



Iowa Department of Transportation

Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

PRIMARY ROAD SYSTEM DALLAS COUNTY BRIDGE REPLACEMENT - PPCB

Bridge over the South Raccoon River on U.S. 6. & U.S. 69

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

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

NO MILEAGE SUMMARY



REVISIONS

TOTAL

30

PROJECT IDENTIFICATION NUMBER

10-25-006-010

PROJECT NUMBER

BRF-006-3(67)--38-25

R.O.W. PROJECT NUMBER

STPN-006-3(68)--2J-25

INDEX OF SHEETS

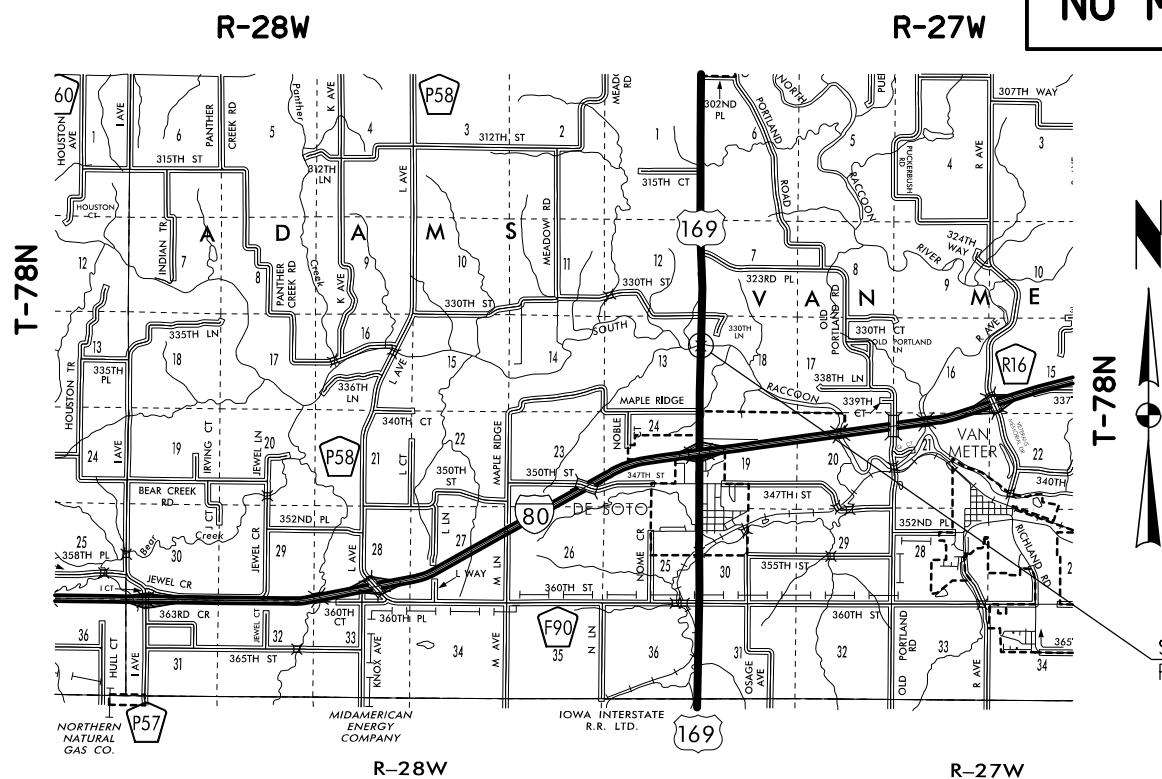
No.	DESCRIPTION
A Sheets	Title Sheets
A.1	Title Sheet
B Sheets	Typical Cross Sections and Details
B.1 - 4	Typical Cross Sections and Details
D Sheets	Mainline Plan and Profile Sheets
* D.1	Plan & Profile Legend & Symbol Information Sheet
* D.2	"Mainline Name"
G Sheets	Survey Sheets
G.1 - 2	Reference Ties and Bench Marks
J Sheets	Traffic Control and Staging Sheets
* J.1 -	Traffic Control Plan
* J.1 -	Staging Notes Stage
* J.1 -	Tabulation of Special Events
* J.2 - 5	Traffic Control & Staging Legend & Symbol Info. Sheet
V Sheets	Bridge and Culvert Situation Plans
V.1	US 6 Bridge Situation Plan
V.2	US 6 Bridge Berm Situation Plan
V.3	South Raccoon River Streambank Repair Plan
W Sheets	Mainline Cross Sections
W.1	Cross Sections Legend & Symbol Information Sheet
W.2 - 13	Mainline Cross Sections
	* Color Plan Sheets

LETTING DATE
10-21-2014

BRIDGE REPLACEMENT - PPCB
BRF-006-3(67)--38-25

DALLAS CO.

PRODUCTION SCHEDULE			
EVENT	Proposed Date	Completed Date	
D-1	Survey	1-04-2012	1-25-2012
D-2	Field Exam	5/04/2012	4/11/2012
D-3	To Prelim. Culverts	6/04/2012	4/18/2012
B-1	Structures Layout	9/04/2012	9/11/2012
D-5	To Right of Way	10/04/2012	10/10/2012
D-4	Design Plans to Bridge	6/24/2014	



STA. 193+86
FHWA # 21880 Maint. No. 2510.3S006

DESIGN DATA RURAL

2016 AADT	5,700	V.P.D.
2036 AADT	7,500	V.P.D.
20-- DHV	--	V.P.H.
TRUCKS	10 %	
Total Design ESALs	--	

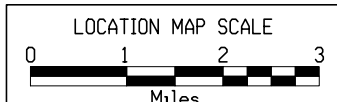
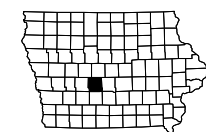
INDEX OF SEALS

SHEET NO.	NAME	TYPE
A.1	Paul W. Flattery	Primary Signature Block
X	X	X

PRELIMINARY PLANS

Subject to change by final design.

D5 PLAN - Date: 10-10-2012



Paved Shoulder Alternates

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

2_P_ALT_		P
10-19-10		
STATION TO STATION		Feet
191+20.00	191+30.66	(1)
196+36.66	196+50.00	(1)

(1) See Typ. 7156 for P distance

Paved Shoulder Alternates

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

2_P_ALT_		P
10-19-10		
STATION TO STATION		Feet
188+70.00	190+47.80	8
190+47.80	191+20.00	(1)
196+50.00	197+55.20	(1)
197+55.20	199+00.00	8

Paved Shoulder Alternates

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

2_P_ALT_		P
10-19-10		
STATION TO STATION		Feet
191+20.00	191+30.33	(1)
196+36.66	196+50.00	(1)

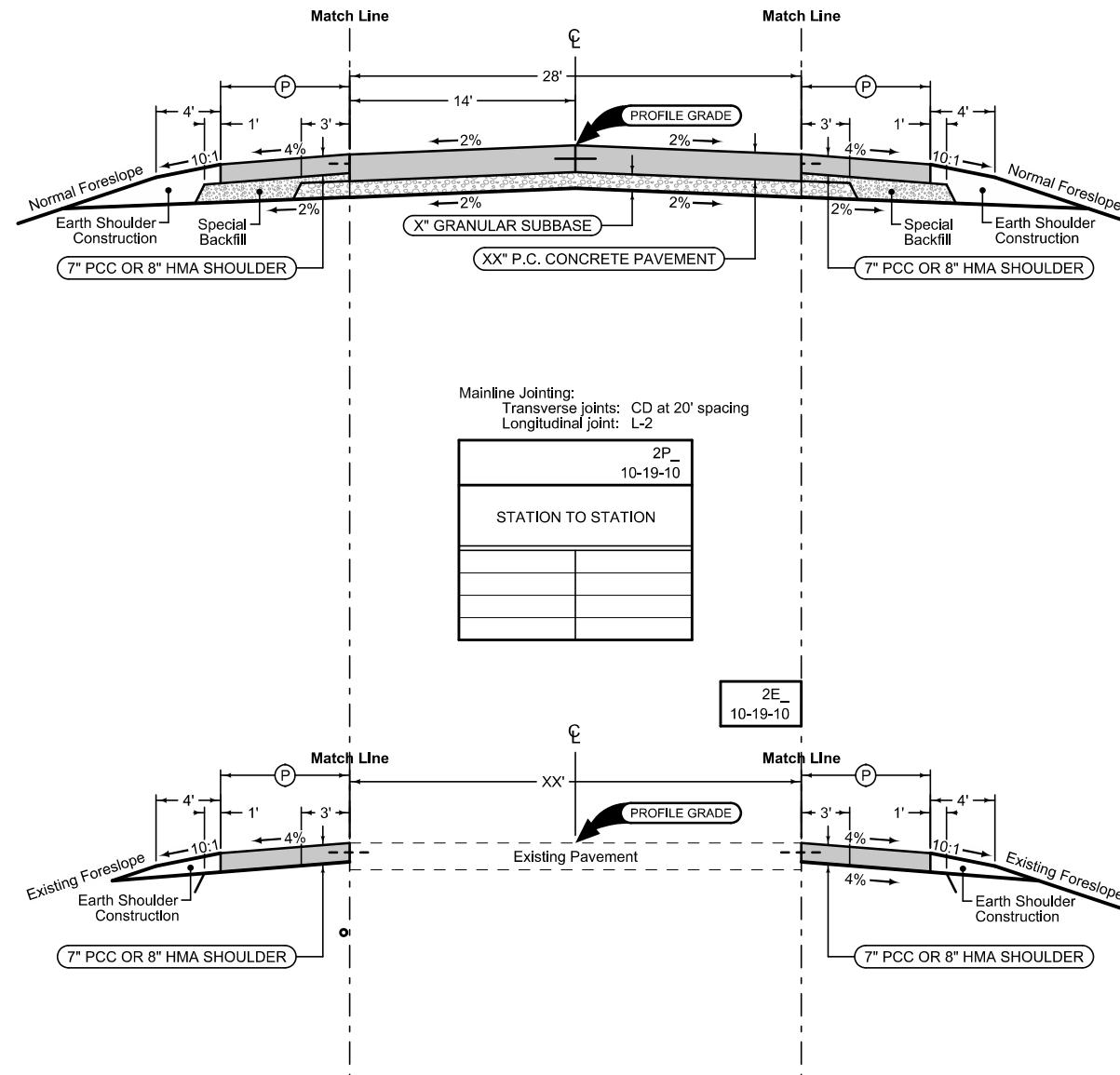
(1) See Typ. 7156 for P distance

Paved Shoulder Alternates

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

2_P_ALT_		P
10-19-10		
STATION TO STATION		Feet
189+50.00	189+98.00	8
189+98.00	191+20.00	(1)
196+50.00	197+21.00	(1)
197+21.00	197+80.00	8

(1) See Typ. 7156 for P distance



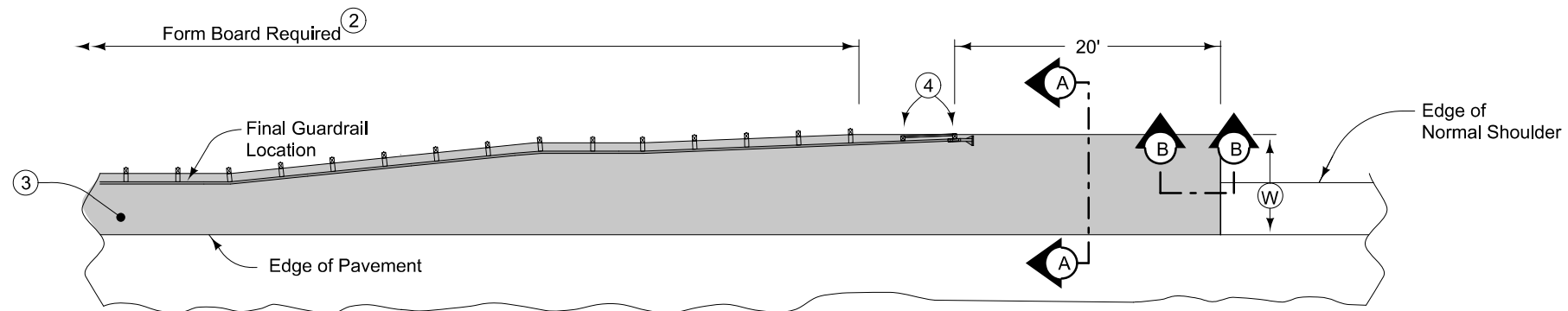
Mainline Jointing:
 Transverse joints: CD at 20' spacing
 Longitudinal joint: L-2

2P_	
10-19-10	
STATION TO STATION	

2E_ 10-19-10

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

U.S. 6 / U.S. 169



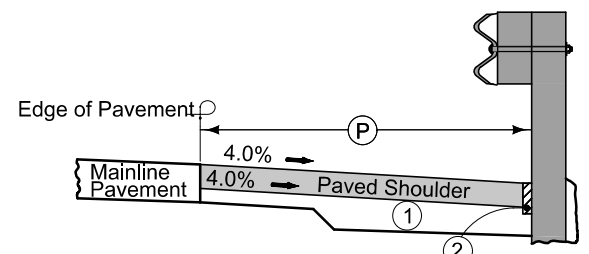
6" HMA Paved Shoulder at guardrail. 7" PCC may be substituted with the following jointing layout:

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

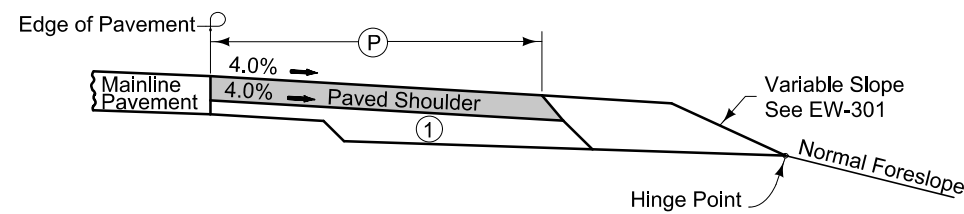
Compaction of HMA is required to face of guardrail post. Hand compaction will be allowed under guardrail. Removal & reinstallation of guardrail will be allowed with no additional payment.

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

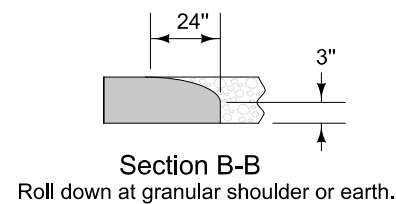
- ① 6" subgrade treatment.
- ② When guardrail posts are installed prior to construction of paved shoulder, nail 1" x 6" untreated form boards along the face of guardrail posts for the length shown. This board is to prevent shoulder material from contacting the sides of the posts and altering the function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



Typical Section with Form Board



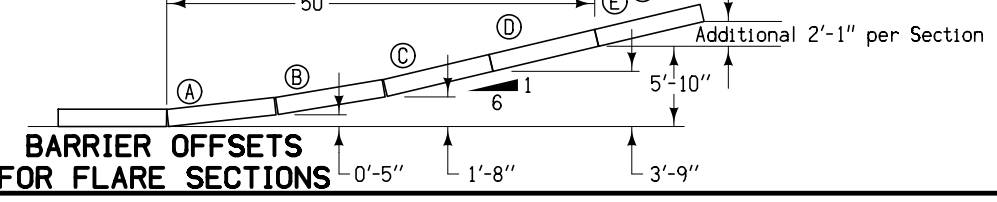
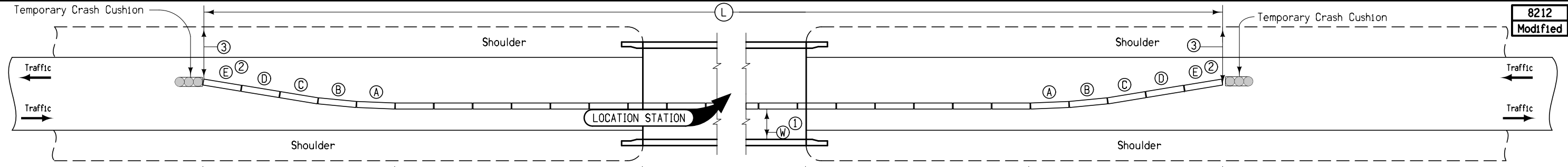
Section A-A



Section B-B

Roll down at granular shoulder or earth.

PAVED SHOULDER AT GUARDRAIL



Station	Side	AE	AA	WL	TA	TE	L	Anchored	W ^①	Remarks
		Feet	Feet	Feet	Feet	Feet	Feet	X	Ft-Inches	
193+83.73	Lt.	112.5	20	535	20	112.5	800	537.5	14'-6"	Stage 1
193+83.73	Rt.	50	20	535	20	50	675	537.5	11'-7 1/2"	Stage 2

- ① Where W = 14'-6" or less, install restricted width signing as per Standard Road Plan TC-81.
- ② E can be multiple Temporary Barrier Sections. Distance/12.5 = number of Temporary Barrier Sections.
- ③ Distance from Shoulder to Front Face of Barrier Gutter. Minimum Distance = 16.0'. Maximum Distance = 20.0'.

TEMPORARY CONCRETE BARRIER LAYOUT for Two-Way Traffic

SURVEY SYMBOLS

- BRG Bridge
- GDL Guard Rail Steel
- SI Sign
- PIP Pipe Culvert
- WHD Water Hydrant
- WV Water Valve
- FW Wire Fence
- TPD Telephone Pedestal
- PPA Power Pole Co. 1
- CON Concrete or A/C Slab
- EW Edge of Water
- RIP Rip-Rap
- BNK Stream Bank
- D Centerline Draw or Stream (Down)
- EP Edge of Paved Roads (ML or SR)
- SH Paved Shoulder
- ENT Centerline BL of Entrance
- ENU Edge Unpaved Entrance & Parking
- DU Centerline Draw or Stream (Up)
- WLA Underground Water Line Co. 1
- TLA Underground Telephone Line Co. 1
- FOA Underground Fiber Optic Co. 1
- BL Topo Breakline

UTILITY LEGEND

- MidAmerican Energy Company
- T1 - Windstream Communications
- W - Xenia Rural Water District
- FO - Paetec/Iowa Communications Net

PLAN VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK		Design Color No.	
Green	(2)		Existing Topographic Features and Labels
Blue	(1)		Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Magenta	(5)		Existing Utilities
SHADING		Design Color No.	
Yellow	(4)		Highlight for Critical Notes or Features
Red	(3)		Delineates Restricted Areas
Lavender	(9)		Temporary Pavement Shading
Gray, Light	(48)		Proposed Pavement Shading
Gray, Med	(80)		Proposed Granular Shading
Gray, Dark	(112)		Proposed Grade and Pave Shading "In conjunction with a paving project"
Brown, Light	(236)		Grading Shading
Tan	(8)		Proposed Sidewalk Shading
Blue, Light	(230)		Proposed Sidewalk Landing Shading
Pink	(11)		Proposed Sidewalk Ramp Shading

PROFILE VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

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

Reference Point

Station

Survey Line

Section Corner

Ground Line Intercept

Saw Cut

Guardrail

Trench Drain

HighTension Cable Guardrail

Sheet Pile

Pavement Removal

Clearing & Grubbing Area

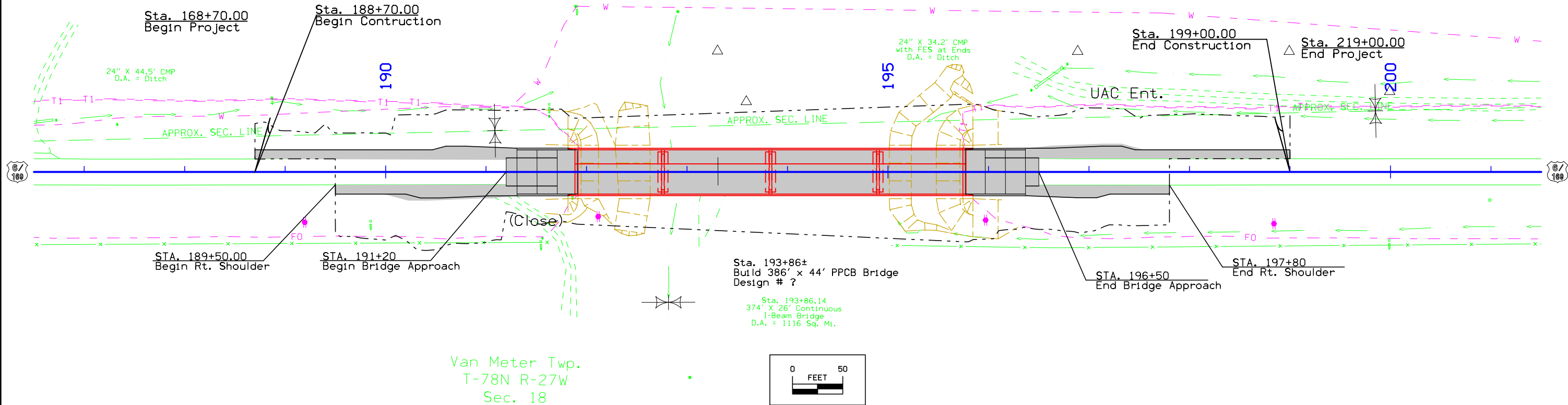
RIGHT-OF-WAY LEGEND

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

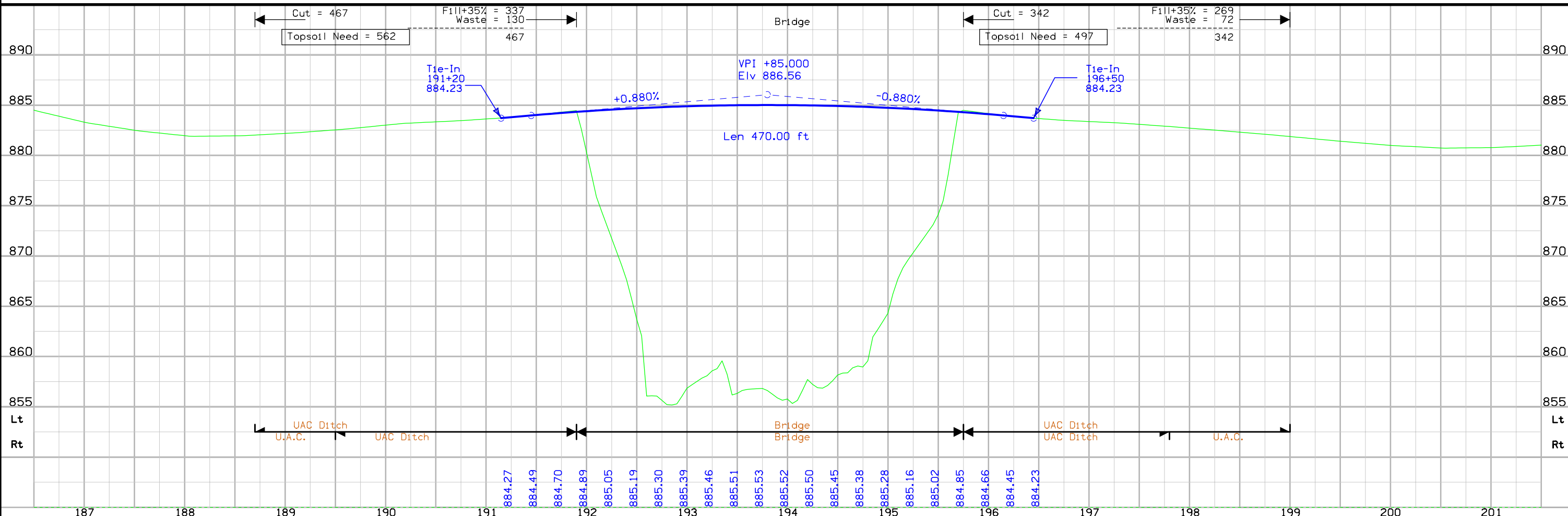
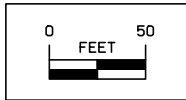
PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

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

Adams Twp.
T-78N R-28W
Sec. 13



Van Meter Twp.
T-78N R-27W
Sec. 18



Survey Information

General Information

Measurement units for this survey are US survey feet. This survey is for proposed replacement of the U.S. 69/ U.S. 169 over the South Raccoon River, 1.1 miles north of the junction with I-80. This project is a partial DTM Survey. It is anticipated aerial coverage will be added at a later date.

Vertical Control

Vertical datum for this survey is relative to NAVD88 computed orthometric height using Geoid 09. US survey feet.

This survey control is relative to IaRTN reference stations. Multiple Iowa RTN observations were completed on CP2. After review of these observations, the shots were averaged to establish the site BM elevation. A level run was then completed through project control points and benchmarks. The error was allowable and the error was distributed proportionately among the project monuments.

Vertical equations are as follows:

Datum Benchmark
 BM #1 this survey Elevation = 888.678 NAVD 88(Geiod09)
 BM #25A Project #366(6) Elevation = 888.18
 Found IHC plug on top of RCBC headwall.

Horizontal Control

Measurement units for this survey are US survey feet. Iowa State Plane South coordinates were transformed to project ground coordinates by applying a 1/combined scale factor from held point CP2 at the center of the project.

State Plane Coordinate Zone 1402 (Iowa South)
 State Plane Coordinate held at Point CP2
 N=567131.177 E=1500169.839
 Combined Scale Factor (Grid)=0.9999301
 1 / Grid= 1.0000699

Local Project Coordinates Conversion Equation:

Local Project Coord y=[(State Plane y-hold point y)/grid factor]+hold point y
 Local Project Coord x=[(State Plane x-hold point x)/grid factor]+hold point x

Point	STATE PLANE COORDS(Y)	STATE PLANE COORDS(X)	LOCAL PROJECT COORDS(Y)	LOCAL PROJECT COORDS(X)
CP1	568382.580	1500151.225	568382.667	1500151.224
CP2	567131.177	1500169.839	567131.177	1500169.839
CP3	566196.952	1500146.066	566196.886	1500146.064

Alignment Information

The horizontal alignment for this survey is a retrace of Widening & Resurfacing Project No. FR-169-4(30)--2G-25. Survey stationing was equated to the plan at P.I. Sta. 169+78.4 and run ahead without equation throughout the survey.

Equations are as follows:

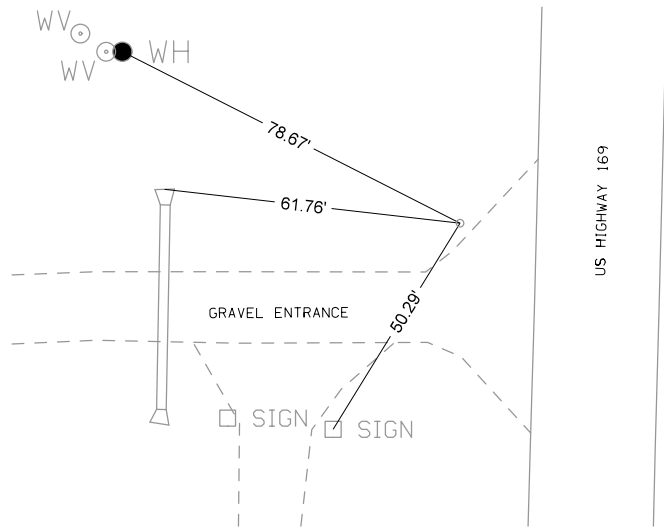
P.I. Sta. 169+78.4 This Survey found PK Nail in Asphalt
 = P.I. Sta. 169+78.4 Dallas Co. Plans FR-169-4(30)--2G-25

P.I. Sta. 216+96.67 This Survey found hinge nail from references
 = P.O.T. Sta. 217+00 Dallas Co. Plans FR-169-4(30)--2G-25

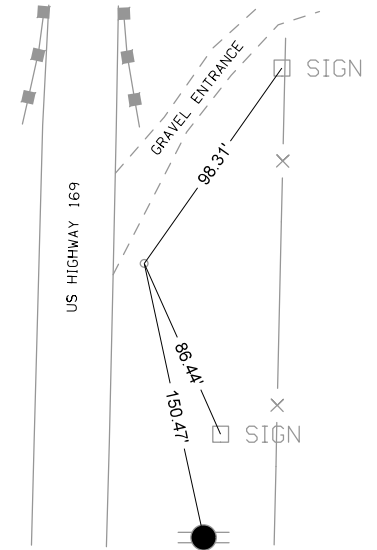
VERTICAL CONTROL

Point	North	East	Elevation	Station	Offset	Feature	Description
BM1	568523.091	1500223.972	888.678	204+60.42	40.033	BM	IHC PLUG TOP OF RCBC HEADWALL
BM2	567638.438	1500146.051	887.369	195+74.00	-14.140	BM	IHC PLUG TOP OF BARRIER WALL OF BRIDGE OVER S RACCOON RIVER
BM3	566371.967	1500185.386	895.426	183+09.04	59.138	BM	SET RR SPIKE IN PP @ NE QUAD HWY 169 & OVERTON CIRCLE

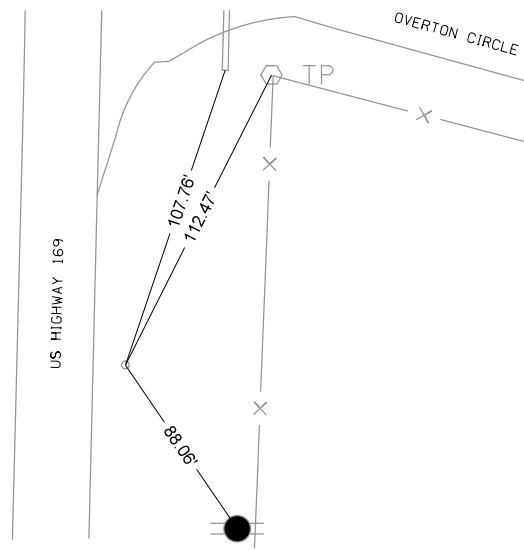
STA. 203+18.10, 28.92 Lt.
 CP 1 SET 1/2" REBAR WEST OF US HIGHWAY 169 SHOULDER
 N=568382.667 E=1500151.224



STA. 190+67.56, 23.24' Rt.
 CP 2 SET 1/2" REBAR EAST OF US HIGHWAY 169 SHOULDER
 N=567131.177 E=1500169.839



STA. 181+32.97, 24.53' Rt.
 CP 3 SET 1/2" REBAR EAST OF US HIGHWAY 169 SHOULDER
 N=566196.886 E=1500146.065



PARCEL CHECK BY PROJ UPDATED 11/27/12 15:22 PAGE: 1

R2360003 PARCEL CHECK LIST BY PROJECT NUMBER
 COUNTY : DALLAS PROJECT NO. :STPN-006-3(68)--2J-25 PIN: 10-25-006010-00
 CONSTRUCTION NO.:BRF-006-3(67)--38-25 ASSIGNED TO: SJD

DESCRIPTION : US 6/US 169 Over S. Raccoon River 1.1 Miles N. Of I-80

PARCEL	KEY	OWNER	TYPE	R/W W.D OR EASE.	BORROW W.D OR EASE.	HOUSE OR OTHER	COMMERCIAL	OCC ENVIRONMENTAL CONCERNS
--------	-----	-------	------	------------------	---------------------	----------------	------------	----------------------------

0001	26569	DWIGHT OLSON	FEE STATE OF IOWA					
		LOU OLSON	FEE	0.06	EASE	ACRE		

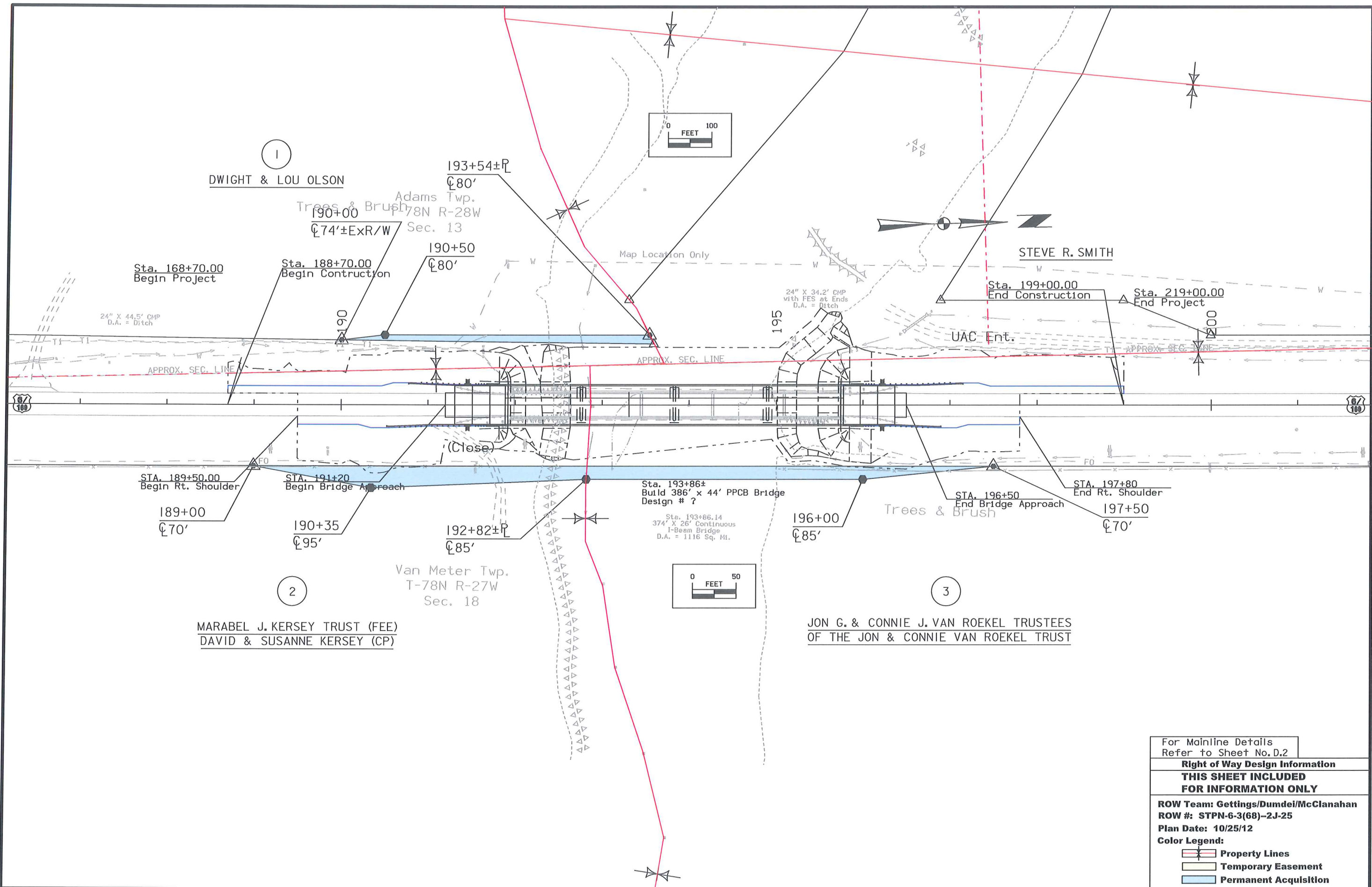
0002	26570	MARABEL J. KERSEY TRUST	FEE STATE OF IOWA					
		MARABEL J. KERSEY, TRUSTEE	FEE	0.15	EASE	ACRE		
		DAVID KERSEY	CP1					
		SUSANNE KERSEY	CP1					

0003	26571	JON VAN ROEKEL TRUST	FEE STATE OF IOWA					
		CONNIE VAN ROEKEL TRUST	FEE	0.14	EASE	ACRE		

STATE OF IOWA

0.35 EASEMENT ACRES

3 TOTAL PARCELS ON PROJECT



For Mainline Details Refer to Sheet No.D.2
Right of Way Design Information
THIS SHEET INCLUDED FOR INFORMATION ONLY
ROW Team: Gettings/Dumdei/McClanahan
ROW #: STPN-6-3(68)-2J-25
Plan Date: 10/25/12
Color Legend:
Property Lines
Temporary Easement
Permanent Acquisition

STAGING NOTES

108-26A
08-01-08

Stage 1
With One Way Traffic alternating using Temporary Traffic Signals on the NBL.

A. Sawcut Old Bridge 5' Lt. of Centerline and remove Bridge, Bridge Approachs and Abutments Lt. of the Sawcut.
B. Build Lt. 14' of New Bridge and Bridge Approaches.
C. Build 10' Shoulder to Stop Bar.

Stage 2
With One Way traffic alternating using Temporary Taffic signals on New Bridge, SBL Shoulder.

A. Buid Rt. 30' of New Bridge and Bridge Approaches.

Stage 3
Open Roadway to two way, two lane, traffic patterns.

TRAFFIC CONTROL PLAN

108-23A
08-01-08

No notes known at this time.

TABULATION OF SPECIAL EVENTS

102-15
08-01-08

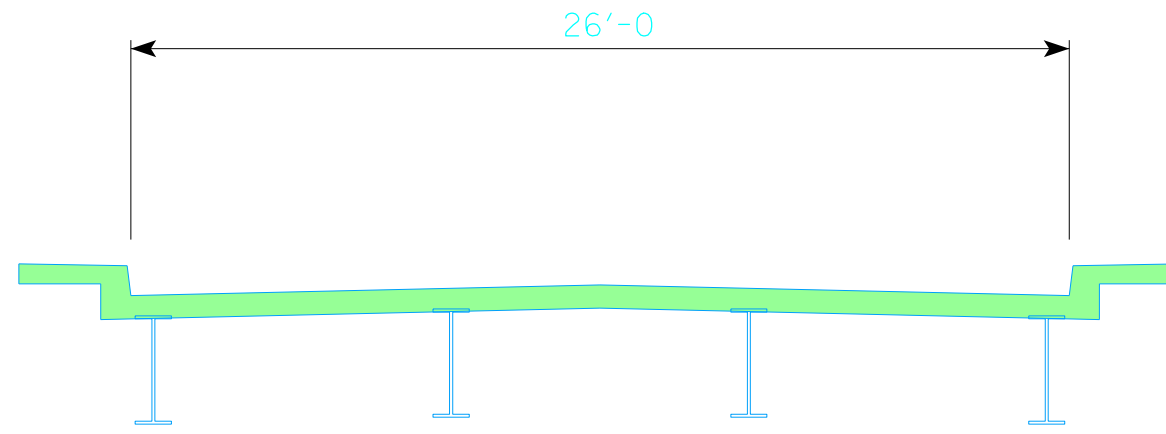
Event	Location	Date
None known at this time.		

COORDINATED OPERATIONS

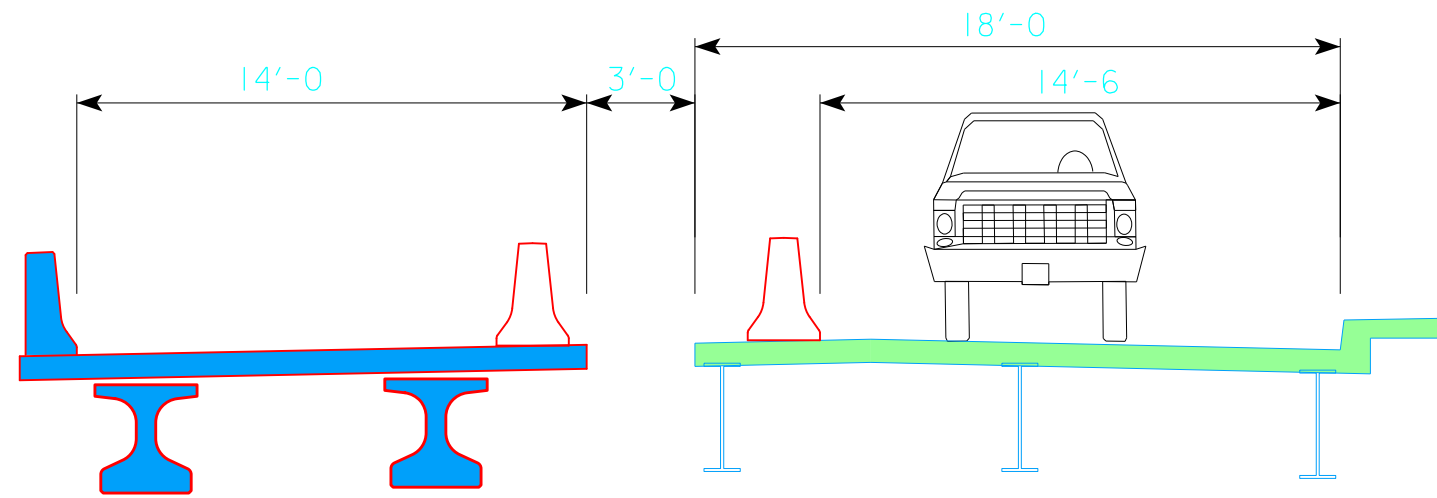
111-01
04-17-12

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

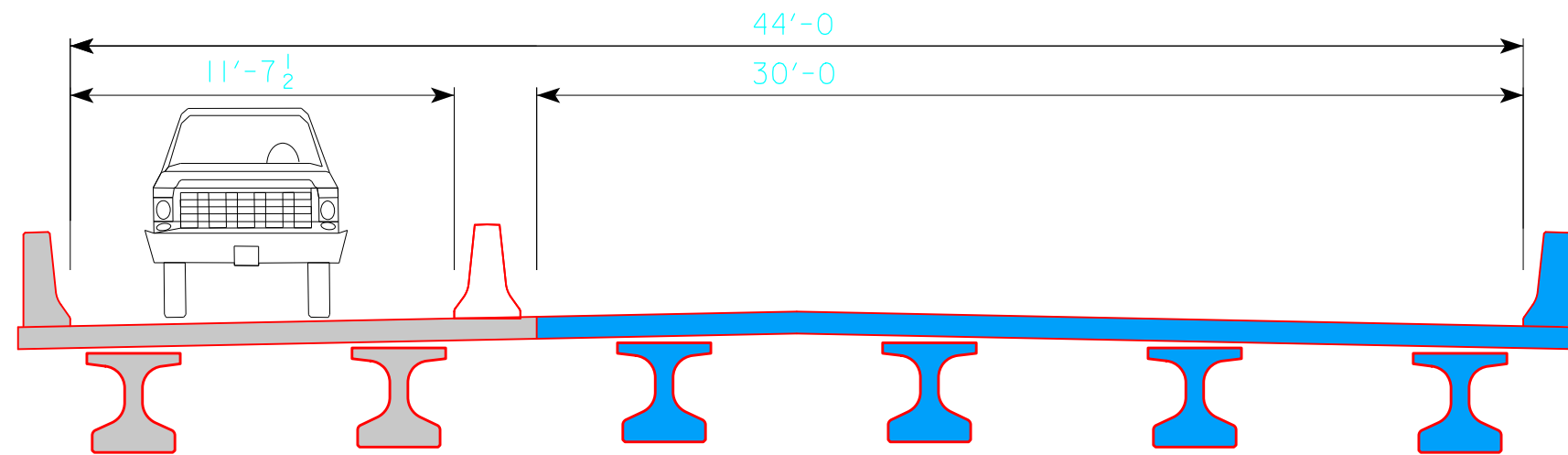
Project	Type of Work
None known at this time.	



Existing Bridge

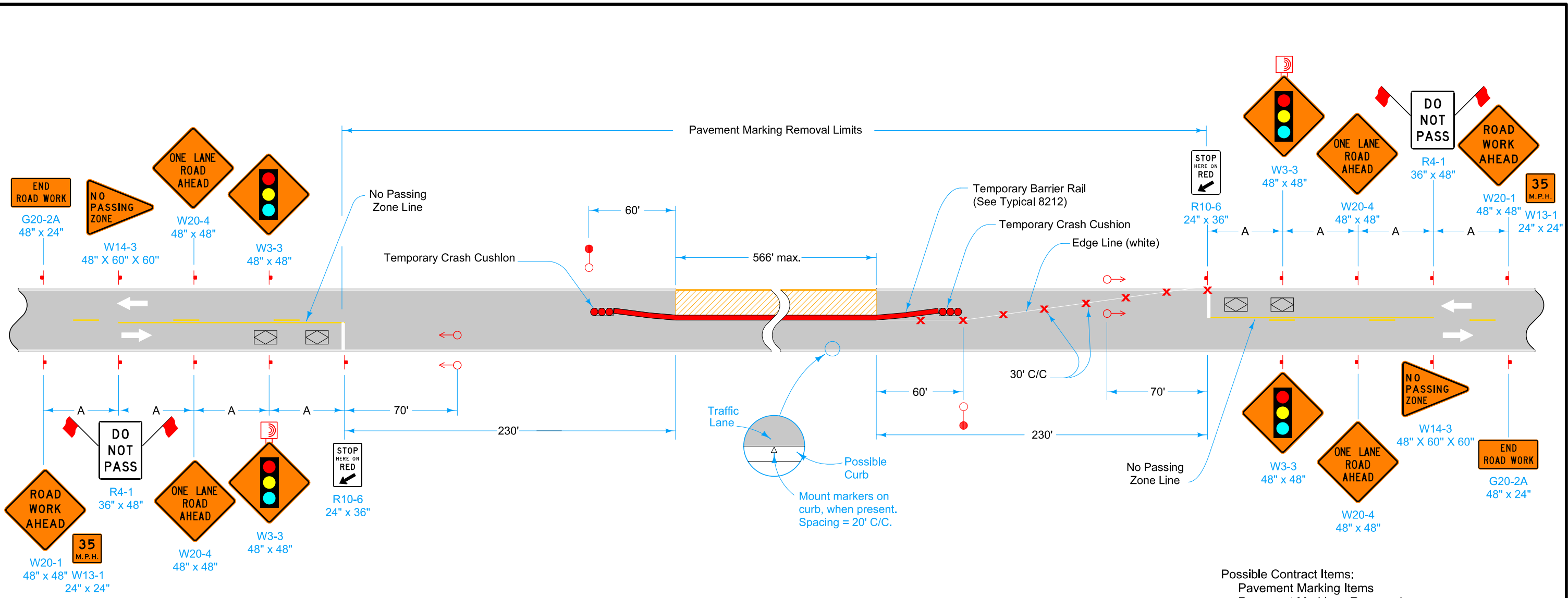


Stage 1 Bridge Construction



Stage 2 Bridge Construction

Bridge Staging Layout



- Possible Contract Items:
- Pavement Marking Items
 - Pavement Markings Removed
 - Temporary Barrier Rail
 - Temporary Crash Cushions
 - Temporary Floodlighting
 - Temporary Traffic Signals
 - Traffic Control

- Possible Tabulations:
- 108-22
 - 108-27
 - 108-28
 - 108-30
 - 108-33

LEGEND

- △ Concrete Barrier Marker
- ⊠ Vehicle Detection Area
- Temporary Crash Cushion
- ← Direction of Traffic
- † Traffic Sign
- × Drum
- Temporary Floodlighting
- Ⓜ Type 'B' High-Intensity Flashing Warning Light
- ▨ Work Area
- ←○ Temporary Traffic Signal

TIMING FOR ACTUATED SIGNALS

Recommended Settings, secs.

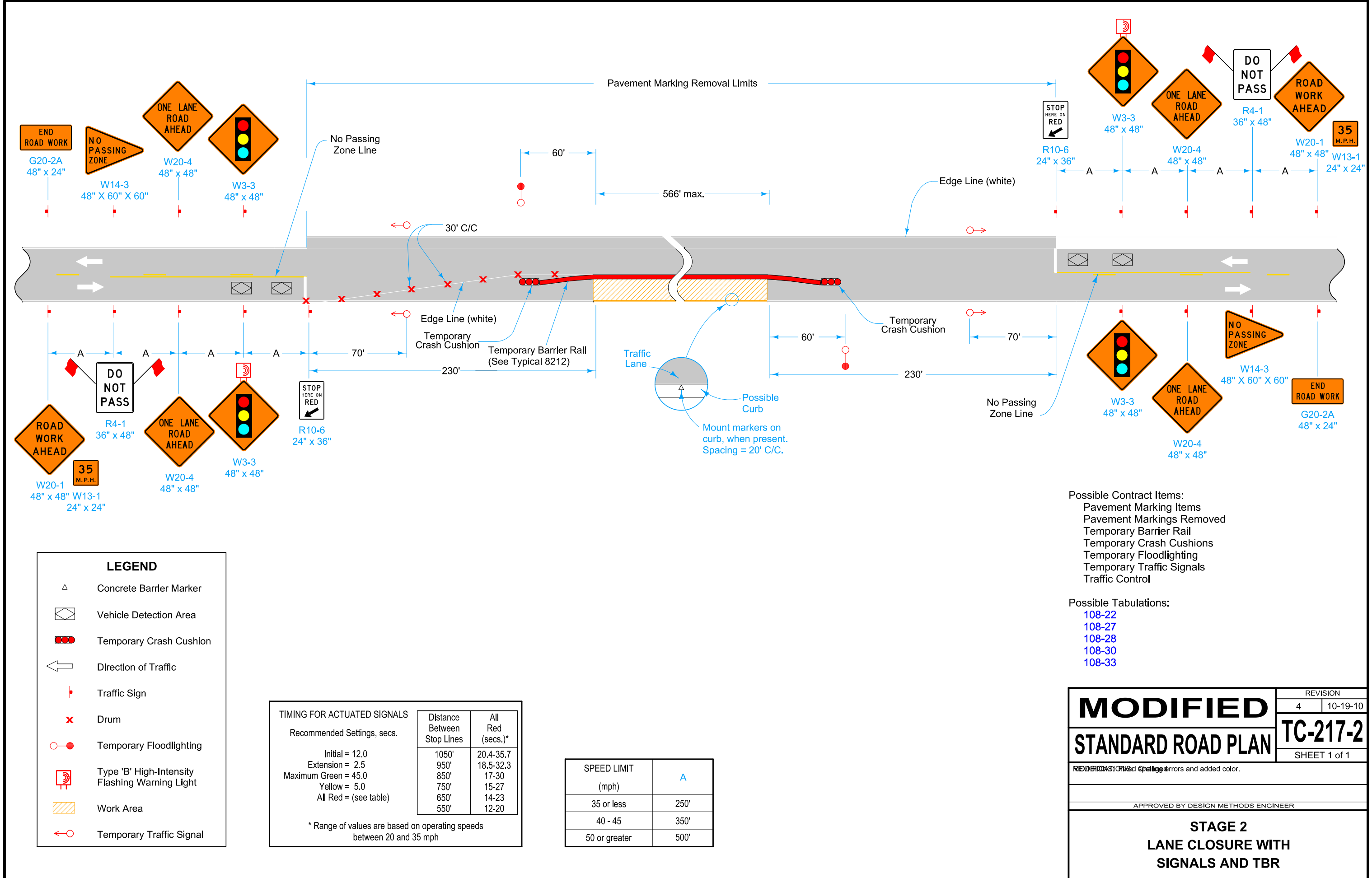
Distance Between Stop Lines	All Red (secs.)*
1050'	20.4-35.7
950'	18.5-32.3
850'	17-30
750'	15-27
650'	14-23
550'	12-20

Initial = 12.0
 Extension = 2.5
 Maximum Green = 45.0
 Yellow = 5.0
 All Red = (see table)

* Range of values are based on operating speeds between 20 and 35 mph

SPEED LIMIT (mph)	A
35 or less	250'
40 - 45	350'
50 or greater	500'

MODIFIED	REVISION	
	4	10-19-10
STANDARD ROAD PLAN	TC-217-1	
SHEET 1 of 1		
APPROVED BY DESIGN METHODS ENGINEER		
STAGE 1 LANE CLOSURE WITH SIGNALS AND TBR		



- Possible Contract Items:
- Pavement Marking Items
 - Pavement Markings Removed
 - Temporary Barrier Rail
 - Temporary Crash Cushions
 - Temporary Floodlighting
 - Temporary Traffic Signals
 - Traffic Control

- Possible Tabulations:
- 108-22
 - 108-27
 - 108-28
 - 108-30
 - 108-33

LEGEND

- △ Concrete Barrier Marker
- ⊠ Vehicle Detection Area
- Temporary Crash Cushion
- ← Direction of Traffic
- ⚡ Traffic Sign
- × Drum
- Temporary Floodlighting
- ⚡ Type 'B' High-Intensity Flashing Warning Light
- ▨ Work Area
- ←○ Temporary Traffic Signal

TIMING FOR ACTUATED SIGNALS

Recommended Settings, secs.

Distance Between Stop Lines	All Red (secs.)*
1050'	20.4-35.7
950'	18.5-32.3
850'	17-30
750'	15-27
650'	14-23
550'	12-20

* Range of values are based on operating speeds between 20 and 35 mph

SPEED LIMIT (mph)	A
35 or less	250'
40 - 45	350'
50 or greater	500'

MODIFIED STANDARD ROAD PLAN

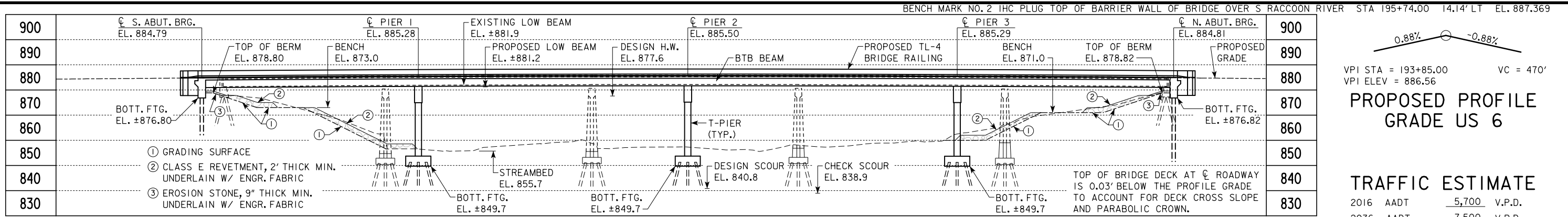
REVISION 4 10-19-10

TC-217-2

SHEET 1 of 1

APPROVED BY DESIGN METHODS ENGINEER

STAGE 2 LANE CLOSURE WITH SIGNALS AND TBR

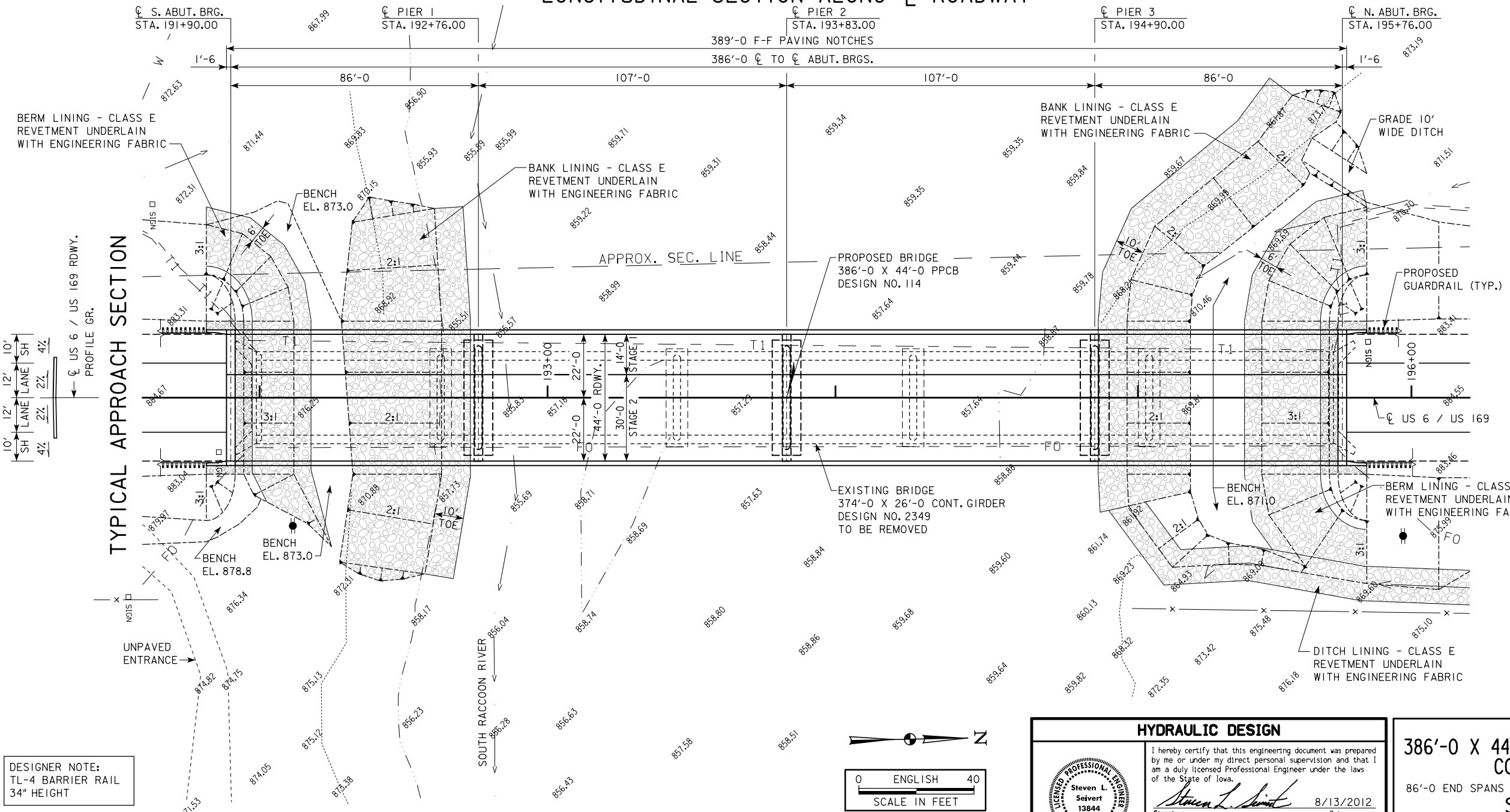


PROPOSED PROFILE GRADE US 6

TRAFFIC ESTIMATE

2016 AADT	5,700	V.P.D.
2036 AADT	7,500	V.P.D.
202_ DHV		V.P.H.
TRUCKS	10	%
TOTAL DESIGN ESALS		

LONGITUDINAL SECTION ALONG C ROADWAY



HYDRAULIC DATA

DRAINAGE AREA = 1,116 SQ. MI.
 STREAM SLOPE = 3.2 FT./MI.
 Q₂ = 10,801 CFS
 STAGE = EL. 869.5
 CHANNEL VELOCITY = 3.8 FPS
 Q₅₀ = 31,674 CFS
 STAGE = EL. 877.6
 BACKWATER = 0.59 FT.
 AVG. BRIDGE VELOCITY = 5.9 FPS
 Q₁₀₀ = 35,912 CFS
 STAGE = EL. 878.7
 BACKWATER = 0.67 FT.
 AVG. BRIDGE VELOCITY = 6.2 FPS
 CALCULATED DESIGN SCOUR = EL. 840.8
 Q OVERTOP = 42,200 CFS
 AVG. BRIDGE VELOCITY = 6.6 FPS
 CALCULATED CHECK SCOUR = EL. 838.9
 ROADWAY OVERTOP EL. 881.2
 STA. 200+58
 Q₅₀₀ = 45,697 CFS
 AVG. LOW WATER = EL. 858.7

LOCATION

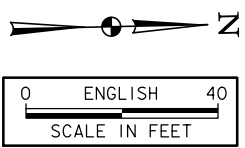
US 6 / US 169
 OVER SOUTH RACCOON RIVER
 T-78 N R-27 W
 SECTION 18
 VAN METER TOWNSHIP
 DALLAS COUNTY
 BRIDGE MAINT. NO. 2510.3S006
 LATITUDE 41.556343°
 LONGITUDE -94.012485°

PRELIMINARY

DESIGNER NOTE:
 TL-4 BARRIER RAIL
 34" HEIGHT

DESIGNER NOTE:
 PROVIDE CONDUIT IN
 BOTH BARRIER RAILS

UTILITIES LEGEND:
 OVERHEAD POWER - MIDAMERICAN ENERGY COMPANY
 TI - TELEPHONE - WINDSTREAM COMMUNICATIONS
 W - WATER - XENIA RURAL WATER DISTRICT
 FO - FIBER OPTIC - PAETEC/IOWA COMMUNICATIONS NET



SITUATION PLAN

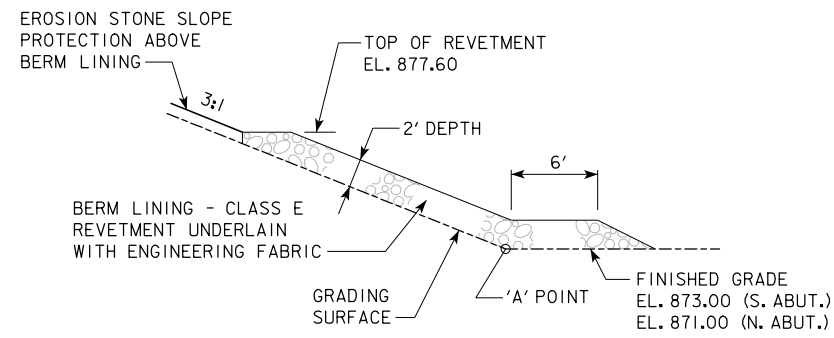
HYDRAULIC DESIGN

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.

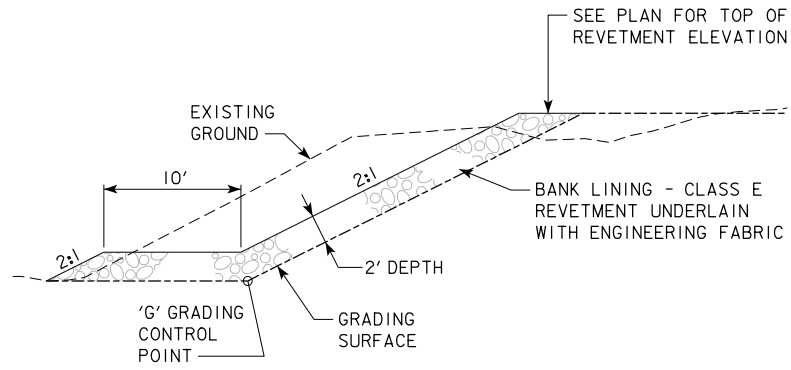
Steven L. Seivert 8/13/2012
 Signature Date
 Steven L. Seivert
 Printed or Typed Name
 My license renewal date is December 31, 2012

Pages or sheets covered by this seal: V.01, V.02

DESIGN FOR 0° SKEW
386'-0 X 44'-0 PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGE
 86'-0 END SPANS (BTB BEAM TYPE) 2 @ 107'-0 INTERIOR SPANS
SITUATION PLAN
 STATION 193+83.00 AUG 2012
DALLAS COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 1 OF 3 FILE NO. 30725 DESIGN NO. 114



SECTION THRU BERM LINING REVETMENT



SECTION THRU BANK LINING REVETMENT

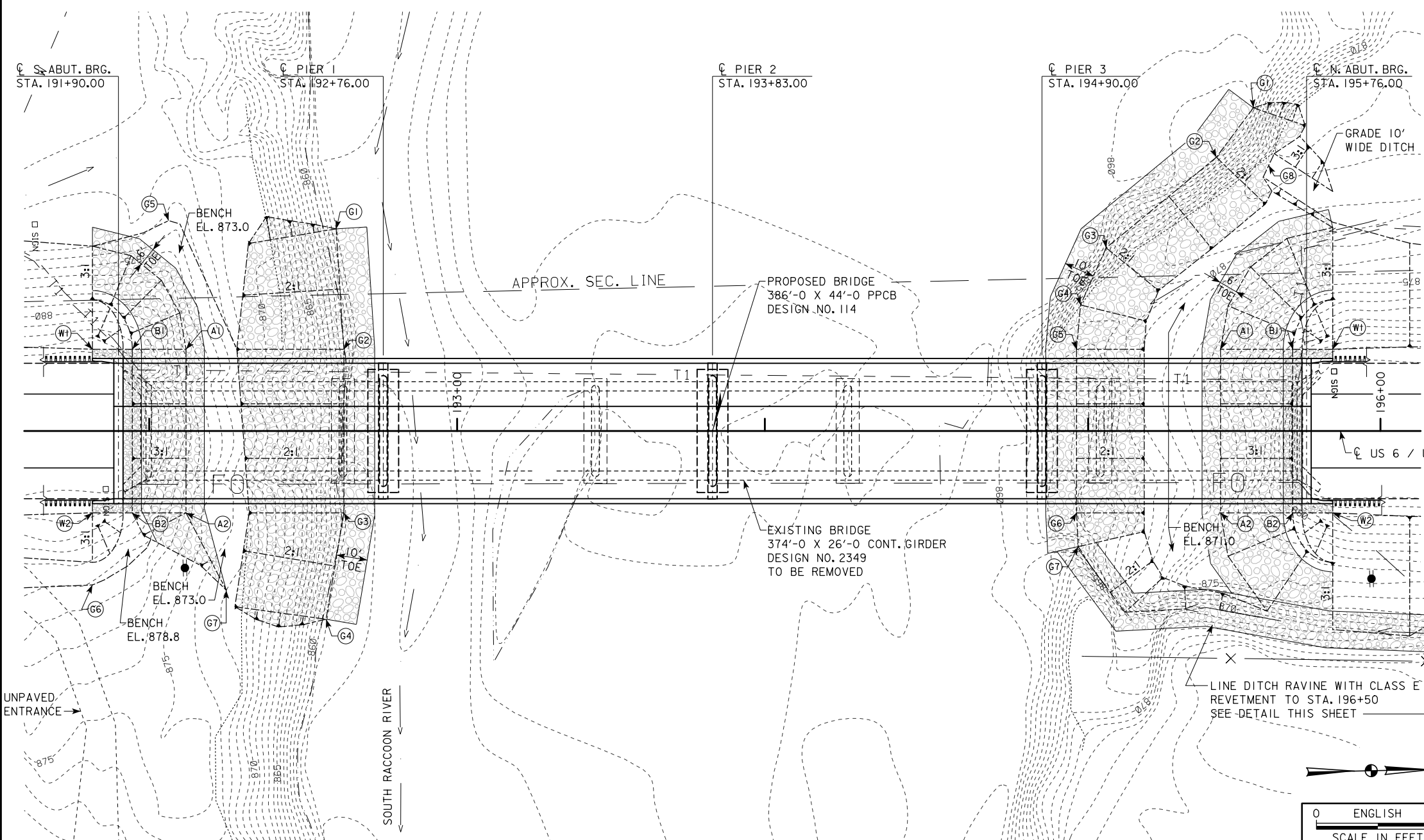
ESTIMATED EROSION CONTROL QUANTITIES				
LOCATION	REVETMENT CL. E (TON)	EROSION STONE (TON)	ENGINEERING FABRIC (SY)	EXCAVATION (CY)
BERM LINING - S. ABUT.	253	22	356	--
BERM LINING - N. ABUT.	438	22	658	--
RIVER BANK LINING - SOUTH	730	--	756	--
RIVER BANK LINING - NORTH	656	--	711	--
DITCH LINING - N.E. DITCH	142	--	288	--
TOTALS	2,219	44	2,769	--

EXCAVATION QUANTITY CALCULATED FROM GRADING SURFACE.

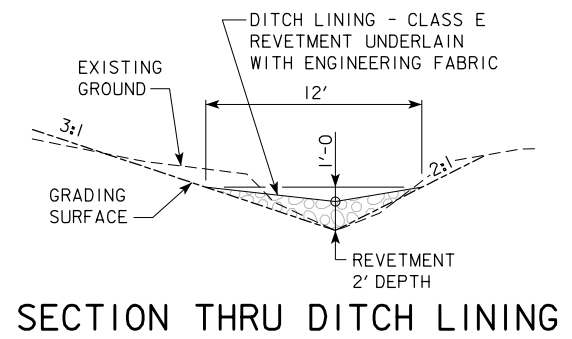
BERM SLOPE LOCATION TABLE						
POINTS	SOUTH ABUTMENT			NORTH ABUTMENT		
	STATION	OFFSET	ELEV.	STATION	OFFSET	ELEV.
A1	192+11.90	26.58' LT	873.00	195+48.01	26.58' LT	871.00
A2	192+11.90	26.58' RT	873.00	195+48.01	26.58' RT	871.00
B1	191+94.50	26.58' LT	878.80	195+71.50	26.58' LT	878.82
B2	191+94.50	26.58' RT	878.80	195+71.50	26.58' RT	878.82
W1	191+81.50	26.58' LT	884.16	195+84.50	26.58' LT	884.20
W2	191+81.50	26.58' RT	884.16	195+84.50	26.58' RT	884.20

BERM SLOPE ELEVATIONS REFLECT THE GRADING SURFACE

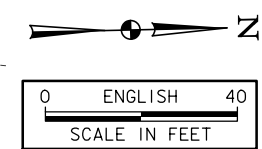
- | | |
|-------------------------------------|--------------------------------------|
| GRADING CONTROL - SOUTH | GRADING CONTROL - NORTH |
| ⓐ1 192+60.69, 65.70' LT, EL. 855.80 | ⓐ1 195+58.70, 105.04' LT, EL. 861.60 |
| ⓐ2 192+63.20, 26.58' LT, EL. 855.60 | ⓐ2 195+46.67, 88.97' LT, EL. 861.60 |
| ⓐ3 192+63.20, 26.58' RT, EL. 857.60 | ⓐ3 195+10.87, 59.53' LT, EL. 860.00 |
| ⓐ4 192+57.43, 61.18' RT, EL. 858.10 | ⓐ4 195+02.54, 41.00' LT, EL. 860.00 |
| ⓐ5 192+06.27, 68.37' LT, EL. 873.00 | ⓐ5 195+01.25, 26.58' LT, EL. 860.00 |
| ⓐ6 191+81.50, 50.03' RT, EL. 878.80 | ⓐ6 195+01.25, 26.58' RT, EL. 860.00 |
| ⓐ7 192+25.00, 51.71' RT, EL. 873.00 | ⓐ7 195+01.79, 37.54' RT, EL. 860.00 |
| | ⓐ8 195+63.68, 86.34' LT, EL. 870.20 |



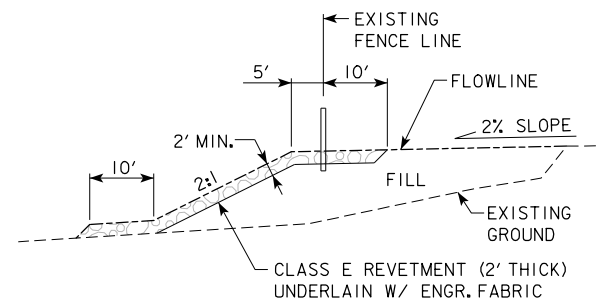
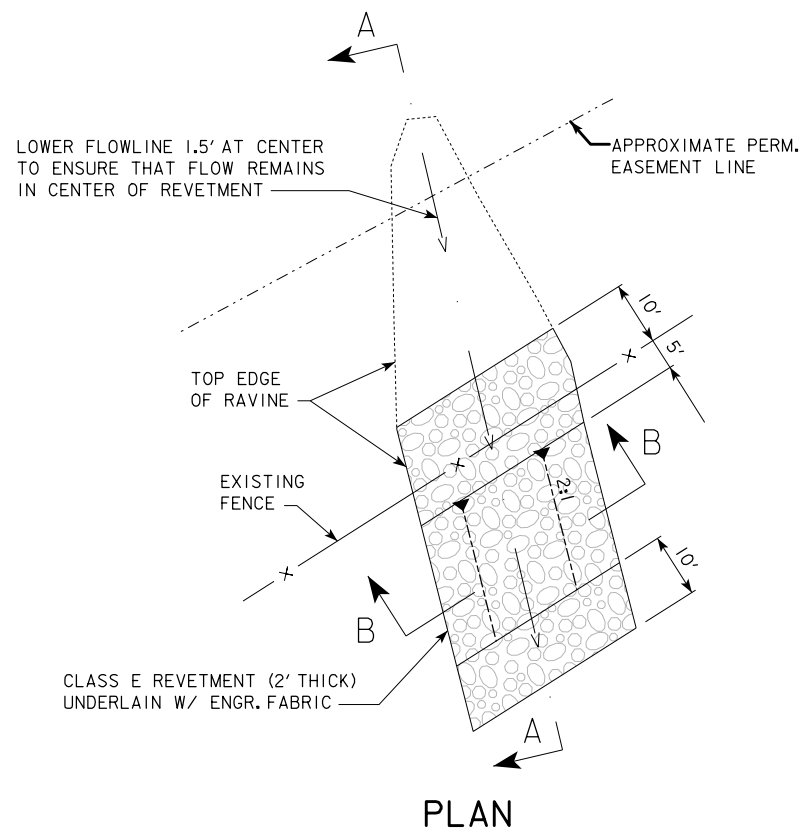
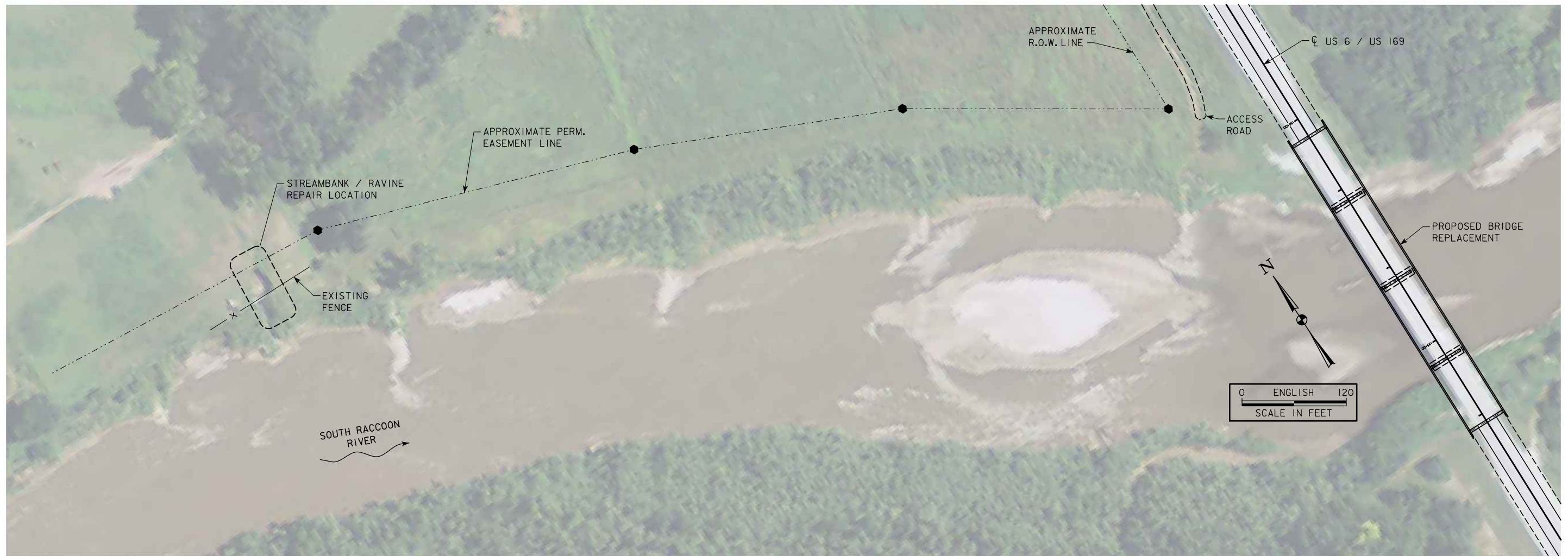
SITE PLAN



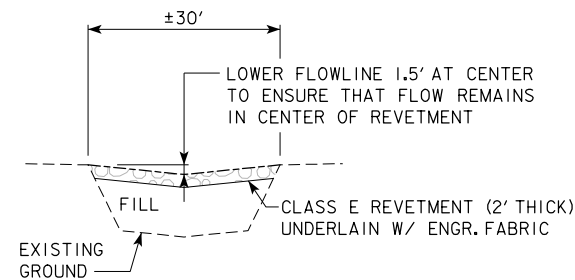
SECTION THRU DITCH LINING



PRELIMINARY
 DESIGN FOR 0° SKEW
386'-0 X 44'-0 PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGE
 86'-0 END SPANS (BTB BEAM TYPE) 2 @ 107'-0 INTERIOR SPANS
SITUATION PLAN - SITE
 STATION 193+83.00 AUG 2012
DALLAS COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 2 OF 3 FILE NO. 30725 DESIGN NO. 114



SECTION A-A



SECTION B-B

ESTIMATED QUANTITIES

LOCATION	REVTMENT CL. E (TON)	ENGINEERING FABRIC (SY)	CLASS 10 FILL (CY)
STREAMBANK / RAVINE REPAIR	180	170	300

PRELIMINARY

DESIGN FOR 0° SKEW

386'-0 X 44'-0 PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGE

86'-0 END SPANS (BTB BEAM TYPE) 2 @ 107'-0 INTERIOR SPANS

STREAMBANK REPAIR PLAN

STATION 193+83.00

AUG 2012

DALLAS COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DESIGN SHEET NO. 3 OF 3 FILE NO. 30725 DESIGN NO. 114

LINE STYLE LEGEND OF CROSS SECTION SHEETS (ROAD)

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

LINE STYLE LEGEND OF CROSS SECTION SHEETS (SOILS)

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

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

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

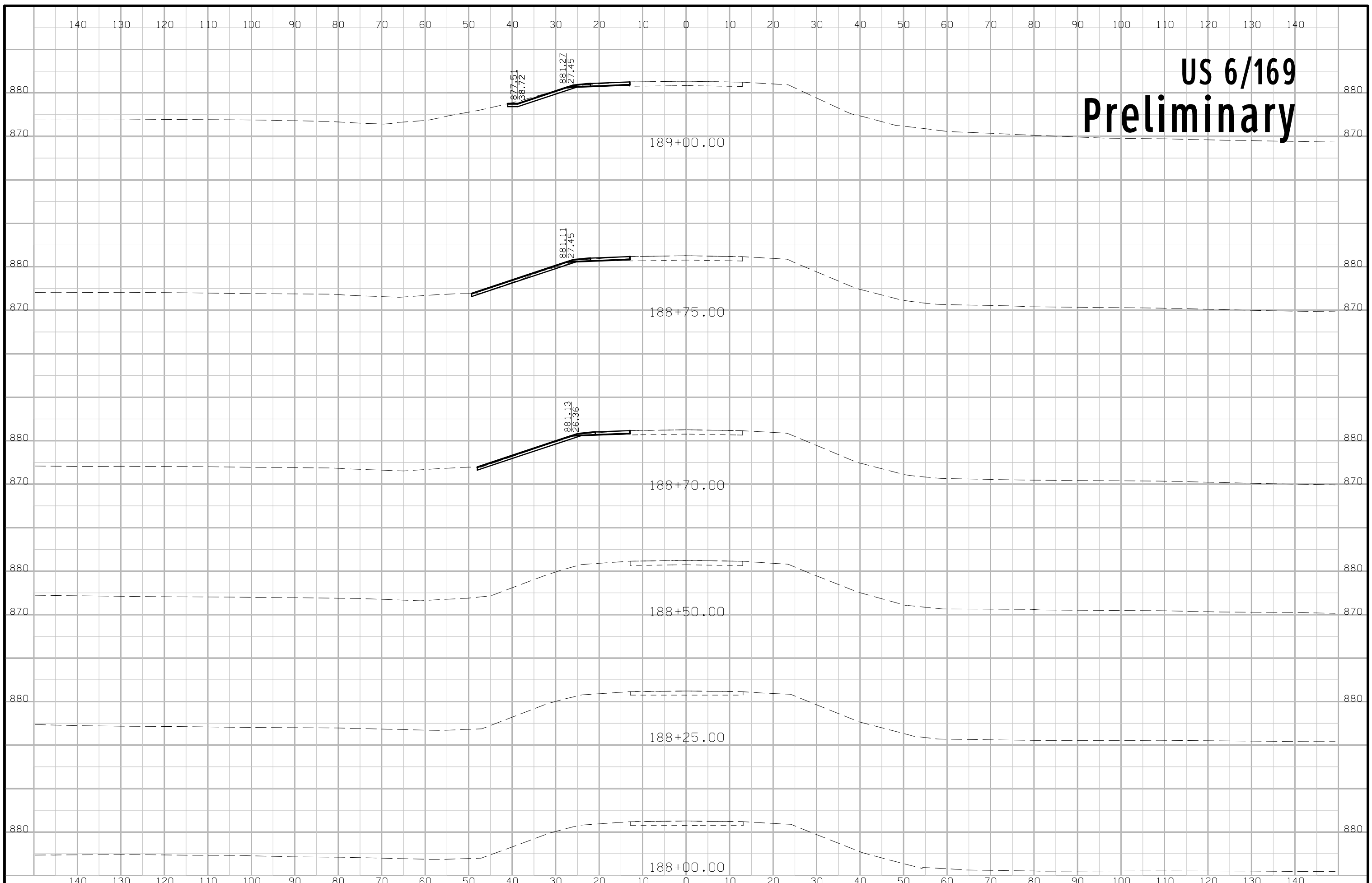
SYMBOL LEGEND OF CROSS SECTION SHEETS

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

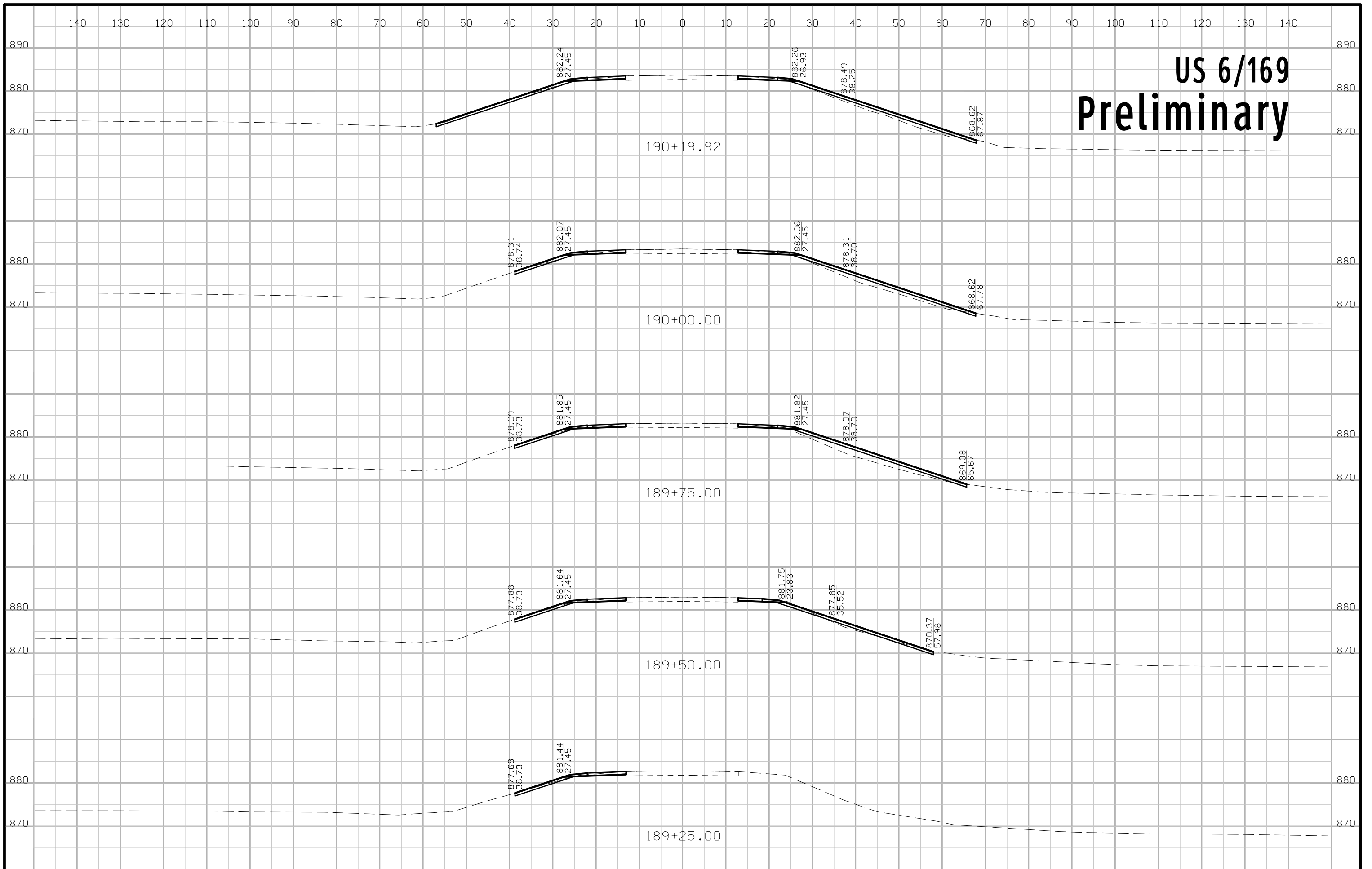
**CROSS SECTION
LEGEND AND SYMBOL
INFORMATION SHEET**

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

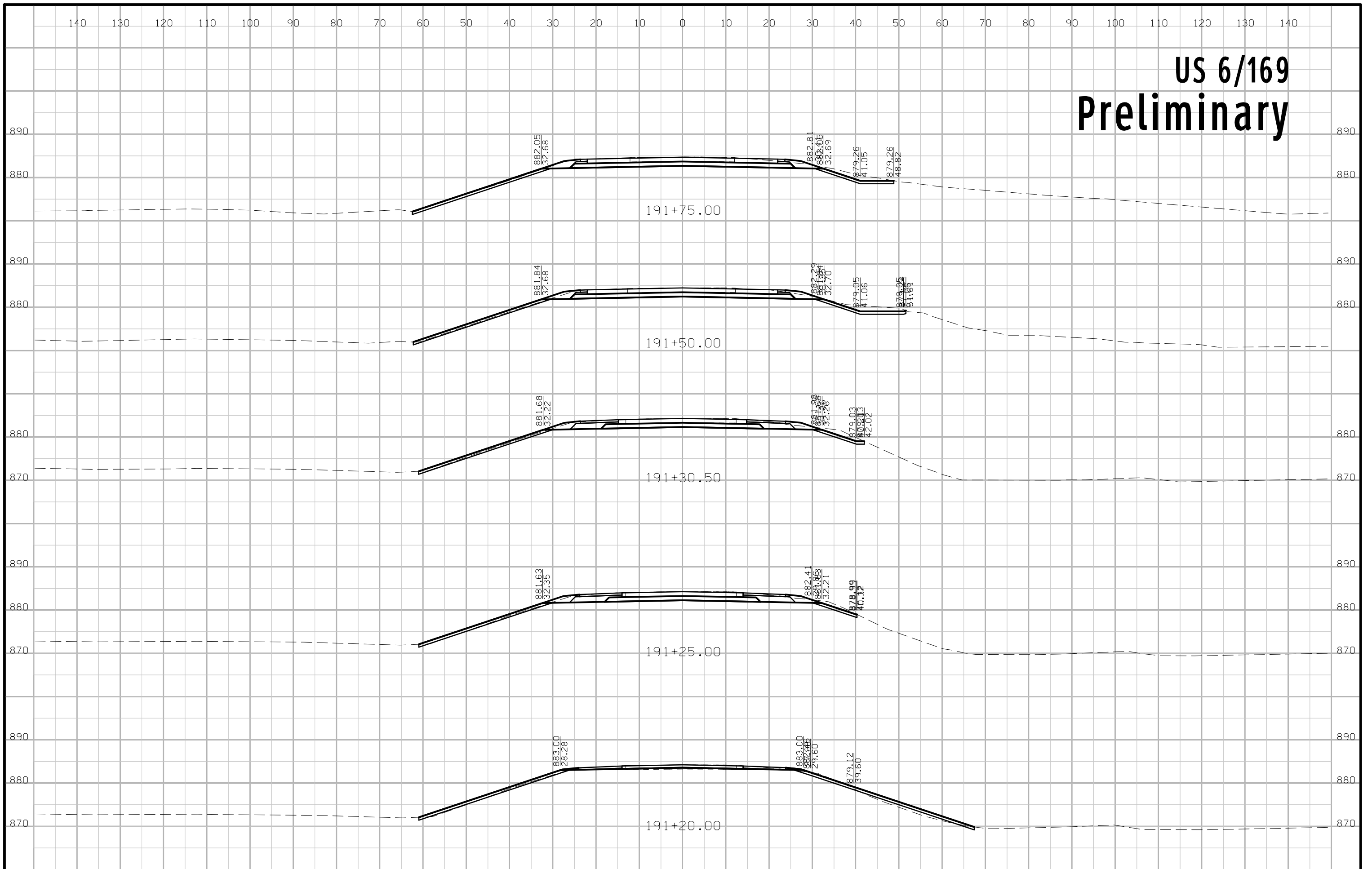
US 6/169 Preliminary



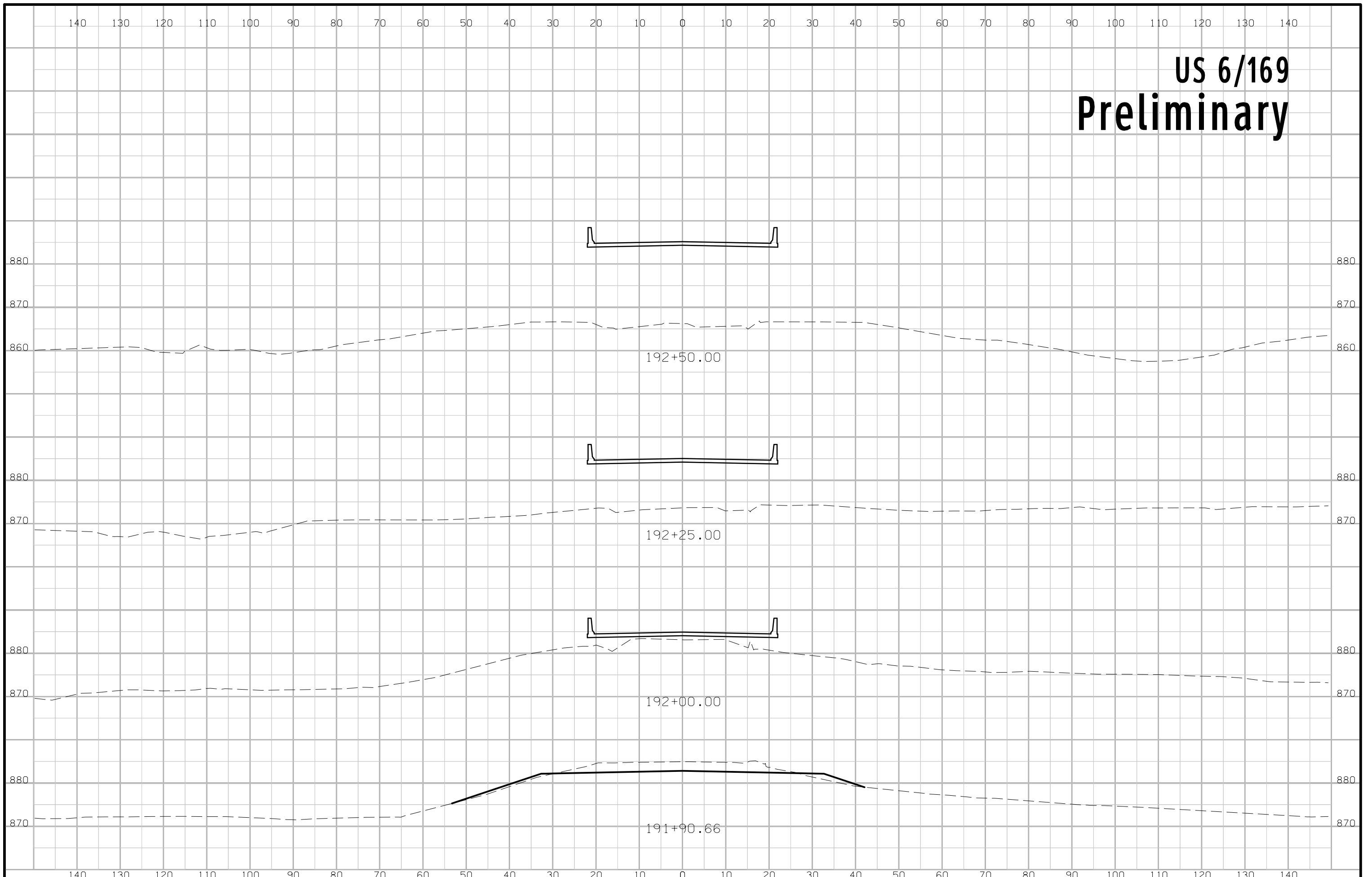
US 6/169 Preliminary



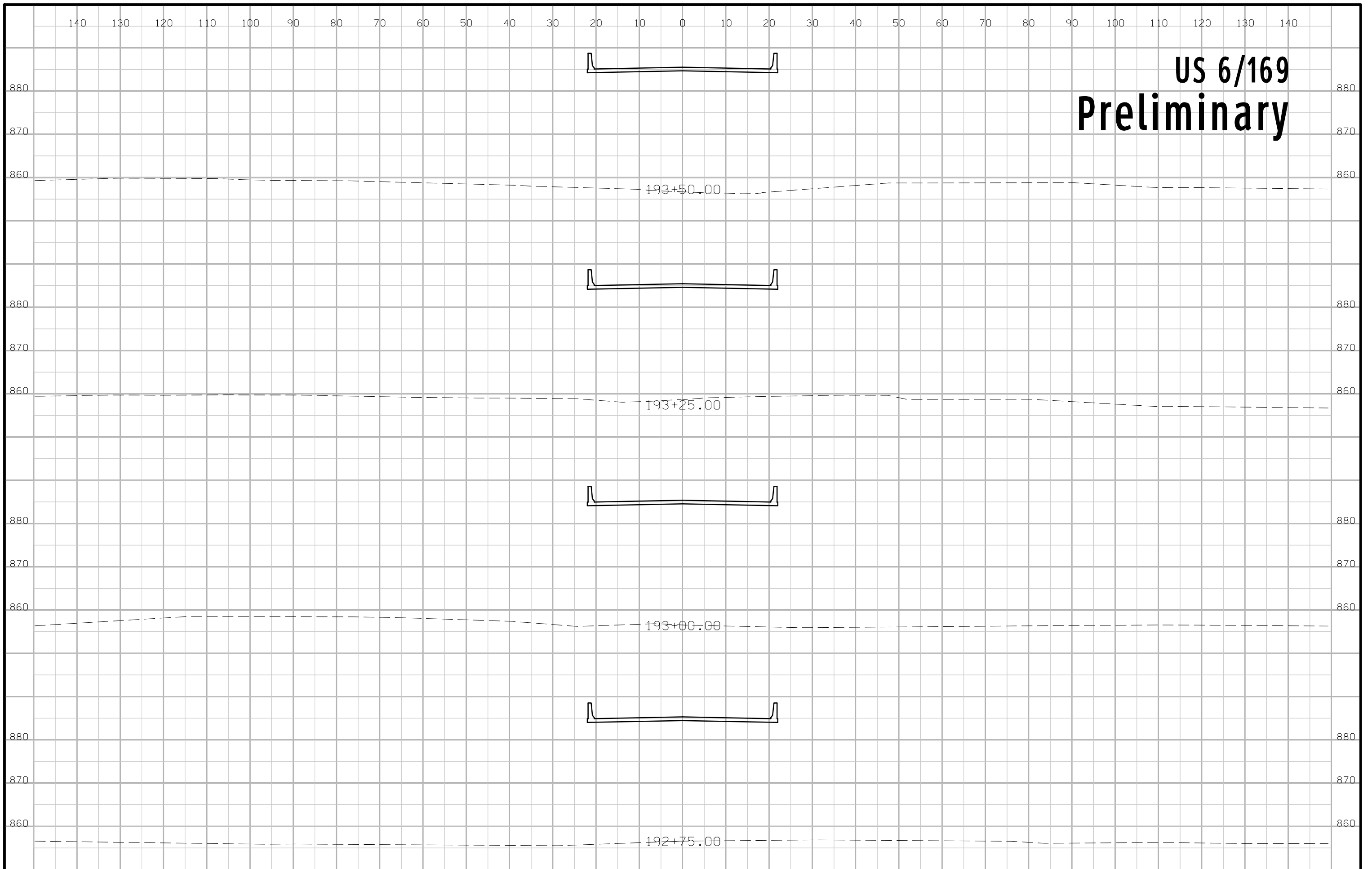
US 6/169 Preliminary



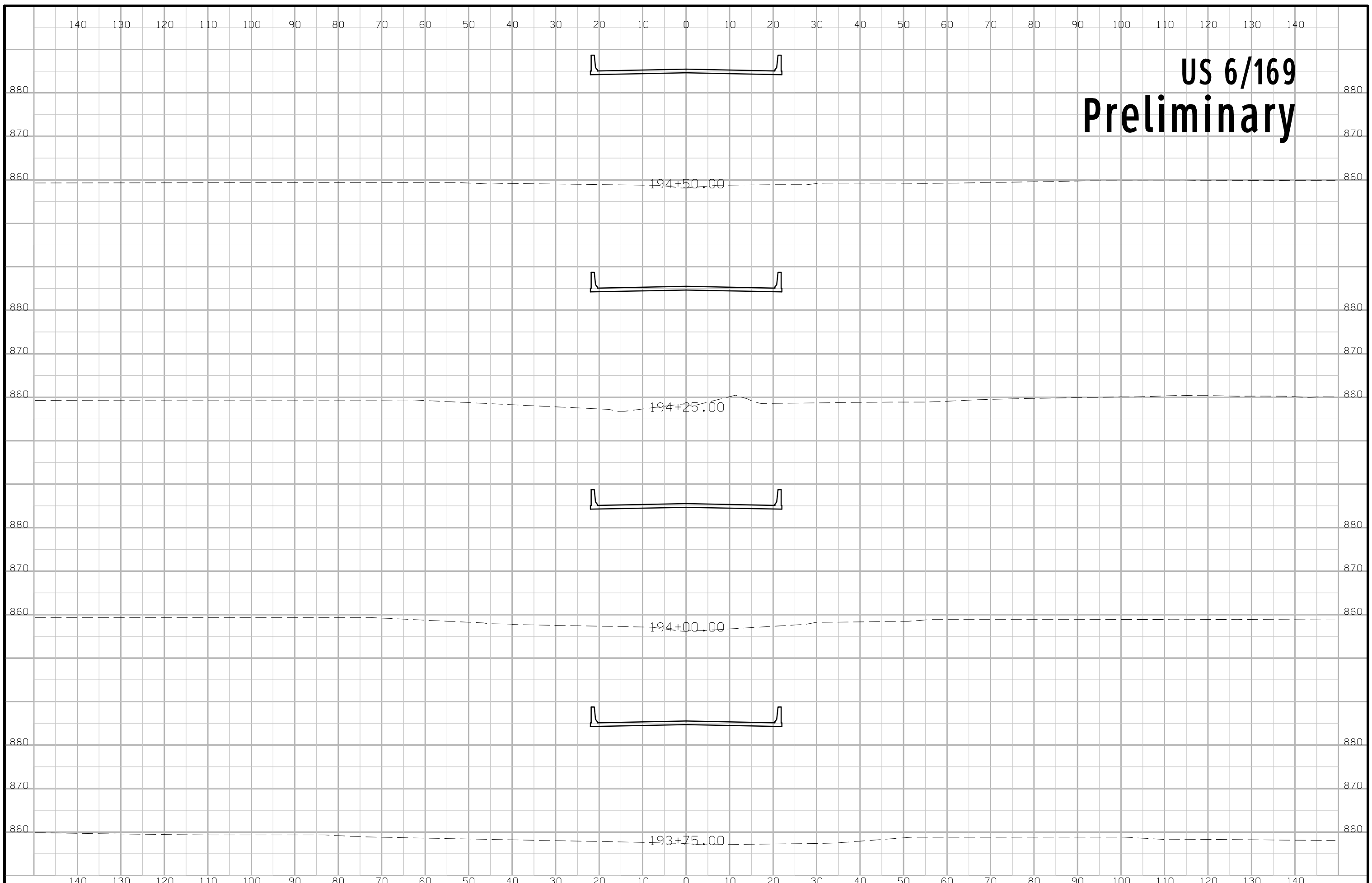
US 6/169 Preliminary



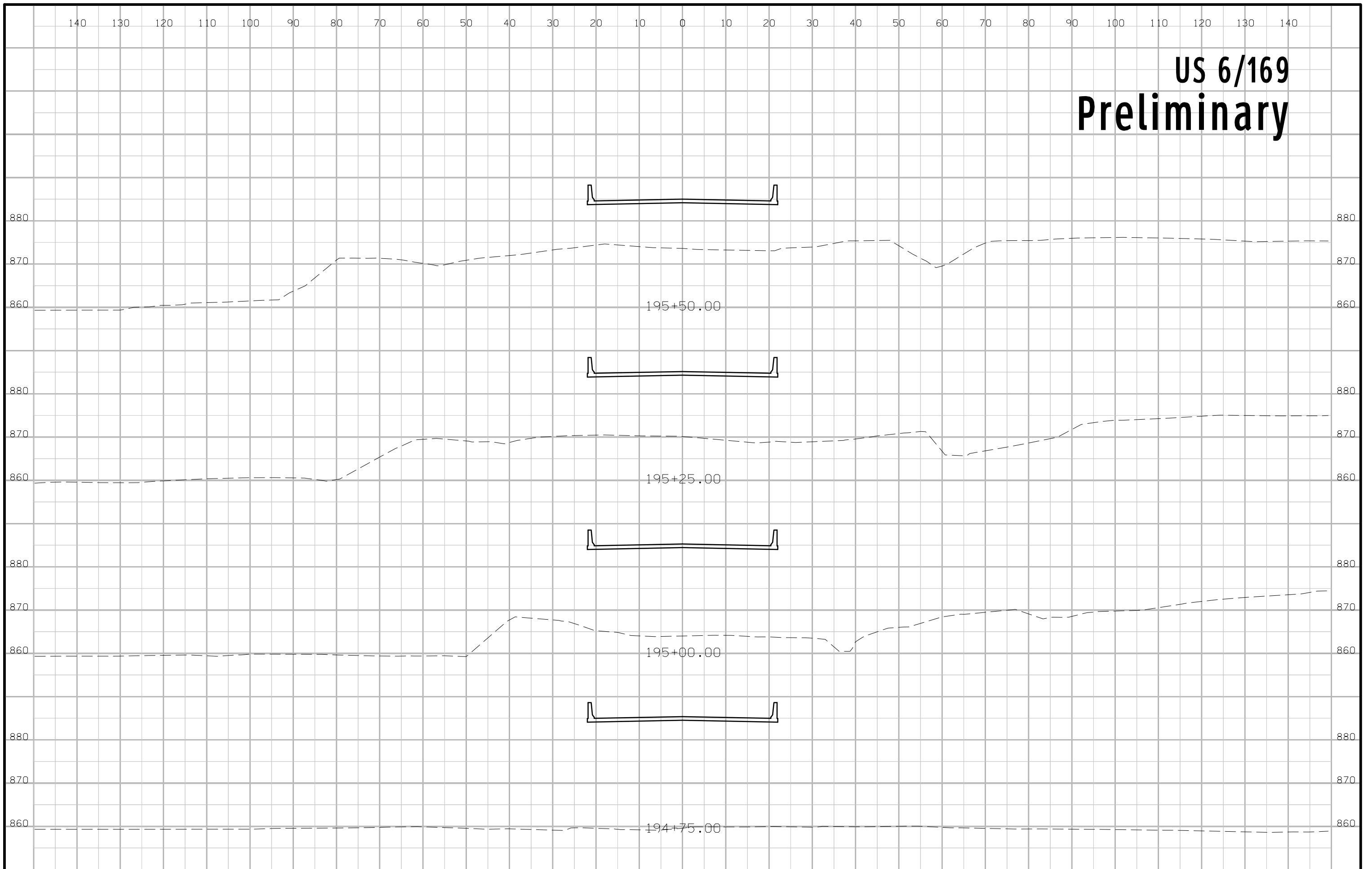
US 6/169 Preliminary



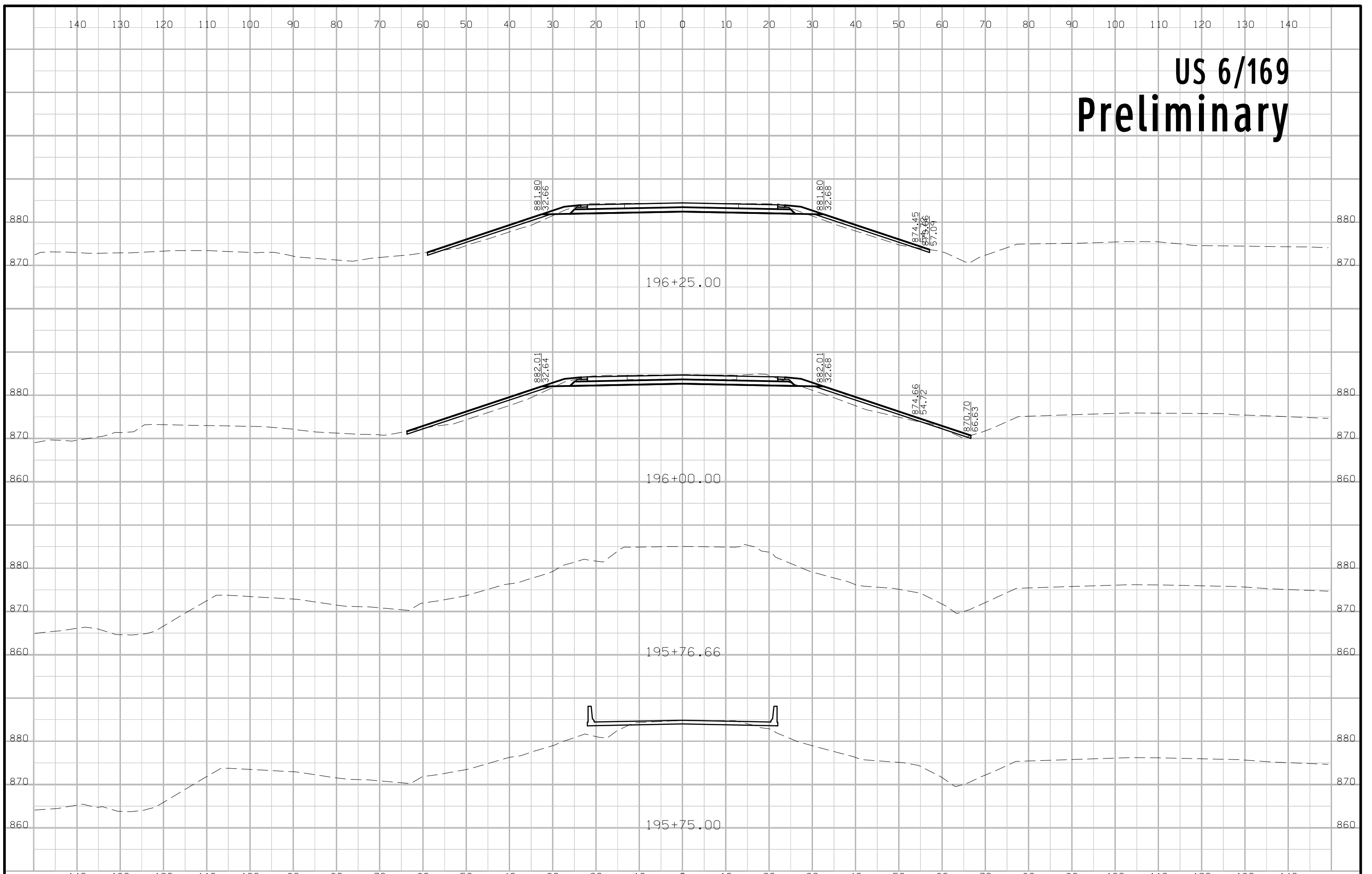
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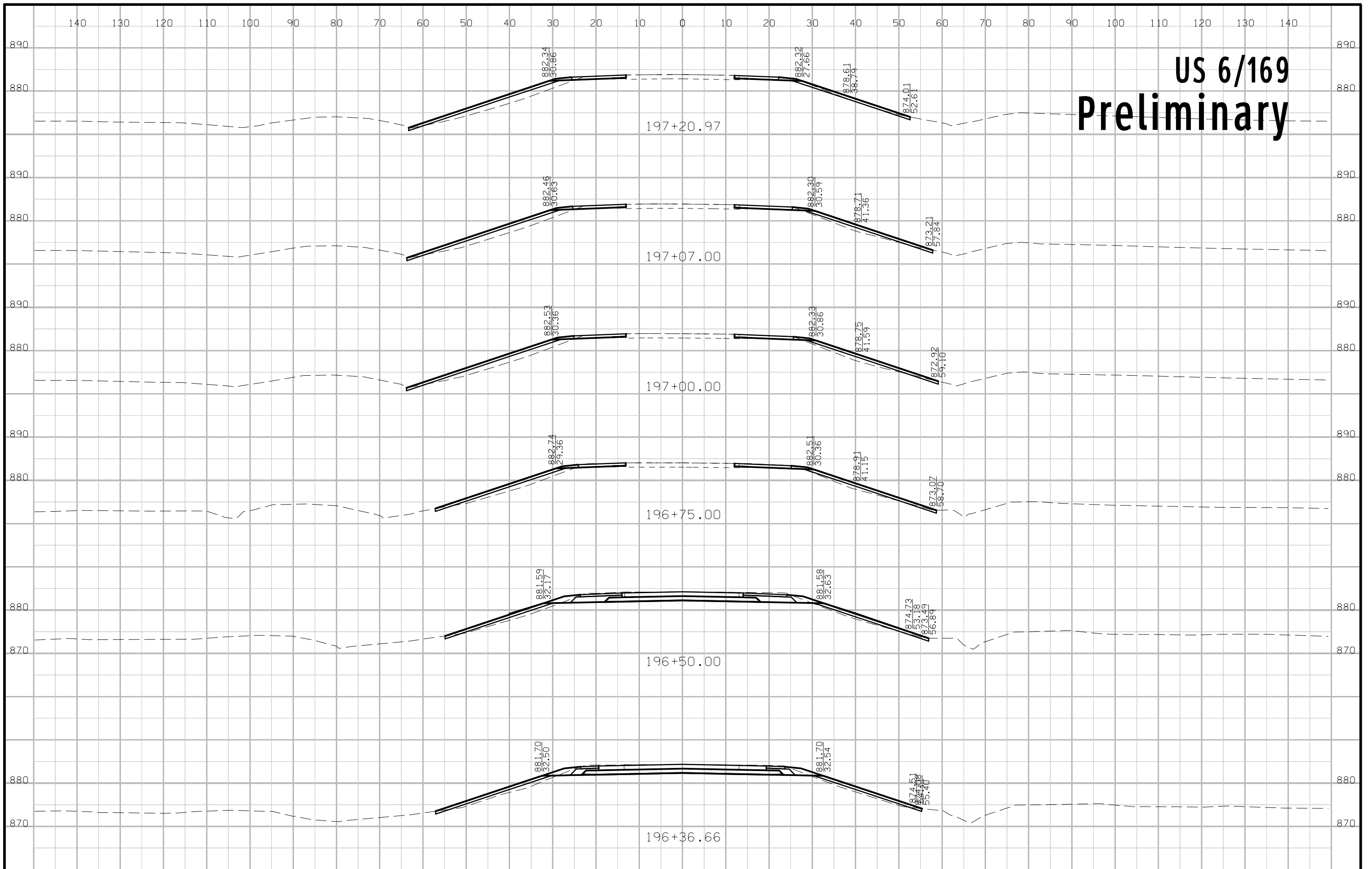
US 6/169 Preliminary



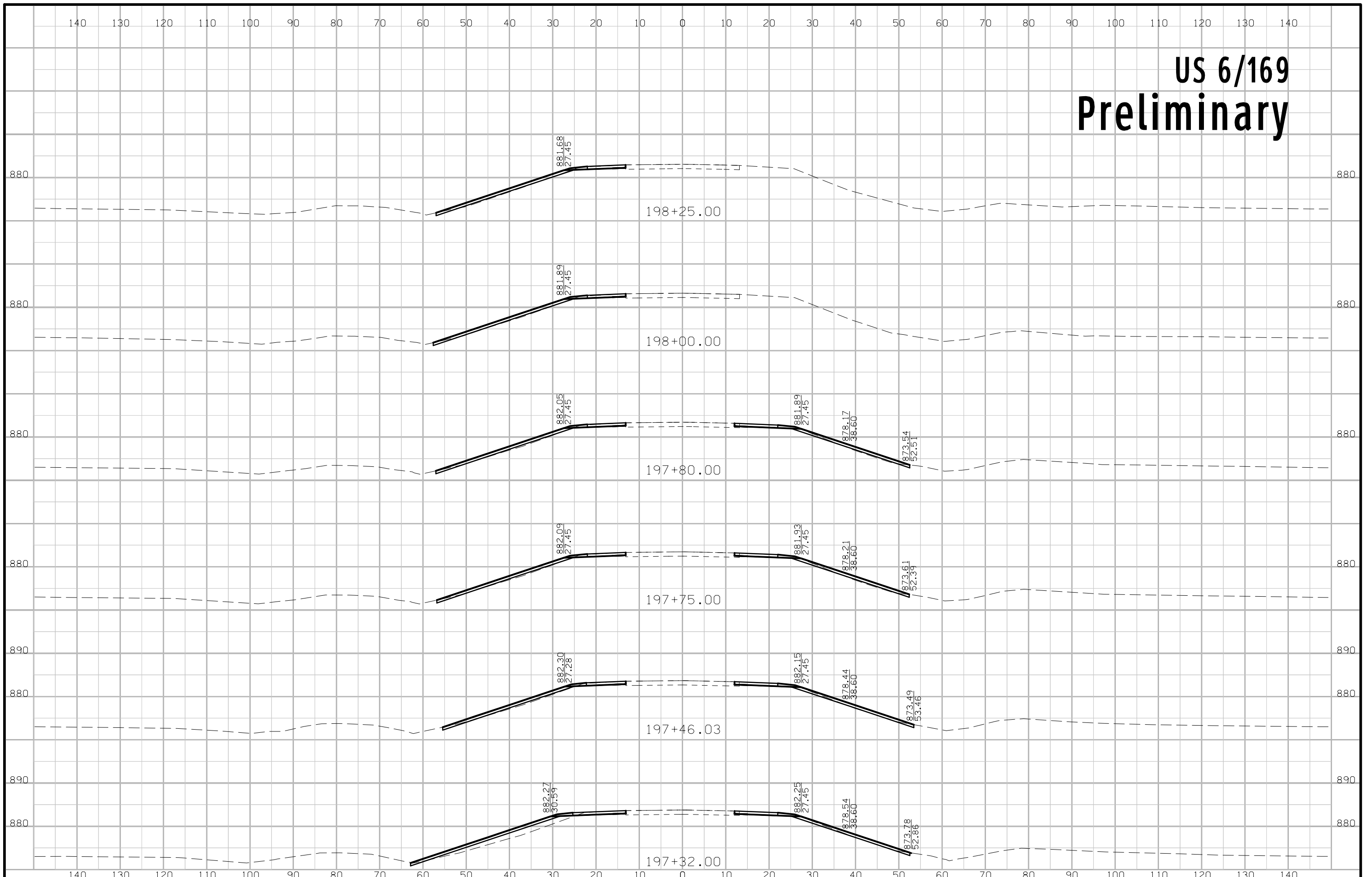
US 6/169 Preliminary



US 6/169 Preliminary



US 6/169 Preliminary



US 6/169 Preliminary

