Posting Date: September 15, 2022

# Request for Proposals Notification

**Title:** Johnson County Highway Department Engineering Services for Replacement of County Bridge No. 85, County Road 500 North over Grassy Creek and Culvert P-004 County Road 500 North over East Grassy Creek (Des # 2211FFE) in the Seymour District.

Response Due Date & Time: October 14, 2022 at 12:00 noon

This Request for Proposals (RFP) is official notification of needed professional services. This RFP is being issued to solicit a letter of Interest (LOI) and other documents from firms qualified to perform engineering work on federal aid projects. A submittal does not guarantee the firm will be contracted to perform any services but only serves notice the firm desires to be considered.

**Contact for Questions:** Daniel Johnston, P.E./Highway Engineer

1051 Hospital Road Franklin, Indiana 46131

(317)346-4630

djohnston@co.johnson.in.us

### **Submittal Requirements:**

1. Letter of Interest – submitted electronically (pdf) to Daniel Johnston at email address djohnston@co.johnson.in.us.

#### AND

One (1) signed Affirmative Action Certification and associated required documents for all items if the DBE goal is greater than 0% sent electronically (pdf) to Daniel Johnston at email address djohnston@co.johnson.in.us.

**Submit To:** Daniel Johnston, P.E./Highway Engineer

1051 Hospital Road Franklin, Indiana 46131

(317)346-4630

djohnston@co.johnson.in.us

#### **Selection Procedures:**

Consultants will be selected for work further described herein, based on the evaluation of the Letter of Interest (LOI) and other required documents. The Consultant Selection Rating Form used to evaluate and score the submittals is included for your reference. Final selection ranking will be determined by:

- The weighted score totals with the highest score being the top ranked firm
- Rank totals with the lowest rank total being the top ranked firm

#### **Requirements for Letters of Interest (LOI)**

- A. General instructions for preparing and submitting a Letter of Interest (LOI).
  - 1. Provide the information, as stated in Item B below, in the same order listed and signed by an officer of the firm. Signed and scanned documents, or electronically applied signatures are acceptable. Do not send additional forms, resumes, brochures, or other material unless otherwise noted in the item description.
  - 2. LOI's shall be limited to twelve (12) 8 ½" x 11" pages that include Identification, Qualifications, Key Staff, and Project Approach.
  - 3. LOI's must be received no later than the "Response Due Date and Time"; as shown in the RFP header above. Responses received after this deadline will not be considered. Submittals must include all required attachments to be considered for selection.

#### B. Letter of Interest Content

- 1. <u>Identification, Qualifications and Key Staff</u>
  - a. Provide the firm name, address of the responsible office from which the work will be performed and the name and email address of the contact person authorized to negotiate for the associated work.
  - b. List all proposed sub consultants, their DBE status, and the percentage of work to be performed by the prime consultant and each sub consultant.
  - c. List the Project Manager and other key staff members, including key sub consultant staff, and the percent of time the project manager will be committed for the contract, if selected. Include project engineers for important disciplines and staff members responsible for the work. Address the experience of the key staff members on similar projects and the staff qualifications relative to the required item qualifications.

d. Describe the capacity of consultant staff and their ability to perform the work in a timely manner relative to present workload.

### 2. Project Approach

a. Provide a description of your project approach relative to the advertised services. For project specific items confirm the firm has visited the project site. For all items address your firm's technical understanding of the project or services, cost containment practices, innovative ideas and any other relevant information concerning your firm's qualifications for the project.

### Work item details:

Local Public Agency: Johnson County Highway Department

Project Location: Bridge No. 85, County Road 500 North over Grassy Creek, in Pleasant Township in Johnson County, spans Grassy Creek; and Culvert P-004 County Road 500 North over East Grassy Creek.

Project Description: Full replacement of bridge with incidental roadway approach replacement.

MPO Des #: 2211FFE

Phases Included: PE, RW

Estimated Construction Amount: \$1,914,000 for Bridge 85; \$380,000 for Culvert P-004

Funding: 100% Local funds for PE, RW.

Term of Contract: Until Project Completion

DBE goal: 0%

Required Prequalification Categories:

▼ 8.1 Non-Complex Roadway Design ▼ 12.4 Appraisal

▼ 9.1 Level 1 Bridge Design ▼ 12.5 Appraisal Review

▼ 11.1 Right of Way Plan Development □ 13.1 Construction Inspection

✓ Additional Categories Listed Below:

5.4 Ecological Surveys

5.5 Stream and Wetland Mitigation

5.6 Waterway Permits

7.1 Geotechnical Engineering Services

9.2 Level 2 Bridge Design

12.3 Value Analysis

12.6 Negotiation

12.7 Closing

16.1 Utility Coordination

17.4 Bridge Hydraulic Design

# **LPA Consultant Selection Rating Sheet**

## Sample:

DEDC	. D 41 A				NT.		
RFP Selecti	ion Rating for			Des	. No.		
		(City, Cou	nty, Town) or (Local Public Agency)				
Com	ices Description:						
Serv	ices Description:						
Consi	ultant Name:						
Colis	Trans.						
Evaluation Cri	teria to be Rated by Sco	orers			•		
Category	Scoring Criteria			Scale	Score	Weight	Weighted Score
	Performance evaluation	n score averages f	rom historical performance data.				Score
Past			score for similar work from performance databa	se.		6	
Performance			Schedule score from performance databa			<u>3</u>	
			Responsiveness score from performance databa	se.		1	
Capacity of			equipment to perform the project on time.	1			
Team to do	A	vanability of more	than adequate capacity that results in added val  Adequate capacity to meet the schedu			20	
Work		T,	nsufficient available capacity to meet the schedu				
	Technical Expertise: I		that yield a relevant added value or efficien			+	
	to the deliverable.	mique Resources	that yield a felt valit added value of efficien	٠, ا			
TD	to the uch whate.	Demonstr	ated outstanding expertise and resources identif	ied			
Team's		Demonstr	for required services for value added bene	1 2		1	
Demonstrated		Demonstra	ated high level of expertise and resources identif	ied		15	
Qualifications			for required services for value added bene				
			Expertise and resources at appropriate lev	*********************			
			Insufficient expertise and/or resource	es3			
	Predicted ability to man	nage the project,	based on: experience in size, complexity,				
	type, subs, documentati						
Project	Demonstrated outstanding experience in similar type and complexity.					20	
Manager	Demonstrated high level of experience in similar type and complexity.					20	
, ,	Experience in similar type and complexity shown in resume.						
	Experience in different type or lower complexity.  Insufficient experience.						
	Project Understanding and Innovation that provides cost and/or time savings.					+	
Approach to			nderstanding and viable innovative ideas propos	ed. 2			
			High level of understanding of the proje	ect. 1		15	
Project			Basic understanding of the proje	ect. 0			
			Lack of project understandi	ng3			
					Weighted	l Sub-Total:	
Tr. 1 1	7.77	CC	4.6 d. 6	1 . 1 !! .	1		cc
	sibility of scorers to make regard to personal prefere	•	ntify the firm most capable of producing the hig	nest deliveral	oies in a tin	nery and cost	errective
	105010 to personal prefere						
I certify that I d	o not have any conflicts o	f interest associate	d with this consultant as defined in 49CFR118.	36.			
I have therew-1	ly ravioused the letter of in	toract for this a	sultant and certify that the above scores represe	nt my boot !	domont of	this firm's at:	litios
i nave moroughi	iy reviewed the letter of in	terest for this cons	untain and certify that the above scores represe	nt my best Ju	ugment of	ims mms abi	nues.
Signature:			Print Name:				
Title:			Date:				
			The state of the s			1	



