Rehabilitation Report for Bridge Local Program Funding - Deck Replacement

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Structure ID:		Feature On:		
Date:		Feature Under:		
County:		Municipality:	of	
Introduction				
This rehabilitation i	eport will serve	e as the "independen	tly funded engineering study'	' to determine if
bridge eligibility criteria as	in the established in	of Wisconsin Administr	ative Code Trans 213.	meets the
Bridge Descript	tion			
is a	span		bridge built in year	. The
following rehabilita	ntion work has l	peen completed (atta	ch additional page if more sp	ace needed):

Wisconsin Administrative Code Trans 213

feet long and

Scour Critical

Wisconsin Administrative Code Trans 213 addresses county, city, village, and township funding eligibility for local bridge replacements and local bridge rehabilitation. Local bridges that are deficient and have a sufficiency rating less than or equal to 80 are eligible for rehabilitation funding.

Fracture Critical

feet wide. It is

Bridges that are eligible for rehabilitation must satisfy the following criteria:

Other:

- 1. The proposed rehabilitation would be cost effective.
- 2. The proposed rehabilitation would extend the life of the bridge by at least 10 years.
- 3. The proposed rehabilitation would correct all deficiencies. This criterion may be waived if the rehabilitation is determined to be eligible based on "safety and the public interest."

Deficiency Analysis

It is

A bridge is deficient if it is considered structurally deficient (SD) or functionally obsolete (FO). The following table summarizes the appraisal ratings for in comparison to the criteria for being defined as SD or FO. The data was taken from (complete one):

- The most recent Eligible Bridge List, dated
- HSIS on

Load Posted

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Deficiency Analysis Table

Description	NBI Item #	Appraisal Rating*	Bridge is SD or FO if one of the following is met:	Eligible	?
Deck Rating	(58)		<=4	Yes	No
Superstructure Rating	(59)		<=4	Yes	No
Substructure Rating	(60)		<=4	Yes	No
Culvert Rating	(62)		<=4	Yes	No
Structural Evaluation	(67)		<=3	Yes	No
Deck Geometry	(68)		<=3	Yes	No
Underclearance	(69)		<=3	Yes	No
Waterway Adequacy	(71)		<=3	Yes	No
Approach Roadway Alignment	(72)		<=3	Yes	No

^{*}Note: NBI appraisal ratings can be found on the Eligible Bridge List or in HSIS.

is considered deficient based on Trans 213 criteria and is therefore eligible for Federal rehabilitation funds.

Rehabilitation Analysis

The following table summarizes the for rehabilitation:

bridge ratings in comparison to Trans 213 criteria

Description		Trans 213 Standard	Eligible?
Bridge Sufficiency Rating		80 or less	Eligible
Bridge life extension	40 years	Minimum 10 years	Eligible
Cost Effective Rehabilitation	Yes	Rehab is cost effective	Eligible
Engineering Study	Provided by WisDOT	Funded independently	Eligible
	Bureau of Structures	,	-

meets the rehabilitation criteria in Trans 213 and thus is eligible for Federal rehabilitation funds.

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Cost-Effective Rehabilitation

The latest inspection data is used to determine work action eligibility. The current inspection condition data is compared to the eligibility criteria for a work action. If the criteria for one work action are not met, the criteria for a different work action are checked. Work actions are checked in order of most cost-effective. If no work actions are eligible for the current year using the current inspection data, the condition data is deteriorated to project the condition in the next year. The work action criteria are then checked for the deteriorated condition data. This process continues until either a work action is found eligible, or until each year of the analysis period is checked and no work actions are found to be eligible based on the condition data.

Recommended Alternative – Deck Replacement

Primary work activity: Rehabilitation of the bridge, remove and replace the deck.

Secondary work activities (attach additional page if more space needed):

Deck replacement is a cost-effective rehabilitation for this bridge. To be recommended for deck replacement, the following criteria must be met:

- Bridge age < 75
- Bridge is not load posted
- One of the following:
 - o Deck NBI <= 4
 - (Area of defect 1080 delaminations/spalls/patch areas/exposed rebar in CS2, CS3, and CS4) + (area of defect 1130 cracking/efflorescence in CS3 and CS4) > 15% of the deck area
- Superstructure NBI >= 4
- Substructure NBI >= 4
- One of the following:
 - Area of defect 3210 debonding/delaminations/spalls/patched area/pothole wearing surface in CS2, CS3, and CS4 > 20% of the wearing surface area
 - Area of defect 3220 crack wearing surface in CS3 and CS4 > 50% of the wearing surface area
 - Area of defect 8911 abrasion, wear, rutting, or loss of friction wearing surface in CS3 and CS4 > 20% of the wearing surface area

Rehabilitation Report for Bridge Local Program Funding - Deck Replacement Structure ID: Feature On: Date: Feature Under: County: Municipality: of The estimated cost for the primary structure work is . Secondary structure work is estimated to be . The total structure rehabilitation cost is This alternative would extend the life of the bridge an estimated 40 years. This rehabilitation alternative meets and exceeds the Trans 213 criteria for Federal bridge rehabilitation funding. **Appendix** • Most recent inspection report Cost estimate Completed by: Consultant Owner

Other: