

INDEX OF SHEETS	
No.	DESCRIPTION
<b>A Sheets</b>	<b>Title Sheets</b>
A.1	Title Sheet
A.1	Location Map Sheet
<b>C Sheets</b>	<b>Quantities and General Information</b>
C.1	Estimated Project Quantities and ERI Notes
C.2	Standard Road Plans
<b>J Sheets</b>	<b>Traffic Control and Staging Sheets</b>
J.1 - 2	Traffic Control Plan and Staging Notes
J.3	Detour Map
J.4	Allowable Lane Closure Map
<b>V Sheets</b>	<b>Bridge and Culvert Situation Plans</b>
V.1 - 2	Deck Repair Details



PLANS OF PROPOSED IMPROVEMENT ON THE  
PRIMARY ROAD SYSTEM  
POLK COUNTY  
Bridge Repair  
NE 46th Ave 0.5 mi S of E I-35/80 Interchange (WB)

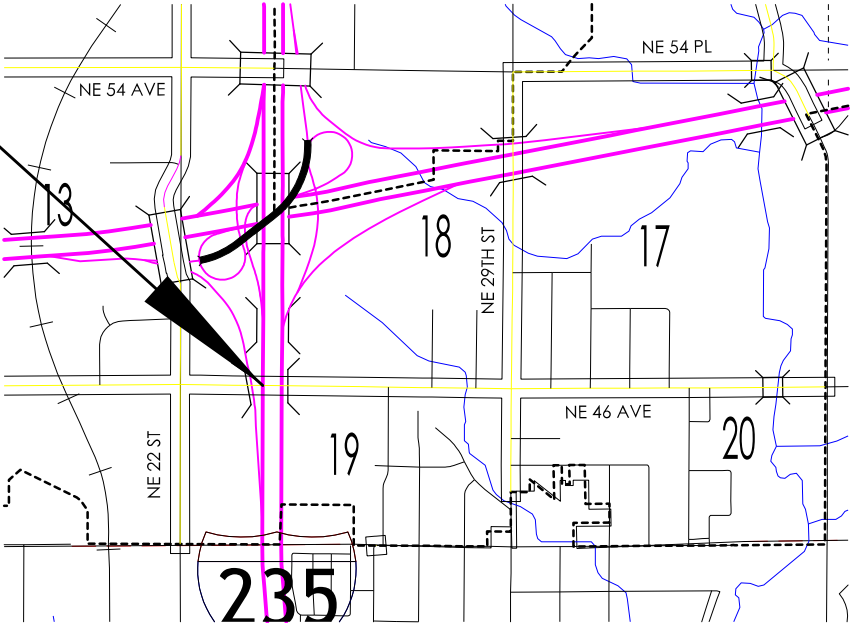
SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

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



PROJECT LOCATION  
FHWA NO. 043061  
DESIGN NO. 2426



101-4 04-30-02			
DESIGN DATA RURAL			
2024	AADT	79,500	V.P.D.
20	AADT		V.P.D.
20	DHV		V.P.H.
TRUCKS		8	%
Total			
Design ESALs			

INDEX OF SEALS			
SHEET NO.	NAME	TYPE	BID QUANTITY SHEETS
A.1	Benjamin Adey	Primary Signature Block	C.1
V.1	Halping Chen	Bridge Repair Details	

**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.

*Benjamin Adey* 03-30-2026  
Signature Date  
Benjamin Adey  
Printed or Typed Name  
My license renewal date is December 31, 2026

Pages or sheets covered by this seal: A.1, C.1-2, J.1-4

REVISIONS

PROJECT IDENTIFICATION NUMBER	
26-77-235-050	
PROJECT NUMBER	
MBIN-235-1(521)13--0M-77	
R.O.W. PROJECT NUMBER	

ESTIMATED PROJECT QUANTITIES AND REFERENCE NOTES

Roadway Items : Roadway Items  
Design No. 2426-POLK : Design No. 2426-POLK

Item no.	Item Code	Item	Unit	Quantities			Estimate Reference Notes
				Estimated			
				Roadway Items	Design No. 2426-POLK	Total	
1	2413-0698074	DECK REPAIR, CLASS A	SY		271	271	
2	2413-0698075	DECK REPAIR, CLASS B	SY		20	20	
3	2528-2518000	SAFETY CLOSURE	EACH	2		2	Road closure type for closing the westbound to southbound ramp at the Northeast Mixmaster. Refer to J Sheets for traffic control details.
4	2528-8445110	TRAFFIC CONTROL	LS	1		1	Refer to J Sheets for additional information.
5	2528-9290050	PORTABLE DYNAMIC MESSAGE SIGN (PDMS)	CDAY	0		0	See Proposal.
6	2533-4980005	MOBILIZATION	LS		1	1	- -
7	2599-9999010	('LUMP SUM' ITEM) TRIAL BATCH APPLICATION	LS		1	1	INCLUDES ALL COSTS ASSOCIATED WITH OFF-SITE TRIAL APPLICATION, SUBMITTAL OF MIX DESIGN, CONCRETE PLACEMENT PLAN, A DETAILED SCHEDULE, AND REQUIRED COMPRESSIVE STRENGTH TESTING.

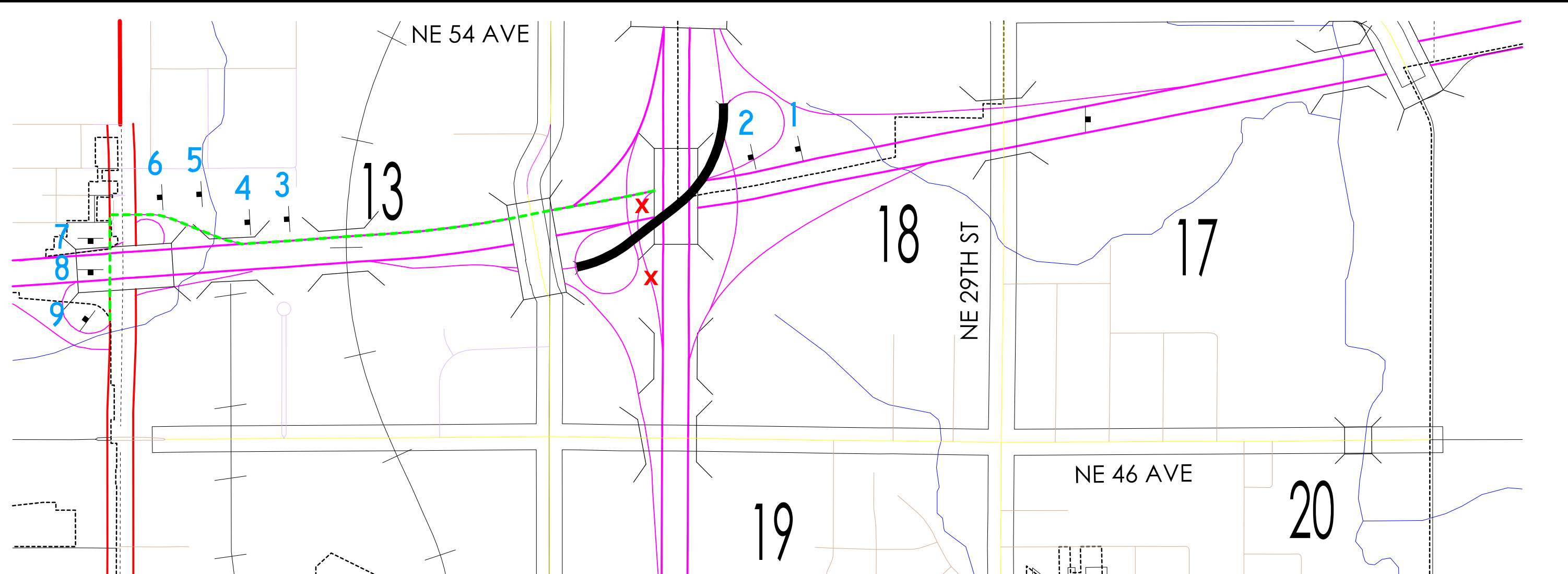
			105-4 10-18-11
STANDARD ROAD PLANS			
The following Standard Road Plans apply to construction work on this project.			
Number	Date	Title	
SI-881	04-16-19	Special Signs for Workzones	
TC-1	10-15-19	Work Not Affecting Traffic (Two-Lane or Multi-Lane)	
TC-202	04-18-23	Work Within 15 ft of Traveled Way	
TC-402	04-18-23	Work Within 15 ft of Traveled Way	
TC-417	04-21-20	Ramp Closure	
TC-418	04-18-23	Lane Closure on Divided Highway	
TC-420	10-16-18	Lane Closure at Ramps	
TC-422	04-18-23	Closure of Two Adjacent Lanes on Divided Highway	
PV-101	01-01-26	Joints	



<div>TRAFFIC CONTROL PLAN</div> <div>Monday 5 AM to Friday 8 PM (Weekdays): Follow Allowable Interstate Lane Closure Map on J.2  Friday 8 PM to Monday 5 AM (Weekend): The I-80 westbound to I-235 southbound ramp may be closed at 8 PM Friday night and Opened at 5 AM on Monday morning. During the weekend, maintain a minimum of two lanes of traffic for I-235 Southbound unless otherwise permitted by the map on J.2 Detour I-80 westbound to I-235 southbound ramp traffic according to the detour shown on J.3</div>				<div>108-23A 08-01-08</div>		<div>STAGING NOTES</div> <div>Construction may be staged as desired by Contractor while meeting the requirements of the Traffic Control Plan.</div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>								<div>108-26A 08-01-08</div>																																																					
<div>511 TRAVEL RESTRICTIONS</div> <table><tr><th>Route</th><th>Direction</th><th>County</th><th>Location Description</th><th>Feature Crossed</th><th>Object Type</th><th>Maint. Bridge No., Structure ID, or FHWA No.</th><th>Type of Restriction</th><th>Existing Measurement</th><th>Construction Measurement</th><th>Construction Measurement as Signed</th><th>Projected As Built Measurement</th><th>Remarks</th></tr><tr><td>I-235</td><td>SB</td><td>Polk</td><td>None Anticipated</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>														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	I-235	SB	Polk	None Anticipated																																				<div>108-25 10-21-14</div>	
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																																																							
I-235	SB	Polk	None Anticipated																																																																
<div>COORDINATED OPERATIONS</div> <div>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.</div> <table><tr><th>Project</th><th>Type of Work</th></tr><tr><td>IM-NHS-080-4(085)138--03-77</td><td>Grade and Pave</td></tr><tr><td>MPIN-035-1(721)68--0N-77</td><td>PCC Patching</td></tr><tr><td>MPIN-235-1(712)0--0N-77</td><td>PCC Patching</td></tr><tr><td>MPIN-080-1(723)121--0N-25</td><td>PCC Patching</td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>				Project	Type of Work	IM-NHS-080-4(085)138--03-77	Grade and Pave	MPIN-035-1(721)68--0N-77	PCC Patching	MPIN-235-1(712)0--0N-77	PCC Patching	MPIN-080-1(723)121--0N-25	PCC Patching					<div>111-01 04-17-12</div>																																																	
Project	Type of Work																																																																		
IM-NHS-080-4(085)138--03-77	Grade and Pave																																																																		
MPIN-035-1(721)68--0N-77	PCC Patching																																																																		
MPIN-235-1(712)0--0N-77	PCC Patching																																																																		
MPIN-080-1(723)121--0N-25	PCC Patching																																																																		
FILE NO.				DESIGN TEAM Vorthерms\Adey			POLK COUNTY			PROJECT NUMBER MBIN-235-1(521)13--0M-77			SHEET NUMBER J.1																																																						

3/26/2026 1:44:49 PM badey c:\pw\_work\pwmmain\idotcentral\_badey\d2664072\j01\_77235521.xlsm

102-15 08-01-08			102-15 08-01-08		
TABULATION OF SPECIAL EVENTS			TABULATION OF SPECIAL EVENTS		
Event	Location	Date	Event	Location	Date
The Salt Company Conference	Iowa Events Center	January 2 - 4, 2026	Greek Food Fair	Greek Orthodox Church of St. George	
World's Toughest Rodeo	Wells Fargo Arena	January 9 - 10, 2026	Iowa High School Boys State Soccer	James Cownie Soccer Park/Mediacom Stadium	June 1 - 5, 2027
Iowa Pork Congress	Iowa Events Center	January 21 - 21, 2026	USA Gymnastics Championship	Iowa Events Center	June 19-27, 2027
Iowa Ag Expo	Iowa Events Center	February 3 - 5, 2026	Iowa Craft Brew Festival	Water Works Park	
Iowa Beef Expo	Iowa State Fairgrounds	February 13 - 22, 2026	World Pork Expo	Iowa State Fairgrounds	June 9-10, 2027
Boys State Wrestling Tournament	Wells Fargo Arena	February 18 - 21, 2026	Capital City Pride Fest	Historic East Village	
Des Moines Home + Garden Show	Iowa Events Center	February 12 - 15, 2026	Iowa Juneteenth Observance	Greater Des Moines	
Iowa AAU Kids State Folkstyle Wrestling Championships	Wells Fargo Arena	February 27 - March 1, 2026	Des Moines Arts Festival	Western Gateway Park	
Girls State Basketball Tournament	Wells Fargo Arena	March 2 - 7, 2026	Yankee Doodle Pops	Iowa State Capitol	
All Iowa Dance Showcase	Wells Fargo Arena	March 6, 2026	GoodGuys Heartland Nationals	Iowa State Fairgrounds	
Iowa Deer Classic	Des Moines Marriott Downtown	March 6 - 8, 2026	All Iowa Attack Center Stage	Iowa Events Center/MidAm Energy RecPlex	July 9-12, 2027
Boys State Basketball Tournament	Wells Fargo Arena	March 9 - 13 2026	NTT INDYCAR Series	Iowa Speedway	
National Archery in Schools Program State Championships	Iowa State Fairgrounds	February 27 - March 1, 2026	National Balloon Classic	Indianola Memorial Balloon Field	
USA Wrestling Folkstyle Nationals	MidAmerican Energy RecPlex	March 13 - 15, 2026	Hinterland Music Festival	St. Charles, IA	
Iowa State 8 & 9 Ball Championships	Hy-Vee Hall	April 8 - 12, 2026	USA Triathlon Sprint, Olympic-Distance National Champions		August 5-8, 2027
Monster Jam	Wells Fargo Arena	April 10 -11, 2026	American Bankers Assn Agricultural Bankers Conference	Iowa Events Center	August 14-18, 2027
Amateur Athletic Twin Rivers Nationals Girls Wrestling	MidAmerican Energy RecPlex	April 17 - 19, 2026	Iowa State Fair	Iowa State Fairgrounds	August 12-22, 2027
AAU Middle School Wrestling Duals	MidAmerican Energy RecPlex	March 27 - 29, 2026	World Food & Music Festival	Western Gateway Park	
Drake Road Races	Drake Stadium	April 18, 2026	GalaxyCon	Iowa Events Center	September 9-12, 2027
Drake Relays America's Athletic Classic	Drake Stadium	April 22 - 25, 2026	NRECA Region 5 & 6 Meeting	Iowa Events Center	September 13-16, 2027
Blue Ribbon Bacon Festival	El Bait Shop	April 18, 2026	Des Moines Streetstyle Open	Lauridsen Skatepark	
Midwest JVA Challenge	Hy-Vee Hall/MidAm Energy RecPlex	May 2 - 3, 2026	Iowa Latino Heritage Festival	Western Gateway Park	
National Mock Trial Tournament	Des Moines Marriott Downtown	May 6 - 9, 2026	Norman E. Borlaug International Symposium	The World Food Prize	October 12-16, 2027
All Iowa Attack Battle of the Best	Iowa Events Center/MidAm Energy RecPlex	May 15-17, 2026	WICSEC Annual Training Conference	Des Moines Marriott Downtown	October 18-22, 2027
Iowa High School Co-Ed State Track Meet	Drake Stadium	May 21 - 23, 2026	IMT Des Moines Marathon	Downtown Des Moines	
CelebrASIAN	Western Gateway Park	May 22 - 23, 2026	USA Wrestling Preseason Nationals		October 28-31, 2027
Greek Food Fair	Greek Orthodox Church of St. George	June 5-7, 2026	Living History Farms Off Road Race	Living History Farms	
Iowa High School Boys State Soccer	James Cownie Soccer Park/Mediacom Stadium	June 1 - 5, 2026	Des Moines Turkey Trot	Downtown Des Moines	
Principal Charity Classic	Wakonda Golf Course	June 1 - 6, 2026	Disney on Ice	Wells Fargo Arena	
Downtown Farmers' Market	Historic Court District	Saturdays, May - October, 2026	Festival of Trees & Lights	Iowa Events Center	
Valley Junction Farmers Market	Historic Valley Junction	Thursdays, May - September, 2026	Holiday Promenade East Village	Historic East Village	
EMC DAM to DSM	Saylorville Dam & Cowles Commons	May 30, 2026	Iowa Dance & Drill Team Association State Team Competitio	Iowa Events Center	
Iowa Craft Brew Festival	Water Works Park	June 6, 2026	Christkindlmarket Des Moines	Principal Park	
World Pork Expo	Iowa State Fairgrounds	June 3 - 4, 2026			
Capital City Pride Fest	Historic East Village	June 11 -13, 2026			
Iowa Juneteenth Observance	Greater Des Moines				
Des Moines Arts Festival	Western Gateway Park	June 26 - 28, 2026			
Yankee Doodle Pops	Iowa State Capitol	July 3, 2026			
GoodGuys Heartland Nationals	Iowa State Fairgrounds	July 3 - 5, 2026			
All Iowa Attack Center Stage	Iowa Events Center/MidAm Energy RecPlex	July 10-13, 2026			
NTT INDYCAR Series	Iowa Speedway	July 11 - 12, 2026			
Women of the Evangelical Lutheran Church Conference	Iowa Events Center	July 12 -19, 2026			
AAU Junior Olympic Games	Drake Stadium/RecPlex	July 29 - August 8, 2026			
National Balloon Classic	Indianola Memorial Balloon Field	July 31 - August 8, 2026			
NASCAR	Iowa Speedway	August 8			
Hinterland Music Festival	St. Charles, IA	July 31 - August 2, 2026			
Iowa State Fair	Iowa State Fairgrounds	August 13 - 23, 2026			
World Food & Music Festival	Western Gateway Park	August 21 - 23, 2026			
Farm Progress Show	Boone	September 1 - 3, 2026			
Des Moines Streetstyle Open	Lauridsen Skatepark	August 28-30, 2026			
Iowa Latino Heritage Festival	Western Gateway Park	September 25 - 27, 2026			
Christ our Life Conference	Wells Fargo Arena	September 25 - 27, 2026			
Norman E. Borlaug International Symposium	The World Food Prize	October 19 - 23, 2026			
IMT Des Moines Marathon	Downtown Des Moines	October 18, 2026			
USA Wrestling Preseason Nationals	Iowa Events Center	October 22 -25, 2026			
Living History Farms Off Road Race	Living History Farms				
Des Moines Turkey Trot	Downtown Des Moines	November 26, 2026			
Disney on Ice	Wells Fargo Arena	November 26 - 29, 2026			
Festival of Trees & Lights	Iowa Events Center	November 26 -29, 2026			
Holiday Promenade East Village	Historic East Village	November - December			
Iowa Dance & Drill Team Association State Team Competitio	Iowa Events Center	December 1 - 4, 2026			
Christkindlmarket Des Moines	Principal Park	December 3-6 & 10-13, 2026			
The Salt Company Conference	Iowa Events Center	January 1-3, 2027			
Iowa Pork Congress	Iowa Events Center	January 20-21, 2027			
Iowa Ag Expo	Iowa Events Center	January 29-February 4, 2027			
Netlynx Sports President's Day Challenge	MidAmerican Energy RecPlex	February 13-15, 2027			
Boys State Wrestling Tournament	Casey's Center	February 17-20, 2027			
Des Moines Home + Garden Show	Iowa Events Center	February 25-28, 2027			
Iowa AAU Kids State Folkstyle Wrestling Championships	Iowa Events Center	February 26-28, 2027			
Girls State Basketball Tournament	Casey's Center	March 1-6, 2027			
Prince Hall Grand Lodge Grand Mastes & Masons	Des Moines Marriott Downtown	March 11-14, 2027			
USA Wrestling Folkstyle Nationals	MidAmerican Energy RecPlex	March 12-14, 2027			
American Society of Animal Science Midwest Meeting	Iowa Events Center	March 14-17, 2027			
Iowa State 8 & 9 Ball Championships	Hy-Vee Hall	April 7-11, 2027			
Amateur Athletic Twin Rivers Nationals Girls Wrestling	MidAmerican Energy RecPlex	April 9-11, 2027			
AAU Middle School Wrestling Duals	MidAmerican Energy RecPlex	March 1-3, 2027			
American Public Works Assn North American Snow Conference	Iowa Events Center	April 18-21, 2027			
Drake Relays America's Athletic Classic	Drake Stadium	April 21-24, 2027			
Midwest JVA Challenge	Hy-Vee Hall/MidAm Energy RecPlex	May 1-2, 2027			
Iowa High School Co-Ed State Track Meet	Drake Stadium	May 20-22, 2027			
CelebrASIAN	Western Gateway Park				
Principal Charity Classic	Wakonda Golf Course				
Downtown Farmers' Market	Historic Court District	Saturdays, May - October, 2027			
Valley Junction Farmers Market	Historic Valley Junction	Thursdays, May - September, 2027			
EMC DAM to DSM	Saylorville Dam & Cowles Commons				

FILE NO.		DESIGN TEAM <b>Vortherms\Adey</b>	POLK COUNTY	PROJECT NUMBER <b>MBIN-235-1(521)13--0M-77</b>	SHEET NUMBER <b>J.2</b>
----------	--	-----------------------------------	-------------	--	-------------------------



-   
1
-   
2
-   
3
-   
4
-   
5
-   
6
-   
7
-   
8
-   
9

LEGEND	
DETOUR ROUTE	----
Closed	X
DETOUR FOR	
I-80 WB to I-235 SB	





General Notes:

This is a 150'-10" × 56' 10 1/4 "± pretensioned, prestressed concrete beam bridge, constructed in 1967 and reconstructed in 2006-2007, carrying I-235 westbound over NE 46th Avenue 0.5 mi S of E I-35/80 Interchange in Polk County.

Electronic copies of original design plans and repair 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. 565,905, 406, 506 & 922).

Repairs shall consist of Class A and Class B Deck Repair.

Utility companies whose facilities are shown on the plans or known to be within the construction limits shall be notified by the Contractor of the construction starting date.

Faint lines on plans indicate the existing structure.

All dimensions and details shown on these plans pertinent to new construction shall be verified in the field by the Contractor before starting construction.

Plan quantity of deck repair is based on the "Deck Repair Plot" as shown in these plans. Red cross hatched portions represent Class A bridge deck repair. The plan quantity for "Deck Repair, Class A" is estimated as 271.0 SY based on bridge inspection sketches and visual inspection of the deck plus 25% increase for estimating purposes. Green hatched portions represent Class B bridge deck repair. The quantity for "Deck Repair, Class B" is estimated as 20.0 SY based on visual inspection of the deck. Actual spalled and hollow areas as determined by the Engineer at the time of construction shall be repaired.

Present deck thickness is variable based on bridge widening and summarized in the table below. The contractor shall exercise care in removing concrete in order to prevent unnecessary unbonding of reinforcing steel. The values in the table are theoretical and based on design plans with design no. 565, 905, and 506.

Location	Full Depth Thickness (In.)	Overlay (In.)
Beam Lines 1 to 8	7 5/8"	1 3/4"±
Beam Lines 8 to 12	9 7/16"	1 9/16"±

Deck repairs shall be constructed using one of the following products in lieu of materials listed in 2413.02 of the standard specification:

- CTS RapidSet DOT Concrete Mix (aggregate included)
- Dayton Superior Pave Patch 3000 (extend with manufacturer's recommended aggregate)
- Mapei Planitop 18 (extend with manufacturer's recommended aggregate)
- Approved equal

Performance of the above products can be adversely affected by using an excessive amount of water. Contractor shall not exceed the maximum amount of mixing water specified in the product documentation. Contractor shall mix the product in accordance with the manufacturer's instructions.

Concrete shall be batched using a continuous mixer with volumetric proportioning or mechanically operated mixers. The Engineer may approve other methods of batching and mixing. Concrete shall be placed in a plastic state to avoid formation of cold joints within a repair area.

Contractor shall submit a concrete placement plan, detailed schedule, and concrete mix design for approval at least 30 calendar days prior to trial application. Submittals and allotted review schedule shall be in accordance with Article 1105.03 of the Standard Specifications.

At least 7 days prior to starting deck repairs, an offsite trial application of the concrete shall be completed to demonstrate proper set time, strength gain, effectiveness of mixing, placing, curing methods and finishing equipment proposed. Finishing shall include method of tining or grooving to match the existing deck surface. The trial application shall be at least 5 feet long and 5 feet wide and 7.5 inches thick. The location of the trial application shall be approved by the Engineer. The Contractor shall repeat the trial application as directed by the Engineer at no additional cost to the State until satisfactory results are obtained. All costs associated with offsite trial application(s) is included in the lump sum bid item, “Trial Batch Application”.

The concrete will be required to be placed and open to traffic in a short time frame due to construction requirements during non-peak hours. Required minimum compressive strength before traffic can be opened shall be 3,000 psi. Concrete shall be wet cured a minimum of one hour prior to opening to traffic.

Concrete compressive strength testing shall be completed during the trial application and at the start of repair work on each bridge. Cylinders shall be tested to determine 24-hour compressive strength. If mixing irregularities are detected, additional cylinders for 24-hour compressive strength confirmation may be cast at no extra cost to the State. Testing will be completed by Iowa DOT District staff.

The finish of the deck shall be restored to existing grade and textured appropriately with tining in the longitudinal direction or longitudinal grooving per Standard Specification Article 2412.03,D,4,a.

ESTIMATED BRIDGE QUANTITIES

ITEM NO.	ITEM CODE	ITEM	UNIT	TOTAL
1	2413-0698074	DECK REPAIR, CLASS A	SY	271
2	2413-0698075	DECK REPAIR, CLASS B	SY	20
3	2533-4980005	MOBILIZATION	LS	1
4	2599-9999010	TRIAL BATCH APPLICATION	LS	1

ESTIMATE REFERENCE INFORMATION

ITEM NO.	ITEM CODE	ITEM DESCRIPTION
1	2413-0698074	DECK REPAIR, CLASS A --
2	2413-0698075	DECK REPAIR, CLASS B --
3	2533-4980005	MOBILIZATION --
4	2599-9999010	TRIAL BATCH APPLICATION INCLUDES ALL COSTS ASSOCIATED WITH OFF-SITE TRIAL APPLICATION, SUBMITTAL OF MIX DESIGN CONCRETE PLACEMENT PLAN, A DETAILED SCHEDULE, AND REQUIRED COMPRESSIVE STRENGTH TESTING.


Specifications:

Design: AASHTO Series of 2002.  
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.

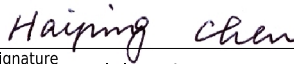
Design Stresses:

Design stresses for the following materials are in accordance with the AASHTO Standard Specifications for Highway Bridges, Series of 2002.  
Reinforcing steel in accordance with Section 8, Grade 60.  
Concrete in accordance with Section 8, f'c = 4.0 ksi, except Deck repair concrete in accordance with manufacturers specifications and plan notes.

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.



03-20-2026

Signature

Haiping Chen

Date

Printed or Typed Name

My license renewal date is December 31, 2026

Pages or sheets covered by this seal: Sheet V.1 & V.2

Location

I-235 W.B. OVER NE 46TH AVE.  
T-79N R-23W  
SECTION 18 & 19  
DELAWARE TOWNSHIP  
POLK COUNTY  
MAINT. NO. 7713.3L235  
FHWA NO. 43061  
Latitude: 41.644259  
Longitude: -93.575818

Roadway quantities shown elsewhere in these plans

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

Design History  
At This Site

(Includes This Design)

Des. No.	Type of Work
565	Original Design
905	Reconstruct-Bridge Widening
406	Median Barrier Rail Const.
506	Bridge Deck Overlay
922	Bridge Repair
2426	Bridge Repair

Design For Repairs to 0 Degree  
150'-10" x 56'-10 1/4" Pretensioned  
Prestressed Concrete Beam Bridge  
38'-11 1/2" End Spans 72'-11" Interior Span

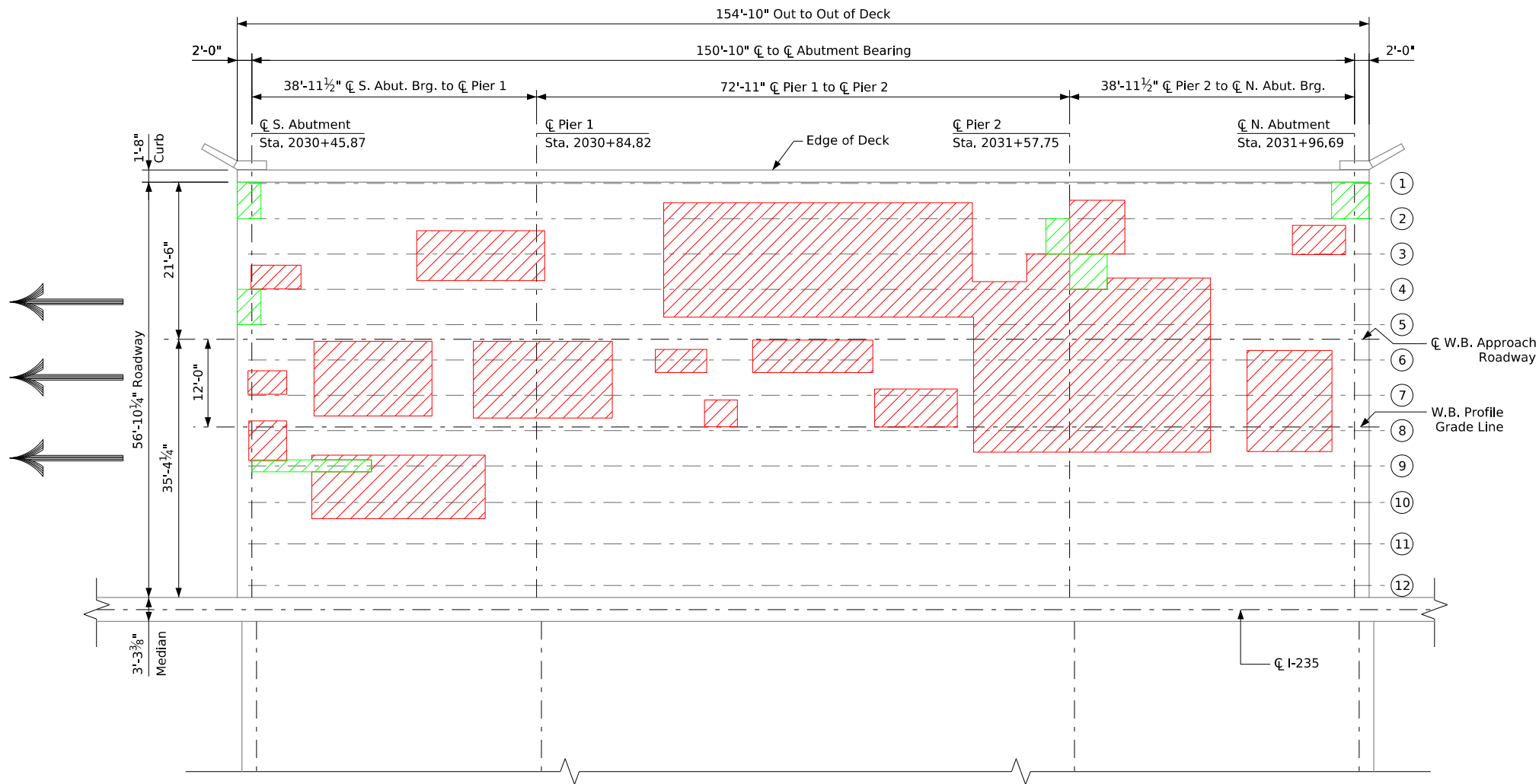
General Notes & Quantities

STA. 2031+20.84 (Ç I-235) Turn-in Date: April 2026

Polk County

IOWA DEPARTMENT OF TRANSPORTATION  
Design No. 2426 Design Sheet No. 1 of 2 FHWA No. 043061





Situation Plan

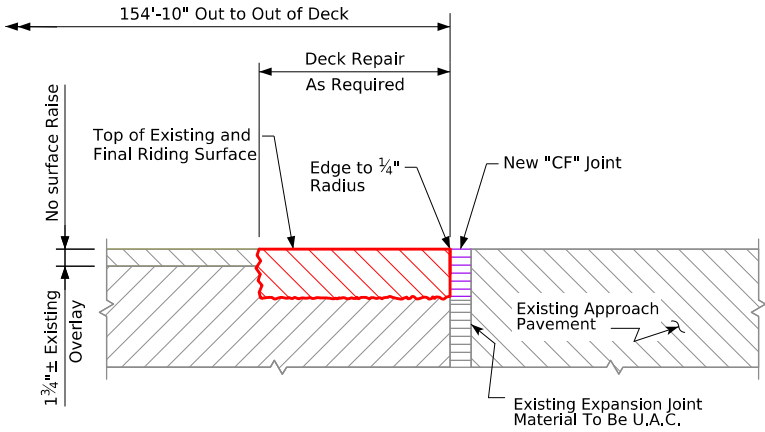
Note:

Class A Repair = 271.0 SY

Class B Repair = 20.0 SY

Actual spalled and hollow area, as determined by the Engineer at the time of construction shall be repaired.

Contractor shall not damage beams during removal operations and take measures to protect the top flange. The engineer shall be notified of damage to the existing beam top flange.

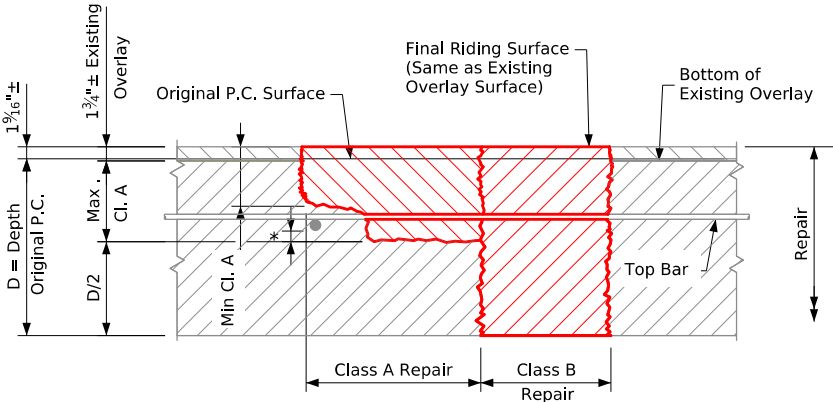


Part Longitudinal Section Along Roadway

Note:

Both Abutments

Where deck repairs at the end of the bridge disturb the existing joint material, the Contractor shall remove existing joint material along the length of the repair to a depth of the repair. Adjacent surfaces shall be cleaned with light sand blasting and new "CF" joints shall be installed. Joint sealant material shall extend 6" minimum beyond the length of the repair, or as directed by the Engineer. All costs for material, equipment, and labor for removing and replacing joint material adjacent to repair areas shall be considered incidental to "Deck Repair" bid items and no additional measurement or payment will be made.



Repair Definition

\*Note:

The maximum Class A repair depth may not in all cases provide 3/4" minimum clearance around unbonded reinforcing bars as required in Section 2413.03, C, 1, c of the Standard Specifications. The Contractor shall perform additional removal to provide the specified minimum clearance. Additional removal beyond the maximum Class A repair depth shall be considered incidental to "Class A Deck Repairs" and does not constitute a reclassification of deck repairs and will not be measured or paid for separately.

Design For Repairs to 0 Degree

150'-10" x 56'-10 1/4" Prestressed Concrete Beam Bridge

38'-11 1/2" End Spans72'-11" Interior Span

Deck Repair Details

STA. 2031+20.84 (C I-235)Turn-In Date: April 2026

Polk County

IOWA DEPARTMENT OF TRANSPORTATION

Design No. 2426Design Sheet No. 2 of 2FHWA No. 043061