

<b>Project Title:</b>	CTH EF, Bark River Bridge	<b>Project #:</b>	202202
<b>Department:</b>	Public Works - Highways	<b>Project Type:</b>	Bridge
<b>Phase:</b>	Preliminary Design	<b>Road Name:</b>	Rybeck Road
<b>Budget Action:</b>	As Planned	<b>Manager:</b>	Allison Bussler
<b>Date:</b>	July 8, 2024	<b>Map / Image:</b>	<a href="#">Click Here</a>

CAPITAL BUDGET SUMMARY						
Year	2022	2023	2024	2025		Total
Project Phase	Design	Design	Land	Const		Project
Expenditure Budget	\$6,000	\$16,000	\$29,800	\$72,000	\$0	\$123,800
Revenue Budget	\$0	\$0	\$0	\$0	\$0	\$0
Net Costs After Revenues Applied	\$6,000	\$16,000	\$29,800	\$72,000	\$0	\$123,800
<b>COST DOCUMENTATION</b>			<b>REVENUE</b>			
Prelim Design		\$6,000				
Design		\$75,000				
WisDOT Design Review		\$15,000				
Land Acquisition		\$28,000				
Construction		\$297,000				
Construction Management		\$45,000				
Contingency		\$17,000				
Total Project Cost		\$483,000				\$359,200
<b>EXPENDITURE BUDGET</b>		<b>\$123,800</b>	<b>REVENUE BUDGET</b>			<b>\$0</b>

**Project Scope & Description:** This project is an overlay of the CTH EF bridge over the Bark River. A concrete overlay will be constructed. Concrete repairs will be made to the spalled and deteriorated culvert ends. Stainless steel flashing will be installed on the ends of the culvert roof. Wingwall strapping will be installed. Existing railing will be replaced with a long span guardrail system. Approach guardrail will be replaced to meet current standards. The immediate asphalt bridge approaches will be repaved. The existing right-of-way at the bridge matches the ultimate width of 66 feet on CTH EF. No additional fee acquisition is anticipated, though grading easements are necessary. Waukesha County completed an independent study report and received approval for Local Bridge Program funding in 2022 (BIL funded) resulting in anticipated federal aid of \$359,200. The state municipal agreement with WisDOT was updated at start of design in 2023 to reflect final design cost.

**Location:** Town of Merton

**Analysis of Need:** The existing bridge (B-67-210) is a two-span box culvert that was constructed in 1984. The roof of the box culvert serves as the roadway driving surface. Most of the structure is in good condition. However, an estimated 8% of the top deck surface is delaminated. The delamination is due to corrosion of the top mat of bar steel. At the two culvert ends, the pier wall and roof underside are deteriorating, with delamination and spalling. The approach guardrail is in poor condition and does not meet current standards. The roadway is functionally classified as a 'minor arterial.' The bridge is considered 'structurally deficient' due to its current condition rating. The structure sufficiency number is 57.0. This indicates that structure rehabilitation is warranted according to Wisconsin Department of Transportation (WisDOT) guidelines, which makes the bridge eligible for federal bridge rehabilitation funding when the sufficiency index is below 80. An independent engineering study report was prepared for this project in 2022, prior to application for federal bridge funding. The purpose of the report is to verify that the proposed project scope is a cost-effective rehabilitation strategy. The 2018 traffic volume on this roadway segment was 3,200 vehicles per day.

**Alternatives:** Reconstruct the existing bridge and roadway approaches to current WisDOT standards. This alternative, while addressing the deficiencies, is not warranted.

**Ongoing Operating Costs:** Maintenance costs will be reduced in the early years after construction.

**Previous Action:**

Approved as a new project in the 2022-2026 capital plan. Approved accelerated with a cost and revenue update in the 2023-2027 capital plan. Approved with a cost and revenue update in the 2024-2028 capital plan.