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C.1-J.5	Road Plans
C.1	Estimated Quantities - Road
C.2	Standard Plans - Road



PLANS OF PROPOSED IMPROVEMENT ON THE

INTERSTATE ROAD SYSTEM

Polk COUNTY

Bridge Painting

EB I-80 over I-35
at W I-35/80/235 Interchange

Revisions

	TOTAL
	14
PROJECT IDENTIFICATION NUMBER	
26-77-080-040	
PROJECT NUMBER	
MBIN-080-1(515)123--0M-77	
R.O.W. PROJECT NUMBER	
PROJECT DIRECTORY NUMBER	
7708004026	

Refer to the Plan Sheets for list of applicable specifications.

Value Engineering Saves. Refer to Article 1105.13 of the Specifications.



1-800-292-8989
www.iowaonecall.com

811
Know what's below. Call before you dig.

Design Data Urban	
I-35	
2023 AADT	56,200 V.P.D.
Trucks	14 %


Design Data Urban	
I-80 E.B.	
2024 AADT	15,200 V.P.D.
Trucks	21 %

Iowa DOT Bridges and Structures
Consultant Coordinator Contact:
Bryant Thelen

Index of Seals		
Sheet No.	Name	Type
A.1	Jeremy D. Kotta	Structural Design
C.1	David J. Wherry	Roadway Design

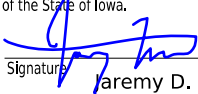
Standard Road Plans

Standard road plans are listed on sheet number C.2



Structural 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:  Date: 4/14/2026

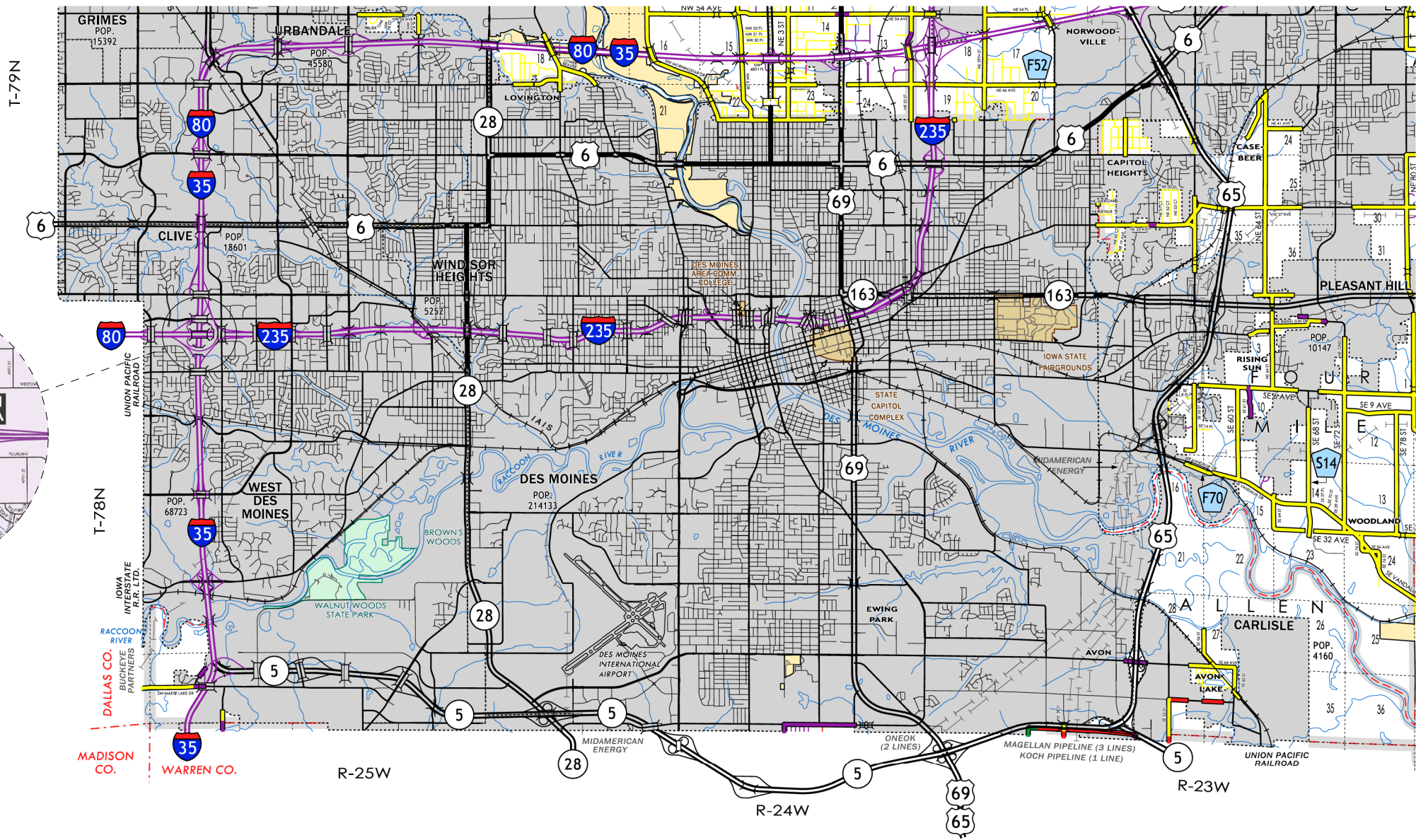
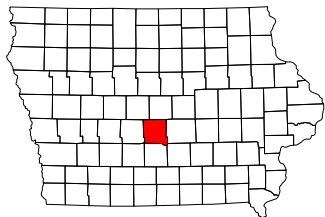
Printed or Typed Name: Jeremy D. Kotta

