

PCC SIDEWALK/TRAIL
NHSN-018-2(161)--2R-71

O'BRIEN COUNTY

LETTING DATE
DEC. 16, 2025



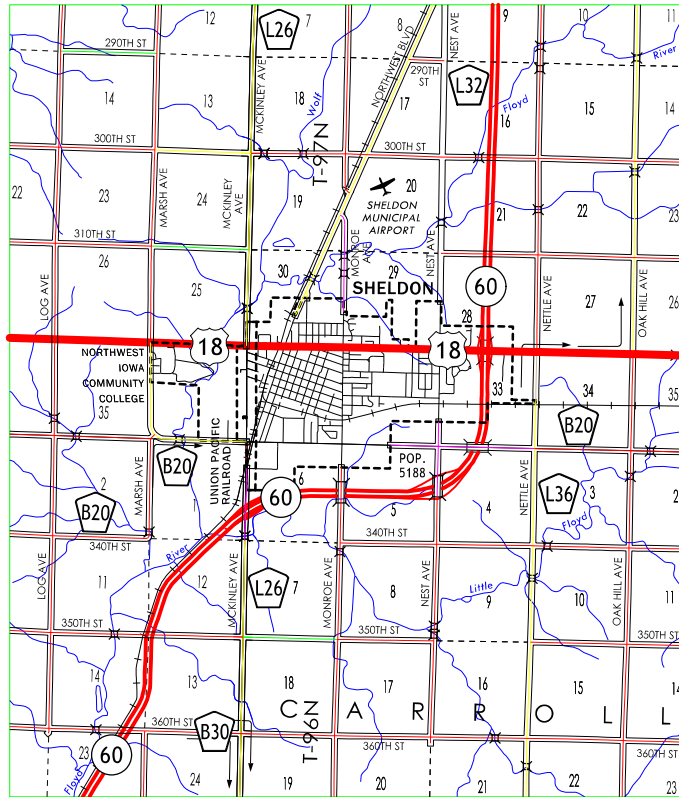
PLANS OF PROPOSED IMPROVEMENT ON THE
PRIMARY ROAD SYSTEM
O'BRIEN COUNTY
PCC SIDEWALK/TRAIL

W OF 2ND AVE. IN SHELDON

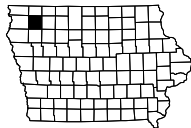
SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

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



For Project Location Map
Refer to Sheet No. A.2



DESIGN DATA URBAN

2025	AADT	8,000	V.P.D.
2045	AADT	8,600	V.P.D.
20	-	DHV	-
			V.P.H.
	TRUCKS	8	%
	Total		
	Design ESALs	-	

REVISIONS

TOTAL

117

PROJECT IDENTIFICATION NUMBER

23-71-018-010

PROJECT NUMBER

NHSN-018-2(161)--2R-71

R.O.W. PROJECT NUMBER

NHSN-018-2(138)--2R-71

INDEX OF SHEETS

No.	DESCRIPTION
A Sheets	Title Sheets
* A.1	Title Sheet
* A.2	Location Map
B Sheets	Typical Cross Sections and Details
* B.1 - 2	Typical Cross Sections and Details
C Sheets	Quantities and General Information
* C.1	Estimated Project Quantities and Reference Notes
C.2	Project Description
C.3	Standards
C.4 - 13	Tabulations
C.14	Standard Notes
D Sheets	Mainline Plan and Profile Sheets
* D.1	Plan & Profile Legend & Symbol Information Sheet
* D.2	Plan Sheets - Highway 18
G Sheets	Survey Sheets
* G.1	Survey Information
G.2	Horizontal Alignment Coordinates
H Sheets	Right-of-Way Sheets
* H.1	Sheldon Right-of-Way Layout Sheets
J Sheets	Traffic Control and Staging Sheets
J.1 - 2	Traffic Control Plan and Staging Notes
J.3	Coordinated Operations
J.4	Pedestrian Path Closures
M Sheets	Storm Sewer and Utility Adjustment Sheets
* M.1	Storm Sewer Tabulations
* M.2	Storm Sewer Legend & Symbol Information Sheets
* M.3	Storm Sewer Plan and Profile Sheets
* M.4	Existing Storm Sewer Network
* M.5	Proposed Storm Sewer Network
R Sheets	Erosion Control Sheets
RC.1 - 2	Erosion Control Quantities & Tabulations
* RR.1	Erosion Control Legend and Symbol Information Sheet
* RR.2	Erosion Control Device Maps
S Sheets	Sidewalk Sheets
* S.1	Sidewalk Legend & Symbol Information Sheet
* S.2	Sidewalk Plan Sheets
S.3 - 4	Sidewalk Compliance
	* Color Plan Sheets

	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 Jason A. Lastovica	Date
	Printed or Typed Name	
	My license renewal date is December 31, 2026	
Pages or sheets covered by this seal: A.1-2, B.1-2, C.1-14, D.1-2, G.2, J.1-4, M.1-5, RC.1-2, RR.1-2, S.1-4		

FILE NO.

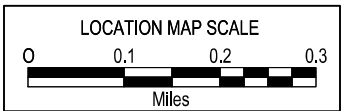
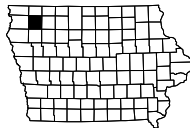
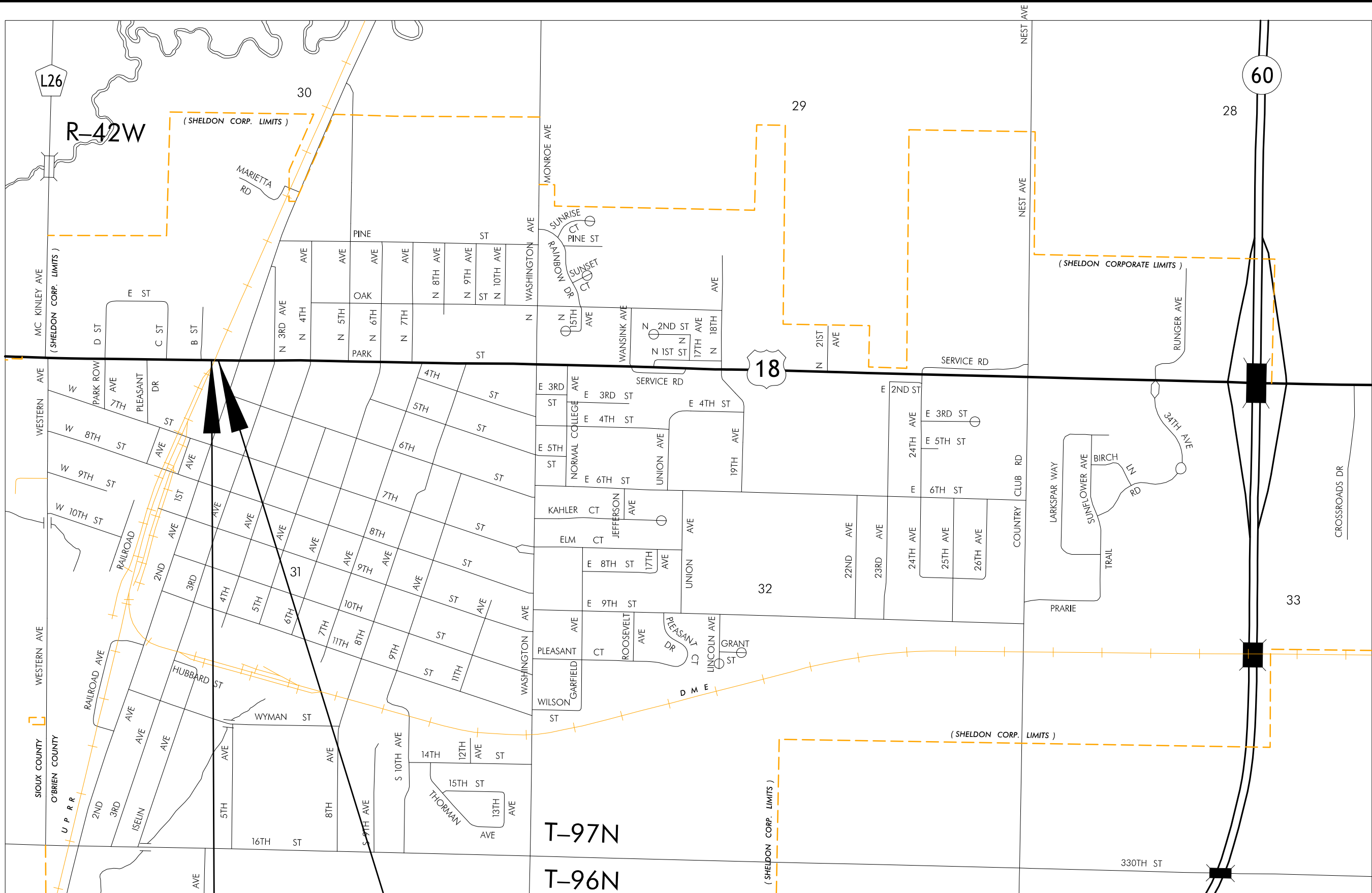
ENGLISH

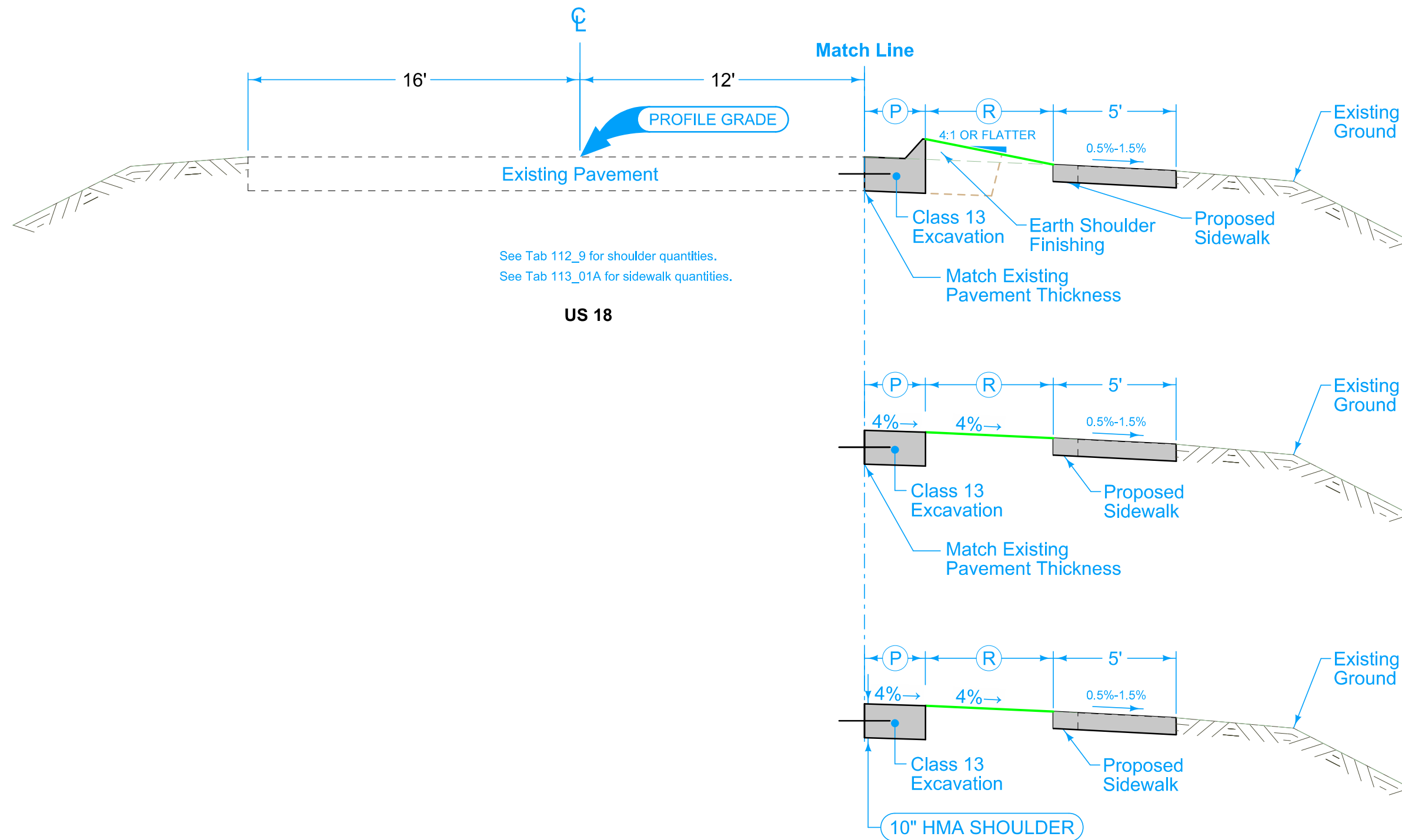
DESIGN TEAM Iowa DOT / HR Green, Inc.

O'BRIEN COUNTY

PROJECT NUMBER NHSN-018-2(161)--2R-71

SHEET NUMBER A.1





See Tab 112_9 for shoulder quantities.
See Tab 113_01A for sidewalk quantities.

US 18

Curbed Shoulder

Shoulder Jointing:
Longitudinal: BT-2
Transverse: C at 17' spacing

2_Curb_04-15-25				
STATION TO STATION		(P) Feet	(R) Feet	Curb Type See PV-102
119+18.84	119+38.84	4.0-2.0	8.5-10.5	6" STD.
119+38.84	119+58.34	2.0	10.5	6" STD.

PCC Shoulder

Shoulder Jointing:
Longitudinal joint: BT-2
Transverse Joints: C at 17' spacing

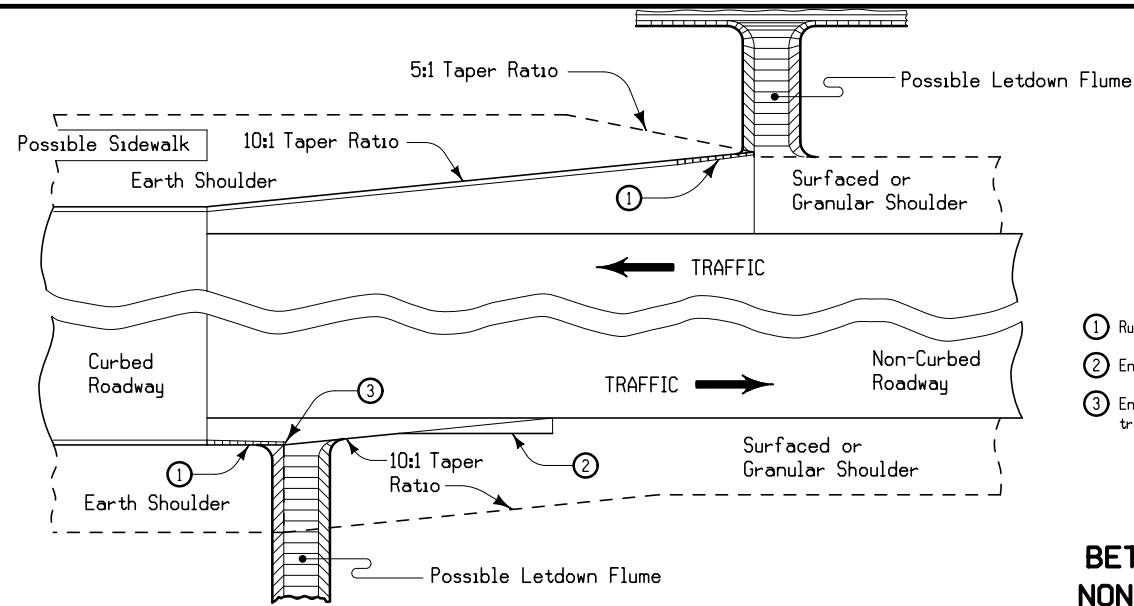
2_P_FullPCC_04-15-25			
STATION TO STATION		(P) Feet	(R) Feet
118+98.84	119+18.84	4.0	12.5-10.5
119+58.34	119+64.71	2.0	10.5

HMA Shoulder

Shoulder Jointing:
Longitudinal joint: B

2_P_HMA_04-21-20			
STATION TO STATION		(P) Feet	(R) Feet
119+64.71	119+67.97	2.0	10.5
119+78.19	119+89.36	2.0	10.5
119+89.36	120+00.77	2.0-0.0	10.5

6147
10-20-15



**TRANSITION
BETWEEN CURBED AND
NON-CURBED ROADWAYS**

SURVEY SYMBOLS

	Interstate Highway Symbol		Septic Tank
	U.S. Highway Symbol		Cistern
	Iowa Highway Symbol		L.P. Gas Tank (No Footing)
	County Road Highway Symbol		Underground Storage Tank
	Evergreen Tree		Latrine
	Deciduous Tree		Satellite TV Dish
	Fruit Tree		Water Hook Up
	Shrub (Bushes)		Radio Tower
	Timber		Tower Anchor
	Hedge		Guardrail (Beam or Cable)
	Stump		Guard Post (one or two)
	Swamp		Guard Post (over two)
	Rock Outcrop		Filler Pipe
	Broken Concrete		Gas Valve
	Revetment (Rip Rap)		Water Valve
	Cemetery		Speed Limit Sign
	Grave		Mile Marker Post
	Cave		SIGN Sign
	Sink Hole		Traffic Signal Control Box
	Board Fence		Rail Road Signal Control Box
	Chain Link or Security Fence		Telephone Switch Box
	Wire Fence		Electric Box
	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		
	Water Hvdrant (Rural)		

UTILITY LEGEND

(CLECIA) WINDSTREAM ENTERPRISE
Company name : WINDSTREAM ENTERPRISE
Design contact: CLEC LOCATE DESK
Phone: 8009413430
Email: wci.clec.locate@windstream.com

(CTLIA01) CENTURYLINK
Company name : CENTURYLINK
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Phone: 9185470147
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Company name : IOWA COMMUNICATIONS NETWORK
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(LBIA07) LONG LINES BROADBAND
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Email: miles.patton@longlines.biz

(MAFR2) MIDAMER-FIBER
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(MD5E) MIDAMER-ELEC
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Design contact: PETER ROOS
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Email: pmroos@midamerican.com

(MD5G) MIDAMER-GAS
Company name : MIDAMER-GAS
Design contact: Heather Murphy
Phone: 7125486157
Email: HRMURPHY@MIDAMERICAN.COM

(MFS) WINDSTREAM COMMUNICATIONS
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Design contact: LOCATE DESK
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Email: LOCATE_DESK@WINDSTREAM.COM

(NT3) PREMIER COMMUNICATIONS
Company name : PREMIER COMMUNICATIONS
Design contact: Jake Van Roekel
Phone: 7127223451
Email: jakevr@mypremieronline.com

(OCR) OSCEOLA COUNTY RURAL WATER
Company name : OSCEOLA COUNTY RURAL WATER
Design contact: Douglas Westerman
Phone: 7127356795
Email: orwsdoug@windstream.net

(SDC) SHELDON, CITY OF
Company name : SHELDON, CITY OF
Design contact: Todd Uhl
Phone: 7123244651
Email: tuhl@cityofsheldon.com

(SSD) SHELDON COMMUNITY SCHOOL
Company name : SHELDON COMMUNITY SCHOOL
Design contact: KASEY TRAMPEL
Phone: 7123242445
Email: KASEY.TRAMPEL@SHELDONSCHOOLS.COM

(W25) IOWA DEPARTMENT OF TRANSPORTATION
Company name : IOWA DEPARTMENT OF TRANSPORTATION
Design contact: LANCE SCHLUMBOHM
Phone: 7122610053
Email: LANCE.SCHLUMBOHM@DOT.IOWA.GOV

(ZAY) ZAYO GROUP LLC
Company name : ZAYO GROUP LLC
Design contact: STEVEN SENGER
Phone: 6122108036
Email: ZAYO.RELO.IOWA@ZAYO.COM

PLAN VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK	Design Color No.		
Green	(2)		Existing Topographic Features and Labels
Blue	(1)		Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Magenta	(5)		Existing Utilities
SHADING	Design Color No.		
Lavender	(9)		Temporary Pavement Shading
Gray, Dark	(112)		Proposed HMA Pavement Shading
Orange	(6)		Proposed Granular Shading
Orange	(70)		Proposed Shoulder Granular Shading
Yellow	(132)		Proposed Shoulder Paved Partial Depth Shading
Brown, Light	(236)		Grading Shading
Orange, Light	(134)		Proposed Granular Entrance Shading
Gray, Light	(48)		Proposed PCC 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

RIGHT-OF-WAY LEGEND

	Station		Survey Line
	Section Corner		Proposed Right-of-Way
	Ground Line Intercept		Existing Right of Way
	Saw Cut		Existing and Proposed Right-of-Way
	Guardrail		Easement and Existing Right-of-Way
	Trench Drain		Easement (Temporary)
	HighTension Cable Guardrail		Easement
	Sheet Pile		C/A Access Control
	Pavement Removal		Property Line
	Clearing & Grubbing Area		



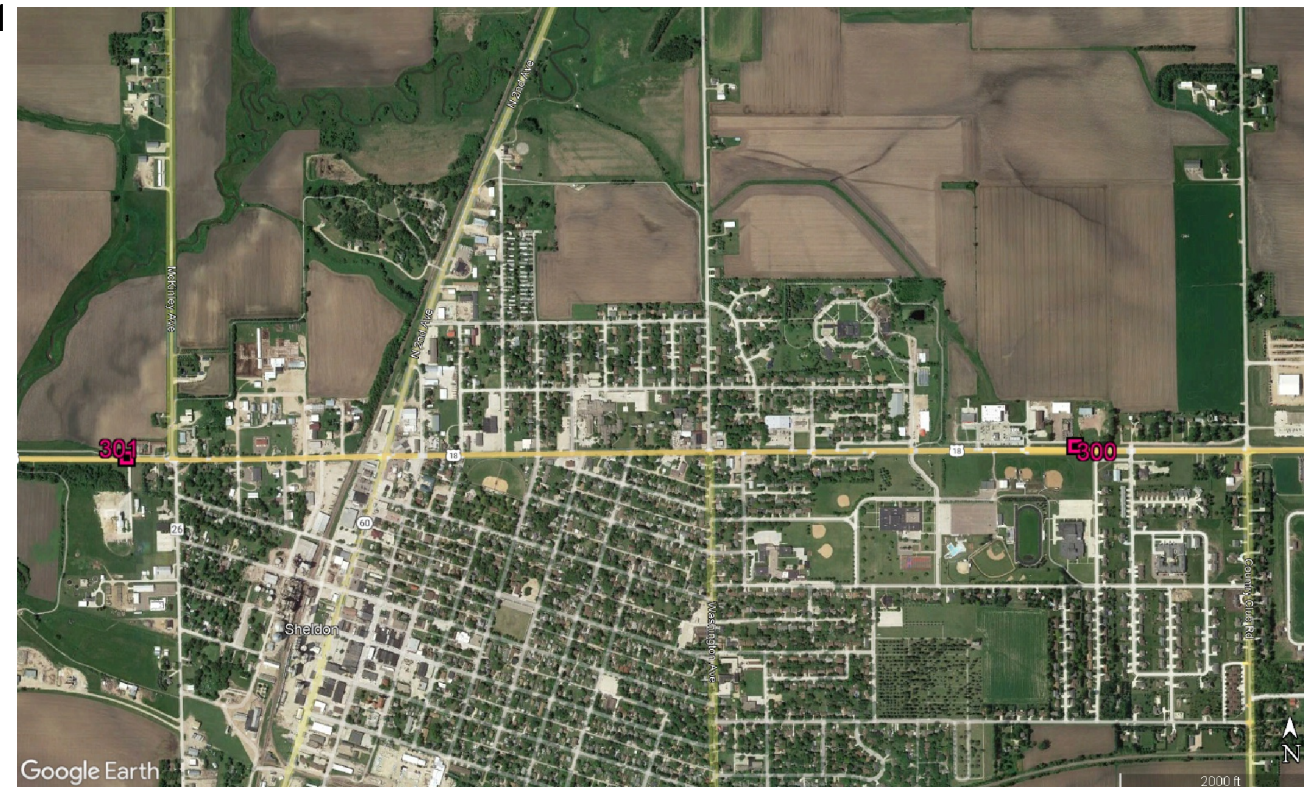
Survey Information
County: O'Brien
Project Number: NHSN-018-2(137)--2R-71
Location: In Sheldon (ADA - District 3)
Type of Work: PCC Sidewalk/Trail

NOTE: The information included in this sheet is to enable locating ADA horizontal only stake points. Any other use of this information exceeds the intent of it. This information is provided to promote the efficient use of the Iowa Real-Time Network (IaRTN) with Global Navigation Satellite System (GNSS) equipment configured to the project coordinate system to stake out horizontal design point locations. Use of the IaRTN with GNSS equipment is used in place of survey control marks at the project site. The IaRTN reference stations are in essence the project control marks.

The project datum for this survey is NAD83(2011) for Epoch 2010.00 (IaRTN 2019 Adjustment). The geographic coordinate system used to perform the pre-design survey is Iowa Regional Coordinate System Zone 01 (U.S. Survey Foot). This coordinate system was used for design and must be configured into GNSS equipment to stake points for this project. Two local marks were used during the pre-design survey to validate GNSS equipment results. These marks can be used to validate results while staking design points.

ELEVATION NOTE: ADA construction requires laying out plan slopes from the gutter line of the roadway. Therefore elevation datum for each ADA ramp is the gutter. Because elevation datum to be used is an existing topographic feature at the date of construction a predetermined elevation of that feature or local benchmark elevations are irrelevant and not included with this information.

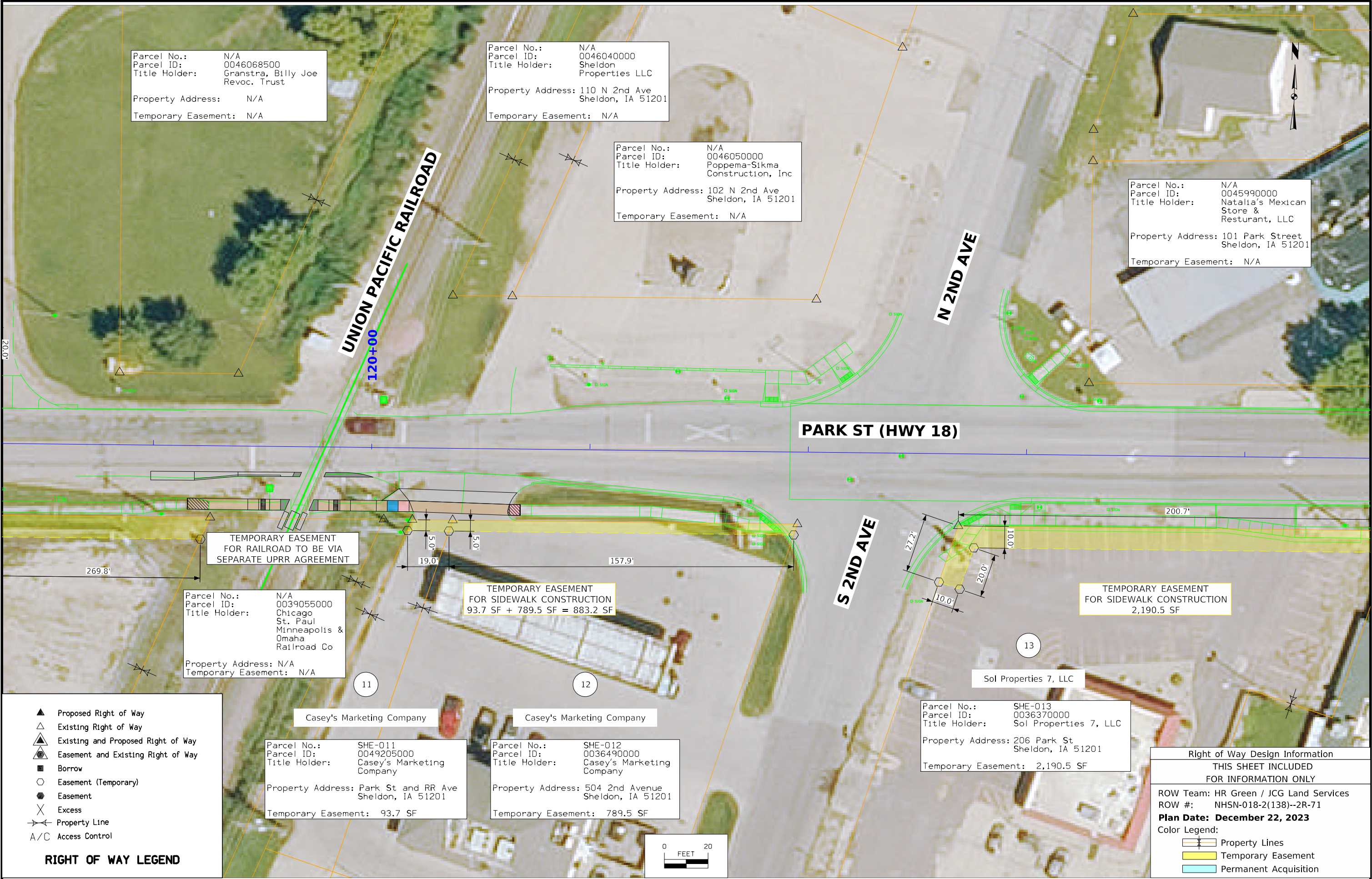
Validation Point 300
Description SET 5/8 RE ROD
IaRCS ZONE 01
N=9595500.906
E=11345683.13



Validation Point 301
Description SET 5/8 RE ROD
IaRCS ZONE 01
N=9595454.316
E=11336292.12

ALIGNMENT COORDINATES

LINE NO.	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
1.0	PI											100+00.00	9595419.71	11336596.19						
2.0	PI											103+62.40	9595414.80	11336958.55						
3.0	PI											105+66.19	9595415.75	11337162.34						
4.0	PI											107+99.73	9595418.71	11337395.87						
5.0	PI											111+21.49	9595422.21	11337717.61						
6.0	PI											118+16.74	9595431.19	11338412.79						
7.0	PI											118+74.29	9595431.88	11338470.34						
8.0	PI											120+43.06	9595434.76	11338639.08						
9.0	PI											121+75.80	9595436.34	11338771.82						
10.0	PI											123+04.38	9595437.97	11338900.39						
11.0	PI											124+51.54	9595439.81	11339047.54						
12.0	PI											129+71.46	9595445.52	11339567.43						
13.0	PI											133+87.81	9595447.46	11339983.77						
14.0	PI											138+63.43	9595449.86	11340459.38						
15.0	PI											143+60.11	9595452.31	11340956.06						
16.0	PI											152+29.42	9595456.26	11341825.36						
17.0	PI											159+33.52	9595455.05	11342529.46						
18.0	PI											167+00.03	9595450.71	11343295.96						
19.0	PI											169+59.33	9595453.40	11343555.25						
20.0	PI											174+29.94	9595453.40	11344025.86						
21.0	PI											175+66.03	9595452.44	11344161.95						
22.0	PI											179+34.29	9595449.86	11344530.19						
23.0	PI											186+46.08	9595446.01	11345241.97						
24.0	PI											186+74.72	9595445.85	11345270.61						
25.0	PI											195+03.85	9595441.34	11346099.72						
26.0	PI											203+24.77	9595438.51	11346920.64						
27.0	PI											207+36.34	9595435.65	11347332.20						
28.0	PI											208+27.19	9595435.02	11347423.05						
29.0	PI											213+69.60	9595431.26	11347965.44						
30.0	PI											219+79.45	9595428.97	11348575.29						
31.0	PI											226+04.08	9595426.17	11349199.91						
32.0	PI											229+86.60	9595423.75	11349582.43						
33.0	PI											232+69.58	9595423.75	11349865.41						
34.0	PI											236+23.46	9595422.27	11350219.29						
35.0	PI											241+70.29	9595421.54	11350766.11						
36.0	PI											246+38.59	9595420.26	11351234.42						



TRAFFIC CONTROL PLAN

1. During construction, maintain traffic on US 18 and sideroads at all times.
2. Traffic Control on this project shall be found in accordance with the TC series of the Standard Road Plans found in Tab. 105-4 in the C Sheets and/or appropriate Detail Sheets included in the plans.
3. For construction of sidewalk, curb ramps, and curb and gutter, utilize Standard Road Plans TC-202.
4. The Contractor shall coordinate Traffic Control with other projects in the area, including any railroad improvements related to this project completed by others.
5. The Contractor is required to furnish and plan any and all Traffic Control required to close the sidewalks per Standard Specifications Section 2518 and 2528 and Standard Road Plan TC-601. Payment for sidewalk closure barricades shall be incidental to Traffic Control.
6. Work may be prohibited during the following events and work area must be free of construction equipment and barricaded with construction fencing.

Special Events in Sheldon:

A. Risefest, June 19-20, 2026

B. Fireworks Celebration, July 3, 2026

C. Celebration Days, September 1-5, 2026
7. Contractor to maintain all current traffic control conditions with temporary signage, as required, until permanent signage has been installed.

108_26A
8/15/22

STAGING NOTES

1. The Contractor shall maintain access to all businesses during construction at all times unless subsequent agreements have been reached between the Contractor and the business owner. The Contractor must notify all businesses at least three (3) business days prior to construction in front of a business.
2. In project areas with proposed ADA pedestrian ramp work, the Contractor is strongly advised to first complete any other work, coordinate the completion of railroad work by others, which may negatively impact the proposed final elevations and tolerances for pedestrian ramps, sidewalks, and associated street crossing paths.

111_01
10/14/22

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

113_02 8/15/22 PEDESTRIAN PATH CLOSURES Refer to TC-601. *Assumes 6 foot wide barricade. Closures may need to be removed and re-established.					
Line No.	Location	Side	Width of Closure (FT)	Type III Barricades* (No.)	Remarks
1.0	US 18	Right	5.0	2	Mid-Block Closure Sta. 119+15.66 to 120+68.45

104_05B
3/6/25

STORM SEWER

(1) Diameter or equivalent diameter
* Bid Item
** For SW-545
Design Length, Slope, and Flowlines are calculated from inside wall to inside wall along CL of pipe. An additional 2 ft length is added to each end of the Design Length to account for estimated length to center of structures.

