

Project Title:	CTH I, Calhoun Creek Bridge	Project #:	202201
Department:	Public Works - Highways	Project Type:	Bridge
Phase:	Preliminary Design	Road Name:	Beloit Road
Budget Action:	As Planned	Manager:	Allison Bussler
Date:	July 8, 2024	Map / Image:	Click Here

CAPITAL BUDGET SUMMARY						
Year	2022	2023-24	2025	2026	2027	Total
Project Phase	Design	Design	Design	Design/Land	Const	Project
Expenditure Budget	\$6,000	\$0	\$21,000	\$45,000	\$98,000	\$170,000
Revenue Budget	\$0	\$0	\$0	\$0	\$0	\$0
Net Costs After Revenues Applied	\$6,000	\$0	\$21,000	\$45,000	\$98,000	\$170,000
COST DOCUMENTATION			REVENUE			
Design Prelim	\$6,000					
Design	\$77,000		Federal Bridge Aid (Anticipated)			\$474,000
WisDOT Design Review	\$28,000					
Land Acquisition	\$45,000					
Construction	\$390,000					
Construction Management	\$78,000					
Contingency	\$20,000					
Total Project Cost	\$644,000		Total Revenue			\$474,000
EXPENDITURE BUDGET	\$170,000		REVENUE BUDGET			\$0

Project Scope & Description: This project is a rehabilitation of the CTH I bridge over Calhoun Creek. The scope of the project consists of structural lining the three existing culvert barrels. This will maintain the integrity of the barrels and extend their useful life. The existing concrete headwalls and the roadway over the structure will remain in-place. There is adequate right-of-way width and permanent easement at this bridge site. However, additional temporary easements will likely be required for construction to begin. The project will be constructed with the roadway open to through traffic. An Independent Study Report was completed in 2023. Waukesha County applied for federal funding in 2023 and was awarded \$474,000 in 2024.

Location: City of New Berlin

Analysis of Need: The existing bridge (B-67-318) is a three-barrel corrugated steel culvert structure. The culvert barrels are six feet in diameter. Two barrels were constructed in 1976 with a CTH I roadway project. In 2009, a developer added a third barrel and constructed the existing headwalls. The two original barrels are corroding with significant section loss in the low flow portion of the pipes. The third barrel has some rust beginning in the low flow area. The roadway over the structure is in good condition and was re-built in 2018. 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 26.8. This indicates that structure replacement is warranted according to Wisconsin Department of Transportation (WisDOT) guidelines, which makes the bridge eligible for federal bridge replacement or rehabilitation funding when the sufficiency index is below 50. Rehabilitation by culvert lining will address the structure deficiencies while avoiding the need to excavate the roadway. An independent engineering study report was prepared for this project 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 7,300 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 beyond 2027.

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