

Additional Information

Memo #1

DATE: March 23, 2023

TO: Alison Krupski, City of Noblesville

FROM: Summer Elmore, Principal Scientist, CHA Consulting, Inc.

RE: Additional Information to the Environmental Assessment, Noblesville East-West Corridor Project

INTRODUCTION

This memorandum provides Additional Information (AI) to the approved Environmental Assessment (EA) for the Noblesville East-West Corridor Project, which was developed for the City of Noblesville. This AI document addresses changes made to the design of the intersection of 19th Street and Pleasant Street and the Pleasant Street bridge over Elwood Wilson Drain (Appendix A, pages A-1 to A-3). The following discussion contains a brief history of the project and intends to address the potential environmental impacts caused by the decision to change the design. Unless specifically discussed in this AI document, the impacts identified in the approved EA remain unchanged.

PROJECT HISTORY

The City of Noblesville is developing an east to west corridor project through the city that will connect SR 37 to SR 32 across the White River. The project is partially funded by the State of Indiana through the Indianapolis Metropolitan Planning Organization's (IMPO) Federal Funds Exchange. Pleasant Street will be extended along new alignment from about the intersection of Walnut/8th on the east side of the White River to River Road on the west side of the White River and include a new bridge over the White River. New road construction will continue west from the River Road/Pleasant Street roundabout to the intersection of Hague Road/SR 32. The intersection at Hague Road/SR 32 will be a multi-lane roundabout. A new bridge will be constructed over Cicero Creek. The Midland Trace Trail will connect to the existing trail near Hague Road. This project also consists of reconstruction and widening of 8th Street between Walnut and existing Pleasant Street and reconstruction of Pleasant Street from 8th Street to 11th Street. Multi-lane roundabouts will be constructed at the intersections of River Road/ Pleasant Street, 8th Street/Relocated Pleasant Street, 8th Street/Existing Pleasant Street, and 10th Street/Pleasant Street. The Midland Trace trail will be constructed adjacent to Pleasant Street, diverging from the Pleasant Street alignment at 8th Street, continuing east along Walnut Street to 10th Street, and following 10th Street south back to the Pleasant Street alignment. Pleasant Street will be widened beginning at 11th Street and extend east to the roundabout at 19th Street. The Midland Trace Trail will be constructed adjacent to Pleasant Street along this stretch. The EA that includes the documentation of this project was approved by the City of Noblesville on July 13, 2022 (Appendix E, pages E-1 to E-19).

The project is needed due to limited mobility through downtown Noblesville on S.R. 32/Conner Street, as outlined in the 2009 Noblesville Thoroughfare Plan and evidenced by increasing traffic volumes. There are currently only two White River crossings in downtown Noblesville, one at S.R. 32/Conner Street and the other at Logan Street. The S.R. 32/Conner Street River crossing provides two through lanes in each direction and the Logan Street river crossing provides one through lane in each direction. This limits the mobility within the Noblesville transportation network. This also contributes to congestion within the S.R. 32/Conner Street corridor through downtown Noblesville. The existing volume of Average Daily Traffic (ADT) along S.R. 32/Conner Street is 15,000 vehicles per day and is anticipated to increase to as much as 19,000 vehicles per day in the design year 2045. The purpose of the project is to provide a significant volume reduction of S.R. 32 downtown Noblesville traffic, defined as 20% reduction. A 20% reduction in traffic volume results in 2045 traffic volumes on S.R. 32/Conner Street that are no greater than existing (year 2025) traffic volumes. The construction of the Midland trace trail along this corridor supports the City of Noblesville's Alternative Transportation Plan by increasing non-motorized connectivity within the project area.

PROPOSED MODIFICATION

The project proposes to include the reconstruction of the existing Pleasant Street and 19th Street intersection single-lane roundabout into a multi-lane roundabout (Appendix A, pages A-14). The intersection is located at the east end of the project and is within the original environmental study area footprint. The addition of lanes to the roundabout was determined through an intersection analysis. (Appendix B, pages B-1 to B-36). The study found that the existing roundabout configuration will reach saturation by year 2036, with queue lengths over 1,000 feet in the PM peak hour. Two additional alternatives in addition to the no-build alternative were analyzed: additional turn lanes and multilane roundabout. The additional turn lanes reduced the queue length to 225 feet in 2045. The multilane roundabout reduced the queue length to 100 feet in 2045. Therefore, the multilane roundabout provided the best improvement in intersection function and is the preferred alternative. The noise study was updated with the change to a multilane roundabout at the 19th Street intersection (Appendix C, pages C-1 to C-89). A noise impact is defined as any receptor with a noise level that is within 1 dBA of the activity threshold, where dBA stands for A-weighted decibels – sound level recommendation for healthy listening. An increase in noise levels for which future noise levels exceed the existing noise levels by 15.0 dBA is considered a substantial noise increase. Noise receivers 450 through 459 are located in the vicinity of the 19th Street intersection. There was no receiver that approached 1 dBA of the activity threshold. The footprint of this intersection reconstruction will require one additional building demolition. An alternative was reviewed to avoid the building impacts. Shifting the roundabout further north resulted in traveling speeds that were not acceptable through the roundabout. Therefore, this alternative was dismissed from further consideration.

The project also proposes an increase in structure size for the Elwood Wilson Drain bridge. The original structure proposed at this location was an 87 foot long 24 foot by 6 foot 3-sided concrete arch. The new proposed structure is a 91 foot long 54 foot by 11 foot 3-sided concrete arch (Appendix D, pages D-1 to D-2). The change in structure size is due to insufficient hydraulic capacity and is designed to meet permitting requirements. The existing structure causes roadway overflow during certain storm events. The impact to Elwood Wilson Drain due to additional encapsulation length totals 4 feet and riprap length for scour protection will not change. A larger structure will provide more room for wildlife to cross under Pleasant Street and improve flood conveyance. The design change is within the limits of the original study area footprint. Recoordination for stream impacts will be conducted with permit agencies with a permit modification.

PUBLIC INVOLVEMENT

The public will be provided an opportunity to comment on the project. This AI document will be updated with the meeting information following the conclusion of the comment response period.

CONCLUSIONS

This AI details the changes to the Noblesville East-West Corridor project. Based on the scope of the modified project it has been determined that the proposed project modification is minor in nature and varies minimally from what was proposed in the approved Environmental Assessment. Therefore, supplemental review of environmental resources has been completed. Unless specifically discussed in this document, the impacts identified in the approved Environmental Assessment remain unchanged. Additionally, there are no new commitments as a result of the AI.

The following signature lines have been provided for approval of this AI document.

City of Noblesville Approval: _____ Date: _____
Alison Krupski, P.E., City Engineer

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Appendix A

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Appendix B
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Appendix E

Original Environmental Assessment