

September 27, 2022

Mr. Paul Davis, PE City of Rochester Hills 1000 Rochester Hills Drive Rochester Hills, MI 48309

RE: Preliminary Engineering (PE) Design Services
Barclay Circle Rehabilitation, Rochester Road to Auburn Road

Dear Mr. Davis,

Thank you for showing continued confidence in OHM Advisors by requesting us to provide the City of Rochester Hills with an engineering services proposal for the Barclay Circle Rehabilitation. Attached are the necessary exhibits to our Continuing Services Agreement defining our Scope of Service with associated Project Supplements which defines the Professional Engineering (Design Phase) services. If you have any questions concerning the Exhibit, please contact me at (734) 466-4441. We look forward to working with the City of Rochester Hills on this project.

Sincerely,

Mark R. Loch, PE Project Manager

Cc: Bill Fritz, City of Rochester Hills

Paul Shumejko, PE, City of Rochester Hills

Rhett Gronevelt, PE, OHM

Attachment: Proposal (Continuing Services Agreement)

INDIVIDUAL PROJECT SERVICES AGREEMENT 019

Between

Orchard, Hiltz & McCliment, Inc.

and

City of Rochester Hills

Dated	City of Roenester Times	
	For	
PR	OFESSIONAL SERVICES	

Project: Professional Engineering Services for Barclay Circle Road Rehabilitation (Auburn Road to Rochester Road) Ave. This is an Individual Project Services Agreement to the Professional Engineering Services Agreement dated August 5, 2020 between the City of Rochester Hills (CITY) and Orchard, Hiltz & McCliment, Inc. (CONSULTANT). ATTACHMENT A - SCOPE OF SERVICES CONSULTANT will perform the services as described in Attachment A. ATTACHMENT B - PERIOD OF SERVICE Services shall be provided in a timely manner and completed and accepted as completed by May 1, 2023. Should the project extend beyond the completion date, a contract Amendment may be required to complete the work. ATTACHMENT C - COMPENSATION AND PAYMENT CONSULTANT shall be compensated for services described above on an hourly not to exceed cost of \$176,000.00 This document shall not be amended, altered or changed, except by written authorization executed by both parties. CITY OF ROCHESTER HILLS Recommended BY: Paul Davis, PE, Deputy DPS In the presence of Approved: Bryan K. Barnett, Mayor In the presence of ORCHARD, HILTZ & MCCLIMENT, INC. BY:_

In the presence of

Rhett Gronevelt, PE

Principal





A. General

The CONSULTANT will provide design services for the following improvements on Barclay Circle:

- Develop design plans for the rehabilitation of Barclay Circle, a five-lane road with median islands at each end. The rehabilitation shall consist of up to a four-inch mill, underlying road patching and overlay of the existing road surface. A different pavement section may be utilized near the intersection of Rochester Road due to a future traffic signal project and island modifications required for this project. Final fix repair shall be determined after cores are obtained.
- The limits of work shall begin just east of the pathway crossing on Rochester Road to the edge of metal of westbound Auburn Road.
- Driveways shall be reviewed on a case-by-case basis for replacement based on condition.
- Side street approaches shall receive the same rehabilitation treatment as the roadway
- Replace all sidewalk ADA ramps within the Barclay Circle that do not meet current design standards.
- The existing sidewalk shall be logged for replacement of sidewalk in bad condition or has heaved slabs greater than one inch.
- New road surface is to be restriped with three lanes of pavement and two outside, bike lanes.
- The project will be locally let by the city and does not have federal funding.

B. Design Phase Service

- 1. Start-up & Preliminary Plans (50%)
 - a. Attend pre-design meeting (optional) with the CITY to finalize project approach, how to communicate between team members, agree on standard documents and details to be used, schedule review meetings and finalize schedule. Prepare summary of action items and distribute after the meeting.
 - b. Topographic survey. The anticipated survey scope is as follows:
 - i. Provide full topographic survey of the roadways, curb and gutter and ADA ramp locations. Periodic cross sections of the road (every 500') shall be taken.
 - ii. ROW linework shall utilize GIS and it is not anticipated there will be minimal ROW impacts.
 - iii. Structure inventories will be obtained.
 - c. Coordinate geotechnical services with the CITY hired geotechnical firm (TEC). It is anticipated that five-foot pavement cores/soil borings will be required throughout the project limits. These shall be taken in varying lanes.
 - d. Prepare base plan sheets (showing existing and proposed geometrics) that will be used to develop the construction plans. No change in geometrics is anticipated.
 - e. Vertical Alignment: No change in the vertical alignment. Since this is a mill and overlay, no proposed profile sheets are anticipated.
 - f. A vertical alignment will be prepared that will balance the need to lower the road in some locations due to the current adjacent property's low door sill elevations and trying not to remove cover over the existing water main that can lead to freeze issue. Proper longitudinal slopes will be incorporated into the roadway to ensure flow in the new curb line.
 - g. Plot known utilities on the topographic survey within the project limits. A Miss Dig request will be submitted to obtain existing private utility information and OHM will use the City's GIS information for public utility information.
 - h. OHM construction personnel will log the visible repairs, noting damaged curb sections, significant pavement issues, and sidewalk issues.
 - i. Prepare Maintenance of Traffic (MOT) concept for the City's review and approval. This is anticipated to



Attachment A - Scope of Services Barclay Circle Road Rehabilitation Auburn Road to Rochster Road

either maintain two lanes of traffic, one in each direction, utilizing the inside/outside method so traffic s always on the correct side of the road and will not impact traffic signal operations. Or maintain one -way traffic sacrificing access to provide the contract more working space to work, possibly expediting the project.

- j. Driveway replacement will be reviewed for replacement based on condition and cross slope of sidewalk path across the driveway. Both may be reasons to replace a driveway.
- k. Curb replacement shall be identified and noted for repair in sections no shorter than 4'.
- l. Traffic signal work is anticipated to remove in replaced new detection pucks placed near Auburn Road. Coordination with RCOC is required.
- m. Prepare striping plan that incorporates a road diet reducing the road to three -11' lanes and two 5' bike lanes.
- n. Prepare a revised preliminary engineer's opinion of probable construction cost.
- o. Submit base design plans and estimate to the CITY for review.
- p. Organize and lead a review meeting with the CITY.

3. Final Plan

- a. Design
 - i. Prepare detailed construction plans for the rehabilitation of Barclay Circle between Rochester Road and Auburn Road. It is anticipated that Removal, and Construction plans will be required. The proposed 5 lane section will contain 11' thru lane widths. The existing shape of the mountable curb, barrier style curb at median islands, will be replaced in kind where needed.
 - ii. Prepare pavement marking plans for the full stretch of roadway. Work shall be performed in accordance with the MMUTCD requirements. Attention to special signing and markings will be investigated.
 - iii. Existing signs will be maintained unless impacted by construction. If OHM identifies a sign missing or not placed correctly, we will notify the city, but no signing complete replacement is planned.
 - iv. Develop maintenance of traffic plans and coordinate the project with the CITY, MDOT (Rochester Road). Possible drive and side street closures will be investigated if alternate access is available.
 - v. Prepare a final plan engineer's opinion of probable construction cost for early review by CITY and at the final plan submittal stage. Cost will be split out by varies items of work corresponding to the city's funding sources.
 - vi. Coordinate and attend the final plan review meeting with the CITY.
 - vii. Prepare for and participate in up to two public meeting with the CITY. Format to be determined. CONSULTANT will provide exhibits for this meeting for the public to review.
 - viii. Anticipated Project Plan Sheets along with the number of sheets anticipated include:

Title Sheet (1)
Typical Section Sheet (4)
Miscellaneous Detail Sheet (1)
Note Sheet (1)
Removal Sheets (7)
Construction Sheets (7)
Detailed Grading Sheets (4)
MOT/Stage Construction Sheets (8)
Traffic Signal Sheet (1)

Pavement Marking and Signing Details (4)

Estimated Plan Sheet Total – 39 sheets





b. Drainage

i. No changes to the existing storm sewer system. Should it be identified that flooding issues are present and additional catch basins are desired, this may require a contract modification. Adjustments to storm manholes in the pavement are anticipated.

c. Utility Coordination

i. Follow up with the utilities contacted during the Preliminary Plan Phase should conflicts be identified. Coordinate with utilities with conflicts will continue though out the design phase or until the utilities have been relocated. If relocation has not occurred prior to bidding, prepare a hand off status document to the CITY outlining status and next steps.

d. Right-of-Way

i. ROW impacts will be minimized as much as possible, either temporary or permanent. Should easements be required this work would need to be added under an amendment.

e. Permitting

- i. Submit permit application to MDOT for construction signing on Rochester Road
- ii. Submit permit application to OCWRC for impacts to the Hampton Drain

f. Project Specifications

- i. Prepare technical specifications (special provisions) for the project
- ii. Assist in preparing a city, local style, bid book contract documents and specifications

4. Final Plans & Bidding

- a. City will advertise and bid this local project
- b. Final submittal will include the following to the CITY:
 - i. Three sets (11" x 17") of reproducible plans
 - ii. Electronic plans in pdf and AutoCAD format
 - iii. PDF (and Word Doc, as needed) of project Special Provisions
 - iv. Engineer's Opinion of Probable Construction Cost
 - v. Field notes and copies of quantity calculations, if required
- c. Answer questions during the bidding process as required by the CITY.
- d. Review bids and discuss the low bid contractor and bid results with CITY.

C. Additional Services (Not Included)

- 1. Geotechnical Services will be hired directly by the City and are not included in this contract.
- 2. Design of public utility relocations (ie. water main of sanitary sewer replacement).
- 3. Preparation or acquisition of grading permits or additional right-of way.
- 4. No federal aid required documentation is included should any federal aid be obtained.

D. City Responsibilities

- 1. Provide existing water, storm and sanitary sewer record plans.
- 2. Coordination with police, fire and schools.
- 3. Coordinate and lead public information component.
- 4. Attend any coordination meetings with Oakland County Water Resources Commissioner's.
- 5. Attend all utility coordination meetings and furnish necessary authorizations for design by private utilities if required, including proposed street lighting by DTE.



Attachment A - Scope of Services Barclay Circle Road Rehabilitation Auburn Road to Rochster Road

- 6. Provide known problem drainage and pavement maintenance areas for the side streets from DPS records.
- 7. Pay all permit and review fees.
- 8. Acquisition of any required right-of-way and easements.

E. Design Criteria and Standards

- 1. The plans will be developed utilizing separate removal and construction sheets and will be at a scale of 1" = 30' horizontal.
- 2. Posted Speed: 35 mph
- 3. Design Speed: 40 mph
- 4. Road Classification: Unknown
- 5. General Design Standards: City of Rochester Hills Standards, Michigan Manual of Uniform Traffic Control Devices Standards, OCWRC Design Standards, and MDOT Standards.
- 6. Specifications: City of Rochester Hills Standards supplemented by OCWRC Design Standards, MDOT: "2020 Standard Specifications for Construction", including the current "MDOT Standard Plans for Roads and Bridges".



PROJECT SCHEDULE

CITY OF ROCHESTER HILLS

BARCLAY CIRCLE ROAD REHABILITATION

The CONSULTANT will provide construction engineering services for the duration of the construction project as outlined in the Contract Proposal, which states the project shall start in October, 2022, have a final completion date of May 1, 2023.

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PAYMENTS TO CONSULTANT

CITY OF ROCHESTER HILLS

BARCLAY CIRCLE ROAD REHABILITATION

Construction Engineering Services

The CITY agrees to pay the CONSULTANT on an hourly basis, billed monthly, a not-to-exceed amount of One hundred Seventy-six Thousand and zero cents (\$176,000.00).

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