

<b>Project Title:</b>	CTH V V, W.B. Bridge over Menomonee River	<b>Project #:</b>	201802
<b>Department:</b>	Public Works - Highways	<b>Project Type:</b>	Bridge
<b>Phase:</b>	Preliminary Design	<b>Road Name:</b>	Silver Spring Drive
<b>Budget Action:</b>	C - \$ Update C - Rev Update	<b>Manager:</b>	Allison Bussler, DPW Director
<b>Date:</b>	August 20, 2024	<b>Map / Image:</b>	<a href="#">Click Here</a>

CAPITAL BUDGET SUMMARY						
Year	2018	2019-2022	2023	2024	2025	Total
Project Phase	Design		Design	Design	Construction	Project
Expenditure Budget	\$6,000	\$0	\$197,000	\$0	\$190,400	\$393,400
Revenue Budget	\$0	\$0	\$0	\$0	\$0	\$0
Net Cost After Revenues Applied	\$6,000	\$0	\$197,000	\$0	\$190,400	\$393,400
<b>COST DOCUMENTATION</b>			<b>REVENUE</b>			
Design Report			\$6,000			
Design			\$177,000			
WisDOT Design Review			\$20,000	Fed Aid Design (SMA)		\$149,600
Land Acquisition			\$0	Fed Aid Const Phase (SMA)		\$1,039,200
Construction			\$1,457,000	Fed Const Increase		\$320,800
Construction Management			\$145,000	(Anticipated)		
WisDOT Construction Review			\$25,000			
Contingency			\$73,000			
Total Project Cost			\$1,903,000	Total Revenue		\$1,509,600
<b>EXPENDITURE BUDGET</b>			\$393,400	<b>REVENUE BUDGET</b>		\$0

### **Project Scope & Description**

This project is a rehabilitation of the westbound (W.B.) CTH V V bridge over the Menomonee River. The scope includes concrete deck and railing replacement. Repairs will be completed to the abutments including epoxy crack injection and grouting of the void beneath the abutment. In addition, concrete approach slabs will be replaced, and approach guardrail upgraded to current standards. The roadway will remain two travel lanes on the bridge. Right of way acquisition is not anticipated. During construction, the bridge will be closed with traffic detoured onto the eastbound CTH V V bridge (with one lane in each direction). A bridge rehabilitation report has been completed, which was necessary to verify the cost effectiveness of the proposed rehabilitation scope. In 2022, Waukesha County received WisDOT's approval of the rehabilitation report and was awarded \$1,188,800 in federal/state bridge aid. The state municipal agreement (SMA) was executed in 2022, and design began in 2023. Expected construction cost has grown due to required girder strengthening, swallow netting, traffic handling with temporary cross-overs, and increased approach length. Waukesha County will apply for additional \$320,800 fed aid for the construction phase through WisDOT's change management process. The expected county cost increase for construction phase is \$80,200.

### **Locations**

Village of Butler

### **Analysis of Need**

The existing bridge (B-67-85) is a three-span concrete deck girder structure that was constructed in 1964. A concrete overlay was placed on the deck in 1994. The bridge girders and substructure are in fair to good condition. The deck is beginning to spall, and a 2021 thermal infrared scan of the deck wearing surface indicates 37.3% delamination or debonding of the previous overlay. In addition, the sidewalk and railings are deteriorating, with spalling and exposed bar steel. The abutments have active cracking and there is a void beneath the east abutment exposing the steel piling. The structure sufficiency number is 72.8 and is eligible for federal bridge aid. The 2018 traffic volume on the westbound bridge was 14,250 vehicles per day.

### **Alternatives**

Reconstruct the existing bridge but will not be eligible for federal bridge aid.

### **Ongoing Operating Costs**

Maintenance costs may be reduced in the early years after construction.

### **Previous Action**

New project in the 2018-2022 capital plan. Approved as planned in the 2019-2023 capital plan. Delayed with a cost update in the 2020-2024 capital plan. Approved as planned in the 2021-2025, 2022-2026 and 2023-2027 capital plans. Approved with a cost and revenue update and delayed in the 2024-2028 capital plan.