

October 29, 2020

City of Rochester Hills
1000 Rochester Hills Dr.
City of Rochester Hills, MI 48309-3033

Attn: Allan E. Schneck, P.E.
Public Services Director

Re: Auburn Road Rehabilitation
Rochester Road to Culbertson Avenue
Proposal for Design Engineering Services

HRC Job No. 20200798

Dear Mr. Schneck:

We are pleased to offer this proposal to perform design engineering services for the Auburn Road Rehabilitation. Our understanding of the work involved is based on conversations held with your office. We propose to complete this work in accordance with our existing Engineering Service Agreement and the following project specific information.

Project Description:

The City recently took ownership of Auburn Road from MDOT and now has plans to rehabilitate this segment of roadway. The project limits are from east of Rochester Road to Culbertson Avenue. The City is interested in widening the existing two-lane section from east of Primrose Drive to west of Bendelow Road and from east of John R Road to west of Culbertson Avenue. In addition, the existing watermain along this route was identified as AC from the 1960's. This main, generally located near the edge of the existing roadway, may be replaced as part of this project.

The City's CIP has a current construction budget of \$1.298 Million for a two inch mill and overlay of this approximately 1.5 mile segment of Auburn Road. With the desire to widen the two-lane sections, HRC anticipates the construction cost for the roadway work to be \$2.4M - \$2.8M, not including construction engineering. This is based on a three-inch (2-course) mill and overlay. Once the final alignment has been determined, including widening areas, the roadway costs will be better identified. HRC has also estimated that construction for the watermain replacement will likely be \$1.2M - \$1.4M. The total project cost, including both roadway and watermain work, is estimated at \$3.6M - \$4.2M.

The anticipated project scope involves:

- Mill and overlay of existing HMA roadway
- Select curb and gutter replacement based on existing conditions
- Widening of existing two-lane segments
- Watermain replacement along the project length
- Minor ADA Improvements with detailed grading plans at side streets
- Coordination with DTE for lighting modifications
- Structure adjustment and reconstructions as required
- Minor drainage modifications including ditch enclosures in some widening areas
- Miscellaneous repairs to the impacted existing pathway facilities
- Rehabilitation of side streets and approaches within the ROW
- Permitting through RCOC, EGLE (watermain), and MDOT

Delhi Township
2101 Aurelius Rd.
Suite 2A
Holt, MI 48842
517-694-7760

Detroit
535 Griswold St.
Buhl Building, Ste 1650
Detroit, MI 48226
313-965-3330

Grand Rapids
1925 Breton Road SE
Suite 100
Grand Rapids, MI 49506
616-454-4286

Howell
105 W. Grand River
Howell, MI 48843
517-552-9199

Jackson
401 S. Mechanic St.
Suite B
Jackson, MI 49201
517-292-1295

Kalamazoo
834 King Highway
Suite 107
Kalamazoo, MI 49001
269-665-2005

Lansing
215 S. Washington SQ
Suite D
Lansing, MI 48933
517-292-1488

- Limited signal staging plans, if required, as part of the Maintenance of Traffic (MOT) plans
- The project will include provisions to account for and address impacts to the existing irrigation and lighting, but the design of new systems are not anticipated at this time

Geotechnical investigation and soil borings will be provided through the City and HRC will coordinate their efforts and review all findings.

Scope of Services:

Topographic Survey:

HRC will perform the topographic survey. General limits are:

- Auburn Road: ROW limits from Rochester Road to Culbertson Avenue. An additional 10-15' will be surveyed at drive approaches and side streets beyond the existing pathway to ensure the pathway meets ADA guidelines.
- Survey all utility structures including ATT, watermain, sanitary and storm sewers. This includes collecting invert and condition information at all watermain, sanitary and storm manholes.
- Survey and tag trees in accordance with the City's requirements.

Design Documents:

Documents will be prepared for a bid opening in early 2022 to ensure the project will be constructed and completed in 2022. HRC anticipates a February 2022 local bid letting with an award and construction start date in March 2022. Full design of the scope of work will be done in phases to provide adequate review time for the City. HRC anticipates the following schedule:

- Authorization: Fall 2020
- Topographic Survey & Utility Mapping Complete: Feb. 2021
- Prepare & Submit Base Plans, Cost Estimate, Utility Coordination & Conflict Identification: May 2021
- Private Utility Relocations: Summer 2021
- Prepare & Submit Preliminary Plans & Permit Applications: July 2021
- Prepare & Submit Final Plans: Fall 2021
- Prepare & Submit Bid Documents: January 2022
- Bid Letting & Award: Feb/Mar 2022

Miscellaneous Design Elements:

As shown in Attachment A, HRC has included several key tasks throughout the design phase to prepare the overall budget for this proposal. HRC will prepare the plans, specifications, and construction cost estimates for the roadway and watermain work. This will include removal, plan and profile sheets as required. HRC has assumed the existing roadway vertical alignment will remain and any new vertical alignments will only be required for widening areas. An existing /proposed vertical alignment profile of the roadway centerline will be included and a profile for the new watermain will also be part of the plans. In addition to the items noted herein and in Attachment A, HRC will also prepare the following plans and design elements:

- SESC plans
- Maintenance of Traffic (MOT) plans
- Detailed grading design for ADA sidewalk ramps
- Detailed grading as required for widening areas, intersections & side streets
- Driveway grading and Slope Stake Line (SSL)
- Permanent signing & pavement marking plans
- Minor storm sewer and/or ditching improvements

Utility coordination:

HRC will request utility data from the companies, including municipal utilities, in the project area and add the necessary line work in plan and profile to the plans. HRC will include additional depth information to be provided by the respective utility

companies and will schedule and attend meetings to coordinate any existing information and to assist with the relocation of the required facilities. HRC anticipates up to two utility meetings and coordination with overhead facilities, RCOC traffic signals, underground gas and fiber/telephone as well as municipal facilities. This will include coordination with DTE lighting in order to upgrade or replace existing street lights, owned by DTE. HRC has assumed that municipal facilities will not require relocation and has not included design and permitting of these facilities in this scope of work.

For clarity, the following items are not included or assumed as part of our proposal:

- New street lighting design
- Design of new irrigation or specialty signs.
- New traffic signal design or upgrades to existing traffic signals
- Sanitary sewer design
- MDOT LAP Design / Bid Letting requirements (NEPA, SHPO Coord., Programming)
- HRC assumes the existing drainage outlets are adequate and new trunkline / outlet sewers will not be required

Ms. Nancy Kolinski, P.E., will be HRC's Project Manager for the Auburn Road Project due to her experience working with City staff and with comparable projects. Charles Hart, P.E. will provide project oversight, staffing coordination, and communication as required to ensure a successful project. HRC's lead road designer will be Jake Darnall, P.E. Jake has extensive experience working on comparable roadway rehabilitation and municipal utility projects. The project team will also communicate regularly with Dan Mitchell and Brad Shepler to ensure the project is coordinated successfully and that the City's expectations are met.

HRC is ready to begin this job immediately and be prepared for construction to be completed in 2022. HRC is proposing to complete this work for a not to exceed cost of \$273,000. This will be invoiced on a time and material basis based on approved rates and in accordance with our contract with the City of Rochester Hills. Please see the attached spreadsheet for more detailed information about the derivation of our costs.

If you have any questions or require any additional information, please contact the undersigned.

Very truly yours,
HUBBELL, ROTH & CLARK, INC.



Charles E. Hart, P.E.
Vice-President
Attachment
City of Rochester Hills; P. Davis, T. Balint, K. Depp, L. Hamilton
HRC; D. Mitchell, B. Shepler, N. Kolinski, File

Accepted By:

Signature: _____

Written Name: _____

Title: _____

Dated: _____

ATTACHMENT A
City of Rochester Hills
Hours / Costs for Preliminary Engineering Services - October 29, 2020
Auburn Road Rehabilitation: Rochester to Culbertson

Task Description	Principal QA/QC	Sr Proj Engr	Dept Mgr	Proj Engr	Grad Engineer	Designer	Survey Office Super	Sr. Party Chief	Inst. Person	Total By Task
Topographic Survey & Property Lines		2	4		4	40	24	200	200	474
Meetings & Preparation	8	16	16	16	12	12				80
Horizontal & Vertical Alignments	4	16	32	80	80	24				236
Watermain Design & Permitting	4	32	12	60	150	150				408
Base Plans	1	12	24	24	60	80				201
Utility Coordination & Relocations	2	4	12	50	50	50				168
Storm Water Drainage Design	4	24	20		60	24				132
Maintenance of Traffic (MOT)	4	8	24		50	40				126
Prepare Preliminary Plans	8	32	40	80	180	180				520
Prepare Final Plans	8	12	32	60	90	90				292
Total Hours by Classification	43	158	216	370	736	690	24	200	200	2637

	Hours	Hourly Rate	Direct Cost
Principal, Charles Hart	43	\$ 145.00	\$ 6,235.00
Senior Project Engineer, Nancy Kolinski	158	\$ 147.90	\$ 23,368.20
Department Manager	216	\$ 113.10	\$ 24,429.60
Project Engineer, Jake Darnall	370	\$ 105.85	\$ 39,164.50
Graduate Engineer	736	\$ 87.00	\$ 64,032.00
Designer / Sr. CAD Tech	690	\$ 104.98	\$ 72,436.20
Survey Office Supervisor	24	\$ 129.63	\$ 3,111.12
Sr. Survey Party Chief	200	\$ 115.71	\$ 23,142.00
Survey Instrument Person	200	\$ 87.00	\$ 17,400.00
Sub total	2637	Total HRC Costs	\$ 273,318.62