

STPN-175-3(58)--2J-47

IDA CO.

LETTING DATE
07-20-2021

INDEX OF SHEETS	
No.	DESCRIPTION
A Sheets	Title Sheets
A.1	Title Sheet
A.1	Location Map Sheet
D Sheets	Mainline Plan and Profile Sheets
* D.1	Plan and Profile Legend & Symbol Information Sheet
* D.2	IA 175
J Sheets	Traffic Control and Staging Sheets
J.1	Traffic Control Plan
V Sheets	Bridge and Culvert Situation Plans
* V.1 - 2	Bridge and Culvert Situation Plans
	* Color Plan Sheets

IOWADOT

Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

PRIMARY ROAD SYSTEM

IDA COUNTY

REVTMENT

Maple River 1 mi E of Battle Creek

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

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



REVISIONS

TOTAL

6

PROJECT IDENTIFICATION NUMBER

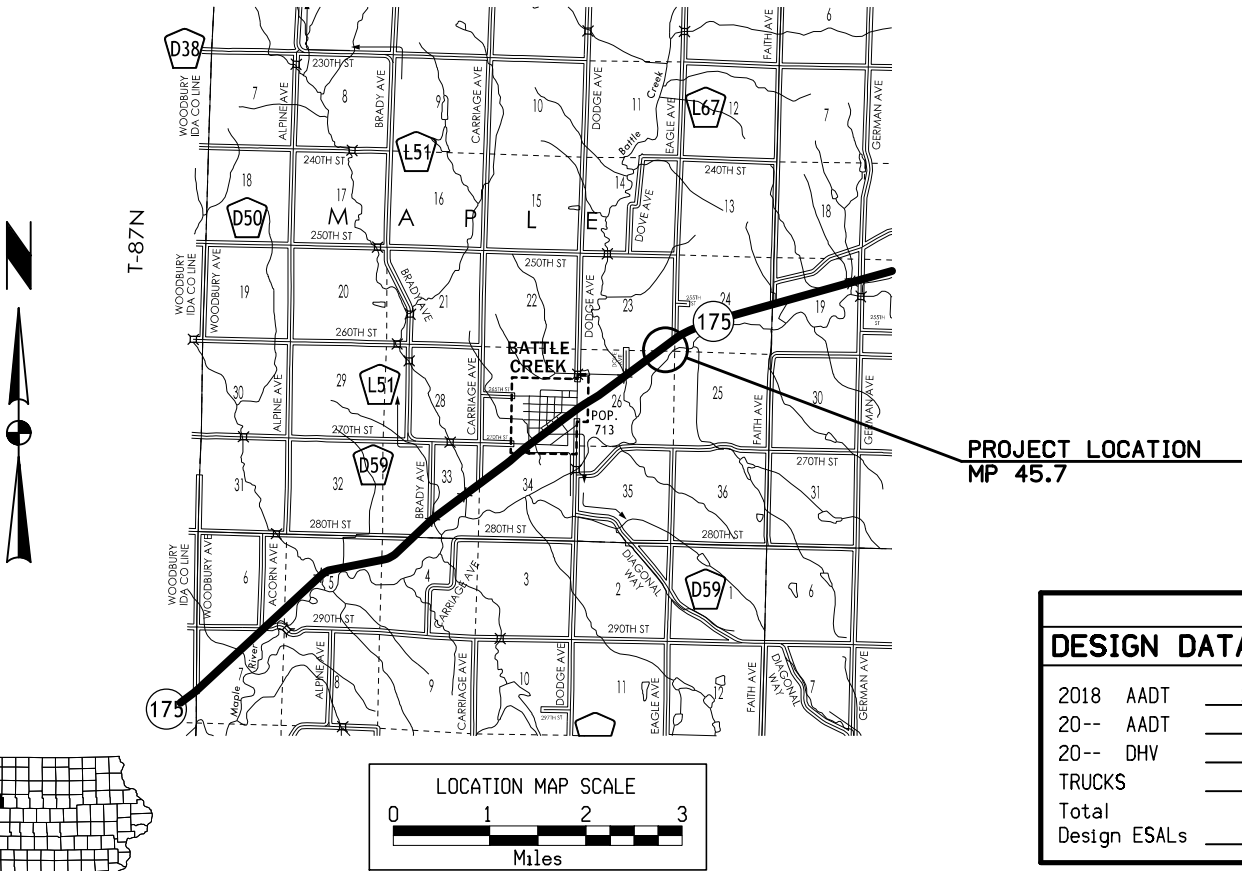
20-47-175-010

PROJECT NUMBER

STPN-175-3(58)--2J-47

R.O.W. PROJECT NUMBER

STPN-175-3(59)--2J-47



DESIGN DATA RURAL

2018	AADT	2210	V.P.D.
20--	AADT	--	V.P.D.
20--	DHV	--	V.P.H.
	TRUCKS	12 %	
	Total		
	Design ESALs	--	

INDEX OF SEALS

SHEET NO.	NAME	TYPE
A.1	Kelly C. Bell	Primary Signature Block

PRELIMINARY PLANS

Subject to change by final design.

