



**CITY OF NOVI CITY COUNCIL**  
**JANUARY 25, 2021**

**SUBJECT:** Approval to award engineering design services to OHM Advisors for the construction of a 15-inch gravity sanitary sewer under I-96 and abandonment of the West Oaks pump station in the amount of \$39,240.00.

**SUBMITTING DEPARTMENT:** Department of Public Works, Engineering Division

<b>EXPENDITURE REQUIRED</b>	<b>\$ 39,240.00</b>
<b>AMOUNT BUDGETED</b>	<b>\$ 485,790.00</b>
<b>APPROPRIATION REQUIRED</b>	<b>\$ 0</b>
<b>LINE ITEM NUMBER</b>	<b>592-592.00-976.071</b>

**BACKGROUND INFORMATION:** This project involves the construction of a 15-inch diameter gravity sanitary sewer under I-96, which will allow the abandonment of the existing West Oaks sanitary sewer pump station and force main. The pump station was constructed in the 1990s following the collapse of the gravity sewer serving this area. Since pump stations require a significant amount of perpetual maintenance, this project reestablishes a gravity sewer, which is a more cost-effective alternative. Inspection of the old gravity sewer reaffirmed the old pipe cannot be salvaged. The new sewer will be bored under I-96, with minimum disruption to existing infrastructure.

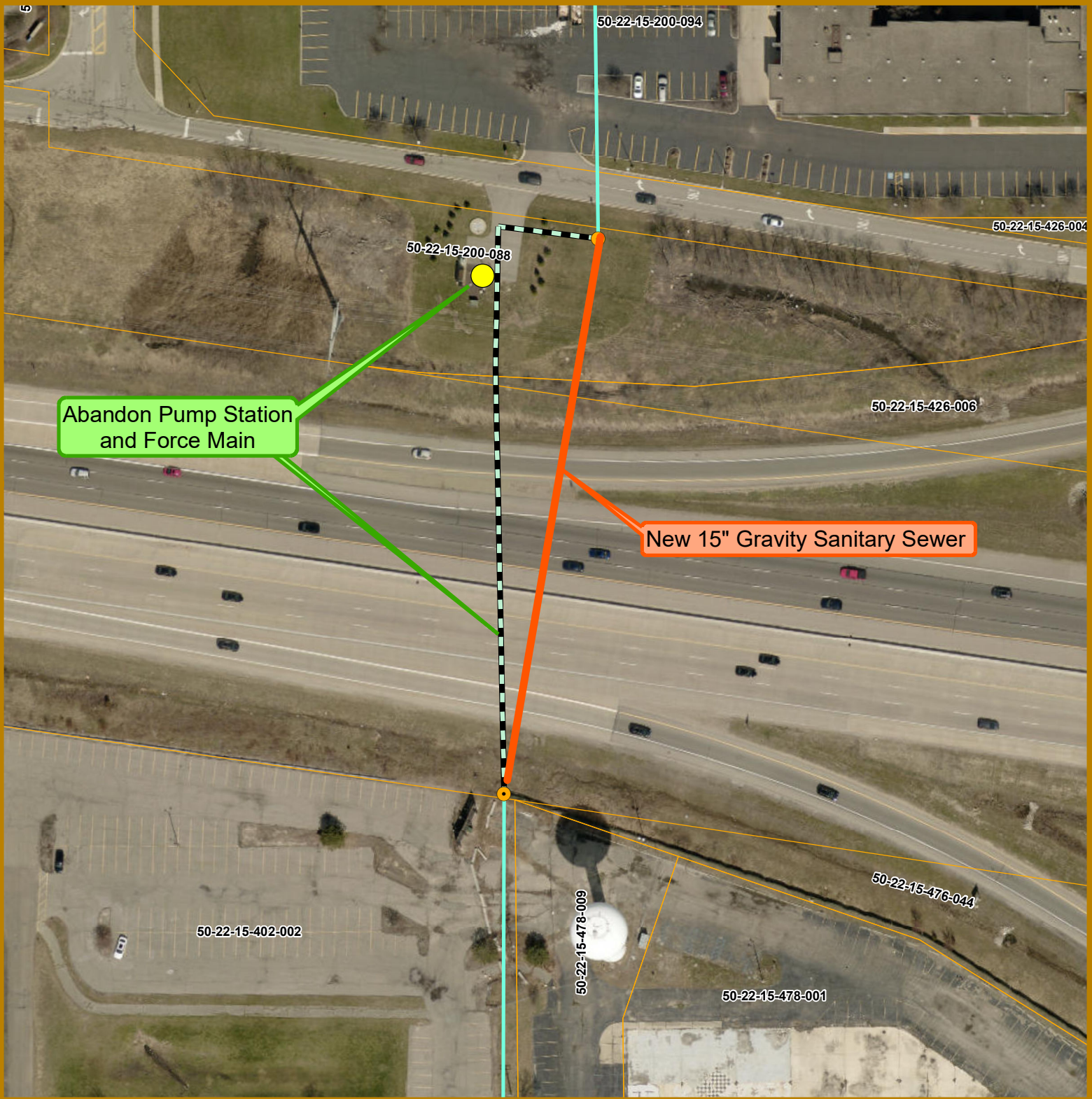
The attached design engineering services proposal outlines the detailed scope of services. The design fee for this project will be \$39,240.00 (9.0% of the estimated construction cost of \$436,000). OHM Advisor's engineering fees are based on the fixed fee schedule established in the Agreement for Professional Engineering Services for Public Projects.

Design of this project would begin following award with construction expected to start in June 2021.

**RECOMMENDED ACTION:** Approval to award engineering design services to OHM Advisors for the construction of a 15-inch gravity sanitary sewer under I-96 and abandonment of the West Oaks pump station in the amount of \$39,240.00.

# I-96 Sanitary Sewer Crossing and West Oaks Pump Station Abandonment

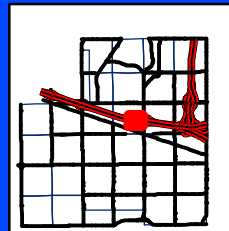
\*Utility Locations are Approximate\*



Map Author: Humna Anjum  
 Date: 1/12/2021  
 Project: I96 SS/West Oaks PS  
 Version #: 1.1

### Map Legend

- Sanitary Lift Station
- Sanitary Manhole
- Force Main**
- 8"
- Gravity Main**
- 15"



**City of Novi**

Engineering Division  
 Department of Public Works  
 26300 Lee BeGole Drive  
 Novi, MI 48375  
[cityofnovi.org](http://cityofnovi.org)



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.



January 11, 2021

Ms. Rebecca Runkel  
Project Engineer  
City of Novi, Department of Public Services  
26300 Lee Begole Drive  
Novi, MI 48375

RE: Scope of Design Services  
West Oaks Sewer Replacement and Pump Station Abandonment

Dear Ms. Runkel:

We are submitting this scope of services as a follow up to our prior discussions and the City's desire to prepare design documents for construction of the West Oaks sewer crossing with the anticipated start of construction in the upcoming spring and summer. The following outlines our Project Understanding, Scope of Work, Schedule, and Fee for the construction phase of this project.

**Project Understanding**

We understand this project to include the construction of approximately 300 feet of 15-inch gravity sanitary sewer and abandonment of the existing West Oaks pump station under I-96, generally between Novi Road and Donelson Drive. We understand the City desires for OHM Advisors to provide professional services through consistent with our on-going Agreement for Civil Engineering Services. 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. The current opinion of construction cost is \$436,000.00.

**Scope of Work**

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 sanitary sewer design phase of work as follows:

- Survey and Obtain Information
- Plan Development and Permitting
- Bidding and Award
- Coordination with the City selected Geotechnical Consultant for soil borings
- Project Close-out

The scope of engineering services shall include the following tasks:

1. Attend an initial kick-off meeting with City Staff to discuss the project scope and schedule.
2. Conduct a follow up site visit and offer recommendations for the design of improvements related to the installation of the sanitary sewer and abandonment of the existing pump station.
3. Review the geotechnical investigation by others. Incorporate the recommendations in the report into the plans and specifications as confirmed by the City.



4. Perform supplemental topographic survey along the project route to assist in evaluation of the sanitary sewer main and lead depths required for gravity service. Topographic survey will be limited to areas outside of the I-96 right-of-way, along the project alignment.
5. Perform preliminary engineering for the installation of a 15" diameter gravity sanitary sewer along the route. Determine grading limits, road impacts, staging, utility conflicts and flow control or bypass pumping requirements, based on the design of the sanitary sewer. Update construction cost estimate to the preliminary stage, based on this level of design.
6. Perform preliminary engineering for the abandonment of the West Oaks pumping station and force main.
7. Meet with the City and confirm preliminary route for sanitary 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.
8. Prepare 90% design plans and specifications for the project improvements for City review.
9. Prepare applications and plans for the sanitary sewer and MDOT right-of-way permit.
10. Prepare SESC plan sheets.
11. Attend one meeting with the City to review the plans and specifications and address any requested revisions.
12. Prepare final bid set documents for the project.
13. 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.

#### **Schedule**

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

- 30% plans – March 2021
- 100% plans – April 2021
- Prepare Bid Recommendation for Council Award – May 2021
- Tentative Construction Start – June 2021
- Tentative Construction Completion – July 2021

This schedule is based upon an authorization to proceed given by January 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. Right-of-way and/or easement acquisitions if applicable – to be acquired by the City
4. Traffic impact studies
5. Remediation or removal of contaminated or hazardous soils or materials.
6. Pavement Evaluation or 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:

- Design Fee at 9.00% of construction cost (\$436,000) = \$39,240



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. If you have any questions regarding this proposal, please do not hesitate to contact me at 248-751-3111.

Sincerely,  
OHM Advisors

Authorization to Proceed

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Steve Siklich, P.E.  
Project Manager

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Signature

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Date

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Printed Name

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Title

Encl: Cost Estimate

cc: Ben Croy, City Engineer  
Tim Juidici, PE, OHM

**CITY OF NOVI**  
**I-96 Sewer Crossing and West Oaks Pump Station Abandonment**  
**Probable Estimate of Cost**  
**12/30/2020**

**Jack and Bore approximately 300' of 15" sanitary sewer under I-96**  
**Work also includes the abandonment of the West Oaks Pump Station**

Item No.	Item Description	Unit	Quantity	Unit Price (\$)	Item Cost (\$)
1	Mobilization, 5%	LS	1.00	\$ 20,800.00	\$ 20,800.00
2	Audio Video Route Survey	LS	1.00	\$ 2,000.00	\$ 2,000.00
3	Traffic and Maintenance and Control	LS	1.00	\$ 10,000.00	\$ 10,000.00
4	Soil Erosion Control	LS	1.00	\$ 5,000.00	\$ 5,000.00
5	Dewatering	LS	1.00	\$ 15,000.00	\$ 15,000.00
6	Sanitary Sewer, PVC Truss, 15 inch	FT	430.00	\$ 230.00	\$ 98,900.00
7	Casing Pipe, 30 inch, Jack and Bore	FT	300.00	\$ 650.00	\$ 195,000.00
8	Connection to Existing Sanitary Manhole	EA	2.00	\$ 2,500.00	\$ 5,000.00
9	4' Sanitary Manhole	EA	2.00	\$ 8,000.00	\$ 16,000.00
10	Storm Sewer Reconstruct	FT	50.00	\$ 150.00	\$ 7,500.00
11	Reconstruct Structure	EA	2.00	\$ 3,000.00	\$ 6,000.00
12	Pavement Removal	Syd	50.00	\$ 40.00	\$ 2,000.00
13	Tree Removal	Each	1.00	\$ 700.00	\$ 700.00
14	Aggregate Base, 21AA, 8 inch	Syd	50.00	\$ 25.00	\$ 1,250.00
15	Trench Undercut and Refill	Cyd	50.00	\$ 50.00	\$ 2,500.00
16	HMA, 4 inch, Parking Lot	Ton	12.00	\$ 250.00	\$ 3,000.00
17	Abandon Existing Sanitary Force Main	LS	1.00	\$ 10,000.00	\$ 10,000.00
18	Abandon West Oaks Lift Station	LS	1.00	\$ 25,000.00	\$ 25,000.00
19	Restoration (Topsoil, Seed and Mulch)	Syd	1000.00	\$ 10.00	\$ 10,000.00
	Construction Subtotal				\$ 436,000.00
	Contingency	%	10%		
	<b>Construction Total</b>				<b>\$ 479,600.00</b>
	Design Engineering*	% Fee	9.00%		\$39,240.00
	Geotechnical Investigation	LS	1.00	\$ 10,000.00	\$10,000.00
	Inspection (Crew Days)	CD	25.00	\$700.00	\$17,500.00
	Contract Administration*	% Fee	6.75%		\$29,430.00
	Materials Testing	LS	1.00	\$ 10,000.00	\$10,000.00
	R.O.W. Acquisition	LS	1.00	\$ 5,000.00	\$5,000.00
	Permitting	LS	0.00	\$ -	\$0.00
	[Other_Non-Bid_Items]	LS	0.00	[Price]	[Cost]
	Services Contingency	%	10%		\$11,117.00
	<b>Total Estimated Cost</b>				<b>\$ 601,887.00</b>

Estimate Assumptions:

Easement Acquisition may be required south of I-96. This project opinion assumes soils are conducive to jack and bore under I-96.

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