My license renewal date is December 31, 2027

Pages or sheets covered by this seal: Sheets A.1 thru A.2 and V.1 thru V.4



FHWA No. 042150



LEGEND	
INTERSTATE HIGHWAY	
PRIMARY HIGHWAY-DIVIDED	
PRIMARY HIGHWAY	
PORTLAND CEMENT CONCRETE ROAD	
ASPHALT ROAD	
BITUMINOUS ROAD	
GRAVEL ROAD	
EARTHEN ROAD	
INTERSTATE HIGHWAY	
UNITED STATES HIGHWAY	
STATE HIGHWAY	
COUNTY HIGHWAY	
RAILROAD	
PIPELINE	
AIRPORT	
HYDROLOGY	
BRIDGE	
STATE BOUNDARY	
COUNTY BOUNDARY	
CORPORATE BOUNDARY	
TOWNSHIP LINE	
SECTION LINE	
ROAD NAMES	
UNINCORPORATED PLACE	
STATE PARKS	
STATE INSTITUTIONS	
FEDERAL LAND	

Polk County Location Map

Not To Scale

ESTIMATED BRIDGE REPAIR QUANTITIES					
ITEM NO.	ITEM CODE	ITEM	UNIT	TOTAL	AS BUILT QTY.
1	2508-0804000	BRIDGE CLEANING FOR PAINTING	LS	1	
2	2508-0805000	BLAST CLEANING OF STRUCTURAL STEEL	LS	1	
3	2508-0970000	CONTAINMENT	LS	1	
4	2508-0990000	PAINT WASTE TRANSPORT AND DISPOSAL	LS	1	
5	2508-0991000	PAINTING OF STRUCTURAL STEEL	LS	1	
6	2533-4980005	MOBILIZATION	LS	1	

ESTIMATE REFERENCE INFORMATION		
ITEM NO.	ITEM CODE	DESCRIPTION
1	2508-0804000	BRIDGE CLEANING FOR PAINTING See General Notes
2	2508-0805000	BLAST CLEANING OF STRUCTURAL STEEL See General Notes
3	2508-0970000	CONTAINMENT See General Notes
4	2508-0990000	PAINT WASTE TRANSPORT AND DISPOSAL See General Notes
5	2508-0991000	PAINTING OF STRUCTURAL STEEL See General Notes
6	2533-4980005	MOBILIZATION --

Roadway Quantities shown
elsewhere in these plans.



Design For Repair to a Radius = 1146'-0"

230' x 39' Continuous
Welded Girder Bridge

48'-0" End Spans67'-0" Interior Span

Estimated Quantities

STA. 8531+45.22 (I-80 EB)Turn-in Date: May 2026

Polk County

IOWA DEPARTMENT OF TRANSPORTATION

Design No. Design Sheet No. 1 of 4FHWA No. 42150

General Notes:

This design is for the steel surface preparation and application of steel coatings to the existing 230'-0" x 39'-0" continuous welded girder bridge on I-80 E.B. over I-35 in Polk County (Maint. No. 7723.1A080).

