



ERIE COUNTY WATER AUTHORITY
INTEROFFICE MEMORANDUM

February 4, 2025

To: Terrence D. McCracken, Secretary to the Authority

From: Michael J. Quinn, PE, Director of Distribution

A handwritten signature in black ink, appearing to be "MJQ", is written over the name Michael J. Quinn.

Subject: Contract MP-089
Sturgeon Point Water Treatment Plant & Van de Water Raw Water Pump Station
Intake Improvements
SEQRA Type II Designation
ECWA Project No. 202100172

On July 8, 2021, the Erie County Water Authority (the Authority) executed an agreement with Arcadis of New York Inc. (Arcadis) for Contract MP-089, for the design of improvements to the intakes at both the Sturgeon Point Treatment Plant and Van de Water Raw Water Pump Station. In general, the project involves the replacement of all existing chemical feed piping at both facilities as well as modifications to the Sturgeon Point intake for the control of the buildup of frazil ice.

The scope of work for the Project has been reviewed under the New York State Environmental Quality Review Act (SEQRA) by both Arcadis and the Authority Engineering Department. As outlined in the attached letter from Arcadis, the project appears to be designated as a Type II action and thus does not require a determination of significance, environmental impact statement, or findings statement for purposes of SEQR compliance. Recognizing the need for certain expertise in the area of SEQRA regulations, the Authority requested input on the SEQRA process from Harris Beach Murtha. The Authority's Engineering and Legal Staff, Harris Beach Murtha, and Arcadis have thoroughly reviewed the project specifics and collectively concur with this proposed designation.

Based on the above, it is recommended that the Authority review the Arcadis letter and consider the project as a Type II action and allow the project to proceed forward without further environmental review under SEQRA.

MJQ:jmf

Attachments

cc: C.Eaton

L.Kowalski

CONT-MP-089-2101-X-30

ERIE COUNTY WATER AUTHORITY
 AUTHORIZATION FORM
 For Approval/Execution of Documents
 (check which apply)

Contract: MP-189 **Project No.:** 202100172
Project Description: Sturgeon Point WTP and Van de Water Raw Water Pump Station Intake Improvements.

Item Description:



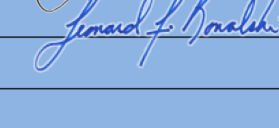

Agreement Professional Service Contract Amendment Change Order
 BCD NYSDOT Agreement Contract Documents Addendum
 Recommendation for Award of Contract Recommendation to Reject Bids
 Request for Proposals
 Other SEQRA Type II Designation

Action Requested:

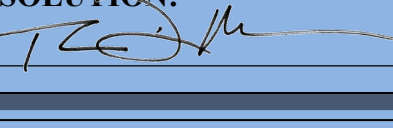
Board Authorization to Execute Legal Approval
 Board Authorization to Award Execution by the Chairman
 Board Authorization to Advertise for Bids Execution by the Secretary to the Authority
 Board Authorization to Solicit Request for Proposals
 Other Resolution for Adopting a SEQRA Type II Designation

Approvals Needed:

APPROVED AS TO CONTENT:

<input checked="" type="checkbox"/> Director of Distribution		Date: <u>2/4/2025</u>
<input checked="" type="checkbox"/> Chief Operating Officer		Date: <u>02/04/2025</u>
<input checked="" type="checkbox"/> Executive Engineer		Date: <u>2/10/2025</u>
<input type="checkbox"/> Director of Administration	_____	Date: _____
<input type="checkbox"/> Risk Manager	_____	Date: _____
<input type="checkbox"/> Chief Financial Officer	_____	Date: _____
<input checked="" type="checkbox"/> Legal		Date: <u>2/4/2025</u>

APPROVED FOR BOARD RESOLUTION:

<input checked="" type="checkbox"/> Secretary to the Authority		Date: <u>02/10/2025</u>
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Remarks: _____

Resolution Date: _____ **Item No:** _____

Michael Quinn, PE, BCEE
Senior Distribution Engineer
Erie County Water Authority
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Date: January 30, 2025

Our Ref: 30089064

Subject: MP-089 Sturgeon Point Water Treatment Plant & Van de Water
Treatment Plant Raw Water Intake Improvements
State Environmental Quality Review (SEQR) Opinion of Classification

Dear Mr. Quinn,

It is Arcadis' opinion that Erie County Water Authority's (ECWA) proposed improvements under contract MP-089, Sturgeon Point Water Treatment Plant & Van de Water Treatment Plant Raw Water Intake Improvements, are most appropriately classified as a SEQR Type II Action as defined by the New York State Department of Environmental Conservation (NYS DEC).

