



CITY of NOVI CITY COUNCIL

**Agenda Item F
March 18, 2019**

SUBJECT: Approval to award civil engineering services to OHM Advisors for design engineering services associated with the DPW Facility Stormwater Management Compliance Project (Vactor Station and Site Improvements) in the amount of \$92,882.

SUBMITTING DEPARTMENT: Department of Public Works, Water & Sewer Division

CITY MANAGER APPROVAL: 

EXPENDITURE REQUIRED	\$ 92,882.00
AMOUNT BUDGETED	\$ 115,320
APPROPRIATION REQUIRED	\$ 0
LINE ITEM NUMBER	592-592.00-976.079

BACKGROUND INFORMATION:

This project involves upgrades to the Department of Public Works facility to comply with the city's MS4 permit (MS4 refers to a Municipal Separate Storm Sewer System). The goal of the MS4 program is to reduce the discharge of pollutants to lakes, streams, etc. through proper management of facilities, so pollutants are not transported to surface water during rain events. The proposed improvements include the construction of a "vactor station" and reconstruction of a portion of the existing DPW parking lot, as shown on the attached figure.

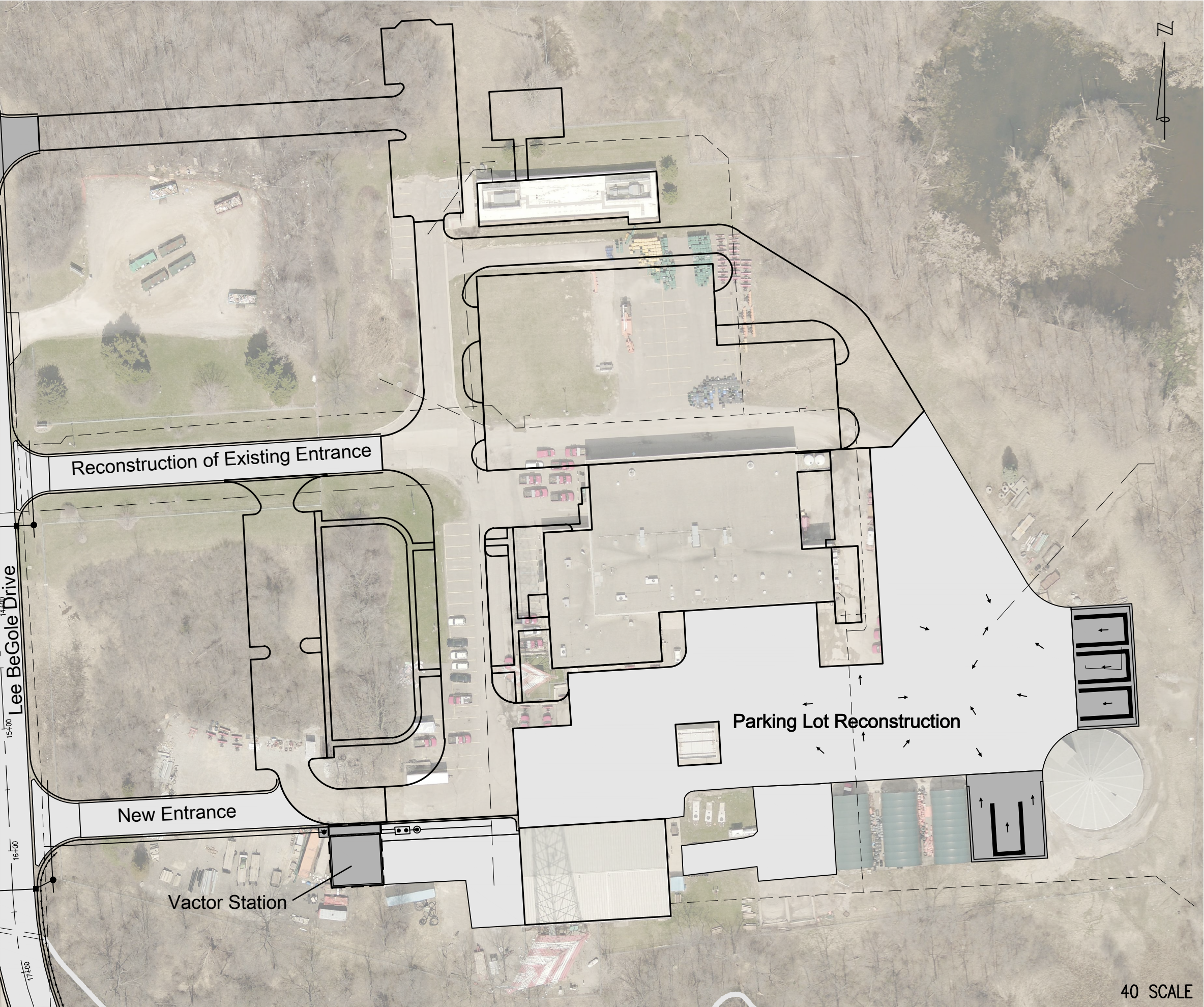
The installation of a vactor station would allow for proper temporary storage of spoils from the city's two vacuum trucks used for cleaning storm sewer catch basins, maintenance of the sanitary sewer system and street sweeping activities. The material collected by these trucks typically has a water content higher than what is permitted to be disposed of at the landfill. This vactor station will provide a method to properly dewater the material, which will drain to the sanitary sewer. Once dewatered, the material can then be loaded and disposed of offsite at the landfill.

The parking lot improvements will include reconstruction of the lot south of the DPW building, reconstruction of a portion of the existing entrance drive, and the construction of a new entrance drive aligned with the southern portion of the parking lot. The parking lot improvements will allow for proper storm water management within the parking lot, including the storm water runoff associated with the salt storage area. Proper storm water management can eliminate the potential for runoff to reach the nearby Bishop Creek to the south of the site.

OHM's engineering fees are based on the fixed fee schedule established in Exhibit B Fee Curve Schedule of the City's general Engineering Services Contract. The attached *Scope of Design Services* proposal outlines the scope of services. The design fees for this project

will be \$92,882, which is 6.5% of the estimated construction cost of \$1,428,950. The construction phase engineering fees will be awarded at the time of construction award and will be based on the construction contractor's bid price.

RECOMMENDED ACTION: Approval to award civil engineering services to OHM Advisors for design engineering services associated with the DPW Facility Stormwater Management Compliance Project (Vactor Station and Site Improvements) in the amount of \$92,882.



Reconstruction of Existing Entrance

New Entrance

Vector Station

Parking Lot Reconstruction

Lee BeGole Drive



40 SCALE



February 18, 2019

Mr. Jeffrey Herczeg
Director of Public Works
City of Novi - Department of Public Works
26300 Lee BeGole Drive
Novi, MI 48375

**RE: Scope of Design Services
Vactor Station and DPW Parking Lot/MS4 Improvements**

Dear Mr. Herczeg:

Per your request, the following outlines our proposed scope of services and fee to perform a design, cost estimate and prepare bidding documents to construct improvements on the DPW site, including a vactor dumping station and parking lot reconstruction. This summary includes our project understanding, proposed scope of work, assumptions, schedule, and fee.

PROJECT UNDERSTANDING

The City of Novi has identified upgrades to the DPW facility for compliance with the City's MS4 storm water permit with the MDEQ. These site improvements include construction of a vactor dumping station and reconstruction of a portion of the existing DPW parking lot.

The vactor dumping station will include area for DPW crews to discharge vactor spoils from sanitary and storm sewer operations. It is also anticipated that the street sweeping spoils will be unloaded in the station as well. The station will include area for spoil dewatering, which will drain to the sanitary sewer system. Solid spoils can then be loaded and disposed of offsite. A pad for waste dumpsters will be incorporated into the station area as containment for discharge, which would be directed to the sanitary sewer as well.

