*63100085 TRAFFIC BARRIE *63100167 TRAFFIC BARRIE 63200310 GUARDRAIL REM *63302700 REMOVE AND RE 64200116 SHOULDER RUM	ITEM IER TERMINAL, TYPE 2 IER TERMINAL, TYPE 6	EACH EACH	90% FED 10% STATE TOTAL QUANTITY	ROADWAY 0005 URBAN	BRIDGE 0013 S.N. 082-0174	BRIDGE 0013 S.N. 082-0175	BRIDGE 0013 S.N. 082-0176	BRIDGE 0013 S.N. 082-0179	BRIDGE 0013	BRIDGE 0013	BRIDGE 0013	BRIDGE 0013
*63100045 TRAFFIC BARRIE *63100085 TRAFFIC BARRIE *63100167 TRAFFIC BARRIE 63200310 GUARDRAIL REM *63302700 REMOVE AND RE 64200116 SHOULDER RUM 67000400 ENGINEER'SFIE	IER TERMINAL, TYPE 2 IER TERMINAL, TYPE 6	EACH	QUANTITY	URBAN								0013
*63100045 TRAFFIC BARRIE *63100085 TRAFFIC BARRIE *63100167 TRAFFIC BARRIE 63200310 GUARDRAIL REM *63302700 REMOVE AND RE 64200116 SHOULDER RUM 67000400 ENGINEER'SFIE	IER TERMINAL, TYPE 6				S.N. 082-0174	S.N. 082-0175	S.N. 082-0176	S N 082-0179				
*63100085 TRAFFIC BARRIE *63100167 TRAFFIC BARRIE 63200310 GUARDRAIL REM *63302700 REMOVE AND RE 64200116 SHOULDER RUM 67000400 ENGINEER'SFIE	IER TERMINAL, TYPE 6		10	10				O.11. GOZ-0170	S.N. 082-0306 (EB)	S.N. 082-0307 (WB)	S.N. 082-308 (EB)	S.N. 082-309 (WB)
*63100085 TRAFFIC BARRIE *63100167 TRAFFIC BARRIE 63200310 GUARDRAIL REM *63302700 REMOVE AND RE 64200116 SHOULDER RUM 67000400 ENGINEER'SFIE	IER TERMINAL, TYPE 6		10	10	<u> </u>							
*63100167 TRAFFIC BARRIE 63200310 GUARDRAIL REM *63302700 REMOVE AND RE 64200116 SHOULDER RUM 67000400 ENGINEER'SFIE		EACH		 	C							
*63100167 TRAFFIC BARRIE 63200310 GUARDRAIL REM *63302700 REMOVE AND RE 64200116 SHOULDER RUM 67000400 ENGINEER'SFIE		EACH						-				
#63302700 REMOVE AND RE 64200116 SHOULDER RUN 67000400 ENGINEER'S FIE	IED TEDMINAL TYPE 4/6DECIAL) TANGENT		6	6								
*63302700 REMOVE AND RE 64200116 SHOULDER RUN 67000400 ENGINEER'SFIE	IER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	12	12				5				
*63302700 REMOVE AND RE 64200116 SHOULDER RUN 67000400 ENGINEER'SFIE												
64200116 SHOULDER RUN 67000400 ENGINEER'SFIE	MOVAL	FOOT	13,856	13,856				i i				
64200116 SHOULDER RUN 67000400 ENGINEER'SFIE					V			3	i i			
67000400 ENGINEER'SFIE	REERECT TRAFFIC BARRIER TERMINALS, TYPE 6	EACH	2		0	4		5	1	1		
67000400 ENGINEER'SFIE	MDLE CEDIDO 40 INCL	5007	400.050	400.050				3				
	WBLE STRIPS, TO INCH	FOOT	139,358	139,358								
67100100 MOBILIZATION	ELD OFFICE, TYPE A	CAL MO	24	24			-	5.	2			
67100100 MOBILIZATION												
		L SUM	1		0.20	0.20	0.20	0.20	0.05	0.05	0.05	0.05
- II		<u>.</u>										
70100207 TRAFFIC CONTR	ROL AND PROTECTION, STANDARD 701402	EACH	8						2	2	2	2
70100325 TRAFFIC CONTR	ROL AND PROTECTION, STANDARD 701423	EACH	2			2		2				
			mm	······	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		C				
70100405 TRAFFIC CONTR	ROL AND PROTECTION, STANDARD 701321	EACH	2		1	1	3					
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70100420 TRAFFIC CONTR	ROLAND PROTECTION, STANDARD 701411	EACH	42	42								
70400450	DOLAND PROTECTION CTANDARS 704004	1 2111	1									
70100450 TRAFFIC CONTR	ROL AND PROTECTION, STANDARD 701201	L SUM	1	1								
70100700 TRAFFIC CONTR	ROL AND PROTECTION, STANDARD 701406	L SUM	1	1				<u></u>				
					ė.	d .						

* SPECIALTY ITEM

A REVISED 2-24-2025

OUTCO ENGINEERING INC	

	PLOT DATE = 2/3/2025	DATE -	12/02/2024	REVISED	- [
- 13	PLOT SCALE = 0.16666633 '/in.	CHECKED -	SMK	REVISED	-
		DRAWN -	RG	REVISED	-
	USER NAME = rgoertz	DESIGNED -	RG	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ľ		S	UMMA	RY OF Q	JANTI'	TIES	F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				I-64			64	82-(4,5,6,7)-1RS-2	ST. CLAIR	388	8
Ų				1-0-1				2.00 V.0	CONTRACT	NO. 76	R99
Ì	SCALE: NONE	SHEET 4	OF '	12 SHEE	STA.	TO STA.		ILLINOIS FED. AI	D PROJECT		1

			90% FED 10% STATE				CO	NSTRUCTION TYPE	CODE			
1			ſ	ROADWAY	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE	BRIDGE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0005	0013	0013	0013	0013	0013	0013	0013	0013
NO.			QUANTITY	URBAN	S.N. 082-0174	S.N. 082-0175	S.N. 082-0176	S.N. 082-0179	S.N. 082-0306 (EB)	S.N. 082-0307 (WB)	S.N. 082-308 (EB)	S.N. 082-309 (WE
70100800	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	LSUM	1	1								
70100815	TRAFFIC CONTROL AND PROTECTION, STANDARD 701446	L SUM	1	1								
					in the second se			1				
70100825	TRAFFIC CONTROL AND PROTECTION, STANDARD 701456	LSUM	1	1			-1	-		-		
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1						0.50	0.50		
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	60	60	3							
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	2	2	0							
			Comm)							
70106700	TEMPORARY RUMBLE STRIPS	EACH	12	12	}							
					<u>/1\</u>			:				
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	633	365	14	14	35	45	40	40	40	40
70200100	NIGHTTIME WORK ZONE LIGHTING	L SUM	1	1	in the second se							
					:							
70300100	SHORT TERM PAVEMENT MARKING	FOOT	7,597	7,597	7.			ie.				
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQFT	31,684	31,684								
70300211	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS - PAINT	SQFT	588	588								
70300221	TEMPORARY PAVEMENT MARKING - LINE 4"- PAINT	FOOT	14,548	14,548	1		·	1		y		
		-		·								
70300241	TEMPORARY PAVEMENT MARKING - LINE 6"- PAINT	FOOT	222,054	222,054								

⚠ REVISED 2-25-2025



PLOT DATE = 2/3/2025	DATE -	12/02/2024	REVISED -
PLOT SCALE = 0.16666633'/in.	CHECKED -	SMK	REVISED -
,	DRAWN -	RG	REVISED -
USER NAME = rgoertz	DESIGNED -	RG	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Ì		S	UMMA	RY	F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
					I-64			64	82-(4,5,6,7)-1RS-2	ST. CLAIR	388	9
Ų					1-0-7			II -	01 19	CONTRACT	NO. 76	R99
Ü	SCALE: NONE	SHEET 5	OF	12	SHEETS	STA.	TO STA.		ILLINOIS FED.	AID PROJECT		

MAINTENANCE OF TRAFFIC GENERAL NOTES THE CONTRACTOR MUST COORDINATE ALL LANE CLOSURES WITH THE ENGINEER. ALL TRAFFIC CONTROL DEVICES AND SIGNAGE REQUIRED ON I-64, IL 157, IL 159 (ILLINOIS ST), HWY 50, RAMPS, AND GREENMOUNT ROAD IN ACCORDANCE WITH APPLICABLE IDOT HIGHWAY STANDARDS.

LANE CLOSURES, RAMP CLOSURES, SIGNING, PAVEMENT MARKING AND BARRICADE PLACEMENT SHALL BE IN ACCORDANCE WITH THE LATEST HIGHWAY STANDARD DRAWINGS.