The ECWA owns and operates the Van de Water (VDW) Water Treatment Plant (WTP) located in Tonawanda, NY and Sturgeon Point (STP) Water Treatment Plant (WTP) located in Evans, NY. The proposed work associated with contract MP-089 will take place at the Van de Water Raw Water Pump Station (RWPS), which is not located within the boundaries of the Van de Water WTP site. No work associated with the MP-089 contract will take place at the Van de Water Treatment Plant property. The Van de Water RWPS is located off River Road in the Town of Tonawanda, adjacent to the eastern shore of the Niagara River.

All planned work activities to upgrade facility infrastructure will take place within the confines of the existing ECWA STP WTP and VDW RWPS property boundaries, and within existing associated WTP infrastructure outside of the ECWA property boundaries. Work conducted at the VDW RWPS would not encroach upon the nearby Empire State Trail. Barges and divers will be utilized to access underwater portions of WTP infrastructure for replacement and upgrades of piping and equipment. However, no ground or riverbeds/banks disturbance is anticipated to take place outside of the ECWA WTP property boundaries.

The chemical piping systems at VDW RWPS and STP WTP were installed in the early 1990's and are nearing the end of their service lives. Other peer utilities have experienced frequent leaks and breaks in their piping systems starting at about 20-years of service life. To prevent unexpected outages of the chemical feed systems due to pipe breaks, this project will be replacing the chemical piping systems and the chemical diffusers in the intake structures. The chemical piping systems will include an additional spare chemical pipe which can be used in an emergency and prevent extended, unplanned outages.

Currently, ECWA uses the existing spare chemical pipe as a raw water sample line at VDW RWPS and STP WTP. The raw water sample lines run from the intake structures back to the pump stations along the same path as the chemical feed systems. For this project, a dedicated raw water sample line for each location will be added.

Van de Water Project Activities

The proposed project includes the demolition of the existing buried chemical and sample lines in the yard. These lines will be removed to make way for the proposed replacement lines. Within the onshore and offshore shafts, the existing exposed chemical piping and diffusers and sample line will be demolished. In the raw water tunnel and at the bottom of the shafts, the piping systems are buried in sediment and will be cut and abandoned in place. It is anticipated that the existing piping is anchored at each end to the riser/intake wall to prevent “creeping” due to expansion and contraction and therefore, the cut will be outside of these anchor points. Removal of the sediment from the raw water tunnel system is not proposed as part of this project. Other exposed ancillary items such as the ROV guide wire, pipe supports, etc. will be demolished.

The existing chemical solution lines within the raw water shafts and tunnels will be replaced with new piping. Two new 3-inch chemical solution lines will be run from the RWPS to the intake diffuser. These lines will function as a duty and spare line. The existing chemical diffuser system in the intake shaft will be replaced in-kind within the throat of the intake shaft.

The existing line used for raw water sampling is believed to be a repurposed version of the 3-inch chemical solution line that was designated as a spare on the original record drawings. A new raw water sample line is proposed as part of this project to replace the aging pipe as well as provide a pipe dedicated specifically for this application. The new raw water sample line will run from the Potassium Permanganate Room, exit the building through the existing cored hole, and run parallel with the chemical solution line and spare chemical solution line to the onshore riser shaft. Since part of the line will be exposed to the outdoor elements, the line will need to be protected to prevent freezing during the winter.

The existing chemical solutions pipelines were installed using a pipe bundling system. This system balances the buoyant force of one or more of the pipelines filled with air with the weight of a steel cable to achieve near neutral buoyancy to assist with pipeline installation through the raw water tunnel. Once installed, all the pipes are flooded with water causing the bundle to rest on the ground of the raw water tunnel. This approach will be reused for the installation of the new piping systems. At VDW RWPS, two chemical solution lines (one primary, and one spare) and a raw water sample line will be bundled together and routed through the tunnel.

It is anticipated that site work associated with trenching required for both the demolition/removal of old piping and the installation of new piping at VDW RWPS will amount to approximately 2,200 square feet (less than one acre) of temporary ground disturbance, which will be restored to preexisting conditions upon completion of associated activities.

Sturgeon Point WTP Project Activities

The STP experiences periodic blockages at the intake during late winter, specifically during when the conditions are calm and particularly cold. These blockages have been attributed to temporary frazil ice build-up on the intake structure. Currently, operations staff use a portable, temporary air compressor attached to the raw water sample line to blow air through the raw water sample intake point in the intake shaft to prevent frazil ice build-up. This project will provide a new permanent air compressor system, housed within a new, engineered permanent enclosure, located outside, adjacent to the STP RWPS building and a dedicated air bubbler system at the intake structure. These improvements will help prevent ice formation at the intake. It is anticipated that site work associated with the installation of the new concrete pad to hold the new, permanent engineered enclosure to house the new air compressor system installation at STP WTP will amount to approximately 310 square feet (less than one acre) of permanent ground disturbance.

A permanent power source is required for the proposed air compressor system at the STP RWPS, and will be provided from the existing, onsite, 480 Volt STP RWPS bus via a new 600-amp circuit breaker installed in an existing switchboard space. The new proposed circuit breaker will be equipped with an electric trip unit so that it may be selectively coordinated with the remaining power system and the new air compressor system. The new air compressor system's engineered enclosure will be located adjacent to the existing electrical room for easy connection to the power supply.

The existing timber grating at STP WTP was installed in 1970 and is made up of 3-inch by 12-inch timber joists spaced with 12-inch openings. The primary purpose of the intake timber grating is to prevent larger objects and debris from entering the intake shaft, which could cause a blockage of the system. This project involves the removal of the existing timber grating and replacement with new HDPE grating with the same bar spacing.

The proposed project includes the demolition of the existing chemical and sample lines in the raw water tunnel, offshore intake shaft, and onshore shaft. These lines will be removed to make way for the proposed replacement lines and minimize potential for entanglement of submersible ROVs during inspections. Other exposed ancillary items such as the ROV guide wire, pipe supports, etc. will be demolished. Based on discussion with marine contractors, it is anticipated that the existing piping will be cut at the intake crib and a pull rope/cable will be attached to the piping at the onshore shaft and removed with a winch. During removal, a hold back line will be installed and then subsequently used to establish a new pull cable to install the new piping.

The existing potassium permanganate feed in the onshore shaft will be replaced with a new 1-inch HDPE line. The line will be attached to the riser shaft wall using pipe clamps. At the bottom of the riser shaft, the line will be connected to a diffuser.

Two new dedicated raw water sample lines from the intake are proposed for STP WTP (one duty and one spare). The spare raw water sample line will allow a common bundling approach for the STP WTP piping systems. Further, this spare sample line provides additional redundancy and resiliency for the proposed project. The new raw water sample lines will run from the STP RWPS, into the Distribution Chamber, down the riser shaft, through the intake tunnel to the intake shaft, and up to the intake structure.

SEQR Opinion of Classification

In accordance with SEQR and its implementing regulations as set forth in 6 NYCRR Part 617, it is our opinion that the above-described improvements are consistent with the activities described in 6 NYCRR Part 617.5(c)(2), Part 617.5(c)(9), and Part 617.5(c)(13) for Type II Actions as follows:

“Replacement, rehabilitation or reconstruction of a structure or facility, in kind, on the same site, including upgrading buildings to meet building, energy, or fire codes unless such action meets or exceeds any of the thresholds in section 617.4 of this Part;”

“Construction or expansion of a primary or accessory/appurtenant, non-residential structure or facility involving less than 4,000 square feet of gross floor area and not involving a change in zoning or a use variance and consistent with local land use controls, but not radio communication or microwave transmission facilities;”

“Extension of utility distribution facilities, including gas, electric, telephone, cable, water and sewer connections to render service in approved subdivisions or in connection with any action on this list;”

Michael Quinn, PE, BCEE
Erie County Water Authority
January 30, 2025

Please feel free to contact me at 716-462-7166 or joshua.tingue@arcadis.com with any questions or comments.

Sincerely,
Arcadis of New York, Inc.



Joshua J. Tingue, PE
Project Engineer

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CC. Jason Williams, P.E.
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Nicole Wiefling