No.	Location Station	Offset	Type or Standard Road Plan*	Form Grade Elev.	Bottom Well Elev.	Extension Length**	Notes	Line Number	Intake / Utility Access No. From	Intake / Utility Access No. To	Class 'D'	Pipe Size (1) (IN)	Bid Length* (FT)	Design Length (FT)	Slope %	Connected Pipe Joint (DR-121)	Flow Line Inlet Elev.	Flow Line Outlet Elev.	Flow Line Other Elev.	Pipe Profile Sheet No.	Notes
S-02	120+12.20	22.4	SW-512 (24")	1409.00	1405.50		Casting Type 4B (SW-604)														
								P-02	S-02	S-01	2000	15.0	13	10.9	1.4		1406.00	1405.85		M.3	
S-01	119+98.69	19.3	SW-401 (60")	1409.22	1403.31		Refer to SW-211 for Existing Pipe Connection														

SURVEY SYMBOLS

	Interstate Highway Symbol		Septic Tank
	U.S. Highway Symbol		Cistern
	Iowa Highway Symbol		L.P. Gas Tank (No Footing)
	County Road Highway Symbol		Underground Storage Tank
	Evergreen Tree		Latrine
	Deciduous Tree		Satellite TV Dish
	Fruit Tree		Water Hook Up
	Shrub (Bushes)		Radio Tower
	Timber		Tower Anchor
	Hedge		Guardrail (Beam or Cable)
	Stump		Guard Post (one or two)
	Swamp		Guard Post (over two)
	Rock Outcrop		Filler Pipe
	Broken Concrete		Gas Valve
	Revetment (Rip Rap)		Water Valve
	Cemetery		Speed Limit Sign
	Grave		Mile Marker Post
	Cave		Sign
	Sink Hole		Traffic Signal Control Box
	Board Fence		Rail Road Signal Control Box
	Chain Link or Security Fence		Telephone Switch Box
	Wire Fence		Electric Box
	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		
	Water Hydrant (Rural)		

UTILITY LEGEND

(CLECIA) WINDSTREAM ENTERPRISE Company name : WINDSTREAM ENTERPRISE Design contact: CLEC LOCATE DESK Phone: 8009413430 Email: wci.clec.locate@windstream.com
(CTLIA01) CENTURYLINK Company name : CENTURYLINK Design contact: SADIE HULL Phone: 9185470147 Email: sadie.hull@lumen.com
(ICN) IOWA COMMUNICATIONS NETWORK Company name : IOWA COMMUNICATIONS NETWORK Design contact: DAVE AUGSPURGER Phone: 5157254604 Email: icnoutsideplantiowaonecall@iowa.gov
(LBIA07) LONG LINES BROADBAND Company name : LONG LINES BROADBAND Design contact: Miles Patton Phone: 7122715550 Email: miles.patton@longlines.biz
(MAFR2) MIDAMER-FIBER Company name : MIDAMER-FIBER Design contact: Telecom On Call Phone: 5152812313 Email: telecomoncall@midamerican.com
(MD5E) MIDAMER-ELEC Company name : MIDAMER-ELEC Design contact: PETER ROOS Phone: 7122777675 Email: pmroos@midamerican.com
(MD5G) MIDAMER-GAS Company name : MIDAMER-GAS Design contact: Heather Murphy Phone: 7125486157 Email: HRMURPHY@MIDAMERICAN.COM
(MFS) WINDSTREAM COMMUNICATIONS Company name : WINDSTREAM COMMUNICATIONS Design contact: LOCATE DESK Phone: 8002891901 Email: LOCATE.DESK@WINDSTREAM.COM
(NT3) PREMIER COMMUNICATIONS Company name : PREMIER COMMUNICATIONS Design contact: Jake Van Roekel Phone: 7127223451 Email: jakevr@mypremieronline.com
(OCR) OSCEOLA COUNTY RURAL WATER Company name : OSCEOLA COUNTY RURAL WATER Design contact: Douglas Westerman Phone: 7127356795 Email: orwsdoug@windstream.net
(SDC) SHELTON, CITY OF Company name : SHELTON, CITY OF Design contact: Todd Uhl Phone: 7123244651 Email: tuhl@cityofsheldon.com
(SSD) SHELTON COMMUNITY SCHOOL Company name : SHELTON COMMUNITY SCHOOL Design contact: KASEY TRAMPEL Phone: 7123242445 Email: KASEY.TRAMPEL@SHELDONSCHOOLS.COM
(W25) IOWA DEPARTMENT OF TRANSPORTATION Company name : IOWA DEPARTMENT OF TRANSPORTATION Design contact: LANCE SCHLUMBOHM Phone: 7122610053 Email: LANCE.SCHLUMBOHM@DOT.IOWA.GOV
(ZAY) ZAYO GROUP LLC Company name : ZAYO GROUP LLC Design contact: STEVEN SENGER Phone: 6122108036 Email: ZAYO.RELO.IOWA@ZAYO.COM

PLAN VIEW COLOR LEGEND OF STORM SEWER SHEETS

LINework	Design Color No.	
Green	(2)	Existing Topographic Features, Utilities, and Labels
Blue	(1)	Proposed Storm Sewer Details, Alignment, Stationing, Tic Marks, and Alignment Annotation
Yellow, Dark	(234)	Existing Storm Sewer Pipe
Pink	(13)	Existing Storm Sewer Structure
Red	(3)	Proposed Storm Sewer Pipe
Black	(0)	Proposed Storm Sewer Structure
SHADING	Design Color No.	
Gray, Light	(48)	Proposed PCC Shading
Gray, Dark	(80)	Proposed HMA Shading
Tan	(8)	Proposed Sidewalk Shading
Blue, Light	(230)	Proposed Sidewalk Landing Shading
Pink	(11)	Proposed Sidewalk Ramp Shading

PROFILE VIEW COLOR LEGEND OF STORM SEWER SHEETS

LINework	Design Color No.	
Green, Dark	(10)	Existing Ground Line Profile and Existing Utilities Information
Red	(3)	Proposed Pipes
Blue, Light	(230)	Proposed Intakes and Stuctures
Yellow, Dark	(234)	Existing Storm Sewer Pipe

PLAN VIEW LINE STYLE LEGEND OF STORM SEWER SHEETS

	Plug and Abandon Existing Pipe or Structure
	Removal of Existing Pipe or Structure
	Previously Constructed Pipe or Structure
	Direction of Pipe Flow

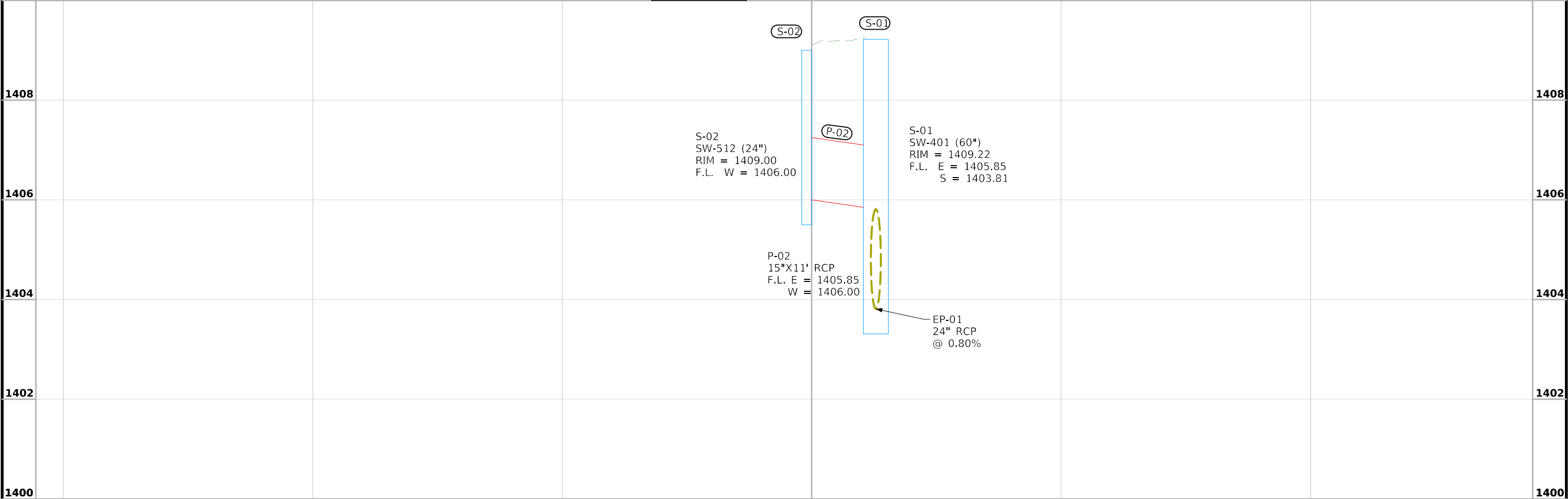
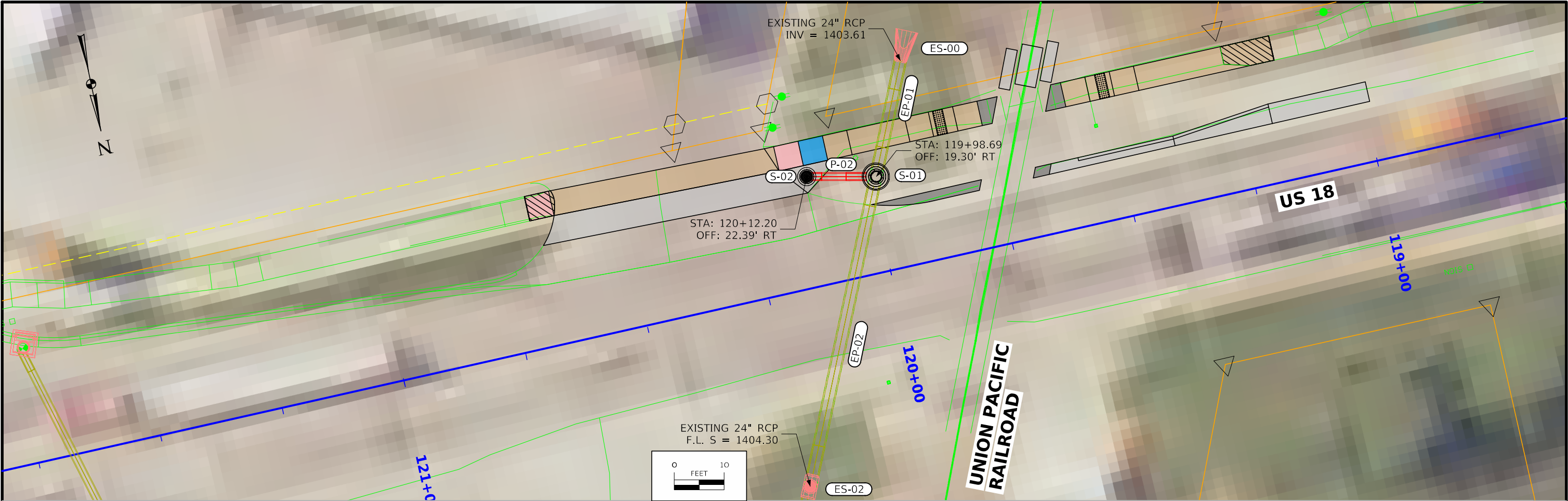
PROFILE VIEW LINE STYLE LEGEND OF STORM SEWER SHEETS

	Existing Ground
	Proposed Ground
	Previously Constructed Pipe or Structure
	Proposed Pipe or Structure

	Reference Point
	Station
	Survey Line
	Section Corner
	Ground Line Intercept
	Saw Cut
	Guardrail
	Clearing & Grubbing Area
	Pavement Removal
	Proposed Right-of-Way
	Existing and Proposed Right-of-Way
	Easement and Existing Right-of-Way
	Borrow
	Easement (Temporary)
	Easement
	Excess
	Access Control

STORM SEWER
LEGEND AND SYMBOL
INFORMATION SHEET

(COVERS SHEET SERIES M)





FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT / HR Green, Inc.	O'BRIEN COUNTY	PROJECT NUMBER NHSN-018-2(161)--2R-71	SHEET NUMBER M.4
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PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE							
Possible Standards: EC-204							
Line No.	Station From	Station To	Side	Sediment Control Device Type	Diameter Size	Length (LF)	Remarks
1.0	118+95.18	119+04.90	Right	Perimeter and Slope	9 inch	10.00	
2.0	119+04.90	119+51.27	Right	Perimeter and Slope	9 inch	50.00	
3.0	119+09.29	119+14.59	Right	Perimeter and Slope	9 inch	10.00	
4.0	119+14.59	119+49.59	Right	Perimeter and Slope	9 inch	40.00	
5.0	119+49.59	119+56.01	Right	Perimeter and Slope	9 inch	10.00	Railroad coordination needed
6.0	120+65.38	120+72.82	Right	Perimeter and Slope	9 inch	10.00	
7.0	119+67.83	119+77.27	Right	Perimeter and Slope	9 inch	10.00	Railroad coordination needed
8.0	119+73.60	120+04.54	Right	Perimeter and Slope	9 inch	40.00	
9.0	119+77.27	120+07.27	Right	Perimeter and Slope	9 inch	30.00	
10.0	119+78.19	120+00.77	Right	Perimeter and Slope	9 inch	30.00	
11.0	119+82.30	119+92.29	Right	Perimeter and Slope	9 inch	20.00	Pipe Apron Perimeter Control
12.0	120+00.77	120+11.16	Right	Perimeter and Slope	9 inch	20.00	
13.0	120+04.54	120+10.85	Right	Perimeter and Slope	9 inch	10.00	
14.0	120+07.27	120+15.71	Right	Perimeter and Slope	9 inch	10.00	

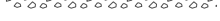
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10/15/24

232_03B 9/28/22 EROSION CONTROL (URBAN SEEDING) Area to be seeded is estimated to be less than 1 acre. If the Contractor determines the area exceeds 2 acres, notify the Engineer. Approved quantity in excess of 2 acres will be paid for as extra work according to Article 1109.03,B of the Standard Specifications. Following the completion of work in a disturbed area and according to the seeding dates in Section 2601 of the Standard Specifications, place seed, fertilizer, and mulch on the disturbed area as follows: Place seed and fertilize according to the requirements of Article 2601.03,C,4 and Section 4169 of the Standard Specifications. Place mulch according to the requirements of Articles 2601.03,E,2,a and 4169.07,A of the Standard Specifications. Preparing the seedbed, furnishing and applying seed, fertilizer, and mulch are incidental to mobilization and will not be paid for separately.									
FILE NO.	ENGLISH	DESIGN TEAM	Iowa DOT / HR Green. Inc.		O'BRIEN COUNTY	PROJECT NUMBER	NHSN-018-2(161)--2R-71	SHEET NUMBER	RC.2

LINE STYLE LEGEND OF LANDSCAPE SHEETS	
LINESTYLE	Design Element
-----	Living Snow Fence Single Row
-----	Living Snow Fence Double Row
-----	Mechanical Edge

CELL LEGEND OF LANDSCAPE SHEETS		
CELL	Design Element	Plant Diameter
⊕	Clearing	
⊙	Proposed Shrub	6 FT
⊙	Proposed Understory Tree	12 FT
⊙	Proposed Conifer Tree	18 FT
⊕	Proposed Overstory Tree	30 FT

PATTERN LEGEND OF LANDSCAPE SHEETS	
	Brush Clearing
	Spray Area
	Clearing & Grubbing

LINE STYLE LEGEND OF EROSION CONTROL SHEETS	
LINESTYLE	Design Element
	Silt Fence
	Perimeter and Slope Sediment Control Device (9")
	Perimeter and Slope Sediment Control Device (12")
	Perimeter and Slope Sediment Control Device (20")
	Open-Throat Curb Intake Sediment Filter
	Concentrated Flow
	Rock Check and Rock Check Dam
	Sheet Flow

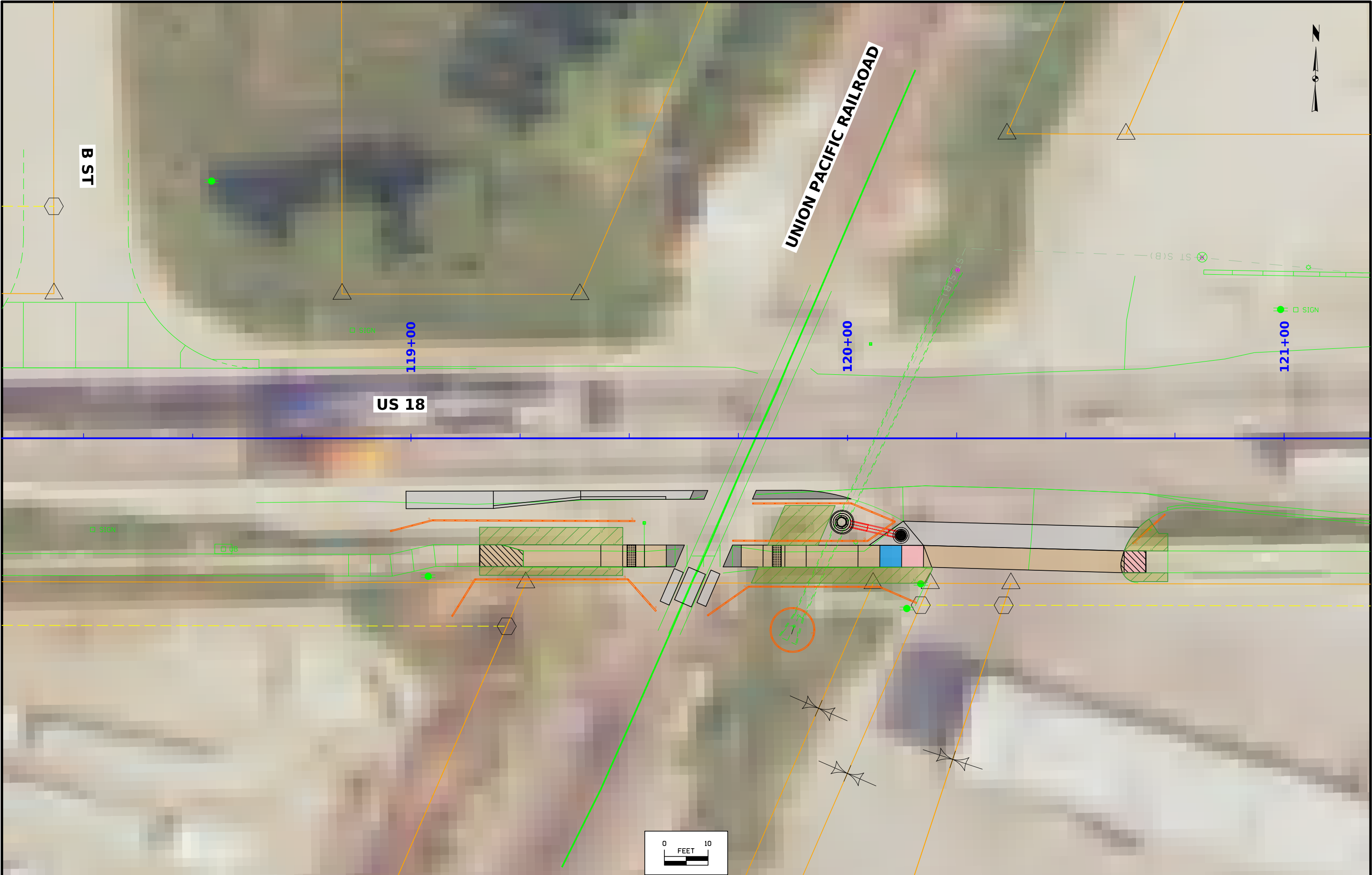
CELL LEGEND OF EROSION CONTROL SHEETS	
CELL	Design Element
	Temporary Sediment Control basin
	Erosion Control for Circular Intake or Manhole Well
	Erosion Control for Rectangular Intake or Manhole Well
	Grate Intake Sediment Filter Bag
	Silt Basin
	Silt Fence Tail
	Stormwater Drainage Basin Discharge Point

