



# CITY of NOVI CITY COUNCIL

**Agenda Item F**  
**June 3, 2019**

**SUBJECT:** Approval to award civil engineering services to Spalding DeDecker for design engineering services associated with the Drakes Bay and Wixom Pump Station Improvement project in the amount of \$48,086.50.

**SUBMITTING DEPARTMENT:** Department of Public Works, Water and Sewer Division

**CITY MANAGER APPROVAL:** *PA*

<b>EXPENDITURE REQUIRED</b>	<b>\$ 48,086.50</b>
<b>AMOUNT BUDGETED</b>	<b>\$ 957,308</b>
<b>APPROPRIATION REQUIRED</b>	<b>\$ 0</b>
<b>LINE ITEM NUMBER</b>	<b>592-592.00-976.081</b>

## **BACKGROUND INFORMATION:**

This project involves the upgrade and improvement of two of the city's eighteen sanitary sewer pump stations. The Drakes Bay and the Wixom pump stations are located on Wixom Road between Ten Mile and Eleven Mile Roads, as shown on the attached location map. These stations serve multiple subdivisions in the western portion of the city (Island Lake, Knightsbridge Gate, Andelina Ridge) and the surrounding area, plus a portion of the future development of the Links of Novi golf course.

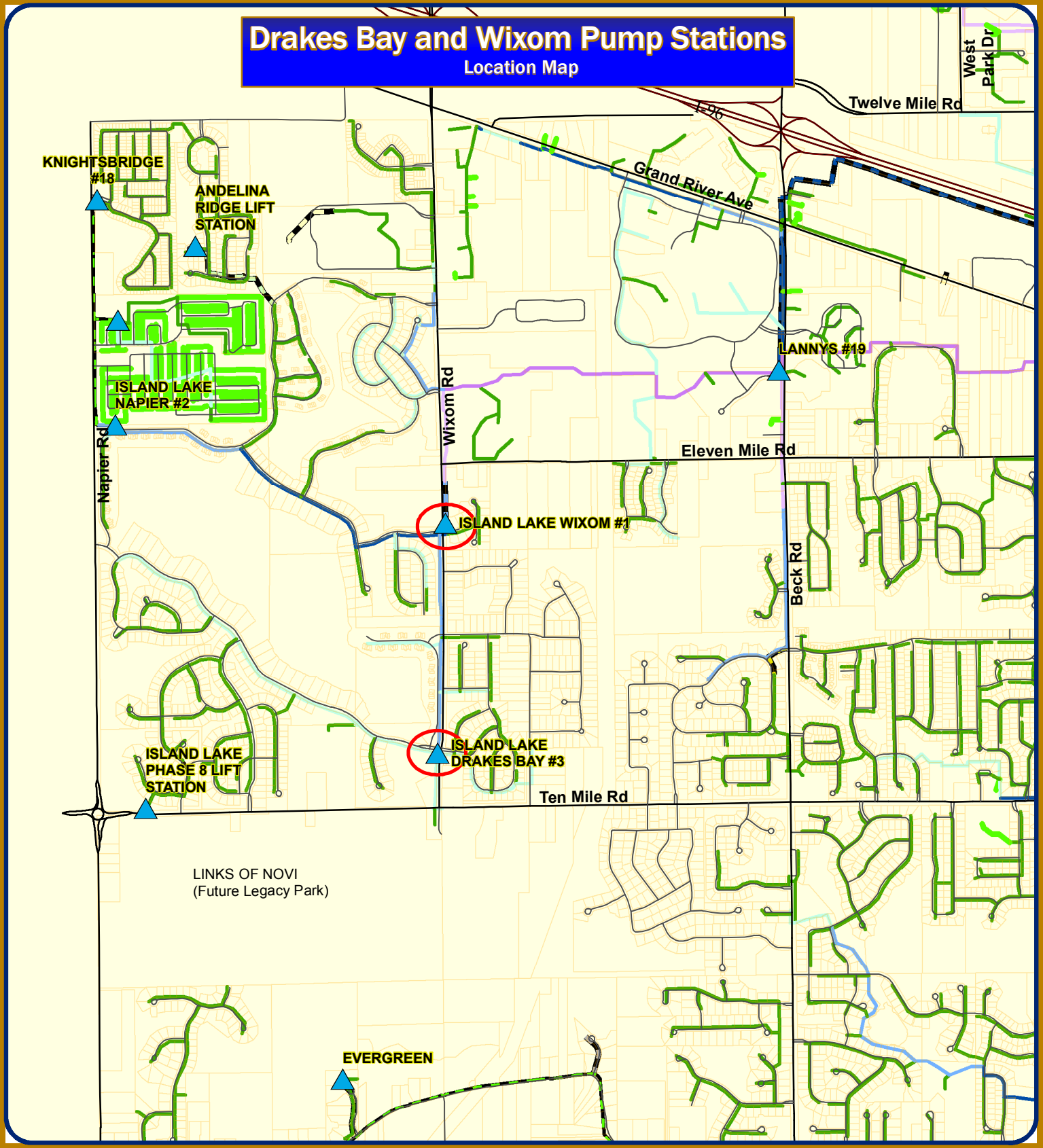
The 2014 Sanitary Sewer Capacity Assessment identified the need to upgrade these two pump stations to accommodate the future growth in this area of the city. In addition to the modifications to increase the capacity of the stations (i.e. new pumps, and generator if needed), this project will also include some upgrades to the control panel and level sensing equipment at each station.

The attached design engineering services proposal outlines the scope of services in more detail. The design cost of the project is \$48,086.50 (8.75% of the estimated construction cost of \$549,560). The Water and Sewer Division has reviewed the scope of services proposal and recommends approval.

**RECOMMENDED ACTION:** Approval to award civil engineering services to Spalding DeDecker for design engineering services associated with the Drakes Bay and Wixom Pump Station Improvement project in the amount of \$48,086.50.

# Drakes Bay and Wixom Pump Stations

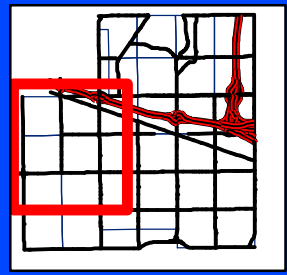
## Location Map



Map Author: Croy  
 Date: May 2019  
 Project: Drakes Bay/Wixom  
 Version #: v1.0

**Map Legend**

▲ Sanitary Lift Station



**CITY OF NOVI**  
 Engineering Division  
 Department of Public Services  
 26300 Lee BeGole Drive  
 Novi, MI 48375  
 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.

Feet  
 0 410 820 1,640 2,460

1 inch = 2,000 feet

May 20, 2019

Ben Croy, PE  
Water and Sewer Senior Manager  
City of Novi  
26300 Lee BeGole Drive  
Novi, Michigan 48375

**Re: Drakes Bay – Wixom Pump Stations Rehabilitation  
Proposal for Civil Engineering Services  
PR19-013**

Dear Mr. Croy:

Spalding DeDecker (SD) is pleased to provide the following proposal for engineering design services to increase the capacity of Drakes Bay and Wixom sanitary sewer pump stations to incorporate other improvements to the stations for current and future demands.

### **Project Understanding**

SD will utilize the capacity study we recently completed along with reviewing the existing sanitary sewer study completed by OHM in 2014 which also outlined current and future population of the district. Using the information we will calculate the required pumping capacity of each pump station for the anticipated future population.

The work on Drakes Bay pump station will include new pumps sized for the anticipated future flows, upgrade the generator as needed, provide an ultrasonic level transducer and control panel upgrades. The work at Wixom pump station will include new pumps sized for the anticipated future flows, upgrade the generator, as needed, provide an ultrasonic level transducer, control panel upgrades and work on the existing drive and parking area at the facility.

### **Proposed Scope of Services**

SD's scope will include:

- Prepare a topographic survey of the Wixom Pump Station and utilize existing site information for Drakes Bay. We will verify the information we have on file is correct.
- Review current documentation for the pump station and determine the appropriate method (new pumps or rehabilitate the current pumps) to increase the capacity.
- Prepare preliminary layout and cost estimate for review.
- Prepare MDEQ permit applications for submittal.
- Prepare 90% plans and specifications for final review.
- Prepare complete set of bid documents including plans and specifications.
- SD will assist the City during the bidding process as needed.

## Construction Cost Estimate and Proposed Fees

Based on our pre-qualification status with the City, engineering design fees are typically based on a pre-determined percentage of the pre-design construction cost estimate. A preliminary cost estimate for the project has been generated with an estimated cost of \$549,560. Based on this estimated cost, the fee for this project will be:

Design Phase Services (8.75% of estimated cost) - **\$48,086.50**

## Project Schedule

The following summarizes the anticipated schedule for the project:

Milestone	Completed By
Design Project Award	6/4/2019
Initial Meetings and Site Visits	6/7/2019
Survey Field Work	7/1/2019
30% Preliminary Plans	7/15/2019
MDEQ Permit Submittals	7/18/2019
90% Final Plans	8/2/2019
100% Bid Package & Advertising	8/15/2019
Bid Opening	9/5/2019
Award by Council	9/23/2019
Construction Start	10/30/2019
Construction Completion	12/16/2019

Thank you for the opportunity to provide this proposal for Engineering Services. Please don't hesitate to contact me if you have any questions or comments regarding this submittal.

**SPALDING DEDECKER ASSOCIATES, INC.**



David Richmond, PE  
Senior Project Manager

## OPINION OF PROBABLE CONSTRUCTION COST

PROJECT NAME: Drakes Bay and Wixom Pump Stations Upgrades  
CLIENT NAME: CITY OF NOVI  
PREPARED BY: DER

PROJECT NO: PR19013  
DATE: 20-May-19

NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
1	Bonds, Insurance & Mobilization (5% max)	1	LS	\$ 23,800.00	\$ 23,800.00
2	Pre Construction Audio/Visual DVD Coverage	1	LS	\$ 1,800.00	\$ 1,800.00
3	Soil Erosion and Sedimentation Control Measures	1	LS	\$ 1,500.00	\$ 1,500.00
4	Temporary Traffic Control Devices	1	LS	\$ 5,000.00	\$ 5,000.00
5	Submersible Pump, Remove and Replace - Drakes Bay	2	EA	\$ 42,000.00	\$ 84,000.00
6	Control Panel Improvements - Drakes Bay	1	EA	\$ 12,500.00	\$ 12,500.00
7	Submersible Level Transducer - Drakes Bay	1	EA	\$ 8,500.00	\$ 8,500.00
8	Generator - Drakes Bay	1	EA	\$ 70,000.00	\$ 70,000.00
9	Submersible Pump, Remove and Replace - Wixom	2	EA	\$ 85,000.00	\$ 170,000.00
10	Control Panel Improvements - Wixom	1	EA	\$ 12,500.00	\$ 12,500.00
11	Submersible Level Transducer - Wixom	1	EA	\$ 8,500.00	\$ 8,500.00
12	Generator - Wixom	1	EA	\$ 90,000.00	\$ 90,000.00
13	HMA Driveway, Complete	50	SF	\$ 100.00	\$ 5,000.00
14	Restoration	1	LS	\$ 6,500.00	\$ 6,500.00
<b>Construction Subtotal:</b>					\$ 499,600.00
				Contingency: 10%	\$ 49,960.00
<b>Construction Total:</b>					\$ 549,560.00
				Design Engineering: 8.75%	\$ 48,086.50
				Geotechnical Investigation:	\$ -
				Inspection (Crew Days at \$700/Day): 20	\$ 14,000.00
				Contract Administration: 6.00%	\$ 32,973.60
				Material Testing:	\$ -
				ROW Acquisition:	\$ -
				Permitting:	\$ -
				[Other Non Bid Items]:	\$ -
<b>OPINION OF PROBABLE CONSTRUCTION COST</b>					<b>Total Estimated Project Cost:</b> \$ 644,620.00

*In providing opinions of probable construction cost, the Client understands that the Consultant has no control over the cost or availability of labor, equipment or materials, or over market conditions or the Contractor's method of pricing, and that the Consultant's opinions of probable construction costs are made on the basis of the Consultant's professional judgement and experience. The Consultant makes no warranty, express or implied, that the bids or the negotiated cost of the Work will not vary from the Consultant's opinion of probable construction cost.*

NOTES: