



# CITY of NOVI CITY COUNCIL

**Agenda Item C**  
**May 21, 2018**

**SUBJECT:** Approval to award OHM Advisors civil engineering services associated with the Ten Mile Road Corridor Study from Napier Road to Haggerty Road in the amount of \$63,850.00.

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

**CITY MANAGER APPROVAL:** *PA*

<b>EXPENDITURE REQUIRED</b>	<b>\$ 63,850.00</b>
<b>AMOUNT BUDGETED</b>	<b>\$ 63,850</b>
<b>APPROPRIATION REQUIRED</b>	<b>N/A</b>
<b>LINE ITEM NUMBER</b>	<b>202-202.00-816.031</b>

**BACKGROUND INFORMATION:**

Consistent with city Council's Long Term Goals, staff requested a study for the current and future operations of Ten Mile Road within the City's limits. Current congestion on this road has raised safety and mobility concerns. The City wishes to take a proactive approach in planning for future improvements to this roadway. Since Ten Mile Road falls in the jurisdiction of the Road Commission for Oakland County (RCOC), the City has begun preliminary discussions with the RCOC to ensure the resulting study is acceptable for both agencies and properly addresses for the future of Ten Mile Road.

OHM Advisors, the City's engineering consultant, provided an overview of the process required to complete the study in the included proposal. **Table 1** below outlines the proposed tasks, associated fee for each task, and anticipated date of completion for the Ten Mile Road Corridor Study:

**Table 1**

#	Tasks	Fee	Date of Completion
<b>Task #1</b>	Project Initiation	\$ 3,220.00	May 21, 2018
<b>Task #2</b>	Data Collection, Review and Analysis	\$ 12,065.00	June 15, 2018
<b>Task #3</b>	Prepare Existing and Future No-Build Condition Models	\$ 15,185.00	August 10, 2018
<b>Task #4</b>	Planning Commission Meeting 1	\$ 1,640.00	September TBD, 2018
<b>Task #5</b>	Evaluate Practical Alternatives	\$ 15,720.00	October 26, 2018
<b>Task #6</b>	Prepare Draft Report	\$ 8,820.00	December 14, 2018
<b>Task #7</b>	Planning Commission Meeting 2	\$ 1,640.00	January TBD, 2019
<b>Task #8</b>	Finalize Report	\$ 5,560.00	March 1, 2019
<b>Grand Total</b>		<b>\$ 63,850.00</b>	