PLAN VIEW COLOR LEGEND OF EROSION CONTROL 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	
Black	(0)		Permanent Erosion Control Features	
Blaze Orange	(222)		Temporary Erosion Control Features	
SHADING	Design Color No.		Transparency	
Citron	(234)		Mulching, All Types	50%
Light Brown	(238)		Special Ditch Control, Wood Excelsior Mat	0%
Grass Green	(233)		8FT Mow Strip	50%
Red	(3)		Delineates Restricted Areas	0%

PATTERN LEGEND OF EROSION CONTROL SHEETS	
	Seeding and Fertilizing
	Seeding and Fertilizing (Rural)
	Seeding and Fertilizing (Urban)
	Native Grass Seeding
	Salt Tolerant Seeding
	Wetland Grass Seeding
	Wildflower Seeding
	Sodding
	Turf Reinforcement Mat Type 1
	Turf Reinforcement Mat Type 2
	Turf Reinforcement Mat Type 3
	Turf Reinforcement Mat Type 4
	Slope Protection, Wood Excelsior Mat
	Transition Mat
	Rock Features, Permanent
	Rock Features, Temporary

EROSION CONTROL
LEGEND AND SYMBOL
INFORMATION SHEET

(COVERS SHEET SERIES R)



SURVEY SYMBOLS

	Interstate Highway Symbol		Septic Tank
	U.S. Highway Symbol		Cistern
	Iowa Highway Symbol		L.P. Gas Tank (No Footing)
	County Road Highway Symbol		Underground Storage Tank
	Evergreen Tree		Latrine
	Deciduous Tree		Satellite TV Dish
	Fruit Tree		Water Hook Up
	Shrub (Bushes)		Radio Tower
	Timber		Tower Anchor
	Hedge		Guardrail (Beam or Cable)
	Stump		Guard Post (one or two)
	Swamp		Guard Post (over two)
	Rock Outcrop		Filler Pipe
	Broken Concrete		Gas Valve
	Revetment (Rip Rap)		Water Valve
	Cemetery		Speed Limit Sign
	Grave		Mile Marker Post
	Cave		Sign
	Sink Hole		Traffic Signal Control Box
	Board Fence		Rail Road Signal Control Box
	Chain Link or Security Fence		Telephone Switch Box
	Wire Fence		Electric Box
	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		
	Water Hydrant (Rural)		

UTILITY LEGEND

(CLECIA) WINDSTREAM ENTERPRISE
Company name : WINDSTREAM ENTERPRISE
Design contact: CLEC LOCATE DESK
Phone: 8009413430
Email: wci.clec.locate@windstream.com

(CTLIA01) CENTURYLINK
Company name : CENTURYLINK
Design contact: SADIE HULL
Phone: 9185470147
Email: sadie.hull@lumen.com

(ICN) IOWA COMMUNICATIONS NETWORK
Company name : IOWA COMMUNICATIONS NETWORK
Design contact: DAVE AUGSPURGER
Phone: 5157254604
Email: icnoutsideplantiowaonecall@iowa.gov

(LBIA07) LONG LINES BROADBAND
Company name : LONG LINES BROADBAND
Design contact: Miles Patton
Phone: 7122715550
Email: miles.patton@longlines.biz

(MAFR2) MIDAMER-FIBER
Company name : MIDAMER-FIBER
Design contact: Telecom On Call
Phone: 5152812313
Email: telecomoncall@midamerican.com

(MD5E) MIDAMER-ELEC
Company name : MIDAMER-ELEC
Design contact: PETER ROOS
Phone: 7122777675
Email: pmroos@midamerican.com

(MD5G) MIDAMER-GAS
Company name : MIDAMER-GAS
Design contact: Heather Murphy
Phone: 7125486157
Email: HRMURPHY@MIDAMERICAN.COM

(MFS) WINDSTREAM COMMUNICATIONS
Company name : WINDSTREAM COMMUNICATIONS
Design contact: LOCATE DESK
Phone: 8002891901
Email: LOCATE_DESK@WINDSTREAM.COM

(NT3) PREMIER COMMUNICATIONS
Company name : PREMIER COMMUNICATIONS
Design contact: Jake Van Roekel
Phone: 7127223451
Email: jakevr@mypremieronline.com

(OCR) OSCEOLA COUNTY RURAL WATER
Company name : OSCEOLA COUNTY RURAL WATER
Design contact: Douglas Westerman
Phone: 7127356795
Email: orwsdoug@windstream.net

(SDC) SHELDON, CITY OF
Company name : SHELDON, CITY OF
Design contact: Todd Uhl
Phone: 7123244651
Email: tuhl@cityofsheldon.com

(SSD) SHELDON COMMUNITY SCHOOL
Company name : SHELDON COMMUNITY SCHOOL
Design contact: KASEY TRAMPEL
Phone: 7123242445
Email: KASEY.TRAMPEL@SHELDONSCHOOLS.COM

(W25) IOWA DEPARTMENT OF TRANSPORTATION
Company name : IOWA DEPARTMENT OF TRANSPORTATION
Design contact: LANCE SCHLUMBOHM
Phone: 7122610053
Email: LANCE.SCHLUMBOHM@DOT.IOWA.GOV

(ZAY) ZAYO GROUP LLC
Company name : ZAYO GROUP LLC
Design contact: STEVEN SENGER
Phone: 6122108036
Email: ZAYO.RELO.IOWA@ZAYO.COM

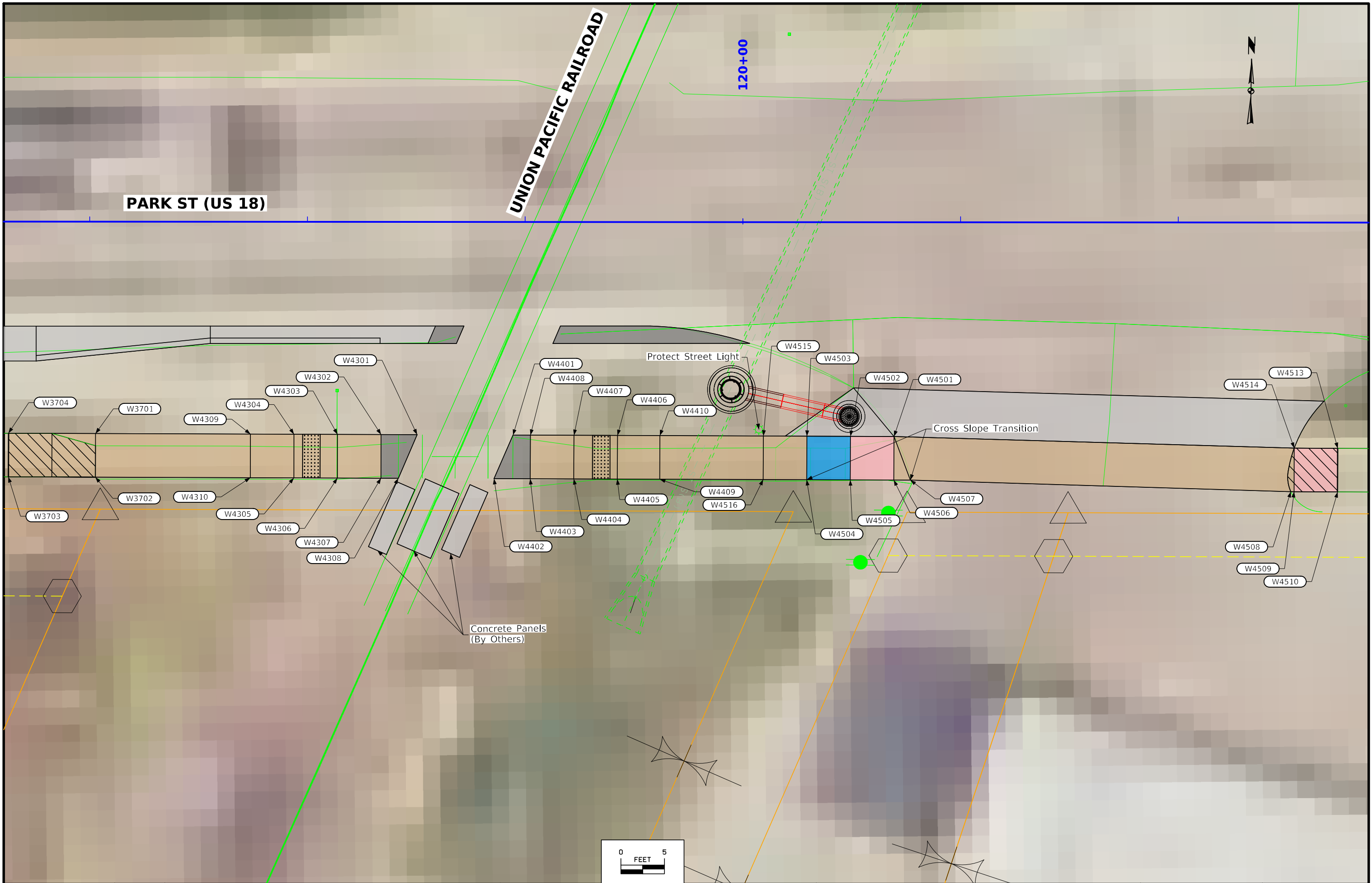
PLAN VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK		Design Color No.
Green	(2)	 Existing Topographic Features and Labels
Blue	(1)	 Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Magenta	(5)	 Existing Utilities
SHADING		Design Color No.
Tan	(8)	 Proposed Sidewalk Shading
Blue, Light	(230)	 Proposed Sidewalk Landing Shading
Pink	(11)	 Proposed Sidewalk Ramp Shading
Magenta	(5)	 Detectable Warning
Yellow	(4)	 Highlight for Critical Notes or Features
Red	(3)	 Delineates Restricted Areas
Lavender	(9)	 Temporary Pavement Shading
Gray, Light	(48)	 Proposed PCC Pavement Shading
Orange	(6)	 Proposed Granular Shading
Gray, Dark	(112)	 Proposed HMA Pavement Shading
Brown, Light	(236)	 Grading Shading

RIGHT-OF-WAY LEGEND

RIGHT OF WAY LEGEND

	Survey Line		Proposed Right-of-Way
	Section Corner		Existing and Proposed Right-of-Way
	Ground Line Intercept		Easement and Existing Right-of-Way
	Saw Cut		Borrow
	Guardrail		Easement (Temporary)
	Clearing & Grubbing Area		Easement
	Pavement Removal		Excess
			Access Control



SIDEWALK COMPLIANCE

See S Sheets

113_10
10/16/24

- * Does not include curb
1. Staking required by Contracting Authority per Article 2511.03 of the Standard Specifications.
2. Refer to tabulation 113-01 for bid quantities.

From Point	Ending Point	Sidewalk Designation	Sidewalk Thickness (IN)	Distance* (FT)	Change in Elevation (FT)	Slope (%)	Acceptable Constructed Range	Staking Required? (1)	Measured Slope (%)	Initials	Remarks
W3701	W3702	Sidewalk Cross Slope	4	5.00	-0.06	-1.2					
W3702	W4310	Sidewalk Running Slope	4	17.79	0.24	1.3					
W4310	W4309	Sidewalk Cross Slope	4	5.00	0.05	1.0					
W4309	W3701	Sidewalk Running Slope	4	17.79	-0.23	-1.3					
W4310	W4305	Sidewalk Running Slope	4	5.00	0.20	4.0					
W4305	W4304	Sidewalk Cross Slope	4	5.00	0.05	1.0					
W4304	W4309	Sidewalk Running Slope	4	5.00	-0.20	-4.0					
W4305	W4306	Sidewalk Running Slope	4	5.00	0.20	4.0					
W4306	W4303	Sidewalk Cross Slope	4	5.00	0.05	1.0					
W4303	W4304	Sidewalk Running Slope	4	5.00	-0.20	-4.0					
W4306	W4307	Sidewalk Running Slope	4	5.00	-0.01	-0.2					
W4307	W4302	Sidewalk Cross Slope	4	5.00	0.21	4.2					Asphalt Approach Panel
W4302	W4303	Sidewalk Running Slope	4	5.00	-0.15	-3.0					
W4307	W4308	Sidewalk Running Slope	4	2.00	0.06	3.0					Asphalt Approach Panel
W4308	W4301	Match Existing Cross Slope	4	5.44	0.03	0.6					Asphalt Approach Panel
W4301	W4302	Sidewalk Running Slope	4	4.14	-0.04	-1.0					Asphalt Approach Panel
W4401	W4402	Match Existing Cross Slope	4	5.45	-0.05	-0.9					Asphalt Approach Panel
W4402	W4403	Sidewalk Running Slope	4	4.16	-0.02	-0.5					Asphalt Approach Panel
W4403	W4408	Sidewalk Cross Slope	4	5.00	0.06	1.2					Asphalt Approach Panel
W4408	W4401	Sidewalk Running Slope	4	2.00	-0.01	-0.5					Asphalt Approach Panel
W4403	W4404	Sidewalk Running Slope	4	5.00	-0.05	-1.0					
W4404	W4407	Sidewalk Cross Slope	4	5.00	0.06	1.2					
W4407	W4408	Sidewalk Running Slope	4	5.00	0.05	1.0					
W4404	W4405	Sidewalk Running Slope	4	5.00	-0.05	-1.0					
W4405	W4406	Sidewalk Cross Slope	4	5.00	0.06	1.2					
W4406	W4407	Sidewalk Running Slope	4	5.00	0.05	1.0					
W4405	W4409	Sidewalk Running Slope	4	5.00	-0.07	-1.4					
W4409	W4410	Sidewalk Cross Slope	4	5.00	0.05	1.0					
W4410	W4406	Sidewalk Running Slope	4	5.00	0.08	1.6					
W4409	W4516	Sidewalk Running Slope	4	11.88	-0.11	-0.9					
W4516	W4515	Sidewalk Cross Slope	4	5.00	0.05	1.0					
W4515	W4410	Sidewalk Running Slope	4	11.88	0.11	0.9					
W4516	W4504	Sidewalk Running Slope	4	5.00	-0.06	-1.2					
W4504	W4503	Sidewalk Cross Slope	4	5.00	-0.05	-1.0					
W4503	W4515	Sidewalk Running Slope	4	5.00	0.06	1.2					
W4504	W4505	Landing/Turning Space	4	5.00	-0.04	-0.8					
W4505	W4502	Landing/Turning Space	4	5.00	0.05	1.0					
W4502	W4503	Landing/Turning Space	4	5.00	0.04	0.8					
W4505	W4506	Ramp Running Slope	6	5.00	0.31	6.2					
W4506	W4501	Ramp Cross Slope	6	5.00	-0.04	-0.8					
W4501	W4502	Ramp Running Slope	6	5.00	-0.22	-4.4					
W4506	W4507	Ramp Cross Slope	6	1.90	-0.01	-0.5					
W4507	W4501	Ramp Cross Slope	6	5.35	-0.03	-0.6					Casey's Driveway
W4507	W4508	Sidewalk Running Slope	6	43.72	0.46	1.1					Casey's Driveway
W4508	W4514	Sidewalk Cross Slope	6	5.15	-0.05	-1.0					Casey's Driveway
W4514	W4501	Sidewalk Running Slope	6	45.98	-0.44	-1.0					Casey's Driveway
3703	3704	Match Existing Cross Slope	4	5.00	0.06	1.2					
3702	3703	Sidewalk Running Slope	4	10.00	-0.11	-1.1					
3701	3704	Sidewalk Running Slope	4	10.00	-0.11	-1.1					
4508	4509	Sidewalk Running Slope	4	0.40	0.01	2.5					
4509	4514	Ramp Cross Slope	6	5.00	-0.06	-1.2					
4509	4510	Ramp Running Slope	6	5.00	0.39	7.8					

SIDEWALK COMPLIANCE

See S Sheets

113_10
10/16/24

- * Does not include curb
1. Staking required by Contracting Authority per Article 2511.03 of the Standard Specifications.
2. Refer to tabulation 113-01 for bid quantities.

From Point	Ending Point	Sidewalk Designation	Sidewalk Thickness (IN)	Distance* (FT)	Change in Elevation (FT)	Slope (%)	Acceptable Constructed Range	Staking Required? (1)	Measured Slope (%)	Initials	Remarks
4510	4513	Match Existing Cross Slope	6	5.00	-0.08	-1.6					
4513	4514	Ramp Running Slope	6	5.00	-0.37	-7.4					