The parking lot work will include the reconstruction of the existing lot south and southeast of the DPW building, reconstruction of the existing main entrance drive, and construction of a new entrance drive aligned with the south portion of the lot. Concrete pads will be constructed around the existing salt dome for material storage and to contain storm water runoff in that location.

SCOPE OF SERVICES

The following outlines our work plan to accomplish the scope of services for this project as noted above:

- Review existing utility information and record drawings for the site.
- Acquire up to date building renovation/site improvement plans and incorporate these into the design set.
- Perform a site review to identify elements that are sensitive to project which includes driveway locations, access issues, geometric deficiencies, drainage features, and utility facilities within the project area.
- Perform topographic survey of the site and prepare existing conditions plans.
- Attend one meeting with the City to review the existing conditions of the site to finalize proposed improvements.

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- Prepare preliminary design plans and specifications with necessary details.
- Coordinate with the Geotechnical Engineer to develop typical pavement sections for the project.
- Prepare technical specifications and method of payment entailing materials, equipment, and labor necessary to perform the work.
- Compute preliminary quantities and prepare a preliminary Engineer's Opinion of Probable Construction Cost.
- Attend one meeting with the City to review the plans and specifications and address any requested revisions.
- Assist the City with coordination of utilities found in the area that may have impacts during construction.
- Coordinate with City staff and other interested parties to prepare a Construction Work Zone plan.
- Prepare proposed preliminary schedule for work including the construction start, substantial completion, and final completion dates.
- Prepare final design plans, specifications and bidding documents with details.
- If required, assist the City with advertising and soliciting bids, printing and distributing bidding documents to interested bidders, tabulate and review the bids, check contractor references and provide a recommendation of the award of the project construction to a qualified contractor.
- Prepare plans and documents required to obtain SESC Permit from the City.

ASSUMPTIONS

The following summarizes our assumptions associated with this proposal:

- Preparation of a revised site plan for presentation to the Planning Commission is not required.
- The City has all property/easements required for the project and no additional property/easements will need to be acquired.
- All fencing and gates for the new access drive will be completed by the City as part of the existing DPW renovation project and are not included in this project.
- No utility pole relocations are necessary as part of the project.
- Geotechnical services are anticipated to be required for design and construction of this project but are not included in our scope of work.
- The City will be responsible for all permit application fees and permit fees.
- We do not anticipate remediation or removal of contaminated or hazardous soils or materials.

SCHEDULE

The following outlines our anticipated schedule milestones of main tasks related to this work:

- 50% plans – April 26, 2019
- 100% plans – June 28, 2019
- Prepare Bid Recommendation for Council Award – July 2019
- Begin Construction – August 2019

FEE

The proposed design fee for the above work per the 2017-2022 Engineering Fee Table is ninety-two thousand eight hundred eighty-two dollars (\$92,882.00).



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: Project Cost Estimates

cc: Ben Croy, Water and Sewer Senior Manager
Alex Parent, OHM
File

CITY OF NOVI
Vactor Station and DPS Parking Lot
Probable Estimate of Cost
1/21/2019

40' x 40' Vactor Station with over 10,000 sq. yd. of parking lot / access drive reconstruction.

