



Agenda

City Council Work Session

Oelwein Community Plaza, 25 West Charles, Oelwein, Iowa

5:30 PM

January 25, 2021
Oelwein, Iowa

Mayor: Brett DeVore

Mayor Pro Tem: Warren Fisk

Council Members: Matt Weber, Renee Cantrell, Tom Stewart, Lynda Payne, Karen Seeders

Pledge of Allegiance

Discussions

- [1.](#) Bridge Discussion
- [2.](#) Road Improvement Discussion
- [3.](#) Equipment Discussion
- [4.](#) Funding Discussion

Adjournment

In compliance with the Americans with Disabilities Act, those requiring accommodation for Council meetings should notify the City Clerk's Office at least 24 hours prior to the meeting at 319-283-5440

January 12, 2021

Vic Kane
City of Oelwein
20 - 2nd Avenue SW
Oelwein, IA 50662

Re: **City of Oelwein, Iowa**
2021 Bridge Inspection Services
IIW Project No.: 21029

www.iiwengr.com

ARCHITECTURE
CIVIL ENGINEERING
CONSTRUCTION SERVICES
ENVIRONMENTAL ENGINEERING
LAND SURVEYING
MUNICIPAL ENGINEERING
STRUCTURAL ENGINEERING
TRANSPORTATION ENGINEERING

Dear Vic:

IIW, P.C. appreciates the opportunity to submit this Proposal for Bridge Inspection Services for the City of Oelwein (Client). This Proposal identifies the inspection services required to bring the City of Oelwein's Bridge Inspection Program into compliance with the National Bridge Inspection Standards (NBIS), and has been divided into the following sections to describe the services proposed:

PROJECT DESCRIPTION

Project includes performing NBIS bridge inspections and the associated Iowa DOT documentation for the City of Oelwein bridges and a non-NBIS inspection of the railroad viaduct on West Charles Street.

SCOPE OF SERVICES

The following list of services will be provided by or under the direct personal supervision of a FHWA certified Program Manager, Team Leader, or Professional Engineer licensed in the State of Iowa, as is appropriate for the specific service. Our services would incorporate the following elements, based upon NBIS, FHWA, and Iowa DOT criteria:

A. *Bridge Inspection and Documentation Services*

1. Complete routine field inspections of the nine (9) bridges under the jurisdiction of the City of Oelwein, as required per I.M. 7.020; Inspection Frequency – Routine Inspections (23 CFR 350.311, a). Complete the non-NBIS inspection of the West Charles Street railroad viaduct.
2. Update the Structure Inventory and Inspection System (SIIMS) on the Iowa DOT website with the results of the routine inspections of the 9 NBIS bridges, which shall include the following:
 - a. Creation of a new Inspection Report based on existing Central Database values.
 - b. Completion of the Local Agency Field Data Collection Form.
 - a. Upload digital photographs, including a road view, side view, and under view of the bridge structure. Additionally, detailed pictures of any observed deficiencies with an NBI condition code of 4 or less will also be collected.
 - c. Submittal of Inspection Report to Program Manager.
 - d. Completion of the Load Rating Evaluation Form.
 - e. Final Program Manager review and approval of Inspection Report.
3. Complete an inspection report detailing the condition of the West Charles Street railroad viaduct.
4. Meeting with licensed public agency to discuss inspection results and/or bridge deficiencies.
5. Generation of electronic copies of Inspection Reports in PDF format and paper copies of the Inspection Reports.
6. Provide a letter summarizing the findings of the inspections.

Services will be provided using NBIS guidelines and the AASHTO Manual for Bridge Evaluation (MBE), following the guidelines and procedures detailed in I.M. 7.020.

CLIENT'S RESPONSIBILITIES

The Client shall do the following in a timely manner so as not to delay the services of the Program Manager:

1. Designate a person to act as Client's representative with respect to the services to be rendered under this agreement. Such person shall have complete authority to transmit instructions, receive information, interpret, and define Client's policies and decisions with respect to the Program Manager's services.
2. Store bridge files and incorporate repair information and maintenance records.
3. Perform all recommendations for bridge repairs and maintenance.
4. Maintain a history of maintenance activities on each bridge and record in the bridge file.
5. Provide As-Built drawings for all bridges, including specifications and shop drawing submittals as available.
6. Provide copies of any permits acquired for the construction or maintenance on the bridge.

ADDITIONAL SERVICES

The following services are not included in this Proposal. IIW can provide proposals for these services if requested:

1. Underwater Inspections.
2. Preparation of element-level inspection reports
3. Bridge Load Ratings
4. Overload or Superload rating or permitting assistance.
5. Preparation of any plans for repairs or replacement of bridge structures.
6. Prepare cost estimates or budget information for bridge repair/maintenance/replacement.

SCHEDULE

IIW proposes to complete the Scope of Services by April 1, 2021.

COMPENSATION

IIW proposes to complete the Scope of Services as follows:

- A. Bridge Inspection and Documentation Services:** Items 1-6 shall be performed by the qualified personnel at IIW's Standard of Professional Fee Rates (hourly) with an estimated fee of \$5,000.00 (Five Thousand Dollars and Zero Cents).


GENERAL TERMS AND CONDITIONS

The attached General Terms and Conditions are a part of this Proposal. If the services and fees defined in this proposal are acceptable, please return one signed copy to our office. If you have any questions, or require further assistance, please feel free to contact me at n.miller@iiwengr.com or our office at (563) 556-2464.

We sincerely thank you for allowing us the opportunity to submit this Proposal and we look forward to providing services as the designated Program Manager and Bridge Inspectors for the City of Oelwein.

Sincerely,
IIW, P.C.


Nathan Miller, P.E.
Project Manager –Team Leader/Program Manager


Pat Ready, P.E.
President & CEO

I hereby accept this Proposal and General Terms and Conditions and authorize this work.

FOR: CITY OF OELWEIN

Authorized Signature

Date

Typed or Printed Name



IIW, P.C.

The following General Terms and Conditions shall apply to the attached Agreement for Professional Services between IIW, P.C., herein referred to as the Consultant, and the Client identified in the attached Agreement.

GENERAL TERMS AND CONDITIONS

The Client shall provide all criteria and full information with regard to his or her requirements for the Project, and shall designate a person to act with authority on his or her behalf with respect to all aspects of the Project. This shall include, but not be limited to, review and approval of design issues in the schematic design phase, design development phase, and contract documents phase. These approvals shall include an authorization to proceed to the next phase.

Services beyond those outlined in the proposal may be required or be required as a result of unforeseen circumstances. The Consultant under terms mutually agreed upon by the Client and the Consultant may provide these services.

For the scope of services agreed upon, the Client agrees to pay the Consultant the compensation as stated. Invoices for the Consultant's services shall be submitted, at the Consultant's option, either upon completion of any phase of service or on a monthly basis. Invoices shall be payable when rendered and shall be considered past due if not paid within 30 days after the invoice date. A service charge will be charged at the rate of 1.5% (18% true annual rate) per month or the maximum allowed by law on the then outstanding balance of Past Due accounts. In the event any portion of an account remains unpaid 90 days after billing, the Client shall pay all costs of collection, including reasonable attorney's fees.

The Consultant shall secure and endeavor to maintain professional liability insurance, commercial general liability insurance, and automobile liability insurance to protect the Consultant from claims for negligence, bodily injury, death, or property damage which may arise out of the performance of the Consultant's services under this Agreement, and from claims under the Worker's Compensation Acts. The Consultant shall, if requested in writing, issue a certificate confirming such insurance to the Client.

The Client and the Consultant each agree to indemnify and hold the other harmless, and their respective officers, employees, agents, and representatives, from and against any and all claims, damages, losses and expenses (including reasonable attorney's fees) to the extent such claims, losses, damages, or expenses are caused by the indemnifying party's negligent acts, errors, or omissions. In the event claims, losses, damages or expenses are caused by the joint or concurrent negligence of Client and Consultant, they shall be borne by each party in proportion to its negligence.

In recognition of the relative risks, rewards and benefits of the Project to both the Client and the Consultant, the risks have been allocated such that the Client agrees that, to the fullest extent permitted by the law, the Consultant's total liability to the Client for any and all injuries, claims, losses, expenses, damages or claim expenses rising out of this Agreement, from any cause or causes, shall not exceed the amount of the Consultant's fee or other amount agreed upon. Such causes include, but are not limited to, the Consultant's negligence, errors, omissions, strict liability, breach of contract or breach of warranty.

Neither party shall be deemed in default of this Agreement to the extent that any delay or failure in the performance of its obligations results from any cause beyond its reasonable control and without its negligence.

The Client and Consultant agree that they shall first submit any and all unsettled claims, counterclaims, disputes, and other matters in question between them arising out of or relating to this Agreement to mediation in accordance with the Construction Industry Mediation Rules of the American Arbitration Association effective as of the date of this agreement.

All documents including calculations, computer files, drawings, and specifications prepared by the Consultant pursuant to this Agreement are instruments of professional service intended for the one time use in construction of this project. They are and shall remain the property of the Consultant. Any re-use without written approval or adaptation by the Consultant shall be at the Client's sole risk and the Client agrees to indemnify and hold the Consultant harmless from all claims, damages, and expenses, including attorney's fees, arising out of such reuse of documents by the Client and by others acting through the Client.

Copies of documents that may be relied upon by the Client are limited to the printed copies (also known as hard copies) that are signed or sealed by the Consultant. Files in electronic media format or text, data, graphic, or of other types that are furnished by the Consultant to the Client are only for convenience of the Client. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. When transferring documents in electronic media format, the Consultant makes no representations as to long-term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the Consultant at the beginning of this project.

The delivery of electronic information to Contractors is for the benefit of the Owner for whom the design services have been performed. Nothing in the transfer should be construed to provide any right of the Contractor to rely on the information provided or that the use of the electronic information implies the review and approval by the Design Professional of the information. Electronic information is drawings, data, modeled data, or computational models. It



IIW, P.C.

is our professional opinion that this electronic information provides design information current as of the date of its release. Any use of this information is at the sole risk and liability of the user who is also responsible for updating the information to reflect any changes in the design following the preparation date of this information. The transfer of electronic information is subject to the approval of the Design Professional. Depending upon the type of information requested, and the format, a fee may be required for acquisition of the data, payable to the Design Professional. Contractors are required to submit a request in writing to the Design Professional indicating the type and format of the information requested. The Design Professional will make a reasonable effort to determine whether or not the information can be provided as requested, and the fee for providing the information.

If this Agreement provides for any construction phase services by the Consultant, it is understood that the Contractor, not the Consultant, its agents, employees, or sub-consultants, is responsible for the construction of the project, and that the Consultant is not responsible for the acts or omissions of any contractor, subcontractor, or material supplier; for safety precautions, programs, or enforcement; or for construction means, methods, techniques, sequences, and procedures employed by the Contractor.

When included in the Consultant's scope of services, opinions of probable construction cost are prepared on the basis of the Consultant's experience and qualifications and represent the Consultant's judgment as a professional generally familiar with the industry. However, since the Consultant has no control over the cost of labor, materials, equipment, or services furnished by others; over contractor's methods of determining prices, or over competitive bidding or market conditions, the Consultant cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from the Consultant's opinions of probable construction cost.

The Client and the Consultant each binds himself or herself, partners, successors, executors, administrators, assigns, and legal representative to the other party of this Agreement and to the partners, successors, executors, administrators, assigns, and legal representative of such other party in respect to all covenants, agreements, and obligations of this Agreement.

Neither the Client nor the Consultant shall assign, sublet or transfer any rights under or interest in (including but without limitations, monies that may be due or monies that are due) this Agreement, without the written consent of the other, except as stated in the paragraph above, and except to the extent that the effect of this limitation may be restricted by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assigner from any duty or responsibility under this Agreement. Nothing contained in this paragraph shall prevent the Consultant from employing such independent consultants, associates, and sub-contractors, as he or she may deem appropriate to assist in the performance of services hereunder.

It is acknowledged by both parties that the Consultant's scope of services does not include any services related to the presence at the site of asbestos, PCB's, petroleum, hazardous waste, or radioactive materials. The Client acknowledges that the Consultant is performing professional services for the Client and the Consultant is not and shall not be required to become an "arranger", "operator", "generator", or "transporter" of hazardous substances, as defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1990 (CERCLA).

The Client may terminate this Agreement with seven days (7) prior written notice to the Consultant for convenience or cause. The Consultant may terminate this Agreement for cause with seven (7) days prior written notice to the Client. The Client is obligated to pay for all services rendered up to the date the Consultant receives the written notice of intent to terminate. Failure of the Client to make payments when due shall be cause for suspension of services or ultimately termination, unless and until the Consultant has been paid in all full amounts due for services, expenses, and other related charges.

This Agreement supersedes all terms and conditions contained on a purchase order typically procuring products. It is understood by both parties upon execution of this agreement that if a purchase order is issued, it is for accounting purposes only. Purchase order terms and conditions are void and are not a part of our agreement.

December 4, 2020

Vic Kane
 City of Oelwein
 20 - 2nd Avenue SW
 Oelwein, IA, 50662

Re: **2019 Bridge Inspection Services, City of Oelwein, Iowa**
IIW Project No.: 19052

Dear Vic:

IIW, P.C. has completed the routine inspections of the City of Oelwein bridges. The inspections were performed in accordance with all applicable state and federal requirements for routine inspections of in-service bridges. The information has been input into the Iowa Department of Transportation's (IDOT) Structure Inventory and Inspection Management System (SIIMS).

We would like to summarize some of our general findings and recommendations. Please refer to the enclosed SIIMS inspection reports for the comprehensive reports formally filed with IDOT. This information is being provided to aid in the maintenance and management of the City's valuable bridge assets.

1ST AVE. SW OVER DRY-RUN

FHWA No.: 8980

Inspection Observations

- Void under roadway near surface drain
- Spalling concrete with exposed reinforcing underside of arch
- Utilities run across inside of arch collecting flood debris

Maintenance Recommendations

- Repair void near surface drain
- Perform comprehensive repair of spalling concrete

2ND AVE. SW OVER DRY-RUN

FHWA No.: 8975

Inspection Observations

- Spalling concrete and exposed reinforcing of south barrel floor
- Vertical cracks with efflorescence at barrel walls
- West extension (privately owned) severely deteriorated

Maintenance Recommendations

- Contact owner of privately owned west extension

2ND ST. NE OVER DRY-RUN

FHWA No.: 8970

Inspection Observations

- NE sidewalk approach undermined
- Roadway deteriorated over bridge
- Spalling and delaminating concrete with exposed reinforcing underside of slab
- Deteriorating concrete near storm sewer penetrations and bearing areas

Maintenance Recommendations

- Repair undermined sidewalk
- Repair roadway above bridge
- Schedule for replacement

4TH ST. SW OVER DRY-RUN**FHWA No.: 8930**

Inspection Observations

- 1ft. scour at inlet and 4ft. scour at outlet
- Utility crosses floor of culvert near midspan
- Transverse cracks with efflorescence underside of slab

Maintenance Recommendations

- Install erosion protection (rip-rap) at inlet and outlet

6TH AVE. SW OVER DRY-RUN**FHWA No.: 502470**

Inspection Observations

- Cracking with efflorescence at center walls and wingwalls
- Flood debris caught at outlet
- 2ft. scour at outlet

Maintenance Recommendations

- Remove flood debris from outlet
- Install erosion protection (rip-rap) at outlet

10TH ST. SW OVER DRY-RUN**FHWA No.: 8920**

Inspection Observations

- Potholes patched with asphalt on deck
- Decayed posts and missing blocking of approach guardrail
- Concrete scaling with efflorescence underside of deck
- Spalling and delaminating concrete exposing circumferential reinforcing of pile encasements at east pier

Maintenance Recommendations

- Perform comprehensive deck repair with concrete overlay
- Repair/replace decayed and missing approach guardrail components
- Perform comprehensive repair of east pier pile encasements

FREDERICK AVE. OVER DRY-RUN**FHWA No.: 24481**

Inspection Observations

- Expansion joints failed
- Erosion at both west wingwalls
- Cracking concrete with efflorescence underside of deck

Maintenance Recommendations

- Clean and reseal expansion joints
- Install erosion protection (rip-rap) at west wingwalls

W CHARLES ST. (E) OVER DRY-RUN**FHWA No.: 8950**

Inspection Observations

- Waterway flows primarily through west barrel, 3-4ft. drift in east barrel
- Severe cracking and spalling concrete with efflorescence and exposed reinforcing of barrel walls and underside of slab

Maintenance Recommendations

- Schedule for replacement

2019 Bridge Inspection Services, City of Oelwein, Iowa
December 4, 2020
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W CHARLES ST. (W) OVER DRY-RUN

FHWA No.: 149695

Inspection Observations

- Weight posting sign missing at east approach
- Erosion at NE approach guardrail has compromised its stability and capacity
- Decayed posts and missing blocking of approach guardrail
- Spalling concrete on deck
- Corrosion of abutment bearings
- Scaling concrete with efflorescence underside of deck
- Erosion at both abutments
- SW exterior edge of deck severely spalled
- Deteriorating concrete at waterline of east pier

Maintenance Recommendations

- Replace weight posting at east approach
- Repair erosion at NE approach guardrail
- Repair/replace decayed and missing approach guardrail components
- Replace expansion joints
- Install erosion protection (rip-rap) at both abutments

We would like to emphasize that all formal inspection documentation has been completed and the information contained in this letter is for the City's reference. IIW would be available to meet with you or the City to discuss any of our findings in more detail.

IIW appreciates the opportunity to provide our services to the City of Dubuque. Please contact our office if we can provide any additional information regarding these inspections or the associated recommendations.

Sincerely,
IIW, P.C.



Nathan W. Miller, PE
Bridge Inspector/Program Manager

Enclosed: SIIMS Inspection Reports

Item 1.



IW, P.C.
4158 PENNSYLVANIA AVENUE
DUBUQUE, IA 52002-2631
(563) 556-2467

CITY OF OELWEIN

BRIDGE INSPECTION SUMMARY

2019

BRIDGE ID.	FHWA	TYPE	INSPECTION SUMMARY			MAINTENANCE RECOMMENDATIONS				COMMENTS	
			EXISTING SIGNAGE / WEIGHT EMBARGO	REDUCED INSP. FREQUENCY (MO)	WEARING SURFACE	COMMENTS	INSTALL OR REPAIR OBJECT MARKERS	INSTALL ADVANCED WEIGHT POSTING	REMOVE EXCESSIVE DECK OVERBURDEN		REMOVE DEBRIS FROM CHANNEL
1ST AVE SW	8980	CONCRETE DECK ARCH 35' X 50'	---	---	AC RDWY	CONCRETE DETERIORATING NEAR DECK DRAINS. VOID UNDER ROADWAY NEAR SURFACE DRAIN.	---	---	---	---	REPAIR DAMAGED UTILITY HANGERS. REPAIR DETERIORATING CONCRETE NEAR DECK DRAINS AND UTILITY PENETRATIONS.
2ND AVE SW	8975	CONCRETE CULVERT 24' X 33' *	---	---	AC RDWY	HAIRLINE CRACKING OF WALLS AND ROOF SLAB. WEST EXTENSION STRUCTURE (BEYOND ROADWAY) SEVERELY DETERIORATED.	---	---	---	---	CONTACT OWNER OF PRIVATELY OWNED STRUCTURE EXTENSION.
2ND ST NE	8970	CONCRETE SLAB 31' X 48'	EAST MISSING W.L. 10T	---	AC RDWY	SEVERELY DETERIORATED CONCRETE WITH SPALLING CONCRETE AND EXPOSED REINFORCING UNDERSIDE OF DECK SLAB. SIDEWALK UNDERMINED AT NORTHEAST APPROACH.	---	X	---	---	REPAIR UNDERMINED SIDEWALK. SCHEDULE FOR REPLACEMENT. ESTIMATED REMAINING LIFE <10 YEARS.
4TH ST SW	8930	CONCRETE CULVERT 28' X 24' *	---	---	INTEGRAL CONC	HAIRLINE CRACKING THROUGHOUT. STREAMBED DEGRADATION AT OUTLET. RAIL CORRODED.	X	---	---	---	PLACE ADDITIONAL REVETMENT AT OUTLET STREAMBED AND EMBANKMENTS. PAINT PIPE RAIL OVER CULVERT.
6TH AVE SW	502470	CONCRETE CULVERT 45' X 40' *	---	---	AC RDWY	2' SCOUR/STREAMBED DEGRADATION AT OUTLET. HAIRLINE CRACKING AT CENTERWALL AND PARAPETS.	X	---	X	---	ARMOR STREAMBED AT OUTLET. REMOVE VEGETATED DEBRIS FROM APRONS.
10TH ST SW	8920	CONTINUOUS STEEL BEAM 154' X 26'	W.L. 21T-30T-32T TRIPLE AXLE 14T	---	AC OVERLAY	SPALLING CONCRETE ON DECK. NUMEROUS AC PATCHES DETRIMENTAL TO CONCRETE. CONCRETE PIER ENCASEMENTS SPALLING WITH EXPOSED REINFORCING AND H-PILE AT EAST PIER.	---	X	---	---	EVALUATE COMPREHENSIVE DECK AND PIER PILE ENCASEMENT REPAIR OPTIONS.
FREDERICK AVE	24481	CONCRETE SLAB 41' X 71'	---	---	CONC	EROSION AT ENDS OF WEST WINGWALLS. LONGITUDINAL CRACKING ON TOP OF SLAB.	---	---	---	---	ARMOR WEST EMBANKMENTS. CLEAN AND RESAL EXPANSION JOINTS. APPLY CONCRETE SEALER TO BRIDGE DECK.
W CHARLES ST (E)	8950	CONCRETE CULVERT 44' X 44' *	---	---	AC RDWY	SEVERELY DETERIORATED CONCRETE WITH SPALLING AND EXPOSED REINFORCING ON BARREL WALLS AND ROOF SLABS.	---	---	---	---	SCHEDULE FOR REPLACEMENT. ESTIMATED REMAINING LIFE <10 YEARS.
W CHARLES ST (W)	149695	CONTINUOUS STEEL BEAM 184' X 24'	EAST MISSING W.L. 25T-38T-38T NARROW BRIDGE	---	AC OVERLAY	SPALLING CONCRETE ON SURFACE OF DECK. AC EFFLORESCENCE UNDERSIDE OF DECK. EROSION OVERLAY DETRIMENTAL TO CONCRETE DECK. EROSION AT NORTHEAST SHOULDER APPROACHING ROADWAY.	X	X	---	---	EVALUATE COMPREHENSIVE DECK REPAIR OPTIONS. REPAIR NORTHEAST SHOULDER.

GENERAL INFORMATION ONLY. SEE SPECIFIC REPORT BEFORE POSTING. REPAIR OR REPLACEMENT. APPROACH ROADWAY WIDTH IF CULVERT AND STRUCTURE WIDTH UNKNOWN.

FFY 2021 City Bridge Candidate List
 Arranged by Total Replacement Score

Item 1.

Accept / Decline	County #	FHWA Structure #	City	City Street	Feature Crossed	Iowa Sufficiency Rating	ADT	Detour Length	Relationship of Operational Rating to Maximum Legal Load (SI&A Item 70)	Structure Open, Posted, or Closed to Traffic (OPCL)	Sufficiency Rating Score	ADT Score	Detour Length Score	Operational Rating to Maximum Legal Load Score (SI&A Item 70)	Replacement Score	Type of Funding	
	D	69	11525	VILLISCA	OLD US 71	OVER BNSF RR	2	1260	4	0	P	10	4	10	10	34	---
	A	7	15490	JANESVILLE	7TH ST	CEDAR RIVER	9.2	1640	4	0	P	10	4	10	10	34	Federal-aid Swap
	A	82	3060	DAVENPORT	ELM ST	OVER I.C.E. RR	2	3160	2	0	K	10	6	6	10	32	Federal-aid
	A	42	6580	IOWA FALLS	RIVER RD	ELK RUN	17.1	450	5	0	P	9	2	10	10	31	Federal-aid Swap
	D	86	8350	MONTOUR	JACOB ST	DRAINAGE	20.7	289	5	0	P	8	2	10	10	30	---
	D	9	12250	WAVERLY	3RD ST SE	CEDAR RIVER	22.9	3130	2	0	K	8	6	6	10	30	---
	A	7	11830	WATERLOO	E 11TH ST	CEDAR RIVER	11.2	7400	1	2	P	9	8	4	6	27	CHBP
	A	81	8890	ODEBOLT	WALNUT ST	DRAINAGE	16.1	152	2	0	K	9	1	6	10	26	Federal-aid Swap
	D	52	31720	IOWA CITY	IA 1 NB	IOWA RIVER	38.5	21300	8	5	A	6	10	10	0	26	---
	D	64	242420	LE GRAND	S WEBSTER ST	OVER UP RR	15.5	150	3	1	P	9	1	8	8	26	---
	D	23	504395	WHEATLAND	MADISON ST	DRAINAGE	17.1	981	1	0	P	9	3	4	10	26	---
	D	16	7400	LOWDEN	5TH ST	DRAINAGE	15.9	289	1	0	K	9	2	4	10	25	---
	D	16	7410	LOWDEN	8TH ST	DRAINAGE	16.8	460	1	0	P	9	2	4	10	25	---
	D	81	8910	ODEBOLT	WILLOW ST	DRAINAGE	18.4	289	1	0	B	9	2	4	10	25	---
	A	2	9640	PRESCOTT	2ND STREET	DREY'S DITCH	20.9	981	1	0	B	8	3	4	10	25	Federal-aid Swap
	A	49	29939	MAQUOKETA	LOCAL RD	PRAIRIE CREEK	33.9	7200	4	5	A	7	8	10	0	25	Federal-aid Swap
	D	78	2700	COUNCIL BLUFFS	BENTON ST	INDIAN CREEK	31.9	853	1	0	P	7	3	4	10	24	---
	D	82	3100	DAVENPORT	W 46TH ST	CARDINAL CREEK	27.5	110	5	2	P	7	1	10	6	24	---
	D	82	3370	DAVENPORT	EASTERN AVE	DUCK CREEK	41.8	16700	3	5	A	6	10	8	0	24	---
	A	85	12890	ZEARING	PEARL ST	MIDDLE MINERVA CREEK	25.1	486	1	0	K	8	2	4	10	24	Federal-aid Swap
	D	79	820	BROOKLYN	ORCHARD ST	LITTLE BEAR CREEK	44.1	460	2	0	P	5	2	6	10	23	---
	D	79	10215	SEARSBORO	4TH ST	FLEENER CREEK	23.3	190	1	0	P	8	1	4	10	23	---
	A	48	12705	WILLIAMSBURG	STATE ST	OLD MANS CREEK	38.5	2220	2	2	P	6	5	6	6	23	Federal-aid Swap
	D	57	220880	BERTRAM	BIG CREEK RD.	BIG CREEK	20.3	140	4	3	P	8	1	10	4	23	---
	A	17	601625	THORNTON	125TH	DRAINAGE DITCH	38	610	16	3	P	6	3	10	4	23	State
	A	60	10000	ROCK RAPIDS	EAST ST	TOM CREEK	39.3	430	5	3	P	6	2	10	4	22	Federal-aid Swap
	A	86	11250	TAMA	5TH ST E	DRAINAGE	19.5	1120	1	2	B	8	4	4	6	22	State
	D	25	80	ADEL	15TH ST	BUTLER CREEK	28	1090	1	2	P	7	4	4	6	21	---
	A	5	530	AUDUBON	DIVISION ST	BLUE GRASS CREEK	17.2	310	1	2	P	9	2	4	6	21	Federal-aid Swap
		29	900	BURLINGTON	SO MAIN ST	DRAINAGE	27.6	780	2	3	K	7	3	6	4	20	
		82	3020	DAVENPORT	E 13TH ST	OVER I.C.E. RR	23	370	0.2	0	K	8	2	0	10	20	
		92	51870	WELLMAN	9TH AVENUE	SMITH CREEK	35.5	1080	22	5	A	6	4	10	0	20	
		57	1270	CEDAR RAPIDS	8TH AVE	CEDAR RIVER	50.3	10050	1	5	A	5	10	4	0	19	
		98	8795	NORTHWOOD	2ND AVE S	SHELL ROCK RIVER	42.1	152	1	1	P	6	1	4	8	19	
		69	9820	RED OAK	5TH ST	OVER BNSF RR	20.8	520	0.00	1.00	P	8	3	0	8	19	
		94	52120	FORT DODGE	5TH AVE	DRAINAGE DITCH	45.2	11200	1	5	A	5	10	4	0	19	
		23	2150	CLINTON	SECOND AVE RD	LITTLE MILL CREEK	50	520	4	5	A	5	3	10	0	18	
		82	3160	DAVENPORT	UTAH AVE	DUCK CREEK	33.1	110	5	5	A	7	1	10	0	18	
		94	5040	FORT DODGE	1ST AVE S	21ST ST & RR	57.5	10200	1	5	A	4	10	4	0	18	
		97	10530	SIoux CITY	6TH ST	FLOYD RIVER	44.7	9500	1	5	A	5	9	4	0	18	
		97	10730	SIoux CITY	WEST ST	DRAINAGE	33	80	9	5	A	7	1	10	0	18	
		96	52770	JACKSON JUNCTION	MAIN ST	SMALL NATURAL STREAM	48.8	690	17	5	A	5	3	10	0	18	
		21	116860	SPENCER	FM 340TH ST	LITTLE SIoux RIVER	65.6	2800	4	5	A	3	5	10	0	18	
		56	5240	FORT MADISON	RICHARDS DR	DRY CREEK	42.4	2080	2	5	P	6	5	6	0	17	
		7	6120	HUDSON	BUTTERFIELD RD	DRAINAGE	67.9	240	4	3	P	2	1	10	4	17	
		18	1900	CHEROKEE	E. MAPLE ST	RAILROAD CREEK	41.2	500	1	3	P	6	2	4	4	16	
		78	2640	COUNCIL BLUFFS	5TH AVE	INDIAN CREEK	37	3200	1	5	A	6	6	4	0	16	
		5	4720	EXIRA	EDGERTON ST	DRAINAGE	44.3	680	1	3	P	5	3	4	4	16	
		97	10540	SIoux CITY	11TH ST	FLOYD RIVER	60.3	4380	2	5	A	3	7	6	0	16	

Federal-aid = Federal Funding
 Federal-aid Swap = Swap Funding
 State = State City Bridge Program
 CHBP = Competitive Highway Bridge Program (US DOT Discretionary Grant)

FFY 2021 City Bridge Candidate List
 Arranged by Total Replacement Score

Item 1.

Accept / Decline	County #	FHWA Structure #	City	City Street	Feature Crossed	Iowa Sufficiency Rating	ADT	Detour Length	Relationship of Operational Rating to Maximum Legal Load (SI&A Item 70)	Structure Open, Posted, or Closed to Traffic (OPCL)	Sufficiency Rating Score	ADT Score	Detour Length Score	Operational Rating to Maximum Legal Load Score (SI&A Item 70)	Replacement Score	Type of Funding
	43	177720	MISSOURI VALLEY	LOC CANAL ST	WILLOW RIVER	28.7	100	2	4	P	7	1	6	2	16	
	76	278340	FONDA	FM	BIG CEDAR CREEK	66.6	600	4	5	A	3	3	10	0	16	
	18	1990	CHEROKEE	UNION ST	RAILROAD CREEK	42.9	920	1	4	P	6	3	4	2	15	
	77	3684	DES MOINES	SCOTT AVE	DES MOINES RIVER	69	4590	2	5	A	2	7	6	0	15	
	33	8950	OELWEIN	W CHARLES ST	DRY RUN CREEK	38.1	2860	1	5	A	6	5	4	0	15	
	78	503935	COUNCIL BLUFFS	9TH AVE	INDIAN CREEK	52.6	4310	1	5	A	4	7	4	0	15	
	18	1980	CHEROKEE	EUCLID AVE	RAILROAD CREEK	43.1	742	1	4	P	5	3	4	2	14	
	60	5530	GEORGE	VIRGINIA ST	LITTLE ROCK RIVER	87	1590	18	5	A	0	4	10	0	14	
	15	500140	ATLANTIC	NISHNA ST	SMALL CREEK	65.9	110	7	5	A	3	1	10	0	14	
	7	503290	CEDAR FALLS	CAMPUS ST	UNIV BR DRY RUN	38	1586	0	3	P	6	4	0	4	14	
	7	1130	CEDAR FALLS	OLIVE ST	DRAINAGE	34.6	486	0	3	P	7	2	0	4	13	
	57	1670	CENTRAL CITY	MAIN ST	WAPSIPINICON RIVER	76.9	3410	2	5	A	1	6	6	0	13	
	57	2430	COGGON	3RD ST	BUFFALO CREEK	54.4	210	2	4	P	4	1	6	2	13	
	84	10020	ROCK VALLEY	14TH ST	CREAMERY CREEK	47.5	321	2	5	A	5	2	6	0	13	
	70	8440	MUSCATINE	CLAY ST	MAD CREEK	80.9	5100	1	5	A	1	7	4	0	12	
	97	354551	PIERSON	FM	STREAM	48.7	270	1	5	A	5	2	4	0	11	
	52	500820	IOWA CITY	IOWA AVE	RALSTON CREEK	53.2	800	1	5	A	4	3	4	0	11	
	52	6530	IOWA CITY	THIRD AVE	SO BR RALSTON CREEK	53.5	361	1	5	A	4	2	4	0	10	
	25	9430	PERRY	PARK RD(SW)	FROG CREEK	47.8	100	1	5	A	5	1	4	0	10	
	57	503755	FAIRFAX	FM E-66	OSCAR CREEK	28.7	660	0	5	P	7	3	0	0	10	
	10	7070	LAMONT	CONCORD ST	DRAINAGE	56.8	250	1	5	A	4	1	4	0	9	
	73	10320	SHENANDOAH	SOUTHWEST RD	JOHNSONS RUN	54.5	1500	0	5	A	4	4	0	0	8	
	82	3095	DAVENPORT	W 49TH ST	SILVER CREEK	97	4090	0	5	A	0	7	0	0	7	
	57	11040	SPRINGVILLE	5TH AVE	LITTLE BIG CREEK	62.1	289	0	5	R	3	2	0	0	5	
	57	11060	SPRINGVILLE	BROADWAY ST	E BIG CREEK	77.3	1950	0	5	A	1	4	0	0	5	
	17	106310	CLEAR LAKE	275TH	WILLOW CREEK	57.7	90	0	5	A	4	1	0	0	5	

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INSTRUCTIONAL MEMORANDUMS

To Local Public Agencies



Item 1.

To: Counties and Cities	Date: December 31, 2020
From: Local Systems Bureau	I.M. No. 1.100
Subject: Highway Bridge Programs for Cities and Counties	

Contents: This Instructional Memorandum (I.M.) includes guidelines and procedures for the Local Public Agency (LPA) Federal-aid Swap and State bridge programs for highways. This I.M. also includes the following attachments:

- [Attachment A](#) – City Bridge Priority Point Rating Worksheet ([Word](#))
- [Attachment B](#) – County Bridge Priority Point Rating Worksheet ([Word](#))
- [Attachment C](#) – Touchdown Points and Limits of Participation
- [Attachment D](#) – County HBP Fiscal Constraint Requirements

GENERAL

Cities and counties in Iowa are provided dedicated funding for bridges through one Federal-aid program and two State programs. The purpose of these programs is to reduce the number of “Poor” bridges (formerly known as Structurally Deficient (SD) and Functionally Obsolete (FO) bridges) on the local roadway system. These bridge programs are administered by the Iowa Department of Transportation (Iowa DOT) Local Systems Bureau in accordance with [761 Iowa Administrative Code \(IAC\), Chapter 161](#). Likewise, the State programs are administered in accordance with [761 IAC, Chapter 160](#). In both cases, these programs are developed and administered in consultation with city and county officials through their representative organizations. Cities are represented by the Iowa Chapter of the American Public Works Association (APWA). The counties are represented by the Iowa County Engineers Association (ICEA). This I.M. documents the results of that consultation by describing each program in detail and providing additional guidance concerning eligible bridges and eligible project costs.

FEDERAL-AID SWAP BRIDGE PROGRAM

A portion of Federal funds were historically set aside from the Surface Transportation Block Grant Program (STBGP), exclusively for city and county bridges. With the ability to exchange Federal-aid for State Primary Road Funds, these funds are now Federal-aid Swap funds, unless specifically requested to remain Federal-aid by an LPA due to the Regional Planning Affiliation (RPA) or Metropolitan Planning Organization (MPO) opting out of Swap, per the [Federal-aid Swap Policy](#). These funds will continue to be referred to in this I.M. as Highway Bridge Program (HBP) funds. The amount of HBP funds set aside and the distribution of these funds between cities and counties is calculated by the Iowa DOT Local Systems Bureau, as detailed in the [HBP Fund Allocation Method](#). This method is periodically reviewed by the ICEA and APWA and revised, typically after the passage of a new multi-year Federal transportation act. The portions of HBP funds allocated for cities and counties are administered differently, as outlined below.

Cities

Cities may request to add a bridge to the City Bridge Candidate List at any time, but the deadline for the next Federal Fiscal Year’s funding is October 1. Such requests shall be submitted in writing on city letterhead or via email with a city official’s signature block, to the Iowa DOT Local Systems Bureau and shall include the Federal Highway Administration (FHWA) bridge number, route carried, feature crossed, most recent replacement cost estimate available, and contact information for the city official. The letter shall be emailed by 11:59 P.M. on October 1, or mailed and postmarked on or before October 1, to the Iowa DOT Local Systems Bureau’s Urban Engineer. Refer to the Iowa DOT [Local Systems website](#) for contact information. Any highway bridge within the corporate limits, whether in whole or in part, may be submitted for consideration. This includes bridges on Farm-to-Market extensions within the city limits of cities less than 500 population. The City Bridge Candidate list, including the priority points, is available on the Local Systems Bureau [web site](#).

During the month of November each year, the Local Systems Bureau selects bridges from the Proposed City Bridge Candidate List based on their ranking and available funding. Candidates are ranked in descending order according to their priority points (see [Attachment A](#) to this I.M.). Cities are limited to one bridge per city per fiscal year. The total Federal-aid Swap contribution limit per bridge is set at \$1 million from this program.

Priority points will be calculated using the data shown on the SI&A form. If the data on the SI&A form does not reflect the most recent inspection, the priority points will not correctly reflect the status of a bridge when the Iowa DOT's Proposed City Bridge Candidate List computer program is run.

Each city with a selected bridge is sent a letter offering HBP or State bridge funding (See STATE BRIDGE PROGRAMS - City Bridge Construction Fund section below) for the next Federal Fiscal Year. State funds are typically offered to only one or two small bridges per year. The city then decides if they have the matching funds to proceed and sends a letter accepting or rejecting the funding. If accepted, the city provides an updated cost estimate and information on who will administer the project. The Local Systems Bureau will then prepare the appropriate agreement for the project, which is distributed by the Local Systems Urban Engineer. This agreement will indicate if the project will receive Federal-aid or State funding, as determined by the Local Systems Bureau. The city must sign and return the agreement to the Urban Engineer within 90 days of receipt. If a city does not return an agreement within 90 days, the Local Systems Bureau will treat the offer as declined by the city.

After the agreement is approved, the city may begin project development. Project development activities shall be carried out as outlined in the associated I.M.s.

Projects must meet all the requirements listed in the agreement, and be let at the Iowa DOT within 3 years of signing the agreement. If requested by the city, a 6 month extension may be granted by the Local Systems Bureau.

HBP funds are awarded in anticipation of receiving Surface Transportation Block Grant Program (STBGP) funds for the next Federal Fiscal Year, which begins on October 1. These funds are not available until the corresponding Federal appropriation bill is passed. While this should occur in advance of the Federal Fiscal Year, delays have and may continue to occur. If a city would like to begin Swap HBP reimbursed work before the funds are available, they may do so, but it will be at the City's risk.

Counties

The Local Systems Bureau does not select county bridges for HBP funding. Instead, county bridge projects are selected by the County Engineer in cooperation with the County Board of Supervisors. HBP funds are allocated to each county according to the following formula:

1. One-third (33 percent) on the county Road Use Tax (RUT) fund distribution, weighted 32 percent on the Farm-to-Market Factor and 68 percent on the Secondary Road Factor, as calculated by the Iowa County Engineers Service Bureau.
2. Two-thirds (67 percent) on a qualifying deficient bridge factor. This factor is the percent of square footage of Poor bridges with ADT's greater than or equal to 25 and a Sufficiency Rating of 80 or less within each county, as compared to the total square footage of all county bridges with those same parameters.

After receiving the notification of the HBP funds available, the Local Systems Bureau will notify the counties of their allocations based on the latest factors. Counties then select their own bridges for programming and development. Any eligible bridge may be programmed, provided the counties' HBP program as a whole is fiscally constrained in the Statewide Transportation Improvement Program (STIP). For additional information regarding the fiscal constraint requirements and procedures, see [Attachment D](#) to this I.M.

Beginning with the May 2021 letting, no county will be allowed to accumulate more than 4 years of HBP funds. In December of each year, the years of funds accumulated is calculated by taking an average of the last 4 years' allocations and dividing that into the current balance of unobligated HBP funds. Projects let in the Iowa DOT's December letting or before, will be considered as obligated for purposes of this calculation. Counties with more than 4 years of accumulated funds after the December letting will have the amount that exceeds 4 years accumulated funds redistributed to those counties with less than 4 years accumulated funds.

Counties may also borrow ahead up to 4.5 years worth of funds, essentially exceeding their accumulated annual HBP allocations by 4.5 years. This is provided that HBP funds statewide are available and the total cost does not exceed their anticipated 4.5 year allocation in the current year. Since Counties may “borrow ahead” in this manner, saving up for a large project generally may not be used to obtain a waiver from the 4.5 year accumulated funds limit, except for extenuating circumstances of very large bridges; this shall be asked for in advance of receiving notification that the funds were to be reallocated.

The allocation system described above is designed to maximize utilization of all the available HBP funds but does not guarantee that a county will be able to let an HBP funded bridge project each and every year, or be able to utilize its entire allocation.

Project development activities shall be carried out as outlined in the I.M.s. All Swap HBP projects must be let by the Iowa DOT. After letting, the county makes initial project payments either from their Farm-to-Market or Secondary Road funds, depending on which system the bridge is on. Reimbursement to the appropriate fund will occur after the payment has been made.

STATE BRIDGE PROGRAMS

City Bridge Construction Fund

[Iowa Code Section 312.2](#), 12.b provides \$500,000 annually off-the-top from the Road Use Tax Fund to the city bridge construction fund for the reconstruction or replacement of highway bridges within or touching a city’s corporate limits, regardless of who owns the bridge. This includes bridges on Farm-to-Market extensions within the city limits of cities less than 500 population. State participation in qualifying projects will be 100 percent of the eligible construction costs, up to the limit specified in the project funding agreement. Some previous agreements may not allow 100 percent of eligible construction costs, and those previous agreements will govern.

The City Bridge funds are allocated to cities in the same manner as the HBP funds for cities, as described above.

Project development must comply with State law and the agreement provisions. Projects involving only City Bridge Funds or other non-Federal-aid funds may be let locally by the city.

County Bridge Construction Fund

[Iowa Code Section 312.2](#), 12.a provides \$2 million annually off-the-top from the Road Use Tax Fund to the county bridge construction fund for the construction, reconstruction, or replacement of highway bridges on the Secondary Road System. State participation in qualifying projects will be 80 percent of the eligible costs, up to a maximum of \$2 million per project.

During the month of November each year, the Iowa DOT Local Systems Bureau requests one candidate from each county for County Bridge Construction funds. To assist counties in selecting candidates for funding, the Local Systems Bureau prepares a current listing of each county’s bridges along with an approximation of priority points, based on the latest information in [Structural Inventory and Inspection Management System \(SIIMS\)](#), calculated in accordance with County Bridge Priority Point Rating factors (see [Attachment B](#) to this I.M.). A list of all county bridges including their priority points is available on the Local Systems Bureau [web site](#).

One of the factors included in the priority point calculations is the detour length. The detour length to be used is the out-of-distance travel. See [Attachment B](#) to this I.M. for those instructions. This detour length is frequently different than the detour length shown in SIIMS.

Candidates are ranked in descending order according to their priority points. Projects are selected from the listing until the available funds are obligated. The successful county candidates are notified of funding in January.

Project development must comply with State law and the agreement provisions. Projects involving only County Bridge Funds or other non-Federal-aid funds may be let locally by the county; however, if the match

funding being utilized is Federal-aid Swap HBP funding, or Farm-to-Market funding, the projects shall be let at the Iowa DOT.

ELIGIBLE BRIDGES

In general, to be eligible for either HBP or State bridge funding, a bridge must be classified as “Poor”; have a Sufficiency Rating of 80 or less; and have an Average Daily Traffic (ADT), as determined by the Iowa DOT, greater than or equal to 25. Each of these criteria are explained in more detail below.

“Poor” Bridges

For a bridge to be classified as Poor, one of the following conditions must be met on the Structural Inventory and Appraisal (SI&A) form:

A condition rating of 4 or less for:

- Item 58 - Deck; or
- Item 59 - Superstructures; or
- Item 60 - Substructures; or
- Item 62 - Culvert and Retaining Walls.¹

¹ Item 62 applies only if the last two digits of Item 43 are coded 07 or 19.

Sufficiency Rating

The Sufficiency Rating is calculated using SI&A data, according to the formula given in the [Recording and Coding Guide for the Structure Inventory and Appraisal of Nations Bridges](#), published by FHWA.

HBP Funds – Bridges with a Sufficiency Rating of 60 or less are eligible for replacement or rehabilitation. Bridges with a Sufficiency Rating of 61 to 80 are eligible for rehabilitation only, unless approved by the Iowa DOT Local Systems Bureau (see “REHABILITATION WORK” section below for more information).

State Bridge Funds – Bridges with a Sufficiency Rating of 80 or less are eligible for either replacement or rehabilitation.

ADT

The current Average Daily Traffic (ADT) must be greater than or equal to 25 vehicles per day (vpd), as determined by the Iowa DOT. If the LPA disagrees with the Iowa DOT’s ADT, Item 29 on the SI&A, the LPA may request an update, provided new count data is submitted and the data collection methods are verified by the Iowa DOT, Systems Planning Bureau. The Iowa DOT loans traffic counting equipment to local agencies on an as-available basis. For equipment availability and other questions, please contact the Systems Planning Bureau at 515-239-1323.

If there is evidence that the deteriorating condition of the bridge caused the low ADT, the LPA may submit a request for consideration to waive this requirement to the Local Systems Bureau. The most effective documentation are old traffic counts that show higher volumes when the bridge was in better condition. However, if old traffic counts are not available, other factors may be considered, such as progressively more restrictive load postings over an extended period of time.

FHWA QUALIFYING BRIDGE LIST

The FHWA Qualifying Bridge List (QBL) is prepared by FHWA in the summer of each calendar year. Bridges on the QBL meet the HBP requirements for Poor bridges and Sufficiency Rating; however, the QBL includes bridges with any ADT. QBL data for a bridge may be viewed by clicking on the QBL link shown for the project in the Transportation Program Management System (TPMS) development module. If no link is shown, the bridge is not on the QBL.

Alternately, the QBL spreadsheet is published on the Local Systems Bureau [“County Reports, Funding, & Resources” webpage](#) and also the [“Bridge Information & Resources” webpage](#). This spreadsheet shows the structures with a sufficiency rating of 80 or less which meet the definition of Poor and includes ADTs of 25 or

greater. (The user may turn off the ADT filter to view bridges with an ADT of less than 25.) The DOT, Bridges and Structures Bureau, assembles this listing by extracting information from SIIMS at the end of each calendar year. The data is then passed to FHWA, and FHWA reviews the data and returns a finalized list to the DOT in approximately June of each year. Bridges in the County Five Year Program in 2021, that no longer qualify due to the change from SD/FO to Poor bridges, will still be allowed to be replaced utilizing these funding programs.

The QBL is based on information that may be over one year old; therefore, it is possible that an eligible bridge may not be included on the list. If an LPA wishes to use HBP funds for a bridge not on the QBL, a written request must be submitted to the Local Systems Project Development Engineer (LSPDE). Updated SI&A information and any other documentation needed to justify the request must be attached or uploaded to the Iowa DOT's SIIMS. After the eligibility has been verified by the LSPDE, the LSPDE will forward the request to the Local Systems Secondary Roads Engineer. This request must be reviewed and approved by the Local Systems Bureau before any HBP funds can be authorized for work on the bridge.

Caution: If the SI&A ratings for the bridge requested have dropped significantly (i.e., 2 points or more in the last year), Local Systems will probably require additional information or explanation to justify the sudden change in bridge conditions. Such additional information might include pictures or other documentation provided by the city, county, or consultant that explains why the sudden change occurred. Reasonable care should be taken to verify that the changes to the SI&A ratings are justifiable, especially for those bridges that are close to not qualifying. Questionable SI&A rating information may lead to an audit of the city or county bridge inspection program.

If a county bridge does not qualify for funding based on the QBL but the county believes the bridge needs to be replaced before it were to deteriorate enough to be on the QBL, the county may be granted an exception from the ICEA Executive Board. In order to request an exception, the county shall email a request to the ICEA President to be added to the ICEA Executive Board agenda. The Secondary Roads Engineer shall be copied on the request. The county shall write a memo, officially requesting the exception, and attach the most recent SI&A to the memo. The county shall state in the memo why this bridge is in need of replacement before all the other bridges shown on the QBL and should be ready to explain and defend their request to the ICEA Executive Board. If the ICEA Executive Board approves the request, the Secondary Roads Engineer shall provide a copy of the memo to the Local Systems Project Development Engineer and Technician, via TPMS Development.

If a bridge has been closed for 10 years, it is considered not significantly important and is therefore not eligible for HBP funding and will be removed from the list; unless, the LPA has made reasonable progress in scheduling the rehabilitation or replacement of the bridge, which indicates the bridge was of significant importance.

DESIGN GUIDELINES

Any road or bridge projects that are located on the Primary System, Interstate System, or National Highway System (NHS), regardless of funding source, shall use the design guidelines in the [Iowa DOT Design Manual](#). Bridge replacement and rehabilitation projects should be designed to meet the design guidelines referenced in [I.M. 3.500](#), Bridge or Culvert Plans. Additionally, for all bridge projects, refer to the guidelines listed below:

- All bridge replacement projects shall be designed to HL-93 loading.
- For projects involving new construction or complete reconstruction within urban areas, refer to Iowa Statewide Urban Design and Specifications (SUDAS) [Design Manual](#), Chapter 5.
- For projects involving new construction or complete reconstruction on rural collectors and rural local roads, refer to [I.M. 3.210](#), Rural Design Guidelines.
- For projects with a rural cross section (e.g. shoulders with open ditches, no curbs) in urban areas or projects in transition areas between rural and urban areas, refer either to the SUDAS [Design Manual](#) or [I.M. 3.210](#).
- For guidance concerning the use and placement of guard rails and bridge rails, refer to [I.M. 3.230](#), Traffic Barriers (Guardrail and Bridge Rail).
- For guidance in providing a safe recovery area, refer to [I.M. 3.240](#), Clear Zone Guidelines.

BRIDGE INSPECTIONS

All public highway bridges must be inspected in accordance with the National Bridge Inspection Standards (NBIS), as required by 23 CFR 650, Subpart C. If the Iowa DOT determines that an LPA is not in at least conditional compliance with NBIS requirements that LPA is not eligible to receive any type of Federal-aid, Swap funds or State bridge funds, even if it has bridges that meet the eligibility requirements outlined above. For additional guidance concerning the NBIS requirements, refer to [I.M. 7.020](#), Bridge Inspections.

RAILROAD BRIDGES

Bridges carrying highway traffic over a railroad may be owned by a railroad company. If the railroad company owns the bridge, it is not subject to the inspection requirements of the NBIS. As a result, this bridge is not listed in the National Bridge Inventory (NBI) and is not eligible for HBP funding, unless the following steps are taken:

1. The bridge is inspected according to NBIS requirements.
2. Any rehabilitation or replacement of the bridge includes the requirement that ownership of the bridge is transferred to a public agency that will be responsible for maintaining the structure.

ELIGIBLE PROJECT COSTS

Types of Costs

City HBP Swap and City Bridge Construction Funds - Within the Limits of Participation (see below), City HBP Swap Funds and City Bridge Construction may only be used for construction. One hundred (100) percent of eligible construction costs will be reimbursed with a maximum reimbursement of \$1,000,000. 100% of development and administrative costs, including design engineering, construction engineering and inspection, right-of-way acquisition, permit requirements, utility relocation costs, and railroad related costs shall be paid by the LPA.

City HBP Federal Funds - Within the Limits of Participation (see below), City HBP Funds may only be used for construction. Eighty (80) percent of eligible construction costs will be reimbursed with a maximum reimbursement of \$1,000,000. At minimum, 20% match of eligible construction costs will be required, due to Federal regulations requiring matching funds. 100% of development and administrative costs, including design engineering, construction engineering and inspection, right-of-way acquisition, permit requirements, utility relocation costs, and railroad related costs shall be paid by the LPA.

County HBP Funds - Within the Limits of Participation (see below), County HBP Funds may only be used for construction, unless a special exception for a funding hardship is granted from the ICEA Executive Board. One hundred (100) percent of eligible construction costs will be reimbursed for County Swap HBP projects, unless 100% exceeds the county's 4.5 year borrow ahead maximum.

County Bridge Construction Funds - Within the Limits of Participation, County Bridge Construction Funds may only be used for construction. 80 percent of eligible construction costs will be reimbursed with a maximum reimbursement of \$2,000,000.

Limits of Participation

Replacement cost may include the bridge plus a nominal amount of roadway work sufficient to connect the structure to the existing roadway or return the grade line to an attainable Touchdown Point in accordance with the Iowa Statewide Urban Design and Specifications (SUDAS) [Design Manual](#), Chapter 5, for urban design guidance and [I.M. 3.210](#), Rural Design Guidelines. In most situations, the Touchdown Points and the Limits of Participation are at the same location. However, there are a few situations where the Limits of Participation may extend beyond the Touchdown Points. For more information, see [Attachment C](#).

Limits on Channel Work

Reasonable channel work necessary to improve the stream alignment through the bridge opening is eligible for funding. Typically, a limit of 500 feet is allowed under USACE Nationwide Permit Number 13, therefore, channel realignments exceeding 500 feet are typically not eligible for HBP or State bridge funds. To be eligible the work must be accomplished as part of the bridge project.

REHABILITATION WORK

Bridge rehabilitation projects have some additional requirements and procedures associated with them, as described below.

Future Bridge Program Eligibility

Because HBP funds are allocated to cities and counties in part based on the number of Poor bridges, the Iowa DOT has instituted a “10-year rule” that prevents a bridge from remaining in the Poor classification after being replaced or rehabilitated, regardless of the type of funds used for the replacement or rehabilitation project. Rehabilitation projects are defined as requiring major work to restore the structural capacity of the bridge, as well as work necessary to correct major safety deficiencies. The Iowa DOT also considers bridge deck overlays that meet the requirements outlined below as rehabilitation work.

The effect of this rule is that the Iowa DOT will remove any bridge that has been replaced or rehabilitated in the last 10 years from the Qualifying Bridge List, and as a consequence, such bridges will not be eligible for any Federal or State bridge funds in Iowa. Therefore, the LPA should carefully consider the potential funding impacts when planning any type of bridge replacement or rehabilitation project.

Structural and Safety Deficiencies

The purpose of the bridge programs is to address bridges that are in Poor condition; therefore, a rehabilitation project must correct a bridge’s Poor status (except as noted in the “Design Exceptions” subsection below) and any major safety or structural problems. For example, the project may have to include widening, barrier rail, strengthening, etc. The remaining life of the rehabilitated bridge must be at least 15 years. The structural capacity after the rehabilitation shall be at least HS-20.

To address possible safety problems, bridge projects should be reviewed according to the safety considerations outlined in [I.M. 3.220](#), 3R Guidelines. Bridge rails and approach guardrails should be reviewed in accordance with [I.M. 3.230](#), Traffic Barriers (Guardrail and Bridge Barrier Rail).

Replacement vs. Rehabilitation

If the bridge is only eligible for rehabilitation with HBP funds but the LPA requests replacement instead, the LPA must submit a written request to the Local Systems Bureau with the following information:

- The reason for replacement vs. rehabilitation. This should include specific numbers relating to such considerations as ADT, detour distance, load limits, number, and proximity of crossings on the stream, bridge widths in the area, public input, safety aspects, etc.
- A cost estimate of rehabilitation to current standards for width and load carrying capacity, and a cost estimate for replacement.
- For county bridges, an explanation of why each of the bridges in the county with a Sufficiency Rating of 60 or less is not being replaced before the proposed structure. Each bridge should be addressed individually or grouped by similar Sufficiency Ratings, ADT, road system, road surface type, or any other logical way.

The Local Systems Bureau will review the proposed justification for possible approval. If the rehabilitation cost is more than 65% of the replacement cost, it is probably more cost effective to replace the bridge and the Local Systems Bureau will usually approve replacement. The Local Systems Bureau will also examine the merits of the project and what the LPA is doing to replace or rehabilitate its remaining deficient bridges.

For city projects, if the replacement is not approved by the Local Systems Bureau, the city may use the funding offered for rehabilitation, or they may decline the funding offered and remain on the Proposed City Bridge Candidate List until the bridge qualifies for replacement.

Overlays

Bridge deck overlays are not typically eligible for HBP or other Federal or Swap funds, unless the project includes substantial reconstruction of the deck by removing all deteriorated deck concrete. Deteriorated concrete includes areas that are delaminated or spalled; as well as concrete which is contaminated with chloride above the corrosion threshold. The LPA may either remove the entire deck down to the top mat of

reinforcement or they may perform chloride testing to determine what, if any, areas of the top mat need to be removed and replaced. When the chloride concentration exceeds 0.6 of the hydroxyl concentration, corrosion is observed, according to a publication by Hausmann, D.A. in 1967 titled "Steel Corrosion in Concrete: How Does it Occur?" *Materials Protection*, 6, 19-23. Chloride contents in excess of 0.025% per cubic yard of concrete for uncoated mild steel reinforcing bars and 0.1% per cubic yard for epoxy coated bars will cause corrosion to begin. This contaminated concrete must be removed and replaced. For concrete with a density of 150 lb./ft.³ this is 1 pound of chloride per cubic yard of concrete for uncoated steel and 4 pounds of chloride per cubic yard of concrete for epoxy coated bars. If chloride testing is performed instead of removing and replacing the concrete down to the top mat of reinforcing steel, the plan sheets should document the following information: locations where testing was performed, the outcomes of the testing, and what action needs to be taken because of the testing. No specific approval from FHWA is required to perform testing in lieu of replacing the concrete down to the top mat of reinforcing steel.

Design Exceptions

All bridge projects shall follow the design guidelines shown above. Designing a bridge rehabilitation project for structural capacity less than what the bridge was originally designed for will not be allowed. However, if the LPA can demonstrate that it is not cost effective to upgrade the bridge to meet the geometric design guidelines for a rehabilitation project, a design exception may be utilized as prescribed in [I.M. 3.260](#), Design Exception Process.

If a design exception is utilized for a geometric element on a bridge rehabilitation project, the LPA has determined that for the remaining life of the bridge, it is adequate for the type and volume of projected traffic. Examples of such geometric elements include deck width, vertical clearance over the bridge roadway, vertical and horizontal under clearances, and approach roadway geometry. Since this may affect the future eligibility of the bridge for the bridge programs, LPAs should carefully consider all applicable justification and proposed mitigation items within I.M. 3.260, Design Exception Process before utilizing a geometric design exception.

BRIDGE REMOVAL INCENTIVE PROGRAM

The Iowa DOT has established a voluntary program to encourage the removal of low-use DOT-owned bridges that serve any non-interchange, grade-separated crossing of a county road with a primary or interstate highway. This includes county bridges over the mainline primary or interstate highway, as well as mainline bridges over a county road.

A proposal to remove a bridge may be initiated by either the Iowa DOT or a county, at any time. For each bridge removed, the Iowa DOT will provide a \$1,500,000 credit to the county HBP balance. This credit may be used on any bridge(s) on any public road in the county. A credit provided to a county will be exempt from the 4 year accumulation rule, since these funds are not part of the county's regular allocation.

If a county elects to take advantage of this program, the county shall hold a public hearing for the proposed bridge removal. After the public hearing, the county and the Iowa DOT shall execute an agreement for the bridge(s) utilizing this program. The crossing may remain open until its removal by the Iowa DOT at the earliest opportunity. Reversal of the agreement shall result in rescinding the credit to the county's HBP balance.

Chip seal: How long of rotation to get them all done?

1.	West Charles	\$26,000 in 2019		
2.	1 ST Avenue NE	32 x 3400	\$24,177	
3.	1 st Street SE	2 nd Avenue to 8 th Avenue	28 x 2200	\$12,320
4.	West Charles	1 st Avenue to Viaduct	40 x 800	\$6,400
5.	South Frederick	New Pavement to 5 th Street	40 x 1750	\$14,000

Crack Seal:

1.	7 th Street SE	South Frederick to 9 th Avenue SE		
2.	2 nd Avenue SE	7 th Street to 14 th Street		
3.	8 th Avenue NE	Charles to 6 th Street NE		
4.	8 th Avenue SE	3 rd Street to Charles		
5.	7 th Street SW	Frederick to 6 th Avenue	\$15,000 Combined	

Streets we want to replace:

Here are three roads and using \$265/ft. cost based off engineer estimated cost of Old Road. I have also added a per foot cost of engineering \$70/ft. based off actual engineering cost of Old Road.

PROJECTS: Submitted to STGB/Swap. (Upper Explorerland)

1.	6 th Street NE – 2,700 feet from North Frederick to 8 th Avenue NE	\$904,500 Estimate
2.	1 st Avenue NE – 3,600 feet from 9 th Street NE to North Frederick	\$1,206,000 Estimate
3.	6 th Avenue SW – 2,000 feet from West Charles to 4 th Street SW	\$670,000 Estimate

Gravel roads to be chip sealed:

2 nd Street SW	10 th to 13 th Avenue	22 x 1171	\$5,724
1 st Street NW	10 th to 12 th Avenue	15 x 770	\$2,566
2 nd Street NW	10 th to 13 th Avenue	18 x 1100	\$4,400
13 th Avenue SW	Charles to 12 th Ave	22 x 1750	\$8,555
6 th Street NW	3 rd Avenue to Great Western	22 x 1650	\$8,066
Great Western	6 th Street to 4 th Street	20 x 1442	\$6,408
5 th Street SW	6 th Avenue to 4 ½ Street	20 x 1300	\$8,345
5 th Avenue SW	5 th Street to 4 ½ Street	18 x 340	\$1,360
4 th Avenue SW	8 th Street to Dead End	15 x 365	\$1,216
Mulford Drive	3 rd Avenue to Dead End	18 x 400	\$1,600
4 th Avenue NW	2 nd Street to Dead End	22 x 320	\$1,564
2 nd Avenue SE	10 th Street to 11 th Street	18 x 500	\$2,000
11 th Street SE	Frederick to 2 nd Avenue	18 x 500	\$2,000

Vehicle Report 2020

Completed 1/2021

City ID	YEAR	MAKE	MODEL	MILES / Hrs.		Misc. & Miles		
				2019-20	2020-21	2019-20	2020-21	
Street								
	2002	18 years	Sterling	Specpro-LT7500	72,995	76,736	4,114 miles	3,741 miles
<p>This truck is starting to be a maintenance issue. We want to replace it with a smaller truck, wider wheel base, with mid mount wing. Carries two less yards. Has one less axle, four less tires, better turn radius, cost less. Easier to use around town. Based on Cedar Rapids spec for their interior trucks. They use tandems on four lanes. Will allow us to keep the current truck to haul loads with but we need to replace the box. Cost: \$160,000 includes \$20,000 for replacement box.</p>								
	2011	8 years	Case	621E	4,022 hrs.	4,612 hrs.	935 hrs.	590 hrs.
<p>This is the department work horse. It will have a quick attach to allow us to get more attachments for more efficient use. It will have a 4 in one bucket and we will purchase a tree grapple along with a snow/mulch bucket. Cost: \$156,000</p>								
	2006	13 years	Bobcat	A300	2,954 hrs.	3,290 hrs.	642 hrs.	336 hrs.
<p>Self-leveling bucket Cost: \$85,000</p>								

Total \$401,000 Add 12th Ave SE = \$456,000

Bridges - lets hire them to do a preliminary design so we have a good idea how much. Give us time to figure the Plaza issue and address the sewer. We will have more info on the viaduct also. Then we can look at how we would fund everything and could replay later or in two years after next inspection cycle.

Streets - lets include 12th Ave at estimate of \$55,000. We are sealcoating West Charles in budget with some patch work. Otherwise, we need to coordinate water sewer and roads this year. Thus the 2023 start in my CIP.

Equipment – Lets by the above equipment and attachments.

I recommend equipment and 12th Ave SE with the \$500,000. Then we could use any excess to help pay for the bride cost study?









To: Mayor and City Council

From: Dylan Mulfinger

Subject: Road User Tax

Date: 01/25/2021

Mayor and Council,

Now that the city has funding in place and that revenues are no longer being speculated due to the pandemic. The City Council will need to determine the direction to spend the budgeted amount of funds shown below. Initially it was approved as road improvements. Discussions between the City Administrator and the Utility Superintendent have led to areas that currently serve a greater need. The City Administrator is looking to present ideas with direction from council and provide for a formal decision to be made at a council meeting.

- 2021 funds approved by City Council
 - \$100,000 Franchise
 - \$100,000 RUT reserve
 - \$200,000 Fund 314 leftover bond proceeds
 - \$100,000 RUT funds
 - Total \$500,000

Road user tax will have \$220,000 starting July of 2021 for the CIP.

The main focus of this discussion is bridges, equipment, and road repairs.