

Project Title:	CTH F – CTH K Intersection	Project #:	202304
Department:	Public Works - Highways	Project Type:	Intersection
Phase:	Preliminary Design	Road Name:	Redford Blvd.
Budget Action:	As Planned	Manager:	Allison Bussler, DPW Director
Date:	June 9, 2025	Map / Image:	Click Here

CAPITAL BUDGET SUMMARY				
Year	2025	2026	2027	Total
Project Phase	Design	Land	Construct	Project
Expenditure Budget	\$24,600	\$100,000	\$219,600	\$344,200
Revenue Budget	\$0	\$0	\$0	\$0
Net Costs After Revenues Applied	\$24,600	\$100,000	\$219,600	\$344,200
COST DOCUMENTATION			REVENUE	
Design	\$230,600		Federal Highway Safety Improvement Program (HSIP) Funding	
WisDOT Design Rev	\$15,000			
Land Acquisition	\$100,000		Design	\$221,000
Construction	\$1,952,000		Construction	\$1,977,000
Construction Management	\$136,600			
WisDOT Construction Review	\$10,000			
Contingency	\$98,000			
Total Project Cost	\$2,542,200		Total Revenue	\$2,198,000
EXPENDITURE BUDGET	\$344,200		REVENUE BUDGET	\$0

Project Scope & Description

The intersection of CTH F (Redford Blvd) and CTH K (Lisbon Road) handles a high percentage of truck traffic due to area industry and quarries. The purpose of this project is to improve the traffic signal equipment and geometry of the intersection. Changes to the existing CTH F and CTH K intersection will provide safer traffic signal control, reduce collisions, and improve visibility for turning vehicles. Improvements include:

- Realign CTH F left turn lanes to improve visibility of opposing traffic.
- Replace all existing traffic signal equipment, installing monotubes and adding retroreflective backplates over each approach lane.
- Replace intersection induction loop detectors with new video detection.
- Reconfigure medians, corner islands, and curve radii to accommodate lane realignment if warranted.
- Conduct a traffic study to determine any appropriate modifications to turning bay capacity and signal timing and whether railroad preemption is needed.
- Investigate whether upgrading street lighting would improve the safety of the intersection.

Waukesha County was awarded Federal HSIP Funding.

Locations – Village of Lisbon

Analysis of Need

Of the intersections reviewed in a 2022 safety screening study, the intersection of CTH F and CTH K had the highest number of recorded accidents and the highest crash rate with respect to its traffic volume. The left turning movements of the northbound and southbound traffic have the second and third highest frequency of accidents for single turn movements. Eighty-two (82) crashes have occurred over a 5-year period with vehicles turning left onto CTH K accounting for thirty-one (31) of them. The existing lane alignment of CTH F restricts visibility of oncoming traffic. Complete replacement of traffic signal equipment is warranted. This intersection has significant numbers of night-time crashes and crashes that occurred under slippery conditions, indicating that a study into improving visibility with improved street lighting is warranted.

Alternatives – The do nothing alternative does not address an identified high accident rate intersection.

Ongoing Operating Costs - It is anticipated that improvements to signal equipment would result in a minor operational cost increase.

Previous Action – Approved as a new project in the 2023-2027 capital plan. Approved with cost and revenue updates in the 2024-2028 and the 2025-2029 capital plans.