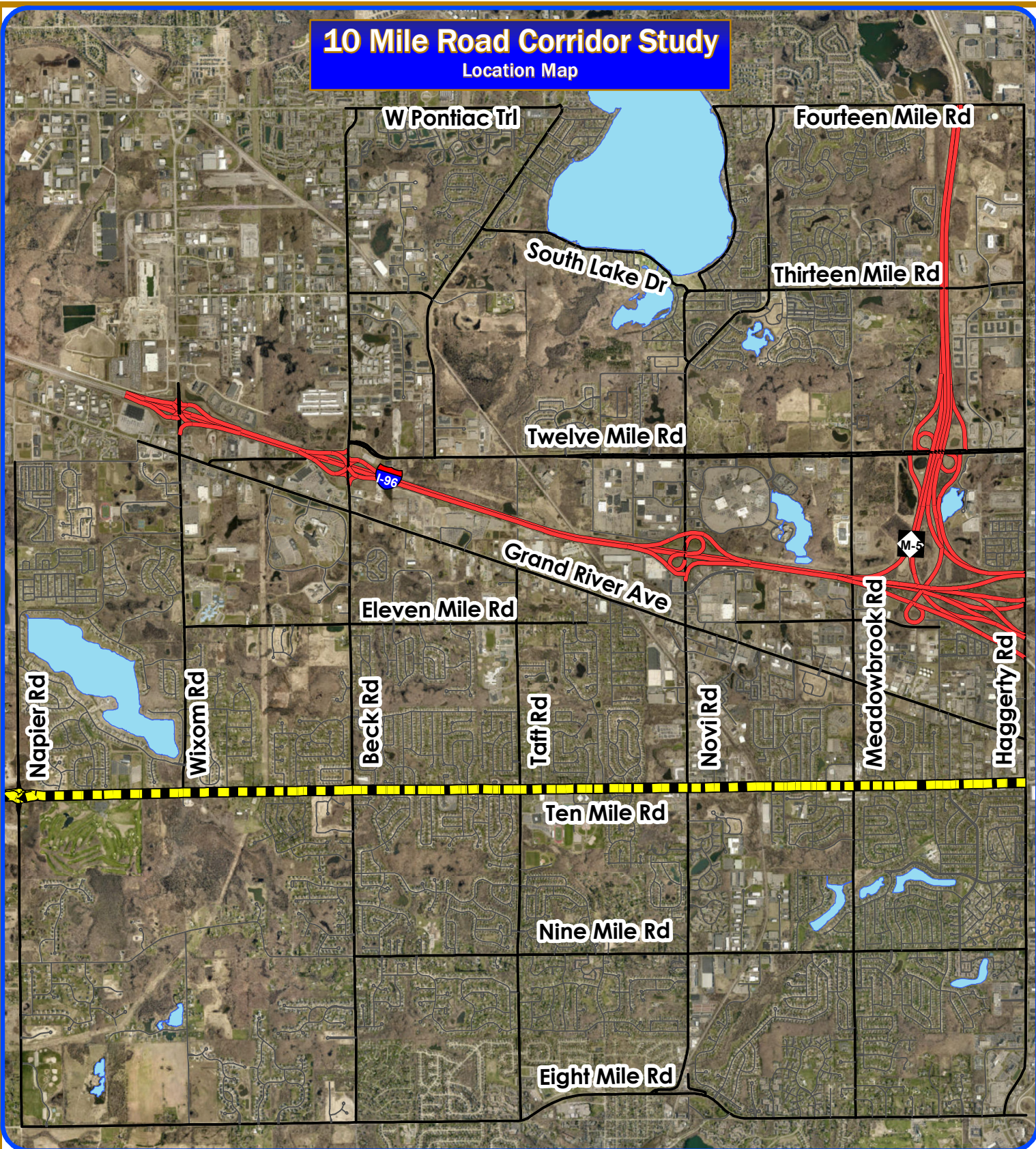
The attached *Design Engineering Services* proposal, as executed by OHM Advisors, outlines the scope of services in further detail. The design fee rate submitted as a lump sum calculated by the consultant fees for each task that is detailed under the Scope of Services. The total cost for the Ten Mile Road Corridor Study is \$63,850.00.

The projected schedule for the completion of the first draft of the Ten Mile Corridor Study is January 2019. The estimated delivery of the final version, including comments by the City and RCOC, is March 2019.

**RECOMMENDED ACTION:** Approval to award OHM Advisors civil engineering services associated with the Ten Mile Road Corridor Study from Napier Road to Haggerty Road in the amount of \$63,850.00.

# 10 Mile Road Corridor Study

Location Map

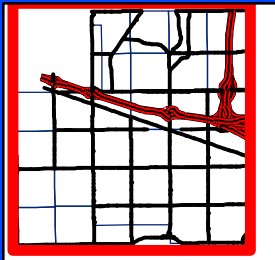
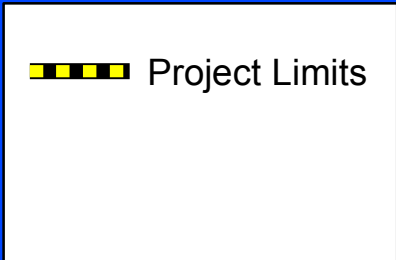


Map Author: Joseph Akers  
 Date: May 1, 2018  
 Project: 10 Mile Road Corridor Study  
 Version #: 1

Amended By:  
 Date:  
 Department:

**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.



## City of Novi

Engineering Division  
 Department of Public Services  
 26300 Lee BeGole Drive  
 Novi, MI 48375  
[cityofnovi.org](http://cityofnovi.org)



1 inch = 4,167 feet





ARCHITECTS. ENGINEERS. PLANNERS.

May 1, 2018

Jeff Herczeg, Director of Public Services  
City of Novi, MI  
26300 Lee BeGole Drive  
Novi, Michigan 48375

**RE: 10 Mile Road Corridor Study  
City of Novi**

Dear Mr. Herczeg:

The City of Novi (Novi) would like to study the current and expected future operations of 10 Mile Road within the City limits. Current congestion on this roadway has raised safety and mobility concerns. The city wishes to take a proactive approach in planning for future improvements to this roadway. Recognizing that this roadway is under the jurisdiction of the Road Commission for Oakland County (RCOC), the city has begun preliminary discussions with the county in order to ensure that the resulting study is acceptable to both agencies. This letter presents our proposed scope of services and fee to complete a corridor study of 10 Mile Road.

### **Project Approach Overview**

This proposal outlines the tasks to be completed by OHM Advisors in preparing a corridor study for 10 Mile Road within the limits of the City of Novi.

### **Scope of Services**

#### **Task #1 Project Initiation (\$3,220)**

The kick-off meeting will mark the formal beginning of the project. OHM will facilitate this meeting to introduce all OHM key personnel, their project roles, responsibilities and relationships. It will be used to establish the relationship between the project team and the client. A draft agenda and schedule will be made available a few days prior to the start of the meeting, and the discussion will include whether any changes to schedule may be needed. We believe it should be possible to use the kick-off meeting as the venue to discuss anecdotal information on traffic operational and safety problems and concerns. At part of the project initiation, OHM will request available data that will assist in the analysis of the study corridor. Meeting minutes will be prepared and distributed to all participants for their comments and corrections.

#### **Task #2 Data Collection, Review and Analysis OHM (\$6,865) TDC (\$5,200)**

The availability of existing data will be discussed during the kick-off meeting. While some data may be readily available, it is likely that new data will need to be collected. Anticipated data collection includes the following:

- Traffic volume data – OHM will use Traffic Data Collection, Inc. (TDC) as a sub-consultant to perform turning movement counts at 13 locations.
- Traffic crash history
- Preliminary agency contact to identify potential Socio, Economic and Environmental (SEE) clearance issues, e.g. endangered/threatened species, wetlands, historic, archeological, etc.
- Other, as appropriate, such as traffic signal timing permits, regional travel forecasting for horizon year of study, etc.



As information is gathered, it will be reviewed to ensure that it is complete and has no evident problems. The data will be reviewed and summarized for inclusion in the study report. OHM will complete a detailed assessment of the traffic crash history of the corridor and mitigations will be identified as appropriate.

**Task #3 Prepare Existing and Future No-Build Condition Models (\$15,185)**

While there are several choices for modeling software, we believe this study would best be served by using Synchro / SimTraffic. We will develop the model network layered over GIS maps and/or digital orthographic photography. Data will be input into the modeling software, including all field data collected, turn movement volumes, signal timings and the appropriate peak hour factor (PHF) for each approach. Prior to analysis, the models will be calibrated and validated by comparing the counted volume to the modeled volume to verify that the model replicates the field conditions within the 10% tolerance.

Each intersection will be evaluated by study period in the model using existing cycle lengths, phasing, timings and lane geometries to determine the current operating conditions, such as level of service, delay, travel time and vehicle queuing. These factors will be considered the project Measures of Effectiveness (MOE).

In addition to the existing condition modelling, the operational analysis will focus on the horizon years of 2030 and 2045. The future traffic growth rates used for the study will be determined upon consultation with SEMCOG and RCOC and will be reviewed with the City prior to use in the study. In addition to general background growth, there may be specific parcels in the immediate vicinity of the project that will need to be included separately. We will work with the City to identify the timeframe and development potential of such parcels for inclusion in the study. Horizon year traffic models will serve as the baseline for the evaluation of various practical alternatives. The study will evaluate the existing conditions and future no-build conditions during the AM and PM peak periods.

**Task #4 Planning Commission Meeting 1 (\$1,640)**

We anticipate that the City will want to incorporate this study into your typical city planning process. At this point in the study, we propose a workshop meeting with the planning commission to brief them on the study process and goals. We will discuss the study evaluation criteria and request suggestions for additional alternatives.

**Task #5 Evaluate Practical Alternatives (\$15,720)**

OHM will prepare detailed evaluations for each practical alternative, including the operational analyses for the existing, 2030 and 2045 volume data sets. Where alternatives involve traditional signalized and stop controlled intersections, we will continue to use Synchro / SimTraffic for analysis. Should roundabouts be included in a practical alternative, we will use RODEL™ for the capacity calculations. As the alternatives are more fully developed, their various evaluation factors will be refined. Practical Alternatives will be evaluated for the PM Peak period first, and the AM Peak period evaluation will be completed where the PM Peak period analysis demonstrates acceptable results.

Additionally, OHM will estimate project costs for the engineering recommendations. These costs can then be included in any future grant applications sought to fund the planned improvements.

**Task #6 Prepare Draft Report (\$8,820)**

The corridor study will discuss the challenges and opportunities within the existing corridor. Data collected and reviewed as part of the study will be summarized in the report. The findings related to the practical alternatives will be discussed as they relate to the evaluation criteria. The report will include our recommendations and will identify the preferred alternative. Results will be discussed for both the target horizon year of 2045 as well as the interim horizon year of 2030. This document will be provided to the City and RCOC for review.

**Task #7 Planning Commission Meeting 2 (\$1,640)**

The preliminary results from the study will be presented to the planning commission. We anticipate the presentation will include the presentation of the preferred alternative. We will solicit feedback from the planning commission and discuss the next steps. If desired, this meeting can also serve as a formal public hearing.



**Task #8 Finalize Report (\$5,560)**  
 Feedback from city team members, the planning commission, RCOC and public meeting attendees will be incorporated into the study as appropriate. Once revised, the report will again be provided to the City and RCOC for final review prior to finalizing the report.

**Budget**

<i>#</i>	<i>Task</i>	<i>Fee</i>
<i>Task #1</i>	<i>Project Initiation</i>	<i>\$3,220</i>
<i>Task #2</i>	<i>Data Collection, Review and Analysis</i>	<i>\$12,065</i>
<i>Task #3</i>	<i>Prepare Existing and Future No-Build Condition Models</i>	<i>\$15,185</i>
<i>Task #4</i>	<i>Planning Commission Meeting 1</i>	<i>\$1,640</i>
<i>Task #5</i>	<i>Evaluate Practical Alternatives</i>	<i>\$15,720</i>
<i>Task #6</i>	<i>Prepare Draft Report</i>	<i>\$8,820</i>
<i>Task #7</i>	<i>Planning Commission Meeting 2</i>	<i>\$1,640</i>
<i>Task #8</i>	<i>Finalize Report</i>	<i>\$5,560</i>
	<b><i>Total</i></b>	<b><i>\$63,850</i></b>

**Schedule**

The project will commence immediately upon authorization to proceed. We understand that the City would like the draft report to be completed by January 2019 for use in their budget process. Anticipated dates for completion of each task are as follows:

<i>#</i>	<i>Task</i>	<i>Completion Date</i>
<i>Task #1</i>	<i>Project Initiation</i>	<i>May 21, 2018</i>
<i>Task #2</i>	<i>Data Collection, Review and Analysis</i>	<i>June 15, 2018</i>
<i>Task #3</i>	<i>Prepare Existing and Future No-Build Condition Models</i>	<i>August 10, 2018</i>
<i>Task #4</i>	<i>Planning Commission Meeting 1</i>	<i>September 2018</i>
<i>Task #5</i>	<i>Evaluate Practical Alternatives</i>	<i>October 26, 2018</i>
<i>Task #6</i>	<i>Prepare Draft Report</i>	<i>December 14, 2018</i>
<i>Task #7</i>	<i>Planning Commission Meeting 2</i>	<i>January 2019</i>
<i>Task #8</i>	<i>Finalize Report</i>	<i>March 1, 2019</i>

This schedule is based upon an authorization to proceed given by May 21, 2018. Specific dates for completion of tasks are estimated and may change based on scheduling by the City and/or RCOC.

**Contract Terms and Conditions**

Work will be performed through our existing as-needed contract with the City of Novi Department of Public Services.

**Assumptions**

The following summarizes our assumptions with this proposal:

- No engineering design, construction services or easement acquisition for recommended infrastructure improvements is included in this proposal.



**Acceptance**

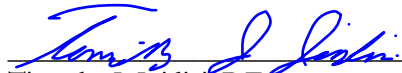
If this proposal is acceptable to you, a signature on the last page of this letter will serve as our authorization to proceed.

Thank you for giving us the opportunity to be of service. We look forward to working with you on this project.

Sincerely,

OHM Advisors

Authorization to Proceed

  
\_\_\_\_\_  
Timothy J. Juidici, P.E.  
tim.juidici@ohm-advisors.com  
D: 248.751.3104

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

  
\_\_\_\_\_  
Stephen Dearing, P.E., P.T.O.E.  
stephen.dearing@ohm-advisors.com  
D: 734.466.4413

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