# Johnson County Highway Department

1051 Hospital Road Franklin, IN 46131 (317) 346-4630 Office (317) 738-5378 Fax www.jchighway.com highway@co.johnson.in.us

Lucas M. Mastin Highway Supervisor Daniel E. Johnston, P.E. Highway Engineer

# **Request for Fee Proposal for Consulting Engineering Services**

September 2022

## **Project Purpose and Need**

Project includes removal, design, and replacement of Johnson County Bridge 85 and Culvert P-004 due to deterioration of existing structures. Construction and inspection funding was awarded by the Indianapolis MPO for Bridge 85. Johnson County added Culvert P-004 to the project for efficiency in design and construction. Funding for Bridge 85 is 100% local for PE and RW phases, with MPO Federal Fund Exchange participation for CE and CN phases. Funding for Culvert P-004 is 100% local for all phases.

## **Project Location and Limits**

*Bridge* 85: Whiteland Road (CR500N) over Grassy Creek, 0.50mi W of Sawmill Rd, Pleasant Twp. (Approx. coordinates 39° 32' 57.7"N, 86° 06' 39.8"W). The existing structure type is a single-span (37.2ft) adjacent prestressed box beam bridge on vertical abutments.

Culvert P-004: Whiteland Road (CR500N) over East Grassy Creek, 0.32mi W of Sawmill Rd, Pleasant Twp. (Approx. coordinates 39° 32' 57.9"N, 86° 06' 27.9"W). The existing structure type is a 11'-2" x 7'-7" steel multi-plate pipe arch.

Project area is located on Whiteland Road west of Sawmill Road at both of the structures noted above. The roadway work between both structures shall only connect if needed for hydraulic purposes or other justifiable design reasons.

## General Design Criteria

- Current INDOT Standards Specifications and Special Provisions
- Indiana Design Manual: 3R Design Standards
- AASHTO LRFD Bridge Design Specifications, 8th Ed. and subsequent interims
- AASHTO Manual for Bridge Evaluation, 3rd Ed. and subsequent interims
- INDOT Bridge Inspection Manual, Ch. 3

## **Project Information**

#### 1. Field Survey

Limits of topographical survey shall be sufficient to thoroughly analyze structure hydraulics, roadway conditions, utilities, property boundaries, etc. Anticipated survey lengths are 350ft east of culvert P-004 to 350ft west of Bridge 85 (total length of approximately 1630ft).

#### 2. Hydraulics

Existing and replacement structures for Bridge 85 and P-004 shall be hydraulically modeled using HEC-RAS software. Proposed structures shall be in support of IDNR Construction in Floodway permitting requirements. Hydraulic data table shall be included in plan details. Shall include scour

analysis (if applicable based on replacement structure type) and/or provide recommendations on scour countermeasures.

#### 3. Economic Analysis

Various structure types which meet criteria shall be considered to determine the most suitable replacement types, given life cycle costs. Proposed alternatives shall improve the existing roadway hydraulic serviceabilility within the estimated construction cost.

#### 4. Environmental Document

Bridge 85 project development shall comply with the MPO's Federal Fund Excahnge Guidance Document requirements. Culvert P-004 is funded with 100% Local funds and shall not be included in the Bridge 85 environmental document.

#### 5. Structural Design

Replacement structures shall be designed according to current AASHTO LRFD design specifications and meet all INDOT Level One, Two, and Three criteria, unless otherwise identified and approved by the County. Design shall include a load rating analysis to certify structures are designed with sufficient capacity for design loads.

#### 6. Roadway Design (Incidental)

Incidental roadway design (both full and partial depth pavement) shall be included as required to tie each structure's construction limits and guardrail into existing roadway. Roadway profile developed shall minimize ROW acquisition and road design limits. Roadway design shall meet all INDOT Level One, Two, and Three criteria, unless otherwise identified and approved by the County, including roadside safety elements. If requested, the Consultant will develop a pavement design for this project, otherwise, the pavement section shall be determined by Johnson County.

#### 7. Geotechnical Investigation

Shall include boring sampling and analysis, foundation recommendations, wall recommendations, and all other geotechnical analysis required for design of proposed structures.

#### 8. R/W Engineering

Includes title search, Plat No. 1, legal descriptions, parcel plats, etc.

#### 9. R/W Services

Includes appraisals, appraisal review, R/W management, official offers, complete negotiations, partial mortgage releases, and closing. County may choose to self-perform R/W staking services.

#### 10. Maintenance of Traffic (MOT)

Anticipated MOT scheme is a full closure and detour; however, phasing of construction for local traffic will be required so that access is provided for all entities located between Bridge 85 and Culvert P-004. Should staggering of each structure's construction be proposed, priority shall be given to addressing the replacement of Bridge 85 first.

#### 11. Utility Coordination

All coordination with applicable utility companies and relocation plans furnished by Consultant. Consultant shall review and advise reimbursable utility agreements and cost estimates as necessary.

Consultant shall provide utility coordination support throughout construction, including issuance of Notice to Proceed, inspection, and verification that relocated facilities is complete.

#### 12. Permitting

All coordination with permitting agencies and required assessment of project site shall be completed, including (but not limited to) IDNR, IDEM, USACE, etc.

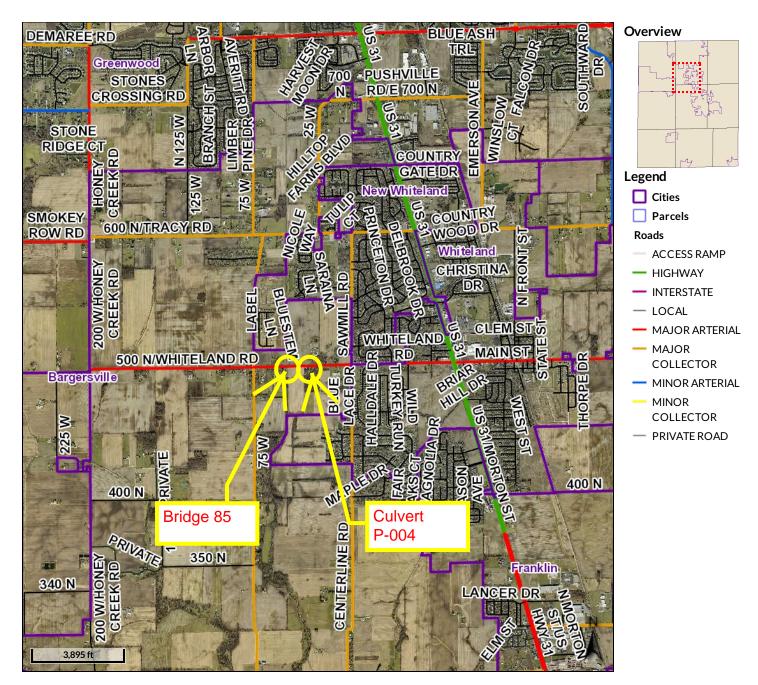
#### 13. Complete Contract Bid Package Preparation

Shall include construction cost estimate, contract plans, specifications, and required contract language and forms. Consultant will handle bid document distribution and questions. Project bid will be public. Letting to occur in SFY 2025.

#### 14. Post-Selection Coordination

Additional project scope details will be discussed with selected consultant prior to developing scope and fee estimates.

# Beacon<sup>™</sup> Johnson County, IN

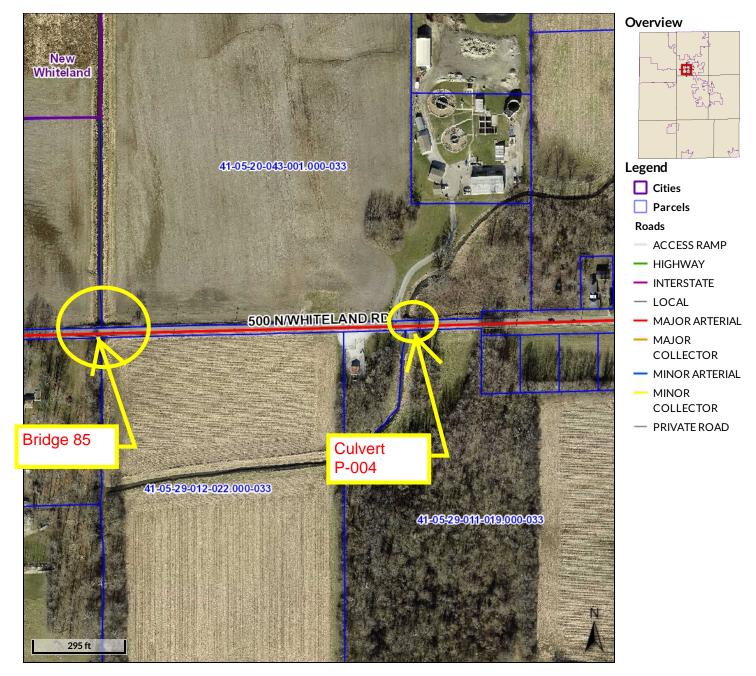


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Date created: 8/4/2022 Last Data Uploaded: 8/2/2022 8:33:06 PM



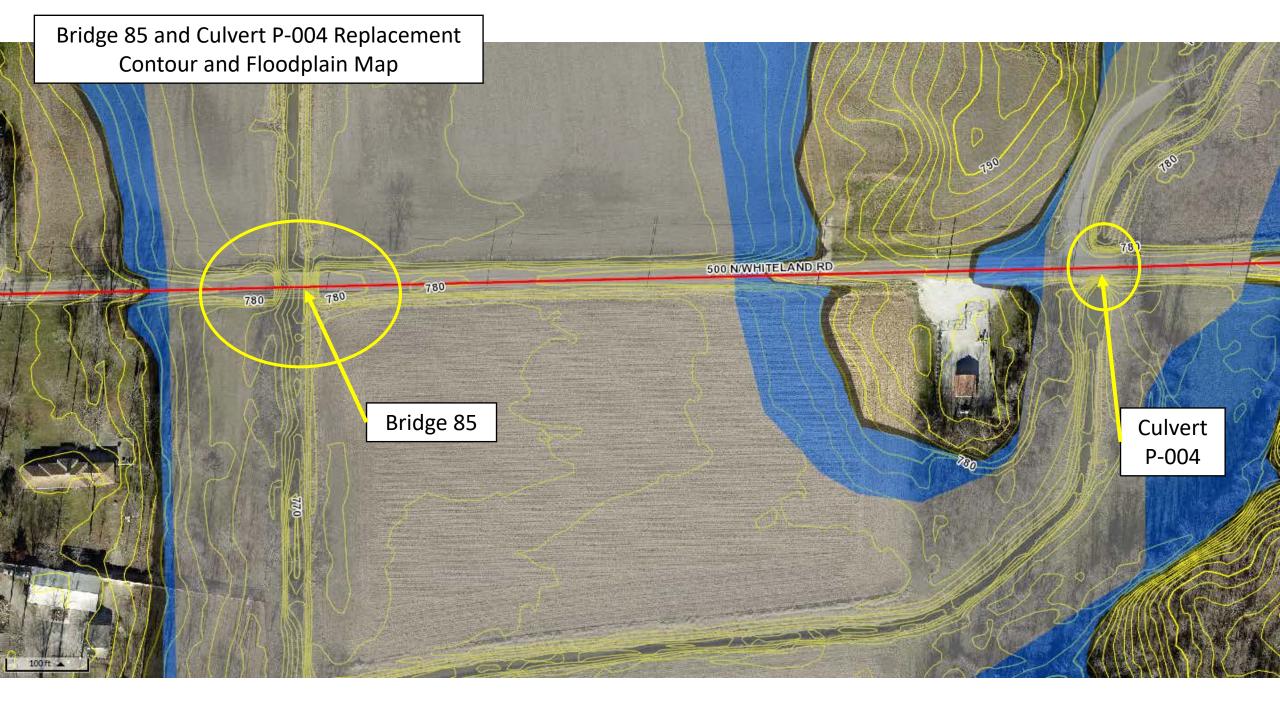




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Date created: 9/6/2022 Last Data Uploaded: 9/5/2022 8:14:48 PM





### Mastin, Lucas - Highway Dept

From: MiTIPHelp <mitiphelp@ecointeractive.com>
Sent: Thursday, October 14, 2021 11:31 AM

**To:** steve.cunningham@Indy.Gov; kristyn.sanchez@indympo.org; Mastin, Lucas - Highway

Dept

**Subject:** PROJECT IMPO1702165 in 22-01.4 - CFP 2021 has been SUBMITTED by LMASTIN

One of your submittals in 22-01.4 - CFP 2021 has been submitted by LMASTIN:

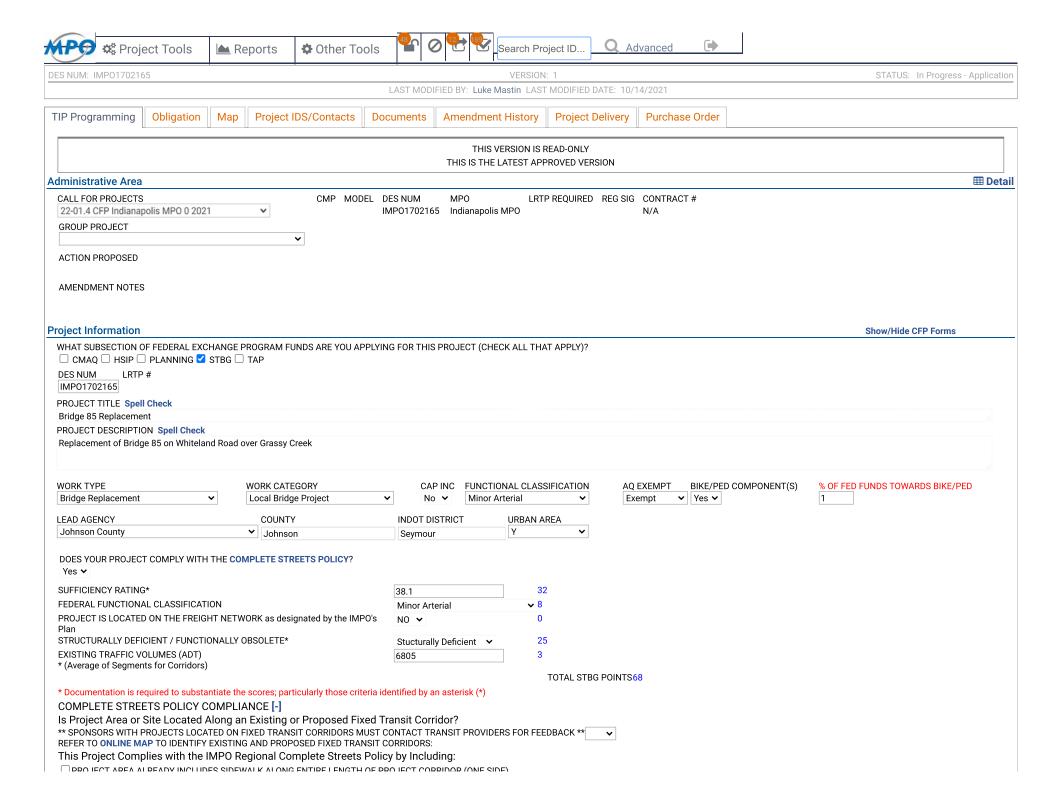
Project ID:IMPO1702165

Version: 1

Title: Bridge 85 Replacement

Comments:

<sup>\*</sup> This email was automatically generated when your submittal was submitted. If you have specific questions regarding this project, please contact Kristyn Sanchez (kristyn.sanchez@indympo.org)





TRAVEL LANES AFTER:

Reports

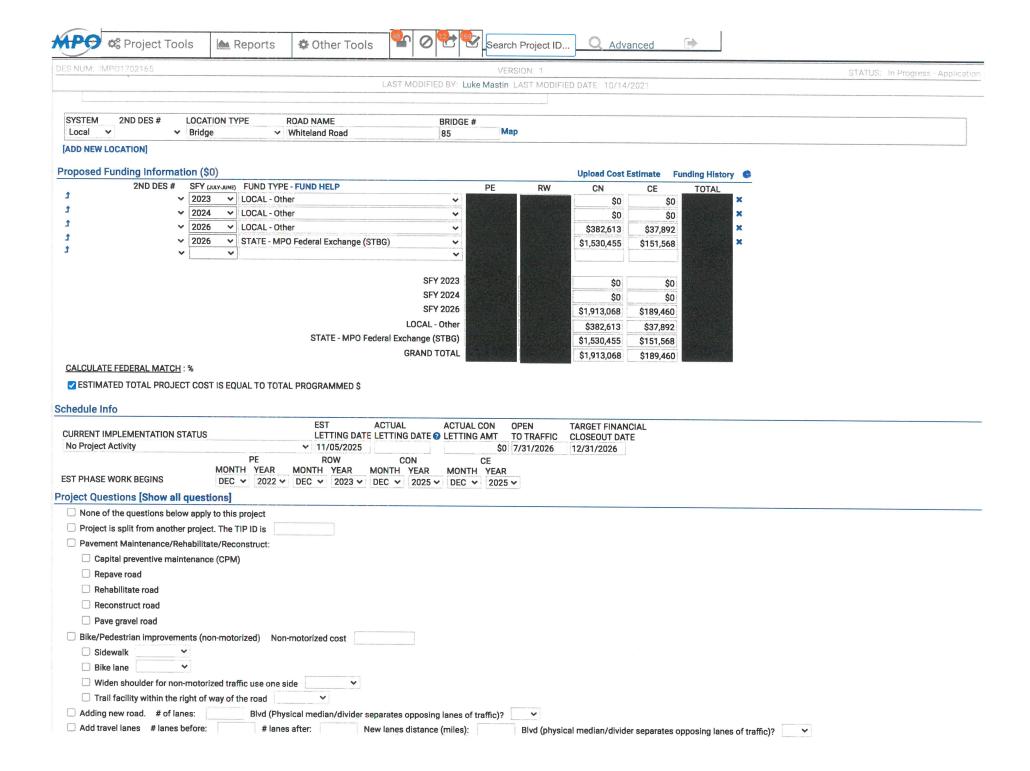
Other Tools



Search Project ID...



DES NUM: IMPO1702165 VERSION: 1 STATUS: In Progress - Application LAST MODIFIED BY: Luke Mastin LAST MODIFIED DATE: 10/14/2021 ☐ PROJECT AREA ALREADY INCLUDES BIKE LANE(S) ALONG ENTIRE LENGTH OF PROJECT CORRIDOR (BOTH SIDES IF TWO-WAY TRAFFIC) ☐ NEW SIDEWALK SIDEWALK IS ON TOTAL LENGTH: FACILITY WIDTH: ☐ NEW MULTI-USE PATH PATH IS ON TOTAL LENGTH: FACILITY WIDTH: ✓ NEW ON-STREET BIKE LANE(S) (MINIMUM FOUR FOOT WIDTH) BIKE LANE IS ON ONE SIDE 🗸 TOTAL LENGTH: FACILITY WIDTH: This Project Also Includes the Following Optional Facilities: Information provided in this section will assist the MPO with federally and state mandated performance measure tracking. ☐ OFF-STREET CYCLE TRACK / ETC. TOTAL LENGTH: FACILITY WIDTH: ☐ BIKEWAY SHARROWS (ARROWS INDICATING SHARED BICYCLE / MOTOR VEHICLE ROUTE) TOTAL LENGTH: ☐ BICYCLE PARKING TOTAL NUMBER OF PARKING SPACES: DESIGNATED CROSSWALKS (SPECIAL PAVING / PAINTING / ETC.) TOTAL NUMBER OF CROSSINGS: ☐ PEDESTRIAN CROSSING SIGNALS TOTAL NUMBER OF SIGNALS: ☐ PEDESTRIAN-SCALED LIGHTING (LIGHT FIXTURE MOUNTED NO HIGHER THAN 16 FEET ABOVE GRADE) TOTAL LENGTH ALONG CORRIDOR: ☐ ADA ACCESSIBLE RAMPS TOTAL NUMBER OF RAMPS: DEDICATED TRANSIT FACILITY (ON-STREET DEDICATED TRANSIT-WAY) TOTAL LENGTH OF LANE(S): ☐ TRANSIT STOP / SHELTER / STATION STOP(S) - TOTAL NUMBER: SHELTER(S) - TOTAL NUMBER: STATION(S) - TOTAL NUMBER: ☐ MEDIAN REFUGE ISLAND FOR CROSSING PEDESTRIANS TOTAL NUMBER: TOTAL AREA (SF): CURB EXTENSIONS (BUMPOUTS) AT INTERSECTION(S) TOTAL NUMBER: TOTAL AREA (SF): ROAD DIET (REDUCING NUMBER OF TRAVEL LANES TO ACCOMMODATE OTHER MODES) TRAVEL LANES BEFORE:



MPO	📽 Project Tools	Reports	Other Tools		Search Project ID.	Q Advanced		
DES NUM:	IMP01702165				VERSION: 1			STATUS: In Progress - Application
				LAST MODIFIED BY	: Luke Mastin LAST MODIFI	ED DATE: 10/14/2021		
R R R A A A A Conv Incluiv Bridge A R R R R R R COthei	adding a new interchange / deconfiguring an existing intextension of interchange randed roundabout add continuous left-turn landed dedicated intersection to the extension of th	terchange/ major interpreter i	ore: # lane:  Current LO:  nsit facility including: bus	e distance (in miles): s after:	ansit center, bike station, LRT	/BRT station, etc.		
R E	project is a vehicle purchas deplacement expansion - Route # project is a purchase of adi project does not fall into an	# of stop	Origin onal supplies or equipme	ent	Destination	Headways		
Change R	Reason							All Comments
DELET DELAT NEW I NARRATI This proj bridge is advance	d deterioration of the struct oot shoulders. This width is	on Whiteland Road, who no whiteland Road, who no was bearn brid ture, it is requested to based on IDM Figure	ge that has advanced det replace the structure. The 53-7, Urhan Arterial, Sub-	terioration of the deck ne proposed structure purhan. CN estimate i	<ul> <li>c, superstructure, substructure</li> <li>will most likely be a single si</li> </ul>	e, and channel. The bridge oan structure with a length of internal conflict with Contor Point	is currently load posted a of approximately 45 feet a	is not currently under development. The existing and has a sufficiency rating of 38.1. Due to the nod a width of 44 feet, including 2. 12 foot lanes, e within easement, though design exceptions will be roadway currently.
LOCAL - 0  ► Add 1  ► Add 1  ► Add 1  STATE - N	funds in SFY 23 in PE for funds in SFY 26 in CN for \$: funds in SFY 24 in RW for APO Federal Exchange (STE funds in SFY 26 in CN for \$:	382,613 CE for \$37,89						

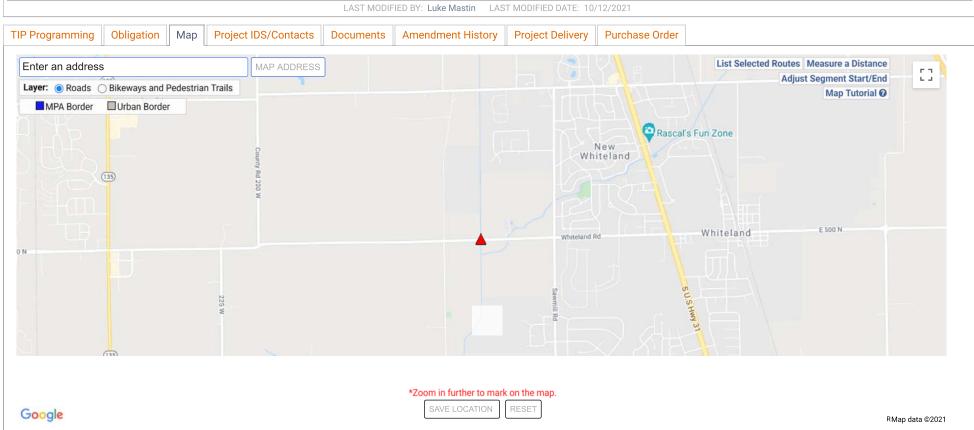
ACCEPTANCE/DENY COMMENTS



DES NUM: IMPO1702165 VERSION: 1 STATUS: In Progress - Application

LAST MODIFIED BY: Luke Mastin LAST MODIFIED DATE: 10/14/2021





STATUS: In Progress - Application



STATUS: In Progress - Application DES NUM: IMP01702165 VERSION: 1 LAST MODIFIED BY: Luke Mastin LAST MODIFIED DATE: 10/14/2021 Obligation **TIP Programming** Map Project IDS/Contacts Documents **Amendment History Project Delivery** Purchase Order **Project Document** Upload 🕰 DOC DATE DESCRIPTION 
10/13/2021 Floodplain and Contour Map FILE SIZE UPLOADED BY UPLOADED ON TYPE Мар ~ 1964KB LMASTIN 10/13/2021 10/13/2021 Utility Design Ticket 139KB LMASTIN 10/13/2021 × Other ~ × 10/13/2021 Score Sheet Project Priority Worksheet 656KB LMASTIN 10/13/2021 × 10/13/2021 Commitment Letter 285KB LMASTIN 10/13/2021 Letter of Local Match Commitment ~ × 10/13/2021 Bridge Typical Section 102KB LMASTIN 10/13/2021 ~ 10/13/2021 Bridge Inspection Report 3376KB LMASTIN 10/13/2021 × Other ~ 10/13/2021 10/13/2021 Project Scoping and Cost Estimate Worksheet 163KB LMASTIN Other ~ 10/14/2021 Cost Estimate BF&S 1209KB LMASTIN 10/14/2021 Itemized Cost Estimate

UPDATE TYPE(S)

Agency: Johnson County Project Title: Bridge 85 Replacement

#### 1. GENERAL PROJECT INFORMATION

IMPO Project Number	IMPO1702165			
Lead Agency	Johnson County			
Project Title	Bridge 85 Replacement			
Lead Agency Contact	act Lucas Mastin, Highway Supervisor			
Alternate Contact	N/A			
Primary Project Type	☐ Bicycle/Pedestrian ☒ Bridge ☐ Interchange ☐ Intersection ☐ Rail ☐ Road ☐ Sign			
	☐ Road Recons / Rehab / Resurface ☐ Signal ☐ Transit ☐ Other (Describe)			

#### 2. PROJECT DESCRIPTION (Include Project Map with Submittal)

Project Limits:	1,000 feet (0.19 mi)
Major Project Features	New single-span bridge and related roadway approach work
Typical Section	2-lane bridge with required shoulder widths per IDM
Bicycle/Pedestrian Facilities	Width for bike lane striping on north side of structure
Project Need	Structurally-deficient bridge with a 38.1 sufficiency rating
Project Purpose	Replace structurally-deficient bridge with new structure designed to current standards
Project Scoping Completed (check items	☐ Engineering Assessment or Scoping Study ☐ Map of Proposed Alignment ☐ Traffic Forecast
that have been uploaded to MiTIP)	☐ Traffic Analysis ☐ Other (Describe)

#### 3. COST ESTIMATE DATA AND ASSUMPTIONS (Include Cost Estimate with Submittal)

Unit Cost Sources	INDOT bid unit pricing
Estimated Year of Construction	2026
<b>Annual Escalation Rate</b> ( <i>explanation required if rate differs from that provided by MPO</i> )	2.5% as stipulated for this call
Design Engineering Cost	
<b>Construction Engineering and Testing Costs</b>	\$189,460
Contingency Estimate	\$146,700

Agency: Johnson County Project Title: Bridge 85 Replacement

#### 4. BASE DATA COLLECTION AND SOURCES

Field Check/Site Visit		
GIS Data	⊠ Yes □ No	
Aerial Photography		
Elevation/Contour Mapping	⊠ Yes □ No	
Field Survey	☐ Yes ⊠ No	
Bridge Inspection Reports	⊠ Yes □ No	
(include as attachments)		
Traffic Counts	⊠ Yes □ No	6,805 vpd, see bridge inspection report
(include as attachments)		

#### 5. RIGHT OF WAY

Existing Right of Way	30' total (15' half)
Description	
New Right of Way Required	☑ Yes □ No □ Unknown
Anticipated Relocations	☐ Yes ☒ No ☐ Unknown
Right of Way Data Sources	County GIS
Right of Way Cost Sources	Consultant Estimate

Agency: Johnson County Project Title: Bridge 85 Replacement

### 6. MAJOR PROJECT COMPONENTS

Earthwork	
Asphalt Pavement	
Concrete Pavement	☐ Yes ☒ No ☐ Unknown
Curb and Gutter	☐ Yes ☒ No ☐ Unknown
Shoulders	
<b>Enclosed Drainage</b>	☐ Yes ☒ No ☐ Unknown
Ditches	
Bridges	
Culverts	☐ Yes ☒ No ☐ Unknown
<b>Storm Water Detention</b>	☐ Yes ☒ No ☐ Unknown
Traffic Signals/ITS	☐ Yes ☒ No ☐ Unknown
Retaining Walls	☐ Yes ☒ No ☒ Unknown
Railroad Crossings	☐ Yes ☒ No ☐ Unknown
Landscaping/Aesthetics	☐ Yes ☒ No ☐ Unknown
Signing/Pavement	
Marking	
Roadway Lighting	☐ Yes ☒ No ☐ Unknown
Pedestrian/Bicycle	
Facilities	
<b>Drives and Access Points</b>	3
Maintenance of Traffic	Road closure with detour
Other Significant Items	Possible conflict with utilities within easements

Agency: Johnson County Project Title: Bridge 85 Replacement

#### 7. ENVIRONMENTAL FEATURES AND ISSUES

Anticipated SEPA Document	☐ Categorical Exemption Memo ☐ Environmental Assessment
	☐ Environmental Impact Statement ☐ Unknown
SEPA Document Status	$\square$ Complete $\square$ Finding of No Significant Impact $\square$ Underway $\boxtimes$ Not Started
	Actual or anticipated completion date: November 2023
<b>Environmental Investigations Complete</b>	$\square$ Red Flag Investigation (attach if complete)
	☐ Archaeological Records Check ☐ Historic Properties Records Check
	☐ Noise analysis ☐ Waters of the US Report
Anticipated Permits	□ Section 404 Department of the Army Corps of Engineers
	☑ IDEM Section 401 Water Quality Certification
	☐ IDEM Rule 5 Stormwater
	☐ IDEM State Isolated Wetlands
	☑ IDNR Certification of Approval for Construction in a Floodway
	☐ IDNR Certification for Alteration, Demolition, or Removal of Historic Resources
	☐ Local Historic Preservation Commission Aproval
	☐ Local Drainage Board Approval
	$\square$ No permits are required
	□ Unknown
	☐ Other:
Streams, Wetlands, or Floodplains	
Historic Properties or Districts	☐ Yes   ☑ No   ☐ Unknown
Public Parks or Recreation Areas	☐ Yes ☒ No ☐ Unknown
Trails or Pedestrian Facilities	☐ Yes   ☐ Unknown
Cemeteries Within 100 Feet	☐ Yes ☒ No ☐ Unknown
Hazardous Materials Sites	☐ Yes ☐ No ☐ Unknown
Community Resources	☐ Yes ☐ No ☐ Unknown
<b>Environmental Mitigation Measures Defi</b>	ned? □ Yes ☒ No

Agency: Johnson County Project Title: Bridge 85 Replacement

o. UTILITIES	8.	UTI	LITIES
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(317) 346-4630 10/13/2021

Source of Utility Location Information	Indiana 811 Design Ticket
Have Utility Easements been Checked?	
Gas	☐ None ☐ In R/W ☒ In Easement 16" line on south side of road, \$500k in CN estimate
Electric	☐ None ⊠ In R/W ☐ In Easement
Telecommunications	☐ None ☒ In R/W ☐ In Easement
Water	$\square$ None $\boxtimes$ In R/W $\square$ In Easement
Sanitary	☐ None ☐ In R/W ☒ In Easement 18" line on north side of road, \$150k in CN estimate
Railroad	☑ None □ In R/W □ In Easement
Other	None □ In R/W □ In Easement
•	and opportunities that could affect the cost estimate significantly. ies regarding easements. Design exceptions will likely be used to limit impact on these utilities.
	est estimate compare to the original planning level estimate provided by the MPO's estimating tool?
Notes to Reviewer: Are there additional	cost estimating assumptions or conditions that you would like to document?
10. FORM PREPARER	
Lucas Mastin Johnson County Highway Department	
Johnson County Highway Department	



Alignment Looking East (20 Tons)



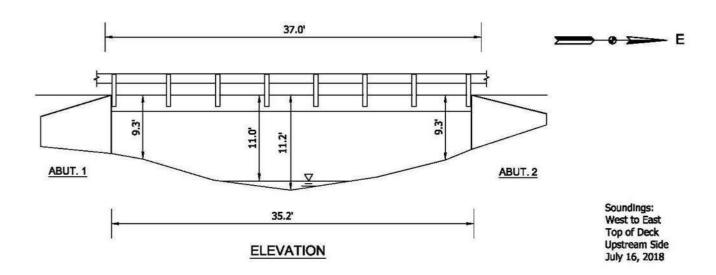
Exposing Steel in Beam 4



South Elevation



Spalling Along North Coping



Inspection Date: 07/07/2021 Facility Carried: CR 500 NORTH

**Bridge Inspection Report** 

#### BRIDGE IS POSTED 20 TONS. THE EAST 20 TON POSTING SIGN IS MISSING.

OVERALL THE STRUCTURE IS IS IN POOR CONDITION. BEAM 1 WAS PATCHED IN 2019 TO REPAIR SPALLS AND A LARGE VOID IN THE SIDE OF THE BEAM. PATCHING APPEARS TO BE HOLDING UP ADEQUATELY. BEAM 6 SPALLED DUE TO GUARDRAIL IMPACT. GUARDRAIL CONNECTIONS HAVE BEEN RETROFITTED WITH STEEL PLATES CONNECTING TO TOP OF BEAMS. ALL BEAMS WITH HEAVY DELAMINATIONS, SPALLS, AND EXPOSED STEEL STIRRUPS AS WELL AS LONGITUDINAL CRACKS. ABUTMENTS WITH MODERATELY SIZED VERTICAL CRACKS AND CORNER DIAGONAL CRACKS WITH LEACHING. HEAVY VEGETATION AROUND BRIDGE.

RECOMMEND REPLACING STRUCTURE WITH A WIDER BRIDGE DUE TO CRITICAL DECK GEOMETRY, BEAM DETERIORATION, AND HIGH ADT.

UNTIL STRUCTURE IS REPLACED, IT IS RECOMMENDED TO PLACE RIPRAP ALONG ABUTMENTS TO PREVENT FURTHER EROSION AND TO CUT BACK OR SPRAY VEGETATION AROUND BRIDGE. IT IS RECOMMENDED TO REPLACE THE EAST 20 TON POSTING SIGN.

Inspection Date: 07/07/2021 Facility Carried: CR 500 NORTH

**Bridge Inspection Report** 

**IDENTIFICATION** 

(1) STATE CODE: 185 - Indiana

(8) STRUCTURE: 4100066

(5 A-B-C-D-E) INV. ROUTE: 1 - 4 - 1 - 00038 - 0

(2) HIGHWAY AGENCY 05 - Seymour

DISTRICT:

(3) COUNTY CODE: 041 - JOHNSON

(4) PLACE CODE: 00000 - N/A

(6) FEATURES INTERSECTED: GRASSY CREEK

(7) FACILITY CARRIED: CR 500 NORTH

(9) LOCATION: 0.20 E OF CR 75 W

(11) MILEPOINT: 0000.000

(12) BASE HIGHWAY NETWORK: 0

(13A) INVENTORY ROUTE:

(13B) SUBROUTE NUMBER:

(16) LATITUDE: 39.54936

(98) BORDER

(17) LONGITUDE:

A) STATE NAME:

B) PERCENT %

(99) BORDER BRIDGE STRUCT.

NO:

#### STRUCTURE TYPE AND MATERIAL

(43) STRUCTURE TYPE, MAIN:

A) KIND OF 5 - Prestressed concrete

MATERIAL/DESIGN:

B) TYPE OF DESIGN/CONSTR: 05 - Box Beam or

Girders - Multiple

(44) STRUCTURE TYPE, APPROACH SPANS:

A) KIND OF 0 - Other

MATERIAL/DESIGN:

B) TYPE OF DESIGN/CONSTR: 00 - Other

(45) NUMBER OF SPANS IN MAIN 001

UNIT:

(46) NUMBER OF APPROACH 0000

SPANS:

(107) DECK STRUCTURE TYPE: 2 - Concrete Precast

Panels

-86.11108

(108) WEARING SURFACE/PROT

SYS:

A) WEARING SURFACE: 6 - Bituminous

B) DECK MEMBRANE: 0 - None

C) DECK PROTECTION: 0 - None

AGE OF SERVICE

(27) YEAR BUILT: 1985

(106) YEAR RECONSTRUCTED: 0000

(42) TYPE OF SERVICE:

A) ON BRIDGE: 1 - Highway

B) UNDER BRIDGE: 5 - Water way

(28) LANES:

A) ON BRIDGE: 02

B) UNDER BRIDGE: 00

(29) AVERAGE DAILY TRAFFIC: 006805

(30) YEAR OF AVERAGE DAILY 2016

TRAFFIC:

(109) AVERAGE DAILY TRUCK 05 %

TRAFFIC:

(19) BYPASS DETOUR LENGTH: 002 MI

Inspection Date: 07/07/2021 Facility Carried: CR 500 NORTH

**Bridge Inspection Report** 

**GEOMETRIC DATA** 

(48) LENGTH OF MAX SPAN: 00035.2 FT (35) STRUCTURE FLARED: 0 - No flare (49) STRUCTURE LENGTH: 00037.0 FT (10) INV RTE, MIN VERT 99.99 FT CLEARANCE:

(50) CURB/SIDEWALK WIDTHS:

A) LEFT 00.0 FT (47) TOT HORIZ CLEARANCE: 023.6 FT (53) VERT CLEAR OVER BR RDWY: 99.99 FT

B) RIGHT: 00.0 FT (54) MIN VERTICAL

(51) BRDG RDWY WIDTH CURB- 023.6 FT UNDERCLEARANCE:
TO-CURB: A) REFERENCE FEATURE:

TO-CURB:

A) REFERENCE FEATURE: N

B) MIN VERT UNDERCLEAR: 0 FT

(32) APPROACH ROADWAY 023.0 FT (55) LATERAL UNDERCLEARANCE RIGHT:

(33) BRIDGE MEDIAN: 0 - No median

A) REFERENCE FEATURE: N
B) MIN LATERAL UNDERCLEAR: 000.0 FT

(34) SKEW: 00 DEG (56) MIN LATERAL UNDERCLEAR 000.0 FT ON LEFT:

INSPECTIONS

(90) INSPECTION DATE: 07/07/2021 (91) DESIGNATED INSPECTION 12 MONTHS

(92) CRITICAL FEATURE FREQUENCY:

INSPECTION: (93) CRITICAL FEATURE

A) FRACTURE CRITICAL N INSPECTION DATE:

REQUIRED/FREQUENCY:

A) FRACTURE CRIT

B) UNDERWATER INSPECTION N
REQUIRED/FREQUENCY:

A) FRACTURE CRITICAL DATE:
B) UNDERWATER INSP DATE:

C) OTHER SPECIAL INSPECTION N

CONDITION

REQUIRED/FREQUENCY:

(58) DECK: 4 - Poor Condition (60) SUBSTRUCTURE: 5 - Fair Condition

(advanced (minor section loss) deterioration)

(58.01) WEARING SURFACE: 5 - Fair Condition (61) CHANNEL/CHANNEL 5 - Bank er oded..

PROTECTION: major damage

(59) SUPERSTRUCTURE: 4 - Poor Condition (62) CULVERTS: N - Not Applicable

(advanced deterioration)

(advanced

CONDITION COMMENTS

(58) DECK: 4 - Poor Condition (advanced deterioration)

Comments:

SEE SUPERSTRUCTURE COMMENTS.

Material:

6 - 17" x 48" PRESTRESSED CONCRETE BOX BEAMS

(58.01) WEARING SURFACE: 5 - Fair Condition

Comments:

HEAVY MAP CRACKING. THICK WEARING SURFACE WHICH IS CRUMBLING AT THE EDGES

Material:

ASPHALT, 6"

Inspection Date: 07/07/2021 Facility Carried: CR 500 NORTH

**Bridge Inspection Report** 

(59) SUPERSTRUCTURE: 4 - Poor Condition (advanced deterioration)

Comments:

HEAVY SEEPAGE AND LEACHING BETWEEN BEAMS. BEAM 1 WAS SPALLED IN NUMEROUS LOCATIONS BUT WAS PATCHED IN 2019. PATCHES ARE HOLDING UP. BEAM 6 ALSO SPALLED DUE TO GUARDRAIL IMPACT. ALL BEAMS WITH DELAMINATIONS, SPALLS, AND EXPOSED STEEL STIRRUPS AS WELL AS MODERATE LONGITUDINAL CRACKS.

Material:

6 - 17" x 48" PRESTRESSED CONCRETE BOX BEAMS

(60) SUBSTRUCTURE: 5 - Fair Condition (minor section loss)

Comments:

NUMEROUS MODERATELY SIZED VERTICAL CRACKS WITH LEACHING IN BOTH ABUTMENTS. DIAGONAL CRACKS AT THE CORNERS.

Material:

CONCRETE ABUTMENTS

(61) CHANNEL/CHANNEL 5 - Bank eroded.. major damage

PROTECTION

Comments:

LITTLE TO NO ABUTMENT PROTECTION. POSSIBLE OLD UNDERPIN VISIBLE AT BOTH ABUTMENTS. NO UNDERMINE.

Material: NATURAL

(62) CULVERTS: N - Not Applicable

Comments:

#### LOAD RATING AND POSTING

(31) DESIGN LOAD:	0 - Unknown	(66) INVENTORY RATING:	25
(70) BRIDGE POSTING	5 - Equal to or above	(65) INVENTORY RATING METHOD	D: 1 - Load Factor (LF)
	legal loads	(66B) INVENTORY RATING (H):	18
(41) STRUCTURE	P - Posted for Load	(66C) TONS POSTED :	20
OPEN/POSTED/CLOSED:		(66D) DATE POSTED/CLOSED:	20-NOV-18
(64) OPERATING RATING:	42	(002) 211121 00122, 020022.	20110 / 10
(63) OPERATING RATING METHOD:	1 - Load Factor (LF)		

#### **APPRAISAL**

SUFFICIENCY RATING:	38.1	(36) TRAFFIC SAFETY FEATURE:	
STATUS:	1	36A) BRIDGE RAILINGS:	0
(67) STRUCTURAL EVALUATION	J: 4	36B) TRANSITIONS:	0
(68) DECK GEOMETRY:	2	36C) APPROACH GUARDRAIL:	0
(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL:	N	36D) APPROACH GUARDRAIL ENDS:	0

(71) WATERWAY ADEQUACY: 7 - Slight Chance of Overtopping Bridge

Comments:

APPEARS ADEQUATE

Inspection Date: 07/07/2021 Facility Carried: CR 500 NORTH

**Bridge Inspection Report** 

(72) APPROACH ROADWAY ALIGNMENT: 8 - Equal to present desirable criteria

Comments:

STRAIGHT, SLIGHT HUMP AT THE STRUCTURE

(113) SCOUR CRITICAL BRIDGES: 4 - Action is required to protect exposed foundations

Comments:

MINOR SCOUR WITH OLDER UNDERPIN EXPOSED, NO PROTECTION.

**CLASSIFICATION** 

(20) TOLL: 3 - On Free Road (21) MAINT. RESPONSIBILITY: 02 - County Highway

Agency (22) OWNER: 02 - County Highway

(26) FUNCTIONAL CLASS OF 16 - Urban - Minor Agency **INVENTORY RTE:** Arterial

(37) HISTORICAL SIGNIFICANCE: 5 - Not eligible

(100) STRAHNET HIGHWAY: Not a STRAHNET route (101) PARALLEL STRUCTURE: N - No parallel structure

(102) DIRECTION OF TRAFFIC: 2-way traffic (103) TEMPORARY STRUCTURE:

(104) HIGHWAY SYSTEM OF 0 - Structure/Route is

(105) FEDERAL LANDS 0-Not Applicable **INVENTORY ROUTE:** NOT on NHS

HIGHWAYS: (110) DESIGNATED NATIONAL Inventory route not on

(112) NBIS BRIDGE LENGTH: Yes **NETWORK:** network

NAVIGATION DATA

(111) PIER OR ABUTMENT

(38) NAVIGATION CONTROL: 0 - No navigation (39) NAVIGATION VERTICAL CLEAR: 000.0 FT control on waterway

(116) MINIMUM NAVIGATION VERT. FT (bridge permit not CLEARANCE, VERT. LIFT BRIDGE:

required)

(40) NAV HORIZONTAL CLEARANCE: 0000.0 FT PROTECTION:

PROPOSED IMPROVEMENTS

(75A) TYPE OF WORK: 31 - Replacement -(95) ROADWAY IMPROVEMENT COST: \$ 000400

Load/Geometry

(96) TOTAL PROJECT COST: \$ 000800 1 - Work to be done by (75B) WORK DONE BY:

contract (97) YR OF IMPROVEMENT COST EST: 2021

(114) FUTURE AVG DAILY TRAFFIC: 009251 (76) LENGTH OF IMPROVEMENT: 000060 FT

(115) YR OF FUTURE ADT: 2036 (94) BRIDGE IMPROVEMENT \$ 000400 COST: