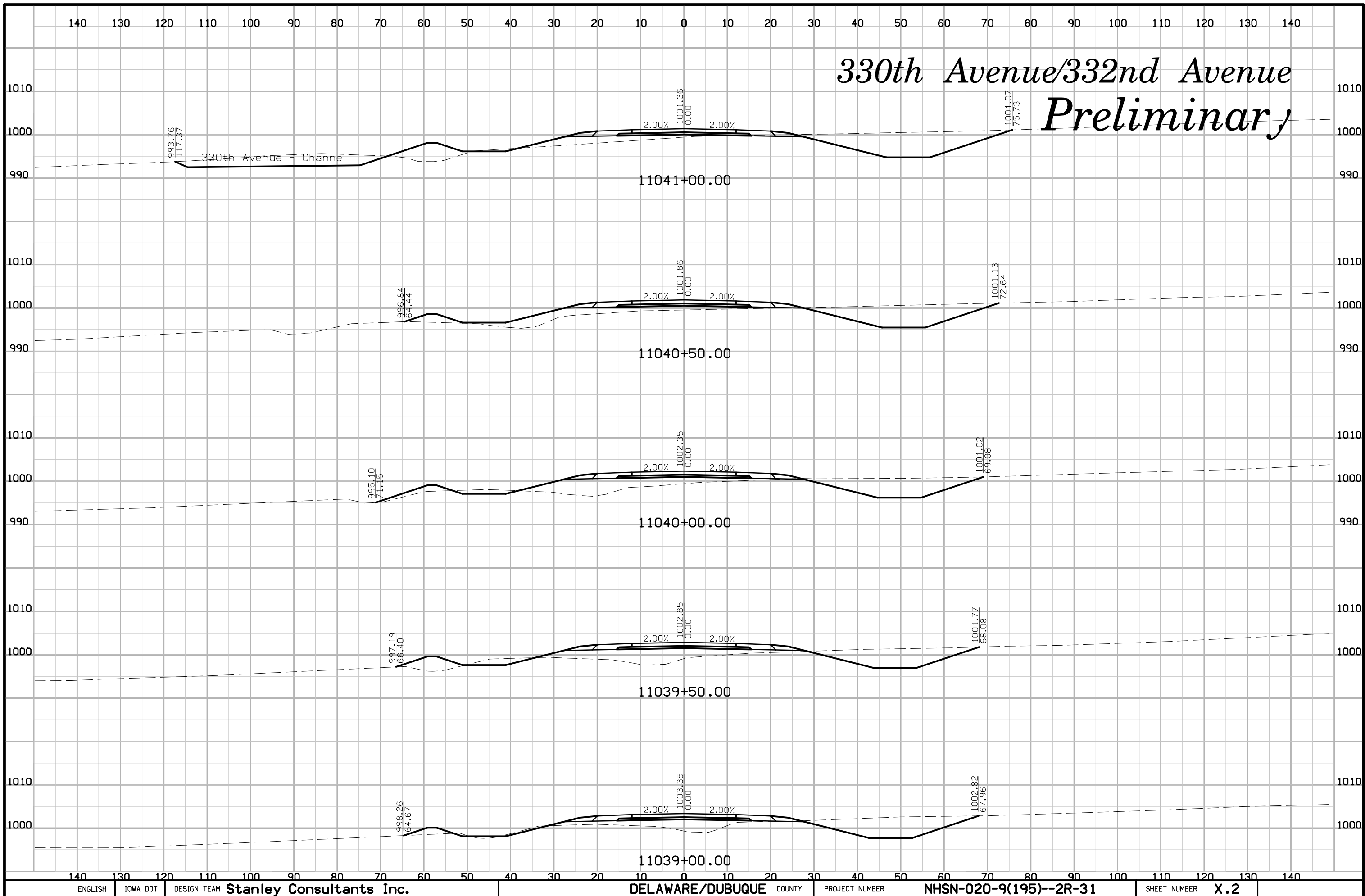
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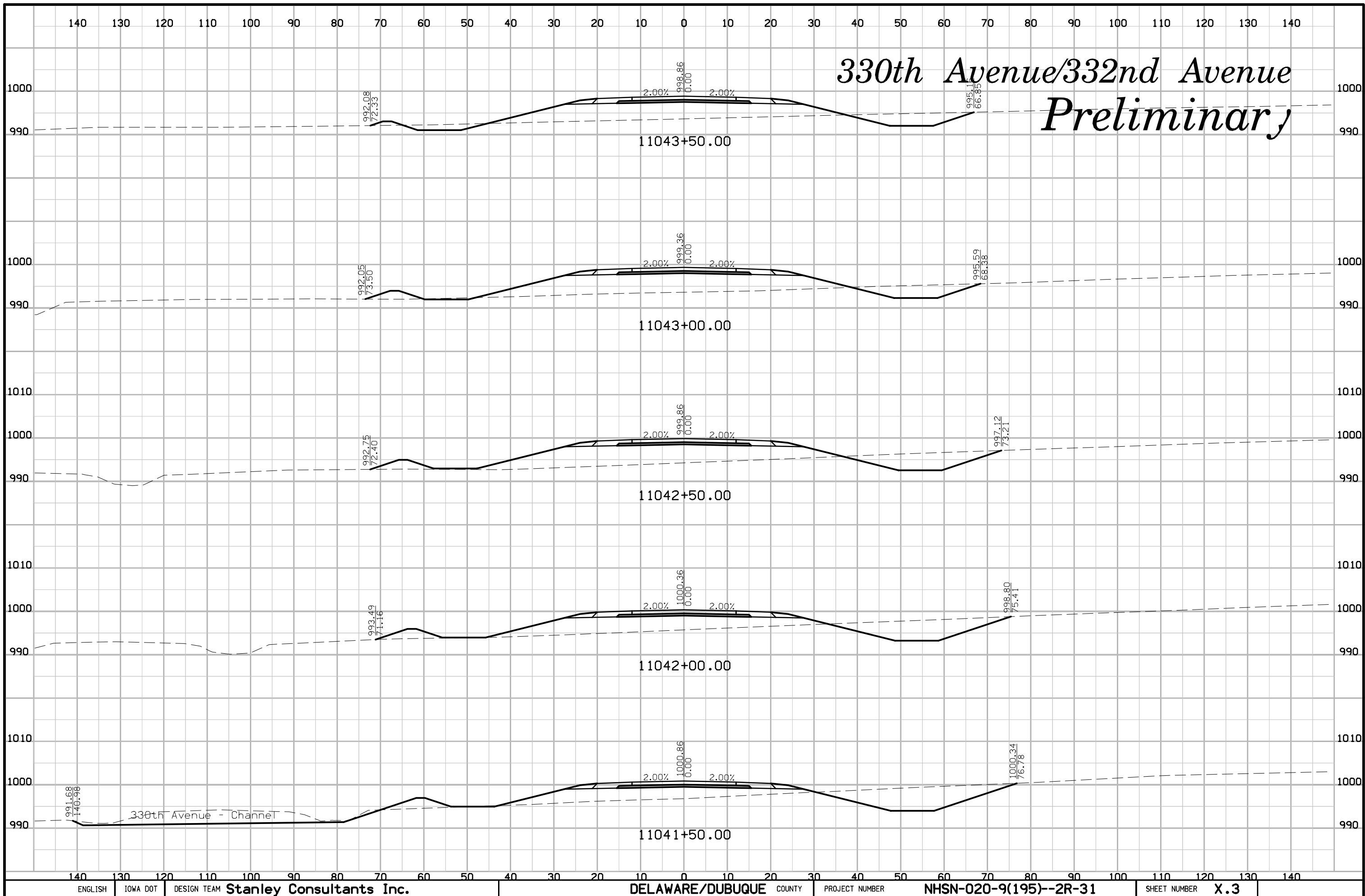


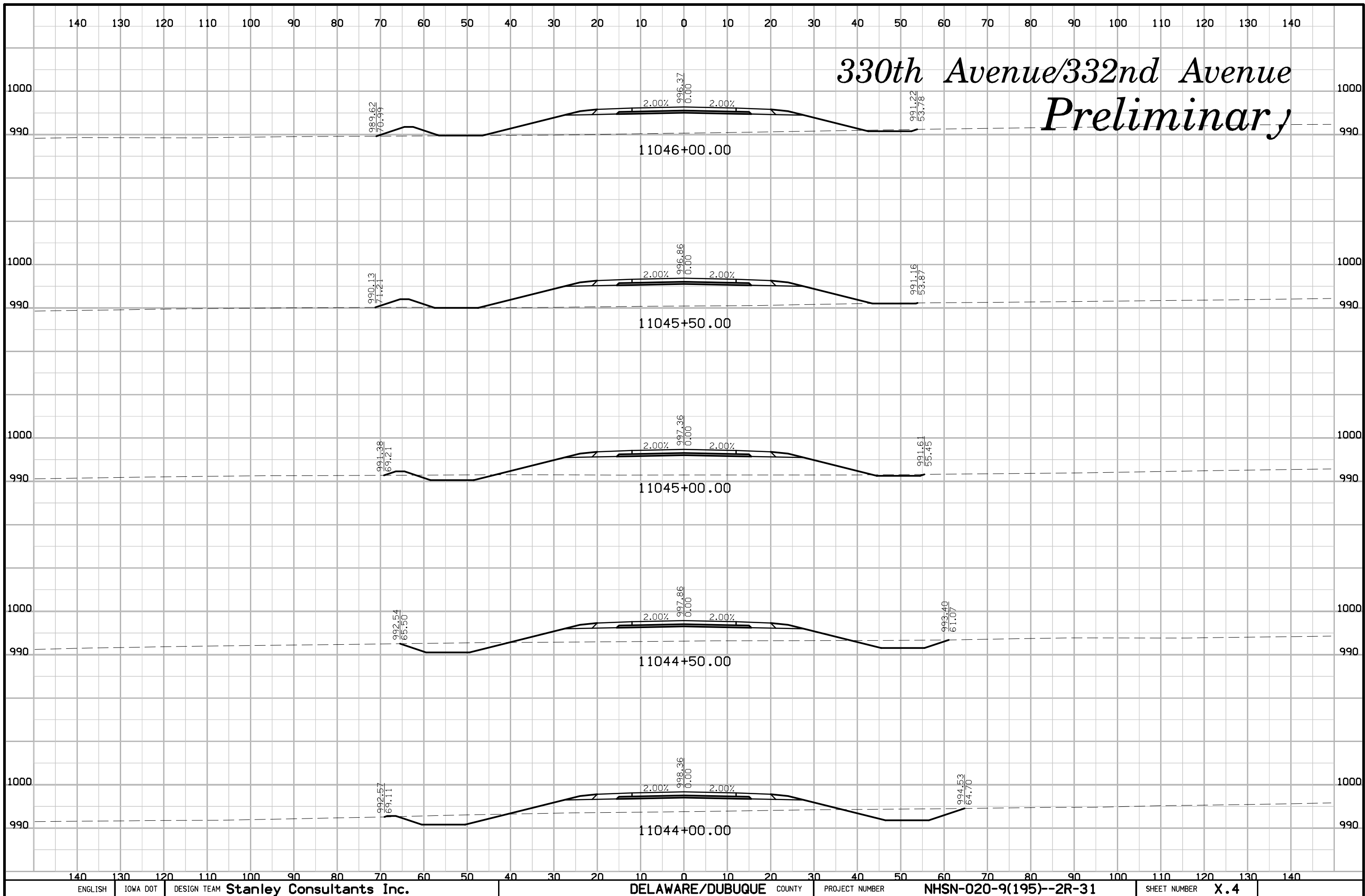
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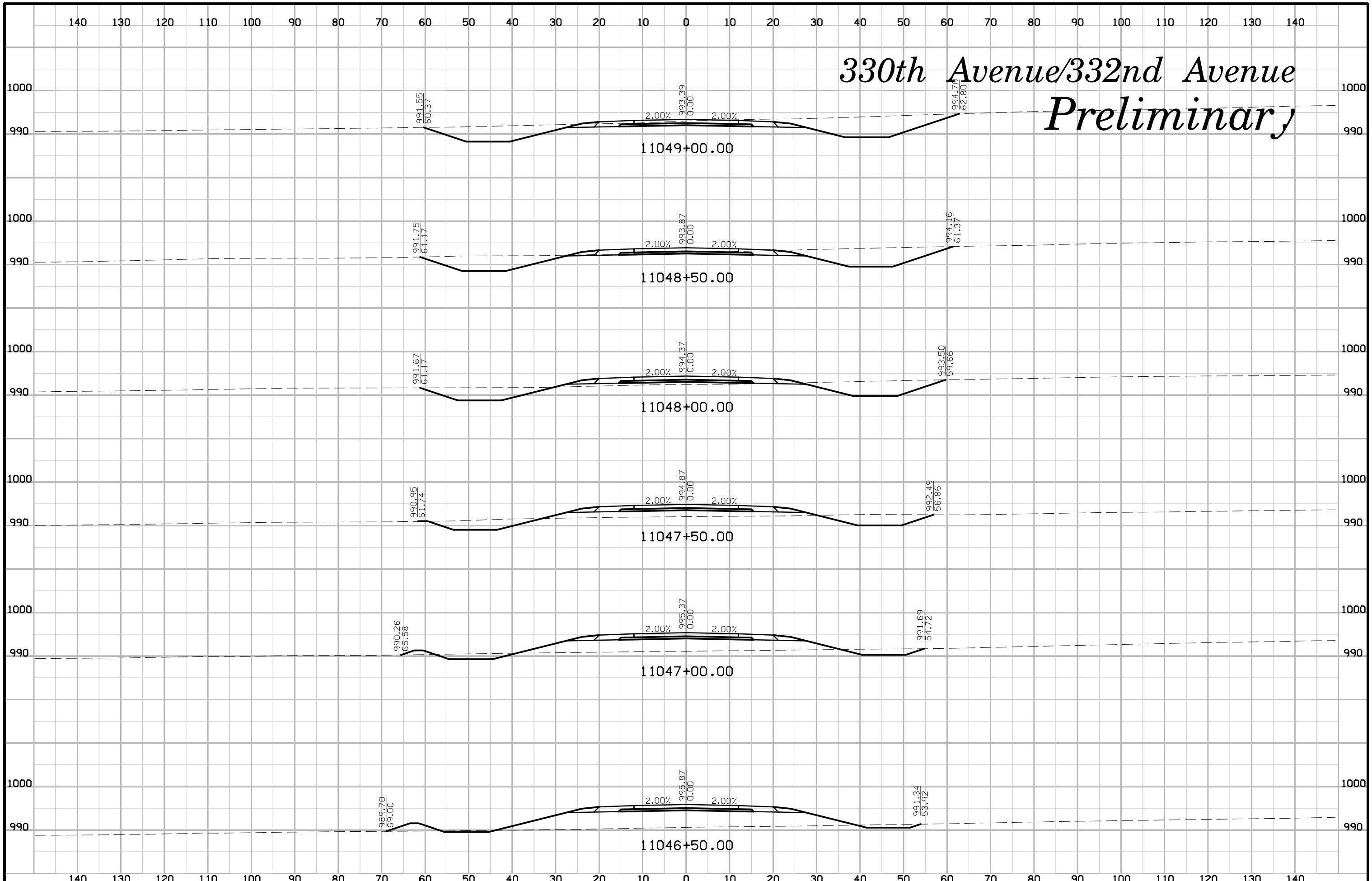
# 330th Avenue/332nd Avenue Preliminary







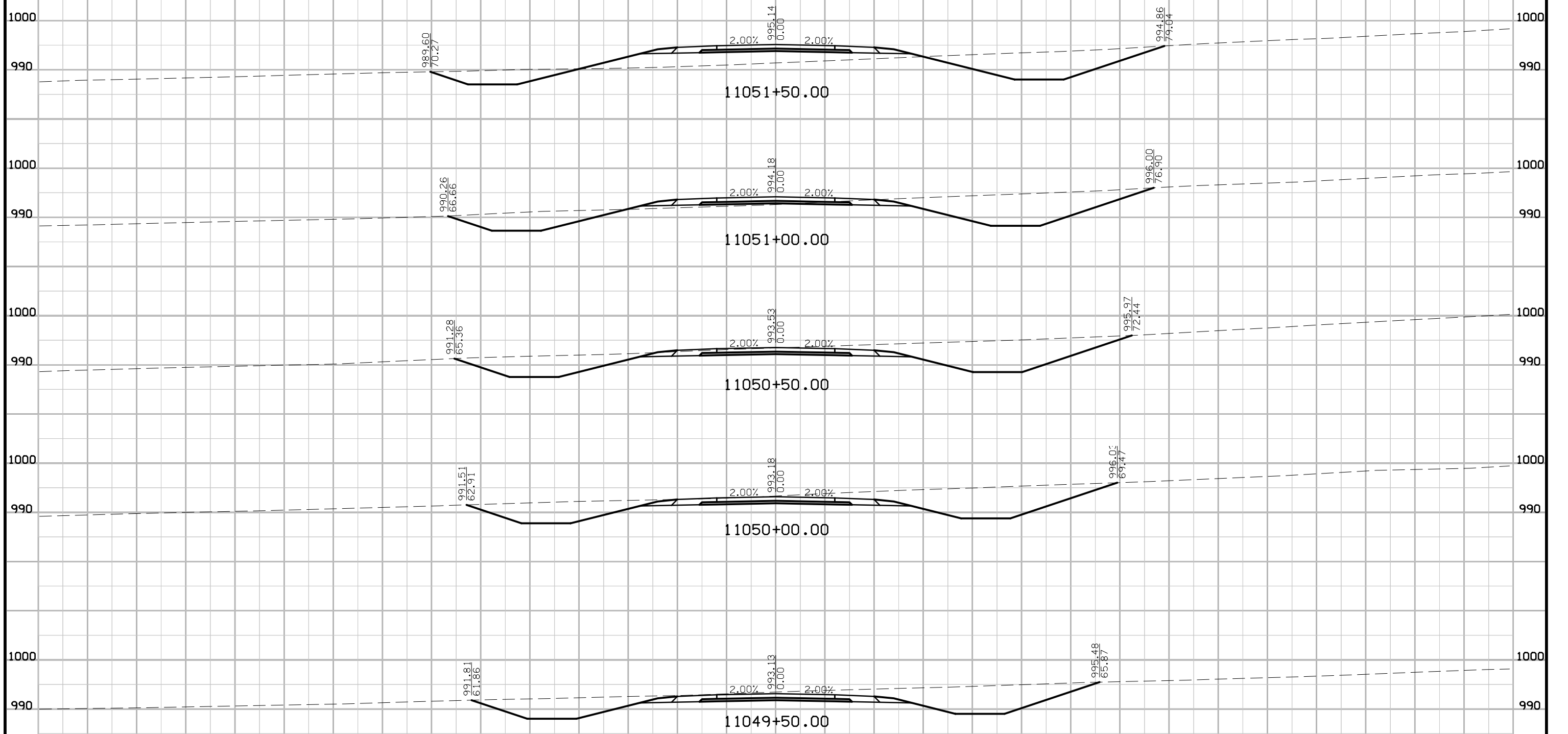




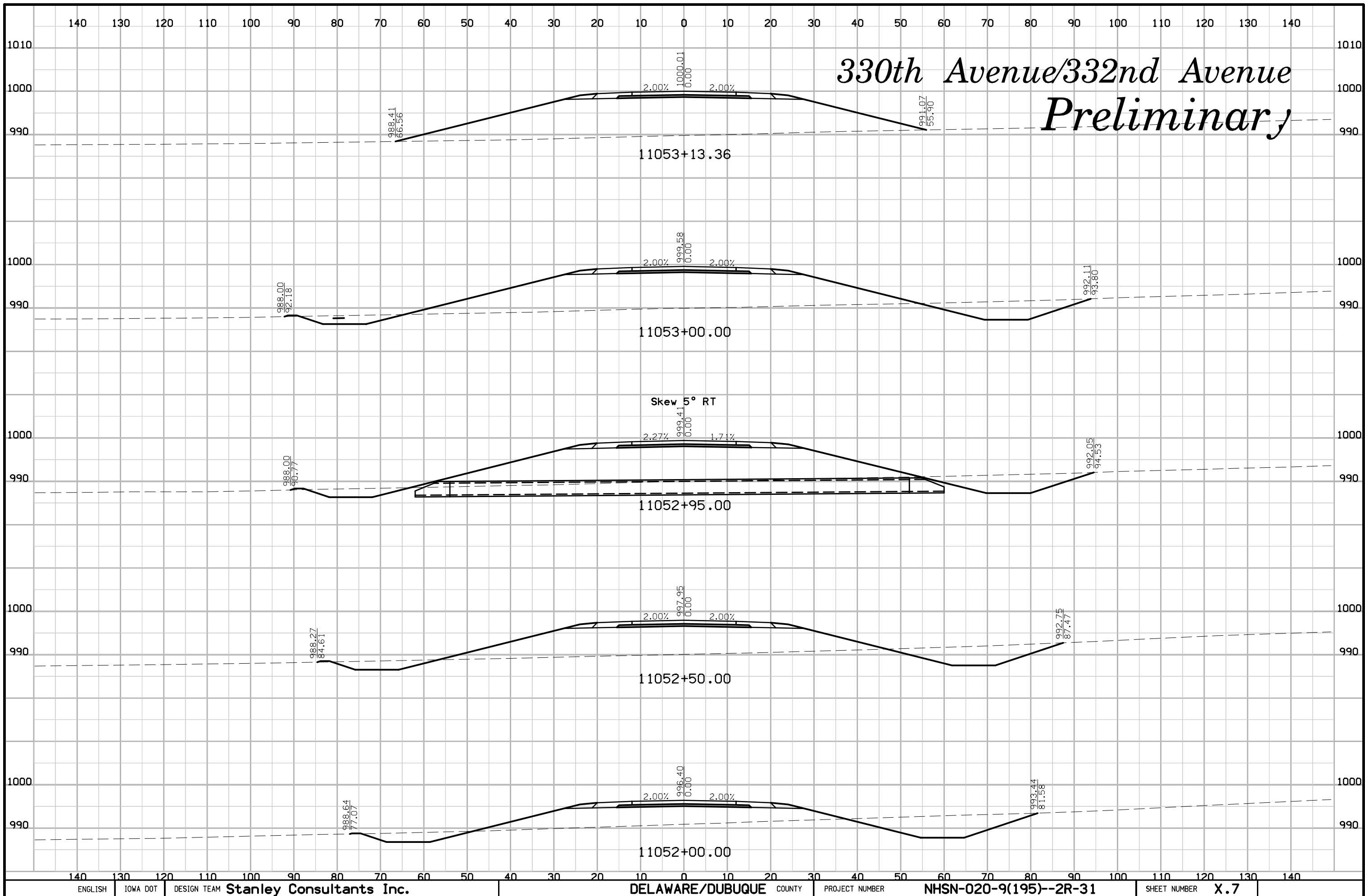
# 330th Avenue/332nd Avenue Preliminary

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# 330th Avenue/332nd Avenue Preliminary



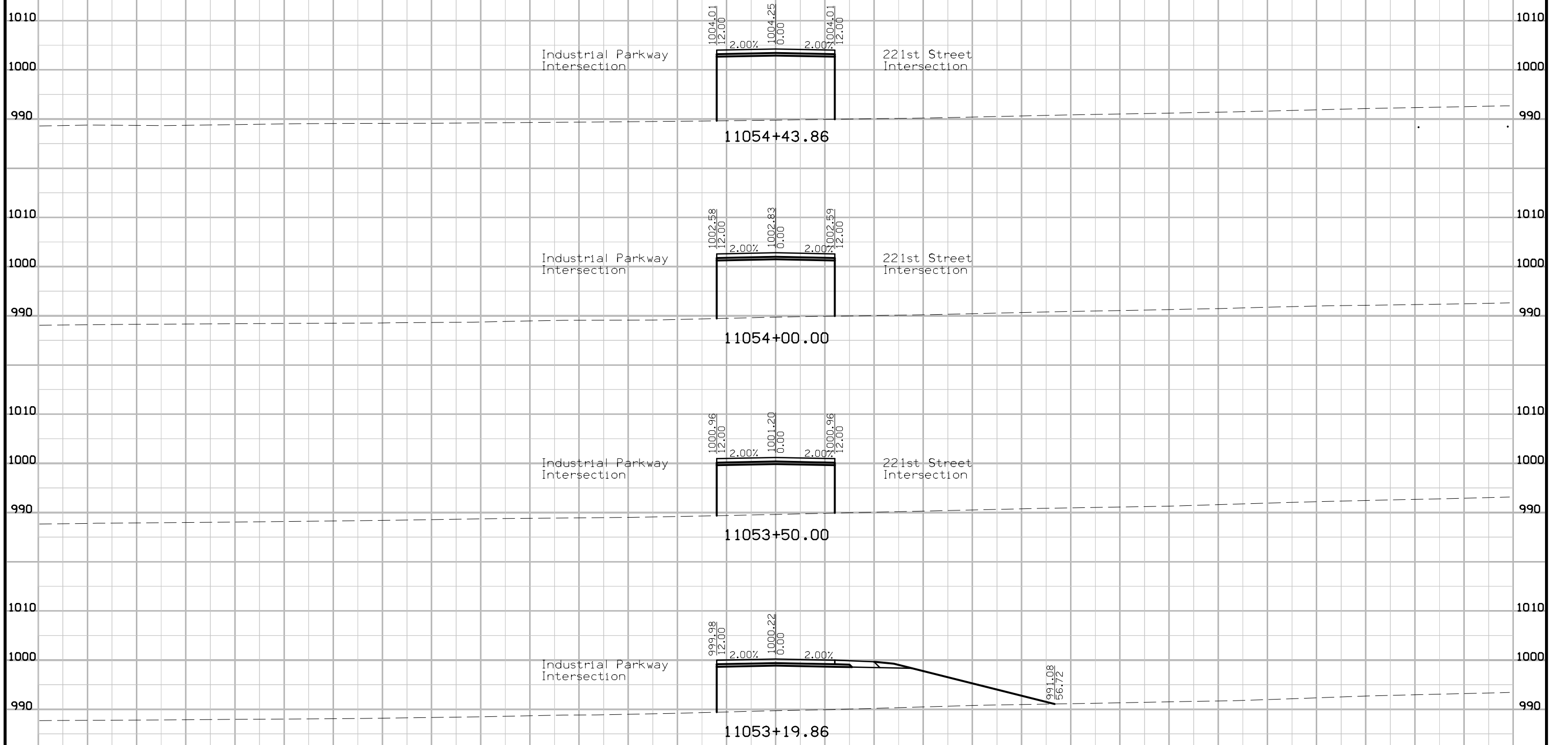
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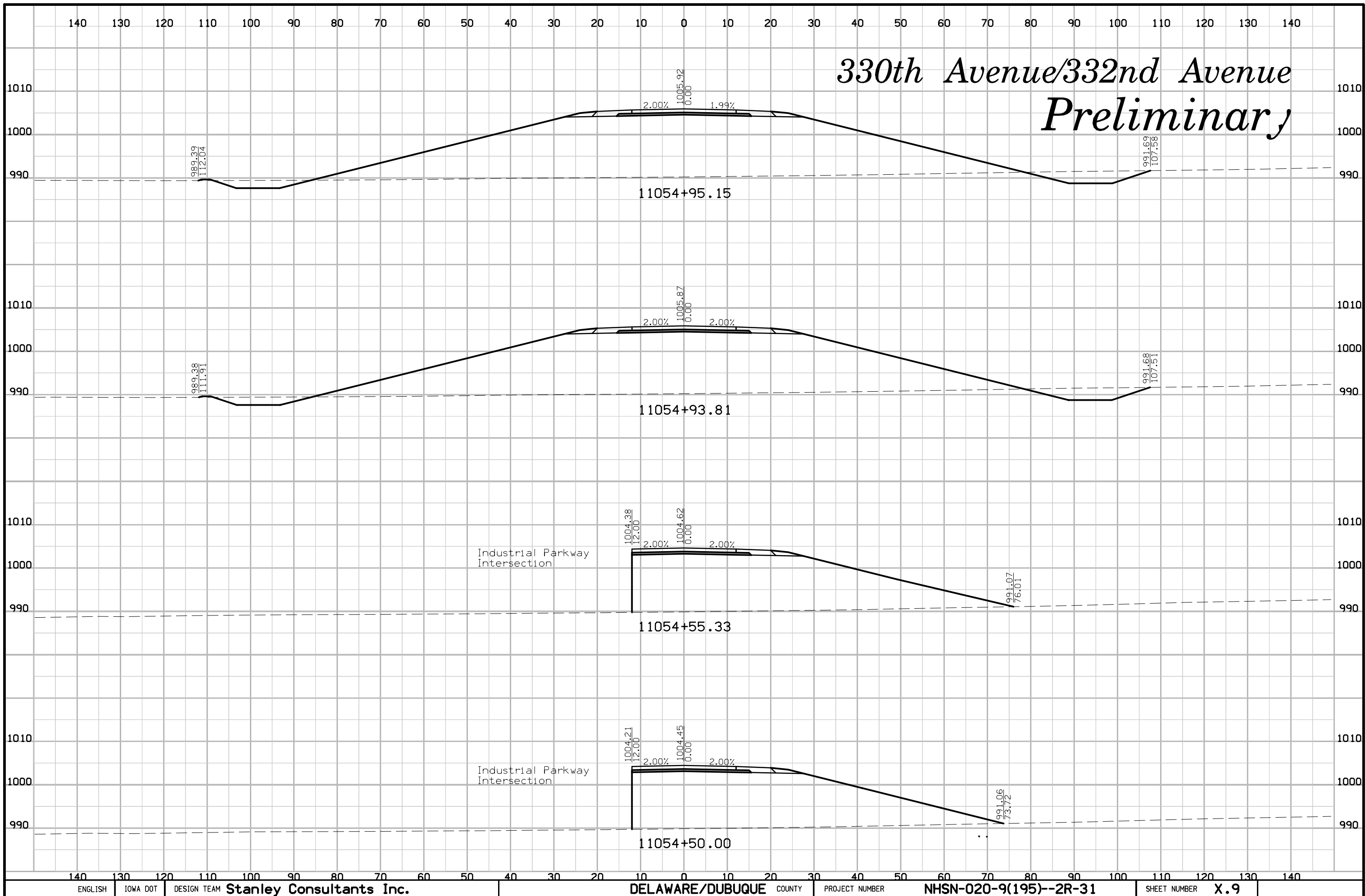


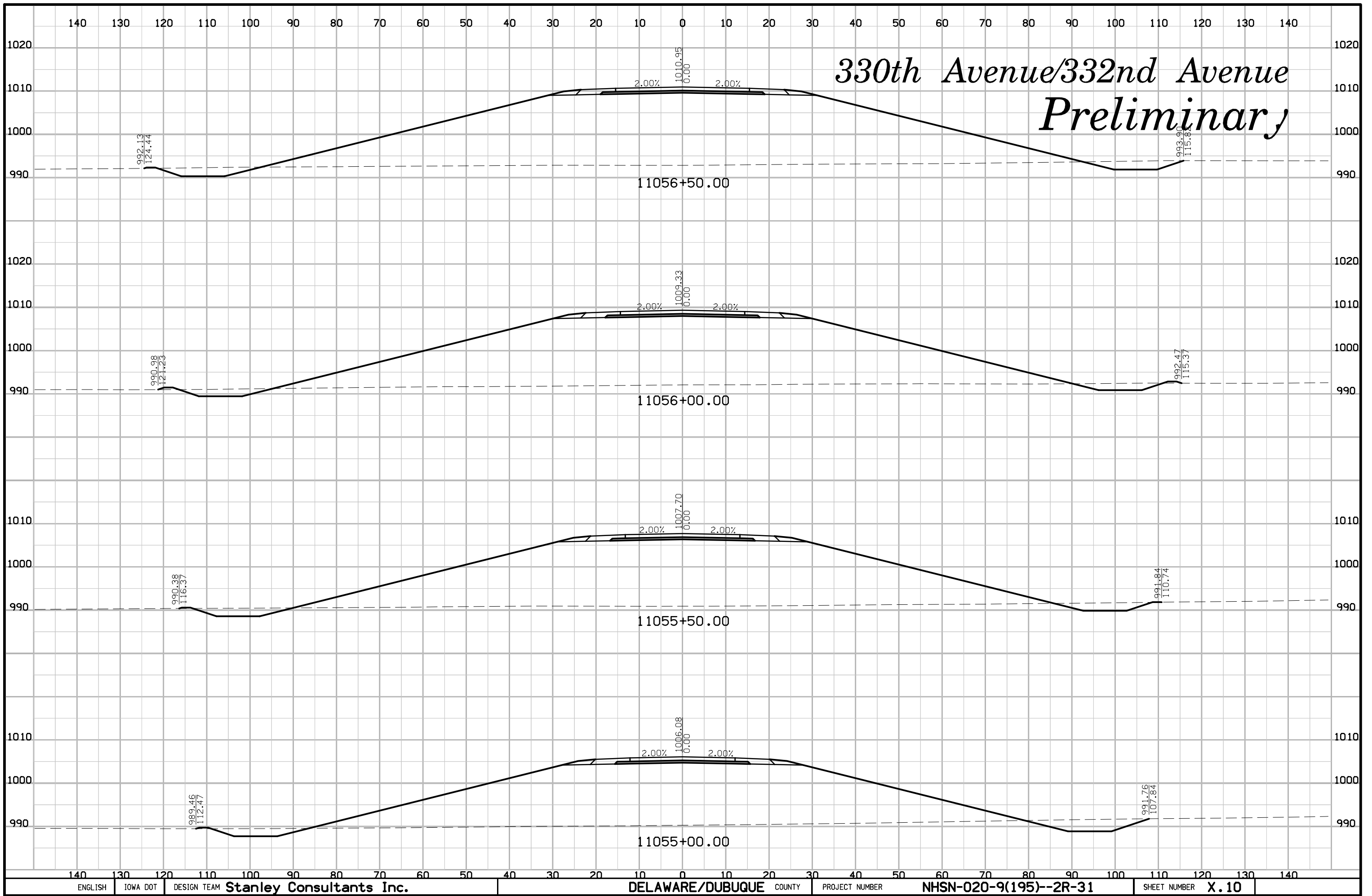
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# 330th Avenue/332nd Avenue Preliminary



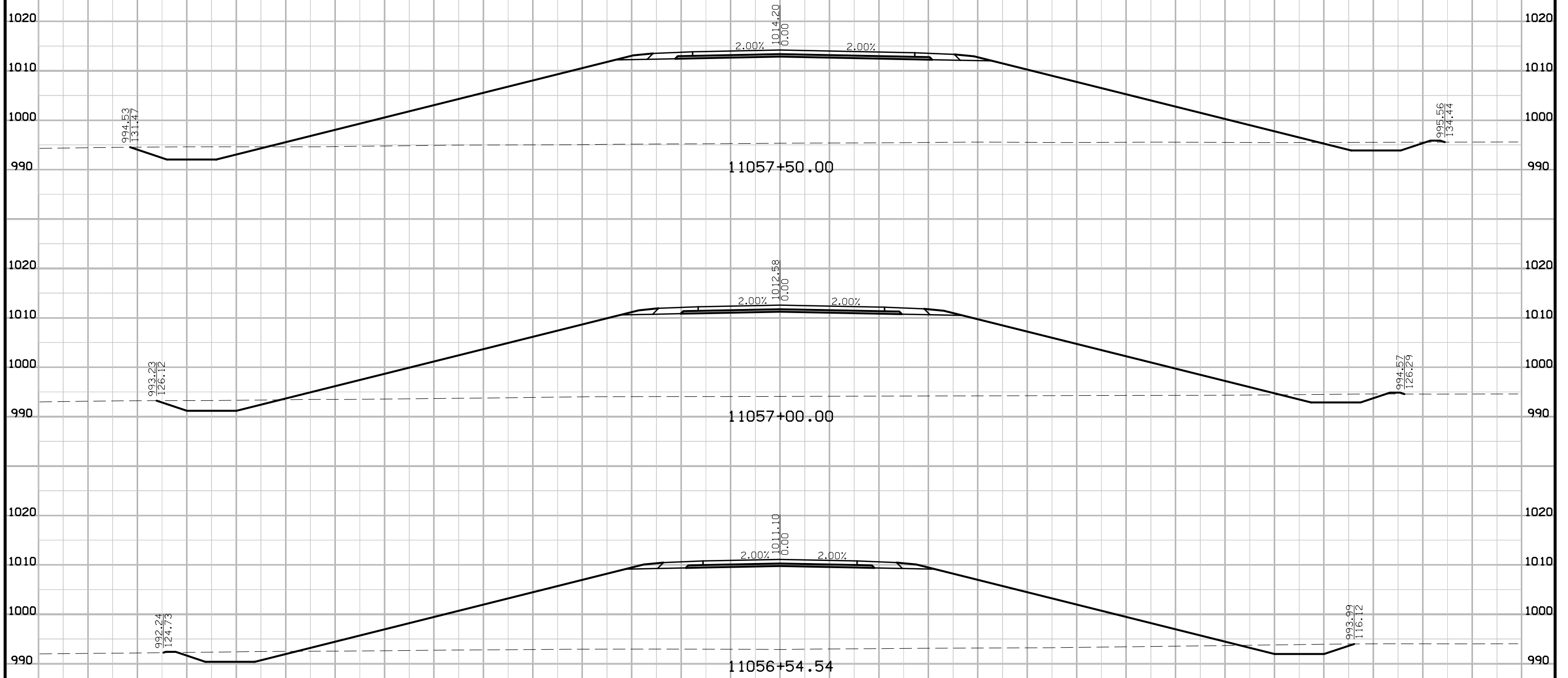
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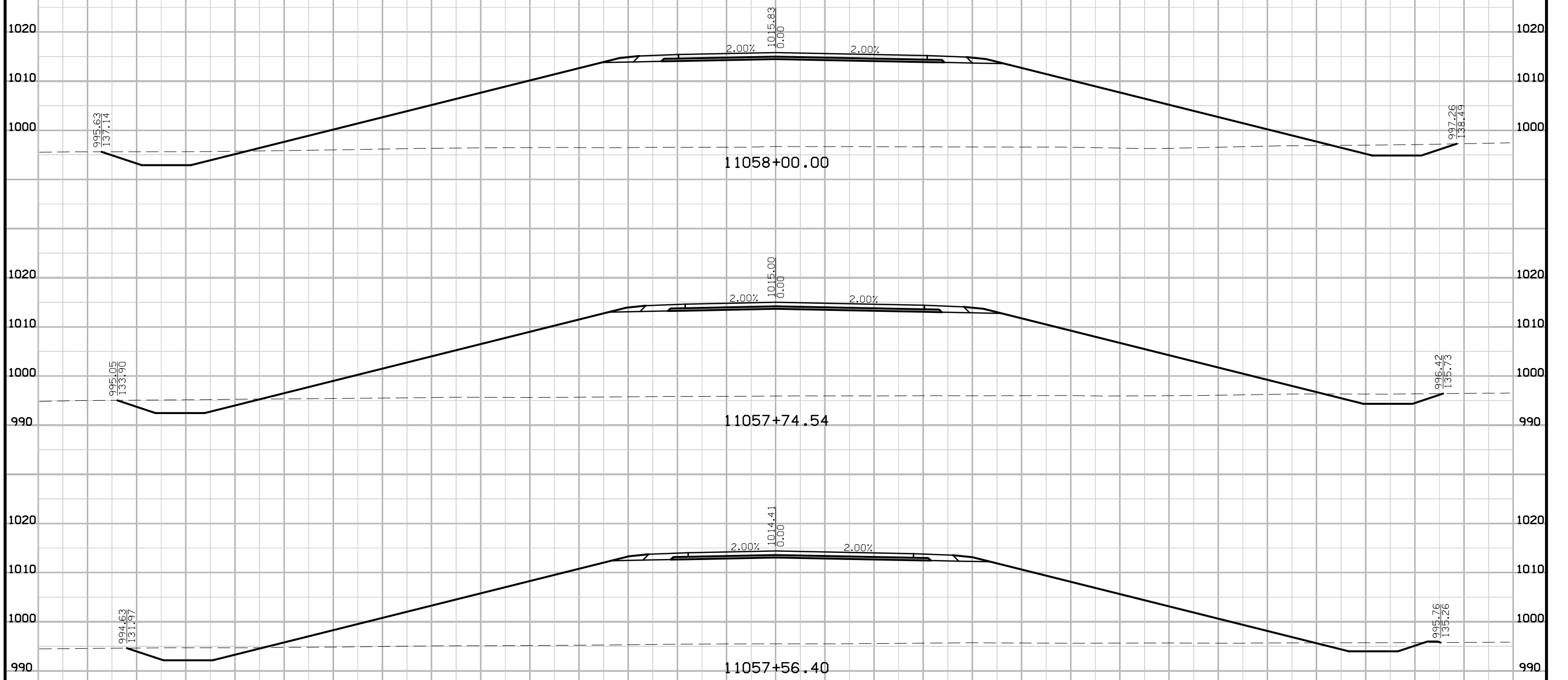
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# 330th Avenue/332nd Avenue Preliminary

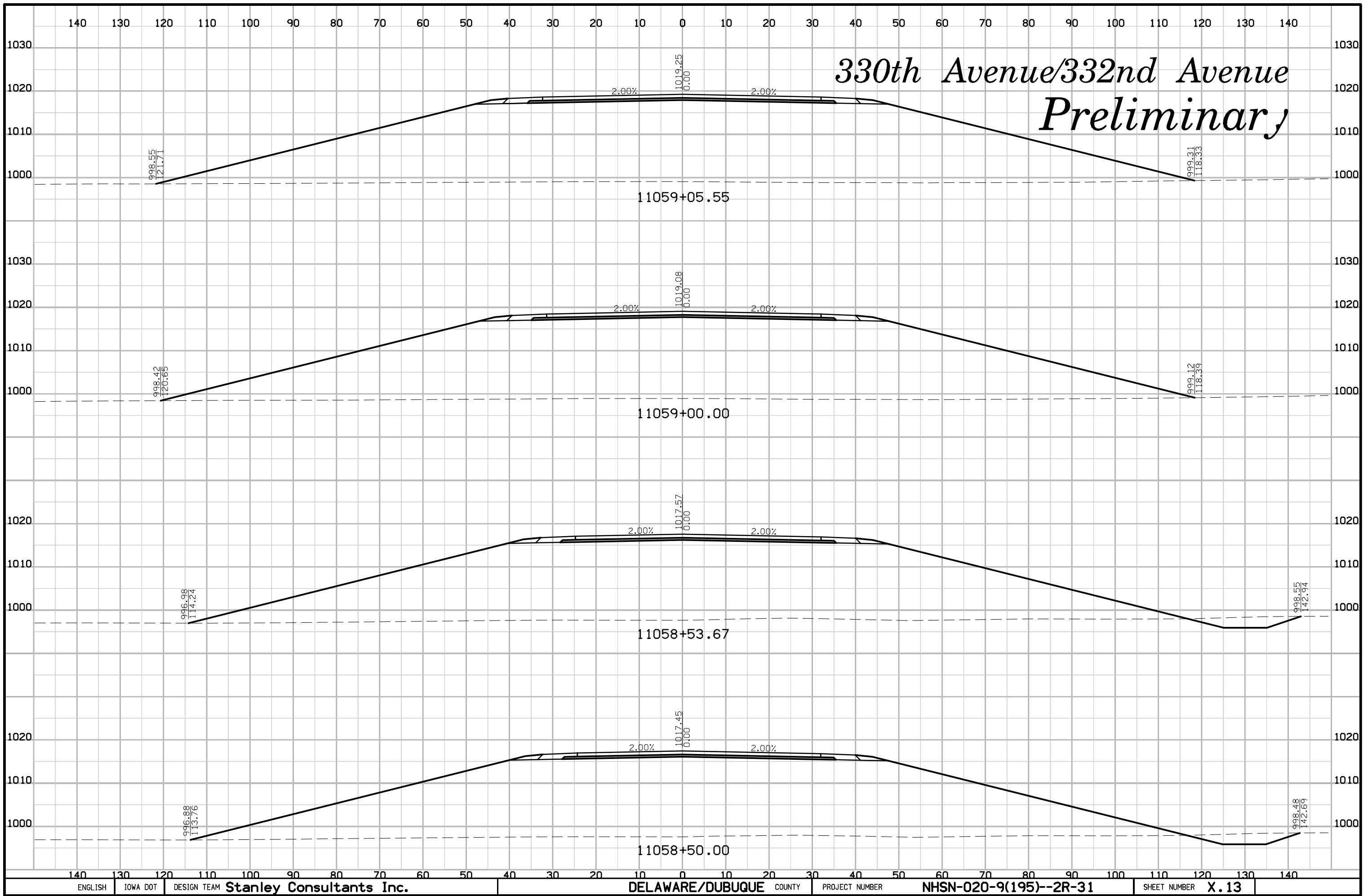


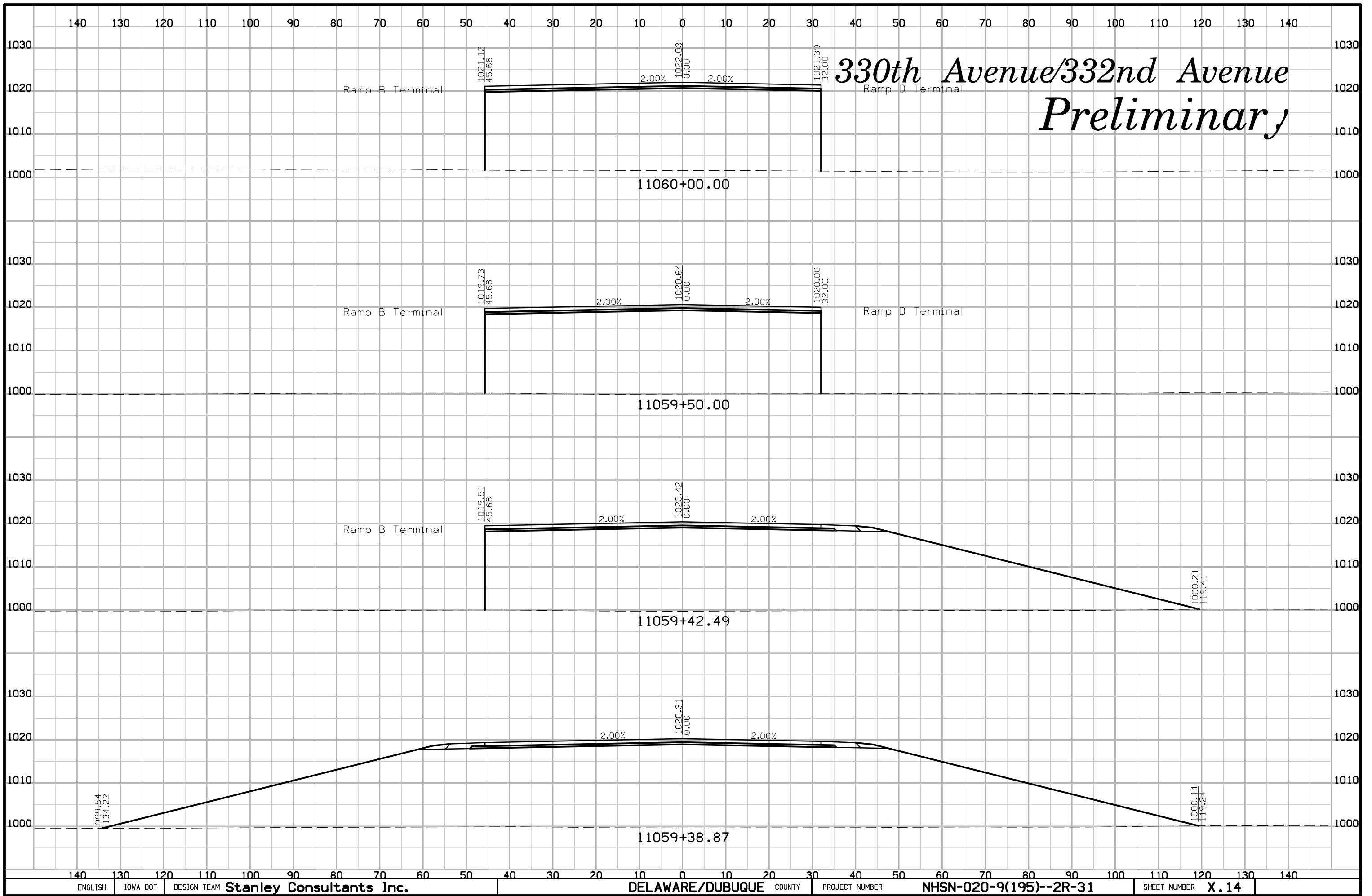
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# 330th Avenue/332nd Avenue Preliminary



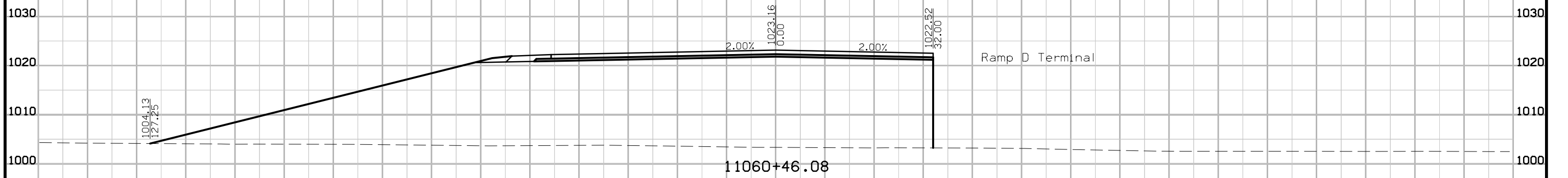
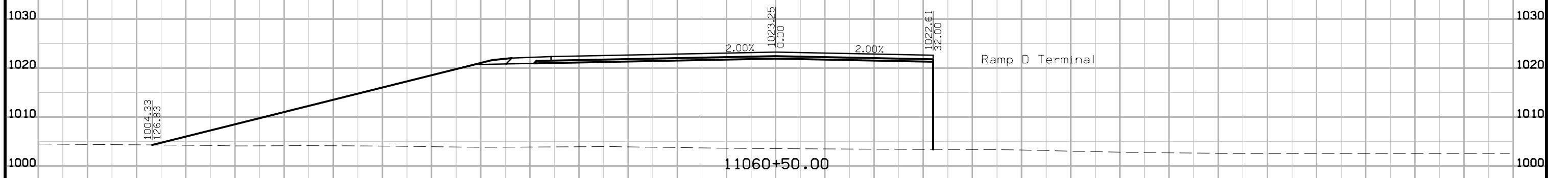
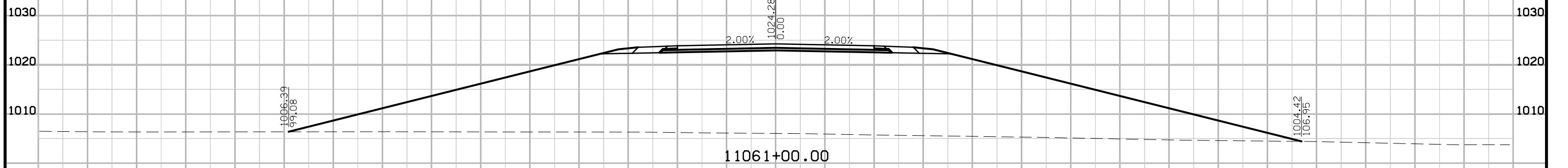
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# 330th Avenue/332nd Avenue Preliminary

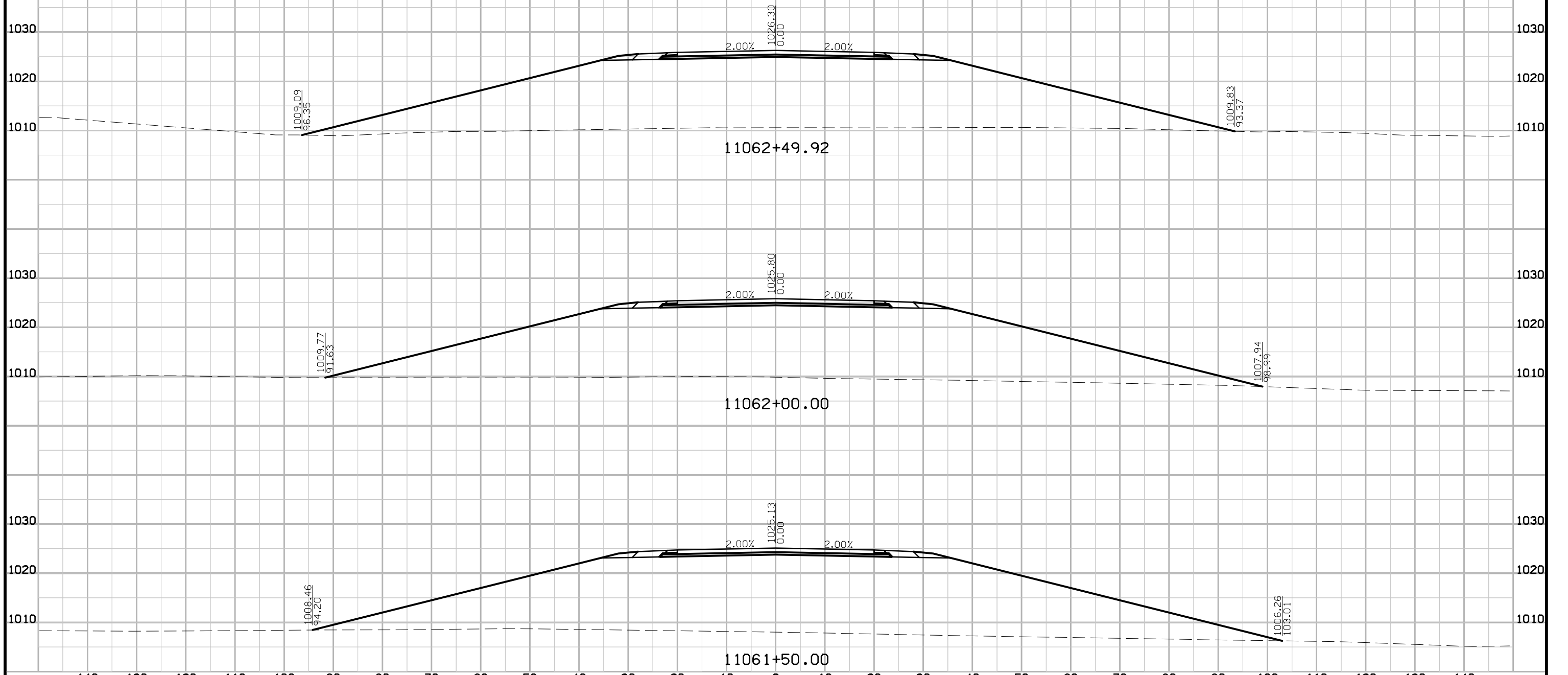


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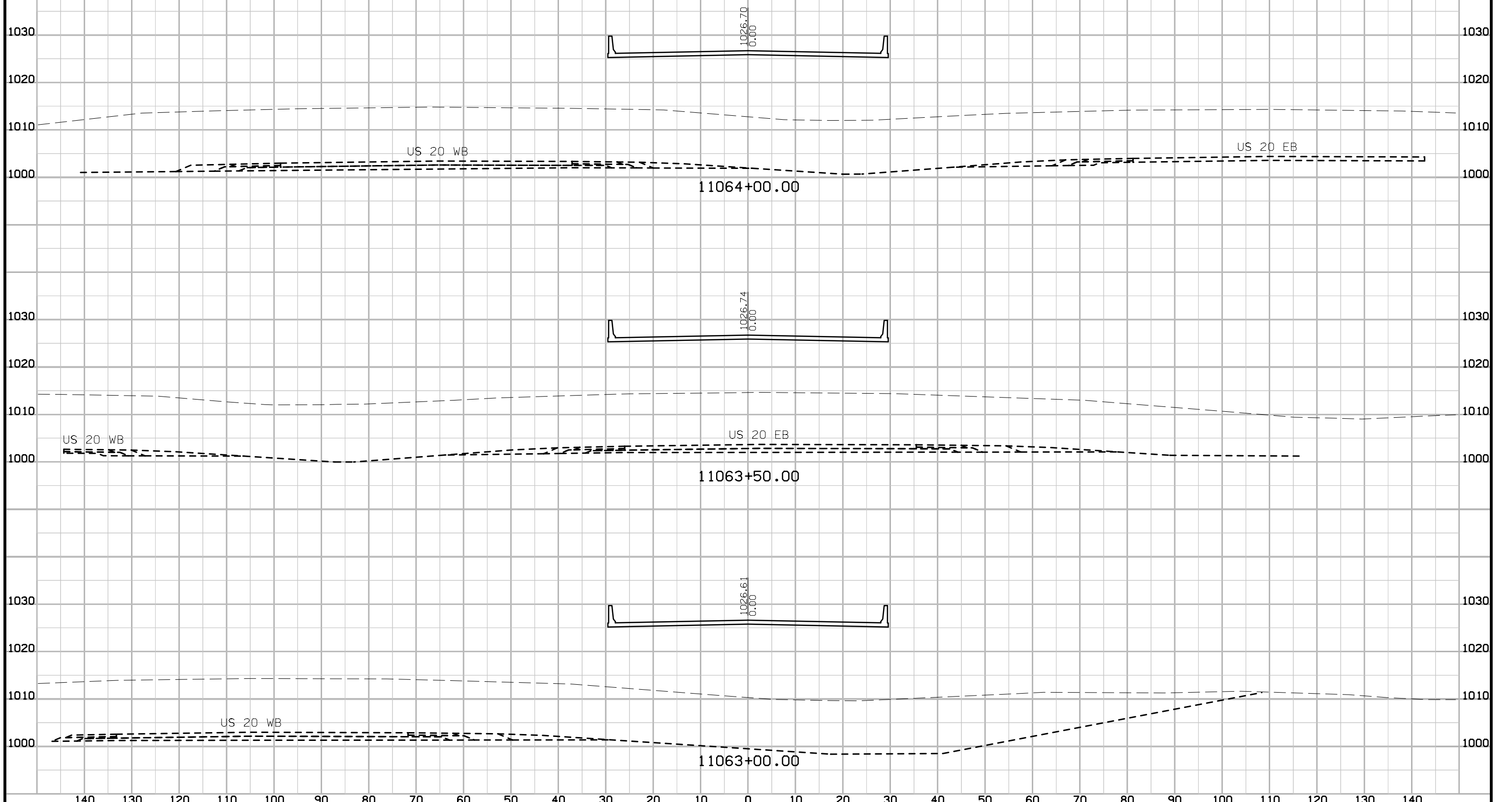
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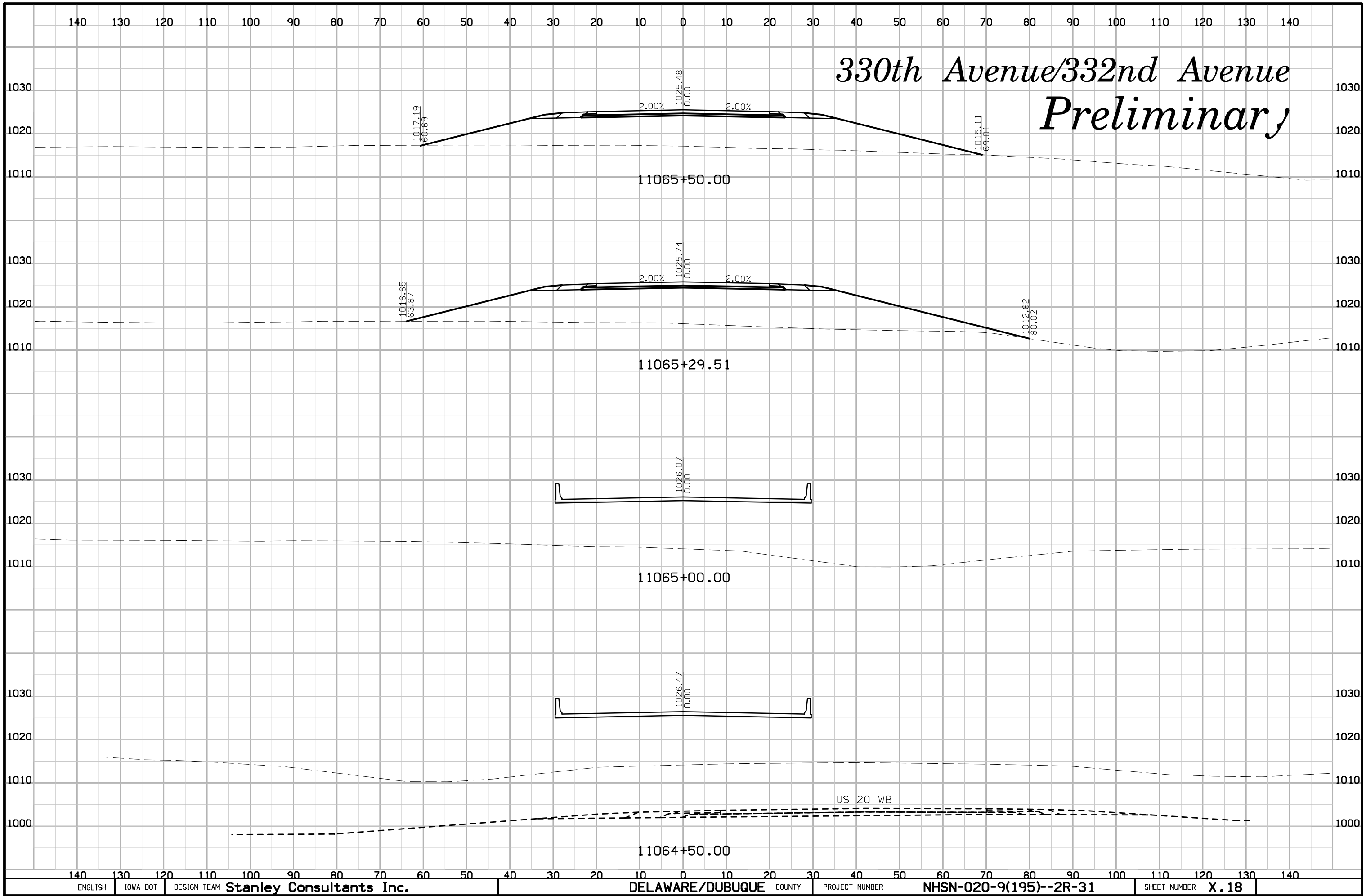


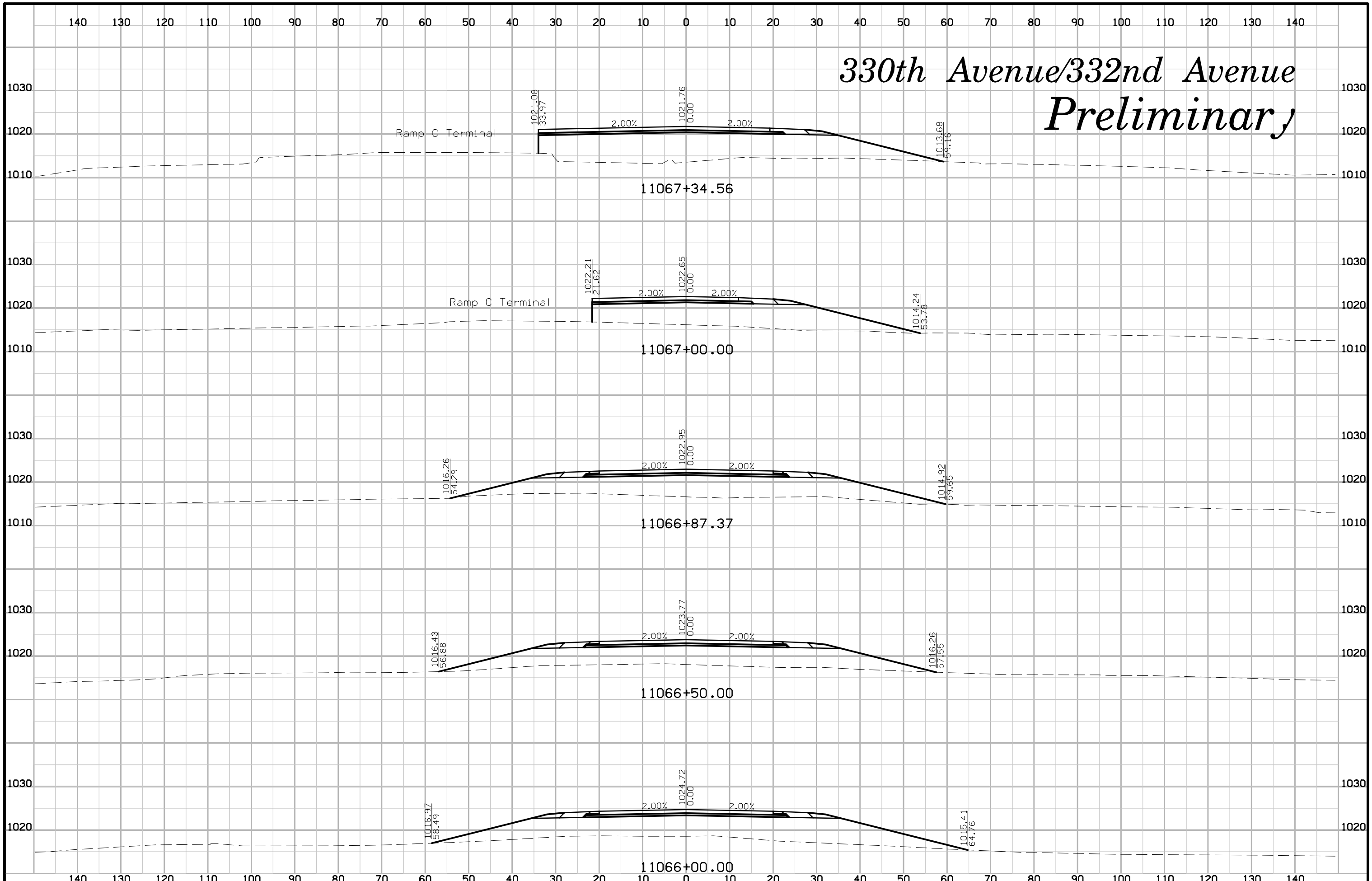
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# 330th Avenue/332nd Avenue Preliminary



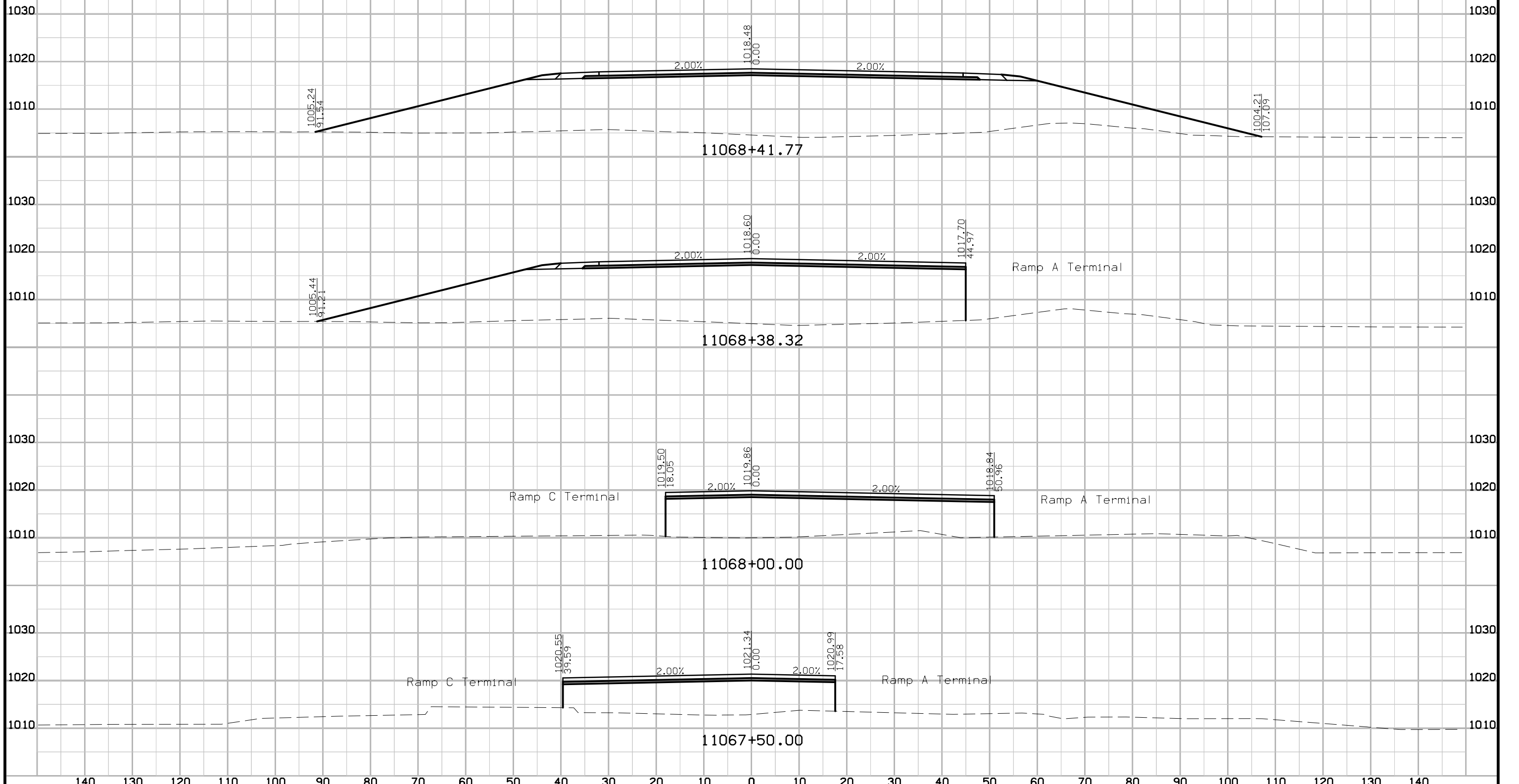




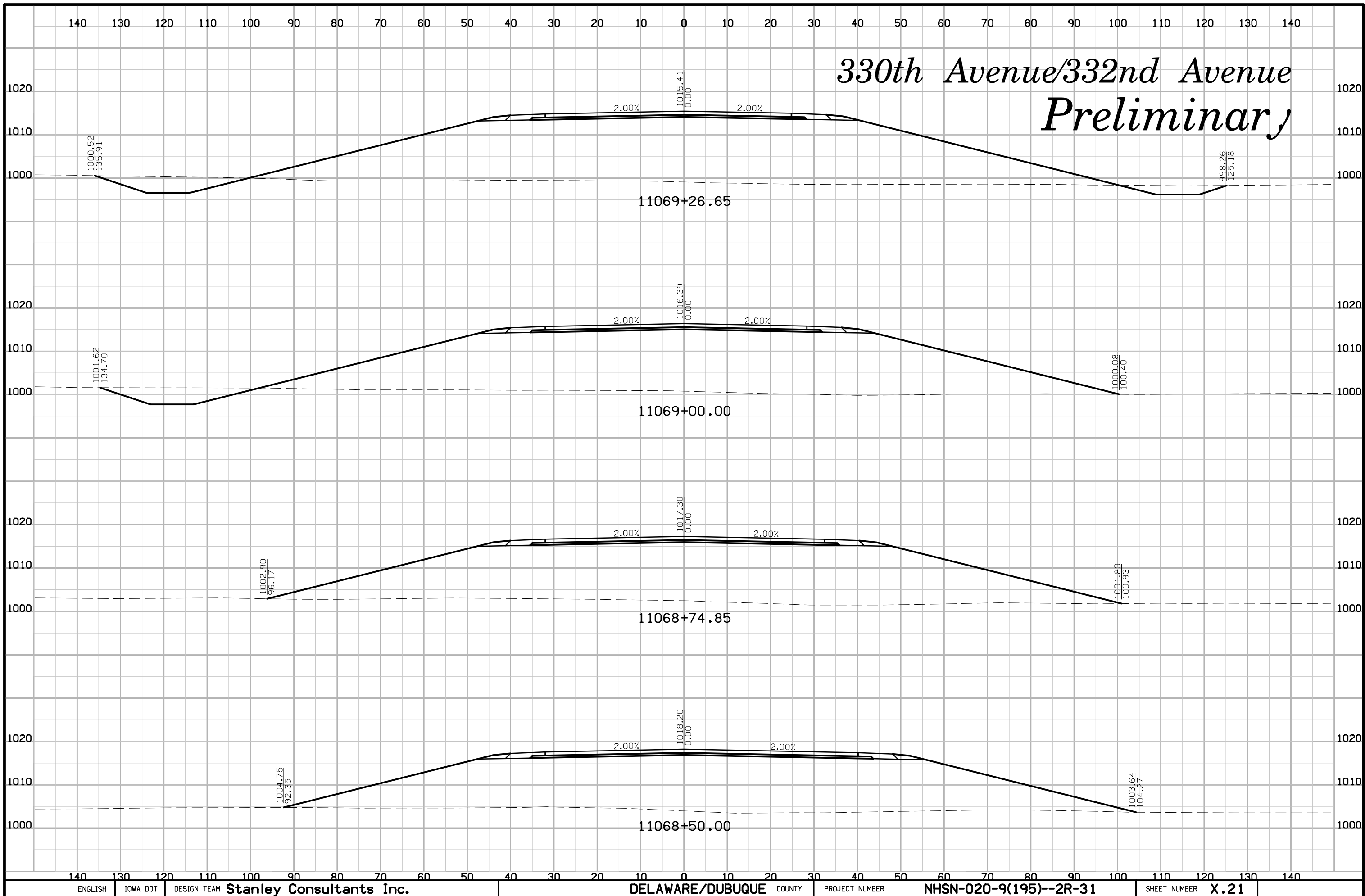
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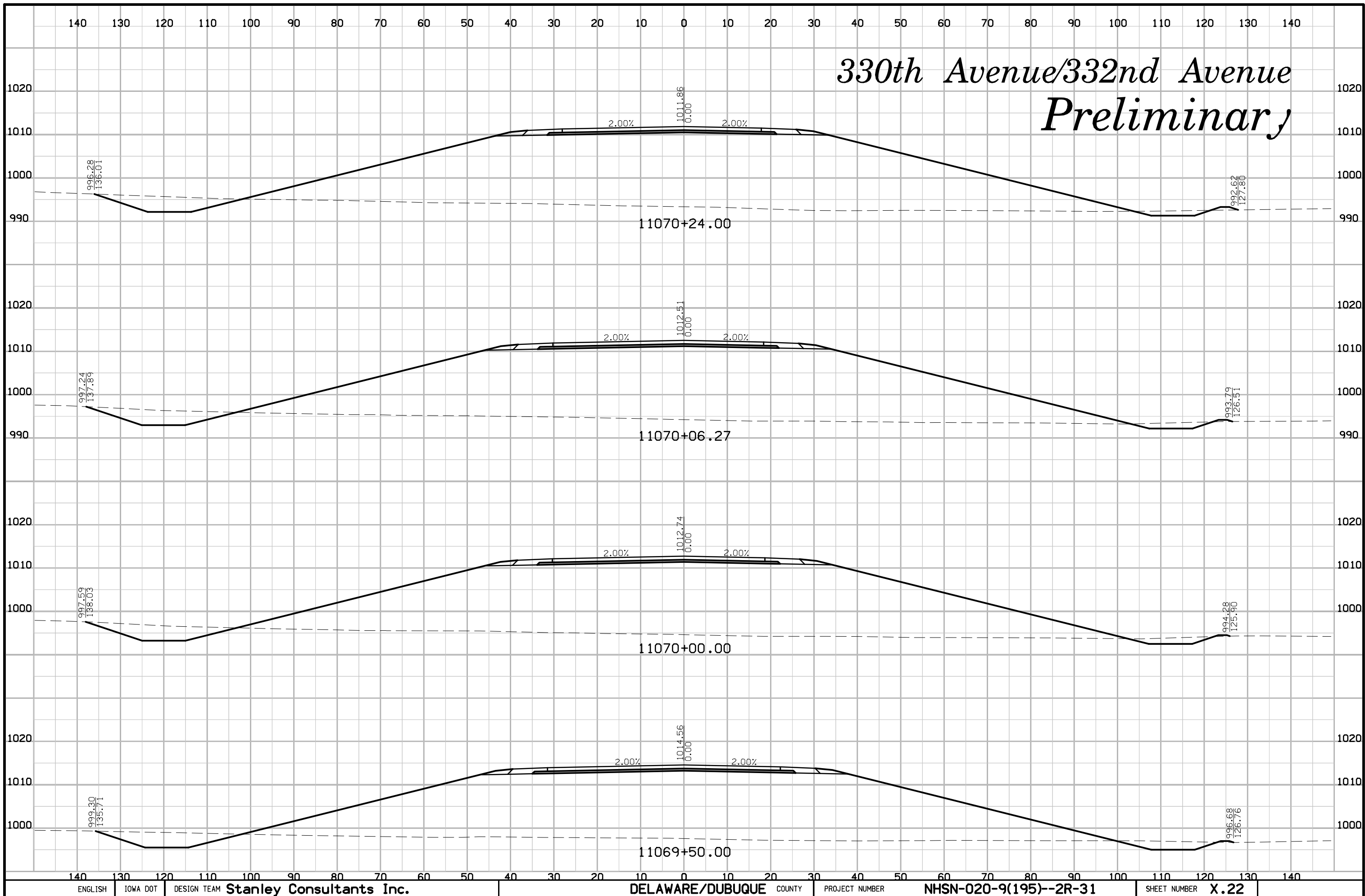
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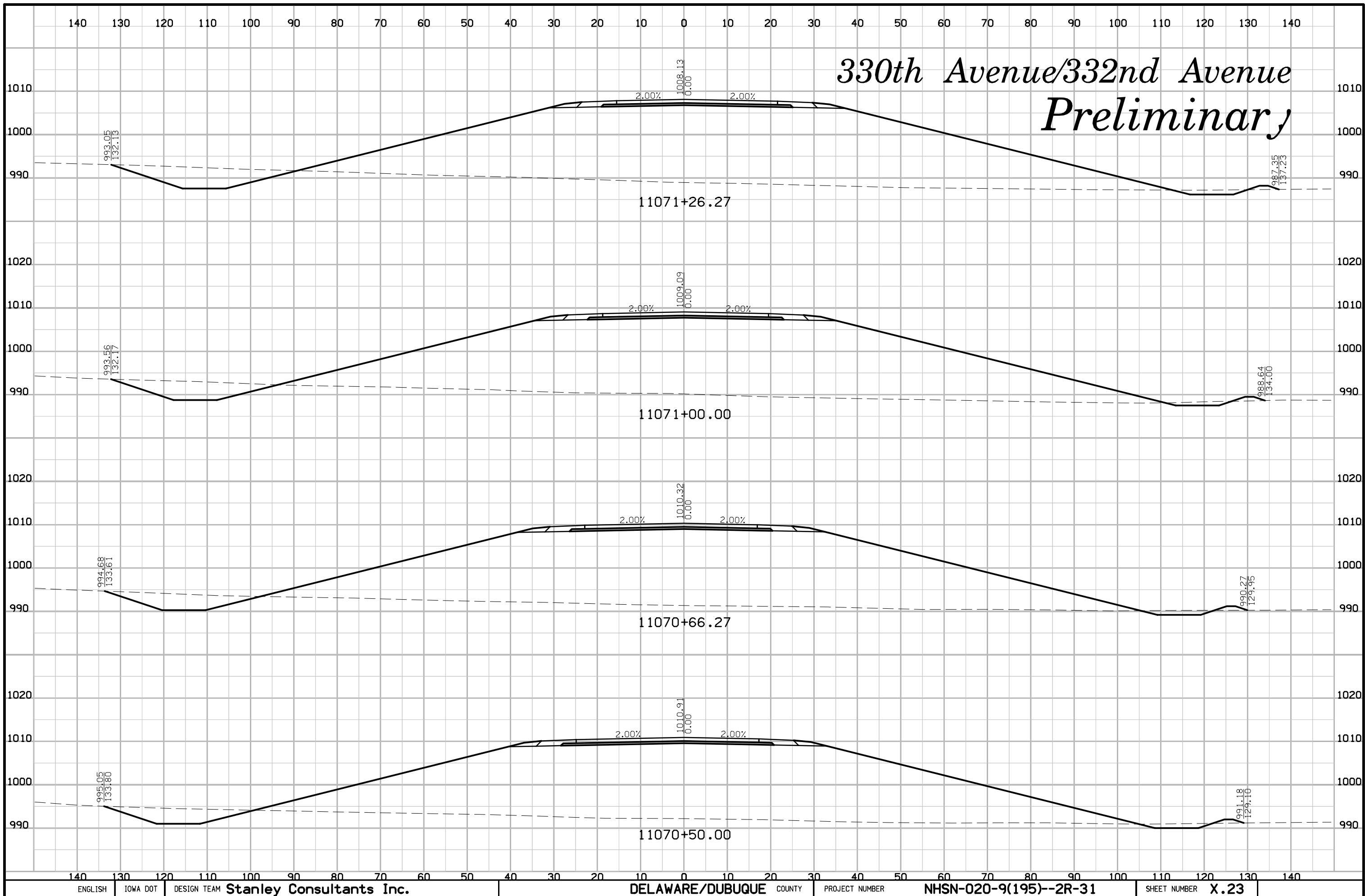
# 330th Avenue/332nd Avenue Preliminary



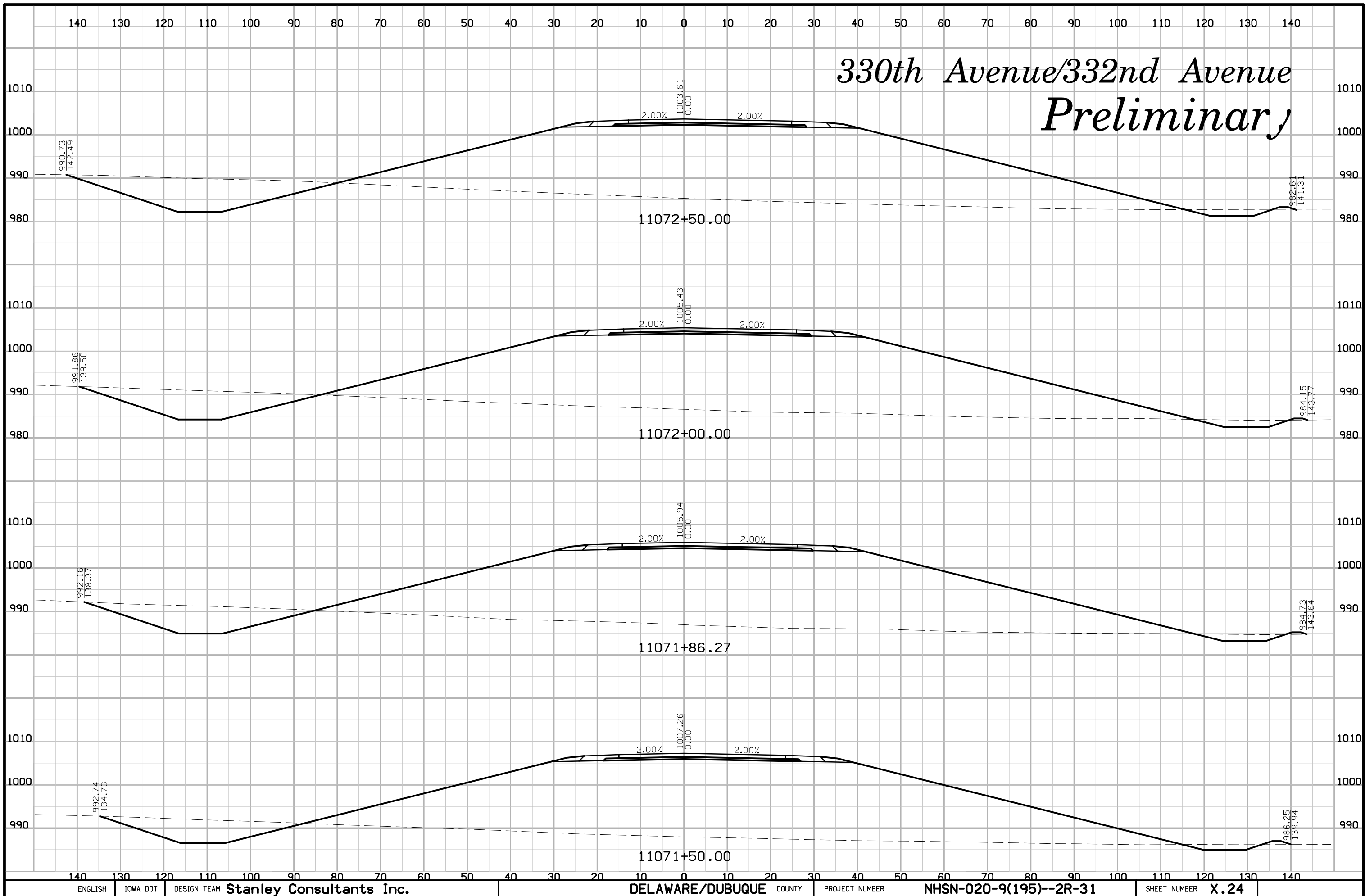
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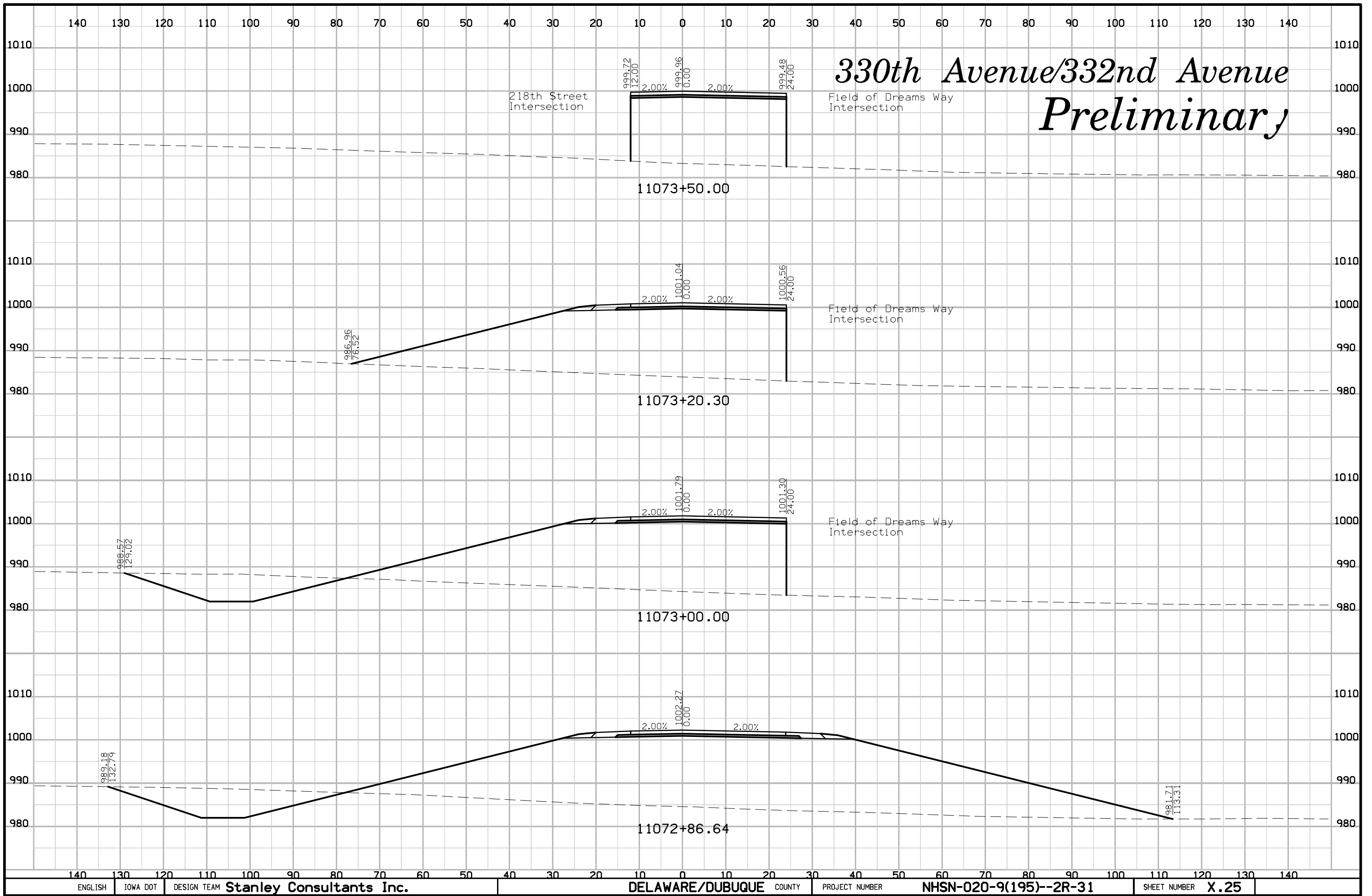


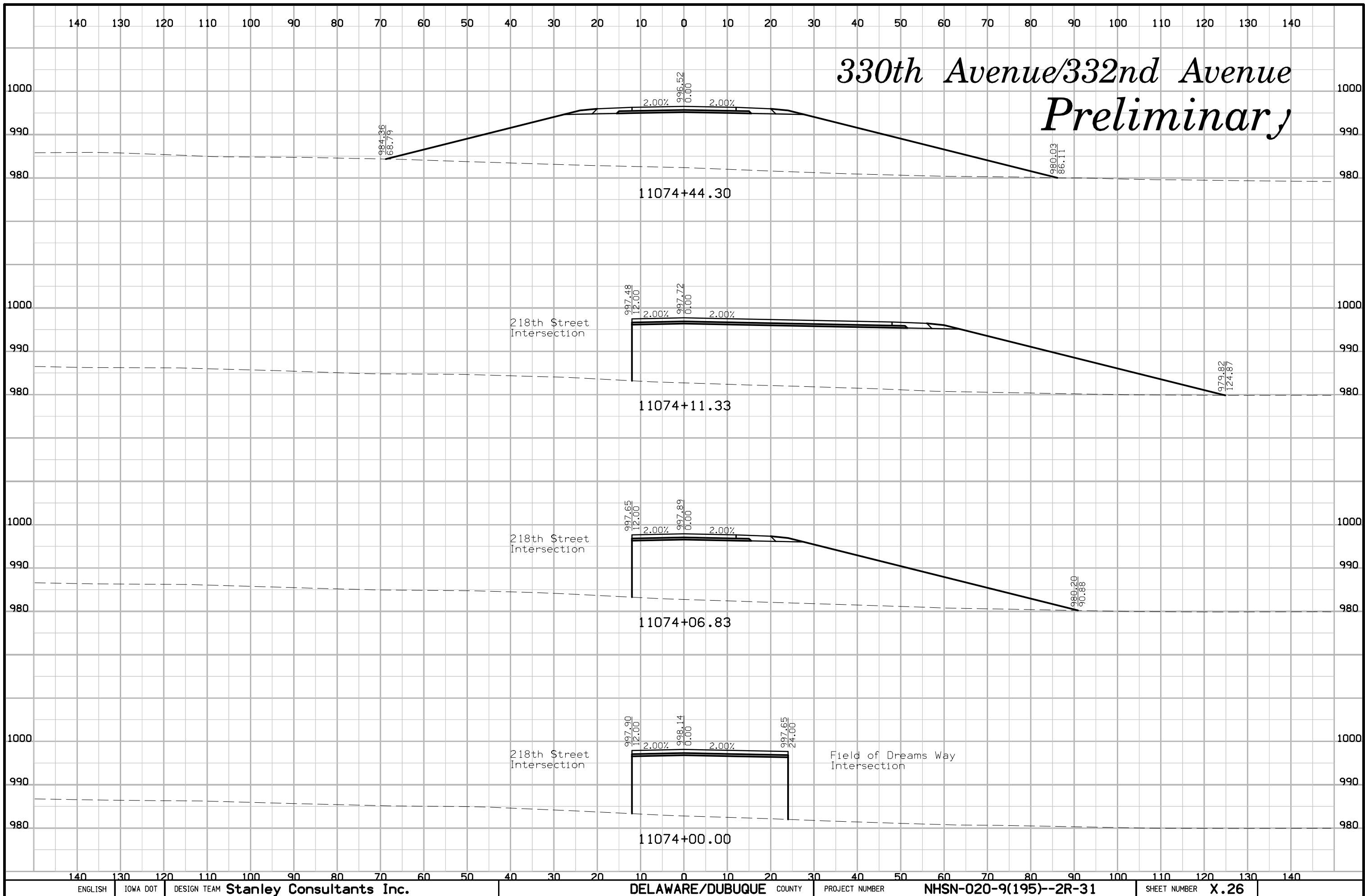


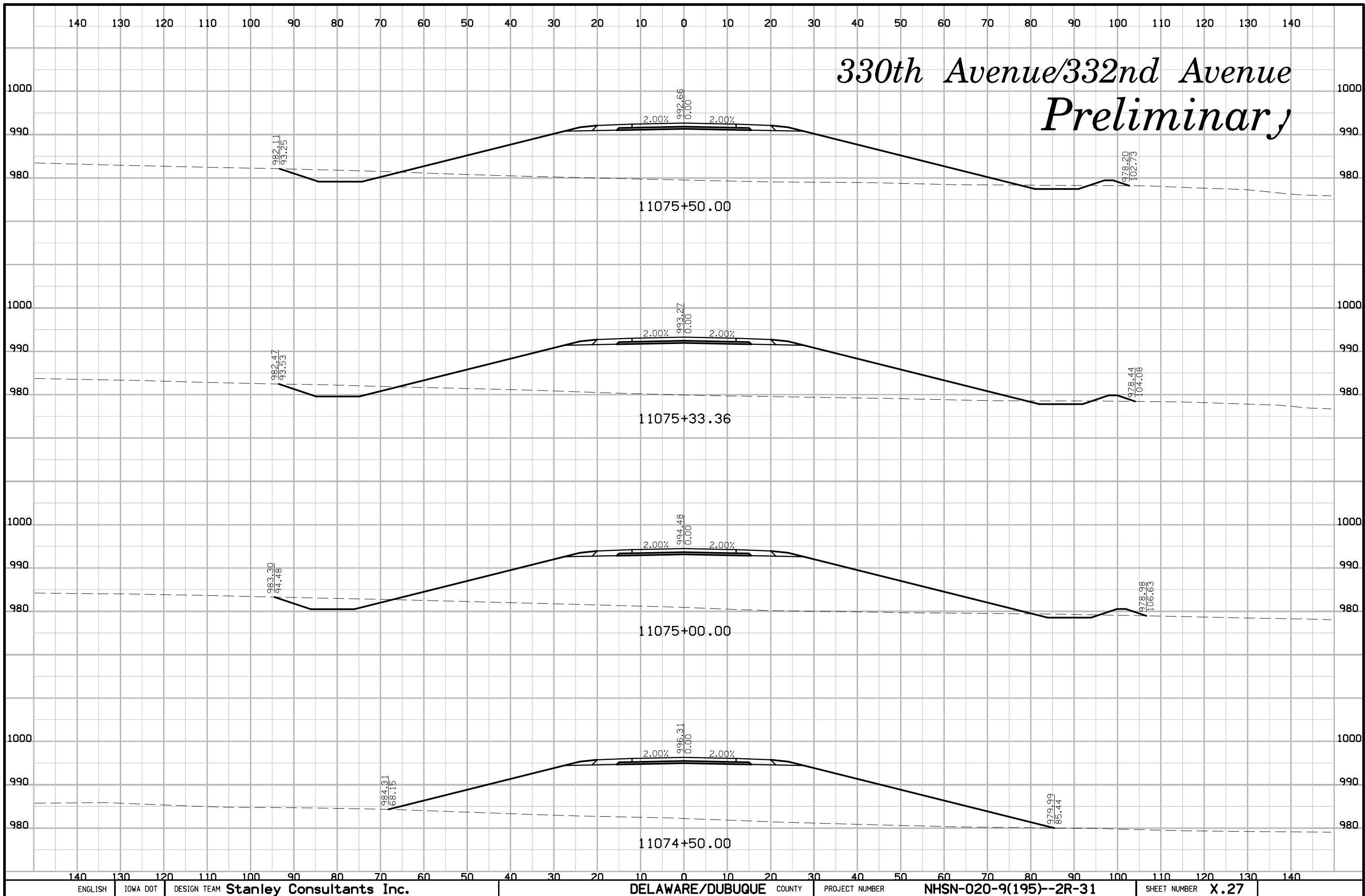


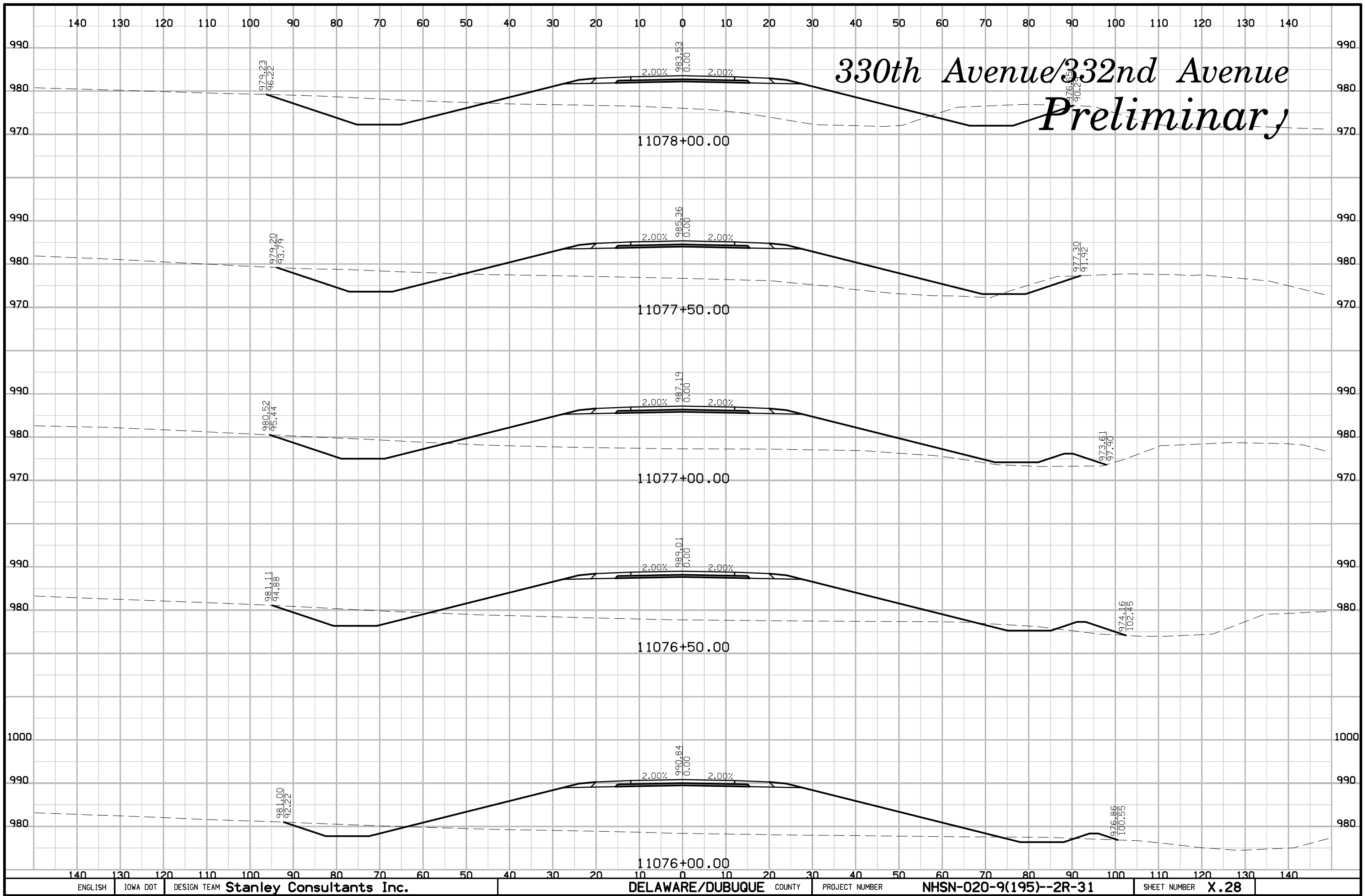






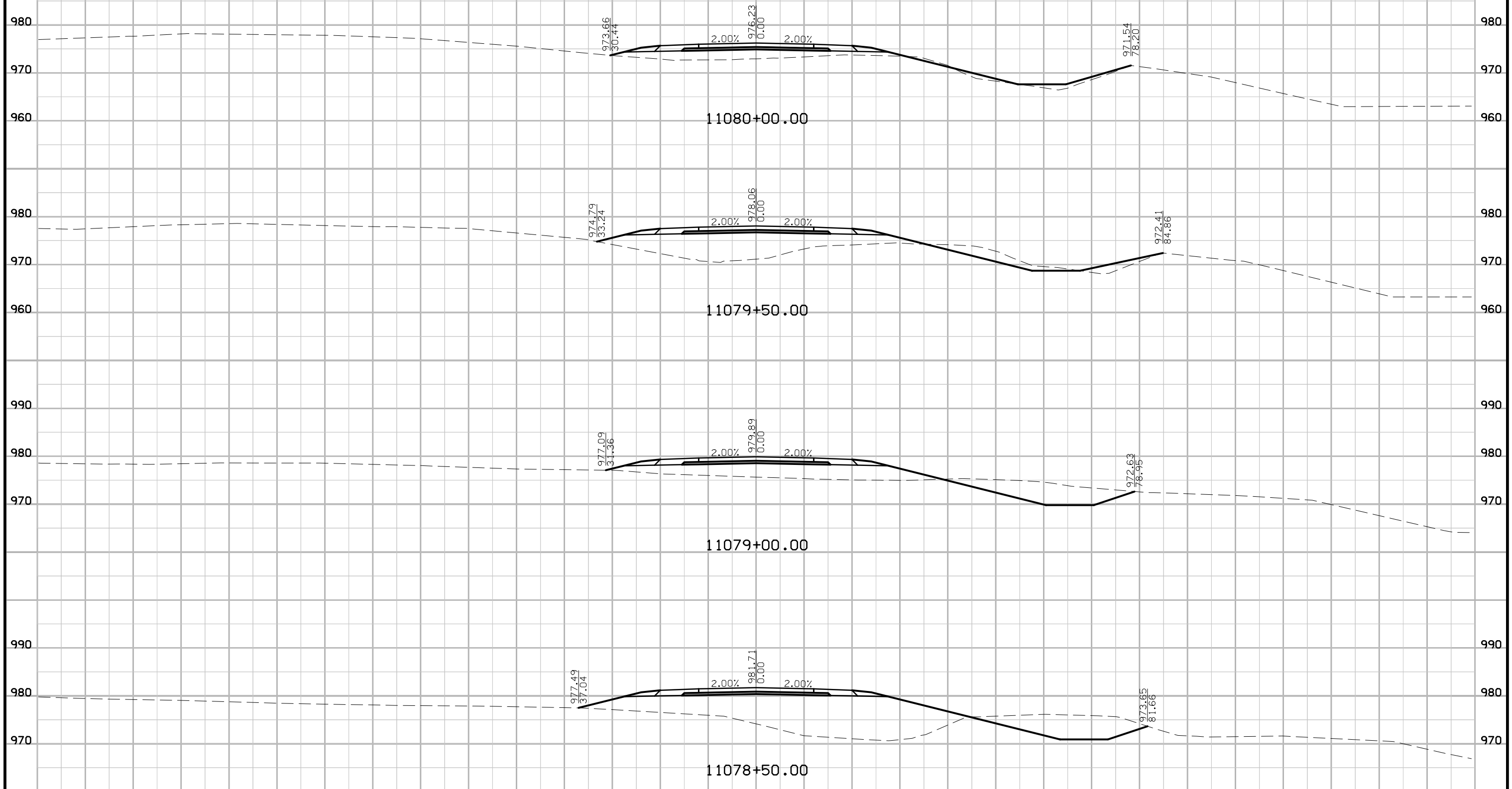


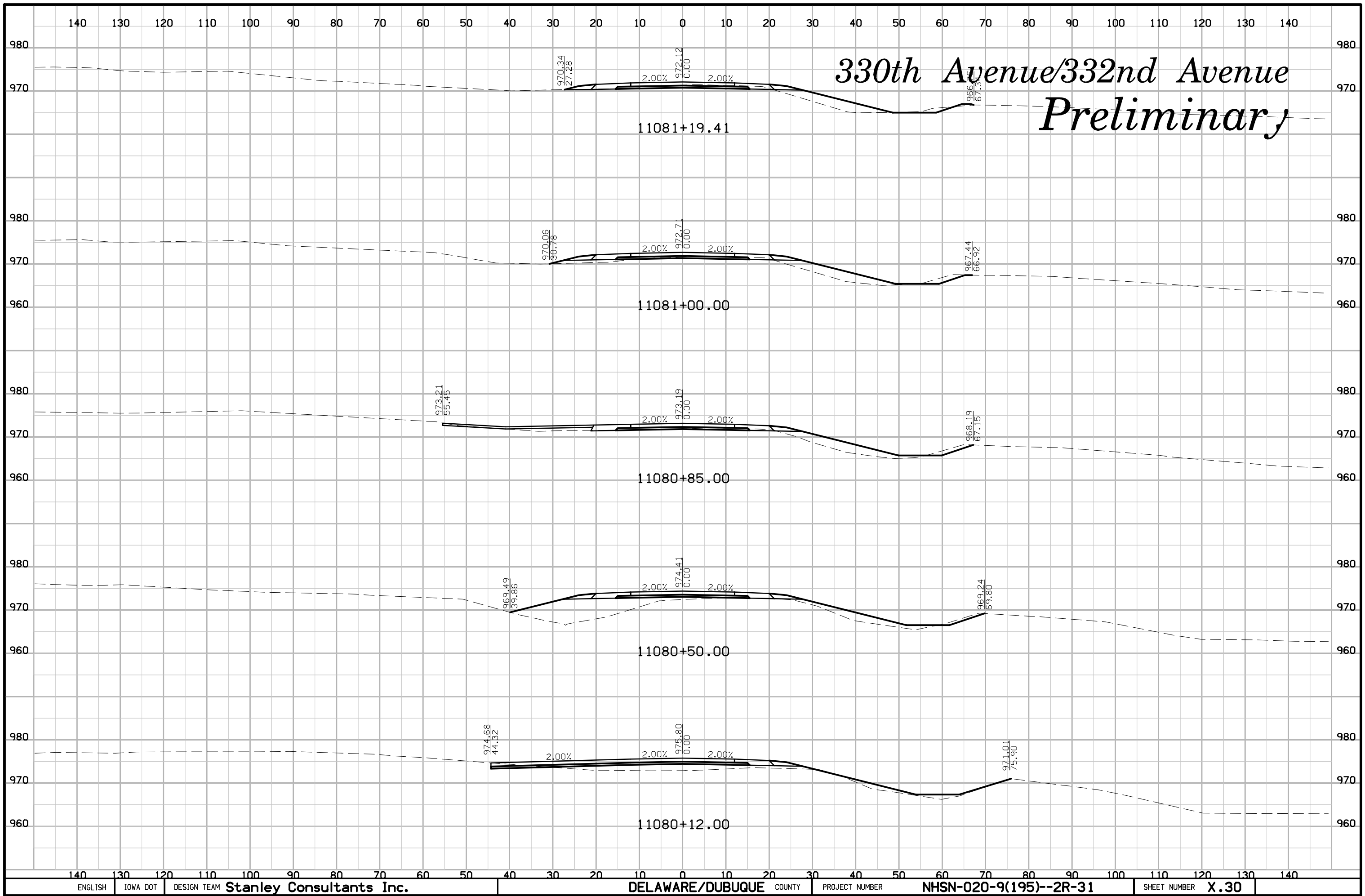




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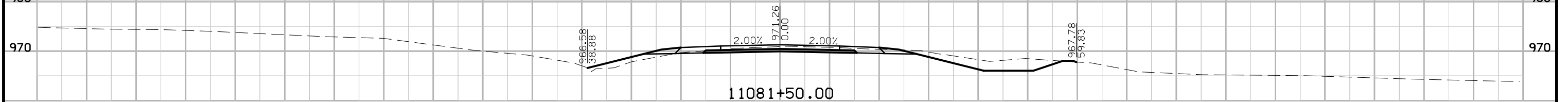
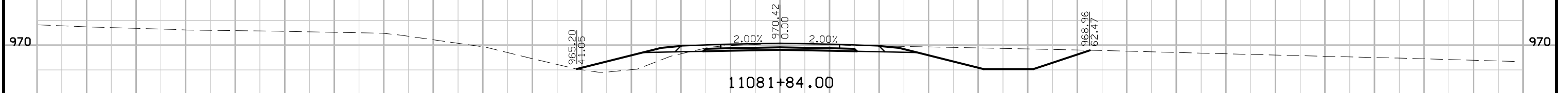
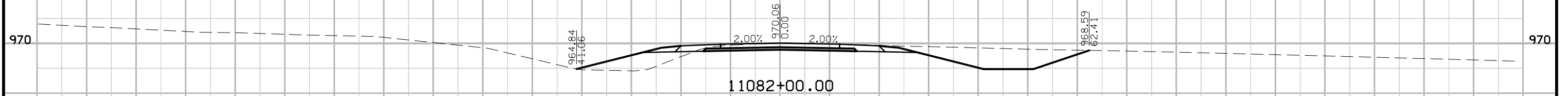
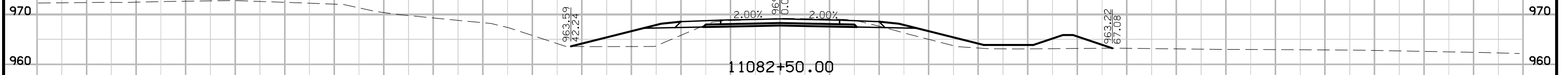
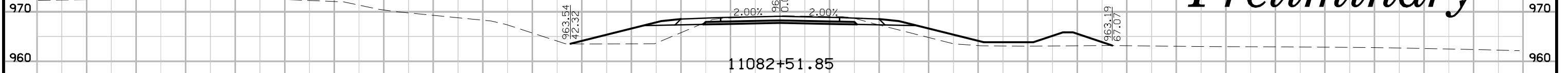
# 330th Avenue/332nd Avenue Preliminary





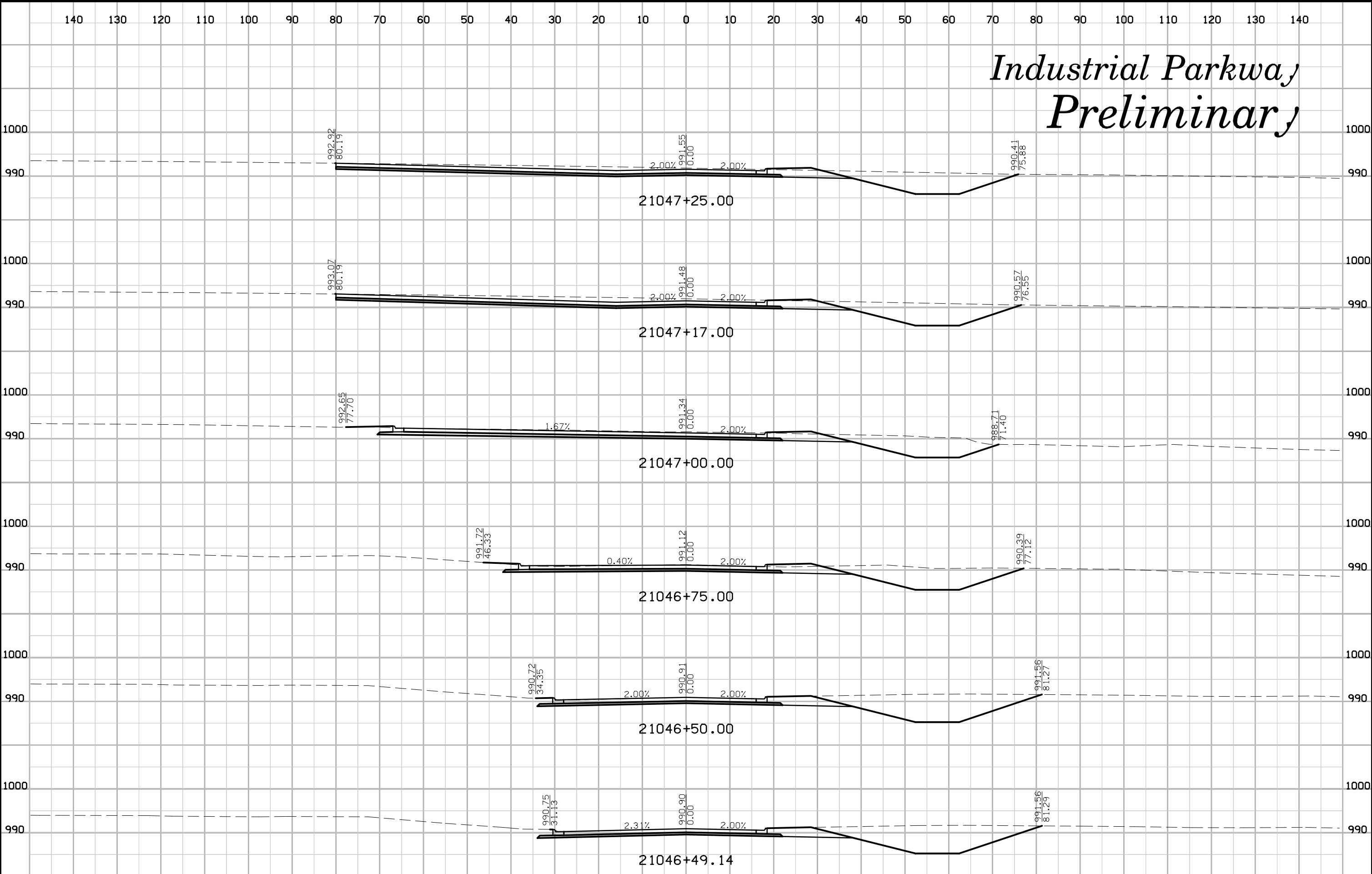
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# 330th Avenue/332nd Avenue Preliminary

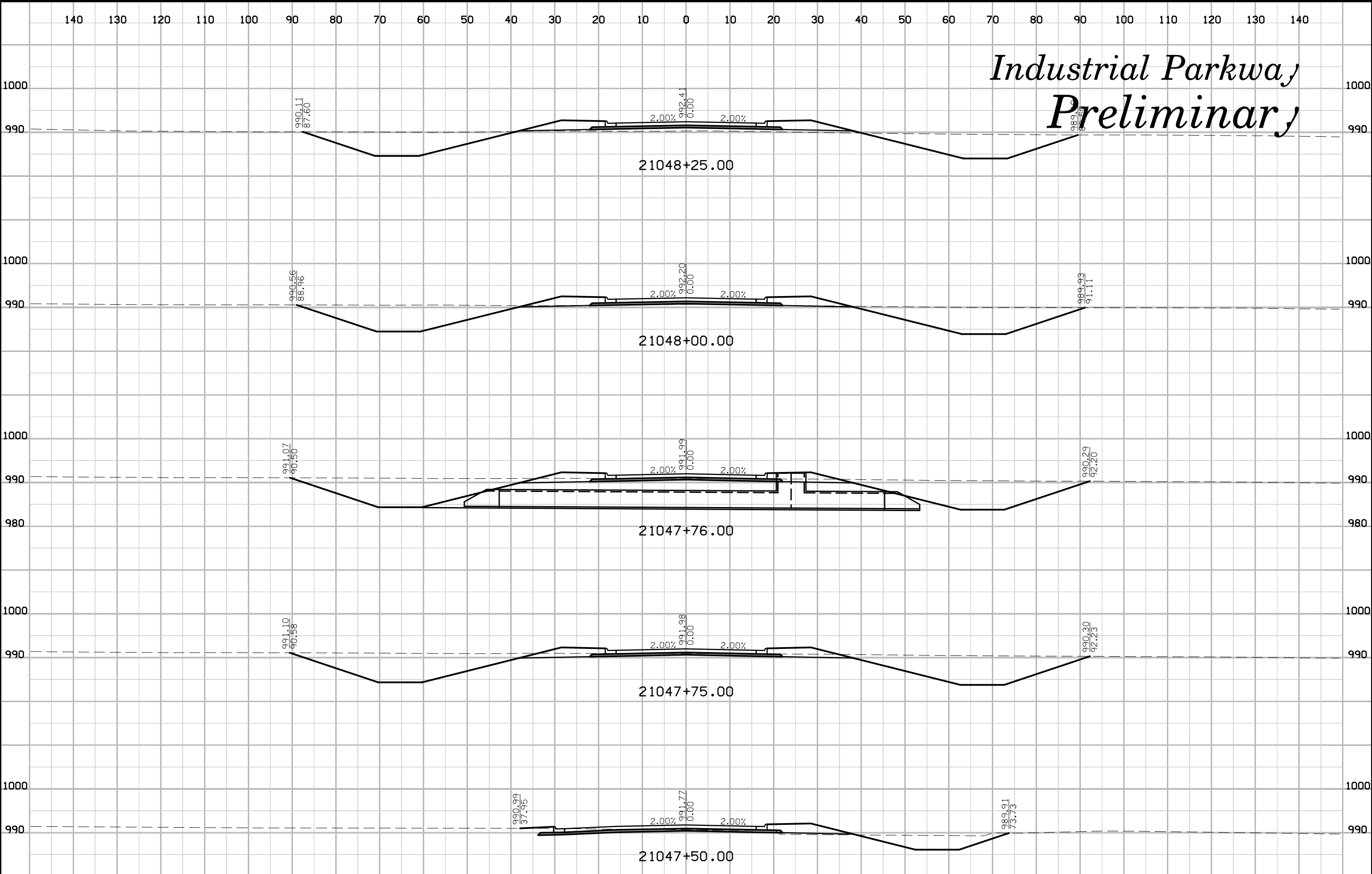




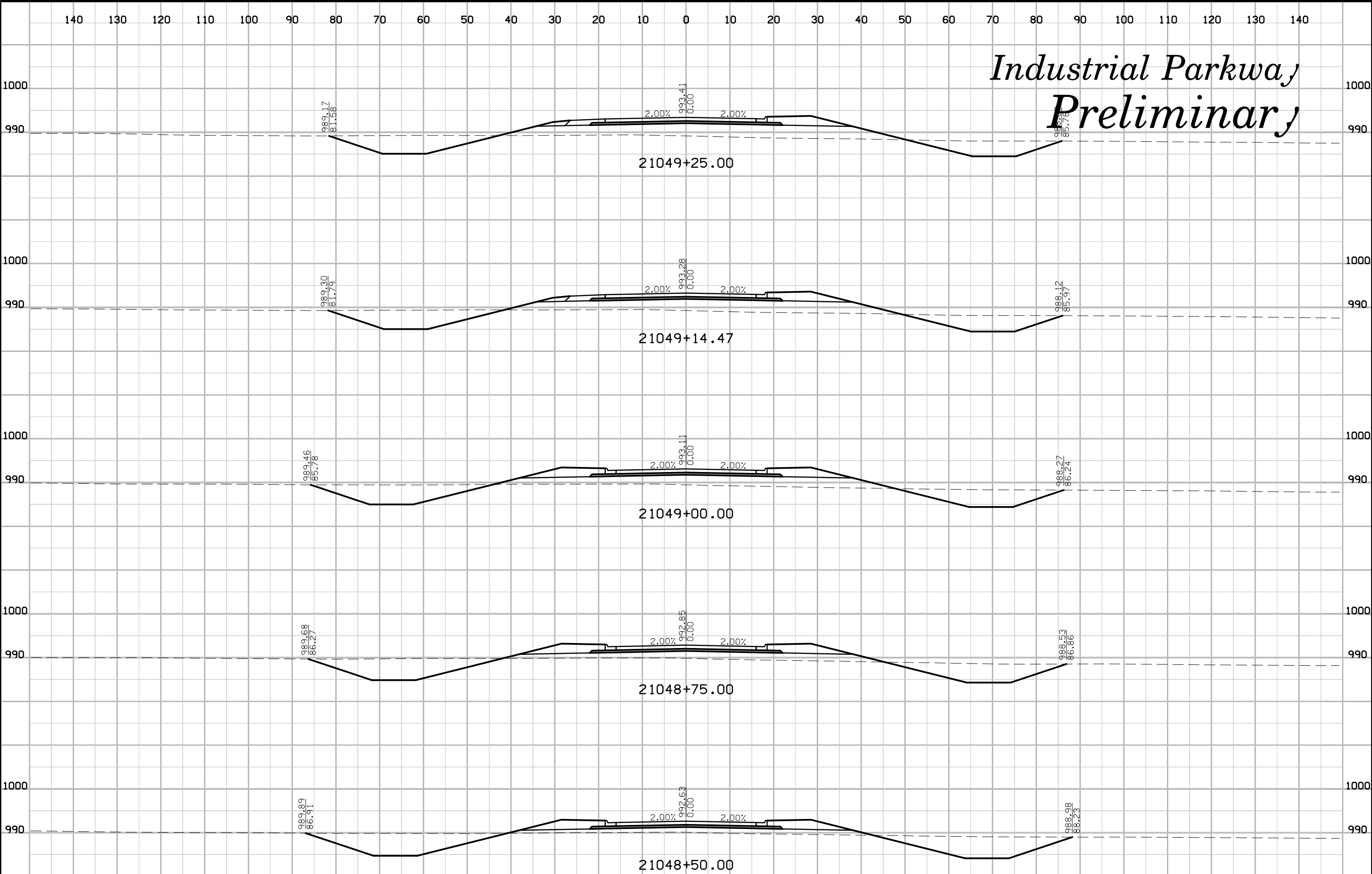
# Industrial Parkway Preliminary



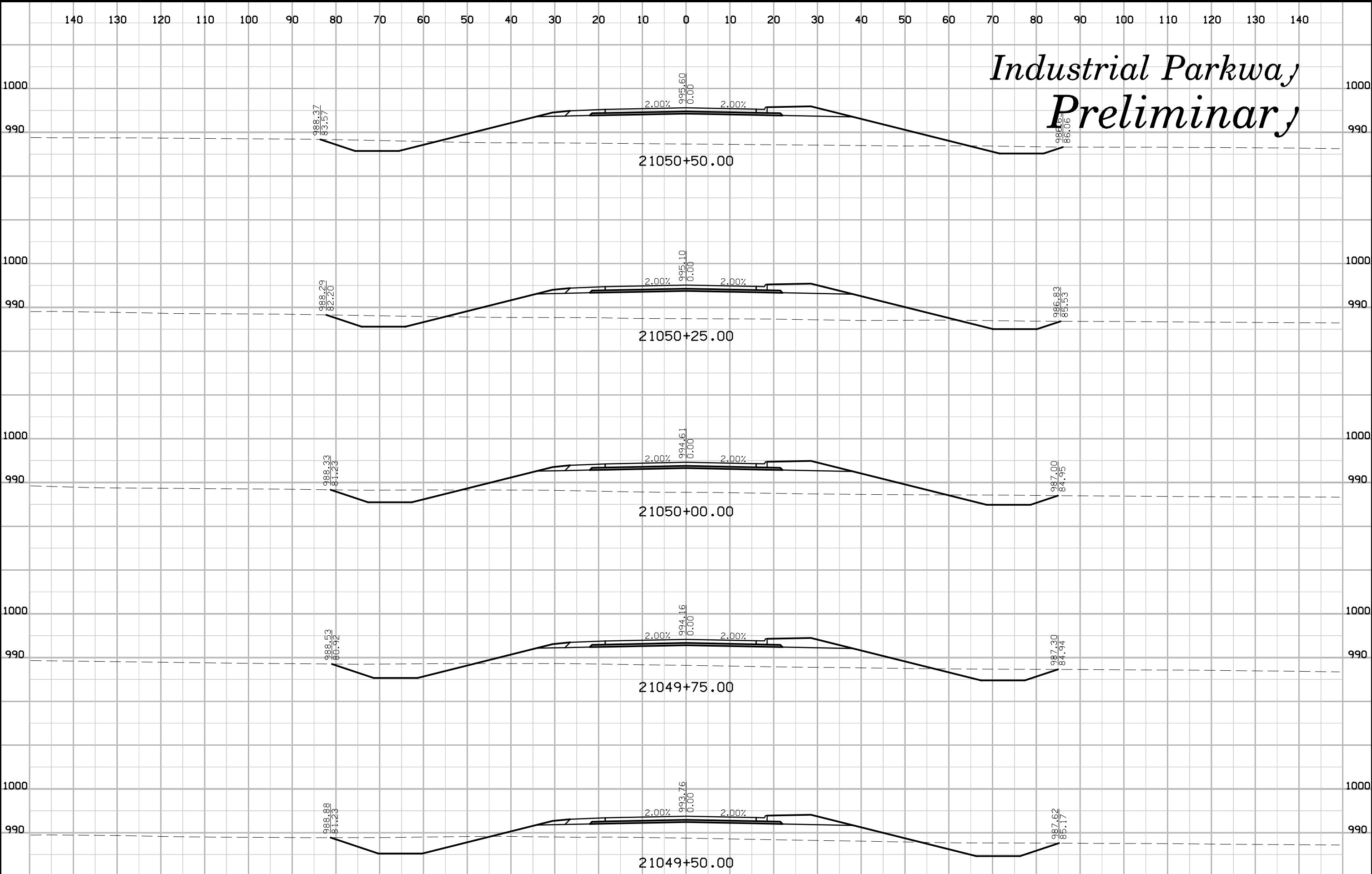
# Industrial Parkway Preliminary



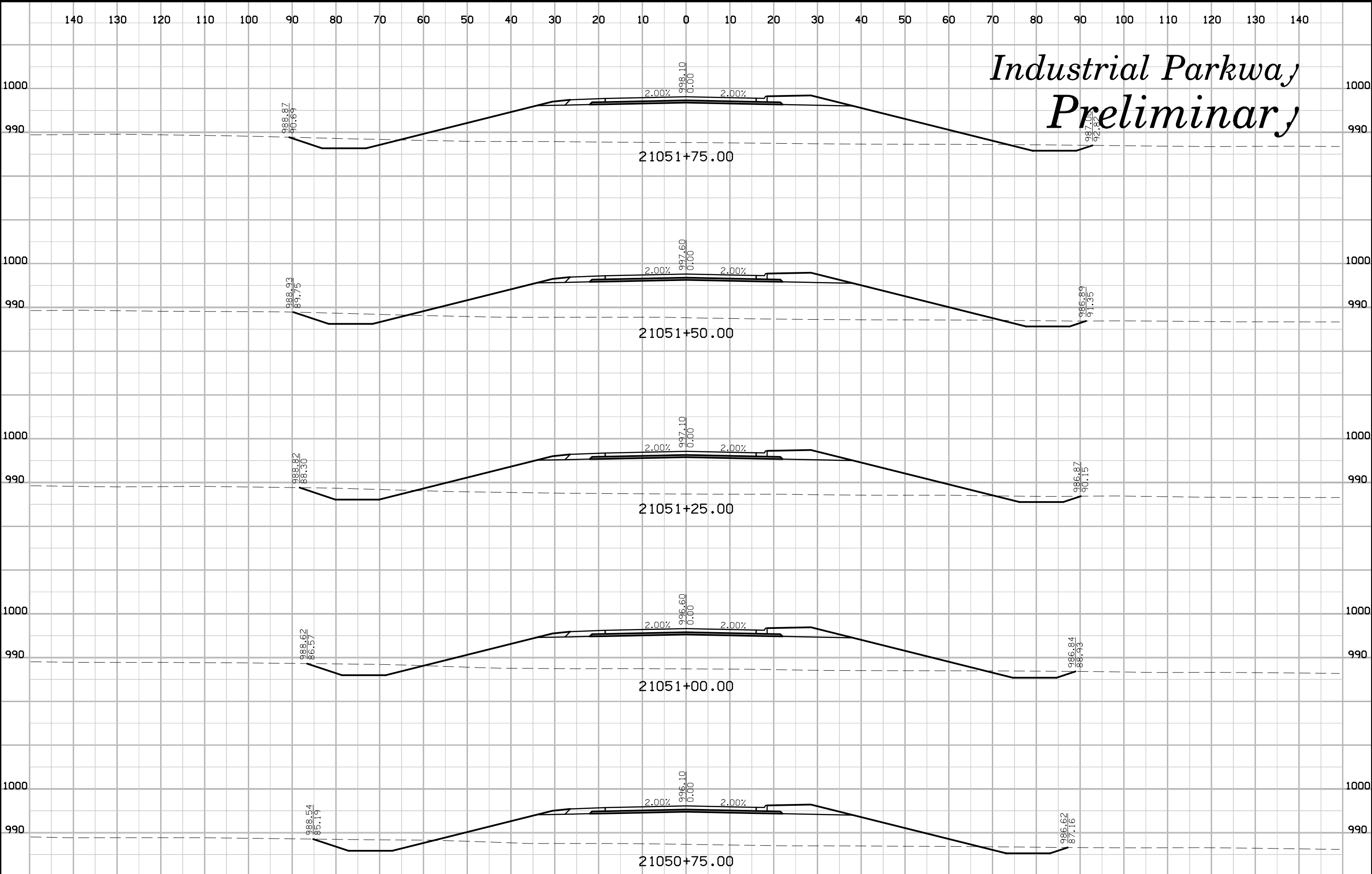
# Industrial Parkway Preliminary

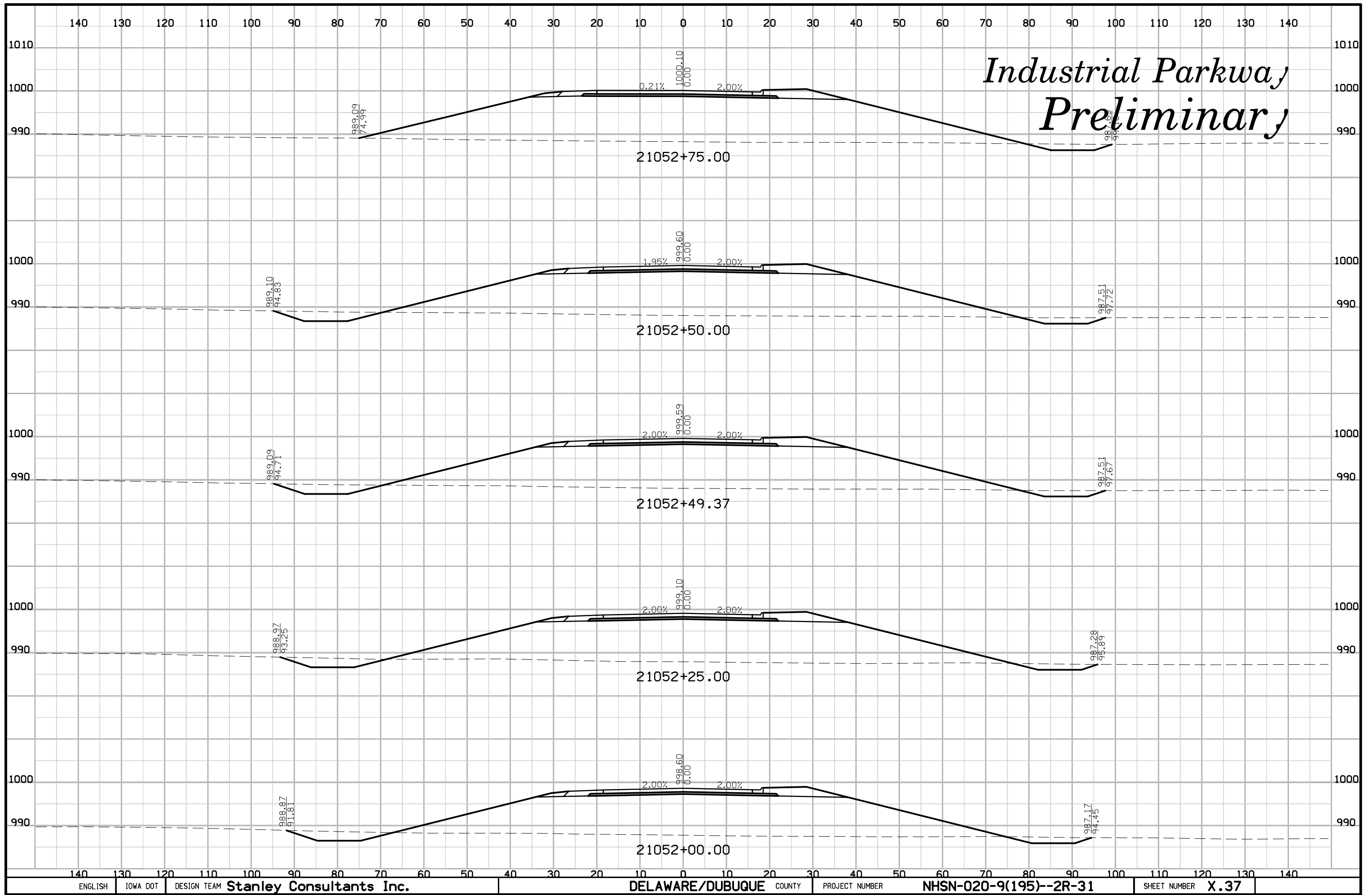


# Industrial Parkway Preliminary

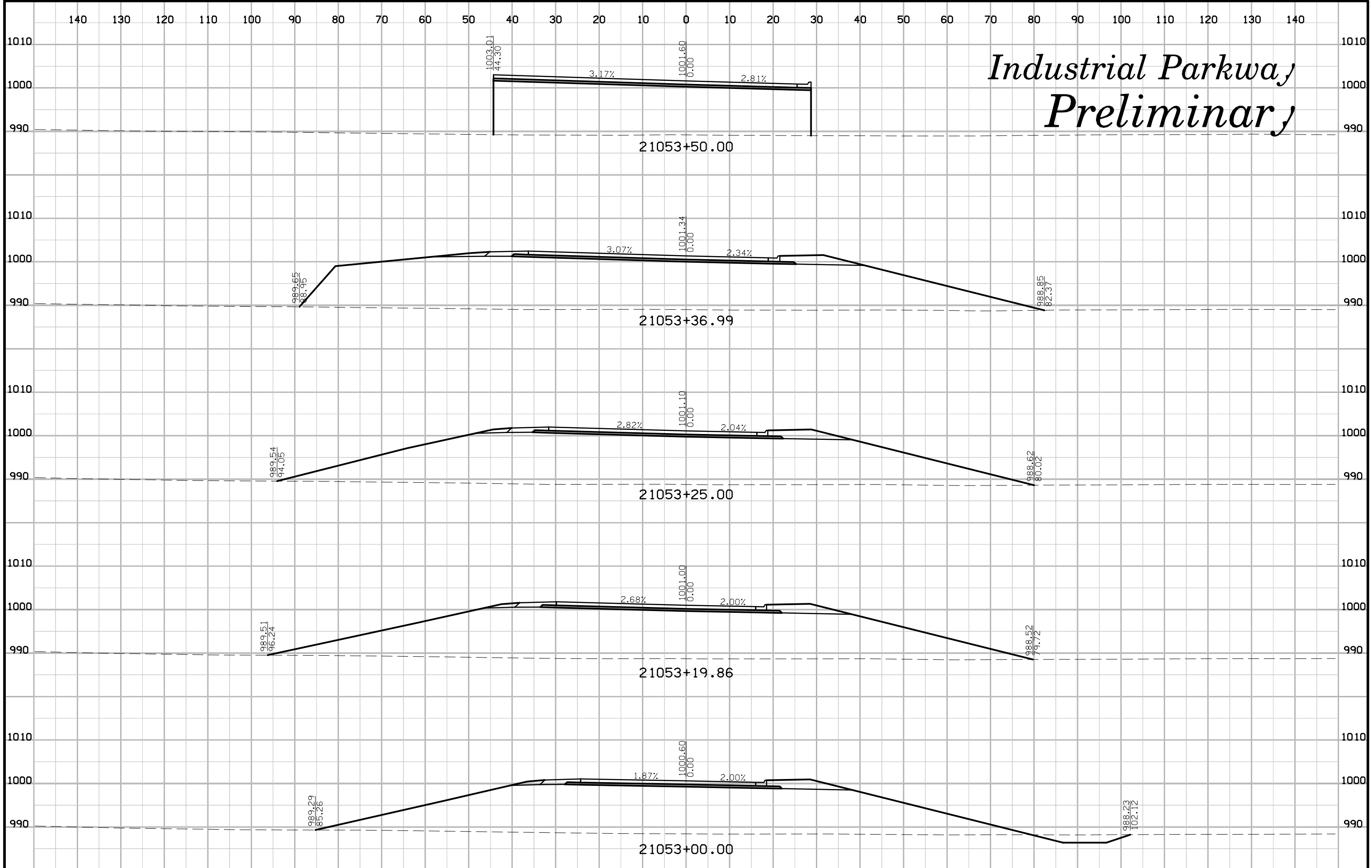


# Industrial Parkway Preliminary

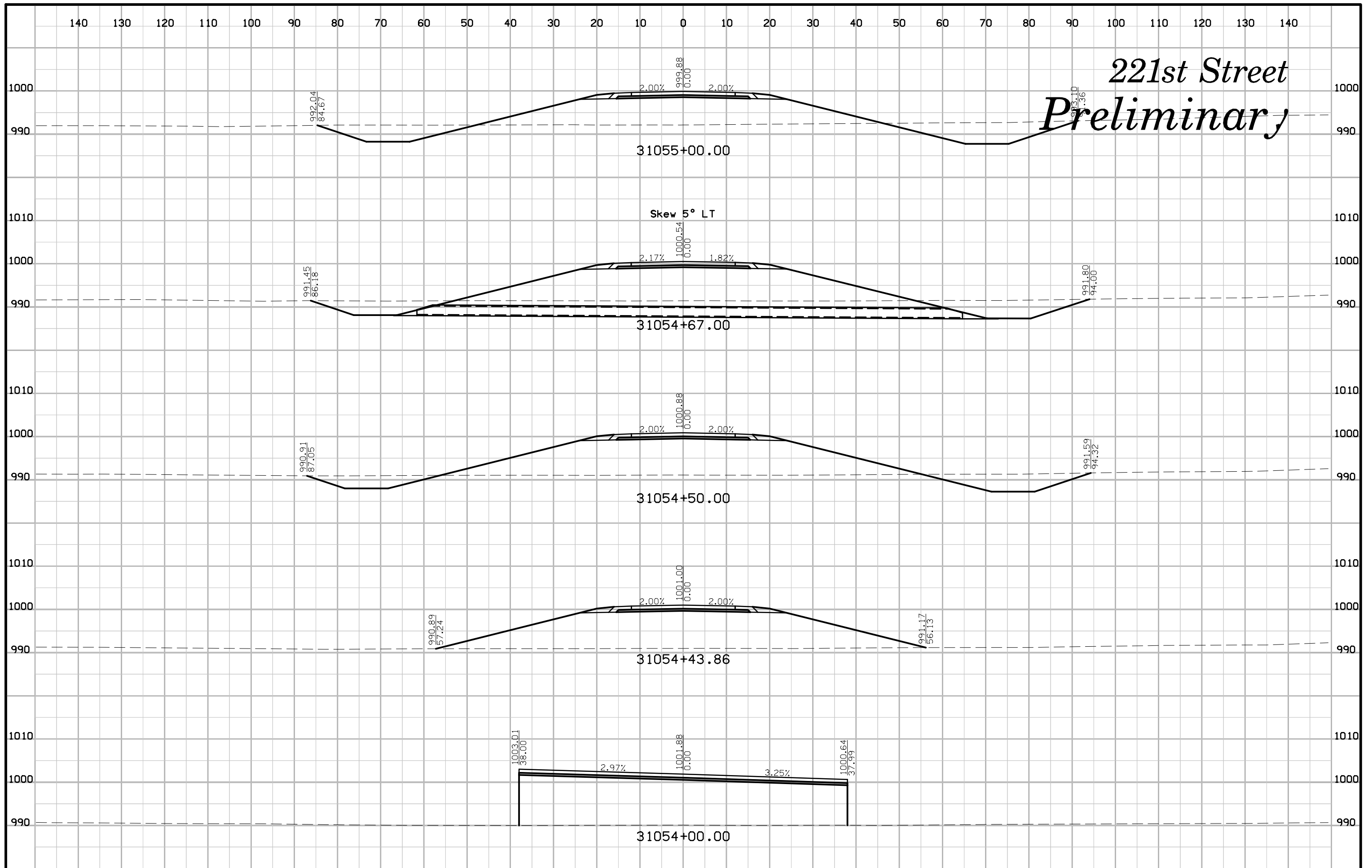




# Industrial Parkway Preliminary

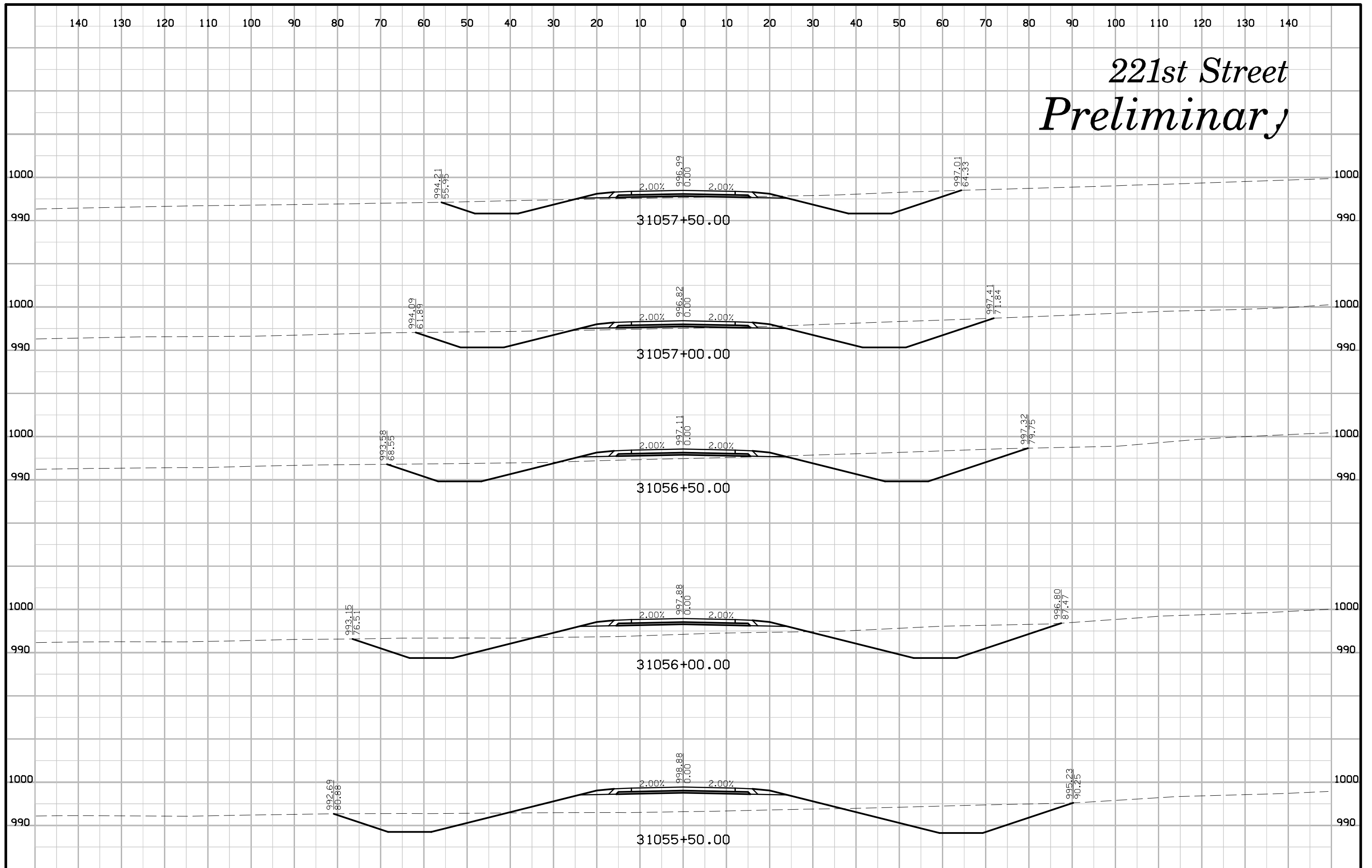


# 221st Street Preliminary

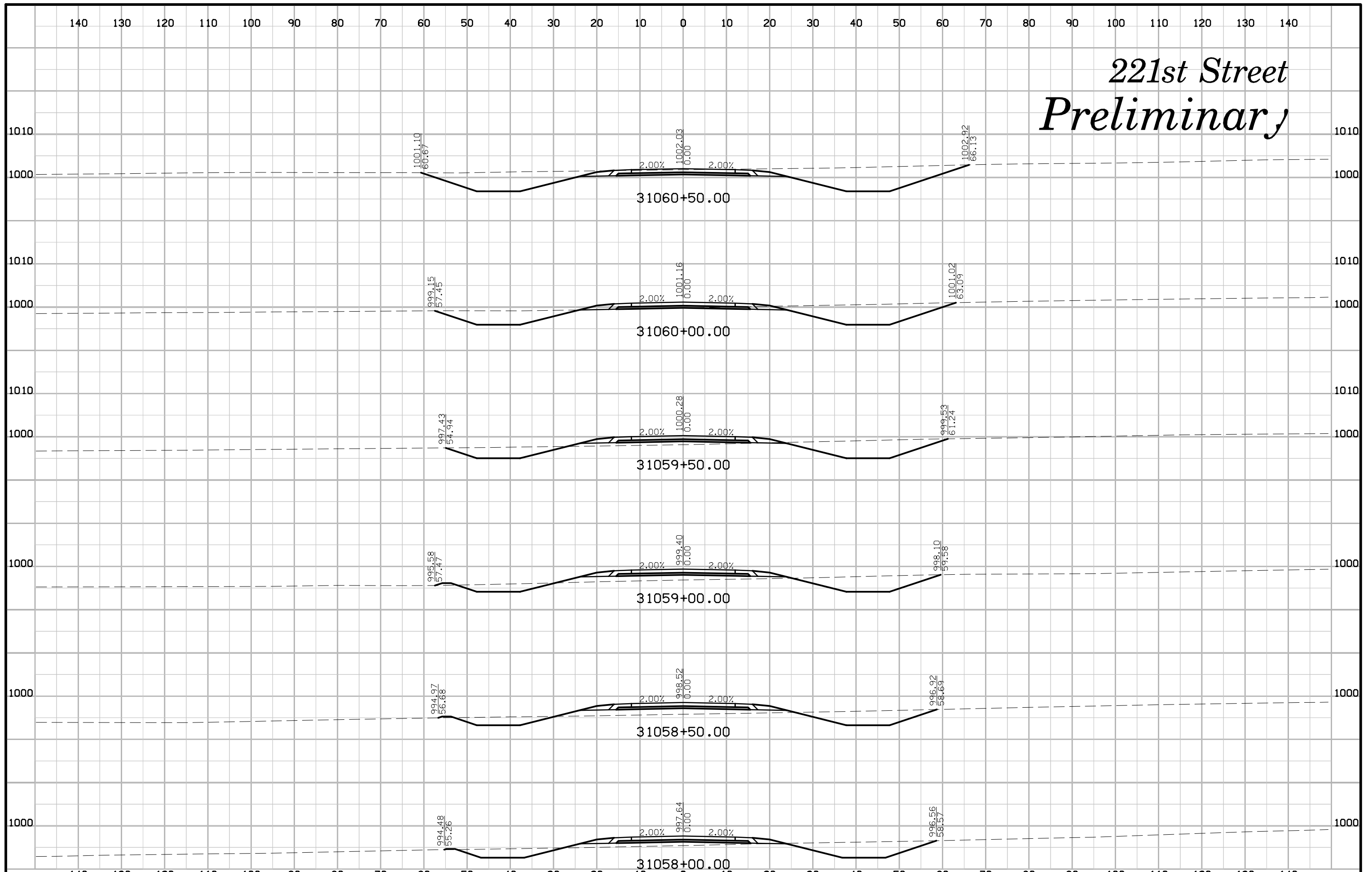




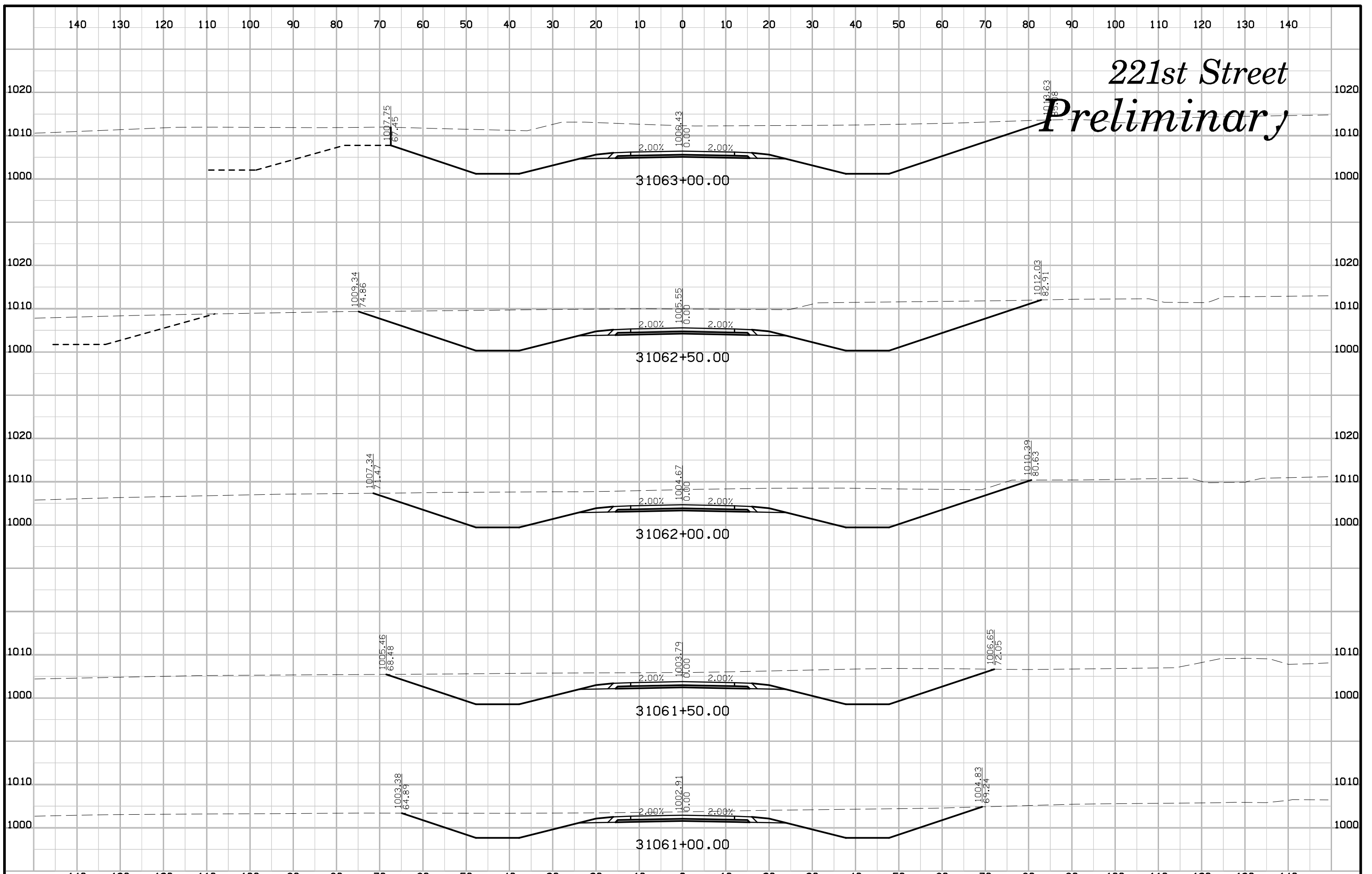
# 221st Street Preliminary



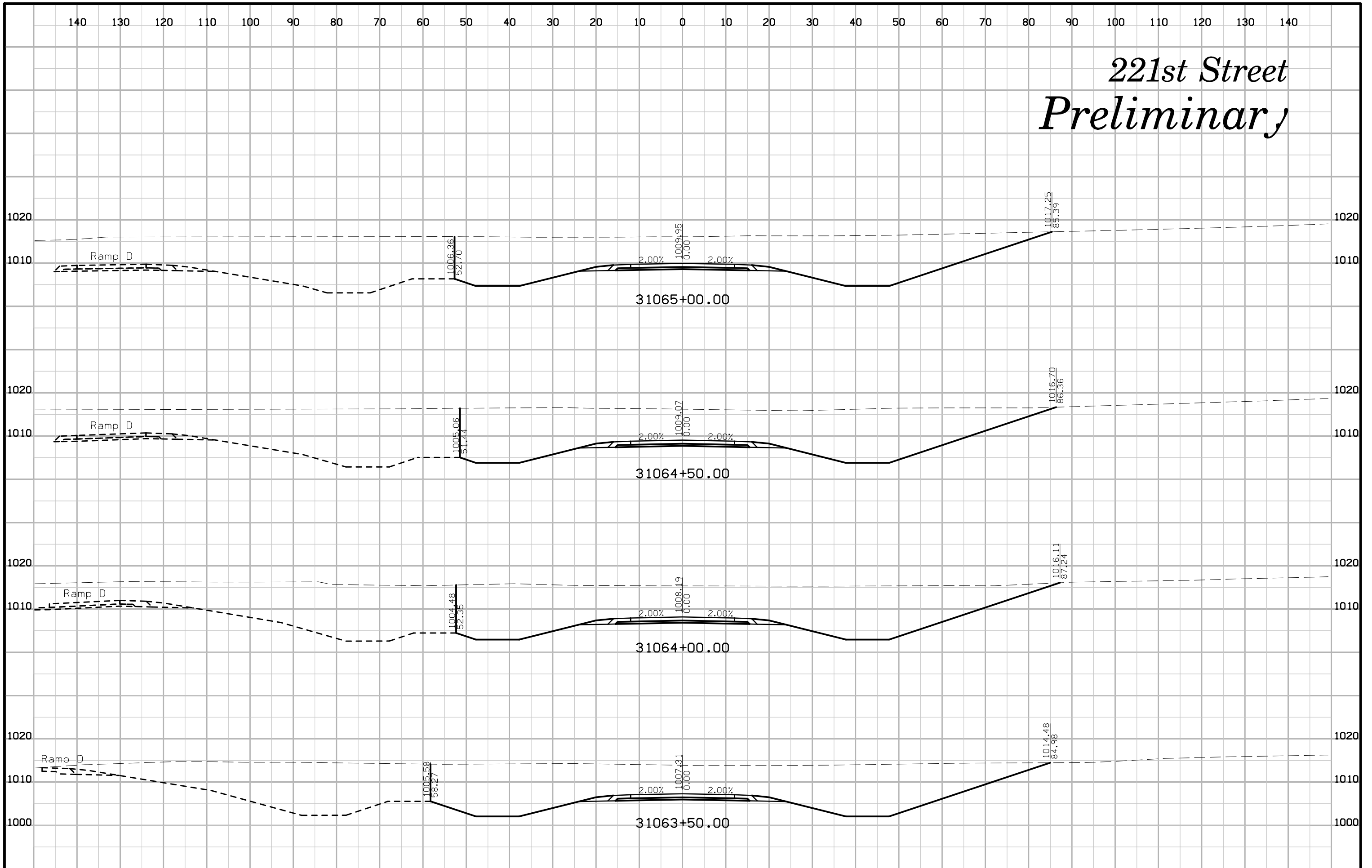
# 221st Street Preliminary



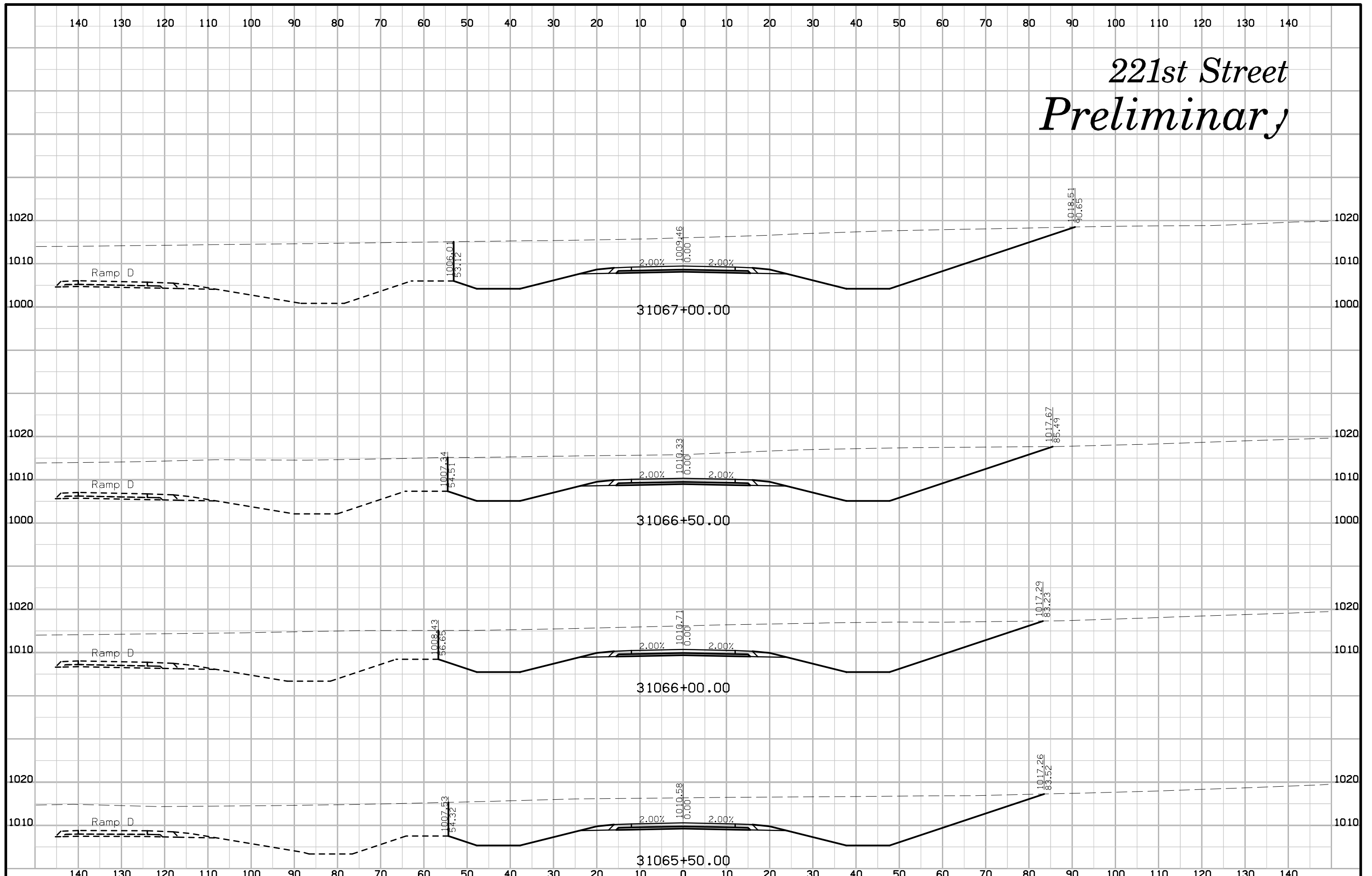
# 221st Street Preliminary



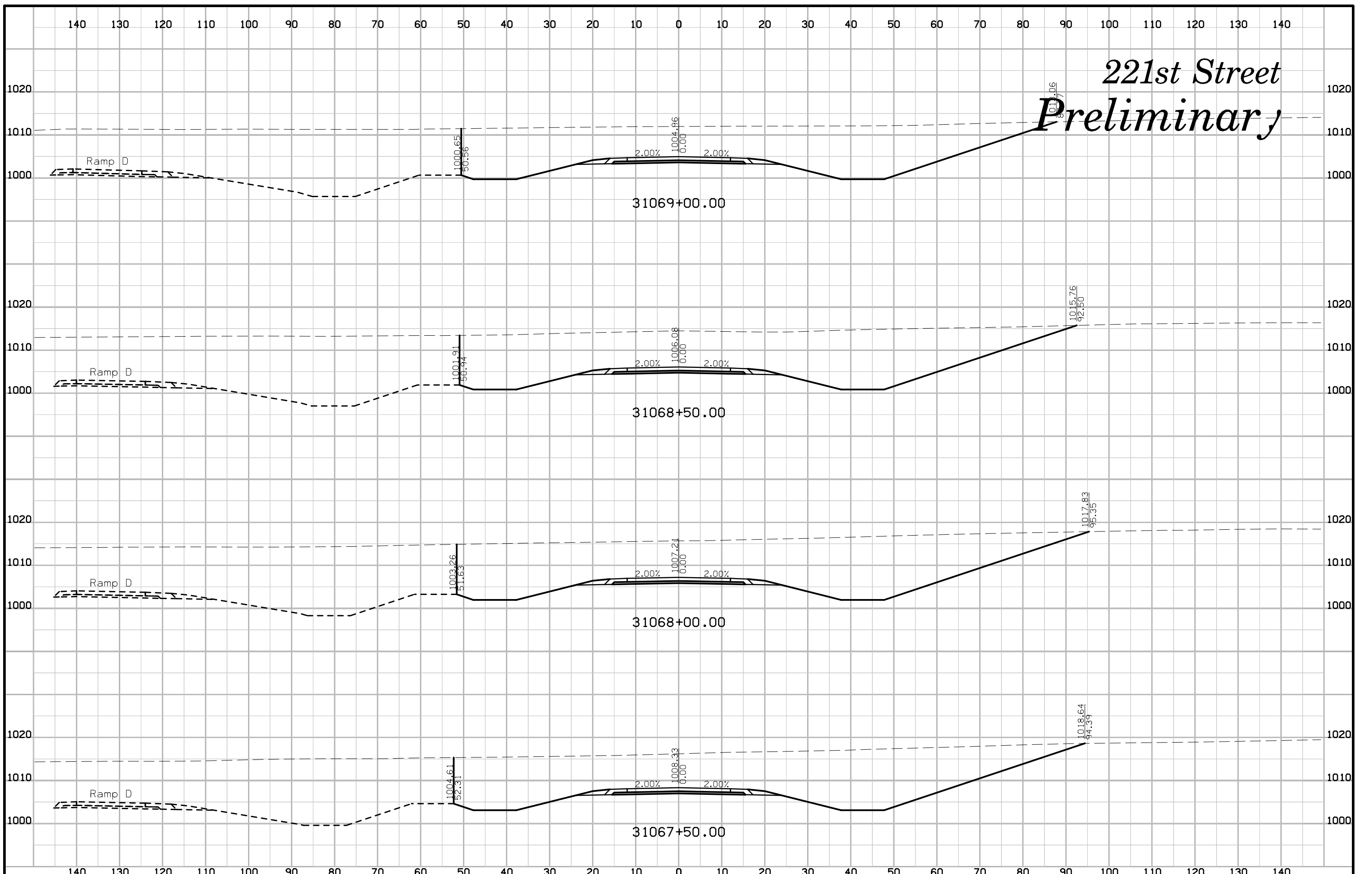
# 221st Street Preliminary



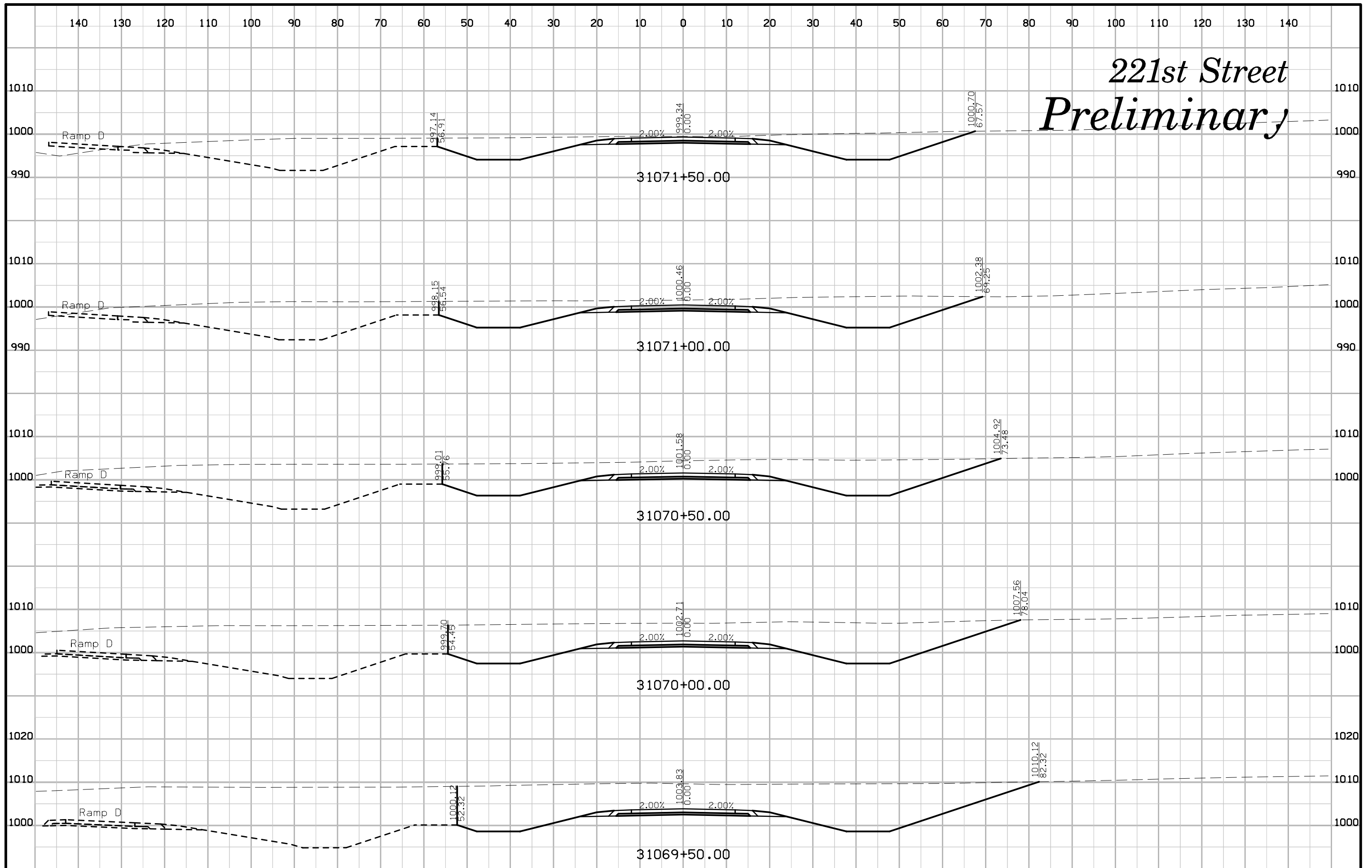
# 221st Street Preliminary



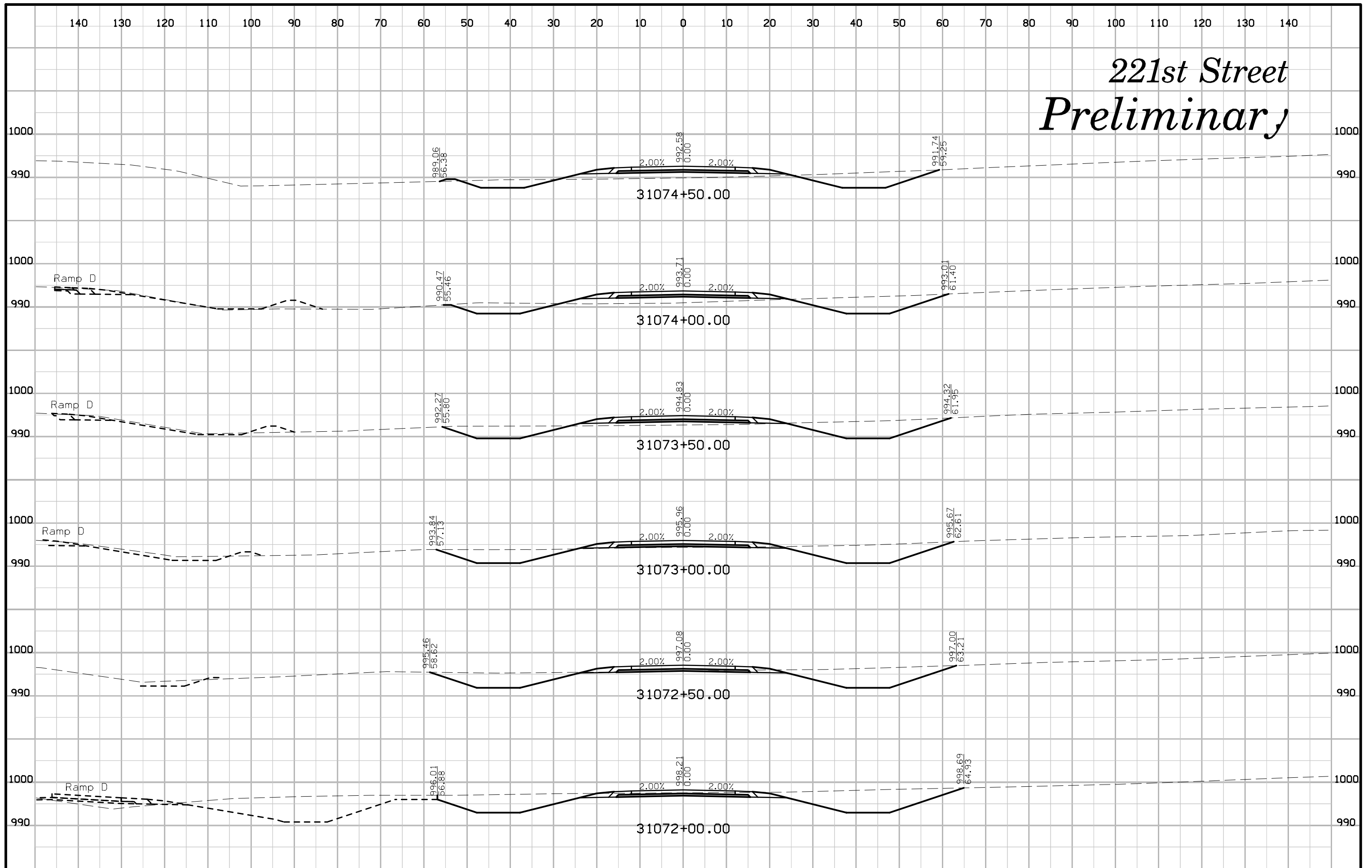
# 221st Street Preliminary



# 221st Street Preliminary

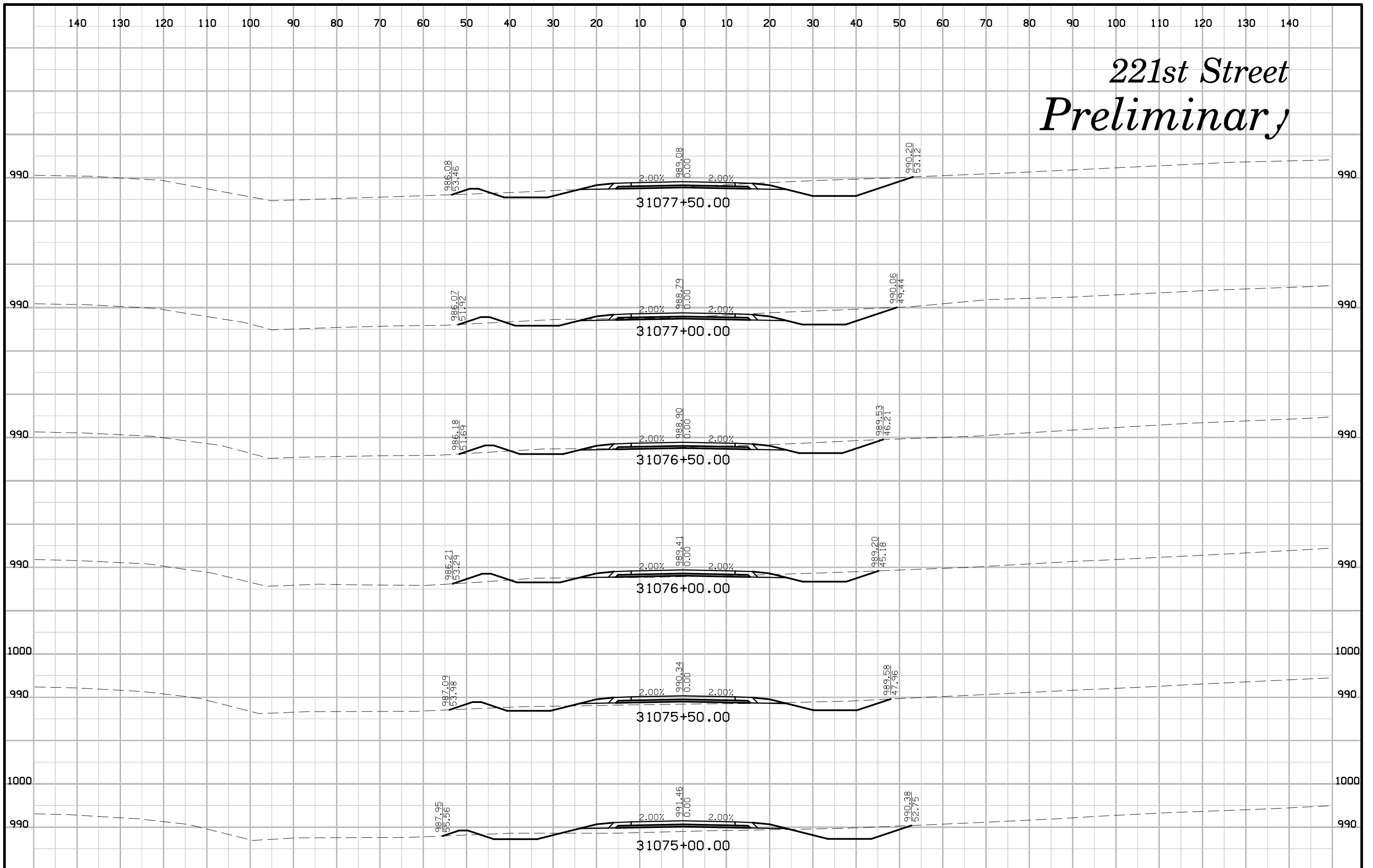


# 221st Street Preliminary

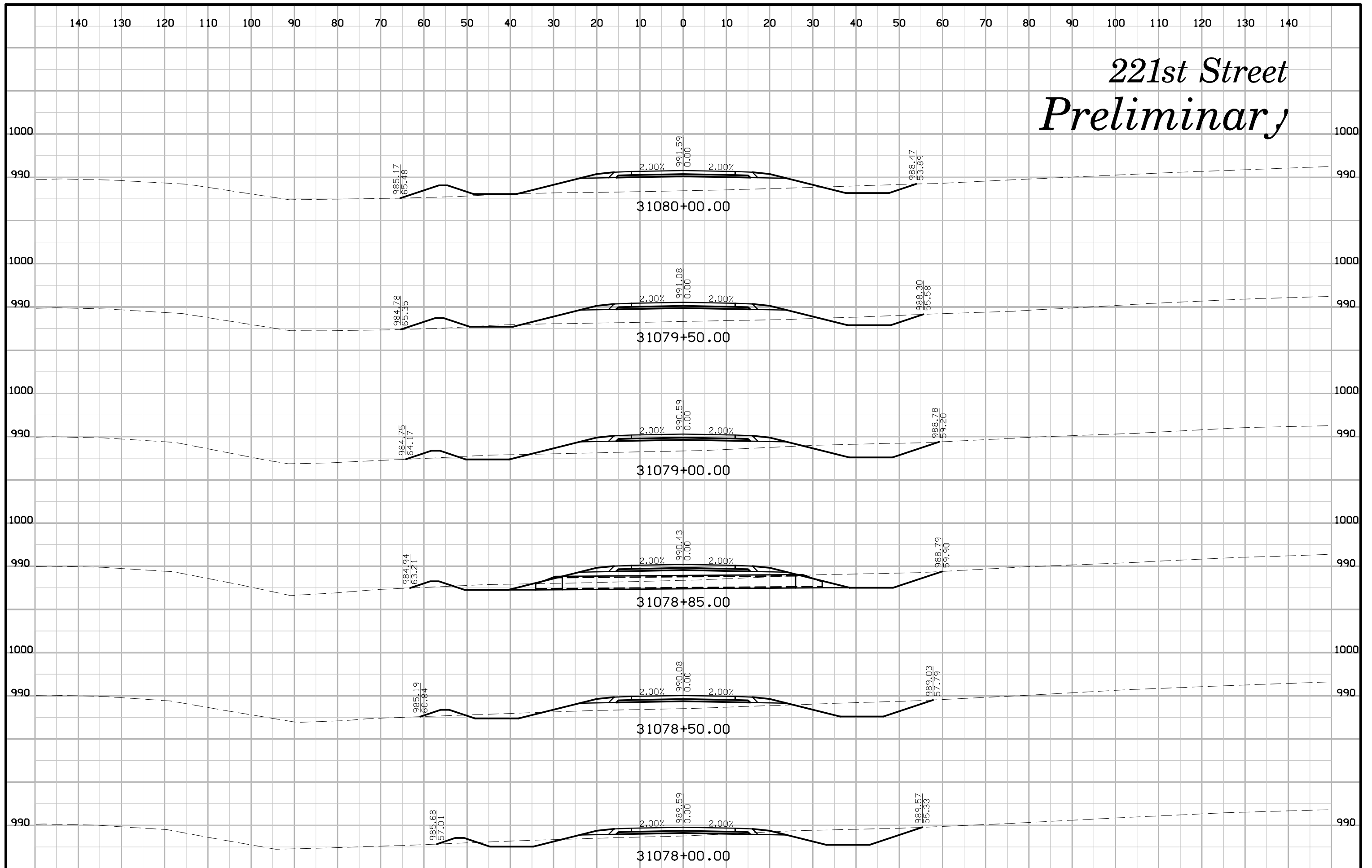




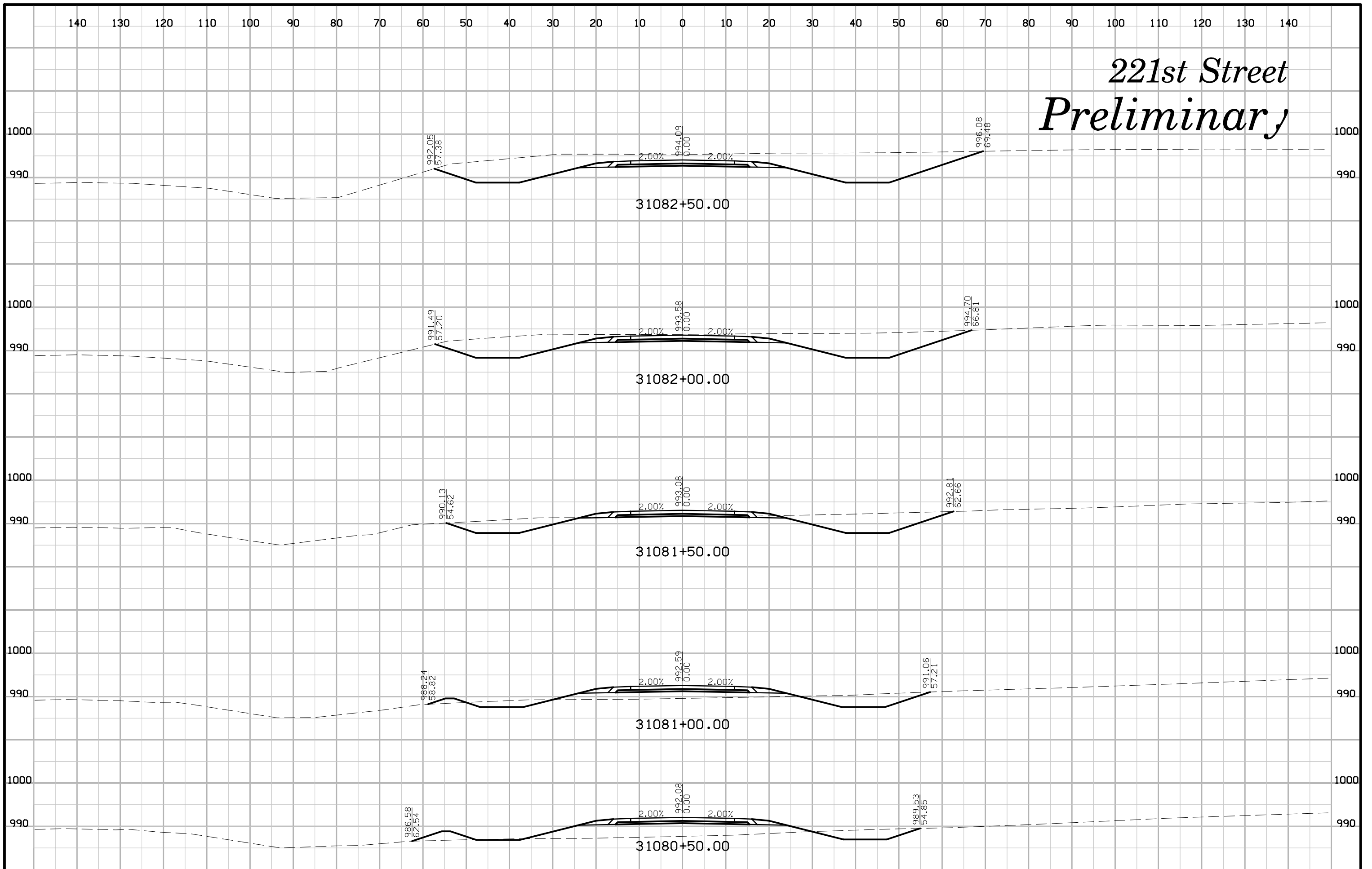
# 221st Street Preliminary



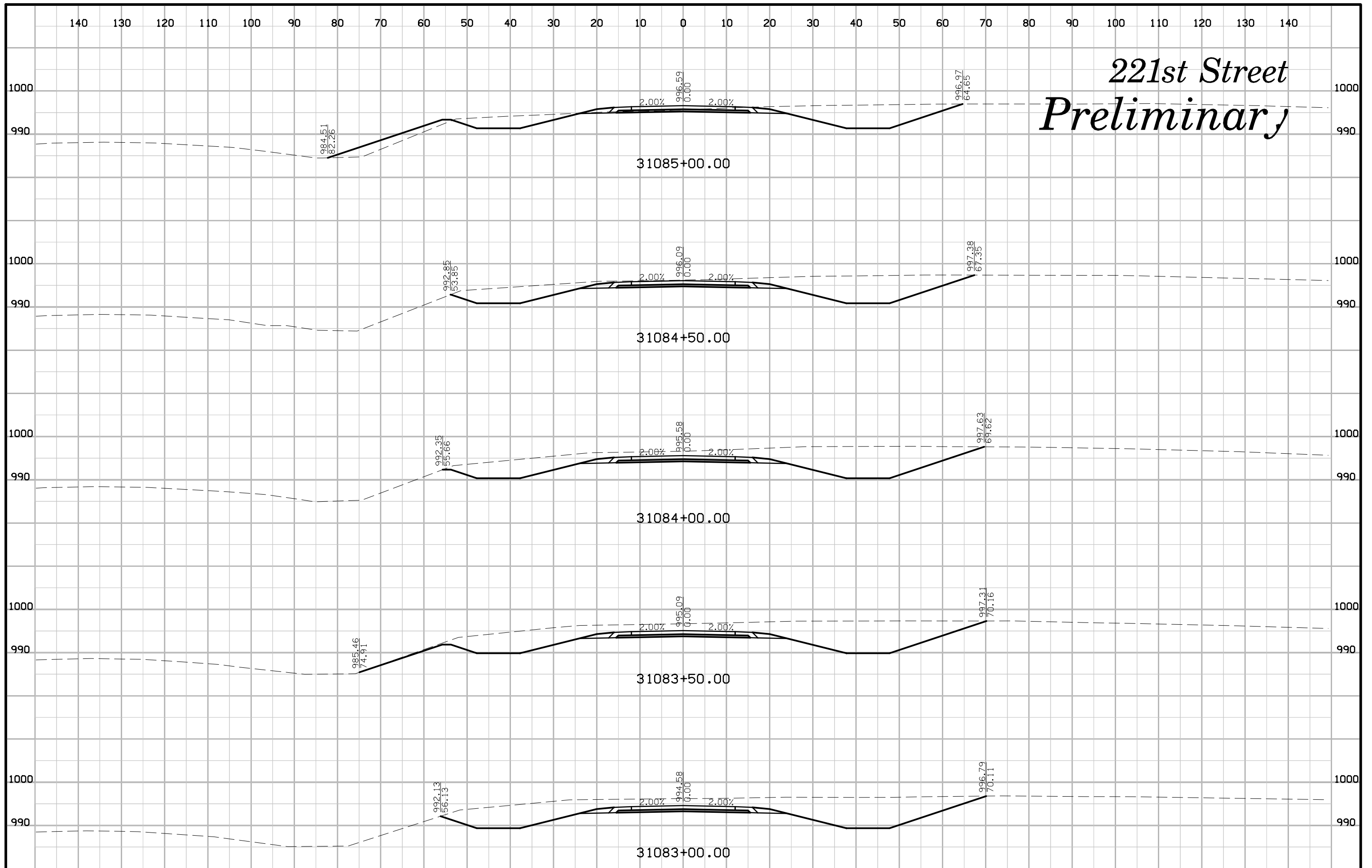
# 221st Street Preliminary



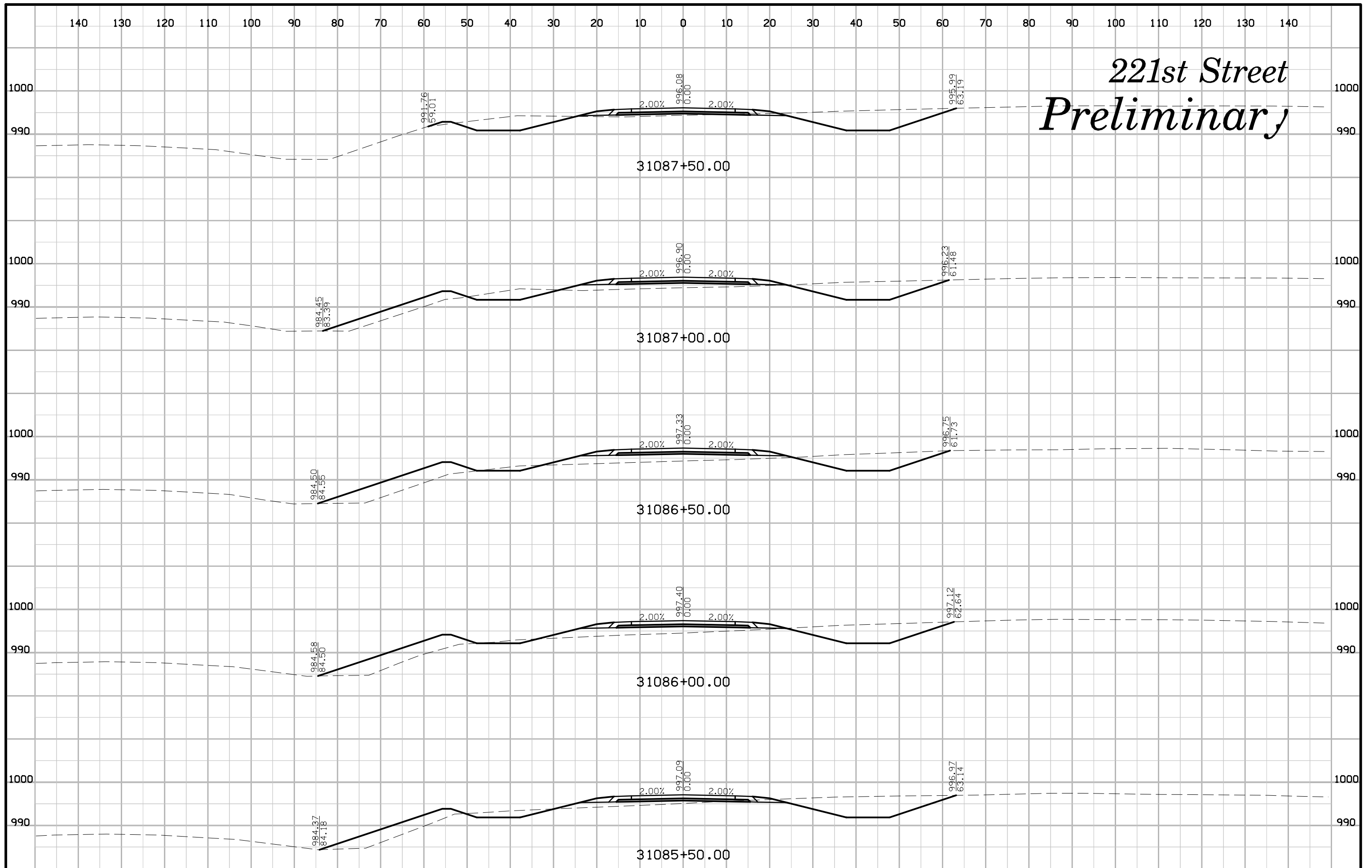
# 221st Street Preliminary



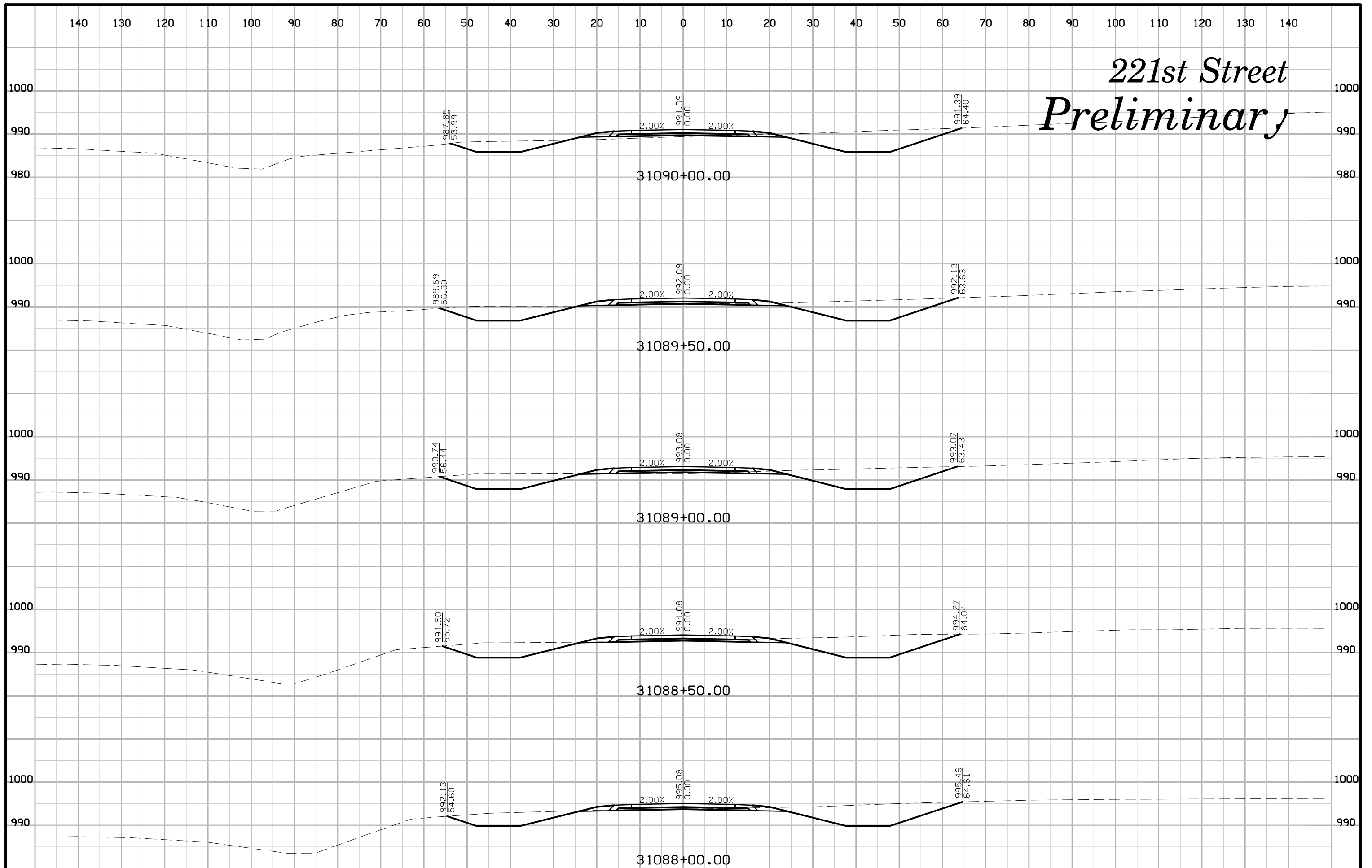
# 221st Street Preliminary



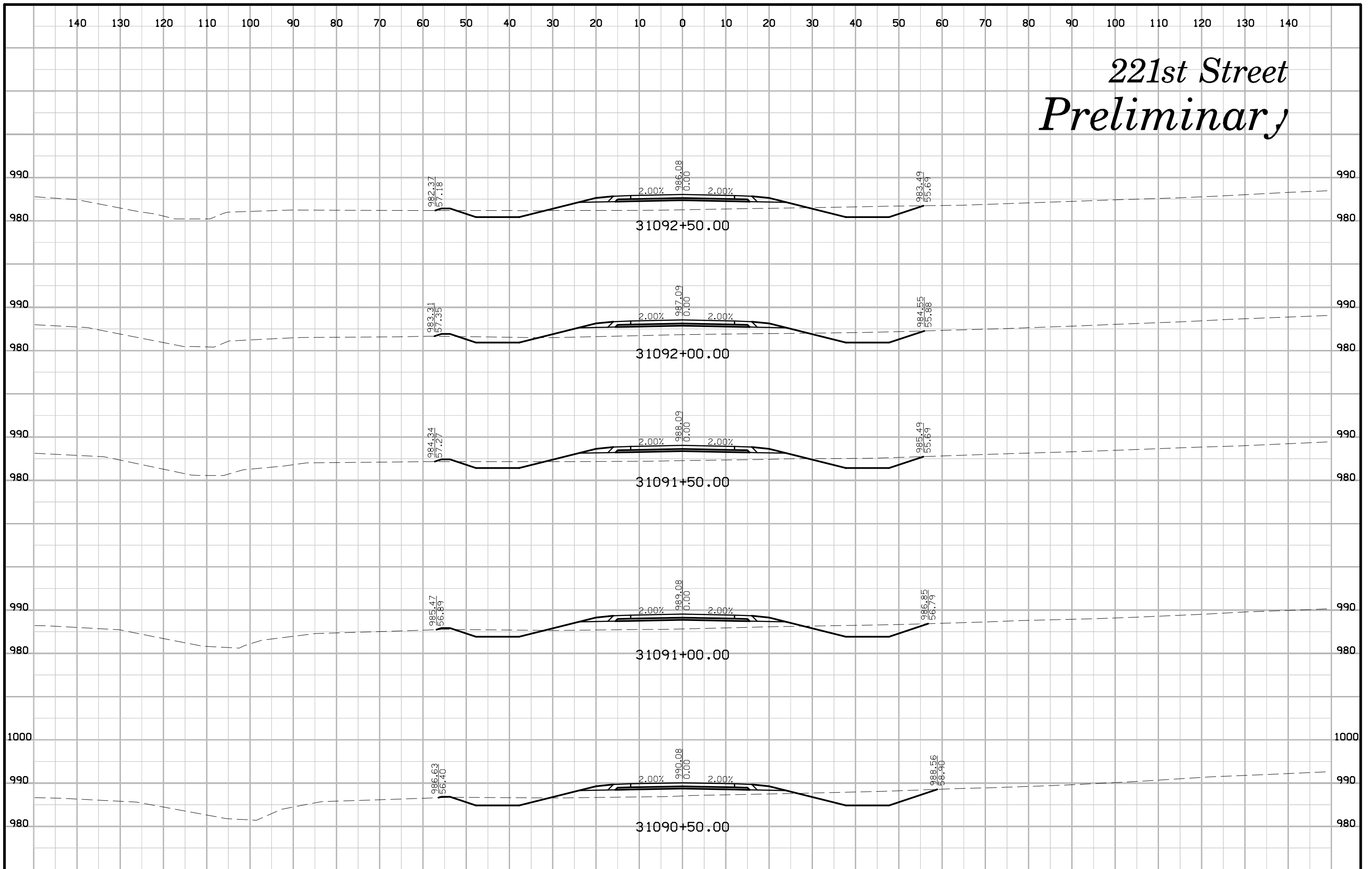
# 221st Street Preliminary



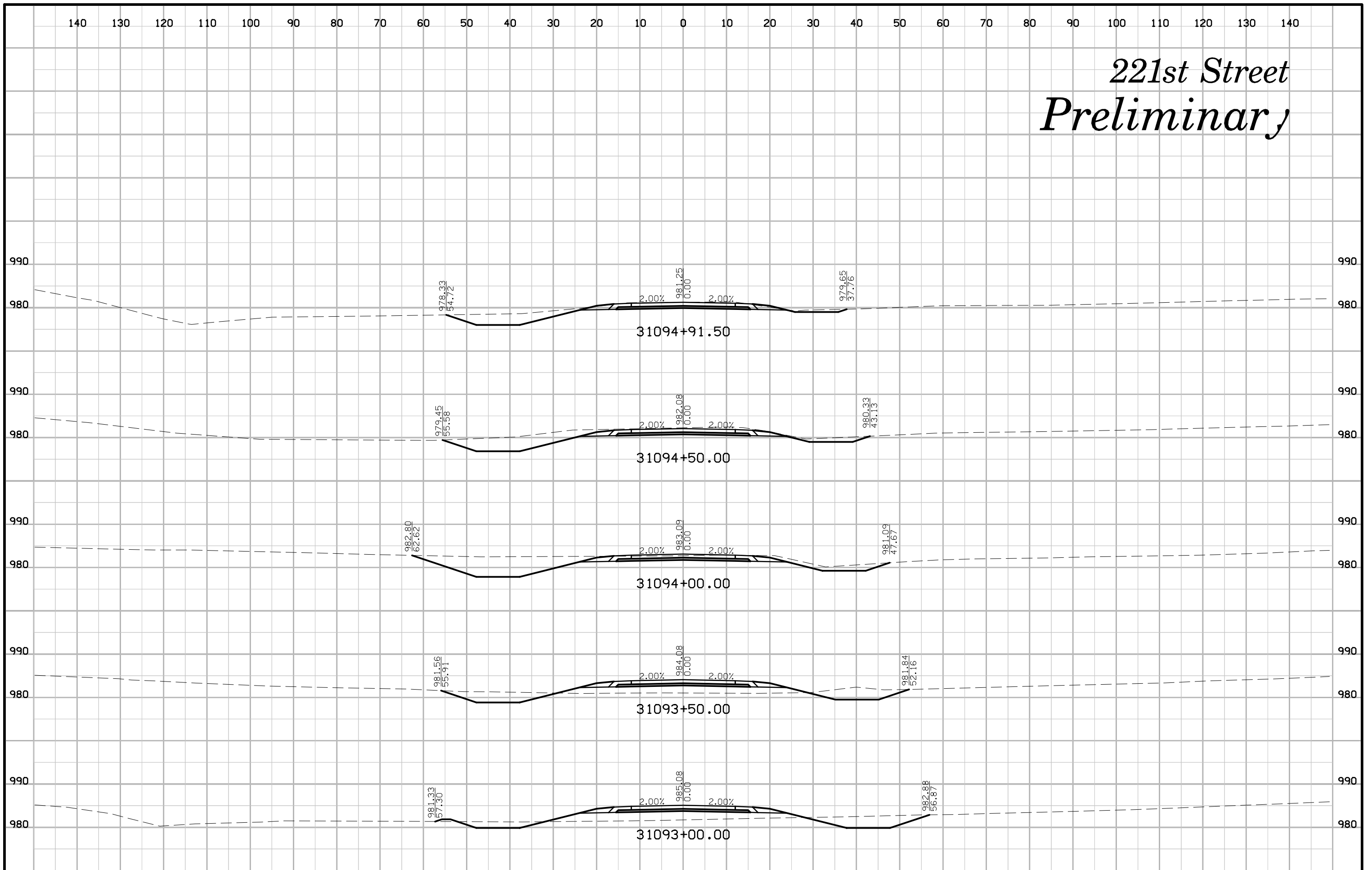
# 221st Street Preliminary



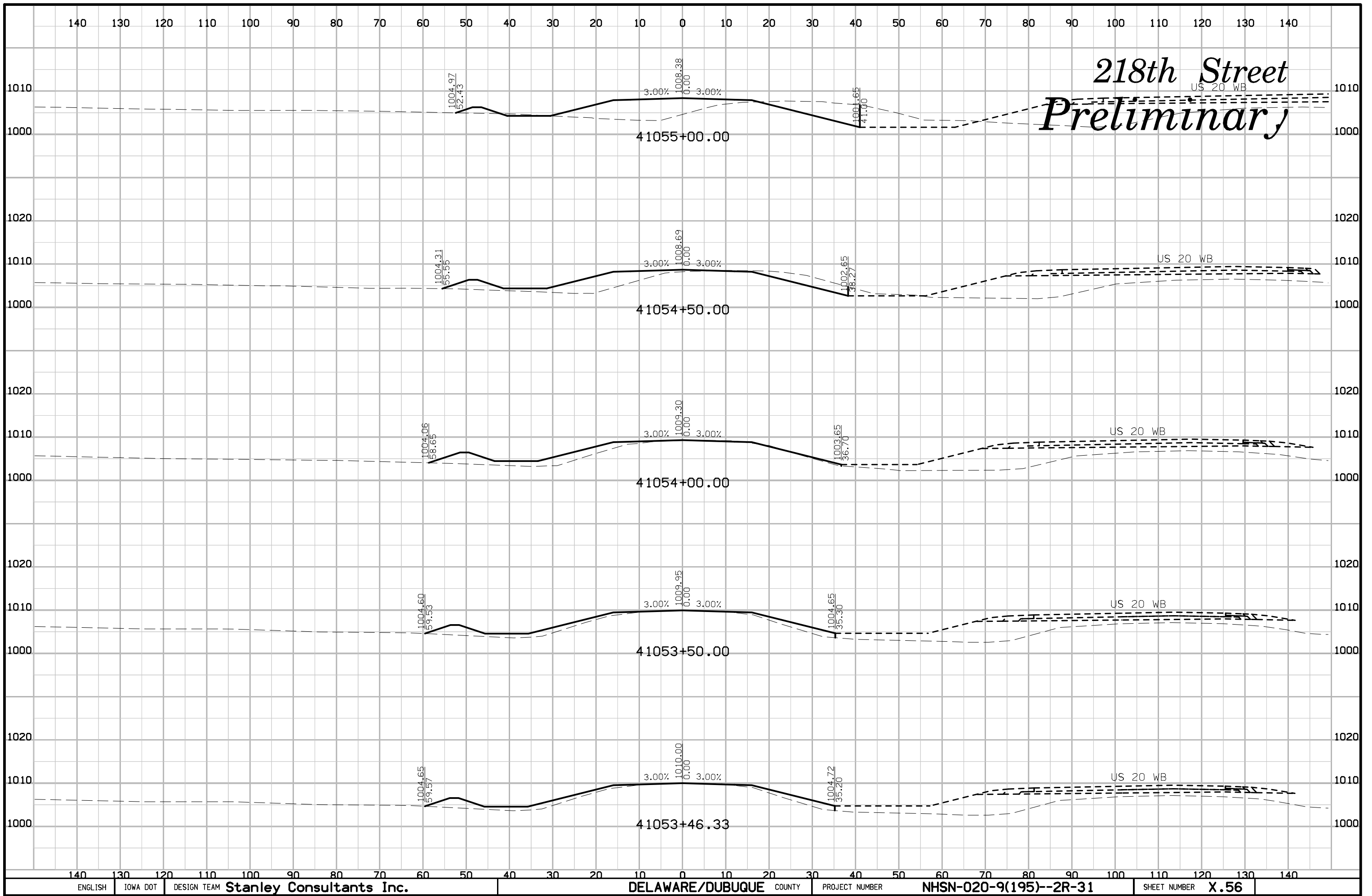
# 221st Street Preliminary



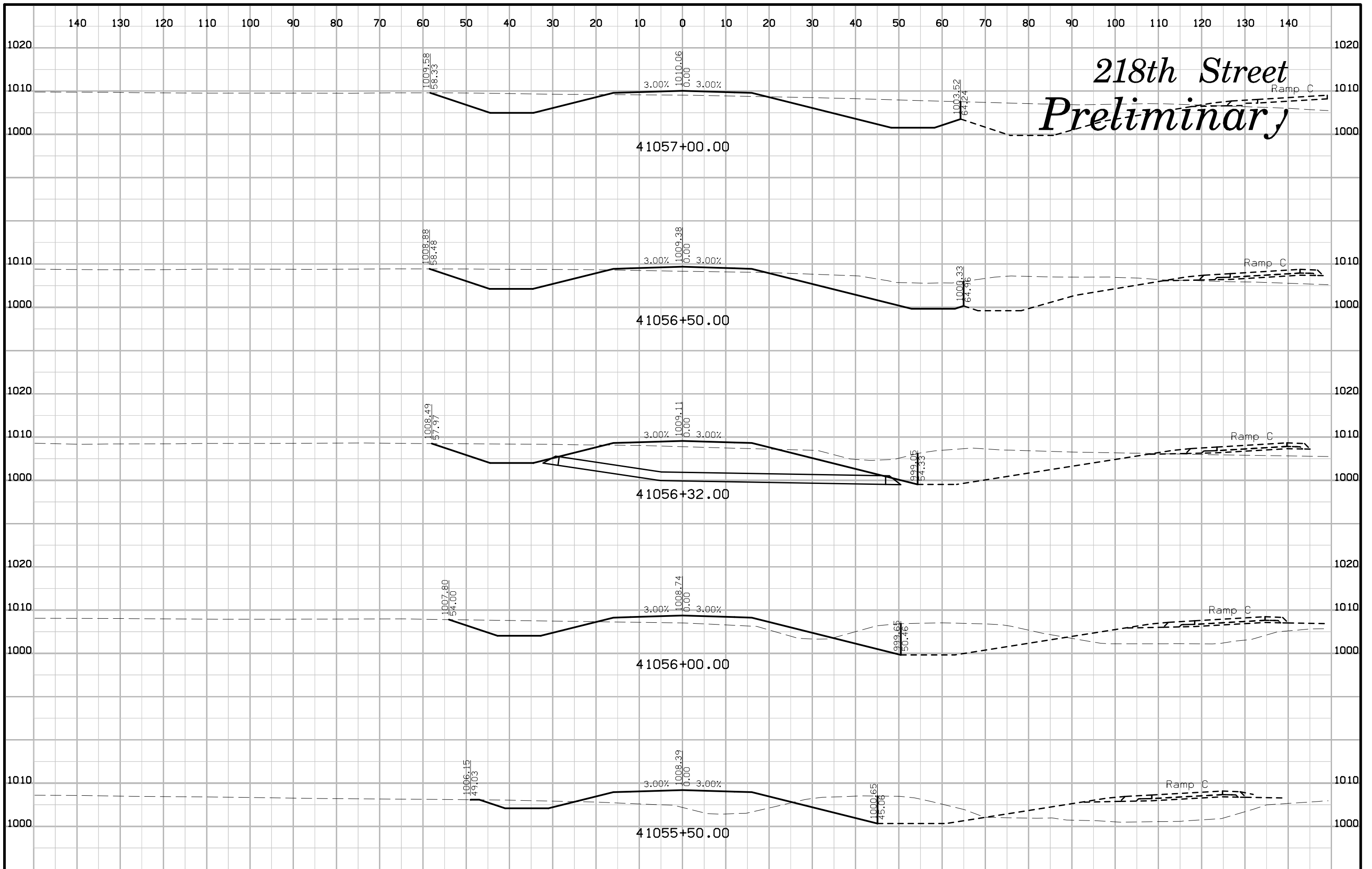
# 221st Street Preliminary



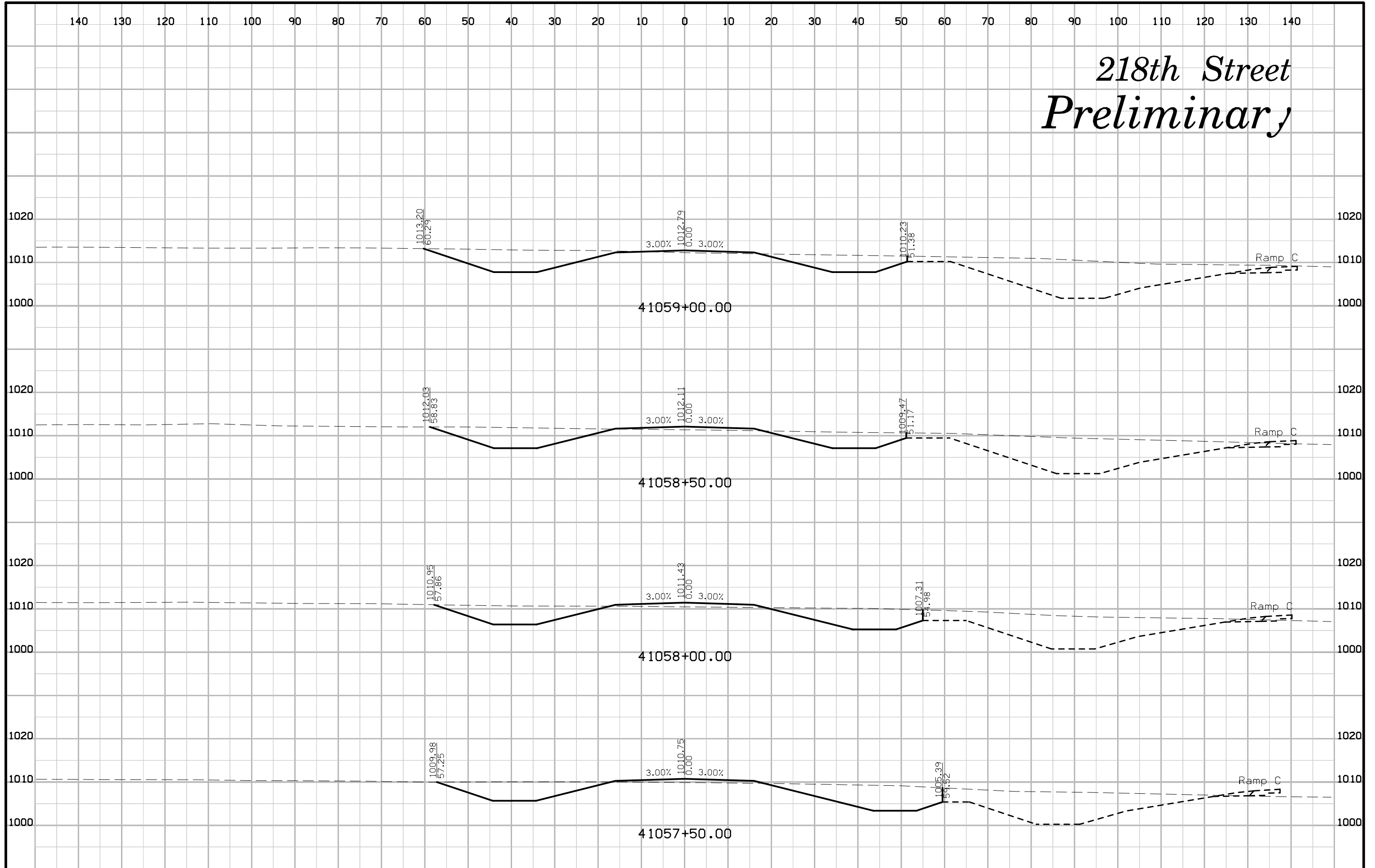




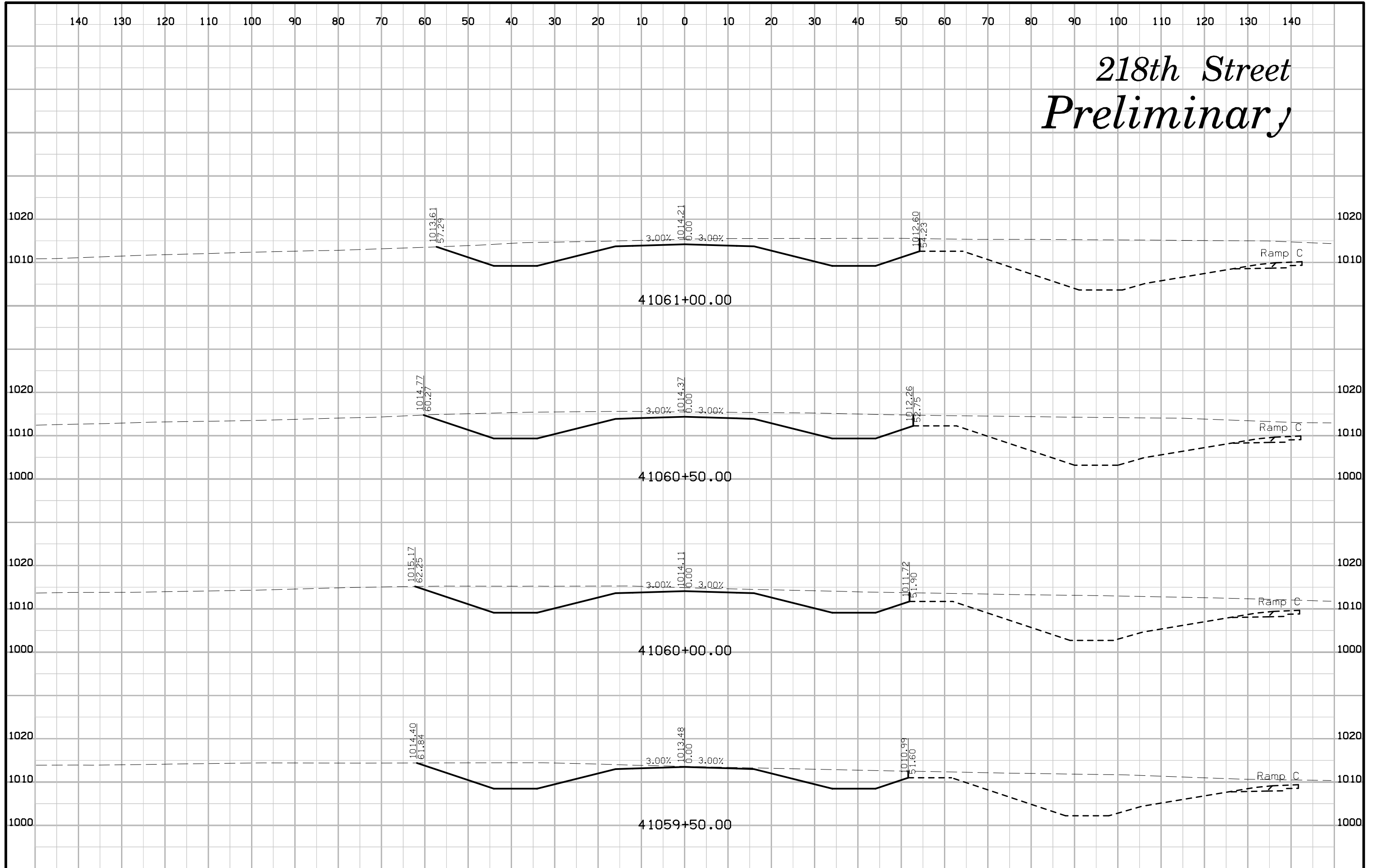
# 218th Street Preliminary



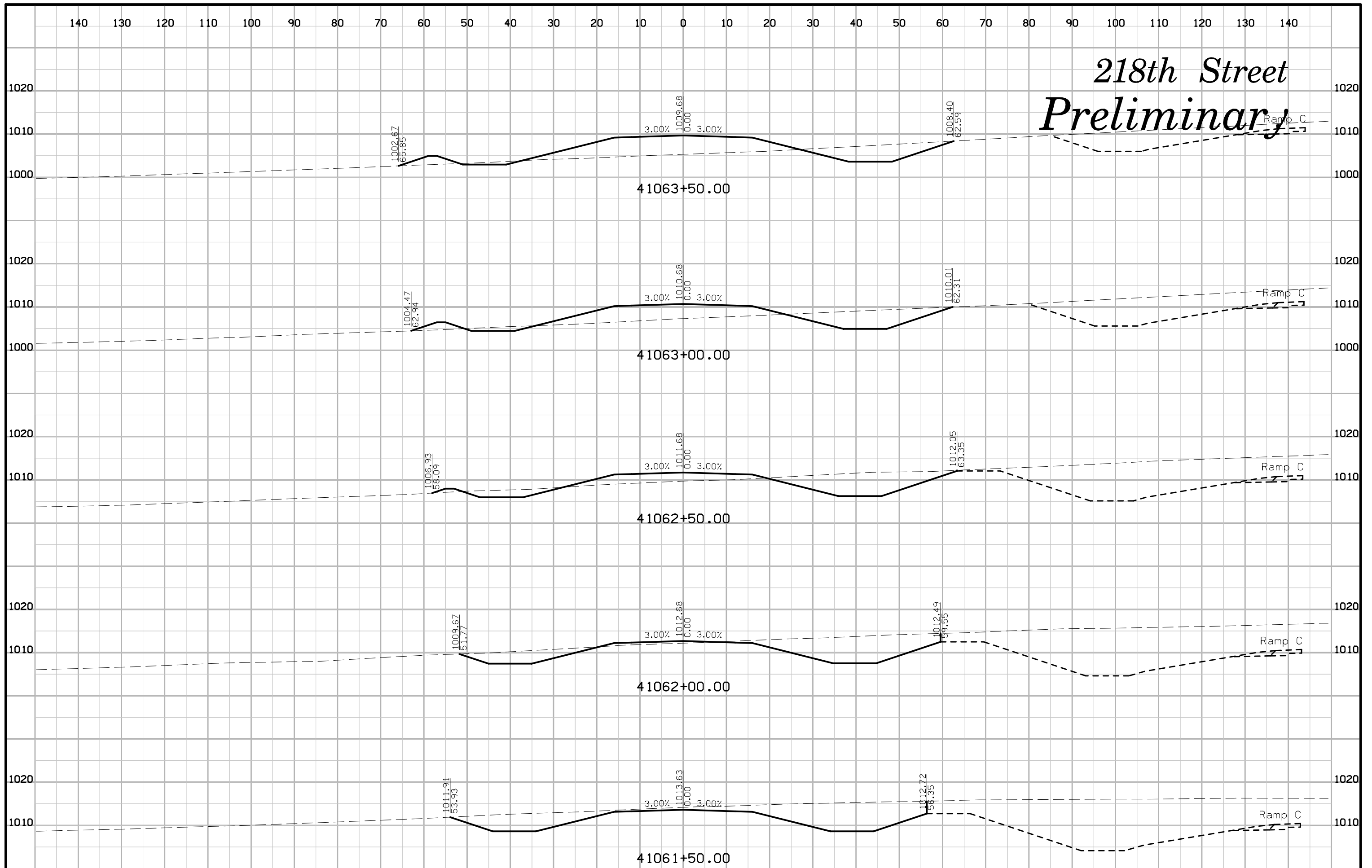
# 218th Street Preliminary



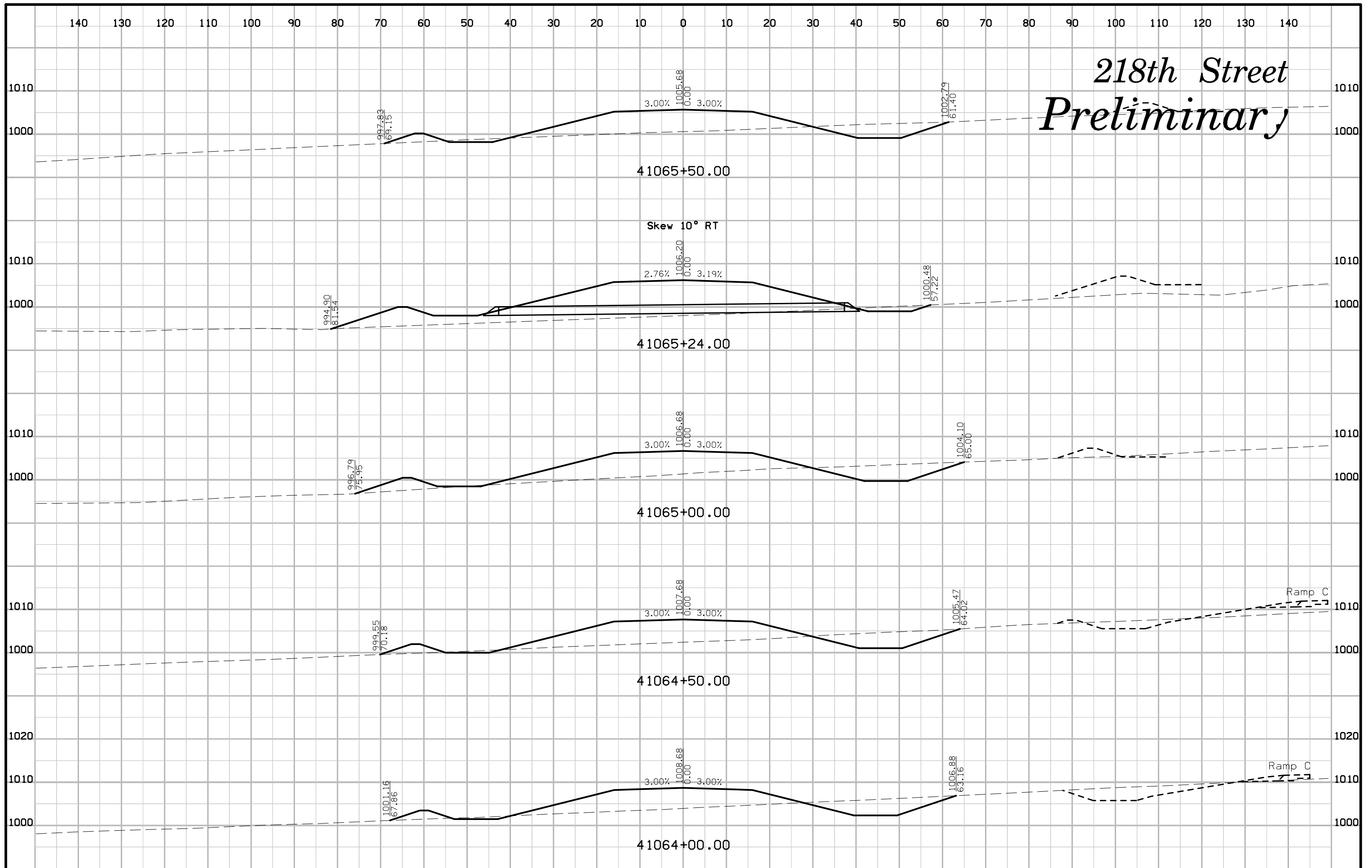
# 218th Street Preliminary



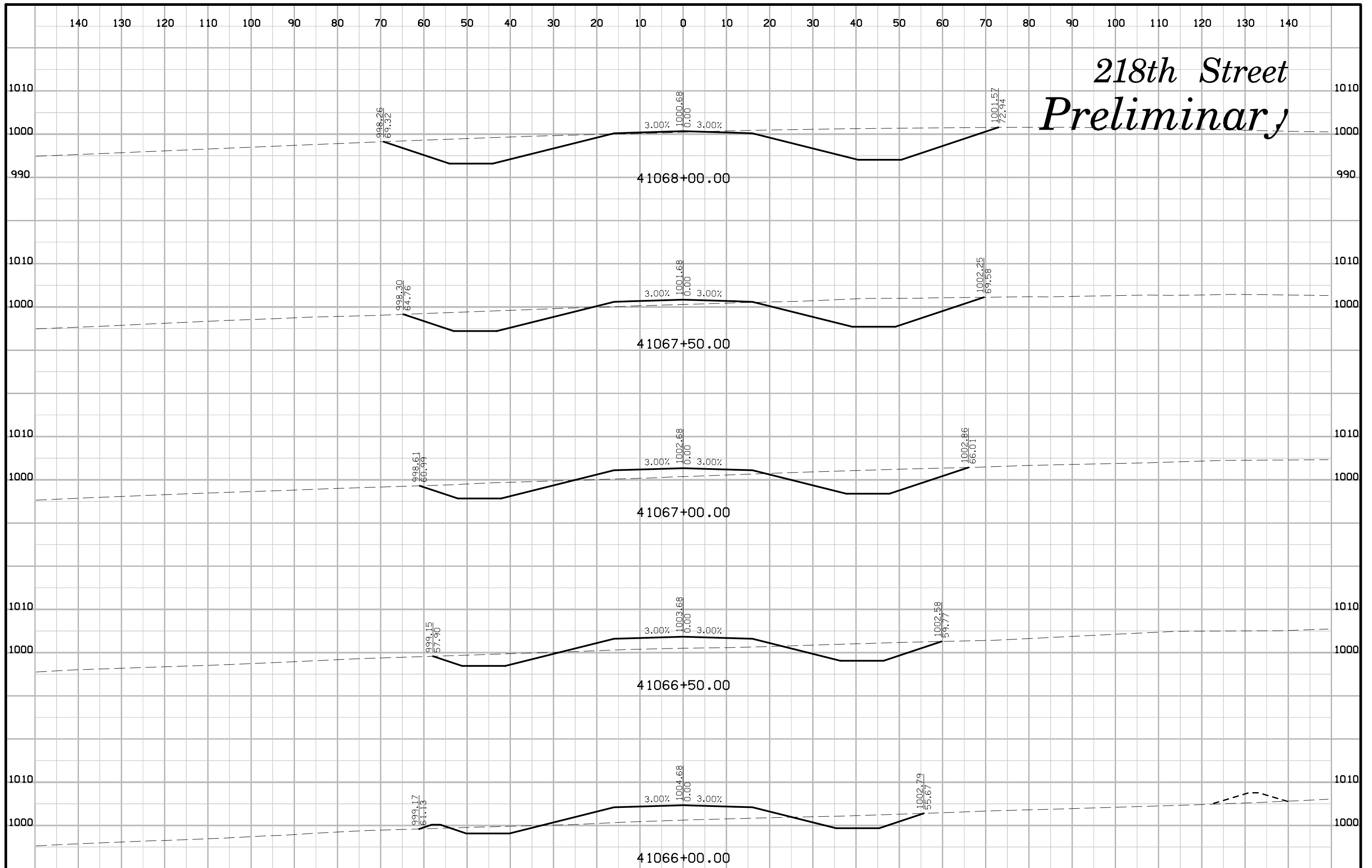
# 218th Street Preliminary



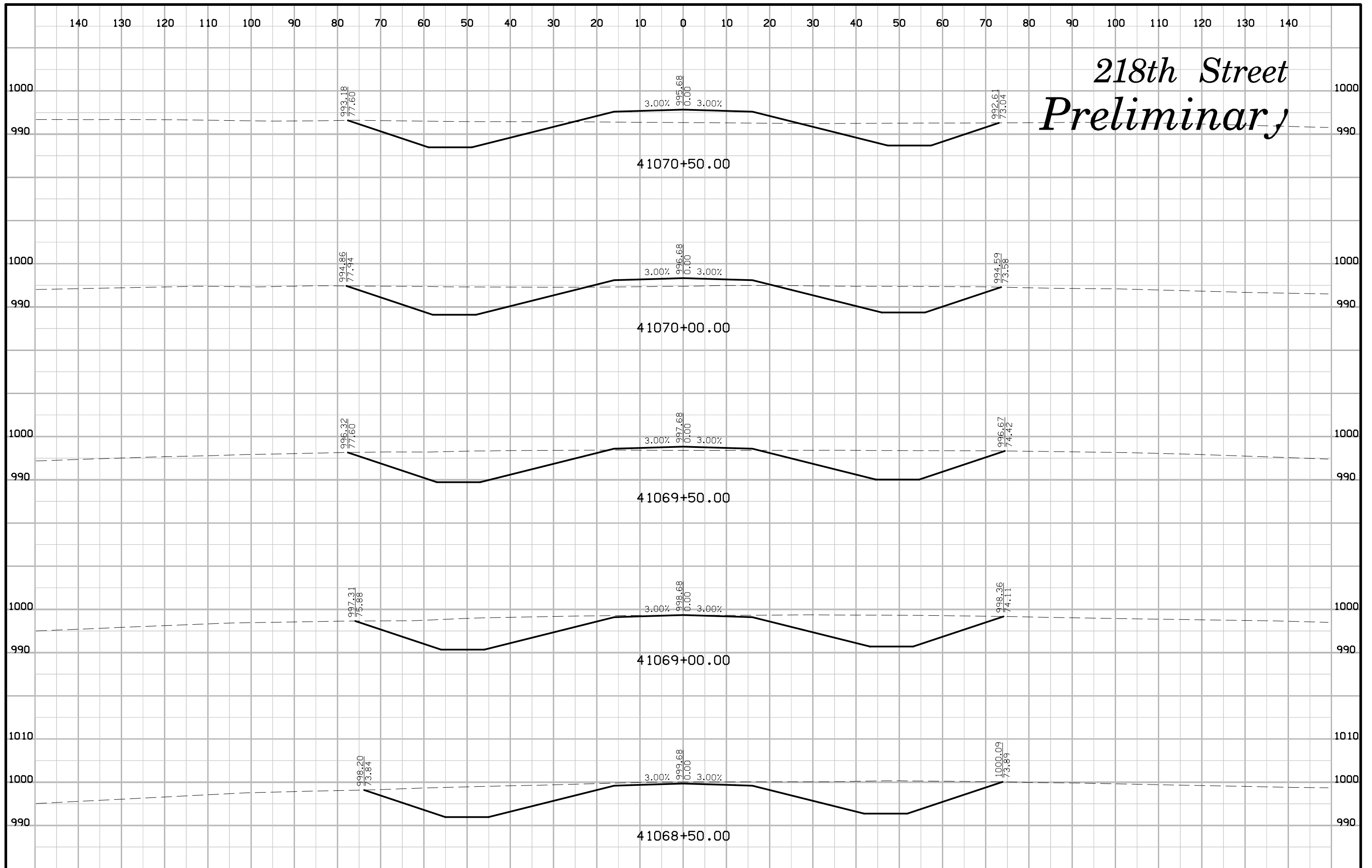
# 218th Street Preliminary



# 218th Street Preliminary

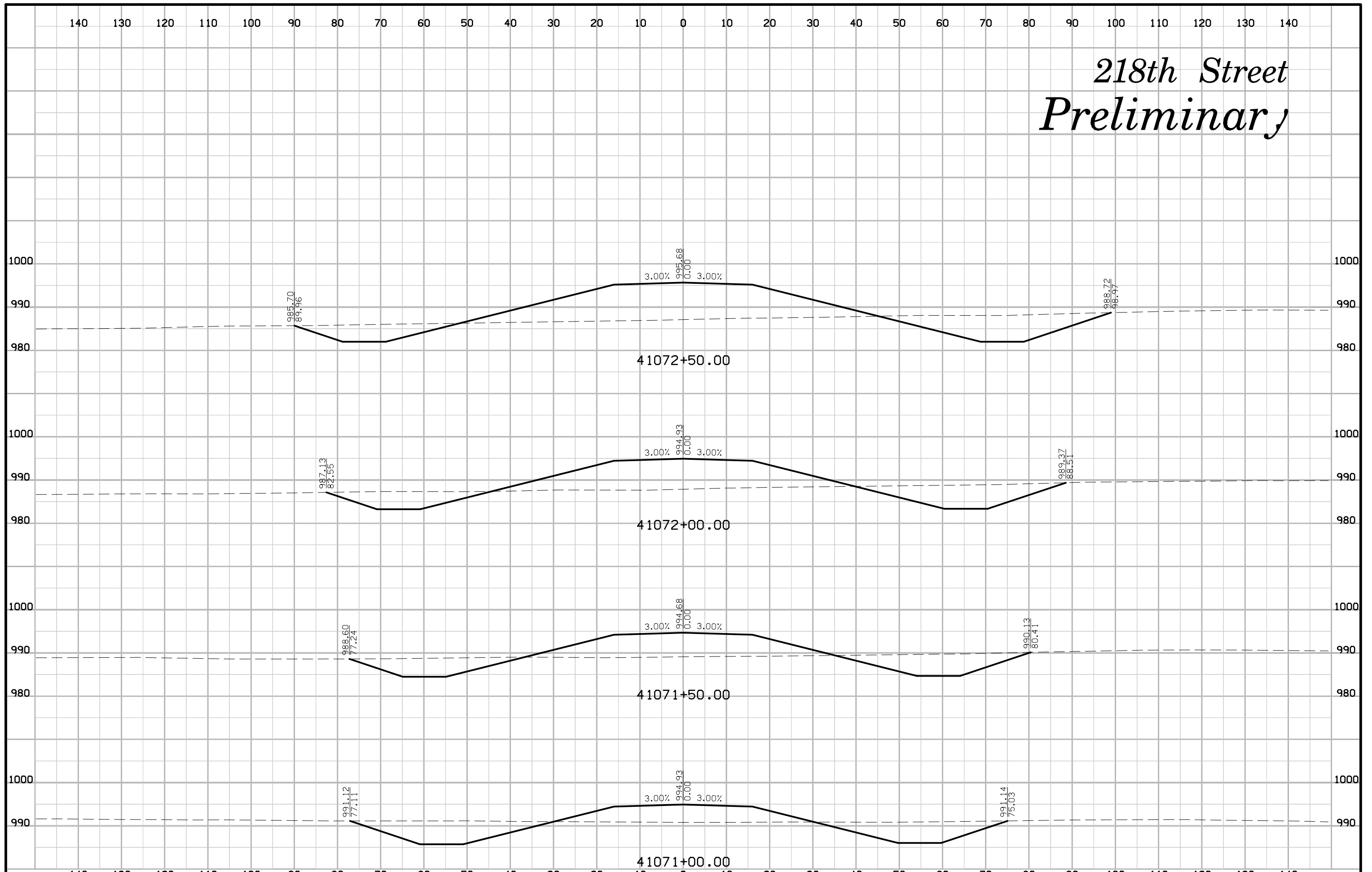


# 218th Street Preliminary

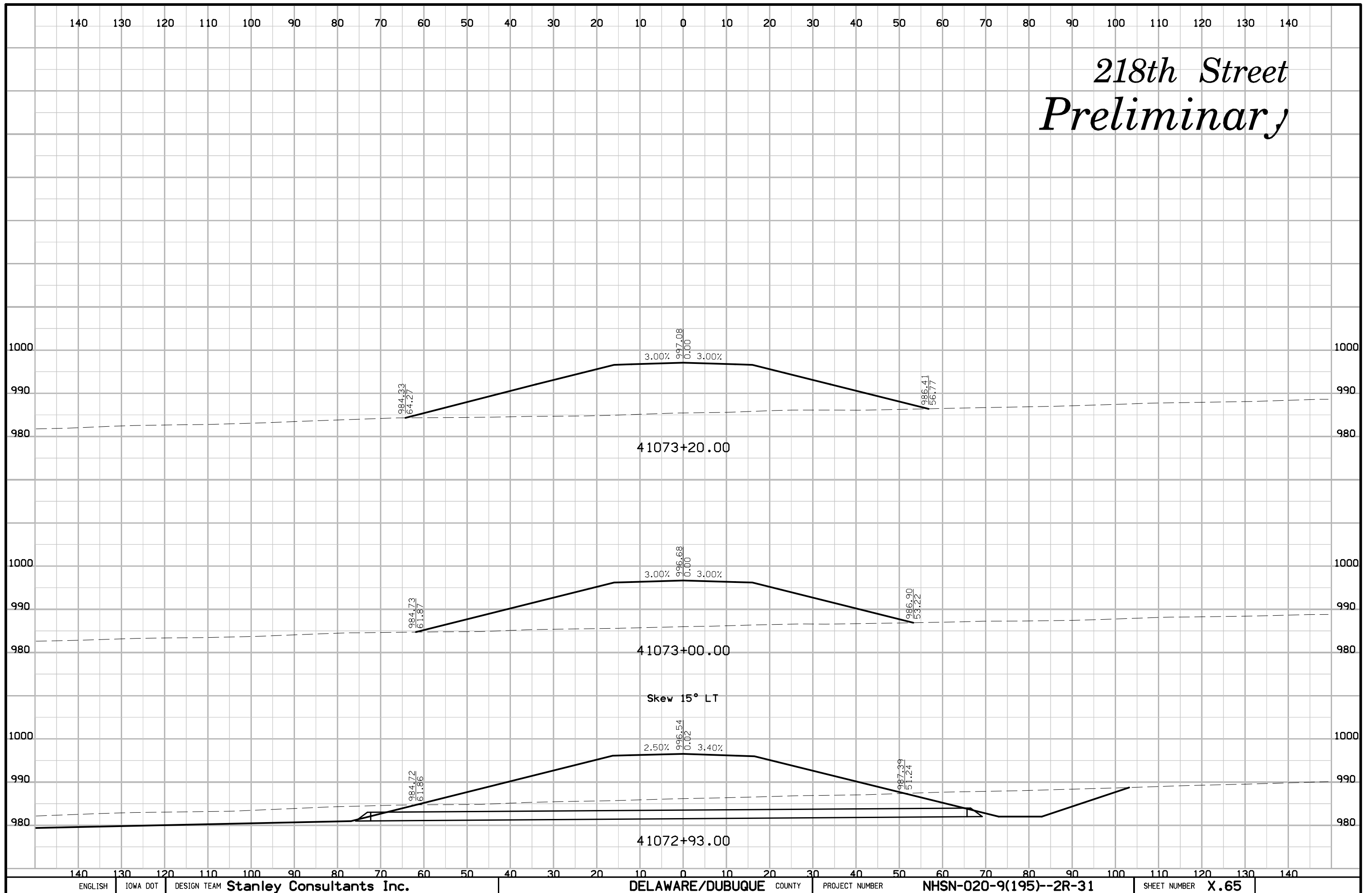




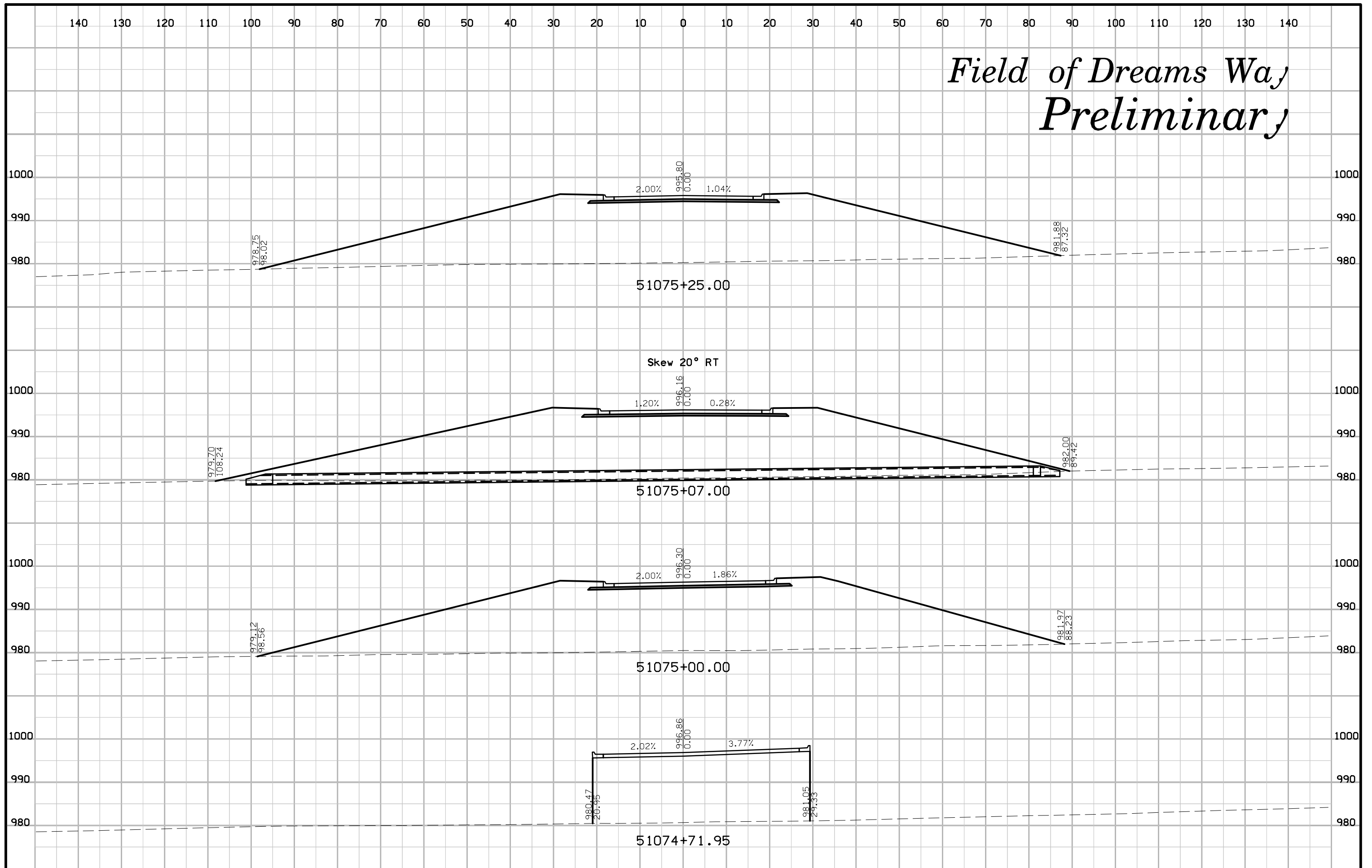
# 218th Street Preliminary



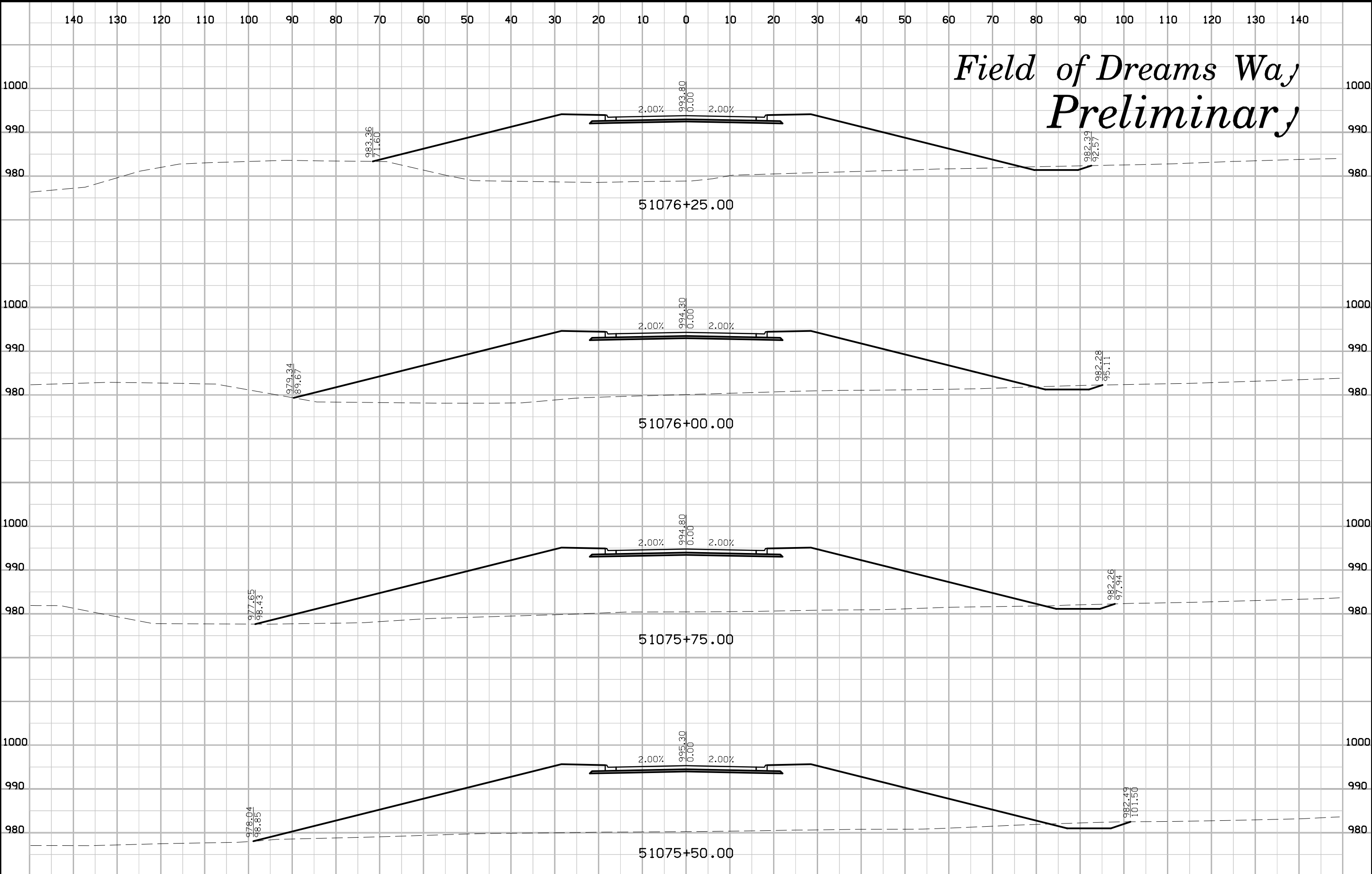
# 218th Street Preliminary

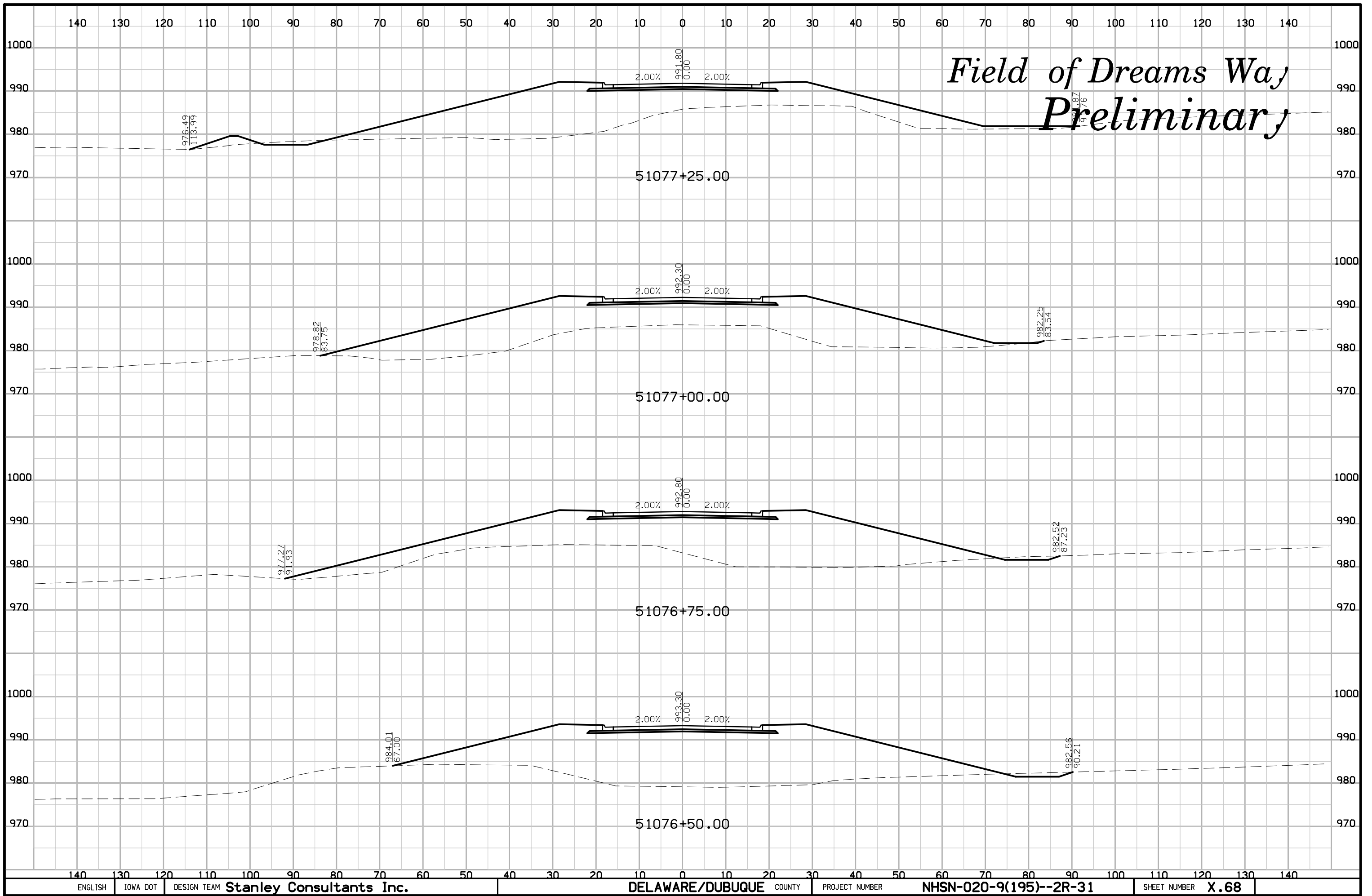


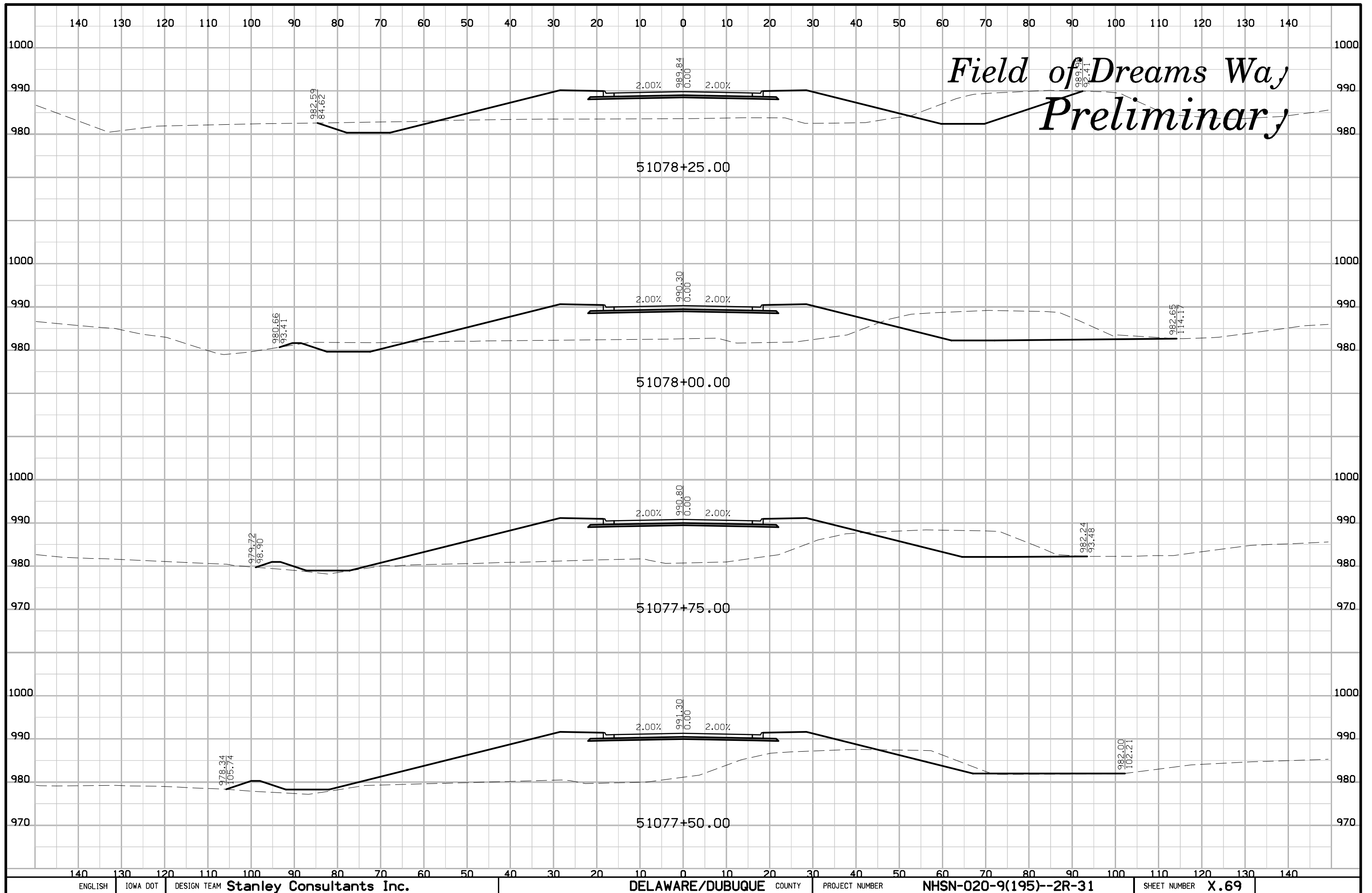
# Field of Dreams Way Preliminary



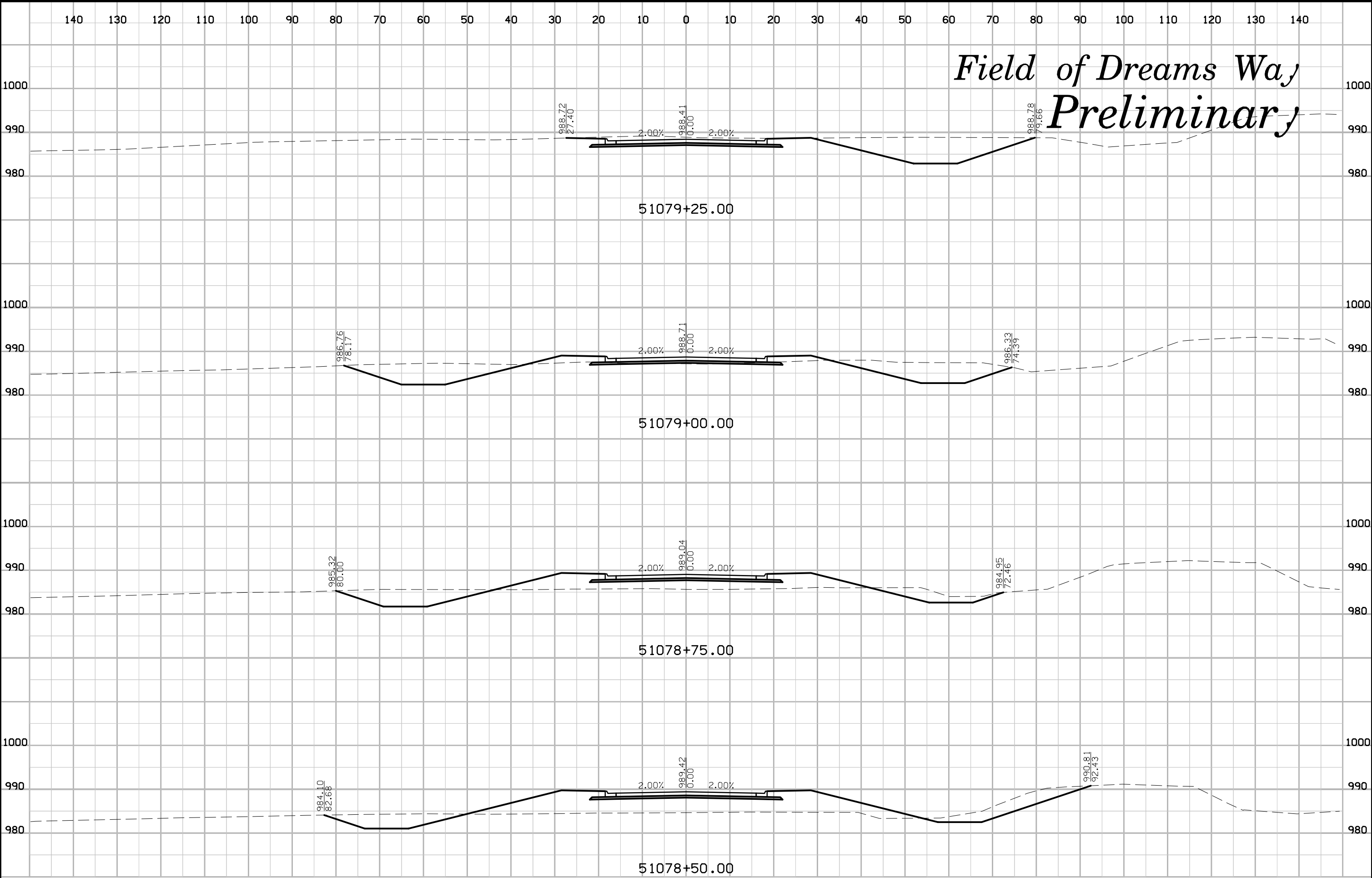
# Field of Dreams Way Preliminary



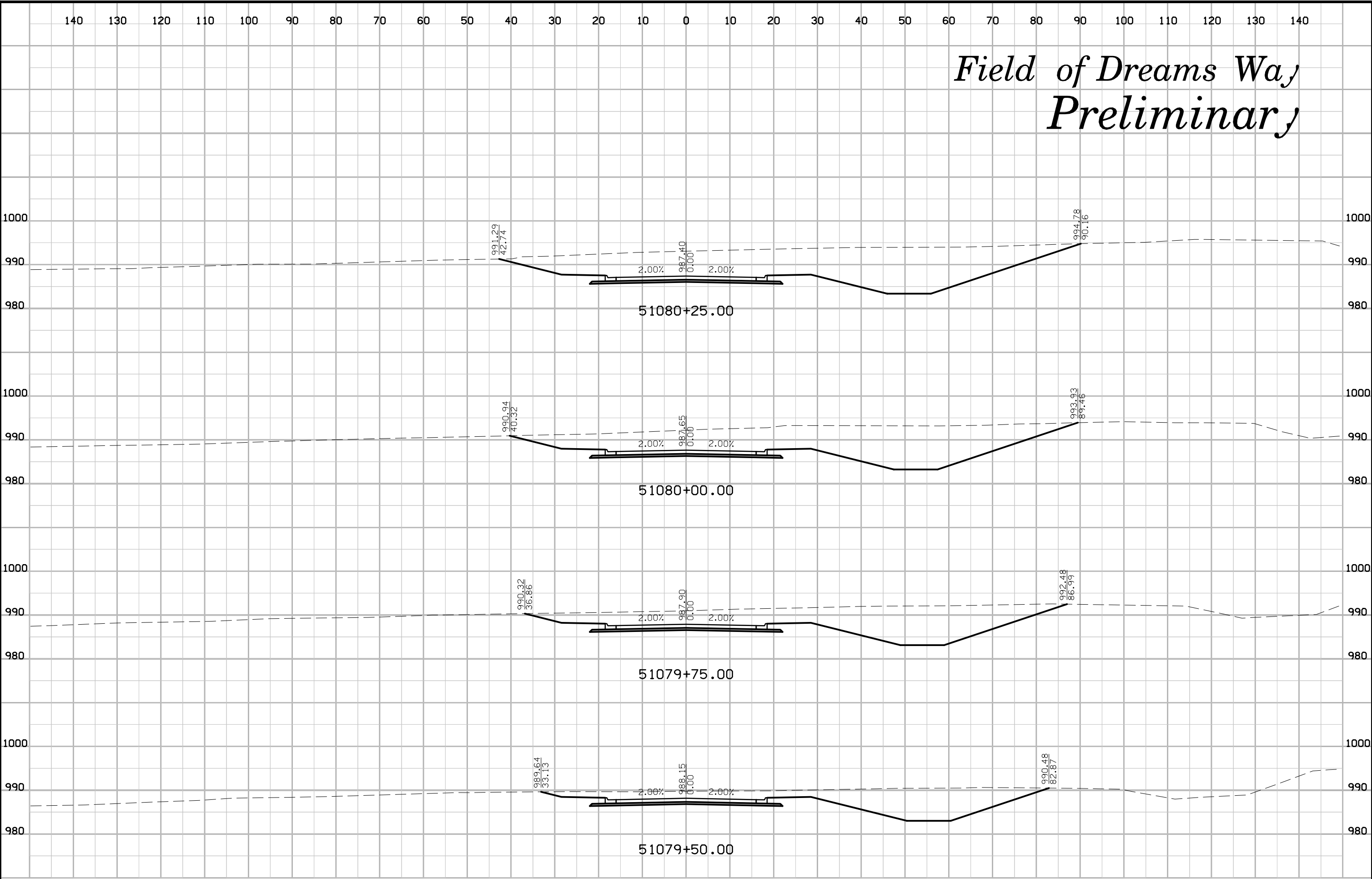




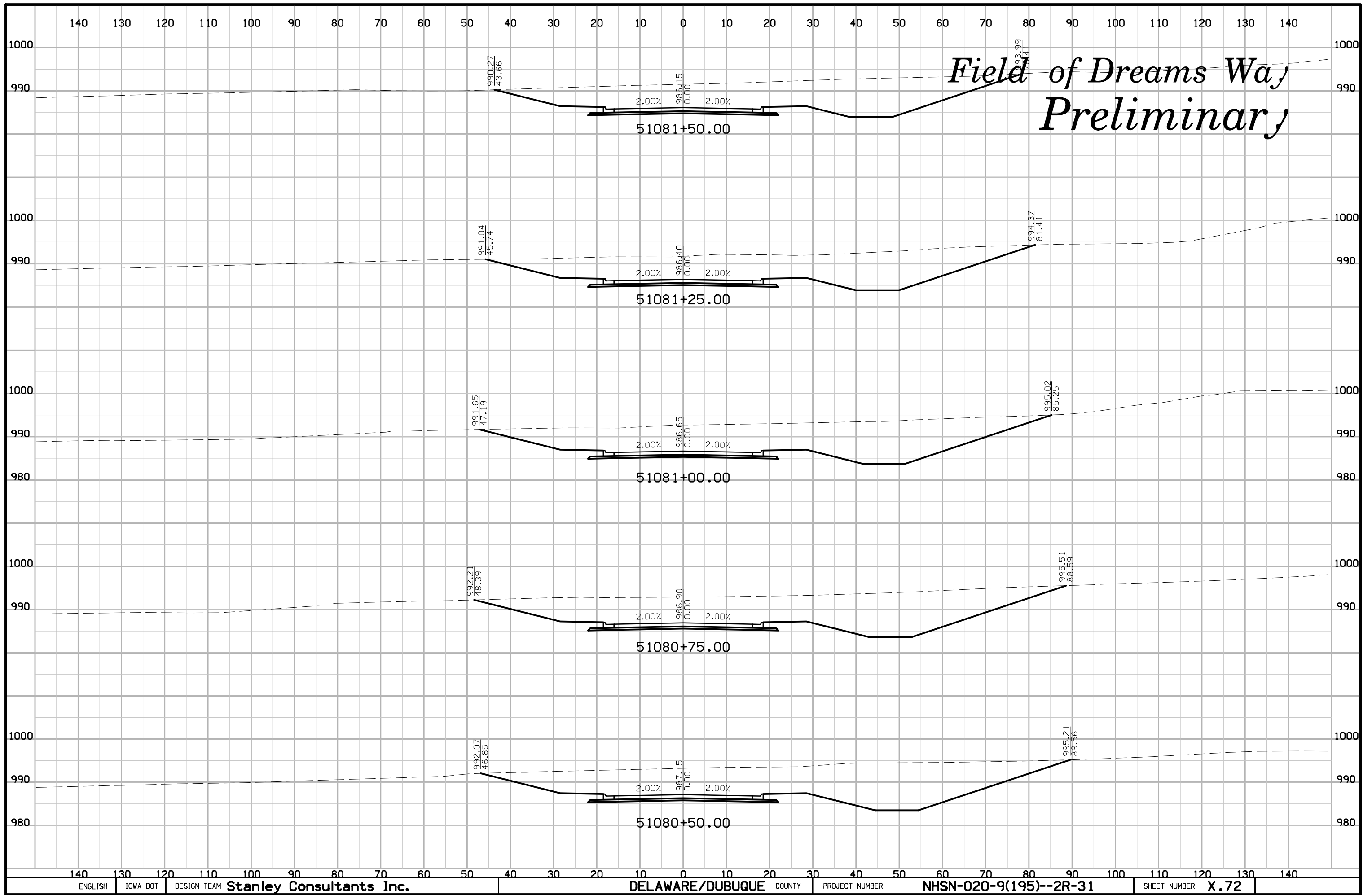
# Field of Dreams Way Preliminary



# Field of Dreams Way Preliminary



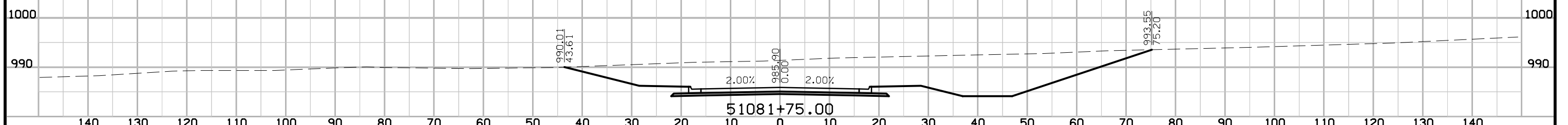
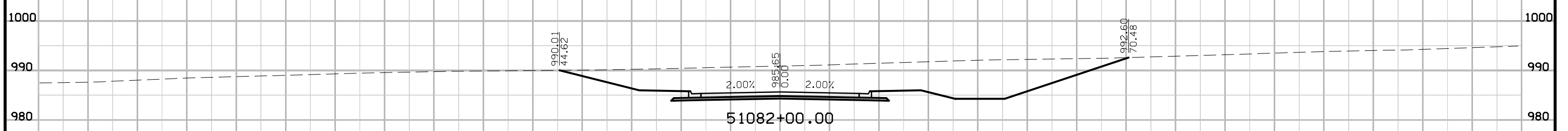
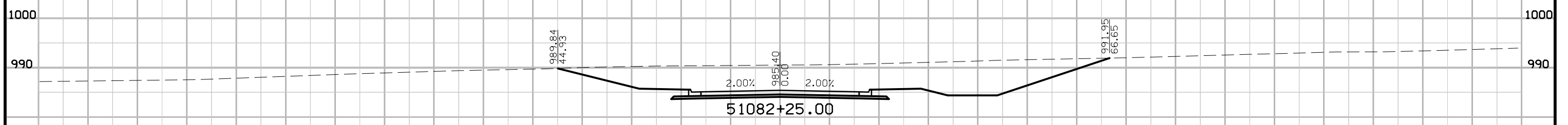
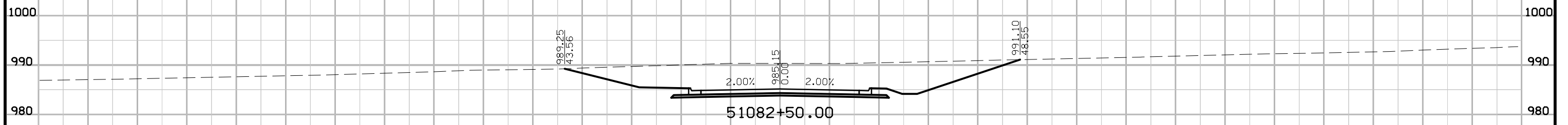
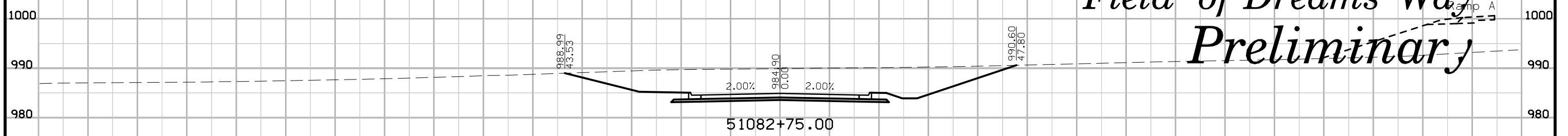


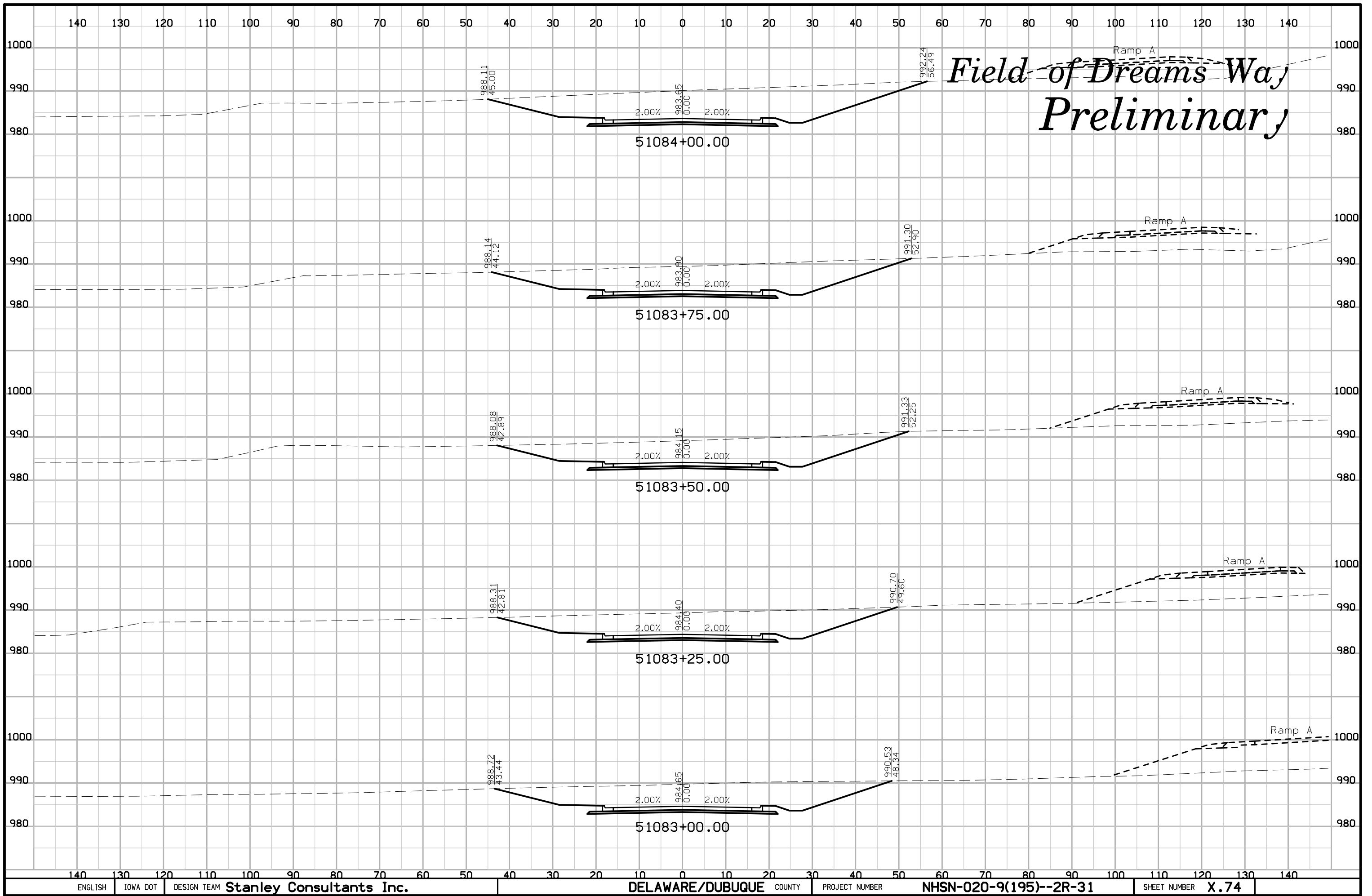


140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

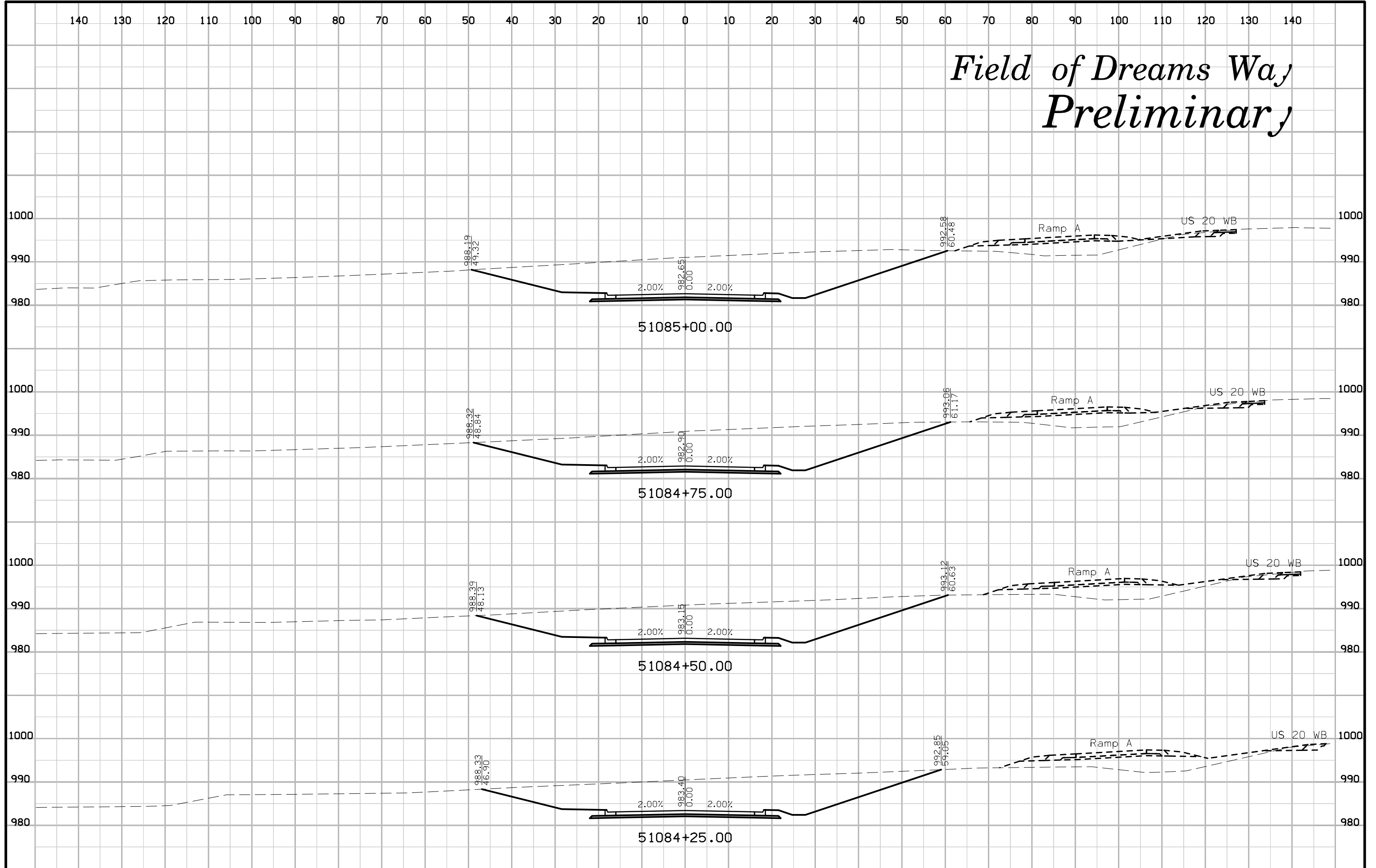
# Field of Dreams Way Preliminary

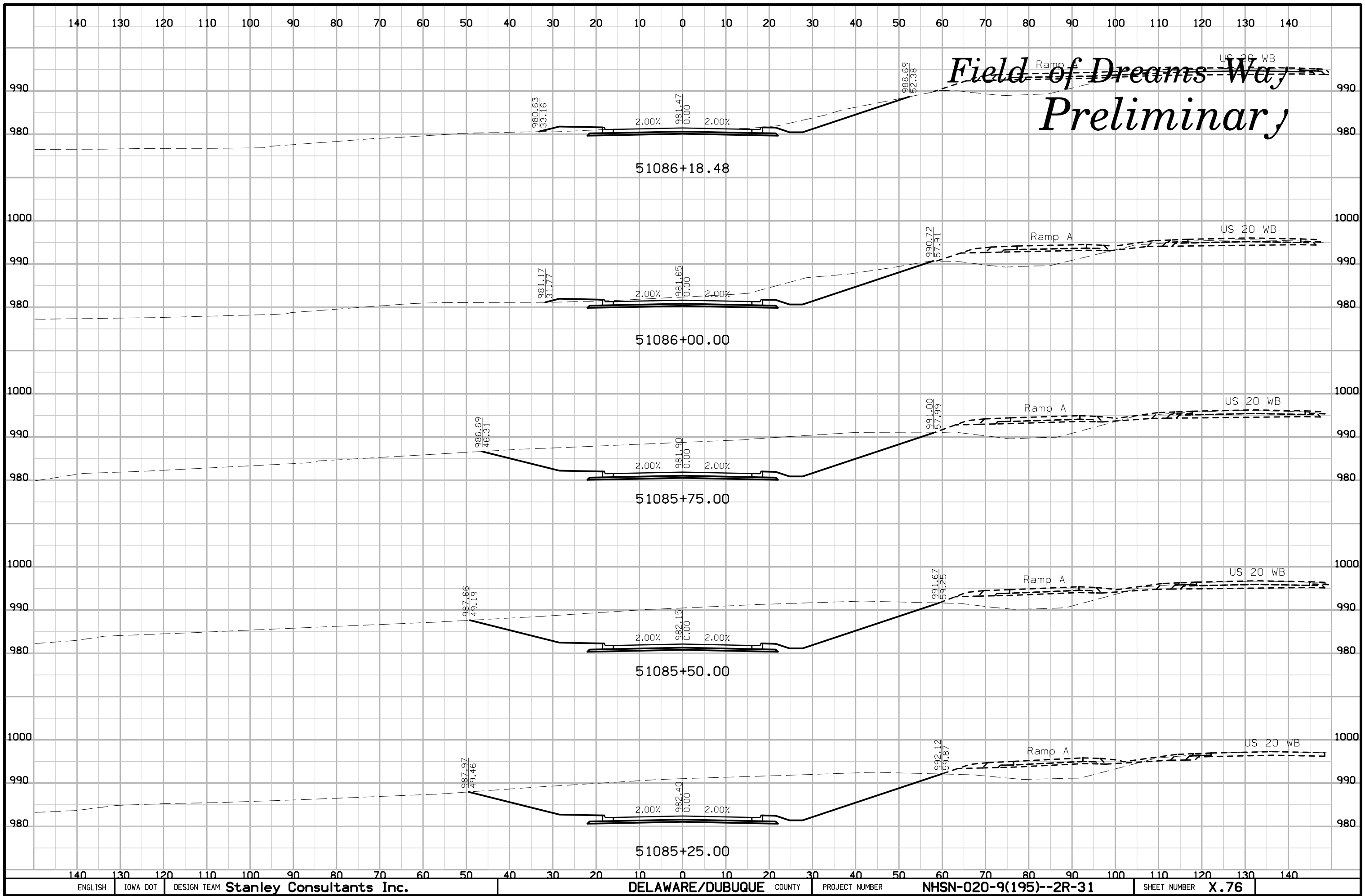
Ramp A



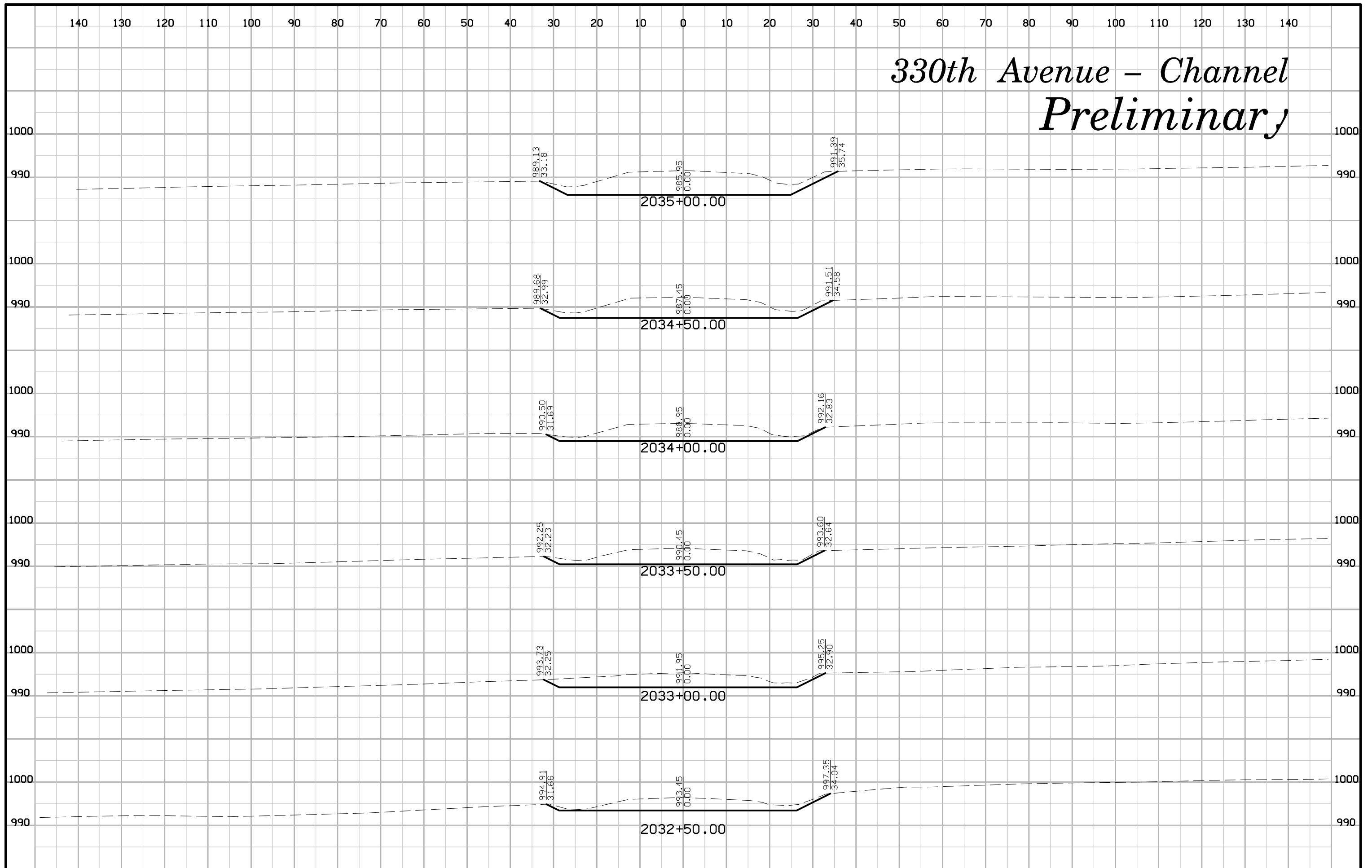


# Field of Dreams Way Preliminary

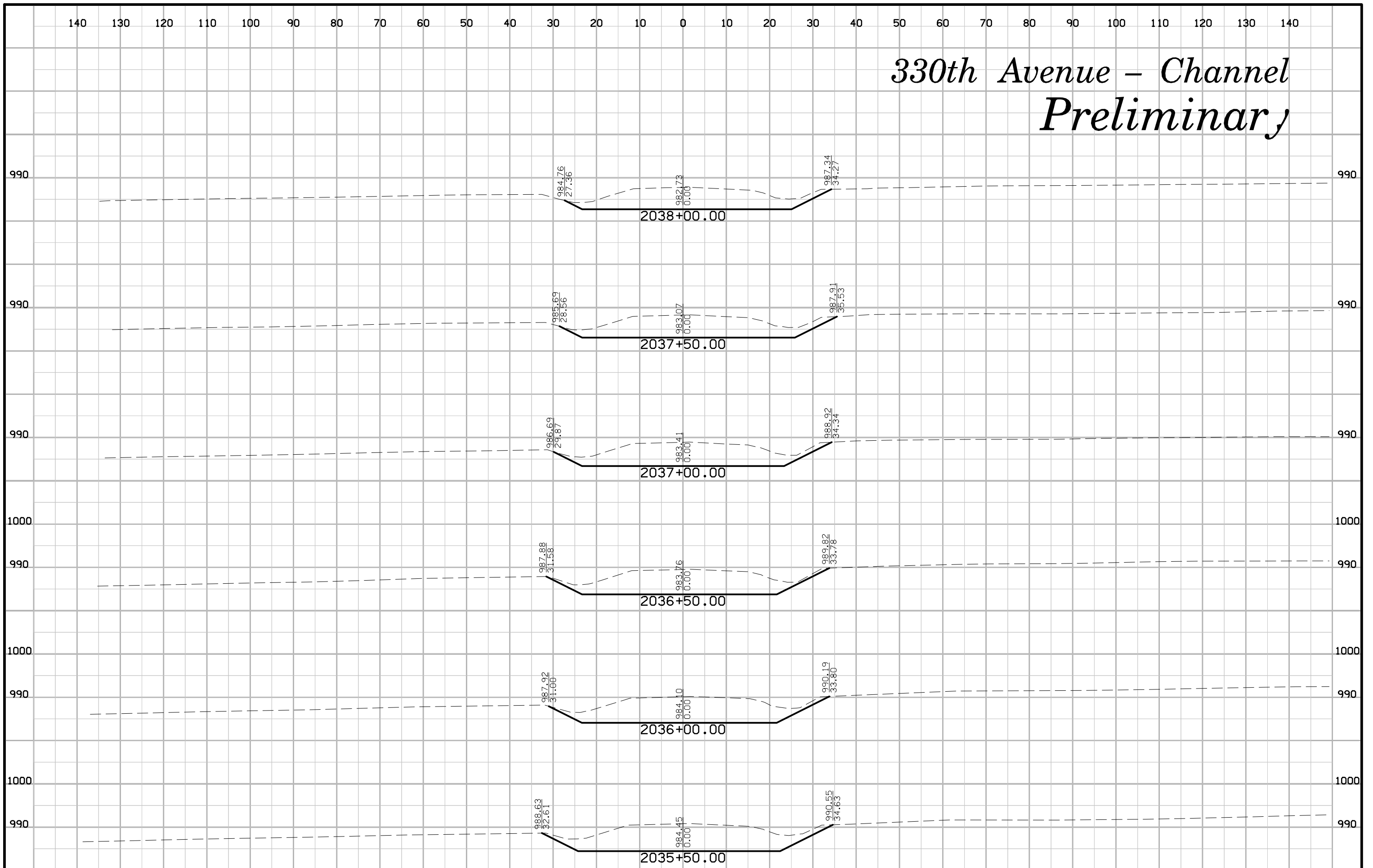




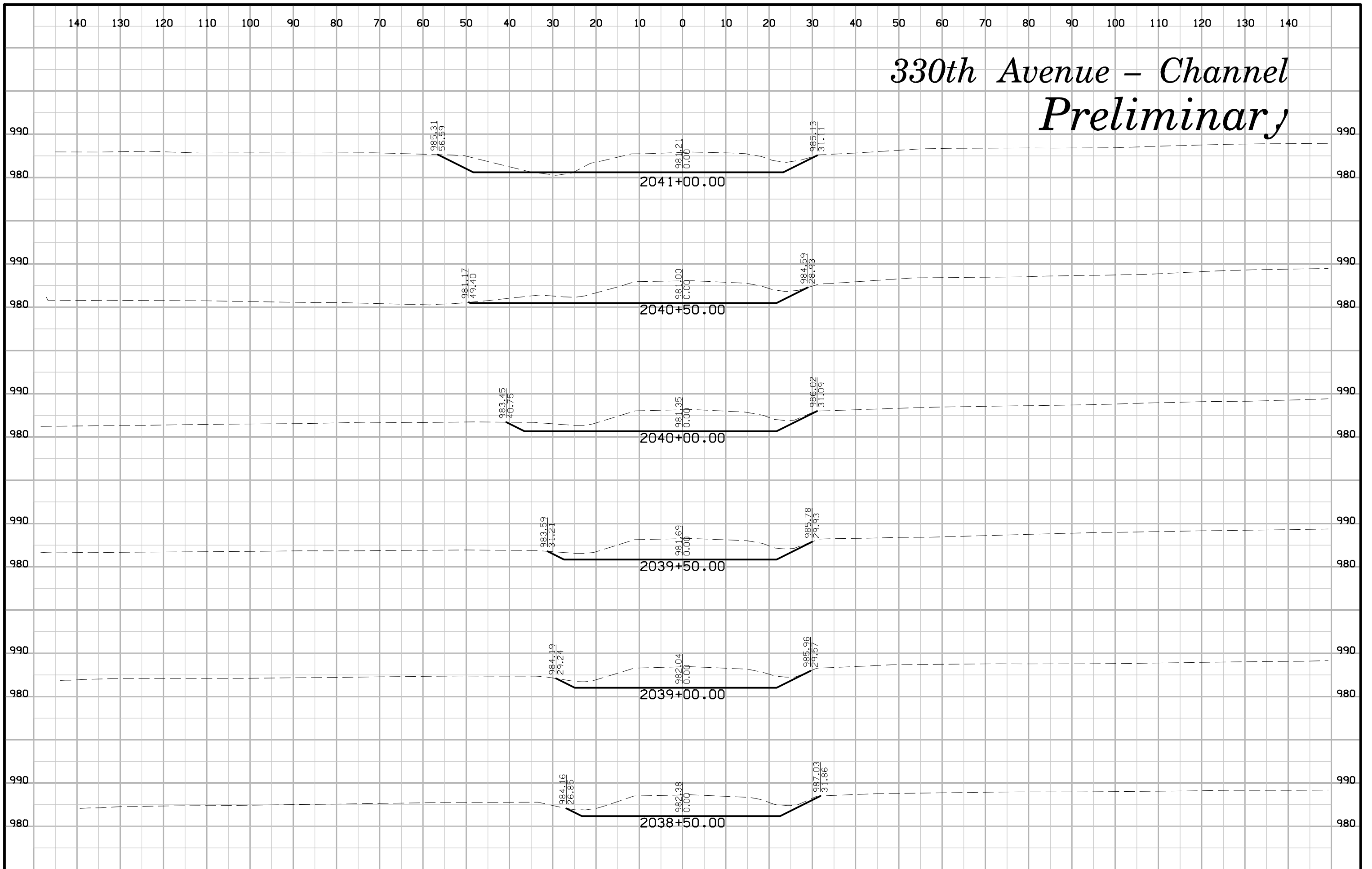
# 330th Avenue - Channel Preliminary



# 330th Avenue - Channel Preliminary

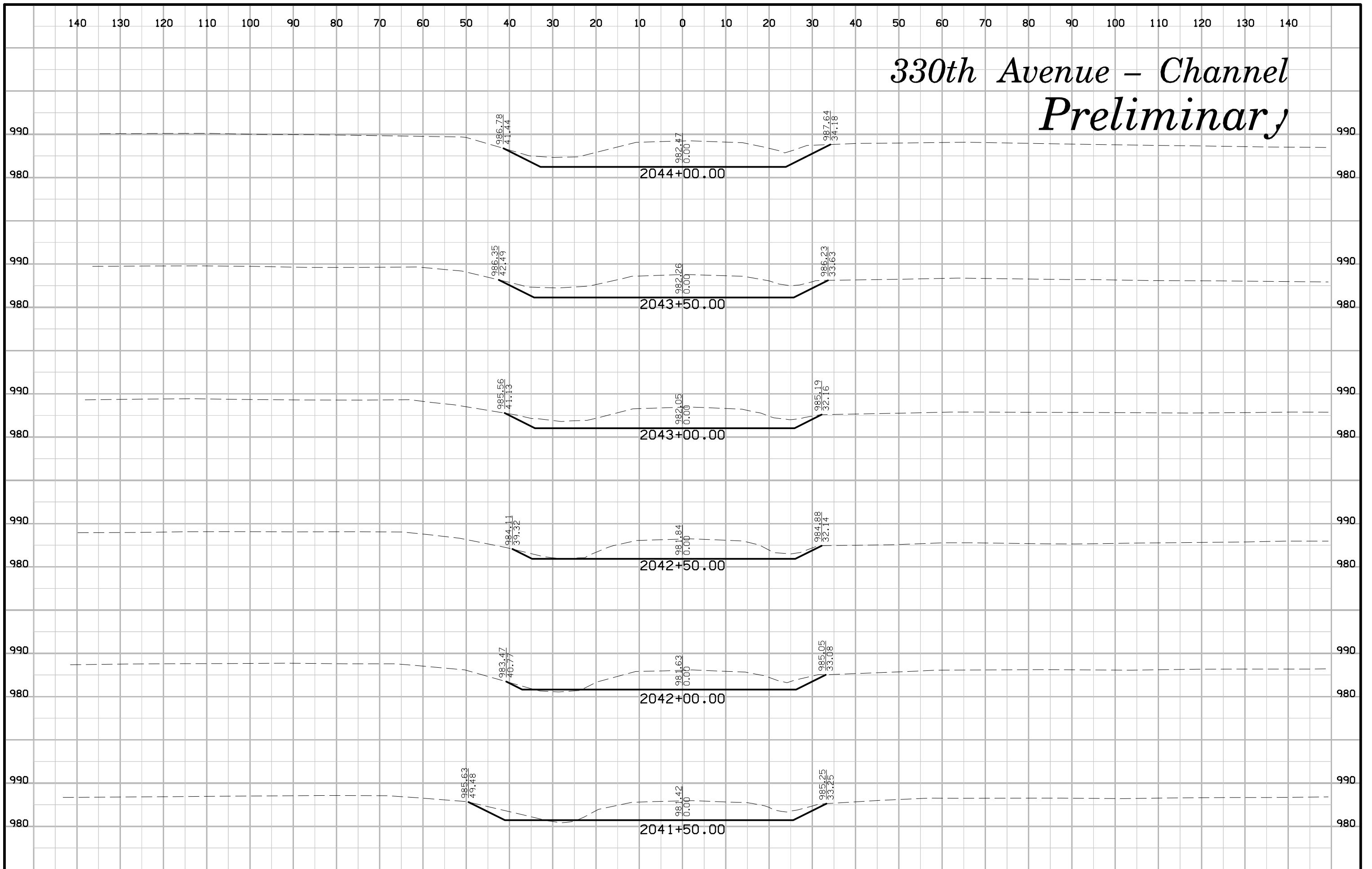


# 330th Avenue - Channel Preliminary



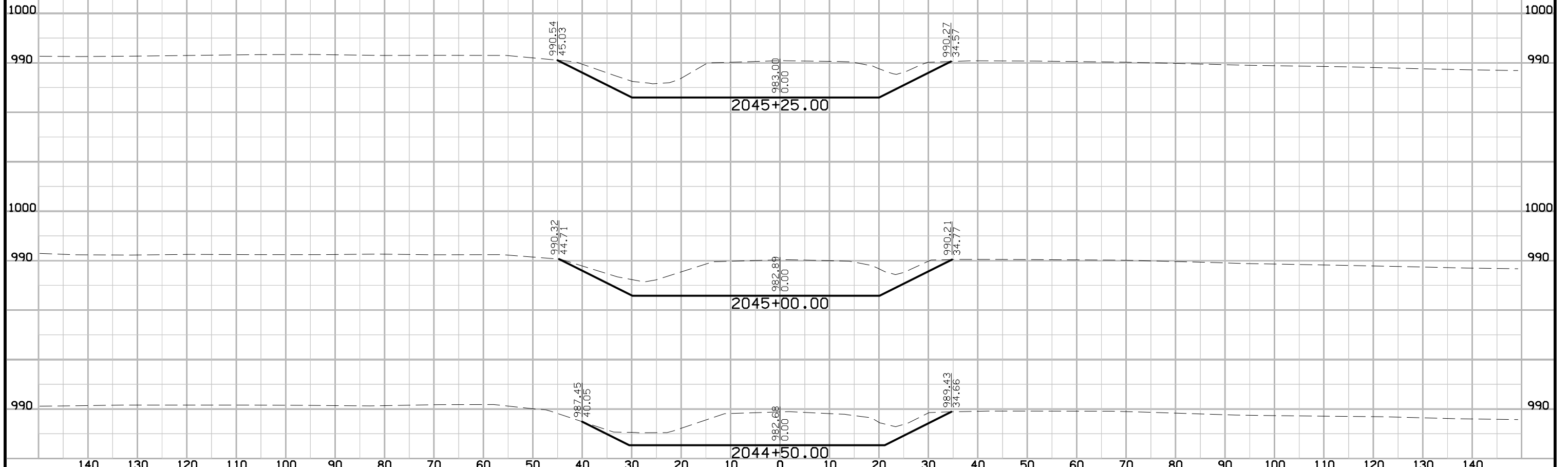


# 330th Avenue - Channel Preliminary

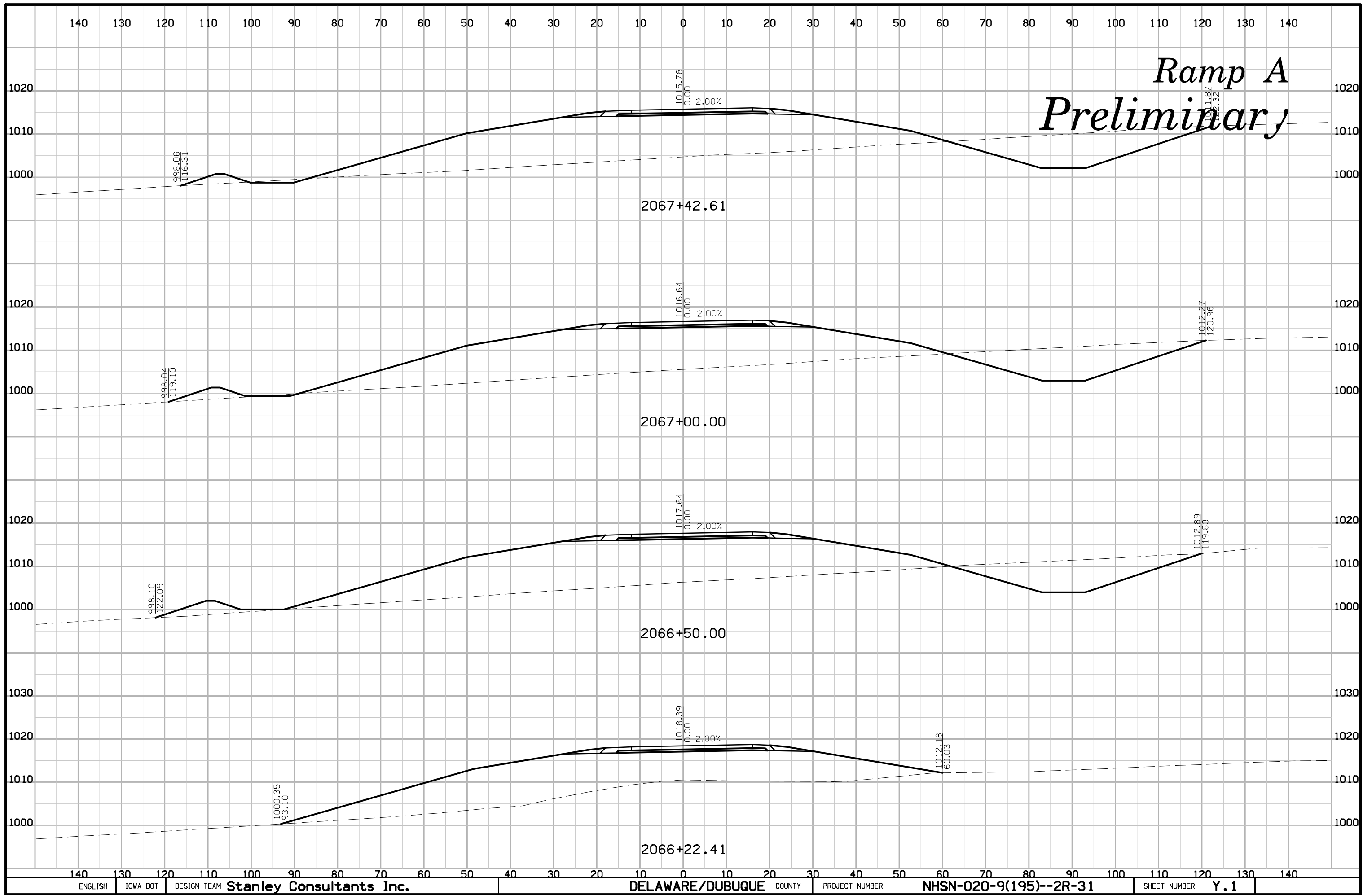


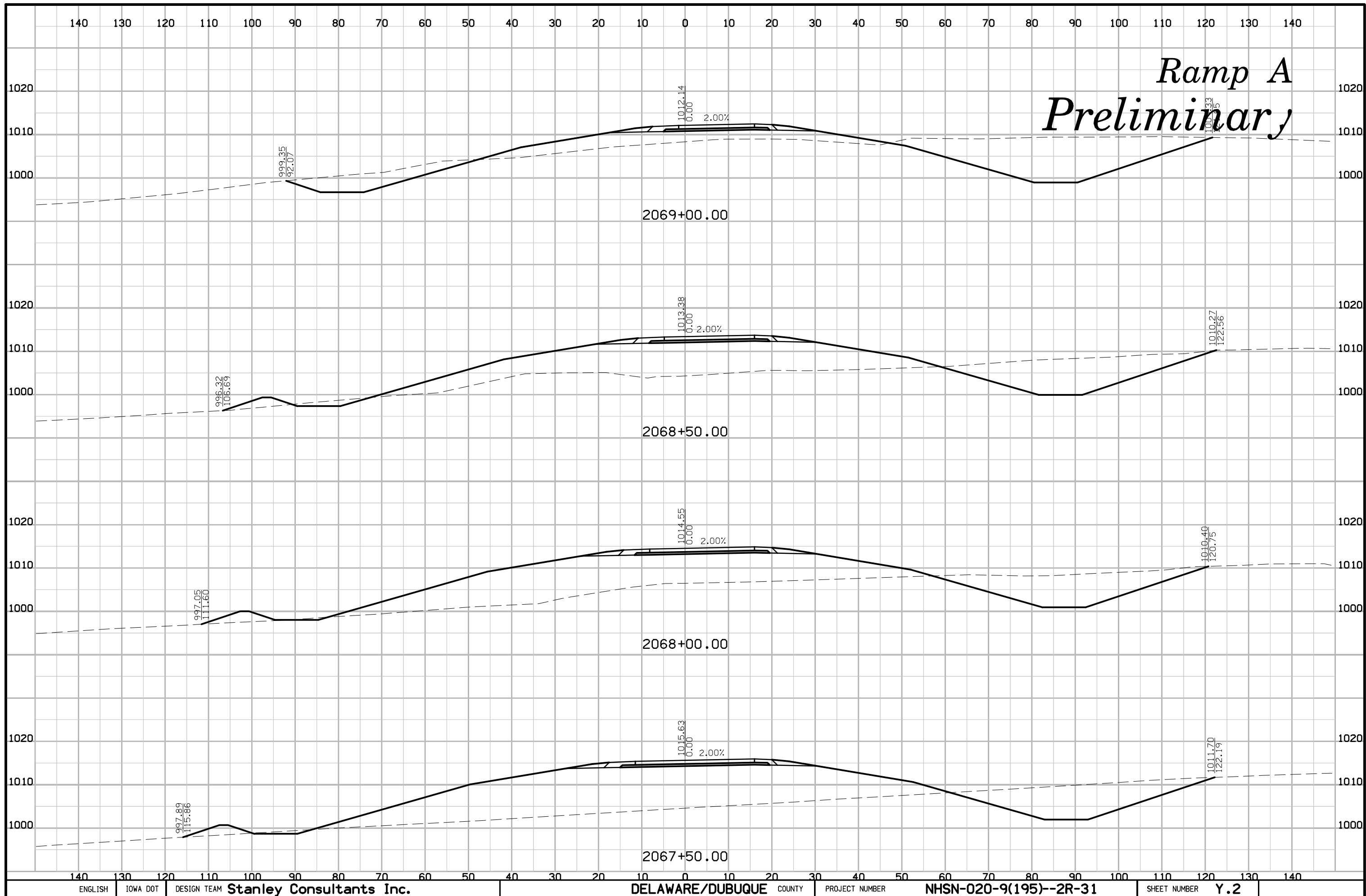
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# 330th Avenue - Channel Preliminary

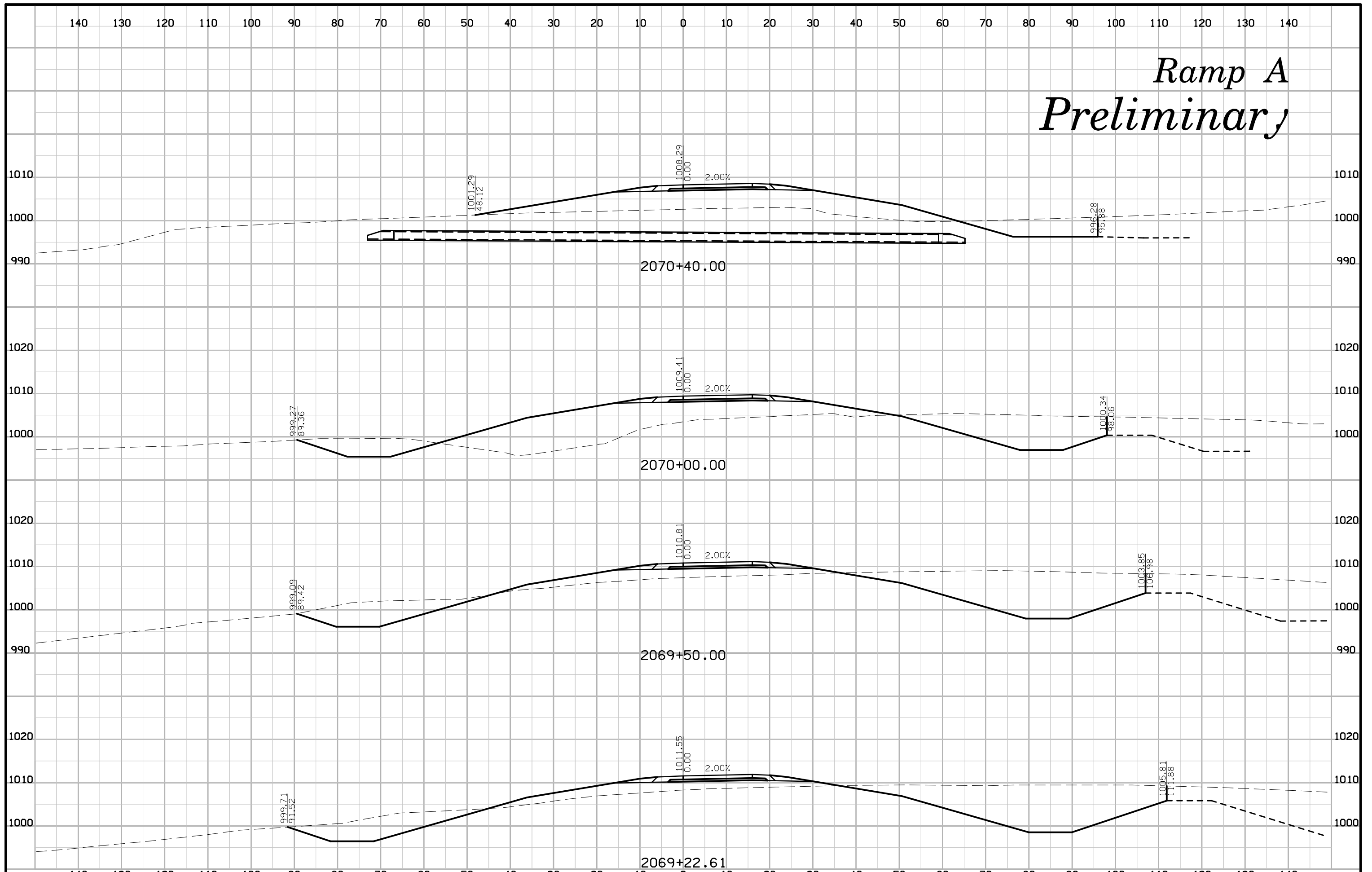


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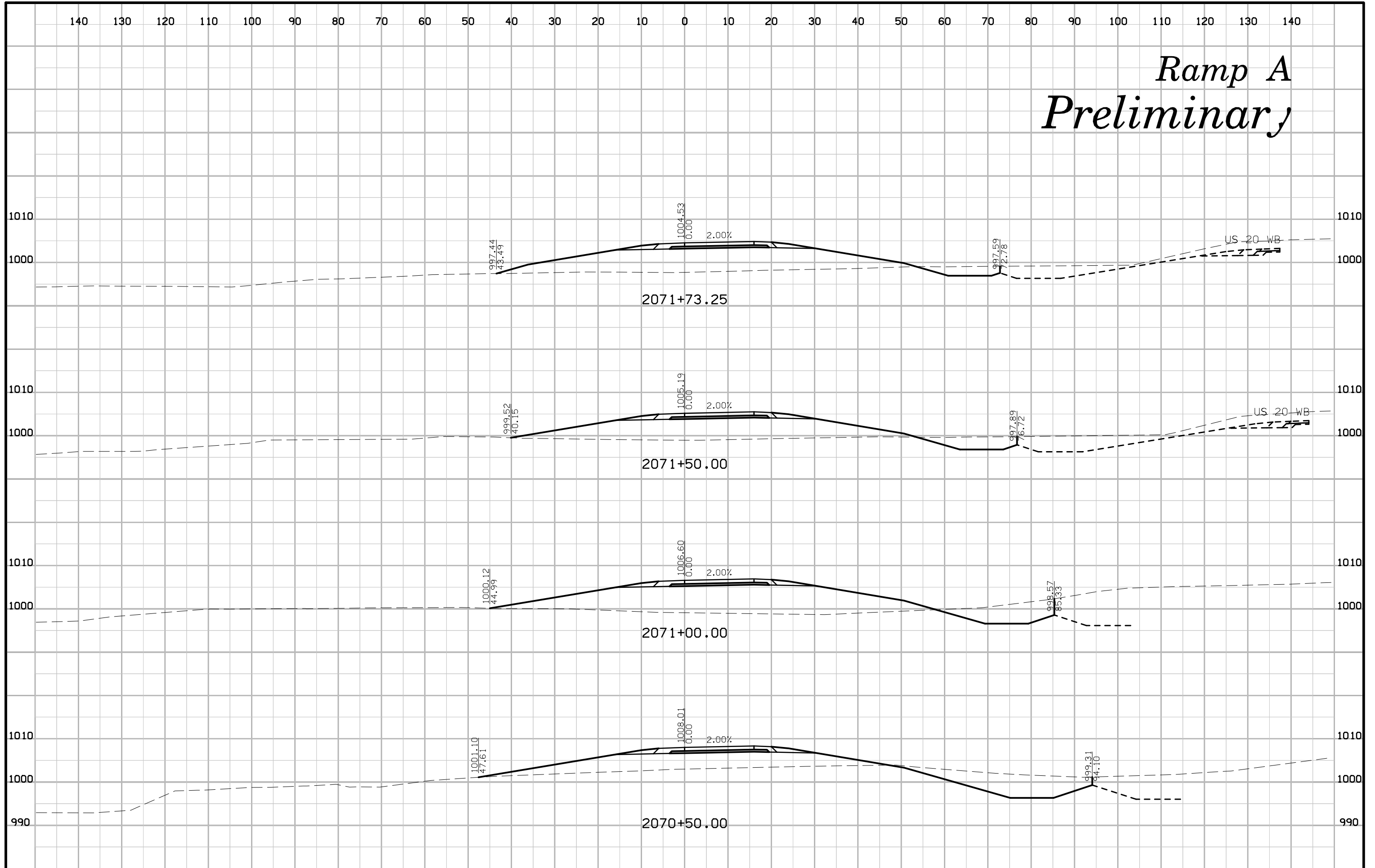




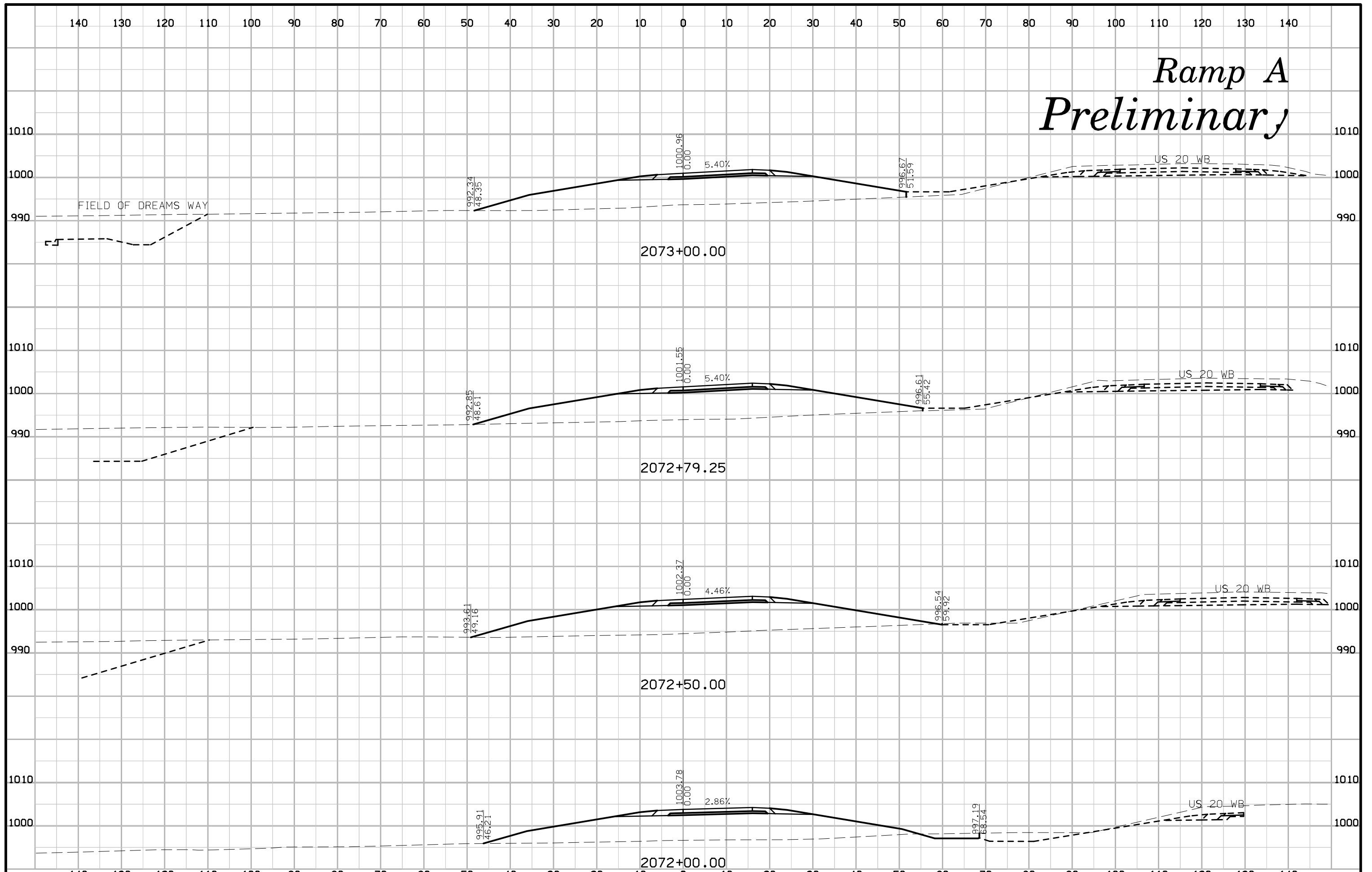
# Ramp A Preliminary



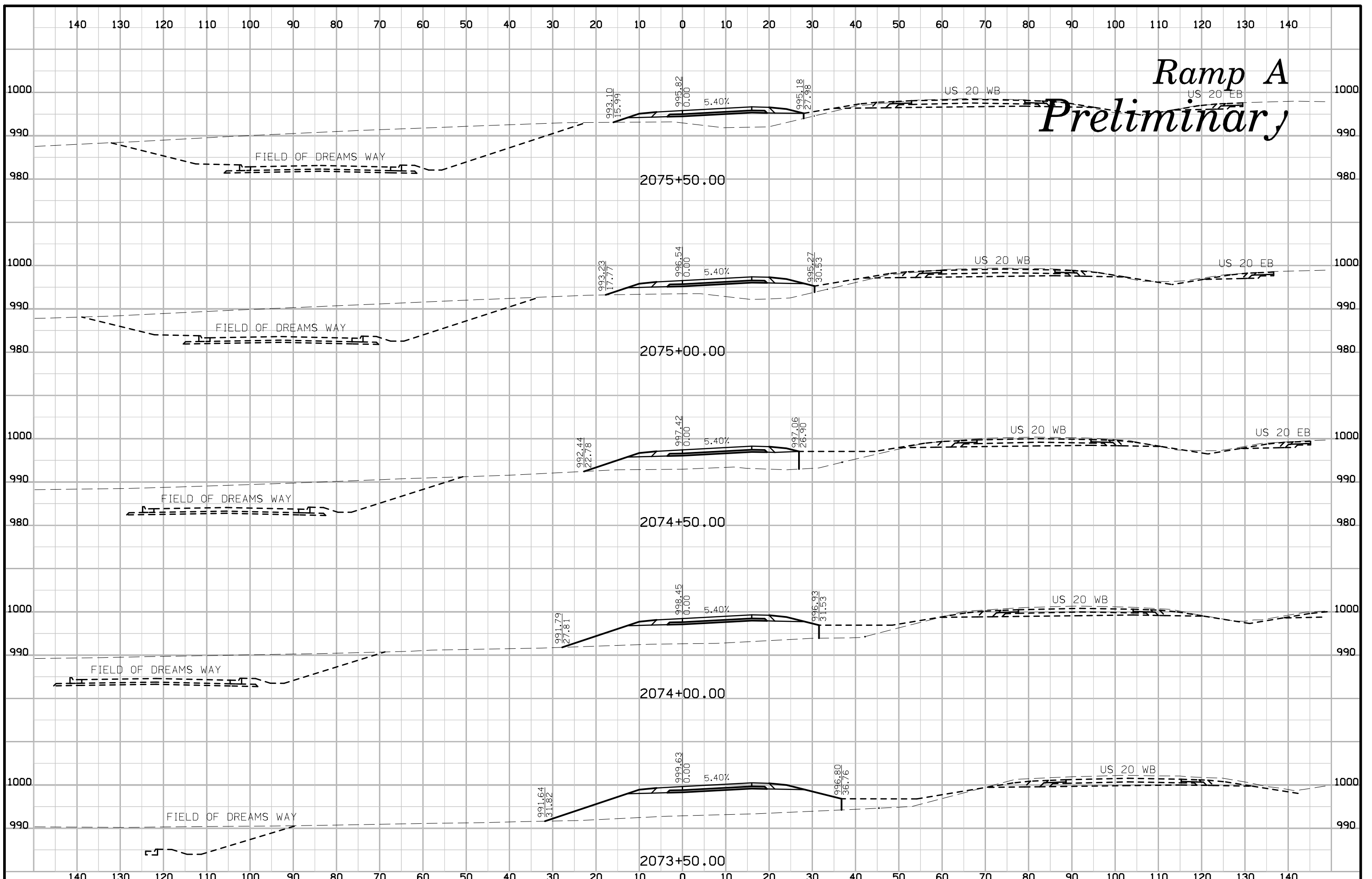
# Ramp A Preliminary



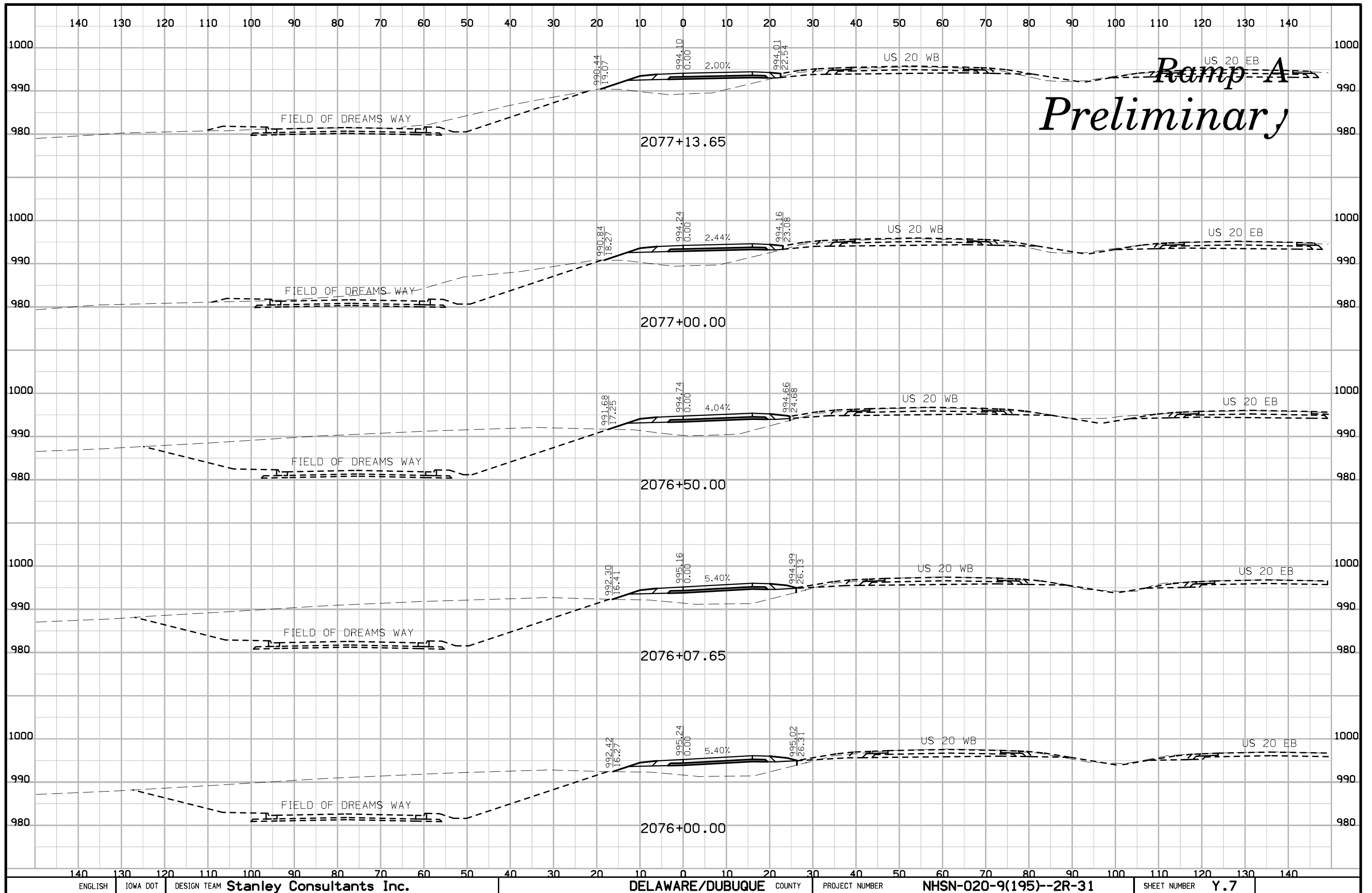
# Ramp A Preliminary



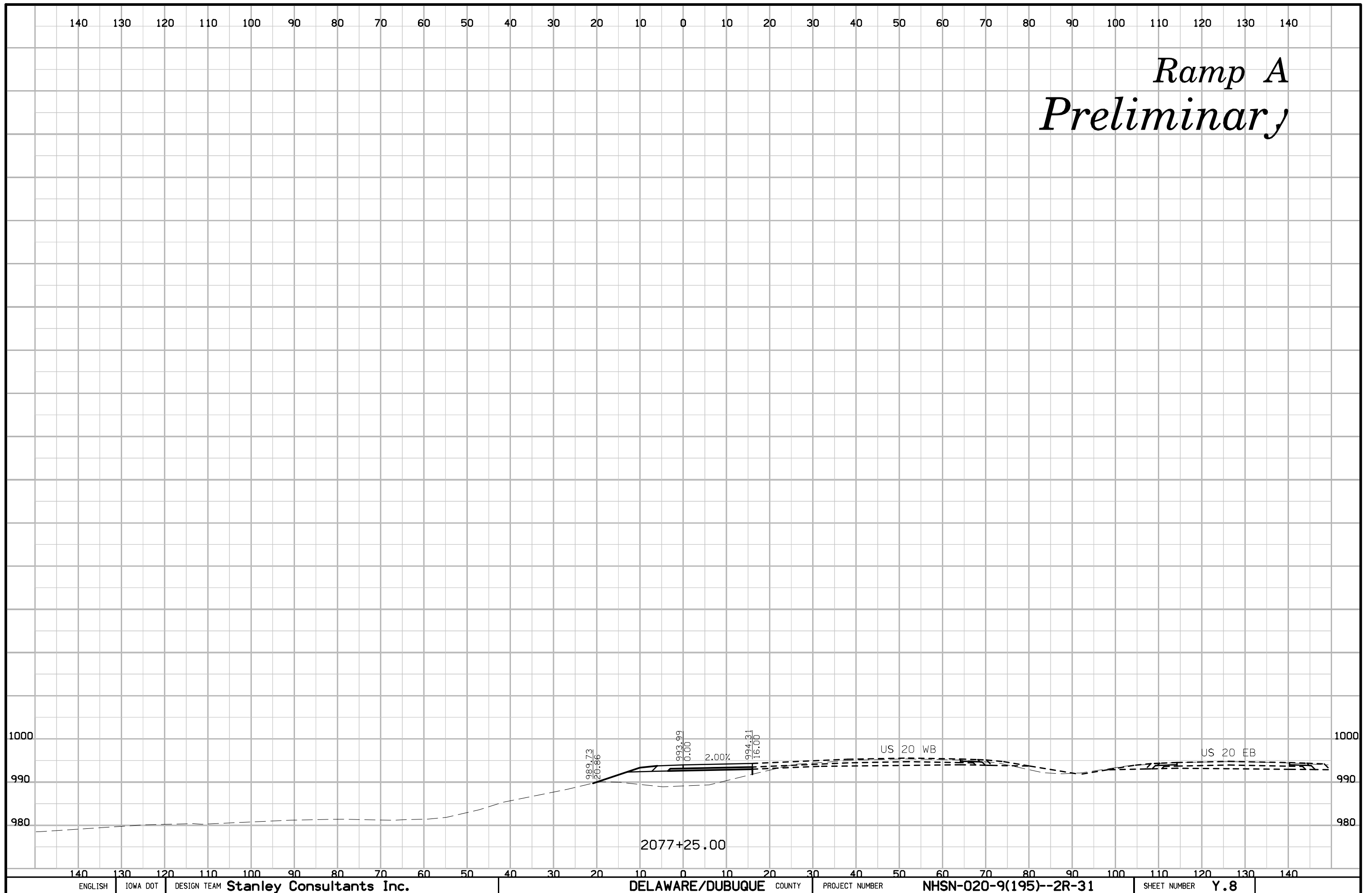
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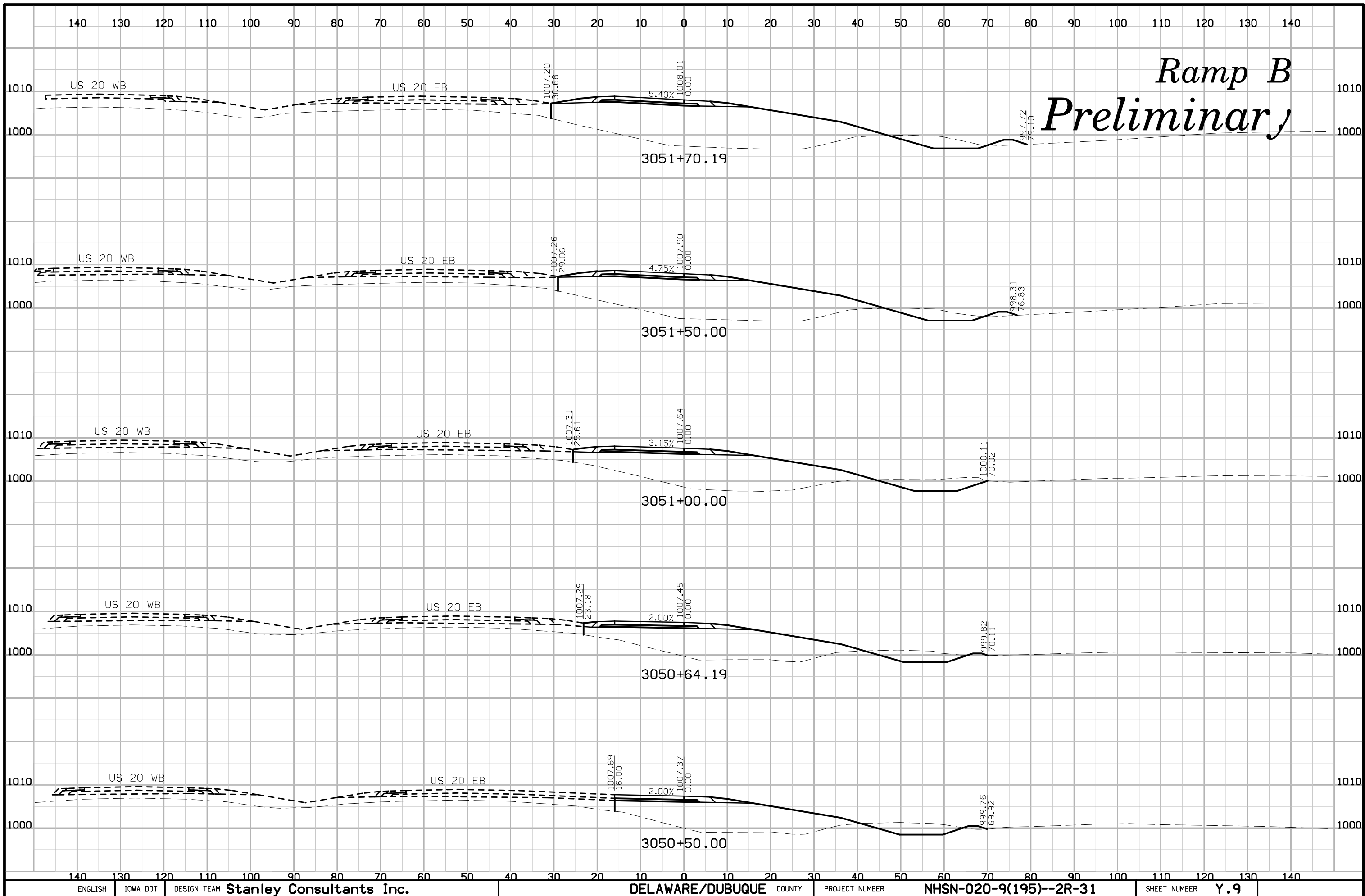




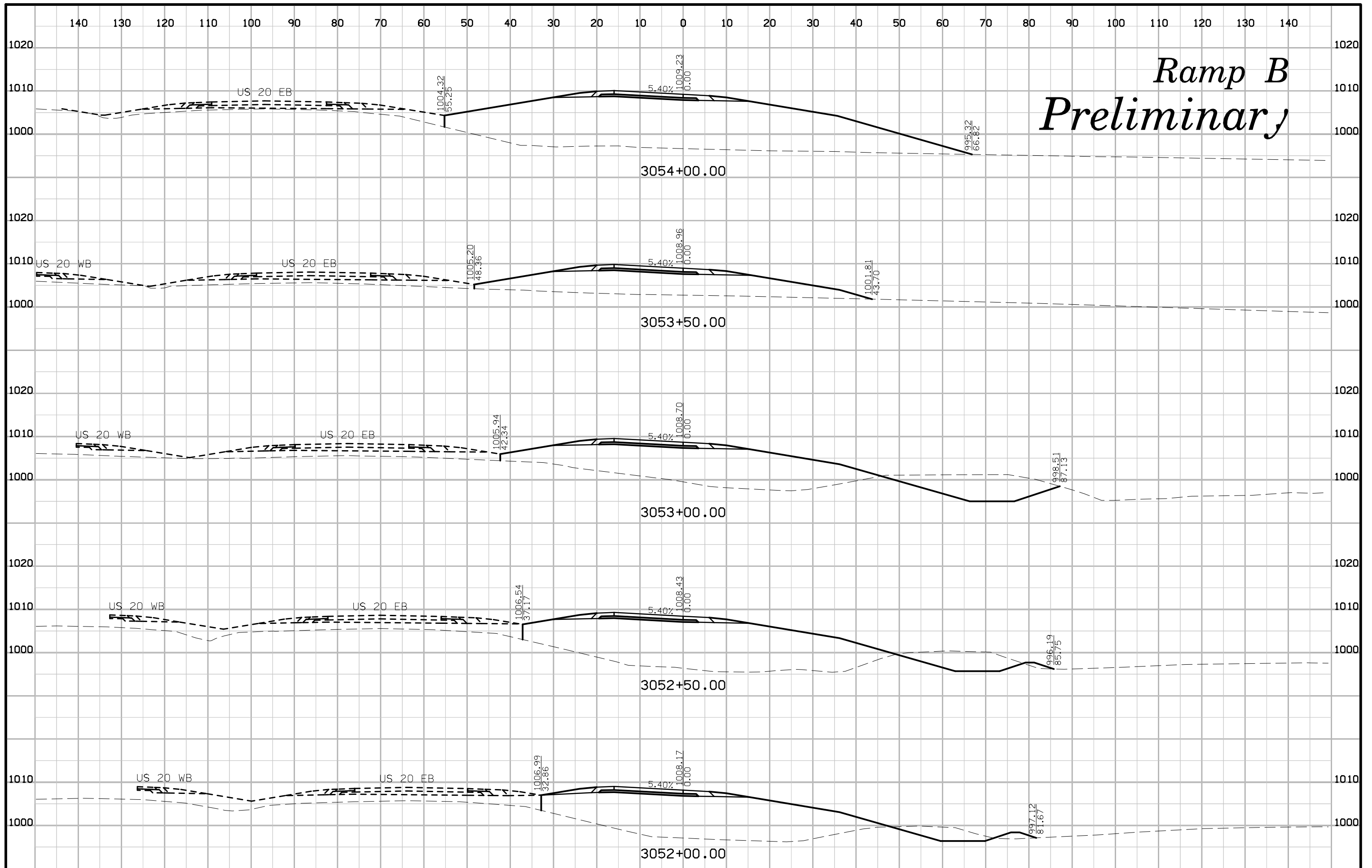


# Ramp A Preliminary

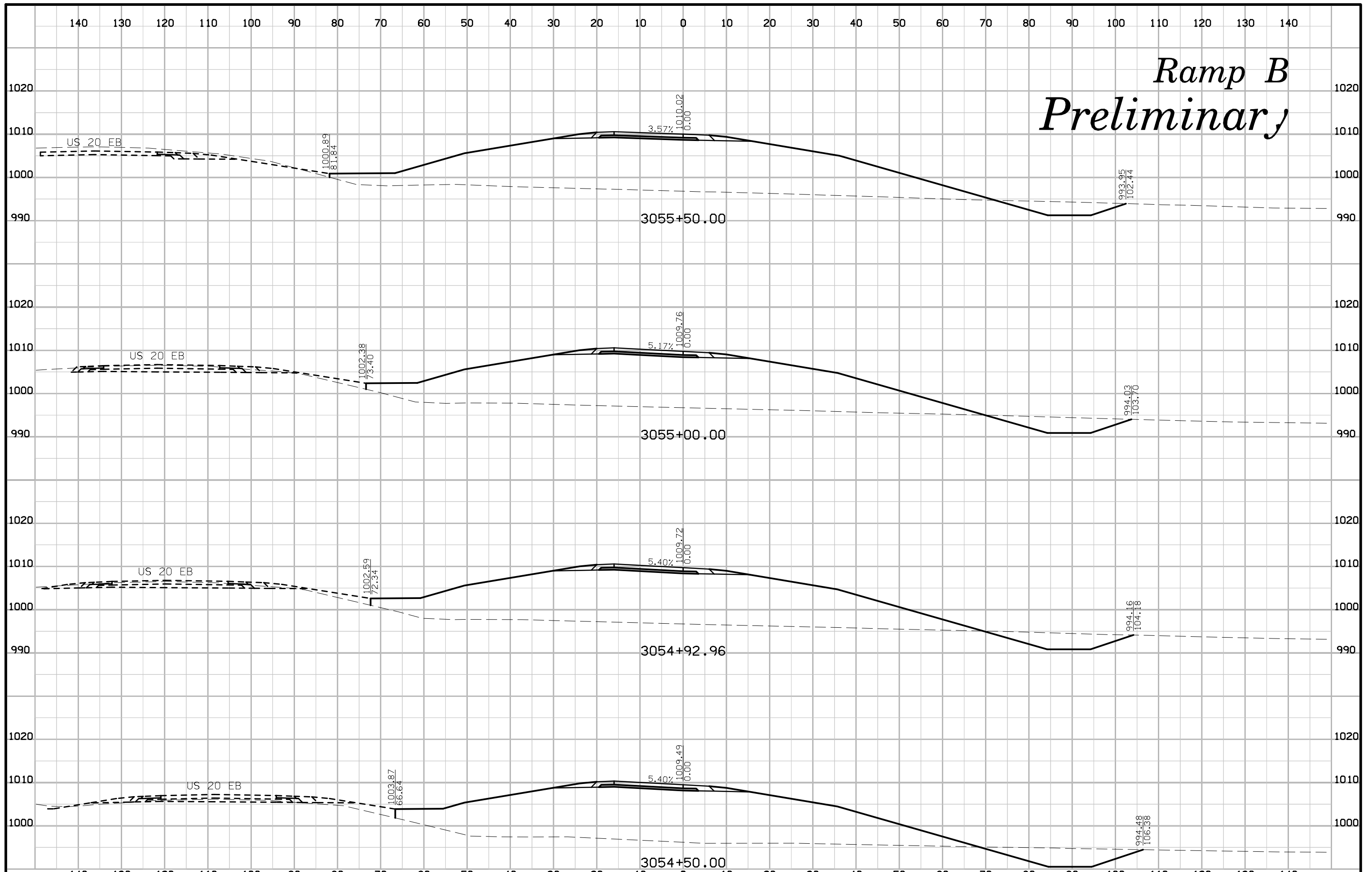


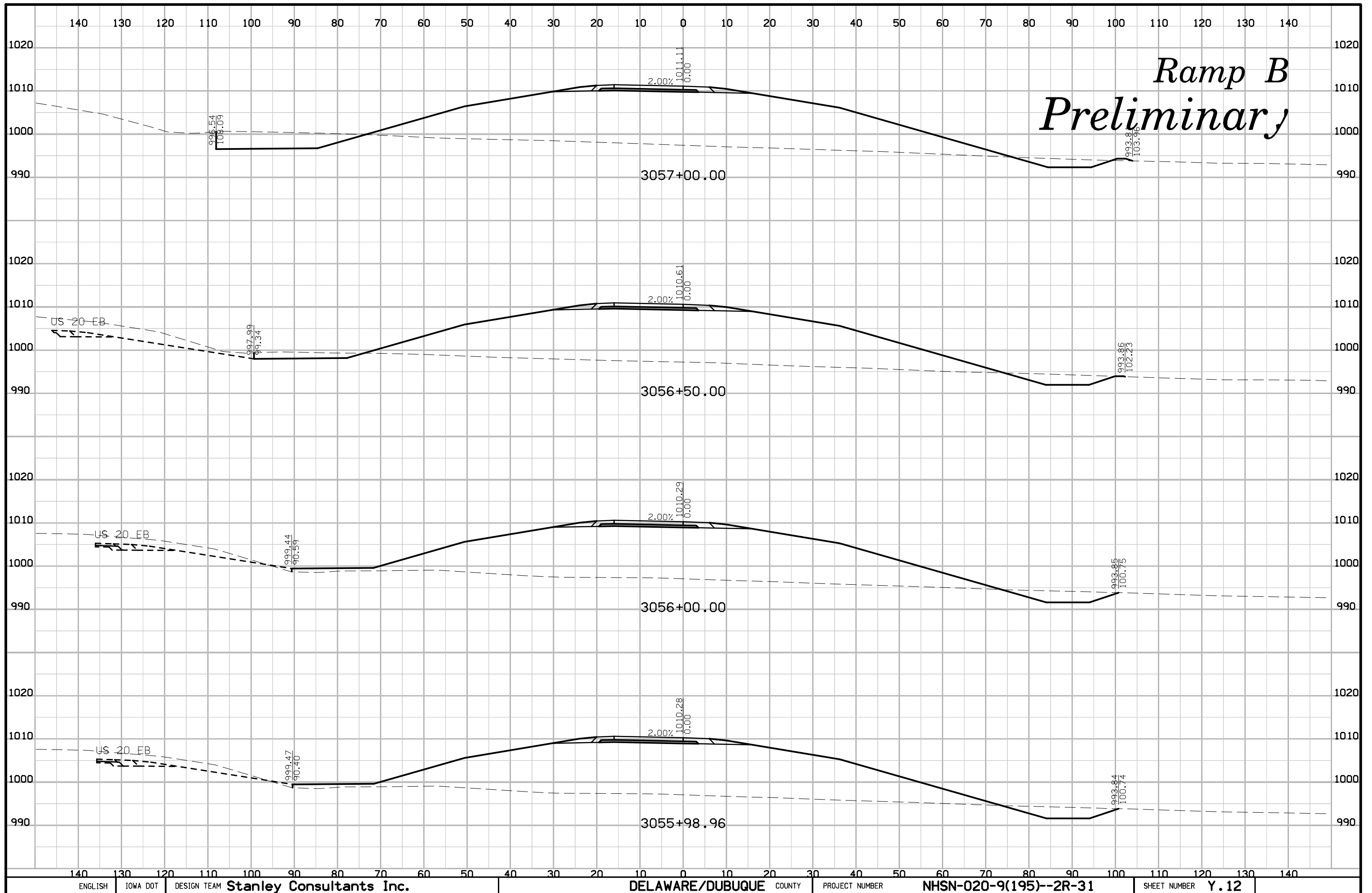


# Ramp B Preliminary

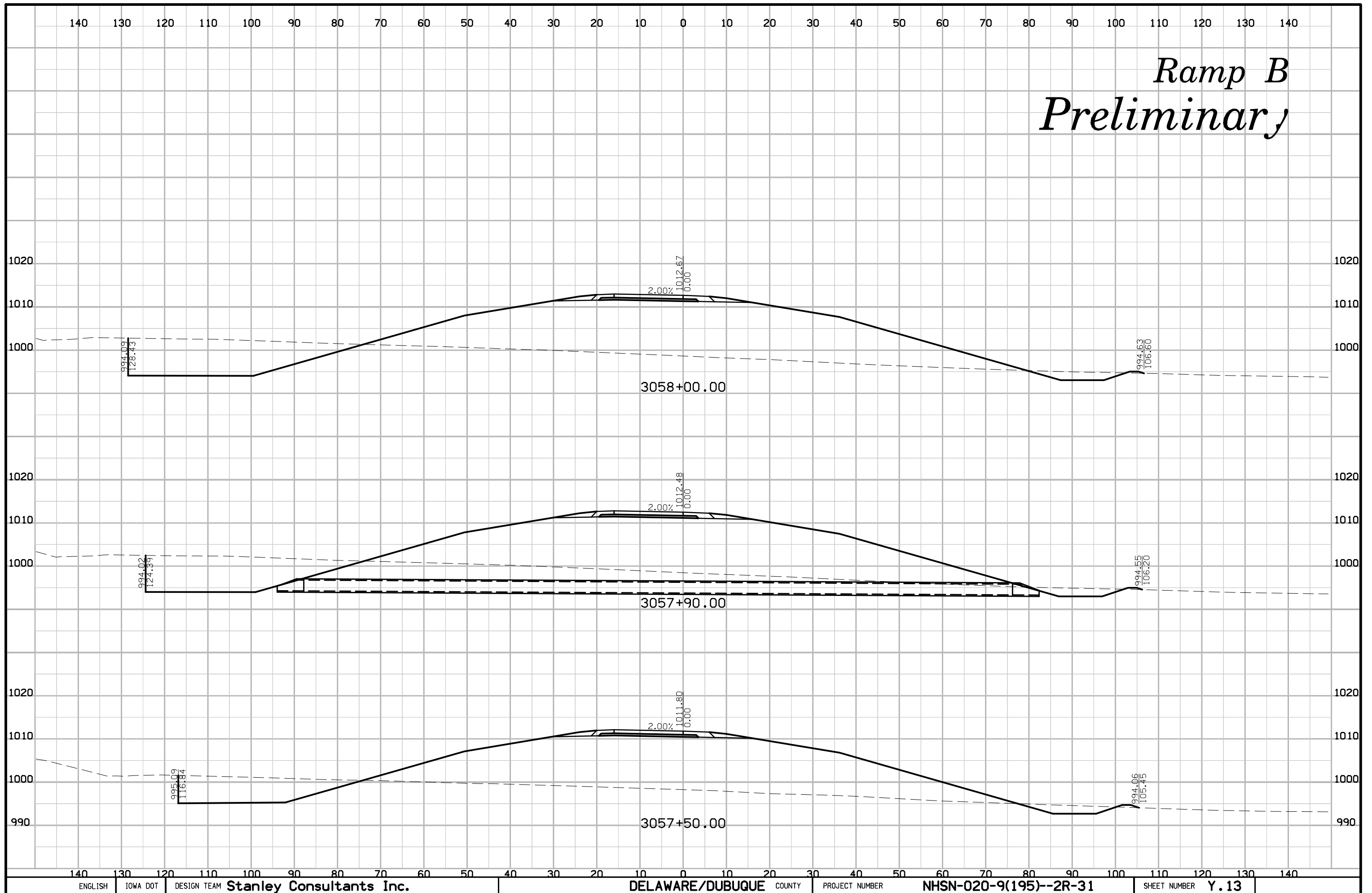


# Ramp B Preliminary

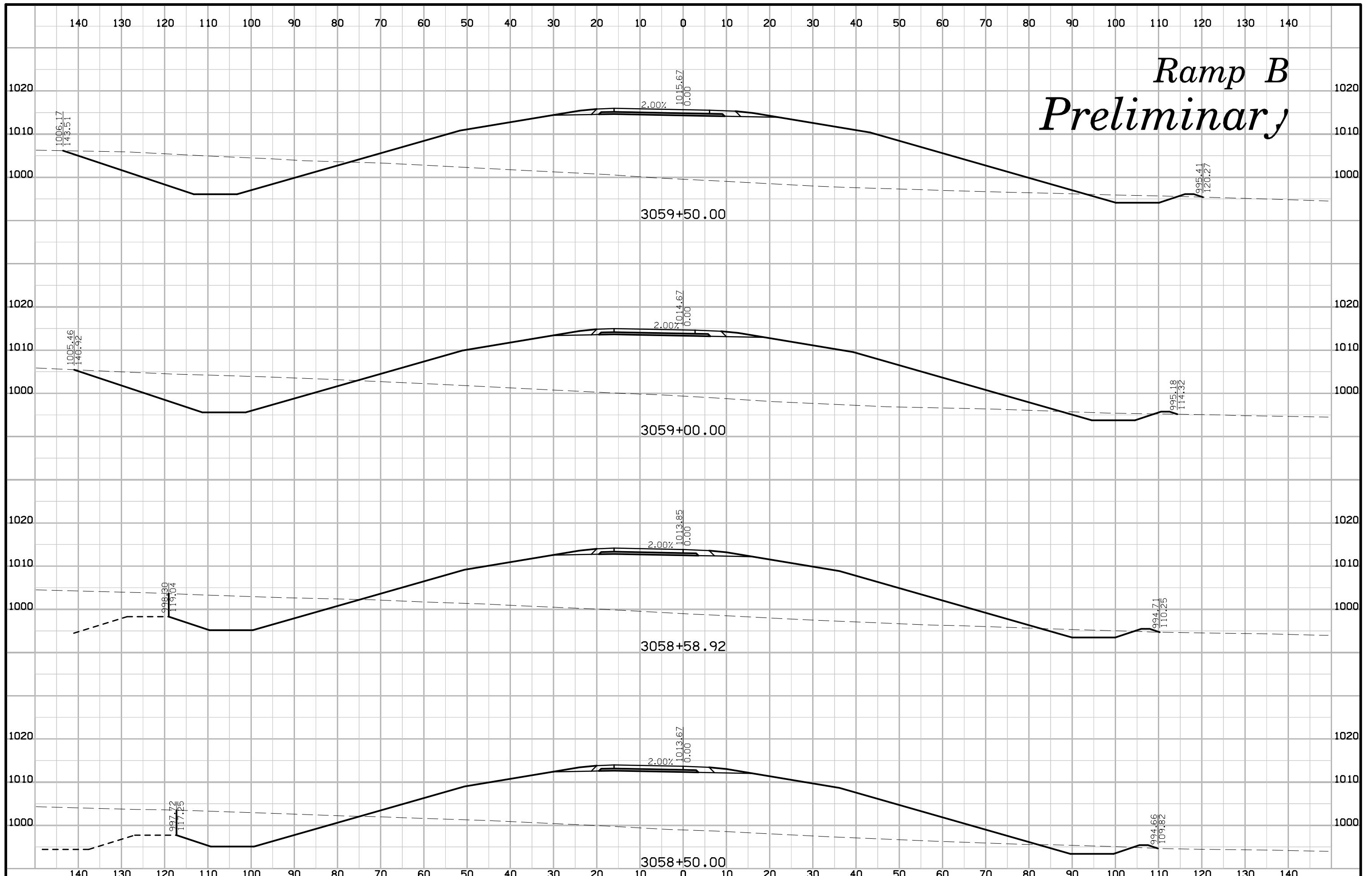




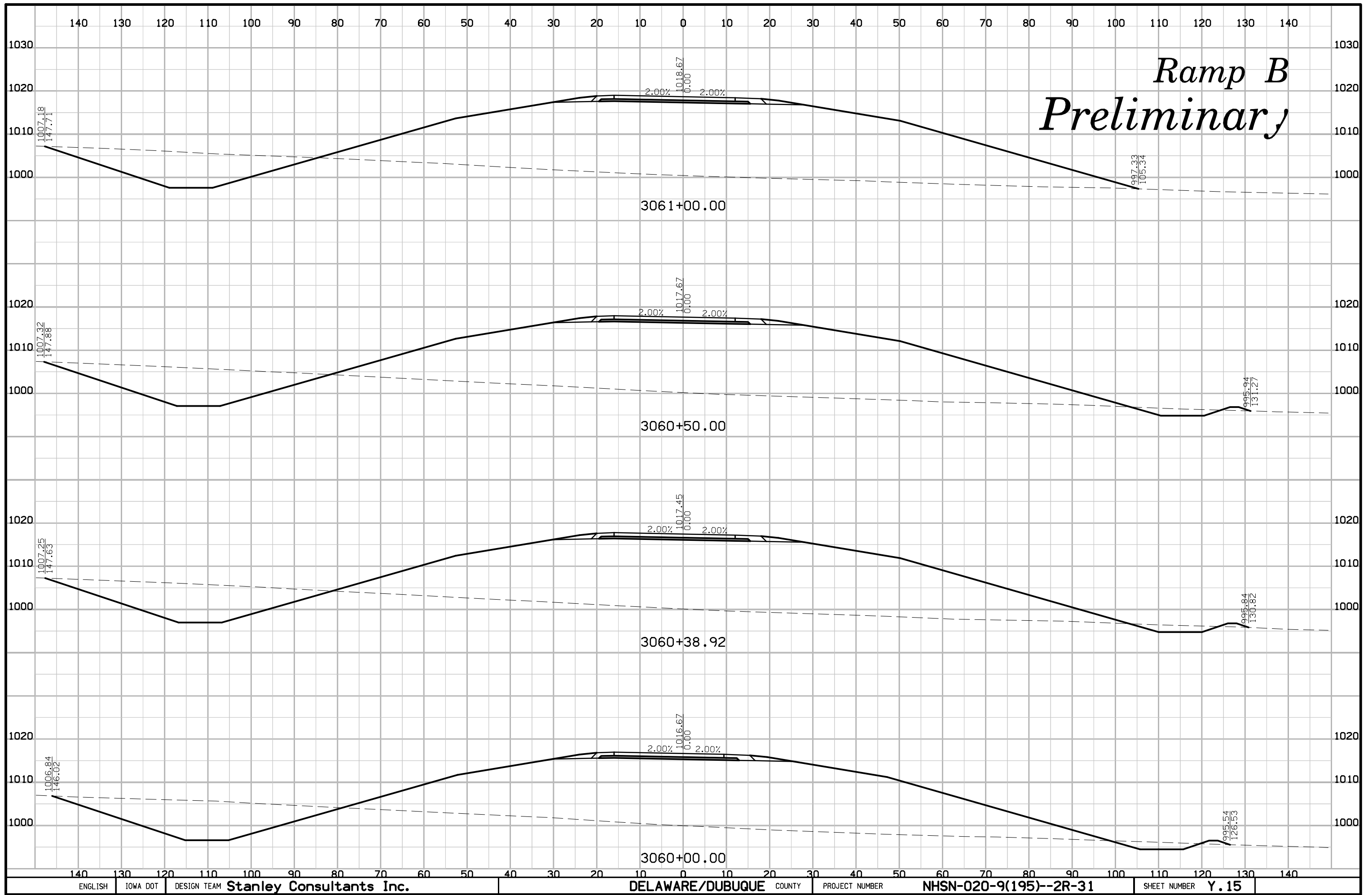
# Ramp B Preliminary



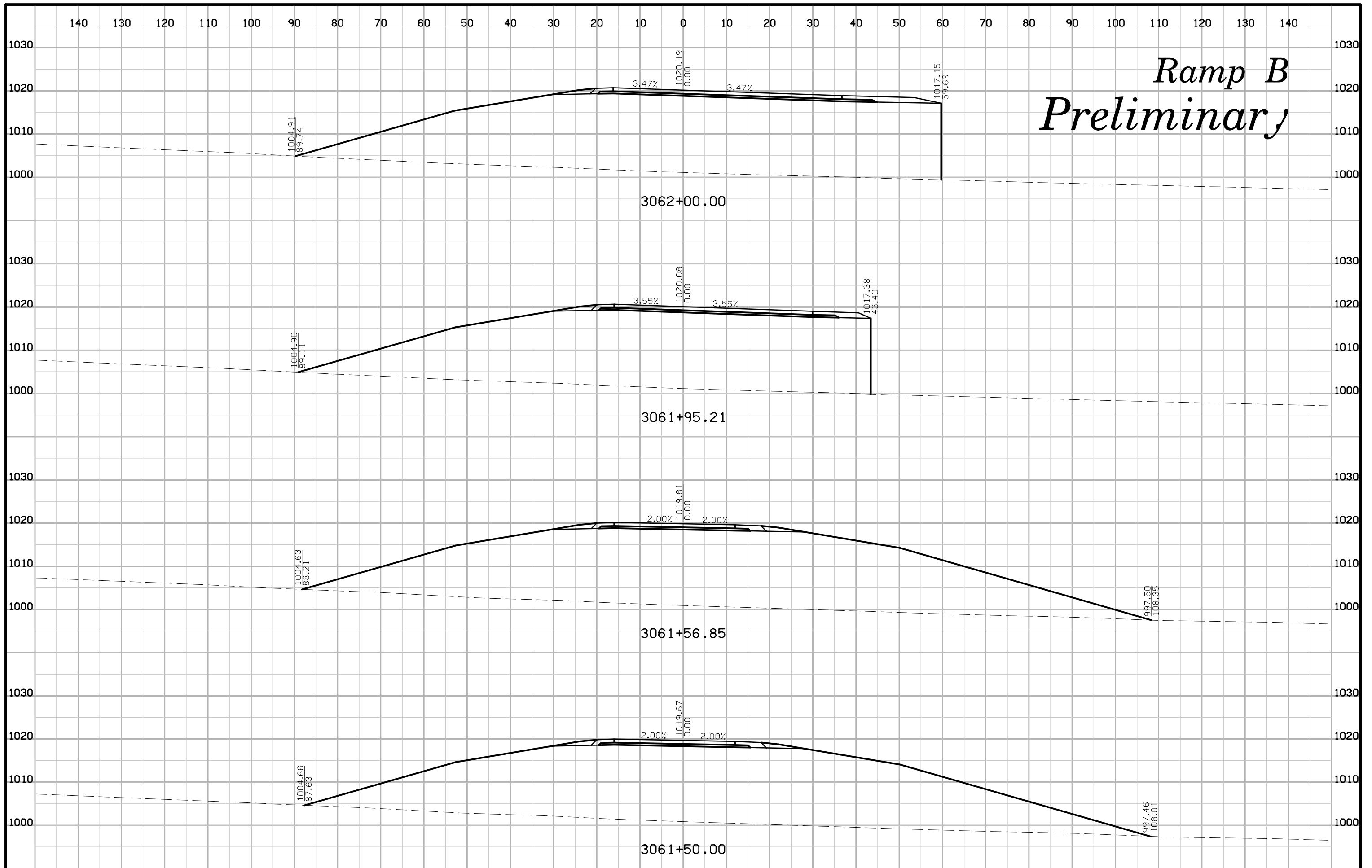
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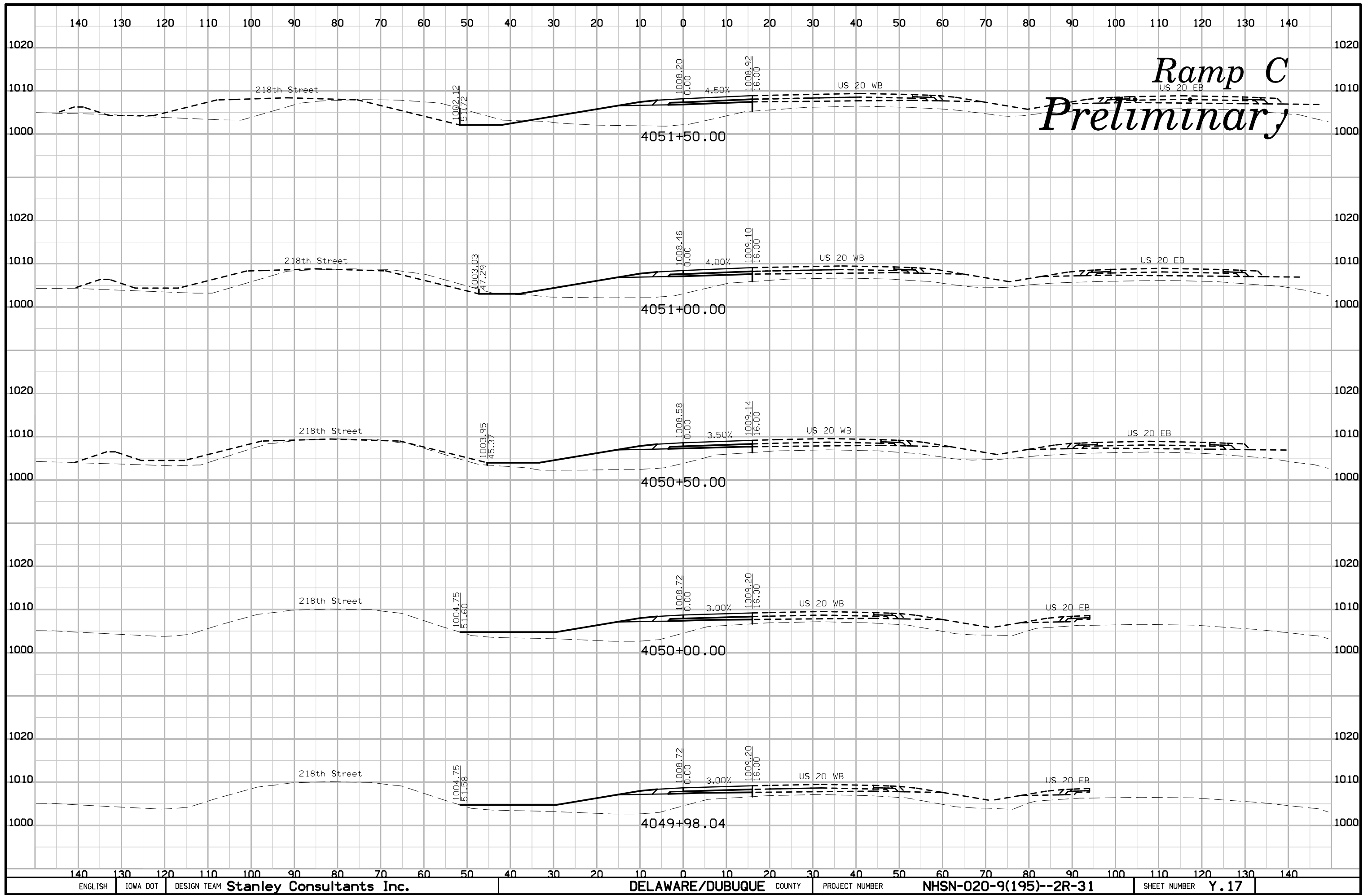




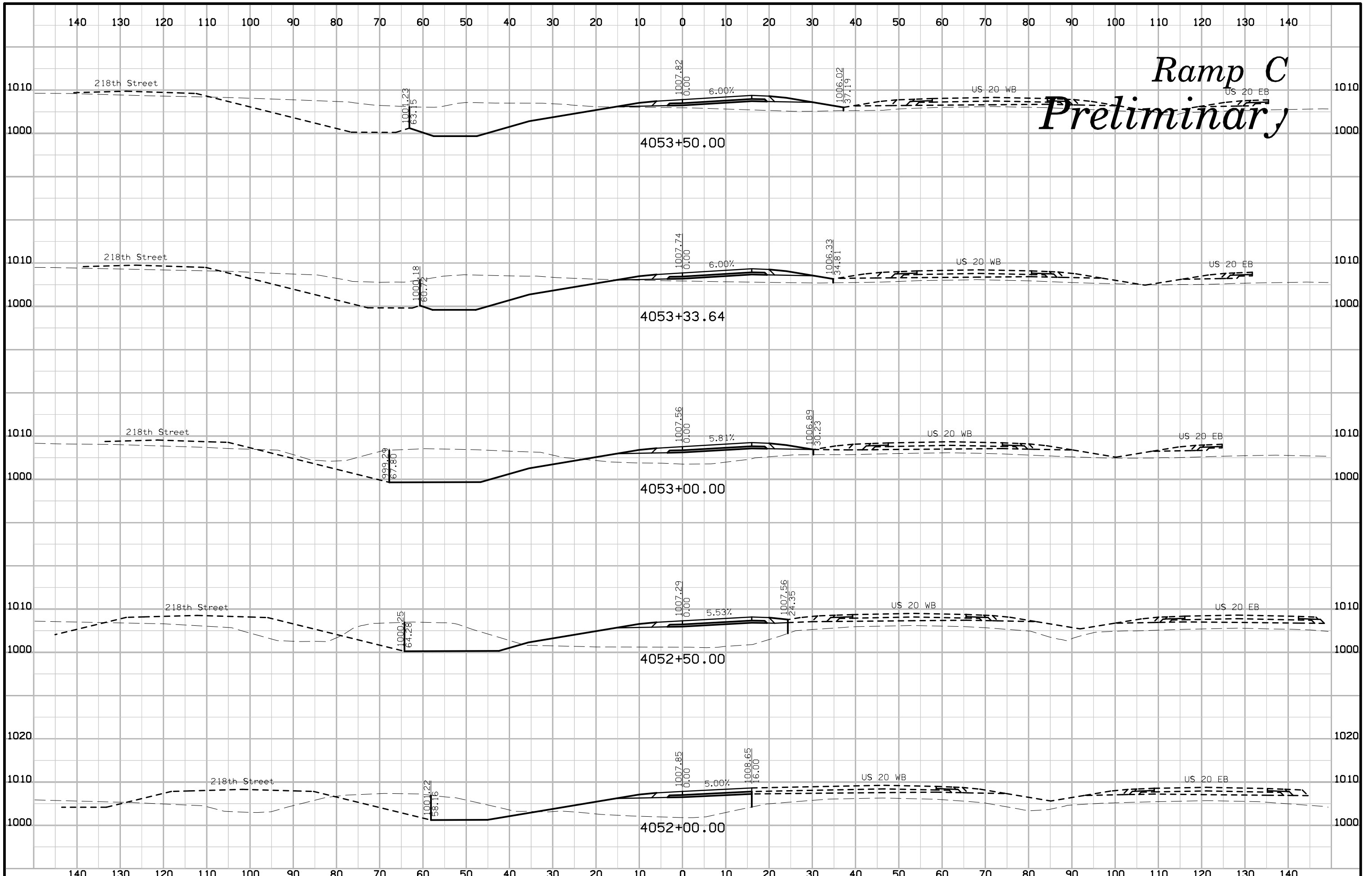


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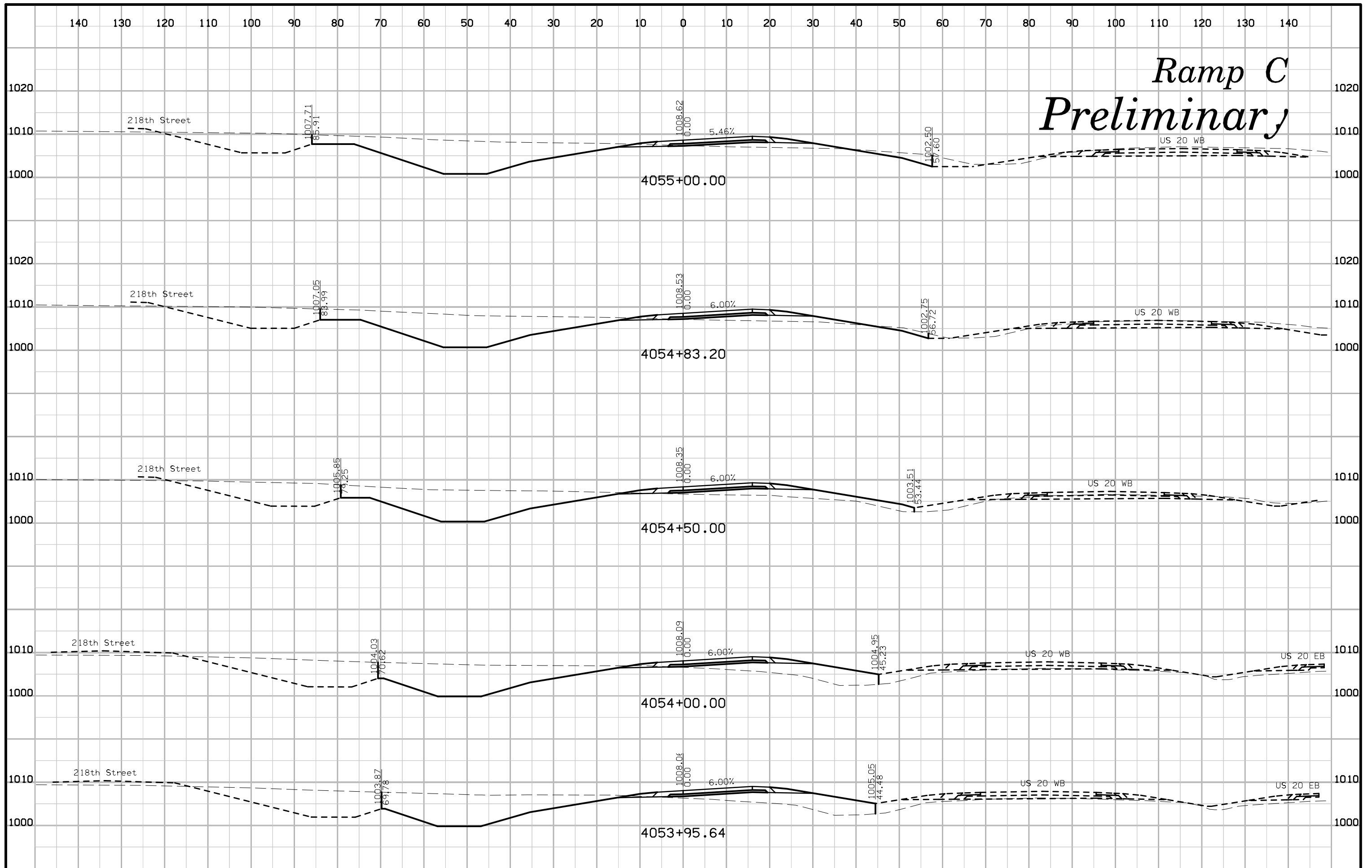




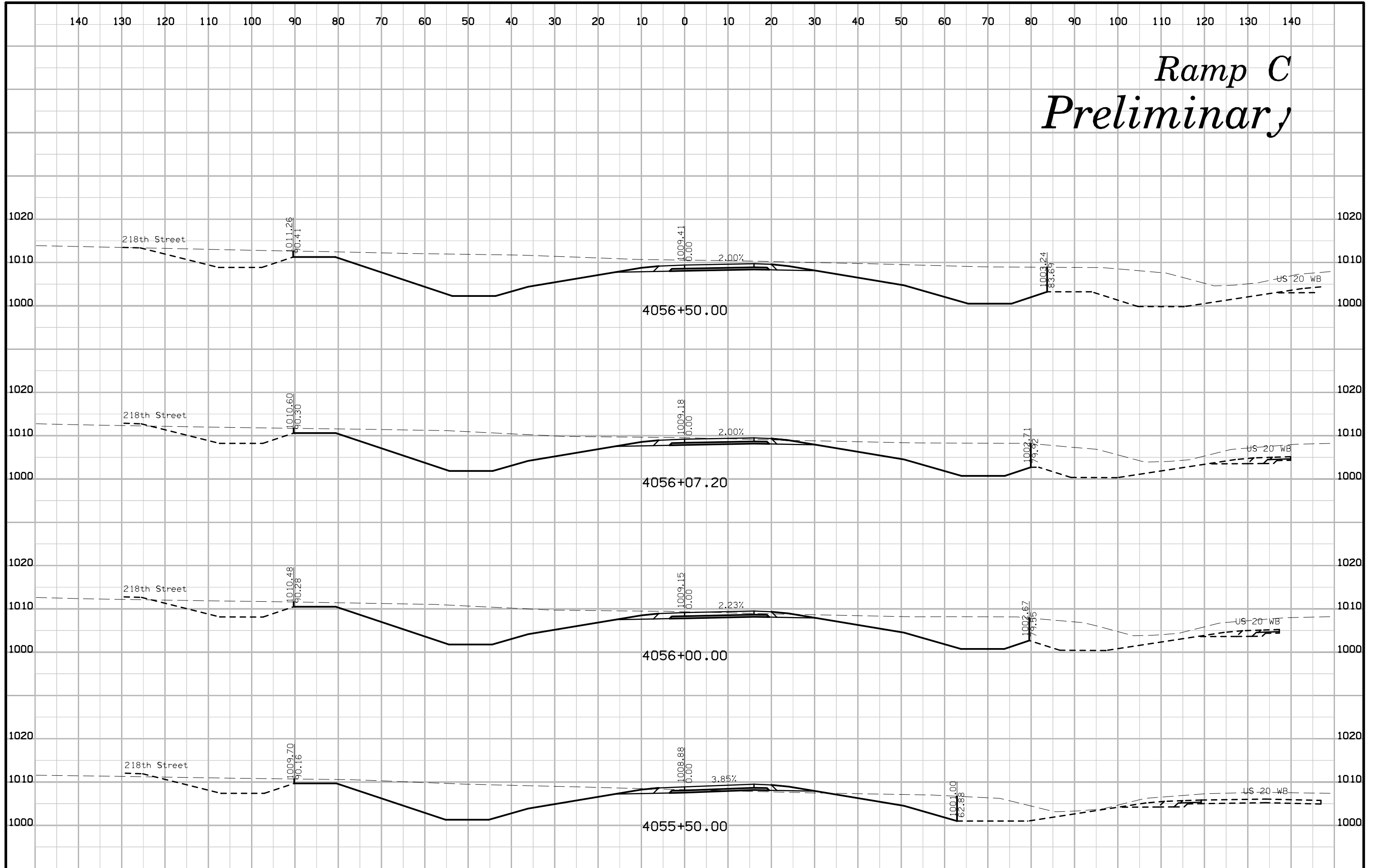
# Ramp C Preliminary



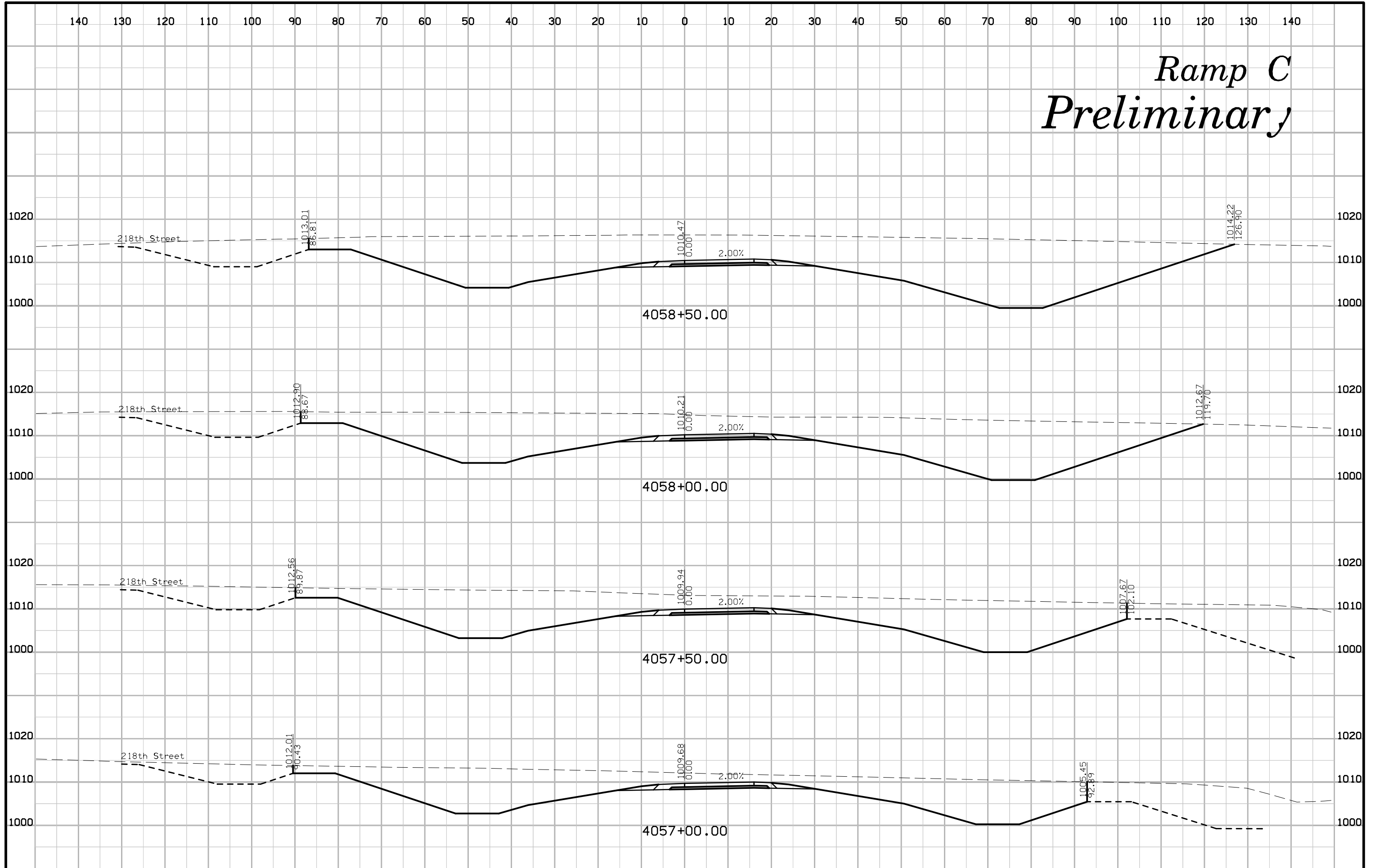
# Ramp C Preliminary



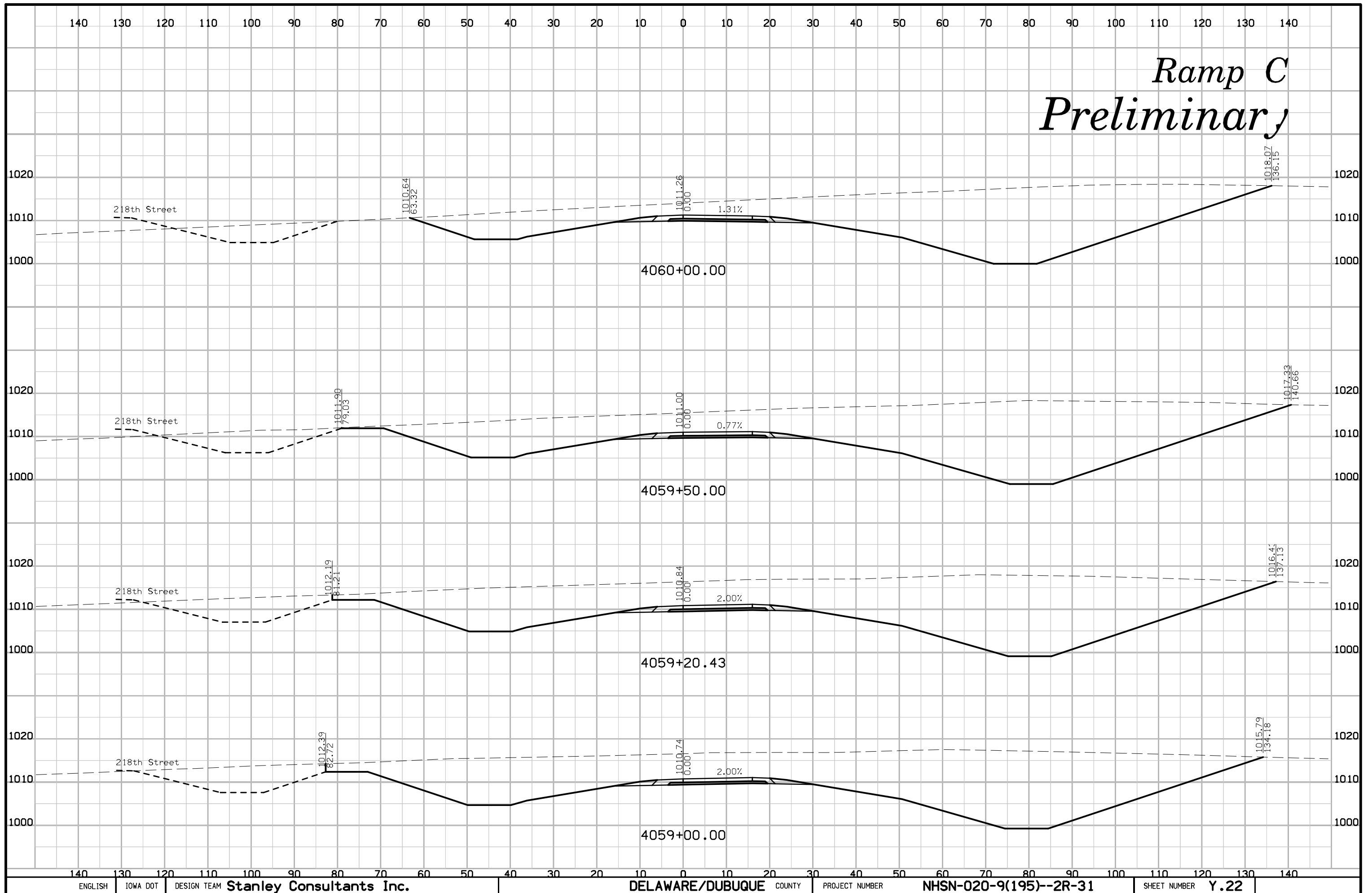
# Ramp C Preliminary



# Ramp C Preliminary

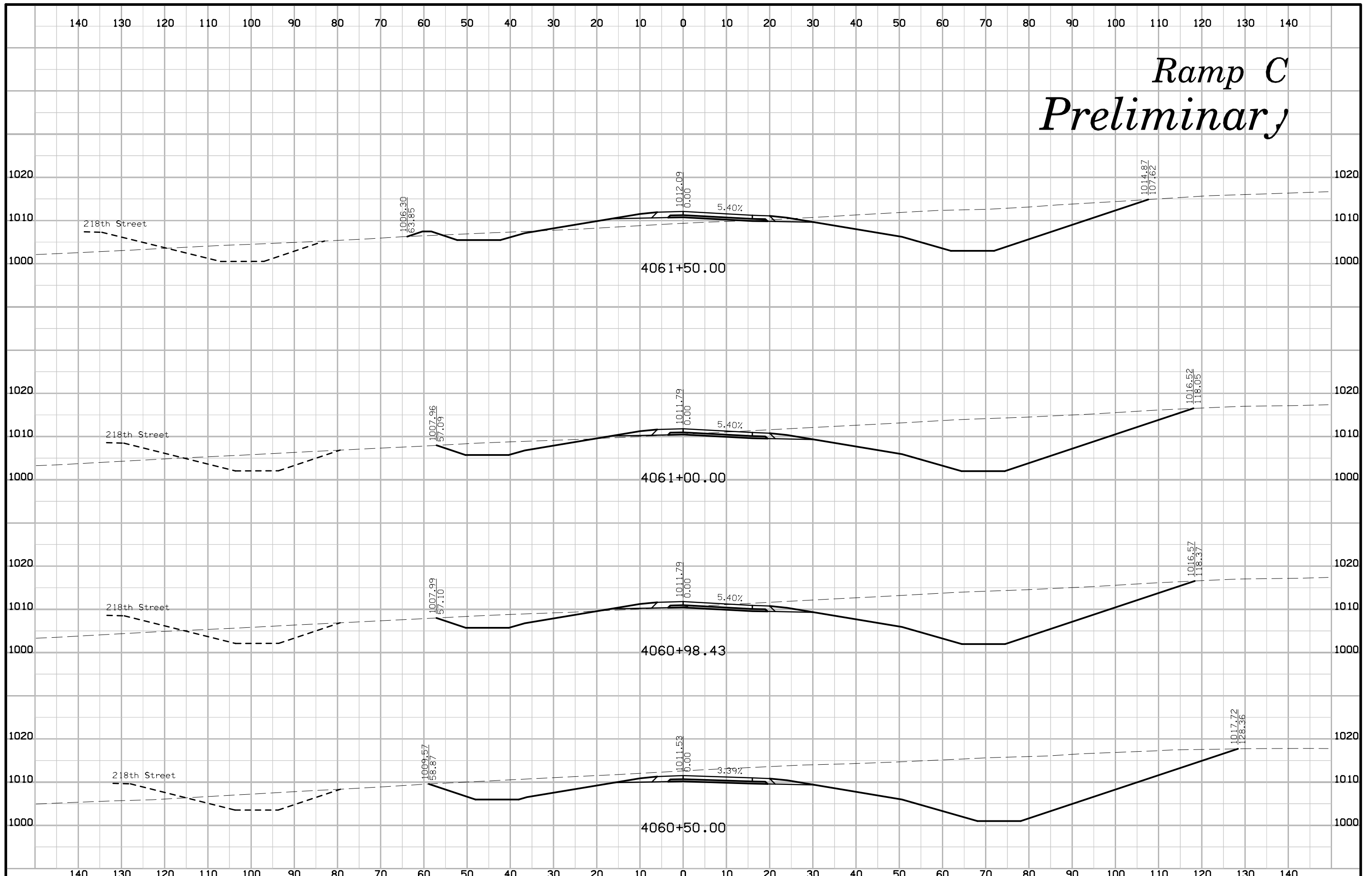


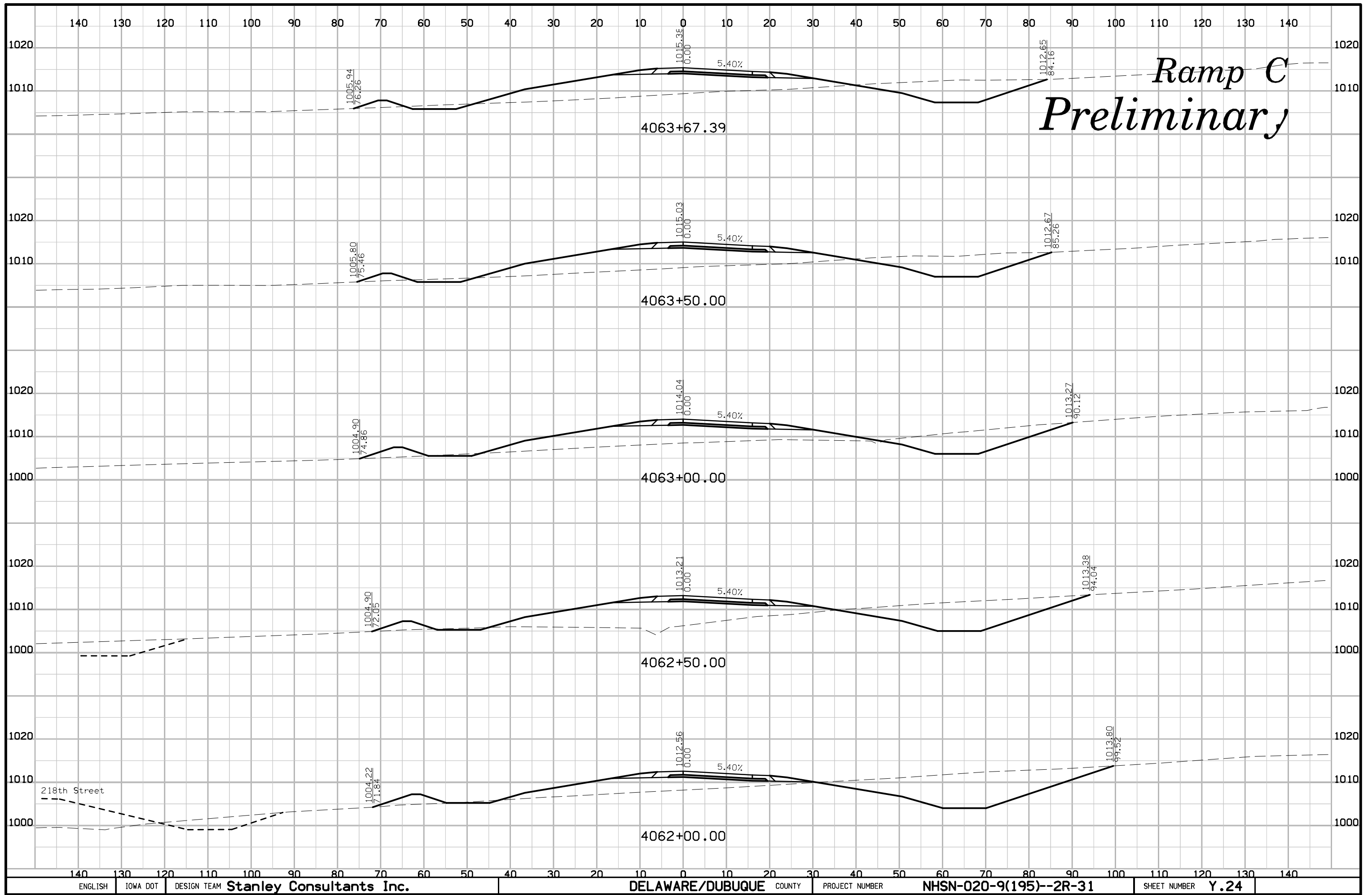
# Ramp C Preliminary



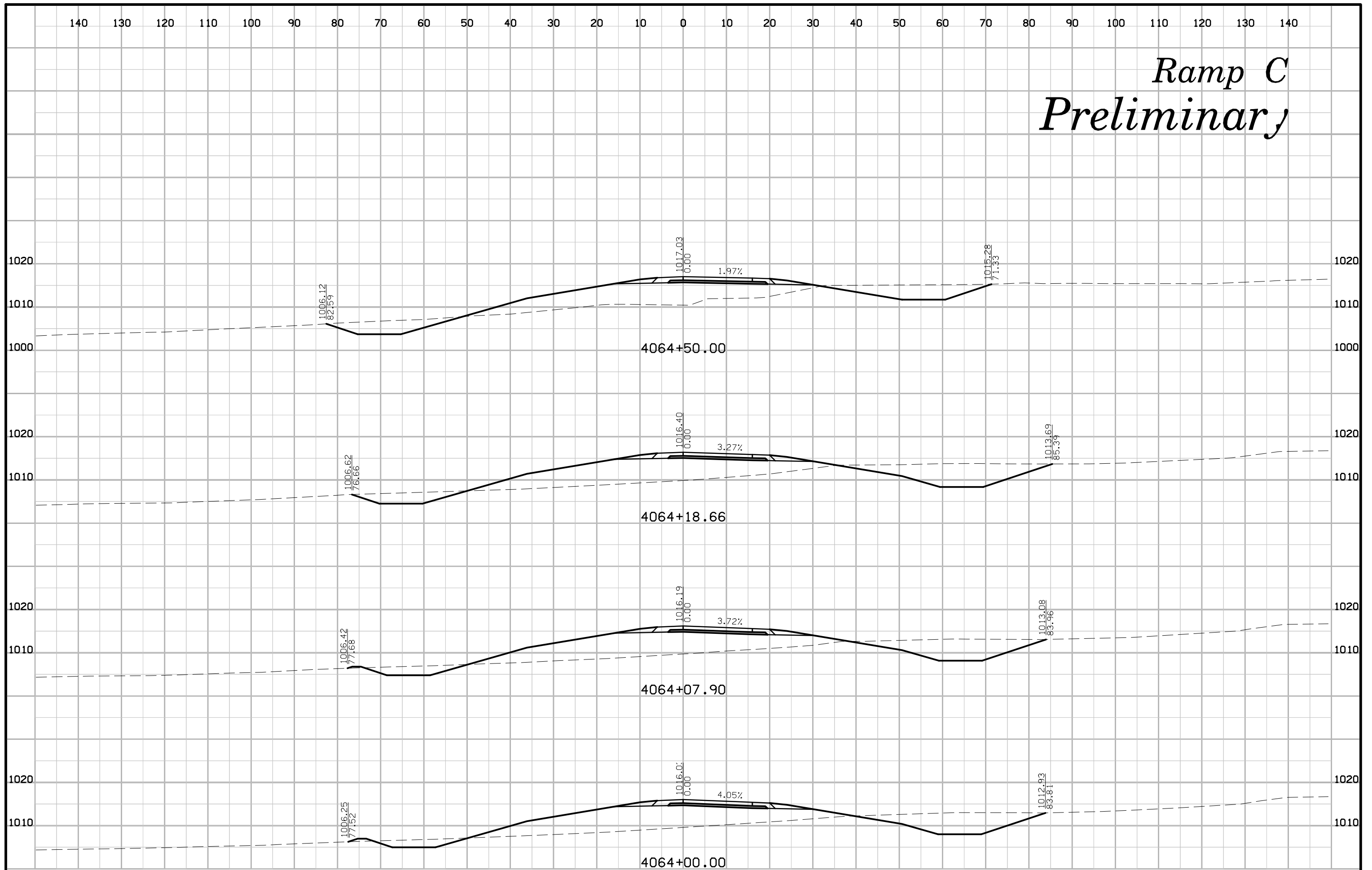


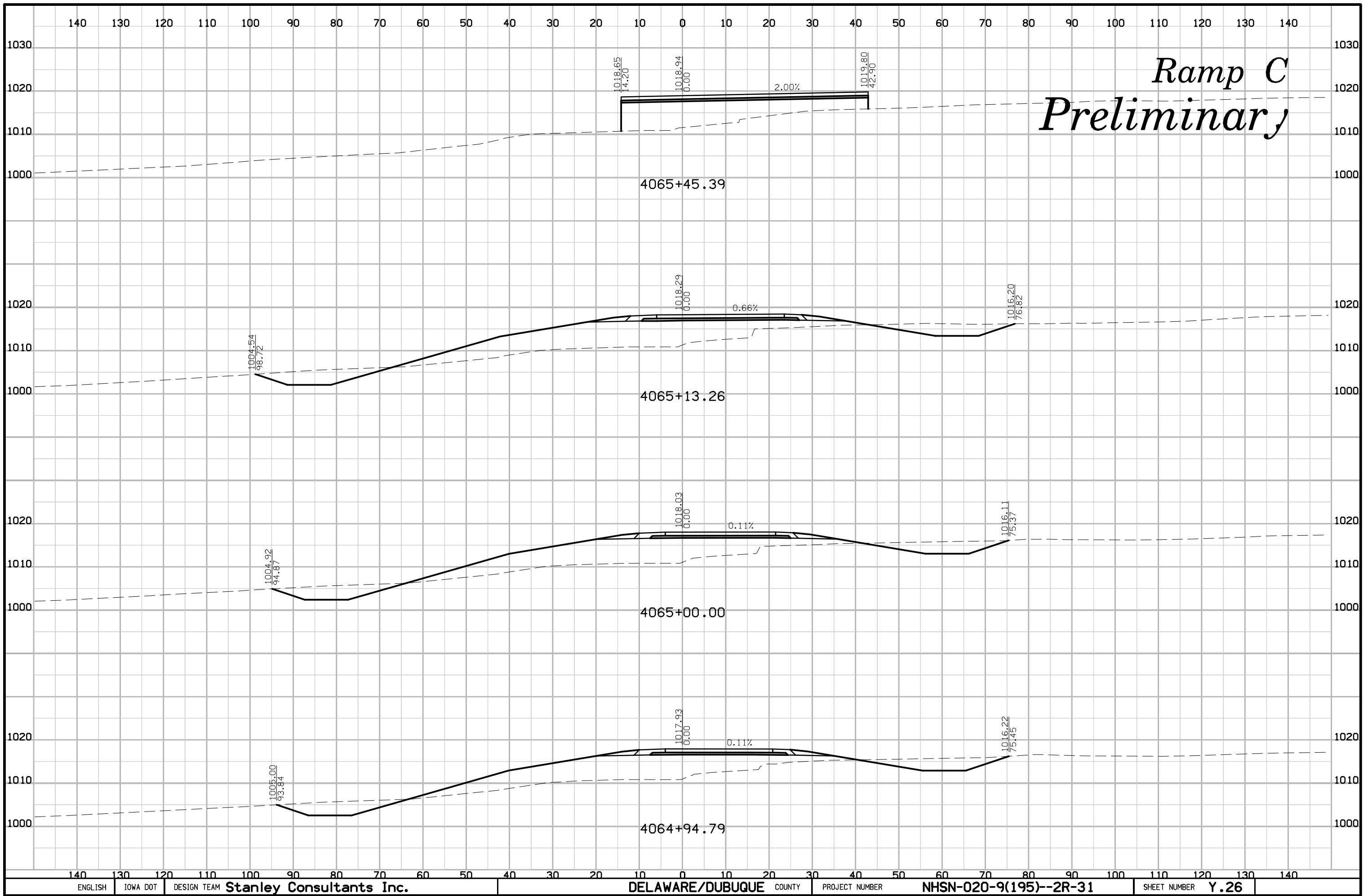
# Ramp C Preliminary



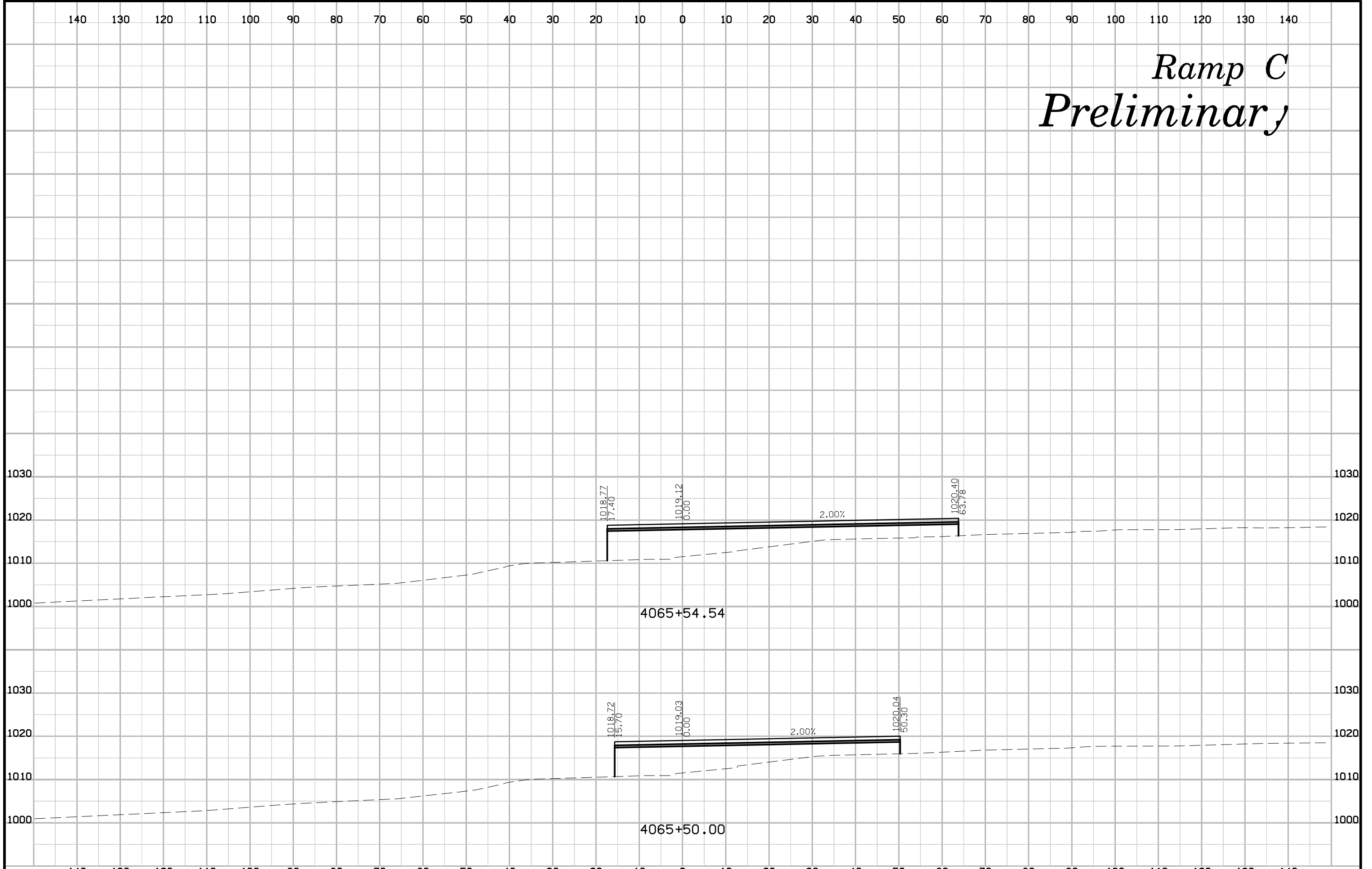


# Ramp C Preliminary

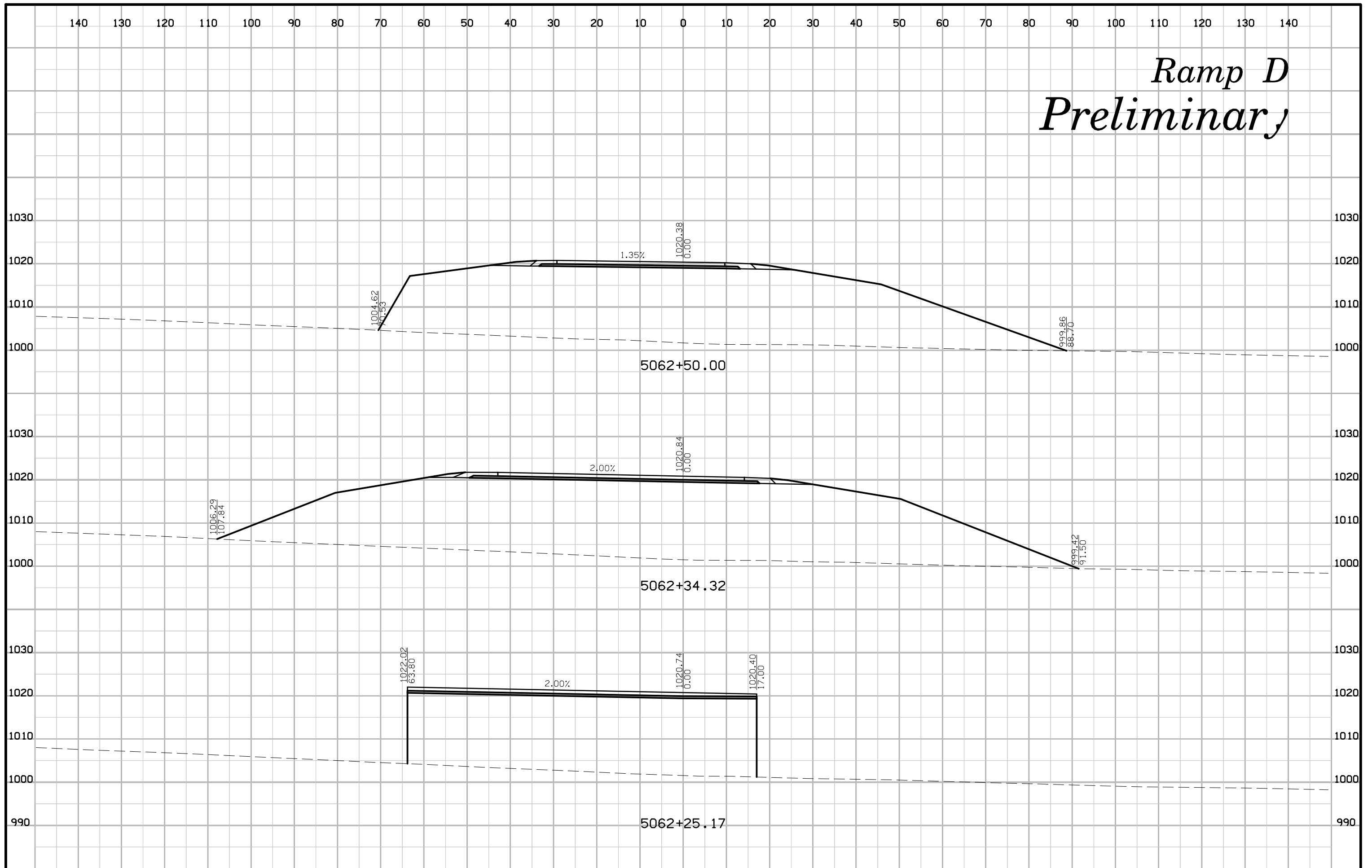




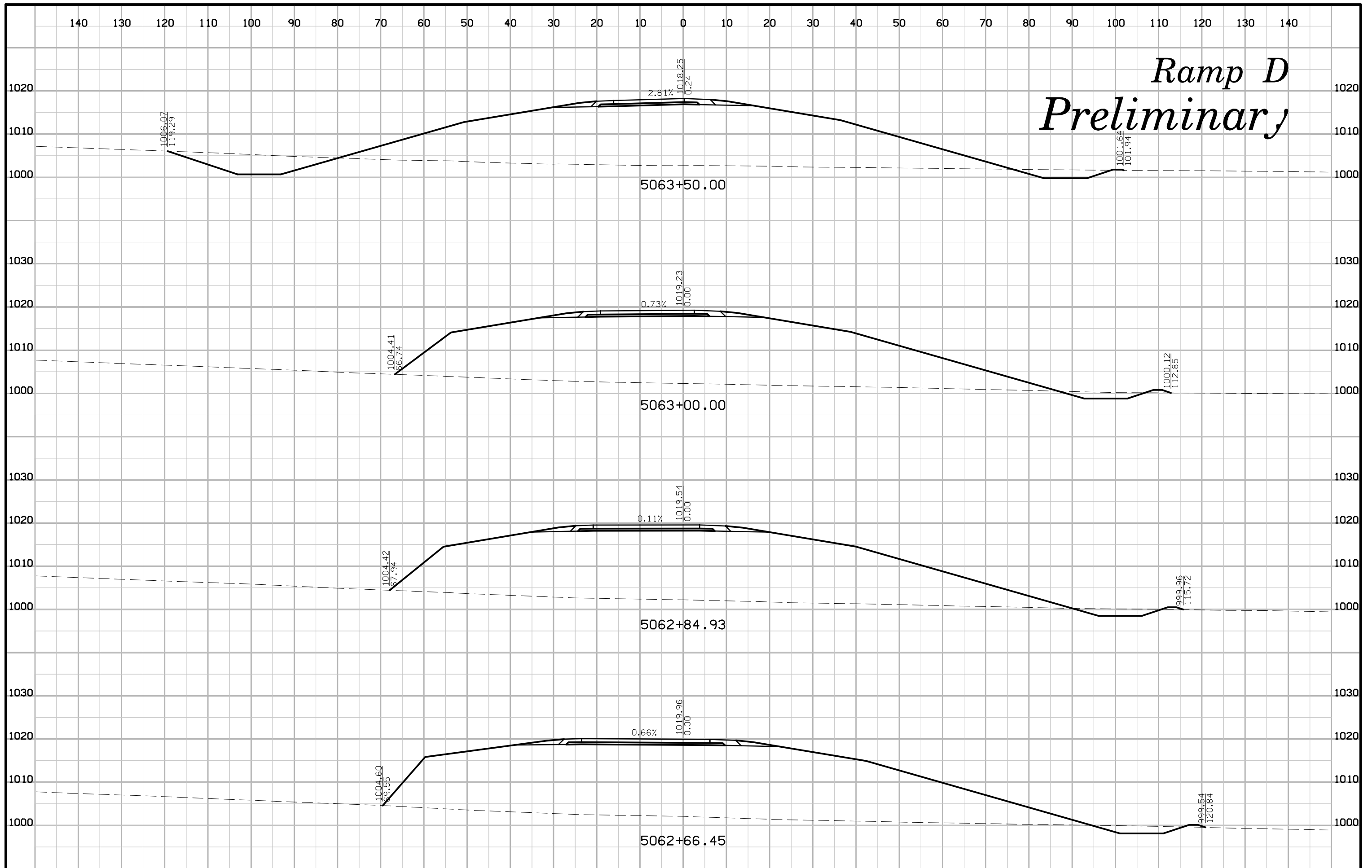
# Ramp C Preliminary



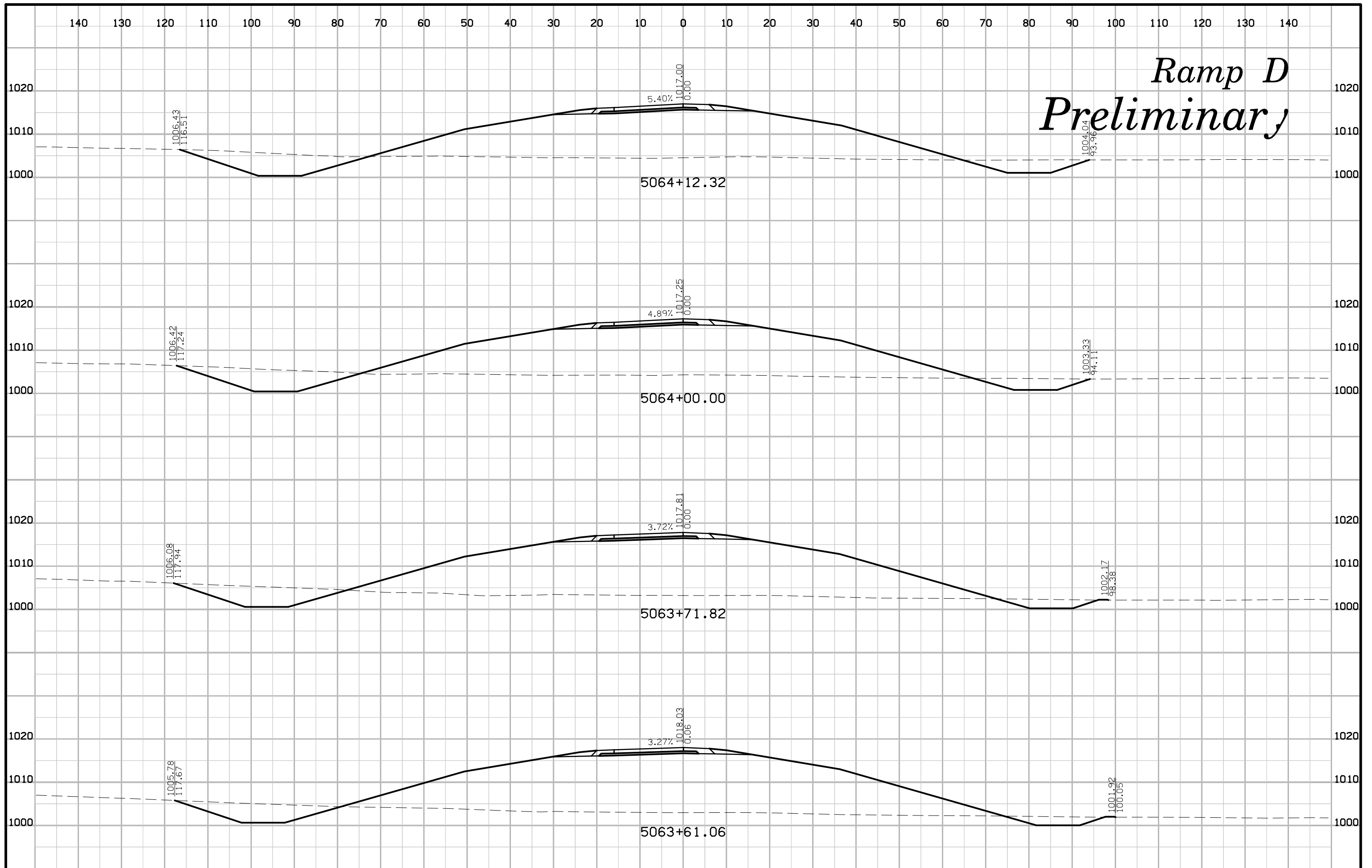
# Ramp D Preliminary



# Ramp D Preliminary

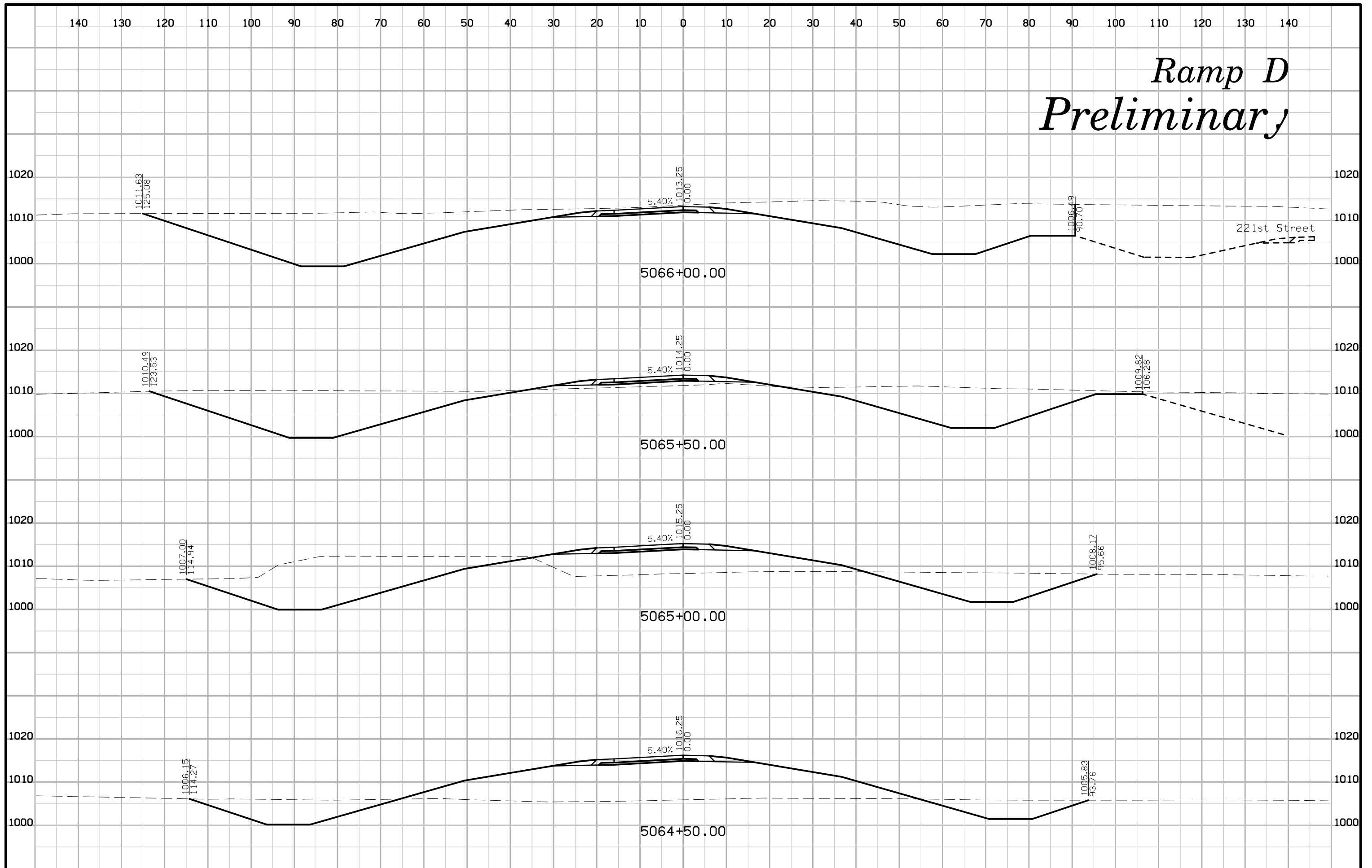


# Ramp D Preliminary



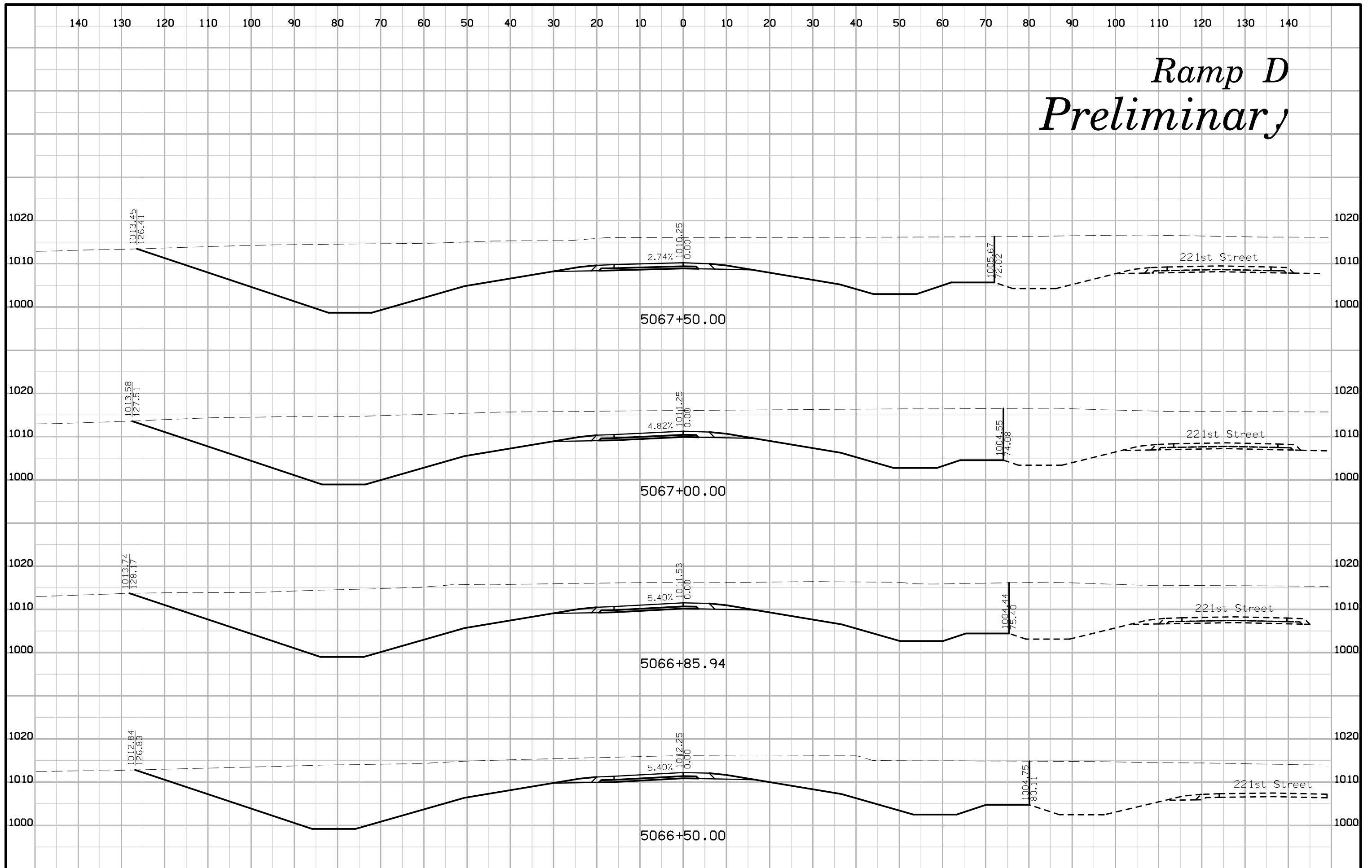


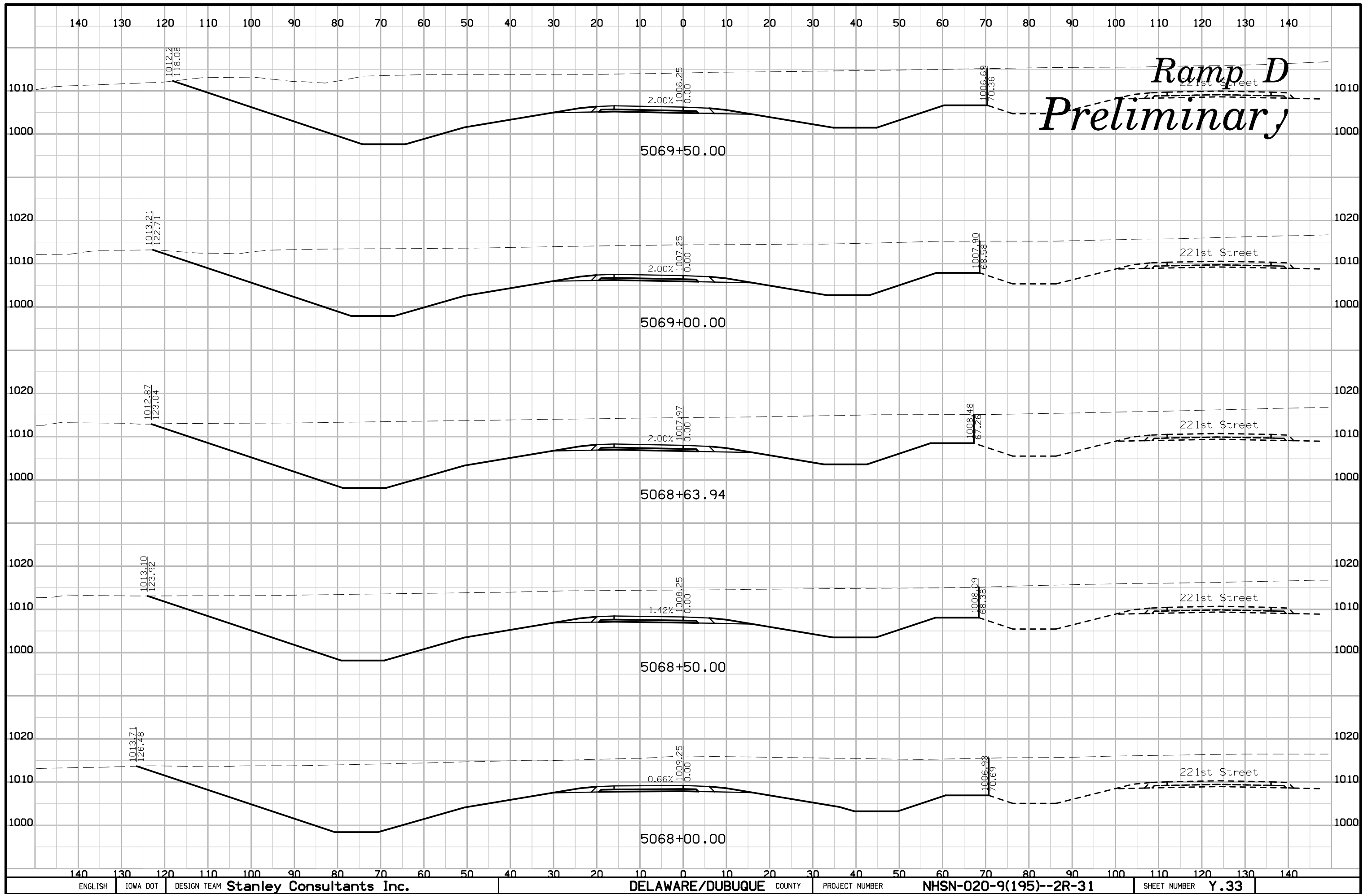
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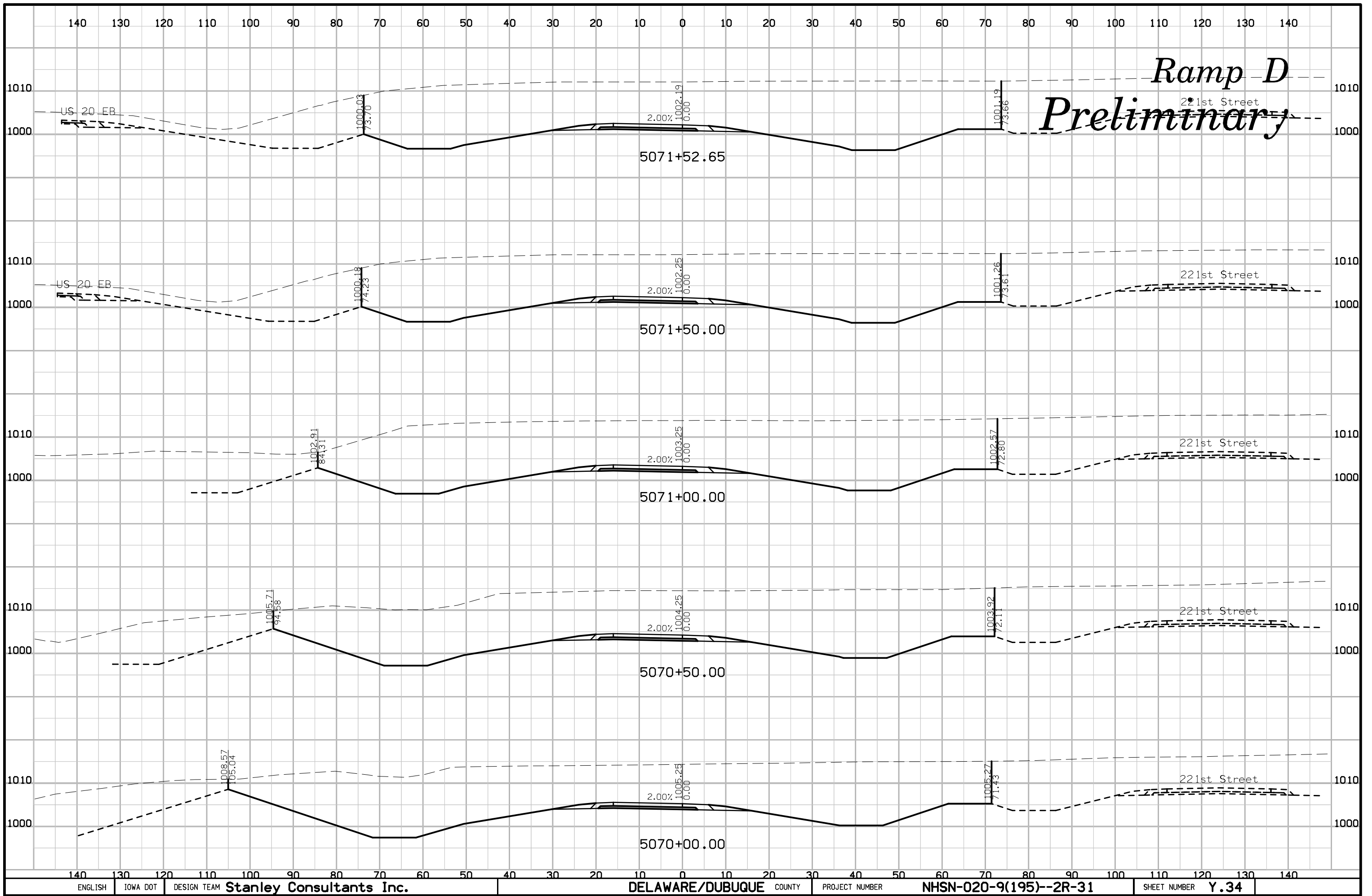


221st Street

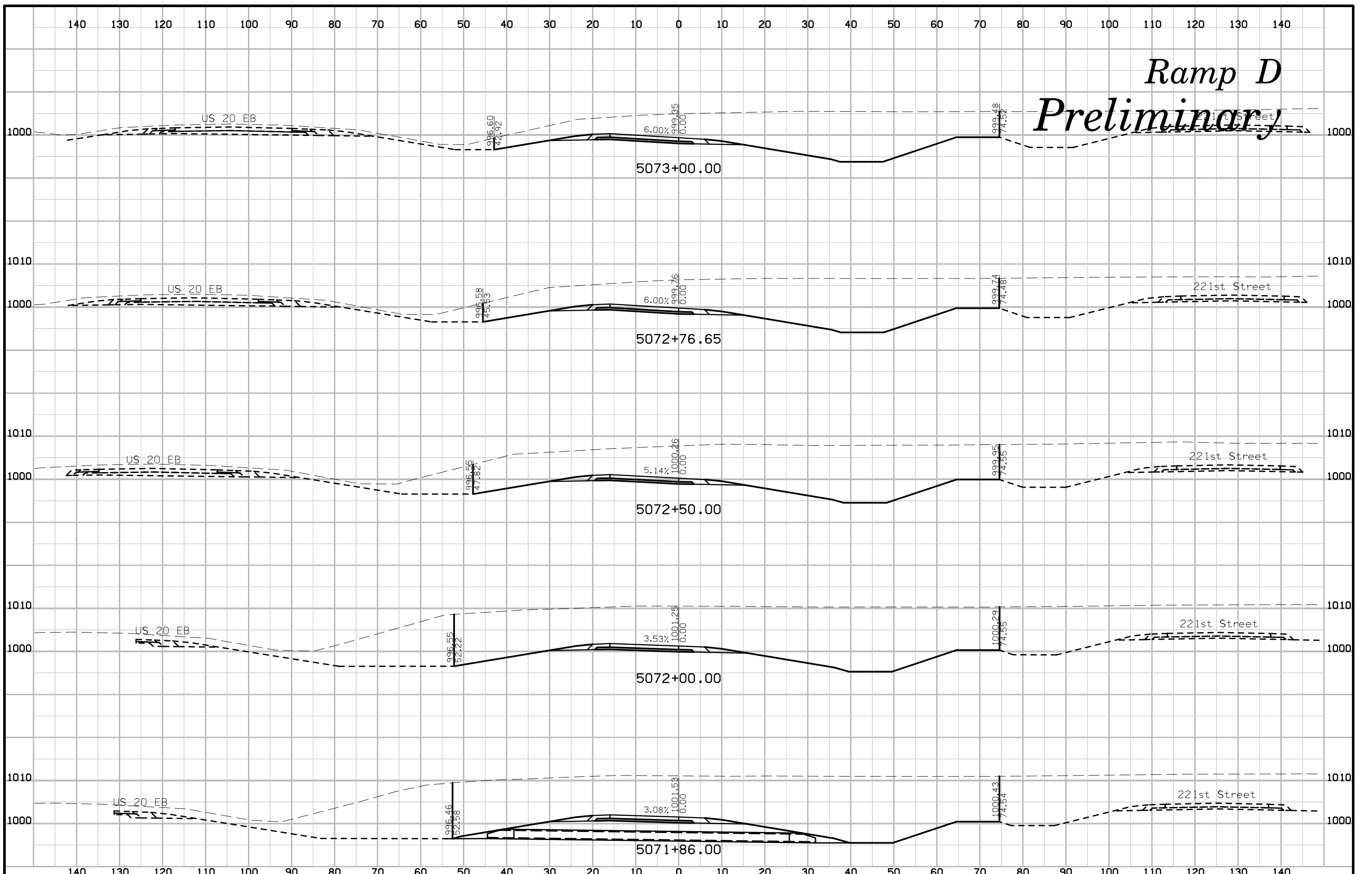
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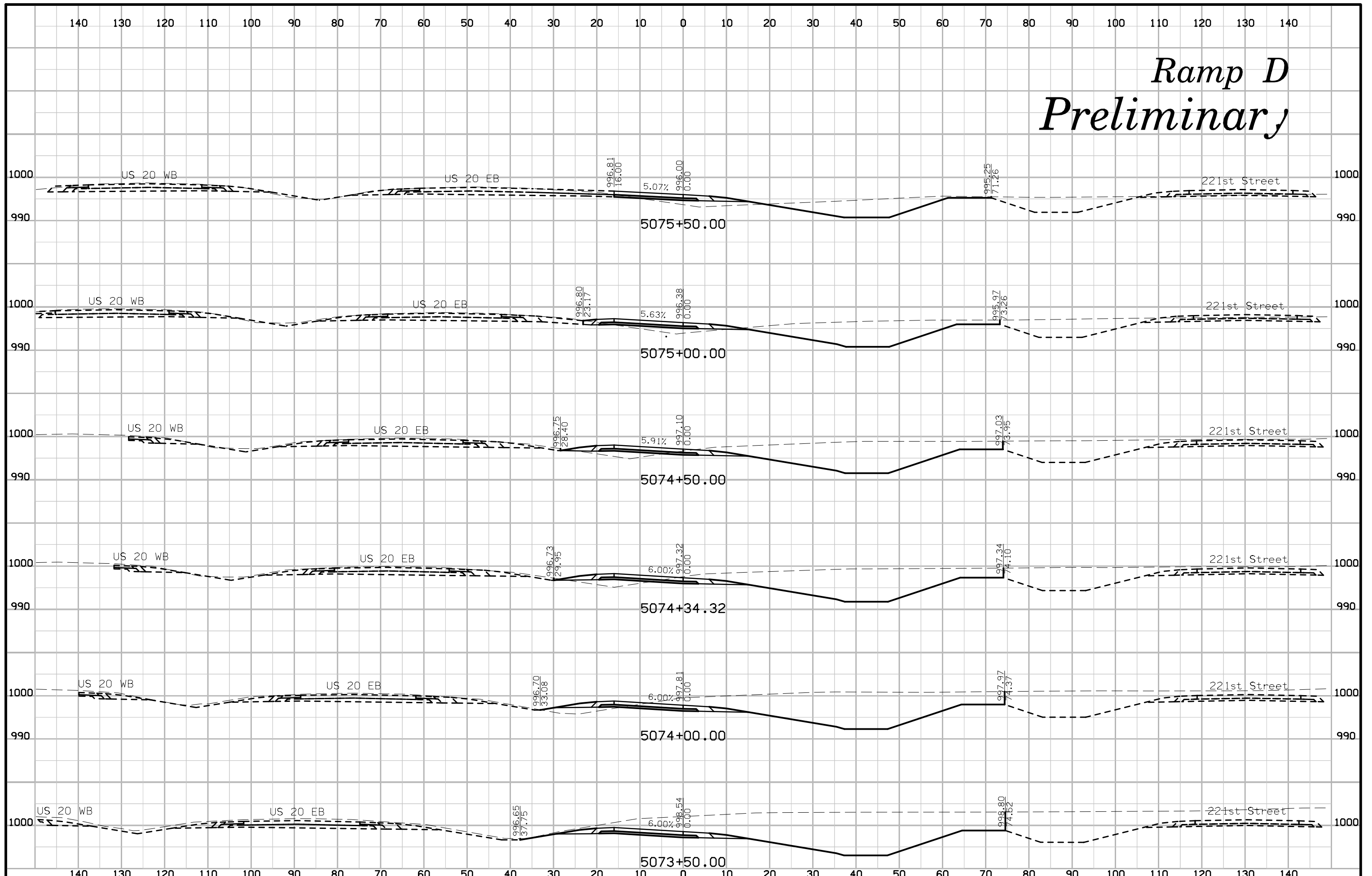




# Ramp D Preliminary



# Ramp D Preliminary



# Ramp D Preliminary