Electronic copies of original design plans are available to the Contractor as part of the e-Files supplied with the contract documents. Dimensions shown on these plans are based on design plans (original design no. 965).

The bridge Contractor shall work in such a manner that equipment and materials shall not be allowed to interfere with traffic or be allowed to fall on the roadway below.

Steel Painting Notes:

All steel to be painted shall be blasted to SP-10. The paint system shall be the epoxy system. This includes a zinc-rich epoxy, an aluminum epoxy mastic intermediate coat, and an aliphatic polyurethane topcoat.

All structural steel is to be painted.

The total area of all structural steel to be painted is estimated to be 13,570 sq. ft. This estimate is given only for the Contractor's information. There will be no additional payment if the actual areas in the zones vary from the estimated amounts shown.

Abrasives shall be steel shot and/or grit, aluminum oxide, or garnet abrasives. Do not use sand or coal slag.

Take care to protect areas that are not to be painted from paint and overspray.

The lump sum bid for "Bridge Cleaning for Painting" shall include the costs of removal of accumulated foreign material, loose paint and water washing in accordance with Section 2508, of the Standard Specifications.

The lump sum bid for "Blast Cleaning of Structural Steel" shall include all costs for the preparation of steel surfaces that require painting in accordance with Section 2508, of the Standard Specifications.

The lump sum bid for "Painting of Structural Steel" shall include all costs for painting the structural steel in accordance with Section 2508, of the Standard Specifications. An epoxy paint system shall be used.

Before cleaning the existing structural steel, the bridge Contractor shall remove any attachments not being reused. In addition, any existing steel inaccessible after reassembly will be given the full paint system before final assembly of the structure.

Containment and disposal of waste shall be in accordance with Section 2508, of the Standard Specifications. All costs associated with hauling and depositing of waste at the designated site/facility shall be the responsibility of the Contractor and included in the contract price bid for the "Containment" item.

A scrape sample was taken from an abutment bearing area and a steel beam of this bridge to get an indication of the existence of and level of total lead and total chromium. Analysis of total lead were 3900 parts per million (ppm) on the abutment bearing sample and 3100 parts per million (ppm) on the steel beam sample. Analysis of total chromium were 60 parts per million (ppm) on the abutment bearing sample and 700 parts per million (ppm) on the steel beam sample. These analyses show the existence of these two toxic constituents. Levels indicated by these tests could create conditions above regulatory limits for health and safety requirements. No other constituents were analyzed. The bidder should not rely on the Iowa DOT's testing and analysis for any purpose other than as an indication of the existence of these two toxic constituents.



Specifications:

Construction: Iowa Department of Transportation Standard Specifications for Highway and Bridge Construction, Series 2023, plus applicable General Supplemental Specifications, Developmental Specifications, Supplemental Specifications and Special Provisions shall apply to construction work on this project.



Bridge Profile View

(Min. Verticcal Clearance = 16'-6")

Traffic Control Plan

Note: The roadway will be open to thru traffic. Refer to the traffic control plan shown elsewhere in these plans.

Design History
At This Site

Des. No.	Type Of Work
965	Original Design
1183	Overlay
1911	Deck Joint Repair
816	Retrofit Barrier Rail
---	Bridge Painting (2026)

Location

I-80 E.B. over I-35
T-78N R-25W
Section 6
Walnut Township
Polk County
Maint. No. 7723.1A080
FHWA No. 042150
Lat: 41.589510°
Long: -93.777864°

Design For Repair to a Radius = 1146'-0"

230' x 39' Continuous
Welded Girder Bridge

48'-0" End Spans

67'-0" Interior Span

General Notes

STA. 8531+45.22 (I-80 EB)

