



**CITY OF NOVI CITY COUNCIL**  
**MARCH 18, 2024**

**SUBJECT:** Consideration of approval to award engineering design services to OHM Advisors for the design of a Southwest Water Main Loop Connection in the amount of \$368,054.

**SUBMITTING DEPARTMENT:** Department of Public Works, Engineering Division

<b>EXPENDITURE REQUIRED</b>	<b>\$ 368,054</b>
<b>AMOUNT BUDGETED</b>	<b>\$ 632,471</b>
<b>APPROPRIATION REQUIRED</b>	<b>\$ 0</b>
<b>LINE ITEM NUMBER</b>	<b>592-536.00-976.214</b>

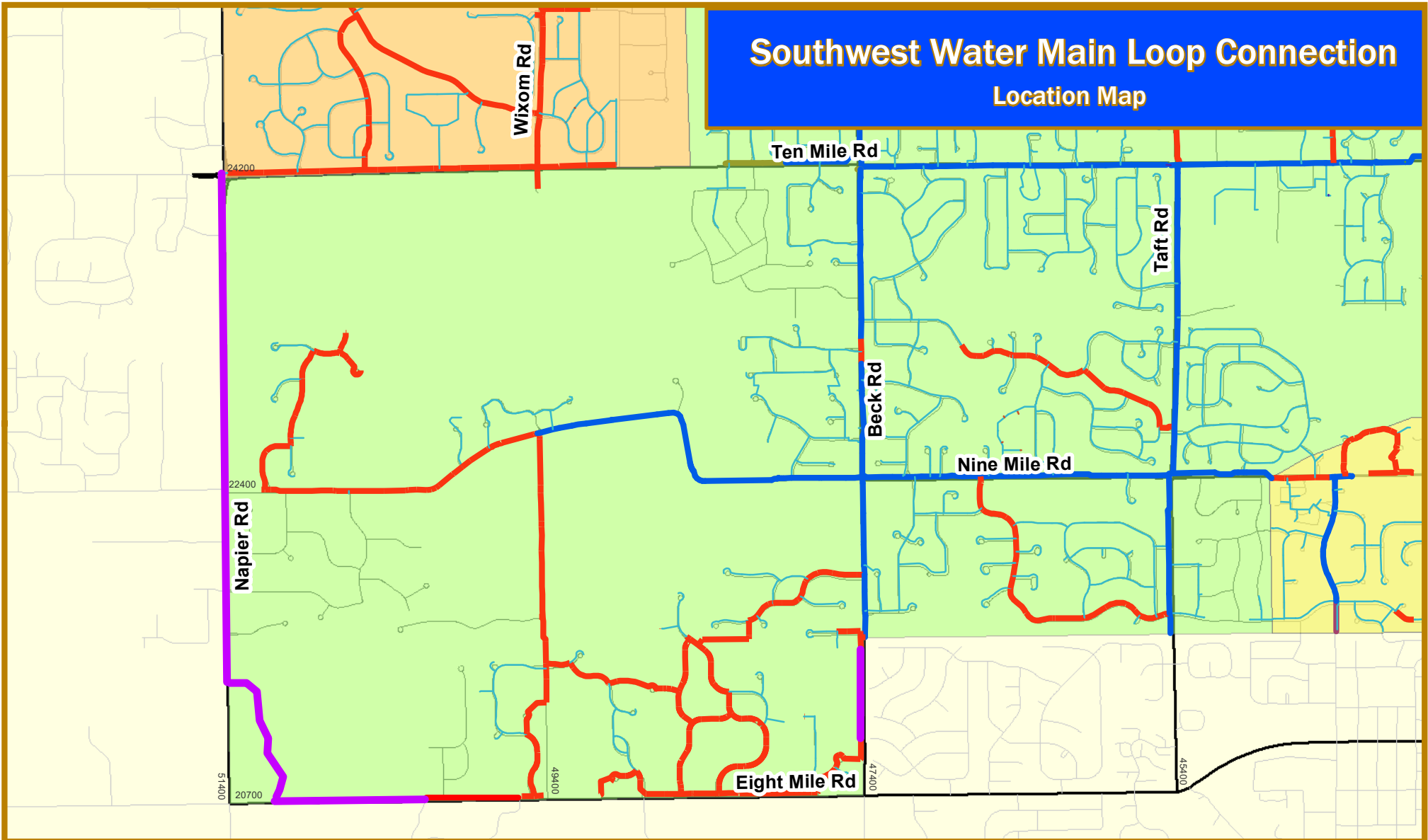
**BACKGROUND INFORMATION:**

Expanding the Island Lake pressure district and providing a looped water main connection between 8 Mile Rd, Napier Rd, 10 Mile Rd and Beck Rd, was identified in the 2014 Water Master Plan Update as an option to improve water pressure and fire protection in the Intermediate pressure district. The project would involve constructing approximately 16,800 feet of 12-inch ductile iron water main between 8 Mile Rd and 10 Mile Rd through ITC Park, along Beck Rd and Napier Rd, within the Southwest pressure district.

City engineering consultant, OHM Advisors, prepared a scope of services for design of the water main connection. The attached design engineering services proposals outline the detailed scope of services. The design fee for the project will be \$368,054 (6.25% of the estimated construction cost of \$5,668,861 plus \$13,750 for 110 hours of study/analysis at \$125/hour). Design of this project would begin following award with a tentative construction start in fall 2024.

**RECOMMENDED ACTION:** Approval to award engineering design services to OHM Advisors for the design of a Southwest Water Main Loop Connection in the amount of \$368,054.

# Southwest Water Main Loop Connection Location Map















Map Author: Rebecca Runkel  
Date: 3/6/24  
Project: SW WM Loop  
Version #: 1.0

#### MAP INTERPRETATION NOTICE

Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.

#### Legend

	Proposed 12" Water Main		Intermediate
	24"		Island Lake
	4"		Lower
	12"		8"
	16"		Data Not Available
	6"		
	20"		



## City of Novi

Engineering Division  
Department of Public Works  
26300 Lee BeGole Drive  
Novi, MI 48375  
cityofnovi.org



March 1, 2024

Mr. Ben Croy, P.E.  
City Engineer  
City of Novi, Department of Public Works  
26300 Lee Begole Drive  
Novi, MI 48375

**RE: Scope of Design Services  
Southwest District Watermain Loop**

Dear Mr. Croy:

Per your request, the following outlines our proposed scope of services and fee to perform design services to prepare plans and specifications for the above referenced project. This summary includes our project understanding, proposed scope of work, assumptions, schedule, and fee.

### PROJECT UNDERSTANDING

The project will consist of constructing a watermain loop between 8-Mile and 10-Mile Roads through ITC Park, Beck Road and along Napier Road, within Southwest district. The loop will allow for better pressures and fire flows, along with extending service to several new locations and prepare for future development. The project will include installation of approximately 16,800 feet of 12-inch ductile iron water main. Several alternate material types will be considered and bid as alternates if desired in order to obtain an accurate cost comparison between materials. Easements may be required along Beck Road for several properties depending on the desired watermain alignment.

The project will also include placement of new valves and hydrants, along with several actuated valves at key connection points to adjacent districts. The project will include the replacement of the pavement through the ITC park main access drive due to the anticipated watermain alignment. The project construction is anticipated to cost approximately \$5,670,000.

### SCOPE OF SERVICES

The following outlines our work plan to accomplish the scope of services for this project as noted above:

- Organize and attend a kickoff meeting with City staff and utility companies to review project objectives, prepare design criteria, and establish a specific delivery schedule.
- Perform analysis and water system modeling to assess the need to expand the Island Lake Pressure District to address low pressures and fire protection in the southwest portion of the City. The analysis will include various scenarios during peak hours with planned and potential growth. Results of the study/analysis will be summarized in a technical memorandum and used as basis for further design efforts.
- Implement existing utility information and record drawings for the project area.
- Perform a site review to identify elements that are sensitive including driveway locations, utility facilities, drainage features, access issues, etc.



- Perform surveys of the project areas where road replacement is anticipated and prepare existing conditions plans.
- Coordinate with the Geotechnical Engineer to assess subsurface soils and ground water conditions of the project area.
- Develop base plans utilizing GIS mapping and existing 1-foot contour grades to establish horizontal and vertical alignments of the water main and prepare typical details.
- Determine road impacts, grading limits, staging, utility conflicts, etc.
- Update construction cost estimate to the preliminary stage, based on this level of design.
- Meet with the City and discuss locations that may require easements and/or temporary grading permits for the project. Confirm staging considerations and traffic control/detours for road closures, utility impacts, etc.
- Prepare design plans and specifications for the project improvements for City review.
- Prepare PA 399 application and plans for the water main permit.
- Prepare a permit application to the Road Commission for Oakland County (RCOC) for installation in the Napier right-of-way.
- Prepare a permit application to the Wayne County Department of Public Services (WCDPS) for installation in the 8 Mile Road right-of-way.
- Prepare proposed preliminary schedule for work including the construction start, substantial completion, and final completion dates.
- Prepare SESC plan sheets and permit application.
- Attend one meeting with the City to review the plans and specifications and address any requested revisions.
- Prepare final bid set documents for the project.
- Assist the City with advertising and soliciting bids, printing and distributing bidding documents to interested bidders, tabulating and reviewing the bids, checking contractor references and providing a recommendation of the award of the project construction to a qualified contractor.

## SCHEDULE

The following outlines our anticipated schedule milestones of main tasks related to this work:

- 50% plans – June 2024
- 100% plans – September 2024
- Prepare Bid Recommendation for Council Award – October 2024
- Tentative Construction Start – Fall 2024
- Tentative Construction Completion – August 2025

This schedule is based upon an authorization to proceed given by March 11, 2024.

## ASSUMPTIONS

The following summarizes our assumptions associated with this proposal:

- The City will be responsible for all permit application fees and permit fees.
- The proposed work will be done within existing right-of-way. Additional right-of-way and/or easements are not anticipated, but if required, the City will acquire.
- We do not anticipate remediation or removal of contaminated or hazardous soils or materials.
- Development of plans for landscaping or ornamental features are not included.



- Geotechnical services are anticipated to be required for design and construction of this project but are not included in our scope of work. These services will be provided by the City's Geotechnical Consultant under a separate contract.
- Design for private utility relocation or repair is not included.
- In the event any additional services are required by OHM Advisors, an addendum to the supplemental engineering agreement will be submitted for your approval prior to performing said services.

**FEE**

Based on the fee schedule in the Civil Engineering Consulting Services Agreement between the City and OHM Advisors, the proposed fee for this project is established as follows:

- Study/Analysis Phase at 110 staff hours at \$125/hour = \$13,750
  - Design Fee at 6.25% of construction cost (\$5,668,861) = \$354,304
- Total = \$368,054**

Thank you for the opportunity to be of service. If you have any questions or require additional information, please contact us. We look forward to working with you on this project.

Sincerely,  
**OHM Advisors**

Authorization to Proceed

\_\_\_\_\_  
Andrew Cousino, P.E.  
Project Manager

\_\_\_\_\_  
Signature Date

\_\_\_\_\_  
Printed Name Title

Encl: Cost Estimate

cc: Jeff Herczeg, Director of Public Works  
Rebecca Runkel, Project Engineer  
Tim Juidici, OHM  
File