



CITY OF NOVI CITY COUNCIL
SEPTEMBER 9, 2024

SUBJECT: Approval to award engineering design services to OHM Advisors for the design of Bellagio Sanitary Lift Station Improvements, in the amount of \$33,660.00.

SUBMITTING DEPARTMENT: Department of Public Works, Engineering Division

KEY HIGHLIGHTS:

- \$33,660.00 requested for engineering design for Bellagio Sanitary Lift Station Improvements.
- The Bellagio Lift Station is already at ~70% firm capacity.
- Upsizing pump station components is needed to meet current demands.

FINANCIAL IMPACT:

	FY 23/24	FY 24/25	FY 25/26	Total
EXPENDITURE REQUIRED	\$ 0	\$ 40,392.00	\$ 802,551.00	\$ 842,943.00
BUDGET				
1. Water and Sewer Fund (592-536.00-976.220)	\$ 891,414.00	\$	\$	\$ 891,414.00
APPROPRIATION REQUIRED	\$	\$	\$	\$ 0
FUND BALANCE IMPACT	\$	\$	\$	\$ 0
<ul style="list-style-type: none"> • Project budgeted and rolled over • Expenditures Required include contingency, geotechnical and crew days 				

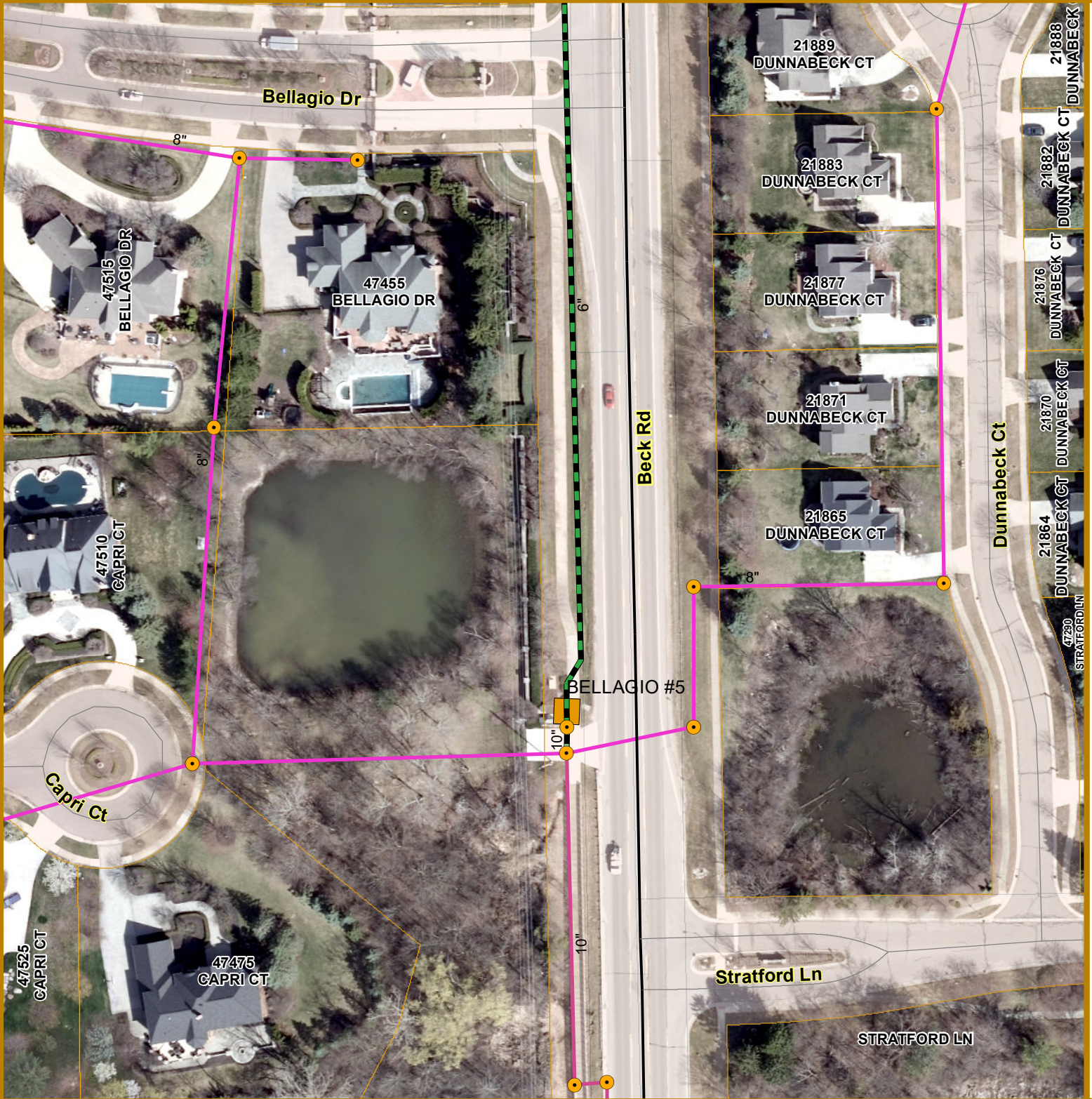
BACKGROUND INFORMATION:

The Bellagio Sanitary Lift Station was identified in the 2023 Sanitary Master Plan for capacity upgrades based on expected growth. The existing design peak flow is 67% of the pump station's firm capacity (capacity met during peak demand when the largest pumping unit is out of service) and current development will result in flows reaching 100% of the firm capacity. This project will include upsizing of select pump station components to meet current demands.

City engineering consultant, OHM Advisors, prepared a scope of services for design of the lift station improvements. The attached proposal outlines the detailed scope of services. The design fee will be \$33,660.00 (5% of the estimated construction cost of \$673,200.00). Design of the project would begin following the award, with construction expected to start in the fall of 2025.

RECOMMENDED ACTION: Approval to award engineering design services to OHM Advisors for the design of Bellagio Sanitary Lift Station Improvements, in the amount of \$33,660.

Bellagio Sanitary Lift Station Location Map



Map Author: Runkel
Date: 8-27-24
Version #: 1.0

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.

Legend

- Sanitary Manhole
- Sanitary Lift Station
- 6"
- 10"
- Gravity Main
- 8"
- 10"



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





August 8, 2024

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

**RE: Scope of Design Services
Bellagio Sanitary Lift Station Improvements**

Dear Mr. Croy:

Per your request, the following outlines our proposed scope of services and fee to perform design services related to the above referenced project. This summary includes our project understanding, proposed scope of work, assumptions, schedule, and fee.

PROJECT UNDERSTANDING

The project will consist of limited upsizing of duplex pumps, valves, flow meter, piping, electrical, instrumentation and related site improvements at the Bellagio sanitary lift station. Upsizing of select pump station components is needed to meet future demands of the station.

The concrete structures and force main for the station will remain. Since the existing station is in service, bypass pumping will be required during construction to maintain sanitary flow. The station's process-mechanical features (piping, pumps, valves) and instrumentation will be designed per current City standards and/or 10 State Standards for permitting through EGLE. Site improvements will include reconstruction of the drive and sidewalk as needed, site landscaping, control & services panels, and a dedicated natural gas generator. The projected construction cost for the station's rehabilitation is approximately \$675,000.

SCOPE OF SERVICES

Design Phase

The following outlines our work plan to accomplish the design phase of work:

- ▶ Organize and attend a kickoff meeting with City staff and utility companies to review project objectives, prepare design criteria, and establish a specific delivery schedule.
- ▶ Preparation of "bidding" plans and specifications for providing pumping, valves, piping, electrical, instrumentation and related site improvements at the Bellagio sanitary pump station. The existing structures and force main will be used as part of the project and new equipment will be installed within those structures.
- ▶ Cost estimates, necessary field work, drafting, design, surveying, bid assistance, and project management. Engineering disciplines may include civil, process, structural, architectural, electrical, instrumentation, process, and mechanical engineering.
- ▶ Perform a site review to identify elements that are sensitive which includes including driveway locations, utility facilities, drainage features, access issues, etc.
- ▶ Coordinate with local/state agencies (i.e. City, WRC, EGLE) on key issues that will impact their review of the station design.



- ▼ Prepare project manual for bidding the proposed work, consisting of bidding requirements and forms, contract forms, general conditions, and supplementary general conditions. These documents will be the current City of Novi standards. Technical specifications for the proposed work will be OHM standards.
- ▼ Prepare sanitary sewer pump station improvement details and schedules including piping, valves, site improvement details, controls, telemetry, electrical, and lighting.
- ▼ Prepare a soil erosion and sedimentation control plan.
- ▼ Complete one (1) QA/QC meeting with the City (at the 75% milestone) to review the plans. OHM Advisors will provide the city with hard copies of the engineering plans one (1) week prior to the meeting date.
- ▼ Prepare a final engineer's opinion of probable cost.
- ▼ Provide one (1) digital plan set and three (3) paper plan sets to the city.
- ▼ Preparation of EGLE Part 41 Construction Permit Applications for the project.
- ▼ Ongoing project administration, such as invoicing, preparation of meeting minutes, progress reports, budget control, and coordination with the city.
- ▼ Coordinate, facilitate and/or attend project-related meetings, such as pre-bid and project progress meetings.
- ▼ Prepare final bid set documents for the project.
- ▼ Assist the City with advertising and soliciting bids, printing and distributing bidding documents to interested bidders, tabulating and reviewing the bids, checking contractor references and providing a recommendation of the award of the project construction to a qualified contractor.

SCHEDULE

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

- 50% plans – October 2024
- 100% plans – January 2025
- Prepare Bid Recommendation for Council Award – February 2025
- Tentative Construction Start – Spring 2025
- Tentative Construction Completion – Fall 2025

ASSUMPTIONS

The following summarizes our assumptions associated with this proposal:

- The City will be responsible for all permit application fees and permit fees.
- The City will provide CAD files for the existing pump station that will be relied on and used for the pump station improvements.
- The proposed work will be done within existing Beck Road right-of-way. Additional right-of-way and/or easements are not anticipated, but if required the City will acquire.
- We do not anticipate remediation or removal of contaminated or hazardous soils or materials.
- Geotechnical services are not anticipated to be required for this project and not included in our scope of work.
- Design for private utility relocation or repair is not included. We do anticipate coordinating with DTE for power supply and Consumers for gas service to the generator.
- In the event any additional services are required by OHM Advisors, an addendum to the supplemental engineering agreement will be submitted for your approval prior to performing said services. Such addendum may include construction phase 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 5.0% of construction cost (\$673,200) = \$33,660.00



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: Opinion of Cost

cc: Rebecca Runkel, Novi
Lambrina Tercala, OHM
File

Project Summary Engineer's Opinion of Probable Project Costs



Owner: City of Novi, Michigan
Project: Master Plan
Work: Replace pumping equipment at Bellagio PS
Reuse Wetwell and Valve Vault
 Conceptual Preliminary Final

Date: 10/11/2023
Project No.: _____
Prepared By: TJJ/EM
Reviewer: _____
Current ENR: 13230.00

Item No.	Item Description	Est. Quantity	Unit	Unit Price	Total Cost
1	Mobilization	1	LS	\$35,000.00	\$35,000.00
2	Bypass Pumping	8	Weeks	\$20,000.00	\$160,000.00
3	2 Submersible Pumps, Flygt Concertor DP N100, Control Panel, Pressure Transducer, Guide Rails	1	EA	\$140,000.00	\$140,000.00
4	6" Check Valves	2	EA	\$3,000.00	\$6,000.00
5	6" Plug Valve	3	EA	\$2,600.00	\$7,800.00
6	6" Gate Valve & Box	1	EA	\$2,400.00	\$2,400.00
7	6" Ductile Iron Pipe	1	LS	\$60,000.00	\$60,000.00
8	Magnetic Flow Meter	1	EA	\$20,000.00	\$20,000.00
9	6" Ductile Iron Fittings and Sleeves	1	LS	\$30,000.00	\$30,000.00
10	Natural Gas Generator	1	LS	\$45,000.00	\$45,000.00
11	Miscellaneous Concrete	1	LS	\$5,000.00	\$5,000.00
12	Electrical	1	LS	\$70,000.00	\$70,000.00
13	Instrumentation	1	LS	\$59,000.00	\$59,000.00
14	Site Improvements	1	LS	\$33,000.00	\$33,000.00
15					
TOTAL CONSTRUCTION COST:					\$673,200.00
	Contingency	10%			\$68,000.00
	Design	5%			\$34,000.00
	CA/CE	6.00%			\$41,000.00
	Crew Days	\$ 800.00	day	20	\$16,000.00
TOTAL:					\$159,000.00
ENGINEER'S OPINION OF PROJECT COST					\$840,000.00