

OFFICE OF THE COUNCIL

COUNCIL MEMBERS

JIM JOLLY, President
LAURA M. TOY, Vice President
SCOTT BAHR
ROB GJONAJ DONOVIC
BRANDON McCULLOUGH
KATHLEEN E. McINTYRE
SCOTT MORGAN



33000 CIVIC CENTER DRIVE
LIVONIA, MICHIGAN 48154-3097
(734) 466-2250
citycouncil@livonia.gov

OFFICE OF THE COUNCIL

**ELECTRONIC AGENDA PACKET FOR
THE REGULAR MEETING OF
MONDAY, JULY 10, 2023
7:00 P.M.**

**The electronic agenda is compiled, produced and
distributed by the City Council Staff.
(734) 466-2250**

The official documents are on file in the City Clerk's office.

**1972nd Regular Meeting Agenda of the Council of the City of Livonia
Monday, July 10, 2023**

7:00 p.m. - City Hall Auditorium
33000 Civic Center Drive
Livonia, Michigan

CALL TO ORDER

INVOCATION/PLEDGE OF ALLEGIANCE

ROLL CALL

PRESENTATION OF MINUTES - Regular Meeting Minutes of June 26, 2023

AUDIENCE COMMUNICATION

REPORTS FROM THE MAYOR AND OTHER CITY OFFICIALS

CONSENT AGENDA

1. [BLOCK PARTY: James Gietzen, re: to be held Saturday, August 5, 2023, from 12:00 p.m. to 10:00 p.m., on Fairfield Street, between Plymouth Road and Orangelawn Street, with a rain date of Sunday, August 6, 2023.](#)
2. [BLOCK PARTY: Christina Zeoli, re: to be held Saturday, August 12, 2023, from 3:00 p.m. to 10:00 p.m., on Summers Street, between Riverside and Ashurst Streets, with a rain date of Sunday, August 13, 2023.](#)
3. [BLOCK PARTY: Jennifer Checcobelli, re: to be held Saturday, August 12, 2023, from 3:00 p.m. to 10:00 p.m., on Irving Street, between 19031 Irving and the intersection of Clarita and Irving Streets, with a rain date of Saturday, August 26, 2023.](#)
4. [BLOCK PARTY: Kara Clarke, re: to be held Saturday, August 19, 2023, from 12:00 p.m. to 10:00 p.m., on Stamford Street, between Schoolcraft Road until it dead ends at Ford Field, with a rain date of Sunday, August 26, 2023.](#)
5. [AWARD OF BID: Department of Public Works, re: for water repair parts and fittings, in an amount not to exceed \\$100,000.00 annually, from budgeted funds.](#)
6. [AWARD OF BID: Department of Public Works, re: for the hydro-excavation of water service lines, from the unexpended fund balance of the Water and Sewer Fund, to be reimbursed from the Drinking Water Asset Management \(DWAM\) Grant.](#)
7. [REQUEST TO AMEND THE CONSTRUCTION ENGINEERING CONTRACT THROUGH THE QUALIFICATION BASED SELECTION \(QBS\) PROCESS WITH OHM ADVISORS AND AUTHORIZE EXPENDITURE: Department of Public Works, re: for the hydro-excavation of water service lines, from budgeted funds, to be reimbursed from the Drinking Water Asset Management \(DWAM\) Grant. \(CR 311-22\)](#)
8. [REQUEST TO ACCEPT STORM WATER FACILITIES MAINTENANCE AGREEMENT: Engineering Division, re: from BP Gasoline Station, in conjunction with the construction of a storm drain system that provides adequate drainage for property located at 33265 Schoolcraft Road in the Northwest 1/4 of Section 27.](#)

9. REQUEST TO APPROVE SECOND AMENDMENT TO LEASE AGREEMENT FOR CITY-OWNED BUILDING AT 33251 FIVE MILE ROAD: Department of Law, re: between the City of Livonia and Minush Velu (Sam's Place Family Restaurant) for the period ending August 31, 2025. (CR 225-20)

UNFINISHED BUSINESS - MEETINGS OF THE COMMITTEE

10. PUBLIC SAFETY AND HEALTH COMMITTEE MEETING OF JUNE 19, 2023
 - a. Subject matter of what options are available concerning the culling and management of the deer and coyote populations in the city. (CR 329-19)
New Data – LPD and Resident responses

UNFINISHED BUSINESS

11. WAIVER PETITION: Planning Commission, re: Petition 2023-03-02-02, submitted by Yo-Yo Spa 1 L.L.C., requesting to operate a massage establishment at 33316 Plymouth Road, located on the north side of Plymouth Road between Mayfield Avenue and Farmington Road in the Southwest ¼ of Section 27, denied by the City Planning Commission on May 9, 2023, and appealed at the Public Hearing on June 12, 2023.
12. REQUEST TO APPROVE AN ADDITIONAL APPROPRIATION AND EXPENDITURE: Department of Public Works, re: for the installation and rental of a temporary chiller unit at the Bennett Library, from the unexpended fund balance of the Library Fund.
13. AWARD OF CONTRACT USING THE QUALIFICATION-BASED SELECTION (QBS) PROCESS: Department of Public Works, re: to provide environmental engineering services to monitor, sampling, data evaluation, and reporting at the City's Type III landfill and former Act 87 landfill, and other related projects for five (5) years beginning July 1, 2023, through June 30, 2028.
New Data - Additional information from NTH Consultants
14. REQUEST FOR ADDITIONAL SERVICES WITH NTH CONSULTANTS FOR ENVIRONMENTAL ENGINEERING SERVICES CONTRACT: Public Service Division, re: to amend five-year agreement with NTH Consultants, Ltd., through June 30, 2028, to provide as-needed environmental engineering services related to the City's landfill in the amount of \$50,000.00 annually. (CR 257-19)
15. AWARD OF CONTRACT: Engineering Division, re: for the Water Main Improvements for Project Areas 7, 8, and 9.
New Data - Additional information from Engineering, OHM and Bidders
16. REQUEST TO AMEND CONTRACT WITH OHM ADVISORS FOR CONSTRUCTION ENGINEERING FOR THE 2023 WATER MAIN REPLACEMENT PROJECT, PROJECT AREAS 7, 8 & 9; Engineering Division, re: for same (CR 336-21)

NEW BUSINESS

AUDIENCE COMMUNICATION

NOTICE(S)

In accordance with Title II of the American with Disabilities Act as it pertains to access to Public Meetings, the City Clerk's Office of the City of Livonia, upon adequate notice, will make reasonable accommodations for persons with special needs. Please call (734) 466-2236 or email clerk@livonia.gov if you need assistance. Council agendas are available on the City's website – www.livonia.gov - under Your Government, City Council, Agendas & Minutes.

SUSAN M. NASH, CITY CLERK

CITY OF LIVONIA – CITY COUNCIL
MINUTES OF STUDY MEETING HELD June 26, 2023

Meeting was called to order at 8:00 p.m. by Council President Jim Jolly. Present: Brandon McCullough, Scott Morgan, Kathleen McIntyre, and President Jim Jolly. Absent: Rob Donovic, Scott Bahr, and Vice President Laura Toy.

Elected and appointed officials present: Susan Nash, City Clerk; Paul Bernier, City Attorney; Todd Zilincik, City Engineer; and Jacob Rushlow, Assistant Director of Public Works.

Councilmember McCullough and his daughter, Harper, led the Pledge of Allegiance.

1. BLOCK PARTY: James Gietzen, re: to be held Saturday, August 5, 2023, from 12:00 p.m. to 10:00 p.m., on Fairfield Street, between Plymouth Road and Orangelawn Street, with a rain date of Sunday, August 6, 2023.

Mr. Gietzen, presented the request to Council.

Councilmember Morgan offered an approving resolution for the Consent agenda.

DIRECTION:

APPROVAL

CONSENT



LETTER TO THE LIVONIA CITY COUNCIL

1.

City Clerk
June 7, 2023

MEETING DATE

S062623/R071023

PREPARED BY

Lori Miller, MiPMC, Deputy City Clerk,

AGENDA ITEM

BLOCK PARTY: James Gietzen, re: to be held Saturday, August 5, 2023, from 12:00 p.m. to 10:00 p.m., on Fairfield Street, between Plymouth Road and Orangelawn Street, with a rain date of Sunday, August 6, 2023.

BACKGROUND DETAILS

Event to take place on Fairfield Street between Plymouth Road and Orangelawn, hard road closure between the addresses of 22034 Fairfield and 9924 Fairfield (approximate). Plan to have music, BBQ, yard games, visit from the police and fire departments (if available), and bounce house. Approximately 75 guests to attend.

PREFERRED COUNCIL RECOMMENDATION/RESOLUTION (Please complete this field. Attachments are not to be used in lieu of the recommendation)

Approve as submitted.

ATTACHMENTS

1. Fairfield Block Party Request

APPROVED BY

**REQUEST FOR NOISE WAIVER BLOCK PARTY and/or
BARRICADING OF CITY STREETS**

Send to: Livonia City Council, c/o City Clerk, 33000 Civic Center Drive, Livonia, MI 48154-3097
or hand deliver to the City Clerk's Office at least 8 weeks prior to the planned event

PLEASE PRINT

Date of Application: May 30, 2023 Date to appear at a Council Meeting: _____

Name of Neighborhood Representative: James Gietzen

Address (please include zip code): 11027 Fairfiels st, Livonia MI 48150

Telephone Number with area code: Home: 2488637043 Office: 248-817-8836 X101

Email: JamesGietzen@gmail.com

Please circle what is being requested – **"BLOCK PARTY"** and/or **"STREET BARRICADING"**

<u>August 5th, 2023</u>	<u>August 6th 2023</u>	<u>Noon to 10:00pm</u>
Date of Block Party and/or Barricading	Rain Date	Start/end time of Block Party and/or Barricading End time is no later than 10:00 p.m.

Location of Block Party and/or Barricading: (Be specific. Indicate which streets and between which boundaries).

The event will take place on Fairfield Street between Plymouth Rd and Orange lawn.

Hard road closure between aproximently 22034 Fairfiled and 9924 Farifiled

Type of Event: Briefly (Describe activities planned. Music, barbecue, games, etc.) _____
Music, barbecue, yard games, Visits from the police and fire departments (if available)for the kids and bounce house

How many barricades are you requesting (max. 10)? 10

Approximate Number Attending: 75

Date of Council Approval/Denial: _____

Council Resolution Number: _____

CITY OF LIVONIA – CITY COUNCIL
MINUTES OF STUDY MEETING HELD June 26, 2023

Meeting was called to order at 8:00 p.m. by Council President Jim Jolly. Present: Brandon McCullough, Scott Morgan, Kathleen McIntyre, and President Jim Jolly. Absent: Rob Donovic, Scott Bahr, and Vice President Laura Toy.

Elected and appointed officials present: Susan Nash, City Clerk; Paul Bernier, City Attorney; Todd Zilincik, City Engineer; and Jacob Rushlow, Assistant Director of Public Works.

Councilmember McCullough and his daughter, Harper, led the Pledge of Allegiance.

2. BLOCK PARTY: Christina Zeoli, re: to be held Saturday, August 12, 2023, from 3:00 p.m. to 10:00 p.m., on Summers Street, between Riverside and Ashurst Streets, with a rain date of Sunday, August 13, 2023.

Christina Zeoli presented the request to Council.

Councilmember Morgan offered an approving resolution for the Consent agenda.

DIRECTION:

APPROVAL

CONSENT



LETTER TO THE LIVONIA CITY COUNCIL

2.

City Clerk
June 12, 2023

MEETING DATE

S06262023/R07102023

PREPARED BY

Lori Miller, MiPMC, Deputy City Clerk,

AGENDA ITEM

BLOCK PARTY: Christina Zeoli, re: to be held Saturday, August 12, 2023, from 3:00 p.m. to 10:00 p.m., on Summers Street, between Riverside and Ashurst Streets, with a rain date of Sunday, August 13, 2023.

BACKGROUND DETAILS

Block party request submitted by Christina Zeoli to close off Summers Street, between Riverside St. and Ashurst St., on Saturday August 12, 2023, from 3:00 p.m. to 10:00 p.m. with a rain date of Sunday, August 13, 2023. Event to include BBQ, games, music, bounce house, and approximately 60-100 guests.

PREFERRED COUNCIL RECOMMENDATION/RESOLUTION (Please complete this field. Attachments are not to be used in lieu of the recommendation)

Approve as submitted.

ATTACHMENTS

1. Summers St Block Party Request

APPROVED BY

**REQUEST FOR NOISE WAIVER BLOCK PARTY and/or
BARRICADING OF CITY STREETS**

Send to: Livonia City Council, c/o City Clerk, 33000 Civic Center Drive, Livonia, MI 48154-3097
or hand deliver to the City Clerk's Office at least 8 weeks prior to the planned event

PLEASE PRINT

Date of Application: 6/2/2023 Date to appear at a Council Meeting: ?

Name of Neighborhood Representative: Christina Zeoli

Address (please include zip code): 14034 Ashurst Livonia 48154

Telephone Number with area code: Home: 734 679 4021 Office: _____

Email: czeoliesbcglobal.net

Please circle what is being requested - "BLOCK PARTY" and/or "STREET BARRICADING"

8/12/2023 8/13/2023 3:00-10:00

Date of Block Party
and/or Barricading

Rain Date

Start/end time of Block Party and/or Barricading
End time is no later than 10:00 p.m.

Location of Block Party and/or Barricading: (Be specific. Indicate which streets and between which boundaries).

Summers Street between Riverside st.
and Ashurst Street (just west side
of Summers 14074 - 34713)

Type of Event: Briefly (Describe activities planned. Music, barbecue, games, etc.) barbecue, games,
music, bounce house

How many barricades are you requesting (max. 10)? 4

Approximate Number Attending: 60-100

Date of Council Approval/Denial: _____

Council Resolution Number: _____

**CITY OF LIVONIA – CITY COUNCIL
MINUTES OF STUDY MEETING HELD June 26, 2023**

Meeting was called to order at 8:00 p.m. by Council President Jim Jolly. Present: Brandon McCullough, Scott Morgan, Kathleen McIntyre, and President Jim Jolly. Absent: Rob Donovic, Scott Bahr, and Vice President Laura Toy.

Elected and appointed officials present: Susan Nash, City Clerk; Paul Bernier, City Attorney; Todd Zilincik, City Engineer; and Jacob Rushlow, Assistant Director of Public Works.

Councilmember McCullough and his daughter, Harper, led the Pledge of Allegiance.

3. BLOCK PARTY: Jennifer Checcobelli, re: to be held Saturday, August 12, 2023, from 3:00 p.m. to 10:00 p.m., on Irving Street, between 19031 Irving and the intersection of Clarita and Irving Streets, with a rain date of Saturday, August 26, 2023.

Jennifer Checcobelli presented the request to Council.

Councilmember Morgan offered an approving resolution for the Consent agenda.

DIRECTION:

APPROVAL

CONSENT



LETTER TO THE LIVONIA CITY COUNCIL

3.

City Clerk
June 15, 2023

MEETING DATE

S062623/R071023

PREPARED BY

Lori Miller, MiPMC, Deputy City Clerk,

AGENDA ITEM

BLOCK PARTY: Jennifer Checcobelli, re: to be held Saturday, August 12, 2023, from 3:00 p.m. to 10:00 p.m., on Irving Street, between 19031 Irving and the intersection of Clarita and Irving Streets, with a rain date of Saturday, August 26, 2023.

BACKGROUND DETAILS

Request to host block party and barricade street from 19031 Irving Street and at the intersection of Clarita and Irving Street, from 3:00 p.m. to 10:00 p.m. on Saturday, August 12, 2023. The event is to get to know each other, games for kids, and BBQ. Approximately 50 people to attend.

PREFERRED COUNCIL RECOMMENDATION/RESOLUTION (Please complete this field. Attachments are not to be used in lieu of the recommendation)

Approve as submitted.

ATTACHMENTS

1. S062623 Block Party Jennifer Checcobelli
2. Irving Block Party Request

APPROVED BY

**REQUEST FOR NOISE WAIVER BLOCK PARTY and/or
BARRICADING OF CITY STREETS**

Send to: Livonia City Council, c/o City Clerk, 33000 Civic Center Drive, Livonia, MI 48154-3097
or hand deliver to the City Clerk's Office at least 8 weeks prior to the planned event

PLEASE PRINT

Date of Application: 6/15/23 Date to appear at a Council Meeting: _____

Name of Neighborhood Representative: Jennifer Checcobelli

Address (please include zip code): 18973 Irving St. Livonia 48152

Telephone Number with area code: ^{cell:} ~~Home:~~ 248.331.3442 Office: _____

Email: JLBYrnes@yahoo.com

Please circle what is being requested – "BLOCK PARTY" and/or "STREET BARRICADING"

<u>8/12/23</u>	<u>8/26/23</u>	<u>3:00 - 10:00</u>
Date of Block Party and/or Barricading	Rain Date	Start/end time of Block Party and/or Barricading End time is no later than 10:00 p.m.

Location of Block Party and/or Barricading: (Be specific. Indicate which streets and between which boundaries).

Irving Street to Clarita. We would like barricades
to start at 19031 Irving St. and at the
intersection of Clarita and Irving St blocking Irving St.

Type of Event: Briefly (Describe activities planned. Music, barbecue, games, etc.) Block party
for neighbors to get to know each other. BQ
games for kids, just a small gathering.

How many barricades are you requesting (max. 10)? 4/6

Approximate Number Attending: 50

Date of Council Approval/Denial: _____

Council Resolution Number: _____

RECEIVED
OFFICE OF THE CITY CLERK
2023 JUN 15 PM 1:34

CITY OF LIVONIA – CITY COUNCIL
MINUTES OF STUDY MEETING HELD June 26, 2023

Meeting was called to order at 8:00 p.m. by Council President Jim Jolly. Present: Brandon McCullough, Scott Morgan, Kathleen McIntyre, and President Jim Jolly. Absent: Rob Donovic, Scott Bahr, and Vice President Laura Toy.

Elected and appointed officials present: Susan Nash, City Clerk; Paul Bernier, City Attorney; Todd Zilincik, City Engineer; and Jacob Rushlow, Assistant Director of Public Works.

Councilmember McCullough and his daughter, Harper, led the Pledge of Allegiance.

4. BLOCK PARTY: Kara Clarke, re: to be held Saturday, August 19, 2023, from 12:00 p.m. to 10:00 p.m., on Stamford Street, between Schoolcraft Road until it dead ends at Ford Field, with a rain date of Sunday, August 26, 2023.

Kara Clarke presented the request to Council.

Councilmember Morgan offered an approving resolution for the Consent agenda.

DIRECTION:

APPROVAL

CONSENT



LETTER TO THE LIVONIA CITY COUNCIL

4.

Council Office
June 9, 2023

MEETING DATE

S062623/R071023

PREPARED BY

Sara Kasprowicz, Council Office Manager,

AGENDA ITEM

BLOCK PARTY: Kara Clarke, re: to be held Saturday, August 19, 2023, from 12:00 p.m. to 10:00 p.m., on Stamford Street, between Schoolcraft Road until it dead ends at Ford Field, with a rain date of Saturday, August 26, 2023.

BACKGROUND DETAILS

Block party request received from Kara Clarke, to be held Saturday, August 19, 2023, from 12:00 p.m. to 10:00 p.m., on Stamford Street, between Schoolcraft Road until it dead ends at Ford Field, with a rain date of Sunday, August 26, 2023.

PREFERRED COUNCIL RECOMMENDATION/RESOLUTION (Please complete this field. Attachments are not to be used in lieu of the recommendation)

To approve as submitted.

ATTACHMENTS

1. S062623 Block Party Kara Clarke
2. S062623 LTC Block Party Kara Clarke

APPROVED BY

Send to: Livonia City Council, c/o City Clerk, 33000 Civic Center Drive, Livonia, MI 48154-3097
or hand deliver to the City Clerk's Office at least 8 weeks prior to the planned event

City Council Office Document
Revised August 2021
A:Block Party Form

CITY OF LIVONIA – CITY COUNCIL
MINUTES OF STUDY MEETING HELD June 26, 2023

Meeting was called to order at 8:00 p.m. by Council President Jim Jolly. Present: Brandon McCullough, Scott Morgan, Kathleen McIntyre, and President Jim Jolly. Absent: Rob Donovic, Scott Bahr, and Vice President Laura Toy.

Elected and appointed officials present: Susan Nash, City Clerk; Paul Bernier, City Attorney; Todd Zilincik, City Engineer; and Jacob Rushlow, Assistant Director of Public Works.

Councilmember McCullough and his daughter, Harper, led the Pledge of Allegiance.

5. AWARD OF BID: Department of Public Works, re: for water repair parts and fittings, in an amount not to exceed \$100,000.00 annually, from budgeted funds.

Jacob Rushlow, Assistant Director of Public Works, presented the request to Council.

President Jolly asked how close we get to the \$100,000 budgeted amount annually.

Jacob Rushlow said the last time it was bid out was 2012 or 2013 and confirmed that purchase lasted about 10 years.

Councilmember Morgan offered an approving resolution for the Consent agenda.

DIRECTION:

APPROVAL

CONSENT



LETTER TO THE LIVONIA CITY COUNCIL

5.

DPW
June 6, 2023

MEETING DATE

S062623/R071023

PREPARED BY

Jill Russell, Secretary III,

AGENDA ITEM

AWARD OF BID: Department of Public Works, re: for water repair parts and fittings, in an amount not to exceed \$100,000.00 annually, from budgeted funds.

BACKGROUND DETAILS

In accordance with Finance Ordinance requirements, on May 11, 2023 the City placed a request for bids on MITN for water supply brass parts and fittings (flare fittings, curb stops, bushings, etc.) The bids were opened on May 23, 2023 via Zoom conference; three bids were submitted. The lowest bidder was ETNA Supply. The bid tab is attached.

PREFERRED COUNCIL RECOMMENDATION/RESOLUTION (Please complete this field. Attachments are not to be used in lieu of the recommendation)

The Department of Public Works requests that Council hereby accept the bid of Etna Supply Company, 529 32nd Street SE, Grand Rapids, MI 49548 for supplying the Public Works Division with water supply brass parts and fittings based upon the unit prices set forth in the attached bid tab for the period June 1, 2023 through May 31, 2024. In addition, we request the Council to authorize purchases from the second lowest bidder, Ferguson Waterworks, 24425 Schoenherr, Warren, MI 48089, in the event Etna is unable to provide the necessary parts.

SPECIFIC NAME OF PRODUCT AND NUMBER TO BE PURCHASED (if more than one)

Various brass flare fittings, couplings, bushings, curb stops and compression unions.

CONTRACT: Amount and/or purchase price and length of contract (with dates if applicable)

\$100,000.00

DETAILED WORK BEING PERFORMED

na

FISCAL CONSIDERATIONS (Amount requested and Account(s) used. If applicable, Grant Funding information)

\$100,000.00 annually from budgeted funds in account. no. 592-109-020.

ACCEPTANCE OF BID (Please detail the following: Why accepted, why not lowest bidder, company name, contact person, full address)

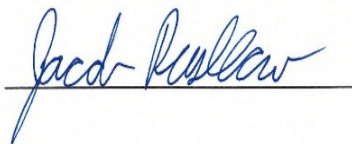
Accept the lowest price bidder, Etna Supply, with approval to use the second lowest bidder, Ferguson Waterworks, in the event Etna Supply is unable to provide the parts in a timely fashion.

REASON TO WAIVE BID PROCESS (Emergency, Professional services, No advantage to City and why, Consortium package, etc): n/a

ATTACHMENTS

1. S062623 LTC Bid - Water Svc Parts and Fittings
2. Ferguson Bid 2023
3. Bid Tab Water Service Parts and Fittings 2023
4. Core and Main Bid 2023
5. Etna Bid

APPROVED BY



Jacob Rushlow, P.E., Assistant Director of Public Works

Date: June 08, 2023



Don Rohraff, Director of Public Works

Date: June 08, 2023



Michael Slater, Finance Director

Date: June 08, 2023



Maureen Miller Brosnan, Mayor

Date: June 09, 2023

CITY OF LIVONIA REQUEST FOR BID
POTABLE / NO-LEAD / BRASS ONLY / USABLE PARTS & FITTINGS

per Public Law 111-380 as of 01/01/2014

shaded areas require input

6/1/23 - 11/30/23

6 MONTH PRICE

12/1/23 - 5/31/24

**6 MONTH PRICE
w/ INCREASE**

DESCRIPTION

	Est		
	Order	PRICE EACH	TOTAL PRICE
3/4" CORPORATIONS flare fitting	75	\$ 33.00	\$ 2,475.00
1" CORPORATIONS flare fitting	164	\$ 51.00	\$ 8,364.00
1 1/2" CORPORATIONS flare fitting	32	\$ 157.00	\$ 5,024.00
2" CORPORATIONS flare fitting	26	\$ 273.00	\$ 7,098.00
3/4" CURB STOPS flare fitting	175	\$ 74.00	\$ 12,950.00
1" CURB STOPS flare fitting	134	\$ 102.00	\$ 13,668.00
1 1/2" CURB STOPS flare fitting	29	\$ 245.00	\$ 7,105.00
2" CURB STOPS flare fitting	41	\$ 400.00	\$ 16,400.00
3/4" UNIONS flare fitting	188	\$ 19.00	\$ 3,572.00
1" UNIONS flare fitting	138	\$ 32.00	\$ 4,416.00
1 1/2" UNIONS flare fitting	28	\$ 97.00	\$ 2,716.00
2" UNIONS flare fitting	36	\$ 158.00	\$ 5,688.00
1" X 3/4" C/S COUPLING C102-43	100	\$ 27.00	\$ 2,700.00
1" C/S COUPLING C102-34	100	\$ 33.00	\$ 3,300.00
1" x 3/4" REDUCER BUSHING	85	\$ 15.00	\$ 1,275.00
1"x3/4 flair fitting reducing union	100	\$ 27.00	\$ 2,700.00
3/4 " compression union	50	\$ 20.00	\$ 1,000.00
1" compression union	50	\$ 23.00	\$ 1,150.00
1 1/2 "compression union	18	\$ 77.00	\$ 1,386.00
2" compression union	21	\$ 103.00	\$ 2,163.00
			\$ 105,150.00



% Increase

0.0%	TOTAL PRICE
\$ 33.00	\$ 2,475.00
\$ 51.00	\$ 8,364.00
\$ 157.00	\$ 5,024.00
\$ 273.00	\$ 7,098.00
\$ 74.00	\$ 12,950.00
\$ 102.00	\$ 13,668.00
\$ 245.00	\$ 7,105.00
\$ 400.00	\$ 16,400.00
\$ 19.00	\$ 3,572.00
\$ 32.00	\$ 4,416.00
\$ 97.00	\$ 2,716.00
\$ 158.00	\$ 5,688.00
\$ 27.00	\$ 2,700.00
\$ 33.00	\$ 3,300.00
\$ 15.00	\$ 1,275.00
\$ 27.00	\$ 2,700.00
\$ 20.00	\$ 1,000.00
\$ 23.00	\$ 1,150.00
\$ 77.00	\$ 1,386.00
\$ 103.00	\$ 2,163.00
	\$ 105,150.00

Bid Submitted by:

Company Name Ferguson Waterworks
Address 24425 Schoenherr
City, State, Zip Warren, MI 48089

Contact:

Name David M. Hobson
Title Municipal Sales
Email david.hobson@ferguson.com
Phone # 810 691-2823

CITY OF LIVONIA
DEPARTMENT OF PUBLIC WORKS
TABULATION OF BIDS FOR WATER SERVICE PARTS AND FITTINGS 2023

Item Description	Quantity	Ferguson		ETNA Supply		Core and Main	
		Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price
3/4" corporations flare fitting	75	\$ 33.00	\$ 2,475.00	\$ 32.80	\$ 2,460.00	\$ 34.11	\$ 2,558.25
1" corporations flare fitting	164	\$ 51.00	\$ 8,364.00	\$ 50.10	\$ 8,216.40	\$ 52.12	\$ 8,547.68
1 1/2" corporations flare fitting	32	\$ 157.00	\$ 5,024.00	\$ 146.85	\$ 4,699.20	\$ 159.86	\$ 5,115.52
2" corporations flare fitting	26	\$ 273.00	\$ 7,098.00	\$ 153.80	\$ 3,998.80	\$ 279.24	\$ 7,260.24
3/4" curb stop flare fitting	175	\$ 74.00	\$ 12,950.00	\$ 72.40	\$ 12,670.00	\$ 75.25	\$ 13,168.75
1" curb stop flare fitting	134	\$ 102.00	\$ 13,668.00	\$ 100.00	\$ 13,400.00	\$ 103.88	\$ 13,919.92
1 1/2" curb stop flare fitting	29	\$ 245.00	\$ 7,105.00	\$ 242.80	\$ 7,041.20	\$ 252.41	\$ 7,319.89
2" curb stop flare fitting	41	\$ 400.00	\$ 16,400.00	\$ 397.50	\$ 16,297.50	\$ 413.16	\$ 16,939.56
3/4" union flare fitting	188	\$ 19.00	\$ 3,572.00	\$ 18.15	\$ 3,412.20	\$ 18.87	\$ 3,547.56
1" union flare fitting	138	\$ 32.00	\$ 4,416.00	\$ 31.80	\$ 4,388.40	\$ 33.07	\$ 4,563.66
1 1/2" union flare fitting	28	\$ 97.00	\$ 2,716.00	\$ 95.50	\$ 2,674.00	\$ 99.24	\$ 2,778.72
2" union flare fitting	36	\$ 158.00	\$ 5,688.00	\$ 179.05	\$ 6,445.80	\$ 161.93	\$ 5,829.48
1" x 3/4" C/S coupling C102-43	100	\$ 27.00	\$ 2,700.00	\$ -	\$ -	\$ 22.41	\$ 2,241.00
1" C/S coupling C102-34	100	\$ 33.00	\$ 3,300.00	\$ 29.90	\$ 2,990.00	\$ 33.41	\$ 3,341.00
1" x 3/4" reducer bushing	85	\$ 15.00	\$ 1,275.00	\$ 15.60	\$ 1,326.00	\$ 3.79	\$ 322.15
1" x 3/4" flair fitting reducing union	100	\$ 27.00	\$ 2,700.00	\$ 30.90	\$ 3,090.00	\$ 27.97	\$ 2,797.00
3/4 " compression union	50	\$ 20.00	\$ 1,000.00	\$ 19.70	\$ 985.00	\$ 20.46	\$ 1,023.00
1" compression union	50	\$ 23.00	\$ 1,150.00	\$ 22.50	\$ 1,125.00	\$ 23.42	\$ 1,171.00
1 1/2 compression union	18	\$ 77.00	\$ 1,386.00	\$ 75.40	\$ 1,357.20	\$ 78.34	\$ 1,410.12
2" compression union	21	\$ 103.00	\$ 2,163.00	\$ 101.75	\$ 2,136.75	\$ 105.78	\$ 2,221.38
			\$ 105,150.00			\$ 98,713.45	\$ 106,075.88

CITY OF LIVONIA REQUEST FOR BID
POTABLE / NO-LEAD / BRASS ONLY / USABLE PARTS & FITTINGS

per Public Law 111-380 as of 01/01/2014

shaded areas require input

6/1/23 - 11/30/23

6 MONTH PRICE

12/1/23 - 5/31/24

**6 MONTH PRICE
w/ INCREASE**

DESCRIPTION

	<u>Est</u>		
	<u>Order</u>	<u>PRICE EACH</u>	<u>TOTAL PRICE</u>
3/4" CORPORATIONS flare fitting	75	\$ 34.11	\$ 2,558.25
1" CORPORATIONS flare fitting	164	\$ 52.12	\$ 8,547.68
1 1/2" CORPORATIONS flare fitting	32	\$ 159.86	\$ 5,115.52
2" CORPORATIONS flare fitting	26	\$ 279.24	\$ 7,260.24
3/4" CURB STOPS flare fitting	175	\$ 75.25	\$ 13,168.75
1" CURB STOPS flare fitting	134	\$ 103.88	\$ 13,919.92
1 1/2" CURB STOPS flare fitting	29	\$ 252.41	\$ 7,319.89
2" CURB STOPS flare fitting	41	\$ 413.16	\$ 16,939.56
3/4" UNIONS flare fitting	188	\$ 18.87	\$ 3,547.56
1" UNIONS flare fitting	138	\$ 33.07	\$ 4,563.66
1 1/2" UNIONS flare fitting	28	\$ 99.24	\$ 2,778.72
2" UNIONS flare fitting	36	\$ 161.93	\$ 5,829.48
1" X 3/4" C/S COUPLING C102-43	100	\$ 22.41	\$ 2,241.00
1" C/S COUPLING C102-34	100	\$ 33.41	\$ 3,341.00
1" x 3/4" REDUCER BUSHING	85	\$ 3.79	\$ 322.15
1"x3/4 flair fitting reducing union	100	\$ 27.97	\$ 2,797.00
3/4 " compression union	50	\$ 20.46	\$ 1,023.00
1" compression union	50	\$ 23.42	\$ 1,171.00
1 1/2 "compression union	18	\$ 78.34	\$ 1,410.12
2" compression union	21	\$ 105.78	\$ 2,221.38
		\$	106,075.88



% Increase

0.0%	<u>TOTAL PRICE</u>
\$ 34.11	\$ 2,558.25
\$ 52.12	\$ 8,547.68
\$ 159.86	\$ 5,115.52
\$ 279.24	\$ 7,260.24
\$ 75.25	\$ 13,168.75
\$ 103.88	\$ 13,919.92
\$ 252.41	\$ 7,319.89
\$ 413.16	\$ 16,939.56
\$ 18.87	\$ 3,547.56
\$ 33.07	\$ 4,563.66
\$ 99.24	\$ 2,778.72
\$ 161.93	\$ 5,829.48
\$ 22.41	\$ 2,241.00
\$ 33.41	\$ 3,341.00
\$ 3.79	\$ 322.15
\$ 27.97	\$ 2,797.00
\$ 20.46	\$ 1,023.00
\$ 23.42	\$ 1,171.00
\$ 78.34	\$ 1,410.12
\$ 105.78	\$ 2,221.38
\$	106,075.88

Bid Submitted by:

Company Name Core & Main LP
Address 4901 Dewitt
City, State, Zip Canton, MI 48188

Contact:

Name Angela Caponi
Title Municipal Sales
Email angela.caponi@coreandmain.com
Phone # 586-785-8851

CITY OF LIVONIA
DEPARTMENT OF PUBLIC WORKS
PUBLIC SERVICE DIVISION

ADVERTISEMENT FOR BIDS
FOR
WATER SERVICE PARTS AND FITTINGS

Sealed bid proposals will be received by the City of Livonia, Michigan, as owner, until 2:00 p.m. on Tuesday, May 23, 2023, via the MITN website only (www.mitn.info) at which time said bid proposals will be opened and publicly read. No faxed bids will be accepted. No late bids will be accepted. No physical bids will be accepted. Please note that the Signature pages shall be uploaded as an Adobe Acrobat PDF document. The Pricing Proposal shall be uploaded as an Excel file. **BIDS MUST BE SUBMITTED ON CITY OF LIVONIA FORMS.**

The City will only accept items as specified from the following manufacturers:

- Muller
- Ford
- Ay McDonald

Bids received via the MITN website by the specified due date and time will be publicly opened at the due date and time via Zoom. Vendors may attend the bid opening virtually by using the following credentials:

:
By Computer:

<https://us02web.zoom.us/j/82294127641>

By Phone:

312-626-6799

Webinar ID: 822 9412 7641

The City reserves the right to reject in or in part any and all bids received, to waive any irregularities or informalities or both; as it is determined to be in the best interests of the City of Livonia to do so.

The City of Livonia officially distributes bid documents through the Michigan Intergovernmental Trade Network (BidNet). **Bid documents obtained from any other source are not considered official copies.** The City of Livonia cannot guarantee the accuracy of any information not obtained from the MITN website and is not responsible for any errors contained by any information received from alternate sources. Only those firms who obtain the RFB documents from the MITN system are guaranteed access to receive addendum information, if such information is issued. If you obtained this document from a source other than the source indicated, it is recommended that you register on the MITN site, www.mitn.info and obtain an official copy.

QUESTIONS:

Questions regarding the Request for Bid must be submitted **in writing** to the attention of Enna A. Bachelor, Purchasing Manager, via email at: ebachelor@livonia.gov. All questions received by MAY 18, 2023, will be responded to in writing in the form of an addendum which will be posted on the MITN website. No phone calls will be accepted. All inquiries regarding this solicitation shall be submitted to the Purchasing Manager.

INSTRUCTIONS TO
BIDDERS FOR
WATER SERVICE PARTS **AND** FITTINGS

1. Bids will be received by the City of Livonia, Michigan, as owner, until 2:00 p.m., local time, on MAY 23, 2023, VIA THE MITN WEBSITE ONLY (WWW.MITN.INFO) Physical bid submission will not be accepted. which time said proposals will be opened and publicly read. Late bids will not be considered.
2. Bids shall be for items as specified on attached Proposal Form **without deviation. No alternates will be accepted. The City will only accept items as specified from the following manufacturers:**
 - Muller
 - Ford
 - Ay McDonald
3. Bids shall be in a single PDF Adobe Acrobat Format uploaded to the MITN website.
5. If any figure already entered on the proposal form by the bidder is to be altered, it shall be crossed out with ink and the new unit price entered above it or below it and initialed by the bidder.
6. The unit price shall be entered where indicated.
7. It is understood that the quantities of materials to be furnished as stated in the proposal are approximate and are given only as a basis for comparing bids.
8. Unless otherwise specified, delivery shall be to the City of Livonia, Department of Public Works, 12973 Farmington Road, Livonia, MI 48154.
9. All invoices shall be submitted to the City of Livonia on the basis of the unit prices bid within the contract period specified.

REMINDERS TO BIDDERS

1. **EXAMINATION OF BID DOCUMENT**-Before submitting a bid, bidders shall carefully examine the specifications and shall fully inform themselves as to all existing conditions and limitations. The bidder shall indicate in the bid the sum to cover the cost of all items included on the bid form.
2. **PREPARATION OF BID**-The bid shall be legibly prepared in ink or typed. If a unit price or extension already entered by the bidder on the Bid and Award form is to be altered, it shall be crossed out and the new unit price or extension entered above or below and initialed by the bidder with ink. The bid shall be legally signed and the complete address of the bidder given thereon. BIDS MUST BE SUBMITTED ON FORMS PROVIDED BY THE CITY OF LIVONIA. BIDS MUST BE UPLOADED TO THE MITN WEBSITE IN ADOBE ACROBAT PDF FORMAT. NO PHYSICAL BID SUBMISSION WILL BE ACCEPTED.
3. **EXPLANATION TO BIDDERS**-Any explanation desired by a bidder regarding the meaning or interpretation of the Invitation for Bids (IFB) and attachments must be requested in writing, and with sufficient time allowed for a reply to reach all prospective bidders before. The submission of their bid. Any information given to a prospective bidder concerning the IFB will be furnished to all prospective bidders as an amendment or addendum to the IFB if such information would be prejudicial to uninformed bidders. Receipt of amendments or addenda by a bidder must be acknowledged in the bid by attachment, or by letter or telegram received before the time set for opening of bids. Oral explanation or instructions given prior to the opening will not be binding.
4. **CASH DISCOUNTS**-Discounts offered for payment within less than thirty (30) days will not be considered in evaluating bids for award. Offered discounts of less than thirty (30) days will be taken if payment is made within the discount period, even though not considered in evaluation of the bid.
5. **WITHDRAWAL OF BIDS**-Bids may be withdrawn in person by a bidder or authorized representative, provided their identity is made known and a receipt is signed for the bid, but only if the withdrawal is made prior to the exact time set for receipt of bid. No bid may be withdrawn for at least 120 days after bid opening.
6. **ALTERNATE BIDS**-Bidders are cautioned that any alternate bid, unless specifically requested or any changes, insertions or omissions to the terms and conditions, specifications or any other requirement of this IFB may be considered non-responsive.

7. LATE BIDS-Any bid received after the exact time specified for receipt, will not be considered.

The owner may at any time, by written notice to the contractor, terminate this contract and the contractor's right to proceed with the work, for just cause, which shall include, but is not limited to the following:

- A. Failure to provide insurance and bonds (when called for), in the exact amounts and within the time specified or any extension thereof.
- B. Failure to make delivery of the supplies, or to perform the services within the time specified herein, or any extension thereof.

WATER SERVICE PARTS AND FITTINGS - PROPOSAL FORM

Honorable Members of the Council
33000 Civic Center Drive
Livonia, Michigan 48154

Dear Council Members:

The undersigned, as bidder, declares that he has familiarized himself with the type of equipment desired and has carefully examined the specifications and instructions to bidders, which he understands and accepts as sufficient for the purpose and agrees he will furnish to the City of Livonia the specified items and will accept in full payment therefor the following amounts:

THE FOLLOWING DOCUMENTS SHALL BE UPLOADED WITH YOUR BID RESPONSE: Proposal Form with authorized signature (Adobe Acrobat PDF) Lead Time Worksheet (Adobe Acrobat PDF) and Price Proposal (Excel File).

Special Note:

All brass products that come into contact with potable water shall meet the new "lead-free" standards of the Low-Lead Brass U.S.A. Federal Public Law 111-380.

NOTE: The City will only accept items specified from the following manufacturers:

- Muller
- Ford
- Ay McDonald

BIDS SUBMITTED FOR ITEMS NOT MANUFACTURED BY THE FIRMS SPECIFIED WILL BE REJECT. THERE ARE NO EXCEPTIONS. THE CITY RESERVES THE RIGHT TO AWARD MULTIPLE CONTRACTS FOR THE PARTS SPECIFIED HEREIN.

THE LOW BIDDER WILL BE DETERMINED BY THE TOTAL PRICE OF ALL ITEMS LISTED,

Materials are to meet or exceed AWWA specifications.

State maximum time required for delivery F.O.B. Livonia 120 DAYS

NET 30

State payment terms:

The City of Livonia reserves the right to reject or accept any or all proposals in whole or in part and waive any irregularities or formalities therein. It is agreed that this bid may not be withdrawn for ninety (90) days from the opening thereof.

The contractor and his subcontractors agree that they will not discriminate against any employee or applicant for employment, to be employed in the performance of this contract with respect to his hire, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to employment, because of his sex or age, except when based on a bona fide occupational qualification, or because of his race, color, religion, national origin or ancestry (Act 251 P.A. 1955, as amended). The contractor further agrees that he will take affirmative action to insure that applicants are employed and that employees are treated during employment without regard to age, sex, race, creed, color or national origin. Breach of this covenant may be regarded as a material breach of the contract.

Bidder will identify business entity as individual, or if doing business under assumed name, indicate assumed name, partnership (naming partners), corporation, foreign or domestic (naming principal officers), and indicate official capacity of person executing proposal and bid.

Extension of Award to the MITN Purchasing Cooperative or Other Governmental Agencies:

Extension of Award to the MITN Purchasing Cooperative or Other Governmental Agencies.

All vendors awarded contracts from this Quotation may, upon mutual agreement, extend pricing to the Michigan Intergovernmental Trade Network (MITN) Purchasing Cooperative or other governmental agencies.

Each entity is responsible for its own payments and is to be considered individually for billing and collection purposes. Each entity will provide their own purchase order and delivery location(s) and must be invoiced separately to the address indicated on their purchase order.

The City of Livonia is a member of the MITN Purchasing Cooperative. If your company is awarded item(s) referenced in the Request for Quotation, the cooperative governmental entities or other governmental agencies may wish to use this contract and will issue a purchase order for the item(s) awarded in the quotation. Each entity is responsible for its own payments and is to be considered individually for billing and collection purposes. Each entity will provide its own purchase order and delivery location(s) and must be invoiced separately to the address indicated on their purchase order.

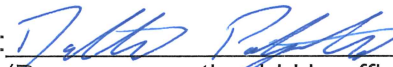
☒ If an award is made by the City of Livonia, it is agreed that the contract will be extended to the MITN Purchasing Cooperative or other governmental agencies, under the same prices, terms and conditions.

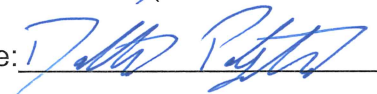
☐ Our company is NOT interested in extending the contract.

Firm Name: ETNA SUPPLY LLC

City GRAND RAPIDS State MICHIGAN Zip 49548

Phone (616) 514-5295 Fax _____

Authorized Signature:  Date 5/11/23
(Person executing bid in official capacity)

Print Name: 

DAVID L. POTGETER _____
(Names of principal officers and designate names of owners) (If partnership or assumed name, indicate official capacity)

COMPANY CONTACT FOR QUESTIONS REGARDING BID SUBMISSION

Name DALTON POTGETER Title CUSTOMER SERVICE

Phone (616) 514-5295 Email DALTONPOTGETER@ETNASUPPLY.COM

2023 BRASS FITTINGS AND PARTS – LEAD TIME WORKSHEET

COMPANY NAME ETNA Supply LLC

NOTE: Provide pricing in the attached Excel spreadsheet. Price charged shall be the price valid at the time of ordering. Orders shall be shipped in the quantities requested on the price sheet. No partial delivery quantities will be accepted.

	DESCRIPTION	LEAD TIME AFTER ORDER IS PLACED (BY NUMBER OF DAYS)	WARRANTY
1	3/4" CORPORATION flare fitting	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
2	1" CORPORATION flare fitting	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
3	1 1/2" CORPORATION flare fitting	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
4	2" CORPORATION flare fitting	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
5	3/4" CURB STOPS flare fitting	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
6	1" CURB STOPS flare fitting	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
7	1 1/2" CURB STOPS flare fitting	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
8	2" CURB STOPS flare fitting	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
9	3/4" UNIONS flare fitting	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
10	1" UNIONS flare fitting	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
11	1 1/2" UNIONS flare fitting	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
12	2" UNIONS flare fitting	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
13	1" X 3/4" C/S COUPLING C102-43	N/A	N/A
14	1" C/S COUPLING C102-34	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
15	1" x 3/4" REDUCER BUSHING	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
16	1"x3/4 flair fitting reducing union	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
17	3/4 " compression union	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
18	1" compression union	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A

CITY OF LIVONIA REQUEST FOR BID
POTABLE / NO-LEAD / BRASS ONLY / USABLE PARTS & FITTINGS

per Public Law 111-380 as of 01/01/2014

shaded areas require input

6/1/23 - 11/30/23
<u>6 MONTH PRICE</u>

12/1/23 - 5/31/24
<u>6 MONTH PRICE</u> <u>w/ INCREASE</u>

DESCRIPTION

	<u>Est</u>			
	<u>Order</u>		<u>PRICE EACH</u>	<u>TOTAL PRICE</u>
3/4" CORPORATIONS flare fitting	75	\$	32.80	\$ 2,460.00
1" CORPORATIONS flare fitting	164	\$	50.10	\$ 8,216.40
1 1/2" CORPORATIONS flare fitting	32	\$	146.85	\$ 4,699.20
2" CORPORATIONS flare fitting	26	\$	153.80	\$ 3,998.80
3/4" CURB STOPS flare fitting	175	\$	72.40	\$ 12,670.00
1" CURB STOPS flare fitting	134	\$	100.00	\$ 13,400.00
1 1/2" CURB STOPS flare fitting	29	\$	242.80	\$ 7,041.20
2" CURB STOPS flare fitting	41	\$	397.50	\$ 16,297.50
3/4" UNIONS flare fitting	188	\$	18.15	\$ 3,412.20
1" UNIONS flare fitting	138	\$	31.80	\$ 4,388.40
1 1/2" UNIONS flare fitting	28	\$	95.50	\$ 2,674.00
2" UNIONS flare fitting	36	\$	179.05	\$ 6,445.80
1" X 3/4" C/S COUPLING C102-43	100	\$	-	\$ -
1" C/S COUPLING C102-34	100	\$	29.90	\$ 2,990.00
1" x 3/4" REDUCER BUSHING	85	\$	15.60	\$ 1,326.00
1"x3/4 flair fitting reducing union	100	\$	30.90	\$ 3,090.00
3/4 " compression union	50	\$	19.70	\$ 985.00
1" compression union	50	\$	22.50	\$ 1,125.00
1 1/2 "compression union	18	\$	75.40	\$ 1,357.20
2" compression union	21	\$	101.75	\$ 2,136.75
			\$	98,713.45

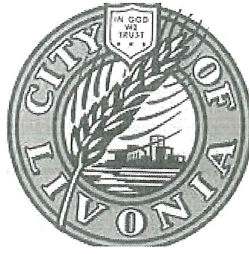
	% Increase	
0.0%		<u>TOTAL PRICE</u>
\$ 32.80	\$	2,460.00
\$ 50.10	\$	8,216.40
\$ 146.85	\$	4,699.20
\$ 153.80	\$	3,998.80
\$ 72.40	\$	12,670.00
\$ 100.00	\$	13,400.00
\$ 242.80	\$	7,041.20
\$ 397.50	\$	16,297.50
\$ 18.15	\$	3,412.20
\$ 31.80	\$	4,388.40
\$ 95.50	\$	2,674.00
\$ 179.05	\$	6,445.80
\$ -	\$	-
\$ 29.90	\$	2,990.00
\$ 15.60	\$	1,326.00
\$ 30.90	\$	3,090.00
\$ 19.70	\$	985.00
\$ 22.50	\$	1,125.00
\$ 75.40	\$	1,357.20
\$ 101.75	\$	2,136.75
	\$	98,713.45

Bid Submitted by:

Company Name ETNA SUPPLY LLC
Address 4901 CLAY AVE SW
City, State, Zip GRAND RAPIDS, MI, 49548

Contact:

Name DALTON POTGETER
Title CUSTOMER SERVICE REP
Email DALTONPOTGETER@ETNASUPPLY.COM
Phone # (616) 241-5414



Date: May 18, 2023
From: Enna A. Bachelor, Purchasing Manager
To: Prospective Bidders
Subject: Addendum No. 1 – WATER SERVICE PARTS AND FITTINGS

Addendum No. 1 is being issued to provide potential bidders with the following clarifications:

- The Lead Time Worksheet has been revised. Please submit the Revised Lead Time Worksheet attached to this addendum with your bid response uploaded to the MITN website (1 page)
- **Vendor Question:** Are the items to be ball or plug style?
City Response: Our corporations are plug style, curb stops are ball.

The due date remains the same. All other provisions of the bid remain the same. Vendors should acknowledge receipt of addendum with bid submission.

Addendum No. 1 – WATER SERVICE PARTS & FITTINGS - Acknowledgement

Company Name: ETNA SUPPLY LLC

Authorized Signature: 

Print Name: DALTON POTGIETER Date: 5/18/23

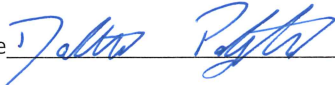
ADDENDUM NO. 1 - REVISED LEAD TIME WORKSHEET

2023 BRASS FITTINGS AND PARTS – LEAD TIME WORKSHEET

Company ETNA SUPPLY LLC Contact Person DALTON POTWETER Phone (616) 514-5295

NOTE: Provide pricing in the attached Excel spreadsheet. Price charged shall be the price valid at the time of ordering. Orders shall be shipped in the quantities requested on the price sheet. No partial delivery quantities will be accepted.

	DESCRIPTION	LEAD TIME AFTER ORDER IS PLACED (BY NUMBER OF DAYS)	WARRANTY
1	3/4" CORPORATIONS flare fitting	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
2	1" CORPORATIONS flare fitting	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
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4	2" CORPORATIONS flare fitting	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
5	3/4" CURB STOPS flare fitting	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
6	1" CURB STOPS flare fitting	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
7	1 1/2" CURB STOPS flare fitting	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
8	2" CURB STOPS flare fitting	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
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12	2" UNIONS flare fitting	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
13	1" X 3/4" C/S COUPLING C102-43	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
14	1" C/S COUPLING C102-34	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
15	1" x 3/4" REDUCER BUSHING	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
16	1"x3/4" flair fitting reducing union	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
17	3/4" compression union	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
18	1" compression union	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
19	1 1/2" compression union	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A
20	2" compression union	1 WEEK IF IN STOCK 33 WEEKS IF NOT IN STOCK	N/A

Authorized Signature  Print Name DALTON POTWETER

**CITY OF LIVONIA – CITY COUNCIL
MINUTES OF STUDY MEETING HELD June 26, 2023**

Meeting was called to order at 8:00 p.m. by Council President Jim Jolly. Present: Brandon McCullough, Scott Morgan, Kathleen McIntyre, and President Jim Jolly. Absent: Rob Donovic, Scott Bahr, and Vice President Laura Toy.

Elected and appointed officials present: Susan Nash, City Clerk; Paul Bernier, City Attorney; Todd Zilincik, City Engineer; and Jacob Rushlow, Assistant Director of Public Works.

Councilmember McCullough and his daughter, Harper, led the Pledge of Allegiance.

9. AWARD OF BID: Department of Public Works, re: for the hydro-excavation of water service lines, from the unexpended fund balance of the Water and Sewer Fund, to be reimbursed from the Drinking Water Asset Management (DWAM) Grant.

Jacob Rushlow, Assistant Director of Public Works, presented the request to Council.

Councilmember McCullough asked how long this overall process will take city wide.

Jacob Rushlow said 381 locations are to be done by December 1, 2023

Councilmember McCullough offered an approving resolution for the Consent agenda.

DIRECTION:

APPROVAL

CONSENT



LETTER TO THE LIVONIA CITY COUNCIL

9.

DPW
June 13, 2023

MEETING DATE

S062623/R071023

PREPARED BY

Jill Russell, Secretary III,

AGENDA ITEM

AWARD OF BID: Department of Public Works, re: for the hydro-excavation of water service lines, from the unexpended fund balance of the Water and Sewer Fund, to be reimbursed from the Drinking Water Asset Management (DWAM) Grant.

BACKGROUND DETAILS

The Department, with assistance from OHM Advisors, successfully applied for and received a Drinking Water Asset Management (DWAM) Grant from the Michigan Department of Environment, Great Lakes, and Energy (EGLE) totaling \$425,900. These grant monies are intended for asset management plan updates and water service line distribution system materials inventory (DSMI), which is required to be conducted by the Department through the State of Michigan's revised Lead and Copper rules.

The DSMI requires physical verification by hydro-excavation to be completed on 381 randomized locations within the City. Per grant requirements, material inspections are to be completed at three (3) locations along the water service line. One inspection will occur where the water service enters into the structure, a second inspection on the private side of the curb stop box, and the third inspection on the public side of the curb stop box. Inspections inside the building structure will be completed by City staff. Exterior inspections on both sides of the curb stop box will be completed by the contractor using hydro-excavation. Data will be collected and compiled digitally using an ArcGIS dashboard.

Bid documents were prepared by the Department with assistance from OHM and were made available to the public for bidding on MITN. A bid opening was held on May 23, 2023, and five bids were received. A bid tabulation and bid summary review with a recommendation for award are included for your consideration.

PREFERRED COUNCIL RECOMMENDATION/RESOLUTION (Please complete this field. Attachments are not to be used in lieu of the recommendation)

Award of bid and authorization of the Mayor and the City Clerk to execute a contract with Underground Infrastructure Services, 12119 Levan Road, Livonia, MI 48150 in the amount of \$252,869.00 and authorize an additional appropriation and expenditure from the unexpended fund balance of the Water and Sewer Fund (592), to be reimbursed from the proceeds of the DWAM grant. As a Livonia Based Business, the vendor qualified for the 1% local vendor credit (\$-\$2,528.69)) pursuant to Ordinance 3.04.104.(F), thus making them the lowest bidder at \$250,340.31. (Reference attached letter from our Legal Department).

SPECIFIC NAME OF PRODUCT AND NUMBER TO BE PURCHASED (if more than one)

N/A

CONTRACT: Amount and/or purchase price and length of contract (with dates if applicable)

252,869.00

DETAILED WORK BEING PERFORMED

Hydro-excavation of 381 randomized locations within the City along with inspections of excavated water lines; per grant requirements.

FISCAL CONSIDERATIONS (Amount requested and Account(s) used. If applicable, Grant Funding information)

Additional appropriation and expenditure from the unexpended fund balance of the Water and Sewer Fund (592), to be reimbursed from the proceeds of the DWAM grant.

ACCEPTANCE OF BID (Please detail the following: Why accepted, why not lowest bidder, company name, contact person, full address)

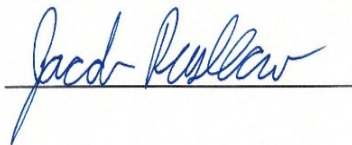
Bid documents were prepared by the Department with assistance from OHM and were made available to the public for bidding on MITN. A bid opening was held on May 23, 2023, and five bids were received.

REASON TO WAIVE BID PROCESS (Emergency, Professional services, No advantage to City and why, Consortium package, etc): n/a

ATTACHMENTS

1. Hydro Ex_Liv DWAM Grant_BidTab
2. OHM Recommend - UIS
3. UIS Bid Proposal
4. Ordinance-Livonia Based Businesses
5. Legal Ruling Livonia Based Ord 3.04.140(f)

APPROVED BY



Jacob Rushlow, P.E., Assistant Director of Public Works

Date: June 13, 2023



Don Rohraff, Director of Public Works

Date: June 13, 2023



Michael Slater, Finance Director

Date: June 15, 2023



Paul Bernier, City Attorney

Date: June 15, 2023



Maureen Miller Brosnan, Mayor

Date: June 15, 2023

Tabulation of Bids Received on 5/23/2023
Hydro Excavation (Livonia DWAM Grant)

City of Livonia, Wayne County, Michigan
 OHM Job No.: 0090-22-0010

ML Chartier Excavating, Inc Scott Kicinski	Underground Infrastructure Services Michelle Young
9195 Marine City Highway Fair Haven, Michigan 48023	12119 Levan Road Livonia, Michigan 48150

L J Inc Matthew Valley	Rouge Industrial Services* Scott Gilliam	D-Angelo Brothers Vincent D'Angelo
6359 Miller Rd Swartz Creek, Michigan	1250 Fox Chase Rd Bloomfield Hills, Michigan	PO Box 531330 Livonia, Michigan 48167

Item #	Description	Est. Quantity		Unit		Unit	
				Price	Amount	Price	Amount
1	Maintaining Traffic	1	LSum	\$ 18,460.00	\$ 18,460.00	\$ 27,500.00	\$ 27,500.00
2	Hydro-Excavation, 0 to 2 ft Diameter	548	Ea	\$ 253.50	\$ 138,918.00	\$ 203.00	\$ 111,244.00
3	Hydro-Excavation, 2 to 6 ft Diameter	146	Ea	\$ 258.50	\$ 37,741.00	\$ 205.00	\$ 29,930.00
4	Hydro-Excavation, 6 ft Diameter and Greater	36	Ea	\$ 263.50	\$ 9,486.00	\$ 220.00	\$ 7,920.00
5	Pavt, Rem, Modified	315	Syd	\$ 10.00	\$ 3,150.00	\$ 25.00	\$ 7,875.00
6	Sidewalk, Rem	67	Syd	\$ 10.00	\$ 670.00	\$ 25.00	\$ 1,675.00
7	Maintenance Gravel	10	Ton	\$ 15.50	\$ 155.00	\$ 50.00	\$ 500.00
8	Aggregate Base, 4 inch, Modified	165	Syd	\$ 5.90	\$ 973.50	\$ 35.00	\$ 5,775.00
9	Aggregate Base, 8 inch, Modified	150	Syd	\$ 11.70	\$ 1,755.00	\$ 35.00	\$ 5,250.00
10	HMA, Hand Patching	25	Ton	\$ 122.00	\$ 3,050.00	\$ 200.00	\$ 5,000.00
11	HMA, 13A	35	Ton	\$ 122.00	\$ 4,270.00	\$ 250.00	\$ 8,750.00
12	Concrete Sidewalk Replacement, 4 inch Thick	600	Sft	\$ 7.00	\$ 4,200.00	\$ 8.00	\$ 4,800.00
13	Concrete Replacement, 6 inch Thick	550	Sft	\$ 10.00	\$ 5,500.00	\$ 15.00	\$ 8,250.00
14	Concrete Replacement, 9 inch Thick	300	Sft	\$ 15.00	\$ 4,500.00	\$ 20.00	\$ 6,000.00
15	Surface Restoration, Seeding	1120	Syd	\$ 9.90	\$ 11,088.00	\$ 16.00	\$ 17,920.00
16	Surface Restoration, Sodding	160	Syd	\$ 49.40	\$ 7,904.00	\$ 28.00	\$ 4,480.00
TOTAL BID :					\$ 251,820.50		\$ 252,869.00

Notes: *No Bid Bond included

Difference \$ (1,048.50)
 % Difference -0.4164%

Ordinance 3.04.140.F.1.2 - Livonia Based Firm

1% Equalization Credit

\$ (2,528.69)

\$ 251,820.50		\$ 250,340.31
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Unit		Unit		Unit	
Price	Amount	Price	Amount	Price	Amount
\$ 25,000.00	\$ 25,000.00	\$ 10,000.00	\$ 10,000.00	\$ 21,888.00	\$ 21,888.00
\$ 325.00	\$ 178,100.00	\$ 372.00	\$ 203,856.00	\$ 575.00	\$ 315,100.00
\$ 500.00	\$ 73,000.00	\$ 391.00	\$ 57,086.00	\$ 576.00	\$ 84,096.00
\$ 1,200.00	\$ 43,200.00	\$ 1,099.00	\$ 39,564.00	\$ 575.00	\$ 20,700.00
\$ 4.00	\$ 1,260.00	\$ 120.00	\$ 37,800.00	\$ 20.00	\$ 6,300.00
\$ 5.00	\$ 335.00	\$ 115.00	\$ 7,705.00	\$ 20.00	\$ 1,340.00
\$ 50.00	\$ 500.00	\$ 82.00	\$ 820.00	\$ 25.00	\$ 250.00
\$ 25.00	\$ 4,125.00	\$ 53.00	\$ 8,745.00	\$ 20.00	\$ 3,300.00
\$ 35.00	\$ 5,250.00	\$ 70.00	\$ 10,500.00	\$ 20.00	\$ 3,000.00
\$ 700.00	\$ 17,500.00	\$ 190.00	\$ 4,750.00	\$ 350.00	\$ 8,750.00
\$ 600.00	\$ 21,000.00	\$ 90.00	\$ 3,150.00	\$ 350.00	\$ 12,250.00
\$ 8.00	\$ 4,800.00	\$ 12.00	\$ 7,200.00	\$ 9.00	\$ 5,400.00
\$ 9.00	\$ 4,950.00	\$ 13.00	\$ 7,150.00	\$ 10.00	\$ 5,500.00
\$ 11.00	\$ 3,300.00	\$ 14.00	\$ 4,200.00	\$ 15.00	\$ 4,500.00
\$ 5.00	\$ 5,600.00	\$ 10.00	\$ 11,200.00	\$ 18.00	\$ 20,160.00
\$ 25.00	\$ 4,000.00	\$ 40.00	\$ 6,400.00	\$ 20.00	\$ 3,200.00
	\$ 391,920.00		\$ 420,126.00		\$ 515,734.00



ARCHITECTS. ENGINEERS. PLANNERS.

June 14, 2023

Jacob Rushlow, P.E.
Assistant Director of Public Works
City of Livonia
12973 Farmington Road
Livonia, MI 48150

Re: **Hydro-Excavation, Livonia DWAM Grant
Bid Submittal Review**

Dear Mr. Rushlow:

Five (5) sealed contractor bids were received via electronic submission to the City Clerk's office for the Hydro-Excavation, Livonia DWAM Grant on May 23, 2023, at 2:00 pm which ranged from \$251,820.50 to \$515,734.00. This project required bidders to submit a statement of qualifications including project references. Below is a summary of findings based on our review of the bids, qualifications, and references submitted by the bidders:

Contractor	Total
ML Chartier Excavating, Inc	\$251,820.50
Underground Infrastructure Services	\$252,869.00
L J Inc	\$391,920.00
Rouge Industrial Services*	\$420,126.00
D-Angelo Brothers	\$515,734.00

*Rouge Industrial Services did not provide a Bid Bond with their submittal.

The second lowest bidder, as read, is Underground Infrastructure Services (UIS), based locally in Livonia, Michigan. UIS had a total bid of \$252,869.00. Per the ruling presented by City Attorney Michael Fisher dated June 13, 2023, UIS is deemed eligible for the 1% equalization credit available to a city-based firm under the City of Livonia Code of Ordinances Section 3.04.140(f) (see attached). This credit would decrease the UIS bid to \$250,340.31; therefore, UIS would be considered the lowest bidder. Based on review of the projects and references provided in the bid submittal, UIS has satisfactorily completed similar projects in southeast Michigan including City of Ecorse, Village of St. Charles, City of Center Line, and City of Plainwell.

Upon approval of the contract by the City Council, OHM will deliver the contracts to the contractor for signature and preparation of the appropriate bonds and insurances. Once the contractor has returned the signed books with the appropriate bonds and insurances, the contract can be executed and work can begin.

If you have any questions or require additional information, please feel free to contact this office.

Sincerely,
OHM Advisors

A handwritten signature in black ink that reads "Jessica Katers".

Jessica Katers, P.E.

cc. Mr. Don Rohraff, Director of Public Works

DRINKING WATER ASSET MANAGEMENT (DWAM) GRANT

CITY OF LIVONIA, MICHIGAN

PROPOSAL

City of Livonia
33000 Civic Center Drive
Livonia, Michigan 48154

The undersigned, by submission of this proposal, represents that he/she is familiar with and has determined for himself/herself the nature and extent of the proposed work and the conditions under which it must be performed and completed, and agrees that he/she will contract with the City of Livonia to furnish at and for the following monies, all materials, labor, equipment, insurance, supervision, and all other things necessary or incidental to complete the entire work in accordance with the appended plans, specifications, general conditions and related contract documents. By submission of this bid, the undersigned represents that he/she is familiar with and understands all of the above referenced contract documents.

The undersigned agrees that if the proposal made herein is accepted, he/she will satisfactorily perform and complete all of the work and meet all of the requirements and obligations imposed upon him/her by the contract including the plans, specifications, and general conditions between July 17, 2023 and December 1, 2023.

Also, the undersigned agrees that if the above proposal is accepted, he/she will execute the contract and furnish acceptable bonds, all on forms attached, within ten (10) calendar days from such acceptance.

To guarantee his/her fulfillment of the foregoing covenants, the bidder attaches hereto his/her bid bond in the sum of 5% of the Proposal and agrees that same shall be forfeited to the City of Livonia, in the event of his/her failure to execute the contract or furnish acceptable bonds, not as a penalty but as actual liquidated damages. The bidder further agrees to pay as liquidated damages the sum of \$1,000.00 for each consecutive calendar day after the required completion date as hereinafter called for in this Proposal and provided in Paragraph 39 of the General Conditions. The City shall not be required to prove or show such liquidated damages.

No bid shall be withdrawn for at least one hundred twenty (120) days after the scheduled closing time for receiving bids.

The undersigned agrees that the City of Livonia may increase or decrease the quantity of work without changing the unit price bid for the work.

The undersigned represents that he acknowledges that the City reserves the right to accept or reject any bid or all bids and to waive irregularities in bids.

Bidder shall not add any conditions or qualifying statements to the bid. If statements are added, the bid may be declared irregular and not responsive to the Advertisement for Bids.

TIME OF COMPLETION

Construction with final restoration shall be completed no later than **December 15, 2023** for all project areas.

It is hereby understood and mutually agreed, by and between the Contractor and Owner, that the time of completion as specified is an essential condition of this contract.

The Contractor agrees that said work shall be prosecuted regularly, diligently and uninterruptedly at such rate of progress as will ensure full completion thereof within the time specified. It is expressly understood and agreed, by and between the Contractor and Owner, that the time for completion of the work described herein are reasonable times for the completion of same, taking into consideration the average climate range and usual industrial conditions prevailing in this locality.

If the said Contractor fails to perform the work within the times herein specified, or any proper extension thereof granted by the Owner, then the Contractor does hereby agree, as a part consideration for the awarding of this contract, to pay to the Owner the sums as specified below, not as a penalty but as liquidated damages for such breach of contract as hereinafter set forth, for each and every calendar day that the Contractor shall be in default each of the times stipulated in the contract for completing the work.

The amount of liquidated damages for this project shall be as follows:

\$1,000.00 per day for each calendar day that the project is not substantially complete and accepted by Owner by December 1, 2023.

Substantial Completion shall include major work items including but not limited to the completion of all water service line investigations. Placement and grading of new gravel surface and all pavement replacement is also included.

Final Completion shall include surface restoration (seeding and sodding), landscaping, final clean-up of all debris and spoil piles, removal of temporary traffic control signs, and completion of all punch list items. Final cleanup, landscaping and surface restoration shall be finished by the final completion date, unless otherwise directed in writing by the OWNER or its ENGINEER.

Final Payment includes all items of work complete including acceptance of surface restoration (seed) and acceptable documentation required to close out the project including warranties and sureties as defined in the General Conditions.

In the event that multiple cases of liquidated damages are to be assessed, the amounts shall be combined and assessed. There is no maximum on the amount of liquidated damages that can be assessed.

No incentive will be given for work completed and accepted by the Owner prior to the completion date set forth in this contract. Each calendar day that the project is not substantially completed by the date in this contract, the above liquidated damages shall be enforced.

It is agreed that time is of the essence of each and every portion of this contract and of the specifications wherein a definite and certain length of time is fixed for the performance of any act whatsoever; and where under the contract and additional time is allowed for the completion of any work, the new time limit fixed by such extension shall be of the essence of this contract.

It is further agreed that should there be an increase or reduction of the amount of work specified within the contract that would increase or reduce the number of calendar days required to complete the project, a revision shall be made to reflect this change in the scope of work, and shall be agreed upon between the Owner's Representative and the Contractor.

Calendar Day is defined as every day shown on the calendar beginning and ending at midnight. Unless otherwise designated, the word "day" shall mean calendar day.

WAIVER

The Bidder does hereby represent and warrant that the price bid in this proposal is a complete and correct statement of the price bid for the work included in said proposal is complete, correct and submitted as intended by him and does hereby waive any right or claim he may now or hereafter have by reason of errors, mistakes or omissions made by him in said proposal.

BID NON-COLLUSIVE

The Bidder does hereby represent and warrant that this proposal is genuine and not collusive or sham, and that he has not in any manner, directly or indirectly agreed or colluded with any other person, firm or association to submit a sham bid or to refrain from bidding or in any way fix this proposal or that of the other bidder, or to secure any advantage against the Owner.

The Bidder does hereby represent and warrant that no officer or employee of the Owner is directly or indirectly interested in this proposal or in any contract which may be made under it, or any expected profits to arise there from.

NOTE: Bidder hereby acknowledges that the unit prices quoted represent all labor, and materials necessary to perform and complete the work in accordance with the current standards of the City of Livonia Engineering Department, MDOT 2020 Standard Specifications for Construction and the requirements of applicable regulatory agencies and accordance with the intent, extent and scope of work so described in the Contract Documents. All related items of work necessary to complete the project which are not detailed above, shall be incidental to the construction of the project.

NOTICE TO BIDDERS: Bidders must submit unit prices for all items in the Proposal to be considered a successful responsible bidder. The completed proposal shall be submitted via MITN website (www.mitn.info) with the Contractor's Bid.

ATTACHMENTS: The following documents are attached to and made a condition of this bid:

- a. Bid Security in the form of a bid bond on the Michigan Standard Form issued by an approved Surety Company.
- b. A listing of Subcontractors and other persons and organizations required to be identified in the Bid.
- c. Statement of Qualifications.
- d. Legal Status of Bidder
- e. Iran Linked Business Certification Form
- f. EGLE DBE Good Faith Effort Worksheet
- g. EGLE Certification Regarding Debarment

ADDENDA: Bidder acknowledges receipt of the following bulletins:

No. <u>1</u>	Date: <u>5/17/23</u>
No. _____	Date: _____
No. _____	Date: _____

The Bidder hereby declares that he has inspected the site of the work and further declares that no charges in addition to the unit prices shall be made on account of it.

The undersigned agrees, if awarded the contract, to deliver the executed contract and bonds and furnish evidence of insurance within ten (10) days after date of award. In addition, the undersigned shall begin work within ten (10) days after receipt of written notice to proceed, unless otherwise directed by the Engineer, and complete the proposed work as outlined in the Special Conditions.

If this Proposal is accepted by the City of Livonia, and the undersigned shall fail to contract as aforesaid and to furnish the required surety bonds within ten (10) days of being notified of the acceptance of his/her bid, then the undersigned shall be considered due and payable to the Owner.

If the undersigned enters into the contract in accordance with the Proposal or if his/her Proposal is rejected then the accompanying bid guarantee shall be voided.

In submitting this bid, it is understood that the right is reserved by the Owner to reject any or all bids, reject any bids that may include unbalanced items, to waive irregularities and/or formalities and, in general, to make award in any manner deemed by it, in its sole discretion, to be in the best interest of the Owner.

SIGNED AND SEALED THIS 22nd DAY OF May, 2023.

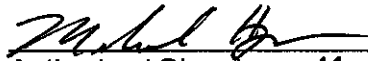
MAILING ADDRESS:

12119 Levan Rd.

Underground Infrastructure Services
Firm Name

Livonia, MI 48150

Michael Hagan
Representative


Authorized Signature Michael Hagan

Director of Operations
Title

248-938-5020
Telephone Number

N/A
Fax Number

Name of firm's representative must be clearly printed or typed under signature.

ADDENDUM NO. 1 - REVISED PROPOSAL PAGE

DRINKING WATER ASSET MANAGEMENT (DWAM) GRANT

CITY OF LIVONIA, MICHIGAN

OHM Job number: 0090-22-0010

Item	Description	Estimated Quantity	Unit Price	Amount
1	Maintaining Traffic	LSum 1	\$ <u>27,500.00</u>	\$ <u>27,500.00</u>
2	Hydro-Excavation, 0 to 2 ft Diameter	Ea 548	\$ <u>203.00</u>	\$ <u>111,244.00</u>
3	Hydro-Excavation, 2 to 6 ft Diameter	Ea 146	\$ <u>205.00</u>	\$ <u>29,930.00</u>
4	Hydro-Excavation, 6 ft Diameter and Greater	Ea 36	\$ <u>220.00</u>	\$ <u>7,920.00</u>
5	Pavt, Rem, Modified	Syd 315	\$ <u>25.00</u>	\$ <u>7,875.00</u>
6	Sidewalk, Rem	Syd 67	\$ <u>25.00</u>	\$ <u>1,675.00</u>
7	Maintenance Gravel	Ton 10	\$ <u>50.00</u>	\$ <u>500.00</u>
8	Aggregate Base, 4 inch, Modified	Syd 165	\$ <u>35.00</u>	\$ <u>5,775.00</u>
9	Aggregate Base, 8 inch, Modified	Syd 150	\$ <u>35.00</u>	\$ <u>5,250.00</u>
10	HMA, Hand Patching	Ton 25	\$ <u>200.00</u>	\$ <u>5,000.00</u>
11	HMA, 13A	Ton 35	\$ <u>250.00</u>	\$ <u>8,750.00</u>
12	Concrete Sidewalk Replacement, 4 inch Thick	Sft 600	\$ <u>8.00</u>	\$ <u>4,800.00</u>
13	Concrete Replacement, 6 inch Thick	Sft 550	\$ <u>15.00</u>	\$ <u>8,250.00</u>
14	Concrete Replacement, 9 inch Thick	Sft 300	\$ <u>20.00</u>	\$ <u>6,000.00</u>
15	Surface Restoration, Seeding	Syd 1120	\$ <u>16.00</u>	\$ <u>17,920.00</u>
16	Surface Restoration, Sodding	Syd 160	\$ <u>28.00</u>	\$ <u>4,480.00</u>
Total Bid Amount (Items 1 thru 16)				<u><u>\$ 252,869.00</u></u>

LEGAL STATUS OF BIDDER

(The Bidder shall fill out the appropriate section and strike out the other two).

A Corporation duly organized and doing business under the laws of the State of

Michigan, for whom Michael Hagan

whose signature is affixed to this Proposal, is duly authorized to execute contracts.

~~A Partnership~~, all members of which, with addresses, are:

~~An Individual~~, whose signature is affixed to this Proposal:

SUBCONTRACTOR LIST

ITEM

NAME, ADDRESS & PHONE # OF CONTRACTOR

HMA Paving

Phone: _____

Concrete

Phone: _____

Underground

Phone: _____

Restoration Items

Phone: _____

Other (Specify)

Traffic Control
Your Traffic Control LLC
5433 Dix Highway #247 Waterford, MI 48329
Phone: 917-690-4095

STATEMENT OF QUALIFICATIONS PROJECT REFERENCES

List similar projects completed within the last (5) years:

Project Title: City of Ecorse Water Service Material Investigation Program

Client: City of Ecorse / AEW Engineering

Contact Person: Ashley Carpenter Phone: 586-329-8557

Contract Amount: \$ 263,719.00

Start Date: April 2022 Completion Date: August 2022

Project Description: 461 Addresses to hydro excavate near stop box to determine pipe material of service. Provide restoration once completed

Project Title: Village of St. Charles - Hydro excavation Service Line Material Exploration

Client: Village of St. Charles / Spicer Engineering

Contact Person: Mitchel Jacqmain Phone: 989-326-1348

Contract Amount: \$ 93,932.00

Start Date: March 2022 Completion Date: April 2023

Project Description: 174 Addresses to hydro excavate at water shut off to determine material of water service. Provide restoration once completed

**STATEMENT OF QUALIFICATIONS
PROJECT REFERENCES**

Project Title: City of Center Line Water Distribution System Material Inventory

Client: City of Center Line / AEW Engineering

Contact Person: Paul Guinnane Phone: 586-855-9576

Contract Amount: \$ 270,950.00

Start Date: January 2023 Completion Date: May 2023

Project Description: 335 Addresses to hydro excavate at
water stop box to determined service line materials.
Restoration performed when completed.

Project Title: City of Plainwell Water Distribution System Material Inventory

Client: City of Plainwell / F&V Engineering

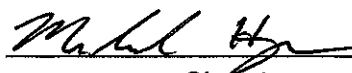
Contact Person: Jeff Wingard Phone: 269-373-7518

Contract Amount: \$ 212,050.00

Start Date: July 2022 Completion Date: October 2022

Project Description: 278 Addresses to hydro excavate at water
shut off to determine service line material. Restoration of
site when complete

Form Completed by: Michael Hagan
Name


Signature

5/22/23
Date

STATEMENT OF QUALIFICATIONS

Bidder must answer all questions. If more space is needed to complete a question, attach a separate sheet. Bidder may submit any additional information.

Name: Underground Infrastructure Services

Address: 12119 Levan Rd. Phone: 248-938-5020
Livonia, MI 48150

Number of years operating under your present name: 2 years

Pre-qualified by MDOT to bid on projects of this magnitude and type of work?

(circle one) YES ☒ NO Pre-qualification Number N/A

General nature of work performed by your company: _____

Hydro excavation and directional drilling

Background and experience of the principal members of your organization including officers: Please see attached documents

Major equipment available for this contract: please see attached fleet list.

David Weber

Title and responsibilities

David Weber is the Project Manager for Underground Infrastructure Services (UIS) and is responsible for overseeing the management of all water service projects

David is a part of the Management team and facilitates the communication and execution of specification for the field crews to ensure all projects are completed to the client's expectations in a timely, safe, and proficient manner.

Experience

As project manager David is responsible to review the specifications of the RFP, scheduling, communicating and tracking the completion of water service projects. This entails the entire project, everything from initial jobsite walks, customer meetings, coordination of miss dig tickets, scheduling of field work, traffic control and final deliverables.

David assist on coordination with our subcontractors and well as ensuring all necessary materials are available for the work to be performed.

Prior to project management, David spent time in the field on the Hydro Excavation crews performing material investigation projects to verify pipe materials and find lead service lines in Metro- Detroit.

Professional training

- Bachelors– Michigan State University
- Site Management, Site Safety and Leadership training scheme
- Confined Space Certified
- Hydro Excavation Operator Training

Representative Contracts

- City of Detroit Department of Water and Sewer – Underground Utility Services
- DSMI Hydro Excavation projects – Center Line, St Clair Shore, Brighton, Grosse Pointe

Mike Hagan

Title and responsibilities

Mike Hagan is the Director of Operations for Underground Infrastructure Services (UIS) / Pipetek Infrastructure Services and is responsible for overseeing overall operations, field personal, scheduling of projects, field work and management of projects.

Mike is a part of the Management team and facilitates the communication and scheduling of resources between field crews and the Client to ensure all projects are completed to the client's specifications in a timely, safe, and proficient manner.

Experience

Mike is a civil engineer who has been performing sewer inspections sewer cleaning, hydro excavation, directional drilling, water service systems, data processing, project management, and day-to-day operations for UIS/Pipetek. In this time, he has operated various sewer inspection equipment, processed client data, and has managed a variety of projects; inspecting, cleaning, and rehabilitating underground infrastructures to Client's standards. Mike has also overseen and performed a number of water service distribution projects completing directional drilling, utility locating, hydro excavation and inspection of the infrastructure.

Mike also spent several years working as a reservoir characterization field engineer in the Oil & Gas Industry acquiring data for the exploration and production of hydrocarbons. Gaining additional knowledge and experience in project management, construction projects and site safety.

Professional training

- Bachelor of Science in Civil Engineering – Michigan State University
- PACP/MACP/LACP – NASSCO Coding and Software
- Site Management, Site Safety and Leadership training scheme
- Confined Space Certified
- HAZWOPER 40 Hr. Certified
- Operator Training

Representative Contracts

- City of Detroit Department of Water and Sewer
- DSMI Hydro Excavation projects – Big Rapids, St Charles, Ecorse, Roscommon, Plainwell, Brighton
- Consumers Energy & DTE Energy
- Inliner Solutions -- Pipe rehabilitation

Kyle Dehne

Title and responsibilities

Kyle Dehne is the Vice President of Operations for Duke's, overseeing the Pipetek Infrastructure Services and Underground Infrastructure Services Divisions. He is responsible for all facets of the organization, particularly client satisfaction and project execution.

Kyle will work directly with the team and client to ensure adherence to the guidelines/timelines of the projects, and in turn help complete the project in such a manner to exceed the customer's expectations.

Experience

Kyle has over fifteen (15) years' experience within the underground infrastructure industry at manager, general manager and director level.

Kyle has overseen a variety of underground contracts with service offering of the following: directional drilling, hydro excavation, water distribution systems, sewer CCTV and cleaning, multi-sensor inspections, sewer rehabilitation projects, flow rate monitoring and data collection.

Professional training

- Bachelor and Master's Degree – Grand Valley State University
- PACP/MACP/LACP – NASSCO Coding
- Site Management safety training scheme
- Confined Space Training
- Operator Training
- Data Collection Software Training
- Member of the Cross Bore Safety Association
- Member of NASSCO – National Association of Sewer Service Companies
- Member of the American Gas Association

Representative Contracts

- City of Detroit
- City of Toronto
- City of Southfield
- City of Warren
- Inliner Solutions – Sewer Rehabilitation



UIS (Underground Infrastructure Services) Fleet List

Hydro Excavation Equipment

Fleet #	Vehicle	Model	Equipment	VIN / SERIAL	Year
MI-H1-21	Hydo Excavation Unit	Kenworth T880	Truvac HXX, 27" PD Vacuum, 12 yrd Debris, 1200 Gal Water, 800,000 BTU Cold Weather Package	1NKZX4EX8NJ491210	2021
MI-H2-21	Hydo Excavation Unit	Kenworth T880	Truvac HXX, 27" PD Vacuum, 12 yrd Debris, 1200 Gal Water, 800,000 BTU Cold Weather Package	1NKZX4EX9NJ491216	2021
MI-H3-22	Hydo Excavation Unit	Kenworth T880	Truvac HXX, 27" PD Vacuum, 12 yrd Debris, 1200 Gal Water, 800,000 BTU Cold Weather Package	1NKZX4EXPJ219735	2022
MI-H4-22	Hydo Excavation Unit	Western Star	Truvac HXX, 18" PD Vacuum, Air & Water Package, 12 yrd Debris, 1200 Gal Water, 800,000 BTU Cold Weather Package	5KKHAVDV5NPNK5815	2022
MI-H5-31	Hydo Excavation Unit	Kenworth T880	Ramvac HX-12, 18" HG Vacuum, 12 yrd Debris, 1300 Gal Water, 800,000 BTU Cold Weather Package	1NKZXPXIMJ407003	2021

Directional Drilling Equipment

Fleet #	Vehicle	Model	Equipment	VIN / SERIAL	Year
	Directional Drill		Toro DD4045 drill - 500' of 2.375" pipe		2013
	Directional Drill		Ditch Witch JT9 - 300' of 1.6" pipe	CMWJT9XXEF0000095	2015
	Mixing Tanks		2x 1000 Gallon Vermeer MX240		
	Mixing Tank		1000 Gallon Mixing Tank		
	Mixing Tank		300 Gallon Straitline SL300		
	Reel Trailer		2023 B&B 3.5T Reel Trailer	4L5ST141XPF064489	2023
	Load Trailer		2018 Gatormade Trailer - JT9	4Z1HD2028JS046117	2018
	Load Trailer		2023 Load Trailer - Toro	4ZEPP3023P1279182	2023

Support Equipment

Fleet #	Vehicle	Model	Equipment	VIN / SERIAL	Year
MI-U1-21	Support Vehicle	Ram 2500	Support Vehicle	3C6UR5CJXMG503472	2021
MI-U2-21	Support Vehicle	Ram 2500	Support Vehicle	3C6UR5CJ0MG512021	2021
MI-U3-04	Support Vehicle	Ford 550	Dump Truck	1FDAF56S74EC05117	2004
MI-U4-19	Support Vehicle	Ram 1500	Support Vehicle	1C6SRFBT4KN892078	2019
MI-U5-01	Support Vehicle	Chevy	Dump Truck	3GBKC34F01M102398	2001
MI-U6-17	Support Vehicle	Ram 2500	Support Vehicle	3C6UR5CJ2HG530798	2017
MI-U7-22	Support Vehicle	Ram 1500	Support Vehicle	1C6SRFFT4NN412085	2022
MI-U8-20	Support Vehicle	Ram 2500	Support Vehicle	3C6UR5HJ5LG275047	2020
MI-U9-07	Support Vehicle	Freightliner M2	Support Vehicle	1FVHC5CV67HU59239	2007
MI-U10-21	Support Vehicle	Ram 2500	Support Vehicle	3C6UR5DJ3MG508754	2021
MI-U11-19	Support Vehicle	Ram 1500	Support Vehicle	1C6SRFHT4KN896719	2019
MI-U12-20	Support Vehicle	Ram 2500	Support Vehicle	3C6UR5CJ4LG252401	2020

MI-D1	Dump Trailer		12' Hydraulic Dump Trailer - 12,500 LBS	3EUDB1025N1004947	2022
MI-D2	Dump Trailer		8' Hydraulic Dump Trailer - 12,500 LBS	3EUDB1023N1004946	2022
MI-D3	Dump Trailer		8' Hydraulic Dump Trailer - 12,500 LBS	58CB1DB24PC002656	2023
MI-D4	Dump Trailer		14' Hydraulic Dump Trailer - 12,500 LBS	4P5D71420F1230421	2015
MI-D5	Dump Trailer		12' Hydraulic Dump Trailer - 12,500 LBS	56WBU11220PE033278	2023

MI-EX1	Excavator		Bobcat E35 excavator		2022
MI-EX2	Excavator		Doosan DX35-5 excavator		2020

IRAN LINKED BUSINESS CERTIFICATION

Pursuant to Michigan Public Act 517 of 2012, any Bidder that submits a bid on a request for proposal with the City of Livonia shall certify that Bidder is not an Iran linked business. An Iran linked business is not eligible to submit a bid on a request for proposal with the City. See attached definitions regarding this certification.

The undersigned Bidder does hereby certify, pursuant to Michigan Public Act 517 of 2012, that:

Bidder is not a person engaging in investment activities in the energy sector of Iran, including a person that provides oil or liquefied natural gas tankers, or products used to construct or maintain pipelines used to transport oil or liquefied natural gas, for the energy sector of Iran, or

Bidder is not a financial institution that extends credit to another person if that person will use the credit to engage in investment activities in the energy sector of Iran.

Date: 5/22/23

Michael Hagan

By: Michael Hagan

Its: Director of Operations

Subscribed and sworn to before me, a Notary Public on this 22nd day of May, 2023

SAMANTHA HARRIS
Notary Public, State of Michigan
County of Wayne
My Commission Expires 08-26-2028
Acting in the County of Wayne

Notary Public Samantha Harris

Wayne County, Michigan

My Commission Expires: 08-26-2028

Disadvantaged Business Enterprise (DBE) Utilization

GOOD FAITH EFFORTS WORKSHEET

Instructions to Bidders for the Completion of the Good Faith Efforts Worksheet

1. Separate worksheets must be provided for each area of work to be subcontracted out. This includes both major and minor subcontracts.
2. A minimum of three (3) DBEs must be contacted by a verifiable means of communication such as e-mail, letter, or fax for each area of work to be subcontracted out. Copies of the solicitation letters/e-mails and fax confirmation sheets must be provided with the worksheet.
3. If less than three (3) DBEs exist statewide for the area of work, then provide documentation that other DBE resources were consulted. This may include the MDOT and www.sam.gov registries and an advertisement in a publication. A printout of the website searched (conducted prior to the end of the bid period) must be submitted.
4. Posting solicitations for quotes/proposals from DBEs on the MITA website (www.mitadbe.com) is highly recommended to facilitate participation in the competitive process whenever possible. The solicitation needs to identify the project and the areas of work to be subcontracted out. A copy of the MITA DBE advertisement must be submitted with the Good Faith Efforts worksheet, if used, or a printout of the resulting quotes posted to the MITA website can be submitted with this form as supporting documentation.
5. If the area of work is so specialized that no DBEs exist, then an explanation is required to support that conclusion, including the documentation required in No. 3 above.
6. The date of the DBE contact must be identified, as it is important to document that the DBE solicitation was made during the bid period and that sufficient time was given for the DBE to return a quote.
7. Each DBE firm's price quote must be identified if one was received or N/A entered on the worksheet if a quote was not received. Copies of all quotes must be submitted with the worksheet.
8. If a quote was received, indicate if it was accepted or rejected. Justification for not accepting a quote and not using the DBE subcontractor must be provided.
9. Under Other Efforts, please indicate additional steps you have taken to obtain DBE contractors and provide the appropriate supporting documentation such as:
 - Follow-up e-mails, faxes, or letters.
 - Copies of announcements/postings in newspapers, trade publications, or minority media that target DBE firms.

Rev. 3-2015

Disadvantaged Business Enterprise (DBE) Utilization

GOOD FAITH EFFORTS WORKSHEET

Bidder: Underground Infrastructure Services

Subcontract Area of Work (one per worksheet): Traffic Control

Outreach Goal: Solicit a minimum of three (3) DBEs via email/letter/fax. It is recommended that various sources be used to locate the minimum number of DBEs. The Michigan Department of Transportation (MDOT) website and www.sam.gov registries may be two resources used to find a minimum of three DBEs.

List the DBEs contacted for the above area of work and complete the following information for each DBE.

Company Name	Type of Contact	Date of Contact	Price Quote Received	Accepted/Rejected	Please Explain if Rejected
Your Traffic Control LLC 5433 Dixie Hwy #247 Waterford, MI	Email/ Phone	5/16	yes	☒ A ☐ R	N/A
				☐ A ☐ R	
				☐ A ☐ R	
				☐ A ☐ R	
				☐ A ☐ R	
				☐ A ☐ R	

Explanation for Not Achieving a Minimum of Three Contacts; you may include a printout of the MDOT and www.sam.gov search results (attach extra sheets if necessary):

MITA DBE Posting Date (if applicable): N/A
(attach a copy of the DBE advertisement)

Other Efforts (attach extra sheets if necessary):

Please include the completed worksheet and supporting documentation with the bid proposal.

Rev.3-2015

Rick Snyder, Governor



Dan Wyant, Director



Your Traffic Control, LLC

5433 Dixie Highway #247
Waterford, MI 48329
917-690-4095

Mike Hagan
Pipetek

May 16, 2023

Dear Mr. Hagan,

Our Traffic Control Company is proud to be a woman and minority owned business that brings over 30 years of construction experience to the table. We have successfully worked in both private and public sectors, with the ability to tackle projects of all sizes. We strive to be an asset to our clients, ensuring that their WBE and SBE needs are met with exceptional service. Our team stays up-to-date with the latest regulations and innovations in the industry, all while providing personalized attention to every project. We are dedicated to efficient and effective traffic control, making safety our top priority. Contact us today to learn how we can assist with your next project.

Warm Regards,

Courtney Recklein
Abdelrahman Eissawy (Adam)
Owners

Disadvantaged Business Enterprise (DBE) Utilization

GOOD FAITH EFFORTS WORKSHEET

Bidder: Underground Infrastructure Services

Subcontract Area of Work (one per worksheet): Hard Surface Restoration

Outreach Goal: Solicit a minimum of three (3) DBEs via email/letter/fax. It is recommended that various sources be used to locate the minimum number of DBEs. The Michigan Department of Transportation (MDOT) website and www.sam.gov registries may be two resources used to find a minimum of three DBEs.

List the DBEs contacted for the above area of work and complete the following information for each DBE.

Company Name	Type of Contact	Date of Contact	Price Quote Received	Accepted/Rejected	Please Explain if Rejected
Michigan Highway Contracting Inc. 12772 Stark Rd. Livonia, MI	Email	5/23	No	☐ A ☒ R	No Response, will try to follow up if awarded
Eminent Contracting LLC 514 S. Ford St. Detroit, MI	Email	5/23	No	☐ A ☒ R	No Response, will try to follow up if awarded
				☐ A ☐ R	
				☐ A ☐ R	
				☐ A ☐ R	
				☐ A ☐ R	

Explanation for Not Achieving a Minimum of Three Contacts; you may include a printout of the MDOT and www.sam.gov search results (attach extra sheets if necessary):

MITA DBE Posting Date (if applicable): N/A
(attach a copy of the DBE advertisement)

Other Efforts (attach extra sheets if necessary):

Please include the completed worksheet and supporting documentation with the bid proposal.

Rev. 3-2015

Rick Snyder, Governor



Dan Wyant, Director



Mike Hagan <mike@uismi.com>

Sub Pricing - DWAM Project Livonia

1 message

Mike Hagan <mike@uismi.com>
To: cmireles@eminentcontractingllc.com

Tue, May 23, 2023 at 8:58 AM

Good morning,

Underground Infrastructure Services (UIS) is looking to build a team of sub contractors for a DWAM project in Livonia. We are interesting in obtaining sub-pricing for surface restoration on the project attached.

Its a goal our ours to use SBE contractors, please let me know if you are interested and can provide any pricing for this project or future projects.

Thanks,

Mike Hagan
mike@uismi.com

 **Livonia Hydro.pdf**
5853K



Mike Hagan <mike@uismi.com>

Sub Pricing - DWAM Project Livonia

1 message

Mike Hagan <mike@uismi.com>
To: michiganhwy@yahoo.com

Tue, May 23, 2023 at 8:54 AM

Good morning,

Underground Infrastructure Services (UIS) is looking to build a team of sub contractors for a DWAM project in Livonia. We are interesting in obtaining sub-pricing for surface restoration on the project attached.

Its a goal our ours to use SBE contractors, please let me know if you are interested and can provide any pricing for this project or future projects.

Thanks,

Mike Hagan
mike@uismi.com

RECEIVED FROM THE FOLLOWING SOURCES: 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 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1012. 1013. 1014. 1015. 1016. 1017. 1018. 1019. 1020. 1021. 1022. 1023. 1024. 1025. 1026. 1027. 1028. 1029. 1030. 1031. 1032. 1033. 1034. 1035. 1036. 1037. 1038. 1039. 1040. 1041. 1042. 1043. 1044. 1045. 1046. 1047. 1048. 1049. 1050. 1051. 1052. 1053. 1054. 1055. 1056. 1057. 1058. 1059. 1060. 1061. 1062. 1063. 1064. 1065. 1066. 1067. 1068. 1069. 1070. 1071. 1072. 1073. 1074. 1075. 1076. 1077. 1078. 1079. 1080. 1081. 1082. 1083. 1084. 1085. 1086. 1087. 1088. 1089. 1090. 1091. 1092. 1093. 1094. 1095. 1096. 1097. 1098. 1099. 1100. 1101. 1102. 1103. 1104. 1105. 1106. 1107. 1108. 1109. 1110. 1111. 1112. 1113. 1114. 1115. 1116. 1117. 1118. 1119. 1120. 1121. 1122. 1123. 1124. 1125. 1126. 1127. 1128. 1129. 1130. 1131. 1132. 1133. 1134. 1135. 1136. 1137. 1138. 1139. 1140. 1141. 1142. 1143. 1144. 1145. 1146. 1147. 1148. 1149. 1150. 1151. 1152. 1153. 1154. 1155. 1156. 1157. 1158. 1159. 1160. 1161. 1162. 1163. 1164. 1165. 1166. 1167. 1168. 1169. 1170. 1171. 1172. 1173. 1174. 1175. 1176. 1177. 1178. 1179. 1180. 1181. 1182. 1183. 1184. 1185. 1186. 1187. 1188. 1189. 1190. 1191. 1192. 1193. 1194. 1195. 1196. 1197. 1198. 1199. 1200. 1201. 1202. 1203. 1204. 1205. 1206. 1207. 1208. 1209. 1210. 1211. 1212. 1213. 1214. 1215. 1216. 1217. 1218. 1219. 1220. 1221. 1222. 1223. 1224. 1225. 1226. 1227. 1228. 1229. 1230. 1231. 1232. 1233. 1234. 1235. 1236. 1237. 1238. 1239. 1240. 1241. 1242. 1243. 1244. 1245. 1246. 1247. 1248. 1249. 1250. 1251. 1252. 1253. 1254. 1255. 1256. 1257. 1258. 1259. 1260. 1261. 1262. 1263. 1264. 1265. 1266. 1267. 1268. 1269. 1270. 1271. 1272. 1273. 1274. 1275. 1276. 1277. 1278. 1279. 1280. 1281. 1282. 1283. 1284. 1285. 1286. 1287. 1288. 1289. 1290. 1291. 1292. 1293. 1294. 1295. 1296. 1297. 1298. 1299. 1300. 1301. 1302. 1303. 1304. 1305. 1306. 1307. 1308. 1309. 1310. 1311. 1312. 1313. 1314. 1315. 1316. 1317. 1318. 1319. 1320. 1321. 1322. 1323. 1324. 1325. 1326. 1327. 1328. 1329. 1330. 1331. 1332. 1333. 1334. 1335. 1336. 1337. 1338. 1339. 1340. 1341. 1342. 1343. 1344. 1345. 1346. 1347. 1348. 1349. 1350. 1351. 1352. 1353. 1354. 1355. 1356. 1357. 1358. 1359. 1360. 1361. 1362. 1363. 1364. 1365. 1366. 1367. 1368. 1369. 1370. 1371. 1372. 1373. 1374. 1375. 1376. 1377. 1378. 1379. 1380. 1381. 1382. 1383. 1384. 1385. 1386. 1387. 1388. 1389. 1390. 1391. 1392. 1393. 1394. 1395. 1396. 1397. 1398. 1399. 1400. 1401. 1402. 1403. 1404. 1405. 1406. 1407. 1408. 1409. 1410. 1411. 1412. 1413. 1414. 1415. 1416. 1417. 1418. 1419. 1420. 1421. 1422. 1423. 1424. 1425. 1426. 1427. 1428. 1429. 1430. 1431. 1432. 1433. 1434. 1435. 1436. 1437. 1438. 1439. 1440. 1441. 1442. 1443. 1444. 1445. 1446. 1447. 1448. 1449. 1450. 1451. 1452. 1453. 1454. 1455. 1456. 1457. 1458. 1459. 1460. 1461. 1462. 1463. 1464. 1465. 1466. 1467. 1468. 1469. 1470. 1471. 1472. 1473. 1474. 1475. 1476. 1477. 1478. 1479. 1480. 1481. 1482. 1483. 1484. 1485. 1486. 1487. 1488. 1489. 1490. 1491. 1492. 1493. 1494. 1495. 1496. 1497. 1498. 1499. 1500. 1501. 1502. 1503. 1504. 1505. 1506. 1507. 1508. 1509. 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2008. 2009. 2010. 2011. 2012. 2013. 2014. 2015. 2016. 2017. 2018. 2019. 2020. 2021. 2022. 2023. 2024. 2025. 2026. 2027. 2028. 2029. 2030. 2031. 2032. 2033. 2034. 2035. 2036. 2037. 2038. 2039. 2040. 2041. 2042. 2043. 2044. 2045. 2046. 2047. 2048. 2049. 2050. 2051. 2052. 2053. 2054. 2055. 2056. 2057. 2058. 2059. 2060. 2061. 2062. 2063. 2064. 2065. 2066. 2067. 2068. 2069. 2070. 2071. 2072. 2073. 2074. 2075. 2076. 2077. 2078. 2079. 2080. 2081. 2082. 2083. 2084. 2085. 2086. 2087. 2088. 2089. 2090. 2091. 2092. 2093. 2094. 2095. 2096. 2097. 2098. 2099. 2100. 2101. 2102. 2103. 2104. 2105. 2106. 2107. 2108. 2109. 2110. 2111. 2112. 2113. 2114. 2115. 2116. 2117. 2118. 2119. 2120. 2121. 2122. 2123. 2124. 2125. 2126. 2127. 2128. 2129. 2130. 2131. 2132. 2133. 2134. 2135. 2136. 2137. 2138. 2139. 2140. 2141. 2

**Certification Regarding
Debarment, Suspension, and Other Responsibility Matters**

The prospective participant certifies, to the best of its knowledge and belief, that it and its principals:

- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in transactions under federal nonprocurement programs by any federal department or agency;
- (2) Have not, within the three year period preceding the proposal, had one or more public transactions (federal, state, or local) terminated for cause or default; and
- (3) Are not presently indicted or otherwise criminally or civilly charged by a government entity (federal, state, or local) and have not, within the three year period preceding the proposal, been convicted of or had a civil judgment rendered against it:
 - (a) For the commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public transaction (federal, state, or local) or a procurement contract under such a public transaction;
 - (b) For the violation of federal or state antitrust statutes, including those proscribing price fixing between competitors, the allocation of customers between competitors, or bid rigging; or
 - (c) For the commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.

I understand that a false statement on this certification may be grounds for the rejection of this proposal or the termination of the award. In addition, under 18 U.S.C. §1001, a false statement may result in a fine of up to \$10,000 or imprisonment for up to five years, or both.

Michael Hagan - Director of Operations
Name and Title of Authorized Representative

Underground Infrastructure Services
Name of Participant Agency or Firm

Michael Hagan
Signature of Authorized Representative

5/22/23
Date

☐ I am unable to certify to the above statement. Attached is my explanation.



Date: May 17, 2023
From: Enna A. Bachelor, Purchasing Manager
To: Prospective Bidders
Subject: Addendum No. 1 – Hydro-Excavation Drinking Water Asset Management

Addendum No. 1 is being issued to notify potential bidders of clarifications to the bid documents.

Please refer to the three (3) pages attached to this cover sheet.

All other provisions of the bid remain the same. **The due date remains the same.** Bidders shall acknowledge receipt of the addendum with your bid response uploaded to the Bidnet Direct website.

ADDENDUM NO. 1 – HYDRO-EXCAVATION DRINKING WATER ASSET MANAGEMENT
ACKNOWLEDGEMENT

Company Name: <i>Underground Infrastructure Services</i>	
Authorized Signature <i>[Signature]</i>	Date <i>5/18/23</i>
Print Name <i>Michael Hagan</i>	Title <i>Director of Operations</i>

ADDENDUM No. 1
May 17, 2023

Drinking Water Asset Management (DWAM) Grant
City of Livonia
OHM Job No.: 0090-22-0010

The following changes, additions, and/or clarifications to the Contract Documents shall be incorporated in said documents and shall be allowed for in the unit prices bid by the Contractor such that the unit prices indicated in the Bid Form shall represent the conditions as set forth in the Contract Documents and this addendum. The bidder shall acknowledge their receipt of this addendum on page BF-1 of their Bid Form submittal. This addendum will be included in its entirety in the final, executed version of the Contract Book.

The Bidder shall also complete and return the acknowledgment of this addendum with their bid response uploaded to MITN.

This Addendum contains 3 pages.

ADDITIONS AND CHANGES TO THE SPECIFICATIONS:

Notice to Bidders Page 1 (NB-1):

1. The Sheet NB-1 within the Notice to Bidders section shall be replaced with the attached, revised NB-1.

Proposal Page 5 (P-5):

2. The Sheet P-5 within the Proposal section shall be replaced with the attached, revised P-5. There was a miscalculation in the original quantities for pavement.

NOTE: Bidders shall use the revised Proposal Page attached to this Addendum to submit pricing.

ADDENDUM NO. 1
NOTICE TO BIDDERS
CITY OF LIVONIA, MICHIGAN

DRINKING WATER ASSET MANAGEMENT (DWAM) GRANT

The City of Livonia is requesting proposals for the **DRINKING WATER ASSET MANAGEMENT (DWAM) GRANT**.

The City of Livonia seeks proposals for the following:

Drinking Water Asset Management (DWAM) Grant: Consists of hydro-excavation to expose selected water service lines on one or both sides of the curb stop box, with associated restoration.

The approximate quantities for some of the major items of work for this project are as follows:

Hydro-Excavation, 0 to 2 ft Diameter	548 EA
Hydro-Excavation, 2 to 6 ft Diameter	146 EA
Hydro-Excavation, 6 ft Diameter and Greater	36 EA
Pavement Removal	315 SYD
Aggregate Base Course	295 SYD
Hand Patching, HMA	60 TON
Concrete Replacement, 6 inch Thick	550 SFT
Concrete Replacement, 9 inch Thick	300 SFT
Maintenance Gravel	10 TON
Maintaining Traffic	1 LSUM

Plans and specifications will only be available online at the Michigan Inter-Governmental Trade Network (MITN) Purchasing Group at <https://www.bidnetdirect.com/mitn> beginning May 9, 2023. Hard copies of plan and specifications will not be available for purchase. Instructions to bidders may be obtained by registering with MITN at <https://www.bidnetdirect.com/mitn>.

Electronic proposals will be received through the Michigan Inter-Governmental Trade Network (MITN) Purchasing Group at <https://www.bidnetdirect.com/mitn> until **2:00 P.M., local time, on Tuesday, May 23, 2023** at which time the bids will be publicly opened and read aloud.

Bidders are to submit questions in writing to the attention of Enna A. Bachelor, Purchasing Manager at ebacheclor@livonia.gov. No phone calls will be accepted.

Each bidder agrees to waive any claim it has or may have against the Owner, the Engineer, and their respective employees, arising out of or in connection with the administration, evaluations, or recommendation of any bid.

Each proposal shall be accompanied by a bid security in the amount of five percent (5%) of the proposal, payable to the City of Livonia, as security for the acceptance of the contract. A bid bond on the Michigan Standard Form, issued by an approved Surety Company, may be furnished. Bidder's wishing to submit their bid security in a cashier's check shall include a photograph of the check with their bid proposal. The City will make arrangements to collect bid securities after the bid opening.

NB-1

F. Bids from City-Based Firms.

1. In comparing bids, the bid of any city-based firm may be deemed a better bid than the bid of any competing firm which is not city-based, whenever the bid of such competing firm shall be less than three (3) percent lower than the bid of the city-based firm on any contract bid in an amount of two hundred thousand dollars (\$200,000.00) or less, and less than one (1) percent lower on any amount bid in excess thereof. The foregoing percentages shall each be deemed to apply to the city-based bid and, as the case may be, to the full and complete amount of the contract bid, e.g., the equalization credit of one (1) percent would apply to the full contract amount bid, and not merely to the amount in excess of two hundred thousand dollars (\$200,000.00). The firm making the lowest bid thus evaluated shall be deemed the lowest bidder. No contract hereafter awarded by reason of an equalization percentage credit shall be sublet to any subcontractor which is not a city-based firm. Any bidder who claims entitlement to an equalization percentage credit shall agree to make available to the city the records necessary to establish eligibility. [Section 3.04.140](#)(E) shall not apply to contracts authorized pursuant to [Section 3.04.140](#)(D).

2. "City-based firm" means a firm which is located within the city and which has made payment of commercial, office, manufacturing or research and engineering property taxes on real or personal property for at least one (1) calendar year.

DEPARTMENT OF LAW

PAUL A. BERNIER
City Attorney

MICHAEL E. FISHER
Chief Assistant City Attorney

ERIC S. GOLDSTEIN
Assistant City Attorney

LEO D. NEVILLE
Assistant City Attorney



MAUREEN MILLER BROSINAN
MAYOR

33000 CIVIC CENTER DRIVE
LIVONIA, MICHIGAN 48154-3097
(734) 466-2520
FAX: (734) 466-2072

June 13, 2023

Michael T. Slater
Director of Finance
City of Livonia

Dear Mr. Slater:

You have requested a ruling from the City of Livonia Department of Law regarding the eligibility of Underground Infrastructure Services, LLC (aka KMR Holdco, LLC; hereinafter "UIS") for local preference under City of Livonia Code of Ordinances Section 3.04.140(F). The Department of Law has determined that UIS is eligible for the preference.

To qualify for the local preference, a bidder must meet the two-fold test of Section 3.04.140(F)(2). Namely, the bidder must be located in the City of Livonia and have paid property taxes to the City for at least one calendar year. UIS occupies space at 12119 Levan and 12145 Levan in the City of Livonia. So the first portion of the test is satisfied. City records indicate that property taxes for winter 2022 and 2022 summer taxes were paid for these properties.

The City has been provided with a copy of UIS's lease for 12119 Levan. The lease for the property at 12119 Levan requires UIS to pay "expenses" of the landlord, including property taxes. This would appear to be a typical arrangement: the landlord pays property taxes and is reimbursed by the tenant. That way the landlord need not worry about its property taxes falling into arrearage.

In any event, we are advised that UIS pays property taxes to the City of Livonia through its rental payments. We believe that makes UIS eligible for a local preference pursuant to Code of Ordinances Section 3.04.140(F).

Very truly yours,

Michael E. Fisher
Chief Assistant City Attorney

MEF/bks

P:\Brenda\Correspondence\Other Dept\Finance\Letter to M. Slater 061323.docx

**CITY OF LIVONIA – CITY COUNCIL
MINUTES OF STUDY MEETING HELD June 26, 2023**

Meeting was called to order at 8:00 p.m. by Council President Jim Jolly. Present: Brandon McCullough, Scott Morgan, Kathleen McIntyre, and President Jim Jolly. Absent: Rob Donovic, Scott Bahr, and Vice President Laura Toy.

Elected and appointed officials present: Susan Nash, City Clerk; Paul Bernier, City Attorney; Todd Zilincik, City Engineer; and Jacob Rushlow, Assistant Director of Public Works.

Councilmember McCullough and his daughter, Harper, led the Pledge of Allegiance.

10.REQUEST TO AMEND THE CONSTRUCTION ENGINEERING CONTRACT THROUGH THE QUALIFICATION BASED SELECTION (QBS) PROCESS WITH OHM ADVISORS AND AUTHORIZE EXPENDITURE: Department of Public Works, re: for the hydro-excavation of water service lines, from budgeted funds, to be reimbursed from the Drinking Water Asset Management (DWAM) Grant. (CR 311-22)

Jacob Rushlow, Assistant Director of Public Works, presented the request to Council.

Councilmember McCullough offered an approving resolution for the Consent agenda.

DIRECTION:

APPROVAL

CONSENT



LETTER TO THE LIVONIA CITY COUNCIL

10.

DPW
June 13, 2023

MEETING DATE

S062623/R071023

PREPARED BY

Jill Russell, Secretary III,

AGENDA ITEM

REQUEST TO AMEND THE CONSTRUCTION ENGINEERING CONTRACT THROUGH THE QUALIFICATION BASED SELECTION (QBS) PROCESS WITH OHM ADVISORS AND AUTHORIZE EXPENDITURE: Department of Public Works, re: for the hydro-excavation of water service lines, to be reimbursed from the Drinking Water Asset Management (DWAM) Grant. (CR 311-22)

BACKGROUND DETAILS

Pursuant to CR 311-22 adopted by City Council on October 5, 2022, OHM assisted the Department with preparing contract documents for bidding to acquire a contractor's services for hydro-excavation of 381 locations needed to verify water service line materials. At this time, we received bids and recommended the Council approve a contract with ML Chartier Excavating for this purpose. OHM would again assist the department with the construction phase services with contract administration, data collection and processing, and construction engineering services. OHM has prepared the attached proposal and contract amendment exhibits for these services.

PREFERRED COUNCIL RECOMMENDATION/RESOLUTION (Please complete this field. Attachments are not to be used in lieu of the recommendation)

Authorize the Mayor and the City Clerk to execute an amendment to the Engineering contract with OHM Advisors, 34000 Plymouth Road, Livonia, Michigan 48150 in the amount of \$38,200, to be reimbursed from the proceeds of the DWAM grant.

SPECIFIC NAME OF PRODUCT AND NUMBER TO BE PURCHASED (if more than one)

n/a

CONTRACT: Amount and/or purchase price and length of contract (with dates if applicable)

\$38,200.00

DETAILED WORK BEING PERFORMED

Construction & Engineering services pursuant to the DWAM grant for hydro-excavation of water service lines.

FISCAL CONSIDERATIONS (Amount requested and Account(s) used. If applicable, Grant Funding information)

Authorize an additional appropriation and expenditure from the unexpended fund balance of the Water and Sewer Fund (592), to be reimbursed from the proceeds of the DWAM grant.

ACCEPTANCE OF BID (Please detail the following: Why accepted, why not lowest bidder, company name, contact person, full address)

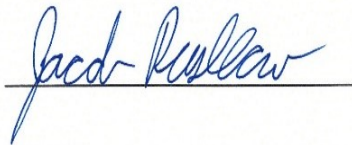
n/a

REASON TO WAIVE BID PROCESS (Emergency, Professional services, No advantage to City and why, Consortium package, etc): Waive the formal bidding process in accordance with Section 3.04.140.E.2 of the Livonia Code of Ordinances, as amended since no advantage to the City would result from competitive bidding.

ATTACHMENTS

1. S062623 LTC DWAM Grant - OHM
2. 6.8.23_DWAM Ph2 Proposal
3. 311-22 - DWAM Grant - OHM
4. R100522 DWAM Grant CR 311-22

APPROVED BY



Jacob Rushlow, P.E., Assistant Director of Public Works

Date: June 13, 2023



Don Rohraff, Director of Public Works

Date: June 13, 2023



Michael Slater, Finance Director

Date: June 15, 2023



Maureen Miller Brosnan, Mayor

Date: June 15, 2023

ARCHITECTS. ENGINEERS. PLANNERS.



June 8, 2023

Jacob Rushlow, P.E.
Assistant Director of Public Works
33000 Civic Center Dr.
Livonia, MI 48154

Regarding: Drinking Water Asset Management Grant
Proposal for Construction Engineering (CE) Services

Dear Mr. Rushlow:

It is our understanding that the City would like OHM to provide construction engineering (CE) and administration services to support the City during the construction process for the Drinking Water Asset Management (DWAM) Grant. This project includes the exploration of three hundred eighty-one (381) randomly selected water service lines via hydro-excavation.

We have worked with City staff to define the schedule for completing the proposed service line material identifications. Based on that effort, we have prepared the attached Scope of Services, Schedule and Proposed Fees to assist the City with the effort necessary to complete this work. We have based our proposal on the terms and conditions of the current Professional Services agreement. The proposed project Supplements (A-C) for this project, as well as a draft of the Exhibit A, are included.

We appreciate this opportunity to provide professional services to the City and look forward to executing the plan that allows the City to maintain compliance with the revised Lead & Copper rule requirements. Should you find our proposal acceptable, please notify us and we will prepare the final documents for execution. Should you have any questions, please do not hesitate to give me a call at 734-466-4594.

Sincerely,
OHM Advisors

A handwritten signature in black ink that reads "Jessica Katers". The signature is written in a cursive, flowing style.

Jessica Katers, PE
Project Manager

CC: Don Rohraff, Director of Public Works
Nolan Pacitto, PE, OHM

CITY OF LIVONIA

DRINKING WATER ASSET MANAGEMENT GRANT

PROJECT UNDERSTANDING

The CITY has been awarded a Drinking Water Asset Management (DWAM) Grant from the department of Environment, Great Lakes, and Energy (EGLE). Under this grant the City of Livonia is required to field verify the material of 381 randomly selected water service lines. Per grant requirements, material inspections are to be completed at three (3) locations along the water service line. One inspection will occur where the water service enters the structure, a second inspection on the private side of the curb stop box, and the third inspection on the public side of the curb stop box. Inspections on both sides of the curb stop box will be completed by a contractor using hydro-excavation.

This is Phase II of the project and will cover water service line material investigations, contract administration, and incorporation of investigation results into the City's GIS. This proposal covers the tasks necessary to complete Phase II, specific tasks are as follows:

CONSTRUCTION ADMINISTRATION AND ENGINEERING SERVICES

The **Construction Engineering and Administrative Services** shall include the following:

- ▼ **Contract Administration Services** shall consist of preparing monthly pay estimates based on quantities provided with field representative's weekly reports to meet CITY deadlines for payment purposes. Work shall also include assisting the CITY staff (i.e., Project Manager) in the resolution of claims, contract interpretations, and review of project schedules and deadlines. CONSULTANT will provide project closeout, consisting of final pay estimate preparation, grant reimbursement assistance, closeout documentation from the contractor, and a balancing Change Order identifying adjustments to the construction contract.
- ▼ **Data Collection and Processing** will consist of the CONSULTANT working with the CITY to update the City of Livonia's geographic information system (GIS) with all collected water service line information from the project. The CONTRACTOR will collect water service line material information during inspection and it will be collected and stored in a GIS based application. The CONTRACTOR will also be responsible for providing a hand written copy of the service line inspection reports for redundancy. In addition, the CONSULTANT will make field visits to project sites to observe the work in progress and assist in reviewing contractor's work in general compliance with the contract.
- ▼ **Public Notification** will consist of the CONSULTANT coordinating with the CITY to draft an informative flyer detailing the project scope, updates to the Lead and Copper Rule (LCR) requirements, and how to schedule appointments for service line inspections inside the structure. These flyers will be distributed to the randomly selected parcel list that was generated in Phase 1.

- ▶ **Construction Engineering Services** shall consist of a senior engineer who will supervise and direct the CONSULTANT'S staff to provide appropriate project documentation, resolution of construction issues/problems that may arise, provide recommendations to the CITY as it relates to claims from the contractor(s) including preparation of change orders if required, responsive complaint resolution, review of project progress for compliance with approved schedule and recommendations to the CITY'S Project Manager for penalties and/or changes in the time of completion of projects. The CONSULTANT shall lead the pre-construction conference and progress meetings.

CONSTRUCTION OBSERVATION SERVICES

The **Construction Observation Services** shall include the following:

- ▶ **Construction Observation** shall consist of part time weekly inspections at all hydro-excavation sites on the public and private side of the curb stop box for the 381 randomly selected services. Construction Daily Reports (CDR's) will be prepared documenting pay item quantities and the general work progress for the week. The CONSULTANT will answer residents' questions and attempt to promptly resolve complaints during the course of construction. The CONSULTANT will also interact with the contractor's supervisory staff to notify them when work is unacceptable and in need of correction, or removal and replacement of specific work elements when necessary.
- ▶ **Complaint Resolution Services** is included as a part of observation. This may include notifying the CITY of:
 - 1) Violations of the CITY ordinance for construction traffic on roads within the CITY
 - 2) Concerns raised by property owners during the construction phase of the project

SERVICES NOT INCLUDED

Changes in scope by Owner will result in additional services and will be billed accordingly. We will provide a proposal for the work at the time of the changes prior to proceeding with the revisions.

- ▶ Permit Fees
- ▶ Easement Documents
- ▶ Materials Testing
- ▶ Regulatory and client meetings not specifically referenced

CITY'S RESPONSIBILITY

- ▶ Handle and scheduled related communications with water service line customers selected to participate in regard to interior inspections.
- ▶ Complete interior inspection portion of the required inspection points.
 - Collect water service line material data in and OHM created GIS based dashboard during interior inspections.



CITY OF LIVONIA

DRINKING WATER ASSET MANAGEMENT GRANT

CONSULTANT shall provide services for the Phase II Tasks outline on Supplement A according to the approximate timeframe below.

Key dates are shown in the following schedule:

<u>Milestone</u>	<u>Date</u>
Contract Award	July 11, 2023
Notice to Proceed	July 25, 2023
Construction Start Date	August 7, 2023
Substantial Completion Date	December 1, 2023
Final Restoration Completion	December 15, 2023



CITY OF LIVONIA

DRINKING WATER ASSET MANAGEMENT GRANT

Phase II

The CITY agrees to pay the CONSULTANT on an hourly basis, billed monthly, per the 2023 Rate Schedule at the not-to-exceed amount of thirty-eight thousand two hundred dollars and zero cents (\$38,200).

Additional Services

Additional services, if approved by City Council, shall be paid at the current hourly rate schedule or at an agreed upon price between the CITY and CONSULTANT.

Notes

- Invoices shall be submitted monthly.
- 2023 Hourly Rate Schedule is attached for reference.

Professional Engineer IV / Architect IV / Senior Interior Designer IV	\$195.00
Professional Engineer III / Architect III / Senior Interior Designer III	\$178.00
Professional Engineer II / Architect II / Senior Interior Designer II	\$162.00
Professional Engineer I / Architect I / Senior Interior Designer I	\$152.00
Project Specialist III	\$180.00
Project Specialist II	\$160.00
Project Specialist I	\$135.00
Graduate Engineer IV	\$153.00
Graduate Engineer III	\$145.00
Graduate Engineer II	\$140.00
Graduate Engineer I	\$130.00
Graduate Architect III / Landscape Architect III / Interior Designer III	\$140.00
Graduate Architect II / Landscape Architect II / Interior Designer II	\$122.00
Graduate Architect I / Landscape Architect I / Interior Designer I	\$115.00
Technician IV	\$148.00
Technician III	\$130.00
Technician II	\$115.00
Technician I	\$96.00
Engineering / Architectural / Interior Design Aide	\$75.00
Professional Surveyor III	\$170.00
Professional Surveyor II	\$158.00
Professional Surveyor I	\$142.00
Graduate Surveyor	\$128.00
Surveyor III	\$130.00
Surveyor II	\$115.00
Surveyor I	\$100.00
Surveyor Aide	\$75.00
Planner IV	\$163.00
Planner III	\$150.00
Planner II	\$127.00
Planner I	\$110.00
Planner Aide	\$72.00
Graphic Designer	\$120.00
Administrative Support	\$90.00
Clerical Aide	\$75.00
Principal	\$230.00
Sr. Associate	\$210.00
Associate	\$198.00

Rates as reflected subject to review and adjustment on an annual basis.
2023 Public Rates 22-1118

EXHIBIT A
PROJECT SPECIFIC SCOPE OF SERVICES, PROJECT SCHEDULE, PAYMENTS
TO CONSULTANT

The information contained in this Exhibit applies only to the following project:

Project Title:
Drinking Water Asset Management Grant

Dated: _____, 2023

This is an Exhibit to the Professional Services Contract dated December 1, 2016, and extended on November 22, 2021, between the City of Livonia, and Orchard, Hiltz & McCliment, Inc. (OHM Advisors), whose address is 34000 Plymouth Road, Livonia, MI 48150.

This Exhibit acts as a duly executed written instrument that amends, supplements, modifies, or cancels certain portions of the contract, as provided in Article 8.01 of the contract.

A. SCOPE OF SERVICES

CONSULTANT is requested to provide Construction Phase Services for the DWAM Grant in accordance with attached Supplement A, dated June 8, 2023.

B. PROJECT SCHEDULE

The Project Schedule is attached as Supplement B, dated June 8, 2023.

C. PAYMENTS TO CONSULTANT

CONSULTANT shall be paid on an hourly basis up to an amount not-to-exceed thirty-eight thousand two hundred dollars and zero cents (\$38,200) in accordance with the tasks and payment terms on Supplement C, dated June 8, 2023.

In Witness Whereof, the City and Consultant, by and through their duly authorized officers and representatives, have executed this Contract.

In the Presence of:

CITY OF LIVONIA, a Michigan
Municipal Corporation

By: _____
Maureen Miller Brosnan, Mayor

By: _____
Susan M. Nash, City Clerk

In the Presence of:

OHM Advisors

Jessica Katers, PE

By: _____
Rhett Gronevelt, PE

Approved:

Its: _____
Principal

Donald R. Rohraff
Director of Public Works

Approved:

Jacob Rushlow, PE
Assistant Director of Public Works

Pursuant to Council Resolution

Approved:

No.: _____

Michael Slater
Director of Finance

Adopted on: _____

Approved:

Paul A. Bernier
Department of Law

Regular Meeting Minutes of October 5, 2022

#311-22 RESOLVED, that having considered a communication from the Assistant Director of Public Works, dated September 15, 2022, submitted pursuant to Council Resolution 336-21, adopted on November 22, 2021, which bears the signatures of the Director of Public Works, the Director of Finance, and is approved for submission by the Mayor, the Council does hereby approve an amendment to the existing Qualification Based Selection (QBS) process with OHM Advisors, 34000 Plymouth Road, Livonia, Michigan 48150, for the Drinking Water Asset Management Grant (DWAM) in an amount not to exceed \$57,900.00; FURTHER, the Council does hereby authorize an expenditure in an amount not to exceed \$57,900.00 from funds budgeted in Account No. 592-559-818-000 for this purpose; FURTHER, such action is taken in accordance with Section 3.04.140E3 of the Livonia Code of Ordinances, as amended; and the Mayor and City Clerk are hereby authorized, for and on behalf of the City of Livonia, to execute the aforesaid amendment to the agreement with OHM Advisors, subject to approval as to form and substance by the Department of Law, and to do all other things necessary or incidental to the full performance of this resolution.

Regular Meeting Minutes of October 5, 2022

On a motion by Vice President Toy, seconded by Councilmember Bahr, it was:

#311-22 RESOLVED, that having considered a communication from the Assistant Director of Public Works, dated September 15, 2022, submitted pursuant to Council Resolution 336-21, adopted on November 22, 2021, which bears the signatures of the Director of Public Works, the Director of Finance, and is approved for submission by the Mayor, the Council does hereby approve an amendment to the existing Qualification Based Selection (QBS) process with OHM Advisors, 34000 Plymouth Road, Livonia, Michigan 48150, for the Drinking Water Asset Management Grant (DWAM) in an amount not to exceed \$57,900.00; FURTHER, the Council does hereby authorize an expenditure in an amount not to exceed \$57,900.00 from funds budgeted in Account No. 592-559-818-000 for this purpose; FURTHER, such action is taken in accordance with Section 3.04.140E3 of the Livonia Code of Ordinances, as amended; and the Mayor and City Clerk are hereby authorized, for and on behalf of the City of Livonia, to execute the aforesaid amendment to the agreement with OHM Advisors, subject to approval as to form and substance by the Department of Law, and to do all other things necessary or incidental to the full performance of this resolution.

<i>CONSENT AGENDA ITEM 12 (Regular Meeting of October 5, 2022)</i>
--

Motion:	Toy
Second:	Bahr
Ayes:	Bahr, Donovic, Morgan, McCullough, McIntyre, Toy, Jolly
Nays:	None
Absent:	None

**CITY OF LIVONIA – CITY COUNCIL
MINUTES OF STUDY MEETING HELD June 26, 2023**

Meeting was called to order at 8:00 p.m. by Council President Jim Jolly. Present: Brandon McCullough, Scott Morgan, Kathleen McIntyre, and President Jim Jolly. Absent: Rob Donovic, Scott Bahr, and Vice President Laura Toy.

Elected and appointed officials present: Susan Nash, City Clerk; Paul Bernier, City Attorney; Todd Zilincik, City Engineer; and Jacob Rushlow, Assistant Director of Public Works.

Councilmember McCullough and his daughter, Harper, led the Pledge of Allegiance.

11. REQUEST TO ACCEPT STORM WATER FACILITIES MAINTENANCE AGREEMENT: Engineering Division, re: from BP Gasoline Station, in conjunction with the construction of a storm drain system that provides adequate drainage for property located at 33265 Schoolcraft Road in the Northwest 1/4 of Section 27.

Todd Zilincik, City Engineer, presented the request to Council.

Councilmember Morgan offered an approving resolution for the Consent agenda.

DIRECTION:	APPROVAL	CONSENT
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LETTER TO THE LIVONIA CITY COUNCIL

11.

Engineering
June 6, 2023

MEETING DATE

S062623/R071023

PREPARED BY

Karen Worley, Secretary IV,

AGENDA ITEM

REQUEST TO ACCEPT STORM WATER FACILITIES MAINTENANCE AGREEMENT:
Engineering Division, re: from BP Gasoline Station, in conjunction with the construction of a storm drain system that provides adequate drainage for property located at 33265 Schoolcraft Road in the Northwest 1/4 of Section 27.

BACKGROUND DETAILS

In conjunction with the development of the property located 33265 Schoolcraft Road, in the N.W. ¼ of Section 27, the Wayne County Department of Public Services has requested that the City of Livonia take jurisdiction and control of the entire on-site storm water collection system constructed by the owner of the property at their expense. A representative of the City must also be designated to execute the County permit for this storm water system construction. In reference to this storm water system, this office has received the attached storm water maintenance agreement from the owner, Hiba Associates Group, LLC, 33265 Schoolcraft Road, Livonia, Michigan 48150 requiring them to reimburse the City for any such maintenance that may become necessary.

The Engineering Division has approved the storm water collection system plans and respectfully recommends that the City Council take the actions:

- Accept the Storm Water Management System (SWMS) for BP Gasoline Station, located at 33265 Schoolcraft Road in the N.W. ¼ of Section 27.
- Authorize the Mayor and the City Clerk to execute the Storm Water Facilities Maintenance Agreement on behalf of the City.
- Advise the Wayne County Department of Public Services (Permit Section) that the City of Livonia has approved the storm water collection system plans and further, that the City will accept jurisdiction and maintenance (at no cost to the County) of the storm water collection system within the property located at 33265 Schoolcraft Road in the N.W. ¼ of Section 27.
- Authorize the City Engineer to execute the Wayne County permit on behalf of the City of Livonia in conjunction with the above storm water collection system.

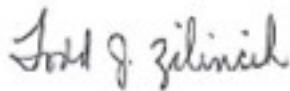
PREFERRED COUNCIL RECOMMENDATION/RESOLUTION (Please complete this field. Attachments are not to be used in lieu of the recommendation)

- Accept the Storm Water Management System (SWMS) for BP Gasoline Station, located at 33265 Schoolcraft Road in the N.W. ¼ of Section 27.
- Authorize the Mayor and the City Clerk to execute the Storm Water Facilities Maintenance Agreement on behalf of the City.
- Advise the Wayne County Department of Public Services (Permit Section) that the City of Livonia has approved the storm water collection system plans and further, that the City will accept jurisdiction and maintenance (at no cost to the County) of the storm water collection system within the property located at 33265 Schoolcraft Road in the N.W. ¼ of Section 27.
- Authorize the City Engineer to execute the Wayne County permit on behalf of the City of Livonia in conjunction with the above storm water collection system.

ATTACHMENTS

1. S062623 LTC Stormwater Agr Comfort Care
2. Comfort Care Storm Water Agreement signed by Developer with exhibits
3. Permit #M-51664

APPROVED BY



Todd Zilincik, P.E., City Engineer

Date: June 07, 2023



Don Rohraff, Director of Public Works

Date: June 07, 2023



Paul Bernier, City Attorney

Date: June 07, 2023



Maureen Miller Brosnan, Mayor

Date: June 09, 2023

STORM WATER FACILITIES MAINTENANCE AGREEMENT

THIS AGREEMENT is made this _____ day of _____, 20____, by and between the City of Livonia, a Michigan municipal corporation, with principal offices located at 33000 Civic Center Drive, Livonia, Michigan 48154, hereafter "City" and

Hiba Associates Group, LLC

a Michigan corporation with principal offices located at 33265 Schoolcraft Road, Livonia, Michigan 48150, hereafter "Proprietor".

RECITALS

1. The Proprietor is developing certain property located in the City of Livonia, Wayne County, Michigan, as BP Gasoline Station ("Development"), 33265 Schoolcraft Road, Livonia, Michigan 48150 and more particularly described in Exhibit "A" attached hereto.
2. The Proprietor must construct a storm drainage system to provide adequate drainage in the proposed Development.
3. Such storm drainage system will encompass or impact storm runoff from the Development.
4. The City has received permit no. M-51664 ("Permit") issued by the County of Wayne, Michigan, a public body corporate ("County") authorizing the construction, operations and maintenance of the storm drainage system which is located within the Development and/or the City of Livonia's, the Wayne County Office of Public Services' and/or the Michigan State Highway Department's right-of-way and/or drain, on or adjacent to the Development described in the Permit as Exhibit "C" attached hereto and incorporated herein by reference, as long as the City assumes jurisdiction for the operation and maintenance of the storm drainage system referred to in the Permit.
5. The Permit signed by the City will benefit the Proprietor and the proposed Development.
6. The City and Proprietor desire to transfer certain responsibilities of the City under the Wayne County Permit to the Proprietor and its successors and confirm the terms and conditions of such transfer of responsibility by this agreement between the City and Proprietor.

NOW, THEREFORE, for and in consideration of the mutual covenants and benefits to be derived hereunder, the receipt, adequacy and sufficiency of which is hereby acknowledged, the City and the Proprietor agree as follows:

1. The Proprietor shall assume the obligations of the City under the Permit, as follows:
 - a. The Proprietors agree they will maintain, at their own expense, the storm drainage system which is located within the Development and/or the City of Livonia's, Wayne County Office of Public Services' and/or the Michigan State Highway Department's right-of-way and/or drain, and on or adjacent to the Development described in the Permit as Exhibit "C" attached hereto and incorporated herein by reference. The City may enter upon said premises for the purposes of maintaining said storm drainage system, if the Proprietor fails to do so. In which event the owners agree to pay the City all charges and expenses incurred thereon.
 - b. In the event of any failure or settlement in the road right-of-way, resulting from the said storm drainage system, the City shall take immediate steps to correct the situation so that the public health, safety and welfare shall not be endangered nor the road improvement damaged. All expenses, including engineering will be remitted by the Proprietors to the City.
 - c. If it is found necessary to adjust or relocate all or any portion of said storm drainage system within the road right-of-way, the City shall cause such adjustment or relocation to be accomplished, and all expenses, including engineering, will be remitted by the Proprietors to the City. Prior to any work being performed in a County road right-of-way, a separate permit shall be secured from the Wayne County Office of Public Services.
 - d. To pay the City upon written request any costs and expenses apportioned to the City under the County Permit.
2. Notwithstanding the Proprietor's assumption of the liabilities of Paragraph 1 hereof, the City shall retain jurisdiction over the storm drainage system and its rights and remedies under the Permit and any applicable statute, ordinance, rule or regulation are hereby preserved. Without limitation of the foregoing, Proprietor, its successors and assigns, at its sole cost and expense shall perform maintenance of the storm water facilities described in the City of Livonia's Storm Water Management and Long-Term Maintenance Plan as Exhibit "B" attached hereto and incorporated herein by reference.
3. The Proprietor, its agents, representatives, successors and assigns shall defend, indemnify and hold the City harmless from and against any claims, demands, actions, damages, injuries, costs or expenses of any nature whatsoever, hereinafter "Claims", fixed or contingent, known or unknown, arising out of or in any way connected with the design, construction, use, maintenance, repair or operation (or omission in such regard) of the storm drainage system referred to in the permit as Exhibit "C" hereto, appurtenances, connections and attachments thereto which are the subject of this Agreement. This indemnity and hold harmless shall include any costs, expenses and

attorney fees incurred by the City in connection with such Claims or the enforcement of this Agreement.

4. In accordance with 1976 PA 453, the parties hereto covenant: (1) not to discriminate against any employee or applicant for employment with respect to hire, tenure, terms, conditions or privileges of employment, or a matter directly or indirectly related to employment, or a matter directly or indirectly related to employment because of race, color, religion, national origin, sex, age, height, weight or marital status.
5. That this Agreement shall be recorded at the Proprietor's expense with the Wayne County Register of Deeds.

IN WITNESS WHEREOF, the Proprietor and City have executed this Agreement on the day and year first above written.

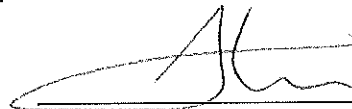
Hiba Associates Group, LLC
a Michigan limited liability company

By: 
Hiba Hamade
Its: Owner

STATE OF MICHIGAN)
) ss.
COUNTY OF WAYNE)

The foregoing instrument was acknowledged before me on this 5th day of June, 2023, a Notary Public and for said County, appeared Hamza Sikander to me being personally known, who being sworn, did for themselves say that they are the Owner of Hiba Associates Group, LLC, the limited liability company named in and which executed the within instrument and, that said instrument was signed on behalf of said limited liability company, and acknowledged said instrument to be the free act and deed of said limited liability company.

HASSAN I HAMADE
Notary Public, State of Michigan
County Of Wayne
My Commission Expires 05-22-2024
Acting in the County of Wayne


Notary Public
Wayne County, Michigan
My Commission Expires On:

CITY OF LIVONIA
a municipal corporation

By: _____
Maureen Miller Brosnan

Its: Mayor

By: _____
Susan M. Nash

Its: City Clerk

STATE OF MICHIGAN)
) ss.
COUNTY OF WAYNE)

On this _____ day of _____, 20_____, before me, a Notary Public in and for said County, appeared Maureen Miller Brosnan and Susan M. Nash to me personally known, who, being sworn, did for themselves say that they are respectively the Mayor and the City Clerk of the City of Livonia, the municipal corporation named in and which executed the within instrument and acknowledged said instrument the free act and deed of said municipal corporation.

Notary Public

_____ County, Michigan
My Commission Expires On:

INSTRUMENT DRAFTED BY:
Todd J. Zilincik, P.E.
City Engineer
City of Livonia
12973 Farmington Road
Livonia, MI 48150

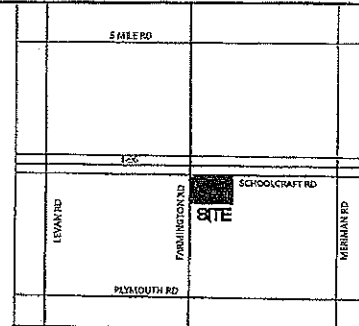
WHEN RECORDED RETURN TO:
City of Livonia
12973 Farmington Road
Livonia, MI 48150
Attn: Engineering Division



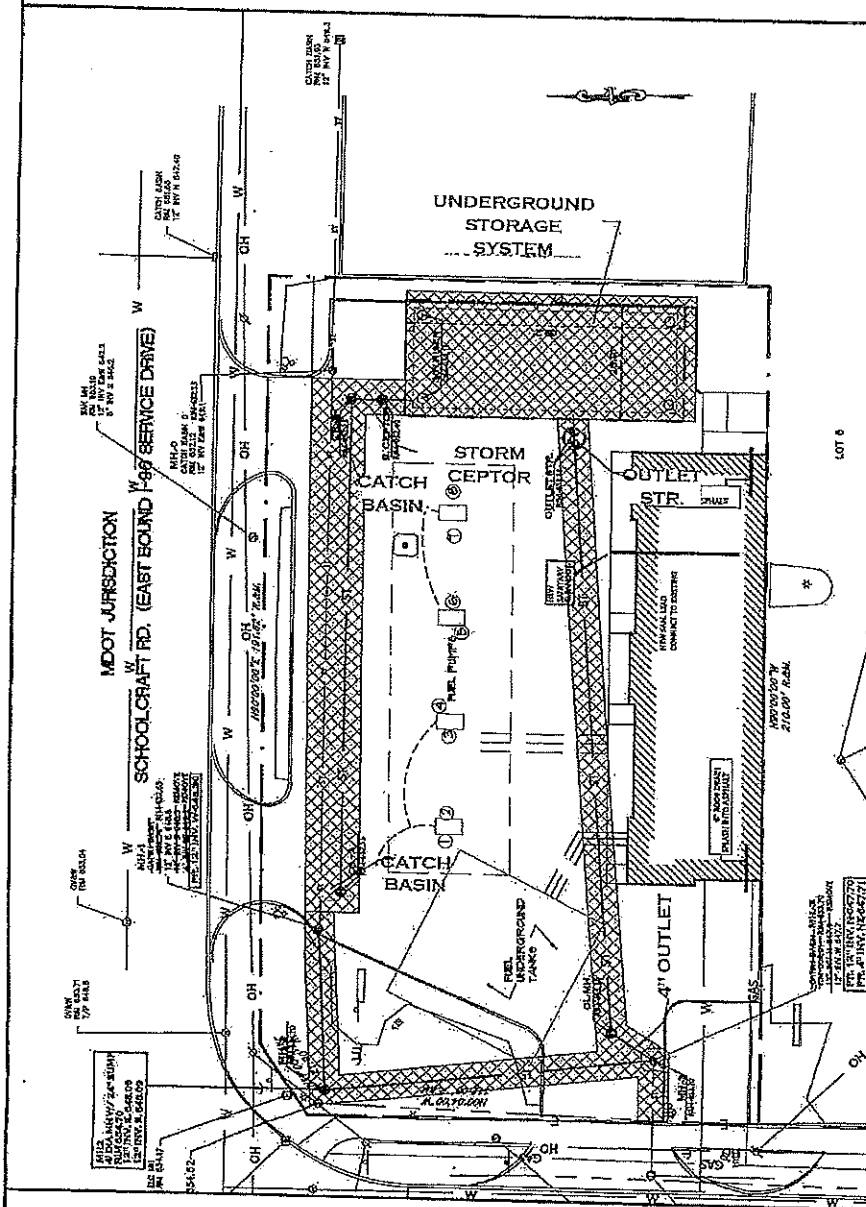
CITY OF LIVONIA
MAINTENANCE RESPONSIBILITY

LEGAL DESCRIPTION:

Part of Lots 1,2,3 and 5 "SCHOOLCRAFT ACRES SUBDIVISION" of part of Northwest Quarter of Section 27, Town 1 South, Range 9 East, Livonia Township (now City of Livonia), Wayne County, Michigan, as recorded in Liber 68, Page 44 of Plats, Wayne County Records, described as beginning at the Southwest corner of Lot 5 and proceeding thence North 00 degrees 04 minutes 00 seconds West 112.08 feet; thence North 57 degrees 00 minutes 56 seconds East 21.90 feet; thence due East 191.62 feet; thence South 00 degrees 04 minutes 00 seconds East 124.00 feet; thence due West 210.00 feet to the point of beginning.



LOCATION MAP
NOT TO SCALE



OWNER:

HIBA HAMADE
HIBA ASSOCIATES
GROUP, LLC
313-610-1666
33265 SCHOOLCRAFT RD.
LIVONIA, MI 48150
HANIHAMADE@GMAIL.COM

ENGINEER:

GK CONSULTING
GHASSAN KHALAF, P.E.
1636 N. GULLEY
DEARBORN, MI 48128
TEL: 313-377-9449
GKCI@OUTLOOK.COM

EXHIBIT "A"

PHYSICAL LIMITS AND
STORM WATER MANAGEMENT SYSTEM
BP GASOLINE STATION

33265 SCHOOLCRAFT RD.
LIVONIA, MI 48150
SHEET 1 OF 1, DATE: 05-6-2019

EXHIBIT B **STORM WATER MANAGEMENT SYSTEM LONG-TERM MAINTENANCE PLAN**

Wayne County DPS Permit No.: M - 51644
Wayne County DPS Plan Review No.: R19-389

A. Physical Limits of the Storm Water Management System

The storm water management system (SWMS) subject to this long-term maintenance plan (Plan) is depicted on Exhibit A to the permit and includes without limitation the storm sewers, swales, catch basins, manholes, inlets, manufactured treatment system, overflow structure and outlet pipe and pump station that conveys flow from storm sewer system to an existing manhole within the right-of-way of Farmington road. For the purposes of this plan, this storm water management system and all of its components as shown in Exhibit A is referred to as "BP GASOLINE STATION SWMS".

B. Time Frame for Long-Term Maintenance Responsibility

Hiba Hamade is responsible for maintaining the BP GASOLINE STATION SWMS, including complying with applicable requirements of the local or Wayne County soil erosion and sedimentation control program until Wayne County releases the construction permit. Long-term maintenance responsibility for the BP GASOLINE STATION SWMS commences when defined by the maintenance permit issued by the County. Long-term maintenance continues in perpetuity.

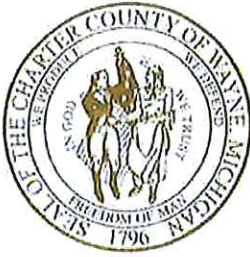
C. Manner of Insuring Maintenance Responsibility

The CITY OF LIVONIA has assumed responsibility for long-term maintenance of BP GASOLINE STATION SWMS. The resolution by which the CITY OF LIVONIA has assumed maintenance responsibility is attached to the permit as Exhibit C. BP GASOLINE STATION (Hiba Hamade), through a maintenance agreement with The CITY OF LIVONIA, has agreed to perform the maintenance activities required by this plan. The CITY OF LIVONIA retains the right to enter the property and perform the necessary maintenance of the BP GASOLINE STATION SWMS if BP GASOLINE STATION (Hiba Hamade) fails to perform the required maintenance activities. To ensure that the BP GASOLINE STATION SWMS is maintained in perpetuity, the map of the physical limits of the storm water management system (Exhibit A), this plan (Exhibit B), the resolution attached as Exhibit C, and the maintenance agreement between the CITY OF LIVONIA and the property owner(s) will be recorded with the Wayne County Register of Deeds. Upon recording, a copy of the recorded documents will be provided to the County.

D. Long-Term Maintenance Plan and Schedule

Table 1 identifies the maintenance activities to be performed, organized by category (monitoring/inspections, preventative maintenance and remedial actions). While performing maintenance, chemicals should not be applied to the bioretention, buffer strip, or watercourses. Table 1 also identifies site-specific work needed to ensure that the storm water management system functions properly as designed.

MAINTENANCE ACTIVITIES	SYSTEM COMPONENTS	Storm Collection System (Sewers, Swales, Catch Basins, Manholes)	Manufactured treatment system	UNDERGROUND STORAGE SYSTEM	Overflow Structures & Outlet Pipe	Pavement Areas	FREQUENCY
Monitoring / Inspection							
Inspect for Sediment Accumulation		X	X	X	X		As Needed / Semi - Annually
Inspect For Floatables, Dead Vegetation & Debris		X	X	X	X		Annually & After Major Events
Inspect For Erosion And Integrity of System		X			X		Annually & After Major Events
Inspect Components During Wet weather & Compare to As-		X	X	X	X		Annually
Ensure Maintenance Access Remain Open/Clear		X	X	X	X		Annually
Preventive Maintenance							
Remove Accumulated sediments		X	X	X	X		As Needed, select areas only
Remove Floatables, Invasive & Dead Vegetation & Debris		X	X	X	X		As needed**
Re-Apply / Replace Mulch Layer							Re-Apply Every 6 Months, Replace Every 2 Years
Replace Subsurface Components (Soils, Stones, 6" Underdrain, Etc.)							Every 5 Years, or When Water Ponds More Than 6 Hours
Sweeping of Paved Surfaces						X	As Needed / Semi-Annually
Remedial Action							
Repair/Stabilize Areas of Erosion, Reseed Bare Areas		X	X	X	X		As Needed
Replace Dead Plantings, Lawn							As needed
Structural Repairs		X	X	X	X	X	As Needed
Make Adjustments/Repairs to Ensure Proper Functioning		X	X	X	X	X	As Needed
NOTES:							
PROPERTY INFORMATION: BP GASOLINE STATION 33265 SCHOOLCRAFT RD. LIVONIA, MI 48150		PROPERTY OWNER: HIBA HAMADE HIBA ASSOCIATES GROUP, LLC 313-610-1666 33265 SCHOOLCRAFT RD. LIVONIA, MI 48150 HANIHAMADE@GMAIL.COM		ENGINEER: GK Consulting 1636 N Gulley Road Dearborn, MI 48128 Phone: (313) 377-9449 GKCI@outlook.com		DATE: 05/06/2019 SHEET 1 OF 1	



Warren C. Evans
Wayne County Executive

Feb 08, 2023

RECEIVED

MAY 31 2023

CITY OF LIVONIA
ENGINEERING DEPARTMENT

Mr. Todd Zilincik, P.E.
City of Livonia - Engineering
12973 Farmington Road
Livonia, MI 48150

RE: Maintenance of Storm Water Management
Maintenance Permit for BP Gasoline Station

Dear Mr. Zilincik:

Enclosed are the Storm Water Maintenance Permit **M-51664** and Exhibits A & B.

Please sign and date the enclosed maintenance permit and request Council to pass a Resolution as required by the Wayne County Storm Water Ordinance.

http://www.waynecounty.com/doe_wqm_res_stormwm_standards.htm

Please return complete packet to Wayne County Permit Office. An executed copy of this permit with exhibits will be returned to your attention.

Sincerely,

Bassma Gawil
Plan Review Engineer

PERMIT OFFICE 33809 MICHIGAN AVE WAYNE, MI 48184, PHONE (734) 595-6504 FAX (734) 595-6356
72 HOURS BEFORE ANY CONSTRUCTION. CALL
FOR INSPECTION



WAYNE COUNTY
DEPARTMENT OF PUBLIC SERVICES
PERMIT TO CONSTRUCT, OPERATE, USE AND/OR MAINTAIN

PERMIT No. M-51664	
ISSUE DATE 2/8/2023	EXPIRES
REVIEW No. R 19-389	WORK ORDER

PROJECT NAME

MAINTENANCE PERMIT FOR BP GASOLINE STATION

LOCATION

33265 SCHOOLCRAFT RD (FARMINGTON RD/I-96)

CITY/TWP

LIVONIA

PERMIT HOLDER

CITY OF LIVONIA
 12973 FARMINGTON ROAD
 LIVONIA, MI 481504202

CONTRACTOR

CONTACT

TODD ZILINCIK

(734) 466-2571

CONTACT

<BLANK>

DESCRIPTION OF PERMITTED ACTIVITY

(72 HOURS BEFORE YOU DIG, CALL MISS DIG 1-800-482-7161, www.missdig.org)

PERMIT TO MAINTAIN THE STORM WATER MANAGEMENT SYSTEM IN ACCORDANCE WITH THE DRAWING ATTACHED AS EXHIBIT "A", THE TERMS OF THE LONG-TERM MAINTENANCE PLAN ATTACHED AS EXHIBIT "B" AND THE WAYNE COUNTY STORM WATER ORDINANCE AND ADMINISTRATIVE RULES. A RESOLUTION FROM THE LOCAL MUNICIPALITY TO MAINTAIN THE PROPOSED STORM WATER MANAGEMENT SYSTEM AND ITS FACILITIES IS REQUIRED.

THE CITY OF LIVONIA SHALL ASSUME JURISDICTION OVER AND ACCEPT RESPONSIBILITY FOR MAINTENANCE OF THE STORM WATER MANAGEMENT SYSTEM(S) TO ENSURE THAT THE STORM WATER MANAGEMENT SYSTEM FUNCTIONS PROPERLY AS DESIGNED AND CONSTRUCTED. THE PERMIT HOLDER'S RESPONSIBILITIES UNDER THIS PERMIT SHALL INCLUDE, WITHOUT LIMITATIONS, (A) ANY MONITORING AND PREVENTIVE MAINTENANCE ACTIVITIES SET FORTH IN THE PLAN; (B) ANY AND ALL REMEDIAL ACTIONS NECESSARY TO REPAIR, MODIFY OR RECONSTRUCT THE SYSTEM AND (C) OTHER ACTIVITIES OR RESPONSIBILITIES FOR MAINTENANCE OF THE STORM WATER MANAGEMENT SYSTEM AS MAY BE SET FORTH IN THE ORDINANCE, ADMINISTRATIVE RULES, THE PLAN OR THIS PERMIT.

THE CITY OF LIVONIA SHALL PERFORM ALL MONITORING, MAINTENANCE, REMEDIAL AND OTHER RESPONSIBILITIES REQUIRED BY THE WAYNE COUNTY ORDINANCE, ADMINISTRATIVE RULES, THE PLAN AND THIS PERMIT, IN PERPETUITY AND AT ITS SOLE COST EXPENSE.

THE CITY OF LIVONIA SHALL PREPARE, EXECUTE AND (IF NECESSARY) RECORD ANY AND ALL AGREEMENTS, CONTRACTS AND OTHER DOCUMENTS THAT MAY BE REQUIRED TO PERFORM ITS OBLIGATIONS HEREUNDER AND ENSURE MAINTENANCE OF THE STORM WATER MANAGEMENT SYSTEM IN PERPETUITY.

IF WAYNE COUNTY FINDS IT NECESSARY TO ADJUST OR RELOCATE ALL OR ANY PORTION OF THE PERMITTED STORM WATER MANAGEMENT SYSTEM, THE PERMIT HOLDER SHALL CAUSE THIS ADJUSTMENT OR RELOCATION TO BE ACCOMPLISHED AT NO EXPENSE TO THE COUNTY. PRIOR TO ANY WORK BEING PERFORMED IN THE RIGHT-OF-WAY, A PERMIT SHALL BE SECURED FROM THE WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES PERMIT OFFICE.

APPROVED PLANS PREPARED BY Hiba Associates Group LLC	REQUIRED ATTACHMENTS EXHIBIT A: MAP DEPICTING PHYSICAL LIMITS OF STORM WATER MGT SYSTEM EXHIBIT 'B': LONG TERM MAINTENANCE PLAN EXHIBIT 'C': BINDING AGREEMENT (COMMUNITY RESOLUTION)
PLANS APPROVED BY Roznowski, J.	(PERMIT VALID ONLY IF ACCOMPANIED BY ABOVE ATTACHMENTS)

In consideration of the Permit Holder and Contractor agreeing to abide and conform with all the terms and conditions herein, a Permit is hereby issued to the above named to Construct, Operate, Use and/or Maintain within the Road Right of Way, County Easement, and/or County Property. The permitted work described above shall be accomplished in accordance with the Approved Plans, Maps, Specifications and Statements filed with the Permit Office which are integral to and made part of this Permit. The General Conditions as well as any Required Attachments are incorporated as part of this Permit.

WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES

PERMIT HOLDER NAME
 PERMIT HOLDER / AUTHORIZED AGENT

DATE

PREPARED BY

VALIDATED BY

PERMIT COORDINATOR

DATE

EXHIBIT B **STORM WATER MANAGEMENT SYSTEM LONG-TERM MAINTENANCE PLAN**

Wayne County DPS Permit No.: M - 51644
Wayne County DPS Plan Review No.: R19-389

A. Physical Limits of the Storm Water Management System

The storm water management system (SWMS) subject to this long-term maintenance plan (Plan) is depicted on Exhibit A to the permit and includes without limitation the storm sewers, swales, catch basins, manholes, inlets, manufactured treatment system, overflow structure and outlet pipe and pump station that conveys flow from storm sewer system to an existing manhole within the right-of-way of Farmington road. For the purposes of this plan, this storm water management system and all of its components as shown in Exhibit A is referred to as "BP GASOLINE STATION SWMS".

B. Time Frame for Long-Term Maintenance Responsibility

Hiba Hamade is responsible for maintaining the BP GASOLINE STATION SWMS, including complying with applicable requirements of the local or Wayne County soil erosion and sedimentation control program until Wayne County releases the construction permit. Long-term maintenance responsibility for the BP GASOLINE STATION SWMS commences when defined by the maintenance permit issued by the County. Long-term maintenance continues in perpetuity.

C. Manner of Insuring Maintenance Responsibility

The CITY OF LIVONIA has assumed responsibility for long-term maintenance of BP GASOLINE STATION SWMS. The resolution by which the CITY OF LIVONIA has assumed maintenance responsibility is attached to the permit as Exhibit C. BP GASOLINE STATION (Hiba Hamade), through a maintenance agreement with The CITY OF LIVONIA, has agreed to perform the maintenance activities required by this plan. The CITY OF LIVONIA retains the right to enter the property and perform the necessary maintenance of the BP GASOLINE STATION SWMS if BP GASOLINE STATION (Hiba Hamade) fails to perform the required maintenance activities. To ensure that the BP GASOLINE STATION SWMS is maintained in perpetuity, the map of the physical limits of the storm water management system (Exhibit A), this plan (Exhibit B), the resolution attached as Exhibit C, and the maintenance agreement between the CITY OF LIVONIA and the property owner(s) will be recorded with the Wayne County Register of Deeds. Upon recording, a copy of the recorded documents will be provided to the County.

D. Long-Term Maintenance Plan and Schedule

Table 1 identifies the maintenance activities to be performed, organized by category (monitoring/inspections, preventative maintenance and remedial actions). While performing maintenance, chemicals should not be applied to the bioretention, buffer strip, or watercourses. Table 1 also identifies site-specific work needed to ensure that the storm water management system functions properly as designed.

	SYSTEM COMPONENTS	Storm Collection System (Sewers, Swales, Catch Basins, Manholes)	Manufactured treatment system	UNDERGROUND STORAGE SYSTEM	Overflow Structures & Outlet Pipe	Pavement Areas	
MAINTENANCE ACTIVITIES							FREQUENCY
Monitoring / Inspection							
Inspect for Sediment Accumulation		X	X	X	X		As Needed / Semi - Annually
Inspect For Floatables, Dead Vegetation & Debris		X	X	X	X		Annually & After Major Events
Inspect For Erosion And Integrity of System		X			X		Annually & After Major Events
Inspect Components During Wet weather & Compare to As-		X	X	X	X		Annually
Ensure Maintenance Access Remain Open/Clear		X	X	X	X		Annually
Preventive Maintenance							
Remove Accumulated sediments		X	X	X	X		As Needed, select areas only
Remove Floatables, Invasive & Dead Vegetation & Debris		X	X	X	X		As needed**
Re-Apply / Replace Mulch Layer							Re-Apply Every 6 Months, Replace Every 2 Years
Replace Subsurface Components (Soils, Stones, 6" Underdrain, Etc.)							Every 5 Years, or When Water Ponds More Than 6 Hours
Sweeping of Paved Surfaces						X	As Needed / Semi-Annually
Remedial Action							
Repair/Stabilize Areas of Erosion, Reseed Bare Areas		X	X	X	X		As Needed
Replace Dead Plantings, Lawn							As needed
Structural Repairs		X	X	X	X	X	As Needed
Make Adjustments/Repairs to Ensure Proper Functioning		X	X	X	X	X	As Needed

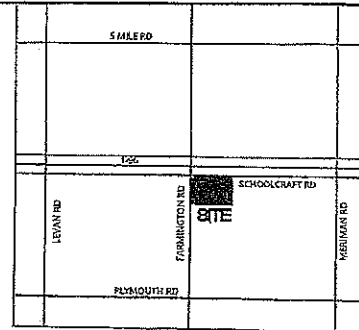
NOTES:	
PROPERTY INFORMATION: BP GASOLINE STATION 33265 SCHOOLCRAFT RD. LIVONIA, MI 48150	PROPERTY OWNER: HIBA HAMADE HIBA ASSOCIATES GROUP, LLC 313-610-1666 33265 SCHOOLCRAFT RD. LIVONIA, MI 48150 HANIHAMADE@GMAIL.COM
ENGINEER: GK Consulting 1636 N Gullley Road Dearborn, MI 48128 Phone: (313) 377-9449 GKCI@outlook.com	
DATE: 05/06/2019	
SHEET 1 OF 1	



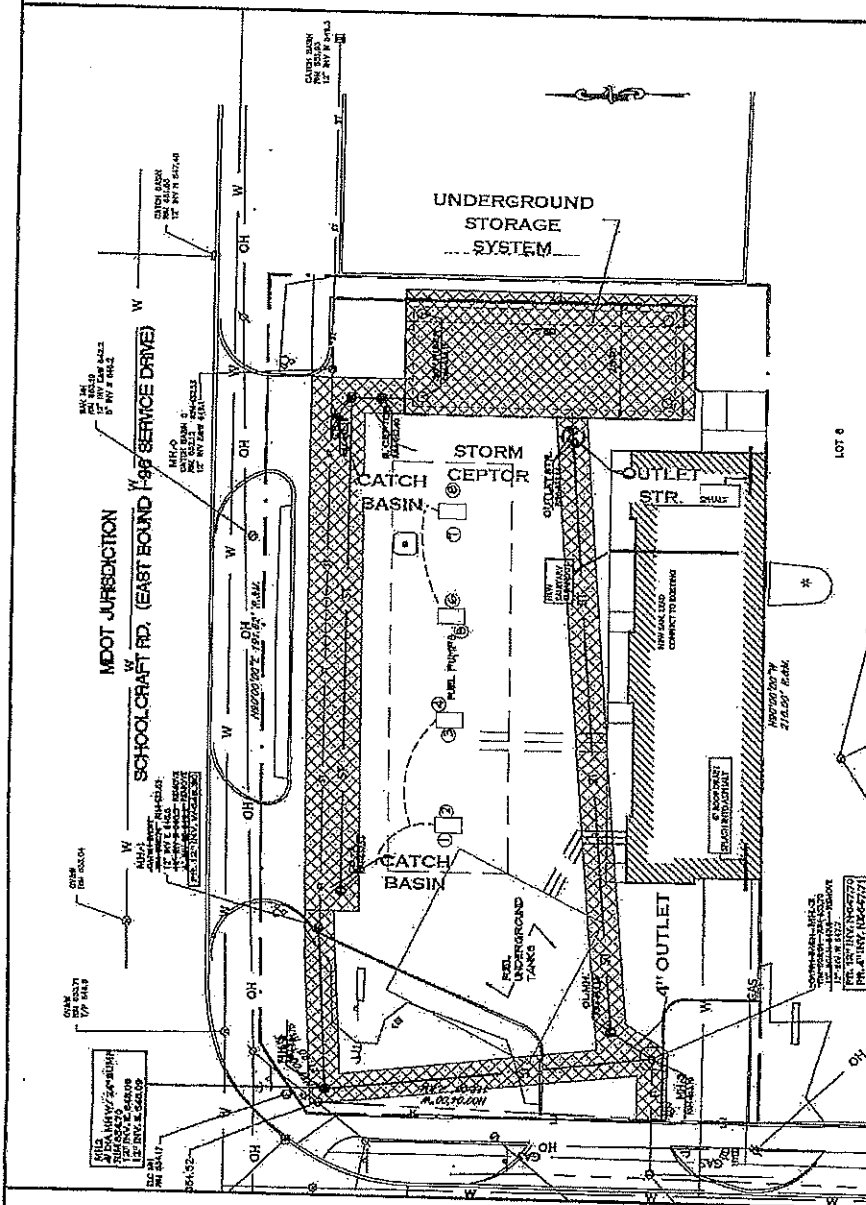
CITY OF LIVONIA
MAINTENANCE RESPONSIBILITY

LEGAL DESCRIPTION:

Part of Lots 1,2,3 and 5 "SCHOOLCRAFT ACRES SUBDIVISION" of part of Northwest Quarter of Section 27, Town 1 South, Range 9 East, Livonia Township (now City of Livonia), Wayne County, Michigan, as recorded in Liber 68, Page 44 of Plats, Wayne County Records, described as beginning at the Southwest corner of Lot 5 and proceeding thence North 00 degrees 04 minutes 00 seconds West 112.08 feet; thence North 57 degrees 00 minutes 56 seconds East 21.90 feet; thence due East 191.62 feet; thence South 00 degrees 04 minutes 00 seconds East 124.00 feet; thence due West 210.00 feet to the point of beginning.



LOCATION MAP
NOT TO SCALE



OWNER:
HIBA HAMADE
HIBA ASSOCIATES
GROUP, LLC
313-610-1666
33265 SCHOOLCRAFT RD.
LIVONIA, MI 48150
HANIHAMADE@GMAIL.COM

ENGINEER:
GK CONSULTING
GHASSAN KHALAF, P.E.
1636 N. GULLEY
DEARBORN, MI 48128
TEL: 313-377-9449
GKCI@OUTLOOK.COM

EXHIBIT "A"
PHYSICAL LIMITS AND
STORM WATER MANAGEMENT SYSTEM
BP GASOLINE STATION
33265 SCHOOLCRAFT RD.
LIVONIA, MI 48150
SHEET 1 OF 1, DATE: 05-6-2019

**CITY OF LIVONIA – CITY COUNCIL
MINUTES OF STUDY MEETING HELD June 26, 2023**

Meeting was called to order at 8:00 p.m. by Council President Jim Jolly. Present: Brandon McCullough, Scott Morgan, Kathleen McIntyre, and President Jim Jolly. Absent: Rob Donovic, Scott Bahr, and Vice President Laura Toy.

Elected and appointed officials present: Susan Nash, City Clerk; Paul Bernier, City Attorney; Todd Zilincik, City Engineer; and Jacob Rushlow, Assistant Director of Public Works.

Councilmember McCullough and his daughter, Harper, led the Pledge of Allegiance.

12. REQUEST TO APPROVE SECOND AMENDMENT TO LEASE AGREEMENT FOR CITY-OWNED BUILDING AT 33251 FIVE MILE ROAD: Department of Law, re: between the City of Livonia and Minush Velu (Sam's Place Family Restaurant) for the period ending August 31, 2025. (CR 225-20)

Paul Bernier, City Attorney, presented the request to Council.

Councilmember McIntyre offered an approving resolution for the Consent agenda.

DIRECTION:	APPROVAL	CONSENT
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LETTER TO THE LIVONIA CITY COUNCIL

12.

Law
June 2, 2023

MEETING DATE

S062623/R071023

PREPARED BY

Carol Driskill, Legal Stenographer II,

AGENDA ITEM

REQUEST TO APPROVE SECOND AMENDMENT TO LEASE AGREEMENT FOR CITY-OWNED BUILDING AT 33251 FIVE MILE ROAD: Department of Law, re: between the City of Livonia and Minush Velu (Sam's Place Family Restaurant) for the period ending August 31, 2025. (CR 225-20)

BACKGROUND DETAILS

Honorable Members of the City Council,

As you are aware, the City of Livonia owns the real property and structure located at 33251 Five Mile Road. The City has leased this property to Minush Velu (Sam's Place Family Restaurant) since September 9, 2005. The lease was amended as of August 5, 2020 to adjust the rental rate in light of the COVID-19 pandemic, but even the amended lease is now about to expire. We have attached for your review and possible approval of a Second Amendment to Lease. The proposed Second Amendment to Lease would increase the rental rate and bring the rate more in line with current market rates.

PREFERRED COUNCIL RECOMMENDATION/RESOLUTION (Please complete this field. Attachments are not to be used in lieu of the recommendation)

Should the Council wish to approve the new lease agreement, we recommend that the following resolution be adopted:

RESOLVED, that having considered the report and recommendation of the Department of Law, dated June 2, 2023, which is approved for submission by the Mayor, to which is attached a proposed Second Amendment to Lease between the City of Livonia and Minush Velu (Sam's Place Family Restaurant) for property located at 33251 Five Mile Road, Livonia, Michigan 48154, the Council does hereby approve of the aforesaid Second Amendment to Lease and authorizes the Mayor and City Clerk, for and on behalf of the City of Livonia, to execute the attached Lease Agreement, as well as to do all other things necessary or incidental to the full performance of this resolution.

ATTACHMENTS

1. S062623 LTC 2nd Amendment Sam's Place Lease Agr
2. Sam's-Golden Lantern Lease 2023 - Final
3. R080520 Lease Agreement for Sams Place - 33251 Five Mile CR 225-20

APPROVED BY

Mike Fisher, Chief Assistant City Attorney

Date: June 02, 2023



Maureen Miller Brosnan, Mayor

Date: June 02, 2023

**SECOND AMENDMENT TO LEASE
SAM'S PLACE FAMILY RESTAURANT**

**BETWEEN THE CITY OF LIVONIA
AND
MINUSH VELIU**

THIS SECOND AMENDMENT TO LEASE made and entered into this ____ day of _____, 2023, by and between the CITY OF LIVONIA, a Michigan municipal corporation, whose address is 33000 Civic Center Drive, Livonia, Michigan 48154, the Lessor, hereinafter designated as the "LANDLORD," and Minush Veliu, 33251 Five Mile Road, Livonia, Michigan 48154, the Lessee, hereinafter designated as the "TENANT."

WITNESSETH:

WHEREAS, the City of Livonia has heretofore been incorporated pursuant to Act 279 of the Public Acts of Michigan of 1909, as amended; and

WHEREAS, the property formerly known as the "Golden Lantern Restaurant," and currently known as Sam's Place Family Restaurant, is owned by the City of Livonia; and

WHEREAS, the City of Livonia, as Lessor, entered into a Lease, commencing September 9, 2005 (the "Lease"), with Tenant as Lessee of the Sam's Place Family Restaurant, formerly known as the Golden Lantern Restaurant, at 33251 Five Mile Road; and

WHEREAS, the parties hereto adopted a First Amendment to Lease as of August 5, 2020 which extended the term of the Lease by two years, ending August 31, 2022, and

WHEREAS, the parties hereto exercised the option to extend the term of the Lease Agreement by one year, ending August 31, 2023; and

WHEREAS, the parties hereto now desire to amend the Lease to extend its term by two years at the current monthly rental rate as adjusted below:

NOW THEREFORE, for and in consideration of value received and the mutual promises contained in the Lease, as well as the promises contained herein (this document being hereinafter known as the " Second Amendment;" the Lease and the First and Second Amendments being hereafter collectively referred to as the "Lease Agreement"), Landlord and Tenant agree as follows:

1.1 Term.

The Paragraph of the Lease numbered 1.3, regarding the term of the Lease, is now amended to read as follows:

The term hereof commenced on September 9, 2005 and will end on August 31, 2025, subject to the Landlord's right to terminate prior thereto as set forth in the Lease Agreement.

1.2 Rental Payments by Tenant.

Paragraph 4.2 of the Lease shall be amended to read as follows:

Tenant, in consideration of this Agreement, hereby covenants and agrees to pay to the Landlord the sum of six thousand one hundred forty-five dollars and three cents (\$6,145.03) per month, with an escalator provision as set forth in this section, to be paid on or before the first day of each month. Landlord shall set the escalator amount for Tenant's rental obligation hereunder annually. Such escalator amount shall equal the rate of the increase in the U.S. Consumer Price Index (CPI), or successor index, during the previous calendar year.

1.3 Remaining terms of Lease Agreement to Remain in Effect

All other provisions of the Lease Agreement are to remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands and seals the day and year first above written.

In the Presence of: **LANDLORD:** CITY OF LIVONIA, a Michigan Municipal Corporation

By: _____
Maureen Miller Brosnan, Mayor

and: _____
Susan Nash, City Clerk

STATE OF MICHIGAN)
)§
COUNTY OF WAYNE)

On this ____ day of _____, 2023, before me, a Notary Public in and for said County, personally appeared Maureen Miller Brosnan and Susan Nash, to me personally known, who being by me duly sworn did say that they are the Mayor and the City Clerk, respectively, of the City of Livonia, and that the seal affixed to said instrument is the corporate seal of said municipal corporation, and that said instrument was signed and sealed in behalf of said municipal corporation by authority of a resolution of its City Council, and said officers acknowledged said instrument to be the free act and deed of said municipal corporation.

Notary Public, Wayne County, Michigan
My commission expires: _____
Acting in Wayne County

In the Presence of:

TENANT:

Minush Veliu

STATE OF MICHIGAN)
)§
COUNTY OF WAYNE)

The foregoing instrument was acknowledged before me this ____ day of _____, 2023, by Minush Veliu.

Notary Public, Wayne County, Michigan
My commission expires: _____
Acting in Wayne County

Pursuant to Council Resolution
____-23 adopted by the Livonia
City Council on _____, 2023

APPROVED AS TO FORM:

Michael E. Fisher, Chief Assistant City Attorney
Dated: _____

Instrument drafted by:

Michael E. Fisher, Chief Assistant City Attorney
City of Livonia
33000 Civic Center Drive
Livonia, MI 48154

P:\Agreements\Sam's-Golden Lantern Lease 2023.doc
030823
MEF:bks

EXHIBIT A -- Description of Golden Lantern/Sam's Place Family

Restaurant Property

That part of the N.W. $\frac{1}{4}$ of Section 22, T. 1 S., R. 9 E., City of Livonia, Wayne County, Michigan, described as beginning at a point distant S. $89^{\circ} 54' 20''$ E. 60 ft. and due S. 255.75 ft. and S. $89^{\circ} 54' 20''$ E. 135 ft. from the N.W. corner of Section 22 thence S. $89^{\circ} 54' 20''$ E. 105 ft. thence due north 75.70 ft. thence N. $89^{\circ} 54' 20''$ W. 36 ft. thence due N. 73 ft. thence N. $89^{\circ} 54' 20''$ W. 69 ft. thence due S. 148.75 ft. to the point of beginning. Parcel No. 46-086-99-0009-001.

EXHIBIT B -- Description of Parking Lot

East 25 feet of the following described parcel:

The East 135 feet of the West 195 feet of the South 148.75 feet of the North 255.75 feet of the N.W. $\frac{1}{4}$ of Section 22, T. 1 S., R. 9 E., City of Livonia, Wayne County, Michigan.
(Bureau of Taxation Parcel Nos. 22J1a1a and 22J1a2a)

Minutes of the August 5, 2020 Regular Meeting

On a motion by Toy, supported by Donovic, and unanimously adopted, it

was:

#225-20 RESOLVED, that having considered the report and recommendation of the Department of Law, dated July 16, 2020, which is approved for submission by the Mayor, to which is attached a proposed First Amendment to Lease between the City of Livonia and Minush Velu (Sam's Place Family Restaurant) for property located at 33251 Five Mile Road, Livonia, Michigan 48154, the Council does hereby approve of the aforesaid First Amendment to lease and authorizes the Mayor and City Clerk, for and on behalf of the City of Livonia, to execute the attached lease agreement, as well as to do all other things necessary or incidental to the full performance of this resolution.

UNFINISHED BUSINESS ITEM (Regular Meeting of August 5, 2020)

Motion by:	Toy
Seconded by:	Donovic
ROLL CALL:	
Ayes:	Donovic, Jolly, Bahr, White, McCullough, McIntyre
Nays:	None
Absent:	None

From: [Marlene Katafias](#)
To: [CityCouncil](#)
Subject: Deer Management in Livonia
Date: Thursday, June 29, 2023 2:00:45 PM

Hello,

My name is Marlene Katafias, 15100 Merriman. I was at the special meeting to discuss the deer problem. I didn't speak since I didn't have anything additional to say. The deer population has indeed expanded in recent years. I have lived at this address since 1952 and never saw deer here prior to 15 years ago or so. I believe one of the council members was going to check out how other municipalities have done with culling and I looked into a few myself. Please check with the following that seem to have had some success, although it does have to be an annual event.

Big Rapids, Michigan. They have been partnering with the USDA Wildlife Services and Michigan Sportsmen Against Hunger since 2014 and appear to have some success with the program, plus the venison goes to feed the hungry.

Michigan Parks Authority has been culling deer in the Metro Parks system since 1999 and consider the program a success.

Since I agree that something must be done, I just wanted to pass the above information on.

I have been sitting in on Council Meetings lately to become familiar how are local government works and would like to let all of you know that I think you are doing an outstanding job.

Thank you

Marlene Katafias
734-891-7297
mkatafias@gmail.com



Virus-free. www.avg.com

From: [Simmons, Jennifer](#)
To: [CityCouncil](#); [Mayor Staff](#)
Cc: [Brosnan, Maureen Miller](#)
Subject: FW: Deer issue
Date: Tuesday, June 27, 2023 10:26:27 AM

Jennifer Simmons
Constituent Relations Specialist
City of Livonia | Mayor's Office
(734) 466-2204
jsimmons@livonia.gov

From: Jennifer Jerore <forev099@yahoo.com>
Sent: Monday, June 26, 2023 10:57 PM
To: Mayor Maureen Miller Brosnan <mayor@livonia.gov>
Subject: Deer issue

I cannot attend the meeting regarding the deer population but wanted to send a comment as I feel strongly about the subject. Deer are in there natural habitat and I don't think we should give into a few noisy citizens because they are eating there hostas. Up north in the middle of the woods at our cottage we plant things deer don't like and that solves the problem, we need to be respectful of Wildlife, what is next squirrels or chipmunks? My voteleave the deer ALONE we have other things we can be using tax dollars to address....

Thank you
Jennifer Jerore

[Sent from Yahoo Mail for iPhone](#)

Kasprowicz, Sara

From: Kenneth Kettenbeil <kketten@umich.edu>
Sent: Friday, June 23, 2023 10:18 AM
To: CityCouncil
Subject: Deer cull information

Dear Livonia City Council,

I saw on the news this week the story about the deer issue in Livonia.

I work at the University of Michigan-Dearborn and we have conducted culls on our campus, three times since 2015. We created a website to inform the community about all aspects of the cull, including: why it is necessary, options explored, safety and related issues. Our situation may be a little different than yours since we do culls to maintain a 300-acre natural area tied to faculty research and community engagement.

I thought the site may be helpful as you explore solutions to the local deer population. We have biologists on campus that may be helpful to you as you discuss this issue in your city.

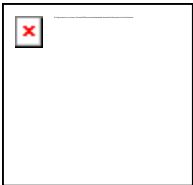
Please let me know if we can be of any help to you.

<https://umdearborn.edu/external-relations/key-issues/deer-management>

Ken

--

Ken Kettenbeil
Vice Chancellor
External Relations
4901 Evergreen Road
1161 AB
Dearborn, MI 48128
313-593-5518
kketten@umich.edu



Kasprowicz, Sara

From: clerk
Sent: Thursday, June 22, 2023 11:46 AM
To: CityCouncil; Mayor Staff
Cc: Nash, Susan M.; Kasprowicz, Sara
Subject: FW: Deer Management, My Opiniom

|

clerk@livonia.gov

From: Faten Fawaz <faten111@hotmail.com>
Sent: Wednesday, June 21, 2023 4:43 PM
To: clerk <clerk@livonia.gov>
Cc: Sabine Neighbor <dreikatzenspielen@gmail.com>
Subject: Deer Management, My Opiniom

Hello,

My name is Faten Fawaz, and I reside on Wentworth St., 48154. Here is my opinion on the recent deer mgmt. discussion:

- Based on the number of deer killed per year (200+ as stated by the rep from the Mayor's office at the public hearing on 6/19), it is likely nature is taking care of the issue. As stated by the rep, this number is not entirely due to automobile accidents.
- Repeated research shows that culling results in an increase of deer, referred to as the "Rebound Effect". Deer will reproduce at higher rates and will birth more females when a sudden population decrease occurs.
- Strongly encourage the input of DNR for well-studied options and associated impacts.
- Regarding ticks: "Deer are immune to Lyme disease and do not carry the disease. If an infected tick bites a deer, the disease does not spread to other ticks that may bite the deer as it would if the tick bit a mouse. Reducing the number of deer may reduce the number of ticks, but because of the dilution effect, the result can be a higher percentage of remaining ticks with the disease since the ticks will choose other hosts that may be carriers of the disease. Deer also browse on the vegetation that provide tick habitat. While deer may provide a meal for the adult tick, research shows the risk of Lyme disease is statistically correlated to mice, chipmunks, and ground dwelling birds. Deer groom themselves, eliminating many ticks." <https://www.deerfriendly.com/lyme-disease>

I have a suggestion... Research indicates that the number of deer remain constant or may decrease when they live in conditions unsuitable for sustaining new reproduction.

We should investigate solutions for long-term results.

For example...

- Host a yearly Livonia Flower Fest Sale in the Spring, showcasing deer-proof flowers, vegetation, landscaping, etc.

- Instruct residents to spray non-hazardous solutions to vegetation and respray after it rains, and make recommendations what sprays to use.

- Loosen the regulations around residential fence heights, and offer fence installers incentives to build fencing in this city that will deter deer where fencing is installed, and in turn preferred fencers can offer discounts to Livonia residents.

This will reduce the number of deer that tread into residential properties, also decreasing tick spread.

It will be the benefit of our community to look for sustainable solutions to serve our now, near, and far needs.

Thank you for allowing us the opportunity to share in this matter with our community leaders and elected officials!

Mrs. Faten Fawaz
248 818 0891

Sent from my iPhone

Kasprowicz, Sara

From: noreply@civicplus.com
Sent: Wednesday, June 21, 2023 9:04 AM
To: CityCouncil
Subject: Online Form Submittal: City Council Inquiries

City Council Inquiries

This form is for any questions, comments, or concerns you may have for the City in regards to city council meetings or other city council inquiries. If you leave contact information, the City will reply within 2 business days. If this is an emergency, please dial 9-1-1.

First Name	Laura
Last Name	Gerhardinger
Address	14119 S Livonia Cres
Email Address	lgerha1991@gmail.com
Phone Number	4199447212
Topic	City Council Meetings
Date of Issue	6/19/2023
Attachment (Optional)	<i>Field not completed.</i>
Comments	I could not attend the meeting on deer and coyote populations, but I wanted to write in to confirm that the deer are a significant problem in my neighborhood. I continually see the same herd (between 3 to over 10 at times) wandering my neighborhood. Recently two deer were laying in my neighbor's yard in the middle of the day. It took a lot of yelling to get them to leave. The other day I confronted two deer to get them to leave my yard, and they were not scared, and came closer to me. This confrontation made me very nervous. I am trying to create an ecosystem in my yard by replacing lawn with native plants. The deer are eating a lot of plants before they have a chance to grow. They also nearly killed an apple tree that was planted last fall. I am in support of a deer cull and anything the DNR recommends to decrease the deer population. I love seeing them, but I also have a lot of concerns about their population as they have no natural predators.

Email not displaying correctly? [View it in your browser.](#)

From: [Paul Walters](#)
To: [Donovic, Rob](#); [Mayor Maureen Miller Brosnan](#); [CityCouncil](#)
Cc: [Leadership Staff](#)
Subject: Re: Management of Deer Population
Date: Tuesday, June 20, 2023 9:50:46 AM
Attachments: [CitySeal100x100_8f7d9122-2022-4a3b-86d9-f05a096c6a3c.png](#)
[Livonia-Logo-250_2521acb0-d42c-429b-900f-b59ac98c1049.png](#)
[SocialLink_Facebook_32x32_15fe2196-de42-486f-ac8c-bd89c9da8fd7.png](#)
[SocialLink_Twitter_32x32_a844deab-cb87-48f2-9175-647012b70cfe.png](#)
[SocialLink_Youtube_32x32_9b8afb50-3b86-4678-b53d-7e423a9d8771.png](#)

All,

I know the question was brought up by citizen's last night in the meeting about deer involved crashes resulting in injuries. I wanted to provide you all with that information. Over the last 5 years there have been a total of 235 deer involved crashes in Livonia, which resulted in 9 reports of possible injury, 4 reports of suspected minor injury and 1 report of suspected serious injury.

Sgt. Paul Walters
Traffic Services Bureau
Livonia Police Department
734-466-2107

From: Donovic, Rob <rdonovic@livonia.gov>
Sent: Monday, June 19, 2023 5:39:30 PM
To: Mayor Maureen Miller Brosnan; CityCouncil
Cc: Leadership Staff; Paul Walters
Subject: Re: Management of Deer Population
Hello,

Thank you for sending all of this very detailed information—an hour and a half before a very important meeting. I appreciate all of the dedication and detail oriented work done by city staff to better inform us. Unfortunately, we can't research it minutes before a meeting.

Thank you



Rob Gjonaj Donovic
Council Member
City of Livonia | City Council
(734) 466-2254
rdonovic@livonia.gov
www.livonia.gov



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From: Mayor Maureen Miller Brosnan <mayor@livonia.gov>
Sent: Monday, June 19, 2023 5:23:08 PM
To: CityCouncil <CityCouncil@Livonia.gov>
Cc: Leadership Staff <LeadershipStaff@Livonia.gov>; Walters, Paul <paul.walters@livoniapd.com>
Subject: Management of Deer Population
Good afternoon,

Please see the attached letter and correlated correspondence.

Best,

Maureen Miller Brosnan
Mayor
City of Livonia | Mayor's Office
(734) 466-2201
mayor@livonia.gov

This message is intended only for the use of the individual or entity to which it is addressed, and may contain information that is privileged, confidential, and/or exempt from disclosure under applicable laws. If the reader of the message is not the intended recipient, or the employee or agent responsible for delivering the message to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone and/or reply to this e-mail message. Thank you.

<i>PUBLIC SAFETY, HEALTH AND ENVIRONMENT COMMITTEE</i>

<i>MONDAY, JUNE 19, 2023</i>

A Public Safety, Health and Environment Committee meeting was held on Monday, June 19, 2023, in the Livonia City Hall Auditorium.

Committee Members Present: Kathleen McIntyre, Chair
Rob Gjonaj Donovic, Vice Chair
Scott Morgan

Committee Members Absent: None

Other Councilmember Present: Council President Jim Jolly
Brandon McCullough, Councilmember

City Officials and Others Present: Lynda Scheel, City Treasurer
Susan Nash, City Clerk
Sgt. Paul Walters, Traffic Services Bureau, LPD
Dave Varga, Chief of Staff
Ted Davis, Superintendent of Parks and Recreation
Don Rohraff, Director of Public Works

Additional attendees: See attached sign in sheet.

The meeting convened at 7:02PM

1. CR 18-22 Subject matter of what options are available concerning the culling and management of the deer and coyote populations in the city.

The Public Safety and Health Committee was led by the Chair, Kathleen E. McIntyre. Background information was given to explain how this subject matter was placed into Committee 2019, clarifying why it has taken so long for such a complicated topic to be discussed.

Councilmember McIntyre gave a slide presentation provided by both the DNR and SEMCOG, showing their research and data regarding deer management.

Dave Varga, Chief of Staff, gave additional information provided by our Livonia Police Department, indicating the calls, reports and complaints regarding deer-related situations in the city.

Many residents shared their stories and encounters with the deer in their yards. The following were consistent complaints and concerns regarding the overpopulation of deer:

- Ticks carrying Lyme disease.
- Destroyed vegetation.
- Dangerous to small pets and children
- Dangerous to drivers

Various suggestions were made to control the population, which include:

- Organized deer cull
- Protect vegetation with coverings.
- Taller fences
- Spray solution to deter the deer.

Councilmember Rob Donovic offered a motion to join the Urban Deer Coalition

Councilmember Brandon McCullough offered a motion to put this item into Committee of the Whole

Councilmember Brandon McCullough requested the Administration to provide a report and recommendation to remove deceased deer from residential property.

The Committee recommends:

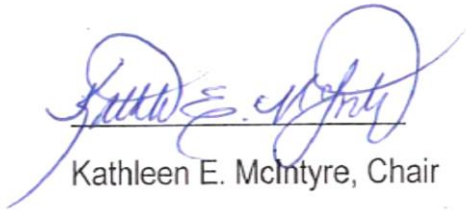
- A resolution to join the Urban Deer Coalition
- A resolution to put this subject matter into Committee of the Whole
- That the Administration provide a report and recommendation to remove deceased deer from residential property.

Note: This item will remain in committee

The meeting adjourned at 8:44PM

This item is to be placed on the **Regular Meeting Agenda of July 10, 2023**

Respectfully submitted,



Kathleen E. McIntyre, Chair

MEETING: PUBLIC SAFETY AND HEALTH COMMITTEE

DATE: MONDAY, JUNE 19, 2023

TIME: 7:00 PM

NAME

DEPT OR CONTACT INFO FOR
NOTIFICATIONS*

*PERTAINING TO THE SUBJECT
MATTER OF THIS MEETING

Marlene Kotaguan

Victoria Trygva

Nancy Kusch

NKUSCH@AOL.COM

Jim Kronz

John Schuler

15638 Brookfield

Sara Schatz

VERI JOHNSON

14847 Ingram site clean up

Rick Smith

19851 FLAMINGO

ROSEMARY MARTIN

33023 CURTIS

BARBARAGAL

31062 Pembroke St

MARIA JOHNSTON

19132 Gill Rd

Donna Manusak

35203 Oatdale

David & Sharon Crook

30339 Rayburn

Martha + Kevin Webb

16885 Canterbury

Lisa Kovalski

15429 Operto

DORIS FURMANSKI

30219 PERTH

Soc Plaza 16007 Oak Dr 48154

Michael J. Bauer 33621 N. HAMPSHIRE

Mary Bauer 33621 N. Hampshire

Dennis Martell. 18620 Filmore 48152

Gini Krenz 34075 Pembroke 48152
18313 STAMFORD 48152

Lewis J. Krenz

Edmund Kozal 11790 JARVIS 48150

Jill Pavlat 33130 Curtis 48152

Sally Rowe 19200 Antago 48150

DEBRA Wheelock 18741 Lathes 48152

Greg & Charly Gould Cary Ln 48154

Frank & Doris 30920 RAYBURN 48154

Barbara Dave St. Clair 17730 Fairfield 48152

Diane Pietrzyk 18692 Godfrey 48152

PAT & DACEY HALLMAN 15137 RIVERSIDE ST 48154

Linda Summers 14647 Bainbridge 48154

Susan Flatley 14621 Riverside 48154

Libbie Ann Jari 31523 Merrimack 48152

BRUCE TENNISWOOD 34921 BRACON LIVONIA 48150

Chris Fernitz 11141 Garden Livonia 48150

Robin Bosak 18380 Leeward Livonia 48152

Margot McCormack 30616 Cooley Rd Westland 48152

Margaret Innis 34105 Burton Ln. Livonia 48154

Linda Marchant 16239 Riverside, Liv. 48154

MEETING: PUBLIC SAFETY AND HEALTH COMMITTEE

DATE: MONDAY, JUNE 19, 2023

TIME: 7:00 PM

NAME

DEPT OR CONTACT INFO FOR
NOTIFICATIONS*

*PERTAINING TO THE SUBJECT
MATTER OF THIS MEETING

MARTHA PTASNIK	
BRIAN CULLTON	
Sheila Malkowski	
PAULA SUCHANEK	35369 Banbury
CHERYL CHAMPINE	35200 Banbury Ct.
Conni SPOKA	17499 DORIS Liv.
Melissa Wogner	20445 Hubbard Liv
Diane Buden	
Jim Beebe	14050 Stark
Roger + Ellen Stacey	19474 Polkanna
Valerie Burton	29748 Puritan
Susan Nye	35016 Bristol Ct.
DAVID SMITH	15382 COMSTOCK ST.
Jeff + Kristin Davis	15130 Padenevski
DAVE LUMLEY	14954 GARY LANE 48104
GLORIA DEARNED	14072 STARK RD 48154
ERIK KUSZYNSKI	37734 PICKFORD DR
A. SOCIA	19263 GILL RD
P. MALO	35164 Scone St. Liv.

CLAUDETTE ELAM	27545 BENTLEY
BONNIE MOTTIA	14632 Bainbridge
Deb Christiansen	LIVONIA 48150
John MORRISON	35364 CURTIS
Susan MORRISON	" "
Laurie Phelps	18355 Loveland
Deb Stoner	18505 Loveland
Bernie Weiss	14265 Norman
Cheryl Mandville	17271 Lathers
Andrea Masters	17275 Lathers
Annette Wojcik	30449 Barkley
FRED & LAURA MCGEE	17435 BROOKVIEW DR.
Diane Peters	35260 Schoolcraft
PHYLLIS NOFZ	16399 BELL CREEK LANE
DEBBIE RAIS	17343 FRANCAVILLA
Donna McGeorge	17940 Fairfield
Jim McDonald	16859 BILLYANNA
Irene Grysiwicz	16112 Burton Ct
GARY McCristow	14217 Livonia Crescent
Susan Nash	Clerk
LARRY BERNHARDT	14744 FLEMING LN 48150
Christopher BAK	34620 Northland Dr. Livonia 48152
Craig R. Juedstodt	19099 FAIRWAY Liv. 48152
Tom Birchler	17309 Doris Liv 48152
Lori Miller	11788 Farmington 48150
Math Colby	34570 N. CT. Livonia 48152
WILLIAM RAMROTH	15561 FOCH ST. LIVONIA, 48154

From: [Paul Walters](#)
To: [Donovic, Rob](#); [Mayor Maureen Miller Brosnan](#); [CityCouncil](#)
Cc: [Leadership Staff](#)
Subject: Re: Management of Deer Population
Date: Monday, June 19, 2023 6:44:08 PM
Attachments: [CitySeal100x100_8f7d9122-2022-4a3b-86d9-f05a096c6a3c.png](#)
[Livonia-Logo-250_2521acb0-d42c-429b-900f-b59ac98c1049.png](#)
[SocialLink_Facebook_32x32_15fe2196-de42-486f-ac8c-bd89c9da8fd7.png](#)
[SocialLink_Twitter_32x32_a844deab-cb87-48f2-9175-647012b70cfe.png](#)
[SocialLink_Youtube_32x32_9b8afb50-3b86-4678-b53d-7e423a9d8771.png](#)
[Covote Stats.docx](#)

Attached is the data in regard to calls for service involving coyotes over the last five years.

Sgt. Paul Walters
Traffic Services Bureau
Livonia Police Department
734-466-2107

From: Donovic, Rob <rdonovic@livonia.gov>
Sent: Monday, June 19, 2023 5:39:30 PM
To: Mayor Maureen Miller Brosnan; CityCouncil
Cc: Leadership Staff; Paul Walters
Subject: Re: Management of Deer Population
Hello,

Thank you for sending all of this very detailed information—an hour and a half before a very important meeting. I appreciate all of the dedication and detail oriented work done by city staff to better inform us. Unfortunately, we can't research it minutes before a meeting.

Thank you



Rob Gjonaj Donovic
Council Member
City of Livonia | City Council
(734) 466-2254
rdonovic@livonia.gov
www.livonia.gov



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From: Mayor Maureen Miller Brosnan <mayor@livonia.gov>
Sent: Monday, June 19, 2023 5:23:08 PM
To: CityCouncil <CityCouncil@Livonia.gov>
Cc: Leadership Staff <LeadershipStaff@Livonia.gov>; Walters, Paul
<paul.walters@livoniapd.com>
Subject: Management of Deer Population
Good afternoon,

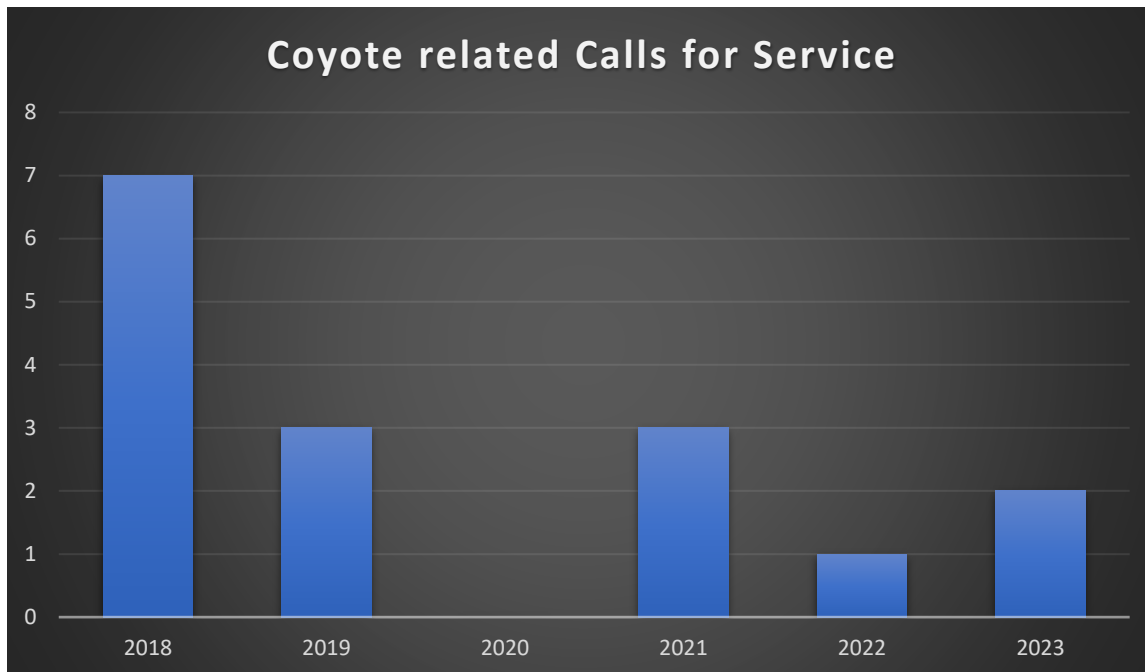
Please see the attached letter and correlated correspondence.

Best,

Maureen Miller Brosnan
Mayor
City of Livonia | Mayor's Office
(734) 466-2201
mayor@livonia.gov

This message is intended only for the use of the individual or entity to which it is addressed, and may contain information that is privileged, confidential, and/or exempt from disclosure under applicable laws. If the reader of the message is not the intended recipient, or the employee or agent responsible for delivering the message to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone and/or reply to this e-mail message. Thank you.

Livonia Police Department Coyote Statistics 2023



Reason for CFS:

2018- Deceased x3, Seen/Concerned x4

2019- Deceased x1, Seen/Concerned x2

2020- None

2021- Seen/Concerned x3

2022- Seen/Concerned x1

2023- Seen/Concerned x2

Only CFS of interest relating to a possible coyote related attack.

CFS #230018956

On 05/06/2023 at 0748 hours, PO Garcia, PO Naumovski and I, PO Alghazaly were dispatched to Seven mile and Hillcrest for a coyote running around chasing the caller and also possibly bit her dog. Upon arrival, I observed the coyote running around on 7 Mile and Purlingbrook. PO Garcia attempted to apprehend the coyote by providing it treats with no luck. I drove back to LPD to obtain a dog stick to attempt to restrain the coyote with the dog stick. After multiple failed attempts on trying to apprehend the coyote, I decided to deploy my taser cartridge Serial Number: C620DATDC in attempt to not run away from officers anymore and hurt nearby civilians. The taser deployment took effect on the coyote. I attempted to place the dog stick around the coyote's neck, but I was unable to sinch the rope around and it fled the location. The coyote took off east towards Doris and officers lost sight of it. ACO Polovich made the location in attempt to locate the coyote with no luck. While on scene officer's made contact with Cynthia Eckley. Eckley stated that she has had the coyote at her residence for a month. Eckley stated she found the coyote when it walked up to her residence and has had it since then. Eckley stated she had a DNA test done on the coyote because she believes it is a mixed dog.

OFFICE OF THE MAYOR

MAUREEN MILLER BROSNAN
MAYOR



33000 CIVIC CENTER DRIVE
LIVONIA, MICHIGAN 48154-3097
mayor@livonia.gov
(734) 466-2201

June 19, 2023

TO: Public Safety and Health Committee Meeting of the Livonia City Council

RE: Culling, management of Deer Population

Council Members:

As part of this upcoming committee meeting, we are providing you with some data and information regarding the deer population and issues related to it in Livonia.

Overall, there is a sense that the deer population has been increasing and we have data that supports that.

Police, Sanitation data

For example, a Livonia Police Department report (*see attached*) shows that deer vehicle crashes, dispatches for deer issues, and calls for dead/injured deer in 2022 (the last full year) were significantly higher than previous years. So far, 2023 looks to have similarly high numbers.

Another data point focusing on deer/vehicle crashes in the LPD report shows that Livonia's numbers are generally below some neighboring communities (Farmington Hills, Novi and Southfield), but higher than others (Dearborn, Plymouth, Westland, etc.)

Since DPW took over Sanitation last year (first quarter of 2022), the City recorded 205 calls for dead deer. So far this year, we have 115. All of those dead deer are collected by GFL Environmental. Unfortunately, previous years' records are not available from GFL or our paper records.

SEMCOG survey

The interest in Livonia's deer population seems significant, based on social media. When Livonia Today shared a link to the SEMCOG Deer Survey in September of 2022, the reach was 30,729, including 56 shares. In total, 755 comments were recorded on the initial post and the shares – and those reactions were mixed between initiating a cull and leaving the deer population alone.

The survey was conducted in October and November of 2022 and had only 12% of the 13,526 respondents from Wayne County. Overall, 60% of survey takers believed the deer population had increased in the last three years.

City Ordinances

Neither the Zoning Ordinance nor the Code of Ordinances addresses anything specific to deer. However, there are ordinance provisions in Code Section 6.01.510, that ban hunting and trapping, and 6.01.530, that ban ground feeding. These would be applicable to deer.

Per section 6.01.530, it is unlawful:

to feed any wild animal, whether directly or indirectly, or place or permit placement on the ground, any fruit, berries, grain, vegetables, nuts, salt or other edible material or bait which may reasonably be expected to feed wild animals.

Additionally, Section 6.01.510 provides that:

It is unlawful for any person, at any time, to hunt, trap, or ensnare any animals, [except] for ... use of a live trap any animal thereon for the purpose of live release thereafter.

Requests for action

The Mayor's Office has received 3 complaints a year identified as deer overabundance/nuisance during 2021 and 2022, whereas by June of this year, we've received 6 such calls.

Similarly, requests for "Deer Crossing" signs have been higher: 2 in 2021, 6 in 2022, and 4 over the first half of 2023. Those recent requests were in neighborhoods.

However, the Traffic Commission has not approved any new signs in recent years, though there are several in place near parks and on main roads. The threshold to add a sign is based the number of deer/vehicle crashes in a year.

Neighboring communities

Some communities have taken specific action, including Ann Arbor, which used sharpshooters to kill a certain number of deer from 2016-2020.

That community, along with Farmington Hills and Rochester Hills, have tips and suggestions on their websites, focusing on plants that can repel deer, co-existing with deer and other ideas.

Southfield voters approved an advisory measure in November 2022 calling for the city to reduce the community's deer herd by humane, lethal means. If a deer cull were allowed, the city intends to donate meat, when deemed safe and where feasible, to local food banks and similar organizations. Any culling would require the approval of the Michigan Department of Natural Resources. Southfield is still weighing their options and will have to budget for whatever they decide to do.

Coyote data

This report has focused largely on deer. However, over the last seven years, Livonia has averaged about 19 calls to Animal Control a year for coyote. Numbers are fairly steady and not increasing.

Calls per year have been:

- 2016 – 15
- 2017 – 18
- 2018 – 21
- 2019 – 24
- 2020 – 21
- 2021 – 16
- 2021 – 20

Thus far this year, the City has received seven calls.

Moving forward on the deer population

It should be noted that Livonia's deer population is part of a larger ecosystem that obviously moves from area to area. At this point, we believe that any solution deemed appropriate to try to reduce the herd should be a regional solution.

However, we are open to further discussion of the issue. If the Council is interested in participating in the conversation the administration is having on the issue of the deer population, we would ask for two Council members who would like to participate to volunteer through my office.

Sincerely,

A handwritten signature in black ink, appearing to read "Maureen Miller Brosnan". The signature is fluid and cursive, with the first name "Maureen" being the most prominent.

Maureen Miller Brosnan
Mayor

Cc: Leadership Staff, Sgt. Walters
Attachment

Livonia Police Department



Departmental Correspondence

Date: 06/19/2023

Subject: Deer Related Incidents

To: Chief Goralski (through channels)

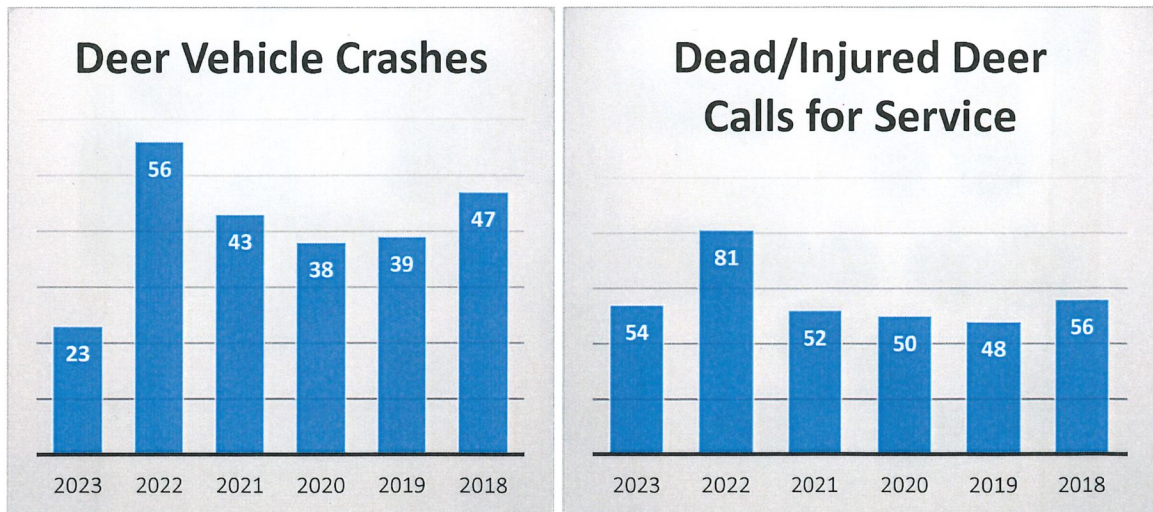
Dept: Administration

From: Sergeant Walters

Dept: Traffic Services Bureau

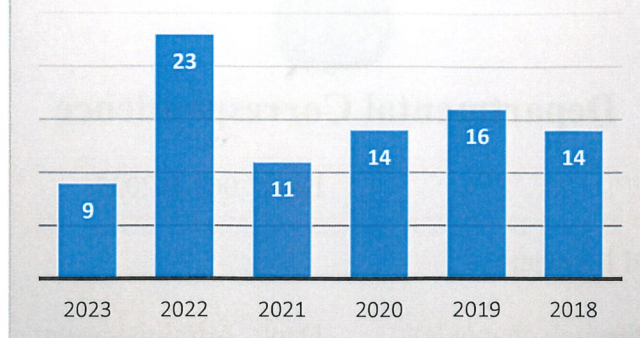
Sir,

I have compiled all of the data you requested about deer related incidents in Livonia. Below is a graph of all deer related traffic crashes over the last five years that occurred in Livonia. I also completed a Clemis search of all reports of dead or injured deer over the last five years. This was performed by a narrative search using the keywords: deer, dead, injured and is displayed in the graph below.

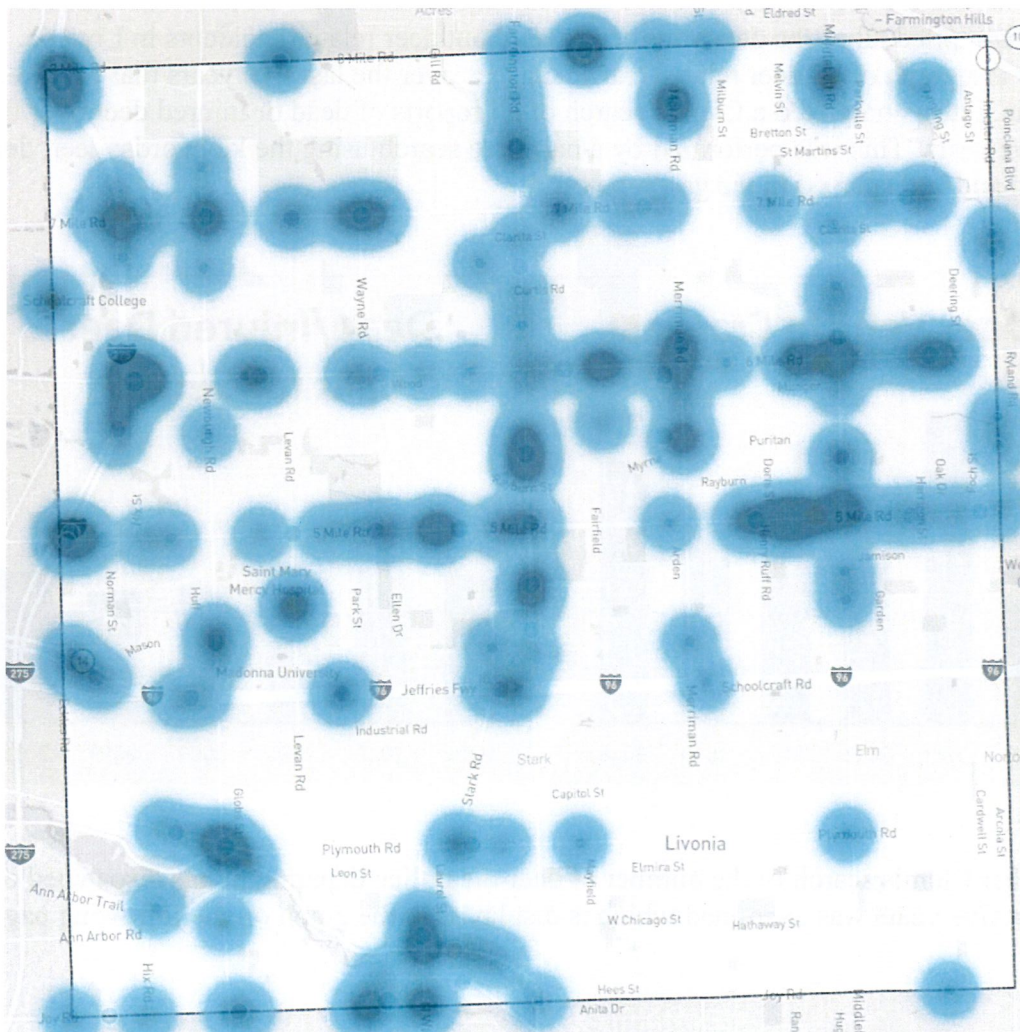


A further Clemis search of the number of deer the police department has dispatched over the last five years was examined which is displayed in the graph on the following page.

Deer Dispatched by Livonia PD



Below is a cluster map of all deer related traffic crashes that have occurred in Livonia over the last five years. The darker the area indicates a higher volume of incidents in that area.



Since the city of Livonia is debating about joining the Urban Deer Management Coalition, I checked the traffic crash data over the last five years comparing our deer related crashes with the neighboring cities. Below is a chart of all deer related traffic crashes over the last five years sorted by the city they occurred in.

	Canton Twp	Dearborn	Dearborn Heights	Farmington	Farmington Hills	Garden City	Livonia	Northville Twp	Novi	Plymouth Twp	Redford Twp	Southfield	Westland
2018	34	7	4	4	119	1	47	30	82	31	5	69	15
2019	37	7	5	8	116	1	39	44	68	34	3	50	24
2020	42	14	5	5	92	0	38	32	87	23	3	50	19
2021	68	14	4	4	125	1	43	29	109	36	2	67	29
2022	64	10	4	5	122	2	56	29	104	42	3	64	23
2023	21	1	2	3	43	1	23	11	30	13	1	20	5

Based on the data, it is apparent Livonia has a large deer population, however, we appear to have less deer related vehicle crashes than cities to the north of us. The data also does show a spike in deer related incidents in 2022 and by the end of 2023 we will know if there is an upward trend of deer related incident in our city.

Respectfully submitted,

Sergeant Paul Walters #665
Traffic Services Bureau

Incl.:
cc:

From: noreply@civicplus.com
To: [CityCouncil](#)
Subject: Online Form Submittal: City Council Inquiries
Date: Monday, June 19, 2023 9:26:44 AM

City Council Inquiries

This form is for any questions, comments, or concerns you may have for the City in regards to city council meetings or other city council inquiries. If you leave contact information, the City will reply within 2 business days. If this is an emergency, please dial 9-1-1.

First Name	Ewa
Last Name	Kedzierska
Address	20310 Mayfield
Email Address	ewalicja1@gmail.com
Phone Number	3139294434
Topic	Other City Council Inquiry
Date of Issue	6/19/2023
Attachment (Optional)	<i>Field not completed.</i>
Comments	Please distribute to pertinent members of the Public Safety and Health Committee and those invited to attend today Monday 19th June 2023 for CR 329-19 concerning opinions available concerning culling and management of deer and coyote populations. 1. The City of Livonia is a City and as such cares for the health and safety of its residents. Deer and coyote populations have grown out of proportion in the city and should be managed. Deer have become a nuisance as well as the coyotes. I have nothing against deer but as the numbers are so large - Not in my back yard! 2. A suggestion is a strong campaign in the City to make residents aware that feeding and "looking after" deer should not be done - difficult to enforce but an awareness campaign goes in the right direction. Also, bird feeders should be in places where the deer cannot reach them as they are easy pickings! 3. Ease up on ordinance, restrictions, on back yard fencing. On my street 10 houses with long back yards and fencing would not prevent the deer jumping them but would probably discourage them and hopefully push them back into the wild park and river that they normally would live in. 4. Distributing the "pill" could help prevent new fawns

5. Culling - deer are clever and in Ann Arbor have learnt not to gather in the parks where the culls take place and the problem there has not been ameliorated. Suggestion - cull in one area at a time - I and my neighbours would be happy to stay indoors or away for a day if an organized cull took place in our back yards. In one day at least 20 deer walk through our yards, many have been born in our area and that's why they keep coming back.

6. I cannot walk barefoot or even in shoes in my back yard due to the droppings, of which there are many - this is unhealthy, deer do carry some disease as well as ticks which are dangerous. It is an unpleasant and I won't start about the damage the deer do to all of our yards by eating every plant in sight! Deer are not afraid of "us" and do attack.

This is a difficult situation which has been ignored for too long and I look forward to some resolution from the City.

Thank you,

ewa kedzierska

313 929 4434

6/19/23

Email not displaying correctly? [View it in your browser.](#)



LETTER TO THE LIVONIA CITY COUNCIL

1.

Council Office
May 17, 2023

MEETING DATE

PSH061923/R071023

PREPARED BY

Sara Kasprowicz, Council Office Manager,

AGENDA ITEM

Subject matter of what options are available concerning the culling and management of the deer and coyote populations in the city. (CR 329-19)

BACKGROUND DETAILS

At the Regular Meeting of September 29, 2019, Councilmember Scott Bahr requested the subject matter of what options are available concerning the culling and management of the deer and coyote populations in the city be referred to the Public Safety, Health and Environment Committee.

PREFERRED COUNCIL RECOMMENDATION/RESOLUTION (Please complete this field. Attachments are not to be used in lieu of the recommendation)

To discuss subject matter as presented

ATTACHMENTS

1. R092319 Subject matter of deer and coyote in the City CR 329-19 (MISC)

APPROVED BY

AUDIENCE COMMUNICATION

Councilmember Bahr stated that at the August 26th, 2019 meeting he offered the subject matter of culling and management of the deer and coyote populations in the City of Livonia to the Public Safety, Health and Environment Committee, and that he failed to get support on the motion and is now reiterating his request.

On a motion by Bahr, supported by McIntyre, and unanimously adopted,
it was:

MISC

Subject matter of what options are available concerning the culling and management of the deer and coyote populations in the City of Livonia.

(Refer to the Public Safety, Health and Environment Committee)

#329-19 RESOLVED, that upon the motion by Councilmember Scott Bahr, seconded by Councilmember Kathleen McIntyre, at the Regular Meeting held September 23, 2019, regarding the subject matter of what options are available concerning the culling and management of the deer and coyote populations in the City of Livonia, the Council does hereby refer this item to the Public Safety, Health and Environment Committee for its report and recommendation.

AUDIENCE COMMUNICATION (Regular Meeting of September 23, 2019)

Motion by: Jolly

Seconded by: Kritzman

ROLL CALL:

Ayes: Jolly, Kritzman, Bahr, White, McIntyre and Toy

Nays: None

Absent: Meakin

**CITY OF LIVONIA
PUBLIC HEARING**

Minutes of Meeting Held on Monday, June 12, 2023

A Public Hearing of the Council of the City of Livonia was held at the Livonia City Hall Auditorium on **June 12, 2023**.

MEMBERS PRESENT: Scott Bahr
Brandon McCullough
Kathleen McIntyre
Scott Morgan

MEMBERS ABSENT: Jim Jolly, President
Laura Toy, Vice President
Rob Donovic

OTHERS PRESENT: Paul Bernier, City Attorney
Mark Taormina, Planning and Economic Development Director
Sara Kasprowicz, Recording Secretary

The Public Hearing was called to order at 7:07 p.m. with Councilmember Scott Bahr presiding. This item is regarding an **appeal of the denial of the Planning Commission** regarding Petition 2023-03-02-02, submitted by Yo-Yo Spa 1, L.L.C. requesting waiver use approval under Section 6.37 of the Livonia Vision 21 Zoning Ordinance, as amended, to operate a massage establishment at 33316 Plymouth Road, located on the north side of Plymouth Road between Mayfield Avenue and Farmington Road in the Southwest ¼ of Section 27

This item will be moved to the Regular Meeting of **June 26, 2023**.

The Public Hearing is now open. There were 5 persons in the audience.

Bahr: Tonight, there is always potentially a resolution offered one way or the other and it will be voted on at the Regular Meeting of June 26, 2023. At Public Hearings, you should go first, Mark.

Taormina: Sure. Yeah, I'll provide some background on the case. Again, this is a request to operate a massage establishment. This would be at the Fountain Park Plaza, which is at the northeast corner of Plymouth and Farmington Roads. The zoning of the property is C-2, General Business, which allows massage establishments as a waiver of use. Fountain Park is a planned general development. It was built in the early 2000s. It includes a residential condominium development of 10 buildings and 142 units. And then there are five other commercial buildings. There's a Dollar Tree, which is the former Walgreens pharmacy. There's a multi-tenant retail building which is where this proposed massage establishment would go and then a freestanding full-service restaurant, Las Palapas, and then

two branch banks. That's all part of what was originally conceived and developed as Fountain Park. This establishment would go in the multi-tenant retail building, as I mentioned, this building is about 12,600 square feet in size, seven tenant spaces. Yo Yo Spa would occupy 1,000 square foot unit, which is between the Check Smart and the Lighthouse Smoke Shop. There is a plan that shows how the unit would be laid out. There's a waiting area, reception office, several individual massage rooms, as well as an employee lunchroom, storage area, and restroom. The section under the ordinance that regulates massage establishments does have a couple of special requirements. One is that they cannot be located within 400 feet of any other licensed massage establishment. In this case, there are no other massage establishments within that 400-foot radius. The other special requirement is that it must be 400 feet from any permitting statewide or any licensed childcare facility or public park. In this case, directly on the opposite side of Plymouth Road is The Learning Tree Childcare Center, which is 122 feet away, and then Sheldon Park and the Alfred Nobel Library, which is roughly 277 feet from the proposed massage establishment. They're not proposing any modifications to the site or to the building other than a new wall side. Parking at the plaza is adequate or sufficient to handle the parking needs of the proposed business. Planning Commission held a Public Hearing on this item on May 9th and they denied it. Tonight, you are hearing the appeal on that tonight. Thank you.

Bahr All right. Does Council have any questions for the Planning Director? I have a couple of quick ones, Mark, do you by chance know how long this space has potentially been vacant?

Taormina I do not off the top of my head.

Bahr Ok, then all the, if I heard correctly, all the places, schools, etcetera, that there's a separation requirement for, they are all across Plymouth Road from this, correct?

Taormina That is correct.

Bahr Okay. All right, if there's no current questions from Council, I guess does the petitioner have anything they'd like to share tonight? If you do, just step up to the podium there, and if you wouldn't mind, if you give your name and address, please.

Liu My name is Sherry Liu, I'm actually the real estate agent and I'm representing Yo Yo Spa, LLC, and this is the future owner. She's also a manager for their current one on Plymouth Road which is located at 34389 Plymouth Road, she's been there since 2014.

McIntyre Where is that, or maybe I should ask what cross street is that?
Liu Stark

- McIntyre That's what I thought, thank you.
- Liu So, she's fully licensed Michigan for massages, this place that we are interested too, because the 34389, is very good. We always have customers come in all at once, like we have, we can only take four. So, the capacity is very small. That's why we are expanding, it takes about two minutes driving, I think, three minutes. The new place was a former medical doctor's office I think so we got four rooms we plan to open. There are no doors. So, we are planning to actually have for foot massage. That's it.
- Bahr Any other questions from Council? I have a question for the City Attorney. Are you aware of any issues, violations or anything with the Elite Foot Spa?
- Bernier I'm unaware either way, if there have been. I have not personally heard of any issues.
- Bahr Okay. Anyone else from Council?
- McIntyre I'd like to hear if there's any comments from the audience before I weigh in on this matter.
- Bahr Okay. Is there anyone from the audience that would like to speak to this?
- Grix My name is Raymond Grix, I'm a resident in the Fountain Park Complex. Just to correct you Mark, there's only 94 residential units, not 140 something. I'm here to urge the Council to uphold the denial resolution by the Planning Commission. The maker of the resolution at the Planning Commission indicated, and I agree with him, this unit is not, or this business is not in harmony with the other businesses in that location. There's currently, for example, four food service locations in there, there's the Red Olive, the Happy Wok, the Pita Way, the Las Palapas. And when they're, you know, anytime of the day you walk past that parking lot, it was full to overflowing to the point that, you know, I don't think it really fits. And as the petitioner indicated, they have a current location already on Plymouth Road. I don't see this as a fit for that location. And again, I would urge the Council to reject the appeal on the basis of the stipulation set up by the Planning Commission in their original motion. Thank you.
- Bahr Sir, could I ask you a quick question? So, you said it's not a fit. Is your contention because it's food services in here, that's what should be here?
- Grix No, I just don't see the medical usage as fitting in with the other general businesses that are in that complex. There is a check cashing location where, again, I just don't feel like it fits. We urge the Council to uphold the Planning Commission motion.
- Bahr Thanks for coming. Anybody else from the audience want to speak for or against this? Did you want to speak?

Liu As the gentleman mentioned, we have one location in the Plymouth Road, same road, however, like I said, the capacity. We can only take four people at a time. So, we have about 20 to 25 a day and they all come at once, therefore, the capacity is not enough. That's why I'm interested to taking the other, kind of look like a medical center, but now it's a great fit for this kind of business. I think that it's, nowadays, everybody works so hard sitting at the office, computer, feet hurt so much, the feet will benefit for the City of Livonia, and also looking for more jobs for the City as well. It will be a win-win.

McCullough I have a quick question.

Bahr Councilmember McCullough.

McCullough Thank you. Through the Chair to the Petitioner. Okay, so the current business that you do have at Stark and Plymouth, you would be leaving that open, correct?

Liu Yes, yes. We're still leaving open, that is under a different owner and she is the manager there.

McCullough Would she still work at that one as well?

Liu She will be planning to work unless they have replaced her position, but she's going to be fully, 100% time, she's going to be the owner of Yo Yo Spa.

McCullough And how many beds are in this proposed location? I can't see off the top of my head. How many rooms are you?

Liu Four.

McCullough Four?

Liu Yes, there's a cafeteria, four.

McIntyre It just seems, you know, you're talking about 25. Isn't this small, too, for what you're looking for?

Liu For right now, the one on Plymouth, it's like 20 to 25 people a day. And then she was here. And then most of the phone call, that was the reservation, that she got about 10 calls already. It's like everyone comes at once. So therefore, it's just like we want to expand but then. Yeah, that's our plan. Thank you.

Bahr Anybody else for the Petitioner? No. Okay. I think you can take a seat now. We'll call you back up for questions. Councilwoman McIntyre.

- McIntyre So, Mark. There is no parking. There is no deficiency of parking, correct?
- Taormina No, there's no deficiency of parking. But I think as everyone knows, there's times when the plaza is busy, you know what the peak operating time of the restaurant will sometimes stress the parking in that area. But overall, there's not much you can do relative to that. It meets the ordinance. It's just the popularity of that restaurant that creates that situation.
- McIntyre And it was it was formerly a medical facility of some sort?
- Taormina Yeah, and I'm not sure what type that is, again, it's not something that would have had to go through any type of formal review process.
- McIntyre Got it. And then the reason this required, the waiver was the proximity to the daycare center and the park?
- Taormina Well, that is a special requirement that can be waived by City Council by two thirds majority vote. The use itself is subject to waiver use approval, the special requirements can be waived or modified, again, by a supermajority vote, or excuse me, a simple majority vote of Council with separate resolution. So, any resolution that would approve this would also have to include a resolution that would waive those separation requirements.
- McIntyre Okay. I really appreciated the resident's comments, we're always very interested in, especially when the Planning Commission has recommended one way and we're looking, and I'm considering not following the recommendations. I did read the Planning Commission minutes. The questions, the issues, that the resident raised, and again, we will always welcome and thank residents for taking the time to come to these meetings or let us know about concerns. There is no deficiency in the parking and the times that the parking is difficult are at peak mealtimes. It's my understanding, and Mr. Taormina, or I'm guessing you can answer this from the packet or from the information you have, these are business hours with business spread throughout the day, right, these are, in other words, could you refresh what hours are please?
- Taormina For the massage establishment, the hours are limited. I apologize I don't have it in front of me. They are limited from 8am to 10pm.
- McIntyre Okay so 8am to 10pm. Those do not, in my experience of going to acupuncture facilities or establishments, the business tends to be spread out throughout the day. It doesn't all come at the same time the restaurants are busy. I would understand maybe if there was concern about the hours, but I didn't hear any concern about the hours. We have no indication from our legal department that these folks have had any sort of legal problems or problems with inappropriate things going on. You said these rooms do not have doors, is that correct?

- Liu No doors.
- McIntyre So, you come in, these are four wide open rooms. You will offer full acupressure, correct, or only reflexology?
- Liu Reflexology for feet.
- McIntyre So only reflexology?
- Liu Yes.
- McIntyre Okay so these are acupressure, and I had acupressure, there is no removal of clothes, none of that.
- Liu Yep, none of that.
- McIntyre And even if it's full acupressure, which you're not, there's no removal of garments like traditional Swedish or you know other types of sports massage. The reflexology license only allows from the knee down, open rooms. This was a medical facility, so, as far, I have a great deal respect for the Planning Commission. But as far as not being in harmony, we have check cashing, this was a medical facility, massage is considered an adjunct kind of medical therapy. It's not covered by insurance. But certainly, it's not an invasive process, it's not anything that involves removal of clothing, it doesn't involve any bio waste. The other thing, in a plaza where we've got consumer orient where we've got restaurants and we love our Livonia restaurants, but restaurants generate a lot of waste and so sometimes, it'll be taxing on, if you're bringing in another food establishment, and we love our food establishments. But again, it will bring in additional and significant amount of waste. In my experience, your business, the waste is very light and minimal, so you're not putting a lot in the dumpster every day. So, with all of those things said, I would like to offer this for an approving resolution, but I would like to know if the hours of that could be done and keeping the hours from 9am to 9pm.
- Liu So, right now, the other one is 10am to 9pm, so if you said, like, 9 o'clock to eight o'clock, that's ok.
- McIntyre That's what I'd like to offer and the reason being, you know I think up until nine o'clock those restaurants are very busy, right, so any concerns that maybe later in the evening, you know things the nature of what was on there are changes, nine o'clock, there's still traffic coming and going.
- Liu People come in like five o'clock six o'clock.
- McIntyre Yes. And if there are anything, I'll say unsavory. Right. I mean, even you can argue and again, we love our complying beer and wine and liquor stores. Right. But there are issues sometimes with hours, right? And, you know, crime and other things right. And we love those businesses. You're

not a high cash business, you don't have an inventory that that draws people who are looking to rob a place, or you know, so I'm going to offer that approving resolution with the with the stipulation that the hours not be any longer than 9am until 9pm.

Bahr So we have an approving resolution, the hours of 9 to 9. Councilmember McCullough.

McCullough Through the Chair to Mr. Taormina, maybe Mr. Bernier. The question I have is if this is approved as the waiver use for a massage business, would they have to come back if they did expand their operation of business to you know, full body massages or anything like that?

Taormina No, this would cover any type of massage therapy. So, it's not limiting this to reflexology, unless you stipulated that in the resolution. So, normally, two of the things we normally do, is we, in this case, there would be a limitation on the hours more restrictive than what the ordinance allows. We limit the use to this user only and any change of user, if they want to sell a business has to come back to you for approval, and then the waiver of the separation requirements. There have been instances where we have restricted the type of massage operations. So, if that's your desire to keep this as reflexology, then that should be posted in the resolution.

McCullough Thank you for that, I'm going to offer a Committee of the Whole and a denying resolution.

Bahr Okay, thank you. I'm gonna ask Councilwoman McIntyre, I'm assuming that you're okay with what Mr. Taormina said about limiting it to this user right now?

McIntyre I am, but again. So, Mark, we don't, and I don't remember, we've talked, we've had so many of these. There's no distinction drawn between acupressure, right, and the traditional massage?

Taormina You know, acupressure, I believe, is treated differently.

McIntyre I thought it was.

Taormina It is and so those do not technically fall under licensed massage therapy. And I believe, reflexology is any type of manipulation. I think, excuse me, I can't really quote how that language is stated. Yeah, just like Elite Foot Spa, it did have to receive waiver use approval. But there have been acupressure and acupuncture and those types of therapy that did not that do not have to go through this process if that makes sense.

McIntyre It does and I'm recalling this. If the business changed, and they wanted to and I would like to not, because of location, because we have condominiums, we do about a residential. I would, and I don't know if we can get this granular. I would like to say there cannot be beds used, but if you decided if you're licensed appropriately to get into the head and neck

where those are seated massages like they have at the mall, right? Again, you're not removing your clothes, you're not lying down. There are no sheets, there's a sometimes a towel, you know if you'd have like a tank top or something. And I don't know if we can get that granular. But I would be comfortable with reflexology and whatever. But I don't know if we can specify exactly what that is.

Bahr What are you asking me to specify?

McIntyre If they decided based on the services, they offered their other place that they wanted to add some of the head neck massage chairs, and again, no doors. You know, this is not a behind closed doors kind of a business. I would be fine with that. But I don't know I guess that this is through the chair to Mr. Bernier?

Bernier Is it the thought that you want to limit it to reflexology?

McIntyre No. The thought is that I don't want any of the beds. Right. I don't want, as I know, from my experience, right?

Bahr Can I just suggest for simplicity's sake, they want to be reflexology, if you're concerned about that, why don't we limited to that and if they ever need to come with a new business proposal? They can.

McIntyre Okay, that's fine.

Bahr I mean, you can do what you want.

McIntyre Yeah, I think that is simpler.

Liu Yeah, we are going to do what you tell us to do.

McIntyre You'd have to come back for the chairs, I guess what am suggesting is the simplest. Right now, as reflexology. If you wanted to add the chairs that would require you to come back for an additional approval. Is that correct?

Bahr I think so. I don't want to lengthen this anymore than we need to, but if Elite Foot Spa, where you are right now, it's just for saying you're not doing the chair stuff that she's talking about there. Okay. All right. Is there anything else from Council? All right, we have an approving we have a denying, we have a Committee of the Whole to consider and will be decided on when we voted on at the Regular Meeting of June 26, 2003. With that, we will close the Public Hearing. Okay, thanks, everybody.

As there were no further questions or comments, the Public Hearing was declared closed at 7:31 p.m.



LETTER TO THE LIVONIA CITY COUNCIL

1.

Planning
May 15, 2023

MEETING DATE

PREPARED BY

Stephanie Reece, Program Supervisor,

AGENDA ITEM

Appeal of the denial of the Planning Commission regarding Petition 2023-03-02-02, submitted by Yo-Yo Spa 1 L.L.C. requesting waiver use approval under Section 6.37 of the Livonia Vision 21 Zoning Ordinance, as amended, to operate a massage establishment at 33316 Plymouth Road, located on the north side of Plymouth Road between Mayfield Avenue and Farmington Road in the Southwest ¼ of Section 27.

BACKGROUND DETAILS

May 15, 2023

Honorable Members of the City Council
City of Livonia, Michigan

Re: Petition 2023-03-02-02 - Yo YO LLC

Dear Council Members:

At the 1,199th Public Hearings and Regular Meeting held by the City Planning Commission on May 9, 2023, the following resolution was unanimously adopted:

PREFERRED COUNCIL RECOMMENDATION/RESOLUTION (Please complete this field. Attachments are not to be used in lieu of the recommendation)

#05-26-2023 RESOLVED, That pursuant to a Public Hearing having been held by the City Planning Commission on May 9, 2023, on Petition 2023-03-02-02 submitted by Yo Yo Spa 1 L.L.C. requesting waiver use approval, under Section 6.37 of the Livonia Vision 21 Zoning Ordinance, as amended, to operate a massage establishment at 33316 Plymouth Road, located on the north side of Plymouth Road between Mayfield Avenue and Farmington Road in the Southwest ¼ of Section 27, the Planning Commission does hereby recommend to the City Council that Petition 2023-03-02-02 be denied for the following reasons:

1. The petitioner has failed to comply with all general standards and requirements outlined in Sections 1.02 and 13.13 of the Livonia Vision 21 Zoning Ordinance.
2. The proposed use fails to comply with the Zoning Ordinance standard outlined in Section 6.37(3), which specifies that no massage establishment shall be located within four hundred feet

(400') of a daycare facility and park.

3. The petitioner has not adequately established a need for the proposed use in this shopping center or the immediate area.

4. The petitioner has not sufficiently demonstrated that the proposed use would be compatible with and in harmony with the surrounding uses in the area; and

5. The proposed use is contrary to the goals and objectives of the Zoning Ordinance, which, among other things, are intended to ensure the suitability and appropriateness of uses.

FURTHER RESOLVED, That notice of the above hearing was given in accordance with the provisions of Section 13.13 of Livonia Vision 21 Zoning Ordinance, as amended.

A roll call vote was taken on the foregoing with the following result:

AYES: Ventura, Caramagno, Long, Wilshaw

NAYS: Dinaro, Bongero

ABSENT: None

ABSTAIN: None

ATTACHMENTS

1. 2023-03-02-02_E-COUNCIL Pkt
2. Yo Yo Spa letter for appeal of denial

APPROVED BY



Mark Taormina, Planning and Economic Development Director

Date: May 16, 2023



Maureen Miller Brosnan, Mayor

Date: May 19, 2023

+ Email: Council
+ CC Planning

Sara Kasprovicz
Program Supervisor
The City of Livonia
City Clerk/The City Council

Re: Letter to Appeal YoYo Spa LLC

Dear Ms Kasprovicz,

I hope you are doing well, I am writing to appeal the city planning commission decision to deny a resolution that was offered to Yo Yo Spa, LLC 33320 Plymouth Road at the 1,199th Public Hearing and Regular Meeting held by the Planning Commission on May 9, 2023.

We initially planned on opening Yo Yo Spa mainly for foot massage and detox; foot massage originated in China about 4,000 years ago. It is a part of ancient Chinese traditional medicine: "acupuncture", and is becoming more and more popular as a way to rid the body of any harmful toxins and relieve fatigue. In addition, when people have certain diseases, the feet can also feel pain; therefore the basis for rubbing the feet can help ease the pain as well as massaging the feet to aide with curing the disease and strengthening the body. The foot soaks can be a wonderful way to relax after a hard day or help revive circulation in the feet. Foot massage is based on the principle of stimulating acupuncture points.

The Yo Yo Spa establishment in Livonia will without a doubt benefit people who are working a long and extremely hard day. Additionally, it will create more job opportunities in the city of Livonia.

The owner of Yo Yo Xiaoping Shen is a fully licensed massage therapist who has been working as manager at New Elite Foot and Body Spa located at 34389 Plymouth Road Livonia since 2014.

In light of these facts, I request that you reconsider your decision about our appeal to establish Yo Yo Spa.

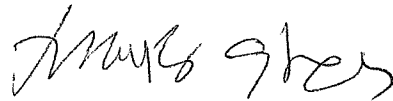
I greatly appreciate you taking the time to read this and the attached document. I am happy to meet with you any time to discuss this further.

Respectfully,

Sherry Liu
Administrator
Yo Yo Spa, LLC



Xiaoping Shen
Owner
YoYo Spa, LLC



* See address attached

Xiaoping Hoob
40564 Blythefield Ln
Canton, MI 48188

614

20-1/740

05/15/2023

Pay City of Livonia \$ 400.00
to the order of
Four Hundred Even Dollars

Security features
are included.
Details on back.

Chase

For 33320 Plymouth Xiaoping Hoob MP
⑆074000010⑆ 116757390⑈0614



**CITY of LIVONIA
OFFICE OF THE CITY CLERK**

**33000 CIVIC CENTER DRIVE, LIVONIA, MICHIGAN 48154
TELEPHONE (734) 466-2230**

Received From: Xiaoping Huo
Address _____
City _____ Zip _____ Date 5/15/33

CERTIFICATES

Dollar Amount

BIRTHS	☐ LF# _____ CC _____ PARCHMENT _____	

DEATHS	☐ LF# _____ CC _____	

GENERAL		
☐	Maps, Books _____	
☐	F.O.I.A. Copies _____	
☐	Signs _____	
☐	Grading Bond _____	
☒	Petition, Waiver <u>Appeal of bond</u>	
☐	Election Fees <u>22320 Plymouth R</u>	
☐	Other <u>400.00</u>	

CASH ☐ CK# 614

Total Amt. > 400.00

BY. NRB

No. **82854**

EXTRA COPY

Petition 2023-03-02-02 submitted by Yo Yo Spa 1 L.L.C.
requesting waiver use approval, under Section 6.37 of the Livonia Vision 21 Zoning Ordinance, as amended, to operate a massage establishment at 33316 Plymouth Road, located on the north side of Plymouth Road between Mayfield Avenue and Farmington Road in the Southwest ¼ of Section 27.

**CITY OF LIVONIA, MICHIGAN
APPLICATION FOR WAIVER USE APPROVAL**

All applications must be presented in triplicate to the City Clerk, 33000 Civic Center Drive, Livonia, MI 48154-3097. Applications **must** include property owner's name, address and notarized signature.

For filing fee see below for computation

Date Filed: 03/08/2023 3/30/23 Petition 2023-03-02-02

Site Address: 33316 Plymouth Sidwell 107990015005 Zoning of Property C-2

Requesting Approval To Spa & Massage

Applicant: Xiaoping Shen Business/Company: Yo Yo Spa 1 LLC

Applicant's Address: 40564 Blythfield City: Canton State: MI Zip Code: 48188

Applicant's Phone # 734, 352 9181 Applicant's Email fajian1115@gmail.com

Contact Person: Sherry Liu Business/Company: National Realty Centers

Contact's Address: 116 W Main St City: Northville State: MI Zip Code: 48168

Contact's Phone # 734, 680 6177 Contact's Email sherry2734@gmail.com

Please provide the following information:

- 1) **Site Plan** showing:
 - property dimensions, including road right-of-way & building setback lines
 - foot print of building(s), including dimensions & square footage
 - all easements, protective walls, sidewalks & existing trees
 - any significant topographic features (existing or proposed)
 - parking layout, including type of surface material, sizes of spaces & aisles
 - method used in calculating parking requirement
 - location of light standards servicing parking lot & cutout showing type & height
 - location of trash receptacle, including description of screening
 - location of signs
- 2) **Detailed Landscape Plan** including:
 - listing or labeling of all planted materials as to type and size
 - areas to be fully irrigated
 - percentage of landscaping provided (15% of total site required)
- 3) **Building Elevation Plan** depicting:
 - architectural quality
 - wall section & detail plan - exterior building materials must be labeled (i.e. brick, thin brick, E.F.I.S.)
 - all visible rooftop mechanical equipment and how they will be screened
- 4) **General Floor Plan** showing:
 - floor layout
 - entrances & exits
 - restaurants are required to illustrate seating arrangement & capacity
- 5) One (1) set of **reduced plans** (i.e. site, landscape, elevation, floor), a **maximum 11" x 17"** in size, or digital file in a .pdf format either on CD or emailed to planning@livonia.gov
- 6) **Legal Description** of the property to be considered (**Clearly Printed**)
- 7) Three (3) completed application forms & **three (3)** sets of full-size drawings

RECEIVED
APR 03 2023
CITY OF LIVONIA
PLANNING COMMISSION

You are invited and encouraged to review your proposal with the Planning Department staff. Only one set of preliminary drawings will be necessary for this analysis.

FEE COMPUTATION	\$700.00 (\$400 publication fee plus \$300 base review fee) plus
_____ sq. ft. of new construction x \$20.00 per 1,000 sq. ft. plus \$30 per lot or unit for residential construction.	(NOTE: Round off to nearest 1,000) + _____
	Total Amount Due \$ _____

Owner of Property: Fountain Park, L.L.C

Owner's Address: 33320 Plymouth Rd City: Livonia State: MI Zip Code: 48150

Owner's Phone # (_____) _____ Owner's Email _____

Signature of Owner: _____ Print Name: Jordan Jomay

Subscribed and sworn to before me, a Notary Public in and for the County of _____ State of MI

on this _____ day of March 2023

Signature of Notary _____ Notary Public, State of Michigan
My commission expires _____

Acting in the County of _____ My Commission Expires 07-08-2027
Acting in the County of Wayne

RECEIVED
OFFICE OF THE CITY CLERK
2023 MAR 30 PM 2:54

Sara Kasprovicz
Program Supervisor
The City of Livonia
City Clerk/The City Council

Re: Letter to Appeal YoYo Spa LLC

Dear Ms Kasprovicz,

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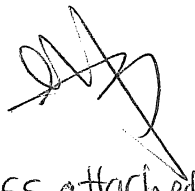
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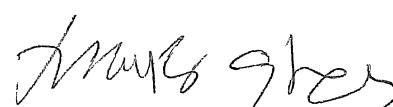
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Respectfully,

Sherry Liu
Administrator
Yo Yo Spa, LLC



Xiaoping Shen
Owner
YoYo Spa, LLC



* See address attached

UNAPPROVED MINUTES

1

MINUTES OF THE 1,199th PUBLIC HEARINGS AND REGULAR MEETING HELD BY THE CITY PLANNING COMMISSION OF THE CITY OF LIVONIA

On Tuesday, May 9, 2023, the City Planning Commission of the City of Livonia held its 1,199th Public Hearing and Regular Meetings in the Livonia City Hall, 33000 Civic Center Drive, Livonia, Michigan.

Mr. Ian Wilshaw, Chairman, called the meeting to order at 7:00 p.m.

Members present:	Wafa Dinaro	David Bongero	Glen Long
	Peter Ventura	Sam Caramagno	Ian Wilshaw

Members absent: None

Mr. Mark Taormina, Planning Director, and Stephanie Reece, Program Supervisor, were also present.

Chairman Wilshaw informed the audience that if a petition on tonight's agenda involves a rezoning request, this Commission makes a recommendation to the City Council who, in turn, will hold its own public hearing and make the final determination as to whether a petition is approved or denied. The Planning Commission holds the only public hearing on a request for preliminary plat and/or vacating petition. The Commission's recommendation is forwarded to the City Council for the final determination as to whether a plat is accepted or rejected. If a petition requesting a waiver of use or site plan approval is denied tonight, the petitioner has ten days in which to appeal the decision, in writing, to the City Council. Resolutions adopted by the City Planning Commission become effective seven (7) days after the date of adoption. The Planning Commission and the professional staff have reviewed each of these petitions upon their filing. The staff has furnished the Commission with both approving and denying resolutions, which the Commission may, or may not, use depending on the outcome of the proceedings tonight.

ITEM #2 PETITION 2023-03-02-02

Yo Yo Spa 1, LLC

Mr. Caramagno, Secretary, announced the next item on the agenda, Petition 2023-03-02-02 submitted by Yo Yo Spa 1 L.L.C. requesting waiver use approval, under Section 6.37 of the Livonia Vision 21 Zoning Ordinance, as amended, to operate a massage establishment at 33316 Plymouth Road, located on the north side of Plymouth Road between Mayfield Avenue and Farmington Road in the Southwest ¼ of Section 27.

Mr. Taormina: Thank you. This is a waiver-use petition involving a massage establishment called Yo Yo Spa. It would be located within the Fountain Park. commercial development. This is a Planned General Development located at the northeast corner of Plymouth and Farmington Roads, and as a PGD or Planned General Development, this was a combination of both residential, as well as commercial construction. The condominium complex is 10 buildings with about 142 units and then there are five commercial buildings including Dollar Tree which is a former Walgreens right at the corner, as well as a multi-tenant retail building, which is where the spa would be located and two full-service branch banks. The massage establishment would be located within the multi-tenant retail building, which is about 12,600 square feet in size. There are seven tenant spaces. The unit that Yo Yo spa would occupy is roughly 1,000 square feet in size. This is located towards the east half of the building. It's between the Tech Smartt and the Lighthouse Smoke Shop. The petitioner has submitted a floor layout which shows the interior layout that includes, as you would expect, a waiting area, a reception office, as well as several individual massage rooms. There's also an employee lunchroom, a storage area and a restroom. Section 6.37 of the zoning ordinances has some special requirements that apply to massage establishments. The first is that it must be separated by at least 400 feet from any other massage establishment as well as a 400-foot separation requirement from any school, place of worship, state licensed daycare facility, public library, playground or public park. Secondly, the operating hours are limited from 8am to 10pm. In this case, there are no other massage establishments within 400 feet of the proposed Yo Yo spa, however, the location does not meet the 400-foot separation requirement from a licensed childcare facility or public park. The Learning Tree childcare center is directly across Plymouth Road, about 122 feet from the subject property, as well as Sheldon Park and the Alfred Nobel library, which are about 277 feet away. So, this will require special approval by City Council. There are no other building or site modifications planned. They'd be allowed one wall sign based on the unit's frontage and the existing parking at the shopping complex is sufficient to handle the traffic from for the proposed spot. With that, Mr. Chairman, I can read out the departmental correspondence.

Mr. Wilshaw: Yes, please.

Mr. Taormina: Mr. Taormina: The first item is from the Engineering Division, dated April 4, 2023, which reads as follows: *"In accordance with your request, the Engineering Division has reviewed the above referenced petition. We have no objections to the proposed waiver use at this time. The subject parcel is assigned the address range of #33302 to #33328 Plymouth Road with the address of #33328 Plymouth Road being assigned to the overall parcel. The existing parcel are currently served by public sanitary sewer, water main and storm sewer. Per the submitted drawings, there are no planned alterations to the services, so we do not expect any impacts to the existing systems at this time. I should be noted that any disturbances within the Plymouth Road right-of-way would require the owner to obtain permits from the Michigan Department of Transportation."* The letter is signed by David W. Lear, P.E., Assistant City Engineer. The next letter is from the Livonia Fire & Rescue Division, dated April 23, 2023, which reads as follows: *"This office has reviewed the site plan submitted in connection with a request to modify a commercial building on property located at the above referenced address. We have no objections to this proposal. If sprinkler system and fire alarm exist, must be maintained and operational. A further detailed plan review will take place when this division receives an official plan set."* The letter is signed by Brian Kukla, Fire Marshal. The next letter is from the Division of Police, dated April 4, 2023, which reads as follows: *"I have reviewed the plans in connection with the petition. I have no objections to the proposal."* The letter is signed by Paul Walters, Sergeant, Traffic Bureau. The next letter is from the Inspection Department, dated April 21, 2023, which reads as follows: *"Pursuant to your request, the above-referenced Petition has been reviewed. 1. The property is closer than 400' to a childcare facility and a park. Council may waive the 400' requirement. This Department has no further objections to this Petition."* The letter is signed by Jerome Hanna, Director of Inspection. The next letter is from the Finance Department, dated May 1, 2023, which reads as follows: *"I have reviewed the addresses connected with the above noted petition. As there are no outstanding amounts receivable, general or water and sewer, I have no objections to the proposal."* The letter is signed by Connie Kumpula, Chief Accountant. The next letter is from the Treasurer's Department, dated April 11, 2023, which reads as follows: *"In accordance with your request, the Treasurer's Office has reviewed the name and addresses connected with the above noted petition. At this time there are no taxes due, therefore I have no objections to the proposal."* The letter is

UNAPPROVED MINUTES

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signed by Lynda Scheel, Treasurer. That is the extent of the correspondence.

Mr. Wilshaw: Thank you Mr. Taormina. Any questions for our planning staff? I believe the petitioner is in the audience. Feel free to come forward to our podium and introduce yourself.

Mr. Wilshaw: Good evening

Sherry Liu, representative for applicant. I was here like a couple of weeks ago. This is a Xiaping. She's the manager of their existing...right now is the New Elite and Foot and Body massage, which is also on 34389 Plymouth Road. So this place, the doctor's office, that as I explained last time is divided by three rooms but without door so we have omitted the doors so totally no doors and we understand that is the library is 277 feet. However, that library I think during the pandemic has been completely closed and so hopefully that we'll be have some consideration. We have a lot of customers for the existing massage place where we provide a Chinese traditional massage and then also Chinese have some physical therapy. And for this new place that what we are planning to do is, including myself and Xiaoping, will be the manager operating both the buildings and we will, at least to the City of Livonia, will create another at least six to eight position, work position for the people and will benefit for the city as well. Thank you.

Mr. Wilshaw: Thank you, Miss Liu. Is there any questions for the petitioner?

Ms. Dinero: Miss Liu, do you already have massage location? Or is this a brand new business?

Ms. Liu: Oh, we do have one that is in 34389 Plymouth Road. It is on the same Plymouth Road. Yes. They've been operated really well. and we want to expand just because of high demand. We have a lot of customers from Canton, Westland, and also from Farmington Hills and with the existing capacity is cannot be fit all those people. Yeah. Thank you.

Mr. Wilshaw: Thank you, Ms. Dinero. Any other questions for petitioner? Mr. Caramagno.

Mr. Caramagno: I've got a couple of questions. How busy is your other spot, the 34000 address? How many days a week is it open? How busy is it?

UNAPPROVED MINUTES

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Ms. Liu: Right now, so far, we have the open every day and then it's only got three rooms in there. And then if the people come in like extra number for people because each one would take about 45 minutes to an hour and then we have to have the people to come back so the really busy traffic we have about like right now. The business with we have about very very good the revenue coming in and each day is at least \$2,000 through \$3,000.

Mr. Caramagno: Why do people travel so far to come to your establishment? You said Canton and Farmington Hills. There seems to be a lot of massage establishments around and in most communities why would they come so far to come here?

Ms. Liu: Because we also do foot massage and nobody else will do that.

Mr. Caramagno: You do foot massages?

Ms. Liu: A lot of people including one is the former professor in university, Eastern University professor. He has cancer so he's the one that will always come to Xiaoping and this place because he may have like eight to nine months but then you know he lives in Canton. So, he's the one that calling me every time and say I want to go to Xiaoping because they have a very good foot massage and I can't even walk, so those people they have the professional help from the from the medical doctor, however, certain thing that they feel to cover to make them feel relaxed and better. So, foot massages are not like easily for everyone because nobody wants to do it, to be honest with you, but they take that as the very specialty for this location.

Mr. Caramagno: Okay, and the last question is you know, you're gonna put people to work, 6,7,8 people I think you said.

Ms. Liu: At least we will hire six to eight people in this new place because we have to rotate the shift because basically, we open from 11 o'clock to seven at night.

Mr. Caramagno: Now the people that work for you, the technicians, what their title is, I don't know, but will they live in the City of Livonia? where will the employees come from?

Ms. Liu: Right now they live in Canton. We have special accommodation for them in Canton condo, but then it like, like I mentioned last time that people that might be from New York because they more experienced but they're the one who's going to be here to

train Livonia people. We were trying to hire people that live in the Livonia or around that, you know, that area. So, if they live in Livonia, they have their own home, either no matter it's condo or house or apartment. So, there are local people. We want to hire local people to work here. Thank you.

Mr. Wilshaw: Thank you, Mr. Chairman. You know, any other questions for our petitioner?

Mr. Wilshaw: I don't see any other questions for our Petitioner from any of our commissioners. Is there anyone in our audience wishing to speak on this item? I don't see anybody in our audience jumping forward. We have one gentleman who is going to come forward. Well, we'll let him speak and then we'll give you another chance. Thank you. Hi, good evening, sir.

Resident (Chuck), 11714 Farmington Road, Livonia, MI. So, I live right behind there, okay? My biggest concern is a lot of the traffic there. I mean, we have stop signs that get run all the time. We have no place to park. If I have somebody over my house or my condo, they are going to have to park over at and Larry's walk across the street to get to my house. A lot of my issues there. Cinco de Mayo, when the Las Palapas opened, there were a lot of fire lanes blocked. So, if an ambulance had to get up or fire trucks had to get up, and nobody was there to be concerned about it. There was a 4th of July weekend one time, and the big dumpster was full of rotten food. Rats. It wasn't very pleasurable. So, I'm trying to cook for my July barbecue and I'm staring at a dumpster full of food. So, my biggest fear is the traffic, and nobody wants to control it. There is no control from the City Council, Ordinance, Planning Commission, I mean, they want to open a business, I don't care, but I mean, where are the employees gonna park?

Mr. Wilshaw: Okay. I appreciate your concern. So, can we get your name just...

Resident: Chuck.

Mr. Wilshaw: Chuck. Okay. Thank you, sir. Appreciate your comments. Anyone else in the audience wishing to add anything to this item for or against? Miss Liu? Is there anything else that you or Xiaoping would like to add before we make our decision?

Mr. Wilshaw: Yeah, please come forward, so the microphone can pick you up.

Ms. Liu: Yeah, she just wanted me to say that she'd been in the same location, not the same. I mean, same street that was mentioned earlier that she's managing right now. Since 2014.

Mr. Wilshaw: Okay, that's the other location on Plymouth Road correct?

Ms. Liu: Yes.

Mr. Wilshaw: Okay. Yep. I appreciate that comment. If there's no other comments or questions from any of our commissioners, I don't see anything else. I will close the public hearing and ask for a motion.

On a motion by Bongero, seconded by Dinaro, was

RESOLVED, That pursuant to a Public Hearing having been held by the City Planning Commission on May 9, 2023, on Petition 2023-03-02-02 submitted by Yo Yo Spa 1 L.L.C. requesting waiver use approval, under Section 6.37 of the Livonia Vision 21 Zoning Ordinance, as amended, to operate a massage establishment at 33316 Plymouth Road, located on the north side of Plymouth Road between Mayfield Avenue and Farmington Road in the Southwest ¼ of Section 27, the Planning Commission does hereby recommend to the City Council that Petition 2023-03-02-02 be approved subject to the following conditions:

1. The use of a massage establishment at this location is allowed, provided the City Council waives the requirement under Section 6.37(3) that no massage establishment shall be located within four hundred feet (400') of a daycare facility and park.
2. The massage treatment rooms shall not have doors, as shown on the floor plan submitted on May 3, 2023.
3. This waiver is limited to this petitioner and can only be transferred to another user with approval by the City Council.
4. The petitioner shall comply with all other special waiver use standards and requirements outlined in Section 6.37 of the Zoning Ordinance and Chapter 5.49 of the Livonia Code of Ordinances, and

5. The Petitioner shall not engage in any form of solicitation for business within the public right-of-way of Plymouth Road.

FURTHER RESOLVED, That notice of the above hearing was given in accordance with the provisions of Section 13.13 of Livonia Vision 21 Zoning Ordinance, as amended.

A roll call vote on the foregoing resolution resulted in the following:

AYES: Bongero, Dinero, Long
NAYS: Ventura, Caramagno, Wilshaw
ABSENT: None
ABSTAIN: None

Chairman Wilshaw declared the resolution failed due to lack of majority.

On a motion by Ventura, seconded by Caramagno, and adopted, it was:

#05-26-2023 **RESOLVED**, That pursuant to a Public Hearing having been held by the City Planning Commission on May 9, 2023, on Petition 2023-03-02-02 submitted by Yo Yo Spa 1 L.L.C. requesting waiver use approval, under Section 6.37 of the Livonia Vision 21 Zoning Ordinance, as amended, to operate a massage establishment at 33316 Plymouth Road, located on the north side of Plymouth Road between Mayfield Avenue and Farmington Road in the Southwest ¼ of Section 27, the Planning Commission does hereby recommend to the City Council that Petition 2023-03-02-02 be denied for the following reasons:

1. The petitioner has failed to comply with all general standards and requirements outlined in Sections 1.02 and 13.13 of the Livonia Vision 21 Zoning Ordinance.
2. The proposed use fails to comply with the Zoning Ordinance standard outlined in Section 6.37(3), which specifies that no massage establishment shall be located within four hundred feet (400') of a daycare facility and park.
3. The petitioner has not adequately established a need for the proposed use in this shopping center or the immediate area.
4. The petitioner has not sufficiently demonstrated that the proposed use would be compatible with and in harmony with the surrounding uses in the area; and

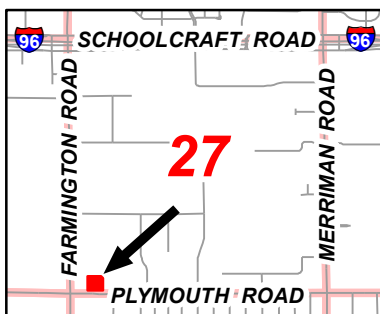
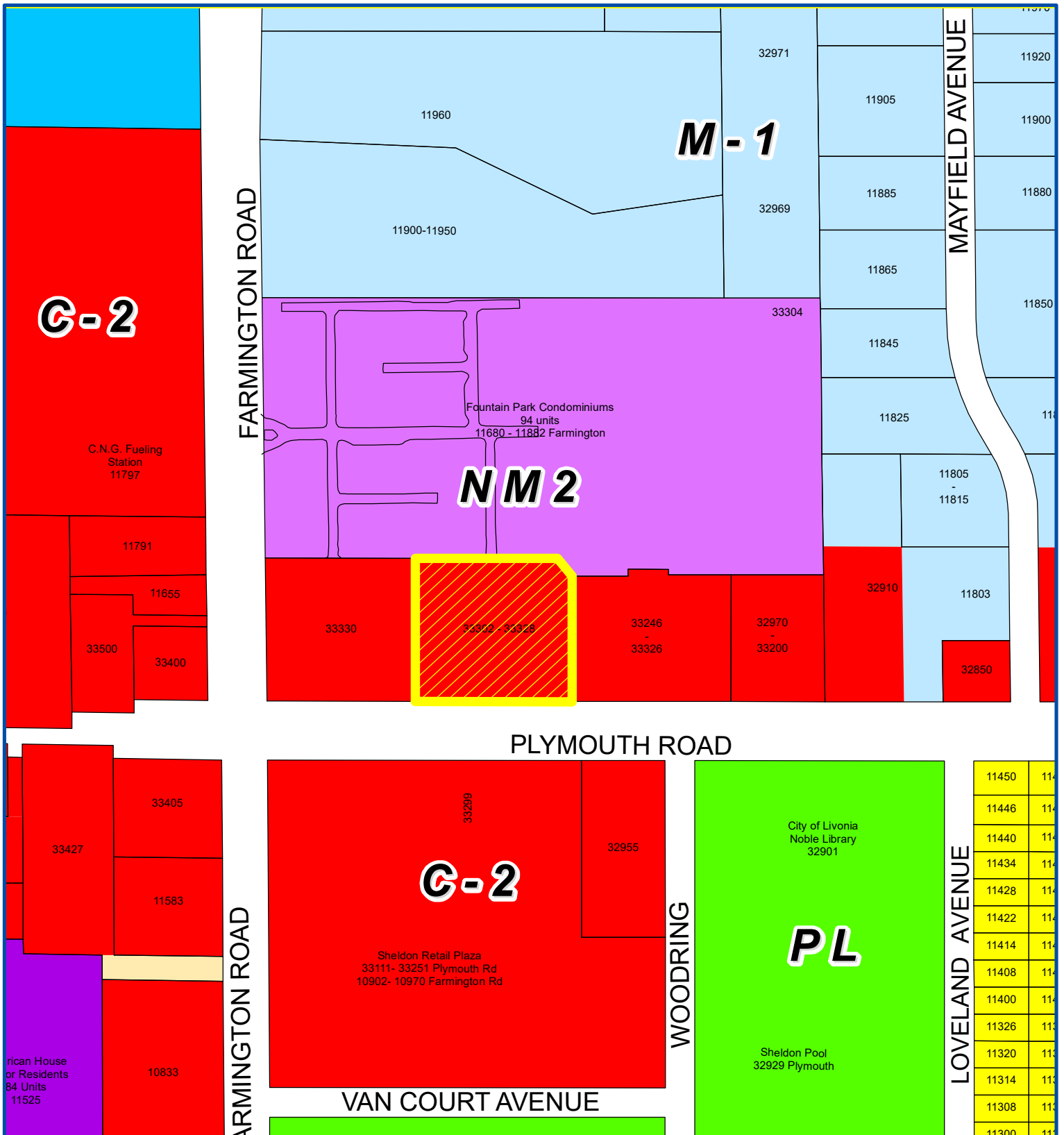
5. The proposed use is contrary to the goals and objectives of the Zoning Ordinance, which, among other things, are intended to ensure the suitability and appropriateness of uses.

FURTHER RESOLVED, That notice of the above hearing was given in accordance with the provisions of Section 13.13 of Livonia Vision 21 Zoning Ordinance, as amended.

A roll call vote was taken on the foregoing with the following result:

AYES:	Ventura, Caramagno, Long, Wilshaw
NAYS:	Dinaro, Bongero
ABSENT:	None
ABSTAIN:	None

Mr. Wilshaw, Chairman, declared the motion is denied. You will have 10 days in which you can appeal this decision in writing to the City Council.



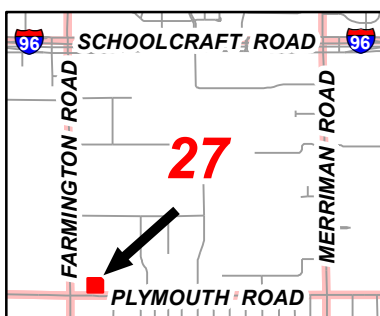
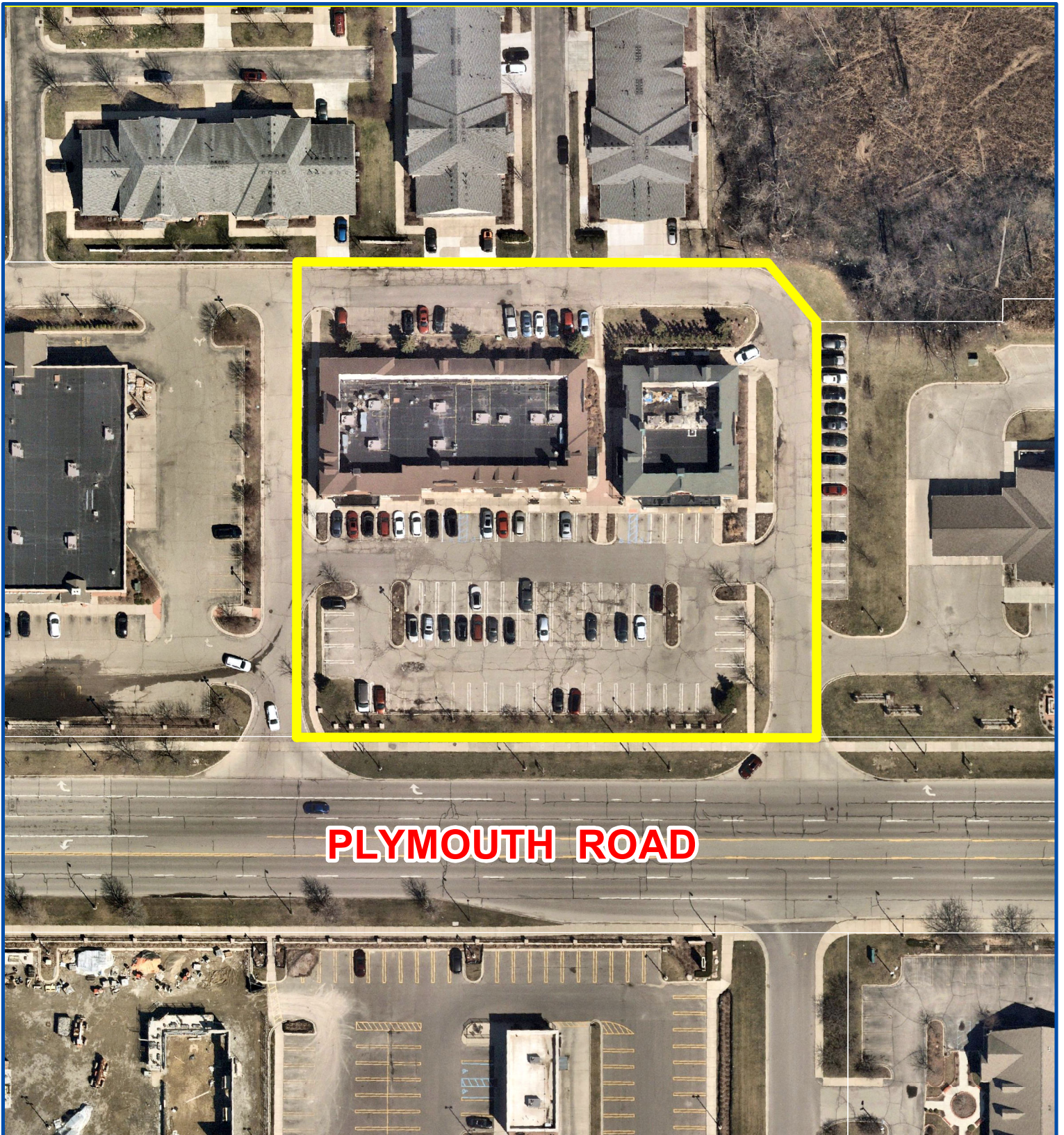
Address & Zoning Map

Petition 2023-03-02-02
Yo Yo Spa
33316 Plymouth Road
to operate a massage establishment



Not to Scale

City of Livonia
Planning Department



Aerial Map

Petition 2023-03-02-02
Yo Yo Spa
33316 Plymouth Road
to operate a massage establishment



Not to Scale



City of Livonia
Planning Department

PLANNING COMMISSION STAFF NOTES

PUBLIC HEARING

ITEM 2

Petition 2023-03-02-02 submitted by Yo-Yo Spa 1 L.L.C. requesting waiver use approval under Section 6.37 of the Livonia Vision 21 Zoning Ordinance, as amended, to operate a massage establishment at 33316 Plymouth Road, located on the north side of Plymouth Road between Mayfield Avenue and Farmington Road in the Southwest $\frac{1}{4}$ of Section 27.

April 25, 2023: Study Meeting:

This request to operate a massage establishment (Yo-Yo Spa) is at the Fountain Park Plaza shopping center. Fountain Park Plaza consists of five (5) commercial buildings located on the north side of Plymouth Road, just east of Farmington Road. Closest to the intersection is a building occupied by Dollar Tree, constructed initially as a Walgreens pharmacy. Lying immediately to the east is Retail "B," which totals 12,639 square feet and is divided into seven (7) tenant spaces. Yo-Yo Spa is proposing to occupy one of the units in this building. Further east is Retail "A," which is separated from Retail "B" by a twenty-four-foot (24') wide pedestrian plaza. Retail "A" measures approximately 5,287 square feet and contains Las Palapas Restaurant. Continuing east of Retail "A" is a Fifth Third Bank branch office and a Huntington Bank next to that.

The subject site is zoned C-2 (General Business). Massage establishments are permitted with waiver use approval in a C-2 District under the provisions outlined in Section 6.37 of the Zoning Ordinance. Stipulated in this section are several requirements, including 1) the establishment must be at least 400 feet from another massage establishment, 2) it also must be at least 400 feet y from any school, place of worship, state-licensed daycare facility, public library, playground, or public park, and 4) the operating hours are limited to 8:00 am to 10:00 pm.

According to the submitted plans, the proposed massage establishment would occupy Unit 5 of Retail "B" of the shopping center. This unit contains a floor area of approximately 1,056 square feet and is located in the easterly half of the building, between a Check Smart and the Lighthouse Smoke Shop. The unit's storefront faces south towards Plymouth Road, with parking directly in front of the business. The submitted floor plan shows the general layout of the interior, which includes a waiting area, reception office, several individual massage rooms, an employee's lunchroom, a storage area, and a restroom. The petitioner has agreed to operate this business between the hours specified in Section 6.37.

As mentioned, a massage establishment cannot be located within 400 feet of another massage establishment. Yo-Yo Spa complies with this requirement since no other massage establishments are within 400 feet of the proposed location.

PUBLIC HEARING

ITEM 2 Petition 2023-03-02-02 – Yo Yo Spa

Page 2

However, the location of Yo-Yo Spa does not meet the separation requirement from a state-licensed daycare facility, public library, playground, or public park. Learning Tree Child Care Center at 32955 Plymouth Road is across Plymouth Road, approximately 122 feet from the subject property. And located about 277 feet from the property are the Alfred Noble Library and Sheldon Park. The City Council must waive the 400-foot separation requirement through a separate resolution in which two-thirds ($\frac{2}{3}$) of the members concur.

No modifications to the building exterior are planned in connection with the proposed massage establishment. The unit is allowed one wall sign based on the frontage of the unit.

Parking is based on the overall requirement for the entire center. Because the users are retail, the required parking for the center is based on the parking schedule for group commercial centers. The existing parking at Fountain Park Plaza shopping center is sufficient to handle the parking needs of the proposed massage establishment.

May 9, 2023: Public Hearing:

The petitioner has submitted a revised plan which removes the doors from the massage treatment rooms.

Approving Resolution: This request to operate a massage establishment at 33316 Plymouth Road is hereby approved, subject to City Council approval and the following conditions:

1. The use of a massage establishment at this location is allowed, provided the City Council waives the requirement under Section 6.37(3) that no massage establishment shall be located within four hundred feet (400') of a daycare facility and park.
2. The massage treatment rooms shall not have doors, as shown on the floor plan submitted on May 3, 2023.
3. This waiver is limited to this petitioner and can only be transferred to another user with approval by the City Council.
4. The petitioner shall comply with all other special waiver use standards and requirements outlined in Section 6.37 of the Zoning Ordinance and Chapter 5.49 of the Livonia Code of Ordinances, and
5. The Petitioner shall not engage in any form of solicitation for business within the public right-of-way of Plymouth Road.

PUBLIC HEARING

ITEM 2 Petition 2023-03-02-02 – Yo Yo Spa

Page 3

Denying Resolution: This request to operate a massage establishment at 33316 Plymouth Road is denied for the following reasons:

1. The petitioner has failed to comply with all general standards and requirements outlined in Sections 1.02 and 13.13 of the Livonia Vision 21 Zoning Ordinance.
2. The proposed use fails to comply with the Zoning Ordinance standard outlined in Section 6.37(3), which specifies that no massage establishment shall be located within four hundred feet (400') of a daycare facility and park.
3. The petitioner has not adequately established a need for the proposed use in this shopping center or the immediate area.
4. The petitioner has not sufficiently demonstrated that the proposed use would be compatible with and in harmony with the surrounding uses in the area; and
5. The proposed use is contrary to the goals and objectives of the Zoning Ordinance, which, among other things, are intended to ensure the suitability and appropriateness of uses.



FOUNTAIN PARK PLAZA

NE QUADRANT OF PLYMOUTH RD AND FARMINGTON RD • LIVONIA, MICHIGAN



A.F. JONNA
DEVELOPMENT & MANAGEMENT CO.

4036 TELEGRAPH ROAD, SUITE 201, BLOOMFIELD HILLS, MI 48302

WWW.AFJONNA.COM

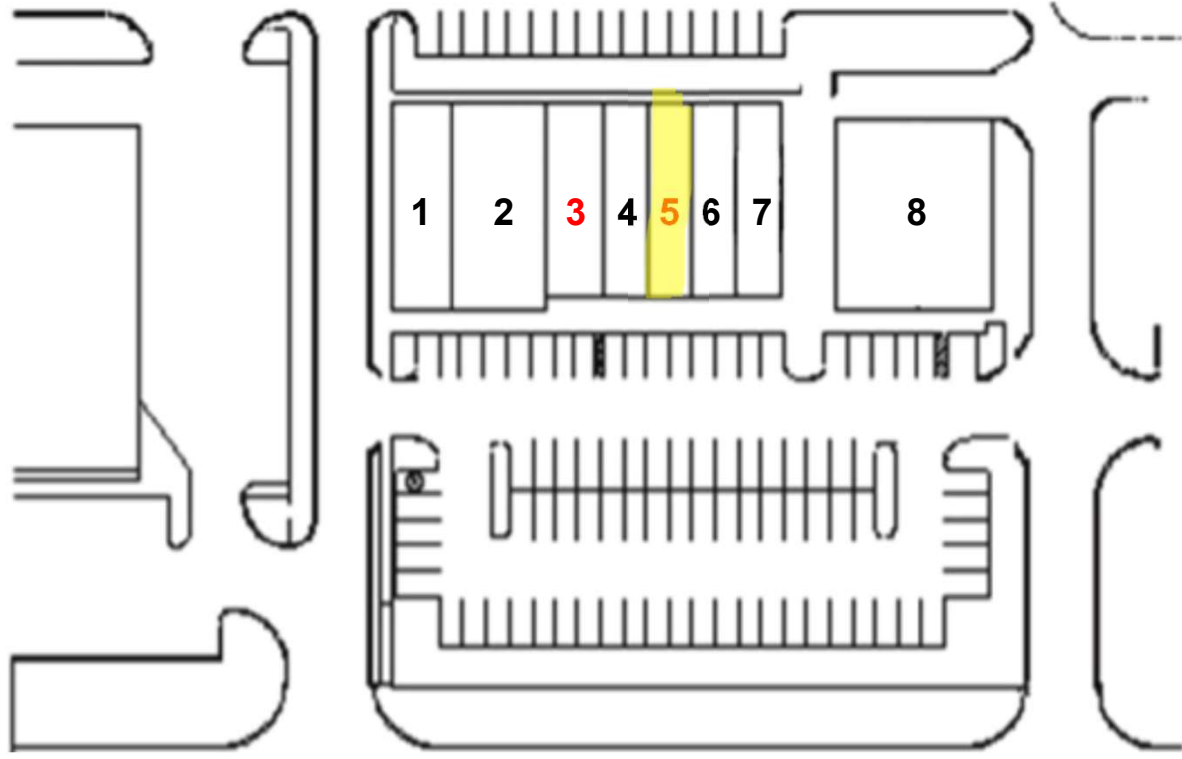
Phone: (248) 593-6200

Disclosure: The information provided herein has been given to us by the owner of the property or other sources we deem reliable. We make no representations or warranties, expressed or implied, as to the accuracy of the information. All information should be verified prior to purchase or lease.



FOUNTAIN PARK PLAZA

NE QUADRANT OF PLYMOUTH RD AND FARMINGTON RD • LIVONIA, MICHIGAN



Plymouth Road

TENANTS

- 1 Happy Wok
- 2 Red Olive Restaurant
- 3 Available 1,796 SF
- 4 Check Smart
- 5 Available 1,333 SF
- 6 Lighthouse Smoke Shop
- 7 Pita Way
- 8 Las Palapas Restaurant

DEMOGRAPHIC PROFILE

1 MILE

3 MILES

5 MILES

Population

6,581

91,672

257,801

Households

2,650

38,746

107,213

Household Income

\$72,792

\$56,320

\$55,757

Traffic Counts

29,403 VPD on Farmington Road
20,730 VPD on Plymouth Road

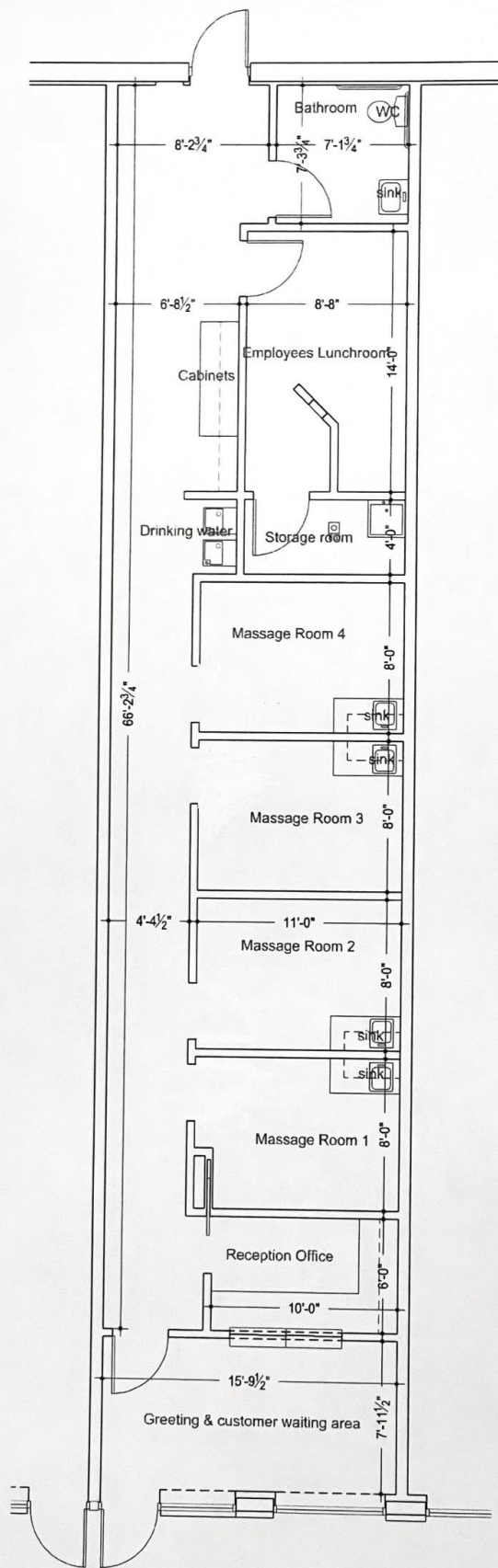
A.F. JONNA
DEVELOPMENT & MANAGEMENT CO.

4036 TELEGRAPH ROAD, SUITE 201, BLOOMFIELD HILLS, MI 48302

WWW.AFJONNA.COM

Phone: (248) 593-6200

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AS-BUILT FLOOR PLANS
33316 PLYMOUTH RD. LIVONIA, MI
 DATE: 8-8-2022 1,266 SF SCALE: NTS

DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION

TODD J. ZILINCIK, P.E.
CITY ENGINEER

DAVID W. LEAR, P.E.
ASST. CITY ENGINEER



MAUREEN MILLER BROSNAN
MAYOR

DONALD R ROHRAFF
DIRECTOR OF PUBLIC WORKS

12973 FARMINGTON ROAD
LIVONIA, MICHIGAN 48150
(734) 466-2571
FAX: (734) 466-2195

April 4, 2023

Mr. Scott Miller
Planner IV
City of Livonia

Re: Petition 2023-03-02-02 – #33316 Plymouth Road

Dear Mr. Miller:

In accordance with your request, the Engineering Division has reviewed the above referenced petition. We have no objections to the proposed waiver use at this time. The subject parcel is assigned the address range of #33302 to #33328 Plymouth Road with the address of **#33328 Plymouth Road** being assigned to the overall parcel.

The existing parcel are currently served by public sanitary sewer, water main and storm sewer. Per the submitted drawings, there are no planned alterations to the services, so we do not expect any impacts to the existing systems at this time.

It should be noted that any disturbances within the Plymouth Road right-of-way would require the owner to obtain permits from the Michigan Department of Transportation.

Should you have any additional questions on this matter, please feel free to contact myself at (734) 466-2608 or the City Engineer, Mr. Todd Zilincik at (734) 466-2561. If you would prefer, you can e-mail either of us at dlear@livonia.gov or tzilincik@livonia.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "D. Lear", is written over a horizontal line.

David W. Lear, P.E.
Assistant City Engineer

cc: 2023 Petition File

DEPARTMENT OF PUBLIC SAFETY
LIVONIA FIRE & RESCUE

ROBERT JENNISON
FIRE CHIEF



MAUREEN MILLER BROSNAN
MAYOR

14910 FARMINGTON ROAD
LIVONIA, MICHIGAN 48154-5419
734-466-2444
734-466-2082 fax

DATE: April 23, 2023
TO: Scott O. Miller, Planner IV
FROM: Livonia Fire Prevention Division
SUBJECT: Petition # 2023-03-02-02 33316 Plymouth Rd. Yo Yo Spa

This office has reviewed the site plan submitted in connection with a request to modify a commercial building on property located at the above referenced address.

We have no objections to this proposal.

If sprinkler system and fire alarm exist, must be maintained and operational.

A further detailed plan review will take place when this division receives an official plan set.

Sincerely,

Brian R. Kukla

Brian R. Kukla
Fire Marshal

DEPARTMENT OF PUBLIC SAFETY
DIVISION OF POLICE

THOMAS GORALSKI
CHIEF OF POLICE



MAUREEN MILLER BROSNAN
MAYOR

15050 Farmington Road
Livonia, Michigan 48154-5499
(734) 466-2470
FAX: (734) 261-2265

April 4th 2023

Mr. Scott Miller
City of Livonia Planning Dept
33000 Civic Center Drive
Livonia, MI 48154

Re: **Petitions 2023-03-02-02 – 33316 Plymouth Road**

Mr. Miller,

I have reviewed the plans in connection with the petition. I have no objections to the proposal.

Please feel free to contact me, should you have any questions.

Sincerely,

FOR THE CHIEF OF POLICE,

Paul Walters, Sergeant
Traffic Bureau
(734) 466-2107

INSPECTION DEPARTMENT

BUILDING
HEATING
PLUMBING
ELECTRICAL
ZONING
ENVIRONMENTAL PROTECTION
ORDINANCE ENFORCEMENT



MAUREEN MILLER BROSNAN
MAYOR

JEROME A. HANNA
DIRECTOR

33000 CIVIC CENTER DRIVE
LIVONIA, MICHIGAN 48154-3097
(734) 466-2580
FAX: (734) 466-2095

Date: April 21, 2023

To: Scott O. Miller

From: Jerome Hanna

RE: Petition 2023-03-02-02 – 33316 Plymouth Road

Pursuant to your request, the above-referenced Petition has been reviewed.

1. The property is closer than 400' to a childcare facility and a park. Council may waive the 400' requirement.

This Department has no further objections to this Petition.

I trust this provides the requested information.

Jerome Hanna

Jerome Hanna
Director of Inspection

DEPARTMENT OF FINANCE

Michael T. Slater
DIRECTOR OF FINANCE

Connie Kumpula
CHIEF ACCOUNTANT



MAUREEN MILLER BROSNAN
MAYOR

33000 CIVIC CENTER DRIVE
LIVONIA, MICHIGAN 48154-3097
(734) 466-2260
FAX: (734) 421-1807

May 1, 2023

Mr. Scott O. Miller
Planning Commission
33000 Civic Center Drive
Livonia, MI 48154

Petition 2023-03-02-02 - 33316 Plymouth Road

Dear Mr. Miller,

I have reviewed the address connected with the above noted petition. As there are no outstanding amounts receivable (general or water and sewer), I have no objections to the proposal.

Please contact me if you have any further questions.

Very truly yours,

Connie Kumpula
Chief Accountant

CK: jw

OFFICE OF THE TREASURER

LYNDA L. SCHEEL
CITY TREASURER



33000 CIVIC CENTER DRIVE
LIVONIA, MICHIGAN 48154-3060
(734) 466-2245
FAX: (734) 421-7230

April 11, 2023

Mr. Scott Miller – Planner IV
Planning Commission
City of Livonia

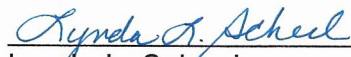
Re: Petition 2023-03-02-02

33316 Plymouth Road
Yo Yo Spa / Fountain Park Plaza LLC

Dear Mr. Miller,

In accordance with your request, the Treasurer's Office has reviewed the name and addresses connected with the above noted petition. At this time there are no taxes due, therefore I have no objections to the proposal.

Sincerely,



Lynda L. Scheel
Treasurer, City of Livonia

CITY OF LIVONIA – CITY COUNCIL
MINUTES OF STUDY MEETING HELD June 26, 2023

Meeting was called to order at 8:00 p.m. by Council President Jim Jolly. Present: Brandon McCullough, Scott Morgan, Kathleen McIntyre, and President Jim Jolly. Absent: Rob Donovic, Scott Bahr, and Vice President Laura Toy.

Elected and appointed officials present: Susan Nash, City Clerk; Paul Bernier, City Attorney; Todd Zilincik, City Engineer; and Jacob Rushlow, Assistant Director of Public Works.

Councilmember McCullough and his daughter, Harper, led the Pledge of Allegiance.

6. REQUEST TO APPROVE AN ADDITIONAL APPROPRIATION AND EXPENDITURE: Department of Public Works, re: for the installation and rental of a temporary chiller unit at the Bennett Library, from the unexpended fund balance of the Library Fund.

Jacob Rushlow, Assistant Director of Public Works, presented the request to Council.

President Jolly asked how much more it would cost to have that piping run into this building. He also asked for a brief explanation of the process going on for the Capital Improvement Study and the work that's going into that.

Councilmember McIntyre said she believed we knew the HVAC was needed about a year ago. She asked when we started and if we have made any progress.

Jacob Rushlow indicated HVAC problems started last August at which time the scoping development phase was completed. They were informed it will be a thirty-to-fifty-week wait for the unit causing the need to rent a chilling unit.

Councilmember McIntyre asked why it takes two years to obtain the unit.

Jacob explained the thirty-to-fifty-week window includes the time for approval, award of the bid to a contractor meeting all obligations, approval to proceed, order from the manufacturer, and the unit arrive on site ready for installation. He said the City Hall unit was ordered many months ago and is expected to arrive July. It will require a crane operator to complete the work.

Councilmember McIntyre asked if that project is related to or completely independent of the roof project.

Jacob Rushlow said it is completely independent. He explained that the Library permanent chiller unit is in the basement. There is a rooftop water cooling tower that provides the water storage reservoir used for cooling the chiller unit. They are moving to a different style that won't require a water tower on the roof. It will be mounted on the ground on the side of the building near the mechanical room.

Councilmember McIntyre said she appreciates the constraints and limitations but the stop gap measures being approved add up. She indicated she is not comfortable with this on consent.

Councilmember McCullough questioned why the design phase takes so long on an existing building and suggested we may need to investigate a different mechanical engineer.

Jacob Rushlow said they are looking at a modular unit comprised of different units in a series, so if one goes bad the whole system won't be shut down. One unit could be pulled out and replaced. We will be paying month to month for the rental unit and can return it if the permanent solution arrives quicker.

Councilmember McCullough said he would like to see five-to-ten-year CIP plan so we are not in reaction mode going forward. He doesn't feel it will be fifty weeks and would like to see if the temporary unit can have off our scheduling hours to save money.

Councilmember Morgan asked for the budgeted cost of the replacement unit including installation and if the rental cost is in addition replacement. He also asked if we got any other quotes on the rental.

Jacob Rushlow said it is upwards of a million dollars and the cost is in addition to replacement. He indicated many quotes were requested but only two responses were received.

Councilmember Morgan confirmed that this is the best, bottom line option available and asked if there was a possibility of using an older unit.

David Parr, 36757 Marler, Library Commissioner, asked when the temporary unit will be installed. He also asked if the money is going to be taken from Library funds.

Jacob Rushlow said they don't have a date yet, and they must do plumbing and electrical work first. They will try to have a date by the next meeting.

Sammy Lovin, Maintenance Manager, doesn't believe it will be a total shut down, but they will work with Library Administration to schedule.

Councilmember McIntyre asked if DPW or the Library are responsible for the cost and planning of facility issues. She also suggested this may need to go into committee.

President Jolly said the former Library Director, Toni LaPorte, indicated it was her responsibility to have the Library HVAC cleaned and it would be beneficial for Council to know the processes and where they lie.

Jacob Rushlow said DPW is responsible for the building maintenance side and making sure that they are working with the departments to put together a budget that's going to meet their capital needs. The Finance Director is the person who recommends what fund these expenses will come from and DPW isn't a part of that decision.

Councilmember McCullough asked who initiates preventative maintenance needs such as carpet cleaning. He asked if this is done regularly or if it is reactionary when a work order is submitted.

Sammy Lovin said DPW oversees preventative maintenance, and they try to do it quarterly. They do check the strainer baskets for the chiller daily.

Mr. Parr said Jacob Rushlow has been very responsive to all their requests. His only question now is when this will be installed and operational.

President Jolly asked Mr. Parr to contact Jacob Rushlow for that answer.

Councilmember McCullough offered an approving resolution for the Regular agenda.

DIRECTION:

APPROVAL

REGULAR



LETTER TO THE LIVONIA CITY COUNCIL

5.

DPW
June 8, 2023

MEETING DATE

S062623/R071023

PREPARED BY

Jill Russell, Secretary III,

AGENDA ITEM

REQUEST TO APPROVE AN ADDITIONAL APPROPRIATION AND EXPENDITURE: Department of Public Works, re: for the installation and rental of a temporary chiller unit at the Bennett Library, from the unexpended fund balance of the Library Fund.

BACKGROUND DETAILS

For the last several years, the chiller (air conditioning) units at the Bennett Library have been failing, requiring extensive repairs. At this point, only one of the three compressor units is functioning, providing minimal, insufficient cooling to the facility. We are in the process of replacing the entire cooling system. However, due to a severe shortage and backlog of orders for such equipment after COVID, we're looking at 2025 (2 years) before we can secure a new unit. In the meantime, the only functioning compressor is operating non-stop to cool the facility but struggles to keep up and it too may fail at any moment. Since we can't get a new unit for another two years, we investigated the possibility of renting a "temporary" chiller unit that can handle a building this size until we can secure a new, permanent unit. We found two companies who have "semi-portable" units available to "rent" and secured quotes from each of them. This project will require two phases; the disconnection of the old rooftop units and installing new/temporary electrical and piping for the rental unit, and the installation of the rental unit itself; this requires two separate contractors.

Guardian Plumbing, Livonia MI - prep work for temporary unit = \$10,950.00

Trane Rental Services, Detroit MI - Monthly rental of temporary unit = \$11,990.00/month (total 12 'active' months)

July-November \$ 59,950.00
2023

May-
November
2024

\$ 83,930.00

**\$143,880.00 Two-
year rental**

PREFERRED COUNCIL RECOMMENDATION/RESOLUTION (Please complete this field. Attachments are not to be used in lieu of the recommendation)

The Department of Public Works recommends Council approve the installation of a temporary chiller unit at the Bennett Library, with prep work to be done by Guardian Plumbing at a cost of \$10,950.00 and the monthly rental of said temporary unit through Trane Rental Services at a cost of \$11,990.00 monthly for a period of two years (12 months active use/rental) at a total cost of \$143,880.00. While we are requesting a 2-year rental, should a permanent unit become available sooner, the rental will no longer be necessary.

SPECIFIC NAME OF PRODUCT AND NUMBER TO BE PURCHASED (if more than one)

120 ton AC Chiller w/pump, including all prep work and installation

CONTRACT: Amount and/or purchase price and length of contract (with dates if applicable)

\$10,050.00 - Guardian Plumbing

\$143,880.00 - Trane Rental (2 year rental)

DETAILED WORK BEING PERFORMED

Relocating current air conditioning services (electric, etc) to ground level; rental, installation and maintenance of temporary chiller unit.

FISCAL CONSIDERATIONS (Amount requested and Account(s) used. If applicable, Grant Funding information)

Request an additional appropriation and expenditure from the unexpended fund balance of the Library Fund (271).

ACCEPTANCE OF BID (Please detail the following: Why accepted, why not lowest bidder, company name, contact person, full address)

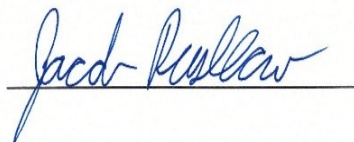
Quotes were requested from several large HVAC suppliers with only two interested in renting the unit and providing quotes. Those quotes are attached.

REASON TO WAIVE BID PROCESS (Emergency, Professional services, No advantage to City and why, Consortium package, etc): Only 2 companies found that would rent the equipment. No advantage to City for soliciting bids.

ATTACHMENTS

1. Mobile Air Proposal
2. Bid Tab - Chiller Rental
3. TraneRentalProposal
4. Guardian Prep Work

APPROVED BY



Jacob Rushlow, P.E., Assistant Director of Public Works

Date: June 12, 2023



Don Rohraff, Director of Public Works

Date: June 12, 2023



Michael Slater, Finance Director

Date: June 12, 2023



Paul Bernier, City Attorney

Date: June 12, 2023



Maureen Miller Brosnan, Mayor

Date: June 15, 2023

Air Conditioner

50 Ton

Mobile Air Portable Air Cooled DX AC packages are self-contained and specifically engineered to provide flexible, temporary commercial and industrial air conditioning and process cooling applications. The DX package is permanently mounted on a rugged steel tubular frame that can be easily maneuvered with a forklift. These onboard features allow for quick delivery and minimal installation time.



Mobile Air Model 50 Ton DAK

Dimensions:

Length	232"
Width	102"
Height	84"
Shipping Weight	7,000 lbs

Specifications:

Manufacturer	Daikin
Model	Maverick II
Compressor Type	Scroll
Number of circuits	2
Refrigerant	R-410a
Total Weight	89.1 Lbs
Operating Range	25°- 120°F
Blower Motor	30hp
Nominal Air Flow	20,000 CFM
External Static Pressure	3"

Features:

- Two Stage Cooling
- Simple return air Thermostat control
- Ambient Control, Allows all units to operate in the cooling mode down to 25 °F outdoor ambient
- Monitors the High and Low-Pressures, Voltage and Phase.
- 3 - 20" Supply duct connections
- 4 - 20" Return duct connections
- MERV 8 Filters
 - 8 - 24" x 24" x 2"
 - 4 - 18" x 24" x 2"
- cETLus listed

Electrical Data:

Single Point Power	460/3 ph/60hz	Min Circuit Ampacity (MCA)	126 A
Connection Type	Series 16 CamLoc	Max Over Current Protection (MOP)	150 A
Connections per Phase	1		

Specifications subject to change without notice consult your Mobile Air sales representative for the most current information
Mobile Air & Power Rentals : 1-888-305-3038 : www.MobileAir.com



MOBILE

Air & Power Rentals

a division of Resolute Industrial

QUOTE ONLY

Quote date: 4/7/2023
Valid for 30 days
Proposal: 001-00-8046224
Project:
Contact: Arnold Pollis
(734) 672-2150
apolis@livonia.gov

To:
City of Livonia

Delivery:
City of Livonia
Arnold, 734-672-2150
32777 Five Mile Rd.
Livonia, MI 48154

Dear Arnold Pollis,

Thank you for the opportunity to present Mobile Air & Power Rental as your partner for temporary climate control and power. Below for your consideration you will find our proposal for equipment and services. Thank you for the opportunity to earn your business!

Est. Rental Start Date: 07/03/2023

Est. Rental End Date: 07/30/2023

Period Pricing

Equipment Description	Rental Term	# Periods	Quantity	Unit Price	Extended
50 TON AIR COOLED SKID AIR CONDITIONR (2) 50-ton air conditioning units.	Monthly	1	2	\$ 7,012.50	\$ 14,025.00
20" White Duct - 25FT (70) 25' lengths of 20" round duct. 3 supply and 4 return required for 25' of travel/unit. 125' of travel needed.	Monthly	1	70	\$ 37.50	\$ 2,625.00
4/0 CAM-LOK CABLE - 50FT (24) 50' lengths of 4/0 camlock cable. (4) 50' lengths required, per unit, per 50' of travel. 150' of travel required.	Monthly	1	24	\$ 60.00	\$ 1,440.00
4/0 CAM-LOK CABLE - FEMALE TAIL (2) 4/0 female pigtail sets for hard wiring to customer's electrical system (customer responsibility).	Monthly	1	2	\$ 24.00	\$ 48.00
Sub-Total:					\$ 18,138.00

One-Time Pricing

	Rental Term	# Periods	Quantity	Unit Price	Extended
Service LABOR Set up / safety start / teardown.	One Time	1	6	\$125.00	\$750.00

Comments: Customer responsible for final electrical connections, adequate lay-down area for equipment and openings in structure for duct.

By signing below, I agree to pay the amount indicated to Mobile Air in exchange for the products listed on this agreement. By signing this agreement, you also accept Mobile Air's terms and conditions (Available upon request).

By signing this agreement, I agree to make all payments on time. I understand that each payment is due within 30 days of the invoice date.

_____ (Y/N) I accept MARPP damage waiver.

Damage waiver will automatically be added if COI is not provided in a timely manner.

Sub-Total:	\$18,888.00
Delivery/Freight:	\$600.00
MA-RPP: (Period Charge)	\$2,539.32
Environmental Fee: (Period Charge)	\$544.14
Estimated Tax:	\$1,354.29
Grand Total:	\$23,925.75

Currency: USD

Customer Signature: _____ Date: _____

Terms and Conditions

- Provide a temporary climate design tailored to the request and needs of the customer for the project.
- Delivery to the project site. Assistance from customer may be required to include lifting and positioning on site by machinery as required.
- Start-up of units. Included gas pressure leak test and safety run testing of units for proper operation.
- Tool Box Safety Talk. Introduce related safety practices and identify emergency procedures of equipment.
- Pick-up of equipment at end of rental. Assistance from customer may be required to include lifting and positioning on site by machinery as required.

Customer Responsibility

- Maintenance charges will apply for a problem occurring with a rental unit due to any of the following conditions;
 - No power, poor power, low running voltage or reverse polarity. Debris obstructing the air intake of the unit, no fuel or low fuel pressure and/or physical damage stopping the rental unit from operation. An invoice will be created to include travel time, mileage, parts and labor at the following rates.
 - \$125.00 per hour straight time (8 AM - 4 PM Monday-Friday)
 - \$250 per hour (Saturday, Sunday & after 4 PM Monday-Friday) (Door to door charge) with 4-hour minimum charge
 - \$350.00 per hour (Holidays) (Door to door charge) with 4-hour minimum charge
 - \$1.75 per mile travel charges (added to labor above)
 - Provide full replacement cost insurance on all rental equipment on project site.
 - Standby Charges for delivery/pick-up for standby time at \$ 125.00 per hour during delays
 - Customer is required to provide all Permits that may be required by the city, state or local codes if any.
 - Customer provides any and all required union labor
 - All lifting/off-loading of equipment (as applicable)
 - State and local taxes (Tax exempt customers must provide a tax exempt certificate with purchase order)
 - Purchase orders and this proposal (signed) are required prior to delivery.
 - All equipment and services provided by Mobile Air are subject to the "Mobile Air, LLC Rental Agreement Terms & Conditions."
- Document online at: <https://www.mobileair.com/terms-and-conditions> Customer accepts these Terms & Conditions.

Rental Protection Plan

- Mobile Air, LLC Rental Protection Plan, MARPP, is not insurance, it is to offset possible damages or theft that may occur during the rental. The cost of this plan is 14.00% of the rental. To opt out of this plan a certificate of insurance can be provided. MARPP covers repairs and replacements up to the first \$75,000. The customer would be responsible for all rental charges, cost of rental protection, 10% of repairs/replacement up to \$1000. Any damage over \$75,000, Mobile Air, LLC will work with the customer and their insurance company. The rental contract must be paid in full for an MARPP claim to be approved. For additional information and limitations please refer to the MARPP Terms and Conditions.

Environmental Fee

- To promote a clean and sustainable environment, Mobile Air takes various measures to comply with certain environmental regulations. Mobile Air also incurs a wide range of environmental related expenses (both direct and indirect) which may include services such as construction and maintenance of cleaning facilities, water disposal as well as labor costs and administration costs, etc. To help recover these and other costs, Mobile Air assesses an Environmental Fee, plus applicable taxes thereon in connection with certain rentals. The Environmental Fee is not a tax or governmentally mandated charge, and is not designated for any particular use or placed in an escrow account, but is a charge that Mobile Air collects as revenue and uses at its own discretion.

Terms

- Payment Terms: Invoiced same month as delivery of equipment, net 30 day terms. All monthly pricing is based on a 28 day billing cycle.
- Proposals are valid for 30 days and equipment selection is contingent upon availability.

I look forward to providing you with our best climate designs and our personal attention for your project site. Please provide me with a completed and signed proposal form, along with a P.O. to start your climate control order. Contact me with any questions at (cell).

Sincerely,

David Brown

David Brown | Mobile Air
Technical Sales Representative
1821 Northwood Drive Troy, MI 48084
| dbrown@mobileair.com

Initials _____

Work Authorization and Proposal Acceptance

☐ STEP 1: Complete Purchase Order Information (If Company to use Purchase Order to Lease Equipment)

Purchase Order #: _____

Purchase Order Amount: _____ (If amount unknown, write 'Per Invoice' or 'To Advise')
 _____ Initial here if a Purchase Order is "not required" for payment

Is order exempt from sales tax? Yes ___ No X

Accounts Payable Contact: _____

Contact Name	Contact E-mail	Contact Phone
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Bill To Address: _____

☐ STEP 2: Read the following statement and sign below (Must complete and sign as Lessee of equipment)

By executing this Acknowledgement, I certify that I am authorized to enter into this agreement on behalf of Lessee and accept the Mobile Air, LLC Terms and Agreement. Additionally, I acknowledge that since the Purchase Order Amount (or Credit Card amount) identified on this Work Authorization and Proposal Acceptance may not reflect the cost of services to be determined after the commencement of the work (i.e. additional rental term, labor, repair etc.) any amount so stated shall not be deemed a restriction on Mobile Air's right to charge customer for continued obligations identified in this proposal.

Signature	Date	Printed Name	Title
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☐ STEP 3: Complete the following information (Must complete)

Requested Delivery Date: 07/03/2023

Delivery Contact: _____

Delivery Contact Phone: _____

Ship To Address: City of Livonia
Arnold, 734-672-2150, 32777 Five Mile Rd., Livonia, MI 48154

☐ STEP 4: Return this entire signed proposal along with a hard copy of:

- ☐ Purchase Order
- ☐ Sales Tax Exempt Certificate (if applicable)

RENTAL PROTECTION PLAN

The Rental Protection Plan (RPP) from Mobile Air & Power Rentals (MAPR) limits your liability in case of equipment damage, loss or theft.

BENEFITS

- Low cost option to manage the unexpected
- Saves money on repairs or replacement
- Waives rental fees during repair time COVERAGE*
- Accidental damage
- THEFT and/or VANDALISM



HOW IT WORKS

- RPP covers the first \$75K of damage or loss when an authorized user incurs an unintentional damage, loss or theft of rental equipment.
 - Purchase RPP for 14.00% of the rental fee. Fee will be automatically added to the rental unless the customer provides MAPR a Certificate of Insurance (COI) naming MAPR as additional insured. This must be property insurance not liability. Email completed COI to your MAPR sales manager. If a covered loss occurs, pay a deductible of (a) 10% of the cost to repair/replace or (b) \$1,000 max; whichever is less
 - For repair or lost costs over \$75K, MAPR will work with the customer and their insurance company
 - to recover the remaining balance.
- For Example:



Pay less if something goes wrong ...

	With RPP	Without RPP
Generator Rental	\$500	\$500
IRPP Cost (14%)	\$0	\$0
Out-of-Pocket Cost	\$560	\$500
Cost to Replace	\$75,000	\$75,000
Deductible*	\$1,000	\$0
RPP Benefit	\$74,000	\$0
Total Cost to Customer	\$1,570	\$75,500

More details related to our Rental Protection Plan can be read on our website at
<https://mobileair.com/wp-content/uploads/2022/08/RPP-Terms-and-Conditions.pdf>

Rental Protection Plan Covers...

Damage To Equipment	Accidental damage if the damage does not result from intentional abuse or negligence of equipment.
Damage to vehicles	Accidental damage if the damage does not result from intentional abuse or negligence of vehicle.
Damage to Ancillary	Accidental damage if the damage does not result from intentional abuse or negligence of ancillary.
Theft	Theft of equipment and vehicles*

Rental Protection Plan does NOT cover...

Damage to tires	Damage to tires and tubes cause by blow out, bruised, cuts, punctures or other causes inherent in the use of the equipment.
Damage from abuse	Damage to equipment resulting from intentional abuse
Theft	Theft of ancillary items.

**Customer is responsible for the care and safekeeping of the rental equipment from the time of delivery until retrieval by the company per MAPR's Rental Agreement Terms and Conditions. Customer agrees that it will use its best efforts to protect the equipment from loss, theft or damage at all times during the rental period, and until the equipment is retrieved and in MAPR's possession.

MARPP Restrictions and Exclusions:

- Damaged Equipment -When a customer rents equipment covered under the RPP program, the customer will not be required to fill out a claim form for damages less than \$15,000.
- If damage to a piece of equipment exceeds \$15,000, the customer is required to complete an incident report form for the RPP Claims Management team to review. Claims will be subject to denial if the damage is determined to be due to: striking an overhead object while in motion, acts of God such as floods, hurricanes, wind, storms, earthquakes or fires, overloading rated capacity, exposing equipment to corrosive material, damage to tubes and tires, overturning equipment, claims history, filling a reservoir with the wrong type of fluid, situations where equipment is used outside the intended purpose or capacity of the machine
- Stolen Equipment -When equipment covered by RPP is stolen from a customer a valid police report must be provided for the RPP claim to be approved. If a police report is provided and Mobile Air's investigation determines no evidence or suspicion of customer conversion, the claim will be approved.
- Claims may also be denied if: a valid police report is not provided, the customer did not safely secure the equipment or provide the keys to the branch, evidence or suspicion of conversion, claims history.
- RPP claims may be denied or put on hold if customer account balance is significantly past due.
- The RPP and Rental contract must be paid in full for an RPP claim to be approved.

* MARPP covers the first \$75K of damage or loss. For repair or lost costs over \$75K, MA will work with the customer and their insurance company.

* MARPP claims may be denied or put on hold if customer account balances are significantly past due.

* The RPP and Rental contract must be paid in full for an RPP claim to be approved.

BID TAB - Bennett Library Chiller Rental
2 year: 2023, 2024 seasons

Prep Work

Guardian Plumbing \$ 10,950.00

		2023 Season	2024 Season
Chiller Rental	#Months	5	7
		July-Nov	May-Nov

	Monthly Chg				
Trane	\$ 11,990.00	\$ 59,950.00	\$ 83,930.00	\$ 143,880.00	
Mobile Air	\$ 23,925.75	\$ 119,628.75	\$ 167,480.25	\$ 287,109.00	



Trane Rental Services
3600 Pammel Creek Rd.
La Crosse, WI 54601

Date: 4/14/2023

Minimum Rental : 7 Days

Project Name: **Livonia Civic Center Library - OMNIA Contract #3341**
Quote #: **P114143**

Thank you for contacting Trane Rental Services for your temporary equipment needs. Trane Rental Services is pleased to offer you this proposal for equipment and installation services as noted to meet your system requirements. Upon your written acceptance, this proposal will constitute the Rental Agreement. All costs are shown in USD.

Equipment Rented

This proposal is subject to your acceptance for 30 days from the date above and is contingent upon equipment availability at the time of contract. Rental rates do not include applicable taxes or delivery and return charges unless otherwise noted.

Description	Quantity
120 ton AC Chiller w/pump	1
4/0 x 100ft Cable Box	2
6" x 200ft Hose Box	2
6" x 100ft Hose Box	1
48ft Flat-bed Trailer	1

Rental Rate: Monthly \$ 11,990.00

Notes:

**Per OMNIA contract #3341 terms and conditions.

Overview of Project:

Trane to Provide

- Portable 120 ton Air-Cooled Chiller w/ pump on a 48 ft trailer
- Provide a 100 ft run of electrical cabling and 200 ft of 4" hose and fitting for horizontal runs.
- Trane Technician for start up of chiller.

Customer Responsibility

- All applicable taxes and permits.
- Equipment to be located in cleared parking spaces adjacent to building.
- Maintenance and winterizing the equipment with glycol (Oct - Mar)
- System fill / disposal of glycol mixture or potable water.
- Installation / removal of all electrical and mechanical connections.
- Equipment for offloading/ loading equipment



Trane Rental Services
3600 Pammel Creek Rd.
La Crosse, WI 54601

Date: 4/14/2023

Minimum Rental : 7 Days

Other Charges

Additional Charges:

Description	Quantity	Price Each	Periodic		Total
Round Trip Freight	1	\$ 4,500.00	One-time	\$	4,500.00
Trane Tech for Start Up	8	\$ 226.48	One-time	\$	1,811.84

Additional One-time Charge Total: \$ 6,311.84

Additional Recurring Charge Total: \$ 0.00

First Month Total: \$ 18,301.84

Recurring Month Total: \$ 11,990.00

Quote is valid for 30 days ---- See Trane Terms and Conditions



Trane Rental Services
3600 Pammel Creek Rd.
La Crosse, WI 54601

Date:
Minimum Rental :

4/14/2023
7 Days

Salesperson: Berry, Steve
Office: DETROIT MAIN
Quote #: P114143

Steve.Berry@trane.com

Proposal Acceptance:

To accept Proposal, please complete, sign and return this page to the Trane Salesperson listed above. Once a signed Proposal Acceptance and hard copy Purchase Order are received, we will process your order.

Customer:

Customer Contact:

Name:
Phone:
Email:
Customer PO#:

Yes / No

Include Rental Protection on this order. The Rental Protection Program offers you peace of mind and protection against unforeseen events such as theft, vandalism and accidental damages. Coverage price is calculated at 12% of the total recurring equipment charges and, if selected will be added to this order. A \$ 2,500 deductible that will apply to each claim. Full details of the Rental Protection Program are included the Rental Protection Terms Summary of this Rental Agreement.

Recurring Period Rental Proposal Protection Price: \$ 1,438.00
Replacement Cost (Insurance Value): \$ 223,101.00

Site Address:

Site Contact:

Name:
Phone:
Alt Site Contact:
Phone:

Customer PO #:

Signature:

Date:

Printed Name:

Date:



Trane Rental Services
3600 Pammel Creek Rd.
La Crosse, WI 54601
Phone: 800-755-5115

Currency: All prices included in this document are reflected in \$ US, unless otherwise specified.

Invoice interval: All monthly pricing based on a 28 Day billing cycle.

Freight: Charges arranged by Trane are included in the quotation. Delivery and Pickup standby time may be charged in the event of delays caused by the customer. If prepositioning of equipment is required, additional freight charges will apply.

After hours fee: \$500 (minimum) will be charged for unplanned services requiring facilities to open outside of normal business hours. If ordered and subsequently canceled, the fee will be charged in addition to any other cancellation charges.

Sales tax: Sales tax is NOT included. A tax exemption certificate is required for those applicable.

Understanding your invoice: If the actual Rental Duration differs from quoted Rental Duration, refer to the following for invoice calculation: Rental extended past original end date or returns prior to:

Daily rate is 1/3 of the weekly rate.
Weekly rate is 1/3 of the monthly rate.

All information: All information subject to Rental Terms and Conditions below

Rental period: The rental period commences when the equipment ships from a Trane facility and ends when the equipment returns to the Trane facility. The Minimum Rental Period is set forth above. If at the end of any rental period Customer has not returned the equipment or contacted their Trane contact to stop the rental charges and notify that the equipment is ready for pick up, this Agreement shall, at Trane's sole option, either automatically be renewed for an additional Minimum Rental Period or be subject to the default provisions. Pricing established in this Rental Agreement will be honored throughout the agreed upon Minimum Rental Period. Trane reserves the right to establish new pricing if the job extends beyond the Minimum Rental Period set forth above. Trane must notify the customer of any pricing changes that should occur after the Minimum Rental Period with a 15-day written notice.

Early returns: Minimum Rental Period is one week unless noted otherwise. If the equipment is returned prior to the end of the Minimum Rental Period noted above, Customer shall pay a service charge equal to the rent for one (1) Minimum Rental Period and other charges that may apply. Equipment returned prior to the Minimum Rental Period may be rented to others and Trane shall have no obligation to make the equipment available to Customer. If discount pricing was provided due to length of rental period and equipment is returned prior to completion of the contracted period, Customer shall also be liable for charges equal to the discount.

Customer responsibility: For the duration of the rental period, Customer is responsible for following the procedures and requirements set forth in any Manufacturer Installation and Operating Manuals, Trane Rental Services Freeze Protection Procedure, the Trane Rental Services Installation Guide for each rental product, and any other literature provided by Trane to Customer. Customer shall be liable for any damage to, or caused by, the rental equipment if Customer fails to install, operate, and maintain the equipment in accordance with those procedures and requirements. Customer is responsible for ensuring it receives the aforementioned documents. Customer responsible for obtaining any relevant operating permits, and shall be liable for any and all penalties, delays and damages caused by its failure to timely obtain all such permits, including reimbursement to Trane for any fines paid on Customer's behalf and regardless of the party to which the citation is issued. All equipment and accessories must return in the same condition in which they were in upon original shipment to the job. Customer is responsible for any repairs or replacements that must be made if the equipment and accessories do not return in the same condition that they were in upon original shipment.

This quotation is based on using water only in the evaporator (and condenser, if applicable). For fluid solutions other than water or any other unusual job conditions, contact Trane Rental Services Marketing. Fees will apply if cleaning is required.

For re-rent orders, we reserve the right to charge actual freight costs plus 20%.

Pre-delivery cancellation fees: If Customer cancels this rental after Trane and/or its freight supplier have commenced mobilization but before delivery of the equipment, Customer shall be responsible for paying Trane the freight charge incurred, a reasonable labor charge at the applicable standard, overtime or holiday rate, and, if after regular business hours, an After Hours Fee.

Labor: Customer induced service calls, drive time to and from sites and any chargeable labor will be charged. If an overnight stay is required, lodging and per diem expense will be charged.

Generator shift pricing: Customer will be responsible for actual generator run rate charges based on actual equipment run hours over the rental term.

Triple shift rate, based on 24 hrs./day.
Double shift (16 hrs./day) = Triple shift x 0.75.
Single shift (8 hrs./day, 40hr/wk.) = Triple shift x 0.50.

Generator Fueling: Generator fuel level at the time of shipment will vary depending on Generator size as indicated in the table below. If the Generator is returned with less fuel than when shipped or with a fuel level greater than the maximum shown in the Fueling Table below, a handling fee will be charged. Additional fuel in the Generator in excess of what was originally delivered will not be reimbursed.

Fueling Table:

Size	Shipping Fuel Level
RSGP36KW-RSGP450KW	Up to 80%
RSGP500KW-RSGP900KW	Up to 25%
RSGP 1350KW	Empty

***TRS does not guarantee fuel percentages**

Generator re-fueling: Refueling must be setup separately.

PM Service is required every 250 run hours for generators 350kW and above and every 500 run hours for generators 250kW and below and must be performed by a pre-approved group. Customer assumes responsibility for all required PM services, unless explicitly outlined

in the scope of this proposal. Normal PM rates will apply M-F (8 AM - 5 PM) local time and include maximum roundtrip travel time of 2 hours or 100 miles from a service center. PM Service performed outside of normal business hours will be charged at overtime rates.

To place an order:

1. Complete, sign, and return the proposal acceptance page.

To terminate rental:

1. Email your Trane Account Manager. Trane requires a minimum of a 48-hour notice for arranging the decommissioning and return freight. Termination notifications received after 5pm will be acknowledged the following day.
2. Provide the Rental Agreement Number, a PO Number, or the Equipment Unit IDs. Also please provide items to be collected, location, pickup date/time window of minimum 2 hrs, site contact person name/phone number, and any decommission needs.
3. You will receive a confirmation email to acknowledge your request. If you do not receive this confirmation, please contact your Trane Representative. A rental will not be deemed terminated without proof of termination, as set forth above.

Trane Rental Terms and Conditions

The Rental Terms and Conditions below are exclusive and are in lieu of all other terms and conditions appearing on Customer's purchase order or elsewhere and shall apply to all proposals or quotations made, orders accepted, and rentals made by Trane. "Trane" shall mean Trane U.S. Inc. for Company performance in the United States and Trane Canada ULC for Company performance in Canada. Trane is not responsible for typographical or clerical errors made in any proposals, quotations, orders or publications. All such errors are subject to correction.

Acceptance: These terms and conditions are an integral part of the firm offer, subject to credit approval, by Trane to rent equipment to Customer and form the basis of any agreement (the "Agreement") resulting from Trane's proposal or quote and any rental of equipment to Customer. The proposal or quote is subject to acceptance within thirty days from its date, and the prices are subject to change without notice prior to acceptance by Customer. Acceptance of Trane's offer will have occurred if Customer: signs Trane's proposal; issues written order pursuant to submission of Trane's proposal; permits or accepts Trane's performance; or accepts in another commercially reasonable manner. If Customer's order is an acceptance of Trane's proposal, Trane may return such order with these terms and conditions attached, which shall serve as an acknowledgement and confirmation of receipt of order. If Customer's order is expressly conditioned upon Trane's acceptance or assent to terms other than those expressed herein, return of Customer's order by Trane with these terms and conditions attached serves as notice of objection to such terms and a counter-offer to rent equipment in accordance with scope and terms of Trane's original proposal. If Customer does not reject or object within ten days, such counter-offer will be deemed accepted. In any event, if Customer permits or accepts performance, these terms and conditions will be deemed accepted by Customer.

Connected Services. In addition to these terms and conditions, the Connected Services Terms of Service ("Connected Services Terms"), available at <https://www.trane.com/TraneConnectedServicesTerms>, as updated from time to time, are incorporated herein by reference and shall apply to the extent that Trane provides Customer with Connected Services, as defined in the Connected Services Terms.

Billing and Payment Terms: Unloading, start up, rigging, installation, piping, disconnection and electrical work are not included in the rental charge and are the sole responsibility of Customer. If Trane performs any of the foregoing, the charges for such services will be billed to Customer (usually in the first rental period). Rental and other periodic or billable charges shall be invoiced at the beginning of each rental period and are due net 30 days

Taxes and Licenses: No license, sales or use taxes are included in the periodic rental rates. Customer shall pay all taxes associated with the rental and use of the equipment, as well as all license fees and costs.

Freight: All freight charges shall be billed in the first rental period. Trane reserves the right to increase freight charges due to extraordinary events, including but not limited to acts of God, disruptions in transportation, acts of terrorism, war or the public enemy, civil disobedience, insurrections, riots, and labor disputes.

Delivery/Pick-up: Trane shall endeavor to meet scheduled delivery and pick up dates and times, but all such dates and times are estimates only. Trane shall not be liable for any damages for failure to meet such estimates. If equipment is to be unloaded upon arrival, customer is responsible for ensuring that equipment is unloaded in a timely manner. Should the truck have to wait in excess of two (2) hours to be unloaded, customer is responsible for all detention charges incurred.

Use and Location: The equipment is to be used by Customer and no other person, without written consent of Trane. The equipment is to be used for the stated purpose and solely for the purpose for which it was manufactured and intended. The equipment will not be removed from the original address of operation without the prior written consent of Trane. If equipment is re-located, without prior written consent from Trane, any and all repair services, costs, and/or other expenses arising out of the relocating the equipment will be at the Customer's sole cost and expense.

Inspection, Installation and Removal: Unless otherwise specified in this Agreement, all equipment must be unloaded upon delivery and upon termination reloaded by Customer. Equipment rental does not include chemicals, wear parts, or other consumables. Customer has inspected the equipment and found it to be in good working order and unbroken condition when received unless Customer advises Trane promptly in writing. If contracted for, as indicated in this Agreement, Trane will unload, rig, and otherwise install the equipment for Customer and at the end of the rental period disconnect, rig, load and otherwise remove the equipment from the jobsite for the fee indicated in this Agreement. Installation and removal are one-time charges billed to Customer in the first rental period and include start-up services and the disconnection inspection. Customer will return the equipment, with all attachments, accessories, and parts thereof to Trane at the address of Trane's choosing, on the date required and in the same condition the equipment was received, ordinary wear and depreciation excepted.

Start-Up: If equipment is damaged during startup by Customer, Customer is liable to Trane for such damages.

Fueling Service: As part of this Agreement, Trane will provide all of the fuel necessary for use in the Equipment. The Customer agrees, as part of this service to reimburse Trane for Trane's cost of fuel, plus a handling charge, specifically delineated in the Rental Agreement. Trane continues to own the Equipment and the fuel contained therein at all times, and in no way is reselling that fuel to the Customer.

Equipment Repair and Maintenance: Following equipment start-up, Customer will be responsible to operate the equipment in accordance with the manufacturer's standard operating procedures, perform routine preventive maintenance by qualified personnel, and to return it in good working condition, less normal wear and tear. If the equipment is not returned in similar or like condition as of rental commencement, Customer shall be liable to Trane for a cleaning fee. Any repairs or replacements required, during or immediately following the rental, required in Trane's judgment to make the unit operate properly due to improper installation by Customer, abuse, misuse, or unusual wear will be charged to Customer at the local time and material rates then prevailing. For rentals over one month duration, Customer shall allow Trane to inspect rental equipment each month.

All repairs to rental equipment must be performed by Trane: Upon Customer's notice to Trane, Trane shall provide emergency repair service that may be necessary in accordance with local time and material rates then prevailing; provided, however, that any repairs or replacements required in Trane's judgment to make the equipment operate properly due to a defect in the rental equipment provided by Trane shall be at Trane's expense.

Insurance: Customer will insure all equipment under an all risk property insurance policy, including windstorm, in the minimum amount of the value of the equipment shown in this Agreement. This clause is waived if Customer participates in the Rental Protection Program (RPP). Additionally, customer shall carry general liability insurance covering the use and operation of the equipment in the minimum amount of \$

1,000,000 per occurrence. All such policies shall name Trane as an additional insured and loss payee as its interests may appear. Customer is responsible for any deductible amounts due. Promptly upon Trane's request, Customer will provide Trane with a Certificate of Insurance evidencing the required coverage (and additional insured and loss payee endorsement).

Default: Customer shall be in default of this Agreement upon occurrence of one or more of the following events:

- a. any rental charge goes unpaid for a period of ten (10) days after its due date;
- b. any other breach of this Agreement by Customer goes uncorrected after ten (10) days written notice to Customer;
- c. any writ or order of attachment, execution or the like against Customer is levied on any of the equipment and is not released or satisfied within ten (10) days; or
- d. immediately when a proceeding in bankruptcy, insolvency or receivership is instituted voluntarily or involuntarily by or against Customer or Customer enters any agreement or composition with its creditors or is otherwise unable to pay its debts as they become due.

Remedies: In the event of Customer's default, Trane shall have the right to do any or all of the following, none of which shall constitute an election of remedies:

- a. declare immediately due, sue for, and receive from Customer all rents and other amounts payable under the terms of this Agreement, as well as all costs and expenses associated with such proceedings (including reasonable attorneys' fees) and all expenses reasonably incurred by Trane in taking possession, cleaning and repairing and re-renting any such Equipment. Any amounts remaining from the re-renting after deduction of all such fees, costs and expenses shall be credited to Customer's obligation hereunder;
- b. disconnect and/or retake possession of any and all equipment with notice required by law or other process of law. For such purpose, Trane may enter upon the premises where the equipment is located and disconnect and/or remove same therefrom with proper notice without being liable in any suit, action or other proceeding by Customer;
- c. terminate this Agreement as to any and all equipment;
- d. terminate any other agreement(s) between Trane and Customer; and/or
- e. pursue any other rights and/or remedies, whether at law or in equity.

Indemnity: To the fullest extent permitted by law, Trane and Customer shall indemnify, defend and hold harmless each other from any and all claims, actions, costs, expenses, damages and liabilities, including reasonable attorneys' fees, resulting from death or bodily injury or damage to real or tangible personal property, to the extent caused by the negligence or misconduct of their respective employees or other authorized agents in connection with their activities within the scope of this Agreement. Neither party shall indemnify the other against claims, damages, expenses or liabilities to the extent attributable to the acts or omissions of the other party. If the parties are both at fault, the obligation to indemnify shall be proportional to their relative fault. The duty to indemnify will continue in full force and effect, notwithstanding the expiration or early termination hereof, with respect to any claims based on facts or conditions that occurred prior to expiration or termination.

Limitation of Liability: NOT WITHSTANDING ANYTHING TO THE CONTRARY, IN NO EVENT SHALL TRANE BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT CONSEQUENTIAL, OR PUNITIVE OR EXEMPLARY DAMAGES (INCLUDING WITHOUT LIMITATION BUSINESS INTERRUPTION, LOST DATA, LOST REVENUE, LOST PROFITS, LOST DOLLAR SAVINGS, OR LOST ENERGY USE SAVINGS, EVEN IF A PARTY HAS BEEN ADVISED OF SUCH POSSIBLE DAMAGES OR IF SAME WERE REASONABLY FORESEEABLE AND REGARDLESS OF WHETHER THE CAUSE OF ACTION IS FRAMED IN CONTRACT, NEGLIGENCE, ANY OTHER TORT, WARRANTY, STRICT LIABILITY, OR PRODUCT LIABILITY). In no event will Trane's liability in connection with the provision of products or services or otherwise under this Agreement exceed the entire amount paid to Trane by Customer under this Agreement.

NO REPRESENTATION OR WARRANTY OF ANY KIND, INCLUDING WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE, IS MADE REGARDING PREVENTING, ELIMINATING, REDUCING OR INHIBITING ANY MOLD, FUNGUS, BACTERIA, VIRUS, MICROBIAL GROWTH, OR ANY OTHER CONTAMINANTS (INCLUDING COVID-19 OR ANY SIMILAR VIRUS) (COLLECTIVELY, "CONTAMINANTS"), WHETHER INVOLVING OR IN CONNECTION WITH EQUIPMENT, ANY COMPONENT THEREOF, SERVICES OR OTHERWISE. IN NO EVENT SHALL TRANE HAVE ANY LIABILITY FOR THE PREVENTION, ELIMINATION, REDUCTION OR INHIBITION OF THE GROWTH OR SPREAD OF SUCH CONTAMINANTS INVOLVING OR IN CONNECTION WITH ANY EQUIPMENT, ANY COMPONENT THEREOF, SERVICES OR OTHERWISE AND CUSTOMER HEREBY SPECIFICALLY ACKNOWLEDGES AND AGREES THERETO.

Customer shall indemnify and defend Trane against, and Customer is solely responsible for, all fines, penalties, losses, claims, arising out of or alleged to arise out of (a) Customer's acts or omissions in connection with the use, operation, handling, repair, maintenance, and/or alteration and modification of the equipment; and (b) the condition of building or physical plant equipment, and suitability of the equipment for Customer's purpose.

If a refrigerant leak or inadvertent venting is discovered by Customer during the rental period, Trane must be notified immediately. Customer must also notify any and all regulatory authorities (e.g., environmental protection agencies) in accordance with applicable laws and regulations. Customer shall be liable for, and indemnify Trane against, any fines, claims, injuries, losses or damages resulting from any refrigerant leak to the extent not caused by Trane.

In case of loss or theft of the equipment, Customer will be responsible for either replacement of the equipment with identical equipment or payment of its full replacement value. In either case, rental charges will continue until the equipment is replaced or reimbursement is made in full. Trane, at its sole discretion may report as stolen all Equipment not returned within ten (10) days of the end of the rental period. Customer will pay all collection fees, court costs, attorney's fees or any other expense required to enforce the terms and conditions of this Agreement.

COVID-19 LIMITATION ON LIABILITY

The transmission of COVID-19 may occur in a variety of ways and circumstances, many of the aspects of which are currently not known. HVAC systems, products, services and other offerings have not been tested for their effectiveness in reducing the spread of COVID-19, including through the air in closed environments. **IN NO EVENT WILL TRANE BE LIABLE UNDER THIS AGREEMENT OR OTHERWISE FOR ANY ACTION OR CLAIM, WHETHER BASED ON WARRANTY, CONTRACT, TORT OR OTHERWISE, FOR ANY BODILY INJURY (INCLUDING DEATH) OR ANY OTHER LIABILITIES, DAMAGES OR COSTS RELATED TO COVID-19 (INCLUDING THE SPREAD, TRANSMISSION OR CONTAMINATION THEREOF) (COLLECTIVELY, "COVID-19 LIABILITIES") AND CUSTOMER HEREBY EXPRESSLY RELEASES TRANE FROM ANY SUCH COVID-19 LIABILITIES.**

Force Majeure: Trane's duty to perform under this Agreement is contingent upon the non-occurrence of an Event of Force Majeure. If Trane shall be unable to carry out any material obligation under this Agreement due to an Event of Force Majeure, this Agreement shall at Trane's election (i) remain in effect but Trane's obligations shall be suspended until the uncontrollable event terminates or (ii) be terminated upon 10 days notice to Customer, in which event Customer shall pay Trane for the period of time Customer has the benefit of the rental to the date of termination. An "Event of Force Majeure" shall mean any cause or event beyond the control of Trane. Without limiting the foregoing, "Event of Force Majeure" includes: acts of God; acts of terrorism, war or the public enemy; flood; earthquake; tornado; storm; fire; civil disobedience; pandemic insurrections; riots; labor/labour disputes; labor/labour or material shortages; sabotage; restraint by court order or public authority (whether valid or invalid), and action or non-action by or inability to obtain or keep in force the necessary governmental authorizations, permits, licenses, certificates or approvals if not caused by Trane; and the requirements of any applicable government in any manner that diverts either the material or the finished product to the direct or indirect benefit of the government.

General Terms: This Agreement shall be governed by and construed in accordance with the laws of the State of North Carolina. This Agreement contains all of the agreements, representations and understandings of the parties and supersedes and replaces all previous understandings, commitments or agreements, oral or written related to the subject matter hereof. This Agreement may not be amended, nor any obligation waived, except by a writing signed by both parties. If any part of this Agreement is deemed to be unlawful, invalid, void or otherwise unenforceable, the rights and obligations of the parties shall be reduced only to the extent required to remove the invalidity or unenforceability. This Agreement may not be assigned by Customer without Trane's prior written consent, in which event this Agreement shall bind and inure to the benefit of the parties hereto and their permitted successors and assigns. Any failure by Trane to enforce any provision of this Agreement shall not constitute a waiver thereof or any other provision. This Agreement may be executed in several counterparts, each of which when executed shall be deemed to be an original, but all together shall constitute but one and the same Agreement. A fully executed facsimile copy hereof or the several counterparts shall suffice as an original.

Limited Waiver of Sovereign Immunity: If Customer is an Indian tribe (in the U.S.) or a First Nation or Band Council (in Canada), Customer, whether acting in its capacity as a government, governmental entity, a duly organized corporate entity or otherwise, for itself and for its agents, successors, and assigns: (1) hereby provides this limited waiver of its sovereign immunity as to any damages, claims, lawsuit, or cause of action (herein "Action") brought against Customer by Trane and arising or alleged to arise out of the furnishing by Trane of any product or service under this Agreement, whether such Action is based in contract, tort, strict liability, civil liability or any other legal theory; (2) agrees that jurisdiction and venue for any such Action shall be proper and valid (a) if Customer is in the U.S., in any state or United States court located in the state in which Trane is performing this Agreement or (b) if Customer is in Canada, in the superior court of the province or territory in which the work was performed; (3) expressly consents to such Action, and waives any objection to jurisdiction or venue; (4) waives any requirement of exhaustion of tribal court or administrative remedies for any Action arising out of or related to this Agreement; and (5) expressly acknowledges and agrees that Trane is not subject to the jurisdiction of Customer's tribal court or any similar tribal forum, that Customer will not bring any action against Trane in tribal court, and that Customer will not avail itself of any ruling or direction of the tribal court permitting or directing it to suspend its payment or other obligations under this Agreement. The individual signing on behalf of Customer warrants and represents that such individual is duly authorized to provide this waiver and enter into this Agreement and that this Agreement constitutes the valid and legally binding obligation of Customer, enforceable in accordance with its terms.

1-50.01 (0423)
Supersedes 1-50.01 (0123)



AIG Insurance Company Rental Protection Program

Coverage Questions: 1-855-601-1787

Claims: 1-800-755-5115

Trane must have the completed and signed rental proposal with Rental Protection Program box marked “Yes” before the equipment arrives at the customer’s site in order to have the equipment protection.

Important Questions:	Answers:		
What is covered?	Direct physical loss to rental equipment caused by a covered peril to property that you have rented from Trane Rental Services including but not limited to theft, vandalism, fire water damage and accidental damages.		
Policy Limit of Liability:	\$ 1,000,000 for any one occurrence. This is the most that is paid in any one occurrence for loss to covered property.		
What is the overall deductible?	Property Damage \$ 2,500 Per Occurrence (except whether the Claim involves loss at one or more locations, the deductible amount shall apply against the total rental equipment loss suffered by the Insured from any one occurrence.		
Valuation:	Replacement Cost for equipment when model age is less than or equal to 5 years. All Other is Actual Cash Value.		
Are there coverage limitations?	Property is only covered for the equipment that is rented from Trane Rental Services. a. Described on the “schedule of coverages”; and b. While in transit to the rental customer or while at the premises of the rental customer after delivery. c. Consequential damages (not including Supplemental coverage below) are not covered		
Supplemental Coverage:	25% of the amount of paid for loss for Debris Removal. * \$ 5,000 Additional Debris Removal Limit * \$ 10,000 in the annual aggregate for Pollutant Cleanup and Removal - subject to a 180 day reporting provision.		
Perils (Causes of Loss) Excluded: Unless modified by endorsement or in the additional terms and conditions section.	<table border="1"> <tr> <td>Aircraft or Watercraft Buildings and Land Contraband Money and Securities Vehicles Waterborne Property Mysterious Disappearance (when no in care custody and control of a 3rd party carrier)</td> <td>Earth Movement or Volcanic Eruption Flood Sewer Backup and Water Below the Surface Electrical Currents Theft from an Unattended Vehicle Wear and Tear/Mechanical Breakdown Intentional Abuse, neglect, or fraud</td> </tr> </table>	Aircraft or Watercraft Buildings and Land Contraband Money and Securities Vehicles Waterborne Property Mysterious Disappearance (when no in care custody and control of a 3 rd party carrier)	Earth Movement or Volcanic Eruption Flood Sewer Backup and Water Below the Surface Electrical Currents Theft from an Unattended Vehicle Wear and Tear/Mechanical Breakdown Intentional Abuse, neglect, or fraud
Aircraft or Watercraft Buildings and Land Contraband Money and Securities Vehicles Waterborne Property Mysterious Disappearance (when no in care custody and control of a 3 rd party carrier)	Earth Movement or Volcanic Eruption Flood Sewer Backup and Water Below the Surface Electrical Currents Theft from an Unattended Vehicle Wear and Tear/Mechanical Breakdown Intentional Abuse, neglect, or fraud		
Who is Marsh?	Marsh Sponsored Programs, a division of Marsh USA Inc., is the program administrator providing insurance for Trane Rental customers through AIG Marine Cargo program. Marsh offers a toll free number, 1-855-1787, where a licenses agent is available to answer any coverage questions or provide any claims assistance, as needed.		
Where should I report a claim?	First notice of loss should be reported by calling 1-800-755-5115		

This document provides a synopsis of coverage and is being provided as a reference only. The actual policy determines coverage. The policy contains exclusions, limitations, and other provisions not referenced (or only briefly summarized) here and the policy should be consulted for full coverage terms, conditions, and requirements. Administrator: Marsh Sponsored Programs, a division of Marsh USA Inc. In CA, dba Marsh Risk & Insurance Services, CA Ins. Lic.# 0437153



GUARDIAN PLUMBING & HEATING, INC.

34400 Glendale Avenue • Livonia, MI 48150-1302 • Phone (734) 513-9550 • Fax (734) 513-9513

May 17, 2023

33000 Civic Center Dr,
Livonia, Michigan, 48154,

Subject: City of Livonia Main Library Chiller Tee's

Attention: Arnold Pollis

We are pleased to submit the proposal for the following work:

SCOPE OF WORK

- Drain Glycol from the chiller system to install Tees.
- Furnish and install Two (2) 6" black steel welded Tee with 6" butterfly valves with blank flange to cap off.
- Reinstall glycol after Tees are installed.
- Smoke eater to be used for welding.

ALSO INCLUDED IN THIS PROPOSAL:

- All necessary plumbing permits.

TO BE FURNISHED BY OTHERS:

- Necessary concrete floor breaking and patching.
- Necessary power wiring.
- All asbestos and hazardous material removal.
- Architectural repair or work of any nature.
- Infectious Disease Control by others.
- Removal & replacement of Lay-in ceilings.
- Free access to material and labor.
- The purchaser agrees to pay for any additional cost due to work done overtime at their request.
- Not responsible for any concealed electrical or hidden piping unless marked by the owner.
- The customer shall furnish and make available to us, free of charge, temporary power and lighting and sanitary facilities.

HOURS OF WORK:

- Our price is based on all work being performed during weekday hours, 7:00 am-3:30 pm. Monday Thru Friday.

WARRANTY:

- All labor and materials are guaranteed for one year.

BASE PRICE

\$10,950.00

Ten Thousand, Nine Hundred and Fifty Dollars.

TERMS:

- All costs incurred during and billed by the 25th of the month are to be paid by the 10th of the following month.
- **Due to the current volatility in product pricing, availability, and delivery, the prices quoted above are good for seven (7) days from the date of this proposal.**
Approvals received beyond seven (7) days are subject to revisions in pricing which will be submitted in writing for further authorization before proceeding.

If you have any questions, please do not hesitate to call.

Thank you.

Sincerely,

Steve Doss

Steve Doss

Director, Construction Services

Guardian Plumbing & Heating INC

ACCEPTED BY

(Please sign and return upon approval)

Date: _____ Purchase Order # _____

SD/SM

Quote #23463

Mr. Jim Bakun
Michigan Department of
Environment, Great Lakes, and Energy
Materials Management Division
Warren District Office
27700 Donald Court
Warren, Michigan 48092-2793

April 28, 2023
NTH Proj. No. 62-180172-Q123T3

**RE: Hydrogeologic Monitoring Report
City of Livonia Type III Landfill
First Quarter 2023**

Dear Mr. Bakun:

On behalf of the City of Livonia's Type III Landfill, NTH Consultants, Ltd. (NTH) is submitting this *First Quarter 2023 Hydrogeologic Monitoring Report*. An electronic copy of the full report is provided along with a spreadsheet (.xlsx) containing the laboratory data generated during this monitoring event.

The monitoring report for this event was prepared to fulfill the requirements of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as well as the site's *Hydrogeologic Monitoring Plan* (HMP) and Operating License. The report will be placed in the site's Operating Record.

In accordance with the EGLE submittal guidelines, we have attached the following items to this letter:

- **Figure 1: Groundwater Contour Map – First Quarter 2023**
- **Summary of Statistical Exceedances Table** – This table lists groundwater monitoring wells with concentrations above the statistical limits for the current monitoring event and the three preceding events. Note that this table has been prepared for information purposes only, and the listed occurrences do not necessarily represent SSIs, as defined by the procedures outlined in the site's HMP.



Mr. James Bakun
April 28, 2023

If you have any questions regarding the information included with this submittal, please call our office at (248) 553-6300 or Mr. Jacob Rushlow at (734) 466-2606.

Sincerely,

NTH Consultants, Ltd.

DocuSigned by:
K. Okonta
2261F01909FB41F...

Karen W. Okonta
Senior Project Professional

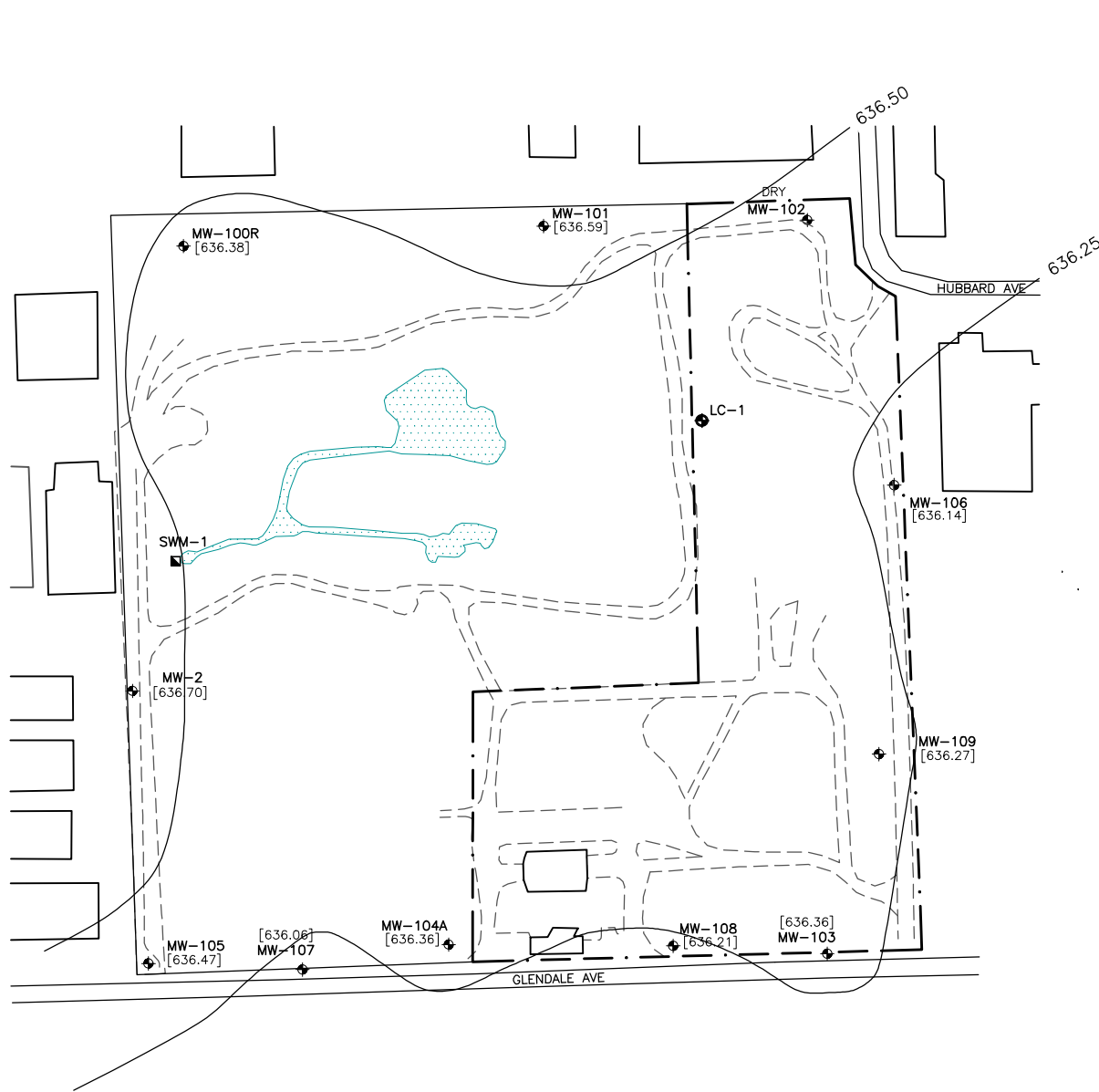
DocuSigned by:
Alan C. Erickson
C9112392EA304AC...

Alan C. Erickson, P.E.
Principal Engineer

KWO/ACE/mam

Attachments

cc: Mr. Patrick Cullen – Wayne County DPS-Land Resources Mgmt. Div.
Mr. Jacob Rushlow, P.E. – Superintendent of Public Service – City of Livonia DPW
Mr. David Lutz, P.E. – NTH Consultants



LEGEND:

--- APPROXIMATE LOCATION OF ACTIVE TYPE III LANDFILL BOUNDARY

--- APPROXIMATE LOCATION OF EXISTING GRAVEL ROADS

[636.93] STATIC GROUNDWATER LEVEL ELEVATION MEASURED FROM JANUARY 18, 2023.

636 ESTIMATED CONTOUR LINES OF EQUAL PIEZOMETRIC ELEVATION. CONTOUR INTERVAL = 0.25 FOOT. DATUM IS MEAN SEA LEVEL.

LC-1 APPROXIMATE LOCATION OF LEACHATE MONITORING POINT

SWM-1 APPROXIMATE LOCATION OF SURFACE WATER MONITORING POINT

MW-108 APPROXIMATE LOCATION OF GROUNDWATER MONITORING WELLS

NOTE: THE GROUNDWATER ELEVATION CONTOURS SHOWN ON THIS PLATE ARE GENERALIZED AND SHOULD NOT BE USED TO DETERMINE SPECIFIC WATER LEVEL ELEVATIONS, EXCEPT AT THOSE LOCATIONS WHERE WATER LEVELS HAVE ACTUALLY BEEN MEASURED.

NTH Consultants, Ltd.

Infrastructure Engineering
and Environmental Services



CAD FILE NAME:	180172-0123
PROJECT No.:	62-180172
DESIGNED BY:	ZBM
DRAWN BY:	ZBM
CHECKED BY:	ACE
DATE:	4/13/2023
SCALE:	1" = 200'
INCEPTION DATE:	9/19/2018

GROUNDWATER CONTOUR MAP
FIRST QUARTER 2023

CITY OF LIVONIA LANDFILL
32500 GLENDALE AVE, LIVONIA, MI 48150

FIGURE:

1

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES & ENERGY

SUMMARY OF STATISTICAL EXCEEDANCES

Data is in () ug/l or
(X) mg/l
unless otherwise
stated

FACILITY: City of Livonia Type III Landfill

WDS ID 470471

DATE: April 2023

Well #	Location	Parameter	Part 201 GRCC	Statistical Limit (or 'CC' for Control Charts)	1st Qtr 2023 (bold > 201)	4th Qtr 2022 (bold > 201)	3rd Qtr 2022 (bold > 201)	2nd Qtr 2022 (bold > 201)
MW-101	North of landfill – hydraulically upgradient	Calcium, dissolved	NA	16.85	NT	18.2	NT	NT
MW-103	South of landfill – hydraulically downgradient	Calcium, dissolved	NA	16.7	NT	25	NT	NT
		Chloride	250	58.42	BL	59	62.5	BL
		Potassium, dissolved	NA	2.44	BL	2.9	2.8	BL
		Total Inorganic Nitrogen	10	0.3092	BL	0.56	0.6	BL
MW-106	East of landfill – hydraulically downgradient	Barium, dissolved	0.01	0.055	NT	0.0705	NT	NT
		Potassium, dissolved	NA	1.9	BL	BL	BL	2.0
		Total Inorganic Nitrogen	10	0.3111	0.64	BL	0.82	1.3
MW-108	South of landfill – hydraulically downgradient	Arsenic, dissolved	0.01	0.005	NT	0.009	NT	NTL
		Calcium, dissolved	NA	14.03	NT	15.7	NT	NT
		Total Inorganic Nitrogen	10	0.2679	BL	0.91	BL	BL

COMMENTS: "BL" = Below statistical limit
"NT" = Not Tested – Annual parameter not scheduled for analysis in current quarter
"NA" = Not Applicable – EGLE has not established a Part 201 GRCC for this parameter

HYDROGEOLOGIC MONITORING REPORT

First Quarter 2023

City of Livonia – Type III Landfill

Livonia, Wayne County, Michigan

April 28, 2023

NTH Project #: 62-180172-Q123-T3



NTH Consultants, Ltd.
41780 Six Mile Rd.
Suite 200
Northville, MI 48168



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1.0 INTRODUCTION

NTH Consultants, Ltd. (NTH) has completed this Hydrogeologic Monitoring Report for the First Quarter 2023 at the City of Livonia Type III Landfill in accordance with the requirements of Part 115 of P.A. 451 and the site's State-approved *Hydrogeologic Monitoring Plan* (HMP) prepared by GZA, dated October 3, 1995, and amended January 7, 1999, and the Statistical Monitoring Plan (SMP) prepared by Golder Associates, Inc. dated January 2010. For reference, Figure 1, Groundwater Contour Map – First Quarter 2023, (in Appendix A, Figures & Tables) depicts the general site layout, sampling locations, and major surrounding features.

2.0 MONITORING RESULTS

Environmental Sampling Services (ESS) of Hartland, Michigan, conducted the sampling for this monitoring event on January 18 and 19, 2023. ESS collected samples from the site's detection monitoring well network and the surface water sampling location. ESS could not collect a sample from the leachate sampling location as ESS reported it to be dry. Laboratory analysis was performed by Eurofins Buffalo laboratory (EBL) of Amherst, New York. Environmental monitoring field data forms and the analytical data report prepared by EBL are contained in Appendix B, Analytical Reports and Field Data Forms.

2.1 SAMPLING & ANALYTICAL PROCEDURES

Designated sampling parameters, test methods, method detection limits, and corresponding containers, preservatives, and holding times for the samples collected are specified in the approved site HMP. Water level measurement procedures and sample collection methods for the sampling event were performed in accordance with the HMP, and applicable P.A. 1994 451, Part 115 Rules.

2.1.1 Groundwater Monitoring

The First Quarter represents a quarterly monitoring event at the site. Therefore, groundwater samples from the detection monitoring wells were analyzed for the designated indicator parameters. As discussed in the letter to EGLE dated February 11, 2020, the City of Livonia temporarily included analysis of dissolved methane for the groundwater samples to help ascertain the extent of dissolved methane in groundwater at the site.

2.1.2 Leachate Monitoring

A sample was not collected from the leachate sample location (designated as "LC-1") as it was dry according to sampling personnel.

2.1.3 Surface Water Monitoring

ESS collected a surface water sample (designated as "SMW-1") from the location identified on Figure 1, on January 19, 2023. Consistent with the HMP, the surface water sample was analyzed for the primary indicator parameters. The analytical results for the surface water sample are included in Appendix B.



2.2 GROUNDWATER ELEVATION MEASUREMENTS

Prior to sampling, ESS recorded groundwater elevations at the wells. The measured groundwater elevations are listed on Table 1, Groundwater Elevations, included in Appendix A, Figure and Tables. NTH used the recorded water level data to develop Figure 1, Groundwater Contour Map – First Quarter 2023. As shown on this figure, the general direction of groundwater flow is to the south or southeast across the active landfill area.

2.3 GROUNDWATER GRADIENT & FLOW VELOCITY

In accordance with Rule 299.4907(5) of Part 115, the groundwater flow velocity at Hastings Landfill was calculated using a derivation of Darcy's Law. Specifically,

$$V = \frac{K * i}{n_e}$$

Where:

V	=	Groundwater flow velocity $\left(\frac{\text{feet}}{\text{day}}\right)$
K	=	Average permeability of the aquifer $\left(\frac{\text{feet}}{\text{day}}\right)$
i	=	Horizontal hydraulic gradient $\left(\frac{\text{feet}}{\text{feet}}\right)$
n_e	=	Effective porosity

Based on collected water level data and aquifer performance tests previously conducted at the site and collected water level data, we calculated groundwater flow velocity along the estimated groundwater flow path from MW-100R to MW-103, with results presented in Table 2, Groundwater Flow Velocity Calculations – First Quarter 2023. Using the lateral gradient, average hydraulic conductivity, and an effective porosity of 0.3, the calculated linear velocity is 0.0001 ft/day (0.0046 ft/year), which is similar to previous calculations.

2.4 QUALITY ASSURANCE & QUALITY CONTROL

According to the laboratory analytical reports from EBL, seven detection monitoring wells were sampled during the First Quarter 2023 monitoring event. Analytical methodologies and chain-of-custody forms are included with the laboratory data reports contained in Appendix B. Batch quality control for each of the methodologies performed was reviewed by EBL and found to be within acceptable criteria, with the exceptions denoted with “Data Qualifiers” included in the EBL report. As such, NTH utilized the data as reported by EBL.

2.5 GROUNDWATER RESULTS & STATISTICAL ANALYSES

The groundwater quality data for the City of Livonia Type III Landfill were statistically analyzed in accordance with the SMP using intra-well upper prediction limits presented in the approved SMP, dated January 2010, with the exception of MW-101R. Prediction limits for MW-101R were developed by GZA using ProUCL Version 5.0.00.



The First Quarter 2023 detection monitoring results are summarized on Table 3, Summary of Sampling Results. A review of this data indicates that the following apparent statistically significant increase (SSI) was identified:

- Total Inorganic Nitrogen at MW-106 (initial)

2.6 GROUNDWATER DISSOLVED METHANE ANALYSIS

Groundwater samples collected from the monitoring wells during this monitoring event were analyzed for dissolved methane. The results are presented on Table 4 - Groundwater Dissolved Methane Results – January 2023 (included in Appendix A). The groundwater analytical results were compared to the Michigan Part 201 Generic Groundwater Screening level for methane (screening level) as defined under Rules 200.44 and 200.49 of the Michigan Administrative Code, effective December 30, 2013. As shown on Table 4, dissolved methane was detected in groundwater at concentrations above the EGLE Part 201 screening level at monitoring wells MW-100R, MW-101, MW-103, MW-105, and MW-108.

While the detected concentrations of dissolved methane in groundwater at these locations is considered a concern with respect to creating an explosive condition should the methane come out of solution in a gaseous phase, direct readings of gaseous methane concentrations at the gas monitoring probes outside the perimeter of the Type III Landfill during the First Quarter 2023 showed no detectable methane in the subsurface outside the landfill limits. Sampling for dissolved methane in groundwater at the Type III Landfill will continue during the next scheduled quarterly monitoring event in the Second Quarter 2023.

2.7 RULE 299.4440(9) DEMONSTRATION

Rule 299.4440(9) of the Part 115 administrative rules allows a site 30 days to make an “Alternate Source Demonstration” (ASD) that apparent SSIs noted in monitoring data are from a source or sources other than a release from the landfill unit. Specifically, R299.4440(9) allows the site to make a demonstration that the changes are caused by errors in sampling or analysis, or from natural variations in groundwater quality.

The initial SSI of total inorganic nitrogen (TIN) at MW-106 is likely due to natural variability in the groundwater chemistry and not a release from the landfill unit. Review of the analytical results for TIN at this well indicates that the reported concentration (0.064 mg/L) was somewhat above the prediction limit for this location (0.31 mg/L). However, none of the other monitoring parameters exhibited a noticeable change at MW-106. Also note that the SSIs identified during the previous (Fourth Quarter 2022) monitoring event, did not re-occur. This behavior demonstrates the variable nature of groundwater quality at the site.

An impact by landfill leachate would result in multiple inorganic SSIs, increasing trends in inorganic concentrations, and detectable organic compounds at downgradient wells – which are not occurring at Livonia Landfill. Based on these considerations, the SSI of TIN at MW-106 is attributed to the natural variability of groundwater quality and not a result of a release from the landfill. Re-sampling for TIN at MW-106 will occur during the next scheduled sampling event in the Second Quarter 2023.



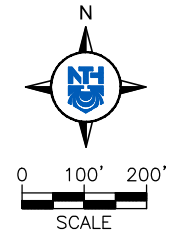
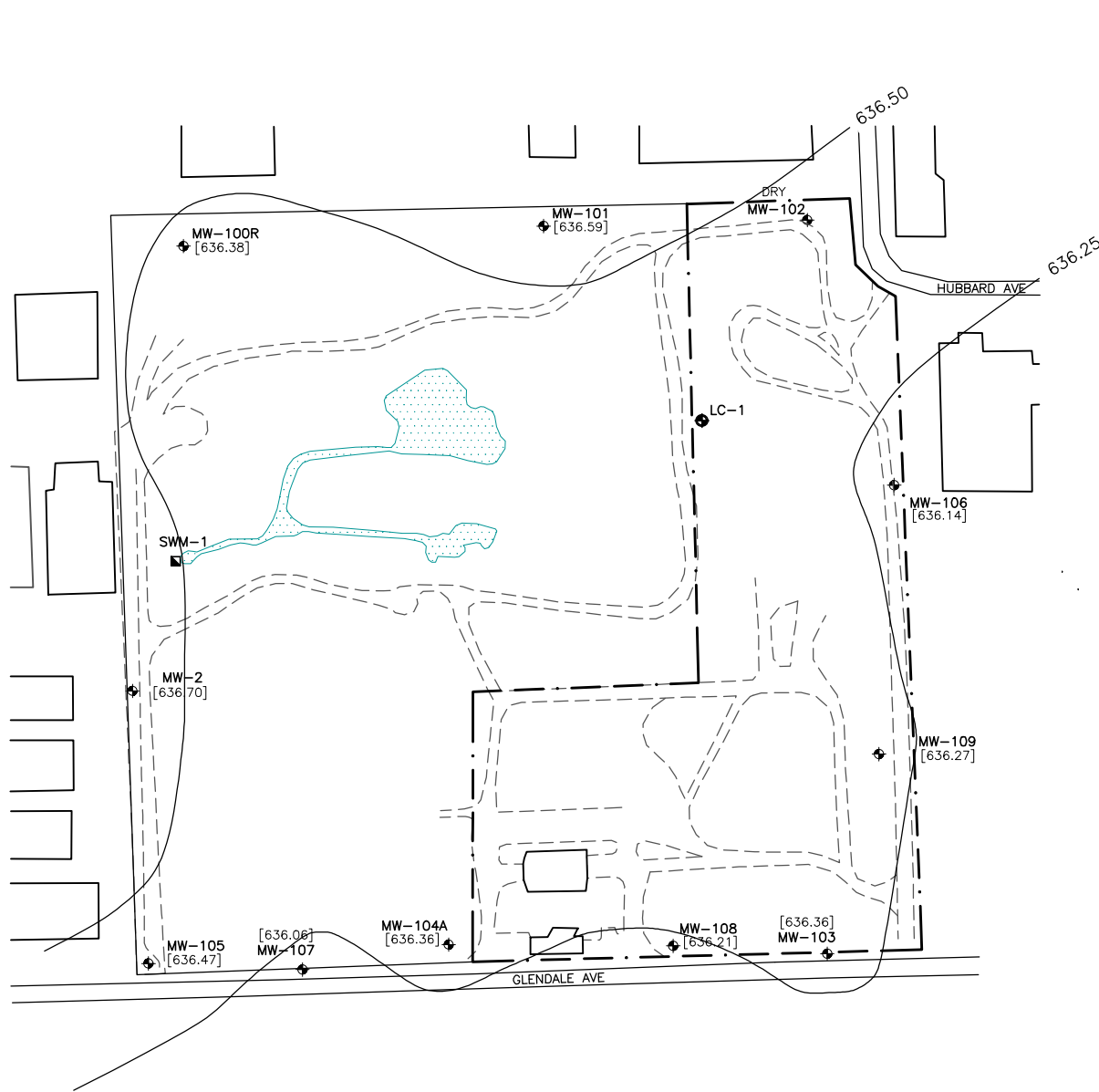
3.0 CONCLUSIONS

This hydrogeologic monitoring report has been prepared to fulfill the requirements of PA 451, Part 115, the site's HMP, and Operating License. Samples were collected on January 18 and 19, 2023. The groundwater flow direction observed during the First Quarter 2023 is generally toward the south or southeast with an average flow velocity of approximately 0.0001 ft/day or 0.0046 ft/year. Review of analytical results and statistical analyses developed for the site indicates the apparent SSI above background identified during the First Quarter 2023 is attributed to natural variability and not a release from the landfill. This report serves as demonstration in accordance with R299.4440(9) that no further action is necessary with respect to the SSI.



APPENDIX A

Figure & Tables



LEGEND:

- APPROXIMATE LOCATION OF ACTIVE TYPE III LANDFILL BOUNDARY
- APPROXIMATE LOCATION OF EXISTING GRAVEL ROADS
- [636.93] STATIC GROUNDWATER LEVEL ELEVATION MEASURED FROM JANUARY 18, 2023.
- 636 ESTIMATED CONTOUR LINES OF EQUAL PIEZOMETRIC ELEVATION. CONTOUR INTERVAL = 0.25 FOOT. DATUM IS MEAN SEA LEVEL.
- LC-1 APPROXIMATE LOCATION OF LEACHATE MONITORING POINT
- SWM-1 APPROXIMATE LOCATION OF SURFACE WATER MONITORING POINT
- MW-108 APPROXIMATE LOCATION OF GROUNDWATER MONITORING WELLS

NOTE: THE GROUNDWATER ELEVATION CONTOURS SHOWN ON THIS PLATE ARE GENERALIZED AND SHOULD NOT BE USED TO DETERMINE SPECIFIC WATER LEVEL ELEVATIONS, EXCEPT AT THOSE LOCATIONS WHERE WATER LEVELS HAVE ACTUALLY BEEN MEASURED.

NTH Consultants, Ltd.

Infrastructure Engineering
and Environmental Services



CAD FILE NAME:	180172-0123
PROJECT No.:	62-180172
DESIGNED BY:	ZBM
DRAWN BY:	ZBM
CHECKED BY:	ACE
DATE:	4/13/2023
DRAWING SCALE:	1" = 200'
INCEPTION DATE:	9/19/2018

GROUNDWATER CONTOUR MAP
FIRST QUARTER 2023

CITY OF LIVONIA LANDFILL
32500 GLENDALE AVE, LIVONIA, MI 48150

FIGURE:

1

TABLE 1
GROUNDWATER ELEVATIONS
City of Livonia - Type III Landfill
NTH Proj. No. 62-180172

Well ID	TOP OF CASING ELEVATION (ft msl)	Jan-19	Jun-19	Aug-19	Oct-19	Mar-20	Jun-20	Aug-20	Dec-20	Jan-21	Jun-21	Aug-21	Nov-21	Jan-22	Jun-22	Sep-22	Oct-22	Jan-23
WELLS INCLUDED IN DETECTION MONITORING PROGRAM:																		
MW-100R	651.39	636.45	636.55	636.78	636.94	636.58	636.82	636.84	636.90	636.80	636.61	636.73	636.89	636.77	636.38	636.28	636.93	636.38
MW-101	641.15	636.37	636.77	636.70	636.61	636.36	636.68	636.60	636.85	636.29	636.52	636.65	636.86	636.63	636.43	636.26	636.85	636.59
MW-103	649.93	635.88	636.21	636.28	635.45	635.36	642.53	642.42	636.96	636.12	636.13	636.13	636.30	636.16	636.02	635.93	636.42	636.36
MW-104A	651.77	635.98	636.36	636.18	636.16	635.71	636.21	636.37	636.40	636.21	636.21	636.21	636.36	636.20	636.06	636.05	636.52	636.36
MW-106	647.95	636.01	636.35	636.12	636.15	635.99	636.21	636.17	636.39	636.19	636.00	636.19	636.40	636.28	635.85	635.80	636.42	636.14
MW-108	652.12	635.99	636.49	635.79	636.32	636.06	636.22	636.11	636.42	636.16	636.17	636.16	636.49	636.32	636.15	636.09	636.51	636.21
MW-109	653.94	635.95	636.48	636.40	641.73	641.51	636.09	636.03	636.48	635.93	636.08	636.24	636.42	636.24	636.02	635.93	641.48	636.27
PIEZOMETERS:																		
MW-102	651.96	636.32	636.50	636.99	636.94	639.79	637.13	636.99	637.13	636.95	636.68	636.25	636.30	636.25	635.92	635.80	DRY	DRY
MW-105	650.03	636.25	636.52	634.37	635.15	634.97	636.36	636.28	636.44	636.17	636.21	636.02	636.25	636.01	635.72	634.83	636.61	636.47
MW-107	648.80	636.13	636.38	636.28	635.45	635.13	635.37	635.54	635.69	635.29	636.15	636.29	636.50	636.33	636.18	636.06	636.30	636.06
MW-2	648.60	636.22	636.59	636.38	636.25	636.15	636.37	636.45	636.55	636.29	636.22	636.37	636.81	636.59	636.44	636.41	636.65	636.7

Notes:

1. Top of Casing Elevation provided by City of Livonia

TABLE 2
GROUNDWATER FLOW VELOCITY CALCULATIONS - FIRST QUARTER 2023
City of Livonia Type III Landfill
NTH Project No.: 62-180172

Flow Paths	MW-100R	MW-103	Distance between wells	Hydraulic Gradient ($\Delta h / \Delta l$)	Average Hydraulic Conductivity, K	Assumed Effective Porosity, n	Average Calculated Groundwater Flow Velocity	
			ft	ft/ft	(ft/day) ^[1]		(ft/day)	(ft/year)
"A"	636.38	636.36	1490	0.00001	0.2835	0.3	0.00001	0.0046

Notes:

1. K based on historic aquifer performance tests (10^{-4} cm/s) from 1995 HMP.
2. Effective porosity from 1995 HMP.
3. Δh = Change in groundwater elevation from MW-100R and MW-103.
4. Δl = Distance between MW-100R and MW-103.
5. Velocity = ($\Delta h / \Delta l \times K$) / n.

TABLE 3
Summary of Sampling Results
January 18, 2023
City of Livonia Landfill
NTH Project No. 62-180172-Q123T3

Monitoring Well	MW-100R		MW-101		MW-103		MW-104A		MW-106		MW-108		MW-109	
	Prediction Limit* (mg/L)	Result (mg/L)	Prediction Limit (mg/L)	Result (mg/L)	Prediction Limit (mg/L)	Result (mg/L)	Prediction Limit (mg/L)	Result (mg/L)	Prediction Limit (mg/L)	Result (mg/L)	Prediction Limit (mg/L)	Result (mg/L)	Prediction Limit (mg/L)	Result (mg/L)
Primary Inorganic Indicators														
Chloride	64	44.5	62.04	59	58.42	41	75.18	49.7	46.6	40	48.85	40.8	53	38.8
Magnesium, dissolved	7.3	6.8	8.958	7.7	6.039	4.8	6.413	5.6	6.818	5.9	5.79	4.70	5.595	3.7
Potassium, dissolved	3.7	2.2	2.43	1.8	2.44	1.6	2.95	1.5	1.9	1.5	2.3	1.5	2.4	1.5
Total Inorganic Nitrogen	0.53	0.15	1.247	0.055	0.3092	0.069	0.353	0.07	0.3111	0.64	0.2679	0.17	3.062	0.3
Total Organic Carbon	3.4	2.4	4.693	2.0	11.59	2.1	84.24	2.6	13.33	2.5	9.83	1.7	40	2.0

Notes:

Denotes Prediction Limit was Exceeded

mg/L = milligram per liter

Prediction Limits are from the Statistical Monitoring Plan, dated January 2010

* Background data includes MW-100 data that was replaced by MW-100R.

ND = Not detected above the laboratory reporting limit

TABLE 4
Groundwater Dissolved Methane Results -January 2023
City of Livonia Landfill
NTH Project No. 62-180172-123T3

Parameter	Monitoring Well Designation										Units	Part 201 Flammability and Explosivity Screening Level (ug/L)
	MW-2	MW-100R	MW-101	MW-103	MW-104A	MW-105	MW-106	MW-107	MW-108	MW-109		
Dissolved Methane	10,000	14,000	13,000	14,000	5,200	14,000	7,600	4,500	11,000	9,200	ug/L	10,000

Notes:

ug/L - Micrograms per liter (parts per billion)

Bold - Concentration exceeds flammability and explosivity screening level



APPENDIX B

Analytical Report & Field Data Forms

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Alan Erickson
NTH Consultants, Ltd.
Attn: A/P Code: T5904
41780 Six Mile Rd
Suite 201
Northville, Michigan 48168
Generated 2/2/2023 12:40:44 PM

JOB DESCRIPTION

City of Livonia, MI - Glendale Landfill
SW - Primary Indicators (1Q,2Q,3Q)

JOB NUMBER

480-205651-1

Eurofins Buffalo

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing Northeast, LLC Buffalo and its client. All questions regarding this report should be directed to the Eurofins Environment Testing Northeast, LLC Buffalo Project Manager or designee who has signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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Authorized for release by
John Beninati, Project Manager
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Definitions/Glossary

Client: NTH Consultants, Ltd.

Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205651-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: NTH Consultants, Ltd.
Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205651-1

Job ID: 480-205651-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-205651-1

Comments

No additional comments.

Receipt

The sample was received on 1/21/2023 10:00 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.7° C.

HPLC/IC

Method 9056A: The following samples were diluted to bring the concentration of target analytes within the calibration range: SWM-1 (480-205651-1) and (480-205657-C-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: NTH Consultants, Ltd.

Job ID: 480-205651-1

Project/Site: City of Livonia, MI - Glendale Landfill

Client Sample ID: SWM-1

Lab Sample ID: 480-205651-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	9.1		0.20	mg/L	1		6010C	Dissolved
Potassium	2.7		0.10	mg/L	1		6010C	Dissolved
Chloride	231		2.5	mg/L	5		9056A	Total/NA
Total Inorganic Nitrogen	0.45		0.020	mg/L	1	⊗	Inorganic N	Total/NA
Total Organic Carbon	13.1		0.50	mg/L	1		SM 5310C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample Results

Client: NTH Consultants, Ltd.
Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205651-1

Client Sample ID: SWM-1

Date Collected: 01/19/23 11:25

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205651-1

Matrix: Surface Water

Method: SW846 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	9.1		0.20	mg/L		01/24/23 09:07	01/24/23 22:40	1
Potassium	2.7		0.10	mg/L		01/24/23 09:07	01/24/23 22:40	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	231		2.5	mg/L			01/31/23 00:30	5
Total Organic Carbon (SM 5310C)	13.1		0.50	mg/L			02/01/23 05:25	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Inorganic Nitrogen (EPA Inorganic N)	0.45		0.020	mg/L	☆		01/25/23 10:32	1

QC Sample Results

Client: NTH Consultants, Ltd.
Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205651-1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-656726/1-A
Matrix: Water
Analysis Batch: 656947

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 656726

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	ND		0.20	mg/L		01/24/23 09:07	01/24/23 22:33	1
Potassium	ND		0.10	mg/L		01/24/23 09:07	01/24/23 22:33	1

Lab Sample ID: LCS 480-656726/2-A
Matrix: Water
Analysis Batch: 656947

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 656726

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Magnesium	10.0	10.27		mg/L		103	80 - 120
Potassium	10.0	10.43		mg/L		104	80 - 120

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 480-657360/28
Matrix: Water
Analysis Batch: 657360

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	mg/L			01/30/23 23:47	1

Lab Sample ID: LCS 480-657360/29
Matrix: Water
Analysis Batch: 657360

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.1	49.31		mg/L		98	90 - 110

Method: SM 5310C - TOC

Lab Sample ID: MB 480-657585/28
Matrix: Water
Analysis Batch: 657585

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		0.50	mg/L			02/01/23 03:27	1

Lab Sample ID: LCS 480-657585/29
Matrix: Water
Analysis Batch: 657585

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	60.0	60.30		mg/L		100	90 - 110

Eurofins Buffalo

QC Association Summary

Client: NTH Consultants, Ltd.
Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205651-1

Metals

Prep Batch: 656726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205651-1	SWM-1	Dissolved	Surface Water	3005A	
MB 480-656726/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 480-656726/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 656947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205651-1	SWM-1	Dissolved	Surface Water	6010C	656726
MB 480-656726/1-A	Method Blank	Total Recoverable	Water	6010C	656726
LCS 480-656726/2-A	Lab Control Sample	Total Recoverable	Water	6010C	656726

General Chemistry

Analysis Batch: 657360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205651-1	SWM-1	Total/NA	Surface Water	9056A	
MB 480-657360/28	Method Blank	Total/NA	Water	9056A	
LCS 480-657360/29	Lab Control Sample	Total/NA	Water	9056A	

Analysis Batch: 657419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205651-1	SWM-1	Total/NA	Surface Water	Inorganic N	

Analysis Batch: 657585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205651-1	SWM-1	Total/NA	Surface Water	SM 5310C	
MB 480-657585/28	Method Blank	Total/NA	Water	SM 5310C	
LCS 480-657585/29	Lab Control Sample	Total/NA	Water	SM 5310C	

Lab Chronicle

Client: NTH Consultants, Ltd.
Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205651-1

Client Sample ID: SWM-1

Date Collected: 01/19/23 11:25

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205651-1

Matrix: Surface Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			656726	NVK	EET BUF	01/24/23 09:07
Dissolved	Analysis	6010C		1	656947	LMH	EET BUF	01/24/23 22:40
Total/NA	Analysis	9056A		5	657360	IMZ	EET BUF	01/31/23 00:30
Total/NA	Analysis	Inorganic N		1	657419	JJP	EET BUF	01/25/23 10:32
Total/NA	Analysis	SM 5310C		1	657585	KER	EET BUF	02/01/23 05:25

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: NTH Consultants, Ltd.
Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205651-1

Laboratory: Eurofins Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-22 *
Connecticut	State	PH-0568	03-31-24
Florida	NELAP	E87672	06-30-23
Georgia	State	10026 (NY)	04-01-23
Georgia	State Program	N/A	03-31-09 *
Georgia (DW)	State	956	03-31-23
Illinois	NELAP	200003	09-30-23
Iowa	State	374	03-01-23
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	01-31-23 *
Kentucky (DW)	State	90029	12-31-22 *
Kentucky (UST)	State	30	04-01-23
Kentucky (VW)	State	KY90029	12-31-22 *
Louisiana	NELAP	02031	06-30-23
Louisiana (All)	NELAP	02031	06-30-23
Maine	State	NY00044	12-04-22 *
Maryland	State	294	03-31-23
Massachusetts	State	M-NY044	06-30-23
Michigan	State	9937	03-31-23
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-22 *
New Jersey	NELAP	NY455	06-30-23
New York	NELAP	10026	03-31-23
Pennsylvania	NELAP	68-00281	07-31-23
Rhode Island	State	LAO00328	12-30-22 *
Tennessee	State	02970	04-01-23
Texas	NELAP	T104704412-18-10	07-31-23
USDA	US Federal Programs	P330-18-00039	03-25-24
Virginia	NELAP	460185	09-14-23
Washington	State	C784	02-10-23
Wisconsin	State	998310390	08-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Buffalo

Method Summary

Client: NTH Consultants, Ltd.

Job ID: 480-205651-1

Project/Site: City of Livonia, MI - Glendale Landfill

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	EET BUF
9056A	Anions, Ion Chromatography	SW846	EET BUF
Inorganic N	Nitrogen, Total Inorganic	EPA	EET BUF
SM 5310C	TOC	SM	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: NTH Consultants, Ltd.
Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205651-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-205651-1	SWM-1	Surface Water	01/19/23 11:25	01/21/23 10:00

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Quantitation Limit Exceptions Summary

Client: NTH Consultants, Ltd.

Job ID: 480-205651-1

Project/Site: City of Livonia, MI - Glendale Landfill

The requested project specific reporting limits listed below were less than laboratory standard quantitation limits (PQL) but greater than or equal to the laboratory method detection limits (MDL). It must be noted that results reported below lab standard quantitation limits may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

Method	Analyte	Matrix	Prep Type	Unit	Client RL	Lab PQL
6010C	Potassium	Surface Water	Dissolved	mg/L	0.10	0.50
Inorganic N	Total Inorganic Nitrogen	Surface Water	Total/NA	mg/L	0.020	0.05
SM 5310C	Total Organic Carbon	Surface Water	Total/NA	mg/L	0.50	1.0

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: NTH Consultants, Ltd.

Job Number: 480-205651-1

Login Number: 205651

List Number: 1

Creator: Sabuda, Brendan D

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.7 #1 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Alan Erickson
NTH Consultants, Ltd.
Attn: A/P Code: T5904
41780 Six Mile Rd
Suite 201
Northville, Michigan 48168
Generated 2/2/2023 12:45:09 PM

JOB DESCRIPTION

Glendale Landfill - GW Primary
GW - Primary Indicators (1Q,2Q,3Q)

JOB NUMBER

480-205657-1

Eurofins Buffalo

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing Northeast, LLC Buffalo and its client. All questions regarding this report should be directed to the Eurofins Environment Testing Northeast, LLC Buffalo Project Manager or designee who has signed this report.

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Authorization



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Definitions/Glossary

Client: NTH Consultants, Ltd.
Project/Site: Glendale Landfill - GW Primary

Job ID: 480-205657-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: NTH Consultants, Ltd.
Project/Site: Glendale Landfill - GW Primary

Job ID: 480-205657-1

Job ID: 480-205657-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative 480-205657-1

Comments

No additional comments.

Receipt

The samples were received on 1/21/2023 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.8° C.

HPLC/IC

Method 9056A: The following samples were reported with elevated reporting limits for all analytes: MW-100R (480-205657-1), MW-101 (480-205657-2), MW-103 (480-205657-3), MW-104A (480-205657-4), MW-106 (480-205657-5) and MW-108 (480-205657-6). The sample was analyzed at a dilution based on screening results.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA

Method RSK-175: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-100R (480-205657-1), MW-101 (480-205657-2), MW-103 (480-205657-3), MW-104A (480-205657-4), MW-106 (480-205657-5), MW-108 (480-205657-6) and MW-109 (480-205657-7). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: NTH Consultants, Ltd.
Project/Site: Glendale Landfill - GW Primary

Job ID: 480-205657-1

Client Sample ID: MW-100R

Lab Sample ID: 480-205657-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Methane	14000		440	ug/L	110		RSK-175	Total/NA
Magnesium	6.8		0.20	mg/L	1		6010C	Dissolved
Potassium	2.2		0.10	mg/L	1		6010C	Dissolved
Chloride	44.5		1.0	mg/L	2		9056A	Total/NA
Total Inorganic Nitrogen	0.15		0.020	mg/L	1	✱	Inorganic N	Total/NA
Total Organic Carbon	2.4		0.50	mg/L	1		SM 5310C	Total/NA

Client Sample ID: MW-101

Lab Sample ID: 480-205657-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Methane	13000		440	ug/L	110		RSK-175	Total/NA
Magnesium	7.7		0.20	mg/L	1		6010C	Dissolved
Potassium	1.8		0.10	mg/L	1		6010C	Dissolved
Chloride	59.0		1.0	mg/L	2		9056A	Total/NA
Total Inorganic Nitrogen	0.055		0.020	mg/L	1	✱	Inorganic N	Total/NA
Total Organic Carbon	2.0		0.50	mg/L	1		SM 5310C	Total/NA

Client Sample ID: MW-103

Lab Sample ID: 480-205657-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Methane	14000		440	ug/L	110		RSK-175	Total/NA
Magnesium	4.8		0.20	mg/L	1		6010C	Dissolved
Potassium	1.6		0.10	mg/L	1		6010C	Dissolved
Chloride	41.0		1.0	mg/L	2		9056A	Total/NA
Total Inorganic Nitrogen	0.069		0.020	mg/L	1	✱	Inorganic N	Total/NA
Total Organic Carbon	2.1		0.50	mg/L	1		SM 5310C	Total/NA

Client Sample ID: MW-104A

Lab Sample ID: 480-205657-4

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Methane	5200		350	ug/L	88		RSK-175	Total/NA
Magnesium	5.6		0.20	mg/L	1		6010C	Dissolved
Potassium	1.5		0.10	mg/L	1		6010C	Dissolved
Chloride	49.7		1.0	mg/L	2		9056A	Total/NA
Total Inorganic Nitrogen	0.070		0.020	mg/L	1	✱	Inorganic N	Total/NA
Total Organic Carbon	2.6		0.50	mg/L	1		SM 5310C	Total/NA

Client Sample ID: MW-106

Lab Sample ID: 480-205657-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Methane	7600		180	ug/L	44		RSK-175	Total/NA
Magnesium	5.9		0.20	mg/L	1		6010C	Dissolved
Potassium	1.5		0.10	mg/L	1		6010C	Dissolved
Chloride	40.0		1.0	mg/L	2		9056A	Total/NA
Total Inorganic Nitrogen	0.64		0.020	mg/L	1	✱	Inorganic N	Total/NA
Total Organic Carbon	2.5		0.50	mg/L	1		SM 5310C	Total/NA

Client Sample ID: MW-108

Lab Sample ID: 480-205657-6

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Methane	11000		440	ug/L	110		RSK-175	Total/NA
Magnesium	4.7		0.20	mg/L	1		6010C	Dissolved
Potassium	1.5		0.10	mg/L	1		6010C	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Detection Summary

Client: NTH Consultants, Ltd.
Project/Site: Glendale Landfill - GW Primary

Job ID: 480-205657-1

Client Sample ID: MW-108 (Continued)

Lab Sample ID: 480-205657-6

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Chloride	40.8		1.0	mg/L	2		9056A	Total/NA
Total Inorganic Nitrogen	0.17		0.020	mg/L	1	⊗	Inorganic N	Total/NA
Total Organic Carbon	1.7		0.50	mg/L	1		SM 5310C	Total/NA

Client Sample ID: MW-109

Lab Sample ID: 480-205657-7

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Methane	9200		440	ug/L	110		RSK-175	Total/NA
Magnesium	3.7		0.20	mg/L	1		6010C	Dissolved
Potassium	1.5		0.10	mg/L	1		6010C	Dissolved
Chloride	38.8		0.50	mg/L	1		9056A	Total/NA
Total Inorganic Nitrogen	0.30		0.020	mg/L	1	⊗	Inorganic N	Total/NA
Total Organic Carbon	2.0		0.50	mg/L	1		SM 5310C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample Results

Client: NTH Consultants, Ltd.
Project/Site: Glendale Landfill - GW Primary

Job ID: 480-205657-1

Client Sample ID: MW-100R

Lab Sample ID: 480-205657-1

Date Collected: 01/18/23 10:04

Matrix: Ground Water

Date Received: 01/21/23 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	14000		440	ug/L			01/26/23 16:30	110

Method: SW846 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	6.8		0.20	mg/L		01/24/23 09:07	01/24/23 22:44	1
Potassium	2.2		0.10	mg/L		01/24/23 09:07	01/24/23 22:44	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	44.5		1.0	mg/L			01/31/23 01:26	2
Total Organic Carbon (SM 5310C)	2.4		0.50	mg/L			02/01/23 00:58	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Inorganic Nitrogen (EPA Inorganic N)	0.15		0.020	mg/L	☼		01/31/23 10:38	1

Client Sample Results

Client: NTH Consultants, Ltd.
Project/Site: Glendale Landfill - GW Primary

Job ID: 480-205657-1

Client Sample ID: MW-101

Date Collected: 01/18/23 10:32

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205657-2

Matrix: Ground Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	13000		440	ug/L			01/26/23 16:49	110

Method: SW846 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	7.7		0.20	mg/L		01/24/23 09:07	01/24/23 22:48	1
Potassium	1.8		0.10	mg/L		01/24/23 09:07	01/24/23 22:48	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	59.0		1.0	mg/L			01/31/23 02:37	2
Total Organic Carbon (SM 5310C)	2.0		0.50	mg/L			02/01/23 01:56	1
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Inorganic Nitrogen (EPA Inorganic N)	0.055		0.020	mg/L	☼		01/31/23 10:38	1

Client Sample Results

Client: NTH Consultants, Ltd.
Project/Site: Glendale Landfill - GW Primary

Job ID: 480-205657-1

Client Sample ID: MW-103

Date Collected: 01/18/23 12:05

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205657-3

Matrix: Ground Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	14000		440	ug/L			01/26/23 17:08	110

Method: SW846 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	4.8		0.20	mg/L		01/24/23 09:07	01/24/23 23:03	1
Potassium	1.6		0.10	mg/L		01/24/23 09:07	01/24/23 23:03	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	41.0		1.0	mg/L			01/31/23 02:51	2
Total Organic Carbon (SM 5310C)	2.1		0.50	mg/L			02/01/23 04:26	1
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Inorganic Nitrogen (EPA Inorganic N)	0.069		0.020	mg/L	☆		01/31/23 10:38	1

Client Sample Results

Client: NTH Consultants, Ltd.
Project/Site: Glendale Landfill - GW Primary

Job ID: 480-205657-1

Client Sample ID: MW-104A

Lab Sample ID: 480-205657-4

Date Collected: 01/18/23 13:17

Matrix: Ground Water

Date Received: 01/21/23 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	5200		350	ug/L			01/26/23 17:27	88

Method: SW846 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	5.6		0.20	mg/L		01/24/23 09:07	01/24/23 23:22	1
Potassium	1.5		0.10	mg/L		01/24/23 09:07	01/24/23 23:22	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	49.7		1.0	mg/L			01/31/23 03:05	2
Total Organic Carbon (SM 5310C)	2.6		0.50	mg/L			02/01/23 04:55	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Inorganic Nitrogen (EPA Inorganic N)	0.070		0.020	mg/L	☆		01/31/23 10:38	1

Client Sample Results

Client: NTH Consultants, Ltd.
Project/Site: Glendale Landfill - GW Primary

Job ID: 480-205657-1

Client Sample ID: MW-106

Date Collected: 01/18/23 10:58

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205657-5

Matrix: Ground Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	7600		180	ug/L			01/26/23 17:45	44

Method: SW846 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	5.9		0.20	mg/L		01/24/23 09:07	01/24/23 23:26	1
Potassium	1.5		0.10	mg/L		01/24/23 09:07	01/24/23 23:26	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	40.0		1.0	mg/L			01/31/23 03:19	2
Total Organic Carbon (SM 5310C)	2.5		0.50	mg/L			02/01/23 06:24	1
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Inorganic Nitrogen (EPA Inorganic N)	0.64		0.020	mg/L	☼		01/31/23 10:38	1

Client Sample Results

Client: NTH Consultants, Ltd.
Project/Site: Glendale Landfill - GW Primary

Job ID: 480-205657-1

Client Sample ID: MW-108

Date Collected: 01/18/23 12:38

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205657-6

Matrix: Ground Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	11000		440	ug/L			01/26/23 18:04	110

Method: SW846 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	4.7		0.20	mg/L		01/24/23 09:07	01/24/23 23:30	1
Potassium	1.5		0.10	mg/L		01/24/23 09:07	01/24/23 23:30	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	40.8		1.0	mg/L			01/31/23 03:33	2
Total Organic Carbon (SM 5310C)	1.7		0.50	mg/L			02/01/23 07:23	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Inorganic Nitrogen (EPA Inorganic N)	0.17		0.020	mg/L	☆		01/31/23 10:38	1

Client Sample Results

Client: NTH Consultants, Ltd.
Project/Site: Glendale Landfill - GW Primary

Job ID: 480-205657-1

Client Sample ID: MW-109

Date Collected: 01/18/23 11:23

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205657-7

Matrix: Ground Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	9200		440	ug/L			01/26/23 18:23	110

Method: SW846 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	3.7		0.20	mg/L		01/24/23 09:07	01/24/23 23:34	1
Potassium	1.5		0.10	mg/L		01/24/23 09:07	01/24/23 23:34	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SW846 9056A)	38.8		0.50	mg/L			01/31/23 03:47	1
Total Organic Carbon (SM 5310C)	2.0		0.50	mg/L			02/01/23 07:52	1
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Inorganic Nitrogen (EPA Inorganic N)	0.30		0.020	mg/L	☼		01/31/23 10:38	1

QC Sample Results

Client: NTH Consultants, Ltd.
Project/Site: Glendale Landfill - GW Primary

Job ID: 480-205657-1

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 480-657099/3

Matrix: Water

Analysis Batch: 657099

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		4.0	ug/L			01/26/23 11:08	1

Lab Sample ID: LCS 480-657099/4

Matrix: Water

Analysis Batch: 657099

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methane	19.4	17.4		ug/L		89	85 - 120

Lab Sample ID: LCSD 480-657099/5

Matrix: Water

Analysis Batch: 657099

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methane	19.4	16.6		ug/L		86	85 - 120	4	50

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-656726/1-A

Matrix: Water

Analysis Batch: 656947

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 656726

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	ND		0.20	mg/L		01/24/23 09:07	01/24/23 22:33	1
Potassium	ND		0.10	mg/L		01/24/23 09:07	01/24/23 22:33	1

Lab Sample ID: LCS 480-656726/2-A

Matrix: Water

Analysis Batch: 656947

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 656726

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Magnesium	10.0	10.27		mg/L		103	80 - 120
Potassium	10.0	10.43		mg/L		104	80 - 120

Lab Sample ID: 480-205657-3 MS

Matrix: Ground Water

Analysis Batch: 656947

Client Sample ID: MW-103

Prep Type: Dissolved

Prep Batch: 656726

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Magnesium	4.8		10.0	14.81		mg/L		100	75 - 125
Potassium	1.6		10.0	11.83		mg/L		103	75 - 125

Lab Sample ID: 480-205657-3 MSD

Matrix: Ground Water

Analysis Batch: 656947

Client Sample ID: MW-103

Prep Type: Dissolved

Prep Batch: 656726

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Magnesium	4.8		10.0	14.94		mg/L		102	75 - 125	1	20
Potassium	1.6		10.0	12.09		mg/L		105	75 - 125	2	20

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QC Sample Results

Client: NTH Consultants, Ltd.
Project/Site: Glendale Landfill - GW Primary

Job ID: 480-205657-1

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 480-657360/28

Matrix: Water

Analysis Batch: 657360

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	mg/L			01/30/23 23:47	1

Lab Sample ID: LCS 480-657360/29

Matrix: Water

Analysis Batch: 657360

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.1	49.31		mg/L		98	90 - 110

Lab Sample ID: 480-205657-1 MS

Matrix: Ground Water

Analysis Batch: 657360

Client Sample ID: MW-100R

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	44.5		100	136.8		mg/L		92	81 - 120

Lab Sample ID: 480-205657-1 MSD

Matrix: Ground Water

Analysis Batch: 657360

Client Sample ID: MW-100R

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	44.5		100	136.9		mg/L		92	81 - 120	0	15

Lab Sample ID: 480-205657-7 MS

Matrix: Ground Water

Analysis Batch: 657360

Client Sample ID: MW-109

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	38.8		50.1	83.62		mg/L		89	81 - 120

Method: SM 5310C - TOC

Lab Sample ID: MB 480-657585/28

Matrix: Water

Analysis Batch: 657585

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		0.50	mg/L			02/01/23 03:27	1

Lab Sample ID: MB 480-657585/4

Matrix: Water

Analysis Batch: 657585

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		0.50	mg/L			01/31/23 15:38	1

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QC Sample Results

Client: NTH Consultants, Ltd.
Project/Site: Glendale Landfill - GW Primary

Job ID: 480-205657-1

Method: SM 5310C - TOC (Continued)

Lab Sample ID: LCS 480-657585/29

Matrix: Water

Analysis Batch: 657585

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	60.0	60.30		mg/L		100	90 - 110

Lab Sample ID: LCS 480-657585/5

Matrix: Water

Analysis Batch: 657585

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	60.0	60.99		mg/L		102	90 - 110

Lab Sample ID: 480-205657-1 MS

Matrix: Ground Water

Analysis Batch: 657585

Client Sample ID: MW-100R

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	2.4		23.3	27.85		mg/L		109	54 - 131

Lab Sample ID: 480-205657-5 MS

Matrix: Ground Water

Analysis Batch: 657585

Client Sample ID: MW-106

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	2.5		23.3	28.25		mg/L		110	54 - 131

Lab Sample ID: 480-205657-2 DU

Matrix: Ground Water

Analysis Batch: 657585

Client Sample ID: MW-101

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon	2.0		2.00		mg/L		2	20

Lab Sample ID: 480-205657-6 DU

Matrix: Ground Water

Analysis Batch: 657585

Client Sample ID: MW-108

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon	1.7		1.70		mg/L		2	20

QC Association Summary

Client: NTH Consultants, Ltd.
Project/Site: Glendale Landfill - GW Primary

Job ID: 480-205657-1

GC VOA

Analysis Batch: 657099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205657-1	MW-100R	Total/NA	Ground Water	RSK-175	
480-205657-2	MW-101	Total/NA	Ground Water	RSK-175	
480-205657-3	MW-103	Total/NA	Ground Water	RSK-175	
480-205657-4	MW-104A	Total/NA	Ground Water	RSK-175	
480-205657-5	MW-106	Total/NA	Ground Water	RSK-175	
480-205657-6	MW-108	Total/NA	Ground Water	RSK-175	
480-205657-7	MW-109	Total/NA	Ground Water	RSK-175	
MB 480-657099/3	Method Blank	Total/NA	Water	RSK-175	
LCS 480-657099/4	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 480-657099/5	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Metals

Prep Batch: 656726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205657-1	MW-100R	Dissolved	Ground Water	3005A	
480-205657-2	MW-101	Dissolved	Ground Water	3005A	
480-205657-3	MW-103	Dissolved	Ground Water	3005A	
480-205657-4	MW-104A	Dissolved	Ground Water	3005A	
480-205657-5	MW-106	Dissolved	Ground Water	3005A	
480-205657-6	MW-108	Dissolved	Ground Water	3005A	
480-205657-7	MW-109	Dissolved	Ground Water	3005A	
MB 480-656726/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 480-656726/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
480-205657-3 MS	MW-103	Dissolved	Ground Water	3005A	
480-205657-3 MSD	MW-103	Dissolved	Ground Water	3005A	

Analysis Batch: 656947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205657-1	MW-100R	Dissolved	Ground Water	6010C	656726
480-205657-2	MW-101	Dissolved	Ground Water	6010C	656726
480-205657-3	MW-103	Dissolved	Ground Water	6010C	656726
480-205657-4	MW-104A	Dissolved	Ground Water	6010C	656726
480-205657-5	MW-106	Dissolved	Ground Water	6010C	656726
480-205657-6	MW-108	Dissolved	Ground Water	6010C	656726
480-205657-7	MW-109	Dissolved	Ground Water	6010C	656726
MB 480-656726/1-A	Method Blank	Total Recoverable	Water	6010C	656726
LCS 480-656726/2-A	Lab Control Sample	Total Recoverable	Water	6010C	656726
480-205657-3 MS	MW-103	Dissolved	Ground Water	6010C	656726
480-205657-3 MSD	MW-103	Dissolved	Ground Water	6010C	656726

General Chemistry

Analysis Batch: 657360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205657-1	MW-100R	Total/NA	Ground Water	9056A	
480-205657-2	MW-101	Total/NA	Ground Water	9056A	
480-205657-3	MW-103	Total/NA	Ground Water	9056A	
480-205657-4	MW-104A	Total/NA	Ground Water	9056A	
480-205657-5	MW-106	Total/NA	Ground Water	9056A	
480-205657-6	MW-108	Total/NA	Ground Water	9056A	
480-205657-7	MW-109	Total/NA	Ground Water	9056A	

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QC Association Summary

Client: NTH Consultants, Ltd.
Project/Site: Glendale Landfill - GW Primary

Job ID: 480-205657-1

General Chemistry (Continued)

Analysis Batch: 657360 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-657360/28	Method Blank	Total/NA	Water	9056A	
LCS 480-657360/29	Lab Control Sample	Total/NA	Water	9056A	
480-205657-1 MS	MW-100R	Total/NA	Ground Water	9056A	
480-205657-1 MSD	MW-100R	Total/NA	Ground Water	9056A	
480-205657-7 MS	MW-109	Total/NA	Ground Water	9056A	

Analysis Batch: 657421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205657-1	MW-100R	Total/NA	Ground Water	Inorganic N	
480-205657-2	MW-101	Total/NA	Ground Water	Inorganic N	
480-205657-3	MW-103	Total/NA	Ground Water	Inorganic N	
480-205657-4	MW-104A	Total/NA	Ground Water	Inorganic N	
480-205657-5	MW-106	Total/NA	Ground Water	Inorganic N	
480-205657-6	MW-108	Total/NA	Ground Water	Inorganic N	
480-205657-7	MW-109	Total/NA	Ground Water	Inorganic N	

Analysis Batch: 657585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205657-1	MW-100R	Total/NA	Ground Water	SM 5310C	
480-205657-2	MW-101	Total/NA	Ground Water	SM 5310C	
480-205657-3	MW-103	Total/NA	Ground Water	SM 5310C	
480-205657-4	MW-104A	Total/NA	Ground Water	SM 5310C	
480-205657-5	MW-106	Total/NA	Ground Water	SM 5310C	
480-205657-6	MW-108	Total/NA	Ground Water	SM 5310C	
480-205657-7	MW-109	Total/NA	Ground Water	SM 5310C	
MB 480-657585/28	Method Blank	Total/NA	Water	SM 5310C	
MB 480-657585/4	Method Blank	Total/NA	Water	SM 5310C	
LCS 480-657585/29	Lab Control Sample	Total/NA	Water	SM 5310C	
LCS 480-657585/5	Lab Control Sample	Total/NA	Water	SM 5310C	
480-205657-1 MS	MW-100R	Total/NA	Ground Water	SM 5310C	
480-205657-5 MS	MW-106	Total/NA	Ground Water	SM 5310C	
480-205657-2 DU	MW-101	Total/NA	Ground Water	SM 5310C	
480-205657-6 DU	MW-108	Total/NA	Ground Water	SM 5310C	

Lab Chronicle

Client: NTH Consultants, Ltd.
Project/Site: Glendale Landfill - GW Primary

Job ID: 480-205657-1

Client Sample ID: MW-100R

Date Collected: 01/18/23 10:04

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205657-1

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	RSK-175		110	657099	DSC	EET BUF	01/26/23 16:30
Dissolved	Prep	3005A			656726	NVK	EET BUF	01/24/23 09:07
Dissolved	Analysis	6010C		1	656947	LMH	EET BUF	01/24/23 22:44
Total/NA	Analysis	9056A		2	657360	IMZ	EET BUF	01/31/23 01:26
Total/NA	Analysis	Inorganic N		1	657421	JJP	EET BUF	01/31/23 10:38
Total/NA	Analysis	SM 5310C		1	657585	KER	EET BUF	02/01/23 00:58

Client Sample ID: MW-101

Date Collected: 01/18/23 10:32

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205657-2

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	RSK-175		110	657099	DSC	EET BUF	01/26/23 16:49
Dissolved	Prep	3005A			656726	NVK	EET BUF	01/24/23 09:07
Dissolved	Analysis	6010C		1	656947	LMH	EET BUF	01/24/23 22:48
Total/NA	Analysis	9056A		2	657360	IMZ	EET BUF	01/31/23 02:37
Total/NA	Analysis	Inorganic N		1	657421	JJP	EET BUF	01/31/23 10:38
Total/NA	Analysis	SM 5310C		1	657585	KER	EET BUF	02/01/23 01:56

Client Sample ID: MW-103

Date Collected: 01/18/23 12:05

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205657-3

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	RSK-175		110	657099	DSC	EET BUF	01/26/23 17:08
Dissolved	Prep	3005A			656726	NVK	EET BUF	01/24/23 09:07
Dissolved	Analysis	6010C		1	656947	LMH	EET BUF	01/24/23 23:03
Total/NA	Analysis	9056A		2	657360	IMZ	EET BUF	01/31/23 02:51
Total/NA	Analysis	Inorganic N		1	657421	JJP	EET BUF	01/31/23 10:38
Total/NA	Analysis	SM 5310C		1	657585	KER	EET BUF	02/01/23 04:26

Client Sample ID: MW-104A

Date Collected: 01/18/23 13:17

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205657-4

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	RSK-175		88	657099	DSC	EET BUF	01/26/23 17:27
Dissolved	Prep	3005A			656726	NVK	EET BUF	01/24/23 09:07
Dissolved	Analysis	6010C		1	656947	LMH	EET BUF	01/24/23 23:22
Total/NA	Analysis	9056A		2	657360	IMZ	EET BUF	01/31/23 03:05
Total/NA	Analysis	Inorganic N		1	657421	JJP	EET BUF	01/31/23 10:38
Total/NA	Analysis	SM 5310C		1	657585	KER	EET BUF	02/01/23 04:55

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Lab Chronicle

Client: NTH Consultants, Ltd.
Project/Site: Glendale Landfill - GW Primary

Job ID: 480-205657-1

Client Sample ID: MW-106

Date Collected: 01/18/23 10:58

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205657-5

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	RSK-175		44	657099	DSC	EET BUF	01/26/23 17:45
Dissolved	Prep	3005A			656726	NVK	EET BUF	01/24/23 09:07
Dissolved	Analysis	6010C		1	656947	LMH	EET BUF	01/24/23 23:26
Total/NA	Analysis	9056A		2	657360	IMZ	EET BUF	01/31/23 03:19
Total/NA	Analysis	Inorganic N		1	657421	JJP	EET BUF	01/31/23 10:38
Total/NA	Analysis	SM 5310C		1	657585	KER	EET BUF	02/01/23 06:24

Client Sample ID: MW-108

Date Collected: 01/18/23 12:38

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205657-6

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	RSK-175		110	657099	DSC	EET BUF	01/26/23 18:04
Dissolved	Prep	3005A			656726	NVK	EET BUF	01/24/23 09:07
Dissolved	Analysis	6010C		1	656947	LMH	EET BUF	01/24/23 23:30
Total/NA	Analysis	9056A		2	657360	IMZ	EET BUF	01/31/23 03:33
Total/NA	Analysis	Inorganic N		1	657421	JJP	EET BUF	01/31/23 10:38
Total/NA	Analysis	SM 5310C		1	657585	KER	EET BUF	02/01/23 07:23

Client Sample ID: MW-109

Date Collected: 01/18/23 11:23

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205657-7

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	RSK-175		110	657099	DSC	EET BUF	01/26/23 18:23
Dissolved	Prep	3005A			656726	NVK	EET BUF	01/24/23 09:07
Dissolved	Analysis	6010C		1	656947	LMH	EET BUF	01/24/23 23:34
Total/NA	Analysis	9056A		1	657360	IMZ	EET BUF	01/31/23 03:47
Total/NA	Analysis	Inorganic N		1	657421	JJP	EET BUF	01/31/23 10:38
Total/NA	Analysis	SM 5310C		1	657585	KER	EET BUF	02/01/23 07:52

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: NTH Consultants, Ltd.
Project/Site: Glendale Landfill - GW Primary

Job ID: 480-205657-1

Laboratory: Eurofins Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-22 *
Connecticut	State	PH-0568	03-31-24
Florida	NELAP	E87672	06-30-23
Georgia	State	10026 (NY)	04-01-23
Georgia	State Program	N/A	03-31-09 *
Georgia (DW)	State	956	03-31-23
Illinois	NELAP	200003	09-30-23
Iowa	State	374	03-01-23
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	01-31-23 *
Kentucky (DW)	State	90029	12-31-22 *
Kentucky (UST)	State	30	04-01-23
Kentucky (VW)	State	KY90029	12-31-22 *
Louisiana	NELAP	02031	06-30-23
Louisiana (All)	NELAP	02031	06-30-23
Maine	State	NY00044	12-04-22 *
Maryland	State	294	03-31-23
Massachusetts	State	M-NY044	06-30-23
Michigan	State	9937	03-31-23
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-22 *
New Jersey	NELAP	NY455	06-30-23
New York	NELAP	10026	03-31-23
Pennsylvania	NELAP	68-00281	07-31-23
Rhode Island	State	LAO00328	12-30-22 *
Tennessee	State	02970	04-01-23
Texas	NELAP	T104704412-18-10	07-31-23
USDA	US Federal Programs	P330-18-00039	03-25-24
Virginia	NELAP	460185	09-14-23
Washington	State	C784	02-10-23
Wisconsin	State	998310390	08-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Buffalo

Method Summary

Client: NTH Consultants, Ltd.
Project/Site: Glendale Landfill - GW Primary

Job ID: 480-205657-1

Method	Method Description	Protocol	Laboratory
RSK-175	Dissolved Gases (GC)	RSK	EET BUF
6010C	Metals (ICP)	SW846	EET BUF
9056A	Anions, Ion Chromatography	SW846	EET BUF
Inorganic N	Nitrogen, Total Inorganic	EPA	EET BUF
SM 5310C	TOC	SM	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: NTH Consultants, Ltd.
Project/Site: Glendale Landfill - GW Primary

Job ID: 480-205657-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-205657-1	MW-100R	Ground Water	01/18/23 10:04	01/21/23 10:00
480-205657-2	MW-101	Ground Water	01/18/23 10:32	01/21/23 10:00
480-205657-3	MW-103	Ground Water	01/18/23 12:05	01/21/23 10:00
480-205657-4	MW-104A	Ground Water	01/18/23 13:17	01/21/23 10:00
480-205657-5	MW-106	Ground Water	01/18/23 10:58	01/21/23 10:00
480-205657-6	MW-108	Ground Water	01/18/23 12:38	01/21/23 10:00
480-205657-7	MW-109	Ground Water	01/18/23 11:23	01/21/23 10:00

Quantitation Limit Exceptions Summary

Client: NTH Consultants, Ltd.

Job ID: 480-205657-1

Project/Site: Glendale Landfill - GW Primary

The requested project specific reporting limits listed below were less than laboratory standard quantitation limits (PQL) but greater than or equal to the laboratory method detection limits (MDL). It must be noted that results reported below lab standard quantitation limits may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

Method	Analyte	Matrix	Prep Type	Unit	Client RL	Lab PQL
6010C	Potassium	Ground Water	Dissolved	mg/L	0.10	0.50
Inorganic N	Total Inorganic Nitrogen	Ground Water	Total/NA	mg/L	0.020	0.05
SM 5310C	Total Organic Carbon	Ground Water	Total/NA	mg/L	0.50	1.0

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

MICHIGAN
190

Chain of Custody Record



Environment Testing

Client Information		Sampler: Wooster	Lab PM: Beninati, John		Carrier Tracking No(s):		COC No: 480-178903-32188.1							
Client Contact: Mr. Alan Erickson		Phone: 248-417-9052	E-Mail: John.Beninati@et.eurofinsus.com		State of Origin:		Page: Page 1 of 1							
Company: NTH Consultants, Ltd.		PWSID:	Analysis Requested				Job #:							
Address: Attn: A/P Code: T5904 41780 Six Mile Rd Suite 201 City: Northville State, Zip: MI, 48168 Phone: 248-662-2737(Tel) 248-324-5179(Fax) Email: aerickson@nthconsultants.com Project Name: City of Livonia, MI - Glendale Landfill/ Event Desc: GW - Primary Site: Michigan		Due Date Requested: TAT Requested (days): Compliance Project: Δ Yes Δ No PO #: 62-180172 WO #: Project #: 48020805 SSOW#:		 480-205657 Chain of Custody				Preservation Codes: A - HCL M - Hexane L - EUA Y - Trizma Z - other (specify) Other:						
Sample Identification		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Performs MS/MSD (Yes or No)	9056A_280 - Chloride	350.1, 353.2_Pres, Nitrogen Inorg	6010C - Dissolved Metals (ICP) - Mg, K	6310C - Organic Carbon, Total (TOC)	RSK_175 - Dissolved Gases (GC) - Dissolved Methane	Total Number of containers	Special Instructions/Note:
					Preservation Code:	X	X	N	S	D	A	A		
MW-101		01/18/23	1032	G	Water	Y	N	X	X	X	X	X		
MW-103		01/18/23	1205	G	Water	Y	N	X	X	X	X	X		
MW-104A		01/18/23	1317	G	Water	Y	N	X	X	X	X	X		
MW-106		01/18/23	1058	G	Water	Y	N	X	X	X	X	X		
MW-108		01/18/23	1238	G	Water	Y	N	X	X	X	X	X		
MW-109		01/18/23	1123	G	Water	Y	N	X	X	X	X	X		
MW-100R		01/18/23	1004	G	Water	Y	N	X	X	X	X	X		
Possible Hazard Identification		☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological												
Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months												
Empty Kit Relinquished by:		Date:	Time:		Method of Shipment:									
Relinquished by: [Signature]		Date/Time: 01/19/23 1220	Company: ESS		Received by: [Signature]		Date/Time: 1/19/23 12:20	Company: EETA						
Relinquished by: [Signature]		Date/Time: 1/19/23 12:25	Company: EETA		Received by: [Signature]		Date/Time: 1-20-23 9:15	Company: EETA						
Relinquished by: [Signature]		Date/Time: 1-20-23 1150	Company: EETNC		Received by: [Signature]		Date/Time: 1/21/23 1000	Company: EETA						
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 3.8 # ICE										

Login Sample Receipt Checklist

Client: NTH Consultants, Ltd.

Job Number: 480-205657-1

Login Number: 205657

List Number: 1

Creator: Sabuda, Brendan D

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.8 #1 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

LOW FLOW GROUNDWATER SAMPLING FIELD DATA FORM

Client: NTH Project Name: City of Livonia Landfill Site Location: ACT 87 TRAP
Well ID: RL 8R

GENERAL									
Weather Conditions: <u>Cloudy 303 WS-10</u>									
Condition of Well:									
Is Well Accessible					Y ☒ N ☐				
Is Well Visible					Y ☒ N ☐				
Is Well Labeled					Y ☒ N ☐				
Well Diameter									
Is Well Locked					Y ☐ N ☒				
Is Drainage Acceptable					Y ☒ N ☐				
General Condition									
Well Type									
STATIC WATER LEVEL Date and Time of Measurement: <u>1/18/23 1519</u>									
Top of Casing Elevation					Measurement taken from: <u>North Edge of TOC</u>				
Depth to Water					Bottom Depth				
Elevation of Water									
WELL PURGING									
Well Purging: Start Date/Time					Sample collection & Peristaltic Pump &				
Well Purging: Complete Date/Time					Polyethylene tubing				
Flow Rate <u>200 ml/min</u>									
Interval	Time	pH	Cond	Turb	DO	Temp	ORP	Static	Units
3 Minutes	1526	7.54	1667	33.6	1.7	12.7	-30		pH (S.U.)
6 Minutes	1529	7.53	1660	21.1	2.1	12.6	-27		Specific Conductivity
9 Minutes	1532	7.53	1669	22.4	2.0	12.6	-26		(µS/cm)
12 Minutes	1535	7.56	1670	23.7	2.1	12.5	-25		Turbidity (NTU)
15 Minutes									Dissolved Oxygen (mg/L)
18 Minutes									Temperature (C°)
21 Minutes									Oxidation Reduction Potential (MV)
24 Minutes									Static (Feet)
27 Minutes									
30 Minutes									
33 Minutes									
36 Minutes									
39 Minutes									
42 Minutes									
45 Minutes									
48 Minutes									
51 Minutes									
54 Minutes									
57 Minutes									
60 Minutes									
SAMPLE COLLECTION Date/Time Collected: <u>1/18/23 1535</u>									
Parameters				Field Filtered Sample Y ☐ N ☒					
Bottle Type				QA/QC Duplicates					
Preservative				Collocated Y ☐ N ☒					
Quantity				Replicate Y ☐ N ☒					
				Split Sample Y ☐ N ☒					
				QA/QC Blanks					
				Field Blank Y ☐ N ☒					
				Equipment Blank Y ☐ N ☒					
				Trip Blank Y ☐ N ☒					
				QA/QC Lab Blanks					
				MS/MSD Y ☐ N ☒					
Laboratory: <u>Test America</u>									
Signature: <u>James Webster</u>									

Unable to obtain static - could not remove cap
Sample tubing installed through hole in the cap

COMMENTS:

LOW FLOW GROUNDWATER SAMPLING FIELD DATA FORM

Client: NTH Project Name: City of Lumberton Landfill Site Location: ACT 87 TRAP
Well ID: RL-19

GENERAL
Weather Conditions: LT Rain 30's E5-10

Condition of Well: Is Well Accessible Y N Is Well Locked Y N
Is Well Visible Y N Is Drainage Acceptable Y N
Is Well Labeled Y N General Condition Good
Well Diameter _____ Well Type _____

STATIC WATER LEVEL Date and Time of Measurement: 1/19/23 1059

Top of Casing Elevation _____ Measurement taken from: North Edge of TOC
Depth to Water 7.29 Bottom Depth _____
Elevation of Water _____

WELL PURGING

Well Purging: Start Date/Time 1/19/23 1101 Sample collection & Peristaltic Pump &
Well Purging: Complete Date/Time 1/19/23 1116 Purge Equipment: Polyethylene tubing
Flow Rate 200 ml/min

Interval	Time	pH	Cond	Turb	DO	Temp	ORP	Static	Units
3 Minutes	1107	7.01	2240	33.6	1.3	13.8	-29	7.66	pH (S.U.)
6 Minutes	1110	7.00	2250	17.9	1.6	13.7	-30	7.67	Specific Conductivity
9 Minutes	1113	6.99	2260	18.1	1.7	13.7	-31	7.67	(µS/cm)
12 Minutes	1114	6.99	2260	20.0	1.7	13.6	-33	7.67	Turbidity (NTU)
15 Minutes									Dissolved Oxygen (mg/L)
18 Minutes									Temperature (C°)
21 Minutes									Oxidation Reduction Potential (MV)
24 Minutes									Static (Feet)
27 Minutes									
30 Minutes									
33 Minutes									
36 Minutes									
39 Minutes									
42 Minutes									
45 Minutes									
48 Minutes									
51 Minutes									
54 Minutes									
57 Minutes									
60 Minutes									

SAMPLE COLLECTION Date/Time Collected: 1/19/23 1116

Parameters	Bottle Type	Preservative	Quantity
<u>Acetone</u>	<u>40ml</u>	<u>HCL</u>	<u>3</u>

Laboratory: TEST America

Field Filtered Sample Y N ☒

QA/QC Duplicates
Collocated Y N ☒
Replicate Y N ☒
Split Sample Y N ☒

QA/QC Blanks
Field Blank Y N ☒
Equipment Blank Y N ☒
Trip Blank Y N ☒

QA/QC Lab Blanks
MS/MSD Y N ☒

SAMPLED BY: W. Foster
Signature: Jammi Weaver

COMMENTS:

LOW FLOW GROUNDWATER SAMPLING FIELD DATA FORM

Client: MTA Project Name: City of Luverne Landfill Site Location: ACT 87 TRAP
Well ID: RL-20

GENERAL

Weather Conditions: LT Rain 30's E 5-10

Condition of Well: Is Well Accessible Y N Is Well Locked Y N
Is Well Visible Y N Is Drainage Acceptable Y N
Is Well Labeled Y N General Condition Good
Well Diameter _____ Well Type _____

STATIC WATER LEVEL Date and Time of Measurement: 1/19/23 1010

Top of Casing Elevation _____ Measurement taken from: North Edge of TOC
Depth to Water 4.72 Bottom Depth _____
Elevation of Water _____

WELL PURGING

Well Purging: Start Date/Time 1/19/23 1001 Sample collection & Peristaltic Pump &
Well Purging: Complete Date/Time 1/19/23 1025 Purge Equipment: Polyethylene tubing
Flow Rate 200ml/min

Interval	Time	pH	Cond	Turb	DO	Temp	ORP	Static	Units
3 Minutes	1017	7.30	1531	11.7	1.9	13.9	-21	5.6	pH (S.U.)
6 Minutes	1020	7.29	1526	12.6	1.8	13.9	-23	5.0	Specific Conductivity
9 Minutes	1023	7.29	1528	13.5	1.9	13.9	-24	5.0	(µS/cm) ²
12 Minutes									Turbidity (NTU)
15 Minutes									Dissolved Oxygen (mg/L)
18 Minutes									Temperature (C°)
21 Minutes									Oxidation Reduction Potential
24 Minutes									(MV)
27 Minutes									Static (Feet)
30 Minutes									
33 Minutes									
36 Minutes									
39 Minutes									
42 Minutes									
45 Minutes									
48 Minutes									
51 Minutes									
54 Minutes									
57 Minutes									
60 Minutes									

SAMPLE COLLECTION Date/Time Collected: 1/19/23 1025

Parameters	Bottle Type	Preservative	Quantity
<u>Acetone</u>	<u>40ml</u>	<u>HCL</u>	<u>3</u>

Field Filtered Sample Y N

QA/QC Duplicates

Collocated Y N
Replicate Y N
Split Sample Y N

QA/QC Blanks

Field Blank Y N
Equipment Blank Y N
Trip Blank Y N

Laboratory Test America

QA/QC Lab Blanks

MS/MSD Y N

SAMPLED BY: Wooster

James Wooster
Signature

LOW FLOW GROUNDWATER SAMPLING FIELD DATA FORM

Client: NTH Project Name: City of Livingston Landfill Site Location: ACT 87 TRAP
Well ID: RL-21

GENERAL

Weather Conditions: LT Rain 30's ES-10

Condition of Well: Is Well Accessible Y N Is Well Locked Y N
Is Well Visible Y N Is Drainage Acceptable Y N
Is Well Labeled Y N General Condition GOOD
Well Diameter _____ Well Type _____

STATIC WATER LEVEL

Date and Time of Measurement: 1/19/23 10921
Top of Casing Elevation _____ Measurement taken from: North Edge of TOC
Depth to Water 5.31 Bottom Depth _____
Elevation of Water _____

WELL PURGING

Well Purging: Start Date/Time 1/19/23 10922 Sample collection & Peristaltic Pump &
Well Purging: Complete Date/Time 1/19/23 10937 Purge Equipment: Polyethylene tubing
Flow Rate 200 ml/min

Interval	Time	pH	Cond	Turb	DO	Temp	ORP	Static	Units
3 Minutes	<u>0928</u>	<u>7.11</u>	<u>543</u>	<u>26.3</u>	<u>1.18</u>	<u>13.0</u>	<u>-17</u>	<u>3.91</u>	pH (S.U.)
6 Minutes	<u>0931</u>	<u>7.07</u>	<u>537</u>	<u>10.9</u>	<u>1.8</u>	<u>12.8</u>	<u>-15</u>	<u>3.91</u>	Specific Conductivity
9 Minutes	<u>0934</u>	<u>7.05</u>	<u>531</u>	<u>11.2</u>	<u>1.9</u>	<u>12.8</u>	<u>-16</u>	<u>3.91</u>	(µS/cm) ²
12 Minutes	<u>0937</u>	<u>7.06</u>	<u>530</u>	<u>10.9</u>	<u>1.8</u>	<u>12.7</u>	<u>-14</u>		
15 Minutes									Turbidity (NTU)
18 Minutes									
21 Minutes									Dissolved Oxygen (mg/L)
24 Minutes									
27 Minutes									Temperature (C°)
30 Minutes									
33 Minutes									Oxidation Reduction Potential
36 Minutes									(MV)
39 Minutes									
42 Minutes									Static (Feet)
45 Minutes									
48 Minutes									
51 Minutes									
54 Minutes									
57 Minutes									
60 Minutes									

SAMPLE COLLECTION

Date/Time Collected: 1/19/23 10937

Parameters	Bottle Type	Preservative	Quantity
<u>Methane</u>	<u>Head</u>	<u>HCL</u>	<u>3</u>

Field Filtered Sample Y N ✓

QA/QC Duplicates

Collocated Y N ✓
Replicate Y N ✓
Split Sample Y N ✓

QA/QC Blanks

Field Blank Y N ✓
Equipment Blank Y N ✓
Trip Blank Y N ✓

Laboratory TEST America

QA/QC Lab Blanks

MS/MSD Y N ✓

SAMPLED BY: _____

Wooters
Jamie Wooters
Signature

COMMENTS:

LOW FLOW GROUNDWATER SAMPLING FIELD DATA FORM

Client: NTM Project Name: City of Linn Co Landfill Site Location: ACT 87 IRAP
Well ID: RL-22

GENERAL																																																					
Weather Conditions: <u>cloudy 30's WS-10</u>																																																					
Condition of Well:					Is Well Accessible Y ☒ N ☐ Is Well Visible Y ☒ N ☐ Is Well Labeled Y ☒ N ☐ Well Diameter _____																																																
					Is Well Locked Y ☒ N ☐ Is Drainage Acceptable Y ☒ N ☐ General Condition <u>Good</u> Well Type _____																																																
STATIC WATER LEVEL Date and Time of Measurement: <u>1/18/23 1600</u>																																																					
Top of Casing Elevation _____					Measurement taken from: <u>North Edge of TOC</u>																																																
Depth to Water _____					Bottom Depth _____																																																
Elevation of Water _____																																																					
WELL PURGING																																																					
Well Purging: Start Date/Time <u>1/18/23 1602</u>					Sample collection & <u>Peristaltic Pump &</u>																																																
Well Purging: Complete Date/Time <u>1/18/23 1617</u>					Purge Equipment: <u>Polyethylene tubing</u>																																																
Flow Rate <u>240 ml/min</u>																																																					
Interval	Time	pH	Cond	Turb	DO	Temp	ORP	Static	Units																																												
3 Minutes	1608	7.17	2030	28.6	2.3	13.6	-10	—	pH (S.U.)																																												
6 Minutes	1611	7.23	2037	18.9	2.4	13.5	-8	—	Specific Conductivity (US/cm) ²																																												
9 Minutes	1614	7.22	2039	19.1	2.5	13.5	-11	—																																													
12 Minutes	1617	7.22	2041	17.8	2.5	13.5	-12	—	Turbidity (NTU)																																												
15 Minutes																																																					
18 Minutes									Dissolved Oxygen (mg/L)																																												
21 Minutes																																																					
24 Minutes									Temperature (C°)																																												
27 Minutes																																																					
30 Minutes									Oxidation Reduction Potential (MV)																																												
33 Minutes																																																					
36 Minutes									Static (Feet)																																												
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48 Minutes																																																					
51 Minutes																																																					
54 Minutes																																																					
57 Minutes																																																					
60 Minutes																																																					
SAMPLE COLLECTION Date/Time Collected <u>1/18/23 1617</u>																																																					
<table border="1"> <tr> <th>Parameters</th> <th>Bottle Type</th> <th>Preservative</th> <th>Quantity</th> </tr> <tr> <td><u>Acetone</u></td> <td><u>Head</u></td> <td><u>HCL</u></td> <td><u>3</u></td> </tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </table>				Parameters	Bottle Type	Preservative	Quantity	<u>Acetone</u>	<u>Head</u>	<u>HCL</u>	<u>3</u>																																					Field Filtered Sample Y ☒ N ☐ QA/QC Duplicates Collocated Y ☒ N ☐ Replicate Y ☒ N ☐ Split Sample Y ☒ N ☐ QA/QC Blanks Field Blank Y ☒ N ☐ Equipment Blank Y ☒ N ☐ Trip Blank Y ☒ N ☐ QA/QC Lab Blanks MS/MSD Y ☒ N ☐					
Parameters	Bottle Type	Preservative	Quantity																																																		
<u>Acetone</u>	<u>Head</u>	<u>HCL</u>	<u>3</u>																																																		
Laboratory <u>Test America</u>																																																					
SAMPLED BY <u>Wroster</u> <u>Jamie Wroster</u> Signature																																																					

Unable to obtain static - Could not remove cap installed tubing in the hole in the cap

LOW FLOW GROUNDWATER SAMPLING FIELD DATA FORM

Client: NTH Project Name: City of Lowell Landfill Site Location: ACT 87 TRAP
Well ID: RL-25

GENERAL

Weather Conditions: Cloudy 30's W 5-10

Condition of Well: Is Well Accessible Y N Is Well Locked Y N
Is Well Visible Y N Is Drainage Acceptable Y N
Is Well Labeled Y N General Condition Good
Well Diameter _____ Well Type _____

STATIC WATER LEVEL

Date and Time of Measurement: 1/18/23 1431

Top of Casing Elevation _____ Measurement taken from: North Edge of TOC
Depth to Water _____ Bottom Depth _____
Elevation of Water _____

WELL PURGING

Well Purging: Start Date/Time 1/18/23 1432 Sample collection & Peristaltic Pump &
Well Purging: Complete Date/Time 1/18/23 1447 Purge Equipment: Polyethylene tubing
Flow Rate 200 ml/min

Interval	Time	pH	Cond	Turb	DO	Temp	ORP	Static	Units
3 Minutes	1438	7.33	794	19.8	1.8	13.9	-13	—	pH (S.U.)
6 Minutes	1441	7.35	787	20.2	1.6	13.8	-19	—	Specific Conductivity
9 Minutes	1444	7.36	783	18.7	1.5	13.7	-18	—	(µS/cm) ²
12 Minutes	1447	7.36	784	19.3	1.5	13.7	-17	—	Turbidity (NTU)
15 Minutes									Dissolved Oxygen (mg/L)
18 Minutes									Temperature (C°)
21 Minutes									Oxidation Reduction Potential (MV)
24 Minutes									Static (Feet)
27 Minutes									
30 Minutes									
33 Minutes									
36 Minutes									
39 Minutes									
42 Minutes									
45 Minutes									
48 Minutes									
51 Minutes									
54 Minutes									
57 Minutes									
60 Minutes									

SAMPLE COLLECTION

Date/Time Collected: 1/18/23 1447

Parameters	Bottle Type	Preservative	Quantity
<u>Acetone</u>	<u>40ml</u>	<u>HCL</u>	<u>3</u>

Laboratory: Test America

Field Filtered Sample Y N

QA/QC Duplicates

Collocated Y N
Replicate Y N
Split Sample Y N

QA/QC Blanks

Field Blank Y N
Equipment Blank Y N
Trip Blank Y N

QA/QC Lab Blanks

MS/MSD Y N

SAMPLED BY: _____

Woofter
Jammi Woofter
Signature

Cup stuck - unable to obtain static
Tubing installed through hole in cup

Client: NTH Project Name: City of Lumbia Landfill Site Location: ACT 87 IRAP
Well ID: RL-29

GENERAL
Weather Conditions: LT Rain 30s E5-10

Condition of Well:

Is Well Accessible Y N
Is Well Visible Y N
Is Well Labeled Y N
Well Diameter _____

Is Well Locked Y N
Is Drainage Acceptable Y N
General Condition Good
Well Type _____

STATIC WATER LEVEL
Date and Time of Measurement: 11/13/10 0857

Top of Casing Elevation _____
Depth to Water 3.43
Elevation of Water _____

Measurement taken from: North Edge of TOC
Bottom Depth _____

WELL PURGING
Well Purging: Start Date/Time 11/13/10 0857
Well Purging: Complete Date/Time 11/13/10 0912
Flow Rate 200ml/min

Sample collection & Purge Equipment: _____
Peristaltic Pump & Polyethylene tubing

Interval	Time	pH	Cond	Turb	DO	Temp	ORP	Static	Units
3 Minutes	0903	7.33	1870	26.3	1.8	13.3	-53	4.15	pH (S.U.)
6 Minutes	0906	7.36	1869	16.7	1.7	13.2	-45	4.16	Specific Conductivity (µS/cm) ²
9 Minutes	0909	7.36	1863	15.9	1.6	13.2	-44	4.16	
12 Minutes	0912	7.33	1867	16.1	1.6	13.1	-41	4.17	
15 Minutes									Turbidity (NTU)
18 Minutes									
21 Minutes									
24 Minutes									Dissolved Oxygen (mg/L)
27 Minutes									
30 Minutes									
33 Minutes									Temperature (C°)
36 Minutes									
39 Minutes									
42 Minutes									Oxidation Reduction Potential (MV)
45 Minutes									
48 Minutes									
51 Minutes									Static (Feet)
54 Minutes									
57 Minutes									
60 Minutes									

SAMPLE COLLECTION
Date/Time Collected 11/13/10 0912

Parameters
Bottle Type
Preservative
Quantity

Acetone
40ml
HCL
3

Field Filtered Sample Y N

QA/QC Duplicates
Collocated Y N
Replicate Y N
Split Sample Y N

QA/QC Blanks
Field Blank Y N
Equipment Blank Y N
Trip Blank Y N

Laboratory Test America

QA/QC Lab Blanks Y N
MS/MSD Y N

SAMPLED BY: James W. Wooten

Signature: James W. Wooten

LOW FLOW GROUNDWATER SAMPLING FIELD DATA FORM

Client: NTH Project Name: City of Lincoln Landfill Site Location: ACT 87 IRAP
Well ID: RL-30

GENERAL
Weather Conditions: LT Rain 30s ES-10

Condition of Well: Is Well Accessible Y N Is Well Locked Y N
Is Well Visible Y N Is Drainage Acceptable Y N
Is Well Labeled Y N General Condition Good
Well Diameter _____ Well Type _____

STATIC WATER LEVEL Date and Time of Measurement: 1/19/13 1032

Top of Casing Elevation _____ Measurement taken from: North Edge of TOC
Depth to Water _____ Bottom Depth _____
Elevation of Water _____

WELL PURGING Well Purging: Start Date/Time 1/19/13 1033 Sample collection & Purge Equipment: Peristaltic Pump & Polyethylene tubing
Well Purging: Complete Date/Time 1/19/13 1048
Flow Rate 200 ml/min

Interval	Time	pH	Cond	Turb	DO	Temp	ORP	Static	Units
3 Minutes	1039	7.41	1739	28.3	2.4	14.0	-43	—	pH (S.U.)
6 Minutes	1042	7.40	1156	18.7	2.5	14.0	-41	—	Specific Conductivity
9 Minutes	1045	7.39	1162	19.1	2.6	13.9	-40	—	(µS/cm) ²
12 Minutes	1048	7.40	1163	20.3	2.6	13.9	-39	—	Turbidity (NTU)
15 Minutes									Dissolved Oxygen (mg/L)
18 Minutes									Temperature (C°)
21 Minutes									Oxidation Reduction Potential (MV)
24 Minutes									Static (Feet)
27 Minutes									
30 Minutes									
33 Minutes									
36 Minutes									
39 Minutes									
42 Minutes									
45 Minutes									
48 Minutes									
51 Minutes									
54 Minutes									
57 Minutes									
60 Minutes									

SAMPLE COLLECTION Date/Time Collected: 1/19/13 1048

Parameters	Bottle Type	Preservative	Quantity
<u>Acetone</u>	<u>Hard</u>	<u>HCL</u>	<u>3</u>

Laboratory: Test America

Field Filtered Sample Y N N

QA/QC Duplicates
Collocated Y N N
Replicate Y N N
Split Sample Y N N

QA/QC Blanks
Field Blank Y N N
Equipment Blank Y N N
Trip Blank Y N N

QA/QC Lab Blanks
MS/MSD Y N N

SAMPLED BY: Wooster
John Wooster
Signature

Unable to obtain static - Installed tubing thru hole in cap

LOW FLOW GROUNDWATER SAMPLING FIELD DATA FORM

Client: NTM Project Name: City of Lowell Landfill Site Location: ACT 87 IRAP
Well ID: RL-31

GENERAL

Weather Conditions: LT Rain 30's E5-10

Condition of Well: Is Well Accessible Y N Is Well Locked Y N
Is Well Visible Y N Is Drainage Acceptable Y N
Is Well Labeled Y N General Condition Good
Well Diameter _____ Well Type _____

STATIC WATER LEVEL Date and Time of Measurement: 1/19/03 0957

Top of Casing Elevation _____ Measurement taken from: North Edge of TOC
Depth to Water 4.73 Bottom Depth _____
Elevation of Water _____

WELL PURGING

Well Purging: Start Date/Time 1/19/03 0958 Sample collection & Peristaltic Pump &
Well Purging: Complete Date/Time 1 Purge Equipment: Polyethylene tubing
Flow Rate 200ml/min

Interval	Time	pH	Cond	Turb	DO	Temp	ORP	Static	Units
3 Minutes									pH (S.U.)
6 Minutes									Specific Conductivity
9 Minutes									(µS/cm) ²
12 Minutes									Turbidity (NTU)
15 Minutes									Dissolved Oxygen (mg/L)
18 Minutes									Temperature (C°)
21 Minutes									Oxidation Reduction Potential
24 Minutes									(MV)
27 Minutes									Static (Feet)
30 Minutes									
33 Minutes									
36 Minutes									
39 Minutes									
42 Minutes									
45 Minutes									
48 Minutes									
51 Minutes									
54 Minutes									
57 Minutes									
60 Minutes									

SAMPLE COLLECTION Date/Time Collected

Parameters	Bottle Type	Preservative	Quantity
<u>Ammonia</u>	<u>Hard</u>	<u>HCL</u>	<u>3</u>

Field Filtered Sample Y N

QA/QC Duplicates

Collocated Y N
Replicate Y N
Split Sample Y N

QA/QC Blanks

Field Blank Y N
Equipment Blank Y N
Trip Blank Y N

Laboratory Test America

QA/QC Lab Blanks

MS/MSD Y N

SAMPLED BY

Wooten
Jamie Wooten
Signature

Purged Dry - No Recovery - No Sample

LOW FLOW GROUNDWATER SAMPLING FIELD DATA FORM

Client: NTH Project Name: City of Livonia - LANDFILL Site Location: ACT 87 IRAP
Well ID: MW-2

GENERAL

Weather Conditions: Sunny 30° W5-10

Condition of Well: Is Well Accessible Y N
Is Well Visible Y N
Is Well Labeled Y N
Well Diameter 2"

Is Well Locked Y N No Lock
Is Drainage Acceptable Y N
General Condition Good
Well Type

STATIC WATER LEVEL

Date and Time of Measurement: 1/18/23 0856

Top of Casing Elevation

Depth to Water 11.90

Elevation of Water

Measurement taken from: North Edge of TOC

Bottom Depth

WELL PURGING

Well Purging: Start Date/Time 1/18/23 0857

Well Purging: Complete Date/Time 1/18/23 0912

Flow Rate 200ml/min

Sample collection &

Purge Equipment:

Peristaltic Pump &

Polyethylene tubing

Interval	Time	pH	Cond	Turb	DO	Temp	ORP	Static	Units
3 Minutes	0903	7.97	391	31.6	1.3	10.9	-53	12.09	pH (S.U.)
6 Minutes	0906	7.98	401	19.2	1.9	10.7	-54	12.11	
9 Minutes	0909	7.99	405	20.1	1.8	10.7	-56	12.11	Specific Conductivity
12 Minutes	0912	7.98	408	20.0	1.7	10.7	-57	12.11	(µS/cm)*
15 Minutes									
18 Minutes									Turbidity (NTU)
21 Minutes									
24 Minutes									Dissolved Oxygen (mg/L)
27 Minutes									
30 Minutes									Temperature (C°)
33 Minutes									
36 Minutes									Oxidation Reduction Potential
39 Minutes									(MV)
42 Minutes									
45 Minutes									Static (Feet)
48 Minutes									
51 Minutes									
54 Minutes									
57 Minutes									
60 Minutes									

SAMPLE COLLECTION

Date/Time Collected 1/18/23 0912

Parameters	Bottle Type	Preservative	Quantity
<u>methane</u>	<u>NAL</u>	<u>HCL</u>	<u>3</u>

Field Filtered Sample Y N /

QA/QC Duplicates

Collocated Y N /

Replicate Y N /

Split Sample Y N /

QA/QC Blanks

Field Blank Y N /

Equipment Blank Y N /

Trip Blank Y N /

Laboratory Test America

QA/QC Lab Blanks

MS/MSD Y N /

SAMPLED BY

James Woodman
Signature

COMMENTS:

LOW FLOW GROUNDWATER SAMPLING FIELD DATA FORM

Client: NTH Project Name: City of Livonia - Landfill Site Location: TYPE III
Well ID: MW-1002

GENERAL

Weather Conditions: Sunny 30s W 5-10

Condition of Well: Is Well Accessible Y N Is Well Locked Y N
Is Well Visible Y N Is Drainage Acceptable Y N
Is Well Labeled Y N General Condition Good
Well Diameter 2" Well Type

STATIC WATER LEVEL Date and Time of Measurement: 1/18/23 0948

Top of Casing Elevation Measurement taken from: North Edge of TOC
Depth to Water 15.01 Bottom Depth
Elevation of Water

WELL PURGING

Well Purging: Start Date/Time 1/18/23 0949 Sample collection & Peristaltic Pump &
Well Purging: Complete Date/Time 1/18/23 1004 Purge Equipment: Polyethylene tubing
Flow Rate 200ml/min

Interval	Time	pH	Cond	Turb	DO	Temp	ORP	Static	Units
3 Minutes	0955	7.63	62	11.7	2.5	13.2	-27	15.15	pH (S.U.)
6 Minutes	0958	7.62	62.9	8.9	2.6	13.0	-26	15.16	Specific Conductivity
9 Minutes	1001	7.62	62.5	9.7	2.9	13.0	-26	15.16	(µS/cm) ²
12 Minutes	1004	7.63	62.7	10.3	2.8	13.0	-29	15.16	Turbidity (NTU)
15 Minutes									Dissolved Oxygen (mg/L)
18 Minutes									Temperature (C°)
21 Minutes									Oxidation Reduction Potential
24 Minutes									(MV)
27 Minutes									Static (Feet)
30 Minutes									
33 Minutes									
36 Minutes									
39 Minutes									
42 Minutes									
45 Minutes									
48 Minutes									
51 Minutes									
54 Minutes									
57 Minutes									
60 Minutes									

SAMPLE COLLECTION Date/Time Collected: 1/18/23 1004

Parameters	Bottle Type	Preservative	Quantity
Chloride	250ml	H2SO4	1
TEN	400ml	HCL	1
TOC	250	H2SO4	1
Metals - Diss	400ml	HCL	3
VOC	400ml	HCL	1
CA/PA/Bio/bio/MS			
SW/PAH			

Field Filtered Sample Y N

QA/QC Duplicates

Collocated Y N
Replicate Y N
Split Sample Y N

QA/QC Blanks

Field Blank Y N
Equipment Blank Y N
Trip Blank Y N

Laboratory Test America

QA/QC Lab Blanks

MS/MSD Y N

SAMPLE ID

Jooster
Jean Watson
Signature

COMMENTS:

LOW FLOW GROUNDWATER SAMPLING FIELD DATA FORM

Client: NTM Project Name: City of Livonia - Landfill Site Location: TYPE III
Well ID: MW-101

GENERAL

Weather Conditions: Sunny 30s W 5-10

Condition of Well: Is Well Accessible Y N Is Well Locked Y N
Is Well Visible Y N Is Drainage Acceptable Y N
Is Well Labeled Y N General Condition Good
Well Diameter 2" Well Type

STATIC WATER LEVEL Date and Time of Measurement: 1/18/23 1 1016

Top of Casing Elevation Measurement taken from: North Edge of TOC
Depth to Water 4.56 Bottom Depth
Elevation of Water

WELL PURGING

Well Purging: Start Date/Time 1/18/23 1 1017 Sample collection & Peristaltic Pump &
Well Purging: Complete Date/Time 1/18/23 1 1032 Purge Equipment: Polyethylene tubing
Flow Rate 200ml/min

Interval	Time	pH	Cond	Turb	DO	Temp	ORP	Static	Units
3 Minutes	1023	7.39	592	8.7	1.8	13.9	-27	4.81	pH (S.U.)
6 Minutes	1026	7.40	587	9.2	1.6	13.8	-26	4.84	Specific Conductivity (µS/cm)
9 Minutes	1029	7.41	586	7.9	1.5	13.8	-24	4.84	Turbidity (NTU)
12 Minutes	1032	7.40	583	6.7	1.5	12.8	-23		Dissolved Oxygen (mg/L)
15 Minutes									Temperature (C°)
18 Minutes									Oxidation Reduction Potential (MV)
21 Minutes									Static (Feet)
24 Minutes									
27 Minutes									
30 Minutes									
33 Minutes									
36 Minutes									
39 Minutes									
42 Minutes									
45 Minutes									
48 Minutes									
51 Minutes									
54 Minutes									
57 Minutes									
60 Minutes									

SAMPLE COLLECTION Date/Time Collected: 1/18/23 1 1032

Parameters	Bottle Type	Preservative	Quantity
Chloride	250ml	HCL	1
TEN	250ml	HCL	1
TOC	250ml	HCL	1
Metals - Diss	250ml	HCL	1
VOC	40ml	HCL	3
CAH/PAH/Blk	125ml		1
Substrate			

Field Filtered Sample Y N

QA/QC Duplicates

Collocated Y N
Replicate Y N
Split Sample Y N

QA/QC Blanks

Field Blank Y N
Equipment Blank Y N
Trip Blank Y N

QA/QC Lab Blanks

MS/MSD Y N

Laboratory Test America

SAMPLE ID:

James W. Winters
Signature

COMMENTS:

QTL7
1, 2, 3

Q4
annual

Client: NTH Project Name: CITY OF LUNDA LANDFILL Site Location: TYPE III
Well ID: MW-102

[illegible]

COMMENTS:

LOW FLOW GROUNDWATER SAMPLING FIELD DATA FORM

Client: NTH Project Name: City of Livonia - Landfill Site Location: TYPE III
Well ID: MW-103

GENERAL

Weather Conditions: cloudy 30's W 5-10

Condition of Well: Is Well Accessible Y N Is Well Locked Y N
Is Well Visible Y N Is Drainage Acceptable Y N
Is Well Labeled Y N General Condition Good
Well Diameter 2" Well Type

STATIC WATER LEVEL Date and Time of Measurement: 1/18/23 1148

Top of Casing Elevation Measurement taken from: North Edge of TOC
Depth to Water 13.57 Bottom Depth
Elevation of Water

WELL PURGING

Well Purging: Start Date/Time 1/18/23 1150 Sample collection & Purge Equipment: Peristaltic Pump & Polyethylene tubing
Well Purging: Complete Date/Time 1/18/23 1205
Flow Rate 200ml/min

Interval	Time	pH	Cond	Turb	DO	Temp	ORP	Static	Units
3 Minutes	1156	6.91	536	5.4	1.9	13.6	11	13.72	pH (S.U.)
6 Minutes	1159	6.93	541	6.8	2.0	13.5	12	13.72	Specific Conductivity (µS/cm) ²
9 Minutes	1202	6.93	543	7.3	1.8	13.5	14	13.72	Turbidity (NTU)
12 Minutes	1203	6.94	539	8.1	1.7	13.5	10	13.72	Dissolved Oxygen (mg/L)
15 Minutes									Temperature (C°)
18 Minutes									Oxidation Reduction Potential (MV)
21 Minutes									Static (Feet)
24 Minutes									
27 Minutes									
30 Minutes									
33 Minutes									
36 Minutes									
39 Minutes									
42 Minutes									
45 Minutes									
48 Minutes									
51 Minutes									
54 Minutes									
57 Minutes									
60 Minutes									

SAMPLE COLLECTION Date/Time Collected: 1/18/23 1205

Parameters	Bottle Type	Preservative	Quantity
Chloride	250 ml	HCL	1
TEN	250 ml	HCL	1
TOC	400 ml	HCL	1
Metals - Diss	250 ml	HCL	1
VOC	400 ml	HCL	3
Crude Oil/Bio/Bulk	125 ml		1
SW/PAH			

Field Filtered Sample Y N

QA/QC Duplicates

Collocated Y N
Replicate Y N
Split Sample Y N

QA/QC Blanks

Field Blank Y N
Equipment Blank Y N
Trip Blank Y N

Laboratory Test America

QA/QC Lab Blanks

MS/MSD Y N

SAMPLE ID

W0034
Jamie Wooten
Signature

COMMENTS:

LOW FLOW GROUNDWATER SAMPLING FIELD DATA FORM

Client: NTH Project Name: City of Livonia - Landfill Site Location: TYPE III
Well ID: MW-104A

GENERAL

Weather Conditions: cloudy 30's W5-10

Condition of Well: Is Well Accessible Y N Is Well Locked Y N
Is Well Visible Y N Is Drainage Acceptable Y N
Is Well Labeled Y N General Condition Good
Well Diameter 2" Well Type

STATIC WATER LEVEL

Date and Time of Measurement: 1/18/23 1301
Top of Casing Elevation 15.41 Measurement taken from: North Edge of TOC
Depth to Water Bottom Depth
Elevation of Water

WELL PURGING

Well Purging: Start Date/Time 1/18/23 1302 Sample collection & Peristaltic Pump &
Well Purging: Complete Date/Time 1/18/23 1317 Purge Equipment: Polyethylene tubing
Flow Rate 200ml/min

Interval	Time	pH	Cond	Turb	DO	Temp	ORP	Static	Units
3 Minutes	1308	7.58	619	4.7	2.4	14.0	-26	15.63	pH (S.U.)
6 Minutes	1311	7.59	624	4.9	2.2	13.8	-29	15.63	Specific Conductivity (µS/cm)
9 Minutes	1314	7.57	625	5.8	2.1	13.8	-28	15.63	Turbidity (NTU)
12 Minutes	1317	7.58	626	4.7	2.1	13.8	-27	15.63	Dissolved Oxygen (mg/L)
15 Minutes									Temperature (C°)
18 Minutes									Oxidation Reduction Potential (MV)
21 Minutes									Static (Feet)
24 Minutes									
27 Minutes									
30 Minutes									
33 Minutes									
36 Minutes									
39 Minutes									
42 Minutes									
45 Minutes									
48 Minutes									
51 Minutes									
54 Minutes									
57 Minutes									
60 Minutes									

SAMPLE COLLECTION

Date/Time Collected: 1/18/23 1317

Parameters	Bottle Type	Preservative	Quantity
Chloride	250ml	HCL	1
TEN	250ml	HCL	1
TOC	250ml	HCL	1
Metals - Diss	250ml	HCL	1
VOC	400ml	HCL	3
CAH/Bio/bio/MS	125ml		1
Sulfate			

Field Filtered Sample Y N

QA/QC Duplicates

Collocated Y N
Replicate Y N
Split Sample Y N

QA/QC Blanks

Field Blank Y N
Equipment Blank Y N
Trip Blank Y N

Laboratory: Test America

QA/QC Lab Blanks

MS/MSD Y N

SAMPLE SIGNATURE

Joanna Wooten
Signature

COMMENTS:

LOW FLOW GROUNDWATER SAMPLING FIELD DATA FORM

Client: NTH Project Name: City of Livonia - LANDFILL Site Location: ACT 87 IRAP
Well ID: MW-105

GENERAL

Weather Conditions: Sunny 30s W5-10

Condition of Well: Is Well Accessible Y N Is Well Locked Y N
Is Well Visible Y N Is Drainage Acceptable Y N
Is Well Labeled Y N General Condition Good
Well Diameter 2" Well Type

STATIC WATER LEVEL

Date and Time of Measurement: 1/18/23 10920

Top of Casing Elevation

Depth to Water 13.56

Measurement taken from: North Edge of TOC

Elevation of Water

Bottom Depth

WELL PURGING

Well Purging: Start Date/Time

1/18/23 10921

Sample collection &

Peristaltic Pump &

Well Purging: Complete Date/Time

1/18/23 10936

Purge Equipment:

Polyethylene tubing

Flow Rate 200ml/min

Interval	Time	pH	Cond	Turb	DO	Temp	ORP	Static	Units
3 Minutes	0927	7.73	537	8.2	2.5	12.3	-49	13.79	pH (S.U.)
6 Minutes	0930	7.70	541	7.7	2.4	12.1	-48	13.81	
9 Minutes	0933	7.70	538	10.3	2.3	12.1	-47	13.81	Specific Conductivity
12 Minutes	0936	7.69	539	9.8	2.3	12.1	-49	13.81	(µS/cm) ²
15 Minutes									
18 Minutes									Turbidity (NTU)
21 Minutes									
24 Minutes									Dissolved Oxygen (mg/L)
27 Minutes									
30 Minutes									Temperature (C°)
33 Minutes									
36 Minutes									Oxidation Reduction Potential
39 Minutes									(MV)
42 Minutes									
45 Minutes									Static (Feet)
48 Minutes									
51 Minutes									
54 Minutes									
57 Minutes									
60 Minutes									

SAMPLE COLLECTION

Date/Time Collected

1/18/23 10936

Parameters	Bottle Type	Preservative	Quantity
<u>methane</u>	<u>40ml</u>	<u>HCL</u>	<u>3</u>

Field Filtered Sample Y N /

QA/QC Duplicates

Collocated Y N /

Replicate Y N /

Split Sample Y N /

QA/QC Blanks

Field Blank Y N /

Equipment Blank Y N /

Trip Blank Y N /

Laboratory TEST America

QA/QC Lab Blanks

MS/MSD Y N /

SAMPLED BY

Wester
John Wester
Signature

COMMENTS:

LOW FLOW GROUNDWATER SAMPLING FIELD DATA FORM

Client: NTM Project Name: City of Livonia - Landfill Site Location: TYPE III
Well ID: MW-106

GENERAL

Weather Conditions: Partly cloudy 30's W 5-10

Condition of Well: Is Well Accessible Y N
Is Well Visible Y N
Is Well Labeled Y N
Well Diameter 2"

Is Well Locked Y N
Is Drainage Acceptable Y N
General Condition Good
Well Type

STATIC WATER LEVEL

Date and Time of Measurement: 1/18/13 1045

Top of Casing Elevation 11.81
Depth to Water
Elevation of Water

Measurement taken from: North Edge of TOC
Bottom Depth

WELL PURGING

Well Purging: Start Date/Time 1/18/13 1046
Well Purging: Complete Date/Time 1/18/13 1058
Flow Rate 200ml/min

Sample collection & Purge Equipment: Peristaltic Pump & Polyethylene tubing

Interval	Time	pH	Cond	Turb	DO	Temp	ORP	Static	Units
3 Minutes	1052	7.53	521	6.3	2.0	13.3	-31	11.95	pH (S.U.)
6 Minutes	1055	7.53	519	4.6	1.9	13.3	-30	11.95	Specific Conductivity (µS/cm)
9 Minutes	1058	7.54	518	5.1	1.9	13.3	-30	11.95	Turbidity (NTU)
12 Minutes									Dissolved Oxygen (mg/L)
15 Minutes									Temperature (C°)
18 Minutes									Oxidation Reduction Potential (MV)
21 Minutes									Static (Feet)
24 Minutes									
27 Minutes									
30 Minutes									
33 Minutes									
36 Minutes									
39 Minutes									
42 Minutes									
45 Minutes									
48 Minutes									
51 Minutes									
54 Minutes									
57 Minutes									
60 Minutes									

SAMPLE COLLECTION

Date/Time Collected: 1/18/13 1058

Parameters	Bottle Type	Preservative	Quantity
Chloride	250ml	HCL	1
TEN	250ml	HCL	1
TOC	250ml	HCL	1
Metals - Diss	250ml	HCL	1
VOC	400ml	HCL	1
CAH/Bio/bio/125	125ml		1
Sulfate			

Field Filtered Sample Y N

QA/QC Duplicates

Collocated Y N
Replicate Y N
Split Sample Y N

QA/QC Blanks

Field Blank Y N
Equipment Blank Y N
Trip Blank Y N

Laboratory: Test America

QA/QC Lab Blanks

MS/MSD Y N

SAMPLE SIGNATURE

James W. Wooten
Signature

LOW FLOW GROUNDWATER SAMPLING FIELD DATA FORM

Client: NTH Project Name: City of Livonia - LANDFILL Site Location: ACT 87 IRAP
Well ID: MW-107

GENERAL

Weather Conditions: Cloudy 30s W 5-10

Condition of Well: Is Well Accessible Y N Is Well Locked Y N
Is Well Visible Y N Is Drainage Acceptable Y N
Is Well Labeled Y N General Condition Good
Well Diameter 2" Well Type

STATIC WATER LEVEL

Date and Time of Measurement: 1/18/23 1337

Top of Casing Elevation

Depth to Water 12.74

Measurement taken from: North Edge of TOC

Elevation of Water

Bottom Depth

WELL PURGING

Well Purging: Start Date/Time

1/18/23 1338

Sample collection &

Peristaltic Pump &

Well Purging: Complete Date/Time

1/18/23 1353

Purge Equipment:

Polyethylene tubing

Flow Rate 200ml/min

Interval	Time	pH	Cond	Turb	DO	Temp	ORP	Static	Units
3 Minutes	1344	7.81	541	4.4	1.7	14.2	-36	13.0	pH (S.U.)
6 Minutes	1347	7.74	533	3.9	1.9	14.1	-37	13.0	
9 Minutes	1350	7.73	537	3.6	2.0	14.0	-36	13.0	Specific Conductivity
12 Minutes	1353	7.73	541	5.1	1.9	14.0	-35	13.0	(µS/cm) ²
15 Minutes									
18 Minutes									Turbidity (NTU)
21 Minutes									
24 Minutes									Dissolved Oxygen (mg/L)
27 Minutes									
30 Minutes									Temperature (C°)
33 Minutes									
36 Minutes									Oxidation Reduction Potential
39 Minutes									(MV)
42 Minutes									
45 Minutes									Static (Feet)
48 Minutes									
51 Minutes									
54 Minutes									
57 Minutes									
60 Minutes									

SAMPLE COLLECTION

Date/Time Collected

1/18/23 1353

Parameters	Bottle Type	Preservative	Quantity
<u>Methane</u>	<u>40ML</u>	<u>HCL</u>	<u>3</u>

Field Filtered Sample Y N /

QA/QC Duplicates

Collocated Y N /

Replicate Y N /

Split Sample Y N /

QA/QC Blanks

Field Blank Y N /

Equipment Blank Y N /

Trip Blank Y N /

Laboratory TEST America

QA/QC Lab Blanks

MS/MSD Y N /

SAMPLED BY

Wroster
Jimm Wroster
Signature

COMMENTS:

LOW FLOW GROUNDWATER SAMPLING FIELD DATA FORM

Client: NTM Project Name: City of Livonia - Landfill Site Location: TYPE III
Well ID: MW-10B

GENERAL

Weather Conditions: Cloudy 30's W 5-10

Condition of Well: Is Well Accessible Y N Is Well Locked Y N
Is Well Visible Y N Is Drainage Acceptable Y N
Is Well Labeled Y N General Condition GOOD
Well Diameter 2" Well Type _____

STATIC WATER LEVEL Date and Time of Measurement: 1/18/23 12:19

Top of Casing Elevation _____ Measurement taken from: North Edge of TOC
Depth to Water 15.91 Bottom Depth _____
Elevation of Water _____

WELL PURGING

Well Purging: Start Date/Time 1/18/23 12:21 Sample collection & Peristaltic Pump &
Well Purging: Complete Date/Time 1/18/23 12:38 Purge Equipment: Polyethylene tubing
Flow Rate 200ml/min

Interval	Time	pH	Cond	Turb	DO	Temp	ORP	Static	Units
3 Minutes	12:24	7.43	487	6.9	1.1	14.0	-17	16.0	pH (S.U.)
6 Minutes	12:32	7.44	495	6.7	1.3	14.0	-20	16.0	Specific Conductivity
9 Minutes	12:35	7.43	489	5.5	1.4	13.9	-21	16.0	(µS/cm) ²
12 Minutes	12:38	7.44	492	6.3	1.3	13.9	-22	16.0	Turbidity (NTU)
15 Minutes									Dissolved Oxygen (mg/L)
18 Minutes									Temperature (C°)
21 Minutes									Oxidation Reduction Potential
24 Minutes									(MV)
27 Minutes									Static (Feet)
30 Minutes									
33 Minutes									
36 Minutes									
39 Minutes									
42 Minutes									
45 Minutes									
48 Minutes									
51 Minutes									
54 Minutes									
57 Minutes									
60 Minutes									

SAMPLE COLLECTION Date/Time Collected: 1/18/23 12:38

Parameters	Bottle Type	Preservative	Quantity
Chloride	200 ml	HCl	1
TEN	200 ml	HCl	1
TOC	250	HCl	1
Metals - Diss	250	HCl	1
VOC	400 ml	HCl	3
CAH/PAH/Blk	125	—	1
Sulfate	—	—	—

Field Filtered Sample Y N

QA/QC Duplicates

Collocated Y N
Replicate Y N
Split Sample Y N

QA/QC Blanks

Field Blank Y N
Equipment Blank Y N
Trip Blank Y N

Laboratory: Test America

QA/QC Lab Blanks

MS/MSD Y N

SAMPLE PREP

Wagner
James Wagner
Signature

COMMENTS:

LOW FLOW GROUNDWATER SAMPLING FIELD DATA FORM

Client: NTM Project Name: City of Livonia - Landfill Site Location: TYPE III
Well ID: MW-109

GENERAL										
Weather Conditions: <u>mostly cloudy 30's W5-10</u>										
Condition of Well:					Is Well Accessible <u>Y</u> N Is Well Visible <u>Y</u> N Is Well Labeled <u>Y</u> N Well Diameter <u>2"</u>					
					Is Well Locked <u>Y</u> N Is Drainage Acceptable <u>Y</u> N General Condition <u>Good</u> Well Type _____					
STATIC WATER LEVEL Date and Time of Measurement: <u>1/18/23 1110</u>										
Top of Casing Elevation _____					Measurement taken from: <u>North Edge of TOC</u>					
Depth to Water <u>17.67</u>					Bottom Depth _____					
WELL PURGING										
Well Purging: Start Date/Time <u>1/18/23 1111</u>					Sample collection & Purge Equipment		Peristaltic Pump & Polyethylene tubing			
Well Purging: Complete Date/Time <u>1/18/23 1123</u>										
Flow Rate <u>200ml/min</u>										
Interval	Time	pH	Cond	Turb	DO	Temp	ORP	Static	Units	
3 Minutes	1114	7.32	616	4.8	3.1	14.2	-53	17.93	pH (S.U.)	
6 Minutes	1117	7.36	632	5.5	3.4	14.0	-55	17.93	Specific Conductivity (µS/cm) ²	
9 Minutes	1120	7.36	635	6.3	3.3	14.0	-56	17.93		
12 Minutes	1123	7.35	636	6.0	3.4	14.0	-57	17.93	Turbidity (NTU)	
15 Minutes										
18 Minutes									Dissolved Oxygen (mg/L)	
21 Minutes										
24 Minutes									Temperature (C°)	
27 Minutes										
30 Minutes									Oxidation Reduction Potential (MV)	
33 Minutes										
36 Minutes									Static (Feet)	
39 Minutes										
42 Minutes										
45 Minutes										
48 Minutes										
51 Minutes										
54 Minutes										
57 Minutes										
60 Minutes										
SAMPLE COLLECTION Date/Time Collected <u>1/18/23 1123</u>										
Parameters				Bottle Type	Preservative	Quantity	Field Filtered Sample <u>Y</u> N			
QTL4 1, 2, 3	Chloride	250ml	—	—	—	—	QA/QC Duplicates			
	TEN	250ml	—	—	—	—	Collocated	<u>Y</u>	<u>N</u>	
	TOC	40ml	HCL	—	—	—	Replicate	<u>Y</u>	<u>N</u>	
	Amphib- Discs	250	HCL	—	—	—	Split Sample	<u>Y</u>	<u>N</u>	
Q4 Amal	VOC	40ml	HCL	—	—	—	QA/QC Blanks			
	CA/PA/Amal/Blank	125	—	—	—	—	Field Blank	<u>Y</u>	<u>N</u>	
	Subs	—	—	—	—	—	Equipment Blank	<u>Y</u>	<u>N</u>	
							Trip Blank	<u>Y</u>	<u>N</u>	
Laboratory <u>Test America</u>							QA/QC Lab Blanks			
							MS/MSD <u>Y</u> <u>N</u>			
SAMPLED BY: <u>James Weston</u> Signature										

COMMENTS:

Acct. Name: CITY OF Livonia-NH Field Personnel: WOOSTER
Acct. Number: _____ Observers: _____
Project Manager: _____ Site ID: GLWA MH
Site Description: Manhole - Corner of Hubbard & Industrial - 13' East of
driveway 6' South curb @ Industrial

Composite Sample Data: Timed Interval: Remix ^{JW} Proportional: _____

• Sampling Initiated: Time: _____ Date: _____ Weather: _____
• Sampling Completed: Time: _____ Date: _____ Weather: _____
• Sample Appearance: _____

Grab Sample Data: Direct: _____ Other: SS Bucket

• Sample Collected: Time: 0850 Date: 1/19/23 Weather: LT Rain 30's
• Sample Appearance: SL. Cloudy Grey

Equipment Calibration: pH(su) 7.00/10.00 DO(mg/l) _____ Cond.(umhos/cm) 1413/1413
1st Measurement: pH(su) 7.43 DO(mg/l) _____ Cond.(umhos/cm) 2260
2nd Measurement: pH(su) _____ DO(mg/l) _____ Cond.(umhos/cm) _____
Total Res. Cl (mg/l) _____ Free Cl (mg/l) _____
Temp. (c) 13.9 Sulfite (mg/l) _____

Sample Pick Up: _____ Sample Drop Off: _____

Flow Measurement: Initial Totalizer Reading: _____ Time: _____ Date: _____
Final Totalizer Reading: _____ Time: _____ Date: _____

Comments: _____

pH, COND, Temp taken as a grab sample on 1/19/23 @ 0850

Sampled by: _____

(Signature)

Water/Wastewater Field Notes & Observations

Field Personnel: Wooster
Observers: —
Site ID: Swm-1

Sampled by: James Woodman
(Signature)

Environmental Sampling Services, Inc.

Water/Wastewater
Field Notes & Observations

Acct. Name: CITY OF LIVON, MI
Acct. Number: _____
Project Manager: _____
Site Description: _____

Field Personnel: _____
Observers: _____
Site ID: LC-1

Composite Sample Data: Timed Interval: _____ Proportional: _____

- Sampling Initiated: Time: _____ Date: _____ Weather: _____
- Sampling Completed: Time: _____ Date: _____ Weather: _____
- Sample Appearance: _____

Grab Sample Data: Direct: _____ Other: Peristaltic Pump

- Sample Collected: Time: _____ Date: _____ Weather: _____
- Sample Appearance: _____

Equipment Calibration: pH(su) _____ DO(mg/l) _____ Cond.(umhos/cm) _____
1st Measurement: pH(su) _____ DO(mg/l) _____ Cond.(umhos/cm) _____
2nd Measurement: pH(su) _____ DO(mg/l) _____ Cond.(umhos/cm) _____
Total Res. Cl (mg/l) _____ Free Cl (mg/l) _____
Temp. (c) _____ Sulfite (mg/l) _____

Sample Pick Up: _____ Sample Drop Off: _____

Flow Measurement: Initial Totalizer Reading: _____ Time: _____ Date: _____
Final Totalizer Reading: _____ Time: _____ Date: _____

Comments: Dry - No Sample Collected

Sampled by: [Signature]
(Signature)

Chain of Custody Record

[illegible]

[illegible]

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Environment Testing

Phone: 716-691-2600 Fax: 716-691-7991		Carrier Tracking No(s):		COC No: 480-178898-32189.1	
Client Information		Lab PM: Beninati, John		Page: Page 1 of 2	
Client Contact: Mr. Alan Erickson		E-Mail: John.Beninati@et.eurofinsus.com		Job #:	
Company: NTH Consultants, Ltd.		PWSID:		Analysis Requested	
Address: Attn: A/P Code: T5904 41780 Six Mile Rd Suite 201		Due Date Requested:		Preservation Codes:	
City: Northville		TAT Requested (days):		A - HCL M - Hexane	
State, Zip: MI, 48168		Compliance Project: ☐ Yes ☐ No		B - NaOH N - None	
Phone: 248-662-2737(Tel) 248-324-5179(Fax)		PO #: 62-180172		C - Zn Acetate O - AsNaO2	
Email: aerickson@nthconsultants.com		WO #:		D - Nitric Acid P - Na2O4S	
Project Name: City of Livonia, MI - Glendale Landfill/ Event Desc: IRAP GW Dis		Project #: 48020805		E - NaHSO4 Q - Na2SO3	
Site: Michigan		SSOW#:		F - MeOH R - Na2S2O3	
Sample Identification		Sample Date		Sample Time	
Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, ST=Tissue, A=Air)		Field Filtered Sample (Yes or No)	
Preservation Code:		Perform MS/MSD (Yes or No)		RSK_175 - Methane	
RL-8R		01/18/23 1535		G Water	
RL-19		01/19/23 1116		G Water	
RL-20		01/19/23 1023		G Water	
RL-21		01/19/23 0937		G Water	
RL-22		01/18/23 1617		G Water	
RL-25		01/18/23 1447		G Water	
RL-29		01/18/23 0912		G Water	
RL-30		01/19/23 1048		G Water	
RL-31				Water	
MW-2		01/18/23 0912		G Water	
MW-105		01/18/23 0936		G Water	
Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Total Number of containers	
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological		☐ Return To Client ☐ Disposal By Lab ☐ Archive For Months		Special Instructions/Note:	
Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/QC Requirements:		Other:	
Empty Kit Relinquished by:		Date:		Method of Shipment:	
Relinquished by: [Signature]		Date/Time: 01/19/23 1220		Company: ESS	
Relinquished by:		Date/Time:		Company:	
Relinquished by:		Date/Time:		Company:	
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:	
Ver: 06/08/2021					

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

eurofins

Environment Testing

[illegible]

880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Environment Testing

[illegible]

INTERIM REMEDIAL ACTION PLAN (IRAP) REPORT

First Quarter 2023

City of Livonia – Former Act 87 Landfill

City of Livonia
Livonia, Michigan

April 28, 2023
NTH Project #: 62-180172-Q123I



NTH Consultants, Ltd.
41780 Six Mile Rd.
Suite 200
Northville, MI 48168



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1.0 INTRODUCTION

NTH Consultants, Ltd. (NTH) has prepared this Interim Remedial Action Plan (IRAP) report for the First Quarter 2023 at the Former Act 87 City of Livonia Landfill (herein after referred to as the Former Act 87 Landfill). The Former Act 87 Landfill is east of the active Type III Landfill located at 32500 Glendale Street in the City of Livonia, Wayne County, Michigan. Landfill gas monitoring, groundwater sampling, and reporting activities were conducted in accordance with the requirements of the *Remedial Alternatives Feasibility Study / IRAP (RAFS/IRAP)* dated January 2008 and modifications requested/obtained by TriMedia in 2017. For reference, Figure 1, Sample Location Plan – IRAP (in Appendix A, Figures & Tables) depicts the general site layout, gas vent, gas probe and gas flare locations.

2.0 MONITORING RESULTS

Environmental Sampling Services (ESS) of Hartland, Michigan conducted the groundwater sampling for this monitoring event on January 18 and 19, 2023. ESS performed gas monitoring at the gas probe and vent locations on February 16, 2023. Eurofins Buffalo laboratory (EBL) of Amherst, New York, performed the laboratory analysis. Environmental monitoring field data forms and the analytical data report prepared by EBL are included in Appendix B, Analytical Report and Field Data Forms.

2.1 SAMPLING & ANALYTICAL PROCEDURES

Landfill gas readings are collected from gas probes, vents, and blower/flare systems using a GEM 2000 Plus® Gas Meter. The meter is calibrated prior to use, and proper function is confirmed before conducting landfill gas readings.

For the groundwater sampling, designated sampling parameters, test methods, method detection limits, and corresponding containers, preservatives, and holding times for the samples collected are specified in RAFS/IRAP. Water level measurement procedures and sample collection methods for the sampling event were performed in accordance with the RAFS/IRAP.

2.1.1 Landfill Gas Monitoring

Methane monitoring at gas probes, gas vents, and two blower/flare systems was conducted on February 16, 2023. Table 1, Methane Monitoring Results (located in Appendix A) provides a summary of current gas readings. Graphs depicting historical percent of the lower explosive limit (LEL) methane gas concentrations are included as Appendix C.



2.1.2 Groundwater Monitoring

Groundwater samples were collected from nine designated gas probes (RL-8R, RL-19, RL-20, RL-21, RL-22, RL-25, RL-29, RL-30, and RL-31) and sent to EBL for laboratory analysis of dissolved methane. The analytical results for these probes are summarized on Table 2 - Summary of Groundwater Methane Analysis – January 2023, included in Appendix A. The lab report is included in Appendix B. Gas probes and monitoring wells sampled as part of the Type III Landfill groundwater monitoring program were also analyzed for dissolved methane. The laboratory analytical data presenting the dissolved methane results for these additional locations is also included in the EET laboratory report.

2.2 GROUNDWATER ELEVATION MEASUREMENTS

Prior to sampling, ESS recorded groundwater elevations at the probes on January 18, 2023. Measured groundwater elevations are listed on Table 2. These elevations were used to develop potentiometric surface elevation contours which are presented on Figure 1 in Appendix A. Based on these contours shallow groundwater apparently flows toward the east which is similar to historic conditions.

2.3 QUALITY ASSURANCE & QUALITY CONTROL

Analytical methodologies and chain-of-custody forms are included with the laboratory data report contained in Appendix B. Batch quality control for each of the methodologies performed was reviewed by EBL and found to be within acceptable criteria, with the exceptions denoted with “Data Qualifiers” included in the EET report. As such, NTH utilized the data as reported by EBL.

2.4 LANDFILL GAS MONITORING RESULTS

Table 1, Methane Monitoring Results, in Appendix A, summarizes the gas readings collected during the current monitoring event. The results are further discussed in the following sections.

2.4.1 Inside the Act 87 Landfill Boundary

The January 2008 IRAP report established a remedial goal for landfill gas probes located within the Former Act 87 Landfill boundary of 1.25 percent methane (or 25 percent of the lower explosive limit (LEL)). During the First Quarter 2023, methane was measured at landfill gas probes located within the Former Act 87 Landfill boundary at concentrations ranging from 0 (non-detect) to greater than 100 percent of the LEL.

Gas probes RL-1, RL-4, RL-6, RL-13, RL-14, and RL-28, located within the Former Act 87 Landfill, exhibited methane readings above the remedial goal of 25 percent LEL. The measured methane concentrations at the six probes were greater than 100 percent LEL. These are the same probes that have exhibited elevated methane readings in the past.



2.4.2 Outside the Former Act 87 Landfill Boundary

The January 2008 IRAP report established a remedial goal for landfill gas probes located outside the Former Act 87 Landfill boundary of 0 percent methane (0% LEL). Methane was not detected at any of the gas probes located outside the Former Act 87 Landfill boundary.

2.4.3 Landfill Gas Vent Readings

Two gas vents located within the Former Act 87 Landfill boundary (GV-1 and GV-11) exhibited methane concentrations greater than 100 percent LEL. No methane was detected at the other gas vents that were monitored during this event, except for a very low reading (1 percent LEL) at GV-12. The detection of methane at the gas vents is an indication of the effectiveness of these devices for releasing methane and thereby mitigating potential subsurface migration.

2.5 GROUNDWATER LABORATORY RESULTS

Groundwater analytical results were compared to the Michigan Part 201 Generic Groundwater Screening Criteria for methane (Criteria) as defined under Rules 200.44 and 200.49 of the Michigan Administrative Code, effective December 30, 2013. Laboratory results are summarized on Table 2, Summary of Groundwater Methane Analysis - January 2023, included in Appendix A.

As shown on Table 2, during the First Quarter 2023 sampling event, dissolved methane was detected in groundwater at seven of the nine gas probe sampling locations. None of the reported dissolved methane concentrations exceeded the EGLE Part 201 screening criteria.

3.0 CONCLUSIONS & RECOMMENDATIONS

Based on the information presented in this report we offer the following conclusions and recommendations:

- Methane was detected at concentrations greater than the remedial goal (25 percent LEL) inside the landfill boundary at six locations (RL-1, RL-4, RL-6, RL-13, RL-14, and RL-28).
- Methane was not detected above the remedial goal (0 percent LEL) outside the landfill boundary.
- Dissolved methane was detected in groundwater at seven of the nine probes sampled; none of the reported concentrations exceeded the Part 201 (Flammability and Explosivity) Screening Level
- In general, landfill gas and groundwater monitoring results are similar to those previously observed.



Based on the information presented in this report, subsurface gas conditions appear to be stabilized at the Former Act 87 Landfill and the next sampling event consisting of quarterly gas readings and dissolved methane at select sampling locations is scheduled for Second Quarter 2023.

APPENDIX A

FIGURE & TABLES

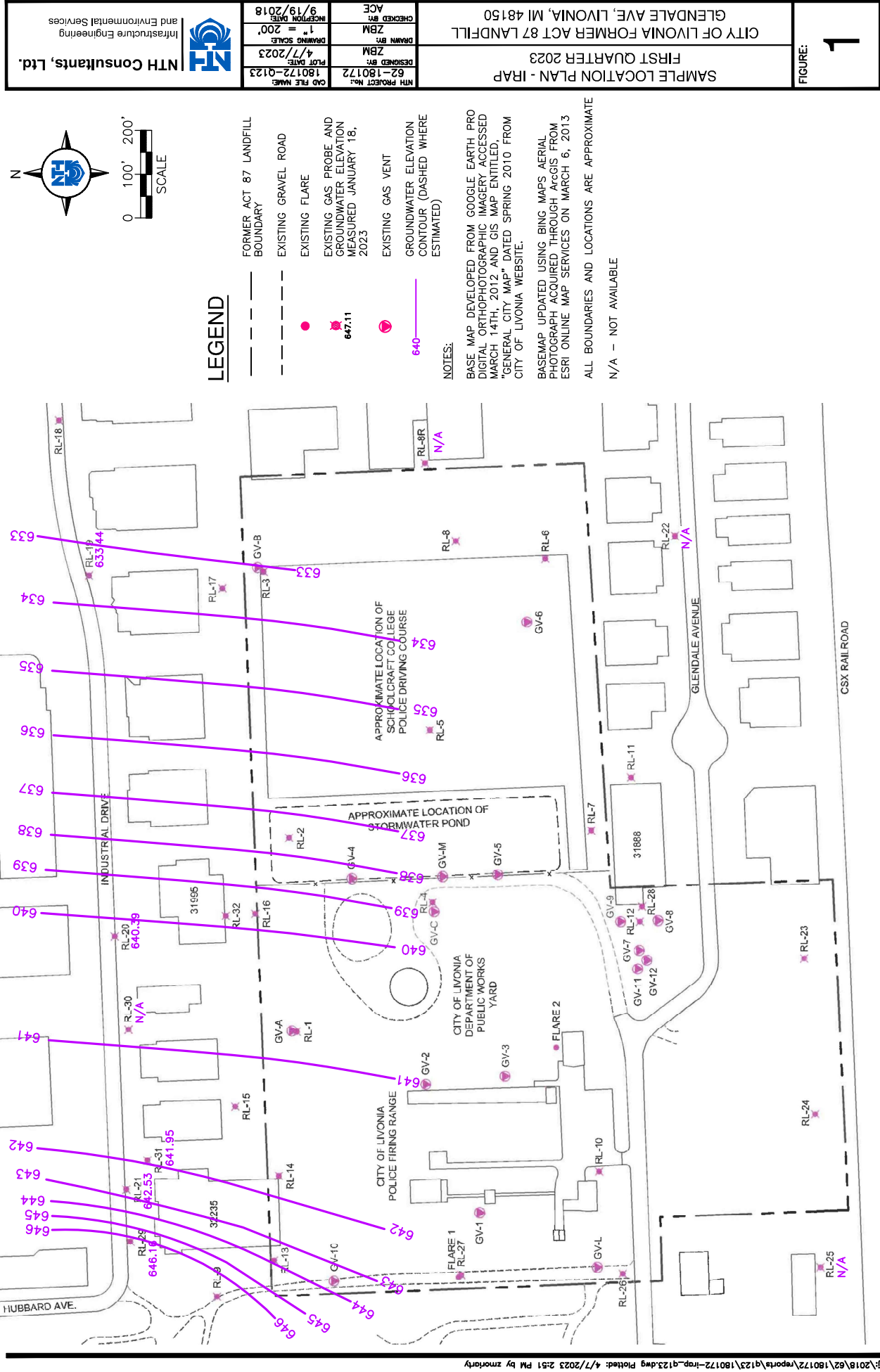


Table 1: Methane Monitoring Results
Former Act 87 City of Livonia Landfill - IRAP
2/16/2023

Probe	LEL (%)	H ₂ S (PPM)	CO (PPM)	O ₂ (%)
Gas Vents and Gas Probes Located Inside Landfill Limits				
GV-A	0.0	0.0	0.0	21.2
GV-B	0.0	0.0	0.0	21.0
GV-C	0.0	0.0	0.0	21.2
GV-L	0.0	0.0	0.0	21.4
GV-M	0.0	0.0	0.0	21.0
GV-1	>100	1.0	0.0	13.0
GV-2	0.0	0.0	0.0	20.2
GV-3	0.0	0.0	0.0	20.8
GV-4	0.0	0.0	0.0	21.2
GV-5	Livonia PD Driving Course - could not locate			
GV-6	Livonia PD Driving Course - could not locate			
GV-7	0.0	0.0	0.0	21.0
GV-8	0.0	0.0	0.0	20.7
GV-9	0.0	0.0	0.0	20.3
GV-10	0.0	0.0	0.0	21.6
GV-11	>100	0.0	0.0	10.6
GV-12	1.0	0.0	0.0	18.9
RL-1	>100	0.0	0.0	11.9
RL-2	Livonia PD Driving Course - could not locate			
RL-3	0.0	0.0	0.0	20.5
RL-4	>100	0.0	0.0	8.8
RL-5	Livonia PD Driving Course - could not locate			
RL-6	>100	5.0	1.0	16.1
RL-7	0.0	0.0	0.0	19.3
RL-8R	0.0	0.0	0.0	21.2
RL-10	0.0	0.0	0.0	12.1
RL-12	0.0	0.0	0.0	20.6
RL-13	>100	11.0	0.0	16.7
RL-14	>100	0.0	0.0	14.2
RL-23	Could not locate - possibly missing			
RL-24	Could not locate - possibly missing			
RL-26	Could not locate - possibly missing			
RL-27	0.0	0.0	0.0	20.4
RL-28	>100	0.0	0.0	15.3
Flare 1	0.0	0.0	0.0	20.2
Flare 2	0.0	0.0	0.0	20.0
Gas Probes Located Outside Landfill Limits				
RL-9	Abandoned			
RL-11	0.0	0.0	0.0	13.0
RL-15	0.0	0.0	0.0	15.0
RL-16	0.0	0.0	0.0	17.2
RL-17	0.0	0.0	0.0	17.4
RL-18	0.0	0.0	0.0	20.7
RL-19	0.0	0.0	0.0	20.1
RL-20	0.0	0.0	0.0	20.0
RL-21	0.0	0.0	0.0	20.5
RL-22	0.0	0.0	0.0	21.3
RL-25	0.0	0.0	0.0	20.9
RL-29	0.0	0.0	0.0	20.0
RL-30	0.0	0.0	0.0	19.9
RL-31	0.0	0.0	0.0	19.5
RL-32	0.0	0.0	0.0	19.7

- Notes:
- 1) LEL - Percent of Lower Explosive Limit
 - 2) PPM - Parts per Million
 - 3) H₂S - Hydrogen Sulfide
 - 4) CO - Carbon Monoxide
 - 5) O₂ - Oxygen (volume percent)

TABLE 2
Summary of Groundwater Methane Analysis - January 2023
Former Act 87 City of Livonia Landfill
NTH Project No. 62-180172-Q123

	Gas Probe Groundwater Sampling Locations									Part 201 Flammability and Explosivity Screening Level (ug/L)
	RL-8R	RL-19	RL-20	RL-21	RL-22	RL-25	RL-29	RL-30	RL-31	
TOC Elevation	640.17	640.73	645.11	645.84	641.88	651.80	649.59	647.02	646.68	
Depth to Water	NA	7.29	4.72	3.31	NA	NA	3.43	NA	4.73	
Water Elevation	NA	633.44	640.39	642.53	NA	NA	646.16	NA	641.95	
Methane (ug/L)	10	390	490	1,300	ND	4,800	29	480	DRY	10,000

Notes:

ug/L - Micrograms per liter (parts per billion)

NA - Not Accessible/blocked - Unable to obtain groundwater level; probe cap could not be removed

ND - Not detected above the laboratory reporting limit

DRY - Well Purged Dry - No sample collected

APPENDIX B

ANALYTICAL REPORT & FIELD DATA FORMS

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Alan Erickson
NTH Consultants, Ltd.
Attn: A/P Code: T5904
41780 Six Mile Rd
Suite 201
Northville, Michigan 48168
Generated 2/1/2023 8:46:36 AM

JOB DESCRIPTION

City of Livonia, MI - Glendale Landfill
IRAP GW Dissolved Methane (1Q,2Q,3Q,4Q)

JOB NUMBER

480-205656-1

Eurofins Buffalo

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing Northeast, LLC Buffalo and its client. All questions regarding this report should be directed to the Eurofins Environment Testing Northeast, LLC Buffalo Project Manager or designee who has signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
2/1/2023 8:46:36 AM

Authorized for release by
John Beninati, Project Manager
John.Beninati@et.eurofinsus.com
(716)504-9874



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Definitions/Glossary

Client: NTH Consultants, Ltd.

Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205656-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: NTH Consultants, Ltd.
Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205656-1

Job ID: 480-205656-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-205656-1

Comments

No additional comments.

Receipt

The samples were received on 1/21/2023 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.0° C.

GC VOA

Method RSK-175: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-105 (480-205656-1), MW-107 (480-205656-2), MW-2 (480-205656-3), RL-19 (480-205656-4), RL-20 (480-205656-5), RL-21 (480-205656-6), RL-25 (480-205656-8) and RL-30 (480-205656-10). Elevated reporting limits (RLs) are provided.

Method RSK-175: The following sample(s) was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed outside the 7-day holding time specified for unpreserved samples but within the 14-day holding time specified for preserved samples: RL-8R (480-205656-11).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: NTH Consultants, Ltd.
Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205656-1

Client Sample ID: MW-105

Lab Sample ID: 480-205656-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Methane	14000		440	ug/L	110		RSK-175	Total/NA

Client Sample ID: MW-107

Lab Sample ID: 480-205656-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Methane	4500		180	ug/L	44		RSK-175	Total/NA

Client Sample ID: MW-2

Lab Sample ID: 480-205656-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Methane	10000		440	ug/L	110		RSK-175	Total/NA

Client Sample ID: RL-19

Lab Sample ID: 480-205656-4

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Methane	390		88	ug/L	22		RSK-175	Total/NA

Client Sample ID: RL-20

Lab Sample ID: 480-205656-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Methane	490		88	ug/L	22		RSK-175	Total/NA

Client Sample ID: RL-21

Lab Sample ID: 480-205656-6

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Methane	1300		180	ug/L	44		RSK-175	Total/NA

Client Sample ID: RL-22

Lab Sample ID: 480-205656-7

No Detections.

Client Sample ID: RL-25

Lab Sample ID: 480-205656-8

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Methane	4800		180	ug/L	44		RSK-175	Total/NA

Client Sample ID: RL-29

Lab Sample ID: 480-205656-9

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Methane	29		4.0	ug/L	1		RSK-175	Total/NA

Client Sample ID: RL-30

Lab Sample ID: 480-205656-10

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Methane	480		88	ug/L	22		RSK-175	Total/NA

Client Sample ID: RL-8R

Lab Sample ID: 480-205656-11

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Methane	10		4.0	ug/L	1		RSK-175	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample Results

Client: NTH Consultants, Ltd.
Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205656-1

Client Sample ID: MW-105

Date Collected: 01/18/23 09:36

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205656-1

Matrix: Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	14000		440	ug/L			01/31/23 16:17	110

Client Sample Results

Client: NTH Consultants, Ltd.
Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205656-1

Client Sample ID: MW-107

Lab Sample ID: 480-205656-2

Date Collected: 01/18/23 13:53

Matrix: Water

Date Received: 01/21/23 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	4500		180	ug/L			01/31/23 16:36	44

Client Sample Results

Client: NTH Consultants, Ltd.
Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205656-1

Client Sample ID: MW-2

Date Collected: 01/18/23 09:12

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205656-3

Matrix: Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	10000		440	ug/L			01/31/23 16:55	110

Client Sample Results

Client: NTH Consultants, Ltd.
Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205656-1

Client Sample ID: RL-19
Date Collected: 01/19/23 11:16
Date Received: 01/21/23 10:00

Lab Sample ID: 480-205656-4
Matrix: Water

Method: RSK-175 - Dissolved Gases (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Methane	390		88	ug/L			01/31/23 17:14	22	

Client Sample Results

Client: NTH Consultants, Ltd.
Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205656-1

Client Sample ID: RL-20

Lab Sample ID: 480-205656-5

Date Collected: 01/19/23 10:23

Matrix: Water

Date Received: 01/21/23 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	490		88	ug/L			01/31/23 17:32	22

Client Sample Results

Client: NTH Consultants, Ltd.
Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205656-1

Client Sample ID: RL-21

Lab Sample ID: 480-205656-6

Date Collected: 01/19/23 09:37

Matrix: Water

Date Received: 01/21/23 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	1300		180	ug/L			01/31/23 17:51	44

Client Sample Results

Client: NTH Consultants, Ltd.
Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205656-1

Client Sample ID: RL-22

Date Collected: 01/18/23 16:17

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205656-7

Matrix: Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		4.0	ug/L			01/31/23 19:44	1

Client Sample Results

Client: NTH Consultants, Ltd.
Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205656-1

Client Sample ID: RL-25

Date Collected: 01/18/23 14:47

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205656-8

Matrix: Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	4800		180	ug/L			01/31/23 18:29	44

Client Sample Results

Client: NTH Consultants, Ltd.
Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205656-1

Client Sample ID: RL-29

Lab Sample ID: 480-205656-9

Date Collected: 01/19/23 09:12

Matrix: Water

Date Received: 01/21/23 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	29		4.0	ug/L			01/31/23 18:48	1

Client Sample Results

Client: NTH Consultants, Ltd.
Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205656-1

Client Sample ID: RL-30

Lab Sample ID: 480-205656-10

Date Collected: 01/19/23 10:48

Matrix: Water

Date Received: 01/21/23 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	480		88	ug/L			01/31/23 19:07	22

Client Sample Results

Client: NTH Consultants, Ltd.
Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205656-1

Client Sample ID: RL-8R

Lab Sample ID: 480-205656-11

Date Collected: 01/18/23 15:35

Matrix: Water

Date Received: 01/21/23 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	10		4.0	ug/L			01/31/23 20:03	1

QC Sample Results

Client: NTH Consultants, Ltd.
Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205656-1

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 480-657453/3

Matrix: Water

Analysis Batch: 657453

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		4.0	ug/L			01/31/23 14:43	1

Lab Sample ID: LCS 480-657453/4

Matrix: Water

Analysis Batch: 657453

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methane	19.4	17.3		ug/L		89	85 - 120

Lab Sample ID: LCSD 480-657453/5

Matrix: Water

Analysis Batch: 657453

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methane	19.4	17.8		ug/L		92	85 - 120	3	50

QC Association Summary

Client: NTH Consultants, Ltd.
Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205656-1

GC VOA

Analysis Batch: 657453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205656-1	MW-105	Total/NA	Water	RSK-175	
480-205656-2	MW-107	Total/NA	Water	RSK-175	
480-205656-3	MW-2	Total/NA	Water	RSK-175	
480-205656-4	RL-19	Total/NA	Water	RSK-175	
480-205656-5	RL-20	Total/NA	Water	RSK-175	
480-205656-6	RL-21	Total/NA	Water	RSK-175	
480-205656-7	RL-22	Total/NA	Water	RSK-175	
480-205656-8	RL-25	Total/NA	Water	RSK-175	
480-205656-9	RL-29	Total/NA	Water	RSK-175	
480-205656-10	RL-30	Total/NA	Water	RSK-175	
480-205656-11	RL-8R	Total/NA	Water	RSK-175	
MB 480-657453/3	Method Blank	Total/NA	Water	RSK-175	
LCS 480-657453/4	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 480-657453/5	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Lab Chronicle

Client: NTH Consultants, Ltd.
Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205656-1

Client Sample ID: MW-105

Date Collected: 01/18/23 09:36

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205656-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	RSK-175		110	657453	DSC	EET BUF	01/31/23 16:17

Client Sample ID: MW-107

Date Collected: 01/18/23 13:53

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205656-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	RSK-175		44	657453	DSC	EET BUF	01/31/23 16:36

Client Sample ID: MW-2

Date Collected: 01/18/23 09:12

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205656-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	RSK-175		110	657453	DSC	EET BUF	01/31/23 16:55

Client Sample ID: RL-19

Date Collected: 01/19/23 11:16

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205656-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	RSK-175		22	657453	DSC	EET BUF	01/31/23 17:14

Client Sample ID: RL-20

Date Collected: 01/19/23 10:23

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205656-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	RSK-175		22	657453	DSC	EET BUF	01/31/23 17:32

Client Sample ID: RL-21

Date Collected: 01/19/23 09:37

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205656-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	RSK-175		44	657453	DSC	EET BUF	01/31/23 17:51

Client Sample ID: RL-22

Date Collected: 01/18/23 16:17

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205656-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	RSK-175		1	657453	DSC	EET BUF	01/31/23 19:44

Eurofins Buffalo

Lab Chronicle

Client: NTH Consultants, Ltd.
Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205656-1

Client Sample ID: RL-25

Date Collected: 01/18/23 14:47

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205656-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	RSK-175		44	657453	DSC	EET BUF	01/31/23 18:29

Client Sample ID: RL-29

Date Collected: 01/19/23 09:12

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205656-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	RSK-175		1	657453	DSC	EET BUF	01/31/23 18:48

Client Sample ID: RL-30

Date Collected: 01/19/23 10:48

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205656-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	RSK-175		22	657453	DSC	EET BUF	01/31/23 19:07

Client Sample ID: RL-8R

Date Collected: 01/18/23 15:35

Date Received: 01/21/23 10:00

Lab Sample ID: 480-205656-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	RSK-175		1	657453	DSC	EET BUF	01/31/23 20:03

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: NTH Consultants, Ltd.
Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205656-1

Laboratory: Eurofins Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-22 *
Connecticut	State	PH-0568	03-31-24
Florida	NELAP	E87672	06-30-23
Georgia	State	10026 (NY)	04-01-23
Georgia	State Program	N/A	03-31-09 *
Georgia (DW)	State	956	03-31-23
Illinois	NELAP	200003	09-30-23
Iowa	State	374	03-01-23
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	01-31-23
Kentucky (DW)	State	90029	12-31-22 *
Kentucky (UST)	State	30	04-01-23
Kentucky (VW)	State	KY90029	12-31-22 *
Louisiana	NELAP	02031	06-30-23
Louisiana (All)	NELAP	02031	06-30-23
Maine	State	NY00044	12-04-22 *
Maryland	State	294	03-31-23
Massachusetts	State	M-NY044	06-30-23
Michigan	State	9937	03-31-23
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-22 *
New Jersey	NELAP	NY455	06-30-23
New York	NELAP	10026	03-31-23
Pennsylvania	NELAP	68-00281	07-31-23
Rhode Island	State	LAO00328	12-30-22 *
Tennessee	State	02970	04-01-23
Texas	NELAP	T104704412-18-10	07-31-23
USDA	US Federal Programs	P330-18-00039	03-25-24
Virginia	NELAP	460185	09-14-23
Washington	State	C784	02-10-23
Wisconsin	State	998310390	08-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Buffalo

Method Summary

Client: NTH Consultants, Ltd.
Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205656-1

Method	Method Description	Protocol	Laboratory
RSK-175	Dissolved Gases (GC)	RSK	EET BUF

Protocol References:

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: NTH Consultants, Ltd.
Project/Site: City of Livonia, MI - Glendale Landfill

Job ID: 480-205656-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-205656-1	MW-105	Water	01/18/23 09:36	01/21/23 10:00
480-205656-2	MW-107	Water	01/18/23 13:53	01/21/23 10:00
480-205656-3	MW-2	Water	01/18/23 09:12	01/21/23 10:00
480-205656-4	RL-19	Water	01/19/23 11:16	01/21/23 10:00
480-205656-5	RL-20	Water	01/19/23 10:23	01/21/23 10:00
480-205656-6	RL-21	Water	01/19/23 09:37	01/21/23 10:00
480-205656-7	RL-22	Water	01/18/23 16:17	01/21/23 10:00
480-205656-8	RL-25	Water	01/18/23 14:47	01/21/23 10:00
480-205656-9	RL-29	Water	01/19/23 09:12	01/21/23 10:00
480-205656-10	RL-30	Water	01/19/23 10:48	01/21/23 10:00
480-205656-11	RL-8R	Water	01/18/23 15:35	01/21/23 10:00

Chain of Custody Record



Client Information					
Sampler:	Lab PM:	Carrier Tracking No(s)	COC No:		
Beninati, John	480-178898-32189.2				
E-Mail:	State of Origin:	Page:	Page 2 of 2		
John.Beninati@et.eurofinsus.com					
PWSID:	Analysis Requested				
Due Date Requested:					
TAT Requested (days):					
Compliance Project: Δ Yes Δ No					
PO #:					
62-180172					
WO #:					
Project #:					
48020805					
Site:					
Michigan					
Address:					
Attn: A/P Code: T5904 41780 Six Mile Rd Suite 201					
City:					
Northville					
State, Zip:					
MI, 48168					
Phone:					
248-662-2737(Tel) 248-324-5179(Fax)					
Email:					
aerickson@nthconsultants.com					
Project Name:					
City of Livonia, MI - Glendale Landfill/ Event Desc: IRAP GW Dis					
SSOW#:					
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=organic)	Field Filtered Sample (Yes or No)
MW-107	01/18/23	1353	G	Water	N/A
Total Number of Containers					3
Special Instructions/Note:					
Possible Hazard Identification					
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological					
Deliverable Requested: I, II, III, IV, Other (specify)					
Empty Kit Relinquished by:					
Relinquished by: [Signature]					
Date/Time:	Company:	Date/Time:	Company:	Date/Time:	Company:
01/19/23 1220	ESS	01/19/23 1220	ESS	01/19/23 1220	ESS
Date/Time:	Company:	Date/Time:	Company:	Date/Time:	Company:
01/19/23 1220	ESS	01/19/23 1220	ESS	01/19/23 1220	ESS
Date/Time:	Company:	Date/Time:	Company:	Date/Time:	Company:
01/19/23 1220	ESS	01/19/23 1220	ESS	01/19/23 1220	ESS
Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:				
A Yes Δ No	see pg 1				

Login Sample Receipt Checklist

Client: NTH Consultants, Ltd.

Job Number: 480-205656-1

Login Number: 205656

List Number: 1

Creator: Sabuda, Brendan D

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.0 #1 ice
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Meter: GEM 5000BAL 79.2Technician: WoodstirDate: 02/16/23

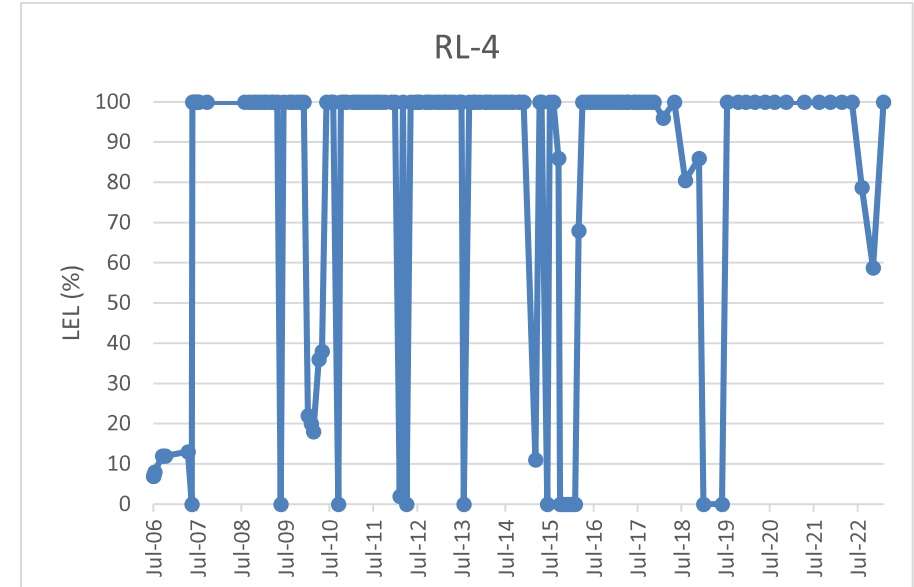
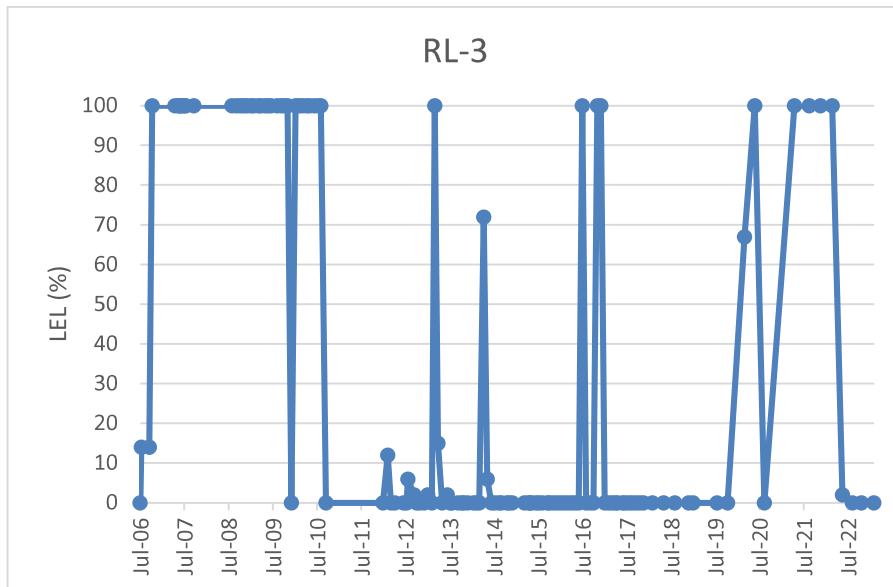
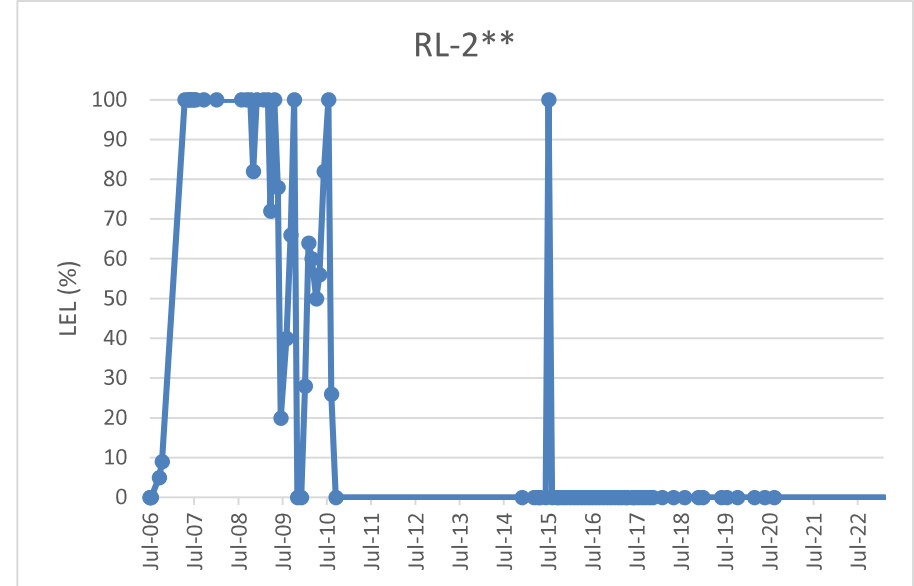
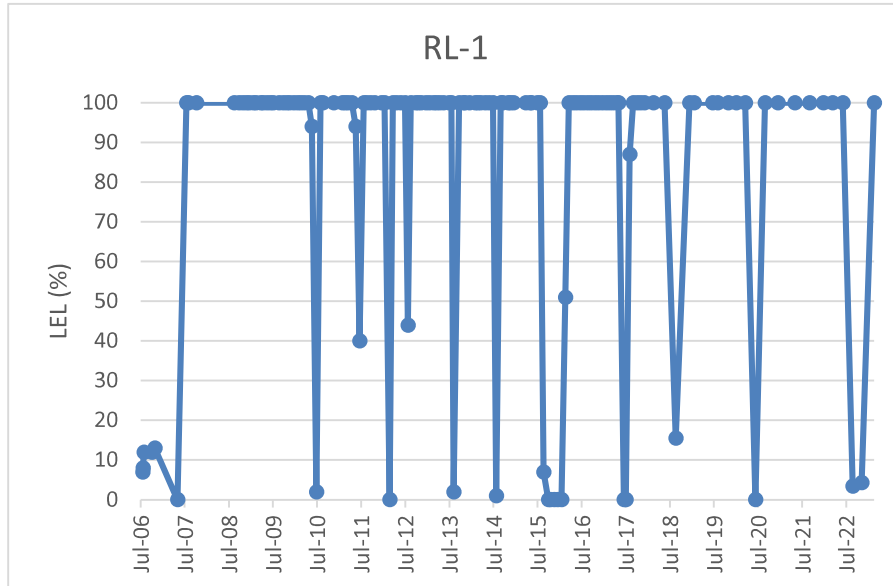
Probe	LEL (%) / CH ₄	H ₂ S (PPM)	CO (PPM)	O ₂ (%)
GV-A	0	0	0	21.2
GV-B	0	0	0	21.0
GV-C	0	0	0	21.2
GV-L	0	0	0	21.4
GV-M	0	0	0	21.0
GV-1	> / 29.2	1	0	13.0
GV-2	0	0	0	20.2
GV-3	0	0	0	20.8
GV-4	0	0	0	21.2
GV-5	Livonia PD Driving Course - could not locate			
GV-6	Livonia PD Driving Course - could not locate			
GV-7	0	0	0	21.0
GV-8	0	0	0	20.7
GV-9	0	0	0	20.3
GV-10	0	0	0	21.6
GV-11	> / 11.0	0	0	10.6
GV-12	/ 1.0	0	0	18.9
RL-1	/ 4.2	0	0	11.9
RL-2	Livonia PD Driving Course - could not locate			
RL-3	0	0	0	20.5
RL-4	> / 58.5	0	0	8.8
RL-5	Livonia PD Driving Course - could not locate			
RL-6	> / 30.9	5	1	16.1
RL-7	0	0	0	19.3
RL-8R	0	0	0	21.2
RL-10	0	0	0	12.1
RL-12	0	0	0	20.6
RL-13	> / 33.0	11	0	16.7
RL-14	> / 22.9	0	0	14.2
RL-23	Could not locate - possibly missing			
RL-24	Could not locate - possibly missing			
RL-26	Could not locate - possibly missing			
RL-27	0	0	0	20.4
RL-28	> / 20.0	0	0	15.3
Flare 1	0	0	0	20.2
Flare 2	0	0	0	20.0
RL-9	Abandoned			
RL-11	0	0	0	13.0
RL-15	0	0	0	15.0
RL-16	0	0	0	17.2
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RL-18	0	0	0	20.7
RL-19	0	0	0	20.1
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RL-22	0	0	0	21.3
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RL-31	0	0	0	19.5
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APPENDIX C

HISTORICAL LANDFILL GAS CONCENTRATION GRAPHS

HISTORICAL METHANE DETECTIONS

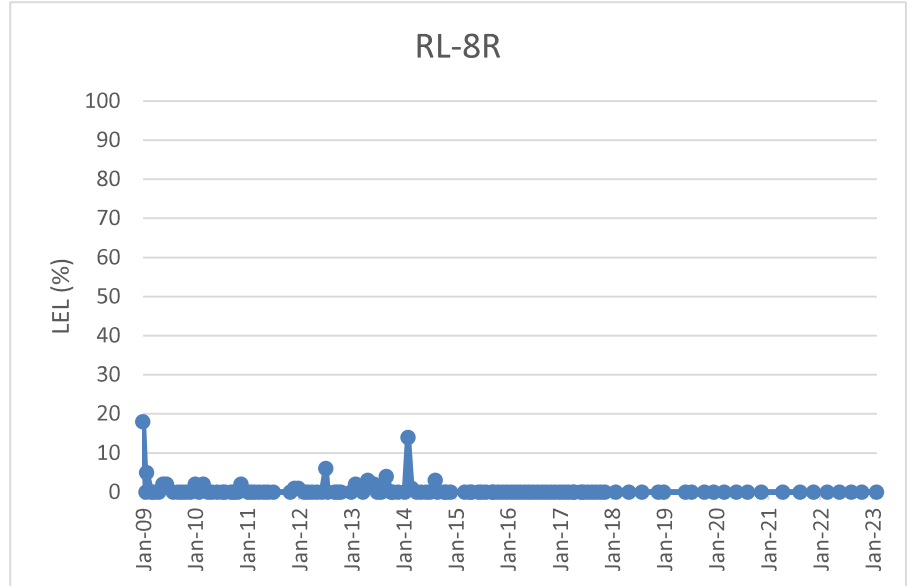
Methane Gas Concentrations
IRAP Monitoring
First Quarter 2023



* = Well abandoned

** = Unable to locate well

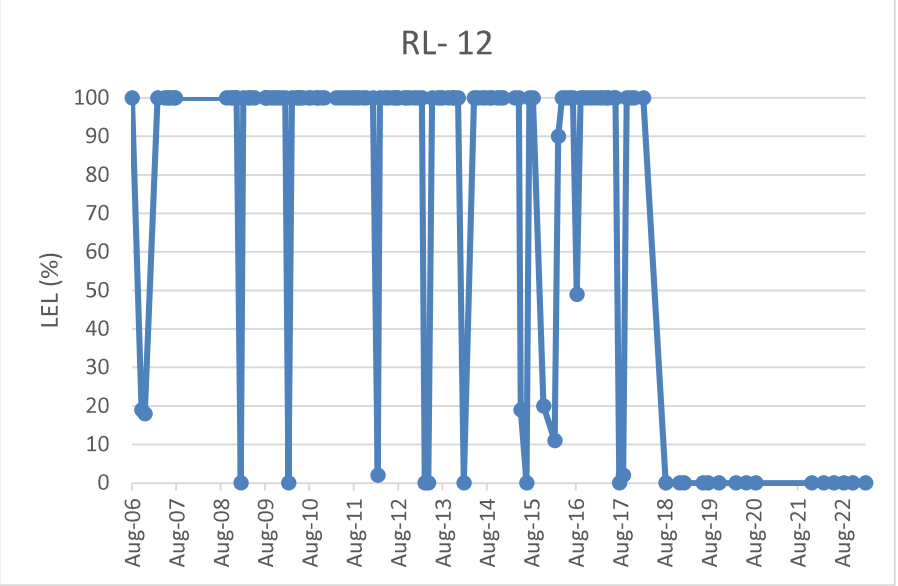
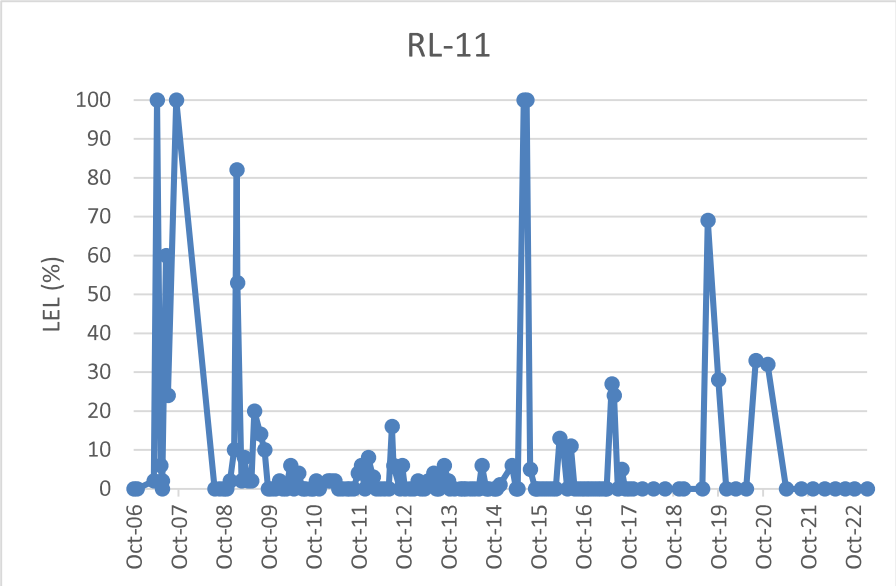
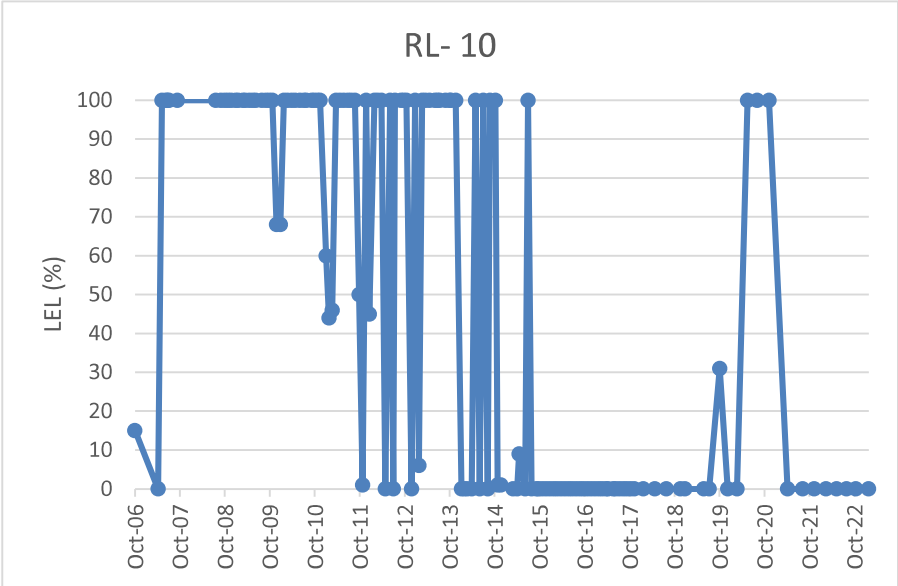
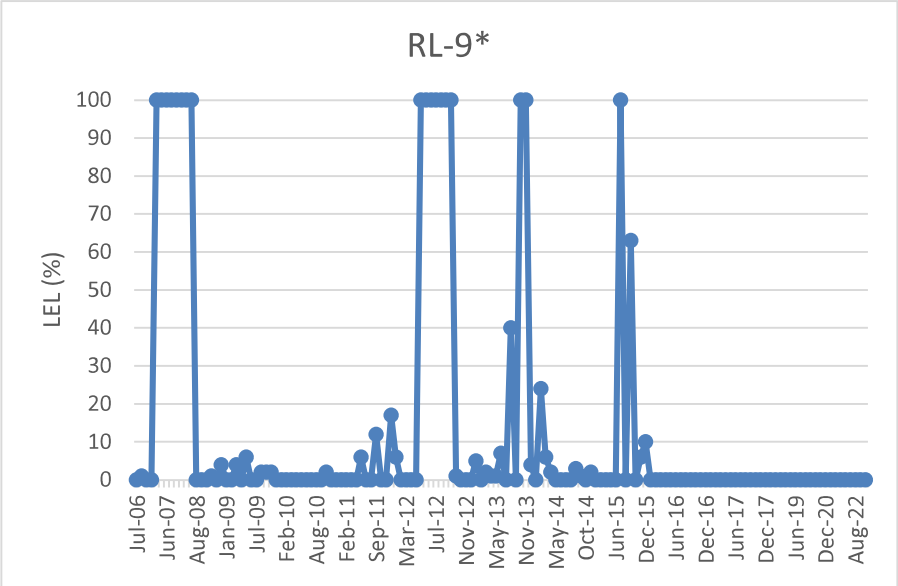
Methane Gas Concentrations IRAP Monitoring First Quarter 2023



** = Unable to locate well

HISTORICAL METHANE DETECTIONS

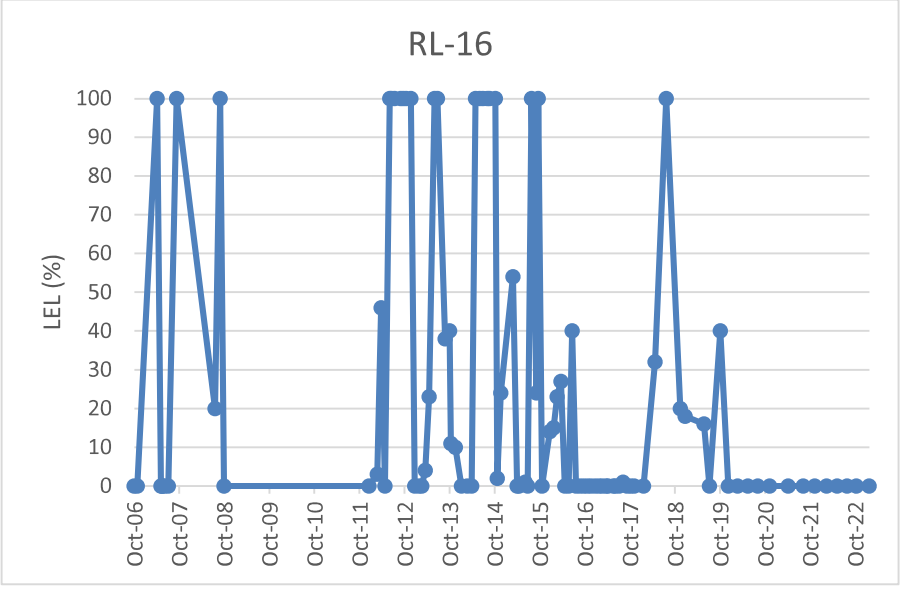
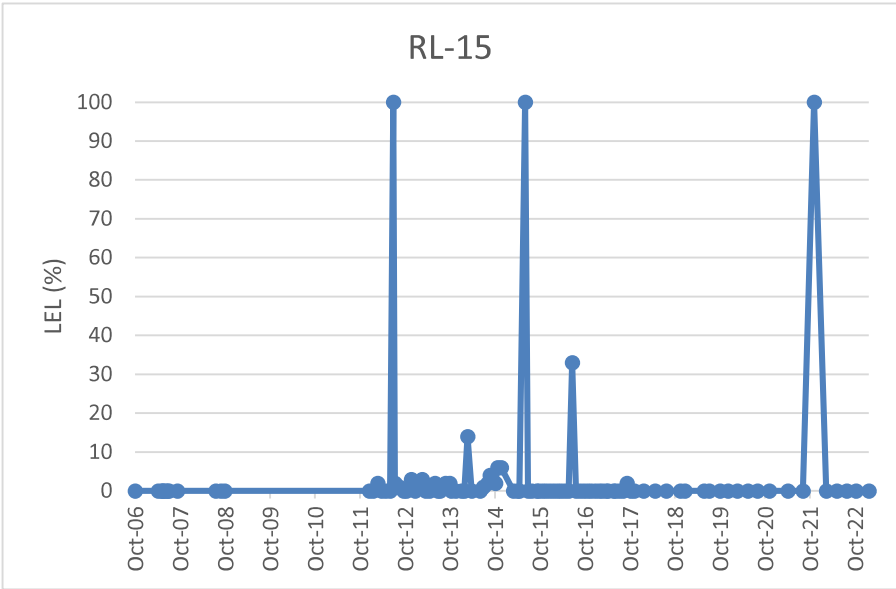
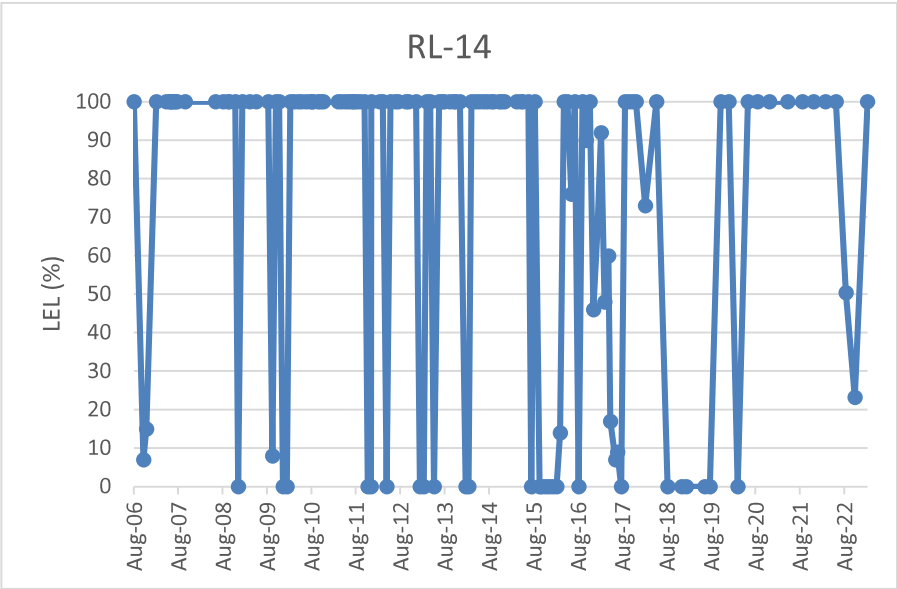
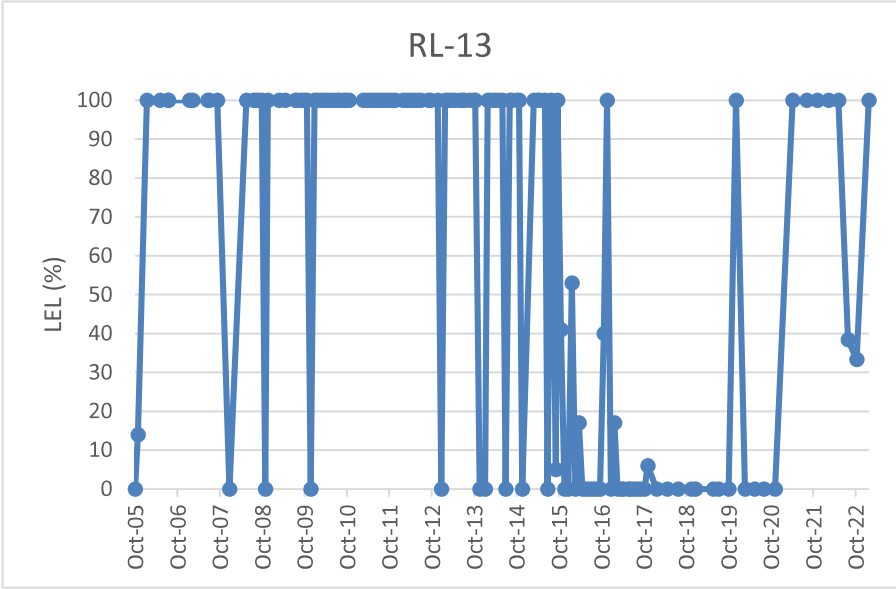
Methane Gas Concentrations
IRAP Monitoring
First Quarter 2023



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HISTORICAL METHANE DETECTIONS

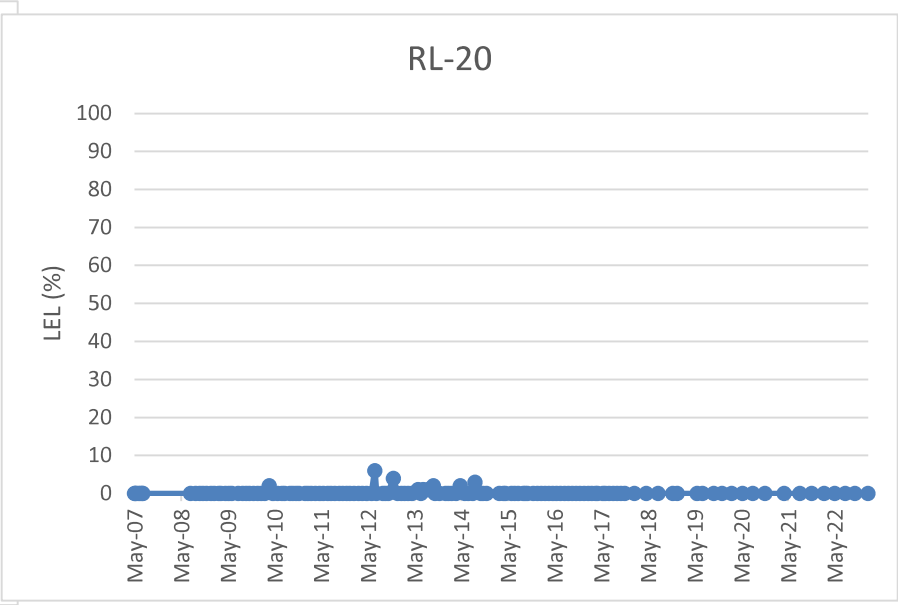
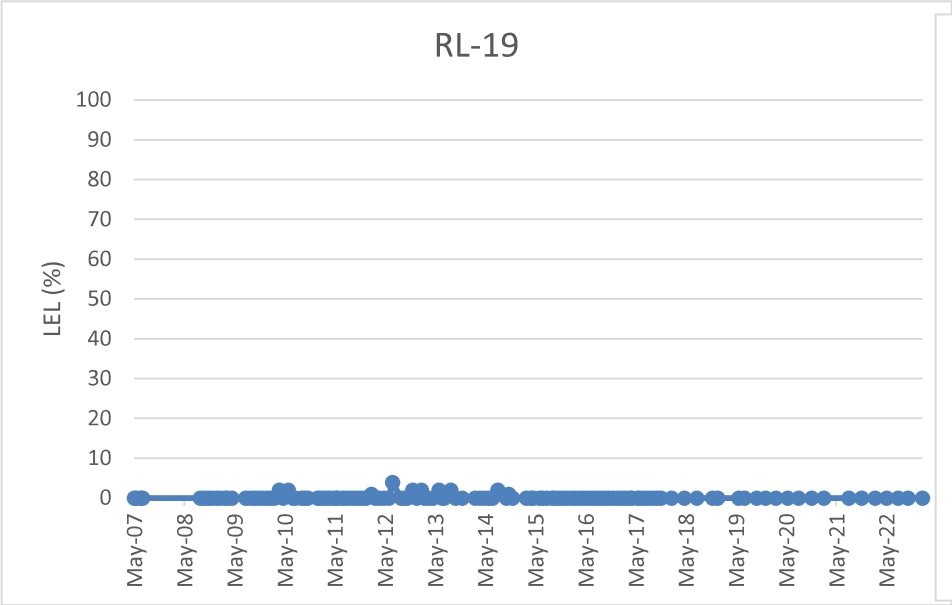
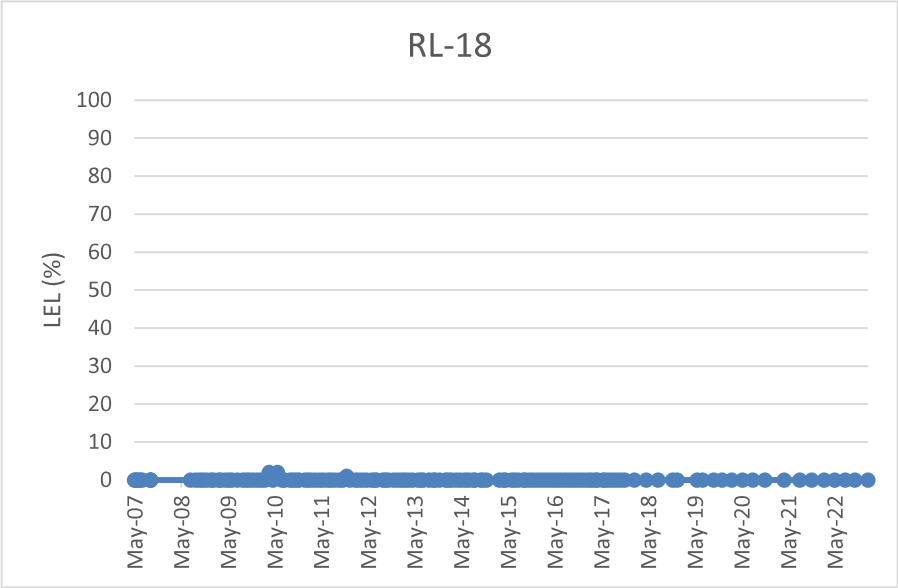
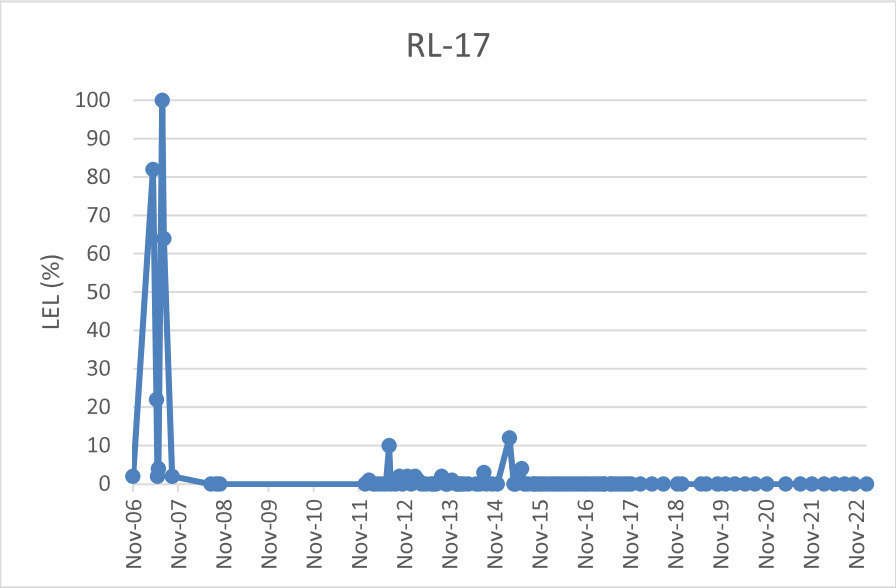
Methane Gas Concentrations
IRAP Monitoring
First Quarter 2023



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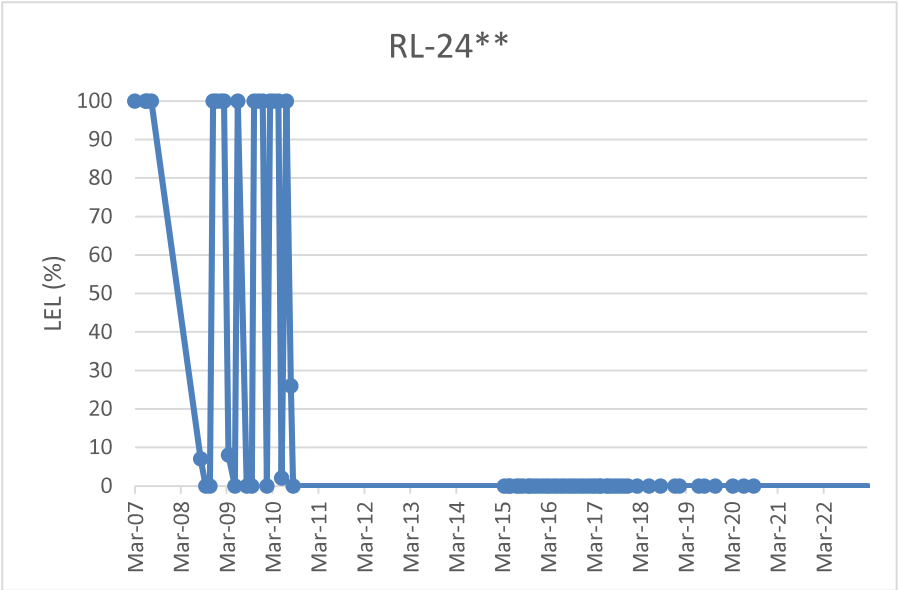
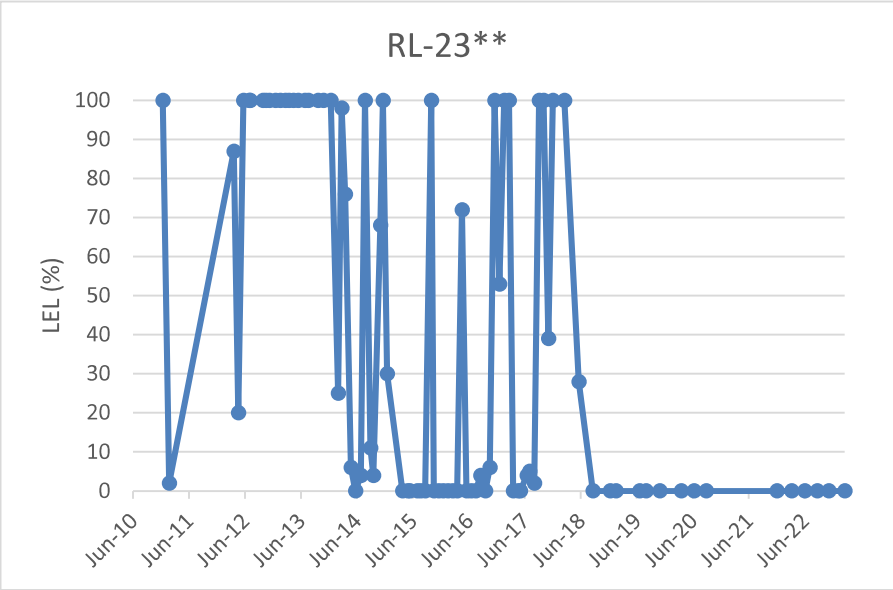
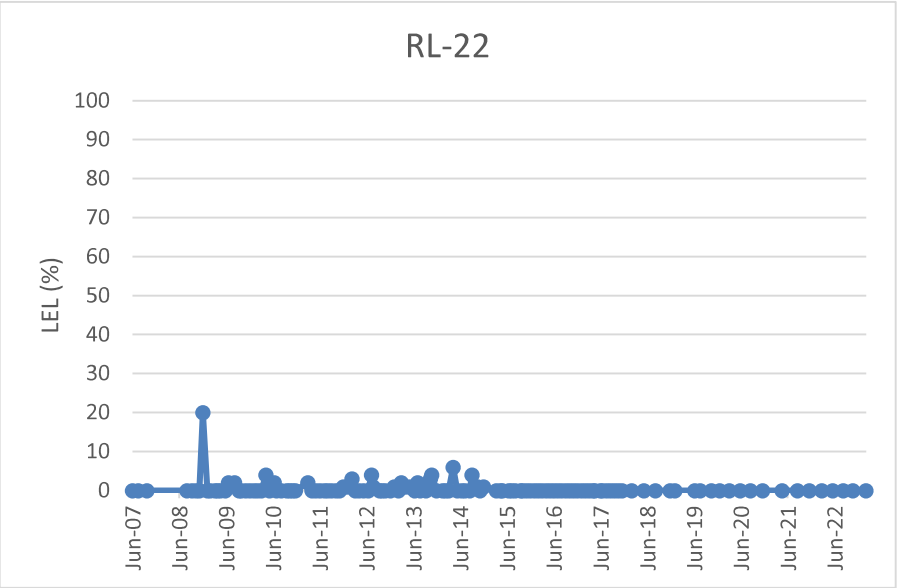
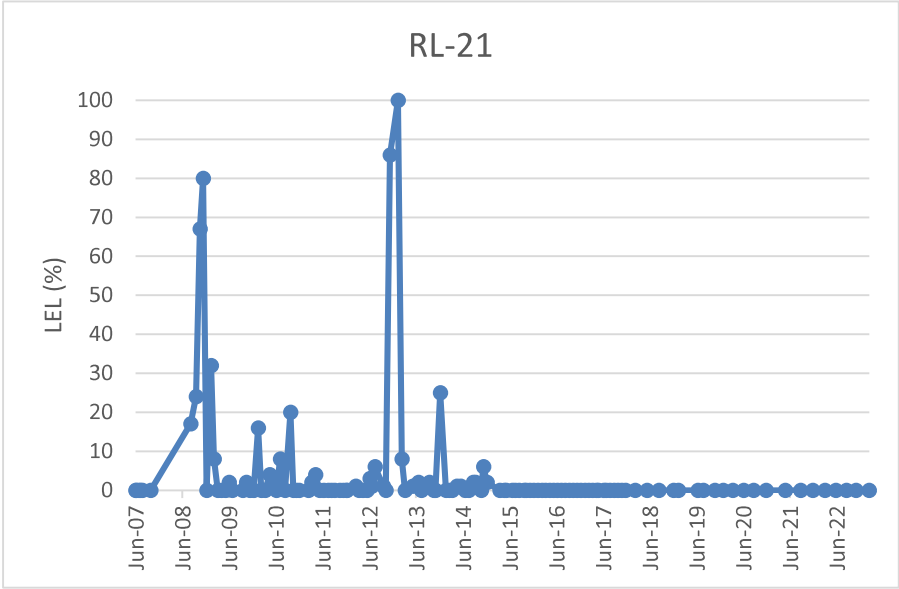
Methane Gas Concentrations
IRAP Monitoring
First Quarter 2023



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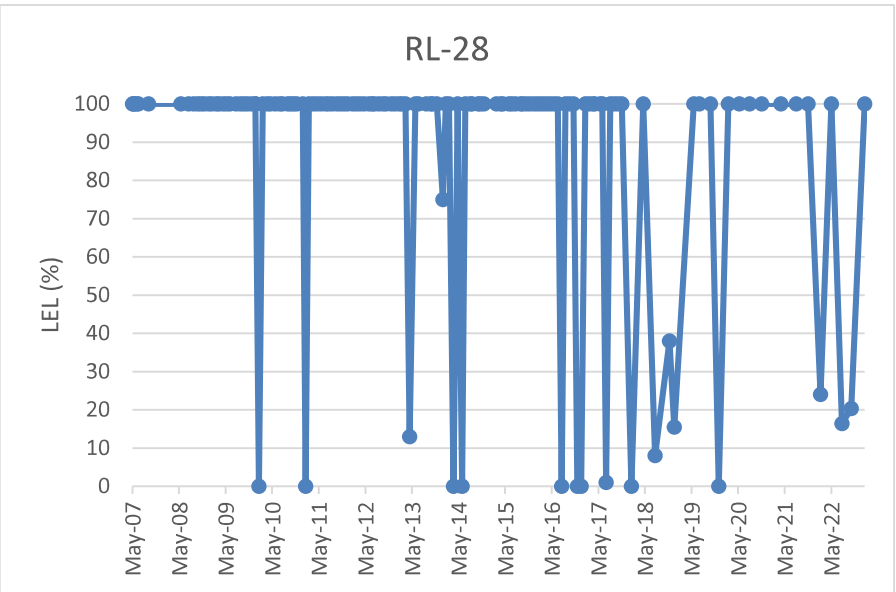
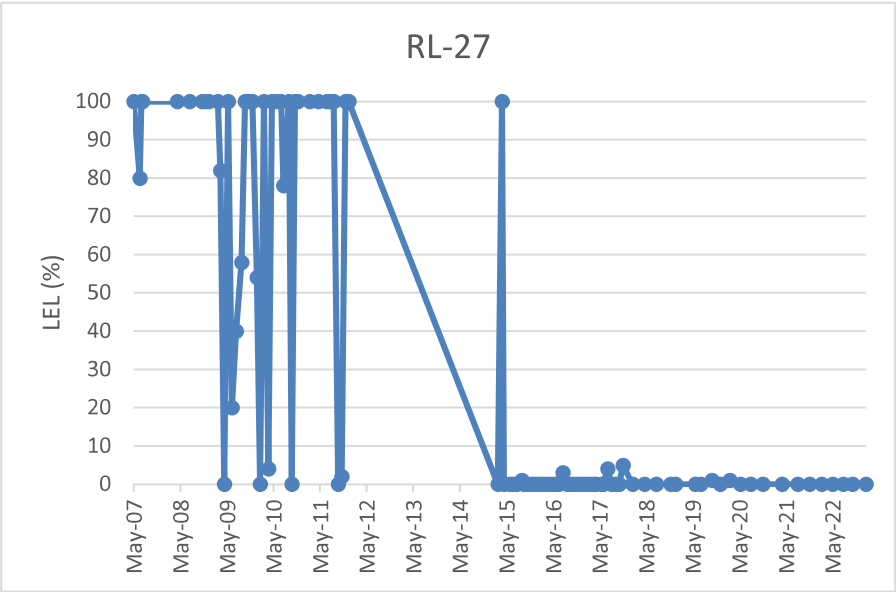
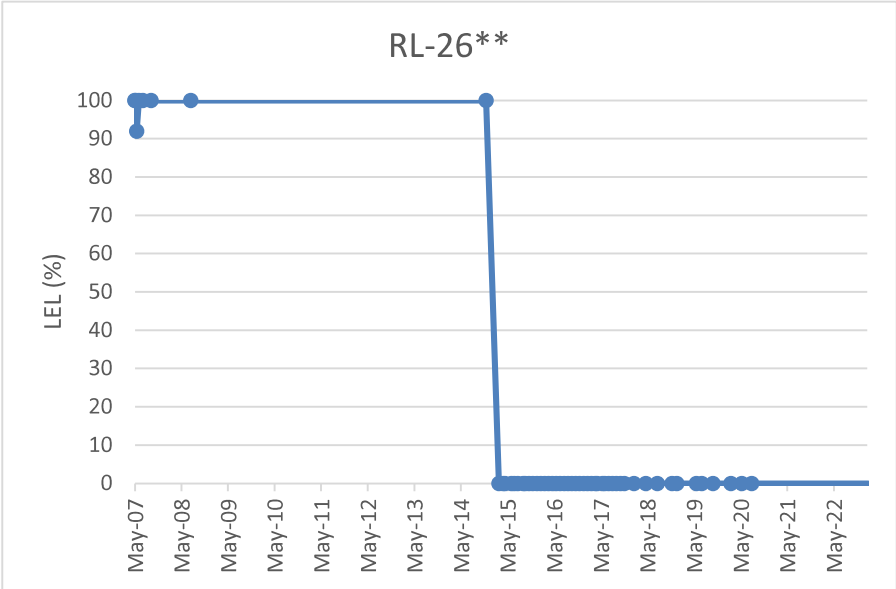
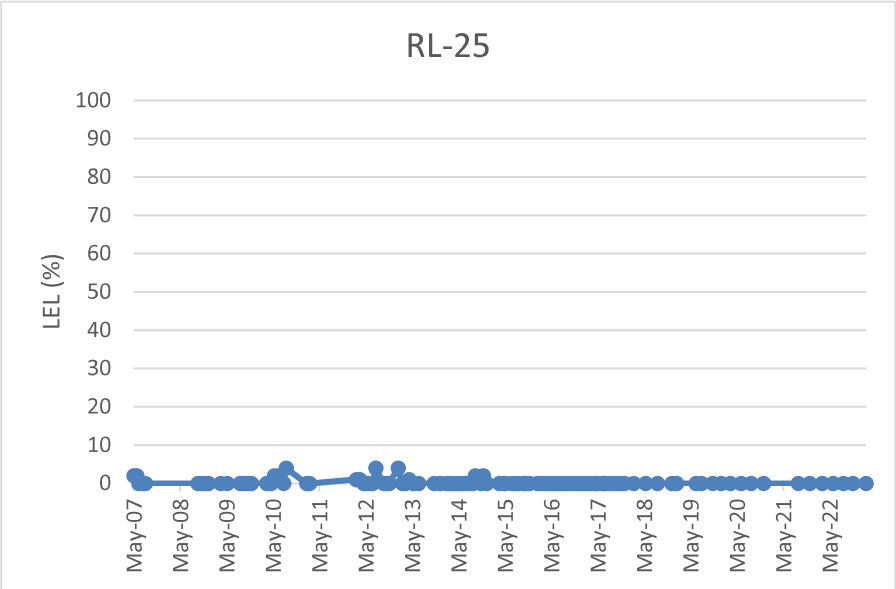
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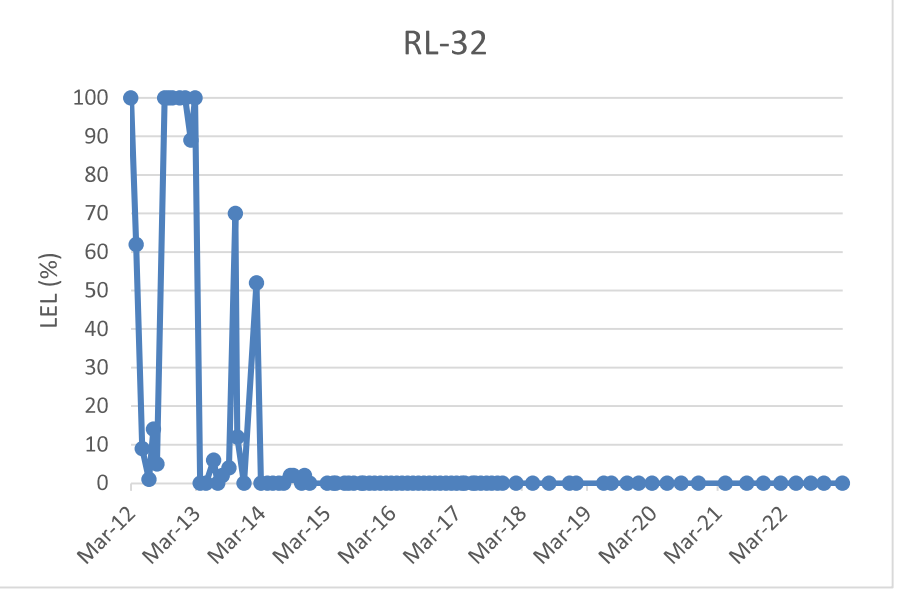
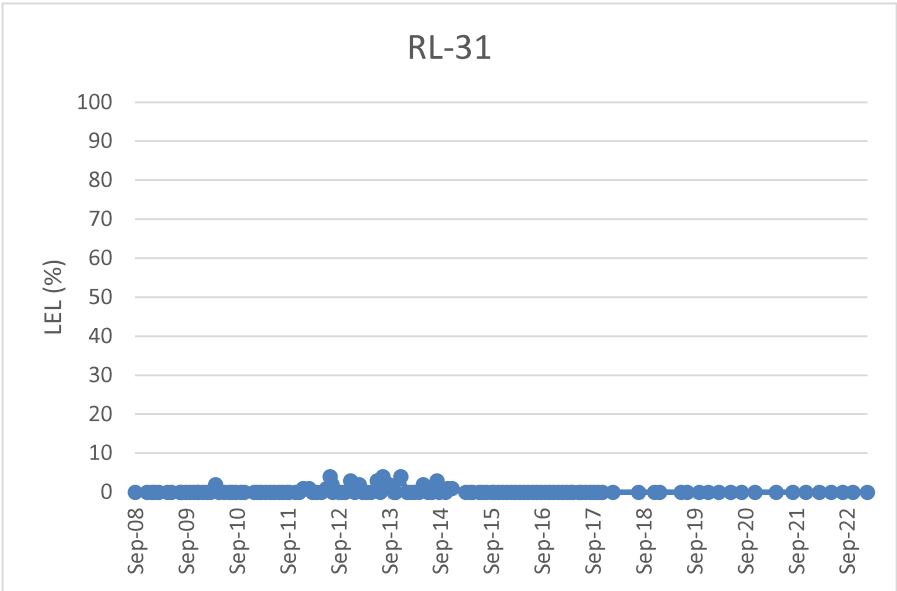
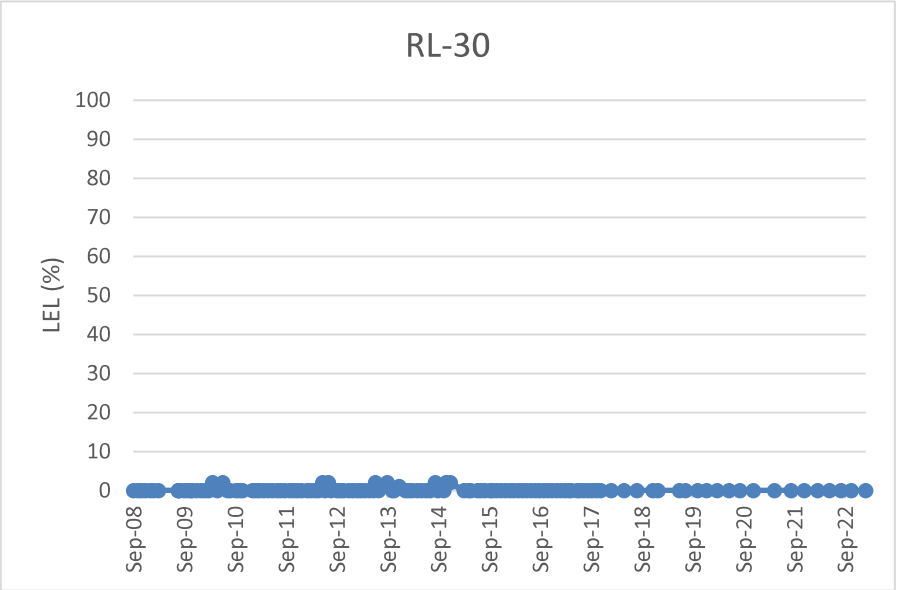
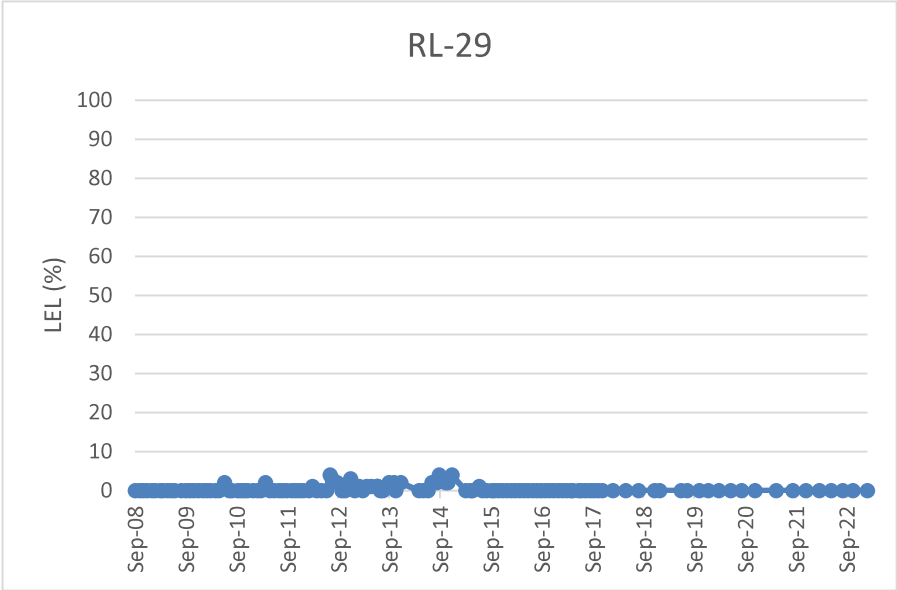
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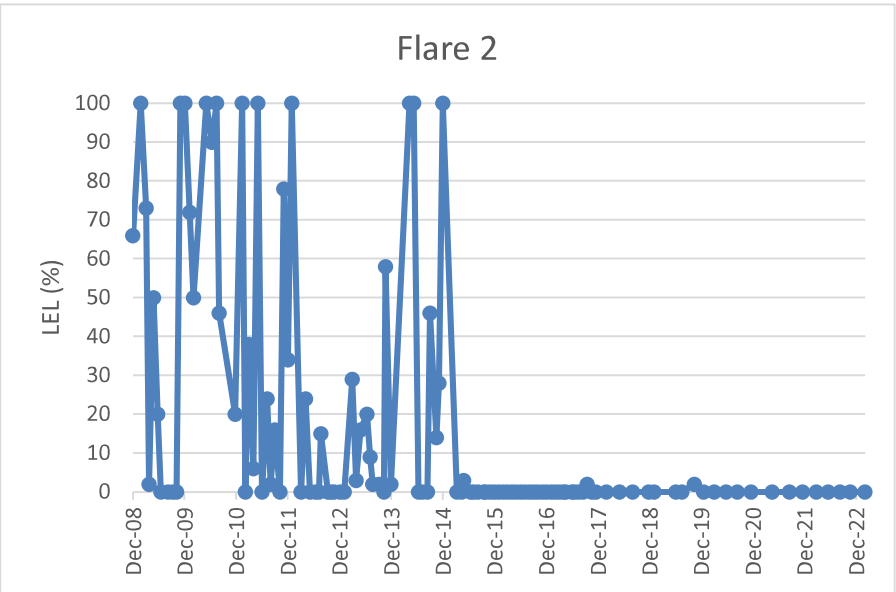
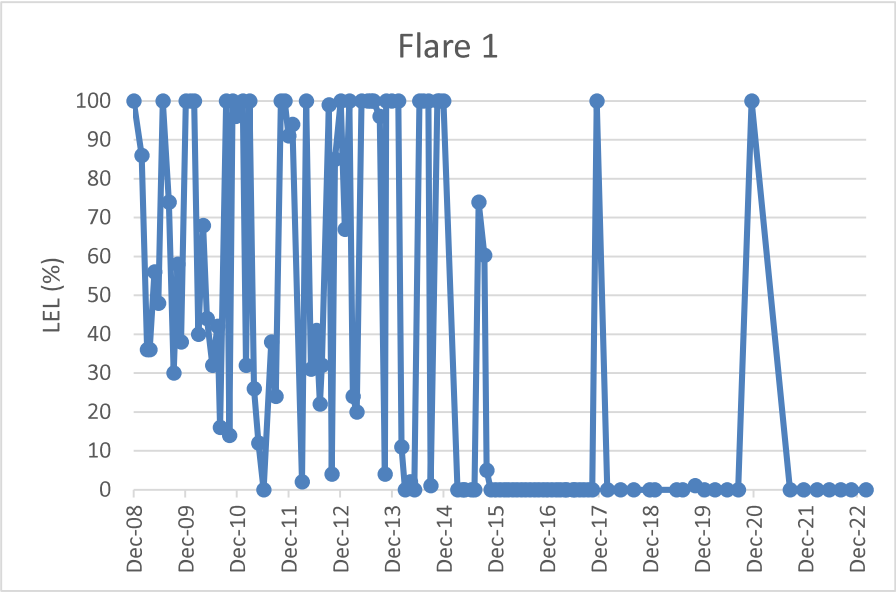
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**CITY OF LIVONIA – CITY COUNCIL
MINUTES OF STUDY MEETING HELD June 26, 2023**

Meeting was called to order at 8:00 p.m. by Council President Jim Jolly. Present: Brandon McCullough, Scott Morgan, Kathleen McIntyre, and President Jim Jolly. Absent: Rob Donovic, Scott Bahr, and Vice President Laura Toy.

Elected and appointed officials present: Susan Nash, City Clerk; Paul Bernier, City Attorney; Todd Zilincik, City Engineer; and Jacob Rushlow, Assistant Director of Public Works.

Councilmember McCullough and his daughter, Harper, led the Pledge of Allegiance.

7. AWARD OF CONTRACT USING THE QUALIFICATION-BASED SELECTION (QBS) PROCESS: Department of Public Works, re: to provide environmental engineering services to monitor, sampling, data evaluation, and reporting at the City's Type III landfill and former Act 87 landfill, and other related projects for five (5) years beginning July 1, 2023, through June 30, 2028.

Jacob Rushlow, Assistant Director of Public Works, presented the request to Council.

President Jolly asked that Council be sent information regarding the status of the landfill, exposure, and our obligations in terms of funding and compliance.

Jacob Rushlow asked for clarification as to what is meant by exposure.

President Jolly said it is Council's responsibility to know the environmental impact is for the sake of the Community.

Jacob Rushlow said they will put together a summary of the regulatory efforts done on a quarterly basis which is what NTH does with the testing and what's done with methane gas and groundwater for the next regular meeting.

President Jolly asked that DPW just forward the NTH quarterly report.

Councilmember McCullough offered an approving resolution for the Regular agenda.

DIRECTION:

APPROVAL

REGULAR



LETTER TO THE LIVONIA CITY COUNCIL

7.

DPW
June 9, 2023

MEETING DATE

S062623/R071023

PREPARED BY

Jill Russell, Secretary III,

AGENDA ITEM

AWARD OF CONTRACT USING THE QUALIFICATION-BASED SELECTION (QBS) PROCESS:

Department of Public Works, re: to provide environmental engineering services to monitor, sampling, data evaluation, and reporting at the City's Type III landfill and former Act 87 landfill, and other related projects for five (5) years beginning July 1, 2023 through June 30, 2028.

BACKGROUND DETAILS

The Department of Public Works advertised a Request for Qualifications (RFQ) to obtain Qualification Statements from consultants to perform Environmental Engineering Services including monitoring, sampling, data evaluation, and reporting at the City's Type III landfill and former Act 87 landfill, and other related projects.

In response to our advertisement, we received six Qualification Statements from interested consulting firms. The Qualification Statements were independently reviewed by a committee of five members including both the Assistant Directors of Public Works, the Superintendent of Public Works, the Road & Parks Supervisor, and the Purchasing Manager. The top three rated firms, NTH Consultants, The Mannik Smith Group and Cornerstone Environmental Group were then invited for interviews.

After evaluation of the written qualification statements and interview responses, cost proposals provided in separate, sealed envelopes were opened and reviewed.

PREFERRED COUNCIL RECOMMENDATION/RESOLUTION (Please complete this field. Attachments are not to be used in lieu of the recommendation)

1. Authorization of the Mayor and the City Clerk to execute a five-year agreement (July 1, 2023 thru June 30, 2028) with NTH Consultants, Ltd., 41780 Six Mile Road, Suite 200, Northville, MI 48168, to provide Environmental Engineering Services on behalf of the City of Livonia.
2. Authorize and expenditure for these services not to exceed annually:

July 1, 2023 – June 30, 2024	\$37,400
July 1, 2024 – June 30, 2025	\$39,300
July 1, 2025 – June 30, 2026	\$41,300
July 1, 2026 – June 30, 2027	\$43,400
July 1, 2027 – June 30, 2028	\$45,600

SPECIFIC NAME OF PRODUCT AND NUMBER TO BE PURCHASED (if more than one)

Environmental Engineering Services - Landfill reporting

CONTRACT: Amount and/or purchase price and length of contract (with dates if applicable)

\$207,000 over 5 years 2023-2028

DETAILED WORK BEING PERFORMED

Monitoring, sampling, data evaluation, and reporting on the City's Type III landfill and former Act 87 landfill, and other related projects.

FISCAL CONSIDERATIONS (Amount requested and Account(s) used. If applicable, Grant Funding information)

\$207,000 over 5 years 2023-2028 from budgeted funds in account no. 205-527-818-041

ACCEPTANCE OF BID (Please detail the following: Why accepted, why not lowest bidder, company name, contact person, full address)

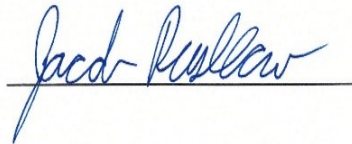
Six companies applied and were independently reviewed by a committee comprised of DPW personnel. Three bidders were invited for interviews. Selection was based on pricing, experience and interview results.

REASON TO WAIVE BID PROCESS (Emergency, Professional services, No advantage to City and why, Consortium package, etc): Request waiving sealed bids under Finance Ordinance section 3.04.140.E.2.b, regarding QBS selection process.

ATTACHMENTS

1. S062623 LTC Landfill contract
2. NTH Enviro Engr - Cost Proposal Form
3. NTH SOQ for Livonia Environmental Services RFQ
4. QBS-Env Engineer Interview Score Sheet

APPROVED BY



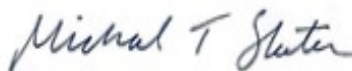
Jacob Rushlow, P.E., Assistant Director of Public Works

Date: June 12, 2023



Don Rohraff, Director of Public Works

Date: June 12, 2023



Date: June 12, 2023

Michael Slater, Finance Director

A handwritten signature in blue ink, appearing to read "Michael Slater", written over a horizontal line.

Date: June 12, 2023

Paul Bernier, City Attorney

A handwritten signature in black ink, appearing to read "Paul Bernier", written over a horizontal line.

Date: June 15, 2023

Maureen Miller Brosnan, Mayor

Request for Qualifications - Environmental Engineering Consulting Services - Cost Proposal

Firm Name: NTH Consultants, Ltd.

City of Livonia Environmental Engineering Services

Environmental Sample Collection Services at the Livonia Type III Landfill

Collect and test, quarterly, samples of seven (7) monitoring wells, one (1) leachate location, and one (1) surface water location in accordance with the approved Hydro geologic Monitoring Plan (HMP) and Michigan's Natural Resources and Environmental Protection Act, Public Act 451 of 1994 (PA 451), Part 115 as amended, on a quarterly basis to allow a quarterly report to be prepared for submittal to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) and the Wayne County Department of Environment within 30 days of the end of each quarter.

	Hours	Cost
Leachate samples	1	\$250
Monitoring well samples (including dissolved methane analysis)	7	\$2400
Surface water samples	1	\$250

Collect quarterly landfill gas measurements in accordance with the Perimeter Landfill Gas Monitoring Plan
Per Collection

2.5	\$400
-----	-------

GLWA Monitoring at the Livonia Type III Landfill

Collect and test, semi-annually, samples and prepare reports, on a semi-annual basis associated with a single GLWA discharge point at the City of Livonia Type III Landfill. The City of Livonia is required to self monitor the GLWA discharge location in accordance with the requirement of the Wastewater Discharge Permit No. 706-27487-IU. These reports are due to be supplied to GLWA by the City of Livonia by June 30th and December 30th of each year.

	Hours	Cost
Per Report	6	\$750
Per Sample	3	\$950

Data Evaluation and Reporting Services at the Livonia Type III Landfill in accordance with the approved EGLE statistic plan for groundwater monitoring

Evaluate data and prepare the quarterly report in accordance with the approved Hydro geologic Monitoring Plan (HMP) and the approved Perimeter Landfill Gas Monitoring Plan, dated May 2008 that is due to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) within 30 days of the end of the quarter, associated with the Environmental Monitoring at the City of Livonia Type III Landfill.

	Hours	Cost
Per Report	10	\$1500

Interim Remedial Action Plan for the Former Act 87 Landfill

	Hours	Cost
Quarterly Groundwater Sample Collection and Analysis	6	\$1900
Quarterly Landfill Gas Monitoring	4	\$400
Quarterly Data Evaluation and Report Preparation	10	\$1400

REQUEST FOR QUALIFICATIONS

ENVIRONMENTAL ENGINEERING CONSULTING SERVICES

HOURLY RATE FEE SCHEDULE

Company Name: NTH Consultants, Ltd.

[illegible]

STATEMENT OF QUALIFICATIONS

Environmental Engineering Consulting Services City of Livonia - Public Service Division

City of Livonia
12973 Farmington Road
Livonia, Michigan 48150-4202
c/o Honorable Mayor Maureen Miller Brosnan
Mr. Douglas L. Moore, Assistant Director of Public Works

March 21, 2023
NTH #: OP23001529



City of Livonia - Glendale Landfill
Wetland Delineation



NTH Consultants, Ltd.
41780 Six Mile Road,
Suite 200
Northville, MI 48168



City of Livonia
12973 Farmington Road
Livonia, Michigan 48150-4202
c/o Honorable Mayor Maureen Miller Brosnan
Mr. Douglas L. Moore, Assistant Director of Public Works

March 21, 2023
NTH #: OP23001529

**RE: Request For Qualifications (RFQ)
Qualification Based-Selection (QBS) Process For
Environmental Engineering Consulting Services And Related Activities**

Mayor Miller Brosnan & Mr. Moore,

NTH Consultants, Ltd. (NTH) is pleased to submit the appended Statement of Qualifications (SOQ), prepared in accordance with your recent Request for Qualifications (RFQ) to provide as-needed environmental engineering services for the five-year period between June 2023 and December 31, 2028 with optional two one-year extensions. We applaud the City of Livonia's choice to follow Qualifications Based Selection System (QBS) to select a consultant for this project, which reflects the City's professionalism and sophistication.

As the incumbent consultant for the City since 2018, we are very familiar with Livonia's management systems, professional staff, and expectations. Over the past five years, we have successfully assisted your Department of Public Services (DPS) staff maintaining a solid regulatory compliance record in accordance with the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Wayne County Land and Water Management, and the Great Lakes Water Authority (GLWA) requirements, as well as related site operational issues.

Our joint accomplishments are summarized below:

- Updated and improved the landfill hydrogeologic monitoring plan (HMP);
- Performed routine groundwater monitoring sampling and reporting on-schedule and on-budget;
- Prepared grading plans to facilitate planning for future installation of the final landfill cover;
- Developed testing and storage criteria for imported soil for future final landfill cover;
- Obtained a permit to fill an existing wetland to increase general operating space;
- Implemented the existing Interim Remedial Action Plan (IRAP) for the "Act 87 landfill";
- Averted potential pretreatment requirements for per and polyfluoralkyl substances (PFAS);
- Resolved methane migration issues threatening adjacent properties;
- Assessed geomembrane "whales" in the stormwater pond located within the Schoolcraft Community College police training area; and

We look forward to the planned QBS interview to continue as Livonia's environmental engineering consultant for the next five years, extending our joint successes. We acknowledge Addendum 1, issued March 16, 2023. The Addendum acknowledgment form is included in **Appendix C**. We also acknowledge Addendum 2, issued on March 20, 2023 (dated March 17, 2023). There is no addendum acknowledgment associated with this addendum.

Sincerely,
NTH Consultants, Ltd.

DocuSigned by:

David R. Lutz

D431240C939C423...
David R. Lutz, P.E.

Vice President | Project Manager
dlutz@nthconsultants.com
248-662-2750

DocuSigned by:

Richard L. Burns

D431240C939C423...
Richard L. Burns

Senior Vice President
Rburns@nthconsultants.com
248-662-2739



TABLE OF CONTENTS



Section 1. Firm History

Section 2. Capacity to Complete the Project Scope

Section 3. Key Personnel



Section 4. Related Experience and Client References

Appendix A. Staff Resumes

Appendix B. Landfill Experience Matrix

Appendix C. Addendum Acknowledgment



CRAIN'S DETROIT BUSINESS 2022





NTH Project

City of Livonia - Glendale Landfill

Wetland Delineation



SECTION 1

NTH HISTORY



WHY NTH?

- ✓ Current Livonia environmental engineering consultant with institutional knowledge
- ✓ Over 150 years cumulative experience working with state and federal landfill statutes
- ✓ Worked at over 70 Type I, II, and III landfills in the US and internationally
- ✓ Active participant in landfill professional associations and rule-making committees
- ✓ Poly- and perfluoroalkyl substances (PFAS) management and treatment expertise
- ✓ 55 years in business as a local, Michigan-based consulting firm, with a Livonia office



Section 1. NTH History

Firm History

Founded in Detroit, Michigan in 1968, NTH is an employee-owned, multi-disciplinary, professional engineering consulting firm consisting of more than 105 highly skilled individuals, including engineers, geologists, environmental scientists, and other professionals working in five offices throughout Michigan. Over our 55-year history, we have served public and private clients with quality engineering services including geotechnical evaluations, hydrogeological investigations, site-civil design, construction monitoring, asset management programs, and environmental regulatory compliance.

Because NTH evolved from a geotechnical company to a full-service infrastructure engineering and environmental consulting firm, we understand the complex interaction between earth materials and the built environment. We apply this unique knowledge to identify and resolve construction constraints as part of the project planning and design process to avoid unexpected delays and related budget issues. Our seasoned environmental professionals, several whom previously worked for state and federal agencies, are accomplished regulatory experts that understand how to successfully navigate statutes working through well-established relationships

You won't be our only client, but you'll think you are.

with agency staff. Our goal to exceed client expectations has consistently led NTH to deliver peer-reviewed, award-winning projects. NTH is a 2022 National Best and Brightest Company, a Cool Places to work, and a Top Places to Work and was named Regional Employee Stock Ownership Plan (ESOP) Company of the Year in 2018. As an employee-owned firm, with decades of experience and a proven client service record, we have earned the respect of our peers and our clients by providing innovative, cost-effective solutions for both unusual and routine projects.

Since our inception, NTH, working closely with our clients, has resolved many challenging and complex environmental and engineering issues. We believe the key to our success is serving as a client advocate, which involves a unique understanding of the owner's objectives, expectations, and financial goals.

NTH at a Glance:

- **Full Name:** NTH Consultants, Ltd.
- **Legal Formation:** Corporation
- **State of Incorporation:** MI
- **Incorporated:** July 30, 1968
- **Federal ID #:** 38-1880747
- **Over 33 PEs, CPG, CPs**
- **Over 105 professionals**
- **Clients:** Serving public and private sector clients
- **Address:** 41780 Six Mile Rd., Suite 200, Northville, MI 48168
- **Authorized negotiator:** David R. Lutz, P.E., Vice President; dlutz@nthconsultants.com; 248.662.2750



Beginning in the late 1970s with the inception of waste regulations, NTH has evolved to a landfill expert, constantly investing in technical and regulatory training to provide our waste clients access to existing trends and state-of-the-art design, operations, and compliance technologies. Currently, we are regarded as landfill experts, including the evolving realm of PFAS and other emerging contaminants.

Company Name and Address:

NTH Consultants, Ltd.

41780 Six Mile Road, Suite 200, Northville, MI 48168

In addition to our Northville headquarters, NTH maintains four other Michigan offices one of which is located in Livonia:

- 11675 Belden Ct., Livonia, MI 48150
- 2990 West Grand Boulevard, Ste. M-10, Detroit, MI 48202
- 3001 Coolidge, Suite 10, East Lansing, MI 48823
- 3300 Eagle Run Drive NE, Suite 202, Grand Rapids, MI 49525

NTH's technical professional staff with relevant capabilities are located primarily in our Northville office; however, we can draw resources from all of our offices as-needed to provide the City of Livonia with other highly-specialized expertise and technical support to complete assignments issued under this contract.

In addition to our work as the City's incumbent environmental engineering consultant, we provide services to many other clients under similar as-needed contracts. Specifically, these include the Michigan Department of Transportation (MDOT), Great Lakes Water Authority (GLWA), DTE Energy, Central Wayne County Waste Authority, Waste Management, GFL Environmental, City of Pontiac, and others.

Under these contracts we provide multiple services Livonia may require, including:

- asbestos and hazardous materials surveys and abatement;
- demolition assistance;
- geophysical investigations;
- environmental assessments;
- response activity plans;
- due-care compliance;
- environmental and geotechnical drilling;
- site investigation and characterization;
- underground storage tank removal; and
- environmental remediation design, monitoring and oversight.

Approximately 20 percent of NTH services are provided under contracts like the City of Livonia. Under most of our as-needed type contracts, NTH's project manager is assigned as the primary contact for the City and is to whom all invoices should be directed. The PM assigns project tasks to NTH staff, and while the primary contact may not be the technical lead on individual assignments, the NTH project manager provides regular updates to keep the client's primary contact apprised of the progress on each task assignment and to track remaining budgets.

Subcontractors:

NTH is proposing to utilize the same subconsultants that are currently serving the City's environmental contract:

Environmental Sampling Services, Inc. (ESS):



ESS was formed in 2000 on the premise that the environmental sampling process is not a secondary issue, but rather the critical first step in data gathering for a particular site or permit requirement.

As an independent company, ESS is an environmental service firm offering a broad range of environmental sampling services, yet singularly focused on providing the highest quality professional environmental sampling services that meet or exceed customer's expectations.

ESS's highly trained team has over 40 years combined practical and professional experience collecting representative environmental samples for a vast array of clients in a variety of industries including waste management, steel, construction, transportation, automotive, petroleum and chemical. They have designed their business to help you achieve and sustain regulatory compliance, manage risk and protect the value of your assets at a competitive rate.

Eurofins:



Eurofins is an environmental testing firm in the United States with 35

laboratories and 38 service centers. Eurofins provides innovative technical expertise and comprehensive analytical testing services. Specialty analyses include source, ambient and indoor air, water quality and aquatic toxicity, compliance, desalination, shale gas, specialty organics, emergency response, industrial hygiene, dioxins, drinking water, sediments and tissues, PPCPs and emerging contaminants, explosives, Federal/DoD, and radiochemistry and mixed waste testing.

Eurofins affiliate companies include EMLab P&K, the leader in analytical microscopy and indoor air quality; QED Environmental Systems, Inc., the leading supplier of groundwater sampling equipment and remediation pumping systems; and Eurofins Air Emissions Corp. (METCO Environmental), specializing in air emissions testing. Eurofins currently employs nearly 2,800 professionals dedicated to exceptional service and solutions for their clients' environmental testing needs.

Site Background and Project Understanding:

Based on our current involvement with the City of Livonia, the landfill property occupies approximately 37.7 acres and is located east of Farmington Road and immediately north of Glendale Avenue. The property includes a closed, former Act 87 landfill and an active, Type III, Part 115 landfill (The National Resources Environmental Protection Act (NREPA) P.A. 451 of 1994, as amended). Portions of the former Act 87 landfill have been repurposed over the years for various uses, including a police firing range, Department of Public Works (DPW) storage yard, fire training academy, and a police training driving facility, which was completed in 2012.

Livonia is required to perform remedial monitoring and response measures for its Act 87 landfill in accordance with an Interim Remedial Action Plan (IRAP) that was completed in 2008, primarily to address off-site migration of landfill gas. As part of these measures, the City installed a passive landfill gas extraction system throughout the Act 87 landfill in 2008, along with a monitoring network of landfill gas probes and groundwater observation wells to routinely monitor both on-site and off-site landfill gas and groundwater quality constituents in accordance with the monitoring criteria set forth in the IRAP.

The Type III, Part 115 active landfill, located immediately west of the former Act 87 landfill, is performing routine surface water, groundwater, leachate, and landfill gas analyses in accordance with State requirements that regulate the landfill operation, the site's hydrogeological monitoring plan (HMP), GLWA wastewater discharge permit requirements, and Perimeter Landfill Gas Monitoring Plan.

As of this year, the City is in general compliance with each of their landfill environmental regulatory requirements. At this point, your obligations are mostly based on continued monitoring and reporting as prescribed in IRAP, HMP, and associated Part 115 operating license as it relates to waste placement, grading, and final cover placement upon reaching permitted final grades, as well as continued compliance with the "no exposure certification" under the NPDES permitting program that exempts monitoring and reporting. NTH has been working with City staff to develop longer-range plans for the landfill, preparing for eventual closure of the facility to limit future regulatory obligations and associated costs.

Environmental Engineering:

As previously indicated, NTH evolved from a specialty geotechnical firm to a full-service multi-disciplined geo-environmental firm many years ago. This evolution followed a natural progression based on our unique understanding of the subsurface, particularly soil and groundwater conditions. This unique combination of skills has enhanced our ability to serve our clients during design and construction phases, expediting resolution of issues.

In today's environment, we have found that good planning must take into consideration a project's effect on natural resources and the impact of existing conditions on the project. With experience dating back to some of the earliest federal environmental regulations, NTH has assisted a broad range of clients with evaluating, constructing and operating facilities, in full compliance with laws and agency protocols. If required for any future environmental projects for Livonia, in addition to the Glendale Landfill regulatory compliance reporting, NTH below.

Civil Engineering

NTH has extensive experience designing landfill containment systems and supporting infrastructure such as roads and underground utilities, including water supply, sanitary sewers, pump stations, and storm water management facilities. Incorporating the latest design techniques in-practice today, we can efficiently design site infrastructure for a wide-variety of client and regulatory needs, from low impact development "green" storm water management, to airspace, cut/fill site balance, and grading analyses.

- Landfill Design: The siting, design, and construction of a sanitary or hazardous waste landfill is a complex process. Furthering the intricacies of such a project are the increasingly stringent federal and state regulations for the design, construction, and operation of landfills. Expertise in siting, design, and construction monitoring is vital to developing a quality facility that meets regulatory requirements and community scrutiny.



NTH Environmental Services

Environmental Management

- Pollution Prevention Plans
- Hydrogeologic Monitoring Plans
- Statistical Monitoring Plans
- Environmental Monitoring and Reporting
- Facility Response Plans
- Environmental Health & Safety Compliance Training

Development and Redevelopment

- Site Assessments
- Brownfield Redevelopment
- Financing Incentives
- Remedial Investigations
- Feasibility Studies
- Soil / Groundwater / Sediment

Water Resources

- NPDES Permitting
- Hydrogeologic Investigations
- Hydraulic Modeling

Industrial Hygiene

- Hazardous Materials Survey
- Asbestos, Lead, Microbial Abatement

Remediation Design

- Risk Assessment / Toxicology
- Facility Decommissioning
- Demolition Specifications
- Storage Tank Management

Air Quality Services

- Permitting
- Dispersion / Deposition Modeling
- Compliance Strategies
- Enforcement Assistance
- Expert Witness

Landfill Engineering and Closure

- Design / Permitting
- Geosynthetics Engineering and Testing
- Construction Quality Assurance
- Methane / Leachate Management

- As indicated previously, NTH has provided consulting assistance in the siting, design and construction of landfills and major vertical and horizontal landfill expansion for approximately 55 years. Our clients have included major landfill companies, municipal landfills, independent landfill operators, and design firms. We employ specialized expertise to assist with landfill site selection; design of cells, leachate and gas control systems; construction; closure; and post-closure monitoring.
- Siting and Design: NTH's experienced team is intimately familiar with the complexities of siting and designing a sanitary or hazardous waste landfill. NTH has demonstrated its proficiency in maximizing the use of available land and materials while facilitating compliance with federal, state, and local regulations.
- Construction Observation and Certification: We have extensive experience in landfill construction observation and testing, from clay liner compaction to flexible membrane liner (FML) installation and seaming at both sanitary and hazardous landfill construction sites. Our specially-trained professionals conduct construction observation and field/laboratory testing of landfill components and prepare appropriate documentation for regulatory compliance. We enforce strict quality control, including the performance of appropriate field and laboratory testing to comply with design and regulatory requirements. NTH has monitored the installation of numerous liner systems including HDPE, LDPE, and PVC.

We have developed comprehensive, state-approved quality control/quality assurance (QA/QC) programs for these liner projects, along with engineering design plans and technical specifications.

Geotechnical Engineering

NTH's geotechnical expertise spans a wide range of services such as soil and rock investigations, groundwater investigations, soil dynamics, slope/excavation stability analyses, value engineering, failure analysis, and forensic evaluations. In addition, we provide design-related services including foundations, pavements, tunnels and shafts, cofferdams, excavation support systems, dewatering systems, as well as civil and site engineering.

Our geotechnical engineering expertise is literally the foundation of NTH as an organization. Our work spans the complete project life, from investigation through design into construction, enabling us to foresee potential construction obstacles during design and resolve issues before they impact budget and schedule. Geotechnical



NTH "As-Needed"

NTH serves as the Engineer of Record for a variety of entities and their infrastructure needs for many multi-year, as-needed contracts in a similar capacity as the City of Livonia's Request. We have been the consultant selected to be a true "extension of their staff" by many municipalities, such as.

City of Livonia

- As-Needed Environmental Engineering

City of Pontiac

- As-Needed Environmental Engineering

GLWA/DWSD

- As-Needed Environmental Health and Safety
- As-Needed Geotechnical Services
- As-Needed Structural Engineering Services
- As-Needed Sanitary, Storm and Water Collection/Distribution Design Services

MDOT

- As-Needed Environmental Services-Statewide
- As-Needed Geotechnical Services-University, Metro, and Bay Regions

DTMB / State of Michigan

- Indefinite-Service, Indefinite-Delivery Environmental Services Contract

City of Lansing

- As-Needed Geotechnical and Construction Engineering Services

engineering is the foundation of all constructed facilities. Performed competently, it confirms that projects are appropriately designed – mitigating excessive costs associated with over-design, and preventing failures caused by under-design.

NTH takes great pride in our geotechnical engineering abilities. We understand the criticality of obtaining and making effective use of reliable and accurate subsurface data.

Additional information about NTH and the landfill services we provide, can be found in **Appendix B**.



NTH Project

Influent Landfill Leachate PFOA & PFOS Contribution to Michigan Water Resource Recovery Facilities
 Michigan Waste & Recycling Association's Technical Report for
 Michigan Department of Environmental Quality / Now Environment, Great Lakes, and Energy
<https://www.bridgemi.com/sites/default/files/mwra-technical-report.pdf>



SECTION 2

NTH CAPACITY TO COMPLETE THE PROJECT SCOPE

Section 2. Capacity

NTH has a long history of success assisting governmental, quasi-governmental, and private organizations in Michigan, Ohio, and across the Midwest, with projects similar in scope to the City of Livonia's request for environmental services. We are knowledgeable in the details and procedures to complete projects of a similar scope in a cost-effective manner, assisting various entities with multiple landfill projects over our 55-year history. Typically, approximately half of our annual services are provided to local, county, state, and federal agencies.

The current workload of our staff assigned to the City of Livonia will allow us to dedicate 50 percent or more of their available time, providing team continuity throughout each task assigned as part of this contract. We are available to initiate work immediately and we are confident in our ability to complete contracted projects within the schedules established for each assignment.

We are not proposing any key staff changes from current staff working for the City of Livonia's environmental services contract.

As indicated above, NTH has provided landfill services to its private and public clients since the passage of federal Subtitle D regulations that required landfills to install liner, leachate, and gas collections systems over 30 years ago. Over this period, we have continually invested resources, hiring experts in landfill engineering, geosynthetics, hydrogeology, and construction, to become Michigan's leading waste industry expert, a distinction we maintain through active participation with several waste-related, professional organizations, including leadership positions, as described further below.

As a southeast-Michigan-based firm, we have worked with many local municipalities on various assignments, including the City of Livonia and the Livonia Public School District, a long-term NTH client. Many of these projects involved interaction with Wayne County Land Resource Management Division, EGLE, GLWA, and Detroit Water and Sewerage Department (DWSD). Based on this experience, we have gained practical insights with regulatory agency protocols, as well as municipal contract administration, construction standards, scheduling, budget management, and overall expectations, all critical skills applicable for this contract.

The NTH Team

We bring a thorough understanding of state and federal regulations for landfill management, a strong working relationship with EGLE, and the ability to successfully navigate the complex regulatory landscape, as has been demonstrated on numerous high profile landfill and landfill re-development projects.

The landfill matrix, included in **Appendix B**, summarizes the scope and breadth of our landfill experience. As shown, we have worked on nearly 70 landfills in Michigan; we collectively bring more than 150 years of direct landfill experience. We currently assist approximately 25 sites with various regulatory reporting programs (groundwater, surface water, leachate, and landfill gas) as required by their site specific HMPs and discharge permit requirements. Of these, six are located in Wayne County and eight have discharges to GLWA or another local WWTP. NTH has also assisted various industrial clients with Industrial Discharge Permits and quarterly reporting with both the DWSD and GLWA.

We are proud of our long history, diverse engineering skills, record-of-success, staff-retention rate, and award-winning recognition by our peers for successful engineering, environmental compliance, and construction administration projects. We believe these attributes, combined with our strong project management system and long-term experience working with county, state, and local entities, make us uniquely qualified to continue to serve as the City's environmental engineering consultant.

City of Livonia, Active Type III, Part 115 Landfill (looking west)



Professional Waste Associations, Committees, and Design Awards:

As demonstrated above, the waste industry has been an NTH core market for several decades. To maintain our expertise, we have actively participated in several waste industry organizations and committees, often in leadership roles, including the following:

Michigan Waste and Recycling Association (MWRA):



NTH has been a member of this leading industry group since its inception (then Michigan Waste Industry Association, MWIA) in the 1980s when the federal and state regulations regarding modern landfill design took effect.

We were one of the original consulting firm members of MWRA that includes national solid waste, hazardous waste, hauling, transfer station, and municipal members. Our staff has participated or led a number of technical subcommittees that addressed engineering, compliance, and legislative issues facing the waste industry to improve landfill operations, safety, environmental protection, and economics. In 2019 MWRA retained NTH to complete a “first in the nation,” state-wide assessment of landfill leachate PFAS impacts to WWTP influent that has been cited in several professional and environmental publications.

ESD, The Engineering Society’s Annual Solid Waste Conference:



NTH is an original and continuous member of ESD’s annual solid waste conference planning committee since the initial event in 1990, with Rick Burns serving

as conference chair for several years. He was recently named an ESD Fellow. In addition, our staff has made several technical presentations over the history of this conference related to engineering, hydrogeology, construction, innovative repair, compliance, and air quality issues, as well as participation on expert panels dealing with a host of topics, receiving leadership awards from ESD for our long-term involvement.

Geosynthetics Research Institute (GRI):



NTH was a member of GRI, the world’s leading geosynthetics research organization, headed by Robert Koerner, Ph.D., P.E, the “father of geosynthetics,” for nearly 20 years beginning in the

1990s when geomembranes, geotextiles, and related synthetics were first incorporated as primary environmental protection features for landfill liners, caps, as well as leachate and gas collection systems. Our participation, which included technical committees and membership on the GRI board of directors, provided unique insights on the applicability and geotechnical challenges associated with using geosynthetics as primary components of environmental containment structures, knowledge that we and our clients continue to benefit to the present day.

American Society of Civil Engineers (ASCE) Michigan Chapter Solid Waste Infrastructure Report Card:



NTH was selected by MWRA to prepare the ASCE Infrastructure “Report Card” for solid waste in Michigan. This report, published in

March 2018, evaluates various components of Michigan’s solid waste infrastructure, including landfill capacity, transfer stations, hauling/collection systems, material recovery facilities, and recycling rates. The report team also included EGLE and Waste Management Incorporated as co-authors, resulting in an overall “grade” for the State of Michigan along with recommendations to improve its waste infrastructure. We updated this report in 2023; its publication is pending.

In addition, NTH has been recognized by our peers with design and construction awards for engineering excellence and innovation on several projects, including landfill repair and redevelopment. Most notably, these include:

APCM/Fairlane Green: NTH’s Fairlane Green project received the National Phoenix Award™ for excellence in brownfield redevelopment and the ESD Award of Merit in 2008. The award winners represent outstanding brownfield projects from each of the ten U.S. Environmental Protection Agency (EPA) regions. Once an idle landfill, Fairlane Green has been transformed into a retail development, built on Ford Motor Company’s former Allen Park Landfill disposal facility, the largest landfill redevelopment in the State of Michigan.

Carleton Farms Landfill Innovative Liner Repair: ESD’s Engineering Excellence Award for the repair of a landfill liner that had been penetrated 80 feet below grade near the center of the site during gas well installation. We designed specialty tooling to access the penetration and a system to repair the liner using liquid polyurea that

allowed filling operations to proceed. NTH provided an innovative and environmentally sound, in-place base liner repair approach that reclaimed several hundred thousand yards of landfill airspace, worth millions of dollars in revenue.

Mulligans Golf Center Landfill Redevelopment: NTH was honored with an ACEC Eminent Conceptor Award for its unique design of an adjustable foundation for a golf practice facility atop a closed landfill. This foundation system allowed adjustments to account for differential waste settlement to keep the clubhouse and practice areas level, allowing the facility to operate successfully for nearly 20 years. NTH's unique combination of geotechnical, environmental, and structural engineering services resulted in the adaptive re-use of the closed Joslyn Road Landfill, making way for one of world's largest indoor golf domes – the first with a three-story tee line, and rated as one of the top ten practice facilities in the country.

Carleton Farms Landfill Innovative Waste Filling Sequence: ESD awarded NTH a Merit Award for our unique waste-filling sequence that included a staged approach using waste loads to achieve time-dependent consolidation of soft clay sub-soils that otherwise precluded full development of this square-mile landfill, which increased total available airspace and associated revenues for the facility.

GFL Pontiac Waste Transfer Station Redevelopment: NTH was awarded a 2018 ACEC of Michigan Honorable Conceptor Award for our design and construction of waste transfer station redevelopment project at a former 40-acre automobile assembly plant, providing new life to this abandoned property as an integral component of Oakland County, Michigan's solid waste infrastructure, adding new employment opportunities and tax revenue for the City of Pontiac. NTH's broad range of consulting and engineering services, including infrastructure, geotechnical, environmental, site-civil, and construction observation, all came into play to transform a formerly unused industrial site into a productive segment of the regional solid waste management system.

Statewide Impact of Landfill Leachate PFOA and PFOS on Waste Water Treatment Plant Influent: In 2022, NTH and MWRA received an ACEC Merit Award for this groundbreaking project, the first of its kind in the US that included assessment of 35 municipal landfills and 20 WWTPs.

NTH PROJECT AWARD HIGHLIGHT

Baldwin Pontiac Solid Waste Transfer Station & Processing Facility

Engineering Services, Permitting, & Consulting

Former GM Pontiac Fiero Assembly Plant (Before)



New Solid Waste Transfer & Processing Facility (After)



2018 ACEC/M ENGINEERING & SURVEYING MERIT AWARD

"NTH, in conjunction with architectural, structural, mechanical, electrical, fire protection and other design sub-consultants, developed detailed engineering construction documents to build-out a portion of the existing facility for re-use as a solid waste transfer and processing facility. NTH, responsible for the site civil design components, navigated the labyrinth of existing site utilities to develop focused solutions for utilizing as much of the existing infrastructure as possible and developing new site utility design services for water, storm, and sanitary infrastructure. NTH's broad range of consulting and engineering services, including infrastructure, geotechnical, environmental, site-civil, and construction observation, all came into play to transform this formerly unused industrial site into a productive segment of the regional solid waste management system."

- Michael Fleming, Executive Vice-President GFL Environmental USA Inc.



SECTION 3

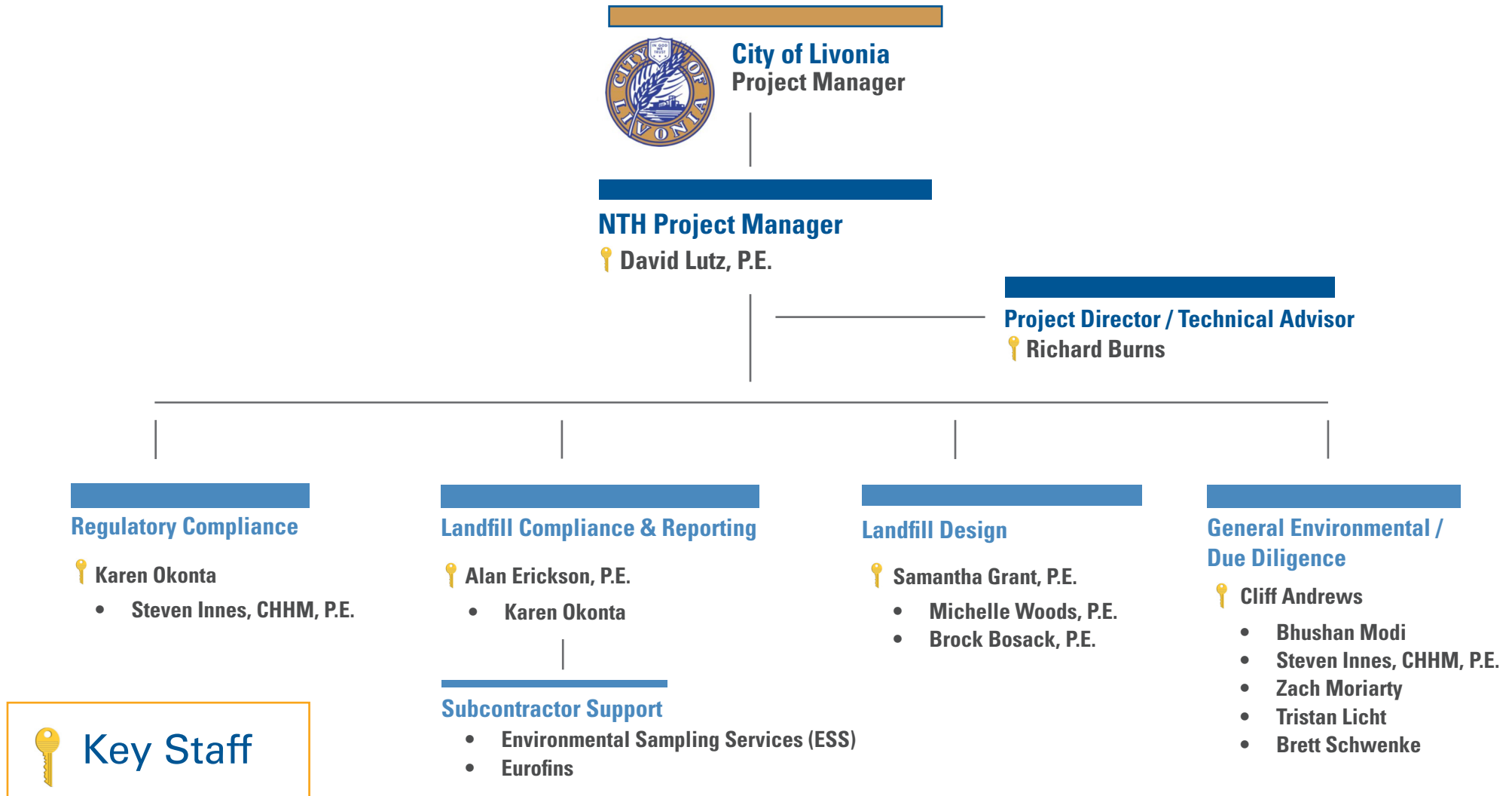
KEY PERSONNEL

Section 3. Key Personnel

Below is an organizational chart that shows the communication path between the City of Livonia and NTH, as well as the supervisory relationship between all members of the team. On the chart, we identify those who will serve as the project manager and other key staff who will provide oversight during the investigation and testing, along with other supporting professionals.

We are not proposing any key staff changes from current staff working for the City of Livonia's environmental services contract.

Key staff for the project team have been selected based on technical expertise, related experience, and availability. Following this chart in this section are brief bios for these key staff members. Full resumes for these staff can be found in **Appendix A**.



David Lutz, P.E. PROJECT MANAGER

Northville Office



Mr. Lutz has nearly 20 years of experience assembling and managing design teams on multi-million dollar construction projects related to site civil, infrastructure improvement, environmental, and landfill construction. He is experienced in managing all phases of a landfill project from cost estimating through planning, design, permitting, field investigation and monitoring, construction administration, certification, and project closeout.

City of Livonia As-Needed Environmental Engineering

Project Manager: Project manager for a multi-year general environmental assistance contract to assist the City with assignments regarding environmental health and safety for various projects and at various City facilities.

GLWA As-Needed Environmental Engineering

Task Manager: Provided general assistance to completion of CS-213 assignments regarding environmental health and safety at various GLWA facilities.

Richard Burns PROJECT DIRECTOR / TECHNICAL ADVISOR

Northville Office



Mr. Burns is a sought out subject matter expert on per and polyfluoroalkyl substances (PFAS) sampling and evaluations. He has 38 years of experience in the environmental/engineering consulting field, with a focus on waste-related, contaminant transport, and water resource projects. He has planned, managed and conducted environmental projects relating to all aspects of the waste management industry.

MCSWMA Application and Project Plan - Leachate Treatment System

Lead Technical Officer: Preparation of CWSRF grant/loan application to provide funding for a new landfill leachate treatment system needed to meet NPDES permit discharge requirements.

Statewide Leachate PFAS Impact on WWTP Influent Study and Report

Technical Lead, PM, Primary Report Author: Statewide evaluation of leachate PFAS impacts on wastewater treatment plant influent based on mass and concentrations.

PFAS / WASTE MANAGEMENT EXPERT

Mr. Burns has extensive experience in permitting/closure/compliance of waste disposal facilities, including: landfills, processing plants, and transfer stations; RCRA and CERCLA environmental investigations and compliance; determining hydrogeologic regimes in multi-aquifer environments, as well as groundwater supply assessments. His technical scope and management of environmental assignments is extensive and comprehensive, including projects throughout the US and several internationally. Rick is a subject matter expert on per and polyfluoroalkyl substances (PFAS) evaluation and treatment.

Mr Burns was recently inducted to the Engineering Society of Detroit (ESD) College of Fellows, which is an honor of unusual distinction, conferred for outstanding and extraordinary qualifications and experience in his profession. He has been an active member of the ESD/MWRA annual solid waste conference planning committee, serving as its former chair and a presenter over the past three decades. Rick has made multiple PFAS presentations to technical organizations locally and nationally over the past several years. As part of his ongoing PFAS work, Rick is an active member of the Michigan PFAS Action Team (MPART) landfill industry workgroup and its Citizen Action workgroup (CAWG). He was recently appointed to represent MMA as a member of a Michigan State University-led technical committee reviewing the economics and effectiveness of Michigan's Part 201 institutional controls policy. Mr. Burns also recently conducted a webinar on PFOS and PFOS research which can be viewed here: <https://vimeo.com/691858547>



Karen Okonta

REGULATORY COMPLIANCE LEAD

Northville Office



Ms. Okonta offers more than 30 years of professional experience in the solid waste arena. Her expertise includes all aspects of project management including environmental monitoring programs and regulatory compliance at solid waste facilities, waste and materials management; special waste and beneficial use programs; remedial investigations and corrective measures; and industrial/commercial compliance programs.

City of Livonia Landfill

Sr. Project Professional: Assisted with the development of hydrogeologic monitoring reports, intermediate remedial action plan reports, gas monitoring reports, including statistical analyses and data evaluation.

Multiple Landfills Michigan

Sr. Project Professional: Assisted with management of hydrogeologic monitoring for landfills throughout Michigan.

Alan Erickson, P.E.

LANDFILL COMPLIANCE & REPORTING LEAD

Northville Office



Mr. Erickson has more than 34 years of experience in environmental remedial investigations and remedial action plans, solid waste facility engineering and monitoring, and water resources engineering and hydrogeology. Mr. Erickson has planned, conducted, and managed investigations related to groundwater and soil contamination, hydrogeology, and watershed hydrology.

Collier Road Landfill

Project Hydrogeologic Engineer: Mr. Erickson has managed and conducted groundwater and methane monitoring programs throughout most of the active life and closure of a city-owned, Type II municipal solid waste landfill.

Multiple Landfills

Project Hydrogeologic Engineer: Managed hydrogeologic monitoring for several commercial Type I, Type II, and Type III landfills throughout Michigan.

Samantha Grant, P.E. LANDFILL DESIGN LEAD

Northville Office



Ms. Grant has over 10 years of experience in civil design/grading, stormwater management, environmental engineering, and permitting assistance required for landfill planning, design, construction, and certification. She has experience performing evaluations and analyses related to landfill base liner and final cover design, grading for landfill cell sequencing, including interim cover and final cover design slopes, stormwater design (hydrology, conveyance, and detention/retention), and lift station pumping and forcemain design.

Ford APCM Cell IV Surcharge Regrading

Project Engineer: Completed engineering design effort for regrading of historically placed surcharge fill over the former Cell IV area of final cover at APCM. Completed volume, grading, liner repair detailing, and stormwater analysis to develop the engineering drawings and technical specifications for construction.

Range Road Ash Landfill

Project Engineer: Performed engineering design and construction drawing preparation and served as certifying engineer for multiple landfill cell closure/base liner designs.

Cliff Andrews GENERAL ENVIRONMENTAL / DUE DILIGENCE LEAD

Northville Office



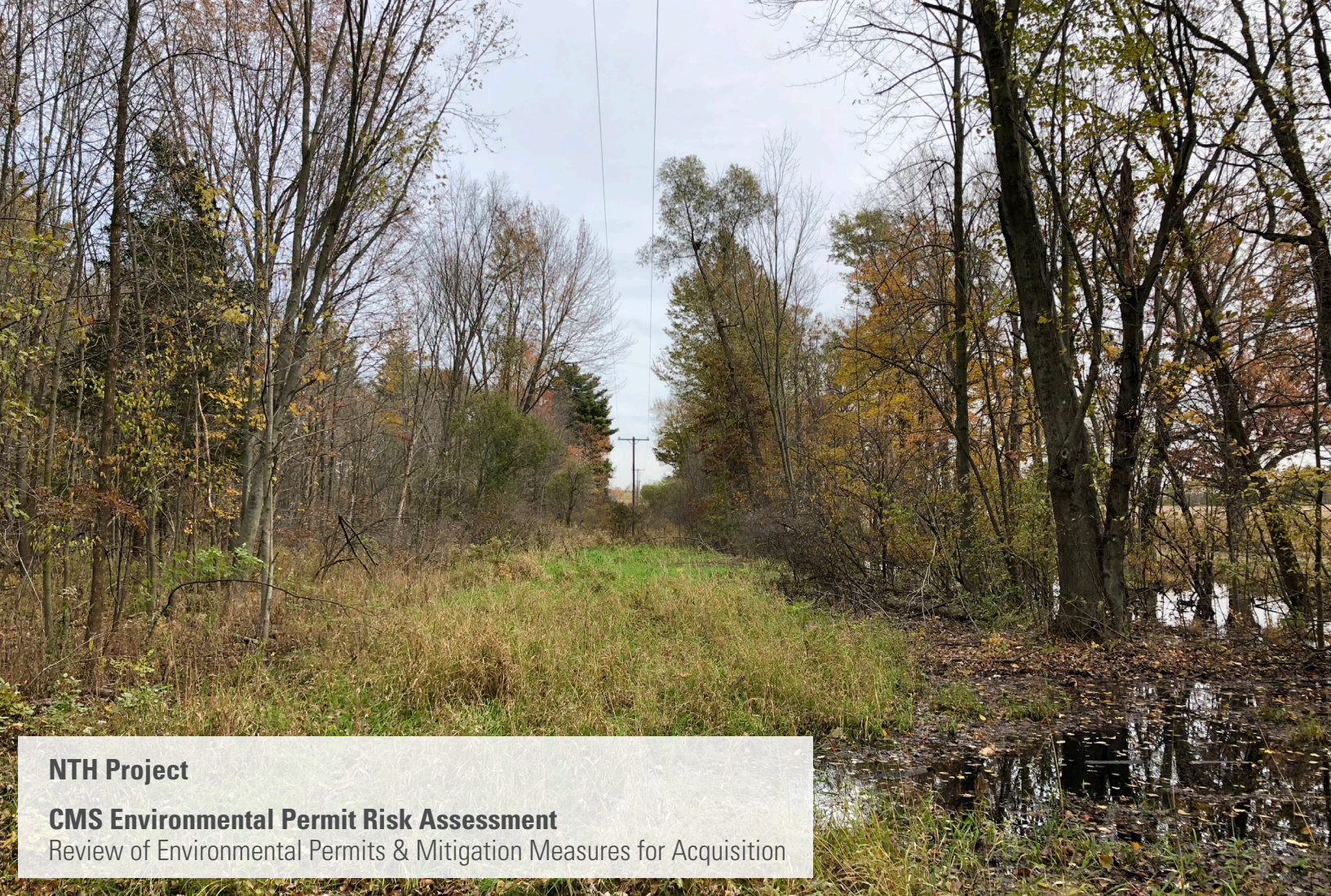
Mr. Andrews has more than 38 years of experience in performing and managing soil investigations, remedial investigations, environmental due diligence assessments, demolition and construction oversight. His project work has included Phase I and II environmental site assessments, baseline environmental assessments and Compliance Analysis (Due Care) Plans, soil and groundwater contamination remedial studies, storm water illicit discharge studies, geotechnical investigations, building demolition, restoration of concrete structures, and construction monitoring.

District of Detroit

Project Manager: Served as Task Manager for Demolition Services for Olympia Development of Michigan. The project included management and engineering services for demolition of eleven commercial buildings.

Willow Run Assembly Plant Redevelopment

Task Manager: Served as Task Manager for conducting Phase I (ESA) of former automotive manufacturing plant (General Motors Willow Run Assembly Plant) in Ypsilanti. Prepared Phase I ESA report, Baseline Environmental Assessment report, and Due Care Plan to be utilized during construction.



NTH Project

CMS Environmental Permit Risk Assessment

Review of Environmental Permits & Mitigation Measures for Acquisition



SECTION 4

RELATED EXPERIENCE & CLIENT REFERENCES

Client: City of Livonia

Location: Livonia, MI

Prime Consultant: NTH Consultants, Ltd.

Project Budget: \$50,000/Yr.

Client Contact: Mr. Jacob Rushlow, Asst. Director of Public Service, 734.466.2606, jrushlow@ci.livonia.mi.us

Project Start: 2018

Project Completion: 2023



City of Livonia Environmental As-Needed Environmental Engineering Compliance Services

Project Challenge: The City of Livonia has projects that emerge throughout the year and thus is in need of an environmental engineering consultant that can take on various as-needed environmental services with short turnaround timetables.

Client Benefit: NTH is a true extension of City staff, providing invaluable expertise in environmental engineering and regulations to ensure continued compliance with applicable local, state, and federal regulations.

Project Overview

The City has called upon NTH's expertise in environmental engineering and regulatory compliance for various projects and issues that arise on a year-to-year basis, including:

- Indoor Air Quality Assessments;
- Building Demolition Assistance;
- Hazardous Materials Survey;
- Asbestos Evaluation and Abatement;
- Contaminated Soil Testing and Evaluation;
- Groundwater Contamination Assessment;
- GLWA Industrial Pre-treatment Sampling and Regulatory Compliance;
- PFAS Evaluation, Compliance and BMP Development;
- Wetland Delineation and Reporting;
- Landfill Regulatory and Operational Compliance; and
- Remedial Action Plan Implementation and Compliance Assistance

Project Scope

NTH's environmental engineering and compliance personnel have provided routine and as-needed environmental engineering and regulatory compliance services to the City since 2018. Whether the project is at the City-owned active Part 115 landfill, old Act 87 landfill, or other project locations throughout the City, NTH has been able to use

its deep bench of professionals to act as an extension of City staff, providing knowledge and capabilities on a wide-variety of environmental issues.

NTH coordinates the efforts of sampling crews and laboratories for both routine and as-needed analyses and completes the statistical evaluation and reporting to ensure regulatory requirements are satisfied. Our professionals have completed demolition assistance compliance, asbestos and other hazardous materials identification and abatement procedures along with contaminated soil testing, groundwater sampling, industrial sanitary sewer discharge sampling and wetland delineation and reporting for the City, among other services.

When the City has called on short turnaround timetables for analysis and evaluation, NTH has stepped up to the plate to respond, ensuring schedule delays are minimized so contractors can continue working without delay. Our knowledge and experience with both environmental regulations and the regulators have served to ensure the City's interests are protected and risk mitigation is shifted to the appropriate responsible party.

Client: Marquette County Solid Waste Management Authority

Location: Marquette County, MI

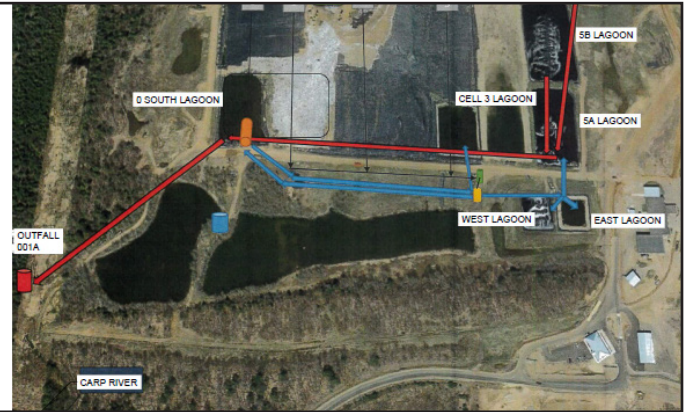
Prime Consultant: NTH Consultants, Ltd.

NTH Budget: \$386,000

Client Contact: Mr. Bradley Austin, Executive Director;
directorrecycle906@gmail.com; 906-249-4125

Project Start: 2022

Project Completion: Anticipated 2025



Marquette County Solid Waste Management Authority (MCSWMA) Landfill Leachate Treatment System

Project Challenge: Fund and design a leachate treatment system to remove PFAS and other parameters within a constrained schedule to meet NPDES and ACO discharge requirements, allowing continued disposal operations.

Client Benefit: NTH assisted with securing a \$4.0M CWSRF grant/loan to design an MBR/UF/GAC system that will operate year-round and meet discharge limits to the Carp River. MCSWMA will achieve regulatory compliance, eliminate existing aeration lagoons, expand solid waste operations within their permitted footprint, and possibly expand the treatment system to serve as a regional PFAS management facility, generating additional revenue to offset associated operating expense.

Project Overview

The MCSWMA Type II landfill, licensed pursuant to Part 115 of Michigan's P.A. 451 (1994, as amended), historically managed leachate disposal via trucking to a local treatment plant, which proved inordinately expensive, representing a significant portion of overall operating budget. Beginning in 2010, the Authority converted to an aeration-based treatment system, using a series of lined ponds and freshwater blending to achieve their National Pollution Discharge Elimination System (NPDES) permit requirements prior to discharge to the adjacent Carp River.

Beginning in 2020, faced with new regulatory requirements for per- and polyfluoroalkyl substances (PFAS), MCSWMA initiated efforts to manage these "emerging contaminants", as well as increased chloride concentrations, which the existing aeration-based system could not sufficiently treat. Based in part on our statewide assessment of landfill leachate PFAS impacts completed in 2019, the Authority retained NTH to assist with funding options and to design a new on-site treatment system capable of achieving new NPDES discharge requirements and compliance with an associated Administrative Consent Order (ACO) issued by Michigan's Department of Environmental Quality, Great Lakes, and Energy (EGLE).

Project Scope

Working closely with MCSWMA and EGLE staff, NTH and our subconsultants prepared a Clean Water State Revolving Fund Grant/Loan Clean Water Program application and associated Project Plan that addressed all required elements, including public engagement. Based on the on this submittal, which was completed in less than 6 weeks, EGLE awarded MCSWMA \$4M to design and construct a new landfill leachate treatment system.

In late 2022, MCSWMA retained the NTH Team to prepare a treatment system design based on the selected alternative, a membrane bioreactor (MBR) with ultrafiltration (UF) and granular activated carbon system that will be housed in a new 5,100 square-foot building with a dedicated laboratory of office space. The design also includes new utilities, underground infrastructure, and improved freshwater blending components to allow year-round operation.. This "first of its kind" treatment system, which will bid in late 2023 and operational by 2025, will eliminate the need the existing aeration lagoons located within the landfill footprint, allowing unfettered expansion within the permitted solid waste boundary.

As with all PFAS removal systems, treatment residual disposal represents a significant challenge, especially in remote Marquette, Michigan where carbon regeneration technology is not economically viable. For now, and until PFAS destruction technology matures and becomes affordable, MCSWMA plans to dispose residuals (MBR/UF sludge and spent GAC) in thick, sealed HDPE "geobags" buried in designated areas of the landfill to prevent recirculation and contaminants concentration increases over time,

NTH is currently evaluating strategies to reduce infiltration and future leachate production, including active face minimization, landfill cell construction/closure phasing to reduce long-term treatment needs. Our recommendations may support MCSWMA's long-term plan to serve as a regional PFAS disposal facility, increasing revenues to offset associated future treatment system expansion and operating costs.

Client: City of Pontiac

Location: Pontiac, MI

Prime Consultant: NTH Consultants, Ltd.

Project Budget: \$100,000/Yr.

Client Contact: Mr. Allen Cooley, III, Interim Director of Public Works 248.758.3617 acooley@pontiac.mi.us

Project Start: 2006

Project Completion: Ongoing



Pontiac Collier Road Landfill Post-Closure Maintenance and Monitoring

Project Challenge: Ensuring that the monitoring and maintenance services were in compliance with regulatory requirements.

Client Benefit: NTH provided a proactive approach to site maintenance issues by planning and implementing preventive measures before problems arose and keeping the site in compliance with its Post-Closure Plan and environmental regulations.

Project Overview

The City of Pontiac's Collier Road Landfill was closed in 2006 following operation as a municipal solid waste disposal facility for over 20 years. Since that time, NTH has provided monitoring and maintenance services to ensure compliance with regulatory requirements and to protect public health and the environment working with limited resources to address on-going PA 451 requirements.

Project Scope

NTH originally became involved with the site in 1982, when the former unregulated fill area was closed and a new landfill, fully compliant with Michigan's then current P.A. 641 design criteria, was constructed. The new landfill unit included a compacted clay liner and a separate leachate collection system built on top of the former fill area. To mitigate potential groundwater contamination from the former fill, a perimeter soil-bentonite slurry wall and an internal perimeter drain were installed to lower the leachate/groundwater head within the fill.

NTH provided investigation, design, and construction services for the City throughout the site closure and new landfill development process. Based on this involvement, NTH has an intimate understanding of the site history, hydrogeologic conditions, and landfill design, and we were uniquely qualified to provide long-term monitoring and maintenance services for the site including all environmental media (air, methane, groundwater, and surface water). We have developed a project team that incorporates NTH personnel who have extensive experience with the site, along with a sampling crew and analytical laboratory that are also familiar with the site monitoring system and requirements. We have also utilized selected subcontractors for drilling and earthwork services on an as-needed basis.

Our project team has provided post-closure monitoring and maintenance services for the Collier Road Landfill since 2006. In addition to implementing the routine groundwater, leachate, and

methane monitoring programs, we have performed supplemental groundwater and methane investigations to address potential off-site migration issues. We have also represented the City of Pontiac during interactions with the Michigan Department of Environmental Quality (MDEQ) to address regulatory compliance requests and financial assurance inquiries

Specific services that NTH provides to the City of Pontiac for the Collier Road Landfill include the following:

- Part 115 leachate, surface water, and groundwater monitoring and reporting
- DWSD leachate discharge permitting and monitoring
- Landfill cover inspection and maintenance
- Part 115 methane monitoring and reporting
- Groundwater monitoring well installation, abandonment, and maintenance
- Gas monitoring probe installation and maintenance
- Storm water inspection and sampling
- Groundwater sampling and laboratory services coordination
- Agency inspections and correspondence
- Remote video camera condition surveys of landfill leachate collection and transmission piping
- Design and oversight of storm sewer slip-lining to eliminate discharge of contaminated shallow groundwater from an adjacent property
- Installation of new monitoring wells and abandonment of unused monitoring wells
- Design and oversight of supplemental leachate extraction well system as part of response activities to mitigate potential off-site groundwater migration issues
- Leachate sampling for analysis of per- and poly-fluoroalkyl substances (PFAS) following MDEQ protocol.

Client: Central Wayne County Sanitation Authority

Location: Huron Township, MI

Prime Consultant: NTH Consultants, Ltd.

NTH Budget: \$300,000

Client Contact: Steve Aynes, Executive Director,
734.722.9980

Project Start: 2005

Project Completion: Ongoing



Huron Monofill Post-Closure Due Care

Project Challenge: Maintaining coordination between the various stakeholders involved in the post-closure of the Huron Monofill.

Client Benefit: NTH's project team has provided the post-closure due care services for the Huron Monofill since final closure in 2005. Through close coordination with the different stakeholders, the site continues to meet its post-closure obligations consistent with environmental regulations.

Project Overview

The Huron Monofill is a closed incinerator ash landfill located on approximately 34 acres in Huron Township, Michigan. It is regulated under Part 115 of Michigan's Act 451, Natural Resources and Environmental Protection Act. Owned by the Central Wayne County Sanitation Authority (CWCSA), the site began operation in 1969 for the disposal of municipal solid waste incinerator ash in a former sandstone quarry. With promulgation of amendments to Part 115, CWCSA upgraded the facility to include a double-composite liner system and permanent dewatering system to depress the local groundwater table to be in compliance with vertical isolation requirements. Existing ash residuals, previously placed directly into the quarry under previous Part 115 permits, were removed and the liner system was installed on top of the former quarry floor. Residuals were then placed on the constructed liner system for disposal. The landfill underwent final closure in 2005.

Project Scope

NTH has been involved with the facility since the mid-2000s, assisting CWCSA with the regrading of the landfill prior to closure, and then closure of the landfill. Due to that extensive involvement and intimate knowledge of the site, NTH was called on to provide post-closure due care services. In addition, NTH has assisted CWCSA in lowering post closure operating costs by successfully negotiating with State regulators to allow the decommissioning of the dewatering wells at the facility. NTH leads a team that coordinates the post-closure due care with CWCSA, Synergy Environmental, regulatory agencies, and our subcontractors.

As such, we have developed a project team that incorporates NTH personnel who have extensive experience at the site (both field technicians and project managers), personnel from the Michigan Consulting & Environmental, Environmental Sampling Services, Eurofins, and other appropriate subcontractor firms. These subcontractors work closely with our in-house team and include sampling crews, analytical laboratories, and earthwork, electrical and mechanical subcontractors.

Our project team has provided the post-closure due care services for the Huron Monofill since final closure in 2005. The services are provided in a manner consistent with the post-closure plan and Part 115 rules.

We continue to provide the following services to CWCSA in conjunction with post-closure care:

- Operation and Maintenance of Leachate Collection and Treatment Systems
- Maintenance Planning and Scheduling
- Landfill Inspection, Maintenance and Repairs
- Camera Inspection of the on-site leachate lines, as needed
- Leachate, Surface Water, and Groundwater Sampling and Reporting
- Repair, replacement and abandonment of monitoring wells, as required
- Financial Assurance and Budget Preparation
- Soil Erosion and Sedimentation Control Compliance
- Agency Inspections and Correspondence

Client: City of Kalamazoo

Location: Kalamazoo, MI

Prime Consultant: NTH Consultants, Ltd.

NTH Budget: \$75,000 / year

Client Contact: Jean Talanda Environmental Programs Manager; 269-337-8737; jtalandaJ@kalamazoocity.org

Project Start: 2008

Project Completion: Ongoing



ALLIED PAPER LANDFILL SUPERFUND SITE CERCLA Closure, Construction Oversight, Long-Term Monitoring, and Potential Site Redevelopment

Project Challenge: Kalamazoo has agreed to accept ownership of the site upon completion of the final remedial actions and will be responsible for future maintenance and monitoring. Therefore, they needed assistance to ensure that the site closure strategy will protect the public and the environment while minimizing long-term costs and allowing potential beneficial use of the property..

Client Benefit: NTH's detailed review of the proposed remedial actions provided the City with an understanding of the risks and implications of different options prior to implementation. During closure activities, NTH provided expertise to assess the long-term stability and monitoring costs associated with site closure. This information and assistance provided a basis for negotiating an acceptable ownership transition agreement with USEPA and the ownership group.

Project Overview

The Allied Paper Landfill is one of five historical paper manufacturing residual landfills containing polychlorinated biphenyls (PCBs) that have impacted an 80-mile-long stretch of the Kalamazoo River, creating one of the longest continuous CERCLA (aka "Superfund") sites in the United States. The site lies within the floodplain of Portage Creek, a major tributary to the Kalamazoo River, and is situated in the center of a densely-populated, demographically diverse area of Kalamazoo, Michigan, and within 1 mile of the City's primary municipal wellfield and its associated Wellhead Protection Area (WHPA)..

Project Scope

Over the course of the project, NTH has served the City in a variety of roles, each related to a specific stage of the CERCLA process, including:

- Completed a comprehensive review and detailed summary of the Remedial Investigation (RI) report prepared by others for the former owner and PRP;
 - Oversaw and evaluated a Supplemental Groundwater
 - Investigation to confirm the Conceptual Site Model (CSM) developed by previous consultants;
 - Developed a technical strategy to help formulate various remedial options and associated construction/ monitoring costs for consideration during feasibility study (FS) completed by USEPA;
 - Interacted with City leadership, USEPA Region 5 staff, MDEQ/ EGLE (RRD and Source Water Protection), various Kalamazoo River Watershed citizen volunteer groups, as well as Michigan's
- US congressional delegation to develop meaningful dialog and outcomes regarding suitable remedial strategies;
 - Worked closely with all agencies, elected officials, and Kalamazoo River community activist groups to develop effective community outreach efforts, clear messaging, goals, and associated support during formal public hearings
 - Assisted USEPA, MDEQ, and associated technical consultants to develop the scope and data interpretation of a relatively extensive 2014 hydrogeologic investigation, which included deep Rotasonic-drilled test borings/wells, completed to further define the hydraulic characteristics and potential extent of groundwater quality impacts in deeper, on-site aquifers upgradient of the Kalamazoo municipal wellfield;
 - Collaborated with MDEQ RRD and USEPA's Office of Superfund Remediation & Technology Innovation, Technology Assessment Branch, to assess the potential of the PulverDryer™ process for possible use to remediate OU-1, resulting in a jointly prepared technical memorandum; and
 - Completed a detailed review of USEPA's formal draft and final FS report issued in late 2014, providing critical technical comment to help guide selection of the final remedial action, leading to the Record of Decision (ROD) that began implementation in 2021. NTH continues to advise Kalamazoo with ROD activities and development of a post-closure operations and maintenance (O&M) plan and long-term environmental monitoring after construction is completed, probably in 2025.

Client: Waste Management, Inc.
Location: Houston, TX
Prime Consultant: NTH Consultants, Ltd.
Project Budget: \$800,000/Yr.
NTH Budget: \$110,000/Yr.
Client Contact: Louis Bull, 303.914.1490
Project Start: 1998
Project Completion: Ongoing



Landfill Hydrogeologic Monitoring Program Landfill Services

Project Challenge: Waste Management was in need of a consultant capable of completing the Hydrogeologic Monitoring Reports for all of their closed and active landfills in Michigan.

Client Benefit: Working with WM staff, NTH has established one of the most efficient groundwater monitoring/reporting programs in Michigan. This has resulted in streamlined hydrogeologic monitoring plans (HMPs) that have reduced parameter lists and well networks at almost every site.

Project Overview

NTH was retained by Waste Management (WM) beginning in 1998 to complete the Hydrogeologic Monitoring Reports for all of WM's active and closed solid waste landfills in Michigan. This has included a total of up to 36 individual sites across the state, most of which require reports to be prepared on a quarterly basis. The reports are prepared in accordance with each site's Hydrogeologic Monitoring Plan and are submitted to the State and local regulatory agencies.

Project Scope

NTH coordinates the efforts of sampling crews and laboratories contracted by WM to collect groundwater, surface water, and leachate samples at each site. The analytical results are transmitted to us electronically. We then compile the water quality data and perform the necessary statistical evaluations.

Statistical analyses are performed in accordance with ASTM Standard Guide 63-12-98 using the computer program DUMPStatTM, which was developed specifically for evaluating groundwater monitoring data by Dr. Robert Gibbons and is the only method approved by WM corporate technical staff.

NTH is responsible for checking all of the field and laboratory data for accuracy, data entry errors, anomalous data points, and conformance with the established QA/QC procedures for each site's monitoring program.

Each quarterly Hydrogeologic Monitoring Report includes a description of the facility, a summary of the hydrogeologic conditions, the number and locations of all sampling points, sampling and analytical methods, any problems encountered during the sampling event either in the field or the laboratory, comparisons of sampling data to historic values, site plans, current groundwater contour maps, and calculated groundwater flow velocities.

Each report also includes a review of the current statistical evaluation and conclusions regarding the possible causes of any statistical excursions. We have developed extensive knowledge regarding the hydrogeology of each site, which we have routinely applied to successfully resolve various groundwater quality issues.

Since inception, our contract has been renewed by WM at least through 2017. As a result of our work at most of these sites, NTH has also been retained to perform a variety of related services, including emergency re-sampling, landfill gas sampling, revisions to HMPs, hydrogeologic investigations, design, and construction monitoring.

Also, our level of efficiency has allowed us to establish lump sum costs to complete the routine reports. This has allowed our client to have predictable expenses and meet their groundwater monitoring/reporting budgets.

Client: Michigan Waste and Recycling Association (MWRA)

Location: Michigan

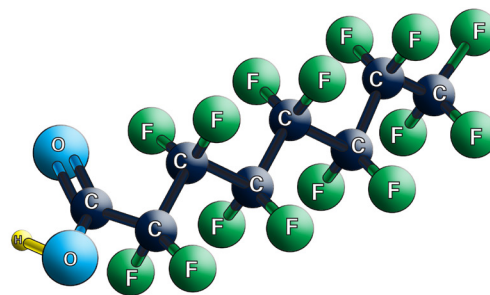
Prime Consultant: NTH Consultants, Ltd.

Project Budget: \$230,000

Client Contact: Kevin Kendall, kkendall@republic-services.com; 248.333.8624

Project Start: 2018

Project Completion: 2019



Landfill Leachate PFOA and PFOS Statewide Study

Project Challenge: MWRA needed to conduct a collective study of leachate from landfills in Michigan to ascertain the correlation between PFOA and PFOS concentrations in landfill leachate and in the influent of water resource recovery facilities.

Client Benefit: NTH developed a statewide report on the impact of landfill leachate PFOA and PFOS influent on water resource recovery facilities. The report is now used as a national model for evaluating PFOA and PFOS in landfill leachate.

Project Overview

In February of 2018, Michigan's Department of Environment, Great Lakes, and Energy (EGLE) launched the Industrial Pretreatment Program (IPP) PFAS Initiative to reduce and eliminate discharges of certain PFAS from industrial sources that may pass through wastewater treatment plants. In response, the Michigan Waste and Recycling Association (MWRA) contracted with NTH to conduct a collective study of leachate from landfills in Michigan. This study was to ascertain the correlation between PFOA and PFOS concentrations in landfill leachate and in the influent of water resource recovery facilities (WRRFs).

Project Scope

Samples from 36 separate landfills across Michigan were collected by NTH staff who were trained by EGLE on their sampling protocols. These samples were collected from both industrial and municipal landfills, and were analyzed using US EPA Method 537 (modified). Evaluation of the laboratory results included:

- Comparing the concentrations to State of Michigan published water quality values and US EPA health-based standards.
- Comparing the concentrations to those identified in other locations globally, such as Europe, Australia and China.

- Estimation of the total PFOA and PFOS loading (pounds per day) at each landfill's receiving WRRF, and what fraction was due to landfill leachate.
- Consideration of the effect on the WRRF due to the various leachate disposal methods, such as direct sanitary discharge, hauling to off-site treatment facilities or deep well injection.

The final report of the collective study was provided directly to EGLE consistent with an agreement with the MWRA. A summary report was also prepared by NTH and shared with statewide media outlets, which was used as the basis for multiple news stories.

The MWRA and EGLE met to discuss the results of the report and agree on next steps. The information contained in the report also helped individual landfill facilities in developing Best Management Practices to manage leachate containing PFAS compounds when requested from their local water resources recovery facility. The report also contributed to development of compliance agreements with the Great Lakes Water Authority and the Michigan PFAS Action Response Team (MPART), round-table discussion on PFAS treatments, existing technologies, and experimental and research efforts.

NTH's report is now being used as a model nationwide on studying impacts of PFOA and PFOS in landfill leachate on WWRF influent.

Client: GFL Environmental

Location: Pontiac, Michigan

Prime Consultant: NTH Consultants, Ltd.

Subconsultant: NF (Topographic Survey)

NTH Budget: \$111,100

Client Contact: Frank Francisco, ffrancisco@gflenr.com

Project Start: 2021

Project Completion: Estimated 2023



GFL-PONTIAC MATERIALS MANAGEMENT AND MAINTENANCE FACILITY

Site Design/Civil Design/SUE/Storm Sewer Investigations/CCTV Inspection

Project Challenge: GFL Environmental wanted to redevelop a former industrial site into a main campus for various services, including a new maintenance garage, container shop, and material recovery facility.

Client Benefit: NTH's experience with GFL's operations and the site through a previous project on this site helped NTH meet GFL's requirements for each site use. NTH developed conceptual layout plans for the 38-acre campus rapidly to allow the client to compare from three alternatives before detailed design in order to meet the client's desired schedule.

Project Overview

GFL Environmental engaged NTH to complete the preliminary and detail engineering drawings and specifications for a 38-acre site. GFL wanted to renovate a former automobile plant site with multiple uses to suit their expanding business needs. GFL chose NTH in part due to NTH's wealth of knowledge of the site, gained over several previous projects at this site. NTH also performed various site exploration and contamination investigations before construction to bolster the construction plans and proactively identify any issues or unique site constraints.

Project Scope

NTH designed site, utility, grading, demolition, and soil erosion and sediment control plans to construction-level and coordinated design with owner and local municipality during design and site plan review. This 38-acre site is to become a "campus" with one new and two renovated buildings, as well as organized parking areas, ADA accessibility, and vehicular site circulation improvements.

As part of schematic design, NTH created multiple conceptual site layout options quickly based on client's desires and met with client representatives to discuss feedback on each layout.

NTH staff performed site visits and coordinated further site exploration using closed-circuit television (CCTV) inspection, subsurface utility exploration (SUE), and contamination/environmental monitoring. Through these upfront investigations, NTH designed the plans to better match existing conditions, and provide a more comprehensive demolition plan to contractors, as well as a vapor barrier detail to seal utility trenches against potential contamination.

NTH attended site meetings during site plan review and coordinated with municipal reviewers as required for permitting.

NTH's knowledge of the site, gained over multiple previous projects, paired with NTH's relationship with client representatives at GFL and understanding of their wants and needs allowed NTH to provide comprehensive support and robust engineering drawings for this site plan package.

Client: Baldwin Pontiac, LLC
Location: Pontiac, Michigan
Prime Consultant: NTH Consultants, Ltd.
NTH Budget: \$594,000
Total Project Budget: \$7 Million
Client Contact: GFL Environmental USA, Inc.,
Mr. Joe Munem, 586.354.2352
Project Start: 2013
Project Completion: 2017

Former GM Pontiac Fiero Assembly Plant (Before)



New Solid Waste Transfer & Processing Facility (After)



Baldwin Pontiac Solid Waste Transfer Station & Processing Facility Engineering Services, Permitting, & Consulting

Project Challenge: GFL Environmental was in the process of converting a portion of their property into a new solid waste transfer station and recycling facility, and in order to do so, GFL needed assistance in performing surveys, site assessments, and preparing various permits throughout the permitting process.

Client Benefit: NTH's broad range of consulting and engineering services, including infrastructure, geotechnical, environmental, site-civil, and construction observation, all came into play to transform a formerly unused industrial site into a productive segment of the regional solid waste management system.

Project Overview

The project site was the former Fiero Assembly Plant, part of the GM Pontiac North manufacturing campus, in Pontiac, Michigan. NTH assisted GFL in converting a portion of the property into a new solid waste transfer station and recycling facility. Services provided by NTH included a property condition survey, Environmental Site Assessment, conceptual and detailed facility site design/layout and construction observation. NTH guided GFL through the extensive permitting process, which included preparing a complete MDEQ Part 115 Construction Permit Application, City of Pontiac Site Plan Review process, SESC Soil Erosion Permitting, NPDES/OCWRC storm-water permitting and Part 55 Air pollution permitting.

Project Scope

NTH assisted GFL during property acquisition and for inclusion in Oakland County Solid Waste Management Plan. During this process, NTH provided an existing property condition survey, including assessment of existing structural, utility and other facility components for the eventual site re-use as a solid waste transfer and processing facility.

NTH prepared several conceptual facility designs and site layouts, which helped GFL strategize and envision the ultimate end-use for the facility as a regional solid waste handling, recycling, and processing facility, while incorporating existing facility buildings at the nearly 70 year old former automobile factory.

As part of the environmental permitting process, NTH reviewed and used the existing available environmental information to characterize the soil and groundwater conditions at the site and prepared necessary hydro-geological and environmental documentation reports to characterize the new facility use while protecting the client from future environmental liabilities.

NTH, in conjunction with architectural, structural, mechanical, electrical, fire protection and other design subconsultants, developed detailed engineering construction documents to build-out a portion of the existing facility for re-use as a solid waste transfer and processing facility.

NTH, responsible for the site-civil design components, navigated the labyrinth of existing site utilities to develop focused solutions for utilizing as much of the existing infrastructure as possible and developing new site utility design services for water, storm, and sanitary infrastructure. Additionally, traditional site/civil layout, grading, and storm water management was designed for the site. NTH provided on-going construction assistance and conflict resolution at various times during construction to assist the contractors with unforeseen conditions.

Client: Green For Life (GFL) Environmental USA Inc.

Location: Various Locations, MI

Prime Consultant: NTH Consultants, Ltd.

NTH Budget: \$90,000/Yr.

Client Contact: Mario Vano, Director of Fleet,
586.772.8900 (ext. 40447), mvano@gflenv.com

Project Start: 2016

Project Completion: Ongoing



Multi-Facility Environmental Compliance Assistance Environmental Services

Project Challenge: Ensuring that multiple and varied compliance deadlines were met.

Client Benefit: NTH assists with ensuring that the various regulatory time frames are met, maintaining compliance with stormwater projects by coordinating and communicating with the regulatory agency, and assisting with implementation of their Stormwater Pollution Prevention Plan and Integrated Spill Prevention Control and Countermeasures Plan and Pollution Incident Prevention Plan.

Project Overview

NTH was retained by a regional waste industry client to provide environmental compliance assistance and on-going master services and professional engineering support for surface water and storm water quality and quantity, planning improvements, and permitting at multiple waste industry facilities in Michigan.

Project Scope

NTH assists a regional waste industry client with surface water and stormwater management, NPDES permitting, and environmental compliance at multiple facilities throughout Michigan.

Services that NTH provide include: General and individual NPDES permit application; NPDES monitoring and reporting, preparation of Storm Water Pollution Prevention Plans (SWPPP); and development of Integrated Spill Prevention Control and Countermeasure (SPCC) Plan and Pollution Incident Protection (PIP) Plan for the facilities.

The SWPPP identifies potential sources of stormwater pollution and recommends appropriate best management practices (BMPs) or pollution control measures to reduce the discharge of pollutants in stormwater runoff. The SWPPP covers the operations of the facility and is prepared in accordance with requirements of the NPDES permit. The SPCC/PIP plan identifies "oil" and other significant polluting materials present at the site above threshold levels and provides measures to prevent and address potential spills of materials to waters of the state.

In addition to permitting and plan preparation, NTH provides the necessary employee training; assists with the monthly inspections and required visual assessments and observations required as part of the General Permits and the plans; and assists with the reporting requirements to be completed in MiEnviro Portal, the State of Michigan electronic database.

 APPENDIX A

KEY STAFF RESUMES

// Resume



David R. Lutz, P.E. Vice President, Sr. Principal Engineer

Mr. Lutz has nearly 20 years of experience assembling and managing design teams on multi-million dollar construction projects related to site civil, infrastructure improvement, environmental, and landfill construction. He is experienced in managing all phases of a landfill project from cost estimating through planning, design, permitting, field investigation and monitoring, construction administration, certification, and project closeout. Mr. Lutz has provided project expertise in the areas of landfill design, closure, project engineering, project management, CQA, and certification for both hazardous and non-hazardous, solid and ash waste landfill facilities. He has engineered and completed projects for transfer stations, landfill cell/final cover, gas/leachate collection system, as well as, landfill phasing and valuation analysis including airspace estimations, waste filling sequence, and grading plans.

EDUCATION

Wayne State University

- MS, Civil and Environmental Engineering (2008)

Wayne State University

- BS, Civil and Environmental Engineering (2006)

PROFESSIONAL LICENSES AND CERTIFICATIONS

- Licensed Professional Engineer (OH-2019, IN (pending), and MI-2010)
- Confined Space Entry (2008)
- Part 91 Soil Erosion and Sedimentation Control (MI-2007)
- 40-hour OSHA HAZWOPER Program (2006)

SELECTED PROJECT EXPERIENCE

City of Livonia As-Needed Environmental Engineering (2018 - Ongoing)

City of Livonia

Livonia, MI

Project Manager: Project manager for a multi-year general environmental assistance contract to assist the City with assignments regarding environmental health and safety for various projects and at various City facilities. Tasks included solid waste landfill regulatory compliance, GLWA IPP reporting, PFAS sampling and guidance, demolition and hazardous material surveys, contaminated soil evaluations, and other tasks as requested by the City.

GLWA As-Needed Environmental Engineering (2018 - 2022)

Great Lakes Water Authority (GLWA)

Detroit, MI

Task Manager: Provided general assistance to completion of CS-213 assignments regarding environmental health and safety at various GLWA facilities. Tasks included emergency evacuation and map preparation, emergency utility shutoff mapping and other tasks as assigned.

GFL Pontiac Materials Management and Maintenance Facility (2021 - Ongoing)

GFL Environmental

Pontiac, MI

Project Manager: Led engineering design effort for a new 35-acre campus for a regional solid waste company that included a new materials management facility, heavy truck maintenance garage and container repair facility. Design included site layout, grading, pavement, stormwater, and site utilities. Extensive permitting coordination through EGLE and local agencies, along with traditional site-civil design was also included.

GFL Saginaw Maintenance Facility (2021 - Ongoing)

GFL Environmental

Saginaw, MI

Project Manager: Led engineering design effort for a new 5-acre facility for a regional solid waste company that included a new heavy truck maintenance garage and storage yard. Design included site layout, grading, pavement, stormwater, and site utilities. Extensive permitting coordination through EGLE and local agencies, along with traditional site-civil design was also provided, including a Part 31 USACE/EGLE joint permit.

SELECTED PROJECT EXPERIENCE (continued)

GFL North Michigan Landfill Cell Construction (2020)

GFL Environmental

Onaway, MI

Project Manager: Oversaw detailed construction quality assurance requirements and served as certifying engineer during construction of various landfill liner Cells over multiple construction seasons to ensure compliance with environmental regulations and project documents.

Pontiac Collier Rd Landfill Leachate Extraction Well System (2018 - 2019)

City of Pontiac

Pontiac, MI

Principal Engineer: Managed engineering design effort to develop engineering drawings and technical specifications for construction of a leachate extraction well and gravity main system to extract leachate from a historical Type II facility to ensure inward groundwater flow gradient across an existing soil-bentonite cutoff wall. Analysis included pumping system evaluation, groundwater and leachate inflow modeling and electrical engineering components.

Ford APCM Cell IV Surcharge Regrading (2018 - 2019)

Ford Land

Allen Park, MI

Principal Engineer: Managed engineering design effort for regrading of historically placed surcharge fill over the former Cell IV area of final cover at APCM. Managed staff in completion of volume, grading, and stormwater analysis to develop the engineering drawings and technical specifications for construction.

Landfill Acquisition Due-Diligence (2018 - Ongoing)

GFL Environmental

Various Locations, MI

Principal Engineer: Managed engineering evaluation efforts related to due-diligence activities for the transaction of solid waste disposal facilities at multiple sites in Michigan. Included comprehensive evaluation of airspace, leachate management/disposal, cell permitting/construction, capital outlay, operational budgets, and detailed financial evaluations to value and advise client on moving forward with asset purchases.

Richfield Landfill Final Closure (2014 - 2015)

Michigan Department of Technology, Management, and Budget (DTMB)

Davison, MI

Sr. Project Engineer: Led engineering design and construction quality control effort for final closure of a Type III solid waste landfill. In addition to developing subgrade (waste) and final cover grading plans, conducted detailed engineering analyses regarding slope stability, settlement, erosion control, stormwater management, and earth balance. Detailed construction quality assurance requirements and served as certifying engineer during construction of the final closure to ensure it compliance with environmental regulations.

DTE Range Road Ash Landfill (2012 - Ongoing)

DTE Energy

China Township, MI

Project Manager: Managed engineering design effort and served as certifying engineer for multiple closure events covering nearly 50 acres of final cover construction for 3 sub areas of the 400 acre ash landfill. Performed construction design documentation (drawings and specifications) in accordance with the approved engineering plans and CQA plan.

// Resume



Richard L. Burns Senior Vice President

Mr. Burns is a sought out subject matter expert on per and polyfluoroalkyl substances (PFAS) sampling and evaluations. He has 38 years of experience in the environmental/engineering consulting field, with a focus on waste-related, contaminant transport, and water resource projects. He has planned, managed and conducted environmental projects relating to all aspects of the waste management industry; renewable energy; agricultural CAFO issues; stormwater/watershed management; GIS application; and pollution prevention. Rick has extensive experience in permitting/closure/compliance of waste disposal facilities, including: landfills, processing plants, and transfer stations; RCRA and CERCLA environmental investigations and compliance; determining hydrogeologic regimes in multi-aquifer environments, as well as groundwater supply assessments. His technical scope and management of environmental assignments is extensive and comprehensive, including projects throughout the US and several internationally.

EDUCATION

Wayne State University

- MS, Hydrogeology/
Geochemistry (1986)

Eastern Michigan University

- BS, Geology (1983)

PROFESSIONAL ASSOCIATIONS

- Michigan Chamber of Commerce Environmental & Energy Committee and PFAS Technical Subcommittee
- ASCE-MI Infrastructure Report Card, Solid & Hazardous Waste Committee (Chairman, 2017)
- Livingston County, Michigan Solid Waste Planning Committee (Chairman, 2010-2016)
- Michigan Waste and Recycling Association Technical Advisory Committee (member)

SELECTED PROJECT EXPERIENCE

City of Livonia Landfill (2018 - Ongoing)

*City of Livonia
Livonia, MI*

Principal Engineer: As Project Director/Technical Advisor, provided guidance on future landfill operations and planning in light of future regulatory and statutory revisions.

Assisted with developing a Compliance Agreement with GLWA to avert potential leachate pre-treatment for PFAS. Advised City regarding acceptance of off-site fill soils for possible future landfill construction. Advised and coordinated other as-needed engineering services, including geotechnical, site assessment, and indoor air quality investigation.

Clean Water State Revolving Fund Loan/Grant (CWSRF) Application and Project Plan - Leachate Treatment System (2022 - Ongoing)

Marquette County Solid Waste Management Authority (MCWSMA)

Lead Technical Officer: On behalf of MCWSMA in early 2022, Rick served as NTH's lead technical officer for the preparation of CWSRF grant/loan application to provide funding for a new landfill leachate treatment system needed to meet NPDES permit discharge requirements, as well as an EGLE administrative consent order (ACO) for per- and polyfluoroalkyl substances (PFAS). Rick coordinated a diverse technical staff to prepare a comprehensive project plan that included natural resource inventory assessments, economic analyses, and alternative treatment technologies reviews, all within a 10-week time-frame. As result, EGLE granted MCWSMA a \$3.8M loan/grant to allow the project to move forward to the design and construction phases that are ongoing.

Statewide Leachate PFAS Impact on WWTP Influent Study and Report (2018 - Ongoing)

MWRA

Technical lead, project manager, and primary report author for the Michigan Waste & Recycling Association's statewide evaluation of leachate PFAS impacts on wastewater treatment plant influent based on mass and concentrations, the first-in-the-nation project often referenced in national publications. The project involved 35 Type II landfills and 34 regional WWTPs with available PFAS data. Ongoing activities include discussions with MPART, EGLE, and MWEA to determine PFAS reduction in landfills and WWTP biosolids.

PROFESSIONAL ASSOCIATIONS CONT.

- Engineering Society of Detroit Annual Solid Waste Conference Committee (member)
- ASFE Fundamentals of Professional Practice (course graduate)
- Geosynthetic Research Institute (corporate member representative)
- Michigan's PA 451 Part 115 Rules Revision Committee (member)
- Michigan Agriculture Environmental Assurance Program Technical Committee (advisor)
- Governor's Recycling Committee Planning Committee (member)
- USDARD/ACEC Coordination Council (member)
- Hamburg Township, Michigan Environmental Review Board (member)
- Brownfield Redevelopment Board - Hamburg Township, Livingston County, MI (member)

SELECTED PROJECT EXPERIENCE (continued)

Central Wayne County Sanitation Authority Huron Monofill (2004 - Ongoing)

Huron Township, MI

Project Manager: Responsible for all aspects of this solid waste disposal facility, including: permitting; stormwater management; leachate industrial pretreatment; groundwater modeling/monitoring; and landfill closure/post-closure care,, focusing on maintaining an inward gradient in this converted rock quarry.

Collier Road Landfill (1994 - Ongoing)

Pontiac, MI

Project Manager/Principal Investigator: Responsible for multiple permitting activities, groundwater monitoring, stormwater management, facility closure/post-closure activities at this lined and unlined municipal solid waste disposal facility, which relies on maintaining an inward gradient, achieve environmental protection criteria negotiated as part of long-standing consent order.

Allied Paper Landfill (OU-1), Kalamazoo River Superfund Site (2007 - Ongoing)

Kalamazoo, Michigan

Project Manager: Representing the City of Kalamazoo in the review and implementation of the CERCLA process leading to closure of this former paper mill disposal facility, one of several operating units located along an 80-mile length of the overall Kalamazoo River Superfund site. Primary responsibilities included technical review of proposed remedial alternatives, groundwater collection/treatment, and long-term closure leading to proposed redevelopment of the site in coordination with MDEQ and USEPA Region 5 staff.

WDI Site No. 1 (1999 - 2003)

Michigan

Project Manager: Worked closely with the owner's technical director to investigate hydrogeologic conditions, focusing on groundwater recharge sources and impacts, as well as establishing the limits of fill at this former mixed-use, unlined disposal facility located immediately adjacent to Michigan's largest operating commercial RCRA/TSCA disposal facility.

Richfield Sanitary Landfill (2004 - 2015)

Genesee County, MI

Project Manager: Responsible for several expansions of this Type II/Subtitle D facility, which, due to the owner's financial default/bankruptcy, left the site overfilled with uncontrolled leachate production, which mobilized emergency actions by the State. Subsequently served as the overall NTH Project Manager as part of a design-build team retained by MDEQ.

Regional and National Landfill Leachate PFAS Presentations (2019 to present)

- Environmental Research and Education Foundation (EREF) PFAS Summit, Ann Arbor, Michigan (August 2019)
- Environmental Business Council, New England (EBC), PFAS Impact on Landfill Operations, Framington, Massachusetts (November 2019)
- Engineering Society of Detroit/MWRA Solid Waste Conference, Statewide PFAS Study, East Lansing, Michigan (March 2020)
- MWRA/NTH Consultants, Ltd PFAS Webinar (June 2020)
- Michigan State University PFAS Research Center, East Lansing, Michigan (November 2020)

// Resume



Karen W. Okonta **Sr. Project Professional**

Ms. Okonta offers more than 30 years of professional experience in the solid waste arena. Her expertise includes all aspects of project management including environmental monitoring programs and regulatory compliance at solid waste facilities, waste and materials management; special waste and beneficial use programs; remedial investigations and corrective measures; and industrial/commercial compliance programs. She has developed and implemented environmental monitoring and compliance programs at numerous landfills and other industrial sites for various media including groundwater, storm water, surface water, explosive gas, and leachate; and managed all aspects of regulatory compliance. Ms. Okonta has extensive experience with statistical analysis, hydrogeological investigations, SPCC and SWPP program management, NPDES permitting, environmental assessment, modeling applications, data management and analyses, risk assessment, geochemical studies, contaminant fate and transport, and special research and development projects. She works with the private and public sector on regulatory compliance programs in several states and her clients have ranged from municipalities to commercial and industrial entities and not-for-profit organizations.

EDUCATION

University of Northern Iowa

- BA, Biology

PROFESSIONAL LICENSES AND CERTIFICATIONS

- Storm Water Industrial (Michigan)
- Storm Water Construction (Michigan)

PROFESSIONAL ASSOCIATIONS

- Water Management Association of Ohio / Ohio Stormwater Association
- Water Environment Federation / Ohio Water Environment Association
- Michigan Water Environment Association
- Water Environment Federation

SELECTED PROFESSIONAL EXPERTISE

City of Livonia Landfill (2018 - Ongoing)

City of Livonia

Livonia, MI

Project Professional: Assisted with the development of hydrogeologic monitoring reports, intermediate remedial action plan reports, gas monitoring reports, including statistical analyses and data evaluation; assisted with GLWA industrial pre-treatment permitting and reporting, PFAS sampling and best management practices for wastewater discharge permit modification, development of operations plan, and other regulatory compliance.

Multiple Landfills Michigan (2016 - Ongoing)

Various Clients

Various Locations, MI

Project Professional: Assisted with management of hydrogeologic monitoring for landfills throughout Michigan. Specific components of these projects included coordinating sampling and laboratory personnel, review and evaluation of hydrogeologic and chemical data, statistical analysis, preparing quarterly reports and notifications, developing and modifying hydrogeologic monitoring plans, assisting with regulatory compliance issues and addressing statistical exceedances. Monitoring plan modifications have included reduced sampling frequency, monitoring parameter waivers, statistical evaluation methods, and demonstrations of site monitorability.

Hoffman Road Landfill (1995 - 2016)

City of Toledo Division of Solid Waste

Toledo, OH

Project Manager: Completed a review of existing hydrogeologic data, and conducted negotiations with Ohio EPA to develop an efficient groundwater monitoring well network and reduce the number of monitoring wells at the site. Developed and implemented the environmental monitoring programs for the facility including the groundwater sampling and analysis plan, statistical monitoring plan, NPDES, leachate monitoring, and explosive gas monitoring plans.

SELECTED PROFESSIONAL EXPERTISE CONT.

City of Toledo - Hoffman Road Landfill (1995 - 2016)

City of Toledo

Toledo, OH

Project Manager: Lead the development of a conceptual model for a Municipal Solid Waste Landfill (MSWL) using hydrogeologic, geochemical, mineralogical, and climatological data to simulate precipitation infiltration and subsequent chemical reaction pathways. The objective of this model was to serve as a tool to demonstrate the expected geochemical results of a leachate release in lieu of statistically evaluating groundwater quality data, where limitations in the methodology often results in "false positive" triggers.

Huron Monofill Post-Closure (2016 - Ongoing)

Huron Township, MI

Project Professional: Responsible for keeping site in compliance with applicable County and State regulations, responsible for groundwater monitoring reports, and working with site manager to prioritize on-going maintenance activities, monitoring reports, and working with site manager to prioritize on-going maintenance activities. Successfully demonstrated that closing down of the secondary collection pumping system did not result in adverse impact to the environment.

Environmental Regulatory Compliance Audits – Regulatory Compliance (2016 - Ongoing)

Various Locations, MI

Project Professional: Conducts facility-wide, multi-media environmental regulatory compliance audits for a variety of clients, including Michigan's largest utility companies. These audits have covered water quality, hazardous, non-hazardous, solid and liquid industrial waste management; spill plans, storm water and NPDES permitting requirements. Assisted clients in preparing for successful agency multi-media inspections, including reviewing site management activities, permitting and regulatory requirements, response planning documents, inspection and training records, and sampling results.

Regulatory Compliance (2016 - Ongoing)

Various Clients

Various Locations, MI & OH

Sr. Project Professional: Managed environmental monitoring programs in various states throughout the mid-west and southern U.S. to comply with appropriate federal, state, and local regulations. Provided oversight of evaluation and interpretation of laboratory analytical data from a variety of media including air, soil and sediments, surface water, and groundwater. Implemented alternative and cost-effective remediation techniques for impacted groundwater at solid waste facilities. Reviewed findings of environmental monitoring investigations and developed reports to submit to private industries, municipalities, and regulatory agencies. Experienced in negotiating with regulatory agencies to resolve compliance and remediation issues at solid waste and other industrial facilities.

// Resume



Alan C. Erickson, P.E. Principal Engineer

Mr. Erickson has more than 34 years of experience in environmental remedial investigations and remedial action plans, solid waste facility engineering and monitoring, and water resources engineering and hydrogeology. Mr. Erickson has planned, conducted, and managed investigations related to groundwater and soil contamination, hydrogeology, and watershed hydrology. His technical expertise includes groundwater and contaminant transport modeling, geochemistry, statistical methods in hydrogeology and groundwater monitoring, and aquifer testing. He has extensive experience in permitting, design, construction, monitoring, and closure of a variety of hazardous and non-hazardous solid waste landfills, waste impoundment lagoons, processing plants, and transfer stations.

EDUCATION

Stanford University

- MS, Civil Engineering

University of Tulsa

- BS, Petroleum Engineering

PROFESSIONAL LICENSES AND CERTIFICATIONS

- Licensed Professional Engineer (MI)
- 40-hour OSHA HAZWOP Program

SELECTED PROJECT EXPERIENCE

City of Livonia Landfill (2018 – Ongoing)

City of Livonia

Livonia, MI

Principal Engineer: Maintained landfill regulatory compliance by coordinating and completing groundwater, landfill gas, and leachate monitoring programs. Renewed the landfill's GLWA discharge permit and developed a Compliance Agreement with GLWA to avoid potential pre-treatment of leachate for PFAS. Developed a landfill operations plan to limit intake of PFAS materials. Coordinated other as-needed engineering services, including geotechnical, site assessment, and indoor air quality investigation.

Collier Road Landfill (1996 – Ongoing)

City of Pontiac

Pontiac, MI

Project Hydrogeologic Engineer: Mr. Erickson has managed and conducted groundwater and methane monitoring programs throughout most of the active life and closure of a city-owned, Type II municipal solid waste landfill, a period spanning over 20 years. He has designed and implemented investigations to address potential impacts due to methane migration, groundwater chemical changes, leachate outbreaks, and other issues that have occurred at the site. Mr. Erickson has been instrumental in negotiating with the EGLE to develop long-term regulatory compliance solutions for the site that are within the City's financial parameters.

Multiple Landfills (1998 - Ongoing)

Waste Management

Various Locations, MI

Managed hydrogeologic monitoring for several commercial Type I, Type II, and Type III landfills throughout Michigan. Specific components of these projects included coordinating sampling and laboratory personnel, review and evaluation of hydrogeologic and chemical data, statistical analysis, preparing quarterly reports and notifications, developing and modifying hydrogeologic monitoring plans, assisting with regulatory compliance issues and addressing statistical exceedances, and developing explosive gas monitoring programs. Monitoring plan modifications have included reduced sampling frequency, monitoring parameter waivers, statistical evaluation methods, and demonstrations of site monitorability, many of which have involved negotiation with EGLE.

SELECTED PROJECT EXPERIENCE (continued)

Allen Park Clay Mine Landfill (2016 - 2021)

Ford Motor Company

Allen Park, MI

Project Manager: Managed long-term monitoring and maintenance activities at this closed hazardous and non-hazardous industrial waste landfill. Maintenance includes regular inspection and cleaning of leachate collection system components, landfill cover maintenance, storm water system improvements, and methane management systems installation.

Renewed GLWA discharge permit for disposal of the site's leachate to the municipal sanitary sewer and developed BMP compliance program for PFAS. Managed disposal of investigation-derived waste at off-site disposal facilities during geotechnical investigations and routine clean-out of leachate collection system.

Huron Monofill (2005 - 2006)

Central Wayne County Sanitation Authority

Huron Twp, MI

Project Hydrogeologic Engineer: Implemented the closure plan for a municipal waste incinerator ash landfill, including ash regrading and final cover installation. Obtained approval by the MDEQ for elimination of a costly active groundwater pumping system.

City Sand & Landfill (2004)

Waste Management

Sumpter Twp, MI

Project Engineer: Compiled documentation to demonstrate compliance and completion of activities required under a Consent Order entered with the MDEQ. The activities included placement and certification of final cover, installation of a slurry wall barrier, and enhanced leachate collection and hydraulic gradient control features. The successful demonstration resulted in the landfill being granted "closure" status by the agency and allowed to begin post-closure monitoring.

Hastings Landfill (2002 - Ongoing)

Waste Management

Hastings, MI

Project Hydrogeologic Engineer: Developed a revised hydrogeologic monitoring plan for a Type II solid waste landfill expansion with historic groundwater impacts. The expansion area was demonstrated to be monitorable based on a "line of demarcation" separating the zone of groundwater impacts from the unaffected area. In addition, site-specific background concentrations of naturally occurring parameters (iron and manganese) were developed utilizing sampling data from surrounding residential water supply wells. Evaluated groundwater PFAS concentrations to delineate historical impact.

// Resume



Samantha L. Grant, P.E. **Project Engineer**

Ms. Grant has over 10 years of experience in civil design/grading, stormwater management, environmental engineering, and permitting assistance required for landfill planning, design, construction, and certification. She has experience performing evaluations and analyses related to landfill base liner and final cover design, grading for landfill cell sequencing, including interim cover and final cover design slopes, stormwater design (hydrology, conveyance, and detention/retention), and lift station pumping and forcemain design. She has performed design and analysis for both municipal solid waste and ash waste landfills in the planning, design, and construction phases and completed waste filling sequences, airspace estimations, construction drawings and specifications, and construction certification reports.

EDUCATION

- Wayne State University, MBA
- University of Michigan, B.S. Civil and Environmental Engineering

PROFESSIONAL LICENSES AND CERTIFICATIONS

- Licensed Professional Engineer (MI)
- NASSCO Pipeline, Manhole, and Lateral Assessment Certification Programs (PACP, MACP, LACP)
- Confined Space Entry

PROFESSIONAL ASSOCIATIONS

- Royal Oak Parks & Recreation Advisory Board
- Royal Oak Traffic Committee
- Royal Oak Zoning Board of Appeals
- Clinton River Watershed Council (member)

SELECTED PROJECT EXPERIENCE

City of Livonia As-Needed Environmental Engineering (2018 - Ongoing)

City of Livonia

Livonia, MI

Project Engineer: Project engineer for a multi-year general environmental assistance contract to assist the City with assignments regarding environmental health and safety for various projects and at various City facilities. Tasks included solid waste landfill regulatory compliance and other tasks as requested by the City.

Range Road Ash Landfill (2016 - Ongoing)

DTE Energy

China Twp., MI

Project Engineer: Performed engineering design and construction drawing preparation and served as certifying engineer for multiple landfill cell closure/base liner designs. Design included final cover grading, borrow pit layout and grading, and stormwater management design. Performed construction design documentation (drawings and specifications) in accordance with the approved engineering plans and CQA plan.

Ford APCM Cell IV Surcharge Regrading (2018 - 2019)

Ford Land

Allen Park, MI

Project Engineer: Completed engineering design effort for regrading of historically placed surcharge fill over the former Cell IV area of final cover at APCM. Completed volume, grading, liner repair detailing, and stormwater analysis to develop the engineering drawings and technical specifications for construction.

Woodland Meadows Landfill Construction Quality Assurance (2021 - 2022)

Waste Management

Van Buren Township, MI

Project Engineer: Responsible for putting together CQA report and documentation for a multi-year/multiple cell construction from 2011-2014 and 2021 for 155 acres of Type II solid waste landfill construction. Included both Cells 8-10 and 13/15 bottom liner and final cover construction quality assurance to ensure compliance with environmental regulations.

SELECTED PROJECT EXPERIENCE (continued)

City of Toledo - Hoffman Road Landfill Waste Filling Sequence (2020 - 2021)

City of Toledo

Toledo, OH

Project Engineer: Completed a waste filling sequence to allow the landfill to plan the construction sequencing for landfill cell liners and final cover for the next 25 years of airspace life. Scope also included on-site borrow quantity estimates, construction cost estimates, and other general construction items that would need to be completed such as pond expansion, utility relocations, and haul road design.

Richfield Landfill Final Closure (2014 - 2015)

Michigan Department of Technology, Management, and Budget (DTMB)

Davison, MI

Sr. Staff Engineer: Assisted in fulfilling construction quality assurance requirements during construction of the final closure to ensure it was in compliance with environmental regulations.

Collier Rd. Landfill Stormwater Downslope Channel Repair (2020 - 2022)

City of Pontiac

Pontiac, MI

Project Manager: Project engineer to develop engineering drawings and technical specifications for 2 failing stormwater downslope channels at a historical Type II facility closed approximately 20 years ago. Developed detailed repair plans for reconstruction of the stormwater downslope channels to convey stormwater runoff from the closed landfill to outlet conveyance systems. Assisted with the procurement, bidding and construction administration of the contract during construction. Provided QA/QC oversight of the underlying cap repairs and prepared a certification report for submission to EGLE to document our observations during construction.

// Resume



Cliff J. Andrews Principal Professional

Mr. Andrews has more than 38 years of experience in performing and managing soil investigations, remedial investigations, environmental due diligence assessments, demolition and construction oversight. His project work has included Phase I and II environmental site assessments, baseline environmental assessments and Compliance Analysis (Due Care) Plans, soil and groundwater contamination remedial studies, storm water illicit discharge studies, geotechnical investigations, building demolition, restoration of concrete structures, and construction monitoring.

EDUCATION

Schoolcraft College

- Associates, Applied Science

PROFESSIONAL LICENSES AND CERTIFICATIONS

- State Michigan Certified Asbestos Inspector
- 40-Hour Hazardous Waste Activities Health and Safety Training per 29 CFR 1910.120, with yearly 8-hour refresher courses as required.

PROFESSIONAL ASSOCIATIONS

- Michigan Association of Environmental Professionals

SELECTED PROJECT EXPERIENCE

City of Livonia Landfill (2018 – Ongoing)

City of Livonia

Livonia, MI

Sr. Environmental Scientist: Performed hazardous material survey for multiple buildings for the City (old buildings near DPS headquarters and Noble Library) and completed demolition plans and technical specifications for Noble Library.

District of Detroit (2017 - 2018)

Olympia Development of Michigan

Detroit, MI

Project Manager: Served as Task Manager for Demolition Services for Olympia Development of Michigan. The project included management and engineering services for demolition of eleven commercial buildings. NTH was retained to conduct Hazardous Material Survey (HMS), prepare bid documents/specifications for the abatement of hazardous materials and demolition, assist in trade contractor procurement, provide management and oversight for waste/debris removal, hazardous materials abatement, building demolition and site restoration.

Willow Run Assembly Plant Redevelopment (2016 - 2017)

American Center for Mobility

Ypsilanti, MI

Task Manager: Served as Task Manager for conducting Phase I (ESA) of former automotive manufacturing plant (General Motors Willow Run Assembly Plant) in Ypsilanti. Prepared Phase I ESA report, Baseline Environmental Assessment report, and Due Care Plan to be utilized during construction.

Michigan Department of Natural Resources Proposed Riverfront Park (2016 - Ongoing)

Michigan Department of Natural Resources (MDNR)

Saginaw, MI

Task Manager: Served as Task Manager for conducting Phase I (ESA) of former automotive manufacturing plant (General Motors Saginaw Malleable Plant) in Saginaw. Prepared Phase I ESA report, Baseline Environmental Assessment report, and Due Care Plan to be utilized during construction.

SELECTED PROJECT EXPERIENCE (continued)

Perrinville Child Center (2019 - 2020)

Livonia Public Schools

Livonia, MI

Project Manager: Severed as Project Manager for Demolition Services for Livonia Public Schools. The project included management and engineering services for demolition of a school building and associate improvements. NTH was retained to conduct Hazardous Material Survey (HMS), prepare bid documents/specifications for the abatement of hazardous materials and demolition, assist in trade contractor procurement, provide management and oversight for waste/debris removal, hazardous materials abatement, building demolition and site restoration.

Proposed Substation (2018 - 2019)

DTE Energy

Detroit, MI

Project Manager: Severed as Project Manager for Demolition Services for DTE Energy. The project included management and engineering services for demolition of a commercial building and associate improvements. NTH was retained to conduct Hazardous Material Survey (HMS), prepare bid documents/specifications for the abatement of hazardous materials and demolition, and oversight for waste/debris removal and hazardous materials abatement.

DTE Energy – Building H (2019 - Ongoing)

DTE Energy

Detroit, MI

Project Manager: Severed as Project Manager for Demolition Services for DTE Energy. The project included management and engineering services for demolition of office/warehouse building, a basement of a former building, two guard houses and a utility tunnel. NTH was retained to conduct Hazardous Material Survey (HMS), prepare bid documents/specifications for the abatement of hazardous materials and demolition, assist in trade contractor procurement, provide management and oversight for waste/debris removal, hazardous materials abatement.

Route Alternative Analysis for Waterworks Park Water treatment Plant to Northeast Water Treatment Plant Transmission Main Contract GLWA-CS-152 (2020 - Ongoing)

Great Lakes Water Authority (GLWA)

Detroit, MI

Task Manager: Responsible for field coordination, review of analysis, recommendations and development of reports for environmental due diligence of various potential routes in a dense urban environment. Tasks included: Phase I and Phase II Environmental Assessments (ESAs or PACS & PSI) preparation.

East Jordan Iron Works Complex - Demolition (2021 - Ongoing)

EJ Corp.

East Jordan, MI

Principal-in-Charge: Severed as Environmental Manager for the Demolition Planning and Hazardous Materials Survey activities. Served as Project Manager during the design, bidding, and construction phases. The project included management and engineering services for demolition of a foundry complex, appurtenant buildings, and general site improvements. NTH's services included the Hazardous Materials Survey (HMS), preparing bid documents / specifications for the abatement of hazardous materials, demolition, and site restoration, as well as oversight for waste/debris removal and hazardous materials abatement.



APPENDIX B

LANDFILL EXPERIENCE MATRIX



NTH Consultants Landfill Project Experience Matrix	LANDFILL ENGINEERING AND COMPLIANCE	Groundwater Investigation, Monitoring, and Reporting	Groundwater Modeling	Leachate Evaluation	Leachate Management	Landfill Gas Investigation	Landfill Gas Engineering	Gas Monitoring / Management Plans	Environmental Monitoring	Feasibility Study	Slope Stability Analysis	HELP Modeling	Geosynthetics Material Testing	Cutoff / Slurry Wall Design & Construction	Base Liner Design	Cap Design	Construction Management	Quality Assurance / Control	Operation & Maintenance	Geophysical Investigation	Design Plans & Specifications	Passive Gas Management Systems	Wick Drain Design for Gas Migration Barrier	Use of Automatic Methane Sensors	Horizontal Gas Extraction or Migration Barrier Trench	Vertical Gas Vent System	Site Closure and/or Redevelopment	Regulatory Assistance	Permitting	Stormwater Management	REGULATORY AGENCY EXPERIENCE	Municipal Agency	County Agency	State Permit Negotiation / Management	Ohio Environmental Protection Agency	U.S. Environmental Protection Agency	ENVIRONMENTAL SERVICES	Phase I ESA	Phase II ESA / Remedial Investigations	BEAs	Interim Response / Cleanup of Contaminated Sites	Risk Assessments (Health)	UST Remediation	Litigation Support	Asbestos / Hazardous Materials Evaluation	Reclamation/Reuse of Contaminated Properties (RRCP)	Hazardous Waste Management	Air Quality	Emergency / Contingency Planning	Wetland Management																																																																																																																																																																																																																																																																																																																																
MI SOLID WASTE LANDFILL PROJECTS	Autumn Hills RDF	Brent Run Landfill	Carleton Farms, Inc. Landfill	Cedar Ridge RDF	CES - Waters Landfill	Citizen's Disposal	City of Livonia Landfill	City of Midland Landfill	City Sand & Landfill	Collier Road Landfill	Dafter Landfill	Eagle Valley RDF	Ford Monroe Stamping Plant	Gibraltar Land Company	Grand Blanc Landfill	Hastings Sanitary Landfill	Huron Monofill	Ken's Pick Up Service	McGill Road Landfill	Munising Landfill	North Michigan Landfill (Elk Run)	Northern Oaks RDF	Oakland Heights Landfill	Peoples Garbage Disposal	Pine Tree Acres Landfill	Pioneer Rock Landfill	Range Road Landfill	Riverview Land Preserve	Rockwood Type III Landfill	S.E. Berrien County Landfill Authority	Saginaw Valley Landfill	Sauk Trail Hills Landfill	Seymour Road Landfill	Tri City RDF	Waterford Hills Landfill	Wayne Disposal Sites 1 & 2	Westside RDF	Woodland Meadows Van Buren RDF	MI LANDFILL REDEVELOPMENT PROJECTS	A & A Landfill	Allen Park Clay Mine Landfill	Eleven Pines Landfill	Kennett Road Landfill	Middlebelt Hill Landfill	Mulligan Golf Dome (former landfill)	Northwest Gateway Methane Control	Old Fons Landfil	Troy Landfill	OHIO LANDFILL PROJECTS	Hoffman Road Landfill	Krejci Dump Site	Lake County Landfill	Lorain County I Landfill	Ottawa County Landfill	Vista Park Landfill	Warner Hill Landfill	Willow Creek Landfill																																																																																																																																																																																																																																																																																																																									
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 APPENDIX C

ADDENDUM

ACKNOWLEDGMENT



Date: March 16, 2023
From: Enna A. Bachelor, Purchasing Manager
To: Prospective Bidders
Subject: Addendum No. 1 – Environmental Engineering Consulting Services

Addendum No. 1 is being issued to address questions raised by potential bidders.

Question 1: Which lab is currently performing these services?

City Response: Eurofins Buffalo, 10 Hazelwood Dr., Amherst, NY

Question 2: Who is currently filing the EGLE reports for the City of Livonia?

City Response: Current vendor, NTH Consultants

Question 3: Can we get a copy of your most recent report submitted to EGLE?

City Response: See Attached

Question 4: How often does Livonia have info reported?

City Response: Quarterly

Question 5: How often are you doing water sampling and gas sampling?

City Response: Quarterly

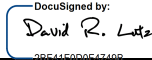
Question 6: What levels of PFAS are you seeing in your GLWA discharge?

City Response: Done every six months. Information attached from March, 2022

THE DUE DATE REMAINS THE SAME. All other provisions of the solicitation remain the same. Firms should acknowledge receipt of this addendum with their bid response.

---ADDENDUM NO.1 2023 PARK TREE AND STUMP REMOVAL - ACKNOWLEDGEMENT---

Company Name: NTH Consultants, Ltd.

Signature:  385445009F47408

Title: Vice President

Print Name: David R. Lutz, PE Date: 3/21/2023

		AECOM	ANDERSON, ECKSTEIN & WESTRICK	MICHIGAN CONSULTING AND ENVIRONMENTAL
EVALUATION CRITERIA	MAX PTS	20	22	18
<i>Experience working and familiarity with the City of Livonia, the Wayne County Department of Public Services, The Wayne County Health Department, the Michigan Department of Environmental Quality, and the Great Lakes Water Authority and their programming, permitting, design, bidding, contracting and construction standards and practices.</i>	25	has worked with EGLE and GLWA; no direct work experience in Livonia	has worked with other small municipal landfills in SE Mich; EGLE; Wayne Co; and EGLE; has an office in Livonia	little experience with SE Michigan municipalities; has worked with Wayne Co on the monofill site
		18	19	15
<i>Overall experience providing similar services to other communities in Southeast Michigan.</i>	20	very large firm; lots of good experiences; not many directly connected to local municipal landfill work	good experiences shown with other small municipal landfills (SMSD)	geotechnical work would be subcontracted to McDowell; experience with work at mid-Michigan landfills
		11	12	10
<i>Key personnel or team members and their experience in performing the duties as outlined in this RFQ.</i>	15	lots of large project experiences for local organizations and EGLE; very little small municipal work experience	lead staff members work directly with other small municipal landfills in SE Mich	staff experience is a bit weak on the municipal landfill projects
		10	8	6
<i>Industry reputation for professional integrity and competence through references.</i>	10	very good industry reputation		relatively new to this field
		3	5	2

<i>A list of Clients and references for which similar services were provided, most specifically over the past 5 years.</i>	5	does not specify within the past 5 years; no local municipal references	provided letters of recommendation from other municipal clients in SE Mich	reference letters included are from private organizations
TOTAL SCORE	75	62	66	51

INTERVIEW SCORE	25			
FINAL SCORE		62	66	51

ENVIRONMENTAL ENGINEERING CONSULTING SERVICES (QBS) EVALUATOR #2

PAGE 2 OF 2

		NTH CONSULTANTS	THE MANNIK SMITH GROUP	CORNERSTONE ENVIRONMENTAL GROUP
EVALUATION CRITERIA	MAX PTS	24	23	23
<i>Experience working and familiarity with the City of Livonia, the Wayne County Department of Public Services, The Wayne County Health Department, the Michigan Department of Environmental Quality, and the Great Lakes Water Authority and their programming, permitting, design, bidding, contracting and construction standards and practices.</i>	25	very familiar with Livonia and our system, has served as our environmental engineers since 2018	good amount of SE Michigan, Wayne Co, and EGLE experience	Has worked with the Livonia landfill previously while with Wayne County
		19	18	19
<i>Overall experience providing similar services to other communities in Southeast Michigan.</i>	20	currently provides as-needed environmental services to other municipalities in SE Mich	works with many municipal clients in SE Mich	experience working with other municipal landfills in SE Michigan (Ann Arbor, Riverview)
		14	14	13

Key personnel or team members and their experience in performing the duties as outlined in this RFQ. (15 points)	15	staff has great experience with landfills and provided a matrix of experience	staff has good landfill experience and provided a matrix	lead staff members have experience working with the Livonia landfill
		10	9	10
Industry reputation for professional integrity and competence through references.	10	very well known and leader in the field of landfills and PFAs	well recognized experts locally	excellent industry reputation in environmental work
		5	5	5
A list of Clients and references for which similar services were provided, most specifically over the past 5 years.	5	clients listed in project references	client refereces listed in project examples	local municipal references provided with time frames of service
TOTAL SCORE	75	72	69	70

INTERVIEW SCORE	25			
FINAL SCORE		72	69	70

CITY OF LIVONIA – CITY COUNCIL
MINUTES OF STUDY MEETING HELD June 26, 2023

Meeting was called to order at 8:00 p.m. by Council President Jim Jolly. Present: Brandon McCullough, Scott Morgan, Kathleen McIntyre, and President Jim Jolly. Absent: Rob Donovic, Scott Bahr, and Vice President Laura Toy.

Elected and appointed officials present: Susan Nash, City Clerk; Paul Bernier, City Attorney; Todd Zilincik, City Engineer; and Jacob Rushlow, Assistant Director of Public Works.

Councilmember McCullough and his daughter, Harper, led the Pledge of Allegiance.

8. REQUEST FOR ADDITIONAL SERVICES WITH NTH CONSULTANTS FOR ENVIRONMENTAL ENGINEERING SERVICES CONTRACT: Public Service Division, re: to amend five-year agreement with NTH Consultants, Ltd., through June 30, 2028, to provide as-needed environmental engineering services related to the City's landfill in the amount of \$50,000.00 annually. (CR 257-19)

Jacob Rushlow, Assistant Director of Public Works, presented the request to Council.

Councilmember Morgan offered an approving resolution for the Regular agenda.

DIRECTION:

APPROVAL

REGULAR



LETTER TO THE LIVONIA CITY COUNCIL

8.

DPW
June 12, 2023

MEETING DATE

S062623/R071023

PREPARED BY

Jill Russell, Secretary III,

AGENDA ITEM

REQUEST FOR ADDITIONAL SERVICES WITH NTH CONSULTANTS FOR ENVIRONMENTAL ENGINEERING SERVICES CONTRACT: Public Service Division, re: to amend five-year agreement with NTH Consultants, Ltd., through June 30, 2028, to provide as-needed environmental engineering services related to the City's landfill in the amount of \$50,000.00 annually (CR 257-19)

BACKGROUND DETAILS

As our environmental engineering consultant, NTH Consultants has provided a variety of as-needed services over the past five years for landfill related tasks that are outside the realm of the typical regulatory compliance tasks under their existing contract. Examples of such services include:

- Consultation and soil testing for disposal of the DPW building spoils
- Landfill financial assurance audit letter review and consultation
- Landfill GLWA PFAS Best Management Practices (BMP) plan development, monitoring, and reporting (GLWA required)
- Landfill Dissolved Methane Addition to Quarterly Monitoring (EGLE required)
- Landfill operations plan development (GLWA required)
- Landfill license renewal application (EGLE required)
- Landfill top of waste grading plan
- Glendale property wetland boundary delineation
- Offsite methane migration monitoring and reporting (EGLE required)
- Dissolved methane quarterly monitoring events for the Type III landfill (EGLE required)
- Updates to the City's landfill operations plan
- Landfill closure plan, topographic survey, updates, and recommendations

Based on the ever-growing list of regulatory requirements for the City Landfill, Council approved an amendment to the original NTH Environmental engineering contracts to include these extra items via Resolution #252-20, approved September 9, 2020, it is recommended that the City Council once again authorize an additional \$50,000 annually for as-needed Environmental Engineering Services to be done by NTH Consultants, Ltd., through June 30, 2028.

PREFERRED COUNCIL RECOMMENDATION/RESOLUTION (Please complete this field. Attachments are not to be used in lieu of the recommendation)

1. Approve a contract amendment with NTH Consultants, Ltd., 41780 Six Mile Road, Northville, MI 48168 to provide as-needed environmental engineering services and to authorize the Mayor and Clerk to execute the contract amendment on behalf of the City of Livonia.
2. Authorize an additional expenditure in the amount of \$50,000 annually through June 30, 2028, for these services from funds budgeted in account number 205-527-818-041, Contractual Services – Landfill Remediation.

SPECIFIC NAME OF PRODUCT AND NUMBER TO BE PURCHASED (if more than one)

n/a

CONTRACT: Amount and/or purchase price and length of contract (with dates if applicable)

\$50,000.00 annually through June 30, 2028

DETAILED WORK BEING PERFORMED

As-Needed environmental engineering services - Landfill Remediation

FISCAL CONSIDERATIONS (Amount requested and Account(s) used. If applicable, Grant Funding information)

\$50,000.00 annually through June 30, 2028; 205-527-818-041, Contractual Services - Landfill Remediation

ACCEPTANCE OF BID (Please detail the following: Why accepted, why not lowest bidder, company name, contact person, full address)

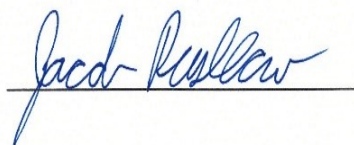
n/a

REASON TO WAIVE BID PROCESS (Emergency, Professional services, No advantage to City and why, Consortium package, etc): QBS process, waived formal bidding via ordinance 3.04..140.E.2.b

ATTACHMENTS

1. 252-20 - Landfill Env Eng - NTH
2. R072219 NTH landfill contract (CR 257-19)
3. S062623 LTC Amend landfill contract wNTH

APPROVED BY



Date: June 12, 2023

Jacob Rushlow, P.E., Assistant Director of Public Works



Date: June 12, 2023

Don Rohraff, Director of Public Works



Date: June 13, 2023

Michael Slater, Finance Director



Date: June 13, 2023

Paul Bernier, City Attorney



Date: June 15, 2023

Maureen Miller Brosnan, Mayor

#252-20 RESOLVED, that having considered a communication from the Director of Public Works, dated August 5, 2020, which bears the signatures of the Director of Finance and the Superintendent of Public Service, and is approved for submission by the Mayor, regarding additional appropriation and expenditure in order to provide as-needed **environmental engineering** services related to the City's **landfill**, previously authorized in Council Resolution No. 257-19, adopted on July 22, 2019, the Council does hereby appropriate and authorize an expenditure in the amount of \$30,000.00, increasing the not to exceed contract amount from \$20,000.00 to \$50,000.00 annually, payable to **NTH Consultants, LTD.**, 41780 Six Mile Road, Northville, MI 48168, for providing as-needed environmental engineering services related to the City's landfill; FURTHER, the additional amount of \$30,000.00 is hereby appropriated and authorized to be expended from Account No. 205-527-818-041 (Contractual Services – Landfill Remediation) for this purpose; FURTHER, the Mayor and City Clerk are hereby authorized for and on behalf of the City of Livonia to execute a contract amendment with the aforesaid company, subject to approval as to form and substance by the Department of Law, and to do all other things necessary or incidental to the full performance of this resolution.

Regular Meeting Minutes of July 22, 2019

#257-19 RESOLVED, that having considered the report and recommendation of the Director of Public Works and the Superintendent of Public Service, dated June 21, 2019, which bears the signature of the Director of Finance and is approved for submission by the Mayor, the Council does hereby authorize an amendment to the five-year contract with NTH Consultants, Ltd., 41780 Six Mile Road, Northville, MI 48168, pursuant to Council Resolution 229-18, adopted on June 18, 2018, to provide as-needed environmental engineering services related to the City's landfill for an annual amount not to exceed \$20,000.00 through June 30, 2023; FURTHER, the Council does hereby authorize an additional expenditure in an amount not to exceed \$20,000.00 annually from funds already budgeted in Account No. 205-527-818-041 (Contractual Services – Landfill Remediation) for this purpose; FURTHER, the Mayor and City Clerk are hereby authorized for and on behalf of the City of Livonia to execute a contract amendment with the aforesaid company, subject to approval as to form and substance by the Department of Law, and to do all other things necessary or incidental to the full performance of this resolution.

CONSENT AGENDA ITEMS <i>(Regular Meeting of July 22, 2019)</i>

Motion by: *Bahr*

Seconded by: *Kritzman*

ROLL CALL:

Ayes: *Meakin, Jolly, Kritzman, Bahr, White, McIntyre and Toy*

Nays: *None*

Absent: *None*

From: [Jordon Bidigare](#)
To: [Kasprowicz, Sara](#)
Cc: [John Bidigare](#)
Subject: New Data for Council to look at
Date: Thursday, July 6, 2023 11:13:02 AM
Attachments: [image001.png](#)
[Recommendation Letters.pdf](#)

Hi Sara,

We have some new data we would like to share on the July 10th council agenda under item #15 if possible?

See attached.

Thank You,

Jordon Bidigare
Bidigare Contractors, Inc.
Cell: 734-476-4461
Office: 248-735-1113
Fax: 248-735-1114
Web: bidigarecontractors.com





CITY OF
WESTLAND
www.cityofwestland.com

Department of Public Service

Ramzi El-Gharib P.E. Director of Department of Public Service
36300 Warren Rd. Westland, Michigan 48185
(734) 728-1770

June 12, 2023

To Whom It May Concern:

I would like to confirm that Bidigare Contractors, Inc has completed many Pre-Chlorinated Pipe Bursting water main contracts and emergency repairs for the City of Westland. They have always been reliable and diligent in providing their services. They also provide us with in house crews that perform our concrete, Asphalt and landscape restorations around the city. Their experience and manpower are a valuable tool to maintain our city's infrastructure. I would consider their workmanship to be better than most, if not all contractors in their field. We have had many contract extensions with Bidigare based on their performance and ability to complete projects on time and on budget. If an opportunity presented itself to award a contract to Bidigare I would not be hesitant to contract their services. Please feel free to contact me with any questions that you may have at 734-728-1770.

Ramzi El-Gharib, P.E.

DPS Director

City of Westland



June 8, 2023

To Whom It May Concern

Bidigare Contractors, Inc. has been our primary contractor for all our water main replacement work since 2019. This includes primarily pre-chlorinated pipe bursting, but also HDD, and direct bury. Several runs of pipe bursting included upsizing DI water main. This can be challenging and cause delays, but has almost never been an issue for Bidigare.

Bidigare Contractors, Inc. has always exceeded our expectations with all aspects of our water main replacement projects. Not only with the care and installation of new main, but more importantly, in response to resident issues and unforeseen conditions. I have received multiple specific compliments and expressions of gratitude from our residents directly affected by construction about Bidigare and their crews. It has been a pleasure working with Bidigare and their employees; they are an asset to our community.

I will not be hesitant in contracting Bidigare for any future Canton Township water distribution system needs.

If you have any questions, please do not hesitate to contact me at (734) 394-5159 or charles.larocque@cantonmi.gov.

Regards,

CANTON TOWNSHIP ENGINEERING SERVICES

Charles Larocque, P.E.
Engineering Supervisor

Enclosure

Cc: File

TIMOTHY WOOLLEY
Mayor

CYNTHIA A. BOWER
City Clerk

MICHELLE TOCCO
Treasurer

City of Taylor

23555 GODDARD ROAD

Taylor, MI 48180

PHONE: (734) 287-6550

www.cityoftaylor.com

CITY COUNCIL

DOUGLAS A. GEISS
Chairman

JILL BRANDANA
Chairwoman Pro-Tem

Council Members
CHARLEY JOHNSON
BUTCH RAMIK
LINDSEY ROSE
IRA SLAVEN
ANGIE WINTON

June 19, 2023

To whom it may concern:

This letter is being written as a letter of recommendation for Bidigare Contractors, Inc.

Bidigare Contractors Inc. has been our sole water main infrastructure improvement contractor over the past 10 years. Over those years they have serviced the City of Taylor with water main improvements in excess of \$10,000,000. They are currently working in the City of Taylor on a \$2,700,000 multi-phase improvement project.

Bidigare Contractors, Inc. is very well known in southeast Michigan for the construction method of pre-chlorinated pipe bursting, but they also excel in all of the smaller areas that get the attention of residents and city staff. Their restoration activities performed by their restoration division excel in making the construction project disappear from view of the public. Whenever I meet with a resident on our water main improvement projects the residents only have pleasant things to say about the construction staff and crews. Their outstanding reputation has also been conveyed by our City Council Members.

Bidigare Contractors, Inc. are very good to work with from my view as the City Engineer. Whenever we have encountered a problem with existing infrastructure in the ground they have always presented me with as many recommendations as possible to solving the problem, keeping the project progressing forward, and within our budget.

I highly recommend Bidigare Contractors, Inc. for any work associated with water main improvements of existing/new infrastructure.

Please contact me with any questions or comments you may have regarding Bidigare Contractors, Inc.

Sincerely,

Christopher Gibbs, M.B.A, P.E.

City of Taylor, City Engineer

(734-374-1473) Telephone



innovative *by* nature

Bryan K. Barnett
Mayor

June 26, 2023

City Council

Carol Morlan
District 1

David J. Blair
District 2

Susan M. Bowyer, Ph.D.
District 3

Ryan J. Deel
District 4

Dale Hetrick
At-Large

Theresa Mungoli
At-Large

David Walker
At-Large

Bidigare Contractors, Inc.
Attn: Mr. Jordon Bidigare
939 S Mill Street
Plymouth, MI 48170

Re: Bidigare Contractors Inc. Recommendation Letter

To Whom It May Concern:

I'm pleased to recommend Bidigare Contractors Inc. for water main construction work. Bidigare Contractors Inc. has completed five water main replacement projects for the City of Rochester Hills since 2015. The projects consisted of over sixteen (16) miles of water main replacement via the pre-chlorinated pipe bursting method. I have worked directly with Bidigare Contractors Inc. throughout each project and can attest to their great workmanship and communication.

The pre-chlorinated pipe bursting method eliminated the need for temporary water service and reduced the water service disruption time to our customers. The restoration was completed in a timely manner and projects came in under or at budget.

I value the professional relationship that the City of Rochester Hills has Bidigare Contractors, Inc. and look forward to another successful project this year.

Sincerely,

Tracey A. Balint, P.E., Public Utilities Engineering Manager
Department of Public Services

Charter Township of West Bloomfield
Water Utilities Department

2400 Haggerty Road
West Bloomfield, MI. 48323
(248) 451-4780



August 2016

Bidigare Contractors, Inc.
939 S. Mill Street
Plymouth, MI 48170

RE: Franklin Valley Water Main Replacement Project

Dear Bidigare Contractors:

On behalf of West Bloomfield Township, including our Civil Engineer, Johnson & Anderson, Inc. out their Waterford, Michigan office, we wanted to follow up and extend our appreciation for a job well done! This was an 11,400 linear foot Pre-Chlorinated Pipe Bursting Project that your company fully completed and performed a superb job.

There were many challenges encountered throughout the project, whereby Bidigare stood up to those challenges and exceeded our expectations. As you know, this was a very speculative residential subdivision that had many sensitive and concerned water customers. Again, we were impressed by the level of shared communication and field experience that was demonstrated throughout the project, and especially the care which took place with respect to restoration, care for existing roads and resident concerns. Additionally, I would be remiss to not mention that West Bloomfield recognized the total project was completed with only a 1% cost overrun.

Your company should be proud as the project garnered an ACEC, Michigan Section Award of Excellence. We look forward to having Bidigare bid on our future water system improvement projects in West Bloomfield Township.

Sincerely yours in water,

Ed Haapala
Utilities Director

CC: Terry Broemer, President, Johnson & Anderson, Inc.

City of Romulus

Robert A. McCraight

Mayor

ADMINISTRATIVE and LEGISLATIVE OFFICES
11111 Wayne Road • Romulus, Michigan 48174-1485
www.romulusgov.com

ELLEN L. CRAIG-BRAGG

Clerk

STACY A. PAIGE

Treasurer

June 20th, 2023

To Whom It May Concern,

The City of Romulus has had the pleasure of working with Bidigare Contractors, Inc., on several occasions. We have specifically used their services for pipe bursting, foot drain disconnects and emergency excavation work. Their crews are professional, knowledgeable and their equipment upkeep is impressive.

Whether it be for new or existing infrastructure, maintenance or emergency work, Bidigare Contractors, Inc., is highly recommended.

If you have any questions regarding our experience with Bidigare Contractors, Inc., please feel free to contact me at (734) 955-8752.

Sincerely,



Roberto J. Scappaticci,
City of Romulus
Director of Public Works

KATHY ABDO
Councilwoman

JOHN BARDEN
Mayor Pro Tem

CELESTE ROSCOE
Councilwoman

TINA M. TALLEY
Councilwoman

WILLIAM WADSWORTH
Councilman

EVA WEBB
Councilwoman

VIRGINIA WILLIAMS
Councilwoman

Mayor
Kip C. Walby
Mayor Pro-Tem
Chris M. Vitale
City Manager
Dustin L. Lent

City of St. Clair Shores

27600 Jefferson Avenue, St. Clair Shores, MI 48081-2075
Phone: (586) 447-3303 Fax: (586) 445-0469 www.scsmi.net



Council Members:
Peter A. Accica
Ronald J. Frederick
David J. Rubello
Candice B. Rusie
John D. Caron

June 7, 2023

To Whom It May Concern:

This letter is to confirm that Bidigare Contractors, Inc., has replaced water mains for the City of St. Clair Shores over the past two years, and is presently working in our city.

Their quality of work has been exceptional. The pre-chlorinated pipe bursting process has been completed without issues. Their experienced crew is properly prepared each day and communicates pertinent information, which provides for the best possible installation that meets our needs and constraints of the contract.

The City of St. Clair Shores is 100% satisfied with Bidigare Contractors, Inc. They are polite and helpful with our residents' concerns and questions, exceptional at notifying the residents and the City regarding time-line for water shut downs, and keep the City updated on a daily basis of their progress.

After unfavorable experiences with previous contractors, it has been a relief to work with Bidigare Contractors and their crew and experience their professional production and project management.

Please feel free to contact me with questions, and to discuss my satisfaction with Bidigare Contractors, Inc.

Sincerely,

Russ Miller
Water Department
City of St. Clair Shores
586.298.7849



VILLAGE OF
GROSSE POINTE SHORES,
A Michigan City

Stephen T. Poloni
City Manager
Village of Grosse Pointe Shores

795 Lake Shore Road
Grosse Pointe Shores, MI 48236
(313) 881- 6565

June 14, 2023

To Whom It May Concern,

In 2021-22, we contracted with Bidigare Contractors, Inc. on two projects that involved water main and sewer replacement. The main portion of the water main project included utilizing the pre-chlorinated pipe bursting method, which reduced both service disruptions and restoration costs. Bidigare Contractors, Inc. exceeded our expectations with the customer service they provided throughout the projects. Bidigare responded to any requests we or our residents had. They went out of their way to make sure the city did not receive complaints about noise, dirt/dust, repairs to lawns and sprinkler systems. I sincerely wish that all the contractors we deal with would have the work ethic, reliability , and customer service that Bidigare provided to us. It has been a true pleasure working with Bidigare and all their employees.

If you have any questions regarding Bidigare Contractors, Inc. please feel free to contact me at (313) 881-6565.

Sincerely,

Stephen T. Poloni

Stephen T. Poloni
City Manager



City of Grosse Pointe Farms

29 Moross Road, Grosse Pointe Farms, Michigan 48236-3161

phone 313 343.2328 fax 313 343.2466

June 7, 2023

To Whom It May Concern:

Bidigare Contractors, Inc. has been our primary contractor for every City of Grosse Pointe Farms water main replacement project since 2017. All our water main replacement projects have utilized the pre-chlorinated pipe bursting method of main replacement to minimize both service disruptions and restoration costs. Bidigare Contractors, Inc. has always exceeded our expectations with all aspects of our water main replacement projects. Bidigare not only has the resources to perform the work needed to complete our projects in a timely manner but also has a highly capable restoration division. Restoration has never been an issue as they are able to restore irrigation systems, sod, and concrete to our specifications and standards. Bidigare has also been called upon to perform several critical emergency water main repairs. In all these after-hours incidents Bidigare's crews were quickly mobilized and the repairs Bidigare completed promptly. Bidigare has been a vital asset with both water main replacement projects and emergency water main repairs. It has been a pleasure working with Bidigare and all their employees have a vast amount of knowledge and skill sets that we have found beneficial for our community. Furthermore, Bidigare has always taken care of our residents' needs and has exceeded the work performance of any contractors that we have awarded contracts to in the past.

I would not be hesitant in contracting Bidigare for any water distribution system needs. If you have any questions regarding Bidigare Contractors, Inc. please feel free to contact me at (313) 343-2328.

Sincerely,

Scott Homminga

Water Superintendent
City of Grosse Pointe Farms
29 Moross Rd.
Grosse Pointe Farms, MI 48236

Kasprowicz, Sara

From: Mark DiMichele <Mark.DiMichele@murphypipelines.com>
Sent: Wednesday, July 5, 2023 5:59 PM
To: Kasprowicz, Sara; Jolly, Jim
Subject: Fw: Contract Award for Livonia Water Main Improvements for Project Areas 7,8 and 9, 2023-24.
Attachments: 2023-07-05 ltr to Livonia Water Main Improvements (002) w signature References.docx; City of Novi.pdf; Huron Township.pdf

Forwarding to correct email addresses.

Thank You,

Mark DiMichele, PE

President

Cell 734-368-2375

D & D Water & Sewer, Inc.



From: Mark DiMichele <Mark.DiMichele@murphypipelines.com>
Sent: Wednesday, July 5, 2023 4:50 PM
To: jjolly@livonia.go <jjolly@livonia.go>; ltoy@livonia.gov <ltoy@livonia.gov>; sbahr@livonia.gov <sbahr@livonia.gov>; rdonovic@livonia.gov <rdonovic@livonia.gov>; bmccullough@livonia.gov <bmccullough@livonia.gov>; kmcintyre@livonia.gov <kmcintyre@livonia.gov>; smorgan@livonia.gov <smorgan@livonia.gov>; mslater@livonia.gov <mslater@livonia.gov>; Don H Livonia <drohaff@ci.livonia.mi.us>; Todd Zilincik <tzilincik@ci.livonia.mi.us>; Mbroshnan@livonia.gov <Mbroshnan@livonia.gov>; Pbernier@livonia.gov <Pbernier@livonia.gov>; Varga, Dave <dvarga@ci.livonia.mi.us>; Jessica KATERS <jessica.katers@ohm-advisors.com>; skaprowicz@livonia.gov <skaprowicz@livonia.gov>
Cc: Andy Mayer <Andy.Mayer@murphypipelines.com>; Thomas Gottsegen <Thomas.Gottsegen@puriscorp.com>
Subject: Re: Contract Award for Livonia Water Main Improvements for Project Areas 7,8 and 9, 2023-24.

To All,

We are submitting an additional letter and reference letters to support your recommendation to award Murphy Pipeline Co, the low bidder for the Livonia Water Main Improvements for Project Areas 7,8, and 9, 2023-24.

If you have any questions, please contact me at any time.

Thank You,
Mark DiMichele, PE
President
Cell 734-368-2375
D & D Water & Sewer, Inc.



From: Mark DiMichele
Sent: Monday, June 26, 2023 3:36 PM
To: jjolly@livonia.go <jjolly@livonia.go>; ltoy@livonia.gov <ltoy@livonia.gov>; sbahr@livonia.gov <sbahr@livonia.gov>; rdonovic@livonia.gov <rdonovic@livonia.gov>; bmccullough@livonia.gov <bmccullough@livonia.gov>; kmcintyre@livonia.gov <kmcintyre@livonia.gov>; smorgan@livonia.gov <smorgan@livonia.gov>; mslater@livonia.gov <mslater@livonia.gov>; Don H Livonia <drohaff@ci.livonia.mi.us>; Todd Zilincik <tzilincik@ci.livonia.mi.us>; Mbroshnan@livonia.gov <Mbroshnan@livonia.gov>; Pbernier@livonia.gov <Pbernier@livonia.gov>; Varga, Dave <darga@ci.livonia.mi.us>; Jessica KATERS <jessica.katers@ohm-advisors.com>; skaprowicz@livonia.gov <skaprowicz@livonia.gov>
Cc: Andy Mayer <Andy.Mayer@murphypipelines.com>; Thomas Gottsegen <Thomas.Gottsegen@puriscorp.com>
Subject: Contract Award for Livonia Water Main Improvements for Project Areas 7,8 and 9, 2023-24.

To All,

We are submitting the attached letter to support your recommendation to award Murphy Pipeline Co, the low bidder, the contract for Livonia Water Main Improvements for Project Areas 7,8 and 9, 2023-24.

If you have any questions, please contact me at any time.

Thank You,
Mark DiMichele, PE
President
Cell 734-368-2375
D & D Water & Sewer, Inc.



Murphy Pipelines Contractors, LLC
5700 S. Sheldon Rd
Canton, MI 48188

July 5, 2023

City Council
City of Livonia
33000 Civic Center Drive
Livonia, Michigan 48154

*Re: Livonia Water Main Improvements for Project Areas 7,8 and 9, 2023-24, Contract Award
Additional Information*

Dear Honorable Members of the Livonia City Council:

We saw that the Agenda and Agenda Packet has been posted for the July 10 meeting.

Assuming those materials can still be supplemented, attached are 2 recent letters from neighboring communities.

Again, our local team looks forward to collaborating with the City engineering staff and OHM to successfully execute this project. We are ready to get to work, and are prepared to answer any additional questions you may have. Thank you for your favorable consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'T. E. Gottsegen'.

Thomas E. Gottsegen
Chief Legal Officer

A handwritten signature in black ink, appearing to read 'Mark DiMichele'.

Mark DiMichele
Livonia Project Manager

cc: Maureen Miller Brosnan, Mayor
Michael Slater, Finance Director
Paul Bernier, City Attorney
Donald Rohraff, Director, Public Works Department
Todd Zilincik, City Engineer
Jessica Katers, OHM Advisors



June 30, 2023

RE: D & D Water & Sewer

To whom it may concern:

CITY COUNCIL

Mayor
Bob Gatt

Mayor Pro Tem
Dave Staudt

Laura Marie Casey

Hugh Crawford

Justin Fischer

Brian Smith

Ericka Thomas

City Manager
Victor Cardenas

Director of Public Works
Jeffrey Herczeg

Deputy Director of Public Works
Megan Mikus

City Engineer
Ben Croy, P.E.

Please have this letter serve as reference to our experience with D & D Water & Sewer over the past 20 plus years. Under the direction of Mark DiMichele, D & D has performed a wide variety of municipal water and sewer infrastructure projects on our behalf. They have completed projects ranging from annual contract services to large capital projects and have always been available to provide expert advice when consulted.

Mark and D & D have always provided prompt responses to our needs whether it be a planned project or emergency repairs to critical infrastructure within the City. If we have future work in the City of Novi, we can count on D & D to provide a competitive price and deliver the project on time and within budget.

We would recommend D & D to any other community in need of an honest contractor that can get the job done. D & D has always met or exceeded our needs, and has always operated in a very professional manner.

Please feel free contact our office at 248-735-5640 with any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Ben Croy'.

Ben Croy, PE
City Engineer

Department of Public Works
26300 Lee BeGole Drive
Novi, Michigan 48375
248.735.5640
248.735.5659 fax

cityofnovi.org



Huron Charter Township

22950 Huron River Drive
New Boston, MI 48164-9791
(734) 753-4466 • Fax (734) 753-4111

www.hurontownship-mi.gov

To Whom it May Concern:

I write this letter to share my experience working with Mr. Mark DiMichele and D&D Water and Sewer. As an elected official, I am under constant pressure to secure professional services to complete critical infrastructure projects that deliver quality and value to the taxpayer. Mr. DiMichele and his crew make this task easy for me. Whether they are installing new or replacing old water or sewer lines, the decades of experience they bring to the job site allow them to quickly and efficiently satisfy our water and sewer needs.

The crew is competent, courteous and professional which all but guarantees a flawless and positive interaction with the public affected by the construction project. And when that unforeseen or unanticipated hick-up does arise, Mark quickly and effectively addresses the problem without missing a beat, keeping the public happy and making my job a lot easier.

I have interacted with countless construction companies over my close to 30 years in local government and I can state with confidence that I have found Mark DiMichele to be one of the dependable, honest and easy to work with contractors in the region. His ability to deliver what he promises has garnered the respect of his peers in the industry and his customers alike.

If you seek a construction company that is dependable, delivers value and gets the job done on budget and on time, you owe it to yourself to take a close look at Mark DiMichele and D&D Water and Sewer.

Sincerely,

David A. Glaab,
Supervisor

Board of Trustees

David A. Glaab - Supervisor • Jeremy R. Cady - Clerk • Colleen Lazere - Treasurer
John Chont - Trustee • Michael Glaab - Trustee • David Patterson - Trustee • Angela Cady - Trustee

DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION

TODD J. ZILINICK, P.E.
City Engineer

DAVID W. LEAR, P.E.
Assistant City Engineer



MAUREEN MILLER BROSNAN
MAYOR

DONALD R. ROHRAFF
Director of Public Works

12973 FARMINGTON ROAD
LIVONIA, MICHIGAN 48150-4202
(734) 466-2571
FAX: (734) 466-2195

June 27, 2023

Honorable Members of the City Council
City of Livonia

Re: Additional Information for Consideration
2023-2024 Livonia Water Main Replacement Project (Areas 7-9)

Dear Council Members:

Per your request we have attached some additional information for your consideration of the award of the construction contract recommendation to Murphy Pipeline Contractors, LLC for the 2023-2024 Livonia Water Main Replacement Project (Areas 7-9).

The additional information includes a letter from OHM Advisors with background bid analysis information and also a copy of the letter dated June 26, 2023 from Murphy Pipeline Contractors, LLC to City Council.

We look forward to your thoughtful consideration based on the attached information presented in which there is \$163,000 difference between 1st and 2nd bidder. The decision on July 10th will hopefully allow the prompt start of the 2023-2024 Livonia Water Main Replacement Project (Areas 7-9). Nagle Paving is scheduled to rehabilitate the asphalt roads to Bell Creek Lane and Bloomfield after the proposed water main has been installed.

Sincerely,

A handwritten signature in black ink, appearing to read "Donald R. Rohraff", written over a horizontal line.
Donald R. Rohraff
DPW Director

A handwritten signature in black ink, appearing to read "Todd J. Zilnick", written over a horizontal line.
Todd J. Zilnick, P.E.
City Engineer



Murphy Pipelines Contractors, LLC
5700 S. Sheldon Rd
Canton, MI 48188

June 26, 2023

City Council
City of Livonia
33000 Civic Center Drive
Livonia, Michigan 48154

Re: *Livonia Water Main Improvements for Project Areas 7,8 and 9, 2023-24, Contract Award*

Dear Honorable Members of the Livonia City Council:

This letter follows the discussion of the referenced pending Contract Award at your Study Meeting held June 5, 2023, and will serve to address various matters crucial to your determination. As the qualified low bidder in this matter, Murphy Pipeline Contractors, LLC ("Murphy") is pleased to submit additional information for your consideration.

We understand that the issue of "self-performance" versus "contracting out" of the work to be performed under this contract was discussed at some length at the meeting. Due to the false suggestion by the second-low bidder that Murphy would likely "contract out" the work in this instance, based on prior jobs in Michigan, this will confirm the representations made at that meeting by Mark DiMichele, as reflected in your Meeting Minutes. **Murphy will be self-performing all work with our locally-employed crews, under the personal direction of Mark DiMichele, Project Manager.**

It bears emphasis that this bid process had no irregularities, and Murphy emerged as the undisputed low bidder by almost \$163,000, which is an important consideration for municipalities seeking to stretch their infrastructure dollars.

The Engineering Department's Letter to the Livonia City Council, dated May 23, 2023, made its Preferred Council Recommendation: ***"We are recommending that the bid be awarded to Murphy Pipeline Contractors, LLC in the amount of \$5,422,555.00, based on the findings of OHM Advisors, that they are lowest qualified bidder."***

This recommendation followed OHM's review of previous projects performed by Murphy and D & D Water and Sewer, ("D&D"), our local partner that Murphy acquired earlier this year. Murphy's/D&D's ties to Michigan are deep, and its personnel have abundant experience deploying pre-chlorinated pipe bursting, both in Michigan and Livonia. Notably, D&D's performance for Livonia of the Water Main Replacement Project, Areas 1, 2 and 3, 2020/21, is still featured on the city's website: <https://livonia.gov/1848/Water-Main-Replacements-20202021-DWRF-74>. Of further relevance to this project, D&D successfully completed the 5 Mile Rd PH1, 5 Mile Rd PH2, and the DWRF Area 2 projects.

Expanding further, in 2007, Murphy was awarded and successfully completed the *first* pre-chlorinated pipe bursting project in Livonia. For its part, D&D has been a presence in Michigan for 53 years, and its local leadership is now affiliated with Murphy. As indicated, Mark DiMichele, the former president of D&D, personally will be overseeing this work. In addition, Murphy is part of PURIS LLC, *a Michigan-domiciled limited liability company* with multiple subsidiaries, including Inland Waters Pollution Control, Inc., *a Michigan-domiciled corporation* that has performed water and sewer rehabilitation projects in the State of Michigan for decades. In simple terms, the personnel that will perform this work are Michiganders, and they are part of a corporate family whose ties to Michigan are long-standing and strong.

Touching briefing on Mr. Bidigare's other points in his email and at the meeting, his suggestion that Murphy is not well-qualified to perform this work is without foundation, and is based on speculation and second-hand, inaccurate information. The references provided by Murphy to OHM demonstrate a history of quality work in Michigan of a similar nature to this project. Also, since neither the first nor second-lowest bidders is a Livonia-based entity, there is no official "local credit" applicable.

It is acknowledged the City of Livonia Ordinance 3.04.140 provides in pertinent part:

The council, at its discretion, shall have the right to reject any and all bids, including, but not limited to, the reason that there is a lack of sufficient American manufactured content. Except as otherwise set forth in this chapter, **no contract shall be awarded other than to the lowest bidder except by authority of the council.** (emphasis added)

It is respectfully submitted that the City Council should award this contract to Murphy, the recommended, preferred lowest bidder.

Murphy's Michigan-based, local team looks forward to collaborating with the City engineering staff and OHM to successfully execute this project. We are ready to get to work, and are prepared to answer any additional questions you may have. Thank you for your favorable consideration.

Sincerely,



Thomas E. Gottsegen
Chief Legal Officer



Mark DiMichele
Livonia Project Manager

cc: Maureen Miller Brosnan, Mayor
Michael Slater, Finance Director
Paul Bernier, City Attorney
Donald Rohraff, Director, Public Works Department
Todd Zilincik, City Engineer
Jessica Katers, OHM Advisors

June 27, 2023

Todd Zilincik, P.E.
City Engineer
City of Livonia
12973 Farmington Road
Livonia, MI 48150

Re: **2023-2024 Livonia Water Main Replacement (Areas 7-9)**
Additional Bid Analysis Information

Dear Mr. Zilincik:

A bid submittal review letter for the 2023-2024 Livonia Water Main Replacement project prepared by OHM on May 22, 2023, noted the low bidder was Murphy Pipeline Contractors, LLC with a bid price of \$5,575,555.00 and the second lowest bidder was Bidigare Contractors, Inc with a total bid of \$5,738,539.00. These bid results were presented and discussed at the June 5th City Council Study Session. Based on discussion at this meeting, the City Council has requested additional information regarding the recommendation of award for this project.

We understand that Council requested additional information regarding the following topics:

1. Further details on the investigation into the qualifications of the bidders.
 2. Additional information regarding the resources committed to this project by the bidders.
 3. Comments on the allegations submitted by one of the bidders in written correspondence.
 4. Contract mechanisms to hold the awarded contractor accountable for performance.
-
1. Given the bids received from the two lowest bidders were relatively close, OHM reviewed the qualifications and references from both Murphy Pipeline Contractors, LLC (MPC) and Bidigare Contractors, Inc (BC). The contract documents required that the successful bidder meet the following requirements as noted in the Instructions to Bidders:
 - “The CONTRACTOR shall be trained by the respective manufacturer of the pipe bursting equipment and/or directional drilling equipment in the use of that machinery. The CONTRACTOR shall provide verification from the manufacturer that the CONTRACTOR has been trained and is proficient in the use of the equipment.”
 - “The Prime Contractor shall demonstrate that they have successfully completed a minimum of 40,000 linear feet of minimum 8-inch Water Main installed by Directional Drilling, 20,000 linear feet of minimum 8-inch Water Main installed by Pre-Chlorinated Pipe Bursting, and 40,000 linear feet of Water Main installed by open cut trench methods on projects in the last three (3) years of similar scope in the state of Michigan. Failure to provide documentation supporting this requirement constitutes an invalid bid submittal.”
 - “In order to ensure that the bidders have municipal experience on previous municipal contracts, the OWNER will require at least three (3) municipal references for work in the last five (5) years (2018 thru 2022) in the State of Michigan.”
 - “Failure to supply at least three (3) satisfactory municipal references for similar work as outlined above may result in the OWNER’s rejection of the bid as non-responsive.”



Based on review of the project references provided by the low two bidders, OHM found both meet the intent of the above requirements and have successfully completed projects of similar nature within southeast Michigan. We contacted thirteen (13) references for MPC and spoke with seven (7). We also talked with four (4) references provided by BC. The documentation of these conversations is included as an attachment to this correspondence. In addition to the external reference discussions, we inquired with MPC as to which crews would be assigned to this project.

We received additional information from MPC in the form of a dozen articles, published from 2006 to 2017 in industry journals such as Trenchless Technology, on their water main replacement project experience, resumes for their local staff slated for this project, and recent resident kudos regarding local southeast Michigan projects.

2. At the June 5th Council Study Meeting, there was discussion regarding the resources that the contractors would use to staff this project.

MPC is a national company specializing in trenchless pipeline work. They are a division of the Puris Corporation with several other divisions. In the Michigan market, Murphy recently acquired a locally owned company, formally known as D&D Water & Sewer (D&D), with which the City of Livonia has previously done business, as recent as 2022 for the 2020 DWRP Water Main Replacement. A representative from the former D&D (now MPC) was present at the meeting and indicated that MPC would commit to the City that the Michigan based resources (previously known as D&D) would perform the pipeline work for this contract. Written correspondence was received on June 26th guaranteeing that the crews would be locally employed crews under the personal direction of Mark DiMichele, MPC Project Manager and former President of D&D.

BC is a local company based out of Plymouth, Michigan and all potential crews would be available locally. BC has completed several prior contracts for the City, most recently in 2022 for the 2021 DWRP Water Main Replacement Project.

Neither bidder is proposing to subcontract the pipeline work for this project. MPC has indicated that the pavement & turf restoration work would likely be sub-contracted. Per the contract documents, all subcontractors must be approved by the City prior to commencing work on the project.

3. Prior to the Council meeting, BC provided a written communication to the Council making several claims including: the due diligence performed by the City and OHM to review references, the capabilities of the low bidder, MPC, and an irrelevant comparison to an unrelated past City project.
 - Contrary to BC claims, OHM performed reference checks on MPC and BC with an emphasis on understanding what crews, equipment and expertise was going to be available for this project.
 - Communication after a bid opening between OHM and bidders is coordinated with the City and is limited to obtaining additional information from the bidder regarding their bid. The City has a defined bidding process that includes bidders directing questions through the Purchasing Department. BC repeatedly tried to influence the recommendation being put forth. Those attempted contacts were intentionally unanswered to maintain the integrity of the process and to adhere to the appropriate means of communication.
 - BC referenced the City's experience in 2015 with Rohl Networks. With this project, a recommendation was made to award to the second lowest bidder based on Rohl stating their intention to subcontract the majority of the contract to a different company with known performance and bond capacity issues. This project scenario is not like our current situation, as MPC is not subcontracting out the pipeline work, nor is Rohl a member of either bidder's team. While ultimately the Rohl contract was completed, it was not without challenges and delays.



However, after penalties for Inspector Days and Liquidated Damages, the contract completed approximately \$500k under the as-bid value.

4. With any contract, work issues do arise. The City has to rely on the strength of the language in the contract documents to ensure the desired outcomes are met. Whichever contractor is selected to do the work, there are mechanisms in the contract to ensure that the work is completed to the City's standards and on-schedule. The following is a summary of some key provisions from the contract documents:
 - Liquidated Damages - \$1,000 per day for not meeting milestone completion dates.
 - Substantial Completion: Bell Creek & Bloomfield St September 15, 2023
 - Final Restoration Completion June 28, 2024
 - Inspector Days – Contractors are required to bid on the number of inspector days they will use on the project. If the contractor spends more workdays on the site than what they bid, they are charged a penalty for each workday. This fee is to offset the costs of additional inspection to the City, should the contractor spend more time on the project.
 - If the Contractor requests to substitute crews for the pipeline work, they must meet the same training and experience criteria as required by the Contract. Any substitutions require the written consent of the City.
 - The Contractor is not allowed to leave exposed soils in a project area before they begin the next project area, i.e., restoration needs to be complete prior to mobilizing for the next area.
 - Restoration and clean-up of each area shall be completed within fourteen (14) calendar days or less of the Contractor substantially completing each area.

We trust this additional information and these clarifications will assist you in awarding this project contract to the lowest qualified bidder. If you have any questions or require additional information, please feel free to contact this office.

Sincerely,
OHM Advisors

Jessica Katers, P.E.

Enclosure: Contractor Reference Correspondence

Cc: Mr. Don Rohraff, Department of Public Works
Rich Hobgood, P.E., OHM Advisors

23/24 City of Livonia Water Main Replacement Contractor Reference Checks

Murphy Pipeline Contractors Reference Checks

OHM Advisors
Contractor Reference Correspondence

Job Name: 23/24 Livonia Water Main Replacement Job No.: 0090-21-0010

Reference Project Information

Project Name: Berkshire Villas Phase I Date Work Took Place: Fall 2020 (12 weeks)

Project Location: Bloomfield Twp, MI Contractor: Murphy Pipeline Contractors

Size of Project: ~4,400ft of 8" WM Consultant: Hubbell Roth & Clark

Reference Contact Information

Project Contact (Name & Number): Dated Called: 5/18/23

Christopher Ross (248-330-7344) Called By: Audrey Stahrr

Contact's Roll in the Project: Voicemail left: ☐

Engineer Date Called Back:

Reference Check Questions

1. What were your general impressions of the contractor's ability (workmanship, pace, etc.)?

Project went very well, pipe bursting is what they do

2. What was the schedule of the job? Did it start on time?

Started and completed on time

3. What was the nature of the project (road reconstruction, road patching, paving, etc.)?
What was the size of the project (length, sft etc.)?

3837 lft (Pre-chlorinated Pipe Bursting), 426 lft (Directional Drilling), 106 lft
(Open Cut) [All install was 8" HDPE]

4. Did the project come in on budget?

5. Were there change orders? If yes, how did the contractor handle negotiations?

No substantial change orders

6. Were there extras and/or claims (how many were asked for/made)?
7. How were field changes handled by the contractor (did they offer solutions/were they proactive in seeking out potential issues)?
8. Was there anything unique about this project (utility conflicts, pedestrian signals, etc.)? If so, how did the contractor handle adversity of completing special tasks?
9. Did the contractor use different techniques than specified in the contract book and plans to complete the project? If yes, how did that impact the project?
10. If you had the opportunity to work with this contractor again would you award them a project without reservation?

Yes

Additional Notes:

OHM Advisors
Contractor Reference Correspondence

Job Name: 23/24 Livonia Water Main Replacement Job No.: 0090-21-0010

Reference Project Information

Project Name: Berkshire Villas Phase II Date Work Took Place: Fall 2021 (12 Weeks)

Project Location: Bloomfield Twp, MI Contractor: Murphy Pipeline Contractors

Size of Project: 3200 ft of 8" Water Main Consultant: Hubbell Roth & Clark

Reference Contact Information

Project Contact (Name & Number): Dated Called: 5/18/23

Christopher Ross (248-330-7344) Called By: Audrey Stahrr

Contact's Roll in the Project: Voicemail left: ☐

Engineer Date Called Back:

Reference Check Questions

1. What were your general impressions of the contractor's ability (workmanship, pace, etc.)?

Project went well, contractor showed ample experience in pipe bursting

2. What was the schedule of the job? Did it start on time?

Started and completed on time

3. What was the nature of the project (road reconstruction, road patching, paving, etc.)?
What was the size of the project (length, sft etc.)?

3200 lft of 8" HDPE Pipe Bursting

4. Did the project come in on budget?

5. Were there change orders? If yes, how did the contractor handle negotiations?

No substantial change orders

6. Were there extras and/or claims (how many were asked for/made)?
7. How were field changes handled by the contractor (did they offer solutions/were they proactive in seeking out potential issues)?
8. Was there anything unique about this project (utility conflicts, pedestrian signals, etc.)? If so, how did the contractor handle adversity of completing special tasks?
9. Did the contractor use different techniques than specified in the contract book and plans to complete the project? If yes, how did that impact the project?
10. If you had the opportunity to work with this contractor again would you award them a project without reservation?

Yes

Additional Notes:

OHM Advisors
Contractor Reference Correspondence

Job Name: 23/24 Livonia Water Main Replacement Job No.: 0090-21-0010

Reference Project Information

Project Name: Cranbrook Subdivision Waterline Replacement Date Work Took Place: 2021 (40 weeks)

Project Location: Harris County, TX Contractor: Murphy Pipeline Contractors

Size of Project: \$4,000,000 Consultant:

Reference Contact Information

Project Contact (Name & Number): Dated Called: 5/18/23
Nathan White (713-389-1573) Called By: Audrey Stahrr

Contact's Roll in the Project: Voicemail left: ☐
Harris County Water Operations Date Called Back:

Reference Check Questions

1. What were your general impressions of the contractor's ability (workmanship, pace, etc.)?

Worked swiftly

2. What was the schedule of the job? Did it start on time?

Yes, completed on time

3. What was the nature of the project (road reconstruction, road patching, paving, etc.)?
What was the size of the project (length, sft etc.)?

7,800 lft 12" HDPE, 10,890 lft 8" HDPE, 3,470 lft 6" HDPE Pre-chlorinated
Pipe Bursting

4. Did the project come in on budget?

Yes

5. Were there change orders? If yes, how did the contractor handle negotiations?

N/A

6. Were there extras and/or claims (how many were asked for/made)?

N/A

7. How were field changes handled by the contractor (did they offer solutions/were they proactive in seeking out potential issues)?

N/A

8. Was there anything unique about this project (utility conflicts, pedestrian signals, etc.)? If so, how did the contractor handle adversity of completing special tasks?

N/A

9. Did the contractor use different techniques than specified in the contract book and plans to complete the project? If yes, how did that impact the project?

N/A

10. If you had the opportunity to work with this contractor again would you award them a project without reservation?

Yes

Additional Notes:

Restoration deficiencies, but eventually was fixed

OHM Advisors
Contractor Reference Correspondence

Job Name: 23/24 Livonia Water Main Replacement Job No.: 0090-21-0010

Reference Project Information

Project Name: Spring Hill Date Work Took Place: 2022-2023
Project Location: Rochester Hills Contractor: Murphy Pipeline Contractors
Size of Project: 3 Miles Consultant: City

Reference Contact Information

Project Contact (Name & Number): Dated Called: 5/18/23
Tracey Balint (248-841-2504) Called By: Jessica Katers

Contact's Roll in the Project: Voicemail left: ☐
Public Utilities Engineer Date Called Back:

Reference Check Questions

1. What were your general impressions of the contractor's ability (workmanship, pace, etc.)?

Got the project in service, but was slower to complete restoration

2. What was the schedule of the job? Did it start on time?

In service by end of October, but restoration remained

3. What was the nature of the project (road reconstruction, road patching, paving, etc.)?
What was the size of the project (length, sft etc.)?

3 miles of water main replacement

4. Did the project come in on budget?

5. Were there change orders? If yes, how did the contractor handle negotiations?

6. Were there extras and/or claims (how many were asked for/made)?

Since project has been in service, the DPW has made two repairs and are in the process of deducting that cost from the retention and amount owed.

7. How were field changes handled by the contractor (did they offer solutions/were they proactive in seeking out potential issues)?

8. Was there anything unique about this project (utility conflicts, pedestrian signals, etc.)? If so, how did the contractor handle adversity of completing special tasks?

N/A

9. Did the contractor use different techniques than specified in the contract book and plans to complete the project? If yes, how did that impact the project?

Yes, the contractor asked for a installation method change from the proposed pre-chlorinated pipe bursting to a hybrid that uses temporary water for 2 - 5 days.

10. If you had the opportunity to work with this contractor again would you award them a project without reservation?

Yes

Additional Notes:

- Current restoration issues; reports of sinkholes and have taken a long time to return to do restoration. Pipe installation crew is doing the restoration which isn't their forte
- Had multiple crews on the project; different levels of workmanship depending on which crew was on site
- Had one point of contact for Project Manager from Murphy; she was out of state but made occasional project visits on top of the virtual meetings; she was good at communicating
- Two significant repairs have been completed by Rochester Hills DPW; determined to be bolts that weren't tightened in pavement locations
- At times, the size of equipment that the job utilized seemed small for the depths of the utilities being installed, equipment may not be suited for Michigan field conditions

OHM Advisors
Contractor Reference Correspondence

Job Name: 23/24 Livonia Water Main Replacement Job No.: 0090-21-0010

Reference Project Information

Project Name: 16" Transmission Main Rehab Date Work Took Place: 2018

Project Location: Coolidge Hwy, MI Contractor: Murphy Pipeline Contractors

Size of Project: 5385 Ft 8" Water Main Consultant: Hubbell Roth & Clark

Reference Contact Information

Project Contact (Name & Number): Dated Called: 6/13/23

Brad Shepler (248-454-6300) Called By: Rich Hobgood

Contact's Roll in the Project: Voicemail left: ☐

Engineer Date Called Back:

Reference Check Questions

1. What were your general impressions of the contractor's ability (workmanship, pace, etc.)?

Good project management; project was a specialty slip lining with HDPE compression fittings and crews were from out of state; Punchlist and restoration took a big longer, but overall turned out well

2. What was the schedule of the job? Did it start on time?

Yes

3. What was the nature of the project (road reconstruction, road patching, paving, etc.)?
What was the size of the project (length, sft etc.)?

5385 lft HDPE

4. Did the project come in on budget?

Yes

5. Were there change orders? If yes, how did the contractor handle negotiations?

None

6. Were there extras and/or claims (how many were asked for/made)?

None

7. How were field changes handled by the contractor (did they offer solutions/were they proactive in seeking out potential issues)?

N/A

8. Was there anything unique about this project (utility conflicts, pedestrian signals, etc.)? If so, how did the contractor handle adversity of completing special tasks?

Specialty project slip lining; out of state crews

9. Did the contractor use different techniques than specified in the contract book and plans to complete the project? If yes, how did that impact the project?

No

10. If you had the opportunity to work with this contractor again would you award them a project without reservation?

Yes

Additional Notes:

OHM Advisors
Contractor Reference Correspondence

Job Name: 23/24 Livonia Water Main Replacement Job No.: 0090-21-0010

Reference Project Information

Project Name: Texas A&M University Date Work Took Place: (3 weeks)
Project Location: College Station, TX Contractor: Murphy Pipeline Contractors
Size of Project: 680 ft Consultant:

Reference Contact Information

Project Contact (Name & Number): Dated Called: 5/18/23
Clyde Oberg (979-845-1042) Called By: Audrey Stahrr
Contact's Roll in the Project: Voicemail left: ☐
Assistant Director of Finance Date Called Back:

Reference Check Questions

1. What were your general impressions of the contractor's ability (workmanship, pace, etc.)?

No complaints, great success

2. What was the schedule of the job? Did it start on time?

Yes

3. What was the nature of the project (road reconstruction, road patching, paving, etc.)?
What was the size of the project (length, sft etc.)?

680 lft 8" and 12" HDPE Pre-chlorinated Pipe Bursting

4. Did the project come in on budget?

5. Were there change orders? If yes, how did the contractor handle negotiations?

No issues

6. Were there extras and/or claims (how many were asked for/made)?

No

7. How were field changes handled by the contractor (did they offer solutions/were they proactive in seeking out potential issues)?

N/A

8. Was there anything unique about this project (utility conflicts, pedestrian signals, etc.)? If so, how did the contractor handle adversity of completing special tasks?

N/A

9. Did the contractor use different techniques than specified in the contract book and plans to complete the project? If yes, how did that impact the project?

N/A

10. If you had the opportunity to work with this contractor again would you award them a project without reservation?

Yes

Additional Notes:

OHM Advisors
Contractor Reference Correspondence

Job Name: 23/24 Livonia Water Main Replacement Job No.: 0090-21-0010

Reference Project Information

Project Name: Simsbury Phase II Date Work Took Place: Spring 2023 (Ongoing)

Project Location: West Bloomfield Twp, MI Contractor: Murphy Pipeline Contractors

Size of Project: \$1,300,000 Consultant: DLZ

Reference Contact Information

Project Contact (Name & Number): Dated Called: 5/18/23
Ed Haapala (248-521-0044) Called By: Jessica Katers

Contact's Roll in the Project: Voicemail left: ☐
DPW Director Date Called Back:

Reference Check Questions

1. What were your general impressions of the contractor's ability (workmanship, pace, etc.)?
 - Project awarded in June 2022; D&D asked to purchase materials and store at DPW yard
 - March 2023 - Mark (D&D) notified sale of company to Murphy Pipeline Contractors
 - April 2023 - Construction start in the field; limited installation with 5 weeks of work
2. What was the schedule of the job? Did it start on time?

Project did not start on time; Lack of material availability was noted the reason; Currently underway and progressing slower than anticipated
3. What was the nature of the project (road reconstruction, road patching, paving, etc.)?
What was the size of the project (length, sft etc.)?

4000 lft of 8" Water Main Replacement
4. Did the project come in on budget?

Not complete; current items of overrun include restoration quantities due to lack of production, however no change order has been requested yet
5. Were there change orders? If yes, how did the contractor handle negotiations?

None submitted as of yet

6. Were there extras and/or claims (how many were asked for/made)?

N/A

7. How were field changes handled by the contractor (did they offer solutions/were they proactive in seeking out potential issues)?

Not far enough into the project to evaluate

8. Was there anything unique about this project (utility conflicts, pedestrian signals, etc.)? If so, how did the contractor handle adversity of completing special tasks?

N/A

9. Did the contractor use different techniques than specified in the contract book and plans to complete the project? If yes, how did that impact the project?

Yes, using a hybrid method of installation that includes temporary water in lieu of traditional prechlorinated pipe bursting

10. If you had the opportunity to work with this contractor again would you award them a project without reservation?

N/A

Additional Notes:

- SESC is an issue - not toeing in the silt fence and tracking onto City streets
- Removal of large mature trees that were not intended due to the operations and the shortening of lengths between bore pits
- Regrouping with Murphy in order to agree upon a successful game plan for the remainder of the project

Bidigare Contractors Reference Checks

OHM Advisors
Contractor Reference Correspondence

Job Name: 23/24 Livonia Water Main Replacement Job No.: 0090-21-0010

Reference Project Information

Project Name: Fair Oaks Dr and Suffolk Ct Date Work Took Place: 2015

Project Location: Canton, MI Contractor: Bidigare Contractors

Size of Project: \$675,000 Consultant: Wade Trim

Reference Contact Information

Project Contact (Name & Number): Dated Called: 5/19/2023

William Fisher (313-363-0532) Called By: Rich Hobgood

Contact's Roll in the Project: Voicemail left: ☐

Project Manager Date Called Back:

Reference Check Questions

1. What were your general impressions of the contractor's ability (workmanship, pace, etc.)?

Very responsive and easy to work with

2. What was the schedule of the job? Did it start on time?

Job started on time

3. What was the nature of the project (road reconstruction, road patching, paving, etc.)?
What was the size of the project (length, sft etc.)?

4000 lft of 8" HDPE Pre-chlorinated pipe bursting

4. Did the project come in on budget?

Yes

5. Were there change orders? If yes, how did the contractor handle negotiations?

No change order

6. Were there extras and/or claims (how many were asked for/made)?

N/A

7. How were field changes handled by the contractor (did they offer solutions/were they proactive in seeking out potential issues)?

Field solutions occurred between the foreman and site observer and were worked out without additional cost.

8. Was there anything unique about this project (utility conflicts, pedestrian signals, etc.)? If so, how did the contractor handle adversity of completing special tasks?

N/A

9. Did the contractor use different techniques than specified in the contract book and plans to complete the project? If yes, how did that impact the project?

No

10. If you had the opportunity to work with this contractor again would you award them a project without reservation?

Yes

Additional Notes:

OHM Advisors
Contractor Reference Correspondence

Job Name: 23/24 Livonia Water Main Replacement Job No.: 0090-21-0010

Reference Project Information

Project Name: 2020 WM CIP Program Date Work Took Place: 2020
Project Location: Canton Twp Contractor: Bidigare Contractors
Size of Project: \$2,300,000 Consultant: Fishbeck

Reference Contact Information

Project Contact (Name & Number): Dated Called: 5/18/23; 6/20/23
Andrew Kilpatrick (734-888-8457) Called By: Audrey Stahr
Contact's Roll in the Project: Voicemail left: ☒
Date Called Back: 5/18/23

Reference Check Questions

1. What were your general impressions of the contractor's ability (workmanship, pace, etc.)?

Work went well, no major issues

2. What was the schedule of the job? Did it start on time?

Job was completed on time

3. What was the nature of the project (road reconstruction, road patching, paving, etc.)?
What was the size of the project (length, sft etc.)?

650 lft of 8" Fusible PVC C900 Pre-chlorinated Pipe Bursting

4. Did the project come in on budget?

5. Were there change orders? If yes, how did the contractor handle negotiations?

6. Were there extras and/or claims (how many were asked for/made)?
7. How were field changes handled by the contractor (did they offer solutions/were they proactive in seeking out potential issues)?
8. Was there anything unique about this project (utility conflicts, pedestrian signals, etc.)? If so, how did the contractor handle adversity of completing special tasks?
9. Did the contractor use different techniques than specified in the contract book and plans to complete the project? If yes, how did that impact the project?
10. If you had the opportunity to work with this contractor again would you award them a project without reservation?

Yes, have used them several times before and would use again

Additional Notes:

OHM Advisors
Contractor Reference Correspondence

Job Name: 23/24 Livonia Water Main Replacement Job No.: 0090-21-0010

Reference Project Information

Project Name: S Brandon St Watermain and Pavement Rehab Date Work Took Place: July 2020

Project Location: Westland, MI Contractor: Bidigare Contractors

Size of Project: \$1,056,000 Consultant: Hennessey Engineers

Reference Contact Information

Project Contact (Name & Number): Dated Called: 5/18/23

Alan Cruz (734-637-6700) Called By: Rich Hobgood

Contact's Roll in the Project: Voicemail left: ☐

Engineer Date Called Back:

Reference Check Questions

1. What were your general impressions of the contractor's ability (workmanship, pace, etc.)?

Has vast experience in this type of work

2. What was the schedule of the job? Did it start on time?

On time

3. What was the nature of the project (road reconstruction, road patching, paving, etc.)?
What was the size of the project (length, sft etc.)?

2600 lft of 8" HDPE Pre-chlorinated Pipe Bursting

4. Did the project come in on budget?

Yes

5. Were there change orders? If yes, how did the contractor handle negotiations?

No change orders

6. Were there extras and/or claims (how many were asked for/made)?

No extras

7. How were field changes handled by the contractor (did they offer solutions/were they proactive in seeking out potential issues)?

Worked well to resolve items in the field as they occurred

8. Was there anything unique about this project (utility conflicts, pedestrian signals, etc.)? If so, how did the contractor handle adversity of completing special tasks?

Worked well with residents

9. Did the contractor use different techniques than specified in the contract book and plans to complete the project? If yes, how did that impact the project?

N/A

10. If you had the opportunity to work with this contractor again would you award them a project without reservation?

Yes

Additional Notes:

OHM Advisors
Contractor Reference Correspondence

Job Name: 23/24 Livonia Water Main Replacement Job No.: 0090-21-0010

Reference Project Information

Project Name: 2020 DWSRF Water System Improvements Date Work Took Place: May 2021

Project Location: Rochester, MI Contractor: Bidigare Contractors

Size of Project: \$1,890,000 Consultant: DLZ

Reference Contact Information

Project Contact (Name & Number): Dated Called: 5/18/23

Leigh Merrill (248-681-7800) Called By: Audrey Stahr

Contact's Roll in the Project: Voicemail left: ☐

Project Manger Date Called Back: 5/18/23

Reference Check Questions

1. What were your general impressions of the contractor's ability (workmanship, pace, etc.)?

Directional drill crew lacked experience on this project; however, have worked with the pipe bursting crew on past projects with a lot of success

2. What was the schedule of the job? Did it start on time?

Project completed on time

3. What was the nature of the project (road reconstruction, road patching, paving, etc.)?
What was the size of the project (length, sft etc.)?

8,500 lft of 12" HDPE Pipe Bursting and Directional Drill

4. Did the project come in on budget?

Project went over on restoration quantities and had a change order for additional restoration work

5. Were there change orders? If yes, how did the contractor handle negotiations?

Disagreement and discussions on if City or Contractor would pay for additional restoration work

6. Were there extras and/or claims (how many were asked for/made)?

BC PM submitted multiple claims, more than typical, many for minor field changes

7. How were field changes handled by the contractor (did they offer solutions/were they proactive in seeking out potential issues)?

Pipe bursting crew was very good with changes on the fly, directional drill crew was not as good at making adjustments

8. Was there anything unique about this project (utility conflicts, pedestrian signals, etc.)? If so, how did the contractor handle adversity of completing special tasks?

N/A

9. Did the contractor use different techniques than specified in the contract book and plans to complete the project? If yes, how did that impact the project?

N/A

10. If you had the opportunity to work with this contractor again would you award them a project without reservation?

Yes

Additional Notes:

**CITY OF LIVONIA – CITY COUNCIL
MINUTES OF STUDY MEETING HELD JUNE 5, 2023**

Meeting was called to order at 8:00 p.m. by Council President Jim Jolly. Present: Rob Donovic, Scott Morgan, Brandon McCullough, Kathleen McIntyre, Scott Bahr, and President Jim Jolly. Absent: Vice President Laura Toy.

Elected and appointed officials present: Susan Nash, City Clerk; Michael Fisher, Assistant City Attorney; Todd Zilincik, City Engineer; Don Rohraff, Director of Public Works; Ted Davis, Superintendent of Parks and Recreation; and Michael Slater, Director of Finance.

Councilmember Donovic led the Pledge of Allegiance.

President Jolly shared that Councilmember Donovic is now officially a veteran having recently concluded his service in the United States Army. He thanked him for his service.

13. AWARD OF CONTRACT: Engineering Division, re; for the Water Main Improvements for Project Areas 7, 8, and 9.

Todd Zilincik, City Engineer, presented the request to Council.

Todd indicated there were several bids provided on MITN. The low bidder including inspector days is Murphy Pipeline Contractors in the amount of \$5,422,555. He indicated we worked with OHM and based on the letter of recommendation, are asking to award the contract to Murphy Pipeline in that amount. Jessica Katers from OHM is present to answer any questions regarding the letter of recommendation or background information. He said this project is to repave Belle Creek Lane and Bloomfield, as it was delayed last year, and to complete it by the end of October.

President Jolly indicated all Councilmembers received an email regarding this matter.

John Bidigare, Bidigare Contractors, 14769 Riverside, indicated he sent the referenced email and wanted to explain that his company has done more of this type of work in Michigan over the last ten years than any others. Bidigare was second low bidder by less than 2%. He indicated that Murphy Pipeline has done four jobs since 2009. He said his company has done jobs in almost every major city in Southeast Michigan. Numerous cities have granted change orders for additional work due to completion on time, quality, and outstanding workmanship. This includes the City of Livonia Footing Drain Disconnection Program, on which OHM was the engineer. Every city's DPW directors and engineers have given them outstanding reviews. And in many of those cities, they've worked change orders for many years thereafter. They have held their prices and 95% of their projects are under budget with no cost overruns. He believes Livonia would choose Bidigare Contractors if these bids were even, because of their quality and minimal cost overruns. They just finished a project in Coventry Gardens two years ago and did one on Seven Mile. Their company self-performs all work and does not subcontract as they have six crews. He was told the low bidder has subcontracted in West Bloomfield Township and Rochester Hills. He stated Livonia had a job in 2015 where the contractor came in from out of state and that job was in the millions in cost overruns. The recommendation at that time was DVM Contractors. That project was also less than 2% difference on bid price, which totaled about \$300,000. The city went with the low bidder against the recommendation of the of the engineer at that time. The engineer, OHM, has sent a

letter stating there are too low bids. It doesn't say anywhere in that letter that it's been recommended.

President Jolly asked Mike Fisher, Assistant City Attorney, to explain the local bidder preference built into the Ordinance to shed some light on the information shared.

Michael Fisher said the 3% preference would have been used here if it applied.

Todd Zilincik explained when the bidder is in Livonia, the preference is 3% for a bid of \$200,000 or more or 1% for bids below \$200,000. This contract is 5.4 million, it would be 3%, but it must be a Livonia based business per the ordinance.

President Jolly stated the address that Mr. Bidigare gave was on Riverside in Livonia and asked if that is a personal address.

Todd indicated the business address is Plymouth.

Mr. Bidigare indicated Riverside is his personal address.

President Jolly asked Jessica Katers from OHM Advisors, if she has any information as to why OHM is making the recommendation.

Jessica Katers indicated OHM provided a summary of the bids received and did due diligence in performing reference checks. They determined whether the bidders met the experience requirements. In their reference checks, they spoke to no less than five references for Murphy Pipeline and called well over 15. They also made at least three calls to Bidigare references, even though they have had multiple contracts with them in the past. In determining the acceptability of the bid, both the first and second low bidder met the qualifications that were put out in the RFP, and both had acceptable references. She stated OHM has documentation as to those conversations with the municipalities that contacted.

Councilmember McCullough asked Jessica if their reference checks included liquidated damages or default on past projects.

Jessica Katers indicated they talked to both municipalities that had completed projects and municipalities that were currently within a project with the Murphy Pipeline Group. They discussed change orders and/or extras and for the majority there were no major claims, or there were no claims that were left on processed or that resulted in major overruns.

Councilmember McCullough indicated there is usually a recommendation from the engineer or architect in this field and it appears OHM gave an opinion that both contractors are okay. He asked if there is any preference or recommendation beyond what is in the packet.

Jessica Katers indicated OHM stated both contractors are qualified to do the project. They understand there is about a 3% difference between the first and second bid, but it isn't their purview to discuss financial matters. What they did want to present is the fact that per the qualifications that were checked, the projects that have been

completed, they both appear to be qualified contractors to complete a successful project.

Councilmember McCullough explained when his employer goes through RFPs for MITN, with an architect or engineer involved, they usually go their direction. They always select the lowest qualified bidder, and the lowest bidder is not always the best in many cases. This is a big project, and the numbers came in sharp which shows the tight scope. It's one of those things that you take the engineer and your administration's decision on.

Councilmember Morgan asked where Murphy Pipeline's company is located and if they do the work or hire subcontractors.

Jessica Katers said they are more of a national contractor and have crews in multiple different locations. One of the questions OHM asked them is which crew will be on this project. There is a crew based here in Michigan that are Murphy Pipeline employees.

Councilmember Morgan asked if they are employees or contractors.

Jessica Katers stated they are employed by Murphy Pipeline.

Councilmember Morgan asked if Bidigare Construction hires subcontractors.

Jessica Katers indicated Bidigare is based in Plymouth and they self-perform all work that they do.

Councilmember McIntyre asked why self-performing the work wasn't a part of the RFP.

Jessica Katers said it is part of the big package to include any subcontractors they intend to use in the bid. If there was a subcontractor listed that was felt to be inappropriate for the project, they could ask for a substitution. Currently, neither the bidder has listed any subcontractors in the bid package.

Councilmember McIntyre asked if there are contractual requirements regarding self-performing versus subcontractors.

Jessica Katers said there could be set up percentage wise, based on the dollar amount of the contract, but this one was not set up that way. This one states a subcontractor being brought in that was not listed in the bid package would need to be approved by the city.

Councilmember McIntyre asked who to question as to why that was not a part of the RFP.

Jessica Katers said there are clauses within the contract that cover subcontracting and how the process is handled. The percentage of a contract that must be performed by the general contractor is a prerogative and not something previously put into the contracts, but it's something that could be included going forward.

Councilmember McIntyre said she is surprised the requirement for self-directed work was not stipulated in the RFP since it seems that we are now saying the low bidder isn't really the best choice.

Jessica Katers said neither bidder has indicated they aren't going to self-perform the work.

Councilmember McIntyre asked if bidding rules for municipal contracts allow us to go back and ask the bidders specifically about commitments for self-performance.

Jessica Katers said there is a clause in the contract that indicates we can ask for clarification of additional criteria to do a more in-depth evaluation.

Councilmember Bahr asked Jessica if the low bidder was using subcontractors for any of the five references that were checked.

Jessica Katers said they were not to her knowledge.

Councilmember Bahr asked if there was anything that would cause doubt as to whether the low bidder is able to do the work sufficiently by looking at the references.

Jessica Katers stated the references indicated the low bidder performed the projects and they have working water systems as a result of those projects. She said everyone has quirks with the way a project comes to fruition and things like restoration may or may not be everyone's best project. There were some things that did come up, but nothing that was of major impact to the projects that we checked references on.

Councilmember McIntyre said there has been discussion about the issue of pre-chlorination pipe bursting and the company formerly known as D and D, now known as Murphy, was one of the one of the companies that started this technology. She asked if they no longer use that protocol and if that would be a potential area of concern. She also asked if the RFP addressed the issue of pre-chlorination pipe bursting.

Jessica Katers said this does not preclude them from asking later to change the methodology in which they wish to install the replacement water main. She indicated D and D performed the 2020 DWRF project and Bidigare performed the 2021 DWRF, both with the pre-chlorinated pipe bursting methodology. She clarified that D and D as stated wasn't the low bid here, it is Murphy Pipeline.

Councilmember McIntyre said she believes it to be preferred technology and asked if it was possible to confirm that the low bidder would use this process on the project as a part of awarding the contract.

Jessica Katers said she feels it would be fair to ask, in writing, that this type of methodology be used.

Councilmember McCullough asked if this was an AIA contract format on MITN, if there was a performance bond, and liquidated damages.

Jessica Katers said it is not AIA, it is CEE and there is a performance bond and liquidated damages. There are liquidated damages set up for two streets involved in the project to get those done by September 15th and the other would start in June of 24.

Councilmember Donovic said Council must do their due diligence in getting questions answered since they are always asked by residents. He asked how long they anticipate this multi-phase project will take.

Jessica Katers said the contract length is currently through June of 2024. There will be a shutdown period because pre-chlorinated pipe is a seasonal install. They will have to stop in January or February, depending on the weather, and restart again in early spring.

Councilmember Donovic said we have a specified number of inspection days and asked what happens if the contractor exceeds it. He also said he understands that it's difficult to ever get liquidated damages.

Jessica Katers said there is a retainage held as part of the contract. It is typically 10% of the contract cost, or 10% of the work performed to date, and it would be utilized to pay any additional inspection days that are required. It would be \$680 per inspection day, and they are tracked just like any other type of item that is paid for through the contract. If those are exceeded, the city would have the opportunity to back charge the contractor for that.

Councilmember Donovic said we have a Florida based company that bought out other companies and a local company that has done tons of work in our community, which is right down the street with a Livonia resident as owner. He has looked at some of the other community's council meetings and found they went with a different bid and not the Florida based company. He indicated the letter councilmembers received has caused some confusion and states a crew from Georgia was apparently doing the work in West Bloomfield. He asked Jessica to elaborate as to whether it is a Georgia based crew, this other national crew, or a Michigan crew doing the work? He also asked if we could guarantee that a Michigan based crew is doing the work according to the contract.

Jessica Katers said there is no requirement that it must be a Michigan based company the way the contract is written. That is not something that has been written into any of our previous contracts. She cannot answer what crew we are going to get on the job. She said representatives from Murphy Pipeline are here and they may be able to answer that question.

Councilmember Donovic said he doesn't feel it is necessary for Council to make a requirement to use a Michigan based company. He just personally would rather go with a local company rather than one that is out of state.

Councilmember Bahr said there is a letter from the administration that expressly recommends that we go with Murphy Pipeline contractors. He feels we have two contractors that are qualified and have the technology we're looking for. He is not seeing any reason why we should ignore the recommendation in front of us and not

go with the low bidder. He asked if someone could explain why we should go with the second lowest bidder.

Don Rohraff, Director of DPW, said the letter to Council brought up questions, comments, and history. He confirmed a letter of recommendation was sent from the department. He said the company, the contractor, and the crew that have done work for the city in the past was D and D and that is not the company that bid on this project, it is Murphy. He is aware that OHM has approached Murphy. He spoke with a representative from Murphy today, which was the first time that he has gotten any feedback. He was also told he would get a letter today. He said this will be the crew that we're going to be putting on the job and that commitment has yet to be received. He said a Murphy representative is present and may have that information. He shared that these are some of the concerns they have had moving forward.

Councilmember Bahr said a letter was sent to Council recommending the contract be awarded to Murphy Pipeline and asked if there has been a concern that has arisen to changed that recommendation.

Don Rohraff said there has not.

Councilmember McIntyre said Don made the recommendation and asked him if it was a soft recommendation because these questions haven't been answered. She also asked why the questions were not asked and concerns were not expressed when he was writing the letter of recommendation.

Don Rohraff said those questions were being addressed or trying to be addressed. As more research and follow-up on references was being done, more of these questions have come up. He indicated they have a deadline and were trying to make sure that it makes a council meeting so that they are not falling off the timeline to get roads paved in the fall. He said he signed the letter and that's the recommendation. He said he is hoping to get some kind of commitment of the crew that we're going to get here tonight.

Councilmember McIntyre asked if there was a pre-bid meeting and if any of these questions were asked at that time.

Don Rohraff said he would have to refer to Mr. Zilincik for that.

Todd Zilincik said there was no pre-bid meeting. He indicated they have done numerous contracts with OHM before, and they fine-tuned it. He stated there is only so much they can do to make sure it's fair when it is bid out.

President Jolly asked if there was a representative from Murphy Pipeline present to answer questions and give a guarantee that it will be a Michigan crew doing the work.

Mark DiMichele, employee of Murphy Pipeline, indicated he was the owner of D and D Water and Sewer until he was bought out by Murphy Pipeline about two months ago. He said D and D Water and Sewer has done over ten million dollars' worth of work in the City of Livonia successfully without any issues over the past five years. There were no liquidated damages, no subcontractors, and no problems whatsoever. He is committing that the D and D of the past, which is now part of Murphy will be

performing this contract with local crews. No out of state subcontractors. They will be self-performing all work with their own crews. He said he knows there have been a lot of rumors and behind the scenes discussions about their capabilities. He feels their record speaks for itself and they can properly perform. He offered to provide a letter to that effect, to solidify this recommendation.

Councilmember Bahr said he doesn't see any reason to go against the recommendation that they have in front of them. He also explained, for the residents' benefit, that we did a first read on water rates earlier tonight. And when we vote on water rates, we vote on covering the costs that have already been incurred. These are the discussions where we control the rate and have a chance to keep water rates as low as possible. That is why we spent so much time on this tonight.

Councilmember Bahr offered an approving resolution for the low bidder on the Regular agenda.

President Jolly asked Mr. DiMichele if he is actively engaged in the operation of the local business as he had been in the past, since it was acquired by Murphy.

Mr. DiMichele said he is in charge of the entire Michigan operation, and he will be actively engaged on this project.

Councilmember McIntyre thanked everyone that worked on this. She indicated her questions are to ensure that they make the right decision.

Councilmember Donovic said he has a personal belief system that he wants to support local contractors. He respects and understands the fact that Mr. DiMichele is local, and recently sold his company, being acquired by a larger corporate company. He said he now has bosses to answer to and they are not here in Michigan. He said he appreciates what our department heads have done. His concerns are based around some of the things he read in the letter with some references. He said when he is supporting a company with a 5.56-million-dollar contract, he wants to make sure he can pick up the phone and call the contractor if there's an issue and he isn't sure we will get that same level of service from a company that is thousands of miles away in a different state.

Councilmember McCullough asked if OHM could have the reference checks forwarded to Council.

Jessica Katers said OHM will forward that information to the City Engineer before the next Regular meeting.

Councilmember Morgan said after listening to all parties there is still hesitation, and he would like to see the reference information as well. He offered a denying resolution on the Regular agenda.

President Jolly asked that any additional information be sent to our City Engineer, Todd Zilincik, or directly to Council at citycouncil@livonia.gov.

President Jolly verified that Councilmember Morgan would like to offer an alternative approving resolution for the second low bidder so that both are on the table.

DIRECTION:

APPROVE LOWEST BIDDER
APPROVE 2ND LOW BIDDER

REGULAR
REGULAR



LETTER TO THE LIVONIA CITY COUNCIL

15.

Engineering
May 23, 2023

MEETING DATE

S060523/R062623

PREPARED BY

Karen Worley, Secretary IV,

AGENDA ITEM

AWARD OF CONTRACT: Engineering Division, re; for the Water Main Improvements for Project Areas 7, 8, and 9.

BACKGROUND DETAILS

The City of Livonia had previously applied and obtained funding for Drinking Water Revolving Funding (DWRF) from the State of Michigan, as follows; \$3.5 million in 2014 (DWRF Project #7355-01), \$7.5 million in 2015 (DWRF Project #7356-01), \$10 million in 2019 (DWRF Project #7452-01) and \$6 million in 2021 (DWRSF #7453-01).

We unfortunately were not unable to obtain DWSRF for FY 22 or 23 as there were too many projects ahead of us and we were further down the list on the PPL. Instead, the funding for the continued water main improvements for FY 23/24 will come from the water rate revenue for Project Areas 7, 8 and 9. This project involves over 12,116 lineal feet or 2.3 miles of 8-inch water main consisting of high density polyethylene (HPDE), 4,634 lineal feet or 0.89 miles of 12-inch water main consisting of HDPE, 43 new break-a-way fire hydrants being installed, and 23 gate valve in wells for 8-inch water main, and 5 gate valve in wells for 12-inch water main to shut the water main down and reduce the number of residents / businesses out of water. New water service connections to replace the existing ones within the right-of-way will be provided to 179 existing residential homes with a new stop box and rod at the property line. If a lead service line is found, it will be replaced from the stop box and rod to the meter inside the house.

The water main replacement project areas will be using trenchless technology via pipe bursting methods. The locations were determined by age of the pipe, number of breaks, and other factors from the 2019 Water Main Master Plan. This project will provide improved water quality and reliability, and improve fire coverage by adding additional hydrants.

Construction for the 2023/2024 Water Main Replacement Project Areas 7, 8 & 9 is planned to begin in July and be completed by late June 2024 with supplemental restoration occurring in fall of 2024. The areas are listed below with the construction costs:

Project	Title	Construction Cost	Construction Year
Project 7a	Farmington Road Replacement (Section 15 & 16)	\$2,458,221.42	23/24

Project 7b	Bell Creek Lane & Bloomfield Street Replacement (Section 15)	\$934,701.24	2023
Project 8a	Merriman Road and Six Mile Road (Section 14 & 15)	\$295,271.55	2024
Project 8b	Bell Creek Estates Subdivision Replacement (Section 15)	\$358,582.61	2023
Project 9b	Greenland Street Replacement (Section 14)	<u>\$1,375,778.18</u>	2024
		\$5,422,555.00	

Our consultant, OHM Advisors, finalized plans and specifications. In response to the advertisement on Michigan Inter-Governmental Trade Network (MITN), five (5) bids were submitted. These bids may be summarized as follows:

NAME OF BIDDER	AMOUNT OF BID
Murphy Pipeline Contractors, LLC Jacksonville, FL	\$5,422,555.00 225 Inspector Days
Bidigare Contractors, Inc. Plymouth, M	\$5,585,539.00 225 Inspector Days
Pamar Enterprises, Inc. New Haven, MI	\$5,795,468.00 280 Inspector Days
Bricco Excavating Company, LLC. Oak Park, MI	\$6,236,684.00 225 Inspector Days
Lawrence M. Clarke, Inc. Belleville, MI	\$7,229,213.00 325 Inspector Days

Note: The summarized bids do not include the inspector day costs. The inspector day costs will be included with the construction engineering (CE) costs. The contractor was required to provide the number of days to complete the project. This bid is good until September 13, 2023.

We are recommending that the bid be awarded to Murphy Pipeline Contractors, LLC in the amount of \$5,422,555.00, based on the findings of OHM Advisors, that they are lowest qualified bidder. Please see attached letter dated May 22, 2023.

In order to proceed with this project, we recommend that the Council take the following actions:

- Award a contract in the amount of \$5,422,555.00 to Murphy Pipeline Contractors, LLC, 12235

New Berlin Road, Jacksonville, Florida, 32226. The award should be on the basis of the bid unit prices. The amount to be adjusted based upon the quantities of work actually completed.

- Authorize an expenditure not-to-exceed \$5,422,555.00 from budgeted funds in Account No. 592-158-034 Water Main Replacement, to be reimbursed upon issuance of Water and Sewer Revenue Bonds.
- Authorize the City Engineer to make minor adjustments to the work, as needed.

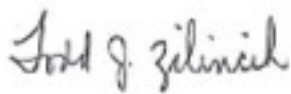
PREFERRED COUNCIL RECOMMENDATION/RESOLUTION (Please complete this field. Attachments are not to be used in lieu of the recommendation)

- Award a contract in the amount of \$5,422,555.00 to Murphy Pipeline Contractors, LLC, 12235 New Berlin Road, Jacksonville, Florida, 32226. The award should be on the basis of the bid unit prices. The amount to be adjusted based upon the quantities of work actually completed.
- Authorize an expenditure not-to-exceed \$5,422,555.00 from budgeted funds in Account No. 592-158-034 Water Main Replacement, to be reimbursed upon issuance of Water and Sewer Revenue Bonds.
- Authorize the City Engineer to make minor adjustments to the work, as needed.

ATTACHMENTS

1. OHM Bid Tab Review Letter for WM Improvements for Proj. Areas 7, 8 & 9_5-22-23

APPROVED BY



Todd Zilincik, P.E., City Engineer

Date: May 24, 2023



Don Rohraff, Director of Public Works

Date: May 25, 2023



Michael Slater, Finance Director

Date: May 25, 2023



Paul Bernier, City Attorney

Date: May 25, 2023



Maureen Miller Brosnan, Mayor

Date: May 25, 2023



ARCHITECTS. ENGINEERS. PLANNERS.

May 22, 2023

Todd Zilincik, P.E.
City Engineer
City of Livonia
12973 Farmington Road
Livonia, MI 48150

Re: **2023-2024 Livonia Water Main Replacement (Areas 7-9)**
Bid Submittal Review

Dear Mr. Zilincik:

Five (5) sealed contractor bids were received via electronic submission to the City Clerk's office for the 2023-2024 Livonia Water Main Replacement (Areas 7-9) on May 16, 2023, at 2:00 pm which ranged from \$5,575,555.00 to \$7,450,213.00 (with inspector days). The bid range is within the engineer's opinion of probable construction cost of \$6,400,000. This project required bidders to submit a statement of qualifications including project references including those completed in the State of Michigan. Below is a summary of findings based on our review of the bids, qualifications, and references submitted for the low two bidders:

Contractor	Division A	Division B	Division C	Division D	Total*
Murphy Pipeline Contractors, LLC	\$273,000.00	\$3,317,838.00	\$639,384.50	\$1,345,332.50	\$5,575,555.00
Bidigare Contractors, Inc.	\$283,290.00	\$3,321,311.00	\$661,302.00	\$1,472,636.00	\$5,738,539.00
Pamar Enterprises, Inc.	\$595,150.00	\$3,342,082.00	\$633,356.00	\$1,415,280.00	\$5,985,868.00
Bricco Excavating Co. LLC	\$518,000.00	\$3,530,300.00	\$682,066.00	\$1,659,318.00	\$6,389,684.00
Lawrence M Clarke, Inc	\$636,000.00	\$4,276,298.00	\$831,620.00	\$1,706,295.00	\$7,450,213.00

*The total includes the inspector day pay item. See attached bid tabulation for itemized bids.

The low bidder, Murphy Pipeline Contractors, LLC (MPC) is based out of Jacksonville, Florida, had a total bid of \$5,575,555.00 (\$5,422,555.00 less inspector days). They have completed projects of similar nature and provided references for those completed within the State of Michigan. MPC also has staff and equipment based out of Canton, Michigan.

The second lowest bidder, Bidigare Contractors, Inc. based out of Plymouth, Michigan, had a total bid of \$5,738,539.00 (\$5,585,539.00 less inspector days). Based on review of the projects and references provided in the bid submittal, Bidigare Contractors, Inc. has satisfactorily completed similar projects in southeast Michigan including Brownstown Township, City of Romulus, and City of Taylor.



In summary, both the low two bidders have experience on similar projects including those completed in southeast Michigan. We would be happy to meet with the City to review the information and references provided if deemed necessary.

Upon approval of the contract by the City Council, OHM will deliver the contracts to the contractor for signature and preparation of the appropriate bonds and insurances. Once the contractor has returned the signed books with the appropriate bonds and insurances, the contract can be executed, and work can begin.

If you have any questions or require additional information, please feel free to contact this office.

Sincerely,
OHM Advisors

Richard R. Hobgood, P.E.

Enclosure: Bid Tabulation

cc. Mr. Don Rohraff, Department of Public Works
Jessica Katers, P.E., OHM Advisors

Tabulation of Bids Received on 5/16/2023
2023/2024 Livonia Water Main Replacement
City of Livonia, Wayne County, Michigan
OHM Job No.: 0090-21-0010

Murphy Pipeline Contractors, LLC.
12235 New Berlin Rd
Jacksonville, FL 32226

Bidigare Contractors, Inc.
939 S Mill St
Plymouth, MI 48170

Pamar Enterprises, Inc.
31604 Pamar Ct
New Haven, MI 48048

Phone: (904) 764-6887

Phone: (248) 735-1113

Phone: (564) 749-8593

Item No.	Description	Estimated Quantity		Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
DIVISION A: All Project Areas									
1)	Permit and Inspection Fee Allowance	20000	Dlr	\$1.00	\$20,000.00	\$1.00	\$20,000.00	\$1.00	\$20,000.00
2)	Audio Visual Route Survey	1.00	Dlr	\$20,000.00	\$20,000.00	\$5,000.00	\$5,000.00	\$3,750.00	\$3,750.00
3)	Mobilization, Max 5%	1.00	LSUM	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$296,000.00	\$296,000.00
4)	Traffic Control	1.00	LSUM	\$10,000.00	\$10,000.00	\$35,290.00	\$35,290.00	\$65,000.00	\$65,000.00
5)	Irrigation System Repair Allowance	10000	Dlr	\$1.00	\$10,000.00	\$1.00	\$10,000.00	\$1.00	\$10,000.00
6)	Landscaping Allowance	10000	Dlr	\$1.00	\$10,000.00	\$1.00	\$10,000.00	\$1.00	\$10,000.00
7)	Inspector Days (225 Days Minimum)	\$680	Days	225	\$153,000.00	225	\$153,000.00	280	\$190,400.00
TOTAL DIVISION A:					\$273,000.00	\$283,290.00		\$595,150.00	
DIVISION B: AREA 7									
8)	Clearing	0.05	Acre	\$100.00	\$5.00	\$20,000.00	\$1,000.00	\$20,000.00	\$1,000.00
9)	Tree, Rem, 19 inch to 36 inch	1	Ea	\$250.00	\$250.00	\$10.00	\$10.00	\$2,500.00	\$2,500.00
10)	Tree, Rem, 37 inch or Larger	1	Ea	\$250.00	\$250.00	\$20.00	\$20.00	\$3,500.00	\$3,500.00
11)	Tree, Rem, 6 inch to 18 inch	1	Ea	\$250.00	\$250.00	\$10.00	\$10.00	\$600.00	\$600.00
12)	Curb and Gutter, Rem	207	Ft	\$8.00	\$1,656.00	\$15.00	\$3,105.00	\$12.00	\$2,484.00
13)	Sidewalk, Rem	531	Syd	\$3.00	\$1,593.00	\$3.00	\$1,593.00	\$7.00	\$3,717.00
14)	Pavt, Rem, Modified	4027	Syd	\$15.00	\$60,405.00	\$5.00	\$20,135.00	\$10.00	\$40,270.00
15)	Sewer Cleaning	300	Ft	\$10.00	\$3,000.00	\$10.00	\$3,000.00	\$10.00	\$3,000.00
16)	Exploratory Excavation	6	Ea	\$150.00	\$900.00	\$150.00	\$900.00	\$990.00	\$5,940.00
17)	Lateral Inspection and Lead Location	59	Ea	\$350.00	\$20,650.00	\$200.00	\$11,800.00	\$300.00	\$17,700.00
18)	Erosion Control, Inlet Protection, Fabric Drop	46	Ea	\$100.00	\$4,600.00	\$77.00	\$3,542.00	\$135.00	\$6,210.00
19)	Erosion Control, Silt Fence	400	Ft	\$5.00	\$2,000.00	\$3.00	\$1,200.00	\$3.50	\$1,400.00
20)	Aggregate Base, 6 inch, Modified	1010	Syd	\$5.00	\$5,050.00	\$4.00	\$4,040.00	\$10.00	\$10,100.00
21)	Aggregate Base, 8 inch, Modified	3358	Syd	\$12.00	\$40,296.00	\$6.00	\$20,148.00	\$14.00	\$47,012.00
22)	Maintenance Gravel	300	Ton	\$35.00	\$10,500.00	\$10.00	\$3,000.00	\$20.00	\$6,000.00
23)	12" CMP Culvert	100	Ft	\$200.00	\$20,000.00	\$60.00	\$6,000.00	\$40.00	\$4,000.00
24)	Sanitary Sewer Lead, Additional Footage	20	Ft	\$50.00	\$1,000.00	\$36.00	\$720.00	\$100.00	\$2,000.00
25)	Sanitary Sewer Lead, Up to 10 feet	2	Ea	\$3,000.00	\$6,000.00	\$1,350.00	\$2,700.00	\$3,500.00	\$7,000.00
26)	Underdrain, 6 inch	500	Ft	\$100.00	\$50,000.00	\$20.00	\$10,000.00	\$30.00	\$15,000.00
27)	Hand Patching	5	Ton	\$500.00	\$2,500.00	\$150.00	\$750.00	\$151.00	\$755.00
28)	HMA, 13A	49	Ton	\$187.00	\$9,163.00	\$50.00	\$2,450.00	\$122.00	\$5,978.00
29)	HMA Approach	55	Ton	\$187.00	\$10,285.00	\$60.00	\$3,300.00	\$122.00	\$6,710.00
30)	HMA, 5EMH	301	Ton	\$200.00	\$60,200.00	\$75.00	\$22,575.00	\$116.00	\$34,916.00
31)	Conc Pavt with Integral Curb, Nonreinf, 7 inch	134	Syd	\$75.00	\$10,050.00	\$35.00	\$4,690.00	\$107.00	\$14,338.00
32)	Conc Pavt with Integral Curb, Nonreinf, 9 inch	300	Syd	\$75.00	\$22,500.00	\$45.00	\$13,500.00	\$119.00	\$35,700.00
33)	Conc Pavt with or without Integral Curb, Nonreinf, 13 inch	2720	Syd	\$75.00	\$204,000.00	\$65.00	\$176,800.00	\$127.00	\$345,440.00
34)	Driveway, Nonreinf Conc, 6 inch	335	Syd	\$75.00	\$25,125.00	\$20.00	\$6,700.00	\$80.00	\$26,800.00
35)	Curb and Gutter, Conc	50	Ft	\$50.00	\$2,500.00	\$43.00	\$2,150.00	\$63.00	\$3,150.00
36)	Detectable Warning Surface	110	Ft	\$50.00	\$5,500.00	\$48.50	\$5,335.00	\$61.00	\$6,710.00
37)	Curb Ramp Opening, Conc	257	Ft	\$150.00	\$38,550.00	\$43.00	\$11,051.00	\$63.00	\$16,191.00
38)	Sidewalk, Conc, 4 inch	2000	Sft	\$12.00	\$24,000.00	\$4.00	\$8,000.00	\$11.00	\$22,000.00
39)	Curb Ramp, Conc, 6 inch	2795	Sft	\$50.00	\$139,750.00	\$6.00	\$16,770.00	\$15.00	\$41,925.00
40)	Line Stop, 12 inch	1	Ea	\$15,000.00	\$15,000.00	\$10.00	\$10.00	\$1,000.00	\$1,000.00
41)	Line Stop, 16 inch	1	Ea	\$25,000.00	\$25,000.00	\$10.00	\$10.00	\$2,000.00	\$2,000.00

Tabulation of Bids Received on 5/16/2023
2023/2024 Livonia Water Main Replacement
City of Livonia, Wayne County, Michigan
OHM Job No.: 0090-21-0010

Murphy Pipeline Contractors, LLC.
12235 New Berlin Rd
Jacksonville, FL 32226

Bidigare Contractors, Inc.
939 S Mill St
Plymouth, MI 48170

Pamar Enterprises, Inc.
31604 Pamar Ct
New Haven, MI 48048

Phone: (904) 764-6887

Phone: (248) 735-1113

Phone: (564) 749-8593

Item No.	Description	Estimated Quantity		Unit	Amount		Unit	Amount		Unit	Amount	
				Price			Price			Price		
42)	Line Stop, 8 inch	1	Ea	\$11,000.00		\$11,000.00	\$10.00		\$10.00	\$800.00		\$800.00
43)	Sign, Salvage	3	Ea	\$100.00		\$300.00	\$30.00		\$90.00	\$200.00		\$600.00
44)	Surface Restoration, Seeding	7725	Syd	\$5.00		\$38,625.00	\$2.00		\$15,450.00	\$5.00		\$38,625.00
45)	Gate Well, Abandon	20	Ea	\$100.00		\$2,000.00	\$1,200.00		\$24,000.00	\$100.00		\$2,000.00
46)	Hydrant, Rem	12	Ea	\$100.00		\$1,200.00	\$800.00		\$9,600.00	\$900.00		\$10,800.00
47)	12" HDPE DR-11 Water Main, Pipe Bursting	3803	Ft	\$180.00		\$684,540.00	\$215.00		\$817,645.00	\$176.00		\$669,328.00
48)	12" HDPE Water Main, Open Cut	16	Ft	\$250.00		\$4,000.00	\$300.00		\$4,800.00	\$176.00		\$2,816.00
49)	8" HDPE DR-11 Water Main, Directional Drill	337	Ft	\$220.00		\$74,140.00	\$175.00		\$58,975.00	\$157.00		\$52,909.00
50)	8" HDPE DR-11 Water Main, Open Cut	391	Ft	\$225.00		\$87,975.00	\$250.00		\$97,750.00	\$157.00		\$61,387.00
51)	8" HDPE DR-11 Water Main, Pipe Bursting	5513	Ft	\$160.00		\$882,080.00	\$175.00		\$964,775.00	\$157.00		\$865,541.00
52)	Abandon Watermain with Flowable Fill	446	Ft	\$25.00		\$11,150.00	\$12.00		\$5,352.00	\$10.00		\$4,460.00
53)	Connection to Existing Water Main	13	Ea	\$2,500.00		\$32,500.00	\$5,000.00		\$65,000.00	\$500.00		\$6,500.00
54)	Fire Hydrant Assembly	27	Ea	\$7,000.00		\$189,000.00	\$10,000.00		\$270,000.00	\$13,500.00		\$364,500.00
55)	Gate Valve and Well, 12 inch	8	Ea	\$15,000.00		\$120,000.00	\$12,000.00		\$96,000.00	\$14,000.00		\$112,000.00
56)	Gate Valve and Well, 8 inch	15	Ea	\$12,000.00		\$180,000.00	\$10,000.00		\$150,000.00	\$12,000.00		\$180,000.00
57)	Water Service, Curb Stop and Box	76	Ea	\$300.00		\$22,800.00	\$750.00		\$57,000.00	\$450.00		\$34,200.00
58)	Water Service, Type K Copper, 1 inch, Long	18	Ea	\$1,500.00		\$27,000.00	\$3,500.00		\$63,000.00	\$2,650.00		\$47,700.00
59)	Water Service, Type K Copper, 1 inch, Short	71	Ea	\$1,000.00		\$71,000.00	\$2,750.00		\$195,250.00	\$1,450.00		\$102,950.00
60)	12" Water Main, DI, Open Cut	50	Ft	\$350.00		\$17,500.00	\$300.00		\$15,000.00	\$216.00		\$10,800.00
61)	16" Water Main, DI, Open Cut	20	Ft	\$450.00		\$9,000.00	\$400.00		\$8,000.00	\$316.00		\$6,320.00
62)	8" Water Main, DI, Open Cut	50	Ft	\$300.00		\$15,000.00	\$250.00		\$12,500.00	\$187.00		\$9,350.00
63)	Water Service, Type K Copper, 1.5 inch, Long	1	Ea	\$3,250.00		\$3,250.00	\$5,500.00		\$5,500.00	\$3,800.00		\$3,800.00
64)	Water Service, Type K Copper, 1.5 inch, Short	2	Ea	\$2,500.00		\$5,000.00	\$4,200.00		\$8,400.00	\$2,100.00		\$4,200.00
65)	Water Service, Type K Copper, 2 inch , Long	1	Ea	\$3,500.00		\$3,500.00	\$6,000.00		\$6,000.00	\$4,650.00		\$4,650.00
66)	Water Service, Type K Copper, 2 inch, Short	1	Ea	\$2,750.00		\$2,750.00	\$4,200.00		\$4,200.00	\$2,800.00		\$2,800.00
TOTAL DIVISION B:						<u>\$3,317,838.00</u>			<u>\$3,321,311.00</u>			<u>\$3,342,082.00</u>
DIVISION C: AREA 8												
67)	Clearing	0.025	Acre	\$100.00		\$2.50	\$20,000.00		\$500.00	\$25,000.00		\$625.00
68)	Tree, Rem, 19 inch to 36 inch	1	Ea	\$250.00		\$250.00	\$10.00		\$10.00	\$2,500.00		\$2,500.00
69)	Tree, Rem, 37 inch or Larger	1	Ea	\$250.00		\$250.00	\$20.00		\$20.00	\$3,500.00		\$3,500.00
70)	Tree, Rem, 6 inch to 18 inch	1	Ea	\$250.00		\$250.00	\$10.00		\$10.00	\$600.00		\$600.00
71)	Sidewalk, Rem	165	Syd	\$3.00		\$495.00	\$3.00		\$495.00	\$7.00		\$1,155.00
72)	Pavt, Rem, Modified	631	Syd	\$15.00		\$9,465.00	\$5.00		\$3,155.00	\$10.00		\$6,310.00
73)	Sewer Cleaning	100	Ft	\$10.00		\$1,000.00	\$10.00		\$1,000.00	\$10.00		\$1,000.00
74)	Exploratory Excavation	6	Ea	\$150.00		\$900.00	\$150.00		\$900.00	\$990.00		\$5,940.00
75)	Lateral Inspection and Lead Location	18	Ea	\$350.00		\$6,300.00	\$200.00		\$3,600.00	\$300.00		\$5,400.00
76)	Erosion Control, Inlet Protection, Fabric Drop	19	Ea	\$100.00		\$1,900.00	\$77.00		\$1,463.00	\$135.00		\$2,565.00
77)	Erosion Control, Silt Fence	50	Ft	\$5.00		\$250.00	\$3.00		\$150.00	\$3.50		\$175.00
78)	Aggregate Base, 6 inch, Modified	442	Syd	\$5.00		\$2,210.00	\$4.00		\$1,768.00	\$10.00		\$4,420.00
79)	Aggregate Base, 8 inch, Modified	353	Syd	\$12.00		\$4,236.00	\$6.00		\$2,118.00	\$14.00		\$4,942.00
80)	Maintenance Gravel	50	Ton	\$35.00		\$1,750.00	\$10.00		\$500.00	\$20.00		\$1,000.00
81)	Sanitary Sewer Lead, Additional Footage	20	Ft	\$50.00		\$1,000.00	\$36.00		\$720.00	\$100.00		\$2,000.00
82)	Sanitary Sewer Lead, Up to 10 feet	1	Ea	\$3,000.00		\$3,000.00	\$1,350.00		\$1,350.00	\$3,500.00		\$3,500.00
83)	Hand Patching	5	Ton	\$500.00		\$2,500.00	\$150.00		\$750.00	\$151.00		\$755.00

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City of Livonia, Wayne County, Michigan
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Murphy Pipeline Contractors, LLC.
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Item No.	Description	Estimated Quantity		Unit	Amount		Unit	Amount		Unit	Amount	
				Price			Price			Price		
84)	HMA, 13A	31	Ton	\$187.00	\$5,797.00		\$50.00	\$1,550.00		\$122.00	\$3,782.00	
85)	HMA Approach	37	Ton	\$187.00	\$6,919.00		\$60.00	\$2,220.00		\$122.00	\$4,514.00	
86)	Conc Pavt with Integral Curb, Nonreinf, 9 inch	6	Syd	\$75.00	\$450.00		\$45.00	\$270.00		\$119.00	\$714.00	
87)	Driveway, Nonreinf Conc, 6 inch	278	Syd	\$75.00	\$20,850.00		\$20.00	\$5,560.00		\$80.00	\$22,240.00	
88)	Sidewalk, Conc, 4 inch	1420	Sft	\$12.00	\$17,040.00		\$4.00	\$5,680.00		\$11.00	\$15,620.00	
89)	Line Stop, 12 inch	1	Ea	\$15,000.00	\$15,000.00		\$10.00	\$10.00		\$1,000.00	\$1,000.00	
90)	Line Stop, 8 inch	1	Ea	\$11,000.00	\$11,000.00		\$10.00	\$10.00		\$800.00	\$800.00	
91)	Sign, Salvage	1	Ea	\$100.00	\$100.00		\$30.00	\$30.00		\$200.00	\$200.00	
92)	Surface Restoration, Seeding	2924	Syd	\$5.00	\$14,620.00		\$2.00	\$5,848.00		\$5.00	\$14,620.00	
93)	Gate Well, Abandon	3	Ea	\$100.00	\$300.00		\$1,200.00	\$3,600.00		\$100.00	\$300.00	
94)	Hydrant, Rem	1	Ea	\$100.00	\$100.00		\$800.00	\$800.00		\$900.00	\$900.00	
95)	12" HDPE DR-11 Water Main, Pipe Bursting	781	Ft	\$180.00	\$140,580.00		\$215.00	\$167,915.00		\$176.00	\$137,456.00	
96)	12" HDPE Water Main, Open Cut	37	Ft	\$250.00	\$9,250.00		\$300.00	\$11,100.00		\$176.00	\$6,512.00	
97)	8" HDPE DR-11 Water Main, Open Cut	29	Ft	\$220.00	\$6,380.00		\$250.00	\$7,250.00		\$157.00	\$4,553.00	
98)	8" HDPE DR-11 Water Main, Pipe Bursting	1244	Ft	\$160.00	\$199,040.00		\$175.00	\$217,700.00		\$157.00	\$195,308.00	
99)	Connection to Existing Water Main	3	Ea	\$2,500.00	\$7,500.00		\$5,000.00	\$15,000.00		\$500.00	\$1,500.00	
100)	Fire Hydrant Assembly	4	Ea	\$7,000.00	\$28,000.00		\$10,000.00	\$40,000.00		\$13,500.00	\$54,000.00	
101)	Gate Valve and Well, 12 inch	2	Ea	\$15,000.00	\$30,000.00		\$12,000.00	\$24,000.00		\$14,000.00	\$28,000.00	
102)	Gate Valve and Well, 8 inch	2	Ea	\$12,000.00	\$24,000.00		\$10,000.00	\$20,000.00		\$12,000.00	\$24,000.00	
103)	Water Service, Curb Stop and Box	19	Ea	\$300.00	\$5,700.00		\$750.00	\$14,250.00		\$450.00	\$8,550.00	
104)	Water Service, Type K Copper, 1 inch, Long	5	Ea	\$1,500.00	\$7,500.00		\$3,500.00	\$17,500.00		\$2,650.00	\$13,250.00	
105)	Water Service, Type K Copper, 1 inch, Short	20	Ea	\$1,000.00	\$20,000.00		\$2,750.00	\$55,000.00		\$1,450.00	\$29,000.00	
106)	12" Water Main, DI, Open Cut	50	Ft	\$350.00	\$17,500.00		\$300.00	\$15,000.00		\$216.00	\$10,800.00	
107)	8" Water Main, DI, Open Cut	50	Ft	\$320.00	\$16,000.00		\$250.00	\$12,500.00		\$187.00	\$9,350.00	
TOTAL DIVISION C:					<u>\$639,384.50</u>			<u>\$661,302.00</u>			<u>\$633,356.00</u>	
DIVISION D: AREA 9												
	Clearing	0.025	Acre	\$100.00	\$2.50		\$20,000.00	\$500.00		\$20,000.00	\$500.00	
	Tree, Rem, 19 inch to 36 inch	1	Ea	\$250.00	\$250.00		\$10.00	\$10.00		\$2,500.00	\$2,500.00	
	Tree, Rem, 37 inch or Larger	1	Ea	\$250.00	\$250.00		\$20.00	\$20.00		\$3,500.00	\$3,500.00	
	Tree, Rem, 6 inch to 18 inch	1	Ea	\$250.00	\$250.00		\$10.00	\$10.00		\$600.00	\$600.00	
	Curb and Gutter, Rem	8	Ft	\$10.00	\$80.00		\$15.00	\$120.00		\$12.00	\$96.00	
	Sidewalk, Rem	30	Syd	\$3.00	\$90.00		\$3.00	\$90.00		\$7.00	\$210.00	
	Pavt, Rem, Modified	1680	Syd	\$15.00	\$25,200.00		\$5.00	\$8,400.00		\$10.00	\$16,800.00	
	Sewer Cleaning	100	Ft	\$10.00	\$1,000.00		\$10.00	\$1,000.00		\$10.00	\$1,000.00	
	Exploratory Excavation	2	Ea	\$150.00	\$300.00		\$150.00	\$300.00		\$990.00	\$1,980.00	
	Lateral Inspection and Lead Location	52	Ea	\$350.00	\$18,200.00		\$200.00	\$10,400.00		\$300.00	\$15,600.00	
	Erosion Control, Inlet Protection, Fabric Drop	9	Ea	\$100.00	\$900.00		\$77.00	\$693.00		\$135.00	\$1,215.00	
	Erosion Control, Silt Fence	50	Ft	\$5.00	\$250.00		\$3.00	\$150.00		\$3.50	\$175.00	
	Aggregate Base, 6 inch, Modified	569	Syd	\$5.00	\$2,845.00		\$4.00	\$2,276.00		\$10.00	\$5,690.00	
	Aggregate Base, 8 inch, Modified	1113	Syd	\$12.00	\$13,356.00		\$6.00	\$6,678.00		\$14.00	\$15,582.00	
	Maintenance Gravel	150	Ton	\$35.00	\$5,250.00		\$10.00	\$1,500.00		\$20.00	\$3,000.00	
	12" CMP Culvert	150	Ft	\$200.00	\$30,000.00		\$60.00	\$9,000.00		\$40.00	\$6,000.00	
	Sanitary Sewer Lead, Additional Footage	20	Ft	\$500.00	\$10,000.00		\$36.00	\$720.00		\$100.00	\$2,000.00	
	Sanitary Sewer Lead, Up to 10 feet	3	Ea	\$3,000.00	\$9,000.00		\$1,350.00	\$4,050.00		\$3,500.00	\$10,500.00	

Tabulation of Bids Received on 5/16/2023
2023/2024 Livonia Water Main Replacement
 City of Livonia, Wayne County, Michigan
 OHM Job No.: 0090-21-0010

Murphy Pipeline Contractors, LLC.
 12235 New Berlin Rd
 Jacksonville, FL 32226

Bidigare Contractors, Inc.
 939 S Mill St
 Plymouth, MI 48170

Pamar Enterprises, Inc.
 31604 Pamar Ct
 New Haven, MI 48048

Phone: (904) 764-6887

Phone: (248) 735-1113

Phone: (564) 749-8593

Item No.	Description	Estimated Quantity		Unit		Price		Amount		Unit		Price		Amount		Unit		Price		Amount	
	Hand Patching	5	Ton			\$500.00		\$2,500.00				\$150.00		\$750.00				\$151.00		\$755.00	
	HMA, 13A	98	Ton			\$187.00		\$18,326.00				\$50.00		\$4,900.00				\$122.00		\$11,956.00	
	HMA Approach	104	Ton			\$187.00		\$19,448.00				\$60.00		\$6,240.00				\$122.00		\$12,688.00	
	HMA, 5EMH	5	Ton			\$200.00		\$1,000.00				\$75.00		\$375.00				\$116.00		\$580.00	
	Conc Pavt with or without Integral Curb, Nonreinf, 13 inch	40	Syd			\$75.00		\$3,000.00				\$65.00		\$2,600.00				\$127.00		\$5,080.00	
	Driveway, Nonreinf Conc, 6 inch	556	Syd			\$75.00		\$41,700.00				\$20.00		\$11,120.00				\$80.00		\$44,480.00	
	Curb and Gutter, Conc	50	Ft			\$50.00		\$2,500.00				\$43.00		\$2,150.00				\$63.00		\$3,150.00	
	Curb Ramp Opening, Conc	8	Ft			\$150.00		\$1,200.00				\$6.00		\$48.00				\$63.00		\$504.00	
	Sidewalk, Conc, 4 inch	200	Sft			\$12.00		\$2,400.00				\$4.00		\$800.00				\$11.00		\$2,200.00	
	Curb Ramp, Conc, 6 inch	70	Sft			\$50.00		\$3,500.00				\$6.00		\$420.00				\$15.00		\$1,050.00	
	Line Stop, 8 inch	1	Ea			\$11,000.00		\$11,000.00				\$10.00		\$10.00				\$800.00		\$800.00	
	Sign, Salvage	1	Ea			\$100.00		\$100.00				\$30.00		\$30.00				\$200.00		\$200.00	
	Surface Restoration, Seeding	9013	Syd			\$5.00		\$45,065.00				\$2.00		\$18,026.00				\$5.00		\$45,065.00	
	Gate Well, Abandon	7	Ea			\$100.00		\$700.00				\$1,200.00		\$8,400.00				\$100.00		\$700.00	
	Hydrant, Rem	5	Ea			\$100.00		\$500.00				\$800.00		\$4,000.00				\$900.00		\$4,500.00	
	8" HDPE DR-11 Water Main, Pipe Bursting	4602	Ft			\$160.00		\$736,320.00				\$175.00		\$805,350.00				\$157.00		\$722,514.00	
	Connection to Existing Water Main	6	Ea			\$2,500.00		\$15,000.00				\$5,000.00		\$30,000.00				\$500.00		\$3,000.00	
	Fire Hydrant Assembly	12	Ea			\$7,000.00		\$84,000.00				\$10,000.00		\$120,000.00				\$13,500.00		\$162,000.00	
	Gate Valve and Well, 8 inch	7	Ea			\$12,000.00		\$84,000.00				\$10,000.00		\$70,000.00				\$12,000.00		\$84,000.00	
	Water Service, Curb Stop and Box	82	Ea			\$300.00		\$24,600.00				\$750.00		\$61,500.00				\$450.00		\$36,900.00	
	Water Service, Type K Copper, 1 inch, Long	42	Ea			\$1,500.00		\$63,000.00				\$3,500.00		\$147,000.00				\$2,650.00		\$111,300.00	
	Water Service, Type K Copper, 1 inch, Short	40	Ea			\$1,000.00		\$40,000.00				\$2,750.00		\$110,000.00				\$1,450.00		\$58,000.00	
	12" Water Main, DI, Open Cut	35	Ft			\$350.00		\$12,250.00				\$300.00		\$10,500.00				\$216.00		\$7,560.00	
	8" Water Main, DI, Open Cut	50	Ft			\$320.00		\$16,000.00				\$250.00		\$12,500.00				\$187.00		\$9,350.00	
TOTAL DIVISION D:								<u>\$1,345,332.50</u>				<u>\$1,472,636.00</u>						<u>\$1,415,280.00</u>			
TOTAL BID (with inspector days):								<u>\$5,575,555.00</u>				<u>\$5,738,539.00</u>						<u>\$5,985,868.00</u>			
TOTAL BID (without inspector days):								<u>\$5,422,555.00</u>				<u>\$5,585,539.00</u>						<u>\$5,795,468.00</u>			

ADDITIONAL BIDDERS	TOTAL BID AMOUNT
Bricco Excavating Company, LLC	\$6,389,684.00
Lawrence M Clarke, Inc.	\$7,450,213.00

**CITY OF LIVONIA – CITY COUNCIL
MINUTES OF STUDY MEETING HELD JUNE 5, 2023**

Meeting was called to order at 8:00 p.m. by Council President Jim Jolly. Present: Rob Donovic, Scott Morgan, Brandon McCullough, Kathleen McIntyre, Scott Bahr, and President Jim Jolly. Absent: Vice President Laura Toy.

Elected and appointed officials present: Susan Nash, City Clerk; Michael Fisher, Assistant City Attorney; Todd Zilincik, City Engineer; Don Rohraff, Director of Public Works; Ted Davis, Superintendent of Parks and Recreation; and Michael Slater, Director of Finance.

Councilmember Donovic led the Pledge of Allegiance.

President Jolly shared that Councilmember Donovic is now officially a veteran having recently concluded his service in the United States Army. He thanked him for his service.

14. REQUEST TO AMEND CONTRACT WITH OHM ADVISORS FOR CONSTRUCTION ENGINEERING FOR THE 2023 WATER MAIN REPLACEMENT PROJECT, PROJECT AREAS 7, 8 & 9; Engineering Division, re: for same (CR 336-21)

Todd Zilincik, City Engineer, presented the request to Council.

Councilmember Bahr offered an approving resolution subject to change depending on the results of the previous item on June 26th.

DIRECTION:

APPROVE

REGULAR



LETTER TO THE LIVONIA CITY COUNCIL

16.

Engineering
May 23, 2023

MEETING DATE

S060523/R062623

PREPARED BY

Karen Worley, Secretary IV,

AGENDA ITEM

REQUEST TO AMEND CONTRACT WITH OHM ADVISORS FOR CONSTRUCTION ENGINEERING FOR THE 2023 WATER MAIN REPLACEMENT PROJECT, PROJECT AREAS 7, 8 & 9; Engineering Division, re: for same (CR 336-21)

BACKGROUND DETAILS

The City Council approved Qualification Based Selection (QBS) firms pursuant to Council Resolution No. 336-21, adopted November 22, 2021 to perform all professional engineering services on various federal, state and locally funded projects through fiscal year 2026. Under this procedure, we recommend that OHM Advisors (OHM) serve as our design engineering consultant for the 2023 Water Main Replacement Project.

The OHM construction engineering services and administration services will include supporting the City during construction of project areas 7, 8 & 9 from the previously developed plan. The work consists of replacing 6-inch water mains with new 8-inch water mains, and replacing portions of 8-inch, 12-inch, and 16-inch mains in like sizes. This is an effort to reduce water main breaks, improve reliability and water quality and increase fire hydrant coverage.

The construction cost for this project is estimated at \$5,422,555.00.

In order to proceed with the construction phase, it is respectfully recommended that the City Council take the following actions:

- Award OHM Advisors (OHM), 34000 Plymouth Road, Livonia, Michigan 48150, the designation of construction engineering consultant to provide engineering services for the 2023 Water Main Replacement Project.
- Authorize the Mayor and the City Clerk to execute an amendment to the Engineering contract with OHM Advisors in the not-to-exceed amount of \$433,805.00 for the construction engineering services for the 2023 Water Replacement Project, Project Areas 7, 8 & 9.
- Authorize an expenditure in the amount of \$433,805.00 from budgeted funds in Account No. 592-158-034 Water Main Replacement, to be reimbursed upon issuance of Water and Sewer Revenue Bonds.
- Authorize the City Engineer to approve minor adjustments to the work, as required.

PREFERRED COUNCIL RECOMMENDATION/RESOLUTION (Please complete this field. Attachments are not to be used in lieu of the recommendation)

- Award OHM Advisors (OHM), 34000 Plymouth Road, Livonia, Michigan 48150, the designation of construction engineering consultant to provide engineering services for the 2023 Water Main Replacement Project.
- Authorize the Mayor and the City Clerk to execute an amendment to the Engineering contract with OHM Advisors in the not-to-exceed amount of \$433,805.00 for the construction engineering services for the 2023 Water Replacement Project, Project Areas 7, 8 & 9.
- Authorize an expenditure in the amount of \$433,805.00 from budgeted funds in Account No. 592-158-034 Water Main Replacement, to be reimbursed upon issuance of Water and Sewer Revenue Bonds.
- Authorize the City Engineer to approve minor adjustments to the work, as required.

SPECIFIC NAME OF PRODUCT AND NUMBER TO BE PURCHASED (if more than one)

n/a

CONTRACT: Amount and/or purchase price and length of contract (with dates if applicable)

\$433,805.00

DETAILED WORK BEING PERFORMED

The OHM construction engineering services and administration services will include supporting the City during construction of project areas 7, 8 & 9 from the previously developed plan. The work consists of replacing 6-inch water mains with new 8-inch water mains, and replacing portions of 8-inch, 12-inch, and 16-inch mains in like sizes. This is an effort to reduce water main breaks, improve reliability and water quality and increase fire hydrant coverage.

FISCAL CONSIDERATIONS (Amount requested and Account(s) used. If applicable, Grant Funding information)

Authorize the Mayor and the City Clerk to execute an amendment to the Engineering contract with OHM Advisors in the not-to-exceed amount of \$433,805.00 for the construction engineering services for the 2023 Water Replacement Project, Project Areas 7, 8 & 9.

- Authorize an expenditure in the amount of \$433,805.00 from budgeted funds in Account No. 592-158-034 Water Main Replacement, to be reimbursed upon issuance of Water and Sewer Revenue Bonds.
- Authorize the City Engineer to approve minor adjustments to the work, as required.

ACCEPTANCE OF BID (Please detail the following: Why accepted, why not lowest bidder, company name, contact person, full address)

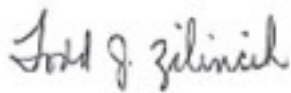
n/a

REASON TO WAIVE BID PROCESS (Emergency, Professional services, No advantage to City and why, Consortium package, etc): Awarded under Qualification Based Selection (QBS)

ATTACHMENTS

1. 5.22.23_OHM_CE Services 2023.2024 WM Replacement
2. CR 336-21

APPROVED BY



Todd Zilincik, P.E., City Engineer

Date: May 25, 2023



Don Rohraff, Director of Public Works

Date: May 25, 2023



Michael Slater, Finance Director

Date: May 25, 2023



Paul Bernier, City Attorney

Date: May 25, 2023



Maureen Miller Brosnan, Mayor

Date: May 25, 2023

May 22, 2023

Todd Zilincik, PE
City of Livonia
12973 Farmington Road
Livonia, MI 48150

Regarding: 2023/2024 City of Livonia Water Main Replacement (Areas: 7, 8, & 9)
Proposal for Construction Engineering (CE) Services

Dear Mr. Zilincik,

It is our understanding that the City would like OHM to provide construction engineering (CE) and administration services to support the City during construction of project Areas 7, 8, & 9 from the previously developed plan. The work consists of replacing 6-inch water mains with new 8-inch water mains, and replacing portions of 8-inch, 12-inch, and 16-inch mains with like sizes. This is an effort to reduce water main breaks, improve reliability and water quality and increase fire hydrant coverage.

We have worked with City staff to define the schedule for completing the proposed improvements. Based on that effort, we have prepared the attached Scope of Services, Schedule and Proposed Fees to assist the City with the effort necessary to deliver the improvements. We have based our proposal on the terms and conditions of the current Professional Services agreement. The proposed project Supplements (A-C) for this project, as well as a draft of the Exhibit A, are included.

We appreciate this opportunity to provide professional services to the City and look forward to executing the plan that continues to save the City money through long term capital investment. Should you find our proposal acceptable, please notify us and we will prepare the final documents for execution. Should you have any questions, please do not hesitate to give me a call at 734-466-4492.

Sincerely,

OHM Advisors



Richard R. Hobgood, P.E.
Project Manager

CC: Donald Rohraff, Director of Public Works
Rhett Gronevelt, P.E., OHM Advisors
Jessica Katers, P.E., OHM Advisors

CITY OF LIVONIA**2023/2024 CITY OF LIVONIA WATER MAIN REPLACEMENT
(AREAS: 7, 8, & 9)****PROJECT UNDERSTANDING**

The CITY wishes to replace various sections of water main within Sections 14, 15 and 16 of the City of Livonia to increase the system reliability. The new water main will be a minimum 8" diameter water main installed primarily by pipe-bursting method, with some directional drill and open cut sections. This project will also include all new valves, hydrants, and water service connections. Any found lead service lines will be replaced per EGLE requirements. It is anticipated, where feasible, that new water main will be installed within the greenbelt area between the edge of the roadway and sidewalk.

No improvements to the existing sanitary sewer system or significant drainage improvements are included in this scope of work. There does not appear to be any regulated or non-regulated wetlands affected by this project. Wetland investigation and/or wetland permitting isn't included.

Existing driveway approaches impacted by the water main installation will be replaced. Concrete driveways will be replaced with concrete, asphalt driveways replaced with asphalt.

Concrete sidewalk will be replaced as needed to install the water main with provisions for the installation of ADA ramps at the intersections of streets disturbed within the project. The intent is to end construction at the end of radii and stay within the CITY'S rights-of-way when possible. Minimal soil erosion control measures are anticipated. Turf restoration is generally anticipated to be accomplished with topsoil, seed and mulch, with isolated use of sod.

The project is anticipated to be funded through City of Livonia water funds. The project areas targeted in the Capital Improvements Plan are Projects 7, 8 & 9. These project areas equate to a Bid Price less inspector days of \$5,422,555.00. The work to be completed under this project will include the streets listed below:

Water Main Replacement along Farmington Road (Project Plan #7A):

- 1) Farmington Road from 5 Mile Road to just south of 6 Mile Road

Water Main Replacement along Bell Creek Lane and Bloomfield Street (Project Plan #7B):

- 1) Bell Creek Lane from Farmington Road to 6 Mile Road
- 2) Bloomfield Street from Farmington Road to Bell Creek Lane

Water Main Replacement along Merriman Road (Project Plan #8A):

- 1) Merriman Road from Grove Street to 6 Mile Road, including 6 Mile Road intersection

Water Main Replacement within the Bell Creek Estates Subdivision (Project Plan #8B):

- 1) Grove Drive from Dead End to Merriman Road

Water Main Replacement for Greenland Street (Project Plan #9B):

- 1) Greenland Street from Middlebelt to approx. 1,200 feet toward the West

CONSTRUCTION ADMINISTRATION AND ENGINEERING SERVICES

The **Construction Engineering and Administrative Services** shall include the following:

- ▶ **Contract Administration Services** shall consist of preparing monthly pay estimates based on quantities provided with field representative's daily reports to meet CITY deadlines for payment purposes. Work shall also include assisting the CITY staff (i.e., Project Manager) in the resolution of claims, contract interpretations, and review of project schedules and deadlines. CONSULTANT will provide project closeout, consisting of final pay estimate preparation, closeout documentation from the contractor, and a balancing Change Order identifying adjustments to the construction contract. In addition, the CONSULTANT will make field visits to project sites to observe the work in progress and assist in review of contractor's work in general compliance with the contract.
- ▶ **Stakeout Services** during the construction phase shall consist of the required staking for line and elevation of water main infrastructure. Staking for water main will be provided for hydrants, gate valves and wells, and connection points.
- ▶ **Public Notification** will consist of the CONSULTANT coordinating with the CITY to draft letters to the residents at the start of construction and, when needed, send out letters to residents when there are changes in construction sequences or schedule.
- ▶ **Informational Meetings** will consist of OHM attending up to two (2) informational meetings with residents to explain the proposed construction program and its impacts on the residents/businesses. Attendance shall be by the CONSULTANT project manager and construction engineer.
- ▶ **Construction Engineering Services** shall consist of a senior construction engineer/technician who will supervise and direct the CONSULTANT'S field staff to provide appropriate project documentation, shop drawing review, resolution of construction issues/problems that may arise, provide recommendations to the CITY as it relates to claims from the contractor(s) including preparation of change orders if required, responsive complaint resolution, review of project progress for compliance with approved schedule and recommendations to the CITY'S Project Manager for penalties and/or changes in the time of completion of projects. CONSULTANT shall coordinate with a local material testing agency and the CITY'S Project Manager for City to contract for any required material testing. The CONSULTANT shall lead the preconstruction conference and biweekly progress meetings.

CONSTRUCTION OBSERVATION SERVICES

The **Construction Observation Services** shall include the following:

- ▶ **Construction Observation** shall consist of full-time observation of the work progress by the contractor(s) on days when work is performed. Construction Daily Reports (CDR's) will be prepared documenting pay item quantities and the general work progress for the day. Checking line and elevation for compliance with the survey stakes will also be provided as part of the CONSULTANT'S regular responsibilities. The CONSULTANT will answer residents' questions and attempt to promptly resolve complaints during the course of construction. The CONSULTANT will also interact with the contractor's

supervisory staff to notify them when work is unacceptable and in need of correction, or removal and replacement of specific work elements when necessary.

- ▼ **Complaint Resolution Services** is included as a part of observation. This may include notifying the CITY of:
 - 1) Violations of the CITY ordinance for construction traffic on roads within the CITY
 - 2) Concerns raised by property owners during the construction phase of the project
- ▼ **Construction Testing Services** is included as a part of this scope and will be SUBCONSULTED through G2 Consulting for the required materials testing through the duration on the project.

SERVICES NOT INCLUDED

Changes in scope by Owner will result in additional services and will be billed accordingly. We will provide a proposal for the work at the time of the changes prior to proceeding with the revisions.

- ▼ Additional Site Survey
- ▼ Additional Permit Packages
- ▼ Permit Fees
- ▼ Easement Documents
- ▼ Regulatory and client meetings not specifically referenced



96CITY OF LIVONIA

**2023/2024 CITY OF LIVONIA WATER MAIN REPLACEMENT
(AREAS: 7, 8, & 9)**

CONSULTANT shall provide services for the Phases and Tasks outline on Supplement A according to the approximate timeframe below.

Key dates are shown in the following schedule:

Project Area #7, 8, & 9:

<u>Milestone</u>	<u>Date</u>
Construction Contract Award	June 26, 2023
Construction State Date	July 5, 2023
Substantial Completion Date (Bell Creek & Bloomfield St.)	September 15, 2023
Substantial Completion Date (Remaining Project Areas)	June 28, 2024
Final Completion & Closeout Date	July 30, 2024



CITY OF LIVONIA

**2023/2024 CITY OF LIVONIA WATER MAIN REPLACEMENT
(AREAS: 7, 8, & 9)**

Construction Phase

The CITY agrees to pay the CONSULTANT for construction services on an hourly basis, billed monthly, per the 2023 Rate Schedule at the not-to-exceed amount of four hundred thirty three thousand eight hundred five dollars and zero cents (\$433,805.00).

Construction Engineering Services* \$433,805.00

*This amount is based on *Attachment A to QBS Contract: Engineering Fees by Construction Value and Type of Project*. (8% of the project's Bid Price less inspector days of \$5,422,555.00 construction value). This includes construction testing services, contract administration, stakeout services, construction engineering, informational meeting attendance, and public notification.

Additional Services

Additional services, if approved by City Council, shall be paid at the current hourly rate schedule or at an agreed upon price between the CITY and CONSULTANT.

Notes

- Invoices shall be submitted monthly.
- 2023 Hourly Rate Schedule is attached for reference.

Professional Engineer IV / Architect IV / Senior Interior Designer IV	\$195.00
Professional Engineer III / Architect III / Senior Interior Designer III	\$178.00
Professional Engineer II / Architect II / Senior Interior Designer II	\$162.00
Professional Engineer I / Architect I / Senior Interior Designer I	\$152.00
Project Specialist III	\$180.00
Project Specialist II	\$160.00
Project Specialist I	\$135.00
Graduate Engineer IV	\$153.00
Graduate Engineer III	\$145.00
Graduate Engineer II	\$140.00
Graduate Engineer I	\$130.00
Graduate Architect III / Landscape Architect III / Interior Designer III	\$140.00
Graduate Architect II / Landscape Architect II / Interior Designer II	\$122.00
Graduate Architect I / Landscape Architect I / Interior Designer I	\$115.00
Technician IV	\$148.00
Technician III	\$130.00
Technician II	\$115.00
Technician I	\$96.00
Engineering / Architectural / Interior Design Aide	\$75.00
Professional Surveyor III	\$170.00
Professional Surveyor II	\$158.00
Professional Surveyor I	\$142.00
Graduate Surveyor	\$128.00
Surveyor III	\$130.00
Surveyor II	\$115.00
Surveyor I	\$100.00
Surveyor Aide	\$75.00
Planner IV	\$163.00
Planner III	\$150.00
Planner II	\$127.00
Planner I	\$110.00
Planner Aide	\$72.00
Graphic Designer	\$120.00
Administrative Support	\$90.00
Clerical Aide	\$75.00
Principal	\$230.00
Sr. Associate	\$210.00
Associate	\$198.00

Rates as reflected subject to review and adjustment on an annual basis.
2023 Public Rates 22-1118

EXHIBIT A
PROJECT SPECIFIC SCOPE OF SERVICES, PROJECT SCHEDULE, PAYMENTS
TO CONSULTANT

The information contained in this Exhibit applies only to the following project:

Project Title:

2023/2024 CITY OF LIVONIA WATER MAIN REPLACEMENT (AREAS: 7, 8, & 9)

Dated: _____, 2023

This is an Exhibit to the Professional Services Contract dated December 1, 2016, and extended on November 22, 2021, between the City of Livonia, and Orchard, Hiltz & McCliment, Inc. (OHM Advisors), whose address is 34000 Plymouth Road, Livonia, MI 48150.

This Exhibit acts as a duly executed written instrument that amends, supplements, modifies, or cancels certain portions of the contract, as provided in Article 8.01 of the contract.

A. SCOPE OF SERVICES

CONSULTANT is requested to provide Construction Phase Services for the proposed improvements in accordance with attached Supplement A, dated May 22, 2023.

B. PROJECT SCHEDULE

The Project Schedule is attached as Supplement B, dated May 22, 2023.

C. PAYMENTS TO CONSULTANT

CONSULTANT shall be paid on an hourly basis up to an amount not-to-exceed four hundred thirty three thousand eight hundred five dollars and zero cents (\$433,805.00). in accordance with the tasks and payment terms on Supplement C, dated May 22, 2023.

In Witness Whereof, the City and Consultant, by and through their duly authorized officers and representatives, have executed this Contract.

In the Presence of:

CITY OF LIVONIA, a Michigan
Municipal Corporation

By: _____
Maureen Miller Brosnan, Mayor

By: _____
Susan M. Nash, City Clerk

In the Presence of:

OHM Advisors



Witness

By: 
Rhett A. Gronevelt, PE

Its: _____
Principal

Approved:

Donald R. Rohraff
Director of Public Works

Approved:

Todd J. Zilincik, PE
City Engineer

Approved:

Pursuant to Council Resolution

No.: _____

Michael Slater
Director of Finance

Adopted on: _____

Approved:

Paul A. Bernier
Department of Law

Regular Minutes of November 22, 2021

AND BE IT FURTHER RESOLVED THAT the street is an approved public street and is open for public purposes; and FURTHER, that said street is accepted into the City's local street system and is located within a right-of-way under the control of the City of Livonia and that said street was open to the public as of December 31, 2021.

#336-21 RESOLVED, that having considered the report and recommendation of the City Engineer, dated October 26, 2021, submitted pursuant to Council Resolution No. 365-16, which bears the signatures of the Director of Public Works, the Director of Finance and the City Attorney, and is approved for submission by the Mayor, requesting to extend the Qualification-Based Selection (QBS) contracts with OHM Advisors, Hubbell, Roth and Clark, Inc., Spalding Dedecker Associates, Inc. and Anderson, Eckstein and Westrick, Inc., for a period of five (5) years, for future proposals relating to professional engineering consulting services, the Council does hereby accept the proposal to extend the qualification based-selection (qbs) contracts with OHM Advisors, 34000 Plymouth Road, Livonia, MI 48150, Hubbell, Roth and Clark, Inc., 555 Hulet Drive, Bloomfield Hills, MI 48303-0824, Spalding Dedecker Associates, Inc., 905 South Boulevard East, Rochester Hills, MI 48307-5358, and Anderson, Eckstein and Westrick, Inc., 51301 Schoenherr Road, Shelby Township, MI 48315, for a five (5) year period ending November 30, 2026, to perform Professional Engineering Services on various Federal, State and Locally funded roads, bridges, storm sewers, sanitary sewers, water mains, traffic signal modernization and pedestrian signal upgrades and other related projects; FURTHER, the Mayor and City Clerk are hereby authorized to execute contracts for and on behalf of the City of Livonia with the aforesaid companies and to do all other things necessary or incidental to the full performance of this resolution; and all QBS contracts based on scope and contract amount for each future individual project will be brought before the City Council for funding approval.

#337-21 RESOLVED, that having considered the report and recommendation of the City Engineer, dated October 29, 2021, which bears the signatures of the Director of Public Works and the Director of Finance, and is approved for submission by the Mayor, the Council does hereby approve the proposed 2022 Road Repair Program as proposed by the Department of Public Works and as reviewed by the Citizens Advisory Committee on Roads for the tenth year of the ten-year road paving millage approved by Livonia residents, as shown in the attachment to that report.

#338-21 WHEREAS, the Mayor and City Council of the City of Livonia believe quality roads are a vital part of any community; and

WHEREAS, the City of Livonia has a Citizens Advisory Committee on Roads which identifies City streets most in need of repair in order to