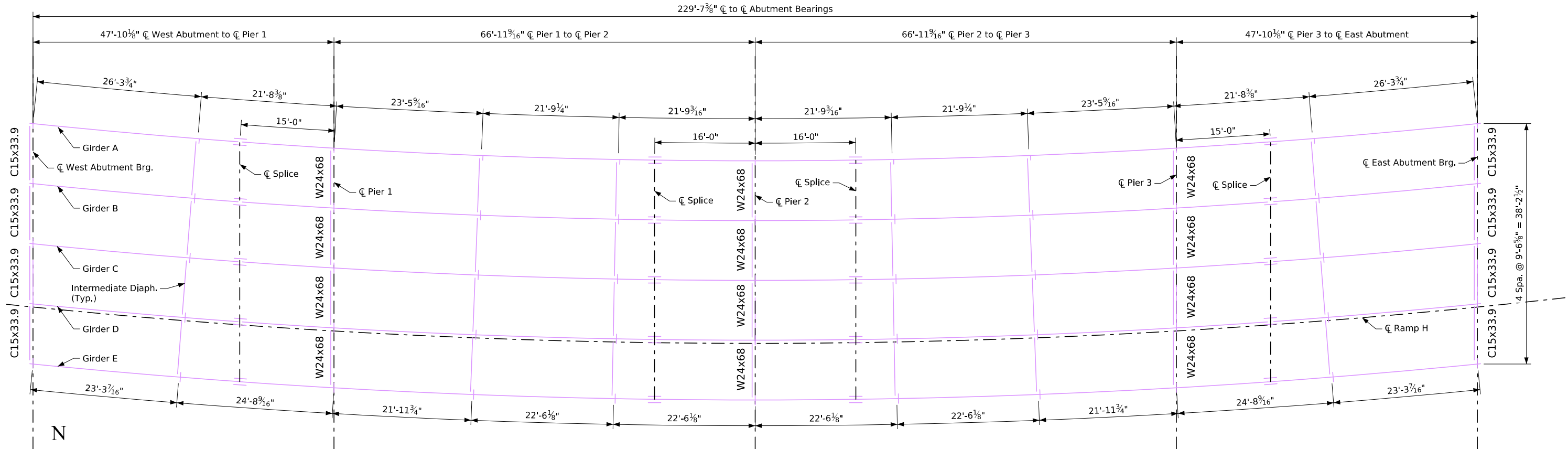
Turn-in Date: May 2026

Polk County

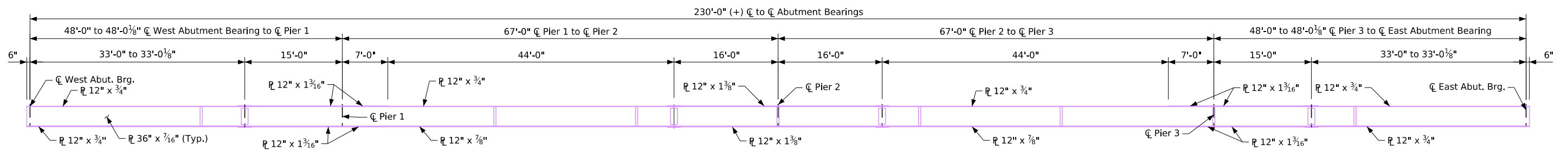
IOWA DEPARTMENT OF TRANSPORTATION

Design No. Design Sheet No. 2 of 4 FHWA No. 42150

FILE NO.	ENGLISH	DESIGN TEAM JK/BH	Polk COUNTY	PROJECT NUMBER MBIN-080-1(515)123--0M-77	SHEET NUMBER V.2
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Steel Framing Plan



Elevation of Girders A,B,C,D,E

(Girdeers A & E Shown, B,C, and D Similar)

Note:
All steel is to be painted. Details and member callouts in these plans are for general information only. See existing plans for additional information on members and details not shown in these plans.

Design For Repair to a Radius = 1146'-0"