Item No.	Item Description	Unit	Quantity	Unit Price (\$)	Item Cost (\$)
1	Mobilization, Max 10%	LS	1	\$ 130,000.00	\$ 130,000.00
2	Clearing	AC	0.05	\$ 50,000.00	\$ 2,500.00
3	Masonry and Conc Structure, Rem	CY	25	\$ 5,000.00	\$ 125,000.00
4	Pavt, Rem, Modified	SY	10657	\$ 10.00	\$ 106,570.00
5	Embankment, CIP	CY	160	\$ 15.00	\$ 2,400.00
6	Excavation, Earth	CY	3785	\$ 8.00	\$ 30,280.00
7	Subgrade Undercutting, Type II, 1 by 3	CY	50	\$ 50.00	\$ 2,500.00
8	Subgrade Undercutting, Type II, 21AA	CY	250	\$ 50.00	\$ 12,500.00
9	Erosion Control, Silt Fence, OCWRC	LF	750	\$ 1.50	\$ 1,125.00
10	Erosion Control, Inlet Protection, OCWRC	EA	5	\$ 100.00	\$ 500.00
11	Project Cleanup	LS	1	\$ 10,000.00	\$ 10,000.00
12	Aggregate Base, Modified	TON	5745	\$ 30.00	\$ 172,350.00
13	Sewer Tap, 8 inch	EA	1	\$ 1,500.00	\$ 1,500.00
14	Sanitary Sewer, SDR-26, 8 inch, Tr Det B	LF	75	\$ 75.00	\$ 5,625.00
15	Dr Structure Cover, Adj, Case 1	EA	5	\$ 750.00	\$ 3,750.00
16	San Structure, 60 inch dia	EA	1	\$ 3,000.00	\$ 3,000.00
17	San Structure, Interior Drop Connection	EA	1	\$ 1,500.00	\$ 1,500.00
18	San Holding Tank, 2000 Gallon	EA	1	\$ 7,500.00	\$ 7,500.00
19	Underdrain, Subgrade, Open-Graded, 6 inch	LF	1460	\$ 10.00	\$ 14,600.00
20	Hand Patching	TON	100	\$ 125.00	\$ 12,500.00
21	HMA, 3E3	TON	2258	\$ 85.00	\$ 191,930.00
22	HMA, 5E3	TON	2258	\$ 90.00	\$ 203,220.00
23	Conc Pavt, Misc, Nonreinf, 9 inch	SY	1063	\$ 80.00	\$ 85,040.00
24	Curb and Gutter, Conc, Det F4	LF	1290	\$ 20.00	\$ 25,800.00
25	Driveway Opening, Conc, Det M	LF	170	\$ 25.00	\$ 4,250.00
26	Barricade, Type III, High Intensity, Lighted, Furn	EA	10	\$ 75.00	\$ 750.00
27	Barricade, Type III, High Intensity, Lighted, Oper	EA	10	\$ 1.00	\$ 10.00
28	Minor Traf Devices	LS	1	\$ 5,000.00	\$ 5,000.00
29	Water Main, DI, 6 inch, Open Cut	LF	230	\$ 75.00	\$ 17,250.00
30	Fire Hydrant	EA	1	\$ 6,000.00	\$ 6,000.00
31	40' by 20' Interlocking Precast Concrete Storage Areas	EA	4	\$ 37,500.00	\$ 150,000.00
32	Audio Video Route Survey	LS	1	\$ 1,500.00	\$ 1,500.00
33	Utility Conflicts	LS	1	\$ 10,000.00	\$ 10,000.00
34	Vactor Discharge Assembly	LS	1	\$ 7,500.00	\$ 7,500.00
35	Vactor Station, Concrete	LS	1	\$ 75,000.00	\$ 75,000.00
	Construction Subtotal				\$ 1,428,950.00
	Contingency	%	10%		
	Construction Total				\$ 1,571,845.00
	Design Engineering*	% Fee	6.50%		\$92,882.00
	Geotechnical Investigation	LS	1.00	\$ 7,500.00	\$7,500.00
	Inspection (Crew Days)	CD	45.00	\$700.00	\$31,500.00
	Contract Administration*	% Fee	5.50%		\$78,593.00
	Materials Testing	LS	1.00	\$ 7,500.00	\$7,500.00
	R.O.W. Acquisition	LS	1.00		\$0.00
	Permitting	LS	1.00	\$ 7,500.00	\$7,500.00
	Contingency	%	10%		\$ 22,548.00
	Total Estimated Cost				\$ 1,819,868.00

Estimate Assumptions: