

BRIDGE REHABILITATION REPORT

Main Street over the Red Cedar River

Structure B-03-0002

City of Rice Lake

Barron County

Wisconsin



Prepared by:

Daniel J Fedderly P.E., R.L.S.

DJ Fedderly Management Consultant, LLC

N9387 330th Street

Boyceville, Wisconsin 54725

Prepared for:

City of Rice Lake, Barron County

June 28th, 2010 (Original Report)

April 12, 2013 (Updated Report)

September 3, 2013 (revised)

Concur with
Recommendations Subject
to Comments on page 2/15
DVB
WisDOT Bureau of
Structures
10-15-2013

Comments 10-15-13

B-3-2

By DVB

We concur with recommended **Alternative No. 5: Complete Deck Replacement with complete Replacement of Arch portion of the structure, and including expansion of the existing Piers, and Abutments** subject to the following comments:

The proposed total deck width needed for traffic and to accommodate Trans 75 will need to be confirmed during project development. It should be noted there appears to be a building in the NW corner that may require some of the widening to occur on the east side. The construction cost estimates used for alternative 5 appear generous and should be sufficient for budget purposes.

On page 11, item 3, the text indicates a structure cost of \$106.33 per square foot. Then in the calculation below this item the equation uses \$145. This is cleared up with an Estimator's Note later on the page that indicates this square foot cost includes mobilization, approach work, etc.

On page 12 the second to last paragraph appears to be a repeat from the previous report. If you compare the alternatives 2 and 5 over the same analysis period of 75 years Alternative 5 has a slightly lower EUAC.

BRIDGE REHABILITATION REPORT FOR:
Main Street over the Red Cedar River
Structure B-03-0002
City of Rice Lake
Barron County
Wisconsin

INTRODUCTION

DJ Pedderly has been contracted to develop a report on the condition of Main Street Bridge in the City of Rice Lake, Barron County, and evaluate rehabilitation options for the City of Rice Lake to consider. This report will determine the alternatives and cost-effectiveness of these rehabilitation alternatives and will recommend the most appropriate alternative that recognizes the overall transportation goals of the city and utilize the federal highway criteria for utilization of Federal Bridge Rehab funding, in addition, this report will meet the funding eligibility criteria according to Wisconsin Administrative Code Trans 213, which is described in detail below.

The Appendix will contain the past and current inspection reports and location map for this bridge.

WISCONSIN ADMINISTRATIVE CODE TRANS 213

Wisconsin Administrative Code Trans 213 addresses county, city, village, or township funding eligibility for local bridge replacements and local bridge rehabilitation. Local bridges with sufficiency ratings less than 50 are eligible for *replacement* funding. Bridges are candidates for *rehabilitation* funding when their sufficiency rating is greater than 50 but less than or equal to 80. Possible bridges that are eligible for rehabilitation must satisfy the following three criteria:

- 1). The proposed rehabilitation is cost-effective
- 2). The proposed rehabilitation will extend the life of the bridge at least 10 years.
- 3). The proposed rehabilitation will correct deficiencies in the bridge that caused the sufficiency rating to be less than 80. The intent of this requirement is that after rehabilitation work is completed, the bridge should not be "Structurally Deficient" or "Functionally Obsolete." Structural Deficiency and Functional Obsolescence are discussed in detail later in this report. This sufficiency rating criteria may be waived if the rehabilitation is determined to be eligible based on "safety and public interest."

The current Sufficiency Rating for the bridge is 73.6. Since the sufficiency rating is greater than 50 and can potentially be raised to 80 or more by addressing the main components that are primarily responsible for the sufficiency rating to be below 80, the Rice Lake Main Street Bridge (B-03-0002) is a candidate for Rehabilitation funding. This report will serve as the independently Funded Engineering Study to determine if the Main Street Bridge in the City of Rice Lake meets the eligibility criteria above as established in WisDOT TRANS 213.

EXISTING STRUCTURE B-03-0002

The existing structure is a two span bridge with a combination of structure types: Main structure being a concrete arch. The deck is a slab span on the spandrels, and is cast in place. The widening section is a two span precast concrete girder bridge with a cast in place concrete deck. The structure has an overall length of 269' between abutments with two (2) 133.6' spans, and an overall deck width of 66'. The clear roadway width on the bridge is 52 feet, with 6' sidewalks, and 1' bridge railing parapets on each side of the structure making up the remaining 14' for the total overall deck width of 66'.

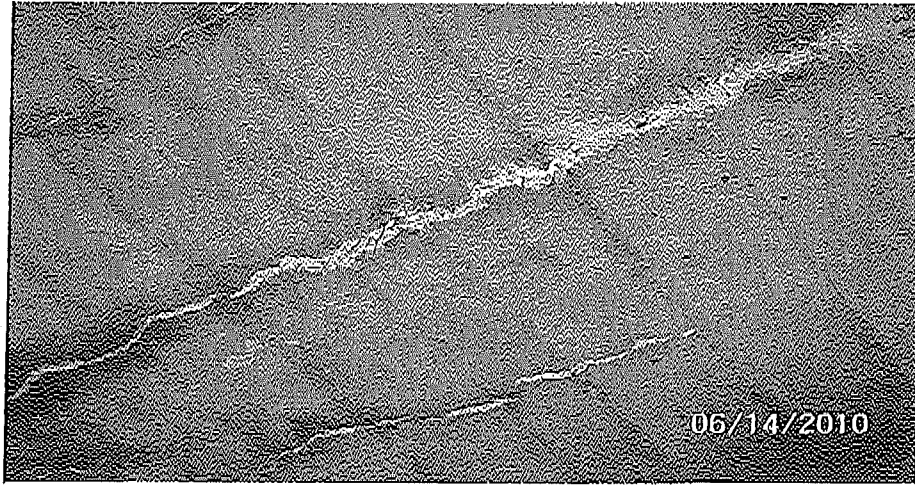
The bridge was originally constructed in 1919. Bridge rehabilitation (widening) was performed in 1949. In 1978, approximately 1/2 of the existing structure was removed and replaced with a two span precast girder structure. From the 1978 plan set, it looks like the existing structure had 4 arches. Two of these, as well as the associated substructure, were removed and replaced with the precast bridge. At this time, the remaining existing deck was also overlaid, and the old parapet removed and a new one installed.

The current sufficiency rating is 73.6. The current inventory rating is HS22 and the current operating rating is IIS74, according to the 2008 inspection report. The bridge is not posted for a weight limit. The speed limit on the road is 25 mph all year long.

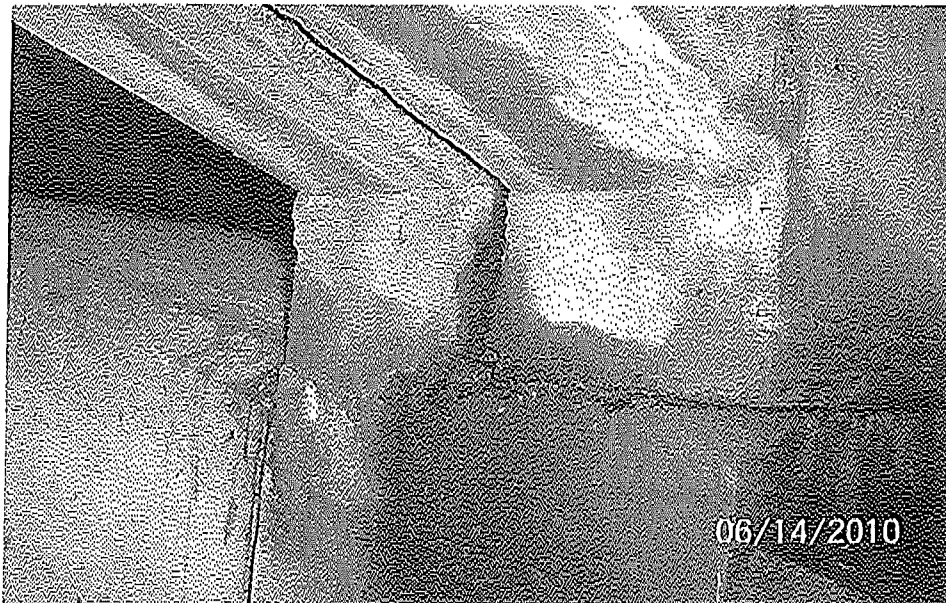
The Appendix contains the most recent inspection reports for the bridge over the last three inspections.

FIELD INSPECTION EXISTING CONDITION STATES:

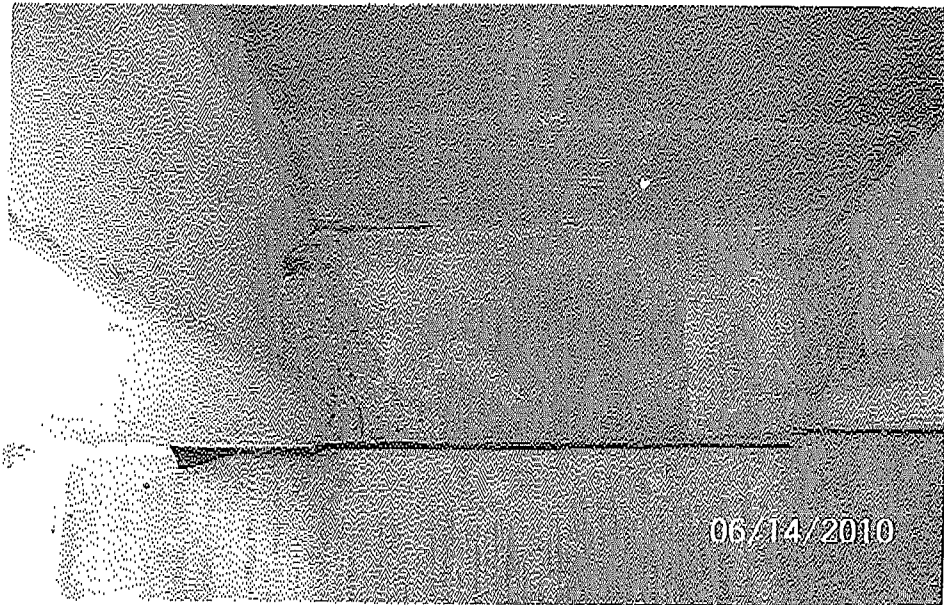
Deck: The cast in place deck shows significant deterioration throughout the entire deck area. The 2010 inspection report identifies delamination over 37% of the total deck area. The total deck area is 17,754 Sq. Ft. with a total roadway area of 13,988 Sq. Ft. thus 37% delamination represents 5,176 Sq. Ft. The delamination of the roadway area on the deck has accelerated over the last two years since the last regular inspection as evidenced by the rapid decline in deck ratings. In addition there are several cracks on the underside of the deck that show efflorescence, a strong indication of full depth seepage and possible full depth deck failure, resulting in significant increased possibilities of "pop throughs." The 2012 Routine Inspection shows continued deck deterioration with increased delamination, the estimated area of deck delamination is currently 40%- 45%. In addition there has occurred since the 2010 routine inspection, significant deterioration of the longitudinal joint between the two different structure types, resulting in full depth failure along this joint area.



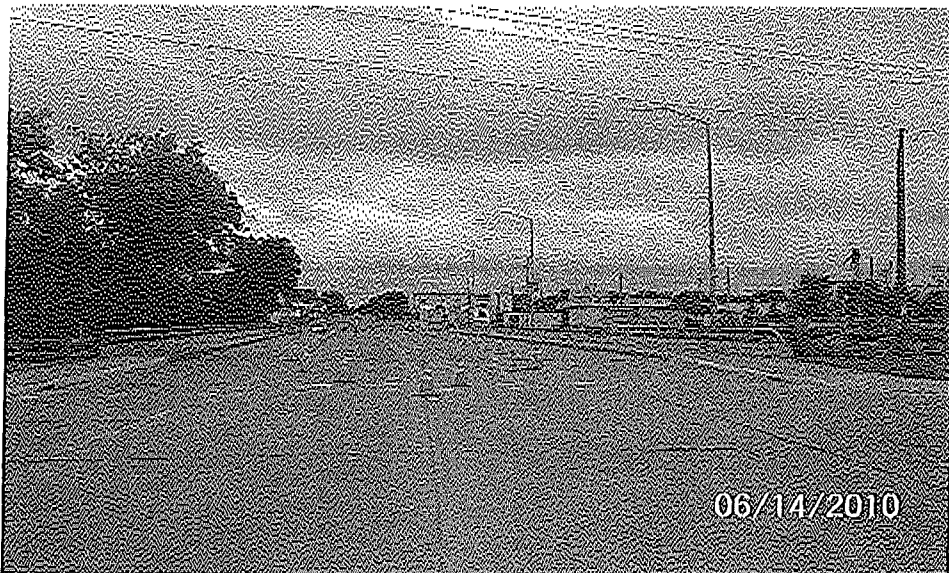
Spandrel Arch & Pre-stress Concrete Girders: The 2012 Routine inspection identified the same minor to moderate cracks in the existing Spandrel arches near the abutment seats and the Pier seats, and around the abutment and pier seats of the Pre-stress Girders. The concrete abutments and abutment seats also show concrete spalls and pop-outs around the pre-stress girders. This is consistent with the 2010 Routine Inspection.



