PCC PAVEMENT - GRADE AND NEW
IM-380-6(358)25--13-57

LETTING DATE
8/20/2024

LINN CO.

IOWADOT

Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

INTERSTATE ROAD SYSTEM

LINN COUNTY

PCC PAVEMENT - GRADE AND NEW

BOYSON ROAD INTERCHANGE IN HIAWATHA

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

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

NO MILEAGE SUMMARY

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

REVISIONS

	TOTAL 1166
PROJECT IDENTIFICATION NUMBER	
96-57-380-050-02	
PROJECT NUMBER	
IM-380-6(358)25--13-57	
R.O.W. PROJECT NUMBER	
IM-380-6(363)25--0E-57	

INDEX OF SHEETS

No.	DESCRIPTION
A Sheets	**Title Sheets TEST**
A.1	Title Sheet
A.2	Location Map Sheet
B Sheets	**Typical Cross Sections and Details**
B.1 - 24	Typical Cross Sections and Details
C Sheets	**Quantities and General Information**
C.1 - 10	Estimated Project Quantities and Reference Notes
C.11 - 47	Tabulations (beg. with tab. of incidentals if needed)
C.48	General Notes
CS Sheets	**Soils Tabulations**
CS.1 - 4	Soils Tabulations
D Sheets	**Mainline Plan and Profile Sheets**
* D.1	Plan & Profile Legend & Symbol Information Sheet
* D.2 - 7	I-380
E Sheets	**Side Road Plan and Profile Sheets**
* E.1 - 4	Boyson Road
F Sheets	**Detour or Temporary Pavement Sheets**
* F.1 - 7	Detour Plan and Profile Sheets
G Sheets	**Survey Sheets**
G.1 - 4	Horizontal and Vertical Control
G.5 - 8	Horizontal Control Tab. & Super for all Alignments
H Sheets	**Right-of-Way Sheets**
H.1 - 4	I-380
HE.1 - 2	Boyson Road
J Sheets	**Traffic Control and Staging Sheets**
J.1	Traffic Control Plan
J.2	Traffic Control Closure Table
J.3 - 4	Staging Notes and Coordinated Operations
* J.5	Traffic Control & Staging Legend & Symbol Info. Sheet
* J.6 - 17	Staging and Traffic Control Sheets
JS Sheets	**Staging and Traffic Control Scrolls**
* JS.1 - 10	Staging Scrolls
* JS.11 - 19	Traffic Control Scrolls
* JS.20 - 29	Ingress & Egress Scrolls
K Sheets	**Interchange Sheets**
* K.1	Interchange Layout Sheets
* K.2	Boyson Road Ramp A Plan and Profile Sheets
* K.3 - 4	Boyson Road Ramp B Plan and Profile Sheets
* K.5 - 6	Boyson Road Ramp C Plan and Profile Sheets
* K.7 - 8	Boyson Road Ramp D Plan and Profile Sheets
L Sheets	**Geometric, Staking and Jointing Sheets**
* L.1	Jointing and Geometrics Legend and Information Sheet
* L.2 - 9	Geometric & Staking I-380
* L.10 - 26	Geometric & Staking Ramps A-D
* L.27 - 32	Geometric & Staking Boyson Road
* L.33 - 40	Jointing I-380
* L.33 - 51	Jointing Boyson Road Ramps A-D
* L.52 - 55	Jointing Boyson Road
M Sheets	**Storm Sewer Sheets**
M.1	Storm Sewer Legend & Symbol Information Sheet
M.2	Storm Sewer Overview
M.3 - 15	Storm Sewer Plan and Profile Sheets and Details
M.16 - 17	Storm Sewer Tabulation
Q Sheets	**Soils Sheets**
Q.1	Soils Legend & Symbol Information Sheet
Q.2 - 4	Soils Sheets I-380
Q.5 - 8	Soils Sheets I-380
Q.9 - 22	Soils Sheets Boyson Road Ramps
Q.23	Soils Sheets
R Sheets	**Erosion Control Sheets**
RC.1 - 10	Est. Quantities, PPP, General Notes and Tabulations
* RR.1	Erosion Control Legend and Symbol Information Sheet
* RR.2 - 15	Drainage Basin and Erosion Control Device Maps
S Sheets	**Sidewalk Sheets**
* S.1	Sidewalk Legend & Symbol Information Sheet
* S.2 - 4	Sidewalk Plan Sheets
* S.5 - 6	Sidewalk Compliance
T Sheets	**Earthwork Quantity Sheets**
T.1 - 35	Earthwork Quantity Sheets
U Sheets	**500 Series, Mod.Stds. and Detail Sheets**
U.1 - 8	Detail Sheets - Pavement Markings
U.9 - 13	500 Series, Modified Standards and Detail Sheets
V Sheets	**Culvert Situation Plans, Retaining Wall**
V.1 - 9	Retaining Wall Plans
V.10	Bridge and Culvert Situation Plans
W Sheets	**Mainline Cross Sections**
W.1	Cross Sections Legend & Symbol Information Sheet
W.2 - 387	Mainline Cross Sections
X Sheets	**Side Road Cross Sections**
X.1 - 181	Side Road Cross Sections
Y Sheets	**Ramp Cross Sections**
Y.1 - 250	Ramp Cross Sections

* Color Plan Sheets

BOYSON ROAD

DESIGN DATA URBAN

2016	AADT	16,579	V.P.D.
2040	AADT	22,746	V.P.D.
2040	DHV	2350	V.P.H.
TRUCKS		4	%
Total Design ESALs		5,314,400	

I-380

DESIGN DATA URBAN

2016	AADT	49,830	V.P.D.
2040	AADT	71,157	V.P.D.
2040	DHV	7351	V.P.H.
TRUCKS		12	%
Total Design ESALs		95,016,800	

For Project Location Map
Refer to sheet A.2

INDEX OF SEALS

SHEET NO.	NAME	TYPE	BID QUANTITY SHEETS
A.1	Ben Smith	Primary Signature Block	X
V.1	Kevin Arp	Structural Signature Block	X
CS.1	Buddika Godagama	Geotech. Signature Block	

ROADWAY DESIGN

LICENSED PROFESSIONAL ENGINEER BENJAMIN S. SMITH 2442542 IOWA

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

Signature: Benjamin S. Smith Date: 5/31/24

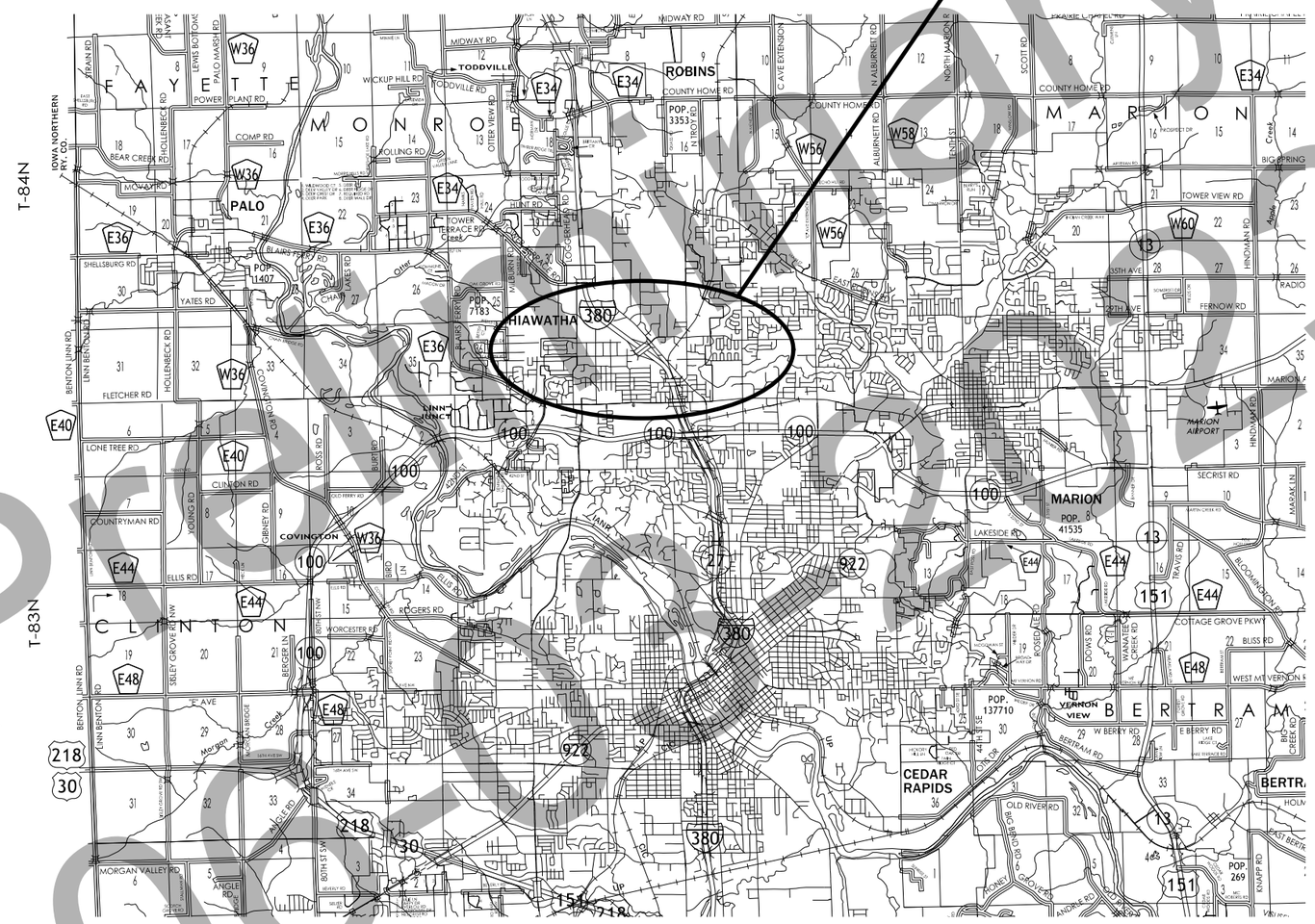
Printed or Typed Name: BENJAMIN S. SMITH

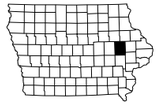
My license renewal date is December 31, 2025

Pages or sheets covered by this seal: X A, B, C, D, E, F, G, J, JS, K, L, M, RC, RR, S, T, U, W, X X AND Y SHEETS AND V.10

Preliminary 06-03-2024

FILE NO.	ENGLISH	DESIGN TEAM Kirkham Michael/Iowa DOT	LINN COUNTY	PROJECT NUMBER IM-380-6(358)25--13-57	SHEET NUMBER A.1



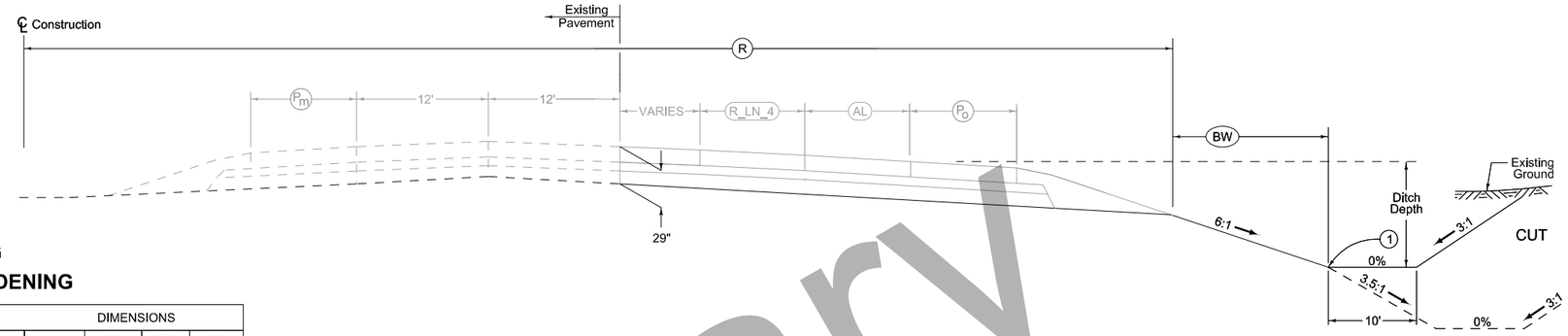


LOCATION MAP SCALE
0 1 2 3
Miles

FILE NO.	ENGLISH	DESIGN TEAM **Iowa DOT**	**LINN** COUNTY	PROJECT NUMBER **IM-380-6(358)25--13-57**	SHEET NUMBER **A.2**

2:07:52 PM 5/31/2024 bsmith pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\5738005096\Design_Boyson_Rd\CADD_Files\Sheet_files\SHT_57380358_A.dgn

Preliminary
06/05/2023



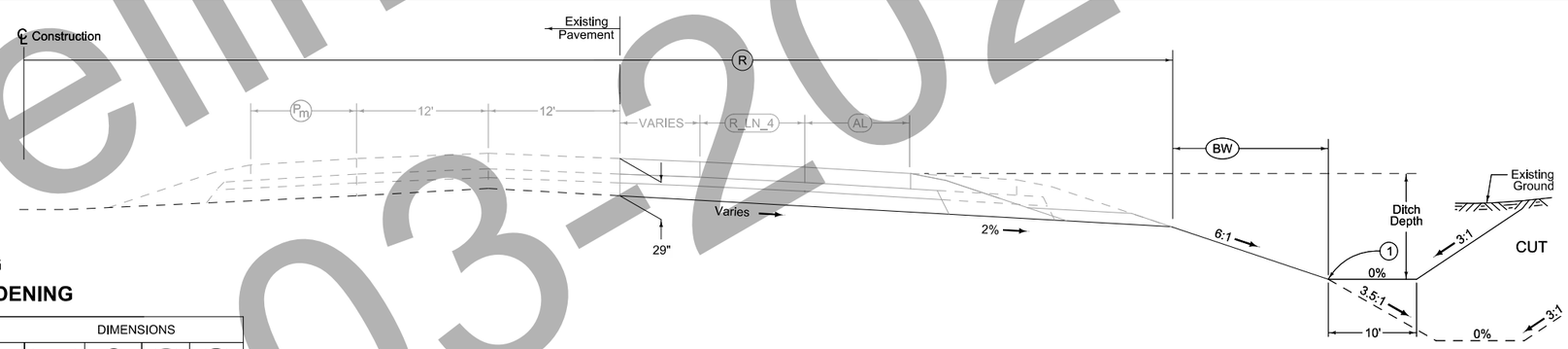
Normal section shown may be modified appropriately in areas of superelevated curves or other locations specifically designated by the Engineer.

See Plan & Profiles 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.

GRADING
INTERSTATE WIDENING

LOCATION			DIMENSIONS				
ROAD IDENTIFICATION	STATION TO STATION		R Feet	R_LN_4 Feet	AL Feet	P_o Feet	BW Feet
I-380	951+92.95	954+80.00	VARIES	12	12	6	VARIES
I-380	954+80.00	955+50.00	VARIES	12	12-18.2	6	11.70
I-380	984+72.54	986+32.69	VARIES	12	18.4-12	6	VARIES
I-380	986+32.69	989+32.75	102.48	12	12	6	10.67



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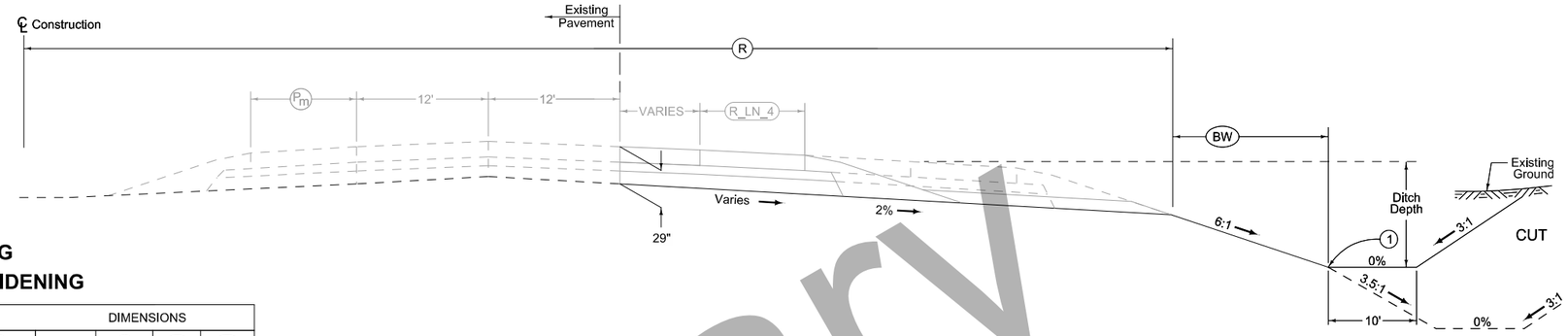
GRADING
INTERSTATE WIDENING

LOCATION			DIMENSIONS				
ROAD IDENTIFICATION	STATION TO STATION		R Feet	R_LN_4 Feet	AL Feet	P_o Feet	BW Feet
I-380	989+32.75	995+32.75	VARIES	12	12	-	11.8

Preliminary
06-03-2023

INTERSTATE 380



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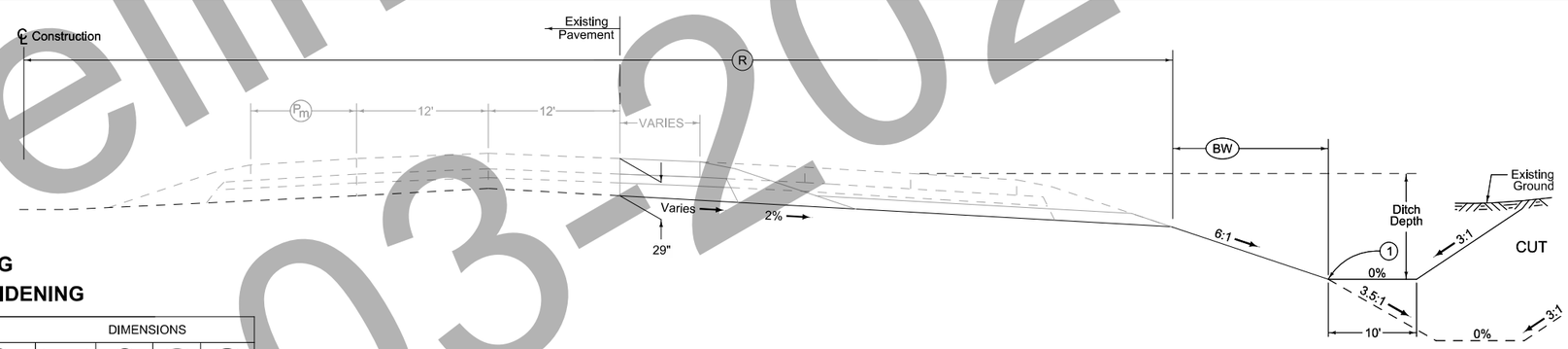
GRADING
INTERSTATE WIDENING

LOCATION			DIMENSIONS				
ROAD IDENTIFICATION	STATION TO STATION		R Feet	R_LN_4 Feet	AL Feet	P_o Feet	BW Feet
I-380	995+32.75	1001+32.75	VARIES	12	-	-	VARIES



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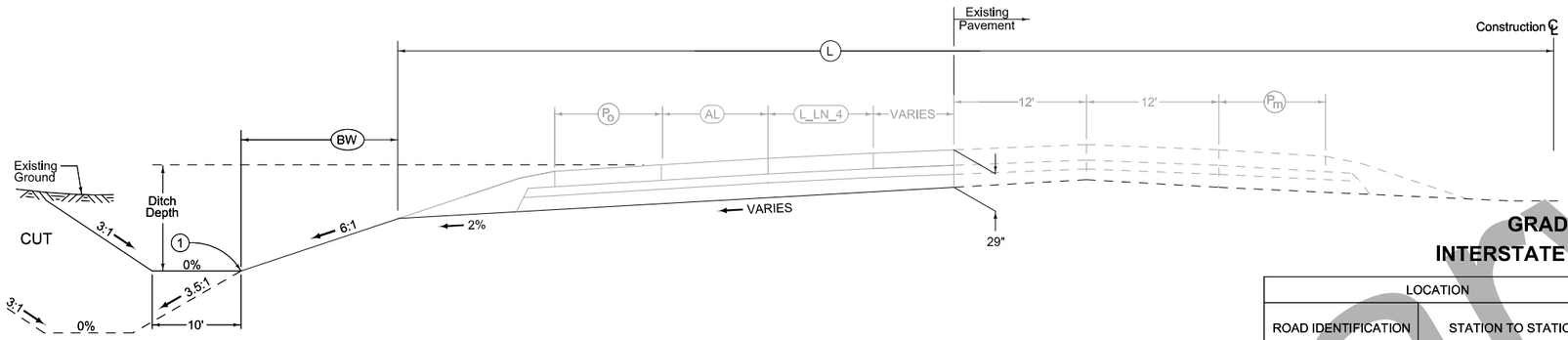
GRADING
INTERSTATE WIDENING

LOCATION			DIMENSIONS				
ROAD IDENTIFICATION	STATION TO STATION		R Feet	R_LN_4 Feet	AL Feet	P_o Feet	BW Feet
I-380	949+60.18	950+33.97	VARIES	-	-	-	VARIES
I-380	955+50.00	955+70.00	VARIES	-	-	-	-
I-380	984+23.00	984+72.54	VARIES	-	-	-	-
I-380	1001+32.75	1003+21.93	VARIES	-	-	-	VARIES

Preliminary
06-03-2023

INTERSTATE 380



GRADING
INTERSTATE WIDENING

LOCATION			DIMENSIONS				
ROAD IDENTIFICATION	STATION TO STATION		L Feet	L_LN_4 Feet	AL Feet	P_o Feet	BW Feet
I-380	983+98.95	988+18.94	VARIES	12	39.9-12	6	10.7
I-380	988+18.94	989+09.14	102.48	12	12	6	10.7

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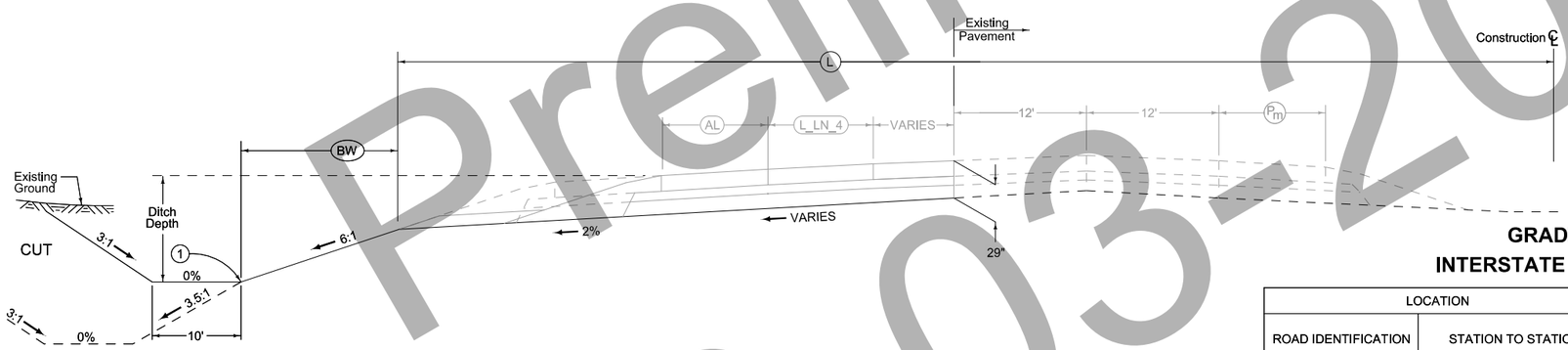

GRADING
INTERSTATE WIDENING

LOCATION			DIMENSIONS				
ROAD IDENTIFICATION	STATION TO STATION		L Feet	L_LN_4 Feet	AL Feet	P_o Feet	BW Feet
I-380	989+09.14	990+89.14	101.35	12	12	-	VARIES

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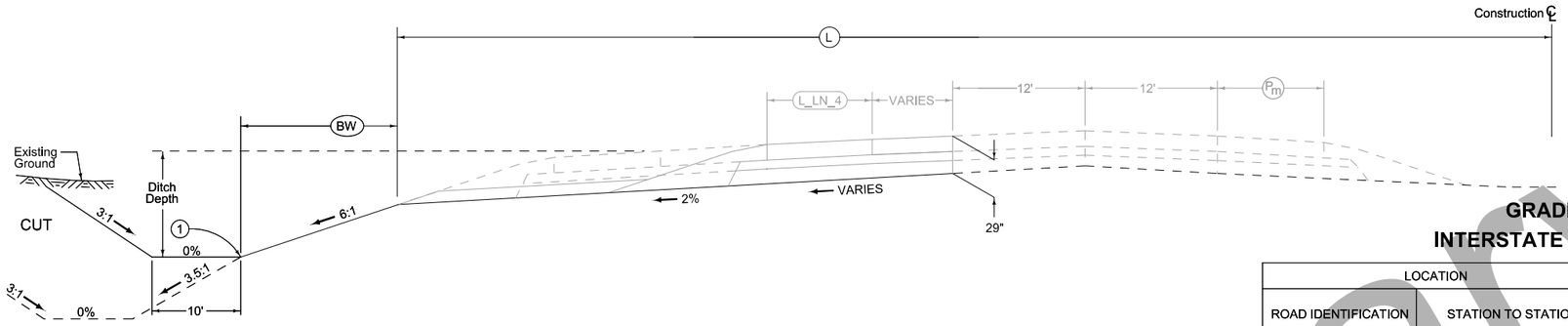
Preliminary
06-03-2023

INTERSTATE 380



GRADING
INTERSTATE WIDENING

LOCATION			DIMENSIONS				
ROAD IDENTIFICATION	STATION TO STATION		L Feet	L_LN_4 Feet	AL Feet	P_D Feet	BW Feet
I-380	990+89.14	992+49.16	100.38	12	-	-	VARIES

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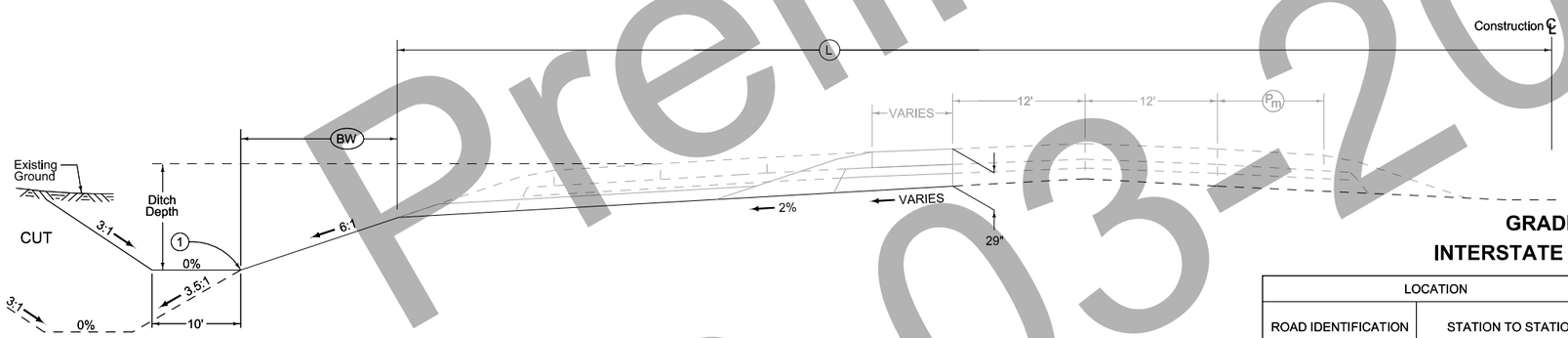

GRADING
INTERSTATE WIDENING

LOCATION			DIMENSIONS				
ROAD IDENTIFICATION	STATION TO STATION		L Feet	L_LN_4 Feet	AL Feet	P_D Feet	BW Feet
I-380	946+61.39	947+31.42	VARIES	-	-	-	VARIES
I-380	992+49.16	993+23.01	VARIES	-	-	-	VARIES

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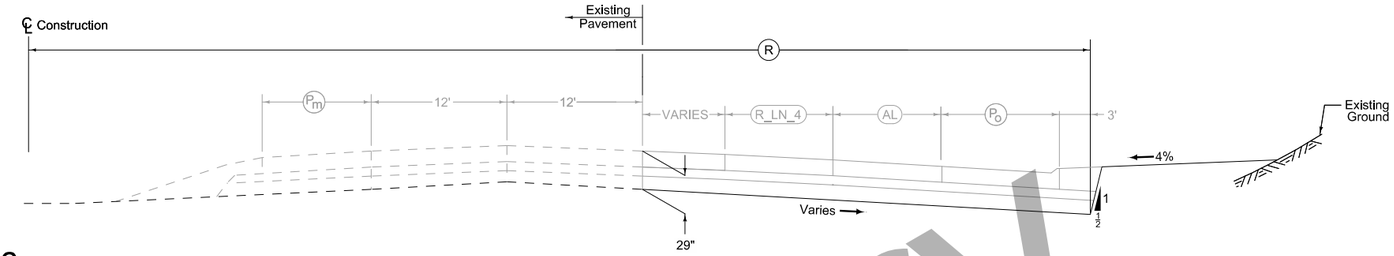
(1) Refer to project plan and cross sections for specific location of foreslope change.

Preliminary
06-03-2023



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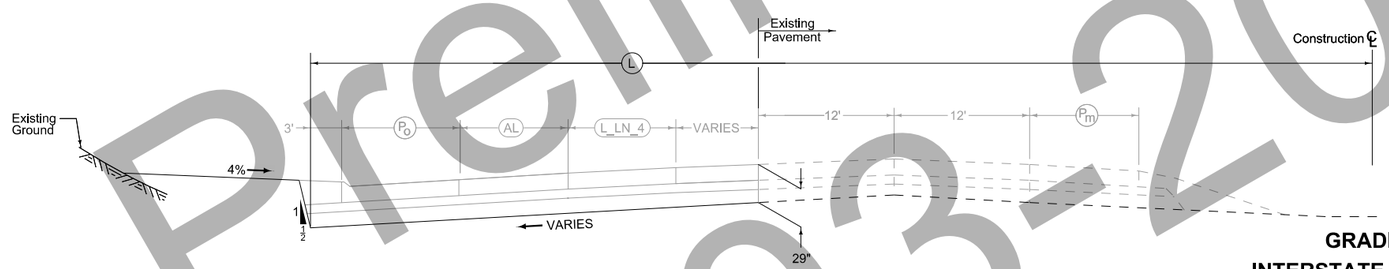
(1) Refer to project plan and cross sections for specific location of foreslope change.

GRADING
INTERSTATE WIDENING

LOCATION			DIMENSIONS			
ROAD IDENTIFICATION	STATION TO STATION		R Feet	R_LN_4 Feet	AL Feet	Po Feet
I-380	950+34.12	951+92.45	VARIES	12	12	7



GRADING
INTERSTATE WIDENING

LOCATION			DIMENSIONS			
ROAD IDENTIFICATION	STATION TO STATION		L Feet	L_LN_4 Feet	AL Feet	Po Feet
I-380	947+31.42	957+40.00	VARIES	12	VARIES	7
I-380	957+40.00	957+19.23	VARIES	12	12-20.1	7
I-380	974+18.56	974+41.99	VARIES	12	0	18
I-380	974+41.99	974+92.04	VARIES	12	0	18-13
I-380	974+92.04	983+98.95	VARIES	12	0	13

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

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Preliminary
06-03-2023

DITCH GRADING

LOCATION				
ROAD IDENTIFICATION	STATION TO STATION		S1 %	S2 %
I-380	944+00.00	944+50.00	10 - 20	16.67 - 25
	944+50.00	946+30.79	20	25

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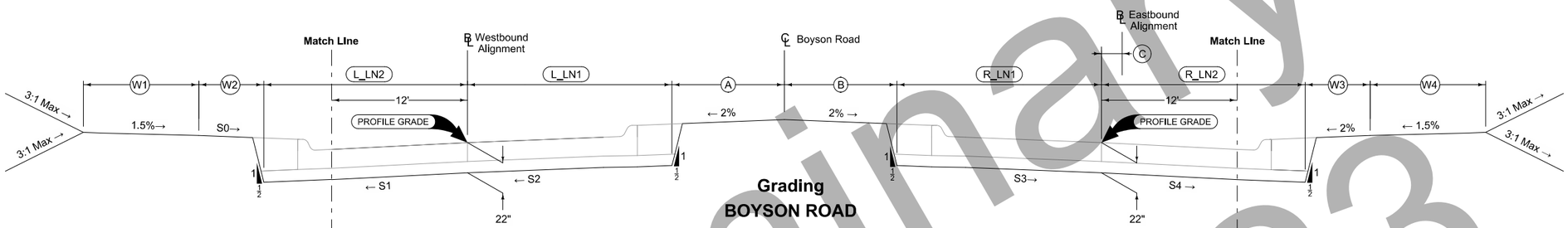
(1) Refer to project plan and cross sections for specific location of foreslope change.

Preliminary
06-03-2023

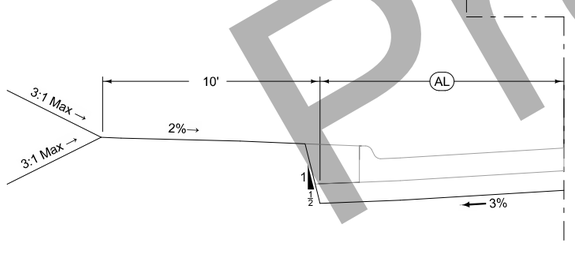
INTERSTATE 380

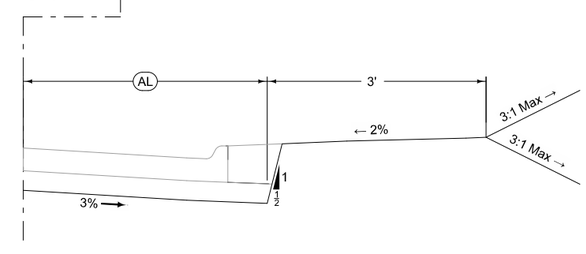


Grading
BOYSON ROAD

LOCATION		DIMENSIONS							
W.B. BEGIN STATION	W.B. END STATION	S0 %	S1 %	S2 %	L_LN2 Feet	L_LN1 Feet	A Feet	W1 Feet	W2 Feet
8962+32.60	8962+60.00	VARIES	1.5-2	1.5-2	4	12	VARIES	12	VARIES
8962+60.00	8963+59.40	VARIES	2	2	4	12	VARIES	12	VARIES
8963+59.40	8964+79.40	VARIES	2	2	4-12	12	VARIES	12	VARIES
8964+79.40	8968+58.75	VARIES	2	2	12	12	VARIES	12	6
8968+58.75	8969+72.89	VARIES	2	2	12-15	12-15	VARIES	12	VARIES
8976+29.28	8977+58.42	VARIES	*	*	15-12	15-12	VARIES	VARIES	VARIES
8977+58.42	8979+82.85	VARIES	*	*	12	12	VARIES	VARIES	VARIES

*Slopes are variable between width transitions. Refer to L Sheets for slopes.





LOCATION		DIMENSIONS							
E.B. BEGIN STATION	E.B. END STATION	S3 %	S4 %	R_LN1 Feet	R_LN2 Feet	B Feet	C Feet	W3 Feet	W4 Feet
7962+03.01	7962+09.24	1.5-2	1.5-2	12	4	VARIES	1.66	VARIES	VARIES
7962+09.24	7963+53.85	2	2	12	4	VARIES	1.66	VARIES	VARIES
7963+53.85	7965+75.00	2	2	11-12	4-12	VARIES	1.66-0	VARIES	VARIES
7965+75.00	7968+42.66	2	2	12	12	VARIES	0	VARIES	VARIES
7968+42.66	7969+71.75	2	2	12-15	12-15	VARIES	0	VARIES	VARIES
7976+28.70	7977+58.18	*	*	15-12	15-12	VARIES	0	VARIES	VARIES
7977+58.18	7977+78.90	*	*	12	12	VARIES	0	VARIES	VARIES
7977+78.90	7979+43.74	*	*	12	12	VARIES	0	6	12
7979+43.74	7979+89.23	*	*	12	12	VARIES	0	6	12

*Slopes are variable between width transitions. Refer to L Sheets for slopes.

Grading
Auxiliary Lane

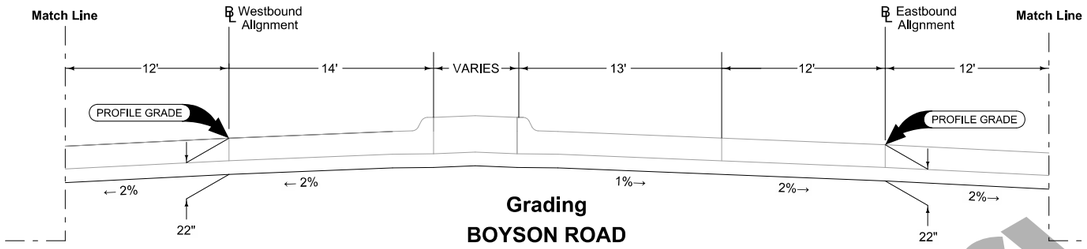
LOCATION			
Direction of Travel	BEGIN STATION	END STATION	AL Feet

Grading
Auxiliary Lane

LOCATION			
Direction of Travel	BEGIN STATION	END STATION	AL Feet
EB	7966+19.43	7967+99.43	0-12
EB	7967+99.43	7968+38.13	12

BOYSON ROAD

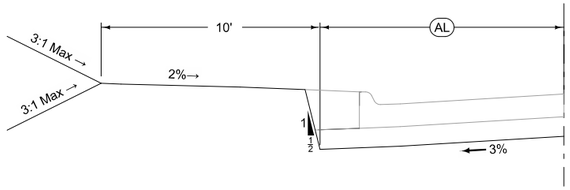
Preliminary
06-05-2023



Grading
BOYSON ROAD

LOCATION	
W.B. BEGIN STATION	W.B. END STATION
8979+82.85	8980+74.63

LOCATION	
E.B. BEGIN STATION	E.B. END STATION
7979+89.23	7980+84.84

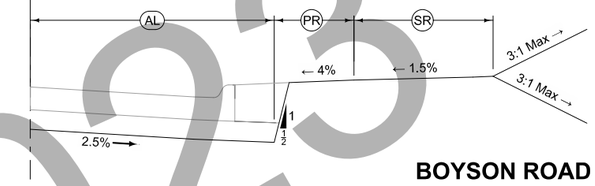


Grading
Auxiliary Lane

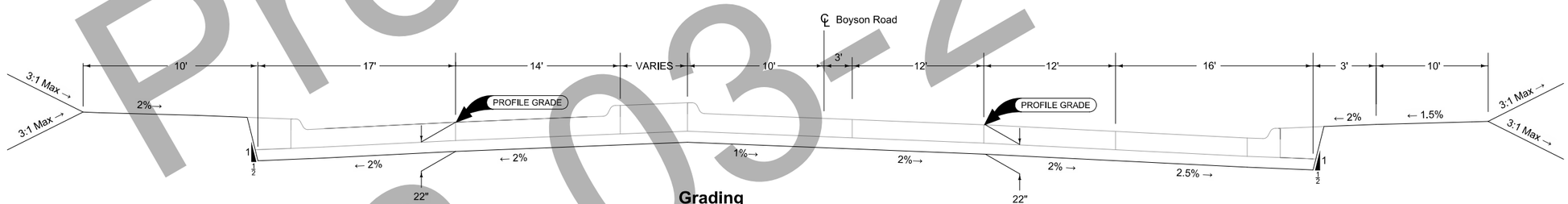
Direction of Travel	BEGIN STATION	END STATION	AL Feet
EB	8977+65.38	8978+92.94	17
EB	8978+92.95	8980+12.94	17-0

Grading
Auxiliary Lane

LOCATION			
Direction of Travel	BEGIN STATION	END STATION	AL Feet
EB	7978+52.78	7979+43.90	0-16
EB	7979+43.90	7980+69.23	16



BOYSON ROAD

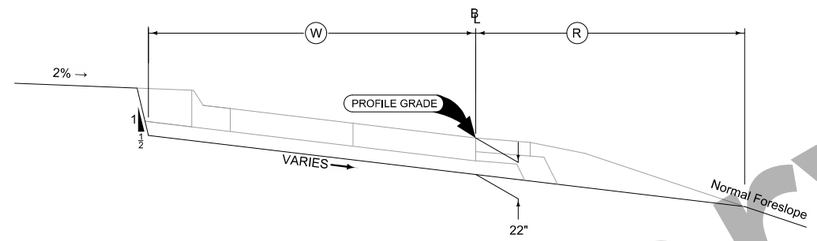


Grading
BOYSON ROAD

LOCATION				
W.B. BEGIN STATION	W.B. END STATION	E.B. BEGIN STATION	E.B. END STATION	Curb Type See PV-102
8979+82.85	8980+74.36	7979+89.23	7980+84.84	6" STANDARD

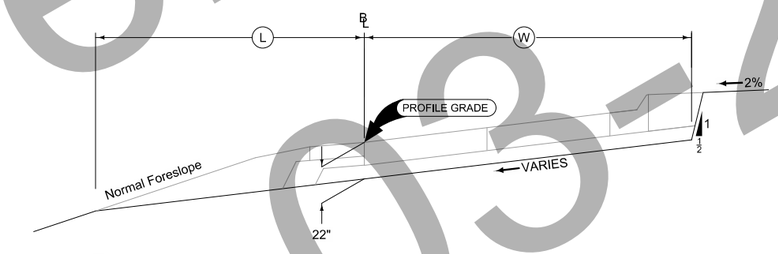
BOYSON ROAD

Preliminary
06-03-2023



Loop Grading

LOCATION				
ROADWAY	BEGIN STATION	END STATION	W Feet	R Feet
RAMP A - EAST	13974+29.19	13975+59.17	39	VARIES
RAMP B - EAST	25970+08.62	25971+32.68	39	VARIES
RAMP C - EAST	14973+04.17	14973+64.65	22	VARIES
RAMP D - EAST	26972+68.69	26974+17.15	22	VARIES



Loop Grading

LOCATION				
ROADWAY	BEGIN STATION	END STATION	W Feet	L Feet
RAMP A - WEST	23974+23.62	23975+58.10	22	VARIES
RAMP B - WEST	15970+18.47	15971+73.62	22	17.8
RAMP C - WEST	24971+27.55	24973+14.85	22	17.8
RAMP D - WEST	16972+43.54	16973+60.46	22	19.5

Preliminary
06-03-2023

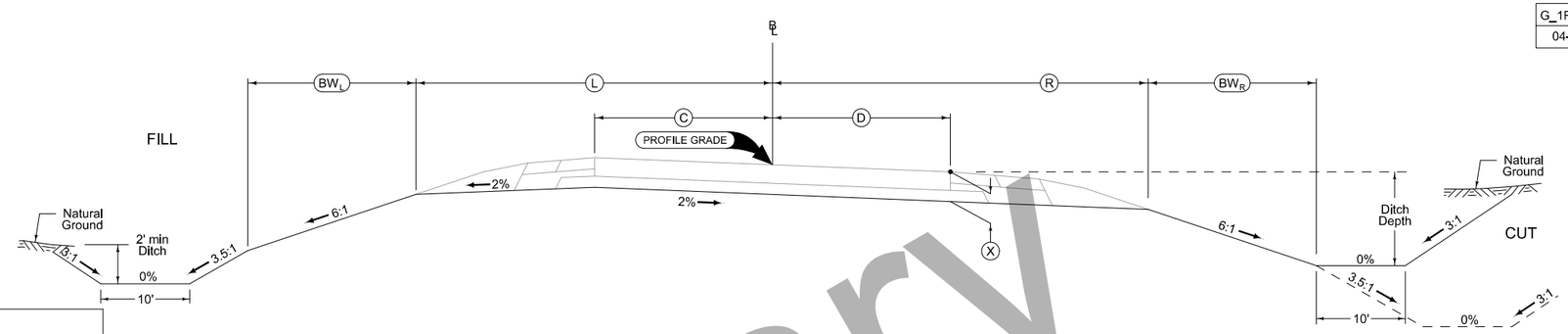
BOYSON ROAD

G_1R_Grade
04-15-14

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



LOCATION				DIMENSIONS						
INTERCHANGE	RAMP	STATION TO STATION		L Feet	R Feet	C Feet	D Feet	X Inches	BW_L Feet	BW_R Feet
BOYSON ROAD	A	3976+10.17	3976+69.82	39.33	VARIES	17	34	22	16.3	VARIES
BOYSON ROAD	A	3976+69.82	3978+81.22	39.3-19.5	55.3-33.3	17-2.8	34-19	22	16.3-16.8	VARIES
BOYSON ROAD	A	3978+81.22	3978+93.69	VARIES	VARIES	2.8-2	19	22	16.8	VARIES
BOYSON ROAD	A	3978+93.69	3979+09.44	VARIES	VARIES	2	19	22	16.8	VARIES
BOYSON ROAD	A	3979+09.44	3979+23.52	19.5	33.3-32	0	19-16	22	16.8	VARIES
BOYSON ROAD	A	3979+23.52	3983+98.94	19.5	32-23	0	16	22	16.8	VARIES
BOYSON ROAD	B	5955+39.89	5965+04.84	30.3-33.9	20-21.5	16	0	22	VARIES	16.6
BOYSON ROAD	B	5965+04.84	5965+19.84	33.9-36.8	21.5	16-17	2	22	VARIES	VARIES
BOYSON ROAD	B	5965+19.84	5965+36.61	36.8	21.5	19	2	22	VARIES	VARIES
BOYSON ROAD	B	5965+36.61	5965+49.84	36.8	21.5	19	2-2.8	22	VARIES	VARIES
BOYSON ROAD	B	5965+49.84	5967+74.84	36.8-51.9	21.5-39.5	19-34	2.8-19	22	16.9	16.6
BOYSON ROAD	B	5967+74.84	5969+56.58	51.9-54.6	39.5-39.9	34	19	22	16.9-17.3	16.6
BOYSON ROAD	C	4964+95.96	4969+56.25	9.1-19.5	39.7-51.8	0	23.7-34	22	0-18	20.8-17.8
BOYSON ROAD	C	4969+56.25	4970+75.87	19.5	51.8	0	34	22	18	17.8

LOCATION				DIMENSIONS						
INTERCHANGE	RAMP	STATION TO STATION		L Feet	R Feet	C Feet	D Feet	X Inches	BW_L Feet	BW_R Feet
BOYSON ROAD	D	6974+76.43	6975+99.01	51.8	19.5	34	0	22	16.8	16.7
BOYSON ROAD	D	6975+99.01	6982+75.04	51.8-32.3	19.5-18.9	34-19	0	22	VARIES	VARIES
BOYSON ROAD	D	6982+75.04	6983+65.17	32.3	18.9	19	0	22	VARIES	VARIES
BOYSON ROAD	D	6983+65.17	6984+10.24	30.3	18.9	17-16	0	22	VARIES	16.7
BOYSON ROAD	D	6984+10.24	6984+75.11	VARIES	18.9	16	0	22	VARIES	16.7

G_1R_Grade
04-15-14

Section view is in direction of traffic.

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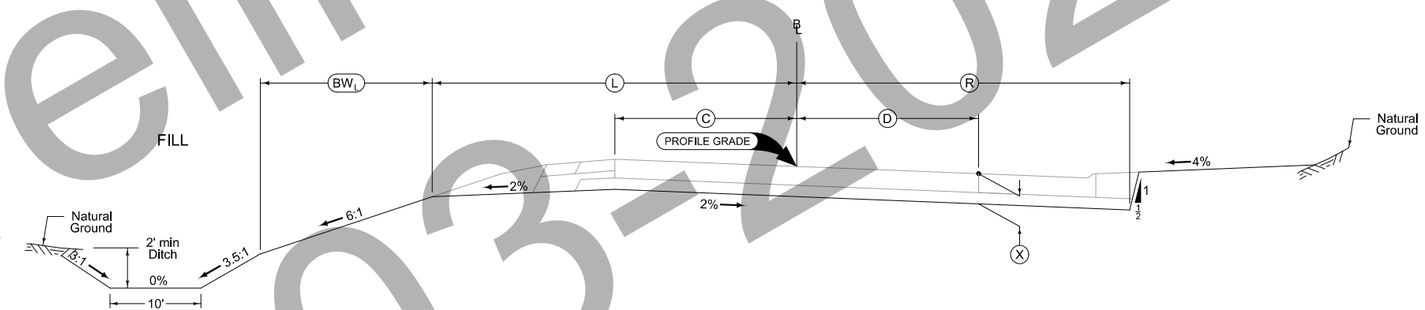
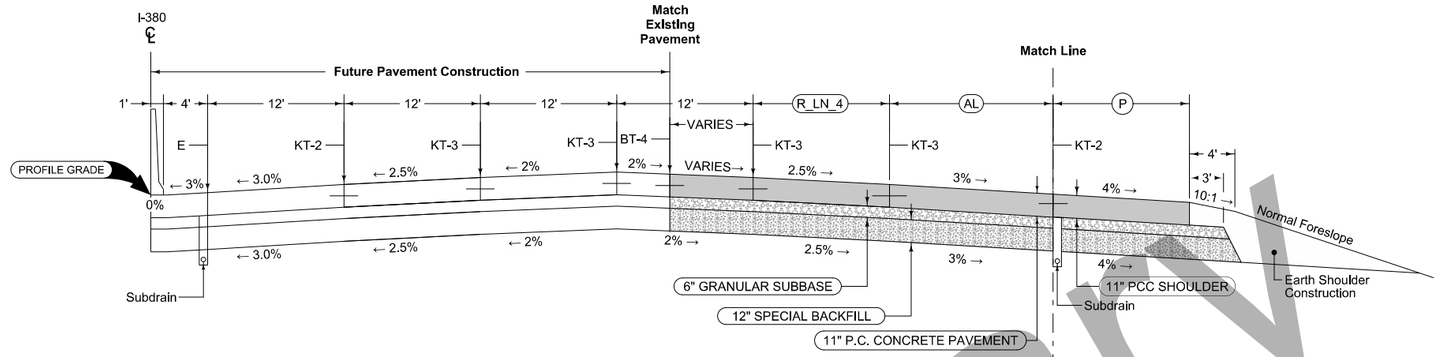
RAMP GRADING



LOCATION				DIMENSIONS					
INTERCHANGE	RAMP	STATION TO STATION		L Feet	R Feet	C Feet	D Feet	X Inches	BW_L Feet
BOYSON ROAD	C	4959+17.51	4961+52.11	32.6	9.1	16	0	22	VARIES
BOYSON ROAD	C	4961+52.11	4961+88.50	32.6-34	9.1	16-17	0	22	VARIES
BOYSON ROAD	C	4961+88.50	4962+86.13	36	9.1	19	0	22	VARIES
BOYSON ROAD	C	4962+86.13	4964+95.96	VARIES	9.1	19-23.7	0	22	VARIES

Preliminary
06-03-2023

BOYSON ROAD



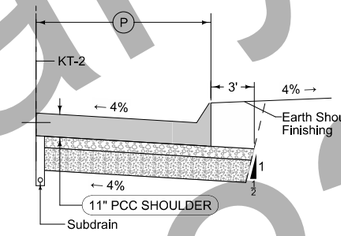
ROADWAY WIDENING
INTERSTATE 380

LOCATION			DIMENSIONS		
ROAD IDENTIFICATION	STATION TO STATION		R_LN_4 Feet	AL Feet	P Feet
I-380	950+34.12	951+92.45	12	12	-
I-380	951+92.45	954+80.00	12	12	6
I-380	954+80.00	955+50.00	12	12-18.1	6
I-380	984+72.54	986+32.69	12	18.4-12	6
I-380	986+32.69	989+32.75	12	12	6

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

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

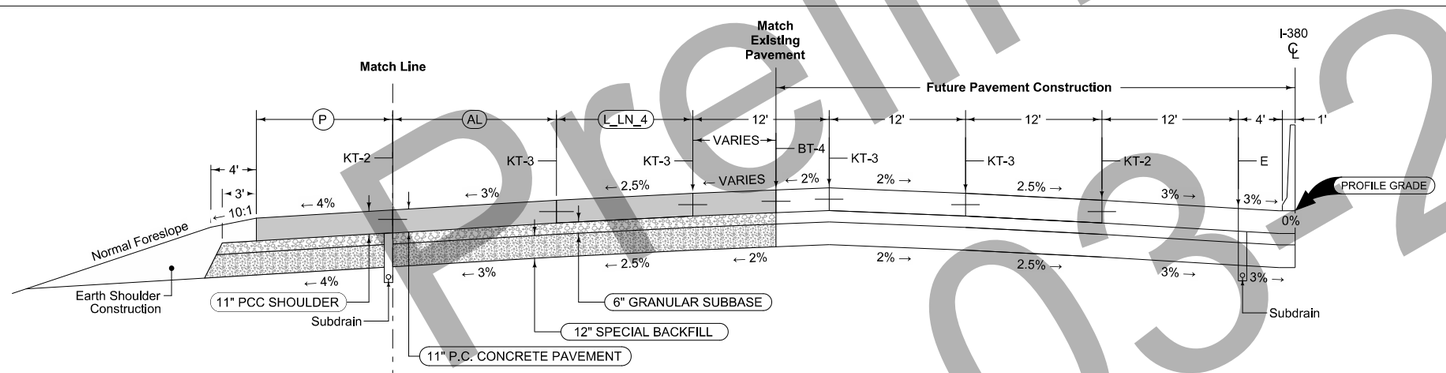
(1) Refer to project plan and cross sections for specific location of foreslope change.

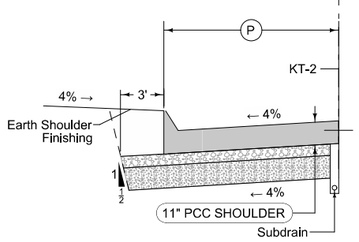


Section shown in the direction of traffic.

Transverse joints: See L Sheets.
Longitudinal joint: L-2

ROADWAY	BEGIN STATION	END STATION	P Feet	Curb Type See PV-102
I-380	950+32.20	951+92.62	7	4" SLOPED CURB





Section shown in the direction of traffic.

Transverse joints: See L Sheets.
Longitudinal joint: L-2

ROADWAY	BEGIN STATION	END STATION	P Feet	Curb Type See PV-102
I-380	947+31.42	959+19.25	7	4" SLOPED CURB
I-380	974+18.56	974+41.99	18	4" SLOPED CURB
I-380	974+41.99	974+92.04	18-13	4" SLOPED CURB
I-380	974+92.04	983+98.95	13	4" SLOPED CURB

ROADWAY WIDENING
INTERSTATE 380

LOCATION			DIMENSIONS		
ROAD IDENTIFICATION	STATION TO STATION		L_LN_4 Feet	AL Feet	P Feet
I-380	947+31.42	957+40.00	12	12	-
I-380	957+40.00	959+19.25	12	12- 20	-
I-380	974+18.56	983+98.95	12	-	-
I-380	983+98.95	988+18.94	12	39.9-12	6
I-380	988+18.94	989+09.14	12	12	6

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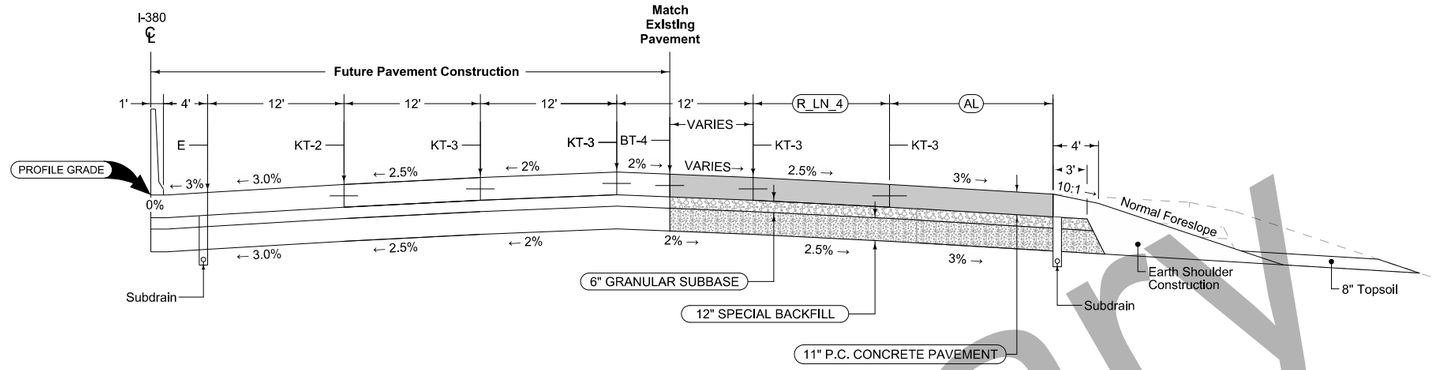
See Plan & Profiles sheets and cross sections for additional details of ditches and backslopes.

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

Preliminary 06-03-2024



ROADWAY WIDENING
INTERSTATE 380

LOCATION			DIMENSIONS		
ROAD IDENTIFICATION	STATION TO STATION		R_LN_4 Feet	AL Feet	P Feet
I-380	989+32.75	995+32.75	12	12	-

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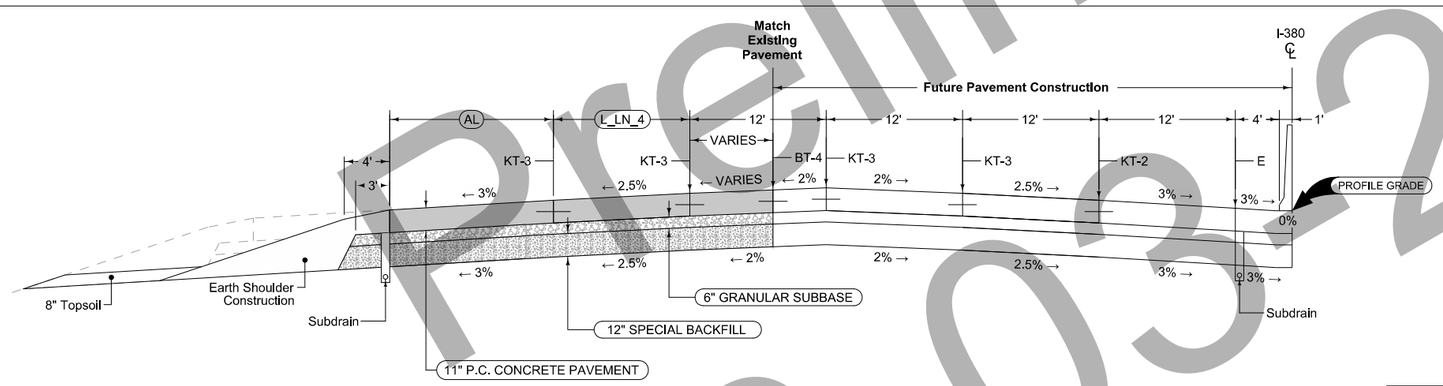
(1) Refer to project plan and cross sections for specific location of foreslope change.



ROADWAY WIDENING
INTERSTATE 380

LOCATION			DIMENSIONS		
ROAD IDENTIFICATION	STATION TO STATION		L_LN_4 Feet	AL Feet	P Feet
I-380	989+09.14	990+89.14	12	12	-

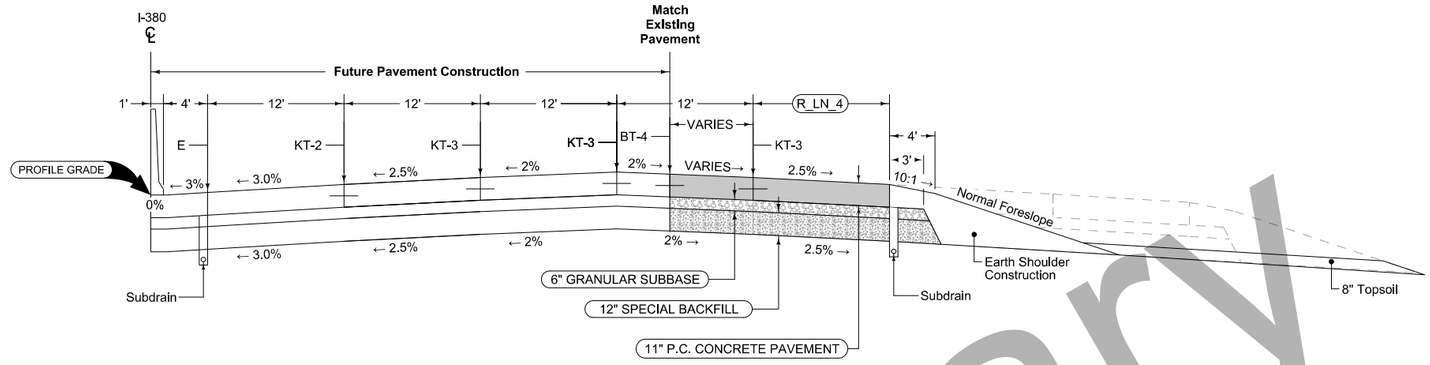
Normal section shown may be modified appropriately in areas of superelevated curves or other locations specifically designated by the Engineer.

See Plan & Profiles 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.

Preliminary
06-03-2023

INTERSTATE 380



ROADWAY WIDENING
INTERSTATE 380

LOCATION			DIMENSIONS		
ROAD IDENTIFICATION	STATION TO STATION		R_LN_4 Feet	AL Feet	P Feet
I-380	995+32.75	1001+32.75	12	-	-

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

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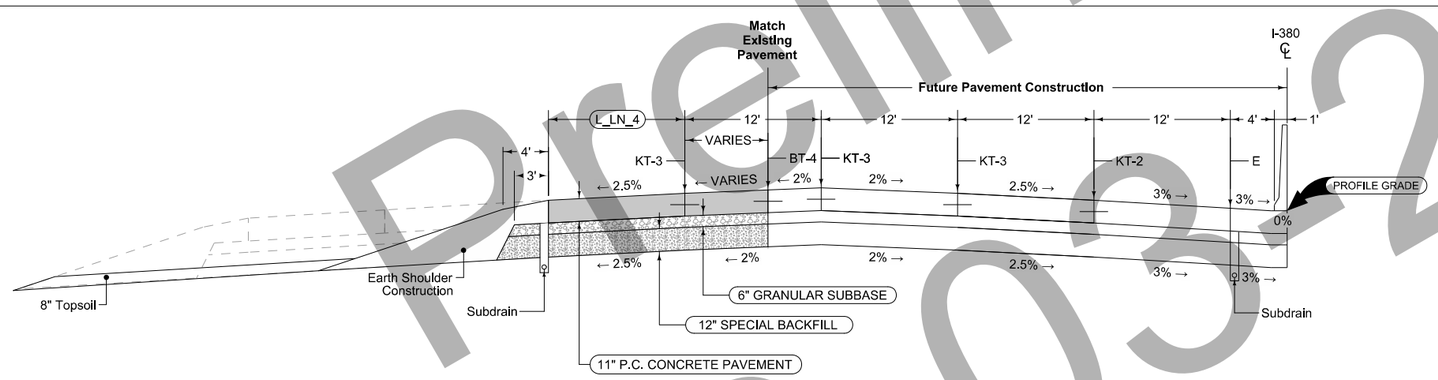
(1) Refer to project plan and cross sections for specific location of foreslope change.



ROADWAY WIDENING
INTERSTATE 380

LOCATION			DIMENSIONS		
ROAD IDENTIFICATION	STATION TO STATION		L_LN_4 Feet	AL Feet	P Feet
I-380	990+89.14	992+49.16	12	-	-

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

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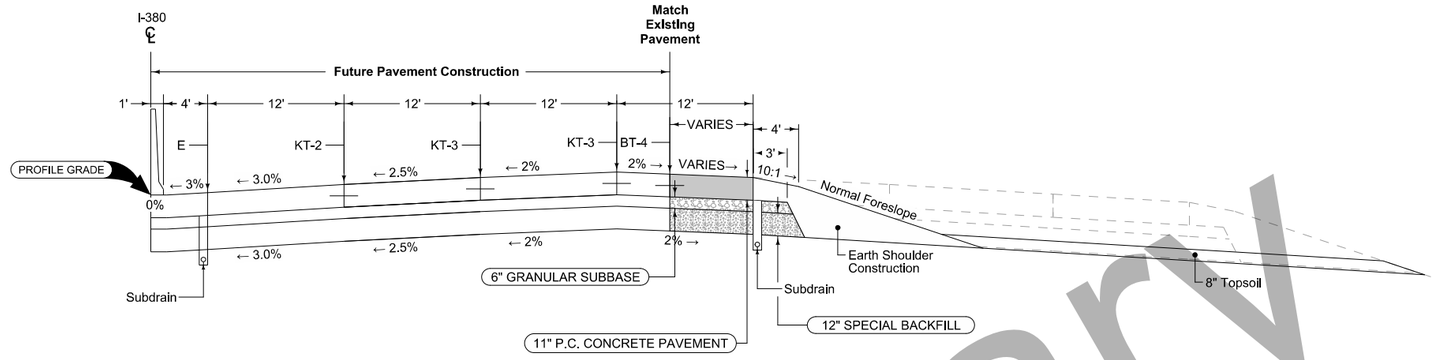
(1) Refer to project plan and cross sections for specific location of foreslope change.

Preliminary
06-03-2023

INTERSTATE 380



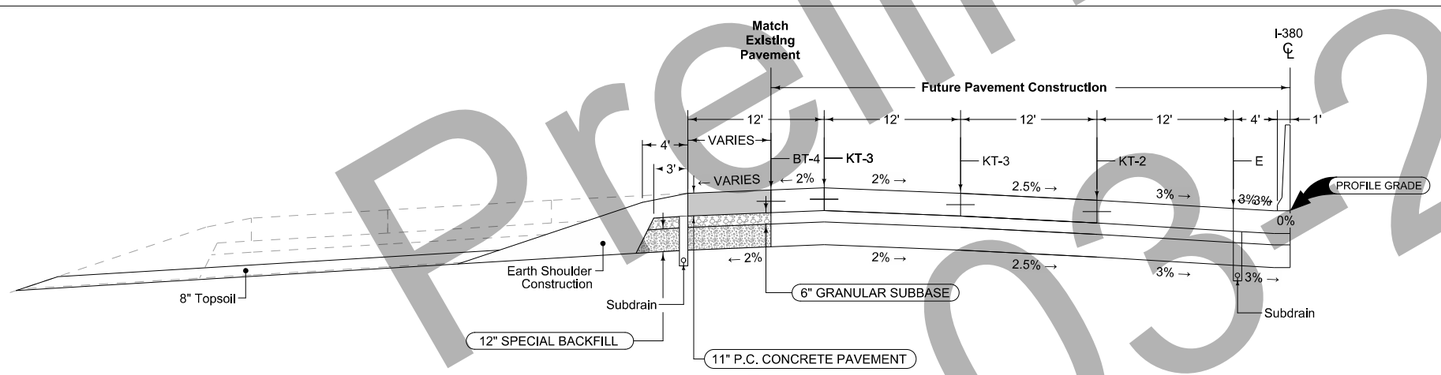
ROADWAY WIDENING
INTERSTATE 380

LOCATION			DIMENSIONS		
ROAD IDENTIFICATION	STATION TO STATION		R_LN_4 Feet	AL Feet	P Feet
I-380	949+60.18	950+33.97	-	-	-
I-380	950+50.00	955+70.00	-	-	-
I-380	984+23.00	984+72.54	-	-	-
I-380	1001+32.95	1003+22.13	-	-	-

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

See Plan & Profiles 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.



ROADWAY WIDENING
INTERSTATE 380

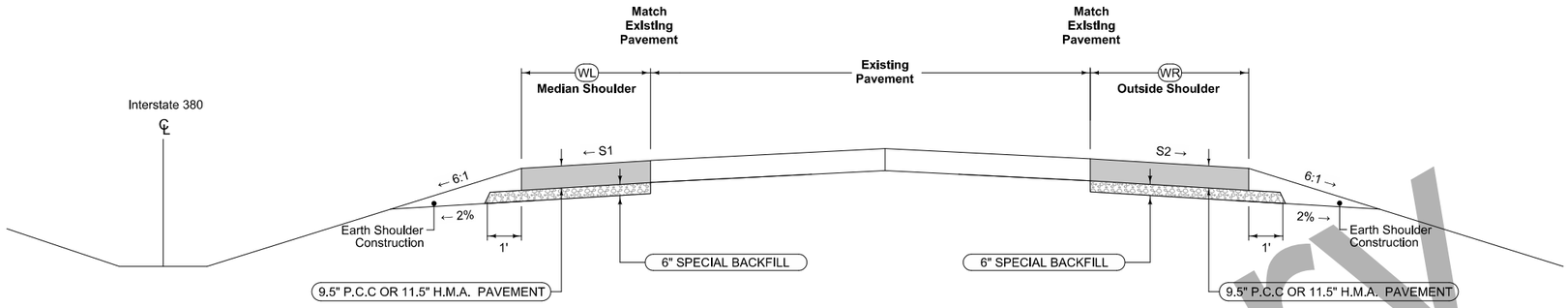
LOCATION			DIMENSIONS		
ROAD IDENTIFICATION	STATION TO STATION		L_LN_4 Feet	AL Feet	P Feet
I-380	946+61.39	947+31.42	-	-	-
I-380	992+49.16	993+23.01	-	-	-
			-	-	-

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

See Plan & Profiles 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.

Preliminary
06-03-2023

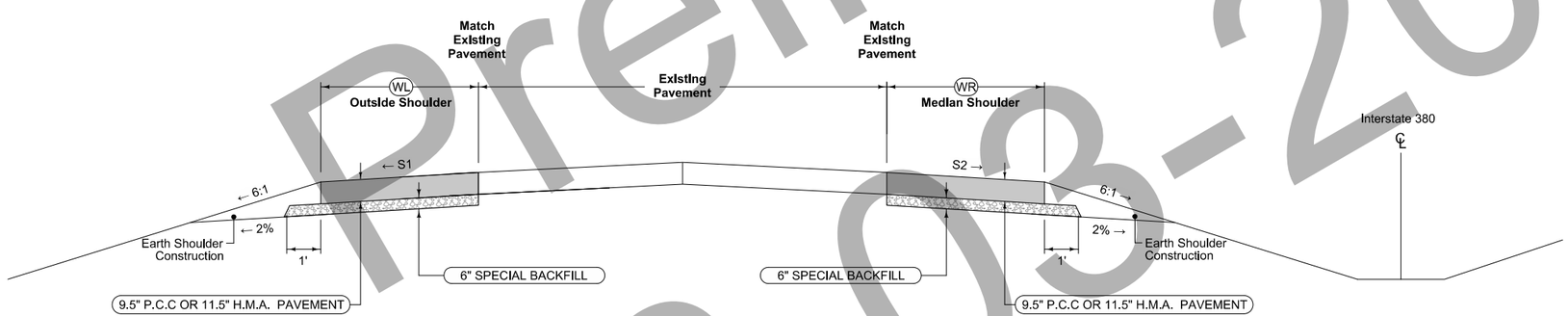


SHOULDER STRENGTHENING
INTERSTATE 380 NORTHBOUND

LOCATION			DIMENSIONS	
ROAD IDENTIFICATION	STATION TO STATION		S1 %	WL Feet
I-380	942+00.22	944+00.00	6%	-
I-380	944+00.00	944+50.00	6-8%	-
I-380	944+50.00	955+85.00	8%	-
I-380	955+85.00	956+35.00	8-6%	-
I-380	956+35.00	961+43.16	6%	-
I-380	942+00.22	945+23.39	-	6.75
I-380	945+23.39	949+80.95	-	6.75-9.5
I-380	949+80.95	955+63.56	-	9.5
I-380	955+63.56	957+97.55	-	9.5-6.75
I-380	957+97.55	961+43.16	-	6.75
I-380	978+53.12	981+05.39	6%	6.75
I-380	981+05.39	982+04.55	6%	6.75-9.0
I-380	982+04.55	1003+20.04	6%	9.0
I-380	1003+20.04	1004+33.25	6%	9.0-6.75
I-380	1004+33.25	1007+96.92	6%	6.75

SHOULDER STRENGTHENING
INTERSTATE 380 NORTHBOUND

LOCATION			DIMENSIONS	
ROAD IDENTIFICATION	STATION TO STATION		S2 %	WR Feet
I-380	960+07.50	983+96.81	5.0	11



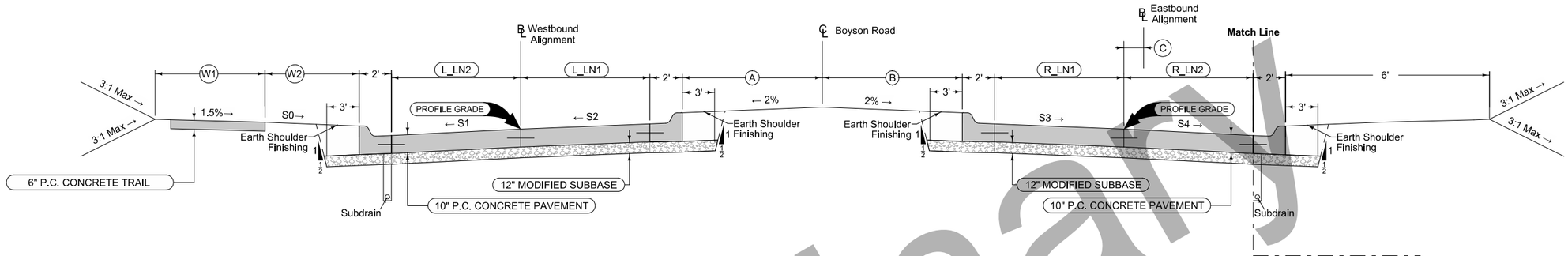
SHOULDER STRENGTHENING
INTERSTATE 380 SOUTHBOUND

LOCATION			DIMENSIONS	
ROAD IDENTIFICATION	STATION TO STATION		S1 %	WL Feet
I-380	942+00.21	974+18.56	5.0	11

SHOULDER STRENGTHENING
INTERSTATE 380 SOUTHBOUND

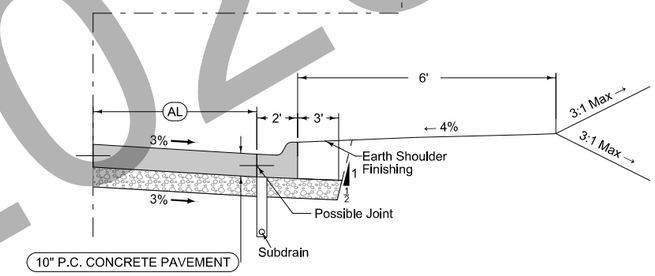
LOCATION			DIMENSIONS	
ROAD IDENTIFICATION	STATION TO STATION		S2 %	WR Feet
I-380	940+69.95	944+00.22	-	6.75
	944+00.22	946+28.00	-	6.75-9
	946+28.00	959+33.76	-	9.0
	959+33.76	960+55.83	-	9-6.75
	960+55.83	963+58.00	-	6.75
	940+69.95	942+75.00	6%	-
	942+75.00	944+30.00	6-0.5%	-
	944+30.00	955+50.00	0.5%	-
	955+50.00	958+00.00	0.5-5%	-
	958+00.00	963+58.00	5%	-
	980+77.25	982+99.51	5%	6.75
	982+99.51	984+25.16	5%	6.75-9.5
	984+25.16	995+98.06	5%	9.5
	995+98.06	997+73.37	5%	9.5-6.75
	997+73.37	1001+02.78	5%	6.75

Preliminary
06-03-2023



LOCATION		DIMENSIONS								
W.B. BEGIN STATION	W.B. END STATION	S0 %	S1 %	S2 %	L_LN2 Feet	L_LN1 Feet	A Feet	W1 Feet	W2 Feet	Curb Type See PV-102
8962+32.60	8962+60.00	VARIES	1.5-2	1.5-2	4	12	VARIES	12	VARIES	6" STANDARD
8962+60.00	8963+59.40	VARIES	2	2	4	12	VARIES	12	VARIES	6" STANDARD
8963+59.40	8964+79.40	VARIES	2	2	4-12	12	VARIES	12	VARIES	6" STANDARD
8964+79.40	8968+58.75	VARIES	2	2	12	12	VARIES	12	6	6" STANDARD
8968+58.75	8969+72.89	VARIES	*	*	12-15	12-15	VARIES	12	VARIES	6" STANDARD

*Slopes are variable between width transitions. Refer to L Sheets for slopes.



LOCATION		DIMENSIONS						
E.B. BEGIN STATION	E.B. END STATION	S3 %	S4 %	R_LN1 Feet	R_LN2 Feet	B Feet	C Feet	Curb Type See PV-102
7962+03.01	7962+09.24	1.5-2	1.5-2	12	4	VARIES	1.66	6" STANDARD
7962+09.24	7963+53.85	2	2	12	4	VARIES	1.66	6" STANDARD
7963+53.85	7965+75.00	2	2	11-12	4-12	VARIES	1.66-0	6" STANDARD
7965+75.00	7968+42.66	2	2	12	12	VARIES	0	6" STANDARD
7968+42.66	7969+71.75	*	*	12-15	12-15	VARIES	0	6" STANDARD

Auxiliary Lane

Longitudinal joint: L-2 or KT-2
Transverse joint: Match Mainline

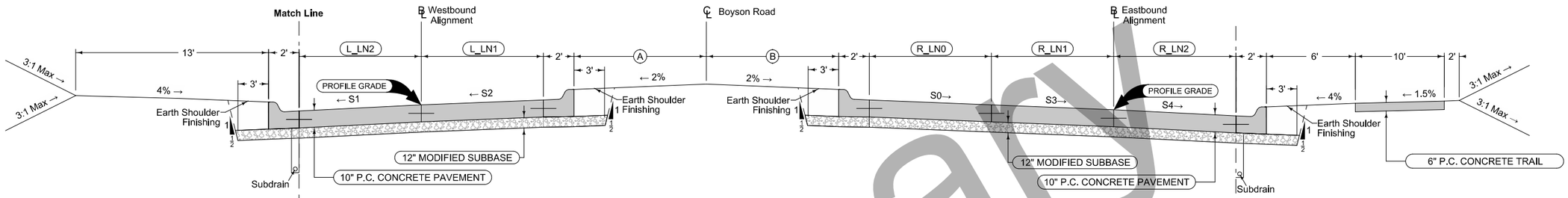
LOCATION				
Direction of Travel	BEGIN STATION	END STATION	AL Feet	Curb Type See PV-102
EB	7966+19.43	7967+99.43	0-12	6" STANDARD
EB	7967+99.43	7968+38.13	12	6" STANDARD

See Tab 100-24 or 100-25 for pavement quantities.

See Tab 112-9 for shoulder quantities.

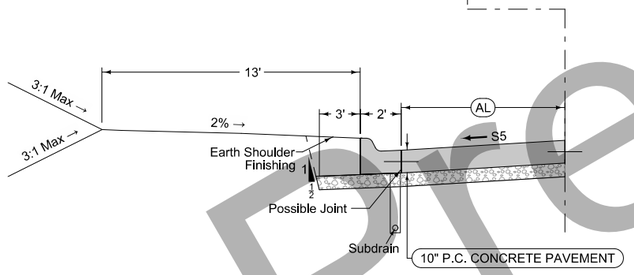
BOYSON ROAD

Preliminary
06-03-2023



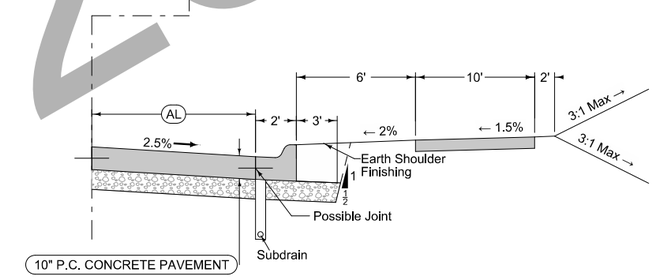
LOCATION		DIMENSIONS					
W.B. BEGIN STATION	W.B. END STATION	S1 %	S2 %	L_LN2 Feet	L_LN1 Feet	A Feet	Curb Type See PV-102
8976+29.28	8977+58.42	*	*	15-12	15-12	VARIES	6" STANDARD
8977+58.42	8979+82.85	*	*	12	12	VARIES	6" STANDARD

*Slopes are variable between width transitions. Refer to L Sheets for slopes.



LOCATION		DIMENSIONS							
E.B. BEGIN STATION	E.B. END STATION	S0 %	S3 %	S4 %	R_LN0 Feet	R_LN1 Feet	R_LN2 Feet	B Feet	Curb Type See PV-102
7976+28.70	7977+58.18	-	*	*	0	15-12	15-12	VARIES	6" STANDARD
7977+58.18	7977+78.90	-	*	*	0	12	12	VARIES	6" STANDARD
7977+78.90	7979+43.74	*	*	*	0-11	12	12	VARIES	6" STANDARD
7979+43.74	7979+89.23	*	*	*	11	12	12	VARIES	6" STANDARD

*Slopes are variable between width transitions. Refer to L Sheets for slopes.



Auxiliary Lane

Longitudinal joint: L-2 or KT-2
Transverse joint: Match Mainline

LOCATION					
Direction of Travel	BEGIN STATION	END STATION	AL Feet	S5 %	Curb Type See PV-102
WB	8977+65.39	8978+25.38	12	2-3	6" STANDARD
WB	8978+25.38	8978+92.94	12	3	6" STANDARD
WB	8978+92.95	8980+12.94	12-0	3	6" STANDARD

Auxiliary Lane

Longitudinal joint: L-2 or KT-2
Transverse joint: Match Mainline

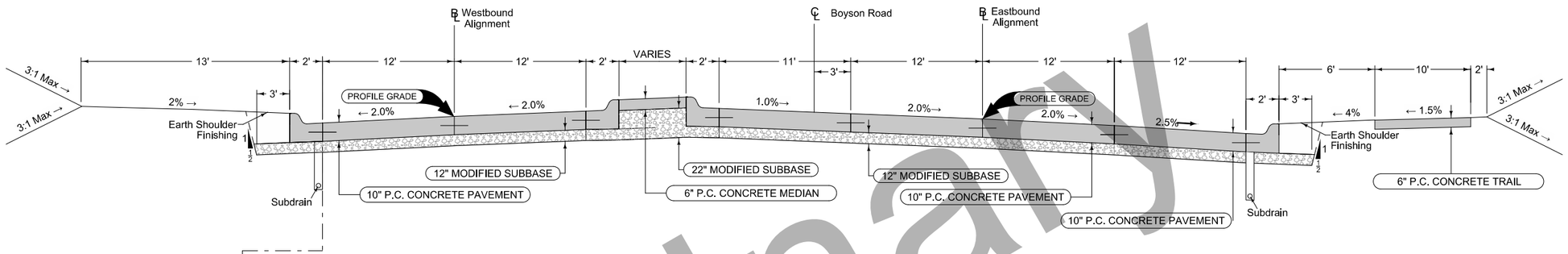
LOCATION				
Direction of Travel	BEGIN STATION	END STATION	AL Feet	Curb Type See PV-102
EB	7978+52.78	7979+43.90	0-12	6" STANDARD
EB	7979+43.90	7979+89.23	12	6" STANDARD

See Tab 100-24 or 100-25 for pavement quantities.

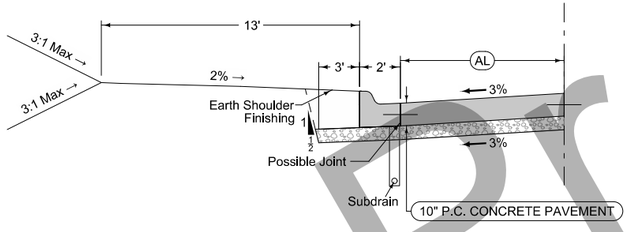
See Tab 112-9 for shoulder quantities.

BOYSON ROAD

Preliminary
06-03-2023



LOCATION				
W.B. BEGIN STATION	W.B. END STATION	E.B. BEGIN STATION	E.B. END STATION	Curb Type See PV-102
8979+82.85	8980+74.36	7979+89.23	7980+84.84	6" STANDARD



Auxiliary Lane

Longitudinal joint: L-2 or KT-2
Transverse joint: Match Mainline

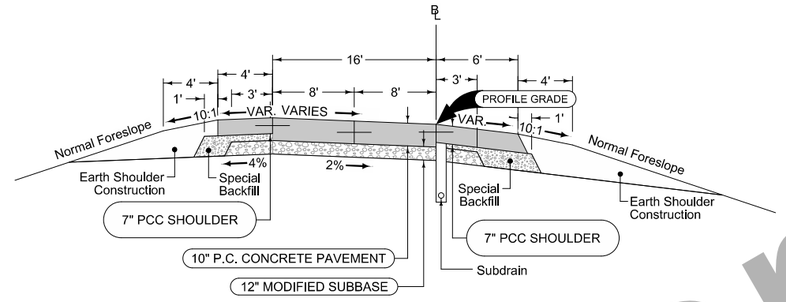
LOCATION				
Direction of Travel	BEGIN STATION	END STATION	AL Feet	Curb Type See PV-102
WB	8978+92.95	8980+12.94	12-0	6" STANDARD

See Tab 100-24 or 100-25 for pavement quantities.

See Tab 112-9 for shoulder quantities.

BOYSON ROAD

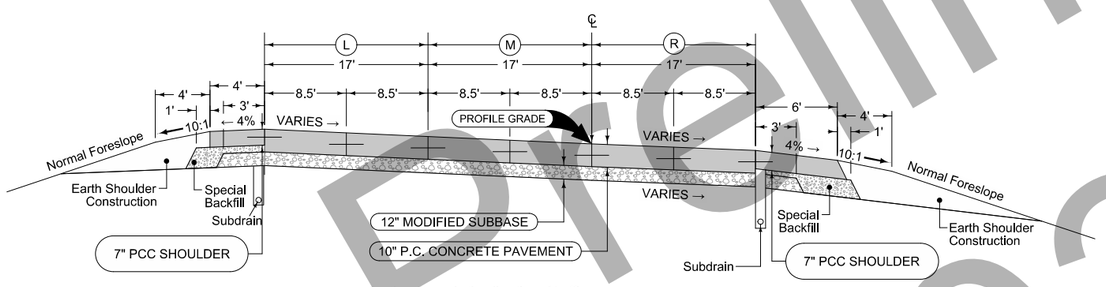
Preliminary
06-03-2023



Section shown in the direction of traffic.
Refer to L Sheets for transitions.

Ramp Jointing:
Transverse joints: See L Sheets.
Longitudinal joint: L-2

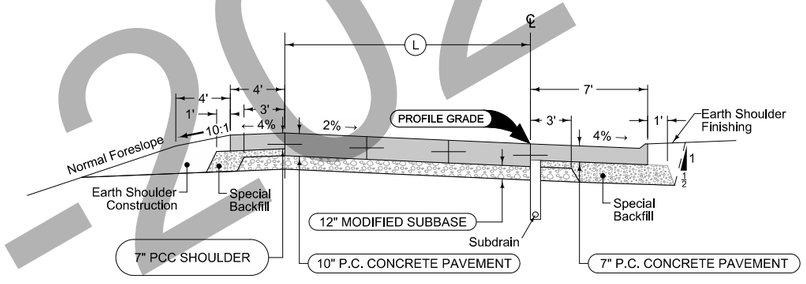
INTERCHANGE PAVEMENT		
ROADWAY	BEGIN STATION	END STATION
RAMP A - SB	3979+23.53	3983+98.94
RAMP B - NB	5955+38.39	5965+04.84
RAMP D - NB	6984+10.24	6984+75.11



Section shown in the direction of traffic.
Refer to L Sheets for transitions.

Ramp Jointing:
Transverse joints: See L Sheets.
Longitudinal joint: L-2

INTERCHANGE PAVEMENT					
ROADWAY	BEGIN STATION	END STATION	L Feet	M Feet	R Feet
RAMP A - SB	3976+10.17	3976+69.82	17	17	17
RAMP A - SB	3976+69.82	3978+81.22	17-2	17	17-2.8
RAMP A - SB	3978+81.22	3978+93.69	2	17	2.8-2
RAMP A - SB	3978+93.69	3979+09.44	2	17	2
RAMP A - SB	3979+09.44	3979+23.52	0	17-16	2
RAMP B - NB	5965+04.84	5965+19.84	0	16-17	2
RAMP B - NB	5965+19.84	5965+36.61	2	17	2
RAMP B - NB	5965+36.61	5965+49.84	2	17	2-2.8
RAMP B - NB	5965+49.84	5967+74.84	2-17	17	2.8-17
RAMP B - NB	5967+74.84	5969+56.58	17	17	17
RAMP C - SB	4964+95.96	4969+56.25	6.7-17	17	-
RAMP C - SB	4969+56.25	4970+75.87	17	17	-
RAMP D - NB	6974+76.43	6975+99.01	17	17	-
RAMP D - NB	6975+99.01	6982+75.04	17-2	17	-
RAMP D - NB	6982+75.04	6983+65.17	2	17	-
RAMP D - NB	6983+65.17	6984+10.24	2	17-16	



Section shown in the direction of traffic.
Refer to L Sheets for transitions.

Ramp Jointing:
Transverse joints: See L Sheets.
Longitudinal joint: L-2

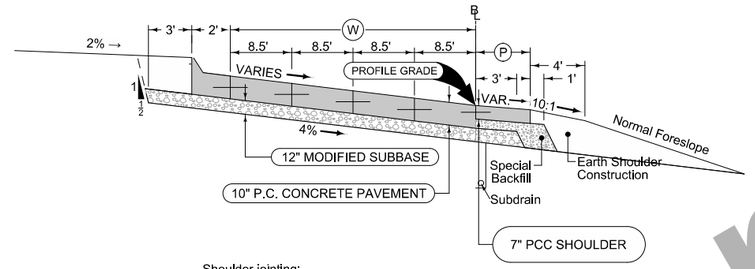
INTERCHANGE PAVEMENT			
ROADWAY	BEGIN STATION	END STATION	L Feet
RAMP C - SB	4959+17.87	4961+52.11	16
RAMP C - SB	4961+52.11	4961+88.50	16-16.8
RAMP C - SB	4961+88.50	4961+96.70	18.8-19
RAMP C - SB	4961+96.70	4964+95.96	19-23.70

See Tab 100-24 or 100-25 for pavement quantities.

See Tab 112-9 for shoulder quantities.

RAMPS - BOYSON ROAD

Preliminary
06-03-2023

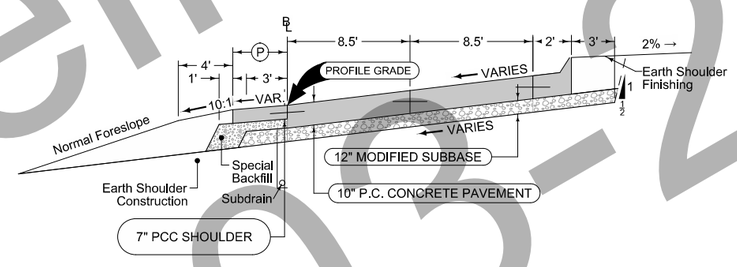


Shoulder jointing:
Longitudinal joint not required when distance from back of curb to nearest joint is less than 16':

Section shown in the direction of traffic.

Loop Jointing:
Transverse joints: See L Sheets.
Longitudinal joint: L-2

LOOP PAVEMENT					
ROADWAY	BEGIN STATION	END STATION	W Feet	P Feet	Curb Type See PV-102
RAMP A - EAST	13974+29.19	13975+59.17	34	4	4" SLOPED CURB
RAMP B - EAST	25970+08.62	25971+32.68	34	6	4" SLOPED CURB
RAMP C - EAST	14973+04.17	14973+64.65	17	6	4" SLOPED CURB
RAMP D - EAST	26972+68.69	26974+17.15	17	4	4" SLOPED CURB



Shoulder jointing:
Longitudinal joint not required when distance from back of curb to nearest joint is less than 16':

Section shown in the direction of traffic.

Loop Jointing:
Transverse joints: See L Sheets.
Longitudinal joint: L-2

LOOP PAVEMENT					
ROADWAY	BEGIN STATION	END STATION	W Feet	P Feet	Curb Type See PV-102
RAMP A - WEST	23974+23.62	23975+58.10	17	6	4" SLOPED CURB
RAMP B - WEST	15970+18.47	15971+73.62	17	4	4" SLOPED CURB
RAMP C - WEST	24971+27.55	24973+14.85	17	4	4" SLOPED CURB
RAMP D - WEST	16972+43.54	16973+60.46	17	6	4" SLOPED CURB

See Tab 100-24 or 100-25 for pavement quantities.

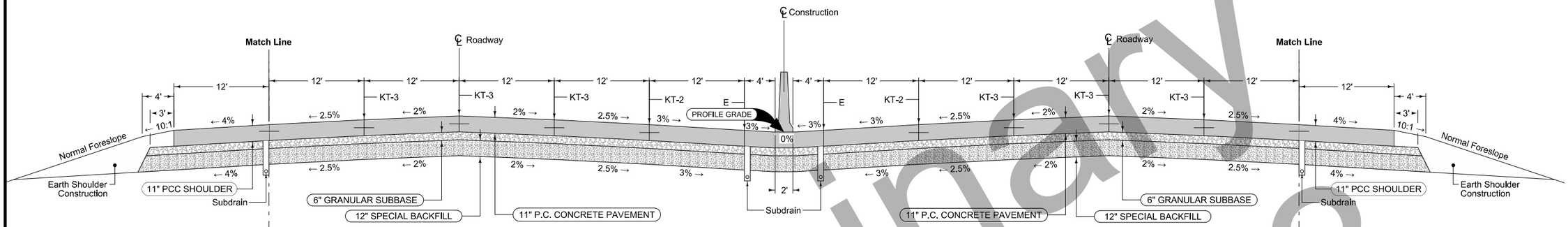
See Tab 112-9 for shoulder quantities.

LOOPS - BOYSON ROAD

Preliminary 06-03-2023

ULTIMATE I-380 ROADWAY SECTION
COMPLETED BY OTHERS IN FUTURE
INCLUDED FOR REFERENCE ONLY

Preliminary
06-03-2023



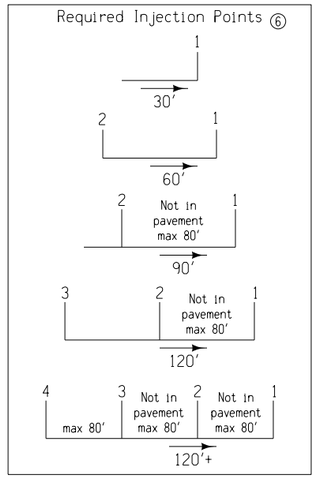
Mainline Jointing:
Transverse joints: CD at 20' spacing

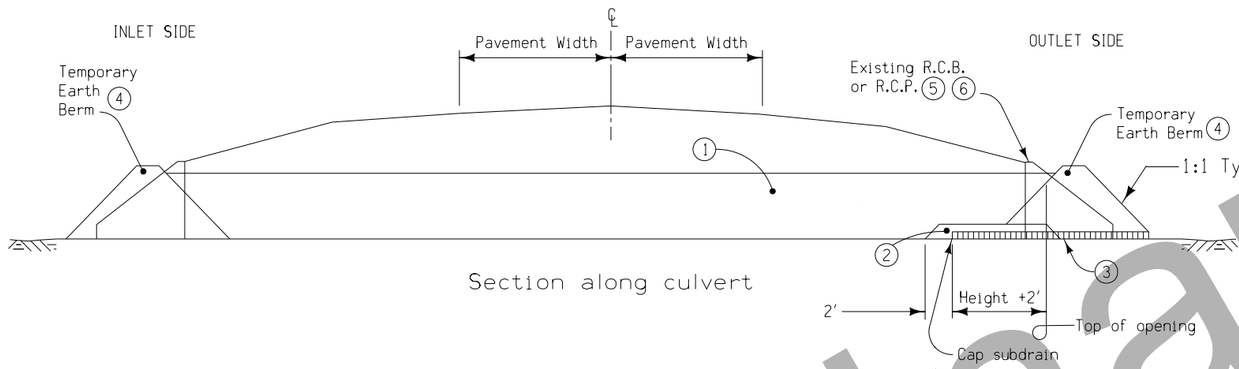
	8DP_Closed_ 04-17-12
BEGIN STATION	END STATION
526+50.48	1005+30.40

Preliminary
06-03-2023

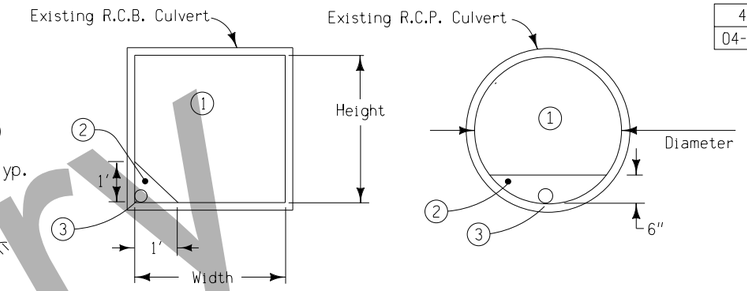
INTERSTATE 380
ULTIMATE BUILD - 8 LANES
****FOR REFERENCE ONLY****

4315
04-15-08





Section along culvert

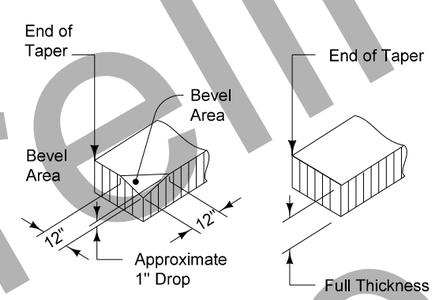


Section thru culvert

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

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

7101
10-19-10

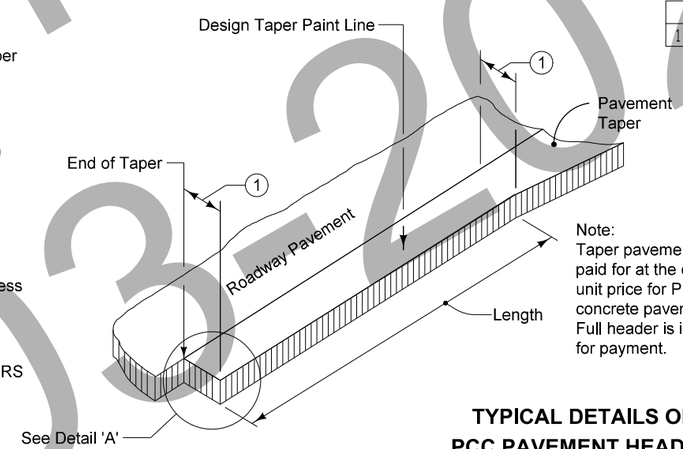


DETAIL 'A'

FOR
GRANULAR SHOULDERS

DETAIL 'A'

FOR
PAVED SHOULDERS

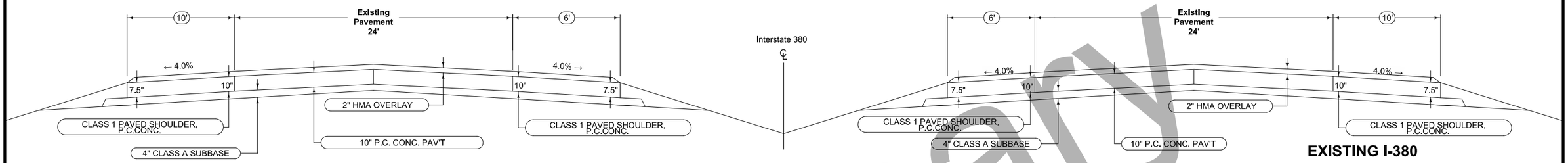


Note:
Taper pavement to be paid for at the contract unit price for P.C. concrete pavement. Full header is included for payment.

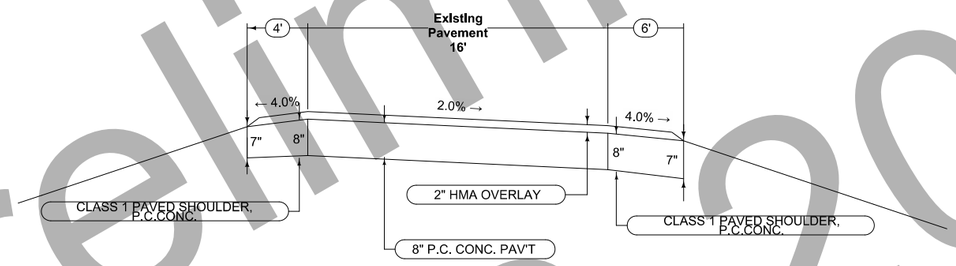
① Normal width is 2'-0". Construct 4'-0" width when butting into 4' wide HMA shoulders (See Typical 7154A).

TYPICAL DETAILS OF PCC PAVEMENT HEADER

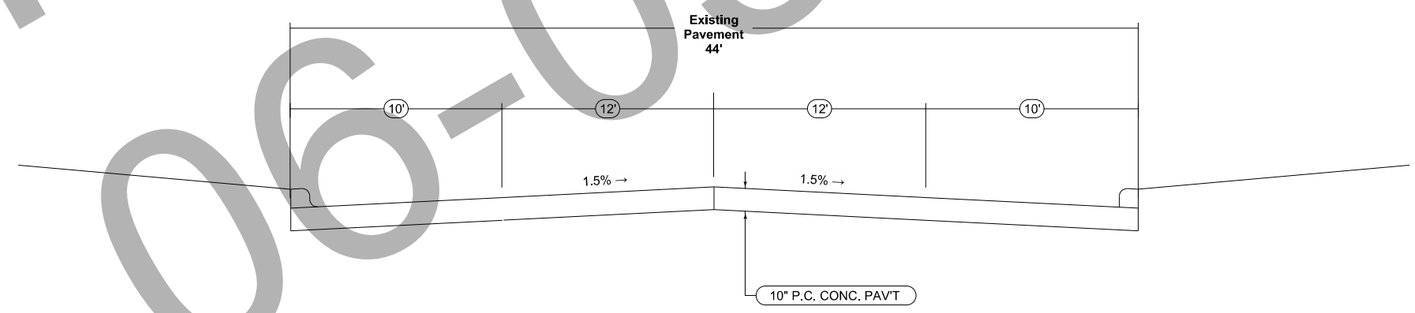
Preliminary
06-03-2023



EXISTING I-380
****FOR REFERENCE ONLY****



EXISTING I-380 RAMPS
****FOR REFERENCE ONLY****



EXISTING BOYSON RD
****FOR REFERENCE ONLY****

Preliminary
06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM **Iowa DOT/Kirkham Michael**	**LINN** COUNTY	PROJECT NUMBER **IM-380-6(358)25--13-57**	SHEET NUMBER **B.24**

SURVEY SYMBOLS

- Interstate Highway Symbol
- U.S. Highway Symbol
- Iowa Highway Symbol
- County Road Highway Symbol
- Evergreen Tree
- Deciduous Tree
- Fruit Tree
- Shrub (Bushes)
- Timber
- Hedge
- Stump
- Swamp
- Rock Outcrop
- Broken Concrete
- Revetment (Rip Rap)
- Cemetery
- Grave
- Cave
- Sink Hole
- Board Fence
- Chain Link or Security Fence
- Wire Fence
- Terrace
- Earth Dam or Dike (Existing)
- Tile Outlet
- Edge of Water
- Existing Drainage
- Right of Way Rail or Lot Corner
- Concrete Monument
- Well
- Windmill
- Beehive Intake
- Existing Intake
- Existing Utility Access (Manhole)
- Fire Hydrant
- WH Water Hydrant (Rural)
- Septic Tank
- C Cistern
- LP L.P. Gas Tank (No Footing)
- UST Underground Storage Tank
- Latrine
- Satellite TV Dish
- WHU Water Hook Up
- RT Radio Tower
- TA Tower Anchor
- Guardrail (Beam or Cable)
- GP Guard Post (one or two)
- Guard Post (over two)
- FP Filler Pipe
- GV Gas Valve
- WV Water Valve
- SL Speed Limit Sign
- MM Mile Marker Post
- SIGN Sign
- TCB Traffic Signal Control Box
- RRB Rail Road Signal Control Box
- TSB Telephone Switch Box
- EB Electric Box

UTILITY LEGEND

- E1 Iowa Department of Transportation
- E2 City of Hiawatha
- E3 Unidentified Electric
- FO Aureon Fiber
- FO2 Unknown Fiber
- FO3 Iowa Communications Network
- FO4 Unite Private Networks, LLC
- FO5 Aureon Network Services
- FO6 Iowa Health System
- FO9 Enseva
- GHP MidAmerican
- T1 IMON Buried Cable
- T2 Century Link
- T3 Windstream
- TV Mediacom
- W City of Hiawatha

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.**	
Lavender	(9)	Temporary Pavement Shading
Yellow	(4)	Proposed Pavement Shading
Orange	(6)	Proposed Granular Shading
Orange	(70)	Proposed Shoulder Granular Shading
Yellow	(68)	Proposed Shoulder Paved Full Depth Shading
Yellow	(132)	Proposed Shoulder Paved Partial Depth Shading
Gray, Dark	(112)	Proposed Grade and Pave Shading "In conjunction with a paving project"
Brown, Light	(236)	Grading Shading
Orange, Light	(134)	Proposed Granular Entrance Shading
Yellow	(220)	Proposed Paved Entrance Shading
Tan	(8)	Proposed Sidewalk Shading
Blue, Light	(230)	Proposed Sidewalk Landing Shading
Pink	(11)	Proposed Sidewalk Ramp Shading
Green, Light	(225)	Existing Pavement Shading
Red	(3)	Proposed Structure Shading
Red	(3)	Delineates Restricted Areas

PROFILE VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

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

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

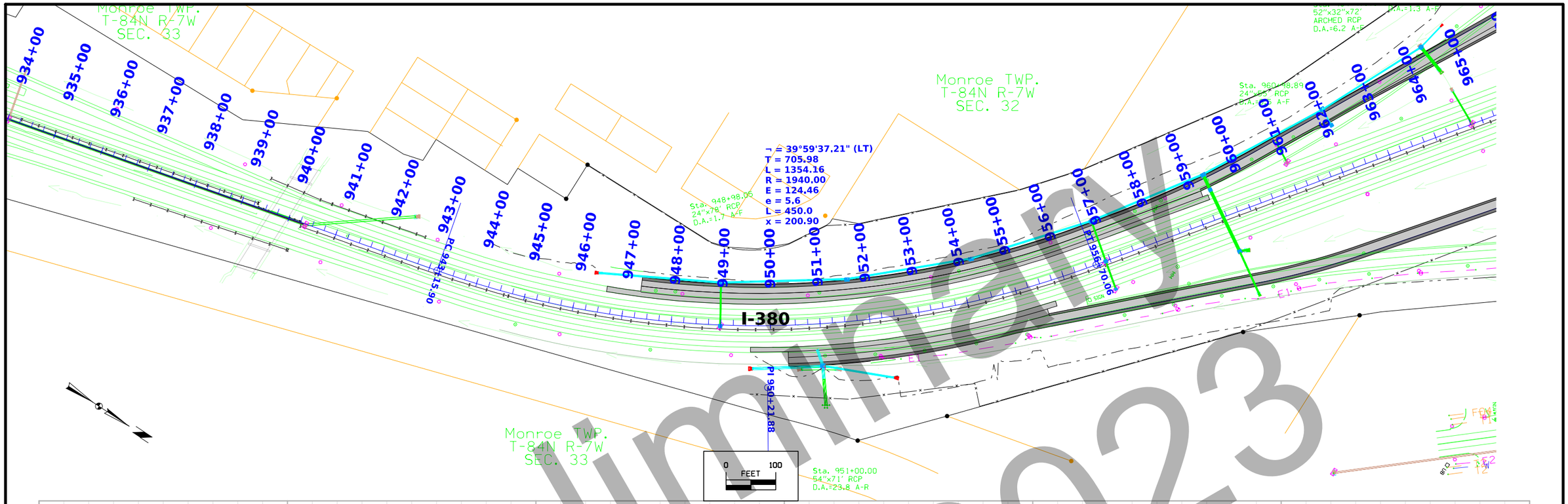
RIGHT-OF-WAY LEGEND

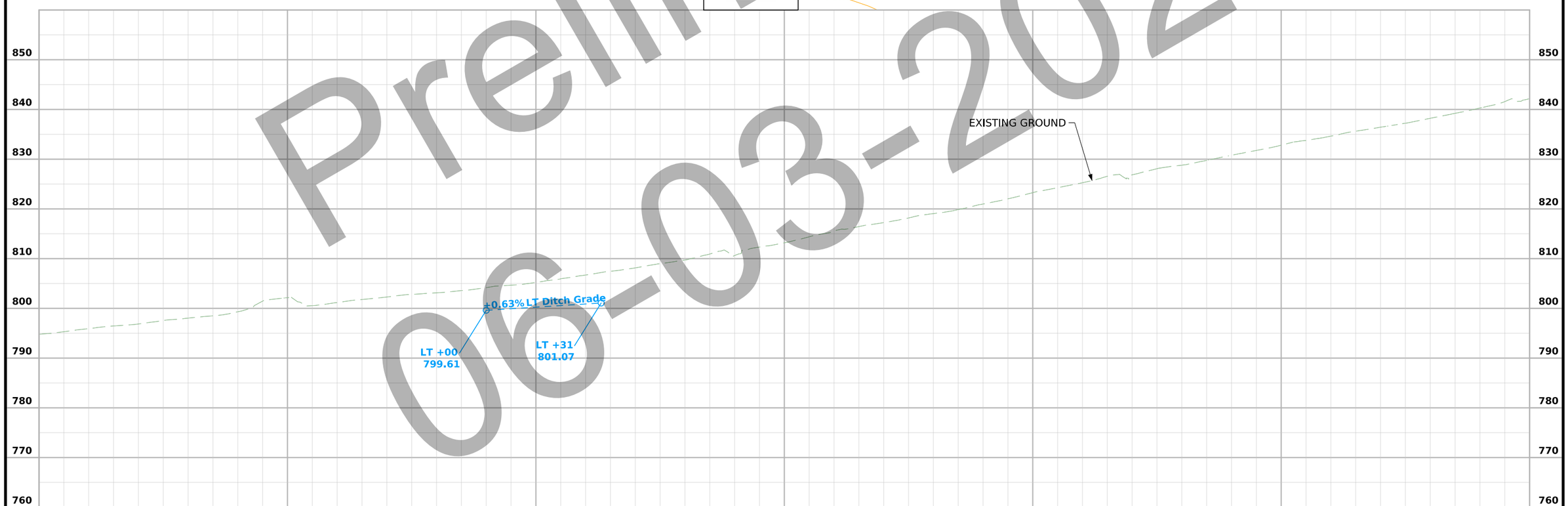
- Proposed Right-of-Way
- Existing Right of Way
- Existing and Proposed Right-of-Way
- Easement and Existing Right-of-Way
- Easement (Temporary)
- Easement
- C/A Access Control
- Property Line

PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

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

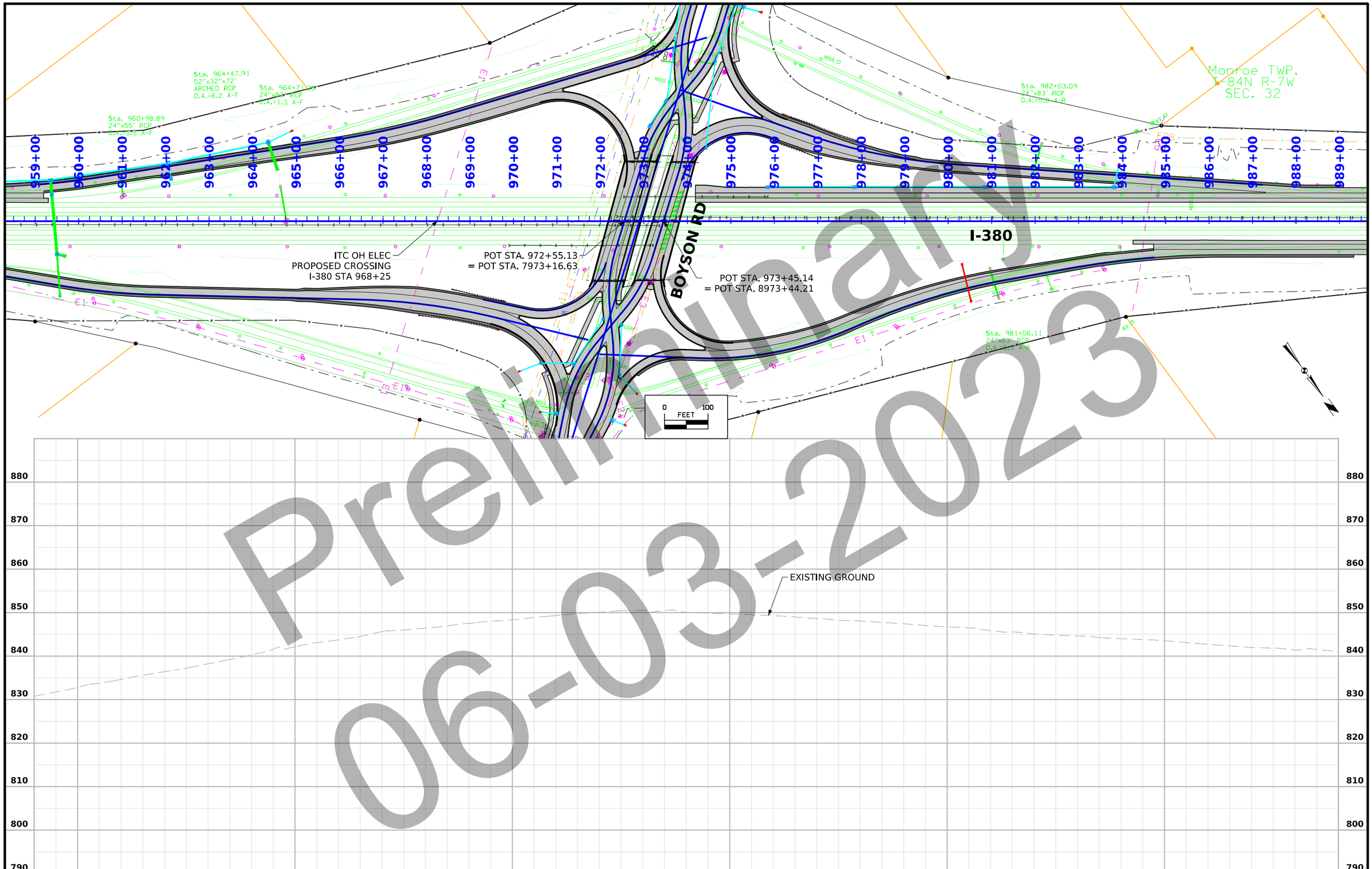
Preliminary
06-03-2025





Preliminary
06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT/Kirkham Michael	LINN COUNTY	PROJECT NUMBER IM-380-6(358)25--13-57	SHEET NUMBER D.2



Preliminary
06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT/Kirkham Michael	LINN COUNTY	PROJECT NUMBER IM-380-6(358)25--13-57	SHEET NUMBER D.3

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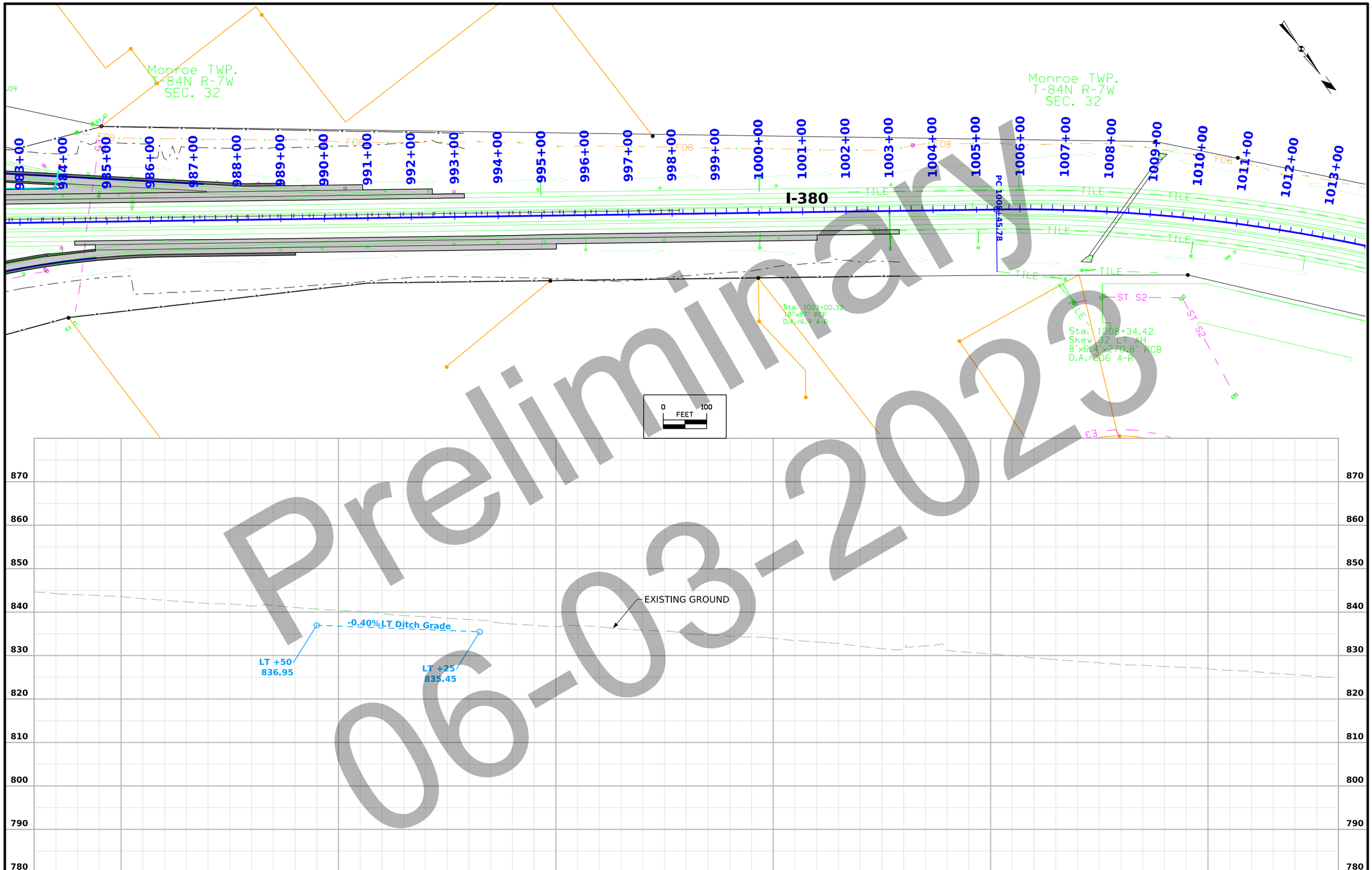
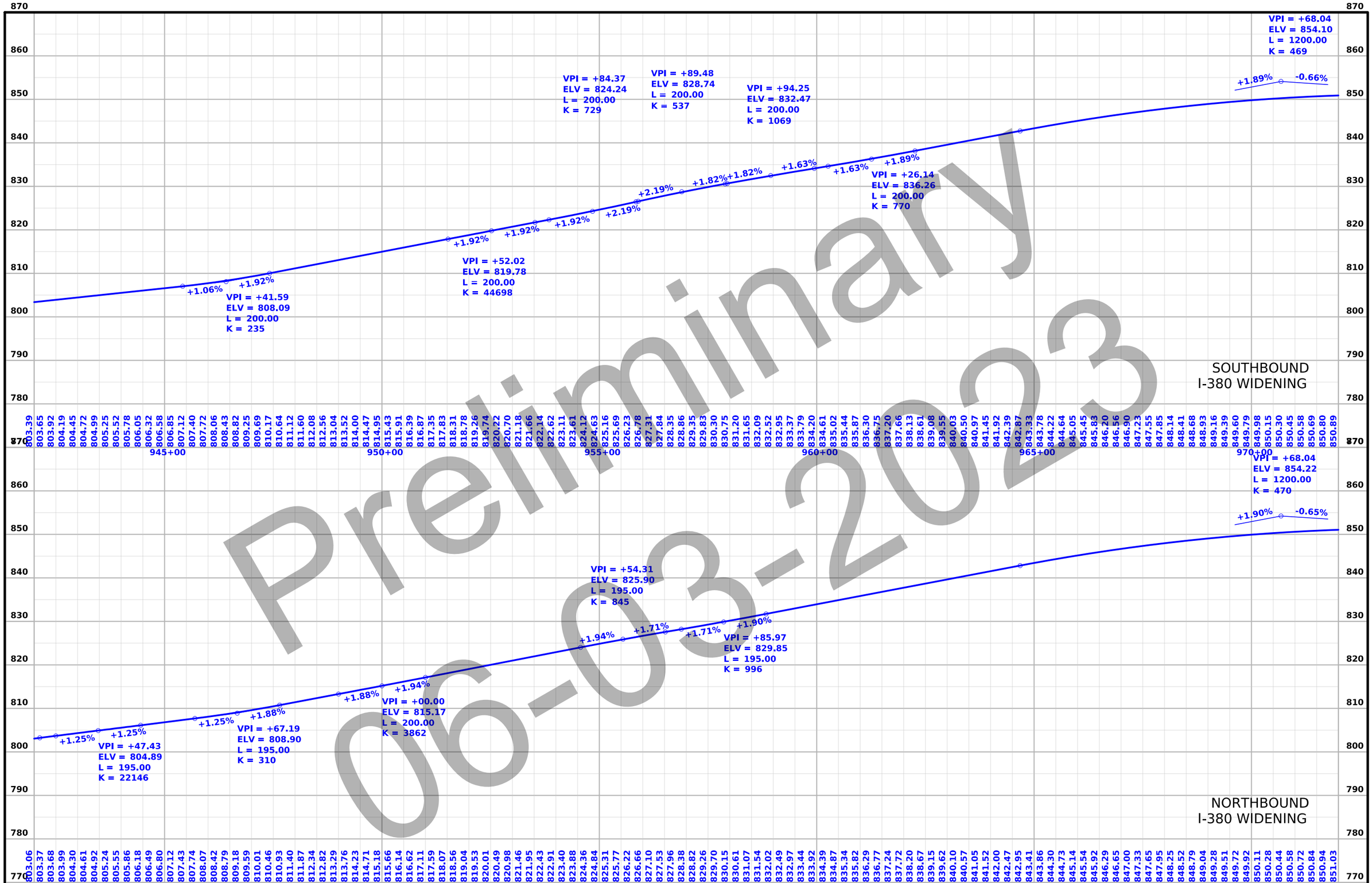


Preliminary
06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT/Kirkham Michael	LINN COUNTY	PROJECT NUMBER IM-380-6(358)25--13-57	SHEET NUMBER D.4

11:12:51 AM 5/31/2024 bsmith pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\5738005096\Design_Boyson_Rd\CADD_Files\Sheet_files\SHT_57380358_D.dgn



Preliminary
06-03-2023

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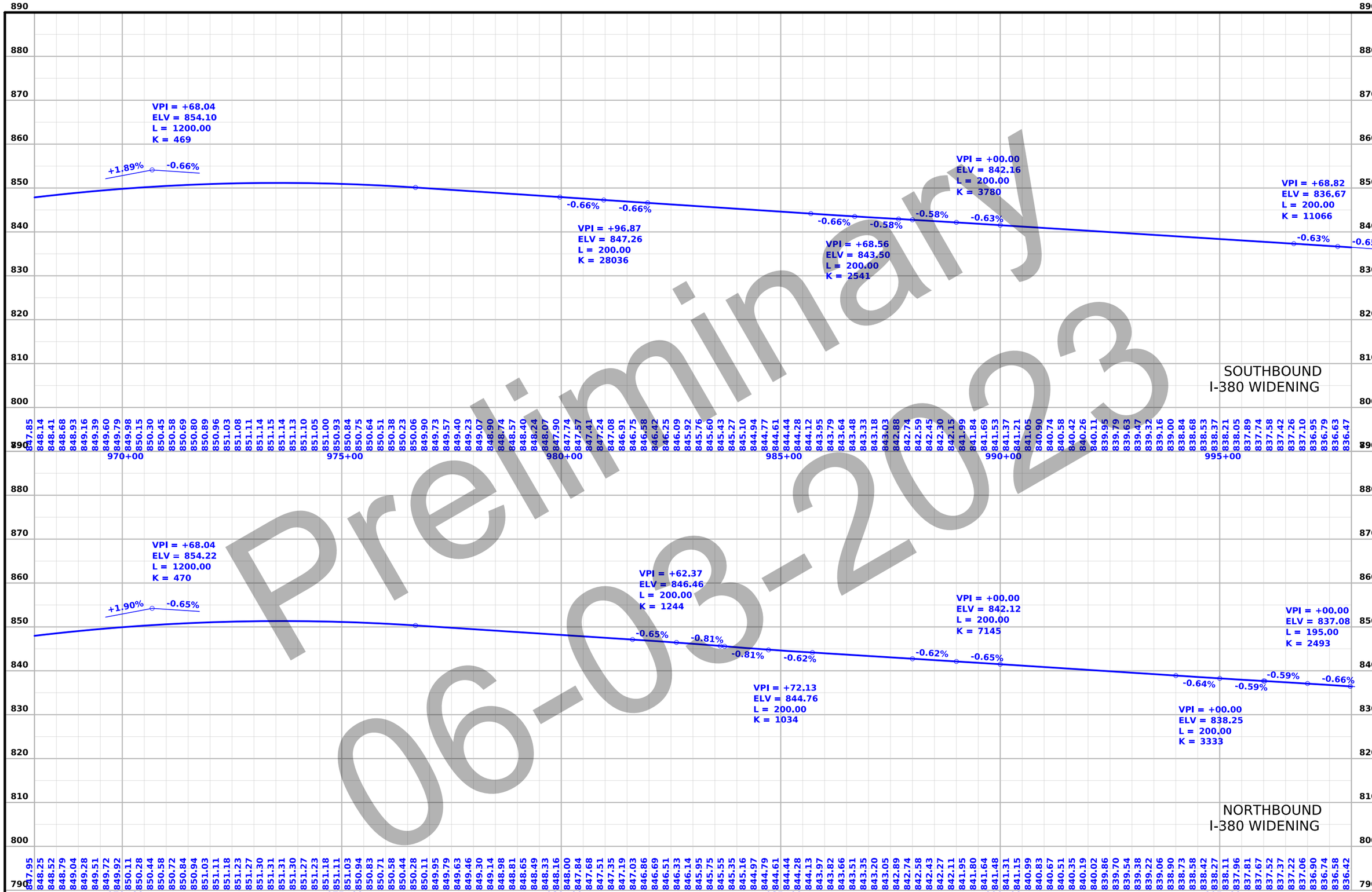
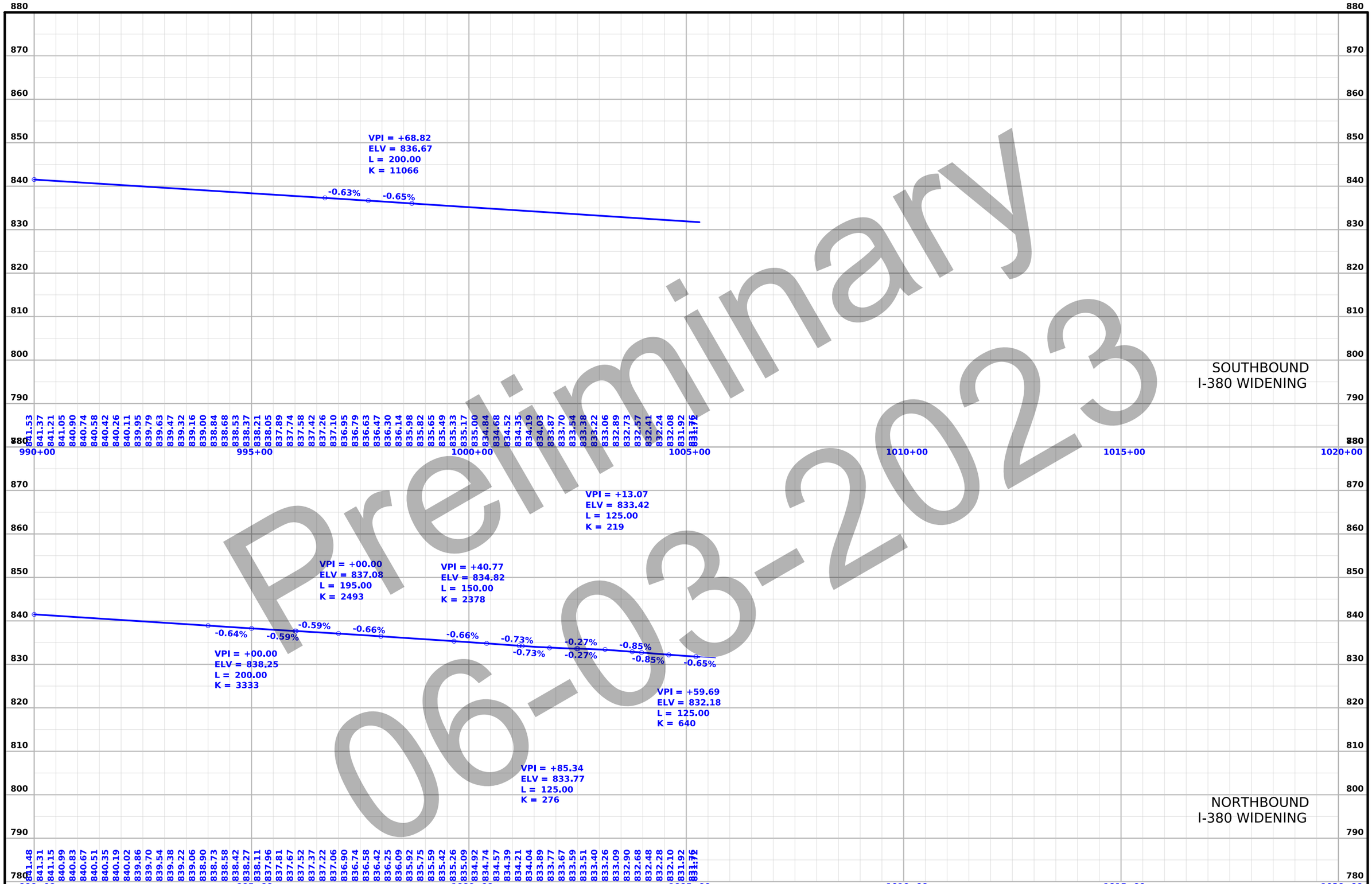


Preliminary
06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT/Kirkham Michael	LINN COUNTY	PROJECT NUMBER IM-380-6(358)25--13-57	SHEET NUMBER D.6

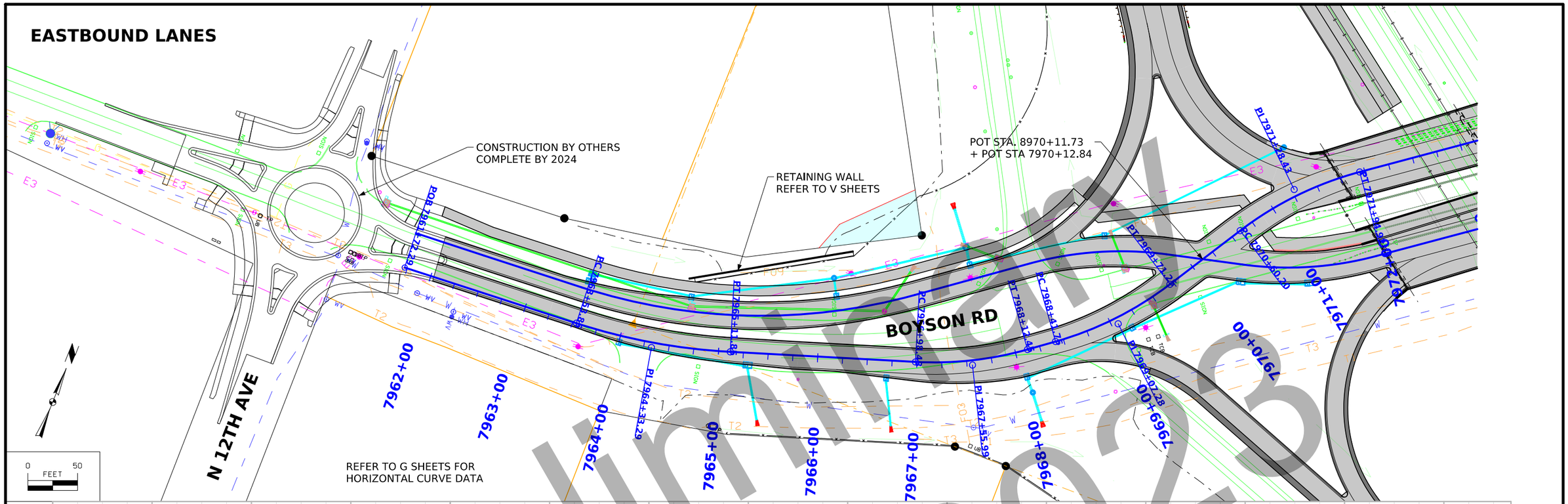


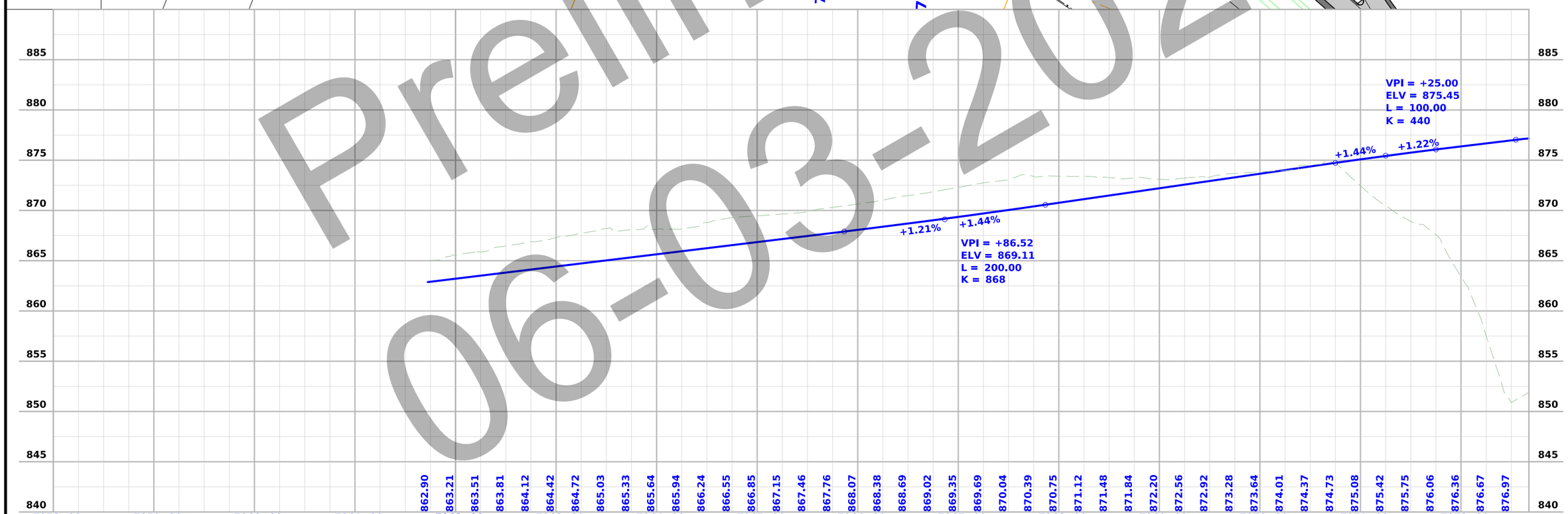
Preliminary
06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM **Iowa DOT/Kirkham Michael**	**LINN** COUNTY	PROJECT NUMBER **IM-380-6(358)25--13-57**	SHEET NUMBER **D.7**

11:13:10 AM 5/31/2024 bsmith pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\5738005096\Design_Boyson_Rd\CADD_Files\Sheet_files\SHT_57380358_D2.dgn

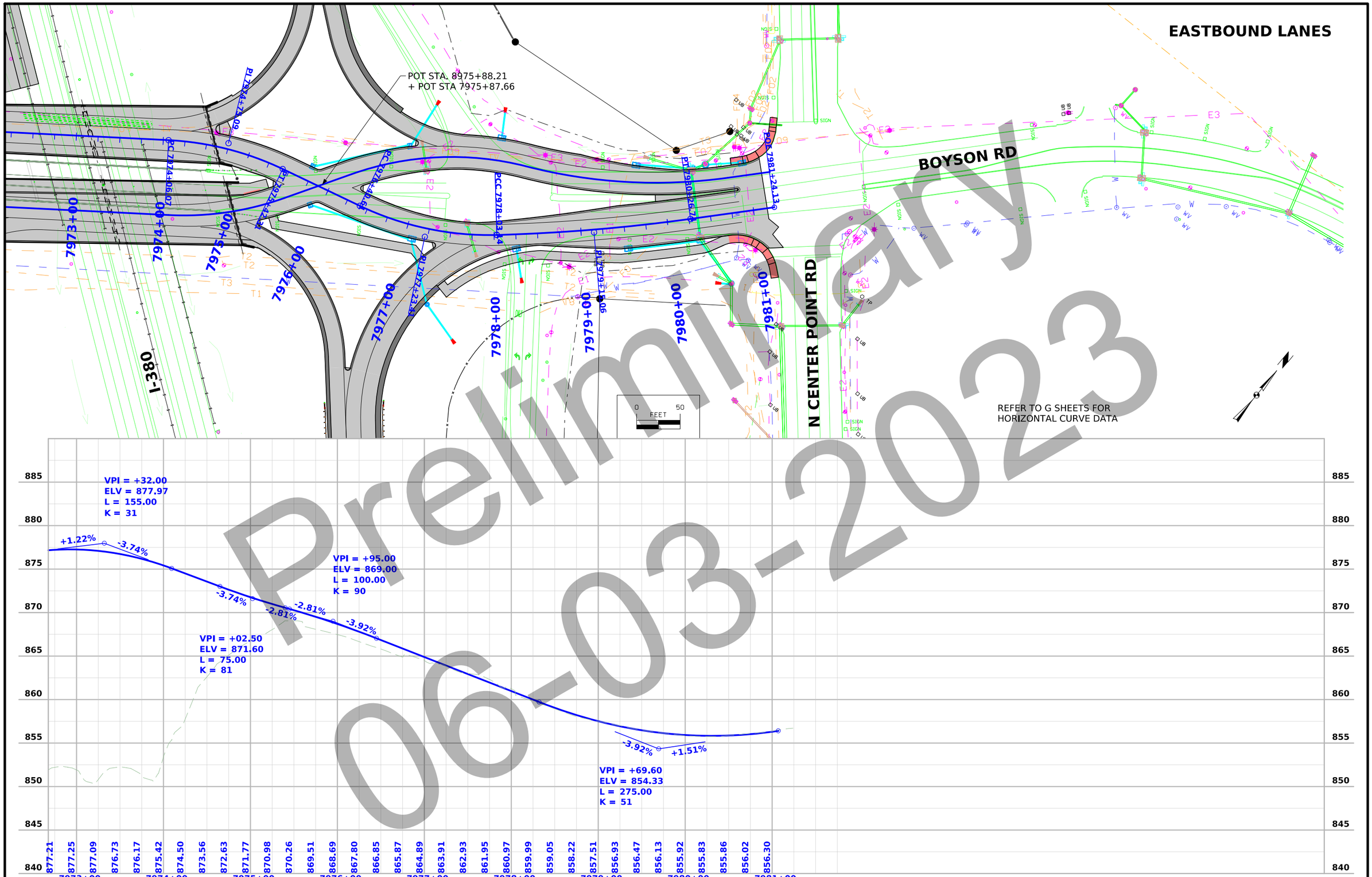
EASTBOUND LANES





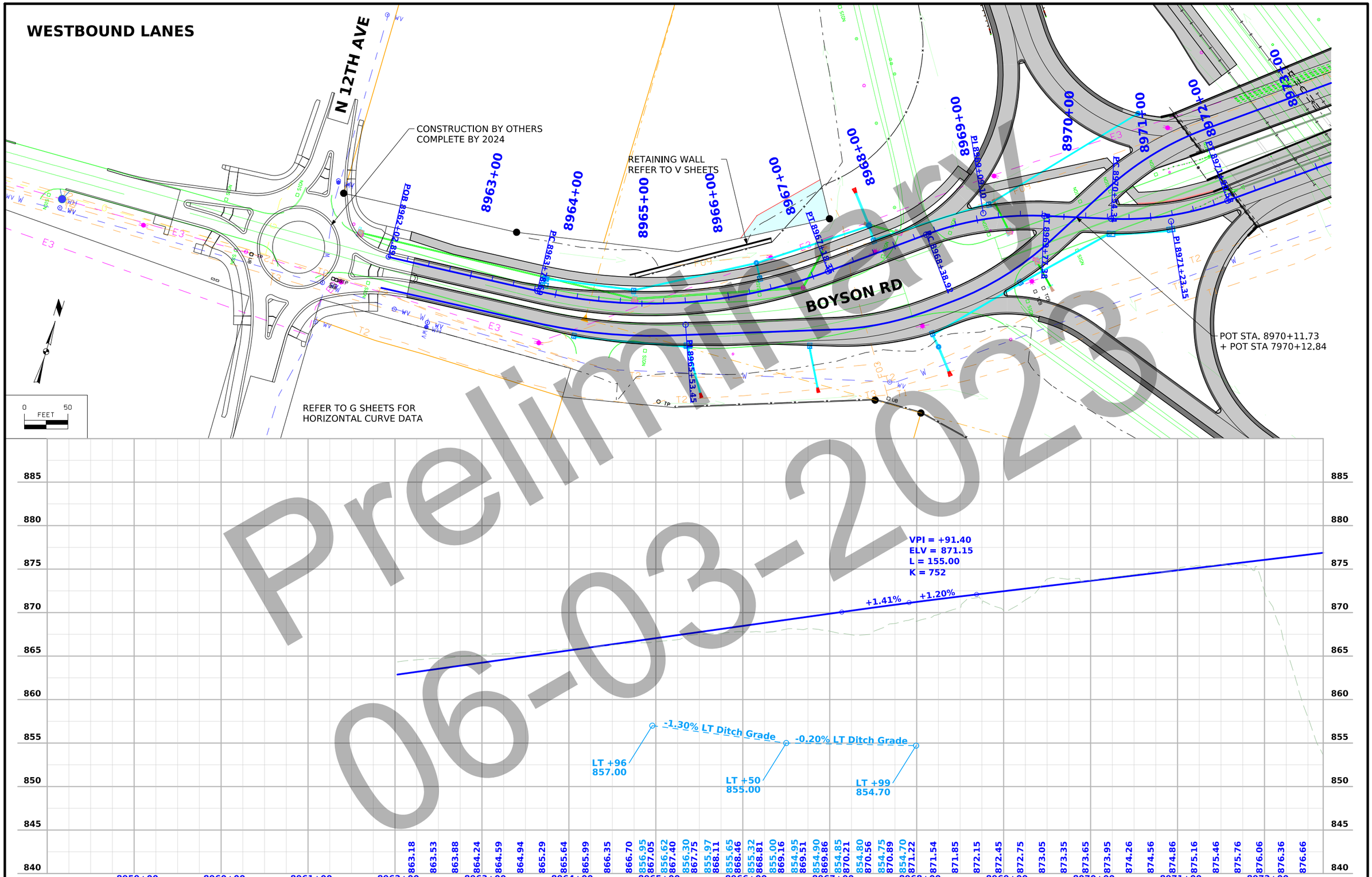
Preliminary
06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT/Kirkham Michael	LINN COUNTY	PROJECT NUMBER IM-380-6(358)25--13-57	SHEET NUMBER E.01



Preliminary
06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT/Kirkham Michael	LINN COUNTY	PROJECT NUMBER IM-380-6(358)25--13-57	SHEET NUMBER E.02



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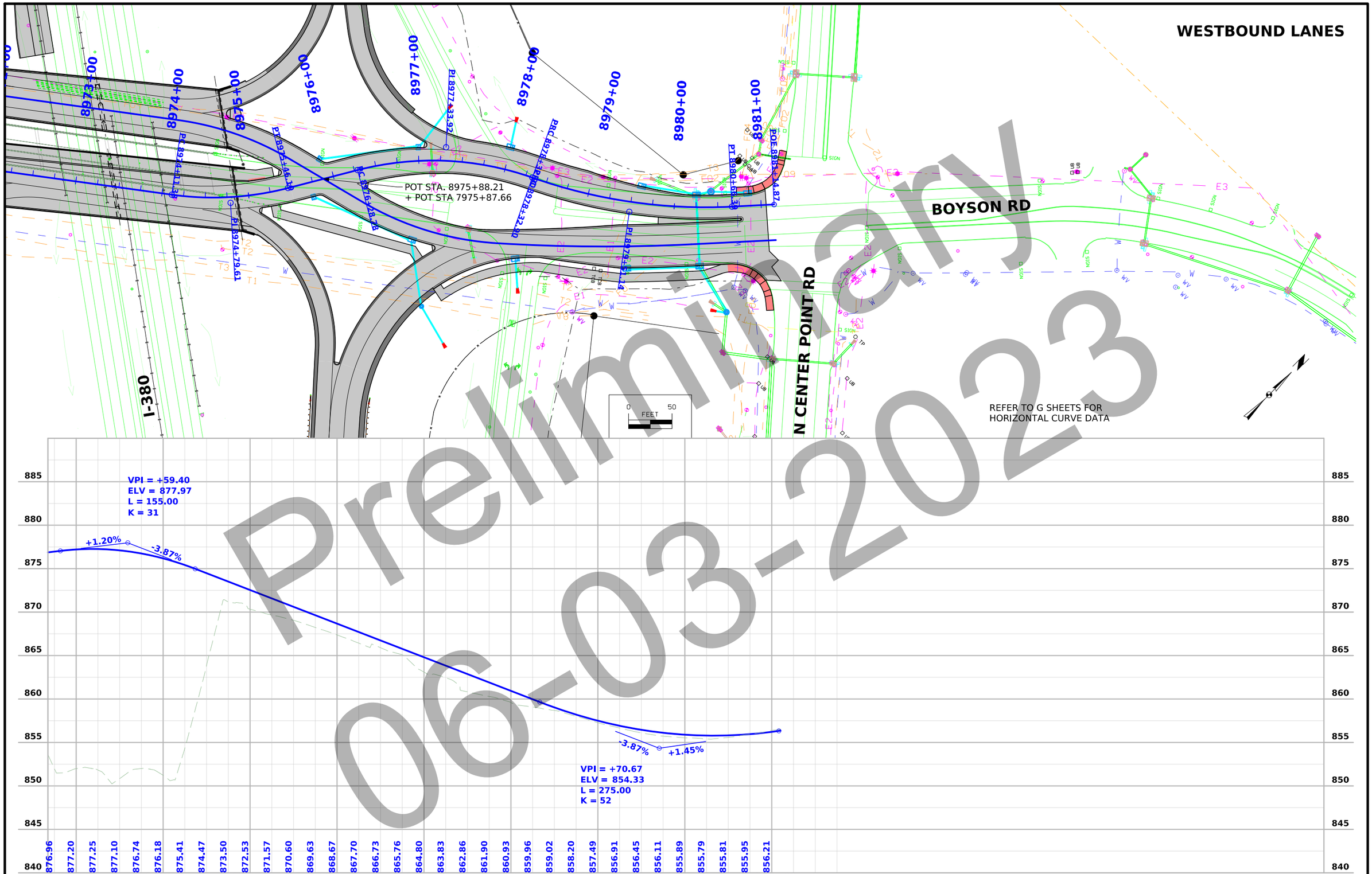

Preliminary
06-03-2023

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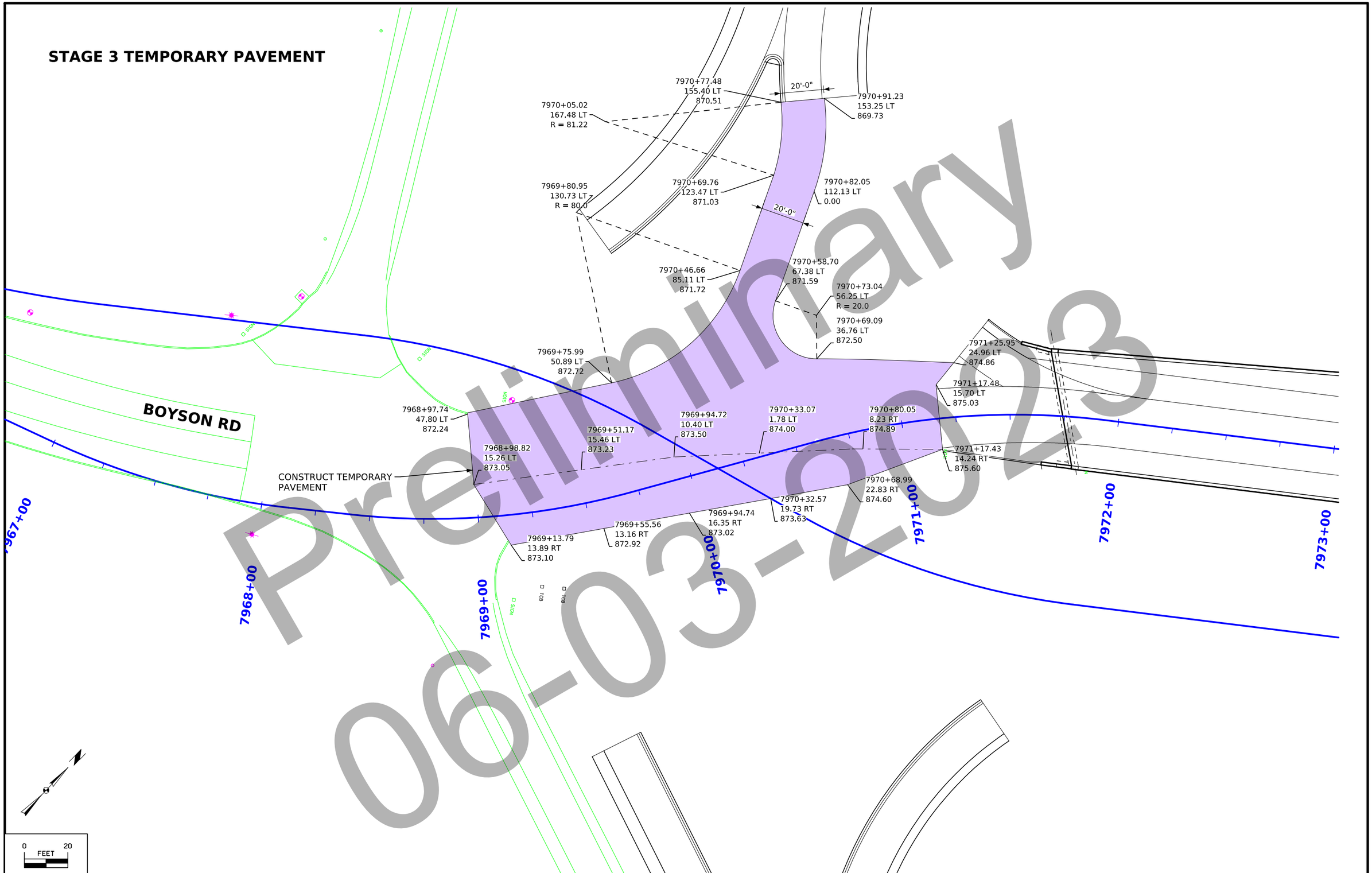
STAGE 3 TEMPORARY PAVEMENT



Preliminary
06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM **Iowa DOT/Kirkham Michael**	**LINN** COUNTY	PROJECT NUMBER **IM-380-6(358)25--13-57**	SHEET NUMBER **F.01**

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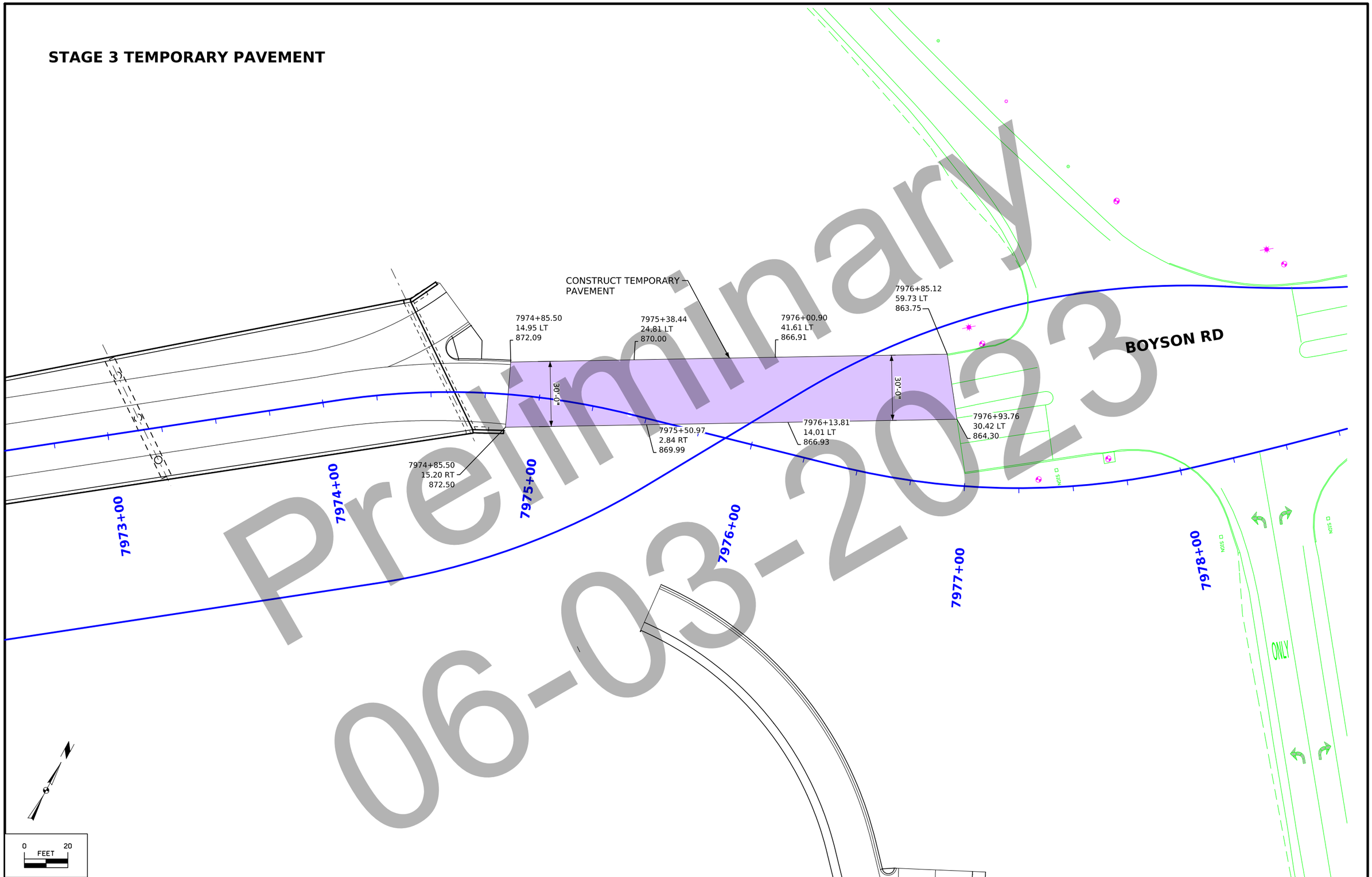
STAGE 3 TEMPORARY PAVEMENT



Preliminary
06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM **Iowa DOT/Kirkham Michael**	**LINN** COUNTY	PROJECT NUMBER **IM-380-6(358)25--13-57**	SHEET NUMBER **F.02**

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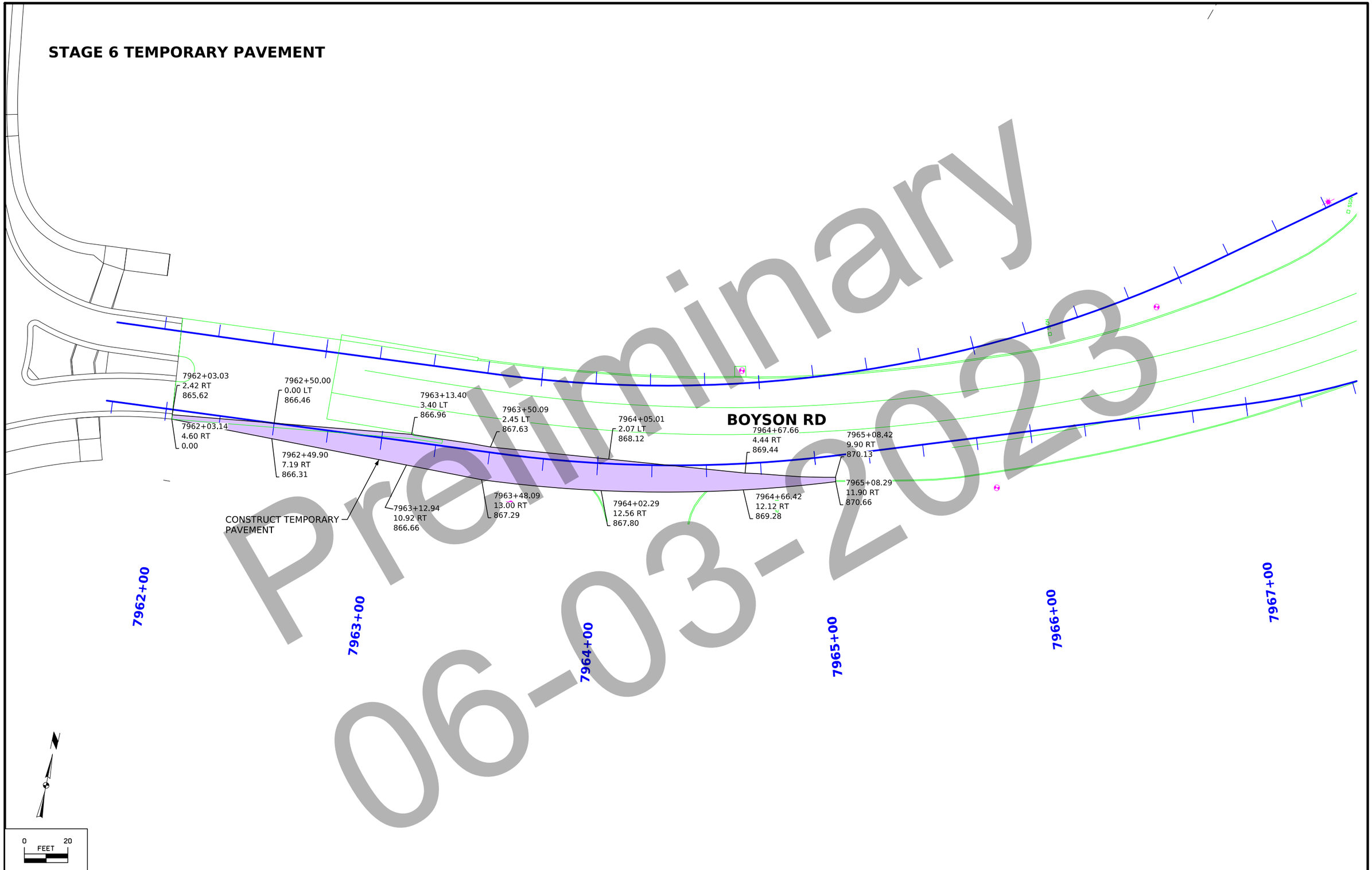
STAGE 6 TEMPORARY PAVEMENT



Preliminary
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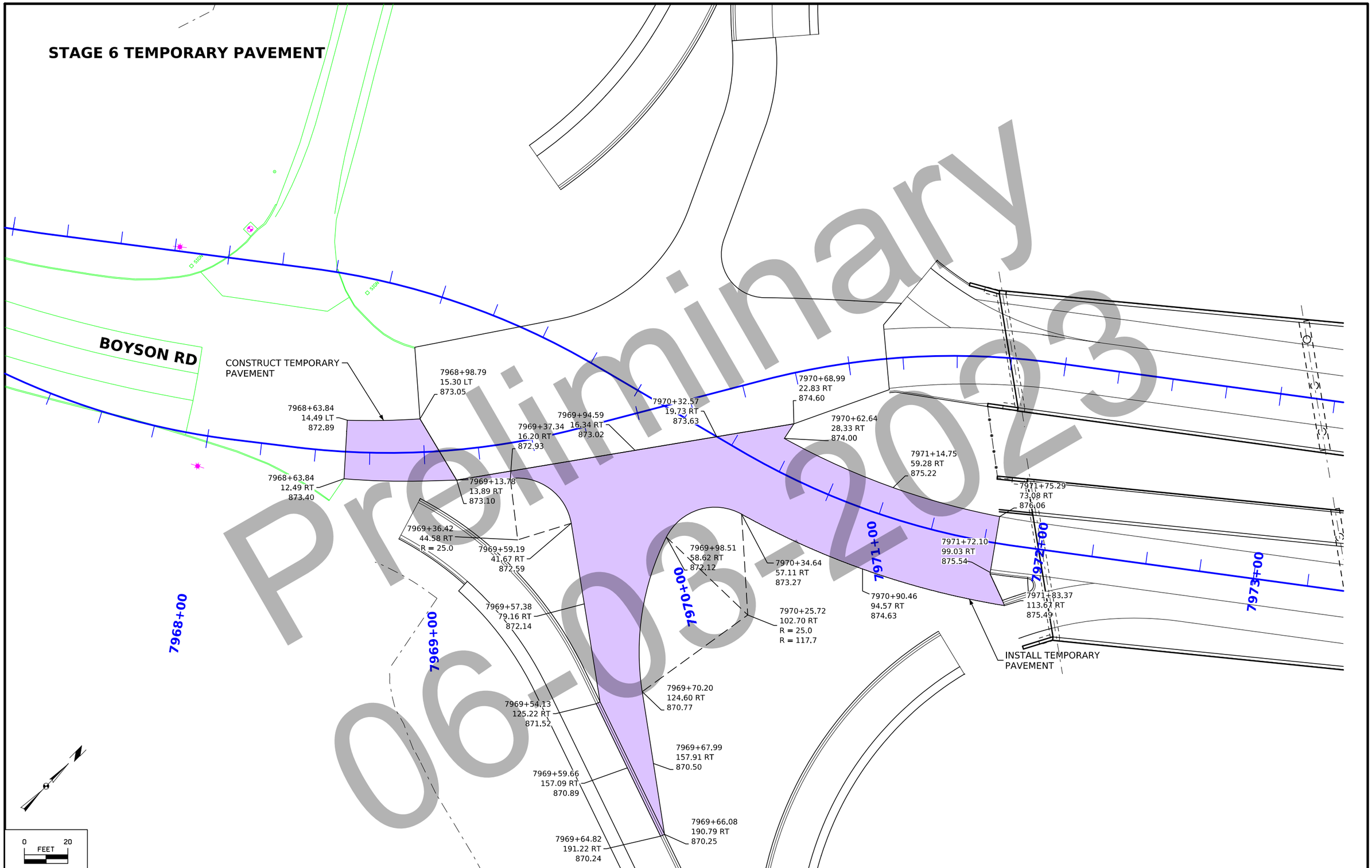

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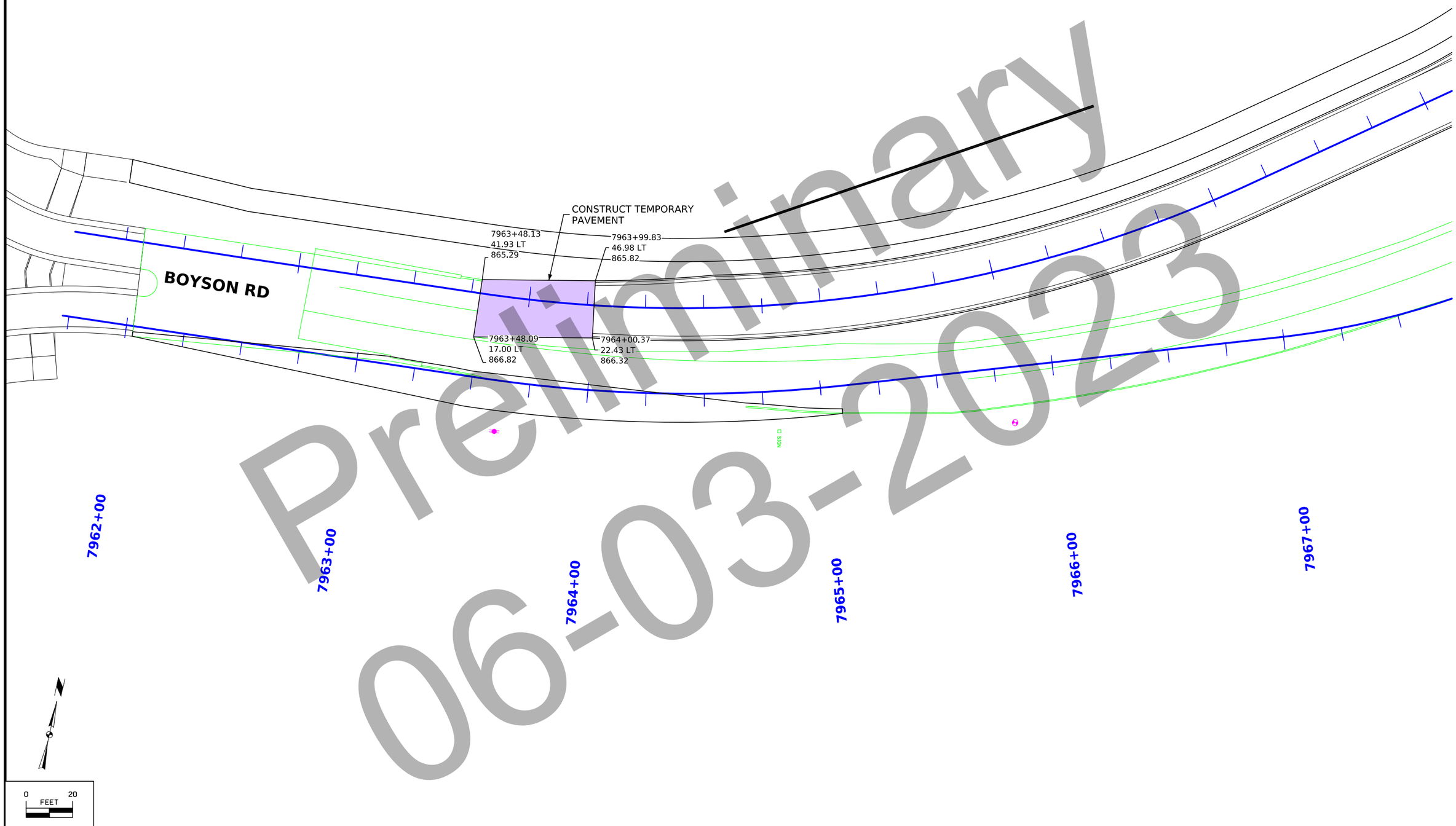
STAGE 7 TEMPORARY PAVEMENT



Preliminary
06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM **Iowa DOT/Kirkham Michael**	**LINN** COUNTY	PROJECT NUMBER **IM-380-6(358)25--13-57**	SHEET NUMBER **F.5**

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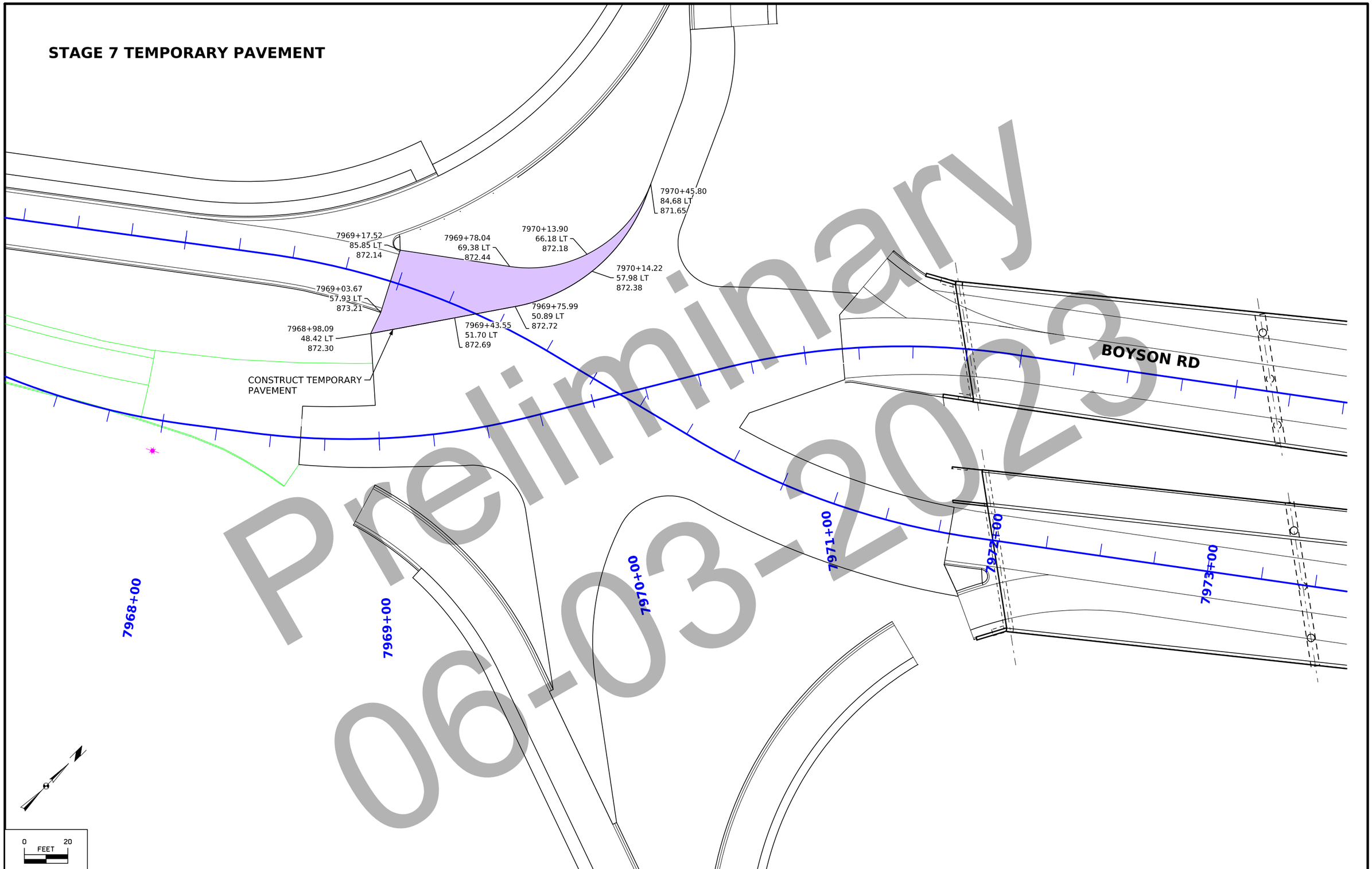
STAGE 7 TEMPORARY PAVEMENT



Preliminary
06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM **Iowa DOT/Kirkham Michael**	**LINN** COUNTY	PROJECT NUMBER **IM-380-6(358)25--13-57**	SHEET NUMBER **F.6**

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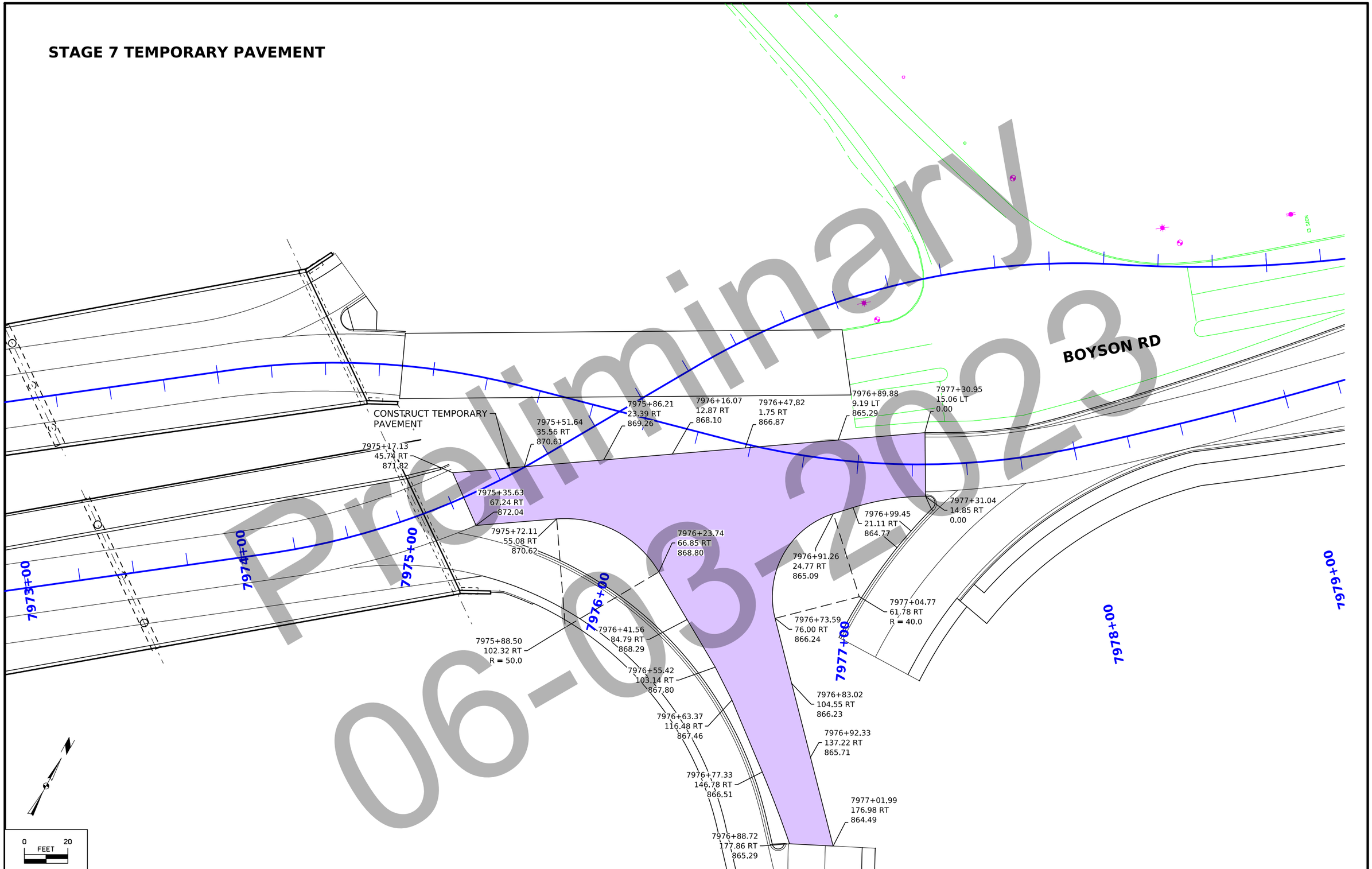
STAGE 7 TEMPORARY PAVEMENT



Preliminary
06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM **Iowa DOT/Kirkham Michael**	**LINN** COUNTY	PROJECT NUMBER **IM-380-6(358)25--13-57**	SHEET NUMBER **F.7**

Survey Information

Linn County
IM-380-6(224)25—13-57, IM-380-6(200)25—13-57,
And IM-380-6(310)25—13-57
I-380, Collins Highway to County Home Road, including interchange
at Tower Terrace and Boyson Road
Preliminary Engineering
PIN 96-57-380-050
Sap-0067.4

Party Personnel

Chad Greenway - Party Chief
Robert Fleming - Assistant Survey Party Chief

Date(s) of Survey

Begin Date	10/2017
End Date	01/2019

General Information

Measurement units for this survey are US survey feet. This survey is for proposed widening of I-380 from Collins Highway to County Home Road, including converting the Boyson Road and I-380 interchange to a Diverging Diamond Interchange and adding a diverging Diamond Interchange at Tower Terrace and I-380. Project datum and control are expanded from the IM-380-6(224)25—13-57 project - I-380/Tower Terrace Rd information is provided by Design Survey Office. This project is a Partial DTM. Aerial survey and mobile ground LIDAR will be added.

Vertical Control

Vertical datum for this survey is NAVD88 based on the information from (IM-380-6(224)25—13-57 project - I-380/Tower Terrace Rd). Benchmarks were placed throughout the project using a LEICA LS 15 digital level, completed between October 3, 2017 and October 12, 2017. The published elevation for Control Point W 75 from (IM-380-6(224)25—13-57 project - I-380/Tower Terrace Rd) was held for the basis of the vertical control. W 75 is the only survey observed NGS Control Monument with published NAVD88 heights to compare to local ground control:
NGS 2nd. order class 0-mark designated W 75 has a published Elev. of 788.69'
Survey Elev. = 788.715'

This survey also observed 5 of the Original Tower Terrace Survey control points and compared them to our Digital level with the following differences:

PT #	KM Digital Level	Original Tower Terrace	Difference
CP 27	835.691	835.66	-0.031
CP52	805.083	805.069	-0.014
CP1	852.742	852.719	-0.023
CP2	859.291	859.228	-0.063
CP3	831.503	831.471	-0.028

6 additional FENO monuments were added and included in the bench loops and added to the Localized coordinate system.

Horizontal Control

This project coordinate system was expanded from the (IM-380-6(224)25—13-57 project - I-380/Tower Terrace Rd) control which is listed as follows:

The project coordinate system for this survey is Modified Iowa State Plane North Zone (U.S. Survey Feet). This survey control is relative to IaRTN reference stations. IaRTN Reference Station coordinates are relative to the National Reference Station network datum: NAD83 (2011) for Epoch 2010.00.

The linear grid to ground distortion at the Tower Terrace I 380 Overpass is 34 parts per million. The project coordinate system is modified from Iowa State Plane North at project point 27 on the overpass that has Iowa State Plane North zone and project coordinates of N= 3489690.186, E= 5410062.684 (US ft.) All project points are scaled about this point using a scale factor of 1.0000335356.

Additional control points were placed throughout the project using post processed static observations relative to Pts. 1, 2, 3, 27, and 52. A minimum of 6hrs of data was simultaneously collected on each point. The horizontal standard deviation of these observations was less than 0.01 ft. at 95% confidence level (2 sigma).

Using Iowa RTN Iowa State Plane North, points 1, 2, 3, 27, and 52 from the (IM-380-6(224)25—13-57 project - I-380/Tower Terrace Rd) and additional points KM1, KM2, KM3, KM4, KM5, and KM7 were collected using an average. Each point was collected with 60 epochs and then collected again using the same procedure 4 hours + later. The point averages were computed and compared to the original data from 1, 2, 3, 27, and 52 from the (IM-380-6(224)25—13-57 project - I-380/Tower Terrace Rd) and all values were found to be +/- 0.0415'. Holding point 27 all points were shifted by 0.0175' in the northing and 0.0415 in the easting to match the data from (IM-380-6(224)25—13-57 project - I-380/Tower Terrace Rd). All points were then scaled about point 27 using the

Preliminary
05-03-2023

same scale factor 1.0000335356 as published with the (IM-380-6(224)25—13-57 project - I-380/Tower Terrace Rd).

Alignment Information

The horizontal alignment for I-380 is a retrace of As-built Plans. The following monuments were found, and the as-built plans utilized to make a best fit centerline alignment. The following are points found and what plans and stations they relate to.

Found rebar at cl survey pt. # 308 which fits I-380 P.O.T. Sta. 566+27.95 and BLAIRS FERRY RD P.O.T. Sta. 1924+84.90 as called out in as-built plans I-F-380-6(114)266 OF-57

Found rebar at cl survey pt. # 309 which fits I-380 P.O.T. Sta. 939+79.978 and EMMONS P.O.T. Sta. 2939+81.83 as called out in as-built plans I-F-380-6(130)267—OF-57 ar 380-6(72)267—01-57

Found rebar at cl survey pt. # 306 which fits I-380 P.O.T. Sta. 972+87.19 and Boyson/Carpenter P.O.T. Sta. 1972+43.93 as called out in as-built plans I-F-380-6(130)267—OF-57 and I-380-6(72)267—01-57

Found rebar at cl survey pt. # 301 which fits T.S. Sta. 1004+73.14 93 as called out in as-plans I-380-6(72)267—01-57

Found rebar at cl survey pt. # 307 which fits I-380 S.T. Sta. 1039+40.42 5.14' north of Tc Terrace cl as called out in as-built plans I-380-6(72)267—01-57

Found rebar at cl survey pt. # 305 which fits I-380 P.C. Sta. 1101+13.14 called out in as-built plans I-380-6(72)267—01-57

Found rebar at cl survey pt. # 304 which fits which fits I-380 P.T. Sta. 1111+13.14 called out in as-built plans I-380-6(72)267—01-57

Found rebar at cl survey pt. # 303 which fits which fits I-380 S.C. Sta. 1187+81.41 called out in as-built plans I-380-6(72)267—01-57

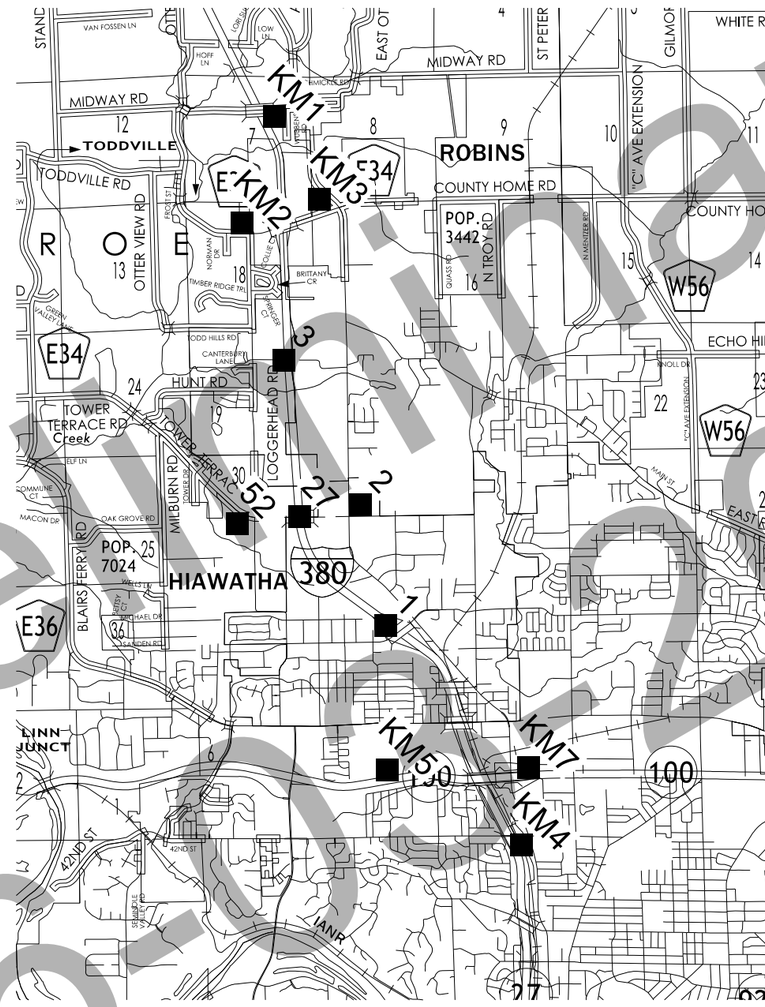
Found rebar at cl survey pt. # 300 which fits which fits I-380 C.S. Sta. 1197+88.94 called out in as-built plans I-380-6(72)267—01-57

Found rebar at cl survey pt. # 302 which fits which fits I-380 S.T. Sta. 1199+88.94 called out in as-built plans I-380-6(72)267—01-57

Preliminary
06-03-2023

CONTROL POINT VICINITY MAP

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



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

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

Preliminary
06-02-2023

HORIZONTAL AND VERTICAL PROJECT CONTROL COORDINATE LISTING

HORIZ. DATUM: NAD83(2011) EPOCH 2010.00

VERT. DATUM: NAVD88

State Plane North

Point Name	North Coordinate	East Coordinate	Elev	Feature Code - Descr	
100	3489789.389	5412213.175	859.2858	CP - CP2	IDOT DISC
101	3489690.186	5410062.684	835.66	CP - CP27	CUT "X"
102	3489674.421	5407726.429	805.0925	CP - CP52	3/4" IRON BAR
103	3502905.587	5411428.357	857.1487	CP - FENO KM3	3 1/2" ALUMINUM CAP STAMPED I.D.O.T. CONTROL MONUMENT
104	3501684.637	5407911.092	817.3614	CP - FENO KM2	3 1/2" ALUMINUM CAP STAMPED I.D.O.T. CONTROL MONUMENT
105	3496321.629	5409461.072	831.4904	CP - CP3	IDOT DISC
106	3485226.263	5413591.485	852.7786	CP - CP1	IDOT DISC
107	3478729.125	5413765.118	822.0235	CP - FENO KM5	3 1/2" ALUMINUM CAP STAMPED I.D.O.T. CONTROL MONUMENT
108	3478890.669	5419769.971	807.9581	CP - FENO KM7	3 1/2" ALUMINUM CAP STAMPED I.D.O.T. CONTROL MONUMENT
109	3476137.853	5419191.026	772.3759	CP - FENO KM4	3 1/2" ALUMINUM CAP STAMPED I.D.O.T. CONTROL MONUMENT
110	3506777.088	5408545.131	810.9327	CP - FENO KM1	3 1/2" ALUMINUM CAP STAMPED I.D.O.T. CONTROL MONUMENT

Preliminary
06-03-2023

ALIGNMENT COORDINATES

Name	Location	Poin on Tangent Station	Point on Tangent Y Northing	Point on Tangent X Easting	Begin Spiral Station	Begin Spiral Y Northing	Begin Spiral X Easting	Begin Curve Station	Begin Curve Y Northing	Begin Curve X Easting	Simple Curve PI or Master PI Station	Simple Curve PI or Master PI Y Northing	Simple Curve PI or Master PI X Easting	End Curve Station	End Curve Y Northing	End Curve X Easting	End Spiral Station	End Spiral Y Northing	End Spiral X Easting
	ML380	509+55.28	3475893.997	5419068.35															
C1	ML380							540+67.74	3478664.559	5417650.115	553+95.28	3479846.273	5417045.203	567+11.04	3481134.989	5416726.489			
C2	ML380							943+15.90	3482832.142	5416306.765	950+21.88	3483517.475	5416137.274	956+70.06	3483933.588	5415566.959			
C3	ML380							1005+45.78	3486807.391	5411628.185	1023+19.99	3487853.13	5410194.918	1038+68.24	3489622.762	5410067.55			
C4	ML380							1101+30.64	3495868.998	5409617.979	1106+31.11	3496368.182	5409582.051	1111+31.50	3496868.247	5409561.76			
C5	ML380				1185+81.62	3504312.234	5409259.718										1187+81.62	3504511.951	5409249.286
C6	ML380							1187+81.62	3504511.951	5409249.286	1192+90.21	3505019.093	5409210.944	1197+88.31	3505482.046	5409000.381			
C7	ML380				1197+88.31	3505482.046	5409000.381										1199+88.31	3505662.114	5408913.369
	BOYSON ROAD EASTBOUND	7961+72.29	9484402.665	5413259.285															
C8	BOYSON ROAD EASTBOUND							7963+53.85	3484414.715	5413440.441	7964+33.29	3484419.988	5413519.712	7965+11.85	3484445.389	5413594.988			
C9	BOYSON ROAD EASTBOUND							7966+98.48	3484505.061	5413771.826	7967+55.99	3484523.447	5413826.313	7968+12.45	3484558.512	5413871.89			
C10	BOYSON ROAD EASTBOUND							7968+41.76	3484576.386	5413895.123	7969+07.28	3484616.335	5413947.05	7969+71.25	3484672.54	5413980.717			
C11	BOYSON ROAD EASTBOUND							7970+60.20	3484748.845	5414026.425	7971+28.43	3484807.378	5414061.487	7971+94.92	3484848.158	5414116.19			
C12	BOYSON ROAD EASTBOUND							7974+06.07	3484974.357	5414285.475	7974+75.09	3485015.608	5414340.81	7975+42.31	3485032.396	5414407.756			
C13	BOYSON ROAD EASTBOUND							7976+40.61	3485056.307	5414503.102	7977+23.41	3485076.448	5414583.421	7978+03.14	3485130.851	5414645.847			
C14	BOYSON ROAD EASTBOUND							7978+03.14	3485130.851	5414645.847	7979+15.06	3485204.377	5414730.218	7980+26.74	3485286.857	5414805.86			
	BOYSON ROAD EASTBOUND	7981+24.13	3485358.633	5414871.684															
	BOYSON ROAD WESTBOUND	8962+02.89	3484438.99	5413256.868															
	BOYSON ROAD WESTBOUND	8962+75.00	3484443.372	5413328.849															
C15	BOYSON ROAD WESTBOUND							8963+78.69	3484450.254	5413432.307	8965+53.45	3484461.853	5413606.69	8967+18.35	3484567.208	5413746.133			
C16	BOYSON ROAD WESTBOUND							8968+38.92	3484639.893	5413842.334	8969+09.10	3484682.196	5413898.325	8969+77.38	3484699.265	5413966.391			
C17	BOYSON ROAD WESTBOUND							8970+54.34	3484717.983	5414041.035	8971+23.35	3484734.772	5414107.981	8971+90.58	3484776.023	5414163.316			
C18	BOYSON ROAD WESTBOUND							8974+11.38	3484907.993	5414340.343	8974+79.61	3484948.773	5414395.047	8975+46.10	3485007.306	5414430.108			
C19	BOYSON ROAD WESTBOUND							8976+28.78	3485078.233	5414472.594	8977+33.92	3485168.431	5414526.624	8978+32.90	3485213.165	5414621.775			
C20	BOYSON ROAD WESTBOUND							8978+32.90	3485213.165	5414621.775	8979+51.14	3485263.472	5414728.782	8980+66.39	3485350.616	5414808.701			
	BOYSON ROAD WESTBOUND	8981+14.87	3485386.344	5414841.467															
	BOYSON ROAD CENTERLINE	1960+97.41	3484430.474	5413156.81															
C21	BOYSON ROAD CENTERLINE							1963+81.02	3484433.639	5413440.403	1965+92.62	3484436.001	5413651.991	1967+90.16	3484562.47	5413821.639			
C22	BOYSON ROAD CENTERLINE							1979+19.40	3485237.392	5414726.991	1979+71.26	3485268.387	5414768.568	1980+22.81	3485306.606	5414803.618			
	BOYSON ROAD CENTERLINE	1983+15.40	3485522.247	5415001.38															
	RAMP A	3973+56.82	3484699.353	5414005.232															
C23	RAMP A							3976+55.99	3484945.84	5413835.691	3978+37.57	3485095.452	5413732.782	3980+16.93	3485212.003	5413593.534			
	RAMP A	3987+23.10	3485665.255	5413052.013															
	RAMP B	5955+38.02	3483922.556	5415716.111															
C24	RAMP B							5959+66.28	3484228.238	5415416.163	5960+72.16	3484303.81	5415342.009	5961+77.69	3484368.216	5415257.975			
C25	RAMP B							5966+44.05	3484651.912	5414887.82	5968+05.02	3484749.831	5414760.059	5969+64.76	3484872.629	5414655.984			
	RAMP B	5971+31.26	3484999.64	5414548.338															
C26	RAMP C							4959+10.85	3484007.393	5415322.739	4959+82.23	3484044.383	5415261.687	4960+53.56	3484076.926	5415198.153			
C27	RAMP C							4965+98.11	3484325.184	5414713.476	4967+29.88	3484385.255	5414596.199	4968+61.27	3484429.421	5414472.055			
	RAMP C	4974+83.70	3484638.048	5413885.624															
	RAMP D	6971+68.83	3485082.349	5414512.005															
C28	RAMP D							6973+91.46	3485220.32	5414337.287	6975+72.65	3485332.614	5414195.086	6977+47.83	3485372.677	5414018.377			
C29	RAMP D							6977+88.67	3485381.706	5413978.551	6979+60.35	3485419.667	5413811.114	6981+30.55	3485494.479	5413656.585			
C30	RAMP D							6982+75.24	3485557.528	5413526.353	6983+75.26	3485601.111	5413436.331	6984+75.11	3485653.457	5413351.105			
C31	RAMP A - EB LOOP							13973+34.79	3484869.508	5414124.751	13974+95.81	3484773.27	5413995.656	13975+84.17	3484905.936	5413904.404			
C32	RAMP A - WB LOOP							23973+04.92	3484625.54	5413803.431	23974+96.21	3484740.853	5413956.054	23976+10.17	3484898.457	5413847.649			
C33	RAMP B - EB LOOP							25969+56.58	3484877.462	5414674.201	25971+50.06	3485024.378	5414548.301	25972+64.11	3485155.075	5414690.967			

Preliminary
06-03-2023

ALIGNMENT COORDINATES

Name	Location	Poin on Tangent Station	Point on Tangent Y Northing	Point on Tangent X Easting	Begin Spiral Station	Begin Spiral Y Northing	Begin Spiral X Easting	Begin Curve Station	Begin Curve Y Northing	Begin Curve X Easting	Simple Curve PI or Master PI Station	Simple Curve PI or Master PI Y Northing	Simple Curve PI or Master PI X Easting	End Curve Station	End Curve Y Northing	End Curve X Easting	End Spiral Station	End Spiral Y Northing	End Spiral X Easting
	RAMP B - WB LOOP	15969+27.73	3484822.056	5414654.89															
C34	RAMP B - WB LOOP							15970+31.51	3484899.547	5414585.856	15971+73.56	3485005.61	5414491.366	15972+61.48	3484920.711	5414377.481			
C35	RAMP C - EB LOOP							24970+74.34	3484533.382	5414281.266	24973+64.10	3484630.503	5414008.269	24974+09.02	3484803.685	5414240.579			
C36	RAMP C - WB LOOP							14973+04.17	3484578.365	5414053.386	14973+88.60	3484606.665	5413973.839	14974+58.79	3484555.181	5413906.92			
C37	RAMP D - EB LOOP							26971+75.92	3484985.168	5414259.821	26974+01.80	3485120.174	5414440.921	26974+76.43	3485240.581	5414249.803			
C38	RAMP D - WB LOOP							16971+58.41	3485197.986	5414549.631	16972+76.68	3485127.817	5414454.427	16973+60.46	3485201.113	5414361.61			
	BRIDGE BASELINE - NORTH	17971+25.00	3484806.368	5414060.132															
	BRIDGE BASELINE - NORTH	17975+00.00	3485030.498	5414360.783															
	BRIDGE BASELINE - SOUTH	18971+75.00	3484762.036	5414154.434															
	BRIDGE BASELINE - SOUTH	18975+16.72	3484975.712	5414421.109															

Preliminary
06-03-2023

SPIRAL OR CIRCULAR CURVE DATA

Name	Location	SCS	S	Ls	Ts	Es	Xc	Yc	L.T.	S.T.	C	T	L	R	E	Remarks
C1	ML380										13.216◆Right	1327.542	2643.3	11459.156	76.641	
C2	ML380										39.994◆Left	705.981	1354.161	1940	124.463	
C3	ML380										49.768◆Right	1774.21	3322.458	3825	391.45	
C4	ML380										1.793◆Right	500.476	500.476	31979.04	3.916	
C5	ML380	118714.96	-2	200	118781.62	119988.31	199.976	2.327	133.342	66.674						
C6	ML380										20.134◆Left	508.589	1006.689	2864.79	44.795	
C7	ML380	119854.98	-2	200	119788.31	119988.31	199.976	2.327	133.342	66.674						
C8	BOYSON ROAD EASTBOUND										14.841◆ Left	79.446	158.003	610	5.152	
C9	BOYSON ROAD EASTBOUND										18.926◆ Left	57.505	113.962	345	4.76	
C10	BOYSON ROAD EASTBOUND										21.505◆ Left	65.517	129.491	345	6.166	
C11	BOYSON ROAD EASTBOUND										22.374◆ Right	68.231	134.723	345	6.682	
C12	BOYSON ROAD EASTBOUND										22.626◆ Right	69.019	136.239	345	6.836	
C13	BOYSON ROAD EASTBOUND										26.993◆ Left	82.805	162.536	345	9.798	
C14	BOYSON ROAD EASTBOUND										6.405◆ Left	111.913	223.594	2000	3.129	
C15	BOYSON ROAD WESTBOUND										33.267◆ Left	174.768	339.662	585	25.548	
C16	BOYSON ROAD WESTBOUND										22.995◆ Right	70.174	138.46	345	7.065	
C17	BOYSON ROAD WESTBOUND										22.626◆ Left	69.019	136.239	345	6.836	
C18	BOYSON ROAD WESTBOUND										22.374◆ Left	68.231	134.723	345	6.682	
C19	BOYSON ROAD WESTBOUND										33.898◆ Right	105.142	204.114	345	15.666	
C20	BOYSON ROAD WESTBOUND										22.297◆ Left	118.242	233.492	600	11.54	
C21	BOYSON ROAD CENTERLINE										36.064◆ Left	211.601	409.137	650	33.575	
C22	BOYSON ROAD CENTERLINE										10.773◆ Left	51.858	103.411	550	2.439	
C23	RAMP A										15.549◆Left	181.587	360.943	1330	12.339	
C24	RAMP B										8.075◆Left	105.876	211.402	1500	3.732	
C25	RAMP B										12.250◆Right	160.968	320.71	1500	8.612	
C26	RAMP C										4.088◆Left	71.384	142.707	2000	1.274	
C27	RAMP C										7.539◆Left	131.767	263.153	2000	4.336	
C28	RAMP D										25.523◆Left	181.194	356.375	800	20.263	
C29	RAMP D										5.726◆Right	100.018	199.869	2000	2.499	
C30	RAMP D										13.059◆Right	171.686	341.885	1500	9.793	
C31	RAMP A - EB LOOP										92.182◆Right	161.019	249.377	155	68.5	
C32	RAMP A - WB LOOP										87.449◆Left	191.288	305.254	200	76.751	
C33	RAMP B - EB LOOP										88.102◆Right	193.482	307.534	200	78.272	
C34	RAMP B - WB LOOP										85.007◆Left	142.048	229.965	155	55.244	
C35	RAMP C - EB LOOP										123.713◆Right	289.758	334.675	155	173.61	
C36	RAMP C - WB LOOP										57.156◆ Left	84.432	154.622	155	21.504	
C37	RAMP D - EB LOOP										111.085◆Left	225.885	300.514	155	118.951	
C38	RAMP D - WB LOOP										74.689◆ Right	118.268	202.053	155	39.968	

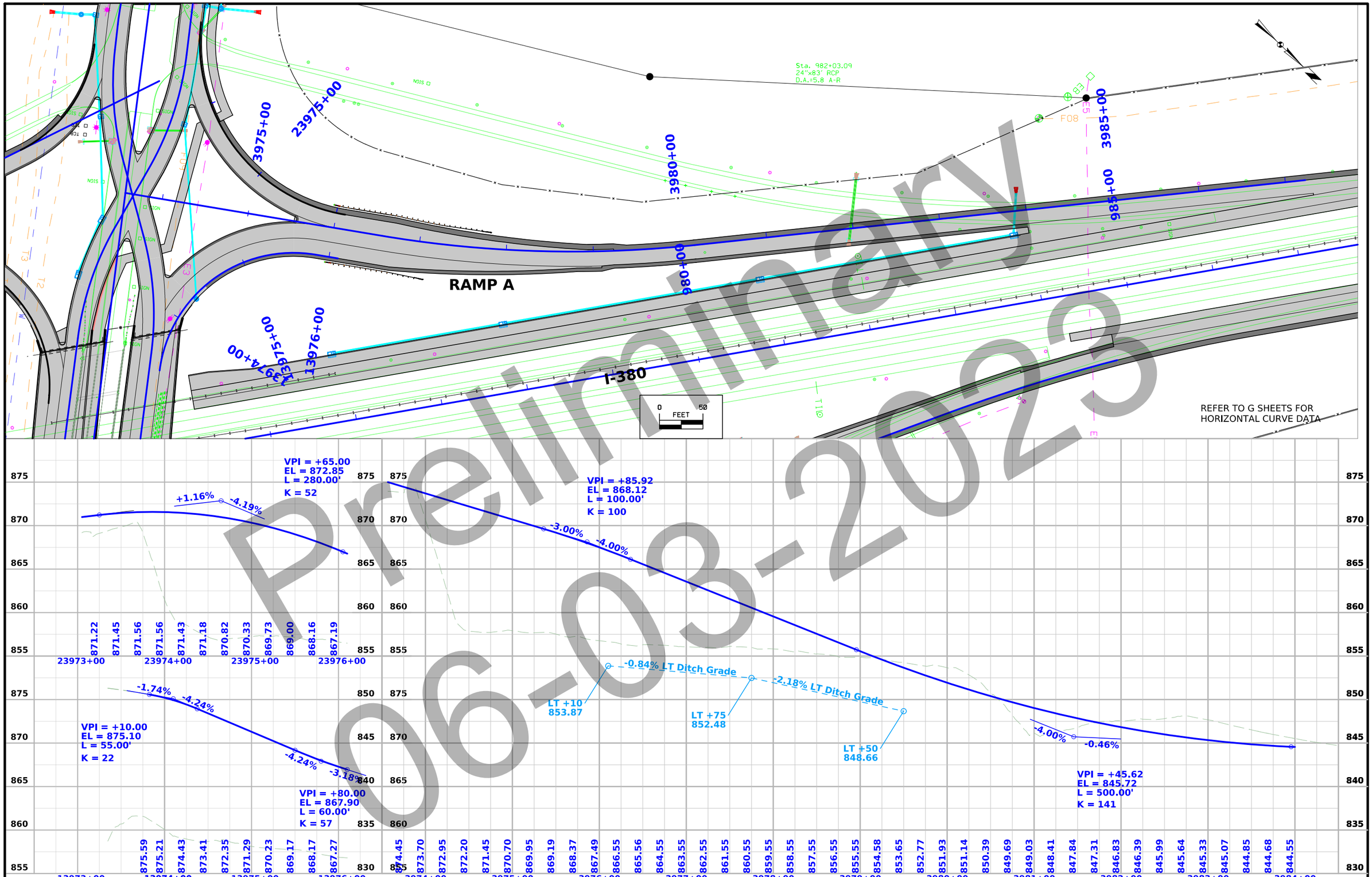
Preliminary
06-03-2023

SUPERELEVATION DATA

See PV-300 Series

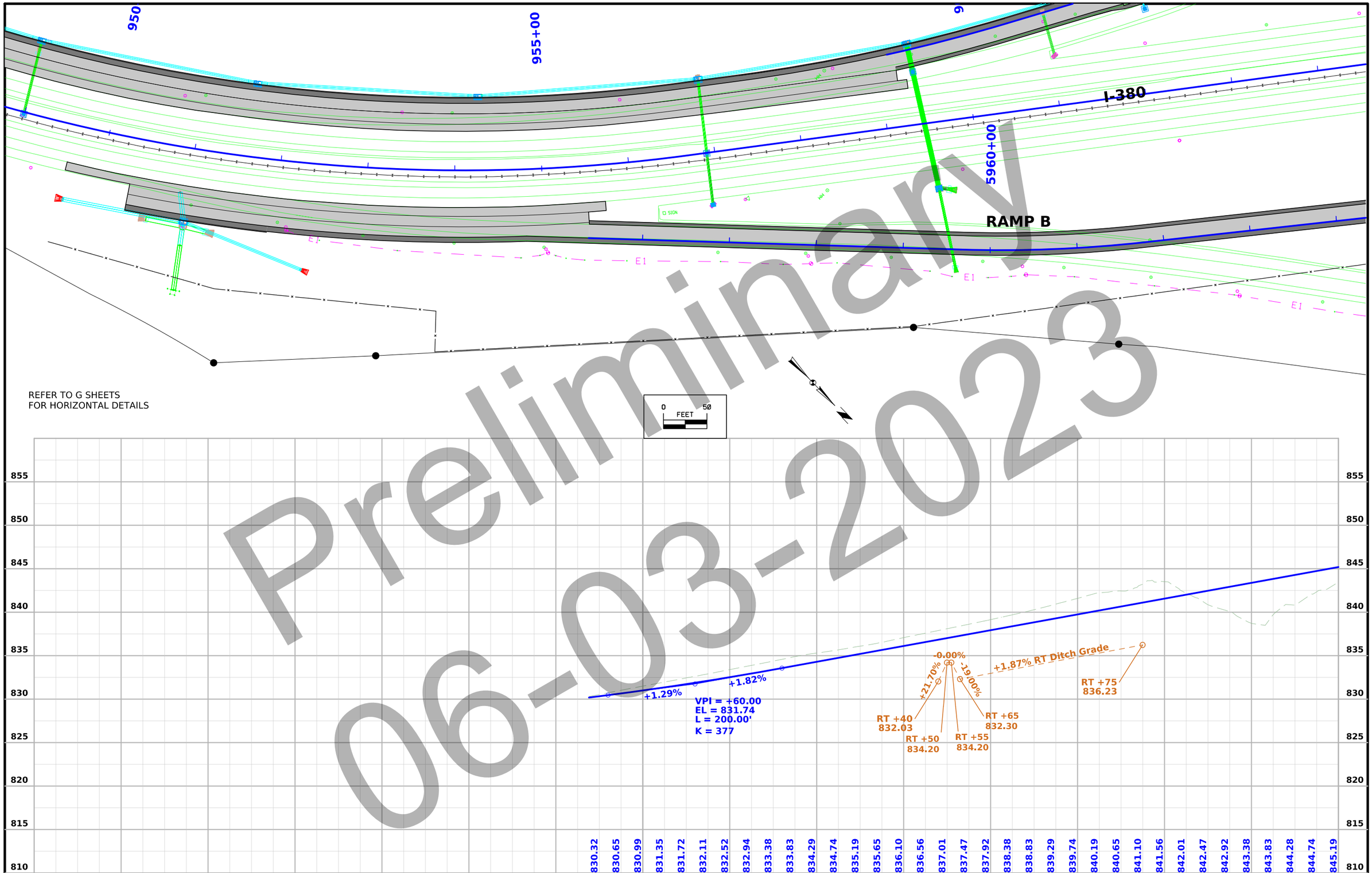
Road Identification	Circular Curve or Spiral Curve Name	Radius (FT)	e (%)	L (FT)	x (FT)	Standard Road Plan	Section A-A	Section A'-A'	Section B-B	Section C'-C'	Section C-C	Section D-D	Case A	Case B	Case C	Case S	Case T	Case U	Remarks
I-380	C2	1940.0	5.6	450.0	200.90	PV-306	938+00.96	938+41.14	940+01.85	941+62.57	942+02.75	944+51.85	94316.85			94323.30	94323.28		
I-380	C2	1940.0	5.6	450.0	200.90	PV-306	961+87.75	961+47.57	959+86.85	958+26.14	957+85.96	955+36.85	95671.90			95665.40	95665.40		

Preliminary
06-03-2023



Preliminary
06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT/Kirkham Michael	LINN COUNTY	PROJECT NUMBER IM-380-6(358)25--13-57	SHEET NUMBER K.2



Preliminary
06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT/Kirkham Michael	LINN COUNTY	PROJECT NUMBER IM-380-6(358)25--13-57	SHEET NUMBER K.3

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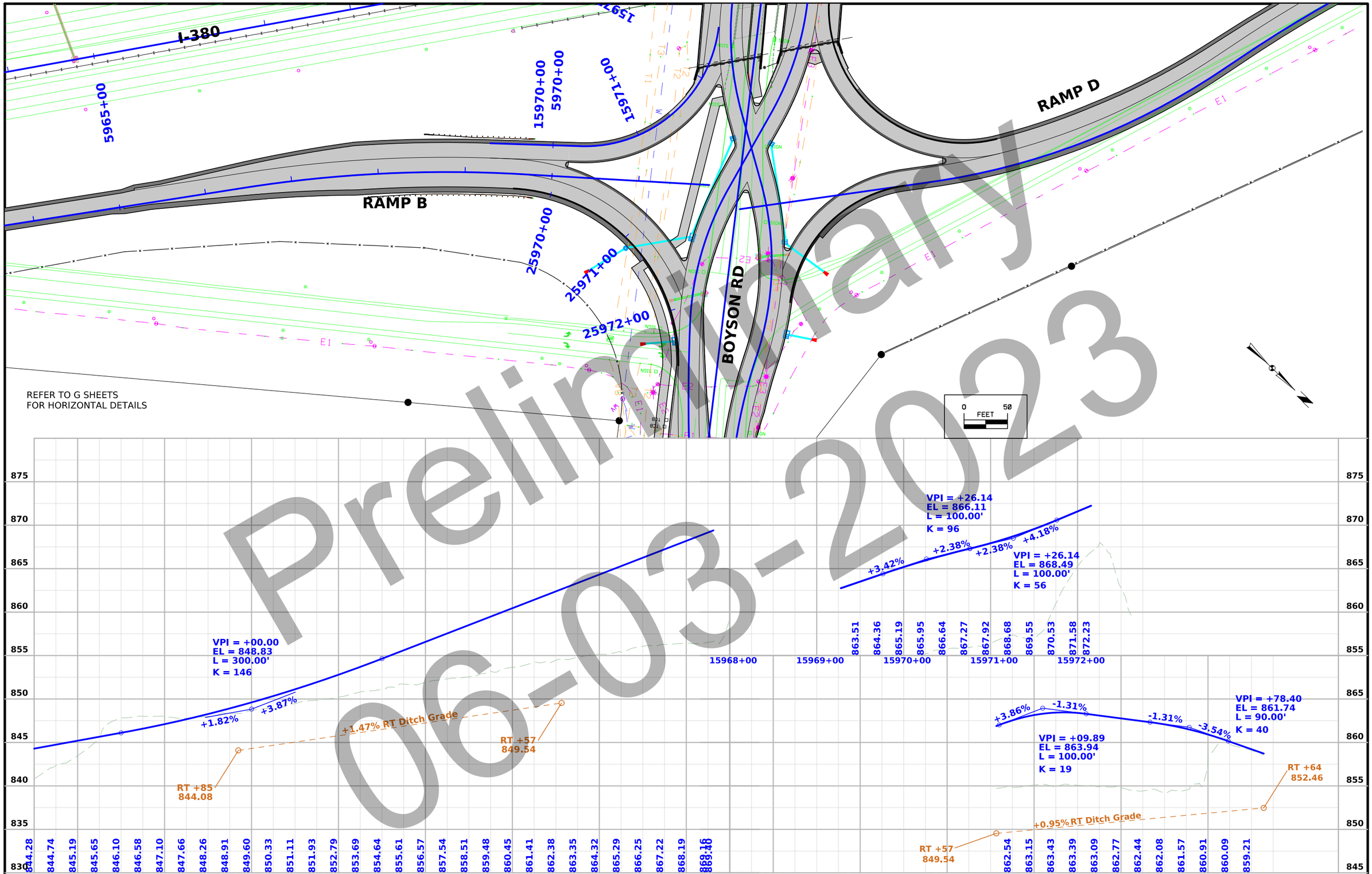

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT/Kirkham Michael	LINN COUNTY	PROJECT NUMBER IM-380-6(358)25--13-57	SHEET NUMBER K.4

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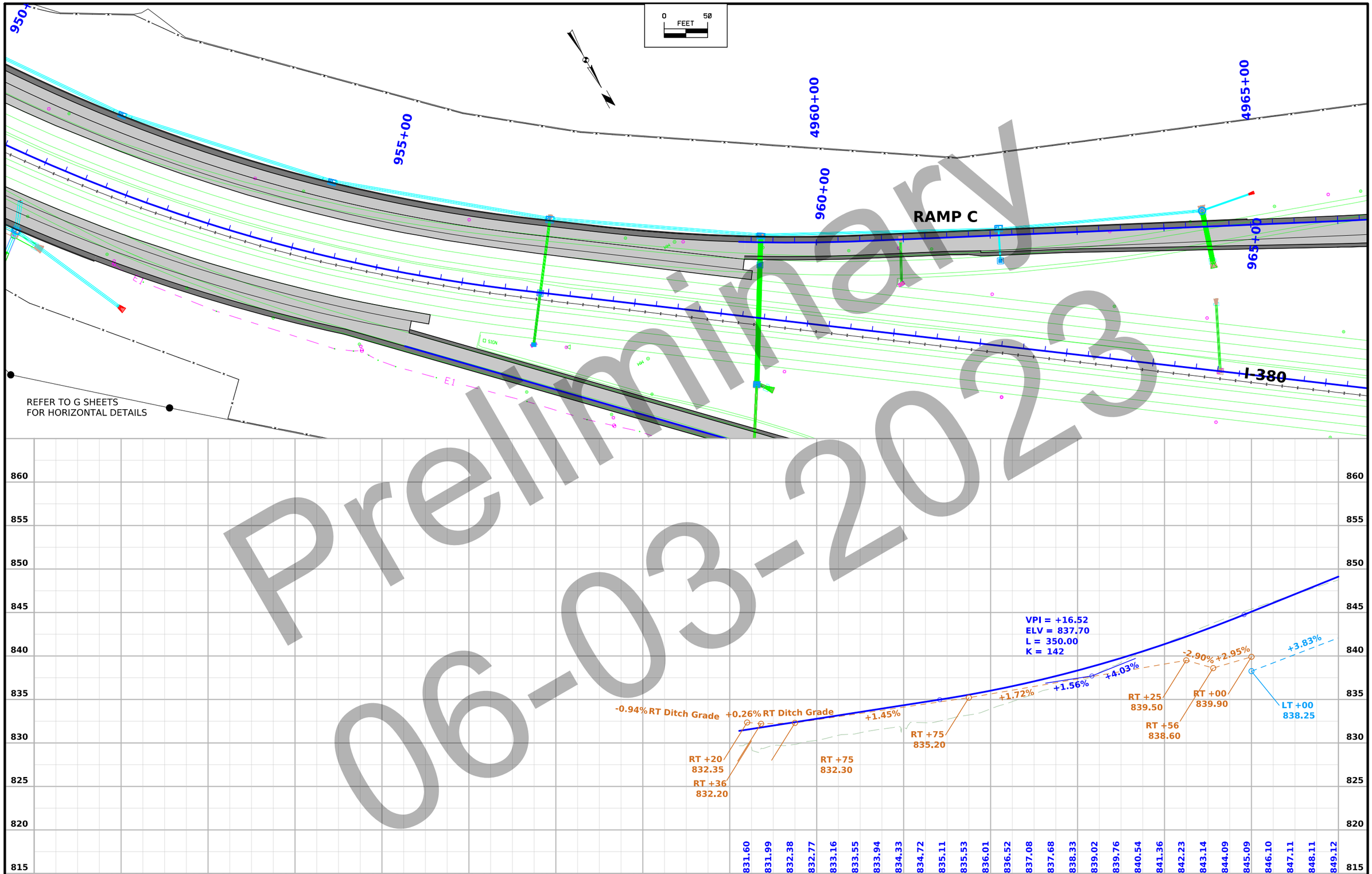

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT/Kirkham Michael	LINN COUNTY	PROJECT NUMBER IM-380-6(358)25--13-57	SHEET NUMBER K.5

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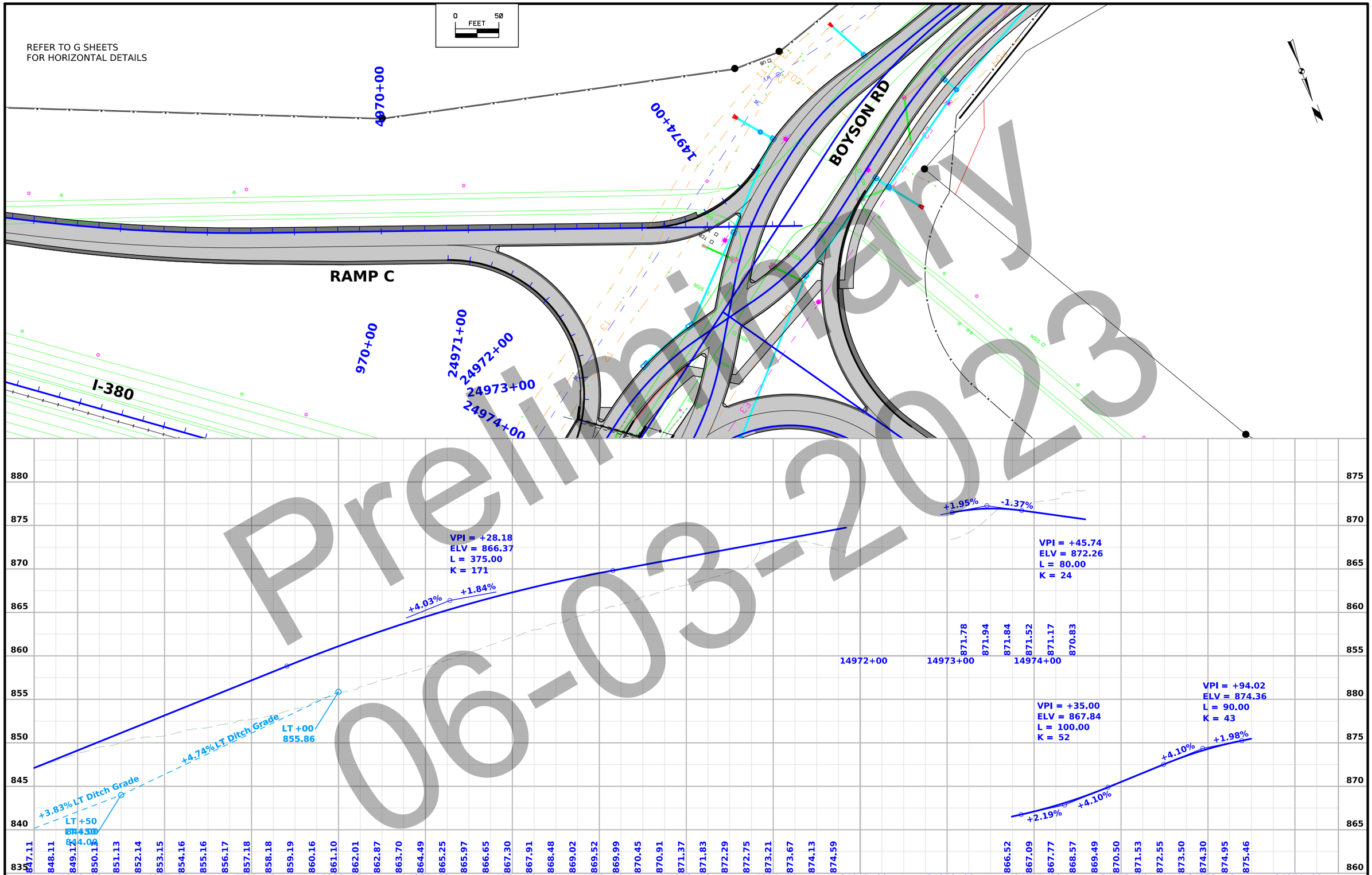

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT/Kirkham Michael	LINN COUNTY	PROJECT NUMBER IM-380-6(358)25--13-57	SHEET NUMBER K.6

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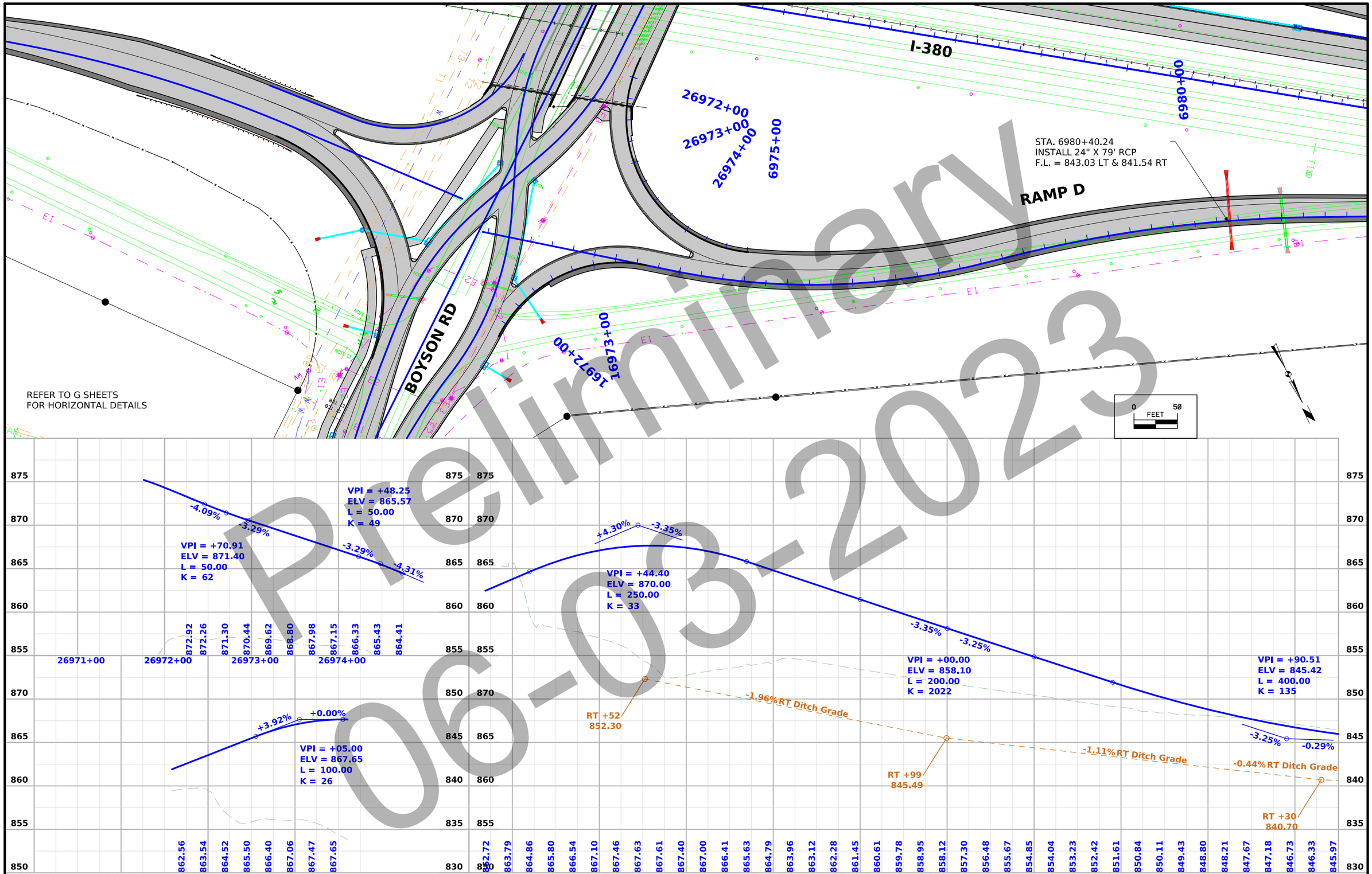

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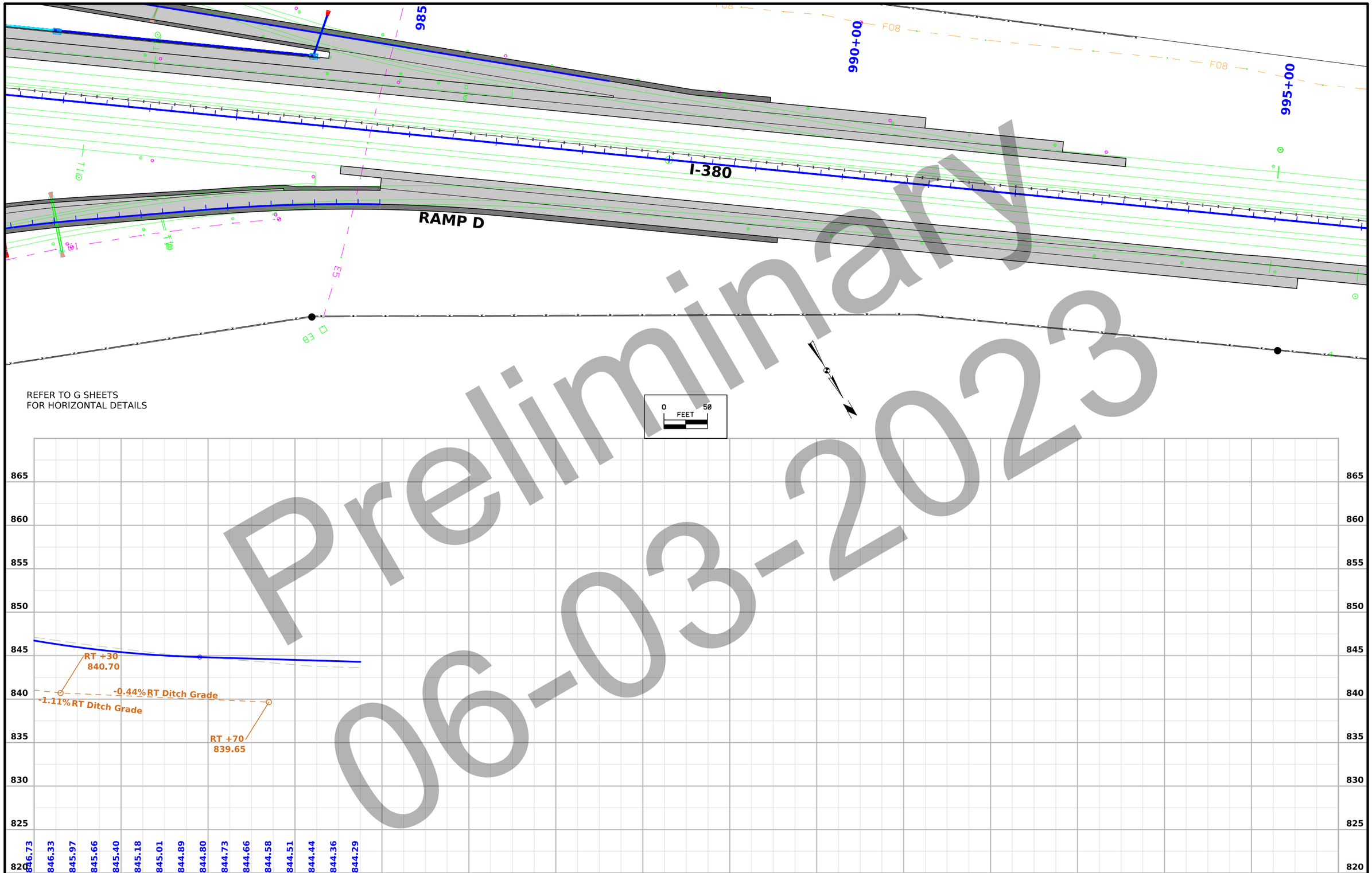
FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT/Kirkham Michael	LINN COUNTY	PROJECT NUMBER IM-380-6(358)25--13-57	SHEET NUMBER K.7



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FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT/Kirkham Michael	LINN COUNTY	PROJECT NUMBER IM-380-6(358)25--13-57	SHEET NUMBER K.8

SURVEY SYMBOLS

- Interstate Highway Symbol
- U.S. Highway Symbol
- Iowa Highway Symbol
- County Road Highway Symbol
- Evergreen Tree
- Deciduous Tree
- Fruit Tree
- Shrub (Bushes)
- Timber
- Hedge
- Stump
- Swamp
- Rock Outcrop
- Broken Concrete
- Revetment (Rip Rap)
- Cemetery
- Grave
- Cave
- Sink Hole
- Board Fence
- Chain Link or Security Fence
- Wire Fence
- Terrace
- Earth Dam or Dike (Existing)
- Tile Outlet
- Edge of Water
- Existing Drainage
- Right of Way Rail or Lot Corner
- Concrete Monument
- Well
- Windmill
- Beehive Intake
- Existing Intake
- Existing Utility Access (Manhole)
- Fire Hydrant
- WH Water Hydrant (Rural)
- Septic Tank
- C Cistern
- LP L.P. Gas Tank (No Footing)
- UST Underground Storage Tank
- Latrine
- Satellite TV Dish
- WHU Water Hook Up
- RT Radio Tower
- TA Tower Anchor
- Guardrail (Beam or Cable)
- GP Guard Post (one or two)
- Guard Post (over two)
- FP Filler Pipe
- GV Gas Valve
- WV Water Valve
- SL Speed Limit Sign
- MM Mile Marker Post
- SIGN Sign
- TCB Traffic Signal Control Box
- RRB Rail Road Signal Control Box
- TSB Telephone Switch Box
- EB Electric Box

UTILITY LEGEND

- E Iowa Department of Transportation
- E City of Hiawatha
- E Unidentified Electric
- F Aureon Fiber
- F Unknown Fiber
- F Iowa Communications Network
- F Unite Private Networks, LLC
- F Aureon Network Services
- F Iowa Health System
- G MidAmerican
- T IMON Buried Cable
- T Century Link
- T Windstream
- T Mediacom
- W City of Hiawatha

PLAN VIEW COLOR LEGEND OF SOILS SHEETS

LINEWORK	Design Color No.		
Green	(2)		Existing Topographic Features and Labels
Purple (Halo)	(15)		Backslope Drains
Blue	(1)		Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
SHADING	**Design Color No.**		
Brown, Light	(236)		Core Out

PROFILE VIEW COLOR LEGEND OF SOILS SHEETS

LINEWORK	Design Color No.		
Blue	(1)		Proposed Alignment, Stationing, and Alignment Annotation
Green	(2)		Existing Ground Line Profile
Green, Med	(2)		Topsoil
Green, Med	(2)		Slope Dressing Only
Orange	(6)		Loam
Aqua (Cyan)	(7)		Class 10
Brown, Med	(4)		Sand
Red	(3)		Unsuitable A
Pink, Dark	(13)		Unsuitable B
Pink	(11)		Unsuitable C
Red	(3)		Shale
Red	(3)		Waste
Gray, Light	(48)		Broken and Weathered Rock
Gray, Med	(80)		Rock
Gray, V.Dark	(128)		Boulders

PATTERN AND SYMBOL LEGEND OF SOILS SHEETS

- Drill
- Dig/Core
- Date(s) Drilled _____
- Water
- Dry
- Sample
- Plugged
- Moisture
- Shelby
- Blow Count
- Dens. Core
- Treatment
- Sand Blanket
- Soil Remediation Area
- Select Soil
- Select Sand
- Slope Dressing Only
- Broken and Weathered Rock
- Rock
- Sandstone
- Unsuitable A
- Unsuitable B
- Unsuitable C
- Sandy Soil
- Boulders
- Shale

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

RIGHT-OF-WAY LEGEND

- Proposed Right-of-Way
- Existing and Proposed Right-of-Way
- Easement and Existing Right-of-Way
- Borrow
- Easement (Temporary)
- Easement
- Excess
- A/C Access Control

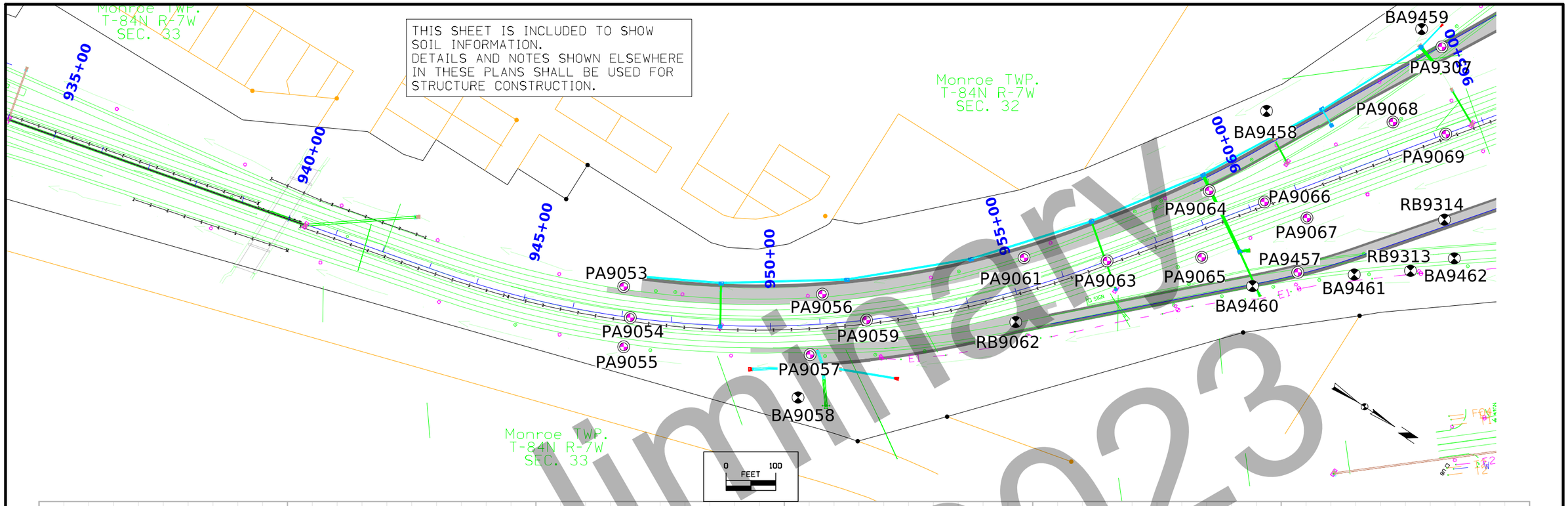
NOTE: Sounding and test boring data shown in the plans were accumulated for designing and estimating purposes. Their appearance on the plans does not constitute a guarantee that conditions other than those indicated will be encountered. Details and notes shown elsewhere shall be used for roadway and structure construction.

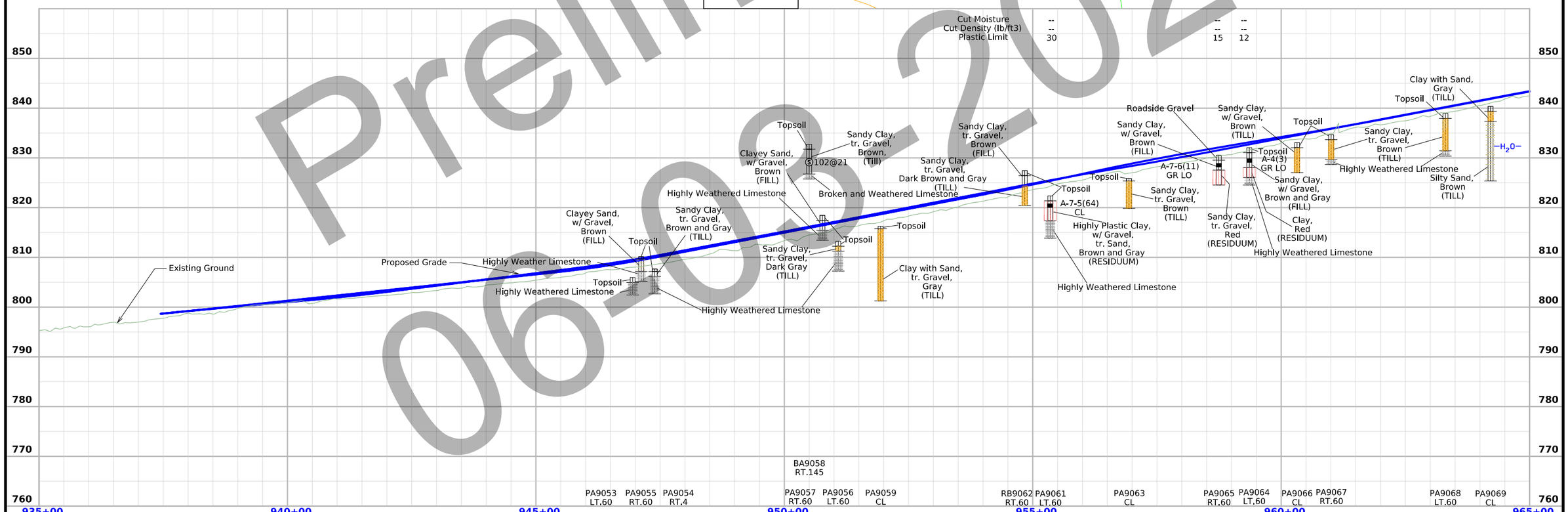
SOILS LEGEND AND SYMBOL INFORMATION SHEET

(COVERS SHEET SERIES Q)

Preliminary 06-03-2023

THIS SHEET IS INCLUDED TO SHOW SOIL INFORMATION.
DETAILS AND NOTES SHOWN ELSEWHERE IN THESE PLANS SHALL BE USED FOR STRUCTURE CONSTRUCTION.





FILE NO.	ENGLISH	DESIGN TEAM **Kirkham Michael/Braun Intertec**	Linn COUNTY	PROJECT NUMBER **IM-380-6(358)25--13-57**	SHEET NUMBER **Q.2**

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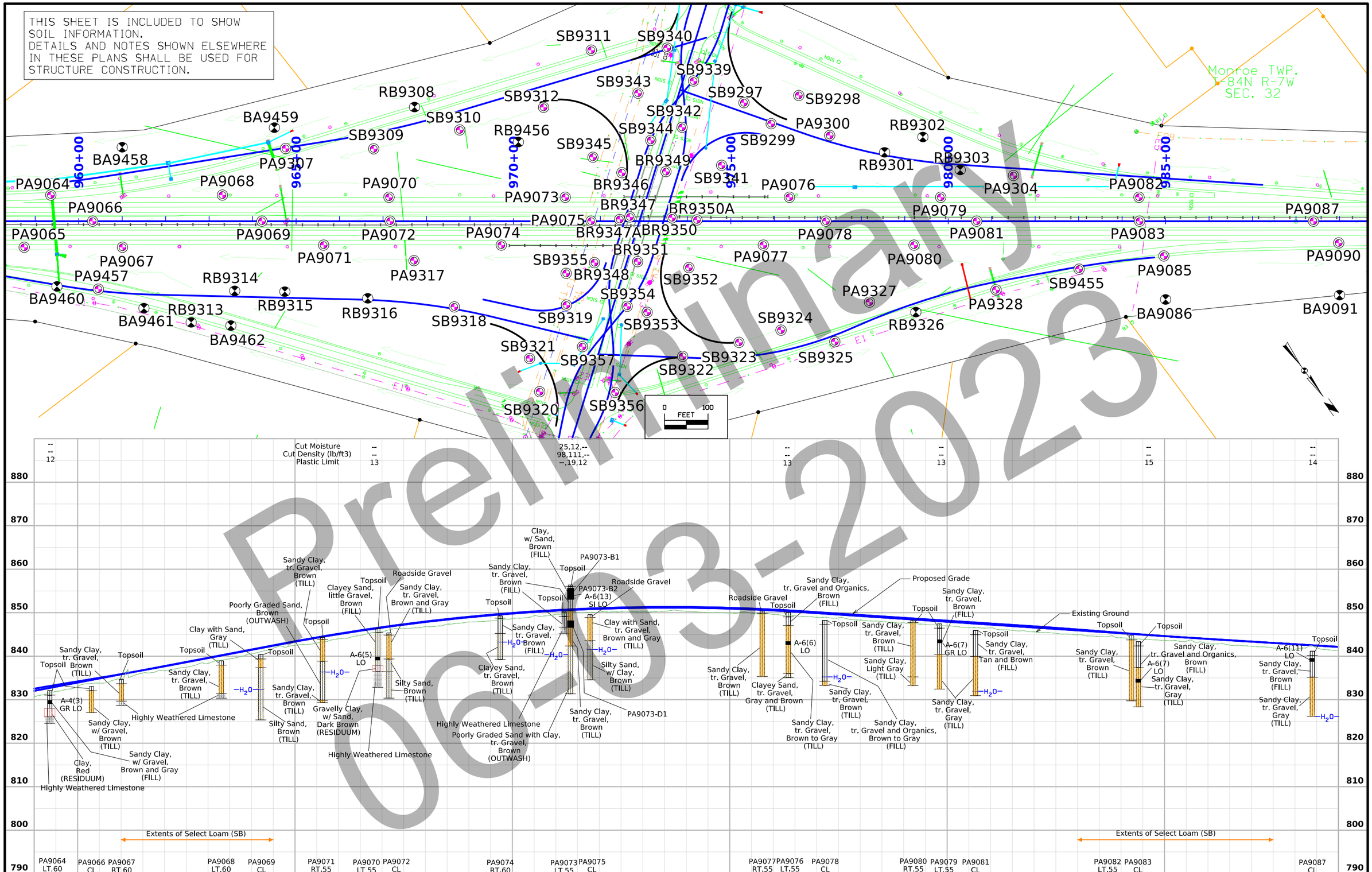

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06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM **Kirkham Michael/Braun Intertec**	Linn COUNTY	PROJECT NUMBER **IM-380-6(358)25--13-57**	SHEET NUMBER **Q.3**

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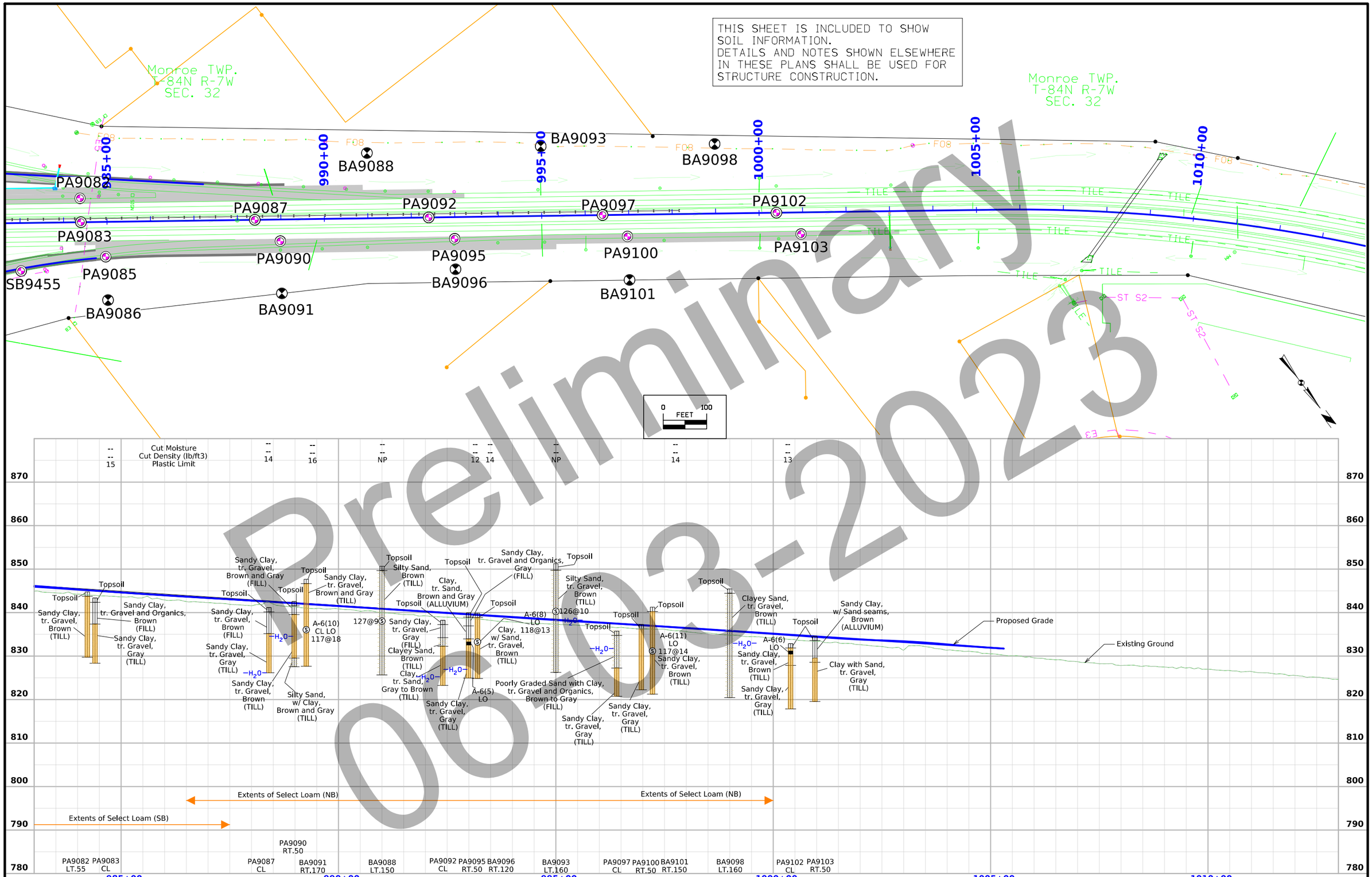

Preliminary
06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM Kirkham Michael/Braun Intertec	Linn COUNTY	PROJECT NUMBER IM-380-6(358)25--13-57	SHEET NUMBER Q.4

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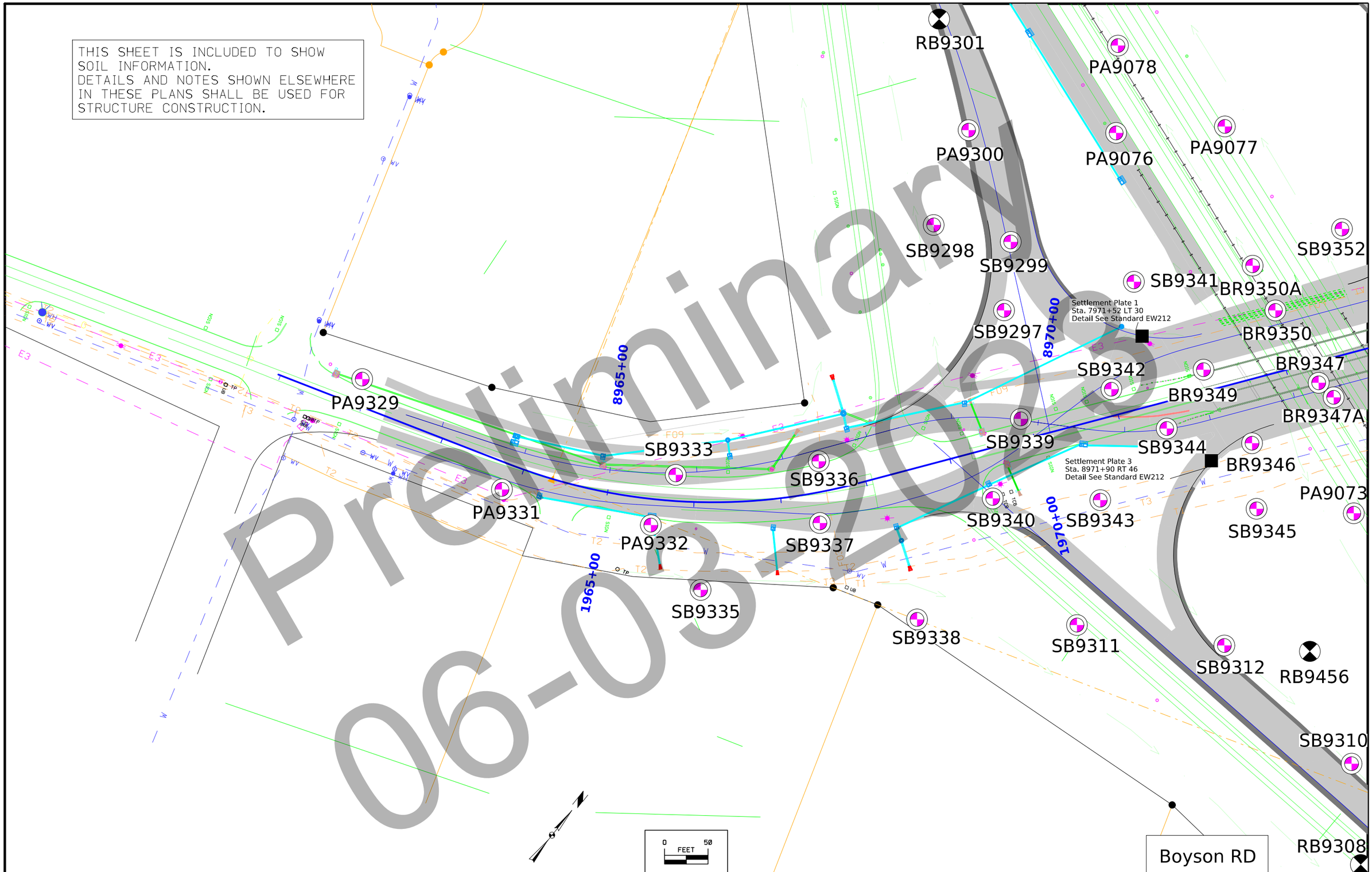

FILE NO.	ENGLISH	DESIGN TEAM **Kirkham Michael/Braun Intertec**	**LINN** COUNTY	PROJECT NUMBER **IM-380-6(358)25--13-57**	SHEET NUMBER **Q.5**

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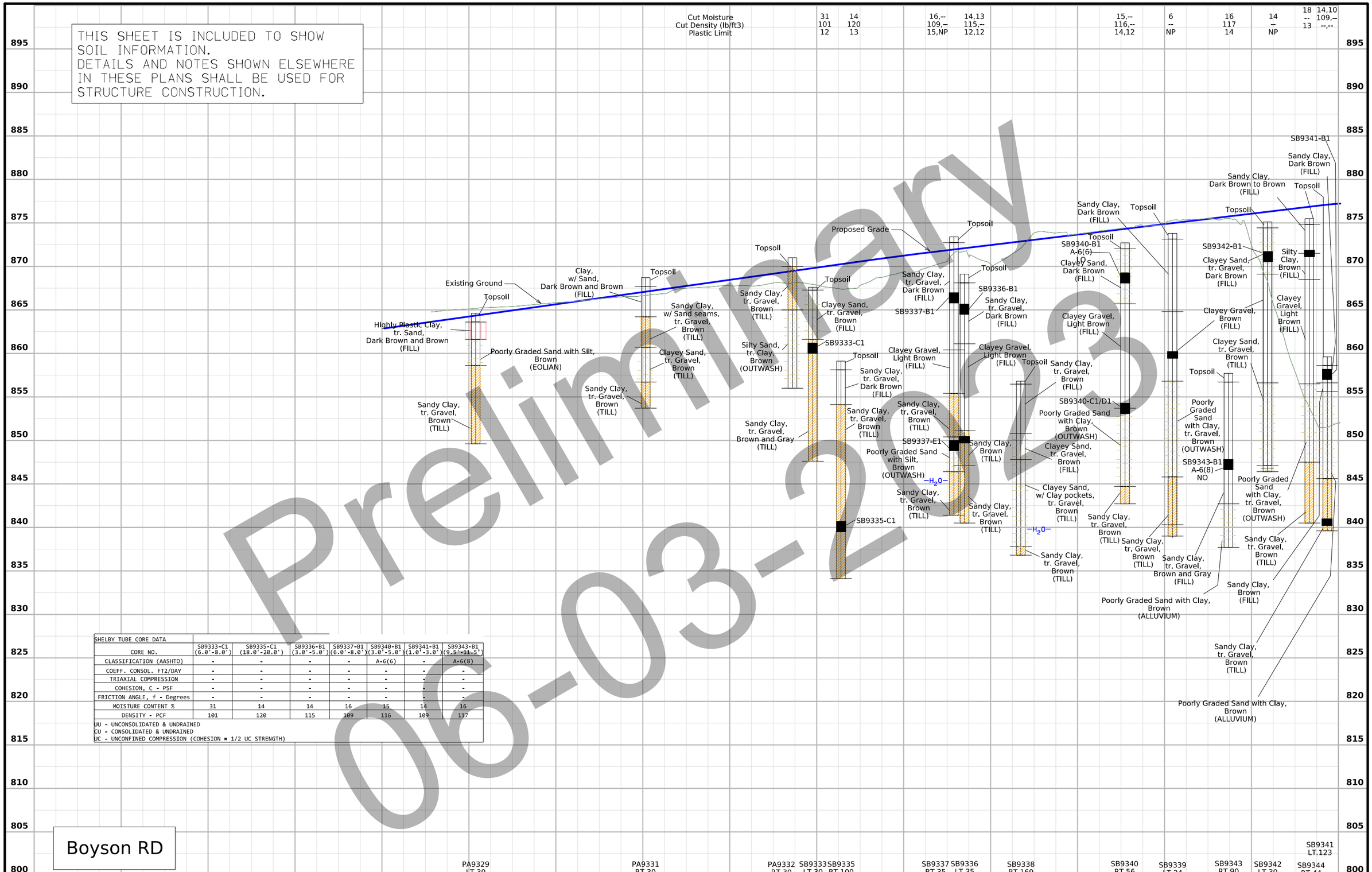

SHELBY TUBE CORE DATA							
CORE NO.	SB9333-C1 (6.0'-8.0')	SB9335-C1 (18.0'-20.0')	SB9336-B1 (3.0'-5.0')	SB9337-B1 (6.0'-8.0')	SB9340-B1 (3.0'-5.0')	SB9341-B1 (1.0'-3.0')	SB9343-B1 (9.5'-11.5')
CLASSIFICATION (AASHTO)	-	-	-	-	A-6(6)	-	A-6(8)
COEFF. CONSOL. FT2/DAY	-	-	-	-	-	-	-
TRIAXIAL COMPRESSION	-	-	-	-	-	-	-
COHESION, C - PSF	-	-	-	-	-	-	-
FRICTION ANGLE, f - Degrees	-	-	-	-	-	-	-
MOISTURE CONTENT %	31	14	14	16	15	14	16
DENSITY - PCF	101	120	115	109	116	109	117

UU - UNCONSOLIDATED & UNDRAINED
CU - CONSOLIDATED & UNDRAINED
UC - UNCONFINED COMPRESSION (COHESION = 1/2 UC STRENGTH)

Preliminary
06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM **Kirkham Michael/Braun Intertec**	**Linn** COUNTY	PROJECT NUMBER **IM-380-6(358)25--13-57**	SHEET NUMBER **Q.6**

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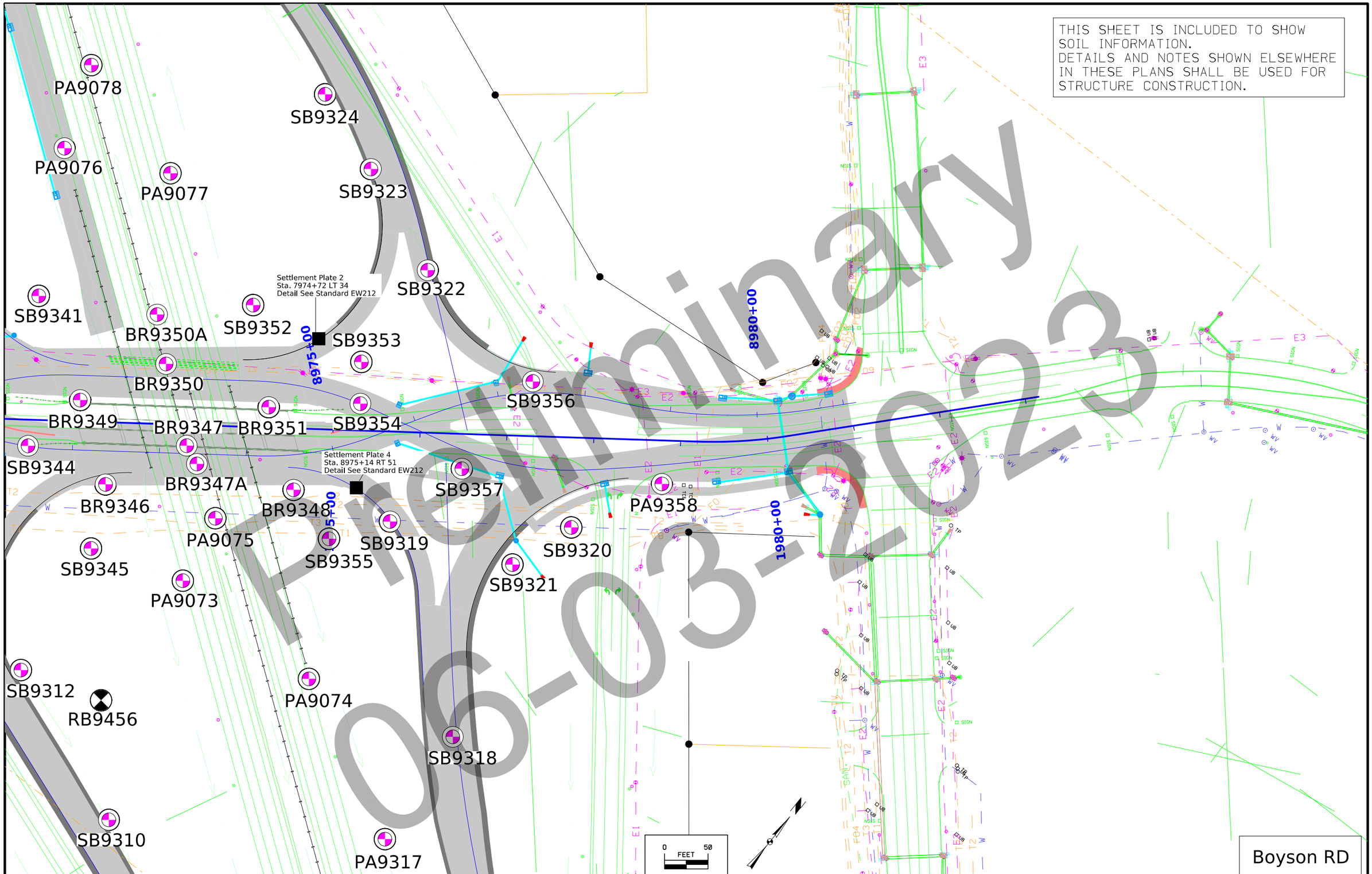

Preliminary
06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM **Kirkham Michael/Braun Intertec**	**Linn** COUNTY	PROJECT NUMBER **IM-380-6(358)25--13-57**	SHEET NUMBER **Q.7**

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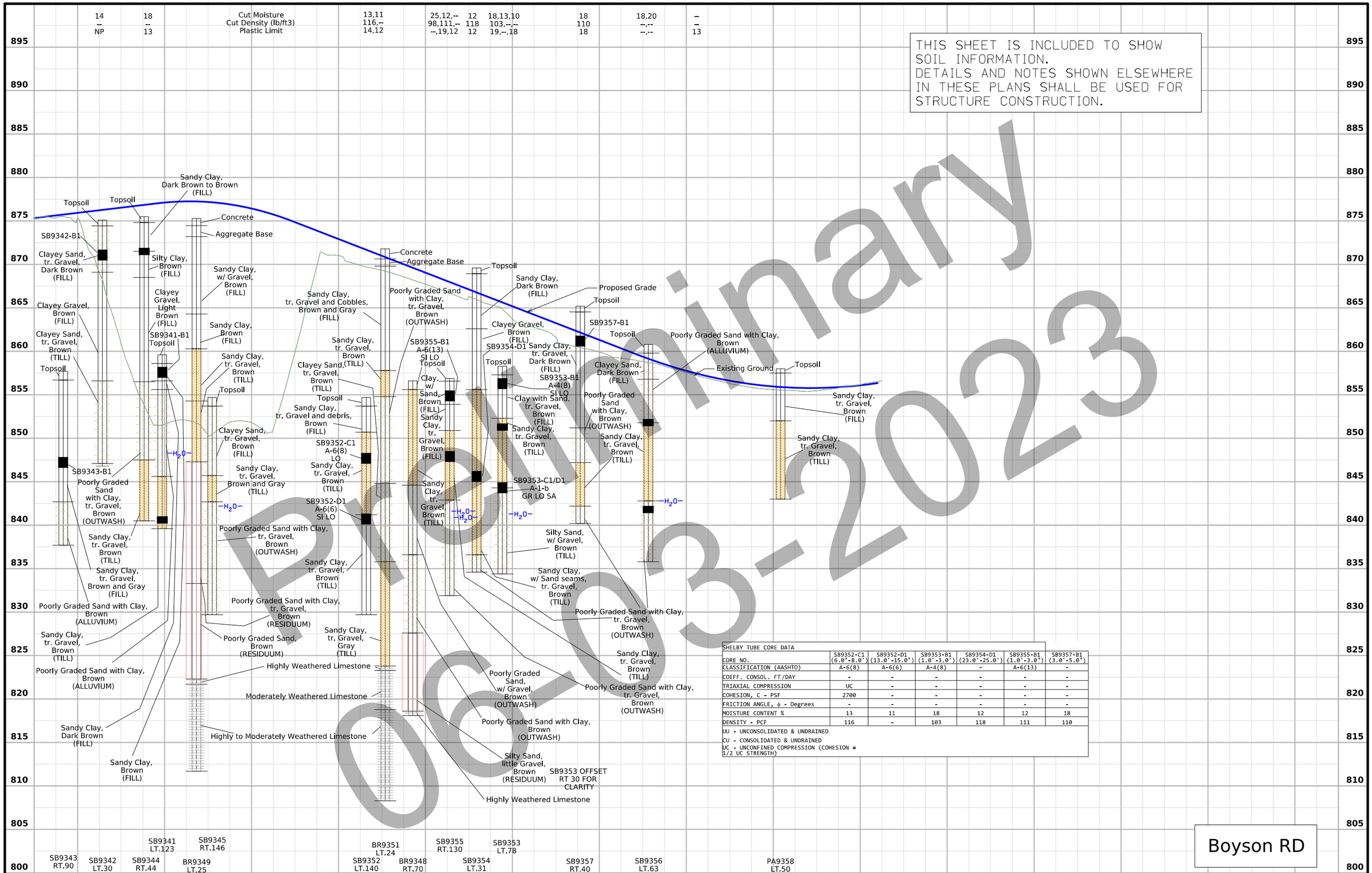

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SHELBY TUBE CORE DATA

CORE NO.	SB9352-C1 (6.0'-8.0')	SB9352-D1 (13.0'-15.0')	SB9353-B1 (1.0'-3.0')	SB9354-D1 (23.0'-25.0')	SB9355-B1 (1.0'-3.0')	SB9357-B1 (3.0'-5.0')
CLASSIFICATION (AASHTO)	A-6(8)	A-6(6)	A-4(8)	-	A-6(13)	-
COEFF. CONSOL. FT/DAY	-	-	-	-	-	-
TRIAXIAL COMPRESSION	UC	-	-	-	-	-
COHESION, C - PSF	2700	-	-	-	-	-
FRICTION ANGLE, ϕ - Degrees	-	-	-	-	-	-
MOISTURE CONTENT %	13	11	18	12	12	18
DENSITY - PCF	116	-	103	118	111	110

UU - UNCONSOLIDATED & UNDRAINED
CU - CONSOLIDATED & UNDRAINED
UC - UNCONFINED COMPRESSION (COHESION = 1/2 UC STRENGTH)

Preliminary 06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM Kirkham Michael/Braun Intertec	Linn COUNTY	PROJECT NUMBER IM-380-6(358)25--13-57	SHEET NUMBER Q.8

THIS SHEET IS INCLUDED TO SHOW SOIL INFORMATION.
DETAILS AND NOTES SHOWN ELSEWHERE IN THESE PLANS SHALL BE USED FOR STRUCTURE CONSTRUCTION.

Preliminary
06-03-2023

SB9340
SB9339
SB9343
SB9342
SB9344
SB9341
BR9349
BR9346
BR9350A
BR9347
BR9350
BR9347A
BR9348
BR9351
BS9352
SB9354
SB9353
SB9324
SB9325
PA9327
RB9326
PA9328
PA9077
PA9076
PA9078
PA9080
PA9081
PA9079
SB9455
BA9086
PA9085
PA9083
PA9082
PA9304
RB9303
RB9301
RB9302
PA9300
SB9299
SB9297
SB9298

Settlement Plate 1
Sta. 7971+52 LT 30
Detail See Standard EW212

Settlement Plate 2
Sta. 7974+72 LT 34
Detail See Standard EW212

23975+00
3975+00
13975+00
3980+00
3985+00

0 50
FEET

Boyson RD
Ramp A

FILE NO.	ENGLISH	DESIGN TEAM **Kirkham Michael/Braun Intertec**	**Linn** COUNTY	PROJECT NUMBER **IM-380-6(358)25--13-57**	SHEET NUMBER **Q.9**

5:21:09 PM 6/3/2024 DRivers pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\5738005096\Soils\(358)\Q-Sheets\Q.3

THIS SHEET IS INCLUDED TO SHOW SOIL INFORMATION.
DETAILS AND NOTES SHOWN ELSEWHERE IN THESE PLANS SHALL BE USED FOR STRUCTURE CONSTRUCTION.

SHELBY TUBE CORE DATA

CORE NO.	SB9297-C1 (6.0'-8.0')	SB9297-D1 (13.0'-15.0')	SB9299-B1/C1 (3.0'-5.0')	SB9298-B1/C1 (6.0'-8.0')	RB9301-B1 (1.0'-3.0')	RB9301-C1 (8.0'-10.0')	RB9302-B2 (3.0'-5.0')	RB9302-C1 (8.0'-10.0')	RB9302-D2 (13.0'-15.0')	RB9303-D2 (8.0'-10.0')	RB9303-E2 (13.0'-15.0')
CLASSIFICATION (AASHTO)	A-1-b	A-6(4)	A-2-6(1)	-	-	-	-	-	-	-	-
COEFF. CONSOL. FT/DAY	-	-	1.05	-	-	-	-	-	-	-	-
TRIAXIAL COMPRESSION	-	UC	CU	-	-	-	-	-	-	-	-
COHESION, C - PSF	-	2970	16	-	-	-	-	-	-	-	-
FRICTION ANGLE, ϕ - Degrees	-	-	23	-	-	-	-	-	-	-	-
MOISTURE CONTENT %	14	9	13	14	18	14	14	17	15	17	17
DENSITY - PCF	-	127	118	122	102	104	116	113	119	115	114

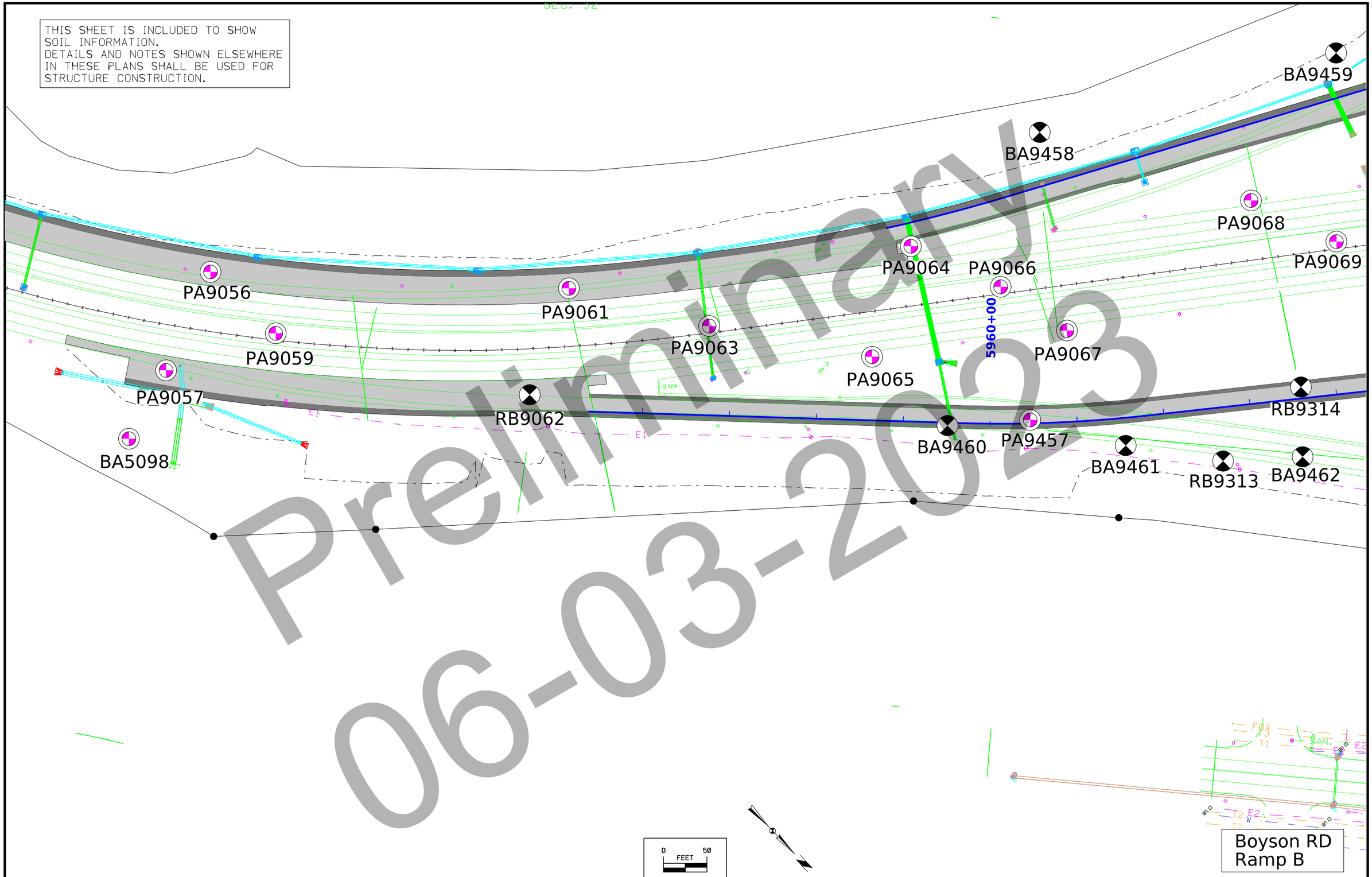
UU - UNCONSOLIDATED & UNDRAINED
CU - CONSOLIDATED & UNDRAINED
UC - UNCONFINED COMPRESSION (COHESION = 1/2 UC STRENGTH)

Boyson RD
Ramp A

Preliminary
06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM Kirkham Michael/Braun Intertec	Linn COUNTY	PROJECT NUMBER IM-380-6(358)25--13-57	SHEET NUMBER Q.10

THIS SHEET IS INCLUDED TO SHOW SOIL INFORMATION.
DETAILS AND NOTES SHOWN ELSEWHERE IN THESE PLANS SHALL BE USED FOR STRUCTURE CONSTRUCTION.



Preliminary
06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM **Kirkham Michael/Braun Intertec**	**Linn** COUNTY	PROJECT NUMBER **IM-380-6(358)25--13-57**	SHEET NUMBER **Q.11**

5:21:35 PM 6/3/2024 DRivers pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\5738005096\Soils\(358)\Q-Sheets\Q.4

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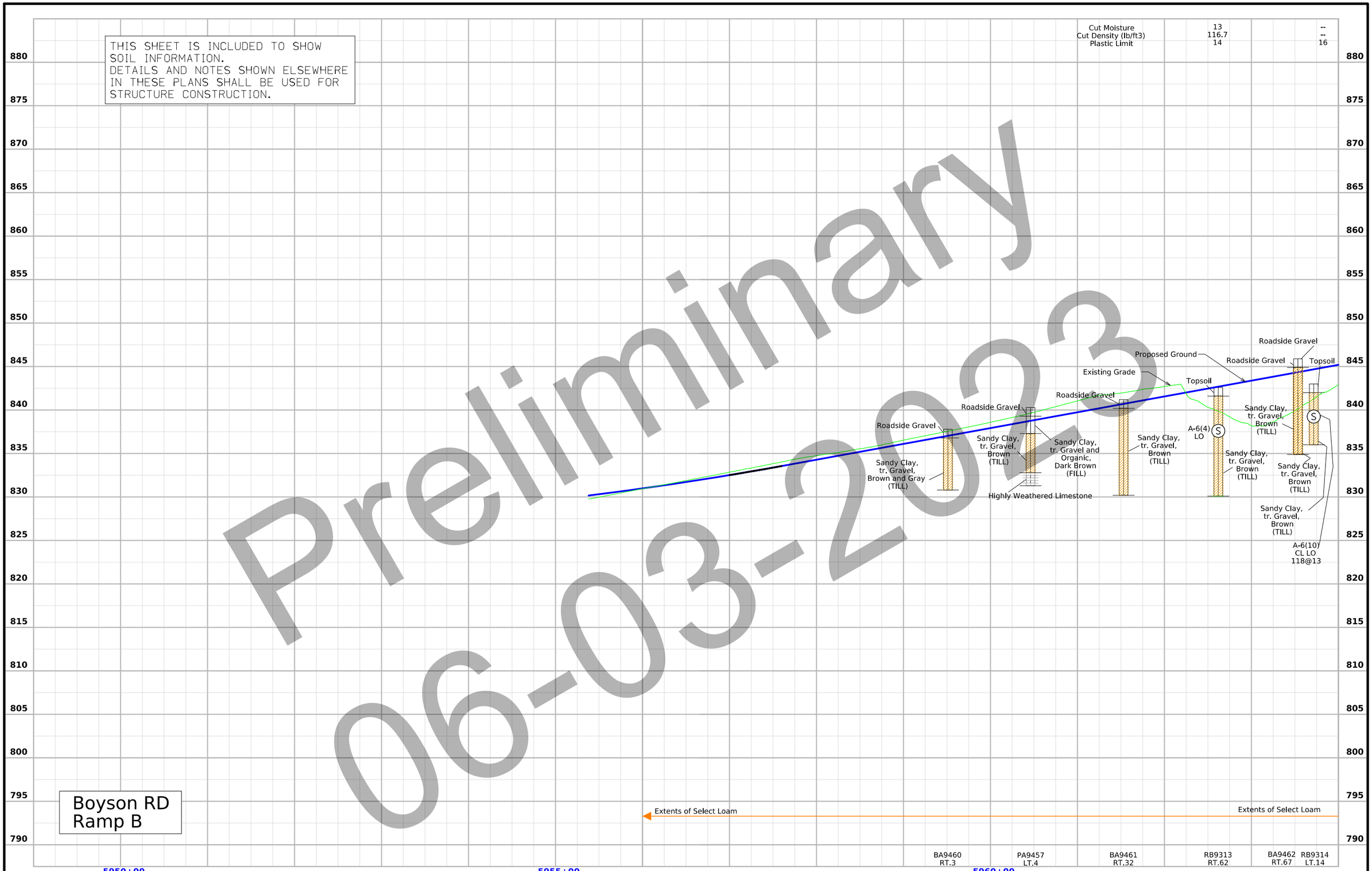
DETAILS AND NOTES SHOWN ELSEWHERE IN THESE PLANS SHALL BE USED FOR STRUCTURE CONSTRUCTION.

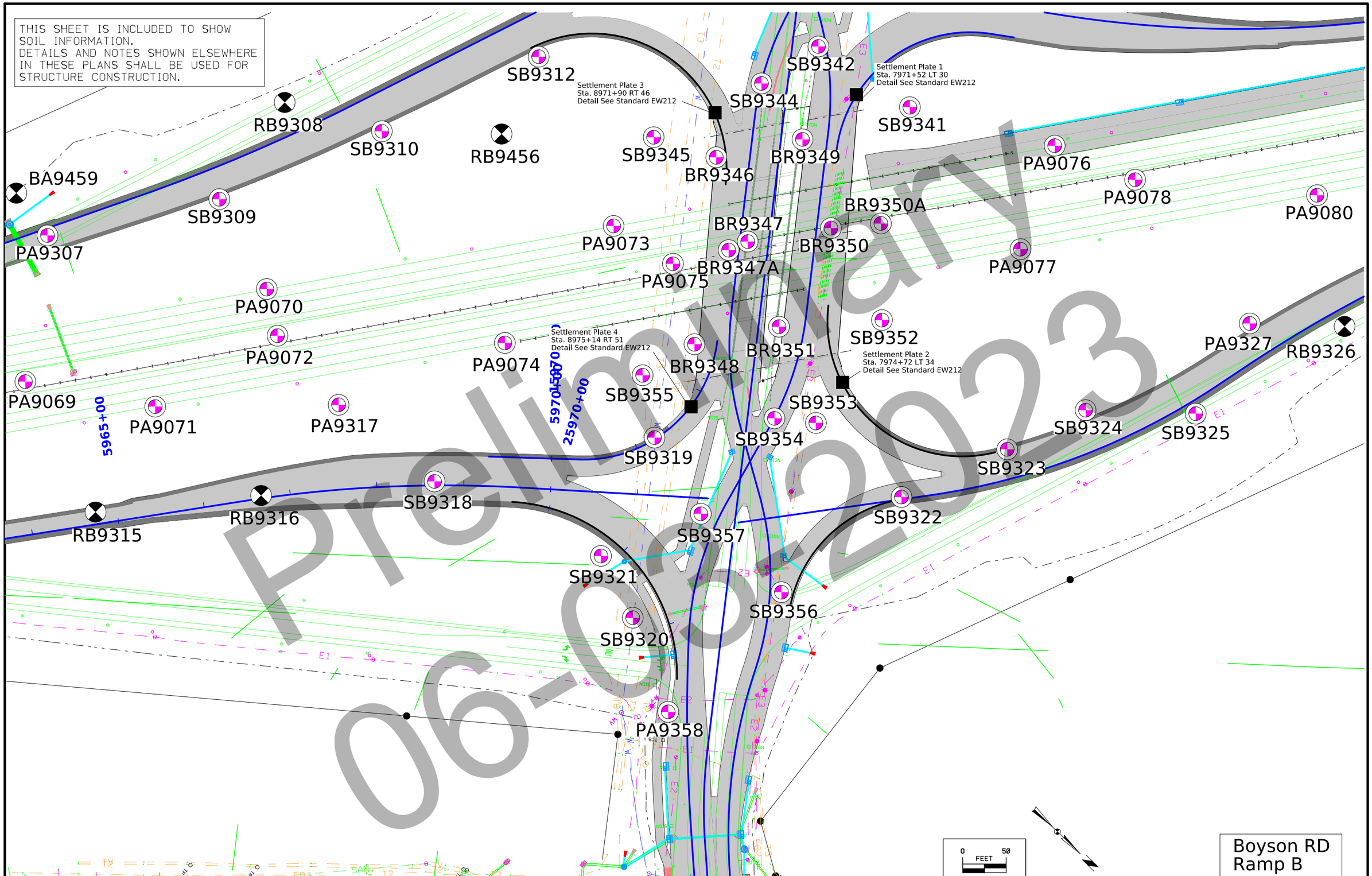


Boyson RD
Ramp B

Preliminary
06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM **Kirkham Michael**	**Linn** COUNTY	PROJECT NUMBER **IM-380-6(358)25--13-57**	SHEET NUMBER **Q.12**

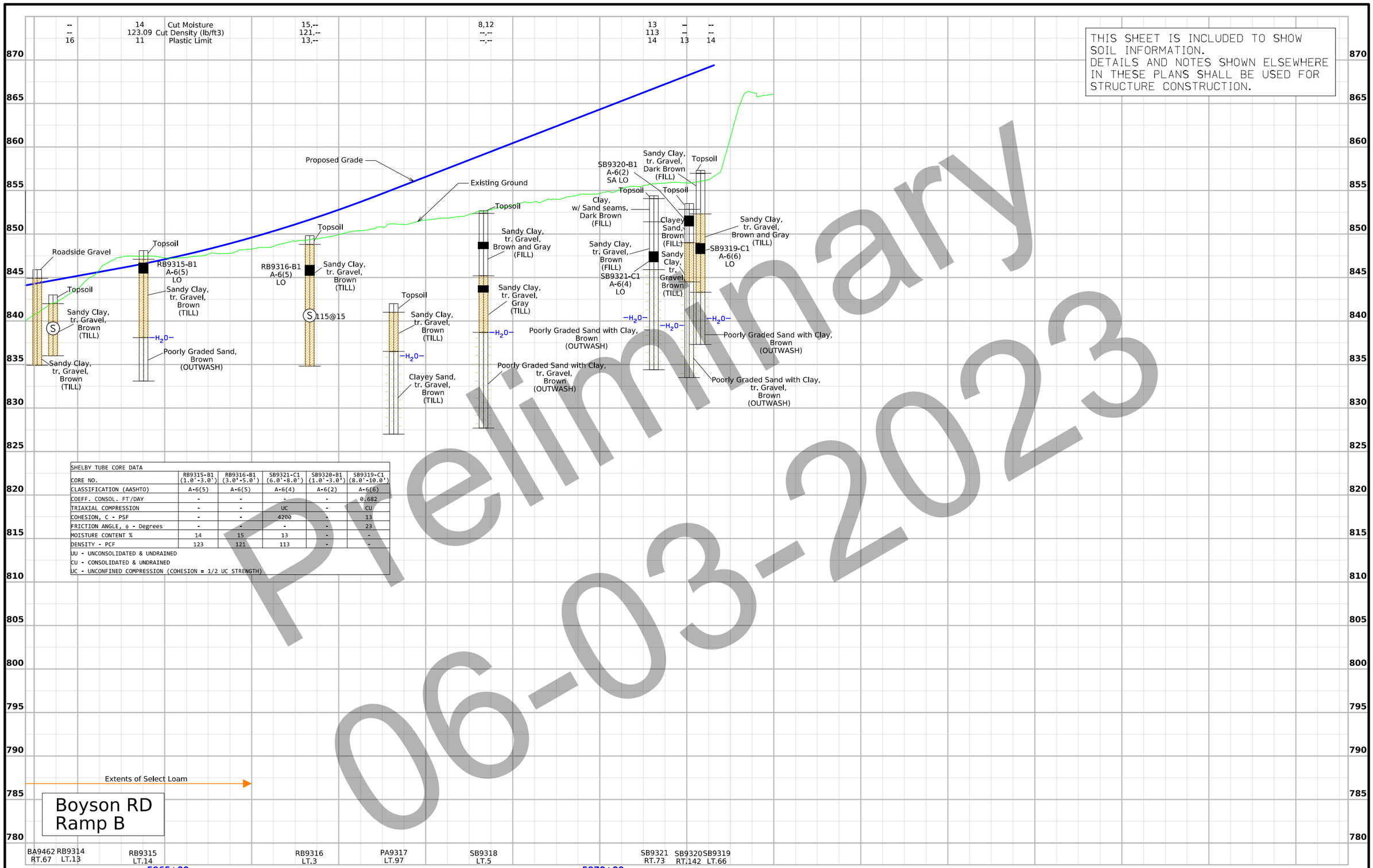
THIS SHEET IS INCLUDED TO SHOW SOIL INFORMATION.
DETAILS AND NOTES SHOWN ELSEWHERE IN THESE PLANS SHALL BE USED FOR STRUCTURE CONSTRUCTION.



Boyson RD
Ramp B

FILE NO.	ENGLISH	DESIGN TEAM **Kirkham Michael/Braun Intertec**	**Linn** COUNTY	PROJECT NUMBER **IM-380-6(358)25--13-57**	SHEET NUMBER **Q.13**

5:22:48 PM 6/3/2024 DRivers pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\5738005096\Soils\(358)\Q-Sheets\Q.4



SHELBY TUBE CORE DATA

CORE NO.	RB9315-B1 (1.0'-3.0')	RB9316-B1 (3.0'-5.0')	SB9321-C1 (6.0'-8.0')	SB9320-B1 (1.0'-3.0')	SB9319-C1 (8.0'-10.0')
CLASSIFICATION (AASHTO)	A-6(5)	A-6(5)	A-6(4)	A-6(2)	A-6(6)
COEFF. CONSOL. FT/DAY	-	-	-	-	0.682
TRIAXIAL COMPRESSION	-	-	UC	-	CU
COHESION, C - PSF	-	-	4200	-	13
FRICTION ANGLE, ϕ - Degrees	-	-	-	-	23
MOISTURE CONTENT %	14	15	13	-	-
DENSITY - PCF	123	121	113	-	-

UU - UNCONSOLIDATED & UNDRAINED
CU - CONSOLIDATED & UNDRAINED
UC - UNCONFINED COMPRESSION (COHESION = 1/2 UC STRENGTH)

Preliminary 06-03-2023

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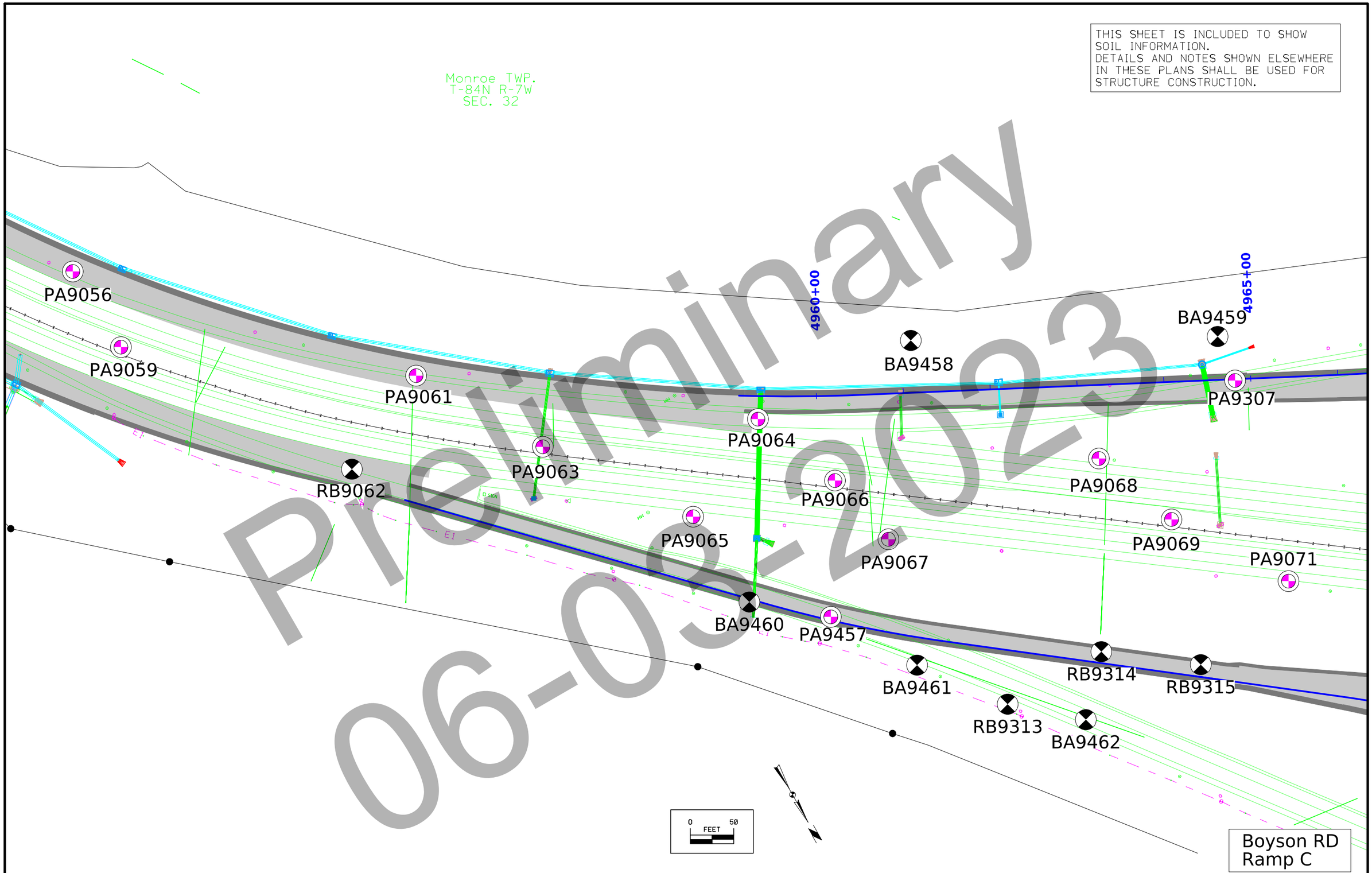
DETAILS AND NOTES SHOWN ELSEWHERE IN THESE PLANS SHALL BE USED FOR STRUCTURE CONSTRUCTION.



Preliminary
06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM **Kirkham Michael/Braun Intertec**	**Linn** COUNTY	PROJECT NUMBER **IM-380-6(358)25--13-57**	SHEET NUMBER **Q.15**

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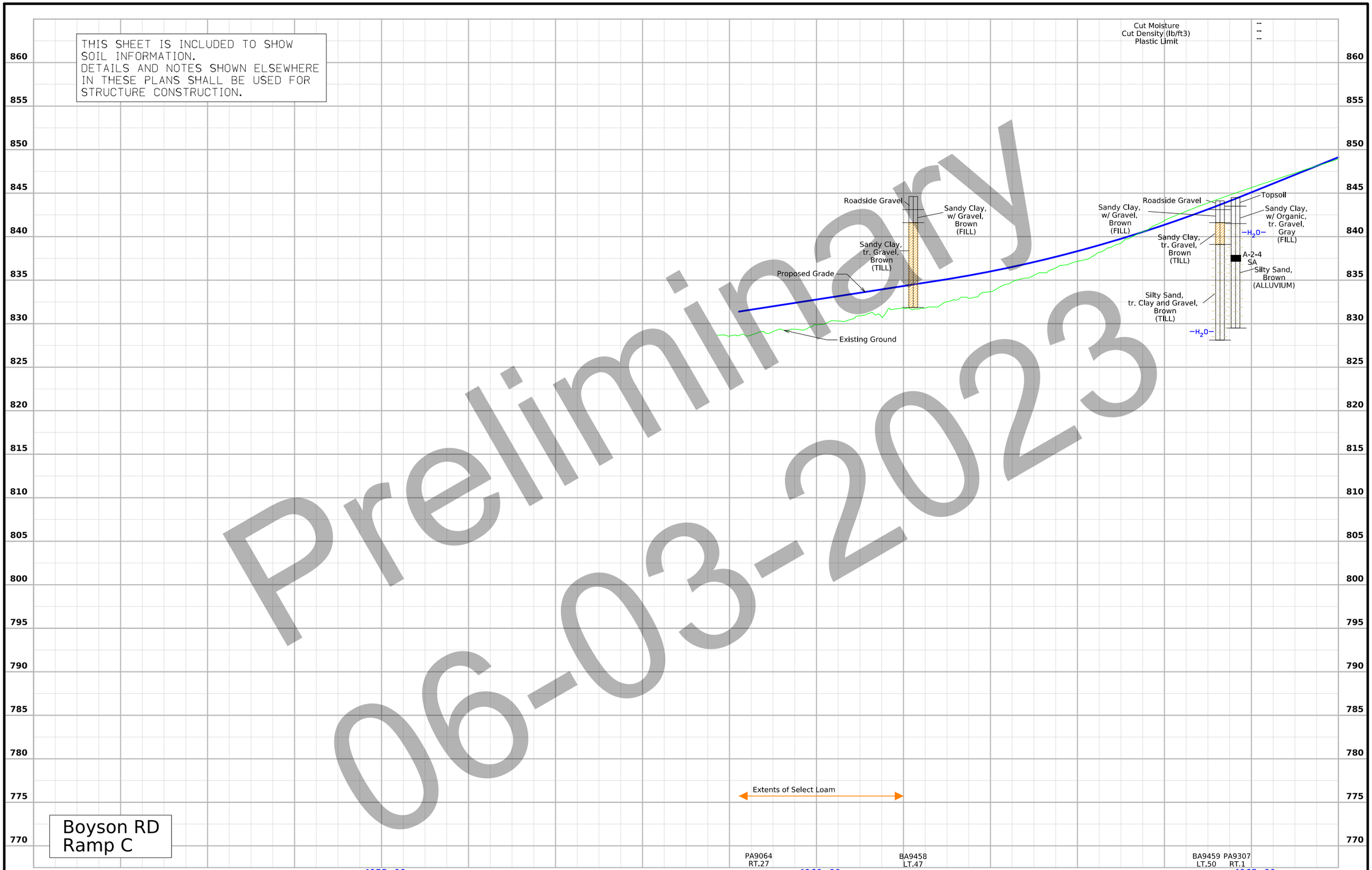
DETAILS AND NOTES SHOWN ELSEWHERE IN THESE PLANS SHALL BE USED FOR STRUCTURE CONSTRUCTION.