230' x 39' Continuous Welded Girder Bridge

48'-0" End Spans67'-0" Interior Span

Framing Plan

STA. 8531+45.22 (I-80 EB)Turn-in Date: May 2026

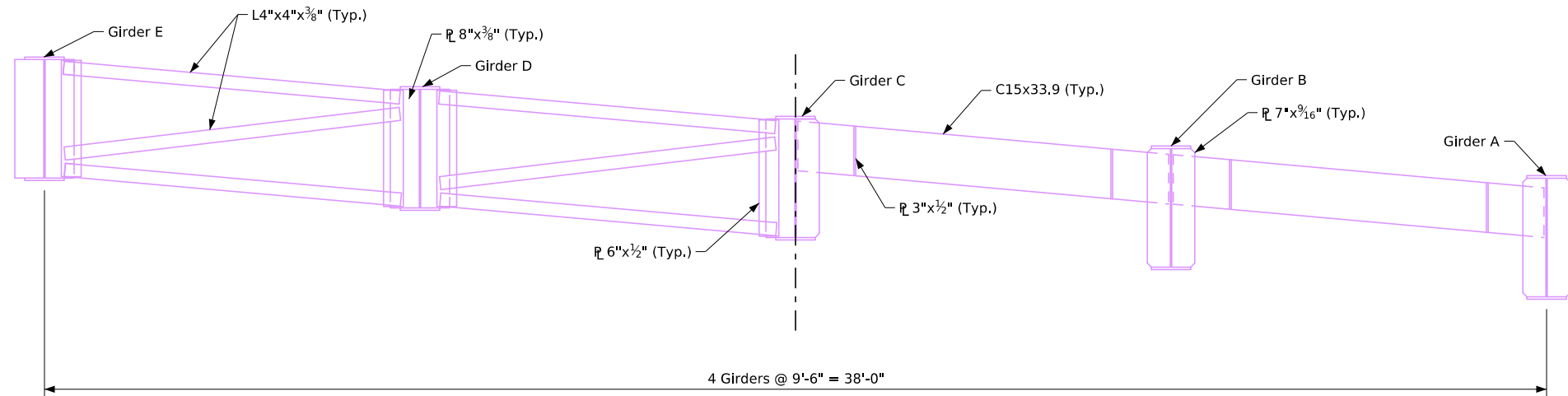
Polk County

IOWA DEPARTMENT OF TRANSPORTATION

Design No. Design Sheet No. 3 of 4FHWA No. 42150



FILE NO.	ENGLISH	DESIGN TEAM JK/BH	Polk COUNTY	PROJECT NUMBER MBIN-080-1(515)123--0M-77	SHEET NUMBER V.3
2:27:38 PM	4/13/2026	bhackman	pw:\\projectwise.dot.int.lan:PWMMain\\Documents\\Projects\\7708004026\\Bridge\\(515)_Bridge Painting\\SHT_77080515_WHKS_042150_Z08		

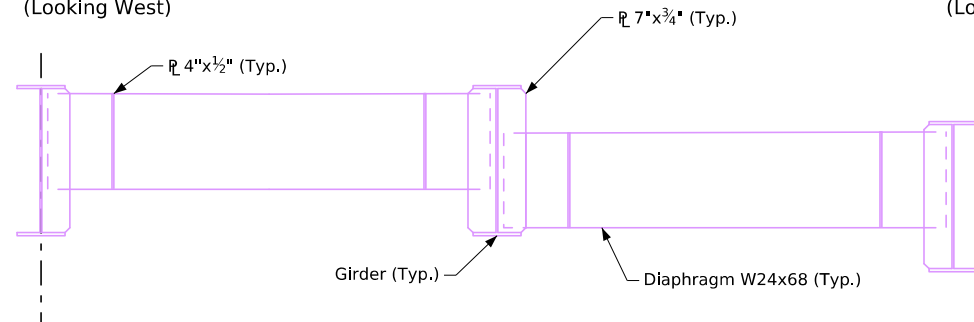


Part Section Near Intermediate Diaphragm

(Looking West)

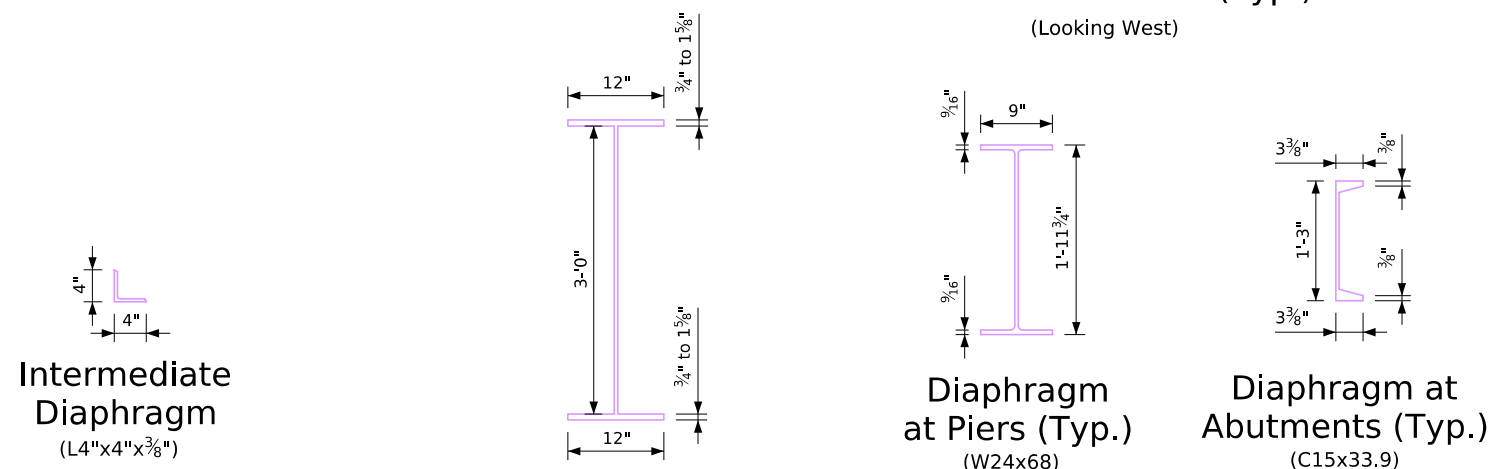
Part Section Near Abutment (Typ.)

(Looking West)



Part Section Near Pier (Typ.)

(Looking West)



Intermediate Diaphragm
(L4"x4"x $\frac{3}{8}$ ")

Typical Girder Cross Section

Diaphragm at Piers (Typ.)
(W24x68)

Diaphragm at Abutments (Typ.)
(C15x33.9)

Note:
All steel is to be painted. Details and member callouts in these plans are for general information only. See existing plans for additional information on members and details not shown in these plans.


Design For Repair to a Radius = 1146'-0"	
230' x 39' Continuous Welded Girder Bridge	
48'-0" End Spans	67'-0" Interior Span
Miscellaneous Details	
STA. 8531+45.22 (I-80 EB)	Turn-in Date: May 2026
Polk County	
IOWA DEPARTMENT OF TRANSPORTATION	
Design No.	Design Sheet No. 4 of 4 FHWA No. 42150



ESTIMATED PROJECT QUANTITIES AND REFERENCE NOTES

Roadway Items : Roadway Items

Item no.	Item Code	Item	Unit	Quantities	Estimate Reference Notes
				Estimated	
				Roadway Items	
1	2528-2518000	SAFETY CLOSURE	EACH	1	Refer to Tab. 108-13A on Sheet C.3.
2	2528-8445110	TRAFFIC CONTROL	LS	1	Refer to Traffic Control Plan on Sheet J.1.
3	2528-9290050	PORTABLE DYNAMIC MESSAGE SIGN (PDMS)	CDAY	0	Portable Dynamic Message Signs will be used for advanced notification of Exit 123A ramp closure. Final locations and message will be determined by the Engineer. Two PDMS boards will be required.



Roadway 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

David J. Wherry

Date

04-13-2026

Printed or Typed Name

David J. Wherry

My license renewal date is December 31,

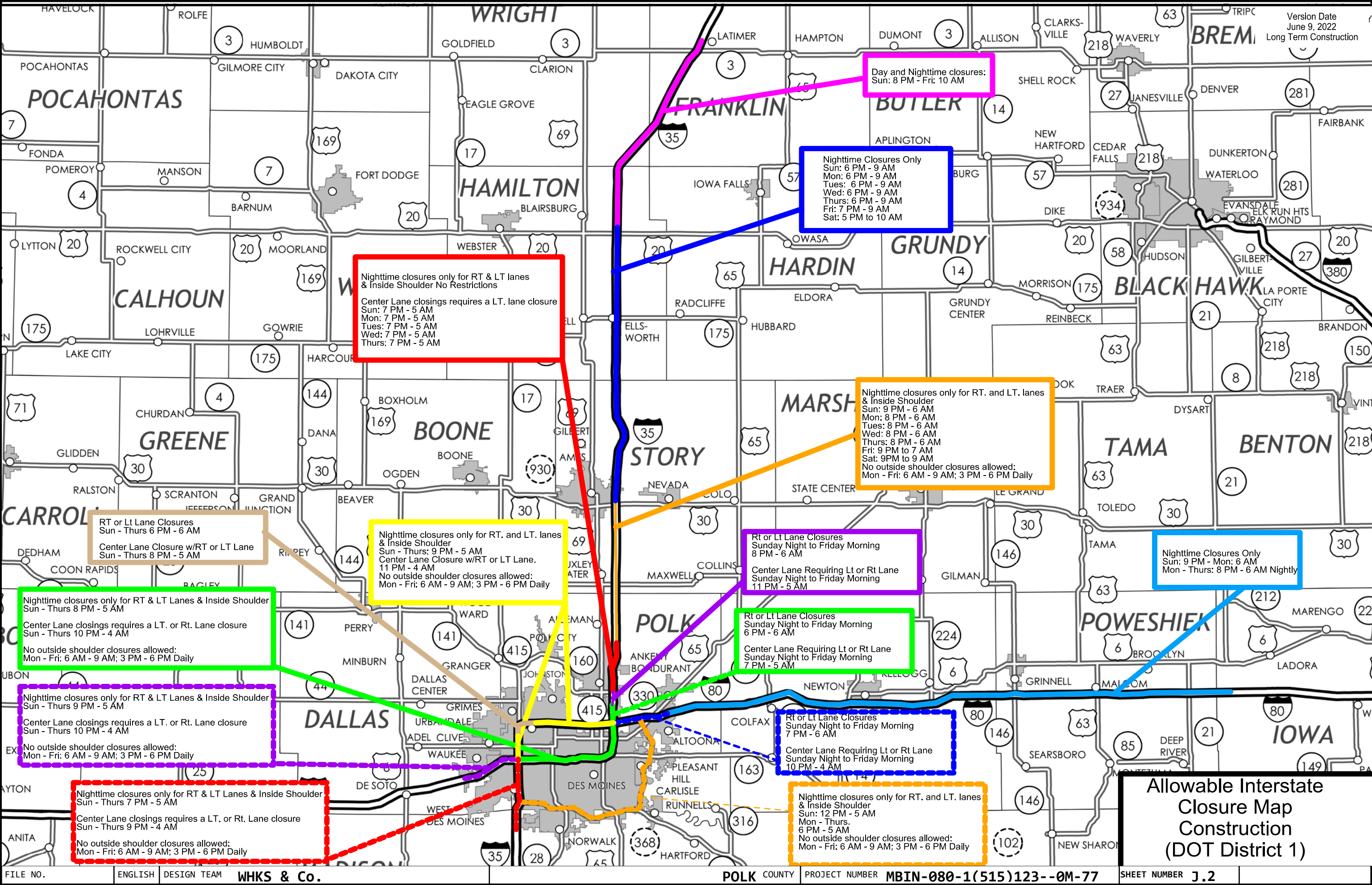
2026

Pages or sheets covered by this seal:

C.1-C.3, J.1-J.5

<div>105_04 4/21/26</div> <div>STANDARDS</div> <div>The following Standards apply to construction work on this project.</div>		
Number	Date	Title
SI-881	4/16/2019	Special Signs for Workzones
TC-1	10/15/2019	Work Not Affecting Traffic (Two-Lane or Multi-Lane)
TC-402	4/18/2023	Work Within 15 ft of Traveled Way
TC-417	4/21/2020	Exit Ramp Closure
TC-418	4/18/2023	Lane Closure on Divided Highway
TC-420	10/16/2018	Lane Closure at Ramps
TC-422	4/18/2023	Closure of Two Adjacent Lanes on Divided Highway

TRAFFIC CONTROL PLAN					108_23A 8/15/22
<div>1. Refer to Sheet A.2 for project location.</div> <div>2. Through traffic shall be maintained on the project at all times.</div> <div>3. See Tab. 105-4 on Sheet C.2 for applicable Standard Road Plans.</div> <div>4. The Engineer may modify the lane closure hours as necessary to accommodate unexpected heavy traffic volumes.</div> <div>5. Night work will be required. See Sheet J.2 for allowable lane closure times.</div> <div>6. See Sheet J.5 for detour route for Exit 123A exit ramp closure.</div> <div>7. Coordination efforts will be required to work with the Southwest Mixmaster (SWM) contractor and their traffic control setup.</div>					
FILE NO.	ENGLISH	DESIGN TEAM	WHKS & Co.	POLK COUNTY	PROJECT NUMBER MBIN-080-1(515)123--0M-77
					SHEET NUMBER J.1



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
IM-035-2(455)73--13-77	Interchange Reconstruction