Abutment Spalding around Girders

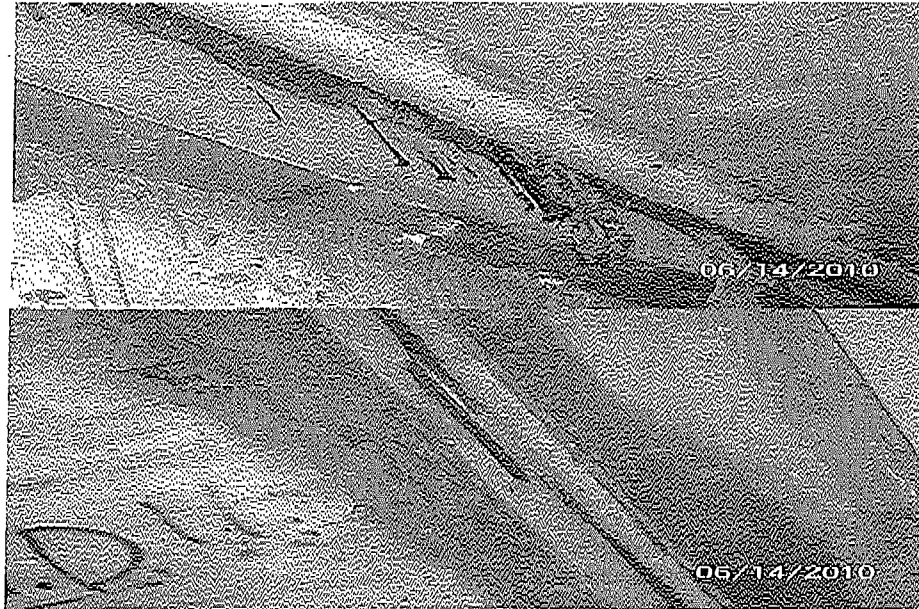


Roadway: As indicated the most recent inspection identified 40%-45% of roadway surface area delaminated. The entire Roadway deck area was checked for delamination and delaminated areas were marked and measured in 2010 and compared the areas sounded with a chain drag in the 2012 routine inspection.



Existing Joints: The most recent inspection and previous inspection reports identified failed joints on the Main Street Structure with significant seepage and debris through the Joints. Both the joints at each end of the bridge and the joint that runs parallel to the centerline between the portion of the bridge with the Spandrel arches and the portion of the bridge with the Pre-stress girders. These joint failures allow debris and seepage through to the sub-

structure components which accelerates the deterioration of the sub-structure components. The 2010 Routine inspection recommended periodic inspections (6 month interval) of the bridge joints due to the failed condition and increased potential for complete failure of the joints creating a safety concern. The interim inspections and the 2012 routine inspection identified the failure of the longitudinal joint between the structures and the subsequent temporary repairs.



STRUCTURAL DEFICIENCIES ANALYSIS:

The federal requirements for funding eligibility are:

Federal funding criteria for either Bridge rehabilitation or replacement is:

The Bridge must be structurally deficient or functionally obsolete. Based on federal standards, a bridge is structurally deficient if it meets any of the following criteria:

1. The NBI rating on the most recent inspection for Deck, Superstructure, or Substructure is rated 4 or less.
2. The Inventory Rating is 10 tons (approximately HS6) or less.
3. The Waterway Adequacy is rated a 2.

The following table summarizes the Main Street Bridge ratings in comparison to the Federal Minimum rating criteria for eligibility:

Table 1: Structural Deficiencies analysis of the Main Street Bridge

Description	Main Street Bridge	Minimum Federal Standard	OK/No Good
Deck Rating	4 (rated from 5 to 4 in 2012 routine inspection)	4	Eligible (Criteria #1)
Superstructure Rtg	7	4	OK Not Eligible

Substructure Rtg	7	4	OK Not Eligible
Inventory Rtg	HS22	10 tons (HS6)	OK Not Eligible
Channel	8	N/A	
Waterway Adequacy	7	2	OK Not Eligible

Conclusion: The Main Street Bridge is considered structurally deficient based on Federal funding criteria, and is eligible for Federal Bridge "**Rehabilitation**" funds based on structural deficiency, and the NBI rating of 4 on the deck.

REPLACEMENT ELIGIBILITY

1. The bridge must be structurally deficient or functionally obsolete.
2. The federal sufficiency number must be less than 50.

The WisDOT requirements for structure replacement eligibility are:

1. The federal sufficiency number must be less than 50.
2. One of the following conditions must be met:
 - The NBI rating of the superstructure or substructure must be 4 or less.
 - The inventory rating is less than HS10.
 - The alignment appraisal is 4 or less.

Table 2: summarizes the replacement eligibility status of the Main Street Bridge

Description	Main Street Bridge	Federal or WisDOT Standard	Replacement Funding Eligibility (Yes/No)
Structurally Deficient or Functionally Obsolete	Yes NBI Rating = 4 on the deck	Structurally Deficient or Functionally Obsolete	No (Greater than 50 S.N.)
Sufficiency Rating	73.6	50.0	No
NBI Superstructure Rating	7	4 or less	No
NBI Substructure Rating	7	4 or less	No
Inventory Rating	HS22	18 tons (HS10)	No
Alignment Appraisal	Adequate/OK	4 or less	No

From **table 2**, it is noted that one criteria, is met for federal replacement eligibility, (the NBI rating of the deck is 4) Based on Federal criteria of Structurally deficient or functionally obsolete, and WisDOT Criteria of a sufficiency rating less than 50.

REHABILITATION ANALYSIS:

At this time the condition of the existing structure does not meet the State requirements for replacement funding eligibility with a sufficiency rating of 73.6. The bridge replacement alternative is included for the purpose of cost comparison with other alternatives, to demonstrate the cost effectiveness of rehabilitation alternatives that ensure the longest useful life of the existing structure.

The bridge rehabilitation criteria for utilization of Federal funding based on WisDOT Trans 213 are as follows:

(b) An eligible local bridge project under sub. (1) may be for rehabilitation of the bridge if the bridge has a sufficiency rating of 80 or less. An engineering study shall be undertaken and funded independently by the eligible applicant that indicates that any rehabilitation would be cost effective, would extend the life of the bridge by at least 10 years, and would correct all deficiencies. If conditions exist that would prevent the completed improvement from correcting all deficiencies, the department may determine if the proposed project is eligible based on safety and the public interest.

Table 3: Summary analysis of TRANS 213 Criteria

Description	Main Street Bridge	TRANS 213 Standard	Eligible/non-eligible
Bridge Suf. Rating	73.6	80 or less	Eligible
Extend life of bridge	Estimated 15 years	Minimum 10 years	Eligible
Cost Effective rehab	yes	Rehab is cost effective	Eligible
Eng. Study	yes	Funded independently	Eligible

The Main Street Bridge (B-03-0002) in Rice Lake meets the rehabilitation criteria in TRANS 213, and thus is eligible for Federal "**Rehabilitation**" Funds. Following are the rehabilitation alternatives and cost effectiveness evaluation.

REHABILITATION ALTERNATIVES

We have evaluated three rehabilitation alternatives for the Main Street Bridge (B-03-0002) which are described in detail below:

- Alternative 1: Do Nothing.** Doing nothing to the bridge would result in increasingly rapid deterioration of the deck which currently shows approximately 37% of the surface area as delaminate. In addition, an inspection of the underside of the deck shows several areas of effervescence, a strong indication of full depth seepage and possible full depth deck failure, or significant increased possibilities of "pop throughs." These areas of full depth deck failure/seepage will continue to accelerate the deterioration of the spandrel Arch, Prestress beams, abutments, roadway and Bridge Joints. Ultimately, a total bridge replacement would be required much sooner than if preventative Rehabilitation measures were undertaken. Doing nothing would also not address safety issues that would result with the possible pop-throughs of the deck. As well as result in significant safety concerns and result in an unacceptable level of service.
- Alternative 2: Rehabilitation with Concrete Overlay, and Full Depth Concrete Deck Repairs and new bridge joint installation with Epoxy injection of cracks.** In order to perform these activities, the existing concrete surface of the bridge deck, throughout the roadway area of the deck, will be removed down to the existing deck rebar. This alternative, including concrete overlay, full depth concrete repairs in areas as required, and Bridge joint replacement. Along with epoxy sealing of the cracks in the Spandrel Arches Pre-stress Girders, abutments and piers and Rip Rap placement around the base of pier to address the exposed areas as identified in the most recent diving inspection. Epoxy sealing of cracks in the concrete arch abutments, pier, and abutment & Pier seats, would provide additional protection to the structure, and help eliminate further cracking or accelerated deterioration due to the unaddressed cracks. This alternative would extend the life of the bridge significantly with only regular

maintenance required for the estimated bridge life extension of 15 years. Although bridge replacement may still be required in 15-20 years, this alternative would significantly increase the useful life of the existing structure. Thus this rehabilitation alternative meets and exceeds the TRANS 213 criteria for Federal bridge rehabilitation funding.

- **Alternative 3: Complete Bridge Replacement:** Complete replacement of the bridge could be expected to provide a 40 year service life before any significant maintenance is required. With an Anticipated useful life of 75 years with Concrete Deck overlays at 40 and 60 years. Under this alternative the bridge would be completely removed, thereby not achieving the maximum useful life of the existing structure and costing significantly more in replacement costs as well as useful life costs. Although the Bridge is not currently eligible for Federal Bridge replacement funds this alternative is used to provide a comparative cost analysis to determine the impact of not providing the rehabilitation to extended the useful life. This alternative does not meet acceptable criteria for Federal funding because the Sufficiency Number is not 50 or below.
- **Alternative 4: Deck Replacement with Repairs to Arch, Piers, and Abutments with Epoxy injection of cracks, and scour Mitigation.** In order to perform these activities, the entire existing concrete bridge deck will be removed down to the existing pre-stress concrete Girder Beams on the east side and the Arch on the west side. This alternative, including Complete Deck replacement, and Bridge joint replacement. Along with epoxy sealing of the cracks in the Spandrel Arches Pre-stress Girders, abutments and piers and Rip Rap placement around the base of pier to address the exposed areas as identified in the most recent diving inspection. Epoxy sealing of cracks in the concrete arch abutments, pier, and abutment & Pier seats, would provide additional protection to the structure, and help eliminate further cracking or accelerated deterioration due to the unaddressed cracks. This alternative would extend the life of the bridge significantly with only regular maintenance required for the estimated bridge life extension of 40 years. With bridge replacement still required after the approximate 40 year life, this alternative would significantly increase the useful life of the existing structure. Thus this rehabilitation alternative meets and exceeds the TRANS 213 criteria for Federal bridge rehabilitation funding. This alternative would not address the need for a wider Bridge Deck with Pedestrian accommodations to address the TRANS 75 requirements.
- **Alternative 5: Complete Deck Replacement with complete Replacement of the Arch portion of the structure, and including expansion of the existing Piers, and Abutments.** In order to perform these activities, the entire existing concrete bridge deck will be removed down to the existing pre-stress concrete Girder Beams on the east side and removal of the entire arch structure on the west side and replace with a similar pre-stress girder type structure as on the east side of the existing structure. This alternative, includes Complete Deck replacement along with epoxy sealing of the cracks in the existing Pre-stress Girders, abutments and piers and Rip Rap placement around the base of pier to address the exposed areas as identified in the most recent diving inspection. Epoxy scaling of cracks in the pier, and abutment & Pier seats, would provide additional protection to the structure, and help eliminate further cracking or accelerated deterioration due to the unaddressed cracks. This alternative would result in a bridge life of 60 - 75 years with regular maintenance required for the estimated bridge life and concrete deck overlays anticipated at 40 years and 60 years. With complete bridge replacement still required after the approximate 75 year life, this alternative would significantly increase the useful life of the majority of the existing structure. Thus this rehabilitation alternative meets and exceeds the TRANS 213 criteria for Federal bridge rehabilitation funding. This alternative would also address the need for a wider Bridge Deck with Pedestrian accommodations to address the TRANS 75

requirements. The Deck would be widened from the 66' total deck width to 74' which meets the TRANS 75 Desired Deck width. This may also require added right of way to allow for the widen structure and the Structure design will need to define if added right of way is required.

Alternatives 4 and 5 were added to the alternative as requested by WisDOT and indications from WisDOT Bureau of Structures, is that the alternative #5 replacing the west side of the structure meet rehabilitation criteria and this option is eligible for Federal Bridge rehabilitation program funding.

INITIAL REHABILITATION COST ESTIMATES COMPARISON

We have determined initial costs for the three alternatives discussed above to provide a comparative cost effectiveness review for the options presented for this bridge. The results of the cost estimates are summarized as follows:

Table 4: Initial Cost Effectiveness Comparison

Alternative	Initial Cost	Life Expect. Before Next Rehab/Replacement
1. Do Nothing+ Replacement after 10 years (Avg. 2%/year)	\$2,985,900	45 years
2. Rehabilitation with Concrete Overlay, Concrete Repair, and Crack Sealing	\$519,490	15 years
3. Bridge Replacement	\$4,186,370	75 years
4. Complete Deck Replacement	\$2,114,640	40 years
5. Replace west side of bridge	\$3,093,195	75 years

1. The cost estimate for the Do Nothing + Bridge Replacement after 10 years alternative was derived from the WisDOT Bridge Manual's square foot costs for pretresses, concrete girder, and cast in place concrete deck bridge replacements 2009, with a average 2% per year cost of construction increase over the 10 year time frame. A value of \$150.00 per square foot was used for the cost of a concrete girder structure with A1 pile encased abutments.

$$19,906 \text{ sq. ft.} \times \$150.00/\text{sq. ft.} = \$2,985,900$$

2. The cost estimates for the Bridge Rehabilitation alternative were derived from the WisDOT Bridge Manual's square foot costs for bridge rehab projects 2009. The value of the recommended rehabilitation alternative for the major items are as follows:

Deck Prep and cleaning	\$85.77	S.Y.	1,555 s.y. X \$85.77/s.y. = \$133,372
Full Depth Repair	\$406.22	S.Y.	575 s.y. X \$406.22/s.y. = \$ 233,576
Concrete overlay	\$494.01	C.Y.	175 c.y. X \$494.01/c.y. = \$ 86,452
Joint Repair	\$684.02	S.Y.	82 s.y. X \$684.02/s.y. = \$ 56,090
Crack Sealing & spald repair	\$10,000.00	Estimated Lump Sum	= \$ 10,000
Total Estimate			= \$519,490

3. The cost estimate for the Bridge Replacement alternative was derived from the WisDOT Bridge Manual's square foot costs for pretresses, concrete girder, and cast in place concrete deck bridge replacements. A value of \$106.33 per square foot was used for the cost of a concrete girder structure with A1 pile encased abutments.

$$19,906 \text{ sq. ft.} \times \$145.00/\text{sq. ft.} = \$2,886,370$$

$$\text{Concrete Overlays at 40 and 60 years} = \$1,300,000$$

$$\text{Total Alternative 3} = \$4,186,370$$

4. The cost Estimate for complete Deck Replacement with Repairs to Arch, Piers, and Abutments with Epoxy injection of cracks, and scour Mitigation was developed from WisDOT Bridge Manual's square foot costs for various activities with redeck costs ranging between \$90 - \$120/ S.F. the \$120/ S.F. was used to account for some of the relatively minor added maintenance activities included in this option

$$17,754 \text{ sq. ft.} \times \$119.11/\text{sq. ft.} = \$2,114,640$$

5. The Estimated Costs for a Complete Deck Replacement with complete Replacement of the Arch portion of the structure, and including expansion of the existing Piers, and Abutments was developed from WisDOT Bridge Manual's square foot costs for various activities with new structure costs ranging from \$150 - \$175/ S.F. and complete redeck costs ranging from \$90 - \$120/ S.F. and increased slightly to accommodate the matching of two separate structures with the single deck to \$140/ S.F.

$$\begin{aligned} &\text{New Structure west side replacement} \\ &35' \times 267' \times \$175 = \$1,635,375 \\ &\text{Existing east side redeck} \\ &39' \times 267' \times \$140 = \$1,457,820 \end{aligned}$$

$$\text{Total Alternative 5} = \$3,093,195$$

Estimator's Note:

All the estimates include bridge construction, mobilization costs, approach work, construction engineering, and contingencies per WisDOT Bridge Costs 2009. As well as consideration of the unique site characteristics of this site and location.

Estimator's Note:

The Major Items for Rehabilitation have been estimated and a detailed design will be required to determine the actual quantities in more specific detail.

SIMPLE LIFE CYCLE COSTS

A simple life cycle cost comparison was utilized to determine the cost of bridge improvement through the estimated life. Since most bridges experience more than one rehabilitation in a lifetime, for comparisons in this study, the initial cost of the activity over the estimated life of the activity was utilized for a simple comparative analysis.

This simplified life cycle costing method is more accurate when the total number of years associated with each life cycle alternative is as long as possible. In addition, the service level of the alternatives must be considered in the evaluation process as well. For example, the "Do Nothing" alternative would result in a significantly reduced level of service from the structure due to the accelerated deterioration, as well as potential safety concerns with the likely bridge deterioration that would be anticipated.

The Life Expectancy alternative combinations are summarized below:

Table 5: Alternative Combinations

Alternative Combination	Total Life Expectancy
1. Do Nothing + Bridge Replacement	45 years
2. Rehabilitation	15 years
3. Bridge Replacement	75 years
4. Complete deck replacement	40 years
5. Replace west side	75 years

Per year Cost Comparison:

1. Do Nothing + Bridge Replacement in 10 years = \$66,353 per year of life
2. Bridge Rehabilitation alternative as Identified = \$34,633 per year of life
3. Bridge Replacement alternative (none eligible) = \$55,818 per year of life
4. Complete Deck Replacement = \$52,866 per year of life
5. Complete replacement west side = \$41,243 per year of life

It should be noted that the life cycle cost estimates do not necessarily identify the least expensive alternative. Assumptions, based on historical data, are made about how long a particular alternative will last before further work is required. Specific site conditions and or regular structure maintenance can increase or decrease the life expectancy of any alternative.

Based on a simple expected life cycle cost effectiveness analysis alternative #2 Bridge Rehabilitation is the most cost effective. In addition this alternative will provide a increased level of service to the traveling public for the useful life of the structure and extent the useful life thus resulting in the most cost effective alternative.

It should also be noted that due to the inability to adequately predict future maintenance and or future maintenance options that the comparison used here is based on what we can reasonably expect as a life expectancy of each option and the yearly associated costs of that alternative, we believe this to be a reasonable basis for comparison of the various options especially in relation to a complex analysis such as this structure and the widely varying options available.

RECOMMENDATION (Updated April 2013) (Revised September 2013)

DJ Fedderly Management Consultant, LLC recommends the Rehabilitation Alternative #5 as the most viable option at this time. The Do Nothing alternative alone, although less expensive at the current time based on the initial cost \$0 would not remove the service level reductions or continued deck deterioration for this bridge or address the safety issues resulting from the continued deck and joint deterioration of the structure, nor does it maximize the useful life of the structure. This alternative also results in the premature replacement of the structure which results in a higher per year cost. The complete bridge replacement is not warranted at this time based on the sufficiency rating and the Federal Funding replacement criteria, the replacement alternative also results in the highest comparative life cycle cost.

Alternative #4 although slightly less costly on a total Cost comparison and a per year of Life comparison does not address the concerns with the deterioration of the existing Arch and the unpredictability of how the two individual structures might act with a single deck over them, this unpredictability could result in significant added costs if there is accelerated deterioration of both the new bridge deck and the existing arch structure. For the relatively small lower cost in comparison to alternative #5 the better value and much higher degree of predictability warrants alternative #5 as the preferred alternative.

The Rehabilitation Alternative #5 satisfies all three requirements of the Wisconsin Administrative Code TRANS 213.

1. It is cost-effective in terms of life cycle and initial costs relative to other alternatives.
2. It extends the life of the bridge, estimated conservatively, 15 years, which is more than the code-required 10 years.
3. It corrects the deficiencies that caused the sufficiency rating to be less than 80. Improving the structures main items, Bridge Deck and Joints, that have been rated down on the inspection reports should increase the sufficiency rating to at least 80. If it does not raise the sufficiency rating to at least 80, this criteria may be waived for this alternative since the deck rehabilitation significantly addresses the safety and stability of the bridge and provides enhanced safety at the bridge.



**Main Street Bridge
City of Rice Lake
Barron County
B - 03 - 0002**