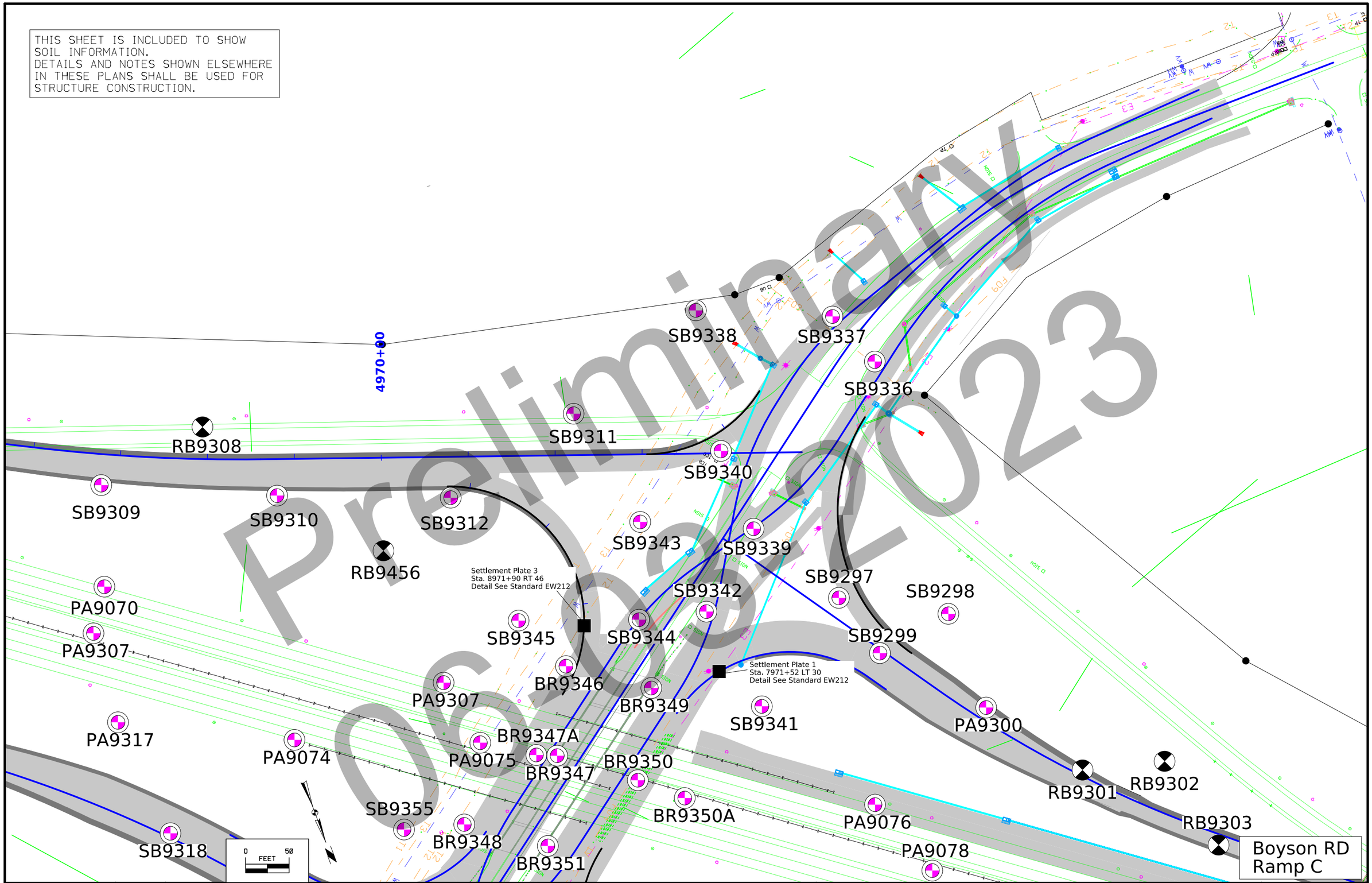


Boyson RD
Ramp C

Preliminary
06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM Kirkham Michael/Braun Intertec	Linn COUNTY	PROJECT NUMBER IM-380-6(358)25--13-57	SHEET NUMBER Q.16

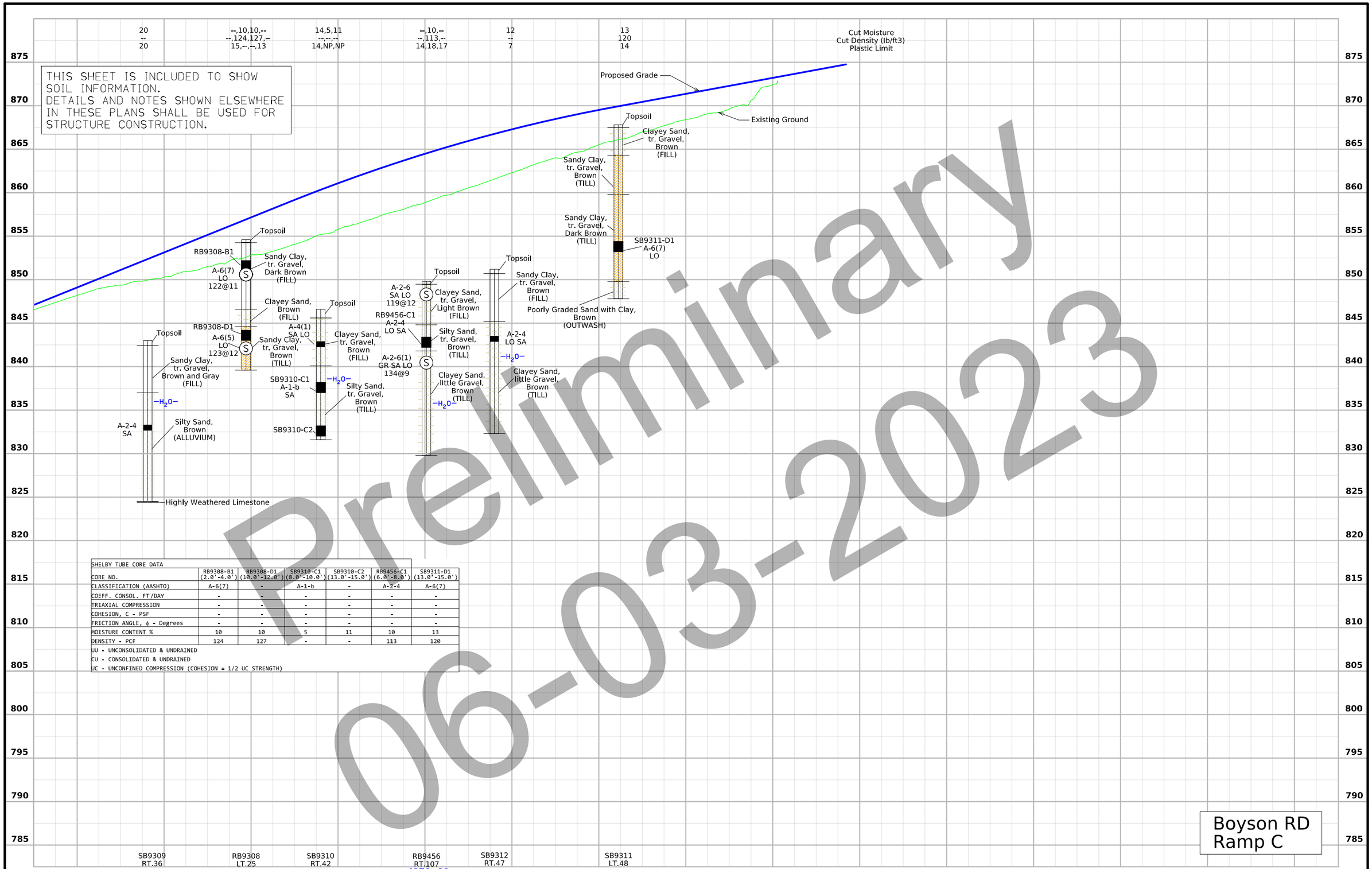
THIS SHEET IS INCLUDED TO SHOW SOIL INFORMATION.
DETAILS AND NOTES SHOWN ELSEWHERE IN THESE PLANS SHALL BE USED FOR STRUCTURE CONSTRUCTION.



Preliminary
06/03/2023

FILE NO.	ENGLISH	DESIGN TEAM **Kirkham Michael/Braun Intertec**	**Linn** COUNTY	PROJECT NUMBER **IM-380-6(358)25--13-57**	SHEET NUMBER **Q.17**

5:23:21 PM 6/3/2024 DRivers pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\5738005096\Soils\(358)\Q-Sheets\Q.4



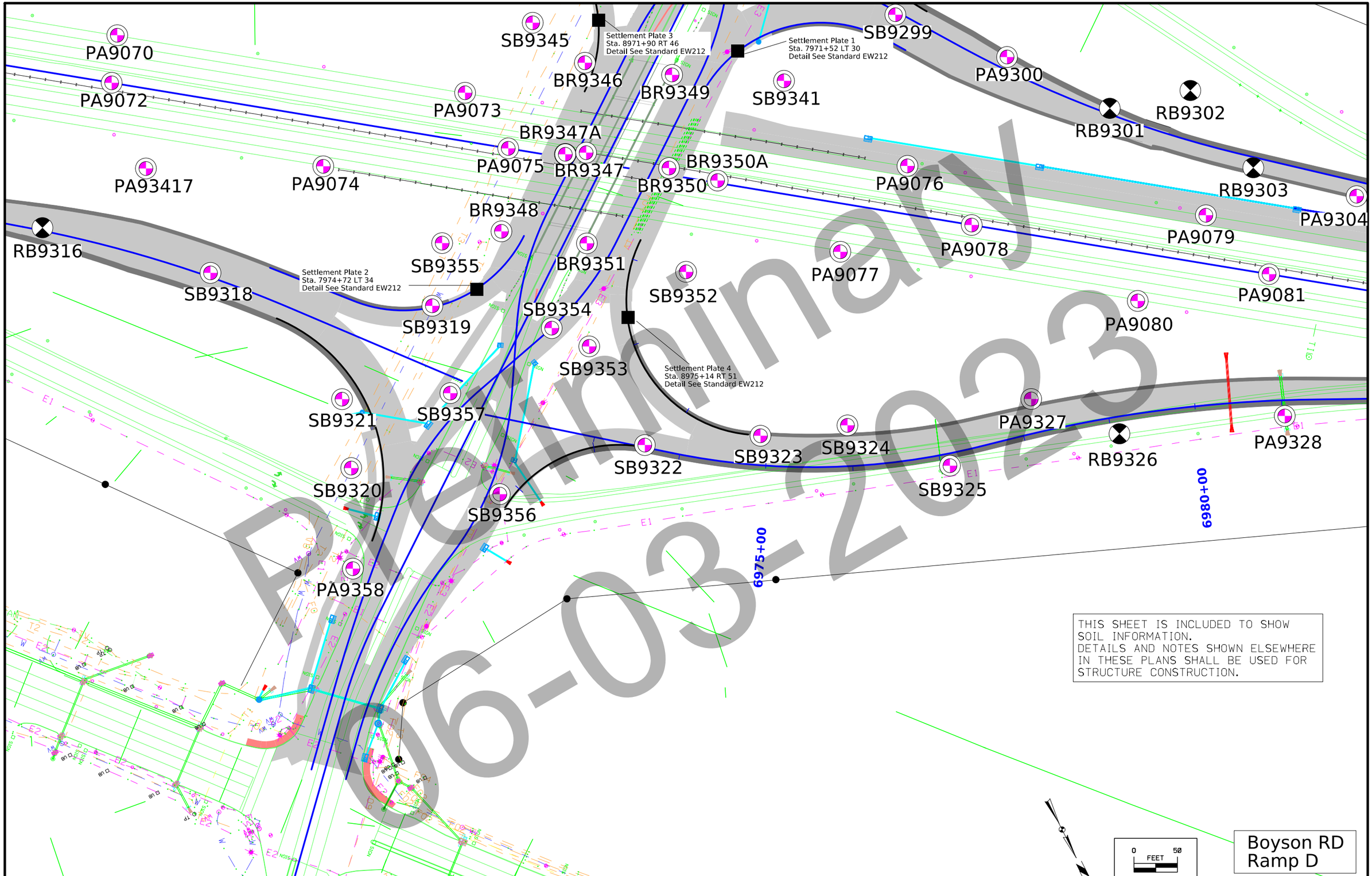
SHELBY TUBE CORE DATA

CORE NO.	RB9308-B1 (2.0'-4.0')	RB9308-D1 (10.0'-12.0')	SB9310-C1 (8.0'-10.0')	SB9310-C2 (13.0'-15.0')	RB9456-C1 (6.0'-8.0')	SB9311-D1 (13.0'-15.0')
CLASSIFICATION (AASHTO)	A-6(7)	-	A-1-b	-	A-2-4	A-6(7)
COEFF. CONSOL. FT/DAY	-	-	-	-	-	-
TRIAXIAL COMPRESSION	-	-	-	-	-	-
COHESION, C - PSF	-	-	-	-	-	-
FRICTION ANGLE, ϕ - Degrees	-	-	-	-	-	-
MOISTURE CONTENT %	10	10	5	11	10	13
DENSITY - PCF	124	127	-	-	113	120

UU - UNCONSOLIDATED & UNDRAINED
CU - CONSOLIDATED & UNDRAINED
UC - UNCONFINED COMPRESSION (COHESION = 1/2 UC STRENGTH)

Preliminary
06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM Kirkham Michael/Braun Intertec	Linn COUNTY	PROJECT NUMBER IM-380-6(358)25--13-57	SHEET NUMBER Q.18



Preliminary
06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM **Kirkham Michael/Braun Intertec**	Linn COUNTY	PROJECT NUMBER **IM-380-6(358)25--13-57**	SHEET NUMBER **Q.19**

THIS SHEET IS INCLUDED TO SHOW SOIL INFORMATION.
DETAILS AND NOTES SHOWN ELSEWHERE IN THESE PLANS SHALL BE USED FOR STRUCTURE CONSTRUCTION.

SHELBY TUBE CORE DATA

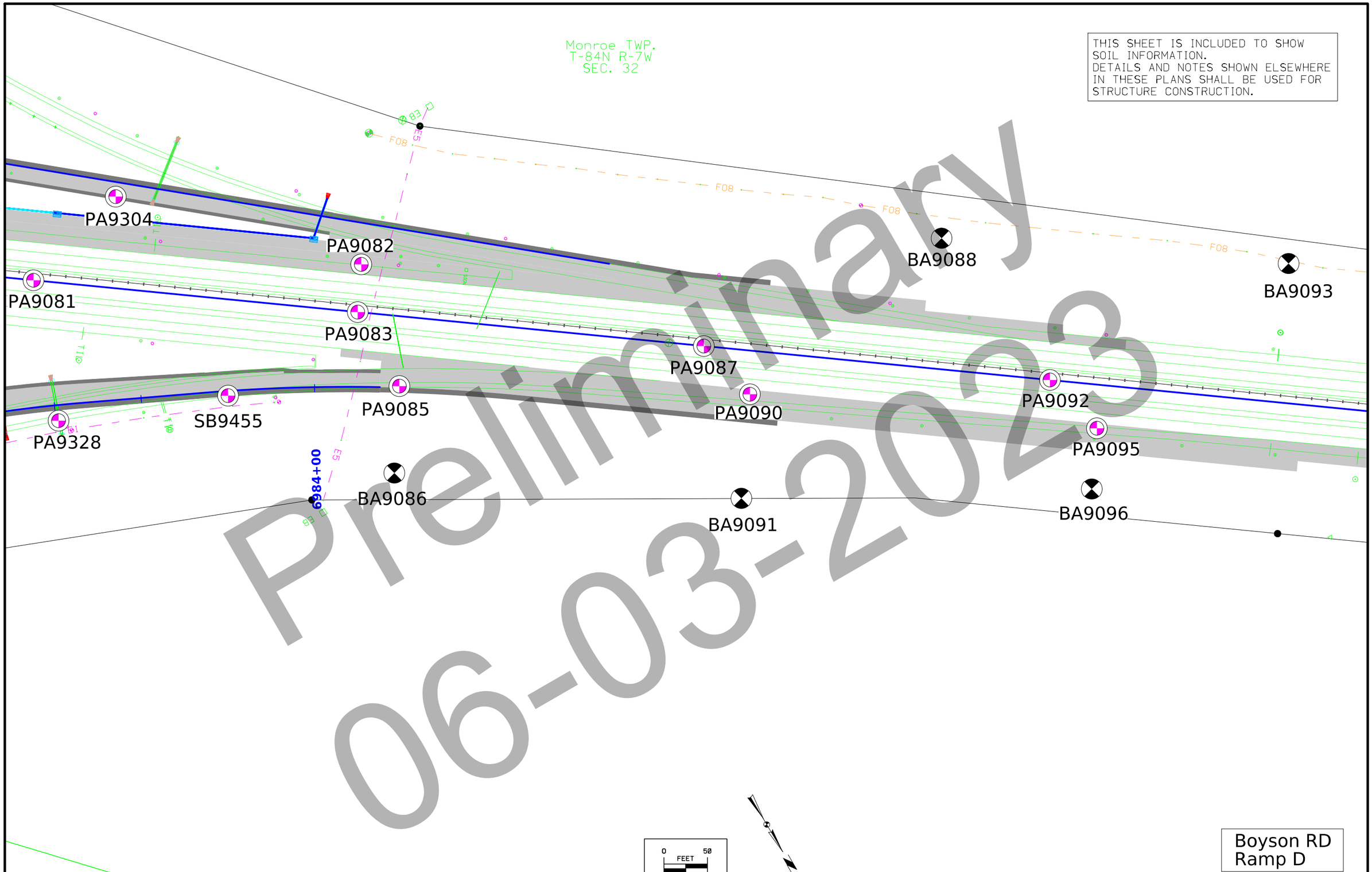
CORE NO.	SB9322-B1 (3.0'-5.0')	SB9324-B1 (6.0'-8.0')	SB9324-C1 (18.0'-20.0')	RB9326-B1 (3.0'-5.0')
CLASSIFICATION (AASHTO)	A-2-4	A-6(10)	A-6(3)	A-6(7)
COEFF. CONSOL. FT/DAY	-	-	-	-
TRIAXIAL COMPRESSION	UC	UC	-	-
COHESION, C - PSF	5436	3410	-	-
FRICTION ANGLE, ϕ - Degrees	-	-	-	-
MOISTURE CONTENT %	13	18	19	15
DENSITY - PCF	121	114	-	116

UU - UNCONSOLIDATED & UNDRAINED
CU - CONSOLIDATED & UNDRAINED
UC - UNCONFINED COMPRESSION (COHESION = 1/2 UC STRENGTH)

Boyson RD
Ramp D

Preliminary
06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM Kirkham Michael/Braun Intertec	Linn COUNTY	PROJECT NUMBER IM-380-6(358)25--13-57	SHEET NUMBER Q.20



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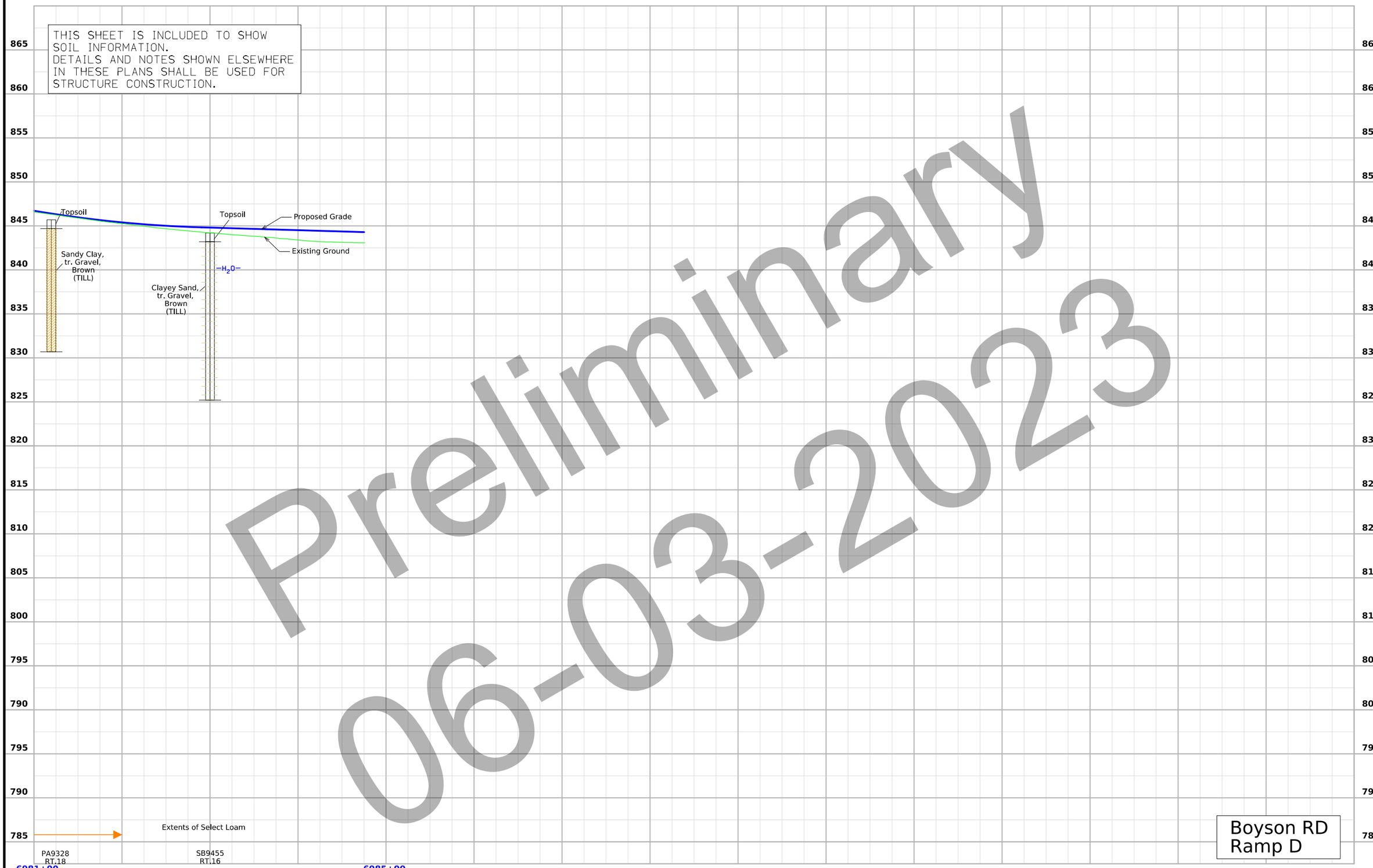
Preliminary
06-03-2023

Boyson RD
Ramp D

FILE NO.	ENGLISH	DESIGN TEAM **Kirkham Michael/Braun Intertec**	**Linn** COUNTY	PROJECT NUMBER **IM-380-6(358)25--13-57**	SHEET NUMBER **Q.21**

THIS SHEET IS INCLUDED TO SHOW SOIL INFORMATION.
DETAILS AND NOTES SHOWN ELSEWHERE IN THESE PLANS SHALL BE USED FOR STRUCTURE CONSTRUCTION.



Preliminary 06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM Kirkham Michael/Braun Intertec	Linn COUNTY	PROJECT NUMBER IM-380-6(358)25--13-57	SHEET NUMBER Q.22

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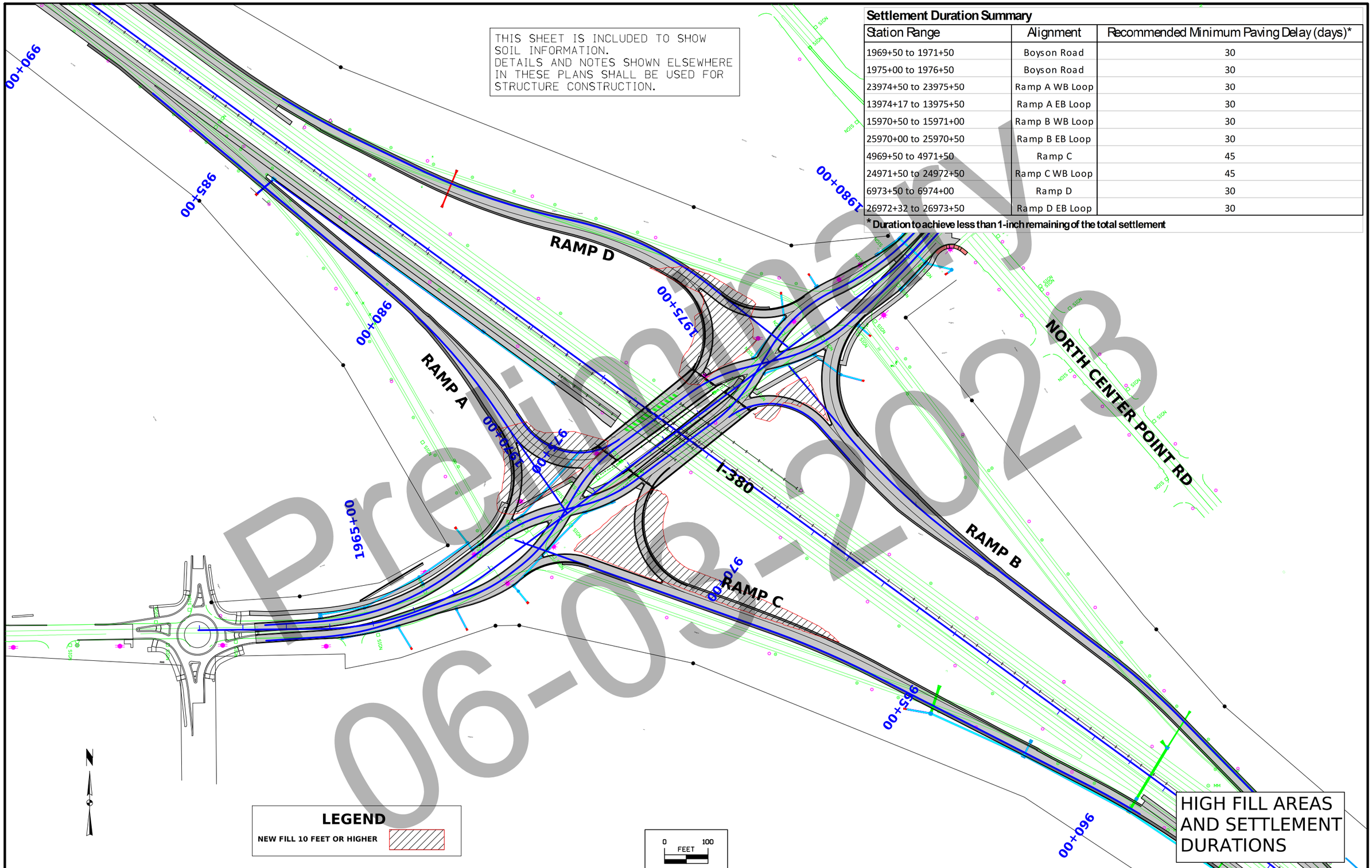
Settlement Duration Summary

Station Range	Alignment	Recommended Minimum Paving Delay (days)*
1969+50 to 1971+50	Boyson Road	30
1975+00 to 1976+50	Boyson Road	30
23974+50 to 23975+50	Ramp A WB Loop	30
13974+17 to 13975+50	Ramp A EB Loop	30
15970+50 to 15971+00	Ramp B WB Loop	30
25970+00 to 25970+50	Ramp B EB Loop	30
4969+50 to 4971+50	Ramp C	45
24971+50 to 24972+50	Ramp C WB Loop	45
6973+50 to 6974+00	Ramp D	30
26972+32 to 26973+50	Ramp D EB Loop	30

* Duration to achieve less than 1-inch remaining of the total settlement



HIGH FILL AREAS AND SETTLEMENT DURATIONS

Preliminary 06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM Kirkham Michael/Braun Intertec	LINN COUNTY	PROJECT NUMBER IM-380-6(358)25--13-57	SHEET NUMBER Q.23

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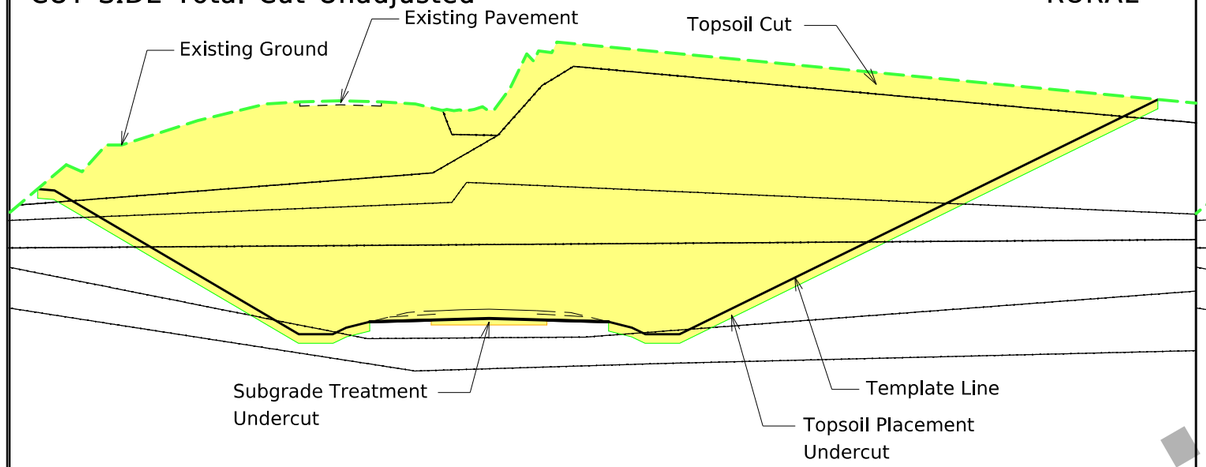
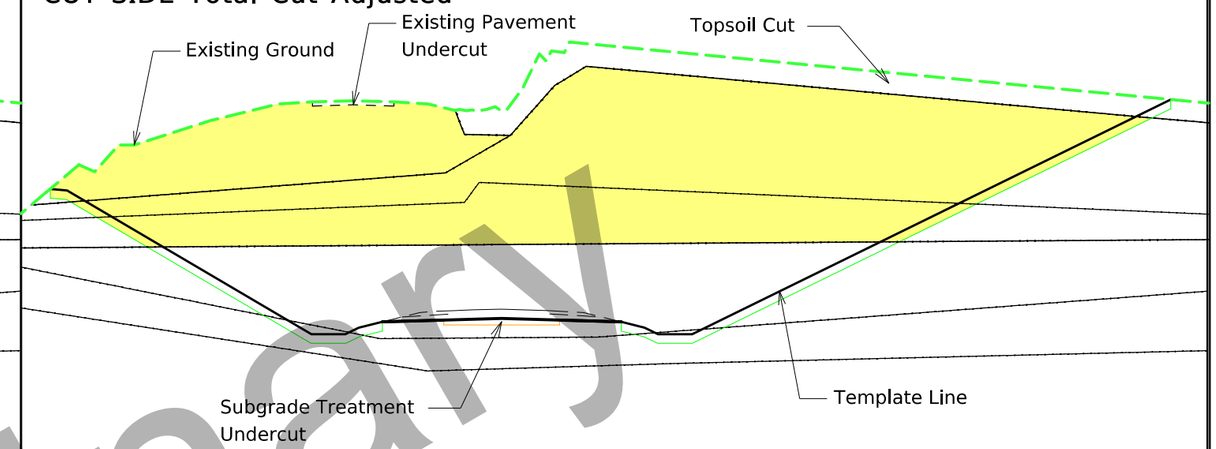
CUT SIDE Total Cut Unadjusted — RURAL



Notes:

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

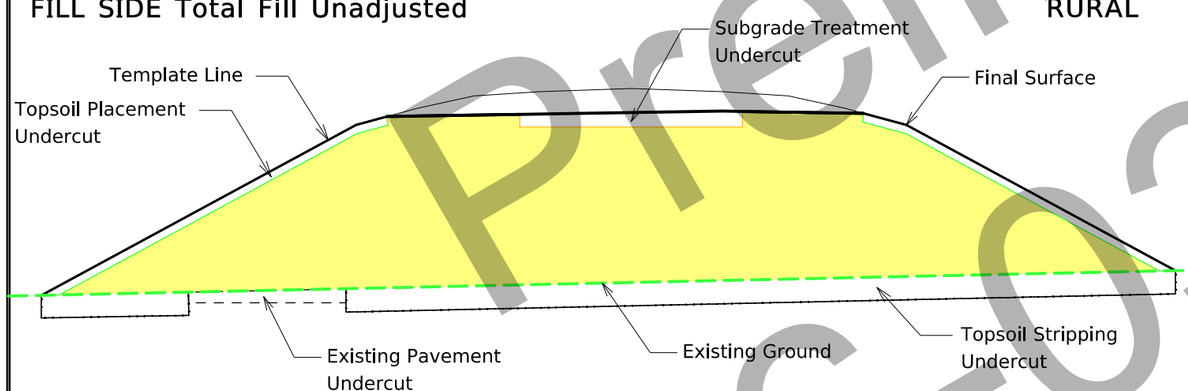
CUT SIDE Total Cut Adjusted



Notes:

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

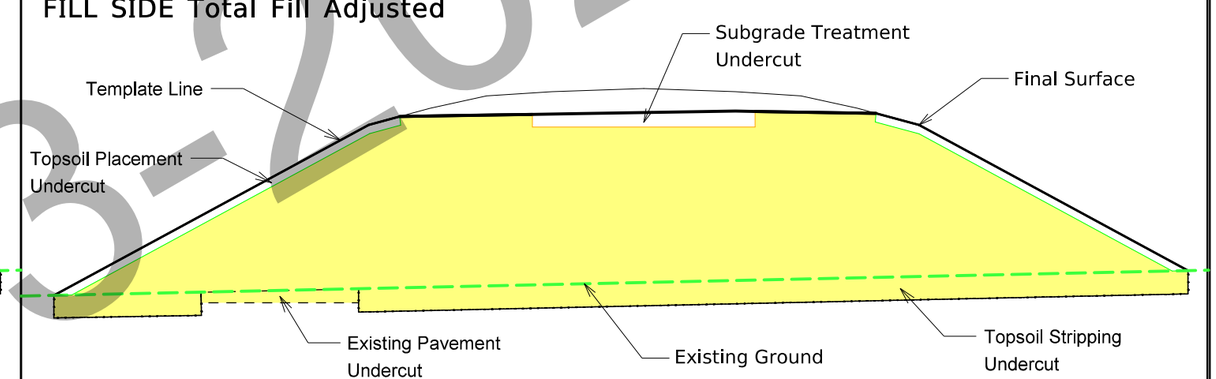
FILL SIDE Total Fill Unadjusted — RURAL



Notes:

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

FILL SIDE Total Fill Adjusted

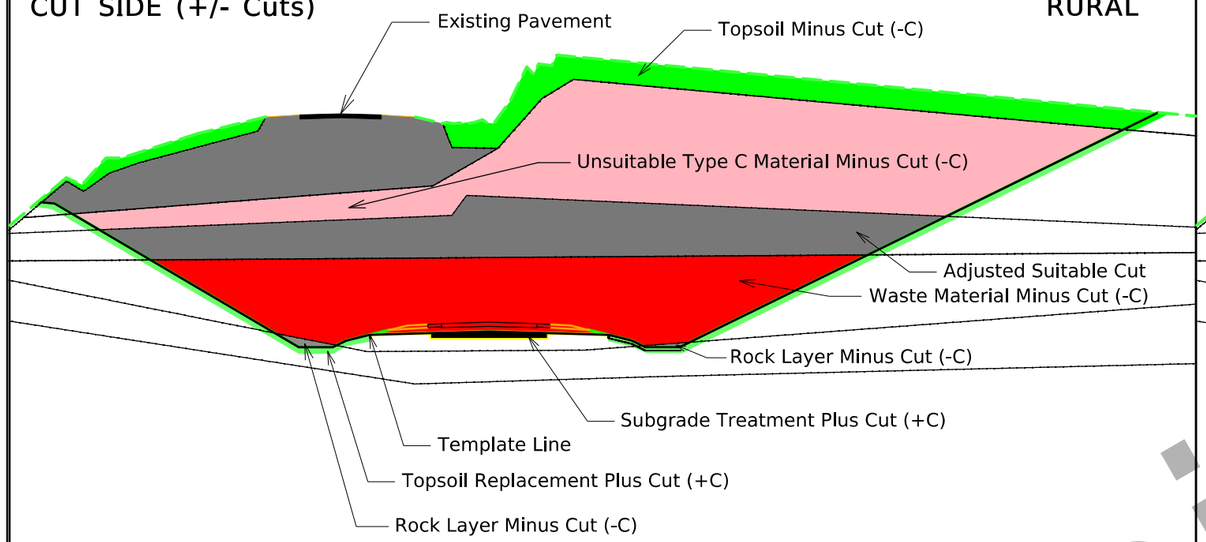


Notes:

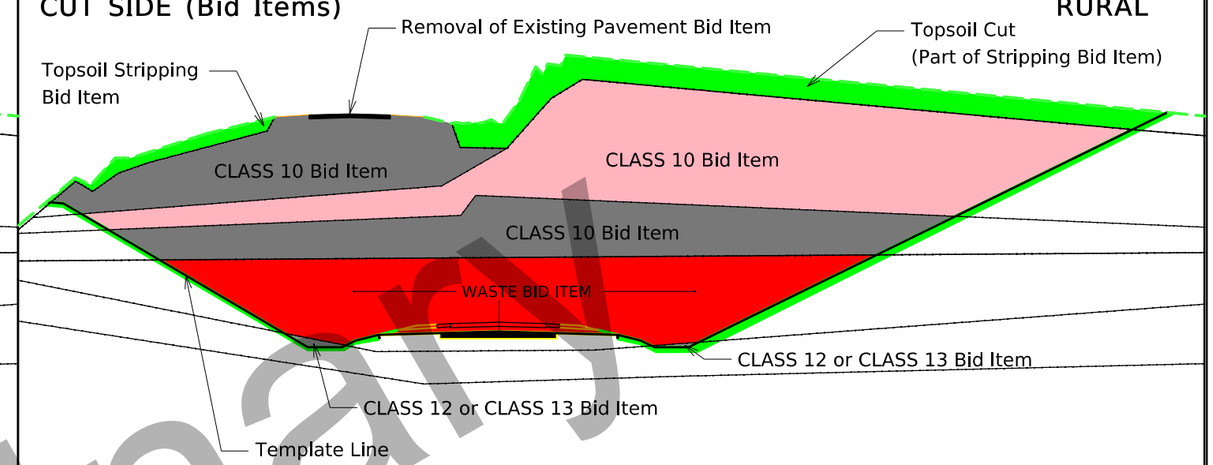
1. "Total Fill Adjusted" Column includes all Class 10, 12, and 13 fill and adjustments for additional fill from cuts such as existing pavement, plowing and shaping operations, entrances, dikes, and topsoil stripping.
2. The available area to place unsuitable materials in the T Sheet tabulation does not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

Preliminary 06-03-2023

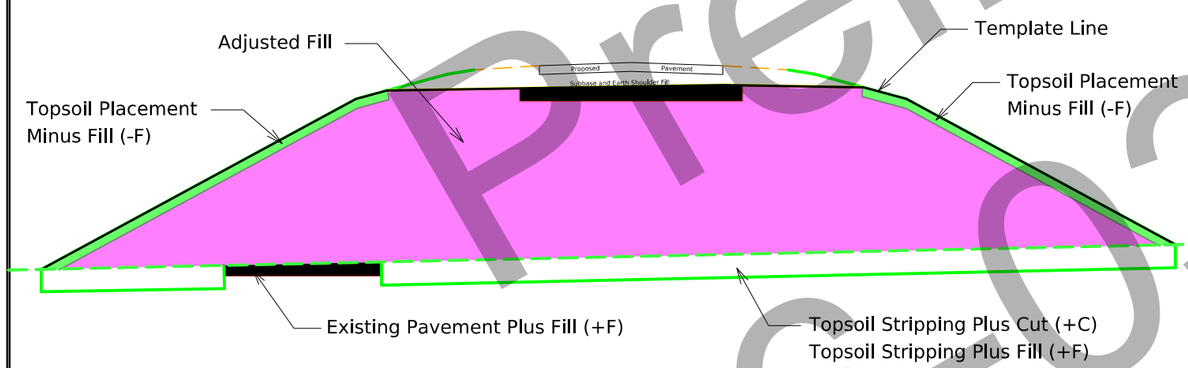
CUT SIDE (+/- Cuts) — RURAL



CUT SIDE (Bid Items) — RURAL



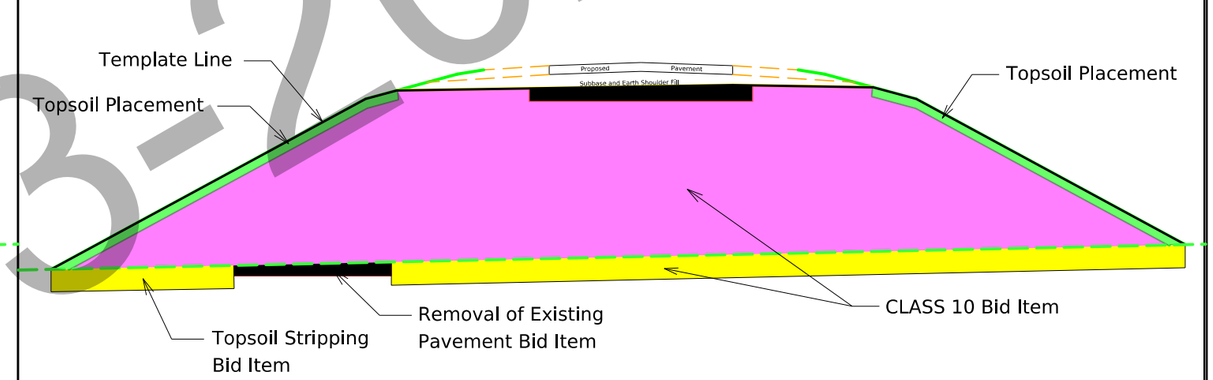
FILL SIDE (+/- Fills) — RURAL



Notes:

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

FILL SIDE (Bid Items) — RURAL

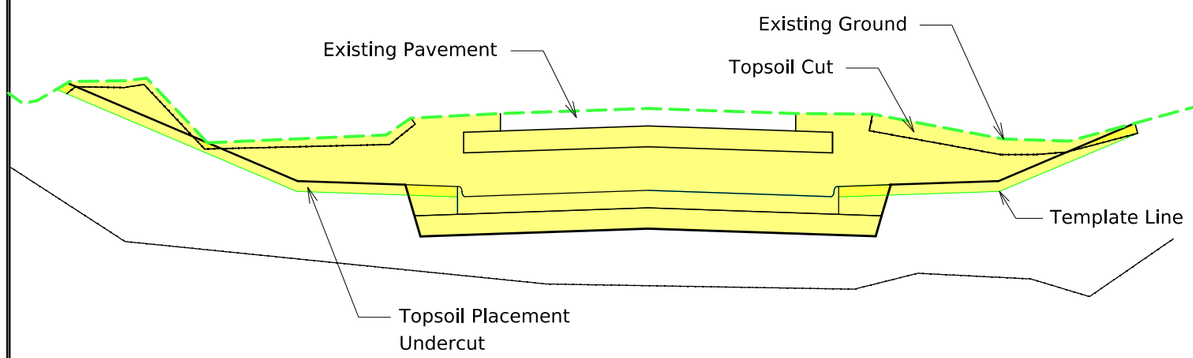


Notes:

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

Preliminary
06-03-2023

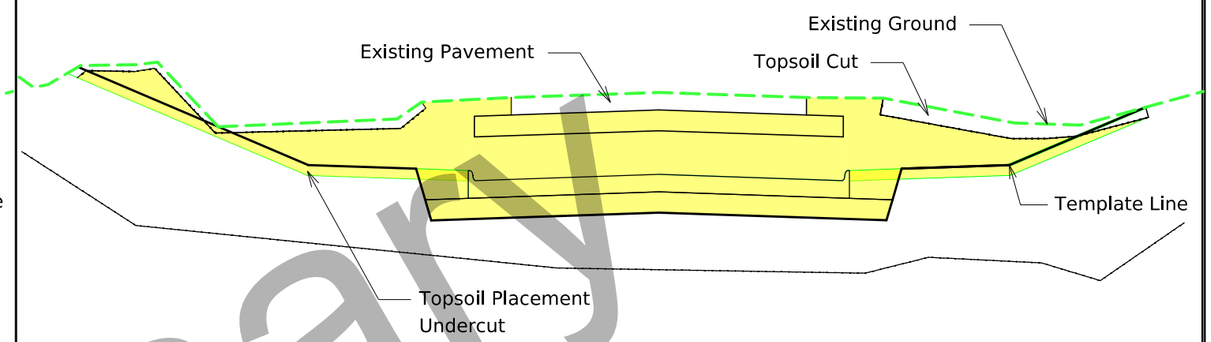
CUT SIDE Total Cut Unadjusted — URBAN



Notes:

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

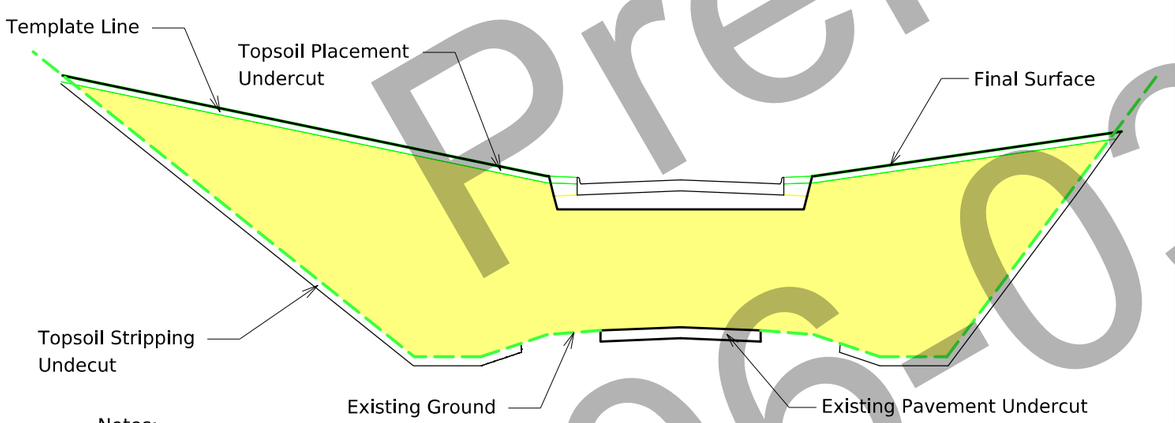
CUT SIDE Total Cut Adjusted — URBAN



Notes:

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

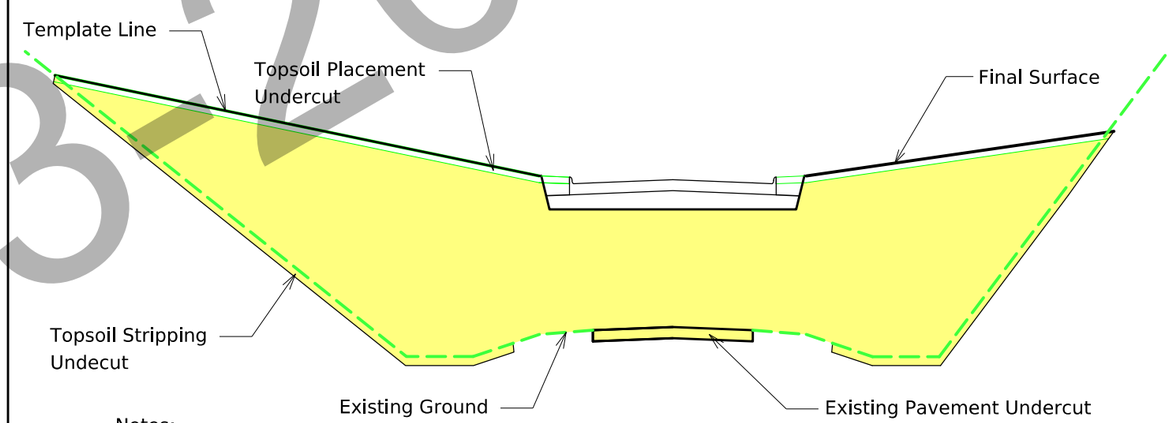
FILL SIDE Total Fill Unadjusted — URBAN



Notes:

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

FILL SIDE Total Fill Adjusted — URBAN

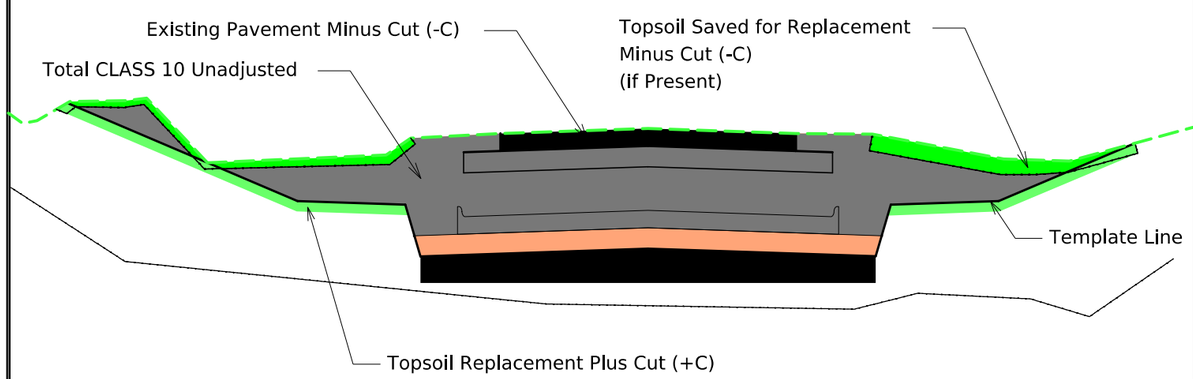


Notes:

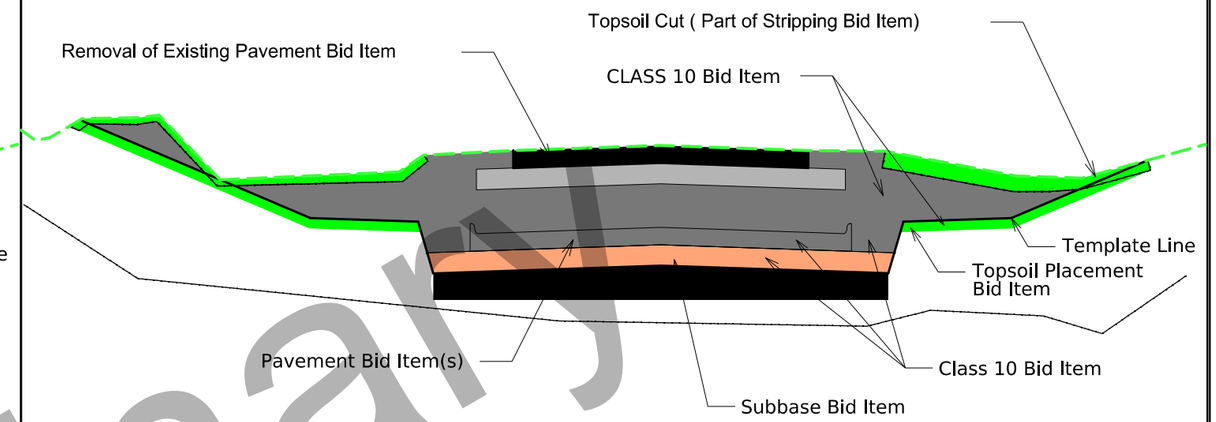
1. "Total Fill Adjusted" Column includes all Class 10, 12, and 13 fill and adjustments for additional fill from cuts such as existing pavement, plowing and shaping operations, entrances, dikes, and topsoil stripping.
2. The available area to place unsuitable materials in the T Sheet tabulation does not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

Preliminary
06-03-2023

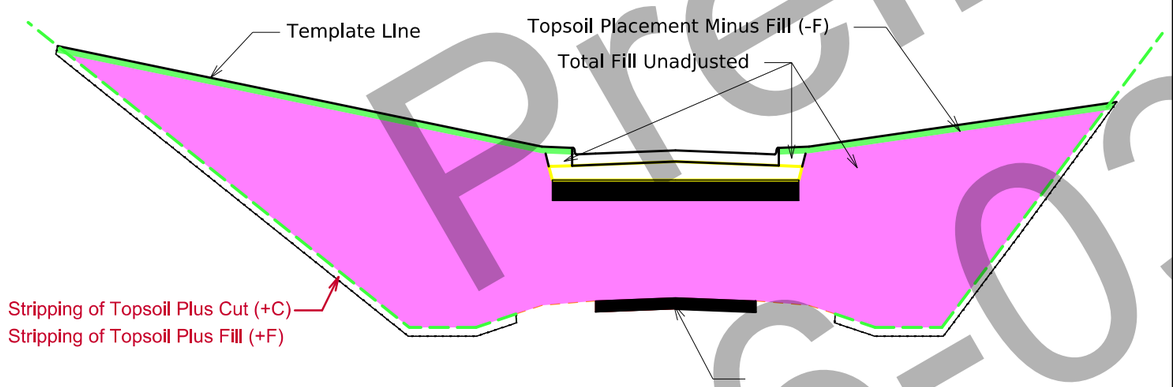
CUT SIDE (+/- Cuts) URBAN



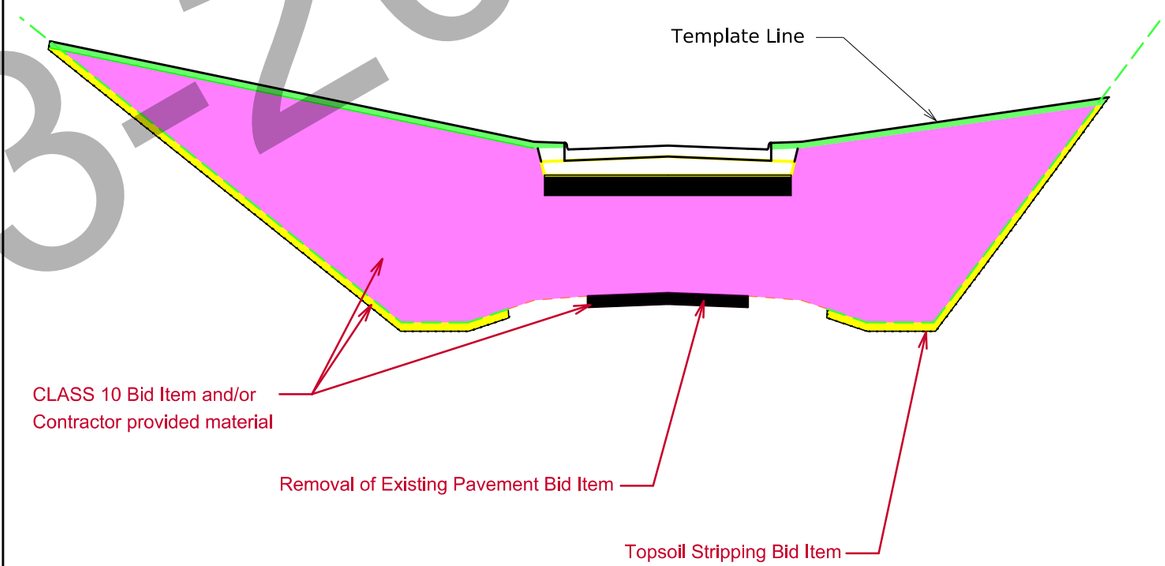
CUT SIDE (Bid Items) URBAN



FILL SIDE (+/- Fills) URBAN



FILL SIDE (Bid Items) URBAN



Notes:

1. "Manually Calculated Cut Adjustments +C" columns are additional cut encountered that is not Typical, Topsoil, or Subgrade Treatment Based. (Entrance, Dike, Etc.)
2. "-C" columns are either soil types or Class 10, 12, or 13 designated material that is encountered in the cut station range that is paid for by other bid items.
3. The "(SoilType) Cut" columns are soil types encountered in the cut that are paid by either Class 10, 12 or 13.
4. The "Adjusted Clas (10,12 or 13)" columns are the sum of all various soil types encountered in that station range, that are paid by Class 10, 12, or 13 bid items.

Preliminary
06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
STG1-ML																						
940+24.97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
940+25.00	3	3	0	0	0	0	0	3	0	0	0	0	0	3	0	0	0	4	5	-5		
940+50.00	9	9	0	0	0	0	0	9	0	0	0	0	0	9	0	0	0	7	10	-10		
940+75.00	12	12	0	0	0	0	0	12	0	0	0	0	0	12	0	0	0	8	11	-11		
941+00.00	12	12	0	0	0	0	0	12	1	0	0	1	2	11	0	0	0	8	11	-11		
941+25.00	12	12	0	0	0	0	0	12	2	0	0	2	3	9	0	0	0	8	11	-11		
941+50.00	12	12	0	0	0	0	0	12	2	0	0	2	3	9	0	0	0	8	11	-11		
941+75.00	12	12	0	0	0	0	0	12	2	0	0	2	3	9	0	0	0	8	11	-11		
942+00.00	20	20	0	0	0	0	0	20	1	0	0	1	1	18	0	0	0	12	17	-17		
942+25.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	16	23	-23		
942+50.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	16	23	-23		
942+75.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	17	23	-23		
943+00.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	17	23	-23		
943+25.00	25	25	0	0	0	0	0	25	0	0	0	0	0	25	0	0	0	17	23	-23		
943+50.00	24	24	0	0	0	0	0	24	0	0	0	0	0	24	0	0	0	17	23	-23		
943+75.00	24	24	0	0	0	0	0	24	0	0	0	0	0	24	0	0	0	17	23	-23		
944+00.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	17	23	-23		
944+25.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	17	23	-23		
944+50.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	17	23	-23		
944+75.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	17	23	-23		
945+00.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	17	23	-23		
945+25.00	25	25	0	0	0	0	0	25	0	0	0	0	0	25	0	0	0	16	23	-23		
945+50.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	16	23	-23		
945+75.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	16	22	-22		
946+00.00	25	25	0	0	0	0	0	25	0	0	0	0	0	25	0	0	0	15	22	-22		
946+25.00	25	25	0	0	0	0	0	25	0	0	0	0	0	25	0	0	0	15	21	-21		
946+50.00	25	25	0	0	0	0	0	25	0	0	0	0	0	25	0	0	0	15	21	-21		
946+75.00	25	25	0	0	0	0	0	25	0	0	0	0	0	25	0	0	0	15	21	-21		
947+00.00	25	25	0	0	0	0	0	25	0	0	0	0	0	25	0	0	0	15	21	-21		
947+25.00	25	25	0	0	0	0	0	25	0	0	0	0	0	25	0	0	0	15	21	-21		
947+50.00	24	24	0	0	0	0	0	24	0	0	0	0	0	24	0	0	0	15	20	-20		
947+75.00	24	24	0	0	0	0	0	24	0	0	0	0	0	24	0	0	0	15	20	-20		
948+00.00	25	25	0	0	0	0	0	25	0	0	0	0	0	25	0	0	0	14	20	-20		
948+25.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	14	20	-20		
948+50.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	14	20	-20		
948+75.00	28	28	0	0	0	0	0	28	0	0	0	0	0	28	0	0	0	14	20	-20		
949+00.00	28	28	0	0	0	0	0	28	0	0	0	0	0	28	0	0	0	14	20	-20		
949+25.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	14	20	-20		
949+50.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	14	20	-20		
949+75.00	25	25	0	0	0	0	0	25	0	0	0	0	0	25	0	0	0	14	20	-20		
950+00.00	25	25	0	0	0	0	0	25	0	0	0	0	0	25	0	0	0	14	19	-19		
950+25.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
950+50.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
950+75.00	28	28	0	0	0	0	0	28	0	0	0	0	0	28	0	0	0	14	19	-19		
951+00.00	29	29	0	0	0	0	0	29	0	0	0	0	0	29	0	0	0	14	19	-19		
951+25.00	29	29	0	0	0	0	0	29	0	0	0	0	0	29	0	0	0	14	19	-19		
951+50.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	14	19	-19		
951+75.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	20	-20		
952+00.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	14	20	-20		
952+25.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	20	-20		
952+50.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	20	-20		
952+75.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	20	-20		
953+00.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
953+25.00	26	26	0	0	0	0	0	26	0	0	0	0	0	25	0	0	0	14	19	-19		
953+50.00	25	25	0	0	0	0	0	25	0	0	0	0	0	25	0	0	0	14	19	-19		
953+75.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
954+00.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
954+25.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
954+50.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	14	19	-19		
954+75.00	28	28	0	0	0	0	0	28	0	0	0	0	0	28	0	0	0	14	19	-19		
955+00.00	28	28	0	0	0	0	0	28	0	0	0	0	0	28	0	0	0	14	19	-19		
955+25.00	28	28	0	0	0	0	0	28	0	0	0	0	0	28	0	0	0	14	19	-19		
955+50.00	29	29	0	0	0	0	0	29	0	0	0	0	0	29	0	0	0	14	19	-19		
955+75.00	30	30	0	0	0	0	0	30	0	0	0	0	0	30	0	0	0	14	20	-20		
956+00.00	30	30	0	0	0	0	0	30	0	0	0	0	0	30	0	0	0	14	20	-20		
956+25.00	29	29	0	0	0	0	0	29	0	0	0	0	0	29	0	0	0	14	20	-20		
956+50.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	15	20	-20		
956+75.00																						
Subtotals:	1,624	1,624	0	0	0	0	0	1,624	10	0	0	10	12	1,611	0	0	0	917	1,287	-1,287		

Preliminary
06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
956+75.00																						
957+00.00	21	21	0	0	0	0	0	21	0	0	0	0	1	21	0	0	0	15	21	-21		
957+25.00	20	20	0	0	0	0	0	20	0	0	0	0	1	20	0	0	0	15	21	-21		
957+50.00	24	24	0	0	0	0	0	24	0	0	0	0	0	24	0	0	0	15	21	-21		
957+75.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	15	21	-21		
958+00.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	15	21	-21		
958+25.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	15	21	-21		
958+50.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	15	21	-21		
958+75.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	15	21	-21		
959+00.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	15	21	-21		
959+25.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	15	21	-21		
959+50.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	15	21	-21		
959+75.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	15	22	-22		
960+00.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	16	22	-22		
960+25.00	42	34	8	0	0	0	0	34	0	0	1	1	2	32	0	0	8	21	30	-22		
960+50.00	50	42	8	0	0	0	0	42	0	0	1	1	2	40	0	0	8	21	30	-22		
960+75.00	49	41	7	0	0	0	0	41	0	0	2	2	2	39	0	0	7	21	29	-22		
961+00.00	52	39	14	0	0	0	0	39	0	0	3	3	4	35	0	0	14	25	35	-22		
961+25.00	53	39	14	0	0	0	0	39	0	0	3	3	3	35	0	0	14	25	36	-22		
961+50.00	45	32	14	0	0	0	0	32	0	0	2	2	2	29	0	0	14	21	29	-16		
961+75.00	35	28	7	0	0	0	0	28	0	0	1	1	1	27	0	0	7	8	11	-4		
962+00.00	34	26	8	0	0	0	0	26	0	0	1	1	1	25	0	0	8	5	7	1		
962+25.00	38	22	17	0	0	0	0	22	0	0	2	2	2	19	0	0	17	10	15	2		
962+50.00	34	25	9	0	0	0	0	25	0	0	1	1	1	24	0	0	9	5	8	1		
962+75.00	30	25	5	0	0	0	0	25	0	0	0	0	0	25	0	0	5	3	4	1		
963+00.00	44	28	16	0	0	0	0	28	0	0	3	3	4	24	0	0	16	10	14	2		
963+25.00	57	34	23	0	0	0	0	34	0	0	6	6	8	26	0	0	23	15	21	2		
963+50.00	57	33	24	0	0	0	0	33	0	0	7	7	9	24	0	0	24	16	22	2		
963+75.00	53	28	25	0	0	0	0	28	0	0	8	8	10	18	0	0	25	16	23	3		
964+00.00	50	24	26	0	0	0	0	24	0	0	7	8	10	14	0	0	26	17	23	3		
964+25.00	47	26	21	0	0	0	0	26	0	0	7	7	9	18	0	0	21	13	18	2		
964+50.00	51	26	25	0	0	0	0	26	0	0	10	10	13	13	0	0	25	16	23	3		
964+75.00	59	23	36	0	0	0	0	23	0	0	12	12	16	7	0	0	36	23	32	4		
965+00.00	57	23	34	0	0	0	0	23	0	0	9	9	12	11	0	0	34	22	31	3		
965+25.00	48	25	23	0	0	0	0	25	0	0	6	6	7	18	0	0	23	14	20	3		
965+50.00	48	25	23	0	0	0	0	25	0	0	7	7	9	16	0	0	23	15	21	3		
965+75.00	56	22	34	0	0	0	0	22	1	0	10	11	14	8	0	0	34	22	31	3		
966+00.00	60	23	37	0	0	0	0	23	1	0	15	16	21	2	0	0	37	24	34	4		
966+25.00	64	23	41	0	0	0	0	23	0	0	22	22	29	-6	0	0	41	27	37	4		
966+50.00	64	23	42	0	0	0	0	23	0	0	24	24	31	-9	0	0	42	27	38	4		
966+75.00	65	23	43	0	0	0	0	23	0	0	24	24	31	-9	0	0	43	28	39	4		
967+00.00	72	23	49	0	0	0	0	23	0	0	27	27	36	-13	0	0	49	32	45	4		
967+25.00	75	22	53	0	0	0	0	22	0	0	31	31	41	-18	0	0	53	35	48	5		
967+50.00	73	22	51	0	0	0	0	22	0	0	32	33	42	-20	0	0	51	33	46	5		
967+75.00	69	23	47	0	0	0	0	23	0	0	28	28	36	-14	0	0	47	30	43	4		
968+00.00	58	23	35	0	0	0	0	23	0	0	15	15	20	4	0	0	35	22	31	3		
968+25.00	56	23	32	0	0	0	0	23	1	0	10	10	13	10	0	0	32	21	30	3		
968+50.00	62	23	39	0	0	0	0	23	1	0	15	16	21	3	0	0	39	26	36	3		
968+75.00	63	23	40	0	0	0	0	23	0	0	19	19	25	-2	0	0	40	26	37	3		
969+00.00	63	23	40	0	0	0	0	23	0	0	20	20	25	-2	0	0	40	26	37	3		
969+25.00	62	23	39	0	0	0	0	23	0	0	18	18	23	0	0	0	39	26	36	3		
969+50.00	57	23	33	0	0	0	0	23	1	0	13	14	18	5	0	0	33	22	30	3		
969+75.00	49	24	25	0	0	0	0	24	1	0	6	6	8	16	0	0	25	16	23	3		
970+00.00	53	24	29	0	0	0	0	24	0	0	8	8	11	13	0	0	29	19	27	3		
970+25.00	61	24	37	0	0	0	0	24	0	0	13	13	17	7	0	0	37	24	34	3		
970+50.00	60	24	37	0	0	0	0	24	0	0	11	11	14	9	0	0	37	24	34	3		
970+75.00	58	24	34	0	0	0	0	24	0	0	9	9	12	12	0	0	34	22	31	3		
971+00.00	51	24	28	0	0	0	0	24	0	0	8	8	10	14	0	0	28	18	26	2		
971+25.00	46	24	22	0	0	0	0	24	0	0	7	7	9	15	0	0	22	15	22	0		
971+50.00	45	24	21	0	0	0	0	24	0	0	6	6	8	16	0	0	21	15	21	0		
971+75.00	54	23	31	0	0	0	0	23	0	0	15	15	20	4	0	0	31	14	20	11		
972+00.00	53	24	29	0	0	0	0	24	0	0	16	16	21	3	0	0	29	13	18	11		
972+25.00	44	25	20	0	0	0	0	25	0	0	8	8	11	14	0	0	20	14	19	0		
972+50.00	52	34	17	0	0	0	0	34	1	0	10	11	15	20	0	0	17	9	13	5		
972+75.00	52	46	6	0	0	0	0	46	1	0	5	7	8	38	0	0	6	1	2	4		
973+00.00	39	39	0	0	0	0	0	39	0	0	0	0	0	39	0	0	0	0	0	0		
973+25.00	43	26	17	0	0	0	0	26	6	0	15	21	27	-1	0	0	17	2	3	14		
973+50.00	57	24	34	0	0	0	0	24	18	0	27	45	59	-35	0	0	34	5	7	26		
973+75.00	51	24	27	0	0	0	0	24	13	0	19	32	67	-43	0	0	27	7	10	18		
Subtotals:	3,254	1,798	1,455	0	1	0	0	1,798	47	0	605	653	874	925	0	0	1,455	1,185	1,662	-205		

Preliminary
06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
973+75.00	46	24	23	0	0	0	0	24	2	0	14	16	21	3	0	0	23	8	11	12		
974+00.00	68	35	33	0	0	0	0	35	6	0	17	22	29	7	0	0	33	7	10	23		
974+25.00	86	46	40	0	0	0	0	46	12	0	18	30	39	7	0	0	40	7	10	30		
974+50.00	81	44	37	0	0	0	0	44	17	0	15	33	43	1	0	0	37	7	10	27		
974+75.00	79	41	37	0	1	0	0	42	18	0	13	31	40	2	0	0	37	7	10	27		
975+00.00	75	42	32	0	1	0	0	43	16	0	12	27	35	7	0	0	32	4	5	27		
975+25.00	72	41	31	0	0	0	0	41	14	0	15	29	38	3	0	0	31	3	4	27		
975+50.00	75	38	36	0	0	0	0	39	13	0	18	31	40	-1	0	0	36	6	9	27		
975+75.00	78	40	38	0	0	0	0	40	11	0	17	28	36	4	0	0	38	8	12	26		
976+00.00	80	39	40	0	0	0	0	39	10	0	17	26	34	5	0	0	40	10	14	26		
976+25.00	78	38	40	0	1	0	0	38	12	0	18	30	38	0	0	0	40	9	13	27		
976+50.00	75	38	37	0	0	0	0	38	13	0	19	31	41	-3	0	0	37	7	10	27		
976+75.00	75	38	36	0	0	0	0	38	11	0	17	28	37	1	0	0	36	7	10	27		
977+00.00	76	39	37	0	1	0	0	39	11	0	16	27	35	5	0	0	37	7	11	27		
977+25.00	79	40	38	0	1	0	0	41	11	0	15	26	34	7	0	0	38	8	11	27		
977+50.00	75	43	32	0	1	0	0	44	11	0	15	26	34	10	0	0	32	4	6	26		
977+75.00	76	43	33	0	0	0	0	43	11	0	16	26	34	9	0	0	33	5	7	26		
978+00.00	81	40	41	0	0	0	0	41	10	0	16	26	34	7	0	0	41	11	15	26		
978+25.00	80	40	39	0	0	0	0	41	9	0	15	24	31	10	0	0	39	10	14	25		
978+50.00	82	45	37	0	0	0	0	45	8	0	13	21	28	17	0	0	37	9	13	24		
978+75.00	88	51	36	0	0	0	0	51	8	0	11	19	25	27	0	0	36	12	17	19		
979+00.00	86	54	33	0	0	0	0	54	6	0	9	15	20	34	0	0	33	14	19	14		
979+25.00	83	54	29	0	0	0	0	54	5	0	6	11	15	40	0	0	29	12	17	12		
979+50.00	86	54	32	0	0	0	0	54	5	0	6	11	15	39	0	0	32	15	20	11		
979+75.00	86	53	33	0	0	0	0	53	6	0	6	12	16	38	0	0	33	15	21	12		
980+00.00	85	51	34	0	0	0	0	51	6	0	6	12	16	36	0	0	34	15	21	12		
980+25.00	83	51	33	0	0	0	0	51	6	0	6	12	15	36	0	0	33	15	21	12		
980+50.00	80	50	29	0	0	0	0	50	6	0	6	11	15	35	0	0	29	13	18	11		
980+75.00	87	54	33	0	0	0	0	54	6	0	7	13	17	37	0	0	33	15	22	12		
981+00.00	95	60	35	0	0	0	0	60	6	0	7	12	16	44	0	0	35	18	25	11		
981+25.00	95	63	32	0	0	0	0	63	5	0	5	10	13	49	0	0	32	17	23	9		
981+50.00	91	62	29	0	0	0	0	62	5	0	4	9	12	50	0	0	29	14	20	9		
981+75.00	87	60	28	0	0	0	0	60	5	0	4	9	12	47	0	0	28	12	16	12		
982+00.00	90	60	30	0	0	0	0	60	5	0	5	10	13	47	0	0	30	13	18	12		
982+25.00	94	62	32	0	0	0	0	62	4	0	5	10	13	49	0	0	32	15	21	11		
982+50.00	93	63	30	0	0	0	0	63	4	0	4	9	12	51	0	0	30	15	21	9		
982+75.00	94	65	29	0	0	0	0	65	5	0	4	8	11	54	0	0	29	19	27	2		
983+00.00	97	68	30	0	0	0	0	68	5	0	4	9	11	56	0	0	30	23	33	-3		
983+25.00	95	68	27	0	0	0	0	68	4	0	3	8	10	58	0	0	27	22	31	-4		
983+50.00	89	68	21	0	0	0	0	68	4	0	2	6	7	61	0	0	21	18	25	-4		
983+75.00	55	47	9	0	0	0	0	47	2	0	0	2	3	44	0	0	9	14	20	-12		
984+00.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	20	-20		
984+25.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
984+50.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	14	19	-19		
984+75.00	28	28	0	0	0	0	0	28	0	0	0	0	0	28	0	0	0	14	19	-19		
985+00.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	14	19	-19		
985+25.00	25	25	0	0	0	0	0	25	0	0	0	0	0	25	0	0	0	14	19	-19		
985+50.00	25	25	0	0	0	0	0	25	0	0	0	0	0	25	0	0	0	14	19	-19		
985+75.00	25	25	0	0	0	0	0	25	0	0	0	0	0	25	0	0	0	14	19	-19		
986+00.00	25	25	0	0	0	0	0	25	0	0	0	0	0	25	0	0	0	14	19	-19		
986+25.00	25	25	0	0	0	0	0	25	0	0	0	0	0	25	0	0	0	14	19	-19		
986+50.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
986+75.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
987+00.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
987+25.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
987+50.00	25	25	0	0	0	0	0	25	0	0	0	0	0	25	0	0	0	14	19	-19		
987+75.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
988+00.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
988+25.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
988+50.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	14	19	-19		
988+75.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
989+00.00	25	25	0	0	0	0	0	25	0	0	0	0	0	25	0	0	0	14	20	-20		
989+25.00	24	24	0	0	0	0	0	24	0	0	0	0	0	24	0	0	0	14	20	-20		
989+50.00	24	24	0	0	0	0	0	24	0	0	0	0	0	24	0	0	0	14	20	-20		
989+75.00	24	24	0	0	0	0	0	24	0	0	0	0	0	24	0	0	0	14	20	-20		
990+00.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	20	-20		
990+25.00	28	28	0	0	0	0	0	28	0	0	0	0	0	28	0	0	0	14	20	-20		
990+50.00	28	28	0	0	0	0	0	28	0	0	0	0	0	28	0	0	0	14	20	-20		
990+75.00																						
Subtotals:	4,055	2,705	1,340	0	9	0	0	2,715	334	0	424	758	986	1,729	0	0	1,340	844	1,185	157		

Preliminary 06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
990+75.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	14	20	-20		
991+00.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	20	-20		
991+25.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	20	-20		
991+50.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	14	20	-20		
991+75.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
992+00.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
992+25.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
992+50.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	14	19	-19		
992+75.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
993+00.00	25	25	0	0	0	0	0	25	0	0	0	0	0	25	0	0	0	14	19	-19		
993+25.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
993+50.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
993+75.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
994+00.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
994+25.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
994+50.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	14	19	-19		
994+75.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	14	19	-19		
995+00.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
995+25.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
995+50.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
995+75.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	14	19	-19		
996+00.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	14	20	-20		
996+25.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	14	20	-20		
996+50.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	14	20	-20		
996+75.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	15	21	-21		
997+00.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	15	21	-21		
997+25.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	15	21	-21		
997+50.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	15	22	-22		
997+75.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	15	22	-22		
998+00.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	15	22	-22		
998+25.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	15	22	-22		
998+50.00	27	27	0	0	0	0	0	27	0	0	0	0	0	27	0	0	0	15	22	-22		
998+75.00	26	26	0	0	0	0	0	26	0	0	0	0	0	26	0	0	0	15	22	-22		
999+00.00	25	25	0	0	0	0	0	25	0	0	0	0	0	25	0	0	0	15	22	-22		
999+25.00	25	25	0	0	0	0	0	25	0	0	0	0	0	25	0	0	0	16	22	-22		
999+50.00	25	25	0	0	0	0	0	25	0	0	0	0	0	25	0	0	0	16	22	-22		
999+75.00	25	25	0	0	0	0	0	25	0	0	0	0	0	25	0	0	0	16	22	-22		
1000+00.00	24	24	0	0	0	0	0	24	0	0	0	0	0	24	0	0	0	16	22	-22		
1000+25.00	23	23	0	0	0	0	0	23	0	0	0	0	0	23	0	0	0	16	22	-22		
1000+50.00	24	24	0	0	0	0	0	24	0	0	0	0	0	24	0	0	0	16	22	-22		
1000+75.00	24	24	0	0	0	0	0	24	0	0	0	0	0	24	0	0	0	16	22	-22		
1001+00.00	25	25	0	0	0	0	0	25	0	0	0	0	0	25	0	0	0	16	22	-22		
1001+25.00	19	19	0	0	0	0	0	19	1	0	0	1	1	18	0	0	0	11	15	-15		
1001+50.00	12	12	0	0	0	0	0	12	1	0	0	1	1	11	0	0	0	5	8	-8		
1001+75.00	13	13	0	0	0	0	0	13	1	0	0	1	1	12	0	0	0	7	9	-9		
1002+00.00	14	14	0	0	0	0	0	14	1	0	0	1	2	12	0	0	0	8	11	-11		
1002+25.00	14	14	0	0	0	0	0	14	1	0	0	1	1	13	0	0	0	8	11	-11		
1002+50.00	14	14	0	0	0	0	0	14	0	0	0	0	0	14	0	0	0	8	11	-11		
1002+75.00	13	13	0	0	0	0	0	13	0	0	0	0	0	13	0	0	0	7	11	-11		
1003+00.00	11	11	0	0	0	0	0	11	1	0	0	1	1	10	0	0	0	7	10	-10		
1003+25.00	11	11	0	0	0	0	0	11	2	0	0	2	2	9	0	0	0	7	10	-10		
1003+50.00	13	13	0	0	0	0	0	13	2	0	0	2	2	11	0	0	0	7	11	-11		
1003+75.00	12	12	0	0	0	0	0	12	1	0	0	1	1	11	0	0	0	4	6	-6		
1004+00.00	10	10	0	0	0	0	0	10	0	0	0	0	0	10	0	0	0	0	0	0		
1004+25.00	10	10	0	0	0	0	0	10	0	0	0	0	0	9	0	0	0	0	0	0		
1004+50.00	10	10	0	0	0	0	0	10	0	0	0	0	0	10	0	0	0	0	0	0		
1004+75.00	10	10	0	0	0	0	0	10	0	0	0	0	0	10	0	0	0	0	0	0		
1005+00.00	11	11	0	0	0	0	0	11	0	0	0	0	0	11	0	0	0	0	0	0		
1005+25.00	11	11	0	0	0	0	0	11	0	0	0	0	0	11	0	0	0	0	0	0		
1005+50.00	12	12	0	0	0	0	0	12	0	0	0	0	0	12	0	0	0	0	0	0		
1005+75.00	12	12	0	0	0	0	0	12	0	0	0	0	0	12	0	0	0	0	0	0		
1006+00.00	13	13	0	0	0	0	0	13	0	0	0	0	0	13	0	0	0	0	0	0		
1006+25.00	13	13	0	0	0	0	0	13	0	0	0	0	0	13	0	0	0	0	0	0		
1006+50.00	14	14	0	0	0	0	0	14	0	0	0	0	0	14	0	0	0	0	0	0		
1006+75.00	14	14	0	0	0	0	0	14	0	0	0	0	0	14	0	0	0	0	0	0		
1007+00.00	13	13	0	0	0	0	0	13	0	0	0	0	0	13	0	0	0	0	0	0		
1007+25.00	13	13	0	0	0	0	0	13	0	0	0	0	0	13	0	0	0	0	0	0		
1007+50.00	14	14	0	0	0	0	0	14	0	0	0	0	0	14	0	0	0	0	0	0		
1007+75.00	14	14	0	0	0	0	0	14	0	0	0	0	0	14	0	0	0	0	0	0		
Subtotals:	1,406	1,406	0	0	0	0	0	1,406	10	0	0	10	13	1,393	0	0	0	672	944	-944		

Preliminary 06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
1007+75.00																						
1007+96.92	12	12	0	0	0	0	0	12	0	0	0	0	0	12	0	0	0	0	0	0		
STG1-ML																						
Totals:	10,350	7,545	2,796	0	10	0	0	7,555	402	0	1,030	1,431	1,885	5,671	0	0	2,796	3,619	5,078	-2,279		

Preliminary
06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
STG1-WBERM W BERM	709	0	709	0	0	0	0	0	3,880	0	709	4,589	5,966	-5,966	0	0	709	0	0	709		
STG1-WBERM Totals:	710	1	710	0	0	0	0	1	3,880	0	710	4,590	5,966	-5,966	0	0	710	0	0	710		

Preliminary
06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
STG1-EBERM E BERM	678	0	678	0	0	0	0	0	3,606	0	677	4,283	5,568	-5,568	0	0	678	0	0	678		
STG1-EBERM Totals:	679	0	679	0	0	0	0	0	3,606	0	677	4,283	5,568	-5,568	0	0	679	0	0	679		

Preliminary
06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
STG2-ML(S)																						
946+39.97	6	1	5	0	0	0	0	1	0	0	1	1	1	0	0	0	5	0	0	5		
946+50.00	47	17	30	0	0	0	1	17	20	0	17	37	48	-31	0	0	30	13	18	12		
946+75.00	65	28	37	0	0	0	1	29	45	0	31	76	99	-70	0	0	37	25	35	2		
947+00.00	65	27	37	0	0	0	1	28	42	0	31	73	94	-67	0	0	37	25	36	2		
947+25.00	67	28	37	0	0	0	2	30	17	0	22	39	50	-20	0	0	37	16	23	15		
947+50.00	69	28	37	0	0	0	3	32	3	0	15	18	24	8	0	0	37	7	9	28		
947+75.00	68	28	37	0	0	0	3	31	7	0	18	25	33	-2	0	0	37	6	9	29		
948+00.00	68	28	37	0	0	0	3	31	10	0	20	29	38	-7	0	0	37	6	9	29		
948+25.00	70	29	37	0	0	0	4	33	12	0	20	32	42	-9	0	0	37	6	9	28		
948+50.00	70	29	37	0	0	0	4	34	14	0	21	34	45	-11	0	0	37	6	8	28		
948+75.00	66	26	36	0	0	0	3	29	17	0	23	40	52	-22	0	0	36	6	8	28		
949+00.00	62	24	36	0	0	0	2	26	17	0	25	42	54	-28	0	0	36	5	7	28		
949+25.00	62	25	34	0	1	0	2	28	14	0	22	36	47	-19	0	0	34	4	6	28		
949+50.00	63	27	32	0	1	0	2	30	11	0	19	30	40	-9	0	0	32	3	5	28		
949+75.00	65	31	31	0	1	0	3	34	9	0	17	26	34	1	0	0	31	2	3	28		
950+00.00	68	34	30	0	1	0	3	38	7	0	16	23	30	8	0	0	30	2	2	28		
950+25.00	68	33	31	0	1	0	3	37	7	0	16	22	29	8	0	0	31	2	3	29		
950+50.00	66	29	32	0	1	0	3	34	7	0	16	23	30	4	0	0	32	3	4	28		
950+75.00	65	26	33	0	2	0	4	32	8	0	16	24	31	1	0	0	33	4	5	28		
951+00.00	63	24	35	0	1	0	2	28	7	0	19	25	33	-5	0	0	35	5	7	28		
951+25.00	62	23	36	0	1	0	1	26	6	0	21	26	34	-9	0	0	36	6	8	28		
951+50.00	64	23	37	0	2	0	2	27	4	0	22	27	35	-8	0	0	37	6	9	28		
951+75.00	65	23	37	0	2	0	3	28	3	0	22	25	33	-5	0	0	37	7	10	27		
952+00.00	65	24	37	0	1	0	3	28	4	0	22	26	34	-6	0	0	37	7	11	27		
952+25.00	68	25	39	0	1	0	3	29	7	0	24	31	41	-11	0	0	39	8	12	27		
952+50.00	70	26	39	0	2	0	3	31	10	0	24	34	44	-12	0	0	39	9	13	26		
952+75.00	71	28	38	0	2	0	3	33	11	0	24	35	45	-12	0	0	38	9	13	26		
953+00.00	72	29	38	0	2	0	3	34	14	0	25	39	51	-17	0	0	38	9	13	25		
953+25.00	73	33	38	0	1	0	1	35	15	0	26	41	53	-18	0	0	38	10	13	25		
953+50.00	73	34	37	1	0	0	0	35	17	0	26	42	55	-20	0	0	37	10	14	24		
953+75.00	73	33	37	3	0	0	0	37	17	0	25	42	54	-18	0	0	37	10	14	24		
954+00.00	74	35	36	3	0	0	0	38	14	0	24	38	49	-11	0	0	36	9	13	23		
954+25.00	73	36	35	2	0	0	0	38	10	0	21	32	41	-3	0	0	35	9	13	22		
954+50.00	73	38	34	2	0	0	0	39	6	0	17	23	30	9	0	0	34	8	12	22		
954+75.00	72	39	32	1	0	0	0	40	4	0	16	20	26	14	0	0	32	8	11	21		
955+00.00	73	41	32	1	0	0	0	41	4	0	18	22	28	13	0	0	32	8	11	21		
955+25.00	75	42	33	1	0	0	0	42	6	0	20	26	34	8	0	0	33	9	12	21		
955+50.00	78	42	35	1	0	0	0	43	13	0	22	35	45	-2	0	0	35	11	15	20		
955+75.00	73	38	34	2	0	0	0	40	22	0	23	45	58	-19	0	0	34	11	16	18		
955+97.42																						
STG2-ML(S) Totals:	2,591	1,135	1,345	18	24	0	71	1,246	461	0	805	1,265	1,644	-398	0	0	1,345	310	435	913		

Preliminary
06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
STG2-ML(N)																						
974+18.56																						
974+25.00	7	3	4	0	0	0	0	3	0	0	0	0	0	3	0	0	4	0	0	4		
974+50.00	23	7	16	0	0	0	0	7	0	0	0	0	0	7	0	0	16	0	0	16		
974+75.00	18	2	16	0	0	0	0	2	0	0	1	1	2	1	0	0	16	0	0	16		
975+00.00	16	1	16	0	0	0	0	1	0	0	4	5	6	-5	0	0	16	0	0	16		
975+25.00	16	0	16	0	0	0	0	0	1	0	9	10	13	-13	0	0	16	0	0	16		
975+50.00	16	0	16	0	0	0	0	0	3	0	13	16	20	-20	0	0	16	1	2	14		
975+75.00	16	0	16	0	0	0	0	0	4	0	13	17	22	-22	0	0	16	2	4	12		
976+00.00	16	0	16	0	0	0	0	0	5	0	13	17	23	-23	0	0	16	2	4	12		
976+25.00	16	0	16	0	0	0	0	0	5	0	13	19	24	-24	0	0	16	2	4	12		
976+50.00	16	0	16	0	0	0	0	0	7	0	14	22	28	-28	0	0	16	2	4	12		
976+75.00	16	0	16	0	0	0	0	0	9	0	15	24	31	-31	0	0	16	2	4	12		
977+00.00	16	0	16	0	0	0	0	0	7	0	14	22	28	-28	0	0	16	2	4	12		
977+25.00	16	0	16	0	0	0	0	0	7	0	14	21	27	-27	0	0	16	2	4	12		
977+50.00	16	0	16	0	0	0	0	0	7	0	14	21	27	-27	0	0	16	2	4	12		
977+75.00	16	0	16	0	0	0	0	0	7	0	14	21	28	-28	0	0	16	2	4	12		
978+00.00	16	0	16	0	0	0	0	0	7	0	14	21	27	-27	0	0	16	2	4	12		
978+25.00	16	0	16	0	0	0	0	0	6	0	13	19	25	-25	0	0	16	2	4	12		
978+50.00	16	0	16	0	0	0	0	0	5	0	13	18	23	-23	0	0	16	2	4	12		
978+75.00	16	0	16	0	0	0	0	0	3	0	13	16	21	-21	0	0	16	2	4	12		
979+00.00	16	0	16	0	0	0	0	0	2	0	11	13	17	-16	0	0	16	2	4	12		
979+25.00	16	0	16	0	0	0	0	0	1	0	9	10	13	-13	0	0	16	2	4	12		
979+50.00	17	1	16	0	0	0	0	1	1	0	7	8	10	-9	0	0	16	2	4	12		
979+75.00	17	1	16	0	0	0	0	1	1	0	6	7	9	-8	0	0	16	2	4	12		
980+00.00	16	1	16	0	0	0	0	1	1	0	7	8	11	-10	0	0	16	2	4	12		
980+25.00	16	0	16	0	0	0	0	0	1	0	8	9	11	-11	0	0	16	2	4	12		
980+50.00	16	0	16	0	0	0	0	0	1	0	7	7	10	-10	0	0	16	2	4	12		
980+75.00	16	0	16	0	0	0	0	0	1	0	7	7	9	-9	0	0	16	2	4	12		
981+00.00	16	0	16	0	0	0	0	0	0	0	7	8	10	-10	0	0	16	2	4	12		
981+25.00	16	0	16	0	0	0	0	0	0	0	6	6	8	-8	0	0	16	1	2	14		
981+38.66	9	0	9	0	0	0	0	0	0	0	3	3	4	-3	0	0	9	0	0	9		
STG2-ML(N) Totals:	470	17	454	0	0	0	0	17	91	0	284	374	486	-469	0	0	454	57	81	375		

Preliminary 06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
STG2-RPA																						
3974+28.39	68	0	68	0	0	0	0	0	329	0	67	396	514	-514	0	0	68	0	0	68		
3974+50.00	107	0	107	0	0	0	0	0	881	0	107	988	1,285	-1,285	0	0	107	0	0	107		
3974+75.00	126	0	126	0	0	0	0	0	1,036	0	125	1,161	1,509	-1,509	0	0	126	0	0	126		
3975+00.00	141	0	141	0	0	0	0	0	1,100	0	141	1,241	1,613	-1,613	0	0	141	0	0	142		
3975+25.00	171	0	171	0	0	0	0	0	1,269	0	171	1,440	1,872	-1,872	0	0	171	4	6	165		
3975+50.00	208	1	207	0	0	0	0	1	1,299	0	199	1,498	1,947	-1,946	0	0	207	40	56	151		
3975+75.00	225	1	224	0	0	0	0	1	1,194	0	210	1,404	1,825	-1,824	0	0	224	69	97	127		
3976+00.00	232	5	227	0	0	0	0	5	1,082	0	210	1,291	1,679	-1,674	0	0	227	86	121	106		
3976+25.00	229	9	220	0	0	0	0	9	951	0	200	1,151	1,496	-1,488	0	0	220	101	141	79		
3976+50.00	219	8	211	0	0	0	0	8	825	0	191	1,016	1,320	-1,312	0	0	211	94	131	80		
3976+75.00	211	4	202	0	6	0	0	10	703	0	178	881	1,145	-1,136	0	0	202	87	122	80		
3977+00.00	206	2	192	0	12	0	0	14	599	0	165	764	994	-980	0	0	192	81	113	79		
3977+25.00	202	10	182	0	11	0	0	20	498	0	153	652	847	-827	0	0	182	75	106	76		
3977+50.00	199	22	172	0	4	0	0	27	401	0	143	544	707	-681	0	0	172	71	99	73		
3977+75.00	195	32	162	0	0	0	0	32	316	0	129	445	578	-546	0	0	162	66	93	70		
3978+00.00	200	47	153	0	0	0	0	47	244	0	113	357	464	-417	0	0	153	62	87	66		
3978+25.00	207	64	143	0	0	0	0	64	187	0	100	287	372	-309	0	0	143	58	81	63		
3978+50.00	208	74	135	0	0	0	0	74	136	0	85	221	288	-214	0	0	135	55	77	58		
3978+75.00	209	82	128	0	0	0	0	82	96	0	65	161	210	-128	0	0	128	52	73	55		
3979+00.00	211	91	121	0	0	0	0	91	72	0	49	120	156	-66	0	0	121	49	69	52		
3979+25.00	221	106	115	0	0	0	0	106	62	0	39	101	132	-26	0	0	115	47	66	49		
3979+50.00	229	120	109	0	0	0	0	120	61	0	33	93	121	-1	0	0	109	45	63	46		
3979+75.00	232	129	103	0	0	0	0	129	56	0	28	84	109	20	0	0	103	44	61	42		
3980+00.00	206	112	94	0	0	0	0	112	47	0	25	71	93	19	0	0	94	38	54	40		
3980+25.00	141	65	76	0	0	0	0	65	39	0	28	67	87	-22	0	0	76	30	42	35		
3980+50.00	83	22	61	0	0	0	0	22	40	0	35	74	97	-75	0	0	61	24	34	28		
3980+75.00	61	6	55	0	0	0	0	6	49	0	44	93	121	-115	0	0	55	21	29	26		
3981+00.00	49	3	46	0	0	0	0	3	47	0	45	92	120	-117	0	0	46	10	14	33		
3981+25.00	40	0	13	0	0	0	0	28	13	28	13	53	69	-41	0	0	13	0	0	13		
3981+41.06																						
STG2-RPA																						
Totals:	5,038	1,014	3,964	0	33	0	0	1,075	13,631	28	3,090	16,748	21,773	-20,699	0	0	3,964	1,308	1,833	2,134		

Preliminary
06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
STG2-RPB																						
5962+64.85	103	3	43	0	32	0	0	60	28	24	18	70	91	-31	0	0	43	22	31	12		
5962+75.00	247	6	107	0	91	0	0	140	66	43	43	151	196	-56	0	0	107	56	78	30		
5963+00.00	226	3	109	0	113	0	0	116	61	0	42	102	133	-17	0	0	109	57	79	30		
5963+25.00	241	11	111	0	119	0	0	130	53	0	39	92	120	10	0	0	111	58	81	30		
5963+50.00	254	30	111	0	113	0	0	143	44	0	36	80	104	39	0	0	111	58	82	30		
5963+75.00	280	46	112	0	122	0	0	168	33	0	33	66	86	82	0	0	112	59	82	30		
5964+00.00	318	54	113	0	152	0	0	205	23	0	27	50	65	140	0	0	113	59	83	30		
5964+25.00	364	46	113	0	204	0	0	250	8	0	17	25	32	218	0	0	113	60	84	30		
5964+50.00	400	31	114	0	255	0	0	286	0	0	5	5	6	280	0	0	114	60	84	30		
5964+75.00	419	22	116	0	282	0	0	304	0	0	0	0	1	303	0	0	116	61	85	30		
5965+00.00	426	22	122	0	282	0	0	304	0	0	1	1	1	303	0	0	122	64	90	32		
5965+25.00	419	27	130	0	262	2	0	291	0	0	1	1	2	290	0	0	130	67	93	37		
5965+50.00	394	31	134	0	228	3	0	262	0	0	2	2	2	260	0	0	134	66	92	42		
5965+75.00	365	34	138	0	193	1	0	227	0	0	4	4	5	223	0	0	138	65	91	48		
5966+00.00	339	30	143	0	166	0	0	196	0	0	15	15	19	177	0	0	143	64	90	53		
5966+25.00	318	24	149	0	145	0	0	170	2	0	37	39	51	119	0	0	149	64	90	58		
5966+50.00	312	26	154	0	132	0	0	158	16	0	65	80	104	54	0	0	154	65	91	63		
5966+75.00	310	49	159	0	103	0	0	152	50	0	89	139	181	-29	0	0	159	65	92	67		
5967+00.00	309	80	164	0	65	0	0	145	94	0	108	202	262	-117	0	0	164	67	93	71		
5967+25.00	306	94	170	0	42	0	0	136	143	0	120	263	342	-206	0	0	170	68	96	74		
5967+50.00	297	95	177	0	26	0	0	120	205	0	131	336	436	-316	0	0	177	71	100	77		
5967+75.00	403	207	182	0	13	0	0	220	275	0	137	413	536	-316	0	0	182	75	105	78		
5968+00.00	464	271	187	0	5	0	0	276	342	0	143	485	630	-354	0	0	187	77	108	79		
5968+25.00	360	164	193	0	3	0	0	167	419	0	150	569	740	-573	0	0	193	81	113	80		
5968+50.00	310	108	199	0	3	0	0	111	490	0	148	637	828	-717	0	0	199	85	119	80		
5968+75.00	338	127	206	0	4	0	0	131	547	0	137	684	889	-757	0	0	206	90	127	80		
5969+00.00	388	171	214	0	3	0	0	174	604	0	134	737	958	-784	0	0	214	96	134	80		
5969+25.00	441	219	222	0	1	0	0	219	668	0	138	806	1,047	-828	0	0	222	101	142	80		
5969+50.00	497	267	230	0	0	0	0	267	747	0	142	889	1,155	-888	0	0	230	106	148	82		
5969+75.00	486	252	234	0	0	0	0	252	824	0	153	977	1,270	-1,018	0	0	234	97	136	98		
5970+00.00	401	188	212	0	0	0	0	188	840	0	150	990	1,287	-1,099	0	0	212	80	112	101		
5970+25.00	325	135	191	0	0	0	0	135	786	0	136	922	1,199	-1,064	0	0	191	77	108	83		
5970+50.00	259	68	191	0	0	0	0	68	792	0	136	928	1,206	-1,138	0	0	191	85	119	72		
5970+75.00	206	15	191	0	0	0	0	15	910	0	156	1,066	1,386	-1,371	0	0	191	87	121	70		
5971+00.00	189	0	189	0	0	0	0	0	1,058	0	176	1,235	1,605	-1,605	0	0	189	80	112	77		
5971+25.00	171	0	171	0	0	0	0	0	956	0	160	1,116	1,451	-1,451	0	0	171	69	97	73		
5971+50.00	86	0	86	0	0	0	0	0	403	0	81	484	629	-629	0	0	86	31	44	43		
5971+75.00	1	0	1	0	0	0	0	0	1	0	1	2	2	-4	0	0	1	0	0	1		
5971+76.83																						
STG2-RPB																						
Totals:	11,973	2,955	5,791	0	3,161	6	1	6,188	11,486	67	3,110	14,662	19,060	-12,874	0	0	5,791	2,593	3,632	2,161		

Preliminary
06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
STG2-RPC																						
4967+52.30																						
4967+75.00	34	0	34	0	0	0	0	0	128	0	34	162	211	-211	0	0	34	0	0	34		
4968+00.00	77	0	77	0	0	0	0	0	439	0	77	516	671	-671	0	0	77	17	24	53		
4968+25.00	91	1	90	0	0	0	0	1	622	0	90	713	926	-926	0	0	90	35	49	42		
4968+50.00	91	1	90	0	0	0	0	1	662	0	90	752	977	-977	0	0	90	35	49	41		
4968+75.00	92	1	91	0	0	0	0	1	688	0	91	779	1,012	-1,012	0	0	91	36	50	41		
4969+00.00	93	1	92	0	0	0	0	1	710	0	92	802	1,043	-1,042	0	0	92	36	51	42		
4969+25.00	95	1	94	0	0	0	0	1	732	0	94	825	1,073	-1,072	0	0	94	37	52	42		
4969+50.00	97	1	96	0	0	0	0	1	760	0	96	856	1,113	-1,112	0	0	96	38	54	43		
4969+75.00	99	1	98	0	0	0	0	1	791	0	98	889	1,155	-1,155	0	0	98	39	55	43		
4970+00.00	100	1	99	0	0	0	0	1	813	0	99	912	1,185	-1,185	0	0	99	40	56	43		
4970+25.00	101	1	100	0	0	0	0	1	829	0	100	929	1,208	-1,207	0	0	100	41	57	43		
4970+50.00	103	1	102	0	0	0	0	1	836	0	102	938	1,220	-1,219	0	0	102	41	58	44		
4970+75.00	106	0	106	0	0	0	0	0	838	0	105	943	1,227	-1,226	0	0	106	42	59	48		
4971+00.00	113	0	113	0	0	0	0	0	856	0	112	968	1,259	-1,259	0	0	113	43	60	53		
4971+25.00	126	0	126	0	0	0	0	0	953	0	125	1,078	1,402	-1,402	0	0	126	48	67	59		
4971+50.00	137	0	137	0	0	0	0	0	1,173	0	137	1,310	1,703	-1,703	0	0	137	45	63	75		
4971+75.00	138	0	138	0	0	0	0	0	1,382	0	137	1,519	1,975	-1,975	0	0	138	25	35	103		
4972+00.00	135	0	135	0	0	0	0	0	1,420	0	134	1,554	2,020	-2,020	0	0	135	6	9	126		
4972+25.00	129	0	129	0	0	0	0	0	1,231	0	127	1,358	1,765	-1,765	0	0	129	0	0	129		
4972+50.00	115	0	115	0	0	0	0	0	846	0	111	958	1,245	-1,245	0	0	115	0	0	115		
4972+75.00	98	0	97	0	0	0	0	0	511	0	92	603	784	-784	0	0	97	0	0	98		
4973+00.00	85	0	84	0	0	0	0	0	372	0	78	450	585	-585	0	0	84	0	0	85		
4973+25.00	96	5	57	0	0	0	0	39	222	34	53	309	401	-362	0	0	57	0	0	58		
4973+28.92	41	3	5	0	0	0	0	36	6	34	4	44	57	-21	0	0	5	0	0	5		
STG2-RPC																						
Totals:	2,390	17	2,307	0	0	0	0	84	17,821	67	2,280	20,168	26,218	-26,135	0	0	2,307	604	846	1,462		

Preliminary
06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
STG3-WEST																						
WEST	1,394	433	729	0	0	0	0	664	4,230	231	491	4,952	6,438	-5,774	0	0	729	184	258	472		
STG3-WEST Totals:	1,394	434	730	0	1	0	0	665	4,231	231	492	4,953	6,439	-5,774	0	0	730	185	258	472		

Preliminary
06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
STG3-EAST																						
EAST	1,399	284	989	0	52	0	0	410	3,882	74	849	4,805	6,246	-5,837	0	0	989	316	442	547		
STG3-EAST Totals:	1,399	285	990	0	52	0	0	410	3,883	74	849	4,805	6,247	-5,837	0	0	990	316	443	548		

Preliminary
06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
STG4-WEST																						
WEST	1,402	1,162	240	0	0	0	0	1,162	1,000	0	214	1,214	1,578	-416	0	0	240	166	232	8		
STG4-WEST Totals:	1,402	1,162	240	0	0	0	0	1,162	1,000	0	215	1,214	1,578	-417	0	0	240	166	233	8		

Preliminary
06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
STG4-EAST																						
EAST	2,088	2,088	0	0	0	0	0	2,088	45	0	0	45	58	2,030	0	0	0	615	861	-861		
STG4-EAST																						
Totals:	2,089	2,089	0	0	0	0	0	2,089	45	0	0	45	59	2,031	0	0	0	616	862	-862		

Preliminary
06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
STG5-ML																						
981+38.66	7	0	7	0	0	0	0	0	0	0	2	2	3	-3	0	0	7	0	0	7		
981+50.00	16	0	16	0	0	0	0	0	1	0	5	5	7	-7	0	0	16	0	0	16		
981+75.00	16	0	16	0	0	0	0	0	1	0	5	6	8	-7	0	0	16	0	0	16		
982+00.00	16	0	16	0	0	0	0	0	0	0	4	5	6	-6	0	0	16	0	0	16		
982+25.00	17	1	16	0	0	0	0	1	0	0	3	3	4	-3	0	0	16	0	0	16		
982+50.00	17	1	16	0	0	0	0	1	0	0	3	3	4	-3	0	0	16	0	0	16		
982+75.00	16	1	16	0	0	0	0	1	0	0	3	3	4	-3	0	0	16	0	0	16		
983+00.00	17	1	16	0	0	0	0	1	0	0	2	2	2	-1	0	0	16	0	0	16		
983+25.00	19	3	16	0	0	0	0	3	0	0	1	1	1	3	0	0	16	0	0	16		
983+50.00	22	4	16	0	2	0	0	6	0	0	0	0	0	6	0	0	16	0	0	16		
983+75.00	24	2	15	0	7	0	0	9	0	0	0	0	0	9	0	0	15	0	0	15		
983+98.52	2	1	1	0	0	0	0	2	0	0	0	0	0	2	0	0	1	0	0	0		
983+98.95	10	6	3	0	1	0	0	7	0	0	0	0	0	7	0	0	3	1	2	1		
984+00.00	226	135	65	0	25	0	0	161	0	0	2	2	2	158	0	0	65	33	46	19		
984+25.00	227	127	74	0	26	0	0	153	0	0	2	2	2	150	0	0	74	42	59	15		
984+50.00	231	128	78	0	25	0	0	153	0	0	3	3	3	150	0	0	78	47	66	11		
984+75.00	231	133	76	0	22	0	0	155	0	0	6	6	8	147	0	0	76	48	67	10		
985+00.00	230	126	85	0	19	0	0	145	0	0	9	10	13	132	0	0	85	48	68	17		
985+25.00	228	117	93	0	18	0	0	135	0	0	11	11	15	120	0	0	93	49	68	25		
985+50.00	224	116	92	0	16	0	0	132	0	0	10	10	13	119	0	0	92	49	69	24		
985+75.00	212	108	90	0	14	0	0	122	0	0	11	11	15	107	0	0	90	49	68	22		
986+00.00	180	96	77	0	7	0	0	103	0	0	12	12	16	88	0	0	77	44	62	16		
986+25.00	143	86	57	0	0	0	0	86	0	0	13	13	17	69	0	0	57	34	48	9		
986+50.00	139	82	57	0	0	0	0	82	0	0	15	15	19	63	0	0	57	34	48	9		
986+75.00	157	86	71	0	0	0	0	86	0	0	15	15	19	68	0	0	71	44	61	10		
987+00.00	171	93	78	0	0	0	0	93	0	0	15	15	20	73	0	0	78	48	68	10		
987+25.00	174	96	78	0	0	0	0	96	1	0	16	18	23	73	0	0	78	49	68	10		
987+50.00	177	98	79	0	0	0	0	98	5	0	17	22	29	70	0	0	79	49	68	11		
987+75.00	183	104	79	0	0	0	0	104	6	0	18	24	31	73	0	0	79	49	69	11		
988+00.00	193	113	80	0	0	0	0	113	4	0	16	21	27	86	0	0	80	49	69	11		
988+25.00	212	130	82	0	0	0	0	130	3	0	16	19	25	105	0	0	82	50	70	12		
988+50.00	233	149	84	0	0	0	0	149	5	0	17	22	28	120	0	0	84	50	70	13		
988+75.00	249	164	85	0	0	0	0	164	7	0	19	26	34	130	0	0	85	50	71	15		
989+00.00	262	175	87	0	0	0	0	175	10	0	22	32	42	132	0	0	87	50	71	17		
989+25.00	272	183	89	0	0	0	0	183	14	0	25	40	52	131	0	0	89	50	71	18		
989+50.00	298	208	90	0	0	0	0	208	16	0	26	43	56	152	0	0	90	50	71	20		
989+75.00	339	247	92	0	0	0	0	247	19	0	27	46	59	187	0	0	92	51	71	21		
990+00.00	371	278	94	0	0	0	0	278	22	0	29	50	65	212	0	0	94	51	71	23		
990+25.00	397	301	95	0	0	0	0	301	25	0	30	55	71	231	0	0	95	51	71	24		
990+50.00	418	321	97	0	0	0	0	321	27	0	31	58	76	245	0	0	97	51	71	26		
990+75.00	435	336	98	0	0	0	0	336	31	0	31	62	81	256	0	0	98	51	71	27		
991+00.00	445	345	100	0	0	0	0	345	34	0	32	65	85	260	0	0	100	51	71	29		
991+25.00	455	352	103	0	0	0	0	352	33	0	32	65	85	267	0	0	103	51	72	31		
991+50.00	468	364	105	0	0	0	0	364	31	0	32	63	82	282	0	0	105	52	73	32		
991+75.00	474	368	106	0	0	0	0	368	28	0	32	60	78	290	0	0	106	53	74	32		
992+00.00	492	386	106	0	0	0	0	386	27	0	32	59	77	309	0	0	106	53	74	32		
992+25.00	518	411	107	0	0	0	0	411	28	0	31	59	77	334	0	0	107	53	75	32		
992+50.00	469	364	105	0	0	0	0	364	25	0	30	55	71	293	0	0	105	55	77	28		
992+75.00	354	254	100	0	0	0	0	254	18	0	27	45	59	195	0	0	100	57	80	20		
993+00.00	209	146	63	0	0	0	0	146	8	0	21	29	37	108	0	0	63	38	53	10		
993+22.81																						
STG5-ML																						
Totals:	10,897	7,349	3,366	0	183	0	0	7,532	433	0	760	1,192	1,550	5,982	0	0	3,366	1,786	2,502	867		

Preliminary
06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
STG5-RPA																						
3974+43.36	8	6	2	0	0	0	0	6	0	0	0	0	0	6	0	0	2	3	4	-2		
3974+50.00	360	305	52	0	3	0	0	308	12	0	3	14	19	289	0	0	52	51	72	-20		
3974+75.00	830	675	87	0	68	0	0	743	57	0	5	62	81	662	0	0	87	82	115	-28		
3975+00.00	986	763	91	0	132	0	0	895	101	0	9	111	144	751	0	0	91	85	120	-29		
3975+25.00	952	734	93	0	125	0	0	859	102	0	11	113	147	712	0	0	93	85	120	-27		
3975+50.00	909	718	91	0	100	0	0	818	75	0	4	79	102	716	0	0	91	84	117	-27		
3975+75.00	856	699	82	0	75	0	0	773	29	0	0	29	37	736	0	0	82	79	111	-29		
3976+00.00	786	658	72	0	57	0	0	715	6	0	0	6	8	707	0	0	72	76	106	-35		
3976+25.00	719	604	67	0	48	0	0	652	6	0	0	6	8	644	0	0	67	76	106	-39		
3976+50.00	666	549	65	0	52	0	0	602	0	0	0	0	0	602	0	0	65	75	106	-41		
3976+75.00	610	487	62	0	61	0	0	547	0	0	0	0	0	547	0	0	62	75	105	-43		
3977+00.00	555	429	61	0	65	0	0	494	0	0	0	0	0	493	0	0	61	76	106	-45		
3977+25.00	511	383	60	0	68	0	0	451	7	0	0	7	9	442	0	0	60	76	106	-46		
3977+50.00	481	346	60	0	76	0	0	422	7	0	0	7	9	413	0	0	60	76	107	-47		
3977+75.00	469	328	60	0	81	0	0	409	1	0	0	1	1	408	0	0	60	76	107	-47		
3978+00.00	468	332	60	0	77	0	0	409	1	0	0	1	2	407	0	0	60	76	107	-47		
3978+25.00	469	342	60	0	68	0	0	410	0	0	0	0	0	410	0	0	60	76	107	-47		
3978+50.00	472	354	59	0	59	0	0	413	0	0	0	0	0	413	0	0	59	75	105	-47		
3978+75.00	467	357	57	0	54	0	0	411	0	0	0	0	0	411	0	0	57	74	103	-47		
3979+00.00	462	356	54	0	51	0	0	408	1	0	0	1	1	407	0	0	54	72	101	-47		
3979+25.00	450	351	51	0	49	0	0	400	2	0	0	2	3	397	0	0	51	69	97	-47		
3979+50.00	436	353	47	0	35	0	0	388	2	0	0	2	3	386	0	0	47	65	91	-44		
3979+75.00	428	372	44	0	11	0	0	384	1	0	0	1	2	382	0	0	44	60	85	-41		
3980+00.00	429	386	43	0	0	0	0	386	0	0	0	0	1	385	0	0	43	56	78	-35		
3980+25.00	452	400	51	0	0	0	0	400	0	0	0	0	0	400	0	0	51	57	81	-29		
3980+50.00	454	397	57	0	0	0	0	397	5	0	0	5	6	391	0	0	57	61	85	-28		
3980+75.00	432	378	54	0	0	0	0	378	5	0	0	5	6	372	0	0	54	59	82	-28		
3981+00.00	410	356	54	0	0	0	0	356	11	0	2	13	17	339	0	0	54	57	80	-26		
3981+25.00	403	332	72	0	0	0	0	332	46	0	20	65	85	247	0	0	72	54	76	-4		
3981+50.00	420	310	83	0	0	0	0	338	62	28	32	122	158	180	0	0	83	49	69	14		
3981+75.00	387	284	75	0	0	0	0	312	45	28	26	98	128	184	0	0	75	45	63	12		
3982+00.00	328	260	68	0	0	0	0	260	28	0	20	48	62	198	0	0	68	41	58	10		
3982+25.00	300	238	62	0	0	0	0	238	18	0	14	31	41	197	0	0	62	38	53	9		
3982+50.00	270	215	55	0	0	0	0	215	11	0	9	21	27	188	0	0	55	35	49	7		
3982+75.00	240	186	49	0	5	0	0	191	7	0	6	13	17	174	0	0	49	31	44	5		
3983+00.00	215	158	44	0	12	0	0	171	3	0	5	8	10	161	0	0	44	29	41	4		
3983+25.00	192	135	39	0	17	0	0	152	1	0	2	3	4	148	0	0	39	28	40	0		
3983+50.00	168	117	35	0	16	0	0	133	0	0	0	0	0	133	0	0	35	28	39	-4		
3983+75.00	146	104	32	0	9	0	0	113	0	0	0	0	0	113	0	0	32	28	39	-6		
3983+99.00																						
STG5-RPA																						
Totals:	18,597	14,758	2,310	0	1,475	0	0	16,287	652	55	169	876	1,138	15,150	0	0	2,310	2,343	3,281	-973		

Preliminary
06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
STG6-ML																						
955+98.82	4	2	2	0	0	0	0	2	2	0	1	3	4	-2	0	0	2	1	2	0		
956+00.00	77	36	40	1	0	0	0	37	38	0	30	68	88	-51	0	0	40	15	21	19		
956+25.00	71	27	42	2	0	0	0	29	50	0	32	82	107	-78	0	0	42	16	23	19		
956+50.00	73	27	44	3	0	0	0	30	64	0	33	97	126	-96	0	0	44	18	25	19		
956+75.00	75	27	45	3	0	0	0	30	75	0	34	109	142	-112	0	0	45	19	26	19		
957+00.00	77	29	46	2	0	0	0	31	84	0	36	120	155	-125	0	0	46	20	28	19		
957+25.00	80	30	47	2	0	0	0	32	93	0	38	131	170	-138	0	0	47	21	29	18		
957+50.00	82	31	48	2	0	0	0	34	100	0	39	139	181	-147	0	0	48	22	30	18		
957+75.00	84	32	48	3	0	0	0	35	99	0	38	137	178	-142	0	0	48	22	31	18		
958+00.00	87	34	49	4	0	0	0	38	99	0	37	136	176	-138	0	0	49	22	31	18		
958+25.00	89	36	50	4	0	0	0	40	106	0	38	144	187	-147	0	0	50	22	31	19		
958+50.00	91	38	50	2	0	0	0	40	109	0	39	148	193	-152	0	0	50	22	31	20		
958+75.00	86	44	42	0	0	0	0	44	103	0	31	135	175	-131	0	0	42	21	30	12		
959+00.00	61	36	25	0	0	0	0	36	72	0	17	89	116	-79	0	0	25	16	22	3		
959+19.23																						
STG6-ML																						
Totals:	1,037	431	579	28	0	0	0	459	1,094	0	443	1,536	1,997	-1,538	0	0	579	256	359	221		

Preliminary
06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
STG6-RPC																						
4959+20.00	13	7	6	0	0	0	0	7	18	0	5	23	30	-24	0	0	6	6	8	-1		
4959+25.00	56	24	32	0	0	0	0	24	91	0	26	117	153	-129	0	0	32	28	39	-7		
4959+50.00	47	16	31	0	0	0	0	16	86	0	26	112	146	-130	0	0	31	28	39	-8		
4959+75.00	48	18	30	0	0	0	0	18	76	0	24	100	130	-112	0	0	30	28	40	-10		
4960+00.00	49	20	29	0	0	0	0	20	61	0	23	84	110	-90	0	0	29	29	41	-11		
4960+25.00	50	21	29	0	0	0	0	21	52	0	23	75	98	-77	0	0	29	31	43	-14		
4960+50.00	53	24	29	0	0	0	0	24	46	0	22	68	88	-65	0	0	29	31	44	-15		
4960+75.00	59	28	31	0	0	0	0	28	43	0	21	64	83	-55	0	0	31	31	44	-13		
4961+00.00	69	33	35	0	0	0	0	33	42	0	21	63	82	-48	0	0	35	32	45	-10		
4961+25.00	78	40	38	0	0	0	0	40	39	0	21	60	78	-38	0	0	38	34	47	-10		
4961+50.00	90	50	40	0	0	0	0	50	41	0	21	61	80	-30	0	0	40	35	50	-10		
4961+75.00	101	59	42	0	0	0	0	59	43	0	20	63	82	-23	0	0	42	37	52	-9		
4962+00.00	110	66	44	0	0	0	0	66	41	0	20	61	79	-12	0	0	44	38	53	-9		
4962+25.00	122	76	46	0	0	0	0	76	38	0	19	57	74	2	0	0	46	39	54	-8		
4962+50.00	133	84	48	0	0	0	0	84	37	0	19	56	73	12	0	0	48	40	56	-7		
4962+75.00	142	91	51	0	0	0	0	91	40	0	19	59	77	14	0	0	51	41	57	-6		
4963+00.00	152	98	54	0	0	0	0	98	44	0	18	62	81	17	0	0	54	42	59	-5		
4963+25.00	158	101	57	0	0	0	0	101	49	0	19	68	89	13	0	0	57	44	62	-5		
4963+50.00	159	100	60	0	0	0	0	100	58	0	21	79	103	-3	0	0	60	46	64	-4		
4963+75.00	156	94	62	0	0	0	0	94	69	0	23	92	119	-25	0	0	62	47	66	-4		
4964+00.00	172	105	67	0	0	0	0	105	85	0	23	108	141	-35	0	0	67	50	71	-4		
4964+25.00	169	96	74	0	0	0	0	96	99	0	24	124	161	-65	0	0	74	54	76	-3		
4964+50.00	140	58	82	0	0	0	0	58	110	0	40	151	196	-138	0	0	82	60	84	-2		
4964+75.00	135	43	92	0	0	0	0	43	105	0	56	162	210	-167	0	0	92	68	95	-3		
4965+00.00	174	71	103	0	0	0	0	71	74	0	52	126	163	-92	0	0	103	80	112	-9		
4965+25.00	294	125	113	0	9	0	0	181	72	46	48	166	216	-35	0	0	113	87	122	-9		
4965+50.00	322	146	120	0	11	0	0	203	115	46	54	216	280	-77	0	0	120	87	122	-3		
4965+75.00	303	132	123	0	1	0	0	180	166	46	60	271	353	-173	0	0	123	88	123	-1		
4966+00.00	289	118	125	0	0	0	0	164	223	46	66	336	437	-272	0	0	125	87	122	3		
4966+25.00	290	119	124	0	0	0	0	166	279	46	71	396	515	-350	0	0	124	83	117	7		
4966+50.00	296	123	127	0	0	0	0	169	325	46	73	445	578	-409	0	0	127	83	116	11		
4966+75.00	301	122	132	0	0	0	0	122	377	0	78	456	593	-470	0	0	132	86	120	12		
4967+00.00	261	122	139	0	0	0	0	122	431	0	82	513	667	-545	0	0	139	89	125	14		
4967+25.00	258	116	142	0	0	0	0	116	483	0	84	567	737	-621	0	0	142	92	129	13		
4967+50.00	225	109	117	0	0	0	0	109	397	0	57	455	591	-483	0	0	117	95	133	-17		
4967+75.00	187	107	80	0	0	0	0	107	143	0	19	162	211	-104	0	0	80	82	115	-35		
4968+00.00	171	99	72	0	0	0	0	99	5	0	8	13	17	81	0	0	72	68	96	-23		
4968+25.00	172	93	79	0	0	0	0	93	11	0	10	21	27	66	0	0	79	71	100	-21		
4968+50.00	177	93	85	0	0	0	0	93	15	0	11	25	33	60	0	0	85	75	105	-20		
4968+75.00	183	93	90	0	0	0	0	93	15	0	11	26	34	59	0	0	90	78	109	-19		
4969+00.00	201	106	94	0	0	0	0	106	16	0	11	28	36	70	0	0	94	81	113	-19		
4969+25.00	222	123	99	0	0	0	0	123	18	0	11	29	38	86	0	0	99	84	117	-18		
4969+50.00	244	140	104	0	0	0	0	140	18	0	11	29	38	102	0	0	104	87	122	-18		
4969+75.00	267	157	110	0	0	0	0	157	18	0	12	29	38	119	0	0	110	91	127	-18		
4970+00.00	292	176	116	0	0	0	0	176	17	0	12	29	38	139	0	0	116	95	133	-17		
4970+25.00	316	195	121	0	0	0	0	195	14	0	11	26	33	162	0	0	121	99	138	-17		
4970+50.00	325	199	126	0	0	0	0	199	10	0	10	20	26	173	0	0	126	104	146	-20		
4970+75.00	301	171	130	0	0	0	0	171	9	0	8	16	21	150	0	0	130	101	141	-11		
4971+00.00	228	101	127	0	0	0	0	101	8	0	6	14	18	83	0	0	127	84	118	9		
4971+25.00	144	47	97	0	0	0	0	47	89	0	34	123	160	-113	0	0	97	78	110	-12		
4971+50.00	118	42	76	0	0	0	0	42	459	0	66	525	683	-641	0	0	76	91	128	-52		
4971+75.00	144	58	86	0	0	0	0	58	1,085	0	72	1,157	1,504	-1,446	0	0	86	101	141	-56		
4972+00.00	184	83	101	0	0	0	0	83	1,682	0	83	1,765	2,295	-2,212	0	0	101	82	115	-14		
4972+25.00	225	101	124	0	0	0	0	101	2,040	0	104	2,144	2,787	-2,686	0	0	124	50	70	54		
4972+50.00	260	111	149	0	1	0	0	112	1,909	0	119	2,028	2,637	-2,525	0	0	149	37	52	97		
4972+75.00	271	121	148	0	1	0	0	122	1,363	0	112	1,475	1,917	-1,795	0	0	148	38	53	95		
4973+00.00	311	120	141	0	1	0	0	170	901	49	96	1,046	1,360	-1,190	0	0	141	38	53	89		
4973+25.00	317	125	143	0	0	0	0	175	563	49	87	699	909	-735	0	0	143	33	46	97		
4973+50.00	276	109	118	0	0	0	0	158	220	49	64	333	433	-274	0	0	118	24	33	85		
4973+75.00	179	63	67	0	0	0	0	112	34	49	28	111	145	-33	0	0	67	9	13	54		
4974+00.00	40	21	19	0	0	0	0	21	3	0	6	9	12	9	0	0	19	0	0	19		
4974+25.00	0	0	0	0	0	0	0	0	5	0	0	5	6	-6	0	0	0	0	0	0		
4974+50.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4974+55.33																						
STG6-RPC Totals:	11,233	5,512	5,177	1	25	0	0	6,010	15,029	474	2,304	17,807	23,149	-17,139	0	0	5,177	3,655	5,121	54		

Preliminary 06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
STG7-ML																						
949+57.27	7	6	0	0	0	0	0	6	0	0	0	0	0	6	0	0	0	0	0	1		
949+75.00	20	19	1	0	0	0	0	19	0	0	0	0	0	19	0	0	1	0	0	1		
950+00.00	28	20	9	0	0	0	0	20	15	0	1	16	21	-2	0	0	9	2	3	6		
950+25.00	42	22	19	0	0	0	0	22	66	0	10	76	99	-77	0	0	19	8	12	8		
950+50.00	48	27	21	0	0	0	1	28	54	0	15	68	89	-61	0	0	21	11	15	6		
950+75.00	65	45	18	0	0	0	2	47	3	0	6	9	11	36	0	0	18	9	12	6		
951+00.00	69	47	21	0	0	0	1	48	13	0	7	20	26	22	0	0	21	13	19	3		
951+25.00	59	33	25	0	0	0	0	33	85	0	18	103	134	-101	0	0	25	20	28	-3		
951+50.00	63	36	27	0	0	0	0	36	151	0	22	173	225	-189	0	0	27	23	33	-6		
951+75.00	75	42	30	0	0	0	3	45	151	0	22	173	225	-180	0	0	30	29	40	-10		
952+00.00	129	80	36	0	0	0	13	93	128	0	20	148	192	-99	0	0	36	37	52	-16		
952+25.00	279	201	42	0	0	0	35	237	85	0	17	102	133	104	0	0	42	47	65	-23		
952+50.00	353	265	45	0	0	0	43	308	56	0	16	72	93	215	0	0	45	51	71	-27		
952+75.00	296	220	43	0	0	0	33	252	47	0	15	63	81	171	0	0	43	50	70	-27		
953+00.00	254	186	42	0	0	0	25	211	39	0	14	53	68	143	0	0	42	49	69	-27		
953+25.00	224	164	41	0	0	0	20	183	29	0	13	42	55	128	0	0	41	49	68	-28		
953+50.00	200	145	40	0	0	0	15	160	21	0	12	32	42	118	0	0	40	48	68	-28		
953+75.00	175	127	39	0	0	0	9	136	15	0	11	26	34	102	0	0	39	48	67	-29		
954+00.00	153	111	39	0	0	0	3	114	9	0	11	20	26	88	0	0	39	49	69	-30		
954+25.00	149	111	38	0	0	0	0	111	3	0	9	12	16	95	0	0	38	48	68	-30		
954+50.00	136	105	31	0	0	0	0	105	0	0	6	7	8	96	0	0	31	40	57	-25		
954+75.00	139	93	46	0	0	0	0	93	0	0	9	9	12	81	0	0	46	39	54	-9		
955+00.00	173	94	70	0	10	0	0	103	0	0	11	11	15	89	0	0	70	46	65	5		
955+25.00	175	89	67	0	19	0	0	108	0	0	7	7	9	99	0	0	67	45	63	5		
955+47.79																						
STG7-ML																						
Totals:	3,310	2,288	791	0	29	0	203	2,519	970	0	274	1,243	1,615	905	0	0	791	761	1,067	-276		

Preliminary
06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
STG7-RPB																						
5955+57.56	123	50	51	0	22	0	0	72	0	0	2	2	3	70	0	0	51	43	60	-10		
5955+75.00	195	80	72	0	42	0	0	123	0	0	2	2	2	120	0	0	72	60	84	-12		
5956+00.00	223	86	80	0	57	0	0	143	0	0	2	2	3	140	0	0	80	59	83	-3		
5956+25.00	247	88	88	0	72	0	0	160	0	0	2	2	3	157	0	0	88	59	83	5		
5956+50.00	267	90	89	0	88	0	0	178	0	0	1	1	1	177	0	0	89	60	84	5		
5956+75.00	281	93	91	0	97	0	0	190	0	0	0	0	1	190	0	0	91	61	86	5		
5957+00.00	286	97	92	0	97	0	0	193	0	0	0	0	0	193	0	0	92	62	88	5		
5957+25.00	290	96	94	0	100	0	0	196	0	0	1	1	1	195	0	0	94	64	90	5		
5957+50.00	305	99	97	0	109	0	0	207	0	0	1	1	1	206	0	0	97	66	92	5		
5957+75.00	324	104	100	0	119	0	0	223	0	0	2	2	2	221	0	0	100	68	95	5		
5958+00.00	335	103	104	0	128	0	0	231	0	0	6	6	8	223	0	0	104	70	98	6		
5958+25.00	351	105	109	0	137	0	0	242	0	0	10	10	13	229	0	0	109	72	101	8		
5958+50.00	375	110	116	0	148	0	0	259	0	0	10	10	13	246	0	0	116	75	105	11		
5958+75.00	394	107	120	0	166	0	0	273	0	0	9	9	12	261	0	0	120	78	109	12		
5959+00.00	350	112	100	0	138	0	0	249	0	0	5	5	7	243	0	0	100	65	92	9		
5959+25.00	273	100	77	0	96	0	0	196	0	0	4	4	6	190	0	0	77	51	71	6		
5959+50.00	334	99	97	0	138	0	0	237	0	0	7	7	9	228	0	0	97	65	90	7		
5959+75.00	415	132	119	0	165	0	0	297	0	0	6	6	8	289	0	0	119	80	111	8		
5960+00.00	410	143	121	0	144	0	3	290	0	0	4	4	6	284	0	0	121	82	115	6		
5960+25.00	396	142	122	0	128	0	4	274	0	0	3	3	4	270	0	0	122	85	119	4		
5960+50.00	372	141	123	0	107	0	1	248	0	0	6	6	7	241	0	0	123	87	122	1		
5960+75.00	337	134	118	0	85	0	0	219	0	0	15	15	20	199	0	0	118	86	120	-2		
5961+00.00	312	135	103	0	74	0	0	209	3	0	26	29	38	171	0	0	103	78	110	-7		
5961+25.00	311	144	90	0	76	0	1	221	14	0	32	46	59	161	0	0	90	73	102	-12		
5961+50.00	328	146	88	0	92	0	2	240	31	0	33	64	83	157	0	0	88	74	104	-16		
5961+75.00	350	154	89	0	103	0	4	261	49	0	32	81	105	156	0	0	89	78	110	-20		
5962+00.00	412	171	90	0	102	0	6	322	61	43	31	135	176	146	0	0	90	83	116	-25		
5962+25.00	441	185	91	0	117	0	5	349	72	43	29	144	188	162	0	0	91	87	122	-31		
5962+50.00	392	184	61	0	127	0	2	332	40	19	14	73	94	237	0	0	61	70	98	-38		
5962+75.00	354	188	30	0	137	0	0	324	0	0	0	0	0	324	0	0	30	52	73	-44		
5963+00.00	392	202	30	0	160	0	0	362	0	0	0	0	0	361	0	0	30	56	78	-48		
5963+25.00	418	211	30	0	176	0	0	387	0	0	0	0	1	387	0	0	30	60	84	-54		
5963+50.00	477	207	31	0	189	0	0	446	0	50	0	50	66	381	0	0	31	64	90	-60		
5963+75.00	472	196	31	0	195	0	0	441	0	50	0	50	65	376	0	0	31	69	96	-66		
5964+00.00	467	192	31	0	194	0	0	436	0	50	0	50	65	371	0	0	31	73	103	-71		
5964+25.00	465	189	32	0	195	0	0	433	0	50	0	50	65	368	0	0	32	78	109	-77		
5964+50.00	419	183	32	0	205	0	0	388	0	0	0	0	0	387	0	0	32	82	115	-83		
5964+75.00	441	182	32	0	227	0	0	409	0	0	0	0	0	408	0	0	32	86	121	-89		
5965+00.00	426	180	32	0	214	0	0	394	0	0	0	0	0	393	0	0	32	82	115	-83		
5965+25.00	402	175	32	0	195	0	0	370	0	0	0	0	0	369	0	0	32	77	108	-76		
5965+50.00	415	174	32	0	209	0	0	382	0	0	0	0	0	382	0	0	32	80	113	-80		
5965+75.00	428	171	32	0	225	0	0	396	0	0	0	1	1	395	0	0	32	83	117	-85		
5966+00.00	453	169	32	0	251	0	0	420	1	0	0	1	2	419	0	0	32	86	121	-88		
5966+25.00	477	170	32	0	274	0	0	444	1	0	0	2	2	442	0	0	32	89	124	-92		
5966+50.00	490	171	32	0	287	0	0	457	1	0	0	1	2	456	0	0	32	91	127	-95		
5966+75.00	497	177	32	0	288	0	0	465	1	0	0	1	2	463	0	0	32	92	129	-97		
5967+00.00	495	198	32	0	265	0	0	463	2	0	0	2	3	460	0	0	32	94	131	-99		
5967+25.00	496	241	32	0	224	0	0	465	2	0	0	2	3	462	0	0	32	94	132	-101		
5967+50.00	491	279	31	0	181	0	0	460	1	0	0	2	2	458	0	0	31	95	133	-102		
5967+75.00	489	307	31	0	150	0	0	457	1	0	1	2	2	455	0	0	31	95	134	-102		
5968+00.00	502	335	31	0	136	0	0	471	0	0	1	1	1	470	0	0	31	96	135	-104		
5968+25.00	516	350	31	0	134	0	0	484	0	0	0	0	1	484	0	0	31	97	136	-104		
5968+50.00	527	361	31	0	135	0	0	496	0	0	0	0	0	496	0	0	31	97	136	-105		
5968+75.00	535	371	31	0	133	0	0	504	0	0	0	0	0	503	0	0	31	97	136	-105		
5969+00.00	532	382	31	0	118	0	0	501	0	0	1	1	1	500	0	0	31	97	136	-105		
5969+25.00	526	402	31	0	93	0	0	495	0	0	1	1	1	495	0	0	31	97	136	-105		
5969+50.00	533	437	32	0	64	0	0	501	0	0	1	1	1	500	0	0	32	96	135	-103		
5969+75.00	572	498	33	0	41	0	0	539	0	0	1	1	2	537	0	0	33	107	150	-117		
5970+00.00	572	508	35	0	28	0	0	536	170	0	2	172	224	313	0	0	35	123	172	-136		
5970+25.00	526	455	48	0	23	0	0	479	455	0	12	468	608	-129	0	0	48	124	174	-126		
5970+50.00	507	412	71	0	24	0	0	436	654	0	34	688	894	-458	0	0	71	117	164	-93		
5970+75.00	490	381	85	0	24	0	0	405	857	0	51	908	1,181	-776	0	0	85	106	148	-63		
5971+00.00	378	250	116	0	11	0	0	261	1,064	0	81	1,145	1,488	-1,227	0	0	116	85	119	-3		
5971+25.00	264	111	153	0	0	0	0	111	1,199	0	112	1,311	1,705	-1,594	0	0	153	67	94	58		
5971+49.72																						
STG7-RPB																						
Totals:	25,869	12,843	4,218	0	8,478	0	28	21,652	4,681	304	602	5,586	7,262	14,391	0	0	4,218	5,127	7,181	-2,965		

Preliminary 06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
STG7-BOYWEST																						
1962+24.67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
1962+25.00	18	3	15	0	0	0	0	3	33	0	15	48	62	-60	0	0	15	10	14	2		
1962+50.00	28	4	25	0	0	0	0	4	63	0	24	87	113	-109	0	0	25	14	20	5		
1962+75.00	28	2	26	0	0	0	0	2	74	0	25	99	129	-127	0	0	26	15	21	5		
1963+00.00	29	2	26	0	0	0	0	2	88	0	26	114	149	-146	0	0	26	16	22	4		
1963+25.00	30	2	27	0	0	0	0	2	99	0	27	126	164	-162	0	0	27	17	23	4		
1963+50.00	35	2	34	0	0	0	0	2	111	0	29	140	183	-181	0	0	34	21	30	4		
1963+75.00	42	1	40	0	0	0	0	1	119	0	31	150	195	-194	0	0	40	25	35	5		
1964+00.00	62	20	42	0	0	0	0	20	124	0	33	157	205	-185	0	0	42	24	34	8		
1964+25.00	82	39	43	0	0	0	0	39	135	0	33	168	219	-180	0	0	43	24	33	10		
1964+50.00	81	36	44	0	0	0	0	36	144	0	33	177	230	-194	0	0	44	23	32	13		
1964+75.00	75	32	44	0	0	0	0	32	141	0	31	172	224	-192	0	0	44	21	30	14		
1965+00.00	69	30	39	0	0	0	0	30	121	0	25	146	190	-160	0	0	39	16	23	17		
1965+25.00	60	26	33	0	0	0	0	26	81	0	20	101	131	-105	0	0	33	10	15	19		
1965+50.00	50	21	29	0	0	0	0	21	153	0	17	171	222	-202	0	0	29	7	10	19		
1965+75.00	46	16	31	0	0	0	0	16	152	0	19	171	223	-207	0	0	31	7	10	21		
1966+00.00	51	10	42	0	0	0	0	10	146	0	31	177	230	-220	0	0	42	14	20	21		
1966+25.00	58	4	53	0	0	0	0	4	282	0	43	325	423	-418	0	0	53	25	35	18		
1966+50.00	112	2	58	0	0	0	0	54	387	53	49	488	635	-581	0	0	58	33	46	12		
1966+75.00	111	1	58	0	0	0	0	53	470	53	50	572	743	-690	0	0	58	34	48	10		
1967+00.00	111	1	58	0	0	0	0	53	476	53	51	579	753	-700	0	0	58	32	45	12		
1967+25.00	120	0	67	0	0	0	0	53	478	53	59	590	767	-714	0	0	67	31	44	23		
1967+50.00	132	2	78	0	0	0	0	54	449	53	68	570	741	-687	0	0	78	35	49	29		
1967+75.00	144	15	77	0	0	0	0	68	305	53	63	421	547	-479	0	0	77	39	55	22		
1968+00.00	94	26	69	0	0	0	0	26	148	0	39	187	243	-217	0	0	69	41	57	12		
1968+25.00	64	33	31	0	0	0	0	33	101	0	12	112	146	-113	0	0	31	44	62	-31		
1968+50.00	141	25	60	0	56	0	0	82	91	0	15	107	139	-57	0	0	60	47	66	-6		
1968+75.00	189	11	122	0	56	0	0	67	330	0	61	391	509	-442	0	0	122	43	60	62		
1969+00.00	161	8	84	0	0	0	0	77	591	70	66	727	945	-868	0	0	84	19	26	58		
1969+25.00	98	7	21	0	0	0	0	76	451	70	20	541	703	-627	0	0	21	0	0	21		
1969+50.00	7	7	0	0	0	0	0	7	297	0	0	297	386	-379	0	0	0	0	0	0		
1969+75.00	4	4	0	0	0	0	0	4	274	0	0	274	356	-352	0	0	0	0	0	0		
1970+00.00	2	2	0	0	0	0	0	2	143	0	0	143	186	-183	0	0	0	0	0	0		
1970+25.00	0	0	0	0	0	0	0	0	3	0	0	3	4	-4	0	0	0	0	0	0		
1970+31.77																						
STG7-BOYWEST																						
Totals:	2,334	394	1,374	1	113	0	0	960	7,062	454	1,018	8,533	11,093	-10,133	0	0	1,374	688	964	411		

Preliminary
06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
STG7-BOYEAST																						
1974+79.50																						
1975+00.00	17	0	17	0	0	0	0	0	38	0	15	53	69	-69	0	0	17	0	0	17		
1975+25.00	84	3	35	0	0	0	0	50	90	47	32	169	220	-170	0	0	35	0	0	35		
1975+50.00	86	3	23	0	0	0	0	63	79	60	23	162	211	-148	0	0	23	0	0	23		
1975+75.00	22	0	22	0	0	0	0	0	97	0	22	119	155	-155	0	0	22	0	0	22		
1976+00.00	30	0	30	0	0	0	0	0	149	0	30	179	233	-233	0	0	30	0	0	30		
1976+25.00	40	0	40	0	0	0	0	0	176	0	39	215	279	-279	0	0	40	0	0	40		
1976+50.00	47	0	47	0	0	0	0	0	169	0	45	214	278	-278	0	0	47	0	0	47		
1976+75.00	48	0	48	0	0	0	0	0	160	0	45	206	267	-267	0	0	48	0	0	48		
1977+00.00	47	0	47	0	0	0	0	0	150	0	43	193	251	-251	0	0	47	0	0	48		
1977+25.00	125	7	47	0	0	0	0	78	102	71	26	199	259	-181	0	0	47	0	0	47		
1977+50.00	136	17	47	0	0	0	0	88	75	71	18	164	213	-125	0	0	47	0	0	47		
1977+75.00	136	21	43	0	0	0	0	93	81	71	19	171	223	-130	0	0	43	2	3	40		
1978+00.00	127	28	28	0	0	0	0	99	48	71	7	126	164	-65	0	0	28	5	7	21		
1978+25.00	42	33	9	0	0	0	0	33	21	0	0	21	27	6	0	0	9	8	11	-2		
1978+50.00	43	38	5	0	0	0	0	38	19	0	1	20	25	12	0	0	5	11	15	-10		
1978+75.00	63	46	16	0	0	0	0	46	14	0	1	16	20	26	0	0	16	11	16	1		
1979+00.00	79	55	24	0	0	0	0	55	23	0	5	28	36	19	0	0	24	11	16	8		
1979+25.00	89	63	26	0	0	0	0	63	29	0	7	36	47	16	0	0	26	10	14	11		
1979+50.00	90	66	24	0	0	0	0	66	24	0	6	30	40	26	0	0	24	9	12	12		
1979+75.00	83	60	23	0	0	0	0	60	21	0	5	26	34	26	0	0	23	9	12	11		
1980+00.00	73	52	21	0	0	0	0	52	14	0	5	19	25	27	0	0	21	9	13	9		
1980+25.00	63	47	16	0	0	0	0	47	9	0	3	11	15	33	0	0	16	4	6	10		
1980+50.00	56	47	10	0	0	0	0	47	7	0	0	7	9	38	0	0	10	0	0	10		
1980+67.35	23	17	6	0	0	0	0	17	2	0	0	2	3	14	0	0	6	0	0	6		
STG7-BOYEAST																						
Totals:	1,650	603	655	0	0	0	0	995	1,599	392	398	2,389	3,105	-2,111	0	0	655	90	126	530		

Preliminary
06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
STG8-ML																						
984+80.55																						
985+00.00	70	36	33	0	0	0	0	36	4	0	20	24	32	5	0	0	33	0	1	33		
985+25.00	88	44	44	0	0	0	0	44	6	0	26	33	43	1	0	0	44	0	1	43		
985+50.00	85	40	45	0	0	0	0	40	8	0	27	35	45	-6	0	0	45	0	1	45		
985+75.00	119	53	66	0	0	0	0	53	9	0	30	39	51	2	0	0	66	1	1	65		
986+00.00	166	79	87	0	0	0	0	79	14	0	34	48	62	17	0	0	87	1	1	86		
986+25.00	186	99	88	0	0	0	0	99	22	0	37	59	77	22	0	0	88	1	1	87		
986+50.00	200	112	88	0	0	0	0	112	29	0	39	68	88	24	0	0	88	1	1	87		
986+75.00	208	120	88	0	0	0	0	120	31	0	38	69	89	31	0	0	88	1	1	87		
987+00.00	212	124	88	0	0	0	0	124	27	0	37	65	84	40	0	0	88	1	1	87		
987+25.00	210	122	88	0	0	0	0	122	23	0	36	59	77	45	0	0	88	1	1	87		
987+50.00	206	118	88	0	0	0	0	118	20	0	35	55	71	47	0	0	88	1	1	87		
987+75.00	204	116	88	0	0	0	0	116	17	0	34	51	66	49	0	0	88	1	1	87		
988+00.00	209	120	89	0	0	0	0	120	18	0	34	52	68	52	0	0	89	1	1	88		
988+25.00	221	133	89	0	0	0	0	133	19	0	34	53	69	64	0	0	89	1	1	88		
988+50.00	232	144	88	0	0	0	0	144	19	0	33	53	68	75	0	0	88	1	1	87		
988+75.00	234	146	88	0	0	0	0	146	18	0	33	51	66	80	0	0	88	1	1	87		
989+00.00	238	150	87	0	0	0	0	150	16	0	33	49	63	87	0	0	87	1	1	86		
989+25.00	241	154	87	0	0	0	0	154	17	0	33	50	65	89	0	0	87	1	1	86		
989+50.00	242	156	86	0	0	0	0	156	19	0	33	52	67	89	0	0	86	1	1	85		
989+75.00	239	154	85	0	0	0	0	154	19	0	33	53	69	85	0	0	85	1	1	84		
990+00.00	232	149	83	0	0	0	0	149	19	0	34	53	68	80	0	0	83	1	1	82		
990+25.00	230	148	82	0	0	0	0	148	20	0	34	53	69	78	0	0	82	1	1	81		
990+50.00	227	145	82	0	0	0	0	145	23	0	33	57	74	72	0	0	82	1	1	81		
990+75.00	222	141	81	0	0	0	0	141	27	0	33	60	79	63	0	0	81	1	1	80		
991+00.00	217	137	79	0	0	0	0	137	28	0	33	61	79	58	0	0	79	1	1	79		
991+25.00	205	127	78	0	0	0	0	127	27	0	33	59	77	50	0	0	78	1	1	77		
991+50.00	191	114	77	0	0	0	0	114	27	0	32	58	76	38	0	0	77	1	1	76		
991+75.00	179	104	75	0	0	0	0	104	28	0	32	60	77	26	0	0	75	1	1	75		
992+00.00	171	97	74	0	0	0	0	97	29	0	33	61	80	17	0	0	74	1	1	74		
992+25.00	166	93	74	0	0	0	0	93	28	0	32	60	78	14	0	0	74	1	1	73		
992+50.00	166	92	74	0	0	0	0	92	27	0	32	58	76	16	0	0	74	1	1	73		
992+75.00	169	94	74	0	0	0	0	94	26	0	32	58	75	19	0	0	74	1	1	74		
993+00.00	175	100	75	0	0	0	0	100	28	0	32	59	77	23	0	0	75	1	1	74		
993+25.00	182	106	76	0	0	0	0	106	27	0	32	59	77	29	0	0	76	1	1	75		
993+50.00	190	113	77	0	0	0	0	113	25	0	31	56	73	40	0	0	77	1	1	76		
993+75.00	197	119	78	0	0	0	0	119	23	0	31	54	70	49	0	0	78	1	1	78		
994+00.00	202	123	79	0	0	0	0	123	21	0	32	53	68	54	0	0	79	1	1	79		
994+25.00	206	126	80	0	0	0	0	126	21	0	33	53	69	57	0	0	80	1	1	80		
994+50.00	208	127	81	0	0	0	0	127	21	0	33	54	71	56	0	0	81	1	1	81		
994+75.00	216	133	82	0	0	0	0	133	18	0	33	52	67	66	0	0	82	1	1	82		
995+00.00	226	143	83	0	0	0	0	143	17	0	34	51	66	77	0	0	83	1	1	82		
995+25.00	236	152	84	0	0	0	0	152	18	0	35	53	69	83	0	0	84	1	1	83		
995+50.00	239	153	85	0	0	0	0	153	22	0	35	57	75	79	0	0	85	1	1	84		
995+75.00	240	154	86	0	0	0	0	154	28	0	36	64	83	71	0	0	86	1	1	85		
996+00.00	252	164	88	0	0	0	0	164	30	0	37	66	86	77	0	0	88	1	1	87		
996+25.00	277	188	89	0	0	0	0	188	30	0	36	66	86	102	0	0	89	1	1	88		
996+50.00	297	208	89	0	0	0	0	208	32	0	35	67	87	121	0	0	89	1	1	88		
996+75.00	300	210	89	0	0	0	0	210	36	0	36	72	93	117	0	0	89	1	1	88		
997+00.00	292	203	89	0	0	0	0	203	39	0	35	75	97	106	0	0	89	1	1	88		
997+25.00	283	194	89	0	0	0	0	194	39	0	36	74	97	97	0	0	89	1	1	88		
997+50.00	270	182	89	0	0	0	0	182	36	0	36	72	93	88	0	0	89	1	1	88		
997+75.00	252	165	87	0	0	0	0	165	35	0	37	72	93	71	0	0	87	1	1	86		
998+00.00	231	146	85	0	0	0	0	146	36	0	37	73	95	51	0	0	85	1	1	84		
998+25.00	212	129	84	0	0	0	0	129	39	0	37	76	99	30	0	0	84	1	1	83		
998+50.00	198	116	82	0	0	0	0	116	41	0	37	78	101	15	0	0	82	1	1	81		
998+75.00	187	106	80	0	0	0	0	106	39	0	37	77	100	6	0	0	80	1	1	79		
999+00.00	179	100	79	0	0	0	0	100	38	0	37	75	97	3	0	0	79	1	1	78		
999+25.00	173	96	77	0	0	0	0	96	37	0	37	74	96	-1	0	0	77	1	1	76		
999+50.00	165	89	76	0	0	0	0	89	36	0	36	73	94	-5	0	0	76	1	1	75		
999+75.00	162	87	75	0	0	0	0	87	31	0	35	66	85	1	0	0	75	1	1	74		
1000+00.00	150	77	73	0	0	0	0	77	27	0	34	61	79	-2	0	0	73	1	1	72		
1000+25.00	127	57	69	0	0	0	0	57	26	0	35	60	78	-21	0	0	69	1	1	68		
1000+50.00	103	37	66	0	0	0	0	37	29	0	37	66	86	-49	0	0	66	1	1	65		
1000+75.00	89	25	63	0	0	0	0	25	33	0	38	71	93	-67	0	0	63	1	1	62		
1001+00.00	83	22	61	0	0	0	0	22	36	0	38	74	96	-74	0	0	61	1	1	61		
1001+25.00	79	19	60	0	0	0	0	19	40	0	42	82	107	-88	0	0	60	0	1	59		
1001+50.00	77	18	59	0	0	0	0	18	46	0	45	91	118	-99	0	0	59	1	1	58		
Subtotals:	13,139	7,849	5,291	0	0	0	0	7,849	1,741	0	2,300	4,041	5,253	2,595	0	0	5,291	43	63	5,231		

Preliminary 06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
1001+50.00																						
1001+75.00	75	18	58	0	0	0	0	18	53	0	46	99	128	-110	0	0	58	1	1	57		
1002+00.00	73	17	56	0	0	0	0	17	63	0	45	108	140	-123	0	0	56	1	1	55		
1002+25.00	73	16	56	0	0	0	0	16	82	0	45	128	166	-150	0	0	56	1	1	56		
1002+50.00	74	16	58	0	0	0	0	16	100	0	47	147	191	-175	0	0	58	1	1	58		
1002+75.00	73	15	58	0	0	0	0	15	111	0	46	157	204	-189	0	0	58	1	1	57		
1003+00.00	47	18	29	0	0	0	0	18	128	0	23	151	196	-178	0	0	29	1	1	28		
1003+21.86	19	19	0	0	0	0	0	19	121	0	0	121	157	-138	0	0	0	1	1	-1		
STG8-ML																						
Totals:	13,574	7,969	5,606	0	0	0	0	7,969	2,400	0	2,552	4,951	6,436	1,533	0	0	5,606	47	70	5,541		

Preliminary
06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
STG8-RPD																						
6973+00.00	135	1	134	0	0	0	0	1	1,323	0	134	1,457	1,894	-1,893	0	0	134	1	1	133		
6973+25.00	197	20	177	0	0	0	0	20	1,850	0	176	2,026	2,634	-2,614	0	0	177	1	2	175		
6973+50.00	256	55	201	0	0	0	0	55	1,778	0	184	1,962	2,551	-2,496	0	0	201	2	3	199		
6973+75.00	255	53	202	0	0	0	0	53	1,471	0	169	1,640	2,132	-2,079	0	0	202	2	3	199		
6974+00.00	201	21	180	0	0	0	0	21	1,249	0	151	1,400	1,820	-1,799	0	0	180	2	2	178		
6974+25.00	167	4	162	0	0	0	0	4	1,129	0	144	1,273	1,655	-1,651	0	0	162	1	2	161		
6974+50.00	155	0	155	0	0	0	0	0	1,025	0	143	1,168	1,518	-1,518	0	0	155	1	2	153		
6974+75.00	158	4	153	0	0	0	0	4	944	0	134	1,078	1,401	-1,397	0	0	153	1	2	151		
6975+00.00	178	29	150	0	0	0	0	29	888	0	119	1,007	1,309	-1,280	0	0	150	1	2	148		
6975+25.00	214	66	148	0	0	0	0	66	832	0	114	946	1,230	-1,164	0	0	148	1	2	146		
6975+50.00	241	94	147	0	0	0	0	94	783	0	111	894	1,162	-1,069	0	0	147	1	2	146		
6975+75.00	261	115	146	0	0	0	0	115	740	0	107	847	1,101	-986	0	0	146	1	2	144		
6976+00.00	277	132	145	0	0	0	0	132	697	0	104	801	1,042	-909	0	0	145	1	2	143		
6976+25.00	290	144	145	0	0	0	0	144	659	0	103	761	989	-845	0	0	145	1	2	143		
6976+50.00	301	153	148	0	0	0	0	153	621	0	103	725	942	-789	0	0	148	1	2	146		
6976+75.00	304	155	149	0	0	0	0	155	577	0	103	681	885	-730	0	0	149	1	2	147		
6977+00.00	283	133	149	0	0	0	0	133	529	0	102	631	821	-687	0	0	149	1	2	148		
6977+25.00	240	92	149	0	0	0	0	92	477	0	100	578	751	-659	0	0	149	1	2	147		
6977+50.00	192	45	148	0	0	0	0	45	423	0	98	522	678	-633	0	0	148	1	2	146		
6977+75.00	151	10	141	0	0	0	0	10	367	0	103	471	612	-602	0	0	141	1	2	139		
6978+00.00	123	2	121	0	0	0	0	2	320	0	93	413	537	-535	0	0	121	1	2	120		
6978+25.00	112	5	107	0	0	0	0	5	287	0	76	363	472	-467	0	0	107	1	1	106		
6978+50.00	115	10	105	0	0	0	0	10	254	0	71	325	423	-413	0	0	105	1	1	104		
6978+75.00	117	14	102	0	0	0	0	14	222	0	65	287	374	-359	0	0	102	1	1	101		
6979+00.00	118	19	100	0	0	0	0	19	200	0	60	260	338	-319	0	0	100	1	1	99		
6979+25.00	121	24	97	0	0	0	0	24	179	0	60	239	310	-286	0	0	97	1	1	96		
6979+50.00	172	29	93	0	0	0	0	78	161	49	61	271	353	-274	0	0	93	1	1	92		
6979+75.00	174	36	89	0	0	0	0	85	154	49	60	263	342	-257	0	0	89	1	1	88		
6980+00.00	177	42	86	0	0	0	0	91	147	49	58	254	330	-239	0	0	86	1	1	85		
6980+25.00	178	41	87	0	0	0	0	91	139	49	57	245	319	-228	0	0	87	1	1	86		
6980+50.00	171	39	83	0	0	0	0	88	118	49	52	219	285	-197	0	0	83	1	1	82		
6980+75.00	164	38	77	0	0	0	0	87	90	49	46	185	241	-154	0	0	77	1	1	76		
6981+00.00	165	40	76	0	0	0	0	89	65	49	44	158	205	-116	0	0	76	1	1	75		
6981+25.00	166	41	76	0	0	0	0	91	37	49	41	128	166	-75	0	0	76	1	1	75		
6981+50.00	113	39	73	0	0	0	0	39	21	0	37	58	75	-36	0	0	73	1	1	73		
6981+75.00	108	39	69	0	0	0	0	39	10	0	33	43	55	-16	0	0	69	1	1	68		
6982+00.00	100	38	61	0	0	0	0	38	5	0	26	31	41	-2	0	0	61	1	1	61		
6982+25.00	89	36	53	0	0	0	0	36	3	0	18	21	27	9	0	0	53	0	1	53		
6982+50.00	83	33	49	0	0	0	0	33	1	0	15	16	21	12	0	0	49	0	1	49		
6982+75.00	79	29	50	0	0	0	0	29	2	0	20	22	29	0	0	0	50	0	1	49		
6983+00.00	73	24	49	0	0	0	0	24	2	0	25	27	35	-11	0	0	49	0	1	49		
6983+25.00	70	21	48	0	0	0	0	21	2	0	28	30	39	-17	0	0	48	0	1	48		
6983+50.00	67	19	48	0	0	0	0	19	1	0	29	30	39	-20	0	0	48	0	1	47		
6983+75.00	67	16	50	0	0	0	0	16	2	0	29	31	40	-24	0	0	50	0	1	50		
6984+00.00	60	13	47	0	0	0	0	13	5	0	30	35	46	-33	0	0	47	0	1	46		
6984+25.00	62	21	41	0	0	0	0	21	10	0	32	42	54	-33	0	0	41	0	1	41		
6984+50.00	72	29	42	0	0	0	0	29	13	0	33	46	59	-30	0	0	42	0	1	41		
6984+75.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
6984+75.11																						
STG8-RPD Totals:	7,570	2,066	5,110	0	0	0	0	2,460	20,812	394	3,704	24,910	32,383	-29,923	0	0	5,110	46	66	5,047		

Preliminary
06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
STG8-BOYWEST																						
1964+26.45																						
1964+50.00	101	90	11	0	0	0	0	90	10	0	4	14	18	71	0	0	11	0	0	11		
1964+75.00	160	125	35	0	0	0	0	125	10	0	11	21	27	98	0	0	35	1	1	34		
1965+00.00	196	153	43	0	0	0	0	153	15	0	12	27	35	118	0	0	43	1	1	43		
1965+25.00	191	157	33	0	0	0	0	157	15	0	7	22	28	129	0	0	33	0	1	33		
1965+50.00	181	157	24	0	0	0	0	157	10	0	1	11	15	142	0	0	24	0	1	24		
1965+75.00	183	160	23	0	0	0	0	160	10	0	1	11	14	146	0	0	23	0	1	23		
1966+00.00	188	165	23	0	0	0	0	165	10	0	1	11	15	151	0	0	23	0	1	23		
1966+25.00	190	167	23	0	0	0	0	167	10	0	1	11	15	152	0	0	23	0	1	23		
1966+50.00	188	165	23	0	0	0	0	165	10	0	1	11	15	150	0	0	23	0	1	23		
1966+75.00	190	167	23	0	0	0	0	167	10	0	1	11	15	153	0	0	23	0	0	23		
1967+00.00	194	171	23	0	0	0	0	171	10	0	1	11	15	156	0	0	23	0	0	23		
1967+25.00	192	170	22	0	0	0	0	170	10	0	1	11	15	155	0	0	22	0	0	22		
1967+50.00	192	170	23	0	0	0	0	170	10	0	1	12	15	154	0	0	23	0	0	23		
1967+75.00	188	163	25	0	0	0	0	163	11	0	3	14	18	145	0	0	25	0	0	25		
1968+00.00	182	154	28	0	0	0	0	154	13	0	7	20	26	128	0	0	28	0	0	28		
1968+25.00	182	154	29	0	0	0	0	154	13	0	8	20	27	127	0	0	29	0	0	29		
1968+50.00	178	153	25	0	0	0	0	153	11	0	5	16	20	133	0	0	25	0	0	25		
1968+75.00	163	143	20	0	0	0	0	143	9	0	3	12	15	128	0	0	20	0	0	20		
1969+00.00	148	138	10	0	0	0	0	138	8	0	2	10	13	124	0	0	10	0	0	10		
STG8-BOYWEST Totals:	3,391	2,923	468	0	0	0	0	2,923	208	0	70	278	361	2,563	0	0	468	5	8	461		

Preliminary 06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
STG8-BOYEAST																						
1974+68.36																						
1974+75.00	23	0	23	0	0	0	0	0	236	0	19	256	332	-332	0	0	23	0	0	23		
1975+00.00	94	2	92	0	0	0	0	2	905	0	81	985	1,281	-1,279	0	0	92	0	1	92		
1975+25.00	102	5	97	0	0	0	0	5	934	0	90	1,024	1,331	-1,327	0	0	97	0	1	97		
1975+50.00	106	7	99	0	0	0	0	7	946	0	92	1,038	1,350	-1,342	0	0	99	1	1	98		
1975+75.00	108	11	97	0	0	0	0	11	928	0	91	1,019	1,325	-1,314	0	0	97	1	1	96		
1976+00.00	106	11	94	0	0	0	0	11	862	0	87	949	1,234	-1,223	0	0	94	1	1	93		
1976+25.00	100	8	92	0	0	0	0	8	742	0	84	826	1,074	-1,065	0	0	92	1	1	91		
1976+50.00	93	5	89	0	0	0	0	5	620	0	81	701	911	-907	0	0	89	1	1	88		
1976+75.00	90	3	87	0	0	0	0	3	522	0	77	599	779	-777	0	0	87	0	1	86		
1977+00.00	88	1	86	0	0	0	0	1	369	0	71	440	572	-571	0	0	86	0	1	86		
1977+25.00	141	0	61	0	0	0	0	80	208	80	49	337	437	-357	0	0	61	0	1	60		
1977+50.00	101	0	21	0	0	0	0	80	144	80	16	240	312	-232	0	0	21	0	1	20		
1977+75.00	14	0	14	0	0	0	0	0	111	0	11	122	159	-158	0	0	14	0	1	13		
1978+00.00	28	2	26	0	0	0	0	2	96	0	19	115	150	-147	0	0	26	0	1	26		
1978+25.00	51	20	31	0	0	0	0	20	92	0	17	109	141	-121	0	0	31	0	0	31		
1978+50.00	73	42	31	0	0	0	0	42	71	0	14	85	111	-68	0	0	31	0	0	31		
1978+75.00	80	52	28	0	0	0	0	52	53	0	12	65	85	-33	0	0	28	0	0	28		
1979+00.00	75	50	24	0	0	0	0	50	39	0	11	49	64	-13	0	0	24	0	0	24		
1979+25.00	65	45	20	0	0	0	0	45	27	0	9	36	47	-2	0	0	20	0	0	20		
1979+50.00	55	38	16	0	0	0	0	38	20	0	8	28	36	2	0	0	16	0	0	16		
1979+75.00	49	36	13	0	0	0	0	36	12	0	6	18	23	13	0	0	13	0	0	13		
1980+00.00	48	36	11	0	0	0	0	36	6	0	6	12	15	21	0	0	11	0	0	11		
1980+25.00	47	36	11	0	0	0	0	36	6	0	7	13	17	19	0	0	11	0	0	11		
1980+50.00	50	39	11	0	0	0	0	39	5	0	5	10	13	26	0	0	11	0	0	11		
1980+75.00	52	42	10	0	0	0	0	42	3	0	2	4	5	37	0	0	10	0	0	10		
1980+98.43	29	22	7	0	0	0	0	22	1	0	1	1	1	22	0	0	7	0	0	7		
STG8-BOYEAST Totals:	1,868	516	1,193	0	0	0	0	676	7,958	160	965	9,082	11,806	-11,131	0	0	1,193	9	14	1,181		

Preliminary
06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

Station	Cut								Fill						Checks (EW-102)		Topsoil					
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Topsoil Cut Volume	Template Unsuitable Type B Volume	Template Select Loam Volume	Template Select Sand Volume	Template B & W Rock Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Plowing & Shaping Undercut (+ Fill) Volume	Existing Topsoil Stripping Undercut (+ Fill)	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink		
STG9																						
STG 9	3,198	2,996	201	0	0	0	0	2,996	4,626	0	40	4,666	6,066	-3,070	0	0	201	2,220	3,109	-2,907		
STG9																						
Totals:	3,198	2,997	202	0	0	0	0	2,997	4,627	0	40	4,667	6,066	-3,070	0	0	202	2,221	3,109	-2,908		

Preliminary
06-03-2023

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

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

107-28
04-21-15

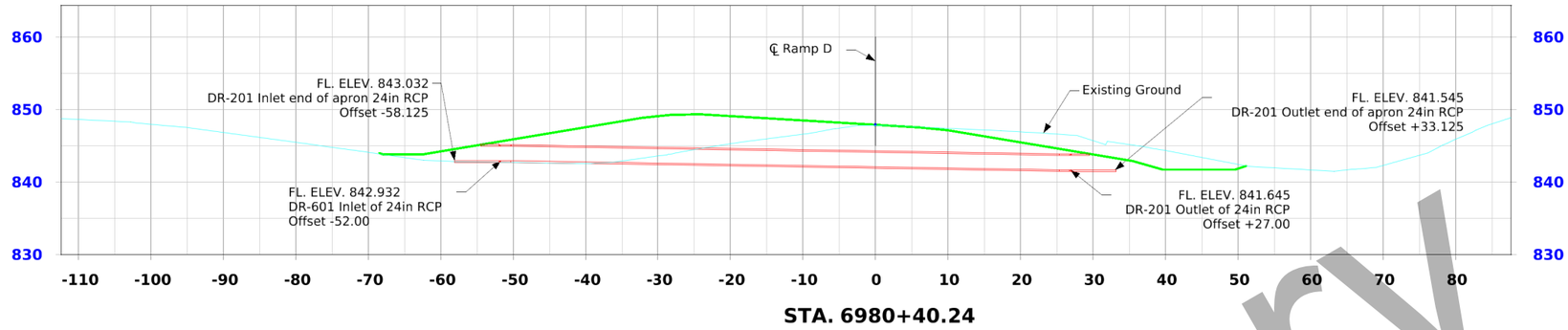
Station	Cut [1] Total Cut Unadjusted Volume	Cut [2] Total Class 10 Unadjusted Volume	Cut [3] Topsoil Cut Volume	Cut [4] Template Unsuitable Type B Volume	Cut [5] Template Select Loam Volume	Cut [6] Template Select Sand Volume	Cut [7] Template B & W Rock Volume	Cut [8] Total Cut Adjusted	Fill [9] Total Fill Unadjusted Volume	Fill [10] Plowing & Shaping Undercut (+ Fill) Volume	Fill [11] Existing Topsoil Stripping Undercut (+ Fill)	Fill [12] Total Fill Adjusted	Fill [13] Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Fill [14] Total Cut Adjusted Minus Fill w/ Shrink	Checks (EW-102) [15] Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Checks (EW-102) [16] Approx. Fill Volume Below 3' w/ Shrink	Topsoil [17] Topsoil Stripping Undercut Volume	Topsoil [18] Topsoil Placement Undercut Volume	Topsoil [19] Topsoil Placement With 1.4 Shrink Factor	Topsoil [20] Topsoil Stripping Minus Topsoil Placement w/Shrink	[21]	[22]
Summary:																						
STG1-ML	10,350	7,545	2,796	0	10	0	0	7,555	402	0	1,030	1,431	1,885	5,671	0	0	2,796	3,619	5,078	-2,279		
STG1-WBERM	710	1	710	0	0	0	0	1	3,880	0	710	4,590	5,966	-5,966	0	0	710	0	0	710		
STG1-EBERM	679	0	679	0	0	0	0	0	3,606	0	677	4,283	5,568	-5,568	0	0	679	0	0	679		
STG2-ML(S)	2,591	1,135	1,345	18	24	0	71	1,246	461	0	805	1,265	1,644	-398	0	0	1,345	310	435	913		
STG2-ML(N)	470	17	454	0	0	0	0	17	91	0	284	374	486	-469	0	0	454	57	81	375		
STG2-RPA	5,038	1,014	3,964	0	33	0	0	1,075	13,631	28	3,090	16,748	21,773	-20,699	0	0	3,964	1,308	1,833	2,134		
STG2-RPB	11,973	2,955	5,791	0	3,161	6	1	6,188	11,486	67	3,110	14,662	19,060	-12,874	0	0	5,791	2,593	3,632	2,161		
STG2-RPC	2,390	17	2,307	0	0	0	0	84	17,821	67	2,280	20,168	26,218	-26,135	0	0	2,307	604	846	1,462		
STG3-WEST	1,394	434	730	0	1	0	0	665	4,231	231	492	4,953	6,439	-5,774	0	0	730	185	258	472		
STG3-EAST	1,399	285	990	0	52	0	0	410	3,883	74	849	4,805	6,247	-5,837	0	0	990	316	443	548		
STG4-WEST	1,402	1,162	240	0	0	0	0	1,162	1,000	0	215	1,214	1,578	-417	0	0	240	166	233	8		
STG4-EAST	2,089	2,089	0	0	0	0	0	2,089	45	0	0	45	59	2,031	0	0	0	616	862	-862		
STG5-ML	10,897	7,349	3,366	0	183	0	0	7,532	433	0	760	1,192	1,550	5,982	0	0	3,366	1,786	2,502	867		
STG5-RPA	18,597	14,758	2,310	0	1,475	0	0	16,287	652	55	169	876	1,138	15,150	0	0	2,310	2,343	3,281	-973		
STG6-ML	1,037	431	579	28	0	0	0	459	1,094	0	443	1,536	1,997	-1,538	0	0	579	256	359	221		
STG6-RPC	11,233	5,512	5,177	1	25	0	0	6,010	15,029	474	2,304	17,807	23,149	-17,139	0	0	5,177	3,655	5,121	54		
STG7-ML	3,310	2,288	791	0	29	0	203	2,519	970	0	274	1,243	1,615	905	0	0	791	761	1,067	-276		
STG7-RPB	25,869	12,843	4,218	0	8,478	0	28	21,652	4,681	304	602	5,586	7,262	14,391	0	0	4,218	5,127	7,181	-2,965		
STG7-BOYWEST	2,334	394	1,374	1	113	0	0	960	7,062	454	1,018	8,533	11,093	-10,133	0	0	1,374	688	964	411		
STG7-BOYEAST	1,650	603	655	0	0	0	0	995	1,599	392	398	2,389	3,105	-2,111	0	0	655	90	126	530		
STG8-ML	13,574	7,969	5,606	0	0	0	0	7,969	2,400	0	2,552	4,951	6,436	1,533	0	0	5,606	47	70	5,541		
STG8-RPD	7,570	2,066	5,110	0	0	0	0	2,460	20,812	394	3,704	24,910	32,383	-29,923	0	0	5,110	46	66	5,047		
STG8-BOYWEST	3,391	2,923	468	0	0	0	0	2,923	208	0	70	278	361	2,563	0	0	468	5	8	461		
STG8-BOYEAST	1,868	516	1,193	0	0	0	0	676	7,958	160	965	9,082	11,806	-11,131	0	0	1,193	9	14	1,181		
STG9	3,198	2,997	202	0	0	0	0	2,997	4,627	0	40	4,667	6,066	-3,070	0	0	202	2,221	3,109	-2,908		
Project Totals:	145,013	77,303	51,055	48	13,584	6	303	93,931	128,062	2,700	26,841	157,588	204,884	-110,956	0	0	51,055	26,808	37,569	13,512		

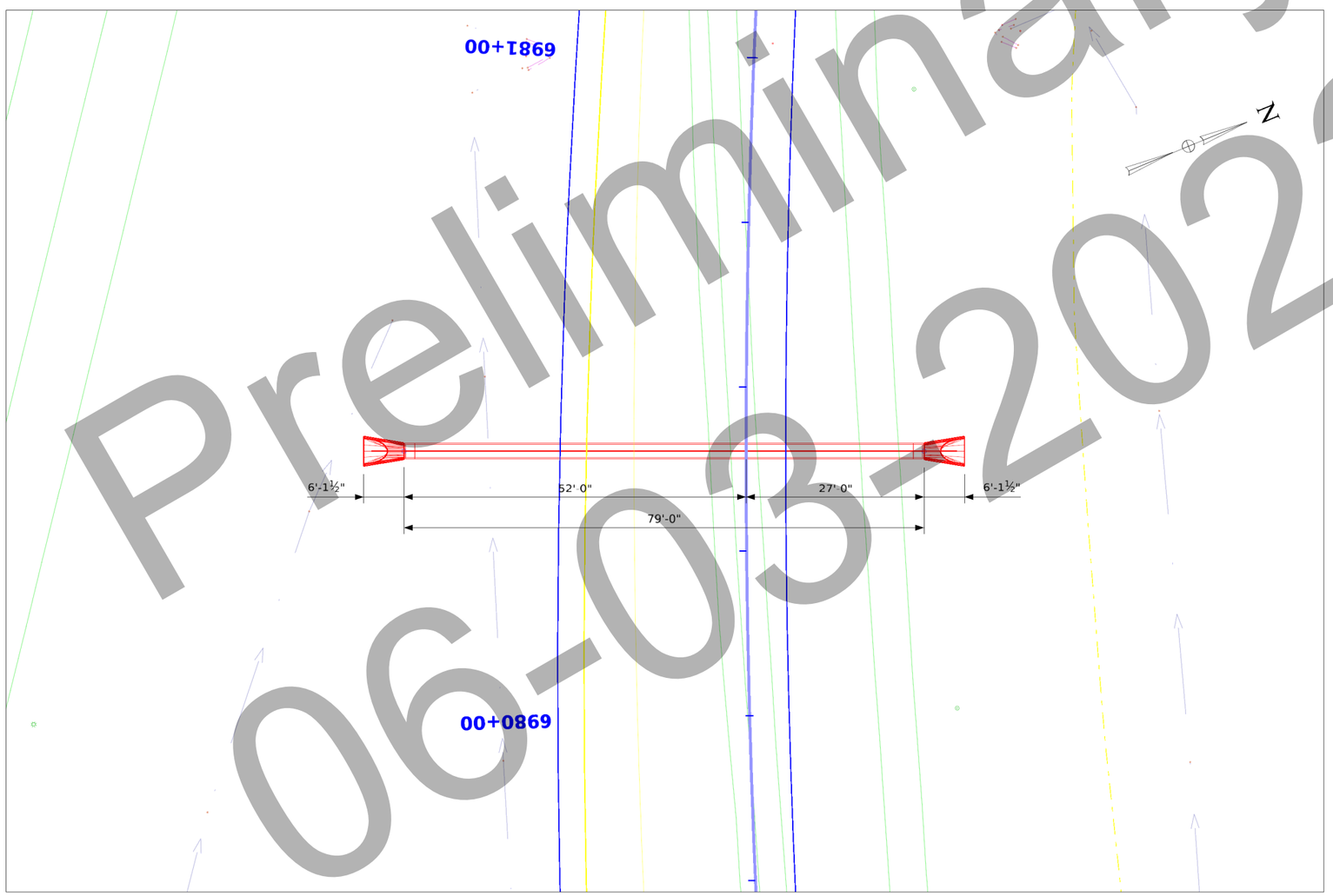
THE QUANTITIES BELOW REPRESENT ESTIMATED QUANTITIES FOR FULL DEPTH FILL PLACEMENT OF AREAS WITH TOTAL FILLS 10' OR GREATER. REFER TO SHEET Q.23 FOR PLAN SHEET SHOWING THE LOCATION OF THESE AREAS.
THE QUANTITIES BELOW DO NOT REPRESENT ADDITIONAL EARTHWORK REQUIRED BEYOND THE TOTALS ABOVE. THE TOTALS ABOVE REPRESENT COMPREHENSIVE EARTHWORK CALCULATIONS FOR THE ENTIRE PROJECT.
THIS INFORMATION IS BEING SHARED FOR THE CONTRACTOR TO REFERENCE, IF IT CONSIDERS CONSTRUCTING THESE EMBANKMENTS EARLY IN THE PROJECT TO MANAGE SETTLEMENT PERIODS.
NO ADDITIONAL PAYMENT WILL BE MADE FOR MATERIAL IMPORTED ABOVE THE ESTIMATED PLAN QUANTITY FOR EMBANKMENT-IN-PLACE.

Station	Cut [1] Total Cut Unadjusted Volume	Cut [2] Total Class 10 Unadjusted Volume	Cut [3] Topsoil Cut Volume	Cut [4] Template Unsuitable Type B Volume	Cut [5] Template Select Loam Volume	Cut [6] Template Select Sand Volume	Cut [7] Template B & W Rock Volume	Cut [8] Total Cut Adjusted	Fill [9] Total Fill Unadjusted Volume	Fill [10] Plowing & Shaping Undercut (+ Fill) Volume	Fill [11] Existing Topsoil Stripping Undercut (+ Fill)	Fill [12] Total Fill Adjusted	Fill [13] Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Fill [14] Total Cut Adjusted Minus Fill w/ Shrink	Checks (EW-102) [15] Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Checks (EW-102) [16] Approx. Fill Volume Below 3' w/ Shrink	Topsoil [17] Topsoil Stripping Undercut Volume	Topsoil [18] Topsoil Placement Undercut Volume	Topsoil [19] Topsoil Placement With 1.4 Shrink Factor	Topsoil [20] Topsoil Stripping Minus Topsoil Placement w/Shrink	[21]	[22]
Summary:																						
RAMPAHIGHFILL	2,157	1	2,157					1	16,758		2,154	18,912	24,586	-24,585	0	0	2,157	0	0	2,157		
RAMPBHIGHFILL	992	1	992					1	5,691		989	6,680	8,684	-8,683	0	0	992	0	0	992		
RAMPCHIGHFILL	3,032	4	3,029					4	27,926		3,021	30,947	40,231	-40,227	0	0	3,029	0	0	3,029		
RAMPDHIGHFILL	1,806	2	1,805					2	13,575		1,793	15,368	19,978	-19,976	0	0	1,805	0	0	1,805		
Project Totals:	7,987	8	7,983					8	63,950		7,957	71,907	93,479	-93,471	0	0	7,983	0	0	7,983		

Preliminary 06-03-2023

Control Point:





Situation Plan

Notes:

Pipe dimensions shown in plan view are based on laying length.

Location

Boyson Road Interchange
Ramp D
T-84N R-7W
Section 32
Monroe Township
Linn County

Design For 0° Skew

24" x 79' Reinforced Concrete Pipe

STA. 6980+40.24 (Ramp D)

Turn-in Date: June 04 2024

Linn County

IOWA DEPARTMENT OF TRANSPORTATION

Design No.

Design Sheet No. V.10 of V.10

Preliminary 06-03-2023

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT/Kirkham Michael	LINN COUNTY	PROJECT NUMBER IM-380-6(358)25--13-57	SHEET NUMBER V.10

SYSTEMTIME SYSTEMDATE USERNAME DGNSPEC