D5 PLAN – Date: June 10, 2020

SURVEY SYMBOLS	
-----	BL Topo Breakline
-----	BNK Stream Bank
-----	C Centerline BL of Road (ML or SR)
—————	CON Concrete or A/C Slab
—————>	D Centerline Draw or Stream (Down)
—————<	DU Centerline Draw or Stream (Up)
- - - - -	ENT Centerline BL of Entrance
- - - - -	ENU Edge Unpaved Entrance & Parking
—————	EP Edge of Paved Roads (ML or SR)
— · · · — · · ·	EW Edge of Water
— FO —	FO1D Fiber Optic Co. 1 - Quality D
— — — — —	SNP Unpaved Shoulder
~~~~~	TLNR Tree Line Right
▲	BM Bench Mark
•	CP Control Point
•	WC Wild Card (Misc. Field Shot)
•	GR Ground Shot
•	PRO Profile Shot
▪	PLG Location of General Photo
—————	ENP Edge Paved Entrance & Park Lot
•	SOP Size of Pipe or Culvert
•	REF Reference Tie Point

**UTILITY LEGEND**

This is NOT a POINT 25 Project and is not subject to the provisions of IAC 761-115.25.

- FO -

Long Lines Ltd.  
Tom Connors  
501 4th Street  
Sergeant Bluff, IA 51054  
(712) 271-5526  
[tom.connors@longlines.biz](mailto:tom.connors@longlines.biz)

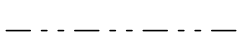
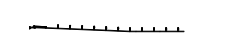
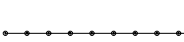
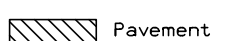
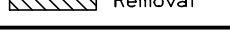
- F0 -

# 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
	C/A Access Control
	Property Line

# PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

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

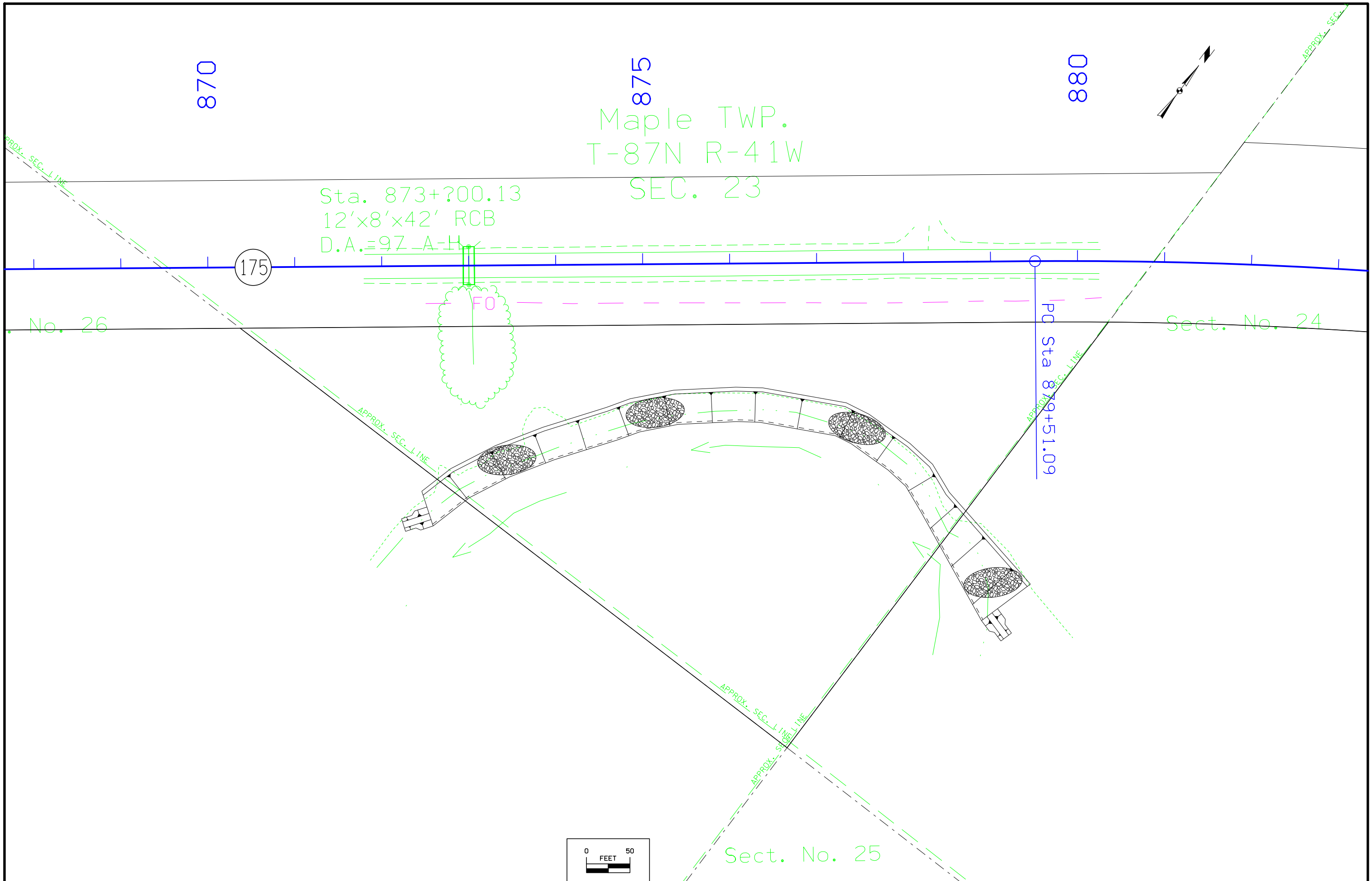
PLAN VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS		
LINEWORK	Design Color No.	
Green	(2)	Existing Topographic Features and Labels
Blue	(1)	Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Magenta	(5)	Existing Utilities
SHADING	Design Color No.	
Yellow	(4)	Highlight for Critical Notes 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

## 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

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



NO ACCESS RIGHTS ARE TO BE ACQUIRED ON THIS PROJECT.



Maple TWP.  
T-87N R-41W  
SEC. 23

SE 1/4  
SEC.23-T87N-R41W

①  
BERT F. EASON JR.  
REV. TRUST  
BERT F. EASON JR. TRUSTEE

Sta. 873+700.13  
12'x8'x42' RCB  
D.A.=97' A-H

870

175

875

880

NE 1/4  
SEC.26-T87N-R41W

①  
BERT F. EASON JR.  
REV. TRUST  
BERT F. EASON JR. TRUSTEE

①  
BERT F. EASON JR.  
REV. TRUST  
BERT F. EASON JR. TRUSTEE

872+31  
±70'±EX.R/W

877+28  
±70'±EX.R/W

877+28  
±113'

879+02±R  
±244'

872+31±R  
±221'

871+73  
±297'

876+33  
±213'

877+07  
±226'

877+80  
±280'

879+88  
±384'

872+53  
±359'

873+19±R  
±290'

875+05  
±222'

878+20±R  
±351'

878+48  
±421'

879+17  
±474'

PERMANENT EASEMENT TO  
CONSTRUCT AND MAINTAIN REVETMENT

②  
RICHARD JR. & JUDY SCHMIDT

SE 1/4  
SEC.24-T87N-R41W

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

ROW Team: Larson / Hughes  
ROW #: STPN-175-3(59)--2J-47  
Plan Date: 6-23-2020

**Color Legend:**

- Property Lines
- Temporary Easement
- Permanent Acquisition





108-23A 08-01-08											
TRAFFIC CONTROL PLAN											
IA 175 traffic shall be maintained at all times.											

108-25 10-21-14												
511 TRAVEL RESTRICTIONS												
Route	Direction	County	Location Description	Feature Crossed	Object Type	Maint. Bridge No., Structure ID, or FHWA No.	Type of Restriction	Existing Measurement	Construction Measurement	Construction Measurement as Signed	Projected As Built Measurement	Remarks
			None provided.									

111-01 04-17-12	
COORDINATED OPERATIONS	
Other work in progress during the same period of time will include the construction of the projects listed. Coordinate operations with those of other contractors working within the same area.	
Project	Type of Work
None provided.	

FILE NO.	ENGLISH	DESIGN TEAM	Flattery\Bell	IDA	COUNTY	PROJECT NUMBER	STPN-175-3(58)--2J-47	SHEET NUMBER	J.1
----------	---------	-------------	---------------	-----	--------	----------------	-----------------------	--------------	-----

10/2/2019 2:05:45 PM mjack c:\pw_work\pwmain\mjack\d1004409\47175058_J01.xlsm

ESTIMATED REVETMENT QUANTITIES					
ITEM NO.	ITEM CODE	ITEM	UNIT	TOTAL	AS BUILT QUAN.
1	2104-2710020	EXCAVATION, CLASS 10, CHANNEL	CY	2,043.0	
2	2507-3250005	ENGINEERING FABRIC	SY	4,477.0	
3	2507-6800061	REVETMENT, CLASS E	TON	4,958.0	

ESTIMATE REFERENCE INFORMATION		
ITEM NO.	ITEM CODE	DESCRIPTION
1	2104-2710020	EXCAVATION, CLASS 10, CHANNEL MATERIAL EXCAVATED FOR THE BANK STABILIZATION WILL BE USED FOR FILL NEEDED FOR THE PROJECT.  ESTIMATE 2043.0 CY OF CLASS 10 CHANNEL EXCAVATION AND 1414.0 CY OF FILL. FILL ESTIMATES INCLUDE 25% SHRINKAGE FACTOR. THE WASTE (629.0 CY) WILL BECOME THE PROPERTY OF THE CONTRACTOR. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE DISPOSAL SITE FOR WASTE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT AREAS (INCLUDING HAUL ROADS) SELECTED FOR WASTE OR DISPOSAL NOT IMPACT 1)CULTURALLY SENSITIVE SITES OR GRAVES OR 2)WETLANDS OR "WATERS OF THE U.S.", INCLUDING STREAMS OR STREAM BANKS BELOW THE "ORDINARY HIGH WATER MARK", WITHOUT AN APPROVED U.S. ARMY CORPS OF ENGINEERS 404 PERMIT. NO PAYMENT FOR OVERHAUL WILL BE ALLOWED FOR MATERIAL HAULED TO THESE SITES.
2	2507-3250005	ENGINEERING FABRIC ENGINEERING FABRIC SHALL BE MATERIAL AS SPECIFIED FOR EMBANKMENT EROSION CONTROL IN ACCORDANCE WITH ARTICLE 4196.01,B,3, OF THE STANDARD SPECIFICATIONS.
3	2507-6800061	REVETMENT, CLASS E ESTIMATED AT 1.6 TON/CU YD.

GENERAL NOTES:

THIS DESIGN IS FOR THE CONSTRUCTION OF STREAMBANK STABILIZATION MEASURES ALONG MAPLE RIVER ADJACENT TO IA HIGHWAY 175. PROJECT LOCATION IS APPROXIMATELY 1.0 MILE EAST OF BATTLE CREEK.

PROJECT SHALL CONSIST OF:

1. INSTALLATION OF CLASS E REVETMENT BANK STABILIZATION.

ROADWAY QUANTITIES SHOWN ELSEWHERE IN THESE PLANS.

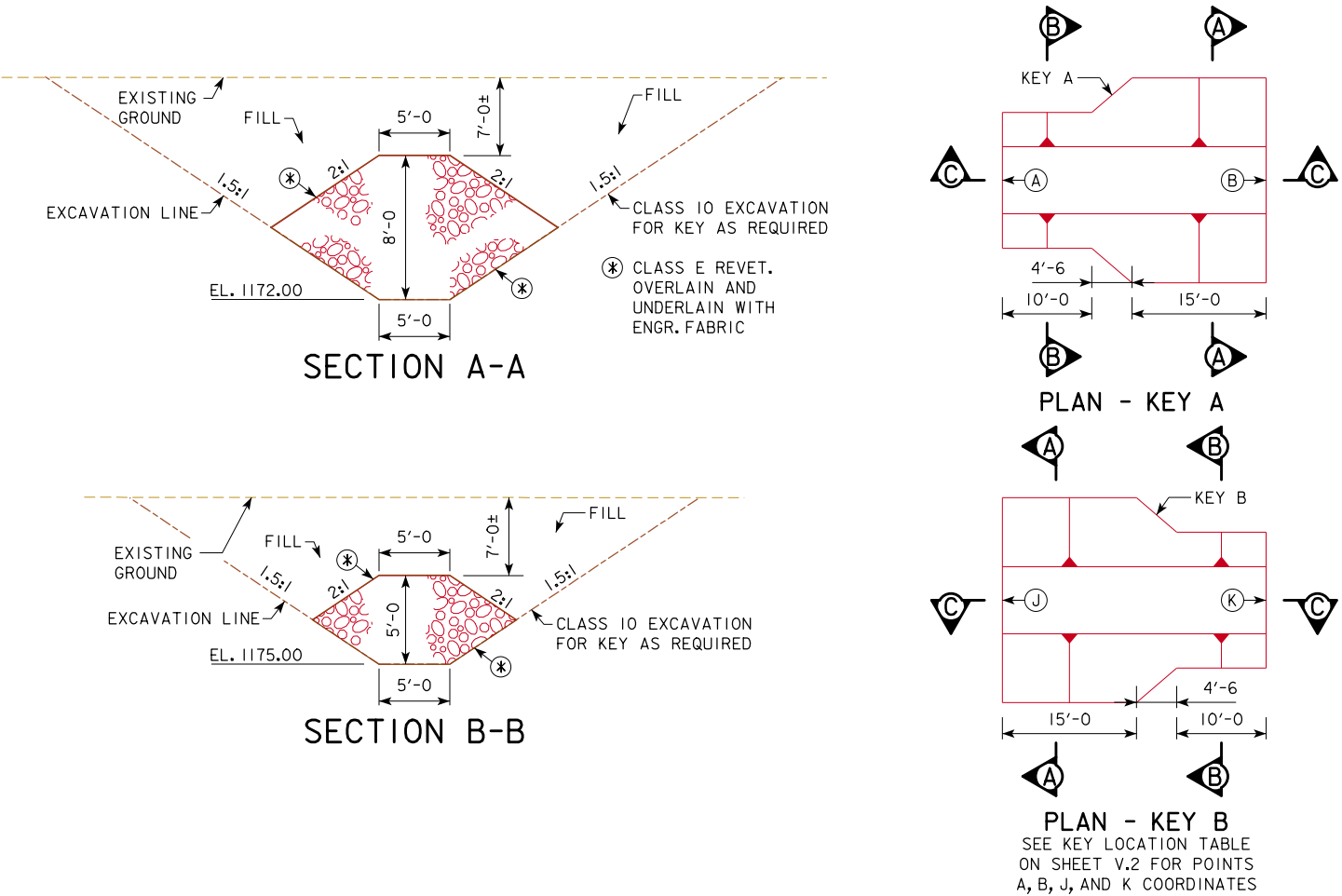
REFER TO TITLE SHEET FOR TRAFFIC DATA.

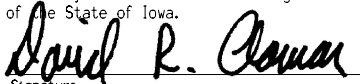
SPECIFICATIONS:

CONSTRUCTION: IOWA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, SERIES OF 2015, PLUS APPLICABLE GENERAL SUPPLEMENTAL SPECIFICATIONS, DEVELOPMENTAL SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS SHALL APPLY TO CONSTRUCTION WORK ON THIS PROJECT.

REVETMENT/GRADING QUANTITIES				
ELEMENT	EMBANKMENT (FILL) (CY)	CL. 10 CHANNEL EXCAVATION (CY)	REVETMENT CL. E (TON)	ENGR. FABRIC (SY)
BANK PROTECTION	490.0	1131.0	4680.0	4175.0
KEY A	462.0	456.0	139.0	151.0
KEY B	462.0	456.0	139.0	151.0
TOTALS	1414.0	2043.0	4958.0	4477.0

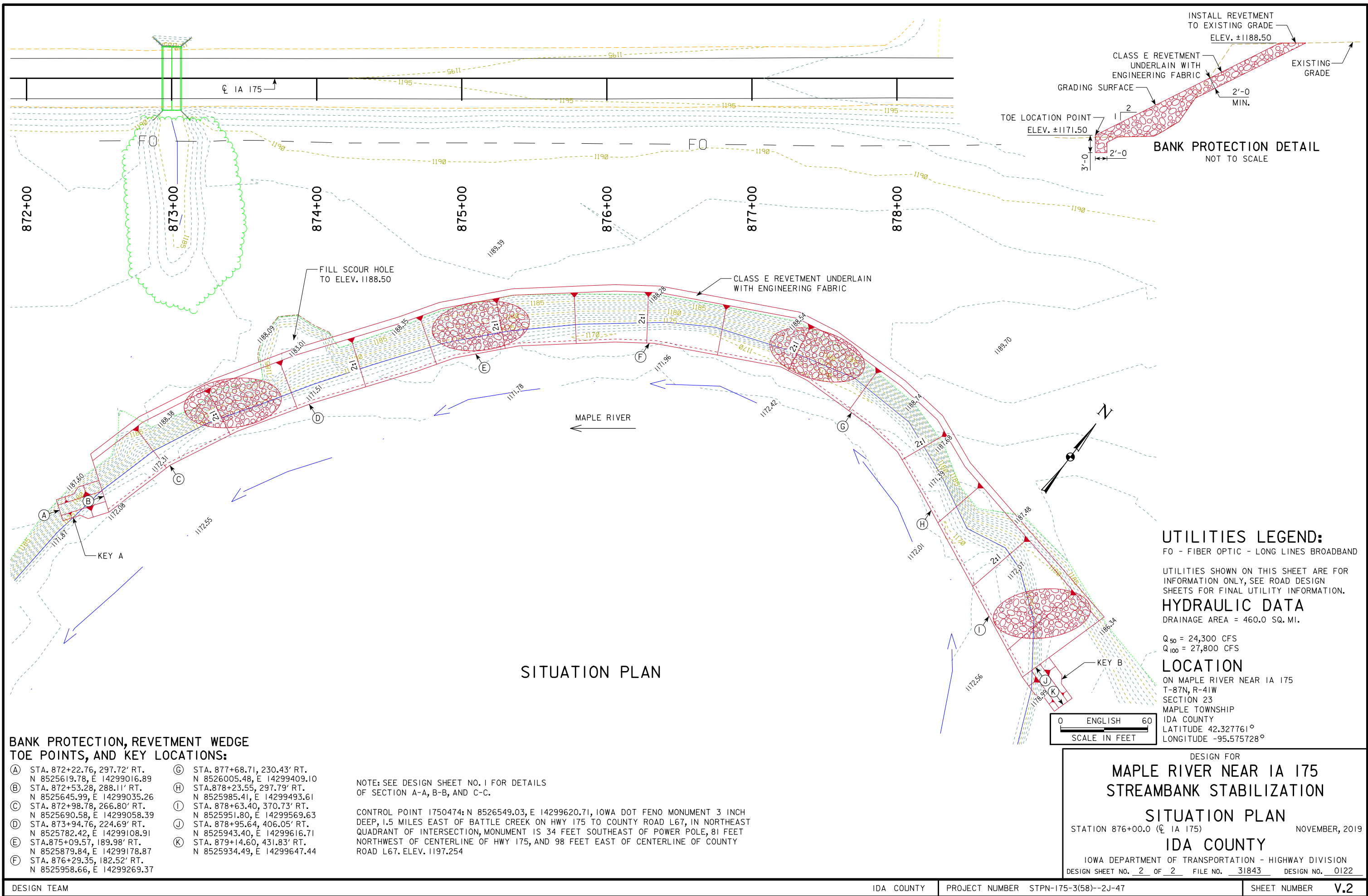
NOTE: CLASS 10 CHANNEL EXCAVATION MATERIAL WILL BE USED FOR EMBANKMENT (FILL) MATERIAL. REMAINDER OF MATERIAL NOT USED FOR EMBANKMENT (FILL) SHALL BECOME THE PROPERTY OF THE CONTRACTOR.  
ALL EMBANKMENT (FILL) QUANTITIES INCLUDE A 25% SHRINKAGE FACTOR.



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.  Signature <u>David R. Claman</u> Date <u>11/15/2019</u> Printed or Typed Name My license renewal date is December 31, <u>2020</u> Pages or sheets covered by this seal: <u>V.1 THRU V.2</u>

NOTE: SEE DESIGN SHEET NO. 2 FOR LOCATIONS OF SECTION A-A, B-B, AND C-C.

DESIGN FOR <b>MAPLE RIVER NEAR IA 175 STREAMBANK STABILIZATION</b> <b>GEN. NOTES, DETAILS AND QUANTITIES</b> STATION 876+00.0 (C 1A 175) <b>IDA COUNTY</b> IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION DESIGN SHEET NO. <u>1</u> OF <u>2</u> FILE NO. <u>31843</u> DESIGN NO. <u>0122</u> NOVEMBER, 2019
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



**BANK PROTECTION, REVETMENT WEDGE TOE POINTS, AND KEY LOCATIONS:**

(A) STA. 872+22.76, 297.72' RT. N 8525619.78, E 14299016.89	(G) STA. 877+68.71, 230.43' RT. N 8526005.48, E 14299409.10
(B) STA. 872+53.28, 288.11' RT. N 8525645.99, E 14299035.26	(H) STA. 878+23.55, 297.79' RT. N 8525985.41, E 14299493.61
(C) STA. 872+98.78, 266.80' RT. N 8525690.58, E 14299058.39	(I) STA. 878+63.40, 370.73' RT. N 8525951.80, E 14299569.63
(D) STA. 873+94.76, 224.69' RT. N 8525782.42, E 14299108.91	(J) STA. 878+95.64, 406.05' RT. N 8525943.40, E 1429916.71
(E) STA. 875+09.57, 189.98' RT. N 8525879.84, E 14299178.87	(K) STA. 879+14.60, 431.83' RT. N 8525934.49, E 14299647.44
(F) STA. 876+29.35, 182.52' RT. N 8525958.66, E 14299269.37	

NOTE: SEE DESIGN SHEET NO. 1 FOR DETAILS OF SECTION A-A, B-B, AND C-C.

CONTROL POINT I750474: N 8526549.03, E 14299620.71, IOWA DOT FENO MONUMENT 3 INCH DEEP, 1.5 MILES EAST OF BATTLE CREEK ON HWY 175 TO COUNTY ROAD L67, IN NORTHEAST QUADRANT OF INTERSECTION, MONUMENT IS 34 FEET SOUTHEAST OF POWER POLE, 81 FEET NORTHWEST OF CENTERLINE OF HWY 175, AND 98 FEET EAST OF CENTERLINE OF COUNTY ROAD L67. ELEV. 1197.254

DESIGN FOR  
**MAPLE RIVER NEAR IA 175  
STREAMBANK STABILIZATION**

**SITUATION PLAN**

STATION 876+00.0 (CL IA 175)

NOVEMBER, 2019

**IDA COUNTY**

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION  
DESIGN SHEET NO. 2 OF 2 FILE NO. 31843 DESIGN NO. 0122

DESIGN TEAM

IDA COUNTY

PROJECT NUMBER STPN-175-3(58)--2J-47

SHEET NUMBER **V.2**