



**CITY OF NOVI CITY COUNCIL
JULY 27, 2021**

SUBJECT: Consideration of approval to award design services to OHM Advisors for the Martin Avenue Storm Water project in the amount of \$20,000.00.

SUBMITTING DEPARTMENT: Department of Public Works, Engineering Division

| | |
|-------------------------------|---------------------------|
| EXPENDITURE REQUIRED | \$ 20,000.00 |
| AMOUNT BUDGETED | \$ 20,000.00 |
| APPROPRIATION REQUIRED | \$ 0 |
| LINE ITEM NUMBER | 210-211.00-865.241 |

BACKGROUND INFORMATION:

At the City Council Meeting on July 12, 2021 staff was directed to address ongoing storm drainage issues on Martin Avenue and the adjacent neighborhood along Linart Street and Wainwright Street.

The Martin Avenue storm drain pipe currently collecting drainage is undersized (15") and the area has been impacted by new development to the west (Lakeview). Runoff from the Lakeview Development has exasperated current poor conditions and upsizing the drain pipe is recommended by staff. Lakeview has been directed to install corrective measures to keep the runoff on site and to manage drainage per the approved site plan.

The significant rainfall event of June 25, 2021 contibuted to flooding reported by residents, and staff responded by engaging OHM Advisors to scope a project to upsize the Martin Avenue pipe. Attached is the scope of engineering services for said project, which will be executed via a change order with another ongoing drainage project. This should expedite the process and bring the construction forward by the end of August or beginning of September. This will require OHM to work with the staff and the contractor to simultaneously design and build the project.

Since the last City Council Meeting, it was determined that upsizing the pipe would conflict with existing sanitary sewer pipe on the west side of Martin. Since the water main pipe is located on the east side of Martin, it is likely the pipe will have to be relocated in the road; therefore, the road will also have to be reconstructed. To keep the project moving, the work associated with the road reconstruction can be included in the Neighborhood Road Program contract as an addition, after the storm drain work is completed.

Based on the estimated construction budget (attached) of \$320,000, the engineering fee percentage in the Consulting Services Agreement for the design phase of storm sewer construction is 9.25%. Since OHM is performing this project as an extension to the original contract documents developed in the initial phase of work, staff negotiated a reduction of this fee to 6.25% (\$20,000.00).

Preliminary engineering and plan preparation are needed to proceed with a change order for the drain work. The project will consist of upsizing the pipe on Martin and new storm lines and structures behind the homes on Wainwright (see attached map). Since some of the work is on private property, staff will need to get easements from residents to execute the project.

When all of the necessary details are confirmed, staff will execute the aforementioned change order(s) and bring them forward to City Council for consideration at an August meeting.

RECOMMENDED ACTION: Approval to award design services to OHM Advisors for the Martin Avenue Storm Water Project in the amount of \$20,000.00.



July 19, 2021

Mr. Ben Croy, P.E.
City Engineer
City of Novi, Department of Public Services
26300 Lee Begole Drive
Novi, MI 48375

RE: Scope of Design Services
Martin Ave Storm Sewer Improvements

Dear Mr. Croy:

Per your request, the following outlines our proposed scope of services to prepare design documents for storm sewer improvements along Martin Avenue south of 13 Mile Road. The following outlines our Project Understanding, Scope of Work, Schedule, and Fee for the construction phase of this project.

PROJECT UNDERSTANDING

The project includes the construction of approximately 900 feet of storm sanitary sewer along Martin Avenue from south of 13 Mile Road to south of Linhart Street. We understand that the City desires to increase the size of this storm sewer to address recent flooding concerns in the neighborhood. New storm sewer will be installed along the former alleyway south of 13 Mile, west of Martin, near the existing wetland area to Martin Ave. Upsized storm sewer will also be installed along Martin Ave from this point to the existing outlet south of Linhart. Roadside ditch inlets along Martin will also be replaced.

Based on discussions with City staff, it is anticipated that this work will be completed under the existing Construction Contract for the Bishop Creek/Meadowbrook sidewalk project. These storm sewer improvements along Martin will be added to the existing Contract through a Change Order. We have attached a conceptual construction cost opinion for this project that was based on an initial review of record drawings and follow up discussion with City engineering staff and the Contractor. The current opinion of construction cost is \$352,000.

It should be noted that the storm sewer work will impact the existing asphalt pavement along Martin Ave. Per discussion with City staff, it was determined that the repaving of Martin Ave will be completed as an addition to this year's Neighborhood Road Program (NRP). This road work is not included in the attached estimate and will be included as a future Change Order to the NRP.

SCOPE OF SERVICES

The scope of work for this project will be consistent with our Agreement for Civil Engineering Consulting Services between the City and OHM Advisors. This includes items related to the storm sewer design phase of work as follows:

1. Attend an initial kick-off meeting with City Staff to finalize the project scope and schedule.
2. Perform topographic survey along the project route to assist in design efforts.



3. Conduct a site review to identify elements that are sensitive to the project, including driveway locations, utility facilities, drainage features, access issues, etc.
4. Perform engineering for the installation of new storm sewer along the route. Determine pipe sizing, grading limits, road impacts, staging, utility conflicts, etc. Update construction cost estimate to the preliminary stage, based on this level of design.
5. Meet with the City and confirm preliminary route for storm sewer main and confirm locations that may require easements and/or temporary grading permits for the project. Confirm staging considerations and traffic control/detours for road closures, temporary roads, utility impacts, etc.
6. Prepare design plans and specifications for the project improvements for City review.
7. Prepare SESC plan sheets.
8. Attend one meeting with the City to review the plans and specifications and address any requested revisions.
9. Prepare a Change Order to complete this work as part of the existing Contract.

SCHEDULE

Based on past communication with the City, the following is the anticipated schedule for this project:

- Design Documents – July/August 2021
- Prepare Change Order for Council Award – August 2021
- Tentative Construction Start – Late August 2021
- Tentative Construction Completion – End September 2021

This schedule is based upon an authorization to proceed given by July 26, 2021.

ASSUMPTIONS

The following services are not anticipated to be required for this project and have not been included at this time:

1. Permit or application fees that are necessary – to be paid by the City
2. Coordination or design for private utility relocations or repairs
3. Easement acquisitions – to be acquired by the City
4. Remediation or removal of contaminated or hazardous soils or materials.
5. Geotechnical Analysis/Report

In the event any of these services are required by OHM Advisors, an addendum to the supplemental engineering agreement will be submitted for your approval prior to performing said services.

FEE

Based on the fee schedule in the Civil Engineering Consulting Services Agreement between the City and OHM Advisors, the proposed fee for this project is established as follows:

- Based on the estimated construction budget of \$320,000, the engineering fee percentage based on our Consulting Services Agreement for the design phase of storm sewer construction is 9.25%. Since we are performing this project as an extension to the original contract documents developed in the initial phase of work, we propose reducing this fee to 6.25%.
 - Design Services Fee is calculated as $6.25\% \times \$320,000 = \$20,000$



Thank you for the opportunity to be of service. If you have any questions or require additional information, please contact us. We look forward to working with you on this project.

Sincerely,
OHM Advisors

Authorization to Proceed

Timothy J. Juidici, P.E.
Principal-in-Charge

Signature

Date

Printed Name

Title

Encl: Cost Estimate

cc: Jeff Herzeg, Director of Public Works
Barry Gates, OHM

CITY OF NOVI
MARTIN AVE STORM IMPROVEMENTS
Probable Estimate of Cost
Storm Sewer Removal and Replacement

7/19/2021

| Item No. | Item Description | Unit | Quantity | Unit Price (\$) | Item Cost (\$) |
|----------|---|-------|----------|-----------------|----------------------|
| 1 | Mobilization, Max 5% | LS | 1.00 | \$ 16,000.00 | \$ 16,000.00 |
| 2 | Traffic Maintenance and Control | LS | 1.00 | \$ 5,000.00 | \$ 5,000.00 |
| 3 | Audio Video Route Survey | LS | 1.00 | \$ 1,500.00 | \$ 1,500.00 |
| 4 | Erosion Control | LS | 1.00 | \$ 5,000.00 | \$ 5,000.00 |
| 5 | Dr Structure, Rem | Ea | 8.00 | \$ 750.00 | \$ 6,000.00 |
| 6 | Sewer, Rem, Less than 24 inch | Ft | 350.00 | \$ 25.00 | \$ 8,750.00 |
| 7 | Sewer, Abandon w/Grout, Less than 24 inch | Ft | 600.00 | \$ 18.00 | \$ 10,800.00 |
| 8 | Pavt, Rem | Syd | 1375.00 | \$ 14.00 | \$ 19,250.00 |
| 9 | HP Storm Drain Pipe, 12 inch | Ft | 205.00 | \$ 75.00 | \$ 15,375.00 |
| 10 | HP Storm Drain Pipe, 18 inch | Ft | 145.00 | \$ 95.00 | \$ 13,775.00 |
| 11 | HP Storm Drain Pipe, 24 inch | Ft | 300.00 | \$ 110.00 | \$ 33,000.00 |
| 12 | HP Storm Drain Pipe, 30 inch | Ft | 170.00 | \$ 140.00 | \$ 23,800.00 |
| 13 | HP Storm Drain Pipe, 42 inch | Ft | 420.00 | \$ 170.00 | \$ 71,400.00 |
| 14 | HP Storm End Section, 12 inch | Ea | 8.00 | \$ 400.00 | \$ 3,200.00 |
| 15 | HP Storm End Section, 18 inch | Ea | 4.00 | \$ 500.00 | \$ 2,000.00 |
| 16 | HP Storm End Section, 24 inch | Ea | 1.00 | \$ 700.00 | \$ 700.00 |
| 17 | HP Storm End Section, 42 inch | Ea | 1.00 | \$ 1,200.00 | \$ 1,200.00 |
| 18 | Catch Basin, 48 inch dia | Ea | 2.00 | \$ 2,500.00 | \$ 5,000.00 |
| 19 | Storm Manhole, 48 inch dia | Ea | 1.00 | \$ 3,000.00 | \$ 3,000.00 |
| 20 | Storm Manhole, 60 inch dia | Ea | 5.00 | \$ 4,000.00 | \$ 20,000.00 |
| 21 | Yard Basin, 12 inch | Ea | 6.00 | \$ 500.00 | \$ 3,000.00 |
| 22 | Riprap, Heavy | Syd | 200.00 | \$ 60.00 | \$ 12,000.00 |
| 23 | Ditch Grading | Ft | 900.00 | \$ 22.00 | \$ 19,800.00 |
| 24 | Restoration | LS | 1.00 | \$ 20,000.00 | \$ 20,000.00 |
| | | | | | |
| | Construction Subtotal | | | | \$ 320,000.00 |
| | | | | | |
| | Contingency | % | 10% | | |
| | | | | | |
| | Construction Total | | | | \$ 352,000.00 |
| | | | | | |
| | Design Engineering* | % Fee | 9.25% | | \$29,600.00 |
| | Inspection (Crew Days) | CD | 15.00 | \$ 700.00 | \$10,500.00 |
| | Contract Administration* | % Fee | 6.75% | | \$21,600.00 |
| | Materials Testing* | % Fee | 2.0% | | \$6,400.00 |
| | Permitting | LS | 1.00 | \$ 2,000.00 | \$2,000.00 |
| | | | | | |
| | Total Estimated Cost | | | | \$ 423,000.00 |

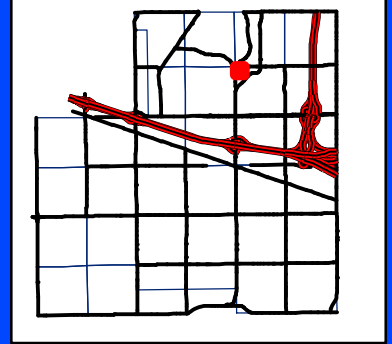
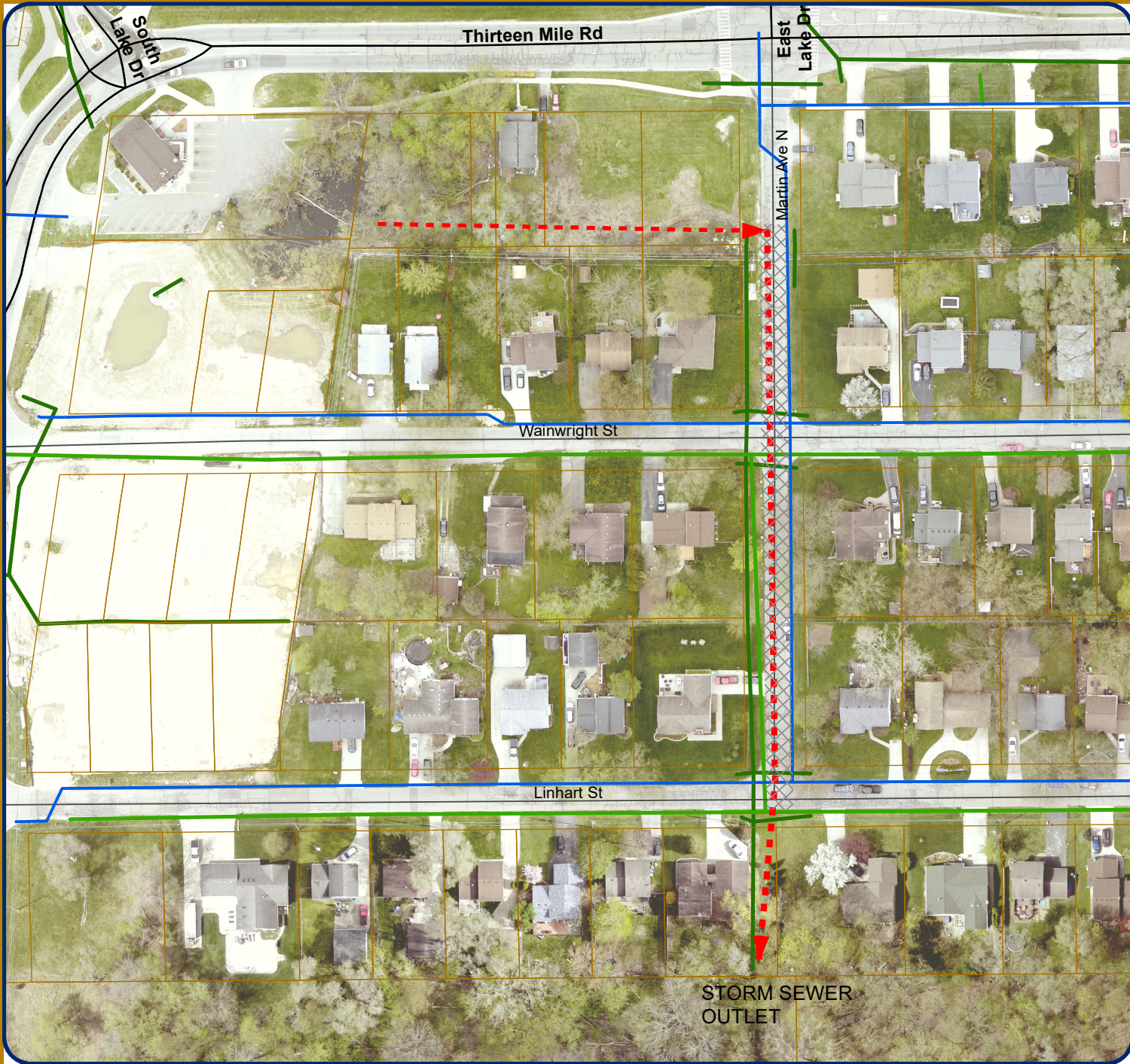
Estimate Assumptions:

Estimate does not include utility coordination/relocation costs or easement costs.

* Per 'Attachment A' of the 2017-2022 Engineering Fee Table

Martin Storm Sewer Improvements

Location Map



Map Legend

- ▶ Proposed Storm Sewer
- Storm Sewer (Existing)
- Water Main
- Sanitary Sewer
- Pavement Replacement



City of Novi
 Engineering Division
 Department of Public Works
 26300 Lee BeGole Drive
 Novi, MI 48375
 cityofnovi.org

Map Author: Croy
 Date: 7/20/21
 Project: Martin Storm Sewer
 Version #: v1.0

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.