

CITY of NOVI CITY COUNCIL

Agenda Item 7 February 26, 2018

SUBJECT: Approval to award civil engineering services to AECOM Great Lakes, Inc. for design engineering services associated with the 2018 Neighborhood Road Program (NRP) in the amount of \$137,025.00.

SUBMITTING DEPARTMENT: Department of Public Services, Engineering Division

CITY MANAGER APPROVAL:

EXPENDITURE REQUIRED	\$ 137,025.00	
AMOUNT BUDGETED	\$ 160,000.00	
LINE ITEM NUMBER	203-203.00-864.190	

BACKGROUND INFORMATION:

Each year the City selects residential streets for reconstruction, repaving, repair, and/or rehabilitation based on Pavement Surface Evaluation and Ratings (PASER), staff's field observations, and residents' concerns. City staff worked with engineering consultant AECOM Great Lakes, Inc. (URS Corporation Great Lakes), to develop a list of streets for the 2018 program. The design award of \$137,025.00 is based upon a \$2,610,000.00 construction estimate (5.25% of \$2,610,000.00), which will be divided into three (3) contracts for logistical purposes. The selection of streets for the three contracts will be determined as part of the design engineering services.

In an effort to better communicate with residents about 2018 local road construction, a public information meeting has been added to the communications plan. The Engineering Division, in collaboration with the Community Relations Department, will be hosting a public information meeting regarding the Neighborhood Road Program (NRP) and Concrete Panel Replacement Program (CPR) on April 11th. Residents of neighborhoods that will be impacted by the proposed construction work will be encouraged to attend.

The attached Design Engineering Services proposal, as executed by AECOM, outlines the scope of services in more detail. The design fee rate per the Exhibit B Fee Curve Schedule (as part of the City's General Engineering Services Contract with AECOM) is 5.25% based upon a combination of construction methods used to reconstruct and/or rehabilitate the local roads. The Engineering Division has reviewed the scope of services proposal and recommends approval.

RECOMMENDED ACTION: Approval to award civil engineering services to AECOM Great Lakes, Inc. for design engineering services associated with the 2018 Neighborhood Road Program (NRP) in the amount of \$137,025.00.



February 14, 2018

Mr. George Melistas
Engineering Senior Manager and Traffic Engineer
City of Novi
Field Services Complex
26300 Lee Begole Drive
Novi, MI 48375

Reference: Proposal for Engineering Services

2018 Neighborhood Road Program and 2018 Concrete Repair Program Projects

Dear Mr. Melistas:

AECOM is pleased to submit this proposal for the above referenced projects.

The Neighborhood Roads Program is anticipated to include two contracts, one for concrete roadways and one for asphalt roadways, as has been done in previous years. The Neighborhood Roads Program includes both reconstruction of roadways, including the aggregate base, and rehabilitation work (typically milling and overlay of asphalt roadways). Each roadway is inspected to determine the appropriate repair work.

The Concrete Repair Program project will be a single construction contract separate from the Neighborhood Roads contracts. The Concrete Repair Program work includes concrete pavement repairs to concrete roadways in an effort to preserve the life of the existing roadways to the extent possible.

The following tasks will be completed for the projects:

Initial Meeting and Scope Verification

The intent of this task is to meet with the City and verify the limits and scope of work for the project. Upon completion of this task, we will move forward with the surveying and preliminary design. AECOM has already solicited a priced proposal for required soil borings and pavement cores for the Neighborhood Roads Program project from TEC, the geotechnical firm selected by the City, and this will be discussed at the meeting. Soil borings and pavement cores are not anticipated to be needed for the Concrete Repair Program project.

Survey and Base Plans

The intent of this task is to provide topographic survey and base mapping as needed for the proposed design work. We anticipate that a full topographic survey will be required for areas planned for complete reconstruction. For areas where rehabilitation is planned (mill and overlay or pavement repair) base drawings will be created using a combination of survey data, aerial photos and a detailed field review of the site.

AECOM will prepare base plans (30%-40% complete) to identify the major design features. These plans will also be used to further the utility investigation and resolution of potential conflicts. Base plans will include the results of the survey information, utility information received in response to our solicitations for information, and a preliminary estimate.

AECOM will obtain existing utility data with a design ticket through the MISS DIG system. In addition, AECOM will distribute the base plan design set to the utility companies that have indicated that they have facilities in the project area. We will incorporate the additional information that utility companies provide to AECOM into the plan set.



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Preliminary Plans

Incorporating the information obtained from the above tasks, we will prepare the preliminary plan sets (90%) in accordance with City requirements. Soil boring/pavement core information will be included in the plans. This submittal will include items such as the typical cross sections, materials/quantities and details. A Project Manual and preliminary updated cost estimate will also be prepared and submitted for each contract.

Final Plans and Proposal

Incorporating comments from the City, AECOM will develop the final plans submittal, including the plan sets, Project Manuals, and cost estimates.

Advertising and Award

We will respond to any final comments received from the City and submit the Advertisements for Bids to the City for publication. Contract Documents will be made available to bidders by AECOM for each contract. AECOM will respond to bidder inquiries during the advertising period and prepare addenda as required. Following the bid opening AECOM will submit the Bid Tabulation and a letter with recommendations regarding contract award for each contract.

Construction

AECOM will provide full time inspection, contract administration, and staking as required for the projects. Materials Testing during construction will be performed by a geotechnical engineering firm hired directly by the City under the direction of AECOM.

Schedule

We anticipate that the following schedules can be maintained. In the event of an early winter, or any unexpected scheduling delays, a spring completion date should be anticipated:

2018 Neighborhood Roads Program (Applies to both the Asphalt and Concrete Contracts)

Notice To Proceed with Design February 27, 2018 Preliminary Plans Submittal March 30, 2018 Public Information Meeting (PIM) April 11, 2018 Final Plans Submittal April 20, 2018 Advertise for Bids May 1, 2018 **Bid Opening** May 24, 2018 Contract Award June 04, 2018 **Beain Construction** June 15, 2018 **End Construction** November 08, 2018



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2018 Concrete Repair Program Project

Notice To Proceed with Design February 27, 2018 March 30, 2018 Preliminary Plans Submittal Public Information Meeting (PIM) April 11, 2018 Final Plans Submittal April 20, 2018 Advertise for Bids May 1, 2018 Bid Opening May 24, 2018 **Contract Award** June 04, 2018 **Begin Construction** June 15, 2018 **End Construction** September 7, 2018

Estimated Cost of Construction and Design Fees

AECOM has agreed to provide Design Engineering services at a reduced rate of 5.25% of the Construction Contract costs and Contract Administration services for 3.75% of the Construction Contract cost.

We understand that the estimated out-the-door cost for the 2018 Neighborhood Roads Program project is \$3,000,000 and that the estimated out-the-door cost for the Concrete Repair Program project is \$1,400,000. The scope of work will be tailored to meet the proposed budgets for each contract. See attachment A for a full breakdown of estimated costs.

2018 Neighborhood Roads Program Design Fee: \$2,610,000 (Construction Cost) x 5.25% = \$137,025.

2018 Concrete Repair Program Design Fee: \$1,241,629 (Construction Cost) x 5.25% = \$65,186.

We understand that fees for construction phase services will be determined after a construction contract is awarded and that the City will pay the geotechnical firm for soil boring/corings and materials testing during construction directly.

Please contact me if you have any questions or wish to discuss this submittal.

Sincerely,

AECOM Great Lakes, Inc.

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Sean Kelsch, PE Vice-President

Attachment A

Neighborhood Roads Program

Construction	\$2,610,000.00
Estimated Geotechnical Investigation	\$45,000.00
Design (5.25%)	\$137,025.00
Estimated CA (3.25%)	\$97,875.00
Estimated Crew Days (120 x \$700)	\$84,000.00
Estimated Geotechnical Testing	\$26,100.00
Out the Door Total	\$3,000,000.00

Concrete Repair Program

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Construction	\$1,241,629
Estimated Geotechnical Investigation	\$0
Design (5.25%)	\$65,186
Estimated CA (3.75%)	\$46,561
Estimated Crew Days (40 x \$700)	\$28,000
Geotechnical Testing	\$18,624
Out the Door Total	\$1,400,000