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## AGENDA

### Business Meeting of the Niagara Falls Water Board December 19, 2022 at 5:00 p.m.

**NOTE: Meeting to be held at Wastewater Treatment Plant Conference Room  
1201 Buffalo Avenue, Niagara Falls, NY 14304**

**\*Meeting may be attended in person or via videoconference -- visit NFWB.org for details.\***

#### 1. Preliminary Matters

##### a. Attendance:

Asklar (Board Member/Chairman of Finance/Member Exec. Staff Review Cmte.) \_\_\_\_\_

Forster (Chairman) \_\_\_\_\_

Kimble (Board Member) \_\_\_\_\_

Larkin (Board Member/Vice Chairwoman/Governance Chairwoman/  
Chairwoman Exec. Staff Review Cmte.) \_\_\_\_\_

Leffler (Board Member/Member Exec. Staff Review Cmte.) \_\_\_\_\_

b. Public Comments (All speakers must register with the meeting clerk prior to roll call and are limited to three minutes per person – total time for all speakers may not exceed one hour).

c. Comments from Chairman Forster

d. Presentations (none scheduled)

- e. **Letters and Communications**
  - i. **2022-12-15– COVID Wastewater Surveillance Update Memorandum**
- f. **Prior Meeting Minutes**
  - i. **Draft November 14, 2022 Meeting Minutes**
- 2. **Executive Director – Dr. Abderrahman Zehraoui**
  - a. **WWTP Project Budget Tracker (CPL)**
  - b. **WWTP Construction Schedule Tracker (CPL)**
  - c. **Financial Award Summary (CPL)**
- 3. **System Infrastructure and Operations – Russell DeFranco**
- 4. **Outside Infrastructure Updates – Michael Eagler**
- 5. **Engineering – Douglas Williamson**
- 6. **Personnel Items – David San Lorenzo**
  - a. **December 19, 2022 Personnel Actions**
- 7. **Information Technology (IT) – Dr. Abderrahman Zehraoui**
- 8. **Finance – Brian Majchrowicz**
  - a. **Drip Program Continuation**
  - b. **Revenue Budget Performance Report through November 30**
  - c. **Sewer Fund Expense Budget Performance Report through November 30**
  - d. **Water Fund Expense Budget Performance Report through November 30**
  - e. **Board Fund Expense Budget Performance Report through November 30**
  - f. **Key Bank and Bank on Buffalo Balance Report**
  - g. **Wilmington Trust Balance Report**
  - h. **Treasury Account Balance Report**
  - i. **Budget Amendments Report**
  - j. **November 2022 Capital Payments**

**9. Questions Regarding November 2022 Operations and Maintenance Report**

**10. Safety – Russell DeFranco**

**11. General Counsel and Secretary – Sean Costello**

- a. Update on One Ton Chlorine Cylinders

**12. From the Chairman**

**13. Resolutions**

**RESOLUTION 2022-12-001 – 2023 BOARD MEETING SCHEDULE**

- a. Board Meeting Dates 2023
- b. 2023 Contractual Holidays

**2022-12-002 – 2022 ANNUAL REVIEW OF MISSION STATEMENT,  
ADOPTION OF AND REPORT ON PERFORMANCE MEASUREMENTS,  
AND REPORT ON OPERATIONS AND ACCOMPLISHMENTS**

- a. 2022 Annual Review of Mission Statement, Performance Measurements, Report on Ops and Accomplishments

**2022-12-003 – ANNUAL REVIEW OF PROCUREMENT AND INVESTMENT  
POLICIES AND ADOPTION OF REVISIONS**

- a. 2022-12-19 - Draft Revised NFWB Procurement Policy
- b. 2022-12-19 - NFWB Investment Policy

**2022-12-004 – AWARD BID FOR PRIMARY TREATMENT POLYMER**

- a. 2022-12-12 - Primary Treatment Polymer Testing Results
- b. Bid W2022-03 - Primary Treatment Polymer - Unofficial Tally Sheet

**2022-12-005 – AWARD BID FOR SLUDGE DEWATERING POLYMER**

- a. 2022-12-12 - Sludge Dewatering Polymer Testing Results
- b. Bid W2022-04 - Sludge Dewatering Polymer - Unofficial Tally Sheet

**2022-12-006 – AGREEMENT FOR ONSITE ENVIRONMENTAL MONITOR SERVICES**

- a. 2022-10-11 - AECOM Onsite Environmental Monitor Proposal

**2022-12-007 – ACCEPTING PROPOSAL FOR LASALLE AREA SANITARY SEWER  
EVALUATION SURVEY PHASE 1**

- a. 2022-12-05 - RFP 2022-01 NFWB Award Recommendation Memo
- b. 2022-12-08 - Arcadis - NFWB Sanitary Sewer Evaluations Proposal

**2022-12-008 – FUNDS FOR CONTINUED INFRASTRUCTURE FUNDING EFFORTS**

- a. **2022-12-02 - CPL Proposal for 2023 Extension of Infrastructure Funding Effort**

**2022-12-009 – AUTHORIZING VOLTAGE FILTERS FOR WWTP ELEVATORS**

- a. **2022-12-09 - DCB Proposal for Elevator Voltage Filters**

**2022-12-010 – AUTHORIZING MONTHLY CHARGES FOR DATA BACKUP AND RECOVERY SERVICES**

- a. **2022-09-22 - Veeam Backup Services Monthly Recurring Charges**

**2022-12-011 – VIDEOCONFERENCE TECHNOLOGY FOR WTP CONFERENCE ROOM**

- a. **2022-12-15 - Park Place Installations Quote for Videoconference Technology**

**2022-12-012 – CHANGE ORDER 1 AND FINAL FOR EMERGENCY 12 INCH COMBINED SEWER REPAIR AT 2214 WHITNEY AVENUE**

- a. **2022-10-25 - Memorandum Regarding 2214 Whitney Avenue Change Order 1 and Final**

**2022-12-013 – WWTP PROJECT 10 CHANGE ORDER 2 FOR SCADA UPDATES AT GPS**

- a. **2022-12-07 - Capital Project 10 Proposed Change Order 2**

**2022-12-014 – AUTHORIZING SETTLEMENT OF GOODEARL CLAIM**

- a. **Goodearl, Edward Notice of Claim**

**14. Unfinished/Old Business**

**1) Board Room WTP:**

- 9/22/22: The acoustical ceiling grid has been laid out and drawing on CAD. The existing ceiling lights have been removed and new ones have been ordered. We received shop drawings on 8/19/22 and are waiting on the fabrication of the conference room desk.
- 10/20/22: The communications pipe, the last obstruction that requires relocation, will be removed on October 31.
- 12/15/22: Proposal for videoconference equipment obtained; floor prepared for carpet installation; doorway work completed; some finish work underway; waiting for delivery of desk.

## **2) WWTP Sodium Hypochlorite Tank Replacement**

- 7/14/22: The 2021 WIIA Sewer (WWTP) Grant of \$1,125,000 was awarded on April 19, 2022 that included the some of the funds necessary to complete the WWTP tank removal and replacement work. We may be able to utilize some of the remaining balance of the WWTP Phase II grant to assist with this work, as well. We need approval from the NYSDEC to include some of the WWTP tank replacement work under this WWTP Phase II grant. The draft WWTP Tank Replacement RFP that was created needs to be finalized to show the grant funding sources that have been approved for the project, before we can proceed.
- 9/22/22: Next step is requesting approval to use Phase II grant funds (will be packaged with other projects).
- 12/15/22: DEC preliminary comments on use of Phase II grant funds being reviewed and addressed prior to formal submission of requests anticipated by end of year.

## **3) Whitney Ave. Water Main Replacement**

- 9/22/22: Design documents to be submitted to DOH for approval by 10/1.
- 11/11/22: Received comments from NYS. Preparing response letter for submission.

## **4) 18<sup>th</sup> Street Water Main Replacement**

- 7/14/22: 4<sup>th</sup> Generation was awarded bid at June 2022 Board meeting. 30-week lead time for material delivery.
- 9/22/22: Construction planned to commence in Spring 2023.

## **5) WTP Perimeter Fence Replacement Update**

- 7/14/22: The 2021 WIIA Water Grant application of \$3 million was awarded on April 19, 2022 that included some funds that can be used for the WTP perimeter fence replacement work. On 7/13/22, the capital purchase order for the \$8,000 brush hog was completed to assist with the work in-house. WTP maintenance to schedule and coordinate the fencing work.
- 9/22/2022: Brush hog delivered, Outside Maintenance has used it to clear along the fence line.
- 11/10/2022: Obtaining quotes related to fence and other security needs, meeting OGS-listed contractor 11/17.

## **6) Paychex Payroll System Update**

- 10/20/22: System is live for payroll, work continues on integrating accruals and time-off requests.
- 12/15/22: Efforts to further integrate Paychex continue.

## **7) Review of Internal Controls on Gate Access Cards and Master Keys**

- 12/15/22: R. DeFranco addressing deficiencies in stockpile of access keys and inventory control via lock and key vendor.

**15. New Business & Additional Items for Discussion**

**16. Executive Session (Anticipated motion to enter into executive session for the purpose of considering matters related to promotion and employment of particular persons as indicated in Personnel Actions sheet (Public Officers Law § 105(f)).**

**17. Adjournment of Meeting**

# WASTEWATER SURVEILLANCE UPDATE

DASHBOARD | WEBSITE

**DATE:** December 15, 2022

**TO:** Niagara County Health Department, Niagara Falls Wastewater Treatment Plant, & Stakeholders

**FROM:** Lydia Bennett, on behalf of the New York State Wastewater Surveillance Network

**RE:** Niagara County Weekly Wastewater Surveillance Data Report

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Wastewater samples collected on December 6, 2022 had a quantifiable detection of SARS-CoV-2 RNA in the following wastewater treatment plant catchment indicating substantial to high community-level transmission:

- City of Niagara Falls

The trend in SARS-CoV-2 over the past two weeks is increasing in the following catchment

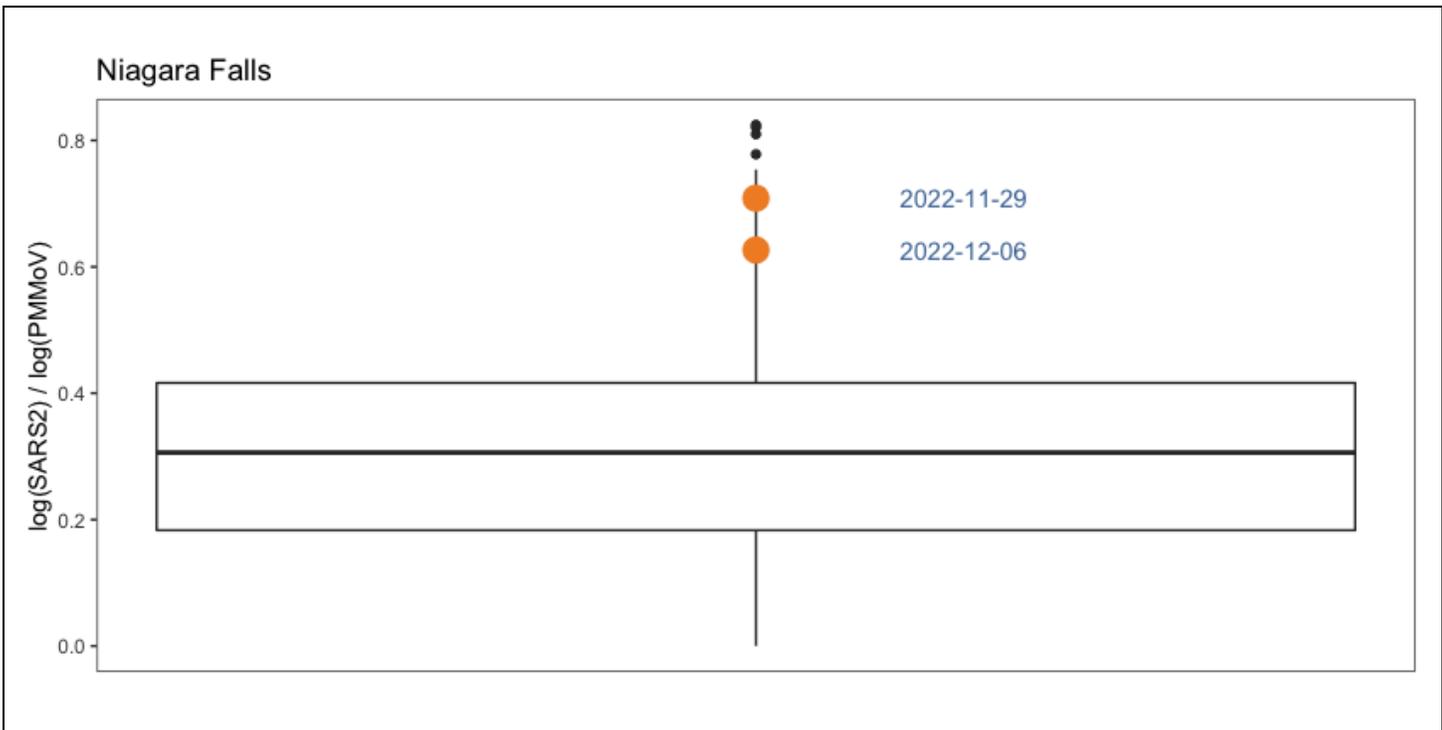
- City of Niagara Falls

Compared to levels found across New York State's average, levels of SARS-CoV-2 are elevated for the following catchment:

- City of Niagara Falls

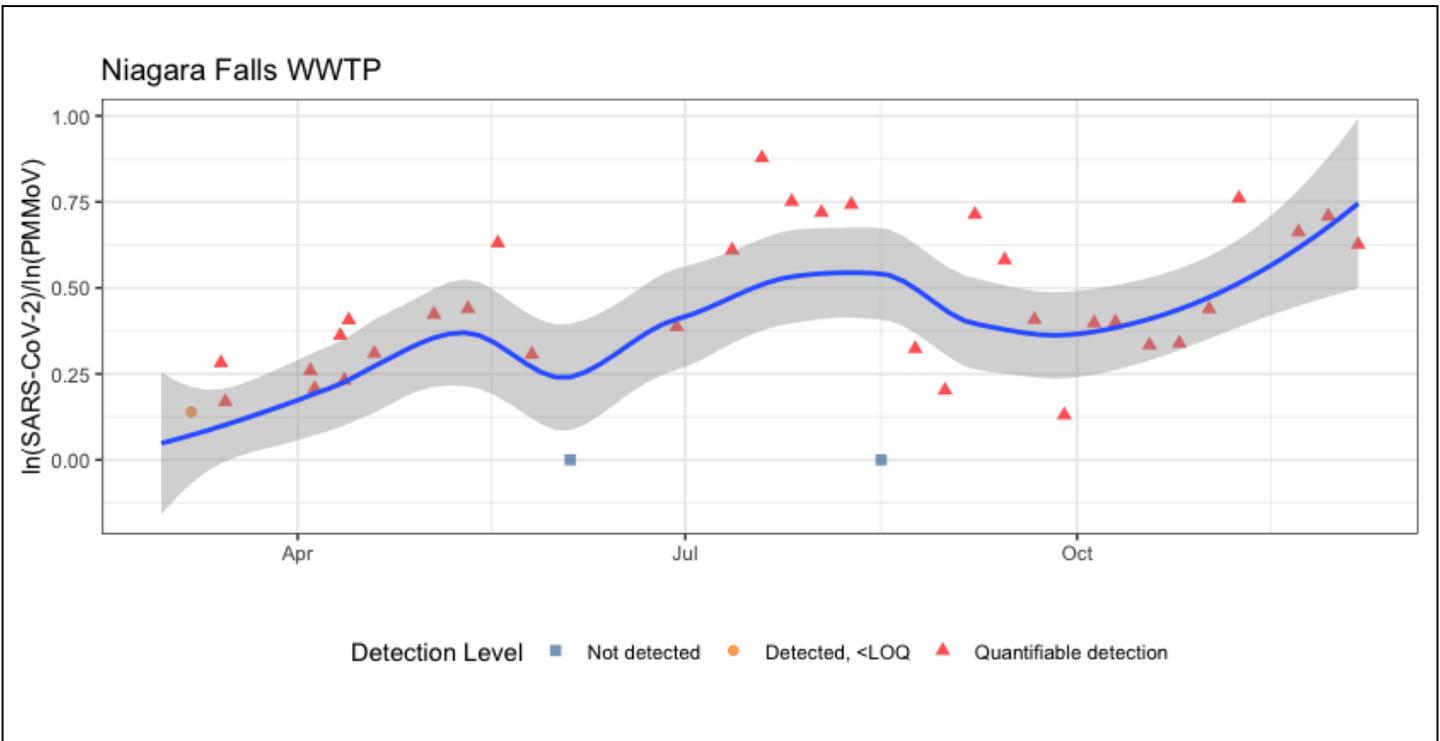
Attached with this memo are several figures that you may find useful. Please note that our quality control variable for the most recent sample from the City of Niagara Falls influent was lower than expected, which indicates that we should be cautious when interpreting this sample. Additionally, we thank you for your continued participation and all the work you do, we truly appreciate all your efforts!

If you have any questions, please contact  
Lydia Bennett | [lbennett@cdcfoundation.org](mailto:lbennett@cdcfoundation.org)



**Figure 1:**  
**Observed levels of SARS-CoV-2 intensity at the City of Niagara Falls influent compared to NYS values.**

Orange points represent the SARS-CoV-2 intensity of samples taken at the influent over the last two weeks. The box plot represents all SARS-CoV-2 values from the previous two weeks as observed from wastewater treatment facilities across New York. The box plot shows the median (solid line), first and third quartiles (box edges), minimum (lower whiskers), maximum (upper whisker), and outliers (black dots) for all NY WWTP's. The concentration of SARS-CoV-2 is normalized by population,  $\ln(\text{SARS-CoV-2})/\ln(\text{PMMoV})$ , to give overall intensity. The most recent sample reveals elevated intensity at the influent in Niagara County, as opposed to the rest of the state.



**Figure 2:**

**SARS-CoV-2 intensity over time at the City of Niagara Falls influent.**

A smoothed trend line (blue), uncertainty (gray), and wastewater samples (dots) are shown. Wastewater sample points are color coded to specify the level of SARS-CoV-2 detected. The concentration of SARS-CoV-2 is normalized by population,  $\ln(\text{SARS-CoV-2})/\ln(\text{PMMoV})$ , to give overall intensity. The recent trend from the influent is increasing.

The level of SARS-CoV-2 RNA can tell us roughly how many cases can be expected in a population.

- Not detected: low transmission, <10 cases per 100,000 in the past 7 days and <5% test positivity
- Detected, <LOQ: medium transmission, 10-50 cases per 100,000 in the past 7 days, and 5-7.9% test positivity
- Quantifiable detection: substantial to high transmission, >50 cases per 100,000 in the past 7 days, and 8.0% test positivity or higher

Over the past two weeks, the population served by the City of Niagara Falls influent is experiencing an increasing trend. This would mean that the population could expect higher daily COVID-19 cases in the coming weeks, if this trend continues. The most recent sample had a quantifiable detection, suggesting daily case incidence of greater than 50 cases per 100,000.



## MINUTES

### **Business Meeting of the Niagara Falls Water Board November 14, 2022 at 5:00 p.m.**

NOTE: Meeting was held at the Wastewater Treatment Plant Conference Room, 1201 Buffalo Avenue, Niagara Falls, NY 14304. Videoconference attendance also was facilitated as set forth in the meeting notice, and Board Members were permitted to participate and vote via videoconference pursuant to Resolution 2022-10-001, Resolution to Permit Videoconference Meetings in Accordance with Part WW of Chapter 56 of the Laws of 2022.

#### **1. Preliminary Matters**

*Chairman Forster called the meeting to order at 5:02 p.m.*

##### **a. Attendance:**

Asklar (Board Member/Chairman of Finance/Member Exec. Staff Review Cmte.) *Present*

Forster (Chairman) *Present*

Kimble (Board Member) *Present via Videoconference*

Larkin (Board Member/Vice Chairwoman/Governance Chairwoman/  
Chairwoman Exec. Staff Review Cmte.) *Present*

Leffler (Board Member/Member Exec. Staff Review Cmte.) *Present*

##### **b. Public Hearing on 2023 Proposed Rates, Fees, and Other Charges**

###### **i. Introduction by Chairperson**

*Chairman Forster discussed the budget issues that the NFWB is facing. These issues are driven by having the largest wastewater treatment plant that utilizes carbon filtration in the country. This plant requires large quantities of chemicals to function, and costs for those chemicals are outside the NFWB's control. In 2018, the chemicals made up 9.6% of the NFWB's budget. Presently, these chemicals make up 26.4% of the NFWB's budget.*

*Therefore, the NFWB has been very aggressive in its efforts to seek state funding for conversion of the carbon filter system to a biological wastewater treatment plant (costing approximately \$250 million). Chairman Forster states that the only way the ratepayers in the City of Niagara Falls are going to have relief regarding the rate increases, is with new technology for the NFWB – which would eliminate the high chemical costs.*

*Chairman Forster thanks his fellow Board Members, who volunteer their time to ensure that the NFWB maintains safe and functioning plants for the ratepayers of the City of Niagara Falls as well as for the employees. He reminds the public that local elected officials appoint the Board Members who receive zero compensation or benefits for their efforts and themselves are ratepayers in the City of Niagara Falls.*

*Chairman Forster thanks Mr. Majchrowicz, Mr. Costello, and Dr. Zehraoui for all of their efforts regarding the 2023 budget.*

- ii. Public Comments/Oral and Written, if Any** (Register to speak by 5:00 p.m. on November 14, 2022. Those who wish to speak at the hearing should contact the Board’s Secretary by email: [scostello@nfwb.org](mailto:scostello@nfwb.org), telephone: (716) 283-9770 x 2110, or by mail to register no later than 12:00 p.m. on November 14, 2022. Additional registrations to speak will be accepted in person and via videoconference between 4:50 p.m. and 5:00 p.m. on November 14, 2022. Oral comments will be limited to three minutes duration. Written comments may be directed to the above email or mailing address.)

*Gerald Skrlin – 162 Buffalo Ave. Niagara Falls, NY 14304*

*Mr. Skrlin states he is a senior citizen on a fixed income and is significantly impacted by the rate increases. He often does not use as much water as is included in the minimum bill. However, he understands the need for an increase to cover rising chemical costs and shows gratitude to the Board Members for their efforts, asking them to keep up the good work.*

*Susan Ford – 1324 Maple Ave. Niagara Falls, NY 14305*

*Mrs. Ford appreciated the reasons for the rate increase being explained but expressed concern regarding the standard minimum bill amounts. She states she believes it is fair for the ratepayers to be charged for their usage rather than be subject to a minimum bill.*

*Michael Daloia (via videoconference line) – 4021 Deveaux St.*

*Mr. Daloia also does not always use the amount included in a minimum bill and noted the public had to absorb a large rate increase last year. He has read documents available online regarding water loss. Mr. Daloia expressed appreciation for the information provided at the public hearing.*

**iii. Presentation by Rate Consultants Drescher & Malecki Regarding Rate Covenant Analysis**

*Matthew Montalbo and Charles Trottier from Drescher & Malecki presented on their financial projections and the user rates, providing independent cash flow estimates sufficient to meet the NFWB's Rate Covenant (debt service coverage ratio of 1.15). These projections are based on historical trends and audited financial data from prior years, the more current available information provided by the NFWB's Executive Staff, year-to-date actual reports per the financial software, along with NYS retirement system, health insurance publications, etc.*

*Drescher & Malecki states that based on the results of their financial projection model, the NFWB should achieve a 1.20 debt ratio on the Operations and Maintenance budget with a 7.5% rate increase in 2023 and recommends a 10.5% rate increase in order to meet the Board's projected 2023 capital plan funding.*

**iv. Motion to Close Public Hearing**

*Motion by Board Member Larkin and seconded by Board Member Leffler to close the public hearing at 5:40 p.m.*

*Asklar \_\_Y\_\_ Forster \_\_Y\_\_ Kimble \_\_Y\_\_ Larkin \_\_Y\_\_ Leffler \_\_Y\_\_*

*Motion carried, 5-0.*

- c. **Other Public Comments (All speakers must register with the meeting clerk prior to roll call and are limited to three minutes per person – total time for all speakers may not exceed one hour).**

*None.*

- d. **Comments from Chairman Forster**

- e. **Other Presentations (None scheduled)**

- f. **Letters and Communications**

- i. **2022-11-08– COVID Wastewater Surveillance Update Memorandum**
  - ii. **2022-11-09 - WIIA Grant Award Letter for Wastewater Projects**
    - 1. **WIIA Grant Project List**

**g. Prior Meeting Minutes**

**i. Draft October 24, 2022 Meeting Minutes**

*Motion by Board Member Asklar and seconded by Board Member Larkin to approve the October 24, 2022 meeting minutes.*

*Asklar \_\_Y\_\_ Forster \_\_Y\_\_ Kimble \_\_Y\_\_ Larkin \_\_Y\_\_ Leffler \_\_Y\_\_*

*Motion carried, 5-0.*

**2. Executive Director – Dr. Abderrahman Zehraoui**

- **WWTP Project Budget Tracker (CPL)**
- **WWTP Construction Schedule Tracker (CPL)**
- **Financial Award Summary (CPL)**

*Project 3 – New booster pump has been installed.*

*Chairman Forster notes that the belt filter press project (Arcadis) is behind schedule and would like further information on the status of that project.*

*18<sup>th</sup> St. water main replacement – all submittals have been reviewed and approved. Once the necessary piping is received, construction will proceed.*

**3. System Infrastructure and Operations – Russell DeFranco**

*Mr. DeFranco introduces himself to the Board Members. He is working on belt filter press water supply issues. Mr. DeFranco states he will be focusing on the safety and security of both the WTP and WWTP, with the assistance of Mr. Accardo.*

**4. Outside Infrastructure Updates – Michael Eagler**

*Mr. Eagler states the annual large meter testing has been completed, with 97 meters successfully tested in 2022 versus 22 large meters tested in 2021.*

*All previously ordered heavy equipment has been delivered and is currently in use.*

*Mr. Eagler states he has reminded ratepayers to remove leaves slowly from the catch basins in front of their homes once the rain stops in order to avoid the combined water main overloading the lateral, causing flooding.*

*Chairman Forster observed that Mr. Eagler’s ability to monitor the pumps from our SCADA system, remotely, has eliminated a substantial amount of overtime.*

5. Engineering – Douglas Williamson
  - a. RFP for Phase 1 Sanitary Sewer Evaluation Survey
6. Personnel Items – David San Lorenzo
  - a. Basic Operations WWTP Course Completion
7. Information Technology (IT) – Dr. Abderrahman Zehraoui
8. Finance – Brian Majchrowicz
  - Revenue Budget Performance Report through October 31
  - b. Sewer Fund Expense Budget Performance Report through October 31
  - c. Water Fund Expense Budget Performance Report through October 31
  - d. Board Fund Expense Budget Performance Report through October 31
  - e. Key Bank and Bank on Buffalo Balance Report
  - f. Wilmington Trust Balance Report
  - h. Budget Amendments Report
  - i. October 2022 Capital Payments
9. Questions Regarding October 2022 Operations and Maintenance Report
10. General Counsel and Secretary – Sean Costello
11. From the Chairman
12. Resolutions

**2022-11-001 – ADOPTING 2023 BUDGET**

- a. 2023 Operations and Maintenance Budget

*Motion by Board Member Larkin and seconded by Board Member Asklar to approve.*

*Asklar \_\_Y\_\_ Forster \_\_Y\_\_ Kimble \_\_Y\_\_ Larkin \_\_Y\_\_ Leffler \_\_Y\_\_*

*Motion carried, 5-0.*

**2022-11-002 – ESTABLISHING RATES, FEES, AND OTHER CHARGES EFFECTIVE JANUARY 1, 2023**

**a. Amendment to 21 NYCRR 1950.20 Effective January 1, 2023**

*Motion by Board Member Asklar and seconded by Board Member Larkin to approve.*

*Asklar \_\_Y\_\_ Forster \_\_Y\_\_ Kimble \_\_Y\_\_ Larkin \_\_Y\_\_ Leffler \_\_Y\_\_*

*Motion carried, 5-0.*

**2022-11-003 – DECLARING CERTAIN PROPERTY SURPLUS AND AUTHORIZING DISPOSAL THROUGH AUCTION**

*Motion by Board Member Leffler and seconded by Board Member Asklar to approve.*

*Asklar \_\_Y\_\_ Forster \_\_Y\_\_ Kimble \_\_Y\_\_ Larkin \_\_Y\_\_ Leffler \_\_Y\_\_*

*Motion carried, 5-0.*

**2022-11-004 – COMBINED BID FOR 2023 WATER AND WASTEWATER TREATMENT PLANT CHEMICALS**

**a. Chemical Bid W2022-02 Official Tally Sheet**

*Motion by Board Member Leffler and seconded by Board Member Larkin to approve.*

*Asklar \_\_Y\_\_ Forster \_\_Y\_\_ Kimble \_\_Y\_\_ Larkin \_\_Y\_\_ Leffler \_\_Y\_\_*

*Motion carried, 5-0.*

**2022-11-005 – AWARD BID FOR SANITARY SEWER REPAIRS AT 8214 LINDBERGH AND 491 82<sup>ND</sup> STREET**

**a. City Engineering Award Recommendation and Bid Tally**

*Motion by Board Member Larkin and seconded by Board Member Asklar to approve.*

*Asklar \_\_Y\_\_ Forster \_\_Y\_\_ Kimble \_\_Y\_\_ Larkin \_\_Y\_\_ Leffler \_\_Y\_\_*

*Motion carried, 5-0.*

**2022-11-006 – WWTP PROJECT 2 CHANGE ORDER FOR WIRING SEAL WATER FLOW AND PRESSURE SWITCHES INTO VARIABLE FREQUENCY DRIVES**

**a. CIR Change Order Proposal dated October 19, 2022**

*Motion by Board Member Asklar and seconded by Board Member Kimble to approve.*

*Asklar \_\_Y\_\_ Forster \_\_Y\_\_ Kimble \_\_Y\_\_ Larkin \_\_Y\_\_ Leffler \_\_Y\_\_*

*Motion carried, 5-0.*

**2022-11-007 – CHANGE ORDER FOR WWTP HVAC AND DUCTWORK CONTRACT TO REPLACE DECAYED DUCT DISCOVERED DURING CONSTRUCTION**

**a. Danforth Change Order Proposal dated November 4, 2022**

*Motion by Board Member Asklar and seconded by Board Member Leffler to approve.*

*Asklar \_\_Y\_\_ Forster \_\_Y\_\_ Kimble \_\_Y\_\_ Larkin \_\_Y\_\_ Leffler \_\_Y\_\_*

*Motion carried, 5-0.*

**13. Unfinished/Old Business**

**1) Board Room WTP:**

- 9/22/22: The acoustical ceiling grid has been laid out and drawing on CAD. The existing ceiling lights have been removed and new ones have been ordered. We received shop drawings on 8/19/22 and are waiting on the fabrication of the conference room desk.
- 10/20/22: The communications pipe, the last obstruction that requires relocation, will be removed on October 31.
- 11/10/22: The communications pipe was removed and wires were re-routed; paint ordered; carpet ordered.

**2) WWTP Sodium Hypochlorite Tank Replacement**

- 7/14/22: The 2021 WIIA Sewer (WWTP) Grant of \$1,125,000 was awarded on April 19, 2022 that included the some of the funds necessary to complete the WWTP tank removal and replacement work. We may be able to utilize some of the remaining balance of the WWTP Phase II grant to assist with this work, as well. We need approval from the NYSDEC to include some of the WWTP tank replacement work under this WWTP Phase II grant. The draft WWTP Tank Replacement RFP that was created needs to be finalized to show the grant funding sources that have been approved for the project, before we can proceed.
- 11/10/22: We are waiting on approval to use Phase II grant funds for this project.

**3) Whitney Ave. Water Main Replacement**

- 9/22/22: Design documents to be submitted to DOH for approval by 10/1.
- 11/10/22: Waiting for DOH approval.

**4) 18<sup>th</sup> Street Water Main Replacement**

- 7/14/22: 4<sup>th</sup> Generation was awarded bid at June 2022 Board meeting. 30-week lead time for material delivery.
- 9/22/22: Construction planned to commence in Spring 2023.

**5) WTP Perimeter Fence Replacement Update**

- 7/14/22: The 2021 WIIA Water Grant application of \$3 million was awarded on April 19, 2022 that included some funds that can be used for the WTP perimeter fence replacement work. On 7/13/22, the capital purchase order for the \$8,000 brush hog was completed to assist with the work in-house. WTP maintenance to schedule and coordinate the fencing work.
- 9/22/2022: Brush hog delivered, Outside Maintenance has used it to clear along the fence line.
- 11/10/2022: Obtaining quotes related to fence and other security needs, meeting OGS-listed contractor 11/17.

**6) Paychex Payroll System Update**

- 10/20/22: System is live for payroll, work continues on integrating accruals and time-off requests.

**7) Review of Internal Controls on Gate Access Cards and Master Keys**

- 11/9/22: R. DeFranco is gathering information on controls currently in place in order to develop appropriate recommendations for improvements.

**14. New Business & Additional Items for Discussion**

**15. Executive Session (if needed)**

*Motion by Board Member Larkin and seconded by Board Member Asklar to enter into Executive Session to discuss employment of a particular individual at 6:19 p.m.*

*Asklar   Y   Forster   Y   Kimble   Y   Larkin   Y   Leffler   Y*

*Motion carried, 5-0.*

*Motion by Board Member Larkin and seconded by Board Member Leffler to exit executive session at 6:24 p.m., approved by unanimous voice vote.*

**16. Adjournment of Meeting**

*Motion by Board Member Larkin and seconded by Board Member Asklar to adjourn the meeting at 6:25 p.m.*

*Asklar \_\_Y\_\_ Forster \_\_Y\_\_ Kimble \_\_Y\_\_ Larkin \_\_Y\_\_ Leffler \_\_Y\_\_*

*Motion carried, 5-0.*



Niagara Falls Water Board (NFWB) Overall Project Budget Summary (Phase 1 Overall Budget = \$27M)

Last Updated: 12/14/2022

Key	
Not approved	
Preliminary Estimate	

Project	Scope	Budget	Scope/Vendor	Estimated/ Final	% Billed	Recent Work Update
1	Sedimentation Basin Upgrades	\$10,390,000	Design and Bidding (AECOM - Approved)	\$409,000	98%	Work continues on Basin #4. On schedule for completion by 12/31/2022.
			CA & CI (CPL - Approved)	\$470,000	37%	
			GEN Construction (Hohl - Per Bid - Approved)	\$7,878,353	58%	
			ELEC Construction (CIR - Per Bid - Approved)	\$894,100	71%	
			<b>Project Total</b>	<b>\$9,651,453</b>	<b>60%</b>	
			<b>Remaining Budget</b>	<b>\$738,547</b>		
2	GPS	\$4,100,000	Design and Bidding (GHD - Approved)	\$218,800	100%	GHD is currently working with contractors to address final punchlist items. Manufacturer met with GHD for seal resolution
			CA & CI (GHD - Approved)	\$315,230	97%	
			GEN Construction (STC - Per Bid - Approved)	\$2,653,000	90%	
			ELEC Construction (CIR - Per Bid - Approved)	\$418,300	94%	
			HVAC Construction (Danforth - Per Bid - Approved)	\$864,400	90%	
			<b>Project Total</b>	<b>\$4,469,730</b>	<b>91%</b>	
<b>Remaining Budget</b>	<b>(\$369,730)</b>					
3	Screens and Grit Transportation Equipment Improvements	\$1,920,000	Design and Bidding (Arcadis - Approved)	\$166,785	100%	Coordinating remaining work with Arcadis, Hohl, and CIR.
			CA & CI (Arcadis - Approved)	\$217,750	71%	
			GEN Construction (Hohl - Per Bid - Approved)	\$1,551,986	68%	
			ELEC Construction (CIR - Per Bid - Approved)	\$255,210	44%	
			<b>Project Total</b>	<b>\$2,191,730</b>	<b>68%</b>	
			<b>Remaining Budget</b>	<b>(\$271,730)</b>		
4	Carbon and Filter Support Gravel Replacement	\$2,000,000	Design, Bidding, and CA/CI (AECOM - Approved)	\$114,718	Final	<b>Construction Complete.</b>
			GEN Construction (Carbon Activated - Per Bid - Approved)	\$1,798,840	Final	
			<b>Final Project Total</b>	<b>\$1,913,558</b>	<b>Final</b>	
			<b>Final Remaining Budget</b>	<b>\$86,442</b>		
5	Electrical System Improvements	\$2,610,000	Design/E.I. Team - Approved	\$102,120	100%	Ferguson proceeding with transformer submittals and purchase of replacement transformer equipment. CPL Coordinating work.
			Phase 2 Design - Approved	\$198,941	100%	
			Task 1 Construction - Ferguson - Approved	\$179,010	100%	
			Task 2 Construction - Ferguson - Approved	\$1,491,000	0%	
			<b>Project Total</b>	<b>\$1,971,071</b>	<b>24%</b>	
			<b>Remaining Budget</b>	<b>\$638,929</b>		

6	Effluent Disinfection	\$3,650,000	Design, Bid, and CI (AECOM - Approved)	\$189,966	Final	Construction Complete.
			GEN Construction (M&B - Per Bid - Approved)	\$1,421,042	Final	
			ELEC Construction (Ferguson - Per Bid - Approved)	\$108,000	Final	
			ELEC Construction (Ferguson - Approved Proposal - Net. Imp.)	\$338,047	Final	
			CA/In-House - CPL (Included in current CPL term contract)	~ 5% or \$185,000 if by engineer		
			<b>Project Total</b>	<b>\$2,057,056</b>		
	<b>Remaining Budget</b>	<b>\$1,592,944</b>				
7	Replacement of Critical Heating and Ventilation Equipment	\$1,160,000	Design and Bidding (E.I. Team - Approved)	\$111,800	100%	Currently in construction. EI Team is providing part time inspection per their CA/CI contract.
			CA/ CI (EI Team - Approved)	\$56,120	46%	
			ELEC Construction (CIR - Per Bid - Approved)	\$177,363	30%	
			HVAC Construction (Danforth - Per Bid - Approved)	\$782,000	21%	
			<b>Running Total</b>	<b>\$1,127,283</b>	<b>15%</b>	
	<b>Remaining Budget</b>	<b>\$32,717</b>				
8	Replacement of Blower Equipment	\$300,000	Design/In-House AECOM/ CPL (Included in current CPL contract)	N/A	N/A	Construction Complete.
			CA/CI/In-House - CPL (Included in current CPL term contract)	N/A	N/A	
			Construction (Armor Sales & Service)	\$2,478	Final	
			Construction (Core Welding)	\$950	Final	
			Construction (D&W Industrial)	\$28,222	Final	
			Construction (Mollenberg)	\$46,925	Final	
			Construction (Niagara Controls)	\$11,544	Final	
			<b>Final Total</b>	<b>\$90,118</b>		
	<b>Final Remaining Budget</b>	<b>\$209,882</b>				
9	Replacement of Process Piping	\$640,000	Piping Assessment Report (Ramboll - Approved)	\$59,770	100%	Construction Complete.
			Design, Bidding, and CA/CI (JMD - Approved)	\$63,480	100%	
			Construction - (MLP - Per Bid - Approved)	\$428,300	100%	
			<b>Running Total</b>	<b>\$551,550</b>	<b>22%</b>	
	<b>Remaining Budget</b>	<b>(\$88,450)</b>				
10	SCADA Improvements	\$455,000	Phase 1 Design/ Construction/Kaman - Approved	\$352,450	64%	Kaman continues SCADA integration work with Capital Project contractors.
			Phase 2 Design/ Construction - Approved (For Project #6)	\$146,200		
			<b>Running Total</b>	<b>\$498,650</b>	<b>64%</b>	
			<b>Remaining Budget</b>	<b>(\$43,650)</b>		
Phase 1 Budget Total =		\$27,000,000	Anticipated Total Cost (Percentage of Total Budget)	\$24,522,198	Remaining Ph. Budget	\$2,477,802

Niagara Falls Water Board (NFWB) Overall Capital Project Budget Summary (Phase 2 Overall Budget = \$13M)

					Key	
					Not approved	
					Preliminary Estimate	
Project	Scope of Work	Budget	Scope/Vendor	Estimated Task	% Billed	Recent Work Update
2B	Outfall	\$1,700,000	Design, Bidding, and CA/CI (GHD - Approved)	\$37,400	100%	(See Project #2 Update)
			GEN Construction (STC - Per Bid - Approved)	\$562,000	90%	
			<b>Running Total</b>	<b>\$599,400</b>	<b>91%</b>	
			<b>Remaining Budget</b>	<b>\$1,100,600</b>		
11A	18" Plant Drain Upgrade	\$225,000	11A Design, Bidding, and CA/CI (JMD - Approved)	\$15,890	100%	<b>Completed</b>
			Const. (Danforth - Per Bid - Approved)	\$169,000	100%	
			<b>Running Total</b>	<b>\$184,890</b>	<b>100%</b>	
			<b>Remaining Budget</b>	<b>\$40,110</b>		
11B	Hypo and Sludge Improvements	\$975,000	11B Design, Bidding, and CA/CI (JMD - Approved)	\$68,343	76%	Proceeding with remaining work on sludge piping.
			Const. (Danforth - Per Bid - Approved)	\$571,490	33%	
			<b>Running Total</b>	<b>\$639,833</b>	<b>37%</b>	
			<b>Remaining Budget</b>	<b>\$335,167</b>		
12	Intermediate Pumps Upgrades	\$3,075,000	Intermediate Pump Assessment (GHD - Approved)	\$21,716	83%	GHD continues pump evaluation.
			<b>Running Total</b>	<b>\$21,716</b>	<b>83%</b>	
			<b>Remaining Budget</b>	<b>\$3,053,284</b>		
<b>Ph. 2 Budget = \$13,000,000</b>			<b>Phase 2 Running Total</b>	<b>\$4,499,123</b>		
*Updated to reflect full available Phase 2 Budget, grant not yet approved			<b>Phase 2 Remaining Budget</b>	<b>\$8,500,877</b>		



NFWB Financial Award Summary



Last Updated: 12/5/22

Note: Changes from last summary are in red text

Description	Amount	Source	Status
<b>AWARDED</b>			
Various Watermain Improvements 2018 GRANT Portion	\$5,495,000 total \$3,000,000 grant \$2,495,000 loan	NYS EFC DWSRF 18588	City Engineer and Urban Engineers started design on two streets. CPL started design on 77th Street & Whitney Ave. EFC requestion more detail on City fee estimates. CPL sent NFWB email concerning this 1/31/22. City responded to NFWB inquiry that they will have no fees to NFWB for these projects.
Various Watermain Improvements 2018 LOAN Portion	\$5,495,000 total \$3,000,000 grant \$2,495,000 loan	NYS EFC DWSRF 18588	City Engineer and Urban Engineers started design on two streets. CPL started design on 77th Street & Whitney Ave. EFC requestion more detail on City fee estimates. CPL sent NFWB email concerning this 1/31/22. City responded to NFWB inquiry that they will have no fees to NFWB for these projects.
Sewer Plant Phase 1 Improvements	\$13,500,000 grant	NYS DASNY ID #15688	Awarded. Six reimbursements received that total \$4.81 million.
Sewer Plant Phase 1 Improvements	\$13,500,000 loan long term \$27,000,000 loan short term	NYS EFC #C9-6603-12-00	Financial agreement has been processed April 2021. Disbursement request #1 for \$1.6 million has been received by NFWB. <b>CPL sent EFC 2nd request paperwork in amount of \$8.8 million 11/1/22. Under EFC review.</b>
Sewer Plant Phase 2 Improvements	\$13,000,000 total \$6,500,000 grant	NYS DASNY	Projects 2B, 11A, 11B and 12 are allowed to access this funding. Work is underway and progressing.
LaSalle Sewer Area Phase 2 system report update & flow monitoring	\$250,000 total \$100,000 grant \$150,000 NFWB Match	NYSDEC Engineering Planning Grant #111586	Application submitted 7/30/21. Grant awarded December 2021. May 2022 conference call with NFWB, DEC and EFC. NYS okay with revised schedule. <b>NFWB is obtaining engineering proposals. When awarded, submit to EFC with remaining grant paperwork.</b>
LaSalle Sewer Area Phase 2 Construction	\$1,000,000 total \$800,000 grant \$200,000 NFWB match	NYSDEC WQIP C01522GG	Application submitted 7/30/21. Grant awarded December 2021. May 2022 conference call with NFWB, DEC and EFC. NYS okay with revised schedule. Possible improvements can be done in 2022 or 2023.
LaSalle Sewer Area Phase 2 Construction	\$1,018,400 loan	NYS EFC CWSRF C9-6603-13-00	Application made to Intended Use Plan and listed. Funding can be for short & long terms to help assists with above WQIP grant. EFC requested Authority resolution to keep application. CPL sent NFWB staff email regarding this 3/17/22. <b>NFWB staff working on resolution.</b>

**NFWB Financial Award Summary**



**Last Updated: 12/5/22**

Note: Changes from last summary are in red text

Description	Amount	Source	Status
Drinking Water Fluoridation Component 1 (Planning Study for water plant upgrades)	\$25,000 grant	NYS Division of Family Health #T37250GG	Application submitted 10/1/21. Planning grant awarded 2/7/22. Requested paperwork provided to DOH 3/7/22. NFWB sent quarterly report to DOH 11/7/22. <b>NFWB to request proposals for study.</b> Then provide remaining paperwork to NYS.
2021 Various Watermain & System Improvements	\$10,025,000 total \$3,000,000 grant \$7,025,000 loan	NYS EFC DWSRF 19056	Board approved resolution 10/25/21. Application to EFC made 11/19/21. Funding awarded April 2022, NFWB accepted 5/13/22. EFC to send draft agreement for review.
2021 Various Sewer & System Improvements	\$4,500,000 total \$1,125,000 grant \$3,375,000 loan	NYS EFC CWSRF C9-6603-14-00	Board approved resolution 10/25/21. Application to EFC made 11/19/21. Funding awarded April 2022, NFWB accepted 5/13/22. EFC to send draft agreement for review.
2022 Various Sewer & System Improvements	\$5,400,000 total \$1,250,000 grant \$4,150,000 loan	NYS EFC	NFWB staff & CPL met 3/7/22 to discuss. EFC submission deadline 9/9/22. Application submitted 9/8/22. EFC announced award 11/4/22. <b>NFWB accepted award 11/16/22. EFC to provide draft agreement.</b>

NFWB Financial Award Summary



Last Updated: 12/5/22

Note: Changes from last summary are in red text

Description	Amount	Source	Status
<b>FUTURE</b>			
Local Government Records Management Improvement	Grant, varies. Up to \$150,000 if submit with City	NYS Archives	Recommend NFWB partner with City to maximize grant award. If City not interested, NFWB should make application by themselves. Application period anticipated to be early 2021. NFWB met with City Feb 2021 to discuss. CPL awaiting direction.
Local Government Efficiency Program	Grant, varies. Up to \$150,000 if submit with City	NYS DOS	For projects that will achieve improvements between NFWB and other entities such as County, City, Public Safety, etc. NFWB met with City Feb 2021 to discuss. CPL awaiting direction.
Zero-Emission Vehicle Infrastructure Grant (electric charging stations)	max \$250,000 per location and max \$500,000 to NFWB, up to 20% NFWB match	NYS OCC	Stations must be accessible by public. Part of CFA process. Next application deadline anticipated July 2023.
Large Funding Request Sewer Plant Biological Conversion	\$250,000,000	NYS & Federal	Effort underway with officials for request. Several meetings with officials and WNY funding delegation. CPL submitted financial application to EFC IUP list 1/11/21. Funding request submitted to Senator Schumer 4/9/22. EFC Intended Use Plan listing updated 6/7/22. EFC updated listing August 2022 to have two components, one of \$20 million for design and second of \$230 million for construction. Easier for EFC to issue funds in phases.
Large Funding Request Lead Removal	\$70,000,000	NYS & Federal	Effort underway with officials for request. Several meetings with officials and WNY funding delegation. CPL to prepare with NFWB staff, list and cost of mains to be replaced.
Drinking Water Fluoridation Component 2 (construction funds for water plant upgrades)	up to \$1,000,000 grant	NYS Division of Family Health	To be submitted for once study prepared and approved by NYS. <b>NYS expected to have additional funding rounds each year.</b>
2022 Lead Service Line Removal Bipartisan Infrastructure Law (BIL)	Program details not yet available, anticipate grant money Requested \$472,780	NYS EFC DWSRF	Program offers funds to replace lead service lines from main to house. NFWB staff elected to submit 8/18/22. Application and report submitted 8/31/22. <b>Anticipate EFC award announcement late 2022.</b>
Water System Pipe Condition Assessment & Real Time Analysis			NFWB staff & CPL discussed 3/7/22 desire to perform assessments within water system. NFWB previously received proposals, however they were cost prohibitive. CPL to see if any funding programs available.

**NFWB Financial Award Summary**



**Last Updated: 12/5/22**

Note: Changes from last summary are in red text

Description	Amount	Source	Status
Additional Lead Removal Funding Programs			NFWB staff met with Senator Gillibrand staff 8/22 and obtained information on several funding programs. CPL to investigate and provide response for possible opportunities.

**NFWB Financial Award Summary**



**Last Updated: 12/5/22**

Note: Changes from last summary are in red text

Description	Amount	Source	Status
<b>COMPLETED / NOT ACTIVE</b>			
LaSalle Sewer Area Phase 1 system report update & flow monitoring	\$100,000 grant	NYSDEC Engineering Planning Grant EPG #93794	Total payment of \$100,000 has been received by NFWB.
Sewer Plant Consent Order Items 11 & 14	\$500,000 grant	NYS DEC & EFC R9-20170906-129	Paperwork submitted and EFC/DEC reviewed. Payment has been issued.
Bollier Avenue Watermain Improvements 2017	\$400,000 total \$240,000 grant	NYS EFC DWSRF 18435	Funding Agreement Signed. Construction completed October 2020. All EFC reimbursements received.
Water Efficiency Green Grant Innovation Program	grant up to 75% of work \$625,000 estimated project cost	NYS CFA	Grant program to pay for meter installation, replacements or upgrades. Anticipated submission deadline July 2022. Neptune involved to help confirm cost and scope. Desire to upgrade meters from AMR to AMI type. CPL sent NFWB email regarding application requirements. NFWB not moving forward per 5/25/22 email.
2022 Various Watermain & System Improvements	\$7,785,000 total \$3,000,000 grant \$4,785,000 loan	NYS EFC	NFWB staff & CPL met 3/7/22 to discuss. EFC submission deadline 9/9/22. Application submitted 9/8/22. Not awarded with 11/4/22 EFC announcements.

**Niagara Falls Water Board  
Personnel Actions and Report  
Monday, December 19, 2022**

**Personnel Actions Sheet & Requested of the Board.  
All appointments are subject to the appointee meeting the minimum qualifications and all applicable civil service conditions.**

**A. PERSONNEL ACTIONS RECOMMEND TO HIRE**

Line Item Number	Position	Department/Location	Pay Rate or Grade	ADDITIONAL INFORMATION

**B. RECOMMENDED PROMOTION / MOVE / APPOINTMENT**

Line Item Number	Name and Position	Type of labor move	Change in pay rate or grade	ADDITIONAL INFORMATION
1	David Roeser, WTP Operator	Promotion to Sr. WTP Operator	\$2.47/hr., approx. \$5,137.60 per annum	Chief Operator recommends. Meets minimum qualifications, Grade 2A License attained and training period completed.
2	Brian Majchrowicz, Deputy Director of Financial Services	Promotion to Director and Salary Review	*Pending Board Executive Session	Title change to Director of Financial Services, meets minimum qualifications.
3	Douglas Williamson, Director of Technical and Regulatory Services	Salary Review	*Pending Board Executive Session	
4	John Accardo, Deputy Director of Administrative Services	Salary Review	*Pending Board Executive Session	

**C. PREVIOUSLY TABLED PERSONNEL ACTIONS**

Line Item Number	Action and Position	Department/Location	Pay Rate or Grade	ADDITIONAL INFORMATION

**D. OTHER PERSONNEL ACTIVITY FOR BOARD NOTIFICATION**

Name	Position	Department/Location	Pay Rate	ADDITIONAL INFORMATION

**E. PERSONNEL ON LONG TERM LEAVE OF ABSENCE**

Name	Last Day Worked	Dept.	Return Status	Comments
J. Syverson	5/4/2022	Admin	Unknown	Workers Comp



# Revenue Budget Performance Report

Fiscal Year to Date 11/30/22

Exclude Rollup Account

Account	Account Description	Adopted Budget	Budget Amendments	Amended Budget	Current Month Transactions	YTD Encumbrances	YTD Transactions	Budget - YTD Transactions	% Used/ Rec'd	Prior Year YTD
Fund	<b>FA - Water Board - Water</b>									
	<b>REVENUE</b>									
	<i>Departmental Income</i>									
2122.001	Visual Inspections	50,000.00	.00	50,000.00	2,520.00	.00	50,125.00	(125.00)	100	55,987.50
2140.001	District 1	1,893,780.00	.00	1,893,780.00	(709.54)	.00	1,873,244.21	20,535.79	99	1,111,859.21
2140.002	District 2	2,338,000.00	.00	2,338,000.00	596,031.86	.00	2,216,028.71	121,971.29	95	1,472,483.18
2140.003	District 3	1,753,500.00	.00	1,753,500.00	(126.03)	.00	1,300,306.24	453,193.76	74	903,378.22
2140.004	Non-Resident	35,070.00	.00	35,070.00	6,679.83	.00	38,378.74	(3,308.74)	109	43,139.12
2140.005	Industrial	3,099,019.00	.00	3,099,019.00	(110.99)	.00	2,543,218.83	555,800.17	82	1,359,303.12
2140.006	Industrial SIU	2,630,250.00	.00	2,630,250.00	.00	.00	2,906,697.91	(276,447.91)	111	2,151,100.53
2140.008	Hydrant Usage	6,000.00	.00	6,000.00	.00	.00	775.60	5,224.40	13	7,290.50
2140.599	Miscellaneous Departmental Incom	5,000.00	.00	5,000.00	.00	.00	1,750.00	3,250.00	35	1,282.39
2141.000	Allowance for Unpaid Trfd	(125,000.00)	.00	(125,000.00)	.00	.00	50,193.41	(175,193.41)	-40	46,839.66
2144.003	Fire Service	91,000.00	.00	91,000.00	.00	.00	304,343.00	(213,343.00)	334	303,963.00
2144.005	Service Charge	455,000.00	.00	455,000.00	32,417.70	.00	426,303.30	28,696.70	94	426,526.45
2144.006	Lab Analysis	39,220.00	.00	39,220.00	2,040.50	.00	26,098.00	13,122.00	67	26,582.50
2144.008	Missing Meter Charge	25,000.00	.00	25,000.00	710.50	.00	14,120.50	10,879.50	56	21,041.50
2144.009	Mtr Install/Reinstall/Reactivate	5,000.00	.00	5,000.00	500.00	.00	4,400.00	600.00	88	4,100.00
2144.010	Final Meter Read/Inspect	17,000.00	.00	17,000.00	1,275.00	.00	18,100.71	(1,100.71)	106	18,600.00
2144.011	Hydrant Testing	300.00	.00	300.00	.00	.00	.00	300.00	0	.00
2144.012	Backflow Certification	7,500.00	.00	7,500.00	400.00	.00	6,665.00	835.00	89	10,015.00
2148.001	District 1	72,478.00	.00	72,478.00	(237.23)	.00	98,440.47	(25,962.47)	136	66,784.56
2148.002	District 2	40,915.00	.00	40,915.00	20,001.81	.00	56,382.96	(15,467.96)	138	44,841.18
2148.003	District 3	60,204.00	.00	60,204.00	(449.56)	.00	76,077.23	(15,873.23)	126	62,609.87
2148.004	Non-Resident	2,338.00	.00	2,338.00	110.06	.00	434.84	1,903.16	19	562.92
2148.005	Industrial	15,197.00	.00	15,197.00	(8.16)	.00	15,524.93	(327.93)	102	13,999.32
2148.006	Industrial SIU	7,014.00	.00	7,014.00	.00	.00	.00	7,014.00	0	8,369.30
2148.599	Penalty - Miscellaneous	4,096.00	.00	4,096.00	.06	.00	1,419.18	2,676.82	35	3,450.81
	<i>Departmental Income Totals</i>	\$12,527,881.00	\$0.00	\$12,527,881.00	\$661,045.81	\$0.00	\$12,029,028.77	\$498,852.23	96%	\$8,164,109.84
	<i>Intergovernmental Charges</i>									
2230.A	City of Niag Falls-Generl	230,102.00	.00	230,102.00	.00	.00	.00	230,102.00	0	.00
	<i>Intergovernmental Charges Totals</i>	\$230,102.00	\$0.00	\$230,102.00	\$0.00	\$0.00	\$0.00	\$230,102.00	0%	\$0.00
	<i>Use Of Money &amp; Property</i>									
2401.000	Interest Earnings	25,000.00	.00	25,000.00	.00	.00	(87,941.79)	112,941.79	-352	2,758.15
	<i>Use Of Money &amp; Property Totals</i>	\$25,000.00	\$0.00	\$25,000.00	\$0.00	\$0.00	(\$87,941.79)	\$112,941.79	-352%	\$2,758.15
	<i>Licenses And Permits</i>									
2550.006	Cellular Towers	230,000.00	.00	230,000.00	15,977.28	.00	210,696.56	19,303.44	92	215,260.17
2590.004	Hydrant Permits & Rentals	12,000.00	.00	12,000.00	.00	.00	3,801.53	8,198.47	32	10,863.64
	<i>Licenses And Permits Totals</i>	\$242,000.00	\$0.00	\$242,000.00	\$15,977.28	\$0.00	\$214,498.09	\$27,501.91	89%	\$226,123.81
	<i>Sale Of Prop/Cmp For Loss</i>									
2650.000	Sale Of Scrap	10,000.00	.00	10,000.00	.00	.00	11,466.39	(1,466.39)	115	8,962.34



# Revenue Budget Performance Report

Fiscal Year to Date 11/30/22

Exclude Rollup Account

Account	Account Description	Adopted Budget	Budget Amendments	Amended Budget	Current Month Transactions	YTD Encumbrances	YTD Transactions	Budget - YTD Transactions	% Used/ Rec'd	Prior Year YTD
Fund <b>FA - Water Board - Water</b>										
<b>REVENUE</b>										
<i>Sale Of Prop/Cmp For Loss</i>										
2665.000	Sale-Equipment	2,723.00	.00	2,723.00	.00	.00	.00	2,723.00	0	.00
2690.001	Damages to WB Property	.00	.00	.00	.00	.00	.00	.00	+++	3,651.12
<i>Sale Of Prop/Cmp For Loss Totals</i>		\$12,723.00	\$0.00	\$12,723.00	\$0.00	\$0.00	\$11,466.39	\$1,256.61	90%	\$12,613.46
<i>Misc Local Sources</i>										
2701.000	Refund Appro Exp Prior Yr	.00	.00	.00	.00	.00	1,124.55	(1,124.55)	+++	(674.70)
2770.001	NSF Check Charge	8,000.00	.00	8,000.00	875.00	.00	7,000.00	1,000.00	88	7,455.00
2770.599	Undesignated	5,000.00	.00	5,000.00	.00	.00	6,859.10	(1,859.10)	137	4,839.54
<i>Misc Local Sources Totals</i>		\$13,000.00	\$0.00	\$13,000.00	\$875.00	\$0.00	\$14,983.65	(\$1,983.65)	115%	\$11,619.84
<i>Interfund Revenues</i>										
2801.GA	Interfd Rev WtrBd-Sewr	.00	.00	.00	.00	.00	430,975.26	(430,975.26)	+++	499,180.22
<i>Interfund Revenues Totals</i>		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$430,975.26	(\$430,975.26)	+++	\$499,180.22
<b>REVENUE TOTALS</b>		\$13,050,706.00	\$0.00	\$13,050,706.00	\$677,898.09	\$0.00	\$12,613,010.37	\$437,695.63	97%	\$8,916,405.32
Fund <b>FA - Water Board - Water Totals</b>		\$13,050,706.00	\$0.00	\$13,050,706.00	\$677,898.09	\$0.00	\$12,613,010.37	\$437,695.63		\$8,916,405.32



# Revenue Budget Performance Report

Fiscal Year to Date 11/30/22

Exclude Rollup Account

Account	Account Description	Adopted Budget	Budget Amendments	Amended Budget	Current Month Transactions	YTD Encumbrances	YTD Transactions	Budget - YTD Transactions	% Used/ Rec'd	Prior Year YTD
Fund	<b>GA - Water Board - Sewer</b>									
	<b>REVENUE</b>									
	<i>Departmental Income</i>									
2120.001	District 1	2,509,153.00	.00	2,509,153.00	(1,178.82)	.00	2,492,986.63	16,166.37	99	1,475,092.98
2120.002	District 2	3,056,935.00	.00	3,056,935.00	792,317.15	.00	2,944,424.80	112,510.20	96	1,955,934.65
2120.003	District 3	2,279,550.00	.00	2,279,550.00	(278.26)	.00	1,733,210.28	546,339.72	76	1,211,190.44
2120.005	Industrial CSIRU	4,664,310.00	.00	4,664,310.00	(222.09)	.00	3,644,801.19	1,019,508.81	78	1,994,156.01
2120.006	Industrial SIU	9,585,800.00	.00	9,585,800.00	1,047,380.17	.00	11,727,751.14	(2,141,951.14)	122	8,591,431.96
2120.007	Waste Hauler Fees	3,000.00	.00	3,000.00	.00	.00	.00	3,000.00	0	3,225.00
2120.008	Hydrant Usage	10,000.00	.00	10,000.00	.00	.00	1,026.09	8,973.91	10	10,166.32
2120.102	Town Of Niagara	631,276.00	.00	631,276.00	.00	.00	613,051.81	18,224.19	97	608,626.54
2122.001	Visual Inspections	.00	.00	.00	.00	.00	(180.00)	180.00	+++	(120.00)
2122.002	Dye Tests	50,000.00	.00	50,000.00	2,520.00	.00	50,305.00	(305.00)	101	56,107.50
2128.001	District 1	90,013.00	.00	90,013.00	(452.51)	.00	129,809.45	(39,796.45)	144	87,691.69
2128.002	District 2	64,295.00	.00	64,295.00	25,900.56	.00	69,354.31	(5,059.31)	108	59,282.61
2128.003	District 3	79,843.00	.00	79,843.00	(893.68)	.00	101,755.86	(21,912.86)	127	82,290.30
2128.005	Industrial	17,535.00	.00	17,535.00	(13.33)	.00	24,719.87	(7,184.87)	141	17,257.82
2128.006	Industrial SIU	18,704.00	.00	18,704.00	.00	.00	14,787.40	3,916.60	79	191,392.01
2141.000	Allowance for Unpaid Trfd	(125,000.00)	.00	(125,000.00)	.00	.00	66,911.52	(191,911.52)	-54	61,324.51
2770.998	Occidental Brine	.00	.00	.00	.00	.00	100,507.90	(100,507.90)	+++	.00
	<i>Departmental Income Totals</i>	\$22,935,414.00	\$0.00	\$22,935,414.00	\$1,865,079.19	\$0.00	\$23,715,223.25	(\$779,809.25)	103%	\$16,405,050.34
	<i>Use Of Money &amp; Property</i>									
2401.000	Interest Earnings	25,000.00	.00	25,000.00	.00	.00	(87,941.80)	112,941.80	-352	2,041.06
	<i>Use Of Money &amp; Property Totals</i>	\$25,000.00	\$0.00	\$25,000.00	\$0.00	\$0.00	(\$87,941.80)	\$112,941.80	-352%	\$2,041.06
	<i>Licenses And Permits</i>									
2590.006	SIU 5-Yr Permits	5,000.00	.00	5,000.00	.00	.00	1,500.00	3,500.00	30	1,000.00
	<i>Licenses And Permits Totals</i>	\$5,000.00	\$0.00	\$5,000.00	\$0.00	\$0.00	\$1,500.00	\$3,500.00	30%	\$1,000.00
	<i>Fines And Forfeits</i>									
2620.000	Forfeitures Of Deposits	800.00	.00	800.00	.00	.00	.00	800.00	0	.00
	<i>Fines And Forfeits Totals</i>	\$800.00	\$0.00	\$800.00	\$0.00	\$0.00	\$0.00	\$800.00	0%	\$0.00
	<i>Sale Of Prop/Cmp For Loss</i>									
2650.000	Sale Of Scrap	5,000.00	.00	5,000.00	2,964.10	.00	8,729.02	(3,729.02)	175	.00
2665.000	Sale-Equipment	.00	.00	.00	.00	.00	.00	.00	+++	70,130.00
2690.001	Damages to WB Property	84,525.00	.00	84,525.00	.00	.00	.00	84,525.00	0	.00
	<i>Sale Of Prop/Cmp For Loss Totals</i>	\$89,525.00	\$0.00	\$89,525.00	\$2,964.10	\$0.00	\$8,729.02	\$80,795.98	10%	\$70,130.00
	<i>Misc Local Sources</i>									
2701.000	Refund Appro Exp Prior Yr	.00	.00	.00	.00	.00	(2,517.27)	2,517.27	+++	(39,455.88)
2770.599	Undesignated	25,000.00	.00	25,000.00	.00	.00	17,398.28	7,601.72	70	31,897.40
	<i>Misc Local Sources Totals</i>	\$25,000.00	\$0.00	\$25,000.00	\$0.00	\$0.00	\$14,881.01	\$10,118.99	60%	(\$7,558.48)
	<i>Interfund Revenues</i>									



# Revenue Budget Performance Report

Fiscal Year to Date 11/30/22

Exclude Rollup Account

Account	Account Description	Adopted Budget	Budget Amendments	Amended Budget	Current Month Transactions	YTD Encumbrances	YTD Transactions	Budget - YTD Transactions	% Used/ Rec'd	Prior Year YTD
Fund	<b>GA - Water Board - Sewer</b>									
	<b>REVENUE</b>									
	<i>Interfund Revenues</i>									
2801.F	Interfd Rev Fr Water	.00	.00	.00	.00	.00	441,216.62	(441,216.62)	+++	504,112.54
	<i>Interfund Revenues Totals</i>	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$441,216.62	(\$441,216.62)	+++	\$504,112.54
	<b>REVENUE TOTALS</b>	\$23,080,739.00	\$0.00	\$23,080,739.00	\$1,868,043.29	\$0.00	\$24,093,608.10	(\$1,012,869.10)	104%	\$16,974,775.46
Fund	<b>GA - Water Board - Sewer Totals</b>	\$23,080,739.00	\$0.00	\$23,080,739.00	\$1,868,043.29	\$0.00	\$24,093,608.10	(\$1,012,869.10)		\$16,974,775.46



# Revenue Budget Performance Report

Fiscal Year to Date 11/30/22

Exclude Rollup Account

Account	Account Description	Adopted Budget	Budget Amendments	Amended Budget	Current Month Transactions	YTD Encumbrances	YTD Transactions	Budget - YTD Transactions	% Used/ Rec'd	Prior Year YTD
Fund	<b>VFG - Plant Fund</b>									
	<b>REVENUE</b>									
	<i>Use Of Money &amp; Property</i>									
2401.000	Interest Earnings	700,000.00	.00	700,000.00	.00	.00	294,099.95	405,900.05	42	382,322.33
	<i>Use Of Money &amp; Property Totals</i>	\$700,000.00	\$0.00	\$700,000.00	\$0.00	\$0.00	\$294,099.95	\$405,900.05	42%	\$382,322.33
	<i>Sale Of Prop/Cmp For Loss</i>									
2675.000	Gain on Disposal of Assets	.00	.00	.00	.00	.00	.00	.00	+++	40,000.00
	<i>Sale Of Prop/Cmp For Loss Totals</i>	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	+++	\$40,000.00
	<i>Misc Local Sources</i>									
2770.000	Other Unclassif'd Revenue	.00	.00	.00	.00	.00	.00	.00	+++	1,146.16
	<i>Misc Local Sources Totals</i>	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	+++	\$1,146.16
	<i>Proceeds Of Obligations</i>									
4990.000	Grant Revenue	.00	.00	.00	.00	.00	1,758,370.70	(1,758,370.70)	+++	2,546,124.00
	<i>Proceeds Of Obligations Totals</i>	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,758,370.70	(\$1,758,370.70)	+++	\$2,546,124.00
	<b>REVENUE TOTALS</b>	\$700,000.00	\$0.00	\$700,000.00	\$0.00	\$0.00	\$2,052,470.65	(\$1,352,470.65)	293%	\$2,969,592.49
Fund	<b>VFG - Plant Fund Totals</b>	\$700,000.00	\$0.00	\$700,000.00	\$0.00	\$0.00	\$2,052,470.65	(\$1,352,470.65)		\$2,969,592.49
	<b>Grand Totals</b>	\$36,831,445.00	\$0.00	\$36,831,445.00	\$2,545,941.38	\$0.00	\$38,759,089.12	(\$1,927,644.12)		\$28,860,773.27



# Expense Budget Performance Report

Fiscal Year to Date 11/30/22

Exclude Rollup Account

Account	Account Description	Adopted Budget	Budget Amendments	Amended Budget	Current Month Transactions	YTD Encumbrances	YTD Transactions	Budget - YTD Transactions	% Used/ Rec'd	Prior Year YTD
Fund	<b>GA - Water Board - Sewer</b>									
	<b>EXPENSE</b>									
	<i>Personnel - Position Control</i>									
0110.000	Biweekly Payroll	3,009,321.00	.00	3,009,321.00	86,740.76	.00	2,149,860.25	859,460.75	71	2,316,432.10
0153.000	Stipend	6,000.00	.00	6,000.00	.00	.00	115.38	5,884.62	2	3,576.93
	<i>Personnel - Position Control Totals</i>	<b>\$3,015,321.00</b>	<b>\$0.00</b>	<b>\$3,015,321.00</b>	<b>\$86,740.76</b>	<b>\$0.00</b>	<b>\$2,149,975.63</b>	<b>\$865,345.37</b>	<b>71%</b>	<b>\$2,320,009.03</b>
	<i>Personnel Services</i>									
0111.000	Biwkly Comp Differential	.00	.00	.00	.00	.00	1,182.20	(1,182.20)	+++	6,125.51
0121.000	Weekly Comp Differential	.00	.00	.00	3.50	.00	116.61	(116.61)	+++	.00
0125.000	Insurance OPT Out	104,598.00	.00	104,598.00	3,628.94	.00	85,395.45	19,202.55	82	97,182.92
0130.000	Temporary Payroll	151,000.00	.00	151,000.00	19,310.19	.00	357,066.07	(206,066.07)	236	167,243.86
0140.000	Overtime	185,500.00	.00	185,500.00	12,669.95	.00	274,602.21	(89,102.21)	148	155,707.89
0150.000	Acting Next-In-Rank Pay	12,480.00	.00	12,480.00	.00	.00	299.72	12,180.28	2	16,641.42
0151.A	Sunday Contractual Pay	36,000.00	.00	36,000.00	.00	.00	16,716.35	19,283.65	46	43,715.87
0151.000	Sunday Premium Pay	.00	.00	.00	2,094.38	.00	27,968.89	(27,968.89)	+++	.00
0152.000	Shift Premium Pay	.00	.00	.00	.00	.00	8,553.87	(8,553.87)	+++	8,341.62
0155.A	Holiday Contractual Pay	18,500.00	.00	18,500.00	3,283.12	.00	23,193.05	(4,693.05)	125	22,812.46
0155.000	Holiday Pay	.00	.00	.00	8,637.09	.00	59,806.12	(59,806.12)	+++	65,404.02
0165.000	Military Leave	.00	.00	.00	1,292.25	.00	13,832.77	(13,832.77)	+++	11,699.18
0170.000	Overtime Meals	6,225.00	.00	6,225.00	303.00	.00	6,924.75	(699.75)	111	4,358.70
0180.000	Comp. Time Earned	.00	.00	.00	186.35	.00	9,400.62	(9,400.62)	+++	.00
0181.000	Vacation Pay	.00	.00	.00	201.59	.00	76,318.57	(76,318.57)	+++	154,365.45
0182.000	Personal Time	.00	.00	.00	.00	.00	1,336.00	(1,336.00)	+++	4,434.92
0183.000	Compensatory Time Off	.00	.00	.00	1,256.50	.00	63,450.99	(63,450.99)	+++	10,708.61
0184.000	Funeral Leave	.00	.00	.00	.00	.00	2,804.84	(2,804.84)	+++	7,768.42
0185.000	Jury Duty	.00	.00	.00	.00	.00	2,067.44	(2,067.44)	+++	3,891.12
0186.000	Call-In Time	16,125.00	.00	16,125.00	1,543.15	.00	23,002.58	(6,877.58)	143	18,507.28
0189.000	Sick Leave	.00	.00	.00	2,082.80	.00	60,872.90	(60,872.90)	+++	65,528.96
	<i>Personnel Services Totals</i>	<b>\$530,428.00</b>	<b>\$0.00</b>	<b>\$530,428.00</b>	<b>\$56,492.81</b>	<b>\$0.00</b>	<b>\$1,114,912.00</b>	<b>(\$584,484.00)</b>	<b>210%</b>	<b>\$864,438.21</b>
	<i>Capital Outlays</i>									
0210.000	Furniture & Furnishings	.00	.00	.00	.00	.00	.00	.00	+++	998.00
0220.000	Office Equipment	500.00	.00	500.00	.00	.00	.00	500.00	0	.00
0250.000	Other Equipment	.00	.00	.00	.00	.00	.00	.00	+++	6,213.76
0250.500	Safety Equipment	15,000.00	.00	15,000.00	.00	2,081.28	4,045.78	8,872.94	41	10,882.68
	<i>Capital Outlays Totals</i>	<b>\$15,500.00</b>	<b>\$0.00</b>	<b>\$15,500.00</b>	<b>\$0.00</b>	<b>\$2,081.28</b>	<b>\$4,045.78</b>	<b>\$9,372.94</b>	<b>40%</b>	<b>\$18,094.44</b>
	<i>Contractual Expenses</i>									
0411.000	Office Supplies	2,950.00	.00	2,950.00	1,207.72	.00	3,206.25	(256.25)	109	2,065.32
0412.000	Uniforms	1,740.00	.00	1,740.00	120.00	.00	2,001.00	(261.00)	115	1,954.00
0413.000	Safety Shoes	11,000.00	.00	11,000.00	200.00	.00	6,270.75	4,729.25	57	6,433.87
0414.000	Automotive-Gas,Oil,Grease	33,000.00	.00	33,000.00	5,443.32	.00	44,163.89	(11,163.89)	134	30,720.02
0416.000	Consumable Printed Forms	700.00	.00	700.00	.00	.00	565.04	134.96	81	624.92



# Expense Budget Performance Report

Fiscal Year to Date 11/30/22

Exclude Rollup Account

Account	Account Description	Adopted Budget	Budget Amendments	Amended Budget	Current Month Transactions	YTD Encumbrances	YTD Transactions	Budget - YTD Transactions	% Used/ Rec'd	Prior Year YTD
Fund	<b>GA - Water Board - Sewer</b>									
	<b>EXPENSE</b>									
	<i>Contractual Expenses</i>									
0417.000	Tool Allowance	300.00	.00	300.00	300.00	.00	300.00	.00	100	297.32
0419.001	Automotive Parts	30,000.00	.00	30,000.00	3,398.65	5,727.99	23,410.66	861.35	97	28,183.26
0419.003	Cleaning/Sanitary	10,000.00	.00	10,000.00	740.28	.00	7,095.37	2,904.63	71	5,991.88
0419.004	Agricultural/Botanical	40,000.00	.00	40,000.00	.00	.00	.00	40,000.00	0	.00
0419.005	Tools & Machine Parts	207,000.00	(5,000.00)	202,000.00	30,294.77	4,321.38	140,652.97	57,025.65	72	160,423.94
0419.006	Construction/Repair	135,000.00	180,000.00	315,000.00	65,386.23	64,892.90	220,627.35	29,479.75	91	106,678.21
0419.008	Signals/Communication	5,000.00	.00	5,000.00	.00	.00	1,494.55	3,505.45	30	3,250.00
0419.009	Misc Chemicals	21,500.00	.00	21,500.00	6,563.04	1,668.89	16,796.29	3,034.82	86	10,235.00
0419.010	Laboratory	26,000.00	.00	26,000.00	1,210.43	3,778.03	21,568.00	653.97	97	18,765.69
0419.012	Carbon	.00	15,000.00	15,000.00	.00	.00	14,835.00	165.00	99	4,928.00
0419.014	Ferric Chloride	445,000.00	.00	445,000.00	34,182.92	.00	434,548.88	10,451.12	98	343,752.28
0419.016	Primary Polymer	80,000.00	.00	80,000.00	.00	.00	76,032.00	3,968.00	95	36,696.00
0419.017	Sludge Polymer	100,000.00	.00	100,000.00	29,400.04	.00	58,800.08	41,199.92	59	74,880.00
0419.018	Pebble Lime	150,000.00	.00	150,000.00	14,750.72	10,054.53	122,268.88	17,676.59	88	127,283.88
0419.024	Hypochlorite Solution	7,500,000.00	(353,162.00)	7,146,838.00	378,952.28	421,579.11	3,953,822.61	2,771,436.28	61	3,035,169.67
0419.599	Undesignated Supplies	49,350.00	75,500.00	124,850.00	9,572.55	13,275.89	70,437.37	41,136.74	67	34,449.15
0421.001	Phone Extension Chgs	29,500.00	.00	29,500.00	3,386.74	.00	37,988.49	(8,488.49)	129	39,266.14
0421.002	Wireless Services	10,000.00	.00	10,000.00	971.76	.00	8,772.42	1,227.58	88	7,241.34
0422.000	Light & Power	628,000.00	.00	628,000.00	4,141.68	.00	557,435.89	70,564.11	89	547,651.80
0423.000	Water/Sewer	486,000.00	.00	486,000.00	.00	.00	441,216.62	44,783.38	91	504,112.54
0424.000	Gas	25,000.00	.00	25,000.00	1,081.11	.00	16,322.65	8,677.35	65	16,429.54
0432.000	Property Insurance	180,000.00	.00	180,000.00	.00	.00	.00	180,000.00	0	.00
0433.000	Liability Insurance	135,000.00	.00	135,000.00	.00	.00	203,363.72	(68,363.72)	151	181,069.02
0440.003	Motor Vehicle Equipment	80,000.00	.00	80,000.00	5,200.81	.00	52,119.18	27,880.82	65	75,784.42
0440.599	Undesignated Leases	1,050.00	.00	1,050.00	62.80	.00	646.67	403.33	62	931.07
0441.000	Rental Of Real Property	75.00	.00	75.00	.00	.00	41.00	34.00	55	41.00
0442.000	Rental Of Equipment	15,500.00	.00	15,500.00	.00	.00	7,074.36	8,425.64	46	4,344.19
0442.003	Motor Vehicle Equip Rentl	.00	6,000.00	6,000.00	458.50	.00	4,669.78	1,330.22	78	9,012.90
0442.599	Undesignated Rentals	3,800.00	.00	3,800.00	72.16	990.86	2,055.21	753.93	80	2,184.83
0443.000	Repair Of Real Property	35,000.00	5,000.00	40,000.00	.00	.00	28,926.74	11,073.26	72	27,452.82
0444.000	Repair Of Equipment	150,000.00	10,000.00	160,000.00	5,677.98	22,154.58	114,839.09	23,006.33	86	79,361.02
0446.000	Computer Services	3,500.00	.00	3,500.00	354.97	.00	3,900.05	(400.05)	111	3,849.76
0446.008	Software Maint/Licenses	.00	55,162.00	55,162.00	52,819.65	.00	52,819.65	2,342.35	96	.00
0449.000	Billing & Collection	45,000.00	.00	45,000.00	3,771.28	.00	41,534.70	3,465.30	92	37,726.89
0449.002	Sludge Disposal	2,500,000.00	.00	2,500,000.00	131,610.59	.00	1,510,285.80	989,714.20	60	1,777,172.11
0449.004	Special Security	.00	.00	.00	65.00	.00	325.00	(325.00)	+++	.00
0449.008	Hazardous Waste Displ.	200.00	.00	200.00	.00	.00	.00	200.00	0	.00
0449.500	Safety-Contractual	3,200.00	.00	3,200.00	.00	.00	3,145.64	54.36	98	1,903.73



# Expense Budget Performance Report

Fiscal Year to Date 11/30/22  
Exclude Rollup Account

Account	Account Description	Adopted Budget	Budget Amendments	Amended Budget	Current Month Transactions	YTD Encumbrances	YTD Transactions	Budget - YTD Transactions	% Used/ Rec'd	Prior Year YTD
Fund	<b>GA - Water Board - Sewer</b>									
	<b>EXPENSE</b>									
	<i>Contractual Expenses</i>									
0449.599	Undesignated Services	186,843.00	4,000.00	190,843.00	39,128.76	24,584.58	329,403.58	(163,145.16)	185	171,619.41
0451.000	Consultants	73,762.00	.00	73,762.00	7,976.94	4,679.44	123,983.22	(54,900.66)	174	111,018.97
0454.000	Attorney Services	55,000.00	.00	55,000.00	3,092.19	.00	18,597.30	36,402.70	34	47,075.58
0461.000	Postage	30,000.00	.00	30,000.00	1,130.08	.00	27,952.84	2,047.16	93	40,798.24
0463.000	Travel & Training Expense	21,100.00	7,500.00	28,600.00	8,148.00	.00	22,821.34	5,778.66	80	6,936.00
0463.500	Safety Training	1,000.00	.00	1,000.00	.00	.00	.00	1,000.00	0	.00
0465.000	Laundry & Cleaning	7,500.00	.00	7,500.00	866.50	728.90	7,613.71	(842.61)	111	1,155.12
0466.000	Books,Mags. & Memberships	500.00	.00	500.00	.00	.00	1,890.00	(1,390.00)	378	2,010.00
0467.000	Advertising	500.00	.00	500.00	84.69	.00	326.77	173.23	65	435.15
0471.000	Recruitment Expenditures	400.00	.00	400.00	.00	.00	689.11	(289.11)	172	476.50
	<i>Contractual Expenses Totals</i>	\$13,555,970.00	\$0.00	\$13,555,970.00	\$851,825.14	\$578,437.08	\$8,839,657.47	\$4,137,875.45	69%	\$7,729,842.50
	<i>Employee Benefits</i>									
0801.000	NYS E.R.S. Retirement	412,820.00	.00	412,820.00	.00	.00	120,942.00	291,878.00	29	106,755.83
0820.000	Worker's Compensation	240,000.00	.00	240,000.00	782.74	.00	8,787.08	231,212.92	4	1,914.57
0830.000	Life Insurance	12,837.00	.00	12,837.00	.00	.00	6,560.53	6,276.47	51	12,290.21
0840.000	Unemployment Ins. NYS	17,253.00	.00	17,253.00	.00	.00	.00	17,253.00	0	.00
0860.000	Medical Insurance	2,245,937.00	.00	2,245,937.00	.00	.00	1,109,906.78	1,136,030.22	49	2,022,597.36
0861.000	Dental Insurance	64,800.00	.00	64,800.00	.00	.00	.00	64,800.00	0	.00
0863.000	Vision Care Insurance	5,713.00	.00	5,713.00	.00	.00	2,311.79	3,401.21	40	5,240.69
0865.000	Chiropractic Insurance	930.00	.00	930.00	70.00	.00	360.00	570.00	39	560.00
	<i>Employee Benefits Totals</i>	\$3,000,290.00	\$0.00	\$3,000,290.00	\$852.74	\$0.00	\$1,248,868.18	\$1,751,421.82	42%	\$2,149,358.66
	<i>Employee Benefit - FICA</i>									
0810.000	Social Security	270,792.00	.00	270,792.00	10,676.69	.00	244,177.64	26,614.36	90	237,332.79
	<i>Employee Benefit - FICA Totals</i>	\$270,792.00	\$0.00	\$270,792.00	\$10,676.69	\$0.00	\$244,177.64	\$26,614.36	90%	\$237,332.79
	<b>EXPENSE TOTALS</b>	\$20,388,301.00	\$0.00	\$20,388,301.00	\$1,006,588.14	\$580,518.36	\$13,601,636.70	\$6,206,145.94	70%	\$13,319,075.63
Fund	<b>GA - Water Board - Sewer Totals</b>	\$20,388,301.00	\$0.00	\$20,388,301.00	\$1,006,588.14	\$580,518.36	\$13,601,636.70	\$6,206,145.94		\$13,319,075.63
	<b>Grand Totals</b>	\$20,388,301.00	\$0.00	\$20,388,301.00	\$1,006,588.14	\$580,518.36	\$13,601,636.70	\$6,206,145.94		\$13,319,075.63



# Expense Budget Performance Report

Fiscal Year to Date 11/30/22

Exclude Rollup Account

Account	Account Description	Adopted Budget	Budget Amendments	Amended Budget	Current Month Transactions	YTD Encumbrances	YTD Transactions	Budget - YTD Transactions	% Used/ Rec'd	Prior Year YTD
Fund	<b>FA - Water Board - Water</b>									
	<b>EXPENSE</b>									
	<i>Personnel - Position Control</i>									
0110.000	Biweekly Payroll	2,437,924.00	.00	2,437,924.00	97,882.39	.00	1,931,597.11	506,326.89	79	1,875,647.41
0153.000	Stipend	10,925.00	.00	10,925.00	230.71	.00	6,671.72	4,253.28	61	9,021.70
	<i>Personnel - Position Control Totals</i>	<b>\$2,448,849.00</b>	<b>\$0.00</b>	<b>\$2,448,849.00</b>	<b>\$98,113.10</b>	<b>\$0.00</b>	<b>\$1,938,268.83</b>	<b>\$510,580.17</b>	<b>79%</b>	<b>\$1,884,669.11</b>
	<i>Personnel Services</i>									
0111.000	Biwkly Comp Differential	.00	.00	.00	.00	.00	1,970.88	(1,970.88)	+++	.00
0121.000	Weekly Comp Differential	.00	.00	.00	3.00	.00	143.93	(143.93)	+++	.00
0125.000	Insurance OPT Out	54,884.00	.00	54,884.00	3,628.94	.00	62,741.99	(7,857.99)	114	51,694.36
0130.000	Temporary Payroll	20,500.00	.00	20,500.00	3,670.00	.00	92,971.53	(72,471.53)	454	14,699.32
0140.000	Overtime	90,150.00	.00	90,150.00	2,379.40	.00	80,787.75	9,362.25	90	67,117.45
0150.000	Acting Next-In-Rank Pay	.00	.00	.00	.00	.00	5,111.55	(5,111.55)	+++	1,851.06
0151.A	Sunday Contractual Pay	15,500.00	.00	15,500.00	.00	.00	5,750.66	9,749.34	37	14,570.63
0151.000	Sunday Premium Pay	.00	.00	.00	685.59	.00	8,940.78	(8,940.78)	+++	.00
0152.000	Shift Premium Pay	.00	.00	.00	.00	.00	3,360.36	(3,360.36)	+++	3,821.72
0155.A	Holiday Contractual Pay	8,000.00	.00	8,000.00	971.08	.00	5,652.89	2,347.11	71	6,022.42
0155.000	Holiday Pay	.00	.00	.00	10,416.49	.00	66,521.80	(66,521.80)	+++	67,362.44
0170.000	Overtime Meals	2,415.00	.00	2,415.00	45.50	.00	1,972.75	442.25	82	1,736.80
0180.000	Comp. Time Earned	.00	.00	.00	312.76	.00	6,154.21	(6,154.21)	+++	.00
0181.000	Vacation Pay	.00	.00	.00	20,743.42	.00	131,658.26	(131,658.26)	+++	183,230.09
0182.000	Personal Time	.00	.00	.00	583.77	.00	5,346.15	(5,346.15)	+++	11,473.51
0183.000	Compensatory Time Off	.00	.00	.00	998.75	.00	59,601.02	(59,601.02)	+++	2,897.67
0184.000	Funeral Leave	.00	.00	.00	.00	.00	4,331.09	(4,331.09)	+++	4,907.22
0185.000	Jury Duty	.00	.00	.00	.00	.00	377.46	(377.46)	+++	.00
0186.000	Call-In Time	8,275.00	.00	8,275.00	555.45	.00	6,859.83	1,415.17	83	5,902.11
0189.000	Sick Leave	.00	.00	.00	5,627.76	.00	88,114.76	(88,114.76)	+++	76,970.44
0190.000	Vacation Cash Conversion	12,337.00	.00	12,337.00	.00	.00	9,288.84	3,048.16	75	2,431.92
	<i>Personnel Services Totals</i>	<b>\$212,061.00</b>	<b>\$0.00</b>	<b>\$212,061.00</b>	<b>\$50,621.91</b>	<b>\$0.00</b>	<b>\$647,658.49</b>	<b>(\$435,597.49)</b>	<b>305%</b>	<b>\$516,689.16</b>
	<i>Capital Outlays</i>									
0210.000	Furniture & Furnishings	4,500.00	.00	4,500.00	.00	.00	.00	4,500.00	0	3,982.74
0220.000	Office Equipment	.00	.00	.00	.00	.00	.00	.00	+++	86.40
0230.000	Motor Vehicle Equipment	5,000.00	.00	5,000.00	.00	.00	375.75	4,624.25	8	1,999.00
0250.000	Other Equipment	20,000.00	10,000.00	30,000.00	1,609.98	3,786.97	15,286.25	10,926.78	64	16,984.44
0250.007	Computer Equipment	25,000.00	.00	25,000.00	402.14	3,463.58	22,931.45	(1,395.03)	106	2,788.90
0250.500	Safety Equipment	3,000.00	.00	3,000.00	.00	.00	.00	3,000.00	0	2,534.97
	<i>Capital Outlays Totals</i>	<b>\$57,500.00</b>	<b>\$10,000.00</b>	<b>\$67,500.00</b>	<b>\$2,012.12</b>	<b>\$7,250.55</b>	<b>\$38,593.45</b>	<b>\$21,656.00</b>	<b>68%</b>	<b>\$28,376.45</b>
	<i>Contractual Expenses</i>									
0411.000	Office Supplies	10,200.00	.00	10,200.00	356.87	1,190.86	6,931.10	2,078.04	80	8,742.69
0412.000	Uniforms	2,550.00	.00	2,550.00	.00	.00	1,067.00	1,483.00	42	1,183.00
0413.000	Safety Shoes	7,800.00	.00	7,800.00	344.99	.00	3,526.77	4,273.23	45	4,387.06



# Expense Budget Performance Report

Fiscal Year to Date 11/30/22

Exclude Rollup Account

Account	Account Description	Adopted Budget	Budget Amendments	Amended Budget	Current Month Transactions	YTD Encumbrances	YTD Transactions	Budget - YTD Transactions	% Used/ Rec'd	Prior Year YTD
Fund	<b>FA - Water Board - Water</b>									
	<b>EXPENSE</b>									
	<i>Contractual Expenses</i>									
0414.000	Automotive-Gas,Oil,Grease	45,000.00	.00	45,000.00	5,376.74	.00	60,311.06	(15,311.06)	134	39,805.39
0415.000	Fuel Oil	30,000.00	.00	30,000.00	.00	.00	.00	30,000.00	0	8,083.56
0416.000	Consumable Printed Forms	1,000.00	.00	1,000.00	.00	.00	565.04	434.96	57	624.92
0417.000	Tool Allowance	150.00	.00	150.00	.00	.00	150.00	.00	100	149.22
0419.001	Automotive Parts	20,000.00	.00	20,000.00	1,586.67	.00	19,822.80	177.20	99	17,304.15
0419.003	Cleaning/Sanitary	5,000.00	.00	5,000.00	790.26	.00	3,369.18	1,630.82	67	1,902.40
0419.005	Tools & Machine Parts	87,500.00	10,000.00	97,500.00	6,217.01	11,697.65	78,240.26	7,562.09	92	54,098.62
0419.006	Construction/Repair	174,000.00	.00	174,000.00	.00	7,787.41	159,102.46	7,110.13	96	132,894.66
0419.009	Misc Chemicals	491,000.00	.00	491,000.00	13,677.38	79,233.62	399,491.03	12,275.35	97	290,562.37
0419.010	Laboratory	31,000.00	5,000.00	36,000.00	5,445.65	7,912.61	27,401.29	686.10	98	20,706.73
0419.599	Undesignated Supplies	9,150.00	.00	9,150.00	525.17	2,420.91	4,820.31	1,908.78	79	5,002.01
0421.001	Phone Extension Chgs	25,000.00	.00	25,000.00	1,854.20	.00	18,540.01	6,459.99	74	18,714.48
0421.002	Wireless Services	14,000.00	.00	14,000.00	976.20	.00	12,425.32	1,574.68	89	11,379.86
0422.000	Light & Power	550,000.00	.00	550,000.00	160.98	.00	457,909.65	92,090.35	83	509,305.40
0423.000	Water/Sewer	698,000.00	.00	698,000.00	.00	.00	430,975.26	267,024.74	62	499,180.22
0424.000	Gas	18,000.00	.00	18,000.00	658.02	.00	16,294.62	1,705.38	91	10,582.06
0432.000	Property Insurance	120,000.00	.00	120,000.00	.00	.00	.00	120,000.00	0	.00
0433.000	Liability Insurance	90,000.00	.00	90,000.00	(221.00)	.00	149,506.07	(59,506.07)	166	140,710.77
0440.003	Motor Vehicle Equipment	84,000.00	.00	84,000.00	5,200.82	.00	52,119.22	31,880.78	62	74,786.34
0440.599	Undesignated Leases	1,250.00	.00	1,250.00	98.71	.00	1,070.38	179.62	86	1,054.17
0441.000	Rental Of Real Property	.00	.00	.00	.00	.00	24.00	(24.00)	+++	24.00
0442.000	Rental Of Equipment	4,000.00	.00	4,000.00	.00	.00	3,323.55	676.45	83	3,383.16
0442.003	Motor Vehicle Equip Rentl	5,000.00	.00	5,000.00	458.50	.00	4,669.78	330.22	93	9,012.88
0442.599	Undesignated Rentals	4,000.00	.00	4,000.00	296.77	210.92	3,296.56	492.52	88	1,806.23
0444.000	Repair Of Equipment	23,700.00	.00	23,700.00	591.75	3,787.15	9,389.89	10,522.96	56	6,676.52
0446.000	Computer Services	4,000.00	.00	4,000.00	354.98	.00	3,900.02	99.98	98	3,849.69
0446.008	Software Maint/Licenses	335,000.00	.00	335,000.00	43,343.09	5,909.27	224,353.01	104,737.72	69	314,802.89
0449.000	Billing & Collection	45,000.00	.00	45,000.00	3,771.28	.00	41,484.08	3,515.92	92	37,726.84
0449.001	Sludge Removal	60,000.00	.00	60,000.00	.00	.00	.00	60,000.00	0	.00
0449.500	Safety-Contractual	1,500.00	5,000.00	6,500.00	1,265.85	701.03	6,862.11	(1,063.14)	116	3,340.65
0449.599	Undesignated Services	830,000.00	(27,500.00)	802,500.00	2,041.06	4,738.94	756,722.18	41,038.88	95	805,081.57
0451.000	Consultants	53,000.00	(2,500.00)	50,500.00	4,383.14	3,409.61	98,815.69	(51,725.30)	202	68,877.06
0454.000	Attorney Services	50,000.00	.00	50,000.00	968.50	.00	15,898.61	34,101.39	32	45,403.03
0461.000	Postage	30,000.00	.00	30,000.00	1,130.08	.00	27,952.83	2,047.17	93	40,798.23
0463.000	Travel & Training Expense	23,300.00	.00	23,300.00	.00	.00	19,847.28	3,452.72	85	4,655.43
0465.000	Laundry & Cleaning	1,500.00	.00	1,500.00	105.60	.00	1,052.23	447.77	70	980.53
0466.000	Books,Mags. & Memberships	300.00	.00	300.00	.00	.00	558.00	(258.00)	186	210.00
0467.000	Advertising	500.00	.00	500.00	84.69	.00	326.78	173.22	65	392.21



# Expense Budget Performance Report

Fiscal Year to Date 11/30/22

Exclude Rollup Account

Account	Account Description	Adopted Budget	Budget Amendments	Amended Budget	Current Month Transactions	YTD Encumbrances	YTD Transactions	Budget - YTD Transactions	% Used/ Rec'd	Prior Year YTD
Fund <b>FA - Water Board - Water</b>										
<b>EXPENSE</b>										
<i>Contractual Expenses</i>										
0471.000	Recruitment Expenditures	800.00	.00	800.00	456.00	.00	1,864.12	(1,064.12)	233	342.50
<i>Contractual Expenses Totals</i>		\$3,986,200.00	(\$10,000.00)	\$3,976,200.00	\$102,299.96	\$128,999.98	\$3,123,979.55	\$723,220.47	82%	\$3,198,523.50
<i>Employee Benefits</i>										
0801.000	NYS E.R.S. Retirement	206,410.00	.00	206,410.00	.00	.00	60,471.00	145,939.00	29	53,377.92
0820.000	Worker's Compensation	225,000.00	.00	225,000.00	521.82	.00	(7,986.66)	232,986.66	-4	1,355.50
0830.000	Life Insurance	10,465.00	.00	10,465.00	.00	.00	4,878.90	5,586.10	47	9,636.27
0840.000	Unemployment Ins. NYS	5,000.00	.00	5,000.00	.00	.00	.00	5,000.00	0	.00
0860.000	Medical Insurance	1,336,959.00	.00	1,336,959.00	.00	.00	725,496.66	611,462.34	54	1,305,768.18
0861.000	Dental Insurance	50,100.00	.00	50,100.00	.00	.00	.00	50,100.00	0	.00
0863.000	Vision Care Insurance	4,115.00	.00	4,115.00	.00	.00	1,550.94	2,564.06	38	3,466.78
0865.000	Chiropractic Insurance	1,680.00	.00	1,680.00	185.00	.00	1,255.00	425.00	75	1,280.00
<i>Employee Benefits Totals</i>		\$1,839,729.00	\$0.00	\$1,839,729.00	\$706.82	\$0.00	\$785,665.84	\$1,054,063.16	43%	\$1,374,884.65
<i>Employee Benefit - FICA</i>										
0810.000	Social Security	208,230.00	.00	208,230.00	10,728.51	.00	193,015.46	15,214.54	93	179,384.31
<i>Employee Benefit - FICA Totals</i>		\$208,230.00	\$0.00	\$208,230.00	\$10,728.51	\$0.00	\$193,015.46	\$15,214.54	93%	\$179,384.31
<b>EXPENSE TOTALS</b>		\$8,752,569.00	\$0.00	\$8,752,569.00	\$264,482.42	\$136,250.53	\$6,727,181.62	\$1,889,136.85	78%	\$7,182,527.18
Fund <b>FA - Water Board - Water Totals</b>		\$8,752,569.00	\$0.00	\$8,752,569.00	\$264,482.42	\$136,250.53	\$6,727,181.62	\$1,889,136.85		\$7,182,527.18
Grand Totals		\$8,752,569.00	\$0.00	\$8,752,569.00	\$264,482.42	\$136,250.53	\$6,727,181.62	\$1,889,136.85		\$7,182,527.18



# Expense Budget Performance Report

Fiscal Year to Date 11/30/22

Exclude Rollup Account

Account	Account Description	Adopted Budget	Budget Amendments	Amended Budget	Current Month Transactions	YTD Encumbrances	YTD Transactions	Budget - YTD Transactions	% Used/ Rec'd	Prior Year YTD
Fund <b>FGB - Water Board</b>										
<b>EXPENSE</b>										
<i>Contractual Expenses</i>										
0419.599	Undesignated Supplies	3,000.00	.00	3,000.00	292.73	.00	3,834.28	(834.28)	128	3,537.18
0451.000	Consultants	61,700.00	.00	61,700.00	.00	.00	32,517.75	29,182.25	53	59,957.07
0454.000	Attorney Services	60,000.00	.00	60,000.00	60.00	.00	3,041.50	56,958.50	5	27,495.20
0459.000	Auditors	28,000.00	.00	28,000.00	.00	.00	26,000.00	2,000.00	93	32,838.50
0461.000	Postage	250.00	.00	250.00	.00	.00	.00	250.00	0	22.04
0466.000	Books,Mags. & Memberships	7,050.00	.00	7,050.00	.00	.00	4,533.50	2,516.50	64	4,509.00
<i>Contractual Expenses Totals</i>		\$160,000.00	\$0.00	\$160,000.00	\$352.73	\$0.00	\$69,927.03	\$90,072.97	44%	\$128,358.99
<b>EXPENSE TOTALS</b>		\$160,000.00	\$0.00	\$160,000.00	\$352.73	\$0.00	\$69,927.03	\$90,072.97	44%	\$128,358.99
Fund <b>FGB - Water Board</b> Totals		\$160,000.00	\$0.00	\$160,000.00	\$352.73	\$0.00	\$69,927.03	\$90,072.97		\$128,358.99
Grand Totals		\$160,000.00	\$0.00	\$160,000.00	\$352.73	\$0.00	\$69,927.03	\$90,072.97		\$128,358.99

**BANK ON BUFFALO & KEYBANK**

**BANK BALANCES-FY 2022**

MONTH	ACCT #	Account Name	STARTING VALUE	DEPOSITS	WITHDRAWALS	TRANSFERS	NET CHANGE IN VALUE	MONTH ENDING VALUE	PY MONTH ENDING VALUE
JULY	X4873	Board Expense Account	91,624.82	-	-	-	-	91,624.82	91,624.82
	X4881	O&M Reserve	5,198,449.50	-	-	-	-	5,198,449.50	5,028,792.08
	X4899	Depository	5,918,574.05	5,115,476.09	-	(3,088,785.22)	2,026,690.87	7,945,264.92	3,219,123.34
	X9220	Depository-Keybank	514,360.64	209,671.49	-	-	209,671.49	724,032.13	781,822.41
	X4906	Payroll	173,821.57	-	(571,941.84)	571,510.37	(431.47)	173,390.10	124,890.77
	X4914	Benefits	14,989.75	-	(6,555.00)	5,945.00	(610.00)	14,379.75	14,127.50
	X0643	Operating	730,667.22	-	(2,150,971.51)	2,511,329.85	360,358.34	1,081,025.56	931,729.32
	X4445	Grants	302.65	-	-	-	-	302.65	772,436.29
		<b>Totals</b>	<b>12,642,780.20</b>	<b>5,325,147.58</b>	<b>(2,729,468.35)</b>		<b>2,595,679.23</b>	<b>15,238,469.43</b>	<b>10,964,546.53</b>

MONTH	ACCT #	Account Name	STARTING VALUE	DEPOSITS	WITHDRAWALS	TRANSFERS	NET CHANGE IN VALUE	MONTH ENDING VALUE	PY MONTH ENDING VALUE
AUGUST	X4873	Board Expense Account	91,624.82	-	-	-	-	91,624.82	91,624.82
	X4881	O&M Reserve	5,198,449.50	-	-	-	-	5,198,449.50	5,028,792.08
	X4899	Depository	7,945,264.92	2,526,197.95	(1,000,000.00)	(2,424,904.94)	(898,706.99)	7,046,557.93	5,089,267.61
	X9220	Depository-Keybank	724,032.13	158,310.33	-	-	158,310.33	882,342.46	1,004,903.74
	X4906	Payroll	173,390.10	-	(594,534.87)	581,236.61	(13,298.26)	160,091.84	113,750.49
	X4914	Benefits	14,379.75	-	(16,040.00)	16,695.00	655.00	15,034.75	13,613.50
	X0643	Operating	1,081,025.56	-	(2,172,709.53)	1,826,973.33	(345,736.20)	745,289.36	910,384.29
	X4445	Grants	302.65	-	-	-	-	302.65	1,648,487.92
		<b>Totals</b>	<b>15,238,469.43</b>	<b>2,684,508.28</b>	<b>(3,783,284.40)</b>		<b>(1,098,776.12)</b>	<b>14,139,693.31</b>	<b>13,910,824.45</b>

MONTH	ACCT #	Account Name	STARTING VALUE	DEPOSITS	WITHDRAWALS	TRANSFERS	NET CHANGE IN VALUE	MONTH ENDING VALUE	PY MONTH ENDING VALUE
SEPTEMBER	X4873	Board Expense Account	91,624.82	-	-	-	-	91,624.82	91,624.82
	X4881	O&M Reserve	5,198,449.50	-	-	-	-	5,198,449.50	5,028,792.08
	X4899	Depository	7,046,557.93	2,156,507.80	-	(2,369,267.72)	(212,759.92)	6,833,798.01	4,665,020.90
	X9220	Depository-Keybank	882,342.46	152,374.94	-	-	152,374.94	1,034,717.40	1,139,424.09
	X4906	Payroll	160,091.84	-	(552,236.64)	543,511.66	(8,724.98)	151,366.86	117,205.41
	X4914	Benefits	15,034.75	-	(10,303.00)	8,027.00	(2,276.00)	12,758.75	11,381.75
	X0643	Operating	745,289.36	-	(1,875,882.12)	1,817,729.06	(58,153.06)	687,136.30	1,229,465.82
	X4445	Grants	302.65	16,813.08	-	-	16,813.08	17,115.73	1,648,487.92
		<b>Totals</b>	<b>14,139,693.31</b>	<b>2,325,695.82</b>	<b>(2,438,421.76)</b>		<b>(112,725.94)</b>	<b>14,026,967.37</b>	<b>13,931,402.79</b>

MONTH	ACCT #	Account Name	STARTING VALUE	DEPOSITS	WITHDRAWALS	TRANSFERS	NET CHANGE IN VALUE	MONTH ENDING VALUE	PY MONTH ENDING VALUE
OCTOBER	X4873	Board Expense Account	91,624.82	-	-	-	-	91,624.82	91,624.82
	X4881	O&M Reserve	5,198,449.50	-	-	-	-	5,198,449.50	5,028,792.08
	X4899	Depository	6,833,798.01	2,531,407.99	-	(2,354,636.28)	176,771.71	7,010,569.72	6,687,356.15
	X9220	Depository-Keybank	1,034,717.40	298,775.91	-	(1,000,000.00)	(701,224.09)	333,493.31	183,200.97
	X4906	Payroll	151,366.86	-	(550,145.45)	552,971.24	2,825.79	154,192.65	112,026.32
	X4914	Benefits	12,758.75	-	(9,177.00)	8,680.00	(497.00)	12,261.75	11,024.75
	X0643	Operating	687,136.30	-	(2,503,080.89)	2,792,985.04	289,904.15	977,040.45	865,255.69
	X4445	Grants	17,115.73	1,320,612.82	(1,000,000.00)	-	320,612.82	337,728.55	1,648,487.92
		<b>Totals</b>	<b>14,026,967.37</b>	<b>4,150,796.72</b>	<b>(4,062,403.34)</b>		<b>88,393.38</b>	<b>14,115,360.75</b>	<b>14,627,768.70</b>

MONTH	ACCT #	Account Name	STARTING VALUE	DEPOSITS	WITHDRAWALS	TRANSFERS	NET CHANGE IN VALUE	MONTH ENDING VALUE	PY MONTH ENDING VALUE
NOVEMBER	X4873	Board Expense Account	91,624.82	-	-	-	-	91,624.82	91,624.82
	X4881	O&M Reserve	5,198,449.50	-	-	-	-	5,198,449.50	5,028,792.08
	X4899	Depository	7,010,569.72	2,456,825.54	-	(2,907,037.58)	(450,212.04)	6,560,357.68	7,566,886.92
	X9220	Depository-Keybank	333,493.31	177,402.33	-	-	177,402.33	510,895.64	431,335.14
	X4906	Payroll	154,192.65	-	(616,457.53)	896,070.08	279,612.55	433,805.20	111,206.00
	X4914	Benefits	12,261.75	-	(6,584.00)	8,224.00	1,630.00	13,891.75	11,328.75
	X0643	Operating	977,040.45	-	(2,273,147.98)	2,002,743.50	(270,404.48)	706,635.97	945,257.44
	X4445	Grants	337,728.55	-	-	-	-	337,728.55	298,917.78
		<b>Totals</b>	<b>14,115,360.75</b>	<b>2,634,227.87</b>	<b>(2,896,199.51)</b>		<b>(261,971.64)</b>	<b>13,853,389.11</b>	<b>14,485,348.93</b>

**BANK ON BUFFALO & KEYBANK**

**BANK BALANCES-FY 2022**

MONTH	ACCT #	Account Name	STARTING VALUE	DEPOSITS	WITHDRAWALS	TRANSFERS	NET CHANGE IN VALUE	MONTH ENDING VALUE	PY MONTH ENDING VALUE
JANUARY	X4873	Board Expense Account	91,624.82	-	-	-	-	91,624.82	91,624.82
	X4881	O&M Reserve	5,198,449.50	-	-	-	-	5,198,449.50	5,026,155.08
	X4899	Depository-BOB	6,316,534.35	5,942,530.51	-	(3,941,036.15)	2,001,494.36	8,318,028.71	2,973,320.83
	X9220	Depository-Keybank	494,125.30	132,410.39	-	-	132,410.39	626,535.69	297,702.76
	X4906	Payroll	115,653.46	-	(551,674.47)	545,442.20	(6,232.27)	109,421.19	109,324.31
	X4914	Benefits	14,488.75	-	(6,534.00)	-	(8,534.00)	5,954.75	12,880.50
	X0643	Operating	867,401.81	-	(3,425,532.83)	3,395,593.95	(29,938.88)	837,462.93	872,159.27
	X4445	Grants	298,917.78	-	-	-	-	298,917.78	56,308.39
		<b>Totals</b>	<b>13,397,195.77</b>	<b>6,074,940.90</b>	<b>(3,985,741.30)</b>	<b>-</b>	<b>2,089,199.60</b>	<b>15,486,395.37</b>	<b>9,439,475.96</b>

MONTH	ACCT #	Account Name	STARTING VALUE	DEPOSITS	WITHDRAWALS	TRANSFERS	NET CHANGE IN VALUE	MONTH ENDING VALUE	PY MONTH ENDING VALUE
FEBRUARY	X4873	Board Expense Account	91,624.82	-	-	-	-	91,624.82	91,624.82
	X4881	O&M Reserve	5,198,449.50	-	-	-	-	5,198,449.50	5,023,518.08
	X4899	Depository	8,318,028.71	2,164,261.20	-	(5,741,075.03)	(3,576,813.83)	4,741,214.88	1,931,772.99
	X9220	Depository-Keybank	676,535.69	99,980.31	-	-	99,980.31	776,516.00	365,426.71
	X4906	Payroll	109,421.19	-	(509,705.92)	507,238.01	(2,467.91)	106,953.28	107,398.56
	X4914	Benefits	5,954.75	-	(5,582.50)	13,238.50	7,656.00	13,610.75	13,181.50
	X0643	Operating	837,462.93	-	(5,226,976.18)	5,220,598.52	(6,377.66)	831,085.27	1,006,001.80
	X4445	Grants	298,917.78	289,894.44	-	-	289,894.44	588,812.22	1.00
		<b>Totals</b>	<b>15,486,395.37</b>	<b>2,554,135.95</b>	<b>(5,736,264.60)</b>	<b>-</b>	<b>(3,182,128.65)</b>	<b>12,304,266.72</b>	<b>8,338,875.46</b>

MONTH	ACCT #	Account Name	STARTING VALUE	DEPOSITS	WITHDRAWALS	TRANSFERS	NET CHANGE IN VALUE	MONTH ENDING VALUE	PY MONTH ENDING VALUE
MARCH	X4873	Board Expense Account	91,624.82	-	-	-	-	91,624.82	91,624.82
	X4881	O&M Reserve	5,198,449.50	-	-	-	-	5,198,449.50	5,028,792.08
	X4899	Depository	4,741,214.88	1,857,650.92	-	(2,509,831.25)	(652,180.33)	4,089,034.55	1,181,664.43
	X9220	Depository-Keybank	726,516.00	152,266.30	-	-	152,266.30	878,782.30	210,550.98
	X4906	Payroll	112,953.28	-	(502,147.62)	499,587.42	(2,560.20)	110,393.08	105,789.51
	X4914	Benefits	13,610.75	-	(14,139.00)	7,430.00	(6,799.00)	6,901.75	14,624.50
	X0643	Operating	831,085.27	-	(2,023,426.23)	2,002,813.83	(20,612.40)	810,472.87	1,506,721.21
	X4445	Grants	588,812.22	1,211,853.48	-	-	1,211,853.48	1,800,665.70	598,755.30
		<b>Totals</b>	<b>12,304,266.72</b>	<b>3,221,770.70</b>	<b>(2,539,712.85)</b>	<b>-</b>	<b>682,057.85</b>	<b>12,986,324.57</b>	<b>8,738,522.83</b>

MONTH	ACCT #	Account Name	STARTING VALUE	DEPOSITS	WITHDRAWALS	TRANSFERS	NET CHANGE IN VALUE	MONTH ENDING VALUE	PY MONTH ENDING VALUE
APRIL	X4873	Board Expense Account	91,624.82	-	-	-	-	91,624.82	91,624.82
	X4881	O&M Reserve	5,198,449.50	-	-	-	-	5,198,449.50	5,028,792.08
	X4899	Depository	4,089,034.55	3,840,564.99	-	(1,523,407.81)	2,317,157.18	6,406,191.73	1,869,991.94
	X9220	Depository-Keybank	878,782.30	178,994.69	-	(850,000.00)	(671,005.31)	207,776.99	372,323.36
	X4906	Payroll	110,393.08	-	(528,381.40)	517,979.88	(10,401.52)	99,991.56	109,678.92
	X4914	Benefits	6,901.75	-	(12,894.00)	17,120.00	4,226.00	11,127.75	12,693.50
	X0643	Operating	810,472.87	-	(1,815,831.94)	1,838,307.93	22,475.99	832,948.86	1,679,650.89
	X4445	Grants	1,800,665.70	1,800,015.00	-	-	1,800,015.00	3,600,680.70	598,755.30
		<b>Totals</b>	<b>12,986,324.57</b>	<b>4,019,559.68</b>	<b>(4,157,122.34)</b>	<b>(0.00)</b>	<b>(137,562.66)</b>	<b>12,848,761.91</b>	<b>9,763,470.81</b>

MONTH	ACCT #	Account Name	STARTING VALUE	DEPOSITS	WITHDRAWALS	TRANSFERS	NET CHANGE IN VALUE	MONTH ENDING VALUE	PY MONTH ENDING VALUE
MAY	X4873	Board Expense Account	91,624.82	-	-	-	-	91,624.82	91,624.82
	X4881	O&M Reserve	5,198,449.50	-	-	-	-	5,198,449.50	5,028,792.08
	X4899	Depository	6,406,191.73	2,627,487.88	-	(1,679,053.03)	948,434.85	7,354,626.58	2,105,131.53
	X9220	Depository-Keybank	207,776.99	148,765.53	-	-	148,765.53	356,542.52	491,357.51
	X4906	Payroll	99,991.56	-	(522,262.08)	522,550.09	288.01	100,279.57	106,462.99
	X4914	Benefits	11,127.75	-	(7,359.00)	13,596.00	6,237.00	17,364.75	11,461.50
	X0643	Operating	832,948.86	-	(1,153,700.15)	1,142,906.94	(10,793.21)	822,155.65	1,294,047.00
	X4445	Grants	650.70	14,250.00	-	-	14,250.00	14,900.70	1.00
		<b>Totals</b>	<b>12,848,761.91</b>	<b>2,790,503.41</b>	<b>(1,683,321.23)</b>	<b>0.00</b>	<b>1,107,182.18</b>	<b>13,955,944.09</b>	<b>9,129,878.43</b>

MONTH	ACCT #	Account Name	STARTING VALUE	DEPOSITS	WITHDRAWALS	TRANSFERS	NET CHANGE IN VALUE	MONTH ENDING VALUE	PY MONTH ENDING VALUE
JUNE	X4873	Board Expense Account	91,624.82	-	-	-	-	91,624.82	91,624.82
	X4881	O&M Reserve	5,198,449.50	-	-	-	-	5,198,449.50	5,028,792.08
	X4899	Depository	7,354,626.58	2,031,324.52	-	(3,467,377.05)	(1,436,052.53)	5,918,574.05	930,994.65
	X9220	Depository-Keybank	356,542.52	157,818.12	-	-	157,818.12	514,360.64	615,740.35
	X4906	Payroll	100,279.57	-	(809,671.26)	883,213.26	73,542.00	173,821.57	469,744.17
	X4914	Benefits	17,364.75	-	(9,584.00)	7,209.00	(2,375.00)	14,989.75	13,404.50
	X0643	Operating	822,155.65	-	(2,668,443.22)	2,576,954.79	(91,488.43)	730,667.22	944,283.88
	X4445	Grants	14,900.70	1,485,401.95	(1,500,000.00)	-	(14,598.05)	302.65	772,436.29
		<b>Totals</b>	<b>13,955,944.09</b>	<b>3,674,544.59</b>	<b>(4,987,698.48)</b>	<b>-</b>	<b>(1,313,153.89)</b>	<b>12,642,790.20</b>	<b>8,867,020.74</b>

Wilmington Trust

BANK BALANCES-FY 2022

MONTH	ACCT #	Account Name	STARTING VALUE	DEPOSITS	Payments	Change in Market Value	NET CHANGE IN VALUE	MONTH ENDING VALUE
JULY	X3250	Debt Service	6,132,374.51	579,738.54	(2,368,237.02)	7,409.27	(1,781,089.21)	4,351,285.30
	X3251	Construction	867.47	-	-	0.81	0.81	868.28
	X3252	Debt Service Reserve	6,973,676.89	-	-	24,672.62	24,672.62	6,998,349.51
	X9279	Expense Account	16,079.32	-	-	-	-	16,079.32
	X4118-0	2022A DSF	304,864.26	101,621.42	-	-	101,621.42	406,485.68
	X4118-1	2022A Issuance	18,119.92	-	(8,500.00)	-	(8,500.00)	9,619.92
	X2722	Capital Fund Construction	1,718,210.17	-	(212,221.25)	1,450.13	(210,771.12)	1,507,439.05
		Totals	15,164,192.54	681,359.96	(2,588,958.27)	33,532.83	(1,874,065.48)	13,290,127.06

MONTH	ACCT #	Account Name	STARTING VALUE	DEPOSITS	Payments	Change in Market Value	NET CHANGE IN VALUE	MONTH ENDING VALUE
AUGUST	X3250	Debt Service	4,351,285.30	515,567.68	-	9,263.47	524,831.15	4,876,116.45
	X3251	Construction	868.28	-	-	-	1.26	869.54
	X3252	Debt Service Reserve	6,998,349.51	-	-	-	24,856.65	7,023,206.16
	X9279	Expense Account	16,079.32	-	-	-	-	16,079.32
	X4118-0	2022A DSF	406,485.68	101,621.42	-	-	101,621.42	508,107.10
	X4118-1	2022A Issuance	9,619.92	-	-	-	-	9,619.92
	X2722	Capital Fund Construction	1,507,439.05	1,000,000.00	(1,726,578.27)	1,502.37	(725,075.90)	782,363.15
		Totals	13,290,127.06	1,617,189.10	(1,726,578.27)	10,765.84	(73,765.42)	13,216,361.64

MONTH	ACCT #	Account Name	STARTING VALUE	DEPOSITS	Payments	Change in Market Value	NET CHANGE IN VALUE	MONTH ENDING VALUE
SEPTEMBER	X3250	Debt Service	4,876,116.45	515,567.68	-	12,610.88	528,178.56	5,404,295.01
	X3251	Construction	869.54	-	-	1.40	1.40	870.94
	X3252	Debt Service Reserve	7,023,206.16	-	-	24,226.60	24,226.60	7,047,432.76
	X9279	Expense Account	16,079.32	-	-	-	-	16,079.32
	X4118-0	2022A DSF	508,107.10	101,621.42	-	-	101,621.42	609,728.52
	X4118-1	2022A Issuance	9,619.92	-	-	-	-	9,619.92
	X2722	Capital Fund Construction	782,363.15	-	(206,812.90)	1,057.42	(205,755.48)	576,607.67
		Totals	13,216,361.64	617,189.10	(206,812.90)	37,896.30	448,272.50	13,664,634.14

MONTH	ACCT #	Account Name	STARTING VALUE	DEPOSITS	Payments	Change in Market Value	NET CHANGE IN VALUE	MONTH ENDING VALUE
OCTOBER	X3250	Debt Service	5,404,295.01	1,508,683.31	(3,000.00)	15,519.48	1,521,202.79	6,925,497.80
	X3251	Construction	870.94	-	-	1.79	1.79	872.73
	X3252	Debt Service Reserve	7,047,432.76	-	-	25,358.10	25,358.10	7,072,790.86
	X9279	Expense Account	16,079.32	-	-	-	-	16,079.32
	X4118-0	2022A DSF	609,728.52	101,621.42	-	-	101,621.42	711,349.94
	X4118-1	2022A Issuance	9,619.92	-	-	-	-	9,619.92
	X2722	Capital Fund Construction	576,607.67	1,000,000.00	(1,144,617.72)	1,196.13	(143,421.59)	433,186.08
		Totals	13,664,634.14	2,610,304.73	(1,147,617.72)	42,075.50	1,504,762.51	15,169,396.65

MONTH	ACCT #	Account Name	STARTING VALUE	DEPOSITS	Payments	Change in Market Value	NET CHANGE IN VALUE	MONTH ENDING VALUE
NOVEMBER	X3250	Debt Service	6,925,497.80	515,567.68	(266,628.39)	21,269.67	270,208.96	7,195,706.76
	X3251	Construction	872.73	-	-	2.22	2.22	874.95
	X3252	Debt Service Reserve	7,072,790.86	-	-	25,044.43	25,044.43	7,097,835.29
	X9279	Expense Account	16,079.32	-	-	-	-	16,079.32
	X4118-0	2022A DSF	711,349.94	101,621.42	-	-	101,621.42	812,971.36
	X4118-1	2022A Issuance	9,619.92	-	-	-	-	9,619.92
	X2722	Capital Fund Construction	433,186.08	-	(85,517.52)	945.69	(84,571.83)	348,614.25
		Totals	15,169,396.65	617,189.10	(352,145.91)	47,262.01	312,305.20	15,481,701.85

MONTH	ACCT #	Account Name	STARTING VALUE	DEPOSITS	Payments	Change in Market Value	NET CHANGE IN VALUE	MONTH ENDING VALUE
DECEMBER	X3250	Debt Service	7,195,706.76	-	-	-	-	7,195,706.76
	X3251	Construction	874.95	-	-	-	-	874.95
	X3252	Debt Service Reserve	7,097,835.29	-	-	-	-	7,097,835.29
	X9279	Expense Account	16,079.32	-	-	-	-	16,079.32
	X4118-0	2022A DSF	812,971.36	-	-	-	-	812,971.36
	X4118-1	2022A Issuance	9,619.92	-	-	-	-	9,619.92
	X2722	Capital Fund Construction	348,614.25	-	-	-	-	348,614.25
		Totals	15,481,701.85	-	-	-	-	15,481,701.85

Wilmington Trust

BANK BALANCES-FY 2022

MONTH	ACCT #	Account Name	STARTING VALUE	DEPOSITS	Payments	Change in Market Value	NET CHANGE IN VALUE	MONTH ENDING VALUE
JANUARY	X3250	Debt Service	7,257,814.15	662,494.43	(1,243,237.02)	10,262.00	(570,480.59)	6,687,333.56
	X3251	Construction	866.50	-	-	-	0.01	866.51
	X3252	Debt Service Reserve	6,832,824.47	-	-	-	23,854.14	6,856,678.61
	X9279	Expense Account	16,079.32	-	-	-	-	16,079.32
	X2722	Capital Fund Construction	1,637,334.07	-	-	-	13.91	1,637,347.98
	<b>Totals</b>		<b>15,744,918.51</b>	<b>662,494.43</b>	<b>(1,243,237.02)</b>	<b>10,262.00</b>	<b>(546,612.53)</b>	<b>15,198,305.98</b>

MONTH	ACCT #	Account Name	STARTING VALUE	DEPOSITS	Payments	Change in Market Value	NET CHANGE IN VALUE	MONTH ENDING VALUE
FEBRUARY	X3250	Debt Service	6,687,333.56	662,494.43	-	10,143.05	672,637.48	7,359,971.04
	X3251	Construction	866.51	-	-	-	0.01	866.52
	X3252	Debt Service Reserve	6,856,678.61	-	-	21,709.90	21,709.90	6,878,388.51
	X9279	Expense Account	16,079.32	-	-	-	-	16,079.32
	X2722	Capital Fund Construction	1,637,347.98	3,000,000.00	(2,730,773.12)	18.44	269,245.32	1,906,593.30
	<b>Totals</b>		<b>15,198,305.98</b>	<b>3,662,494.43</b>	<b>(2,730,773.12)</b>	<b>31,871.40</b>	<b>963,592.71</b>	<b>16,161,898.69</b>

MONTH	ACCT #	Account Name	STARTING VALUE	DEPOSITS	Payments	Change in Market Value	NET CHANGE IN VALUE	MONTH ENDING VALUE
MARCH	X3250	Debt Service	7,359,971.04	665,494.43	(416,371.00)	12,879.00	262,002.43	7,621,973.47
	X3251	Construction	866.52	-	-	-	0.02	866.54
	X3252	Debt Service Reserve	6,878,388.51	-	-	24,047.85	24,047.85	6,902,436.36
	X9279	Expense Account	16,079.32	-	-	-	-	16,079.32
	X2722	Capital Fund Construction	1,906,593.30	-	(899,017.11)	32.20	(898,984.91)	1,007,608.39
	<b>Totals</b>		<b>15,161,898.69</b>	<b>665,494.43</b>	<b>(1,315,388.11)</b>	<b>36,959.07</b>	<b>(612,934.61)</b>	<b>15,548,964.08</b>

MONTH	ACCT #	Account Name	STARTING VALUE	DEPOSITS	Payments	Change in Market Value	NET CHANGE IN VALUE	MONTH ENDING VALUE
APRIL	X3250	Debt Service	7,621,973.47	662,494.13	-	13,692.84	676,186.97	8,298,160.44
	X3251	Construction	866.54	-	-	-	0.10	866.64
	X3252	Debt Service Reserve	6,902,436.36	-	-	23,331.93	23,331.93	6,925,768.29
	X9279	Expense Account	16,079.32	-	-	-	-	16,079.32
	X2722	Capital Fund Construction	1,007,608.39	1,800,000.00	(160,955.24)	245.77	1,639,290.53	2,646,898.92
	<b>Totals</b>		<b>15,548,964.08</b>	<b>2,462,494.13</b>	<b>(160,955.24)</b>	<b>37,270.64</b>	<b>2,338,809.53</b>	<b>17,887,773.61</b>

MONTH	ACCT #	Account Name	STARTING VALUE	DEPOSITS	Payments	Change in Market Value	NET CHANGE IN VALUE	MONTH ENDING VALUE
MAY	X3250	Debt Service	8,298,160.44	497,475.15	(259,670.73)	23,526.90	261,331.32	8,559,491.76
	X3251	Construction	866.64	-	-	-	0.30	866.94
	X3252	Debt Service Reserve	6,925,768.29	-	-	24,253.01	24,253.01	6,950,021.30
	X9279	Expense Account	16,079.32	-	-	-	-	16,079.32
	X2722	Capital Fund Construction	2,646,898.92	-	(193,475.36)	873.30	(192,602.06)	2,454,296.86
	<b>Totals</b>		<b>17,887,773.61</b>	<b>497,475.15</b>	<b>(453,146.09)</b>	<b>48,653.51</b>	<b>92,982.57</b>	<b>17,980,756.18</b>

MONTH	ACCT #	Account Name	STARTING VALUE	DEPOSITS	Payments	Change in Market Value	NET CHANGE IN VALUE	MONTH ENDING VALUE
JUNE	X3250	Debt Service	8,559,491.76	579,738.54	(3,018,371.88)	11,516.09	(2,427,117.25)	6,132,374.51
	X3251	Construction	866.94	-	-	-	0.53	867.47
	X3252	Debt Service Reserve	6,950,021.30	-	-	23,655.59	23,655.59	6,973,676.89
	X9279	Expense Account	16,079.32	-	-	-	-	16,079.32
	X4118-0	2022A DSF	-	304,864.26	-	-	-	304,864.26
	X4118-1	2022A Issuance	18,119.92	-	-	-	-	18,119.92
	<b>Totals</b>		<b>17,998,876.10</b>	<b>2,384,602.80</b>	<b>(5,255,345.35)</b>	<b>36,058.99</b>	<b>(2,834,683.56)</b>	<b>15,164,192.54</b>

## BANK ON BUFFALO- 2643

### Treasury Reconciliation FY 2022

<u>MONTH</u>	<u>STARTING VALUE</u>	<u>DEPOSITS/WITHDRAWALS</u>	<u>TRANSFERS</u>	<u>CHANGE IN VALUE</u>	<u>MONTH ENDING VALUE</u>	<u>PY MONTH ENDING VALUE</u>
JAN	15,446,992.31	(9,571.87)	-	(596.27)	15,436,824.17	17,497,998.15
FEB	15,436,824.17	(2,623.55)	-	(848.44)	15,433,352.18	17,497,884.90
MAR	15,433,352.18	(2,621.85)	-	(594.63)	15,430,135.70	17,496,366.58
APR	15,430,135.70	(2,367.56)	-	(3,214.61)	15,424,553.53	17,488,479.16
MAY	15,424,553.53	(5,241.30)	-	1,857.77	15,421,170.00	17,470,018.06
JUN	15,421,170.00	(2,451.10)	-	(21,150.71)	15,397,568.19	15,471,993.88
JUL	15,397,568.19	(2,508.87)	-	3,735.74	15,398,795.06	15,457,966.34
AUG	15,398,795.06	-	-	(76,372.61)	15,322,422.45	15,461,635.16
SEP	15,322,422.45	(13,125.00)	-	(76,079.18)	15,233,218.27	15,449,981.80
OCT	15,233,218.27	(34,121.85)	-	(24,448.91)	15,174,647.51	15,444,969.98
NOV	15,174,647.51	(11,500.52)	-	66,497.67	15,229,644.66	15,449,882.33
DEC	15,229,644.66	-	-	-	15,229,644.66	15,446,992.31
FY TOTAL		(86,133.47)	-	(131,214.18)		

NFWB Live  
**Budget Amendments Report**

From Date: 11/1/2022 - To Date: 11/30/2022

Account	G/L Date	Journal	Description	Increases	Decreases	Amended Balance
Fund: FA Water Board - Water						
Department: 1990 Contingency Account						
Sub Department: 0000 .						
0449.599 - Undesignated Services				Amended Balance as of: 11/1/2022		\$35,000.00
	11/08/2022	2022-00003436	TRANSFER FROM CONTINGENCY TO TOOLS & MACHINE PARTS	\$0.00	\$5,000.00	\$5,000.00
				\$0.00	\$5,000.00	\$30,000.00
Sub Department: 0000 . Totals:				\$0.00	\$5,000.00	
Department: 1990 Contingency Account Totals:				\$0.00	\$5,000.00	
Department: 8330 Purification						
Sub Department: 0200 Maintenance						
0419.005 - Tools & Machine Parts				Amended Balance as of: 11/1/2022		\$65,000.00
	11/08/2022	2022-00003436	TRANSFER FROM CONTINGENCY TO TOOLS & MACHINE PARTS	\$5,000.00	\$0.00	\$75,000.00
				\$5,000.00	\$0.00	\$70,000.00
Sub Department: 0200 Maintenance Totals:				\$5,000.00	\$0.00	
Department: 8330 Purification Totals:				\$5,000.00	\$0.00	
<b>Fund Totals: Water Board - Water</b>				\$5,000.00	\$5,000.00	
Fund: GA Water Board - Sewer						
Department: 1990 Contingency Account						
Sub Department: 0000 .						
0449.599 - Undesignated Services				Amended Balance as of: 11/1/2022		(\$6,000.00)
	11/14/2022	2022-00003516	TRANSFER FUNDS FOR ADDITIONAL TESTING	\$0.00	\$10,000.00	\$4,343.00
				\$0.00	\$10,000.00	(\$16,000.00)
Sub Department: 0000 . Totals:				\$0.00	\$10,000.00	
Department: 1990 Contingency Account Totals:				\$0.00	\$10,000.00	
Department: 8120 Sewers						
Sub Department: 4900 Collection System						
0419.006 - Construction/Repair				Amended Balance as of: 11/1/2022		\$135,000.00
	11/02/2022	2022-00003353	TRANSFER TO COMPLETE WWTP PROJECTS	\$50,000.00	\$0.00	\$265,000.00

NFWB Live  
**Budget Amendments Report**  
 From Date: 11/1/2022 - To Date: 11/30/2022

Account	G/L Date	Journal	Description	Increases	Decreases	Amended Balance
Fund: GA Water Board - Sewer						
Department: 8120 Sewers						
Sub Department: 4900 Collection System						
0419.006 - Construction/Repair				Amended Balance as of: 11/1/2022		\$135,000.00
	11/17/2022	2022-00003575	TRANSFER TO COVER PROJECTS:GPS TUNNEL, WTP CONFERENCE ROOM	\$50,000.00	\$0.00	\$315,000.00
				\$100,000.00	\$0.00	\$235,000.00
Sub Department: 4900 Collection System Totals:				\$100,000.00	\$0.00	
Department: 8120 Sewers Totals:				\$100,000.00	\$0.00	
Department: 8130 Sewage Trtmt/Disposal						
Sub Department: 0100 Operations						
0419.024 - Hypochlorite Solution				Amended Balance as of: 11/1/2022		\$7,500,000.00
	11/02/2022	2022-00003353	TRANSFER TO COMPLETE WWTP PROJECTS	\$0.00	\$50,000.00	\$7,196,838.00
	11/17/2022	2022-00003575	TRANSFER TO COVER PROJECTS:GPS TUNNEL, WTP CONFERENCE ROOM	\$0.00	\$50,000.00	\$7,146,838.00
				\$0.00	\$100,000.00	\$7,400,000.00
Sub Department: 0100 Operations Totals:				\$0.00	\$100,000.00	
Department: 8130 Sewage Trtmt/Disposal Totals:				\$0.00	\$100,000.00	
Department: 8145 Laboratory						
Sub Department: 5220 Environmental Lab						
0444.000 - Repair Of Equipment				Amended Balance as of: 11/1/2022		\$30,000.00
	11/14/2022	2022-00003516	TRANSFER FUNDS FOR ADDITIONAL TESTING	\$0.00	\$10,000.00	\$20,000.00
				\$0.00	\$10,000.00	\$20,000.00
0449.599 - Undesignated Services				Amended Balance as of: 11/1/2022		\$51,500.00
	11/14/2022	2022-00003516	TRANSFER FUNDS FOR ADDITIONAL TESTING	\$20,000.00	\$0.00	\$71,500.00
				\$20,000.00	\$0.00	\$71,500.00
Sub Department: 5220 Environmental Lab Totals:				\$20,000.00	\$10,000.00	
Department: 8145 Laboratory Totals:				\$20,000.00	\$10,000.00	

# Budget Amendments Report

From Date: 11/1/2022 - To Date: 11/30/2022

<u>Account</u>	<u>G/L Date</u>	<u>Journal</u>	<u>Description</u>	<u>Increases</u>	<u>Decreases</u>	<u>Amended Balance</u>
<b>Fund Totals: Water Board - Sewer</b>				\$120,000.00	\$120,000.00	
<b>Grand Totals:</b>				\$125,000.00	\$125,000.00	

BANK PAID DATE	Req #	Invoice Date	PP # of #	VENDOR	Project Name	DESCRIPTION	INVOICE	AMOUNT	CIP FUNDING ACCOUNT
11/10/2022	2022-203	4/1/2022	4	RB Uren	WWTP Old Lime System Demolition	Lift Rentals	22488A-1/22488B-1	\$ 9,300.00	WWTP-14.2
11/10/2022	2022-204	10/6/2022	1	TI Sales	Meter replacement & Upgrade	New Meters	INV0149263	\$ 34,573.32	C-2
11/10/2022	2022-205	9/23/2022	1	Hoicim	Parking Lot Upgrade WWTP	Parking Lot Upgrade WWTP	Numerous	\$ 9,569.82	WWTP-17
11/10/2022	2022-206	9/30/2022	15	CIR Electrical Construction	Screenings & Grit Transport	Electrical	45604	\$ 2,012.56	WWTP-3
11/10/2022	2022-207	9/30/2022	3	CIR Electric	Replacement of critical Heating & Ventelation Equipment	HVAC Electrical	45490	\$ 4,822.82	WWTP-7
11/10/2022	2022-208	10/10/2022	N/A	CPL	Combined Projects-Misceleneous	Professional Services-Capital Work Management	85719	\$ 25,239.00	C-5
								\$ 85,517.52	



## Monthly O&M Report For the Month of November 2022

### 1. Treatment & Plant Maintenance

#### 1.1. Water – Robert Rowe, updated 12/07/2022.

#### OPERATIONS AND MAINTENANCE

Total water production for the month of November was 546 million gallons. The average daily water production was 18.2 million gallons (1 million gallons lower than Nov. 2021). The plant data summary table is included below for your reference.

#### 2022 TOTALS AND AVERAGES

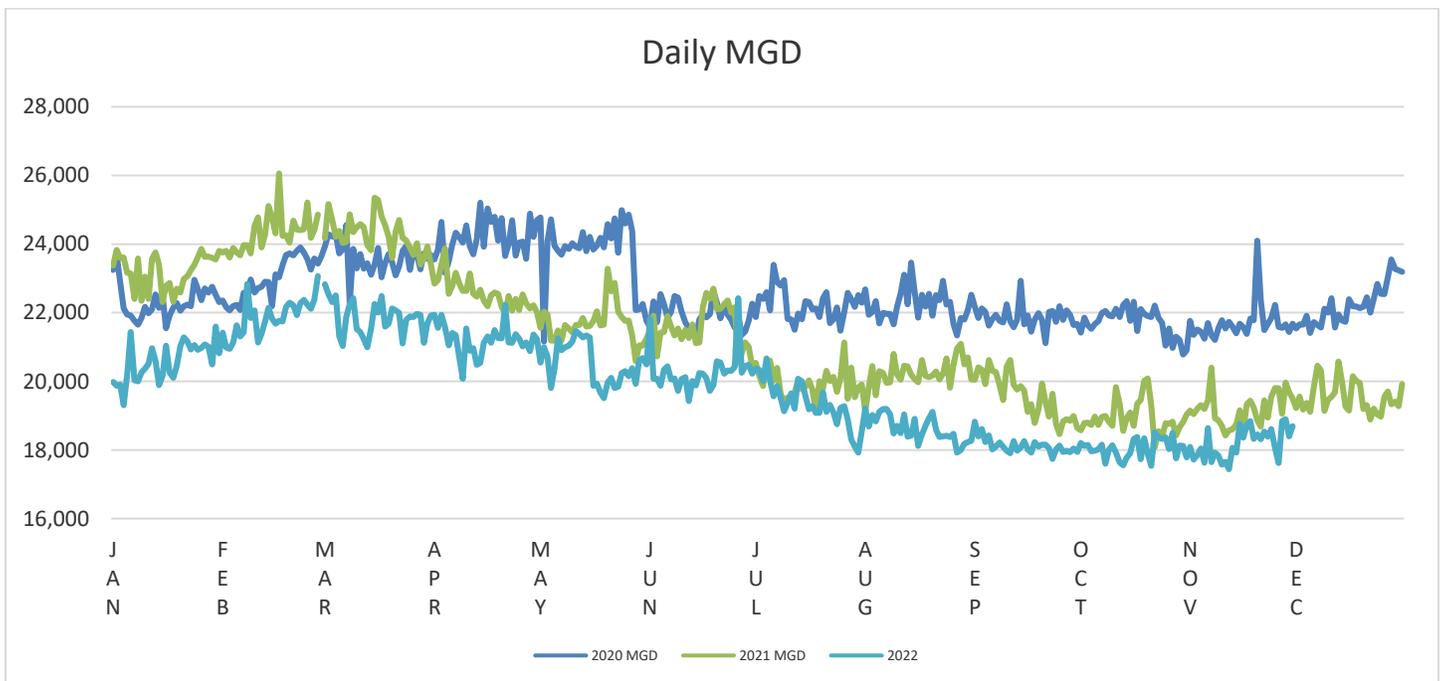
	R/W	PRE CL2	PACL	H2SiF6	PO4	POST CL2	F/W 1000 GAL/ DAY
	PUMPAGE	LBS	LBS	LBS	LBS	LBS	
JAN	637,659	6204	121300	15499	1680	4054	20570
FEB	612,048	6616	111900	15155	1682	3718	21859
MAR	677,306	7211	139500	17187	1854	4264	21849
APR	636,257	7744	116500	15914	1757	3999	21209
MAY	635,991	7910	108200	16438	1732	4341	20516
JUN	608,333	8066	82900	16195	1625	4035	20278
JUL	600,130	8528	89200	16400	1606	4134	19359
AUG	577,218	8690	95700	15248	1728	3748	18620
SEP	543,695	8185	95900	13682	831	3452	18123
OCT	559,128	6949	100100	13280	1548	3352	18036
NOV	545,795	6661	107800	13006	1495	3416	18193
DEC							
<b>TOTAL</b>	<b>6633560</b>	<b>82764</b>	<b>1169000</b>	<b>168004</b>	<b>17538</b>	<b>42513</b>	<b>218611</b>



**FOR COMPARISON: 2021 TOTALS AND AVERAGES**

	R/W	PRE CL2	PACL	H2SiF6	PO4	POST CL2	F/W 1000 GAL/ DAY
	PUMPAGE	LBS	LBS	LBS	LBS	LBS	
JAN	719125	6987	157000	18691	1968	3939	23198
FEB	681002	6389	150200	18097	1847	3998	24322
MAR	752361	7210	177400	19096	1994	4684	24270
APR	677021	6706	129000	15693	1746	4322	22567
MAY	672042	7449	120700	15869	1819	4293	21679
JUN	647984	7631	96900	14000	1772	4054	21599
JUL	618489	8800	93200	13164	1695	4055	19951
AUG	627495	9628	101200	13459	1696	3997	20242
SEP	587289	8881	105200	12509	1704	3361	19576
OCT	586999	8063	109800	12925	1700	3349	18935
NOV	575545	6763	112700	13599	1692	3294	19185
DEC	605715	6680	136400	14584	1665	3620	19539
<b>TOTAL</b>	<b>7751067</b>	<b>91187</b>	<b>1489700</b>	<b>181686</b>	<b>21298</b>	<b>46966</b>	<b>255063</b>

**Chart Comparing Daily Finished Water Flows, 2022 Versus Past Years**





## 2022 ANALYTICAL RESULTS

	RAW TURB NTU	RAW pH	PRE Cl2 RES.mg/l	POST Cl2 RES.mg/l	EFF TURB NTU	EFF pH	F. RES mg/l
JAN	10.3	8.1	0.57	1.23	0.062	7.5	0.72
FEB	6.8	8.0	0.59	1.25	0.050	7.5	0.69
MAR	4.5	8.1	0.58	1.23	0.061	7.6	0.67
APR	7.8	8.1	0.56	1.25	0.062	7.6	0.67
MAY	2.6	8.0	0.55	1.25	0.063	7.6	0.70
JUN	2.3	7.9	0.57	1.27	0.057	7.6	0.72
JUL	2.5	7.9	0.50	1.26	0.063	7.6	0.71
AUG	0.8	8.1	0.51	1.23	0.046	7.7	0.70
SEP	1.5	8.2	0.55	1.24	0.045	7.7	0.70
OCT	1.7	8.2	0.57	1.22	0.039	7.7	0.70
NOV	5.1	8.1	0.55	1.24	0.051	7.5	0.68
DEC							
AVG	4.2	8.1	0.56	1.24	0.054	7.6	0.70

### Operations and Maintenance Highlights

The need for a booster pump system to aid and back-up our Chlorine dosing into the raw water has been discussed and has become more evident. We have started the process of sourcing equipment and drawing up plans.

\*We have received approval to move forward from DOH\*

NY State has granted approvals for the state drinking water fluoride program.

Freeze Thaw Beds 1 & 2 have been consolidated into bed 1. Repairs were made to bed 2 and it is now in service. This leaves bed 1 very full and in need of drying and solids removal to determine if repairs are necessary, as Operating Engineers reported that there is likely damage to the liner.

Operator David Roeser has reached his 5 year anniversary with NFWB. With his experience and certifications, he is now eligible for a Senior Operator position. Dave runs shift #1, and shows dedication, dependability, and attention to detail in his work. Thank you for your efforts, Dave!

Fall basin and tank cleanings are now complete, with all sedimentation basins, sludge, and supernatant tanks complete.



**Wastewater – Dennis Kirkland, Acting Chief Operator- updated 12/14/2022**  
**November 2022**

**Project #1 (Sedimentation Basins and Screening)** Sed basin #5 is majority done other than a few punch-list items and SCADA incorporations. The level sensor, floating baffle. Once the tipping pole sensors and level sensor is added we can incorporate everything into SCADA. Sed Basin #4 is will be done in mid- December, just need to link a few chain and flights together and place the screws in the troughs.

**Project #2 (GPS)** All gorge pumps are up and running. The few things left need to be discussed with GHD, CIR and Plant IQ. They still need to incorporate the HOA Switch and Speed POT. Next month we should be moving forward with the piping of the seal water from the pumps to the wet wells and that will eliminate the concerns of the submersible pump being able to handle the flow.

**Project #3 (Poly, Grit Conveyor, BFP (Belt Filter Press) Controls-** The BFP portion is held up on materials and approvals of change orders. The Grit conveyor is in operation and both Operations and Maintenance have received training. Polymer they have the booster pump concrete pad poured and our Maintenance crew piped in what is needed for install. We are working on cleaning up the poly basement and poly room for when they place the concrete flooring it will already be cleaned.

**Project #5 (Electrical)** At June Board meeting Ferguson was authorized to replace transformers for two power centers, other portions of Project 5 are being re-evaluated by CPL. Timeline for transformer replacement not yet final.

**Project #7 (HVAC)** Work continues with the ductwork throughout the facility. We had some necessary changes that needed to be made. The generator unit has been installed outside the facility waiting on the foliage to come in and place around generator for aesthetics. They are now working above the Main wet well area to improve the ventilation. Also chose the location of where the control PC will be for the units.

**Project #9 & #11 (Inside/Outside Piping)** Project #9 is completed. Danforth finished all the replacement valves in the thickened sludge building and all the temporary piping is set up in the basement of the facility. We started back up on Project 11 and the piping to and from the pumps to the sludge building. The temporary safety railing was put in place by our carpenters and project is moving along nicely.

**Project #10 (Kaman – Overall Controls)** Kaman is still waiting for components for the controls that will be added to the BFP and incorporating them. Capabilities will be added to the HMI (Human Machine Interfaces) screens at each of the three belt filter presses. Kaman teamed up with Plant IQ at the GPS to give us automation of Gorge Pump #1/#2/#3 at the WWTP (Wastewater Treatment Plant), all vibration and temperature sensors read back to the plant. Kaman would be involved in the HOA switch on each Gorge Pump if that moves forward. Kaman is waiting on the level sensor and tipping pole sensors to move forward with project #1 Sed basins incorporation.

In conclusion, everything at the WWTP has been moving forward without issue. Conditions have never been better, and morale has never been higher. Each department has put in time and effort to make sure all the projects and upgrades to the facility are getting done the way we have envisioned and in a timely manner.



WASTEWATER TREATMENT PLANT OPERATING DATA															
2022	FLOWS			Chlorine		Rainfall	SLUDGE		Polymer		FeCl3	LIME	H2O2	NaOCl	Grit
	INF/EFF	CBE	GPS	Residual	NET		LANDFILL	BFP	PRIM						
MONTH	MGD	MGD	MGD	PPM	inches	(Tons)		(Lbs)		(gals.)	(Tons)	(gals.)	(gals.)	(Tons)	
January	21.28	32.04	12.47	2.0	0.8	1341.0	372.0	1336.0	3117.0	21140	63.6	0	202700	19.6	
February	28.61	41.96	13.22	1.7	1.2	1455.0	338.0	1383.0	3462.0	24200	67.6	0	188370	22.3	
March	27.56	40.99	14.66	2.0	2.3	946.0	300.0	1119.0	3528.0	24240	42.4	0	252175	11.4	
April	24.94	40.19	13.96	1.8	1.1	956.0	276.0	1642.0	3306.0	23620	54.6	0	289230	13.8	
May	22.80	37.90	13.27	1.6	1.9	1243.0	371.0	1594.0	3686.0	24980	57.0	0	345240	14.2	
June	21.05	32.89	13.74	1.4	1.6	940.0	273.0	1357.0	3415.0	22940	25.4	0	414870	7.5	
July	19.95	32.17	12.33	1.3	2.5	1197.0	355.0	1980.0	3513.0	24020	76.1	0	392060	10.3	
August	20.99	32.98	14.39	1.4	2.4	1164.0	356.0	1707.0	6883.0	22820	44.9	0	390270	13.6	
September	21.60	34.36	11.49	1.1	1.7	1160.0	345.0	1478.0	5470.0	20260	56.5	0	377060	3.4	
October	23.31	37.38	11.98	1.2	1.8	1168.0	319.0	1922.0	6336.0	22280	61.7	0	420600	7.2	
November	23.96	37.96	12.03	1.7	1.5	1043.0	287.0	1532.0	6312.0	21750	80.0	0	273220	11.1	
December															
<b>Totals</b>	<b>23.28</b>	<b>36.44</b>	<b>13.05</b>	<b>1.6</b>	<b>18.7</b>	<b>12613.0</b>	<b>3592.0</b>	<b>17050.0</b>	<b>49028.0</b>	<b>252250</b>	<b>629.8</b>	<b>0</b>	<b>3545795</b>	<b>134.4</b>	

**Explanation of data abbreviations:**

- |                                  |                            |
|----------------------------------|----------------------------|
| INF: Influent                    | BFP: Belt Filter Press     |
| EFF: Effluent                    | PRIM: Primary              |
| CBE Carbon Bed Effluent          | FeCl3: Ferric Chloride     |
| GPS: Gorge Pump Station          | H2O2: Peroxide             |
| MGD: Millions of Gallons per Day | NaOCl: Sodium Hypochlorite |
| PPM: Parts Per Million           |                            |

**2021 Data for Comparison Purposes**

WASTEWATER TREATMENT PLANT OPERATING DATA															
2021	FLOWS			Chlorine		Rainfall	SLUDGE		Polymer		FeCl3	LIME	H2O2	NaOCl	Grit
	INF/EFF	CBE	GPS	Residual	NET		LANDFILL	BFP	PRIM						
MONTH	MGD	MGD	MGD	PPM	inches	(Tons)		(Lbs)		(gals.)	(Tons)	(gals.)	(gals.)	(Tons)	
January	32.12	41.31	13.50	2.2	0.3	2421.0	643.0	3664.0	4398.0	27380	121.8	0	367350	18.8	
February	23.60	43.20	12.12	1.8	0.6	1721.0	518.0	2391.0	3107.0	19700	45.7	0	424560	12.0	
March	24.32	45.57	12.00	2.0	0.7	2805.0	816.0	3397.0	3430.0	21380	79.0	0	301700	41.2	
April	24.18	45.25	12.28	1.8	0.7	2150.0	582.0	2800.0	3335.0	22160	86.1	0	478895	26.0	
May	20.59	42.66	11.12	1.6	0.8	1674.0	463.0	2334.0	3345.0	22500	69.8	0	697120	46.4	
June	20.69	41.20	11.28	1.6	0.7	1735.0	524.0	2641.0	3363.0	21800	67.8	810	763300	65.3	
July	26.76	48.23	12.75	1.4	6.1	1516.0	455.0	2544.0	3629.0	24780	55.7	6140	711170	15.9	
August	19.49	36.87	11.21	1.3	0.4	1544.0	440.0	2846.0	3368.0	21420	91.6	0	739870	15.6	
September	24.36	43.10	12.14	1.9	0.7	1775.0	533.0	2943.0	3931.0	24840	100.1	0	817405	23.5	
October	25.66	44.13	12.74	1.9	2.2	1281.0	394.0	1753.0	3854.0	25100	82.4	0	744630	15.8	
November	24.03	35.73	12.71	2.0	1.0	1624.0	470.0	1899.0	3573.0	23360	77.6	0	431430	11.0	
December	25.02	35.86	13.47	1.7	0.5	1418.0	409.0	1351.0	3470.0	23660	42.9	0	288885	14.4	
<b>Totals</b>	<b>24.24</b>	<b>41.93</b>	<b>12.28</b>	<b>1.8</b>	<b>14.7</b>	<b>21664.0</b>	<b>6247.0</b>	<b>30563.0</b>	<b>42803.0</b>	<b>278080</b>	<b>920.5</b>	<b>6950</b>	<b>6766315</b>	<b>305.9</b>	



**2.1. Sewer Collection & Water Distribution Michael Eagler, updated 12/7/2022**

Sewer Collections System										
2022	Service Calls	Flushing (Feet)	UFPO Responses	Receivers Cleaned	Bypass Pumping (Hours)	Catch Basins	Manholes	Main	Connections	Lateral
January	88	17650	329	249	0.00	3	6	0	3	2
February	106	17390	348	121	388.60	1	1	1	1	1
March	148	26000	973	171	5.1	2	7	2	1	0
April	143	47961	1023	8	0	8	5	1	8	0
May	115	11,720	987	11	0	5	3	1	5	0
June	192	69474	1099	15	0	3	4	8	4	5
July	157	17951	798	202	4	7	1	2	4	3
August	194	54120	882	71	8	1	5	1	3	2
September	114	22349	1094	62	0.6	5	6	2	5	0
October	137	32410	1143	57	3.5	4	3	1	4	0
November	105	16945	691	235	35.15	3	4	3	4	2
December										
<b>Totals</b>	<b>1395</b>	<b>333970</b>	<b>9367</b>	<b>1202</b>	<b>444.95</b>	<b>42</b>	<b>44</b>	<b>21</b>	<b>39</b>	<b>15</b>

Water Distribution																
2022	Main Break	Svc. Leaks	Curb Box Reset	Valve Repaired	Valve Replaced	Hydrant Replaced	Hydrant Repaired	Hydrant Flow	Hydrant Flush-Winterized	Hydrant Leaks	Hydrants out of Svc.	Misc. Svc. Calls	Concrete	Landscape	UFPO	
January	5	8	7	3	0	8	3	0	76	0	0	88	0	0	329	
February	10	7	11	2	2	2	1	0	88	0	0	106	0	0	348	
March	15	8	7	1	0	1	3	0	0	0	0	149	4	0	973	
April	3	9	10	3	3	1	4	5	27	0	0	143	23	0	1023	
May	3	7	17	0	4	1	2	111	115	0	1	115	9	54	987	
June	2	9	7	1	5	1	4	105	41	0	0	192	7	5	1099	
July	11	9	10	6	5	5	5	85	73	0	0	157	9	36	798	
August	10	11	8	8	5	2	6	87	83	0	0	194	12	22	882	
September	4	9	13	3	0	3	2	28	337	0	0	114	6	14	1094	
October	3	9	7	3	2	9	4	37	289	0	0	137	18	13	1143	
November	2	6	9	6	2	5	6	0	136	0	0	105	7	4	691	
December																
<b>Totals</b>	<b>68</b>	<b>92</b>	<b>106</b>	<b>36</b>	<b>28</b>	<b>39</b>	<b>40</b>	<b>492</b>	<b>1265</b>	<b>0</b>	<b>1</b>	<b>1395</b>	<b>148</b>	<b>158</b>	<b>9367</b>	



### **3. Analytical Services**

#### **3.1 Water Laboratory – Jordan Boyd, updated 12/6/2022**

##### **1. New York State Water Sanitary Code Part V Monitoring/Reporting**

- November samples have been collected & analyzed in-house for TOC, DOC & UV254 on both finished and source water. All samples were in compliance.
- Monthly collection and reporting for the Distribution System were conducted for November. 60 Samples for Free Chlorine, Turbidity, Phosphate, Fluoride, Standard Plate Count & Mf Coliform. Those results were satisfactory and were within reporting limits.

##### **2. In-house/DEC Monitoring**

- All in-house monitoring for bacteriology and chemistry have been within normal limits for November.
- The monthly SPDES sample collected from the freeze thaw bed was within normal limits for November.
- No community complaint or water main breaks were sampled in November.
- Samples analyzed for 2022: 12,318.

##### **3. Laboratory Concerns**

- The Chemistry Laboratory Analyzed 34 Trihalomethanes and 34 Haloacetic Acids samples for 17 Municipalities of Niagara County. The Laboratory also analyzed 9 samples for Total Organic Carbon and 9 Wet Chemistry Samples for City of Lockport and Town of Tonawanda, 3 Wet Chemistry samples from the Village of Lewiston, and 1 Total Suspended Solids sample from Niagara County Water District.
- The Microbiology lab analyzed 12 samples from the Aquarium of Niagara's indoor and outdoor pools, 3 samples from the Village of Lewiston. All results were reported to the representative contacts- Revenue created in 2022 is \$31,433.00

#### **3.2 Wastewater Laboratory - Brian Eldridge 12/14/2022**

1. The data for November's State Pollutant Discharge Elimination System (SPDES) report is currently being compiled.
2. Bench testing for the Primary Treatment and Sludge Dewatering Polymer bids was conducted.



**4. Customers & Compliance**

**4.1. Meter Shop – Bob Reid Updated 12/9/22**

MONTH:	WORK ORDERS	STOPPED METERS	Registers Replaced	SCRAPPED METERS	INDUSTRIAL METERS READ	RESIDENTIAL METERS READ
JANUARY	96	0	7	0	0	7191
FEBRUARY	89	0	9	0	0	5243
MARCH	115	5	7	0	565	5443
APRIL	115	6	4	0	0	7191
MAY	108	4	6	0	0	5242
JUNE	150	3	6	0	565	5435
JULY	105	3	3	0	0	7187
AUGUST	116	1	7	0	0	5242
SEPTEMBER	114	4	5	0	565	5439
OCTOBER	137	0	13	0	0	7187
NOVEMBER	96	1	8	0	0	5241
DECEMBER						
<b>TOTAL</b>	<b>1141</b>	<b>27</b>	<b>75</b>	<b>0</b>	<b>1130</b>	<b>66041</b>

**METER READINGS:**

DISTRICT 3	B.REID	M.MACRI	V.Virtuoso	J.PAUL	F.DERUBEIS	TOTAL
11/1/22	674			843		1517
11/2/22	1539			1288		2827
11/3/22	529			338		867
11/4/22				30		30
<b>TOTAL</b>	<b>2742</b>			<b>2499</b>		<b>5241</b>

**Shop read 5241 Residential Meters.**



#### **4.2. Industrial Pretreatment Monitoring / Enforcement – Joel Paradise updated 12/01/2022**

**Hauled Waste Program** – The Hauled waste moratorium imposed on August 16<sup>th</sup>, 2017 is still in effect. All indications are that this program will not be reinstated.

**Investigations/Enforcement** – All inspections have been conducted and Notices of Violation have been issued as required.

#### **SIU Updates:**

1. All SIU (Significant Industrial User) whose discharge permits nearing expiration in the next several months have been sent their renewal applications for our review and eventual reissuance of their NFWB wastewater discharge permit. This is an ongoing and continuing process.  
The Cross Connection Inspectors work of conducting his inspections as a function of building sales, monitoring the annual tests results of all back flow prevention devices, along with updating our database and filing/archiving the hard copies has been progressing on schedule.
2. SIU discharge permits are being continually updated using the most recent data generated by Steve Stewart to verify / adjust discharge limits.
3. The RFP for the Local Limits re-evaluation will be released in late 2022 or early 2023. Work on the RFP document commenced in 2019 but its release was delayed due to the need for technical assistance in preparing the RFP itself and the workload of several of the consultants believed to be likely proposers, and subsequently has been further delayed by disruptions resulting from the COVID-19 pandemic. Barring the cost of the study exceeding available funds, a local limits evaluation will be completed early in 2023. (revised 11/07/2022)
4. NFWB and the DEC continues to closely monitor Cascades which has made significant progress getting their ETP back working as designed and appears to have turned the corner with their discharge permit compliance. The weekly report submitted by Cascades on July 5<sup>th</sup>, 2022 indicated that they have maintained effluent discharges for SOC well below their discharge permit limits consistently now since June 10<sup>th</sup>, 2022 although there have been several instances where the TSS valued on the discharge to the WWTP were above their discharge permit limits. We continue to monitor the situation through site visits, sampling, and their required weekly progress reports. We are in the process of writing an Order on Consent and assessing violations and associated fines. The consolidation of discharge permits #50 and #73 is almost ready to be issued.
5. The 2021 Annual IPP Report to the USEPA, copied to NYSDEC has been completed , mailed out, and was received in a timely fashion. We are still awaiting their comments.



**4.3. Industrial Pretreatment Monitoring / Enforcement (continued) updated 12/01/2022**

6. SIU #59 North American Hoganas (NAH) ceased the “wash process” on Friday, July 1<sup>st</sup>, 2022. It was this “wash process” that prompted NAH to renew their discharge permit in March 2022. As of that July 1 date the plan was to complete the sale of the property and for NAH to vacate the property. At North American Hoganas’ request, the NFWB terminated their discharge permit (#59) with the NFWB thus NAH will no longer be classified as an SIU. The sale of the property is pending but has been delayed beyond what was anticipated and as of November 4<sup>th</sup> it has yet to be finalized.

7. Negotiations with the DEC, the NFWB, and Olin Chemical to accept excess process brine wastewater from SIU #23 were commenced on Monday, June 27<sup>th</sup>, 2022. It was agreed at that meeting at Olin on Monday, June 27<sup>th</sup> that this brine wastestream would not be compatible for treatment at the WWTP at this time. It was instead recommended that the possibility of discharging it to their SPDES discharge point 008 be looked into. The DEC will discuss this situation with the Buffalo office and with DEC officials in Albany and have a preliminary report of those discussions for Olin by August 1<sup>st</sup>, 2022. As of November 30<sup>th</sup> Olin had still not received an update from the DEC.

8. On Thursday, November 8<sup>th</sup> we collected the required quarterly collection system BHC samples. As in prior BHC sampling events, the samples were delivered to the Lab and sent out for analysis.

9. The current TAM Ceramics Group, LLC discharge permit will expire on December 4<sup>th</sup>, 2022. The application for renewal has been received and the renewed discharge permit was issued on November 22, 2022 and will be in effect on December 4<sup>th</sup>, 2022.

10. On Monday, November 14<sup>th</sup> we collected Mercury samples which are required semi-annually (2X per year) in the NFWB sewer collection system. As in prior Mercury sampling events, the samples were then delivered to the Lab, logged in and sent out for analysis.



## **5. Support Services**

### **5.1. Safety – Russell DeFranco, Updated 12/14/2022**

1. Employees working with hazardous materials and hazardous waste at of NFWB in process of being fit tested by Niagara Falls Memorial Medical Occupational Health. Upon completion, employees will be issued the appropriate PPE for work assignments.
2. Awaiting layout fire pull alarms to replace smoke detectors at WTP. Require approval by City of Niagara Falls Electrical Inspector and Niagara Falls Fire Department to remove existing smoke detectors for fire pull alarms.

## **6. Technical Services – Doug Williamson, updated 12/8/2022**

1. **LaSalle SSO Abatement Program and Consent Order (R9-20080528-32):**  
**An RFP 2022-01 – Professional Engineering Services for LaSalle Area Sanitary Sewer Evaluation Survey SSES** was advertised and provided to Engineering Consultants on November 10th. A Mandatory Proposal Information Session was held on November 29<sup>th</sup> and an Addendum No.1 was provided to the Consultants in attendance on December 1<sup>st</sup>. **The deadline for sealed proposal submission was extended to December 8<sup>th</sup> by 2 pm.**

We have a second NYSDEC Engineering Planning grant of \$100,000 in place for new Sanitary Sewer Evaluation Surveys in LaSalle along with the engineering report. We also have an NYSDEC WQIP grant of \$800,000 in place for the construction improvements recommended by this engineering report. A revised work plan that included Phase 1, 2 and 3 LaSalle sewer shed work areas was approved by the NYSDEC on May 24<sup>th</sup>. Upon approval of the plan, the NFWB immediately began sanitary sewer cleaning and CCTV work in the approved sewer shed areas. We are planning on revising the current LaSalle consent order for years 12 - 18 and eliminate the remaining work items within the schedule that have a negligible impact on I & I.

2. **NYSDEC Consent Order (R9-20170906-129) WWTP Phase I and II Projects:**  
In November, we continued to support CPL and the design consultants on the WWTP Phase I and II projects and continually work on the grant reimbursements for construction work completed. Monthly construction progress meetings were held for ongoing projects.  
**Project 1** Sedimentation Basins and Scum Collection System Modification – A formal progress meeting was last held on August 16th. Construction at sedimentation basin no.4 is still ongoing.  
**Project 2** GPS Rehabilitation - Final walk through meeting was held on August 16<sup>th</sup>. Onsite operational meetings, close-out and punch list items continued to be addressed in November.  
**Project 3** Screenings and Grit Transport Equipment Improvements – progress meeting was held on November 15<sup>th</sup> regarding the new booster pump. Construction is ongoing.  
**Project 5** Electrical System Improvements – Phase II work has been proceeding with Ferguson Electric. Meeting was held on November 9<sup>th</sup> to discuss status.



**Project 7** Replacement of Critical Heating & Ventilation Equipment – Progress meeting was last held on August 23<sup>rd</sup>. Weekly inspection progress reports have been provided and construction is ongoing.

**Project 10** SCADA Improvements – Change order to scope of work provided on December 7<sup>th</sup> for additional Project No.2 Gorge Pump Station work.

**Project 11** Exterior Piping Improvements – progress meeting was held on November 16<sup>th</sup> and December 7<sup>th</sup>. Change order construction work on exterior sludge lines is ongoing with anticipated completion at the end of December 2022.

**Project 12** WWTP Intermediate Pumps Assessment – progress meeting was last held on site on September 27<sup>th</sup>. The assessment is ongoing and an engineering report from GHD is anticipated soon.

3. **NYSDEC WWTP SPDES Permit NY0026336 and Consent Order (R9-20170906-129)**

**Items:**

In November, we continued to address the WWTP SPDES Permit NY0026336 and Consent Order (R9-20170906-129) items.

The WWTP NetDMR was approved on December 7<sup>th</sup>.

4. **WWTP and Chemical Bulk Storage Tanks:**

In November, we continued addressing corrective actions due to the Notice of Violation from the NYSDEC for the WWTP Chemical Bulk Storage (CBS).

We are still hoping to utilize some of the remaining **WWTP Phase II grant** money (requires NYSDEC approval) to remove and **replace sodium hypochlorite tank #216** (14,750 gallons). The (2) ferric chloride tanks #214 and #215 (7,000 gallons each) may be a more difficult task. Draft drawings and specifications have been assembled for the RFP.

5. **Town of Niagara Sewer Flow Monitoring**

The 2022 Fall Town of Niagara flow monitoring for the period of 9/8/22 (flow meter installs) to 10/10/22 (flow meter removals) was completed. The 2022 average flow results were provided to the Town of Niagara on October 20<sup>th</sup>. 2023 billing rate has been calculated with 8.9% rate increase.

We are looking into renegotiating the Agreement in early 2024.

6. **Stormwater Management**

WNYSC meeting was held in November.



7. **Engineering Support**

In November, the engineering department continued to provide engineering and GIS support to NFWB departments, engineering consultants and developers as needed.

In November, attended several Industrial meetings including the new **Linde Electrolyzer Project** water/sewer service and **Cascades** ETP Operating Data discussion.

**Centerpointe Corporate Park** letter regarding adequate water and sewer capacity provided to Wendel on November 8<sup>th</sup>.

8. **Capital Improvement Projects:**

In November, the **5 Year Capital Improvement Plan** project statuses and progress continued to be tracked. Determined potential WWTP projects to be submitted for the remaining balance of the existing WWTP Phase II grant. CPL memo was put together on December 2<sup>nd</sup> regarding **WWTP Phase II Projects** to submit to NYSDEC/EFC for approval.

**Water Projects**

CPL completed design work on the **Whitney Avenue** watermain replacement project. **77<sup>th</sup> Street** watermain replacement project design ongoing.

The **18th Street watermain** - Ontario Avenue to Whitney Avenue construction submittals are ongoing.

The **2021 WIIA Water Grant application** of \$3 million was awarded on April 19<sup>th</sup>, 2022. Water replacement projects are being planned.

The **2022 WIIA grant application for water projects** were submitted by CPL on September 9<sup>th</sup>.

**Sewer Projects**

The NFWB has been performing sanitary sewer cleaning and CCTV work in the approved LaSalle Consent Order sewer shed and other areas. The **RFP 2022-01** engineering consultant to be determined for **Phase 1 SSES work**.

**WTP Projects**

**Water Treatment Plant Conference room expansion** work was ongoing in November.

**Drinking Water Fluoridation Component 1 (Planning Study for water plant upgrades)**, NYS Division of Family Health Grant #T37250GG, quarter 1 report was submitted on November 7<sup>th</sup>.



**WWTP Projects (additional)**

The **2021 WIIA Sewer (WWTP) Grant application** of \$1,125,000 was awarded on April 19<sup>th</sup>, 2022.

The **2022 WIIA grant application for WWTP and sewer projects** were submitted by CPL on September 9<sup>th</sup>.

**2022 OXIDIZER BUDGET**

BUDGET = \$7,500,000.00 for year

COST = \$4,163,175.70 to date

% USED = 55.51% to date

BUDGET = \$20,547.95 per day avg. \$625,000.00 per month avg.

COST = \$12,464.60 per day avg. \$346,931.31 per month avg.

23.5 Flow (MGD) 334 total days



WWTP DATA		OXIDIZER USAGE				SLUDGE REMOVAL			
MONTH	FLOW (MG)	H2O2 (GAL)	NaOCl (GAL)	GAL PER MG FLOW	TOTAL ESTIMATED COST	LANDFILL SLUDGE (TONS)	SOLIDS THROUGH PUT (%)	FERRIC CHLORIDE (TONS)	LIME (TONS)
Jan-2022	659.8	0	197,600	302	\$233,168.00	386.3	152.1	39.4	73.2
Feb-2022	886.9	0	188,370	240	\$222,276.60	338.3	116.1	45.4	67.6
Mar-2022	854.3	0	252,175	300	\$297,566.50	299.7	129.1	45.5	42.7
Apr-2022	748.2	0	289,230	287	\$341,291.40	276.1	98.3	44.3	54.8
May-2022	709.3	0	345,240	509	\$407,383.20	371.1	131.2	46.8	57.0
Jun-2022	631.7	0	414,870	379	\$489,546.60	273.4	119.8	43.0	25.4
Jul-2022	633.7	0	392,060	636	\$462,630.80	354.7	111.7	45.0	76.1
Aug-2022	642.7	0	390,270	660	\$460,518.60	355.5	140.0	42.8	44.9
Sep-2022	649.6	0	364,480	571	\$430,086.40	332.1	89.1	37.1	55.7
Oct-2022	722.5	0	420,600	619	\$496,308.00	321.6	92.0	41.8	64.3
Nov-2022	718.8	0	273,220	599	\$322,399.60	286.8	102.3	40.8	80.1
Dec-2022									
<b>TOTALS</b>	<b>7,857.5</b>	<b>0</b>	<b>3,528,115</b>	<b>464</b>	<b>\$4,163,175.70</b>	<b>3,595.7</b>	<b>114.2</b>	<b>471.8</b>	<b>641.5</b>

Low value for year

High value for year



**2021 Oxidizer Figures for Comparison:**

**2021 OXIDIZER BUDGET**

BUDGET = \$2,050,000.00 for year

COST = \$3,341,237.44 to date

% USED = 162.99% to date



BUDGET = \$5,616.44 per day avg. \$170,833.33 per month avg.

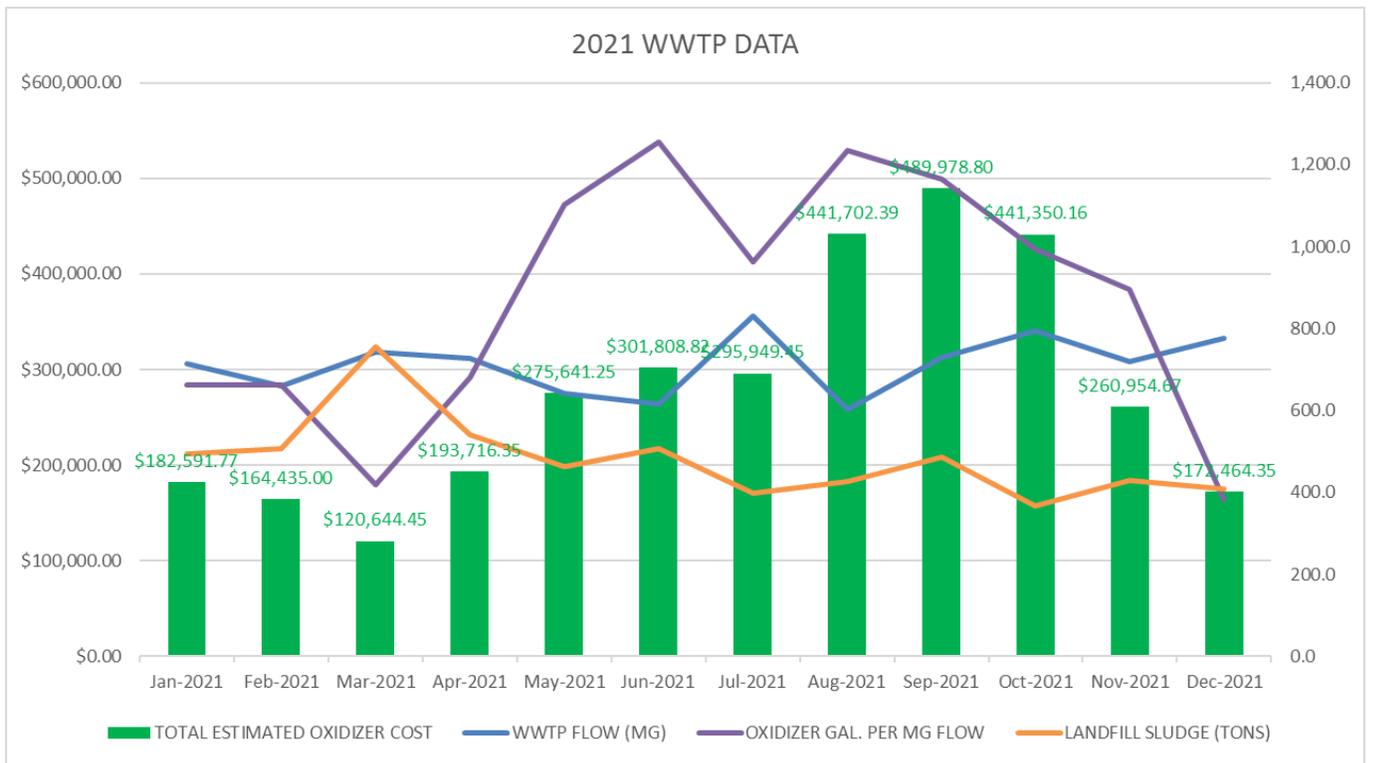
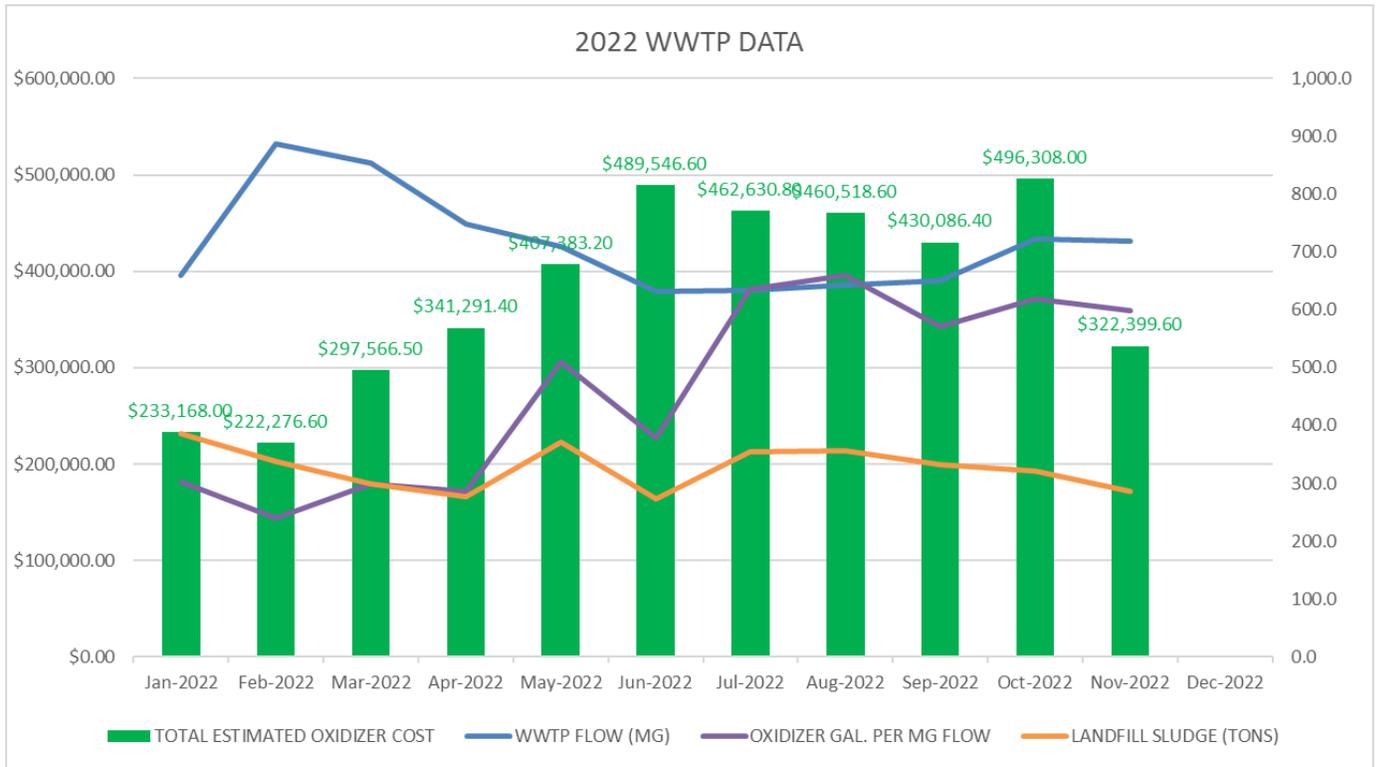
COST = \$9,154.08 per day avg. \$278,436.45 per month avg.

23.4 Flow (MGD) 365 total days

WWTP DATA		OXIDIZER USAGE				SLUDGE REMOVAL			
MONTH	FLOW (MG)	H2O2 (GAL)	NaOCI (GAL)	GAL PER MG FLOW	TOTAL ESTIMATED COST	LANDFILL SLUDGE (TONS)	SOLIDS THROUGH PUT (%)	FERRIC CHLORIDE (TONS)	LIME (TONS)
Jan-2021	714.9	0	461,790	663	\$182,591.77	494.8	88.2	40.7	66.8
Feb-2021	660.8	0	415,870	664	\$164,435.00	507.8	62.0	37.0	42.7
Mar-2021	742.1	0	305,120	419	\$120,644.45	756.2	102.7	40.1	81.9
Apr-2021	726.4	0	489,925	682	\$193,716.35	540.3	94.4	41.8	78.9
May-2021	640.6	0	697,120	1102	\$275,641.25	463.4	125.2	42.2	69.8
Jun-2021	616.1	0	763,300	1256	\$301,808.82	508.3	134.8	39.4	65.4
Jul-2021	831.1	6,020	707,480	964	\$295,949.45	399.2	114.6	46.6	51.7
Aug-2021	604.1	0	739,870	1236	\$441,702.39	426.6	110.1	40.2	90.6
Sep-2021	729.8	0	820,735	1164	\$489,978.80	487.0	100.0	45.4	97.6
Oct-2021	795.4	0	739,280	993	\$441,350.16	366.3	119.1	47.0	80.4
Nov-2021	720.6	0	437,110	895	\$260,954.67	429.8	162.8	43.7	67.2
Dec-2021	775.6	0	288,885	383	\$172,464.35	408.8	180.0	44.4	42.9
<b>TOTALS</b>	<b>8,557.5</b>	<b>6,020</b>	<b>6,866,485</b>	<b>868</b>	<b>\$3,341,237.44</b>	<b>5,788.5</b>	<b>106.1</b>	<b>508.3</b>	<b>836.0</b>

Low value for year

High value for year





## **7. SECURITY REPORT— Russell DeFranco 12/14/2022**

1. Interviewed vendors for Security System in preparation of RFP for WTP & WWTP Security System.
2. Awaiting walk through with stakeholders of Erie County WWTP. Vendor recently installed a security system at Erie County WWTP.
3. Reviewed key inventory at WTP. Addressing deficiencies in stockpile of access keys and inventory control via lock and key vendor.
4. Reviewed key inventory at WWTP. Addressing deficiencies in stockpile of access keys and inventory control via lock & key vendor.

## **8. INFORMATION TECHNOLOGY (I.T.) 12/15/2022**

### **Primary System Statuses**

**VMware Environment** – Joe - No issues to report.

**New World Cloud** – Joe - No issues to report.

**Exchange Office 365** – Joe - No issues to report.

**Network WTP/WWTP/Gorge** – Joe – No Issues to report.

**Network Security** – Joe – All systems secured, no incidents to report.

### **Updates/Issues Addressed/Resolved for the Current Month:** **(Not Included: Daily tasks/User Issues)**

NFWB – We identified and fixed Azure directory synchronization errors that were causing password issues with some users.

WTP – Conference room pole removed, fire alarm wire was relocated and reconnected.

NFWB - Project to replace costly Barracuda backup system with industry leading synology+Veeam+cloud for DR compliance. Yearly savings to switch are approximately \$10,616.54 year.



NFWB – Project to replace outdated Broadcom Antivirus with a cutting edge system by Sophos called Intercept X XDR, This protection system brings 2 layers of security, one being it integrates at the hardware level fully utilizing our Sophos firewalls, offering real time external protection greatly reducing malicious attacks from the outside, Broadcom is old and slow to update against threats and only offers inside protection whereas Sophos does outside and inside and uses AI technologies to detect unknown threats to further enhance protection, Broadcom does not. Network security is key and it is necessary that we move on from the old and utilize the full potential of our Sophos firewalls with this Sophos integrated advanced security system.

NFWB - Ticketing system – we are setting up a system that will allow users from any location to submit tickets that will notify the entire IT group, we will also have the ability to remotely access a user's pc to troubleshoot issues before having to

WTP – NFPD – substation we installed security camera and NVR unit.

#### **Project planning:**

- Exploring options to replace the Verizon Onetalk phone system as the costs keep rising and the system we use as administrators is not performing as it should. Multiple issues have been reported with no resolutions being provided.
- TBD: Explore PA/intercom options using a digital IP based system to address need for alarm or PA system for each plant.
- TBD: Have discussed potential thin client PC deployment hosting options with a vendor. This will allow for very granular control of a PC and also greatly simplify setting up and deploying devices to end users; it's also very cost effective but a lot of pre- planning is required to build departmental images and configure a PXE environment.
- TBD: Wi-Fi – The plan is to setup 2 Wi-Fi networks – one being a production network and the other a guest network on its own VLAN to ensure our network is not accessible. As simple as this is security is the top concern. Wi-Fi may not include internet access in some locations but will allow devices to talk to one another (for example, PC to printer).
- Deployed an RMM “remote management monitoring tool” to patch all NFWB computer operating systems as well as security patches and create a policy to install and/or update 3<sup>rd</sup> party software. The RMM tool software also works as an inventory system so we can easily identify the older computers that need to be replaced or upgraded. Lastly, the software also works as a help desk application for Niagara Falls Water Board employees. This new system will help us improve the service desk by resolving issues and documenting errors much more quickly than previously.



- The IT department has deployed a new antivirus “Sophos” to most of the NFWB computers. We have had some issues installing the software on some older machines. The IT department has been working closely with individuals whose computers are affected.
- On December 3 our domain controller server at our wastewater building went offline. As a result, all VoIP phones and computers at the location did not have an Internet connection. The server would not turn back on. We were temporarily able to repair the connection by moving the DHCP role to the Sophos firewall and moving the DNS service to our other server at our other site. This is a temporary fix, and the Wastewater domain controller will need to be replaced ASAP. I am waiting for a quote from a vendor to replace that server.
- The IT department has been testing a new cellular gateway for the NFWB camera truck. We are currently in a 30-day trial for the equipment. This cellular gateway will replace the camera truck’s technician’s mobile hot spot. The IT department would have a direct connection with the computer in the camera truck, and this will give the IT department ability to remote in, backup, and provide support anywhere the truck is covered by Verizon LTE network.

NIAGARA FALLS WATER BOARD RESOLUTION # 2022-12-001

2022 WATER BOARD MEETING SCHEDULE

WHEREAS, the Niagara Falls Water Board has, by past practice, approved the schedule for the work sessions and the regular meetings by resolution prior to the next year of operation; and

WHEREAS, the Water Board must schedule an annual meeting pursuant to Article V, Section 1 of its By-Laws;

NOW THEREFORE BE IT

RESOLVED, that the calendar of work sessions, business meetings, and the annual meeting that is attached hereto is hereby adopted by the Niagara Falls Water Board for 2022.

Water Board Personnel Responsible for Implementation of this Resolution:

- Executive Director
General Counsel and Secretary

Water Board Budget Line or Capital Plan Item with Funds for this Resolution:

Not applicable.

On December 19, 2022, the question of the adoption of the foregoing Resolution was duly put to a vote on roll call, which resulted as follows:

Table with 5 columns: Name, Yes, No, Abstain, Absent. Rows include Board Member Asklar, Board Member Kimble, Board Member Larkin, Board Member Leffler, and Chairman Forster.

Signed By:

Vote Witnessed By:

Nicholas J. Forster, Chairman

Sean W. Costello, Secretary to Board



**Board Members:**

Nicholas Forster, Chairman  
Colleen Larkin, Vice-Chair  
Michael Asklar, Treasurer  
Rena Kimble  
Gretchen Leffler

**TO:** All Interested Parties

**FROM:** Niagara Falls Water Board

**RE: Niagara Falls Water Board Work Session and  
Business Meeting Dates for the Calendar Year 2023**

The Niagara Falls Water Board (“Water Board”) has scheduled the dates below for its 2023 work sessions and the regular business meetings. Unless notice is posted changing the meeting location, meetings are held at the Water Board offices located at 5815 Buffalo Avenue, Niagara Falls, New York, begin at 5:00 p.m., and may be attended by videoconference pursuant to the instructions and procedures posted at <https://nfwb.org/reports/minutes/>. The business meeting held March 27, 2023 shall be deemed the Annual Meeting pursuant to Article V, Section 1 of the Water Board’s by-laws. Any changes to this schedule (including cancellations) or special meetings shall be announced to the public pursuant to the Open Meetings Law.

**Work Sessions:**

**January 23, 2023**

**None Scheduled**

**March 20, 2023**

**April 17, 2023**

**May 15, 2023**

**None Scheduled**

**July 17, 2023**

**August Recess**

**September 18, 2023**

**October 16, 2023**

**November 13, 2023**

**December 11, 2023**

**Business Meetings:**

**January 30, 2023**

**February 27, 2023**

**March 27, 2023**

**April 24, 2023**

**May 22, 2023**

**June 26, 2023**

**July 24, 2023**

**August Recess**

**September 25, 2023**

**October 23, 2023**

**November 20, 2023**

**December 18, 2023**



# Niagara Falls Water Board

5815 Buffalo Ave  
Niagara Falls, NY 14304

To: All Employees & Unit Chairs

Subject: **2023 Holidays**

Below is a list of the contractual holidays for the year **2023** with the date the holiday will be observed:

<b>New Year's Day*</b>	<b>Monday</b>	<b>January 2, 2023</b>
<b>Martin Luther King Jr. Day*</b>	<b>Monday</b>	<b>January 16, 2023</b>
Lincoln's Birthday	Monday	February 13, 2023
Washington's Birthday	Monday	February 20, 2023
<b>Memorial Day*</b>	<b>Monday</b>	<b>May 29, 2023</b>
<b>Independence Day*</b>	<b>Tuesday</b>	<b>July 4, 2023</b>
<b>Labor Day*</b>	<b>Monday</b>	<b>September 4, 2023</b>
Columbus Day	Monday	October 9, 2023
<b>Veterans Day*</b>	<b>Friday</b>	<b>November 10, 2023</b>
<b>Thanksgiving Day*</b>	<b>Thursday</b>	<b>November 23, 2023</b>
<b>Christmas Day*</b>	<b>Monday</b>	<b>December 25, 2023</b>
<b>Birthday where applicable*</b>		

\*Paid Holiday for employees hired after 12/31/07.

NIAGARA FALLS WATER BOARD RESOLUTION # 2022-12-002

**2022 ANNUAL REVIEW OF MISSION STATEMENT,  
ADOPTION OF AND REPORT ON PERFORMANCE MEASUREMENTS,  
AND REPORT ON OPERATIONS AND ACCOMPLISHMENTS**

**WHEREAS**, pursuant to the Public Authorities Law and best-practice guidance from the Authorities Budget Office, the Niagara Falls Water Board (“Water Board”) has determined annually to review its mission statement, has prepared performance measurement objectives as a means for the Board and management to evaluate and monitor whether the Water Board’s policies and operating practices are in accordance with its mission, has reviewed those performance measurements, and has developed a format for an annual report on operations and accomplishments that it deems appropriately describes the Water Board’s operations, completed and active projects, as well as material changes in its operations and programs, if any;

**NOW THEREFORE BE IT**

**RESOLVED**, that the Niagara Falls Water Board hereby adopts the performance measurements set forth in the attached 2022 Annual Review of Mission Statement, Performance Measurement Report, and Report on Operations and Accomplishments, as well as the reports on those subjects set forth in that document.

*Water Board Personnel Responsible for Implementation of this Resolution:*

Executive Director  
General Counsel

*Water Board Budget Line or Capital Plan Item with Funds for this Resolution:*

Not applicable.

On December 19, 2022, the question of the adoption of the foregoing Resolution was duly put to a vote on roll call, which resulted as follows:

	<b>Yes</b>	<b>No</b>	<b>Abstain</b>	<b>Absent</b>
Board Member Asklar	[ ]	[ ]	[ ]	[ ]
Board Member Kimble	[ ]	[ ]	[ ]	[ ]
Board Member Larkin	[ ]	[ ]	[ ]	[ ]
Board Member Leffler	[ ]	[ ]	[ ]	[ ]
Chairman Forster	[ ]	[ ]	[ ]	[ ]

Signed By:

Vote Witnessed By:

\_\_\_\_\_  
Nicholas J. Forster, Chairman

\_\_\_\_\_  
Sean W. Costello, Secretary to Board



**2022 Annual Review of Mission Statement,  
Performance Measurement Report,  
and Report on Operations and Accomplishments**

December 19, 2022

**A. Mission Statement**

Pursuant to Public Authorities Law Section 2824-a, the Niagara Falls Water Board has adopted a mission statement and reviews that statement annually to ensure its mission has not changed and that its performance goals continue to support its mission.

The Water Board's mission statement, adopted in 2003, is as follows:

**The mission of the Niagara Falls Water Board (NFWB) is to provide safe and reliable water and wastewater management services to our community in an economical and efficient manner.**

The Water Board has reviewed its mission statement and the following performance goals and is proud to report that its policies and operating practices are in accordance with its mission statement.

**B. Performance Goals**

The Niagara Falls Water Board has established the following performance goals, and met them during 2022 as follows:

**1) Safe:**

- **Meet or exceed Department of Health and EPA drinking water quality requirements.**

In 2022, the Water Treatment Plant has operated with no violations, providing clean, ample, and high-quality water for our service area. [In May 2022, the Water Board issued its Annual Drinking Water Quality Report for 2021](#), and it is proud to report that our system has never violated a state established maximum contaminant level.

- **Environmentally sound sewage treatment in accordance with SPDES permit.**

The Water Board has operated its aging wastewater treatment plant as efficiently and effectively as possible, while aggressively seeking funding to convert that 1970's era treatment plant to a more appropriate biological treatment technology. Its only SPDES permit violations in 2022 relate to low-level detections of BHC, and the Water Board has initiated a robust response to address this issue. In October 2022, the Board approved a professional services agreement with AECOM, an engineering firm, to research the cause and solution for the BHC violations, a process which will include sampling, setting and implementing new limits for industrial users, working with DEC on a potential consent order to address BHC violations pending completion of corrective actions, and other work over an anticipated three-year implementation period.

## **2) Reliable:**

- **Invest in capital projects required to maintain facilities and customer satisfaction.**

The Board has invested an average of \$9 million per year in capital improvements over the past three years and plans \$47 million in capital improvements over the next five years. Its capital investments are intended to ensure reliable drinking water and wastewater treatment and delivery of those services through the City-wide network of mains maintained by the Water Board. It also has invested in its vehicle fleet, purchasing equipment in 2022 to allow its outside crews to perform more jobs in-house at lower cost, and it has continued to invest in newer passenger vehicles for employee safety, fuel efficiency, and to reduce maintenance costs and downtime.

## **3) Economical:**

- **Consider burden on ratepayers when determining operational and capital spending.**

The Water Board funds all its operational costs from rates and fees charged to users of its system, and covenants with its bondholders require it to raise the full amount of its operations budget in rates and fees each year. In 2022 and again in 2023, the competitively bid contracts for chemicals increased dramatically. 2023 chemical costs are forecast to total \$10,775,000 or 26.36% of the Water Board's budget, versus \$3,294,000 and 9.63% in 2018. The chemical whose cost most impacts the Water Board's budget is sodium hypochlorite, as the Water Board's outdated wastewater treatment plant uses a physical/chemical treatment technology that requires vast quantities of sodium hypochlorite to achieve treatment and disinfection. The bid price for sodium hypochlorite rose from \$0.3954 per gallon in 2021 to \$1.18 per gallon in 2022 (a 198% increase) and increased to \$2.389 per gallon in 2023 (at 102% increase).

The Water Board has no ability to control these chemical bid prices and uses the chemicals as efficiently as possible given the outdated treatment technology at its disposal. It urgently is pursuing funding from the State and Federal governments to convert its aging wastewater treatment plant to a biological process that will greatly reduce the reliance on chemicals.

To control other costs, the Water Board is keeping expenses in control, including by investing in new equipment for outside maintenance to repair more water/sewer main breaks rather than hire outside contractors for the work, and similarly by hiring temporary employees from trade Union Halls to perform more work in house without contractor markup. Relentless efforts to reduce non-revenue water, are showing considerable results – a 7.4% decrease in finished water produced at the Water Treatment Plant from Jan.-Oct. 2022 versus the same period in 2021 (determining the exact percent of non-revenue water reduction will require full-year production and billing results). It also is keeping personnel costs under control to the greatest extent possible; while two long-vacant management positions were filled in 2022 to ensure proper and professional administration of personnel and facilities, salary and benefits made up 33.7% of the 2018 budget but are 30.8% of the 2023 budget.

In 2022 Water Board staff helped to complete refinancing of the Niagara Falls Public Water Authority's \$37,000,000 Series 2013A Water and Sewer System Revenue Bonds. This refinancing took advantage of favorable interest rates to save approximately \$1,250,000 in debt service costs. Early in 2022 S&P Global Ratings affirmed the Authority's "A" rating with a stable outlook.

The Water Board will continue to explore innovative ways to perform needed work as efficiently as possible while maintaining its existing facilities in the best possible condition. In 2022 it has completed many small and medium-scale projects to restore and refurbish worn surfaces, improve lighting, and to improve the appearance of its properties. These projects are intended to improve employee working conditions, to make the Water Board a better neighbor in our community, and to help to demonstrate to potential funding sources that the Water Board will be a good steward of requested State and Federal investment in the Water Board's wastewater treatment plant.

- **Actively seek grants and cooperative agreements with other government entities to reduce costs.**

In 2022, the Water Board has continued to invest in professional grant writing services and in a consultant to assist with seeking State and Federal infrastructure funds to maximize the grant money it can obtain, as its ratepayers cannot shoulder the cost of all needed system investments on their own. In 2022 the Water Board also approved an agreement with the City of Niagara Falls to place an unstaffed

police substation in the Water Treatment Plant's disused guardhouse for intermittent use by officers, with the presence of police officers and vehicles expected to enhance security at this critical infrastructure at no cost to Water Board ratepayers.

**4) Efficient:**

- **Leverage advances in technology and science to meet expanding system needs without excess increases in costs.**

In 2022, integration or enhancement of SCADA control for equipment continued to be a major focus of projects at the wastewater treatment plant and gorge pumping station. IT infrastructure has been upgraded, and the Board approved moving the wastewater laboratory information management system to a cloud-based system that will be more reliable and secure. New methods of handling carbon filter beds were employed at the wastewater treatment plant which reduce sodium hypochlorite usage. The payroll and time management system was upgraded to replace existing outdated and cumbersome systems and provide management and staff with improved and efficient access to information.

**C. Report on Operations and Accomplishments**

There have been no material changes in the Water Board's operations, which are focused on its mission to provide safe and reliable water and wastewater management services to our community in an economical and efficient manner. The Water Board continuously monitors its operations and accomplishments through creation and review of monthly operations and maintenance reports. Reference is made to the full reports which are posted as part of monthly Water Board agenda packets here: [Minutes | Niagara Falls Water Board \(nfwb.org\)](#). For future-looking projects, the Water Board maintains and updates its Capital Improvement Plan, available at [Capital Improvements | Niagara Falls Water Board \(nfwb.org\)](#). Combined, these documents provide a detailed picture of the Water Board's operations as well as its completed and active projects. Interested persons may request a compilation of these reports by contacting the Water Board's Secretary at [scostello@NFWB.org](mailto:scostello@NFWB.org).

**ANNUAL REVIEW OF PROCUREMENT AND INVESTMENT POLICIES  
AND ADOPTION OF REVISIONS**

**WHEREAS**, the Niagara Falls Water Board (“Water Board”) is required by Public Authorities Law § 2824(1)(e) to adopt written policies and procedures for the procurement of goods and services and pursuant to Public Authorities Law § 2925(1) to adopt comprehensive guidelines regarding the investing, monitoring, and reporting of its funds; and

**WHEREAS**, the Water Board annually reviews its procurement and investment policies; and

**WHEREAS**, the Water Board has identified certain desirable revisions and improvements to the procurement policy and desires no change to the investment policy;

**NOW THEREFORE BE IT**

**RESOLVED**, that the Niagara Falls Water Board hereby adopts the procurement policy with a revision date of December 19, 2022, to be effective immediately; and

**IT IS FURTHER RESOLVED**, that the Niagara Falls Water Board hereby continues in force the investment guidelines last revised on December 13, 2021.

*Water Board Personnel Responsible for Implementation of this Resolution:*

- Executive Director
- Deputy Director of Financial Services
- General Counsel and Secretary

*Water Board Budget Line or Capital Plan Item with Funds for this Resolution:*

Not applicable.

On December 19, 2022, the question of the adoption of the foregoing Resolution was duly put to a vote on roll call, which resulted as follows:

	<b>Yes</b>	<b>No</b>	<b>Abstain</b>	<b>Absent</b>
Board Member Asklar	[   ]	[   ]	[   ]	[   ]
Board Member Kimble	[   ]	[   ]	[   ]	[   ]
Board Member Larkin	[   ]	[   ]	[   ]	[   ]
Board Member Leffler	[   ]	[   ]	[   ]	[   ]
Chairman Forster	[   ]	[   ]	[   ]	[   ]

Signed By:

Vote Witnessed By:

\_\_\_\_\_  
Nicholas J. Forster, Chairman

\_\_\_\_\_  
Sean W. Costello, Secretary to Board



## **NIAGARA FALLS WATER BOARD PROCUREMENT POLICY AND PROCEDURES**

The Niagara Falls Water Board (“NFWB”) is a public benefit corporation that was created pursuant to Public Authorities Law § 1231-b. The statute setting forth the NFWB’s functions states that its “powers and duties are in all respects for the benefit of the people of the city and the service area and the state for the improvement of their health, welfare and prosperity and that such purposes are public purposes and that the water board is and will be performing an essential governmental function.” Pub. Auth. L. § 1230-e (6). The NFWB’s powers permit it to “enter into contracts” and to “acquire . . . property.” *Id.* at § 1230-f. “All contracts for construction or purchase of supplies, materials or equipment shall be let by the water board, shall be made in conformity with the applicable provisions of section one hundred three of the general municipal law and section one hundred thirty-five of the state finance law.” *Id.* at § 1230-u. This procurement policy is designed to set forth in simple language how the NFWB will implement these provisions of law.

NFWB’s procurement policy is intended to assure the prudent and economic use of public monies in the best interests of the people in the NFWB’s service area and of the State of ~~New York, and~~New York and will facilitate the acquisition of goods and services of maximum quality at the lowest possible cost under the circumstances. It is also the intention of this policy to guard against favoritism, extravagance, fraud and corruption, and, wherever possible within existing laws, to promote and support local businesses and industry. The principal way that this procurement policy will help to accomplish these aims will be promoting the competitive securing of goods and services whenever feasible.

### **PROCEDURE FOR THE PROCUREMENT OF GOODS AND SERVICES**

The NFWB hereby formally adopts the following written procedure (“procedure”) applicable to all purchases of goods and services after November 1, 2018. This procedure is meant actively to promote competitive procurements of all goods and services, with very limited exceptions, as set forth herein. The current revision, as noted on the last page of this document, replaces and supersedes all prior procurement policies. NFWB staff is hereby directed to comply with this procedure and to retain the necessary documentation as required herein to substantiate such compliance. This procedure and the NFWB’s guidelines for acquisition and disposal of property should be included in the NFWB employee handbook and posted at NFWB.org.

1. REQUIREMENTS APPLICABLE TO ALL PROCUREMENTS

- 1.1. For all procurements, it is the responsibility of those involved to comply with all state and local laws and always to perform their duties in an ethical manner which will not cast suspicion on the way in which the NFWB operates its procurement system. It is imperative that all NFWB employees involved in the process of procuring goods and services be especially cautious to avoid any appearance of indiscretion or impropriety when dealing with vendors and/or prospective vendors. In addition, NFWB Board Members, officers, and employees shall conduct themselves at all times in accordance with the NFWB Conflicts of Interest Policy and the NFWB Code of Ethics Policy as amended from time to time by the Board.
- 1.2. All purchasing contracts made by the NFWB shall be evidenced digitally in its Financial Management Software (“FMS”), or in writing, on a Requisition form which provides a description of the items purchased, the terms of the sale, and the NFWB internal budget account number, and shall be maintained as part of the records of the Board.
- 1.3. Tied offers and local vendor preference. When all variables are equivalent, local vendors shall be given preference over non-local vendors. When local preference is not a viable method of resolving a tied bid or proposal, the Executive Director shall determine the bidder to be awarded, and the basis for the award determination shall be documented in the Board Resolution awarding the contract.
- 1.4. Procurements shall not be parceled, split, divided, or purchased over a period of time in order to circumvent the dollar purchasing limitations specified herein or to circumvent the employee’s authorized spending limit.
- 1.5. Non-bid products and services should be reviewed periodically for competitive pricing and at any time that prices have increased.
- 1.6. To promote competition, in addition to advertising bids, NFWB staff is encouraged to take additional reasonable steps to encourage as many bidders as possible, and may notify known vendors of bids, post bids in trade message boards, notify Union halls, and post bids on construction exchange websites.
- 1.7. All invitations to bid and requests for proposals are to be advertised in the NYS Contract Reporter.
- 1.8. All invitations to bid and requests for proposals with an anticipated value in excess of \$25,000 for labor, services, supplies, equipment, materials, or any combination of the foregoing, or in excess of \$100,000 for acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon, shall be evaluated for Minority and Women Business Enterprise (“MWBE”) and Service Disabled Veteran Owned Business (“SDVOB”) participation goals as required by the Water Board’s MWBE and SDVOB policies.

1.9. All procurements in excess of \$15,000 annually are subject to State Finance Law Sections 139-j and 139-k, effective January 1, 2006 (“Lobbying Law”). Under the Lobbying Law, all “contacts” (defined as oral, written or electronic communications with the NFWB intended to influence a procurement) during a procurement - from the earliest notice of intent to solicit bids/proposals through final award and approval - must be made with one or more designated point(s) of contact only. Each invitation to bid and request for proposals must identify the point(s) of contact for Lobbying Law purposes. Additional requirements are found in the Water Board’s Lobbying Law policy. Violations of the policy regarding permissible contacts must be reported to the appropriate NFWB officer (Executive Director or General Counsel) and investigated accordingly.

2. CONSTRUCTION AND PUBLIC WORKS CONTRACTS – GENERAL POLICY

All contracts or orders for work, material, or supplies performed or furnished in connection with construction or other public works involving the expenditure of more than \$35,000 shall be publicly bid.

The NFWB shall include such bid specifications as are deemed desirable in the judgment of the Executive Director, including requiring appropriate bid security. The NFWB shall not award any construction contract except to the lowest bidder who, in its opinion, is qualified to perform the work required and who is responsible and reliable. The NFWB may, however, reject any or all bids or waive any informality in a bid if it believes that the public interest will be promoted thereby. The NFWB may reject any bid if, in its judgment, the business and technical organization, plant, resources, financial standing, or experience of the bidder justifies such rejection in view of the work to be performed.

All construction contracts shall be let in accordance with General Municipal Law § 103 and the provisions of state law pertaining to prevailing wages, labor standards, and working hours. Where a cost for erection, construction, or alteration of buildings shall exceed \$500,000, the contract must comply with State Finance Law § 135, which is incorporated by reference herein and includes, among other things, requirements for separate bidding on plumbing, HVAC, and electrical work. Where appropriate, construction contracts should be advertised in not only a newspaper and the NYS Contract Reporter, but also posted to online construction exchanges to encourage multiple competitive bids.

Nothing in this policy shall be construed to limit or diminish the power of the NFWB to do any construction directly by the officers, employees, or agents of the NFWB.

3. PURCHASES OF GOODS, EQUIPMENT AND SERVICES (NOT INVOLVING CONSTRUCTION OR PUBLIC WORKS) – GENERAL POLICY

Except as otherwise expressly provided herein, NFWB purchase orders involving an expenditure on a reasonably anticipated annual basis of more than \$20,000 for goods, materials, supplies, equipment, or services (such as service contracts) not necessary for the completion of a public works contract shall be made pursuant to an open competitive bidding process. For goods, materials, supplies, and equipment, purchase contracts shall be awarded to the lowest responsible bidder furnishing the security required by NFWB for the purchase after advertisement for sealed bids in the manner provided for by General Municipal Law § 103. In the case of services, the award must be based on the best value to NFWB, which if not equated to low price should be, wherever possible, based upon quantifiable criteria that result in the contract award to the offeror that optimizes quality, cost, and efficiency.

In any case where a responsible bidder's gross price is reducible by an allowance for the value of used machinery, equipment, apparatus, or tools to be traded in by NFWB, the gross price shall be reduced by the amount of such allowance, for the purposes of determining the low bid. In cases where two or more responsible bidders furnishing the required security submit identical bids as to price, NFWB's Board may award the contract to any of such bidders. NFWB reserves its discretion to reject all bids and re-advertise for new bids in the manner provided for in this procedure.

4. PROCEDURES FOR PURCHASE ORDERS, INCLUDING BLANKET PO'S

**4.1. Purchases Less Than \$1,000**

- 4.1.1. Where possible, prior to the purchase of an item or service, the NFWB employee shall contact at least two (2) suppliers of the item or items to be procured to obtain the best price for and quality of the item or items to be purchased.
- 4.1.2. Division Heads are authorized to make and approve purchases on behalf of the NFWB in an aggregate amount up to \$1,000.
- 4.1.3. Various other subordinate employees, if designated in writing by a Director, are authorized to make and approve purchases on behalf of the NFWB in an aggregate amount up to \$500.

**4.2. Purchases Greater Than \$1,000 and Less than \$5,000**

- 4.2.1. Quotes for purchases of \$1,000 up to and including \$5,000, whether verbal or written, shall be documented in the quotes section of the procurement process and/or as part of a manual purchase requisition.
- 4.2.2. Required Final Approval: Any Director, provided that budgeted funds for the purchase first have been identified.

#### 4.3. Purchases Greater Than \$5,000 and Less than Competitive Bidding Thresholds

- 4.3.1. Quotes for purchases of \$5,000 up to and including the appropriate competitive bidding threshold of \$20,000 or \$35,000, whether verbal or written, shall be documented in the quotes section of the procurement process and/or as part of a manual purchase requisition form and as a separate written document, dated and signed by an authorized vendor representative. Wherever possible, a minimum of three written quotes must be obtained. All written quotes and a memorandum for verbal quotes shall be scanned and attached to the requisition and maintained by the Board's FMS.
- 4.3.2. Required Final Approval: Executive Director or his designee as authorized in writing may approve up to and including \$15,000. **Purchases over \$15,000 require Board of Directors approval.**

#### 4.4. Purchase Contracts Greater Than \$20,000 and Public Works Greater than \$35,000

- 4.4.1. Must be supported by summary of the competitive bids received or be subject to one of the exceptions listed in Section 5 below, with the Board resolution including an explanation for the exception.
- 4.4.2. Required Final approval: Board of Directors (Board approval is required for all purchases over \$15,000, see Sections 2 and 3 for competitive bidding thresholds).

### 5. EXCEPTIONS TO COMPETITIVE BIDDING REQUIREMENTS

The NFWB may contract or purchase through non-competitive negotiations under the following circumstances.

#### 5.1. Emergencies

- 5.1.1. Notwithstanding any of the other provisions in this procedure, in the case of public emergency arising out of an accident or other unforeseen occurrence or condition whereby circumstances affecting NFWB buildings, property, pipelines, or the life, health, safety or property of NFWB employees, customers or the general public require immediate action which cannot await a competitive process or competitive bidding, contracts for public work or the purchase of supplies, materials or equipment or services (including necessary replacement parts that could not reasonably be stockpiled) may be let by NFWB's Executive Director or his designee by immediate contract and the Executive Director may temporarily dispense with the competitive bidding or procurement requirements set forth herein. However, a good faith emergency must exist and while the emergency procurements do not require competitive bidding, it is nevertheless the policy and procedure of NFWB that such procurements must, wherever possible, be made at the lowest possible cost to NFWB.

5.1.2. Declarations of Emergency shall be documented in writing. The Executive Director will email to all members of the NFWB Board prior to or as soon as possible after making a procurement pursuant to this section a short statement to advise them of the emergency, the reason why the situation constitutes an emergency, a description of the emergency procurement, and the estimated cost of the emergency procurement. Emergency procurements shall be ratified by the NFWB Board at their next regularly scheduled ~~meeting, or meeting or~~ may be ratified at a special meeting called pursuant to NFWB by-laws.

## 5.2. New York State Contracts and Niagara County Contracts

5.2.1. The NFWB may, without soliciting competitive bids, purchase materials, equipment and supplies through New York State (“NYS”) and Niagara County contracts at the same prices and under the same terms and conditions as the State or County. However, no purchase may be made through a NYS or County contract after competitive bids have been received unless the purchase may be made upon the same conditions and specifications as the bid but at a lower price.

5.2.2. All purchases through a NYS or County contract must be made only from the vendor awarded the contract. No purchases may be made from other vendors without soliciting competitive bids.

5.2.3. When it is determined that a purchase is to be made through NYS or Niagara County contract, an approved requisition and/or purchase order referencing a valid NYS contract number must be prepared.

5.2.4. A list of commodities available through NYS contracts can be reviewed at the following website: <http://www.ogs.state.ny.us>

## 5.3. “Piggybacking” on Contracts of the United States or any State, Agency, or other Political Subdivision or District Thereof

5.3.1. The NFWB may, pursuant to General Municipal Law § 103(16), “piggyback” on contracts awarded by government entities that have been made available for use by other government entities, provided that those contracts were let in a manner that constitutes competitive bidding consistent with New York state law, including municipal cooperative purchasing. When “piggybacking,” the NFWB is not required independently to seek competitive bids, as this already has been done by the other government entity.

5.3.2. The contract to be “piggybacked” must have been let by a government entity, not a private party or not-for-profit corporation. Contracts let through Sourcewell, Omnia Partners Public Sector, NASPO ValuePoint, National Cooperative Purchasing Alliance (“NCPA”), and similar public cooperative contract purchasing agencies may be appropriate for piggybacking.

5.3.3. The contract explicitly must have been made available for use by other governmental entities; unilateral offers by vendors to extend contract pricing and terms and conditions offered to other government entities are not acceptable.

- 5.3.4. The contract must have been let to the lowest responsible bidder or on the basis of best value.
- 5.3.5. To “piggyback” on a contract generally will require NFWB staff to obtain and review a copy of the underlying contract/bid specification. This and any similar documentation should be scanned and maintained as part of the requisition/purchase order for the procurement.

#### **5.4. Repair and Maintenance Provided by Original Manufacturer**

Repair and maintenance services provided by the original equipment manufacturer, supplier or installer (or their authorized agent or representative) are exempt from the quoting aspect of this policy when their services are required due to a specific or proprietary type of equipment.

#### **5.5. Sole Source**

- 5.5.1. It is the policy of the NFWB to promote competition in the procurement process, whenever possible. Toward that end, the NFWB will not specify the product of a certain manufacturer to the exclusion of all other comparable products, except where such a designation is required for the public interest, such as where local geographic (e.g. there is only a single source within a reasonable geographical area of the goods or services to be procured), security, public health or other conditions require the use of and only the type of equipment specified.
- 5.5.2. Where NFWB specifies a particular article or type of equipment which it regards as its general standard, it will provide that any other manufacturer of a similar equipment may meet the specifications if his or her product is reasonably equivalent to that mentioned as the standard.
- 5.5.3. Only in those instances where NFWB is required to secure equipment or service from a sole source of reasons of local geographic, security, public health or other conditions, may a purchase of such items or service be made without a competitive procurement process. In such instance, where the procurement exceeds \$20,000 the Board shall by resolution declare the need to purchase the equipment or service from a sole source vendor prior to purchase.

#### **5.6. Standardization**

- 5.6.1. Standardization should be utilized only where there are strong reasons of efficiency or economy. It is NFWB’s policy and procedure that it will not specify the product of a certain manufacturer to the exclusion of all other comparable products, except where such a designation is required for the public interest.
- 5.6.2. Although NFWB may specify a particular article or type of equipment which it regards as its general standard, it should provide that any other manufacturer of a similar object may meet the specifications if his or her product is reasonably equivalent to that mentioned as the standard.

5.6.3. In those instances where the public interest requires that NFWB standardize, such standardization may only occur upon the adoption of a Resolution by the members of the Board stating that, for reasons of efficiency or economy explained in the resolution, there is a need for standardization.

5.6.4. Even where NFWB standardizes on a particular article or type of equipment, competitive bids or quotes from all suppliers of that article or type in Western New York or, if necessary, outside the area should be actively solicited to promote competition. In such case, the Executive Director, or designee, shall contract with the lowest responsible bidder, or the party providing the lowest quote, furnishing the required security after any public advertisement as may be required.

#### 5.7. Surplus and Second-Hand Supplies

Surplus and second-hand supplies, material, or equipment may be purchased by NFWB without competitive bidding from the Federal Government, the State of New York or from any other political subdivision, district, or public benefit corporation.

#### 5.8. Professional Services

5.8.1. Professional services are those services requiring special or technical skill, training, or expertise. These types of services are routinely provided by attorneys, accountants, engineers, and architects, etc. Bidding is not required when a service is so specialized that it would not be in the NFWB's best interest to do so. The decision not to rely on competitive bidding procedures is based on the nature of the service, qualifications, prior experience, or an existing relationship with the NFWB.

5.8.2. An effective way to award contracts for professional services is to solicit requests for proposals ("RFP"). This ensures that qualified firms are given the opportunity to submit proposals and can result in reduced costs as a result of competition. However, contracts are awarded based on the criteria listed above and not on price alone.

5.8.3. Except as provided below, a formal RFP or where more appropriate a request for qualifications ("RFQ") shall be required prior to the award of any agreement for professional services requiring the expenditure of Water Board funds over ~~\$240,000~~. Where feasible, three written quotes should be obtained for procurements between \$5,000 and \$20,000. Water Board approval is required for procurements of professional services in excess of \$15,000.

5.8.4. Where Water Board approval of a professional services agreement over \$20,000 is requested without a prior RFP or RFQ, the proposed resolution for the award shall state (1) the reasons why a formal RFP or RFQ was not issued; (2) which firms informally were solicited for proposals; and (3) why the procurement should not be postponed to permit compliance with Section 5.8.3.

5.8.5. All procurements of architectural and engineering services for federally funded projects (including projects receiving Clean Water State Revolving Fund [CWSRF], Drinking Water State Revolving Fund [DWSRF], or Infrastructure Investment and Jobs Act of 2021 funds) after October 1, 2022 are subject to specific federal procurement requirements. Such procurements must follow applicable Environmental Facilities Corporation (“EFC”) guidance available at <https://efc.ny.gov/forms-tools>.

~~5.8.4.~~

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## 5.9. Lease Arrangements

- 5.9.1. Leases of equipment shall also be awarded after a competitive process.
- 5.9.2. NFWB staff shall obtain, whenever possible, formal written quotations or proposals from three or more vendors for any lease involving in excess of \$5,000 annually. Such written quotations or proposals shall set forth the particulars as to the equipment to be provided and details as to cost, on an annual and total lease basis, which may be used for evaluation of the proposal. The lease shall also include details as to additional cost beyond the base lease amount necessary properly to evaluate the equipment to be leased prior to award to the successful vendor.
- 5.9.3. For leases involving an annual total lease expense of less than \$5,000, NFWB staff shall secure at least three informal quotes, whenever possible, and perform the same evaluation before making a recommendation to the Executive Director relative to the selection of a lessor for the equipment to be leased.
- 5.9.4. Leases in excess of \$15,000 shall be approved by the NFWB Board.

## 6. PURCHASE CARDS/NFWB CREDIT CARDS

- 6.1. Are available to employees authorized by Board of Directors policy.
- 6.2. The Director of Financial Services or Deputy Director of Financial Services shall maintain a list of all employees with purchase cards.
- 6.3. All employees shall be required to sign a Purchase Card Policy before being issued a purchase card.
- 6.4. Purchase card transactions shall require appropriate ~~documentation, and~~ documentation and shall be reflected by the FMS.

6.5. Purchase card transactions shall regularly be audited by the Director of Financial Services, Deputy Director of Financial ~~Services, or~~ Services, or their designee, formally or informally, and any discrepancies shall be reported to the NFWB Board if they cannot be reconciled after investigation.

7. PETTY CASH

7.1. Where cash can be used for small purchases or expenses less than \$50, the Petty Cash system may be utilized.

7.2. Written receipts and internal expense codes must accompany all reimbursements.

7.3. Petty Cash purchases are not intended to circumvent the purchasing system.

8. SUPPORT FOR MINORITY, WOMEN-OWNED, SERVICE-DISABLED VETERAN OWNED, AND SMALL BUSINESSES

NFWB supports contracts with minority, women, and service-disabled veteran owned businesses and small businesses when awarding contracts in purchasing goods, services and equipment, and by statute is subject to Articles 15-A and 17-B of the Executive Law with respect to MWBE and SDVOB requirements in procurement contracts. NFWB will not discriminate against any person who is qualified and available to perform the work by reason of race, color, creed, gender, or national origin. NFWB will encourage active participation by MWBE, SDVOB, and small businesses in its procurement process, including reviewing and referencing any available lists of such vendors and actively and affirmatively soliciting their participation through email and/or telephone advisement of the coming procurement, and will fully support equal opportunity and fair treatment of all people in its contracting. NFWB staff involved in the procurement process should be familiar with NFWB's MWBE and SDVOB procedures and goals.

9. ANNUAL REVIEW

The Board shall annually review this Policy and Procedure. NFWB's Executive Director shall be responsible for assisting NFWB in conducting an annual review of this Procurement Policy and for an evaluation of the internal control structure established to ensure compliance with this Procurement Policy.

REVISION INFORMATION

- Originally Adopted January 29, 2018
- Annual Review Completed, and Revisions Made, October 29, 2018
- Revised March 25, 2019 to add Sections 5.8.3 and 5.8.4

- Revised December 14, 2020 to add Sections 1.7, 1.8, and 1.9 and a number of updates and clarifications throughout.
- Revised December 13, 2021, adding language regarding ties to Section 1.3, revising Sections 4.3 and 4.4 to increase the Executive Director’s approval authority from \$10,000 to \$15,000, and added Deputy Director of Financial Services to Section 6.
- Revised December 19, 2022, adding Section 5.8.5 related to new procurement guidelines for architectural and engineering services for projects receiving Federal funds and revising Sections 5.8.3 and 5.8.4 to make certain procedures and threshold amounts for professional services procurements consistent with those for procurement of other services as set forth in Section 4.

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[Significant revisions and annual reviews should be noted here.]



## **INVESTMENT GUIDELINES FOR THE NIAGARA FALLS WATER BOARD PURSUANT TO PUBLIC AUTHORITIES LAW SECTION 2925**

### **SCOPE**

This cash management and investment policy applies to all money and other financial resources available to the Niagara Falls Water Board for deposit and/or investment on its own behalf or on behalf of any other entity or individual.

These guidelines have been constructed pursuant to the laws detailed in Exhibit I.

### **OBJECTIVES**

The primary objectives of the Water Board's investment activities are, in priority order:

1. To conform with all applicable federal, state and other legal requirements (legality);
2. To adequately safeguard principal (safety);
3. To provide sufficient liquidity to meet all operating requirements (liquidity); and
4. To obtain a reasonable rate of return (yield).

### **DELEGATION OF AUTHORITY**

The Niagara Falls Water Board's responsibility for administration of the investment program is delegated to the Director of Financial Services or Deputy Director of Financial Services as appropriate, who shall establish written procedures for the operation of the investment program consistent with these investment guidelines. Such procedures shall include an adequate internal control structure to provide a satisfactory level of accountability based on a data base or records incorporating description and amounts of investments, transaction dates, and other relevant information and regulate the activities of subordinate employees.

### **PRUDENCE**

All participants in the investment process shall seek to act responsibly as custodians of the public trust and shall avoid any transaction that might impair public confidence in the Niagara Falls Water Board to operate effectively.

Investments shall be made with judgment and care, under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the safety of the principal as well as the probable income to be derived. All participants involved in the investment process shall refrain from personal business activity that could conflict with proper execution of the investment program, or which could impair their ability to make impartial investment decisions.

### **DIVERSIFICATION**

It is the policy of the Niagara Falls Water Board to diversify its deposits and investments by financial institution, by investment instrument, and by maturity scheduling.

### **INTERNAL CONTROLS**

The Director of Financial Services or Deputy Director of Financial Services, as appropriate, are responsible for establishing and maintaining an internal control structure to provide reasonable, but not absolute, assurance that deposits and investments are safeguarded against loss from unauthorized use or disposition, that transactions are executed in accordance with management's authorization and recorded properly, and are managed in compliance with applicable laws and regulations.

### **DESIGNATION OF DEPOSITARIES**

The banks and trust companies authorized for the deposit of money are as follows:

Bank on Buffalo  
Wilmington Trust  
Manufacturers and Traders Trust Company  
Bank of America  
Key Bank of New York  
JP Morgan Chase  
Citizens Bank, N.A.

The Board shall review and approve this list at least annually.

## **COLLATERALIZING OF DEPOSITS**

In accordance with the provisions of General Municipal Law, Article 2, Section 10, all deposits of the Niagara Falls Water Board, including certificates of deposit and special time deposits, in excess of the amount insured under the provisions of the Federal Deposit Insurance Act shall be secured:

1. By a pledge of “eligible securities” with an aggregate “market value” as provided by GML 10, equal to the aggregate amount of deposits from the categories designated in Appendix A to the guidelines.
2. Current market values will be reviewed monthly to ensure all deposits are properly collateralized.

## **SAFEKEEPING AND COLLATERALIZATION**

Eligible securities used for collateralizing deposits shall be held by a third party, bank or trust company subject to written security and custodial agreements.

The security agreement shall provide that eligible securities are being pledged to secure Niagara Falls Water Board deposits together with agreed upon interest, if any, and any costs or expenses arising out of the collection of such deposits upon default. It shall also provide the conditions under which the securities may be sold, presented for payment, substituted or released and the events which will enable the Niagara Falls Water Board to exercise its rights against the pledged securities. In the event that the securities are not registered or inscribed in the name of the Niagara Falls Water Board, such securities shall be delivered in a form suitable for transfer or with an assignment in blank to the Niagara Falls Water Board or its custodial bank.

The custodial agreement shall provide that securities held by the bank or trust company, as agent of and custodian for, the Niagara Falls Water Board, will be kept separate and apart from the general assets of the custodial bank or trust company and will not, in any circumstances, be commingled with or become part of the backing for any other deposit or other liabilities. The agreement should also describe that the custodian shall confirm the receipt, substitution or release of the securities. The agreement shall provide for the frequency of revaluation of eligible securities and for the substitution of securities when a change in the rating of a security may cause ineligibility. Such agreement shall include all provisions necessary to provide the local government a perfected interest in the securities.

## **PERMITTED INVESTMENTS**

The Niagara Falls Water Board authorizes the Director of Financial Services or Deputy Director of Financial Services to invest money not required for immediate expenditure for terms not to exceed its projected cash flow needs in the following types of investments:

1. Special Time Deposit accounts.
2. Certificate of deposit.
3. Obligations of the United States of America.
4. Obligations guaranteed by agencies of the United States of America where the payment of principal and interest are guaranteed by the United States of America.
5. Obligations of the State of New York.
6. Obligations issued pursuant to Local Finance Law, section 24 or 25 (with approval of the State Comptroller) by any municipality, school district or district corporation other than this Water Board.
7. Obligations of public authorities, public housing authorities, urban renewal agencies and industrial development agencies where the general State statutes governing such entities or whose specific enabling legislation authorizes such investments.

All investment obligations shall be payable, saleable, or redeemable at the option of the Niagara Falls Water Board within such times as the proceeds will be needed to meet expenditures for purposes for which the monies were provided and, in the case of obligations purchased with the proceeds of bonds or notes, shall be payable, saleable or redeemable at the option of the Water Board within two years of the date of purchase.

## **AUTHORIZED FINANCIAL INSTITUTIONS AND DEALERS**

The Niagara Falls Water Board shall maintain a list of financial institutions and dealers approved for investment purposes and establish appropriate limits to the amount of investment which can be made with each financial institution or dealer. All financial institutions with which the Board conducts business must be credit worthy. Banks shall provide their most recent Consolidated Report of Condition (Call Report) at the request of the Niagara Falls Water Board. Security dealers not affiliated with a bank shall be required to be classified as reporting dealers affiliated with the New York Federal Reserve Bank, as primary dealers. The Director of Financial Services or Deputy Director of Financial Services is responsible for evaluating the financial position and maintaining a listing of proposed depositories, trading partners and custodians. Such listing shall be evaluated at least annually.

If the Niagara Falls Water Board deems it advisable to retain an investment banker, broker, agent, dealer or other investment advisor or agent to transact business with the Board, it shall establish criteria for said individuals or firms covering the quality, reliability, experience, capitalization, size and any other factors that at the time the Board feels pertinent before qualifying said firm to transact business with the Water Board.

The Board must have discretion over all investment transactions and must be supplied with adequate documentation for each transaction. All agreements must comply with the Investment Advisor's Act of 1940 and applicable New York State and Federal laws. In addition, a separate agreement will be entered into with a third party custodian to hold all securities purchased by the investment advisor.

See Exhibit II for Authorized Financial Institutions and Dealers.

### **PURCHASE OF INVESTMENTS**

The Director of Financial Services and Deputy Director of Financial Services are authorized to contract for the purchase of investments:

1. Directly, including through a repurchase agreement, from an authorized trading partner.
2. By participation in a cooperative investment program with another authorized governmental entity pursuant to Section 1230a of the Public Authorities Law where the specific program has been authorized by the governing board.
3. By utilizing an ongoing investment program with an authorized trading partner pursuant to a contract authorized by the Water Board.

All purchased investments, obligations, or participations unless registered or inscribed in the name of the Niagara Falls Water Board, shall be purchased through, delivered to, and held in the custody of a bank or trust company. Such obligations shall be purchased, sold or presented for redemption or payment by such bank or trust company only in accordance with prior written authorization from the officer authorized to make the investment. All such transactions shall be confirmed in writing to the Niagara Falls Water Board by the bank or trust company. Any obligation held in the custody of a bank or trust company shall be held pursuant to a written custodial agreement as described in General Municipal Law section 10.

The custodial agreement shall provide that securities held by the bank or trust company, as agent of and custodian for, the Niagara Falls Water Board, will be kept separate and apart from the general assets of the custodial bank or trust company and will not, in any circumstances, be commingled with or become part of the backing for any other deposit or other liabilities.

## **REPURCHASE AGREEMENTS**

Repurchase agreements are authorized subject to the following restrictions:

1. All repurchase agreements must be entered into subject to a Master Repurchase Agreement.
2. Trading partners are limited to banks or trust companies authorized to do business in New York State and primary reporting dealers.
3. Obligations shall be limited to obligations of the United States of America and obligations guaranteed by agencies of the United States of America.
4. No substitutions of securities will be allowed.
5. The custodian shall be a party other than the trading partner.

## **REPORTING**

The Director of Financial Services or Deputy Director of Financial Services shall report to the Niagara Falls Water Board on the investments of the Water Board not less than once a month.

The independent accounting firm retained by the Water Board to perform the yearly audit of the Water Board's books and records shall audit the investments of the Water Board and Water Authority and make its report available to the members of the Niagara Falls Water Board.

## **ANNUAL REVIEW**

The Board shall annually review these Investment Guidelines.

## **REVISION INFORMATION**

- Originally Adopted June 16, 2005.
- December 13, 2021: Annual review completed, list of approved financial institutions updated, and references to Deputy Director of Financial Services added.
- December 19, 2022: Annual review completed, no revisions.

**APPENDIX A**  
**Schedule of Eligible Securities for Collateralization of Deposits**

1. Obligations issued, or fully insured or guaranteed as to the payment of principal and interest, by the United States of America, An agency thereof or a United States government sponsored corporation.
2. Obligations issued or fully guaranteed by the International Bank for Reconstruction and Development, the Inter-American Development Bank, the Asian Development Bank, and the African Development Bank.
3. Obligations partially insured or guaranteed by any agency of the United States of America, at a proportion of the Market Value of the obligation that represents the amount of the insurance or guaranty.
4. Obligations issued or fully insured or guaranteed by the State of New York, obligations issued by a municipal corporation, school district or district corporation of such State or obligations of any public benefit corporation which under a specific State statute may be accepted as security for deposit of public moneys.

## **EXHIBIT I**

The Niagara Falls Water Board Investment Guidelines have been constructed pursuant to the following laws:

General Municipal Law 10, 11 and 39  
Banking Law 107a  
Public Authorities Law 2890, 2925, 1230  
New York State Office of the State Comptroller Investment Guidelines for  
Public Authorities (Revised 1/2/98)  
New York State Office of the State Comptroller's Local Government  
Management Guide (Formerly call Financial Management Guide)  
Investment Advisor's Act of 1940

## **EXHIBIT II**

### Authorized Financial Institutions and Dealers:

HSBC Bank USA  
Manufacturers & Traders Trust Company  
Wilmington Trust  
Bank on Buffalo  
Bank of America  
FHN Financial  
Key Bank of New York  
JP Morgan Chase Bank  
Bank of New York  
Citizens Bank, NA  
MBIA – Municipal Investors Services Corp.  
New York State Environmental Facilities Corporation

**AWARD BID FOR PRIMARY TREATMENT POLYMER**

**WHEREAS**, Niagara Falls Water Board (“Water Board”) was assisted by the City of Niagara Falls Purchasing Department in soliciting bids under Bid No. W2022-03 for primary treatment polymer, which is used to promote flocculation and settlement of solids at the wastewater treatment plant; and

**WHEREAS**, three vendors submitted bids for two candidate polymers each, and following laboratory analysis by Water Board staff of the potency of candidate polymers, the bid product that will result in the lowest total cost to the Water Board based on estimated annual usage is Slack Chemical polymer Sta Flocc 5368 at \$1.69 per pound;

**NOW THEREFORE BE IT**

**RESOLVED**, that the Niagara Falls Water Board hereby awards Bid No. W2022-03 for primary treatment polymer to Slack Chemical, for polymer Sta Flocc 5368 at \$1.69 per pound.

*Water Board Personnel Responsible for Implementation of this Resolution:*  
Executive Director

*Water Board Budget Line or Capital Plan Item with Funds for this Resolution:*  
Budget Line: GA-0419.016  
Budget Line Supplied by: B. Majchrowicz  
Available Funds Confirmed by: B. Majchrowicz

On December 19, 2022, the question of the adoption of the foregoing Resolution was duly put to a vote on roll call, which resulted as follows:

	<b>Yes</b>	<b>No</b>	<b>Abstain</b>	<b>Absent</b>
Board Member Asklar	[ ]	[ ]	[ ]	[ ]
Board Member Kimble	[ ]	[ ]	[ ]	[ ]
Board Member Larkin	[ ]	[ ]	[ ]	[ ]
Board Member Leffler	[ ]	[ ]	[ ]	[ ]
Chairman Forster	[ ]	[ ]	[ ]	[ ]

Signed By:

Vote Witnessed By:

\_\_\_\_\_  
Nicholas J. Forster, Chairman

\_\_\_\_\_  
Sean W. Costello, Secretary to Board

## Niagara Falls Water Board

To: Leeann Huey

December 12, 2022

From: Brian Eldridge  
Laboratory Director

Subject: Wastewater Treatment Plant Polymer - Bid # W2022-03

The Wastewater Treatment Laboratory has completed testing and analysis of six candidate polymer samples submitted for consideration in the above referenced bid. These are non-dusting dry polymers for use in conditioning primary influent for solids removal. Annual use and use per day were calculated at 23.84 MGD (average flow for 2021). Results for each product are tabulated below:

<b>Vendor</b>	<b>Polymer</b>	<b>Annual Use (lbs./Yr.)</b>	<b>Daily Use (lbs./ Day)</b>
Solenis	4145	25,415	69.6
Solenis	2640	18,154	49.7
Slack	5368	10,892	29.8
Slack	5268	18,154	49.7
Marubeni	Besfloc	36,307	99.5
Marubeni	Diafloc	18,154	49.7

Yearly usage results are calculated based on jar testing performed by the Wastewater Treatment Lab. Results may vary when scaled to operational levels and depending on changes in polymer mixing, influent matrix makeup and plant operation.

The polymers are not listed in any order of preference.

**UNOFFICIAL TALLY SHEET  
CITY OF NIAGARA FALLS, NEW YORK**

BID # W2022-03 PRIMARY TREATMENT POLYMER  
 BID OPENING: DECEMBER 14, 2022 11:00 AM

PAGE 1 OF 1  
 SET 1 OF 1

ITEM #	MARUBENI AMERICA CORPS 500 MAMARONECK AVE HARRISON NY 10528	SOLENIS 2475 PINNACLE DRIVE WILMINGTON DE 19803	SLACK CHEMICAL 465 S CLINTON STREET CARTHAGE NY 13619
1			
Quantity (lbs.)	127,682	18,154	55 LB Bags
Manufacturer	Kolan Life Sciences	Solenis LLC	Polydyne
Polymer Name/Type/Number	BESFLOC RA8534	Praestol 2640	Sta Floc 5368 – Niagara 3rd
Unit Price Per Pound	\$1.994	\$1.88	\$1.69
2			
Quantity (lbs)	-	25.415	55 LB Bags
Manufacturer	-	Solenis LLC	Polydyne
Polymer Name/Type/Number	-	Zetag 4145	Sta Floc 5268 – Niagara 3 <sup>rd</sup>
Unit Price Per Pound	-	\$2.00	\$1.69
Certifications	X	X	X

**AWARD BID FOR SLUDGE DEWATERING POLYMER**

**WHEREAS**, Niagara Falls Water Board (“Water Board”) was assisted by the City of Niagara Falls Purchasing Department in soliciting bids for sludge dewatering polymer which is used in the processing of sludge at the wastewater treatment plant under Bid No. W2022-04; and

**WHEREAS**, two vendors submitted bids for two candidate polymers each, and following laboratory analysis by Water Board staff of the potency of candidate polymers, the bid product that will result in the lowest total cost to the Water Board based on estimated annual usage is Slack Chemical polymer Sta Flocc 6532 at \$2.61 per pound;

**NOW THEREFORE BE IT**

**RESOLVED**, that the Niagara Falls Water Board hereby awards Bid No. W2022-04 for sludge dewatering polymer to Slack Chemical, for polymer Sta Flocc 6532 at \$2.61 per pound.

*Water Board Personnel Responsible for Implementation of this Resolution:*  
Executive Director

*Water Board Budget Line or Capital Plan Item with Funds for this Resolution:*  
Sludge Polymer GA-0419.017  
Budget Lines Supplied by: B. Majchrowicz  
Funds Confirmed by: B. Majchrowicz

On December 19, 2022, the question of the adoption of the foregoing Resolution was duly put to a vote on roll call, which resulted as follows:

	<b>Yes</b>	<b>No</b>	<b>Abstain</b>	<b>Absent</b>
Board Member Asklar	[   ]	[   ]	[   ]	[   ]
Board Member Kimble	[   ]	[   ]	[   ]	[   ]
Board Member Larkin	[   ]	[   ]	[   ]	[   ]
Board Member Leffler	[   ]	[   ]	[   ]	[   ]
Chairman Forster	[   ]	[   ]	[   ]	[   ]

Signed By:

Vote Witnessed By:

\_\_\_\_\_  
Nicholas J. Forster, Chairman

\_\_\_\_\_  
Sean W. Costello, Secretary to Board

## Niagara Falls Water Board

To: Leeann Huey

December 12, 2022

From: Brian Eldridge  
Laboratory Director

Subject: Wastewater Treatment Plant Sludge Dewatering Polymer - Bid # W2022-04

The Wastewater Treatment Laboratory has completed testing and analysis of six candidate polymer samples submitted for consideration in the above referenced bid. These are non-dusting dry polymers for use in conditioning thickened sludge for dewatering. Annual use was calculated using 6062 tons of dry sludge (total from 2021). Results for each product are tabulated below:

<b>Vendor</b>	<b>Polymer</b>	<b>Polymer Dosage(lbs/ton)</b>	<b>Annual Use (lbs./Yr.)</b>
Slack	6444	13.4 lbs/ton	81,395
Slack	6532	6.45 lbs/ton	39,094
Solenis	857BS	14.71 lbs/ton	89,142
Solenis	859BS*	7.96 lbs/ton	48,250
Marubeni	Besfloc	15.07 lbs/ton	91,375
Marubeni	Diafloc	9.52 lbs/ton	57,710

\*Current polymer in use

Yearly usage results are calculated based on bench testing performed by the Wastewater Treatment Lab. Results may vary when scaled to operational levels.

The polymers are not listed in any order of preference.

**UNOFFICIAL TALLY SHEET  
CITY OF NIAGARA FALLS, NEW YORK**

BID # W2022-04 SLUDGE DEWATERING TREATMENT POLYMER  
 BID OPENING: DECEMBER 14, 2022 11:45 AM

PAGE 1 OF 1  
 SET 1 OF 1

ITEM #	SOLENIS 2475 PINNACLE DRIVE WILMINGTON DE 19803	SLACK CHEMICAL 465 S CLINTON STREET CARTHAGE NY 13619	
1			
Quantity (lbs.)	Not provided as per specs	55 LB Bags	
Manufacturer	Solenis LLC	Polydyne	
Polymer Name/Type/Number	Praestol 857 BS KF NC	STA FLOC 6532 – Niagara 3 <sup>rd</sup>	
Unit Price Per Pound	\$2.42	\$2.61	
2			
Quantity (lbs)	Not provided as per specs	55 LB Bags	
Manufacturer	Solenis LLC	Polydyne	
Polymer Name/Type/Number	Praestol 859 BS KF NC	STA FLOC 6444 – Niagara 3 <sup>rd</sup>	
Unit Price Per Pound	\$2.42	\$2.44	
Certifications	x	X	

*NIAGARA FALLS WATER BOARD RESOLUTION # 2022-12-006*

**AGREEMENT FOR ONSITE ENVIRONMENTAL MONITOR SERVICES**

**WHEREAS**, pursuant to the terms of Order on Consent R9-20170906-129 with the NYSDEC, the Niagara Falls Water Board agreed to retain the services of an onsite environmental monitor (“OEM”); and

**WHEREAS**, the NYSDEC has approved John Goeddertz, Ph.D., as the OEM, and he performs those services while an employee of AECOM and with the occasional assistance of certain AECOM staff; and

**WHEREAS**, Dr. Goeddertz and AECOM perform services that include oversight, review, and suggestions for operations and maintenance, review of treatment performance, regulatory issues, and capital improvement projects, and prepare quarterly reports as required by NYSDEC; and

**WHEREAS**, the OEM’s services have helped to improve the operations and maintenance status of the WWTP; and

**WHEREAS**, the funds previously approved for OEM services have been exhausted; and

**WHEREAS**, AECOM has presented a proposal dated October 11, 2022 to continue to provide the OEM services required pursuant to the Order on Consent for the period from December 2022 through December 2023 for a fee billed on a time-and-material basis and not to exceed \$245,450; and

**WHEREAS**, pursuant to Water Board Procurement Policy Section 5.8.4, this extension of a professional services agreement (1) was not the subject of an RFP because it is a continuation of ongoing professional services which are required to be performed by applicable Order on Consent; (2) no other firms informally were solicited for proposals because John Goeddertz, Ph.D., is the NYSDEC approved OEM; and (3) the procurement is not being postponed to permit an RFP as only one firm is able to provide these OEM services at this time;

\* CONTINUED ON NEXT PAGE \*

**NOW THEREFORE BE IT**

**RESOLVED**, that the Niagara Falls Water Board hereby authorizes the Executive Director to execute a consulting services agreement with AECOM USA, Inc., for Onsite Environmental Monitor services by John Goeddertz, Ph.D., pursuant to Order on Consent R9-20170906-129, for the period from December 2022 through December 2023, to be billed on a time-and-material basis and for a total fee not to exceed \$245,450.

*Water Board Personnel Responsible for Implementation of this Resolution:*  
Executive Director

*Water Board Budget Line or Capital Plan Item with Funds for this Resolution:*  
Capital Item C-5 Combined Projects-Miscellaneous  
Capital Item Supplied by: B. Majchrowicz

On December 19, 2022, the question of the adoption of the foregoing Resolution was duly put to a vote on roll call, which resulted as follows:

	<b>Yes</b>	<b>No</b>	<b>Abstain</b>	<b>Absent</b>
Board Member Asklar	[ ]	[ ]	[ ]	[ ]
Board Member Kimble	[ ]	[ ]	[ ]	[ ]
Board Member Larkin	[ ]	[ ]	[ ]	[ ]
Board Member Leffler	[ ]	[ ]	[ ]	[ ]
Chairman Forster	[ ]	[ ]	[ ]	[ ]

Signed By:

Vote Witnessed By:

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Nicholas J. Forster, Chairman

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Sean W. Costello, Secretary to Board

October 11, 2022

Mr. Sean Costello  
General Counsel and Secretary  
Niagara Falls Water Board  
5815 Buffalo Avenue  
Niagara Falls, NY 14304

Subject: Proposal for 2023 Onsite Environmental Monitor

Dear Mr. Costello:

AECOM USA, Inc. (AECOM) is pleased to provide the Niagara Falls Water Board (NFWB) with this proposal for the continuation of Onsite Environmental Monitoring (OEM) services at the wastewater treatment plant (WWTP) for 2023. These services are currently being provided by AECOM, specifically John Goeddertz, Ph.D., per the direction of the New York State Department of Environmental Conservation (NYSDEC) under our Consulting Services Agreement dated January 23, 2019.

#### **PROJECT UNDERSTANDING**

AECOM has been providing OEM services for the NFWB WWTP since 2019. In general, these services have provided oversight, review, and suggestions for the operation and maintenance (O&M) of the WWTP. Furthermore, these services include the participation in routine (weekly) O&M meetings to review the status of the WWTP ranging from treatment performance, analytical testing, regulatory compliance, unit process maintenance, impacts to the facility (i.e., weather events, specific industrial users, etc.), quarterly regulatory summary reports, and facility capital improvement projects.

While serving as the designated OEM for the NFWB WWTP, AECOM has worked hand-in-hand with the NFWB WWTP representatives to improve the WWTP O&M processes with open lines of communication, prompt responses as challenges occur, and consistency. It should be noted that AECOM provided services for other Consent Order items (Items 6, 7, 10, and 11) that have been executed and completed under budget with final approvals from the NYSDEC. The available budgets remaining from these Consent Order projects have been reallocated as no cost change orders to maintain the OEM services through 2022 thereby providing two plus years of OEM services at no additional cost to the NFWB.

#### **SCOPE OF SERVICES**

Services associated with this project will include the following work items at the WWTP:

1. Observation of day-to-day operation, maintenance, and planning activities while onsite,
2. Monitoring of plant performance,

3. Assistance with troubleshooting and evaluation of systems and equipment as the need arises,
4. Provide engineering assistance as needed including process troubleshooting, capital improvement planning, equipment specification, etc.,
5. Attendance at routine operations and maintenance meetings. These meetings are assumed to occur concurrent with AECOM's planned onsite activities as further defined under Assumptions,
6. Onsite Environmental Monitor reporting to the NYSDEC per the Consent Order requirements.

## PROJECT STAFFING

Personnel anticipated to work on this project are listed below:

- John Goeddert, Ph.D. Sr. Engineer
- Jeff Tudini, Project Manager
- Ryan Delamere, Project Engineer
- Christine Abplanalp, Project Engineer
- Dan Casper/Courtney Pelle, Staff Engineers

Dr. Goeddert will remain as the designated AECOM representative to conduct the tasks listed above and see that the project is properly executed and addresses the NFWB's needs and requirements. Jeff Tudini will support John, as needed, and serve as the point of contact for contract and management aspects of this project. If needed, project engineers will assist Dr. Goeddert with appropriate tasks at a lower hourly cost.

## FEES and RATES

This effort will occur over the next 1-year (December 2022 through December 2023). AECOM proposes to perform the services on a time and materials not-to-exceed basis with a recommended budget of \$245,450. Current direct labor rates for the proposed personnel follows:

Personnel	Title	Rate
John Goeddert	Senior Engineer	\$84
Jeff Tudini	Project Manager	\$64
Christine Abplanalp	Project Engineer	\$45
Dan Casper / Courtney Pelle	Staff Engineer	\$30
Tamie Moeller	Project Controls	\$22

Project charges will be billed as follows:

- Labor – Direct salary times a 2.74 labor multiplier.
- Other Direct Costs: Cost plus 5% (includes mileage at the IRS rate, blueprints, photocopying, etc.)
- Subcontractors: Cost plus 5%.

Personnel not listed above may be used depending upon their expertise and availability. Personnel not listed will be billed at their rates at the time the work is completed. All project billings will identify the individual working on the project, their title, billing rate, and hours worked listed by week ending date. Rates are subject to change during the period of performance. Other direct costs including travel, subsistence, copies, shipping, etc. will be billed at cost plus 5 percent. In the event the funds are insufficient, AECOM will notify the NFWB and request additional funding.

## ASSUMPTIONS

In preparing this proposal we have assumed the following

1. Detailed design (i.e., preparation of contract documents suitable for competitive bidding) is NOT included in AECOM's scope of services. However, assistance with scoping and equipment selection for activities undertaken by maintenance staff or IDIQ contractors (i.e., Mollenberg-Betz and Ferguson) will be included as we have done with a number of other in-house upgrades as the budget allows. For portions of this work that require a detailed design to be prepared by others and as budget allows, AECOM will contribute and assist as necessary to check that activities are consistent with the NFWB long-term operation of the WWTP.
2. Onsite OEM level of effort is estimated to include approximately 3-days/week and 4-hours/day (i.e., 12-hours/week). This level of effort may vary week-to-week depending on WWTP conditions and needs. In addition, engineering assistance with capital improvement planning, equipment specification, etc. is estimated to include a level of effort of approximately 8-hours/week.
3. No subcontractor services are anticipated under this project.
4. AECOM will not be responsible for the preparation of extensive written documents other than the quarterly progress reports.
5. Suggestions, recommendations, guidance, or strategies provided by AECOM represent its reasonable judgment within the time and budget context of its scope and the information available to it at the time. It is NFWB's responsibility to or not to adopt, use or comply with any suggestion, recommendation, guidance, or strategy provided by AECOM. NFWB is solely responsible for the outcome of its decision to or not to adopt, use, or comply with any suggestion, recommendation, guidance, or strategy provided by AECOM.

AECOM is committed to support the NFWB in addressing this important service. This proposal is conditioned upon using our Consulting Services Agreement (attached) that has been used for the current OEM Services and other similar projects with the NFWB. AECOM proposes a change to Item 26 (Special Terms and Conditions) regarding the total aggregate liability as noted with red font in the attached contract. Please contact Jeff Tudini at 716-868-4306 or [jeffrey.tudini@aecom.com](mailto:jeffrey.tudini@aecom.com). If you have any questions or need additional information. Thank you for your consideration

Sincerely yours,  
AECOM USA, Inc.



Jeff Tudini  
Project Manager



Doug Gove  
Vice President

ATTACHMENTS:  
AECOM Consulting Services Agreement

## CONSULTING SERVICES AGREEMENT

This Consulting Services Agreement (“Agreement”) effective this \_\_\_\_\_, 2022, is by and between The Niagara Falls Water Board, a New York State Agency, (“Client”), and AECOM USA, Inc., a New York State Corporation, (“AECOM”); each also referred to individually as (“Party”) and collectively as (“Parties”).

In consideration of the mutual covenants and promises contained herein, the Parties agree as follows:

### 1. SCOPE OF SERVICES

1.1 AECOM shall perform the services set forth in **EXHIBIT A** (“Services”), incorporated herein by reference.

1.2 AECOM will provide the work products (“Deliverables”) in accordance with the schedule (“Project Schedule”), if applicable, as set forth in **EXHIBIT A**.

**2. TERM OF AGREEMENT** Upon execution by the Parties, this Agreement shall have the effective date set forth above. This Agreement shall remain in force until all obligations related to the Services, other than those obligations which survive termination of this Agreement under Article 22, have been fulfilled, unless this Agreement is sooner terminated as set forth herein.

**3. COMPENSATION AND PAYMENT** AECOM shall be paid for the performance of the Services in accordance with **EXHIBIT B** (“Compensation and Payment”), incorporated herein by reference.

**4. NOTICE** All notices, requests, claims, demands and other official communications herein shall be in writing. Such notices shall be given (i) by delivery in person, (ii) by a nationally recognized commercial courier service; or (iii) by United States Postal Service, registered mail, postage prepaid and return receipt requested. Notices shall be effective upon actual delivery to the other Party at the following addresses:

**TO CLIENT:**

Niagara Falls Water Board  
5815 Buffalo Ave,  
Niagara Falls, NY 14304

Attn: Dr. Abderrahman Zehraoui  
Executive Director

**TO AECOM:**

AECOM  
1 John James Audubon Pkwy  
Suite 210  
Buffalo New York 14228  
Attn: Jeff Tudini, Project Manager

Claims-related notices shall be copied to:  
Chief Counsel, Americas Design and Consulting Services  
515 South Flower Street, Suite 1050  
Los Angeles, CA 90071

or to which address the receiving Party may from time to time give notice to the other Party. Rejection or other refusal to accept, or the inability to deliver because of changed address for which no notice was given, shall be deemed to be receipt of the notice as of the date of such rejection, refusal to accept, or inability to deliver.

## **5. AECOM'S RESPONSIBILITIES**

5.1 AECOM shall perform the Services in accordance with the degree of professional skill, quality and care ordinarily exercised by members of the same profession currently practicing in the same location under comparable circumstances and as expeditiously as is consistent with professional skill and the orderly progress of the Project. The full extent of AECOM's responsibility with respect to the Services shall be to perform in accordance with the above standards and to remedy any material deficiencies or defects in the Deliverables at AECOM's own expense, provided that AECOM is notified by Client, in writing, of any such deficiency or defect within a reasonable period after discovery thereof, but in no event later than 90 days after AECOM's completion or termination of the Services. AECOM MAKES NO OTHER REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, INFORMATIONAL CONTENT OR OTHERWISE.

5.2 AECOM will endeavor in good faith, as needed, to obtain from the appropriate authorities their interpretation of applicable codes and standards and will apply its professional judgment in interpreting the codes and standards as they apply to the Project at the time of performance of the Services. Notwithstanding the above, the Parties agree that, as the Project progresses, such codes or standards may change or the applicability of such codes or standards may vary from AECOM's original interpretation through no fault of AECOM and that additional costs necessary to conform to such changes or interpretations during or after execution of the Services will be subject to an equitable adjustment in the Compensation and Project Schedule.

5.3 AECOM shall be responsible for its performance and that of AECOM's lower-tier subcontractors and vendors. However, AECOM shall not be responsible for health or safety programs or precautions related to Client's activities or operations or those of Client's other contractors and consultants or their respective subcontractors and vendors ("Contractors"). AECOM shall have no responsibility for (i) construction means, methods, techniques, sequences or procedures; (ii) for the direction of Contractors' personnel; (iii) selection of construction equipment; (iv) coordination of Contractors' work; (v) for placing into operation any plant or equipment; or (vi) for Contractors' failure to perform the work in accordance with any applicable construction contract. AECOM shall not be responsible for Client's pre-existing site conditions or the aggravation of those preexisting site conditions to the extent not caused by the negligence or willful misconduct of AECOM. AECOM shall not be responsible for inspecting, observing, reporting or correcting health or safety conditions or deficiencies of Client, Contractors or others at the project site ("Project Site") other than AECOM's employees, subconsultants and vendors. So as not to discourage AECOM from voluntarily addressing health or safety issues while at the Project Site, in the event AECOM does identify such issues by making observations, reports, suggestions or otherwise, AECOM shall have no authority to direct the actions of others not under AECOM's responsibility and control and shall have no liability, responsibility, or affirmative duty arising on account of AECOM's actions or forbearance.

5.4 Notwithstanding anything contained in this Agreement, AECOM shall have no responsibility for the discovery, presence, handling, removal, transportation, storage or disposal of, or exposure of persons to hazardous materials in any form related to the Project.

## **6. CLIENT'S RESPONSIBILITIES**

6.1 Client shall provide in writing any specific Client requirements or criteria for the Project.

6.2 Client shall furnish to AECOM all information and technical data in Client's possession or control reasonably required for the proper performance of the Services. AECOM shall be entitled to reasonably rely without independent verification upon the information and data provided by Client or obtained from generally accepted sources within the industry, except to the extent such verification by AECOM is expressly required as a defined part of the Services.

6.3 Client shall arrange for access and make all provisions necessary for AECOM to enter upon public and/or private property as required for AECOM to properly perform the Services. Client shall disclose to AECOM any known or suspected hazards at the Project Site which may pose a threat to human health, property or the environment.

6.4 If any document or inquiry requires Client to approve, comment, or to provide any decision or direction with regard to the Services, such approval, comment, decision or direction shall be provided within a reasonable time within the context of the Project Schedule, or if not identified in the Project Schedule, within a reasonable time to facilitate the timely performance of the Services.

**7. INDEPENDENT CONTRACTOR** Nothing contained in this Agreement shall be construed to create a partnership, joint venture, or create a relationship of employer/employee or principal/agent between Client or Client's Contractors and AECOM.

## **8. CONFIDENTIALITY**

8.1 AECOM shall treat as confidential information and data delivered to it by Client or developed in the performance of the Services that are specified in writing by Client to be confidential ("Confidential Information"). Confidential Information shall not be reproduced, transmitted, disclosed or used by AECOM without the consent of Client, except in the proper performance of the Services, for a period of 5 years following completion or termination of this Agreement.

8.2 Notwithstanding the above, these restrictions shall not apply to Confidential Information which (i) is already known to AECOM at the time of its disclosure; (ii) becomes publicly known through no wrongful act or omission of AECOM; (iii) is communicated to a third party with the express written consent of Client and not subject to restrictions on further use or disclosure; (iv) is independently developed by AECOM; or, (v) to the extent such Confidential Information is required by Law to be disclosed to any governmental agency or authority; provided that before making such disclosure, AECOM shall promptly provide Client with written notice of such requirement and a reasonable opportunity for Client to object to the disclosure or to take action that Client deems appropriate to maintain the confidentiality of the Confidential Information.

8.3 Upon termination of this Agreement or upon Client's written request, AECOM shall return the Confidential Information to Client or destroy the Confidential Information in AECOM's possession or control. Notwithstanding the above, AECOM shall be entitled to retain a copy of such Confidential Information relating to the Services or this Agreement for its archives, subject to AECOM's continued compliance with this Article 8.

## **9. DATA RIGHTS**

9.1 All Deliverables set forth in **Exhibit A** shall become the property of Client upon proper payment for the Services. AECOM shall bear no liability or responsibility for Deliverables that have been modified post-delivery or used for a purpose other than that for which it was prepared under this Agreement.

9.2 Notwithstanding Section 9.1 above, AECOM's proprietary information, including without limitation, work papers, drawings, specifications, processes, procedures, software, interim or draft documents, methodologies, know-how, software and other instruments of service belonging to or licensed by AECOM and used to develop the Work Product ("AECOM Data"), shall remain the sole property of AECOM. To the extent the Deliverables contain or require the use of AECOM Data, AECOM hereby grants to Client, upon proper payment for the Services, a non-exclusive, non-transferable and royalty-free license to use such AECOM Data solely for the purposes for which the Deliverables were developed.

9.3 Nothing in this Article shall be construed to prohibit AECOM from using skills, knowledge or experience gained by AECOM in the performance of the Services for other purposes, provided that AECOM does not use Client's Confidential Information.

**10. COMPLIANCE** The Parties shall comply with applicable treaties, compacts, statutes, ordinances, codes, regulations, consent decrees, orders, judgments, rules, and other requirements of governmental or judicial entities that have jurisdiction over the Services (“Law”).

**11. FORCE MAJEURE** Neither Party shall be responsible for a delay in its respective performance under this Agreement, other than a delay in payment for Services already performed, if such delay is caused by extraordinary weather conditions or other natural catastrophes, war, terrorist attacks, sabotage, computer viruses, riots, strikes, lockouts or other industrial disturbances, acts of governmental agencies or authorities, discovery of Hazardous Materials or differing and unforeseeable site conditions, or other events beyond the reasonable control of the claiming Party. AECOM shall be entitled to an equitable adjustment to the Project Schedule in the foregoing circumstances.

## **12. INSURANCE**

12.1 AECOM will maintain the following insurance coverages and amounts:

- 12.1.1 Workers Compensation insurance as required by Law;
- 12.1.2 Employer’s Liability insurance with coverage of \$1,000,000 each accident/employee;
- 12.1.3 Commercial General Liability insurance with coverage of \$2,000,000 per occurrence/aggregate;
- 12.1.4 Automobile Liability insurance with coverage of \$1,000,000 combined single limit; and
- 12.1.5 Professional Liability insurance with coverage of \$2,000,000 per claim/aggregate.

## **13. INDEMNITY**

13.1 AECOM agrees to indemnify Client, its officers, directors and employees, from loss or damage for bodily injury or property damage (“Claims”), to the extent caused by AECOM’s negligence or willful misconduct.

13.2 If the Services include AECOM’s performance during the construction phase of the Project, Client shall require Client’s Contractors working on the Project Site to include AECOM, its directors, officers and employees in any indemnity that the Client requires such Contractors to provide to the Client.

**14. CONSEQUENTIAL DAMAGES WAIVER** IN NO EVENT SHALL EITHER PARTY, THEIR PARENTS, AFFILIATES AND SUBSIDIARIES OR THEIR RESPECTIVE DIRECTORS OFFICERS OR EMPLOYEES BE LIABLE TO THE OTHER FOR ANY INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL OR PUNITIVE DAMAGES WHATSOEVER (INCLUDING, WITHOUT LIMITATION, LOST PROFITS, LOSS OF REVENUE, LOSS OF USE OR INTERRUPTION OF BUSINESS) ARISING OUT OF OR RELATED TO THIS AGREEMENT, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

**15. RISK ALLOCATION AND RESTRICTION OF REMEDIES** THE PARTIES HAVE EVALUATED THE RESPECTIVE RISKS AND REMEDIES UNDER THIS AGREEMENT AND AGREE TO ALLOCATE THE RISKS AND RESTRICT THE REMEDIES TO REFLECT THAT EVALUATION. CLIENT AGREES TO RESTRICT ITS REMEDIES UNDER THIS AGREEMENT AGAINST AECOM, ITS PARENTS, AFFILIATES AND SUBSIDIARIES, AND THEIR RESPECTIVE DIRECTORS, OFFICERS, SHAREHOLDERS AND EMPLOYEES, (“AECOM COVERED PARTIES”), SO THAT THE TOTAL AGGREGATE LIABILITY OF THE AECOM COVERED PARTIES SHALL NOT EXCEED THE ACTUAL PAID COMPENSATION FOR THE SERVICES. THIS RESTRICTION OF REMEDIES SHALL APPLY TO ALL SUITS, CLAIMS, ACTIONS, LOSSES, COSTS (INCLUDING ATTORNEY FEES) AND DAMAGES OF ANY NATURE ARISING FROM OR RELATED TO THIS AGREEMENT WITHOUT REGARD TO THE LEGAL THEORY UNDER WHICH SUCH LIABILITY IS IMPOSED. CLAIMS MUST BE BROUGHT WITHIN ONE CALENDAR YEAR FROM PERFORMANCE OF THE SERVICES UNLESS A LONGER PERIOD IS REQUIRED BY LAW.

**16. DISPUTES RESOLUTION**

16.1 Either Party may initiate a dispute resolution by providing written notice to the other Party setting forth the subject of the claim, dispute or controversy ("Claim") and the requested relief. The recipient of such notice shall respond within 5 business days with a written statement of its position and a recommended solution to the Claim.

16.2 If the Parties cannot resolve the dispute through negotiation, either Party may refer the Claim to a panel ("Panel") consisting of a designated senior representative from each Party ("Representative"), who shall have the authority to resolve such Claim. The Representatives shall not have been directly involved in the Services and shall negotiate in good faith. No written or verbal representation made by either Party in the course of any Panel proceeding or other settlement negotiations shall be deemed to be a party admission. If the representatives are unable to resolve the dispute within 3 weeks, either Party may pursue its respective legal and equitable remedies.

**17. GOVERNING LAW** This Agreement shall be governed by and interpreted under the laws of the State of California, excluding the conflict of law provisions.

**18. TERMINATION**

18.1 This Agreement may be terminated for convenience by either Party upon 30 days advance written notice. On termination, AECOM will be paid for all Services performed up through the termination date.

18.2 This Agreement may be terminated for cause by either Party if the other Party materially fails to perform its obligations under this Agreement, does not commence correction of such non-performance within 10 business days of receipt of written notice and/or fails to diligently complete such correction thereafter. The respective rights and obligations of the Parties predating such termination shall survive termination of this Agreement.

**19. ASSIGNMENT**

19.1 Neither Party may assign this Agreement without the written consent of the other Party.

19.2 Notwithstanding Section 19.1 above, the Parties recognize that AECOM has affiliated companies who have specialized expertise, necessary certifications/registrations or other capabilities that may make use of such affiliates more suitable for the performance of all or part of the Services. AECOM shall be entitled without additional consent to assign this Agreement or performance of the Services, in whole or in part, to any of AECOM's subsidiaries or affiliates upon written notice to Client; provided, however, that AECOM shall remain liable for the performance, obligations and responsibilities of such Affiliates under this Agreement.

**20. PARTIES IN INTEREST** Nothing in this Agreement, expressed or implied, is intended to confer on any person or entity other than the Parties any right or remedy under or by reason of this Agreement. The provisions of this Agreement shall bind and inure solely to the benefit of the Parties and their respective successors and permitted assigns.

**21. WAIVER** Either Party may in writing waive any provisions of this Agreement to the extent such provision is for the benefit of the waiving Party. No waiver by any Party of a breach of any provision of this Agreement shall be construed to be a waiver of any subsequent or different breach.

**22. SEVERABILITY AND SURVIVAL** The invalidity or unenforceability of any particular provision of this Agreement shall not affect the other provisions, and this Agreement shall be construed in all respects as if any invalid or unenforceable provision were omitted. Articles 4 (Notice), 5 (AECOM's Responsibilities), 6.2 (Reliance on Data), 8 (Confidentiality), 9 (Data Rights), 12 (Insurance), 13 (Indemnity), 14 (Consequential Damages Waiver), 15 (Risk Allocation), 16 (Disputes Resolution), 17 (Governing Law), 19 (Assignment), 20 (Parties in Interest) or 22 (Survival) shall survive termination of this Agreement.

**23. PREPARATION OF AGREEMENT** Each Party has had the opportunity to avail itself of legal advice and counsel. Neither Party shall be deemed to be the drafter or author of this Agreement. In the event this

Agreement is subject to interpretation or construction by a court of law or panel of arbitration, such court or panel shall not construe this Agreement, or any portion hereof, against either Party as the drafter of this Agreement.

**24. SIGNATURES** Each person executing this Agreement warrants that he/she has the necessary authority to do so on behalf of the respective Party. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute a single agreement.

**25. ORDER OF PRECEDENCE**

<b>EXHIBIT C</b>	Change Orders
<b>Consulting Services Agreement</b>	Article 26
<b>Consulting Services Agreement</b>	Articles 1 through 25 and 27
<b>EXHIBIT B</b>	Compensation and Payment
<b>EXHIBIT A</b>	Services
<b>Other contract documents</b>	

**26. SPECIAL TERMS AND CONDITIONS**

26.1 **Article 15. RISK ALLOCATION AND RESTRICTION OF REMEDIES**, above, is replaced by the following:

The parties have evaluated the respective risks and remedies under this agreement and agree to allocate the risks and restrict the remedies to reflect that evaluation. Client agrees to restrict its remedies under this agreement against AECOM, its parents, affiliates and subsidiaries, and their respective directors, officers, shareholders and employees, ("AECOM Covered Parties"), so that the total aggregate liability of the supplier covered parties shall not exceed the compensation paid for the services, or \$5 Million per project, whichever is ~~greater~~ **lesser of the two values**. This restriction of remedies shall apply to all suits, claims, actions, losses, costs (including Attorney fees) and damages of any nature arising from or related to this agreement without regard to the legal theory under which such liability is imposed. Claims must be brought within one calendar year from the performance of the services unless a longer period is required by law.

26.2 **Article 12. INSURANCE**, add:

12.1.6 The Niagara Falls Water Board will be named as an additional insured on the General Liability Insurance associated with the projects

26.3 **Article 17. GOVERNING LAW**, , above, is replaced by the following:

**17. GOVERNING LAW** This Agreement shall be governed by and interpreted under the laws of the State of New York, excluding the conflict of law provisions.

26.4 AECOM agrees to comply, when possible, with the Niagara Falls Water Board's women and minority business enterprise (M/WBE) utilization, Service-Disabled Veteran-Owned Business (SDVOB), and equal employment opportunity Goals. AECOM will provide the appropriate documentation to support the Niagara Falls Water Board's Reporting Responsibilities.

**27. ENTIRE AGREEMENT** This Agreement contains all of the promises, representations and understandings of the Parties and supersedes any previous understandings, commitments, proposals or agreements, whether oral or written. This Agreement shall not be altered, changed, or amended except as set forth in a written amendment to this Agreement, duly executed by both Parties. The attached **EXHIBIT C** ("Change Order"), incorporated herein by reference, is the preferred form for such use.

**AECOM USA, Inc.**

**CLIENT: Niagara Falls Water Board**



\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

Doug Gove

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Printed Name

Vice President Northeast Water Business Line  
Regional Market Sector Lead

\_\_\_\_\_  
Printed Title

\_\_\_\_\_  
Printed Title

Address  
250 Apollo Dr.  
Chelmsford, MA 01824

\_\_\_\_\_

Address  
5815 Buffalo Avenue  
Niagara Falls, NY 14304

\_\_\_\_\_

(End of page)

**EXHIBIT A**  
**SERVICES**

Services:

- |  |
|--|
| <ol style="list-style-type: none"> <li>1. Monitoring of plant performance,</li> <li>2. Troubleshooting and evaluation of systems and equipment as the need arises,</li> <li>3. Provide engineering assistance as needed including process troubleshooting, capital improvement planning, equipment specification, etc.,</li> <li>4. Attendance at routine operations and maintenance meetings,</li> <li>5. Miscellaneous services within the scope and budget of this task, and</li> <li>6. Onsite Environmental Monitor reporting to the NYSDEC.</li> </ol> |
|  |

Schedule:

This work will be completed between December 2022 and December 2023

Deliverables:

Quarterly monitoring reports

AECOM Project Manager

Name	Jeffrey Tudini
Title	Project Manager
Address	1 John James Pkwy, Suite 210, Buffalo NY 14228
Phone Number	716 868-4306
Email Address	jeffrey.tudini@aecom.com

Client Project Manager

Name	Dr. Abderrahman Zehraoui
Title	Executive Director
Address	5815 Buffalo Avenue, Niagara Falls, NY 14304
Phone Number	716 283-9770 x2113
Email Address	azehraoui@NFWB.org

(End of page)

**EXHIBIT B**

**COMPENSATION AND PAYMENT**

**1 COMPENSATION** The Services set forth in **EXHIBIT A** will be compensated on the following basis:

Advance retainer of [\$] The advance retainer is to be applied to the final invoice. Any remainder will be returned to Client within 30 days of receipt of final payment.

Time & Material - See Section 2.1 for Hourly Labor Rates

Time and Materials with a Not-to-Exceed (“NTE”) amount of \$245,450. The Hourly Labor Rates (if applicable) are as in Section 2.0 below. Reimbursable expenses are included in the overall NTE cap.

Lump Sum [\$]:

Milestone/Deliverable & Date	Payment Amount
	\$

Cost Plus Fixed Fee: [Cost \$ and Fee \$]

Other:

--

**2. RATE SCHEDULE** Compensation shall be based on the following Hourly Direct Salary Rate Schedule times a 2.74 multiplier:

John Goeddertz	\$84
Jeff Tudini	\$64
Christine Abplanalp	\$45
Dan Casper / Courtney Pelle	\$30
Tamie Moeller	\$22

**2.1 HOURLY LABOR RATE SCHEDULE**

**2.2 OTHER HOURLY LABOR RATE CATAGORIES** If additional labor categories are authorized during the performance of this Agreement, compensation for each additional category will be negotiated at the time the additional Services are authorized.

**2.3 ANNUAL HOURLY LABOR RATE ADJUSTMENTS** The Hourly Labor Rate Schedule is adjusted each calendar year to reflect updated labor cost categories. Labor cost of Services authorized in subsequent calendar years will be based on the applicable Hourly Labor Rate Schedule for those years.

**3. REIMBURSEABLE EXPENSES** Reimbursable expenses are expenditures made by AECOM for goods, travel expenses and vendor services in support of the performance of the Services. Such expenditures will be billed at the actual cost to AECOM plus five percent (5%) to cover related administrative costs.

**4. CHANGE ORDERS** The Parties may at any time and by written agreement make changes in the Services, Project Schedule, Deliverables, Compensation or other terms and conditions in this Agreement.

The Parties shall effect such change through the use of a written Change Order. **EXHIBIT C** is the preferred form for such use.

**5. INVOICING** AECOM will invoice Client on a monthly basis unless otherwise set forth herein. If Client disagrees with any portion of an invoice, it shall notify AECOM in writing of the amount in dispute and the specific reason for Client's objection within 10 days of receipt of invoice. Client shall pay the undisputed portion of the invoice as set forth below. Documentation supporting the invoice will be made available upon request.

## **6 PAYMENT**

6.1 If payment is based on Time and Materials with a NTE, once AECOM reaches the NTE, AECOM will stop further Services pending a Change Order to adjust the budget and schedule for the continued performance of the Services.

6.2 Timely payment is a material term of this Agreement. Client shall pay all undisputed portions of AECOM's invoices within 45 days of receipt without holdback or retention. Amounts remaining unpaid 45 days after the invoice date shall bear interest at the rate of 1.5% per month on the unpaid balance and AECOM may suspend the Services pending receipt of such payment. In addition, AECOM retains its unrestricted rights under Article 18 (Termination) of the Agreement.

6.3 If the Project is suspended by Client for more than 30 days, AECOM shall be paid for all Services performed prior to the effective date of suspension within 45 days of such suspension. Upon resumption of the Project, AECOM shall be entitled to an equitable adjustment in cost and schedule to compensate AECOM for expenses incurred as a result of the interruption and resumption of the Services.

6.4 To the extent that completion of the Services is delayed beyond the original scheduled completion date and such delay is not the fault of AECOM, an equitable adjustment shall be made to AECOM's Compensation and Project Schedule.

6.5 Except as otherwise specifically provided herein, Client shall pay or reimburse AECOM, as appropriate, for all categories of taxes other than income tax, including without limitation, sales, consumer, use, value added, gross receipts, privilege, and local license taxes related to the Services.

6.6 Client shall make payments to AECOM using one of the following methods:

### 6.6.1 AECOM LOCKBOX:

AECOM USA, Inc.  
1178 Paysphere Circle  
Chicago, IL 60674

### 6.6.2 ELECTRONIC FUNDS TRANSFER/ACH PAYMENT:

Account Name: AECOM USA, Inc.  
Bank Name: Bank of America  
Address1: Building D  
Address2: 2000 Clayton Road  
City/State/Zip: Concord, CA 94520-2425  
Account Number: 5800937020  
ABA Routing Number: 071000039

6.6.3 WIRE TRANSFER:

Account Name: AECOM USA, Inc.  
Bank Name: Bank of America  
Address: 100 West 33rd St  
City/State/Zip: New York, NY 10001  
Account Number: 5800937020  
ABA Routing Number: 026009593  
SWIFT Code: BOFAUS3N

6.6.4 Questions related to payment can be sent to:

AECOM Cash Applications Supervisor by phone at (804) 515-8490 or by email at [cashappsremittance@aecom.com](mailto:cashappsremittance@aecom.com)

(End of page)

AECOM Project Name: OEM Services  
AECOM Project No.: \_\_\_\_\_  
Change Order No.: \_\_\_\_\_

**EXHIBIT C**

**CHANGE ORDER FORM**

In accordance with the Consulting Services Agreement dated \_\_\_\_\_, 20\_\_ between **The Niagara Falls Water Board** ("Client"), and AECOM USA, Inc., a New York Corporation, ("AECOM"), this Change Order, with an effective date of \_\_\_\_\_, 20\_\_ modifies that Agreement \_\_\_\_\_ as follows:

**1. Changes to the Services:**


**2. Change to Deliverables:**

--

**3. Change in Project Schedule** (attach schedule if appropriate):

--

**4. Change in CONSULTANT's Compensation:**

The Services set forth in this Change Order will be compensated on the following basis:

No change to Compensation

Time & Material (See **Exhibit B** for the Hourly Labor Rate Schedule)

Time and Materials with a Not- to-Exceed amount of (\$ \_\_\_\_\_). The Hourly Labor Rate Schedule is set forth in **EXHIBIT B** (if applicable). Reimbursable expenses are included in the overall Not to Exceed cap.

Lump Sum [\$ \_\_\_\_\_]

Milestone/Deliverable & Date	Payment Amount
	\$

**Cost Plus Fixed Fee:** [Cost \$ \_\_\_\_\_ and Fee \$ \_\_\_\_\_]

Therefore, the total authorized Compensation, inclusive of this Change Order is \$ \_\_\_\_\_.

**5. Project Impact:**

--

**6. Other Changes** (including terms and conditions):

--

- 7. All other terms and conditions of the Agreement remain unchanged.
- 8. Each Party represents that the person executing this Change Order has the necessary legal authority to do so on behalf of the respective Party.

**AECOM USA, Inc.**

**CLIENT:  
Niagara Falls Water Board**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Printed Name

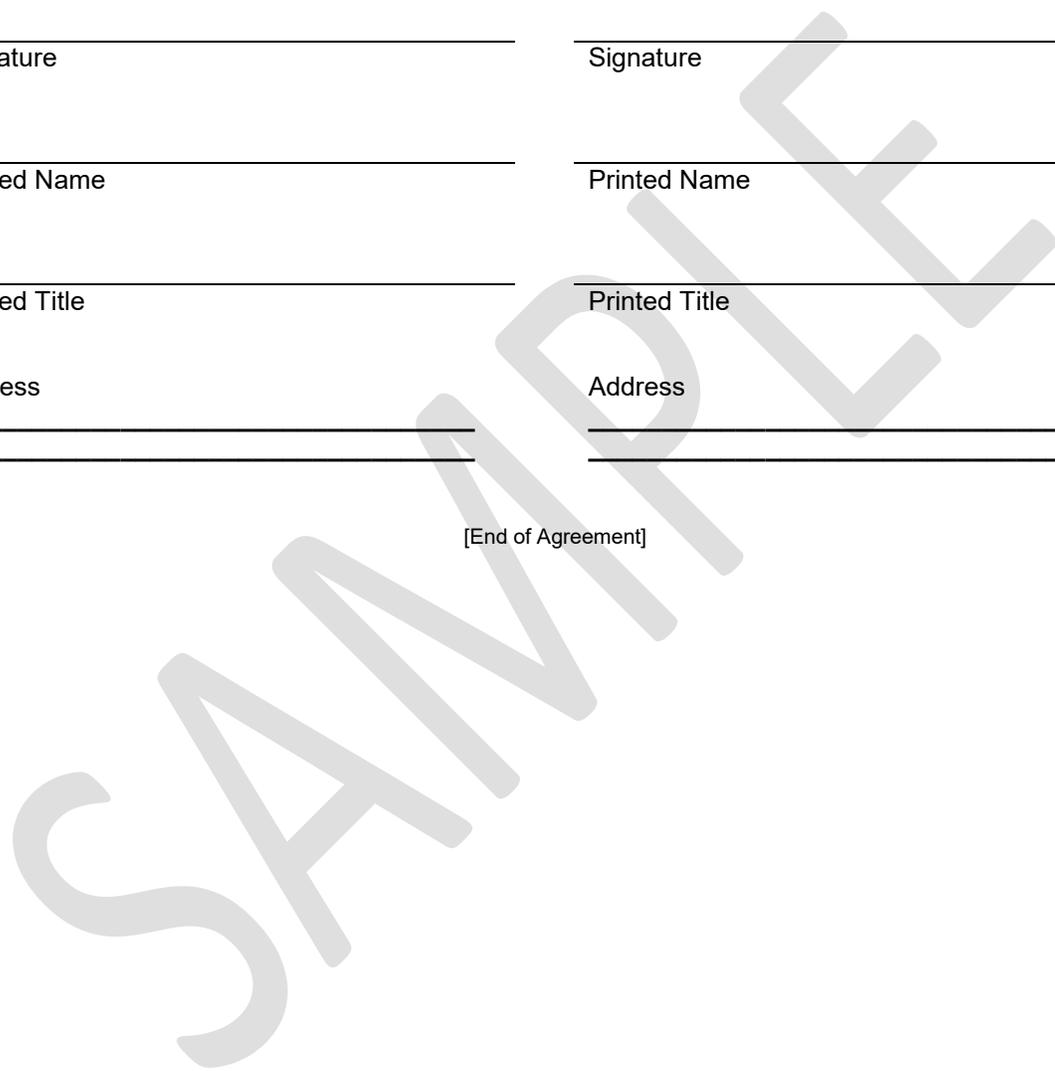
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[End of Agreement]



**ACCEPTING PROPOSAL FOR LASALLE AREA  
SANITARY SEWER EVALUATION SURVEY PHASE 1**

**WHEREAS**, the Niagara Falls Water Board (“NFWB”) issued request for proposals (“RFP”) 2022-01 for Professional Engineering Services for LaSalle Area Sanitary Sewer Evaluation Survey SSES – Phase 1; and

**WHEREAS**, the goal of this procurement is to retain a qualified engineering firm to perform sanitary sewer evaluation survey (“SSES”) work and to produce a report identifying sources of inflow and infiltration (“I&I”) and a corrective action plan for reducing I&I sources in future years for a specific section of the LaSalle sanitary sewer system referred to as the Phase 1 area, and proposing firms were requested to supply option prices should the Water Board wish to continue the firm’s services for additional areas referred to as Phase 2 and Phase 3; and

**WHEREAS**, this work is to be performed in connection with a 2009 Order on Consent between the NFWB and NYSDEC, No. R9020080528-32, for the abatement of Sanitary Sewer Overflows (“SSO”), and the scope of work described in the RFP was determined following negotiations with NYSDEC to modify the original schedule of work associated with the Order on Consent in a manner that will help direct investment of corrective action funds into the most effective projects, and a formal amendment to the Order on Consent to incorporate this work is expected to be negotiated in 2023; and

**WHEREAS**, two proposals were received, both dated December 8, 2022, one from Arcadis with a proposed fee of \$126,935 and one from Watts with a proposed fee of \$252,813.70; and

**WHEREAS**, the Water Board staff who have reviewed the proposals recommend selection of the Arcadis proposal; and

**WHEREAS**, the Water Board has received Engineering Planning Grant No. 111586 in the amount of \$100,000 which will fund a substantial portion of this SSES Phase 1 work;

\* CONTINUED ON NEXT PAGE \*

**NOW THEREFORE BE IT**

**RESOLVED**, that the Niagara Falls Water Board hereby accepts the proposal by Arcadis to complete the Professional Engineering Services for LaSalle Area Sanitary Sewer Evaluation Survey SSES – Phase 1 as set forth in that firm’s December 8, 2022 proposal for a total fee not to exceed \$126,935.

*Water Board Personnel Responsible for Implementation of this Resolution:*  
Executive Director

*Water Board Budget Line or Capital Plan Item with Funds for this Resolution:*  
CIP Item No. S-3, LaSalle Area Sewer Improvements (SSO)  
Capital Line Supplied by: D. Williamson  
Available Funds Confirmed by: B. Majchrowicz

On December 19, 2022, the question of the adoption of the foregoing Resolution was duly put to a vote on roll call, which resulted as follows:

	<b>Yes</b>	<b>No</b>	<b>Abstain</b>	<b>Absent</b>
Board Member Asklar	[ ]	[ ]	[ ]	[ ]
Board Member Kimble	[ ]	[ ]	[ ]	[ ]
Board Member Larkin	[ ]	[ ]	[ ]	[ ]
Board Member Leffler	[ ]	[ ]	[ ]	[ ]
Chairman Forster	[ ]	[ ]	[ ]	[ ]

Signed By:

Vote Witnessed By:

\_\_\_\_\_  
Nicholas J. Forster, Chairman

\_\_\_\_\_  
Sean W. Costello, Secretary to Board

# NIAGARA FALLS WATER BOARD



## **REQUEST FOR PROPOSALS (“RFP”) NO. 2022-01** **Professional Engineering Services for LaSalle Area Sanitary** **Sewer Evaluation Survey SSES – Phase 1**

### **AWARD RECOMMENDATION MEMO**

**DATE:** 12/15/2022

After review of the (2) two engineering consultant proposals received by **December 8<sup>th</sup>, 2022 at 2:00 pm**, (1) one final award recommendation has been made by the NFWB proposal evaluation team for the Request for Proposals (“RFP”) No. 2022-01 Professional Engineering Services for LaSalle Area Sanitary Sewer Evaluation Survey SSES – Phase 1. The NFWB evaluation team reviewed and scored the (2) two proposals received using the following criteria, as stated in the RFP:

#### **7. Evaluation Criteria**

Proposals shall be examined and evaluated to determine whether the proposals meet the requirements of this RFP. The contract will be awarded based on the following criteria:

1. Situational understanding (20 points)
2. Demonstrated experience, capabilities, and qualifications (40 points)
3. Completeness of the proposal (20 points); and
4. Total proposed cost (20 points)

The NFWB evaluation team recommends awarding the Professional Engineering Services for LaSalle Area Sanitary Sewer Evaluation Survey SSES – Phase 1 work to **Arcadis** to complete the scope of services outlined in Section 8 Schedule, Effort and Budget Breakdown of their December 2022 Proposal for Professional Engineering Services for LaSalle Area Sanitary Sewer Evaluation Survey SSES – Phase 1. Section 8 of their proposal includes the Request for Proposal No.2022-01, Fee Proposal – Phase 1 Sewersheds (91<sup>st</sup> & Luick and 81<sup>st</sup> & Frontier 1) amount not to exceed \$126,935 plus other direct costs including transportation and equipment necessary to complete the SSES work.

ORIGINAL

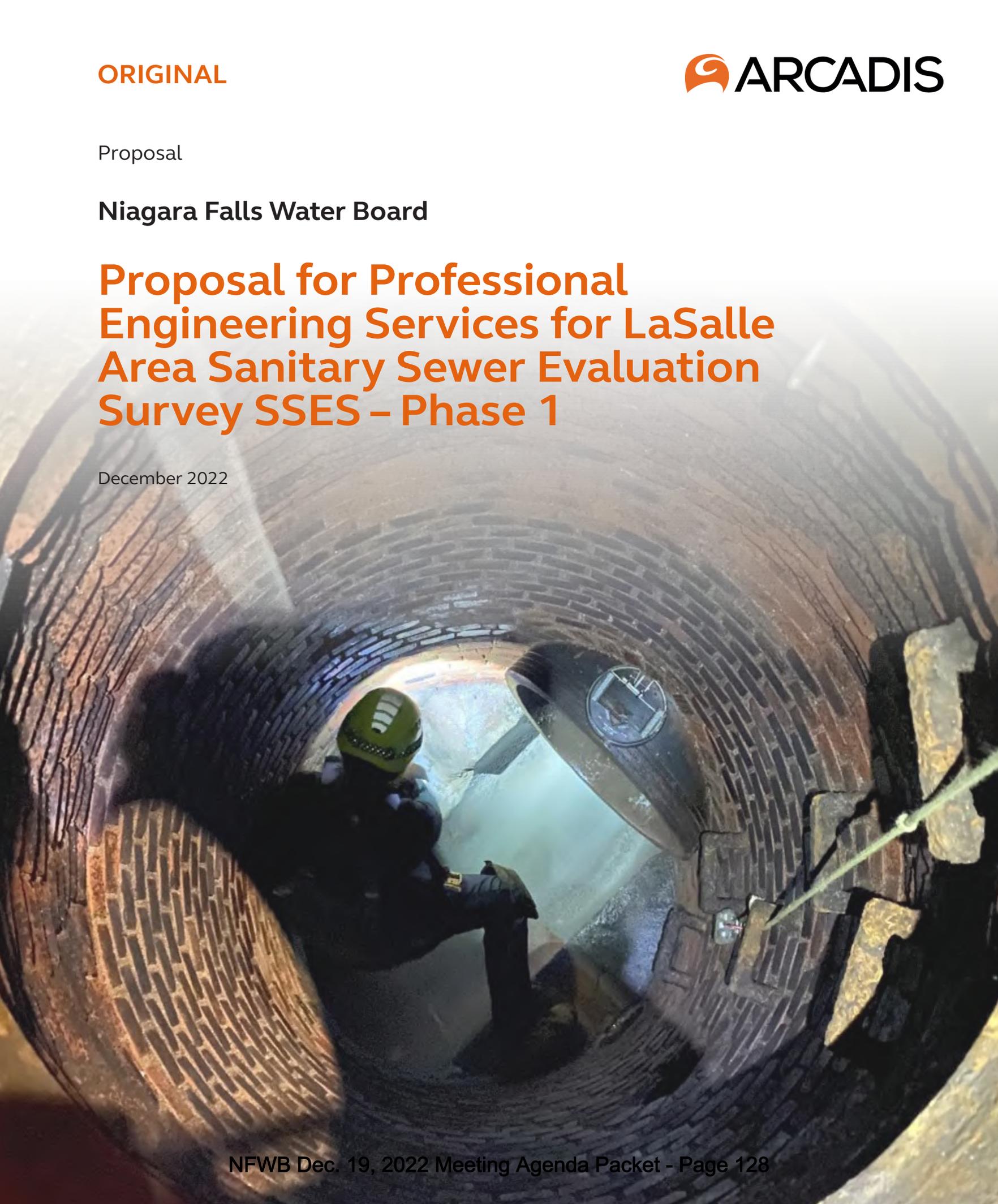


Proposal

Niagara Falls Water Board

# Proposal for Professional Engineering Services for LaSalle Area Sanitary Sewer Evaluation Survey SSES – Phase 1

December 2022



Douglas S. Williamson, PE  
Director of Technical & Regulatory Services  
Niagara Falls Water Board  
5815 Buffalo Avenue  
Niagara Falls, New York 14304

Arcadis of New York, Inc.  
50 Fountain Plaza  
Suite 600  
Buffalo, NY 14202  
T: 716 667 0900  
F: 716 842 2612

Date: December 8, 2022

[www.arcadis.com](http://www.arcadis.com)

Subject: Professional Engineering Services Proposal for LaSalle Area Sanitary  
Sewer Evaluation Survey SSES – Phase 1

Dear Mr. Williamson:

Arcadis is pleased to submit our Proposal to the Niagara Falls Water Board (NFWB) to provide professional engineering services regarding Sanitary Sewer Evaluation Survey (SSES) work in the LaSalle Area. We believe our team offers the NFWB exceptional value for this work due to the following key differentiators:

**Proven Team and Project Manager** – The Arcadis team members have worked together on numerous successful projects over the last several years and have developed excellent working relationships with your staff. Dan Seider, PE and John Salvagno, PE have led several SSES projects locally with the Erie County Department of Environment and Planning – Division of Sewerage Management as well as supporting the NFWB’s completion of the Sanitary Sewer System Management Plan (SSSMP) – Year 12 Progress Evaluation and subsequent discussions with the New York Department of Environmental Conservation. The Arcadis project team is once again teaming with our skilled subconsultants JM Davidson Engineering and TECsmith from the Year 12 SSSMP to ensure the successful completion of this project.

**In-House Equipment and Tools** – The Arcadis team has the necessary equipment in-house to complete the SSES activities including sanitary sewer flow meters, smoke testing and night-time weiring equipment and the Arcadis-developed Time Series Analyzer software. Our team is well versed in their mobilization, calibration, and results interpretation.

**Successful Approach** – Arcadis brings the right people, right references, and right technology. We bring a familiar team composed of local staff, regional experts with high profile project experience, and a dedicated WBE firm to provide the best possible outcomes for the NFWB.

If you have any questions or require additional information, please do not hesitate to contact me at your convenience.

Sincerely,



Dan Seider, PE  
Project Manager  
Email: [Daniel.Seider@arcadis.com](mailto:Daniel.Seider@arcadis.com)  
Tel: 716 667 6670

# Value Propositions

**Arcadis will support Niagara Falls Water Board's goals of focused Sanitary Sewer Evaluation Studies to maintain compliance with New York State DEC's revised Order on Consent for the LaSalle area and mitigate SSOs consistent with the 18-year work plan through a series of improvements that are financially responsible to the City rate payers**

## PROVEN LOCAL TEAM



Our Arcadis leadership team has extensive experience on local projects with industry recognized expertise to bring NFWB a team familiar with the LaSalle sewer system, industry best practices and funding opportunities

Arcadis will meet the needs of this project with a responsive, local team that also includes national experts and MWBE partners.



Project Manager

**Dan Seider** has successfully led several local sewer system management projects and will continue leading the same Arcadis team for this project. He supported NFWB's discussions with the NYSDEC to guide the next phases of study and capital improvements in the LaSalle sewer system.



Project Engineer

**John Salvagno** is a licensed professional engineer that completed data analysis and reporting to quantify inflow/infiltration under the Year 12 Progress Evaluation. He has presented nationally on emerging software technologies to help utilities visualize collection system data and model the impacts of I/I.



Technical Support

**JM Davidson Engineering (JMD)** will provide smoke testing field services and support Arcadis staff with manhole inspection and CCTV data review. Jaime Davidson's collection system experience includes supporting development of the original sanitary sewer management plan for the LaSalle area. Arcadis and JMD have partnered on collection system improvement projects throughout the region since 2017.

## INSTITUTIONAL KNOWLEDGE



Arcadis has supported clients across the Country with successful sanitary sewer evaluation surveys that are reviewed and approved by regulatory agencies.

The data analysis, engineering report development and technical discussions with the NFWB, NYSDEC and related stakeholders included under the Year 12 Evaluation Sanitary Sewer System Management Plan provides our team with the background context critical to understanding the objectives of this next phase of work and future initiatives by the NFWB.

The Arcadis team has calculated inflow/infiltration parameters for each of the sewersheds delineated in the LaSalle area developing a revised SSSMP Work Plan. We participated in follow up discussions with the NYSDEC to support NFWB's goal of a revised Order on Consent that aligns with the project analysis and recommendations from the Year 12 SSSMP.

Arcadis has led many SSES, infiltration/inflow quantification projects, condition assessments, and rehabilitation projects throughout the Northeast as indicated in the diagram below.



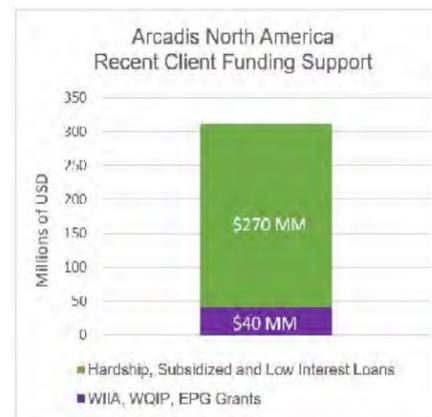
## FUNDING EXPERTIES



Arcadis understands the NFWB's desire to study and improve the LaSalle area sewer system in a financially responsible manner to rate payers

The Arcadis team will provide guidance to the NFWB on potential grant or low interest loan funding initiatives for this project and future phases of work.

We have successfully worked with upstate NY communities to guide them through the process of planning for long-term successful funding of their projects to maximize the use of available grant and State Revolving Fund (SRF) loans. In the last three years we have successful assisted NY clients in the award of over \$40 million in WIIA, WQIP, and EPG grants and more than \$270 million in hardship, subsidized and market rate SRF loans for critical infrastructure projects.



Arcadis will deliver the Engineering Report compliant with the New York State Environmental Facilities Corporation outline and provide guidance on other funding opportunities for this project and future initiatives

## EXPERIENCE & INNOVATION



We will deliver innovative solutions with fresh perspectives and an eye toward minimizing costly project delays.

For the SSSMP Year 12 Evaluation, Arcadis teamed with JM Davidson Engineering to provide NFWB with an updated work plan that referenced completed improvements to date and analyzed flow monitoring data to identify the next phases of this critical program.

For Erie County Sewer District Nos. 1-6, we completed six flow monitoring projects over a 5-year period with 95% system wide equipment uptime. Under each authorization, significant wet weather events showed unique response patterns that focused future investigations to areas with the highest percentage of I/I.

In Allentown, PA, our team performed night-time weiring and related investigations at over 400 locations in 3.5 months to support calibration of an Arcadis-developed collection system model used to inform capital planning.



## SUCCESSFUL APPROACH



We bring a familiar team composed of local staff, regional experts with high profile project experience, and dedicated MWBE firms to provide the best possible outcomes for NFWB.

Our approach is founded on these principles:

- RIGHT PEOPLE** – Identifying the team with both the technical expertise and local knowledge of the sewer system.
- RIGHT EXPERIENCE** – Having a comprehensive understanding of regulatory materials to provide “best-in-class” recommendations.
- RIGHT TECHNOLOGY** – Utilizing the latest equipment to monitor and analyze the sanitary sewer flow, I/I sources and rainfall data with the most appropriate interface.



Example smoke testing form developed by JM Davidson Engineering to mitigate data entry errors and provide comprehensive documentation of field results



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<b>Section 1</b>	<b>Firm Qualifications</b>
<b>Section 2</b>	<b>Situation Understanding</b>
<b>Section 3</b>	<b>Understanding of Applicable Regulations and Standards</b>
<b>Section 4</b>	<b>Project Approach, Scope, and Project Organization</b>
<b>Section 5</b>	<b>Demonstrated Experience on Similar Projects</b>
<b>Section 6</b>	<b>Specific Experience of Key Project Professionals</b>
<b>Section 7</b>	<b>Experience &amp; Qualifications of Subconsultants/Contractors</b>
<b>Section 8</b>	<b>Schedule, Effort and Budget Breakdown</b>
<b>Appendix A</b>	<b>Resumes</b>
<b>Appendix B</b>	<b>Featured Projects</b>
<b>Appendix C</b>	<b>Required Forms</b>

*This proposal and its contents shall not be duplicated, used or disclosed — in whole or in part — for any purpose other than to evaluate the proposal. This proposal is not intended to be binding or form the terms of a contract. The scope and price of this proposal will be superseded by the contract. If this proposal is accepted and a contract is awarded to Arcadis as a result of — or in connection with — the submission of this proposal, Arcadis and/or the client shall have the right to make appropriate revisions of its terms, including scope and price, for purposes of the contract. Further, client shall have the right to duplicate, use or disclose the data contained in this proposal only to the extent provided in the resulting contract.*

# Section 1. Firm Qualifications



# 1 Firm Qualifications

Arcadis is the leading global company providing consultancy, design, engineering and management services in water, wastewater, infrastructure environment and buildings. We work in partnership with our clients to enhance mobility, sustainability and quality of life by creating a balance in the built and natural environments. Our most defining characteristics are a staff of talented and passionate people, a unique combination of capabilities covering the whole asset life cycle, deep market sector insights that work to our clients' advantage, and a commitment to integrate health and safety and sustainability into the design and delivery of customized solutions.

Please note that the roots of the Arcadis organization began operation in 1888, when the organization was founded in the Netherlands as an association for wasteland redevelopment. Arcadis has evolved throughout the 20th century, expanding its global reach and range of service offerings through strategic initiatives and targeted acquisitions.

With 27,000 employees and \$3.8 billion in annual revenues worldwide, the company has an extensive international network supported by strong local knowledge and experience. Arcadis has 5,000+ employees working in 110+ offices across the U.S.

Arcadis has been providing solutions to our clients' water and wastewater needs for over 125 years. Our clients have access to the best talents of our multidisciplinary staff and the most effective and well-structured project teams in any geographic location. Currently our organization encompasses:

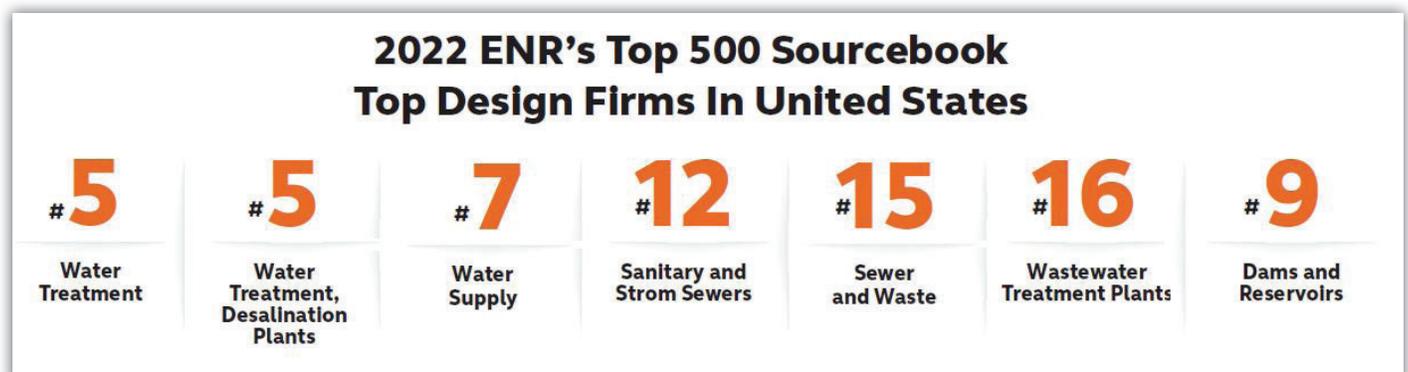
- Approximately 27,000 engineers, scientists, planners, management consultants and support staff worldwide, enabling us to offer a global perspective combined with local knowledge.
- More than 5,000 multidisciplinary personnel in the U.S.
- More than 110 branch and field offices across the U.S.

## New York State Presence

Arcadis has strong roots in New York State due largely to the founding of two of the predecessor firms — Malcolm Pirnie, Inc. and Blasland, Bouck and Lee, Inc. Today, our presence remains strong:

- 9 offices and 650+ staff in New York State.
- 50+ employees in our Buffalo office.
- More than 330 employees in the Western and Central New York region (Buffalo, Syracuse, Rochester).

This project will be staffed primarily from Arcadis' Buffalo, NY office, which has 50+ employees.



**Arcadis Parent Companies, Subsidiaries and Affiliates:**

<b>Arcadis Parent Company</b>	<b>Arcadis North America</b>	
<b>Arcadis Subsidiaries</b>	Arcadis of New York Inc. Arcadis Corporate Services, Inc. Arcadis FieldTech Solutions, LLC Arcadis of Michigan, LLC Arcadis G&M of Ohio, Inc. Arcadis Central AM Holdings, LLC Arcadis CE, Inc. (f/k/a Malcolm Pirnie, Inc.) LFR, Inc. LFR Group, Inc. LFR Holding Corp	Reese, Macon and Associates, Inc. Lawson, Noble & Webb, Inc. Lewis and Zimmerman Associates, Inc. PinnacleOne, Inc. E2 ManageTech, Inc. Construction Dynamics Group, Inc. RISE Group, LLC RISE Alaska, LLC Rise International, LLC
<b>Arcadis Affiliates</b>	Arcadis G&M of Ohio A&E, LLC Arcadis Honduras, S.A.	Arcadis Guatemala, S.A. BBL Environmental Services, Inc.

- Any other names under which proposer has done business in the past 10 years: **None**
- State whether proposer ever has been:
  - Debarred or suspended by any government entity from entering contracts with it: **No**
  - Found not responsible by any government entity: **No**
  - Declared in default or terminated for cause from any contract, or had any contract canceled for cause: **Yes**

Project	Description
Confidential Natural Gas Client	<b>For Cause: October 2021</b> Arcadis was engaged for emergency response work to support a pipeline spill, which was a successful initiative. Following completion thereof, the project was turned over to the client to perform derivative remediation and restoration of the site. This client division had a contractual standard of care for work and expectations that were above market standard, and which Arcadis worked diligently to meet. The client ultimately stated that they did not think Arcadis could meet their expectations at this site and elected to terminate the contract.

- Required to pay liquidated damages on a contract: **No**
- State whether proposer has filed for bankruptcy or been the subject of an involuntary bankruptcy proceeding; **Arcadis has not filed for bankruptcy or been the subject of an involuntary bankruptcy proceeding.**
  - State whether proposer has been a party to any legal action or government investigation related to proposer's business practices, or alleging that any of proposer's agents or employees committed any act of fraud, collusion, bid rigging, price fixing, or bribery. If proposer, any of proposer's principals, or any of proposer's agents has pleaded guilty or entered into a consent order in connection with respect to any of these, provide details. **Yes**

**Matter No. 1**

**Name of Investigating Government Agency:** United States Attorney's Office for the Northern District of Alabama

**Date Initiated:** October 2016

In October 2016, Arcadis U.S., Inc. ("Arcadis"), was served with a grand jury subpoena from the United States Attorney's Office for the Northern District of Alabama. This federal subpoena sought information related to contracts and other interactions among Arcadis, the Birmingham Water Works Board ("BWWB"), and other government entities in Jefferson County, Alabama. In 2017, Arcadis was served with Special Grand Jury Subpoenas from the Attorney General's Office for the State of Alabama. These state subpoenas sought similar information to the federal subpoena, as well as the testimony of three then-current employees.

In December 2017, a former employee of Arcadis who had served as a Marketing Development Manager in the firm's Birmingham, Alabama, office was indicted by a Jefferson County (Alabama) Special Grand Jury for alleged violations of the Alabama Ethics Act. In February 2021, that individual entered into a plea agreement in with the state, pleading guilty to a charge of offering or giving something to a public official for the purpose of improperly influencing that official. In May 2019, the individual was indicted by a grand jury in the United States District Court for the Northern District of Alabama on alleged charges of conspiracy and wire fraud to defraud the BWWB. In July 2020, that individual entered into a plea agreement with the federal authorities, pleading guilty to a charge of conspiracy to commit wire fraud.

Arcadis fully cooperated with the investigations described above. No charges were brought or asserted against Arcadis, nor any of its subsidiaries or affiliates, regarding the matters outlined above.

Arcadis places integrity, one of the company's core values, at the center of everything it does. Arcadis strives to operate its business in an honest and responsible way, working to the highest professional standards. The actions of one former employee do not reflect the level of importance the company places on integrity.

**Outcome:** The investigation is now concluded.

### **Matter No. 2**

**Name of Investigating Government Agency:** California Attorney General

**Date Initiated:** 2/22/17 – 11/31/2017

The California Attorney General investigated allegations arising from a project where Arcadis U.S., Inc. ("Arcadis") performed environmental sampling work for the California Department of Toxic Substances Control (DTSC). The issues involved questions about the manner in which sampling was performed, health and safety issues, and compliance with anti-harassment/nondiscrimination policies. Arcadis fully cooperated with the investigation. In November, 2017 the California Attorney General issued a report confirming that Arcadis was fully compliant with all technical aspects of the project and health and safety requirements. Arcadis also trained employees on anti-discrimination policies and took appropriate action, as needed, in full compliance with those policies.

**Outcome:** The investigation is now concluded.

### **Matter No. 3**

**Name of Investigating Government Agency:** Louisiana State Board of Ethics

**Date Initiated:** 5/2018– Dismissed 12/13/2018

In May, 2018 Arcadis U.S., Inc. ("Arcadis") and one of its current full-time employees (our "Employee") each received notice from the Louisiana State Board of Ethics ("Ethics Board") advising that the Ethics Board authorized a confidential investigation related to the New Orleans Sewerage and Water Board's ("Water Board") engagement of Arcadis under a Professional Services Agreement. Under that agreement, Arcadis was hired as an independent contractor to the Water Board and our Employee was partially-embedded at the Water Board to perform the agreed scope of services. It appears that the investigation notice was triggered by the erroneous assumption that our Employee was receiving salary from both Arcadis and the Water Board. Arcadis has reached out to the Ethics Board to confirm that our Employee has received salary from only Arcadis and is employed by only Arcadis. As grounds for the investigation, the Ethics Board appears to allege that Arcadis' Employee may have been deemed a "public employee" while performing the services at the Water Board on behalf of Arcadis, and therefore, should not have received anything of value from Arcadis while working in such capacity. As an independent contractor, Arcadis would dispute any allegation that our Employee was a public employee or that any benefit Arcadis provided to our Employee as a normal condition of employment at Arcadis would be prohibited.

**Outcome:** The investigation has been dismissed.

5. Disclose any potential conflicts of interest your firm may have or encounter if selected, and your firm's plan for resolving the conflict. **None**

# Section 2.

## Situation Understanding



# 2 Situation Understanding

The Niagara Falls Water Board (NFWB) owns and operates a wastewater collection system comprised of both combined and separate sanitary sewers. The residential neighborhoods where the separate sanitary and storm sewers are located are in the eastern portion of the City of Niagara Falls, NY and make up approximately one-third of the NFWB collection system. The separate sanitary sewer area is generally termed the LaSalle Area and has historically experienced wet weather-related sanitary sewer overflows (SSOs).

The NFWB has been diligently working to reduce SSOs and improve the condition of the sanitary sewers in the LaSalle Area since the mid-1990's. The initial work in this area was completed in accordance with the LaSalle Area Corrective Action / Improvement Plan, prepared by Malcolm Pirnie in 1997. From 1999 to 2001, Parsons completed three detailed field investigations to assess inflow and infiltration sources and the condition of the sanitary sewers located in the MH-1 (Love Canal), MH-4 (Frontier), and MH-6 (LaSalle) areas. These condition assessments, along with flow monitoring completed in 2003, formed the basis of the Sanitary Sewer System Management Plan (SSSMP) that was completed by Parsons in 2007 and accepted by the NYSDEC in 2008.

The SSSMP included an 18-year Detailed Work Plan that is being implemented by the NFWB under Order on Consent R9-20080528-32. The Detailed Work Plan included re-evaluation periods in Years 5, 11, and 18 to ensure the effectiveness of the work completed to date and to provide an opportunity to adjust or reprioritize the Detailed Work Plan if the desired SSO reduction results were not being achieved. In February 2013, GHD completed the SSSMP Year 5 Evaluation, which recommended that the Detailed Work Plan continue to be implemented as originally written.

In March 2019, Arcadis with subconsultant JM Davidson Engineering was retained to provide the NFWB a comprehensive Engineering Report of flow monitoring activities, data analyses, results and recommendations for the LaSalle sewer system. This included a review of applicable background information to fully understand the expectations and goals of the Year 12 Progress Evaluation.

This evaluation reviewed the specific rehabilitation work performed in Years 6 through Year 11 and examined planned activities in Years 13 through Year 18 considering the recent flow monitoring results. The objective of the Year 12 evaluation was to reprioritize the remaining work within Table 4.2 that had not yet been completed to maximize future corrective measures, with an emphasis on inflow / infiltration (I/I) mitigation and Sanitary Sewer Overflow (SSO) abatement. This report identified several sewersheds within the LaSalle system that (1) exhibited high I/I statistics and (2) contributed to SSO's.

To ensure that capital expenditures are being invested appropriately within the LaSalle area sanitary sewer system, Arcadis recommended that the NFWB pursue SSES's within the sewersheds tributary to Lift Stations 4 and 6 prior to any capital improvements to identify the best I/I mitigation strategies. These lift stations were identified in the Year 12 evaluation as having the highest volume of SSO's. This approach required a series of negotiations with the NYSDEC to ensure the regulatory agency would accept a different approach for future capital investment within the LaSalle area. Currently, NYSDEC is working with NFWB on a revised Order on Consent that includes a three phase plan of SSES's, corrective actions (capital improvements), and post-construction monitoring to document the I/I reduction within five sewersheds that are tributary to Lift Stations 4 and 6.

Our preliminary review of documents developed for the LaSalle sanitary sewer area are provided in the following page:

Resource	Considerations
Sanitary Sewer System Management Plan - Year 12 Evaluation	<ul style="list-style-type: none"> <li>The Arcadis team supported the NFWB with development of this document and participated in follow up discussions with NYSDEC and related stakeholders that informed the development of this SSES Project. This previous history working with the LaSalle collection system will expedite our review of available information</li> </ul>
NFWB Regulations update to latest NFWB ordinance that was provided in addendum	<ul style="list-style-type: none"> <li>We will ensure that all recommended corrective measures will meet NFWB regulations and staffing resources.</li> </ul>
Parsons' August 2007 Sanitary Sewer System Management Plan and Prior Parsons Work	<ul style="list-style-type: none"> <li>Our updated assessment will fully address efforts from Year 0 through Year 4, Year 6 through Year 10 and planned activities for Year 13 through Year 18.</li> <li>Evaluation of 2019 flow monitoring data will consider previous repair and rehabilitation efforts to ensure the most effective corrective measures are recommended moving forward.</li> </ul>
Collection System Maps & Documentation	<ul style="list-style-type: none"> <li>Available mapping will be used to accurately define subsewershed (mini-system) boundaries and wet weather responses relative to other flow monitoring locations.</li> </ul>
Annual Reports to the NYSDEC	<ul style="list-style-type: none"> <li>Annual reports provide a summary of NYSDEC's knowledge of SSO abatement efforts by the NFWB to date.</li> </ul>
NYSDEC Order on Consent	<ul style="list-style-type: none"> <li>We will meet with NYSDEC early on to confirm our technical approach for Year 13 through Year 18 is acceptable for Order on Consent R9-20080528-32.</li> </ul>
Previous flow monitoring reports	<ul style="list-style-type: none"> <li>Through completion of the Year 12 Progress Evaluation, our team has reviewed flow monitoring data from previous studies, including the I/I statistics used to evaluate capital planning over time. Most recently, NYSDEC has identified the R-value method as being the required statistic to prioritize sewershed investigations. This analysis will be used moving forward to provide consistency between evaluations.</li> </ul>
Resolution No. 2022 - Relative to Adding Chapter 251 Of The Codified Ordinances Entitled "Private Sanitary Sewer Laterals	<ul style="list-style-type: none"> <li>We will incorporate the details of this legislation into the field activities to align the responsibilities of NFWB customers to reduce I/I, including property access, follow up mitigation strategies and enforcement relevant to SSES activities and sewer rehabilitation capital planning.</li> </ul>

## Section 3.

# Understanding of Applicable Regulations and Standards

Section 3.  
Understanding of Applicable  
Regulations and Standards

# 3 Understanding of Applicable Regulations and Standards

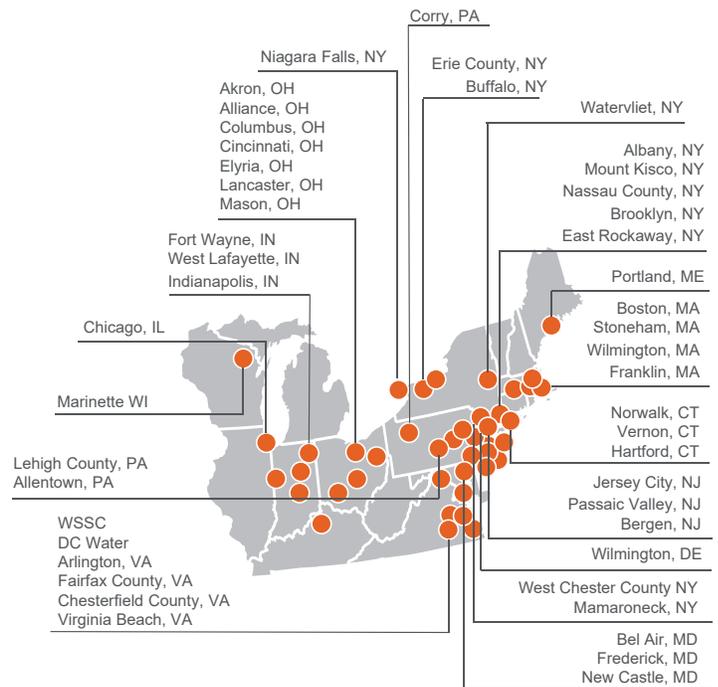
Our team has extensive experience working with the NYSDEC, specifically Region 9, to ensure our technical approach for analyzing collection system information and conducting SSES activities meets expectations and provides insightful recommendations for our clients. Our team’s innovative Time Series Analyzer (TSA) database management tool was developed using parameters and calculation methodologies defined in technical guidance resources. Specifically, we have developed sanitary sewer evaluations and programmatic recommendations conforming to numerous regulatory materials, including:

- **Water Environment Federation (WEF), Manual of Practice FD-6 (MOP FD-6):** Our evaluation and recommendations from pre- and post-construction flow monitoring data will conform to the methodologies and interpretations outlined in WEF MOP FD-6. Past and planned rehabilitation efforts will be described using defined terminologies in this manual. Our recent successes on local flow monitoring and inflow/infiltration reports have highlighted the importance of communication with the NYSDEC on the data analyses undertaken.
- **United States Environmental Protection Agency, Sewer System Infrastructure Analysis and Rehabilitation Handbook:** Our definition of Baseline Sanitary Sewer Flows and Rainfall Induced Infiltration are supported throughout this reference. The Arcadis team’s experience conducting night-time weiring to measure groundwater infiltration will be used to differentiate between dry weather and base sanitary flows as described in this resource.
- **United States Environmental Protection Agency, Computer Tools for Sanitary Sewer System Capacity Analysis and Planning:** The percentage of rainfall volume (R-value) method and data derived hydrograph method are two examples of data analyses we’ve built into our TSA database management tool that are covered in depth in this technical resource. The R-value method is the preferred I/I statistic by NYSDEC Region 9 to characterize sewershed priority and includes an evaluation of the R<sup>2</sup> (or coefficient of determination) to only include storm events that are not statistical outliers.
- **Massachusetts Department of Environmental Protection, Guidelines for Performing Infiltration/Inflow Analyses and Sewer System Evaluation Surveys:** This resource has been adopted by NYSDEC Region 9 and includes procedures and phasing considerations for conducting SSES activities.

At Arcadis, our staff are committed to involvement in professional associations that increase our breadth of knowledge. This includes regional water environment associations, the North American Society for Trenchless Technology (NASTT), and the National Association of Sewer Service Companies (NASSCO).

Our consistent presence in knowledge sharing communities allows us to gain insight on emerging technologies and provide innovative solutions to client needs. **Arcadis and JM Davidson Engineering are both long-standing members of the WEF Collections System Committee and regularly present on collection system investigation, rehabilitation and replacement topics at local and national conferences including the New York Water Environment Association Greater Buffalo Environmental Conference, the Annual State NYWEA Meeting, and WEFTEC.**

**Recent Sanitary Sewer Condition Assessment and Rehabilitation Projects**



## NIGHT TIME WEIRING

Arcadis staff are trained in critical health and safety topics including confined space entry, first aid, CPR, and various OSHA certifications as projects require. Specifically, our Team's commitment to Health and Safety locally is proven through our strong track record of having zero recordable incidents during the 2016-2022 time period supporting clients such as Erie County, Lehigh County, North Tonawanda and the Niagara Falls Water Board with sanitary sewer field activities. Our night time weiring staff understand the importance of early planning using available desktop information to prioritize our measurements to areas that will provide the most insightful results.

Additionally, our team understands the critical need for a high level of QA/QC. Our field work includes multiple site visits to verify night time weiring results to ensure a typical amount of groundwater infiltration is being measured. Our comprehensive understanding of sewer investigation, design and rehabilitation provides our clients with a "best-in-class" team that understands the need for cost-effective solutions to I/I and SSO mitigation.



## SMOKE TESTING, MANHOLE INSPECTIONS, DYE TESTING, HOUSE INSPECTIONS, AND CCTV INSPECTIONS

For field inspections, the Arcadis team has developed custom field applications to support data collection and onsite observation applications for national buried infrastructure clients. Field staff are equipped with internet (cellular) connected tablets allowing them access to project reference materials and mobile applications that enable real-time, paperless data collection and entry. Daily field notes, health and safety forms, inspection results per parcel, and property data are among the available template files that are generated to collect real-time, precise system readings and site inspection observations. Once the digital forms are saved within the mobile applications, the data is instantly available for review on a web interface which facilitates quick review by office team members and enables more rapid data analysis as well as the ability to catch collection errors or anomalous data while the staff are still in the field.



## FLOW MONITORING AND ANALYSIS

The Arcadis Buried Infrastructure team has supported high profile sewer collection system programs with study, design and construction phase services for more than 20 years. This team specializes in the use of SSES activities and proprietary software to inform sewer rehabilitation using the most cost effective rehabilitation strategies for reducing I/I contribution from failing infrastructure.

The majority of this team has NASSCO certifications in Pipeline Assessment, Manhole Assessment, and/or Lateral Assessment to provide comprehensive knowledge on the techniques, industry standards and cost implications of I/I reduction. This team has supported New Castle County's (NCC) 15-year Brandywine Hundred Sewer Rehabilitation and Capacity Assurance Program for approximately 1,800 miles of gravity sewer and interceptors of the oldest infrastructure maintained by NCC.

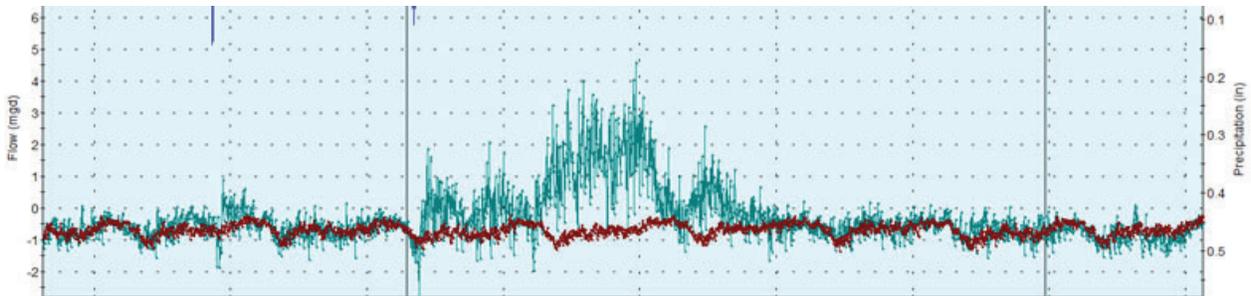
### 3.0 UNDERSTANDING OF APPLICABLE REGULATIONS AND STANDARDS

This phased approach included Arcadis staff performing various SSES activities including house inspections, manhole inspections and dye water testing while overseeing the use of innovative technologies including the Infosense Rapid Assessment Tool for acoustic sewer inspection. Our team believes strongly in cross training between field, hydraulic analysis and program management to provide a holistic solution to reduce I/I, renew critical assets and maintain a cost effective bottom line for rate payers.

The Arcadis team has extensive experience developing fully customized flow monitoring programs that include the use of flow meters, rain gauges and groundwater dataloggers. This has resulted in a project team with significant field experience identifying and resolving problems and providing value-added analyses throughout the data evaluation process to draw informative conclusions. Our local presence allows for the quick resolution of issues or to provide clarification of data anomalies within the flow meter network.

The Arcadis-developed Time Series Analyzer (TSA) program will be used once again to efficiently analyze rainfall and flow data collected throughout the post-construction monitoring period. This tool allows for an automated QA/QC process, identification of stochastic flow behavior, and a range of presentation options. This will result in an expedited project delivery and significant value addition to the post-construction monitoring and cost-effective analysis report.

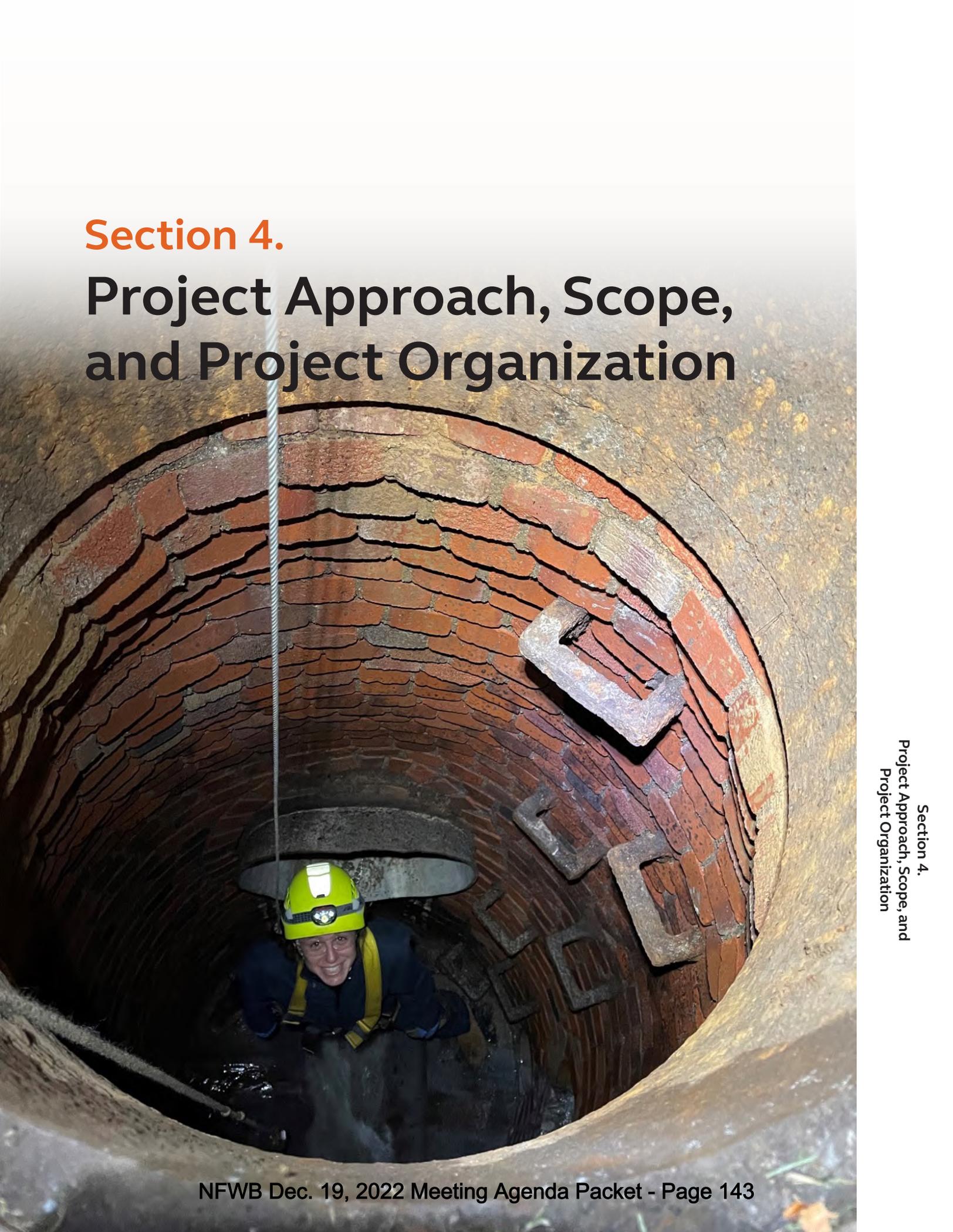
Using Microsoft Power Business Intelligence and R Statistical Software, Arcadis has developed multiple dashboards to evaluate monitoring data included in collection system condition assessment and rehabilitation projects. This includes efficient calculation of base sanitary flow, normalized I/I, peaking factor, R-value, and rainfall intensity in compliance with technical and regulatory guidance resources. Interactive mapping visualizations increase project understanding and significant value for assessing how well the recommended construction improvements reduces I/I within the LaSalle sanitary sewer area.



Flow monitoring graph results

## Section 4.

# Project Approach, Scope, and Project Organization



# 4 Project Approach, Scope, and Project Organization

## Project Scope of Work

### Task 1 – Project Management and Support

Arcadis will conduct a kick-off workshop with NFWB staff and key members of the Arcadis team. We view the project kick-off workshop as a critical task to lay the groundwork for a collaborative process resulting in an accurate and effective project that meets the Water Board's objectives. The workshop will provide all stakeholders the opportunity to prioritize project work activities and ideas. Our team will lead the kick-off workshop and prepare an agenda to establish workshop goals.

One of the most important parts of the project is to review the existing data to plan and prepare for the field investigations. Arcadis will obtain and review existing reports, data, and projects related to the NFWB collection system. Our field assessments, data analysis and regulatory discussions conducted under the Year 12 Progress Evaluation will allow us to expedite our information review process and initiate the field activities described under Tasks 2 through 6.

### Task 2 – Smoke Testing

Smoke testing is a standard method of detecting defects in the collection system. The process involves placing a high- capacity blower on top of a sanitary manhole and blowing “smoke” into the sewer system. The smoke will then escape the sewer system through pipe connections, leaks or cracks in the pipes, or low vents in the system. Smoke testing will be completed by JMD with their in-house engineering staff through the following activities:

- Develop 11x17 field maps from GIS data for use during smoke testing. These maps will be used to record the location of each instance of observed smoke from the sanitary sewer.
- Create an electronic field inspection form for use during smoke testing. JMD uses JotForm for field data collection. They will create a customized inspection form within the JotForm application that can be accessed via smartphone in the field to document each instance of observed smoke from the sanitary sewer. A draft inspection form will be provided to the Water Board for review prior to the start of field work. JotForm allows for easy conversion to pdf for electronic delivery of all field data to NFWB.
- Draft a notification door hanger to residents and businesses within the study area to inform them of the upcoming smoke testing work. Once the Water Board has reviewed and approved, JMD will hand distribute the notification flyer using plastic door hangers. It is assumed that the notifications will be delivered approximately one week prior to the actual smoke testing.
- Conduct smoke testing of approximately 4,600 LF of 8” gravity sewer, 17,000 LF of 10” gravity sewer, and 3,900 LF of 15” gravity sewer within the two sewersheds to investigate and document locations of potential sewer defects and sources of inflow and infiltration, such as leaking laterals.
  - It is assumed that the Water Board will be responsible for notifying emergency personnel and necessary public staff regarding the smoke testing prior to work being performed.

**Smoke Testing Form**  
LCWSA - Hemlock, NY

JMDavidson  
Engineering, P.C.  
Wednesday, July 29, 2020

Address Number	Street	Property GPS Location	Investigator
4572	Clay St	42.79669, -77.60607	KMG

**Smoke Location**  
 Street  Sidewalk  Lawn  House

**Within ROW?**  Yes  No  Both

**Property Type**  
 Public  Private  Both  Unsure

**Smoke Source**  
 Storm Manhole  Storm Drain Inlet  Ditch  Roof Drain / Downspout  Roof Vent  
 Inside Building  Foundation Drain / Lateral  Cleanout / Vent  Sanitary Sewer Main  
 Sanitary Manhole  Sidewalk  Water Meter / Vault  
 Yard, not sure what line is here, roughly 20, off shoulder

**Comments from Public?**  
 Yes  No

**Comment**  
None

Example smoke testing form developed by JM Davidson Engineering to mitigate data entry errors and provide comprehensive documentation of field results

#### 4.0 PROJECT APPROACH, SCOPE AND PROJECT ORGANIZATION

- JMD will use a Hurco Ripcord Smoker with LiquiSmoke, which produces a white, non-toxic smoke, for the field work. A copy of the LiquiSmoke Safety Data Sheet will be provided to the Water Board and with the draft Resident Notification Letter.
- JMD anticipates that the work will be conducted over the course of two weeks, weather permitting. Our team will email the Water Board at the end of each working day with an update on the progress made and planned work for the next day.
- Upon completion of field work, we will download and review all data collected in JotForm for accuracy and create final maps of the study area from the field notes. Smoke testing results will be provided in summary PDF format with a file geodatabase that aligns with NFWB's existing data management practices.

The field work and observations will be documented in the Engineering Report under Task 7, including the final field maps, inspection forms for each instance of observed smoke, and all photographs taken during the field investigation (in electronic format).

#### Task 3 – Flow Isolation and Measurement

All flow measurement and flow analyses performed to date for the relevant sewersheds will be reviewed. Arcadis will prepare a detailed workplan and a health and safety plan, including a confined space entry plan. Primary weir locations for the areas to be measured will be selected. Field locations will be discussed with NFWB staff when finalizing primary weir locations. Primary weir location selection will be based on:

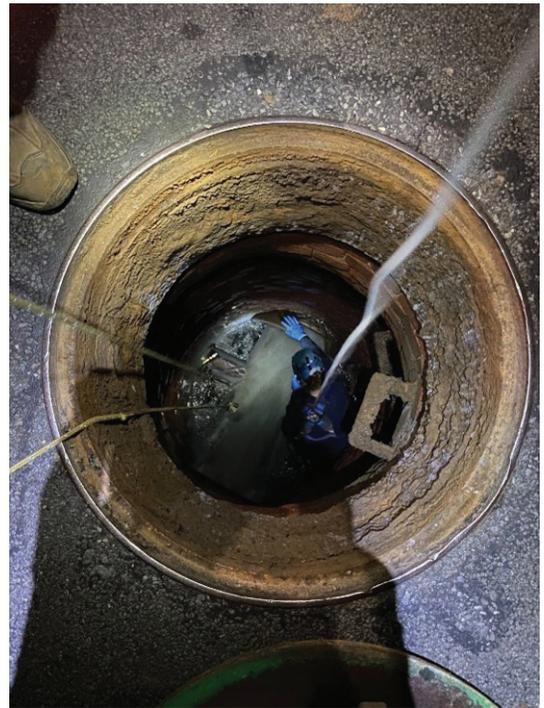
- Manholes with two (2) or three (3) influent pipes, preferable to those with only one (1).
- Areas with documented defects included under the NFWB's previous CCTV investigations and related summary forms.
- Areas with less than one foot of standing water in the bottom of the manhole to avoid a potential health and safety impact to staff entering the confined space.

Primary weir locations will be assigned unique IDs. As part of the preparatory work, a weiring analysis spreadsheet will be created along with GIS-based field maps. All primary weir locations will be field verified during the day time hours to:

- Locate and open the manhole.
- Confirm that all pipes are weirable (i.e., no controlled inside drops or lined pipe).
- Verify flow directions.
- Confirm atmospheric conditions.
- Assess traffic.

Residents will be notified 2-4 days prior to nighttime weiring via hand-delivered door hangers. Arcadis will assist NFWB in preparing a press release as additional residential notification.

Nighttime weiring will be conducted during the overnight hours to capture, as close as practicable, the groundwater infiltration into the sewer system. Work will be performed Monday through Friday from 0000 to 0600, with weiring being conducted between 0045 and 0515. Arcadis will perform a tailgate health and safety meeting every evening prior to starting work for the night. Each location will be measured a minimum of two times and on different days to ensure data accuracy. If flow measurements are not within 10% of each other, the weir location will be measured a third time on a subsequent night. Work will not be performed if more than 0.5 inches of rain occurs within 12 hours of planned weiring, if more than 1" of rain has fallen within 24 hours of planned weiring, or if more than 2" of rain has fallen within 36 hours of planned weiring, as recent significant rainfall skews weiring results.



*The Arcadis Team supported the Lehigh County Association with night-time weiring. The weiring team was assigned over 430 manholes to collect data on 800+ pipe segments and completed 1,972 jumps over a ten-week period.*

The weiring data collected in the field will be entered into the weiring results spreadsheet. Infiltration in gallons per day per linear foot of sewer main will be calculated for each weiring segment and the data linked to GIS-based map reports.

#### Task 4 – Review of CCTV Inspection Reports and Manhole Inspection Reports Completed by NFWB Staff

CCTV inspection reports completed by NFWB staff holding NASSCO PACP certification will be reviewed by our JMD to identify any deterioration of the collection system and further investigate any areas of potential inflow and infiltration in conjunction with the smoke testing results. Defects will be classified in accordance with NASSCO's PACP coding. Lateral locations and sizes will be shown on the log sheets, as well as any other sewer features.

Similarly, JMD will review manhole inspection reports completed by NFWB staff holding NASSCO PACP certification. The identified manholes in the sanitary sewer system were inspected for materials of construction, condition, and evidence of inflow, infiltration, or surcharging. Review of the manhole inspection reports include the following, at a minimum:

Additional data collection, as necessary, will be performed by JMD to ensure a thorough review. Repairs that have been made after CCTV and manhole inspection reports were prepared will be discussed before conducting the review.

- Depth of each manhole (rim to lowest invert).
- Groundwater level using wet ring or highest level of condensation within the manhole.
- Size and number of pipe connections.
- Manhole cover type and condition.
- Condition of frame.
- Condition of risers/brickwork below frame.
- Photograph of the manhole location and manhole interior, in particular, the defects observed.
- Whether cover is subject to ponding.
- Number and size of holes in cover.

#### Task 5 – Outfall/SSO Condition Assessment

For the two outfalls included in the Phase 1 sewershed, the Arcadis team will complete the following activities:

- Review available information provided by NFWB, including structure dimensions, estimated SSO volumes, recent outfalls inspection reports, and discharge configuration.
- Conduct site visits of the SSO/outfall locations to document existing conditions and confirm record information. NFWB staff will assist in locating.
- Develop a recommended Work Plan for conducting an assessment of the Outfall/SSO locations, which may include:
  - The installation of flow meters and rain gauges.
  - Confined space entry and/or dye water testing to establish flow directions and supporting field information.
  - Coordination with NFWB to conduct CCTV inspections of the SSOs. Any required CCTV inspections at SSOs will be conducted by NFWB.
- Upon authorization from NFWB, the Arcadis team will complete actions identified in the Outfall/SSO assessment Work Plan.
- Document findings in a GIS-compatible format and prepare recommendations to reduce extraneous flows into the NFWB collection system.

**Arcadis has assumed one site visit during dry weather to perform the condition assessment and measure the elevation difference between the invert of the existing outfalls and the water level in Cayuga Creek. We will perform a second site visit during a rainfall event when NFWB is bypass pumping to determine whether the outfalls are submerged and contributing additional I/I into the sanitary sewer system.**

#### Task 6 – Focused SSES

Once areas have been identified as sources of I/I, the Arcadis team will conduct focused SSES, including the following as appropriate:

4.0 PROJECT APPROACH, SCOPE AND PROJECT ORGANIZATION

- a. Dye Water Testing
- b. House Inspections
- c. Additional CCTV – any required imaging of mains will be performed by NFWB crew at consultant’s direction.

These additional SSES activities may be required to locate specific I/I sources or confirm findings from previous activities but may not be necessary. Our price proposal includes the requested \$10,000 contingency amount to cover this task or other unforeseen but necessary work, which shall be expended only if needed and upon NFWB approval.

**Task 7 – Report and Recommendations**

Following the field investigations and completed SSES, Arcadis will develop a Draft Engineering Report summarizing all data, information, evaluations, findings, and recommendations and submit to the Water Board for review and comment. This report will conform to the current New York State Wastewater Infrastructure Projects Engineering Report Outline. Following receipt of comments from the Water Board and NYSDEC, Arcadis will then finalize the report and resubmit to the Water Board.

This report will summarize the methodology for measuring, verifying, and reviewing data; a summary of the data; estimates of base and peak flows for each of the sewersheds and our interpretations of those results; a prioritization of the sewersheds based on the data; recommendations for capital improvements, including sewer system rehabilitation or replacement, and preliminary schedules for implementing the recommended actions.

**Task 8 – Post-Construction Monitoring and Assessment**

After the capital improvements are complete, Arcadis will perform post-construction flow monitoring and assessment to measure the I/I reduction effectiveness of the improvements.

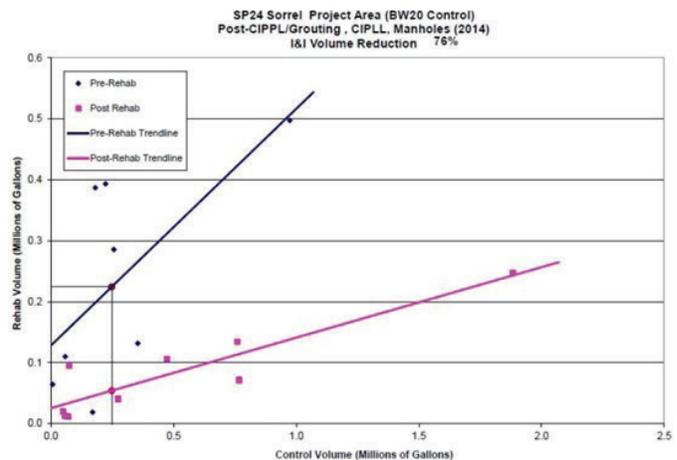
Our proposed program conducts flow monitoring within the rehabilitated sewershed and a similarly sized non-rehabilitated sewershed to account for differences in antecedent conditions by normalizing flows relative to a control basin where no sewer rehabilitation was performed. By flow monitoring pre-rehabilitation and post-rehabilitation flows for both a rehabilitated area (pilot) and non-rehabilitated area (control) over the same time periods, the seasonal, annual, and storm variations are normalized. As done with pre-construction flow monitoring, rainfall data will be collected as well. Arcadis will utilize TECsmith to provide all equipment installation, calibration and maintenance for the post-construction flow monitoring period.

The methodology used to determine the effectiveness of the rehabilitation will be performed in two steps: 1) hydrograph decomposition and 2) linear correlation analysis.

The hydrograph decomposition method involves computing I/I flows from pilot and control areas during the pre- and post-rehabilitation flow monitoring periods. The first step of this analysis is to perform a hydrograph decomposition to determine diurnal dry weather flow hydrographs during this monitoring period and then subtracting the hydrographs measured during a rainfall event. The difference is the flow amount directly resulting from the I/I contribution. These procedures determine the volume of I/I resulting from a given rainfall event.

The correlation analysis is a method of developing a linear relationship between the computed I/I of the rehabilitated areas and the I/I of the control areas. This linear relationship is established independently, during pre-rehabilitation conditions and post-rehabilitation conditions, by performing a linear regression between the I/I volumes of the rehabilitated pilot basin and control basin during each monitoring period. The change in the slope of the best-fit line during the pre- and post-rehabilitation monitoring periods is used to indicate the success of the rehabilitation methods in reducing I/I in the rehabilitated area.

All results from the post-construction monitoring will be summarized in a Post-Construction I/I Assessment and Cost Analysis Report and will be submitted to NYSDEC.



*This figure demonstrates our experience supporting clients with pre- and post-rehabilitation data analysis to identify the most cost-effective rehabilitation strategy for reducing extraneous flows to the collection system.*

**Section 5.**

**Demonstrated Experience  
on Similar Projects**



Section 5.  
Demonstrated experience on  
similar projects

# 5

## Demonstrated Experience on Similar Projects

Arcadis is pleased to provide the following table that summarizes our experience working with clients on similar projects. Arcadis is providing the same core team members and subconsultants as the Sanitary Sewer System Management Plan - Year 12 Progress Evaluation to ensure continuity between this previous effort and this important project.

Project Name	Client/ Contact	Project Size	Regulatory Agencies Involved	Status
Sanitary Sewer Management Plan - Year 12 Progress Evaluation	<b>Niagara Falls Water Board</b> Doug Williamson Niagara Falls Water Board Tel: 716 283 9770 ext. 2290	\$68,300	New York Department of Environmental Conservation and New York State Environmental Facilities Corporation	Completed
Tonawanda Island Infrastructure Analysis	<b>City of North Tonawanda</b> Chelsea Spahr, PE email:cspahr@northtonawanda.org Tel: (716) 695-8565	\$105,000	None	Ongoing
ECDEP Sewer District No. 2 Flow Monitoring and I/I Quantification Report	<b>Erie County DEP</b> David Millar, PE Tel: 716 858 6499	\$145,000	New York Department of Environmental Conservation and New York State Environmental Facilities Corporation	Completed
Western Lehigh Sewer Partners/ City of Allentown 2022 Nighttime Weiring	<b>Lehigh County Authority</b> Philip DePoe, PE Tel: 717 887 8953 Email: PhilipDePoe@lehighcountyauthority.org	\$391,000	None	Completed
ECDEP Sewer District No. 6 Flow Monitoring and I/I Quantification Report	<b>Erie County DEP</b> David Millar, PE Tel: 716 858 6499	\$145,000	New York Department of Environmental Conservation and New York State Environmental Facilities Corporation	Completed
ECDEP Sewer District No. 3 Flow Monitoring and I/I Quantification Report	<b>Erie County DEP</b> David Millar, PE Tel: 716 858 6499	\$160,000	New York Department of Environmental Conservation and New York State Environmental Facilities Corporation	Completed
Sanitary District Nos. 1 & 4 Flow Monitoring - I/I Quantification Report	<b>Erie County DEP</b> David Millar, PE Tel: 716 858 6499 Email: David.Millar@erie.gov	\$360,000	New York Department of Environmental Conservation and New York State Environmental Facilities Corporation	Completed

**5.0 DEMONSTRATED EXPERIENCE ON SIMILAR PROJECTS**

Projects and Proposed Team Correlation	
Project	Team Member
Sanitary Sewer System Management Plan - Year 12 Progress Evaluation	Dan Seider, PE John Salvagno, PE John Paul Travis Julia Manzano, EIT JM Davidson Engineering TECsmith
Tonawanda Island Infrastructure Analysis	Dan Seider, PE John Salvagno, PE Julia Manzano, EIT Jaime Davidson, PE Catherine Knab, PE
ECDEP Sewer District No. 2 Flow Monitoring and I/I Quantification Report	Dan Seider, PE John Salvagno, PE John Paul Travis
Western Lehigh Sewer Partners/City of Allentown 2022 Nighttime Weiring	Julia Manzano, EIT Paul Batman, PE
ECDEP Sewer District No. 6 Flow Monitoring and I/I Quantification Report	Dan Seider, PE John Salvagno, PE John Paul Travis
ECDEP Sewer District No. 3 Flow Monitoring and I/I Quantification Report	Dan Seider, PE John Paul Travis
ECDEP Sewer District Nos. 1&4 Flow Monitoring and I/I Quantification Reports	Dan Seider, PE John Salvagno, PE Julia Manzano, EIT John Paul Travis TECsmith

The following table lists projects similar to the proposed project along with the types of services provided. These projects include the five featured projects listed above which are also included in Appendix B.

Relevant Project Experience					
Projects	Flow Metering	Flow Isolation	Assessment	I/I Reduction	Funding Assistance
Sanitary Sewer System Management Plan - Year 12 Progress Evaluation	✓		✓	✓	✓
Erie County Sewer District Nos. 1&4 Flow Monitoring and I/I Quantification Reports	✓		✓	✓	
Western Lehigh Sewer Partners/City of Allentown 2022 Nighttime Weiring	✓	✓			
Erie County Sewer District No. 2 Flow Monitoring and I/I Quantification Report	✓		✓	✓	
Erie County Sewer District No. 6 Flow Monitoring and I/I Quantification Report	✓		✓	✓	
Erie County Sewer District No. 3 Flow Monitoring and I/I Quantification Report	✓		✓	✓	
Hartford MDC - Sewer System Studies and Rehabilitation Design to Eliminate Sanitary Sewer Overflows	✓	✓	✓	✓	
Norwalk - Sewer System Master Planning and I/I Rehabilitation	✓	✓	✓	✓	✓

Relevant Project Experience					
Projects	Flow Metering	Flow Isolation	Assessment	I/I Reduction	Funding Assistance
City of North Tonawanda - Tonawanda Island Infrastructure Analysis	✓		✓	✓	✓
New Castle County - Brandywine Hundred Sewer Rehabilitation and Capacity Assurance Program	✓	✓	✓	✓	✓
Greater New Haven – I/I Improvements	✓		✓	✓	✓
Lehigh County - SSES and Sewer Capacity Assurance and Rehabilitation Program	✓		✓	✓	✓
Groton - Fort Hill Homes Sanitary Sewer Construction and Rehabilitation	✓		✓		✓
New Castle County - Clearwater Disconnection Pilot Program	✓			✓	
Stoneham - Collection System and Pump Station Investigations and Rehabilitation for I/I Removal	✓	✓	✓	✓	✓
Nashville TN - Whites Creek Performance Based I/I Reduction	✓	✓	✓	✓	
Emerald Coast Utilities Authority (Pensacola FL) - Sewer Rehabilitation/Replacement Program	✓	✓	✓	✓	
DC Water (Washington D.C.) - Sewer Program Management	✓		✓		
Hartford County MD - Upper Bynum Run I/I Abatement Program	✓	✓			
Program for Eight Sewer Basins	✓		✓		
Blasdell Collection System	✓		✓	✓	
Buffalo Sewer Authority LTCP	✓	✓	✓	✓	✓
Metropolitan Sewer District of Greater Cincinnati (MSDGC), OH / West Fork Branch Model /GI As-Needed Services	✓		✓		
Albany Pool Combined Sewer Overflow Long- Term Control Plan and Affordability Study	✓		✓		✓
NYSOGS / Otisville Correctional Facility	✓	✓	✓	✓	

## Section 6.

# Specific Experience of Key Project Professionals

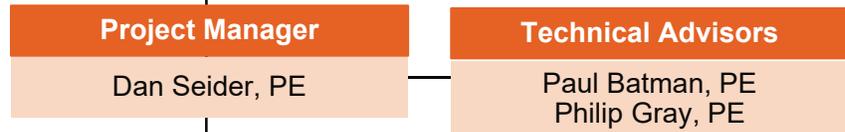


# 6

## Specific Experience of Key Project Professionals

Our project team will be composed of Arcadis staff from the Buffalo office with key expertise provided by our Wilmington, Delaware sewer system management experts, John Paul Travis and Paul Batman, as well as Ontario, Canada collection system planning leader, Phil Gray. This project team has an excellent combination of local experience and national expertise in buried infrastructure and trenchless technologies. We are also proposing to use JM Davidson and TECsmith to support our team of local leaders and national experts.

The key project team members are summarized below. Resumes are provided in Appendix A.



Project Team	
Task 2. Smoke Testing	Task 3. Flow Isolation and Measurement
Jaime Davidson, PE (JM Davidson) Catherine Knab, PE (JM Davidson)	Emily Sadowsky Julia Manzano, EIT Zachary Cox, EIT
Task 4. CCTV and Manhole Inspection Reports	Task 5. Outfall/SSO Condition Assessment
Jaime Davidson, PE (JM Davidson) Catherine Knab, PE (JM Davidson)	John Paul Travis John Salvagno, PE, CDT
Task 6. Focused SSES	Task 7. Report and Recommendations
John Paul Travis Julia Manzano, EIT Zachary Cox, EIT	John Salvagno, PE, CDT Jamie Davidson, PE Julia Manzano, EIT
Task 8. Post-Construction Monitoring and Assessment	
John Salvagno, PE, CDT Julia Manzano, EIT TECsmith	

## KEY TEAM MEMBERS

**Dan Seider, PE**

Mr. Seider brings more than 26 years of experience managing a variety of engineering design and construction projects. He has led the Arcadis efforts for several sewer system management plans, including the flow meter installations, flow monitoring, data collection/analysis, and the development of the Engineering Report. Mr. Seider will serve in the project manager role for this project.

**Jaime Davidson, PE**

Ms. Davidson has managed and designed a variety of water and wastewater projects throughout her career. Her experience includes water process and infrastructure design; collection system rehabilitation analysis and design; sanitary sewer evaluation surveys and inflow and infiltration investigations; wastewater process design; permit applications; regulatory and environmental compliance; construction administration; stormwater MS4 program support; and technical writing and editing.

**John Salvagno, PE**

Mr. Salvagno has worked on numerous design and planning projects as a water resources project engineer at Arcadis. He has performed the data validation and analyses for numerous I/I quantification studies and performed SSES investigations, including the NFWB Year 12 Progress Evaluation. John will continue in his role conducting SSES field activities and contributing to the development of various analyses, reports, and workshop presentations to ensure the NFWB with a high level of success for this project.

**John Paul Travis**

Mr. Travis has provided the technical services for dozens of sewer system management plans, flow quantification, and rehabilitation efforts. He has extensive experience with collection system projects involving flow data collection, data QA/QC, and flow analysis. He has personally installed hundreds of flow meters and was closely involved in the development of the Arcadis Time Series Analyzer database management tool. He will oversee our local staff as they perform the data analysis and SSES field work for this project.

**Julia Manzano**

Ms. Manzano earned her master's degree in May 2021 in Civil Engineering from Michigan Technological University, along with a graduate certificate in Resilient Water Infrastructure. In May 2020, she received her bachelor's degree in Environmental Engineering from Michigan Technological University. She began her role as a Water Resources Specialist with Arcadis in July of 2021 and has supported project teams with data evaluations, desktop assessments, and hydraulic modeling using a variety of software applications.

**Emily Sadowsky**

Mrs. Sadowsky has managed, led and performed numerous inflow/infiltration studies and infrastructure evaluations and provided construction oversight. This work includes basin prioritization, flow analysis, smoke-testing, flow metering, above grade storm observations, nighttime infiltration evaluation, basement inspections, manhole/catch basin inspections, dye-testing, reviewing and coding CCTV inspection videos, photographs, and inspection reports using PACP, LACP, and MACP defect coding, and developing rehabilitation recommendations.

## Section 7.

# Experience & Qualifications of Subconsultants/ Contractors

# 7 Experience & Qualifications of Subconsultants/Contractors

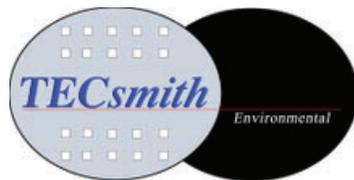


**JM Davidson Engineering, D.P.C. (JMD)** is a consulting firm located in Western New York that offers a full range of civil engineering services, including water and wastewater, structural, transportation, and railroad design. The firm includes professional engineers that can not only assist with a project from preliminary design through construction but are also experienced working both for the Niagara Falls Water Board (NFWB) and in the City of Niagara Falls, NY. JMD's office is located less than 10 miles from the NFWB and the LaSalle neighborhood, which will enable their staff to be readily available for support during the field evaluation, as needed.

**Ms. Jaime Davidson, PE** has 18 years of experience on a variety of wastewater collection system projects. She was a project engineer and author of the original NFWB Sanitary Sewer System Management Plan prepared by Parsons, dated August 2007. Ms. Davidson was also a member of the ECSD No. 1 Clinton Trunk and Related Areas project team that established the basis for infiltration and inflow (I/I) values by defect type in the Western New York area. In addition, Ms. Davidson has managed or been involved in collection system evaluation projects in ECSD No. 1 French Road Area in Cheektowaga, NY, ECSD No. 3 Town of Boston, NY and the Village of Hamburg, NY.

**Ms. Cati Knab, PE** is a civil engineer specializing in the areas of capital program management, water and wastewater treatment, water transmission and distribution, and construction administration and inspection. She has extensive experience in all phases of project development and implementation, including preliminary scoping and permitting stages, detailed design, bidding, and construction administration and project close-out for both small and large scale infrastructure improvement projects. Ms. Knab's previous experience as Chief Collection Systems Engineer for the Buffalo Sewer Authority will benefit the Arcadis team's SSES activities, long term planning and overall recommendations under this important project.

JMD has been **certified as a Women Business Enterprise (WBE)** by New York State and a Disadvantaged Business Enterprise (DBE) by the Niagara Frontier Transportation Authority.



**TECsmith, Inc. (TECsmith)** is an environmental services company that specializes in water and wastewater monitoring. Located in Hamburg, NY, TECsmith provides wastewater sampling and flow measurement services for engineering studies, municipal billing, and industrial compliance. TECsmith technicians are experts in open channel flow measurement. TECsmith will assist Arcadis with flow monitoring and field services under the oversight of Arcadis to ensure a high level of service is provided to the NFWB.

## Section 8.

# Schedule, Effort and Budget Breakdown

# 8

## Schedule, Effort and Budget Breakdown

### PROJECT SCHEDULE

We are pleased to provide a preliminary project schedule (see following page) based on our extensive data analysis and sewer management plan experience. We invite and we would welcome the opportunity to sit down to review and refine our schedule to meet NFWB's needs. Time frames can be extended or expedited based on future, in-depth discussions.

For Phase 1, we are committed to providing a compressed schedule to meet the NFWB's needs. Due to the weather conditions of Western New York and number of field activities to be performed, we anticipate delivery of the Final Engineering Report to NYSDEC by May 2023.

For Phases 2-3, we anticipate commencing field activities in the Spring of 2023 and 2024 with an Engineering Report submitted to NYSDEC before the end of each year.

LaSalle Area Sanitary Sewer Evaluation Survey SSES-Phase 1

Niagara Falls Water Board

Description	Start	End	2022	2023												2024											
			Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug				
<b>Project Initiation</b>	1/6/2023	1/6/2023		★	Award, Contract Signing and Notice to Proceed Complete: January 6 <sup>th</sup> , 2023																						
<b>Task 1. Project Management and Support</b>	12/19/2022	8/30/2024																									
Kickoff Meeting with NFWB	1/6/2023	1/6/2023		★	Kickoff Meeting: January 6 <sup>th</sup> , 2023																						
RFI & Information Review	12/19/2022	1/31/2023																									
Project Management (Invoicing, NFWB & NYSDEC Support)	1/6/2023	8/30/2024																									
<b>Task 2. Smoke Testing</b>	2/3/2023	3/17/2023																									
Submit Smoke Testing Plan (incl. Press Release) to NFWB	2/3/2023	2/3/2023																									
Notify Residents, Police, Fire Officials, and Others	2/17/2023	2/17/2023			★	Notification Submitted: February 17 <sup>th</sup> , 2023																					
Conduct Smoke Testing and Documentation (Appropriate Weather Conditions Dependent)	2/20/2023	3/17/2023																									
<b>Task 3. Flow Isolation and Measurement</b>	3/3/2023	3/17/2023																									
Coordination Meeting with NFWB	3/3/2023	3/3/2023				★	Coordination Meeting with NFWB: March 3 <sup>rd</sup> , 2023																				
Initial Site Visits to Confirm Locations	3/6/2023	3/6/2023																									
Perform Nighttime Weiring (Appropriate Weather Conditions Dependent)	3/6/2023	3/10/2023				★	Nighttime Weiring Complete: March 10 <sup>th</sup> , 2023																				
Tabulate Results for Engineering Report	3/6/2023	3/17/2023																									
<b>Task 4. Review of CCTV and Manhole Inspection Reports</b>	1/9/2023	1/30/2023																									
CCTV Inspection Report Analysis and Review	1/9/2023	1/27/2023																									
Manhole Inspection Report Analysis and Review	1/16/2023	1/27/2023																									
Workshop Attendance with NFWB to Discuss Improvement Strategies	1/30/2023	1/30/2023																									
<b>Task 5. Outfall/SSO Condition Assessment</b>	1/9/2023	3/21/2023																									
Review Available Information	1/9/2023	1/13/2023																									
Site Visits to Document Existing Conditions	1/16/2023	1/20/2023																									
Develop Draft Work Plan	2/1/2023	2/10/2023			★	Submit Draft Work Plan: February 10, 2023																					
Workshop with NFWB to Review Work Plan	2/10/2023	2/10/2023																									
Finalize Workplan and Resubmit	2/13/2023	2/28/2023			★	Submit Draft Final Work Plan: February 28, 2023																					
Outfall/SSO Condition Assessments	3/1/2023	3/31/2023																									
<b>Task 6. Focused SSES</b>	1/6/2023	4/28/2023																									
Contingency (TBD; Based on NFWB Approval)	1/6/2023	4/28/2023																									
<b>Task 7. Report and Recommendations</b>	1/6/2023	4/28/2023																									
Develop Draft Engineering Report	1/6/2023	4/14/2023						★	Submit Draft Engineering Report: April 14 <sup>th</sup> , 2023																		
Workshop with NFWB to Review Engineering Report	4/18/2023	4/18/2023																									
Develop Final Engineering Report and Submit to NYSDEC	4/19/2023	5/12/2023							★	Submit Final Engineering Report to NYSDEC: April 28 <sup>th</sup> , 2023																	
<b>Task 8. Post-Construction Monitoring and Assessment</b>	6/1/2023	8/30/2024																									
Sanitary Sewer Improvements by NFWB	6/1/2023	2/28/2024																									
Post Construction Flow Monitoring	3/1/2024	5/31/2024																									
Prepare Draft Post Construction I&I Report	5/24/2024	7/26/2024																					★				
Finalize Post Construction I&I Report	7/26/2024	8/30/2024																					★				

LaSalle Area Sanitary Sewer Evaluation Survey SSES-Phase 2

Niagara Falls Water Board

Description	Start	End	2023										2024												
			Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug						
<b>Project Initiation</b>	3/1/2023	4/14/2023	★	Award, Contract Signing and Notice To Proceed Complete: April 14, 2023																					
<b>Task 1. Project Management and Support</b>	4/14/2023	8/30/2024																							
Kickoff Meeting with NFWB	4/14/2023	4/14/2023	★	Kick Off Meeting: April 14, 2023																					
RFI & Information Review	4/17/2023	4/28/2023																							
Project Management (Invoicing, NFWB & NYSDEC Support)	4/14/2023	8/30/2024																							
<b>Task 2. Smoke Testing</b>	5/1/2023	6/16/2023																							
Submit Smoke Testing Plan (incl. Press Release) to NFWB	5/5/2023	5/5/2023																							
Notify Residents, Police, Fire Officials, and Others	5/8/2023	5/12/2023		★	Notification Submitted: May 12, 2023																				
Conduct Smoke Testing and Documentation (Appropriate Weather Conditions Dependent)	5/15/2023	6/16/2023																							
<b>Task 3. Flow Isolation and Measurement</b>	6/1/2023	6/30/2023																							
Coordination Meeting with NFWB	6/1/2023	6/1/2023			★	Coordination Meeting with NFWB: June 1, 2023																			
Initial Site Visits to Confirm Locations	6/5/2023	6/5/2023																							
Perform Nighttime Weiring (Appropriate Weather Conditions Dependent)	6/12/2023	6/16/2023			★	Nighttime Weiring Complete: June 16, 2023																			
Tabulate Results for Engineering Report	6/14/2023	6/30/2023																							
<b>Task 4. Review of CCTV and Manhole Inspection Reports</b>	6/5/2023	6/28/2023																							
CCTV Inspection Report Analysis and Review	6/5/2023	6/16/2023																							
Manhole Inspection Report Analysis and Review	6/12/2023	6/23/2023																							
Workshop Attendance with NFWB to Discuss Improvement Strategies	6/28/2023	6/28/2023																							
<b>Task 5. Outfall/SSO Condition Assessment (NOT INCLUDED)</b>																									
<b>Task 6. Focused SSES</b>	4/14/2023	7/31/2023																							
Contingency	4/14/2023	7/31/2023																							
<b>Task 7. Report and Recommendations</b>	5/8/2023	9/29/2023																							
Develop Draft Engineering Report	5/8/2023	8/31/2023																							
Workshop with NFWB to Review Engineering Report	8/31/2023	8/31/2023						★	Submit Draft Engineering Report: August 31, 2023																
Develop Final Engineering Report and Submit to NYSDEC	9/1/2023	9/29/2023							★	Submit Final Engineering Report: September 29, 2023															
<b>Task 8. Post-Construction Monitoring and Assessment</b>	1/1/2024	8/30/2025																							
Sanitary Sewer Improvements by NFWB	1/1/2024	12/31/2024																							
Post Construction Flow Monitoring	3/1/2025	5/31/2025																							
Prepare Draft Post Construction I&I Report	5/24/2025	7/26/2025																							
Finalize Post Construction I&I Report	7/26/2025	8/30/2025																							

LaSalle Area Sanitary Sewer Evaluation Survey SSES-Phase 3

Niagara Falls Water Board

Description	Start	End	2024										2025									
			Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug			
<b>Project Initiation</b>	3/1/2024	4/14/2024	★	Award, Contract Signing and Notice To Proceed Complete: April 14, 2024																		
<b>Task 1. Project Management and Support</b>	4/14/2024	8/30/2025																				
Kickoff Meeting with NFWB	4/14/2024	4/14/2024	★	Kick Off Meeting: April 14, 2024																		
RFI & Information Review	4/17/2024	4/28/2024																				
Project Management (Invoicing, NFWB & NYSDEC Support)	4/14/2024	8/30/2025																				
<b>Task 2. Smoke Testing</b>	5/1/2024	6/16/2024																				
Submit Smoke Testing Plan (incl. Press Release) to NFWB	5/5/2024	5/5/2024																				
Notify Residents, Police, Fire Officials, and Others	5/8/2024	5/12/2024		★	Notification Submitted: May 12, 2024																	
Conduct Smoke Testing and Documentation (Appropriate Weather Conditions Dependent)	5/15/2024	6/16/2024																				
<b>Task 3. Flow Isolation and Measurement</b>	6/1/2024	6/30/2024																				
Coordination Meeting with NFWB	6/1/2024	6/1/2024			★	Coordination Meeting with NFWB: June 1, 2024																
Initial Site Visits to Confirm Locations	6/5/2024	6/5/2024																				
Perform Nighttime Weiring (Appropriate Weather Conditions Dependent)	6/12/2024	6/16/2024			★	Nighttime Weiring Complete: June 16, 2024																
Tabulate Results for Engineering Report	6/14/2024	6/30/2024																				
<b>Task 4. Review of CCTV and Manhole Inspection Reports</b>	6/5/2024	6/28/2024																				
CCTV Inspection Report Analysis and Review	6/5/2024	6/16/2024																				
Manhole Inspection Report Analysis and Review	6/12/2024	6/23/2024																				
Workshop Attendance with NFWB to Discuss Improvement Strategies	6/28/2024	6/28/2024																				
<b>Task 5. Outfall/SSO Condition Assessment</b>	4/15/2024	7/5/2024																				
Review Available Information	4/15/2024	4/19/2024																				
Site Visits to Document Existing Conditions	4/22/2024	4/26/2024																				
Develop Draft Work Plan	5/8/2024	5/17/2024		★	Submit Draft Work Plan: May 17, 2024																	
Workshop with NFWB to Review Work Plan	5/17/2024	5/17/2024																				
Finalize Workplan and Resubmit	5/20/2024	6/4/2024			★	Submit Draft Final Work Plan: June 4, 2024																
Outfall/SSO Condition Assessments	6/5/2024	7/5/2024																				
<b>Task 6. Focused SSES</b>	4/14/2024	7/31/2024																				
Contingency	4/14/2024	7/31/2024																				
<b>Task 7. Report and Recommendations</b>	5/8/2024	9/29/2024																				
Develop Draft Engineering Report	5/8/2024	8/31/2024																				
Workshop with NFWB to Review Engineering Report	8/31/2024	8/31/2024					★	Submit Draft Engineering Report: August 31, 2024														
Develop Final Engineering Report and Submit to NYSDEC	9/1/2024	9/29/2024						★	Submit Final Engineering Report: September 29, 2024													
<b>Task 8. Post-Construction Monitoring and Assessment</b>	1/1/2025	8/30/2026																				
Sanitary Sewer Improvements by NFWB	1/1/2025	12/31/2025																				
Post Construction Flow Monitoring	3/1/2026	5/31/2026																				
Prepare Draft Post Construction I&I Report	5/24/2026	7/26/2026																				
Finalize Post Construction I&I Report	7/26/2026	8/30/2026																				

## PROJECT MANAGEMENT

Delivering a successful project requires both technical excellence and outstanding project management capabilities. With Dan Seider serving as project manager, John Salvagno and John Paul Travis leading the SSES and data analysis QA/QC measures, NFWB will have individuals working on your project who will always be available and responsive, regardless of the topic.

Arcadis follows an integrated project management approach based on best practices from the Project Management Institute (PMI). Our management approach integrates scope, schedule, and budget management with timely communications and effective quality controls to provide the following benefits to NFWB:

- Effective management of schedule, resources and budget. We use a work breakdown structure detailing the schedule and resource allocation for each task so that deadlines are met.
- Clear and concise communications with all stakeholders. Our communications approach ensures timely delivery of the right information to the right project participants and stakeholders. Outstanding issues will be tracked until resolved.
- High-quality data and deliverables. Our project manager will be responsible for verifying that deliverables receive appropriate quality control review prior to submittal to NFWB.

## PROJECT FEE SCHEDULE

Fees are based on the following rate schedule, which has been utilized on previous NFWB projects. Overhead and markups are noted below.

NFWB Specific Hourly Rate Table	
Category	Hourly Rate (\$/hr)
Project/Administrative Assistant I	70
Design Tech II / Field Technician II/Admin II	85
Drafter I / Field Technician III and IV /Admin III & IV	95
Drafter II / Field Technician V / Admin V	130
CADD Designer / Project Controller	135
Field Supervisor	155
Engineer / Scientist	130
Staff Engineer / Scientist / Architect	140
Project Engineer / Scientist / Architect	155
Senior Engineer / Scientist / Architect I	175
Senior Engineer / Scientist / Architect II	195
Principal Engineer / Scientist / Architect I	205
Principal Engineer / Scientist / Architect II	235
Engineer / Scientist Director	255

**OVERHEAD RATE AND BASIS OF FEE DEVELOPMENT**

Arcadis’ audited overhead rate for the Water Business Line for 2022 is 1.75.

All indirect costs are included in the overhead rate including computers, reproduction, communication fees — as well as all taxes, benefits, rent, utilities, and administrative support services.

The overhead rate shown above does not include other direct costs (ODCs) and transportation costs, which are billed separately as shown below.

**Other Direct Costs:** All expenses incurred for a project will be invoiced at cost plus 10 percent to cover administrative expenses. Other direct costs include such items as, but are not limited to: shipping charges, external printing, field supplies and equipment, traveling expenses, special insurance, licenses, permits, or subcontractors.

**Transportation:** \$0.625/mile.

**Equipment:** A schedule of usage rates for specialty equipment is available for field assignments.

**FEE PROPOSAL**

As requested, we have also prepared the following price proposal for SSES activities in the Phase 2 (81st & Frontier 2 and 80th & Lindbergh) and Phase 3 (Mang & 88th) sewersheds that may be awarded by NFWB at a later date. Our pricing is based on Phase 2 being completed in 2023 and Phase 3 being completed in 2024. Given the current economic environment, should NFWB award this work at a later date than indicated, Arcadis proposes to adjust the fee schedule according to the current direct labor and audited overhead rate.

Niagara Falls Water Board Request for Proposal No. 2022-01 Fee Proposal – Phase 1 Sewersheds (91st & Luick and 81st & Frontier 1)		
Task Name	Project Team Hours	Fee
Task 1. Project Management Support	54	\$7,500
Task 2. Smoke Testing	177	\$23,540
Task 3. Flow Isolation and Measurement (night-time weiring)	118	\$15,650
Task 4. Review of CCTV inspection reports and manhole Inspection Reports Completed by NFWB Staff Holding NASSCO PACP Certification	114	\$14,815
Task 5. Outfall/SSO Conditions Assessment	84	\$10,970
Task 6. Focused SSES	-	\$10,000
Task 7. Report and Recommendations	138	\$18,320
Task 8. Post-Construction Flow Monitoring	201	\$26,140
<b>TOTAL</b>	886	\$126,935

Niagara Falls Water Board Request for Proposal No. 2022-01 Fee Proposal – Phase 2 Sewersheds (81st & Frontier 2 and 80th & Lindbergh)		
Task Name	Project Team Hours	Fee
Task 1. Project Management Support	54	\$8,030
Task 2. Smoke Testing	180	\$25,190
Task 3. Flow Isolation and Measurement (night-time weiring)	125	\$16,670
Task 4. Review of CCTV inspection reports and manhole Inspection Reports Completed by NFWB Staff Holding NASSCO PACP Certification	114	\$15,850
Task 5. Outfall/SSO Conditions Assessment	-	-
Task 6. Focused SSES	-	\$10,000
Task 7. Report and Recommendations	138	\$19,600
Task 8. Post-Construction Flow Monitoring	200	\$27,970
<b>TOTAL</b>	811	\$123,390

Niagara Falls Water Board Request for Proposal No. 2022-01 Fee Proposal – Phase 3 Sewersheds (88th & Mang)		
Task Name	Project Team Hours	Fee
Task 1. Project Management Support	54	\$8,590
Task 2. Smoke Testing	190	\$26,950
Task 3. Flow Isolation and Measurement (night-time weiring)	130	\$17,920
Task 4. Review of CCTV inspection reports and manhole Inspection Reports Completed by NFWB Staff Holding NASSCO PACP Certification	118	\$16,960
Task 5. Outfall/SSO Conditions Assessment	45	\$6,250
Task 6. Focused SSES	-	\$10,000
Task 7. Report and Recommendations	138	\$20,970
Task 8. Post-Construction Flow Monitoring	200	\$29,930
<b>TOTAL</b>	875	\$137,570

## FEE REVIEW AND NEGOTIATION

We developed these fees based on providing NFWB the same high-value service that we have in the past and we would welcome the opportunity to sit down to review and refine our scope and fee to meet NFWB's needs. We have always found this process to be beneficial and critical to establishing clear expectations before starting the project.

**The fee proposed above fully meets NFWB's 30% M/WBE participation goals. We are actively trying to identify an SDVOB partner to also meet the respective 6% goal.**

# Appendix A. Resumes



## Dan Seider, PE

Mr. Seider has broad expertise in water treatment, conveyance, operations, and maintenance. Recently, he was the production department manager for the Erie County Water Authority, responsible for the daily O&M of two conventional treatment plants, 34 pump stations, and 37 storage tanks, producing 70 mgd of water. Prior to his work with the Authority he was a project manager for an engineering consultant with a focus on providing drinking water, sanitary sewer, and storm sewer solutions to a variety of public and private clients.

### Key Information

#### Education/Qualifications

- MS, Civil Engineering, University at Buffalo, 2000
- BS, Civil Engineering, University at Buffalo, 1996

#### Years of Experience

Total – 26  
With Arcadis – 7

#### Professional Registrations/ Certifications

- Professional Engineer – NY
- Water System Operator - NY
- Grade 1A-SW/GUI Filtration Plant and Grade D – Distribution System

#### Office Location

Buffalo, NY

### Relevant Experience

#### Sanitary Sewer System Management Plan – Year 12 Evaluation Niagara Falls Water Board, Niagara Falls, NY

Project Manager for a flow monitoring study that documented I/I removal progress within the LaSalle sanitary sewer collection system of Niagara Falls. This area is currently under a NYSDEC Order on Consent to improve the sanitary sewer system and eliminate the need for sanitary sewer overflows. The project included analyzing three months of flow data within 15 sewersheds, development of I/I statistics, and preparation of an Engineering Report that reprioritized the 18-year capital improvement plan to favor the most cost-effective approach for implementing corrective measures within the sewersheds having the highest I/I.

#### Tonawanda Island Infrastructure Analysis City of North Tonawanda, North Tonawanda, NY

Project Manager for an ongoing project for the condition assessment and capacity evaluation of the drinking water and wastewater system on Tonawanda Island. The project will inform the potential for the island to support future development including mixed-use, residential, and

public waterfront access. The project includes smoke testing, CCTV, and flow monitoring of the sanitary sewer system. Broadband electromagnetic inspections and hydrant testing evaluations will be performed on the water system. Following the field investigations, an Engineering report will be developed, in accordance with NYSEFC requirements, that will summarize the infrastructure condition, consequence of failure, remaining useful life, and capacity including rehabilitation and replacement recommendations for the long-term development of the island.

#### ECDEP Sewer Districts 1, 2, 3, 4, 5, 6 and Town of Clarence Sewer Districts 2, 4, 6, 7, 9 and 10 Flow Monitoring - Inflow / Infiltration (I/I) Reports Erie County Dept. of Environmental Planning, Buffalo, NY

Project manager for multi-year, multi-project sanitary sewer flow monitoring and I/I quantification studies. The projects included the installation of up to 45 flow meters for each monitoring period as well as rain gauges and groundwater monitoring wells. Flow data was collected on a bi-weekly basis. I/I analyses were conducted using the Arcadis developed Time Series Analyzer and included the development of normal baseflows,

storm hydrographs and I/I parameters to evaluate and quantify I/I within each sub-basin of the sewer districts. The final reports included an overview of each sub-basin's response to wet weather conditions and prioritized recommendations for future Sewer System Evaluation Studies (SSES's).

#### **North Tonawanda WTP Improvements**

##### **City of North Tonawanda, NY**

Project Manager for the condition assessment, alternatives evaluation, design, and construction phase services for improvements to the City's 12-mgd drinking WTP. The project includes a new low service pump station, high service pump replacements, sedimentation basin roof improvements, delivered water meter vaults, transmission main replacements, and associated structural, electrical, HVAC, SCADA, and instrumentation improvements. The project requires detailed maintenance of plant operations and construction sequencing plans, including bypass pumping, to ensure the plant provides continuous water service to the City's residents during construction.

#### **Aspinwall Treatment Plant Pretreatment, Chemical, and Clarification Improvements**

##### **Pittsburgh Water and Sewer Authority, Pittsburgh, PA**

Project Manager for the condition assessment, alternatives evaluation, capital improvement plan and preparation of schematic design documents for improvements to the raw water intakes, raw water pump station, screening, flocculation, clarification, sedimentation processes, and chemical systems at the City of Pittsburgh's 117-mgd drinking water treatment plant. Additional work included high-level facility planning for a new high-service pump station, clearwell and UV disinfection facility. The Capital Improvement Program

identified long-term capital projects with an estimated budget of \$260 million to be completed over the next 10 to 15 years. Led the detailed design and construction phase services for upgrades to the powdered activated carbon system, utility water piping, sodium hypochlorite system, and emergency rehabilitation to Clarifiers No. 2 and No. 4.

#### **Ball Pump Station Capital Improvement Program**

##### **Erie County Water Authority, Erie County, NY**

Project Manager for the condition assessment, hydraulic evaluation, and prioritized capital improvement program for the Ball Pump Station. The project included an inventory of all assets, condition rating, risk assessment, including likelihood of failure, consequence of failure, and the development of a final risk matrix to prioritize improvements. Also included was a hydraulic evaluation of the existing pumps to develop alternatives for improving reliability, increasing energy efficiency, and operational flexibility. Recommendations were incorporated into a 15-year Capital Improvement Program.

#### **Lake Huron Water Treatment Plant Improvements**

##### **Great Lakes Water Authority, Detroit, MI**

Project manager for an eight-year project that includes the condition assessment, alternatives evaluation, design, and construction phase services for replacement of the low lift, high lift, and wash water pumping systems ranging in size from 900 hp to 5,500 hp, electrical systems, and phosphoric acid chemical system at the 400 mgd water treatment plant. The new wash water system will include two 750,000-gallon elevated storage tanks and parallel 42" DIP wash water lines with 42" cone valves for rate of flow control.

#### **Allentown Water System Master Plan Lehigh County Authority, Allentown, PA**

Technical QA/QC for the condition assessment of the LCA's Allentown Water System. The assessment involved an inventory of all assets, condition rating, risk assessment including likelihood of failure, consequence of failure, and level of service analyses, estimate of remaining useful life, and the development of a final risk matrix to prioritize improvements as part of a 50-year Capital Improvement Program.



## Paul Batman, PE

Mr. Batman has been involved as Program Manager, Project Manager, or Senior Engineer in sewer infrastructure investigation and rehabilitation efforts for projects and programs across the Mid-Atlantic region as well as providing technical support for projects nationwide. His experience includes inflow/ infiltration (I&I) studies, infrastructure evaluations, physical condition assessments, gravity sewer design, gravity sewer operations and maintenance planning and implementation, water distribution design, sanitary sewer rehabilitation, storm system rehabilitation, preparation of construction/ bid documents, construction administration services, design support during construction, community relations, and flow data analysis for evaluating effectiveness of I&I reduction efforts. He is currently Arcadis' national practice coordinator for buried infrastructure assessment, design, and rehabilitation and is responsible for identifying and sharing our best talent, tools, and practices with project teams and clients nationwide.

### Key Information

#### Education/Qualifications

- MS, Environmental Engineering, Drexel University 1999
- BS, Environmental Health Sciences, West Chester University of Pennsylvania, 1996

#### Years of Experience

Total – 26  
With Arcadis – 22

#### Professional Registrations/ Certifications

- Professional Engineer – DC, DE, MA, MD, PA, VA, DC
- Construction Documents Technologist
- NASSCO Pipeline, Lateral and Manhole Assessment and Certification Programs (PACP, LACP and MACP)

#### Office Location

Wilmington, DE

### Relevant Experience

#### Rose Creek, Rebsamen, Rock Creek, and Grassy Flat I&I Reduction Project Little Rock Water Reclamation Authority, AR

Project Manager leading this I&I reduction project which follows an “Expedited Holistic Rehabilitation” approach aimed at identifying I&I sources in mains, manholes and laterals then moving them quickly to repair/rehabilitation under task orders using four annual contracts. Work to date includes flow data analysis for 65 flow meter sub-basins, night-time weiring, smoke testing, CCTV inspection, rehabilitation selection, contract procurement, bidding assistance, and preparation for construction implementation.

#### Large Diameter Pipe Inspection Program

#### Little Rock Water Reclamation Authority, Little Rock, AR

Senior Engineer supporting the inspection and condition assessment of large diameter and difficult-to-reach sewers across the collection

system. Participated in man-entry inspections of portions of pipe in five inspection task order areas totaling nearly 30 miles. Oversaw the ensuing physical condition assessment including review of CCTV and MSI data, and presentation of findings.

#### Walnut Street Trunk Sewer Assessment

#### JEA, Jacksonville, FL

Senior engineer for the assessment and rehabilitation alternatives evaluation of a 60-inch single cage reinforced concrete trunk sewer downstream of two pump stations and discharging into an 84-inch interceptor. The pipe was severely deteriorated by hydrogen sulfide attack, had experienced two collapses in the previous year and closed-circuit television (CCTV) inspection showed exposed rebar and portions of rebar hanging from the crown, and approximately 24 inches of debris in the pipe invert along its entire 4,000 LF length.

### **B-Street and New Jersey Sewer Assessment**

**DC Water, Washington District of Columbia**

Senior engineer and technical advisor during the inspection and assessment of more than 4 miles of combined sewer interceptor measuring from 72-inch-diameter to 18-foot by 16-foot arched, constructed of brick and unreinforced concrete. Assessment techniques included manned-entry inspection using pipe penetrating radar and ultrasonic testing to verify concrete thickness and relative density as well as identify potential voids on the exterior. The final deliverable included detailed recommendations for repair/rehabilitation.

### **Big C Sewer Assessment**

**Albany Water Board, Albany, NY**

Technical Lead for the assessment and development of repair/rehabilitation recommendations for approximately 7,700 LF of combined sewer consisting of 96-inch to 114-inch sewer constructed of brick and concrete in varying cross sections as well as an abandoned stone arch sewer that is under consideration for reactivation. The work involved a combination of Multi-Sensor Inspection and man-entry inspection. Recommendations consisted largely of repairs to deteriorating concrete sections of the active sewers and masonry repairs to the stone arch.

### **Brandywine Hundred Sewer Rehabilitation Projects**

**New Castle County, DE**

Project Manager and Design Leader for a series of sewer rehabilitation projects including over 100,000 LF of 8" – 12" collection pipe and associated manholes and laterals. Responsible for the inspection, condition assessment, basis of design, and preparation of drawings and specifications. Rehabilitation technologies included

cured-in-place pipe lining, pipe joint grouting, excavated repairs, and manhole lining.

### **Consent Decree Sewer Rehabilitation Program**

**Washington Suburban Sanitary Commission,**

**Laurel, MD**

Principal Engineer and Professional Engineer of record for the PACP-based condition assessment and design of rehabilitation for more than 40 miles of sewers ranging from 8-inch to 4-inch-diameter. The rehabilitation work was administered using more than twenty Indefinite Deliverable-Indefinite Quantity (IDIQ) contract-based construction task order packages totaling more than \$60 million in construction cost.

### **Sewer Management Program**

**DC Water, Washington DC**

Technical advisor providing guidance, expertise and quality assurance for pipe inspection and pipe rehabilitation technologies and techniques.

### **Carderock/Scotts Run Sewer Assessment and Rehabilitation**

**Fairfax County, Virginia**

Project manager and technical lead for the assessment of approximately 1,400 LF of 30-inch PCCP trunk sewer located in National Park Service property and crossing the C&O canal. Condition assessment determined the trunk sewer's pipes and manholes to be severely deteriorated from hydrogen sulfide attack with the steel cylinder exposed and pieces of inner mortar liner littering the pipe invert. A rehabilitation alternatives evaluation was performed leading to a recommendation of CIPP lining and the start of the design work is impending.

### **Assessment of Force Mains**

**City of Greensboro, NC**

Senior Engineer for the assessment of three metallic force mains ranging in size from 16" to 36" and totalling approximately 60,000 LF. Assessment includes desktop and field study to determine potential points of external corrosion, internal acoustic inspection for potential points of internal corrosion such as gas pockets and leaks, and test pitting to allow external electromagnetic scans of the pipe to determine wall loss at the points of suspected internal and external corrosion. The results will be used to prioritize and estimate replacement and repair work for inclusion in the DPW's Capital Improvement Plan.



# John Paul Travis

Mr. Travis provides technical services for projects involving water supply, wastewater treatment, stormwater collection systems, environmental remediation, and utility construction. His experience ranges from field services, small and large diameter pipe condition assessment, design, O&M planning, and inflow/infiltration studies. Currently, Mr. Travis concentrates most of his efforts in a program management role with the City of Wilmington Department of Public Works. The City maintains and operates a Combined Sewer Overflow (CSO) system and the area's large Wastewater Treatment plant. Mr. Travis focuses mainly on pipe assessment, outfall assessment related to improving capture rates, and the design and implementation of Green Stormwater Infrastructure projects to alleviate the stress on the CSO system during wet weather events. Mr. Travis is the Arcadis's Subject Matter Expert in Open Channel Flow Metering and continues to provide nationwide assistance with various metering projects.

## Key Information

### Education/Qualifications

- HS, Glasgow High School, 1994

### Years of Experience

Total – 20  
With Arcadis – 20

### Professional Registrations/ Certifications

- OSHA Occupational Safety and Health Training
- NASSCO Pipeline, Lateral, & Manhole Assessment and Certification Program

### Office Location

Wilmington, DE

## Relevant Experience

### Flow Monitoring – District No. 2 I/I Quantification Report

**Erie County Department of  
Environmental Protection (ECPDEP),  
Buffalo, NY**

Data Analyst currently overseeing the initial data analysis. Project includes the placement and installation of 23 flow meters, 3 rain gauges and 2 groundwater monitoring wells. Provided technical oversight for the I/I analysis, utilizing the Arcadis developed Time Series Analyzer (TSA) software to support the Final Engineering Report.

### Flow Monitoring – District No. 6 I/I Quantification Report

**ECDEP, Buffalo, NY**

Provided technical oversight to field staff. Coordinated the placement and installation of 20 flow meters, 2 rain gauges and 3 groundwater monitoring wells. Assisted junior staff during collected data validation to ensure high meter up-time. Currently utilizing the Arcadis developed TSA software to produce final data analyses to support the Final Engineering Report.

### Flow Monitoring – District No. 6 I/I Quantification Report

**ECDEP, Buffalo, NY**

Design Lead role in envisioning, evaluating, and executing a new biosolids and biogas operational system for Columbus DOSD which operates two 100-mgd Water Reclamation Plants and consists of multiple biosolids end use facilities including digestion, land application, and large-scale composting. Results from the plan included de-emphasizing incineration and focusing on expanding land application and composting. Arcadis worked closely with Material Matters on this project to develop new, highly sustainable biosolids outlets such as deep row hybrid poplar farms. With the shutdown of incineration came a significantly large supply of biogas to utilize. Arcadis designed a large-scale Combined Heat and Power system to recover energy from biogas with Shayla Allen as the lead designers.

### **Resilient Wilmington Wilmington, DE**

Project Manager applied and received state funding to develop a report to guide Wilmington's path forward in taking resilient measures to improve the safety and health of the population and assets within Wilmington and the surrounding areas. The report included data analysis of the areas of the City that are most vulnerable to Sea Level Rise, Heat Islands, and CSO system failure caused by increasing rainfall intensities. The document has been used to guide policy within the City's planning department, improvement in zoning regulations along waterfront parcels, and is being used to inform stormwater and wastewater management, guiding future capital projects.

### **Flow Metering DC Water, DC**

Project Manager directed the installation, collection, and maintenance of 40 flow meters installed within the DC system. Provided analysis and recommendations to client and worked with clients' needs to finalize various short-term metering projects. Led team building a large, year-long metering study to provide support for a system wide model and I/I analysis involving 161 meters for a year-long study.

### **Green Infrastructure – Various Wilmington, DE**

Program Manager led design team in two major park improvement projects utilizing Best Management Practice (BMP) for managing and treating storm water at the source. Cool Spring Park – Worked with the City to manage a drainage issue that affected a large City Park and worked with the community and Parks department to design in a way to better serve community needs through park improvements. Rodney Square – Worked at the Mayor's behest to add stormwater BMPs to an existing park improvement project. The team managed the challenge of designing the BMPs around the ongoing construction for the other park improvements. Currently in planning phase to design stormwater practices on a site that is underutilized, with the goal of using the funding to improve the community and create a large outdoor City operated performance stage and artist stalls.

### **11st Pump Station Long Term Control Plan CSO Mitigation Improvements Wilmington, DE**

Project Manager to assist the Water Division in selecting and staging economical, expedient ways to restore capacity at the 11th Street Pump Station in order to curtail combined sewer overflows at CS04A.

### **County Wide Flow Metering/ Rehabilitation Effectiveness New Castle County, DE**

Task Manager implemented several long-term flow monitoring projects. Team installed, maintained, and reviewed data from 55 meters and seven rain gauges to support a rehabilitation effectiveness study and the recalibration of the County's model used to determine compliance with a consent decree. Led a rehabilitation effectiveness analysis to measure the benefits of various construction technologies and their effect on sanitary flow during rain events. Studied over 20 rehabilitation projects and presented results, methods, and findings at 11 national and local conferences and recently presented as part of a large professional engineer continuing education series.



## John Salvagno, PE, CDT

Mr. Salvagno has worked across the planning, design and construction phases of collection system programs as a Project Engineer at Arcadis. He has supported senior staff on various Sanitary Sewer Evaluation Survey projects locally and regionally with data analysis, field assessments, equipment installation and report development. He was closely involved in NFWB's Year 12 Sanitary Sewer System Management Plan and will continue in a similar role to maintain continuity for this next phase of work in the NFWB's Lasalle sewer system.

### Key Information

#### Education/Qualifications

- MEng, Engineering Management, Cornell University, 2017
- BS, Environmental Engineering, Cornell University, 2016

#### Years of Experience

Total – 6  
With Arcadis – 6

#### Professional Registrations/Certifications

- Professional Engineer – New York State
- Certified Construction Documents Technologist Confined Space Entry Certification
- CPR/AED Certification

#### Office Location

Buffalo, NY

### Relevant Experience

#### Sanitary Sewer System Management Plan – Year 12 Evaluation Niagara Falls Water Board, Niagara Falls, NY

Responsible for a flow monitoring study to document progress made to date in the LaSalle sanitary sewer collection system and update the NFWB's SSSMP accordingly. Responsible for the review of flow monitoring data, calculation of I/I statistics, and Engineering Report development. This included recommendations for prioritization of remaining improvements in the 15 sewersheds evaluated.

#### Tonawanda Island Infrastructure Analysis City of North Tonawanda, NY

Project Engineer for an ongoing project for the condition assessment and capacity evaluation of the drinking water and wastewater system on Tonawanda Island. The project will inform the potential for the island to support future development including mixed-use, residential, and public waterfront access. The project includes smoke testing, CCTV, and flow monitoring of the sanitary sewer system. Broadband electromagnetic inspections and

hydrant testing evaluations will be performed on the water system. Following the field investigations, an Engineering Report will be prepared, in accordance with NYSEFC requirements, that will summarize the infrastructure condition, consequence of failure, remaining useful life, and capacity including rehabilitation and replacement recommendations for the long-term development of the island.

#### ECDEP Sewer District 5 and Town of Clarence Sewer Districts 2, 4, 6,7, 9 and 10 Flow Monitoring - Inflow / Infiltration Report Erie County Dept. of Environmental Planning, Buffalo, NY

Initial tasks included monitoring equipment site selection and installation. Provided bi-weekly data validation for the data set. Analysis included stochastic flow data, including development of normal baseflows, hydrographs, and I/I parameters to evaluate different sub-basins to provide recommendations to reduce I/I to the system. Final report included an overview of each sub-basin's response to wet weather conditions and prioritized recommendations for future Sewer System Evaluation Studies (SSES's).

**ECDEP Sewer District 2 Flow Monitoring - Inflow / Infiltration Report**

**Erie County Dept. of Environmental Planning, Buffalo, NY**

Provided bi-weekly data validation for the data set. Analysis included stochastic flow data, including development of normal baseflows, hydrographs, and I/I parameters to evaluate different sub-basins to provide recommendations to reduce I/I to the system. Final report included an overview of each sub-basin's response to wet weather conditions and prioritized recommendations for future Sewer System Evaluation Studies SSES's.

**ECDEP Sewer Districts 1 and 4 Flow Monitoring - Inflow / Infiltration Report**

**Erie County Dept. of Environmental Planning, Buffalo, NY**

Field manager for the installation, calibration and data analysis of 49 flow meters at key locations to evaluate the impacts of inflow and infiltration (I/I) with reference to NYSDEC standards and industry best practices. Engineering Reports were submitted to ECDEP-DSM and NYSDEC with recommendations to prioritize follow up SSES activities and potential capital improvements. Reports were developed to align with NYSEFC funding submission guidelines.

**ECDEP Sewer District 6 Flow Monitoring - Inflow / Infiltration Analysis**

**Erie County Dept. of Environmental Planning, Buffalo, NY**

Assisted in installing flow meters in manholes for pipes ranging from 12-inch to 60-inch- diameter and in data collection and meter maintenance, repairs and coordinated subcontractor's work after these tasks were transferred over. Provided bi-

weekly data validation for the data set. Analysis included stochastic flow data, including development of normal baseflows, hydrographs, and I/I parameters to evaluate different sub-basins to provide recommendations to reduce I/I to the system. Final report included an overview of each sub-basin's response to wet weather conditions and prioritized recommendations for future SSES's.

**Industrial Parkway Pump Station Erie County Dept. of Environmental Planning, Buffalo, NY.**

Providing engineering support for an evaluation of the existing 21-mgd pump station. Activities include hydraulic calculations, alternative process-mechanical improvements design support and report development. Recommendations of the final report will support future capital planning decisions.

**PWSA Aspinwall WTP Process/ Facilities Assessment**

**The Pittsburgh Water & Sewer Authority, Pittsburgh, PA**

Assisted in the preparation of a basis of design report highlighting proposed capital improvements resulting from a facility wide assessment. Report identified the risk profiles and associated costs with improvements to the existing facility. Evaluation included treatment performance, health and safety considerations, and AACE Class 3 cost estimation.

**PWSA Highland MFP UV System The Pittsburgh Water & Sewer Authority, Pittsburgh, PA**

Assisted in the development of the project permit application, design calculations and construction administration. Work included hydraulic evaluations, vendor and subcontractor coordination, and technical report writing. Updated critical path schedule to keep project team and client informed on timeline and potential scheduling conflicts. Specific responsibilities included sizing mechanical piping and appurtenances, preparing project cost estimate and assisting in the development of the project basis of design report.

# Julia Manzano, EIT



Ms. Manzano earned her master’s degree in May 2021 in Civil Engineering from Michigan Technological University, along with a graduate certificate in Resilient Water Infrastructure. In May 2020, she received her bachelor’s degree in Environmental Engineering from Michigan Technological University. She began her role as a Water Resources Specialist with Arcadis in July of 2021 and has supported project teams with data evaluations, desktop assessments, and hydraulic modeling using a variety of software applications.

## Key Information

### Education/Qualifications

- MS, Civil Engineering, Michigan Technological University, 2021
- Graduate Certificate, Resilient Water Infrastructure, Michigan Technological University, 2021
- BS, Environmental Engineering, Michigan Technological University, 2020

### Years of Experience

Total – 2  
With Arcadis – 2

### Professional Registrations/Certifications

- Engineer in Training
- Confined Space Entry Certification
- CPR/AED Certification

### Office Location

Buffalo, NY

## Relevant Experience

### LCA Flow Data QA/QC Lehigh County Authority, Allentown, PA

Performed multiple rounds of thorough flow, velocity, level, and rainfall data validation of 100+ flow meters and 10+ rain gauges. Data is reviewed to ensure data are valid, true, and suitable for RDII analysis, model calibration and verification, and catchment-wide rehabilitation effectiveness evaluations.

### ECDEP Sewer District No. 1 and 4 Flow Monitoring – I/I Quantification Report Erie County Department of Environmental Planning, Buffalo, NY

Reviewed existing reports, data, and projects to identify potential areas of concern. Performed site visits to ensure accuracy of flow meters. Analyzed raw flow rate and rain gauge data. Characterized storm events and identified the four largest events. Prepared Final Engineering Reports summarizing all data, information, evaluations, findings, and recommendations.

### Tonawanda Island Infrastructure Analysis City of North Tonawanda, North Tonawanda, NY

Developed material to be presented at the kick-off workshop. Reviewed existing data to plan and prepare for field investigations. Developed a health and safety plan for the planned field activities. Field activities to be completed for this project includes smoke testing, CCTV inspection, manhole inspections, broadband electromagnetic inspection, and flow monitoring. All data collected will be analyzed to provide a comprehensive conditions assessment and capacity analysis of the city owned infrastructure on Tonawanda Island.

### Western Lehigh Sewer Partners / City of Allentown 2022 Nighttime Weiring Lehigh County Authority, Allentown, PA

Participated in five weeks of nighttime weiring to measure groundwater infiltration at an average resolution of less than a half-mile of sewer main. Performed confined space entry into 70+ weir locations.

**KISS Preliminary Screening of Alternatives****Lehigh County Authority, Allentown, PA**

Modeled several alternatives to evaluate the impact of major corrective measures and assess their costs. Determined the size, extent, and cost of infrastructure improvements needed to eliminate all overflows and achieve the site specific hydraulic grade line level of service that protects homes near the interceptors for basement backups when presented by the occurrence of rainfall from Hurricane Ida under 2050 wastewater usage demands.

**KISS Capacity Problem Definition****Lehigh County Authority, Allentown, PA**

Conducted a design storm evaluation to select a rain event to act as the design storm stand-in for alternatives analysis. Identified SSO locations and quantified magnitude of volume during various design storm events under 2021 and proposed 2050 flow conditions. Developed modeling methods specific to the KISS model calibration to estimate the reduction in baseline and wet weather flows using various source reduction techniques. Applied multiple SRP approaches and identified SSO locations and magnitude of volume during various storm events under 2021 and proposed 2050 flow conditions.

**KISS 2021 Model Expansion & Calibration****Lehigh County Authority, Allentown, PA**

Expanded, updated, and calibrated a Rainfall-Derived Infiltration and Inflow model based on newly collected rainfall and flow data. Project involves recalibrating a previous model to evaluate the competing effects of growth and of rehabilitation work realized since the original model was first developed with 2009 data. The recalibrated model is intended to provide a more accurate reflection of the current system's response to rainfall events and aids in the identification and evaluation of regional alternatives for both treatment and conveyance solutions through the 2050 planning horizon.

**Initial LCRR Compliance and Risk Assessment****Town of Tonawanda Water Department, Tonawanda, NY**

Assisted in creating a roadmap containing the preliminary work plan and budgetary estimates. Prepared presentations for workshops to be held with the Town of Tonawanda Water Department. Project includes an initial risk and compliance assessment of the Town's operations and practices related to corrosion control treatment, lead service line inventory, and lead service line replacement strategies relative to the Lead and Copper Rule Revisions (LCRR), followed by identifying areas for improvement to comply with the LCRR.

Ms. Davidson has managed and designed a variety of water and wastewater projects throughout her career. Her experience includes collection system rehabilitation analysis and design; sanitary sewer evaluation surveys and inflow and infiltration investigations; wastewater process design; permit applications; regulatory and environmental compliance; construction administration; water process and infrastructure design; stormwater MS4 program support; and technical writing and editing. Ms. Davidson is also an active member of the Water Environment Federation (WEF). She currently is Past Chair of the WEF Collection System Symposia and was a founding member of WEF's Private Property Virtual Library, an on-line resource on private property-related programs at wastewater utilities.

## PROJECT EXPERIENCE

### **Tonawanda Island Infrastructure Analysis, City of North Tonawanda, NY**

JMD teamed with Arcadis to analyze the City-owned infrastructure on Tonawanda Island, including a condition assessment and capacity analysis of the water and sewer utilities, to support future development plans along the waterfront. Responsible for evaluating the existing sanitary sewer system, including manhole inspections, smoke testing, managing the CCTV inspection and reviewing inspection results, providing field assistance with flow monitoring, and drafting related sections of the engineering report.

### **Niagara Falls Water Board (NFWB) Sanitary Sewer System Management Plan Year 12 Update, Niagara Falls, NY**

As a subconsultant to Arcadis, assisted with the development of the Year 12 Update to the Sanitary Sewer System Management Plan for the LaSalle Area of the City of Niagara Falls, NY. Work included developing the draft report, including review of the prior evaluations and previous work completed in the collection system, and assistance with flow monitoring analysis and re-prioritization of rehabilitation measures, preparation of the final report, and participating in workshop meetings with NFWB as needed.

### **NFWB Sanitary Sewer System Management Plan, Niagara Falls, NY**

Project Manager for development of report to identify and prioritize sanitary sewer rehabilitation measures with the goal of mitigating sanitary sewer overflows in the LaSalle Area of the City of Niagara Falls, NY. Project included flow monitoring and data analysis; development of a sanitary sewer system management plan based on management, operation and maintenance (MOM) principles; prioritization, schedule development, and preparation of cost estimates for selected rehabilitation projects; and meetings with client and regulatory agency.

### **Erie County Division of Sewerage Management ECSD No. 1 Sewer System Rehabilitation Projects, Cheektowaga and West Seneca, NY**

Served as Project Manager during construction of two separate sanitary sewer rehabilitation projects and lead engineer on a pre- and post-construction flow monitoring analysis to determine the effectiveness of the installed rehabilitation measures at removing inflow and infiltration (I/I) in the collection system. Participated in initial field investigation, including manhole inspections, flow monitoring, and smoke testing, to identify structural deficiencies and interconnections within the sewers and manholes. Assembled cost estimate information, organized field results, and made recommendations for cost effective rehabilitation measures and prioritized implementation. Developed bid/construction documents.



## LICENSE

Professional Engineer:

- New York

## EDUCATION

MS, 2001, Civil (Environmental) Engineering, University at Buffalo, The State University of New York

BS, 1999, Civil Engineering, University at Buffalo, The State University of New York (Summa Cum Laude and Departmental Honors)

## AFFILIATIONS

Water Environment Federation (WEF)

WEF Program and Collection System Committees

NY Water Environment Association (NYWEA)

Western NY Stormwater Coalition (WNYSC)

## EXPERIENCE

21 Years

Ms. Knab is a civil engineer specializing in the areas of capital program management, water and wastewater treatment, water transmission and distribution, and construction administration and inspection. She has extensive experience in all phases of project development and implementation, including preliminary scoping and permitting stages, detailed design, bidding, and construction administration and project close-out for both small and large scale infrastructure improvement projects.

## PROJECT EXPERIENCE

### Tonawanda Island Infrastructure Analysis, City of North Tonawanda, NY

JMD teamed with Arcadis to analyze the City-owned infrastructure on Tonawanda Island, including a condition assessment and capacity analysis of the water and sewer utilities, to support future development plans along the waterfront. Responsible for evaluating the existing sanitary sewer system, including manhole inspections, smoke testing, managing the CCTV inspection and reviewing inspection results, providing field assistance with flow monitoring, and drafting related sections of the engineering report.

### Various Sanitary Sewer Smoke Testing Projects

Participated in team of engineers responsible for smoke testing portions of the following sanitary sewer systems:

- Village of Bolivar, NY
- Village of Kenmore, NY
- Village of Liverpool, NY
- Livingston County Water and Sewer Authority, Hamlet of Hemlock, NY
- City of North Tonawanda, NY
- City of Watertown, NY (95,000 LF)

Smoke testing was conducted to help identify sources of infiltration and inflow (I/I) in the collection system, such as broken clean outs, low lying manholes and vents, illicit connections, and defective laterals. Responsibilities included resident notifications, field work, report preparation to document field results, and maintaining communication with the municipality.

### Ontario County Honeoye Lake County Consolidated Sewer District (HLCCSD) Pump and Collection Pump Station Improvements, Honeoye, NY

This project included field assessment of 80 pump stations, including 18 sewer pump stations and 62 minor collection pump stations, servicing the properties surrounding Honeoye Lake. As a subconsultant to Arcadis and member of the field inspection team, responsible for evaluating the existing pump station facilities to document their condition using an asset scoring system and determining whether there was sufficient evidence to warrant complete replacement of the pump station or if repairing portions of the system is preferable or more cost effective. Also visually evaluated the presence of I/I in each pump station wet well structure, developed preliminary opinions of probable construction cost for each renewal item, and assisted with engineering report development.

### Town of Tonawanda Sanitary Sewer Evaluation Survey, Tonawanda, NY

As Project Engineer and a subconsultant to Nussbaumer and Clarke, performed field work to investigate the presence of improper downspout connections to the sanitary sewer, prepared a technical memorandum to document findings, assisted with production of GIS maps, and maintaining communication with the field team, prime engineer, and municipality.



## LICENSES

Professional Engineer

- New York

## EDUCATION

BS, 2003, Civil Engineering,  
Worcester Polytechnic Institute

## AFFILIATIONS

American Public Works  
Association (APWA) – New York  
Chapter, Western Branch Board  
Member

## CERTIFICATIONS

Project Management  
Professional

## TRAINING

Confined Space Entry  
(Entrant/Attendant) and Fall  
Protection Safety Training

OSHA 10-hr Construction Safety  
& Health

## EXPERIENCE

19 Years



# Zachary Cox, EIT, CDT

## Flow Isolation and Measurement / Focused SSES

Mr. Cox is a Project Engineer for local Water/Wastewater projects and has design, bidding assistance, and construction administration experience in water/wastewater treatment and has operational experience in stand-alone food waste anaerobic digestion systems.

### Key Information

#### Education/Qualifications

- BS, Environmental Engineering, University at Buffalo, 2017
- AS, Liberal Arts, Mathematics and Sciences, Niagara County Community College, 2015

#### Years of Experience

Total – 5  
With Arcadis – 2

#### Professional Registrations/Certifications

- OSHA 10 Certification
- EIT Certification
- CDT Certification
- Permit Required Confined Space Certified
- First Aid/CPR Certified

#### Office Location

Buffalo, NY

### Relevant Experience

#### Department of Water - Covid-19 Sewershed Sampling NYS Department of Environmental Conservation, Buffalo, New York

Project engineer responsible for (a) Sampling location inspection assistance; (b) Buffalo sewer wastewater sampling and sample preparation; (c) Equipment setup, testing, and installation at various locations of the Buffalo sewershed; (d) Development of field sampling logs/field notes and chain of custody reports

#### Smith Street and Eagle Street CSO Real-Time Control Facility Buffalo Sewer Authority, Buffalo, NY

Project engineer responsible for assisting with construction administration efforts of CSO real-time control facility including detailed submittal reviews and contractor coordination.

#### Sludge Handling System Improvements City of North Tonawanda Wastewater Treatment Plant, North Tonawanda, NY

Project engineer responsible for (a) Sludge Handling System inventory condition assessment assistance; (b) Process data reviews; (c) NOV Report development; (d) Cost estimate development

#### Process Piping Improvements City of North Tonawanda Wastewater Treatment Plant, North Tonawanda, NY

Project engineer responsible for (a) Piping condition assessment assistance for piping in the carbon filter building; (b) Piping evaluation report development assistance; (c) Cost estimate development.

#### Digester No. 3 Cover Replacement and Sludge Mixing System Upgrade Township of Neptune Sewerage Authority (TNSA), Monmouth County, NJ

Project engineer responsible for: (a) Development of design improvements drawings; (b) Standard Operating Procedure (SOP) development for digester startup and normal operation including associated digester process procedures and overflow system operation; (c) Startup presentation and training of TNSA staff; (d) Digester start up assistance with TNSA staff including daily evaluation of laboratory data; (e) Development of technical memorandums for cover replacement and digester improvements evaluations.

**Grit Removal System Improvements**  
**Buffalo Sewer Authority Bird Island**  
**Wastewater Treatment Plant,**  
**Buffalo, New York**

Project engineer working on design Grit Removal System Improvements at the wastewater treatment facility. Responsible for: (a) Grit removal and dewatering equipment evaluations and selection; (b) Alternatives analysis for grit discharge pipe flushing improvements; (c) Contract bidding documents development including specifications and drawings; (d) Basis of Design report; (e) Development of opinion of probable construction cost; (f) Construction administration support

**Bar Screen and Valve Improvements**  
**Town of Amherst, Town of Amherst,**  
**New York**

Project engineer working on design improvements of valves and screens, and at the wastewater treatment facility. Responsible for: (a) Valves, gates, and screenings equipment evaluations and selection; (b) Contract bidding documents including specifications and drawings; (c) Opinion of probable construction cost development



# Emily Sadowsky

## Flow Isolation and Measurement

Mrs. Sadowsky specializes in conditional assessment and construction activities related to buried infrastructure work for municipal and industrial clients. Mrs. Sadowsky has provided management, engineering and field support for projects involving municipal wastewater collection systems evaluations, design, and construction and storm water rehabilitation and design in Arizona, Arkansas, California, Delaware, District of Columbia, Florida, Georgia, India, Maryland, Michigan, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, Virginia and Wisconsin.

She has managed, led and performed numerous inflow/infiltration studies and infrastructure evaluations and provided construction oversight. This work includes basin prioritization, flow analysis, smoke-testing, flow metering, above grade storm observations, nighttime infiltration evaluation, basement inspections, manhole/catch basin inspections, dye-testing, reviewing and coding CCTV inspection videos, photographs, and inspection reports using PACP, LACP, and MACP defect coding, and developing rehabilitation recommendations. Her experience with rehabilitation methods includes cured in place pipe/lateral lining; mainline and lateral test and seal; open-cut sewer replacement; manhole grouting, lining, and chimney replacement. Mrs. Sadowsky is proficient in the use of GIS.

### Key Information

#### Education/Qualifications

- BS, Environmental Protection, West Virginia University, 2006

#### Years of Experience

Total – 16  
With Arcadis – 16

#### Professional Registrations/Certifications

- NASSCO Pipeline Lateral, & Manhole Assessment and Certification Program
- NASSCO Inspector Training & Certification Program for CIPPL
- Avanti Municipal Grout Operator Trained
- PADI Certified Open Water Diver)

#### Office Location

Wilmington, DE

### Relevant Experience

#### **Pensacola Beach SSES** **Emerald Coast Utilities Authority,** **Pensacola FL**

Served as a member of the field team in the assessment of the amount of infiltration and inflow leaking into the municipal sanitary sewers on Pensacola Beach using smoke testing and weiring.

the smoke test workplan, training the smoke test teams, notifications and directing and QA/QCing the work.

#### **Sand River Basin Sewer Rehab** **Design Build Project** **Aiken, City of Aiken, SC**

Technical lead and field team superintendent of the SSES portion of a design-build project to stabilize, repair, and reduce I&I from 49 miles of 100 year old 6”-24” clay and concrete sanitary sewers featuring ARCADIS’s Expedited Rehabilitation Approach. Tasks included preparing and writing

#### **Countywide Flow Meter Maintenance** **New Castle County, New Castle** **County DE**

Field team member that helps install and maintain and review data from 55 meters and 7 rain gauges. The meters are in place to support a rehabilitation effectiveness study and the recalibration of NCC’s model used to determine compliance with a consent decree.

#### **HCA Phase 1: Weiring** **Harford County Department of** **Public Works, Bel Air MD.**

Field team leader overseeing two weiring field teams for a nighttime

infiltration evaluation of a 260-mile sanitary sewer system with the objective of identifying and prioritizing the worst leaking sections of the system in order to rehabilitate the system to reduce rainfall derived I & L. Responsibilities included overall work safety including confined space entry, selecting weir locations, setting up the infiltration network using GIS mapping, use of GIS in the creation of field maps, process and analyze results, coordinating field effort, assessing field measurements, reducing, tabulating, and validating data, performing analysis and prioritization, and tracking overall progress. Results were displayed and presented within the GIS platform.

#### **Manhole Inspection**

**Metropolitan Sewer District of Greater Cincinnati, Cincinnati, OH**

Served as field team leader for an inspection team inspecting and assessing manholes for defects.. This effort led to the identification of numerous manholes that requires rehabilitation. Responsibilities included creating field maps in GIS, taking defect pictures, performing physical condition assessment of manholes and selecting rehabilitation method used to repair defects.

#### **Downtown/cantonment SSES**

**Emerald Coast Utilities Authority, Pensacola FL**

Served as field team leader for SSES investigation, which included both smoke testing and nighttime weiring .Responsibilities included overall work safety, making all necessary arrangements for the field work, including contact with local emergency services, writing work plans, coordinating all field activities, including acquiring equipment, preparing GIS field maps and figures, preparing notifications for the public, answering calls and interacting with the public, process and analyze

results, assessing field measurements, reducing, tabulating, and validating data, performing analysis and prioritization, and tracking overall progress. Results were prepared and presented to the client in GIS platform.

#### **Pensacola Beach Manhole Inspections**

**Emerald Coast Utilities Authority, Pensacola FL**

Served as field team leader for an inspection team inspecting and assessing over 400 manholes for defects on Pensacola Beach. This effort led to the identification of numerous manholes that requires rehabilitation. Responsibilities included creating field maps in GIS, taking defect pictures, performing physical condition assessment of manholes, selecting rehabilitation method used to repair defects, and incorporating their rehabilitation into a design package.

#### **First Priority Areas**

**Emerald Coast Utilities Authority, Pensacola FL**

Served as field team leader for SSES investigation, which included nighttime weiring .Responsibilities included overall work safety, making all necessary arrangements for the field work, including contact with local emergency services, writing work plans, coordinating all field activities, including acquiring equipment, preparing GIS field maps and figures, preparing notifications for the public, answering calls and interacting with the public, process and analyze results, assessing field measurements, reducing, tabulating, and validating data, performing analysis and prioritization, and tracking overall progress. Results were prepared and presented to the client in GIS platform.

#### **Downtown South PCA-BOR**

**Emerald Coast Utilities Authority, Pensacola FL**

Design services included review of CCTV inspections, preparation of PACP-based physical condition assessment, preparation of cost estimates of various rehabilitation methods, determination of method of rehabilitation and preparation of drawings. The method of sewer rehabilitation included a combination of pressure testing and chemical sealing, cured-in-place pipe lining, and excavated point repairs. Results were integrated and shown in GIS.

#### **SSES Workplan Development**

**Lehigh County Authority, Allentown PA**

Developed standard operating procedures and data capture and management tools for SSES activities. These documents and tools allowed various municipalities to individually conduct SSES activities in a planned, consistent, and efficient manner such that the data collected could be readily used to identify neighborhoods, pipe segments, and private properties across the different municipalities that contribute the highest levels of infiltration and inflow.

#### **SSES Workplan Training,**

**Lehigh County Authority, Allentown PA**

Trained municipalities' employees in the standard operating procedures and data capture and management tools for SSES activities. Led classroom and field training on these methods. These trainings allowed various municipalities to individually conduct SSES activities in a planned, consistent, and efficient manner such that the data collected could be readily used to identify neighborhoods, pipe segments, and private properties across the different municipalities that contribute the highest levels of infiltration and inflow.

# Appendix B. Featured Projects



# Sanitary Sewer Management Plan - Year 12 Progress Evaluation

Niagara Falls, NY

Arcadis and subconsultant JM Davidson Engineering assisted the Niagara Falls Water Board (NFWB) with the development of the Year 12 Update to the Sanitary Sewer System Management Plan (SSSMP) for the LaSalle Area of the City of Niagara Falls, NY.

The LaSalle Area refers to the separate sanitary sewer area located on the east side of the City. This area has historically experienced wet weather-related sanitary sewer overflows (SSOs). As part of the Order on Consent R9-20080525-32, an 18-year Detailed Work Plan was developed to address the SSOs. The work under this contract was for the re-evaluation of the SSSMP at Year 12. This evaluation included installation of 15 flow meters throughout the LaSalle area sewer system and flow monitoring from March 2019 through June 2019; examining the specific work performed in Years 6 through Year 11; examining planned activities in Years 13 through Year 18 considering recent flow monitoring results; and reprioritizing the work moving forward, as necessary, to favor the most effective approach for implementation of corrective measures.

Specific tasks related to this project include:

- Development of an updated management plan, including review of prior SSSMP evaluations and work completed in the collection system, and flow monitoring data analysis

and re-prioritization of rehabilitation measures

- Preparation of final report
- Participation in workshop meetings with NFWB and NYSDEC

Arcadis supported the NFWB with Water Quality Improvement Project and Engineering Planning Grant applications to support completion of various sanitary sewer rehabilitation projects identified in the Year 12 SSSMP.

Arcadis recommended that the NFWB reprioritize the remaining SSSMP tasks by sewershed. The data supports, and was validated with NFWB personnel, that (1) Lift Station 4 (Outfall 13) and Lift Station 6 (Outfall 14) are the most problematic during wet weather events, resulting in excessive O&M costs and the occurrence of SSOs and; (2) that Love Canal presents opportunities to remove I&I from the system due to directly connected laterals from abandoned lots. Additionally, Arcadis recommended that priority be given to those sewersheds (i.e. neighborhoods) with high volumes of normalized I&I and R-values that also contribute to SSOs, namely the areas around and tributary to 81st Street and Frontier Avenue and 91st Street and Luick Avenue. These are the two sewersheds that are now being included in the Phase 1 work.

## Client

Niagara Falls Water Board

## Project Value

\$68,300

## Project Dates

2019 - 2020

## Key Team Members

- Dan Seider, PE
- John Salvagno, PE
- John Paul Travis
- Paul Batman, PE

## Reference

Doug Williamson

716 283 9770 ext. 2290

# Sewer District Nos. 1,2,3,4,5 & 6 Flow Monitoring - I/I Quantification Reports

Erie County, NY

Arcadis was retained to lead multiple flow monitoring studies with the purpose of documenting the magnitude of infiltration/inflow (I/I) within 1,098 miles of pipe and 124 sub basins within Erie County Sewer Districts (ECSD) No. 1, 2, 3, 4, 5, and 6 in Erie County, New York. The major goals of the studies were to quantify the I/I that directly contributes to the monitoring area's respective wastewater treatment facility, provide qualitative and quantitative descriptions of the collection system responses to wet weather events on a sub basin level, and provide prioritized recommendations, as necessary, for future Sewer System Evaluation Survey (SSES) activities and potential capital improvements.

Across all Sewer Districts, 127 temporary flow meters and 13 rain gauges were installed and used to delineate the sanitary sewer basins. Data from permanent flow meters were utilized when available. The data from groundwater monitoring wells with data loggers were analyzed to evaluate groundwater level trends in response to storm events. The monitoring periods ranged from six to nine months. Data was collected more frequently in the first few weeks of flow monitoring to ensure the physical site conditions and installed equipment were adequate for the duration of the study. Field maintenance and validation was performed consistently to ensure

high data quality. Field activities included velocity readings with a portable ultrasonic flow meter, depth measurements, and debris clearing.

Consistent quality assurance/quality control resulted in a total meter uptime of above 90% across the system. The Arcadis in-house developed Time Series Analyzer (TSA) program was used to fully investigate the collected data. Significant wet weather events were compared against established base flow conditions and evaluated both individually and relative to the entire study areas.

The Final Engineering Reports summarized and evaluated all data collected over the monitoring periods. Lists of priority recommendations for future action were provided from these analyses, as well as insight into recent rehabilitation efforts, as applicable.

All reports were developed according to the NYSEFC Engineering Report Outline for NYS Wastewater Infrastructure Projects.



## Client

Erie County DEP

## Project Value

\$350,000

## Project Dates

2016 - 2022

## Relevant Experience

- Flow Monitoring
- Data Analysis
- Condition Assessment
- Engineering Reporting
- Grant Funding

## Key Team Members

- Daniel Seider, PE
- John Salvagno, PE
- Julia Manzano, EIT
- John Paul Travis
- Paul Batman, PE

## Reference

David Millar, PE

(716) 858-6499

David.Millar@erie.gov



# Western Lehigh Sewer Partners/City of Allentown 2022 Nighttime Weiring

Lehigh County, NY

Arcadis was retained to conduct nighttime weiring investigations within the City of Allentown, Borough of Coplay, Whitehall Township, and the following Western Lehigh Sewer Partners (WLSP): Lower Macungie Township, Upper Macungie Township, Lowhill Township, Weisenberg Township, Borough of Alburtis, Bourough of Macungie, and Upper Milford Township. This included confined space entry into 432 manholes to assess 808 pipes.

Arcadis conducted primary weir location selection for the areas to be measured, assigned unique IDs to the selected primary weir locations, and created a weiring analysis spreadsheet and GIS-based field maps. Daytime preparatory activities included locating and opening the selected manholes to confirm that all pipes are weirable, flow direction, atmospheric condition, and the traffic control situation. Rainfall was continuously monitored to ensure appropriate conditions for weiring data collection.

Nighttime weiring was conducted at the selected locations a minimum of two times on different days. If flow measurements were not within 10% of each other, the weir locations were entered a third time on a subsequent night.

All weiring data that was collected in the field was later entered into the weiring results spreadsheet to be analyzed and were linked to GIS-based map reports. Calculations were completed to find the infiltration in gallons per day per linear foot of sewer main of for each weiring segment.

#### Client

Lehigh County Authority

#### Project Value

\$551,000

#### Project Dates

2022

#### Relevant Experience

- Nighttime Weiring

#### Key Team Members

- Julia Manzano, EIT
- Emily Sadowsky

#### Reference

Philip DePoe, PE  
717 887 8953

[PhilipDePoe@lehighcountyauthority.org](mailto:PhilipDePoe@lehighcountyauthority.org)

# Tonawanda Island Infrastructure Analysis

North Tonawanda, NY

Arcadis, with subconsultant JM Davidson Engineering, are analyzing the city-owned infrastructure on Tonawanda Island, including a conditions assessment and capacity analysis of the water and sewer utilities to support future development plans for the Island.

The entire sanitary sewer system testing will be smoke tested and all manholes inspected with defects classified in accordance with NASSCO's Pipeline Assessment Certification Program (PACP) coding. CCTV will be performed within the sections of gravity sewer on Tonawanda Island that are identified during smoke testing as requiring a more detailed investigation to identify potential improvements including rehabilitation or replacement.

The water system and sanitary sewer forcemain will be tested at key locations using broadband electromagnetic (BEM) inspection to measure the wall thickness of the existing piping and develop estimates for remaining useful life. To understand the capacity of the existing sanitary sewer system during dry and wet weather, Arcadis is installing several sewer flow meters and a rain gauge. This equipment will be used to capture a minimum of two storm events to understand if the existing system has available capacity to support future development.

The capacity of the water system will be evaluated using hydrant flow testing data previously completed by the City. The test results will be reviewed and compared against future system demands and fire flow requirements established by the Insurance Services Office (ISO).

Following the field investigations and capacity analysis, Arcadis will develop an Engineering Report documenting the condition and capacity of the water and sewer systems, identifying single points of failure, estimating remaining useful life, establishing consequence of failure thresholds, and recommending rehabilitation and replacement alternatives for the evaluated assets.

#### Client

City of North Tonawanda

#### Project Value

\$105,000

#### Project Dates

2022 - 2023

#### Relevant Experience

- Flow Monitoring
- Data Analysis
- Condition Assessment
- Engineering Report
- Grant Funding

#### Key Team Members

- Dan Seider
- John Salvagno
- Julia Manzano
- Jaime Davidson
- Catherine Knab

#### Reference

Chelsea Spahr, PE  
(716) 695-8565  
CSpahr@northtonawanda.org

# Appendix C. Required Forms



## About Arcadis

Arcadis is the leading global Design & Consultancy firm for natural and built assets. Applying our deep market sector insights and collective design, consultancy, engineering, project and management services we work in partnership with our clients to deliver exceptional and sustainable outcomes throughout the lifecycle of their natural and built assets. We are 29,000 people, active in over 70 countries that generate \$4.2 billion in revenues. We support UN-Habitat with knowledge and expertise to improve the quality of life in rapidly growing cities around the world.

[www.arcadis.com](http://www.arcadis.com)

**Supporting our clients in their quest to become Fit-for-Future.**

*Utilities must plan for unprecedented scenarios while navigating a changing workforce, but where should leaders focus?*

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**Arcadis.** Improving quality of life

**FUNDS FOR CONTINUED INFRASTRUCTURE FUNDING EFFORTS**

**WHEREAS**, the Niagara Falls Water Board recognizes the increasingly urgent need to obtain funding to replace its outdated wastewater treatment plant (“WWTP”) with a modern treatment plant that among other benefits will not require the large expenditures for treatment process chemicals that are required to maintain operations at the existing WWTP; and

**WHEREAS**, the Water Board desires to derive the maximum possible benefit for its system from initiatives such as the recent Federal infrastructure bill; and

**WHEREAS**, the Water Board previously authorized funds for Clark Patterson Lee (“CPL”) to manage and package an application for funding for the Water Board from the Federal infrastructure bill, including subcontracting for grant writing and lobbyist services as may be required in order to position the Water Board to secure funding; and

**WHEREAS**, these efforts have greatly increased visibility and awareness of the Water Board’s funding needs with senior government officials and are ongoing, and new opportunities may be presented as a result of voter approval of Ballot Proposition 1, the Environmental Bond Act; and

**WHEREAS**, the funds previously authorized by the Water Board are exhausted, and CPL has presented a proposal dated December 2, 2022 to extend this effort through the end of 2023 for a total cost of \$60,000; and

**WHEREAS**, pursuant to Water Board Procurement Policy Section 5.8.4, this extension of a professional services agreement (1) was not the subject of an RFP because it is a continuation of ongoing professional services with professionals who are familiar with the Water Board’s needs and current position and who have been personally coordinating educational and lobbying efforts at various levels of government; (2) no other firms informally were solicited for proposals because the current proposal represents continuation of an ongoing effort; and (3) the procurement is not being postponed to permit an RFP for the reasons set forth above;

\* CONTINUED ON NEXT PAGE \*

**NOW THEREFORE BE IT**

**RESOLVED**, that on behalf of the Niagara Falls Water Board, the Executive Director is hereby authorized to enter into an agreement with Clark Patterson Lee consistent with that firm's proposal dated December 2, 2022, and an additional \$60,000 is authorized to continue the services through CPL of a grant writer and lobbyist through the end of 2023.

*Water Board Personnel Responsible for Implementation of this Resolution:*  
Executive Director

*Water Board Budget Line or Capital Plan Item with Funds for this Resolution:*  
Budget Line: GA.8110.0001.0451.000  
Budget Line Supplied by: B. Majchrowicz  
Available Funds Confirmed by: B. Majchrowicz

On December 19, 2022, the question of the adoption of the foregoing Resolution was duly put to a vote on roll call, which resulted as follows:

	<b>Yes</b>	<b>No</b>	<b>Abstain</b>	<b>Absent</b>
Board Member Asklar	[ ]	[ ]	[ ]	[ ]
Board Member Kimble	[ ]	[ ]	[ ]	[ ]
Board Member Larkin	[ ]	[ ]	[ ]	[ ]
Board Member Leffler	[ ]	[ ]	[ ]	[ ]
Chairman Forster	[ ]	[ ]	[ ]	[ ]

Signed By:

Vote Witnessed By:

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Nicholas J. Forster, Chairman

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Sean W. Costello, Secretary to Board



December 2, 2022

Chairman Nicholas Forster  
Niagara Falls Water Board  
5815 Buffalo Avenue  
Niagara Falls, NY 14304

Dear Chairman Forster:

As you know, our current term agreement has a line item for the Federal Infrastructure Bill. The Board previously approved funds for managing and packaging an “ask” to our federal (and state) representatives for funding out of the infrastructure bill. CPL hired a grant writer and a lobbyist as subconsultants to perform this function for a total of \$5,000 per month for 2022. Our focus has been seeking appropriations for conversion of the wastewater treatment plant to a biological process and for significant improvements to the water transmission and distribution system.

This letter is regarding a further extension of the CPL agreement with the NFWB, last extended by resolution adopted on May 23 of this year. In addition to the rationale provided above, the approval in the election this month by the voters of Ballot Proposition 1, the Environmental Bond Act, provides a significant added funding source to pursue the fulfillment of the Water Board's objectives.

We are getting closer to the goal, progress has been made but more needs to be done. The Environmental Bond Act is a factor but other funding sources must continue to be sought. To see this important work through the end of 2023, we propose extending our existing agreement by requesting additional funding to continue the services of the grant writer and lobbyist for \$60,000.

We will continue to bill to separate job numbers so that we can be transparent on the billings. Either party may discontinue upon 30 days written notice.

If you have any questions or require any additional information, please feel free to contact me via email at [rhenry@cplteam.com](mailto:rhenry@cplteam.com) or by phone at 716.852.2100, extension 7579.

Very truly yours,  
CPL

Richard B. Henry III, P.E.  
President

*NIAGARA FALLS WATER BOARD RESOLUTION # 2022-12-009*

**AUTHORIZING VOLTAGE FILTERS FOR WWTP ELEVATORS**

**WHEREAS**, two elevators at the Niagara Falls Water Board (“Water Board”) wastewater treatment plant (“WWTP”) which are used to move personnel and equipment have experienced premature failures of their motor drives; and

**WHEREAS**, DCB Elevator Co., Inc., holds the bid for maintenance and repair of elevators at Water Board facilities; and

**WHEREAS**, DCB has consulted with motor drive experts who have opined that the WWTP’s large horsepower electric pump motors and drives are causing a destructive electrical phenomenon known as a reflective wave which is damaging the elevator motor drives; and

**WHEREAS**, to replace a recently failed motor drive in the pump room and to protect the new drive and the drive for the maintenance shop elevator DCB recommends installation of dV/dT filter units on each drive control system; and

**WHEREAS**, DCB proposes to furnish the labor and materials for this work pursuant to the elevator maintenance repair bid for a total cost of \$27,195;

\* CONTINUED ON NEXT PAGE \*

**NOW THEREFORE BE IT**

**RESOLVED**, that the Niagara Falls Water Board hereby authorizes the Executive Director to accept the December 9, 2022 proposal by DCB Elevator Co., Inc., to furnish and install dV/dT filters on the wastewater treatment plant pump room and maintenance shop elevators at a total cost not to exceed \$27,195, with the work to be performed pursuant to the terms of the Elevator Maintenance and Repair bid.

*Water Board Personnel Responsible for Implementation of this Resolution:*

Executive Director

*Water Board Budget Line or Capital Plan Item with Funds for this Resolution:*

WWTP-17, WWTP Infrastructure Projects – Miscellaneous

Capital Line Supplied by: D. Williamson

Available Funds Confirmed by: B. Majchrowicz

On December 19, 2022, the question of the adoption of the foregoing Resolution was duly put to a vote on roll call, which resulted as follows:

	<b>Yes</b>	<b>No</b>	<b>Abstain</b>	<b>Absent</b>
Board Member Asklar	[ ]	[ ]	[ ]	[ ]
Board Member Kimble	[ ]	[ ]	[ ]	[ ]
Board Member Larkin	[ ]	[ ]	[ ]	[ ]
Board Member Leffler	[ ]	[ ]	[ ]	[ ]
Chairman Forster	[ ]	[ ]	[ ]	[ ]

Signed By:

Vote Witnessed By:

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Nicholas J. Forster, Chairman

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Sean W. Costello, Secretary to Board



**D C B ELEVATOR CO., INC.**  
P.O. BOX 426  
LEWISTON, NEW YORK 14092

December 9, 2022

P-1667U

Niagara Falls Water Board  
**Attn: Mr. Russell DeFranco, Facilities**  
5815 Buffalo Ave,  
Niagara Falls, NY 14304

Re: Waste Water Treatment Plant – Pump Room Elevator Drive

Dear Mr. DeFranco,

The pump room elevator motor drive recently failed. We removed the drive and shipped it to a certified drive repair facility for diagnostics and a cost to repair. We were informed that the IGBT firing board has failed and will need to be replaced. The lead time for this repair is currently running 16 days at a cost of a new, replacement drive.

The normal life span of these drives is typically ten (10) years. Since this is the second drive to fail prematurely at this facility I began to question the repair specialist about possible causes. He explained this is a common occurrence at locations where there are large horse power electric motors and drives such as the pump motors at your facility. The destructive electrical phenomena is known as “Reflective Wave” which is created by this equipment will damage smaller motors and drives.

In order to prevent this occurrence from repeating, he recommends the installation of dv/dt Filter units on each elevator control system. I’ve attached a technical bulletin explaining “Reflective Wave” and how the dv/dt Filter works to protect the connected equipment from reflective wave damage.

**PUMP Room:**

The estimated cost to furnish, install and adjust a new HPV900 elevator drive with dv/dt filter is: **\$17,625.00**

**Maintenance Shop:**

The estimated cost to furnish and install a dv/dt filter on the rear (shop) elevator is: **\$9,570.00**

**Labor/Material Total: Labor: \$17,080.00; Material: \$10,115.00**  
**(per contract billing rate is \$305 per man hour @ 56 total hours)**

Pricing was calculated as per labor rate under City of Niagara Falls & NFWB Elevator Maintenance and Repair bid.

Please feel free to call me if you have any questions.

Very truly yours,  
**D.C.B. ELEVATOR CO., INC.**

*Daniel C. Brockway*

Daniel C. Brockway  
Vice President

**Approved for NF Water Board**

By: \_\_\_\_\_ Date: \_\_\_\_\_

NIAGARA FALLS WATER BOARD RESOLUTION # 2022-12-010

**AUTHORIZING MONTHLY CHARGES FOR DATA BACKUP AND RECOVERY SERVICES**

**WHEREAS**, the Niagara Falls Water Board (“Water Board”) IT department has been tasked with maintaining a secure and reliable technology environment; and

**WHEREAS**, IT staff have determined that Veeam data backup and recovery services provide appropriate safeguards and redundancy for Water Board data; and

**WHEREAS**, these services are available through Advance2000 at a cost of \$1,306.50 per month; and

**WHEREAS**, utilizing the Veeam backup solution will allow the Water Board to discontinue the Barracuda backup system it currently utilizes at a monthly cost of \$2,134, resulting in a net annual savings of more than \$9,900;

**NOW THEREFORE BE IT**

**RESOLVED**, that the Niagara Falls Water Board hereby authorizes the Executive Director to pay to Advance2000 the monthly recurring charges of \$1,306.50 for Veeam data backup and recovery services.

*Water Board Personnel Responsible for Implementation of this Resolution:*  
Executive Director

*Water Board Budget Line or Capital Plan Item with Funds for this Resolution:*  
GA.8145.5220.0446.008-Software Maint/Licenses

On December 19, 2022, the question of the adoption of the foregoing Resolution was duly put to a vote on roll call, which resulted as follows:

	<b>Yes</b>	<b>No</b>	<b>Abstain</b>	<b>Absent</b>
Board Member Asklar	[ ]	[ ]	[ ]	[ ]
Board Member Kimble	[ ]	[ ]	[ ]	[ ]
Board Member Larkin	[ ]	[ ]	[ ]	[ ]
Board Member Leffler	[ ]	[ ]	[ ]	[ ]
Chairman Forster	[ ]	[ ]	[ ]	[ ]

Signed By:

Vote Witnessed By:

\_\_\_\_\_  
Nicholas J. Forster, Chairman

\_\_\_\_\_  
Sean W. Costello, Secretary to Board

## Niagara Falls Water Board

### Backup Services -MRC

**DATE: 9/22/2022**

**QUOTE NUMBER: ADVQ51731**

**SALES REP: Mike Cook**

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(800) 238-2621  
Info@advance2000.com  
Advance2000.com

**ADVANCE2000**

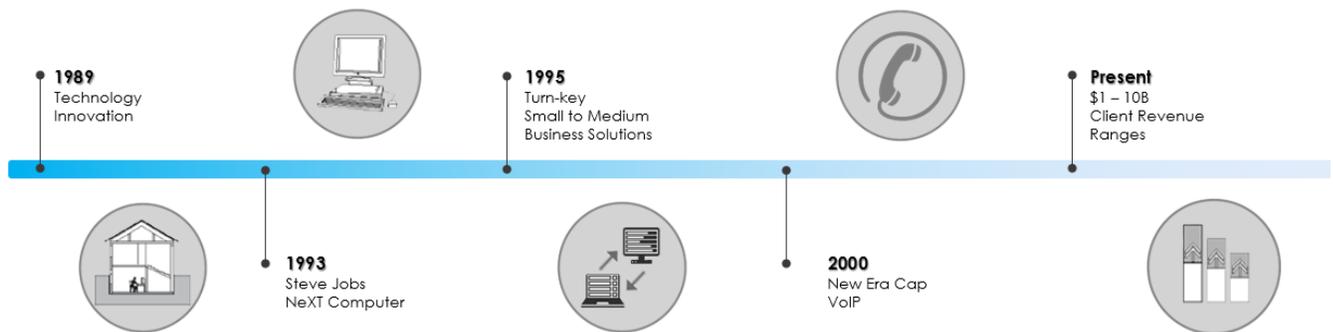
# ADVANCE2000

## FOREWORD

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Advance2000 is an information technology (IT) engineering firm with more than twenty years of recognized innovation and customer satisfaction. Our key focus is understanding the business needs of our clients and providing progressive technology solutions.

Advance2000 was founded in 1989 by Brian Maouad in the basement of his Amherst, NY home. The company began as a build-to-order manufacturer of high performance workstations. At that time, the company's primary customer was Steve Jobs' NeXT Computer. Shortly after, the company shifted its focus to providing full service IT solutions for the small- and medium-sized business market.



Today, Advance2000 continues to provide IT services to companies in many diverse industries including architecture, construction, engineering, education, healthcare, legal, government and manufacturing throughout North America. Our customer base includes companies of all sizes ranging from a single employee to the Fortune 500. Advance2000 was one of the first IT firms to provide private cloud computing services for its customers. The company owns all its assets, maintains multiple state-of-the-art datacenters, and provides exceptional support services 24/7/365.

Regardless of the size of your organization, Advance2000 can help take care of your technology needs while you focus on your core business. We have the expertise, proven methodologies, and tools to plan, deploy, optimize and manage complex multi-vendor IT infrastructures creating a technology environment that supports your business goals while reducing capital investment.

## OUR CORE VALUES

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- We are an organization committed to helping others that need help to succeed - our clients, our vendors and our community.
- We are a customer service-centric organization that believes that the best service comes from employing the best people.
- We believe in Trust, Transparency and Teamwork.
- We value leadership regardless of title – At Advance2000 you don't have to wear a particular hat to be influential.
- We practice sustainability throughout all levels of our organization from facility management to employee health.

Date	Quote #
09/22/22	ADVQ51731

## SALE INFORMATION

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**QUOTE TO:** Niagara Falls Water Board

Joseph Morock  
5815 Buffalo Avenue  
Niagara Falls, NY 14304

(716) 283-9770 Ext.  
jmorock@NFWB.org

**SHIP TO:** Joseph Morock  
Niagara Falls Water Board

5815 Buffalo Avenue  
Niagara Falls, NY 14304

(716) 283-9770 Ext.  
jmorock@NFWB.org

**SHIP TO: (IF DIFFERENT THAN ABOVE)**

NAME:

ADDRESS:

PHONE:

E-MAIL:

**ADDITIONAL INFORMATION:**

## PRICING

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LN.#	QTY	DESCRIPTION	UNIT PRICE	EXT. PRICE
<b>Backup Services -MRC</b>				
<b>Monthly Recurring Services (MRC)</b>				
1	5	Veeam Backup and Replication Standard (per VM)	\$20.00	\$100.00
2	1	Cloud Backup Storage for On Premise Client Owned Servers (1GB): 5,000 GB	\$1,006.50	\$1,006.50
3	1	Backup and Replication Services	\$200.00	\$200.00
<b>Total MRC</b>				<b>\$1,306.50</b>
SubTotal				\$1,306.50
Sales Tax				\$0.00
Shipping				\$0.00
<b>Total</b>				<b>\$1,306.50</b>

## AGREEMENT AND SIGNATURE

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Pricing is valid for 15 days from the date of the proposal

This Agreement includes and incorporates by reference General Terms and Conditions. If Customer is considering this Agreement and the purchase of A2000 Products and Services online, then by signing this Agreement, Customer agrees to be bound by this proposal and said General Terms and Conditions.

Advance2000 Terms and Conditions <http://www.advance2000.com/terms-and-conditions>

The Agreement is effective as of the date signed by the Parties. Any prices, fees, costs and expenses do not include taxes, fees, surcharges and other similar charges that may apply. Facsimile or email transmission or re-transmission of a signed original, or transmitted copy, will be deemed to be delivery of an original. The parties hereby enter into this Agreement, including all related agreements and exhibits for the Services and the rented equipment with full authority to be bound hereunder, and this Agreement shall be effective date (Start Date) as of the \_\_\_\_ day of \_\_\_\_, 20\_\_\_\_.

**Authorized Advance2000 Representative**

**Name**

**Title**

**Signature**

**Authorized Customer Representative**

**Name**

**Title**

**Signature**

*NIAGARA FALLS WATER BOARD RESOLUTION # 2022-12-011*

**VIDEOCONFERENCE TECHNOLOGY FOR WTP CONFERENCE ROOM**

**WHEREAS**, the Niagara Falls Water Board (“Water Board”) is expanding the conference and meeting room at the Michael C. O’Laughlin Municipal Water Plant to facilitate larger and more productive meetings, training, and similar uses for that room; and

**WHEREAS**, recent amendments to the Open Meetings Law permit videoconference attendance at Board meetings in some situations, and videoconference capabilities expand opportunities for staff training, but the Water Board does not currently have a location equipped with the technology required for high-quality videoconferencing; and

**WHEREAS**, the Water Board has solicited quotes for the technology, engineering, and integration services required to add high-quality videoconferencing using widely adopted and user-friendly platforms such as Zoom to the conference room; and

**WHEREAS**, three written quotes for the required work were obtained, and Water Board staff recommend approval of the quote from Park Place Installations, Inc., a local vendor, in the amount of \$19,957.75 as providing the best value for a complete system using technology that is anticipated to be user-friendly;

\* CONTINUED ON NEXT PAGE \*

**NOW THEREFORE BE IT**

**RESOLVED**, that the Niagara Falls Water Board hereby authorizes the Executive Director to purchase conference room technology and services from Park Place Installations, Inc., as set forth in that firm's December 15, 2022 quotation, for a total cost not to exceed \$19,957.75.

*Water Board Personnel Responsible for Implementation of this Resolution:*  
Executive Director

*Water Board Budget Line or Capital Plan Item with Funds for this Resolution:*  
CIP Item: WTP-6, WTP Building Improvements and Caulking  
Capital Line Supplied by: B. Majchrowicz  
Funds Confirmed by: B. Majchrowicz

On December 19, 2022, the question of the adoption of the foregoing Resolution was duly put to a vote on roll call, which resulted as follows:

	<b>Yes</b>	<b>No</b>	<b>Abstain</b>	<b>Absent</b>
Board Member Asklar	[ ]	[ ]	[ ]	[ ]
Board Member Kimble	[ ]	[ ]	[ ]	[ ]
Board Member Larkin	[ ]	[ ]	[ ]	[ ]
Board Member Leffler	[ ]	[ ]	[ ]	[ ]
Chairman Forster	[ ]	[ ]	[ ]	[ ]

Signed By:

Vote Witnessed By:

\_\_\_\_\_  
Nicholas J. Forster, Chairman

\_\_\_\_\_  
Sean W. Costello, Secretary to Board



# NFWB Conference Room-B

NFWTP - John Joyce

5815 Buffalo Ave  
Niagara Falls NY 14304



Presented By:



**Park Place Installations, Inc.**

255 Great Arrow Dr Suite 206  
Buffalo, NY 14207

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# Scope of Work

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We Will:

- Install X1 Crestron flex video conferencing integrator kit and program on site. This kit allows for B.Y.O.D. which will allow people to plug and play. This kit is compatible with zoom rooms as well.
- Install X2 Logitech PTZ Pro camera's which will be located with view's of the front of the rooms and the back as well ( client will choose exact locations on site)
- We will use HDMI and Baluns to daisy chain client provided TV's.
- Install X8 In-ceiling speakers to provide good audio coverage throughout the room size.
- Install X7 microphones in total, providing coverage for front area and also wireless microphones for the audience to use.
- Train all necessary staff that will be operating rooms on site
- Provided training videos for future reference so staff can easily share
- Clean up any debris created by this project.

\*\*\*With terms client will install X5 client provided TV mounts and X5 client provided TV's.

## Video Conferencing



Qty: 1

**Crestron UC-CX100-Z**  
Crestron Flex Advanced Video Conference System  
Integrator Kit for Zoom Rooms™ Software

**Price: \$4,395.00**

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Qty: 2

**Logitech PTZ PRO2**  
Video Camera for Conference Rooms

**Price: \$1,390.00**

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Qty: 1

**AV Access USB Balun**  
USB 2.0 Balun, sends signal unto 164'

**Price: \$75.00**

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Qty: 1

**Strong SR-WMS-10U**  
Locking Secure wall mount rack

**Price: \$497.00**

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Qty: 3

**Binary B-230-HDSPLTR-1x2**  
1x2 HDMI Splitter & Clock Stretcher, Supports 3D and  
Deep Color

**Price: \$362.85**

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## Wiring

Speaker, Data, Video wire



Qty: 2

**B6A-4K2-15 Binary**  
15 meter 4K High Speed HDMI Cable 18Gbps capable  
with ARC, GripTek ULTRA HD 60-hz

**Price: \$391.90**

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Qty: 7

**Binary B6-XLR-3FM-2FT**  
Female to Male Gold Plated XLR Cable

**Price: \$87.50**

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Qty: 3      **Binary B6A-4K2-10**  
10 Meter High Speed 4K HDMI Cable      **Price: \$285.00**



Qty: 1      **WattBox WB-11-LIGHT**  
WattBox Rack Mount Lighted Power Surge Protector - 11 Outlets      **Price: \$155.00**



Qty: 300      **Wirepath NST-162-1000-WH**  
Wirepath 16-Gauge 2-Conductor Speaker Wire - 1000 ft. Nest in Box (White)      **Price: \$90.00**



Qty: 750      **Wirepath NST-CAT6-1000-PNK**  
Wirepath™ Cat 6 550MHz Unshielded Wire - per foot      **Price: \$187.50**

**Audio**



Qty: 1      **Behringer X1222USB**  
12 Channel Pro Mixer      **Price: \$335.00**



Qty: 7      **Sense SE-350-WT-HAND**  
UHF Wireless Microphone Transmitter – Handheld      **Price: \$1,575.00**



Qty: 7      **Sense SE-350-WR-1CHD**  
UHF Wireless Microphone Receiver      **Price: \$2,226.00**



Qty: 1      **Crestron AMP-X300**  
4 Channel 300 watt amplifier 70V or 100V or 8 ohm stable      **Price: \$480.00**



Qty: 8

**Episode** KIT-ECS-250-IC-6  
Episode® 250 Commercial Series 25/70-Volt In-Ceiling Speaker with 6.5" Woofer and Tile Bridge (Each) - Kit

**Price: \$464.00**



Qty: 2

**AtlasIED** MS-12CE  
MS12CE MIC FLOOR STAND

**Price: \$136.00**



Qty: 7

**Bilione** B0874BM9Z6  
Adjustable Table Mic Stand with Microphone Clip

**Price: \$175.00**

## Unassigned

Undefined System



Qty: 1

**Parts and Connections** Multiple  
Various connectors, attachment points, boxes, mounting hardware and more

**Price: \$225.00**



Qty: 20

**Labor Engineering**  
Design, Define Calibrate system create drawings and diagrams



Qty: 50

**Labor 2022**  
Install AV,Technology Systems

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## Proposal Summary

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Equipment:	<b>\$13,532.75</b>
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Labor:	<b>\$6,425.00</b>
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<b>Grand Total:</b>	<b>\$19,957.75</b>
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## Payment Schedule

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Deposit to order and schedule :	<b>\$14,968.31</b>
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Balance Due upon Completion :	<b>\$4,989.44</b>
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 Request Revisions

 Approve

*NIAGARA FALLS WATER BOARD RESOLUTION # 2022-12-012*

**CHANGE ORDER 1 AND FINAL FOR  
EMERGENCY 12 INCH COMBINED SEWER REPAIR AT 2214 WHITNEY AVENUE**

**WHEREAS**, the Niagara Falls Water Board (“Water Board”) identified a need to repair a section of 12-inch combined sewer main near 2214 Whitney Avenue on an emergency basis, and on behalf of the Water Board, the City of Niagara Falls Engineering Department prepared specifications and solicited bids for the sewer main repair; and

**WHEREAS**, the Water Board awarded the bid to low bidder J.R. Swanson Plumbing Co., Inc., with a total base bid item price of \$29,489.80; and

**WHEREAS**, once excavation commenced it was discovered that the extent of the subsurface damage, along with the need to replace existing laterals, increased the amount of pavement and margin restoration required to complete the project beyond the quantities set forth in the initial bid; and

**WHEREAS**, the additional restoration costs total \$3,983.30, bringing the total contract cost to \$33,473.10; and

**WHEREAS**, City Engineering recommends that the contract for the 12-inch combined sewer main repair be amended to reflect the additional work and to provide for payment of the additional costs associated with the project; and

**WHEREAS**, the necessary work now is complete and this contract amendment will be accomplished through the one and final change order for the contract;

\* CONTINUED ON NEXT PAGE \*

**NOW THEREFORE BE IT**

**RESOLVED**, that on behalf of the Niagara Falls Water Board, its Executive Director hereby is authorized execute a change order one and final to amend the contract with J.R. Swanson Plumbing Co., Inc., for the repair of a 12-inch combined sewer main at 2214 Whitney Avenue, and the Water Board authorizes payment of an additional \$3,983.30 for the contract, bringing the contract total to \$33,473.10.

*Water Board Personnel Responsible for Implementation of this Resolution:*  
Executive Director

*Water Board Budget Line or Capital Plan Item with Funds for this Resolution:*  
Capital Plan Item S-8, Sewer/GPS Infrastructure Projects – Miscellaneous  
Capital Line Supplied by: M. Eagler  
Available Funds Confirmed by: D. Williamson

On December 19, 2022, the question of the adoption of the foregoing Resolution was duly put to a vote on roll call, which resulted as follows:

	<b>Yes</b>	<b>No</b>	<b>Abstain</b>	<b>Absent</b>
Board Member Asklar	[ ]	[ ]	[ ]	[ ]
Board Member Kimble	[ ]	[ ]	[ ]	[ ]
Board Member Larkin	[ ]	[ ]	[ ]	[ ]
Board Member Leffler	[ ]	[ ]	[ ]	[ ]
Chairman Forster	[ ]	[ ]	[ ]	[ ]

Signed By:

Vote Witnessed By:

\_\_\_\_\_  
Nicholas J. Forster, Chairman

\_\_\_\_\_  
Sean W. Costello, Secretary to Board



**NIAGARA FALLS WATER BOARD**

October 25, 2022

**TO:** Niagara Falls Water Board Members

**FROM:** Dr. Abderrahman Zehraoui  
Executive Director

**SUBJECT: EMERGENCY 12" COMBINED SEWER REPAIR PROJECT – 2214 WHITNEY AVENUE  
CHANGE ORDER #1/FINAL - \$3,983.30**

A contract for the above-referenced emergency repair contract was awarded to J.R. Swanson Plumbing, Co. Inc. 413 103<sup>rd</sup> Street, Niagara Falls, New York in the amount of \$29,489.80.

Following the emergency repair at the above-referenced location, the extent of the subsurface damage, along with the replacement of existing laterals in proximity, led to pavement and margin restoration beyond the original scope of the project. The additional restoration costs came to \$3,983.30, bringing the actual contract total to \$33,473.10.

It is the recommendation of the undersigned that you allow this contract to be amended to reflect the additional tasks and compensation necessary to complete the project, to the satisfaction of the Niagara Falls Water Board's counsel.

Respectfully submitted,

Dr. Abderrahman Zehraoui  
Executive Director

A handwritten signature in black ink, appearing to read "Robert Buzzelli".

Robert Buzzelli  
Civil Engineer III

Meeting: November\_\_\_\_, 2022

Asklar\_\_\_\_\_ Forster\_\_\_\_\_ Kimble\_\_\_\_\_ Larkin\_\_\_\_\_ Leffler\_\_\_\_\_

*NIAGARA FALLS WATER BOARD RESOLUTION # 2022-12-013*

**WWTP PROJECT 10 CHANGE ORDER 2 FOR SCADA UPDATES AT GPS**

**WHEREAS**, in 2019, the Niagara Falls Water Board (“Water Board”), with the assistance of engineering firm Clark Patterson Lee (“CPL”), solicited proposals for supervisory control and data acquisition (“SCADA”) design, development, and programming services in connection with a number of capital upgrades at the wastewater treatment plant (“WWTP”), with this SCADA work referred to as WWTP Project 10; and

**WHEREAS**, WWTP Project 10 was awarded to Kaman Automation, Inc., which now does business under the name Motion AI; and

**WHEREAS**, in connection with WWTP Project 2, the Gorge Pumping Station (“GPS”) rehabilitation, new pumps and variable frequency drives (“VFDs”) were installed; and

**WHEREAS**, it originally was contemplated that the SCADA controls from the existing VFDs, which although several years old were in good condition, would provide satisfactory control for the new VFDs; and

**WHEREAS**, following installation of the new VFDs it was discovered that while the VFDs and existing SCADA control system use compatible protocols, the VFD manufacturer supplied its most current version of VFDs which while highly desirable incorporate a more advanced revision of firmware which uses more bandwidth than can be supported on the existing control system without eliminating redundancies and limiting functionality; and

**WHEREAS**, as a result of these conditions replacement of the existing control system is necessary to maintain reliable operation; and

**WHEREAS**, the SCADA control system which allow operation of the GPS pumps from the WWTP is critical and without a reliable SCADA control system the Water Board may need to station an operator at the GPS 24 hours per day; and

**WHEREAS**, Kaman/Motion AI has presented proposal No. 190801-8, dated December 5, 2022, proposing to supply the hardware, program update, and startup services required to update the SCADA controls for the new GPS VFDs to increase available bandwidth and restore full and reliable SCADA control for the new GPS pumps for a total fee of \$64,500, with this work if approved to be incorporated into the existing Project 10 agreement as Change Order 2;

\* CONTINUED ON NEXT PAGE \*

**NOW THEREFORE BE IT**

**RESOLVED**, that the Niagara Falls Water Board hereby authorizes the Executive Director to execute Change Order 2 to WWTP Capital Project No. 10, SCADA Improvements, for installation of updated SCADA control equipment at the Gorge Pumping Station for an additional fee no to exceed \$64,500.

*Water Board Personnel Responsible for Implementation of this Resolution:*  
Executive Director

*Water Board Budget Line or Capital Plan Item with Funds for this Resolution:*  
CIP Item No. WWTP – 10, WWTP Rehab Phase 4J – SCADA Improvements.

On December 19, 2022, the question of the adoption of the foregoing Resolution was duly put to a vote on roll call, which resulted as follows:

	<b>Yes</b>	<b>No</b>	<b>Abstain</b>	<b>Absent</b>
Board Member Asklar	[ ]	[ ]	[ ]	[ ]
Board Member Kimble	[ ]	[ ]	[ ]	[ ]
Board Member Larkin	[ ]	[ ]	[ ]	[ ]
Board Member Leffler	[ ]	[ ]	[ ]	[ ]
Chairman Forster	[ ]	[ ]	[ ]	[ ]

Signed By:

Vote Witnessed By:

\_\_\_\_\_  
Nicholas J. Forster, Chairman

\_\_\_\_\_  
Sean W. Costello, Secretary to Board



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**Ted Donner**

December 5, 2022

Subject: NFWB Gorge PLC Upgrade – Motion AI Proposal 190801-8

Mr. Donner,

We are submitting the following Kaman Automation Inc. (KAI) proposal #190801-8 for the NFWB Gorge PLC Upgrade. Our proposal addresses specific elements of the following specification:

- Emails between Clayton Hotchkiss and Matt Klimek
- Gorge PLC program

### **Work Scope**

Engineering Submittal will be provided covering the following:

1. NFWB Gorge PLC
  - a) Qty. (3) Rockwell ControlLogix 7 Slot Rack, 1756-A7
  - b) Qty. (3) Rockwell ControlLogix Power Supply, 1756-PA72
  - c) Qty. (2) Rockwell ControlLogix Processor, 1756-L81E
  - d) Qty. (2) Rockwell ControlLogix Redundancy Module, 1756-RM2
  - e) Qty. (2) Rockwell ControlLogix Redundancy Cable, 1756-RMC3
  - f) Qty. (3) Rockwell ControlLogix Ethernet Card, 1756-EN2TR
  - g) Qty. (2) Rockwell 16pt Digital Input, 1756-IB16
  - h) Qty. (2) Rockwell 16pt Digital Input, 1756-IB16
  - i) Qty. (2) Rockwell 8pt Analog Input, 1756-IF8
  - j) Qty. (1) Rockwell 8pt Digital Relay Output, 1756-OX8I
2. PLC Programming and Startup
  - a. Programming to upgrade existing program to v32 (newest at plant).
  - b. Motion AI personnel will travel to the installation site and provide startup and installation of material supplied in this proposal.
  - c. NFWB to provide qualified representative and required operators for startup assistance.
  - d. Startup Schedule
    - i. PLCs to be preconfigured before startup to minimize downtime. Communications will be tested between all equipment supplied in this proposal.
    - ii. One main PLC rack will be powered up outside of the control cabinet and connected to the Ethernet network to confirm communication with VFDs.
    - iii. Installation of equipment expected to take approximately 2 hours. IO Terminal blocks will be reused from old modules to prevent having to rewire cards and prevent errors during installation.
    - iv. During installation, the VFDs will have to be operated in manual mode from VFD cabinet.
    - v. Upon installation, new PLCs to be tested under the guidance of NFWB to ensure everything is working as expected.

3. Engineering Submittal Format
  - a. Manufacturers cut sheets will be provided for the material being provided with red box identification or specific component model numbers and certifications (i.e. UL listing, etc.), where applicable.
4. Final Documents to include the following:
  - a. Updated engineering submittal incorporating all changes made over the course of the project, if any.

### Exceptions and Clarifications

1. No performance improvements or functional changes are included in this proposal. All programming will replicate existing applications.
2. Removed PLC equipment will be turned over to NFWB.
3. Additional services are available and can be quoted upon request. Refer to ***Motion AI 2022 Service Rates.pdf*** (separate document) for more information.

### Pricing Summary

- Schedule of Values (SOV)

Item #	Description	Qty.	Price Ea.	Ext. Price
1	Hardware	1	\$59,005.00	\$59,005.00
2	Labor – Programming and Startup	1	\$5,495.00	\$5,495.00
			<b>Total</b>	<b>\$64,500.00</b>

### Terms & Conditions

- Terms and Conditions per Motion Terms and Conditions 081722.pdf (separate document)
- Shipping: FOB Motion AI Shipping Dock, Rochester, NY
- Freight: Prepaid & Add
- Invoicing: Net 30 days
  - Invoicing to follow SOV line items as defined in Pricing Summary
- Remit To:
  - Motion Automation
  - 62303 Collections Center Dr.
  - Chicago, IL 60693-0623
- Delivery:
  - Final delivery schedule will be determined at the time of order. Currently lead times extend into June 2023.
  - Expediting fees to be applied when understood, as needed and with customer approval.
- Purchase order acceptance is expressly based upon KAI standard terms and conditions.

- Purchase Order must match line-item breakdown as identified in the Pricing Summary SOV.
- Cancellation Policy:
  - Please note that the assemblies listed in this proposal are custom, made to order, items and cannot be returned. In the event this order is cancelled or modified for any reason, the customer is obligated for cost and expenses incurred by KAI as a result of the cancellation, modification, returns, progress being stopped or other changes from proposed quantities and conditions specified herein.
- Warranty:
  - Motion AI guarantees all workmanship for a period of 12 months from date of install. Component Warranties are limited to that provided by the manufacturers—component warranties will be transferred to the customer.
- Proposal is Valid for 30 days

I look forward to reviewing this proposal with you at your earliest convenience. Please let me know of any questions or need for additional information.

Best Regards,

*Matt Klimek*

Matt Klimek  
Controls Engineering Manager  
Motion AI

NIAGARA FALLS WATER BOARD RESOLUTION # 2022-12-014

**AUTHORIZING SETTLEMENT OF GOODEARL CLAIM**

**WHEREAS**, on March 10, 2022 Edward Goodearl filed a notice of claim for damage resulting from an object which fell off of a Niagara Falls Water Board trailer coming into contact with the side of his vehicle; and

**WHEREAS**, Mr. Goodearl presented three estimates for the alleged cost to repair the damage, ranging from \$2,549.88 to \$4,502.68; and

**WHEREAS**, a question exists as to the extent of the damage allegedly caused by the incident recited in the notice of claim versus damage which may have pre-existed; and

**WHEREAS**, Mr. Goodearl has agreed to compromise and settle his claim for the sum of \$1,440.43;

**NOW THEREFORE BE IT**

**RESOLVED**, that the Niagara Falls Water Board hereby authorizes settlement of Edward Goodearl’s March 10, 2022 claim for the sum of \$1,440.43 in order to avoid litigation and buy its peace, and without an admission of fault by any party, provided Mr. Goodearl executes a general release prior to payment of the settlement amount.

*Water Board Personnel Responsible for Implementation of this Resolution:*  
General Counsel

*Water Board Budget Line or Capital Plan Item with Funds for this Resolution:*  
Budget Line: GA.1930.0000.0449.599 – Judgments and Claims

On December 19, 2022, the question of the adoption of the foregoing Resolution was duly put to a vote on roll call, which resulted as follows:

	<b>Yes</b>	<b>No</b>	<b>Abstain</b>	<b>Absent</b>
Board Member Asklar	[ ]	[ ]	[ ]	[ ]
Board Member Kimble	[ ]	[ ]	[ ]	[ ]
Board Member Larkin	[ ]	[ ]	[ ]	[ ]
Board Member Leffler	[ ]	[ ]	[ ]	[ ]
Chairman Forster	[ ]	[ ]	[ ]	[ ]

Signed By:

Vote Witnessed By:

\_\_\_\_\_  
Nicholas J. Forster, Chairman

\_\_\_\_\_  
Sean W. Costello, Secretary to Board



# NIAGARA FALLS WATER BOARD

MAR 10 2022

5815 Buffalo Avenue  
Niagara Falls, NY 14304

## NOTICE OF CLAIM FORM FOR PERSONAL INJURY, DAMAGE TO PROPERTY OR LOSS OF PROPERTY

NOTE: NO NOTICE OF CLAIM WILL BE ACCEPTED IF FILED LATER THAN 90 DAYS FROM THE DATE OF LOSS. YOUR CLAIM MUST PROVIDE VALID PROOF OF ALLEGED DAMAGES AND PROOF OF THE VALUE OF ANY PROPERTY ALLEGEDLY DAMAGED.

UNDER NEW YORK LAW, ANY PERSON WHO PRESENTS A FALSE OR FRAUDULENT CLAIM TO A LOCAL GOVERNMENT FOR PAYMENT IS SUBJECT TO CRIMINAL AND CIVIL PENALTIES INCLUDING RECOVERY OF THREE TIMES THE AMOUNT OF DAMAGES SUSTAINED BY SUCH LOCAL GOVERNMENT.

CLAIM INVESTIGATION BY THE NIAGARA FALLS WATER BOARD WILL TAKE BETWEEN 6 TO 8 WEEKS

1. Name of Claimant: Edward Goodearl
2. Address of Claimant: [REDACTED] Fairway dr NF NY 14205
3. Claimant's telephone number: 716 [REDACTED]
4. Owner of damaged or lost property: Same
5. Owner's address: Same
6. Owner's telephone number: Same
7. Date of Loss: 3-2-2022
8. Time when loss occurred: 10:30-11 AM  PM
9. Exact location of loss (i.e. house address, nearest cross street): Corner  
of NF Blvd & 80th

10. Police report number (if any) \_\_\_\_\_

11. Describe how loss occurred: while stopping for a red  
light something fell off of trailer  
and hit my truck

12. List all items of property damage ascertained to date (attach two original  
estimates of repair or replacement and all paid original  
receipts): \_\_\_\_\_

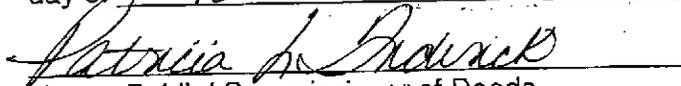
Claim must be notarized

THE UNDERSIGNED DECLARES, UNDER PENALTIES OF PERJURY, THAT HE/SHE IS THE CLAIMANT, THAT HE/SHE HAS READ THE FOREGOING NOTICE OF CLAIM, THAT TO THE BEST OF HIS/HER KNOWLEDGE THE INFORMATION CONTAINED HEREINABOVE IS TRUE AND CORRECT.

  
Signature of Claimant

Sworn to before me this March 10

day of 10<sup>th</sup>, 20 2022

  
Notary Public/ Commissioner of Deeds

PATRICIA L. FREDERICK  
Notary Public, State of New York  
Qualified in Niagara County  
My Commission Expires July 15, 2023