4 EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH TEMPORARY PAVEMENT MARKINGS SHALL BE REMOVED, AS DIRECTED BY THE ENGINEER. THE REMOVAL WILL BE MEASURED IN SQUARE FEET AND PAID FOR AS "PAVEMENT MARKING REMOVAL".

ALL DRUMS, VERTICAL PANELS, AND BARRICADES IMMEDIATELY ADJACENT TO THE EDGE OF TRAVELED WAY SHALL BE EQUIPPED WITH BIDIRECTIONAL STEADY BURN LIGHTS. CONES WILL NOT BE ALLOWED, UNLESS NOTED. DRUM SPACING SHALL BE 50' CENTER TO CENTER ALONG THE I-64 AND 25' C-C AT ALL RAMP LOCATIONS. DRUM SHALL BE PLACED AT 100' C-C AT LOCATIONS OF FULL SHOULDER WIDTH.

ANY EXISTING SIGNS DENOTED WITHIN THE PLAN SET THAT DO NOT APPLY TO THE REVISED TRAFFIC PATTERNS SHALL BE REMOVED OR COVERED, AS DIRECTED BY THE ENGINEER. THE COVERING OR REMOVAL OF GROUND MOUNTED/OVERHEAD SIGNS SHALL BE NON-DESTRUCTIVE IN NATURE.

TEMPORARY CONCRETE BARRIER MUST BE CONTINUOUSLY PINNED ALONG THE TRAFFIC SIDE WHERE HAZARD EXISTS WITHIN 3.5 FEET OF BEHIND OF THE TEMPORARY CONCRETE BARRIER; THE BARRIER SHALL BE ANCHORED TO THE PAVEMENT

ADVANCED SIGNING AND/OR CHANGEABLE MESSAGE SIGNS SHALL BE USED IN ADVANCE OF ROAD WORK IN BOTH DIRECTIONS ALONG I-64, IL 157, IL 159 (ILLINOIS ST), HWY 50, AND GREENMOUNT ROAD. CHANGEABLE MESSAGE SIGNS SHALL BE USED IN ADVANCE OF RAMP WORK. ADVANCED SIGNING WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR "TEMPORARY SIGNING" CHANGEABLE MESSAGE SIGNS WILL BE PAID AT THE CONTRACT UNIT PRICE FOR "CHANGEABLE MESSAGE SIGN".

ALL TEMPORARY PAVEMENT MARKINGS SHALL BE PAVEMENT MARKING TAPE. TYPE IV OF THE LINE WIDTH SPECIFIED.

THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND PROVIDING ACCESS POINTS TO THE WORK ZONE. ACCESS POINTS MUST BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

THERE ARE NO DRAWINGS FOR MAINLINE PAVING STAGING PROVIDED. WORK ZONE SHALL BE IN ACCORDANCE WITH APPLICABLE IDOT HIGHWAY STANDARDS 701401, 701411, 701446, 701451, & 701456.

THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE PLACEMENT AND MESSAGES FOR ALL CHANGEABLE MESSAGE SIGNS WITH THE ENGINEER.

MAINTENANCE OF TRAFFIC GENERAL NOTES, CONTINUED

- STRUCTURAL WORK FOR OVERHEAD STRUCTURES THAT IS REQUIRED TO BE COMPLETED FROM BELOW WILL NEED LANE CLOSURES ON 1-64 WITH IDOT DISTRICT MOVABLE BARRIER. CONTACT CRAIG POETTKER AT 618-346-3279 TEN WORKING DAYS PRIOR TO ANTICIPATED LANE CLOSURS.
- (4) LANE CLOSURES REQUIRED ON OVERHEAD BRIDGES WILL REQUIRE TEMPORARY CONCRETE BARRIER WALL, ATTENUATORS AND TEMPORARY BRIDGE TRAFFIC SIGNALS AS SHOWN ON HIGHWAY STANDARD 701321.

PRE-STAG

WORK DURING THIS STAGE WILL INCLUDE ALL WORK THAT IS REQUIRED TO PLACE TRAFFIC IN STAGE 1 INCLUDING BUT NOT LIMITED TO SIGNING, PAVEMENT MARKING AND INLET AND PIPE PROTECTION.

PROPOSED BRIDGE REPAIR ON STRUCTURES. CONSTRUCTION ALLOWED ON ONE STRUCTURE AT A TIME IN EACH DIRECTION.

I-64 (I-255 TO IL 159)

SEE PEAK HOUR SCHEDULE BELOW

I-64 (IL 159 TO GREENMOUNT ROAD)

SEE PEAK HOUR SCHEDULE BELOW

SCALE:

								PEAK	HOUR	SCHEE	DULE								_					
		,					I-6	64 (I- 2 55	to GRE	ENMO	UNT RD).,										=		
	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
I-64 W OF IL 159																								
WB BRIDGE (ONE LANE CLOSED CONC BARRIER)	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
WB ONE LANE CLOSED REPAVING	Υ	Y	Υ	Υ	Υ	Υ	N	N	N	N	N	N	N	N	N	N	N	N	N	Υ	Y	Υ	Υ	Υ
WB TWO LANE CLOSED REPAVING	Υ	Υ	Υ	Υ	Υ	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Υ	Υ	Υ
I-64 W OF IL 159			-																					
EB BRIDGE (ONE LANE CLOSED CONC BARRIER)	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y	Υ	Υ	Υ
EB ONE LANE CLOSED REPAVING	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	N	N	N	N	N	N	N	N	N	N	N	Υ	Υ	Υ	Υ	Υ
EB TWO LANE CLOSED REPAVING	Υ	Υ	Υ	Y	Υ	Υ	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Υ	Y
I-64 E OF IL 159			1																					
WB BRIDGE (ONE LANE CLOSED CONC BARRIER)	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
WB ONE LANE CLOSED REPAVING	Υ	Υ	Υ	Υ	Υ	Υ	N	N	N	N	N	N	N	N	N	N	N	N	Υ	Υ	Υ	Υ	Υ	Υ
WB TWO LANE CLOSED REPAVING	Υ	Υ	Υ	Υ	Υ	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	Υ	Y
I-64 E OF IL 159			0.									0.												
EB BRIDGE (ONE LANE CLOSED CONC BARRIER)	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
EB ONE LANE CLOSED REPAVING	Υ	Y	Υ	Υ	Y	Υ	Υ	Υ	Υ	N	N	N	N	N	N	N	N	N	Υ	Υ	Υ	Υ	Υ	Υ
EB TWO LANE CLOSED REPAVING	Υ	Υ	Υ	Υ	Υ	Υ	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Υ	Υ

↑ REVISED SHEET 2-20-2025

Kaskaskia Emgineering Group, LLC	206 E. Main Sr., Some HSD Sellarette, Etterete (2220 685,233,5877 phone 685,233,5877 for www.lestoakds.cng.com
Illinois Professional Design Firm Professional Engineering Group	184,004773 20-5380586

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90	USER NAME = rjo	DESIGNED -	REVISED -
		DRAWN -	REVISED -
-		CHECKED -	REVISED -
	PLOT DATE = 1/14/2025	DATE -	REVISED -

Existing Structure: S.N. 082-0174 originally built 1970 as a 2-span continuous Plate Girder with R.C. deck, $318'-5\frac{1}{8}''$ back to back length and out to out width is 46'-0''. Back to Back of Approach bents with 5'-0'' sidewalks on each side. Re-built in 2007. Road shall be remain open to traffic utilizing staged construction. No Salvage.

318'-51/8" Back to Back of Approach Bents 53'-71/4" 113'-01/2" 45'-61/4" 106'-31/8" nemierererenadadadadad 0000000000000000000 S. ABUT. N. ABUT. **PIER**

LOADING HS20-44

Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications

for Highway Bridges, 17th Ed.

ELEVATION VIEW

DESIGN STRESSES

FIELD UNITS (EXISTING CONSTRUCTION) f'c = 3,000 psi (Superstructure - 1970 original)

fy = 40,000 psi (Reinforcement - 1970 original) fy = 60,000 psi (Reinforcement - 2004 rehab.)

FIELD UNITS (NEW CONSTRUCTION)

f'c = 4,000 psi

fy = 60,000 psi (Reinforcement)

- 2 Staging Details
- 3 Deck Patches Top Side
- 4 Floor Drain Details
- 5 Abutment Joint Replacement Details

- 10 Bar Splicer Assembly and Mechanical Splicer Details

INDEX OF SHEETS LOCATION 3

- 1 General Plan and Elevation

- 6 Joint Replacement and Repair Details
- 7-8 Preformed Joint Strip Seal
- 9 Abutment Repairs

Ç Pier´Śta. 13+01.38 Ç Bunkum Rd. $\langle A \rangle$ Sta. 455+75.48 Ç F.A.I. 64 (D)Bk. of S. Appr. Bent Bk. of N. Appr. Bent Sta. 14+53.16 Sta. 11+34.73 manage of the state of the stat ~B $\langle B \rangle_7$ & Brg. S. Abut. & Brg. N. Abut. Sta. 14+07.64 Sta. 11+88.34 53'-71/4" 106'-31/8" 45'-61/4" 113'-01/5'

318'-51/8" Back to Back of Approach Bents

PLAN VIEW

GENERAL NOTES:

Existing reinforcement bars extending into removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splice or anchorage system at the contractors expense.

BILL OF MATERIAL

UNIT SUPER

20

975

9.2

12

116

20

Sq Yd

Sq Yd

Cu Yd

Foot

Sq Yd

Each

Cu Yd Pound 1,250

Fach

Foot

Each

Foot

Foot

L Sum

Sq Ft

Sq Ft

Sq Yd

Sq Yd

Sq Yd

L Sum

Each

Sq Ft 15,950

SUB

165

30

TOTAL

30

9.2

20

975

9.2

1,250

12

116

20 77

165

30

30

15,950

ITEM

Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches,

Structural Repair of Concrete (Depth Greater Than 5 Inches)

tone Riprap, Class A4

oncrete Superstructure

Preformed Joint Strip Seal

Deck Slab Repair (Partial)

Bridge Deck Concrete Sealer

Abutment Vault Door Retrofit

*See Special Provisions

Steel Flared End Sections 12"

Reinforcement Bars, Epoxy Coated

Removing and Re-Erecting Existing Railing

Cleaning and Painting Steel Bridge No. 3

Deck Slab Repair (Full Depth, Type I)

Deck Slab Repair (Full Depth, Type II)

Cleaning and Painting Exposed Rebar

ilter Fahric

loor Drains

Bar Splicers

Pipe Drains 12"

oncrete Removal

Protective Shield

Pipe Culvert Removal

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50° F

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless noted otherwise. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

Plan dimensions and details relative to the existing structure have been taken from existing plans are Subject to nominal construction variations. The contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Cleaning and painting of the existing structural steel is required for this structure and shall be performed as specified in the special provisions for "Cleaning and Painting Existing Steel Structures." All beams, bearings and other structural steel within 5ft (measured along the beam) of either side of deck joints shall be cleaned per near white blast cleaning SSPC-SP10.

The designated areas cleaned per Near White Blast Cleaning shall be painted according to the requirements of System I-OZ/E/U. The color of the final finish coat for all surfaces shall be Gray, Munsell No. 5B 7/1.

 \langle SSPC QP1 \langle and QP2 \rangle certification is required for this contract.

Bridge deck concrete sealer includes the top of decks, approach slabs, and the front faces and tops of curbs and parapets.

SCOPE OF WORK

- $\langle \overline{\mathsf{A}}
 angle$ Remove existing Expansion Joints and install new Preformed Joint Strip Seals.
- $\langle B \rangle$ Install Deck Drains.
- $\langle C \rangle$ Clean and Paint Structural Steel at Joint locations.
- $\langle \overline{D}
 angle$ Bridge Deck Slab Repair, various locations. See Structural Sheet 3 of 9.



Pipe Culvert & End Section Repair, Riprap Erosion Repair. DATE: 2/19/2025 EXPIRES 11/30/26 Range 8W. 3rd P.M.

STRUCTURAL SHEET 1 OF 10 SHEETS

└Structure Location LOCATION SKETCH

GENERAL PLAN AND ELEVATION S.A. ROUTE 34 (BUNKUM RD.) OVER F.A.I. ROUTE 64 SEC. 82-(4,5,6,7)-1RS-2 ST. CLAIR COUNTY STATION 455+75.48 STRUCTURE NO. 082-0174



V	USER NAME =	DESIGNED	JKP	REVISED	- 🛕 2/19/2025 - EEL
С		CHECKED - I	DCB	REVISED	-
iG .	PLOT SCALE =	DRAWN - F	FDL	REVISED	-
8	PLOT DATE =	CHECKED - I	DCB	REVISED	-

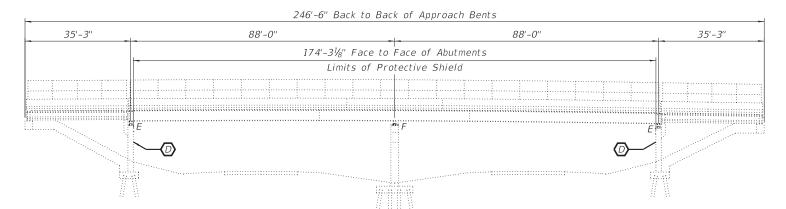
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

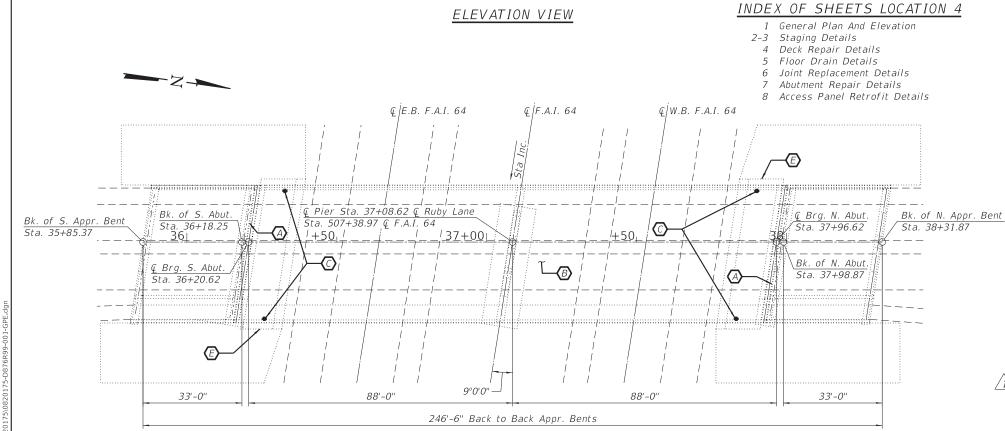
Bridge Deck Concrete Sealer.

SECTION COUNTY 82-(4.5.6.7)-1RS-2 ST CLAIR 388 339 WHA# 1155D20 CONTRACT NO. 76R99 ILLINOIS F

EXISTING STRUCTURE: SN 082-0175: Built as Ruby Lane over F.A.I Route 64 in 1970. The superstructure consist of R.C. deck 246'-6" long by 46'-0" wide supported on two span welded plate girder. Two approach spans over vaulted abutment consist of PPC I-beams. and rehabilitated in 2003. Structure to be repaired as detailed in

Traffic maintained utilizing stage construction.





PLAN VIEW

BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Protective Shield	Sq Yd	891		891
Floor Drains	Each	4		4
* Cleaning and Painting Steel Bridge No. 4	L Sum	1		1
* Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq Ft		1,312	1,312
* Structural Repair of Concrete (Depth Greater Than 5 Inches)	Sq Ft		100	100
* Deck Slab Repair (Full Depth, Type I)	Sq Yd	15	1	16
* Deck Slab Repair (Full Depth, Type II)	Sq Yd	15		15
* Deck Slab Repair (Partial)	Sq Yd	30		30
* Silicone Joint Sealer, 2.75	Foot	92		92
* Temporary Shoring and Cribbing	Each		2	2
* Cleaning and Painting Exposed Rebar	L Sum	1		1
* Bridge Deck Concrete Sealer	Sq Ft	12,350		12,350
* Abutment Vault Door Retrofit	Each	1		1
*Con Chasial Brayisians				

*See Special Provisions

GENERAL NOTES:

This structure will retain the same number: 082-0175.

Two way traffic shall be maintained during rehabilitation of existing structure.

Prior to pouring the new concrete deck section, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

Repair dimensions and locations shown are estimates and will be determined by the Engineer in the field.

The contractor shall provide support and/or shoring systems for the beams in the area of Structural Repair of Concrete to maintain solid bearing during concrete removal. The support shoring system shall be approved by a Licensed Structural Engineer in the State of Illinois. Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50° F.

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during the concrete removal shall be replaced with approved bar splicer or anchorage system. Cost included with Concrete Removal.

Plan dimensions and details relative to the existing structure have been taken from existing plans are Subject to nominal construction variations. The contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such overiations shall not be cause for additional compensation for a change in scope of the work, however, the contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Cleaning and painting of the existing structural steel is required this structure and shall be performed as specified in the special provisions for "Cleaning and Painting Existing Steel Structures." All beams, bearings and other structural steel within 5ft (measured along the beam) of either side of deck joints shall be cleaned per Near White Blast Cleaning SSPC-SP10.

The designated areas cleaned per Near White Blast Cleaning shall be painted according to the requirements of I-OZ/E/U. The color of the final finish coat for all surfaces shall be Gray, Munsell No. 5B 7/1.

 \searrow SSPC QP1 ${$ and QP2 ${}$ certification is required for this contract.

Bridge deck concrete sealer includes the top of decks, approach slabs, and the front faces and tops of curbs and parapets.

LOADING HS20-44

Allow 25#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS (EXISTING)

1996 AASHTO Specifications, with 1997 thru 2000 Interim pecifications

DESIGN SPECIFICATIONS (NEW)

2002 AASHTO Standard Specifications for Highway Bridges, 17th. Edition

SCOPE OF WORK:

- (A) Remove existing expansion Preformed Joint Seal at abutments and replace with Silicone joint sealer. See structural sheets 6 of 7.
- (B) Deck repair. See structural sheet 4 of 7.
- (C) Floor Drain Installation, See structural sheets 5 of 7.
- (D) Abutment Repair Details, and location of Temporary Shoring and Cribbing. See structural sheets 7 of 7.
- (E) Install Vaulted Abutment Access Panel hardware.



DATE: 2/19/2025 EXPIRES 11/30/26

STRUCTURAL SHEET 1 OF 8 SHEETS



LStructure Location
LOCATION SKETCH

GENERAL PLAN AND ELEVATION

F.A.U. 9329 (RUBY LANE)

OVER F.A.I. ROUTE 64

SEC. 82-(4,5,6,7)-1RS-2

ST. CLAIR COUNTY

STATION 37+08.62

STRUCTURE NO. 082-0175

WILLETT HOFMANN
& A S S O C I A T E S I N C
ENGINEERING ARCHITECTURE LAIDS SURVEYING
809 EAT 2ND STREET, IDXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

 $f'c = 4,000 \ psi$

DESIGN STRESSES

FIELD UNITS (EXISTING CONSTRUCTION)

f'c = 3,000 psi (Superstructure - 1970 original)

fy = 40,000 psi (Reinforcement - 1970 original)

fy = 60,000 psi (Reinforcement - 2003 rehab.)

FIELD UNITS (NEW CONSTRUCTION)

fy = 60,000 psi (Reinforcement)

USER NAME = DESIGNED - SM REVISED - 1	2/19/2025 - EEL
CHECKED - DCB REVISED -	
PLOT SCALE = DRAWN - FDL REVISED -	
PLOT DATE = CHECKED - DCB REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

A.I. TE.	SEC ⁻	Γ Ι ΟΝ		COUNTY	TOTAL SHEETS	SHEET NO.
64	82-(4,5,6,	7)-1RS-2		ST, CLAIR	ST. CLAIR 388	
	WHA# 1155	D20		CONTRACT NO. 76R		
ILLINOIS FED. AID PROJECT						

This structure will retain the same number: 082-0176.

Two way traffic shall be maintained during rehabilitation of existing structure.

Prior to pouring the new concrete latex deck surface, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces.

Repair dimensions and locations shown are estimates and the final areas will be determined by the Engineer in the field.

Concrete parapet, deck, and abutment repair areas shown in the drawings for S.N. 082-0176 are estimated based on inspection data from October 2023.

It is expected that the actual repair areas may be different in shape, size, and location than shown on the drawings. The exact locations shall be determined by the Engineer. The Engineer shall show actual repair areas and their dimensions on AS-BUILT-PLANS.

Extreme caution shall be exercised while removing concrete adjacent to beams. Any Damage to Beams shall be repaired at the Contractor's expense.

Existing reinforcement bars exposed during construction shall be field coated with epoxy at the discretion of the Engineer in accordance with manufacturer of epoxy system.

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the polymer concrete nosing is poured at an ambient temperature other than $50^{\circ}F$.

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during the concrete removal shall be replaced with approved bar splicer or anchorage system. Cost included with Concrete Removal.

Deck slab repair (Full Depth, Type 1) has a contingency quantity. If required, the limits shall be determined by the Engineer in field.

Up to $\frac{1}{4}$ " may be ground off the bridge deck and the bridge approach slabs.

Plan dimensions and details relative to the existing structure have been taken from existing plans are Subject to nominal construction variations. The contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Cleaning and painting of the existing steel structural steel is required for this structure and shall be as specified in the special provisions for "Cleaning and Painting Existing Steel Structures." After removal of deck ends but prior to encasement of the steel beams, all beams, bearings, and other structural steel within 5ft (measured along the beam) of the deck joints shall be cleaned per Near White Blast Cleaning SSPC-SP10.

The designated areas cleaned per Near White Blast Cleaning shall be painted according to the requirements of paint system I-OZ/E/U. The color of the final finish coat for all interior surfaces shall be Interstate Green (Munsell No. 7.5G 4/8).

SSPC QP1 (and QP2) certification is required for this contract.

Bridge deck concrete sealer includes the top of decks, approach slabs, and the front faces and tops of curbs and parapets.

DESIGN STRESSES

FIELD UNITS (EXISTING CONSTRUCTION)

f'c = 3,000 psi (Superstructure - 1975 original) fy = 40,000 psi (Reinforcement - 1975 original)

fy = 60,000 psi (Reinforcement - 2001 rehab.)

FIELD UNITS (NEW CONSTRUCTION)

f'c = 4,000 psi fy = 60,000 psi (Reinforcement)

Ty = 60,000 psi (Reini or cement)

<u>LOADING HS20-44</u> Future wearing surface, Not Allowed

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges, 17th Edition

GENERAL DATA

IL 159 OVER F.A.I. ROUTE 64

SEC. 82-(4,5,6,7)-1RS-2

ST. CLAIR COUNTY

STATION 684+74.22

S.N. 082-0176

WILLETT HOFMANN
& A S S O C I A T E S I N C
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAT 2ND STREET, DIXON, IL 61021-0367
7:815-284-3381 DESIGN FIRM: #184-000918

 USER NAME =
 DESIGNED - LEL
 REVISED - ...
 2/19/2025 - EEL

 CHECKED - DCB
 REVISED - ...

 PLOT SCALE = DRAWN - FDL
 REVISED - ...

 PLOT DATE = CHECKED - EEL
 REVISED - ...

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

This structure will retain the same number: 082-0179.

Two way traffic shall be maintained during rehabilitation of existing structure. Prior to pouring the new concrete deck section, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

The existing structural steel coating contains lead. The contractor shall take appropriate precautions to deal with the presence of lead on this project.

Repair dimensions and locations shown are estimates and will be determined by the Engineer in the field.

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the polymer concrete nosing is poured at an ambient temperature other than $50^{\circ}F$.

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during the concrete removal shall be replaced with approved bar splicer or anchorage system. Cost included with Concrete Removal.

The SW shoulder pipe drain shall be replaced. The replacement will be paid for by the pay items "Pipe Culvert Removal, Pipe Drains 12", and "Steel Flared End Sections 12". The plan quantities for these pay items are estimated. The engineer shall determine the limits of these pay items in the field.

Plan dimensions and details relative to the existing structure have been taken from existing plans are Subject to nominal construction variations. The contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Cleaning and painting of the existing structural steel is required for this structure and shall be performed as specified in the special provisions for "Cleaning and Painting Existing Steel Structures." All beams, bearings and other structural steel within 5ft (measured along the beam) of either side of deck joints shall be cleaned per near white blast cleaning SSPC-SP10.

The designated areas cleaned per Near White Blast Cleaning shall be painted according to the requirements of System I-OZ/E/U. The color of the final finish coat for all surfaces shall be Gray, Munsell No. 5B 7/1.

 \bigwedge SSPC QP1 \int and QP2 certification is required for this contract.

Bridge deck concrete sealer includes the top of decks, approach slabs, and the front faces and tops of curbs and parapets.

LOADING HS20-44

Allow 25#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS (EXISTING)

1996 AASHTO Specifications, with 1997 thru 2002 Interim specifications

DESIGN SPECIFICATIONS (NEW)

2002 AASHTO Standard Specifications for Highway Bridges, 17th. Edition

DESIGN STRESSES

FIELD UNITS (EXISTING CONSTRUCTION)

f'c = 3,000 psi (Superstructure - 1972 original) fy = 40,000 psi (Reinforcement - 1972 original) fy = 60,000 psi (Reinforcement - 2005 rehab.)

FIELD UNITS (NEW CONSTRUCTION)

f'c = 4,000 psi

fy = 60,000 psi (Reinforcement)

STRUCTURAL SHEET 2 OF 12 SHEETS

GENERAL DATA

U.S. 50 OVER F.A.I. ROUTE 64

SEC. 82-(4,5,6,7)-1RS-2

ST. CLAIR COUNTY

STATION 684+74.22

STRUCTURE NO. 082-0179

WILLETT HOFMANN
& A S S O C I A T E S I N C
ENGINEERING ARCHITECTURE LAND SUMPEYING
S09 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

 USER NAME =
 DESIGNED - SM
 REVISED - 2/19/2025 - EEL

 CHECKED - DCB
 REVISED

 PLOT SCALE = DRAWN - FDL
 REVISED

 PLOT DATE = CHECKED - DCB
 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION