



CITY OF NOVI CITY COUNCIL
APRIL 17, 2023

SUBJECT: Consideration of approval of the final balancing change order and the final payment to D.V.M. Utilities, Inc. for the Nine Mile Sanitary Relief Sewer project, in the amount of \$113,204.29 and \$303,009.74, respectively, plus interest earned on retainage.

SUBMITTING DEPARTMENT: Department of Public Works, Engineering Division

EXPENDITURE REQUIRED	\$ 203,009.74 Expenditure \$ 100,000.00 Retainage \$ 303,009.74 Total
AMOUNT BUDGETED	\$ 364,756.00
APPROPRIATION REQUIRED	\$ 0
LINE ITEM NUMBER	592-536.00-976.029

BACKGROUND INFORMATION:

The Nine Mile Sanitary Sewer project involved the replacement of approximately 6,400 feet of force main sanitary sewer with gravity sewer from Evergreen Court to Kensington (see attached Location Map). The main purpose of this project was to provide redundancy to the Park Place pump station, which is 1.6 miles from the closest gravity sewer outlet (near Kensington).

Construction began in early February of 2019 with the western third of the project which was installed via the open-cut trench method since the depths of the main were fairly shallow. At this same time, the contractor, DVM Utilities, Inc., also began preparing for the deeper portions of the proposed sewer by installing a significant groundwater dewatering system.

Difficulties began when the contractor approached the deeper parts of the installation. Progress was slowed and stalled many times mainly due to narrow

construction width limits; maintaining traffic; encountering excessive groundwater (even more than the dewatering system could handle); and numerous changes in ground conditions (rocks and boulders).

Changed conditions, above and below ground, forced the project to explore different methods for installing the new pipe and proposed manhole structures. Delays were realized when the contractor had to adjust for these different methods. These methods varied from open-cut or directional drilling or guided pilot tube or bore & jack drilling.

Although a difficult project, it was successfully completed in May of 2022. Below is a summary of change orders issued to the contract:

Change Order No.	Date Approved	Amount	Description of Change Order
1	04/15/2019	\$20.00	Balancing of Tree Clearing Items No. 7 & 8
2	07/08/2019	-\$11.32	Xypex Treatment additive and balancing of Erosion Control/Silt Fence Item
3	01/10/2020	\$99,000.00	Upsize the dewatering header pipe from 12-inch to 18-inch, material only
4	02/24/2020	\$97,332.34	Additional increases for dewatering header pipe and increases for crew days on Basin "B" Improvements and CMP installation
5	05/04/2020	\$536,429.91	Increase Item No. 7 (Tree Removal, 6"-18") and Item No. 82 (Emergency Excavation) and addition of dewatering claims from the contractor for additional effort, rental equipment, pumps, drop pipes, etc. along with the correlated inspection crew days and contract time
6	07/13/2020	\$81,712.51	Materials for larger 18-inch dewatering header from Manhole 5 to Manhole 1
7	09/14/2020	\$74,250.00	Additional effort to install piping to divert water to Garfield Lake and operate system for three months
8	11/23/2020	\$481,772.00	Two emergency excavations, three months of diversion of water to Garfield Lake (October – December), rock drilling equipment and effort to complete the work
9	02/22/2021	\$984,279.84	Dewatering operations through December 2020, dewatering operations (January – March), steel sheeting rental and replacement
10	07/26/2021	\$20,822.20	Balances and increases to Items 8, 10, 55 and 57 while also increasing the crew days by 156 days used on contract through February 2021
11	08/19/2021	\$1,577,521.68	Additional dewatering claims from the contractor for additional effort, rental equipment, pumps, etc. ten months of diversion of water to Garfield Lake (March –

			October), pipe ramming equipment and effort to complete the work
12	03/28/2022	-\$3.37	Balances Items 3 through 84 and adds in new items 108 through 111 which was to line the 16-inch heavy wall casing, grout the casing, and locate the existing force main and water main
13	10/19/2022	\$113,204.29	Final Balancing of Items 85 through 107 which mostly includes the final four months of dewatering diversion to Garfield Lake

The construction contract was approved at the November 13, 2018, City Council meeting to D.V.M. Utilities, Inc., in the amount of \$5,553,167.65. Staff worked with the engineering consultant for this project, OHM-Advisors, to review and verify the final contract payment amount of \$303,009.74 that is due to the Contractor. The City Attorney reviewed the final documentation and found it to be in acceptable form (Beth Saarela, March 31, 2023).

The thirteen (13) change orders listed in the table above resulted in an overall increase of \$4,066,330.06 or 73.2% over the awarded amount. The approved change orders resulted in a final contract price of \$9,619,497.71.

RECOMMENDED ACTION: Approval of the final balancing change order and the final payment to D.V.M. Utilities, Inc. for the Nine Mile Sanitary Relief Sewer project, in the amount of \$113,204.29 and \$303,009.74, respectively, plus interest earned on retainage.