

# INDIVIDUAL PROJECT SERVICES AGREEMENT 013

Between  
Orchard, Hiltz & McCliment, Inc.  
and  
City of Rochester Hills

Dated \_\_\_\_\_

For  
**PROFESSIONAL SERVICES**

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Project: Auburn Road (Old M-59) Early Preliminary Engineering (EPE) Report

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This is an Individual Project Services Agreement to the Professional Engineering Services Agreement dated May 25, 2011 between the City of Rochester Hills (CITY) and Orchard, Hiltz & McCliment, Inc. (CONSULTANT).

## ATTACHMENT A - SCOPE OF SERVICES

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CONSULTANT will perform the design services described below:

Prepare an Early Preliminary Engineering (EPE) Report (or Project Scoping Report) that identifies potential design/construction challenges in the corridor. OHM will investigate numerous possible engineering challenges that can arise during the design and construction phases when improving the stretch of Auburn Road between Culbertson Ave. and Dequindre Road per the attached concept improvement plans which follow Attachment A. Knowing these challenges will better help the City to budget the resources during the design and construction phases of the project. Being an MDOT road, any planned improvements are subject to MDOT Permit approval.

### EPE Study Requirements:

- Develop an EPE Report that will provide an engineering review the roadway corridor and identify, to the best of the authors ability, the following items so that the City will obtain needed information to determine the next steps to move forward in the Design and Construction Phases of this project.
  - Field Visits
  - Evaluation of the preferred alternative for the proposed Auburn Road improvements from LSL Improvement Study.
  - Request and evaluate for impacts to public and private utilities
  - Obtain survey data (Minimal)
  - Determine approximate construction costs and total project costs
  - Right-of-Way (ROW) impacts
  - Investigate possible wetland impacts
  - Investigate historical impacts
  - Investigate archeological impacts
  - Investigate project area for contamination
  - Evaluation of existing and proposed storm water
  
- The final deliverable will be three hard copies and an electronic copy of the EPE Report. The EPE Report will contain the following sections:
  - Section 1 - Location Map
  - Section 2 - Minutes from Project Meetings
  - Section 3 - Photographs
  - Section 4 - Base Map
  - Section 5 - Pavement Recommendation (MDOT Roadway)

- Section 6 - Existing and Proposed Typical Cross Sections
- Section 7 - Traffic Analysis/Crash Report
- Section 8 - Storm Sewer Design Calculations and Supporting Documentation
- Section 9 - Maintaining Traffic Recommendation
- Section 10 - Project Area Contamination Evaluation
- Section 11 - Right-of-Way Impact Evaluation
- Section 12 - Archeological, Historical and Wetland Evaluations
- Section 13 - Utility Evaluation – Public/Private
- Section 14 - Preliminary Construction Cost Estimate/Total Project Cost Estimate
- Section 15 – MDOT Permitting Discussion

### **Developing EPE Report:**

The following is OHM's approach to developing the EPE Report:

- Visit project site prior to identify any items that need to be considered. Pictures will be taken for inclusion in the EPE Report. Note existing utility structures identifiable within the corridor.
- Look for drainage deficiencies and other corridor issues. Note traffic signal type, location, push button facilities, and pedestrian signal presence
- Using LSL project exhibits, create a base map of the proposed improvements.
- Obtain as-built records of the project, as possible. This is will need to be requested through MDOT, as the Owner of road.
- Develop existing typical sections and proposed typical sections. This information typically comes in the form of existing plans, aerial photos, ROW maps, sewer and utility maps, and many other potential sources. The availability of information will impact how accurate the existing information can be conveyed. OHM will note areas that have changed substantially from previous construction plans. The identification of these modified areas will necessitate collecting additional information (i.e. seeking to collect more as-built plan information) and could indicate that a past problem has been potentially fixed.
- Conduct a more extensive field review of the project after the topo survey once received. An experienced road design engineer and construction engineer will walk the project and note areas of deficiencies. Items to note include drainage routes, grading near doorway entrances, visualizing impacts if road is lowered and building façade impacts if working against buildings.
- Request private utilities through filing a Miss Dig Ticket. Once the utility information is obtained, utilities that could pose a major conflict to the proposed work that could become “project killers” will be investigated. In other words, a conflict between this utility and the road project has the potential to affect the intended project schedule due to utility relocation timeline. Examples of this are petroleum pipelines, high pressure gas mains, high voltage power lines and large diameter water transmission lines that are in conflict with proposed work.
- Existing public utility information will be requested and obtained from the City. This includes water main, storm sewer, and sanitary sewer information. The goal of this coordination is to eliminate surprises when the project goes into design, and eventually construction. OHM will contact public utility owners that have utilities in this corridor (ie. GLWA) to obtain records of this utility.
- Traffic Analysis - Obtain current ADT and project a future ADT for the project. Future lane requirements may be obtained from MDOT's Sufficiency Rating Manual. This may be supplemented from data obtained from SEMCOG or TIA (Transportation Improvement Association). A Crash Analysis will begin to identify areas of concentrated crashes. These areas will be investigated to see if the proposed geometric concept may relieve these crash patterns.
- A project area contamination evaluation will be performed to identify possible contamination sites (e.g. old gas stations). The purpose of this analysis is to review parcels of property for the presence of environmental contamination. The primary objective in performing this analysis is to evaluate if further investigation and/or any remediation activities may be necessary regarding hazardous waste or environmental contamination issues in areas conflicting with project construction activities. There may be costs included with obtaining these maps. A budget has been set up for these costs.

- Develop a base plan for the report identifying project findings
- Develop a conceptual landscaping / streetscaping plan for the project area.
- Develop a construction cost estimate. The estimate will be developed using MDOT pay items. Inflation will be taken into consideration. A total project estimate will be provided which will include construction cost, ROW costs, PE costs, and CE costs.
- Evaluate the presence of archeological, historical and wetland in the project corridor the research public records.
- Investigate if any geotechnical data is available and report on the findings.
- OHM will investigate permit issues that MDOT may introduce and how these impacts could affect the city's project.
- Attend up to two Progress Meeting with the City to review findings od Study

**CITY'S Responsibilities:**

- Attend up to two Progress Meetings with OHM.
- Provide OHM with any unique knowledge of the area.
- Provide any geotechnical records the city may have of the area.
- Provide as-built plans for City's utilities and GIS information.

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**ATTACHMENT B - PERIOD OF SERVICE**

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OHM shall complete the attached services within 3 months of the notice to proceed.

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**ATTACHMENT C - COMPENSATION AND PAYMENT**

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CONSULTANT shall be compensated for services described above on an hourly not to exceed cost of \$115,702.60. OHM shall utilize the agreed upon rate schedule between OHM and the City for 2017.

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This document shall not be amended, altered or changed, except by written authorization executed by both parties.

**CITY OF ROCHESTER HILLS**

BY: \_\_\_\_\_  
           Bryan K. Barnett, Mayor

\_\_\_\_\_ In the presence of

**ORCHARD, HILTZ & MCCLIMENT, INC.**

BY: \_\_\_\_\_  
           Daniel G. Fredendall, PE  
           Vice President

\_\_\_\_\_ In the presence of

# Typical Dimensions - Alternative 2: Parallel Parking

Drive Lanes & Turn Lanes	12'
Parking Space (width from lane to curb)	12'
Sidewalks	10'
Tree Lawn	Leftover ROW

Retains some on-street parking

Parallel parking maneuver may be difficult given existing speed and traffic on Auburn Rd.

Wide sidewalks and more opportunities for outdoor dining/patios

Bump outs

Improved walkability through greater district character

Left-turn pocket

Enhanced pedestrian crossings

Additional landscaping



## Exhibit 3 - DERIVATION OF COST PROPOSAL

## PROJECT DESCRIPTION:

Auburn Road Early Preliminary Engineering Study (EPE)

CONSULTANT:

Orchard, Hiltz &amp; McCliment, Inc.

DATE:

4/5/2017

<u>Classification</u>	<u>Person Hours</u>	x	<u>2016/2017 Hourly Rate</u>	=	<u>Labor Cost</u>
Sr. Associate	6		183.87		\$1,103.23
Associate	179		173.06		\$30,977.02
Professional Engineer IV	16		167.65		\$2,682.37
Professional Engineer III	8		146.02		\$1,168.13
Professional Engineer II	291		135.20		\$39,343.20
Graduate Engineer II	171		116.81		\$19,974.99
Planner II	48		108.16		\$5,191.68
Architect I	40		121.14		\$4,845.57
Technician IV	32		118.98		\$3,807.23
Technician II	8		94.10		\$752.79
Professional Surveyor II	6		135.20		\$811.20
Surveyor III	20		104.92		\$2,098.30
Surveyor II	20		97.34		\$1,946.88
	<u>Total Hours</u>				
	845		Subtotal Labor		\$114,702.60
<u>Subconsultants</u>					\$0.00
<u>Direct Costs</u>					
Sanborn Maps					\$1,000.00
			Project Total		\$ 115,702.60



**2017 HOURLY RATE SCHEDULE**

Professional Engineer IV/Architect IV .....	\$ 167.65
Professional Engineer III/Architect III .....	\$ 146.02
Professional Engineer II/Architect II .....	\$ 135.20
Professional Engineer I/Architect I .....	\$ 108.21
Graduate Engineer III .....	\$ 121.14
Graduate Engineer II .....	\$ 124.38
Graduate Engineer I .....	\$ 116.81
Technician IV .....	\$ 118.98
Technician III .....	\$ 108.16
Technician II .....	\$ 94.10
Technician I .....	\$ 71.39
Engineering/Architectural Aide .....	\$ 56.24
Professional Surveyor III .....	\$ 151.42
Professional Surveyor II .....	\$ 135.20
Professional Surveyor I .....	\$ 118.98
Graduate Surveyor .....	\$ 108.16
Surveyor III .....	\$ 104.92
Surveyor II .....	\$ 97.34
Surveyor I .....	\$ 75.71
Surveyor Aide .....	\$ 56.24
Planner Aide .....	\$ 56.24
Planner IV .....	\$ 146.02
Planner III .....	\$ 129.79
Planner II .....	\$ 108.16
Planner I .....	\$ 75.71
Graduate Architect III/Landscape Architect III .....	\$ 116.81
Graduate Architect II/Landscape Architect II .....	\$ 95.18
Graduate Architect I/Landscape Architect I .....	\$ 84.36
Graphic Designer .....	\$ 108.16
Data Base Developer .....	\$ 189.28
IT Technician III .....	\$ 173.06
IT Technician II .....	\$ 151.42
IT Technician I .....	\$ 91.94
Administrative Support .....	\$ 59.49
Clerical Aide .....	\$ 48.67
Principal .....	\$ 194.69
Senior Associate .....	\$ 183.87
Associate .....	\$ 173.06
3-Man Survey Crew w/Equipment .....	\$ 248.77
2-Man Survey Crew w/Equipment .....	\$ 216.32
1-Man Survey w/Robotic Equipment .....	\$ 173.06